1 Introduction

This document shows the canonical missing cycle path graphs up to length 7, calculated using Gröbner bases.

The bidirected edges are drawn inverted: Any pair of nodes is connected by a bidirected edge if we do *not* draw a dashed line between them.

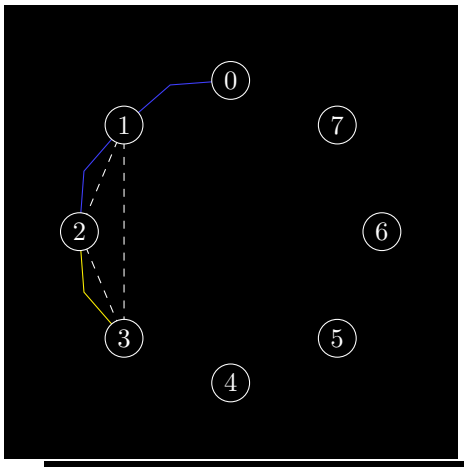
The directed edges form a path $0 \to 1 \to 2 \to 3 \to \dots$ in each graph.

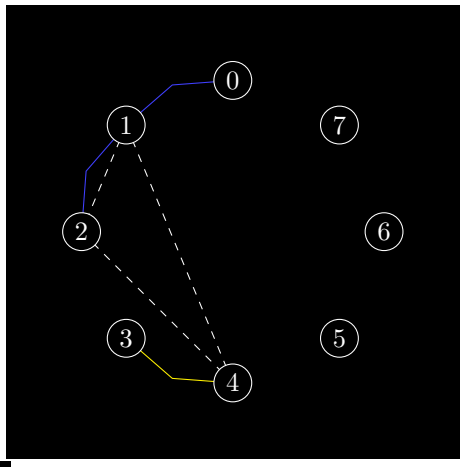
The color of the directed edges encodes the identifiability:

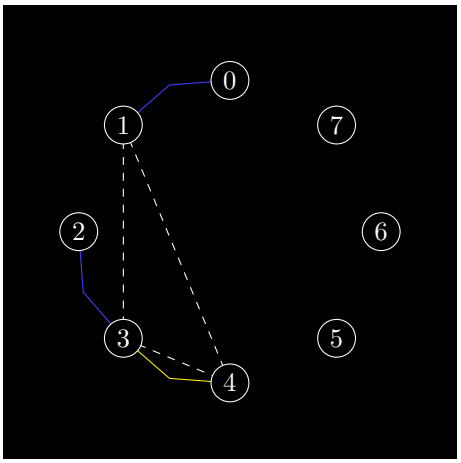
1. green: The edge is uniquely identifiable.
2. yellow: The edge is 2-identifiable.
3. blue: The Gröbner base does not include a solution the edge identifiability directly, but the edge can be identified using propagate from adjacent edges. It is either 1-identifiable or 2-identifiable depending on the color of the adjacent edge.
4. black: The edge is not identifiable

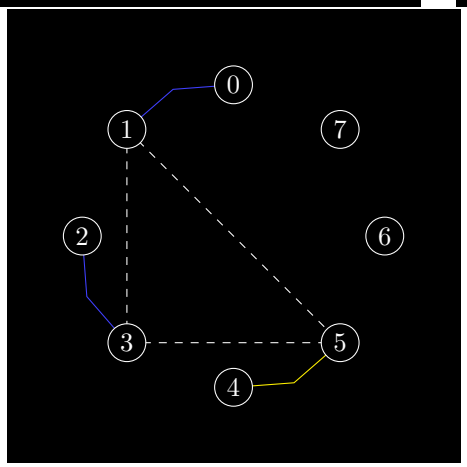
The number of nodes is not specified, since additional nodes do not affect the identifiability

2 Length 3









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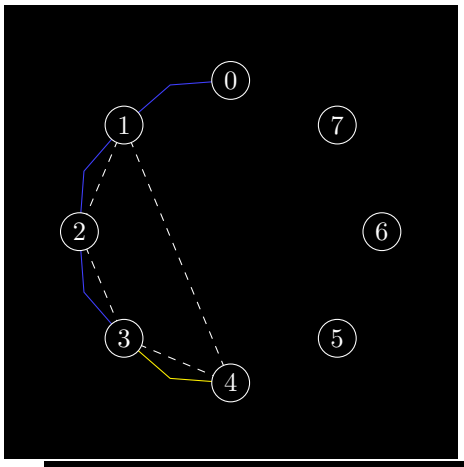
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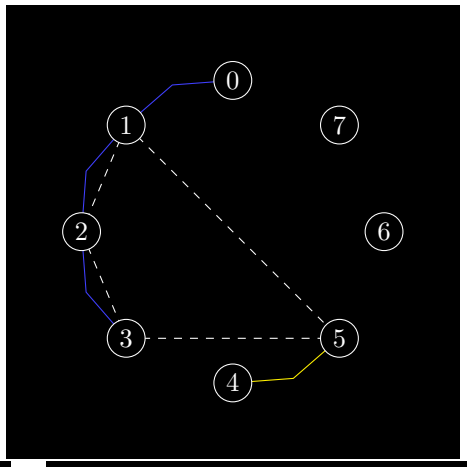
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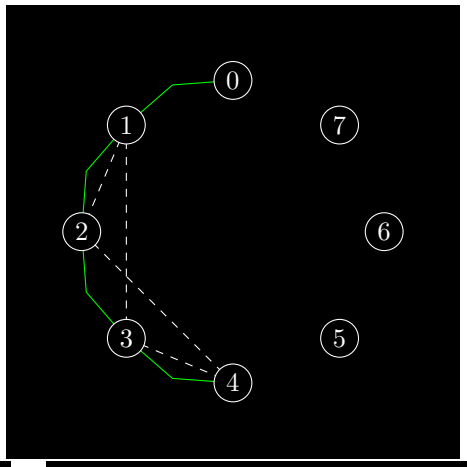
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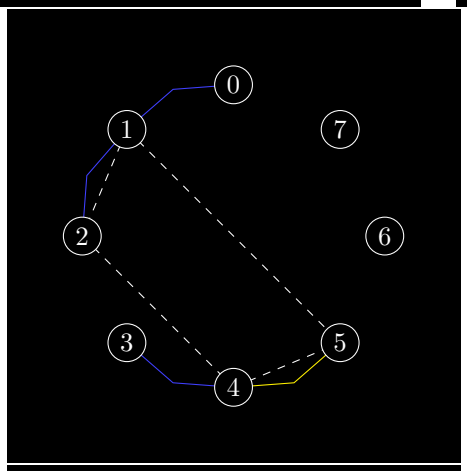
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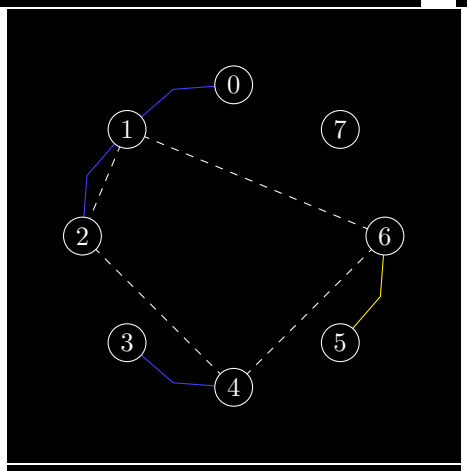
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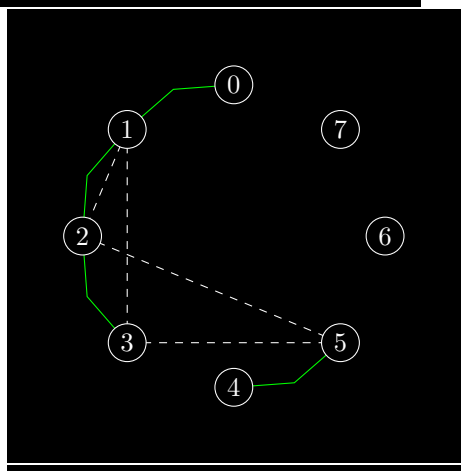
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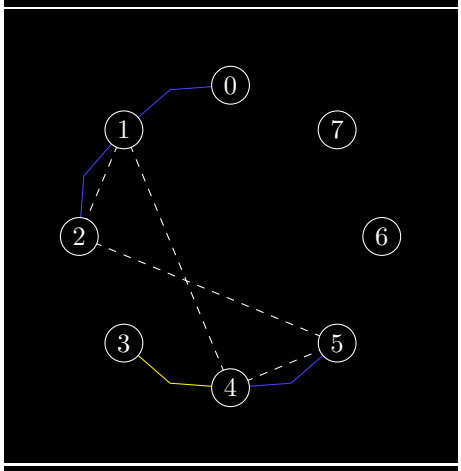
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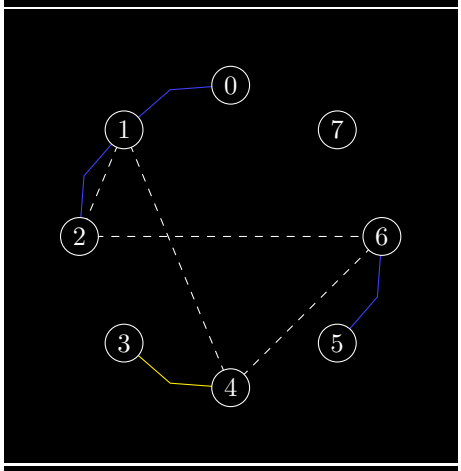
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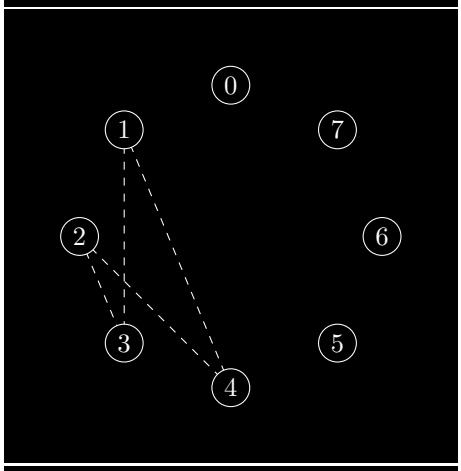
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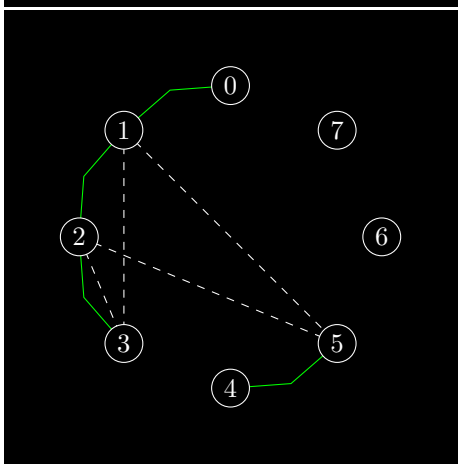
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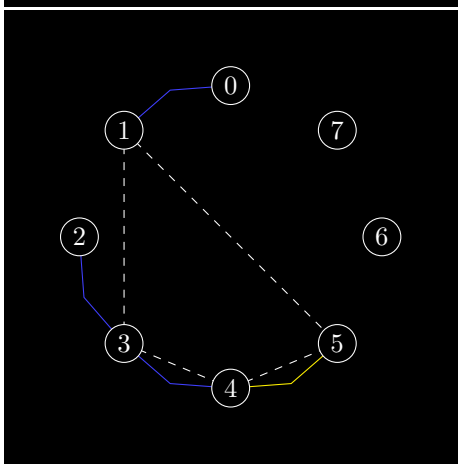
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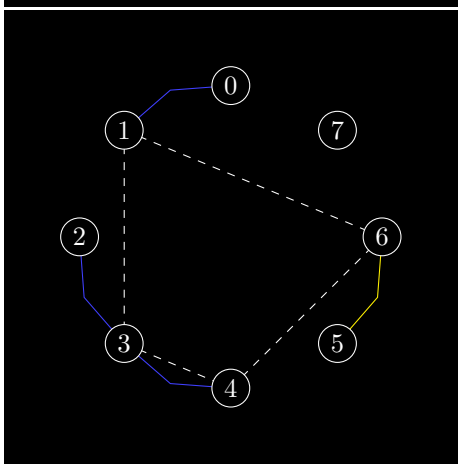
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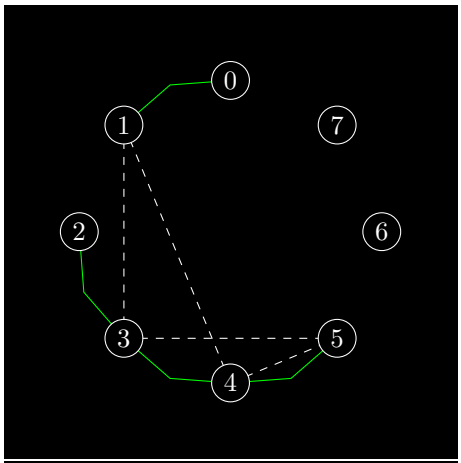
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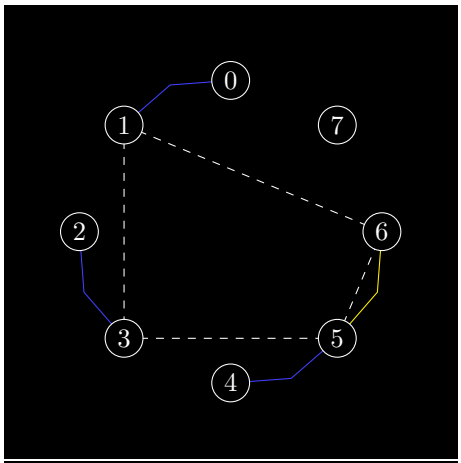
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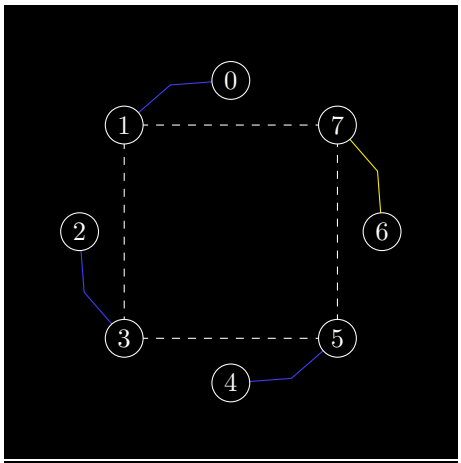
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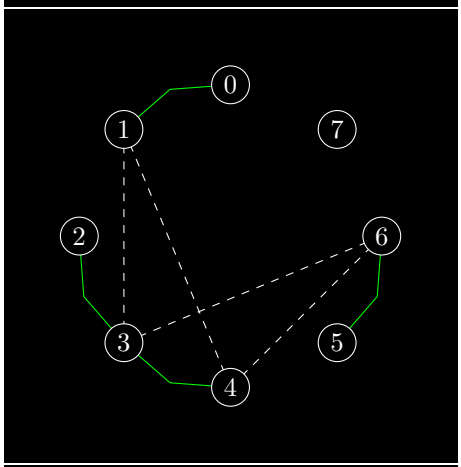
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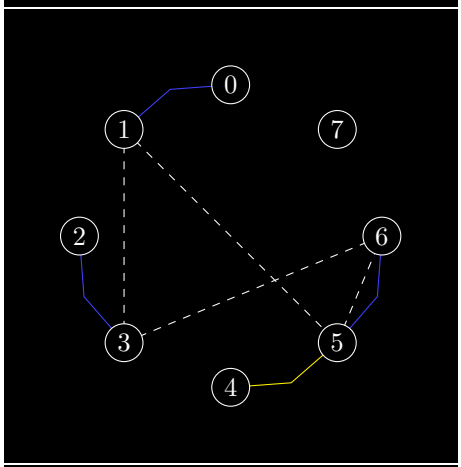
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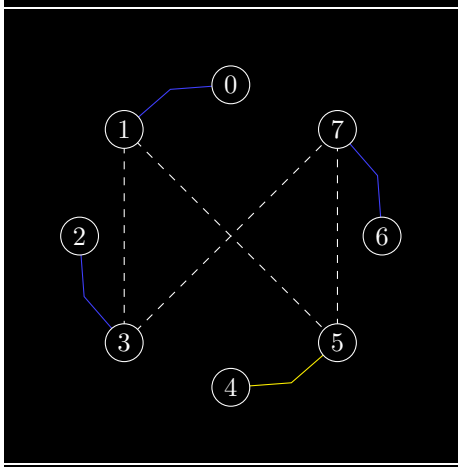
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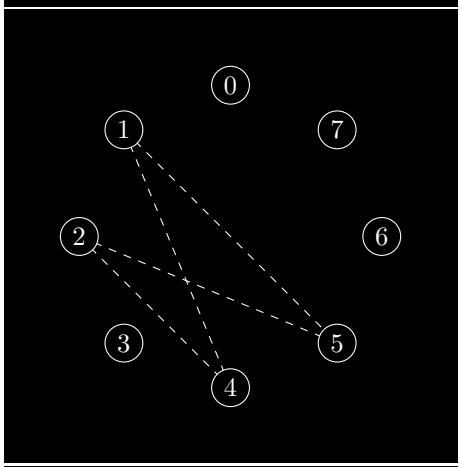
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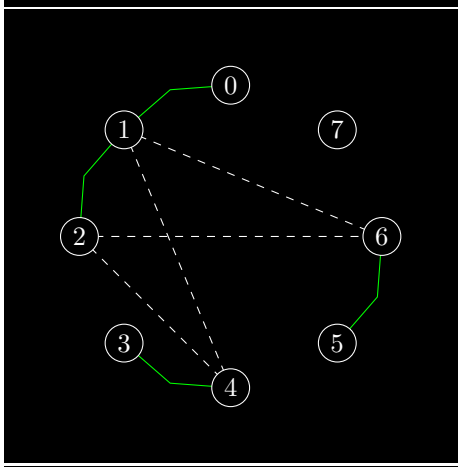
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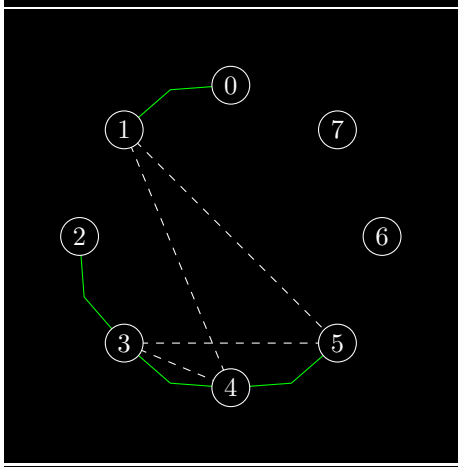
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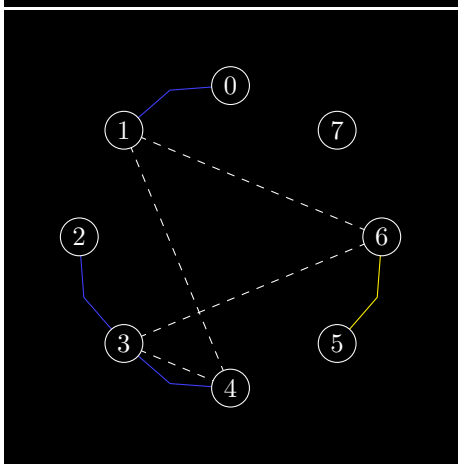
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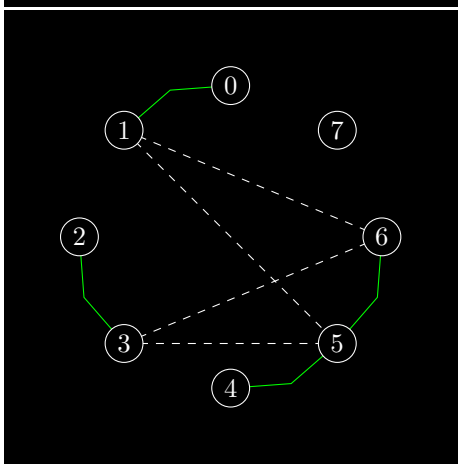
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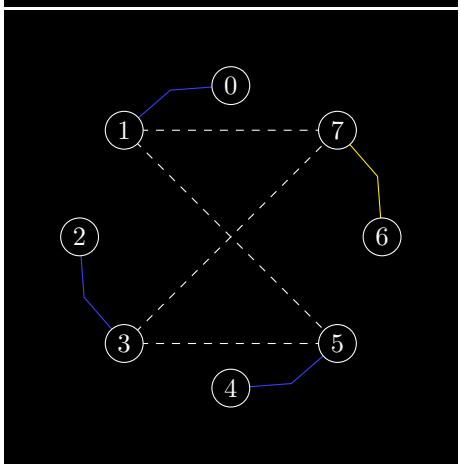
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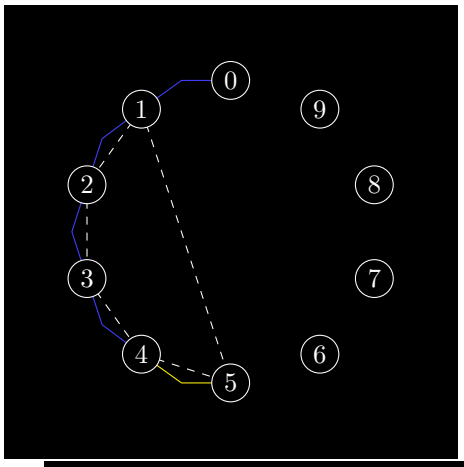
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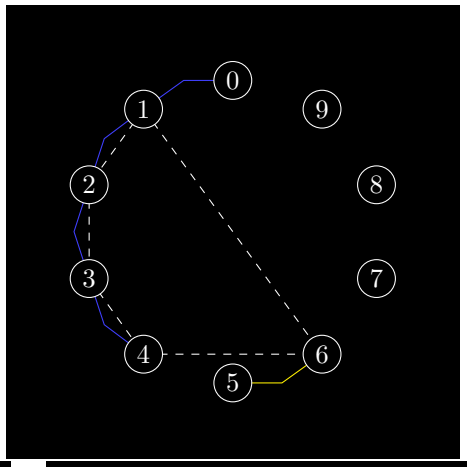
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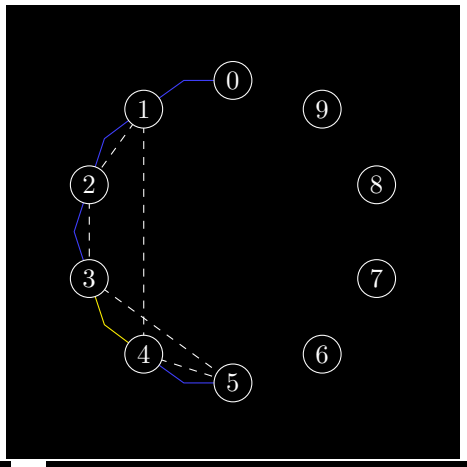
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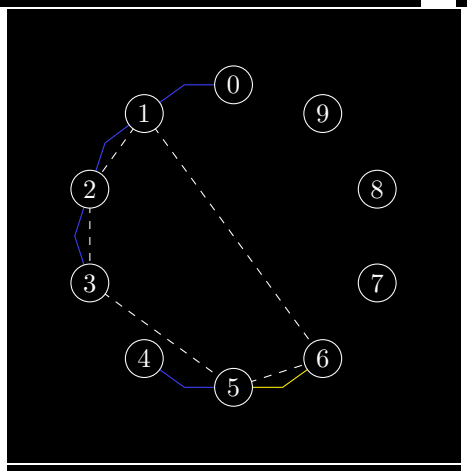
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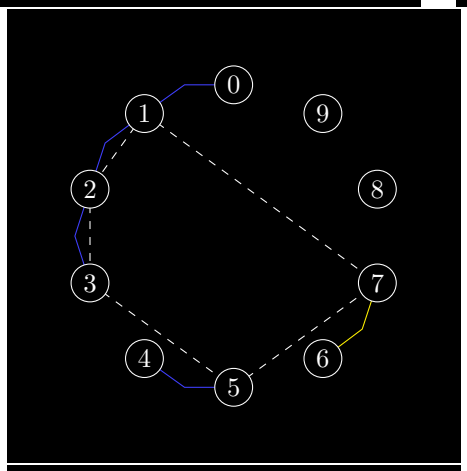
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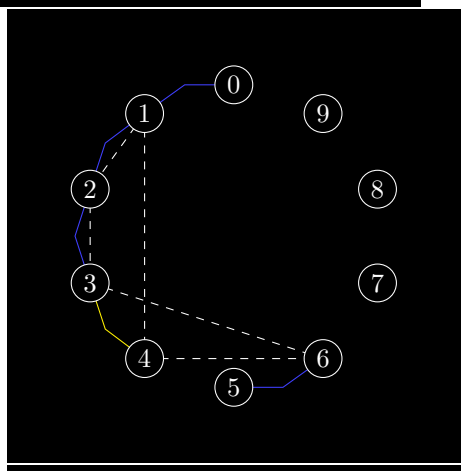
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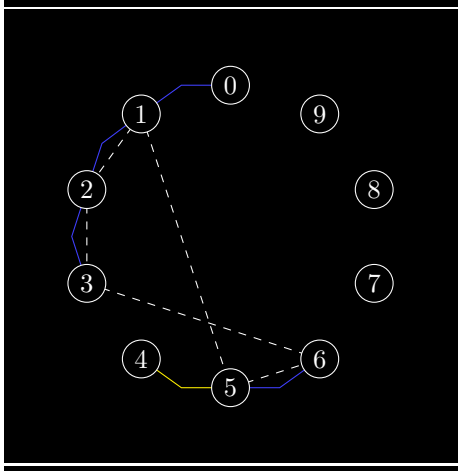
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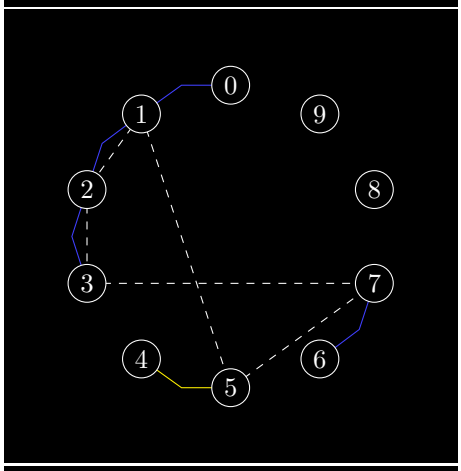
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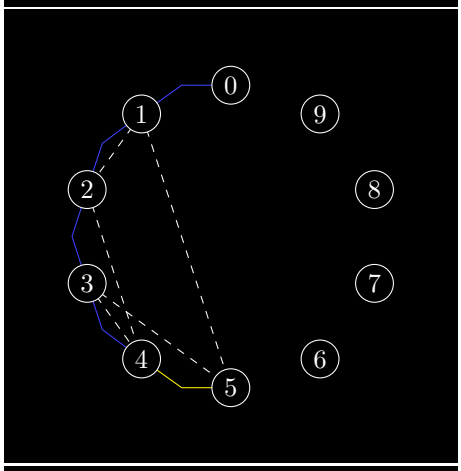
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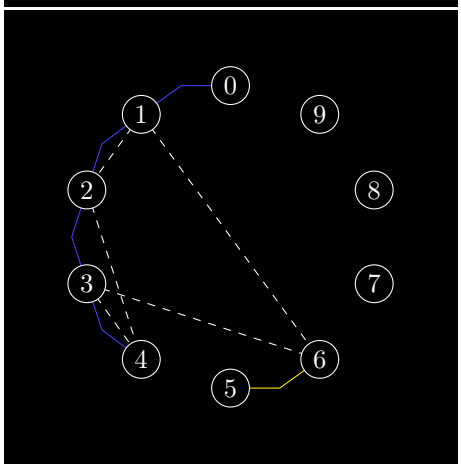
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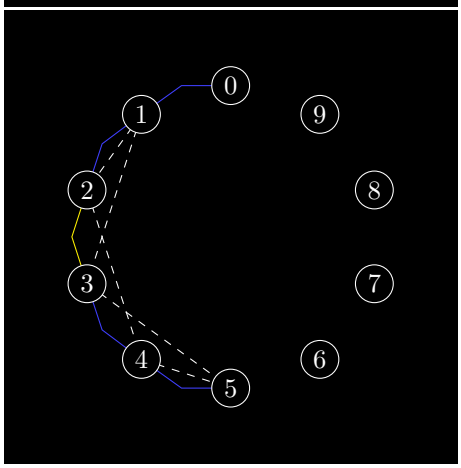
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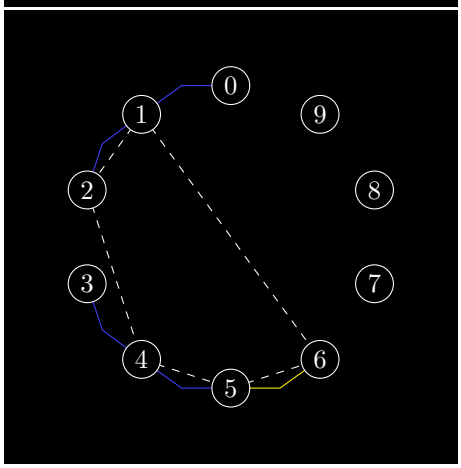
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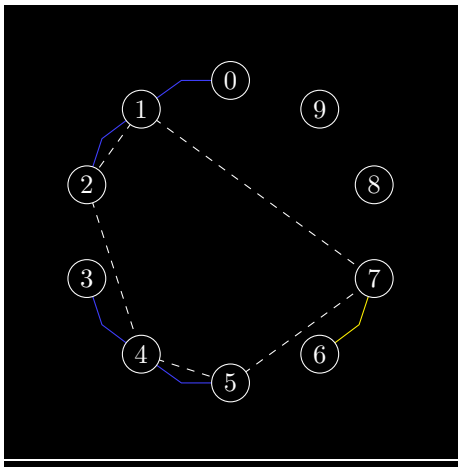
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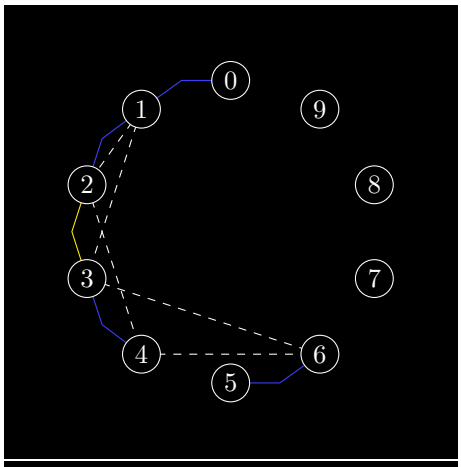
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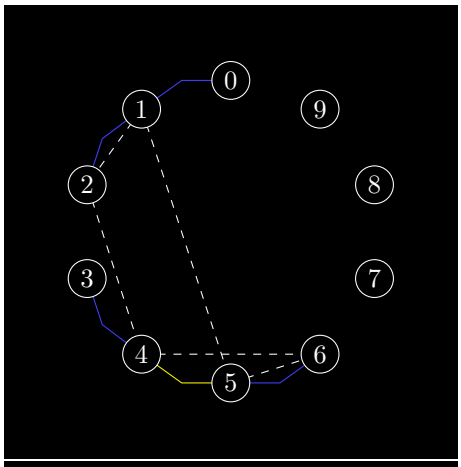
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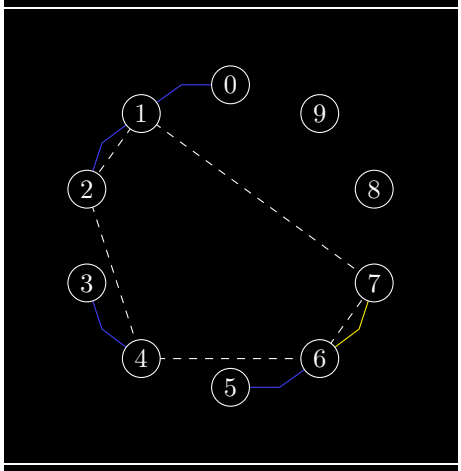
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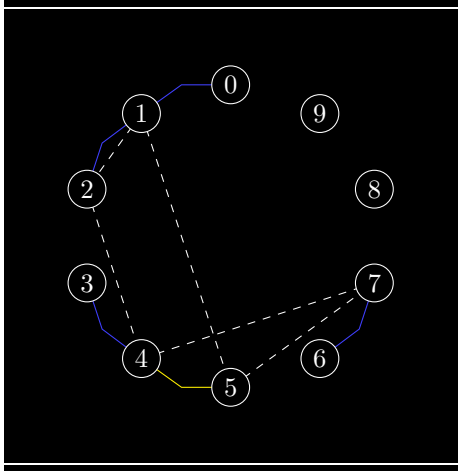
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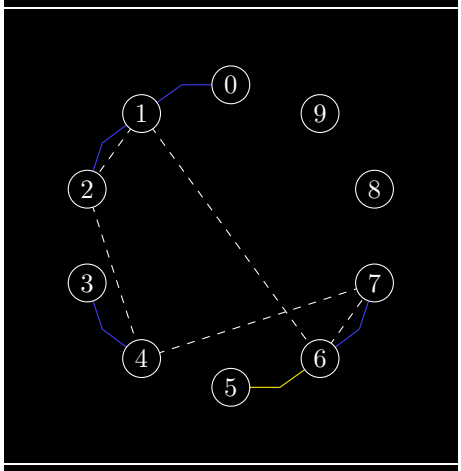
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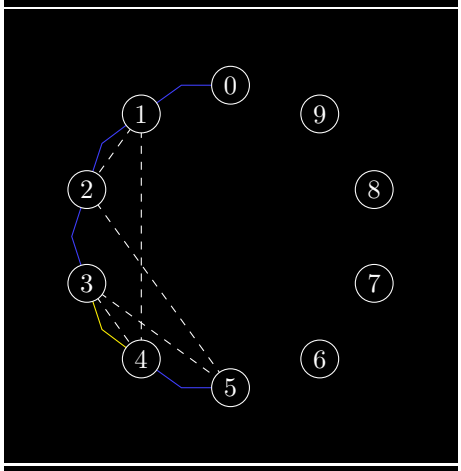
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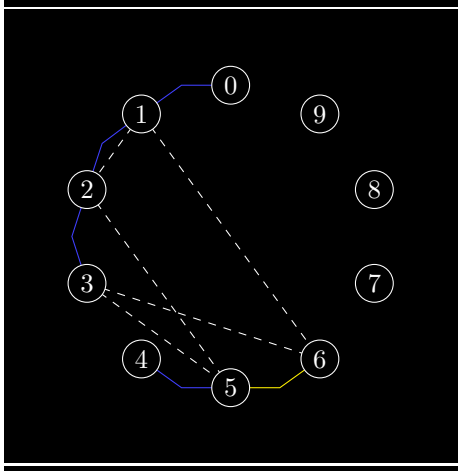
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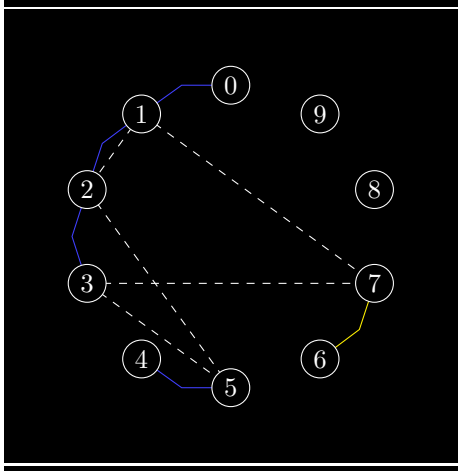
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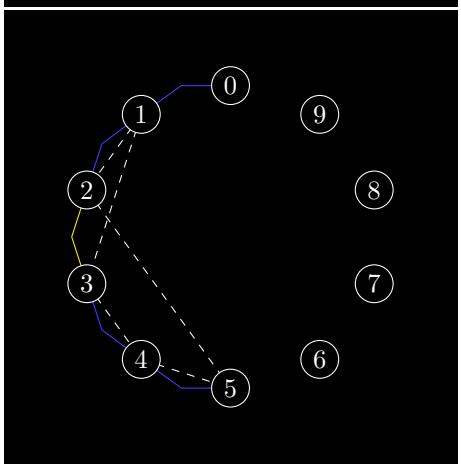
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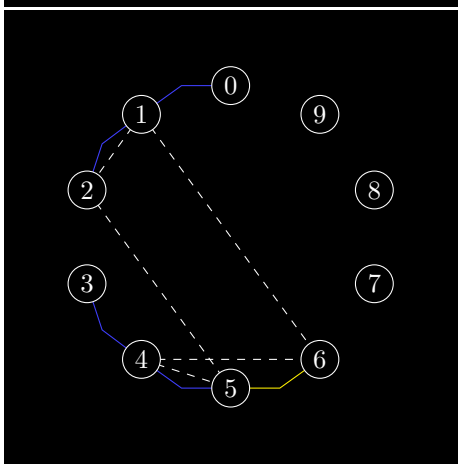
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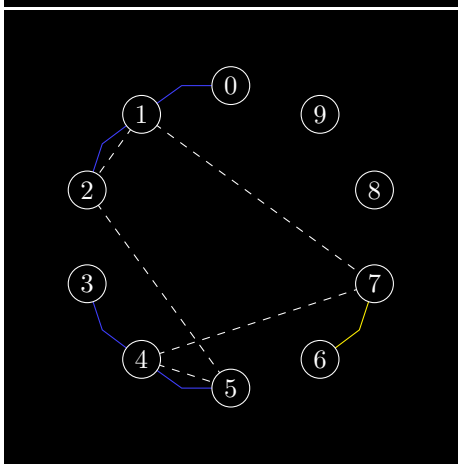
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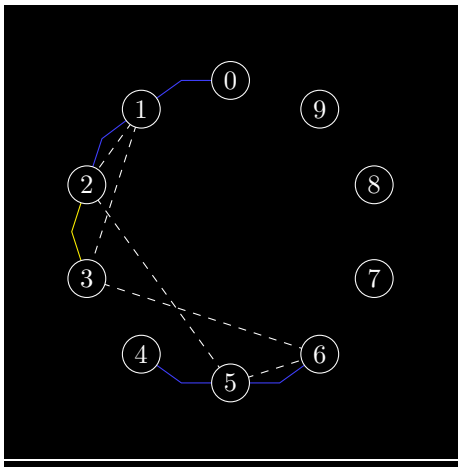
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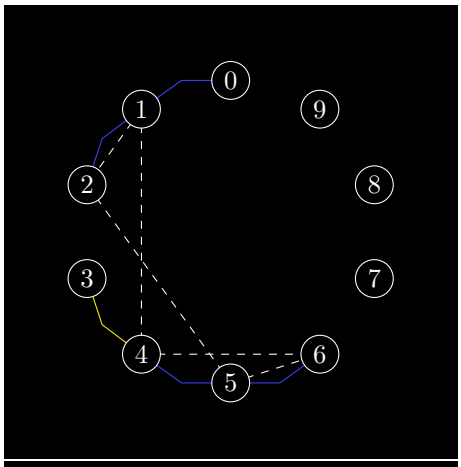
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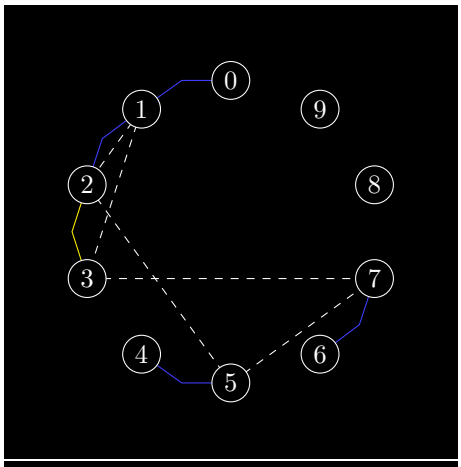
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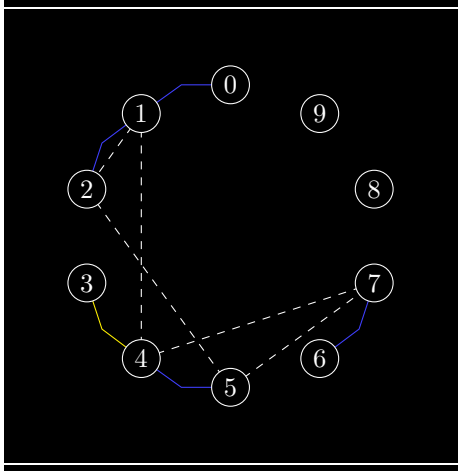
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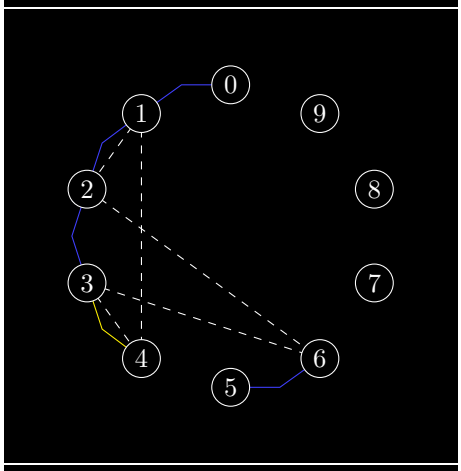
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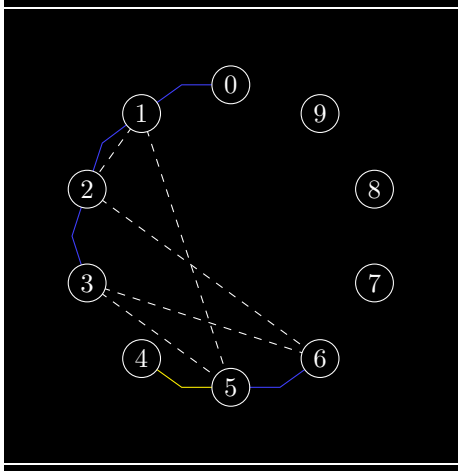
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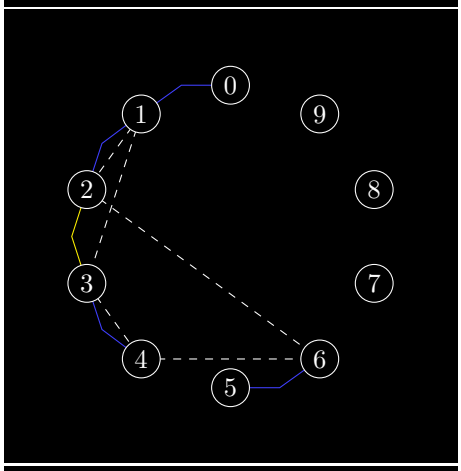
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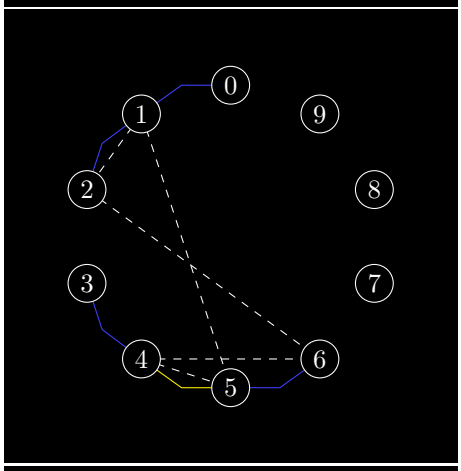
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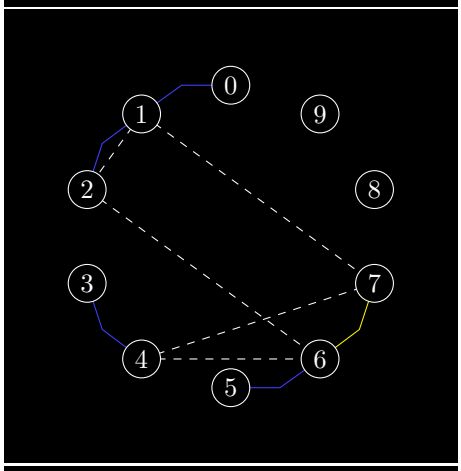
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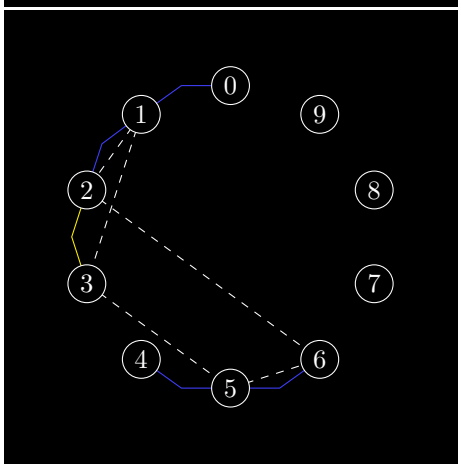
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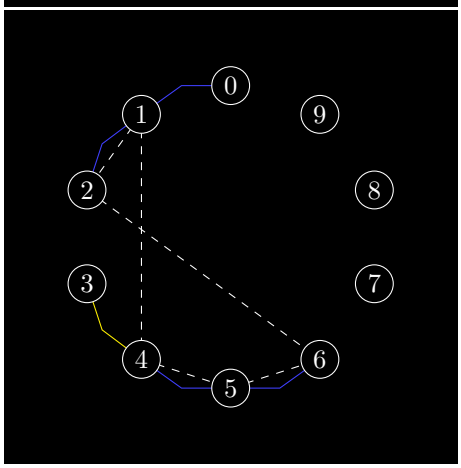
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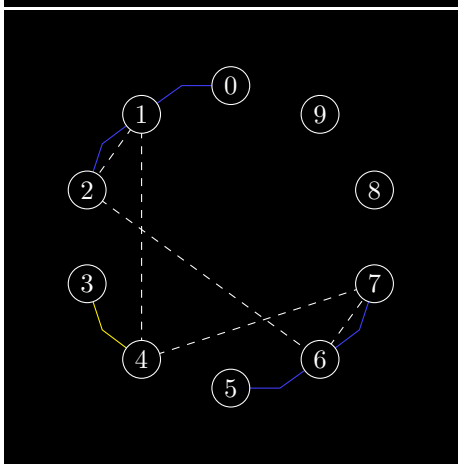
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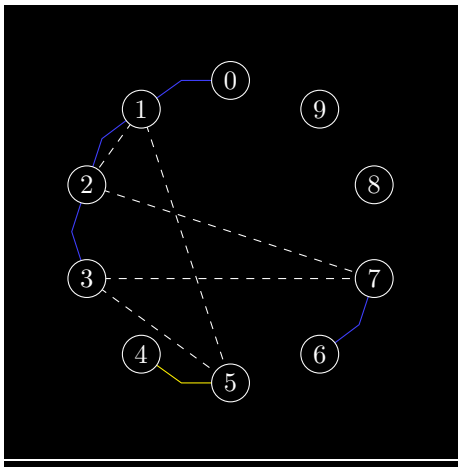
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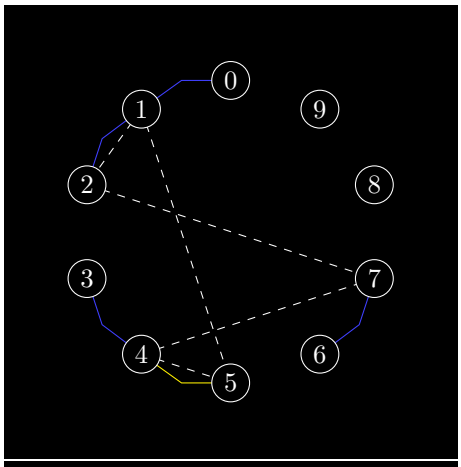
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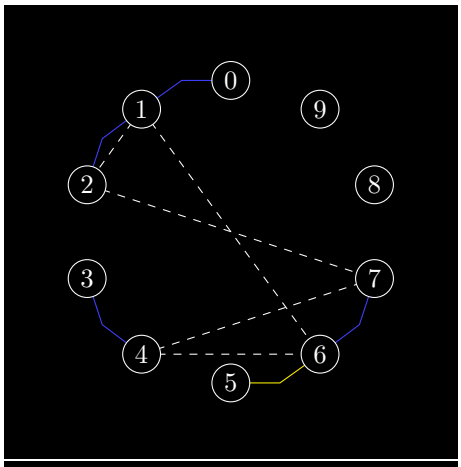
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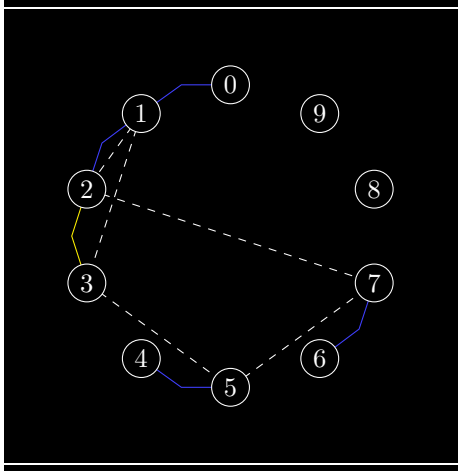
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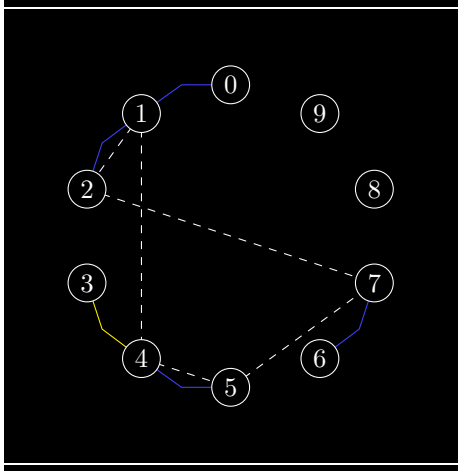
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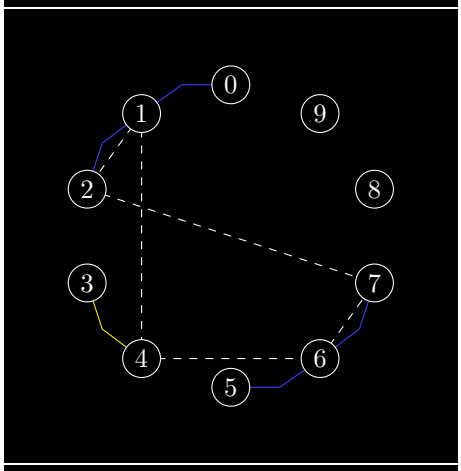
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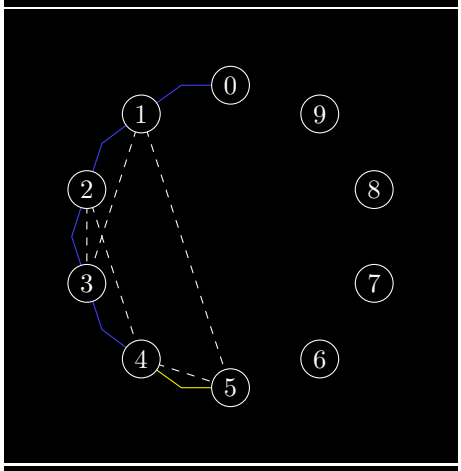
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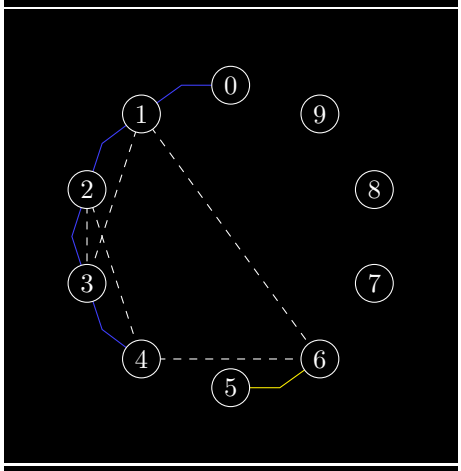
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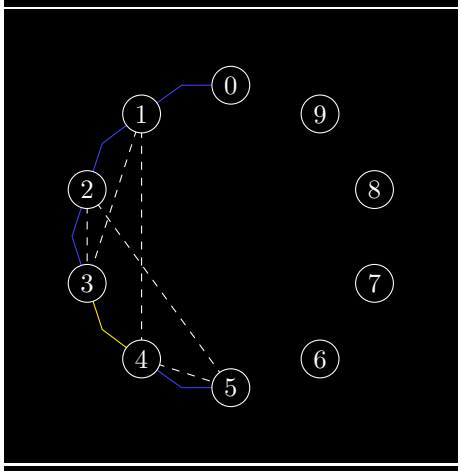
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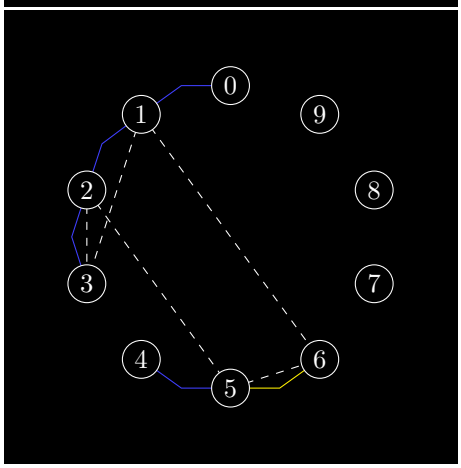
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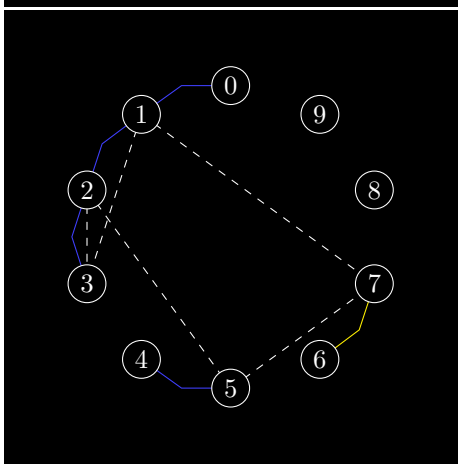
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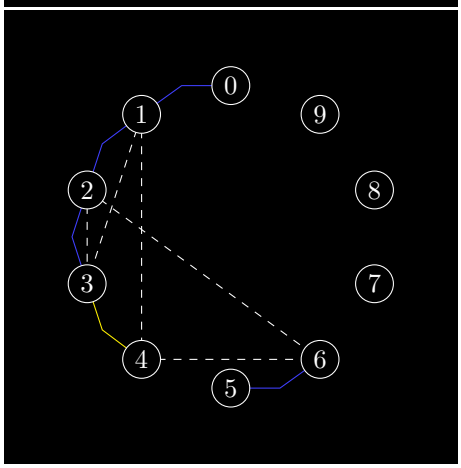
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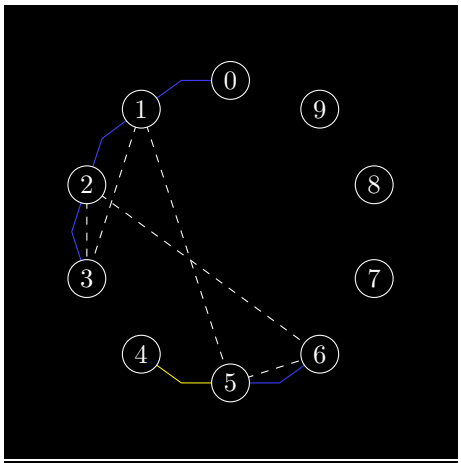
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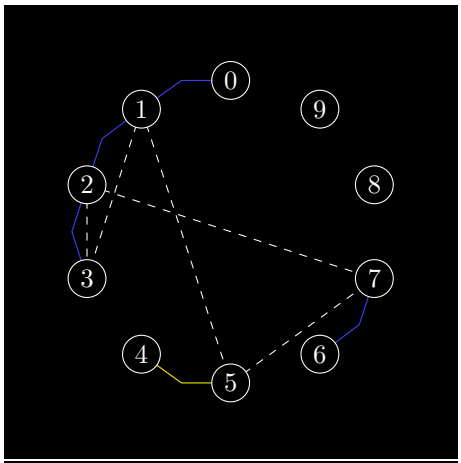
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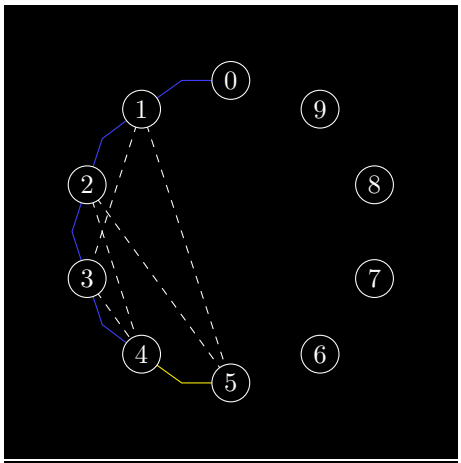
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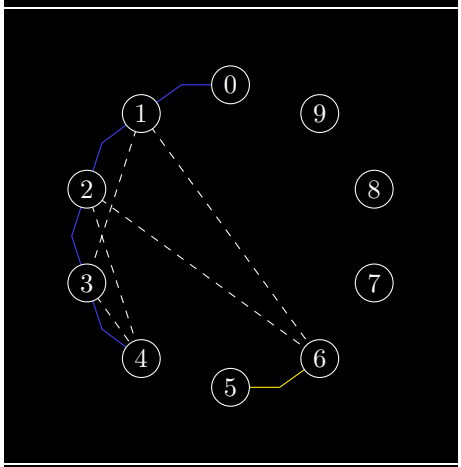
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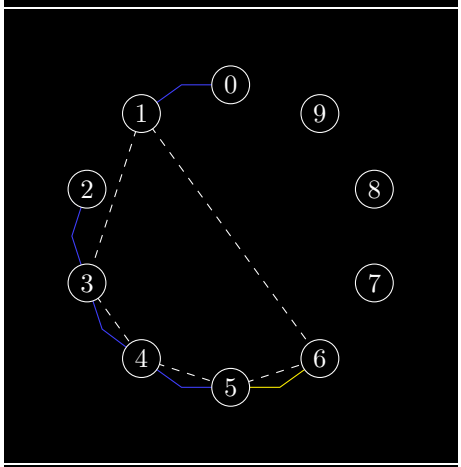
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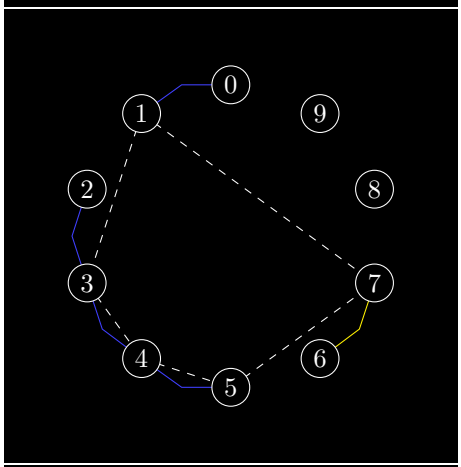
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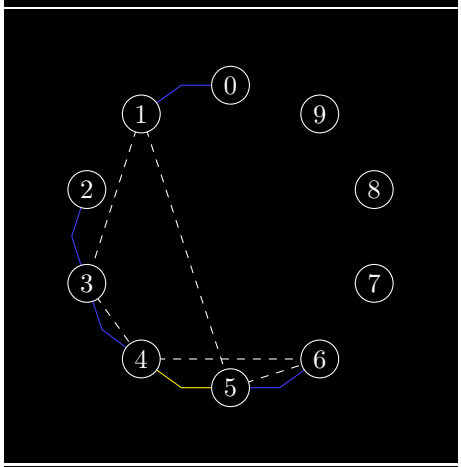
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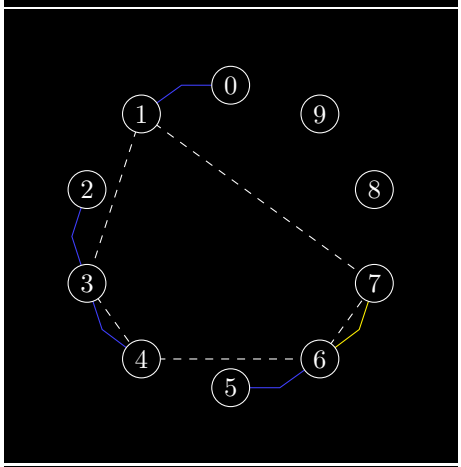
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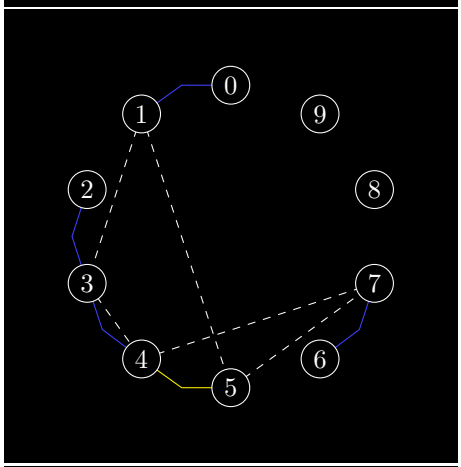
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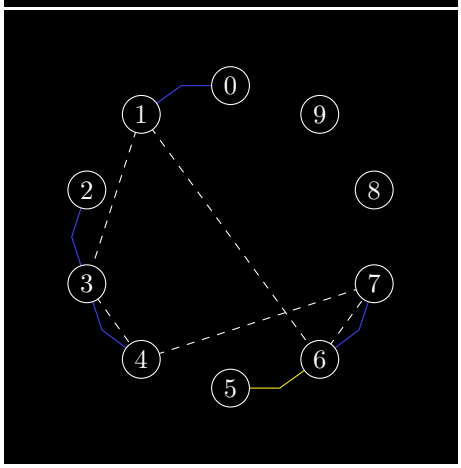
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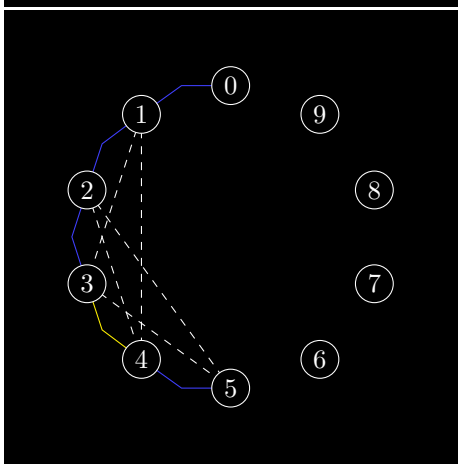
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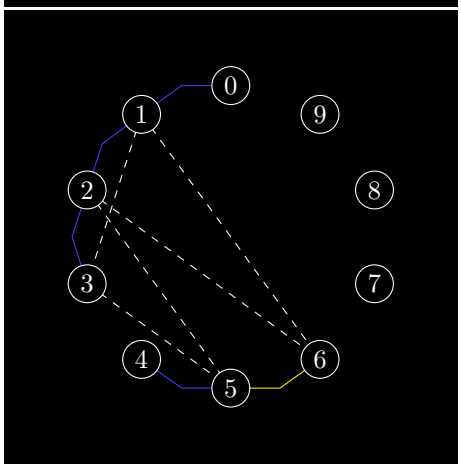
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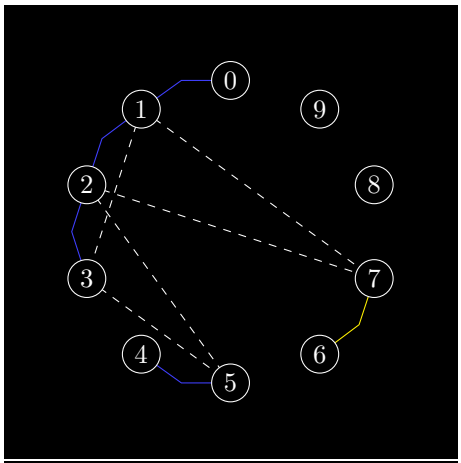
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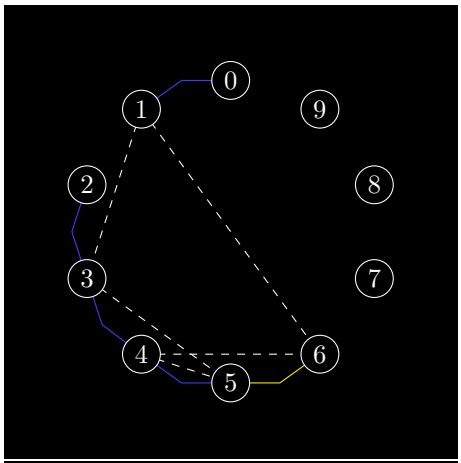
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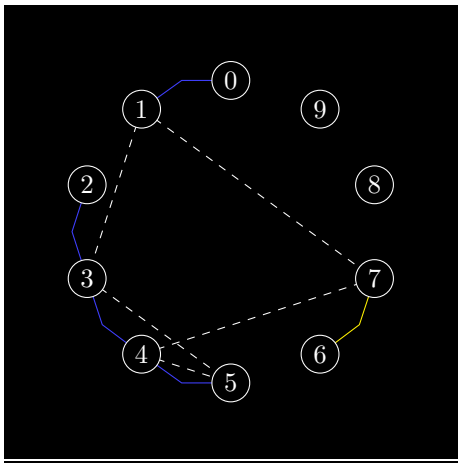
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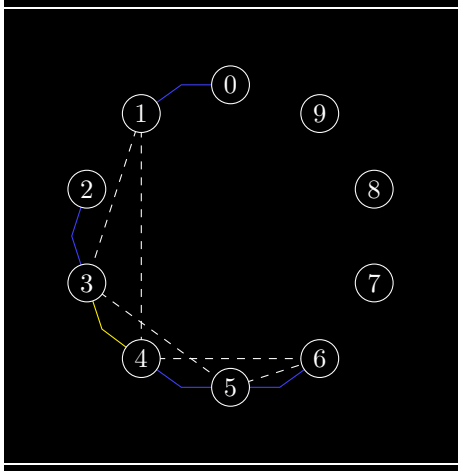
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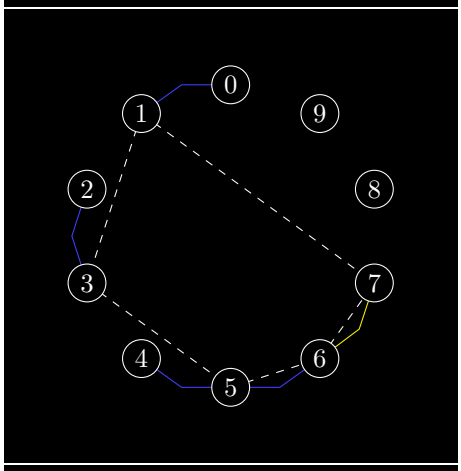
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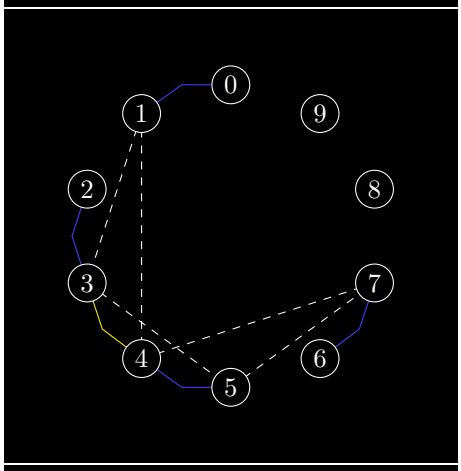
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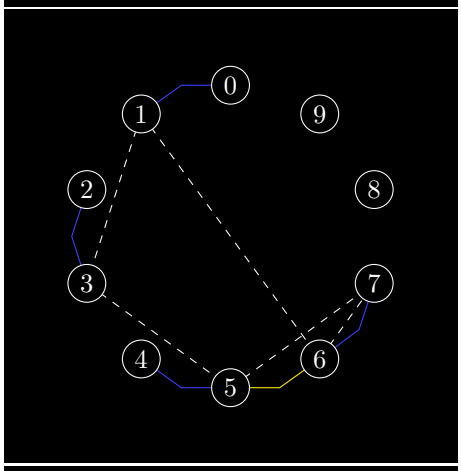
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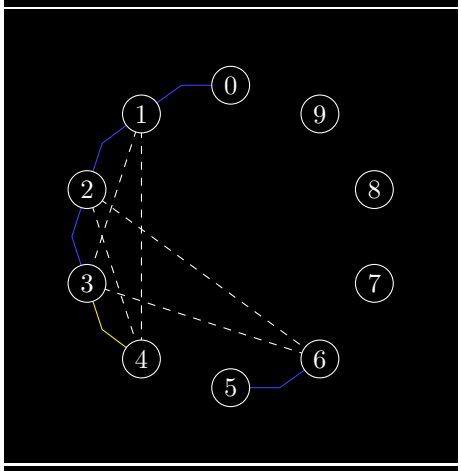
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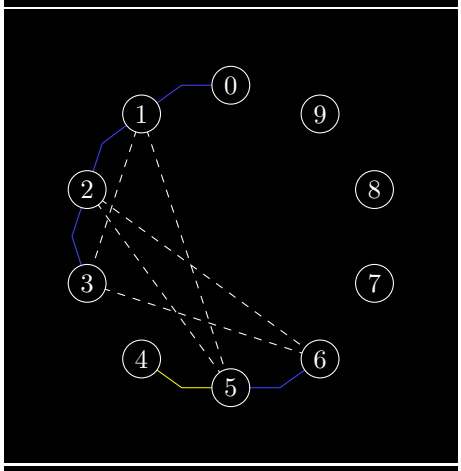
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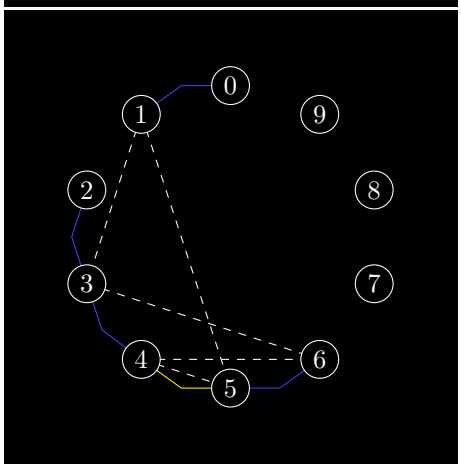
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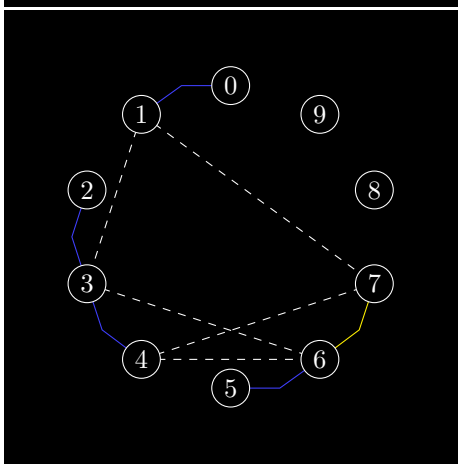
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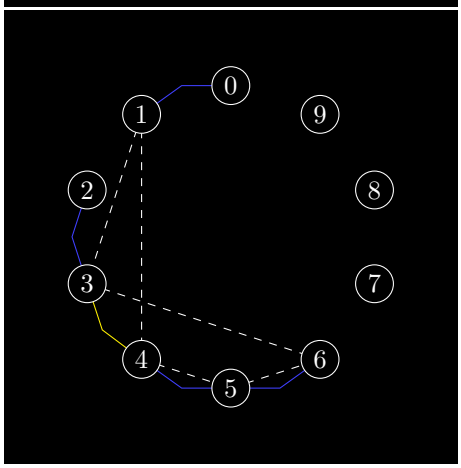
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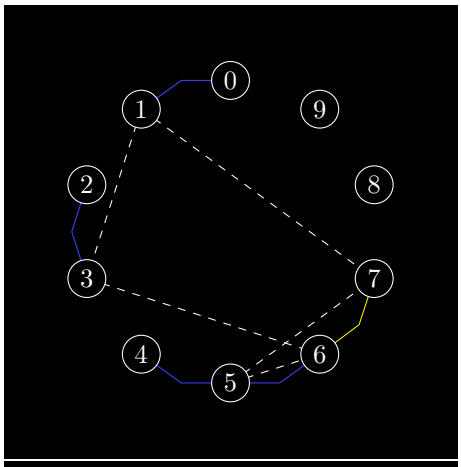
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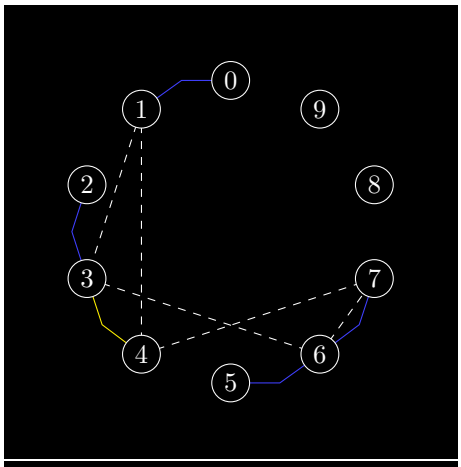
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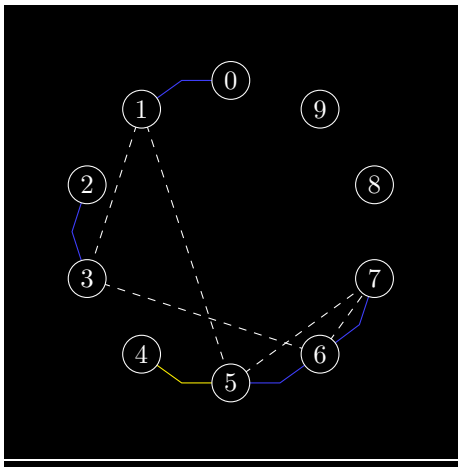
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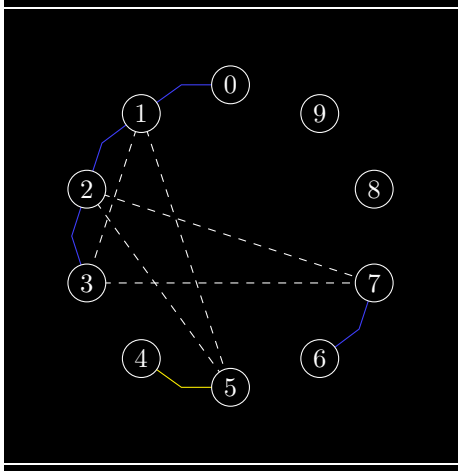
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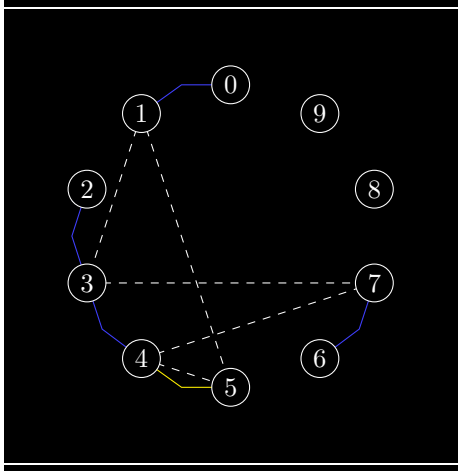
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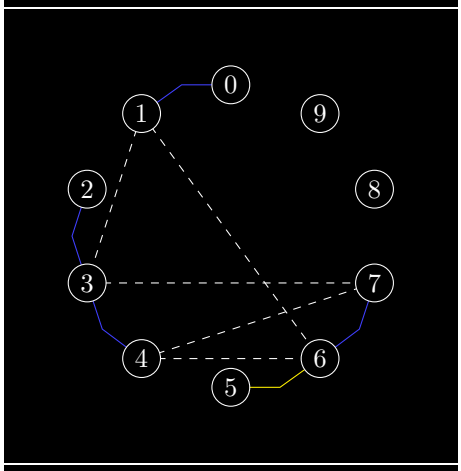
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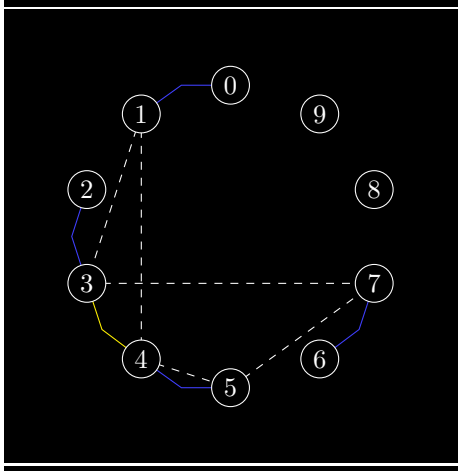
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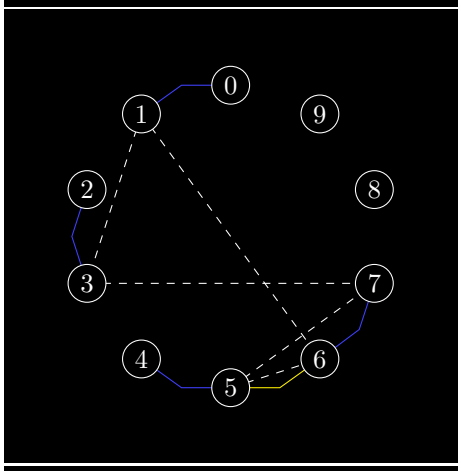
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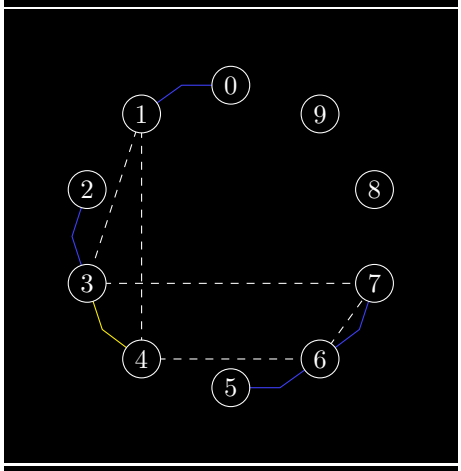
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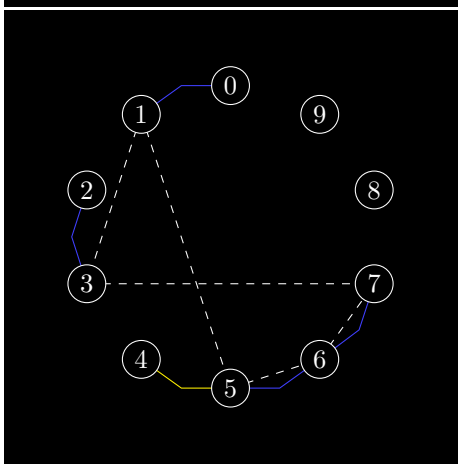
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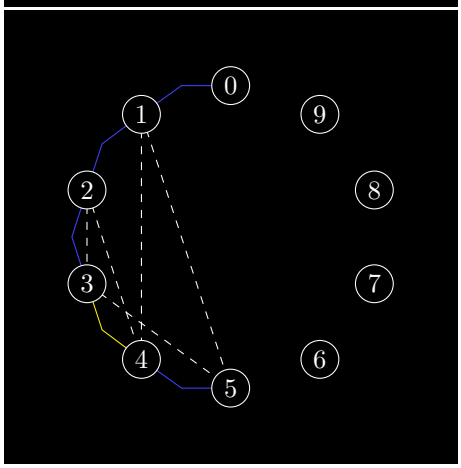
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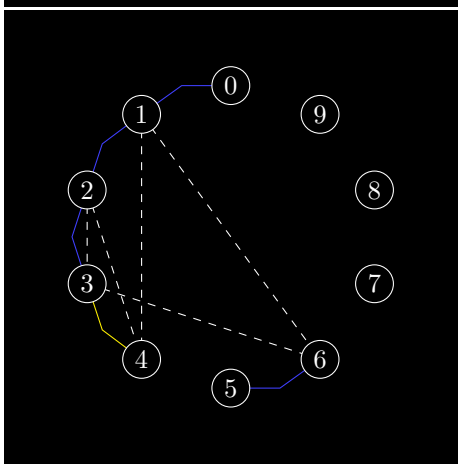
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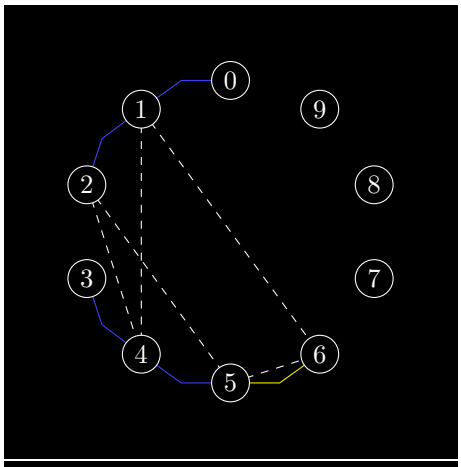
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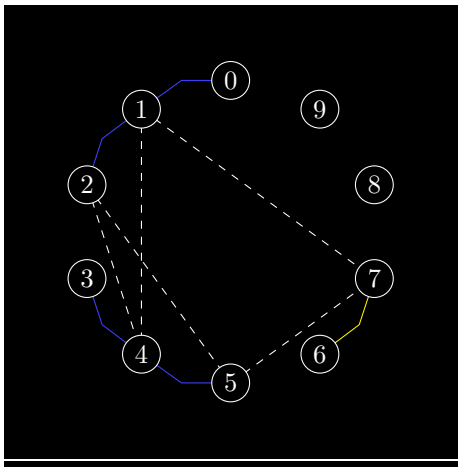
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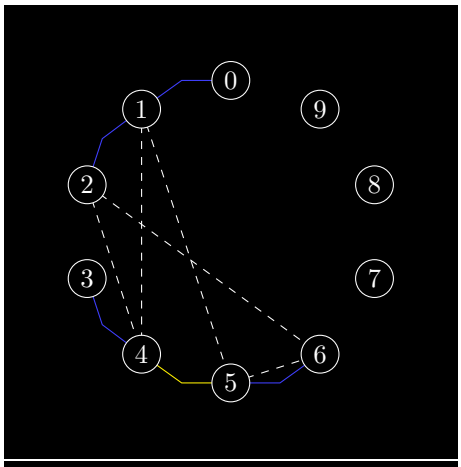
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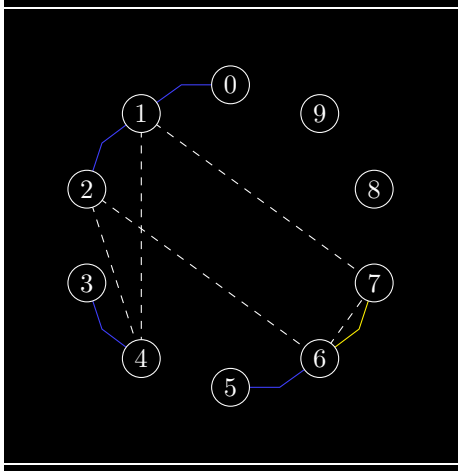
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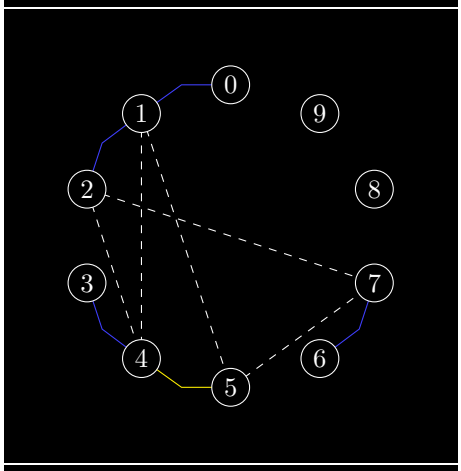
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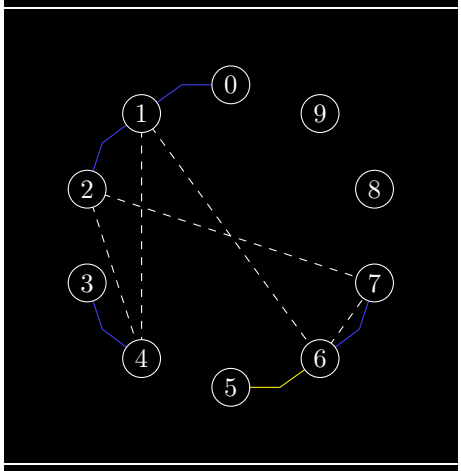
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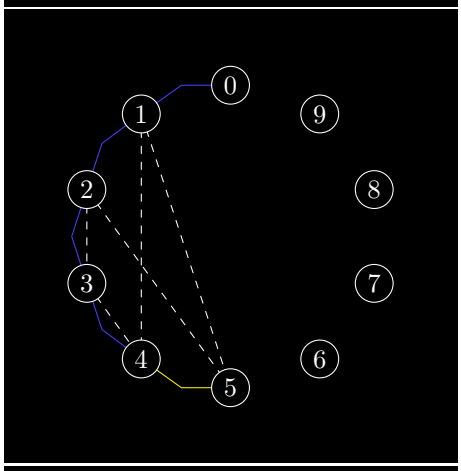
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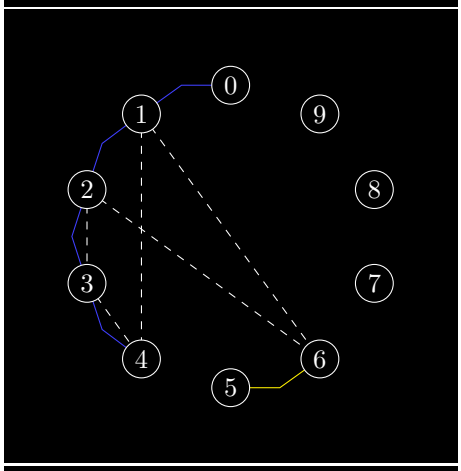
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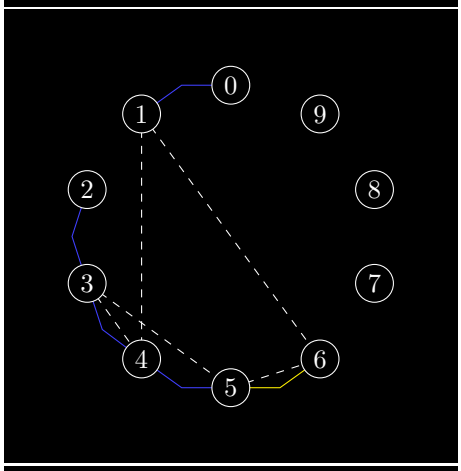
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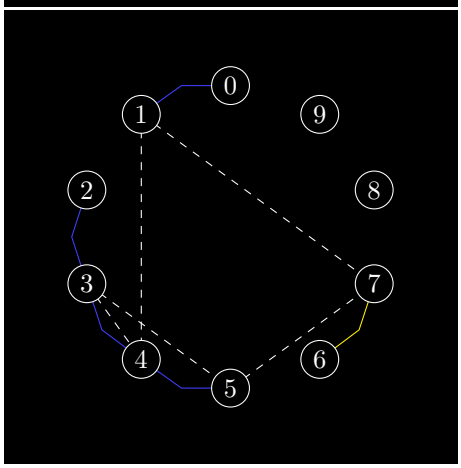
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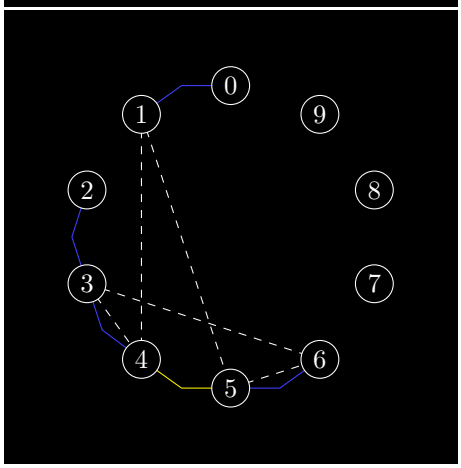
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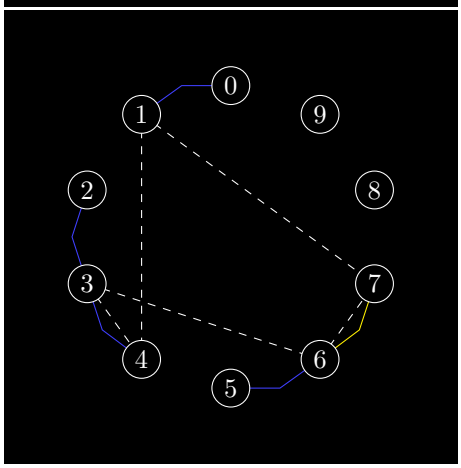
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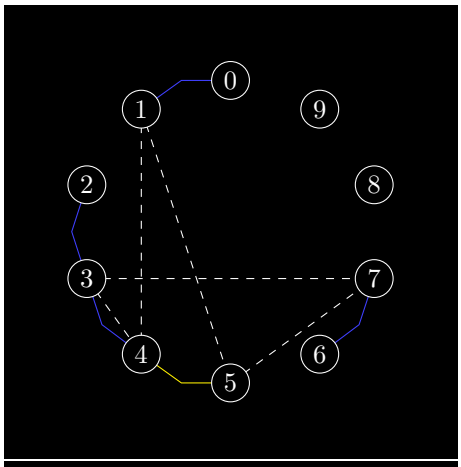
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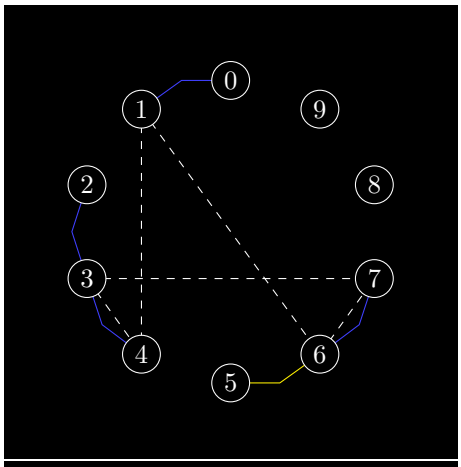
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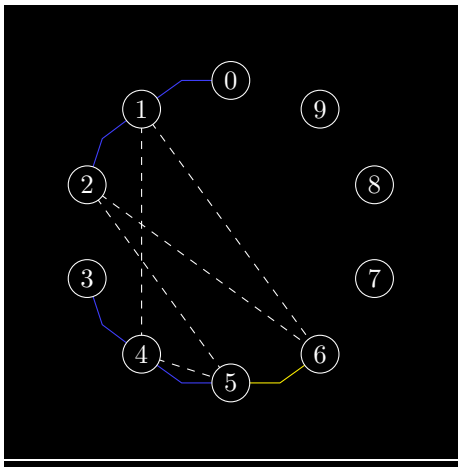
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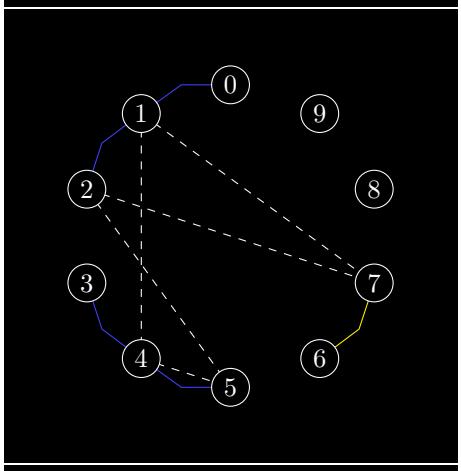
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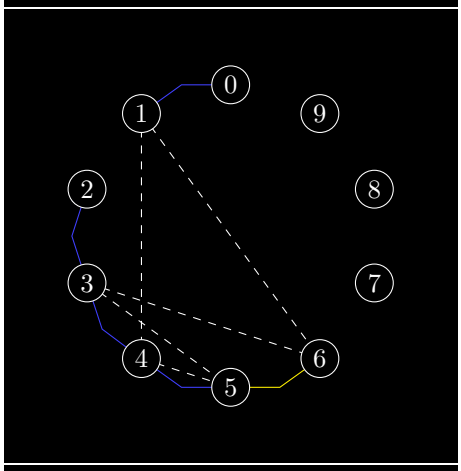
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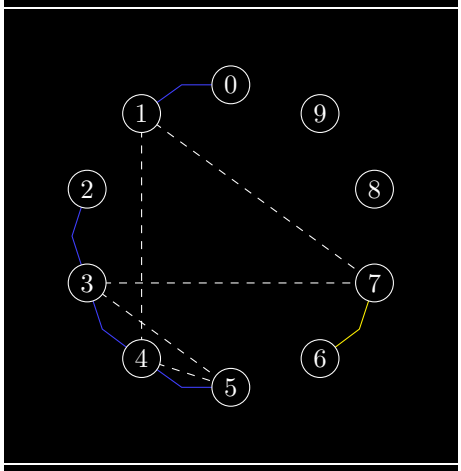
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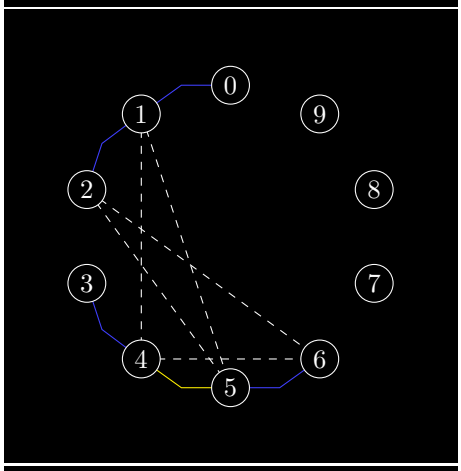
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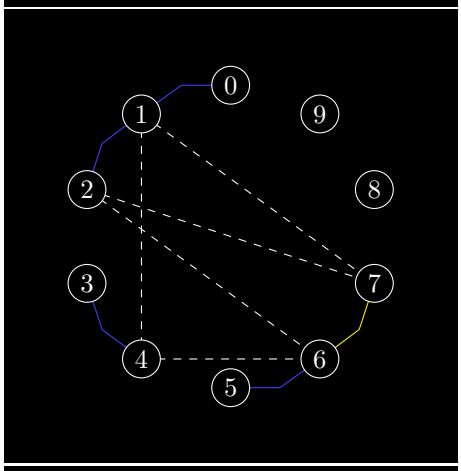
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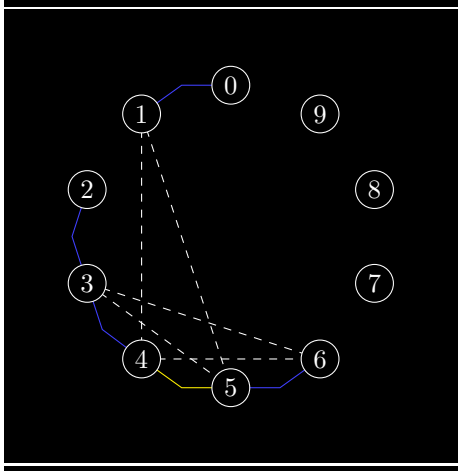
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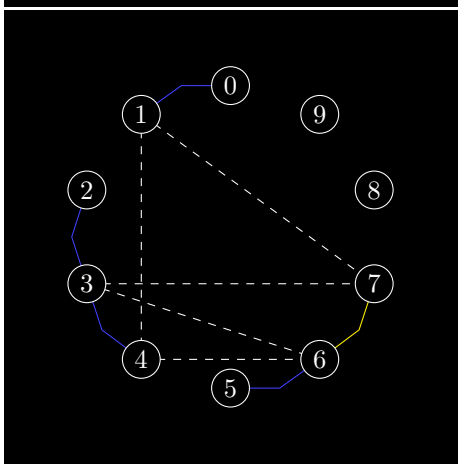
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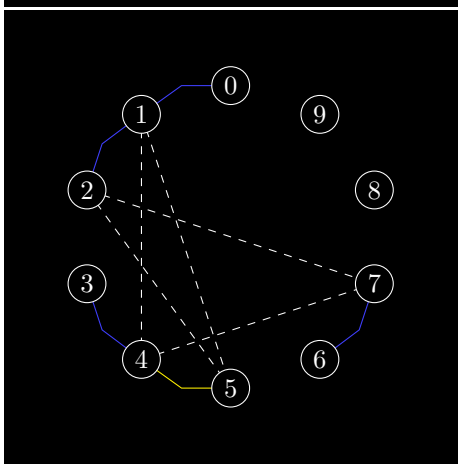
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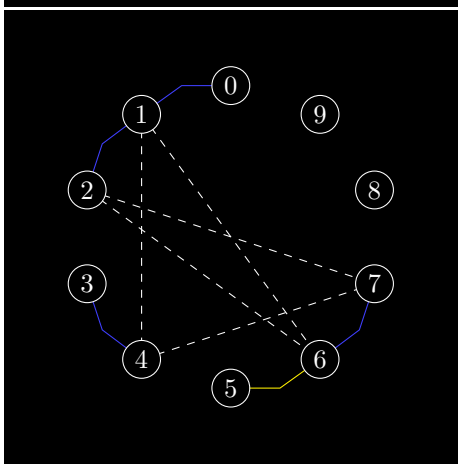
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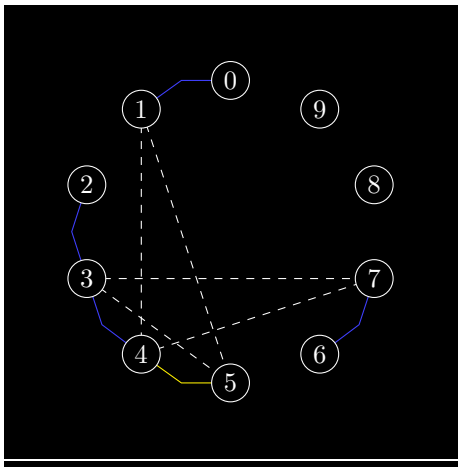
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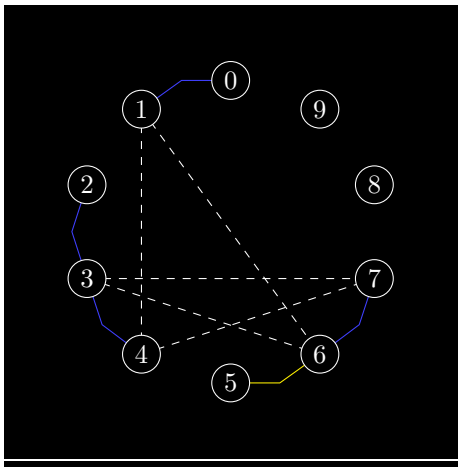
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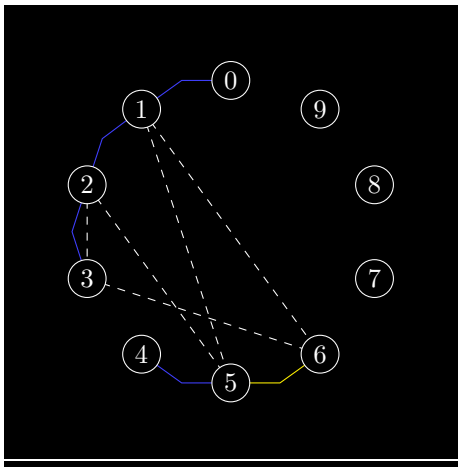
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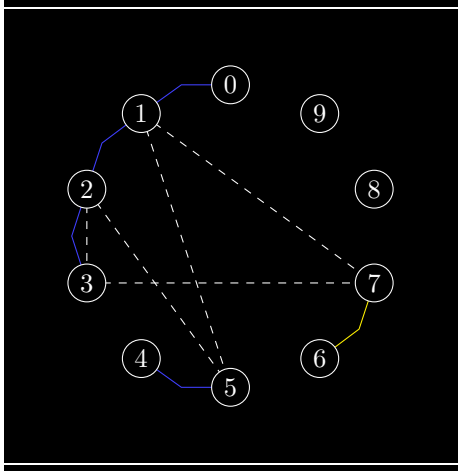
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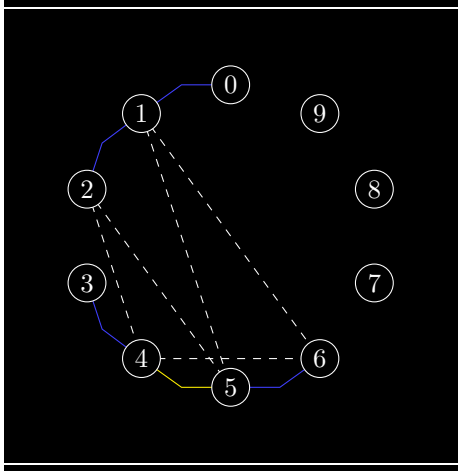
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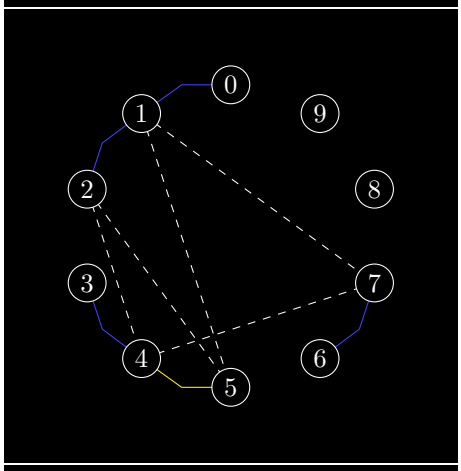
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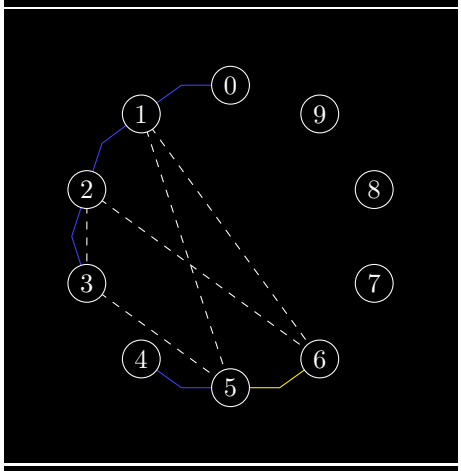
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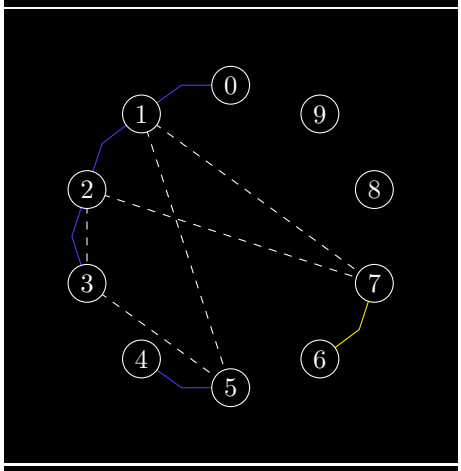
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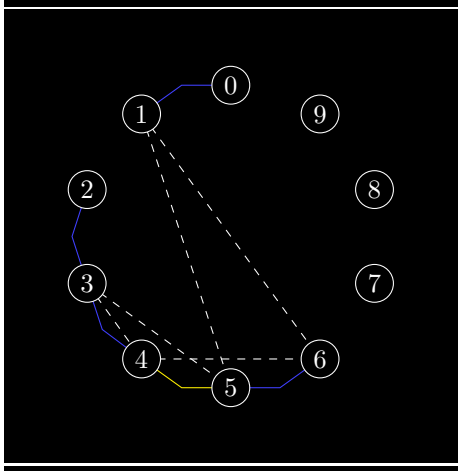
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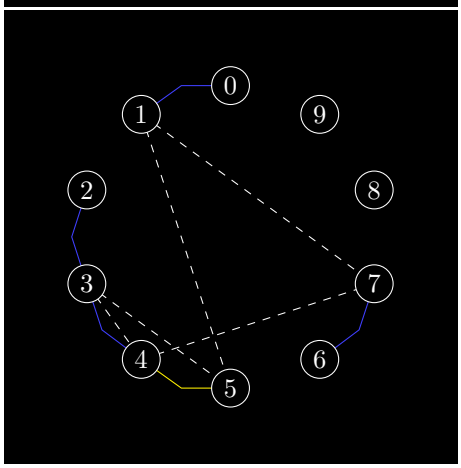
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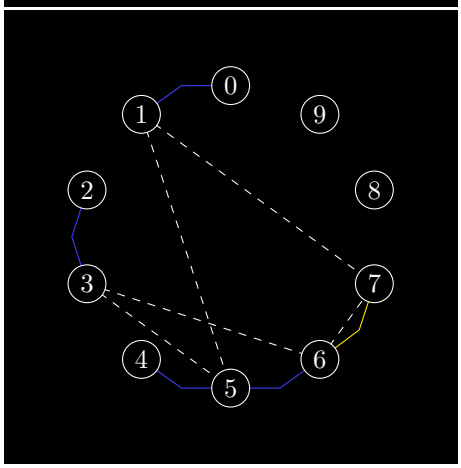
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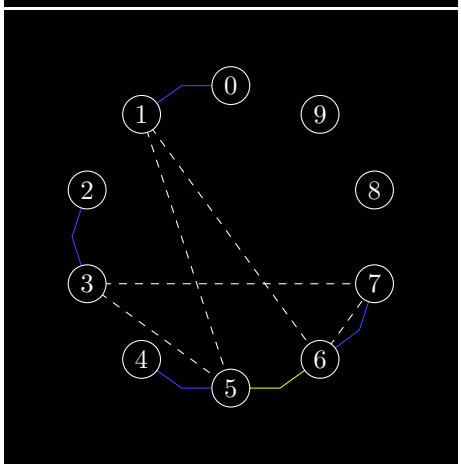
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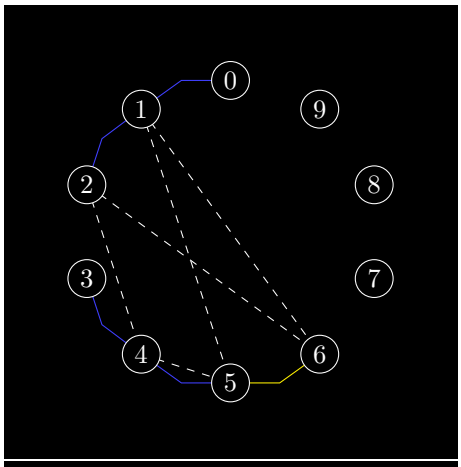
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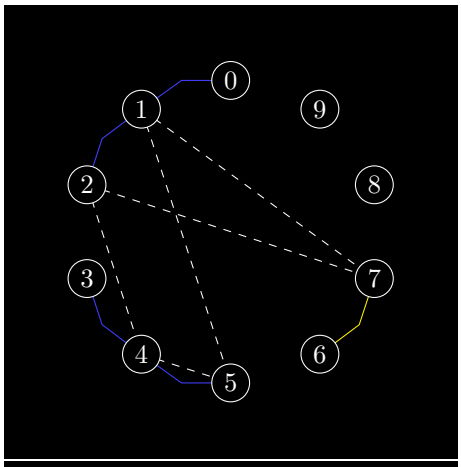
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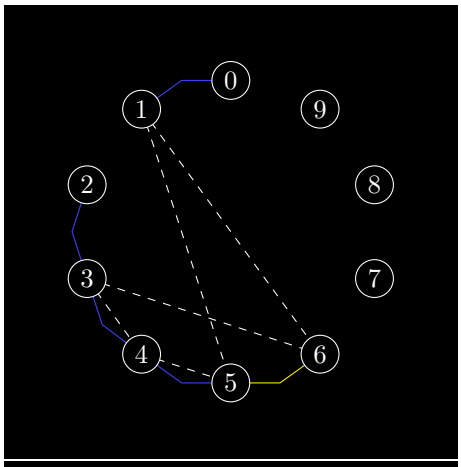
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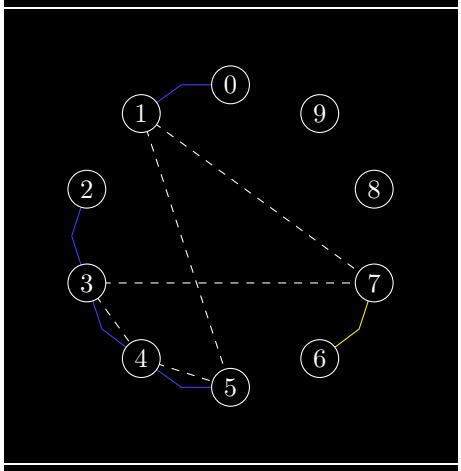
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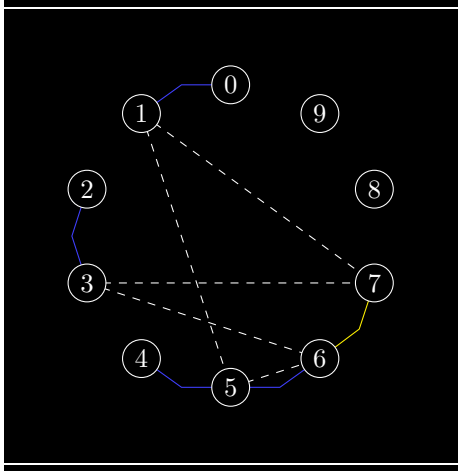
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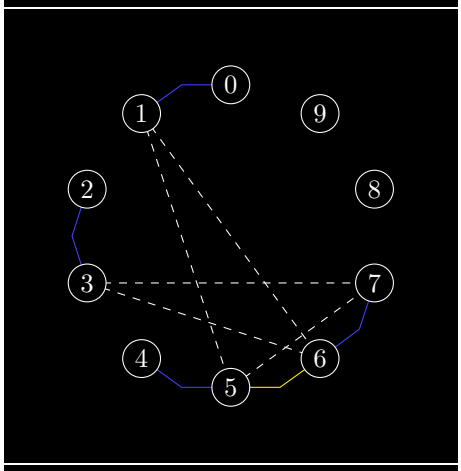
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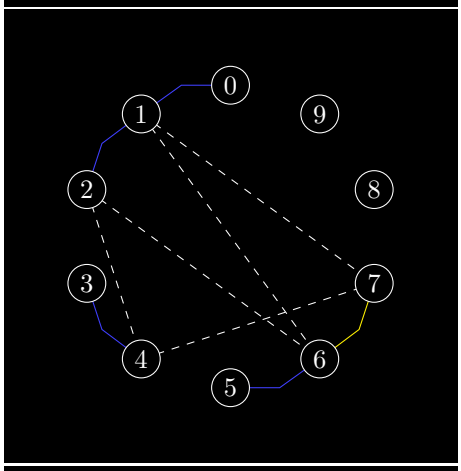
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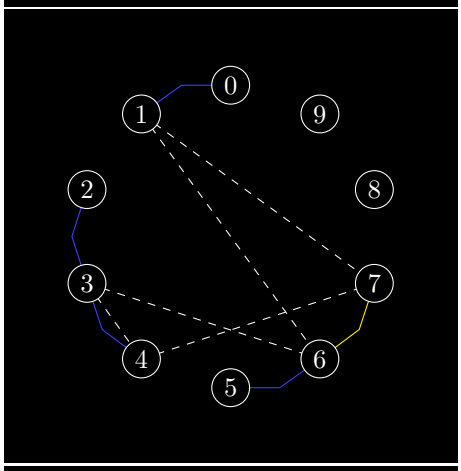
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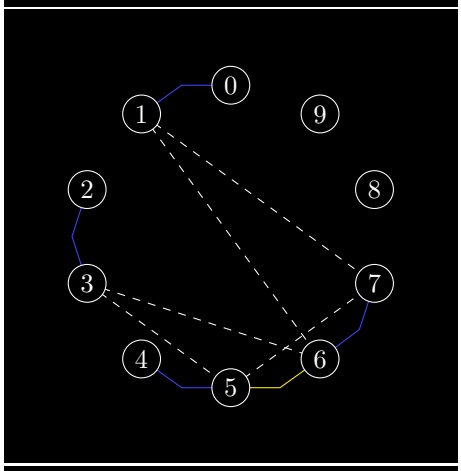
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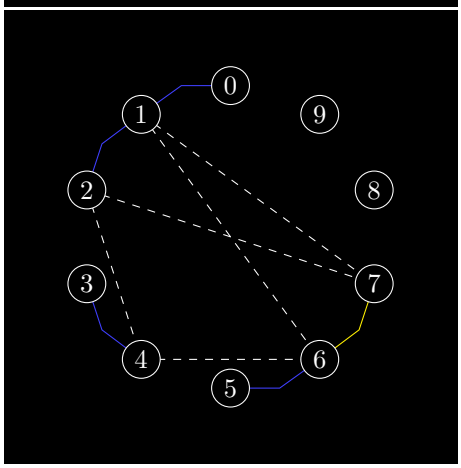
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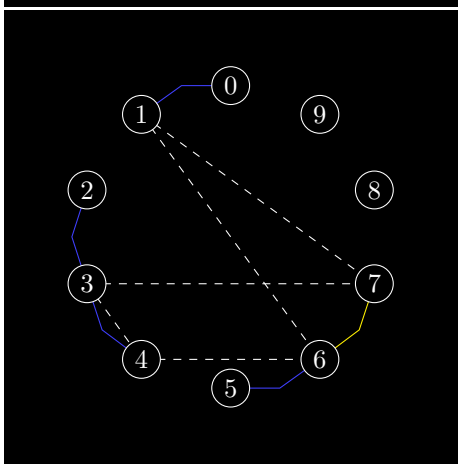
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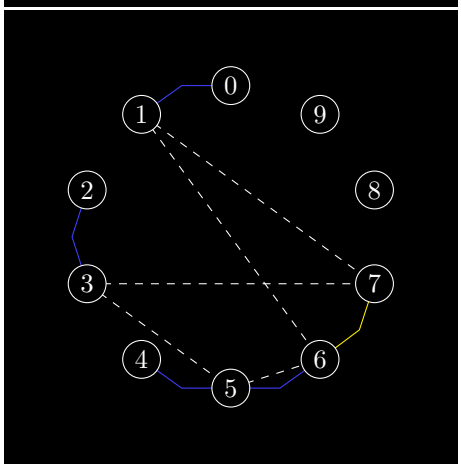
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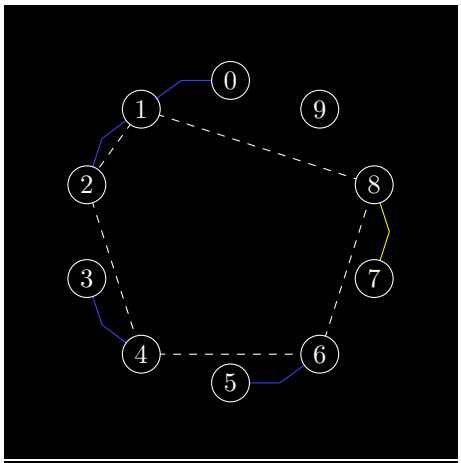
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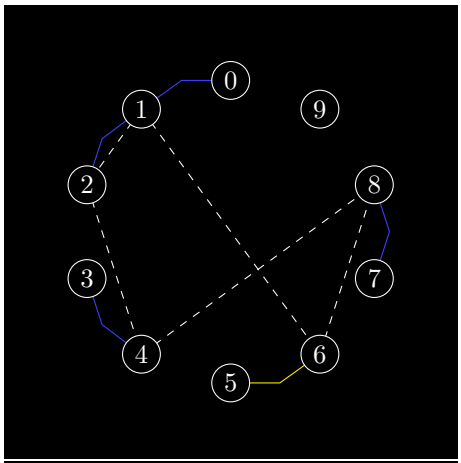
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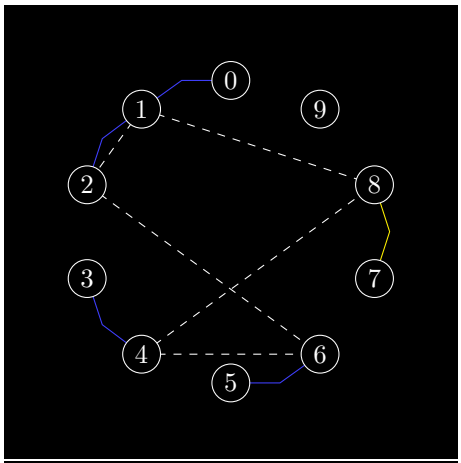
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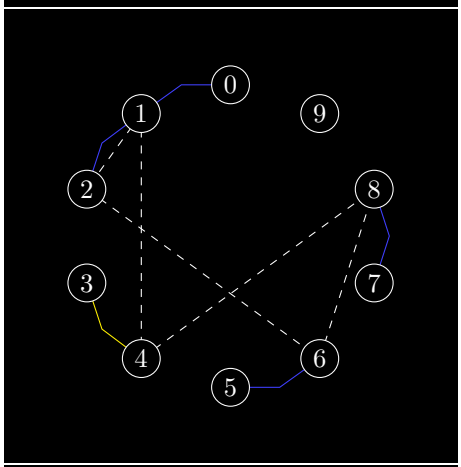
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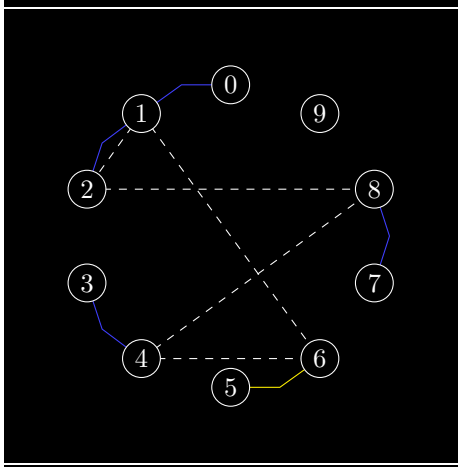
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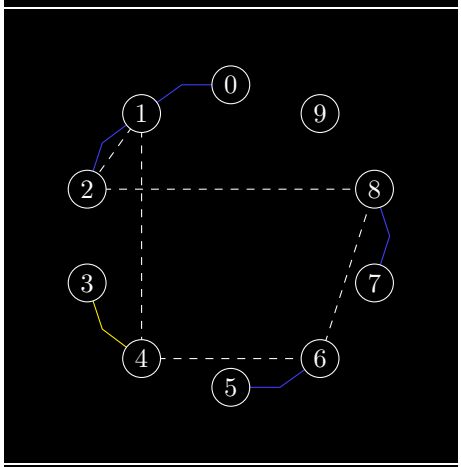
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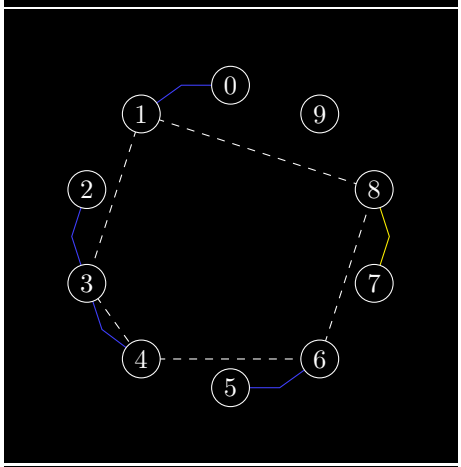
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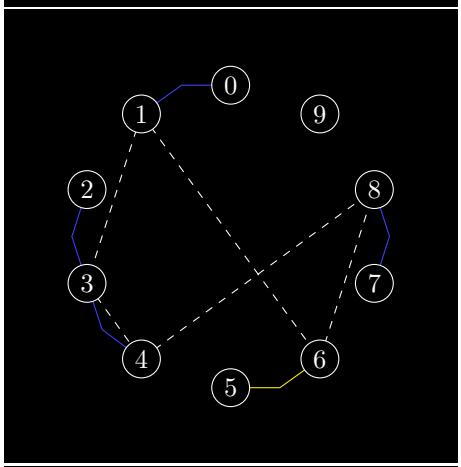
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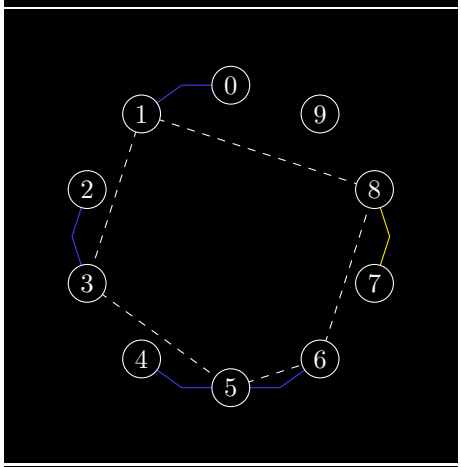
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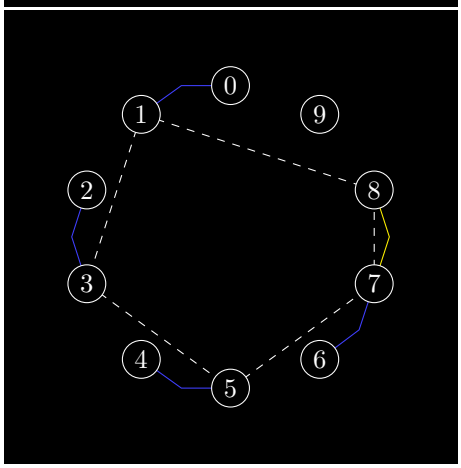
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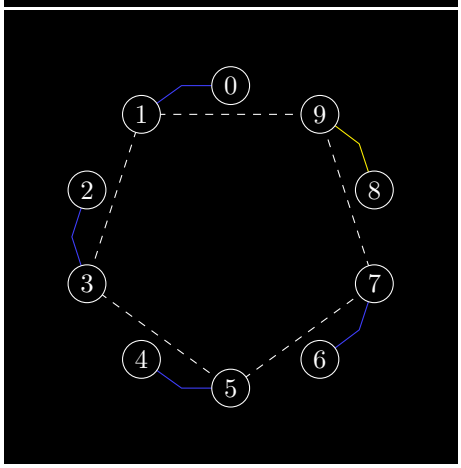
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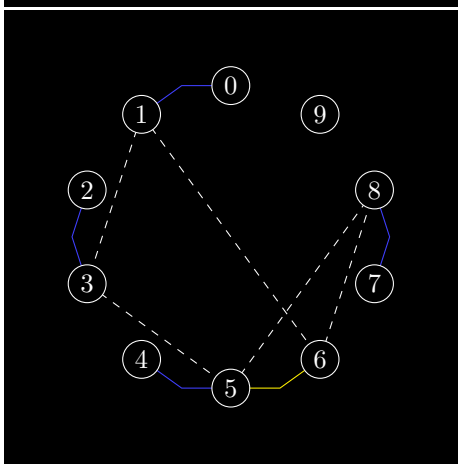
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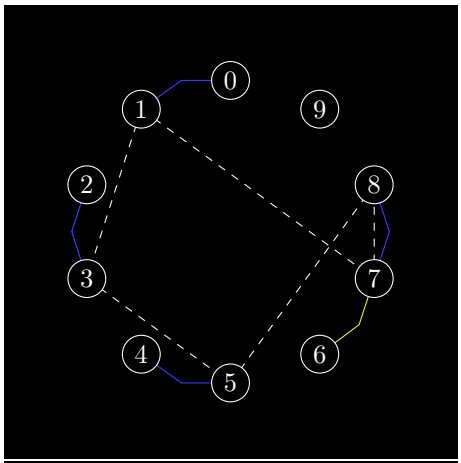
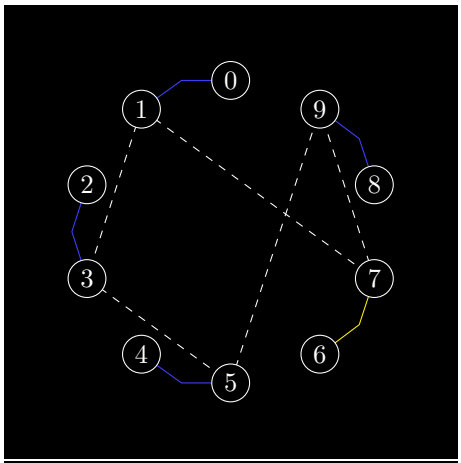
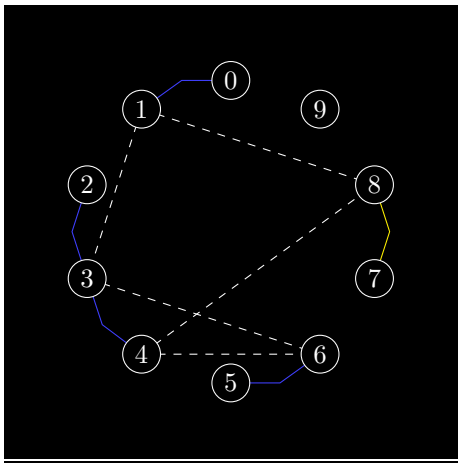
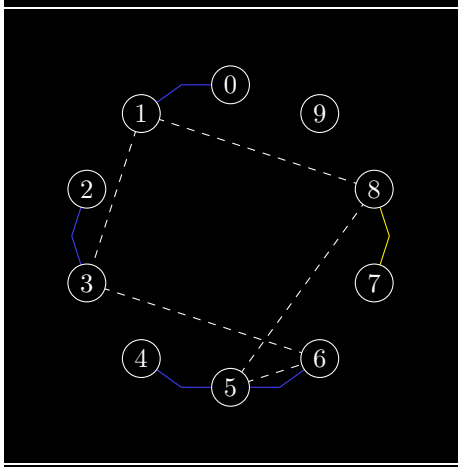
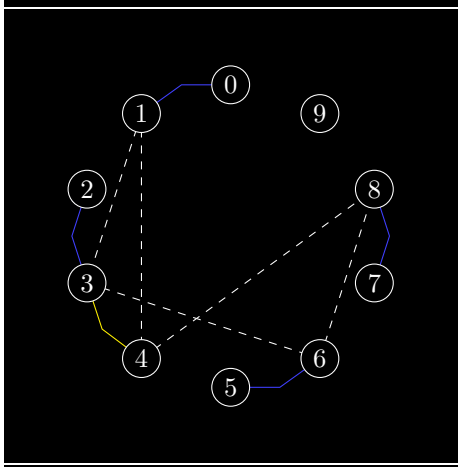
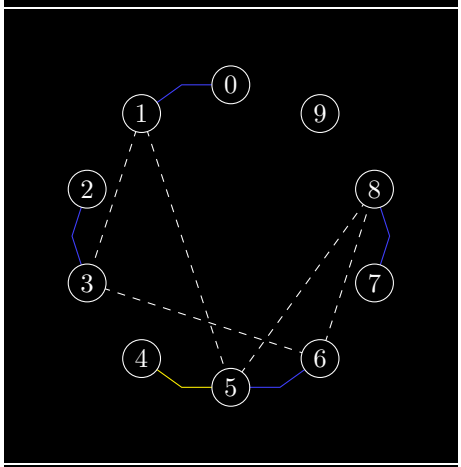
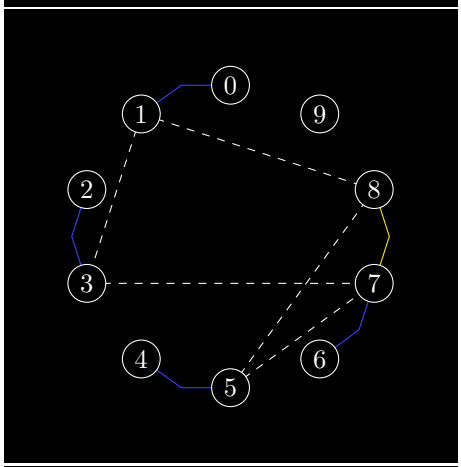
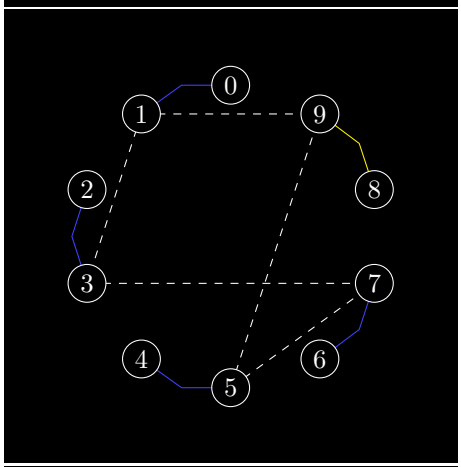
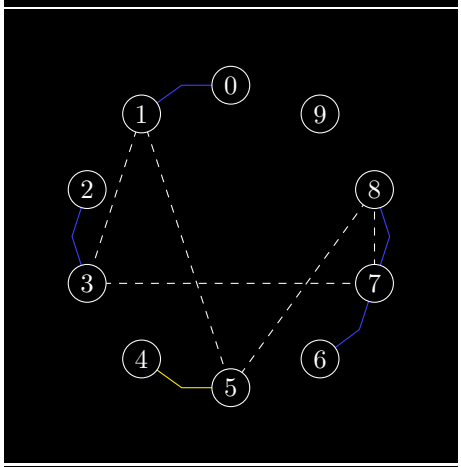
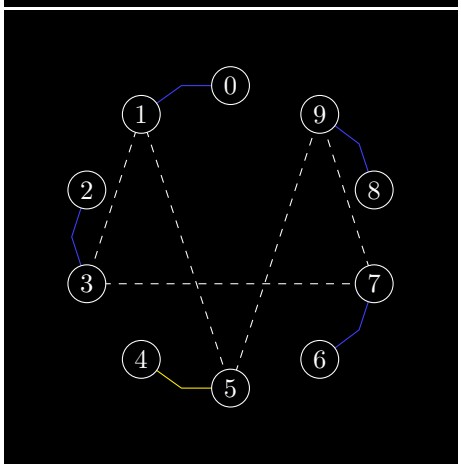
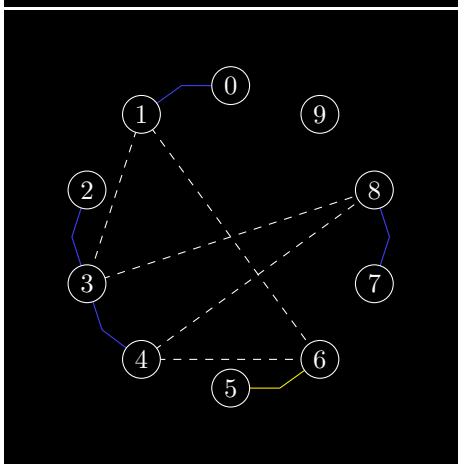
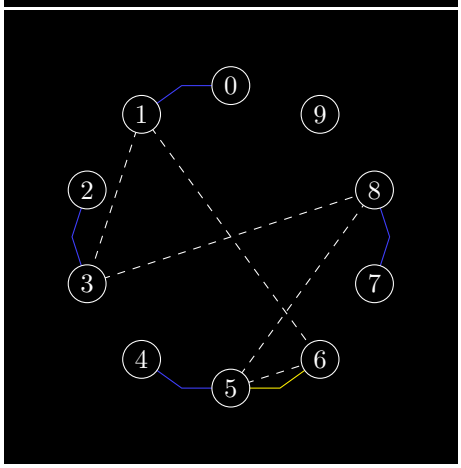

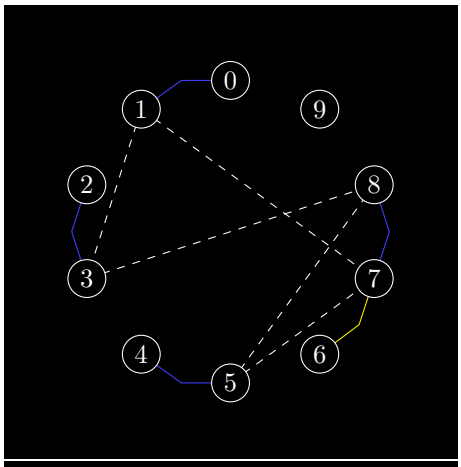
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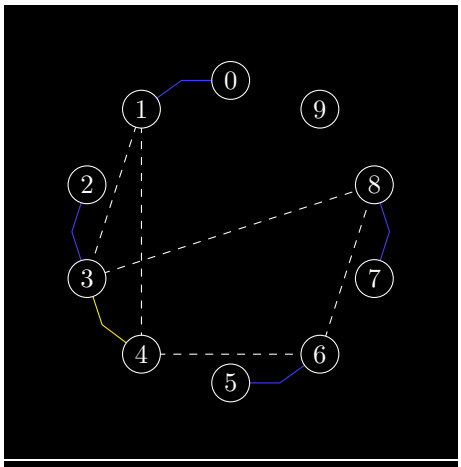
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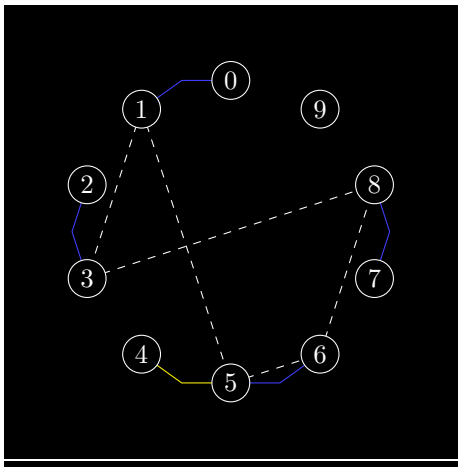
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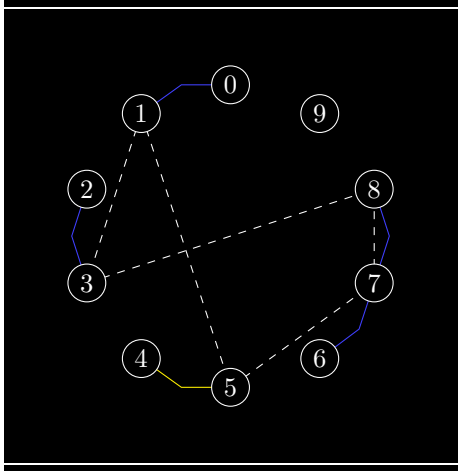
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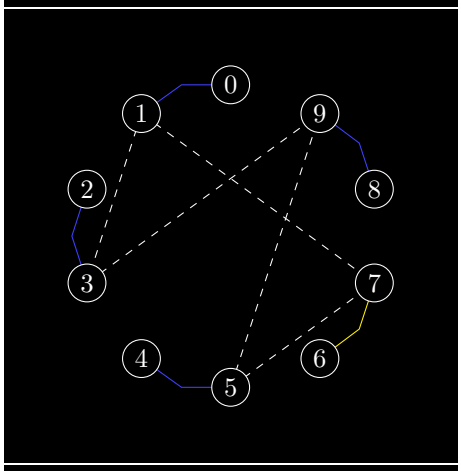
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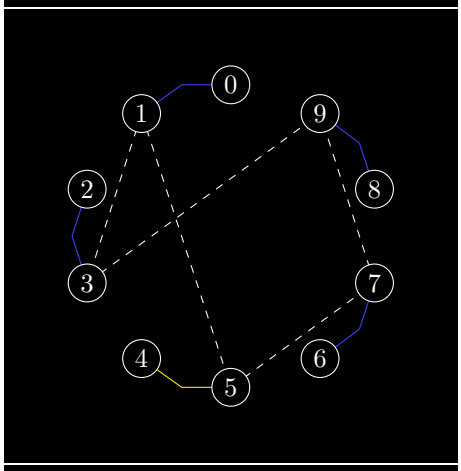
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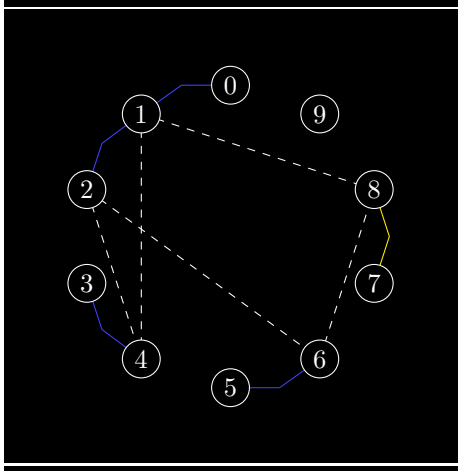
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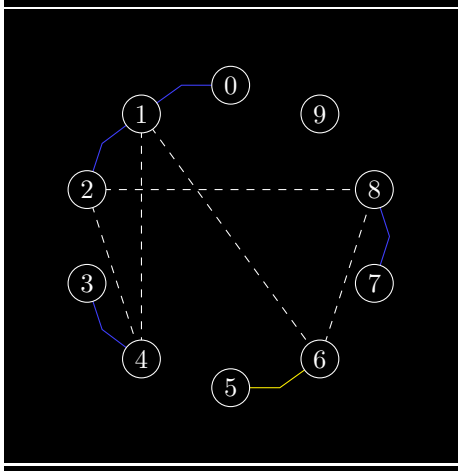
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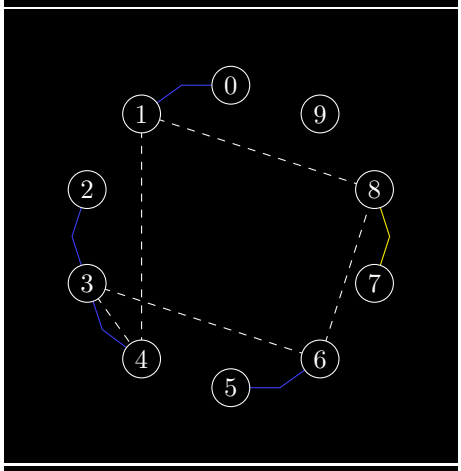
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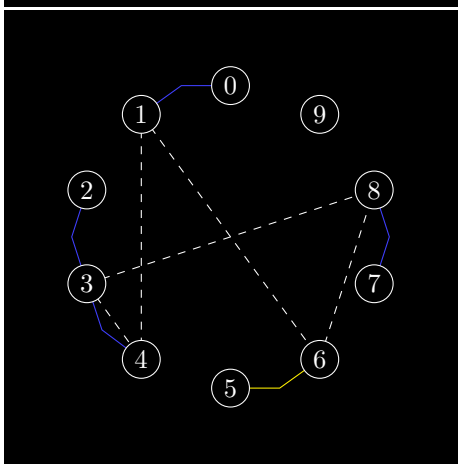
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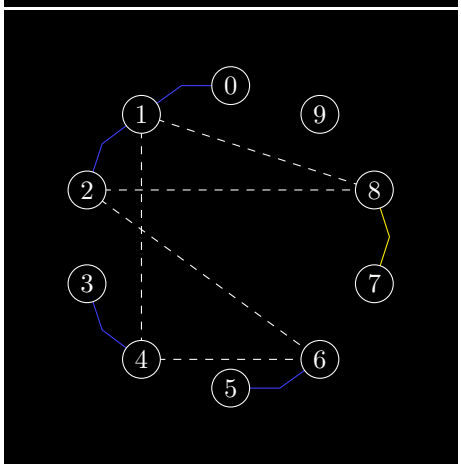
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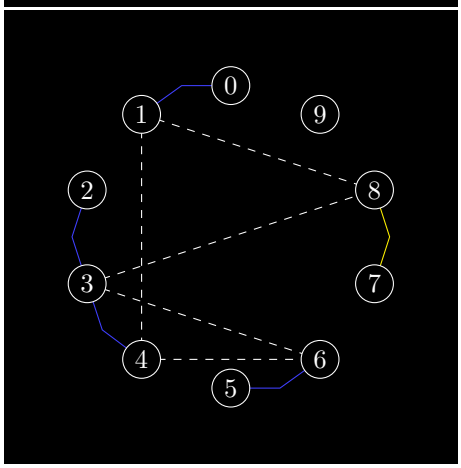
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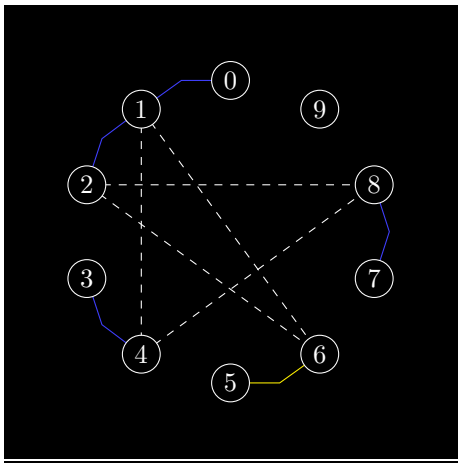
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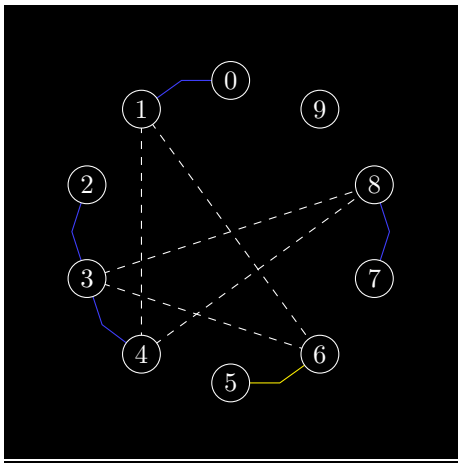
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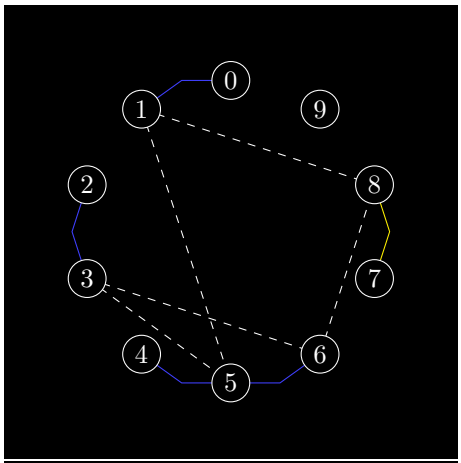
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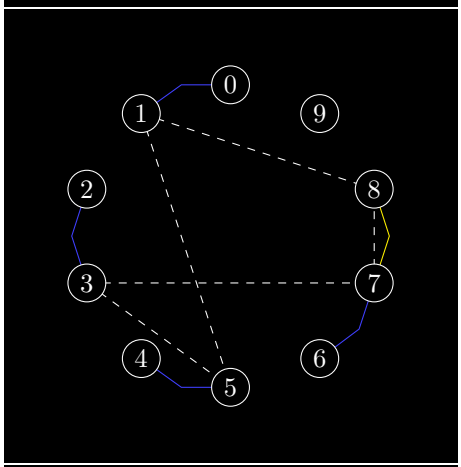
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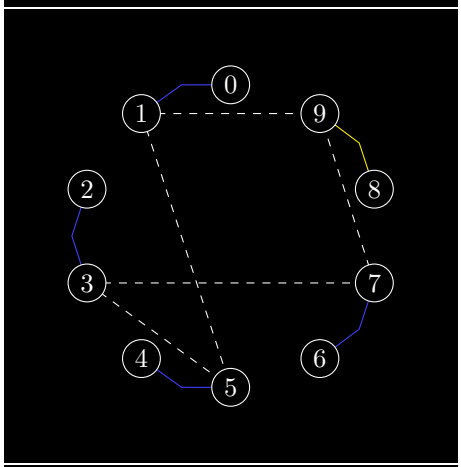
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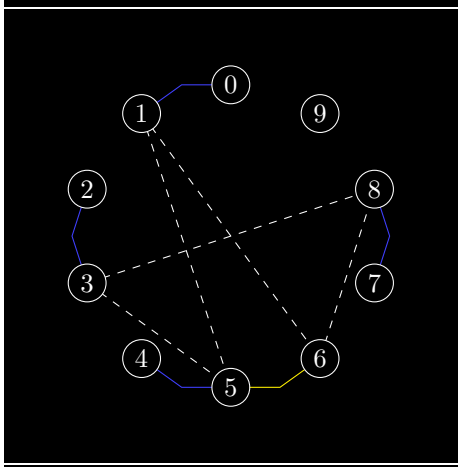
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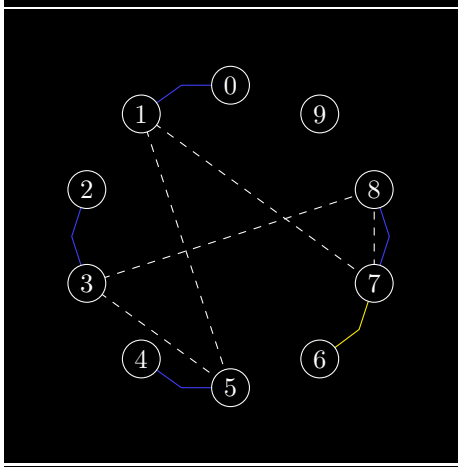
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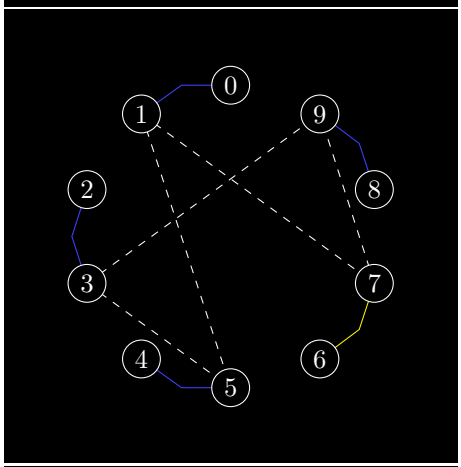
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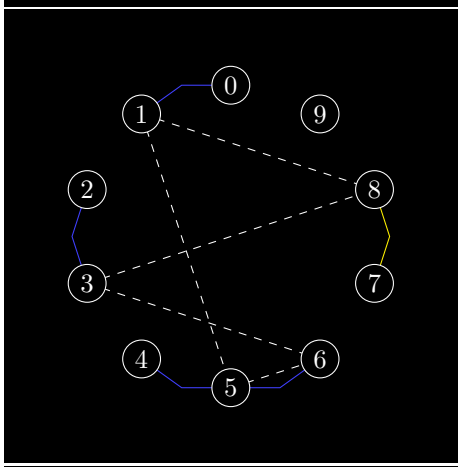
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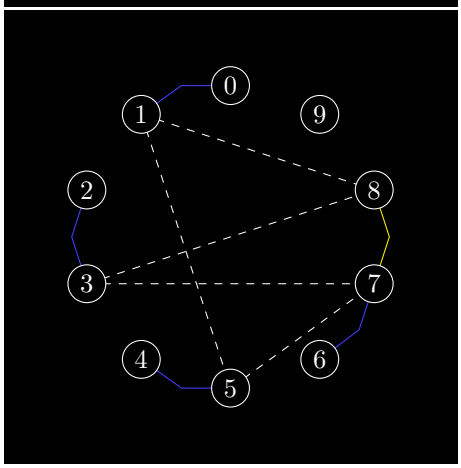
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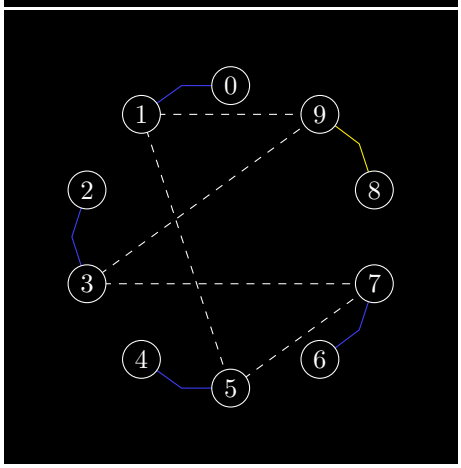
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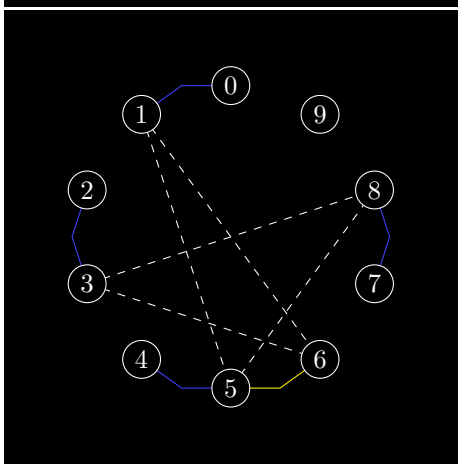
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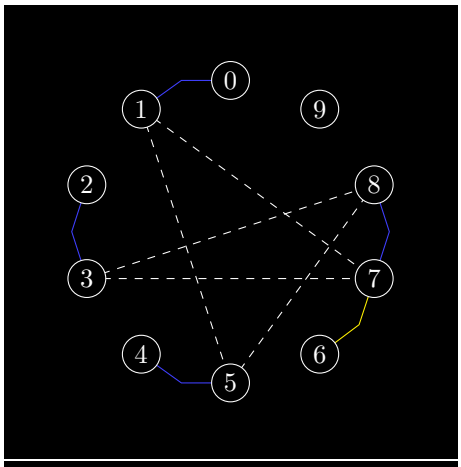
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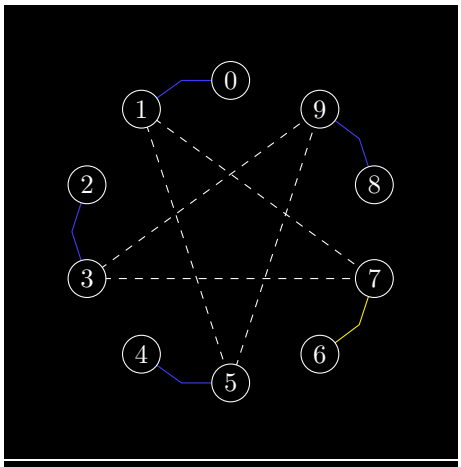
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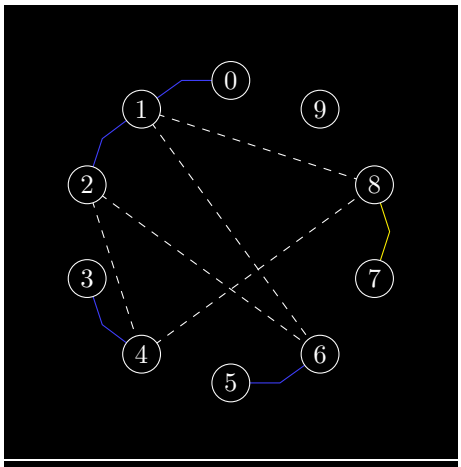
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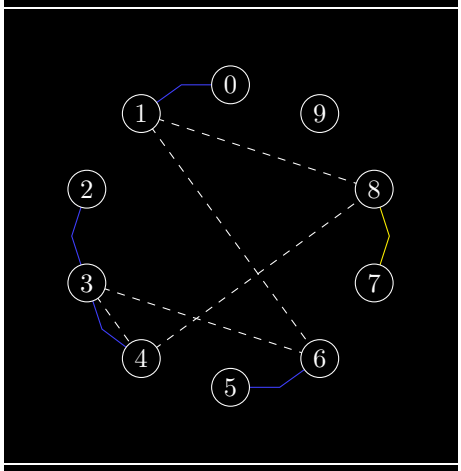
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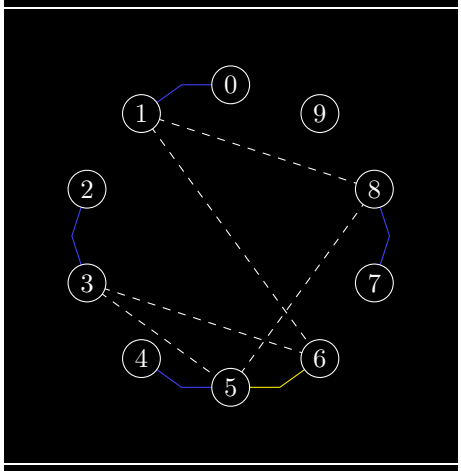
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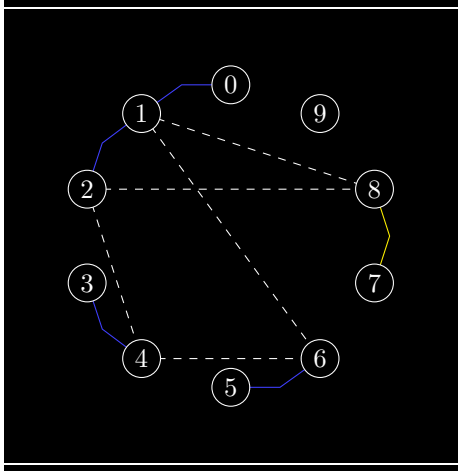
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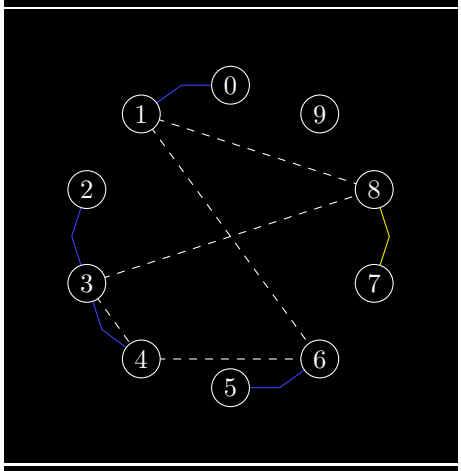
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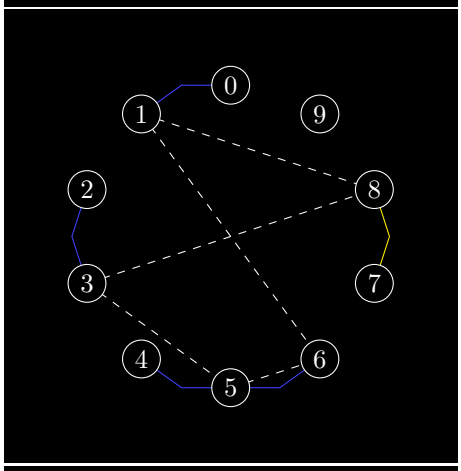
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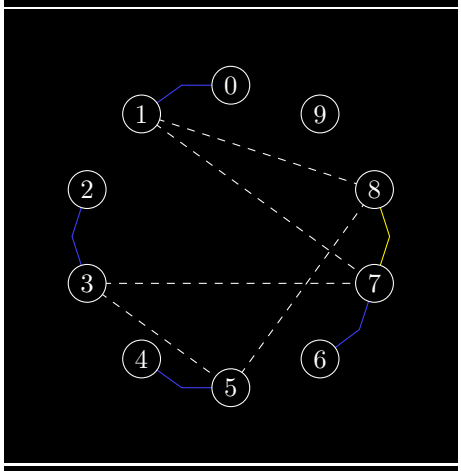
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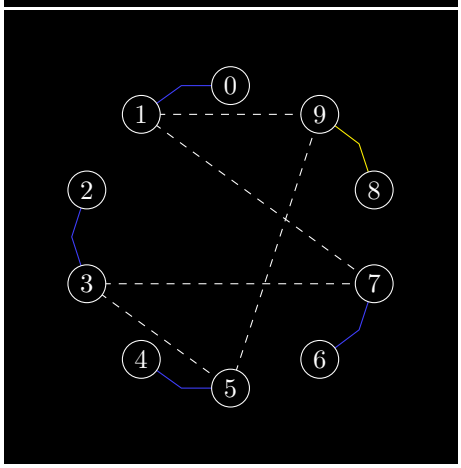
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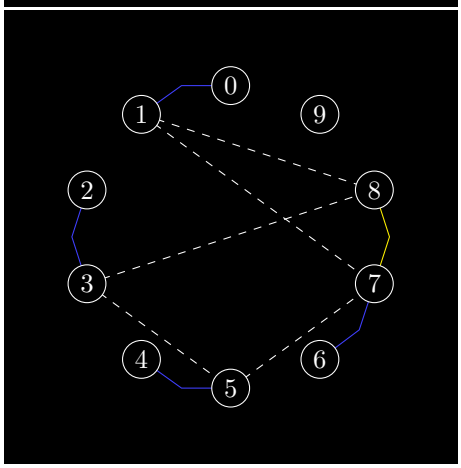
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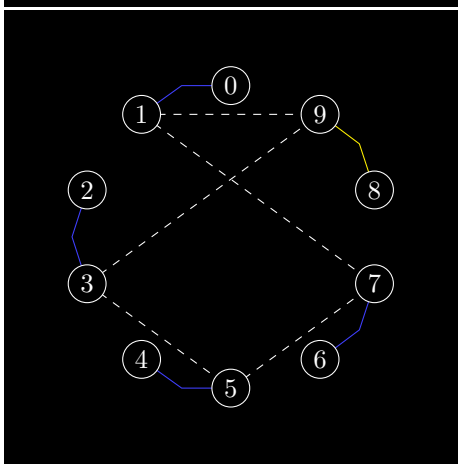
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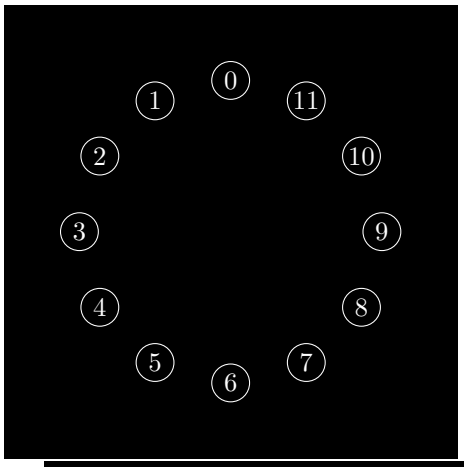
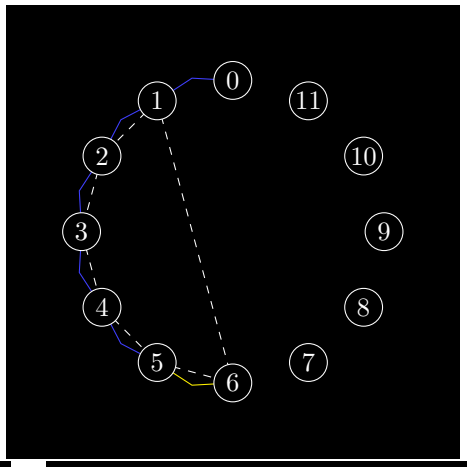
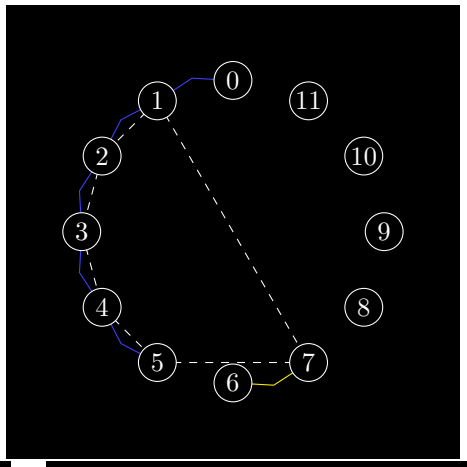
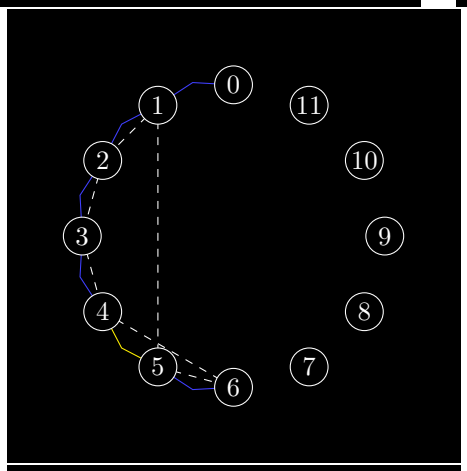
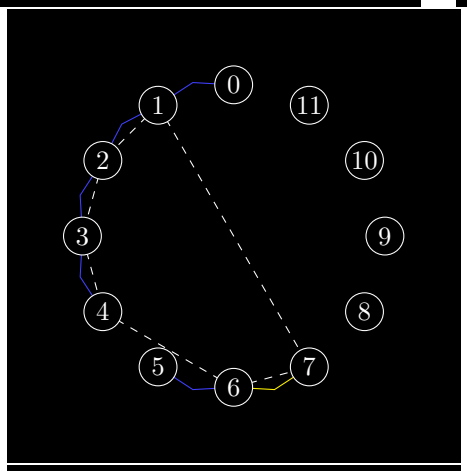
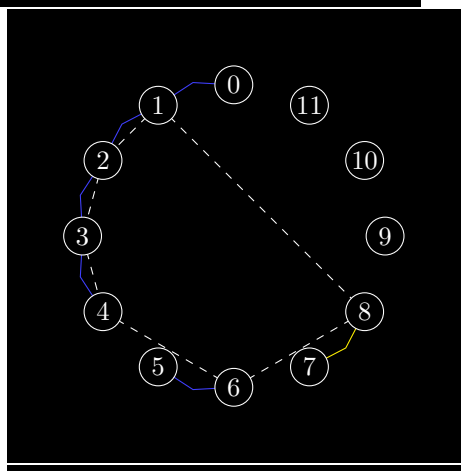
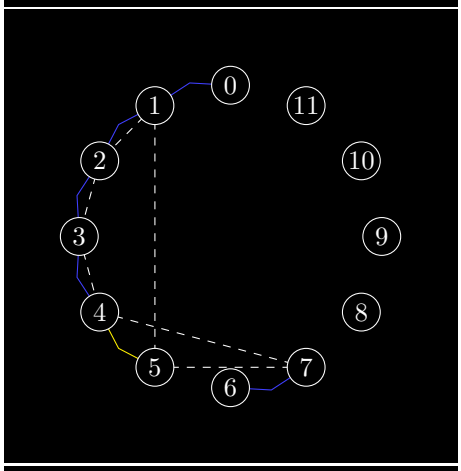
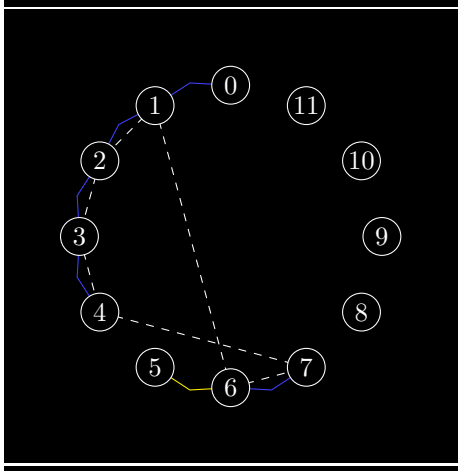
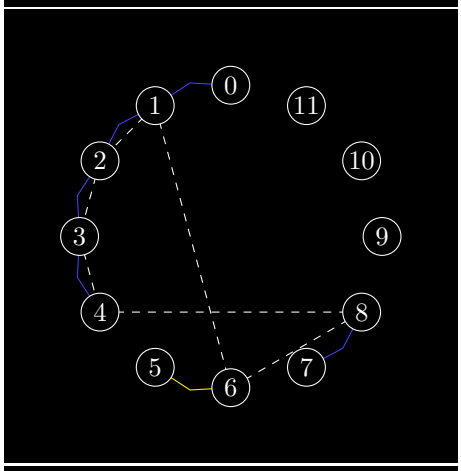
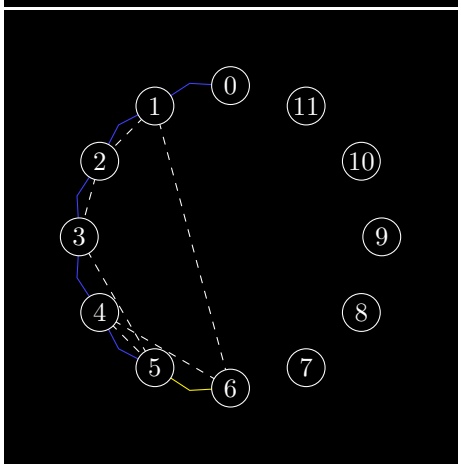
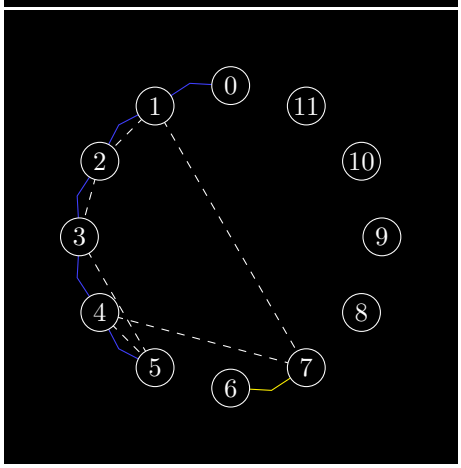
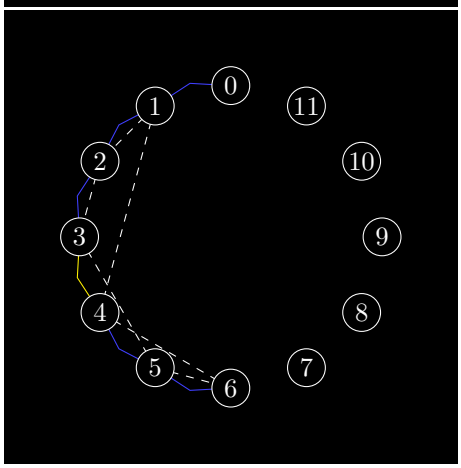

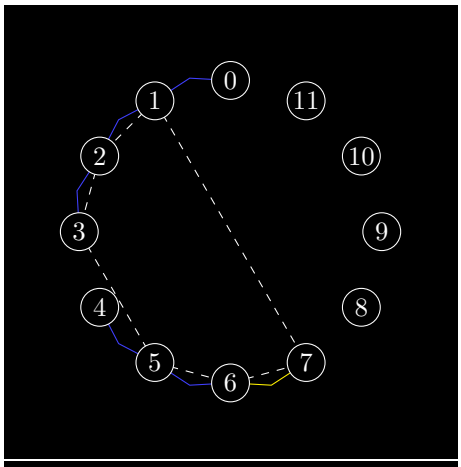
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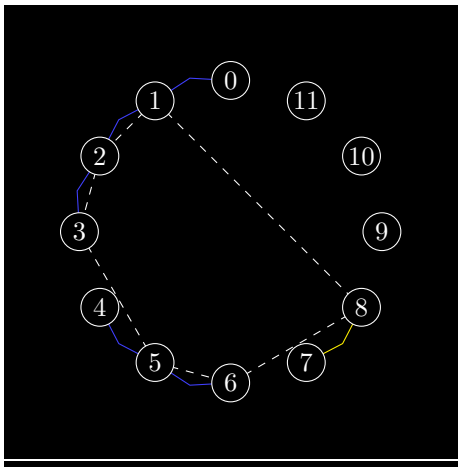
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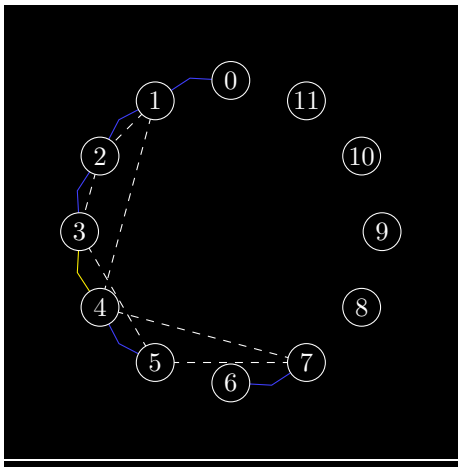
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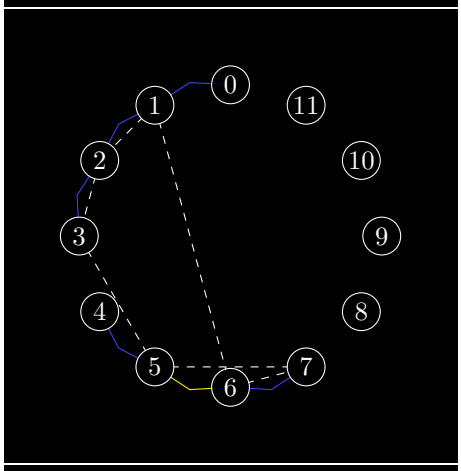
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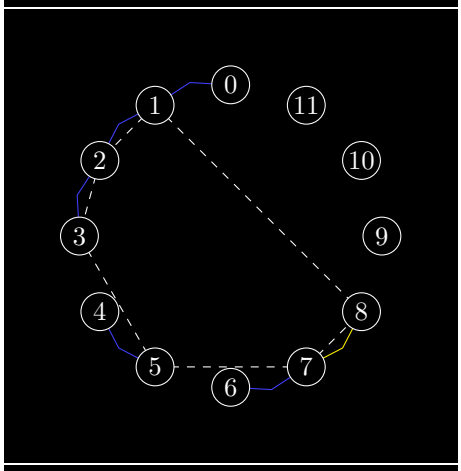
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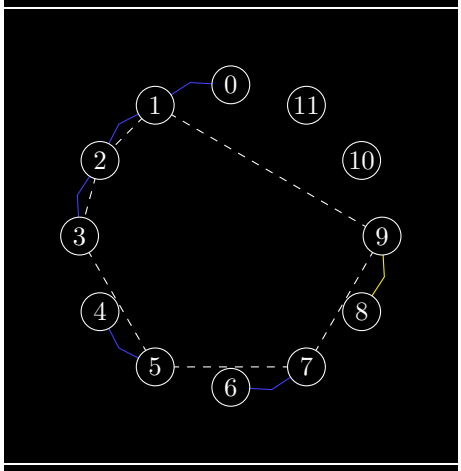
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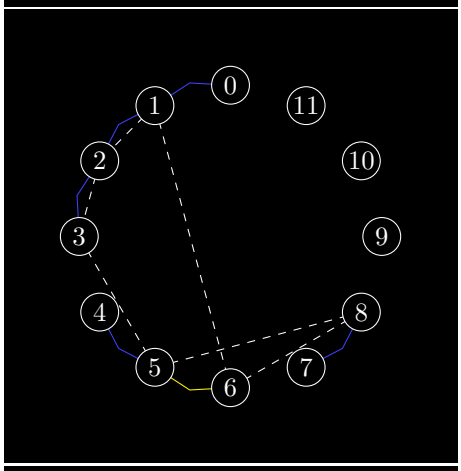
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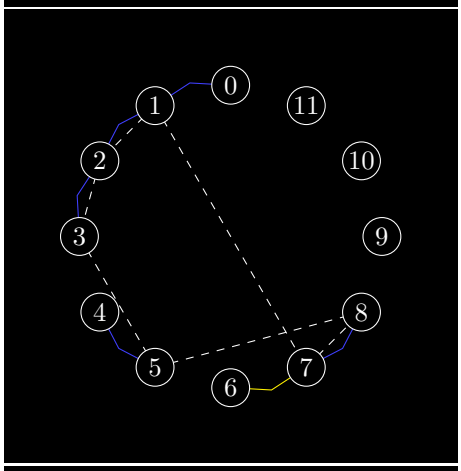
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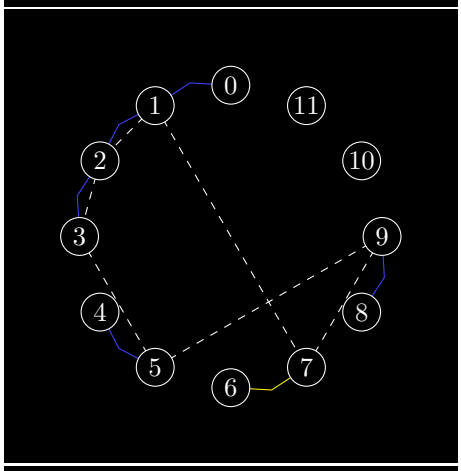
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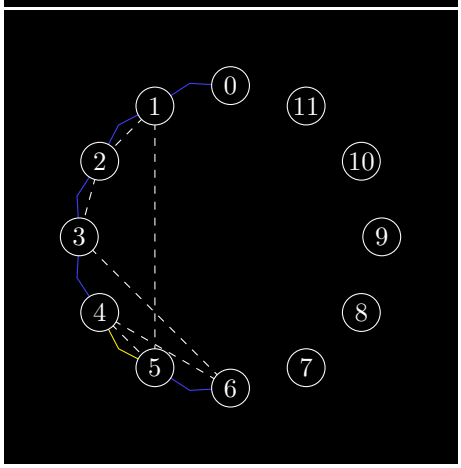
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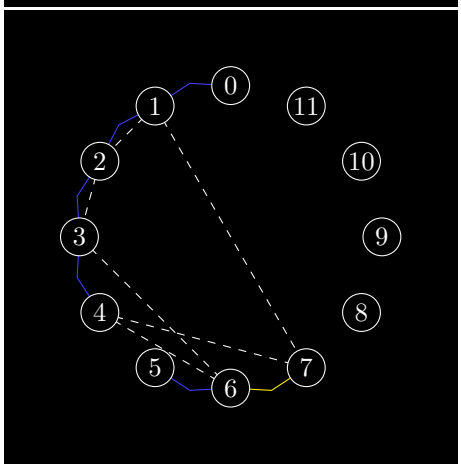
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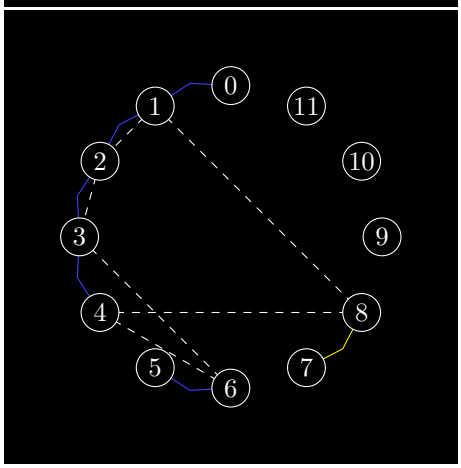
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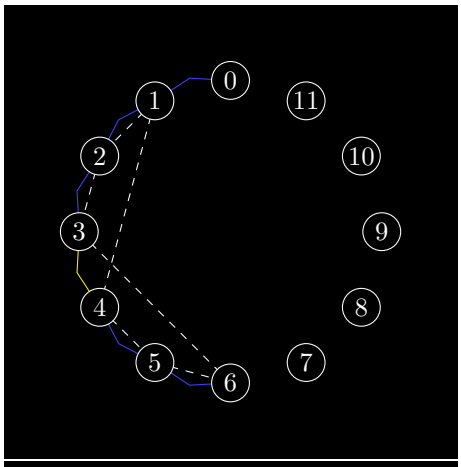
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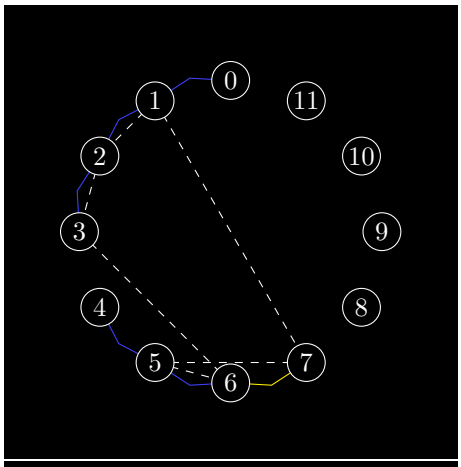
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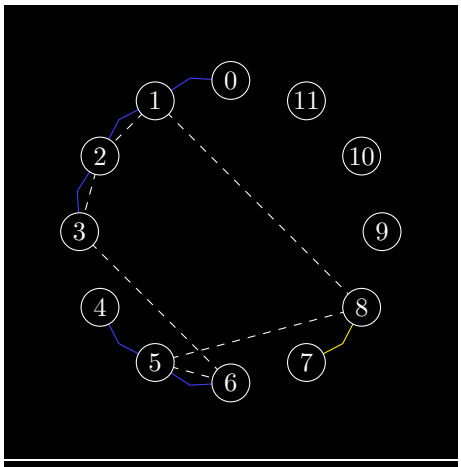
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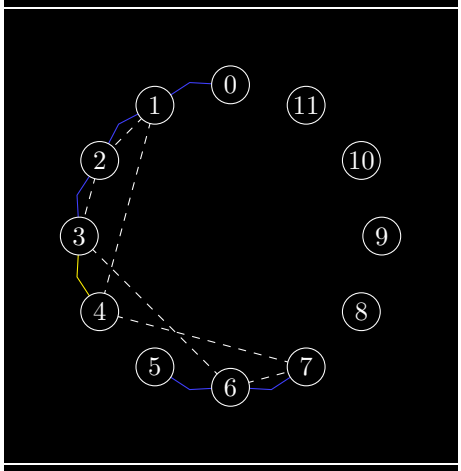
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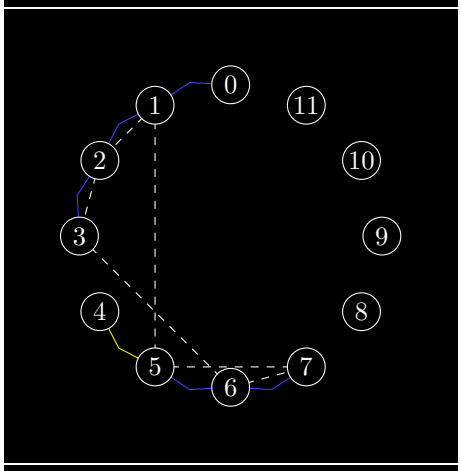
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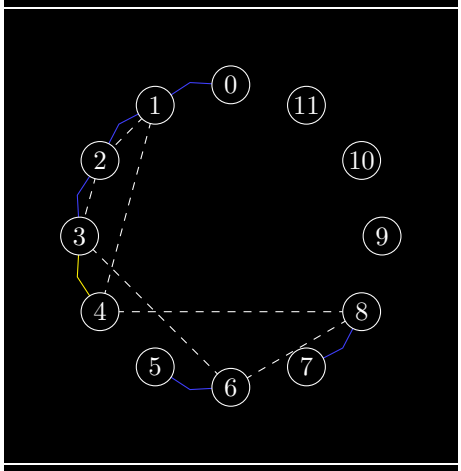
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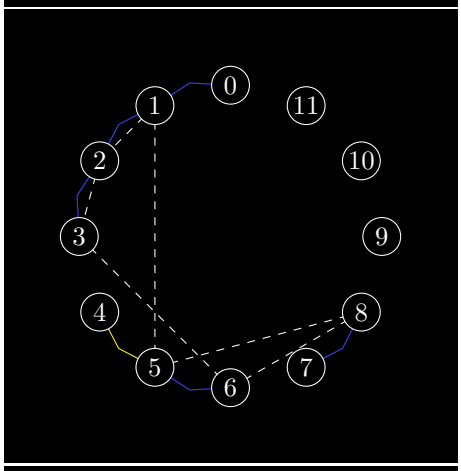
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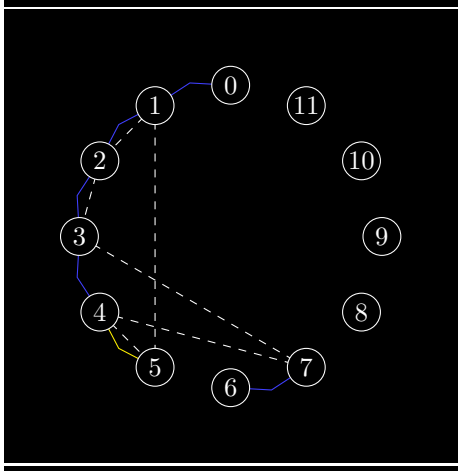
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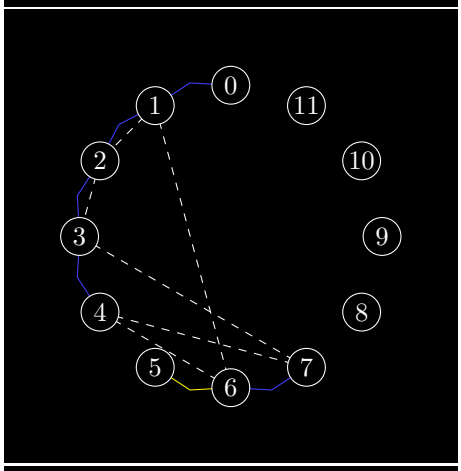
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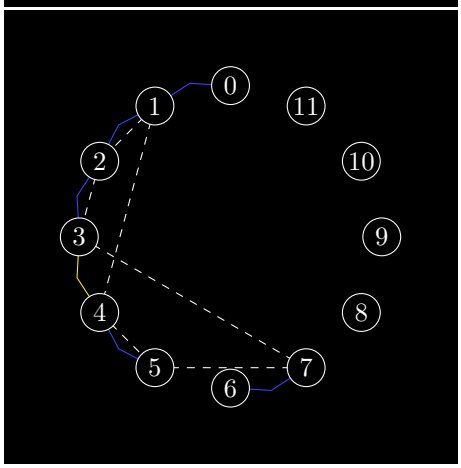
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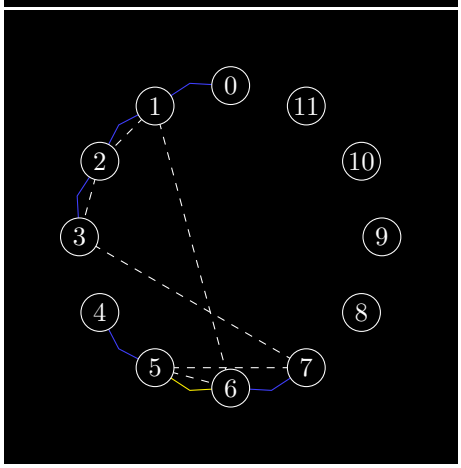
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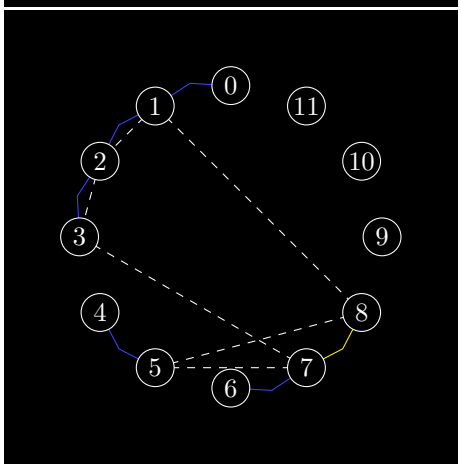
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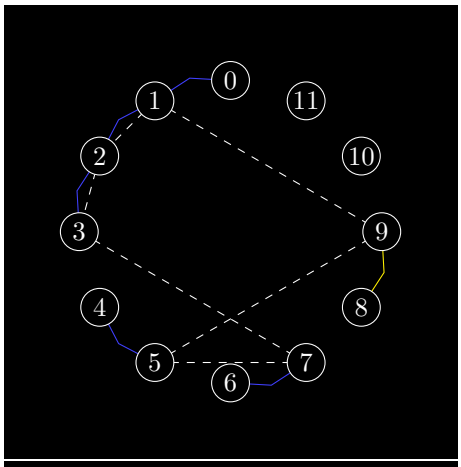
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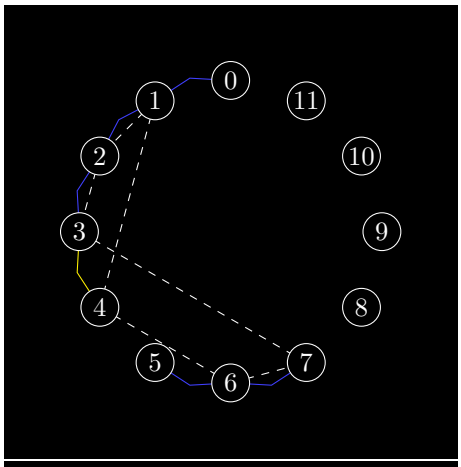
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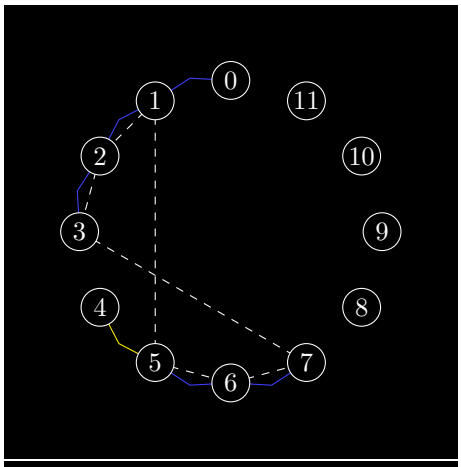
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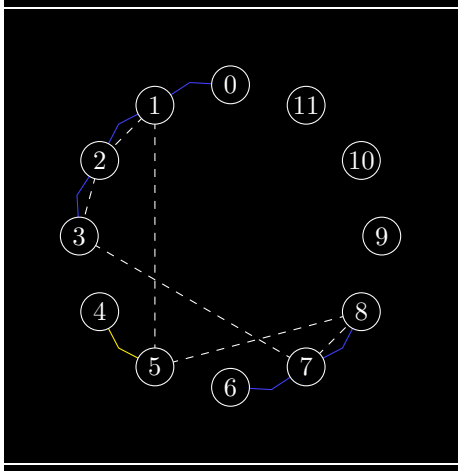
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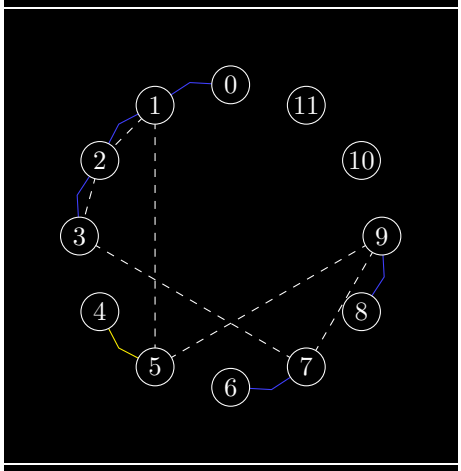
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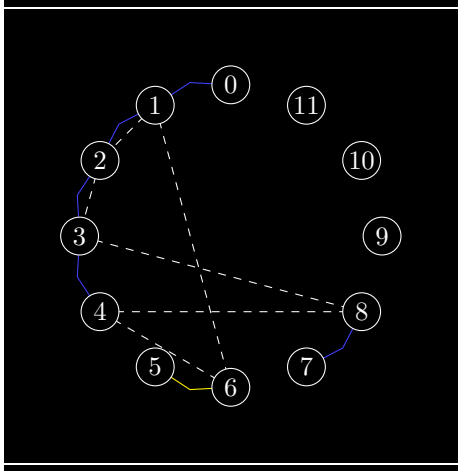
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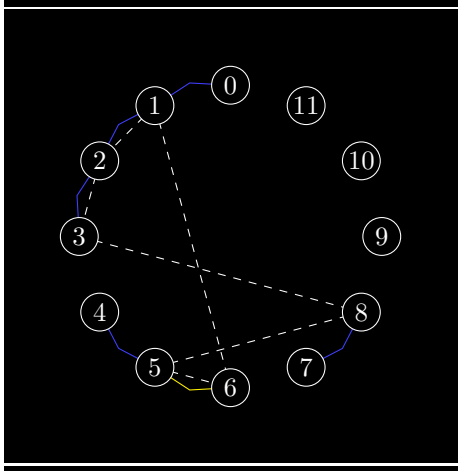
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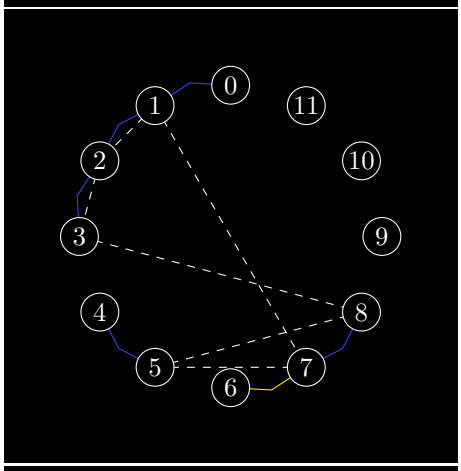
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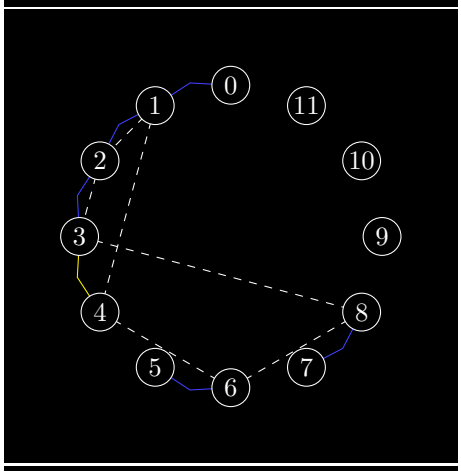
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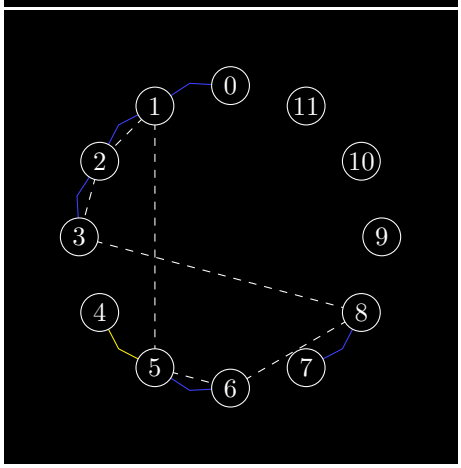
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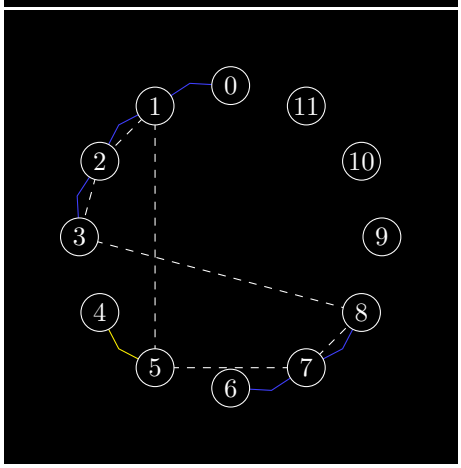
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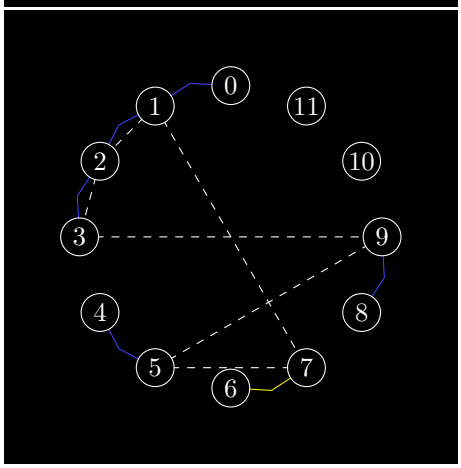
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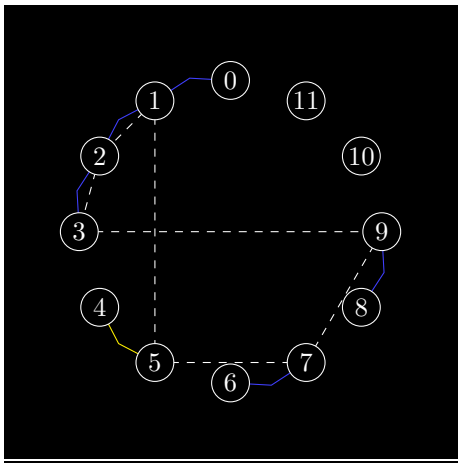
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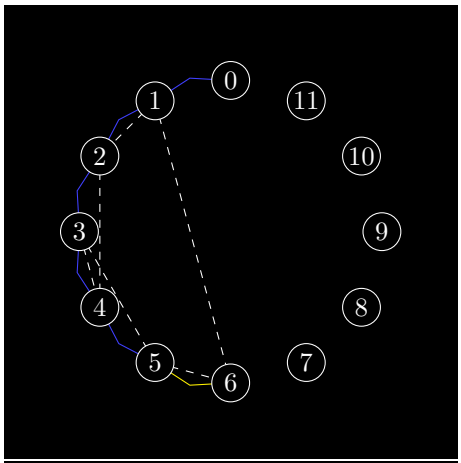
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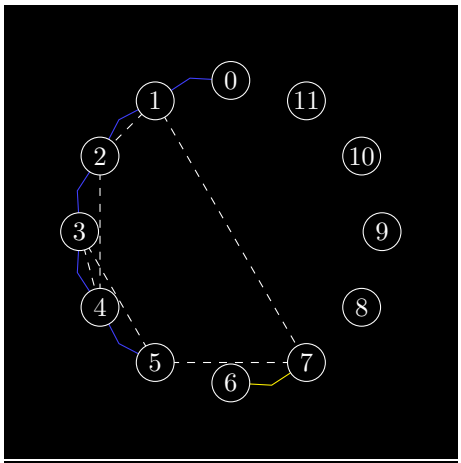
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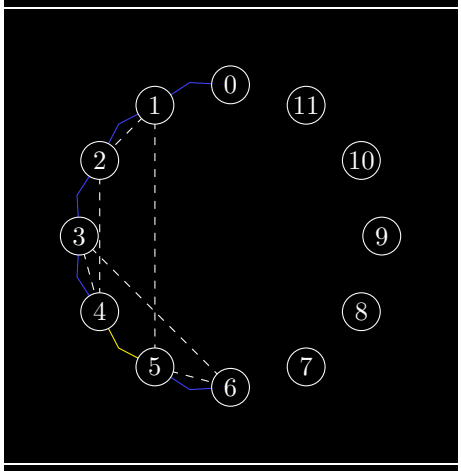
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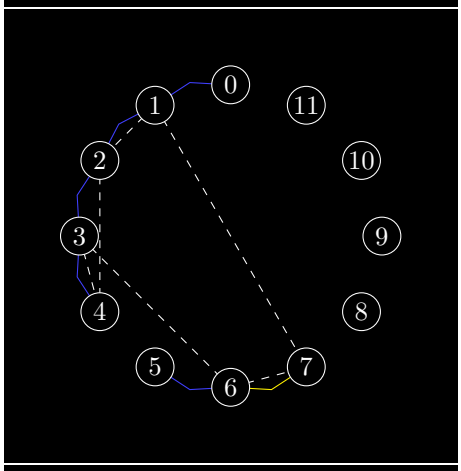
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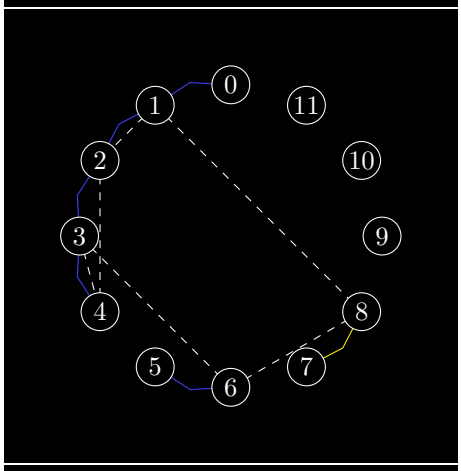
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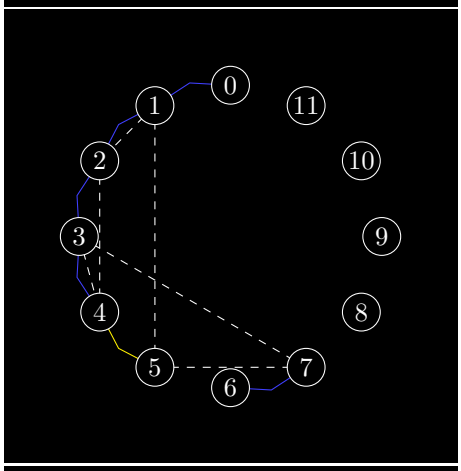
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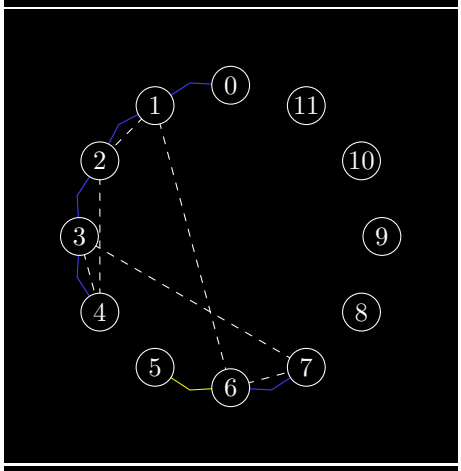
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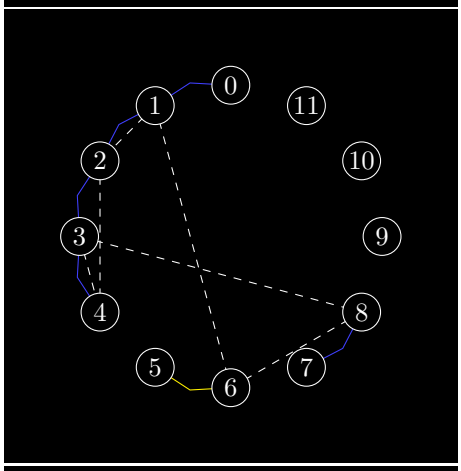
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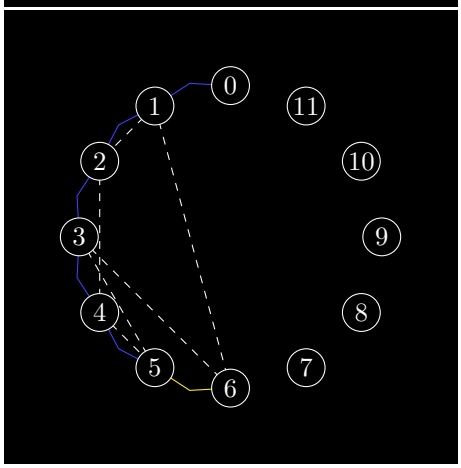
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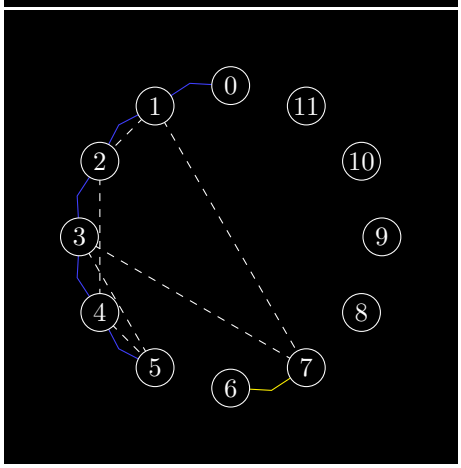
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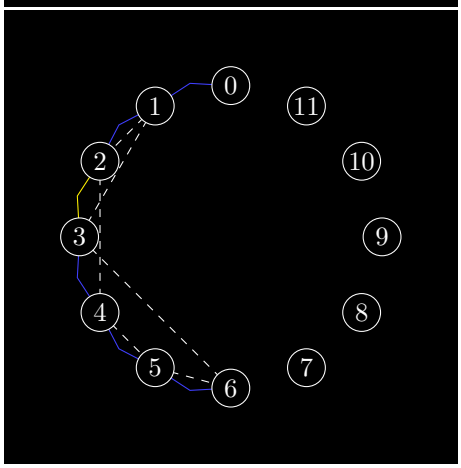
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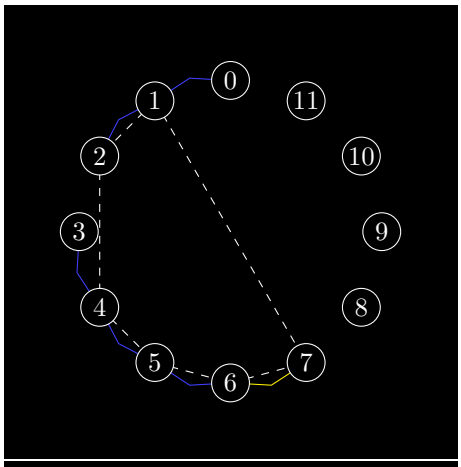
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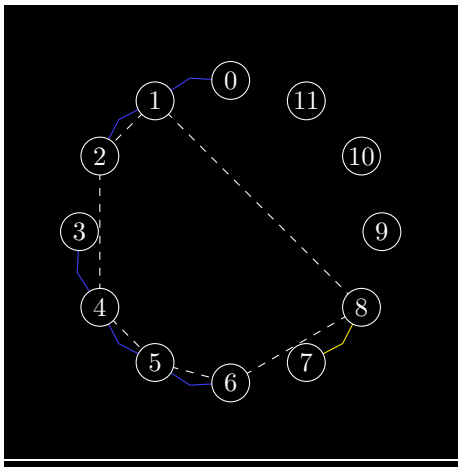
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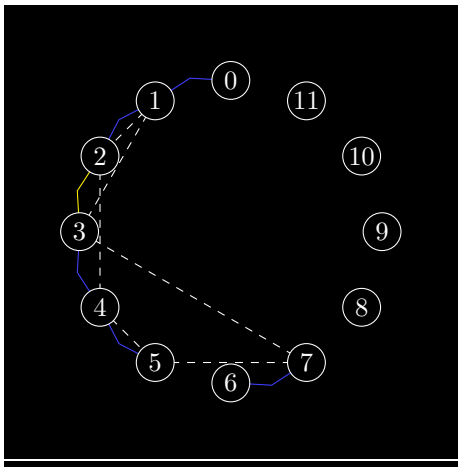
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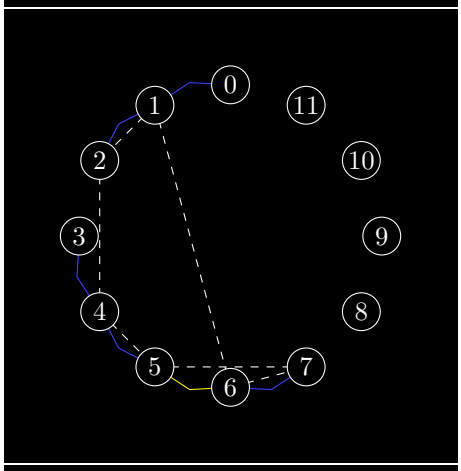
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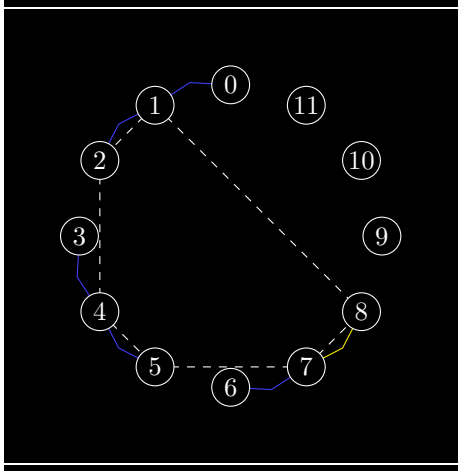
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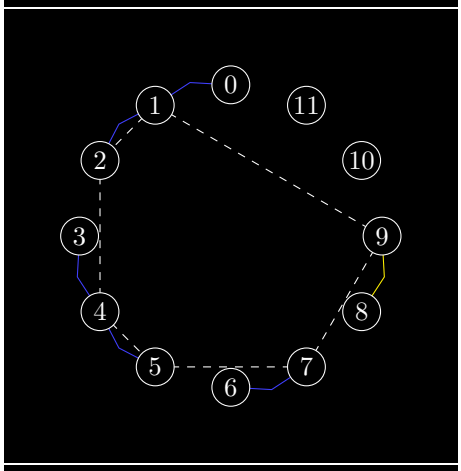
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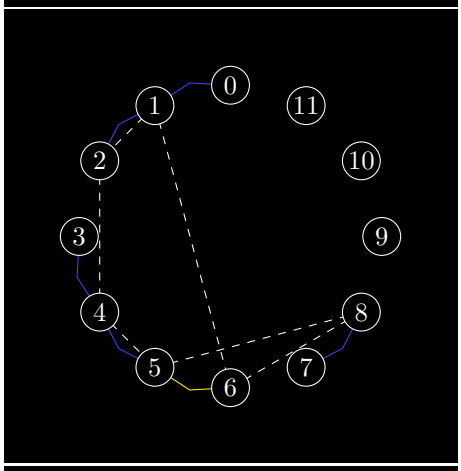
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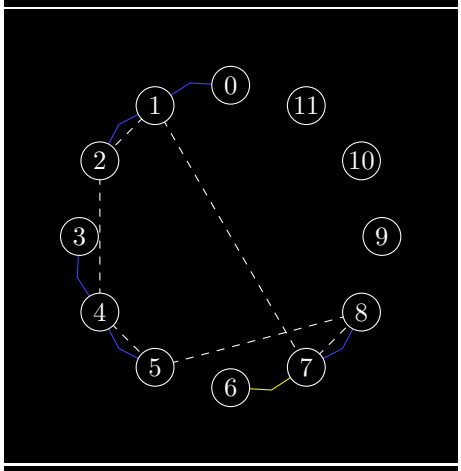
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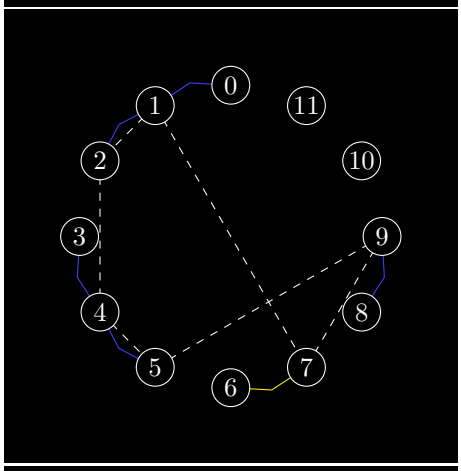
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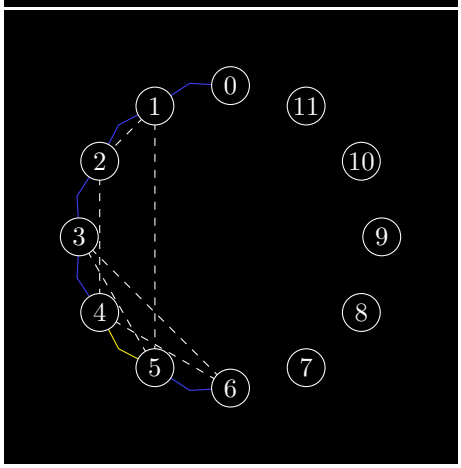
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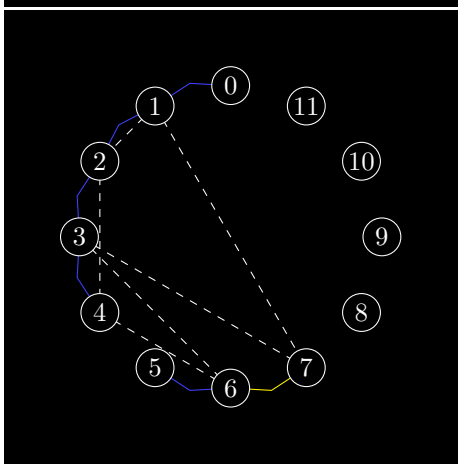
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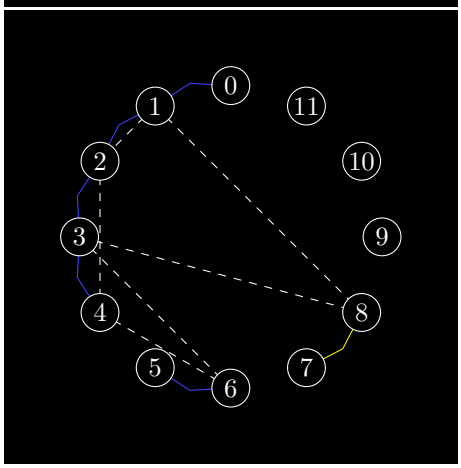
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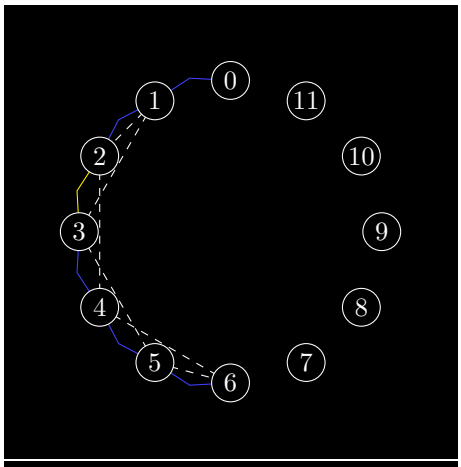
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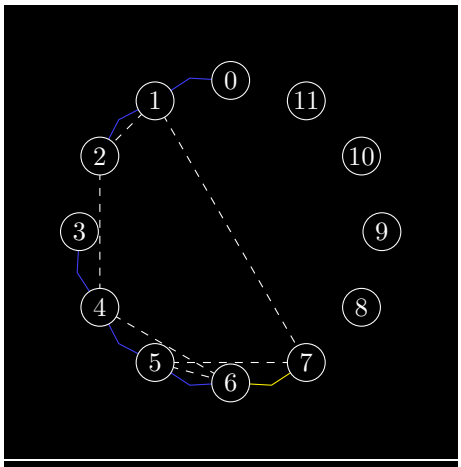
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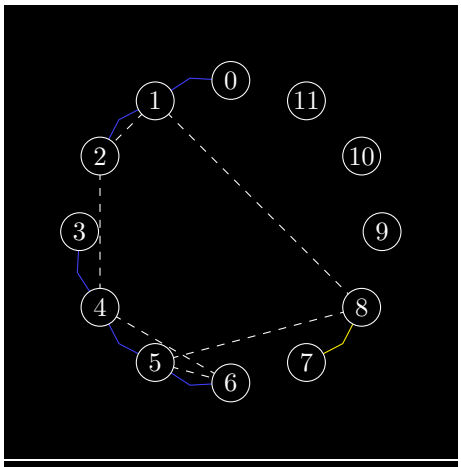
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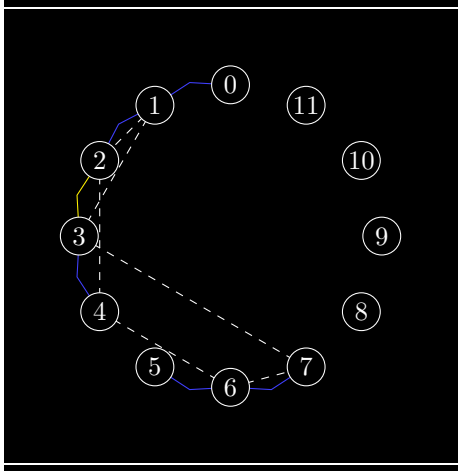
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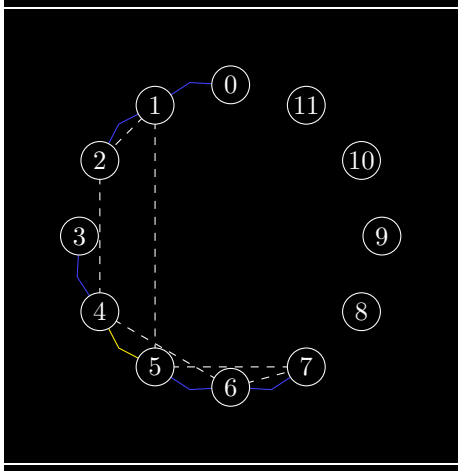
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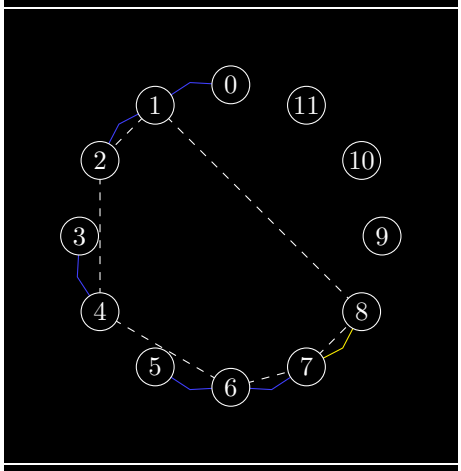
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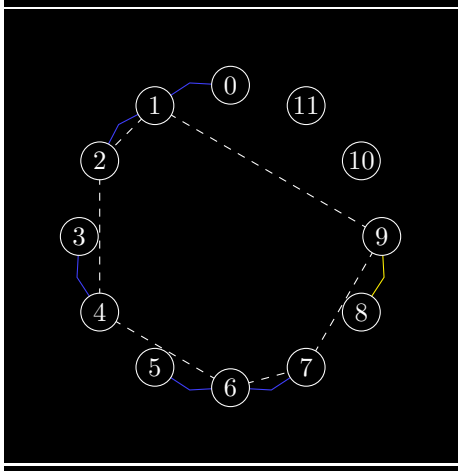
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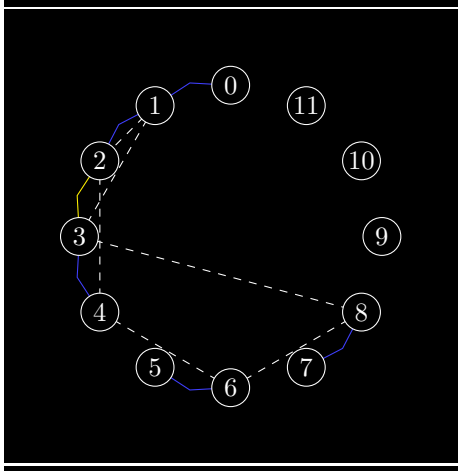
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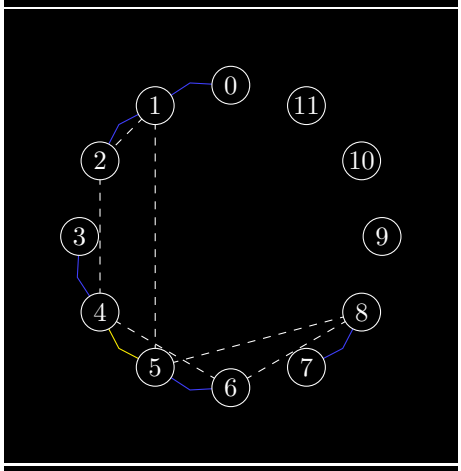
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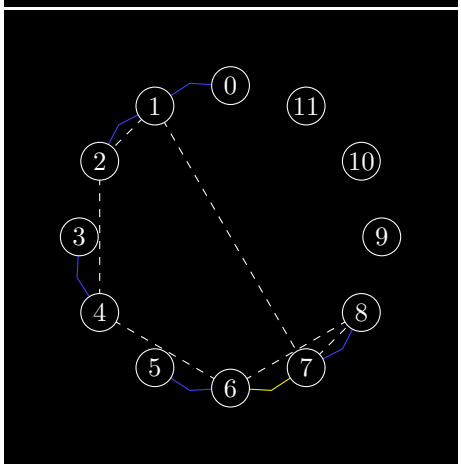
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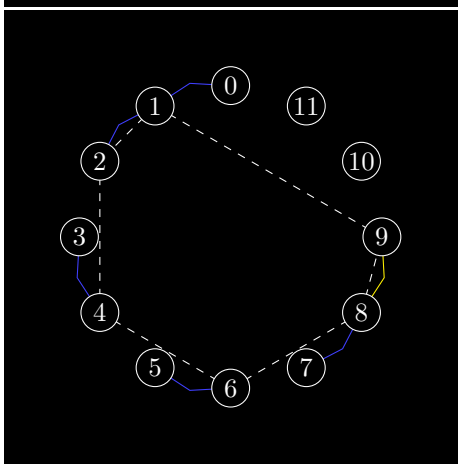
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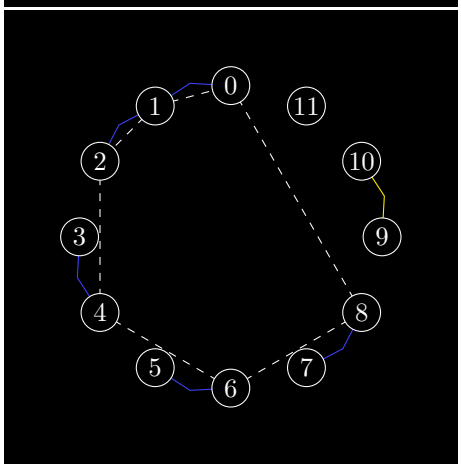
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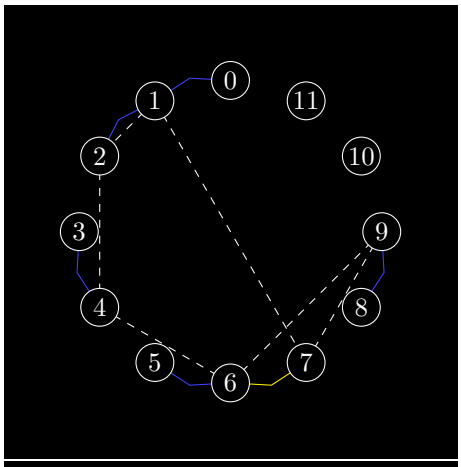
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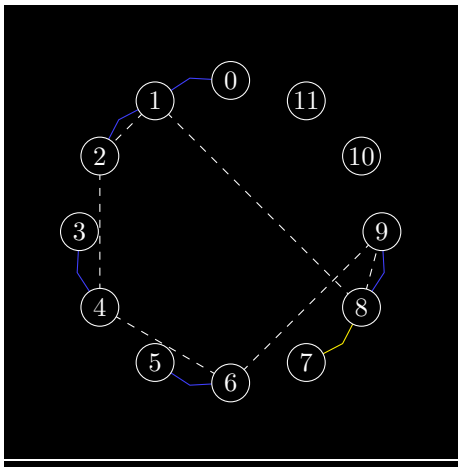
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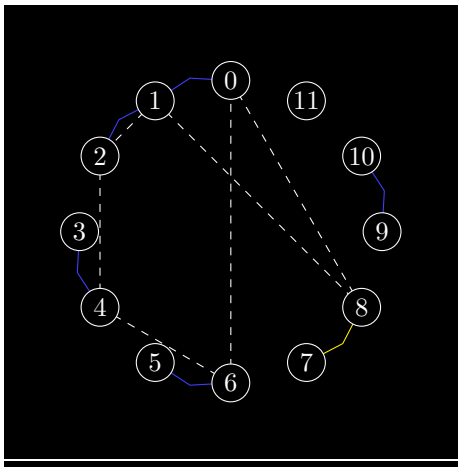
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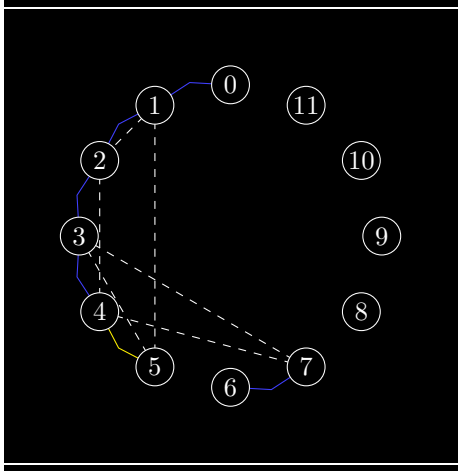
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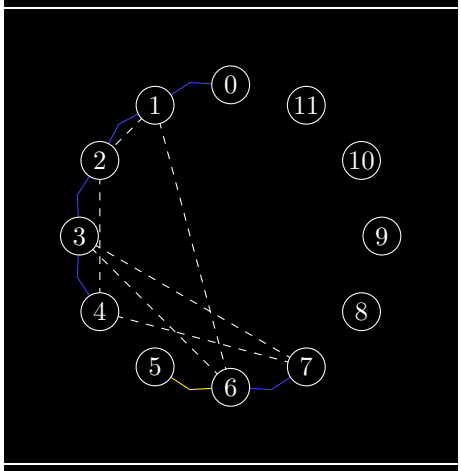
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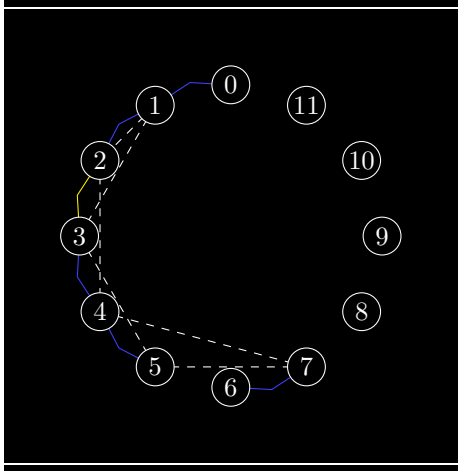
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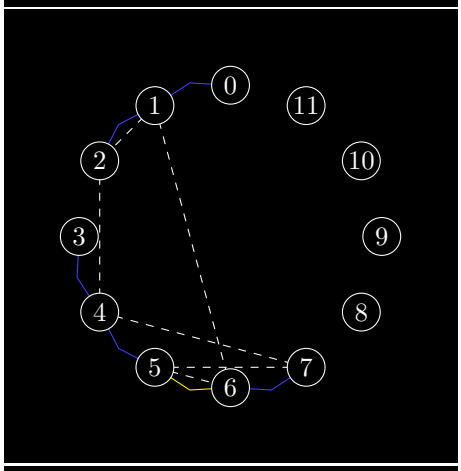
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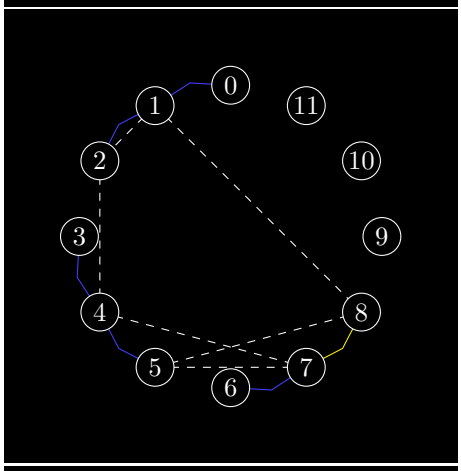
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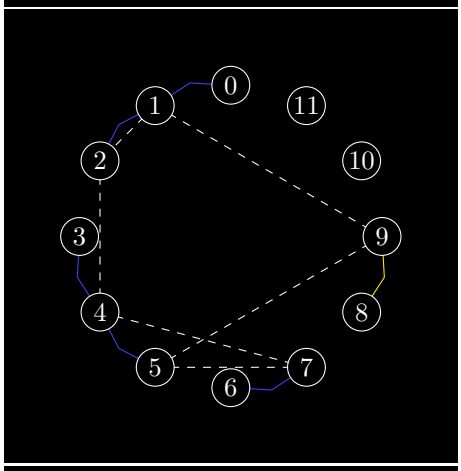
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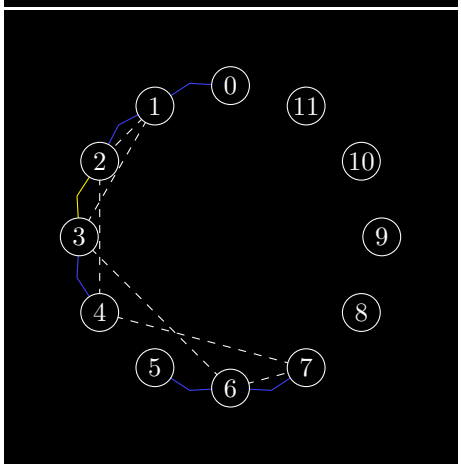
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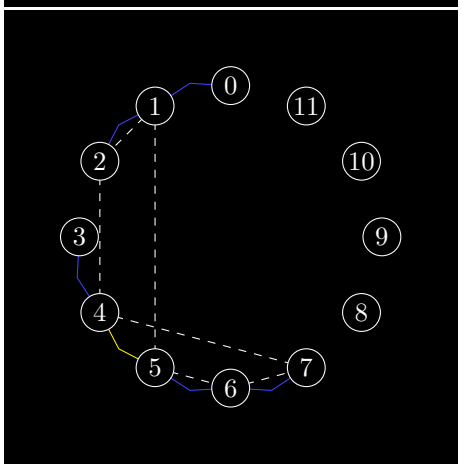
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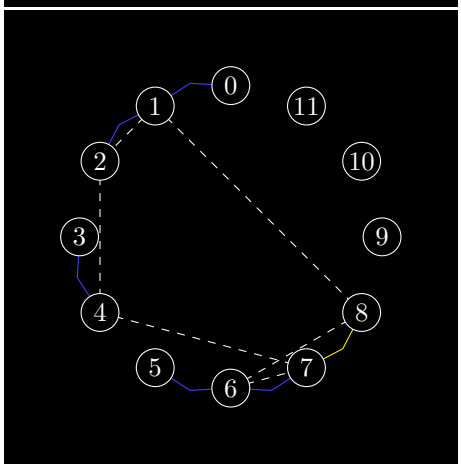
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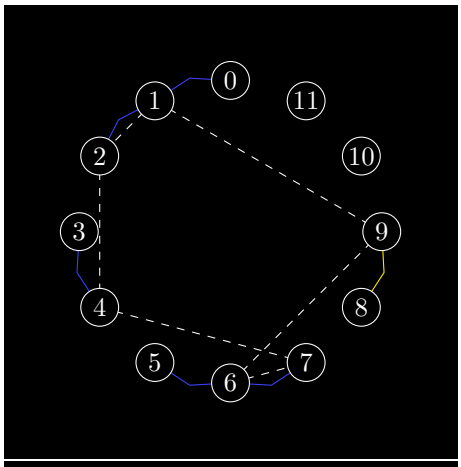
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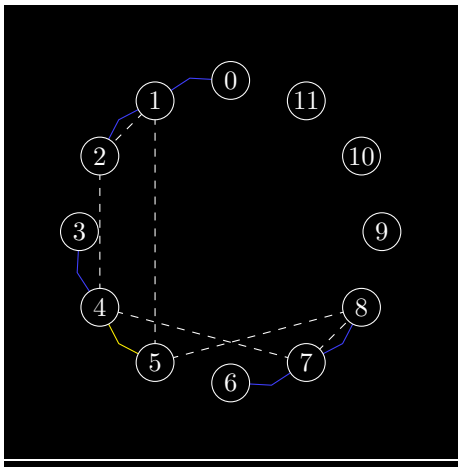
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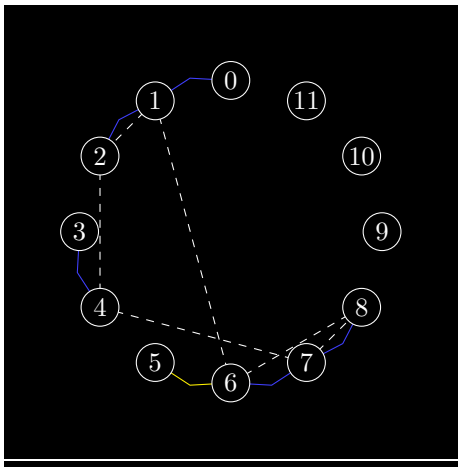
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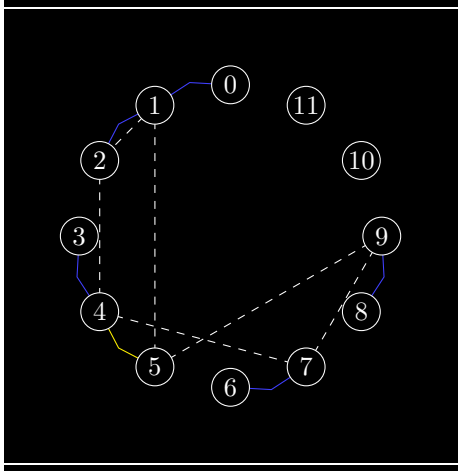
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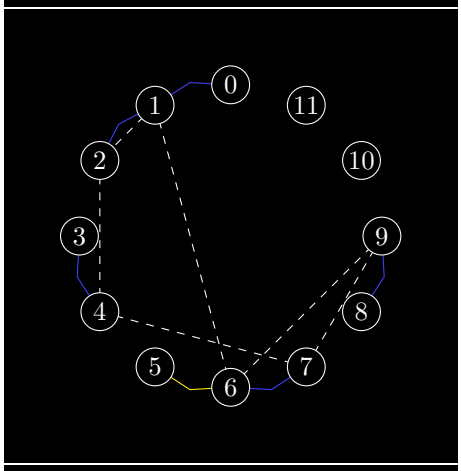
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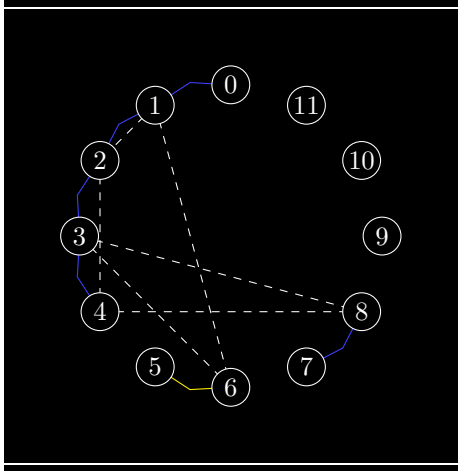
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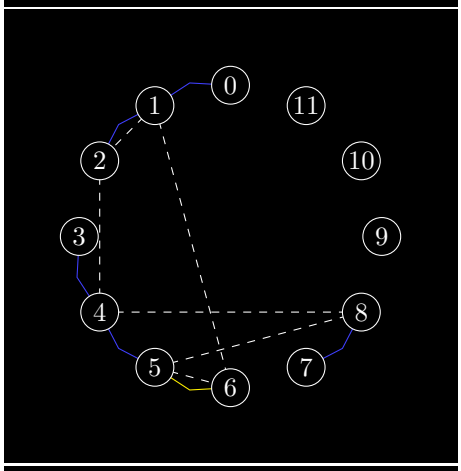
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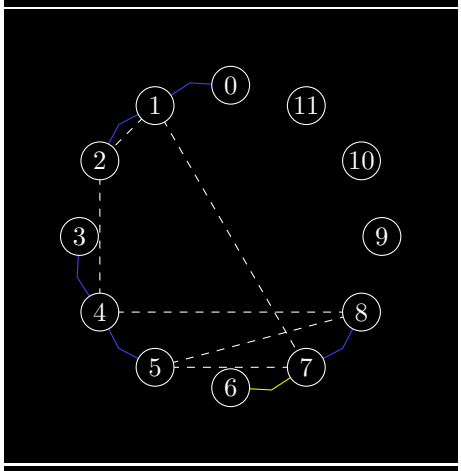
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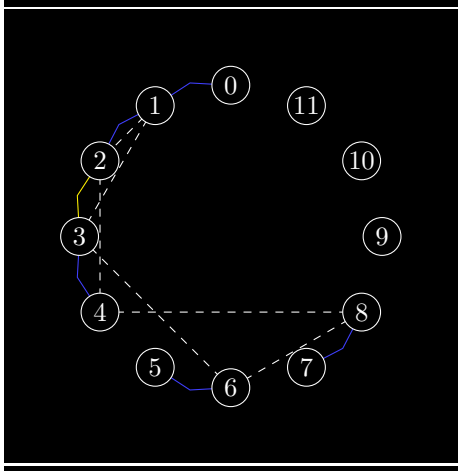
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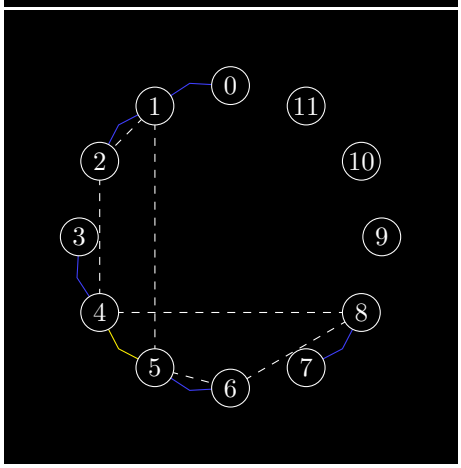
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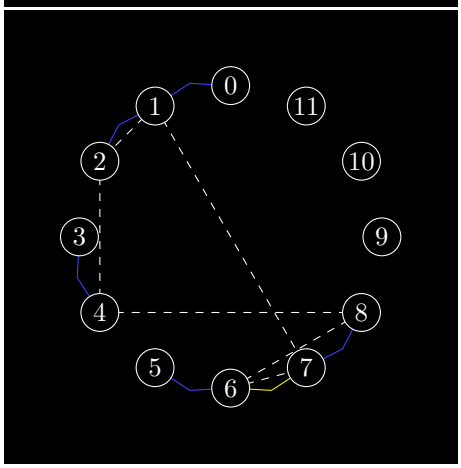
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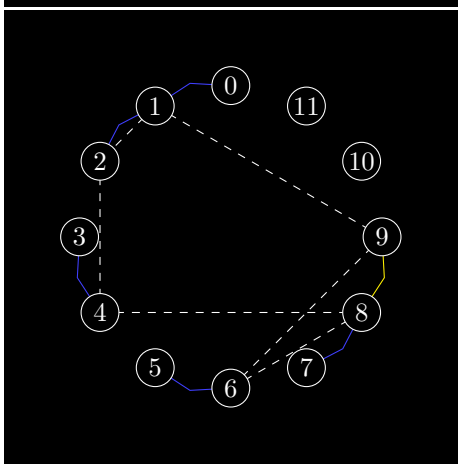
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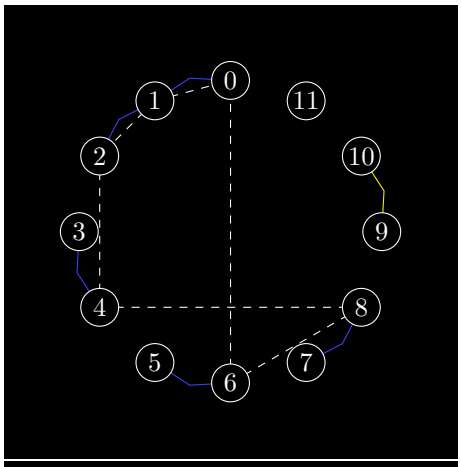
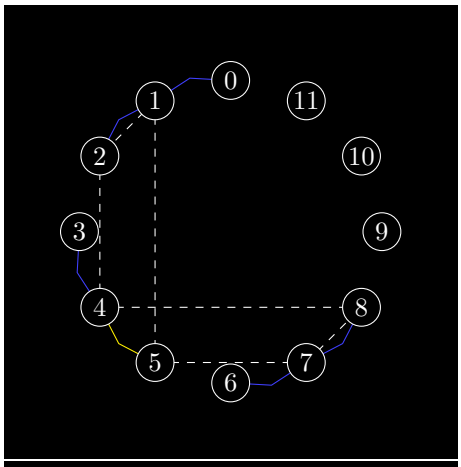
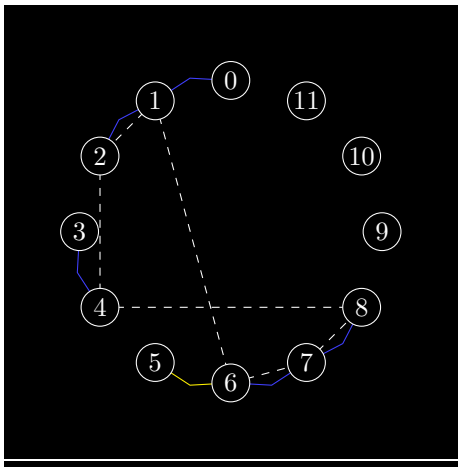
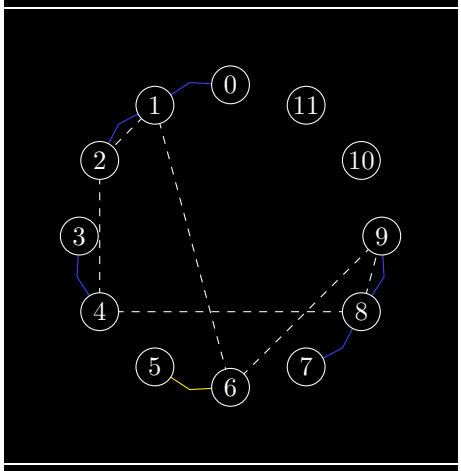
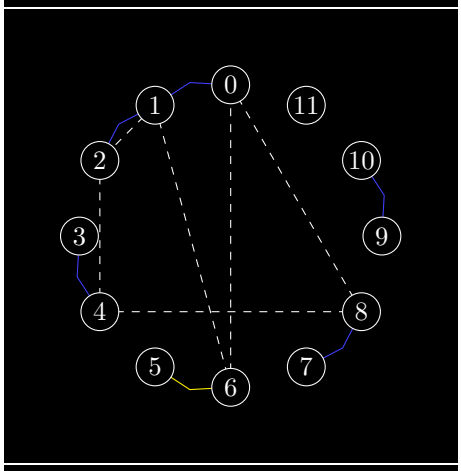
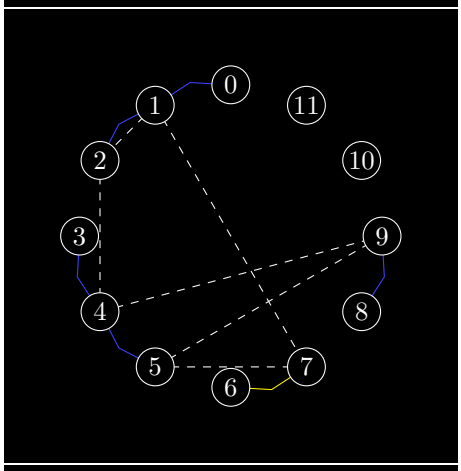
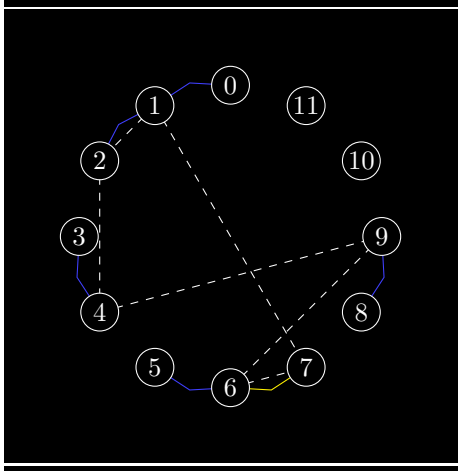
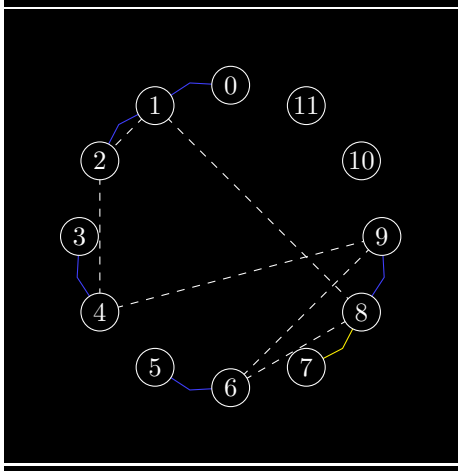
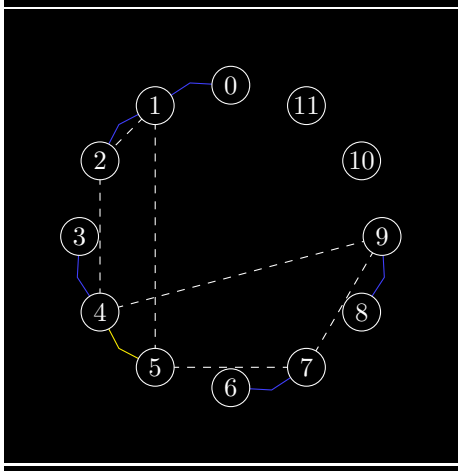
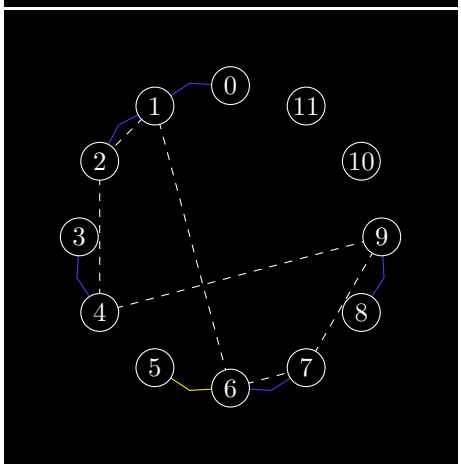
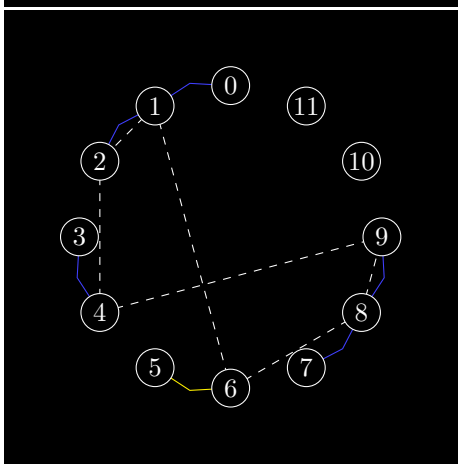
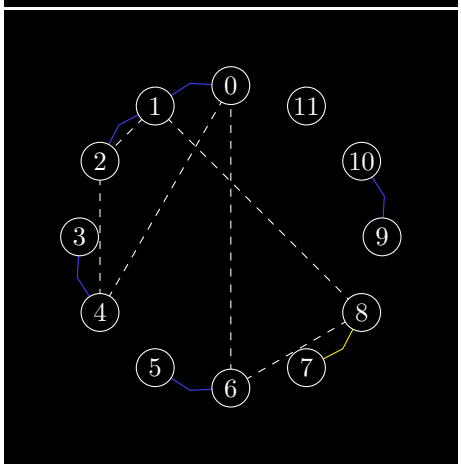

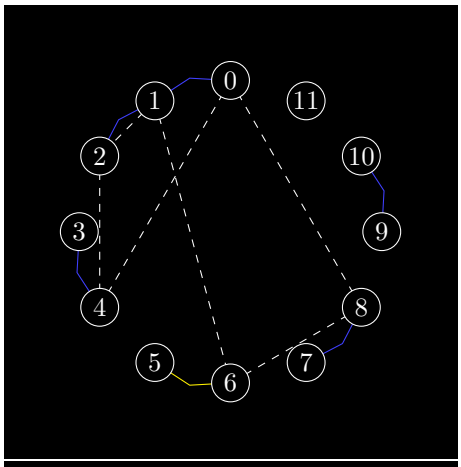
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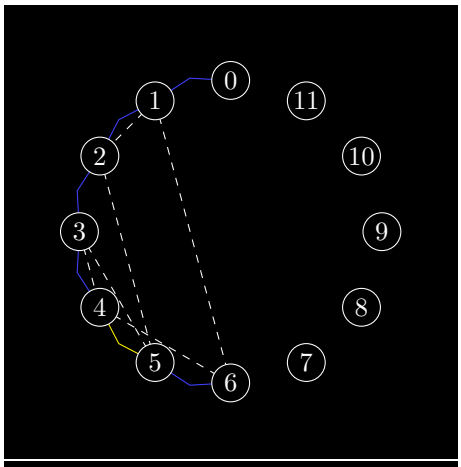
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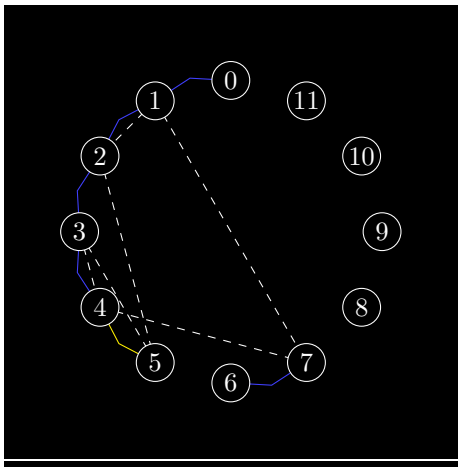
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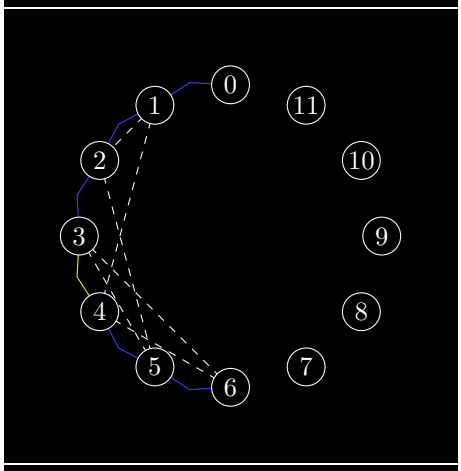
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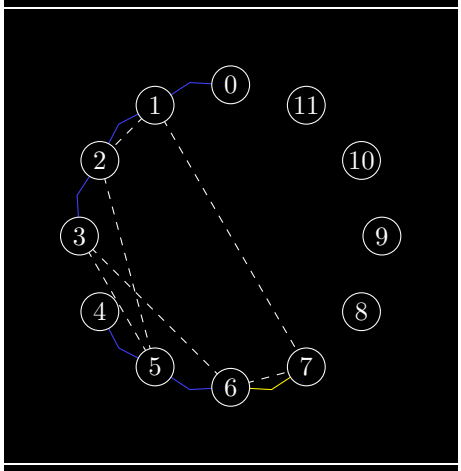
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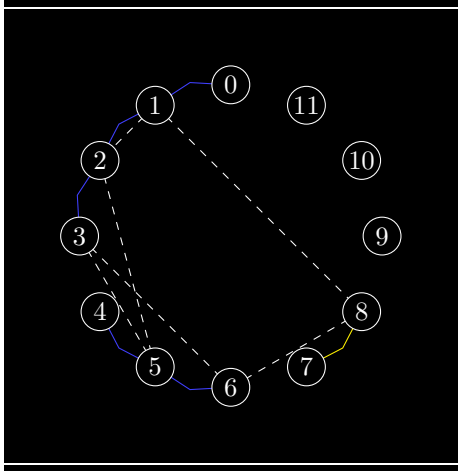
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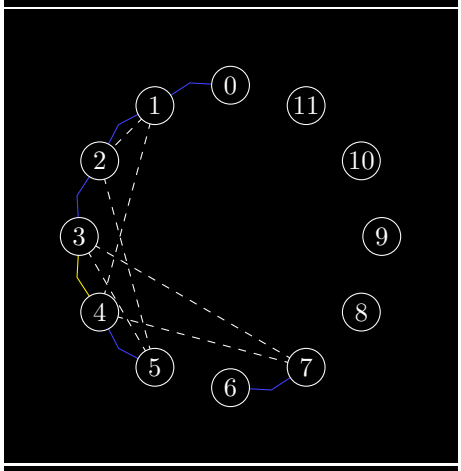
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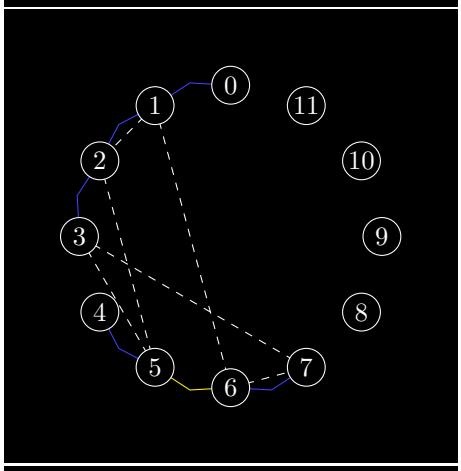
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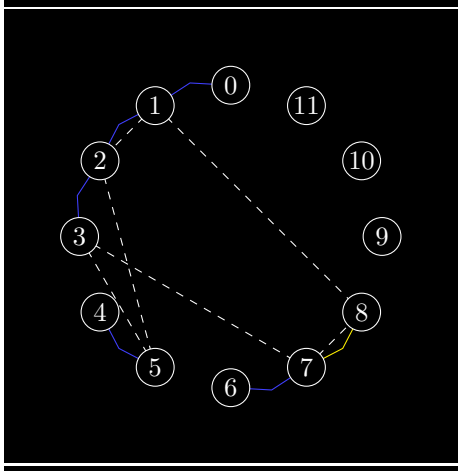
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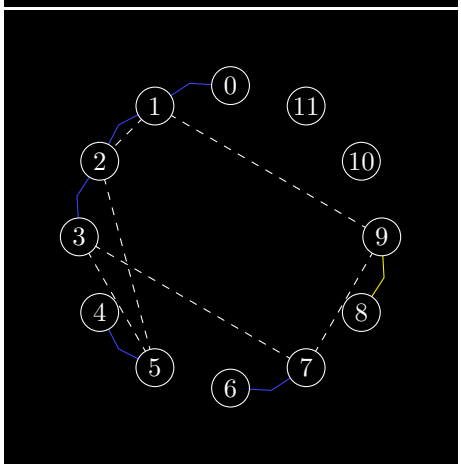
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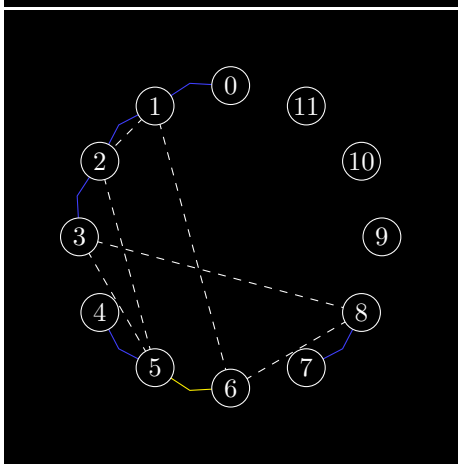
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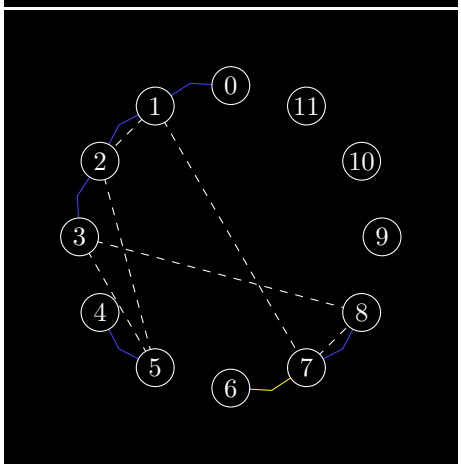
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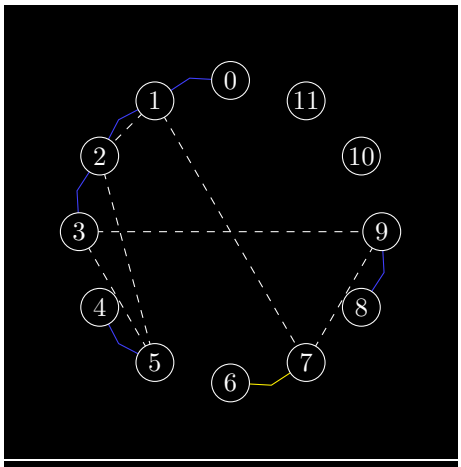
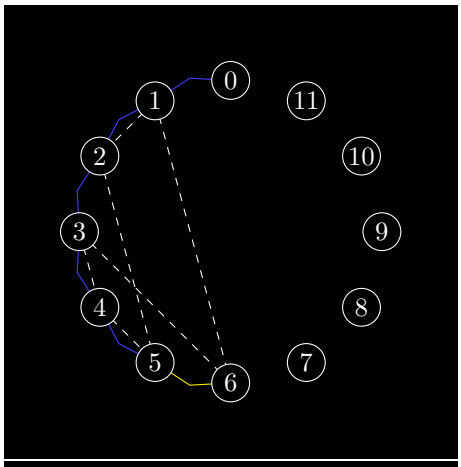
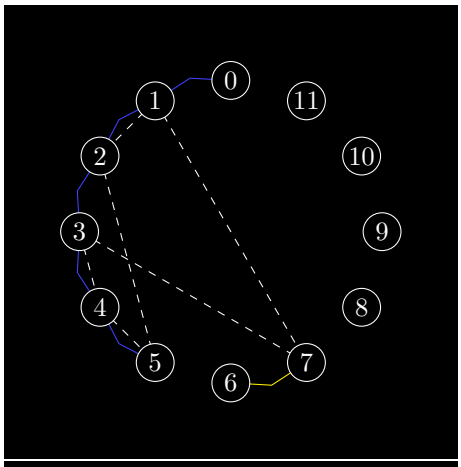
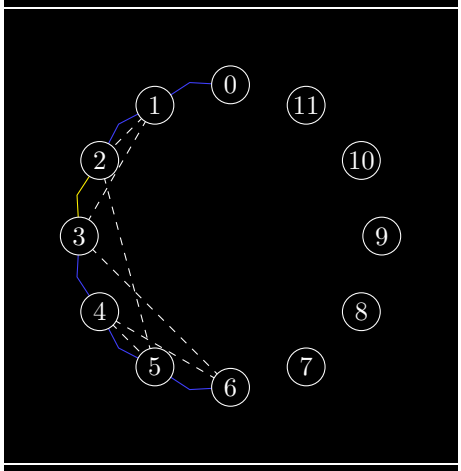
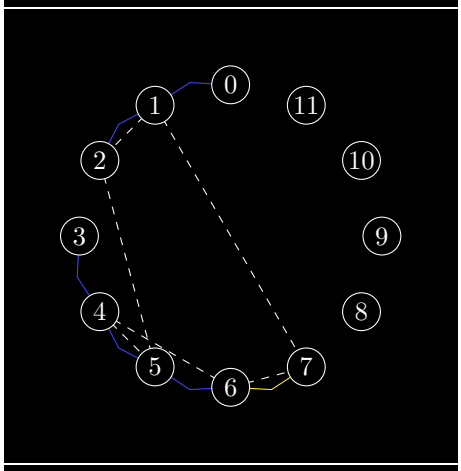
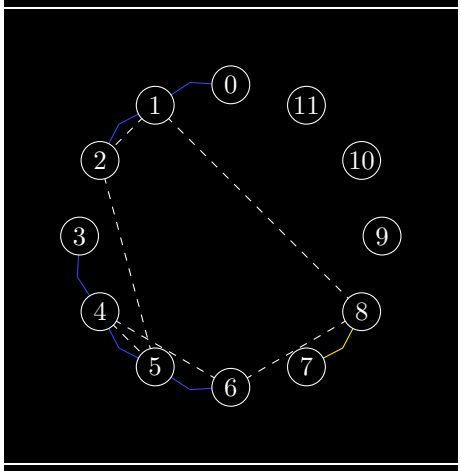
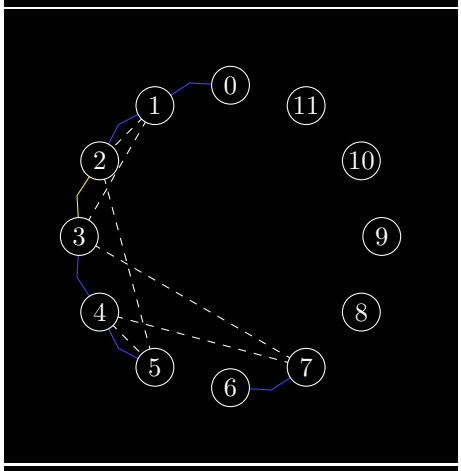
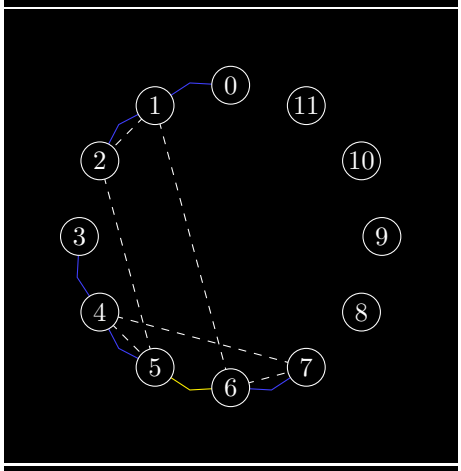
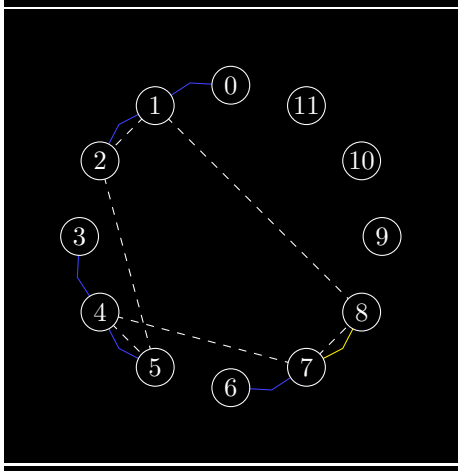
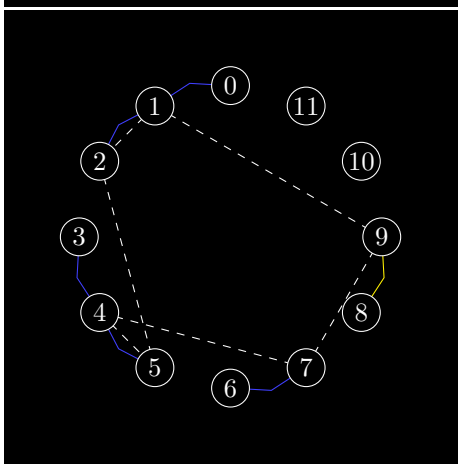
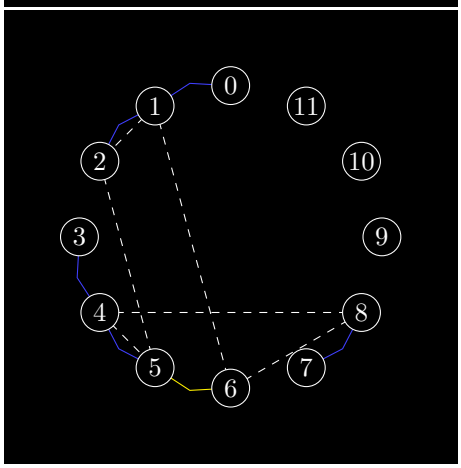
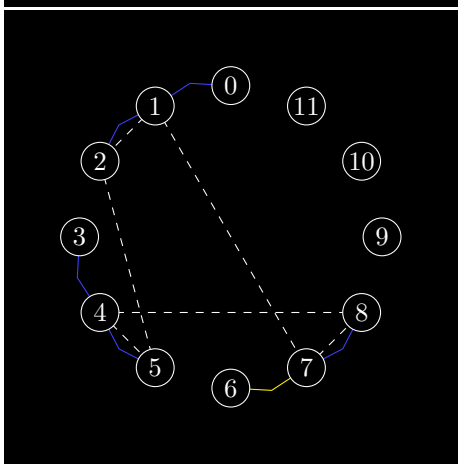

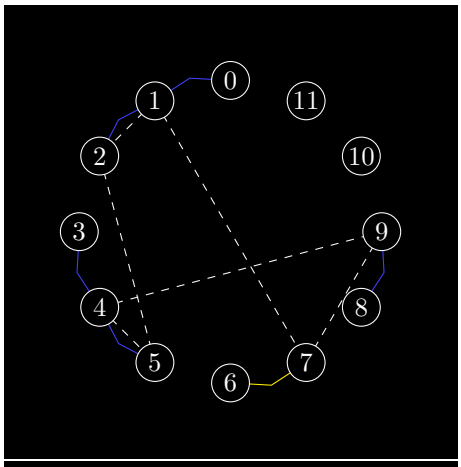
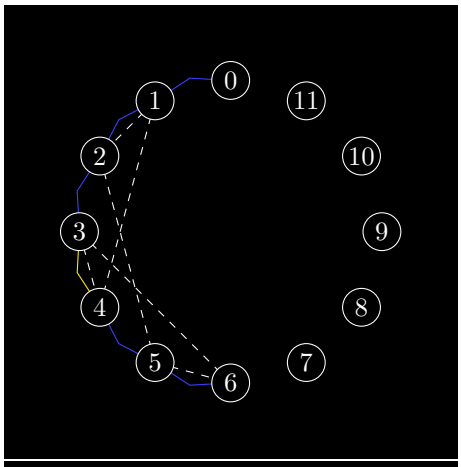
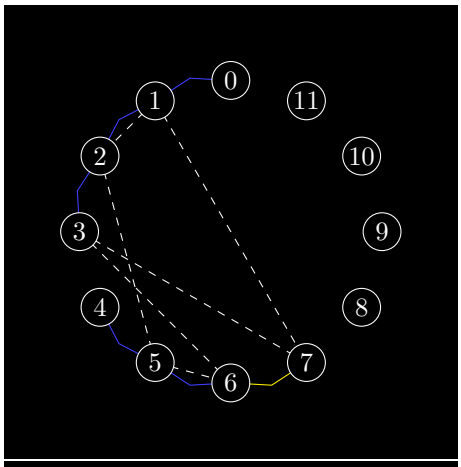
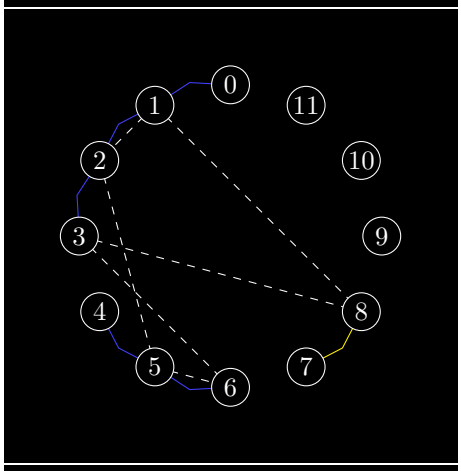
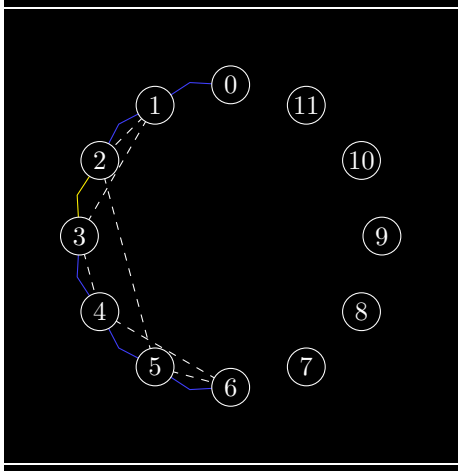
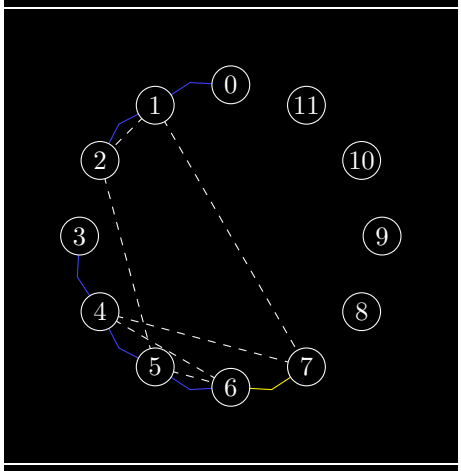
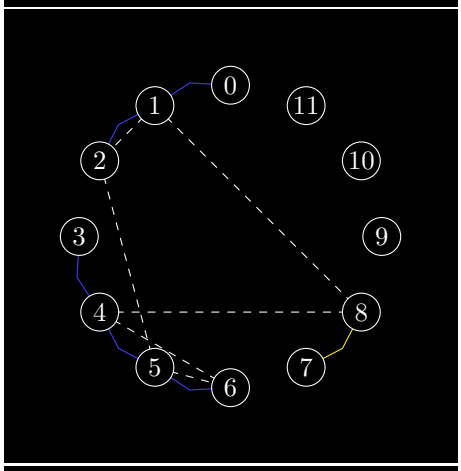
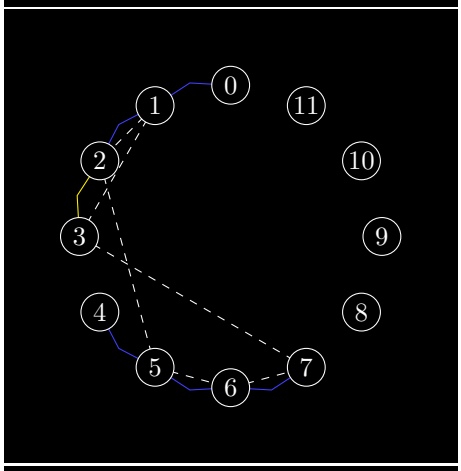
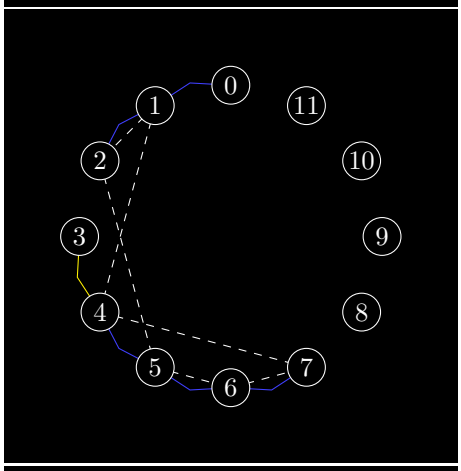
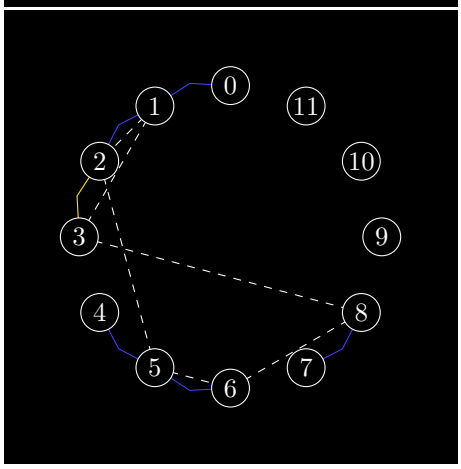
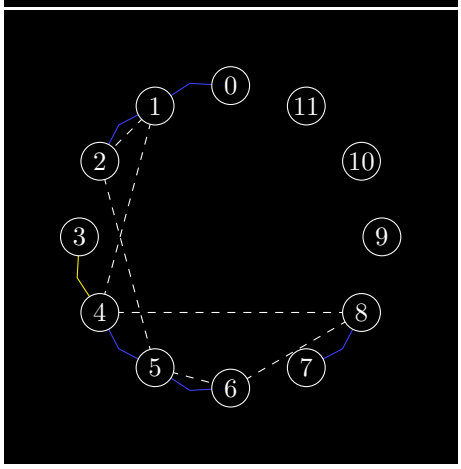
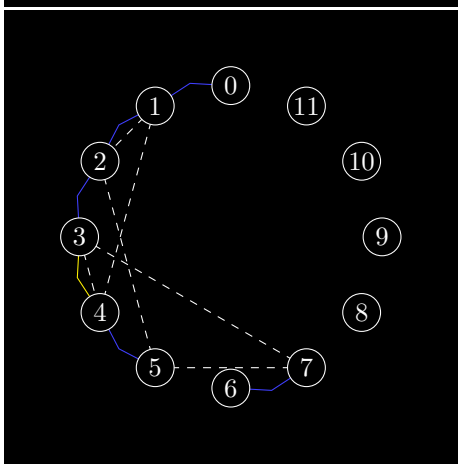

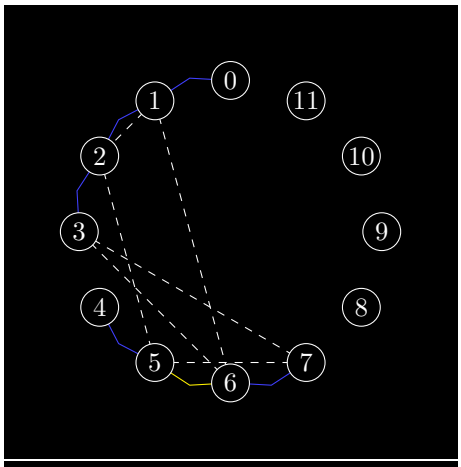
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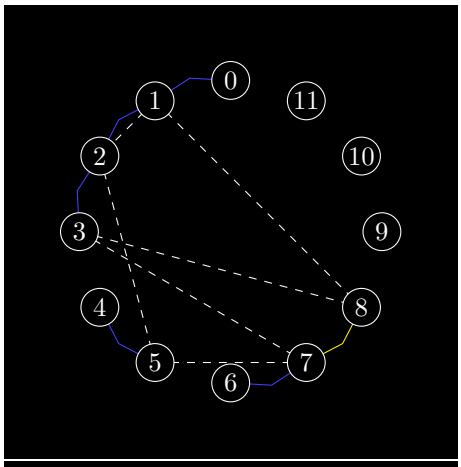
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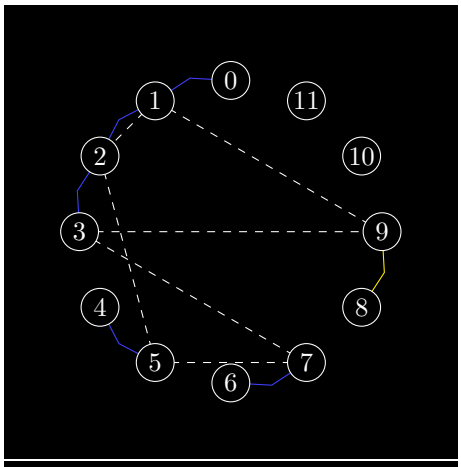
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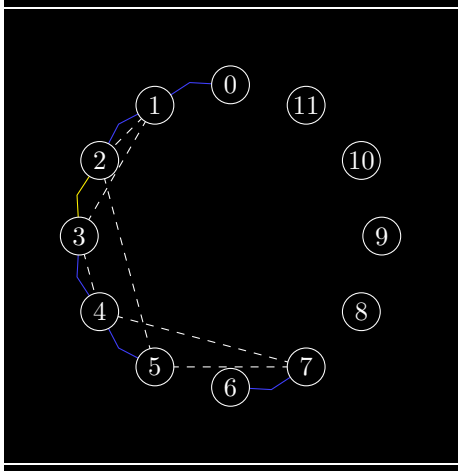
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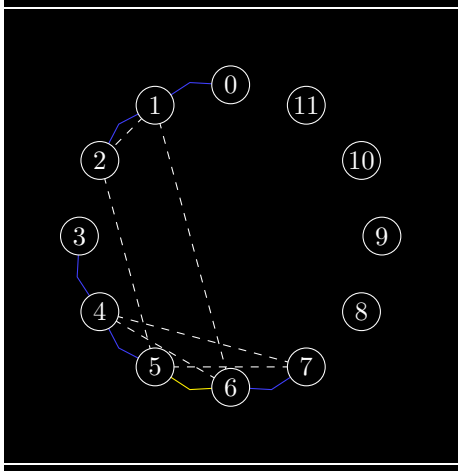
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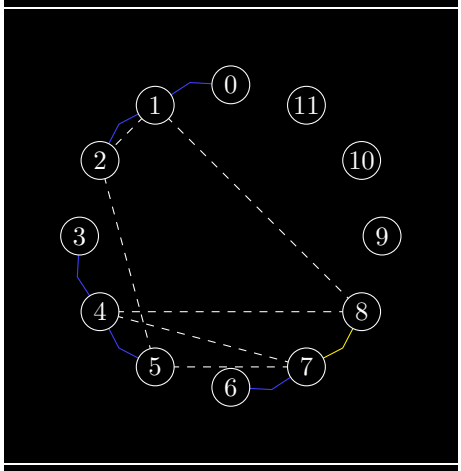
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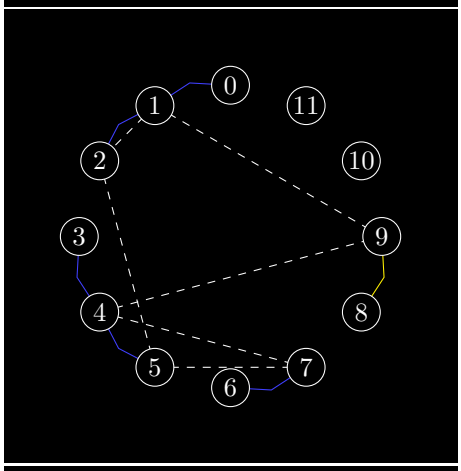
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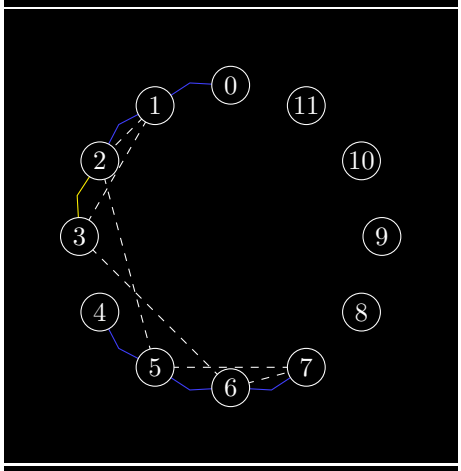
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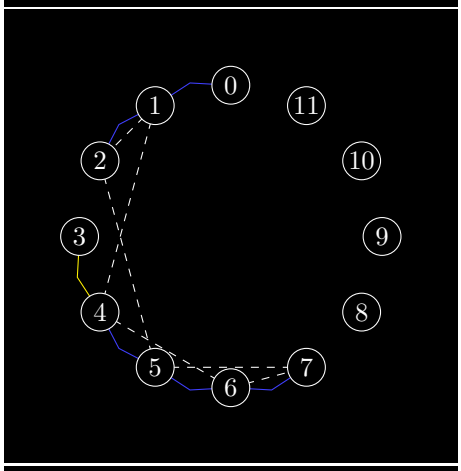
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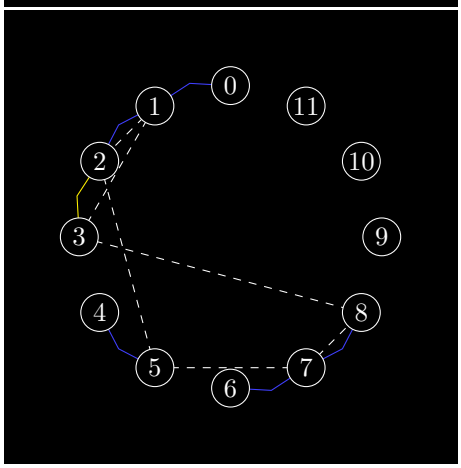
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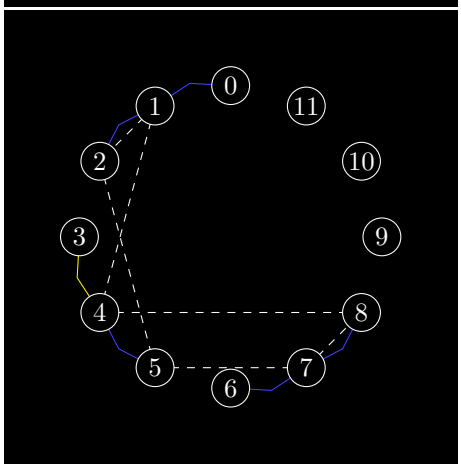
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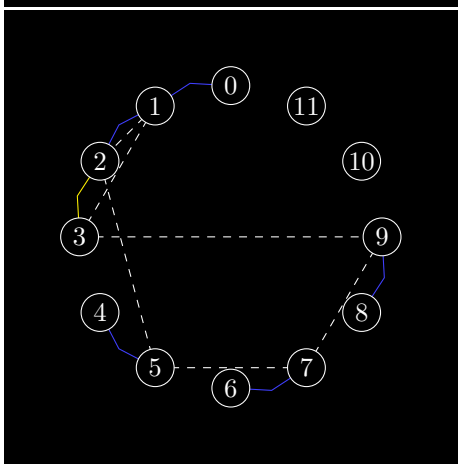
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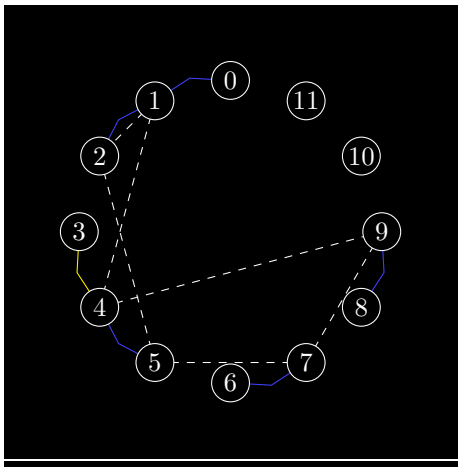
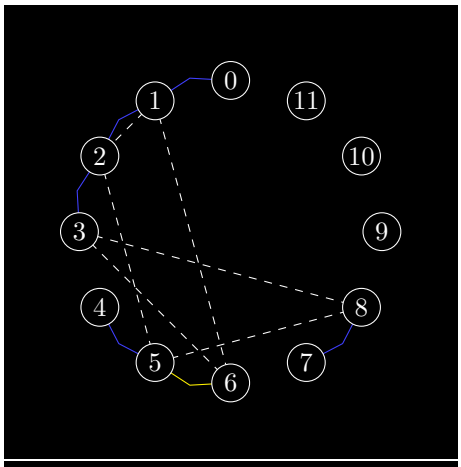
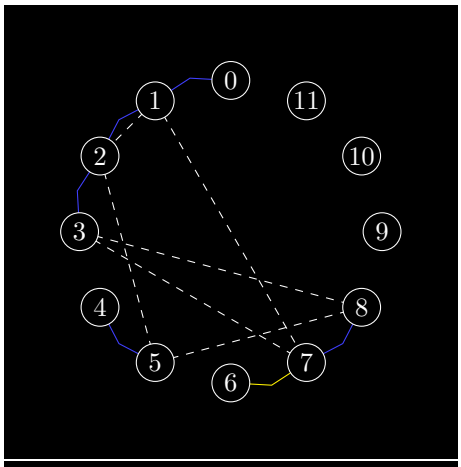
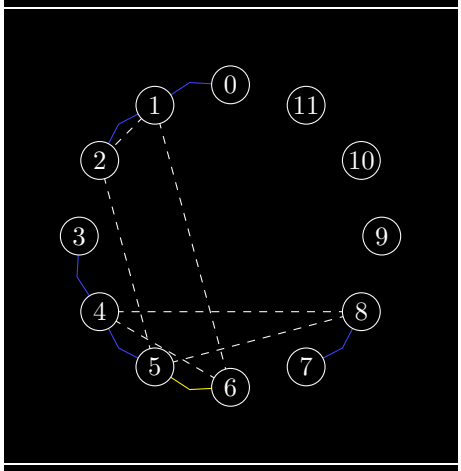
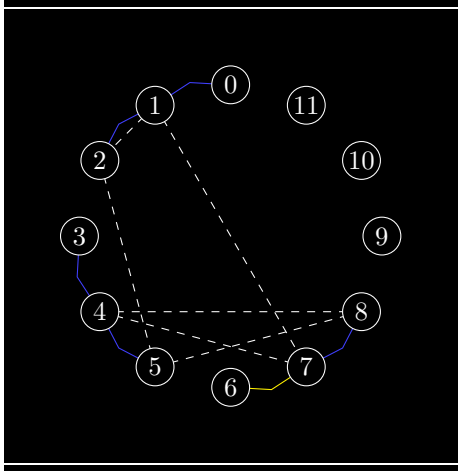
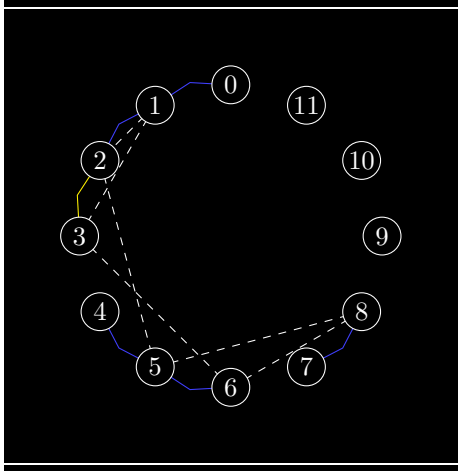
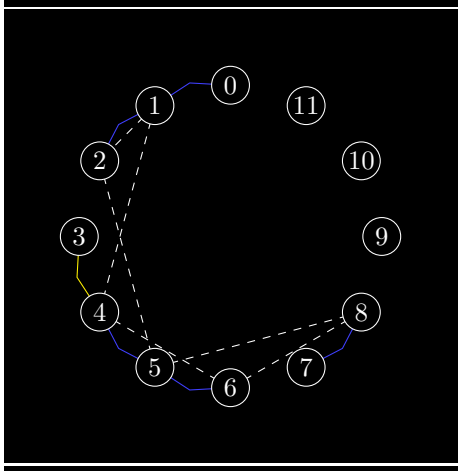
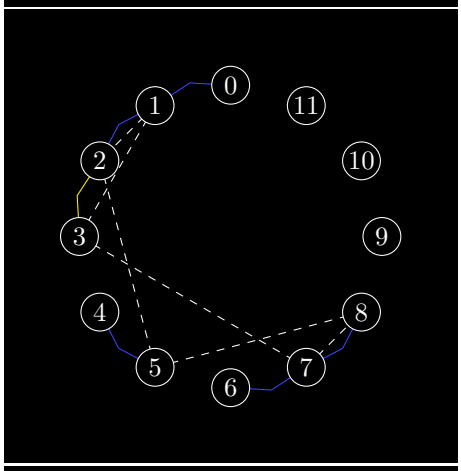
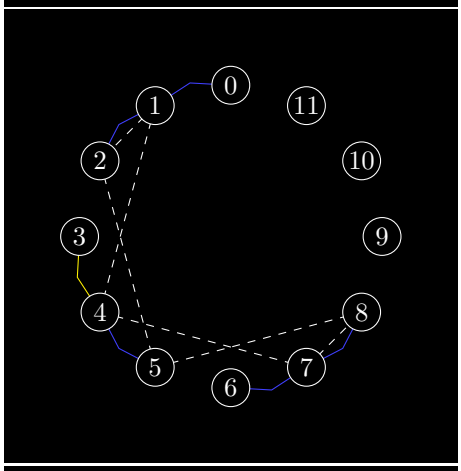
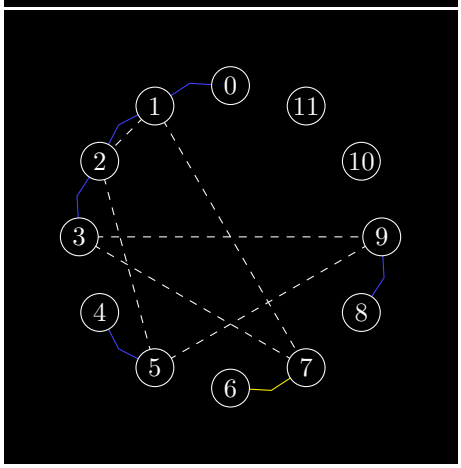
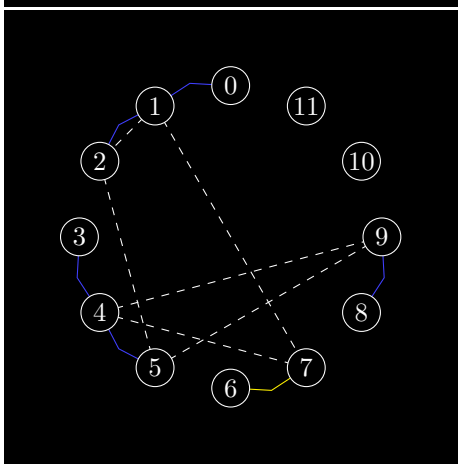
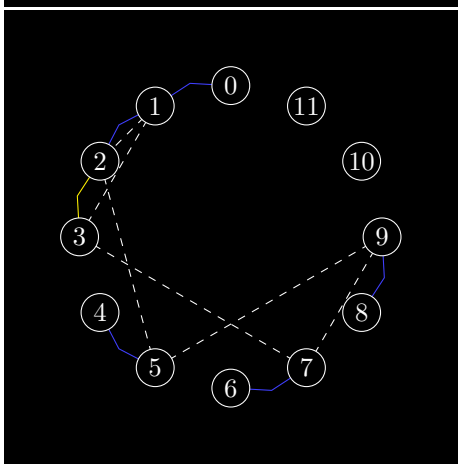

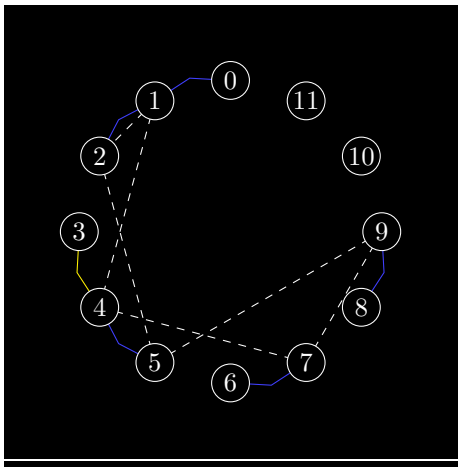
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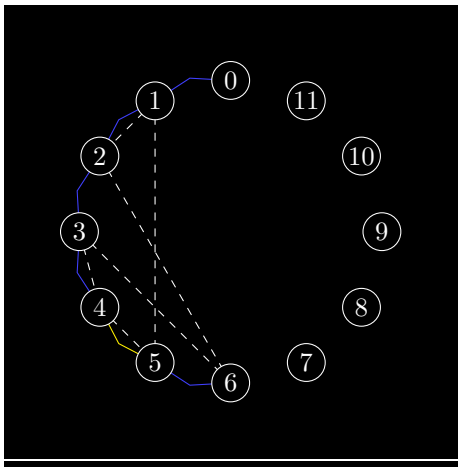
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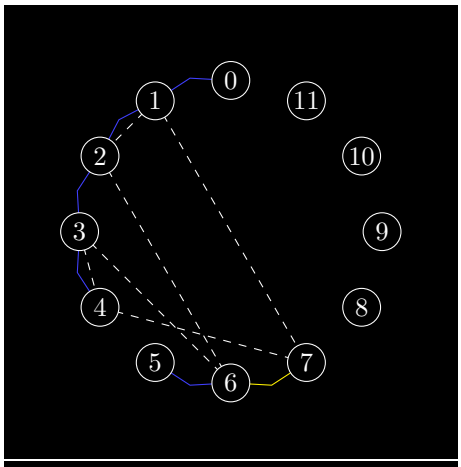
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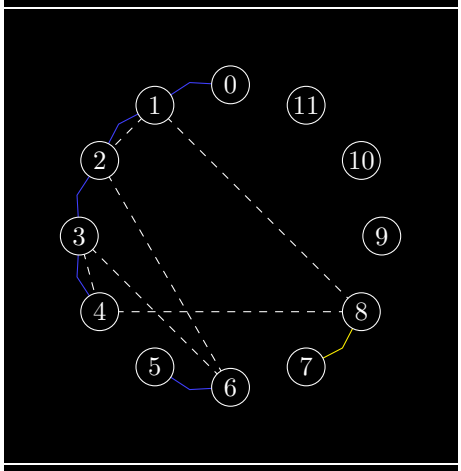
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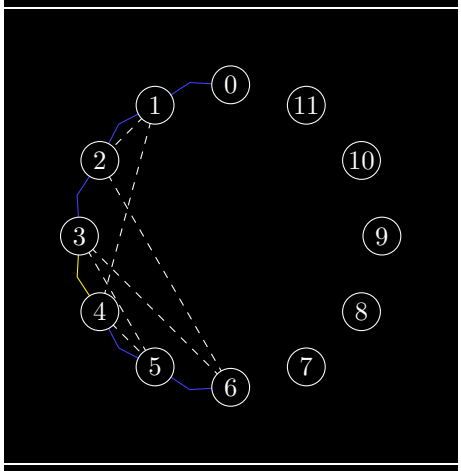
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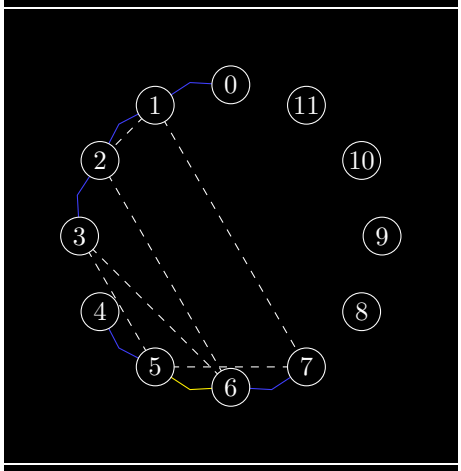
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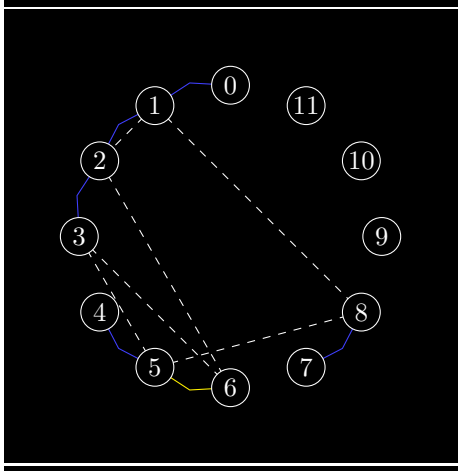
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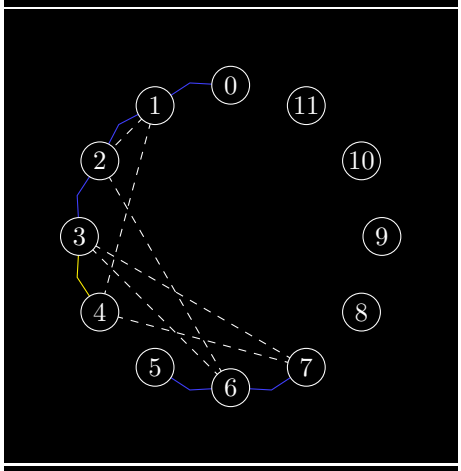
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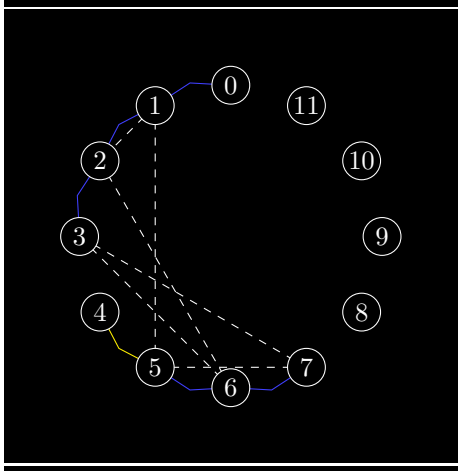
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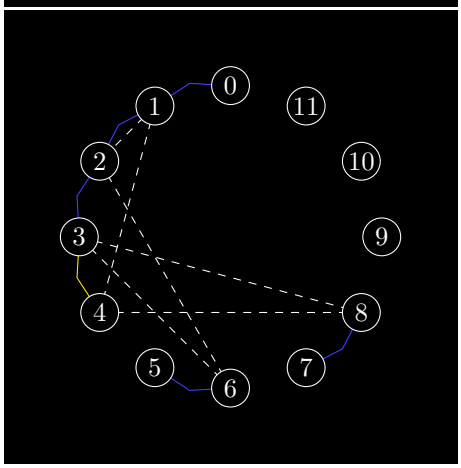
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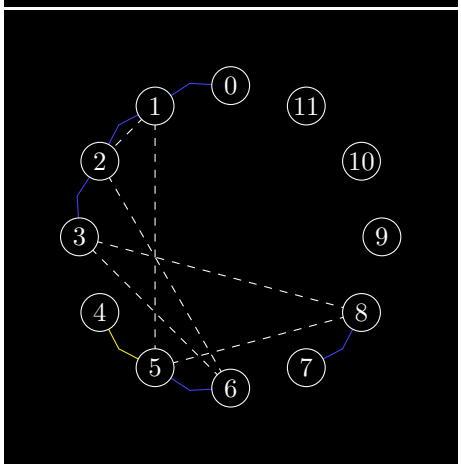
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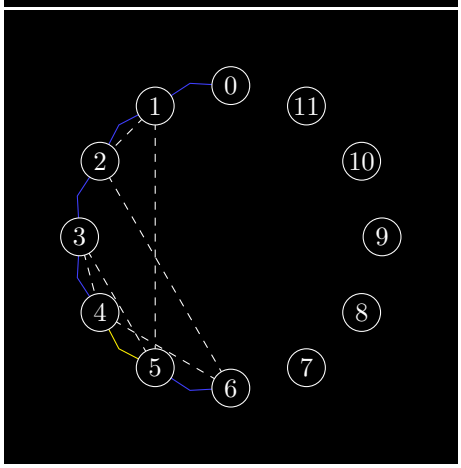
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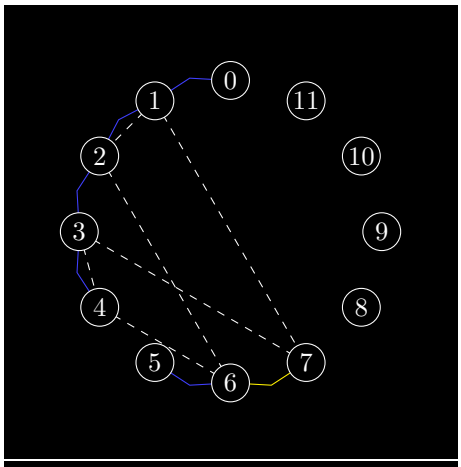
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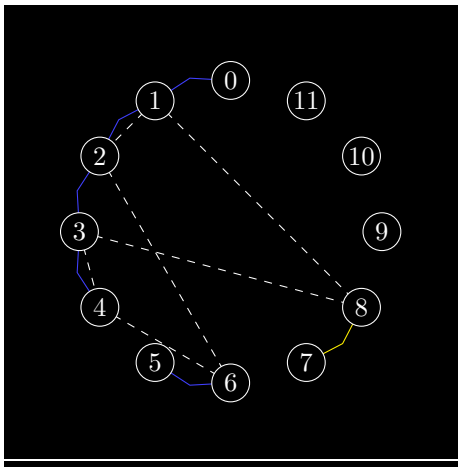
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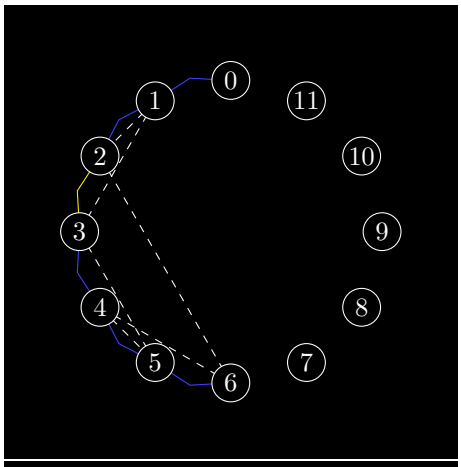
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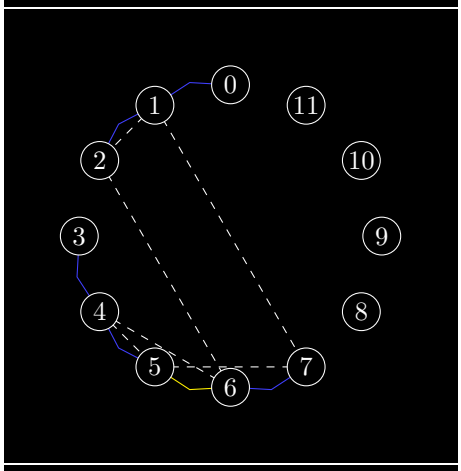
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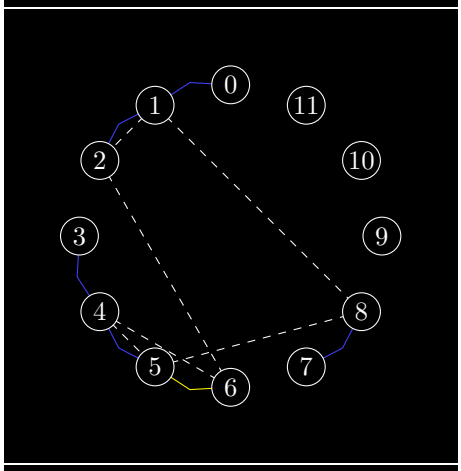
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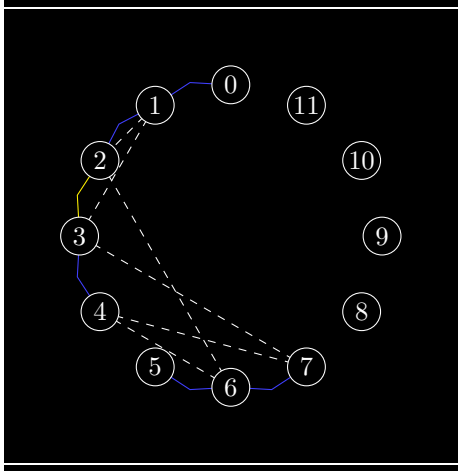
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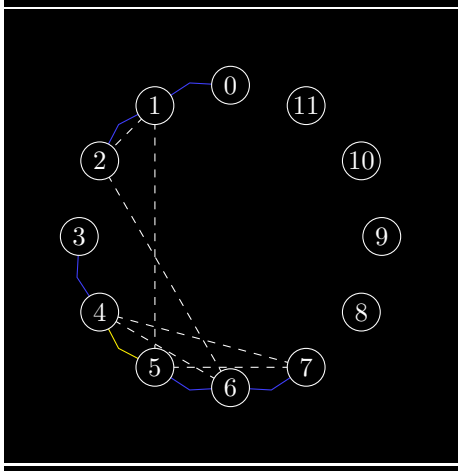
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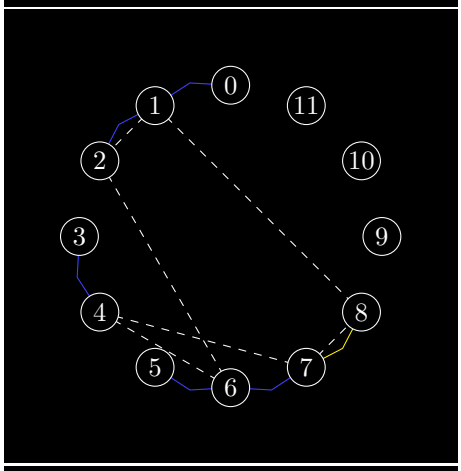
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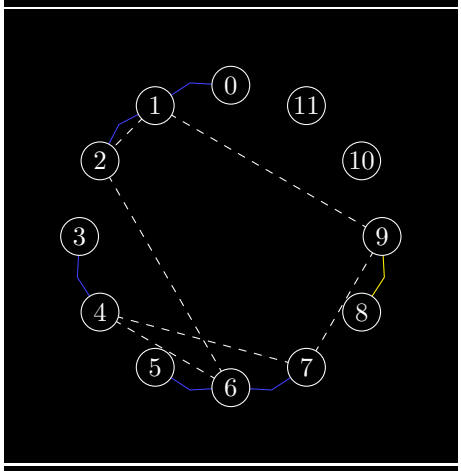
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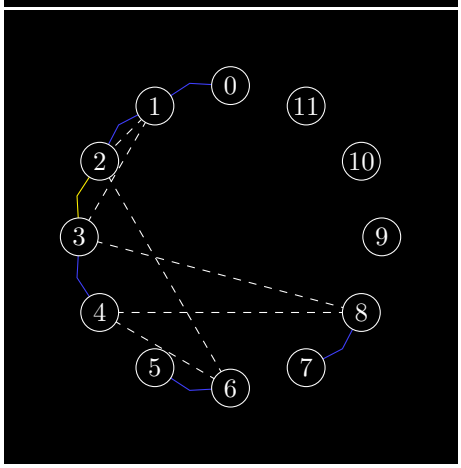
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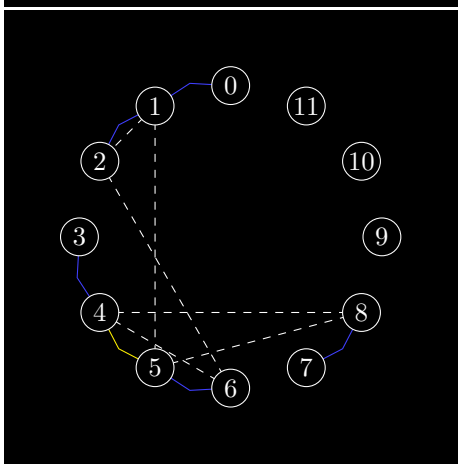
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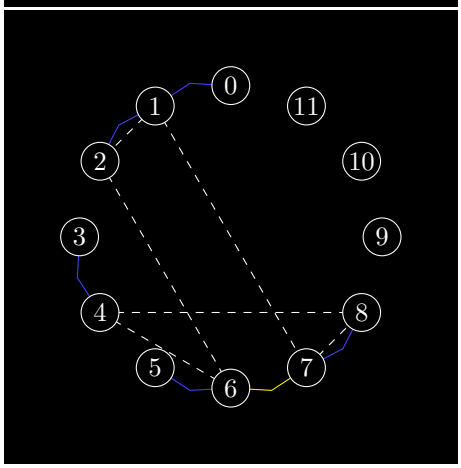
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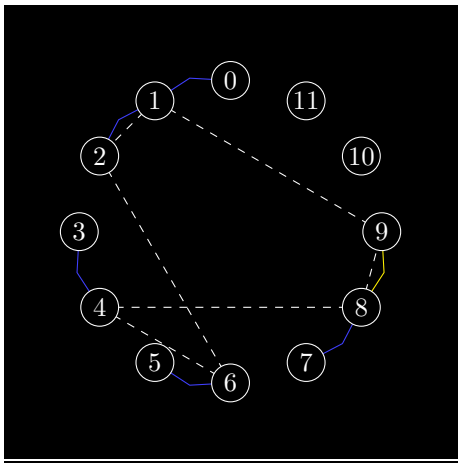
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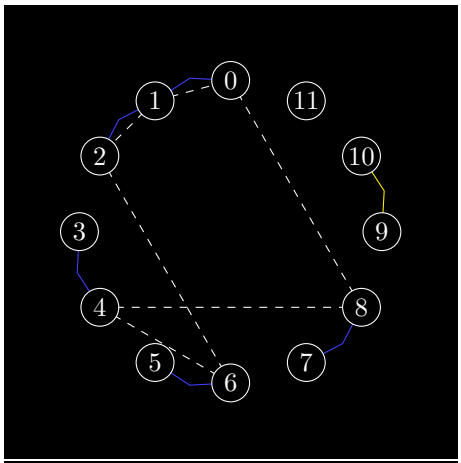
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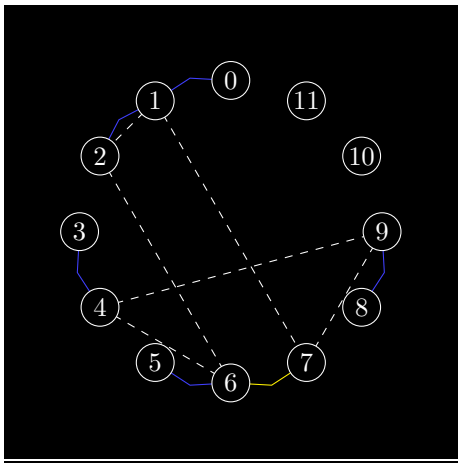
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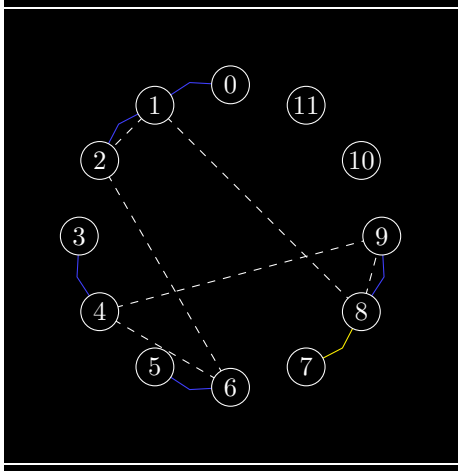
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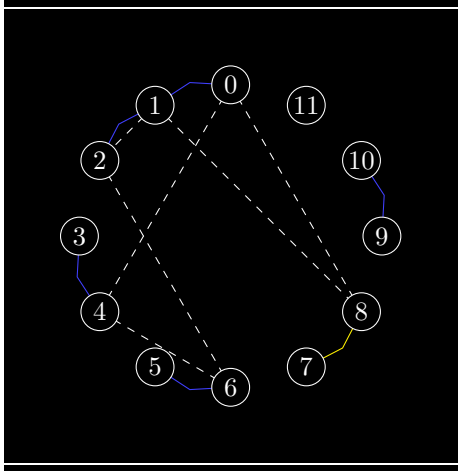
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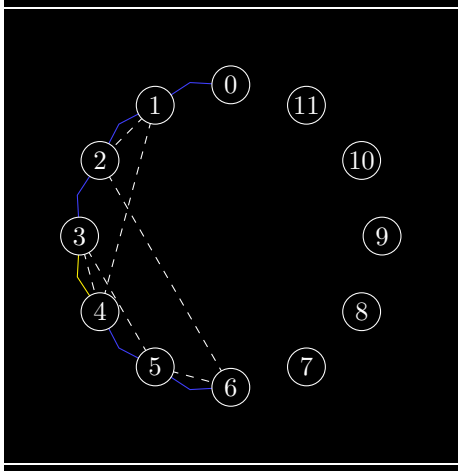
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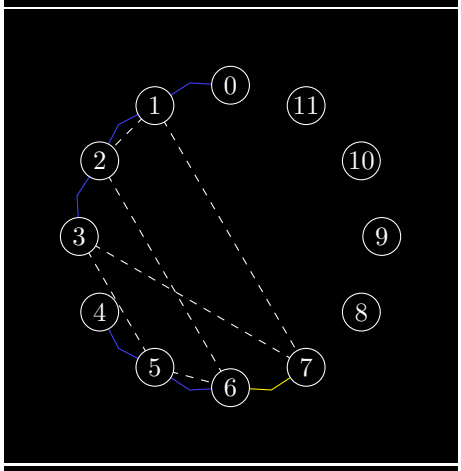
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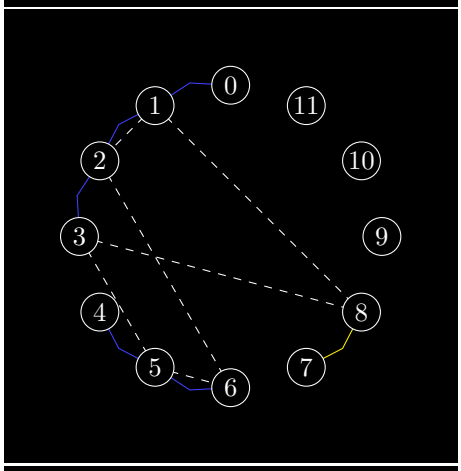
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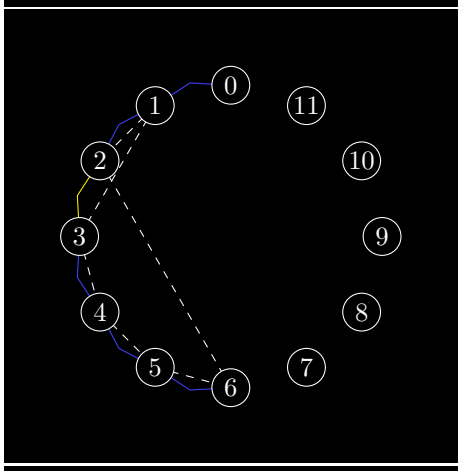
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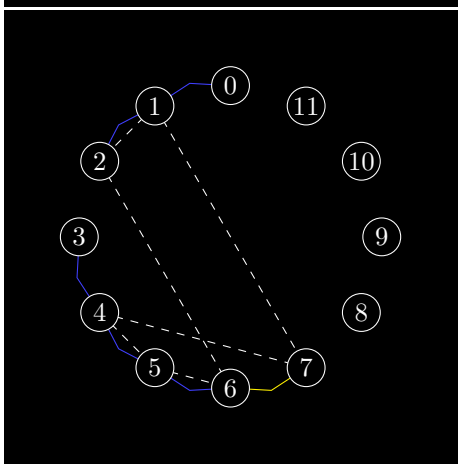
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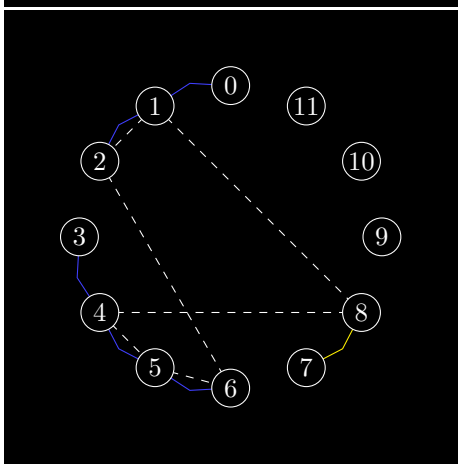
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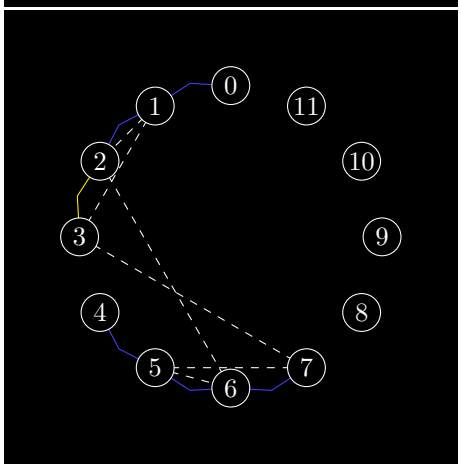
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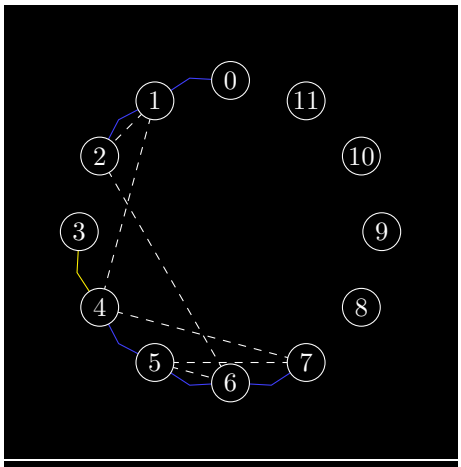
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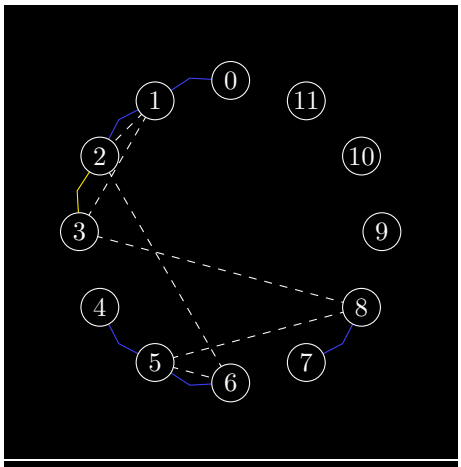
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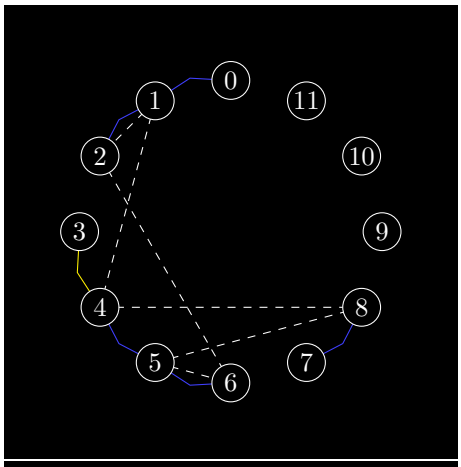
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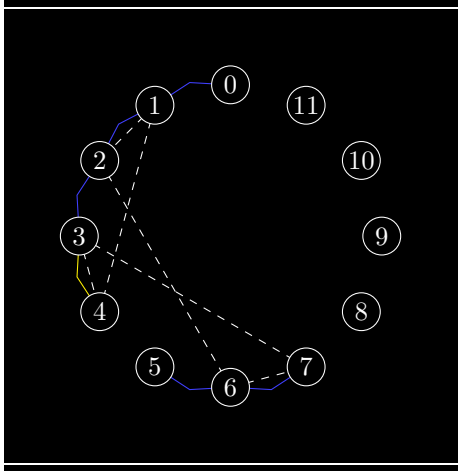
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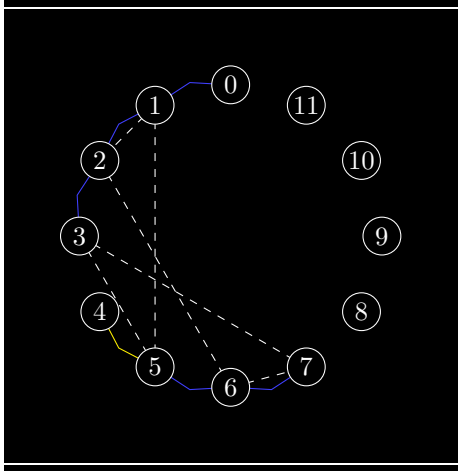
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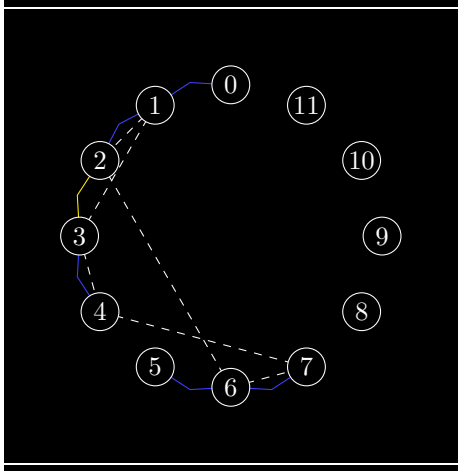
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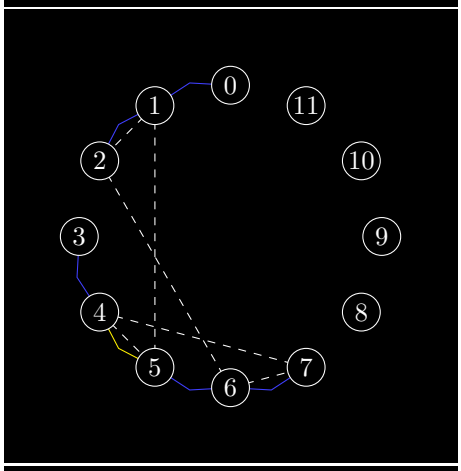
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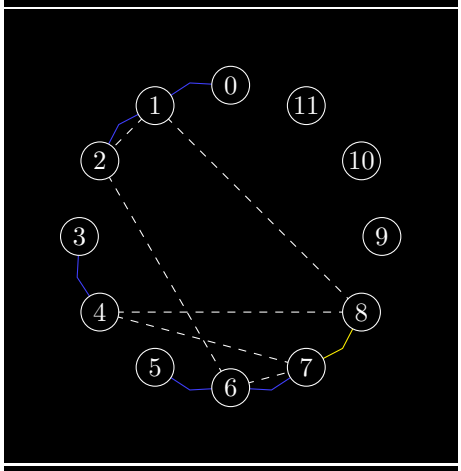
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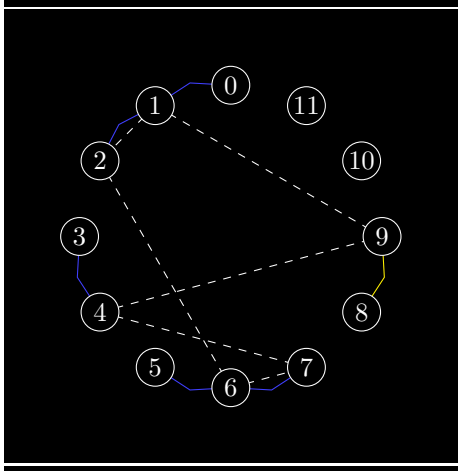
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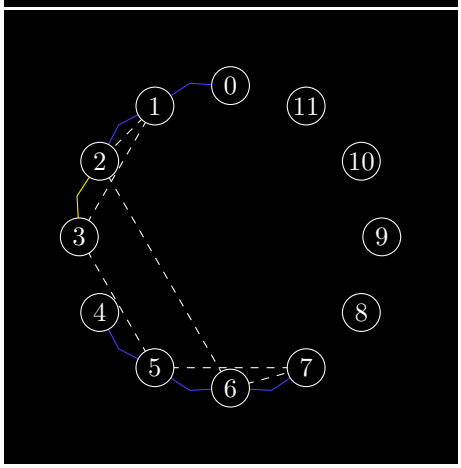
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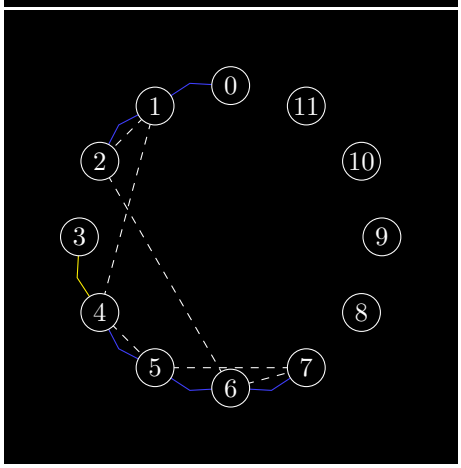
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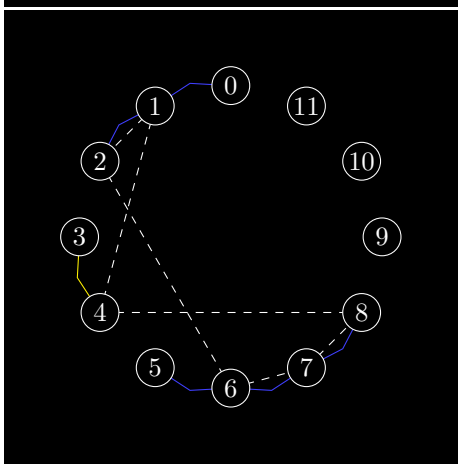
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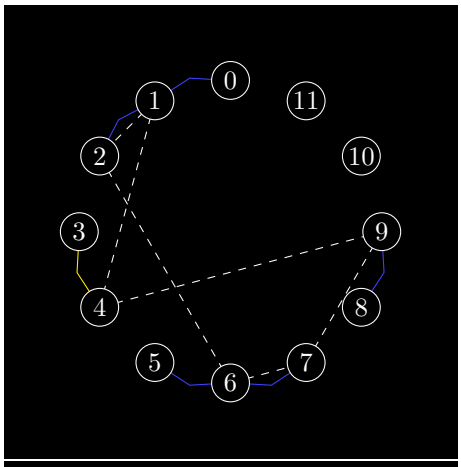
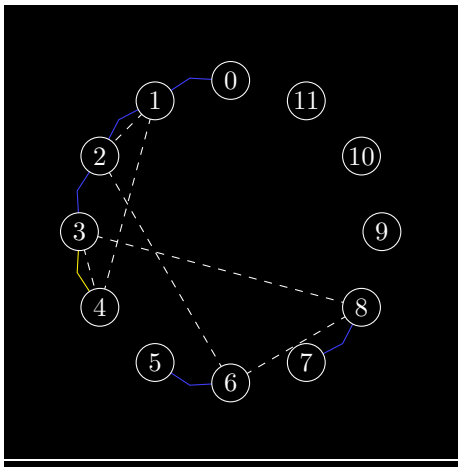
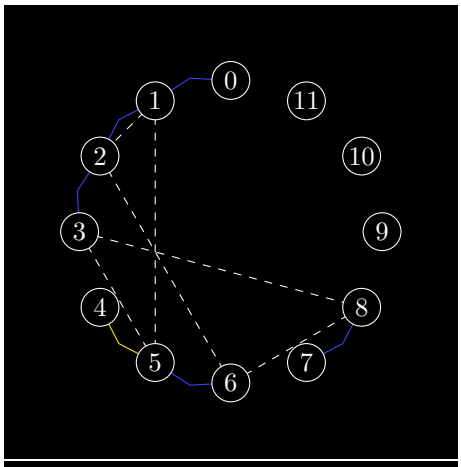
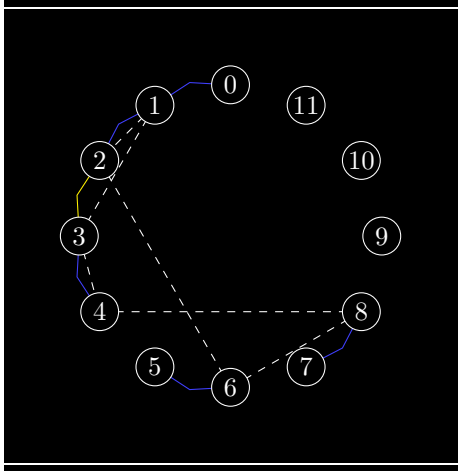
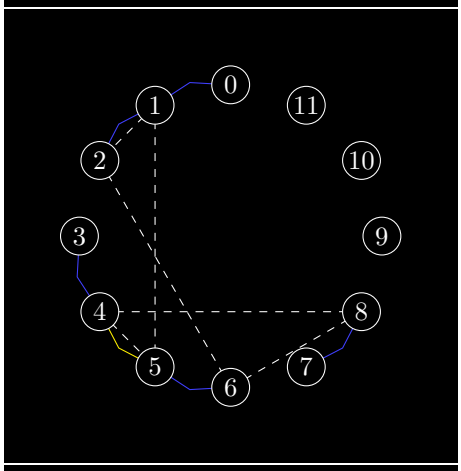
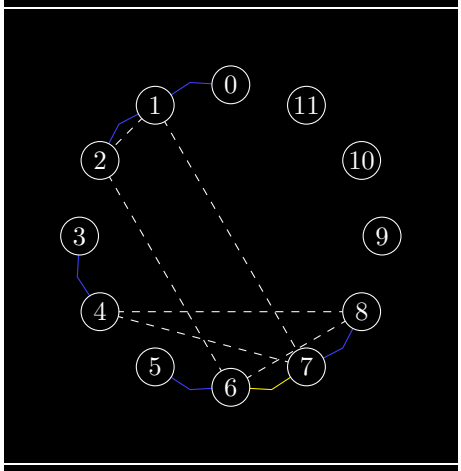
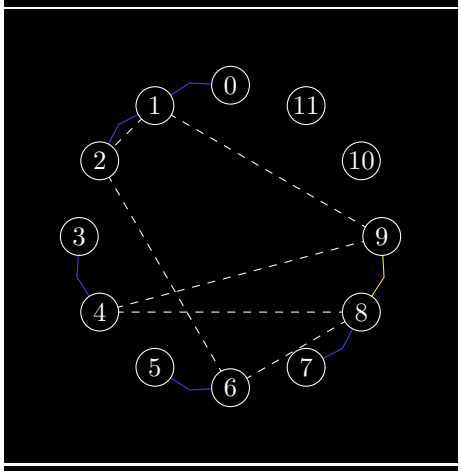
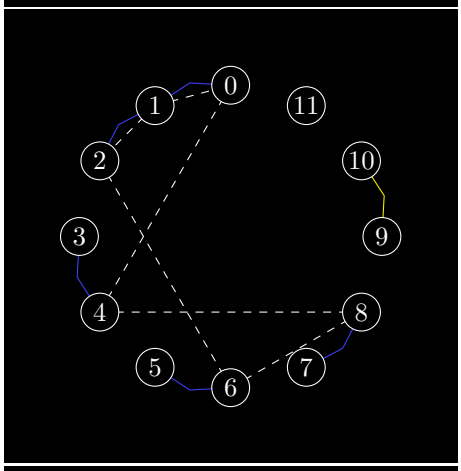
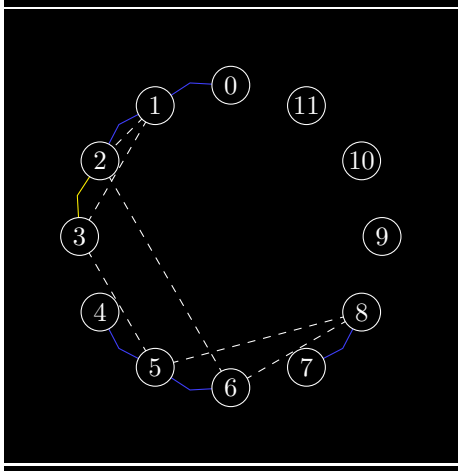
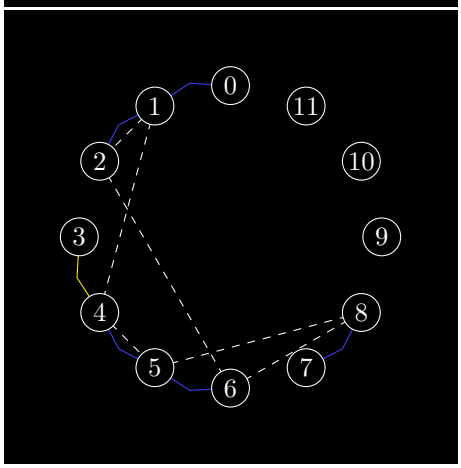
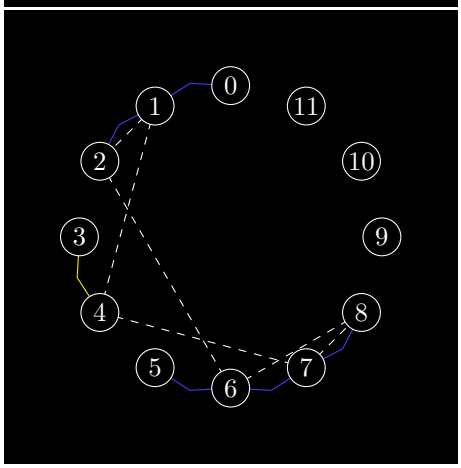
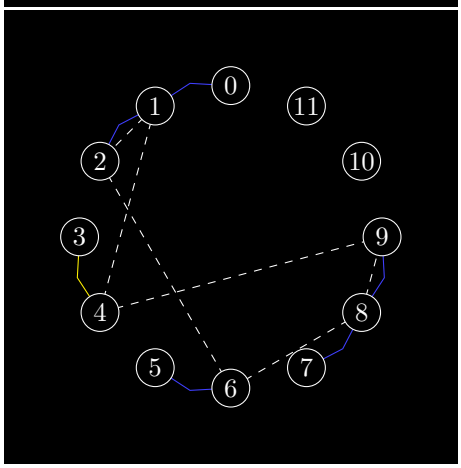

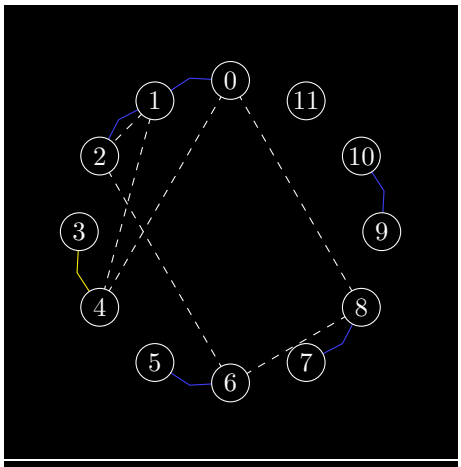
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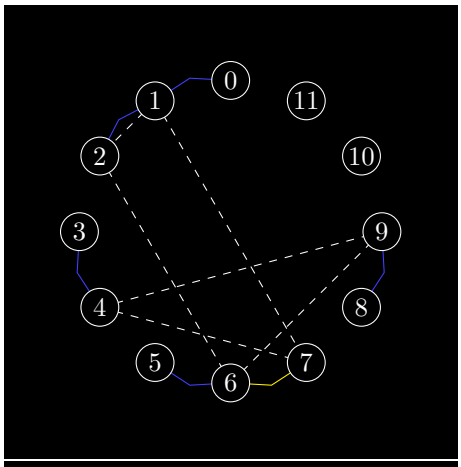
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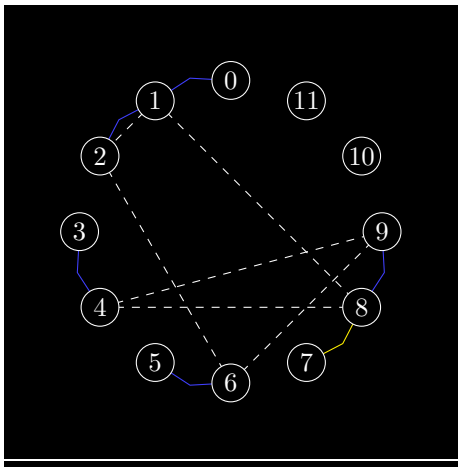
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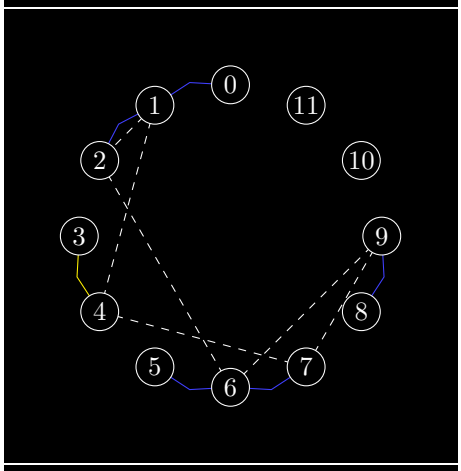
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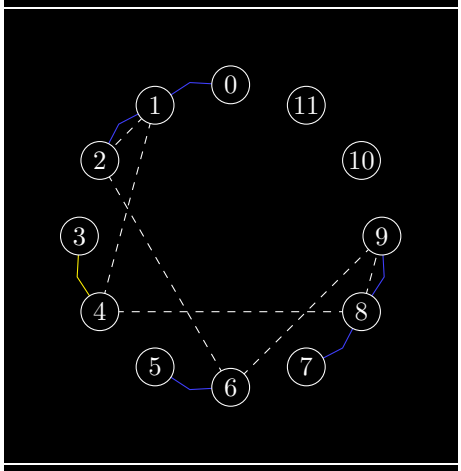
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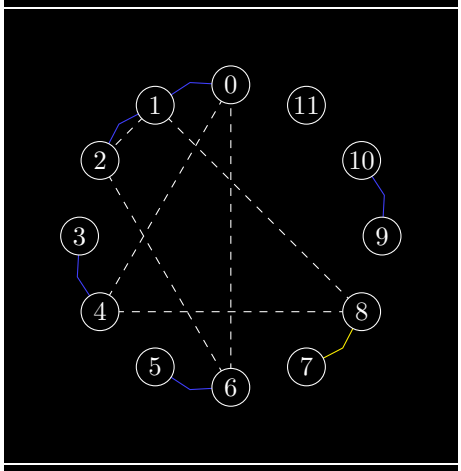
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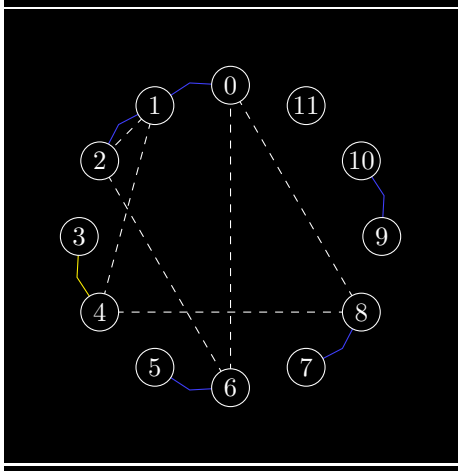
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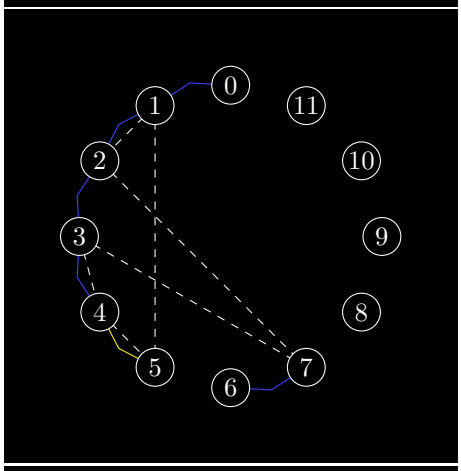
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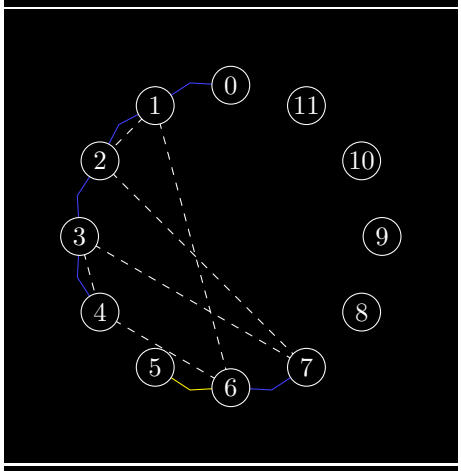
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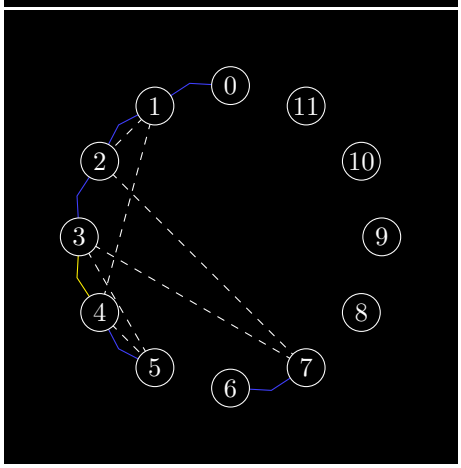
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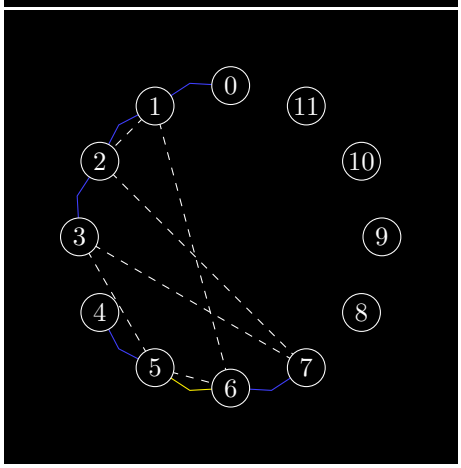
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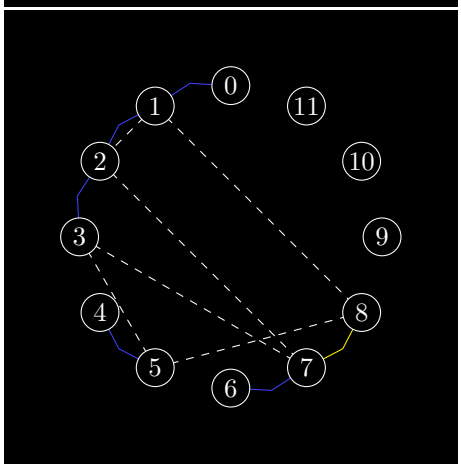
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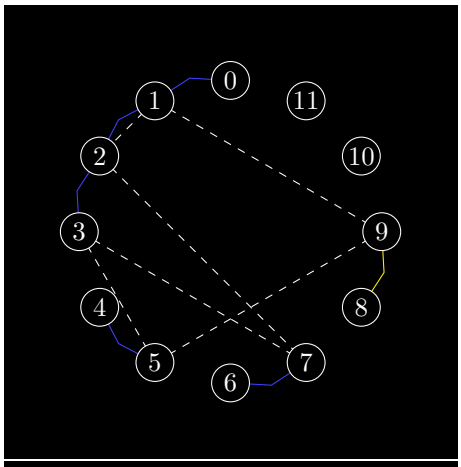
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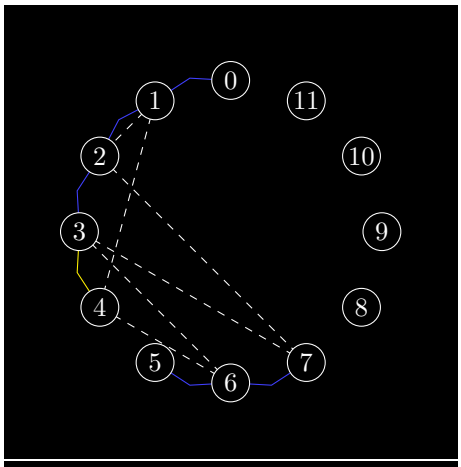
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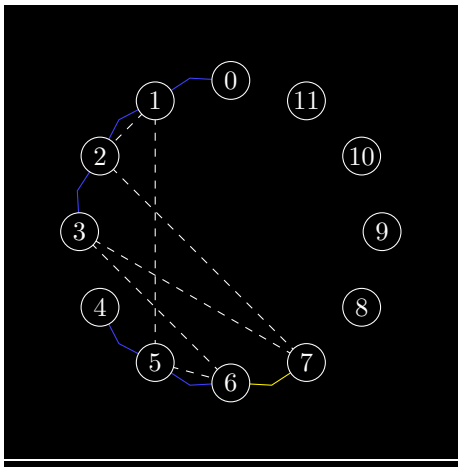
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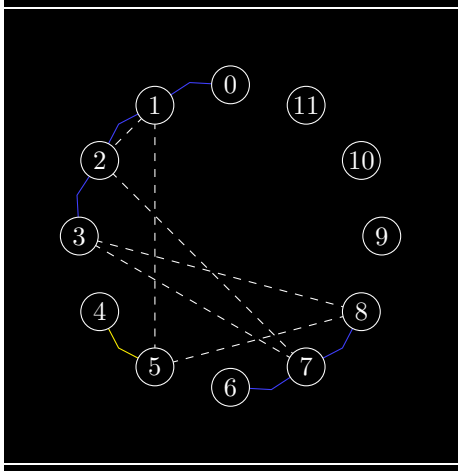
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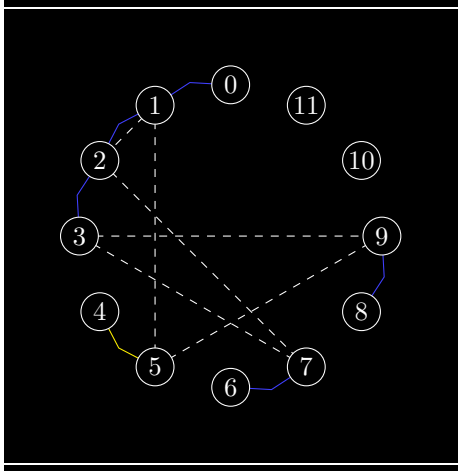
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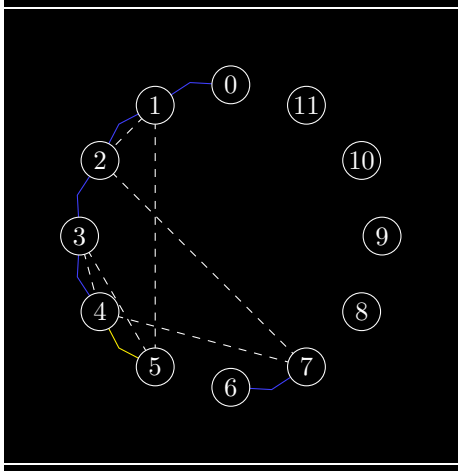
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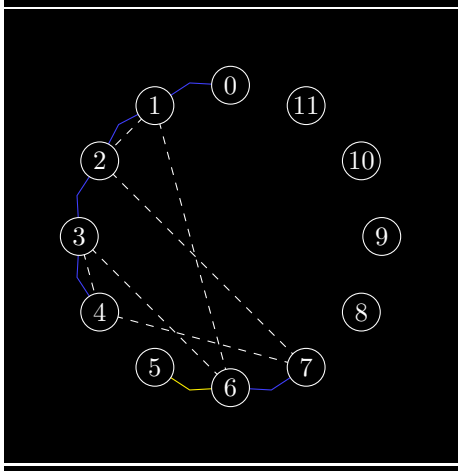
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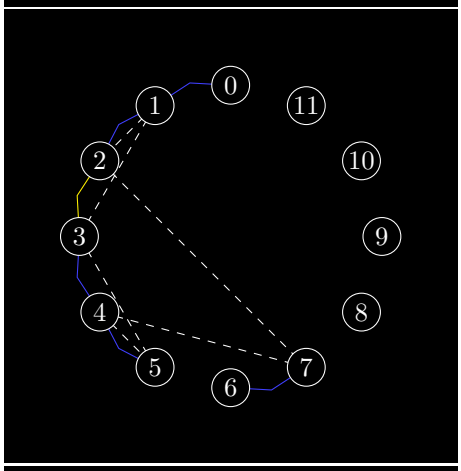
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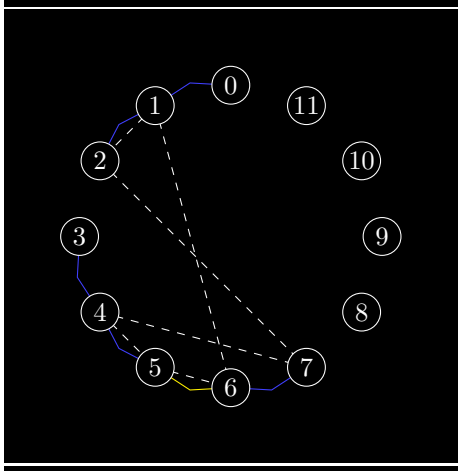
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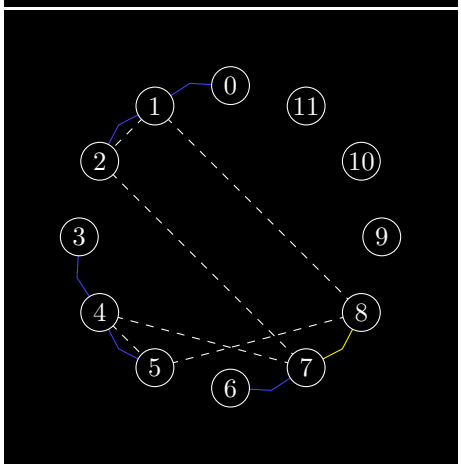
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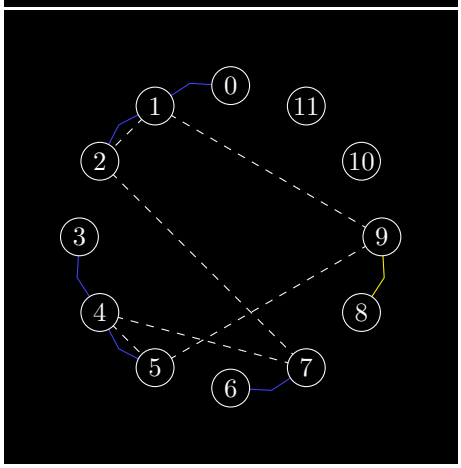
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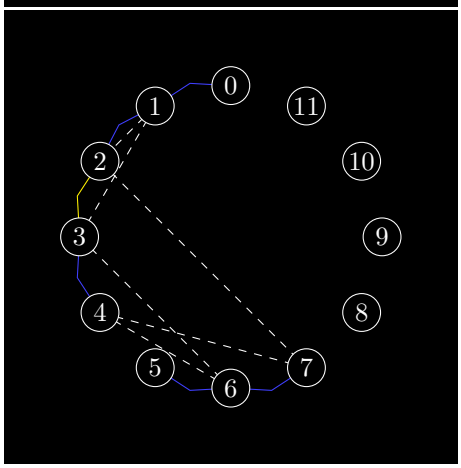
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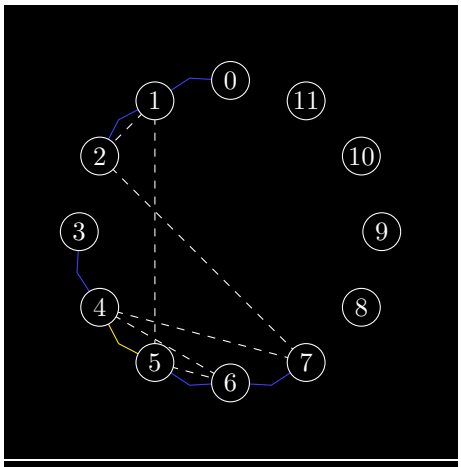
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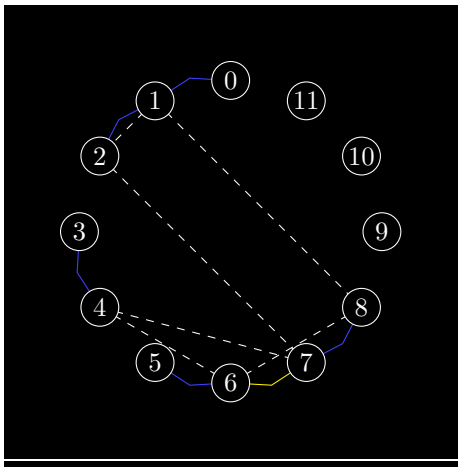
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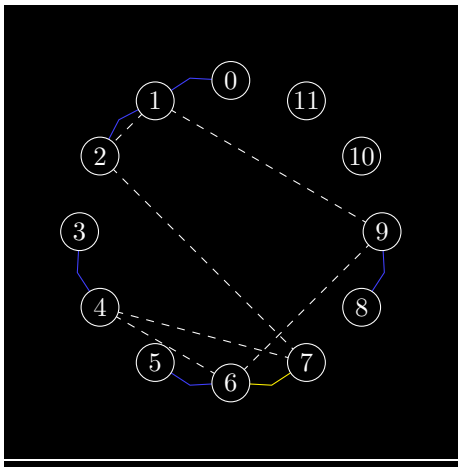
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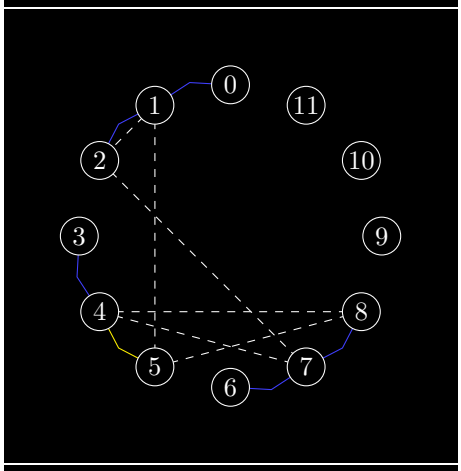
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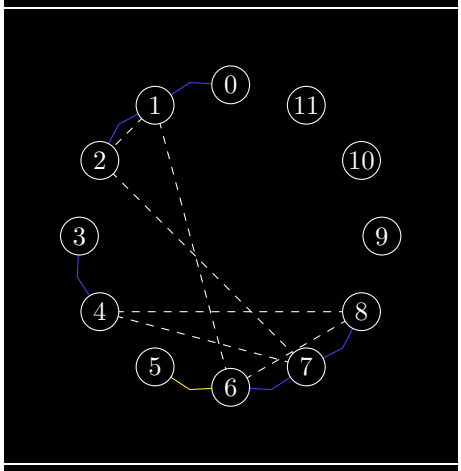
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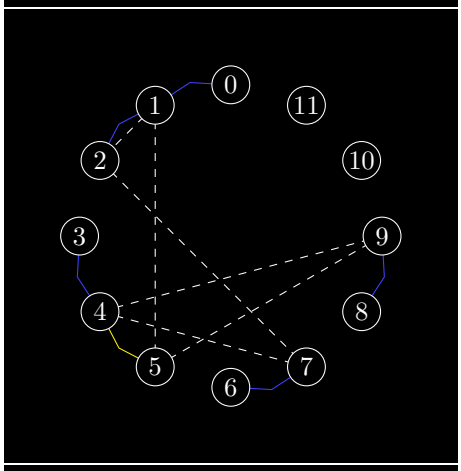
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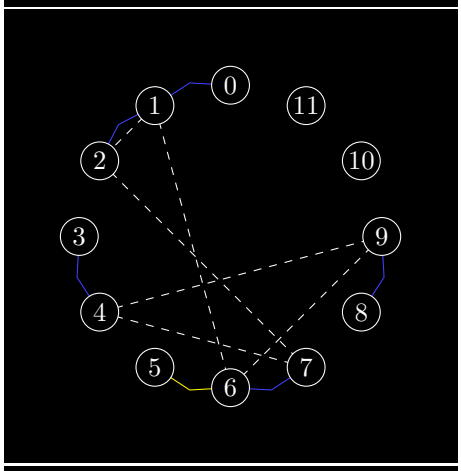
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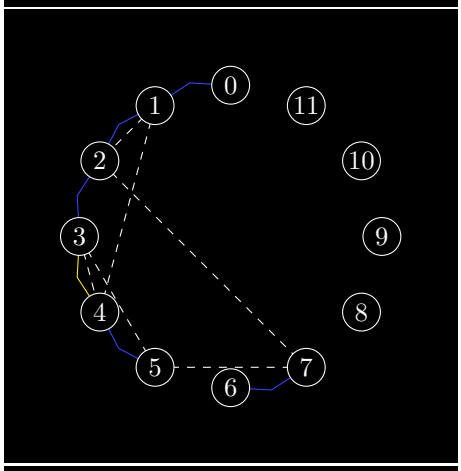
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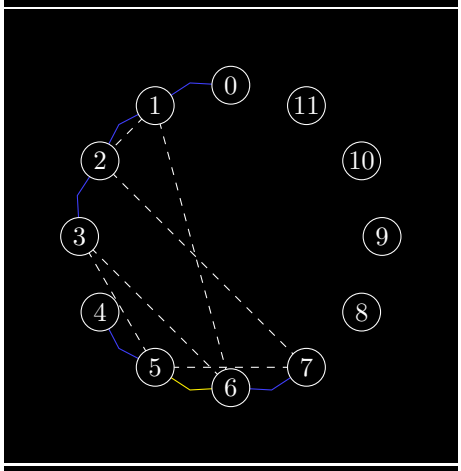
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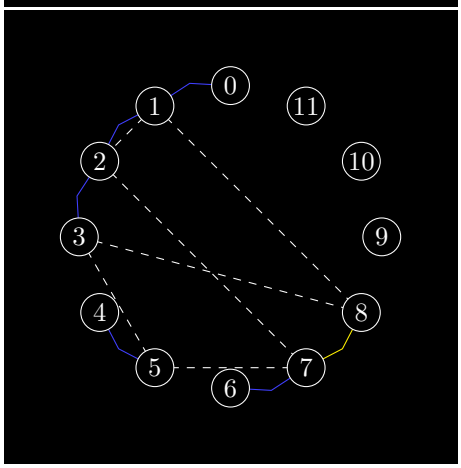
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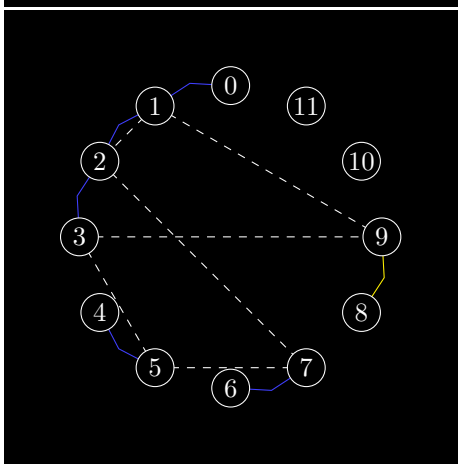
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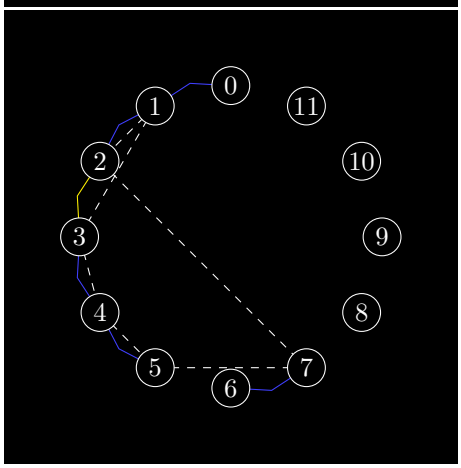
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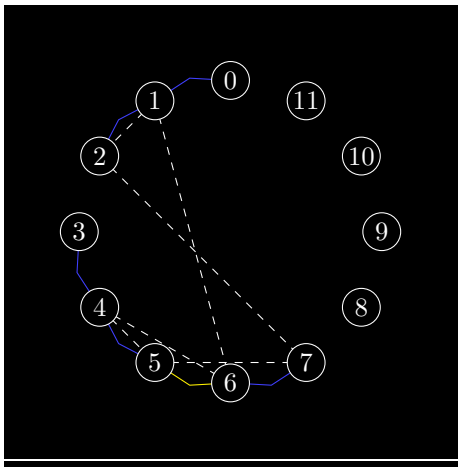
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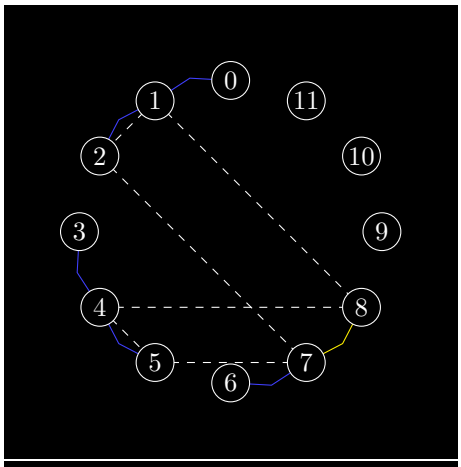
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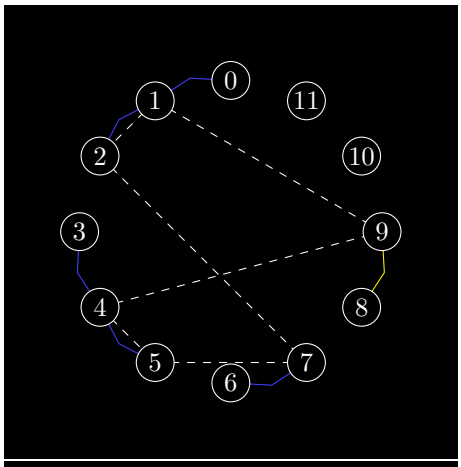
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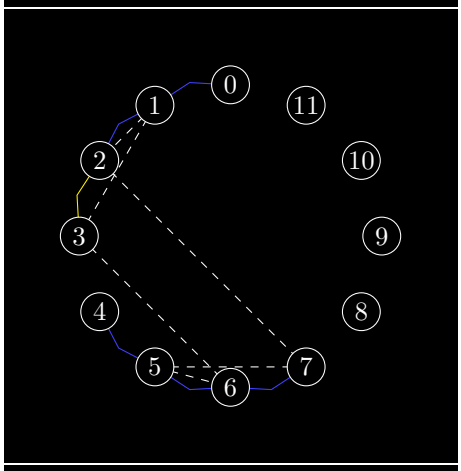
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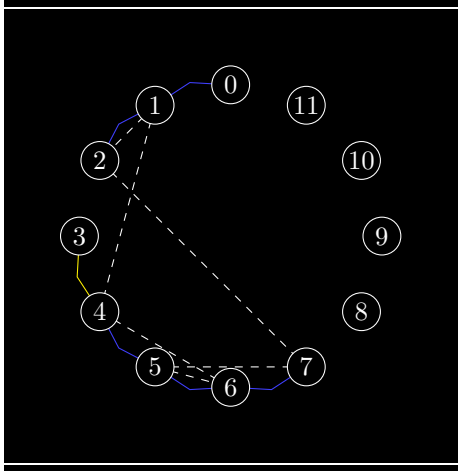
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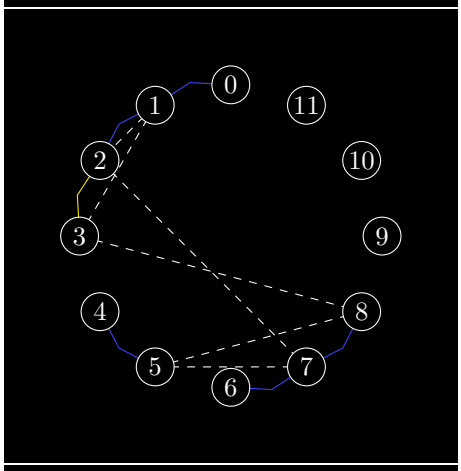
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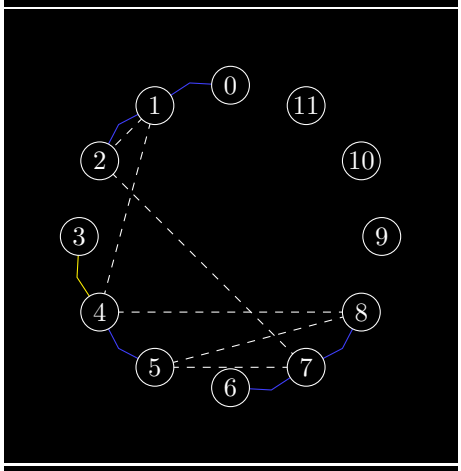
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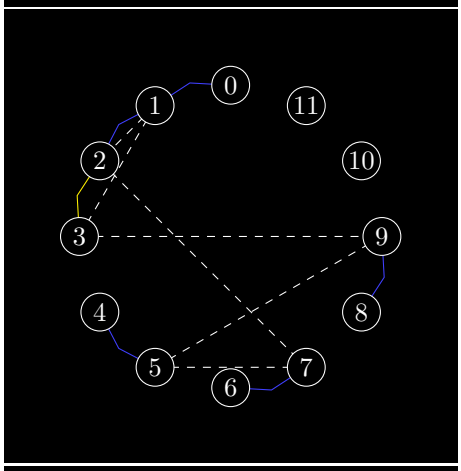
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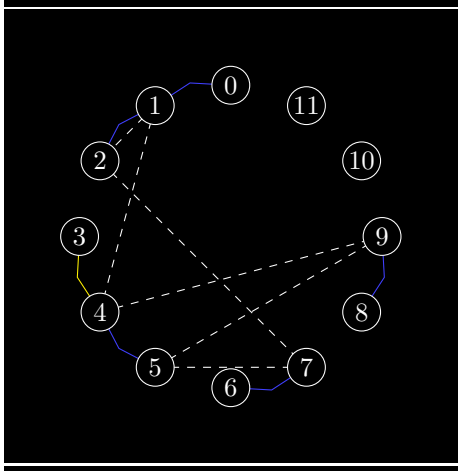
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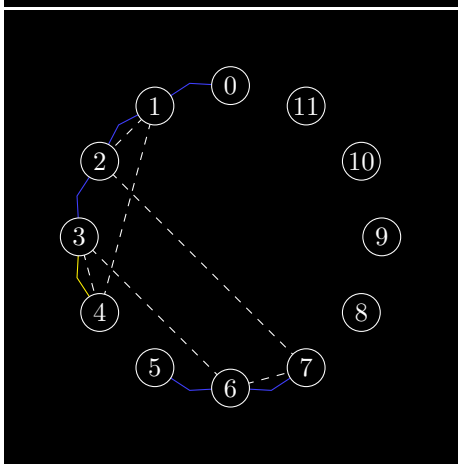
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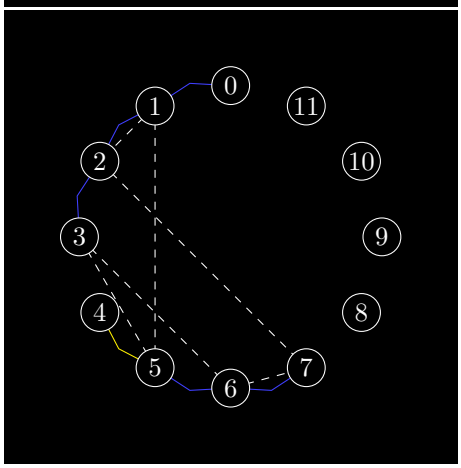
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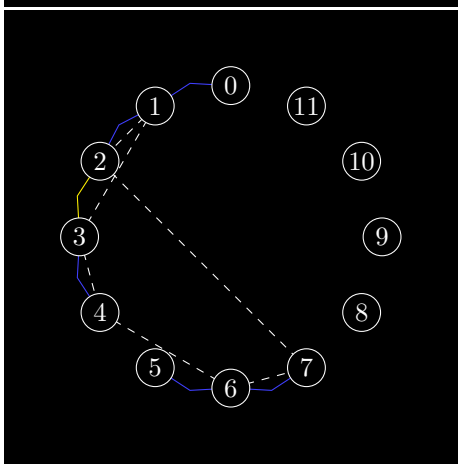
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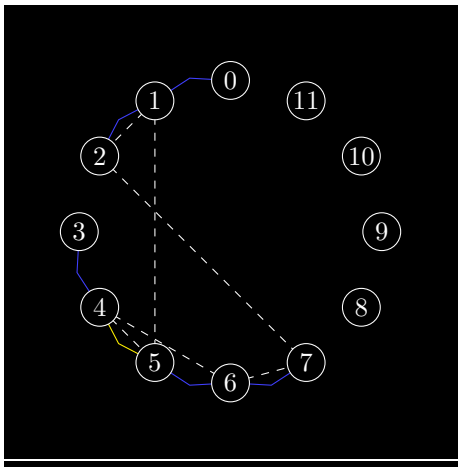
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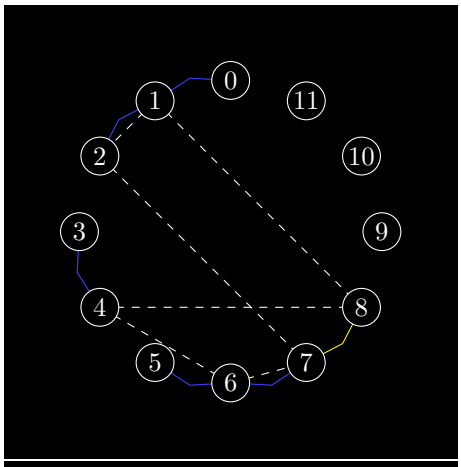
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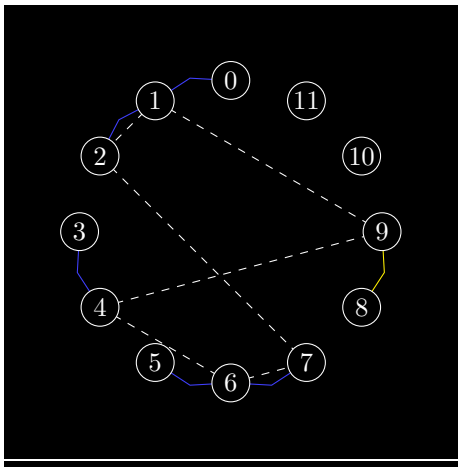
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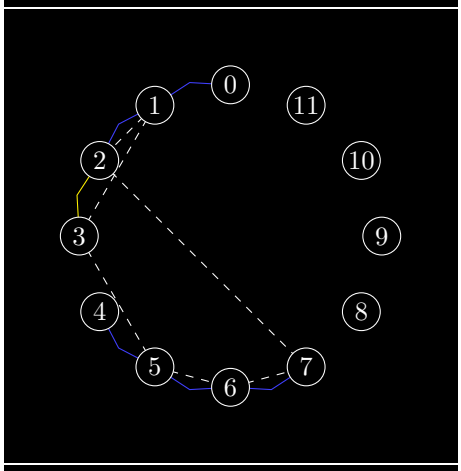
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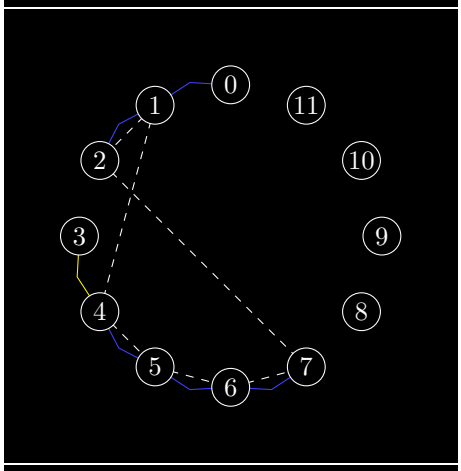
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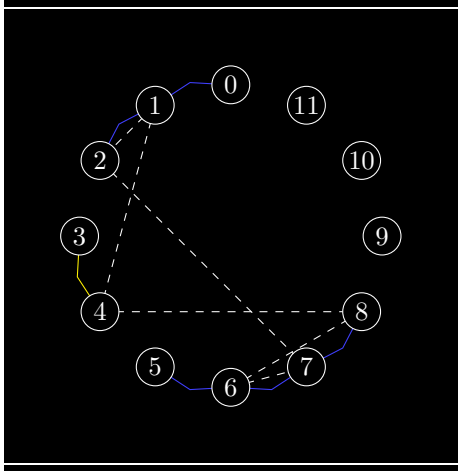
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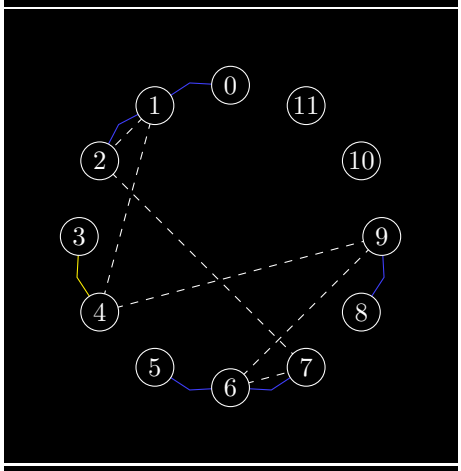
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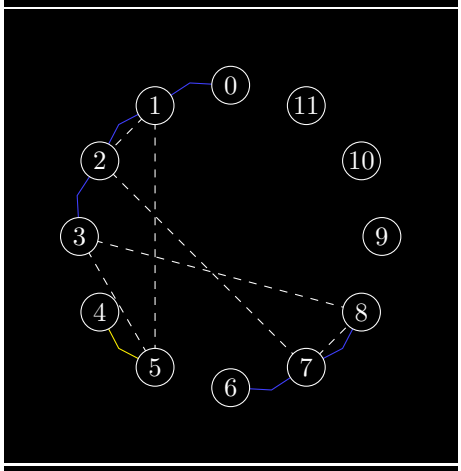
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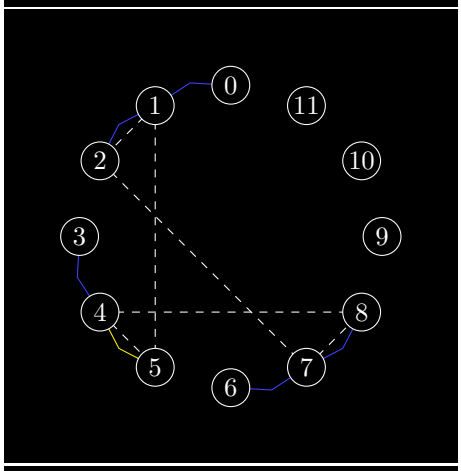
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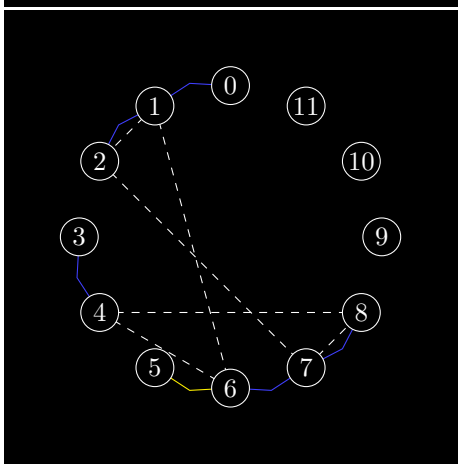
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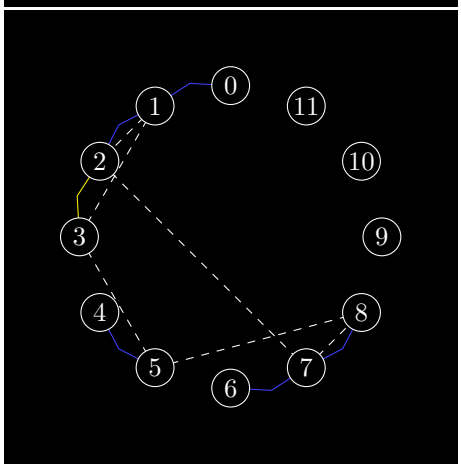
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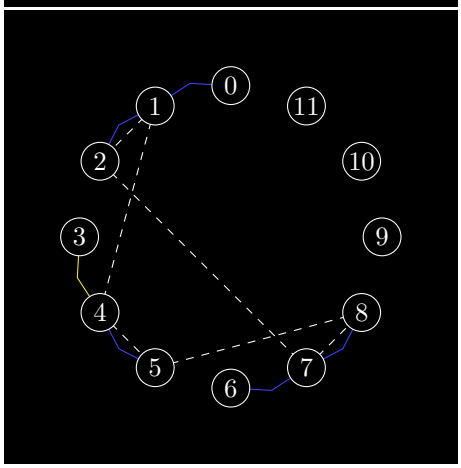
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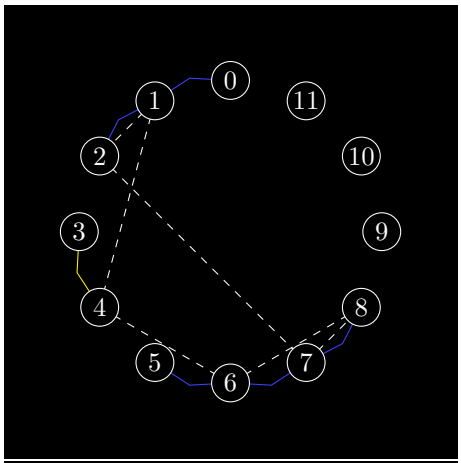
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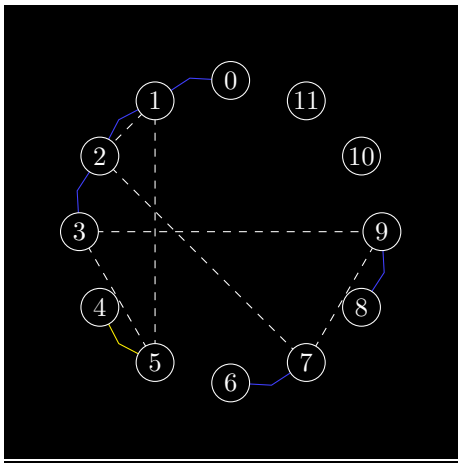
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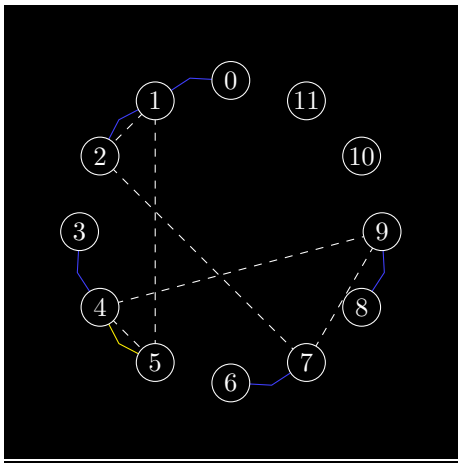
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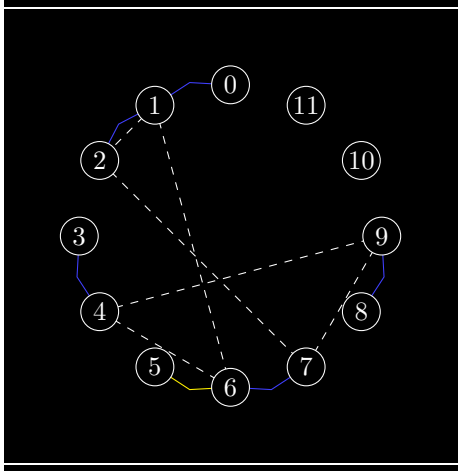
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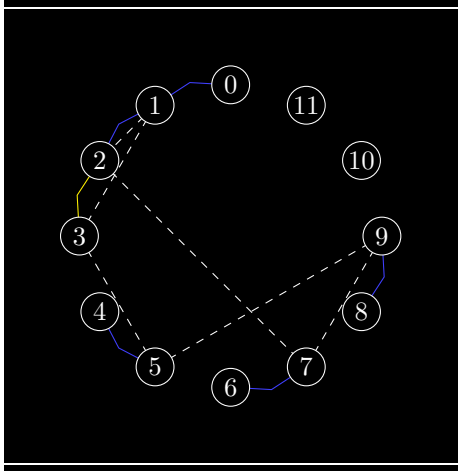
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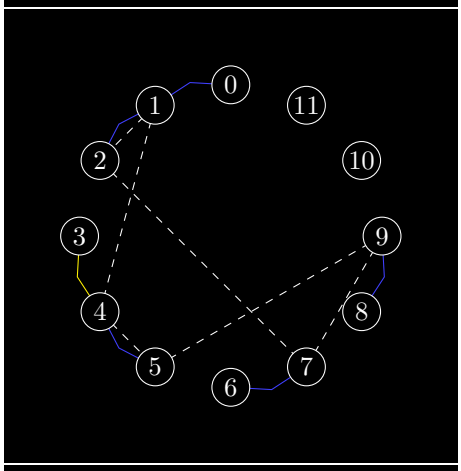
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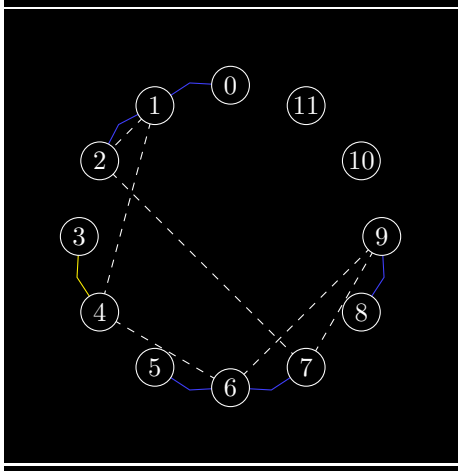
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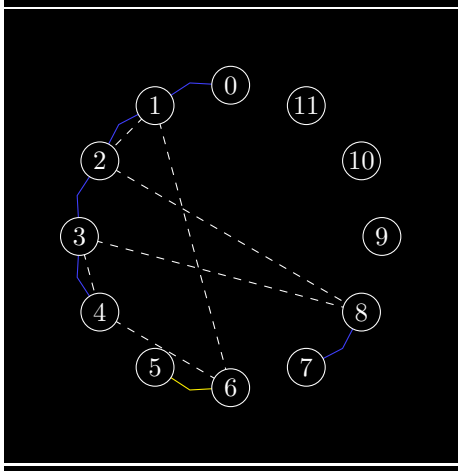
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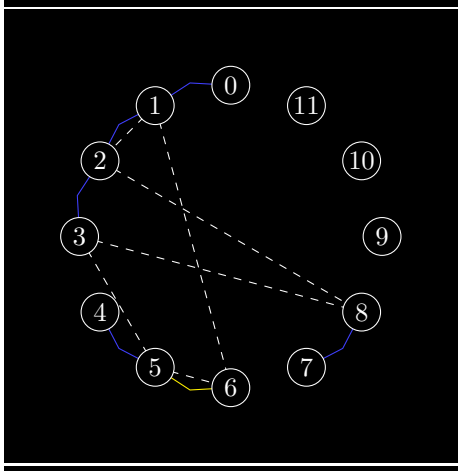
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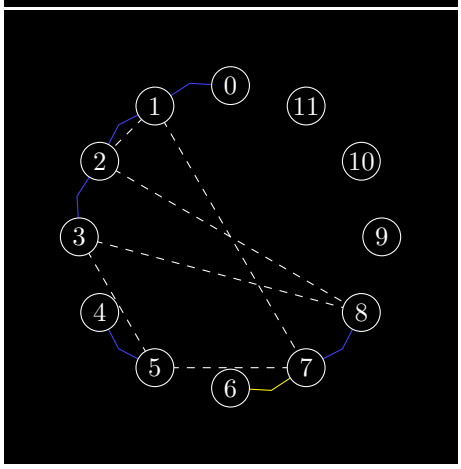
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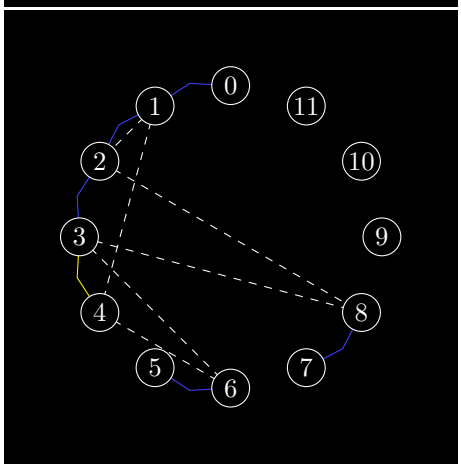
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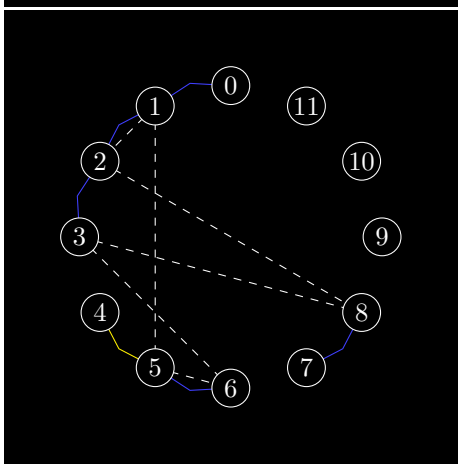
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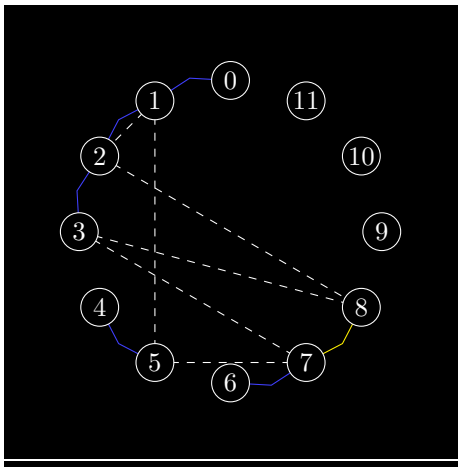
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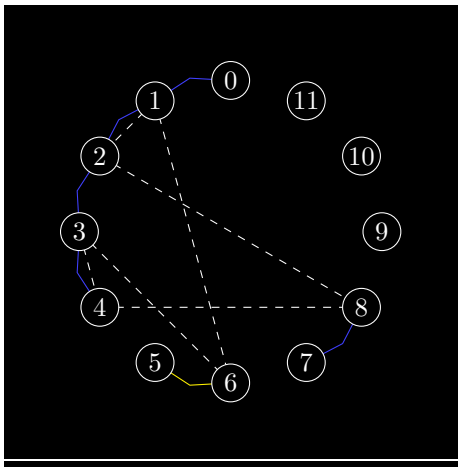
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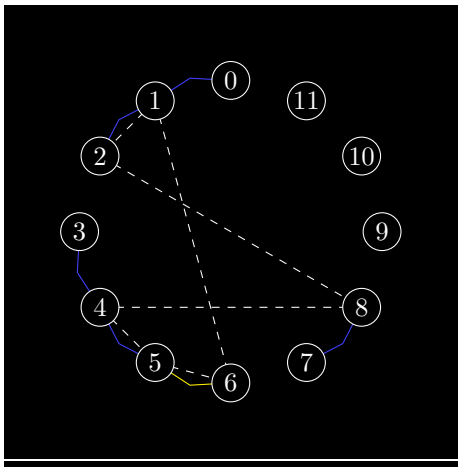
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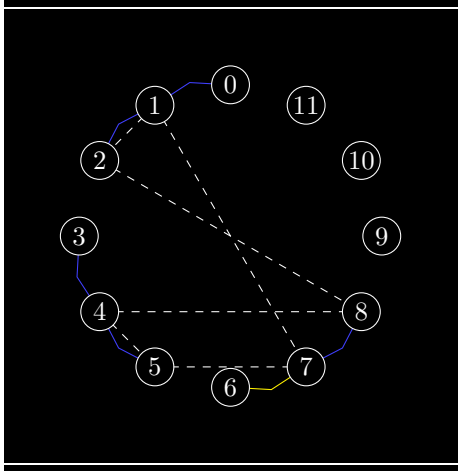
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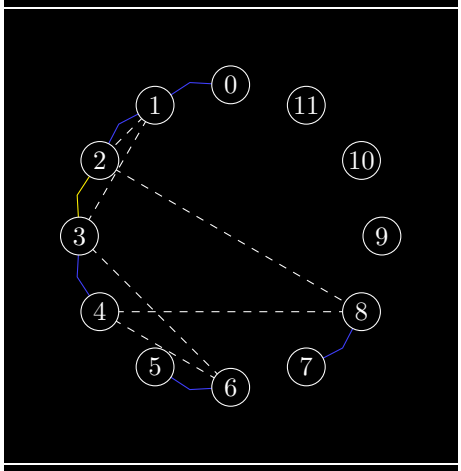
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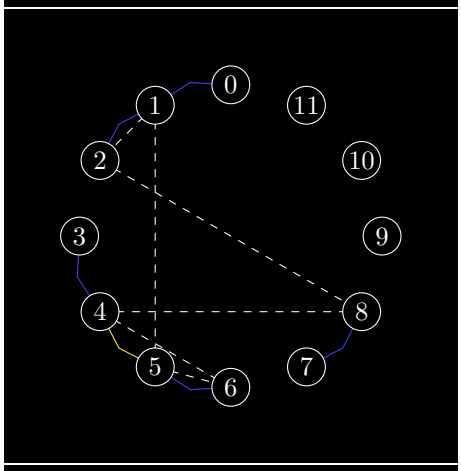
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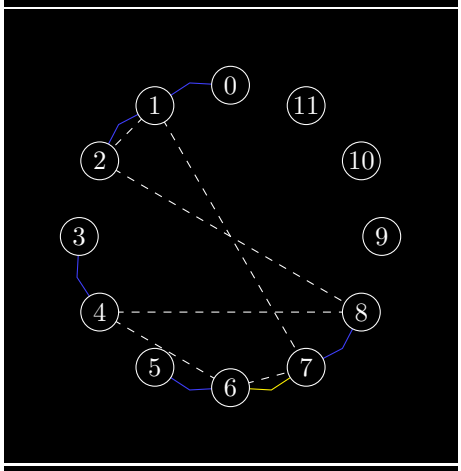
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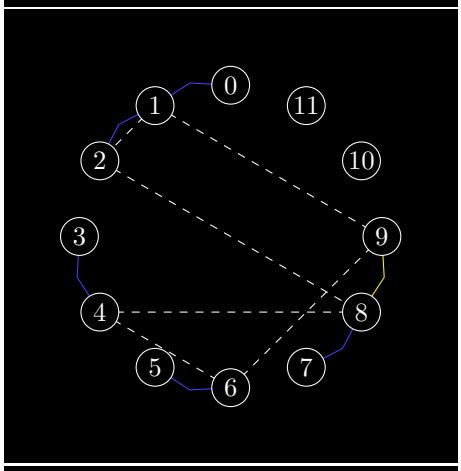
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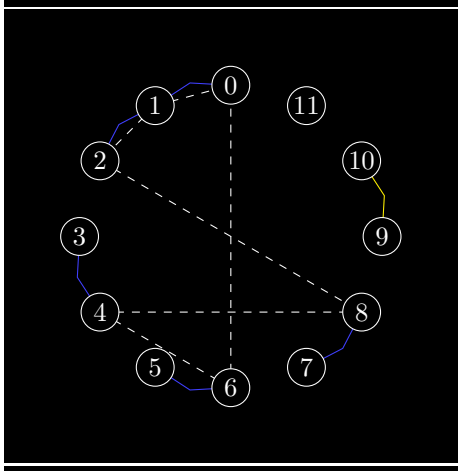
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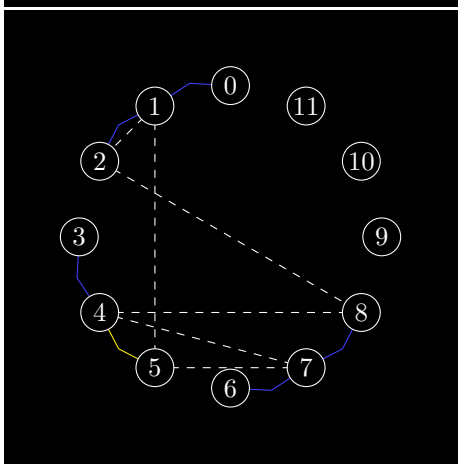
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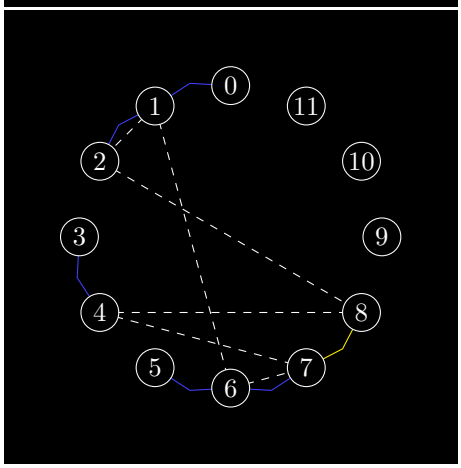
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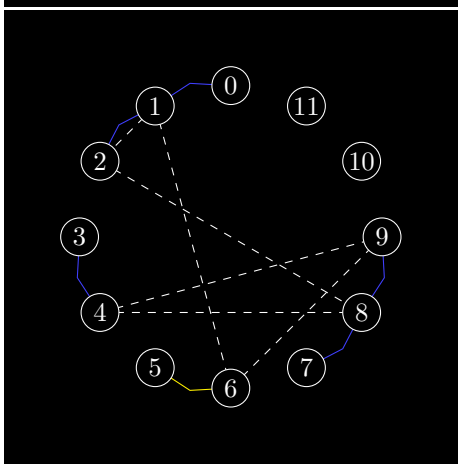
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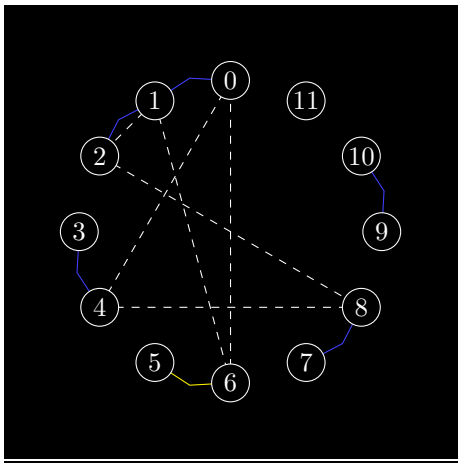
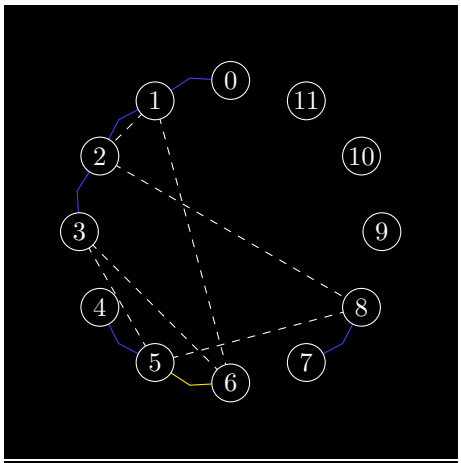
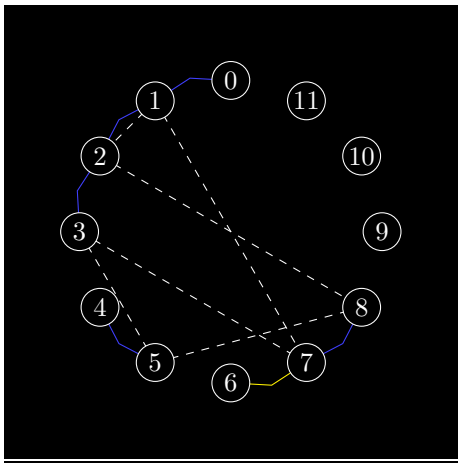
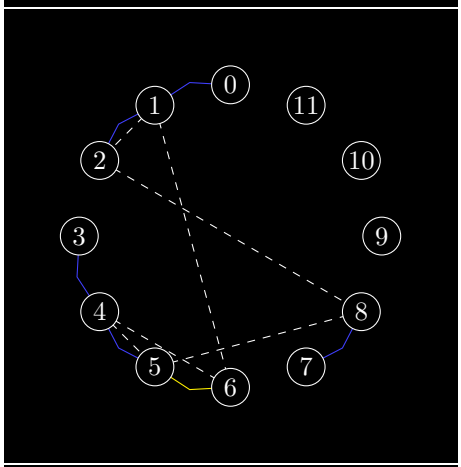
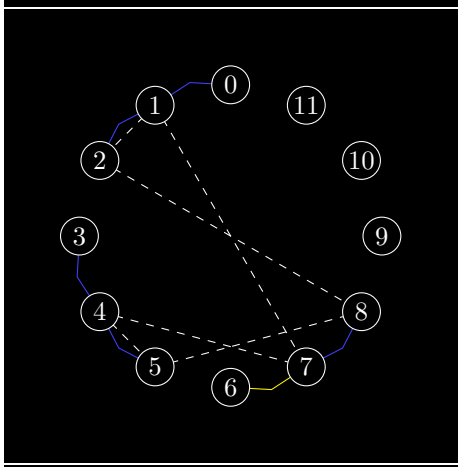
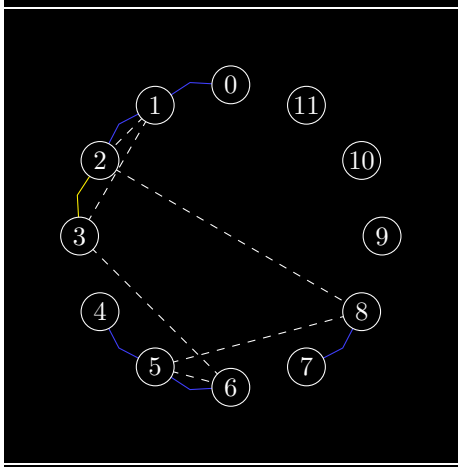
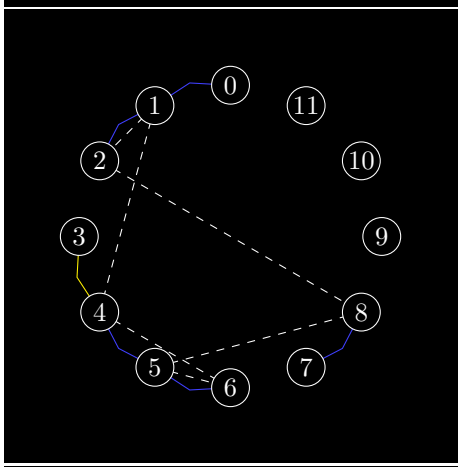
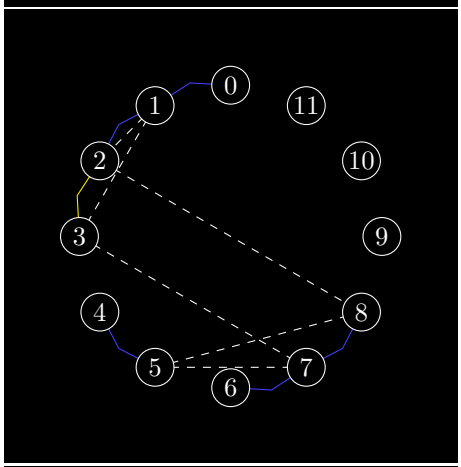
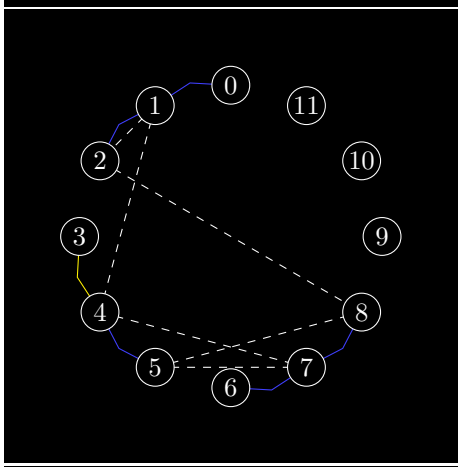
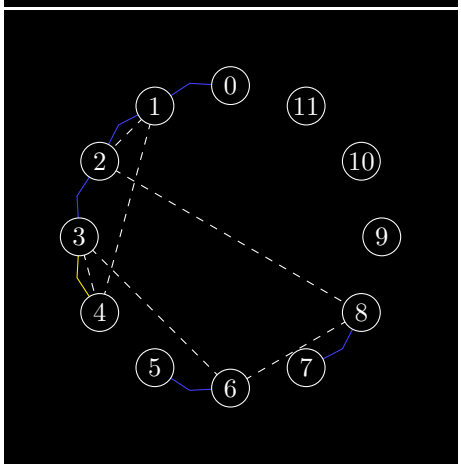
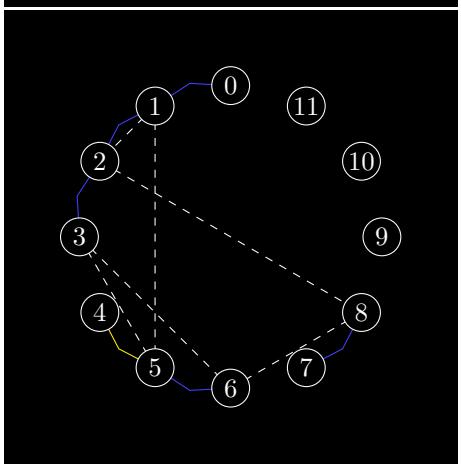
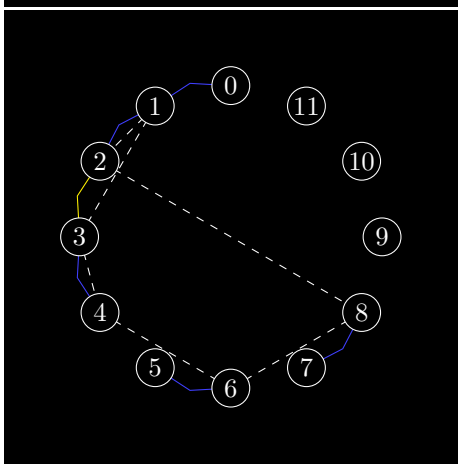

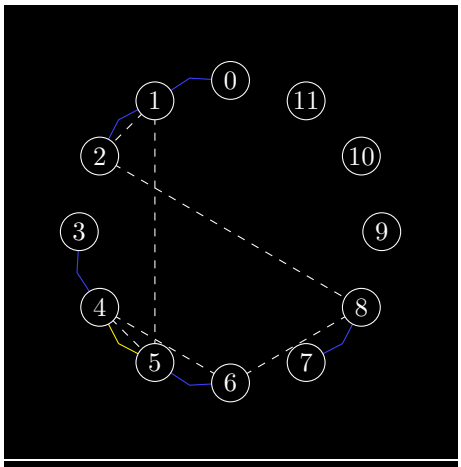
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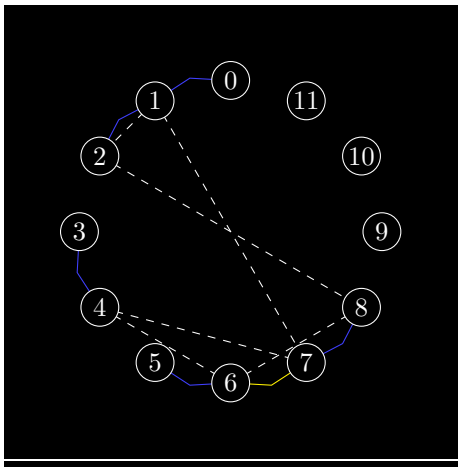
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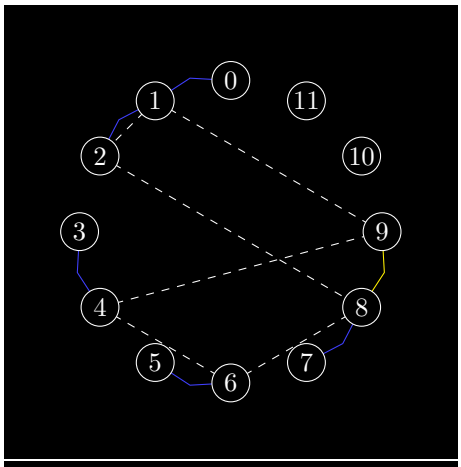
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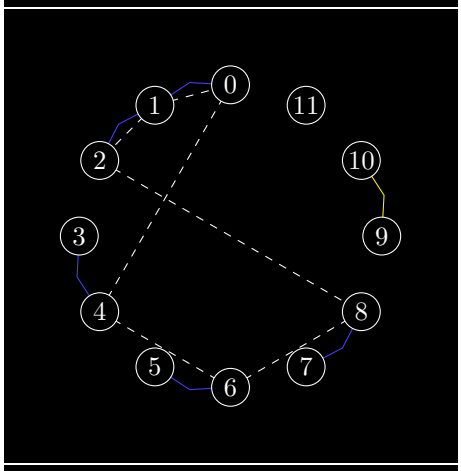
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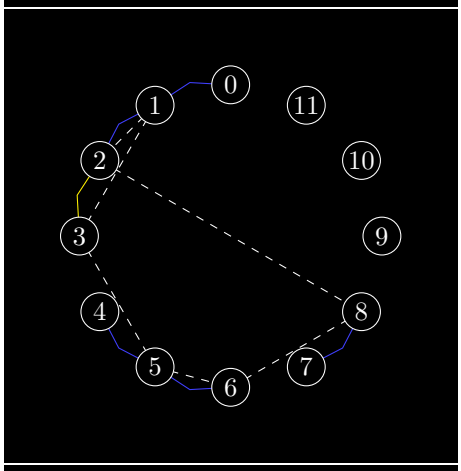
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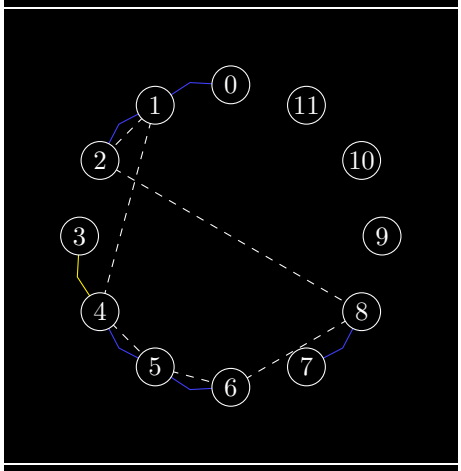
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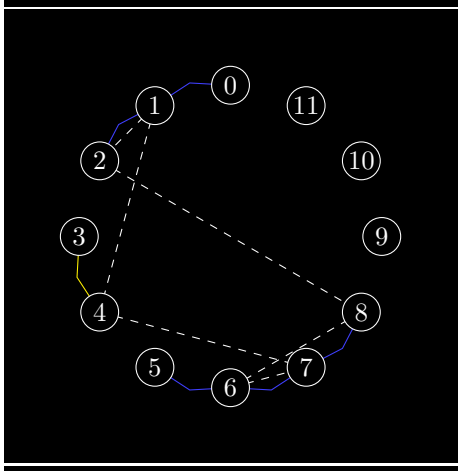
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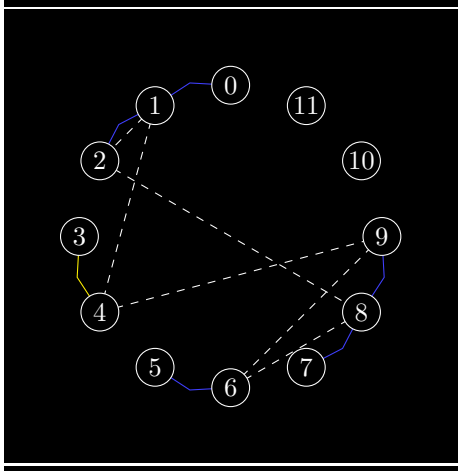
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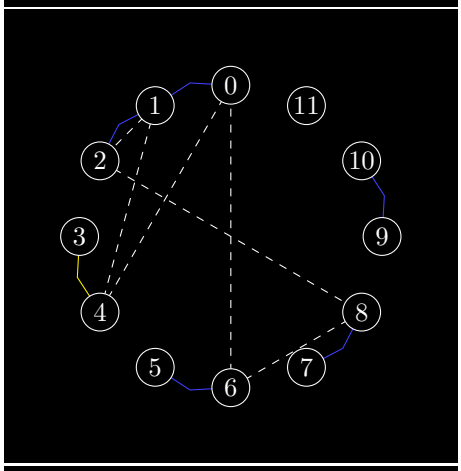
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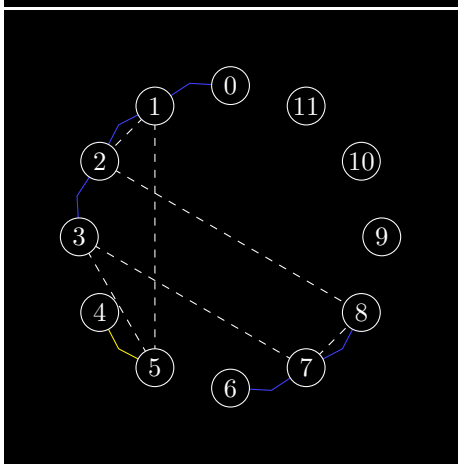
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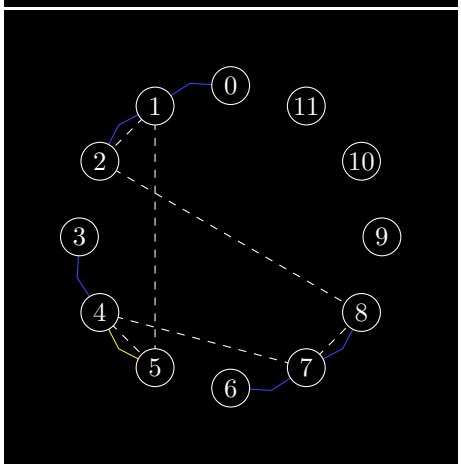
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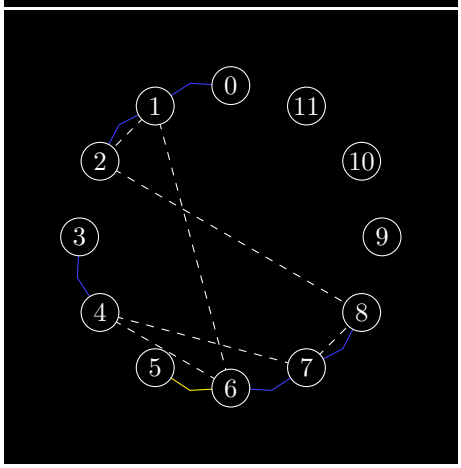
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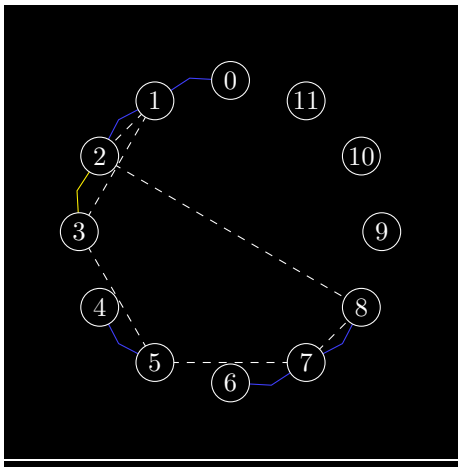
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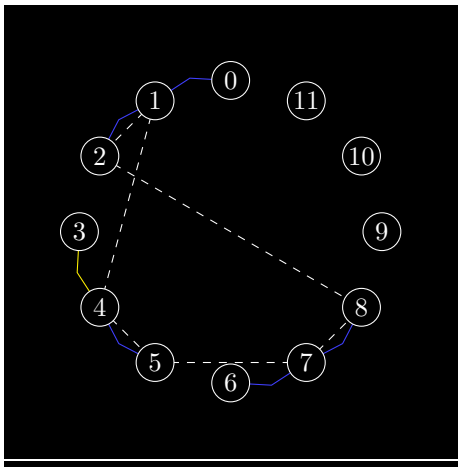
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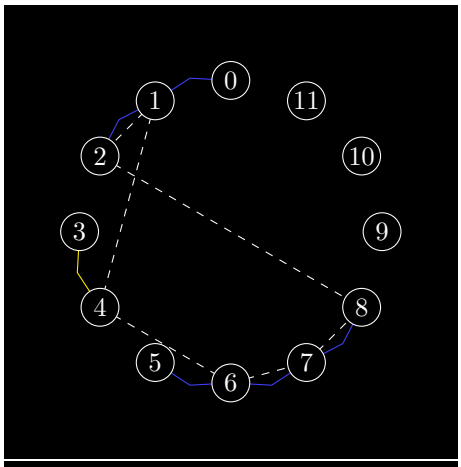
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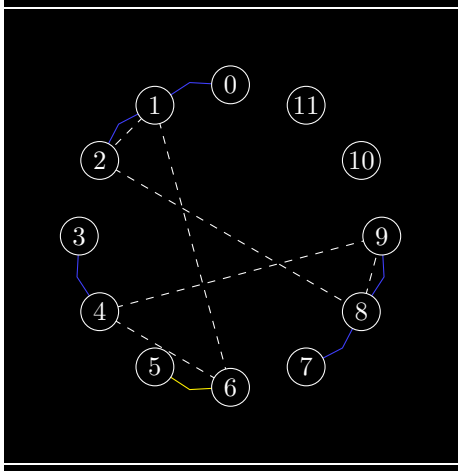
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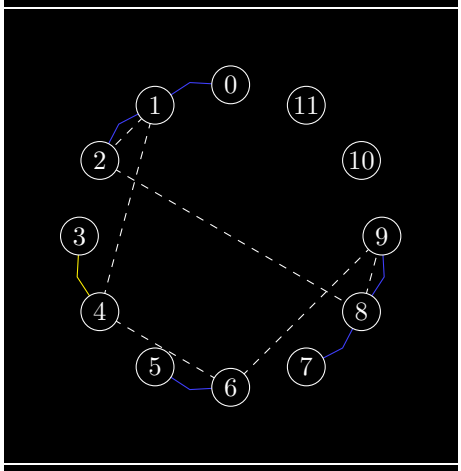
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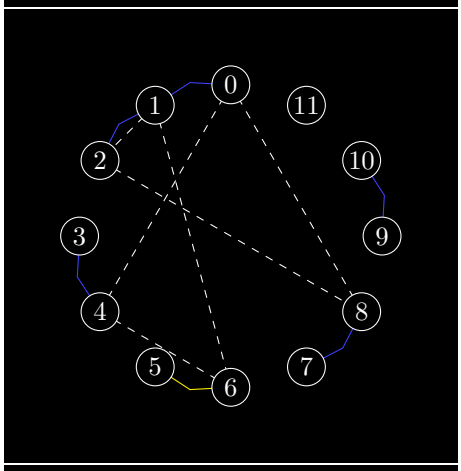
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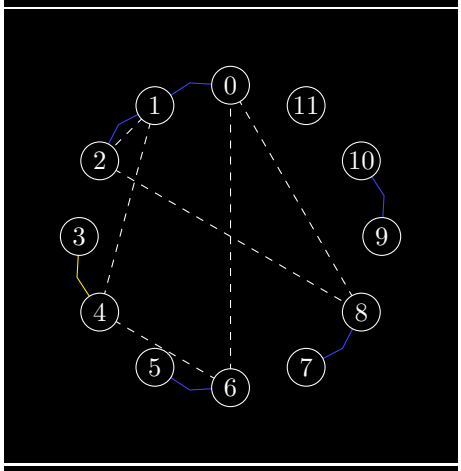
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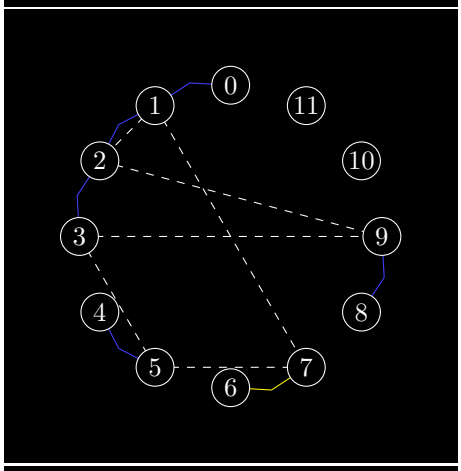
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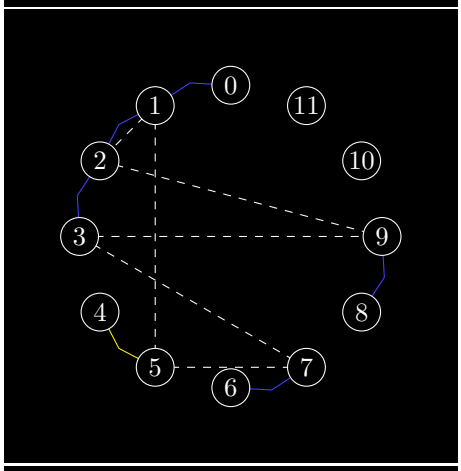
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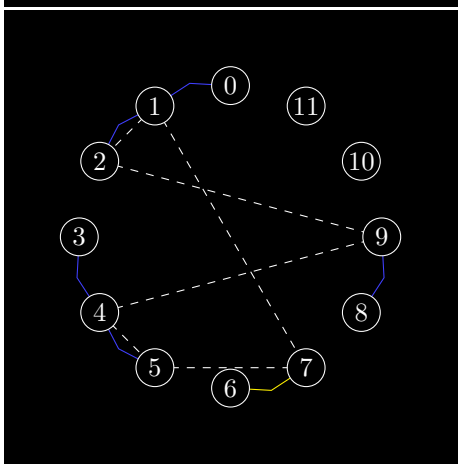
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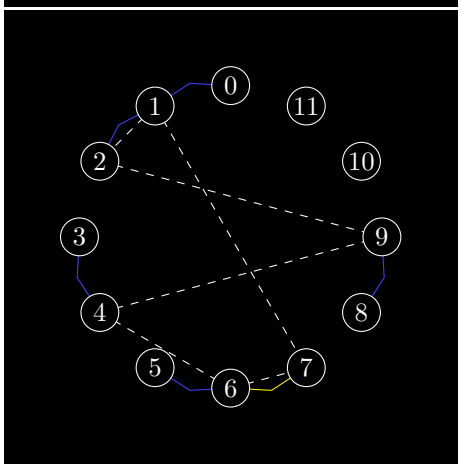
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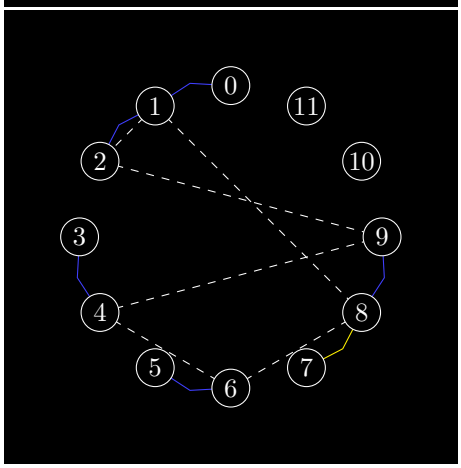
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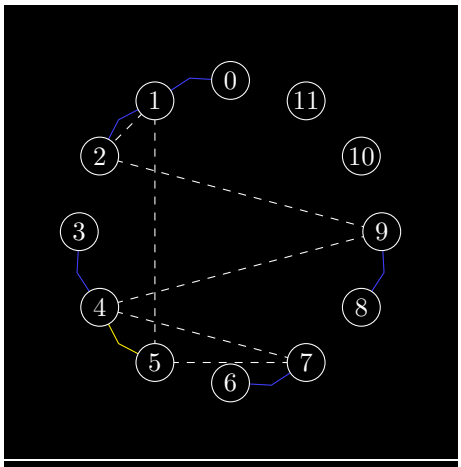
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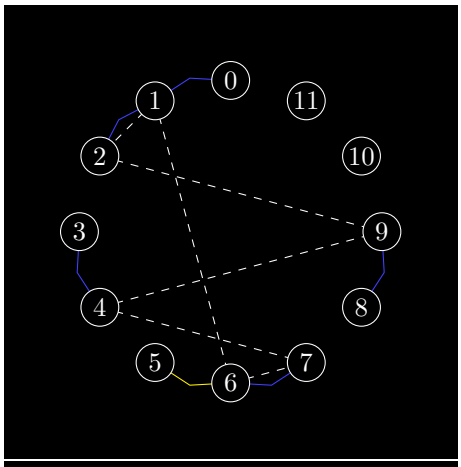
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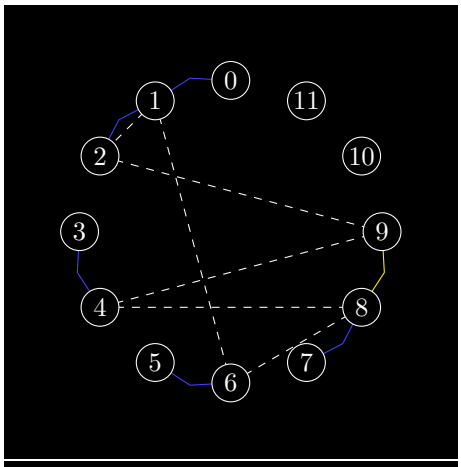
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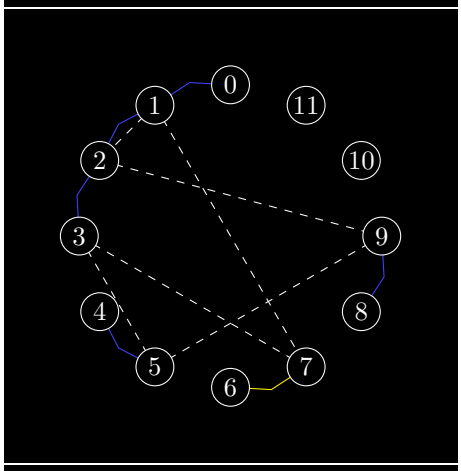
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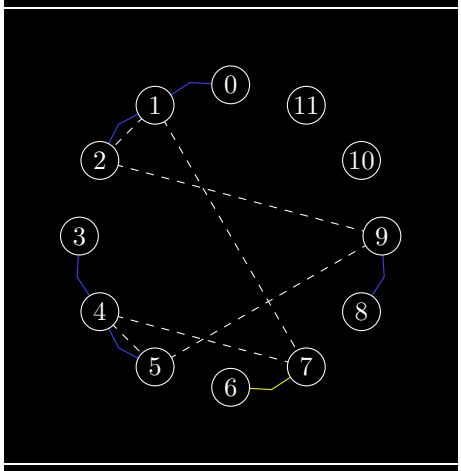
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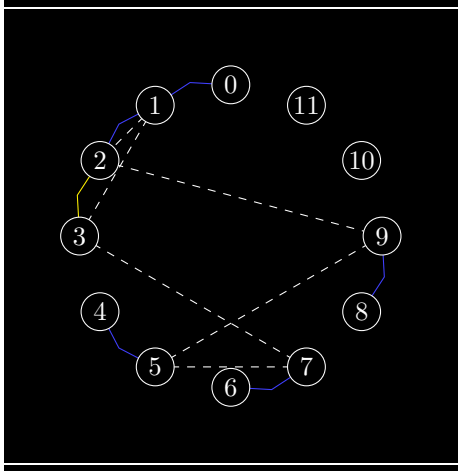
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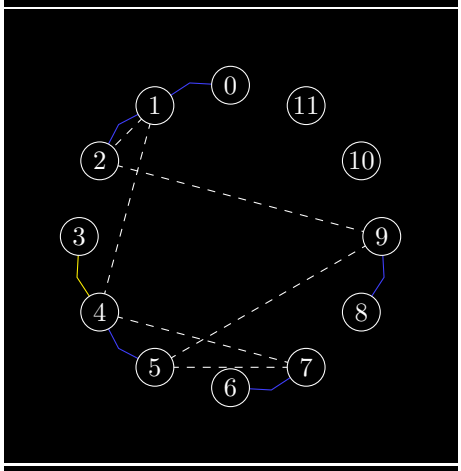
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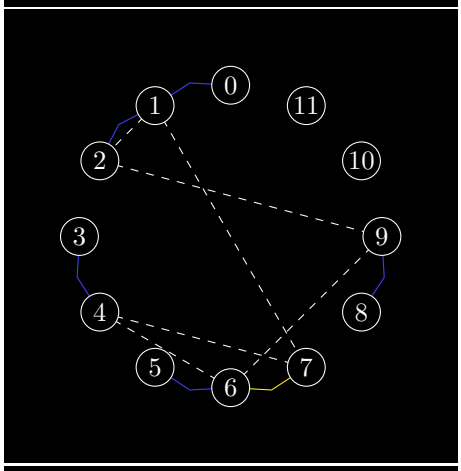
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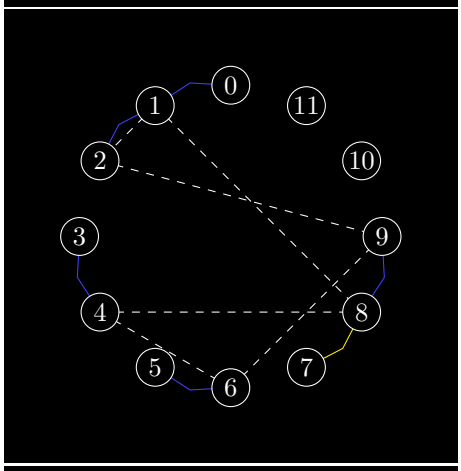
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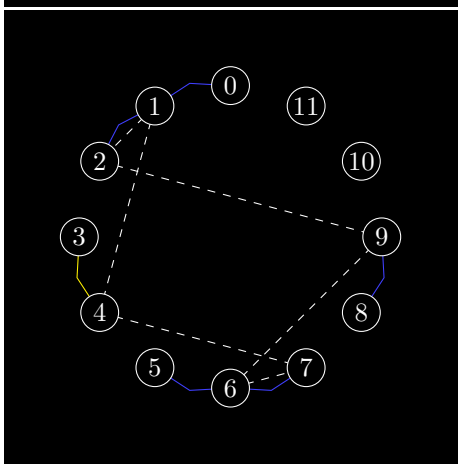
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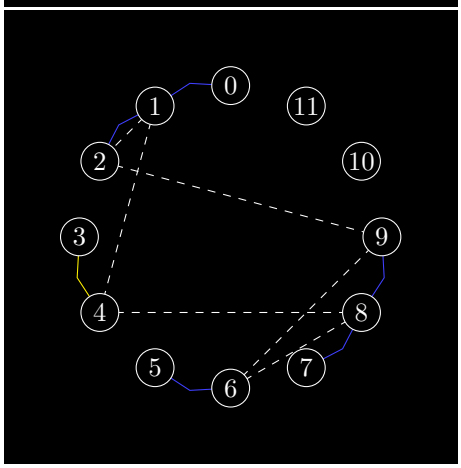
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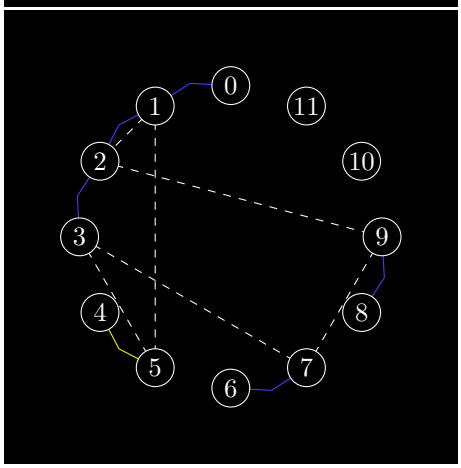
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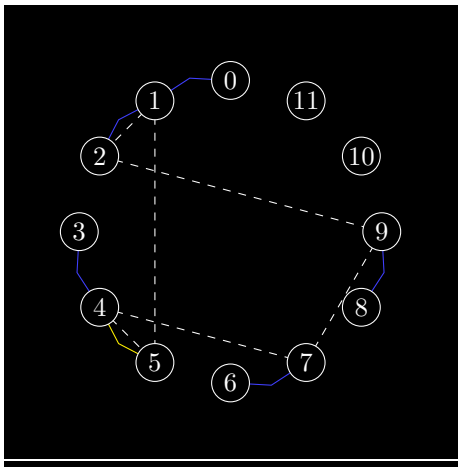
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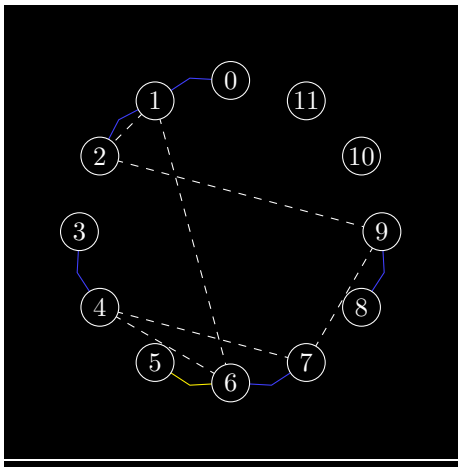
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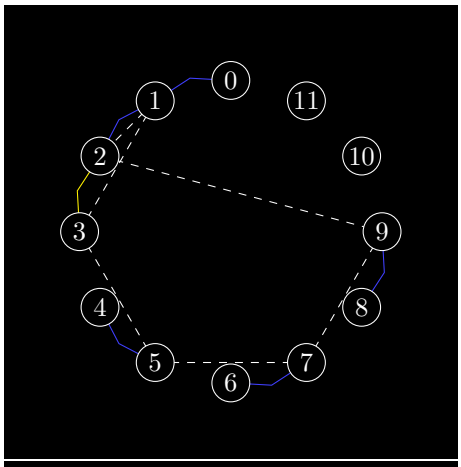
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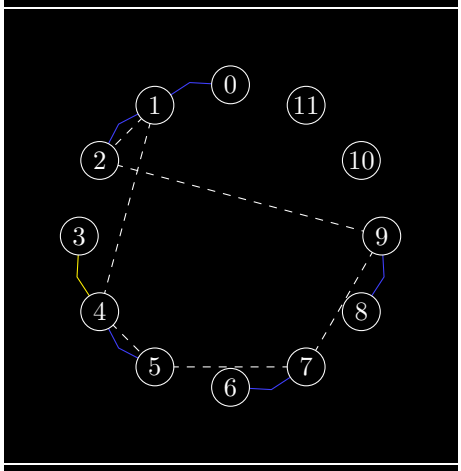
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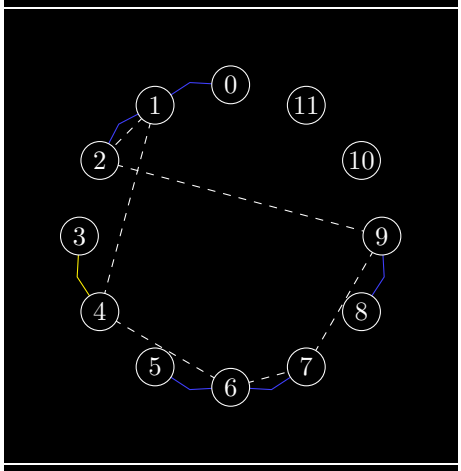
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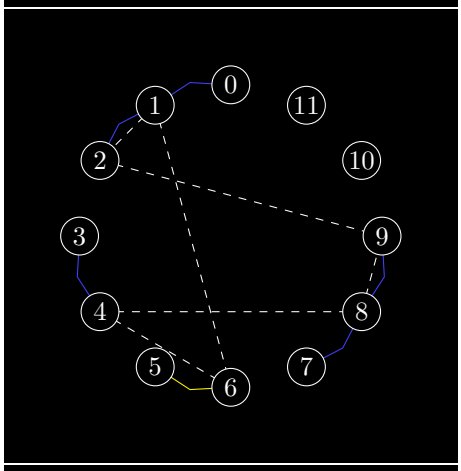
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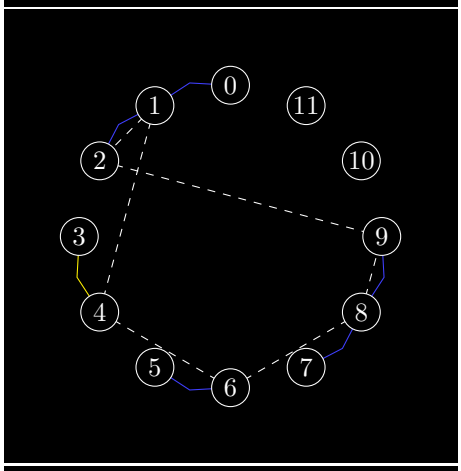
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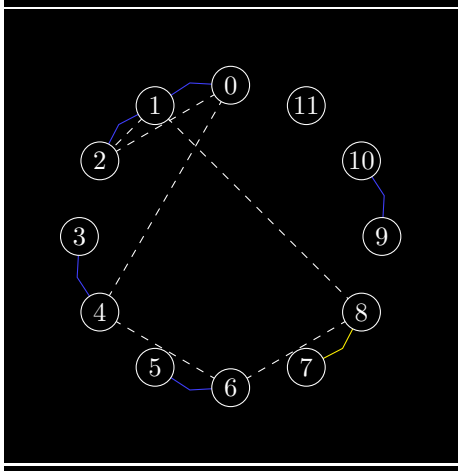
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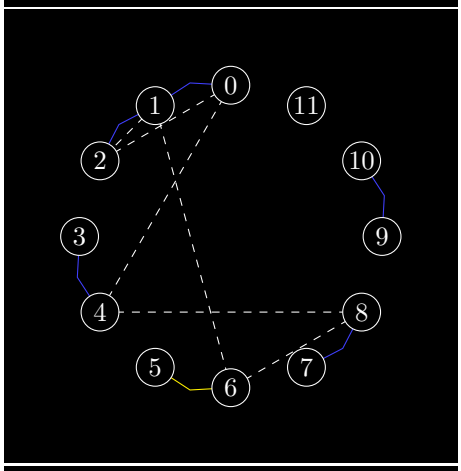
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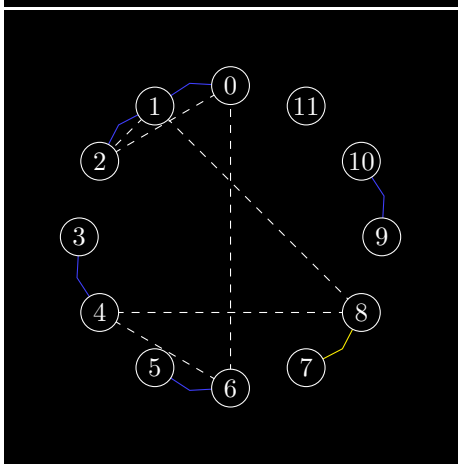
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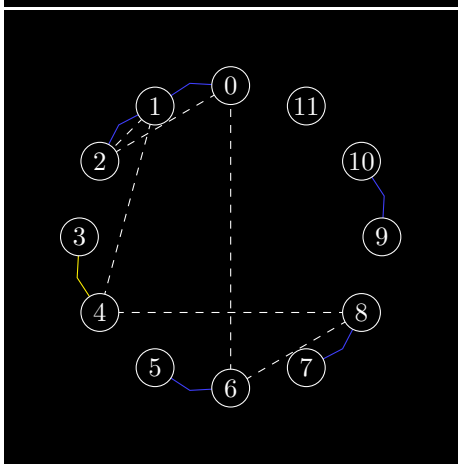
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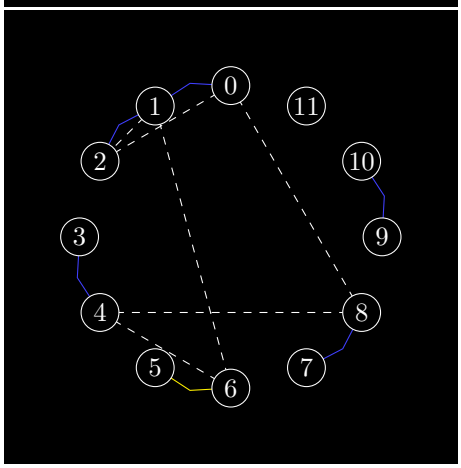
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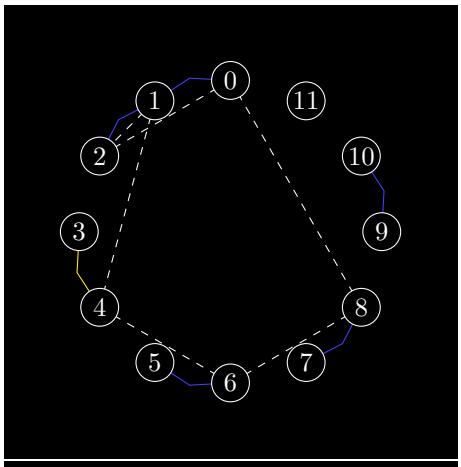
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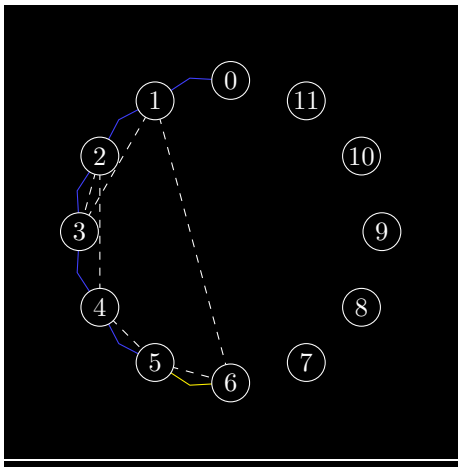
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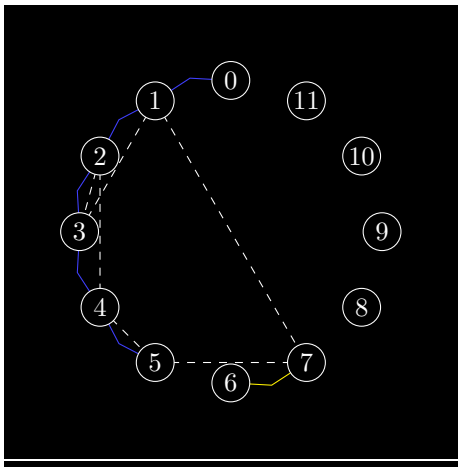
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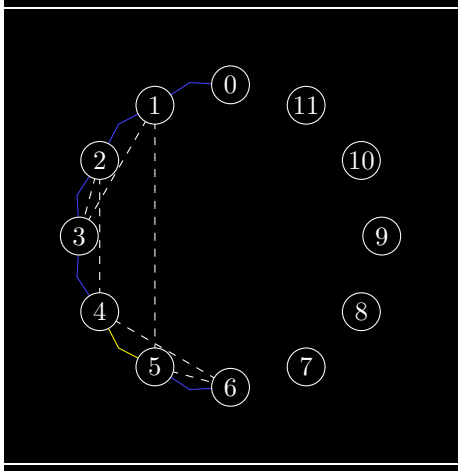
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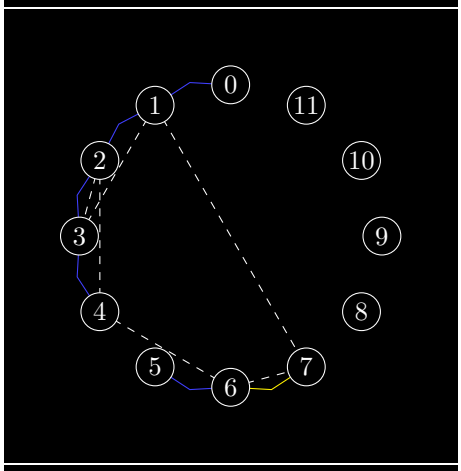
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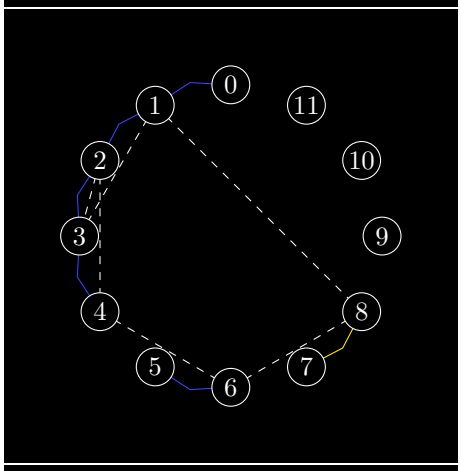
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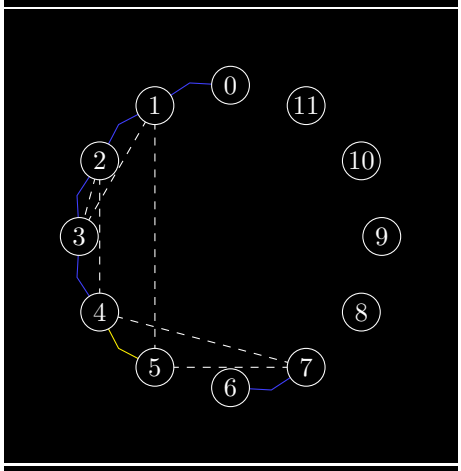
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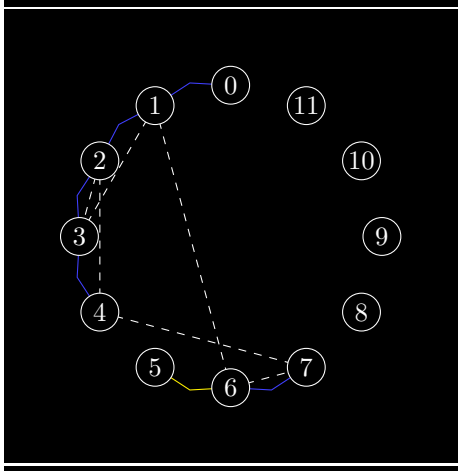
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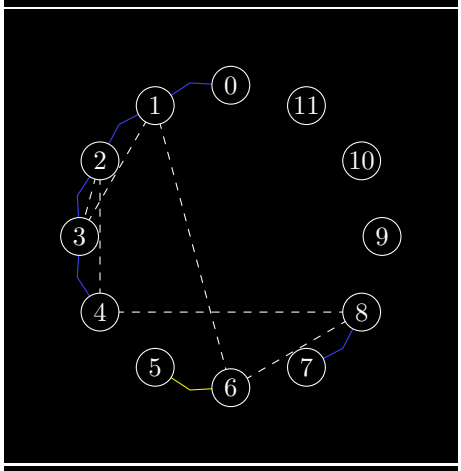
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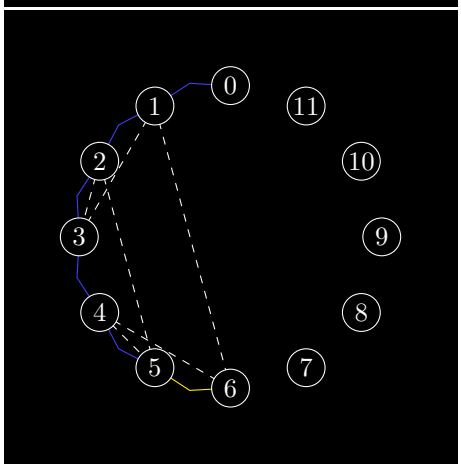
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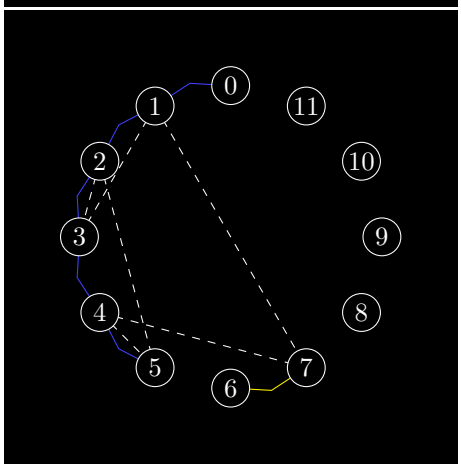
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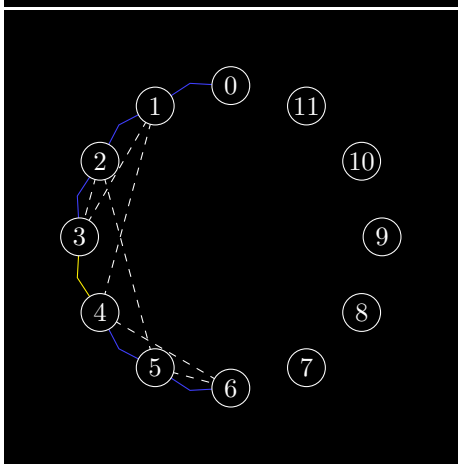
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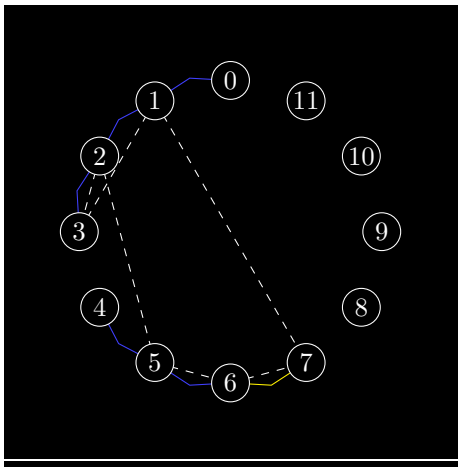
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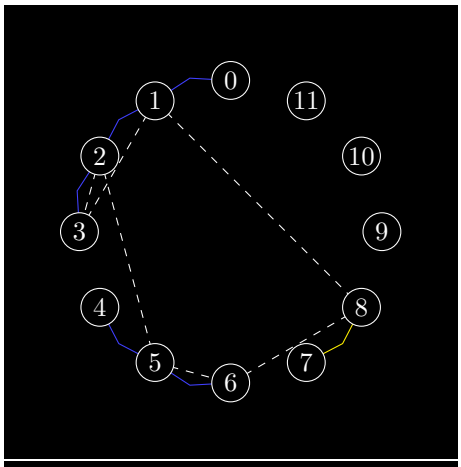
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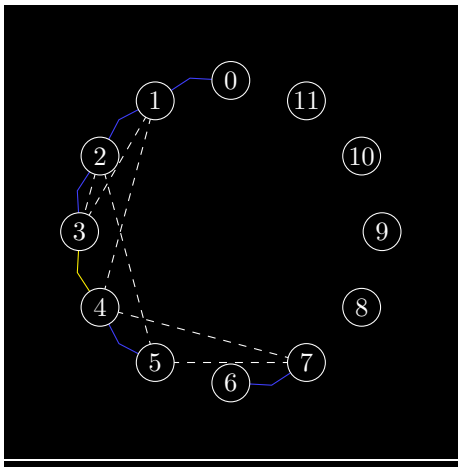
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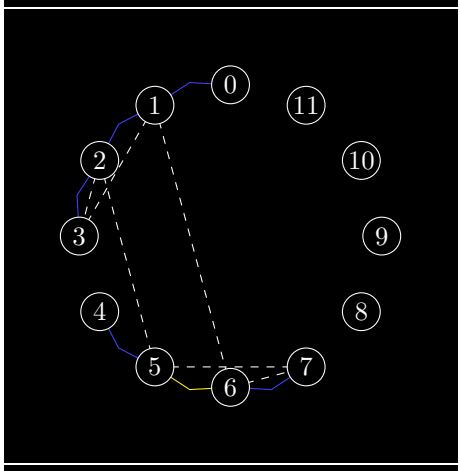
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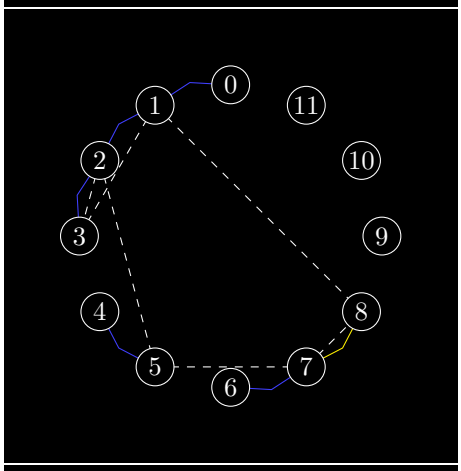
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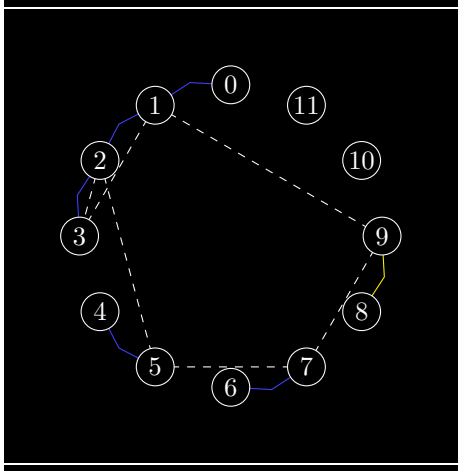
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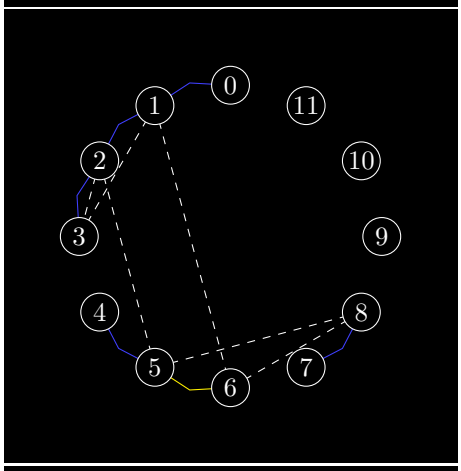
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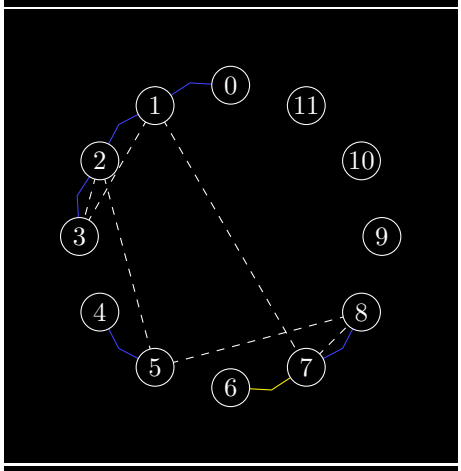
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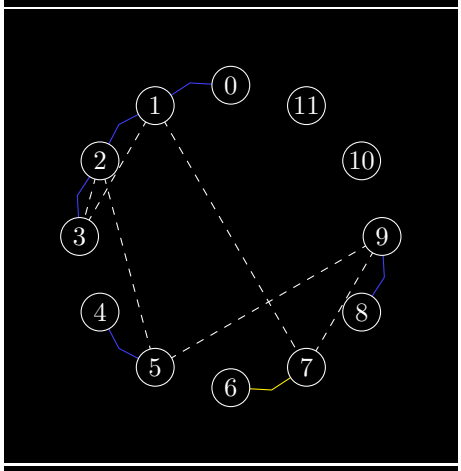
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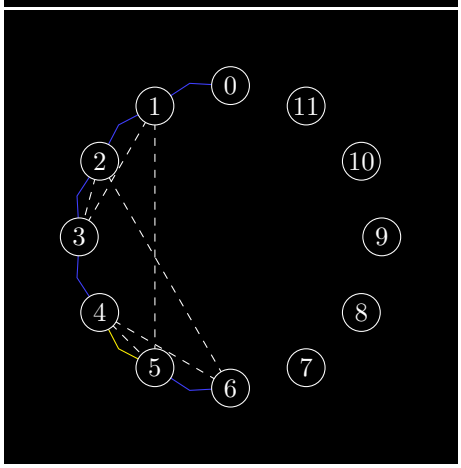
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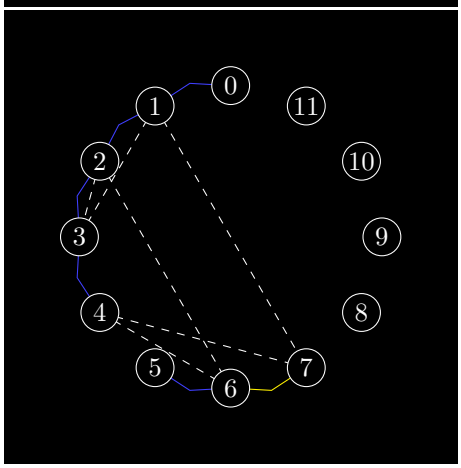
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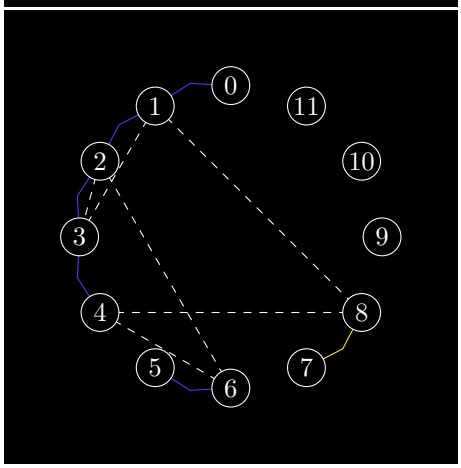
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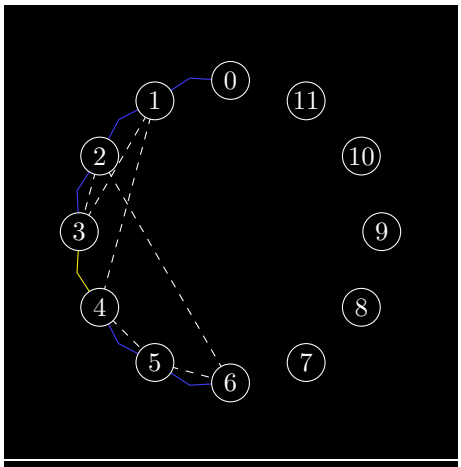
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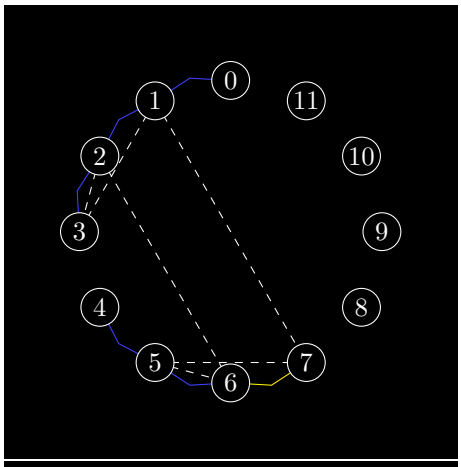
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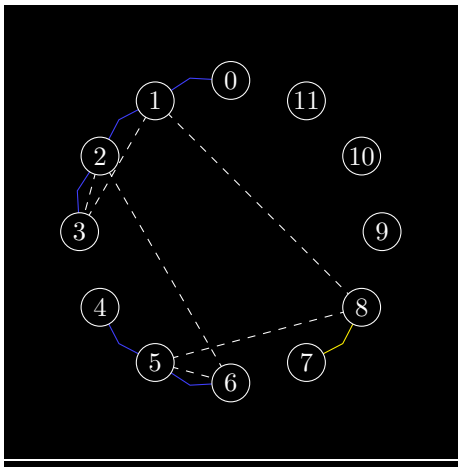
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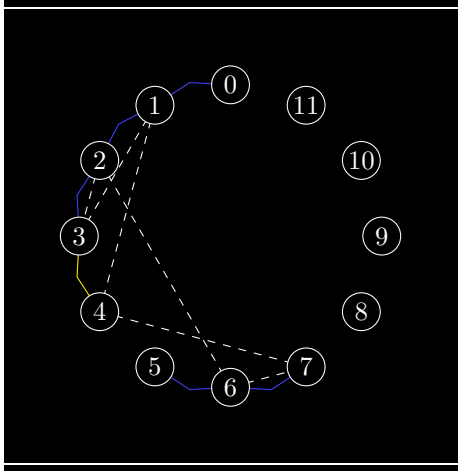
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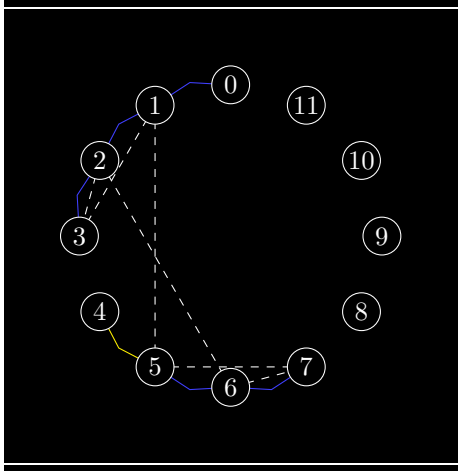
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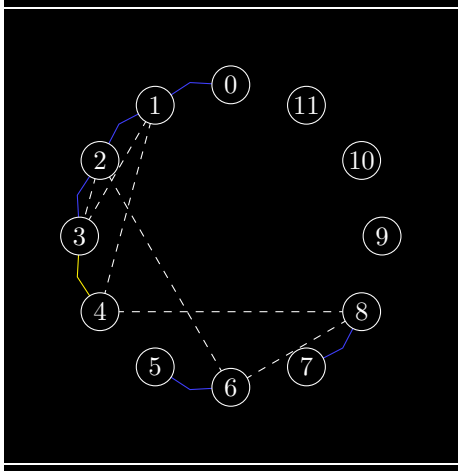
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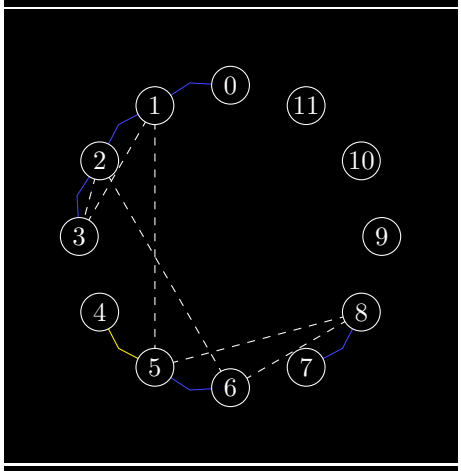
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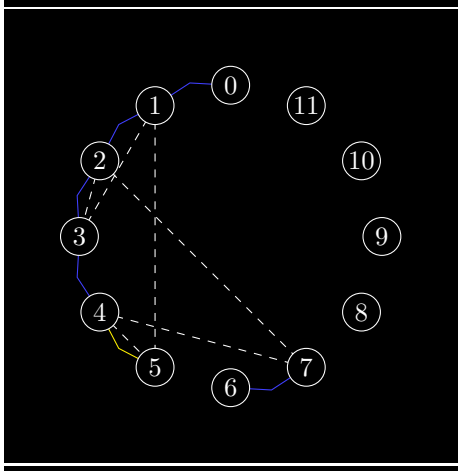
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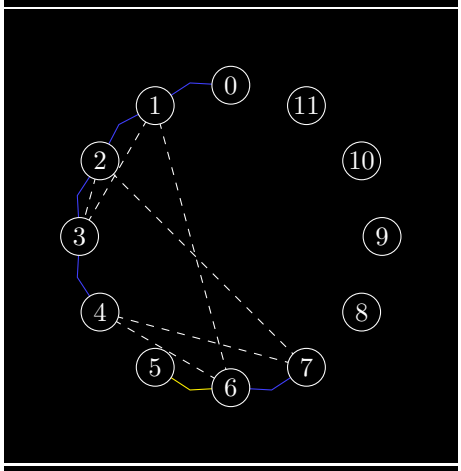
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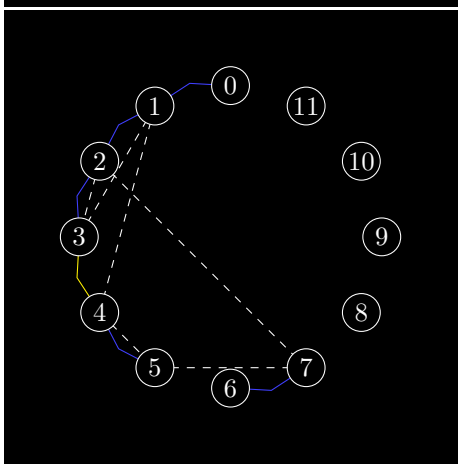
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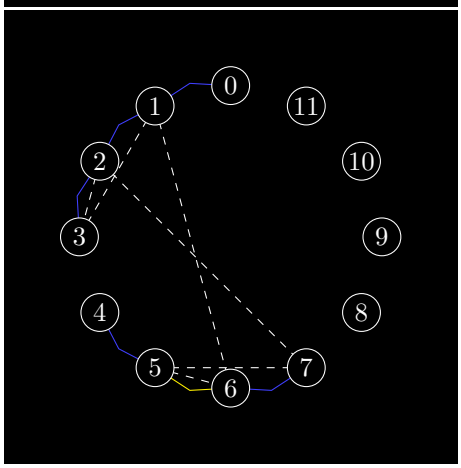
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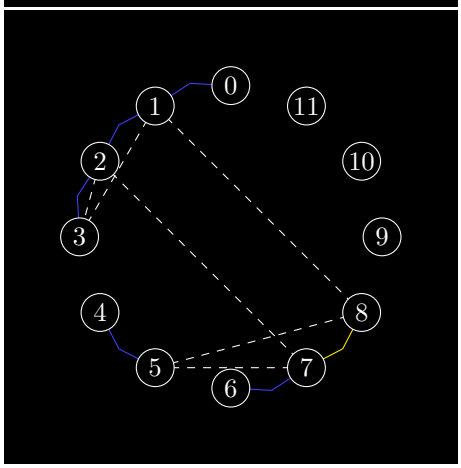
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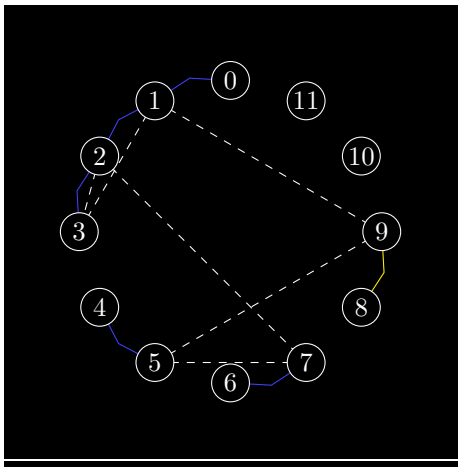
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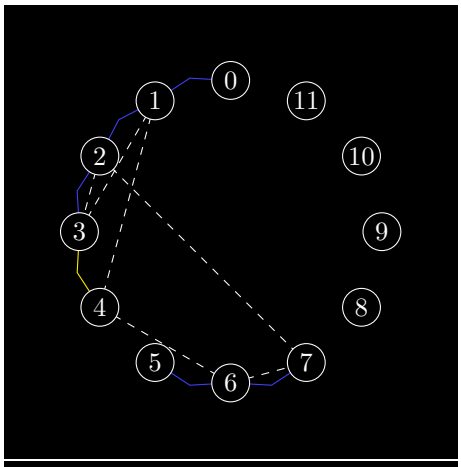
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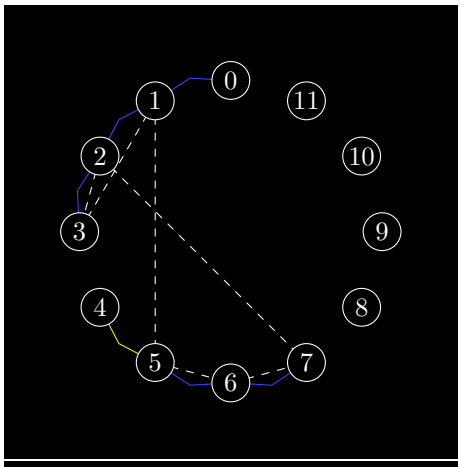
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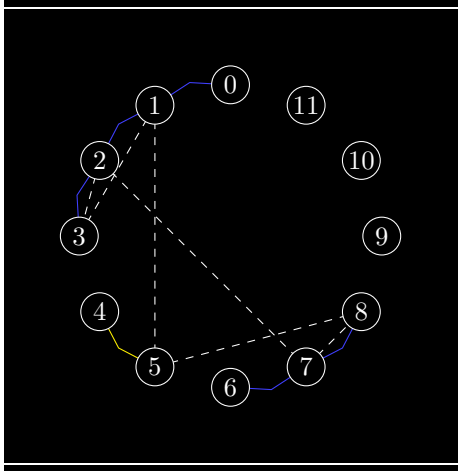
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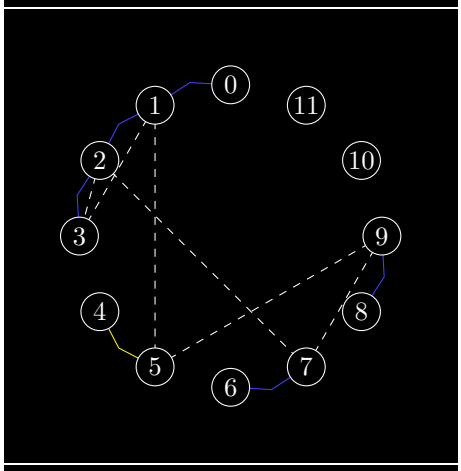
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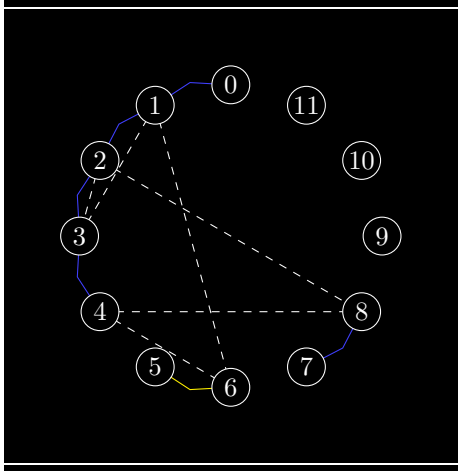
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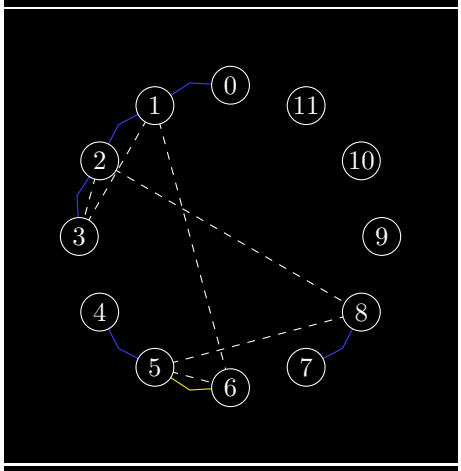
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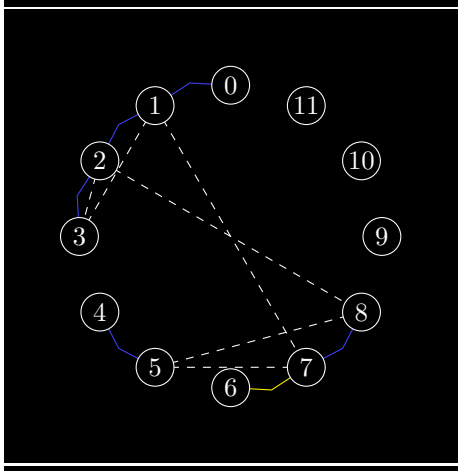
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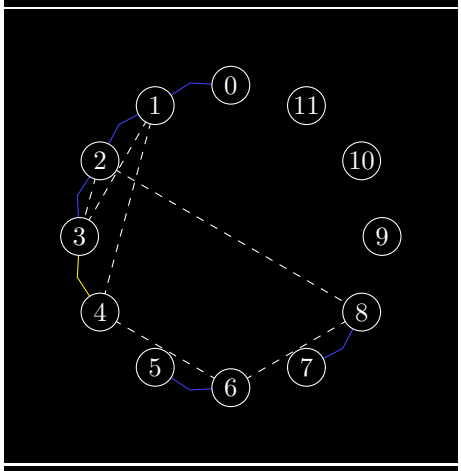
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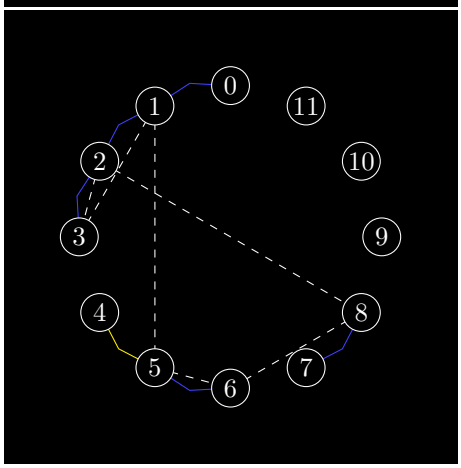
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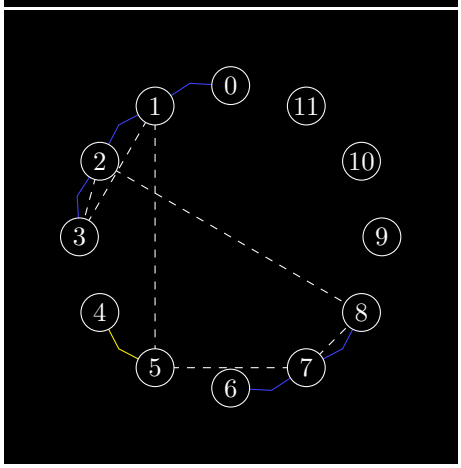
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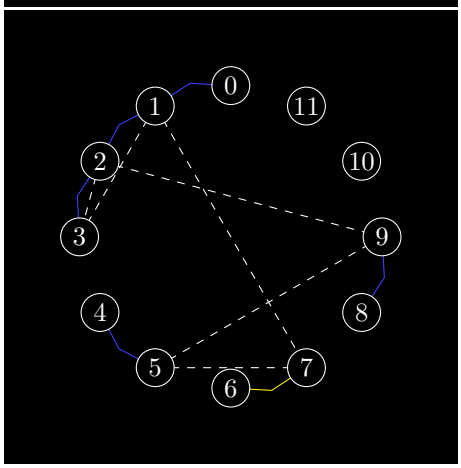
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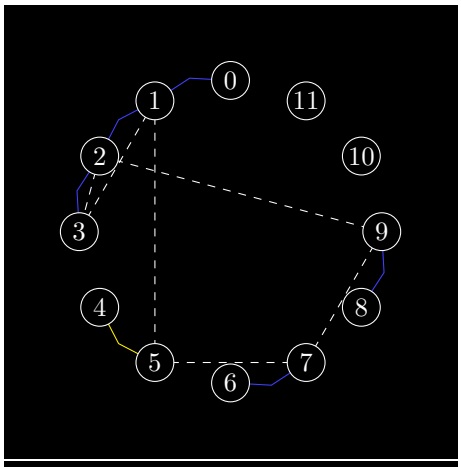
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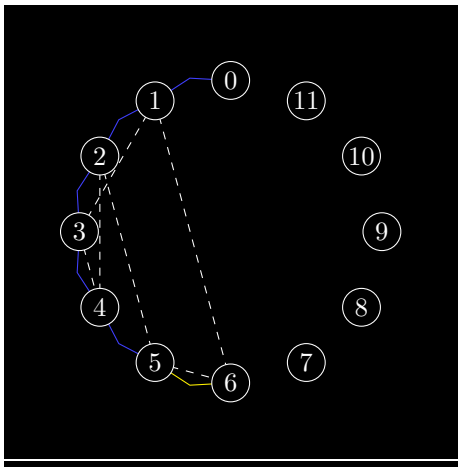
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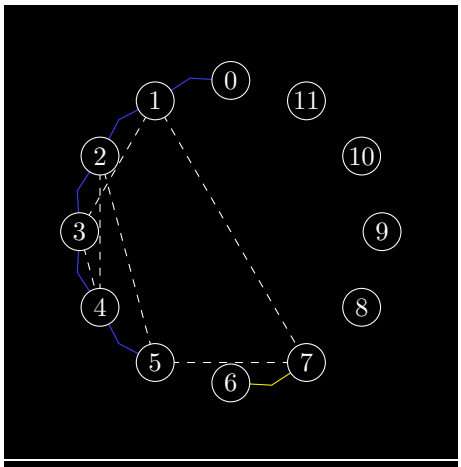
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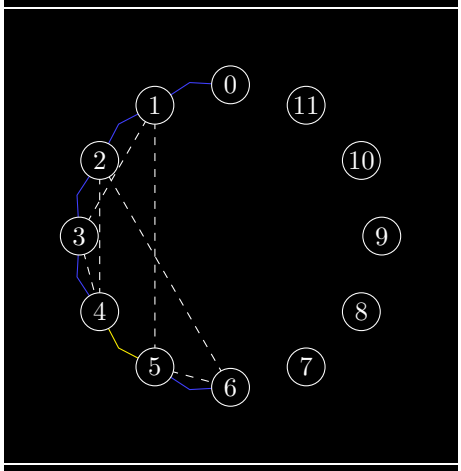
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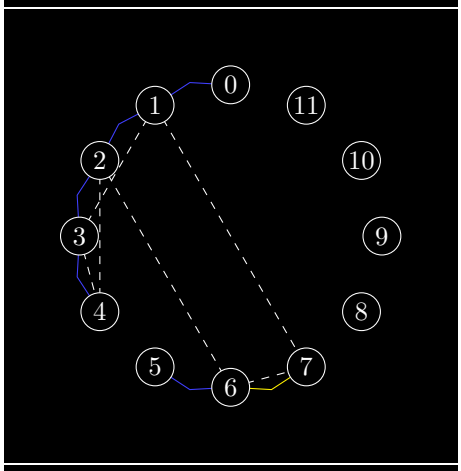
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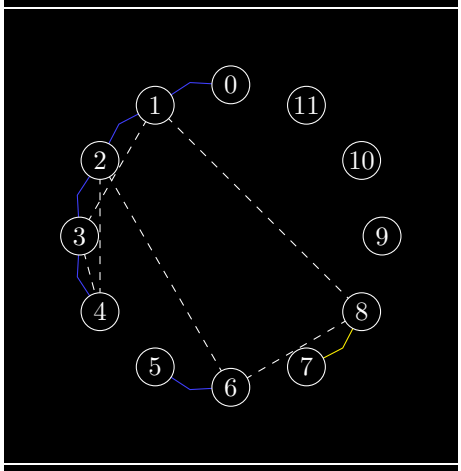
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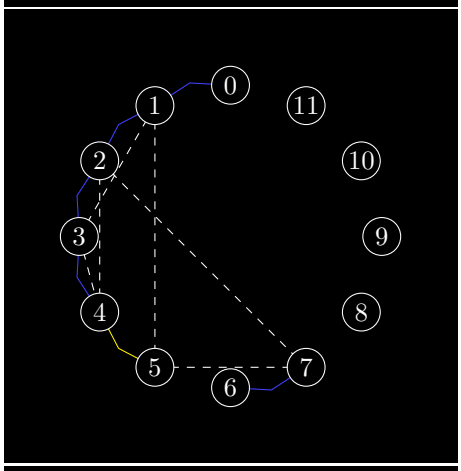
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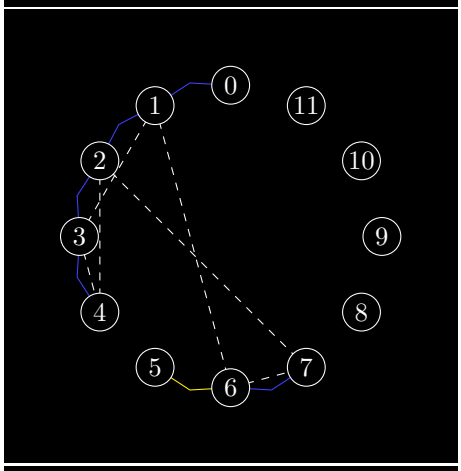
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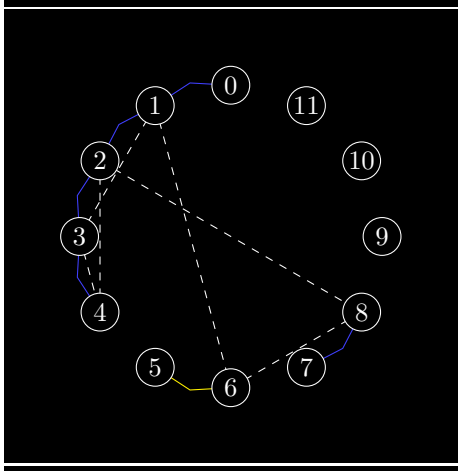
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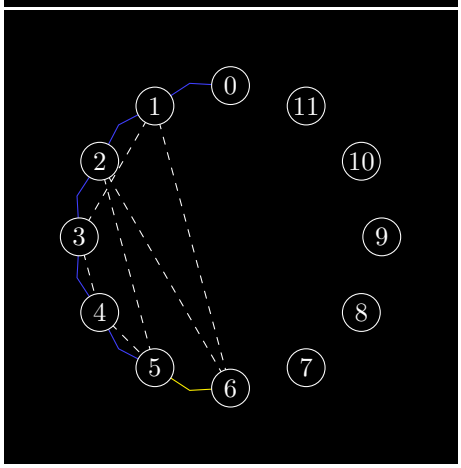
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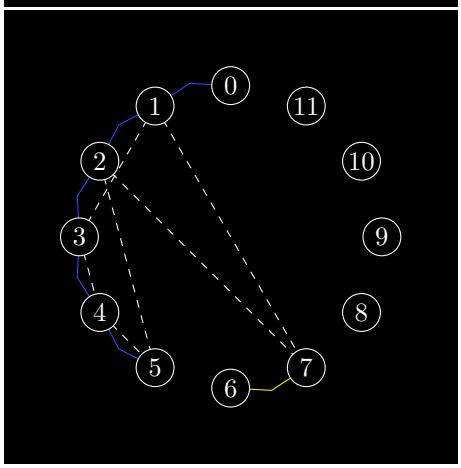
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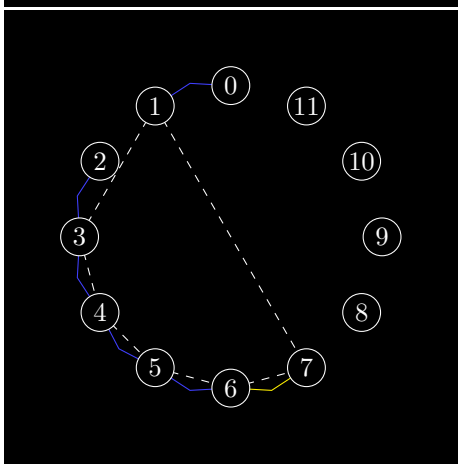
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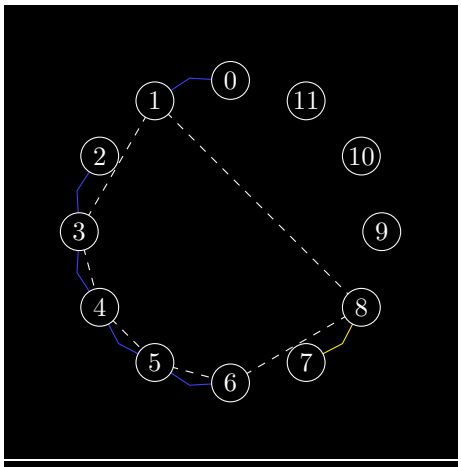
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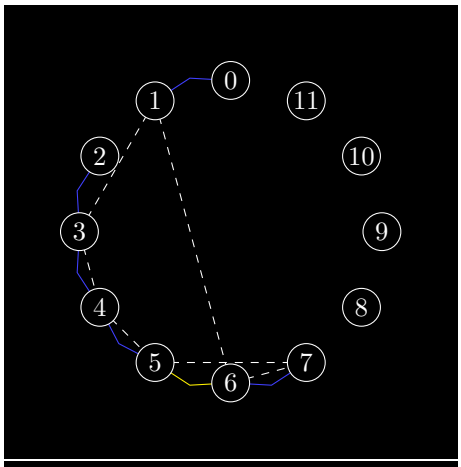
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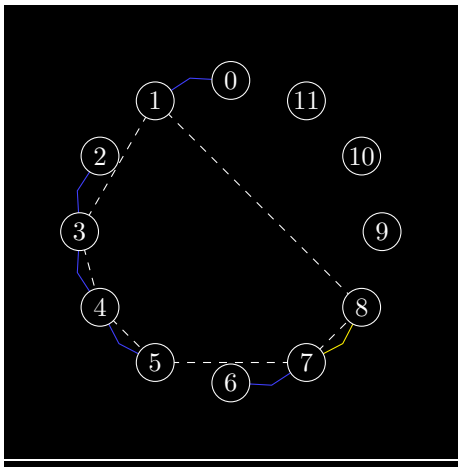
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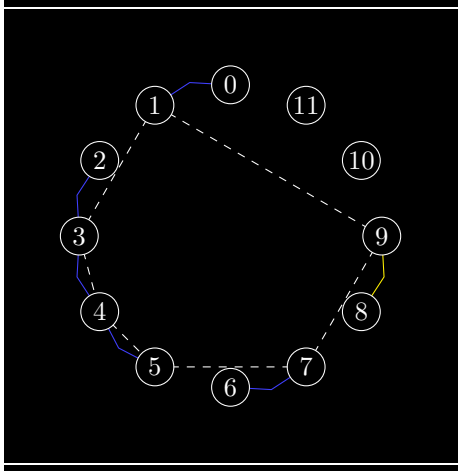
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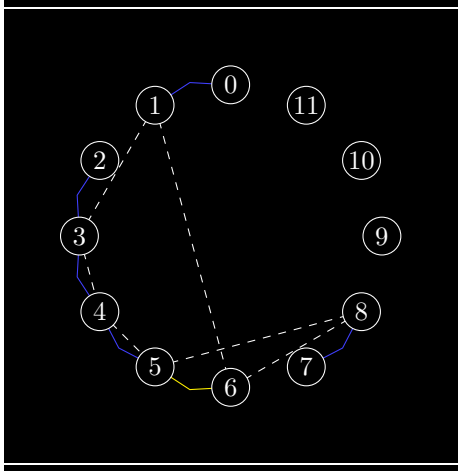
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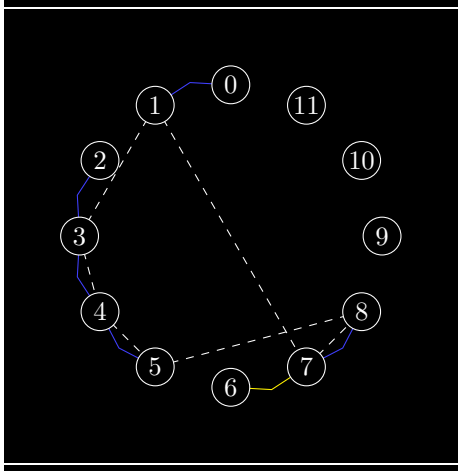
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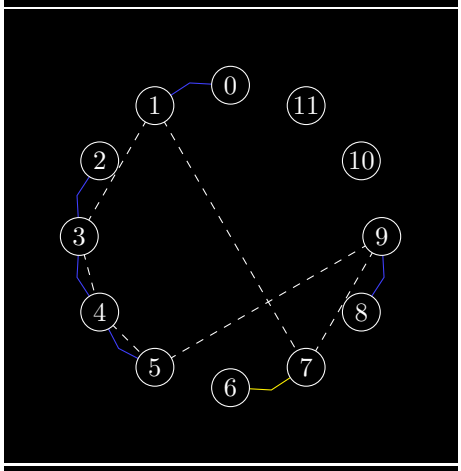
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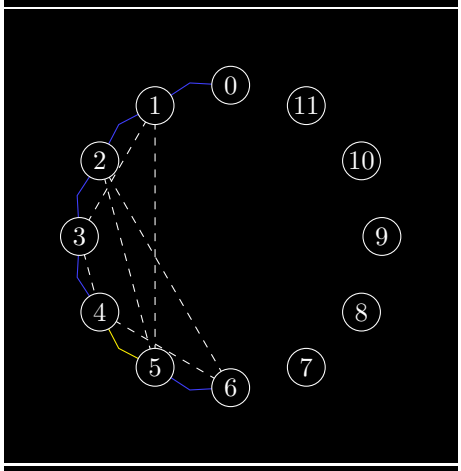
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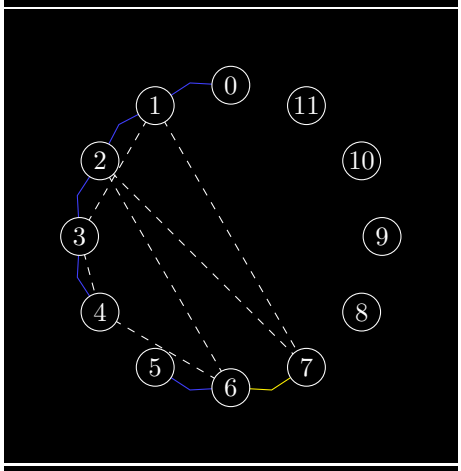
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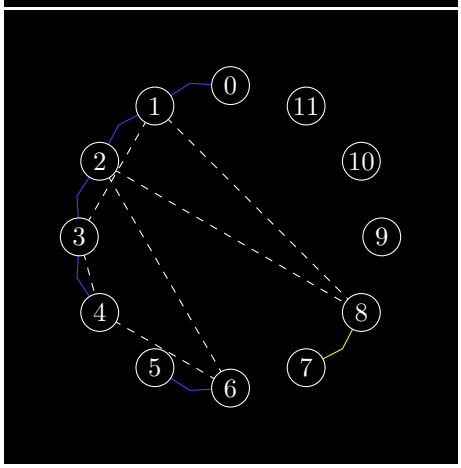
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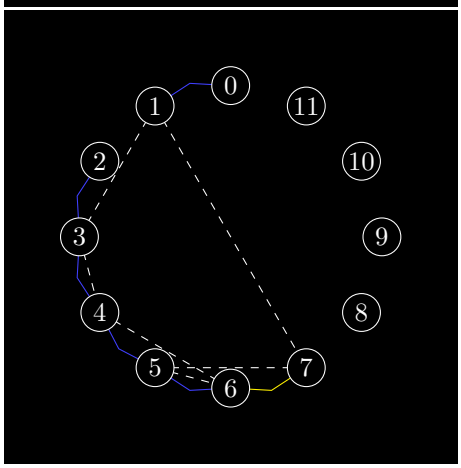
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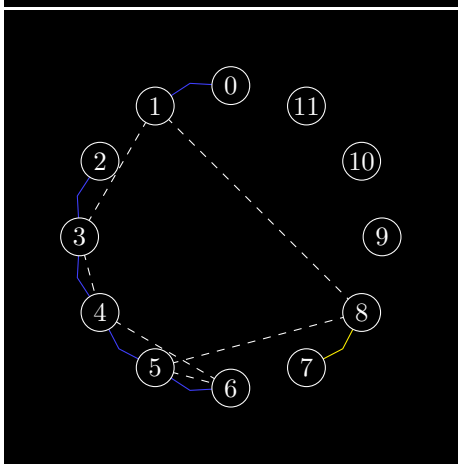
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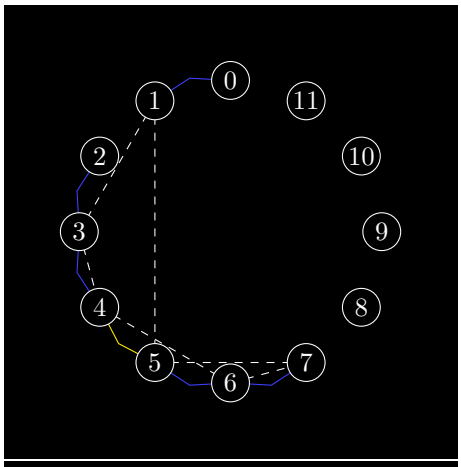
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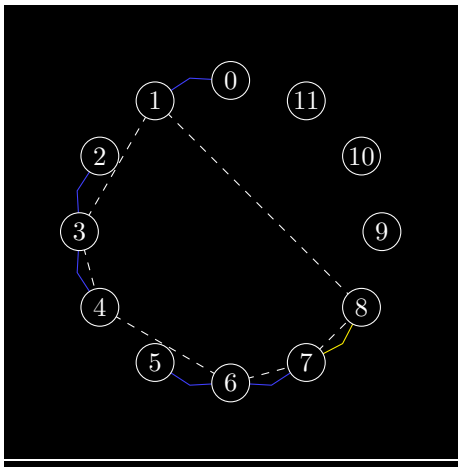
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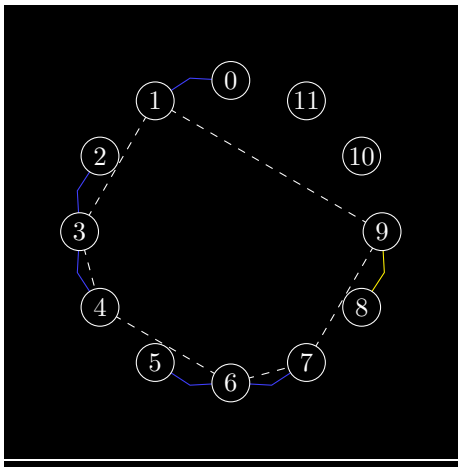
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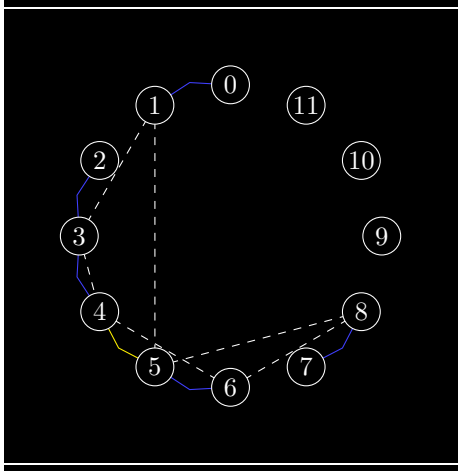
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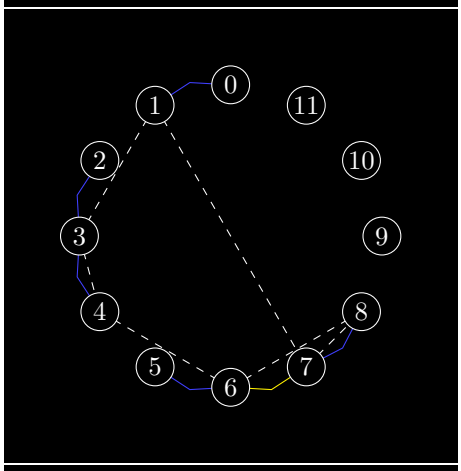
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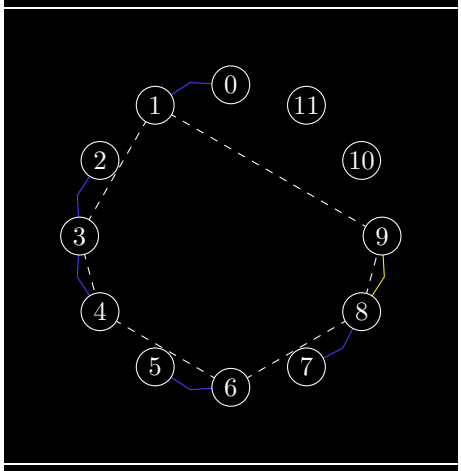
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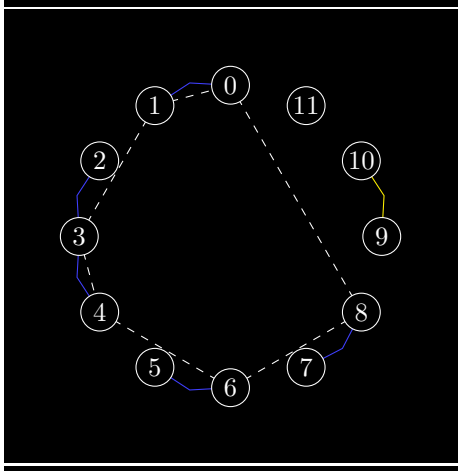
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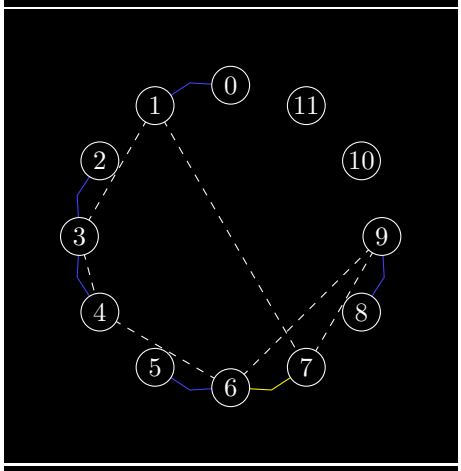
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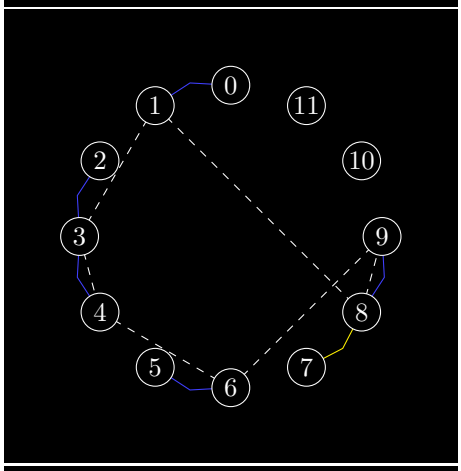
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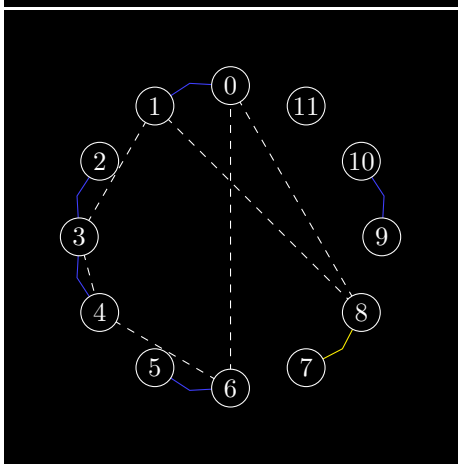
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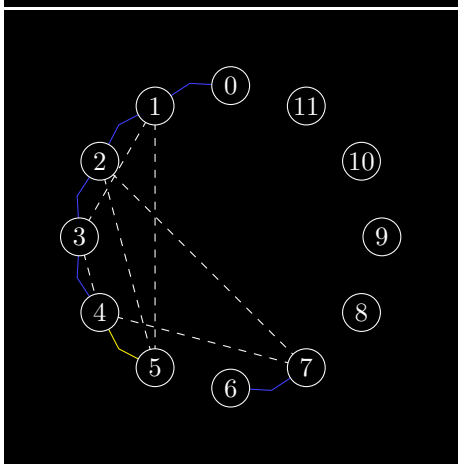
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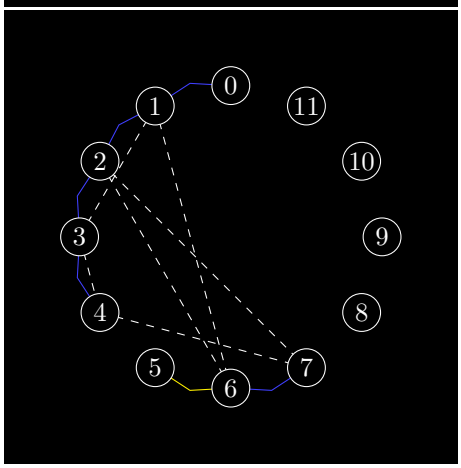
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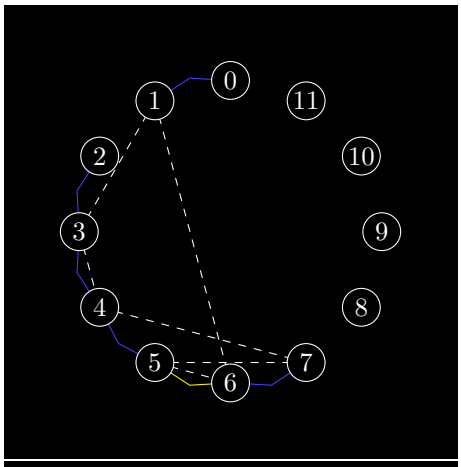
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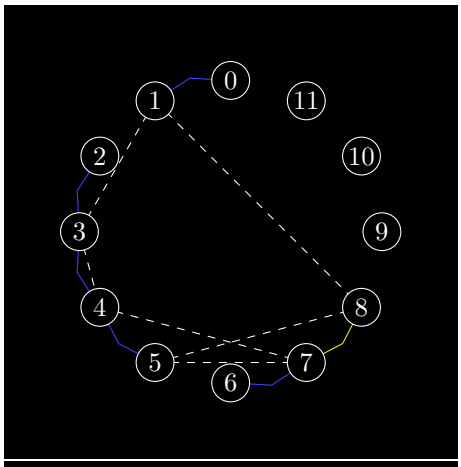
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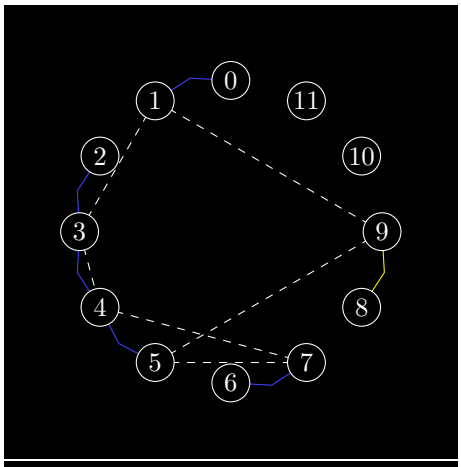
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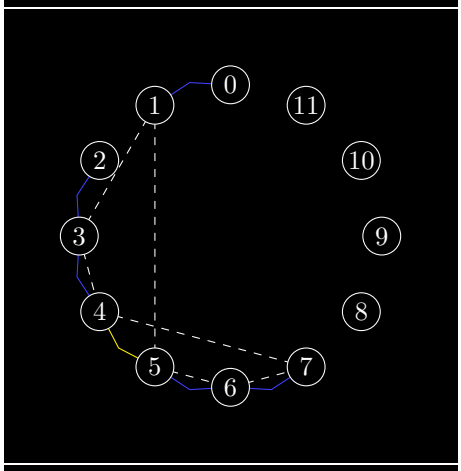
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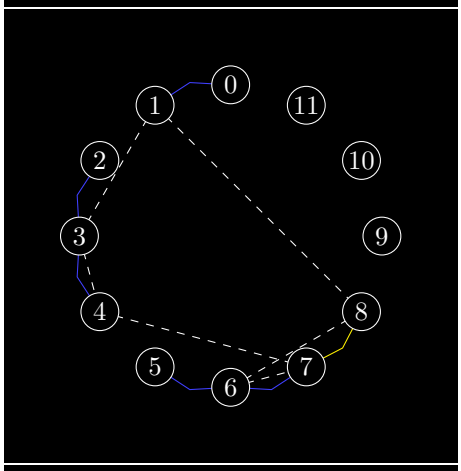
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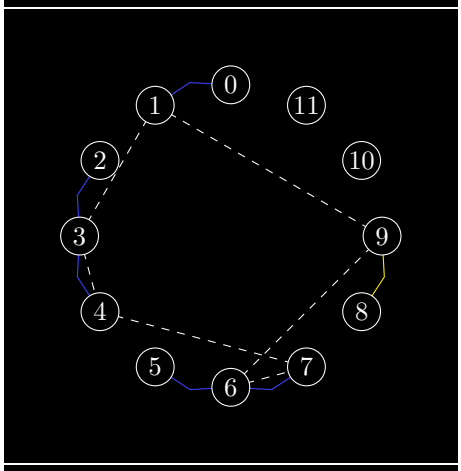
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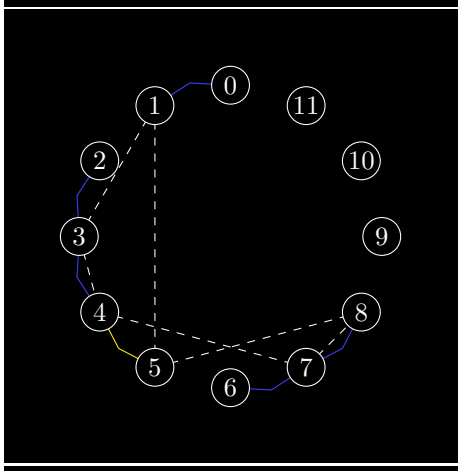
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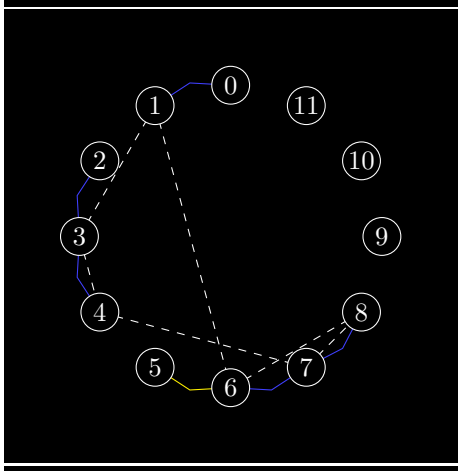
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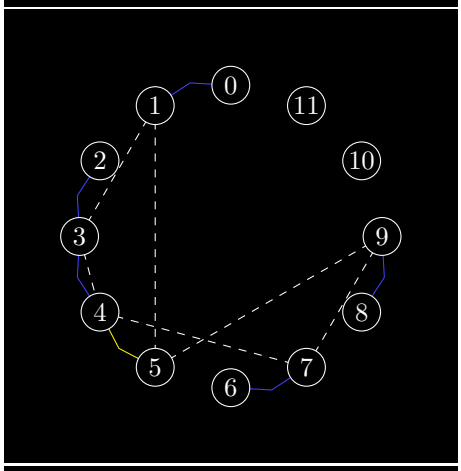
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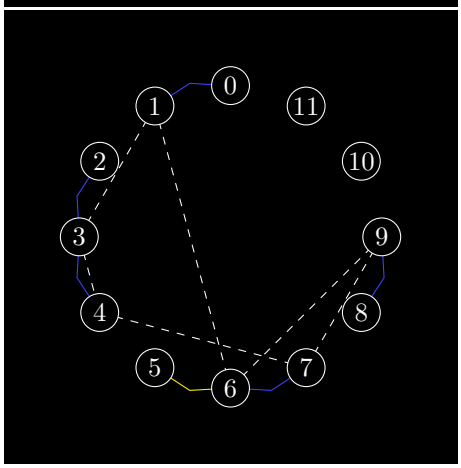
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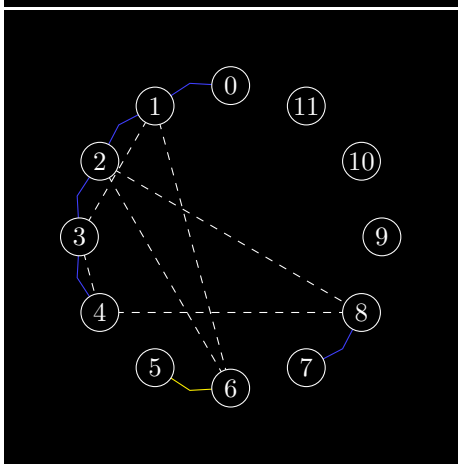
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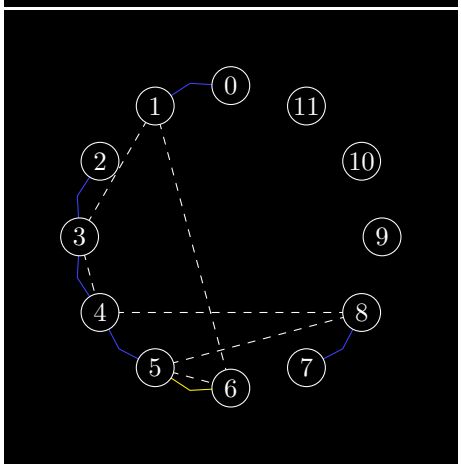
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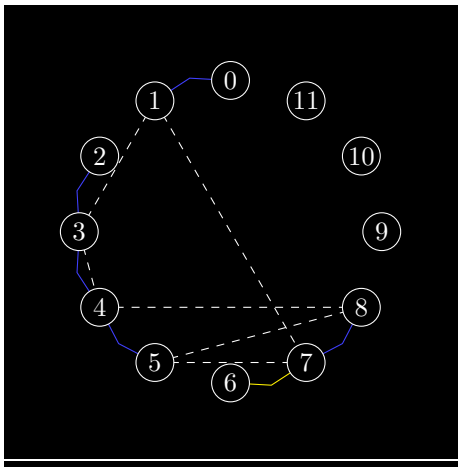
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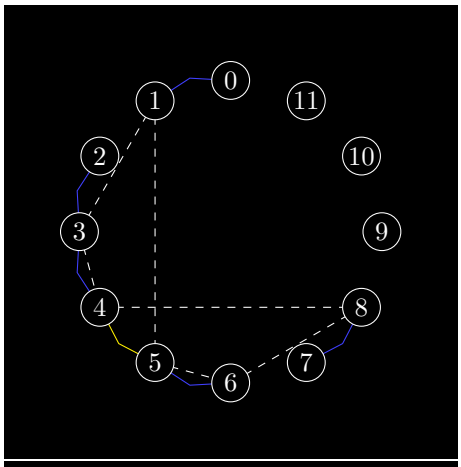
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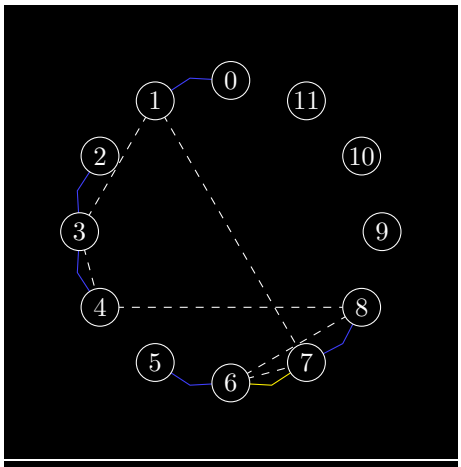
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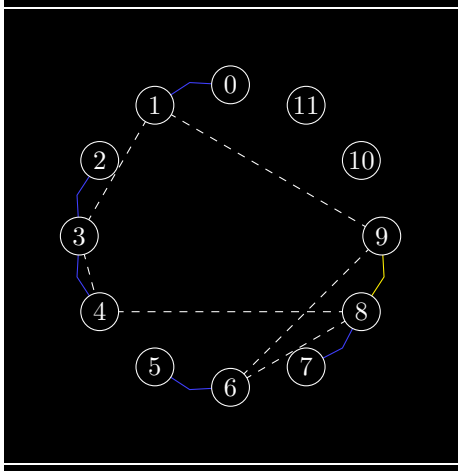
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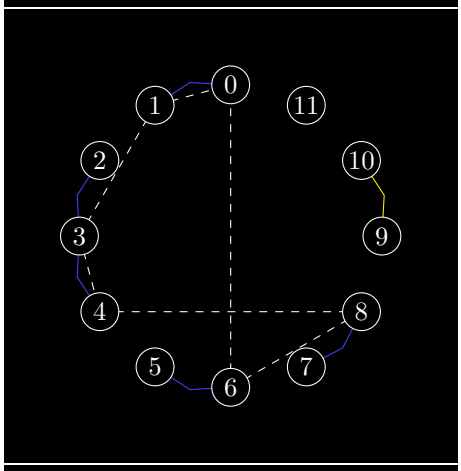
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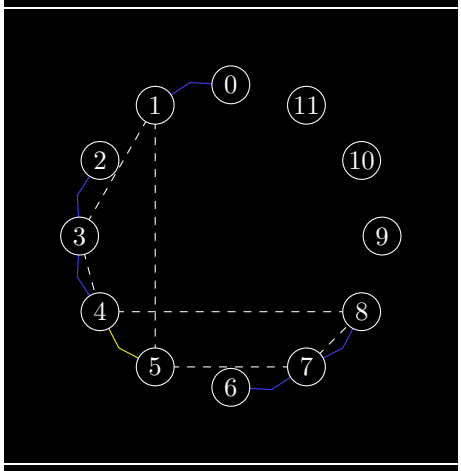
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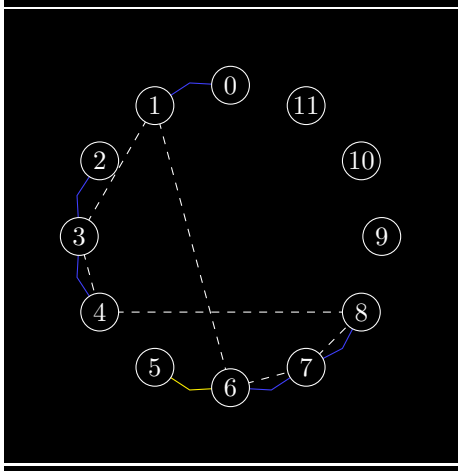
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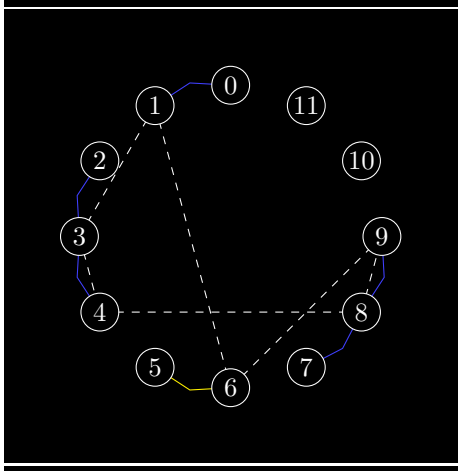
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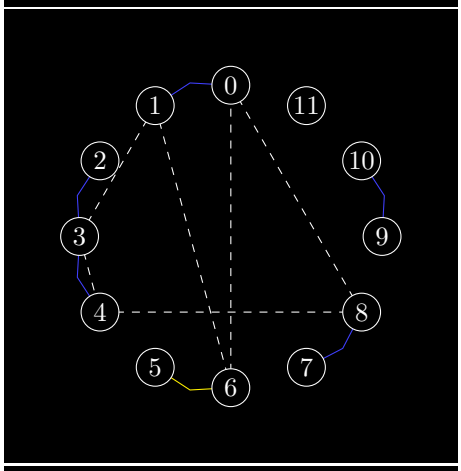
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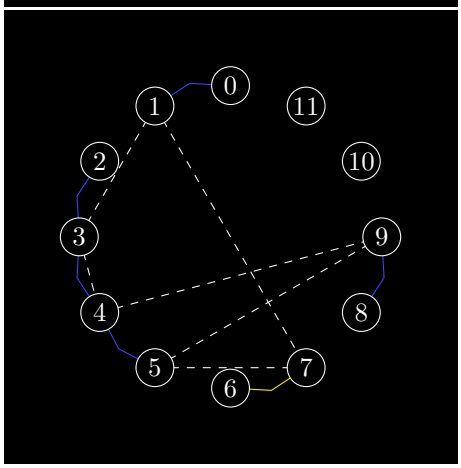
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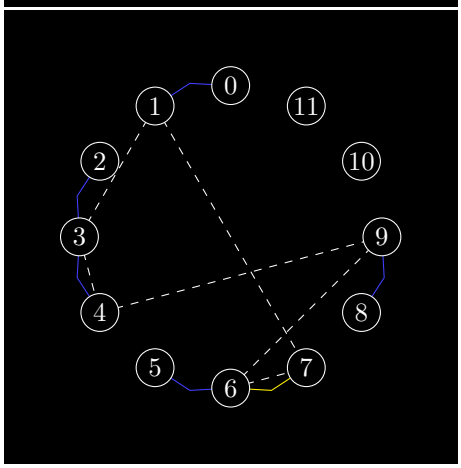
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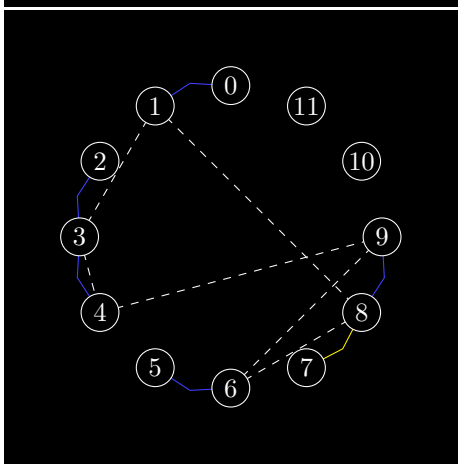
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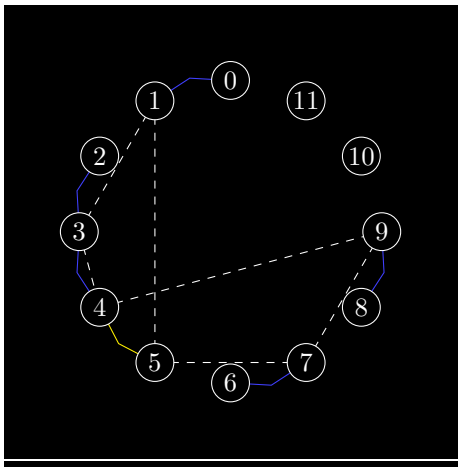
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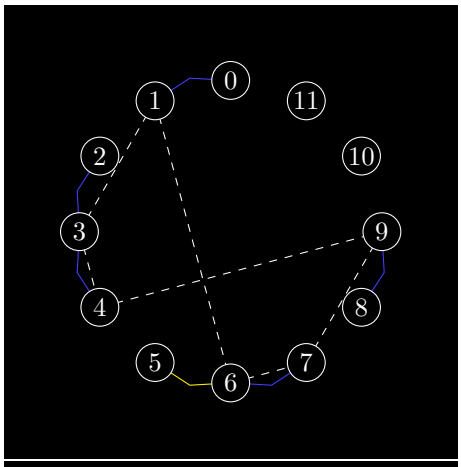
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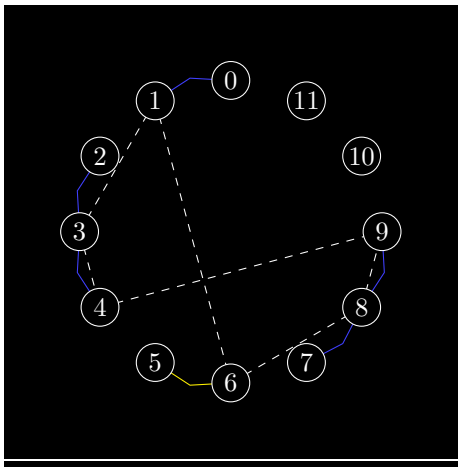
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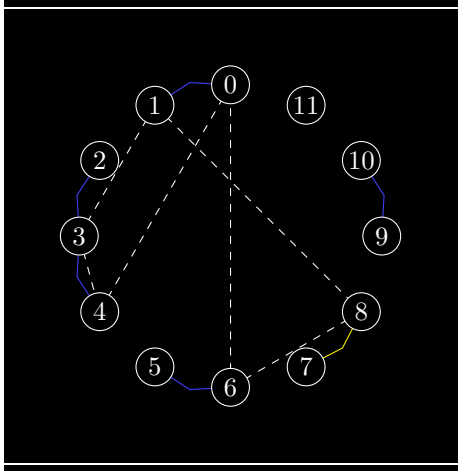
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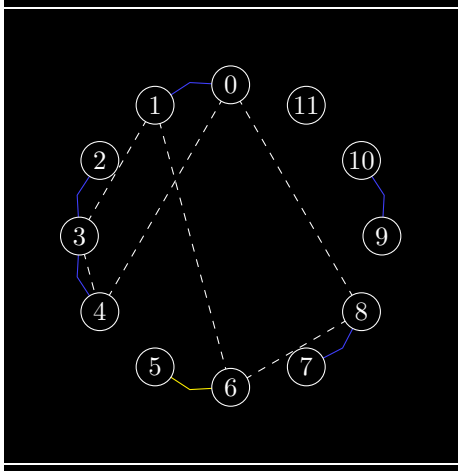
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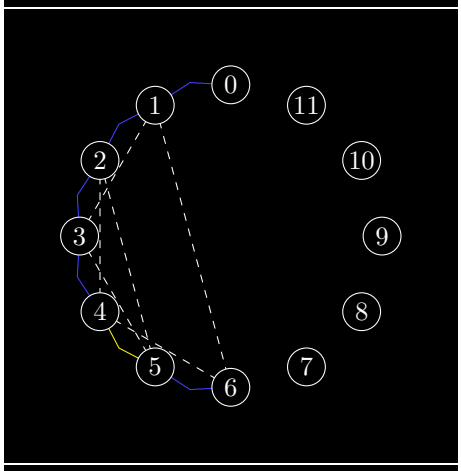
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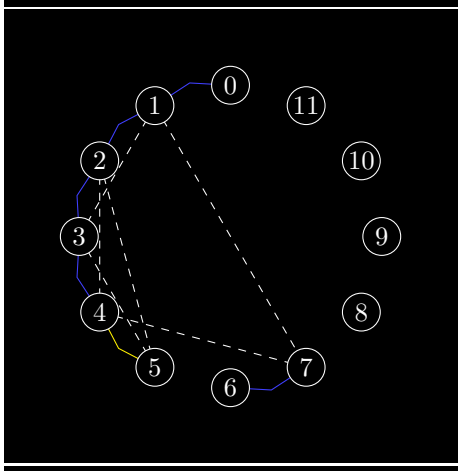
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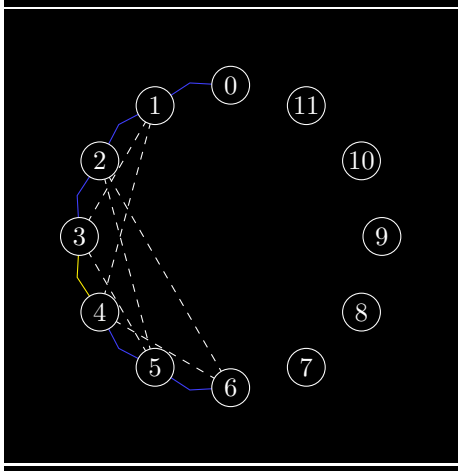
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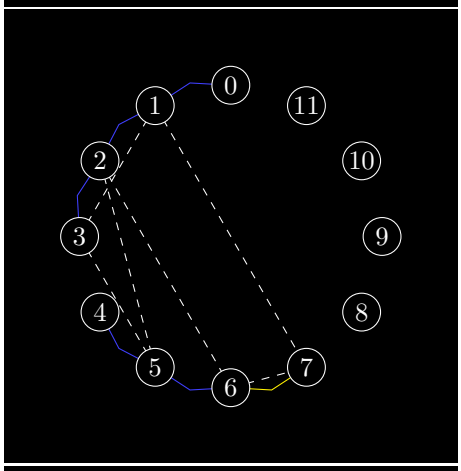
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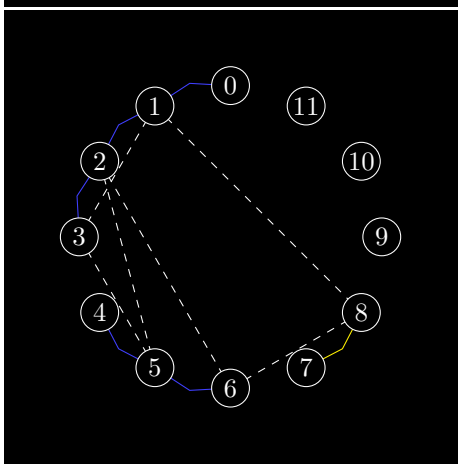
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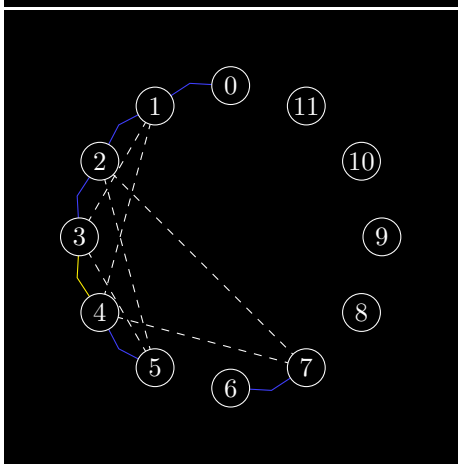
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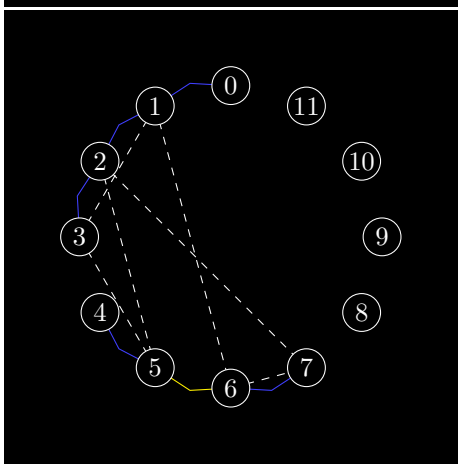
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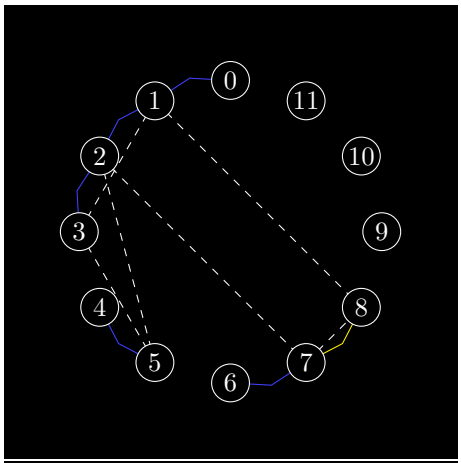
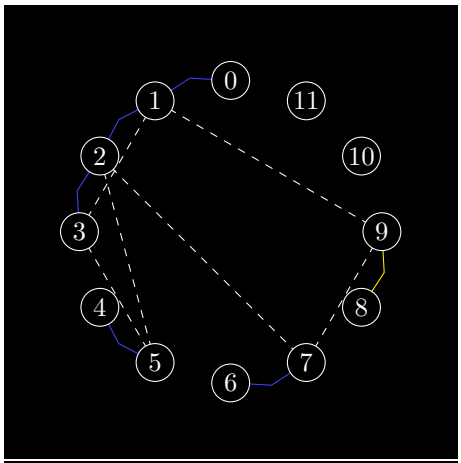
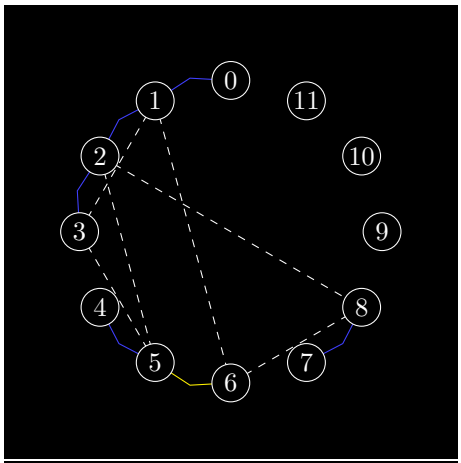
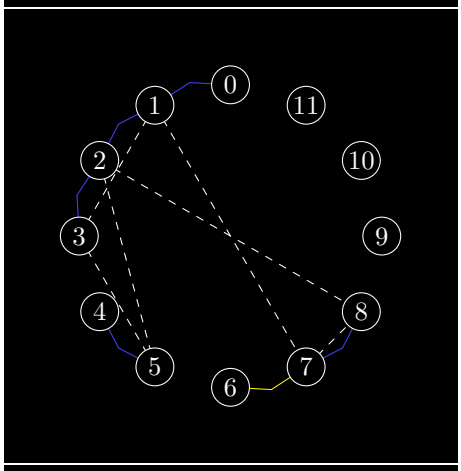
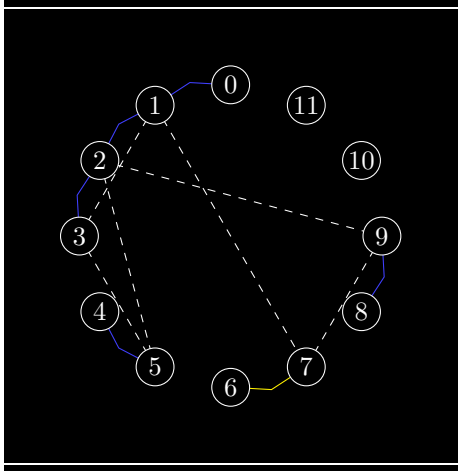
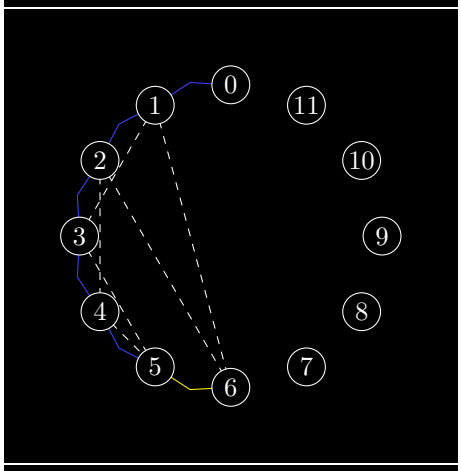
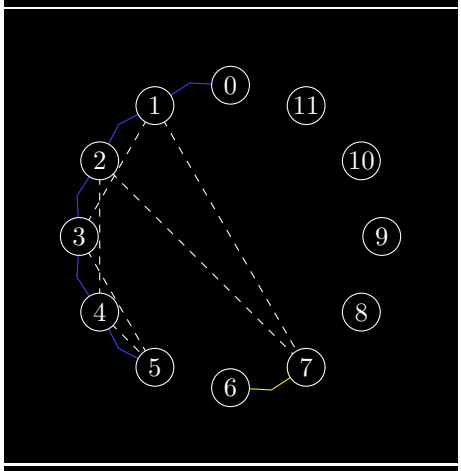
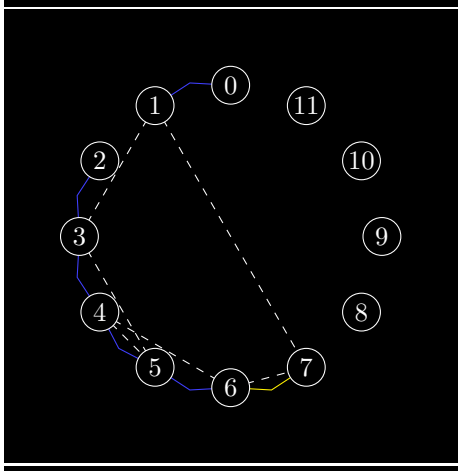
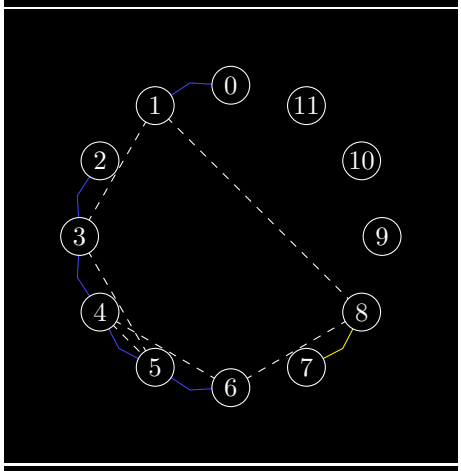
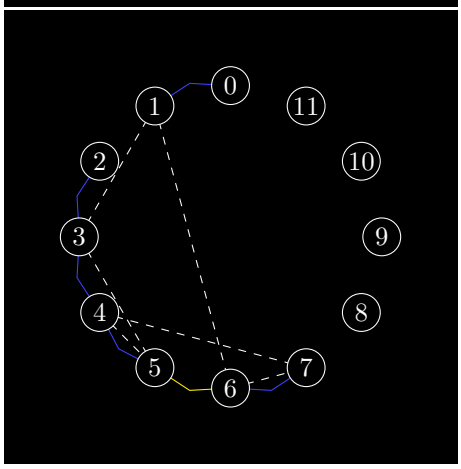
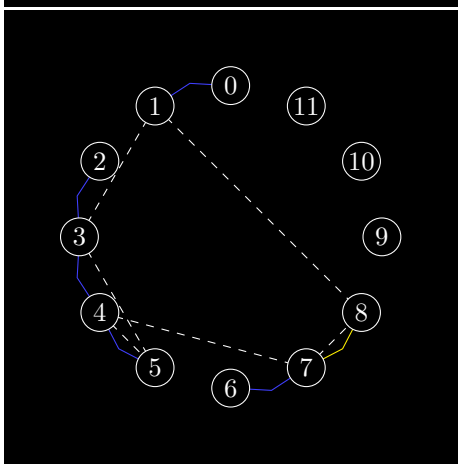
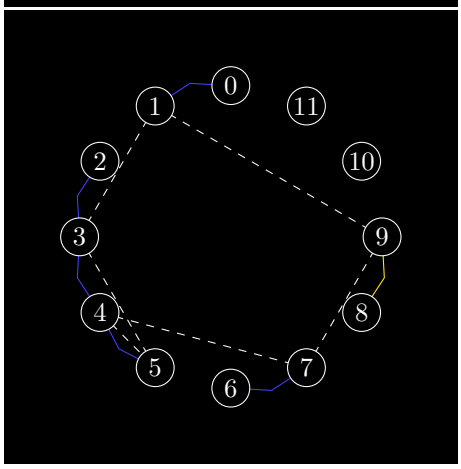

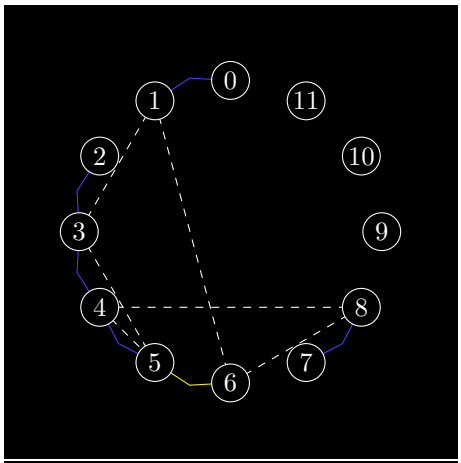
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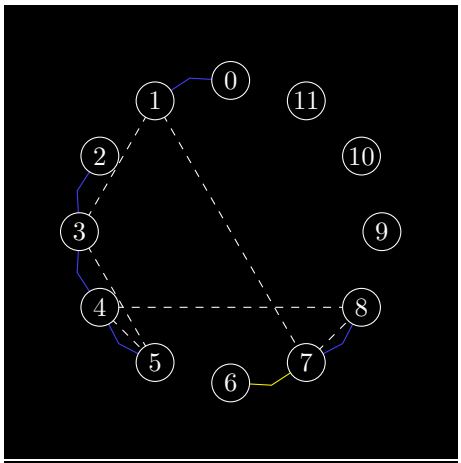
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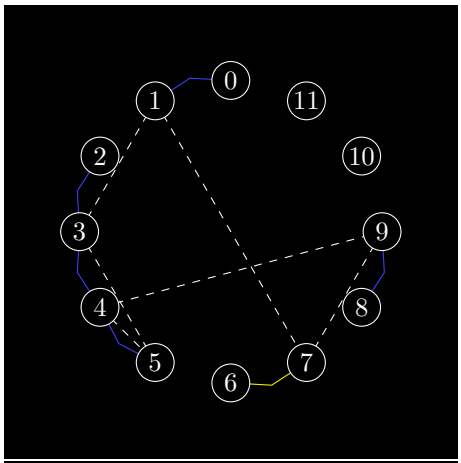
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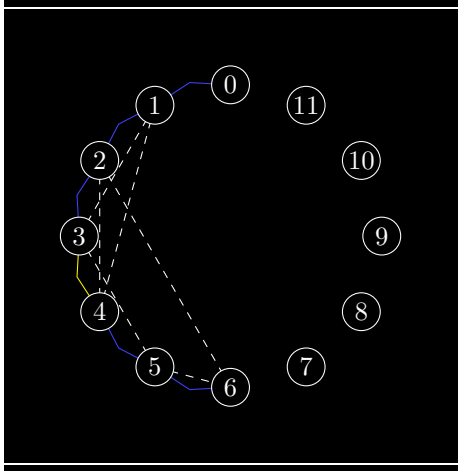
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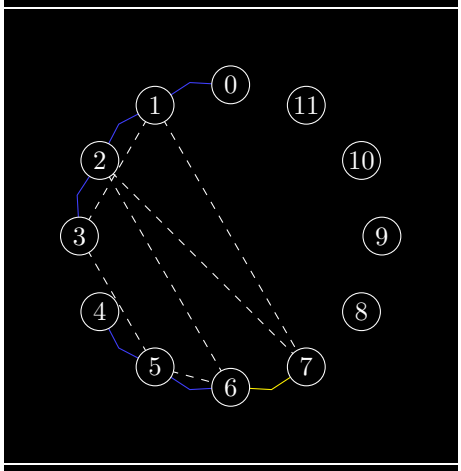
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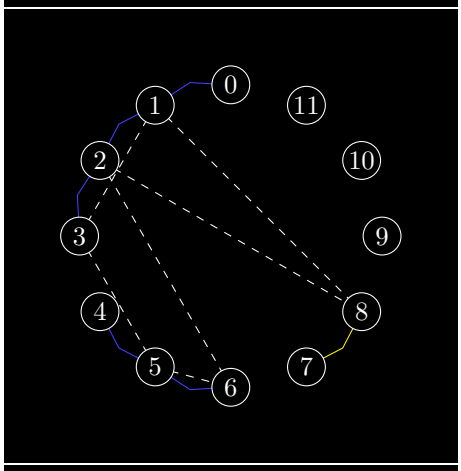
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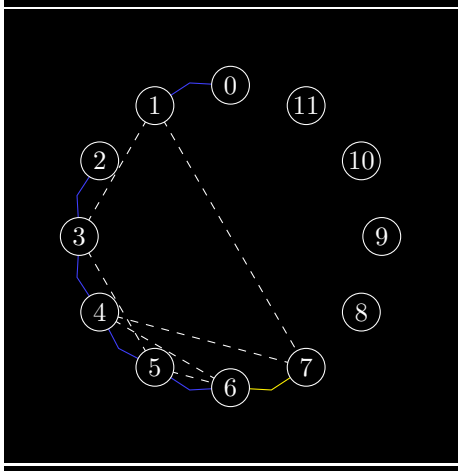
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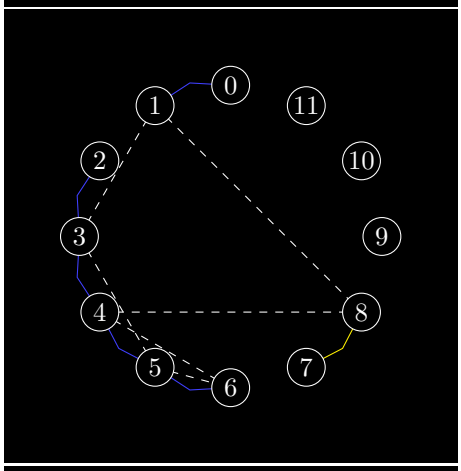
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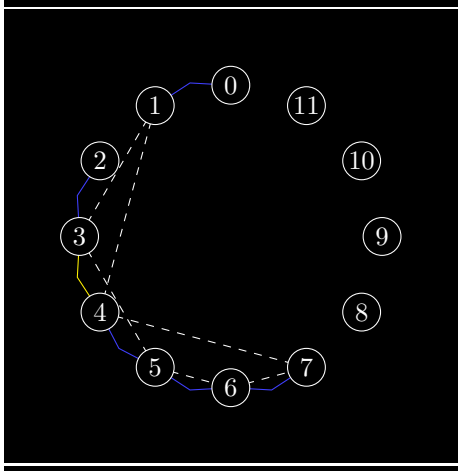
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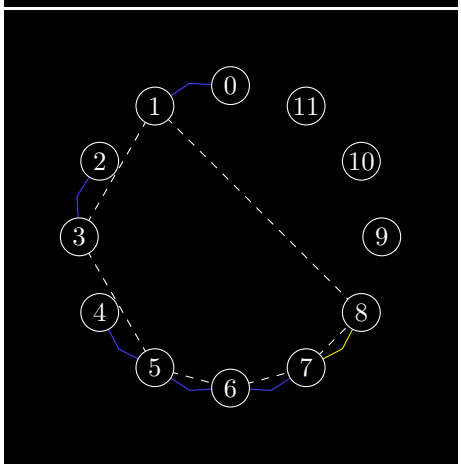
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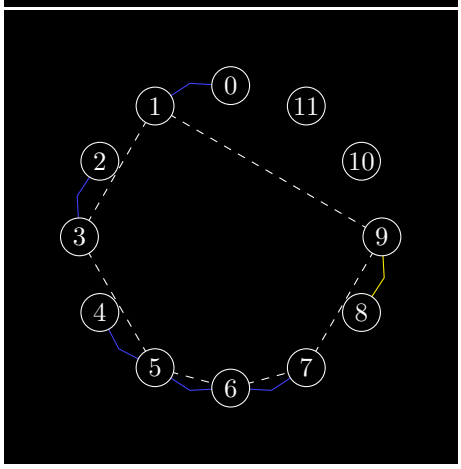
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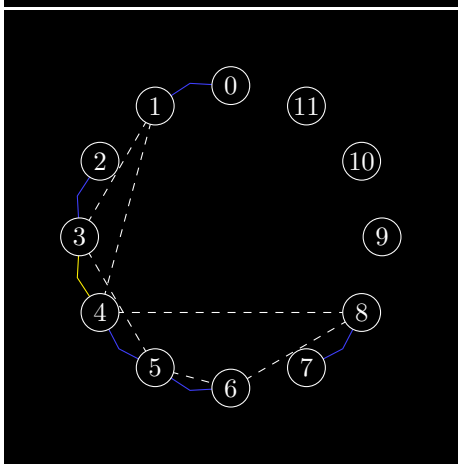
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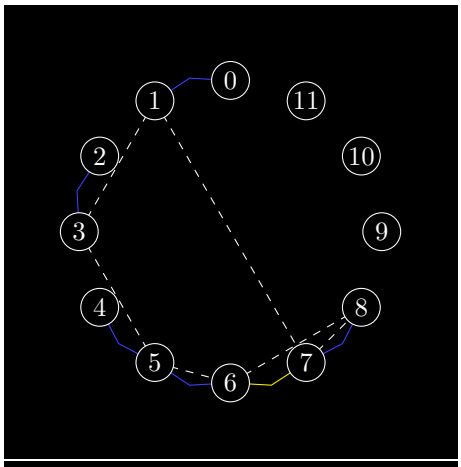
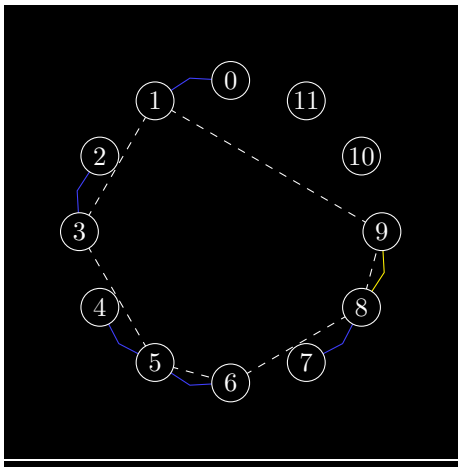
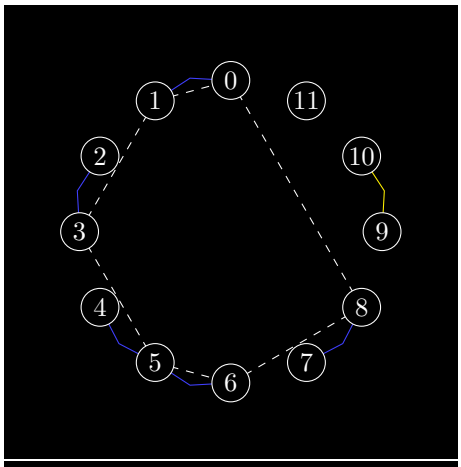
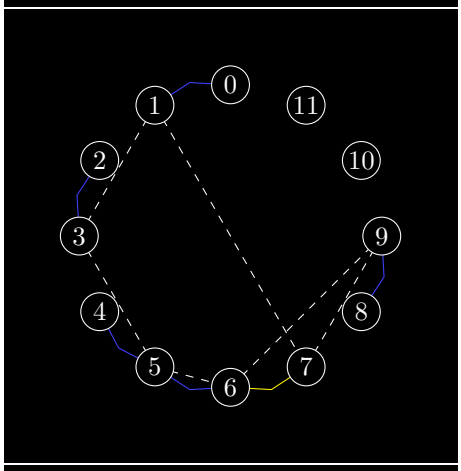
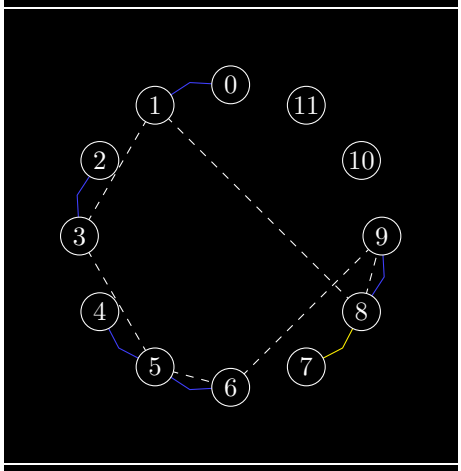
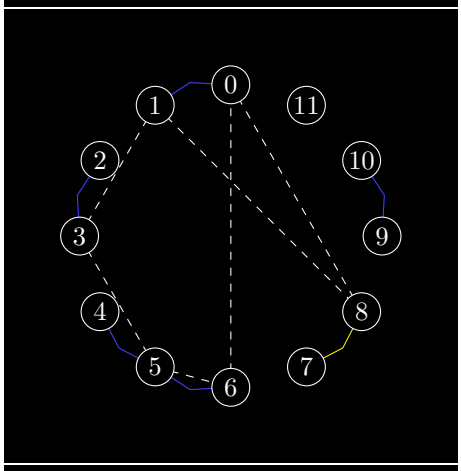
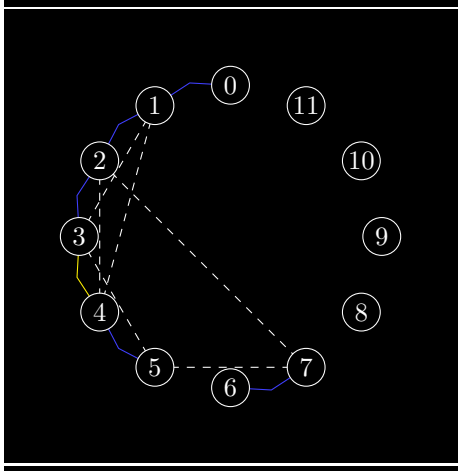
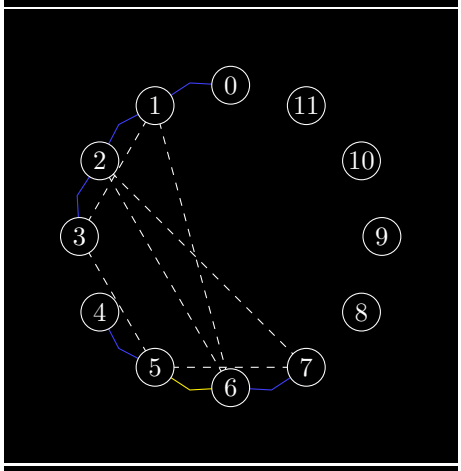
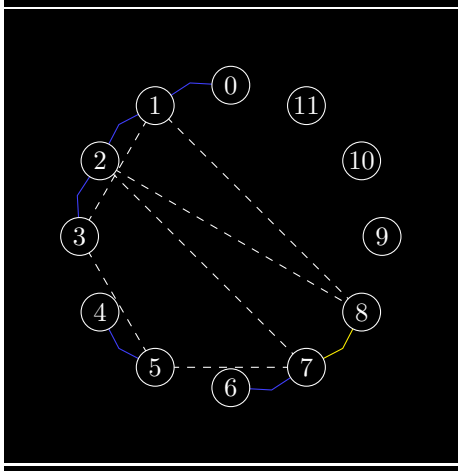
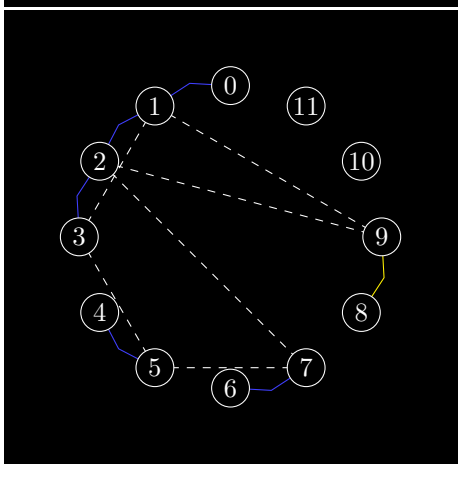
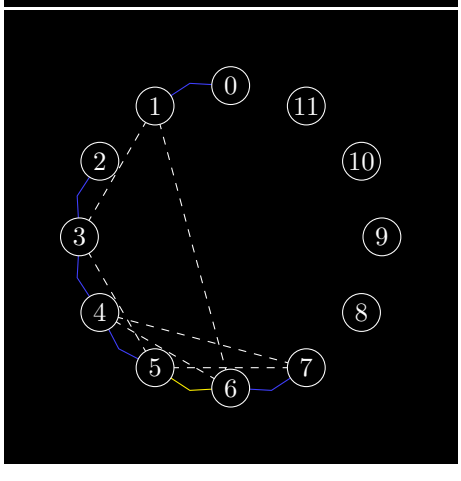
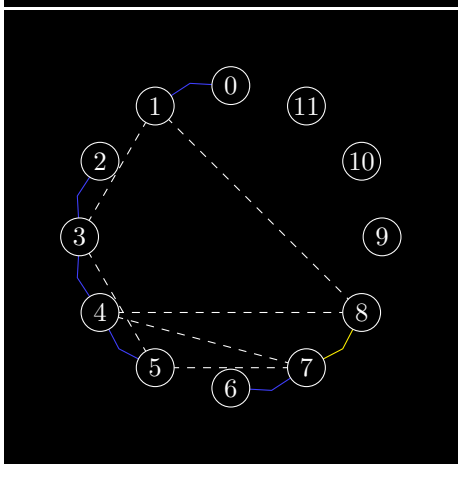

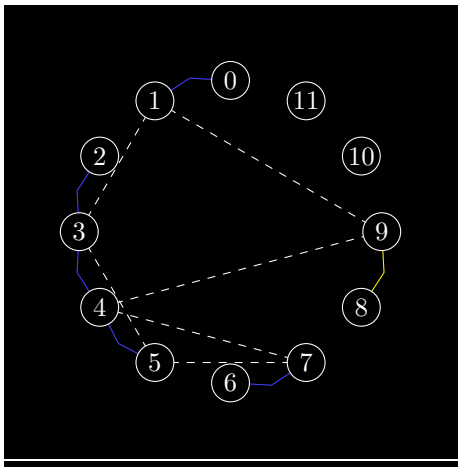
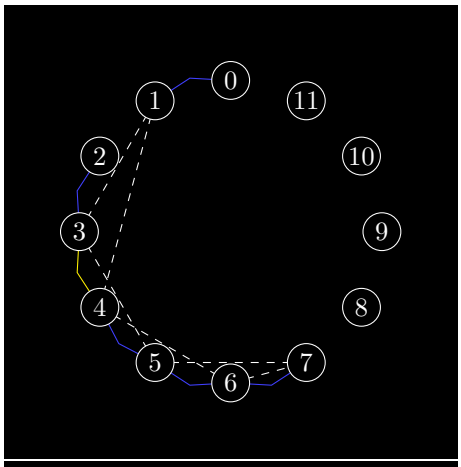
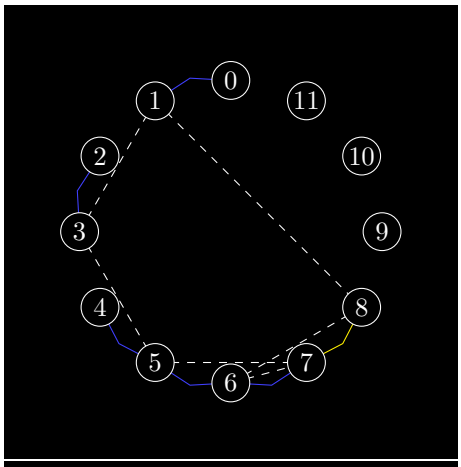
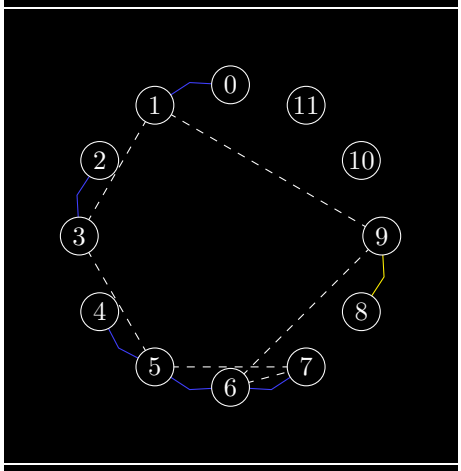
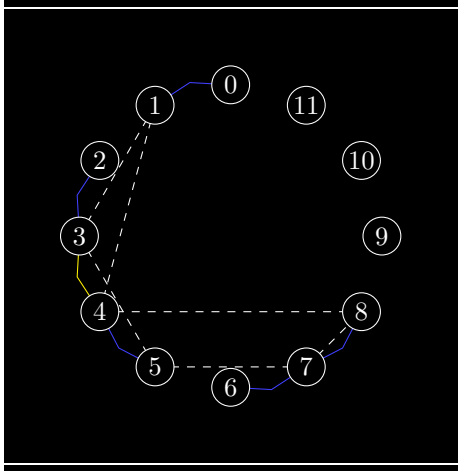
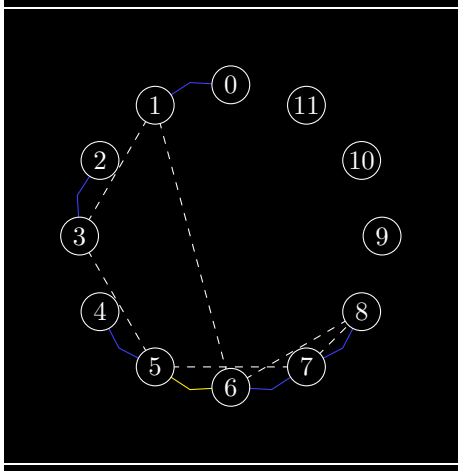
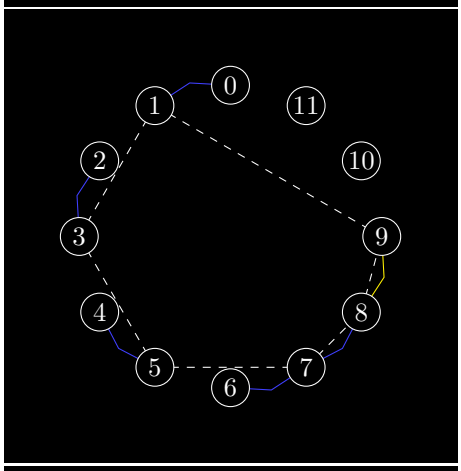
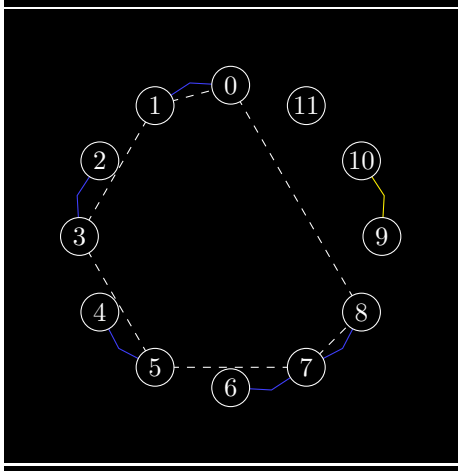
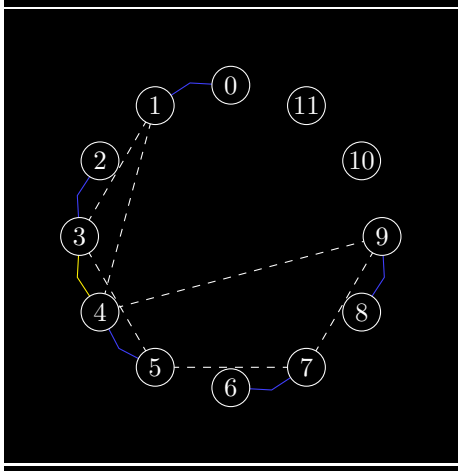
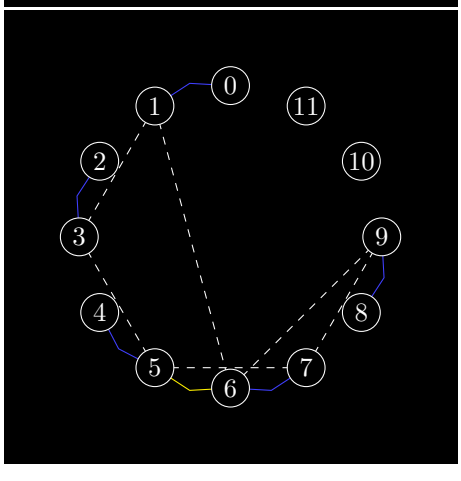
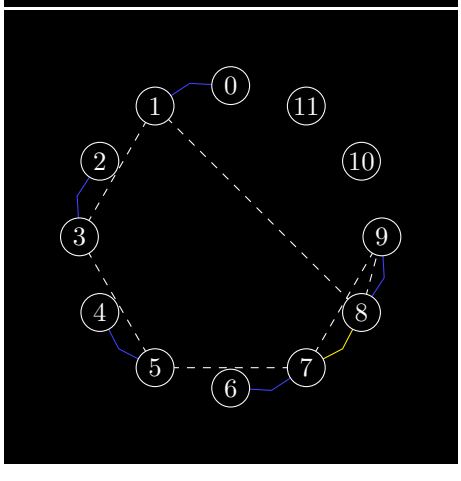
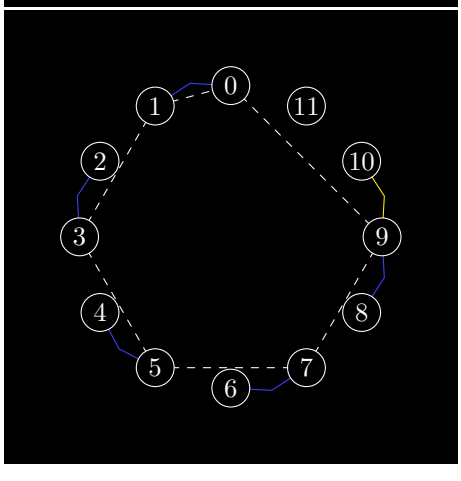

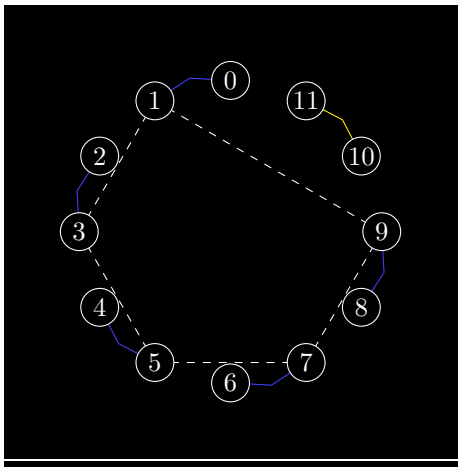
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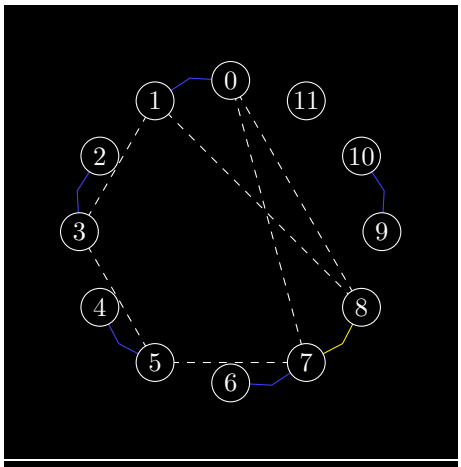
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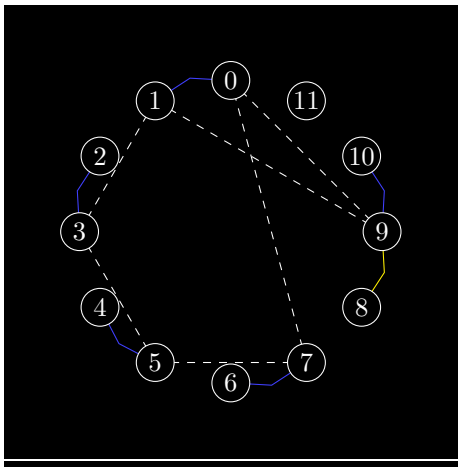
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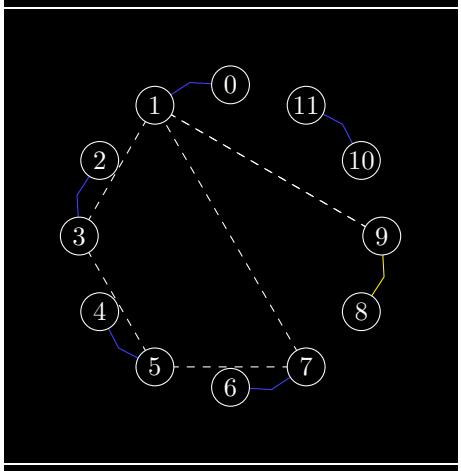
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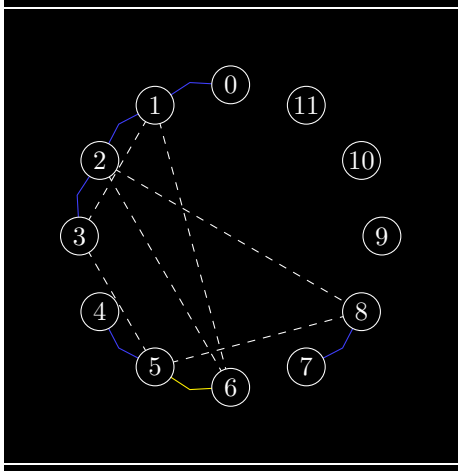
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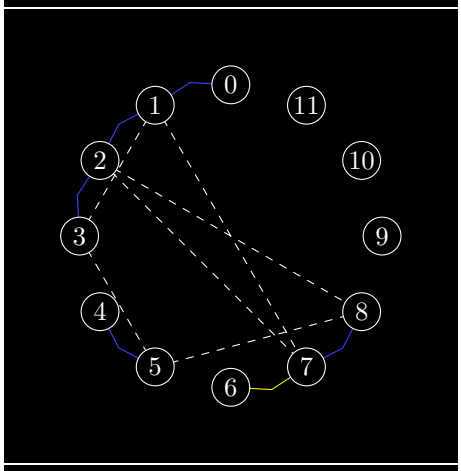
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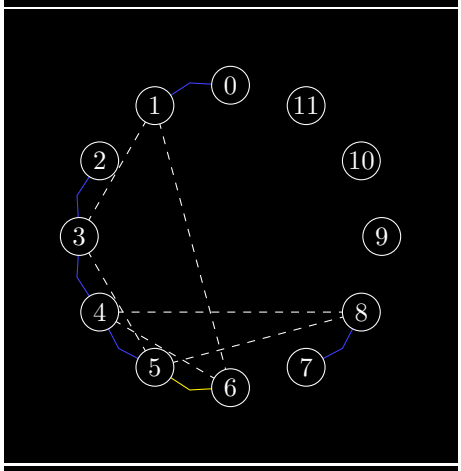
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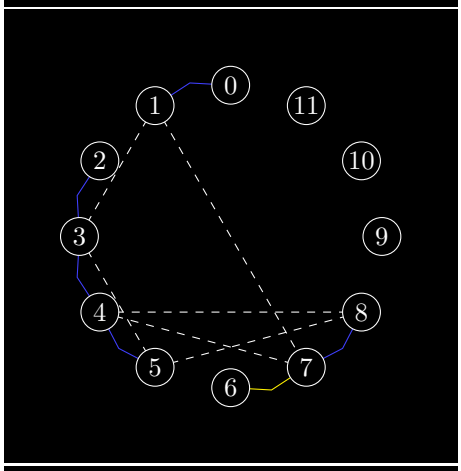
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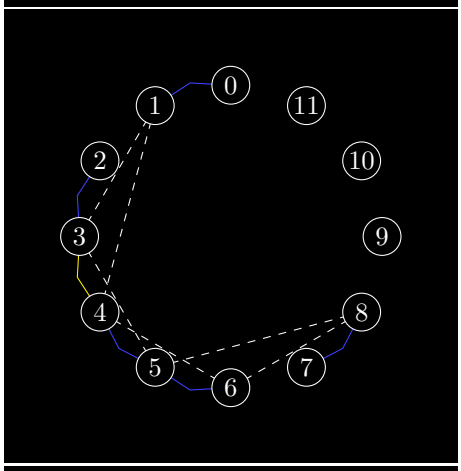
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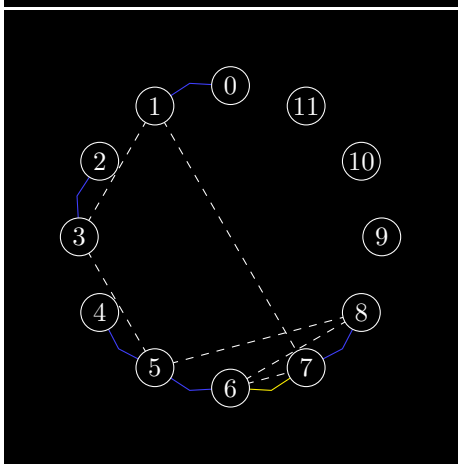
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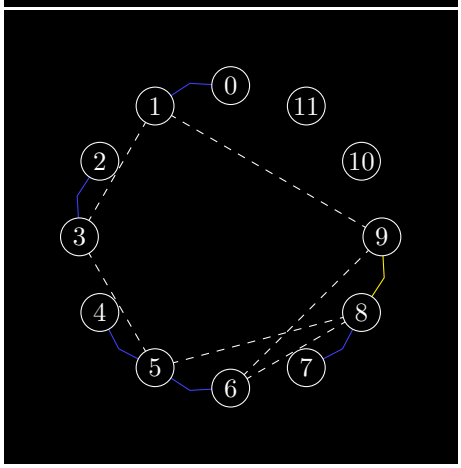
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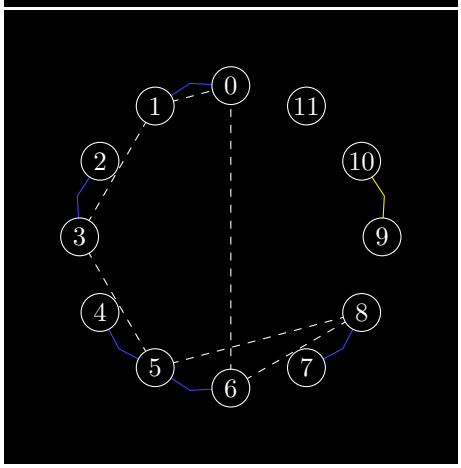
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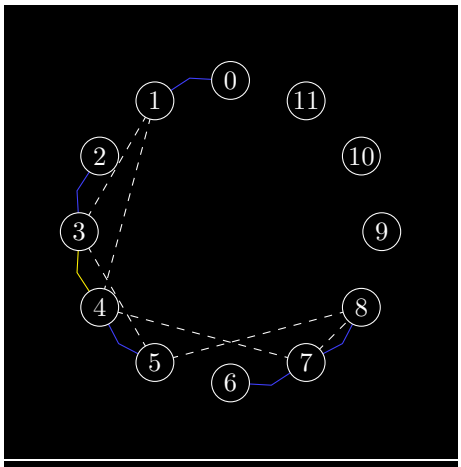
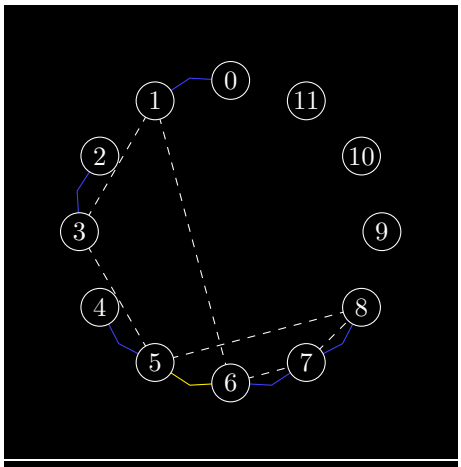
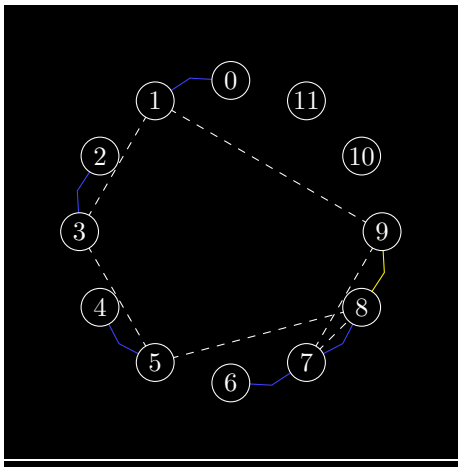
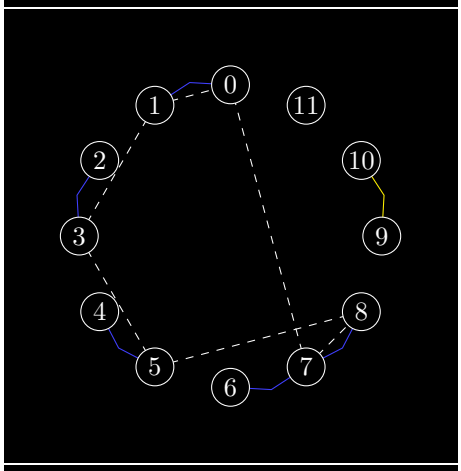
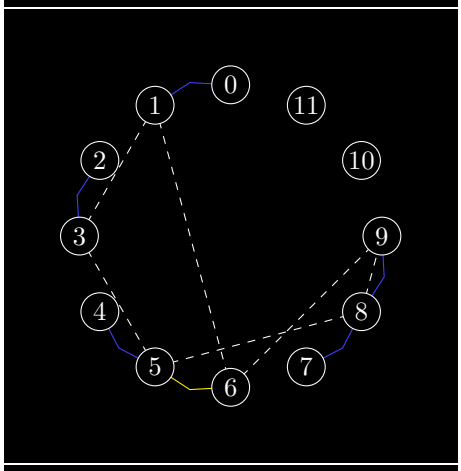
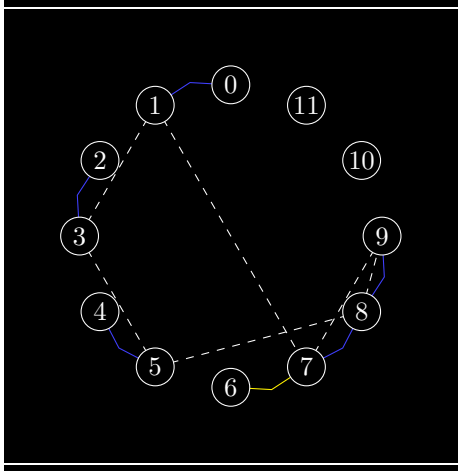
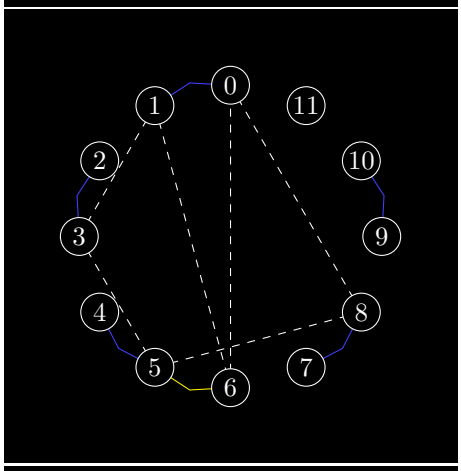
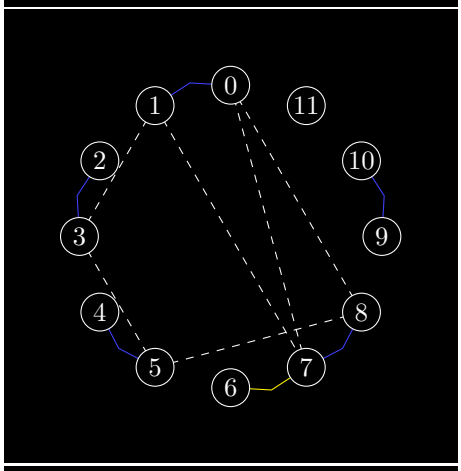
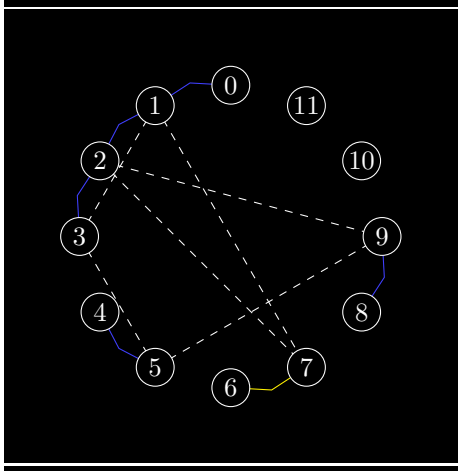
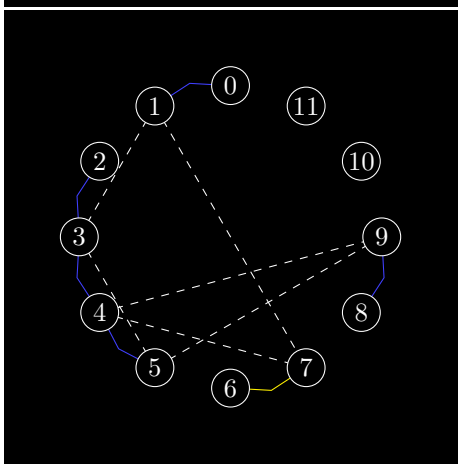
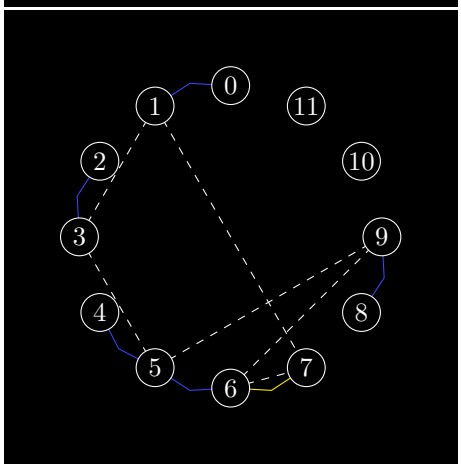
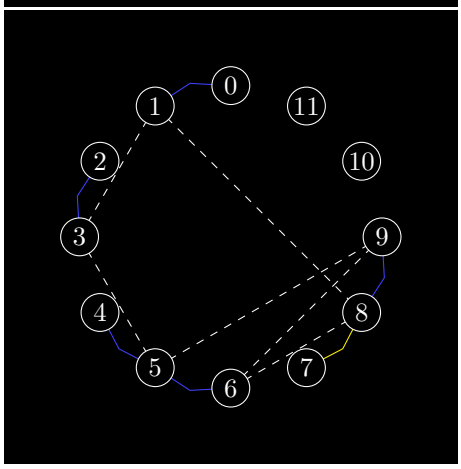

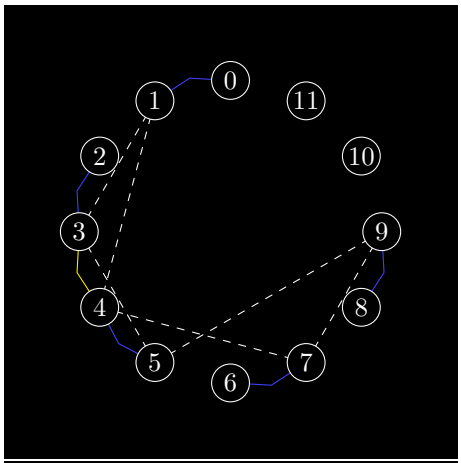
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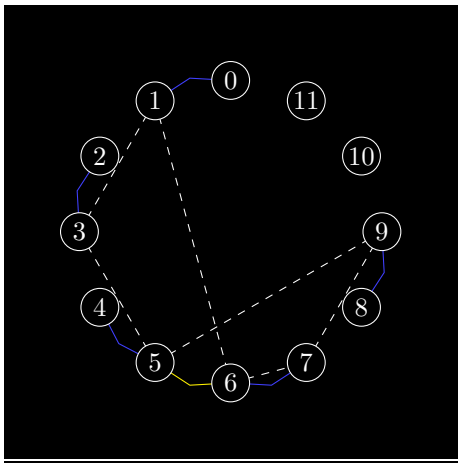
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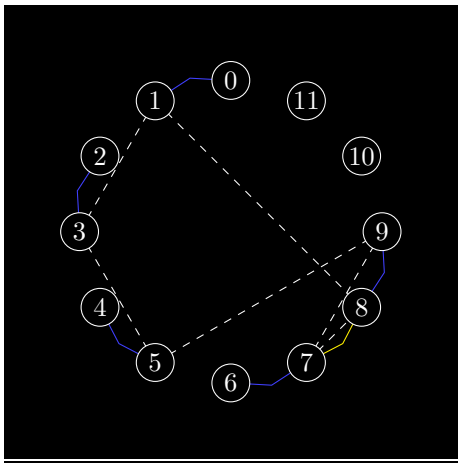
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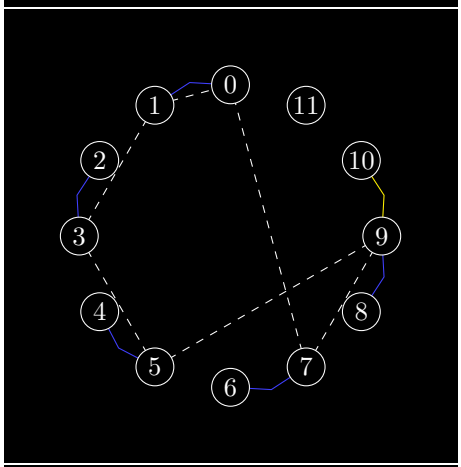
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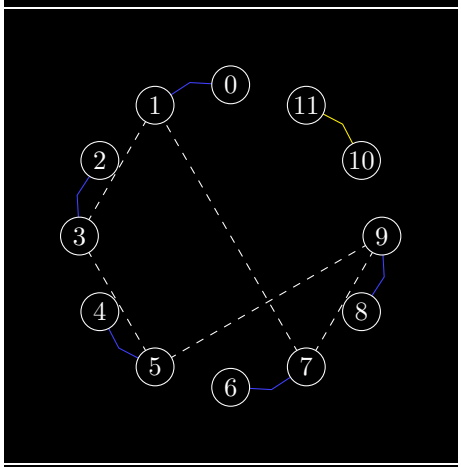
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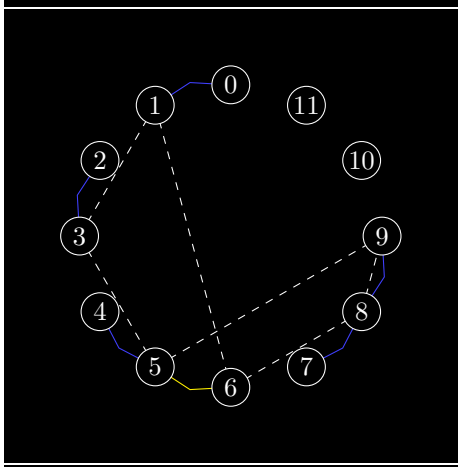
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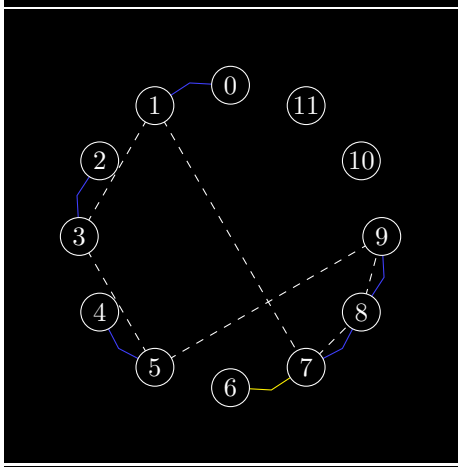
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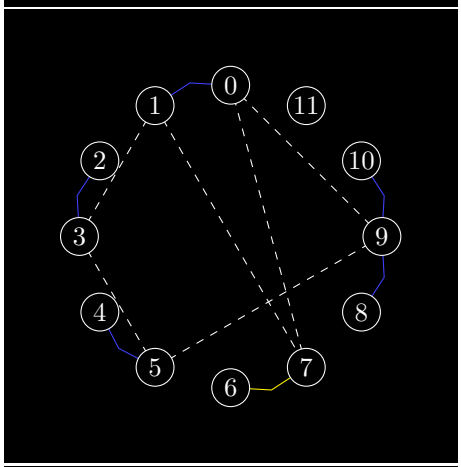
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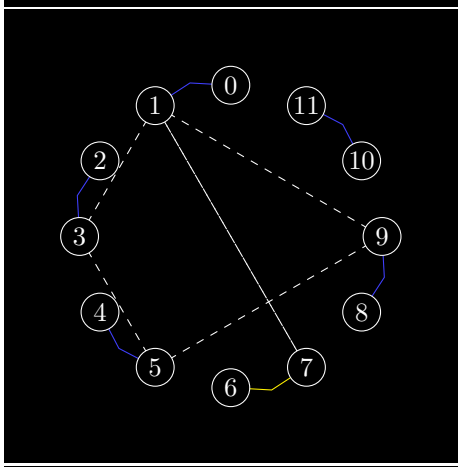
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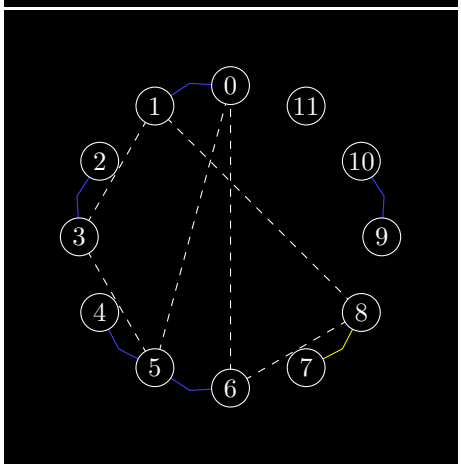
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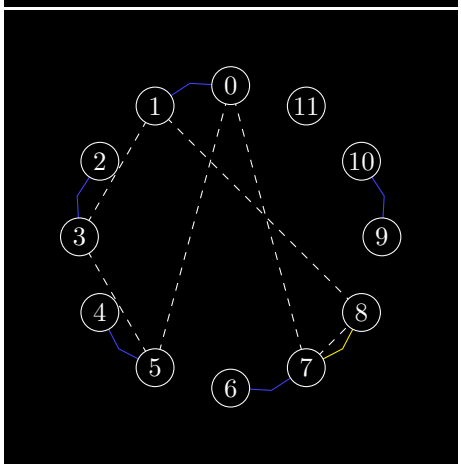
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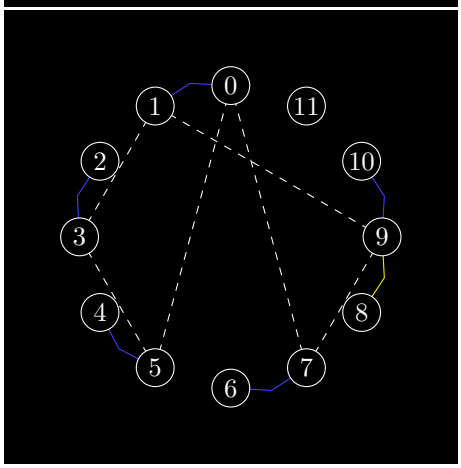
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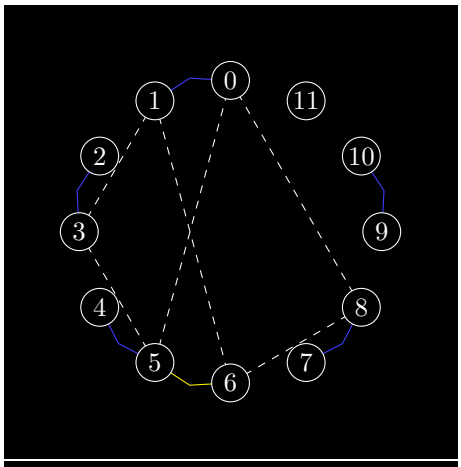
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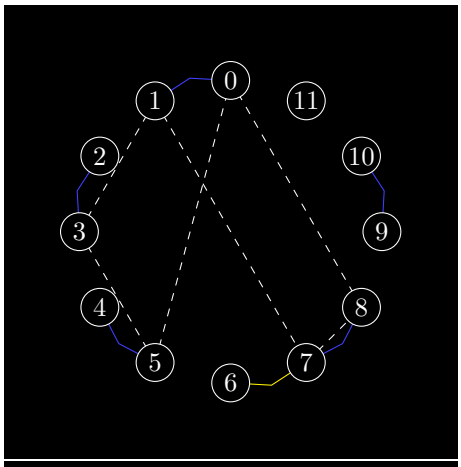
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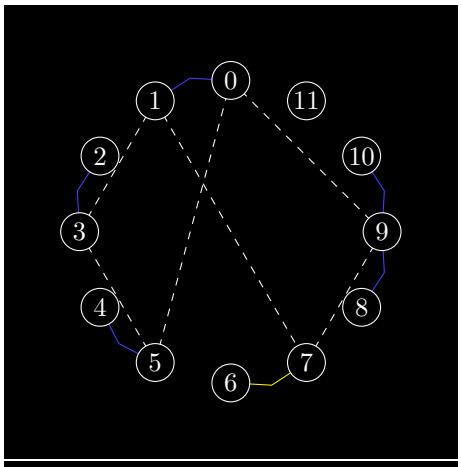
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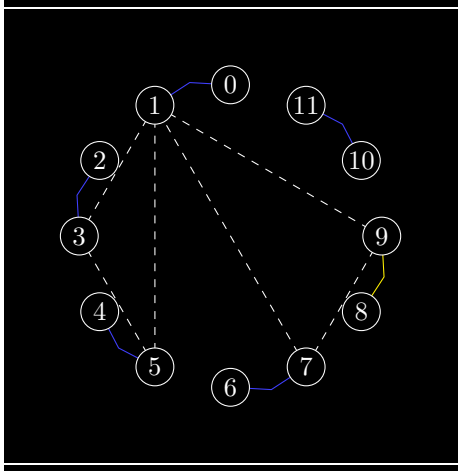
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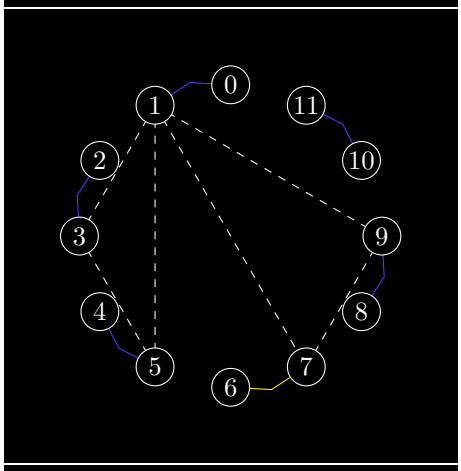
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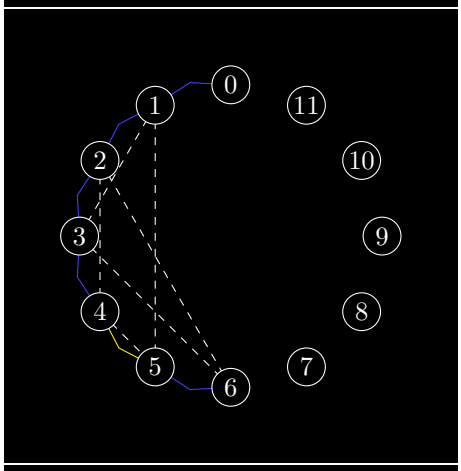
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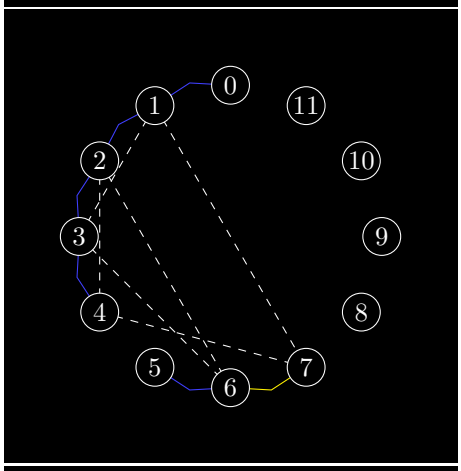
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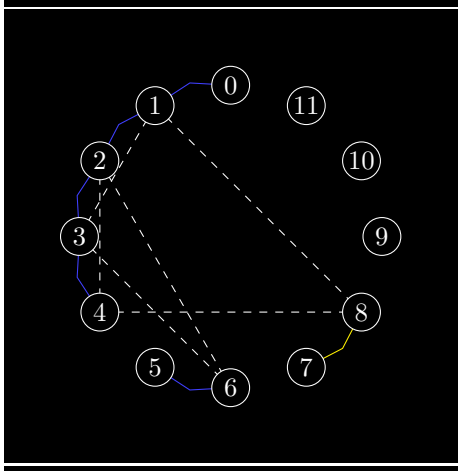
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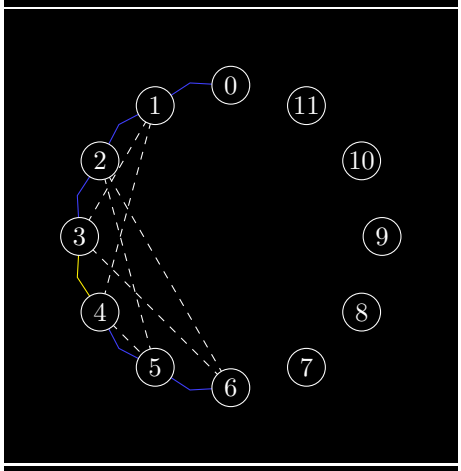
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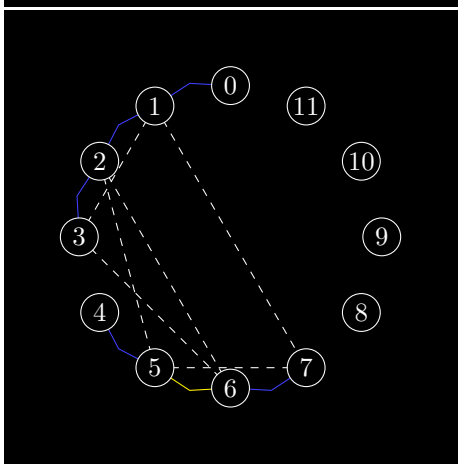
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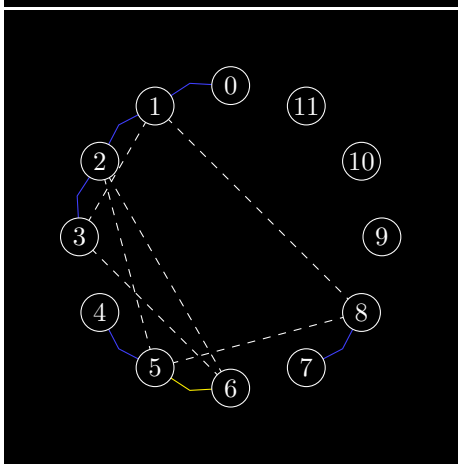
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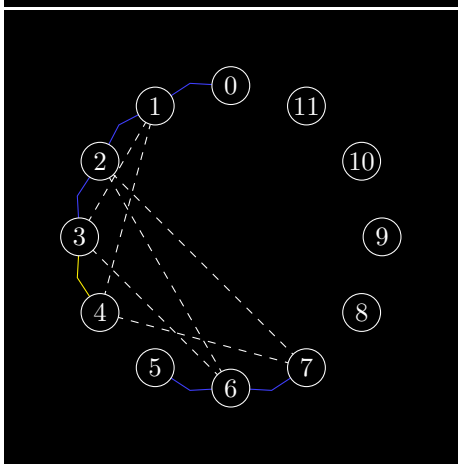
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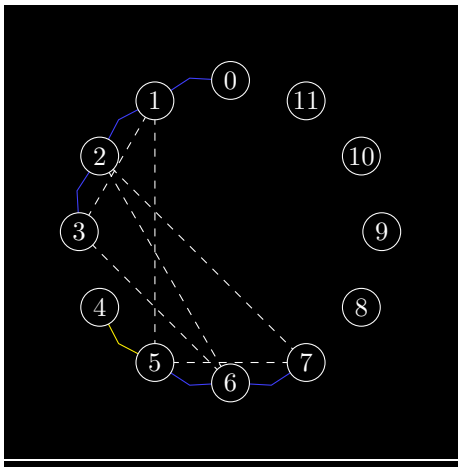
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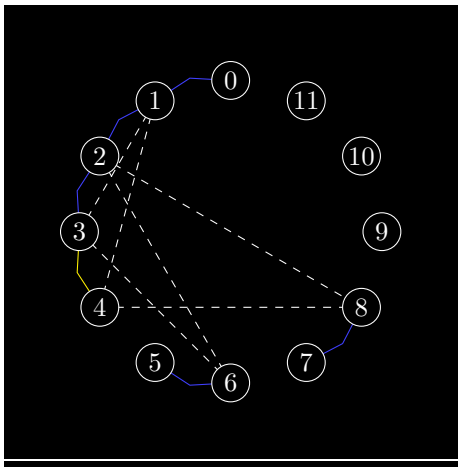
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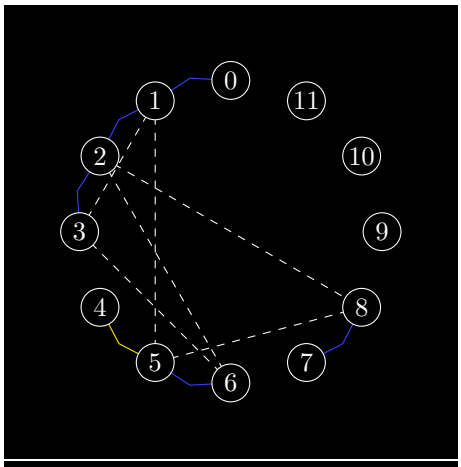
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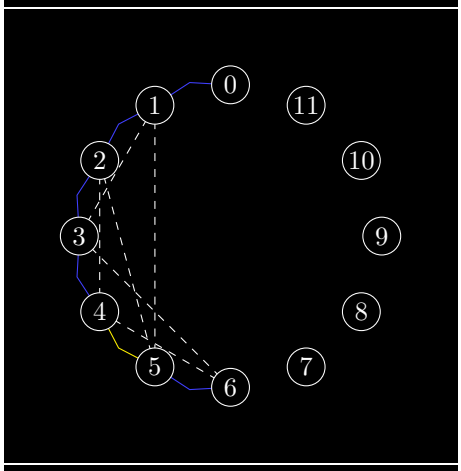
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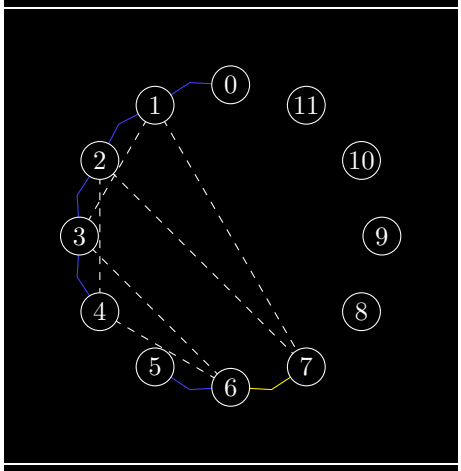
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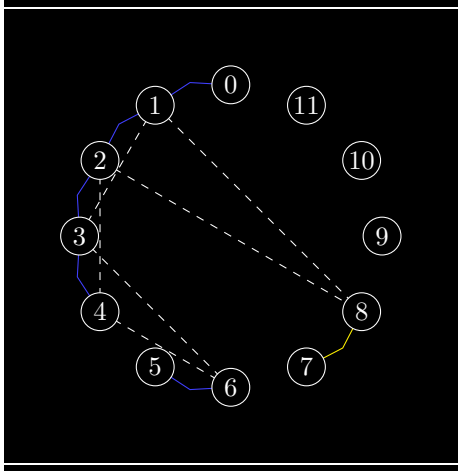
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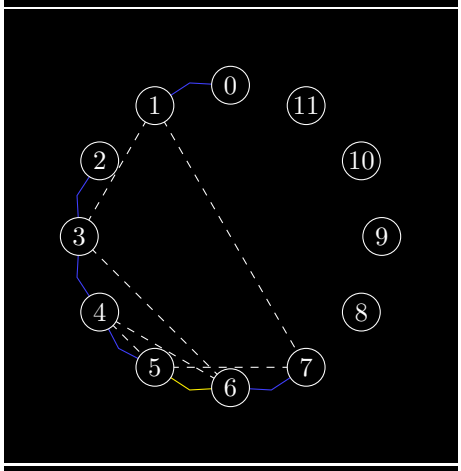
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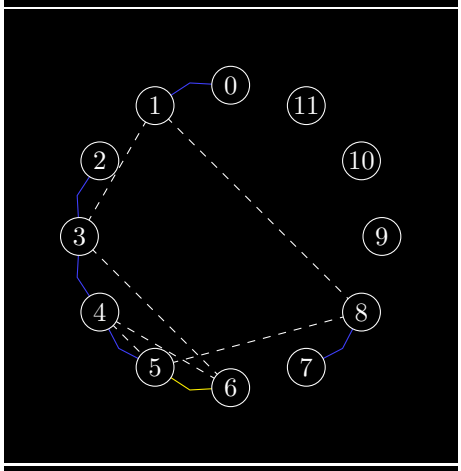
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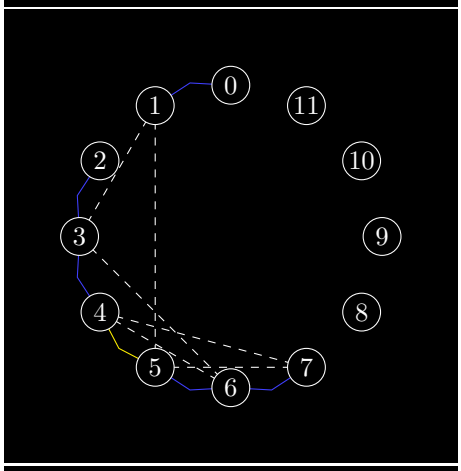
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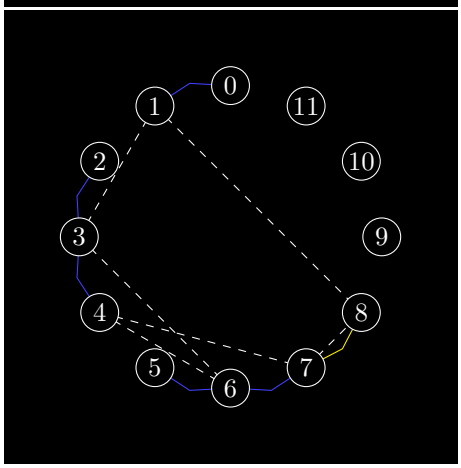
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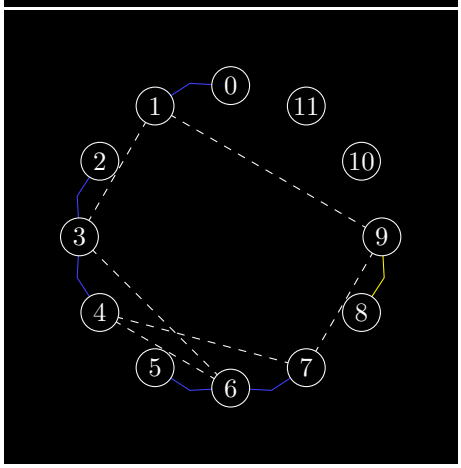
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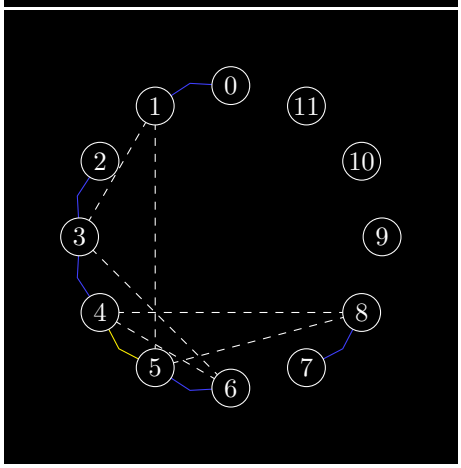
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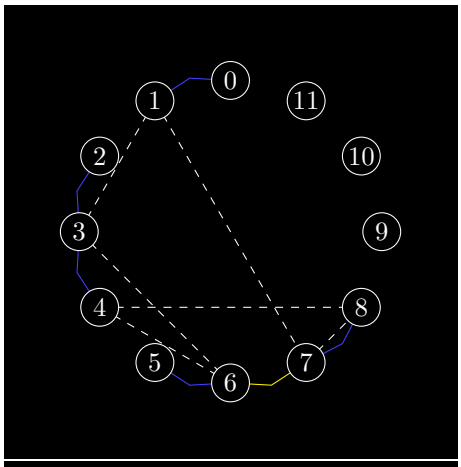
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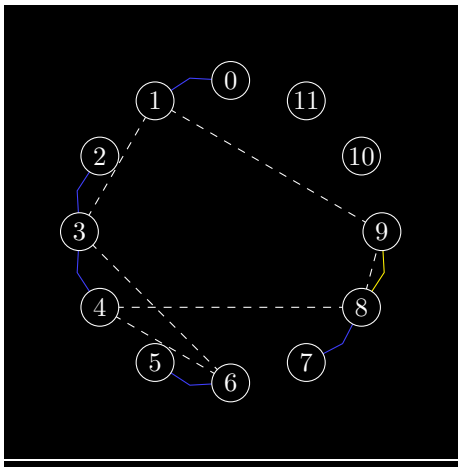
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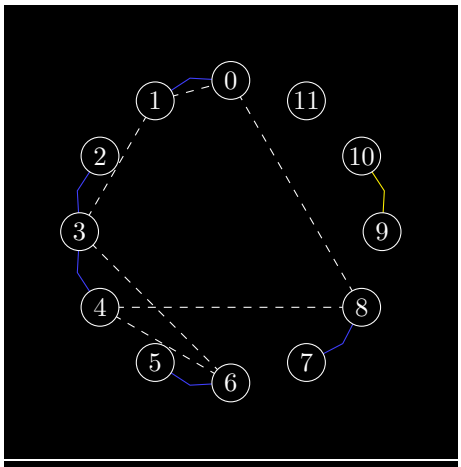
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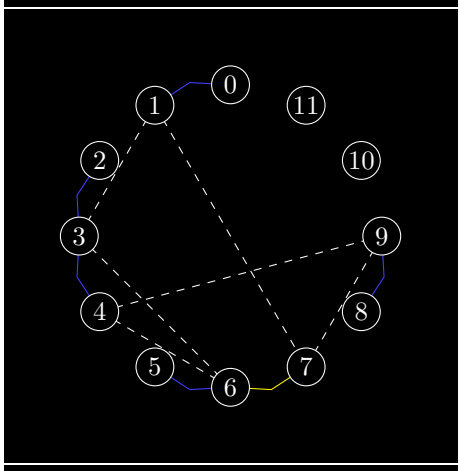
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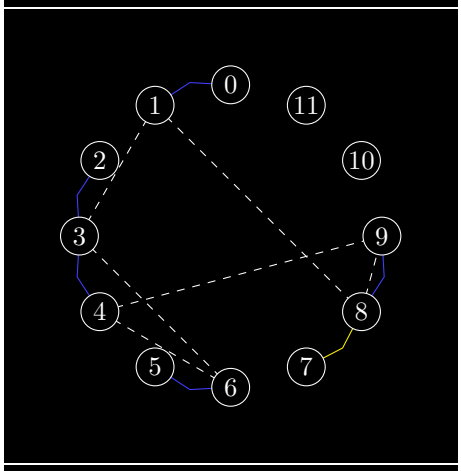
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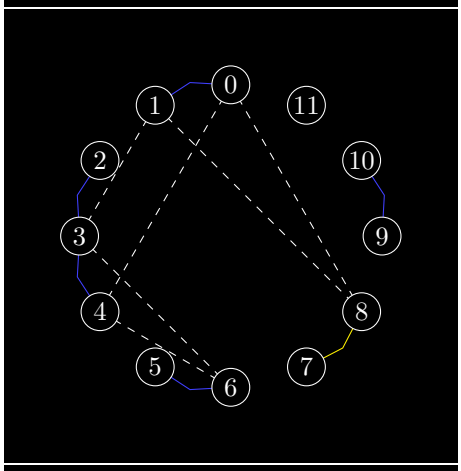
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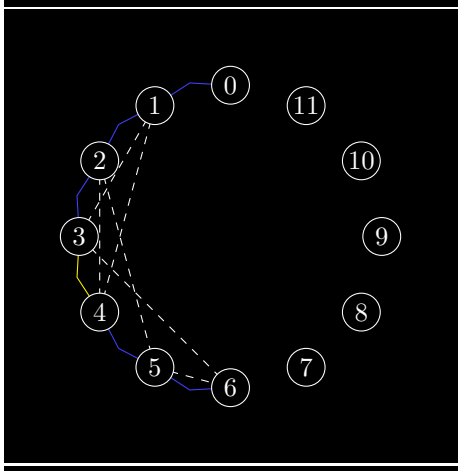
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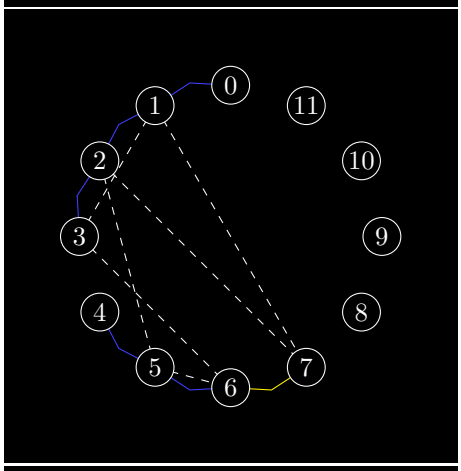
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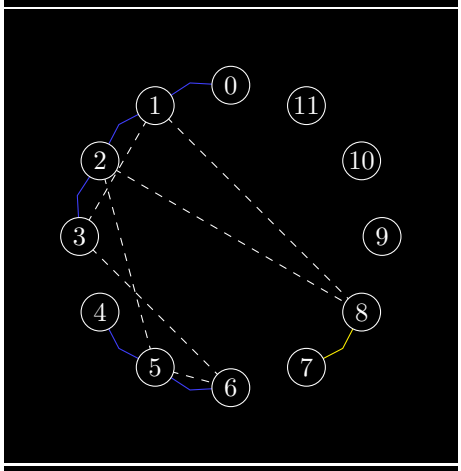
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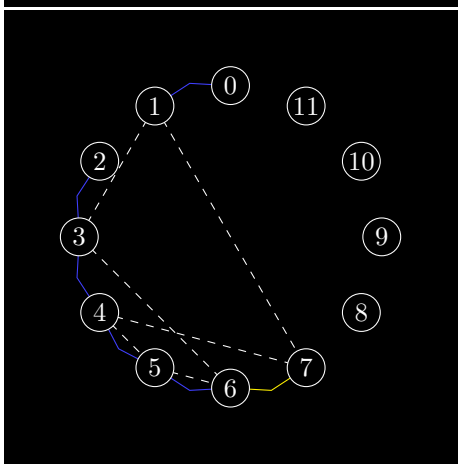
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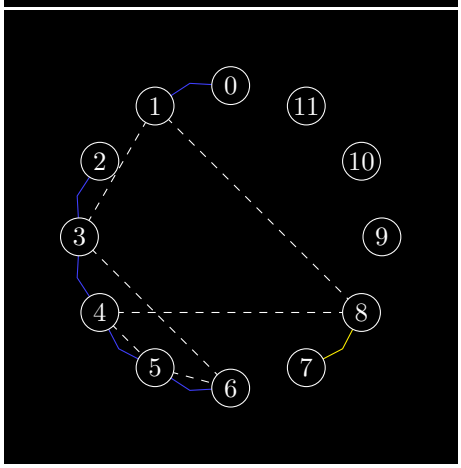
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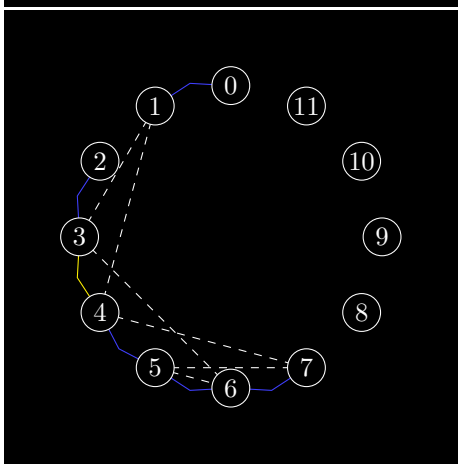
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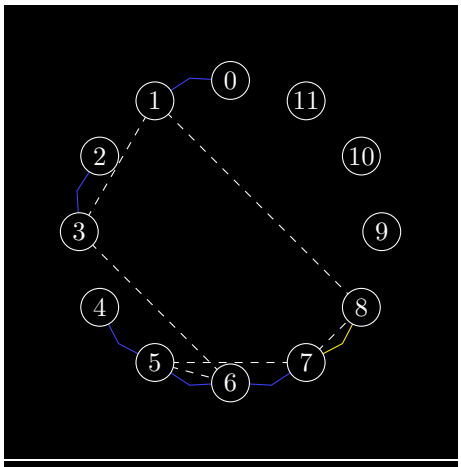
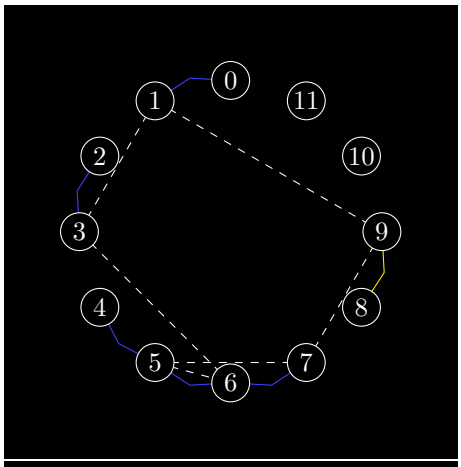
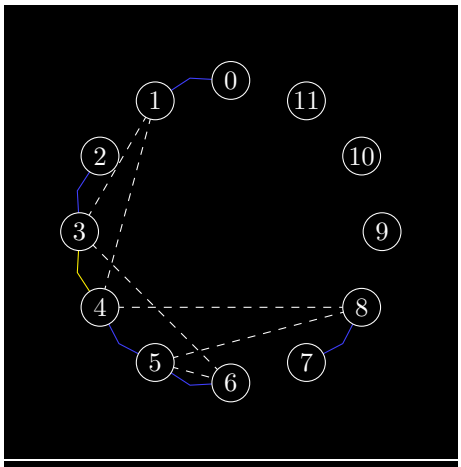
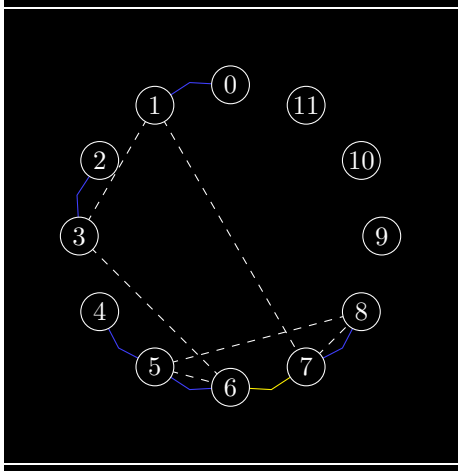
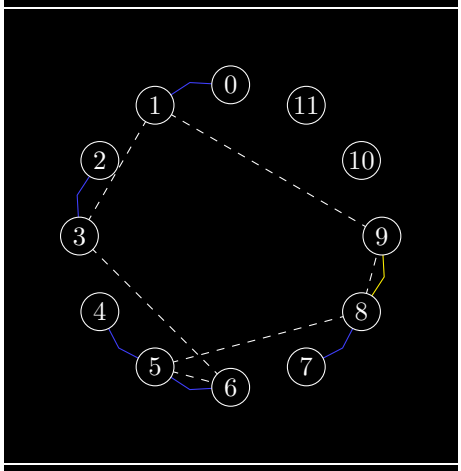
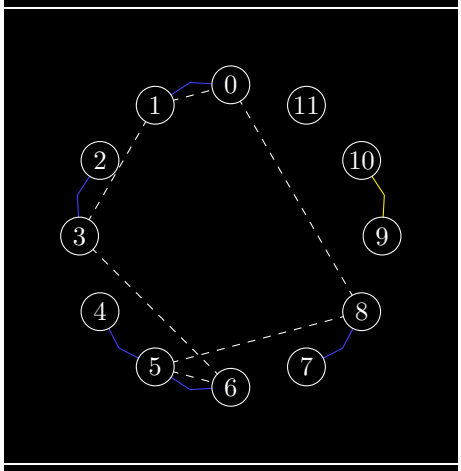
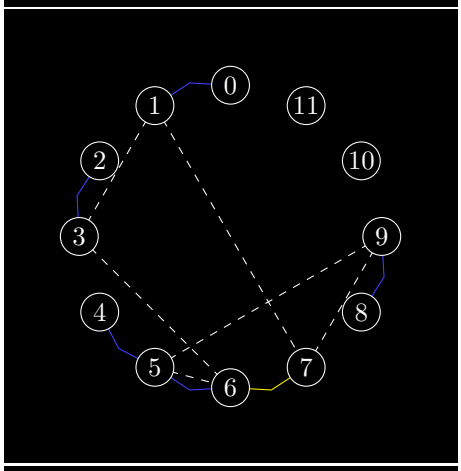
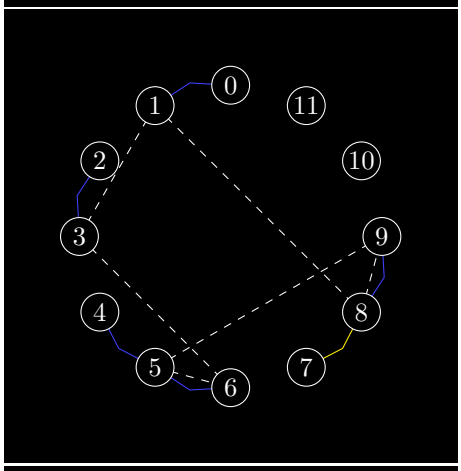
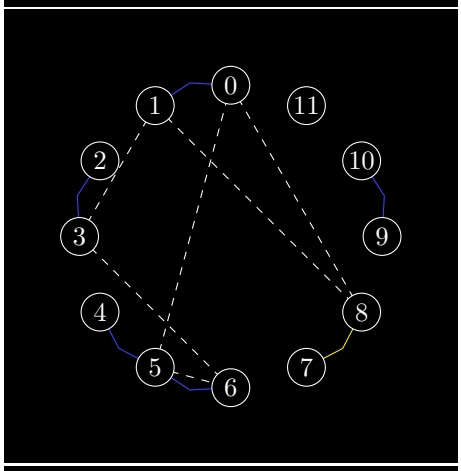
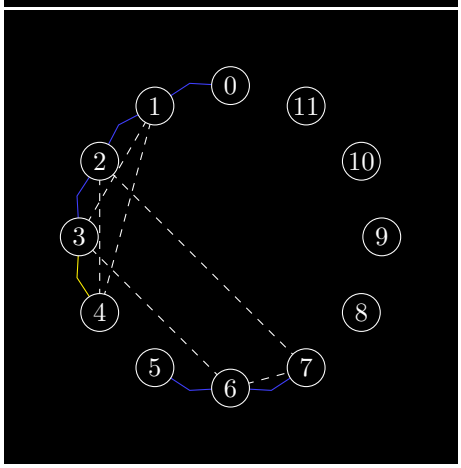
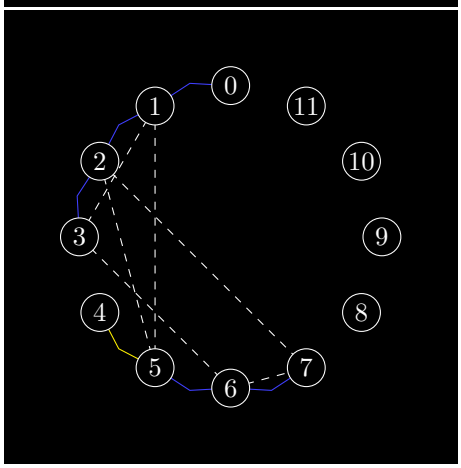
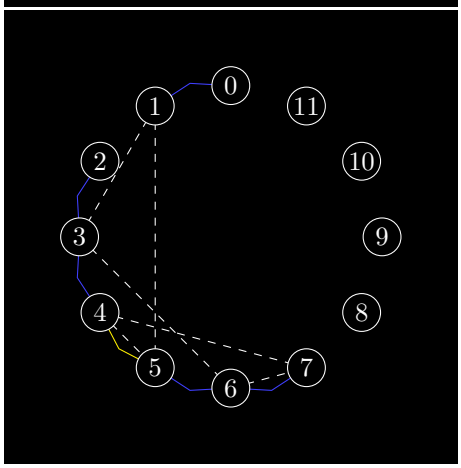

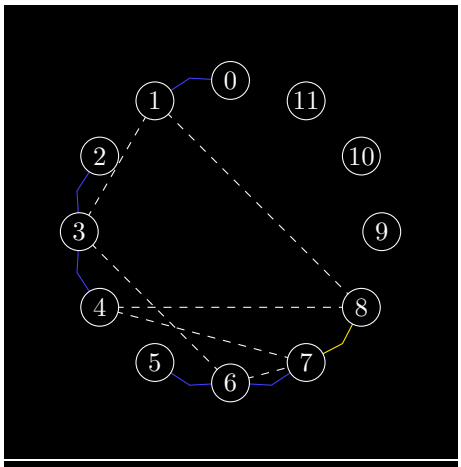
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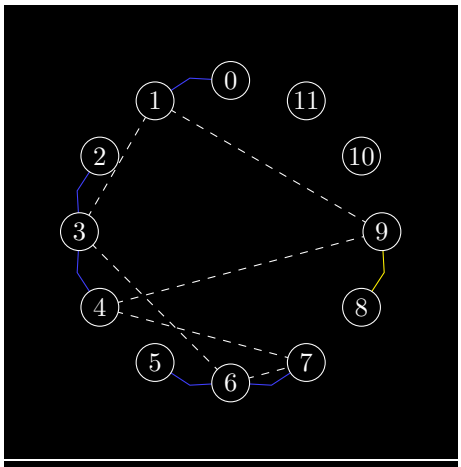
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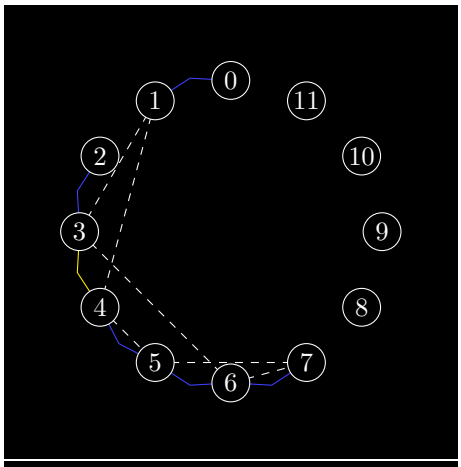
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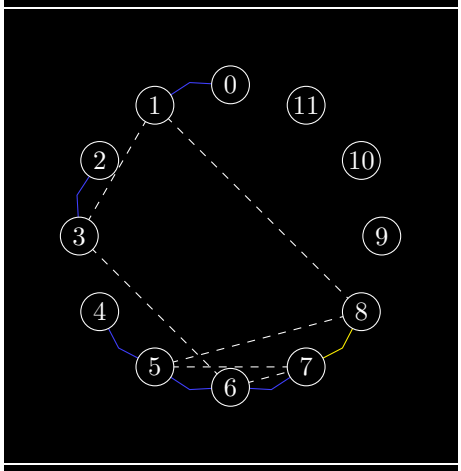
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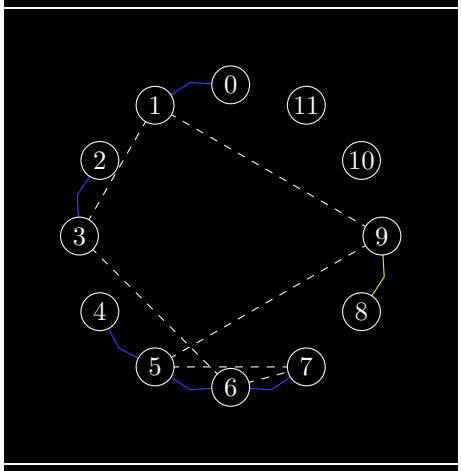
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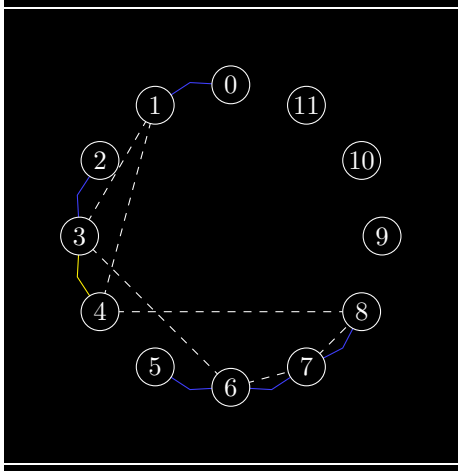
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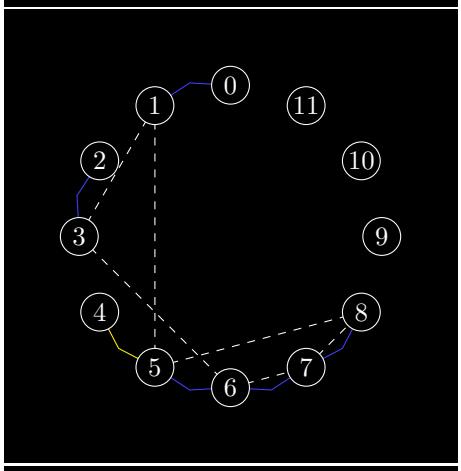
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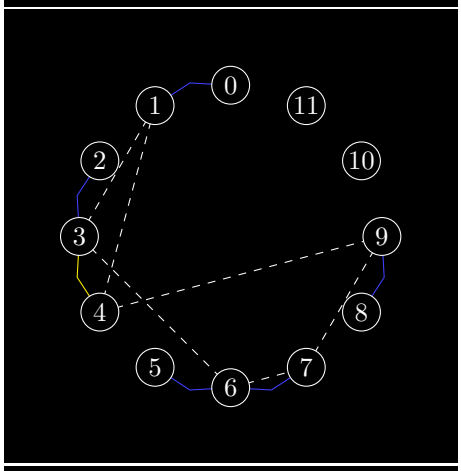
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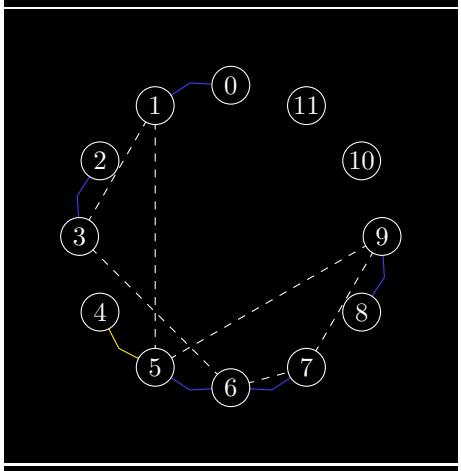
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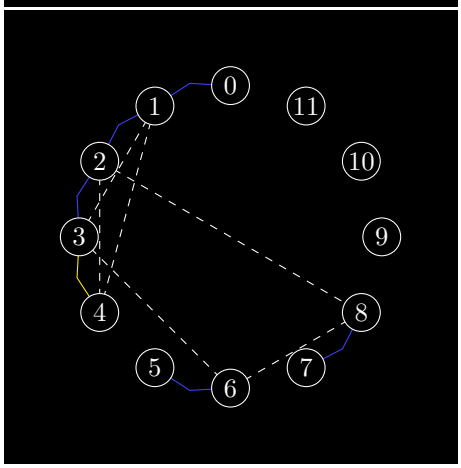
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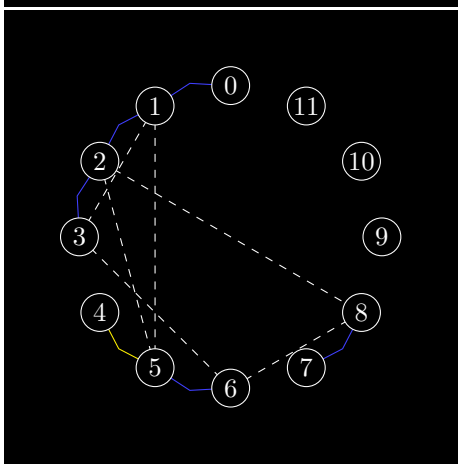
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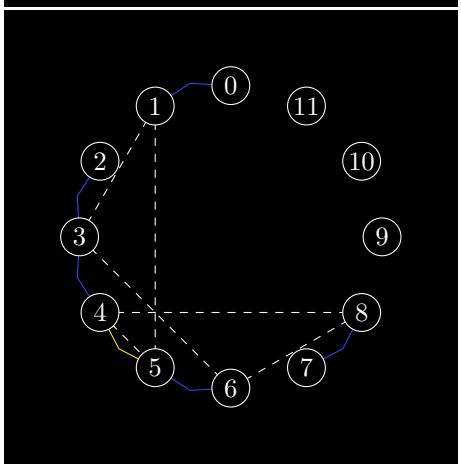
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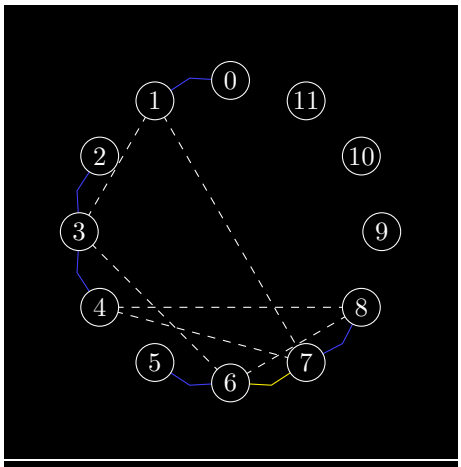
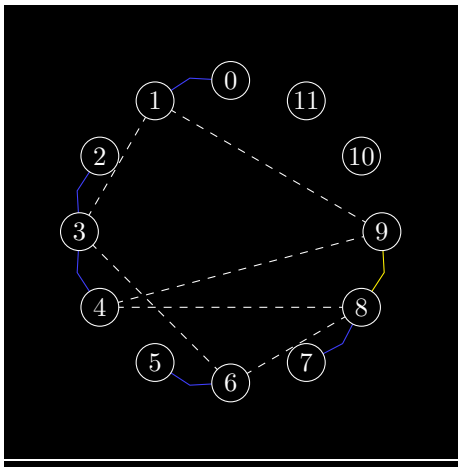
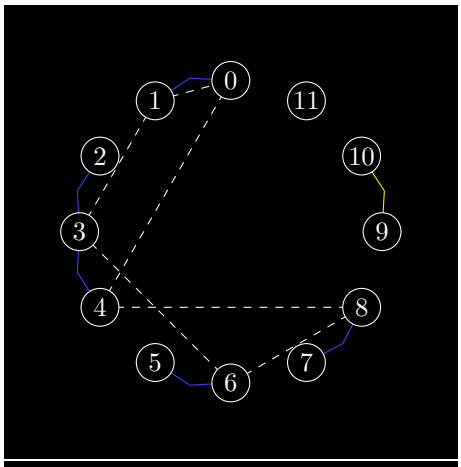
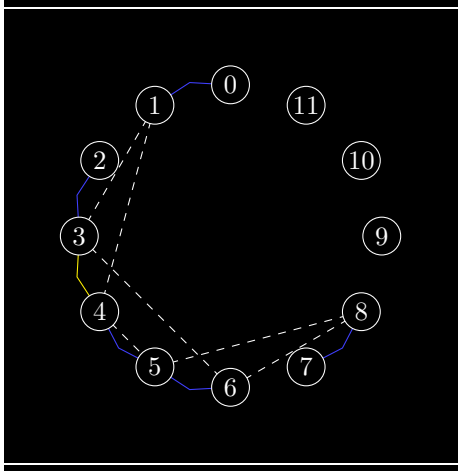
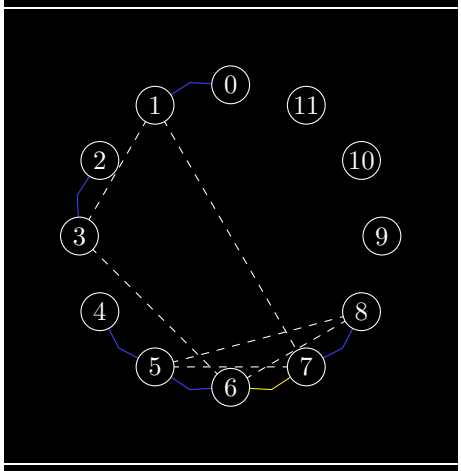
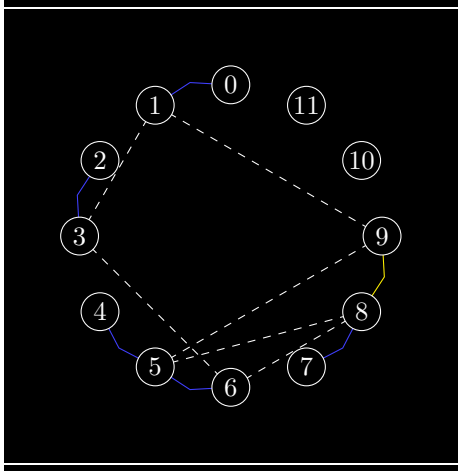
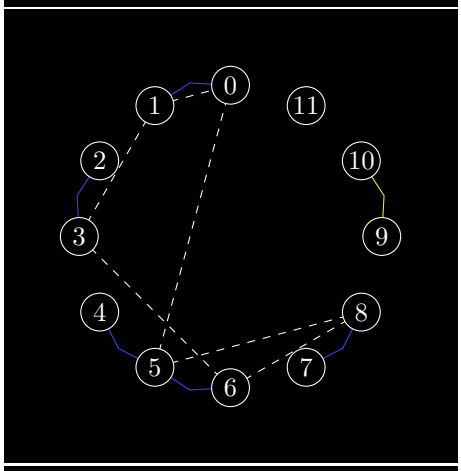
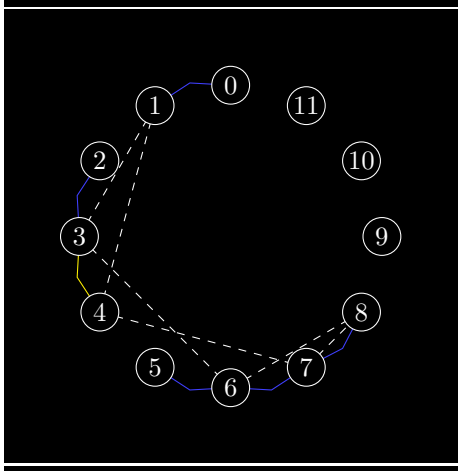
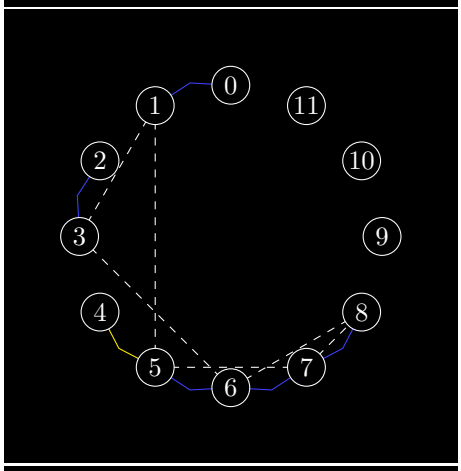
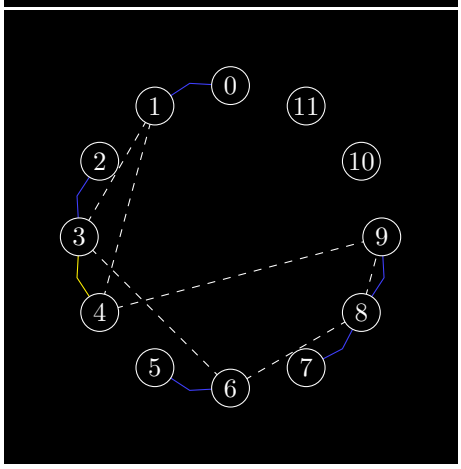
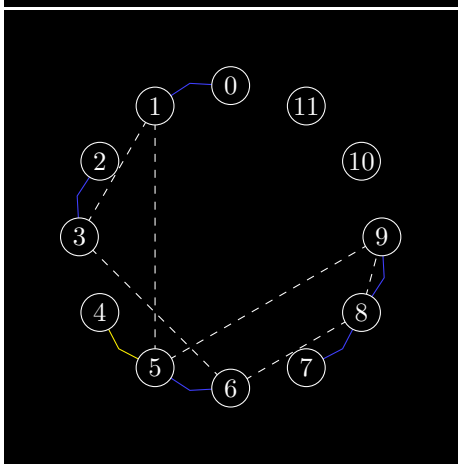
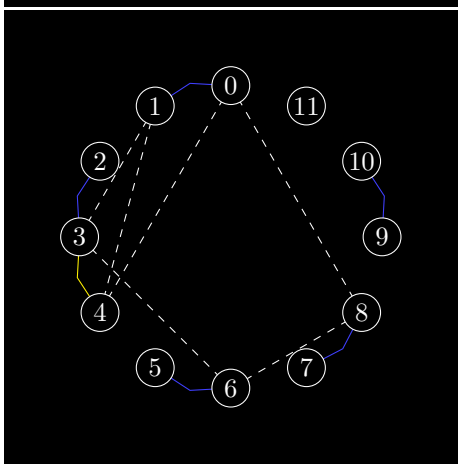

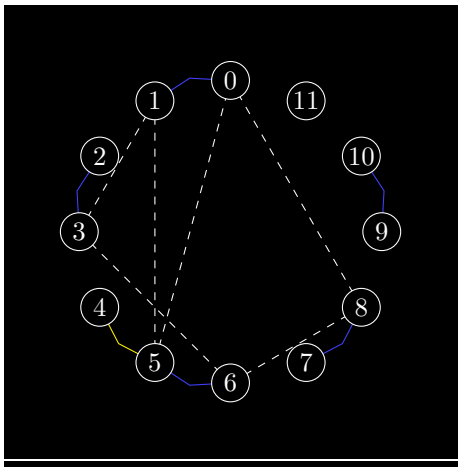
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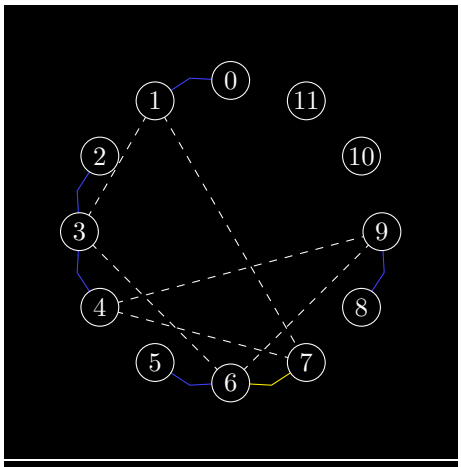
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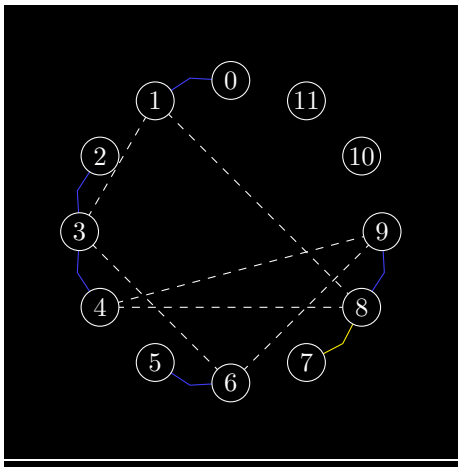
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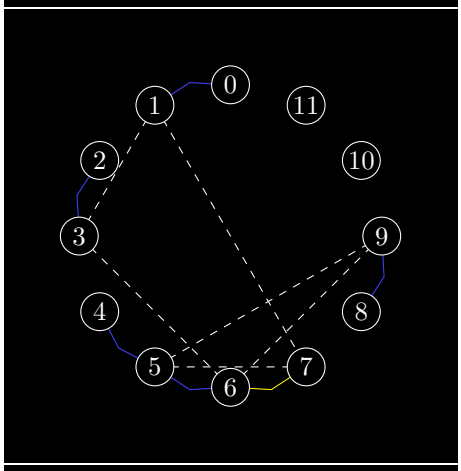
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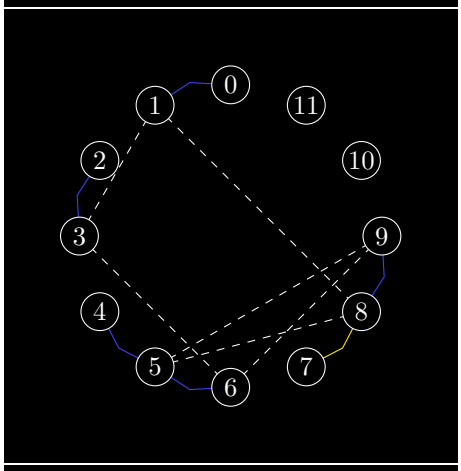
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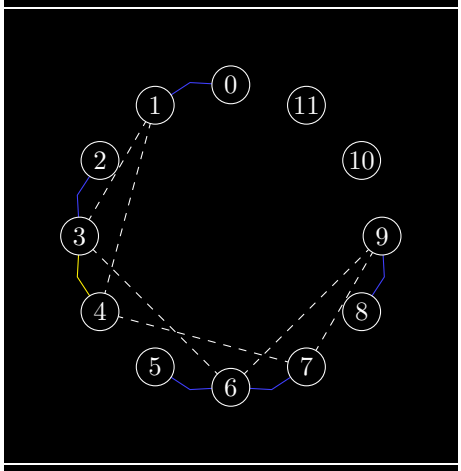
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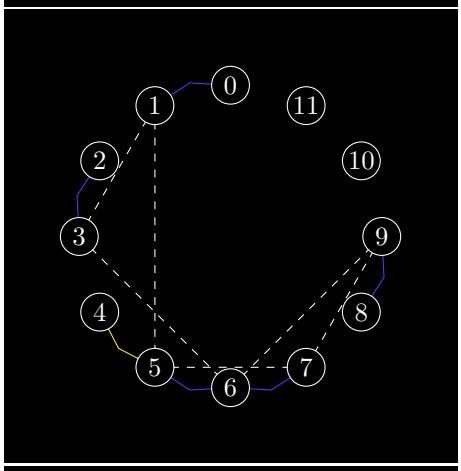
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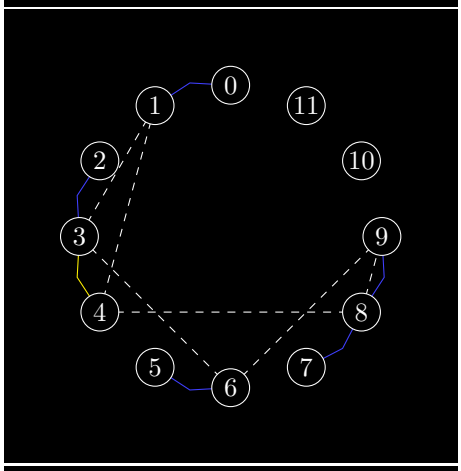
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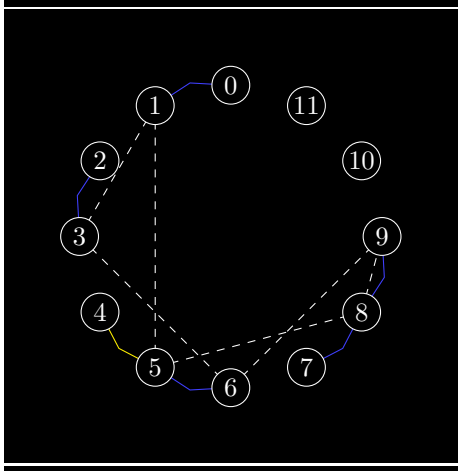
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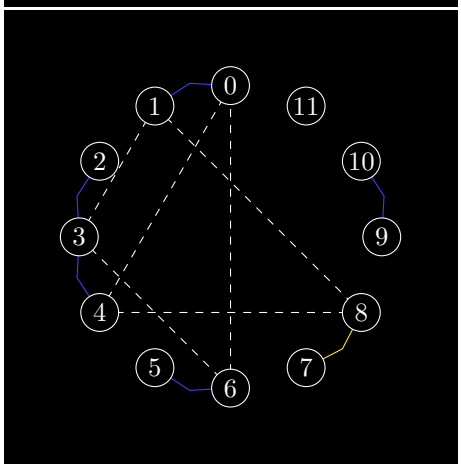
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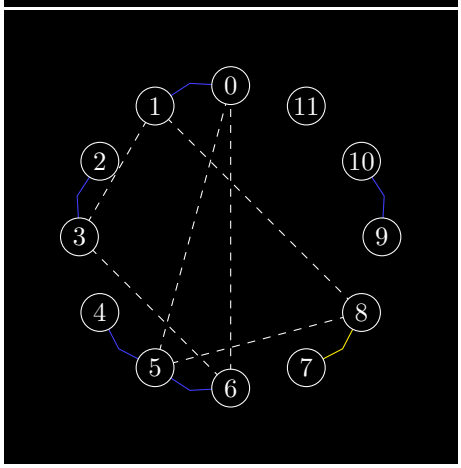
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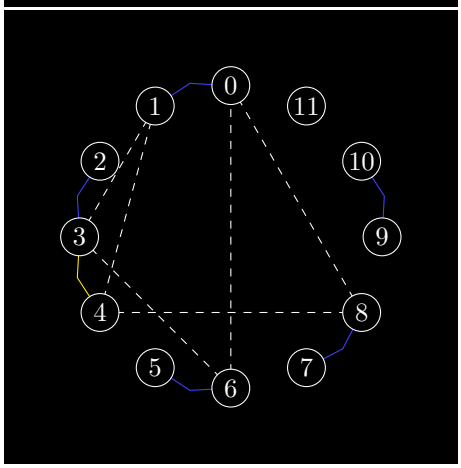
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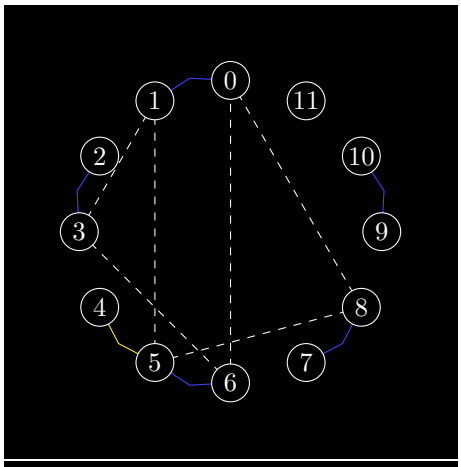
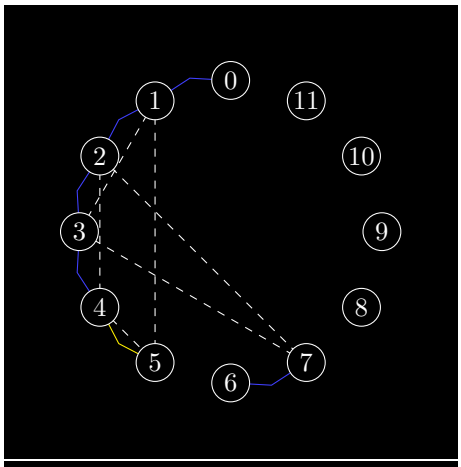
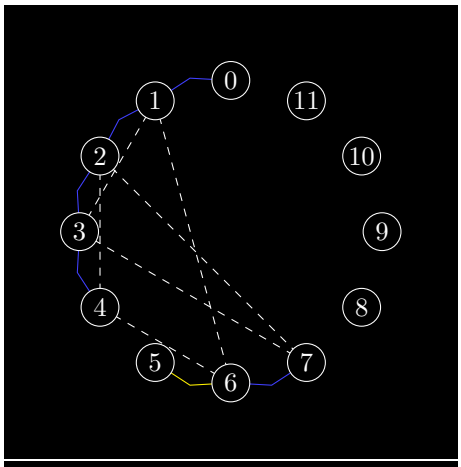
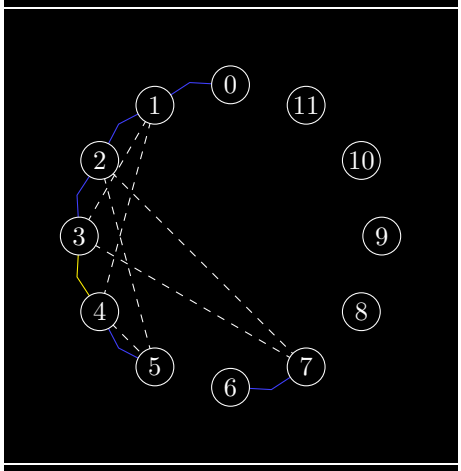
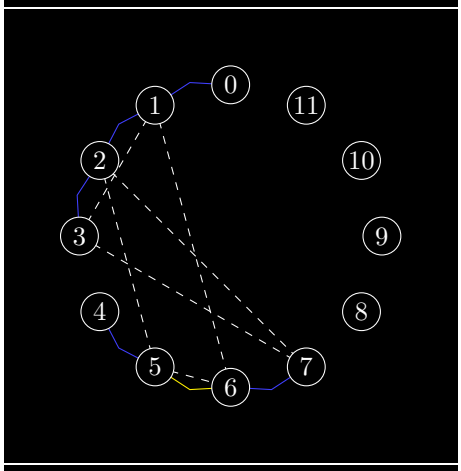
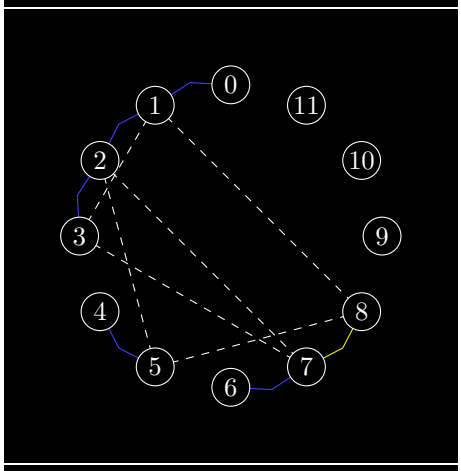
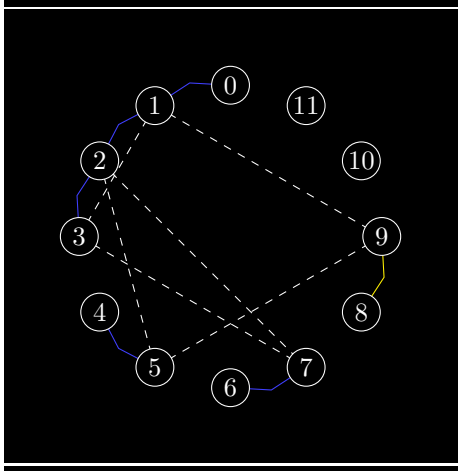
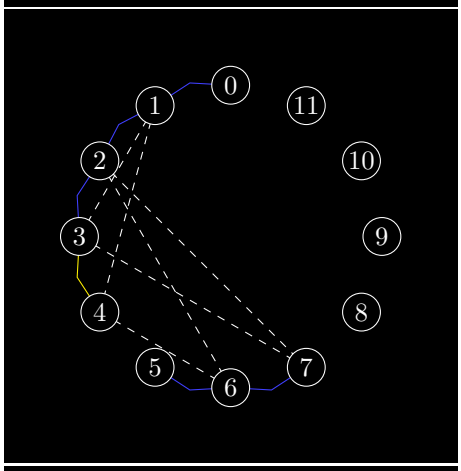
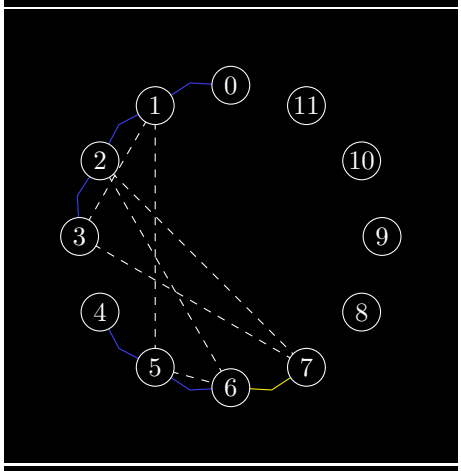
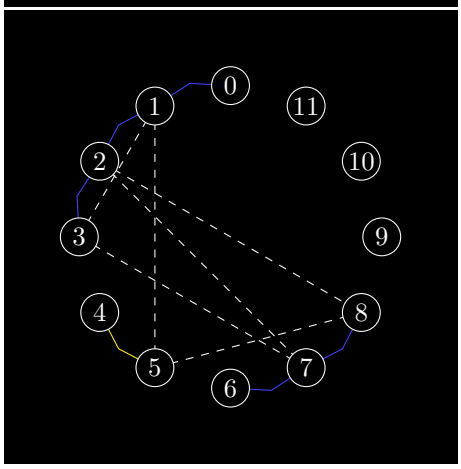
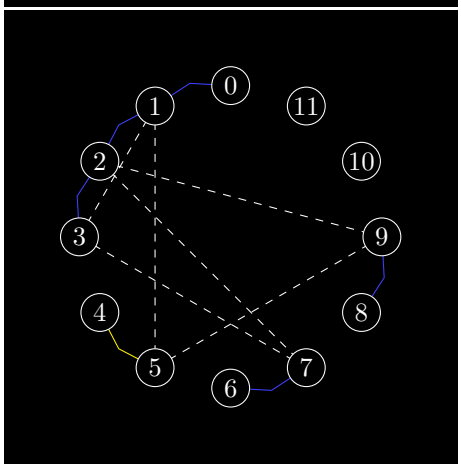
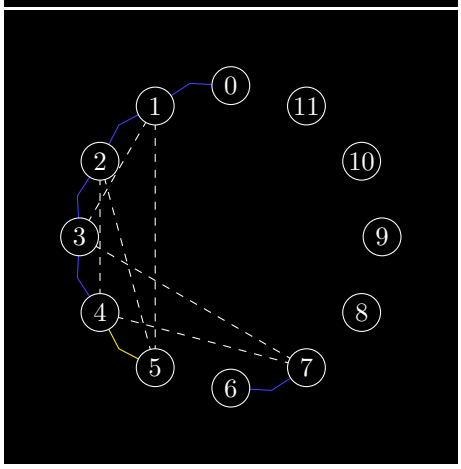

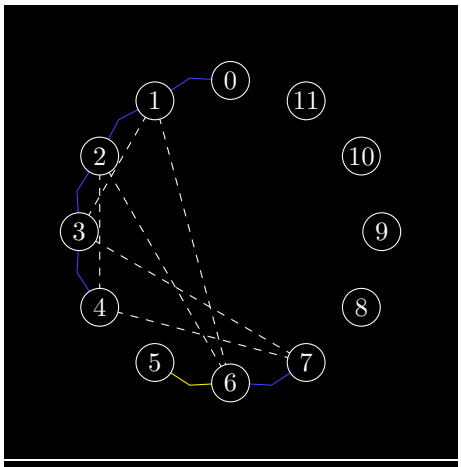
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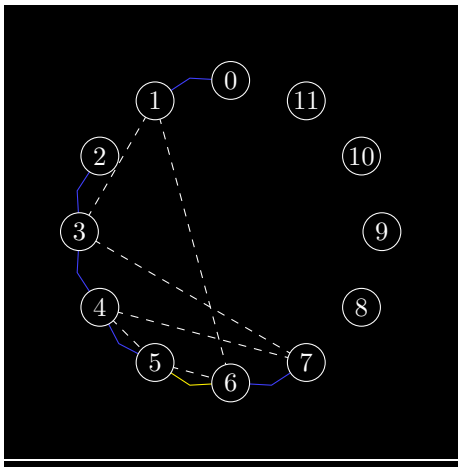
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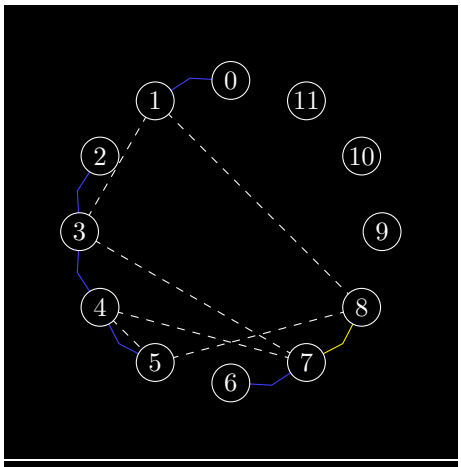
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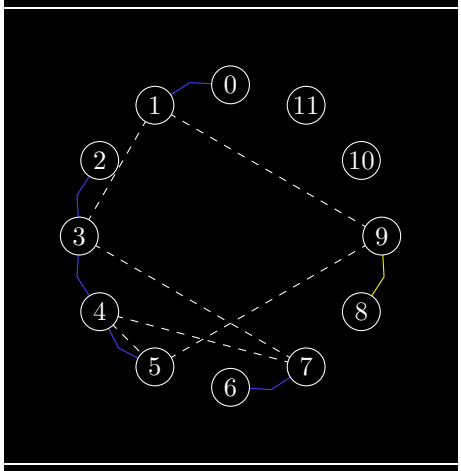
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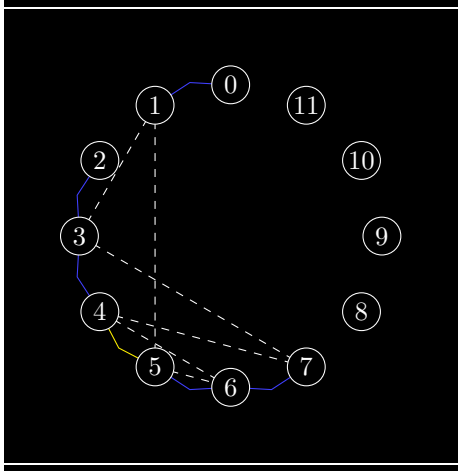
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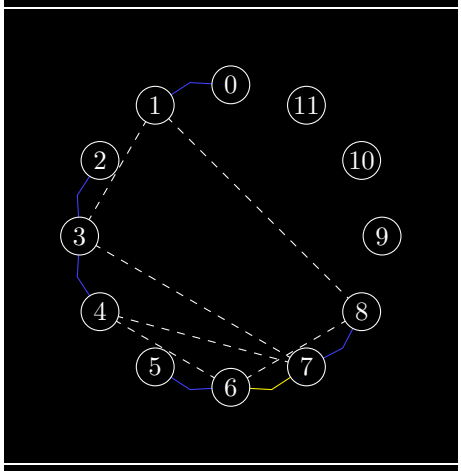
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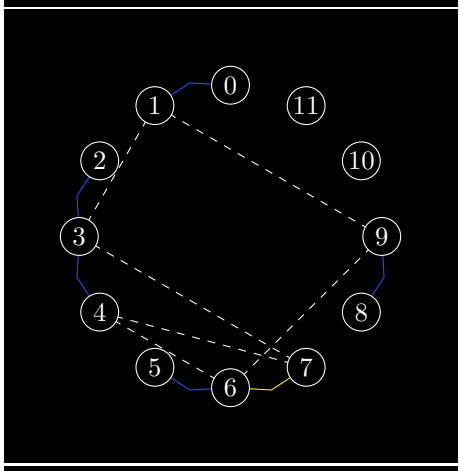
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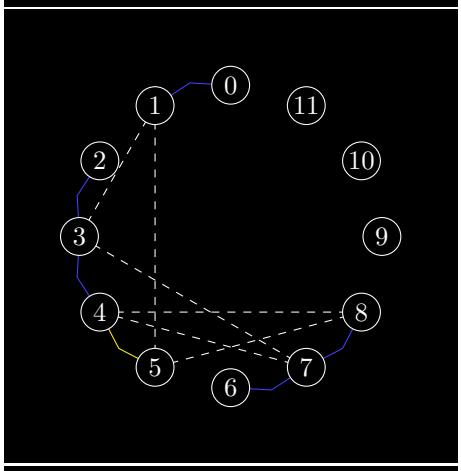
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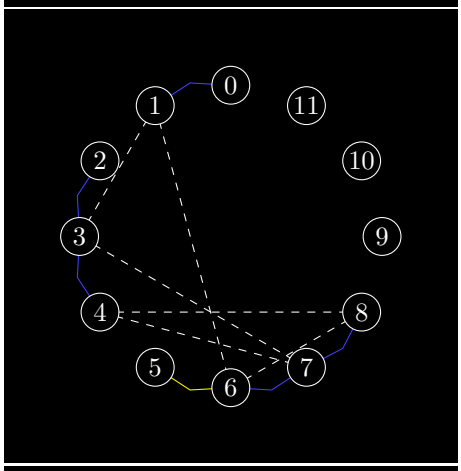
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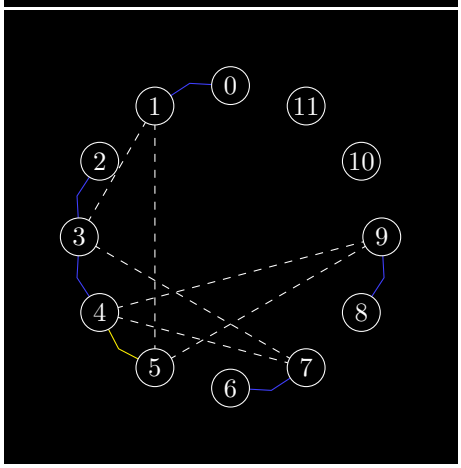
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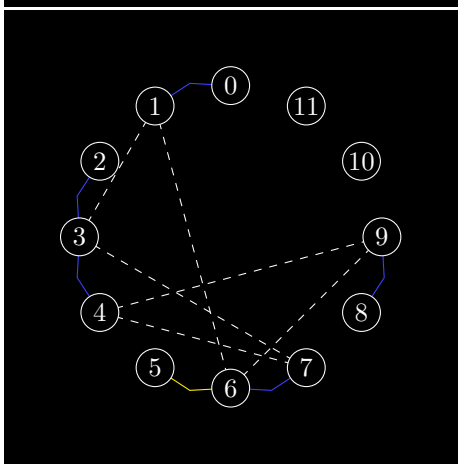
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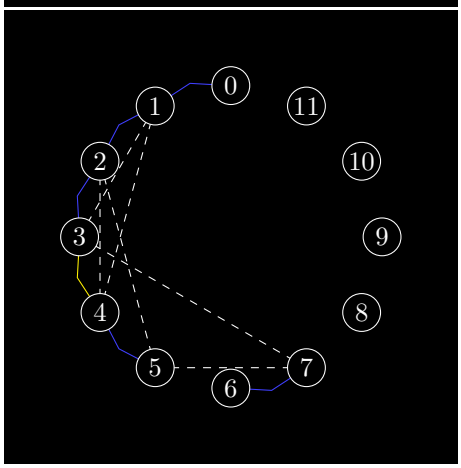
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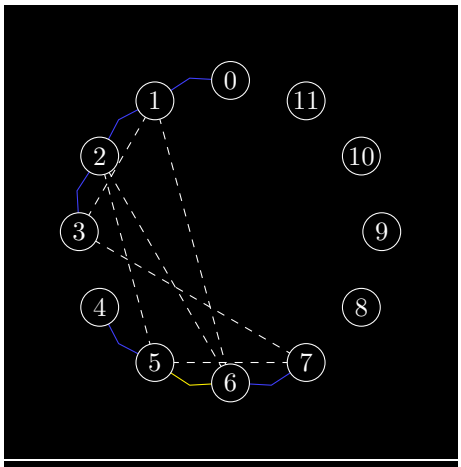
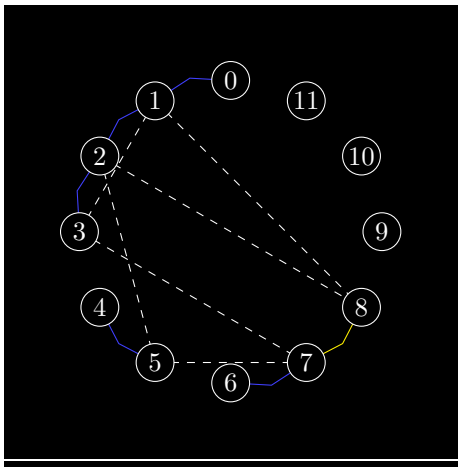
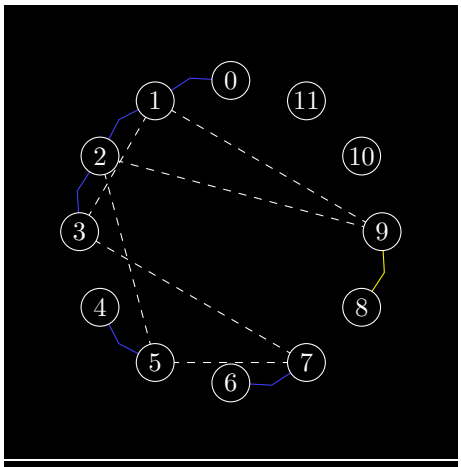
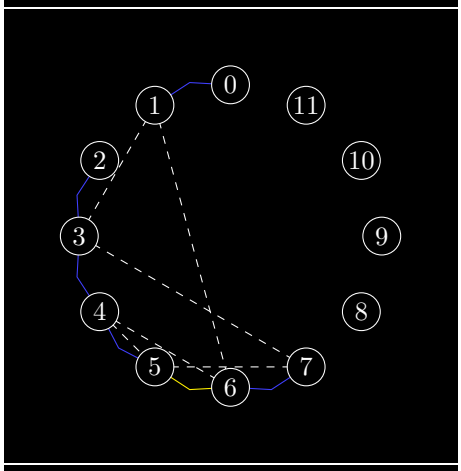
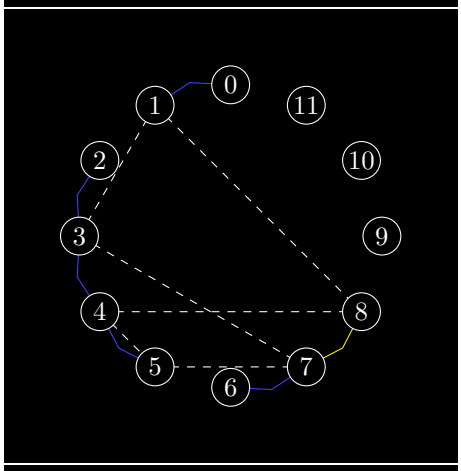
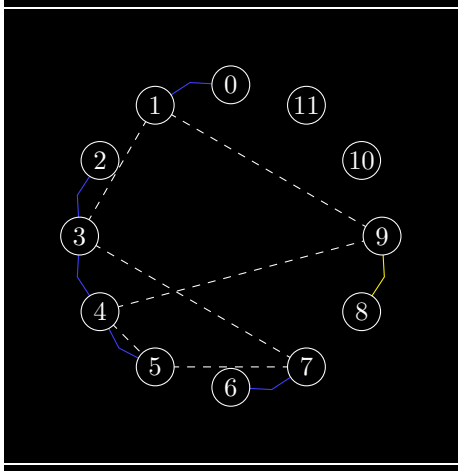
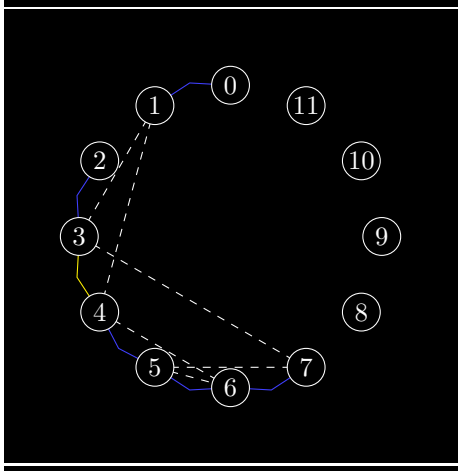
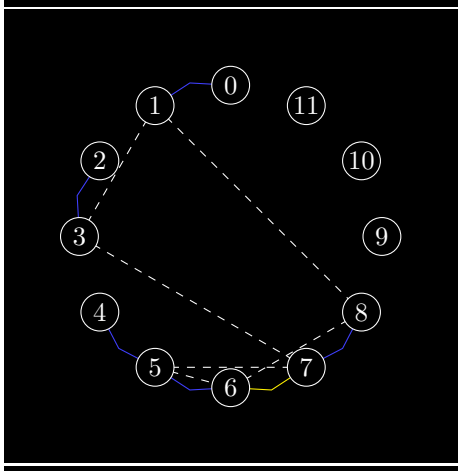
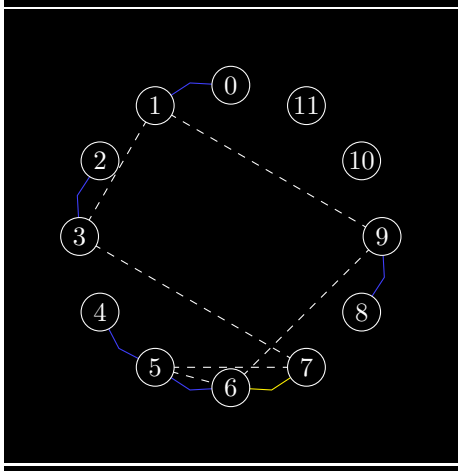
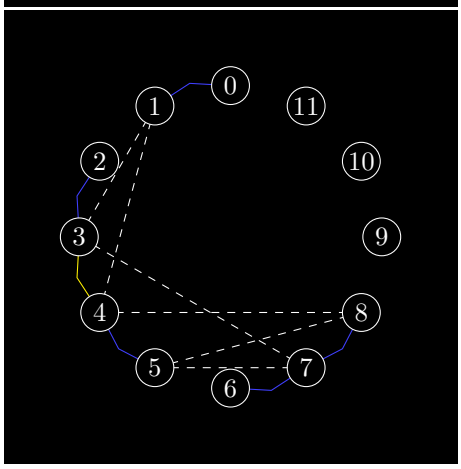
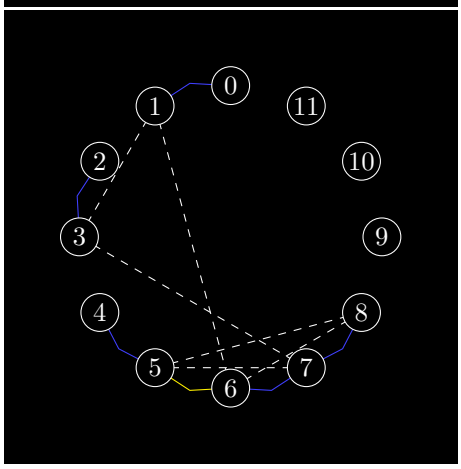
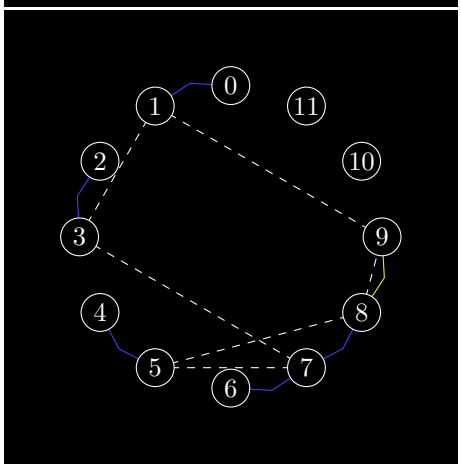

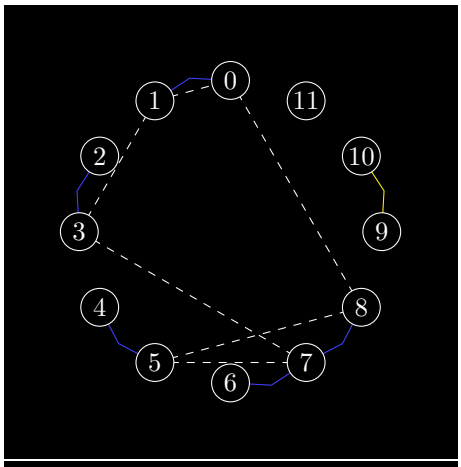
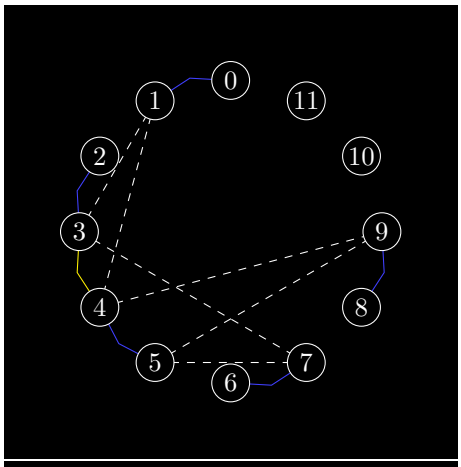
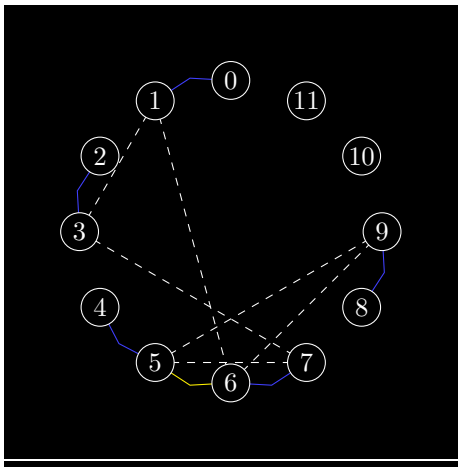
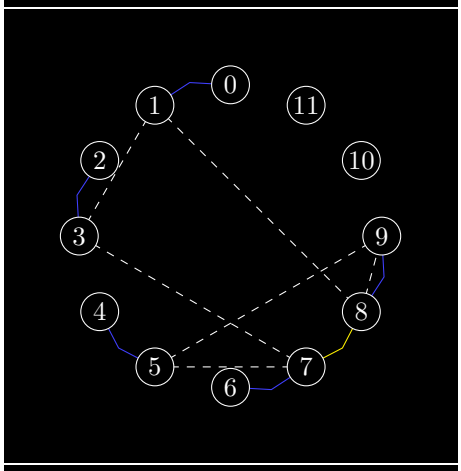
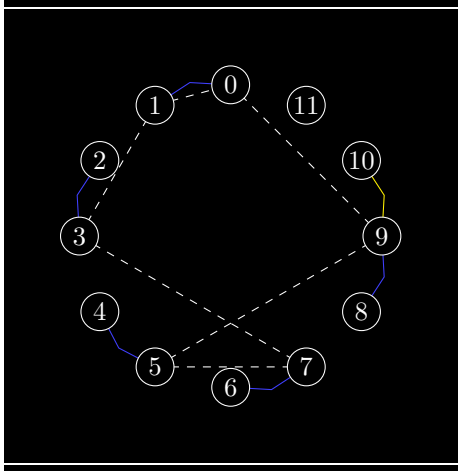
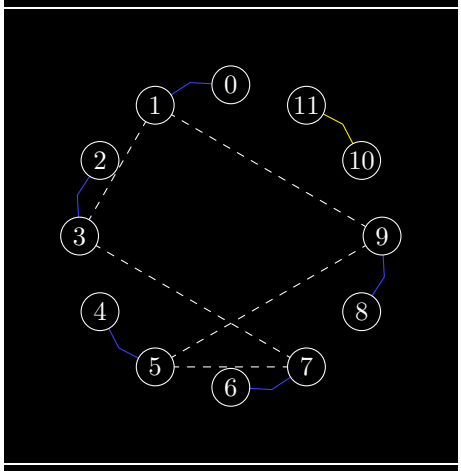
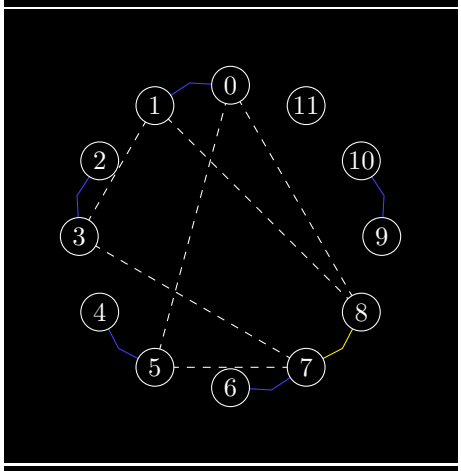
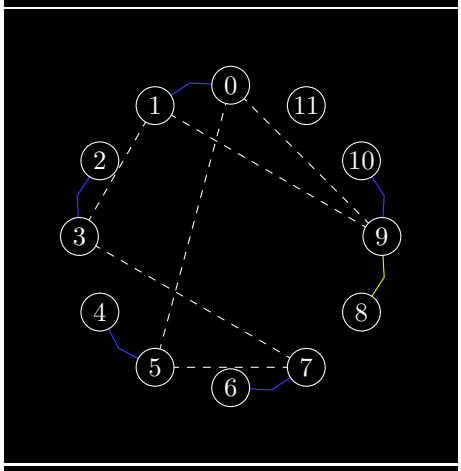
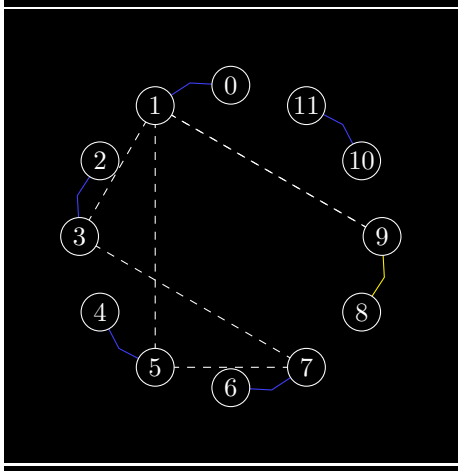
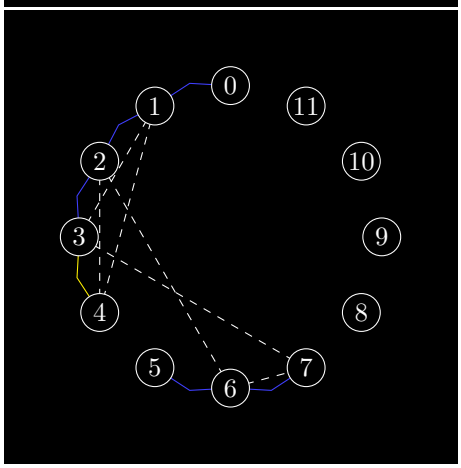
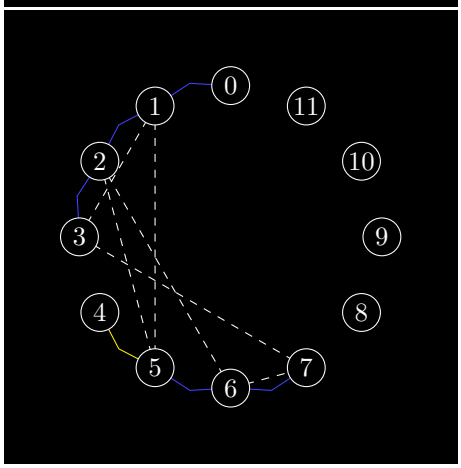
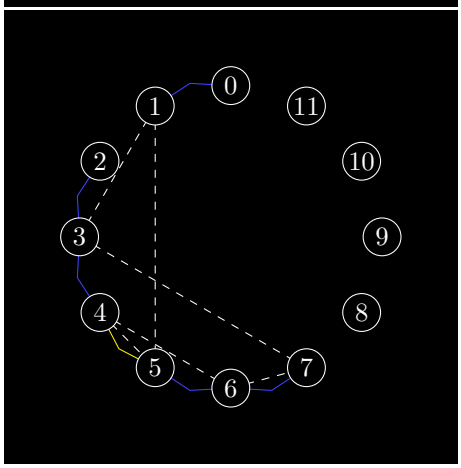

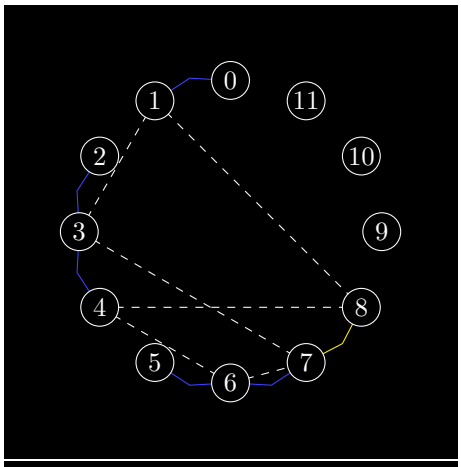
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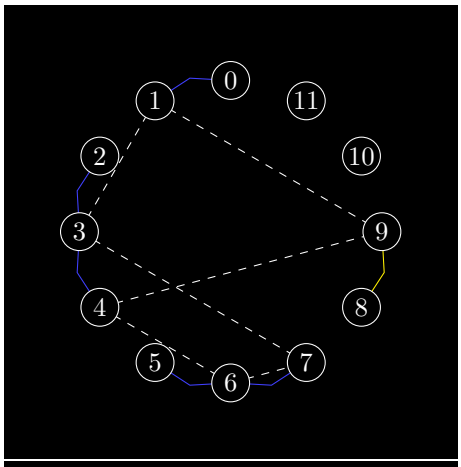
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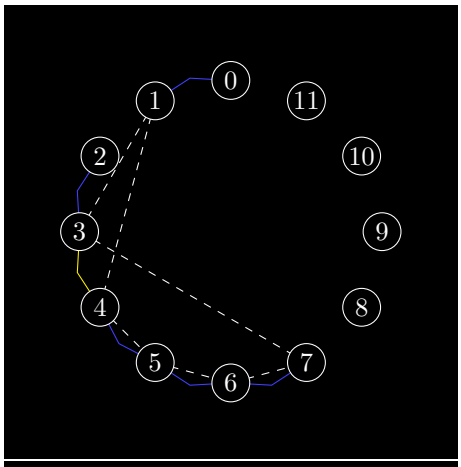
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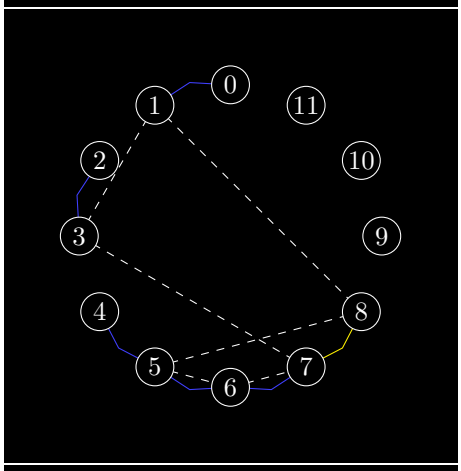
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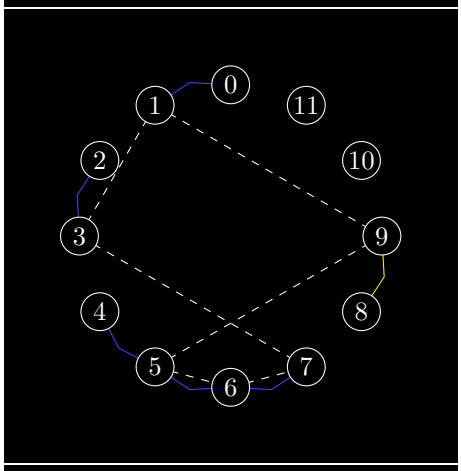
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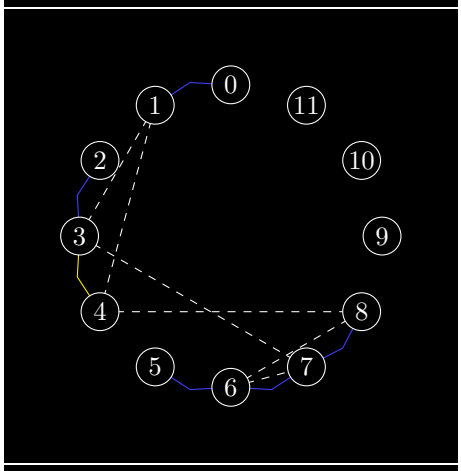
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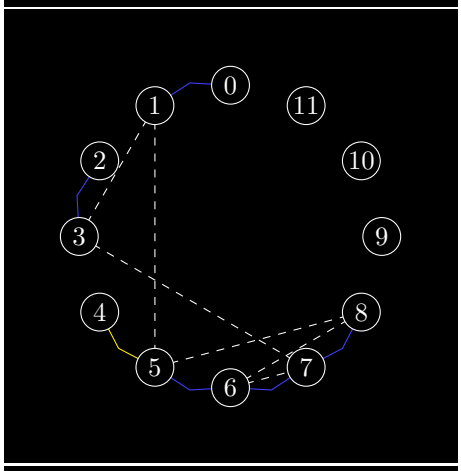
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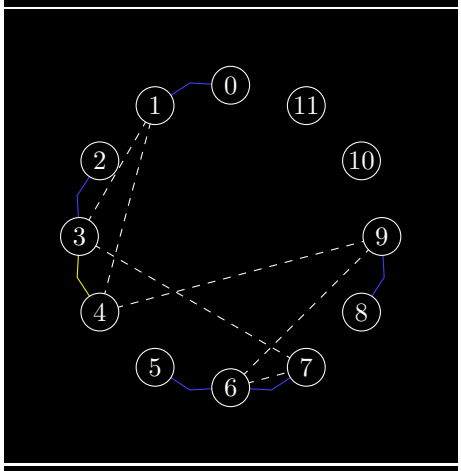
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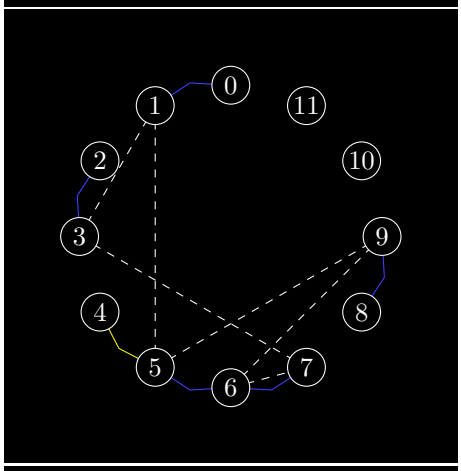
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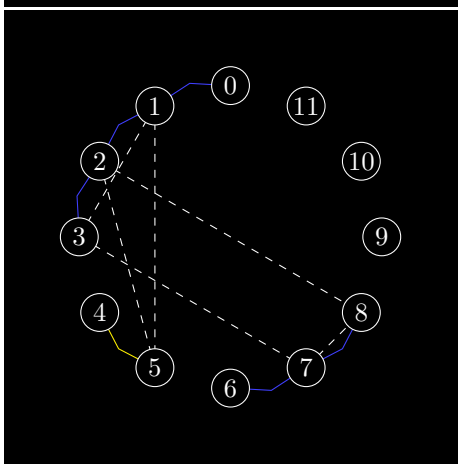
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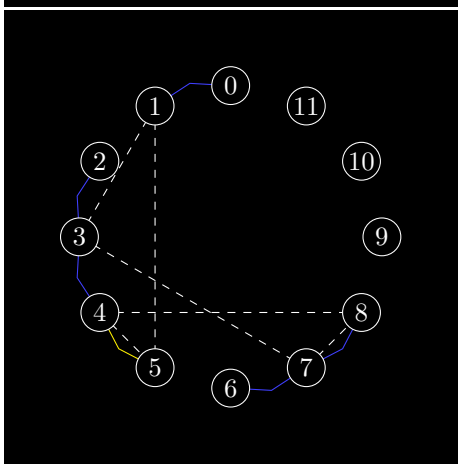
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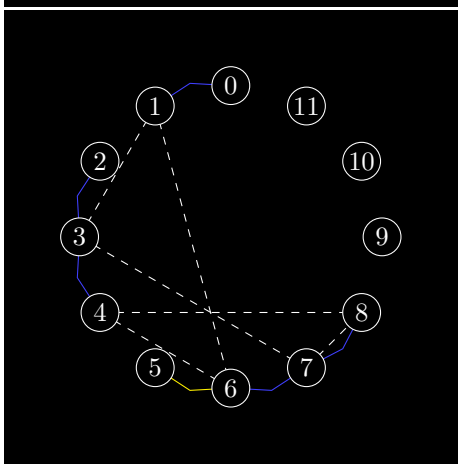
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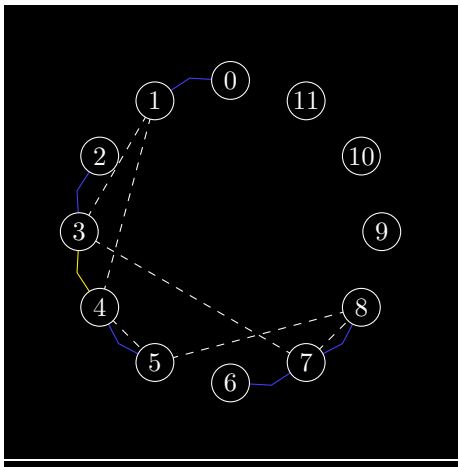
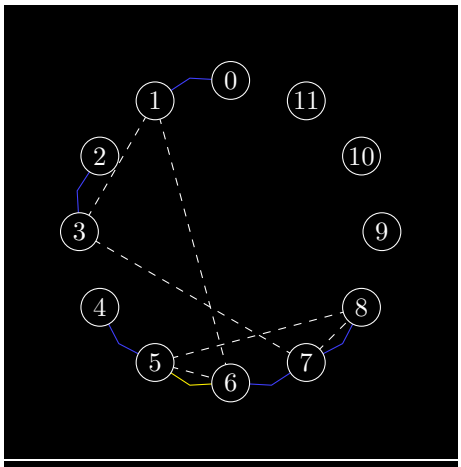
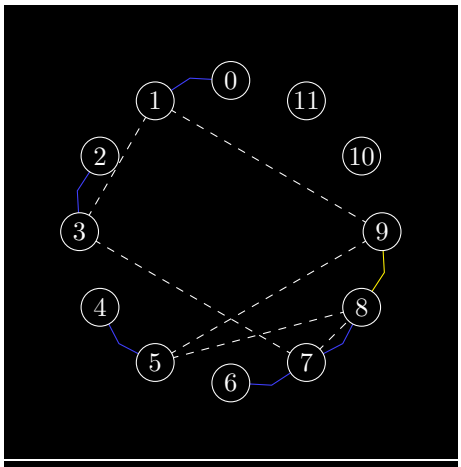
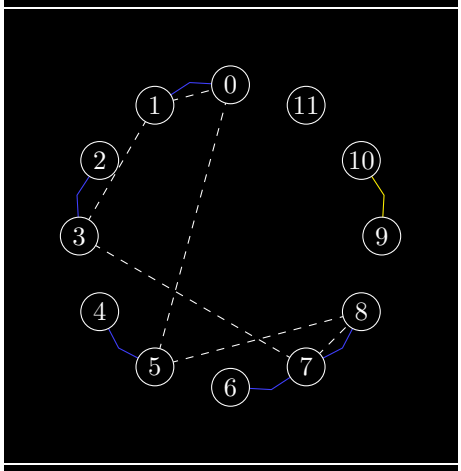
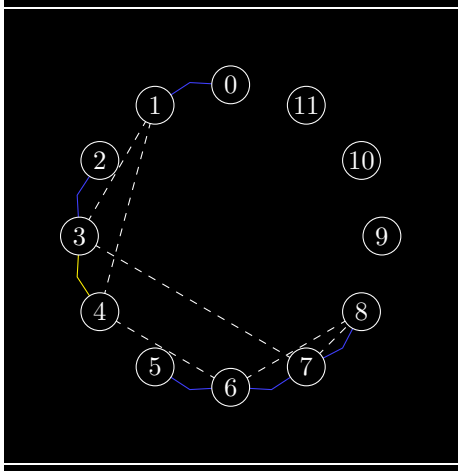
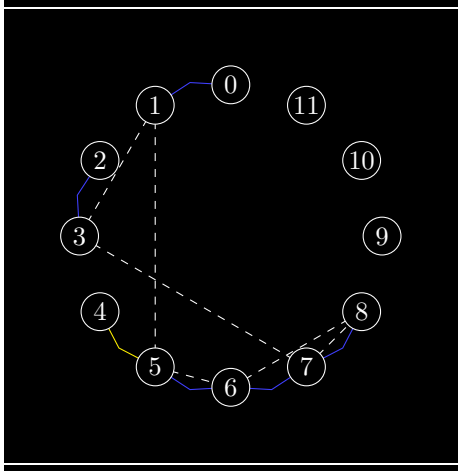
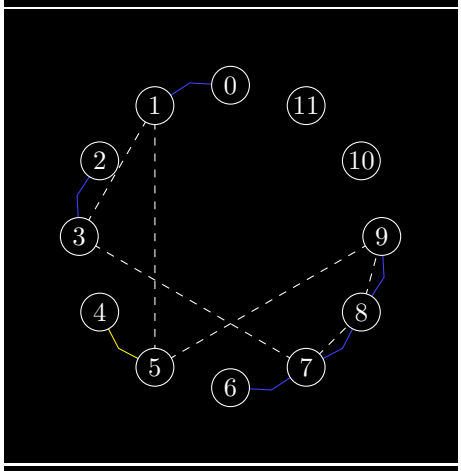
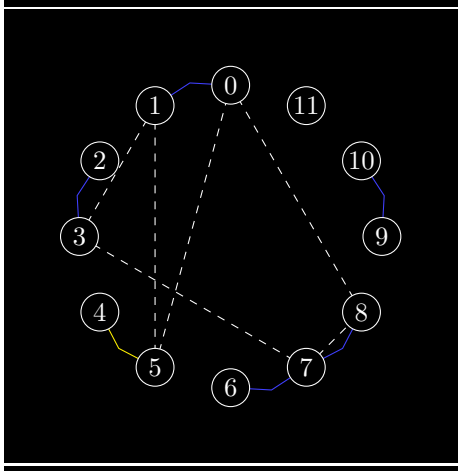
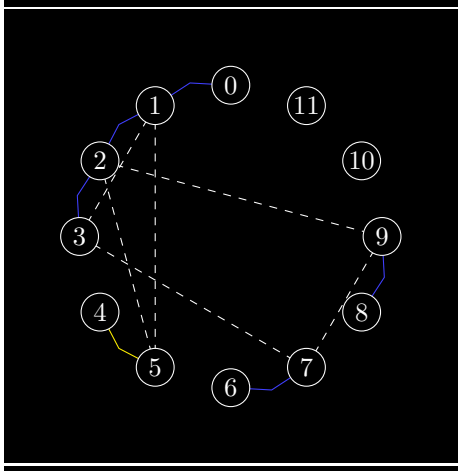
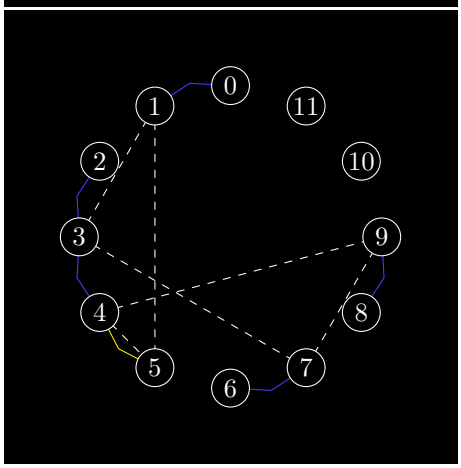
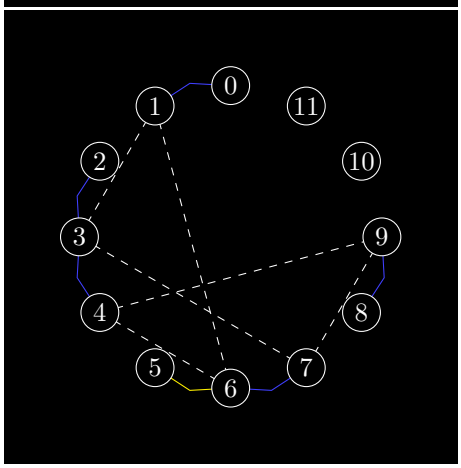
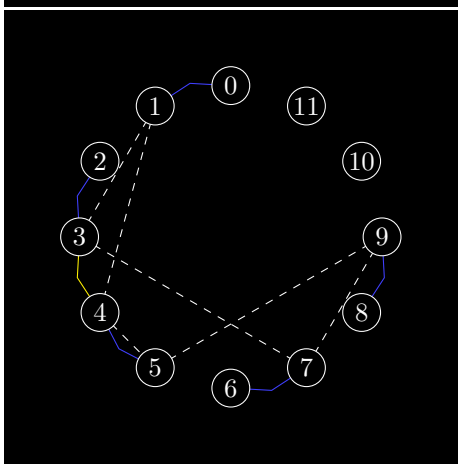

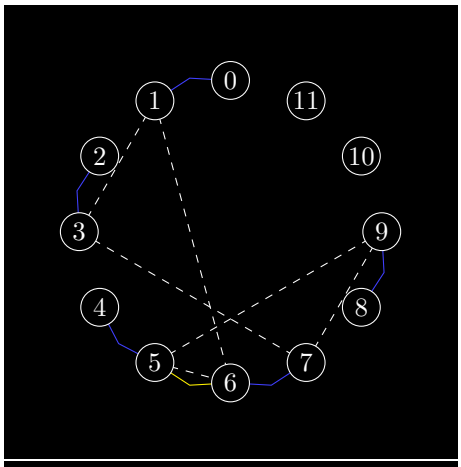
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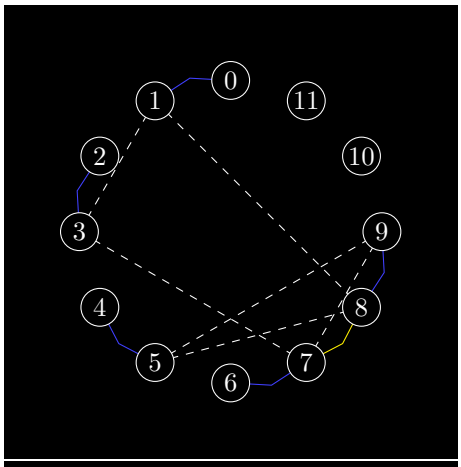
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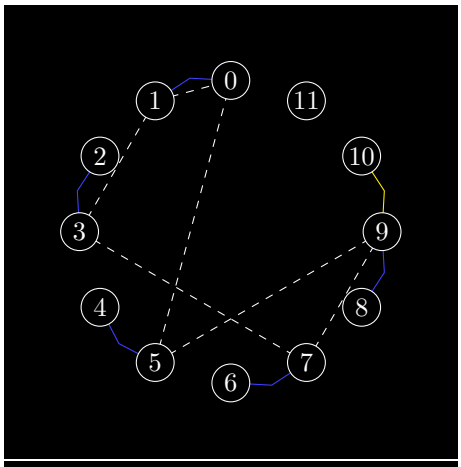
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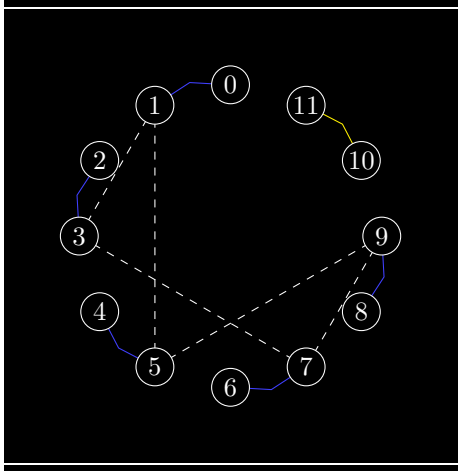
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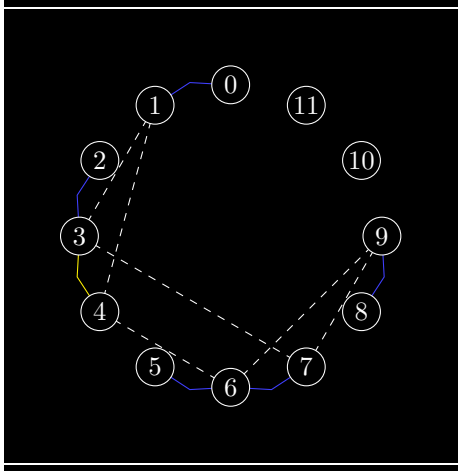
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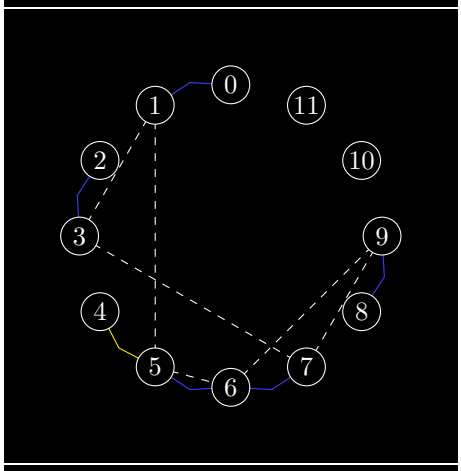
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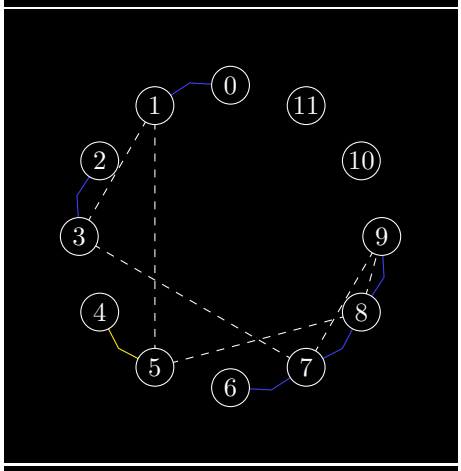
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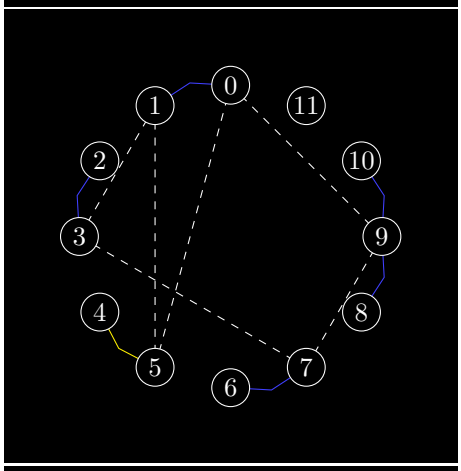
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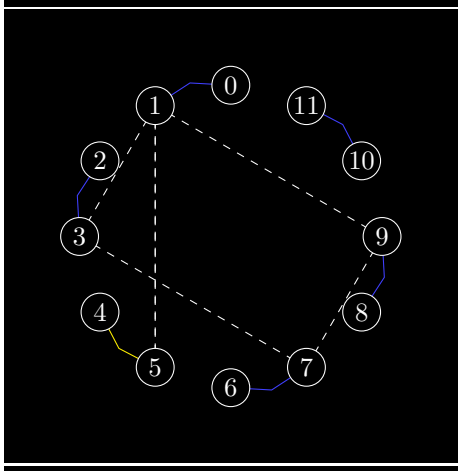
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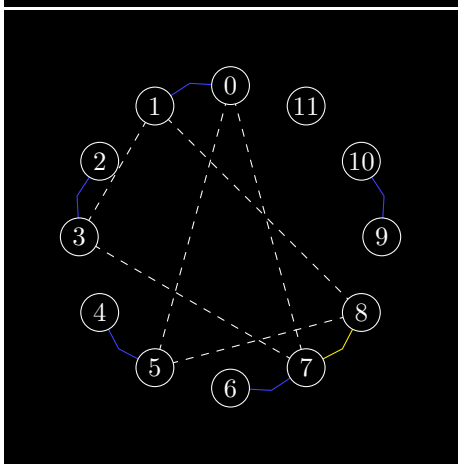
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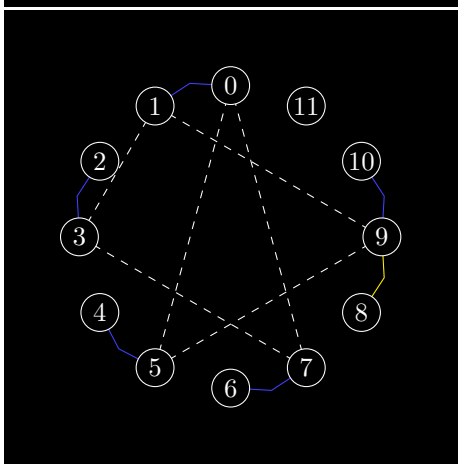
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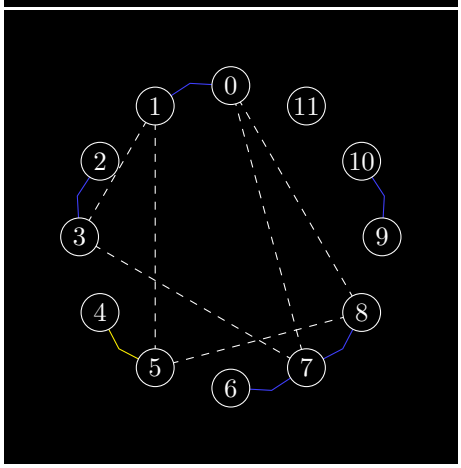
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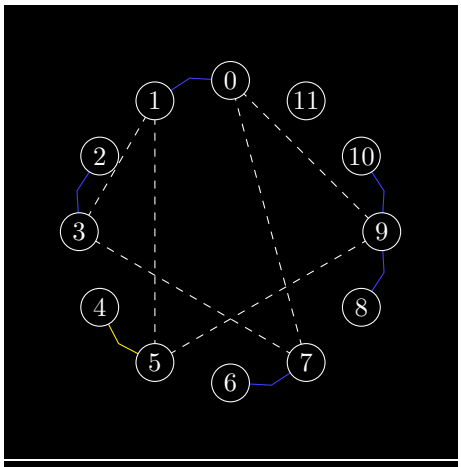
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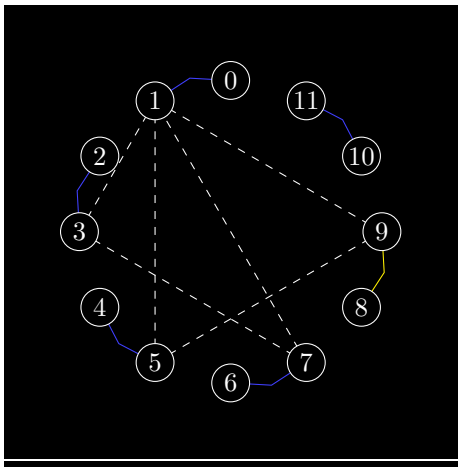
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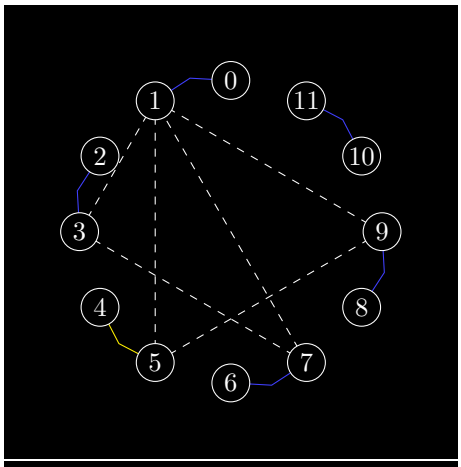
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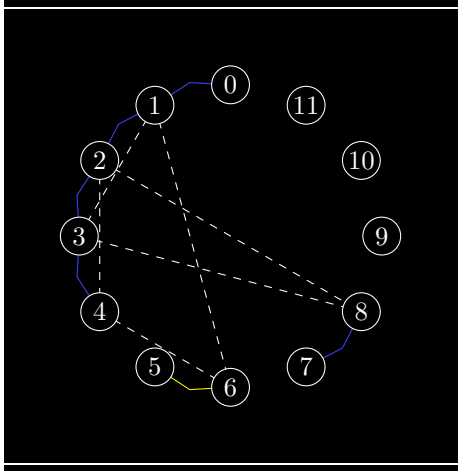
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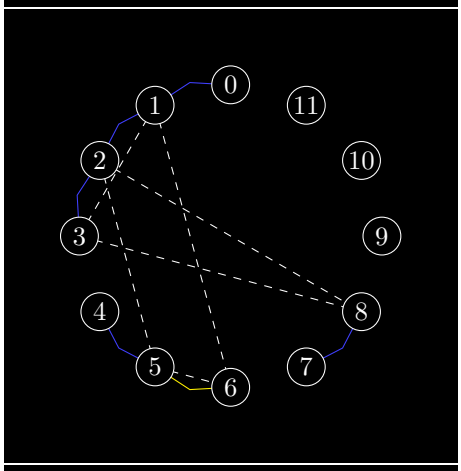
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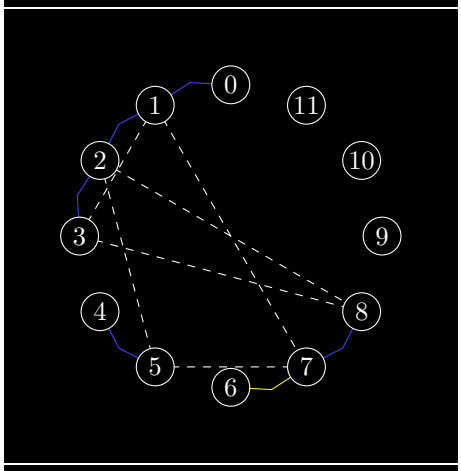
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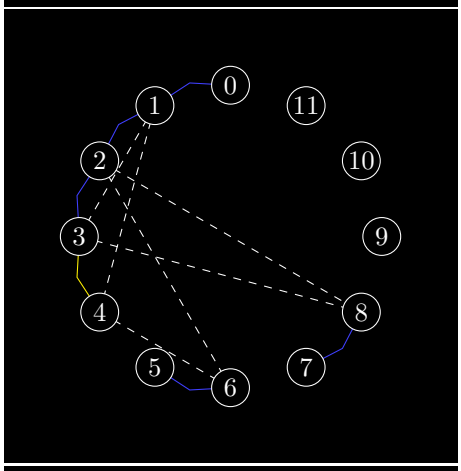
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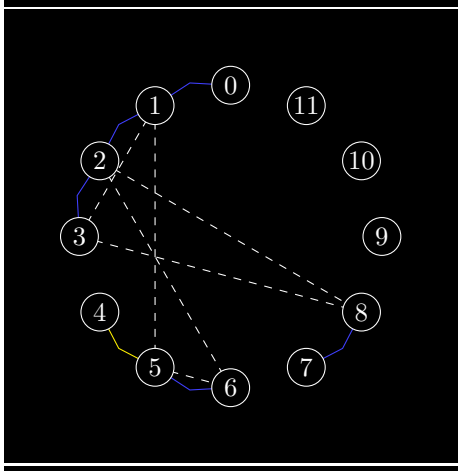
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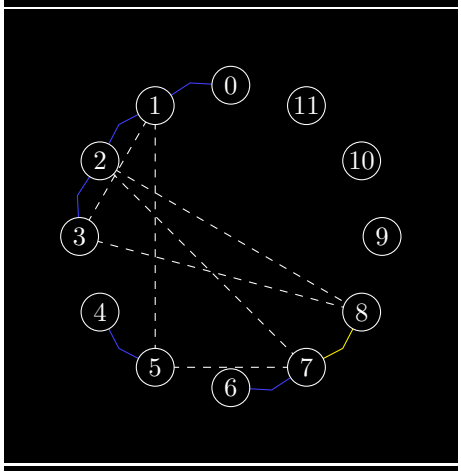
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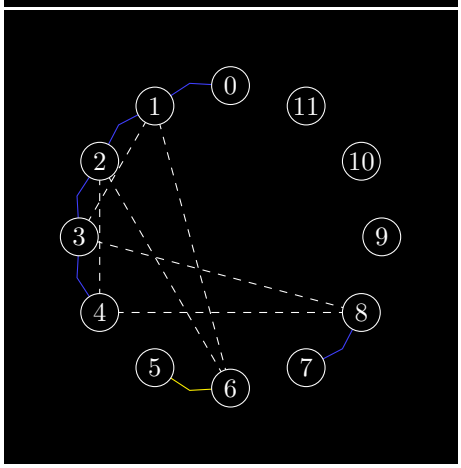
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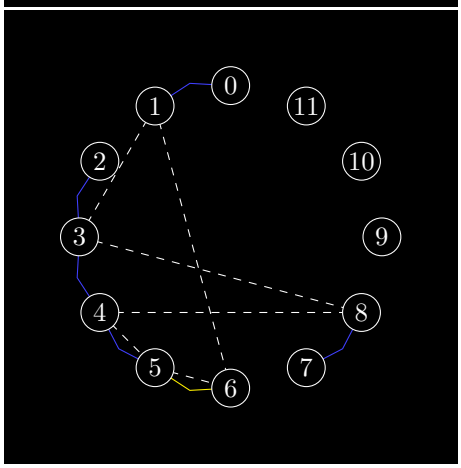
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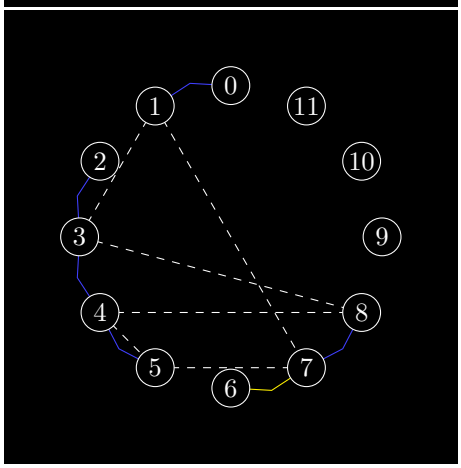
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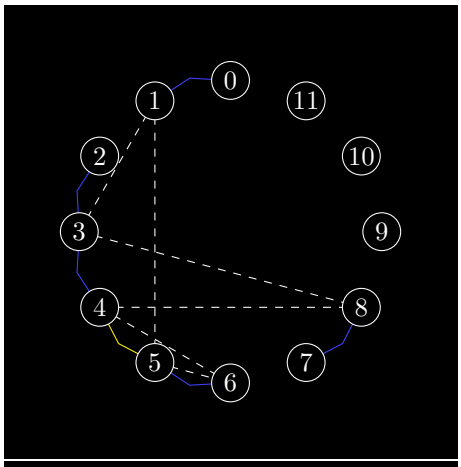
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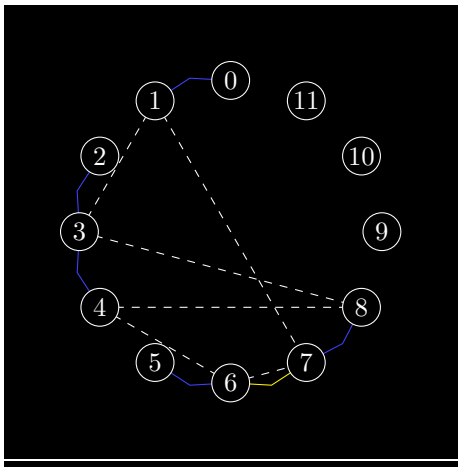
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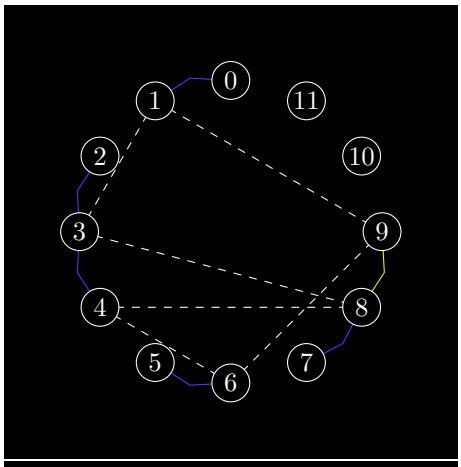
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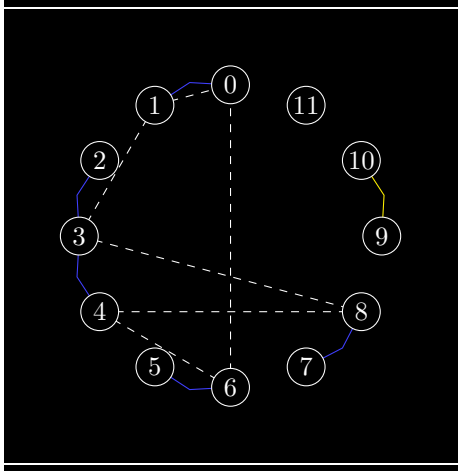
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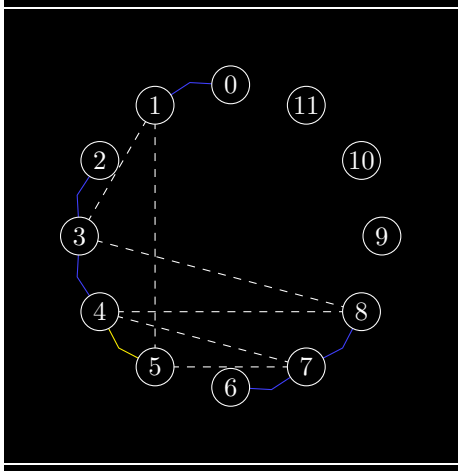
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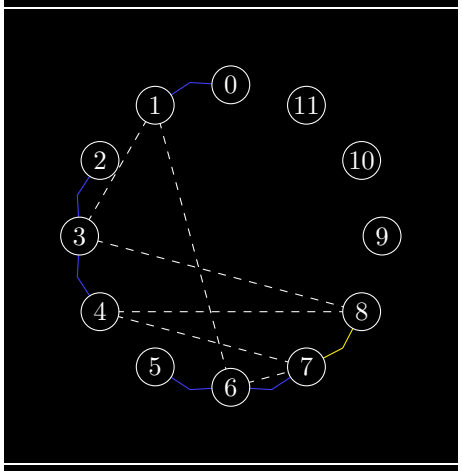
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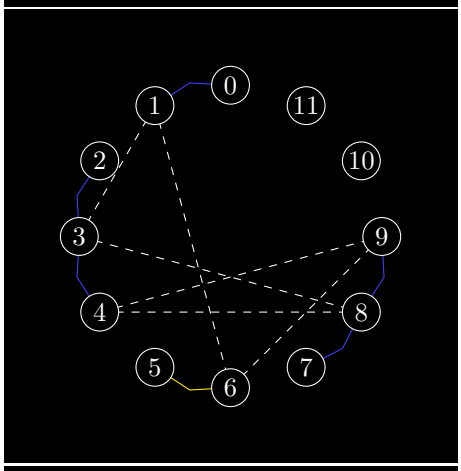
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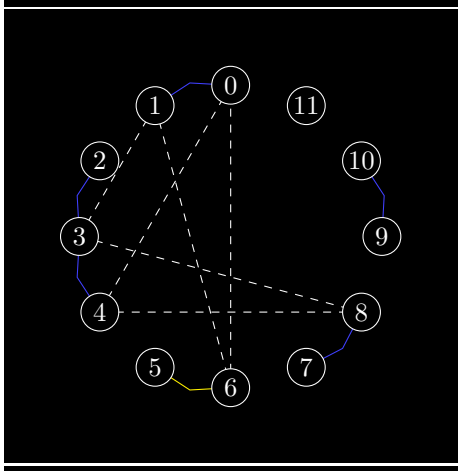
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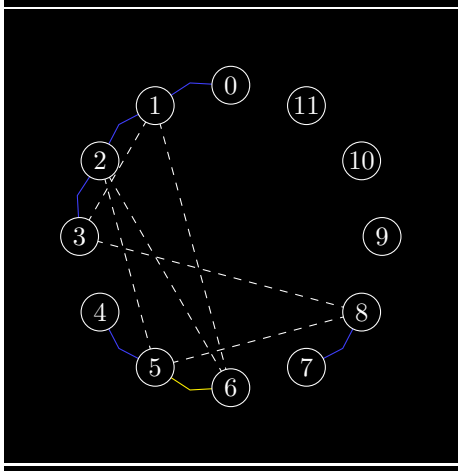
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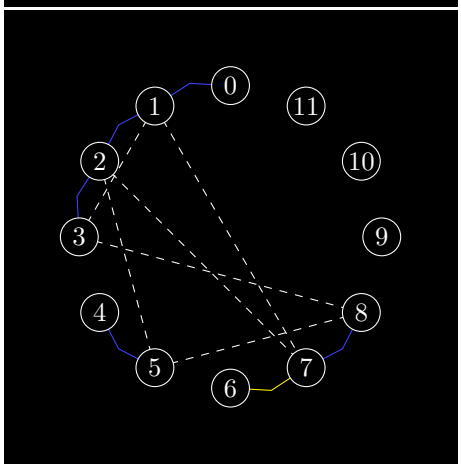
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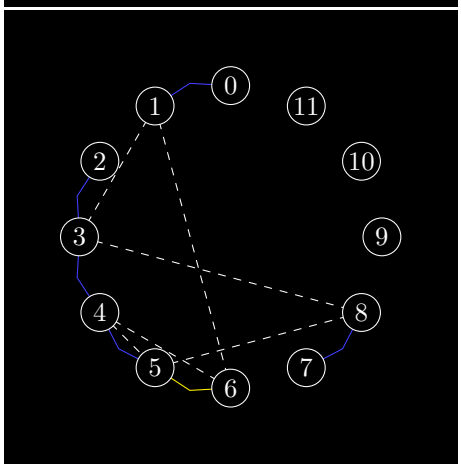
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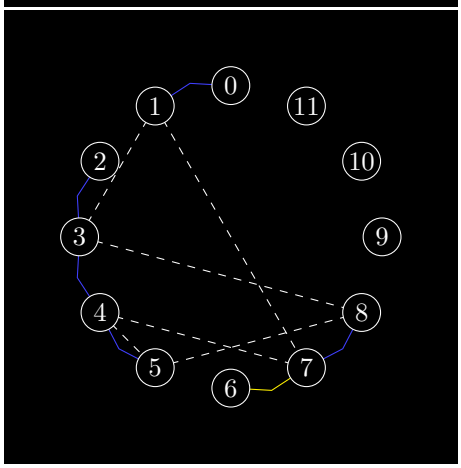
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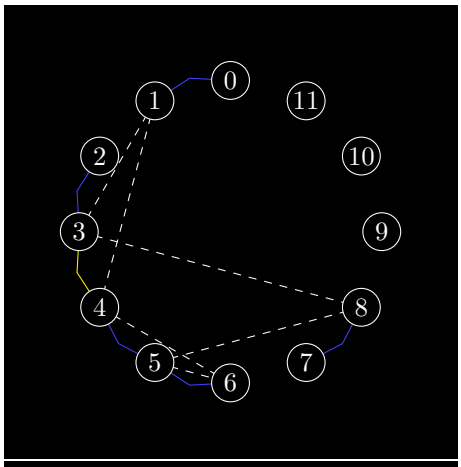
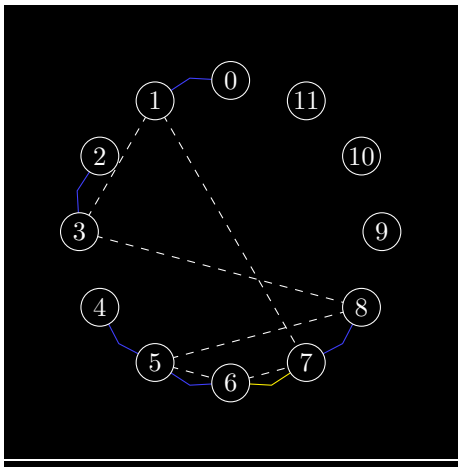
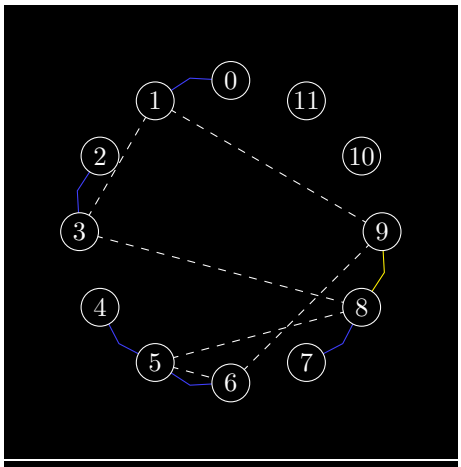
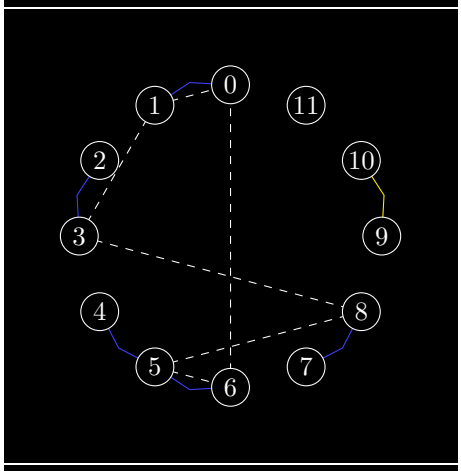
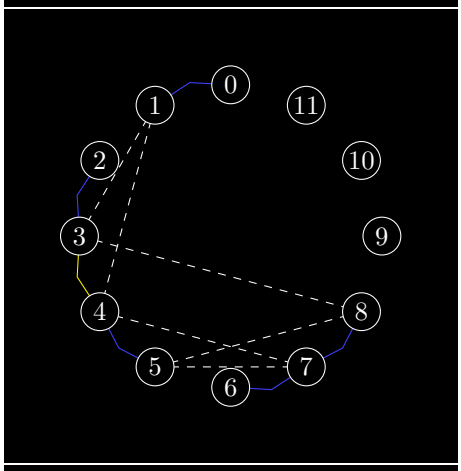
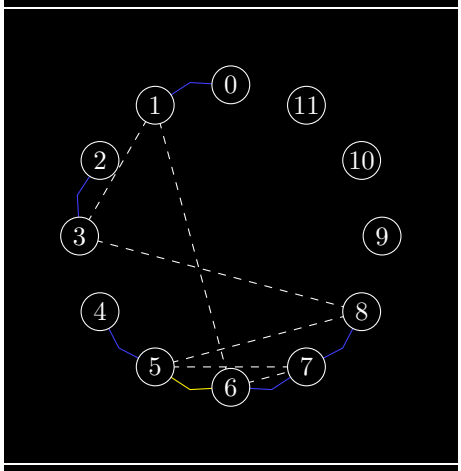
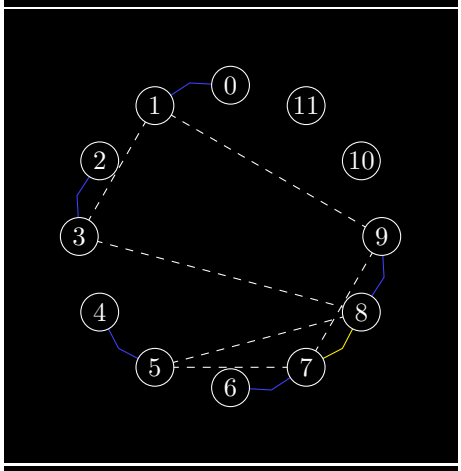
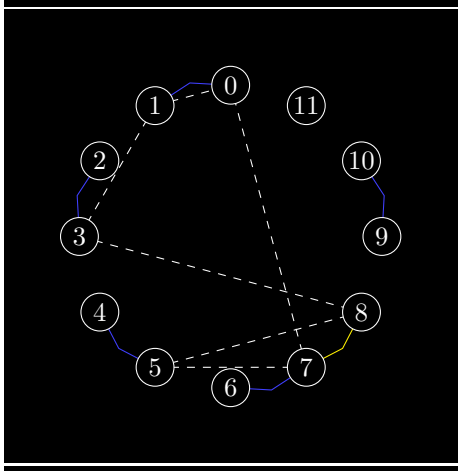
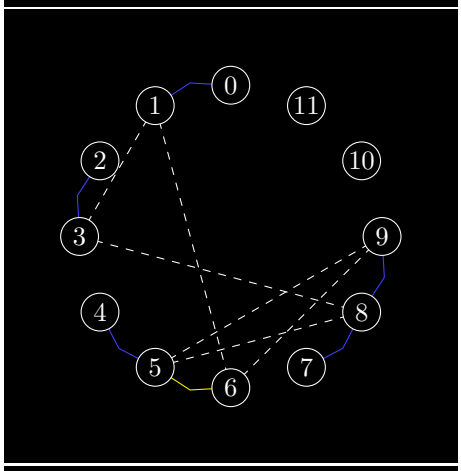
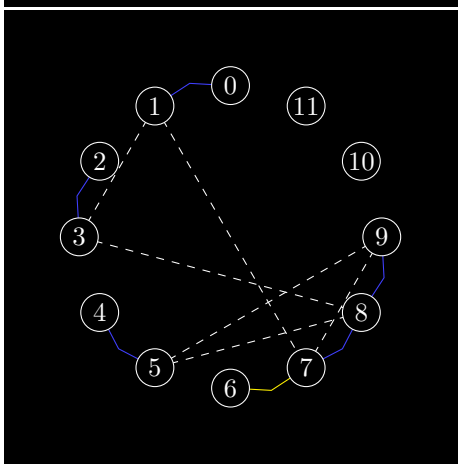
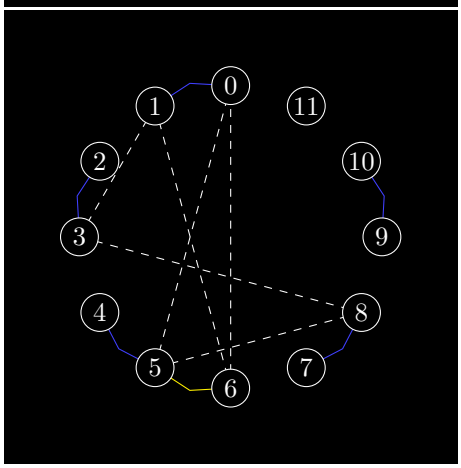
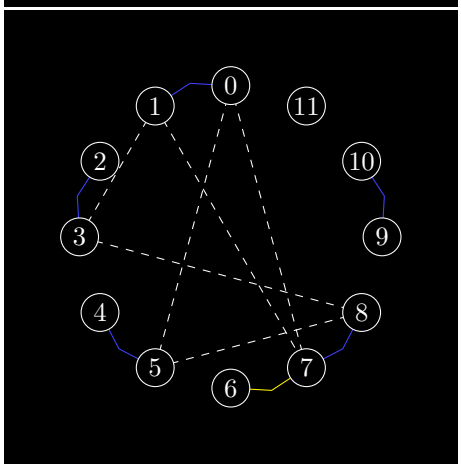

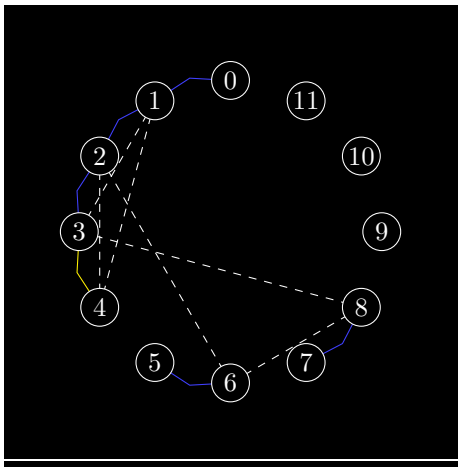
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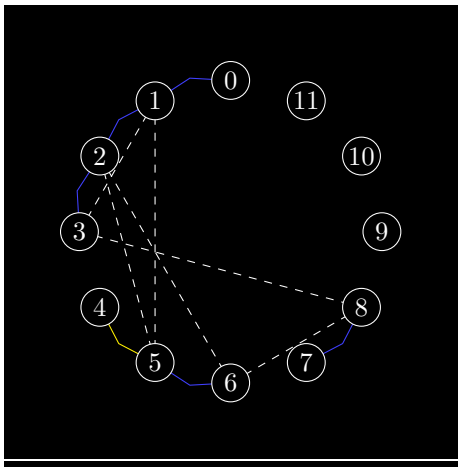
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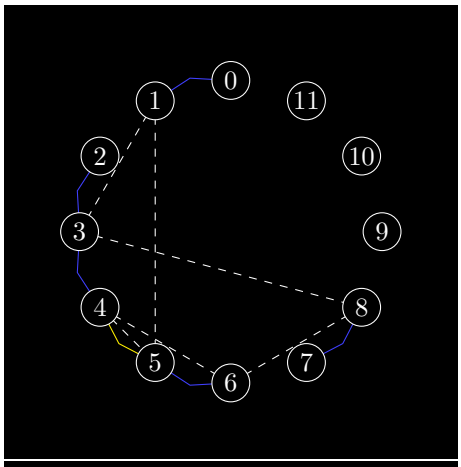
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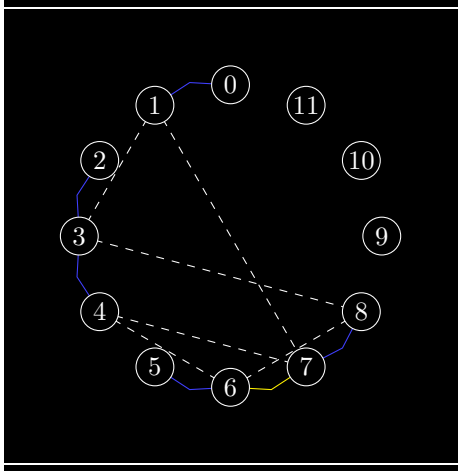
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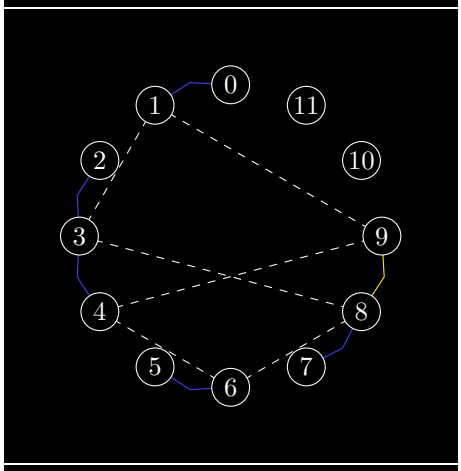
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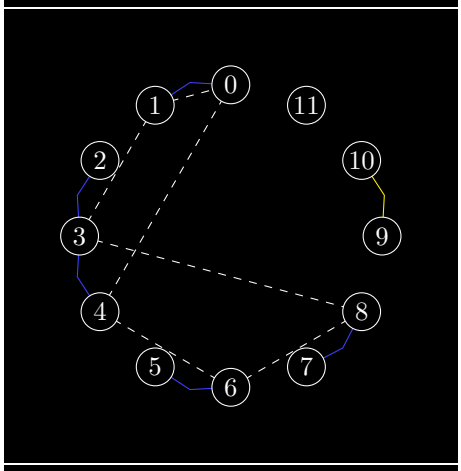
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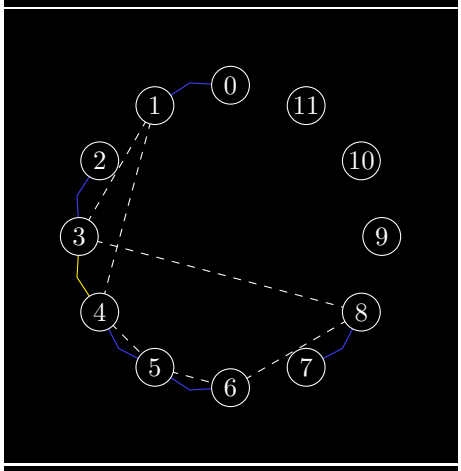
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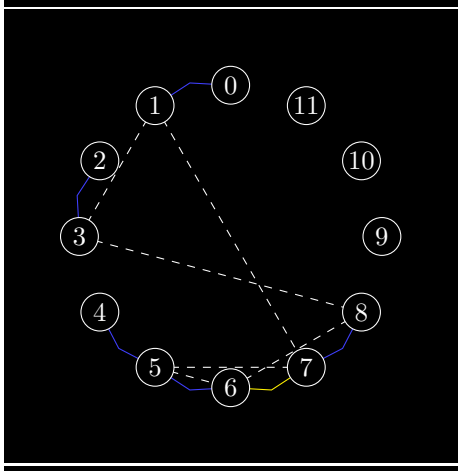
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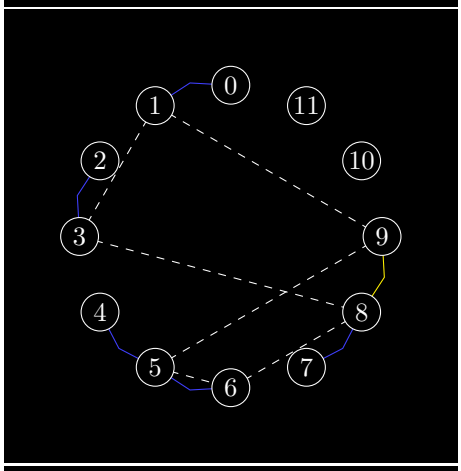
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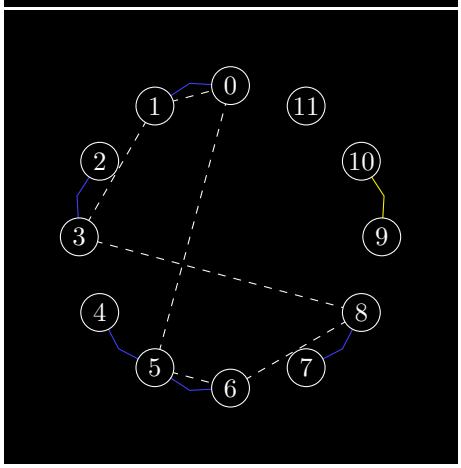
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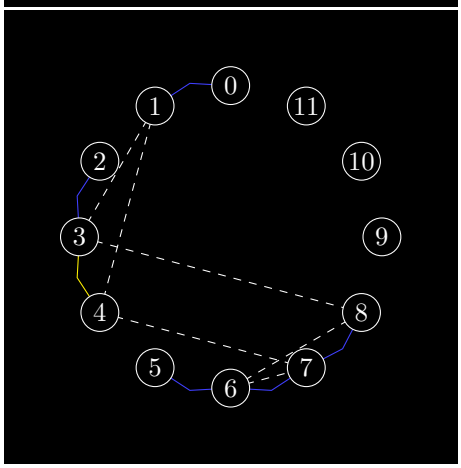
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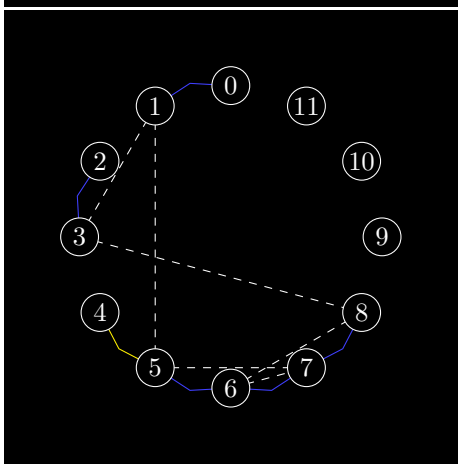
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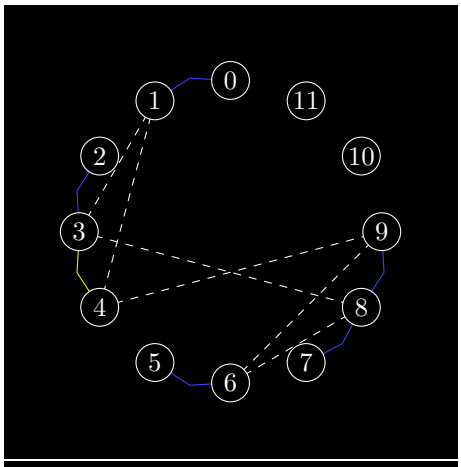
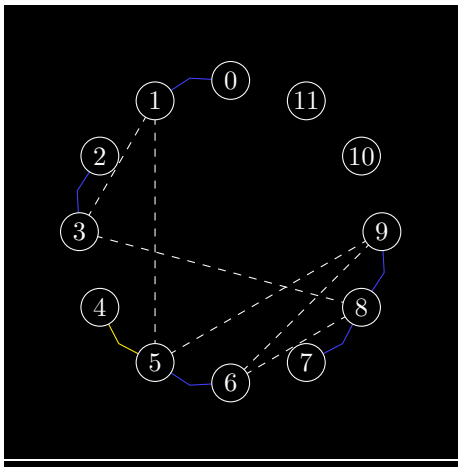
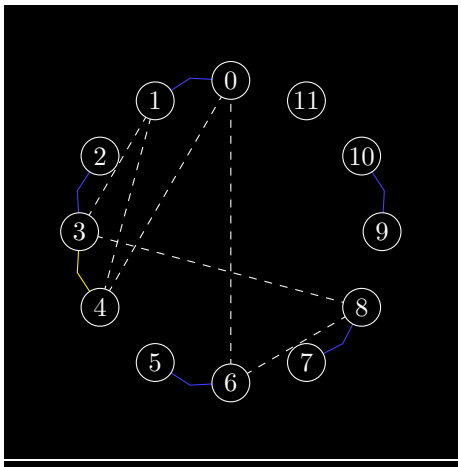
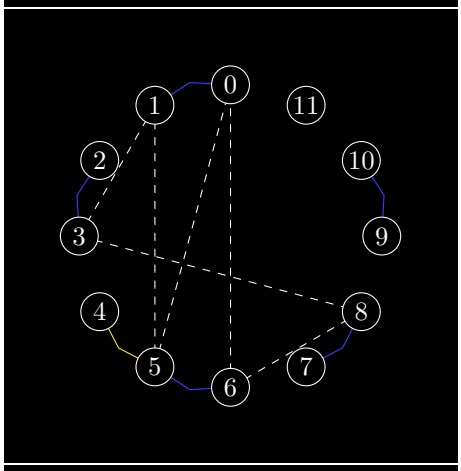
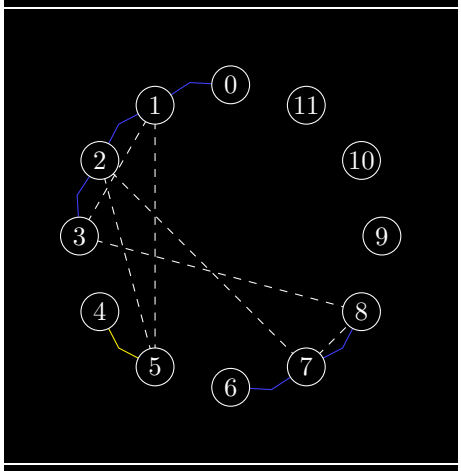
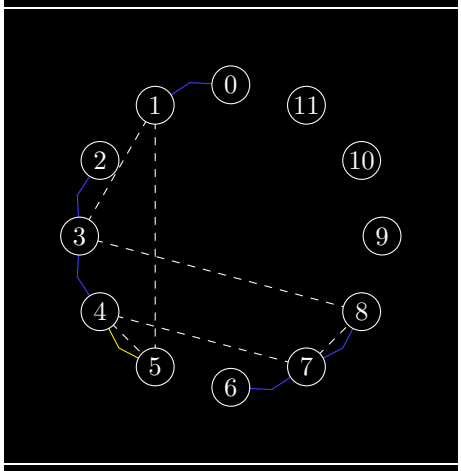
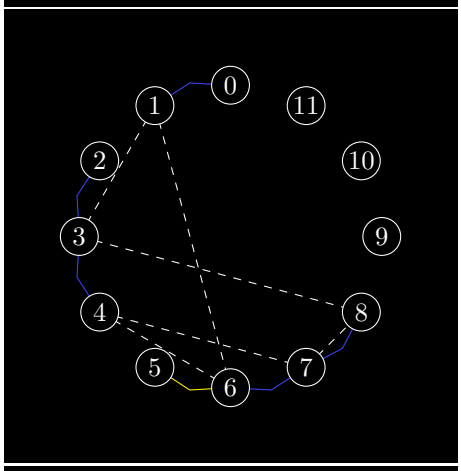
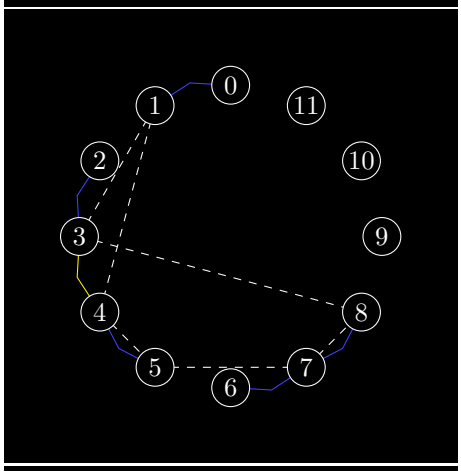
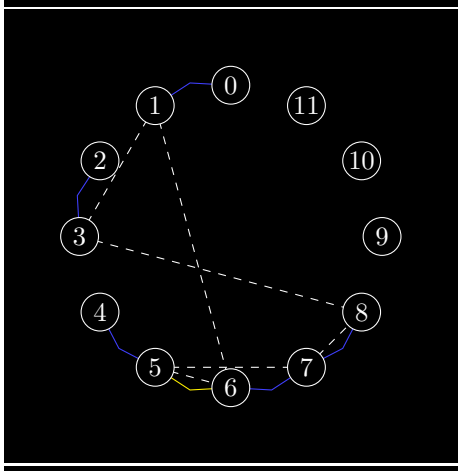
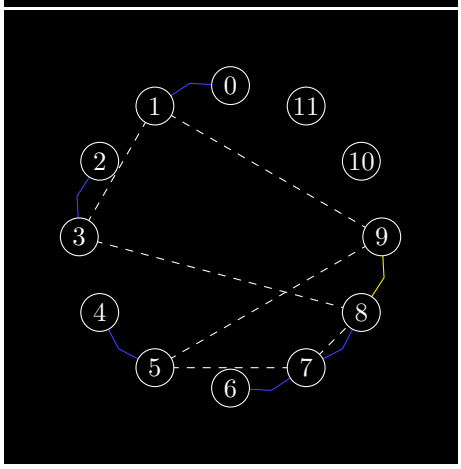
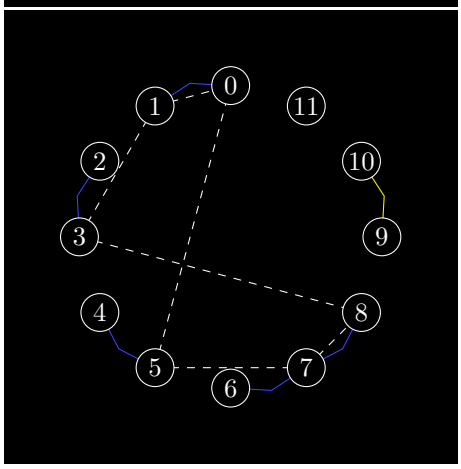
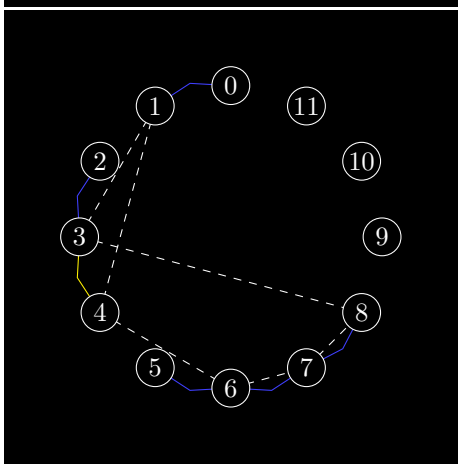

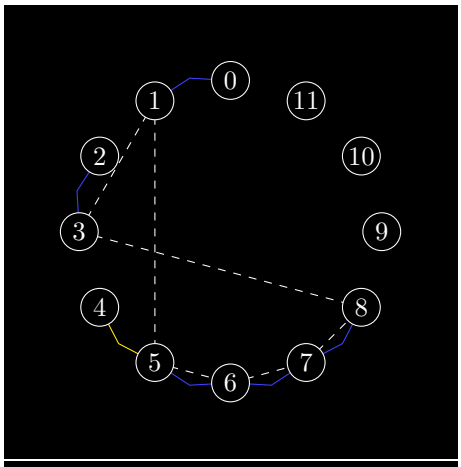
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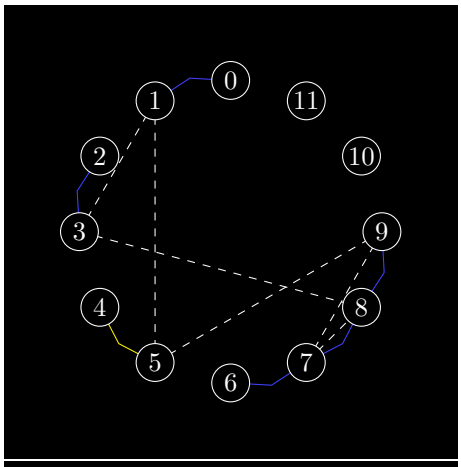
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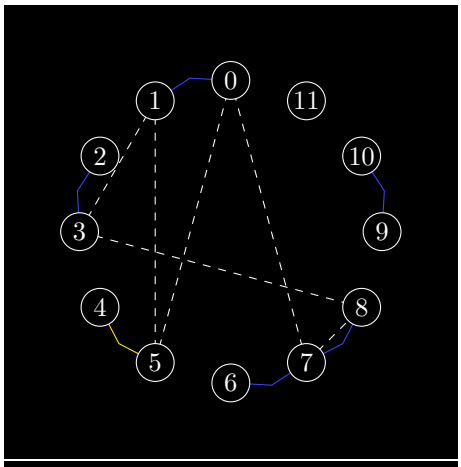
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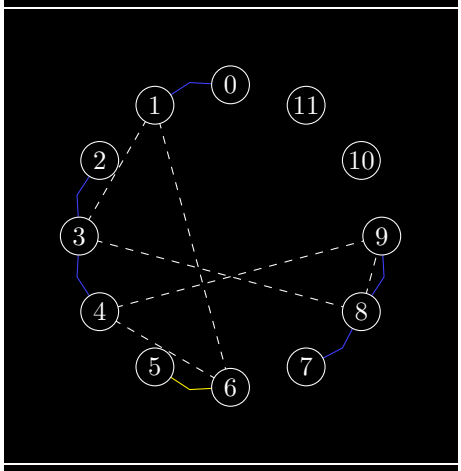
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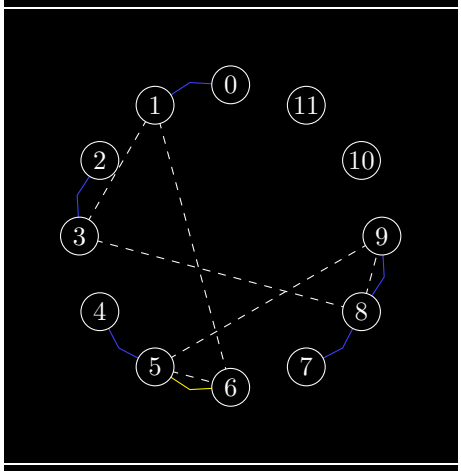
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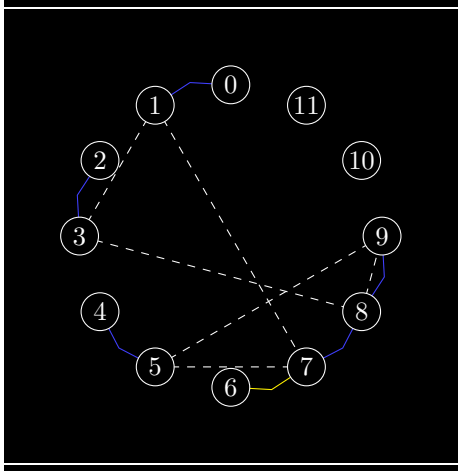
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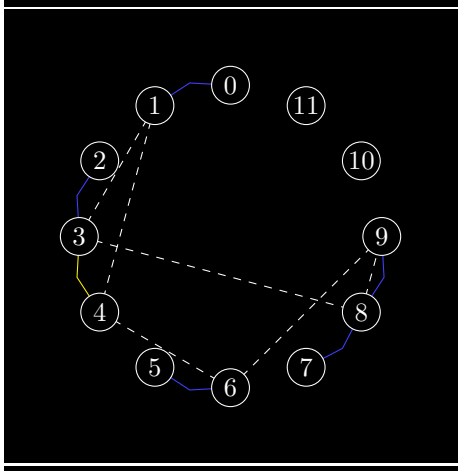
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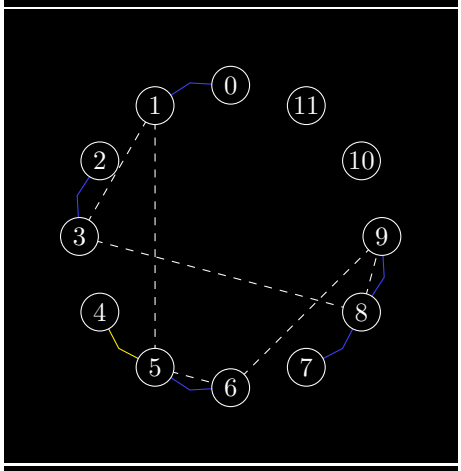
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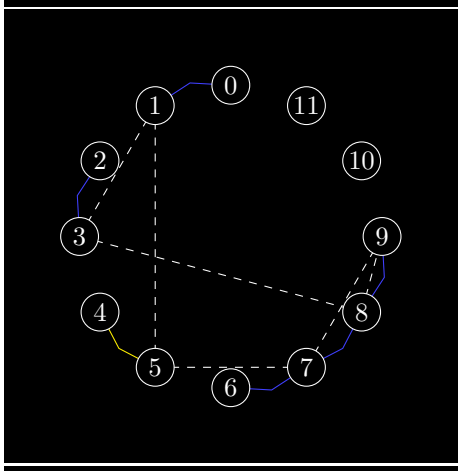
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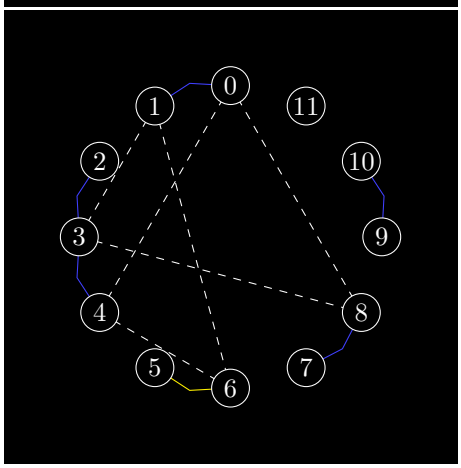
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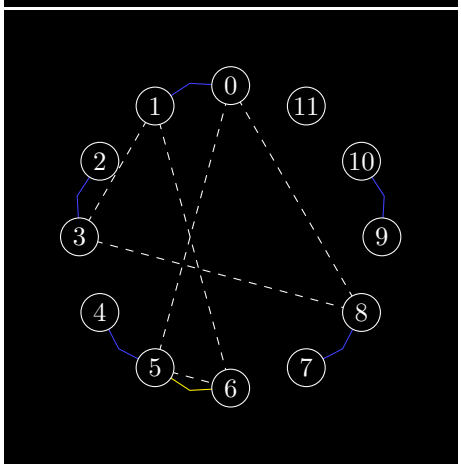
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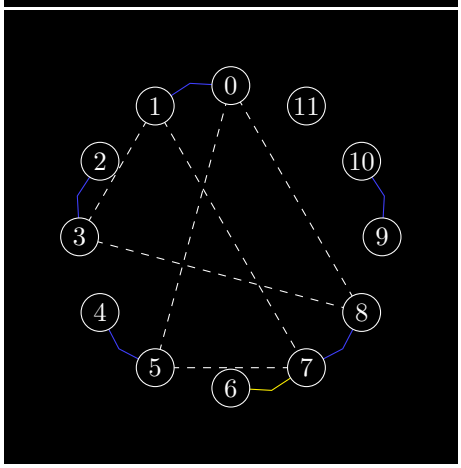
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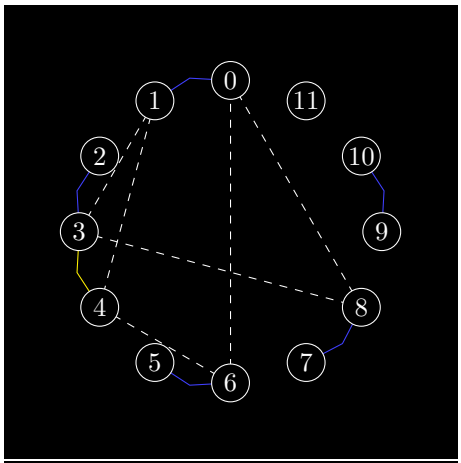
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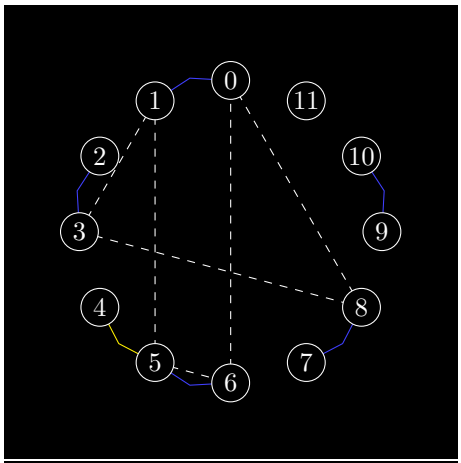
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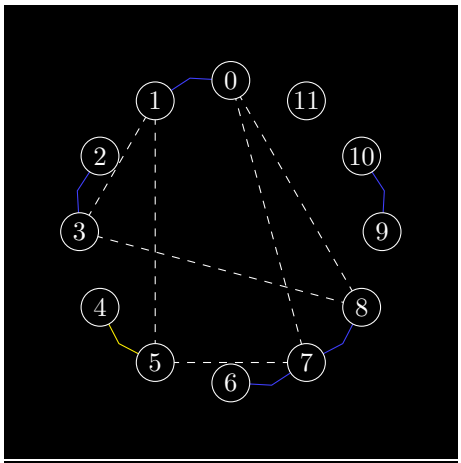
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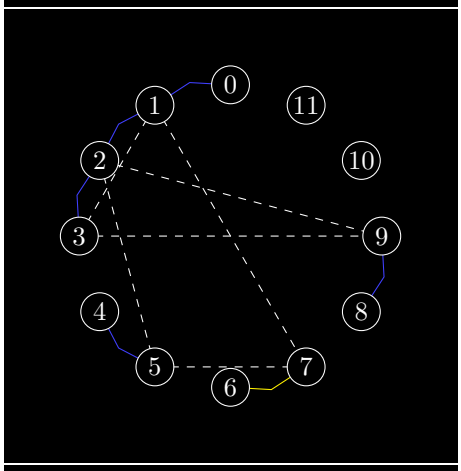
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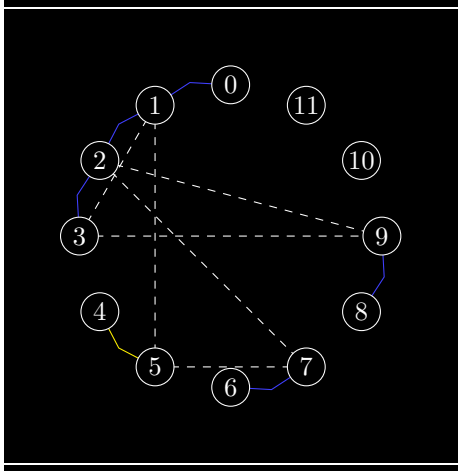
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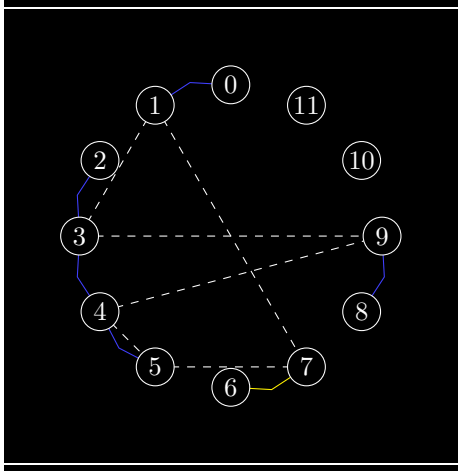
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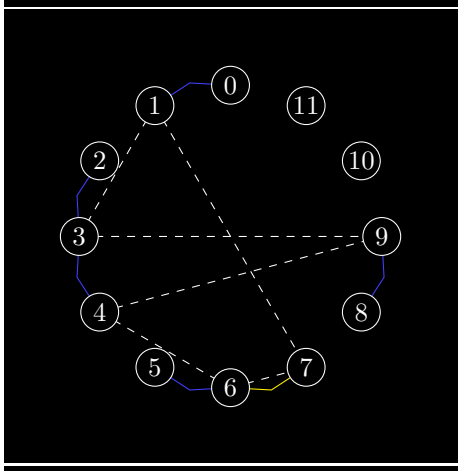
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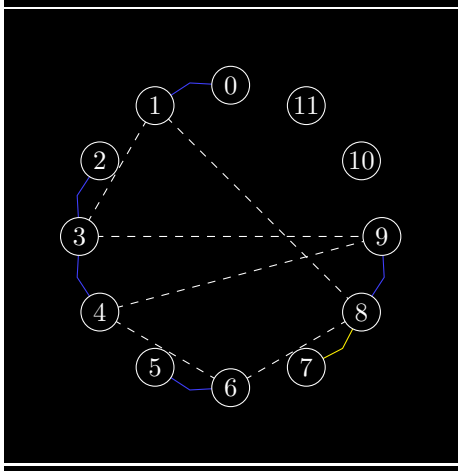
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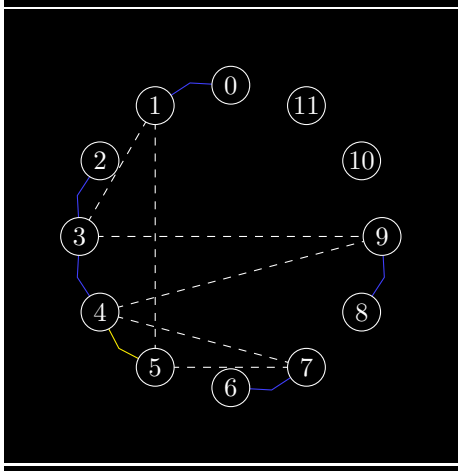
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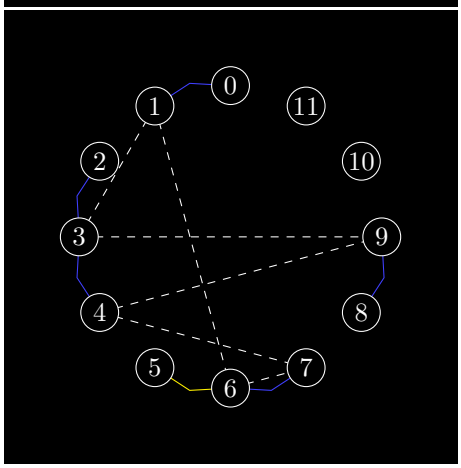
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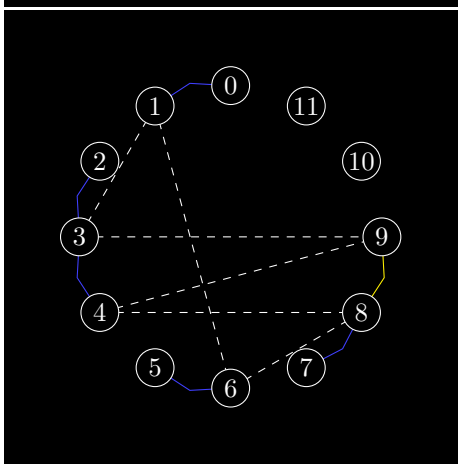
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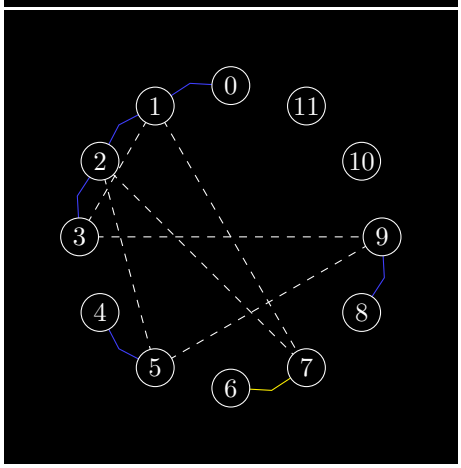
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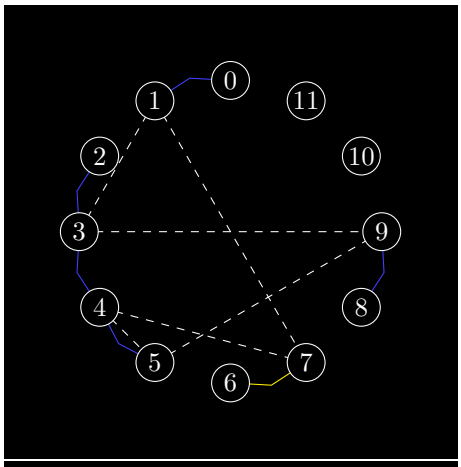
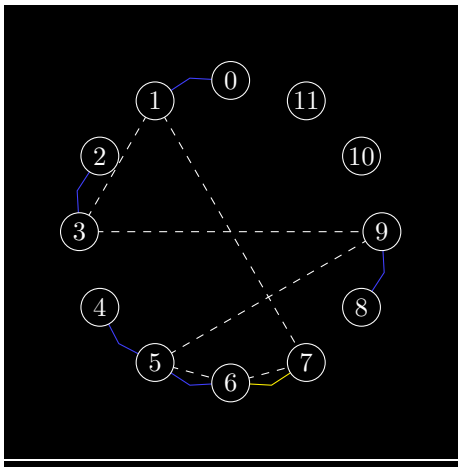
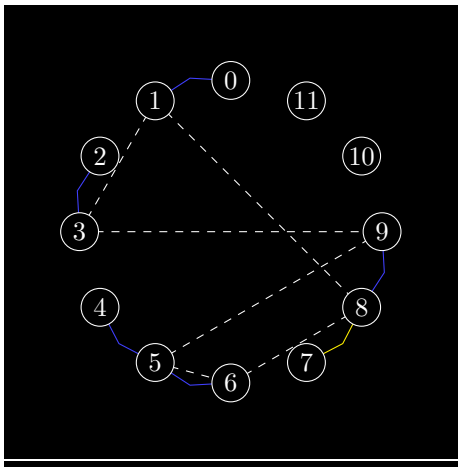
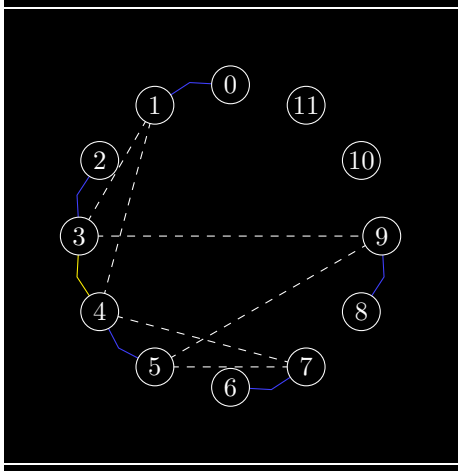
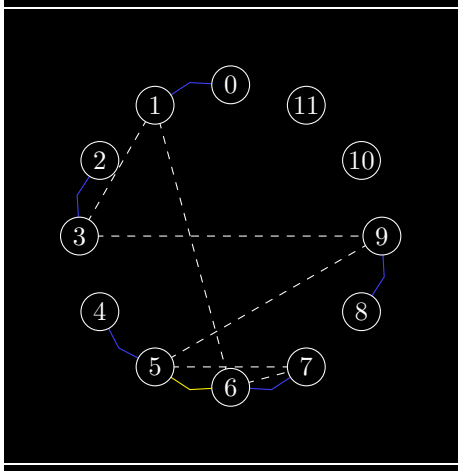
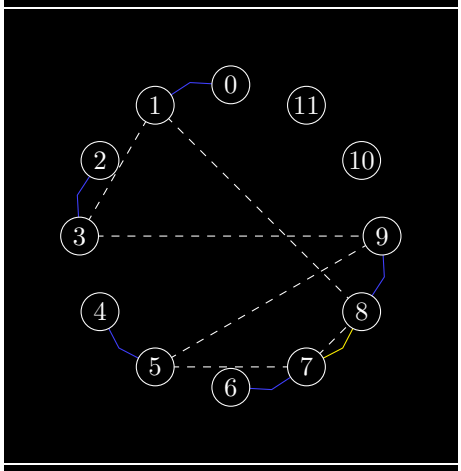
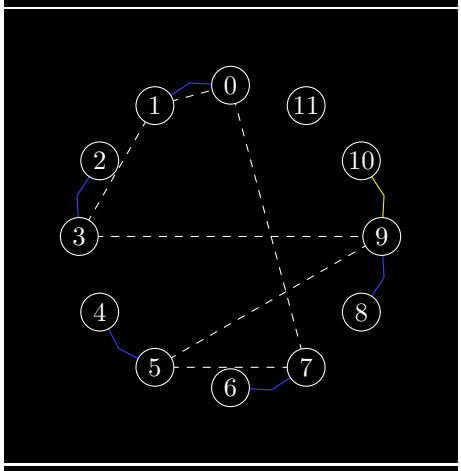
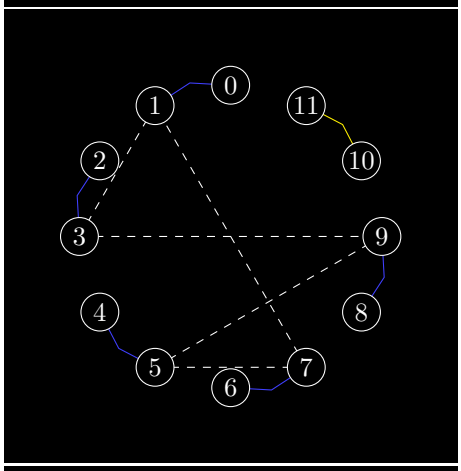
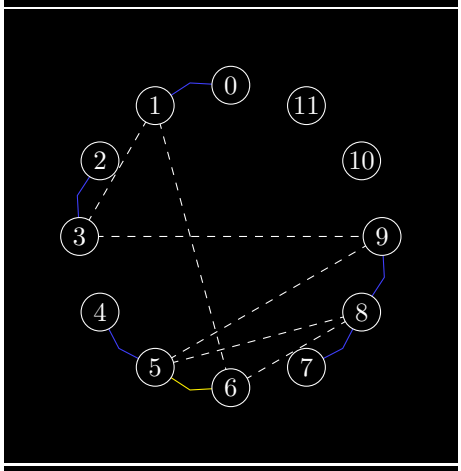
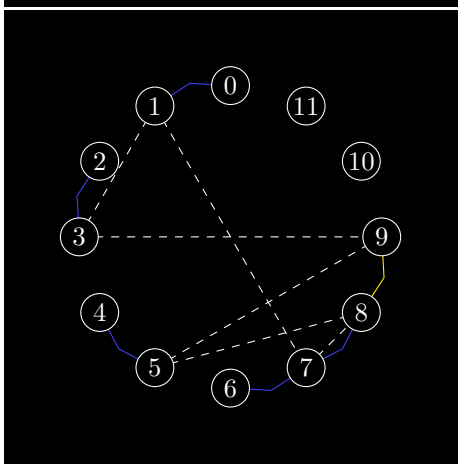
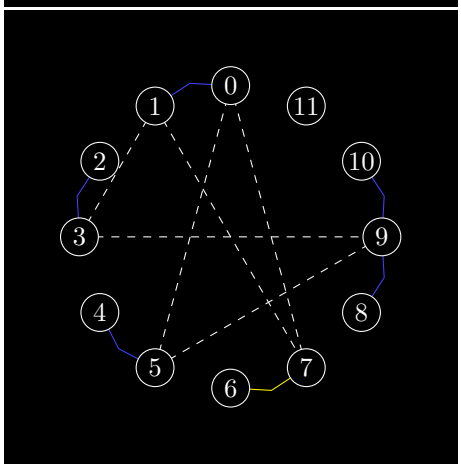
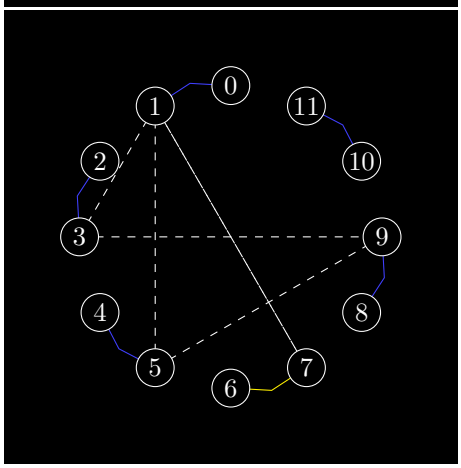

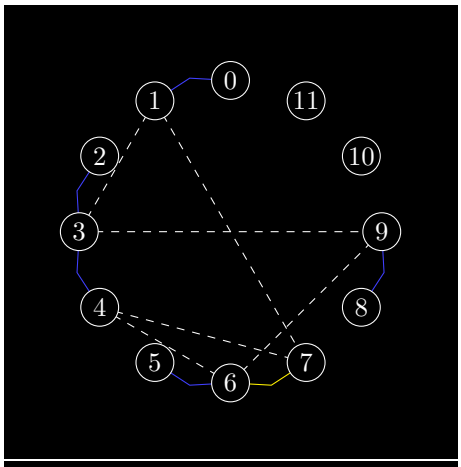
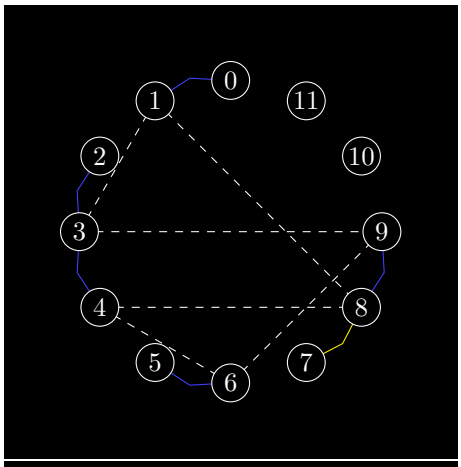
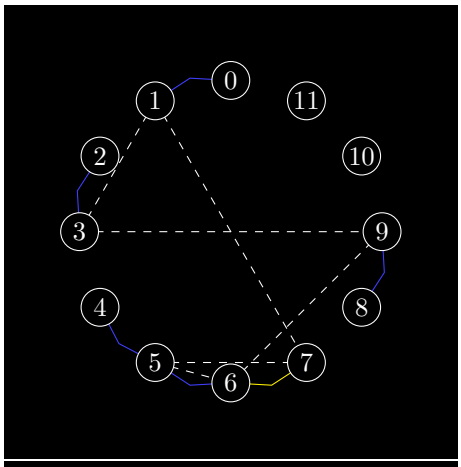
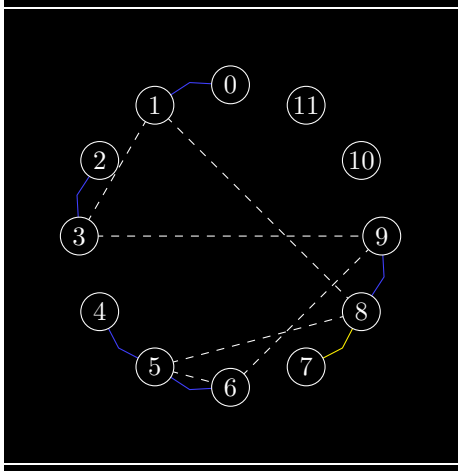
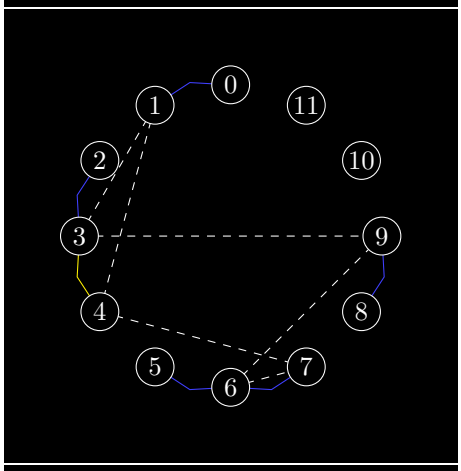
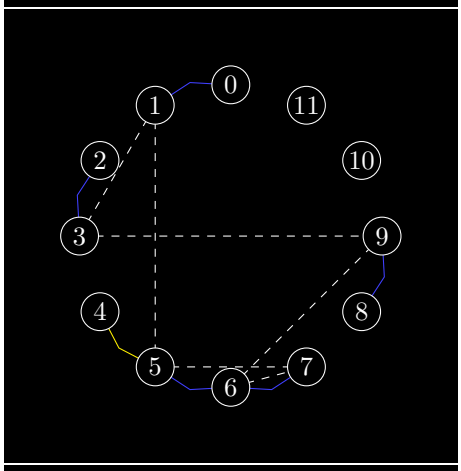
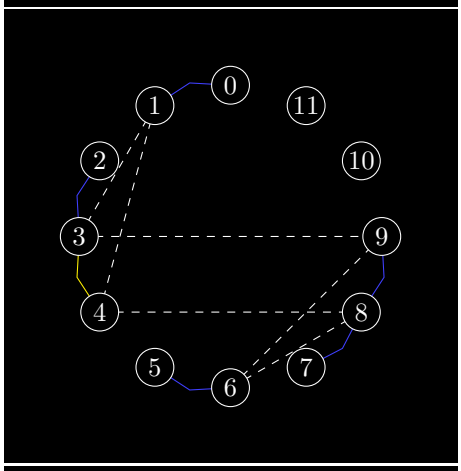
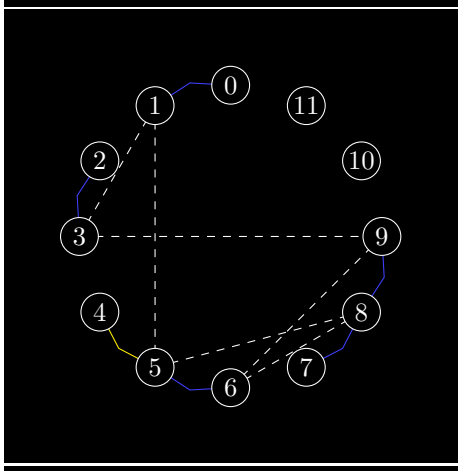
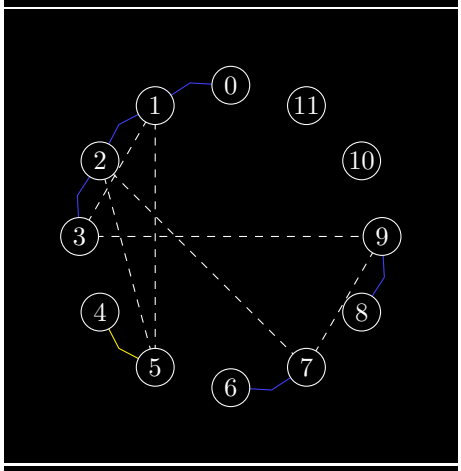
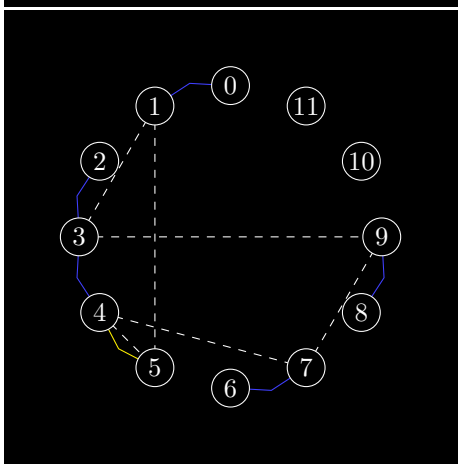
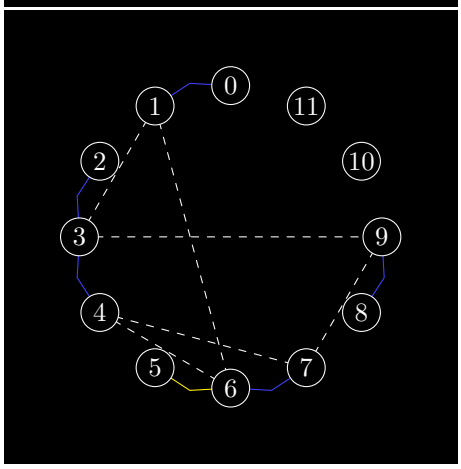
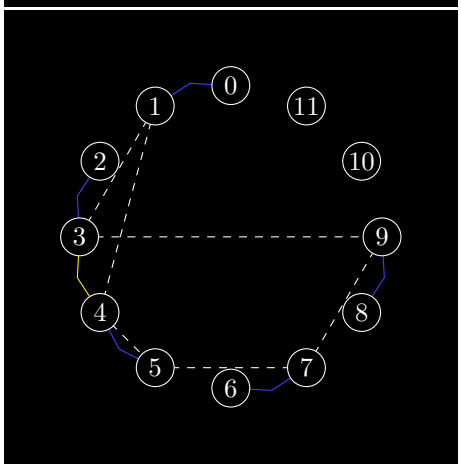

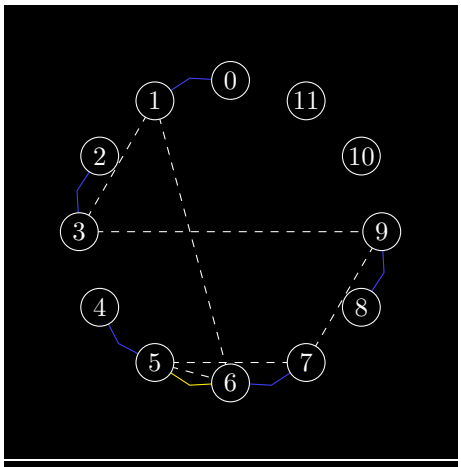
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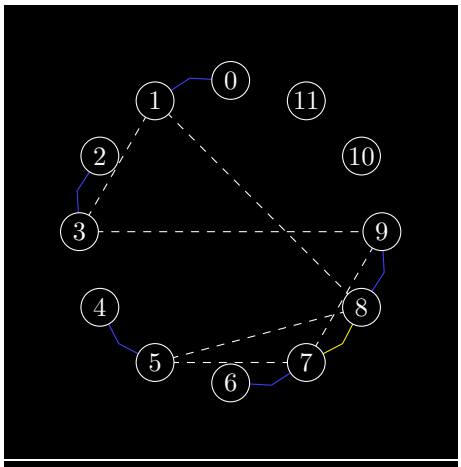
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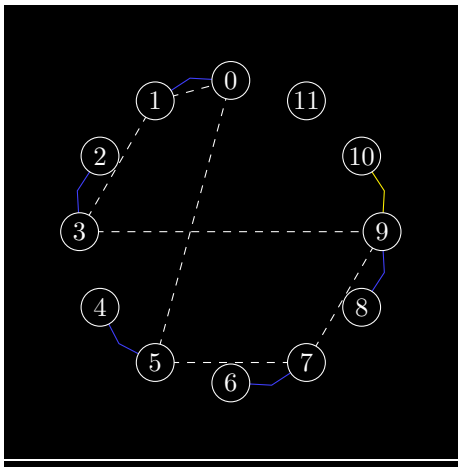
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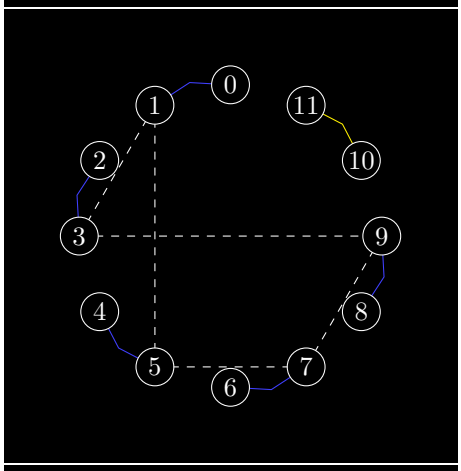
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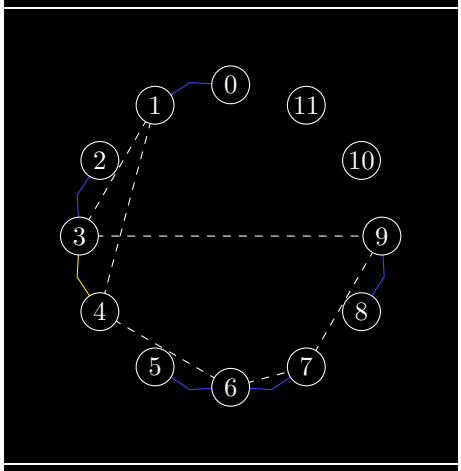
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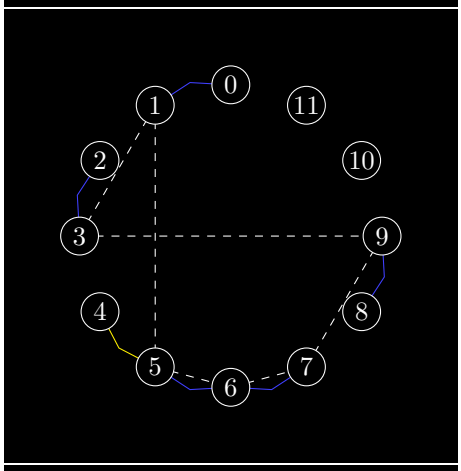
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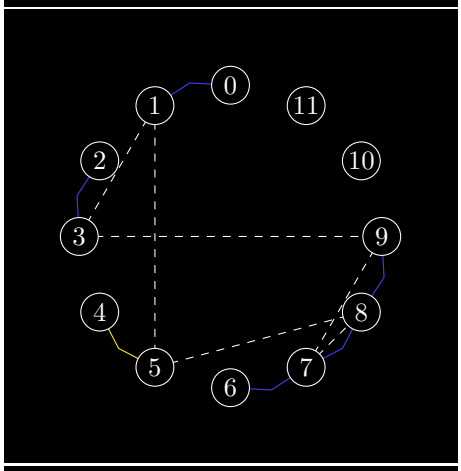
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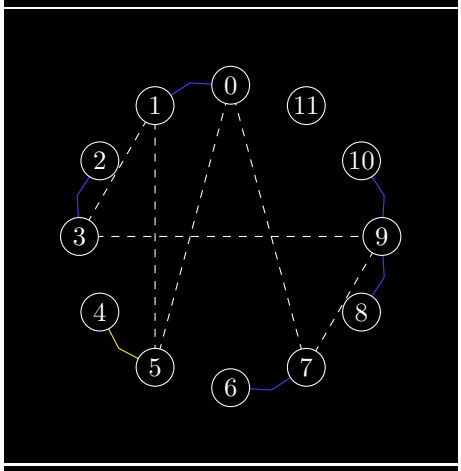
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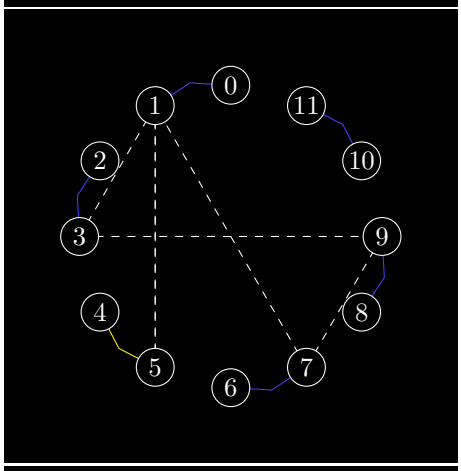
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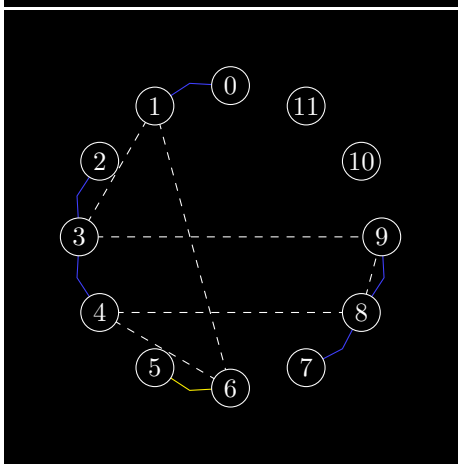
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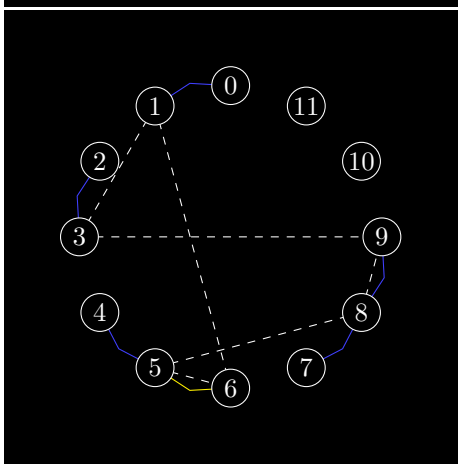
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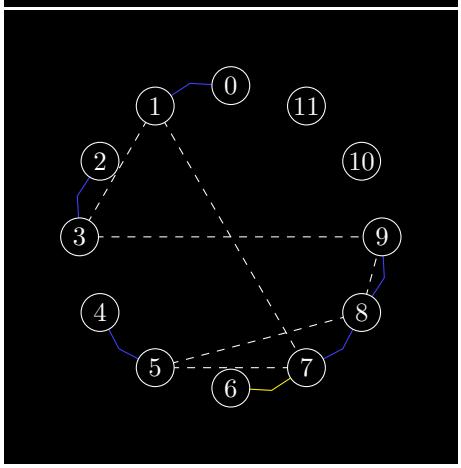
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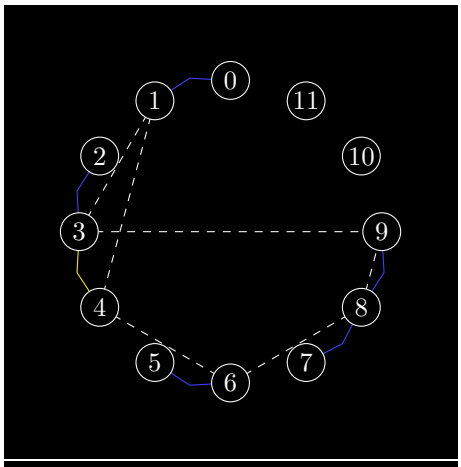
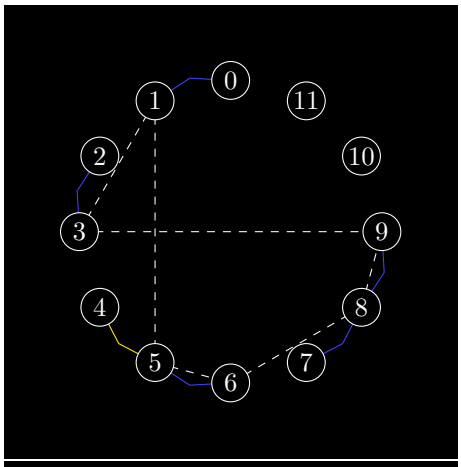
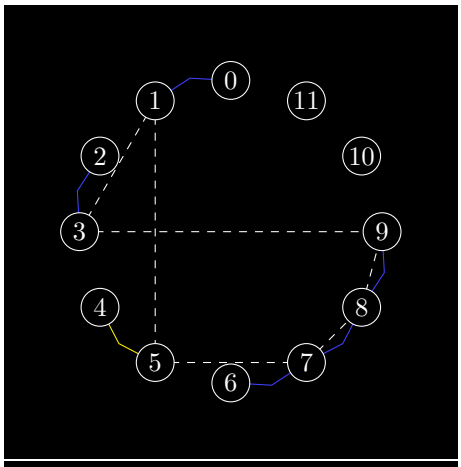
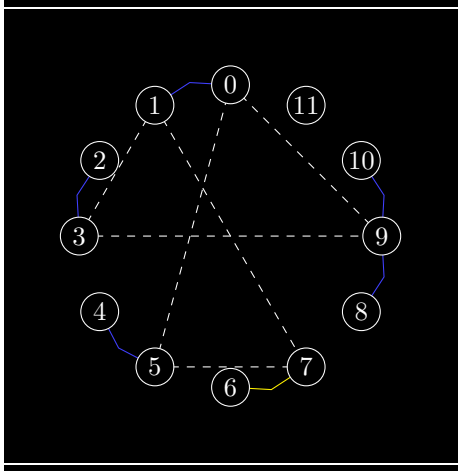
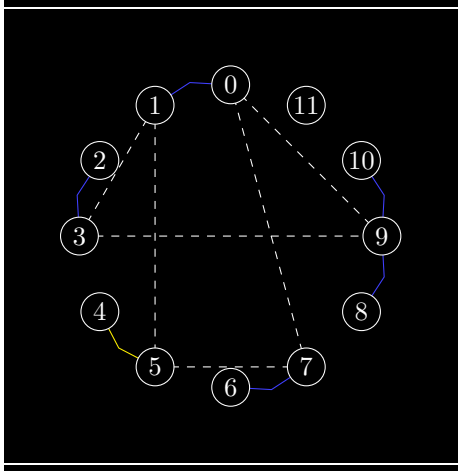
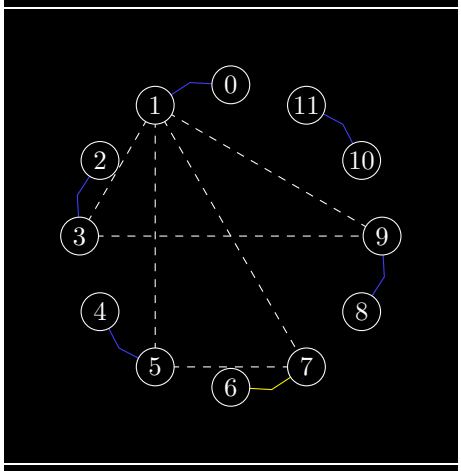
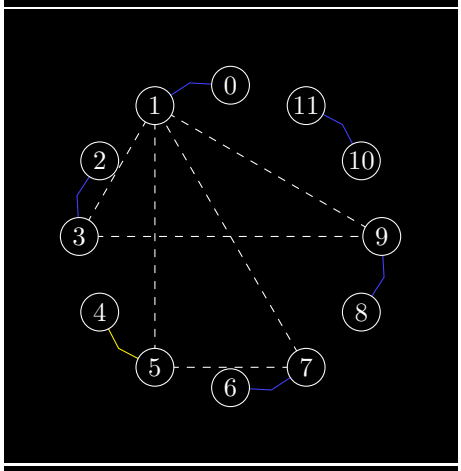
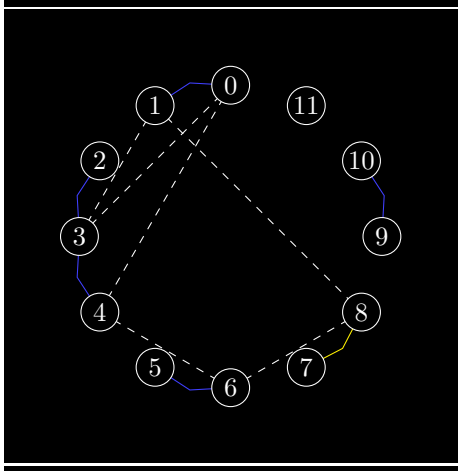
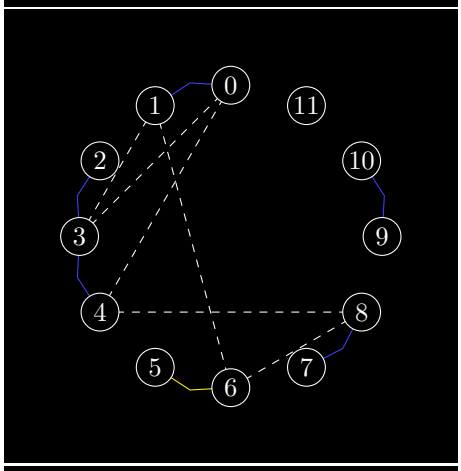
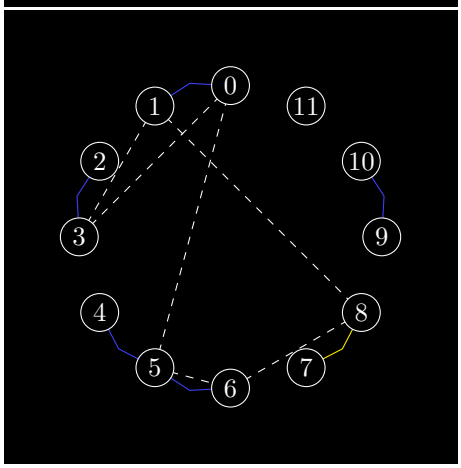
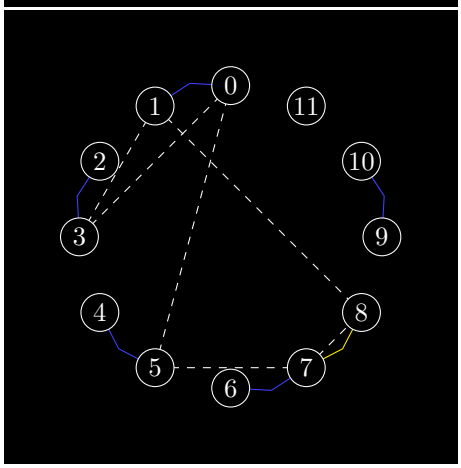
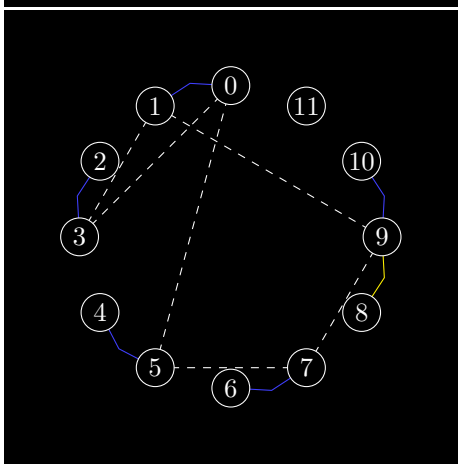

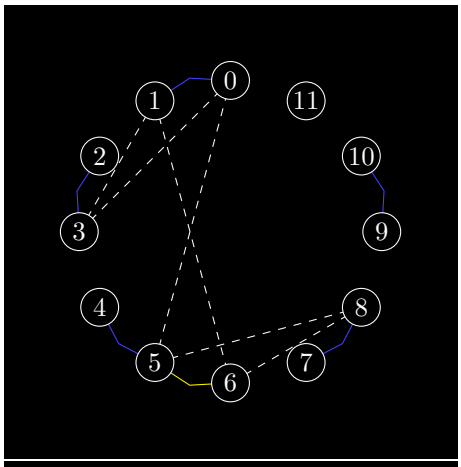
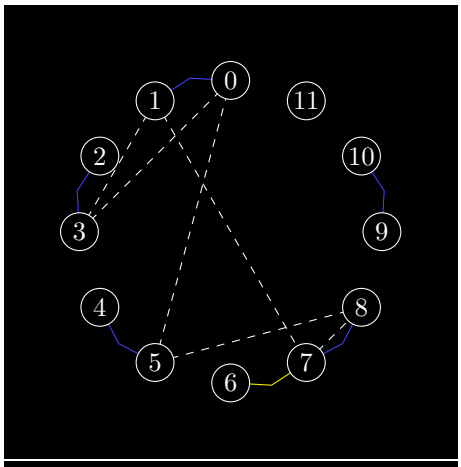
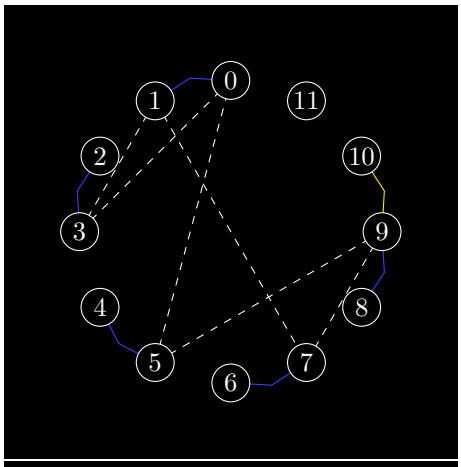
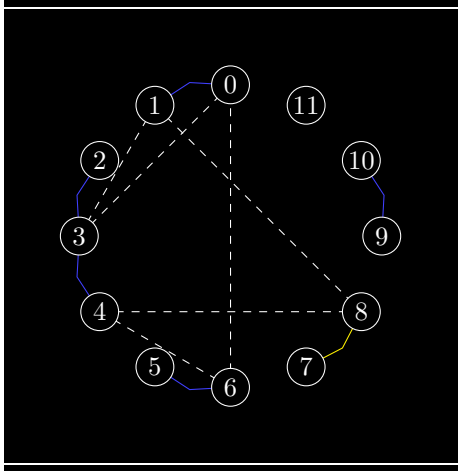
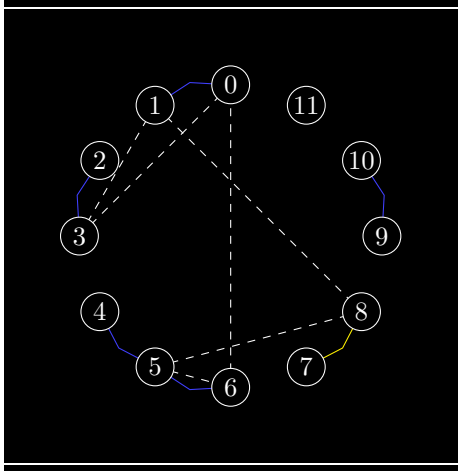
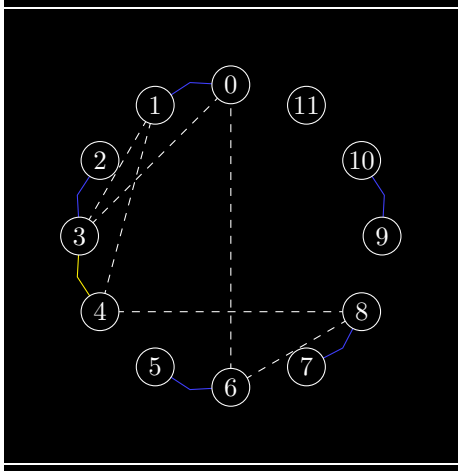
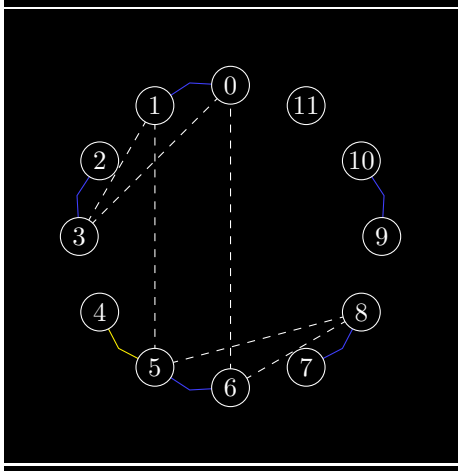
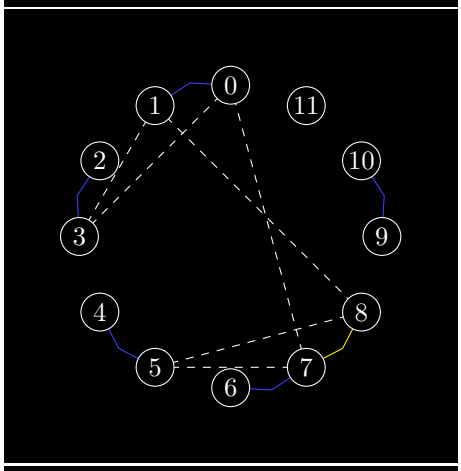
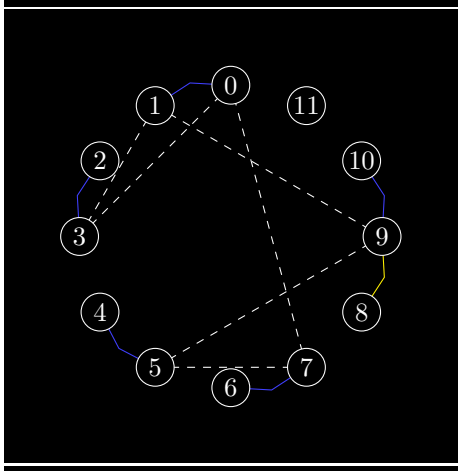
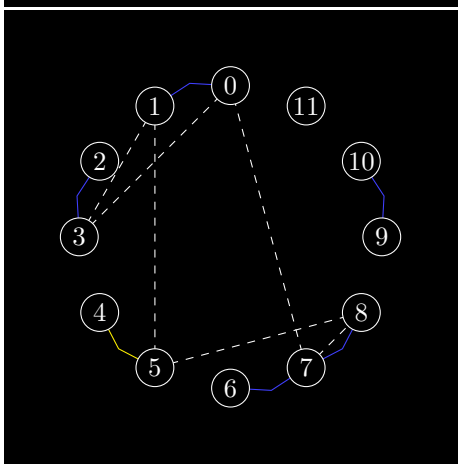
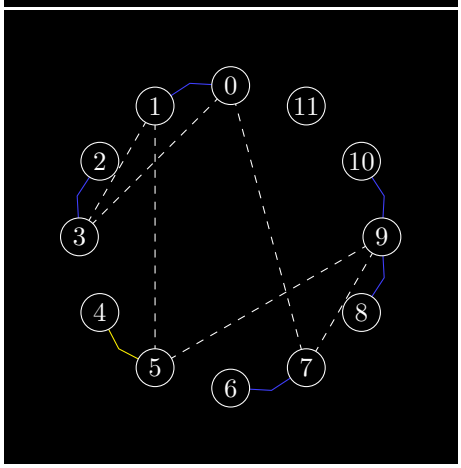
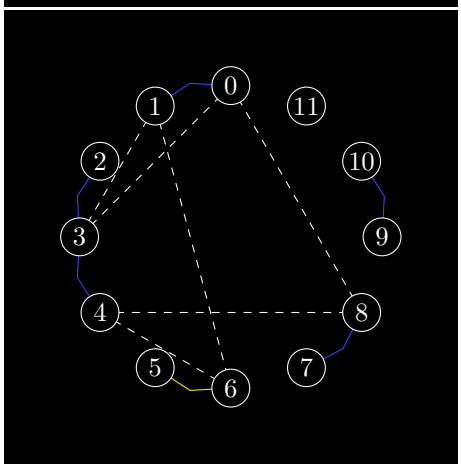

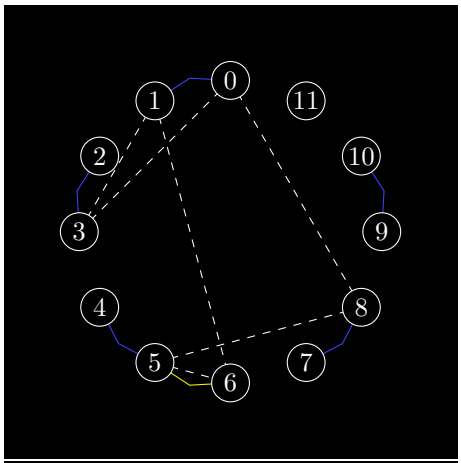
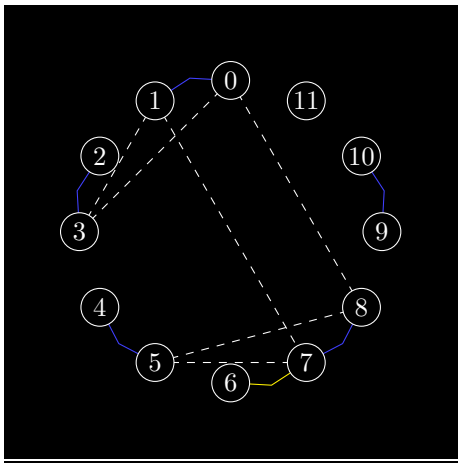
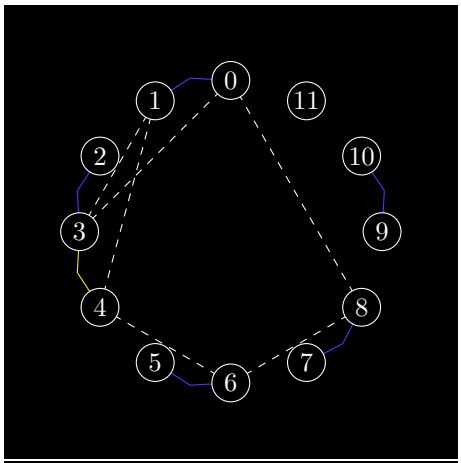
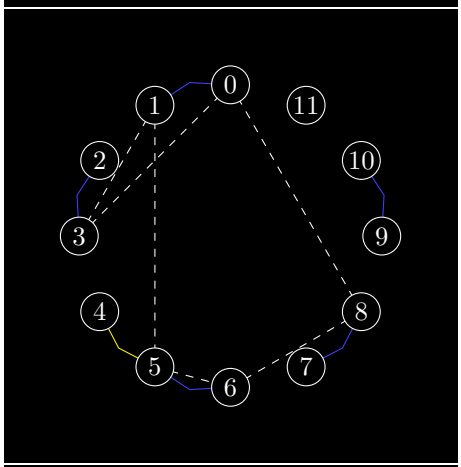
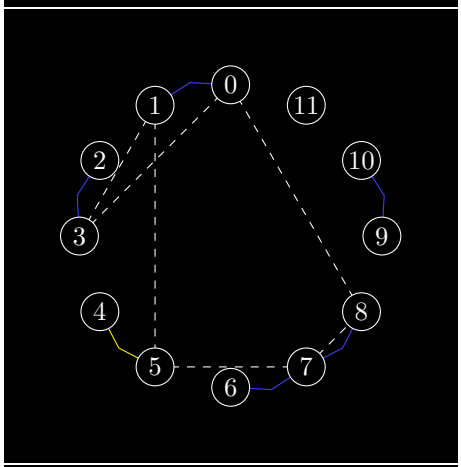
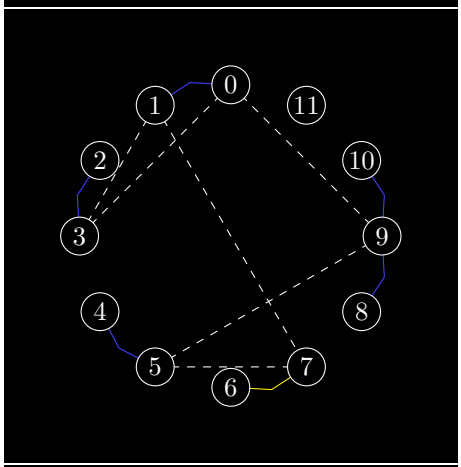
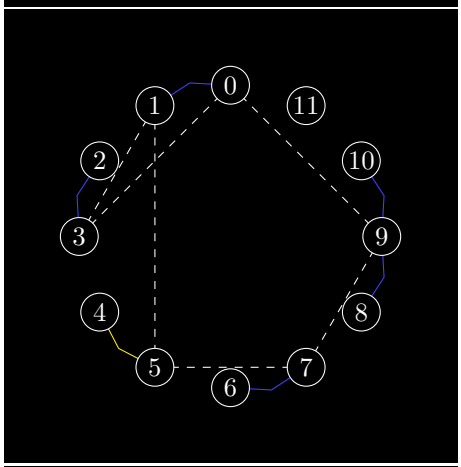
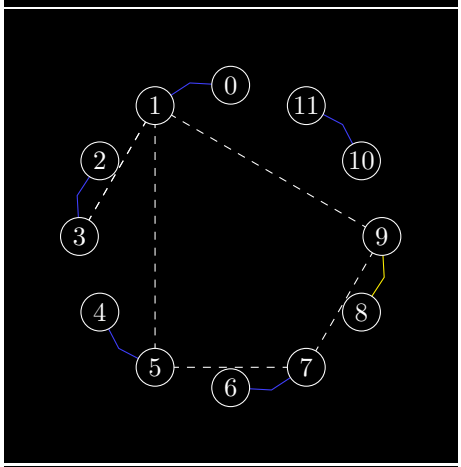
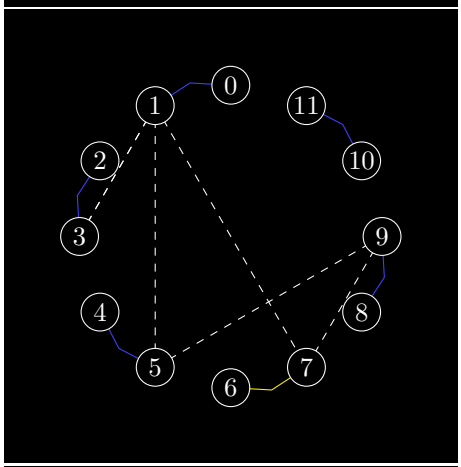
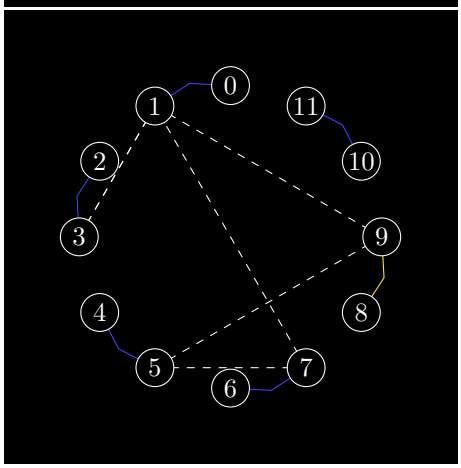
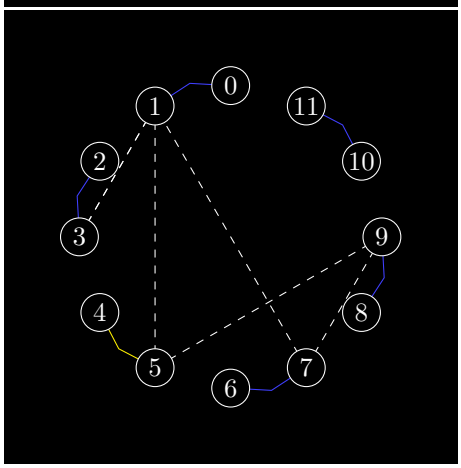
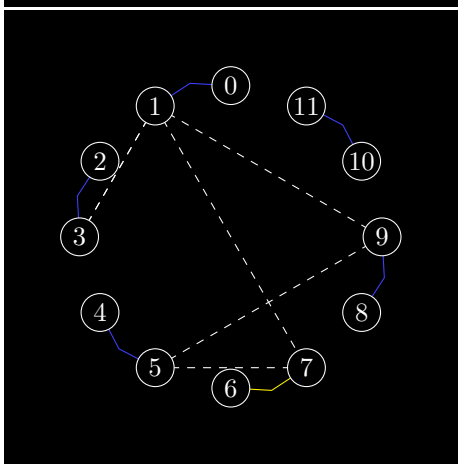

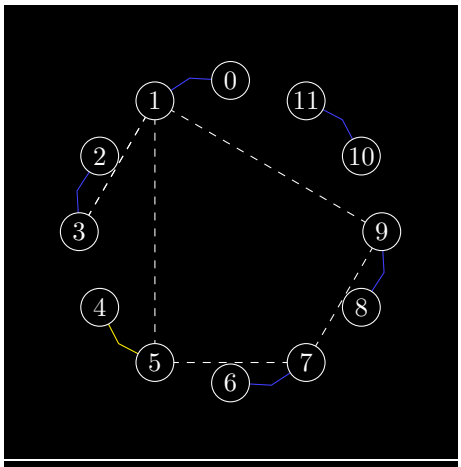
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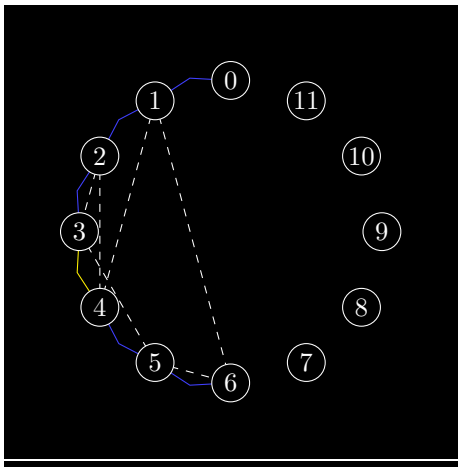
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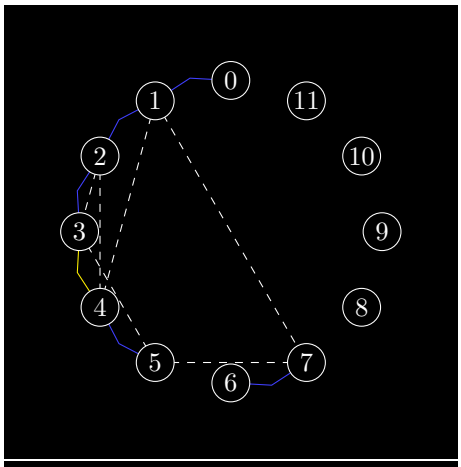
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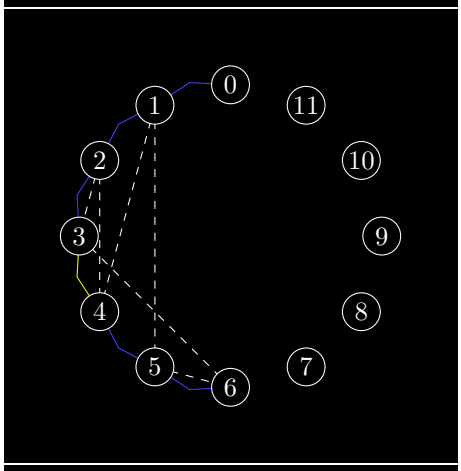
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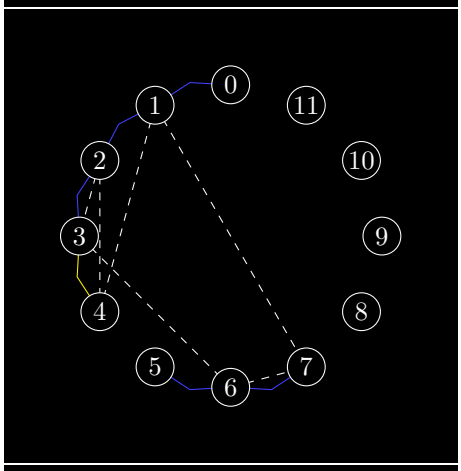
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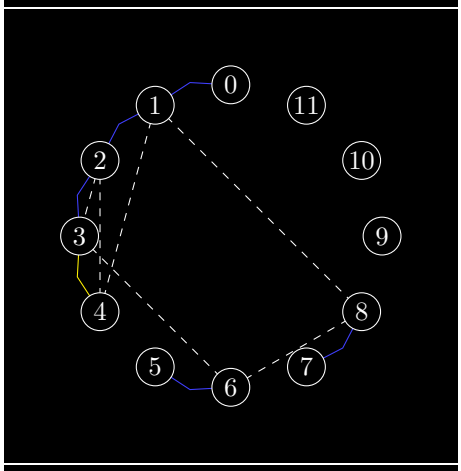
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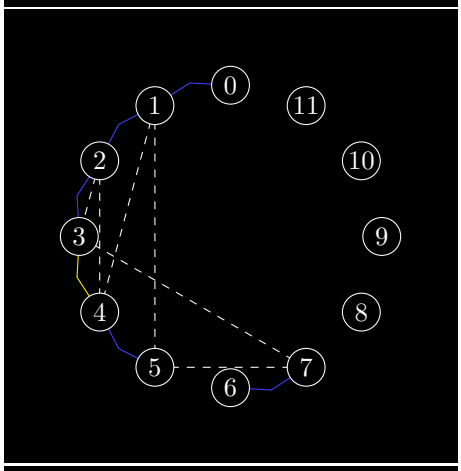
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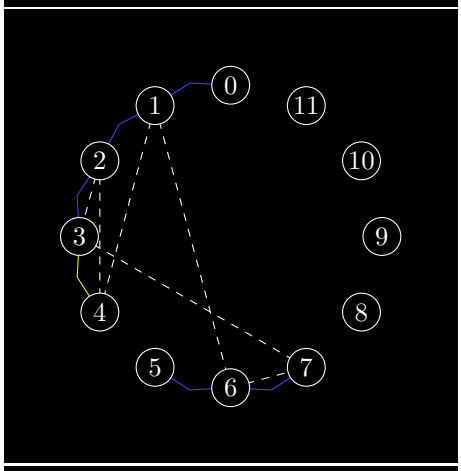
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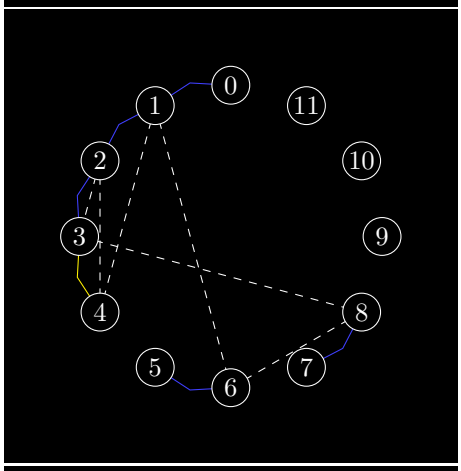
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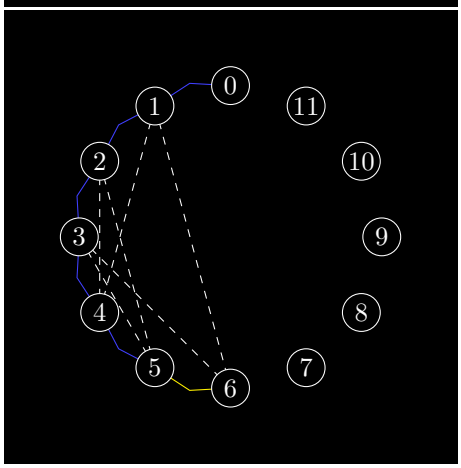
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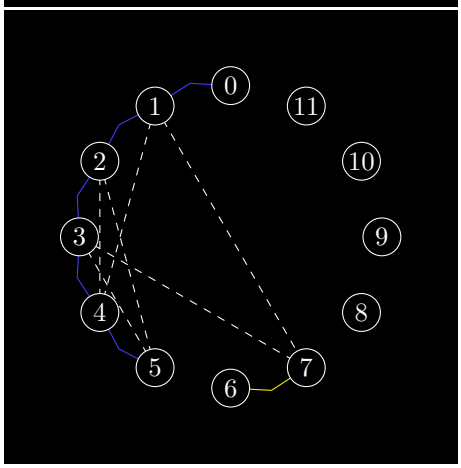
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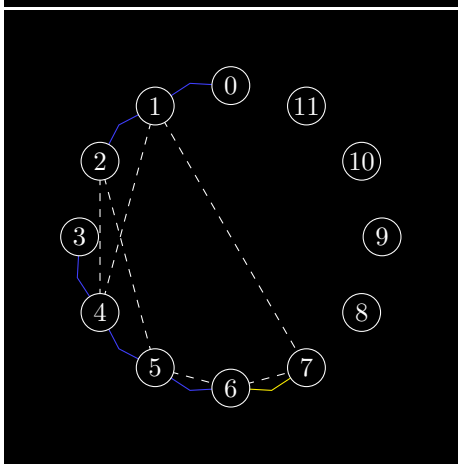
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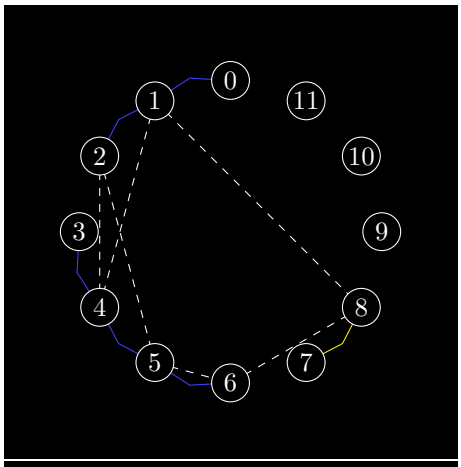
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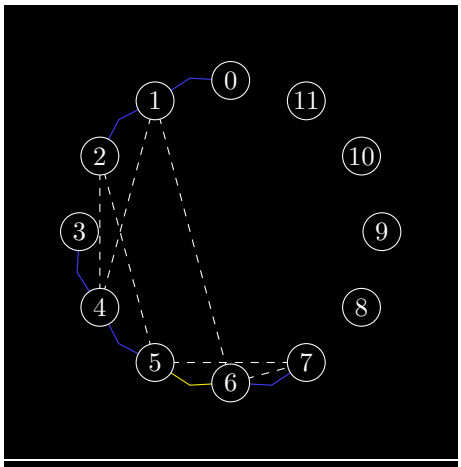
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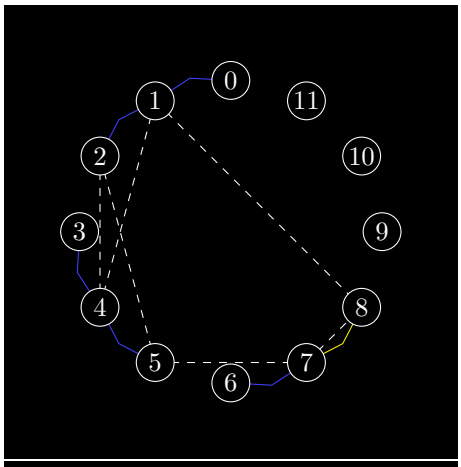
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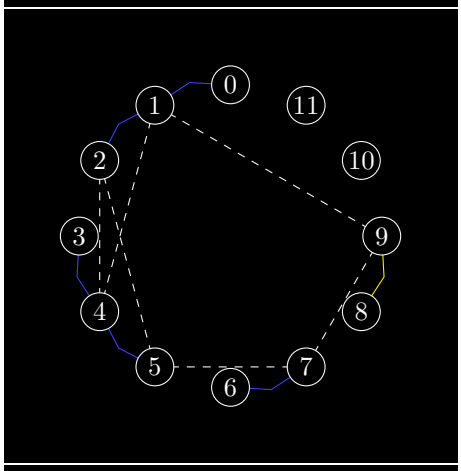
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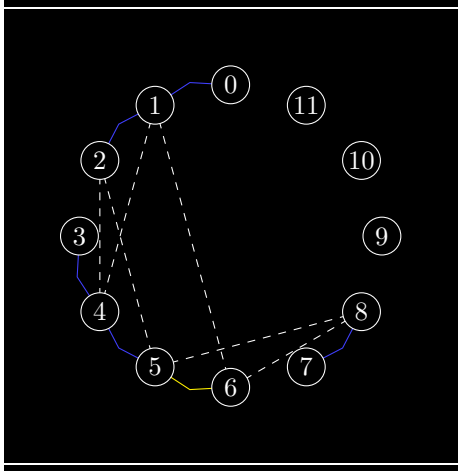
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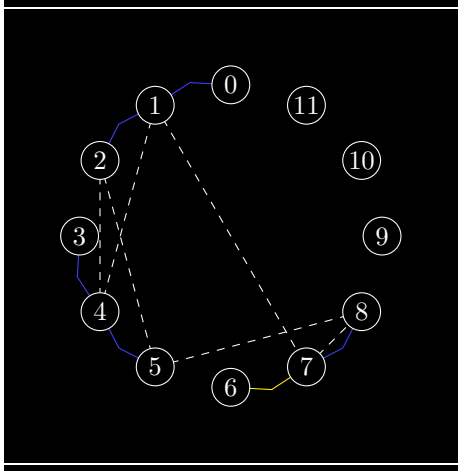
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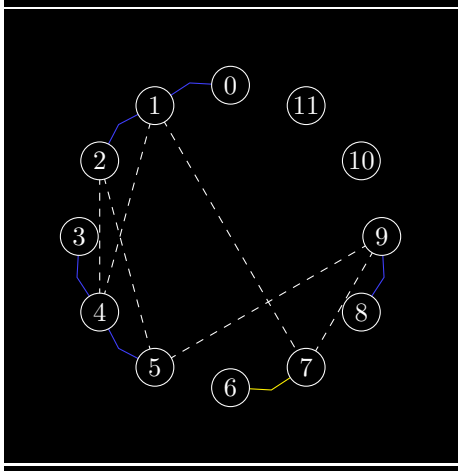
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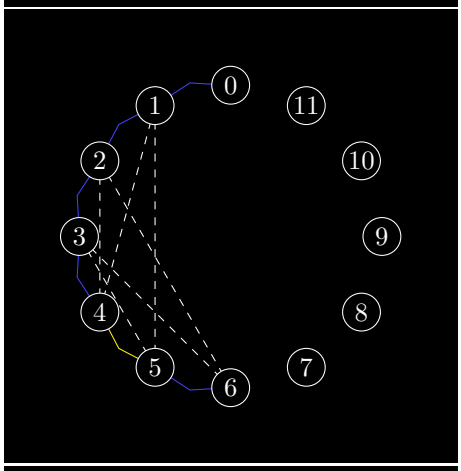
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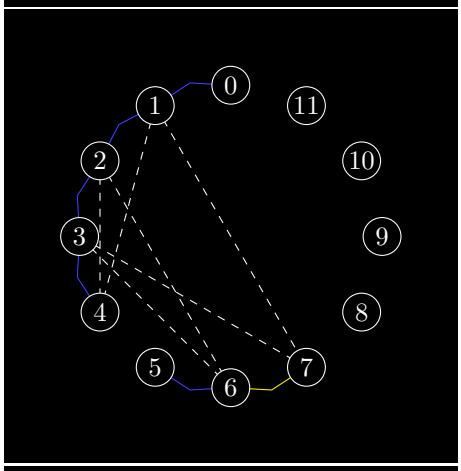
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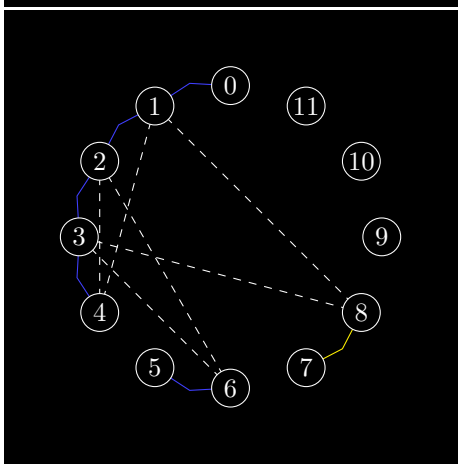
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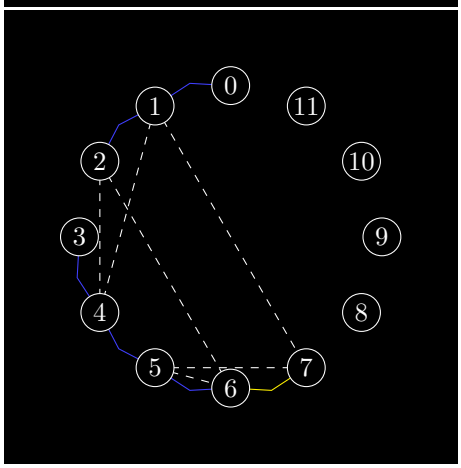
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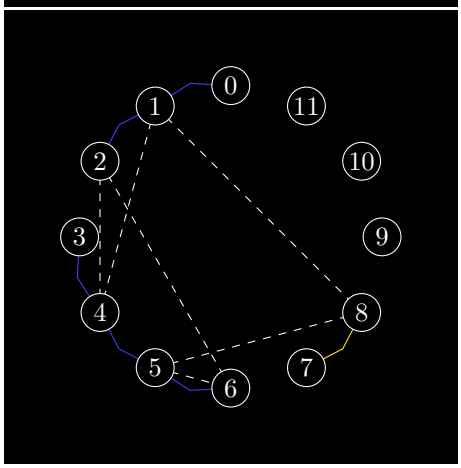
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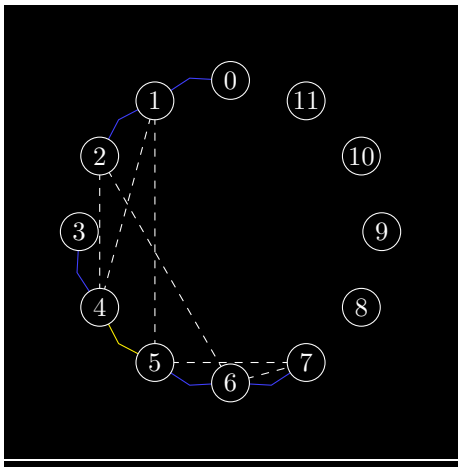
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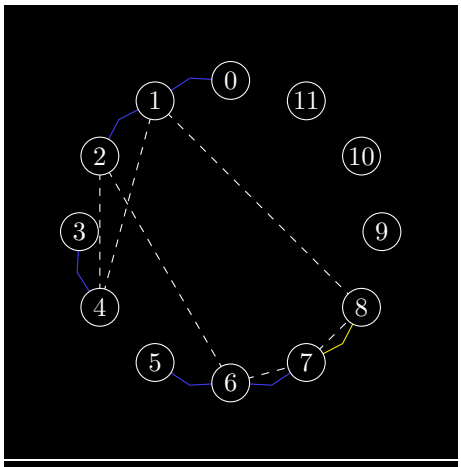
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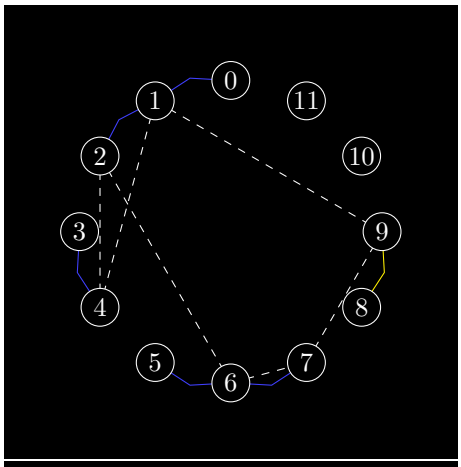
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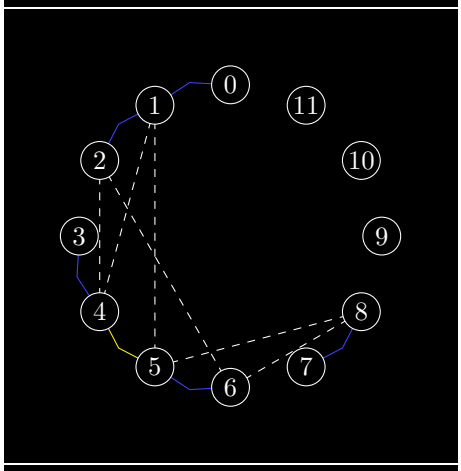
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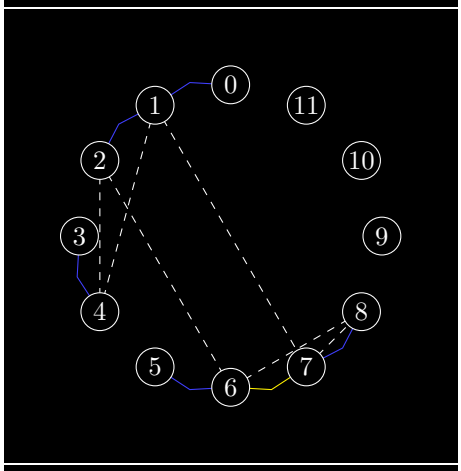
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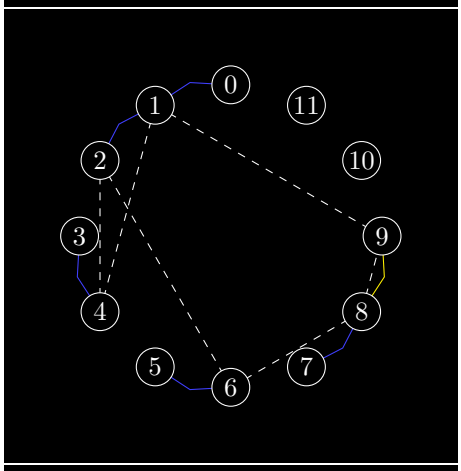
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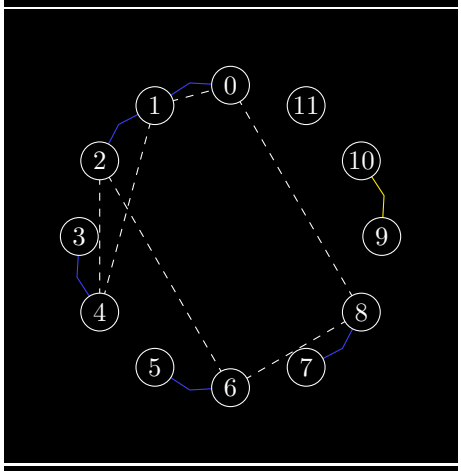
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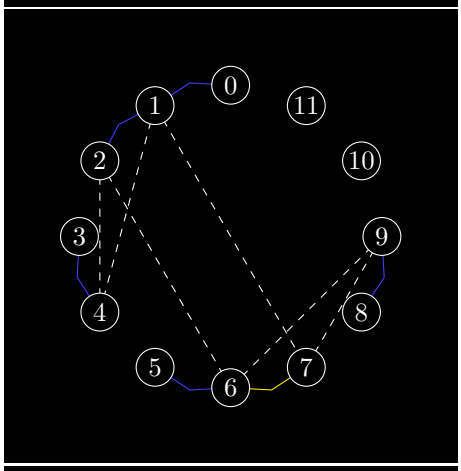
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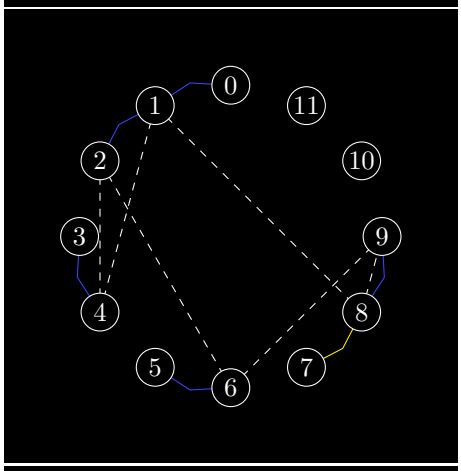
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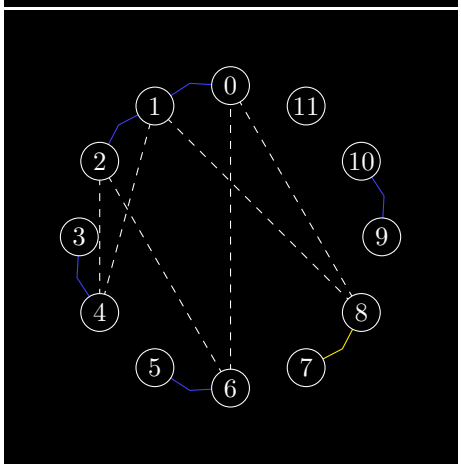
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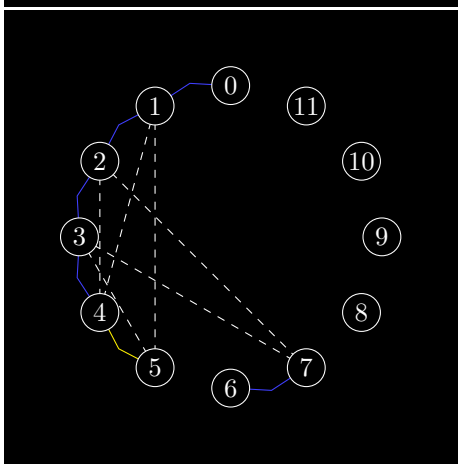
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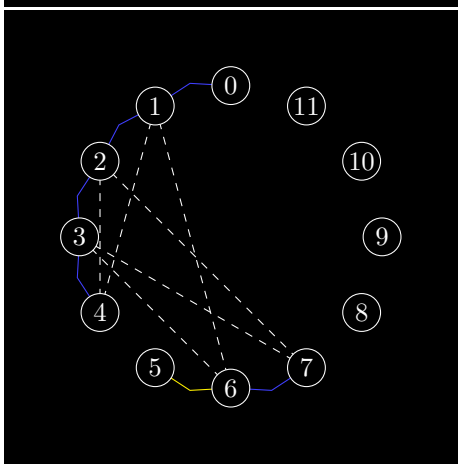
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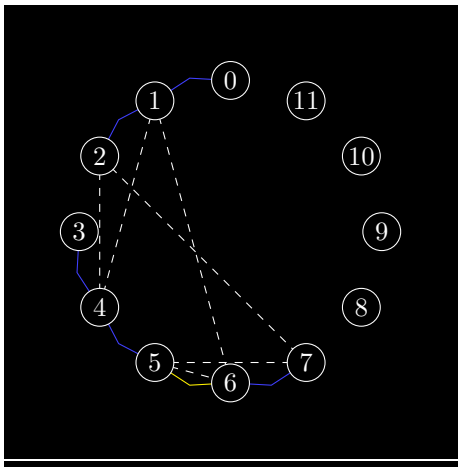
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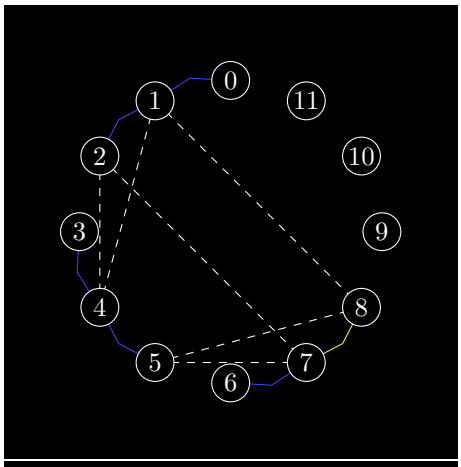
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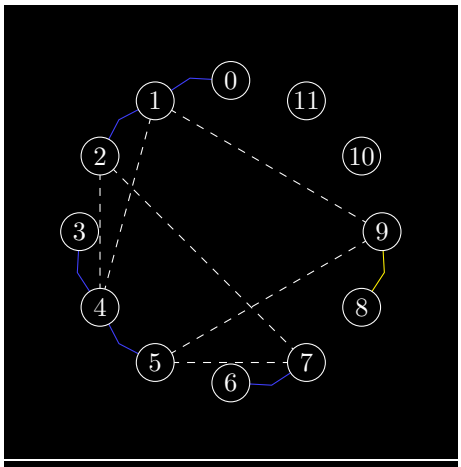
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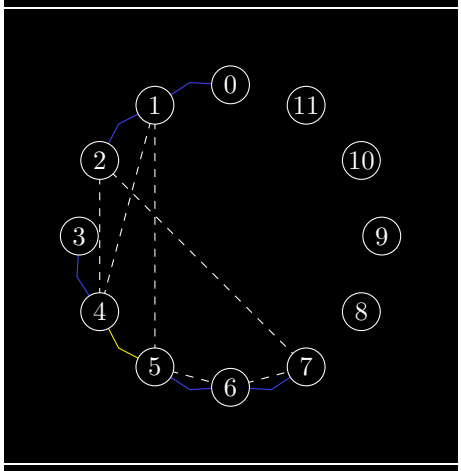
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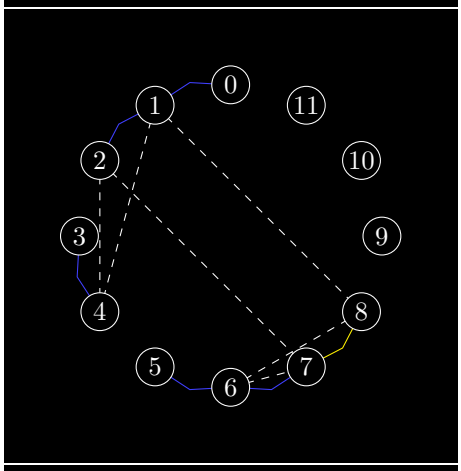
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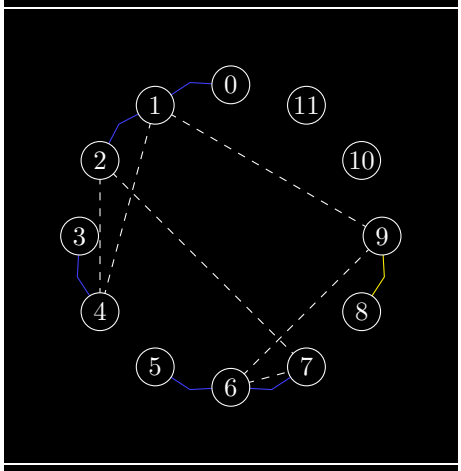
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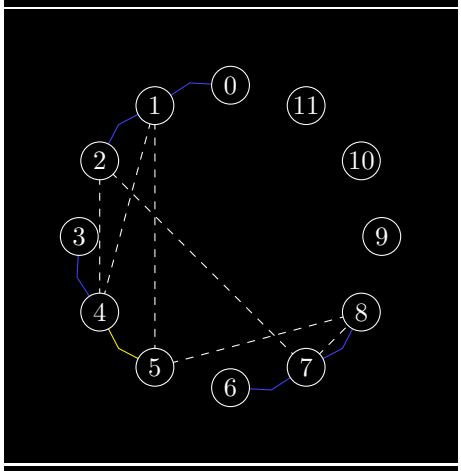
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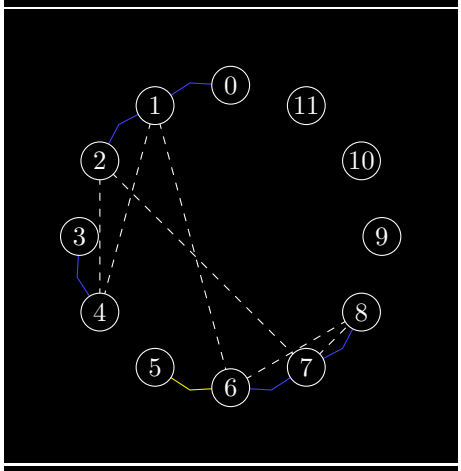
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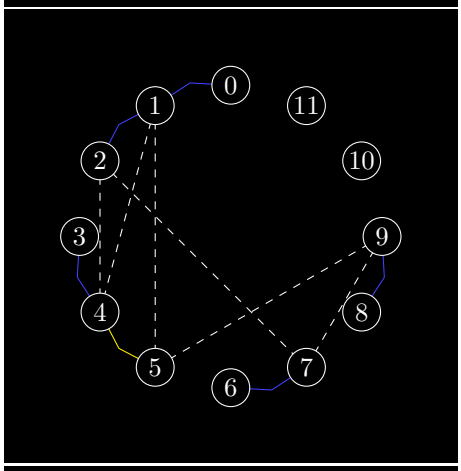
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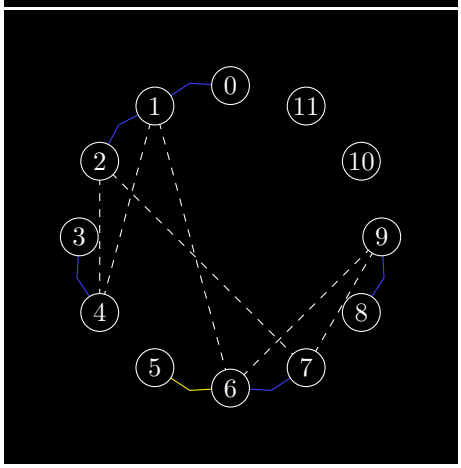
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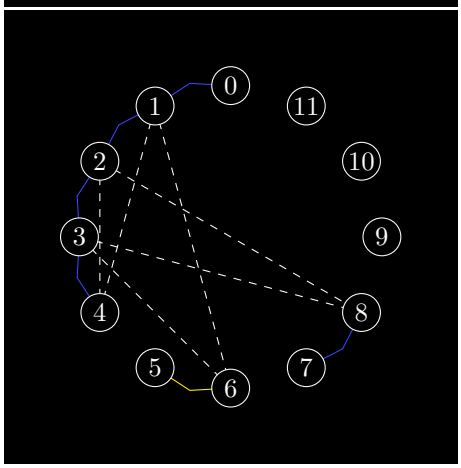
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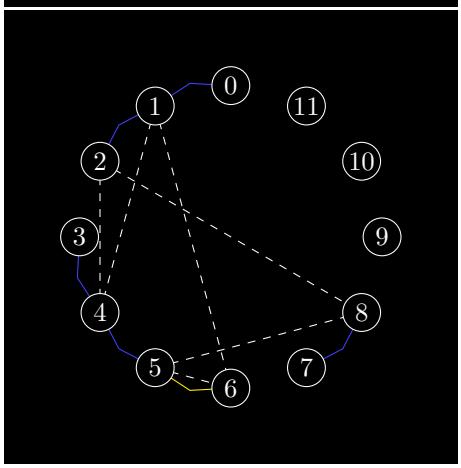
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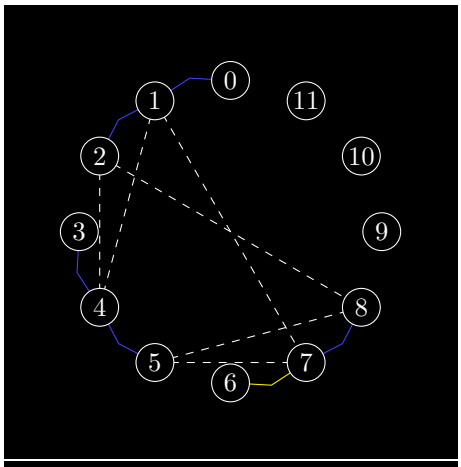
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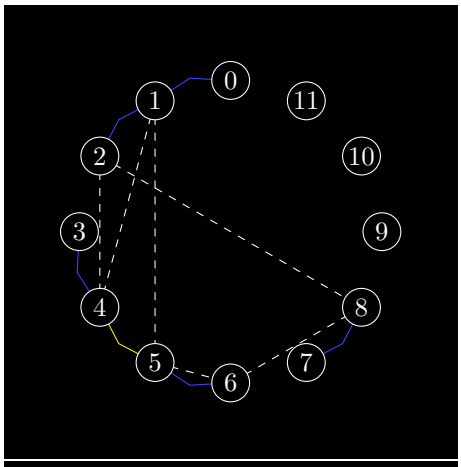
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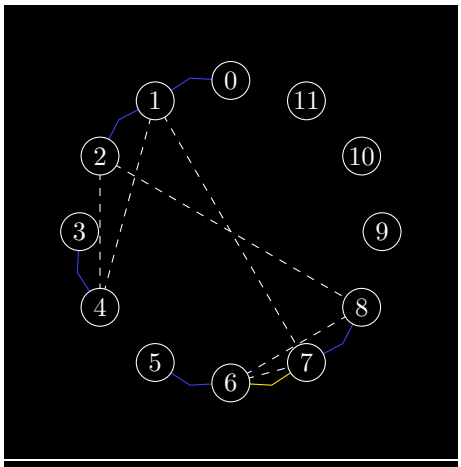
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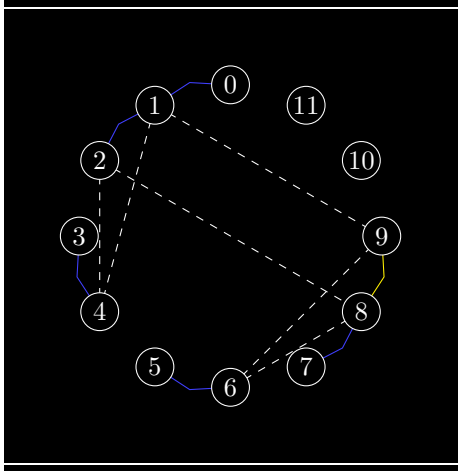
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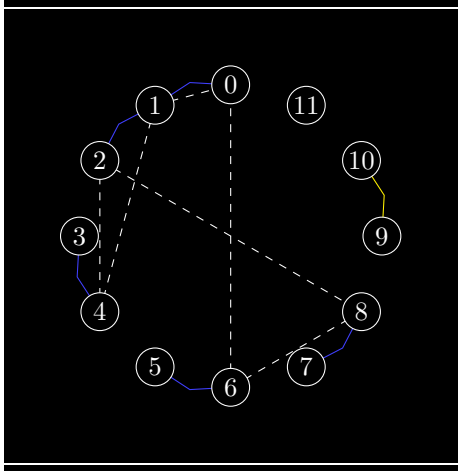
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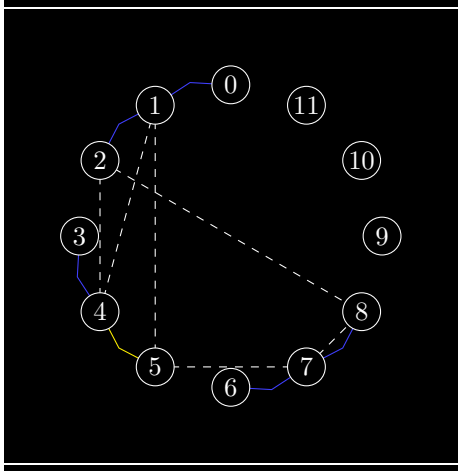
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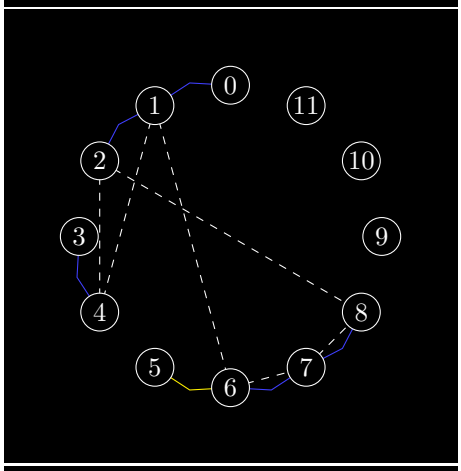
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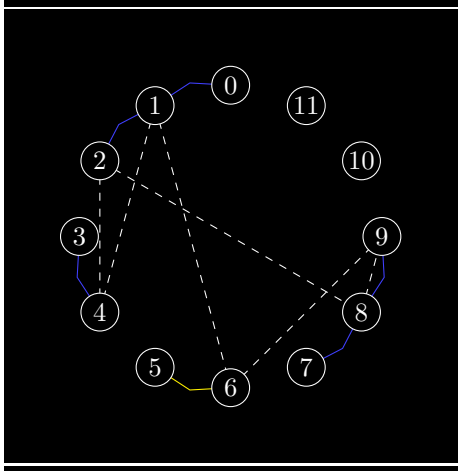
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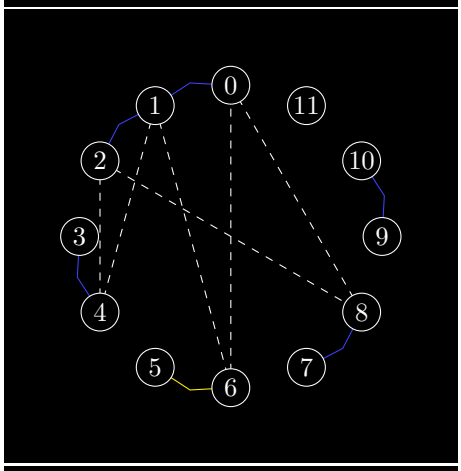
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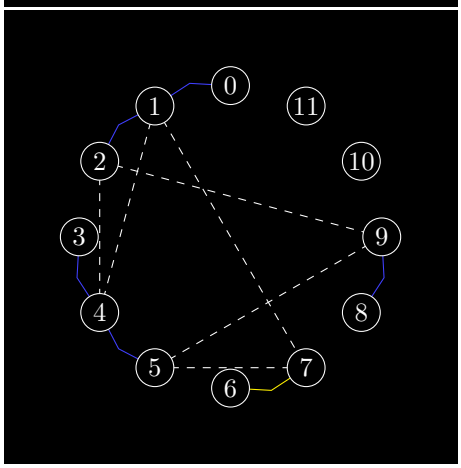
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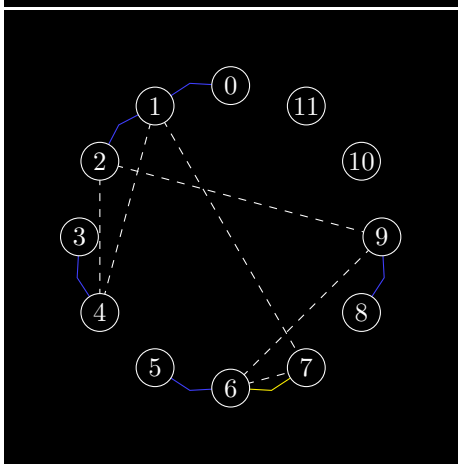
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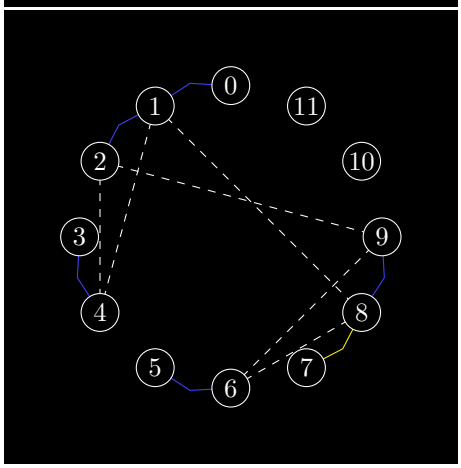
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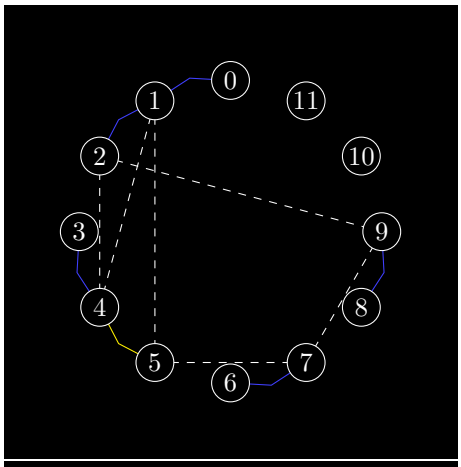
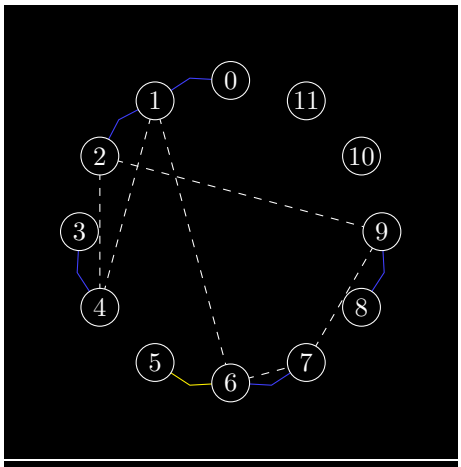
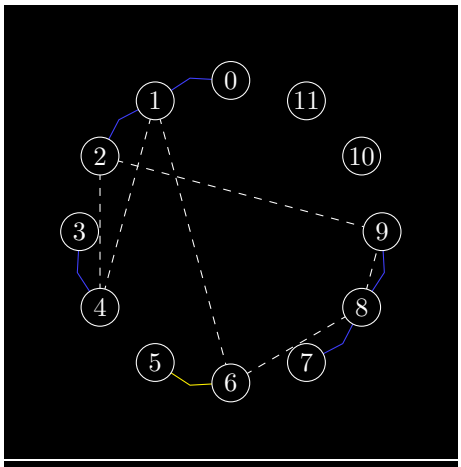
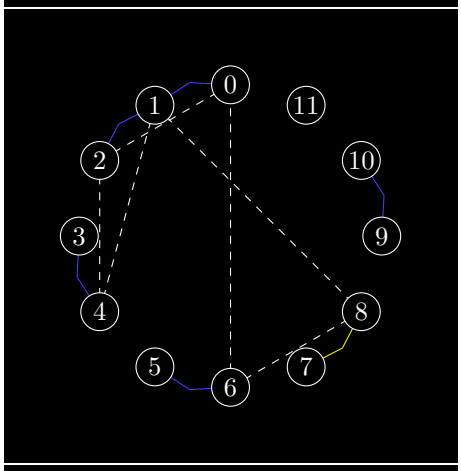
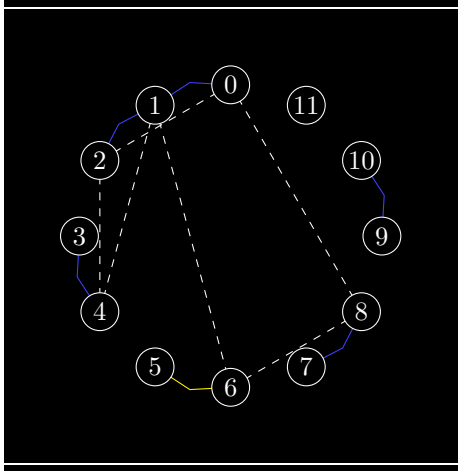
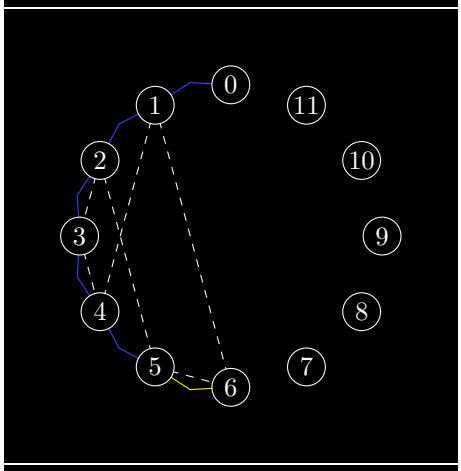
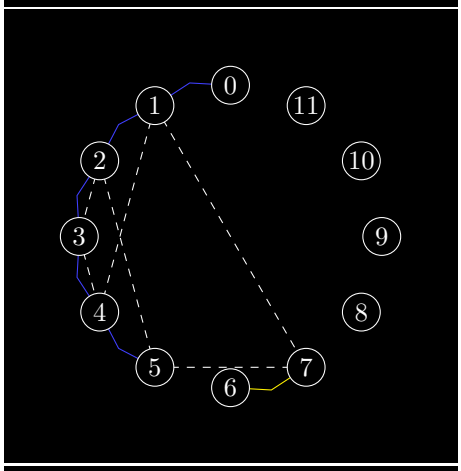
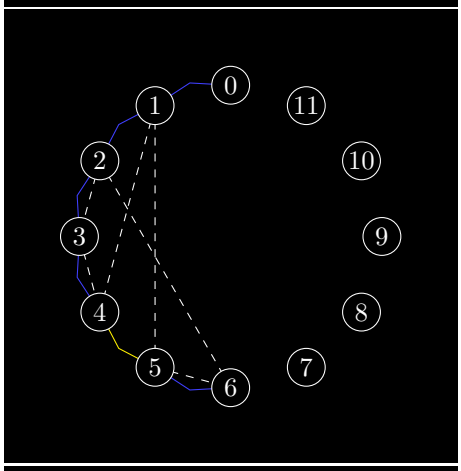
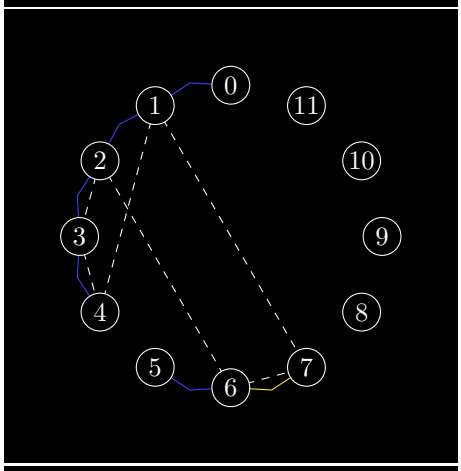
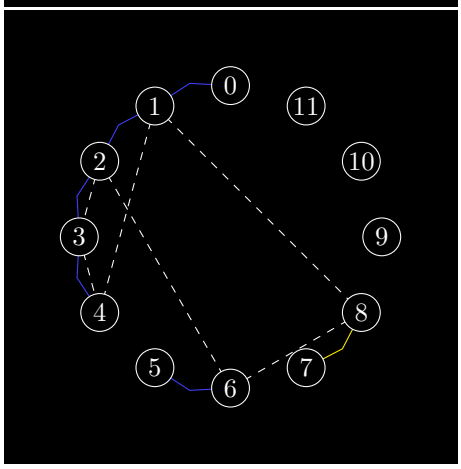
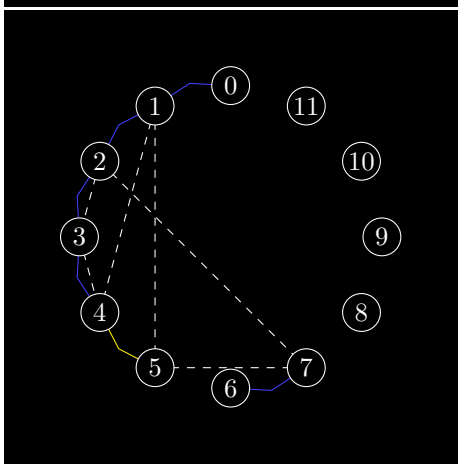
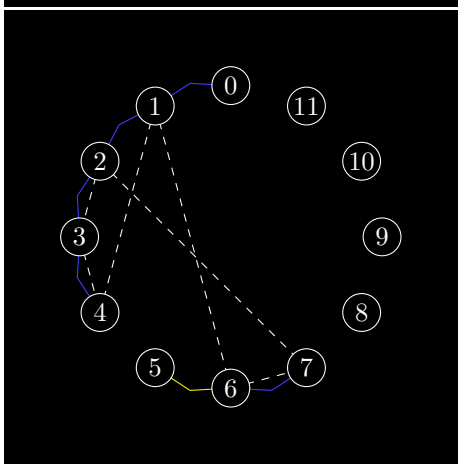

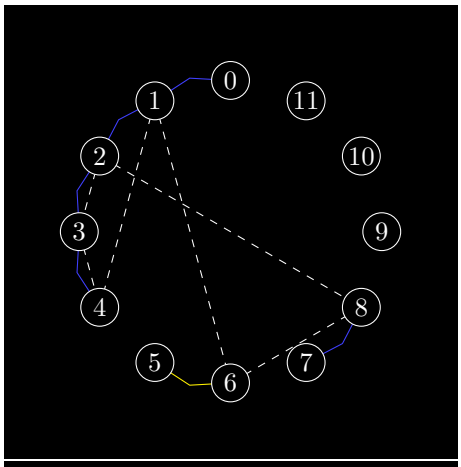
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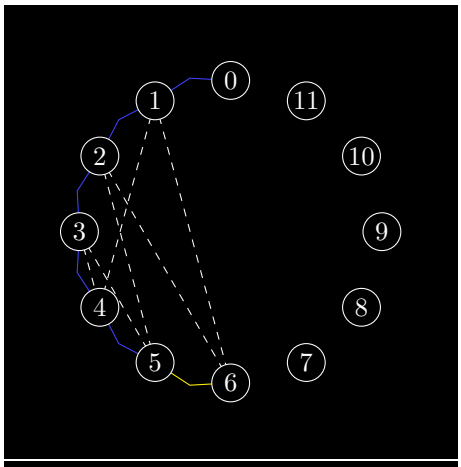
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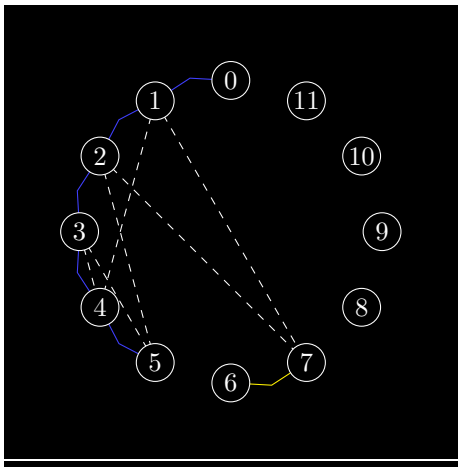
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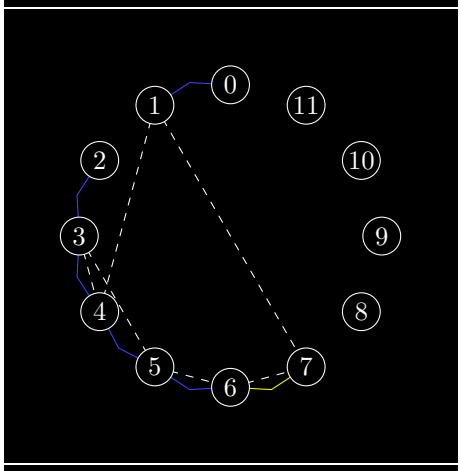
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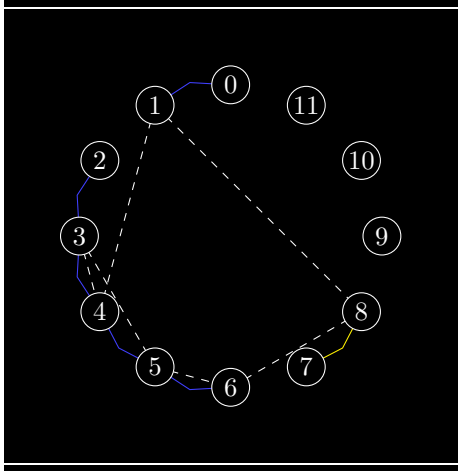
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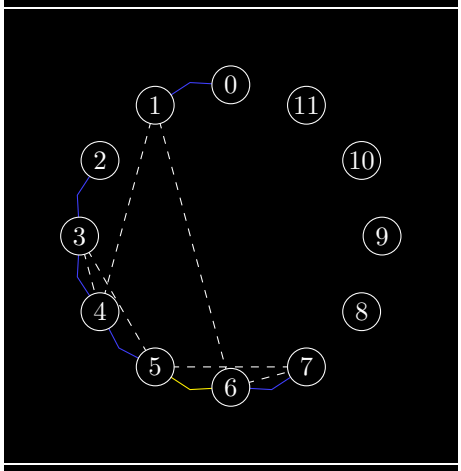
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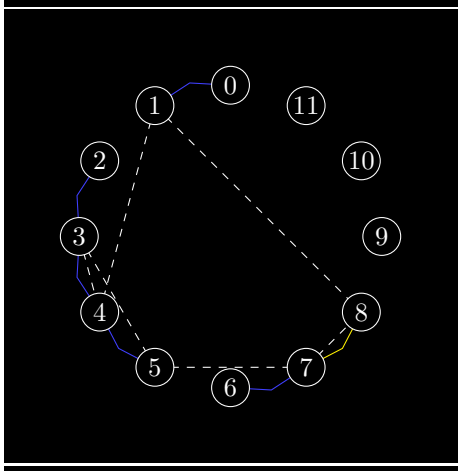
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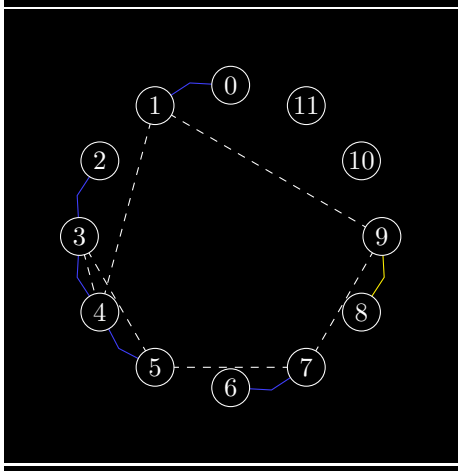
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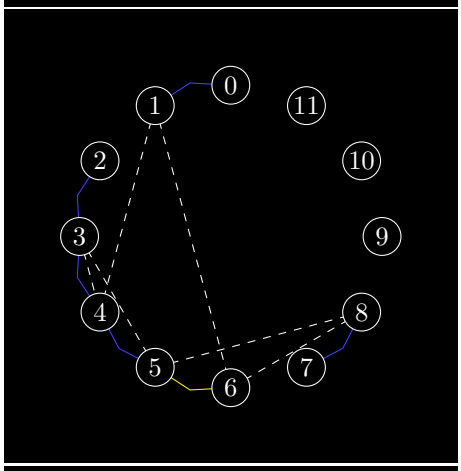
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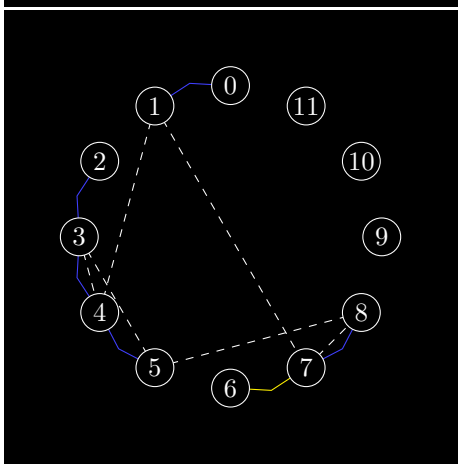
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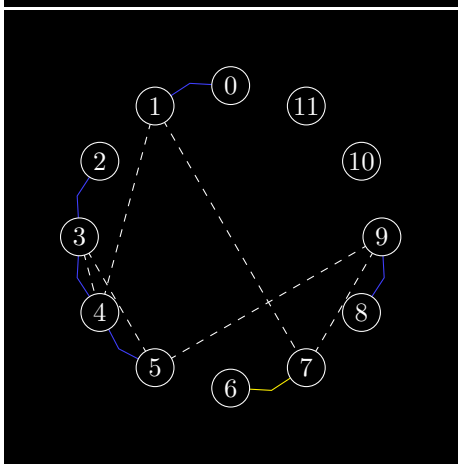
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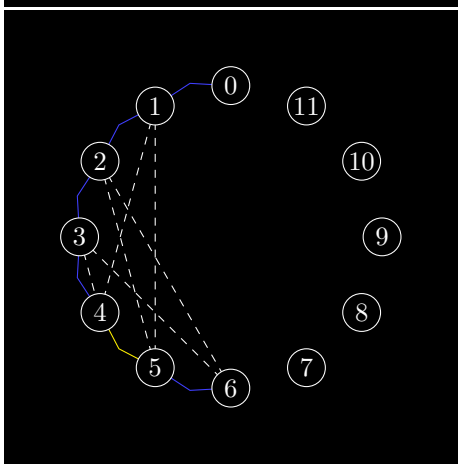
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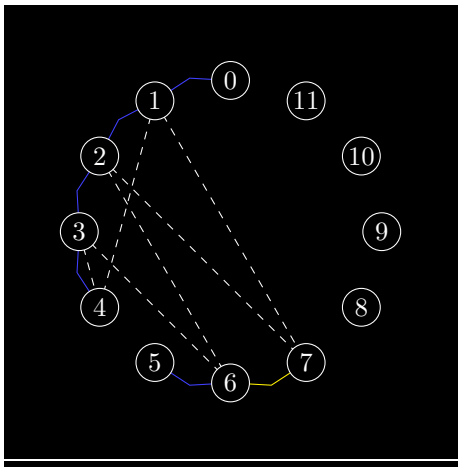
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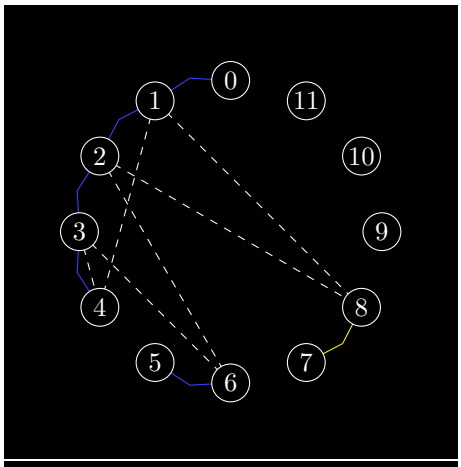
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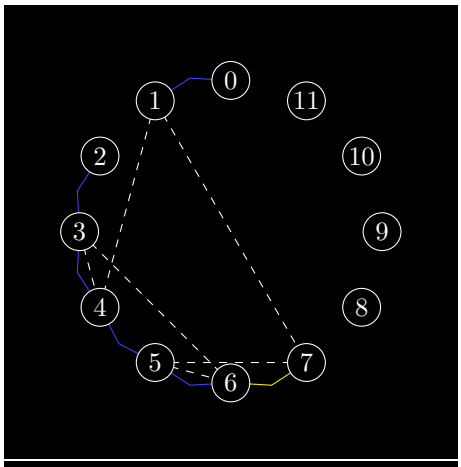
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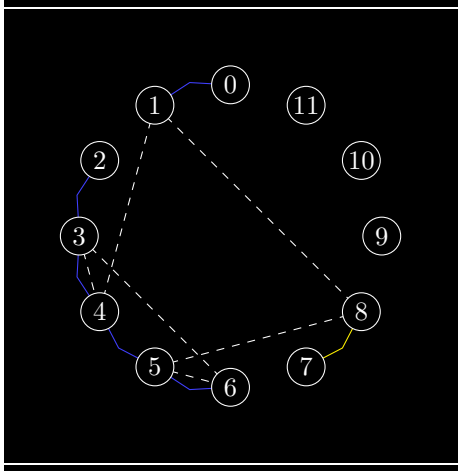
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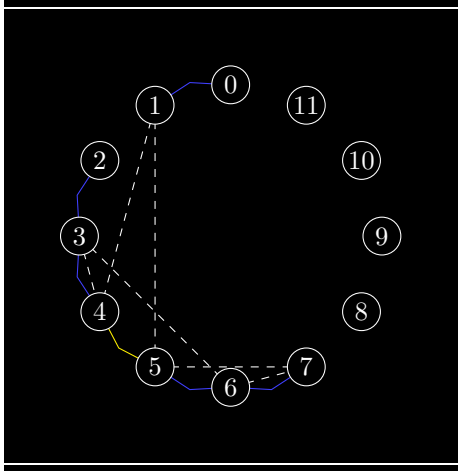
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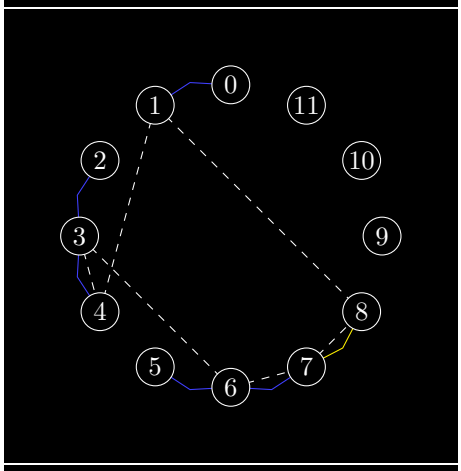
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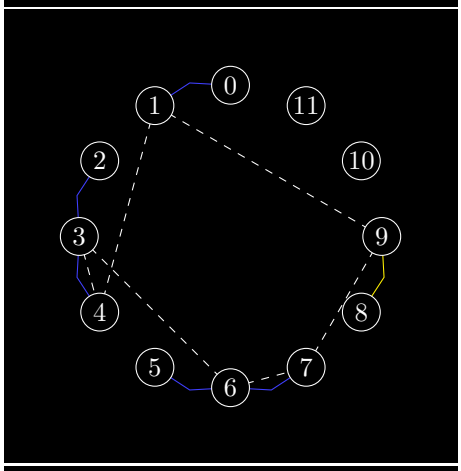
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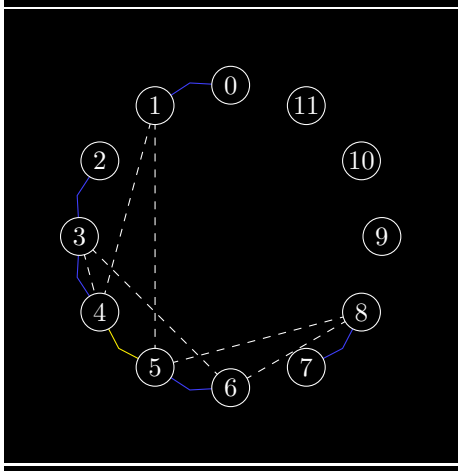
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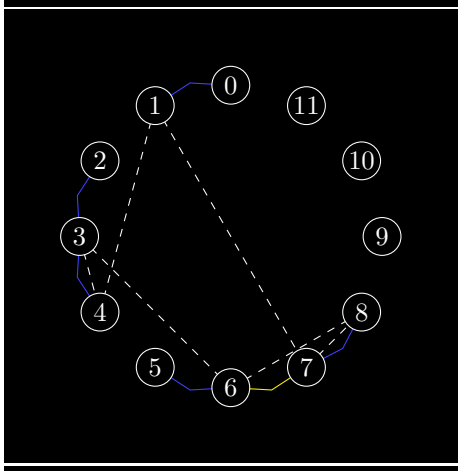
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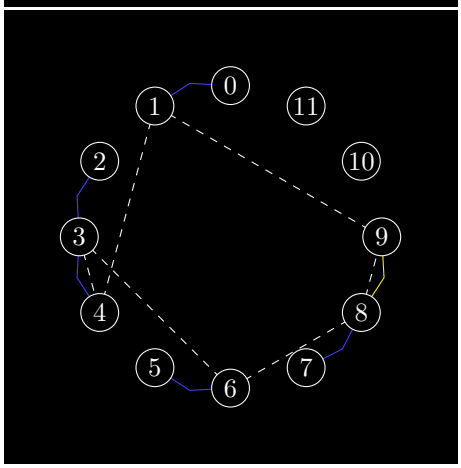
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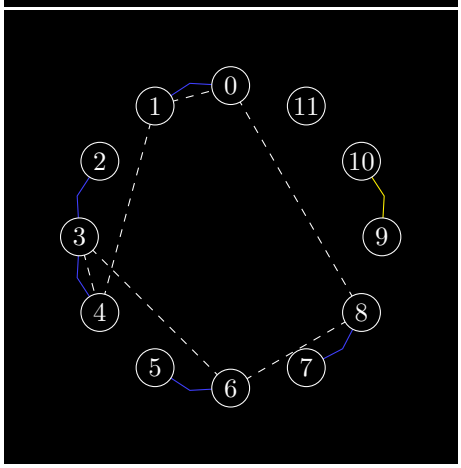
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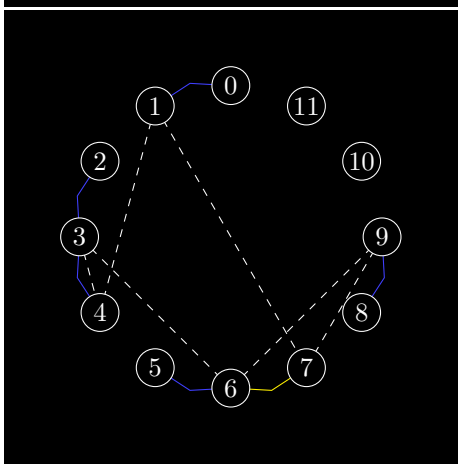
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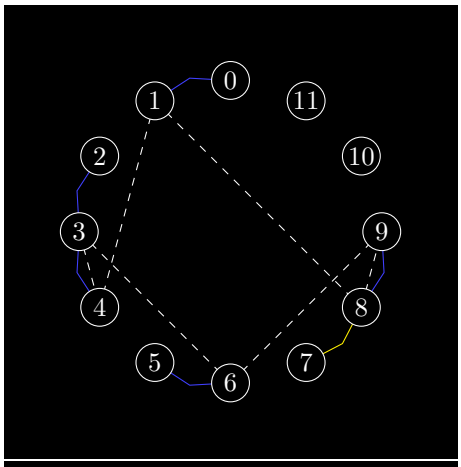
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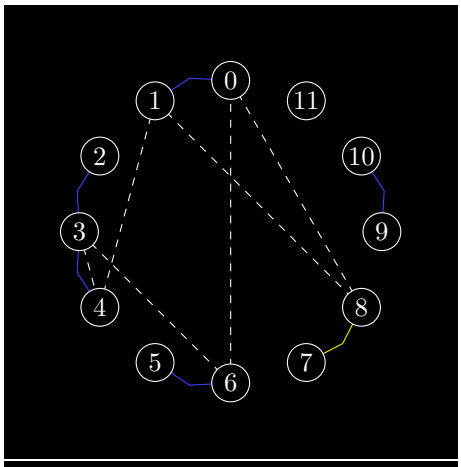
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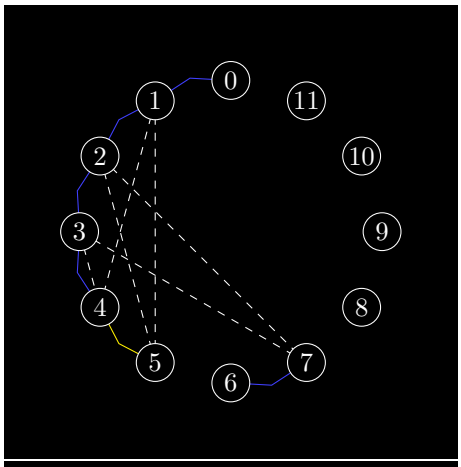
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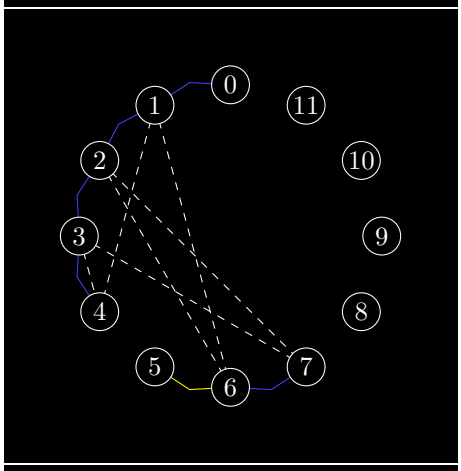
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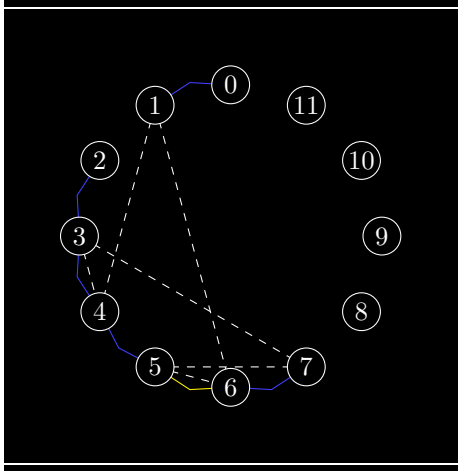
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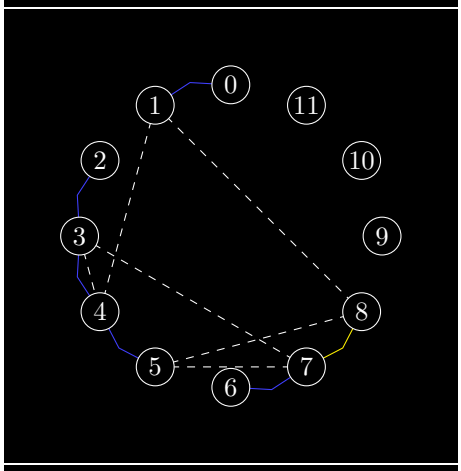
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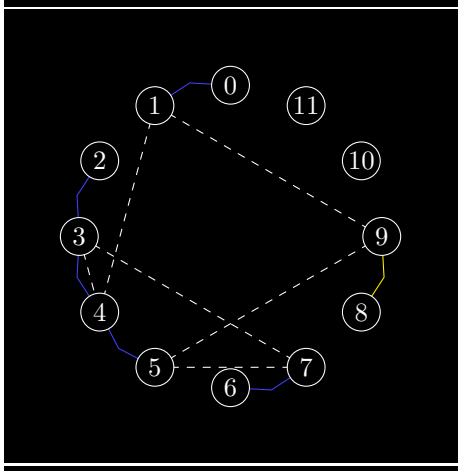
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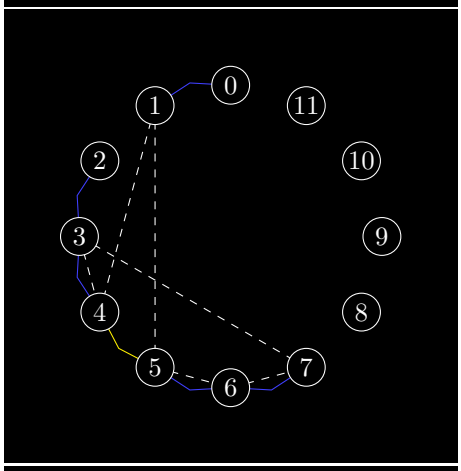
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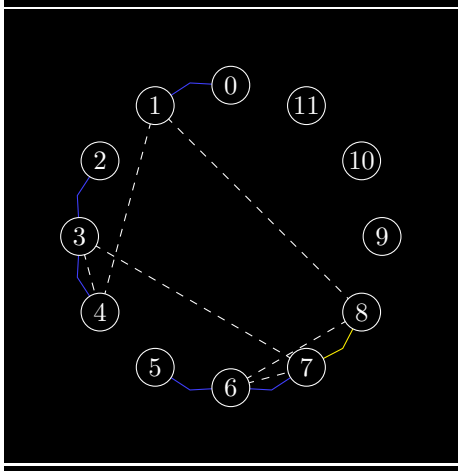
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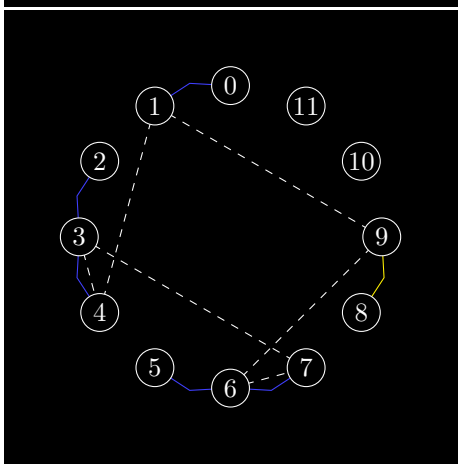
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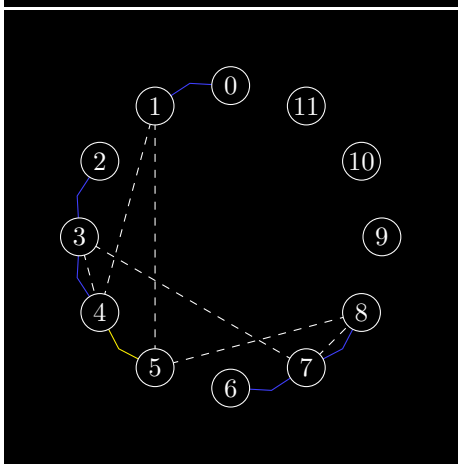
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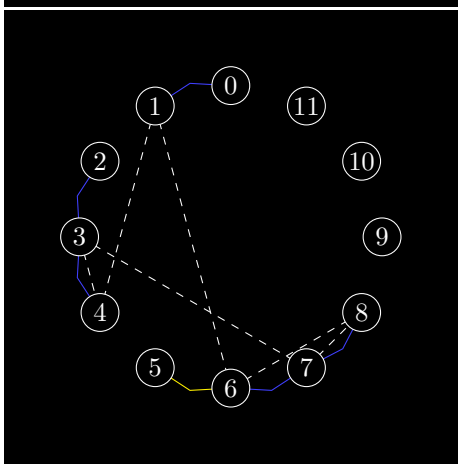
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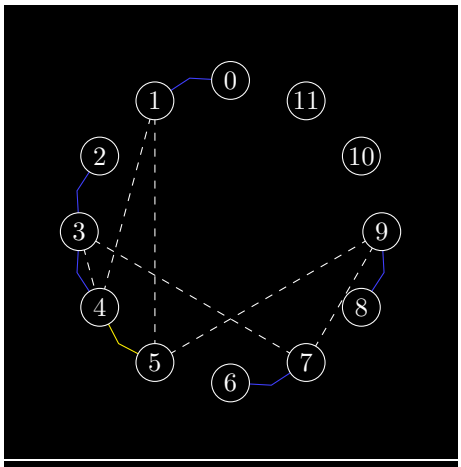
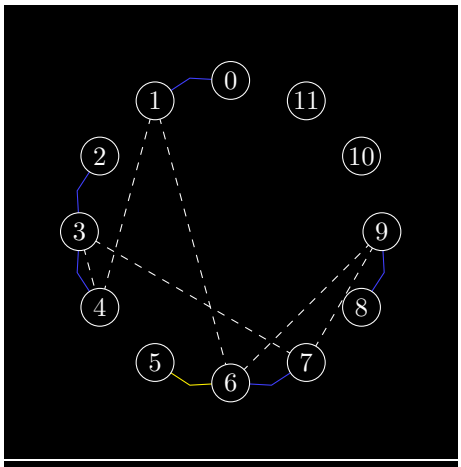
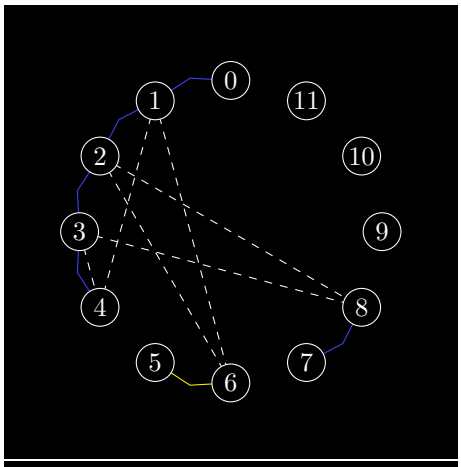
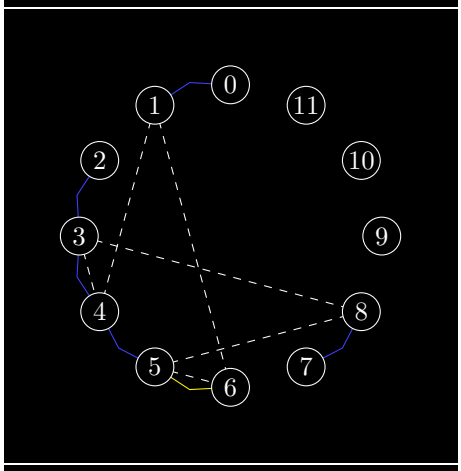
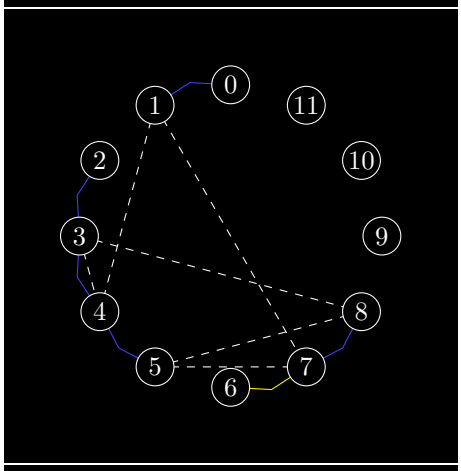
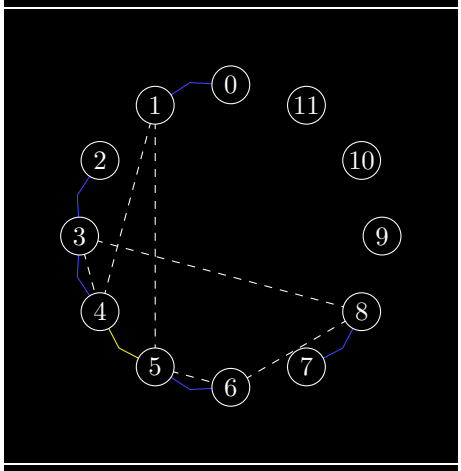
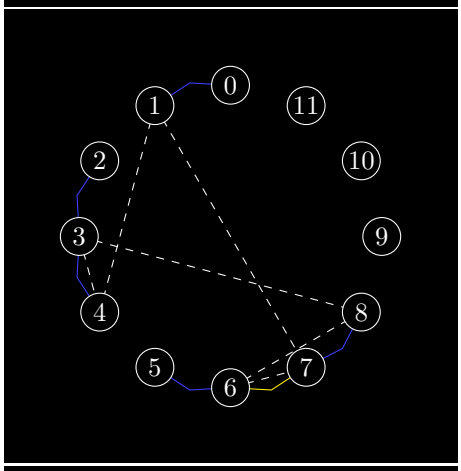
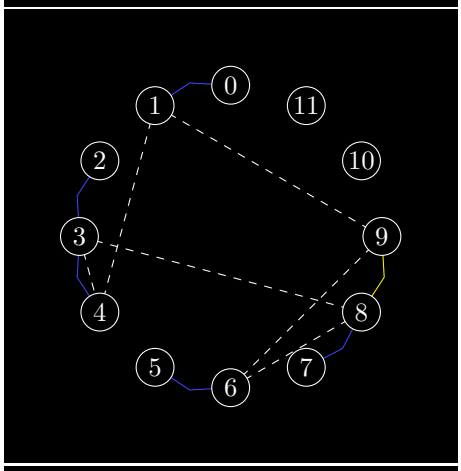
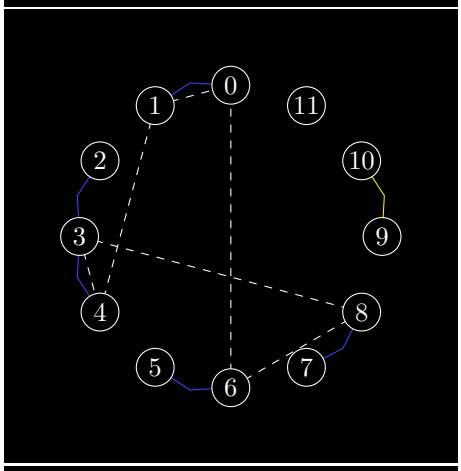
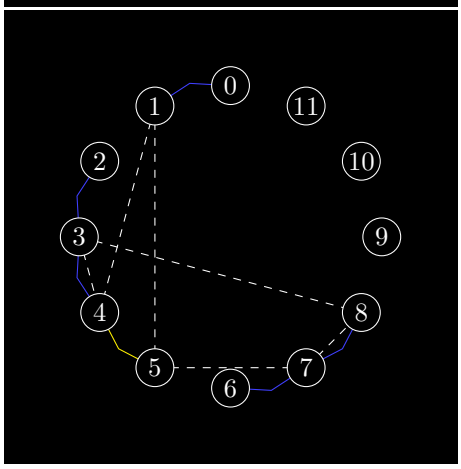
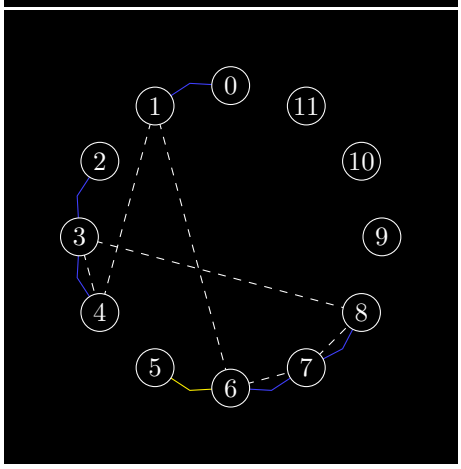
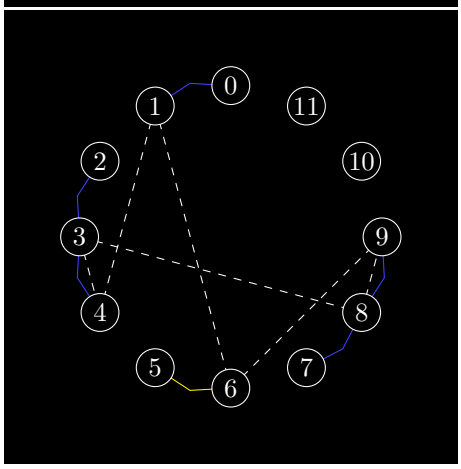

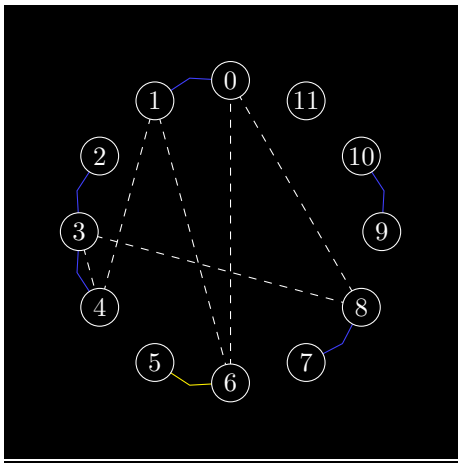
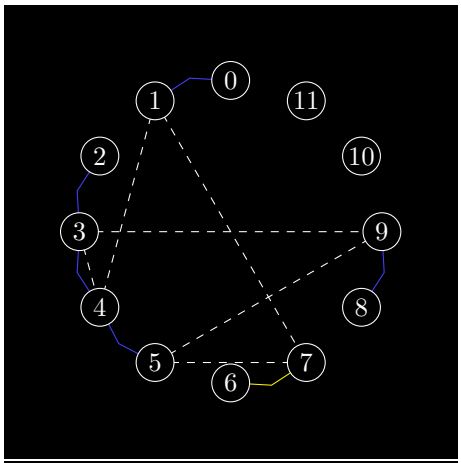
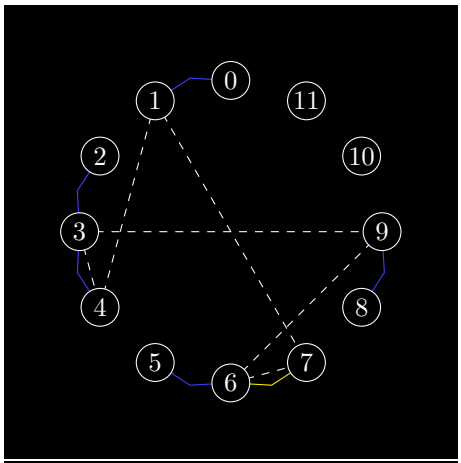
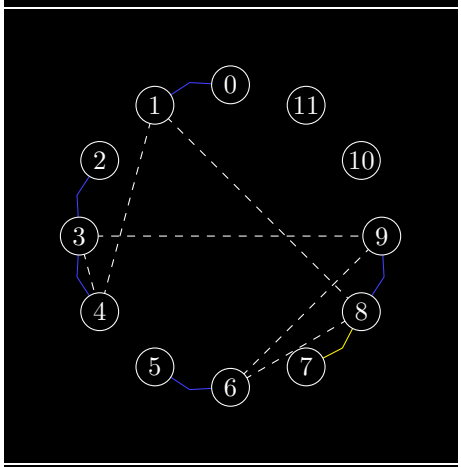
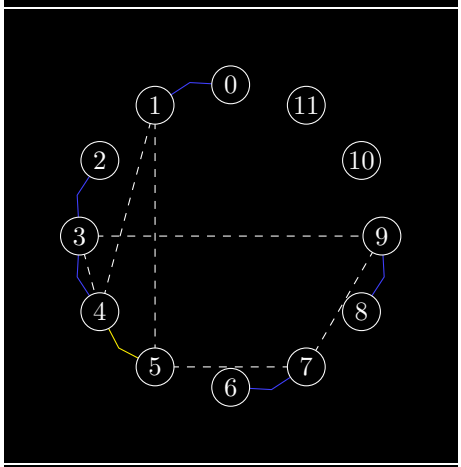
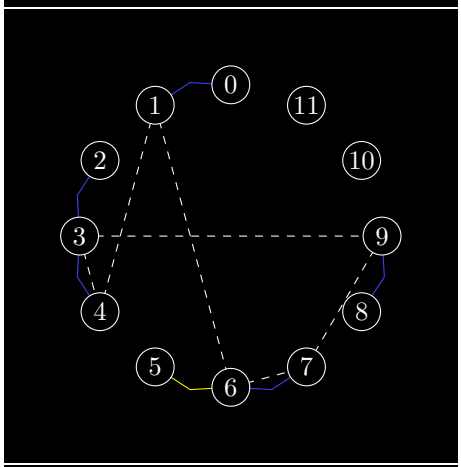
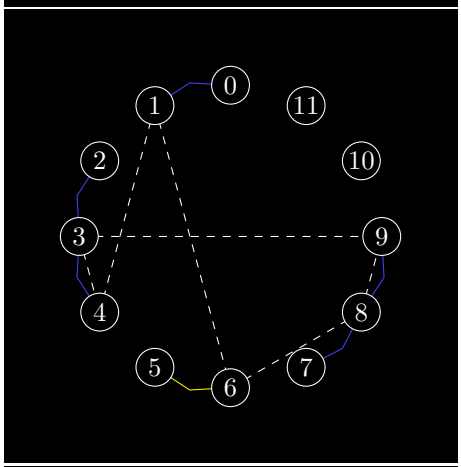
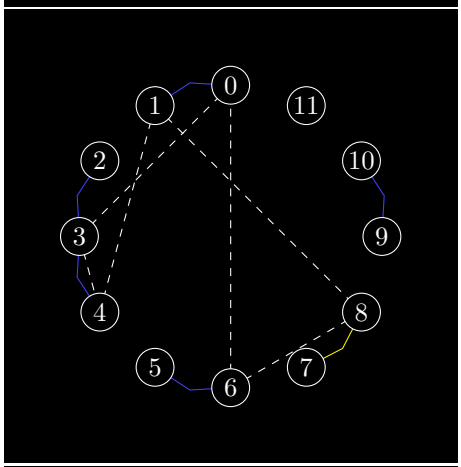
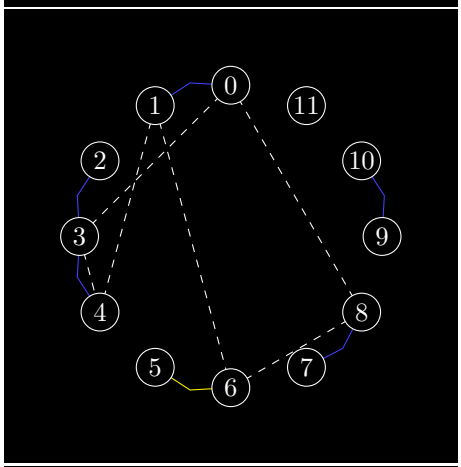
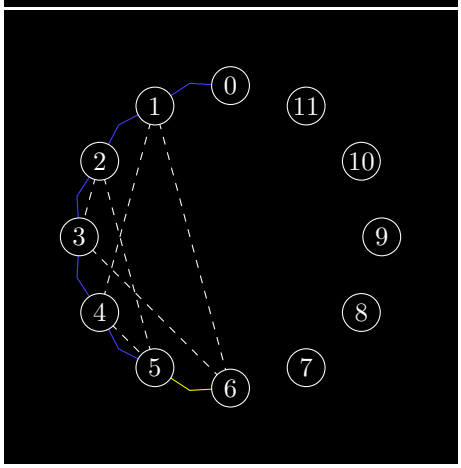
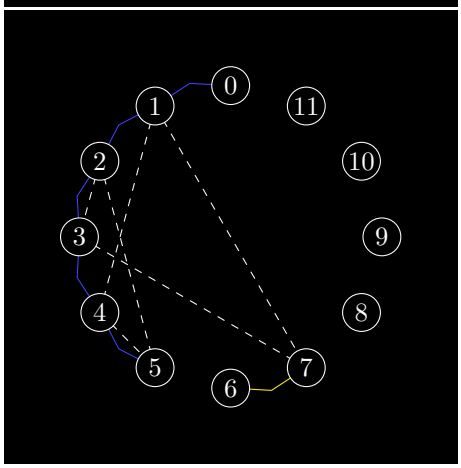
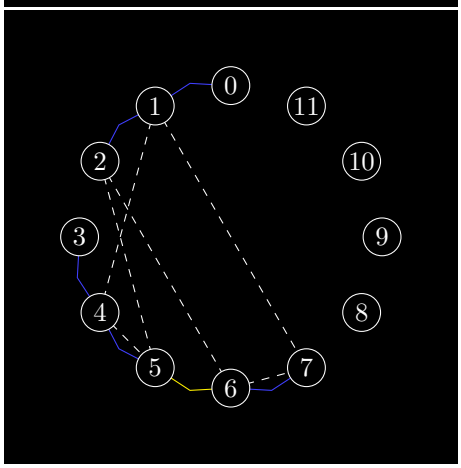

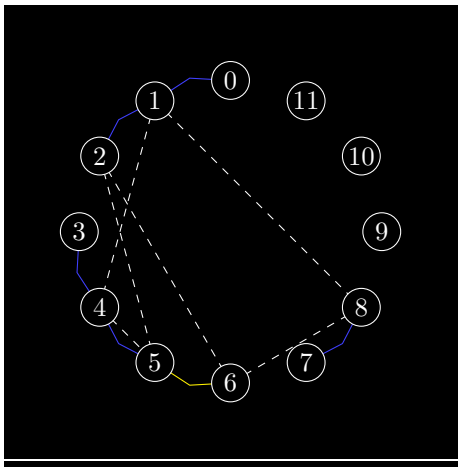
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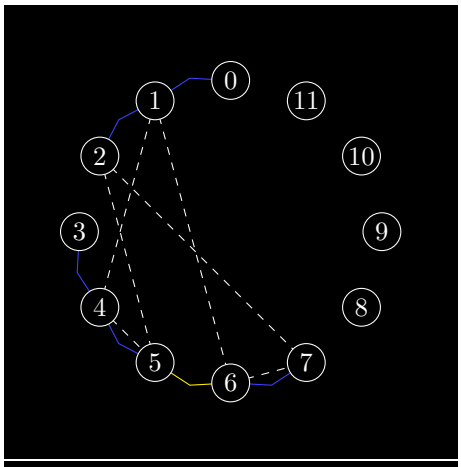
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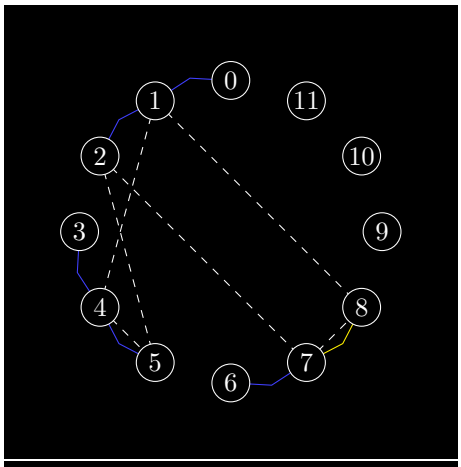
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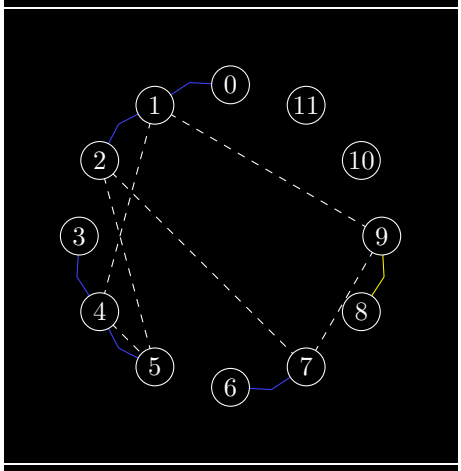
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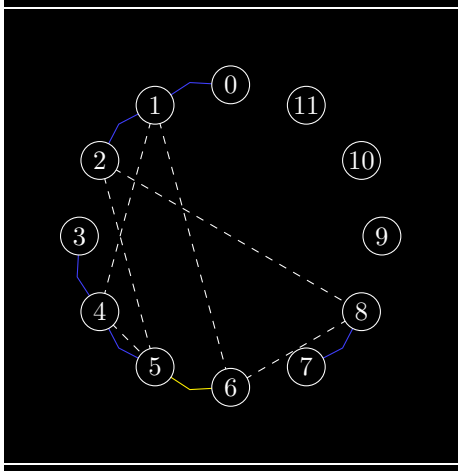
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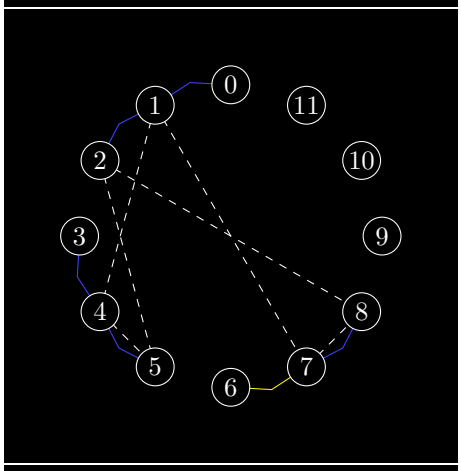
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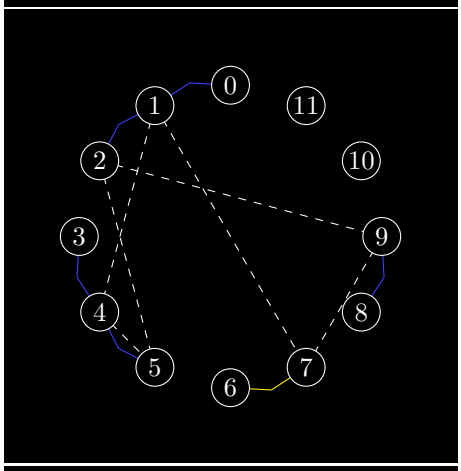
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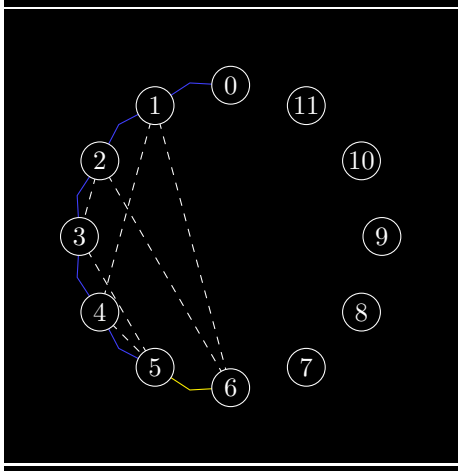
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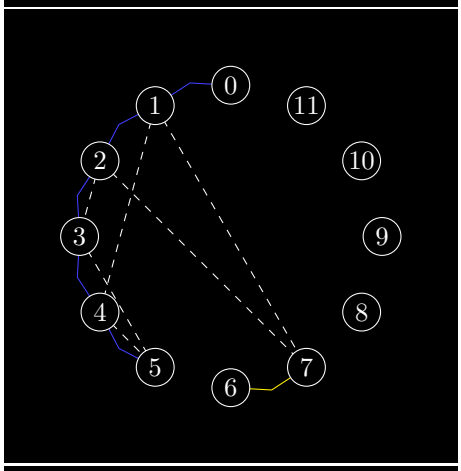
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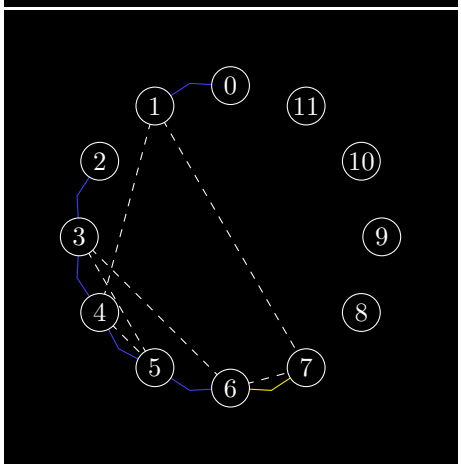
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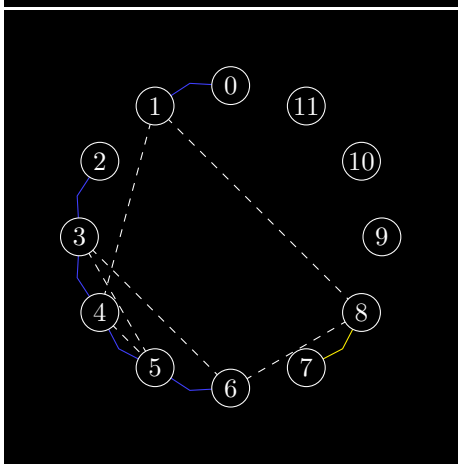
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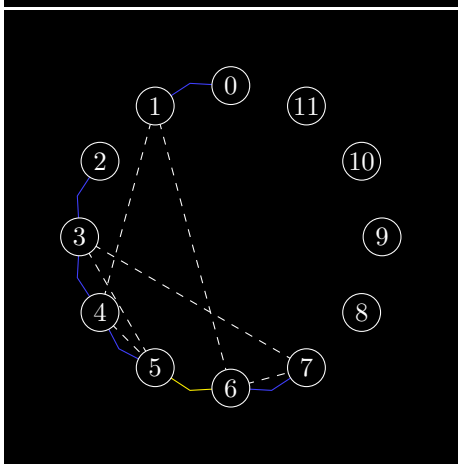
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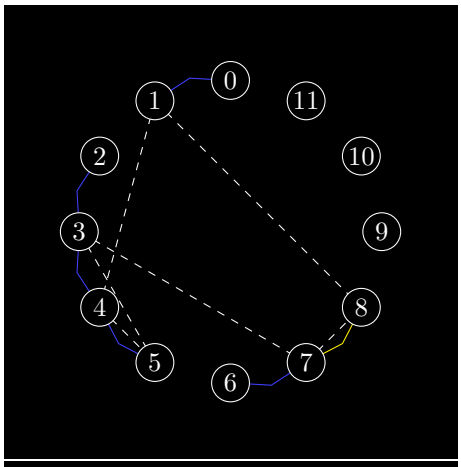
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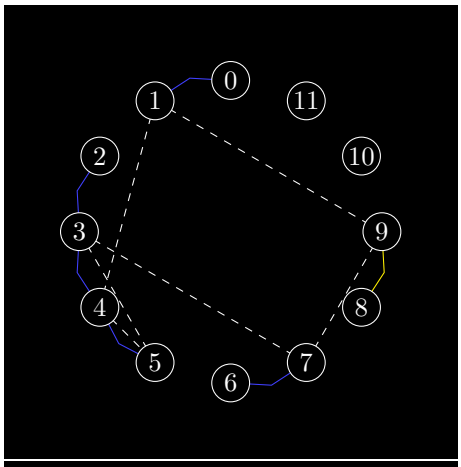
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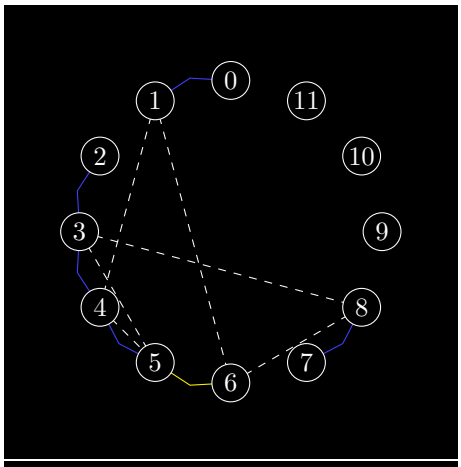
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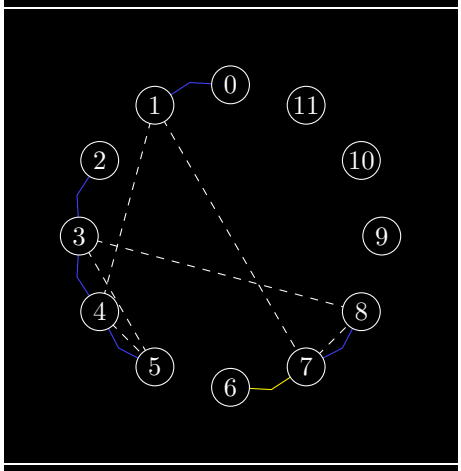
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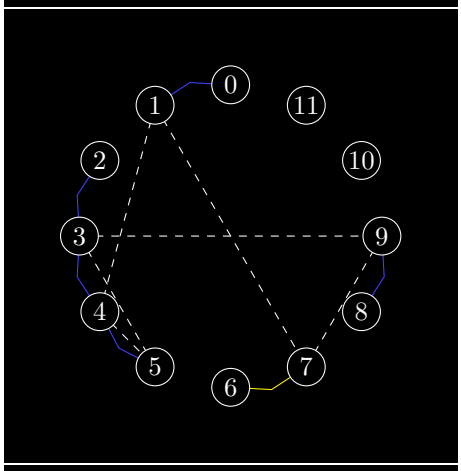
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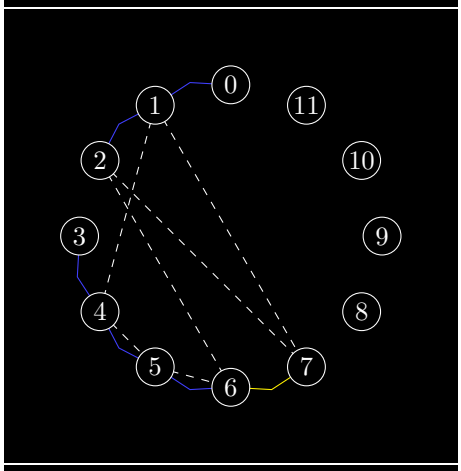
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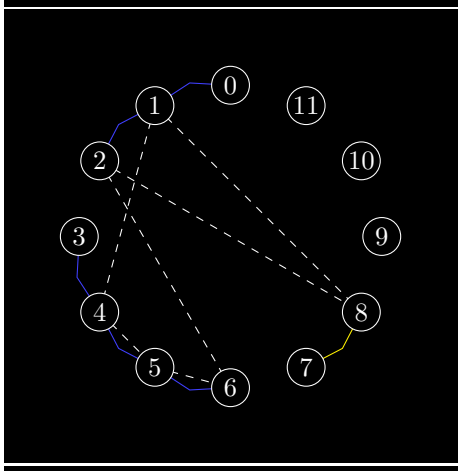
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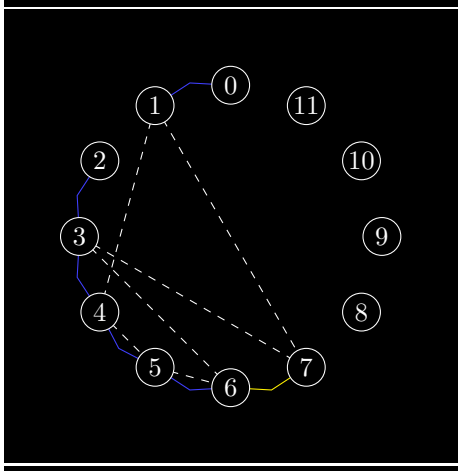
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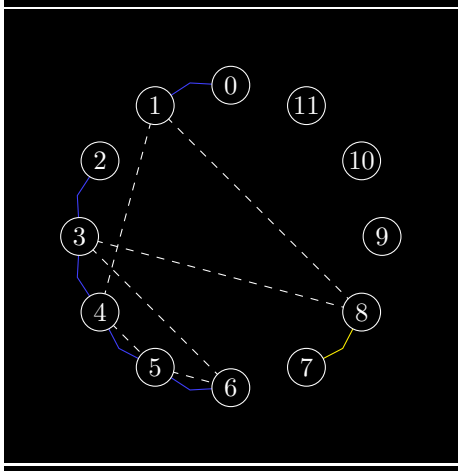
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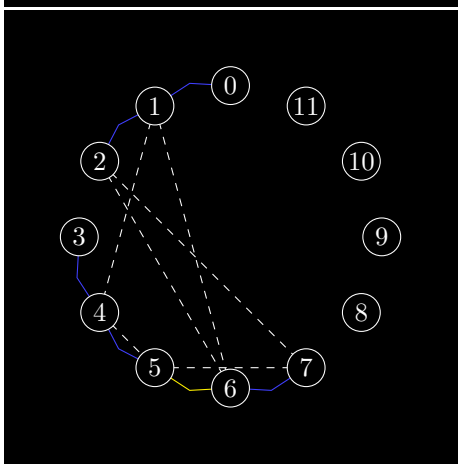
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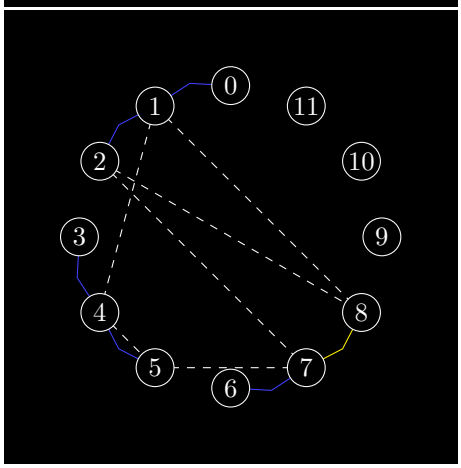
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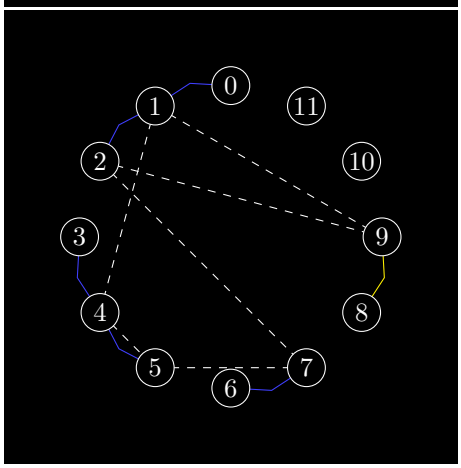
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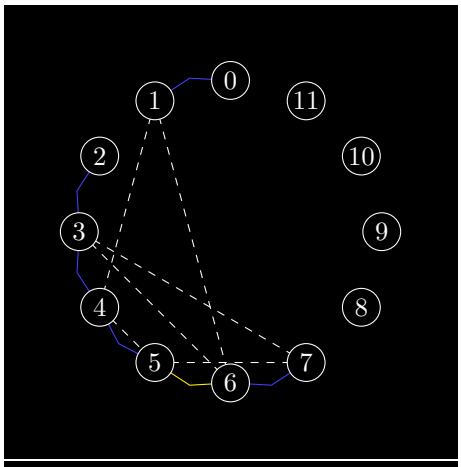
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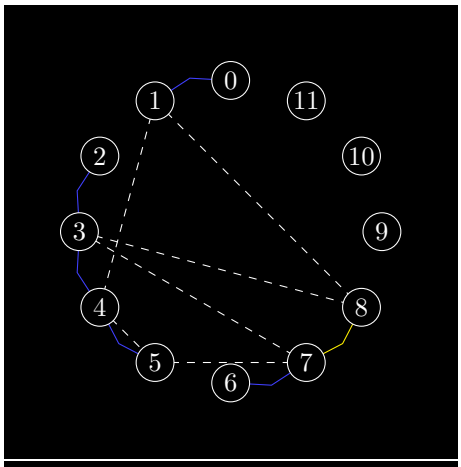
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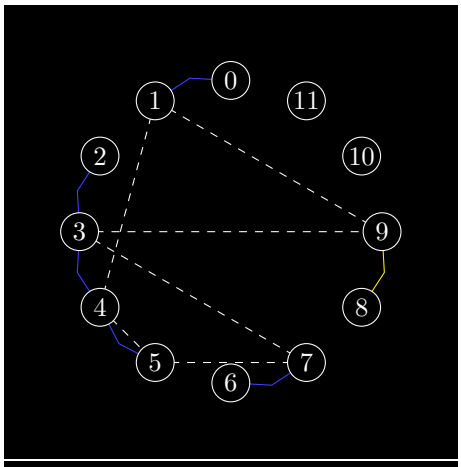
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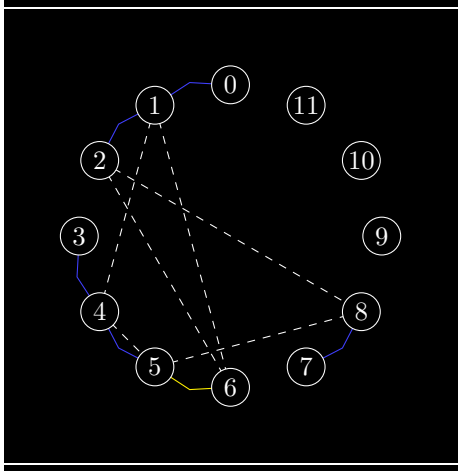
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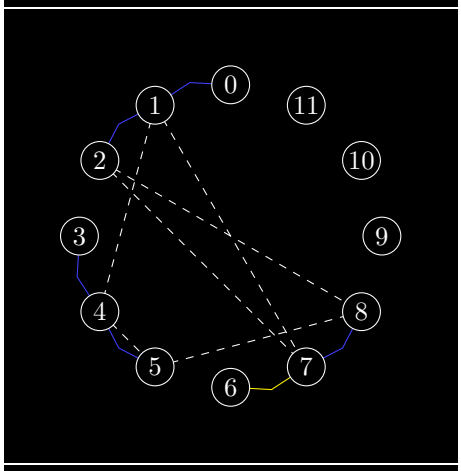
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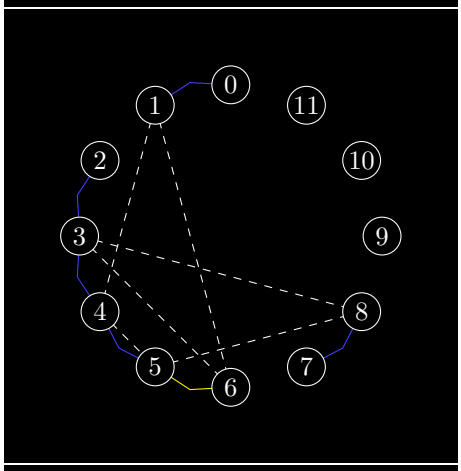
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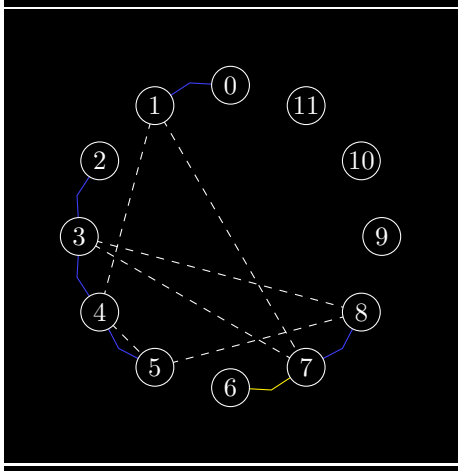
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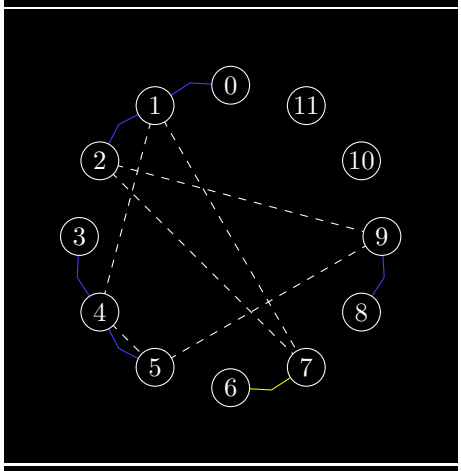
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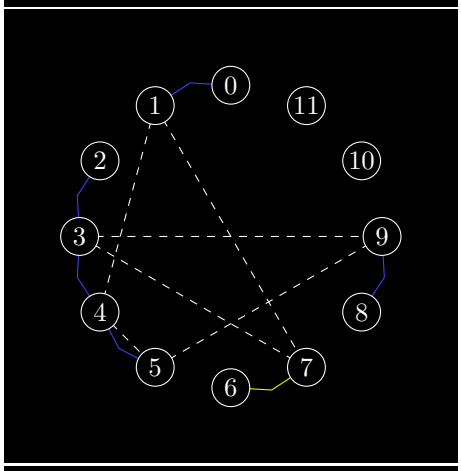
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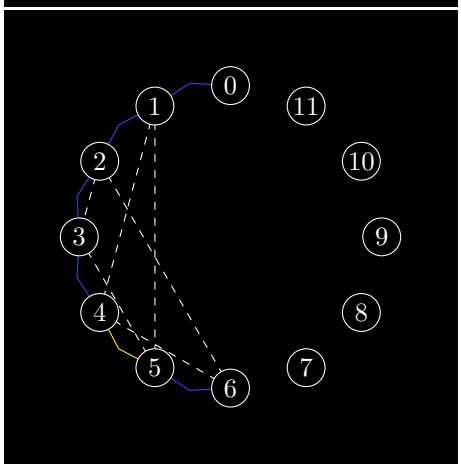
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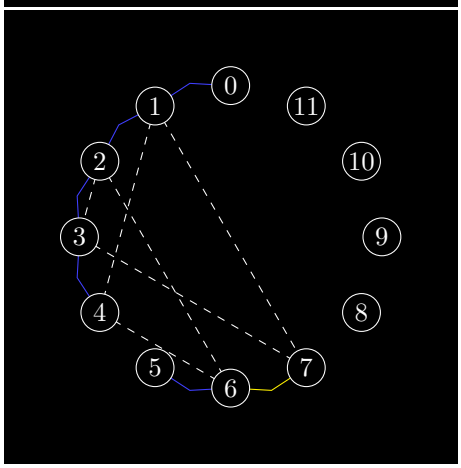
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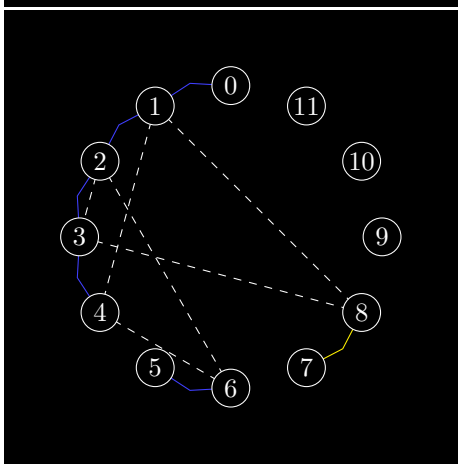
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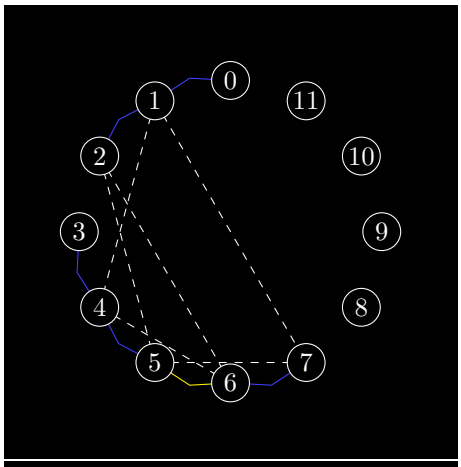
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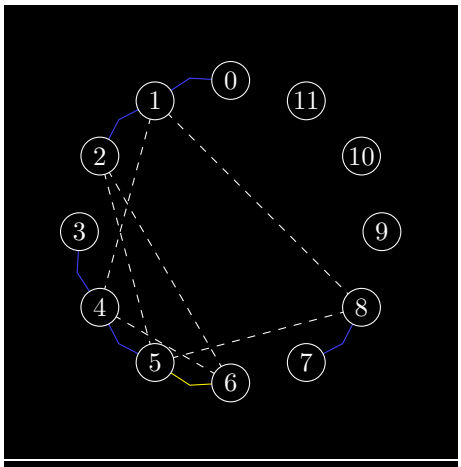
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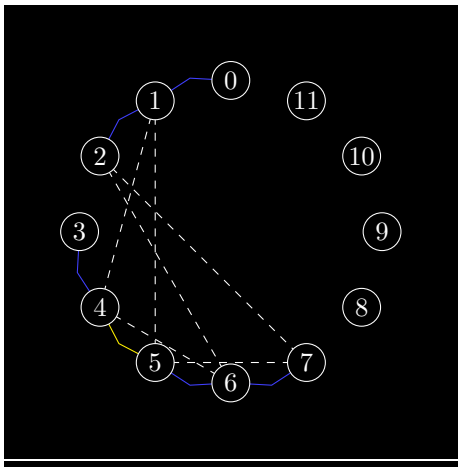
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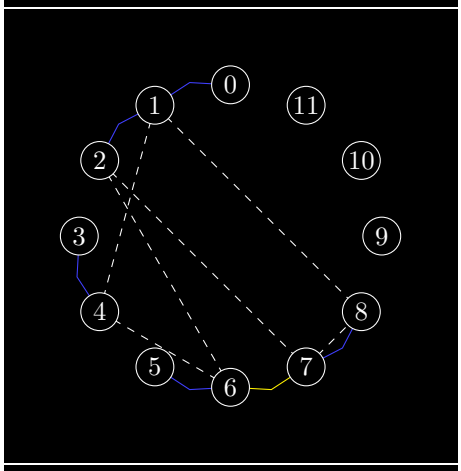
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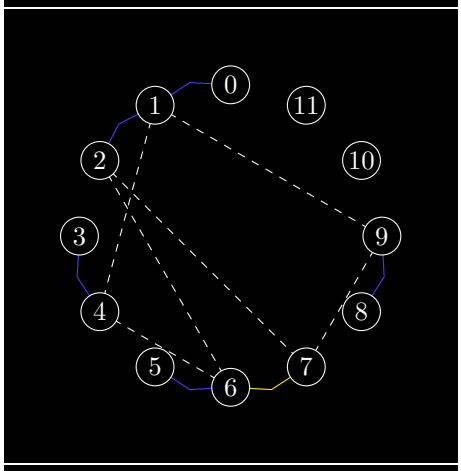
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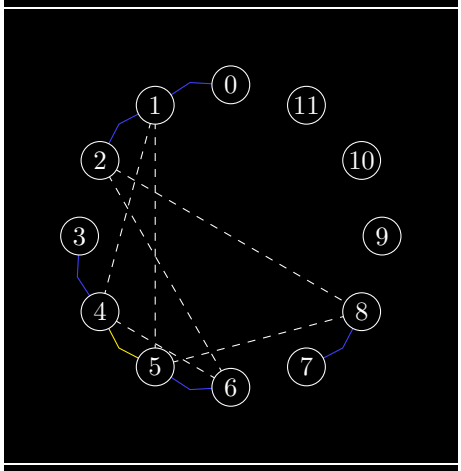
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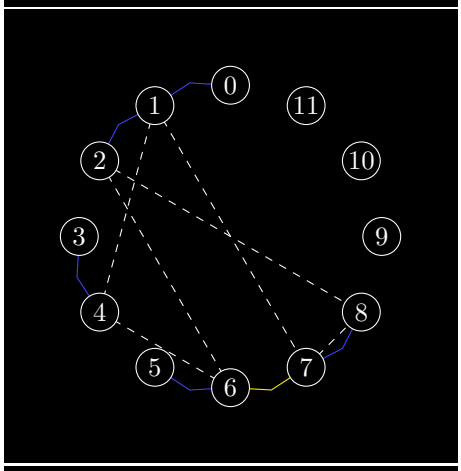
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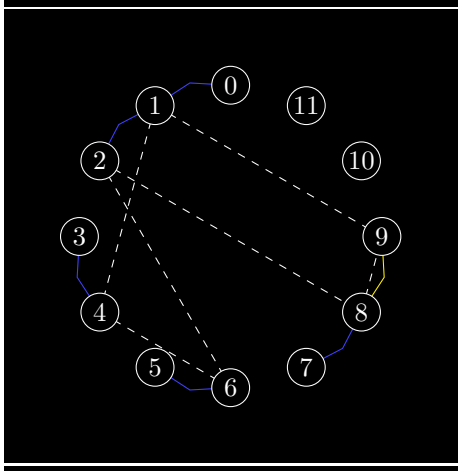
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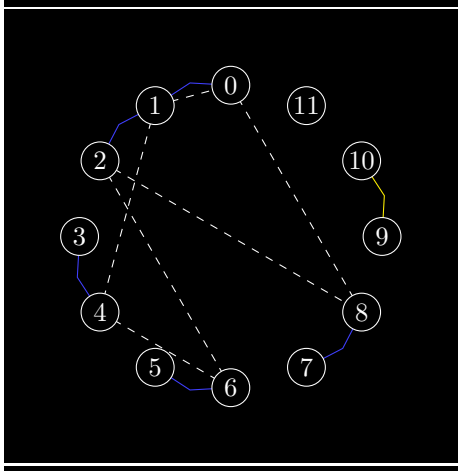
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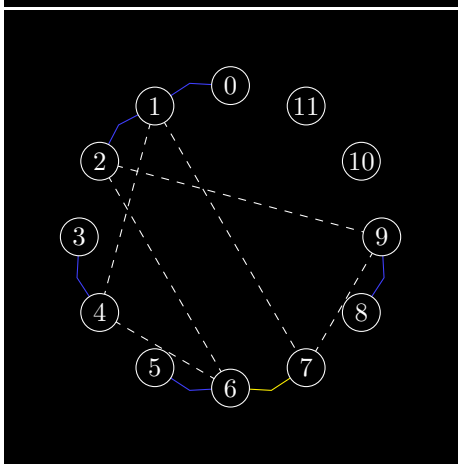
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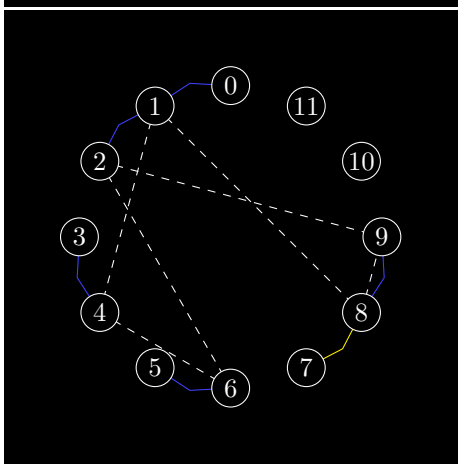
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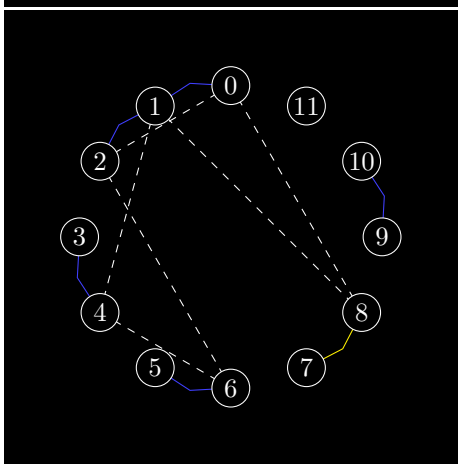
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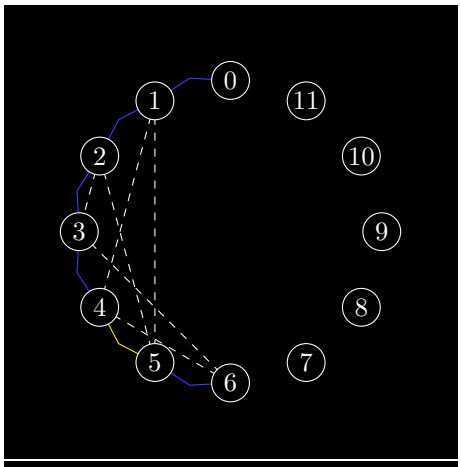
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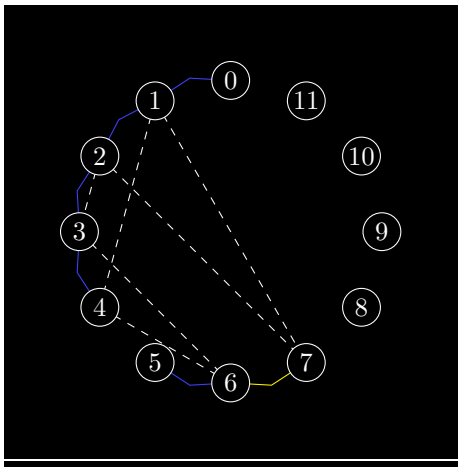
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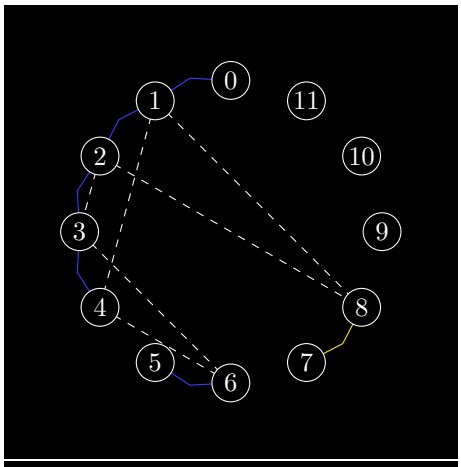
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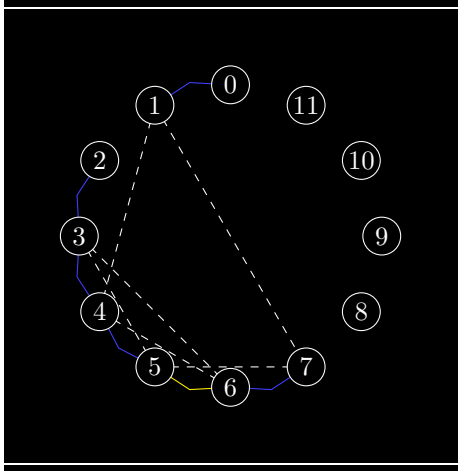
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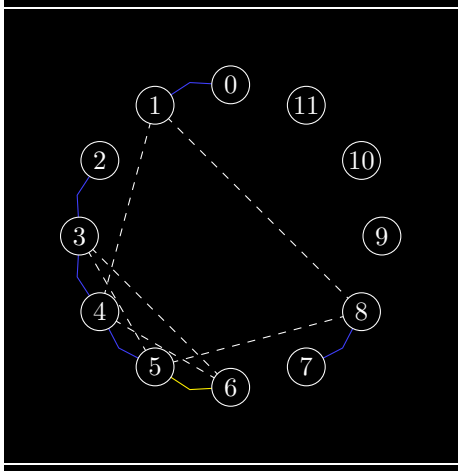
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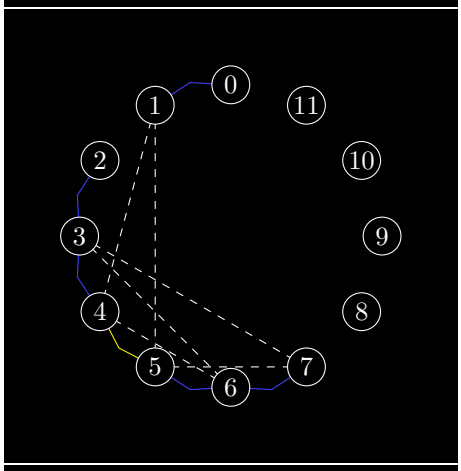
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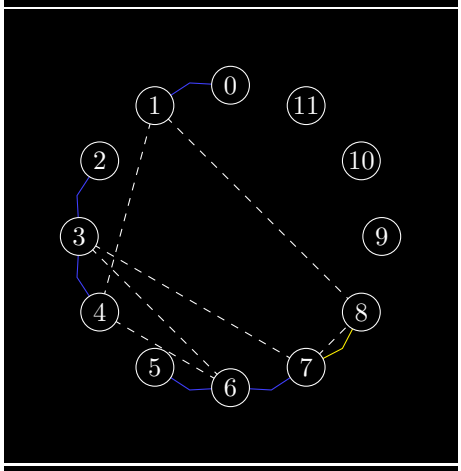
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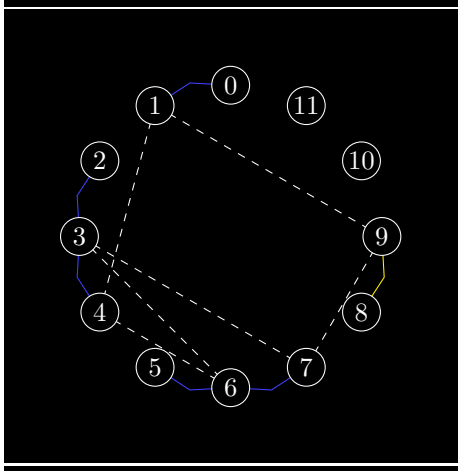
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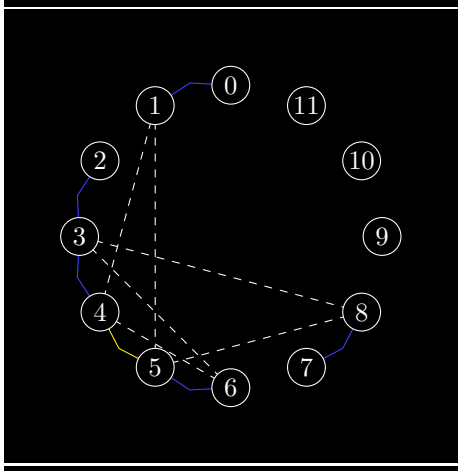
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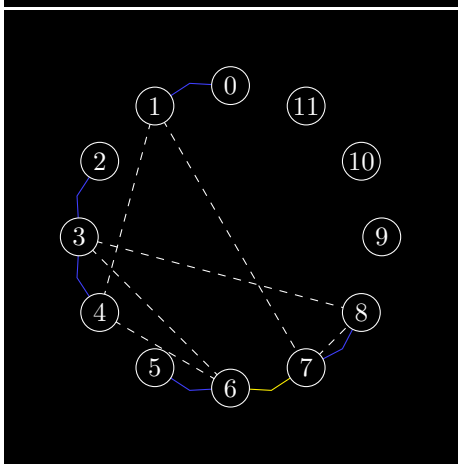
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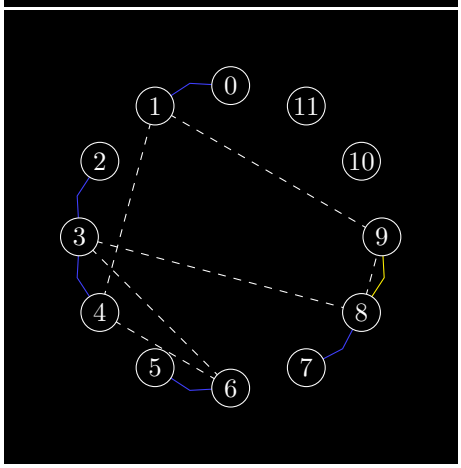
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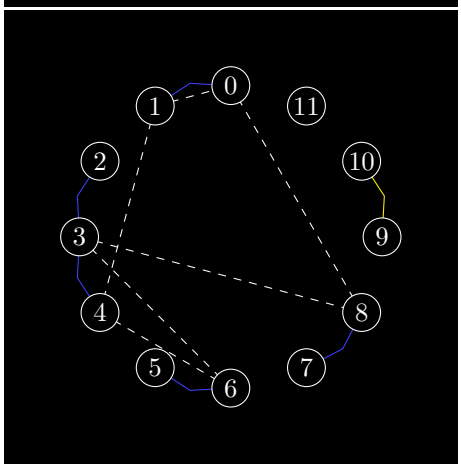
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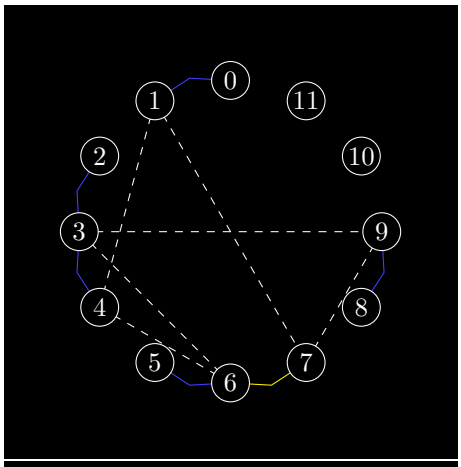
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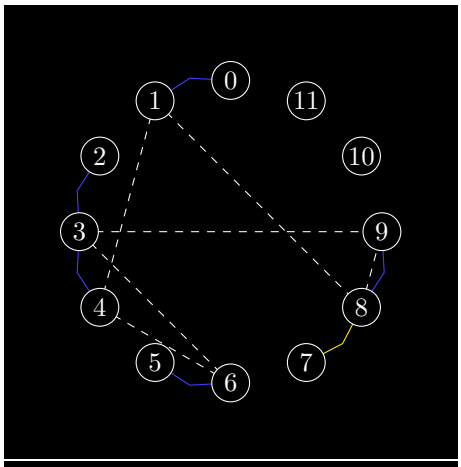
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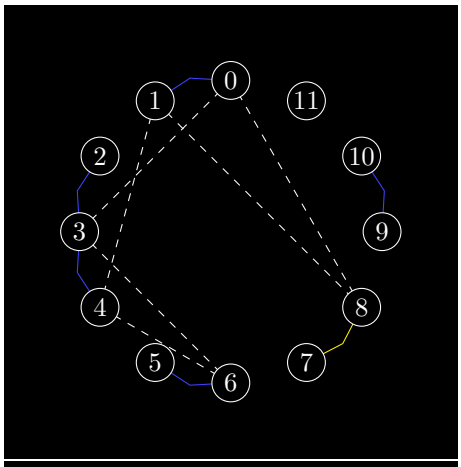
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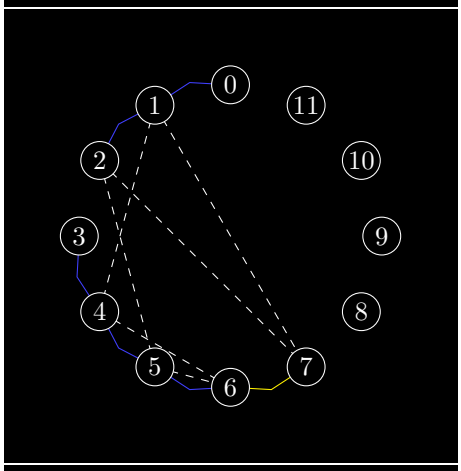
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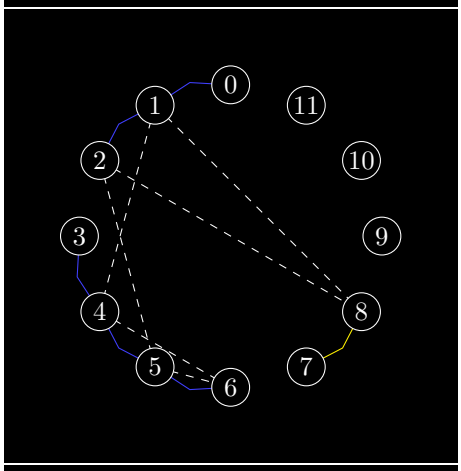
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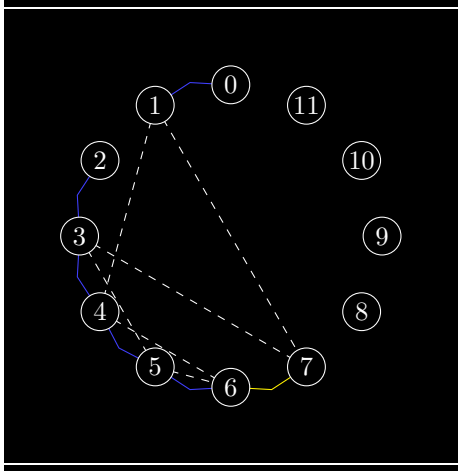
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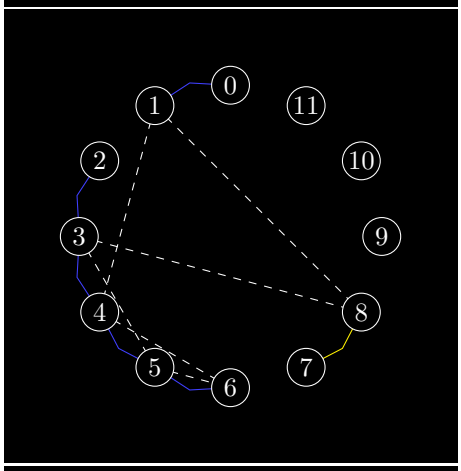
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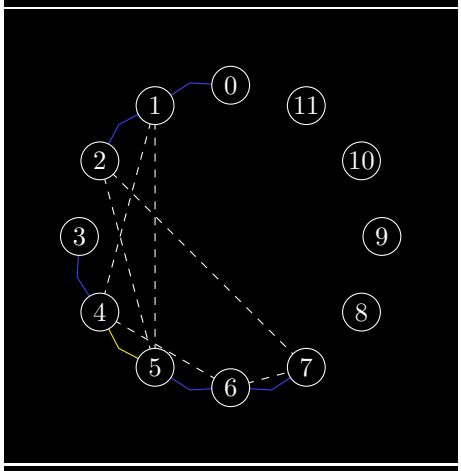
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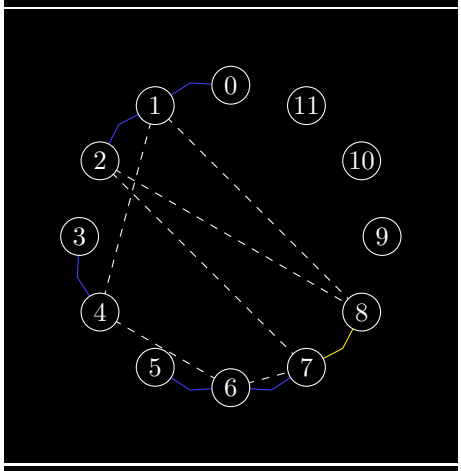
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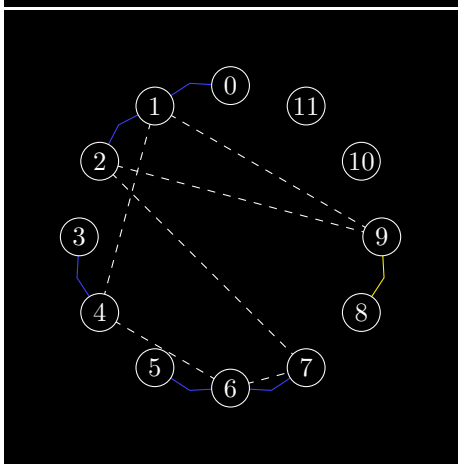
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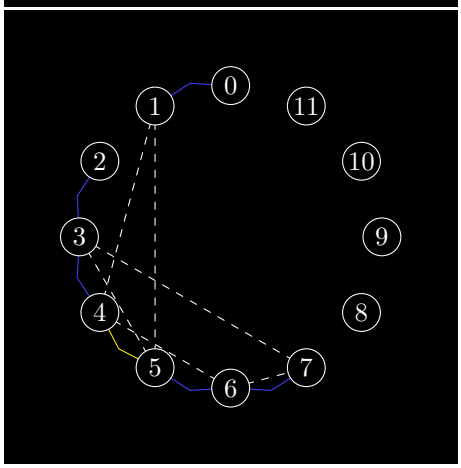
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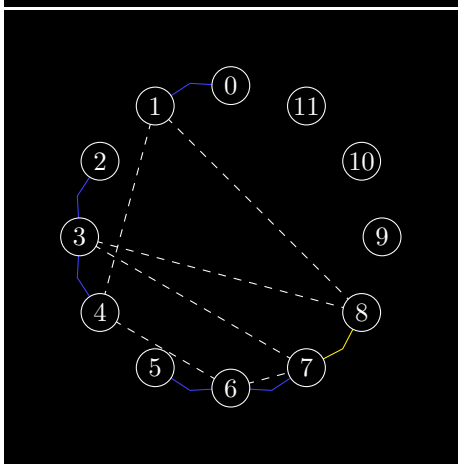
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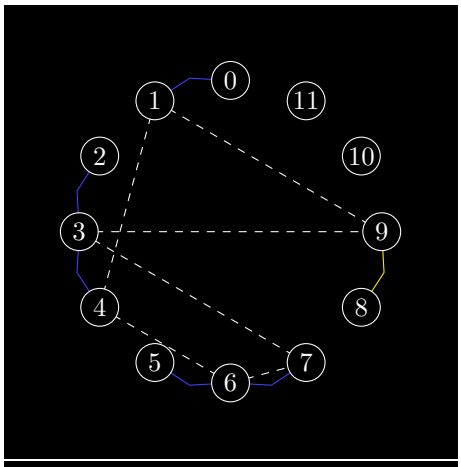
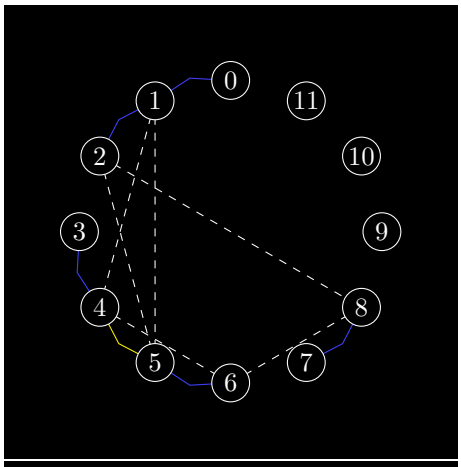
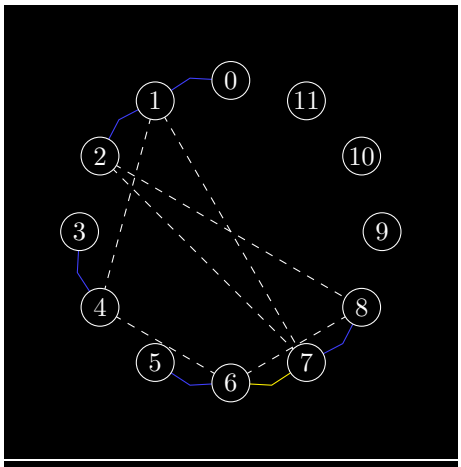
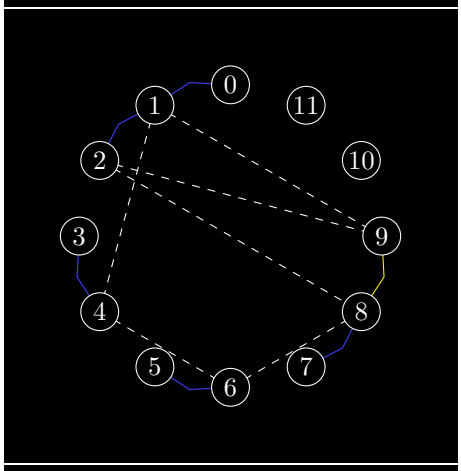
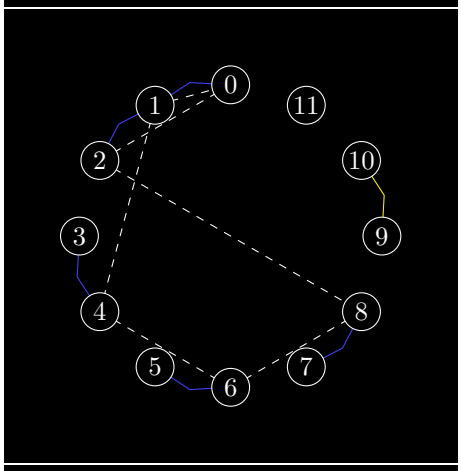
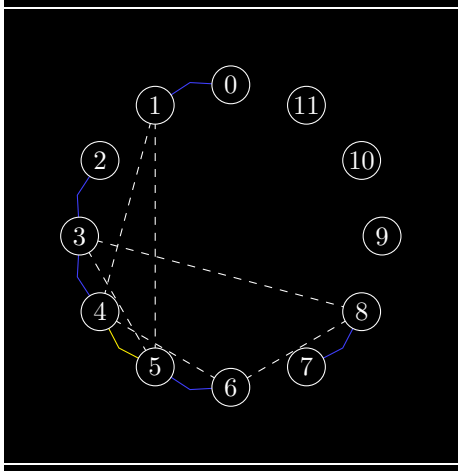
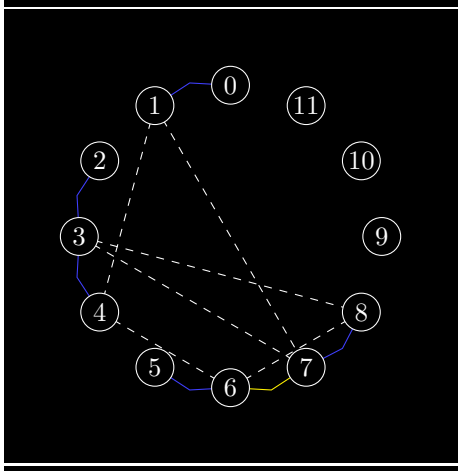
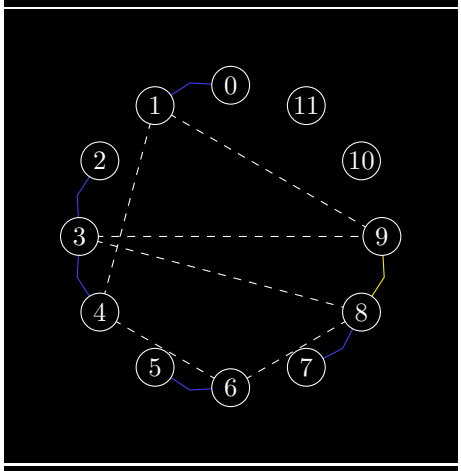
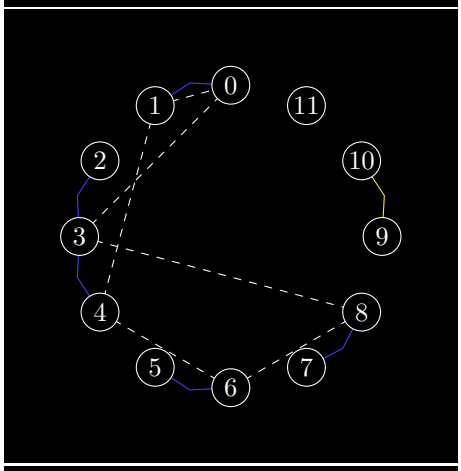
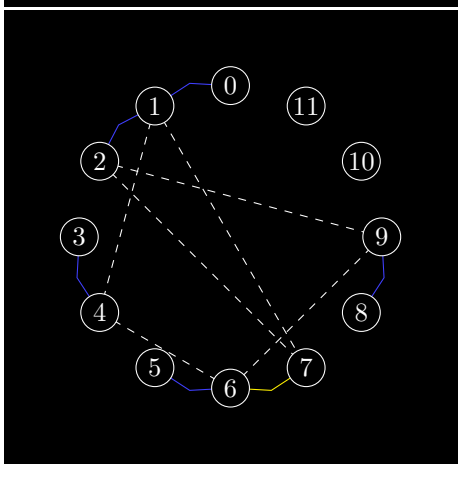
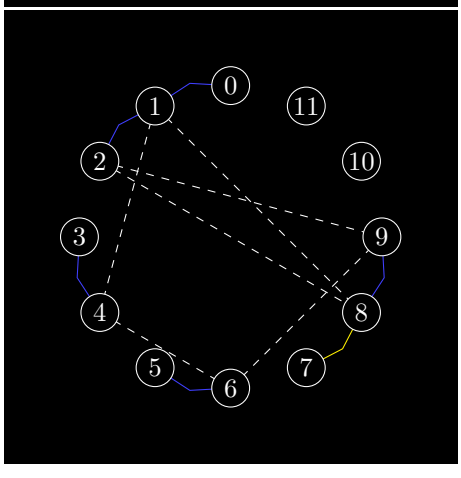
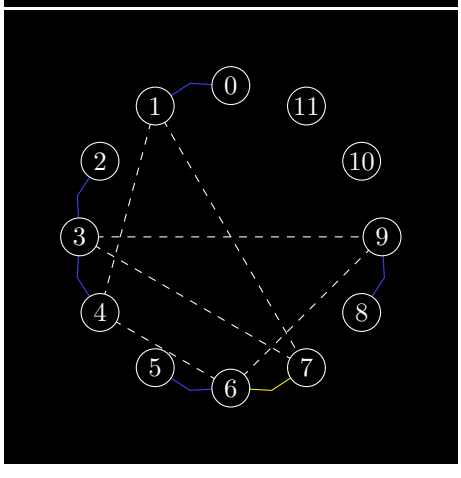

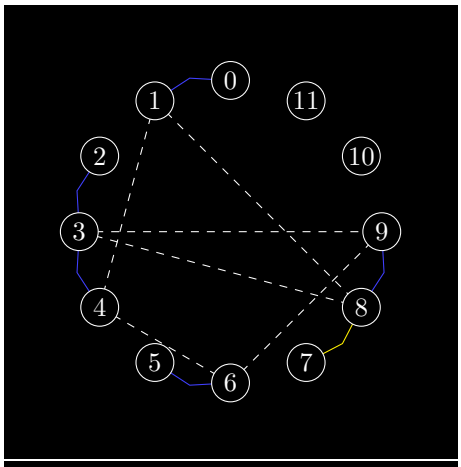
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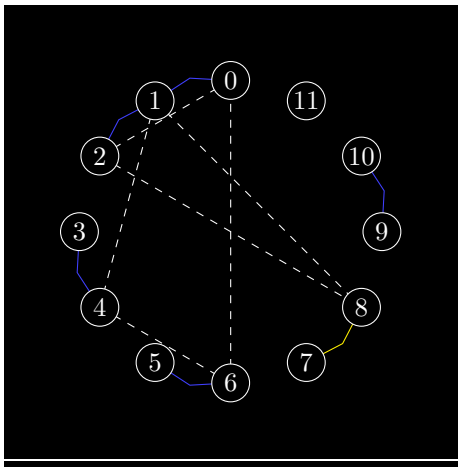
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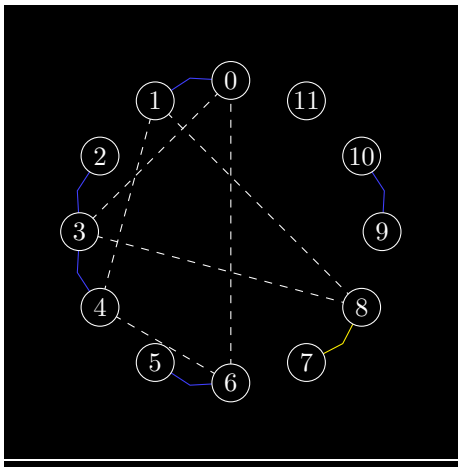
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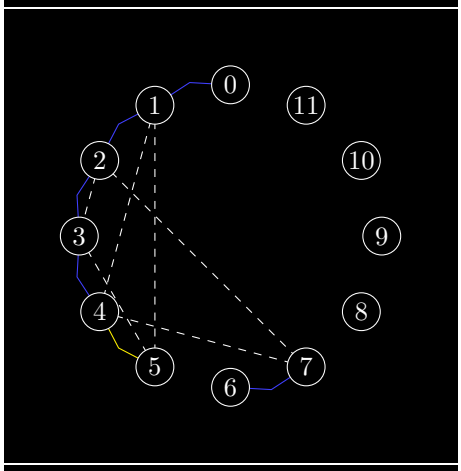
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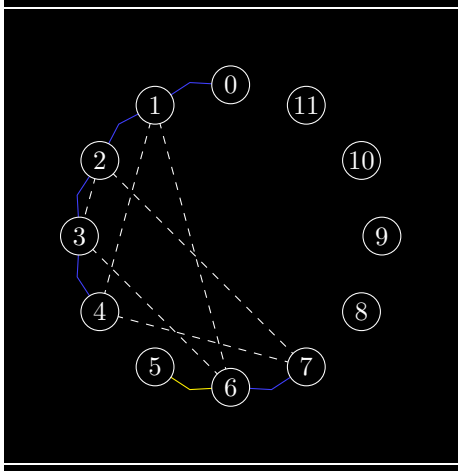
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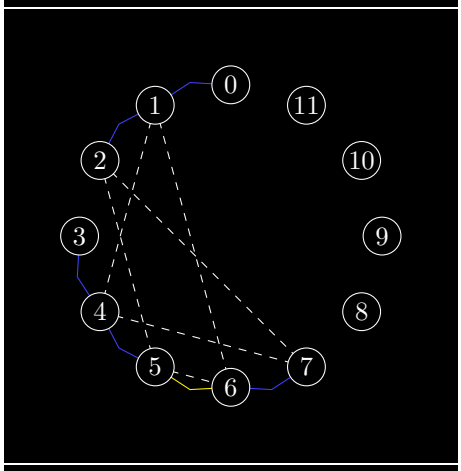
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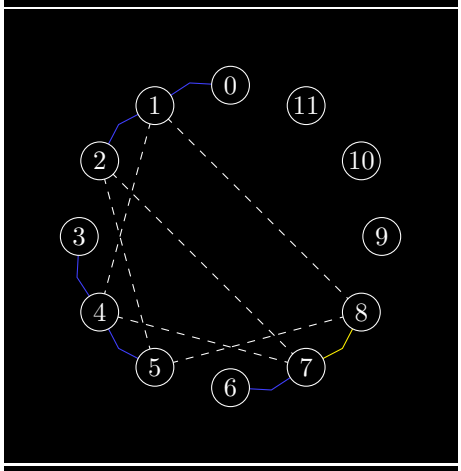
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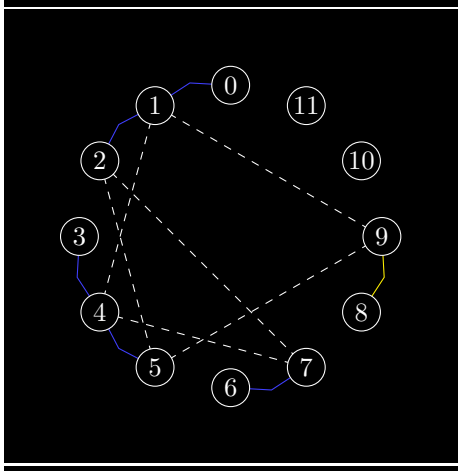
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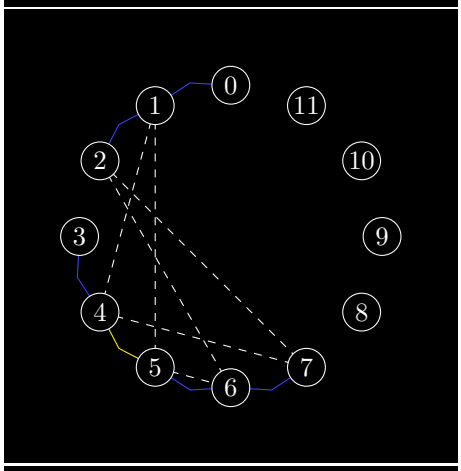
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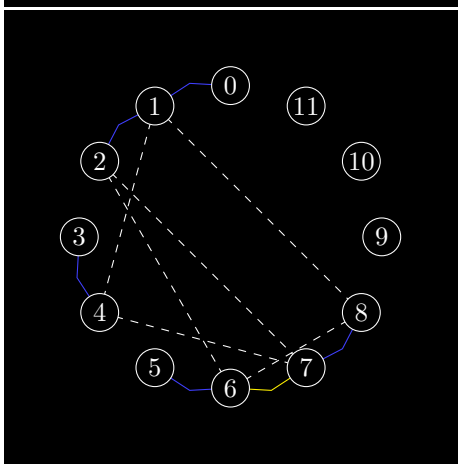
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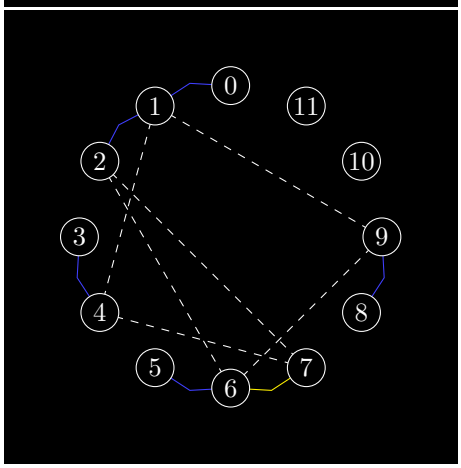
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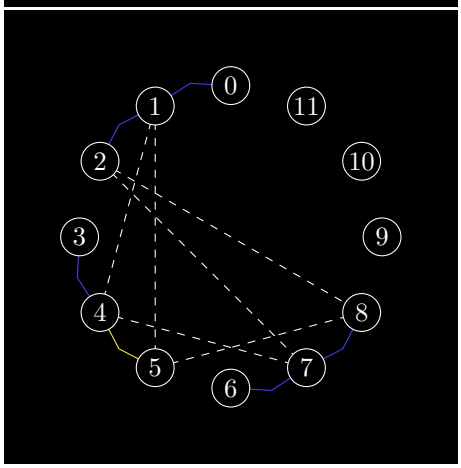
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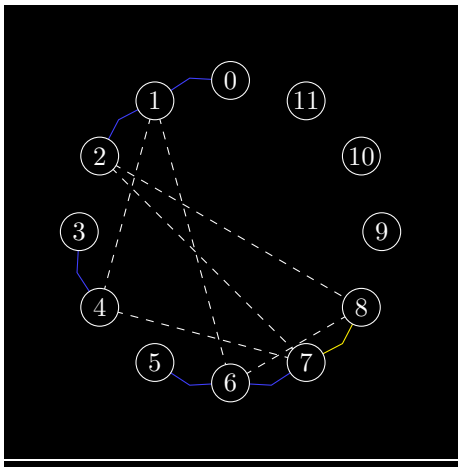
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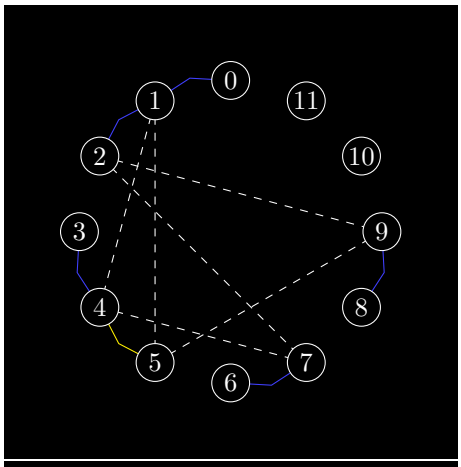
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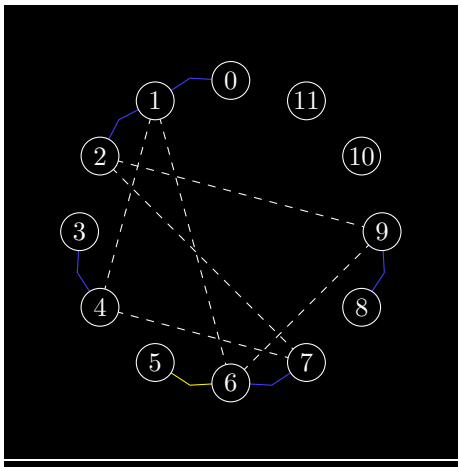
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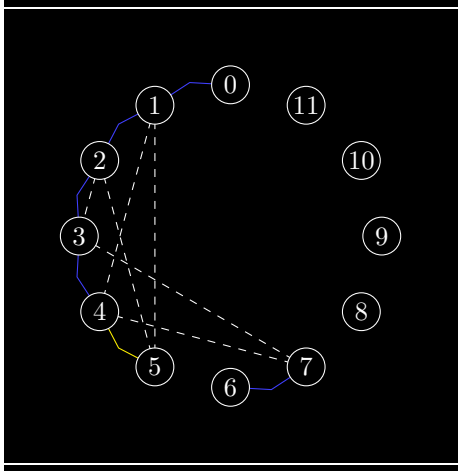
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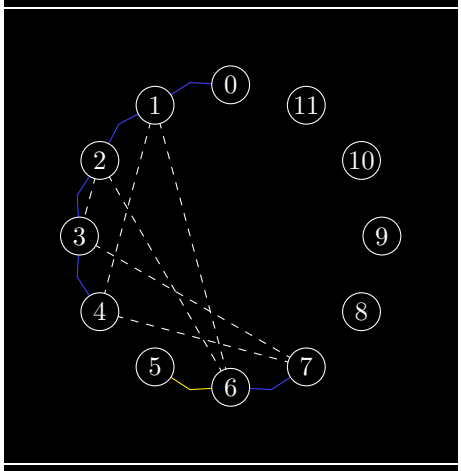
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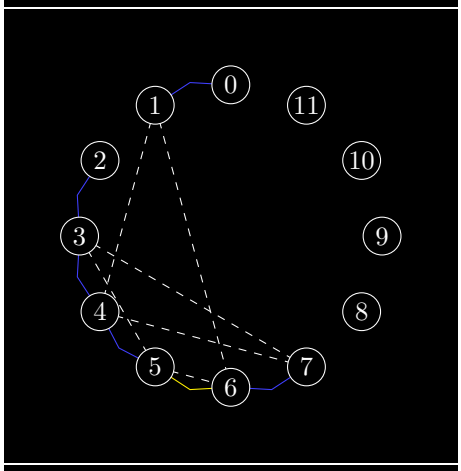
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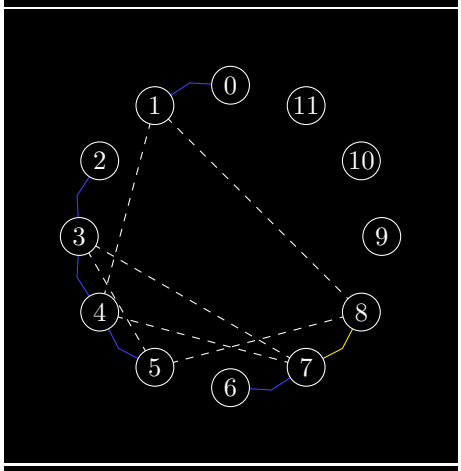
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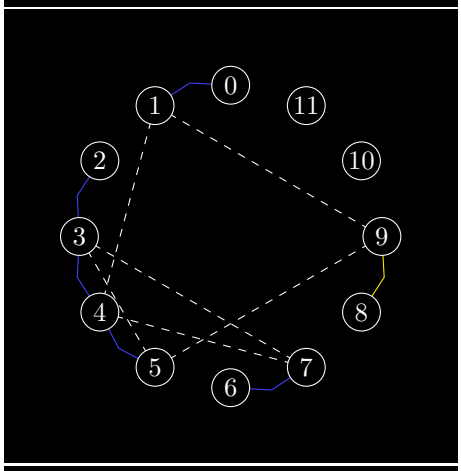
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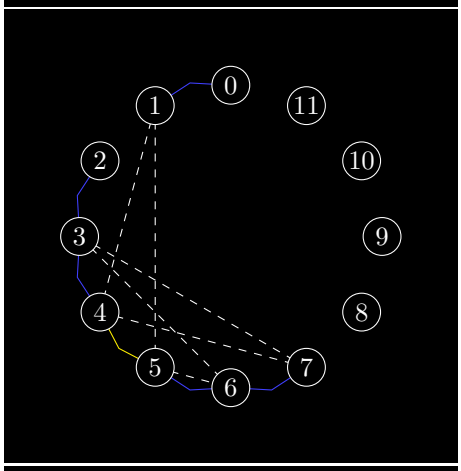
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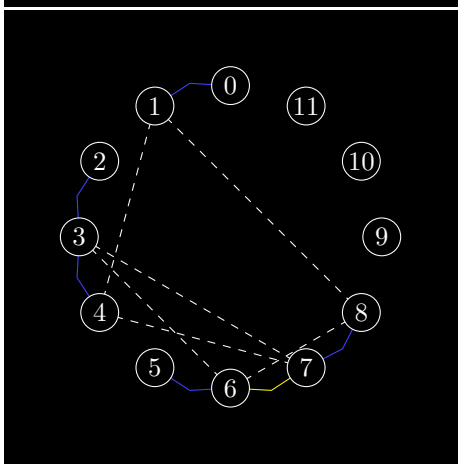
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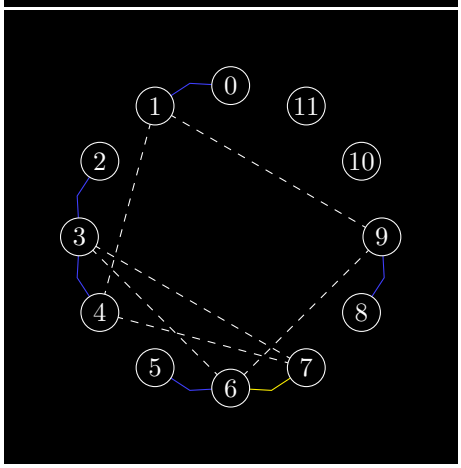
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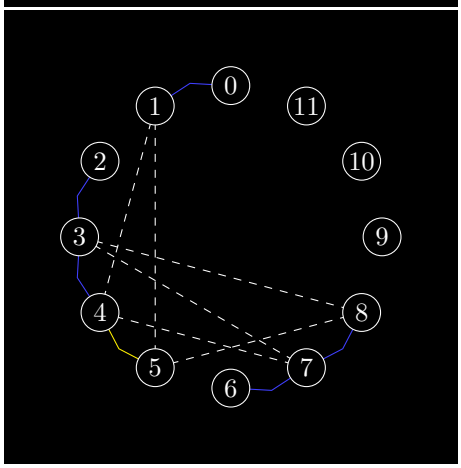
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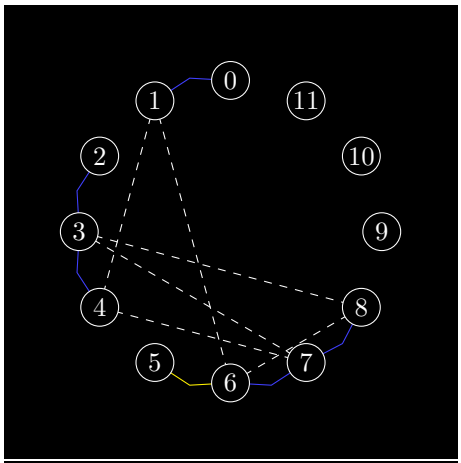
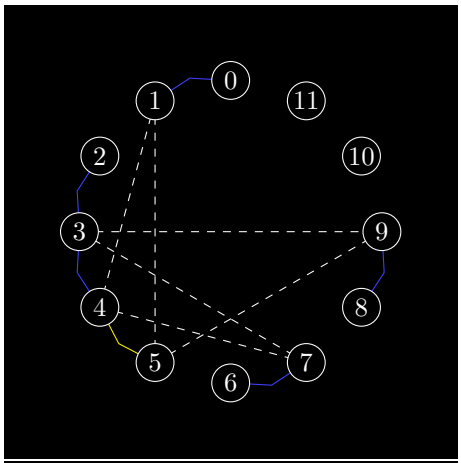
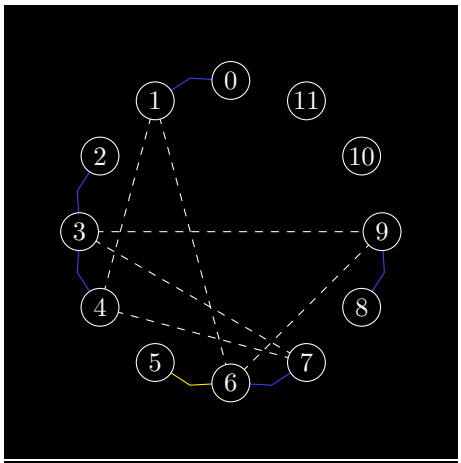
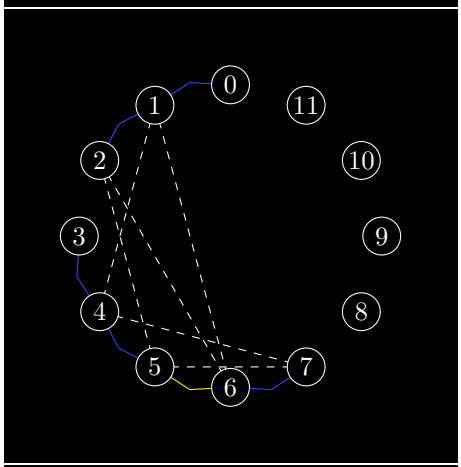
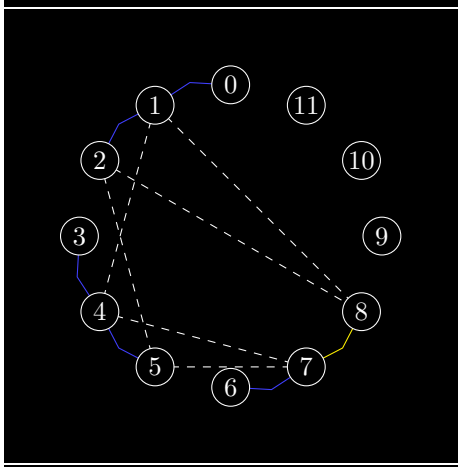
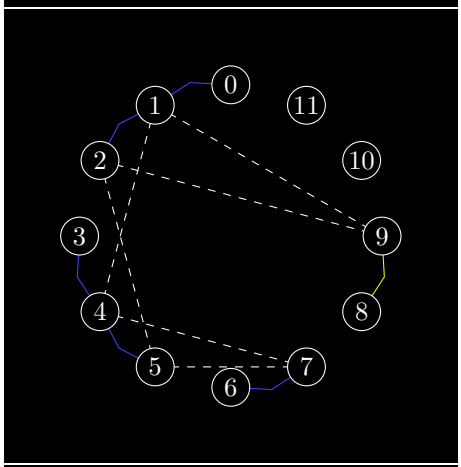
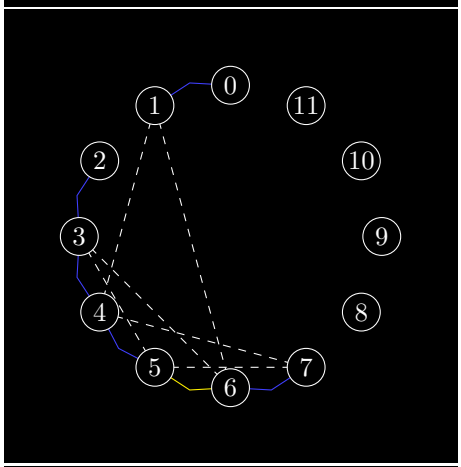
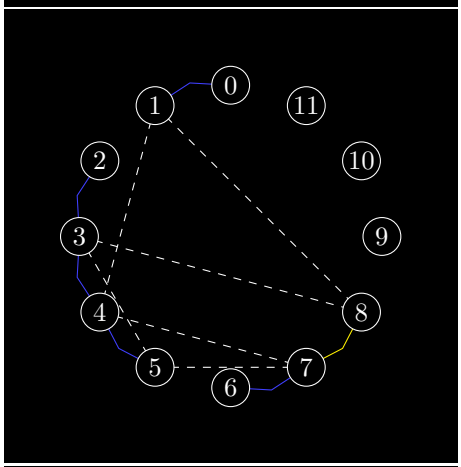
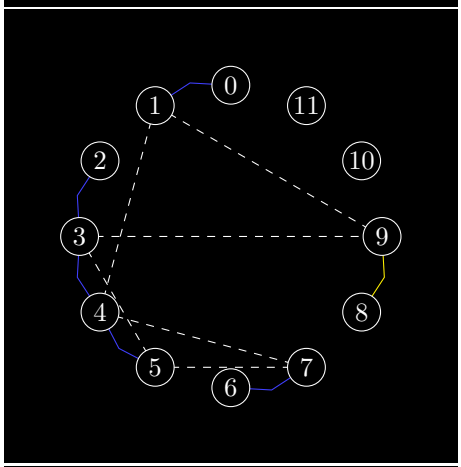
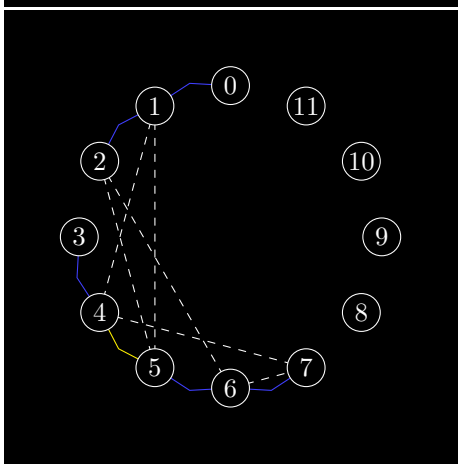
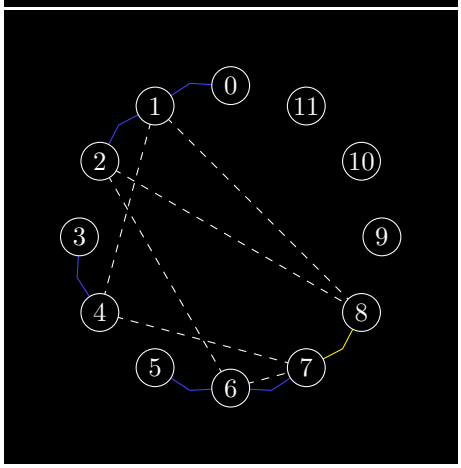
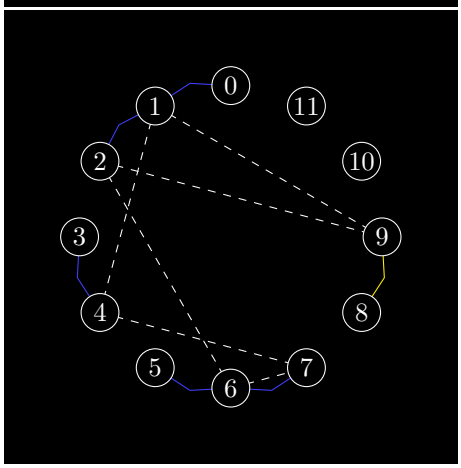

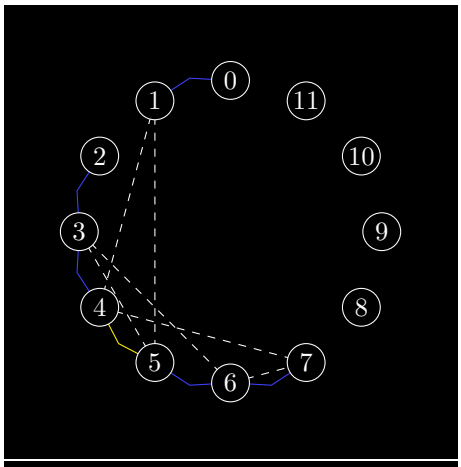
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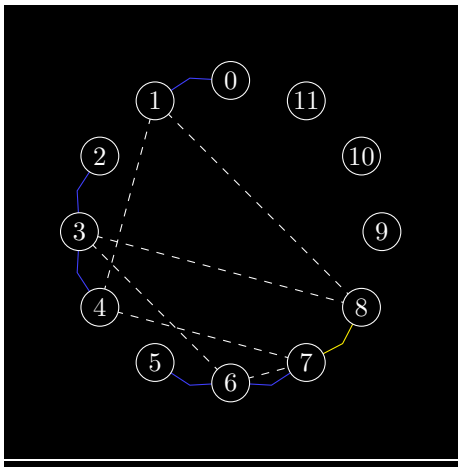
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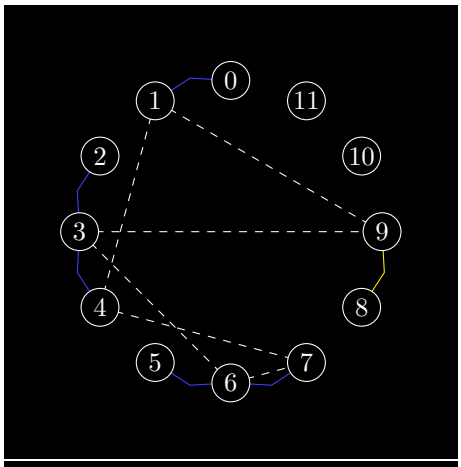
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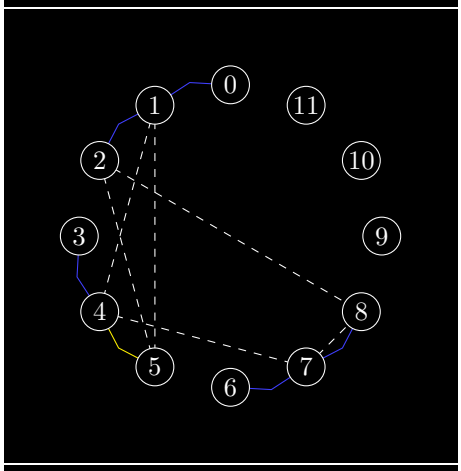
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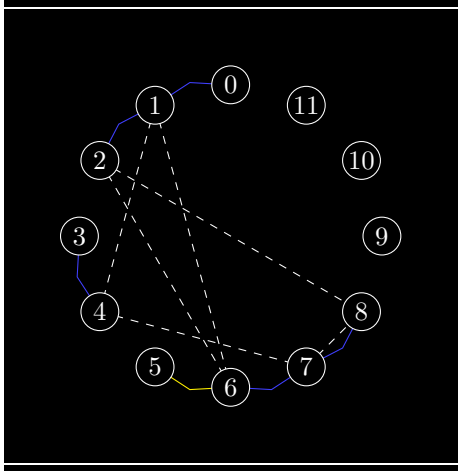
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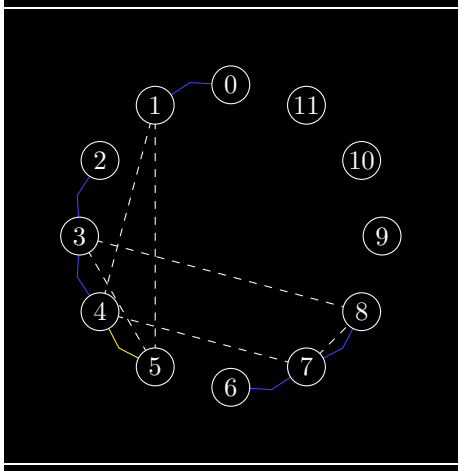
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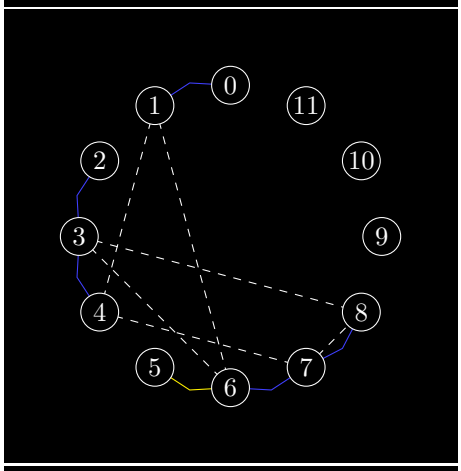
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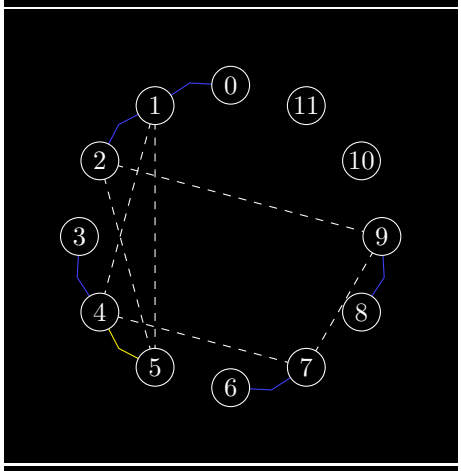
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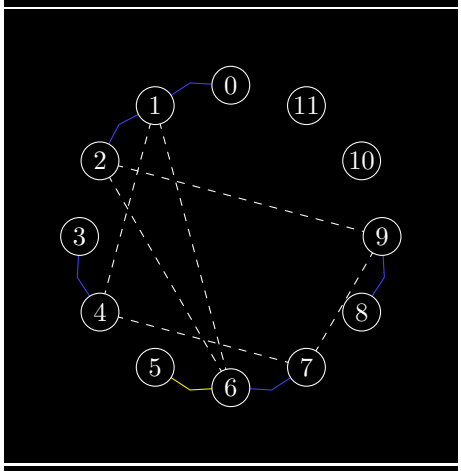
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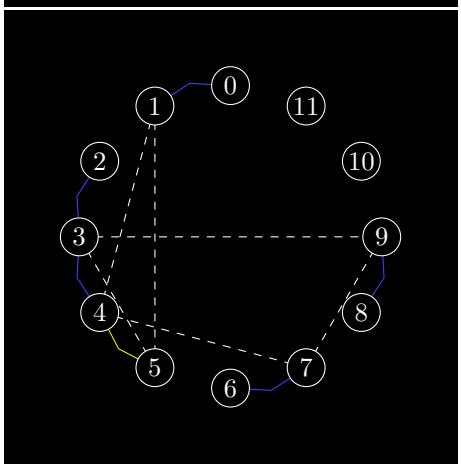
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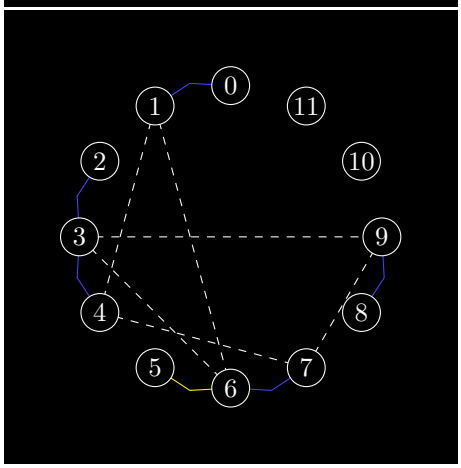
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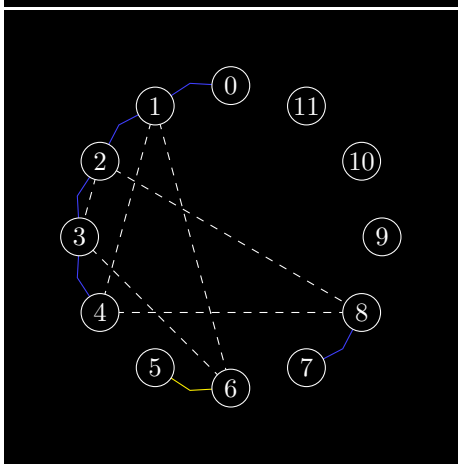
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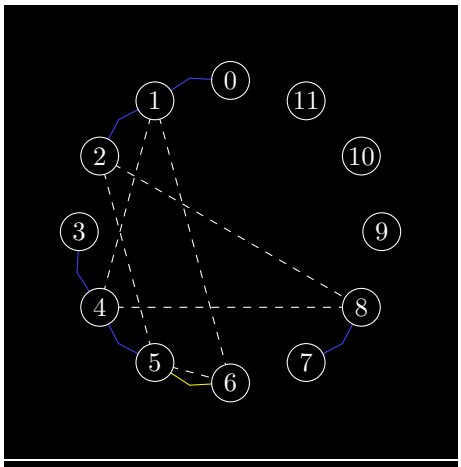
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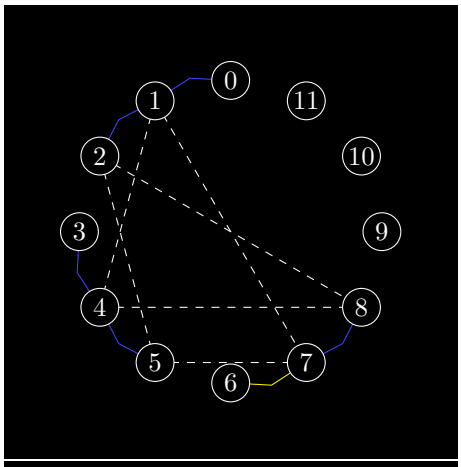
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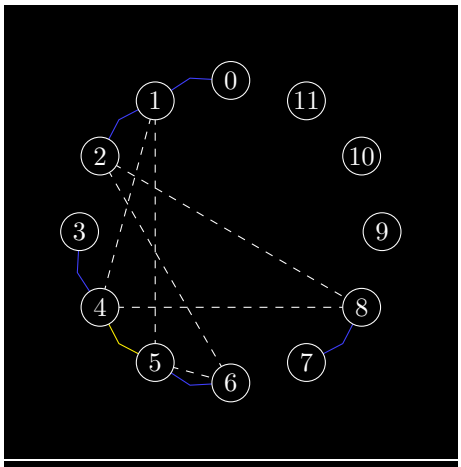
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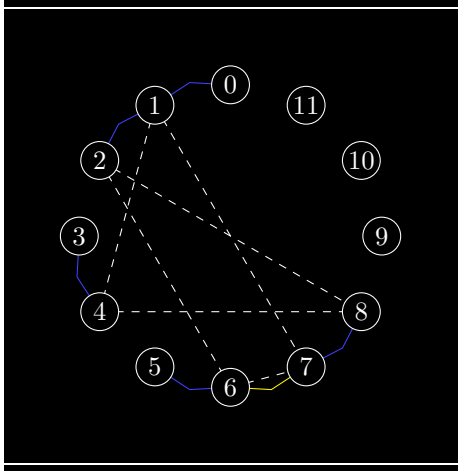
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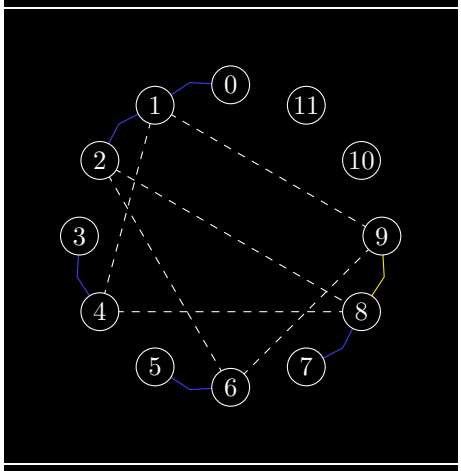
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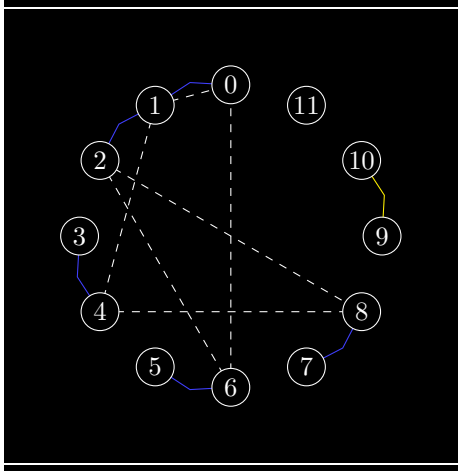
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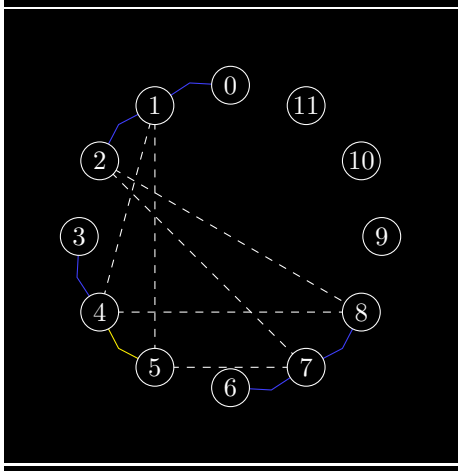
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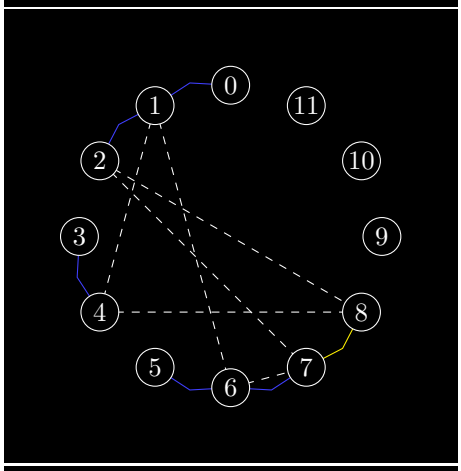
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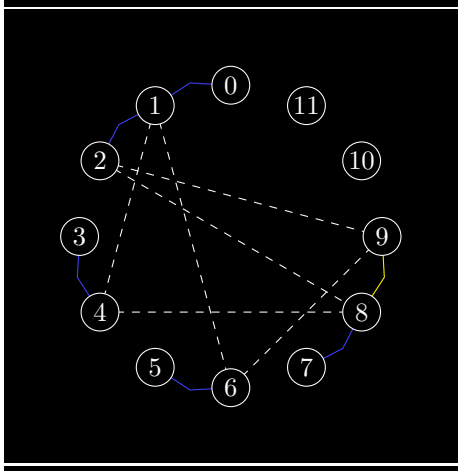
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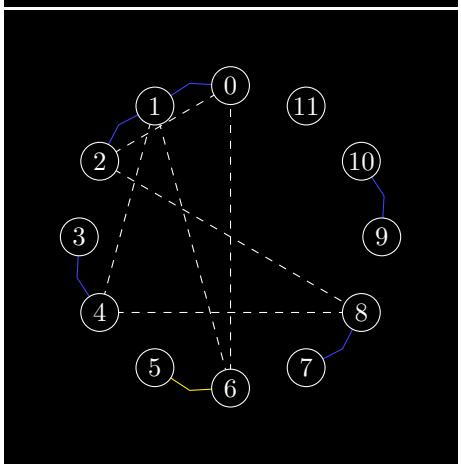
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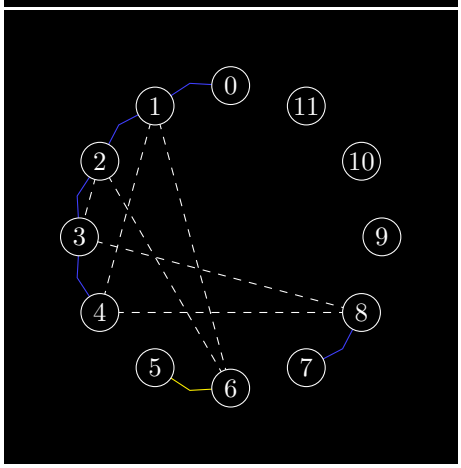
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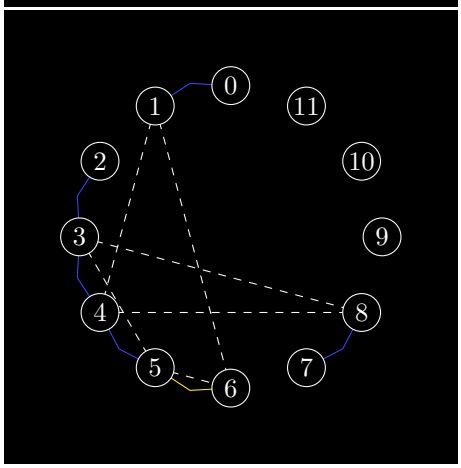
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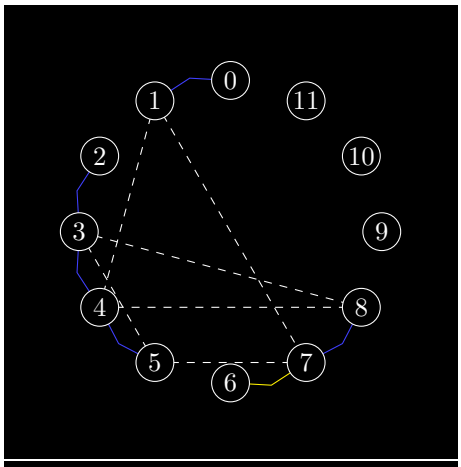
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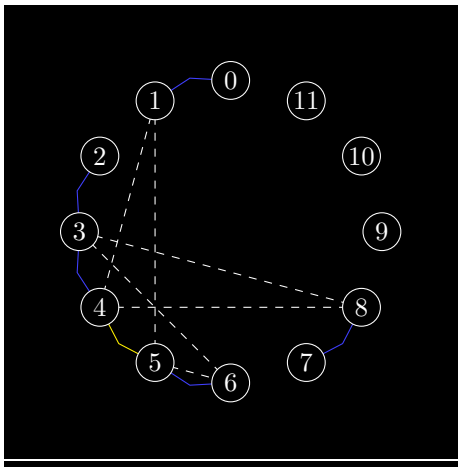
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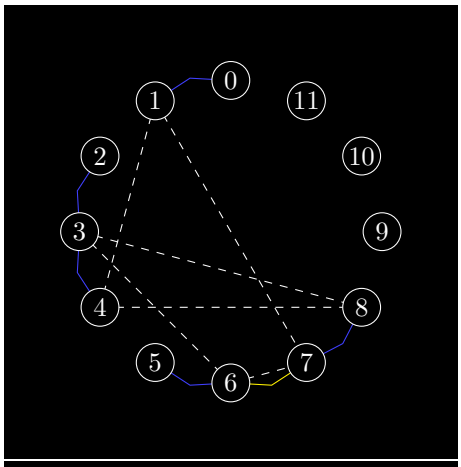
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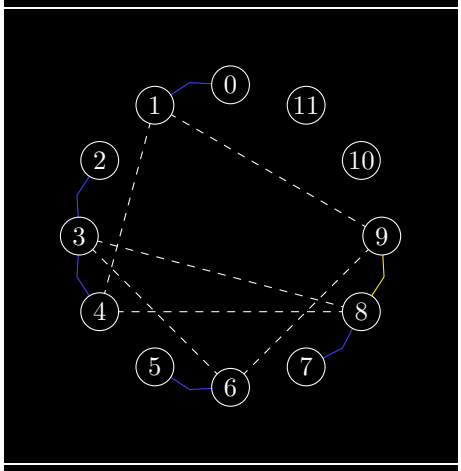
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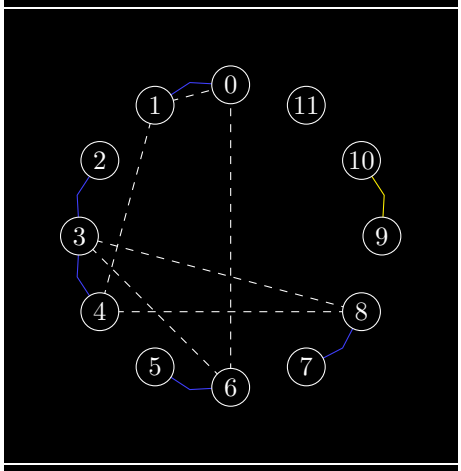
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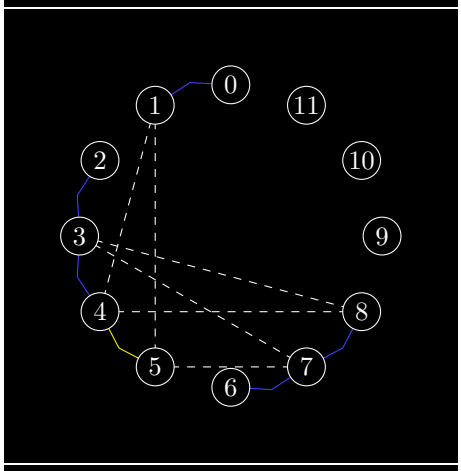
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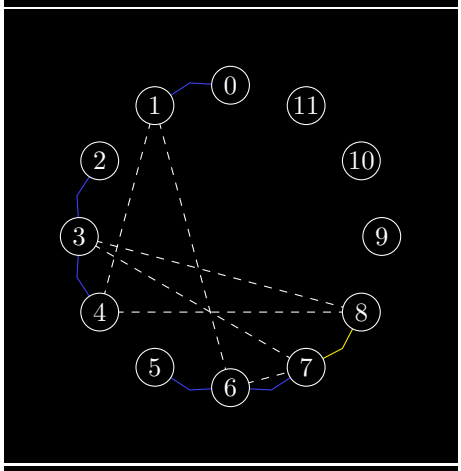
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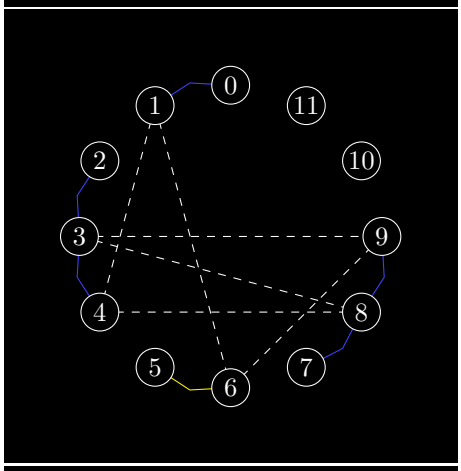
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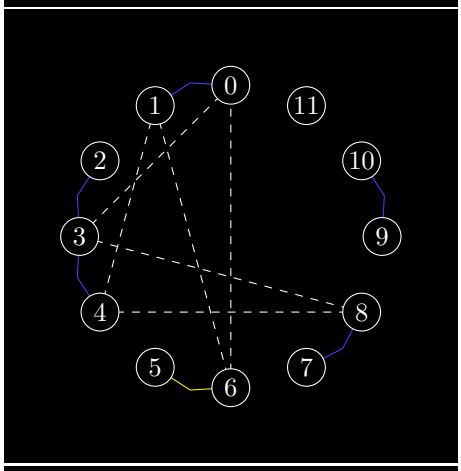
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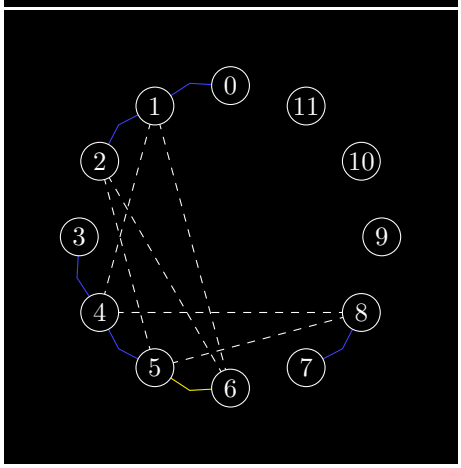
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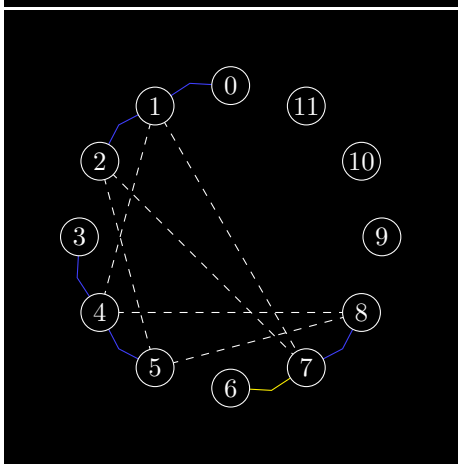
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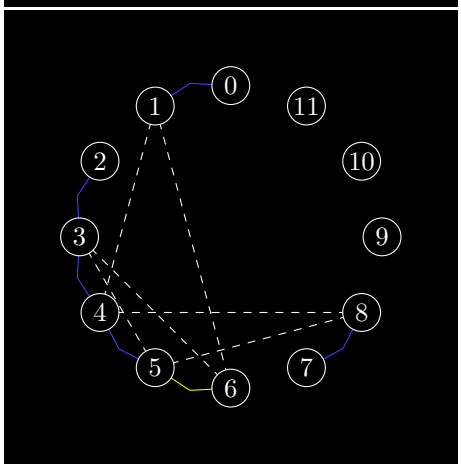
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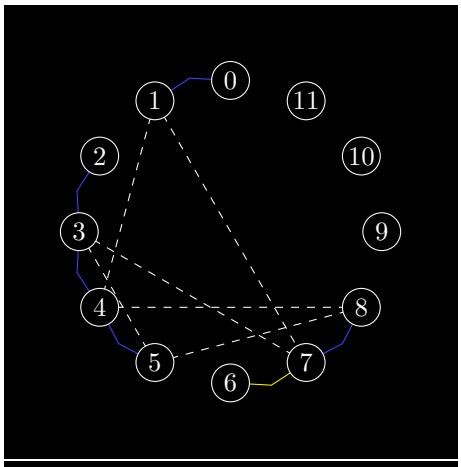
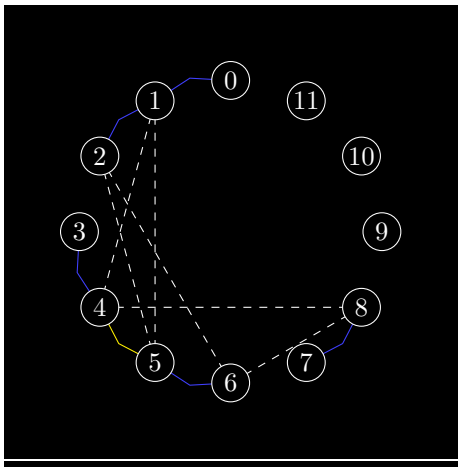
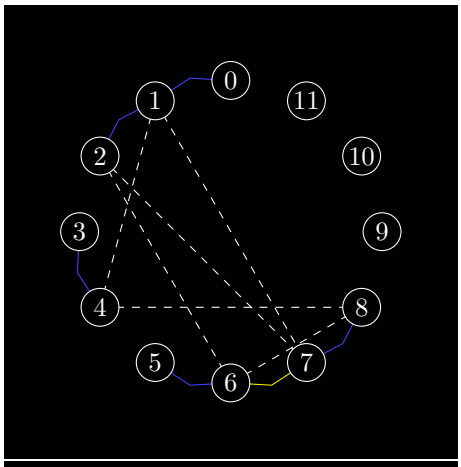
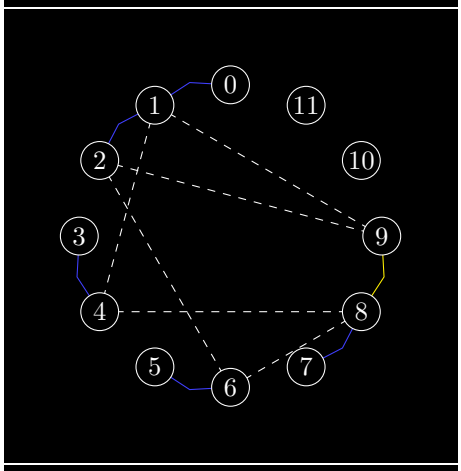
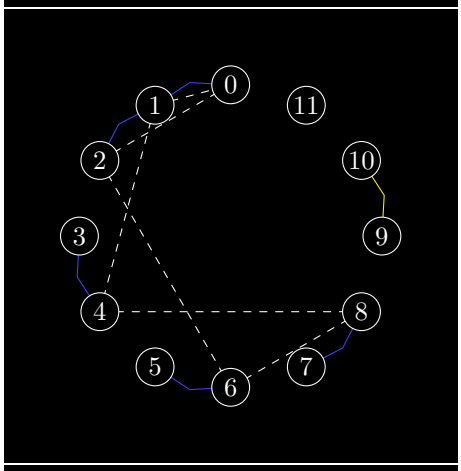
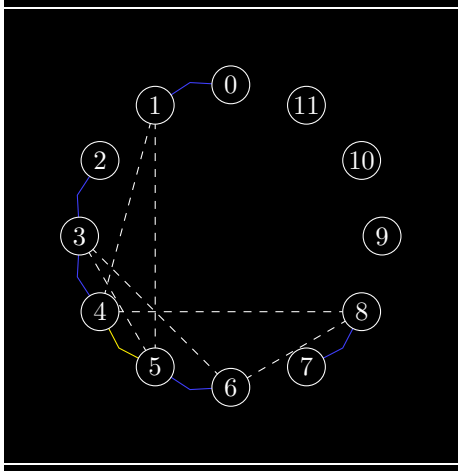
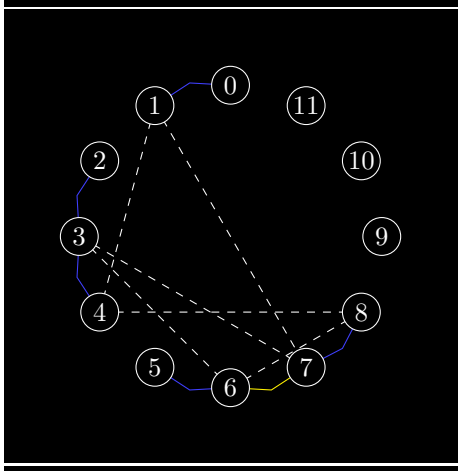
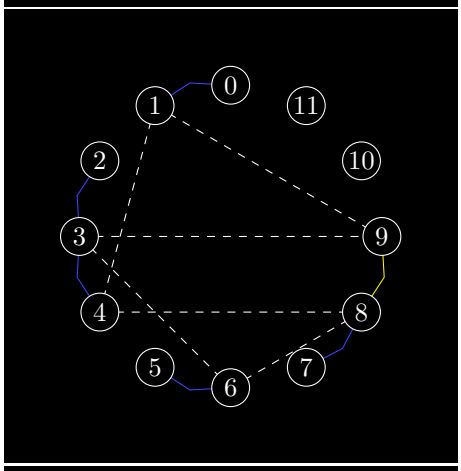
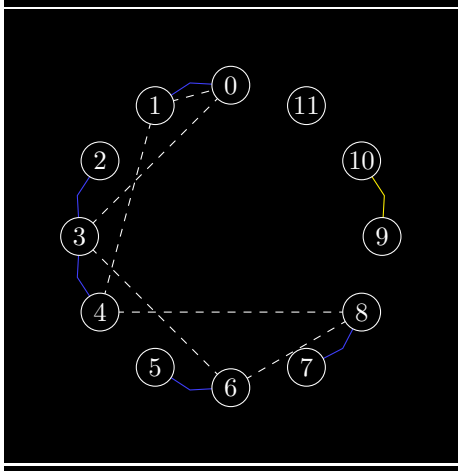
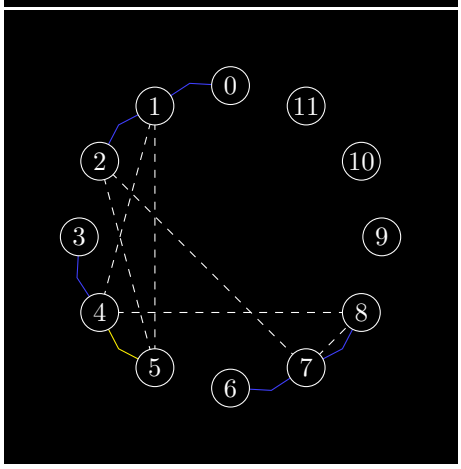
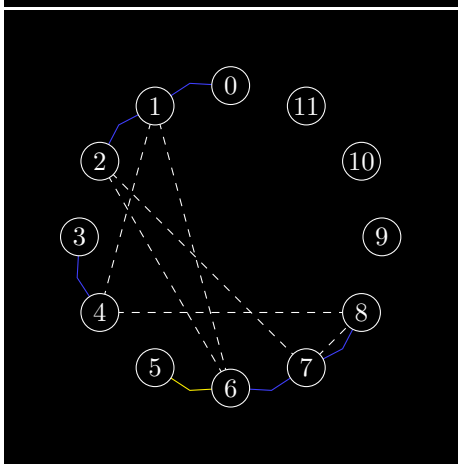
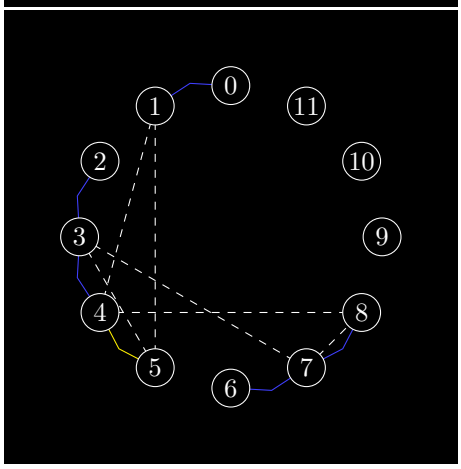

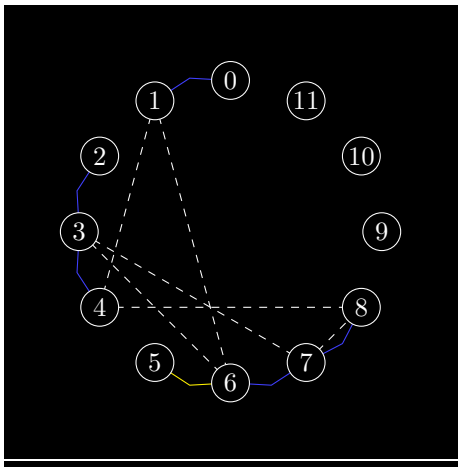
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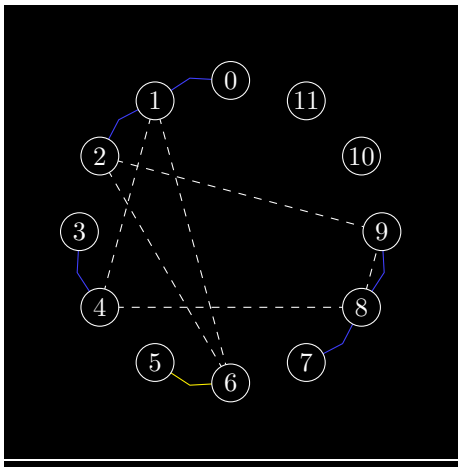
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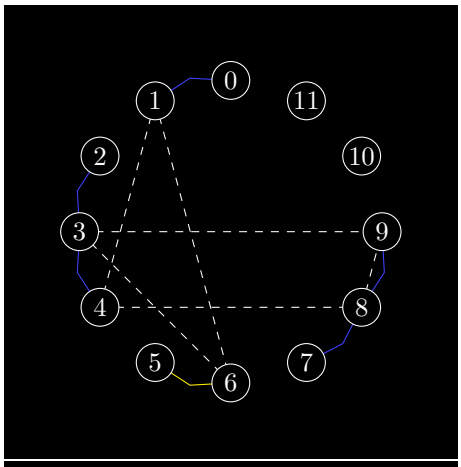
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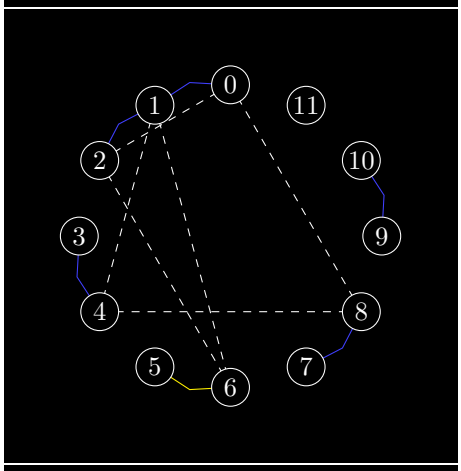
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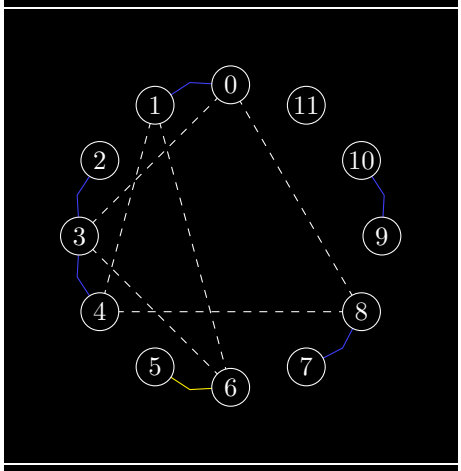
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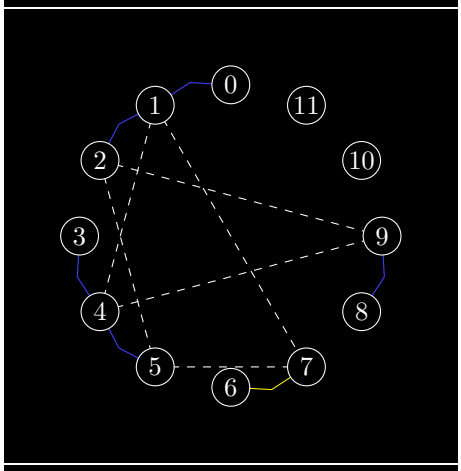
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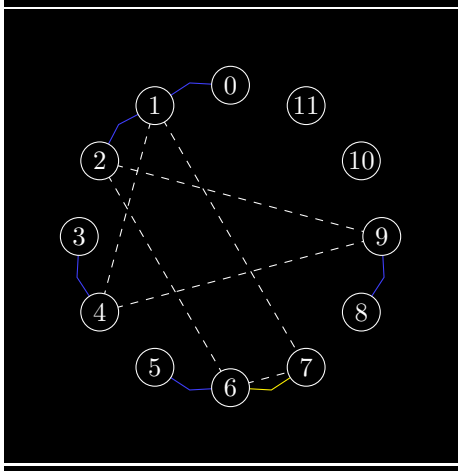
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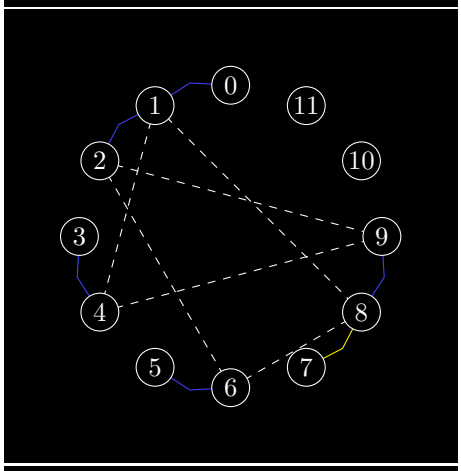
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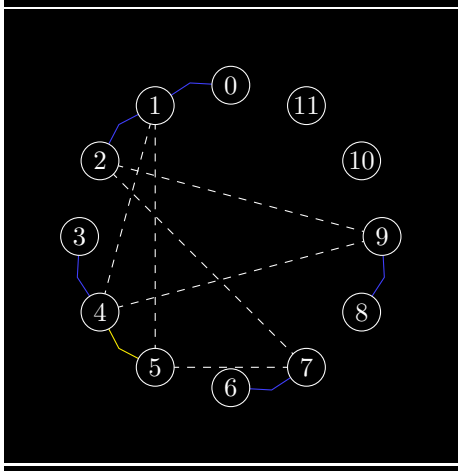
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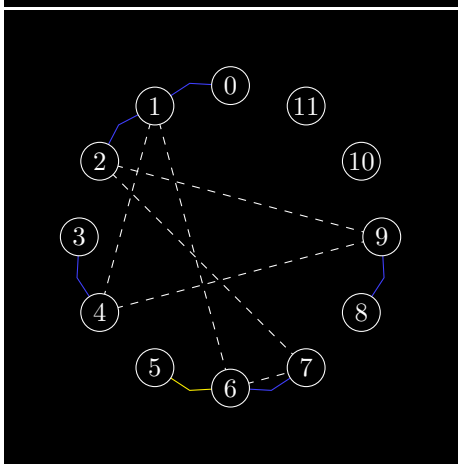
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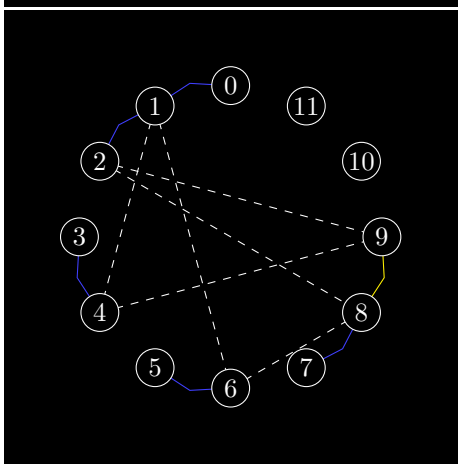
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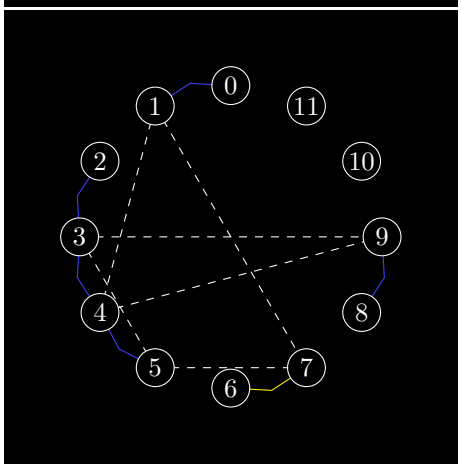
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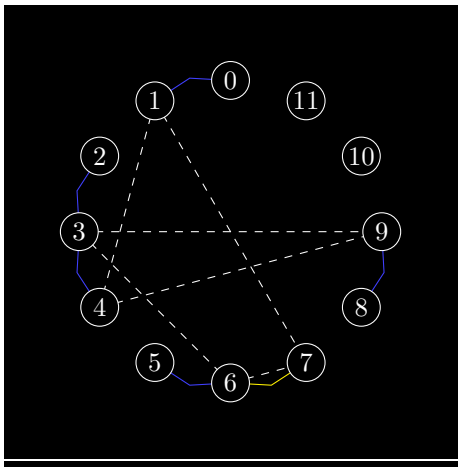
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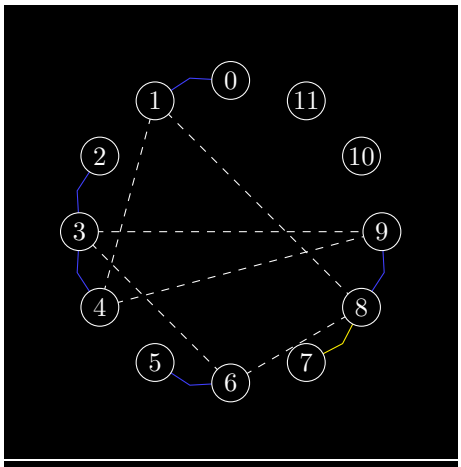
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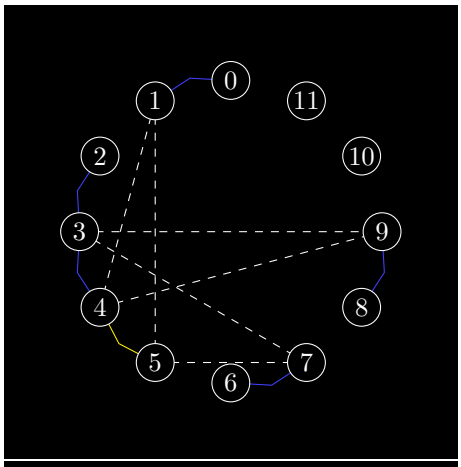
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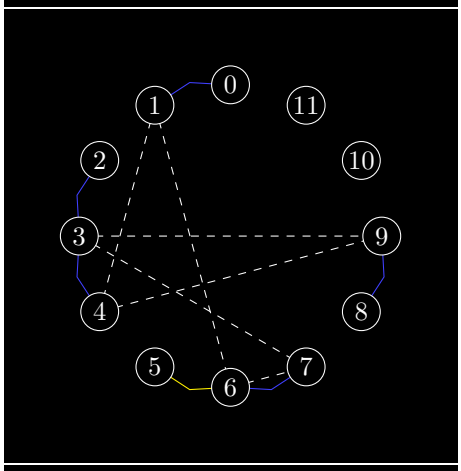
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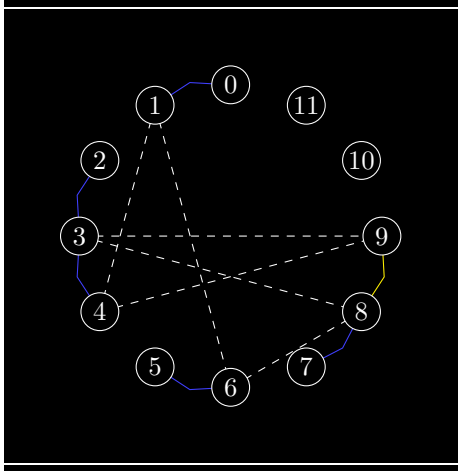
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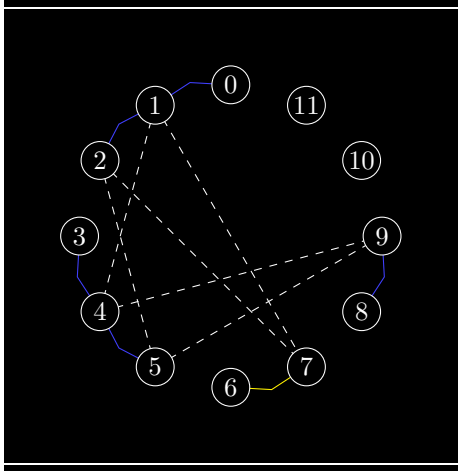
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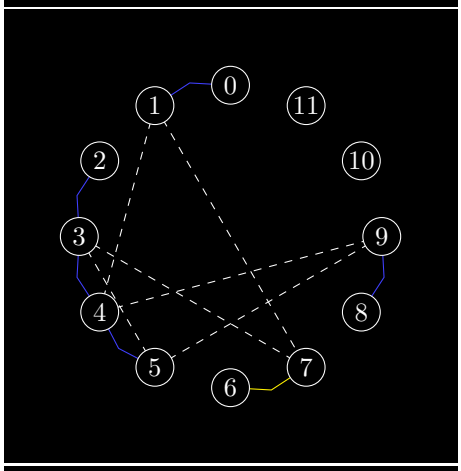
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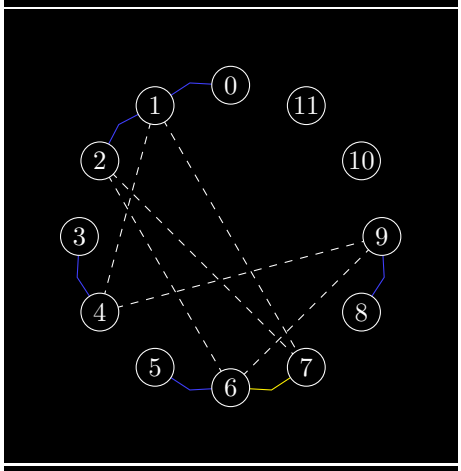
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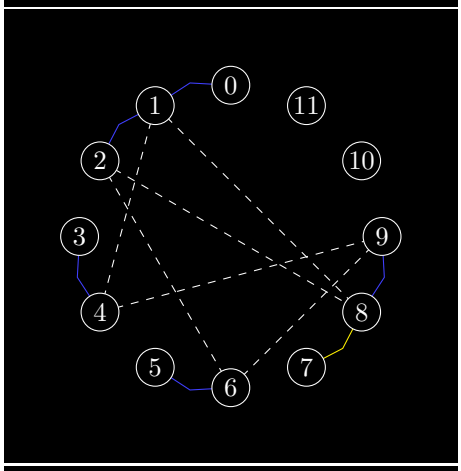
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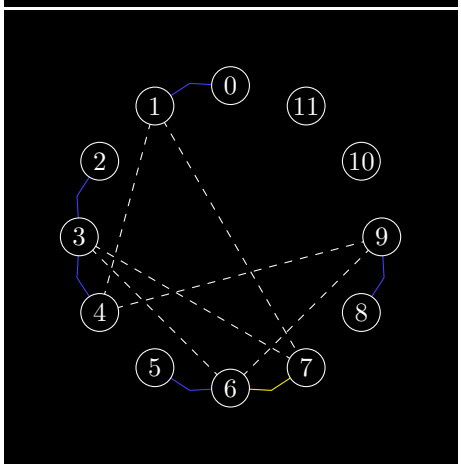
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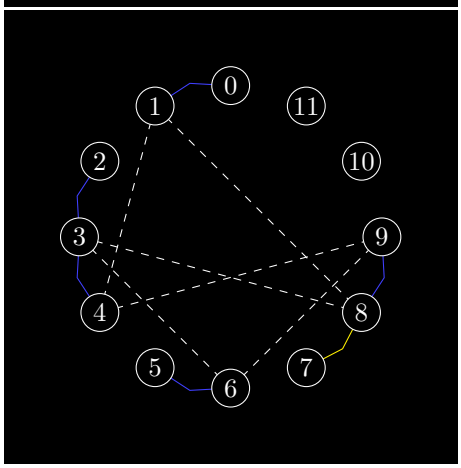
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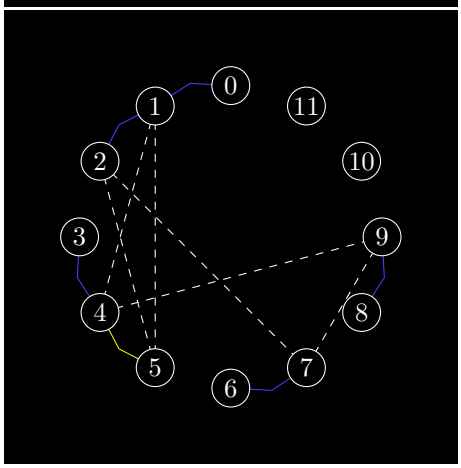
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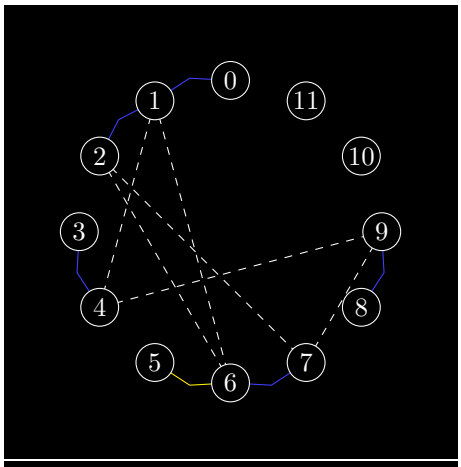
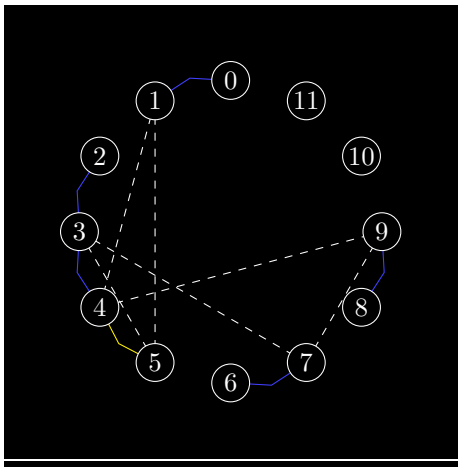
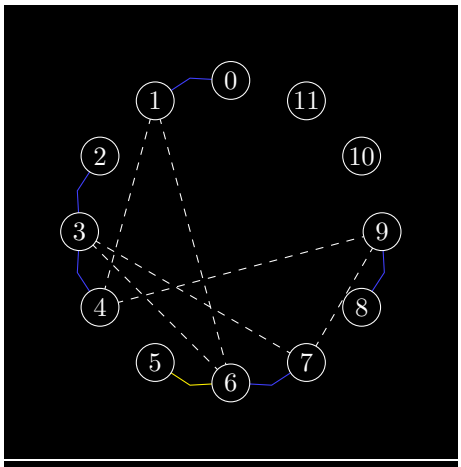
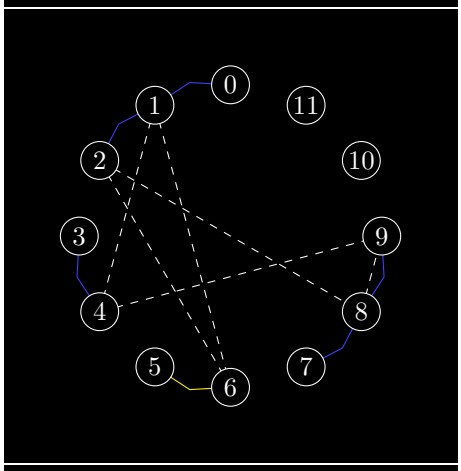
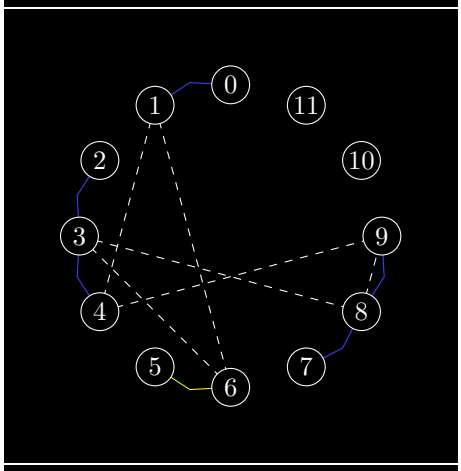
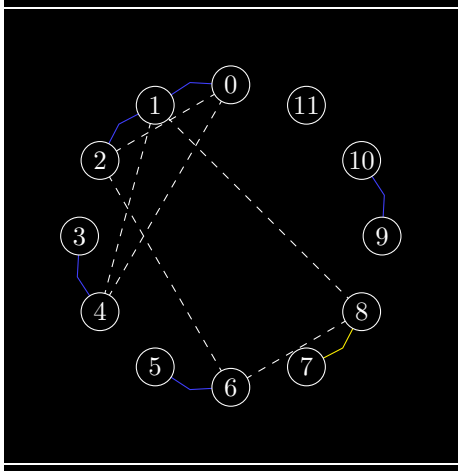
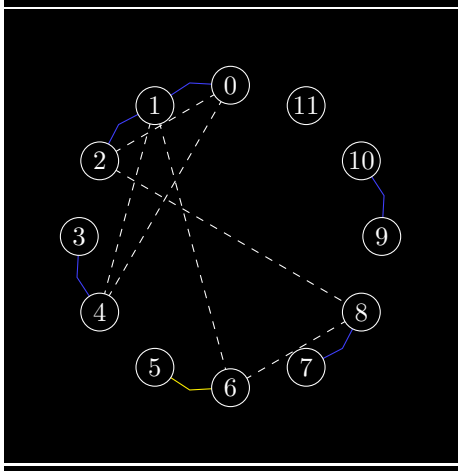
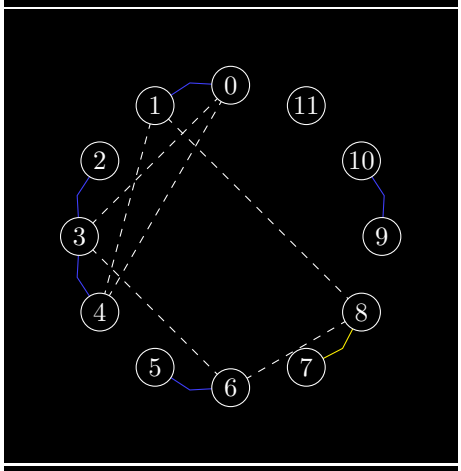
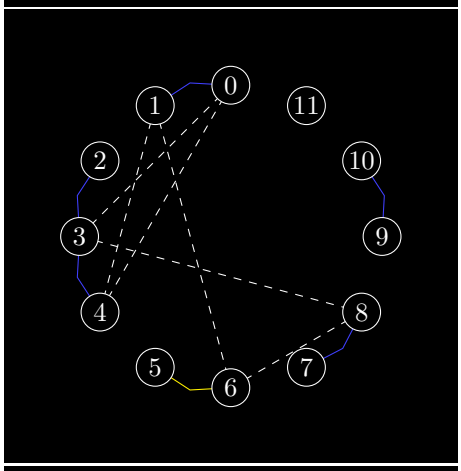
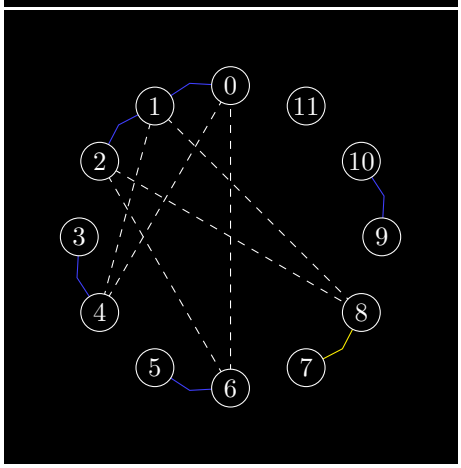
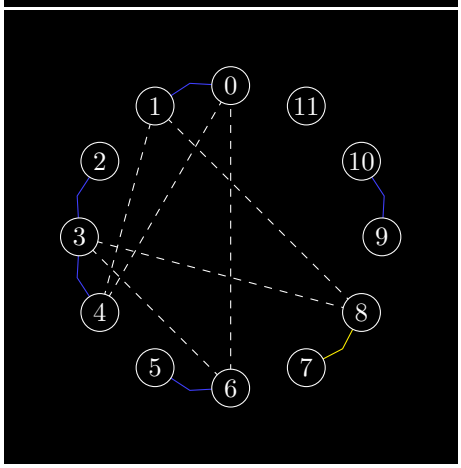
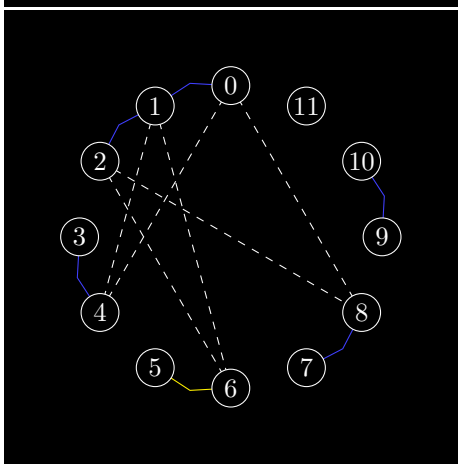

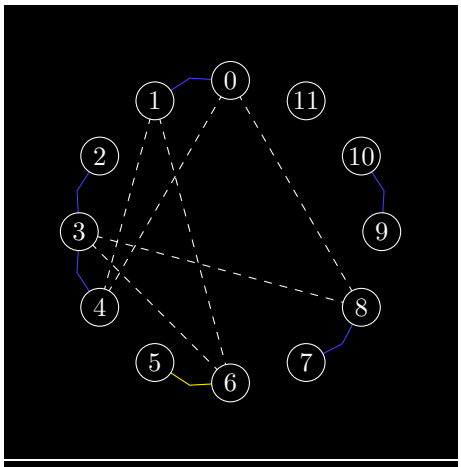
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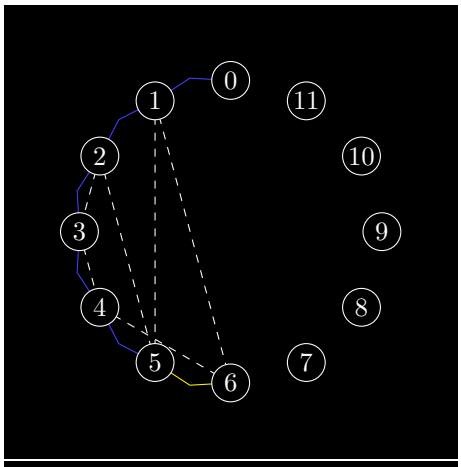
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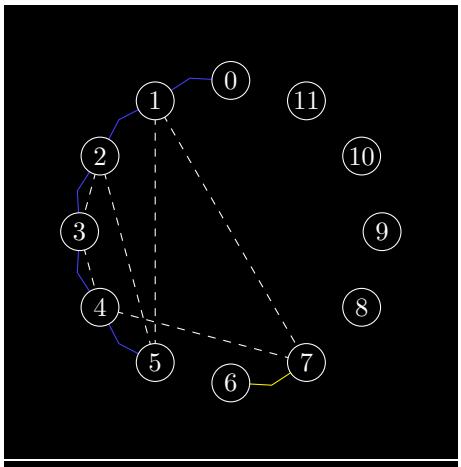
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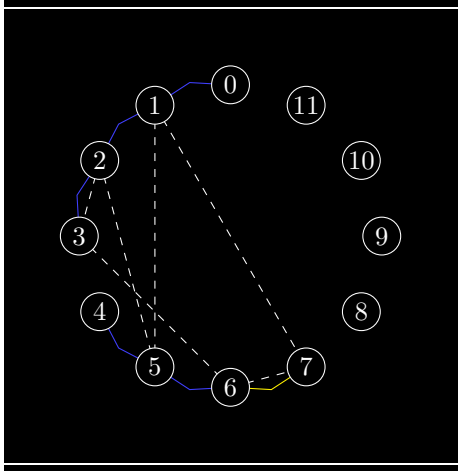
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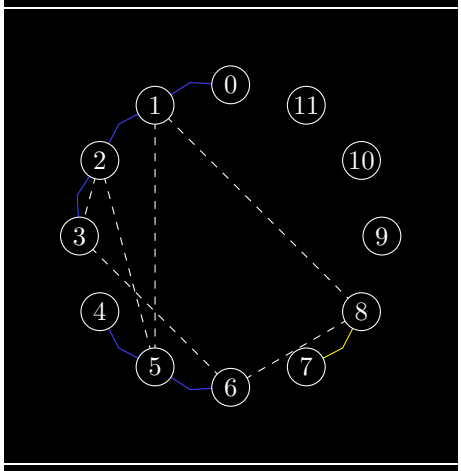
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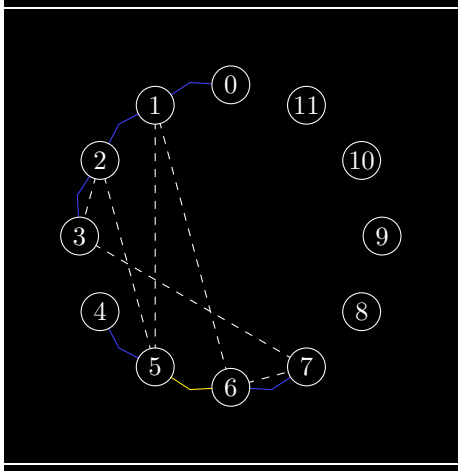
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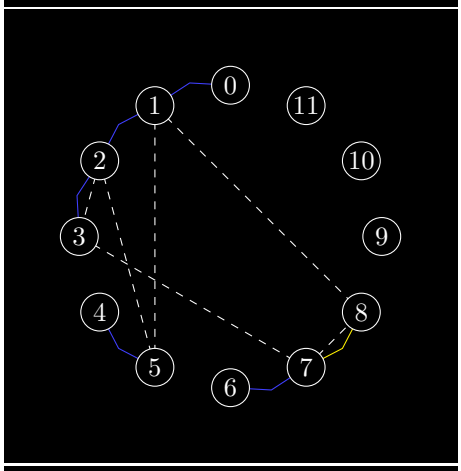
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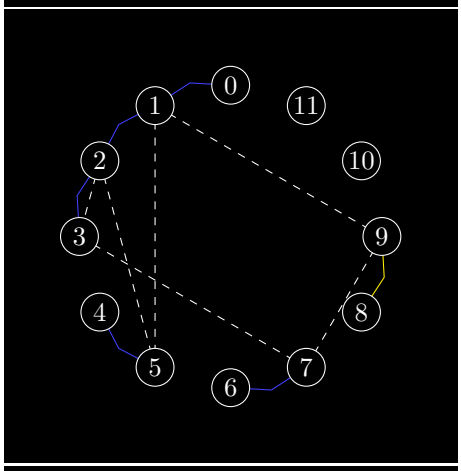
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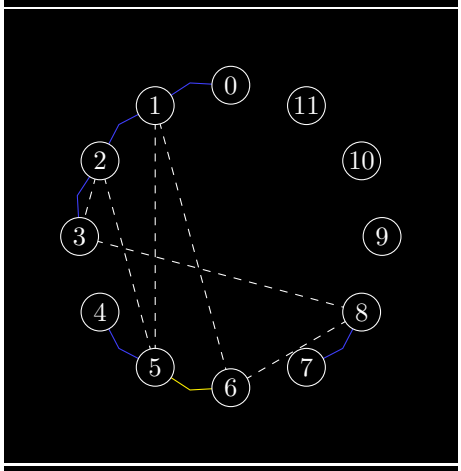
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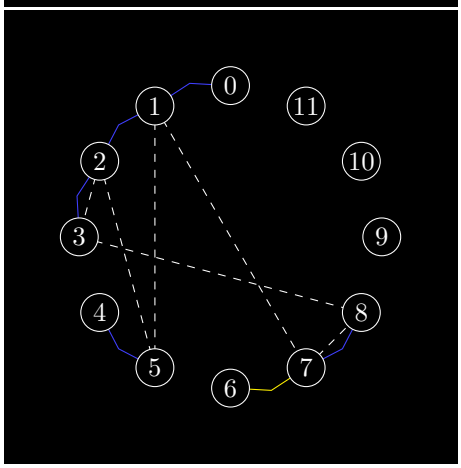
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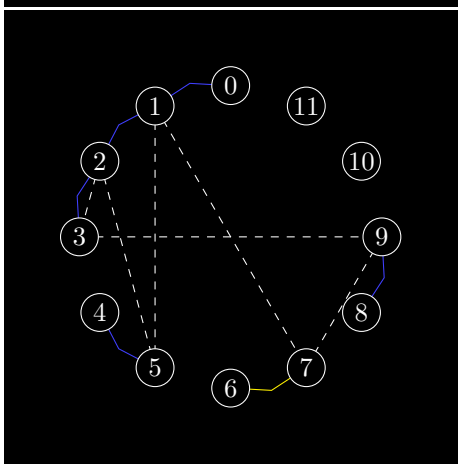
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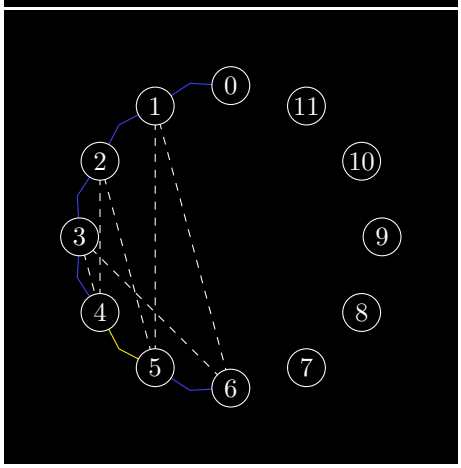
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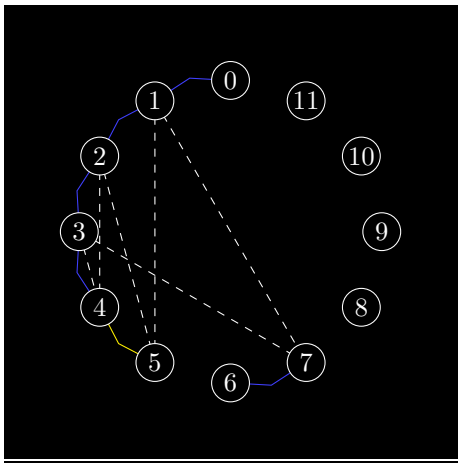
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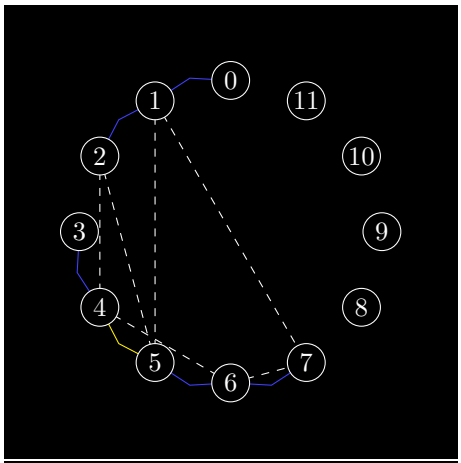
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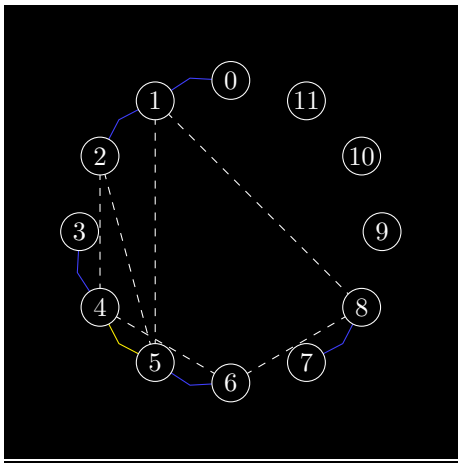
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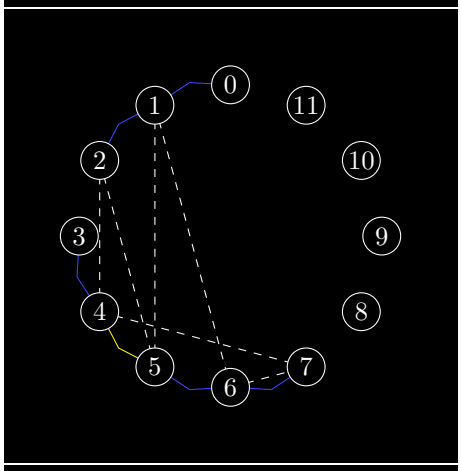
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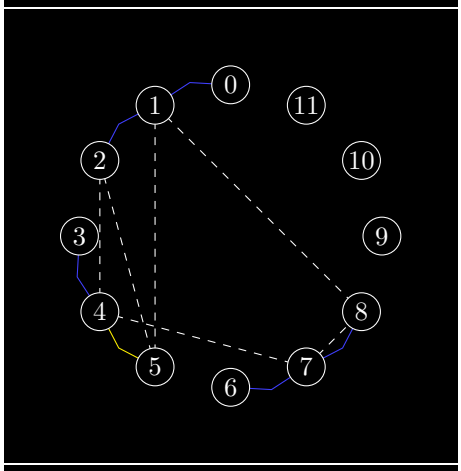
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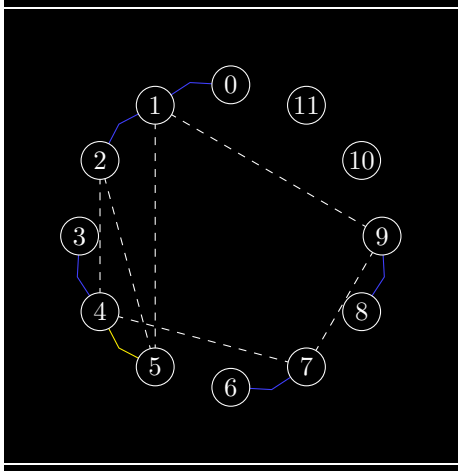
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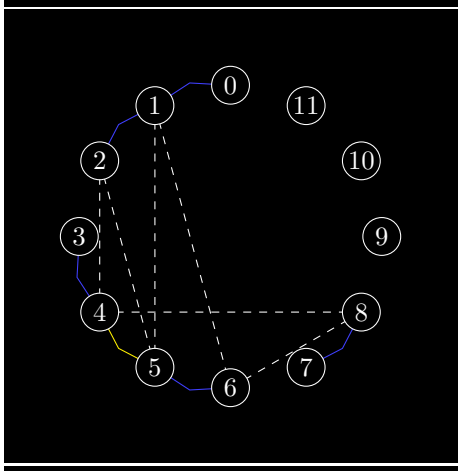
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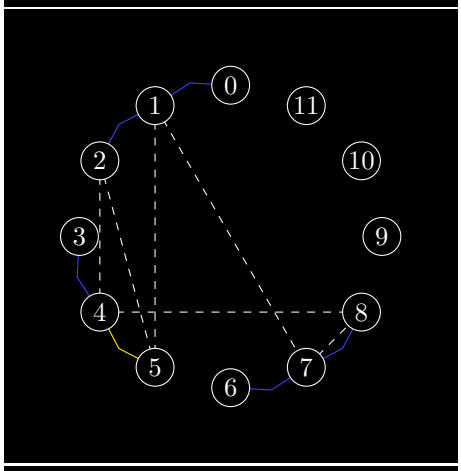
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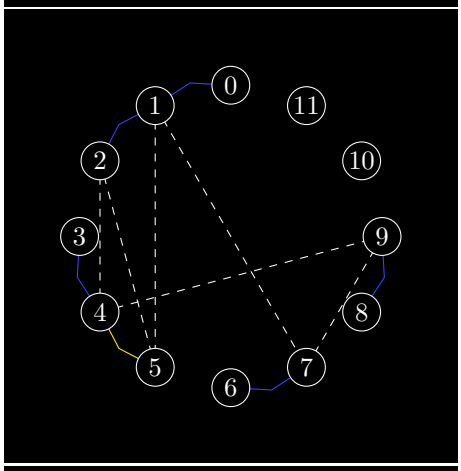
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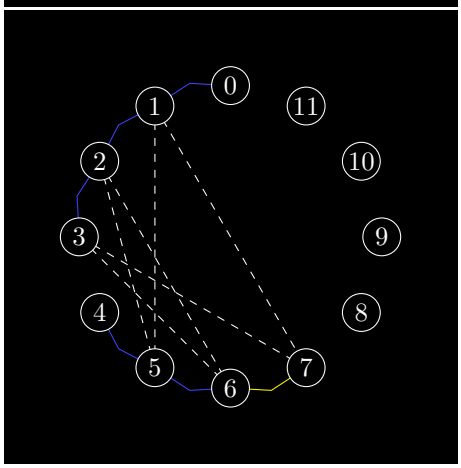
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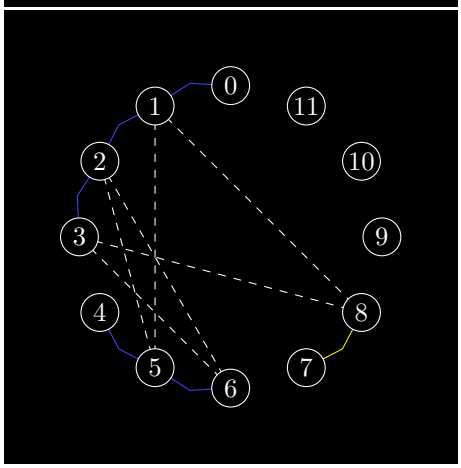
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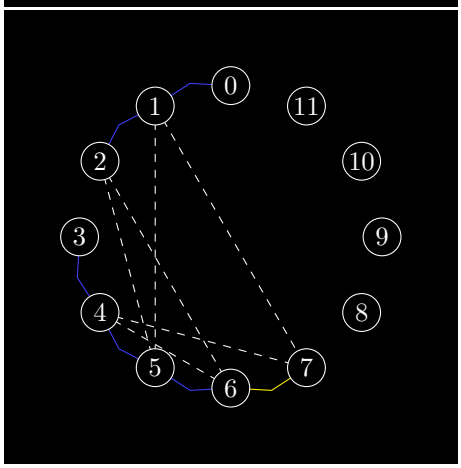
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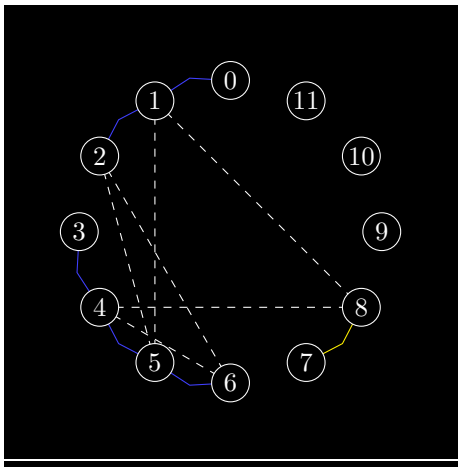
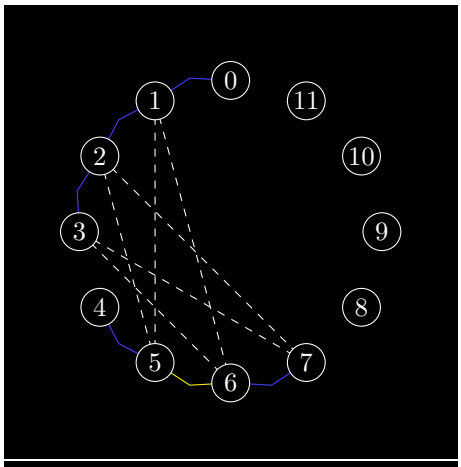
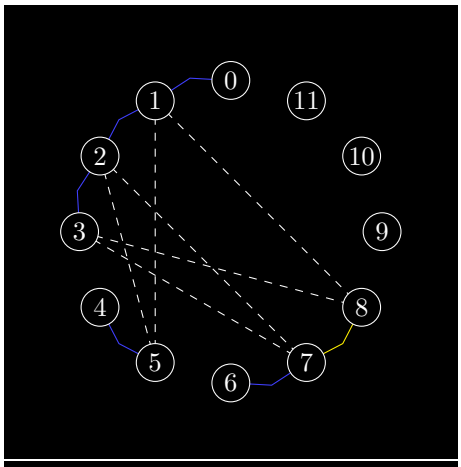
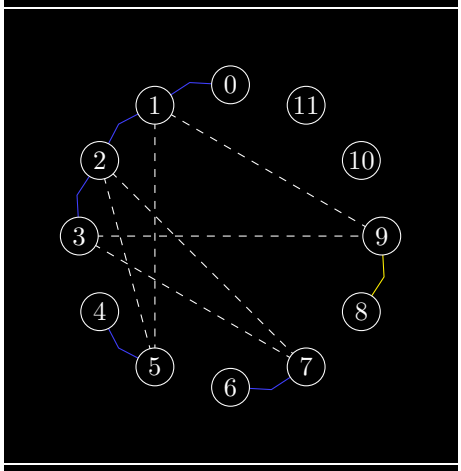
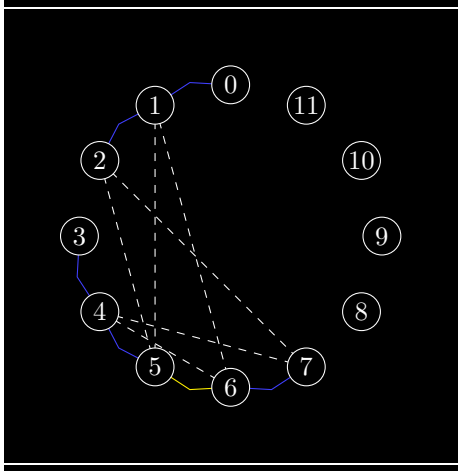
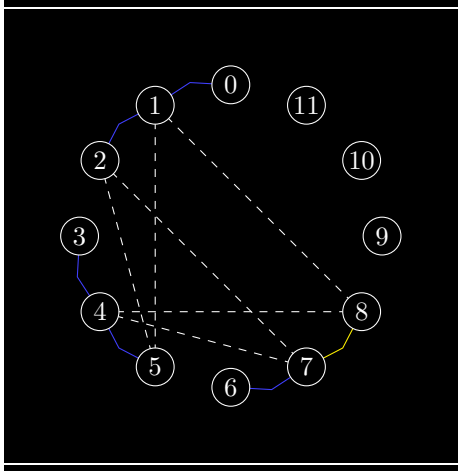
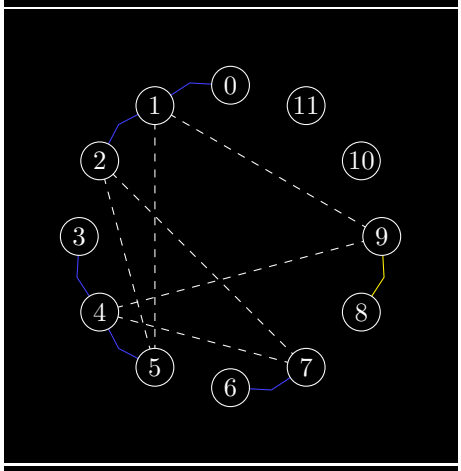
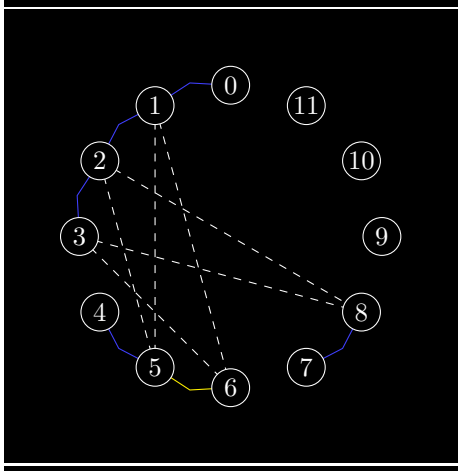
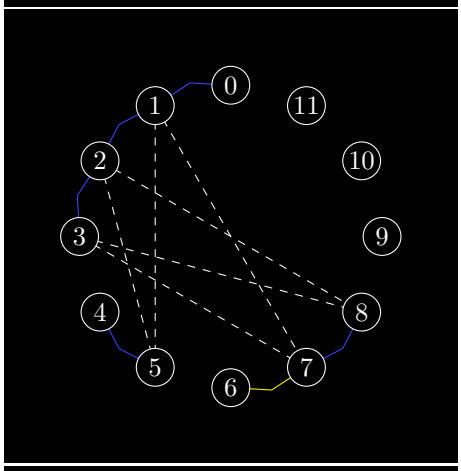
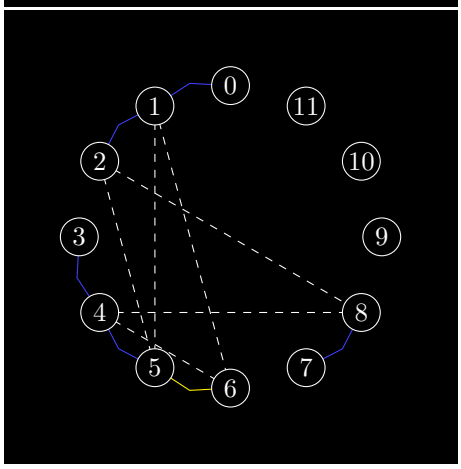
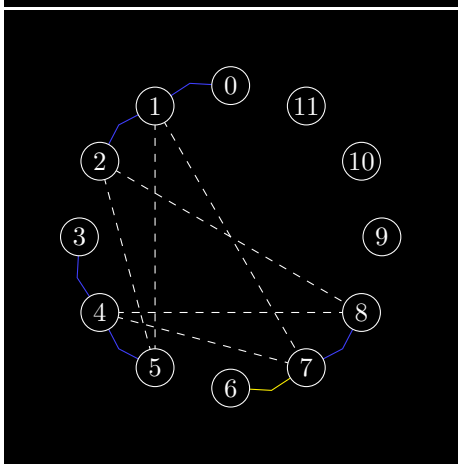
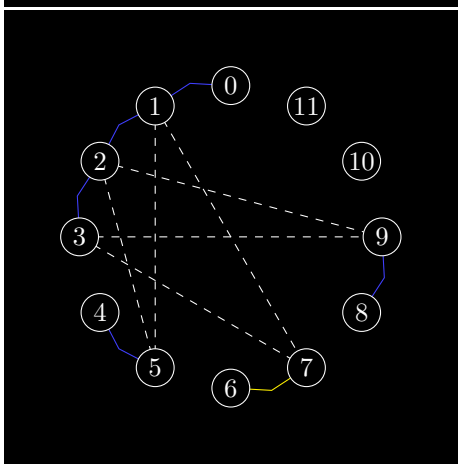

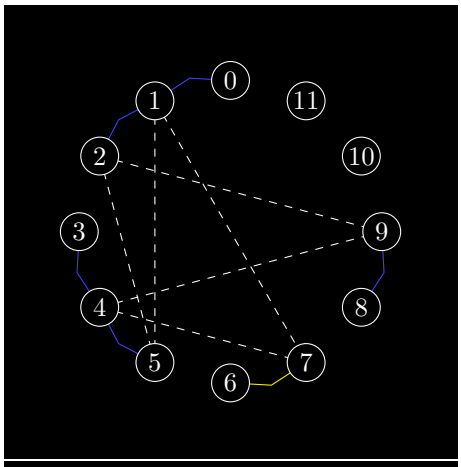
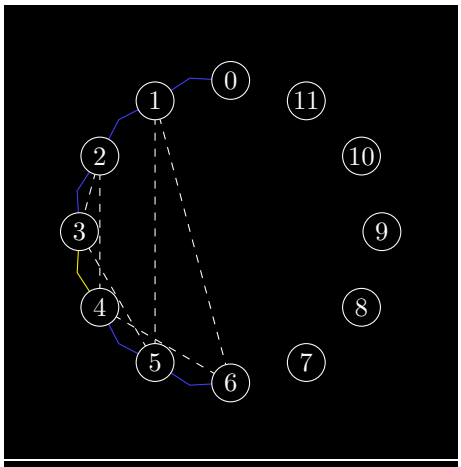
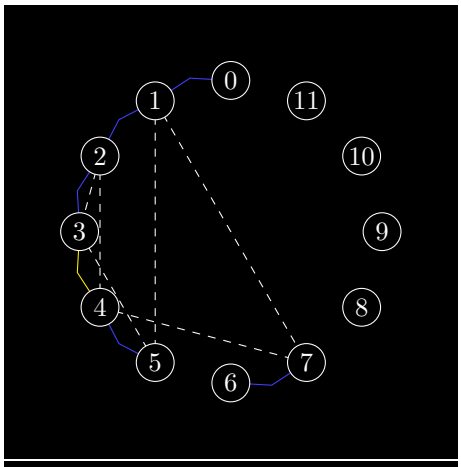
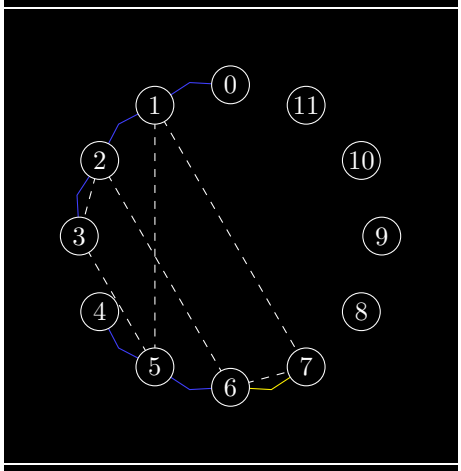
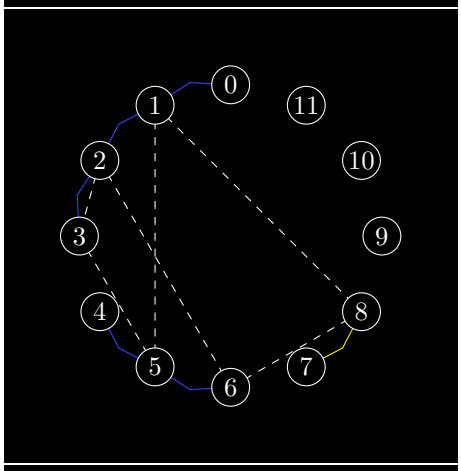
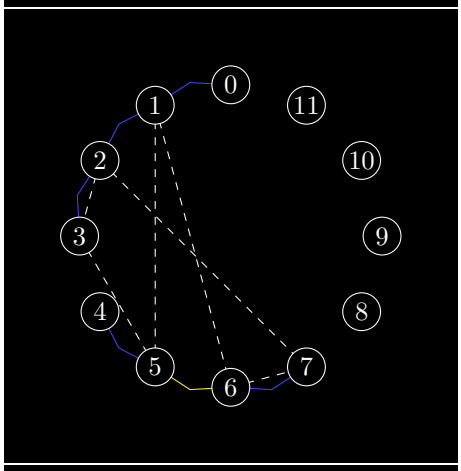
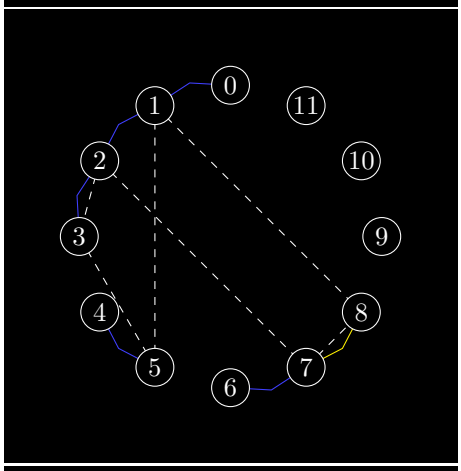
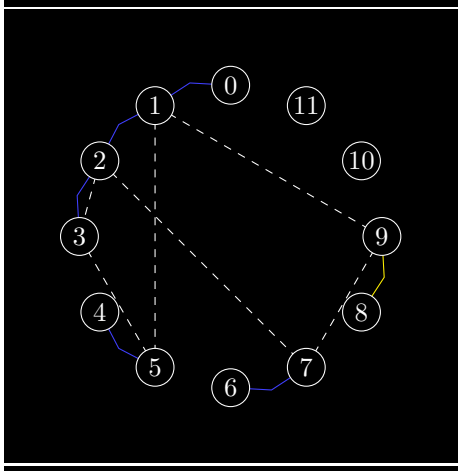
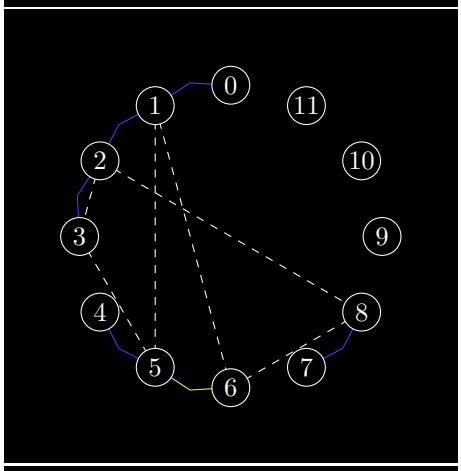
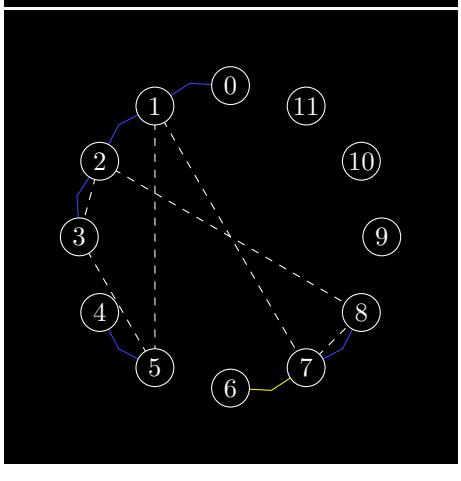
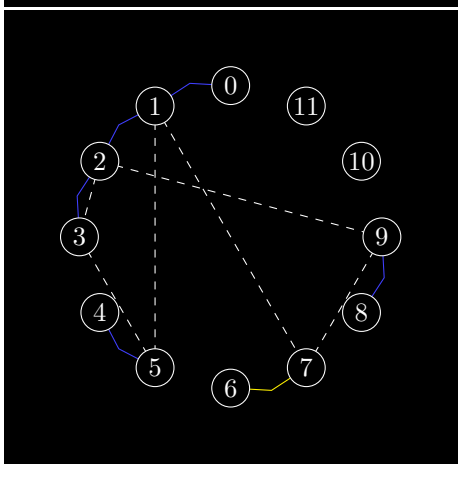
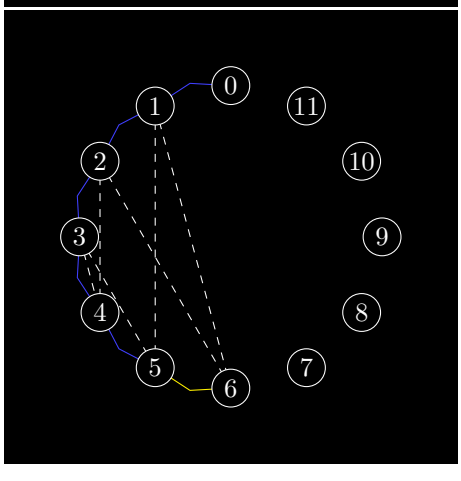

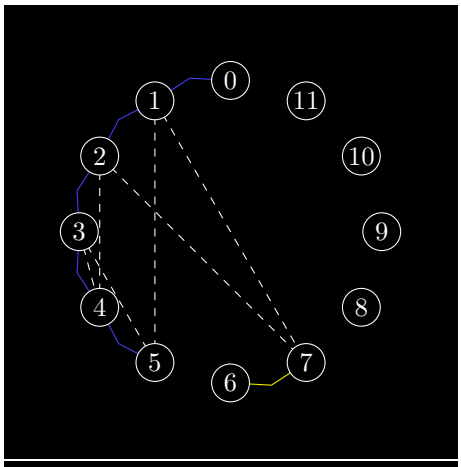
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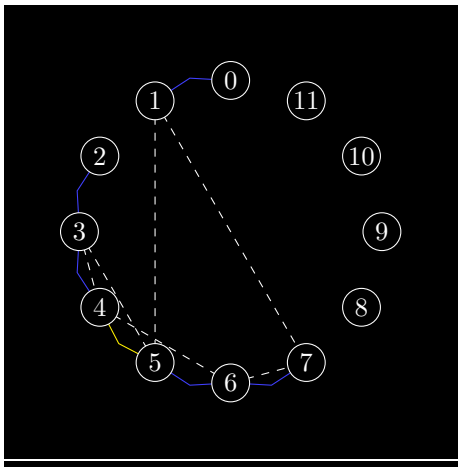
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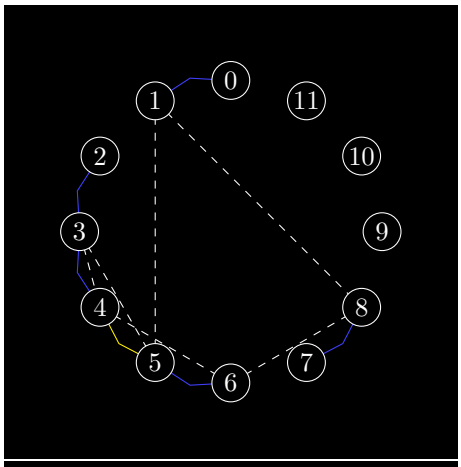
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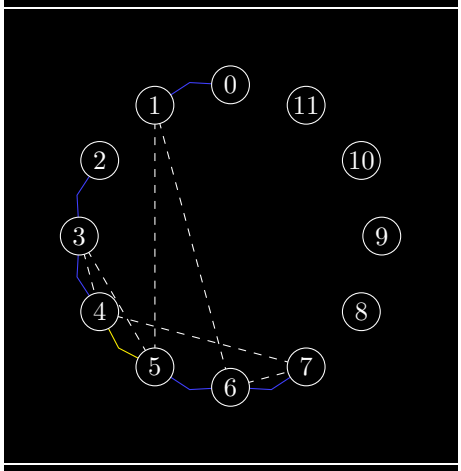
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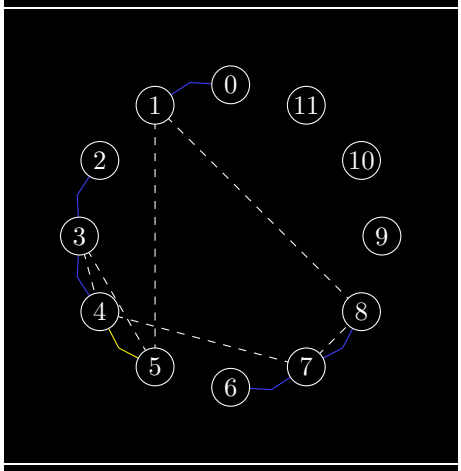
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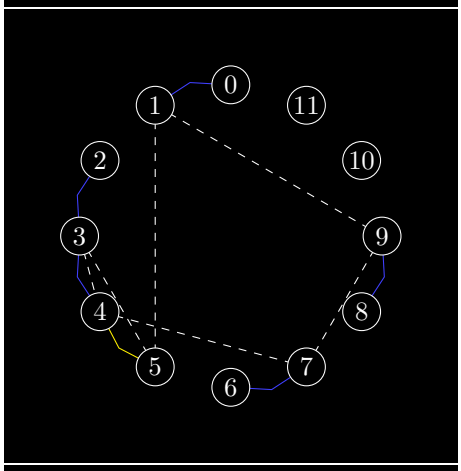
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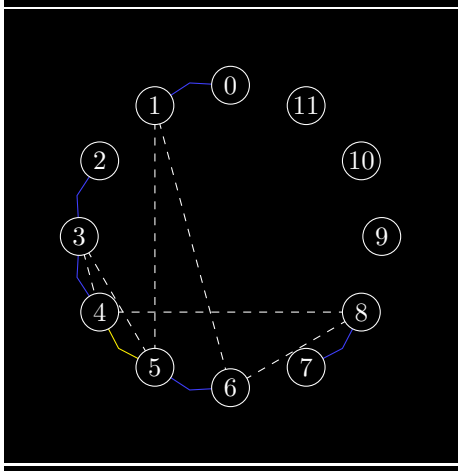
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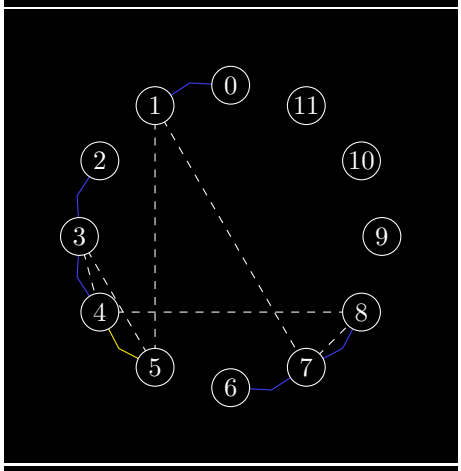
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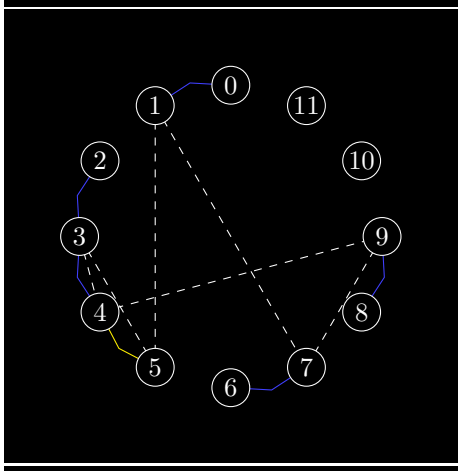
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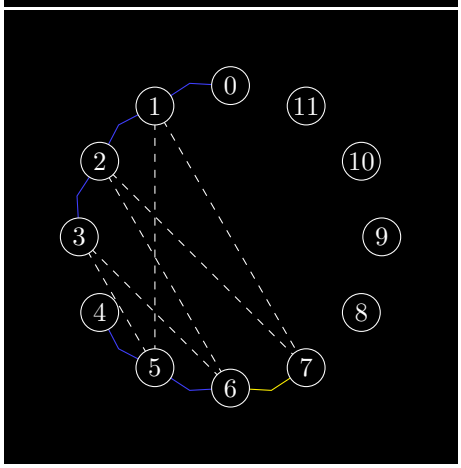
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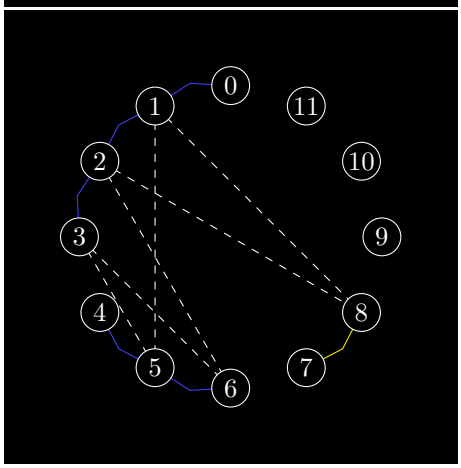
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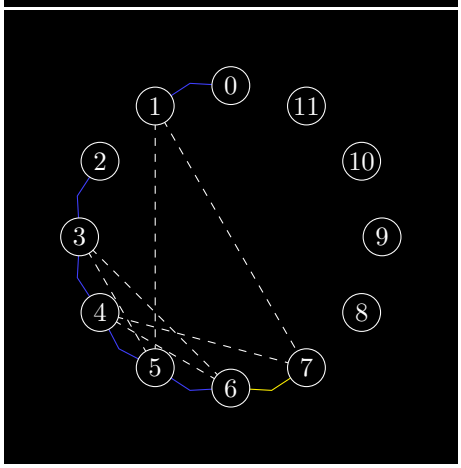
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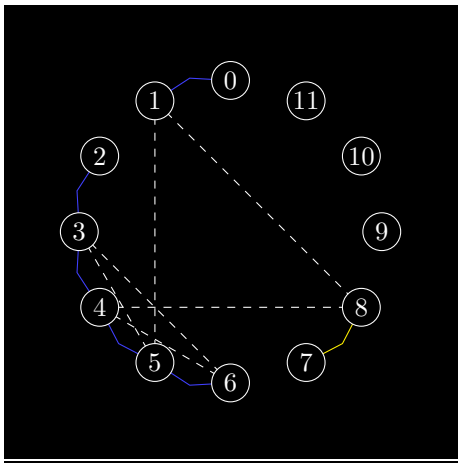
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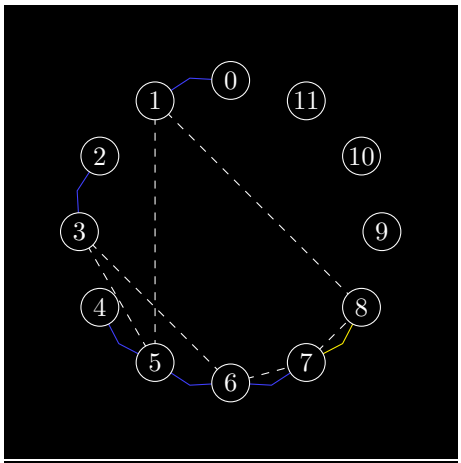
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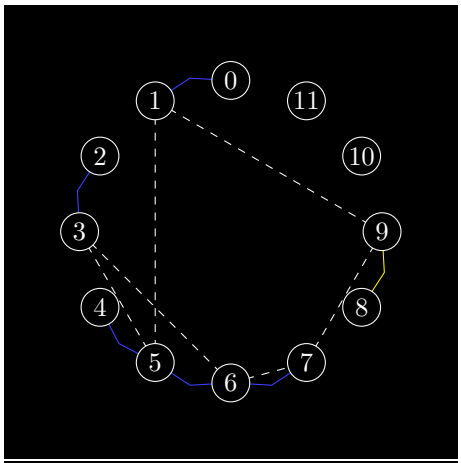
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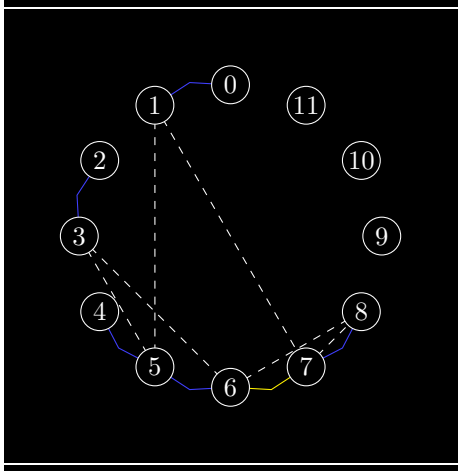
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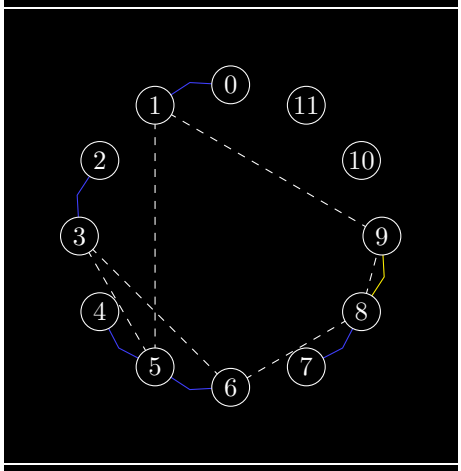
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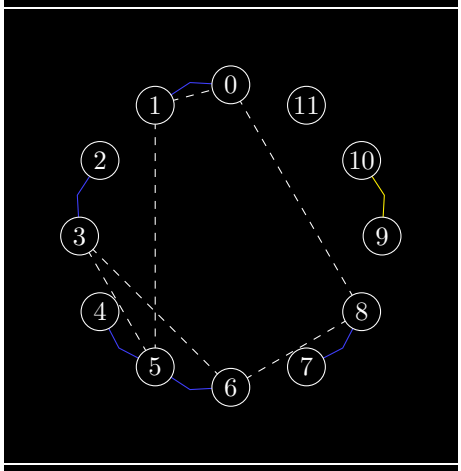
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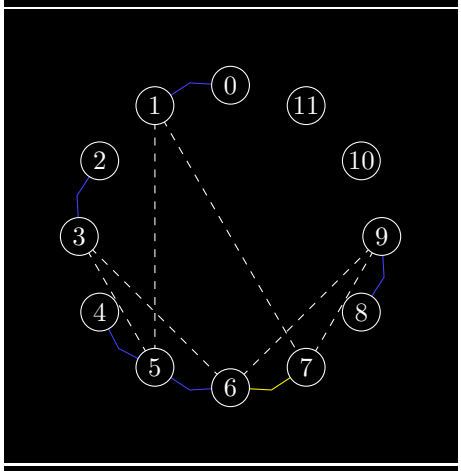
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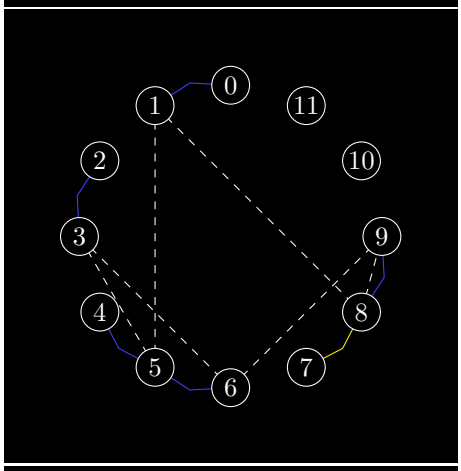
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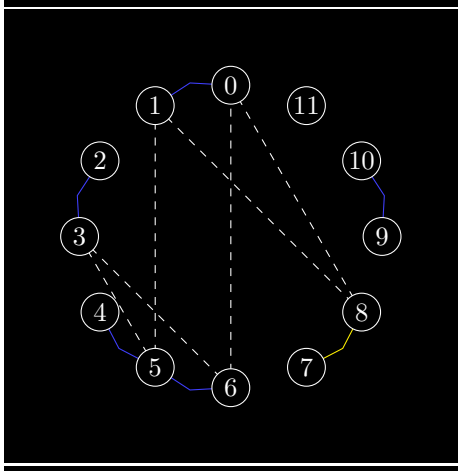
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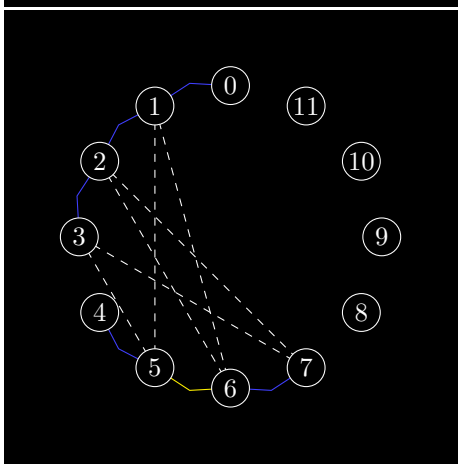
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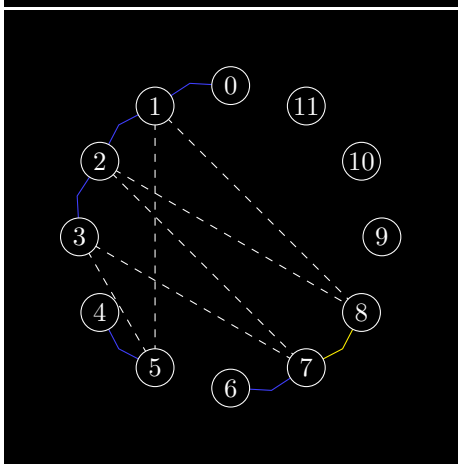
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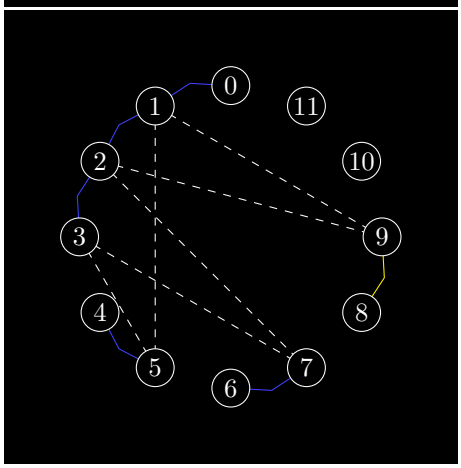
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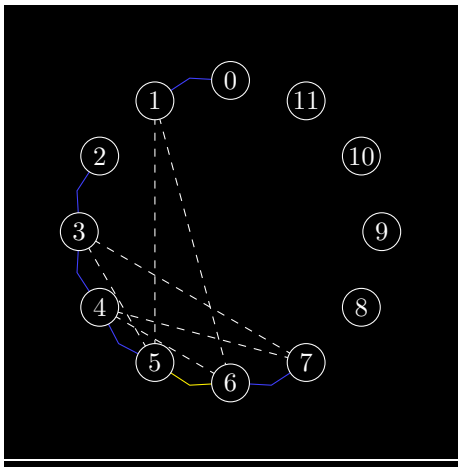
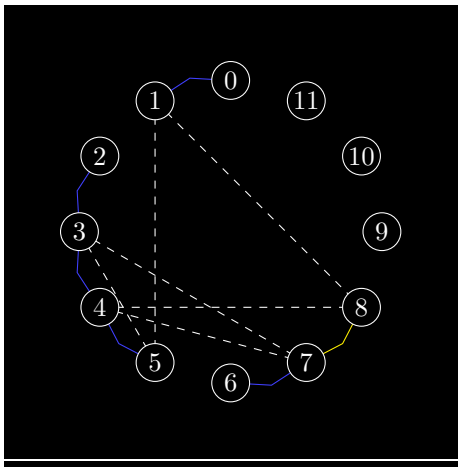
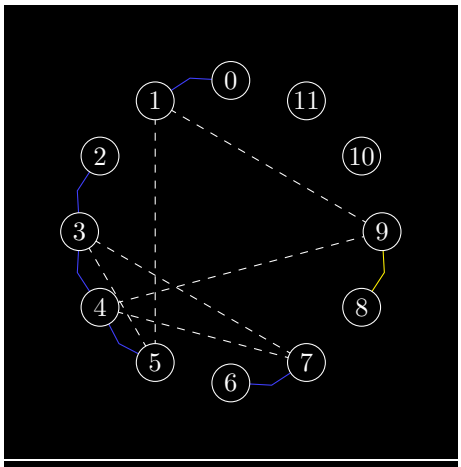
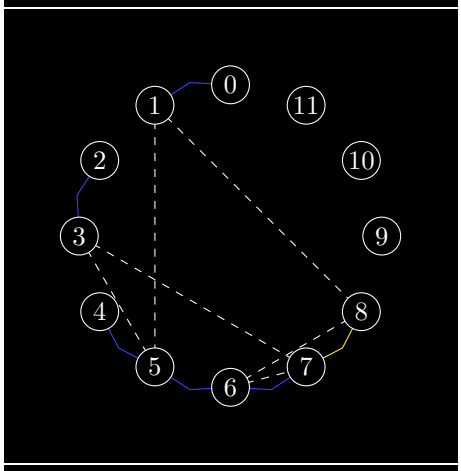
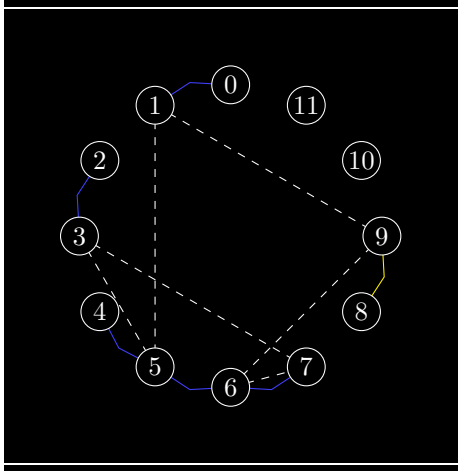
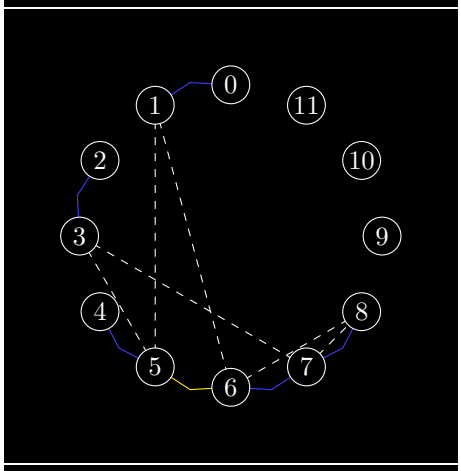
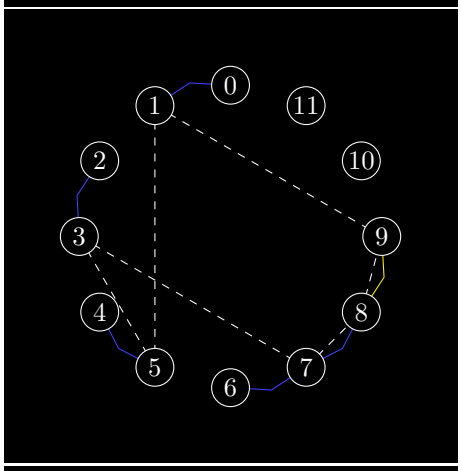
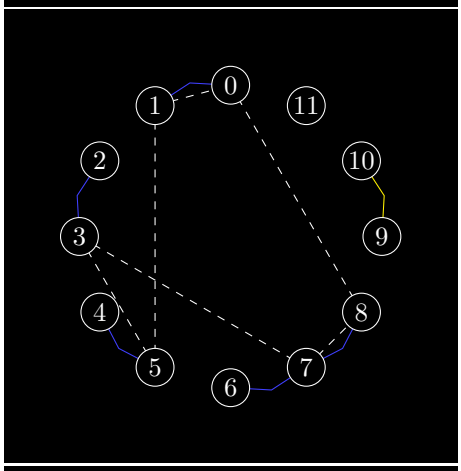
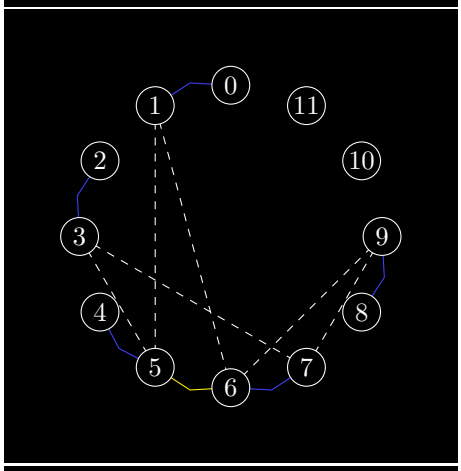
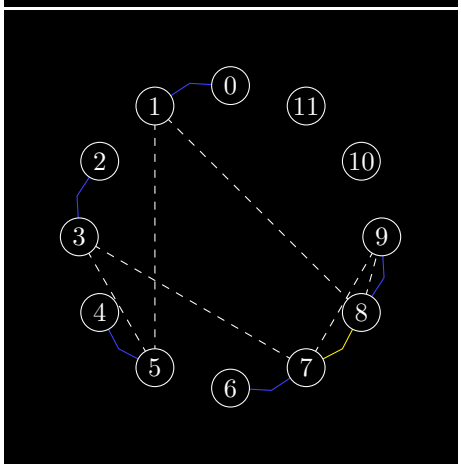
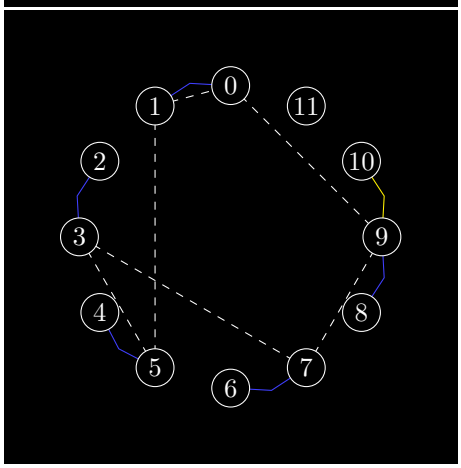
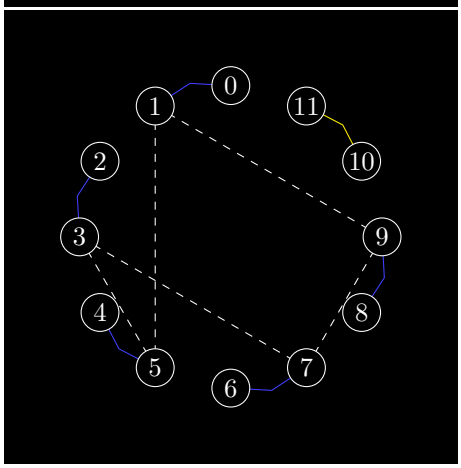

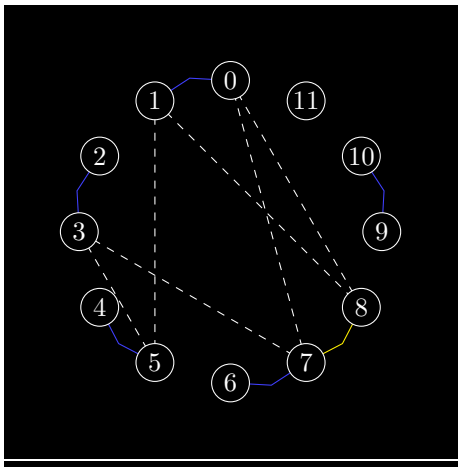
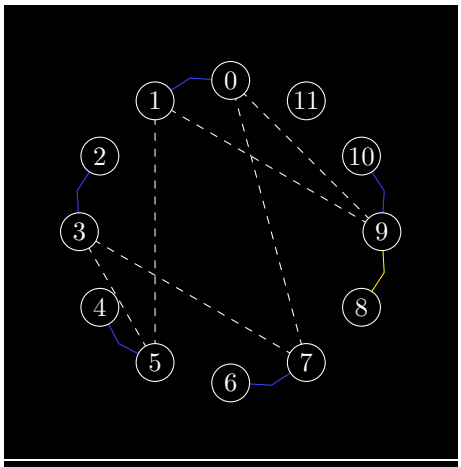
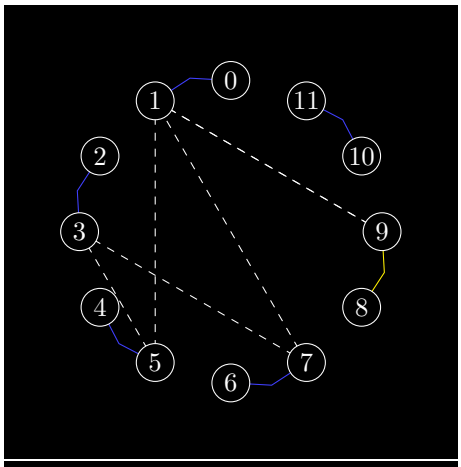
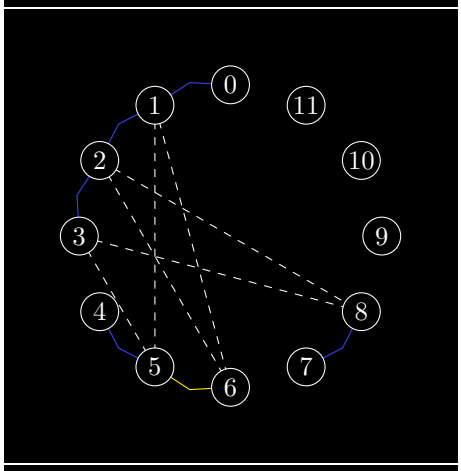
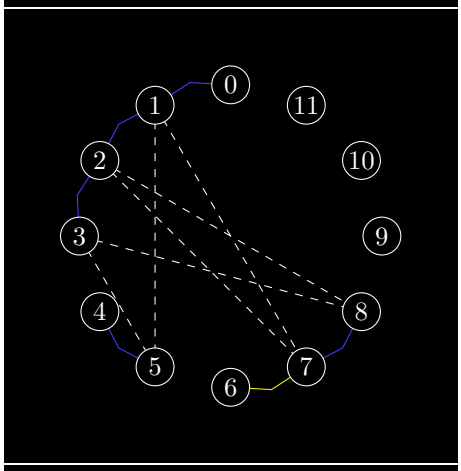
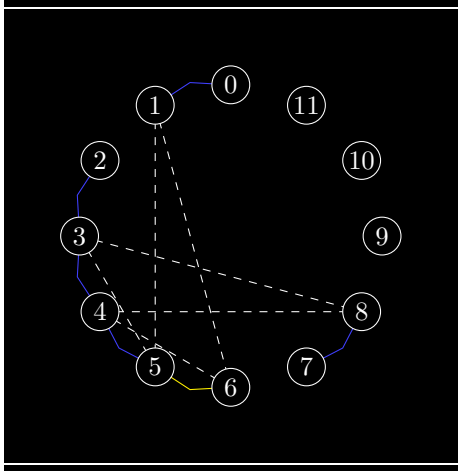
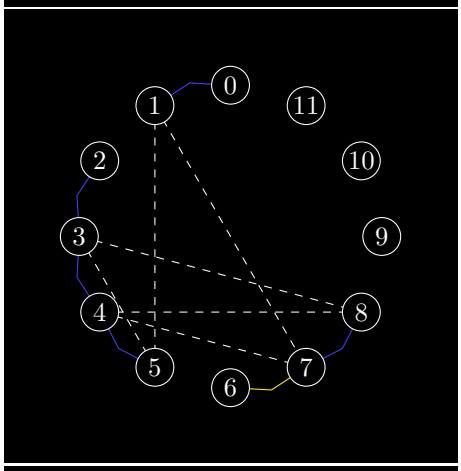
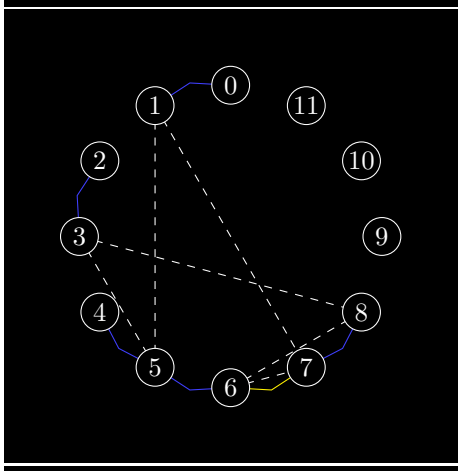
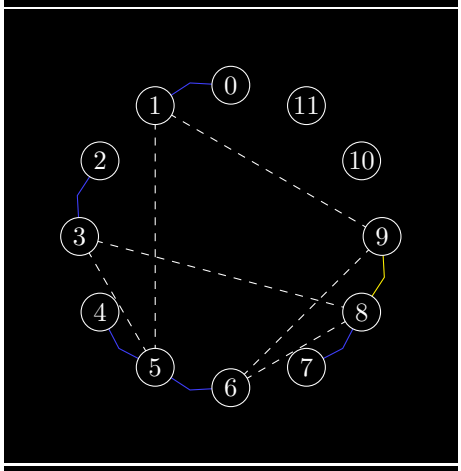
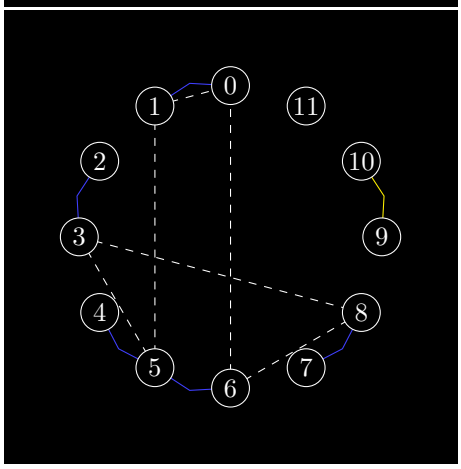
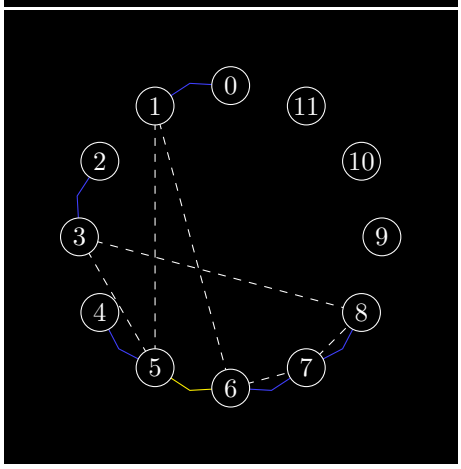
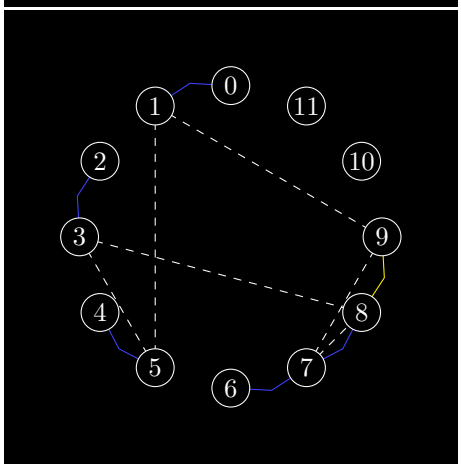

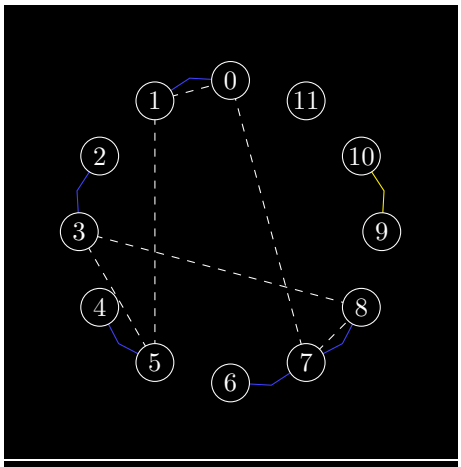
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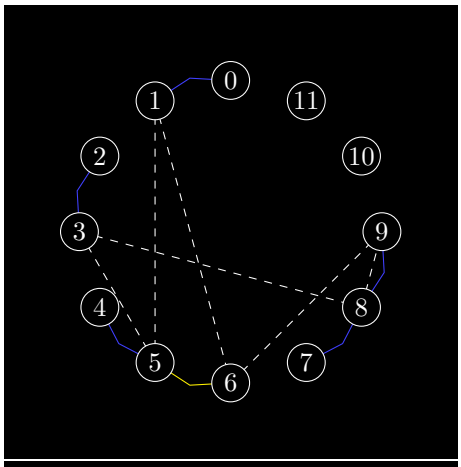
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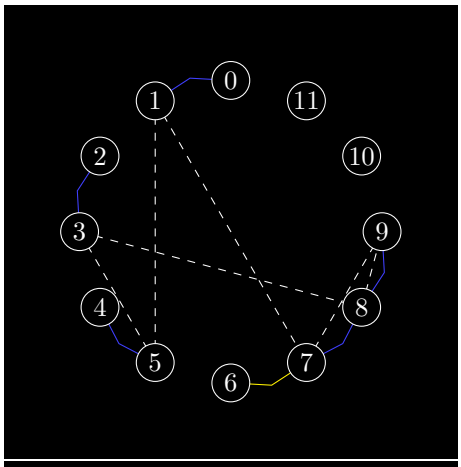
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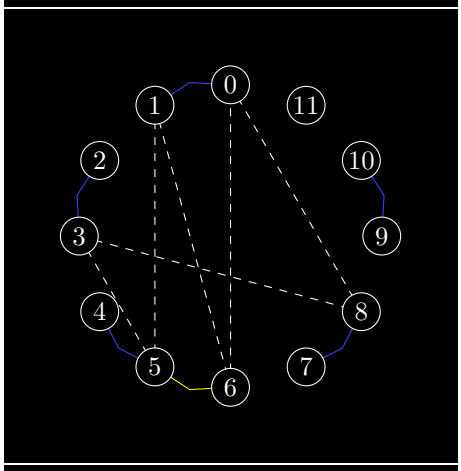
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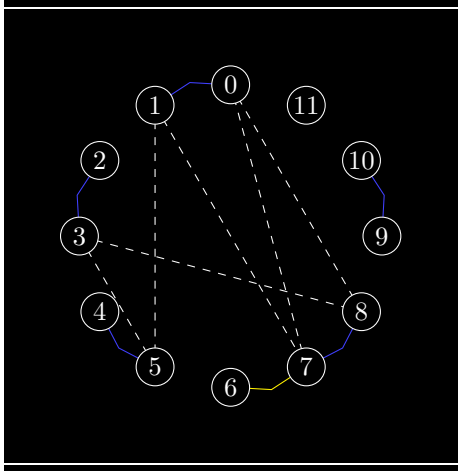
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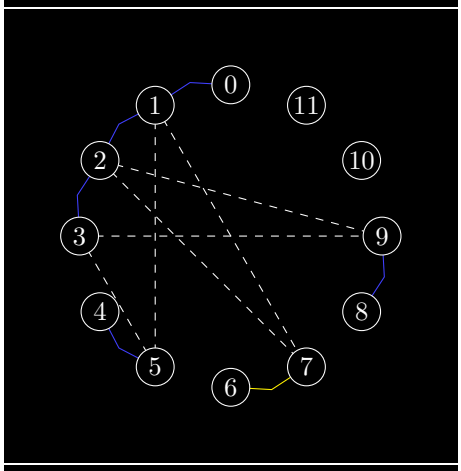
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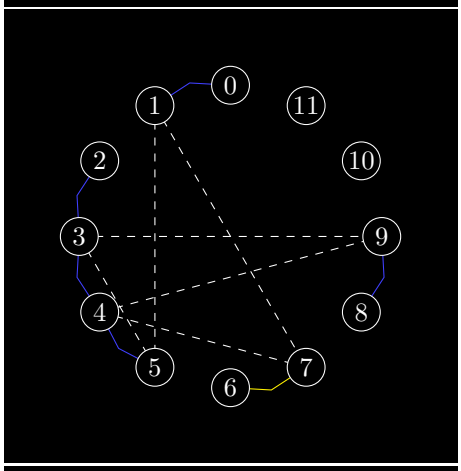
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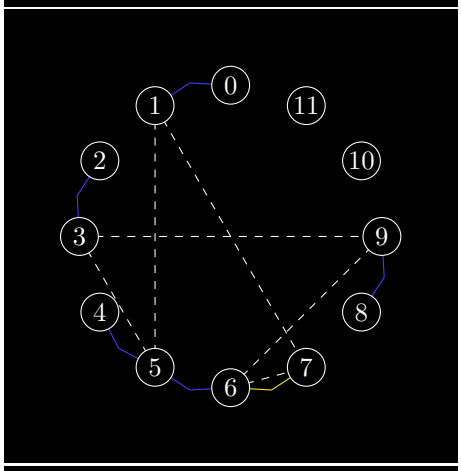
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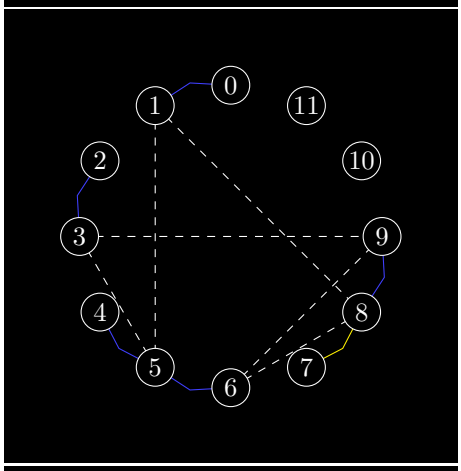
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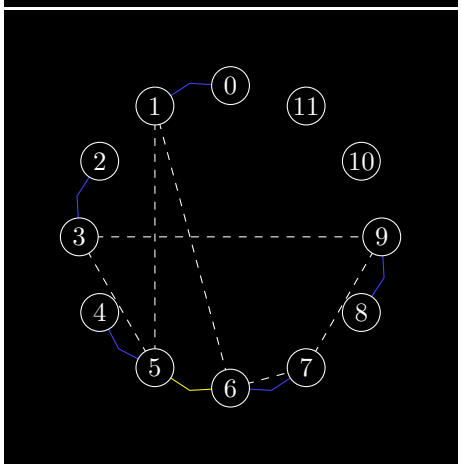
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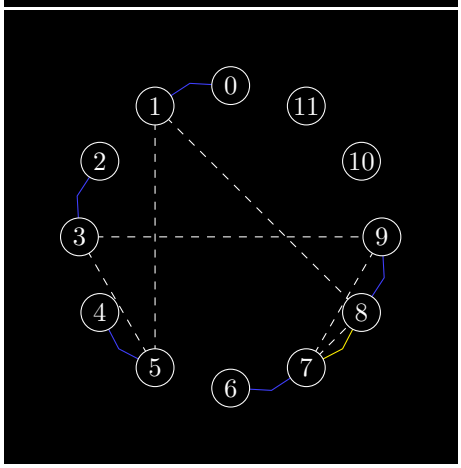
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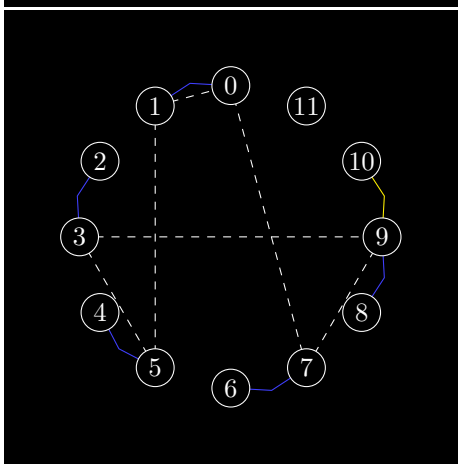
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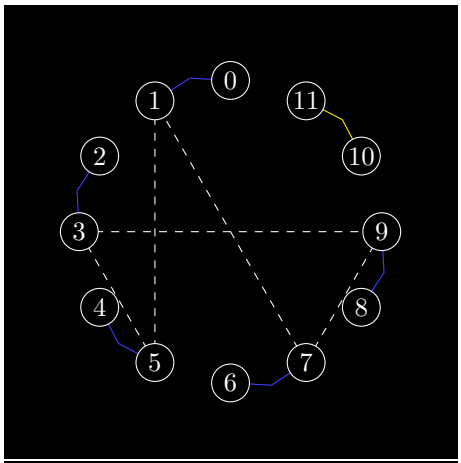
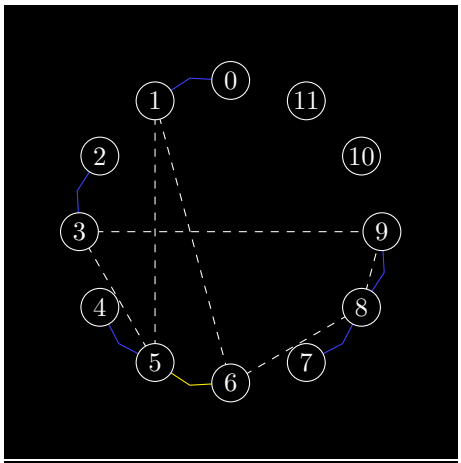
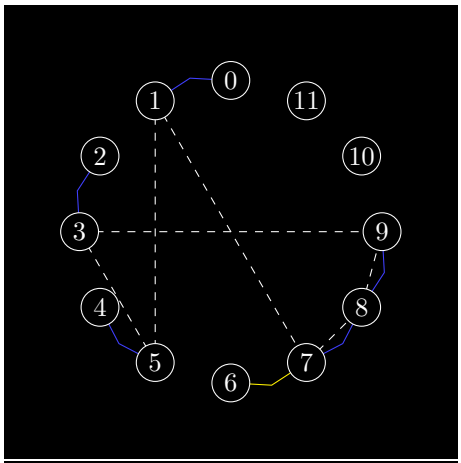
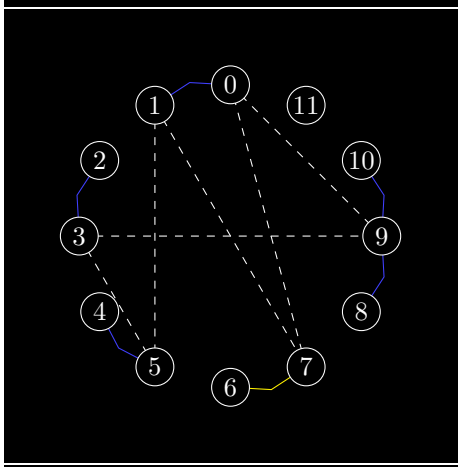
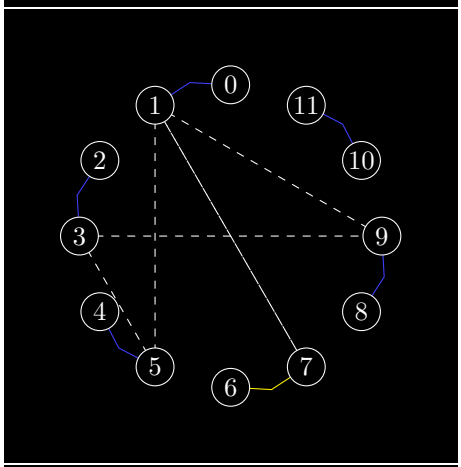
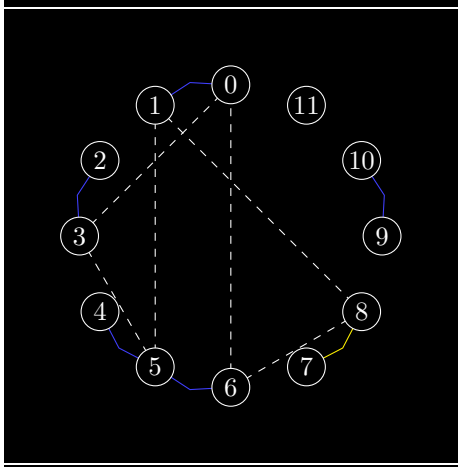
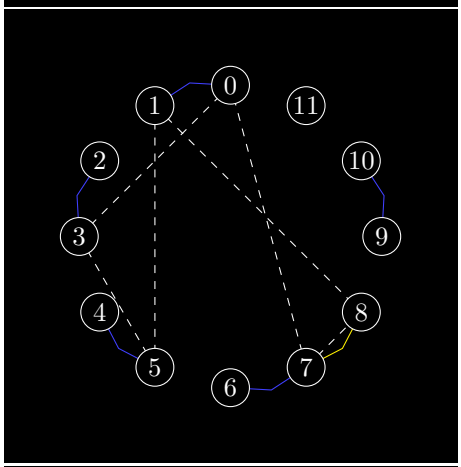
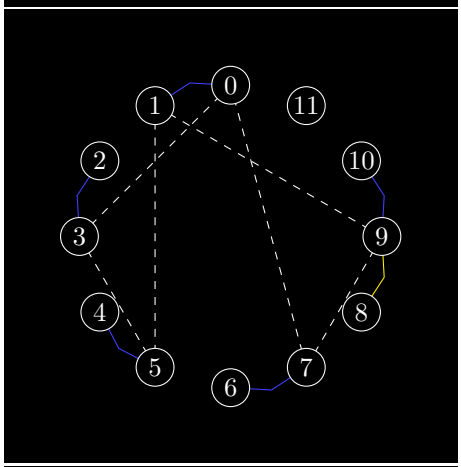
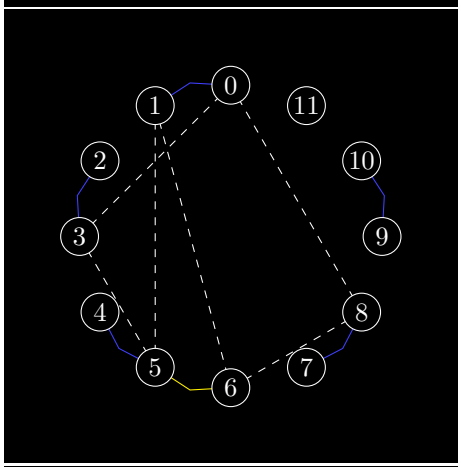
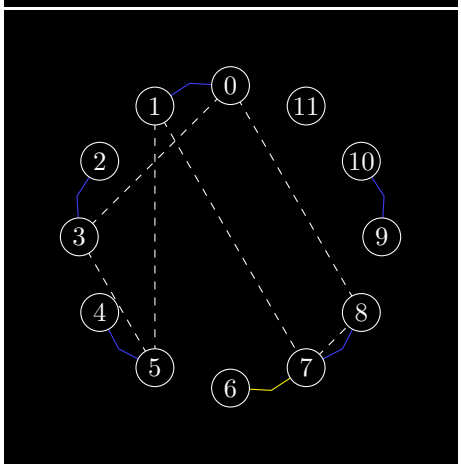
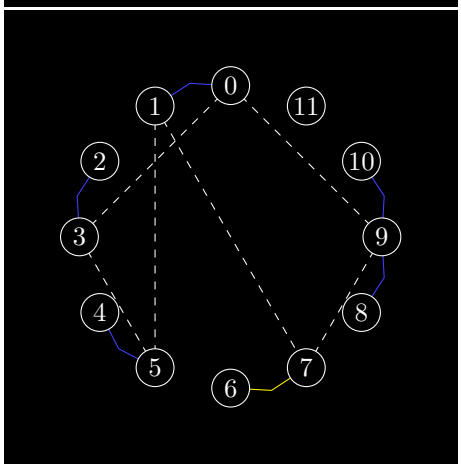
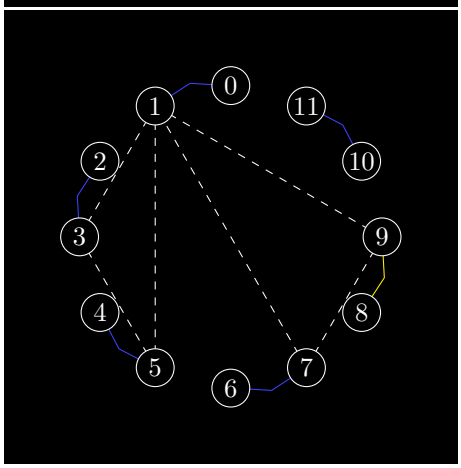

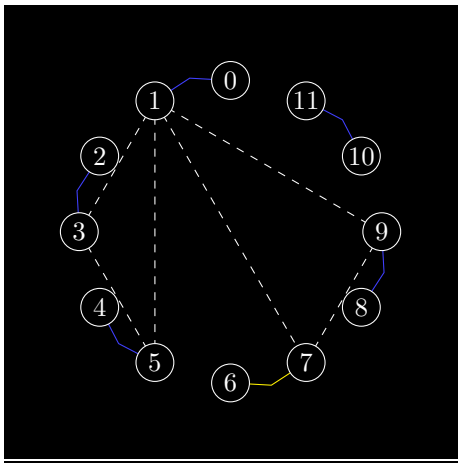
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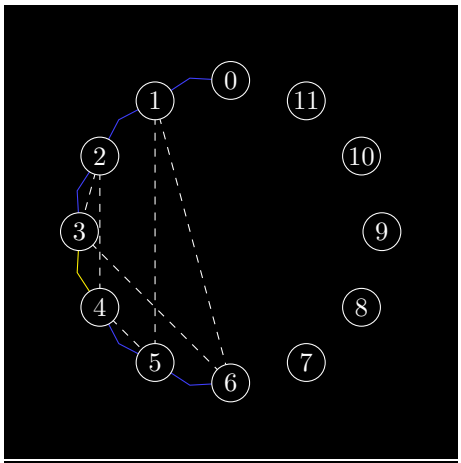
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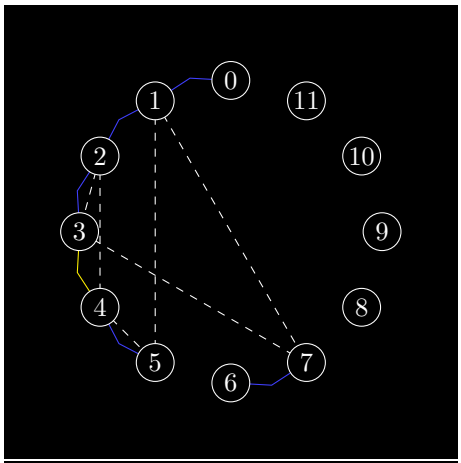
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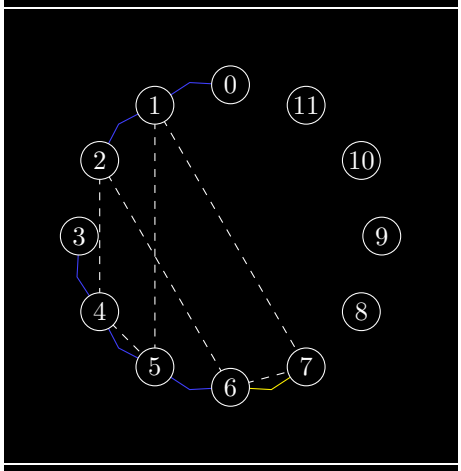
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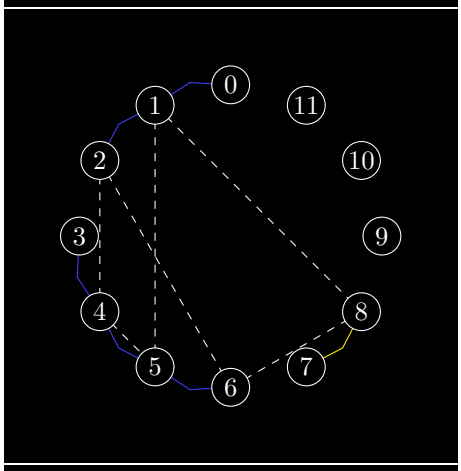
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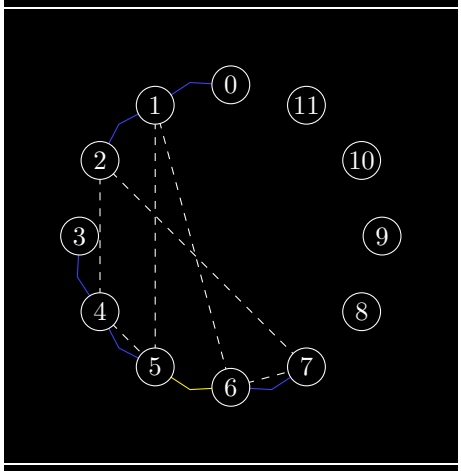
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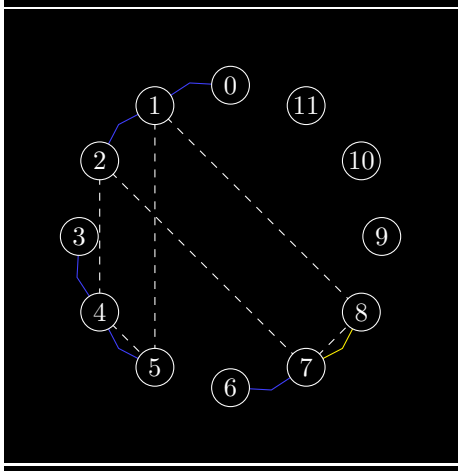
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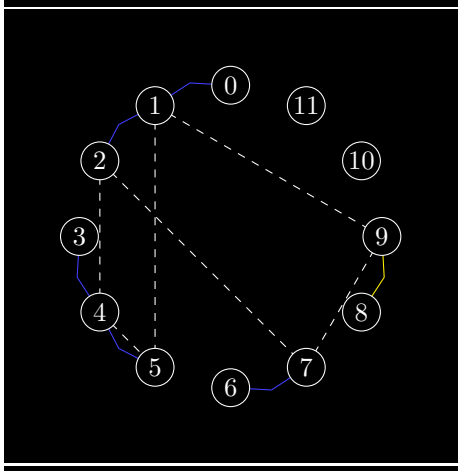
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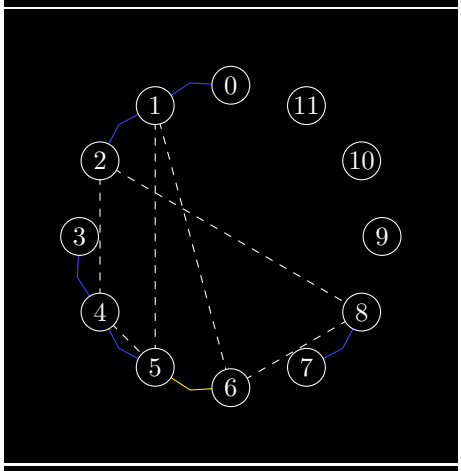
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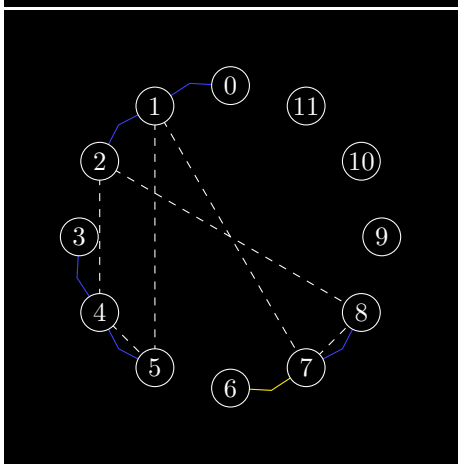
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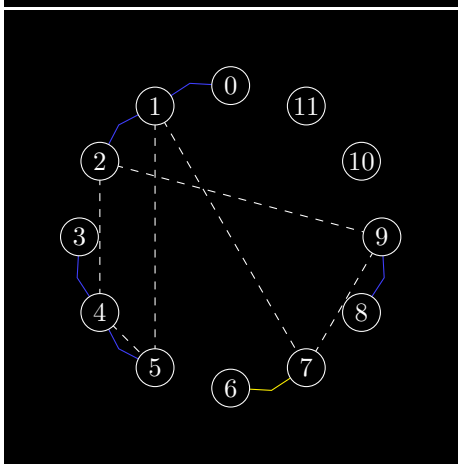
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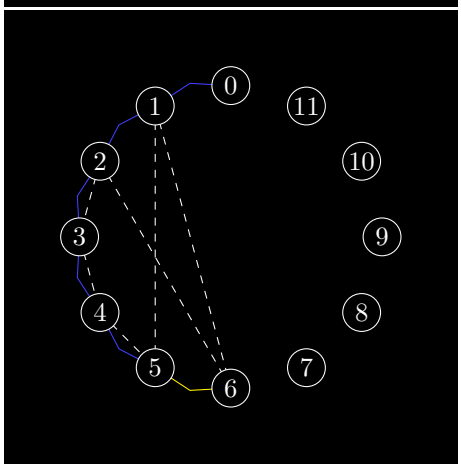
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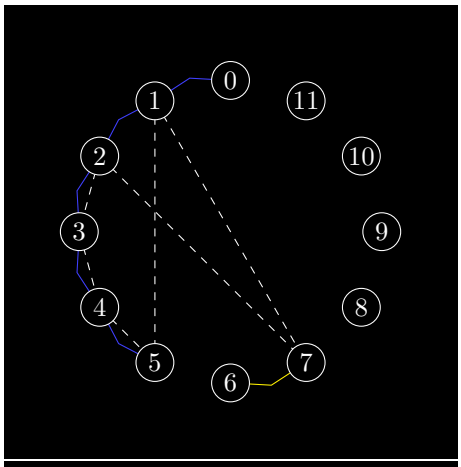
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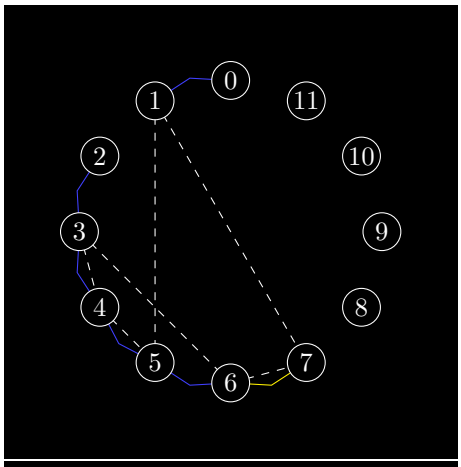
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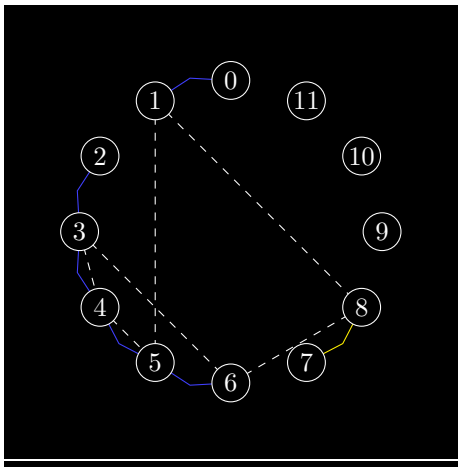
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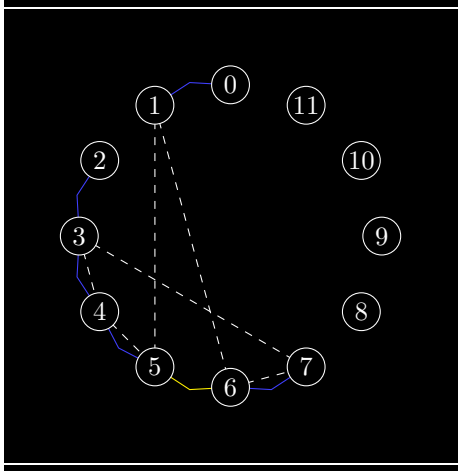
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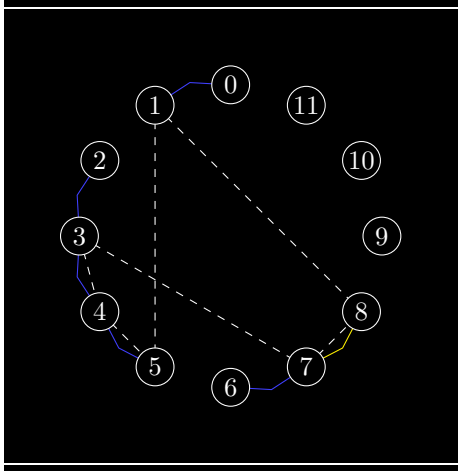
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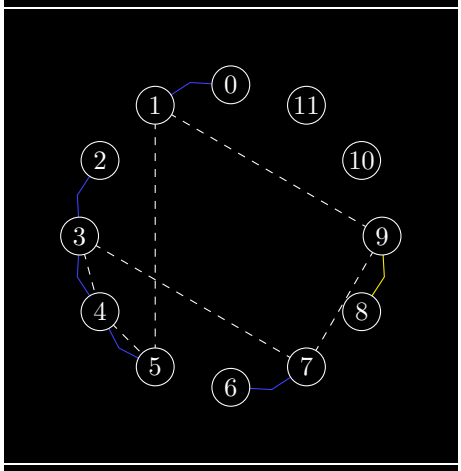
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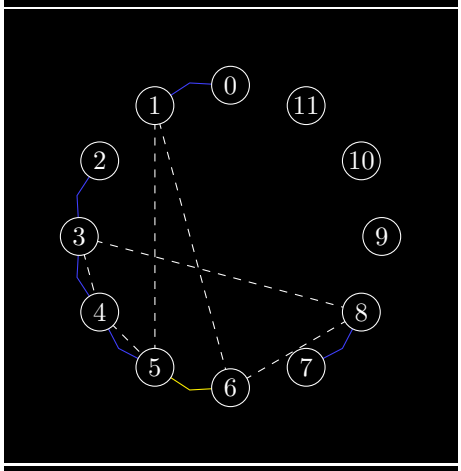
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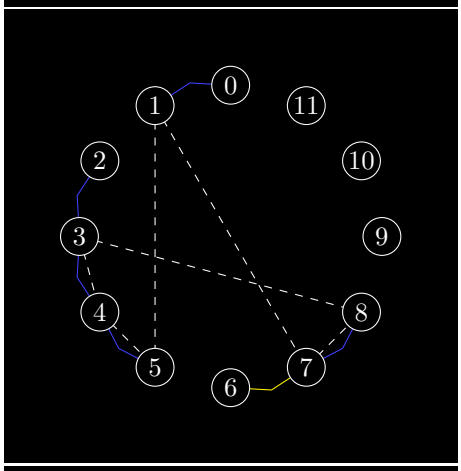
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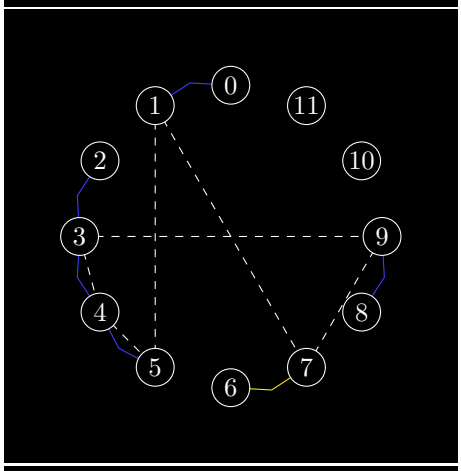
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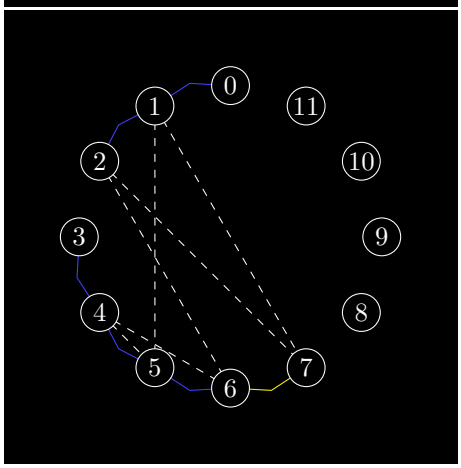
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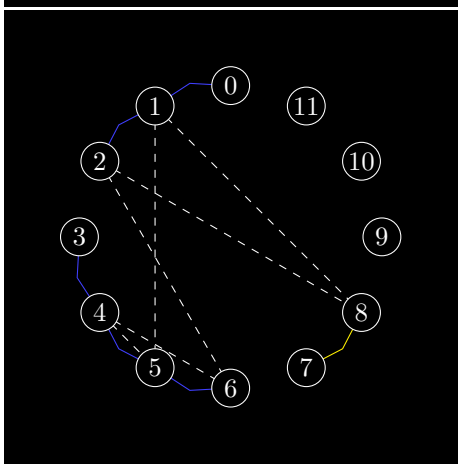
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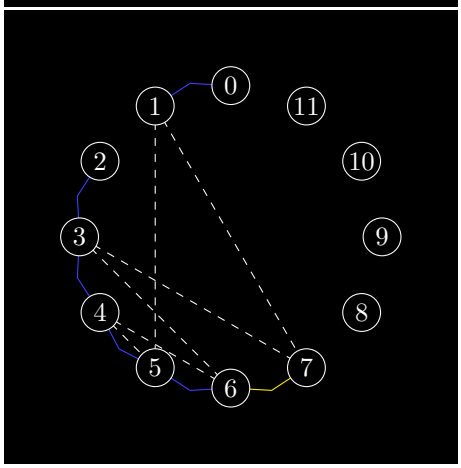
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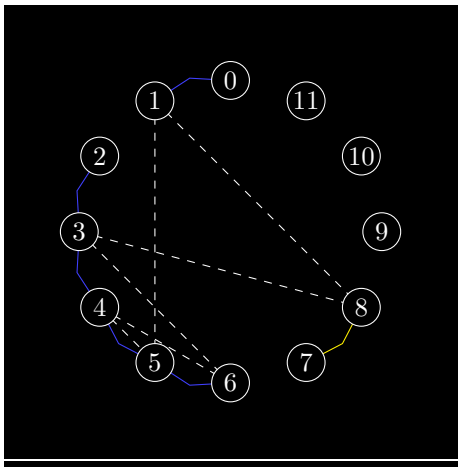
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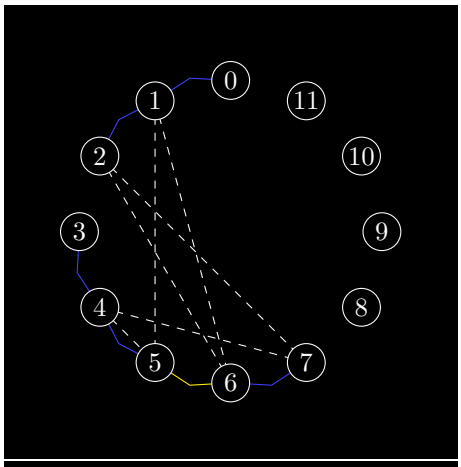
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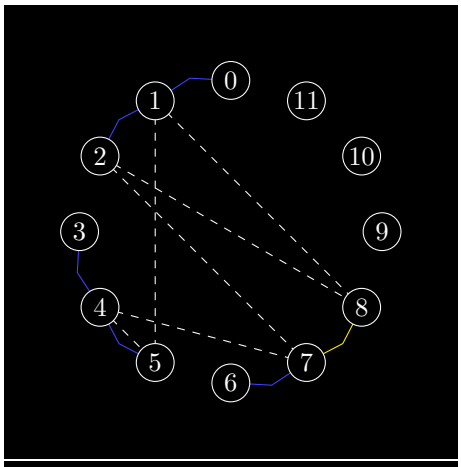
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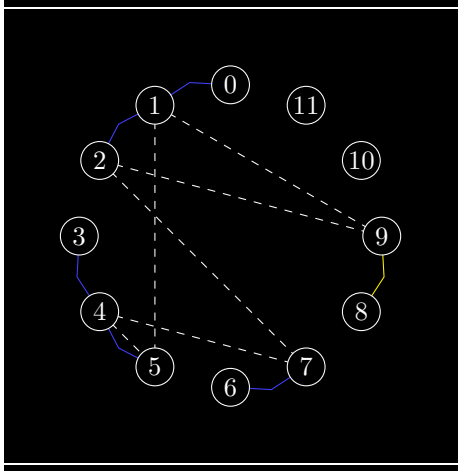
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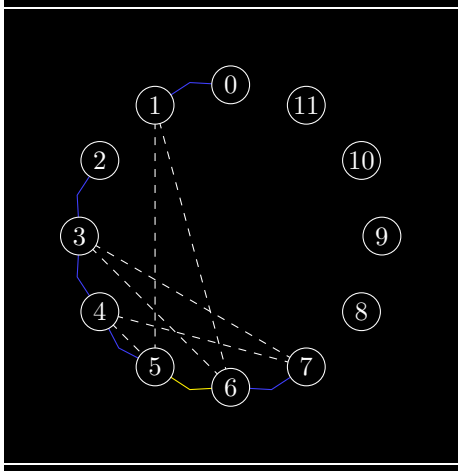
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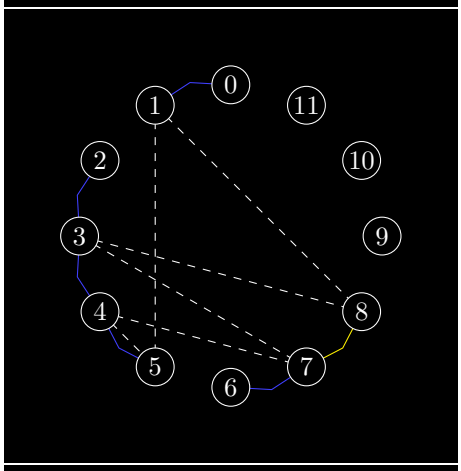
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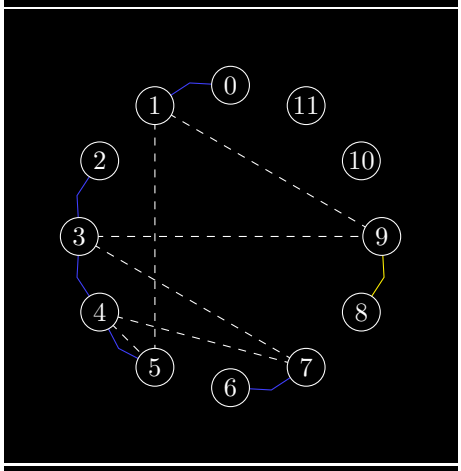
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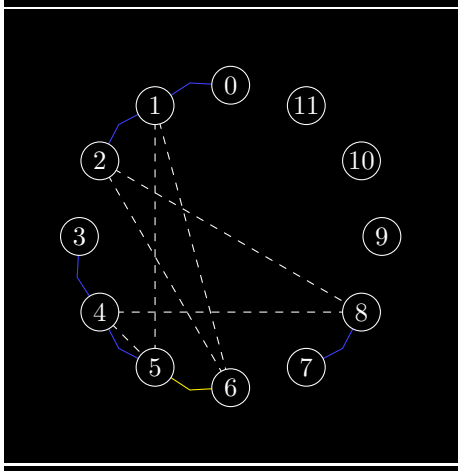
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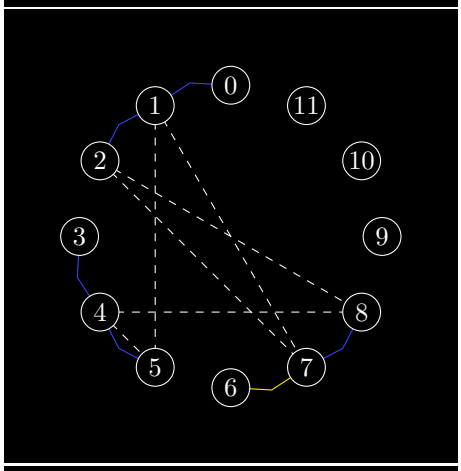
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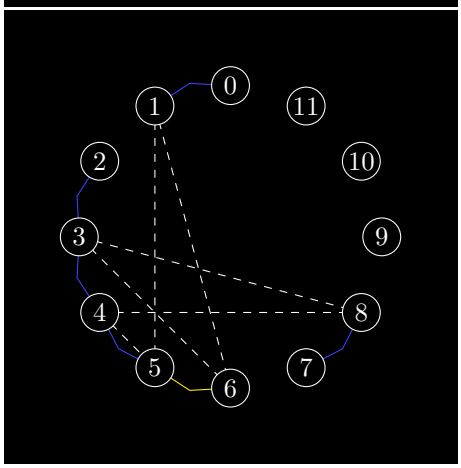
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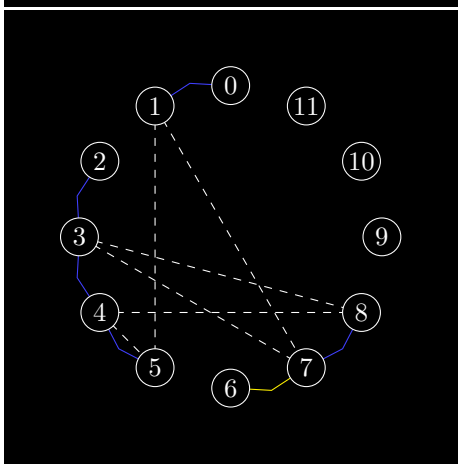
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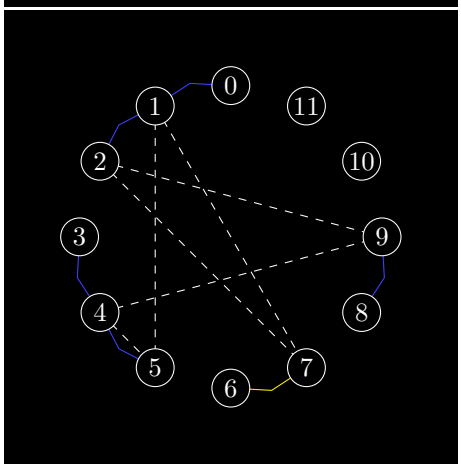
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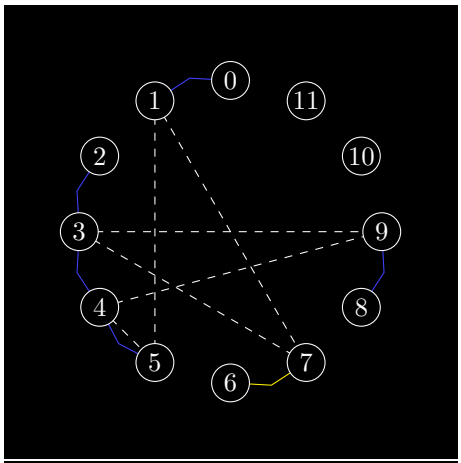
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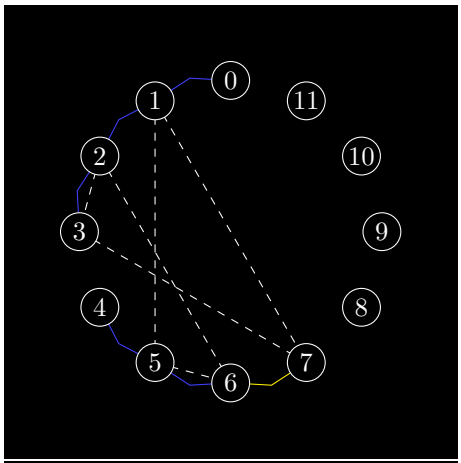
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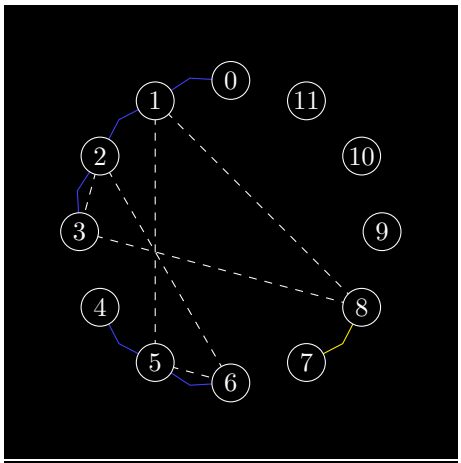
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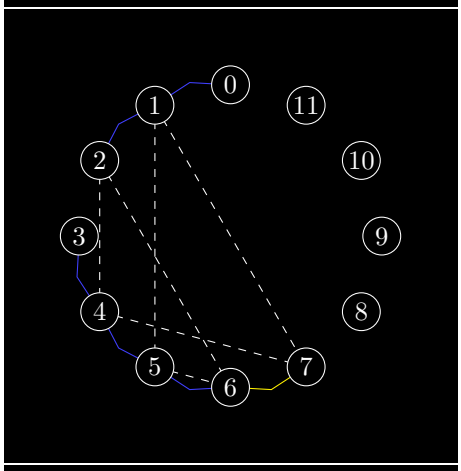
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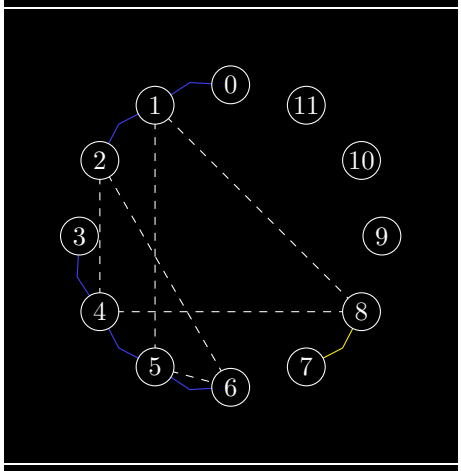
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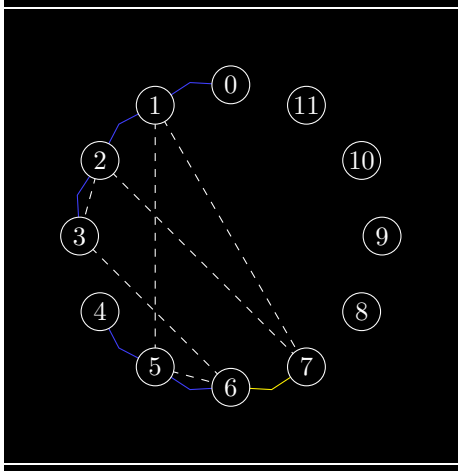
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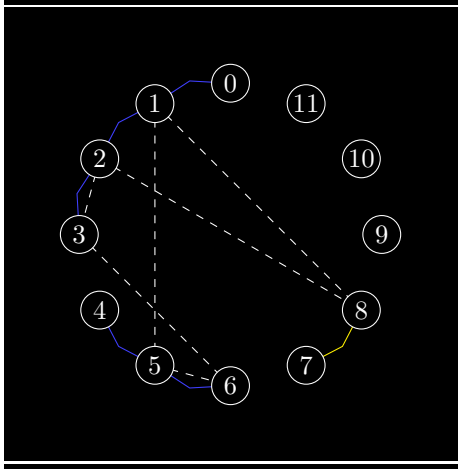
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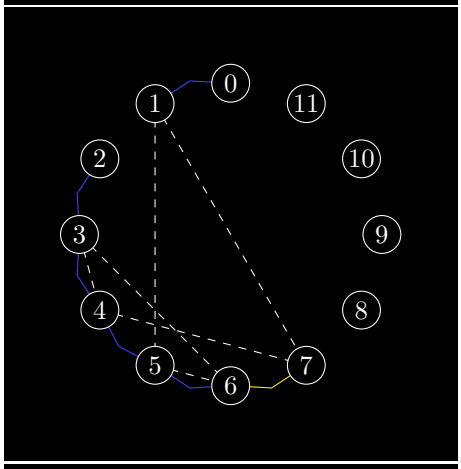
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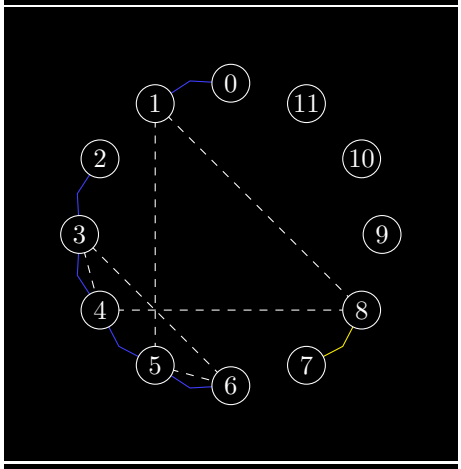
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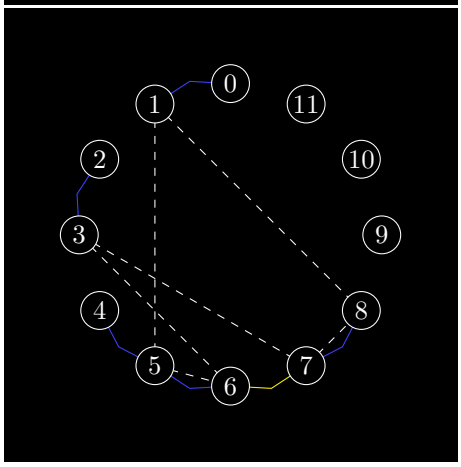
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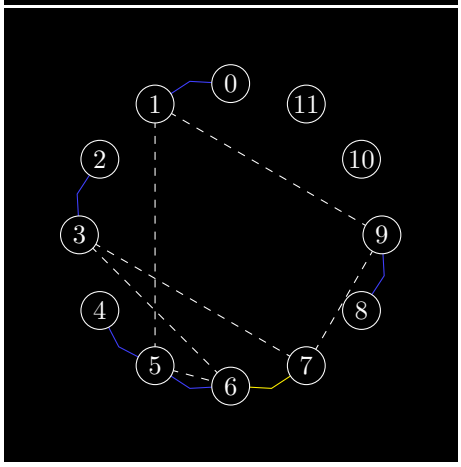
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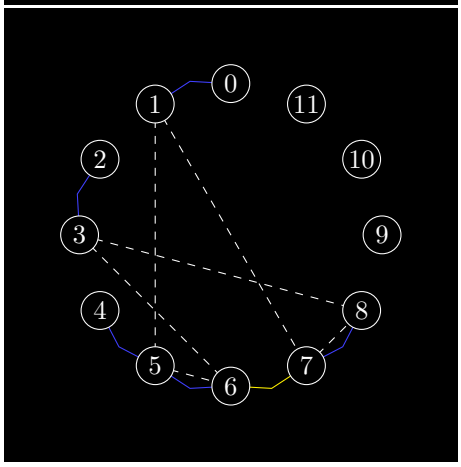
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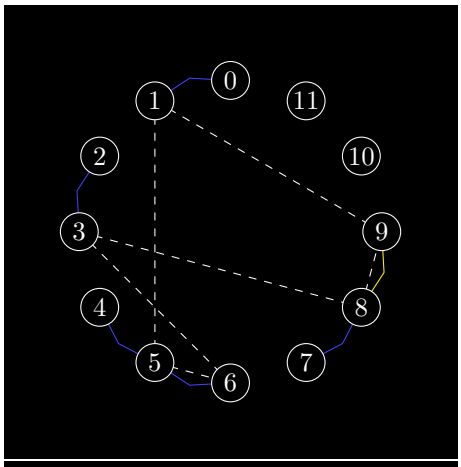
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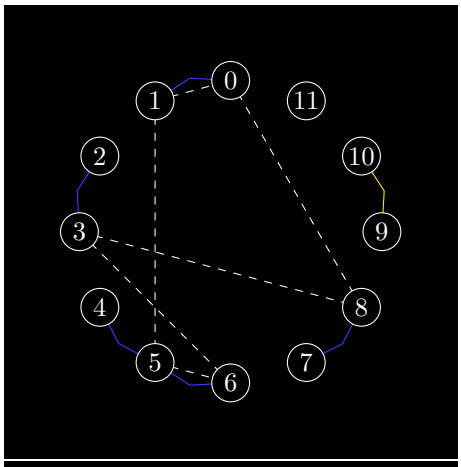
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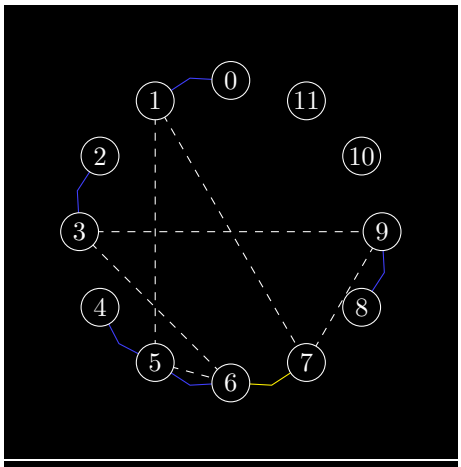
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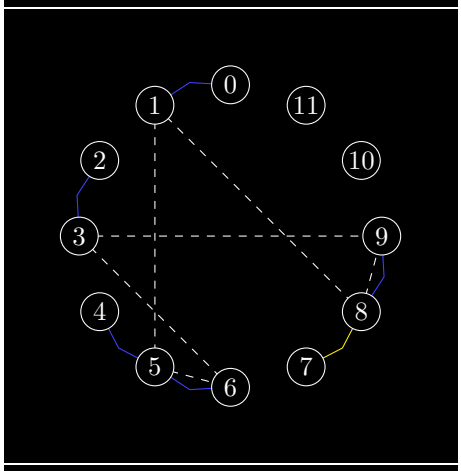
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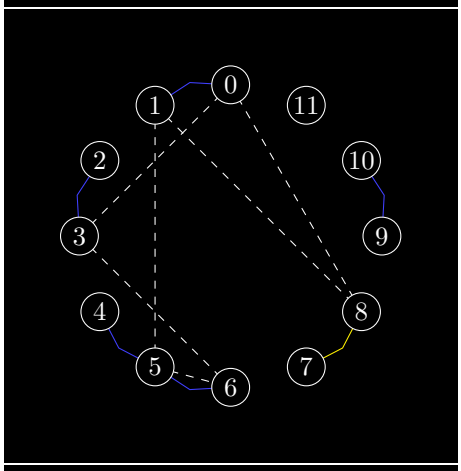
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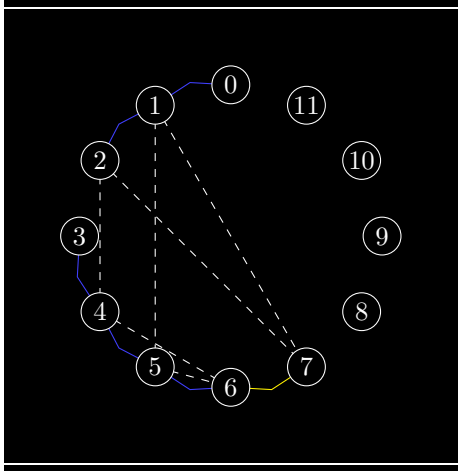
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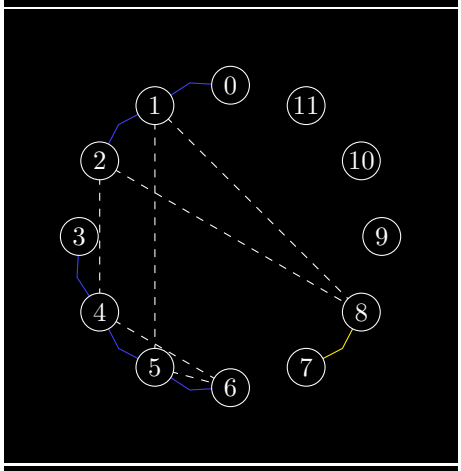
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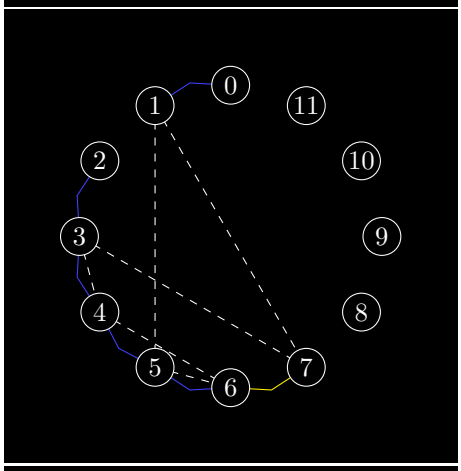
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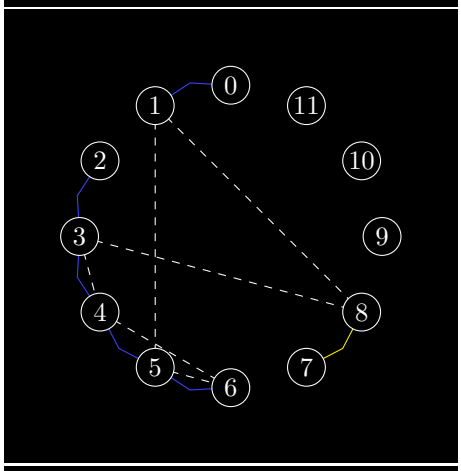
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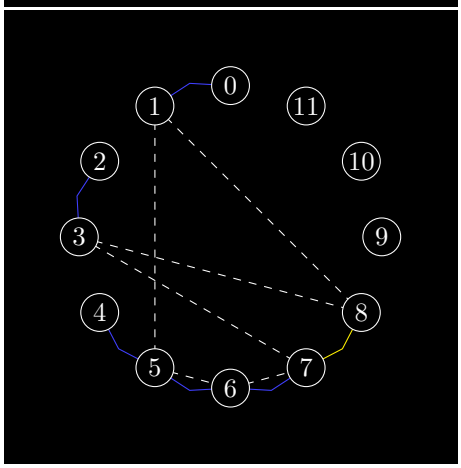
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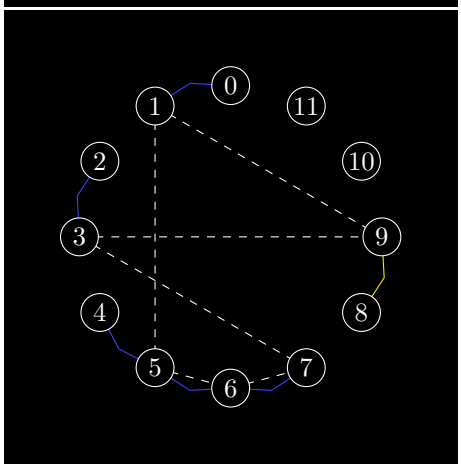
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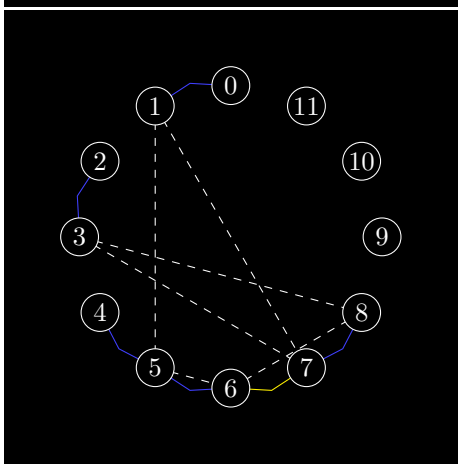
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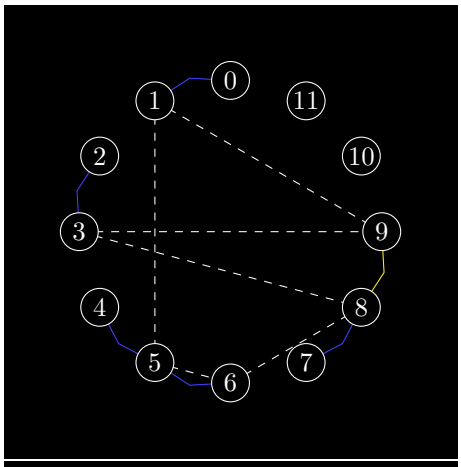
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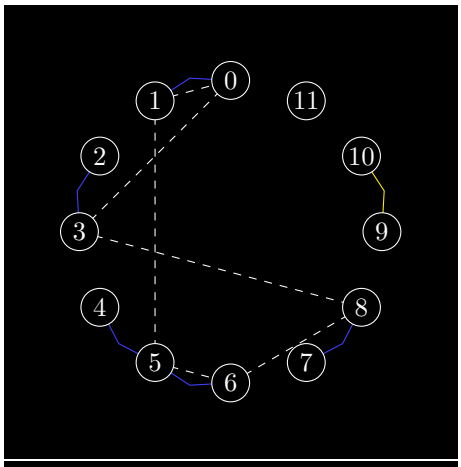
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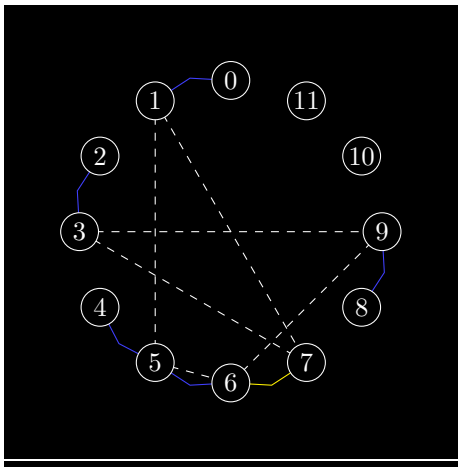
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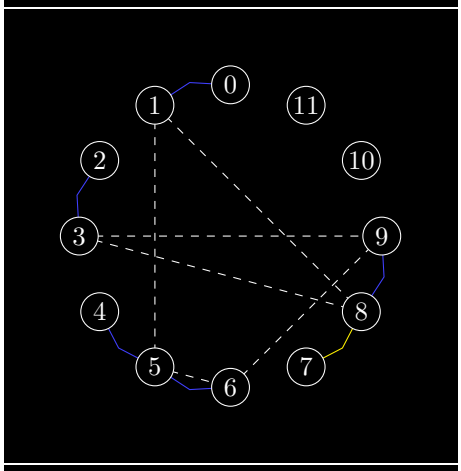
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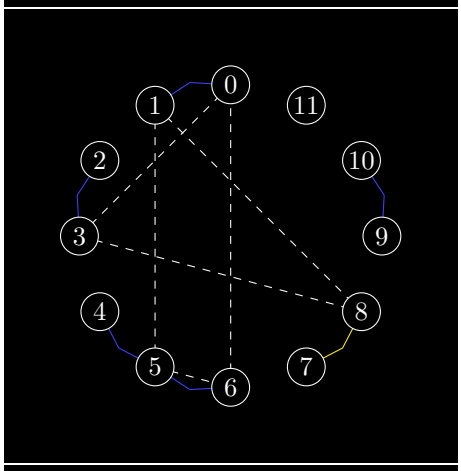
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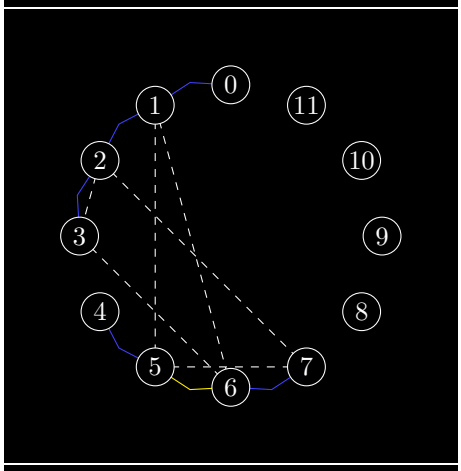
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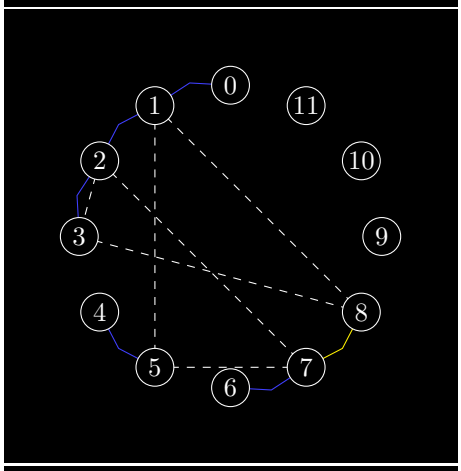
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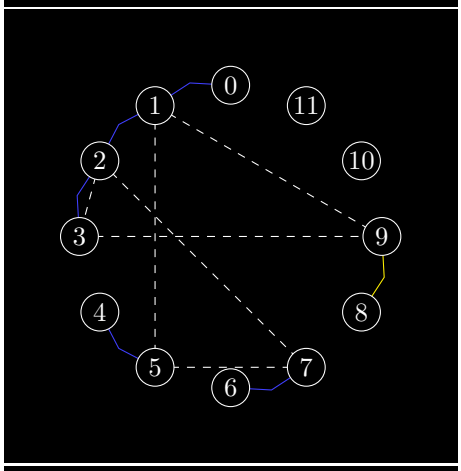
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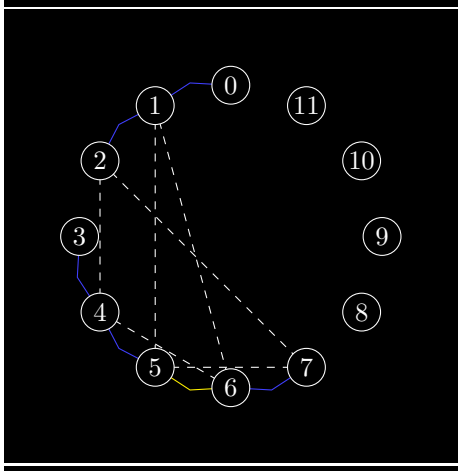
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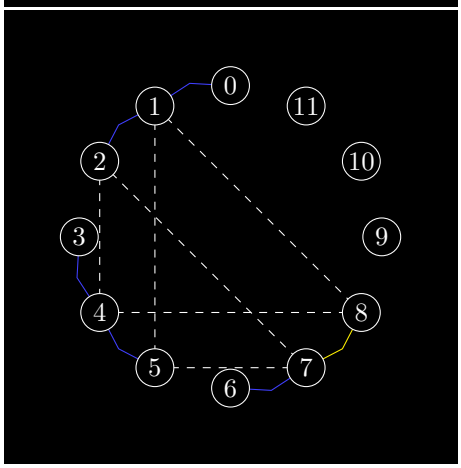
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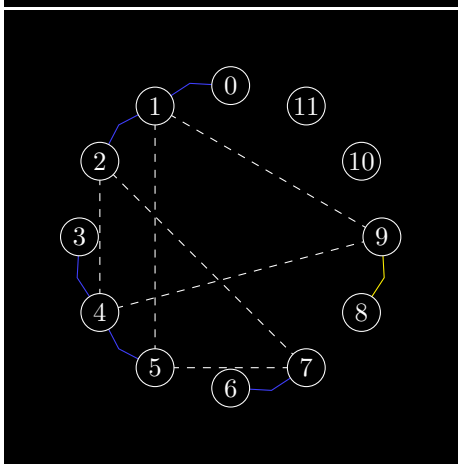
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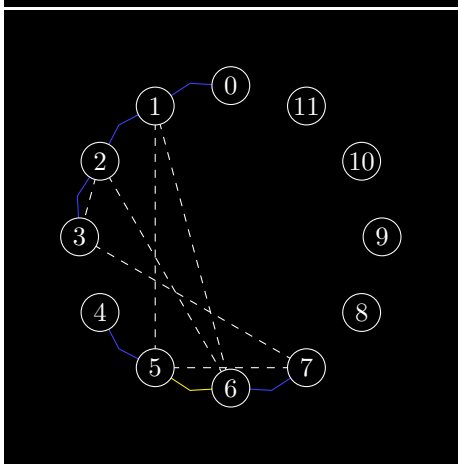
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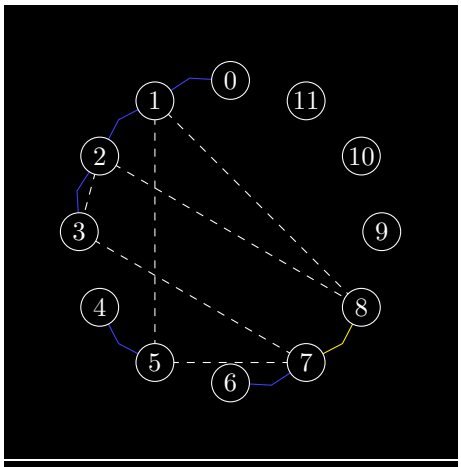
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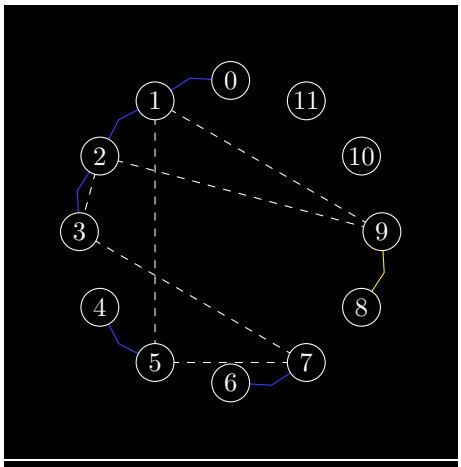
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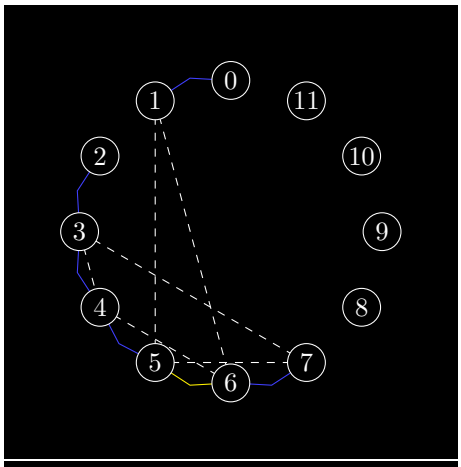
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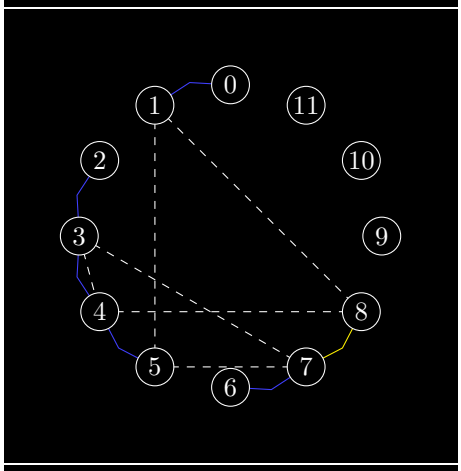
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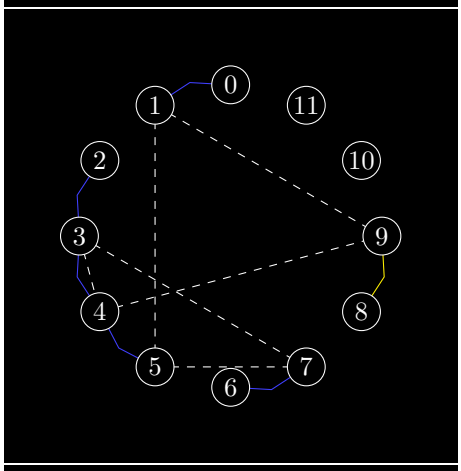
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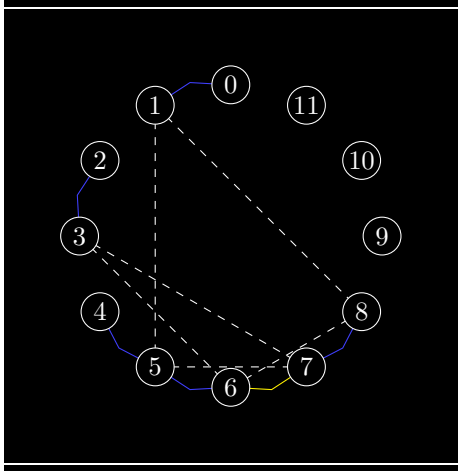
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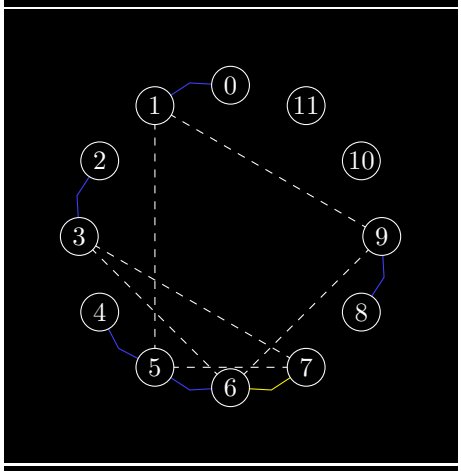
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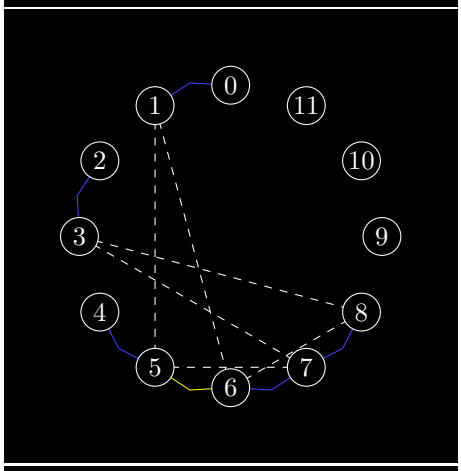
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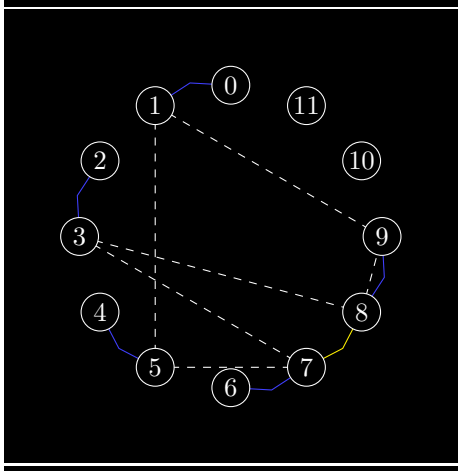
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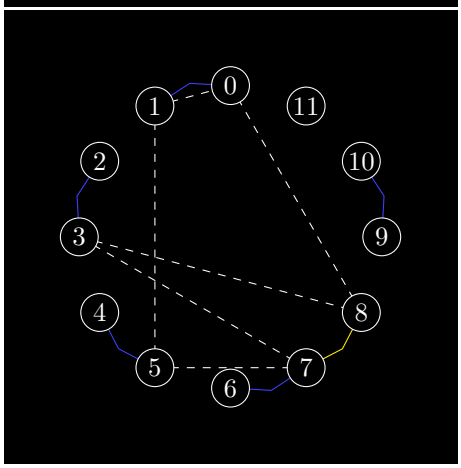
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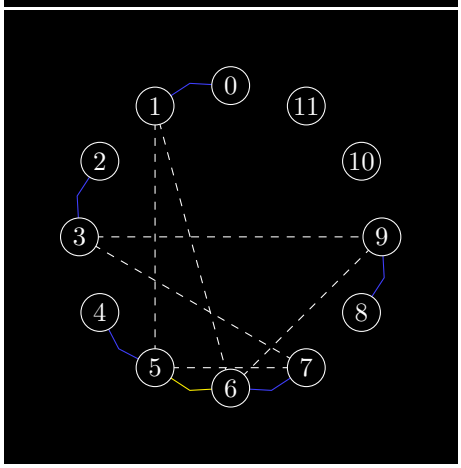
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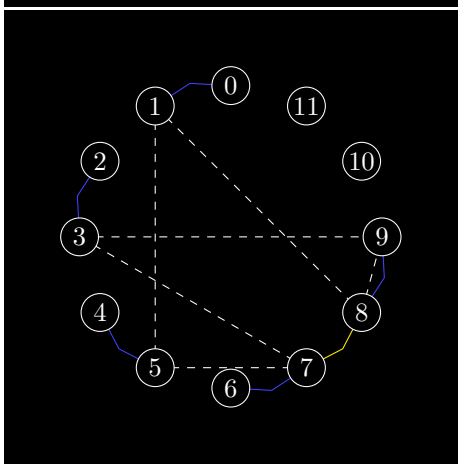
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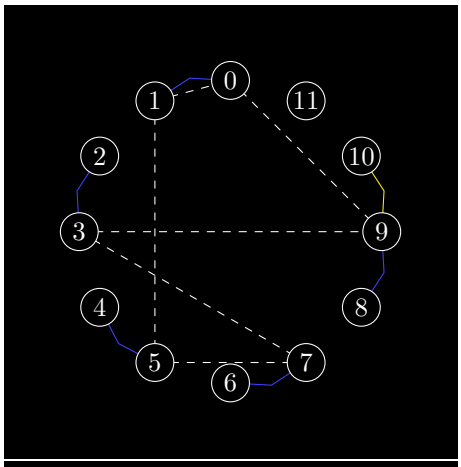
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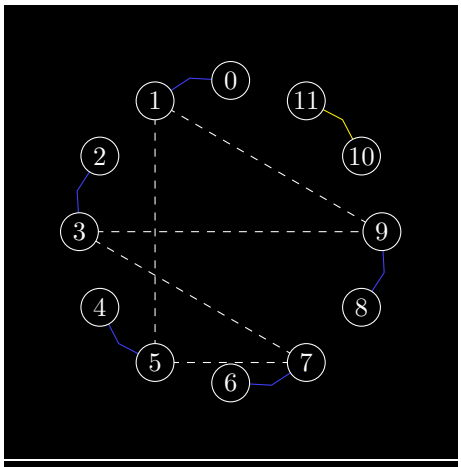
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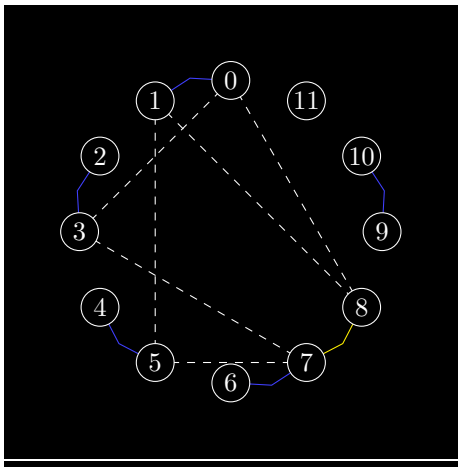
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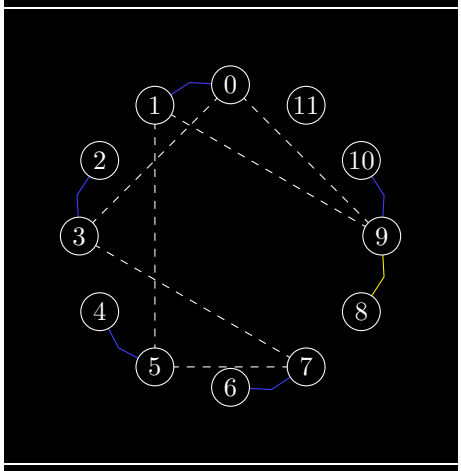
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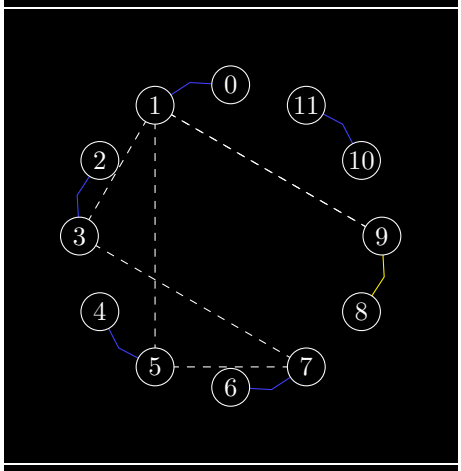
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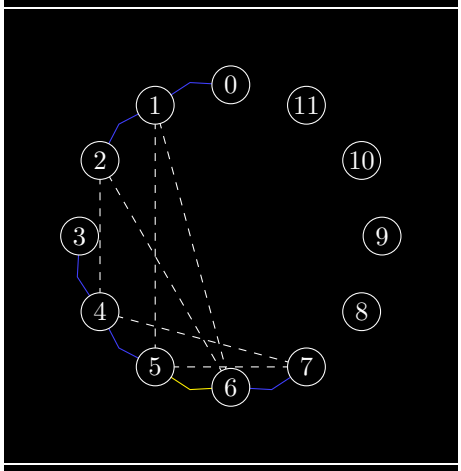
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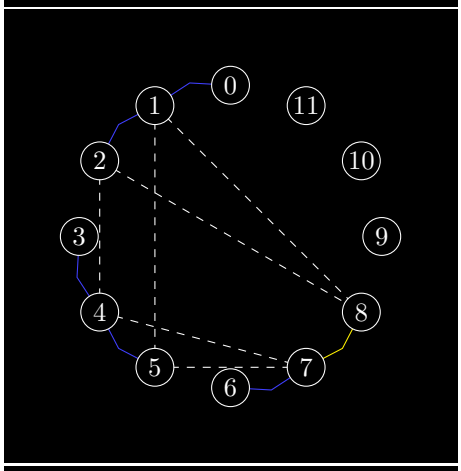
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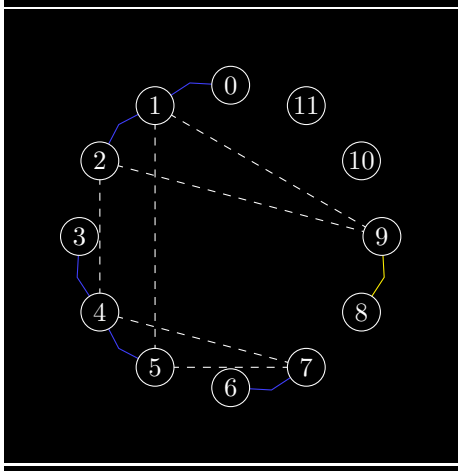
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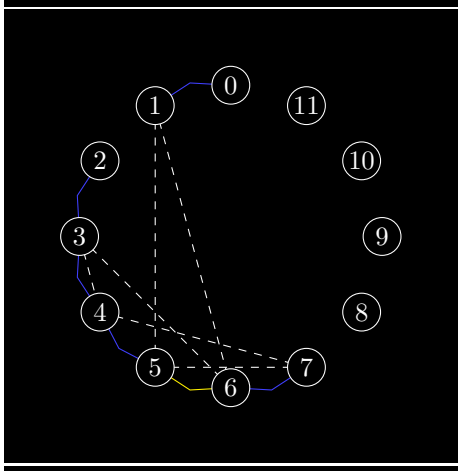
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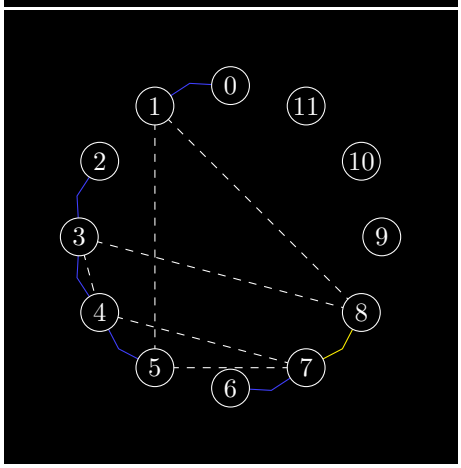
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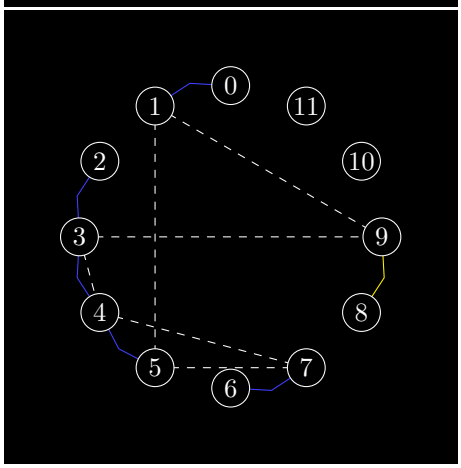
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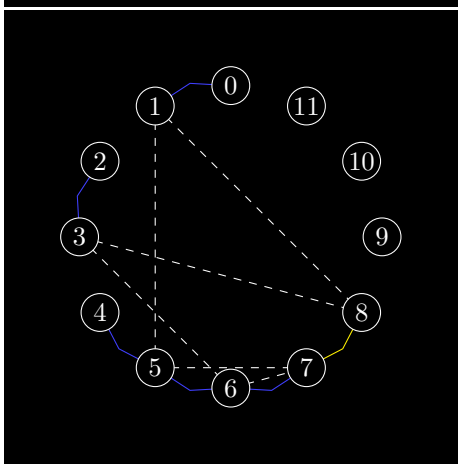
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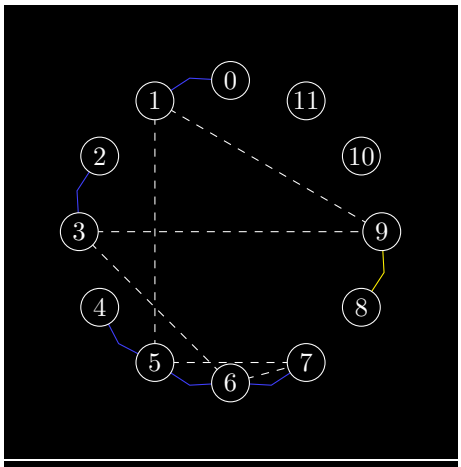
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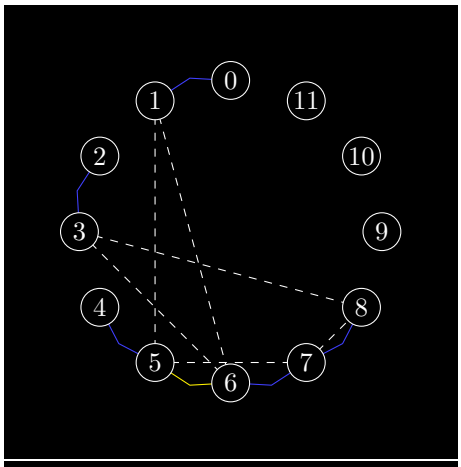
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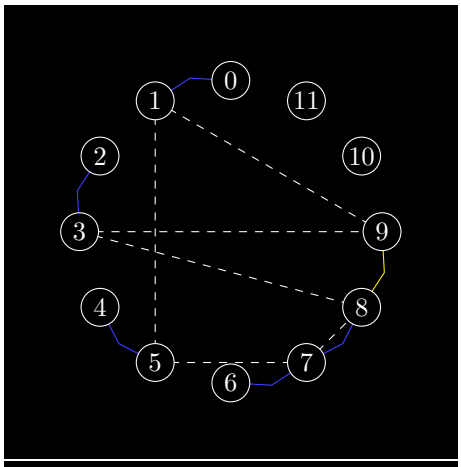
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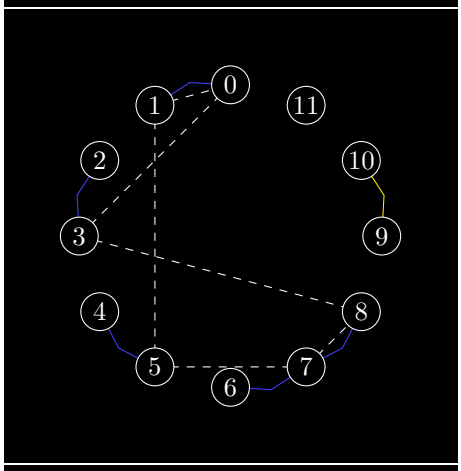
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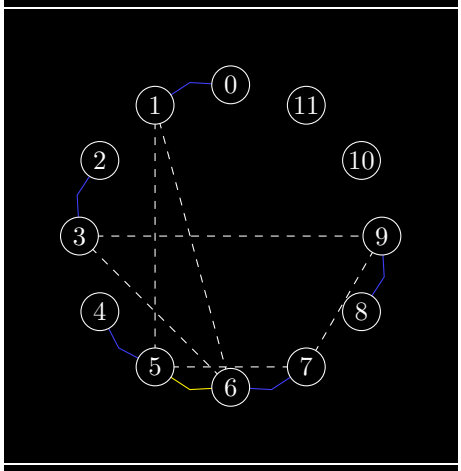
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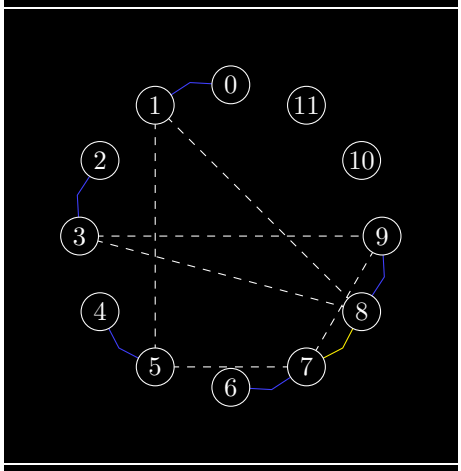
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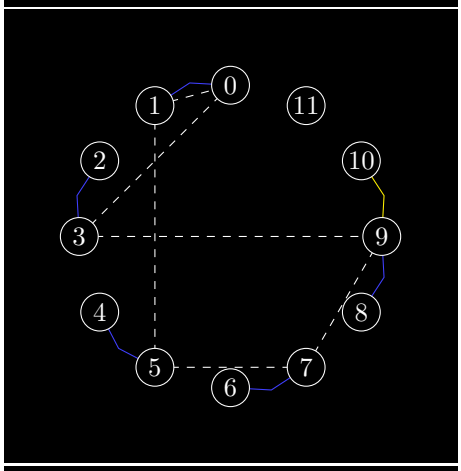
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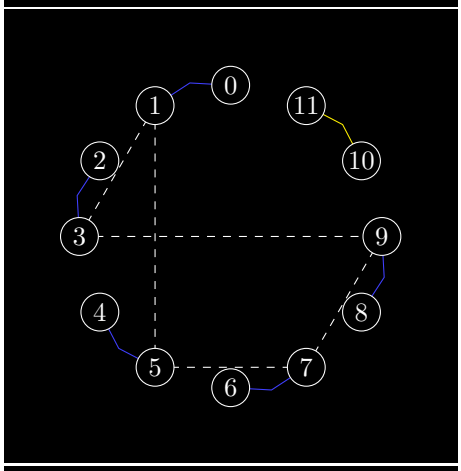
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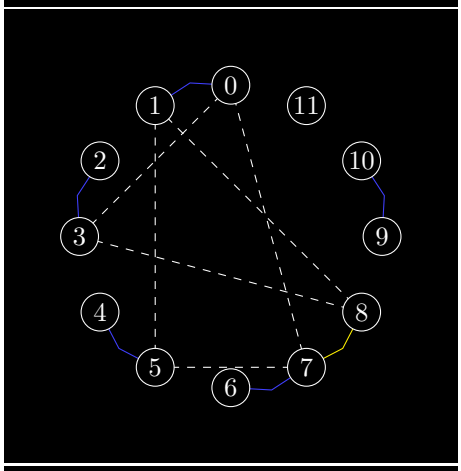
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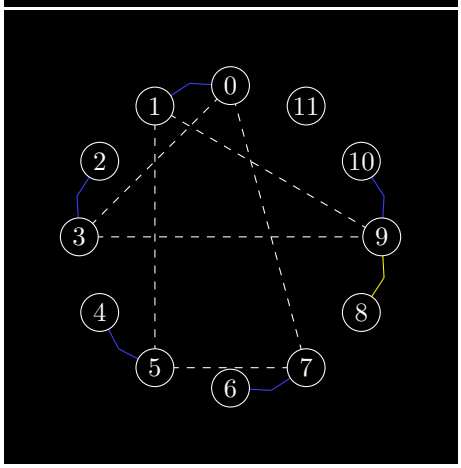
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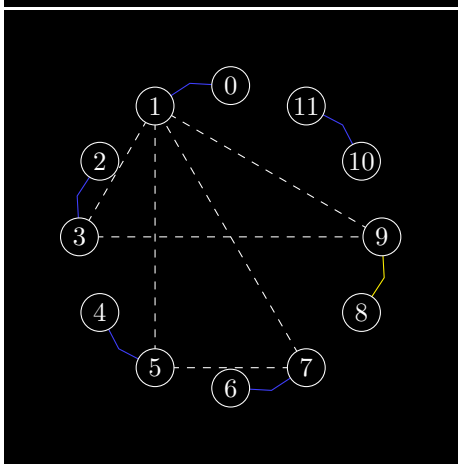
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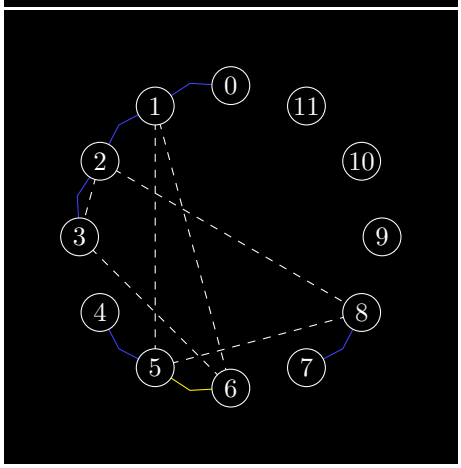
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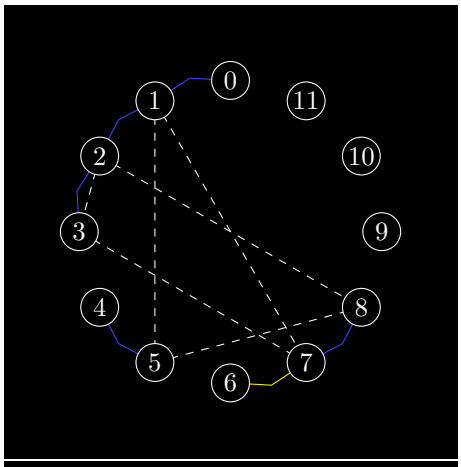
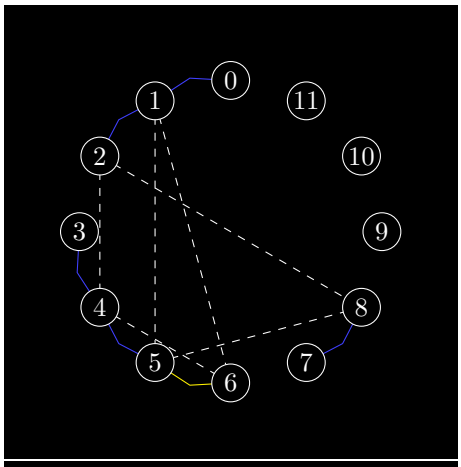
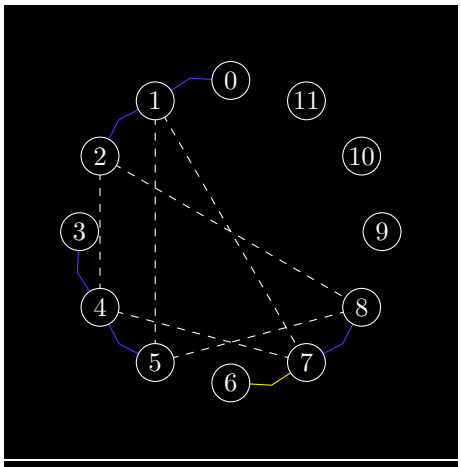
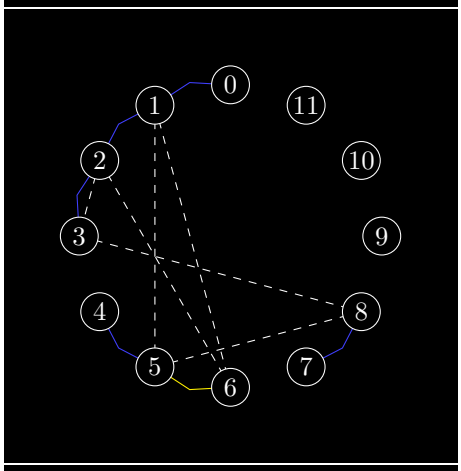
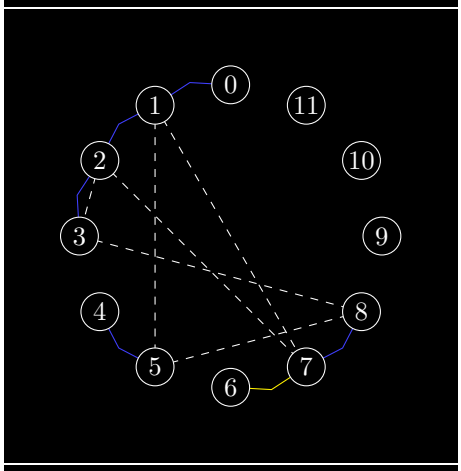
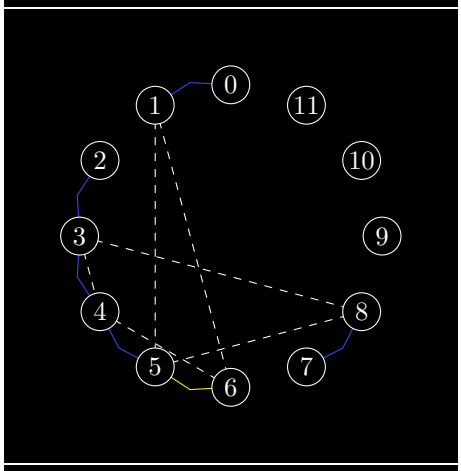
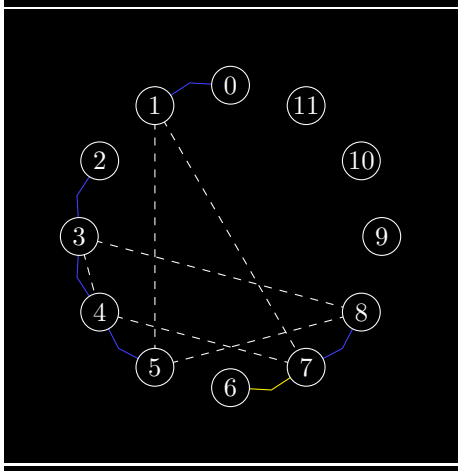
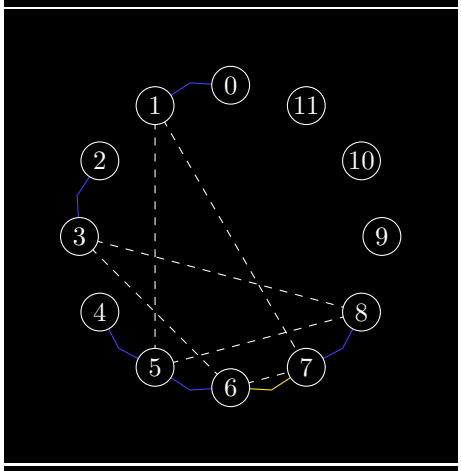
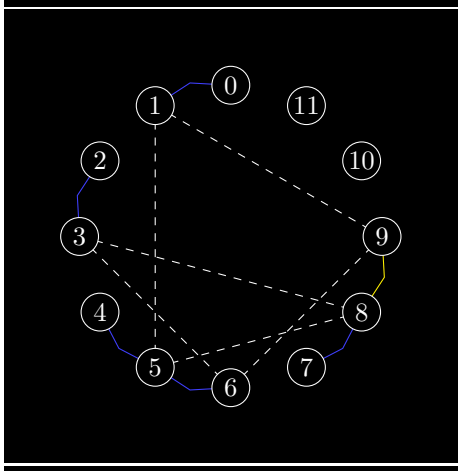
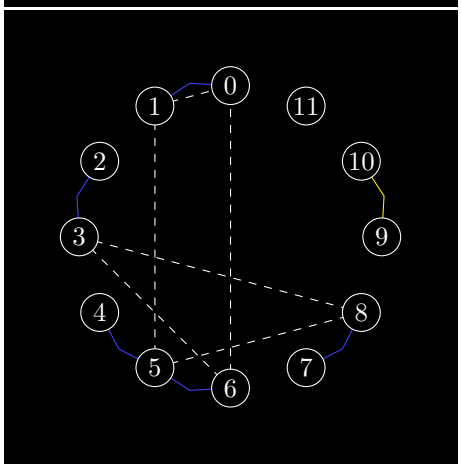
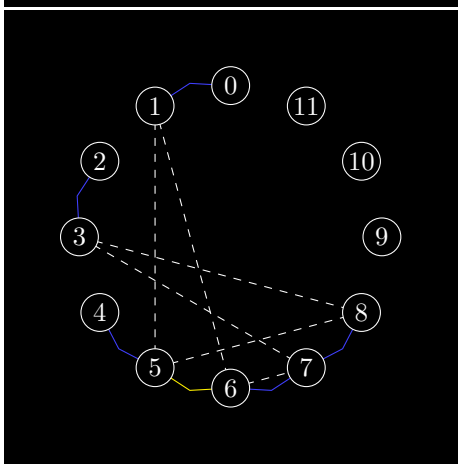
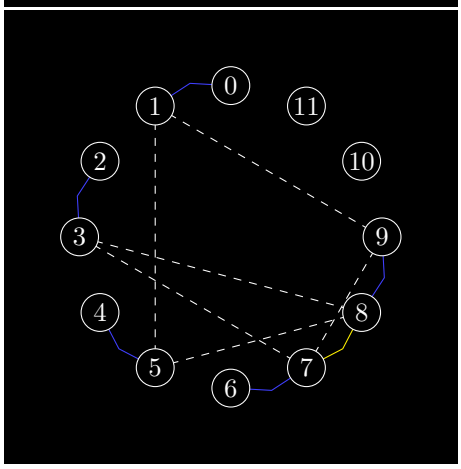

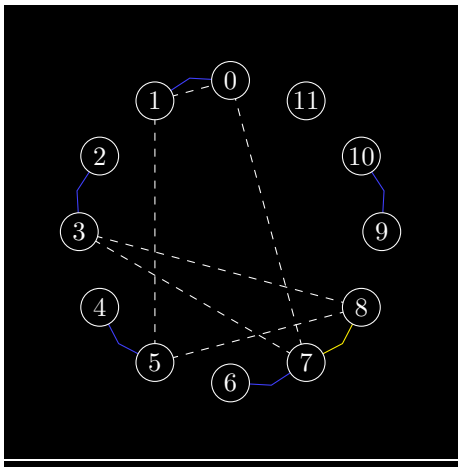
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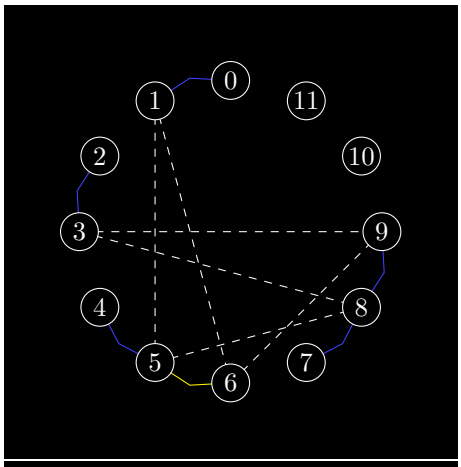
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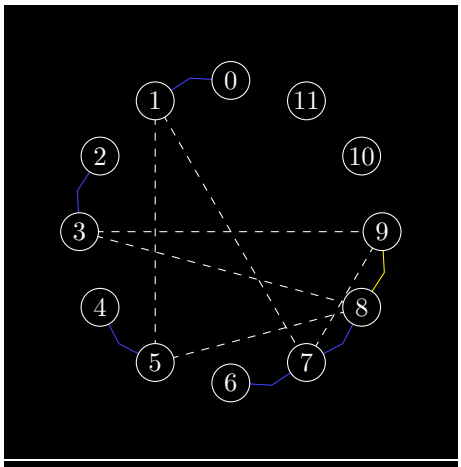
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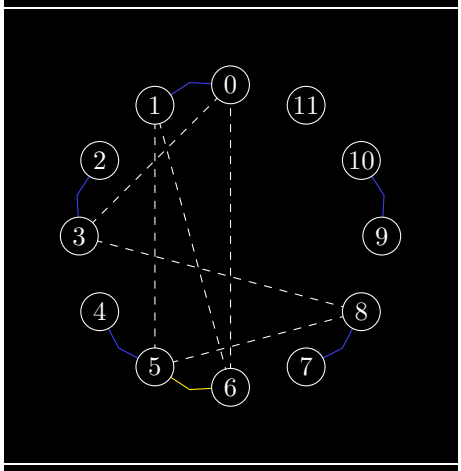
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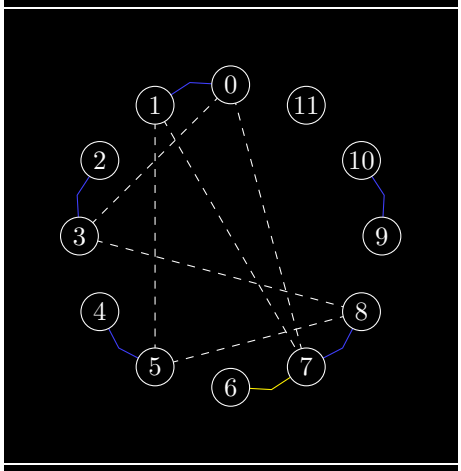
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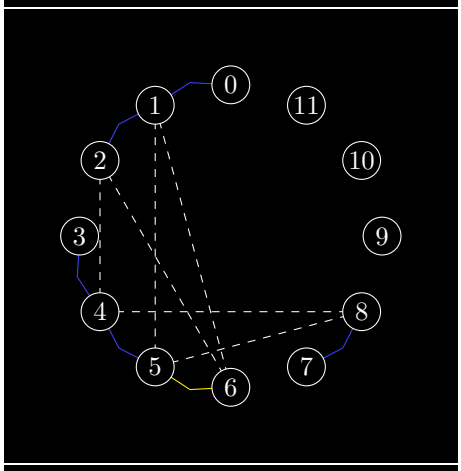
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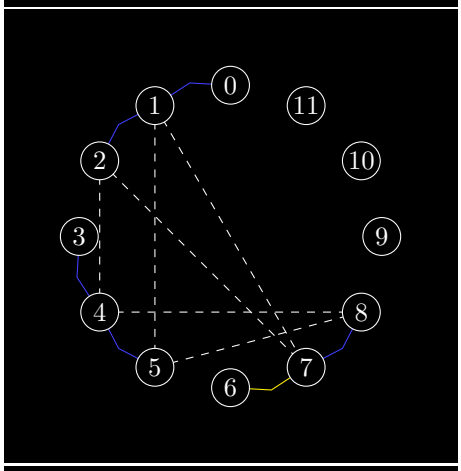
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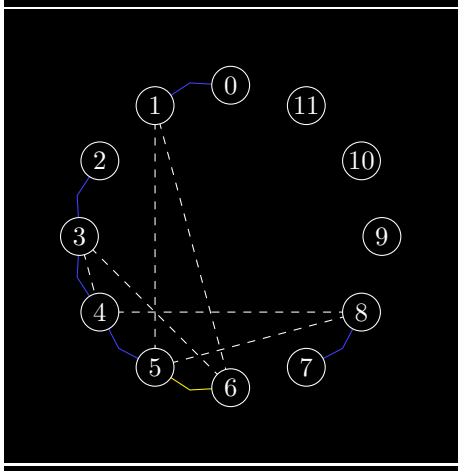
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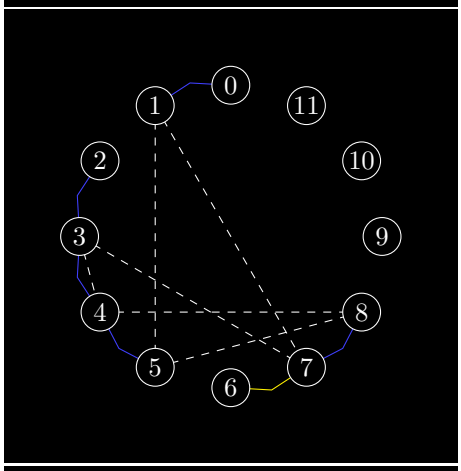
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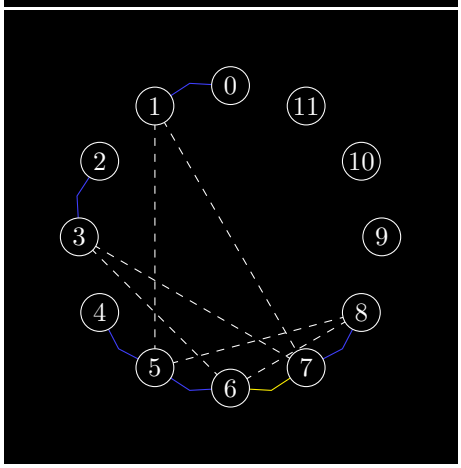
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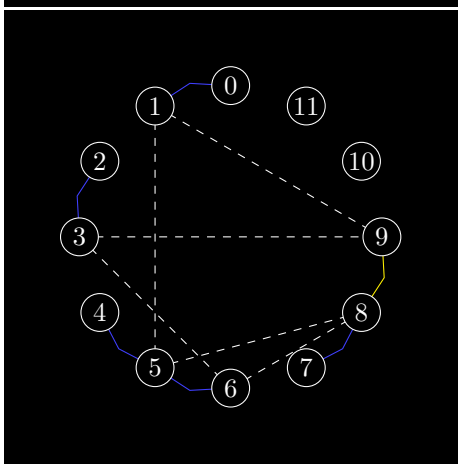
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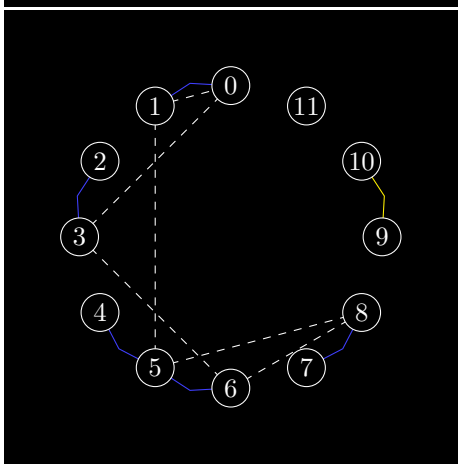
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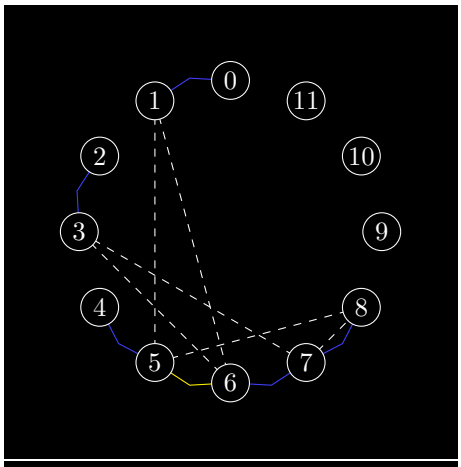
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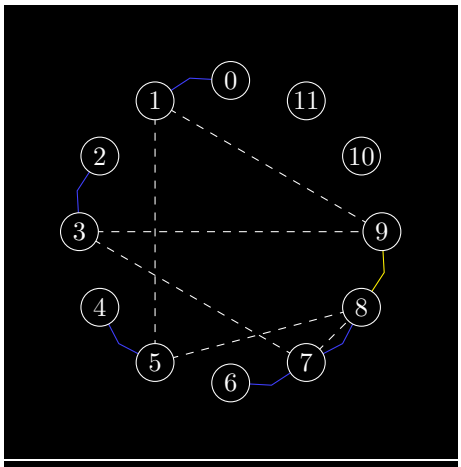
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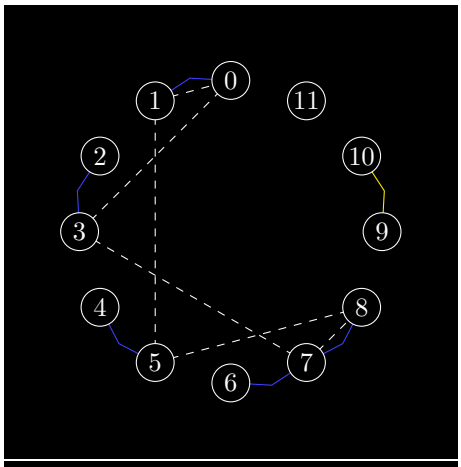
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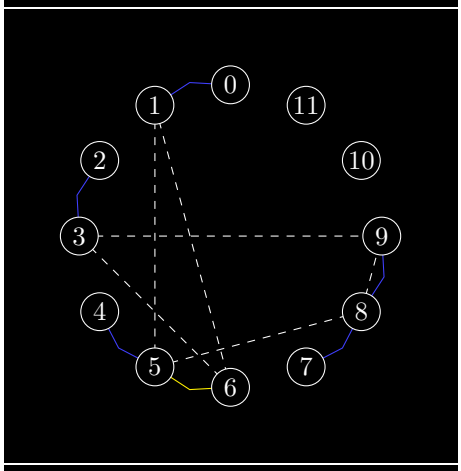
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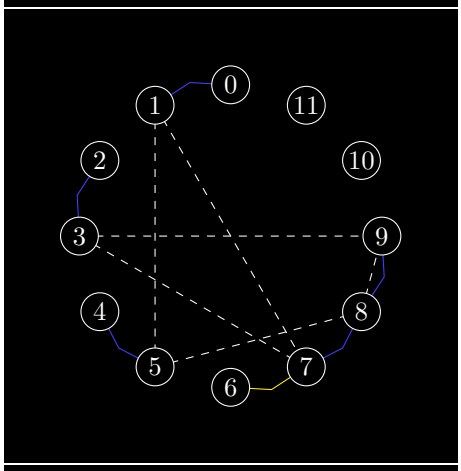
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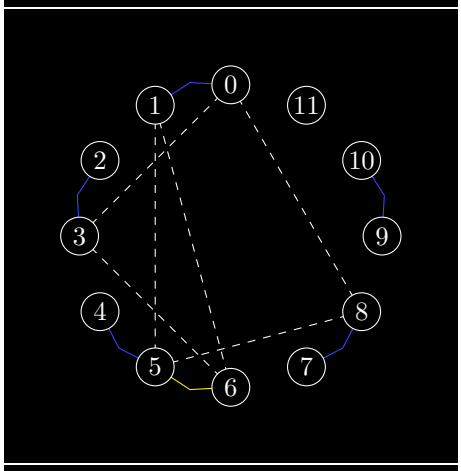
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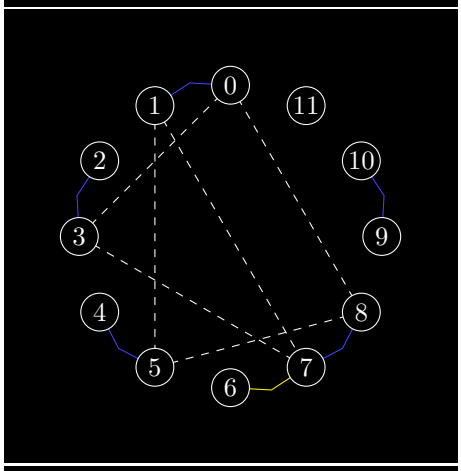
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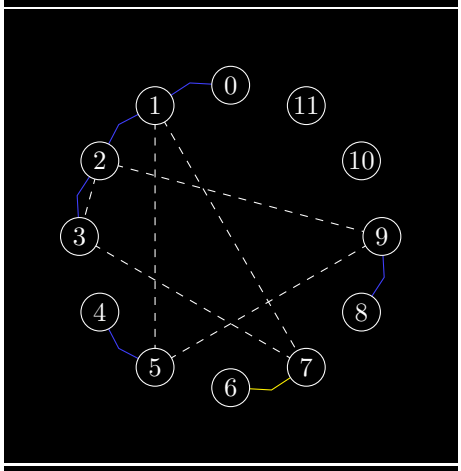
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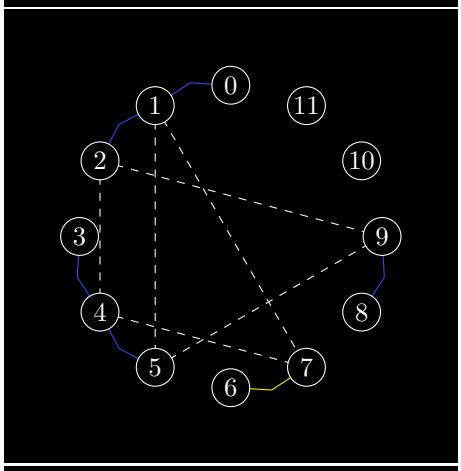
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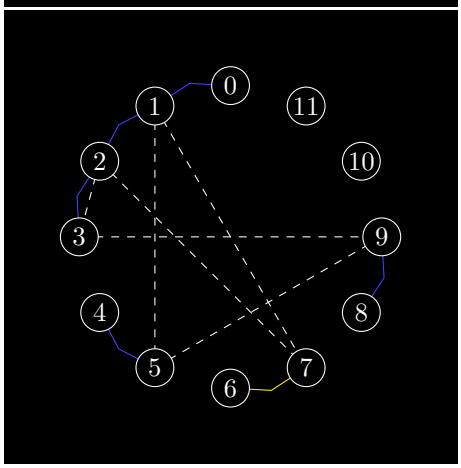
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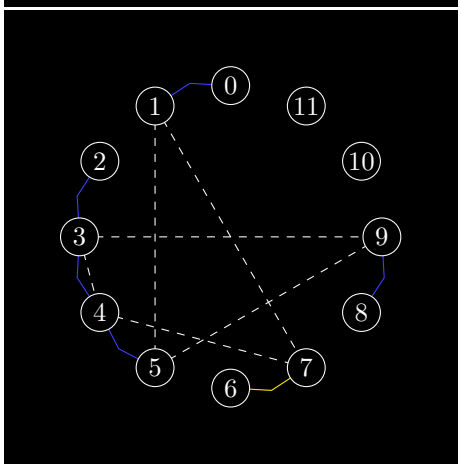
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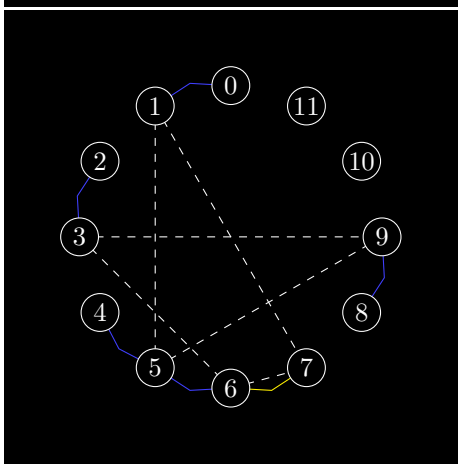
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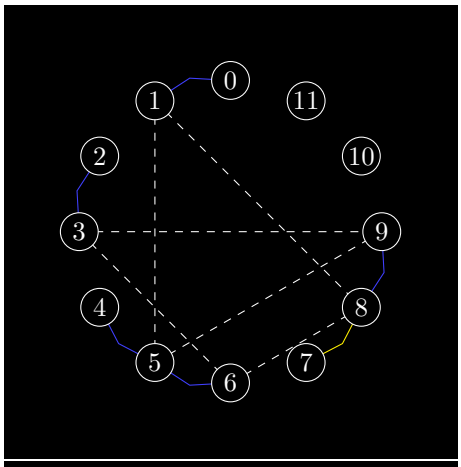
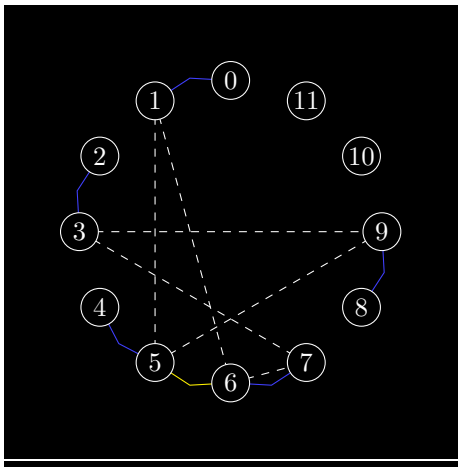
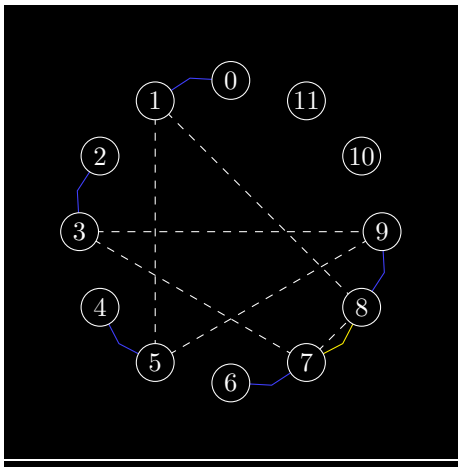
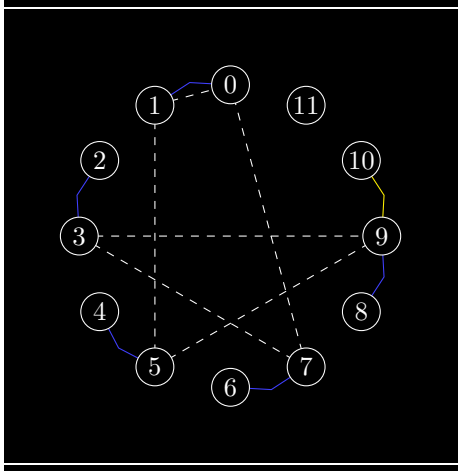
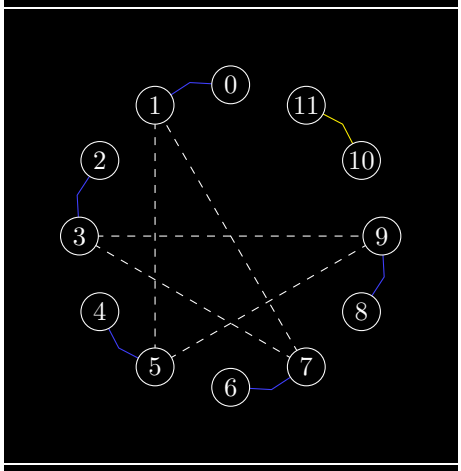
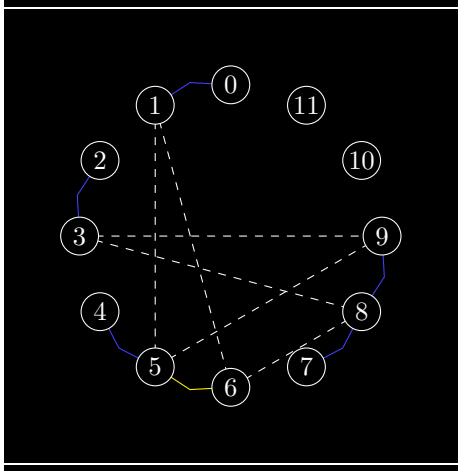
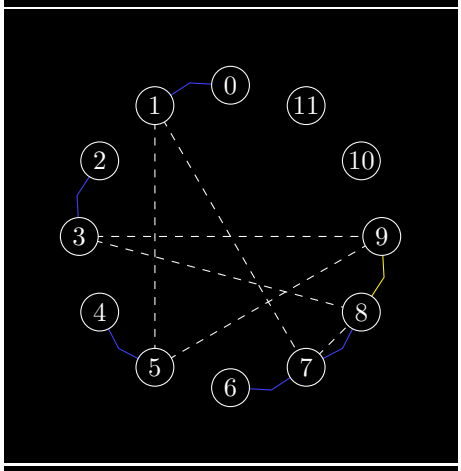
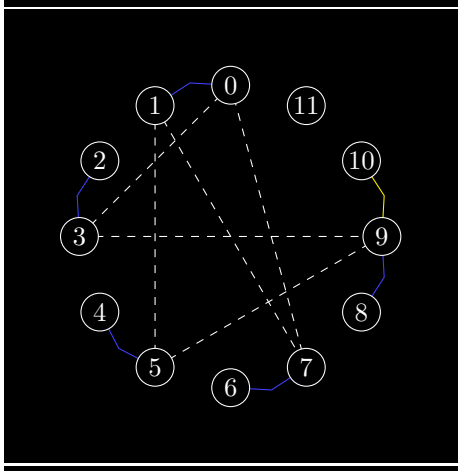
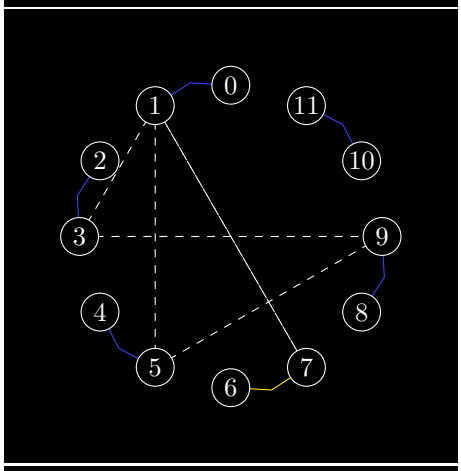
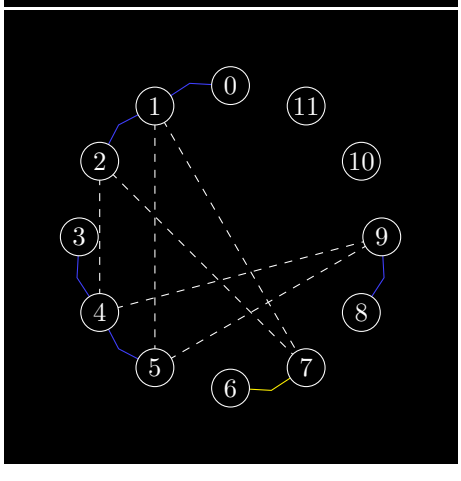
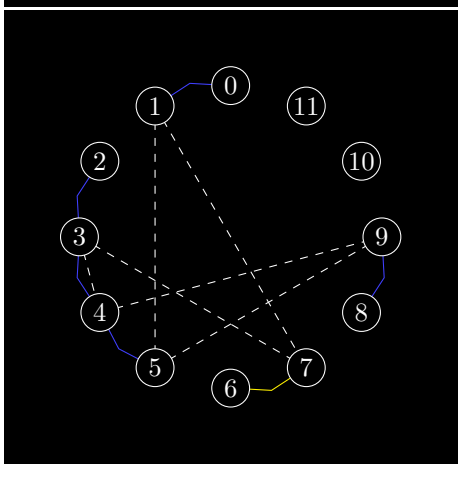
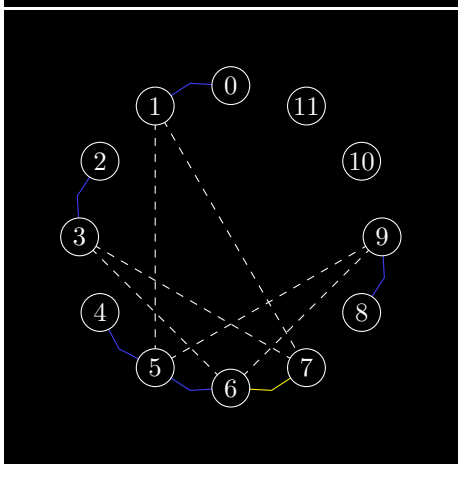

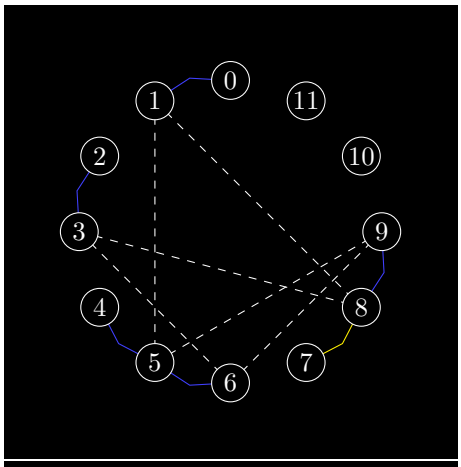
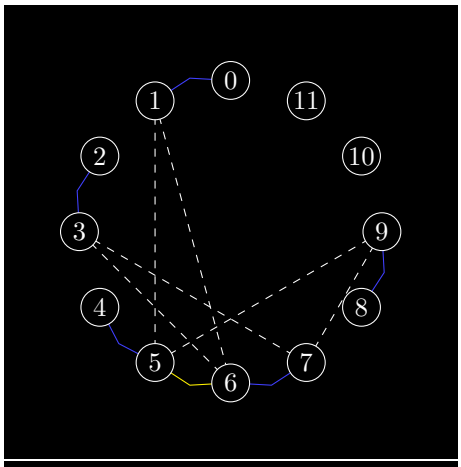
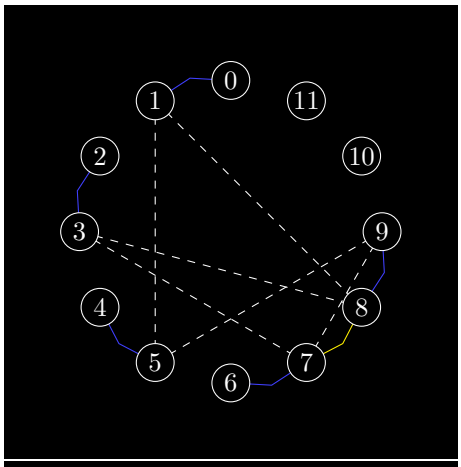
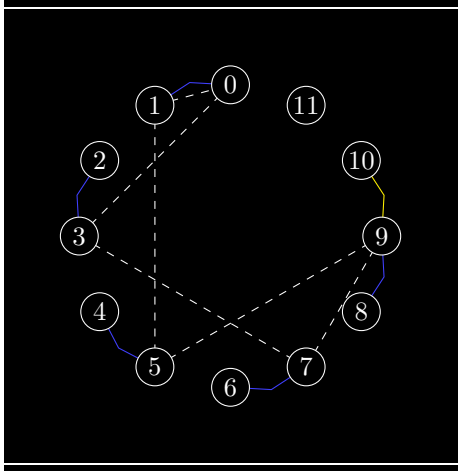
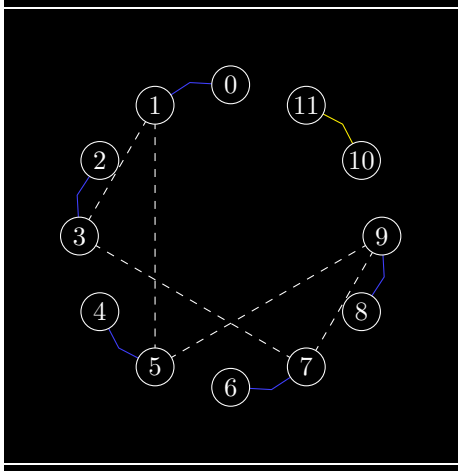
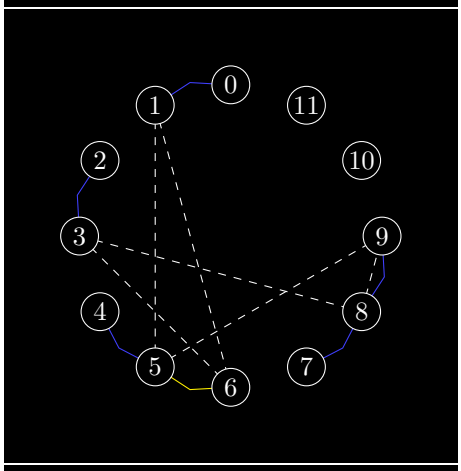
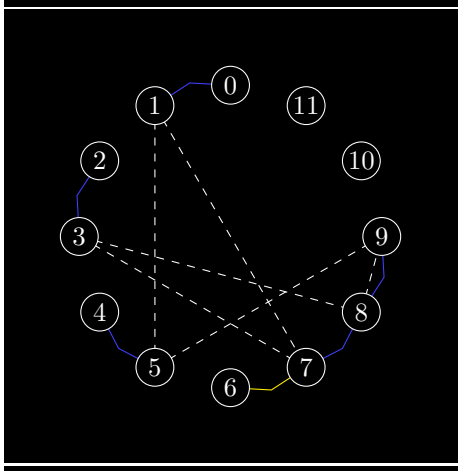
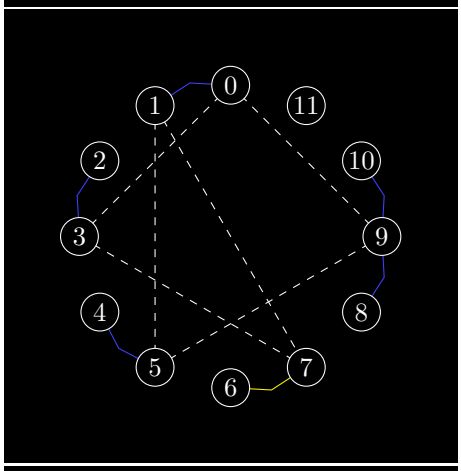
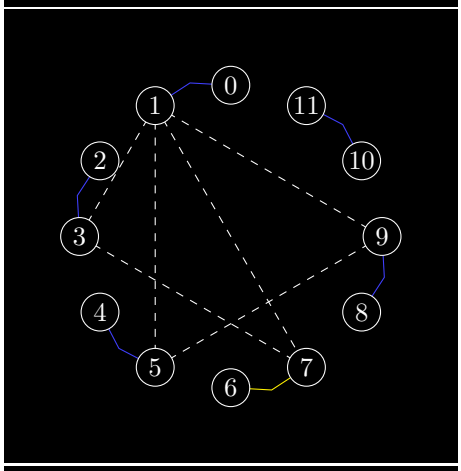
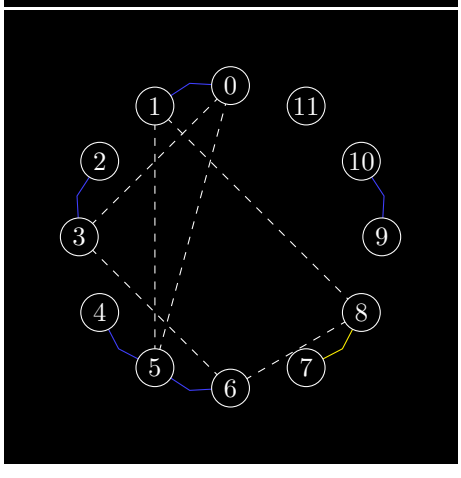
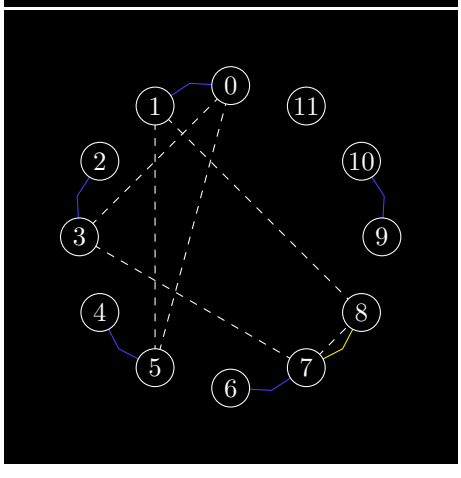
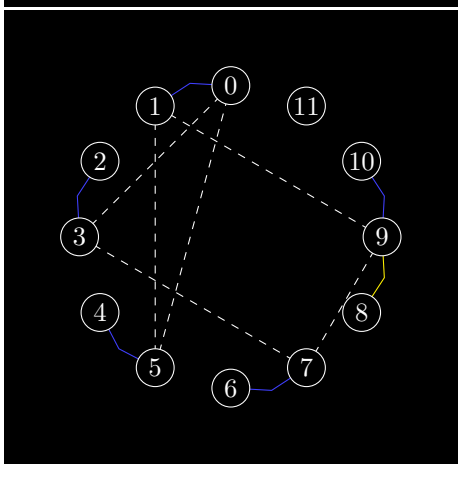

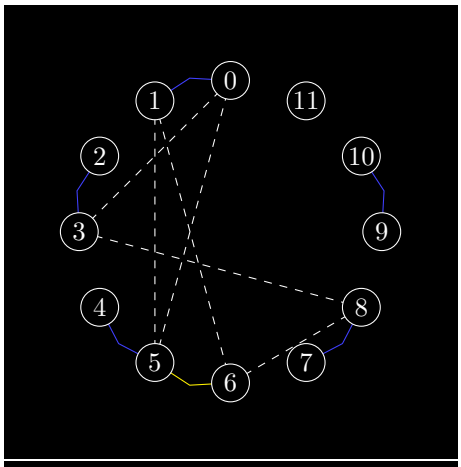
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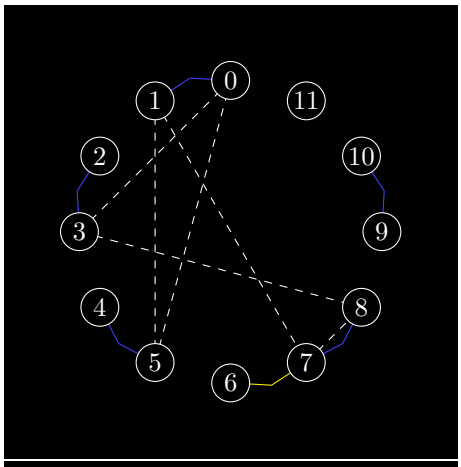
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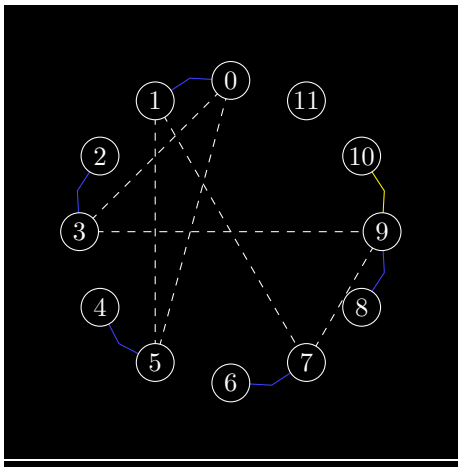
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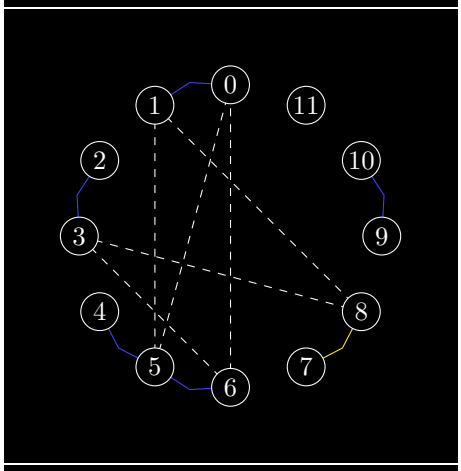
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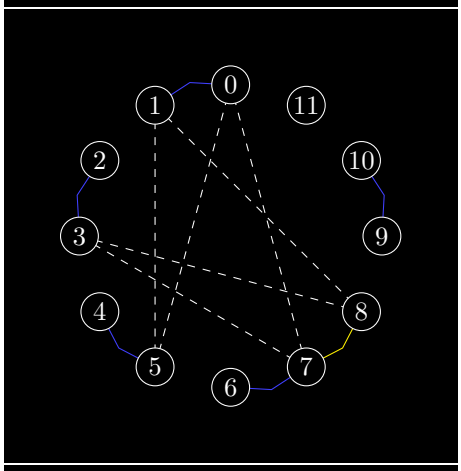
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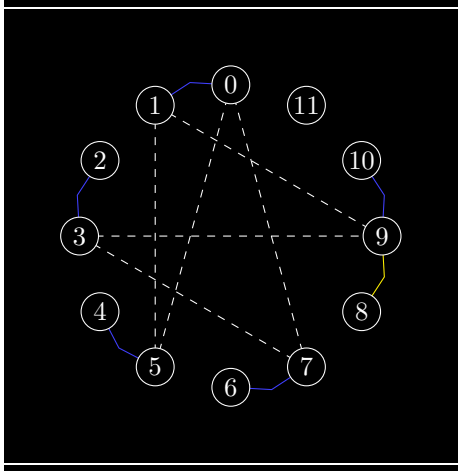
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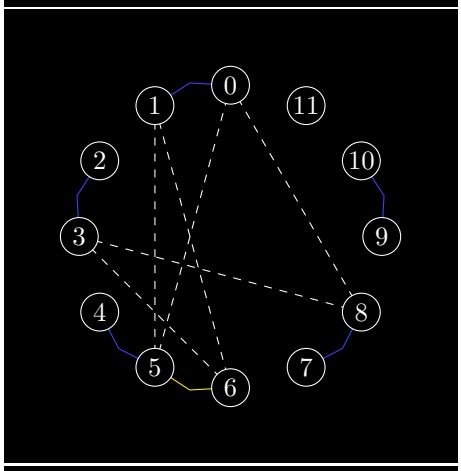
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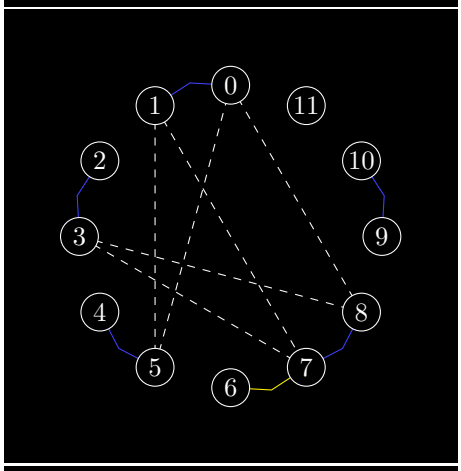
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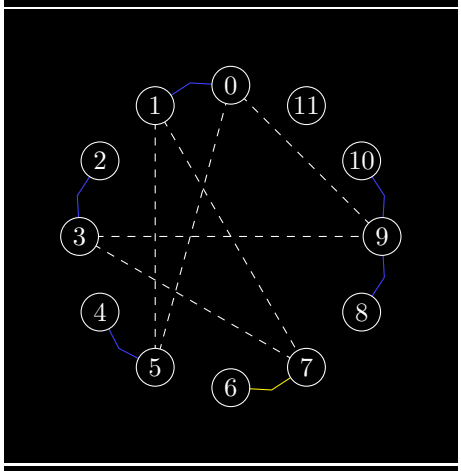
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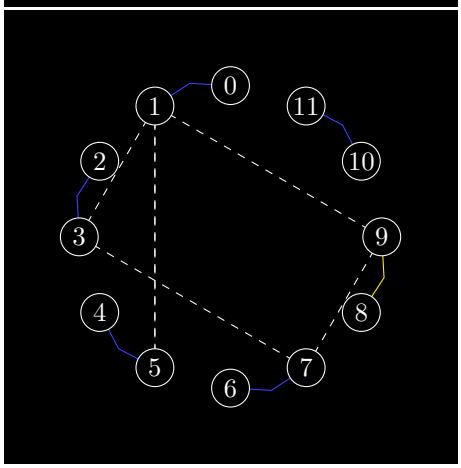
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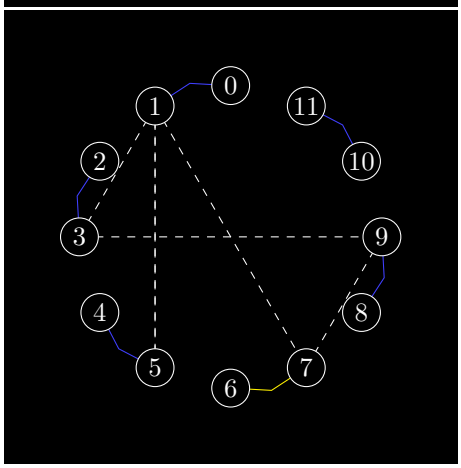
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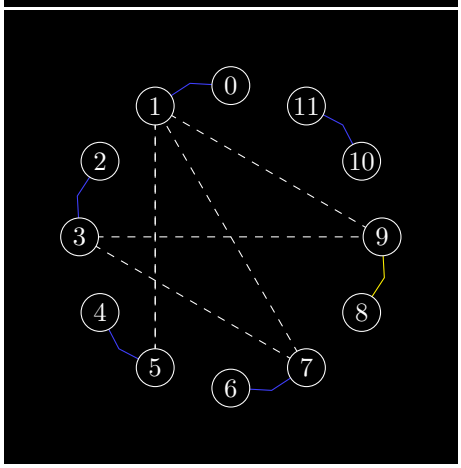
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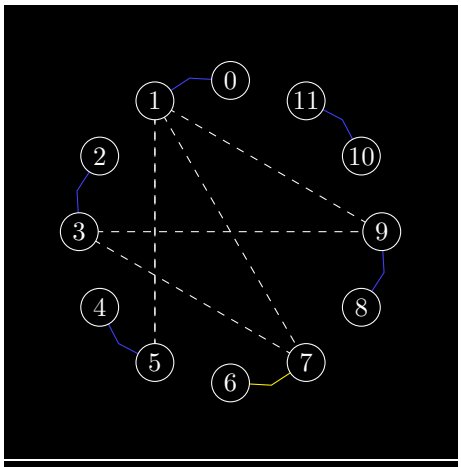
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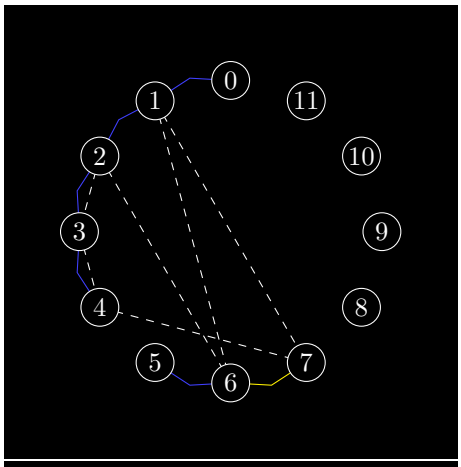
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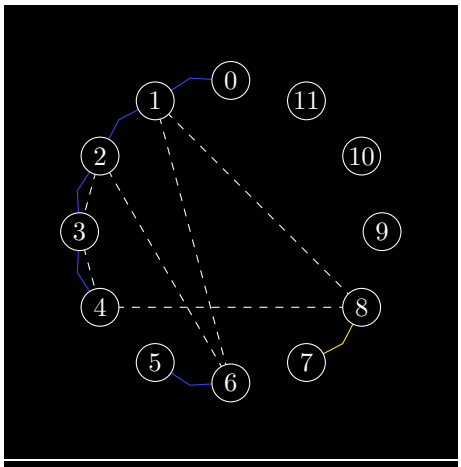
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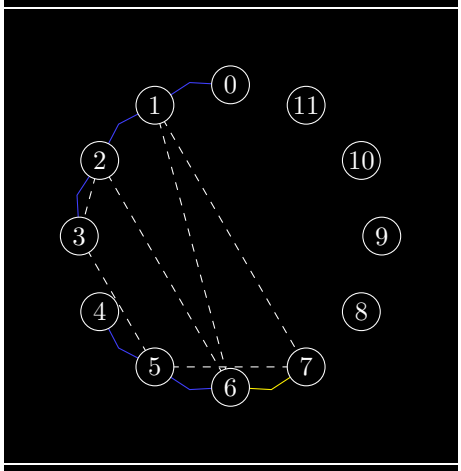
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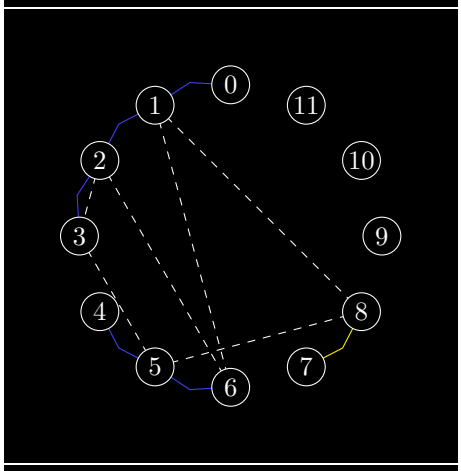
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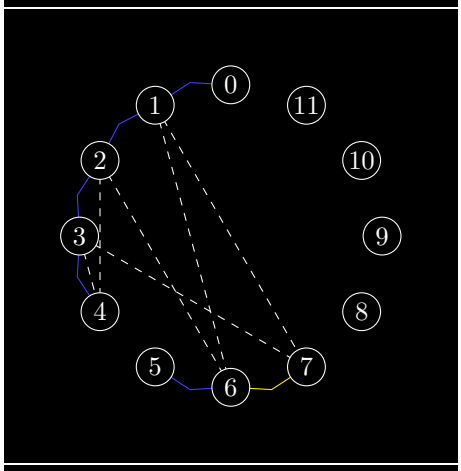
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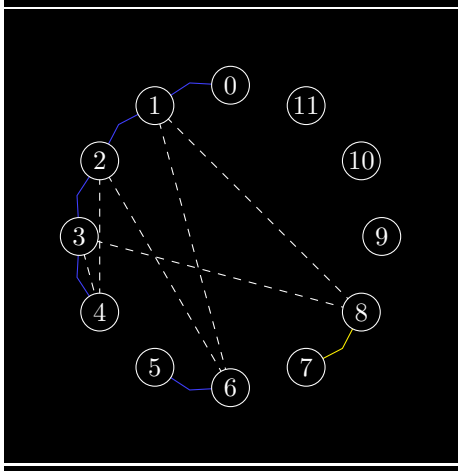
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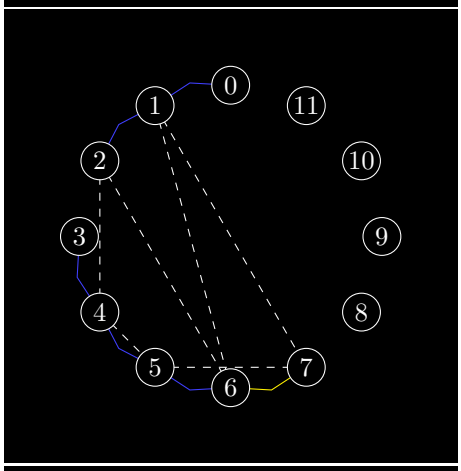
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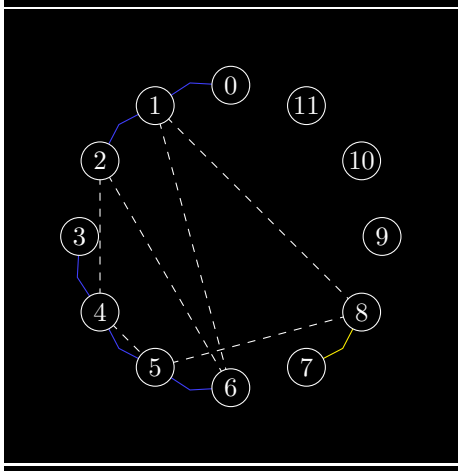
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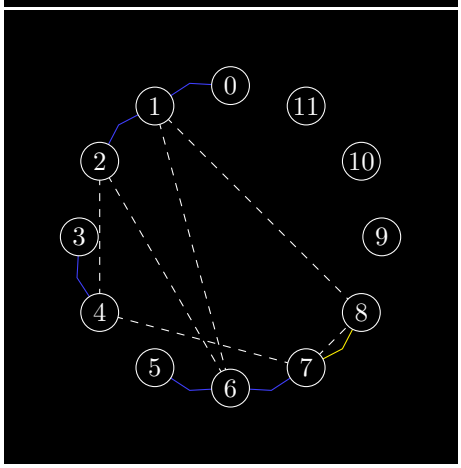
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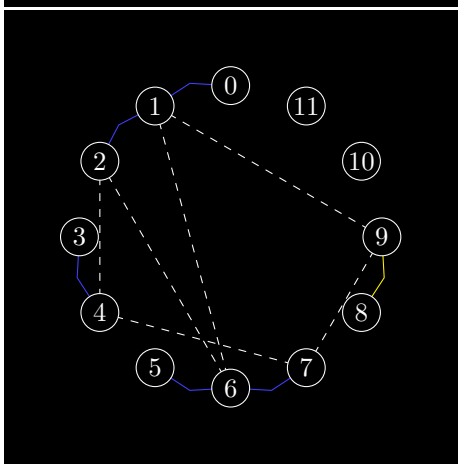
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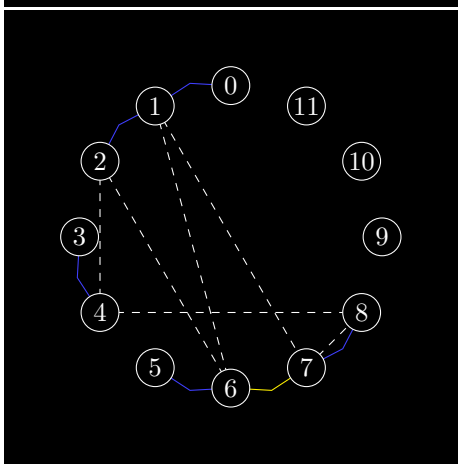
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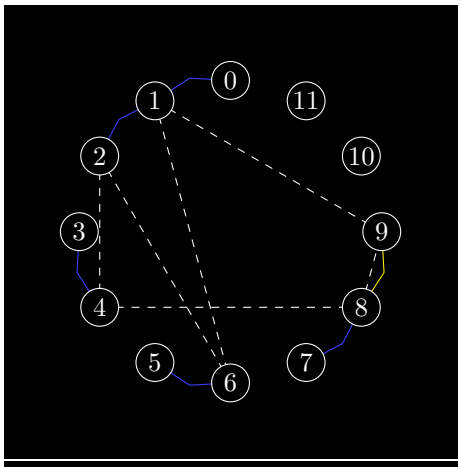
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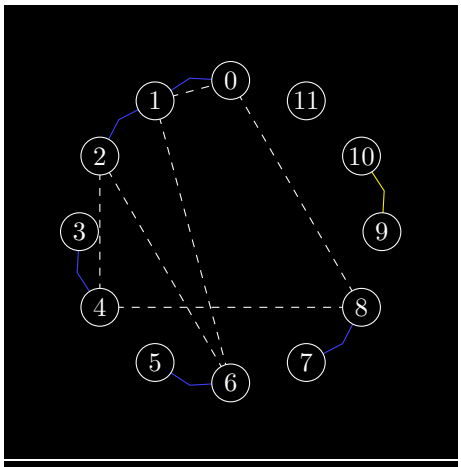
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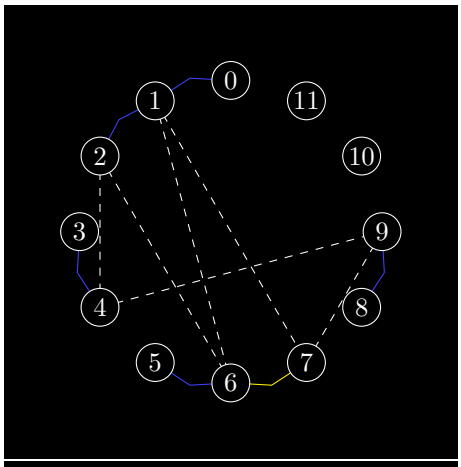
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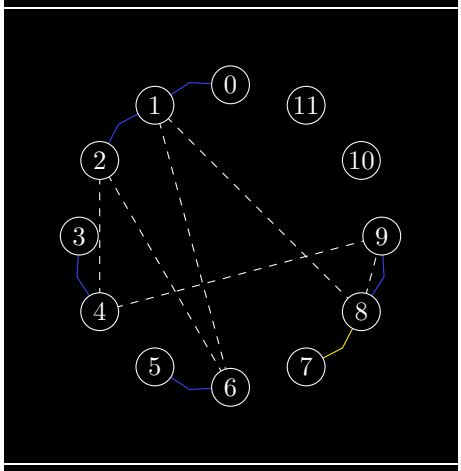
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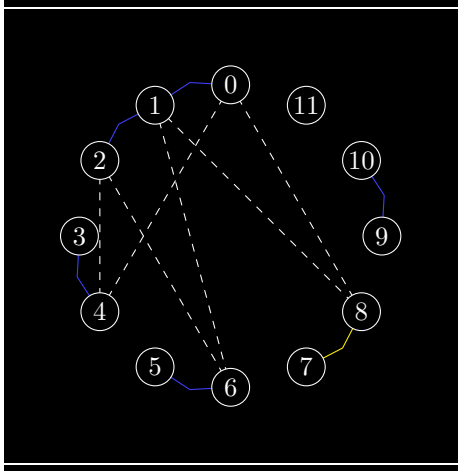
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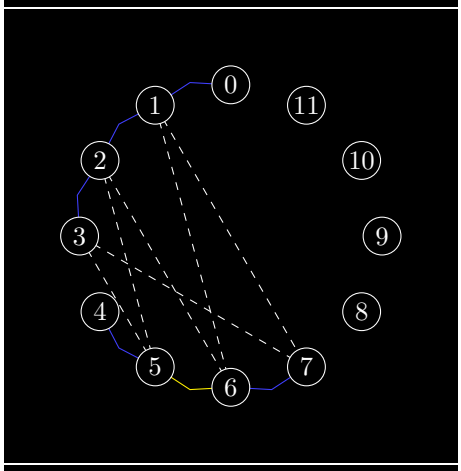
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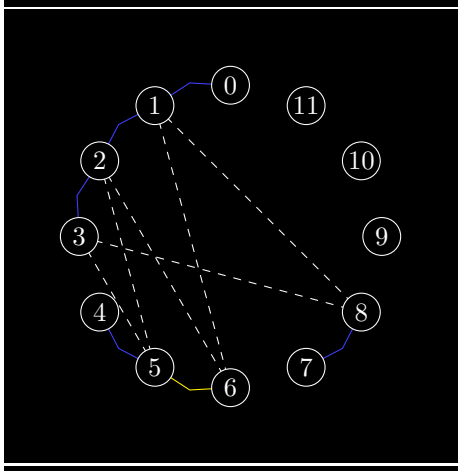
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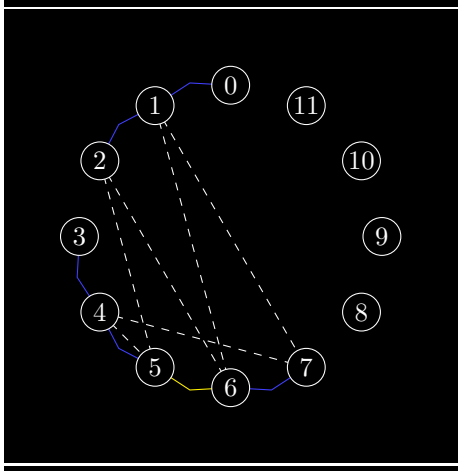
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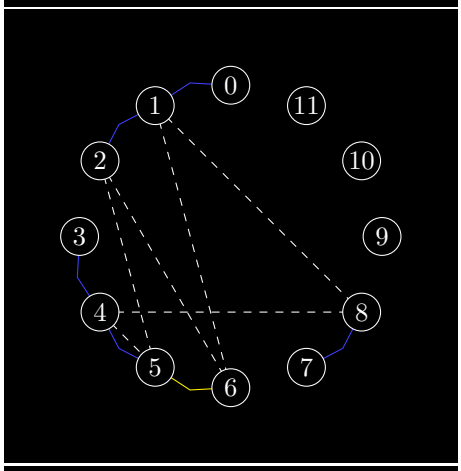
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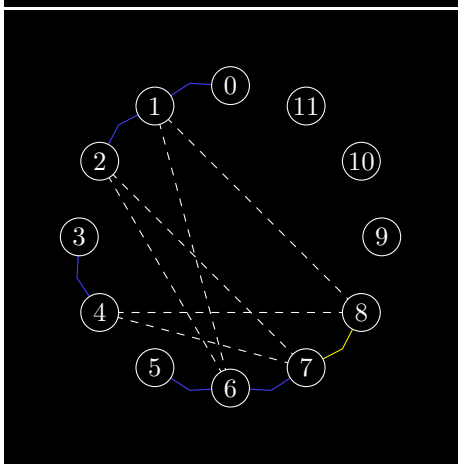
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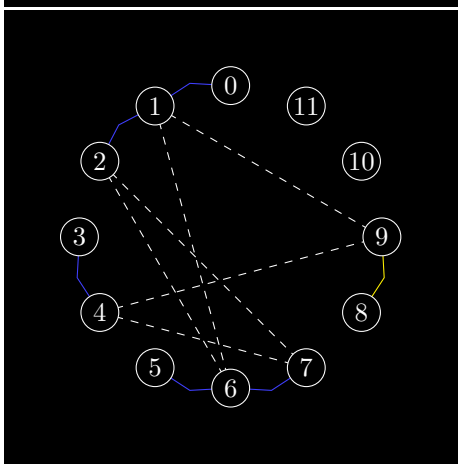
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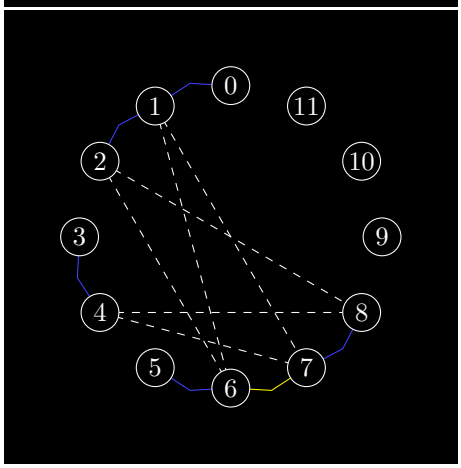
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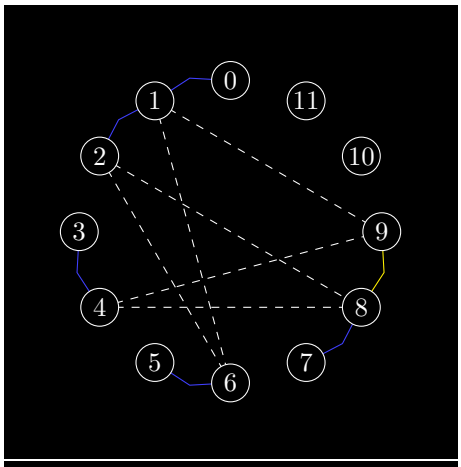
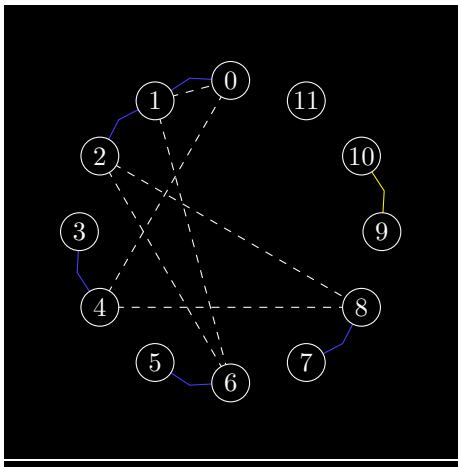
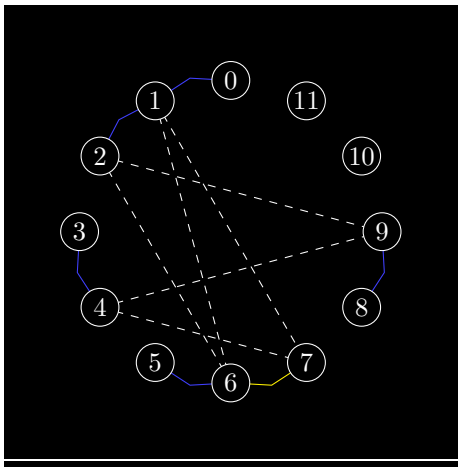
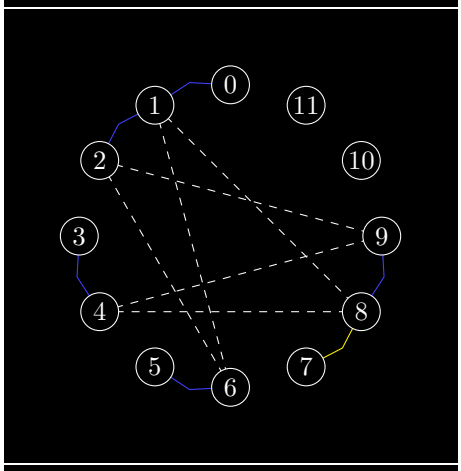
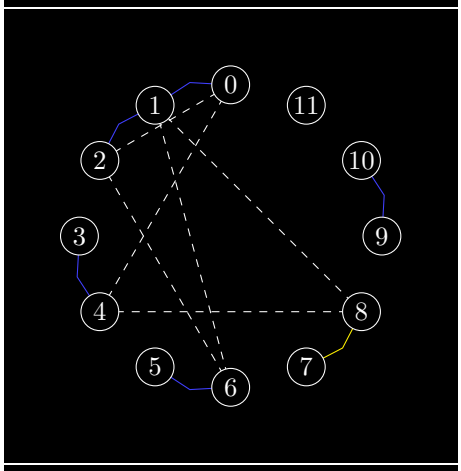
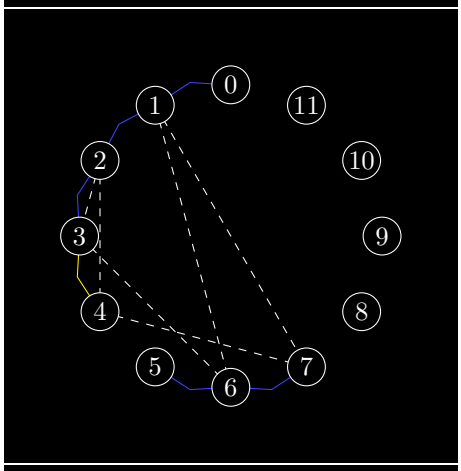
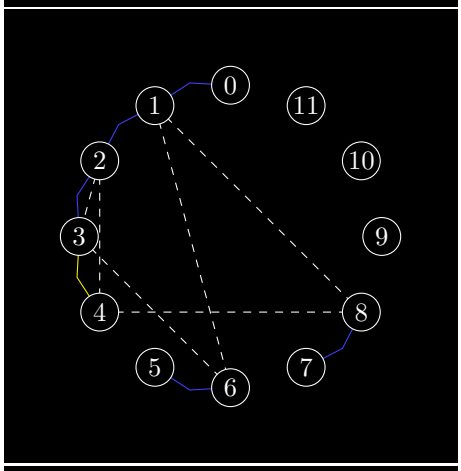
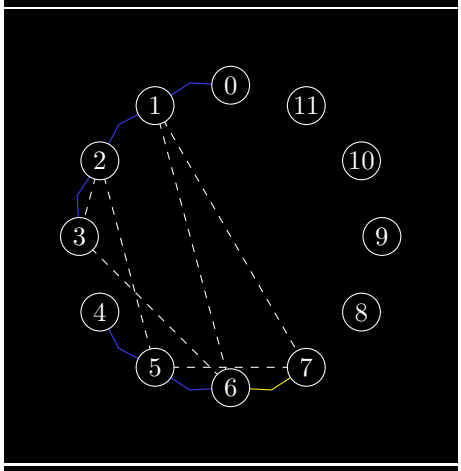
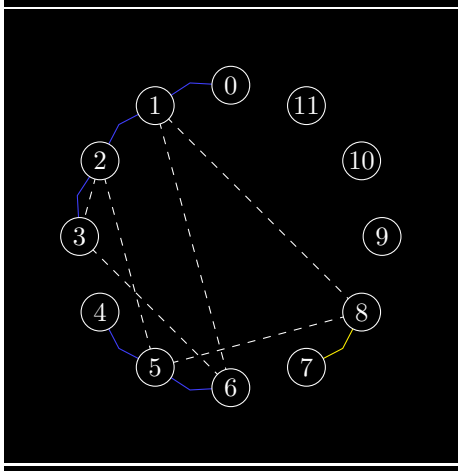
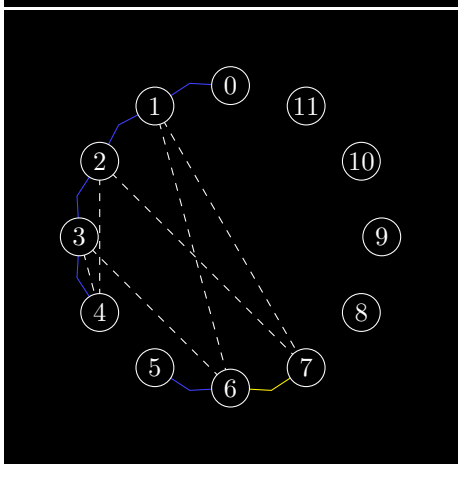
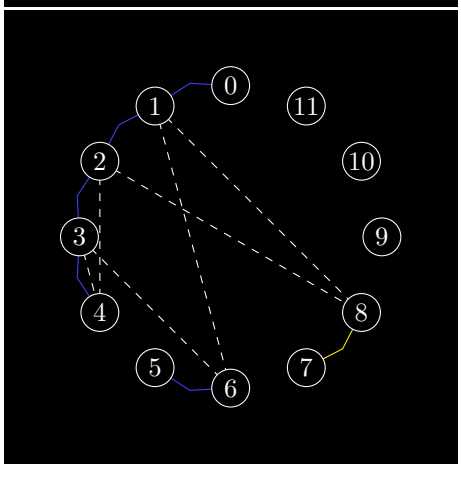
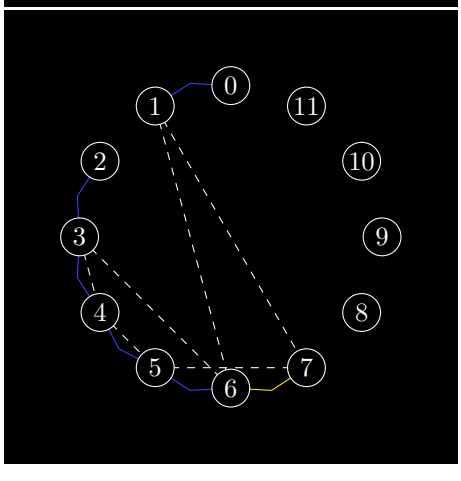

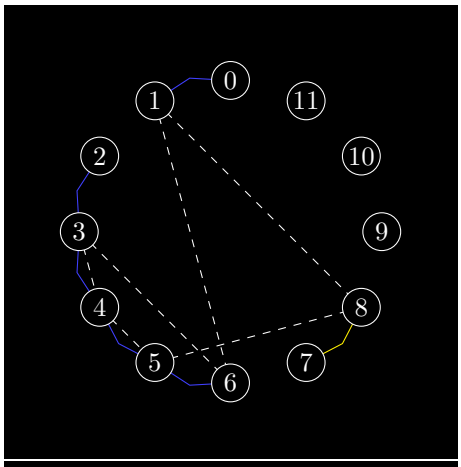
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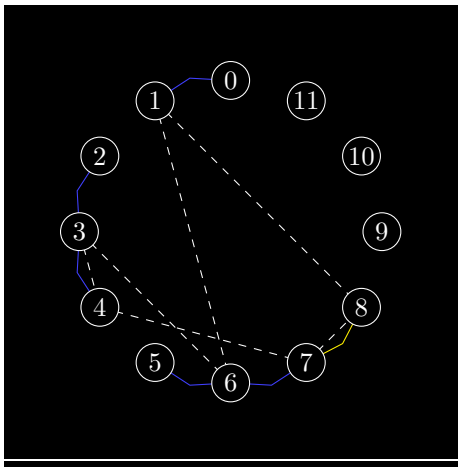
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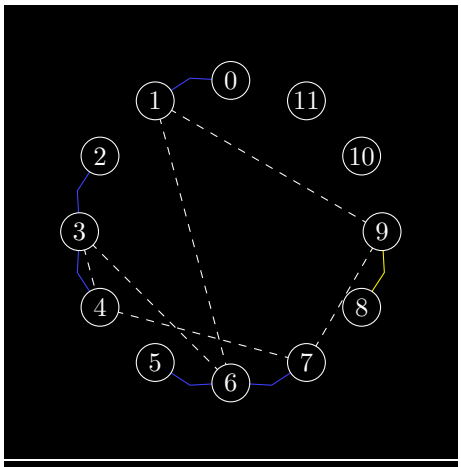
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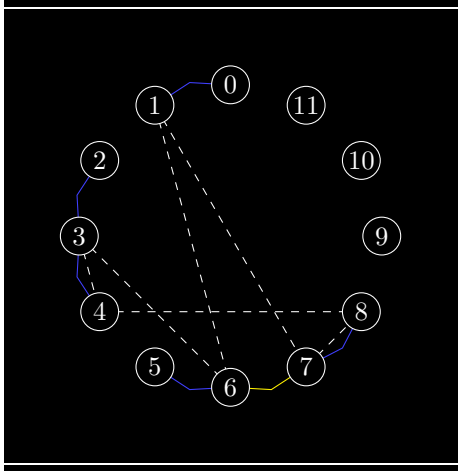
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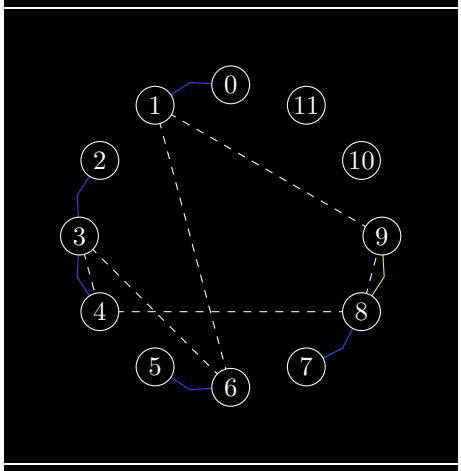
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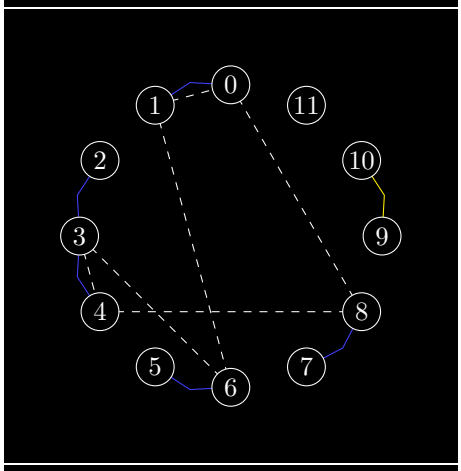
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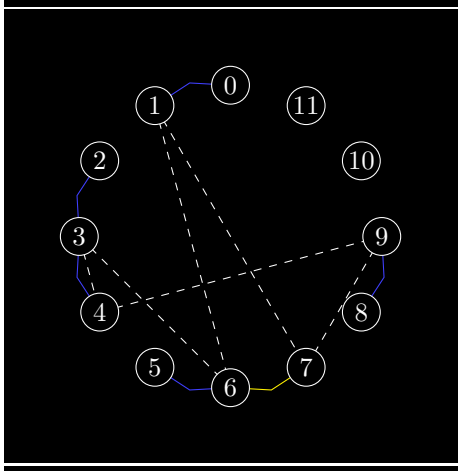
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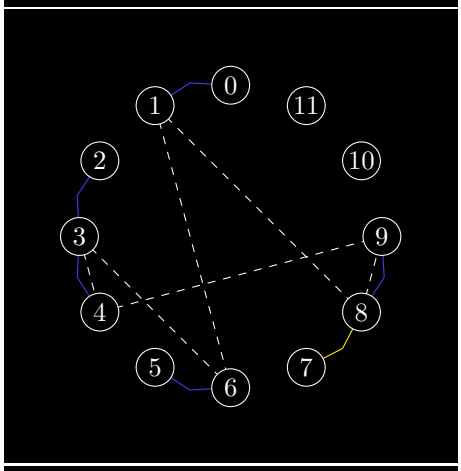
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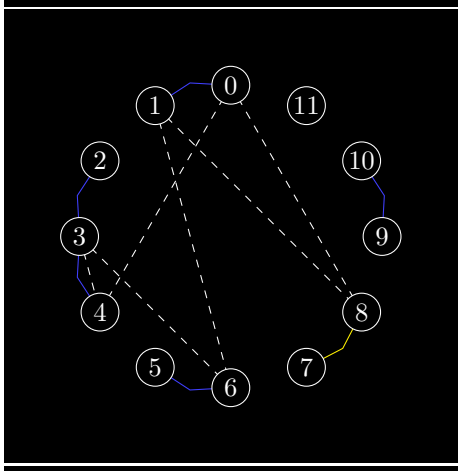
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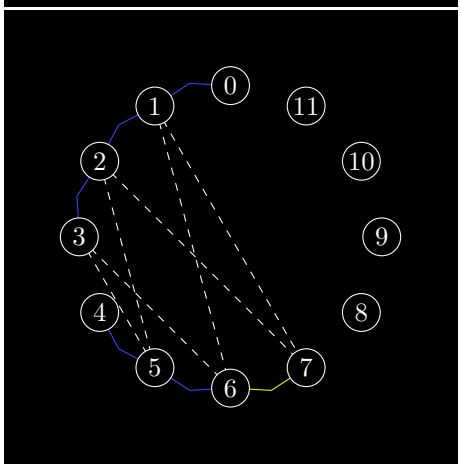
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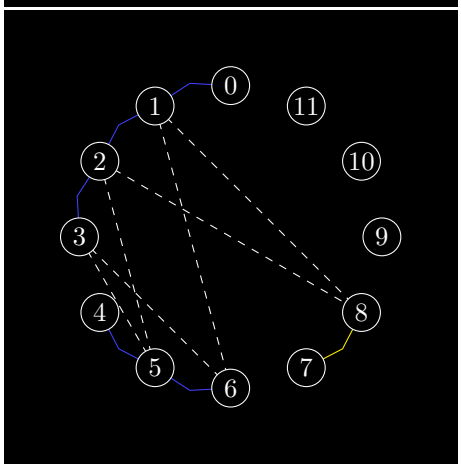
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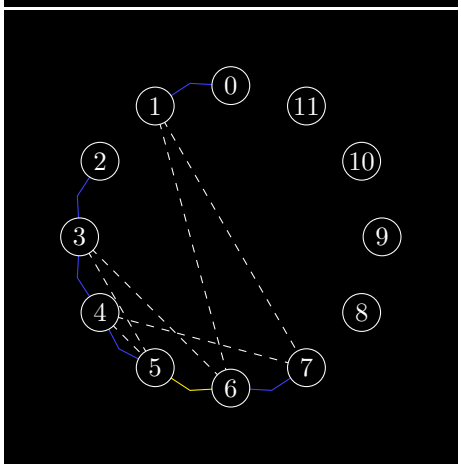
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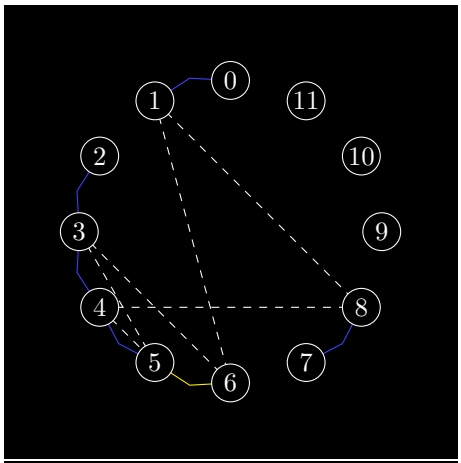
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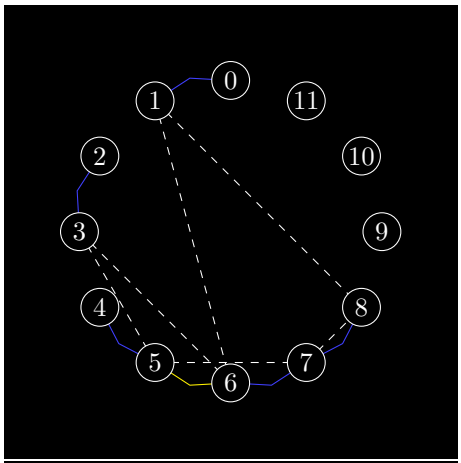
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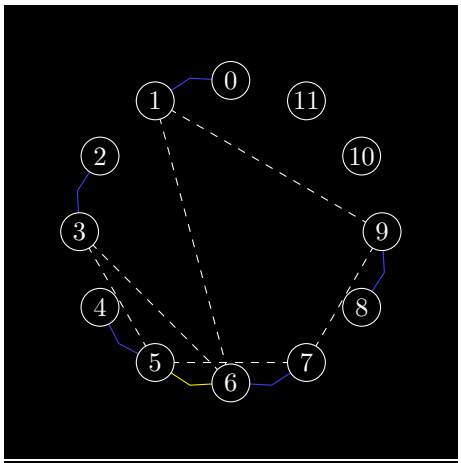
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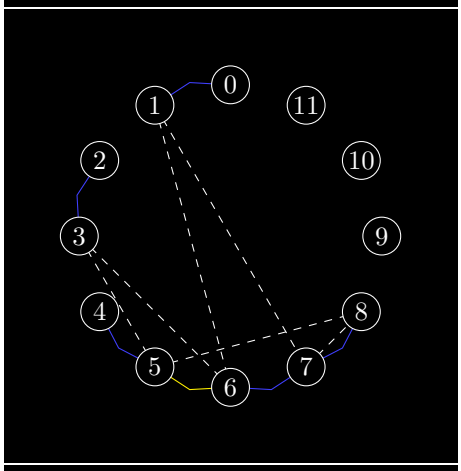
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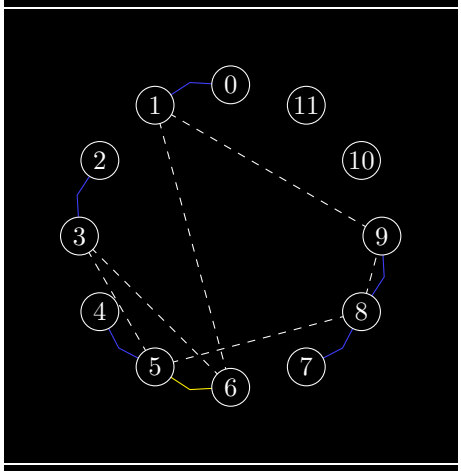
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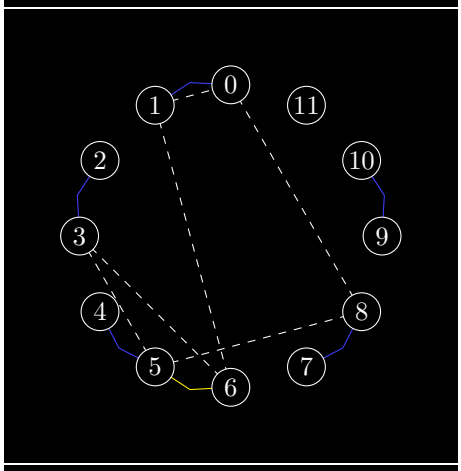
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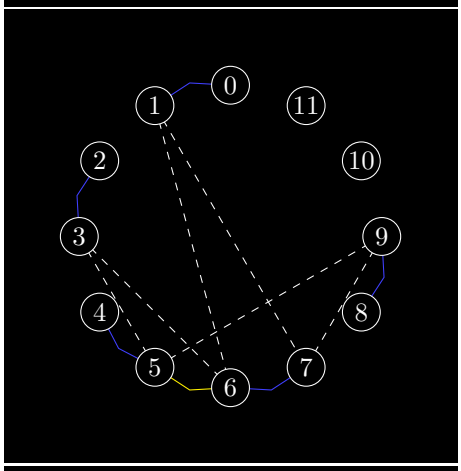
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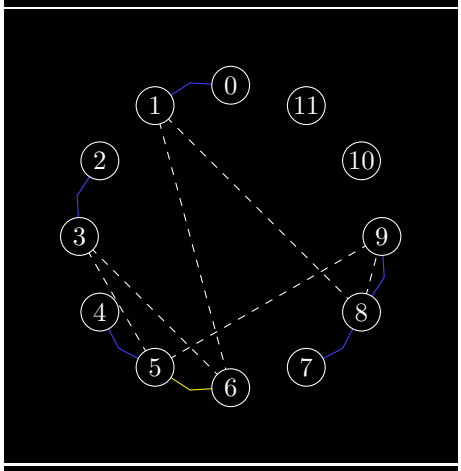
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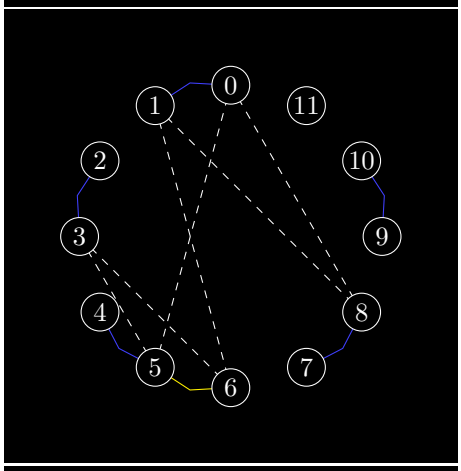
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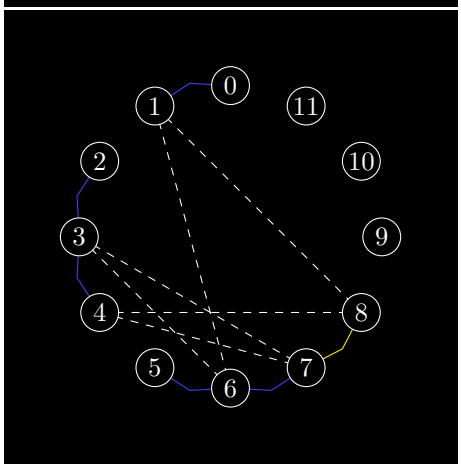
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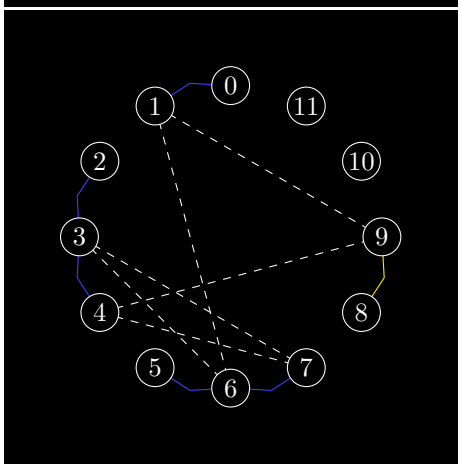
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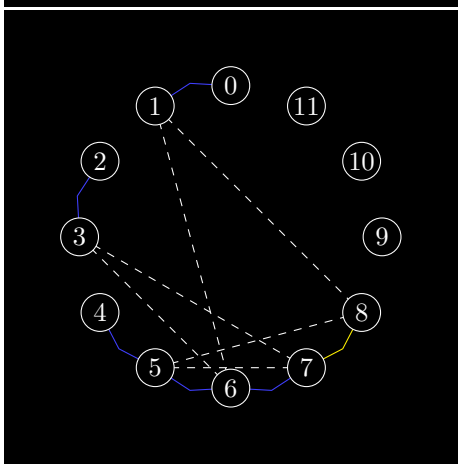
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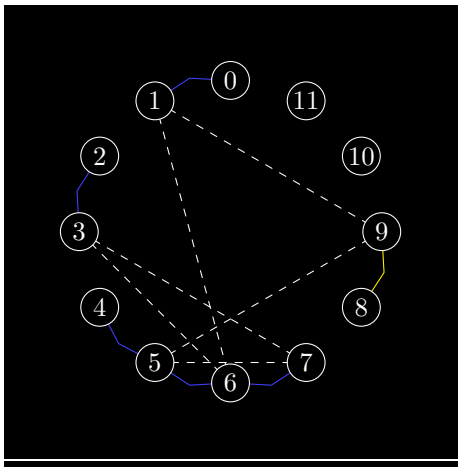
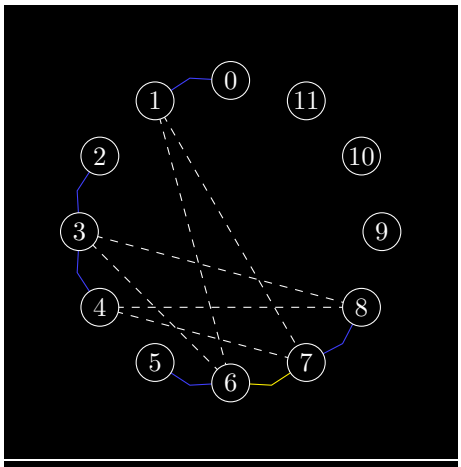
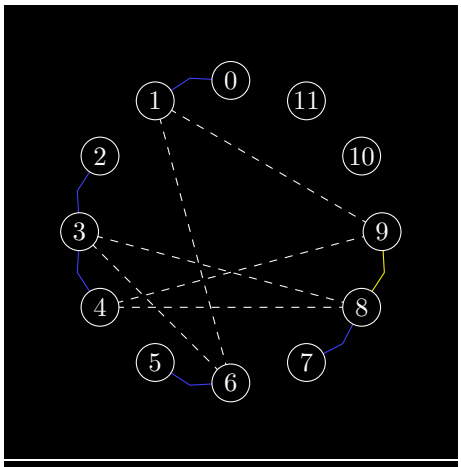
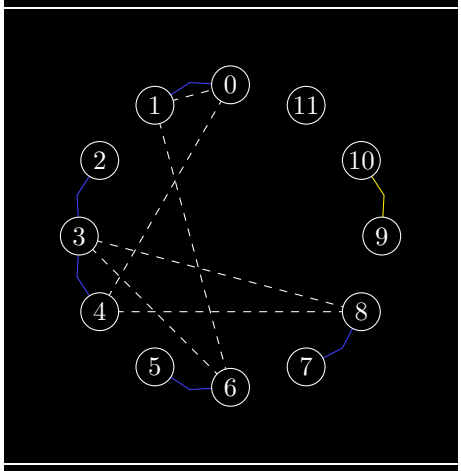
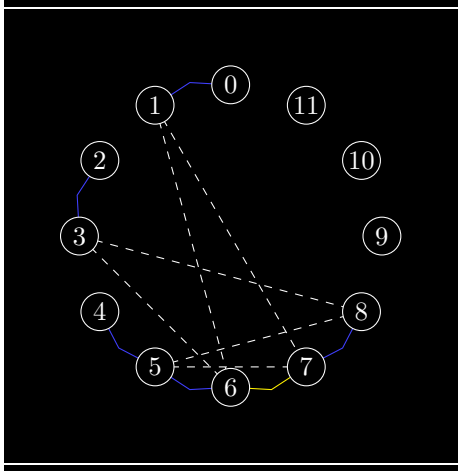
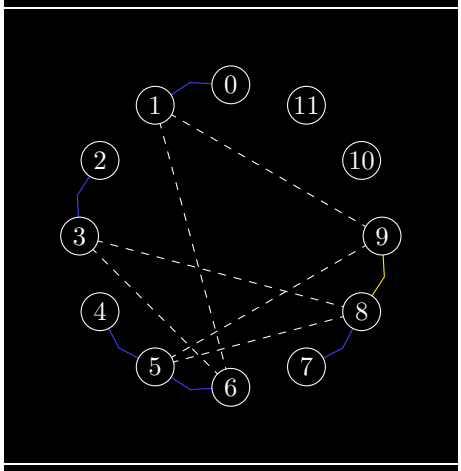
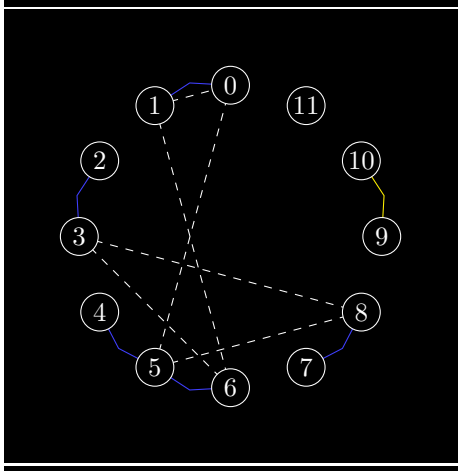
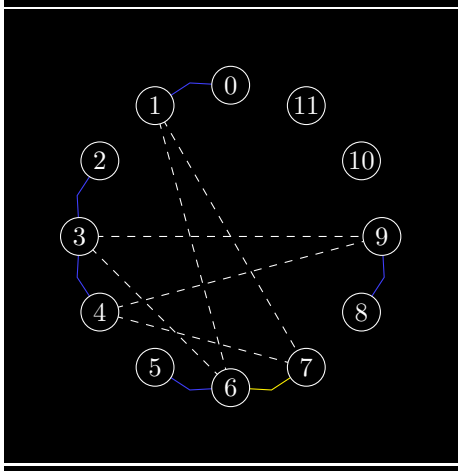
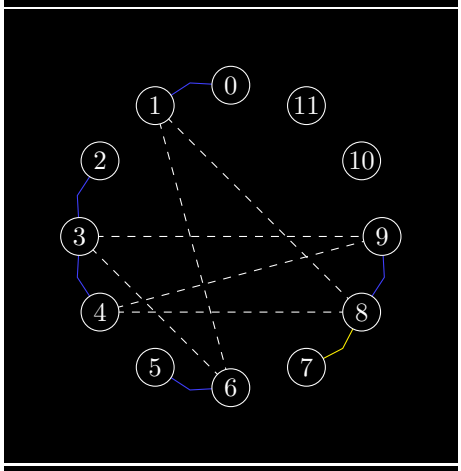
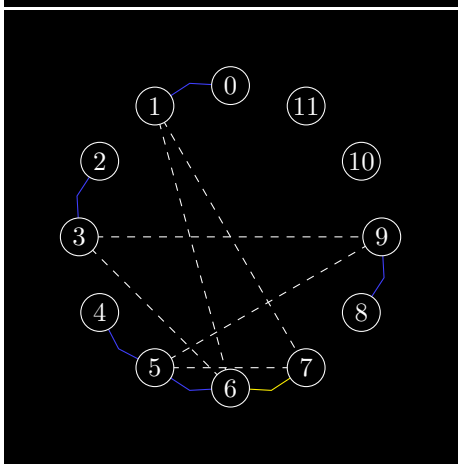
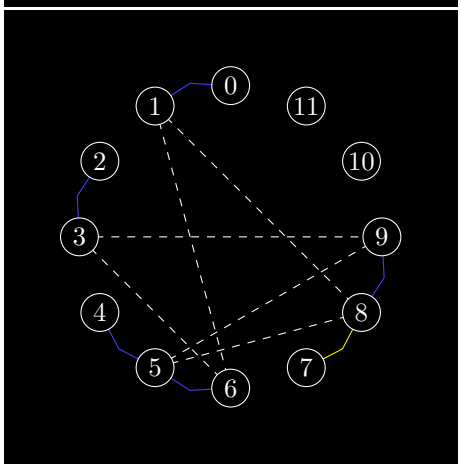
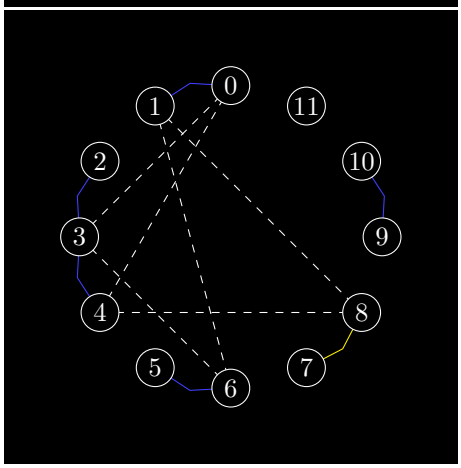

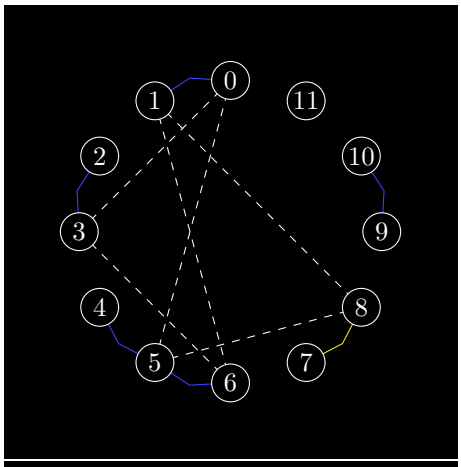
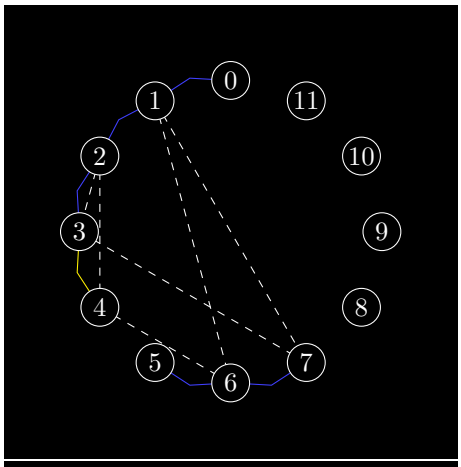
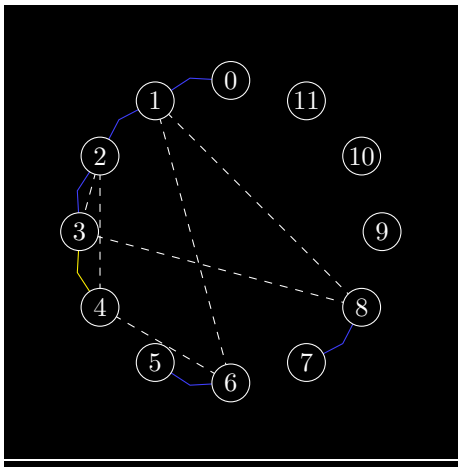
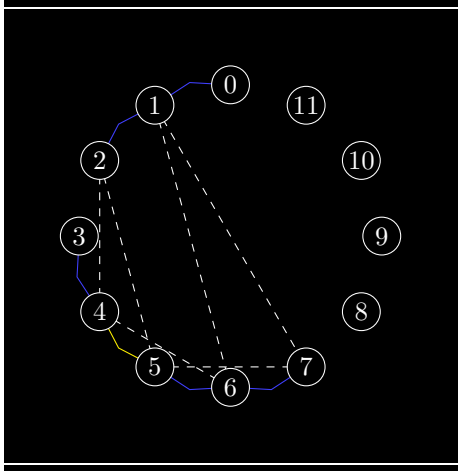
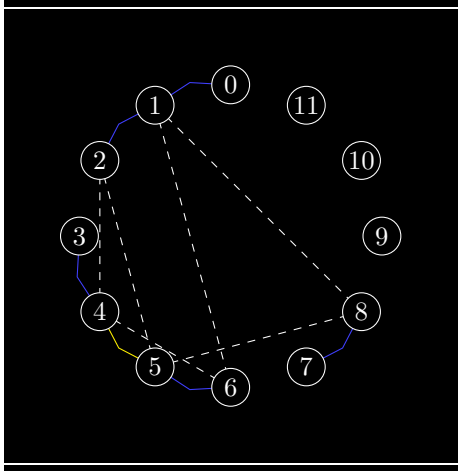
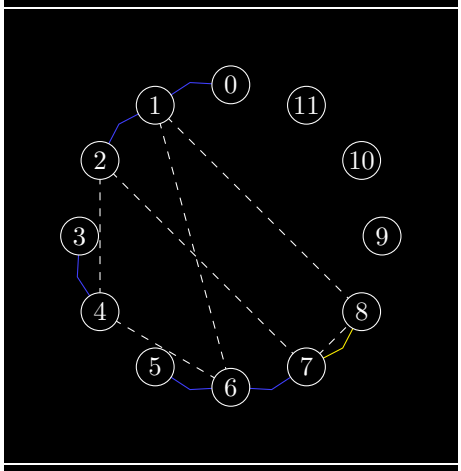
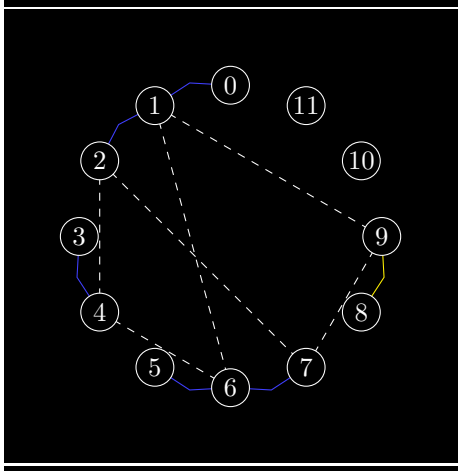
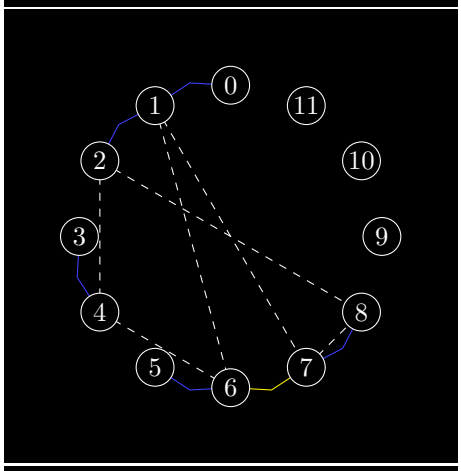
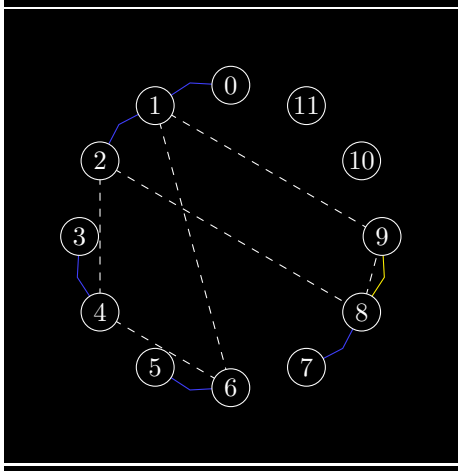
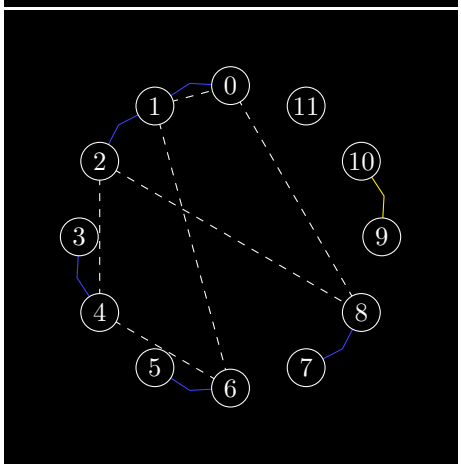
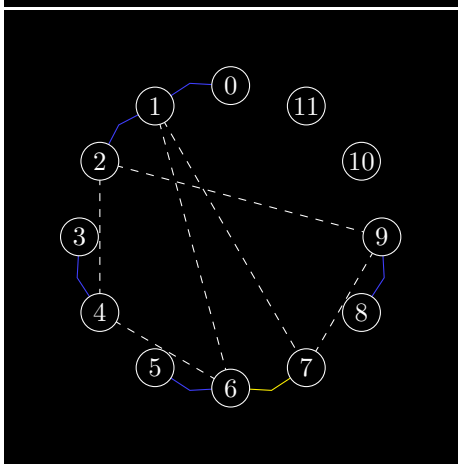
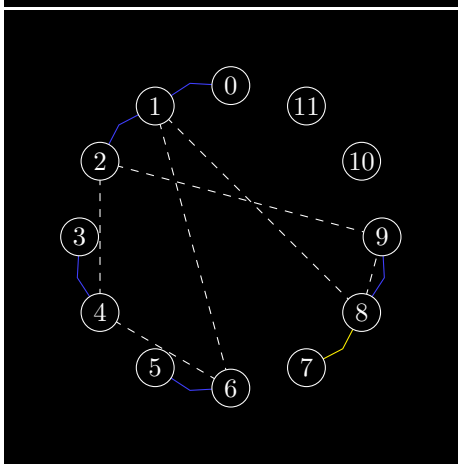

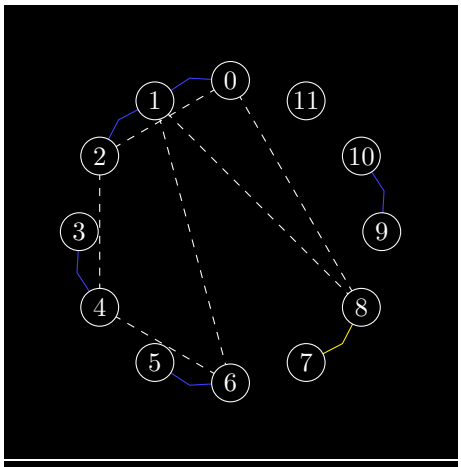
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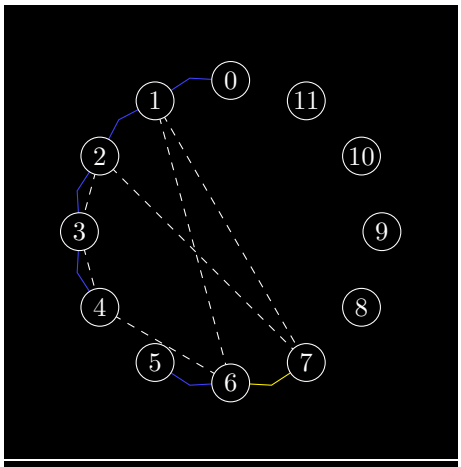
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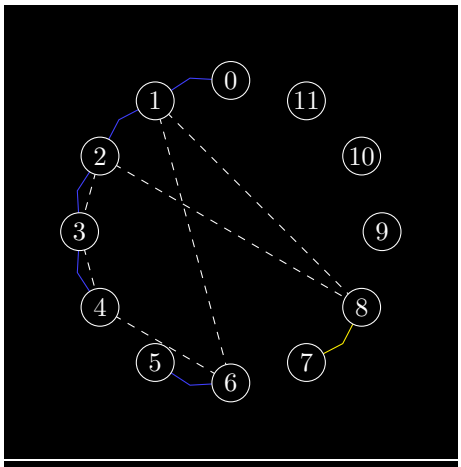
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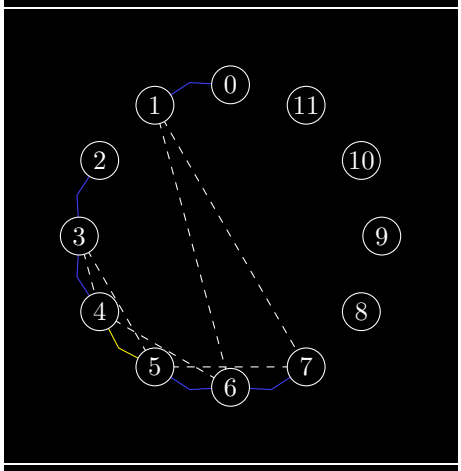
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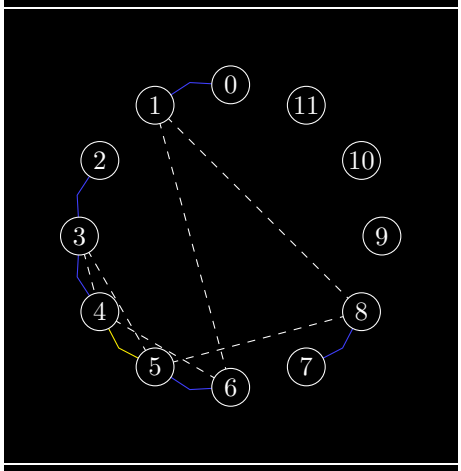
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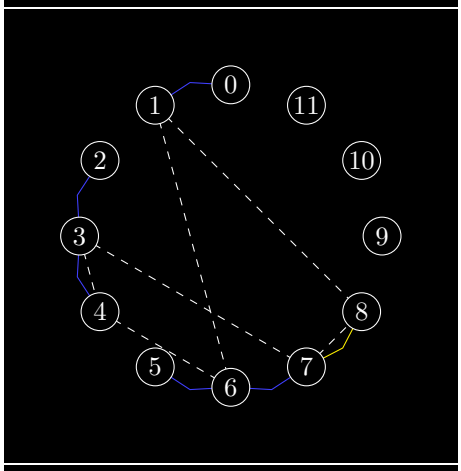
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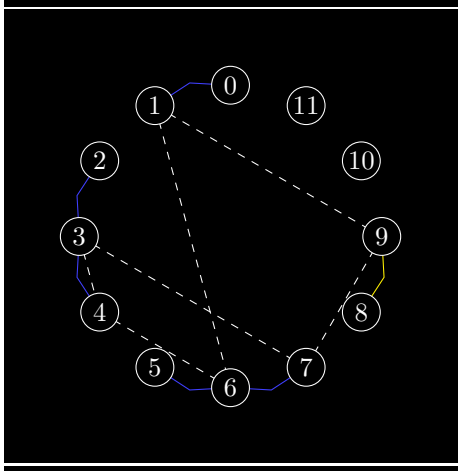
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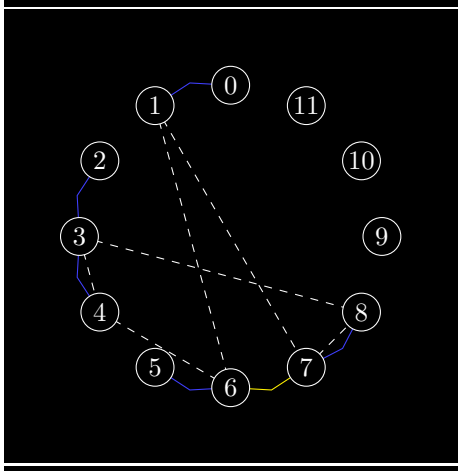
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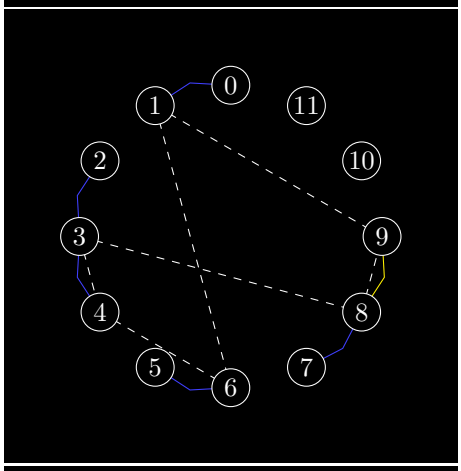
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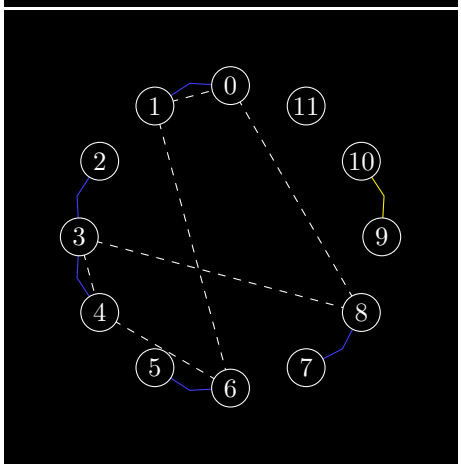
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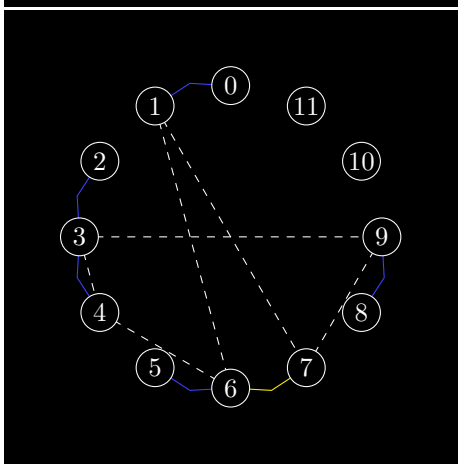
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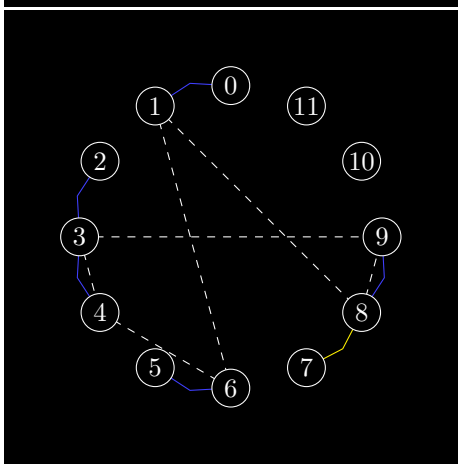
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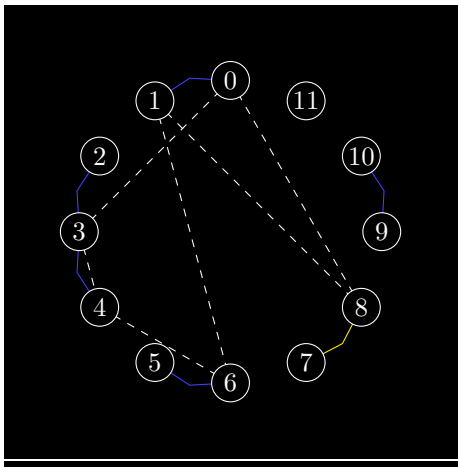
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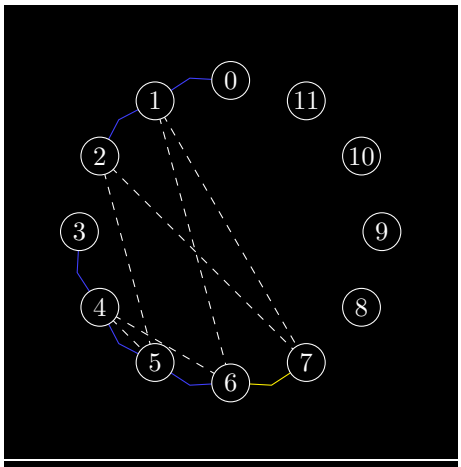
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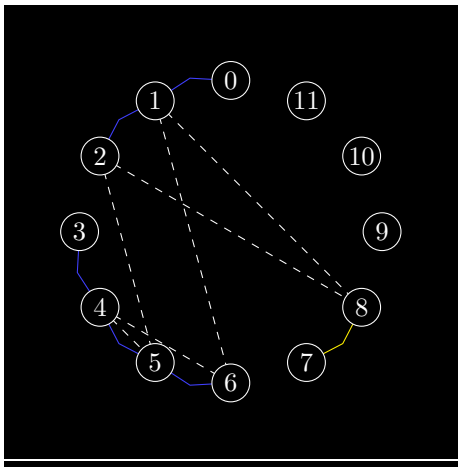
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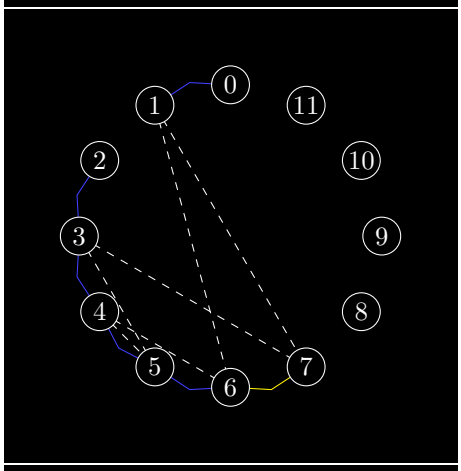
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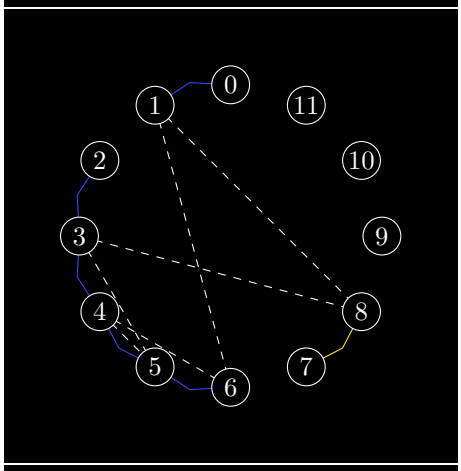
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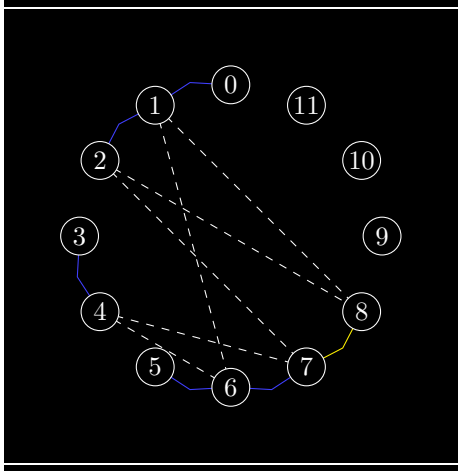
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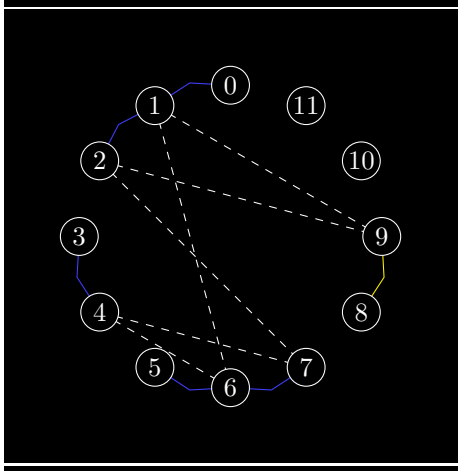
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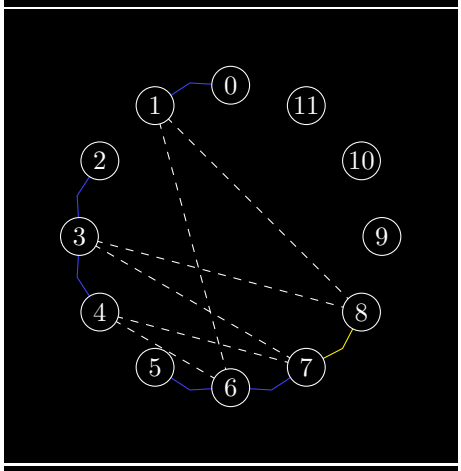
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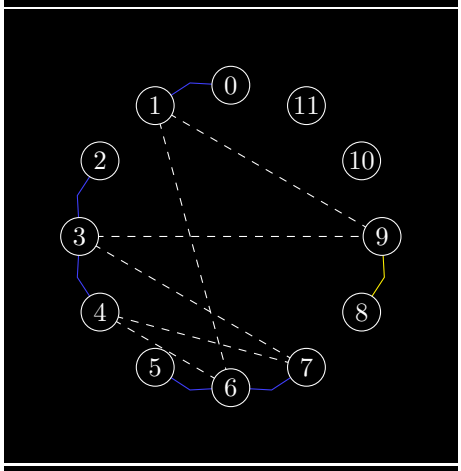
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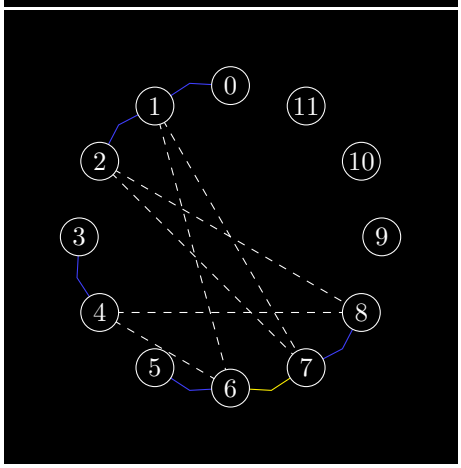
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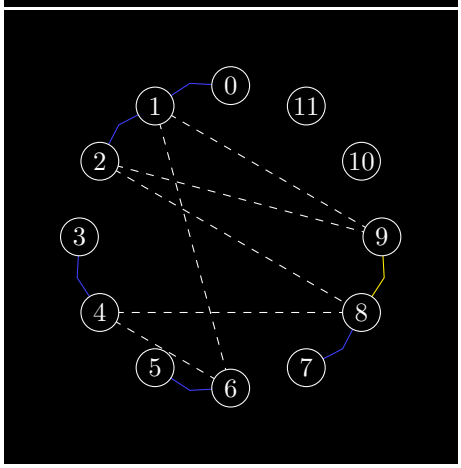
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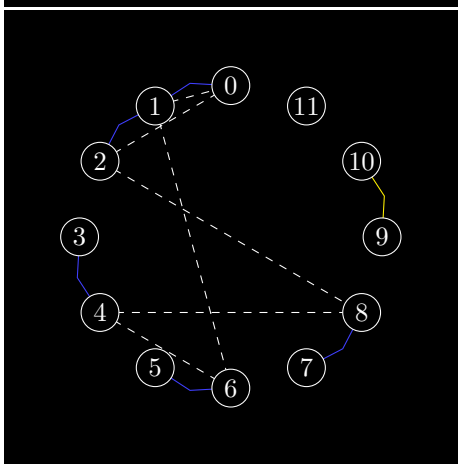
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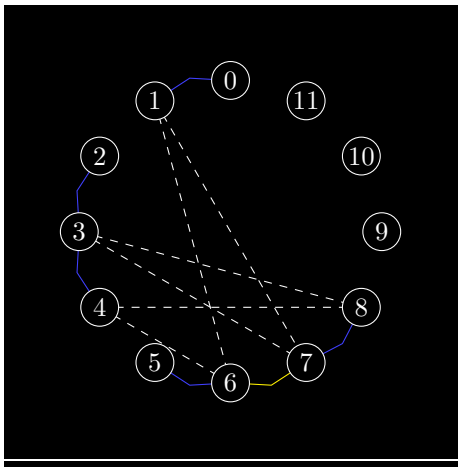
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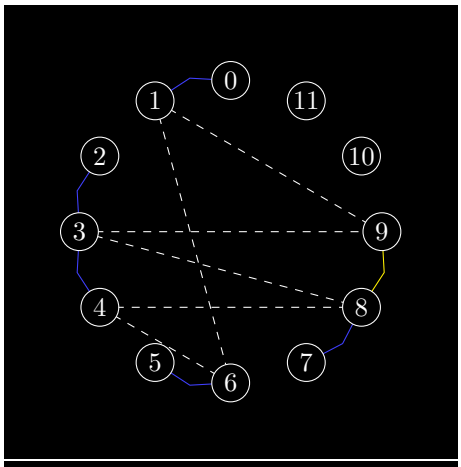
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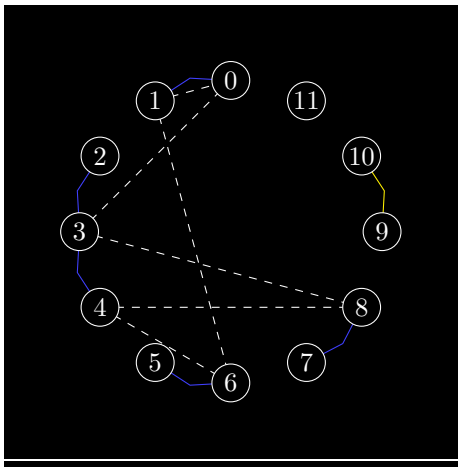
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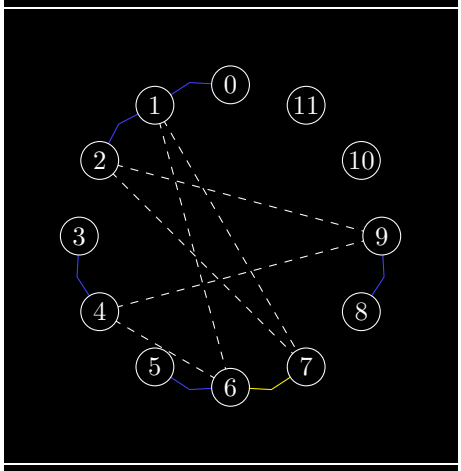
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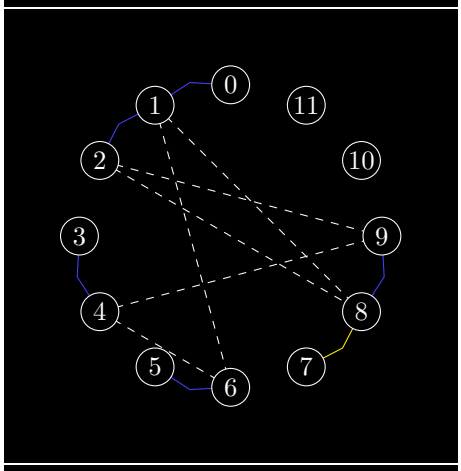
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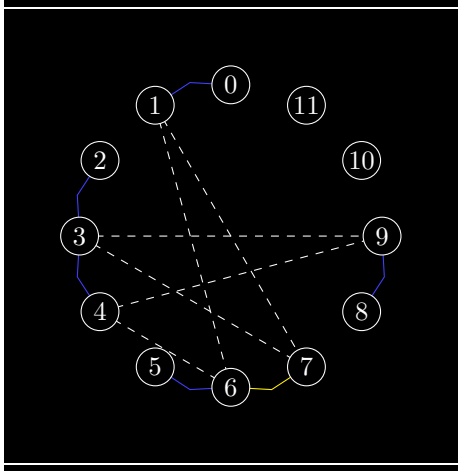
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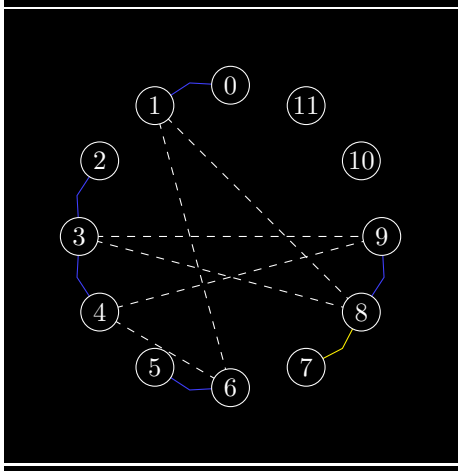
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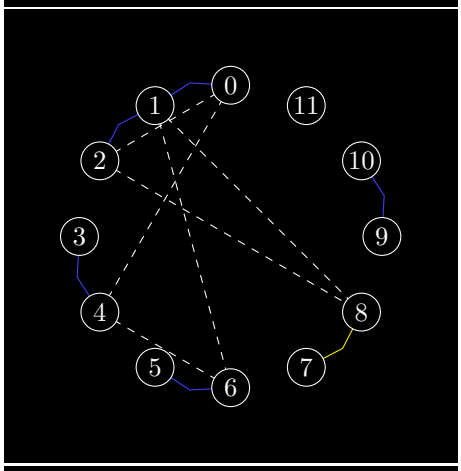
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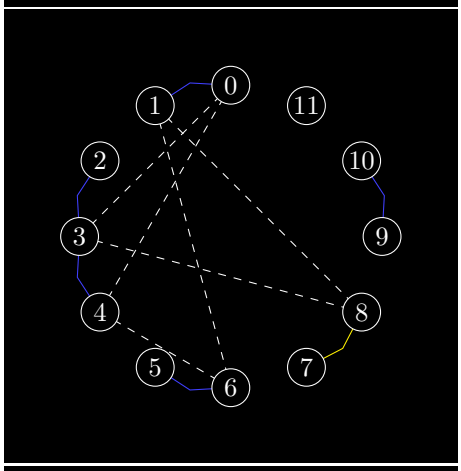
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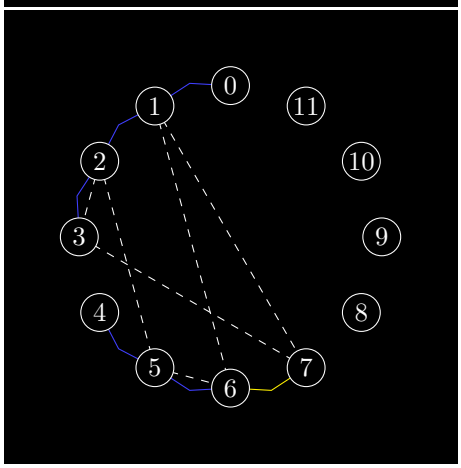
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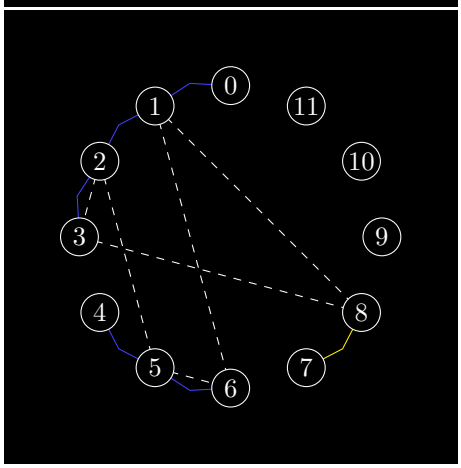
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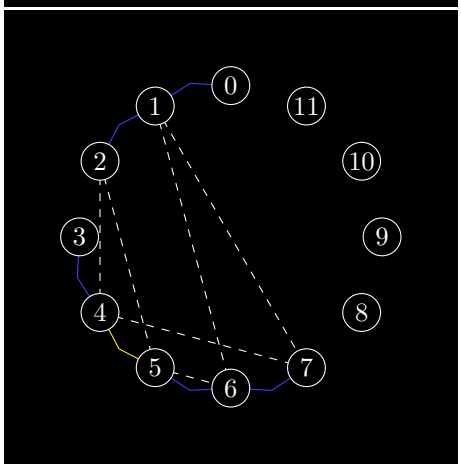
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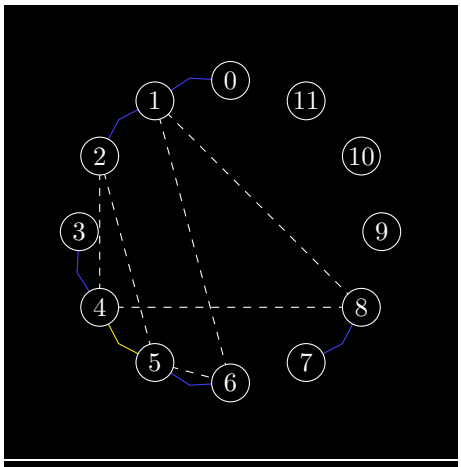
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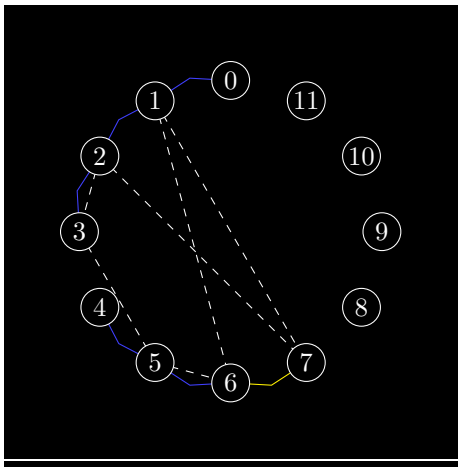
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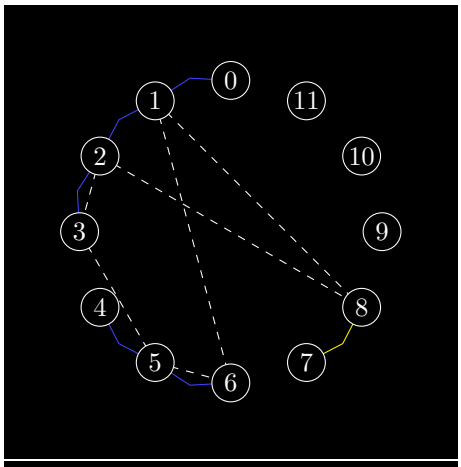
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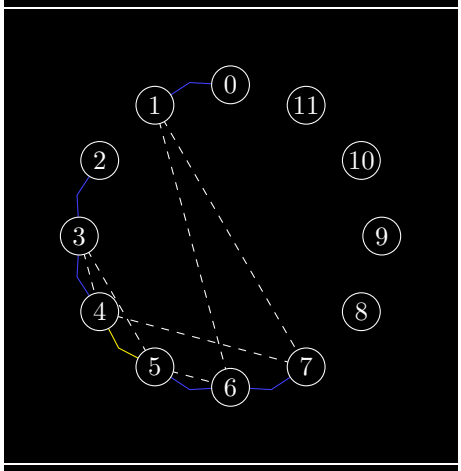
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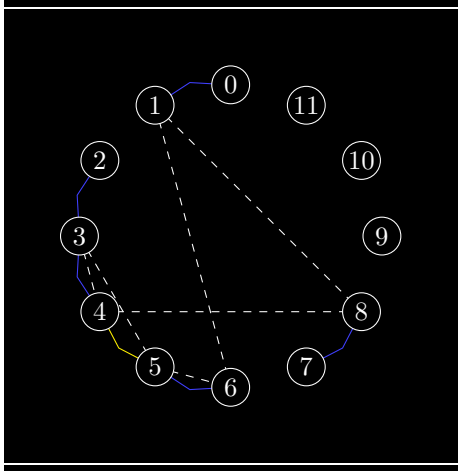
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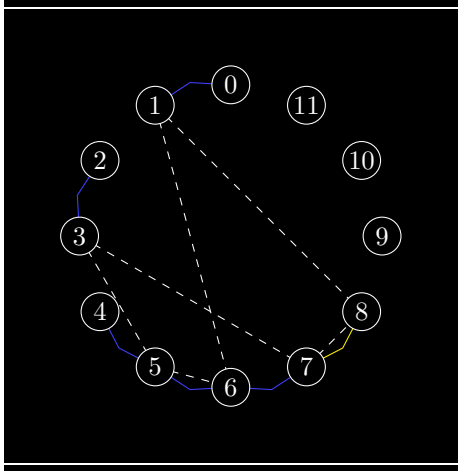
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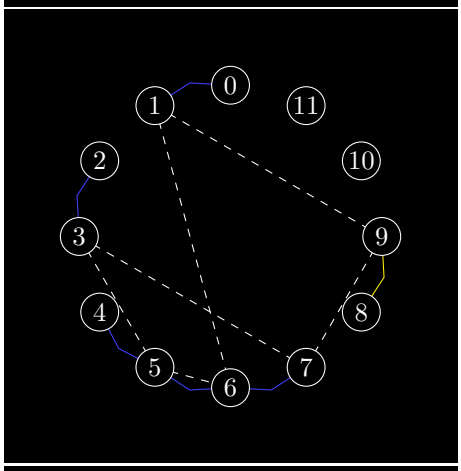
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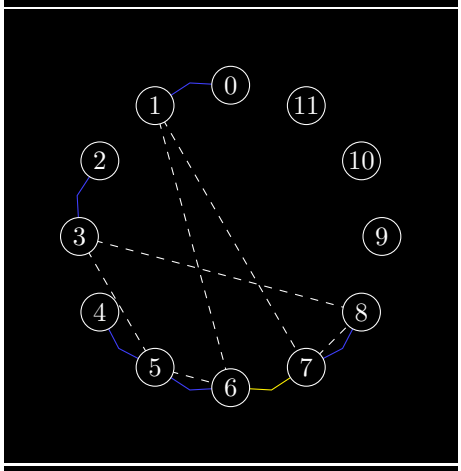
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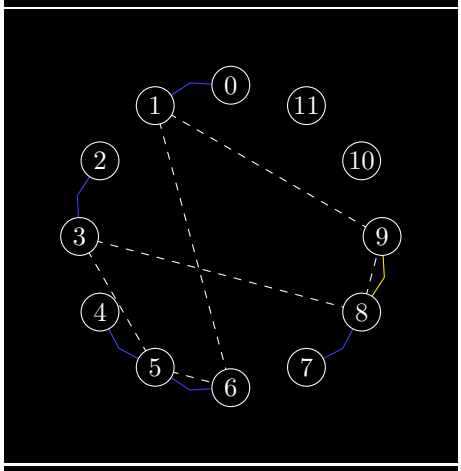
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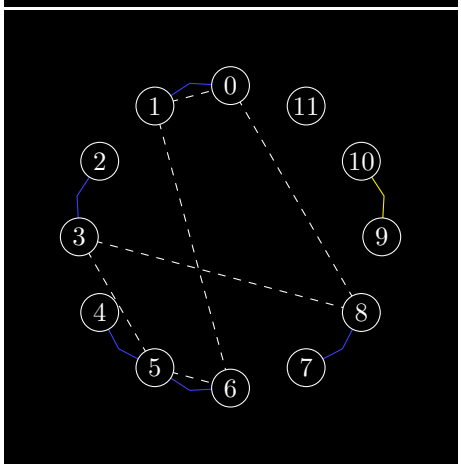
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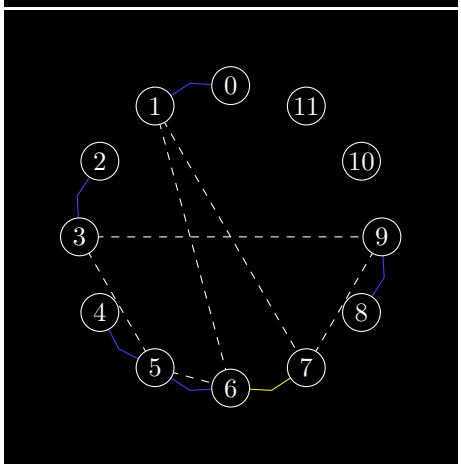
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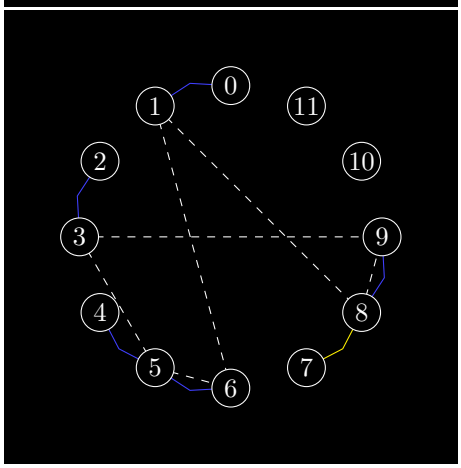
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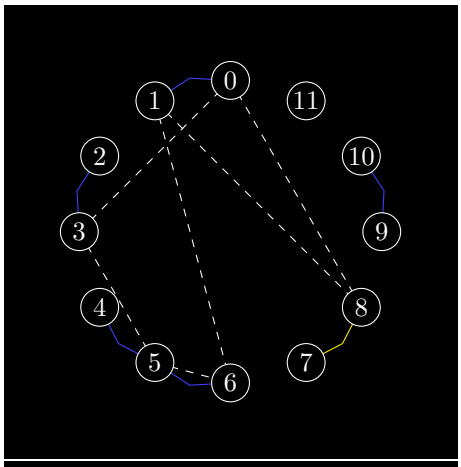
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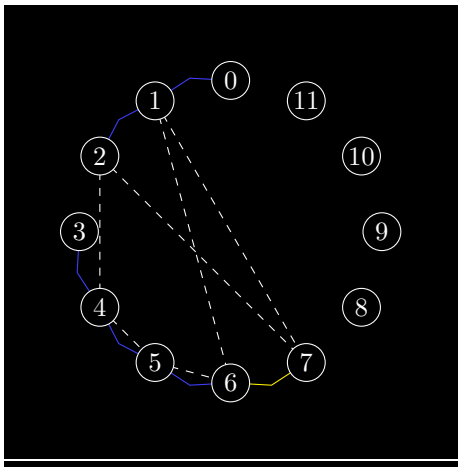
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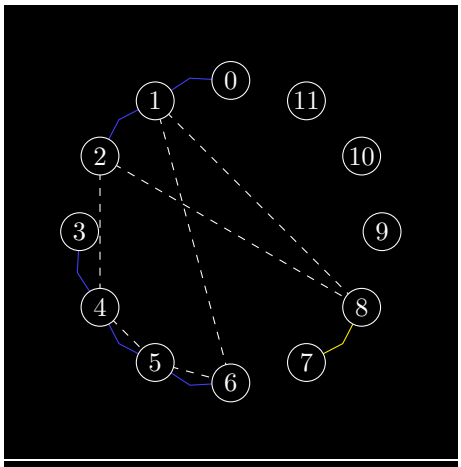
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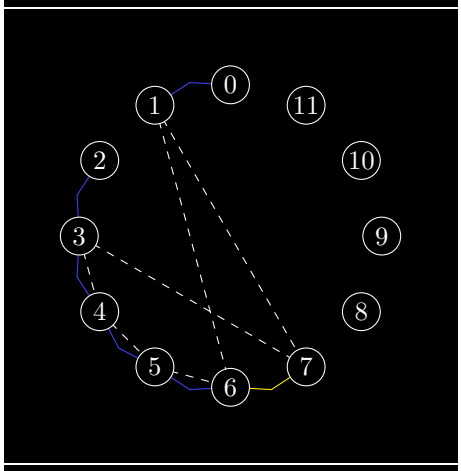
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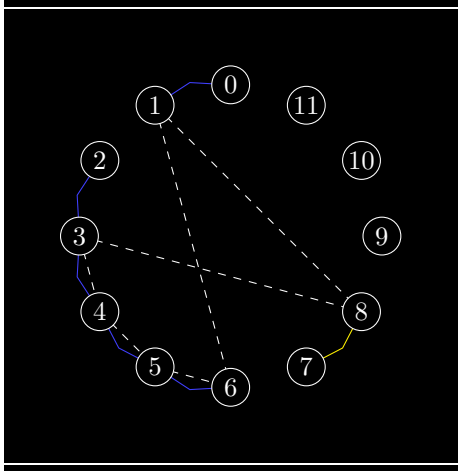
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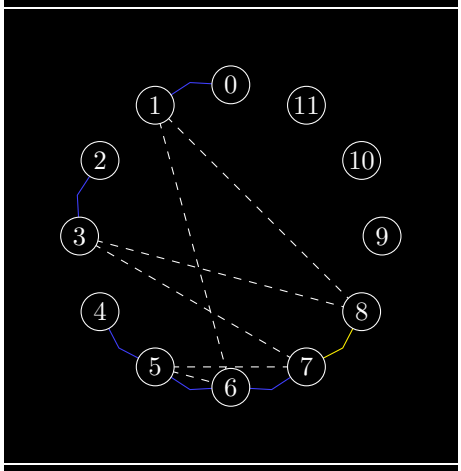
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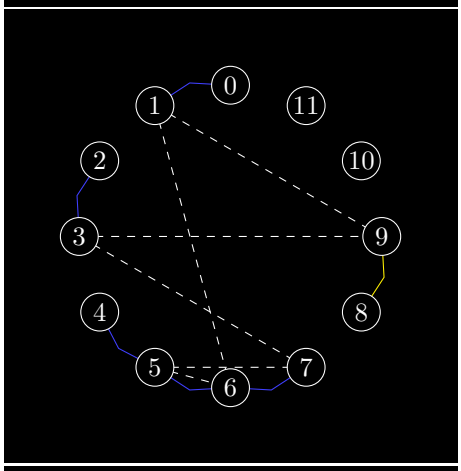
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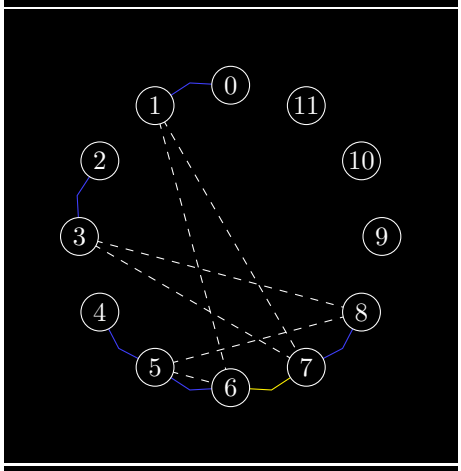
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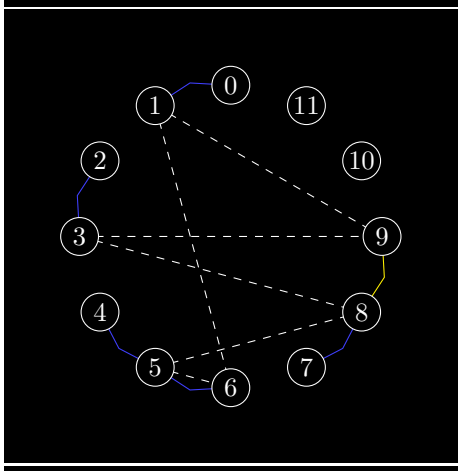
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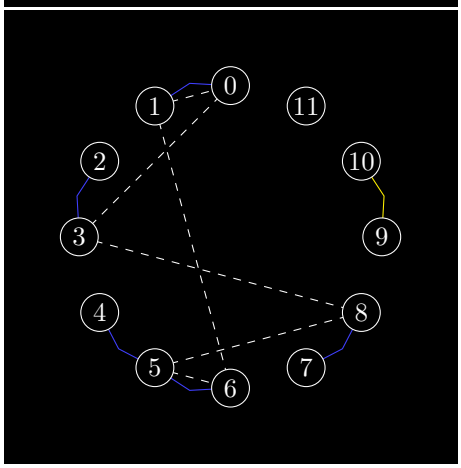
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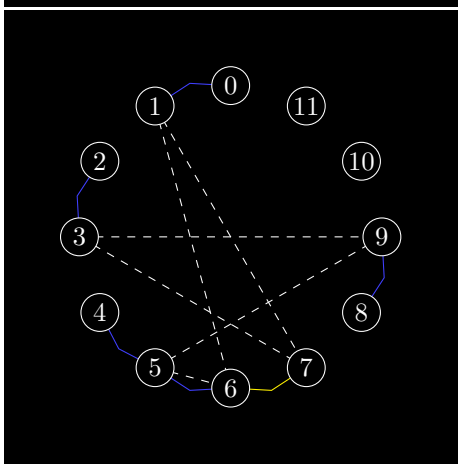
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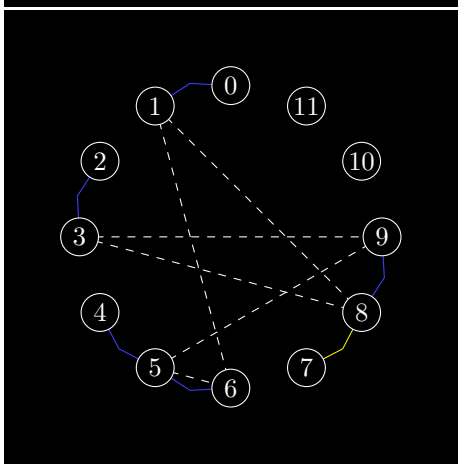
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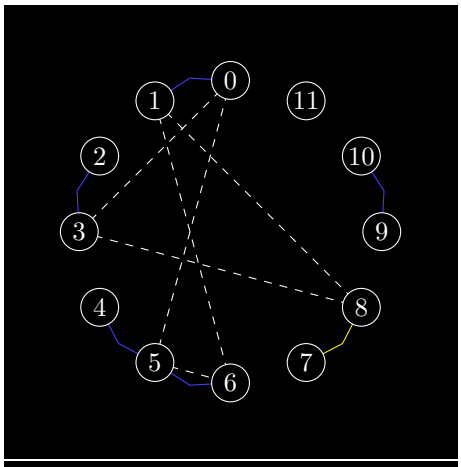
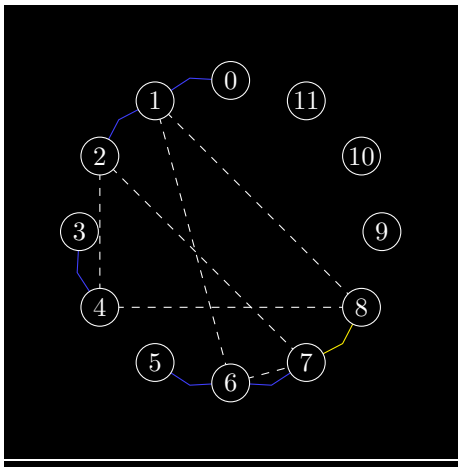
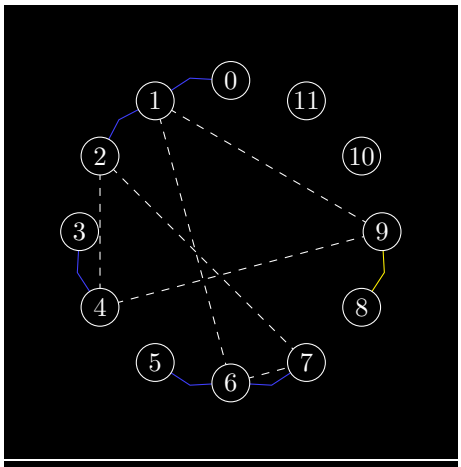
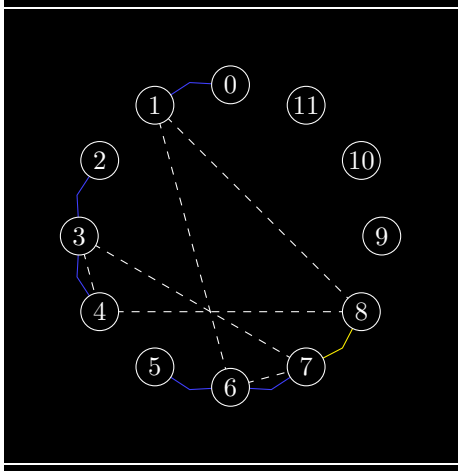
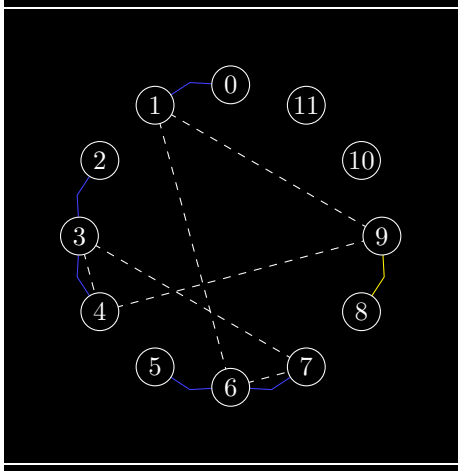
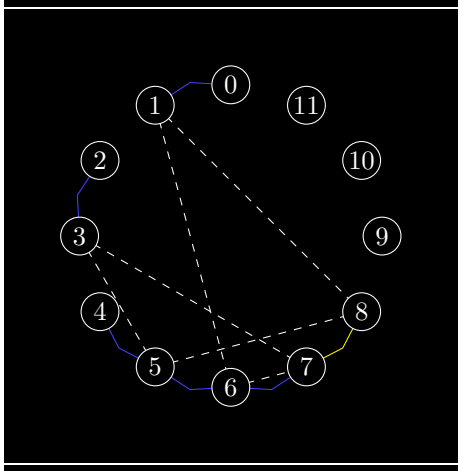
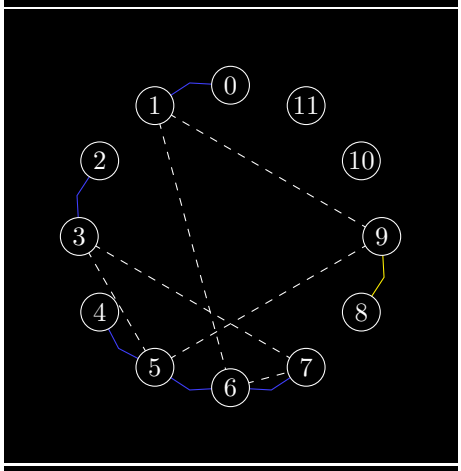
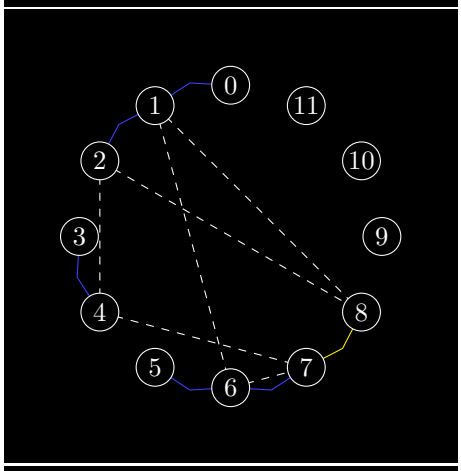
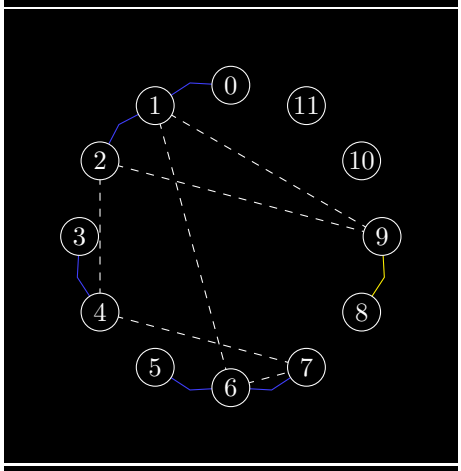
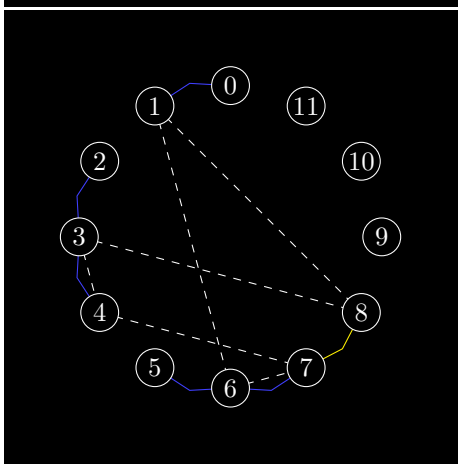
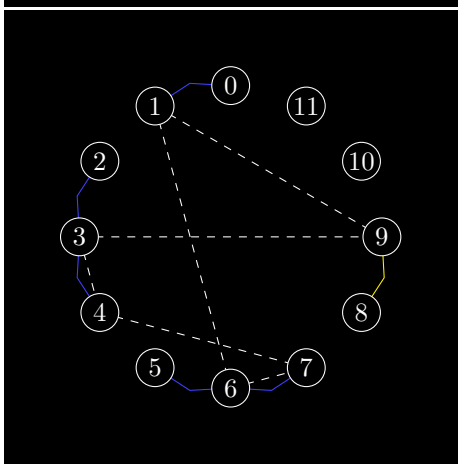
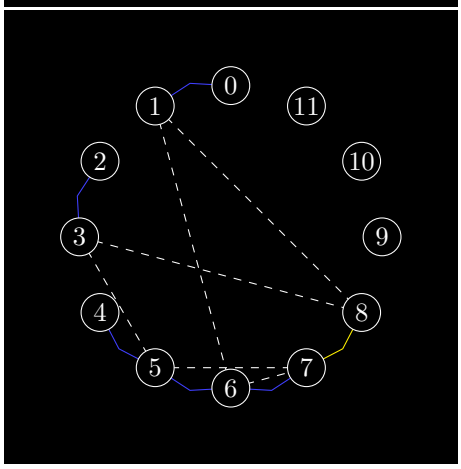

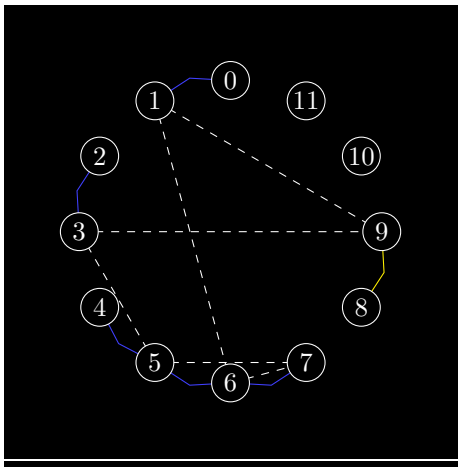
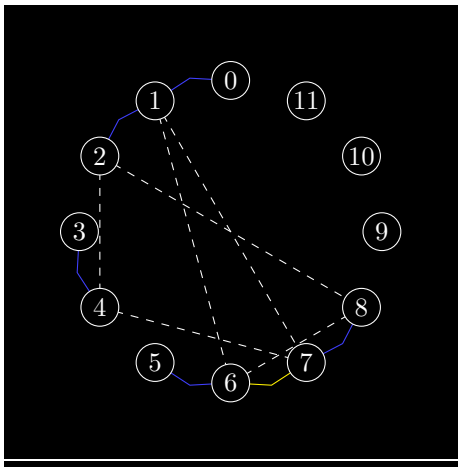
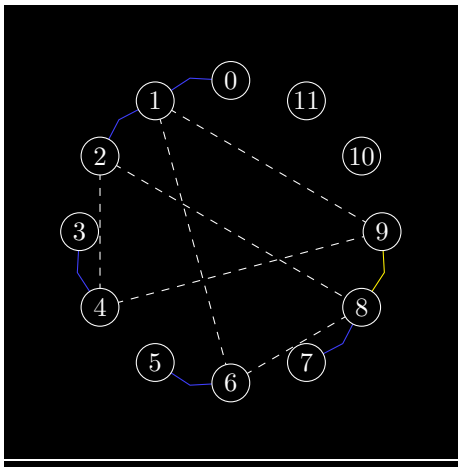
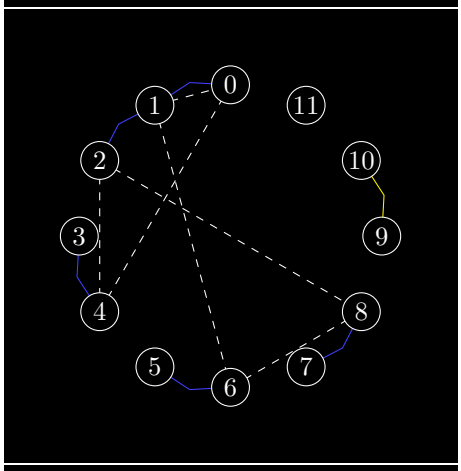
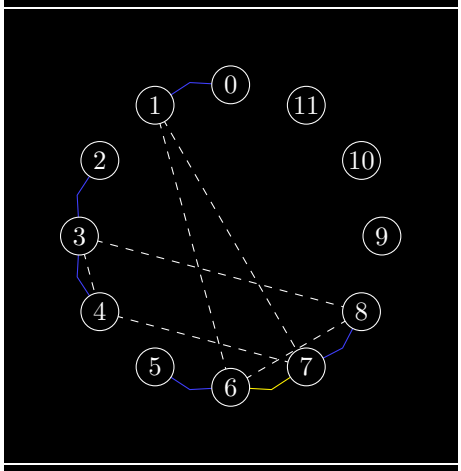
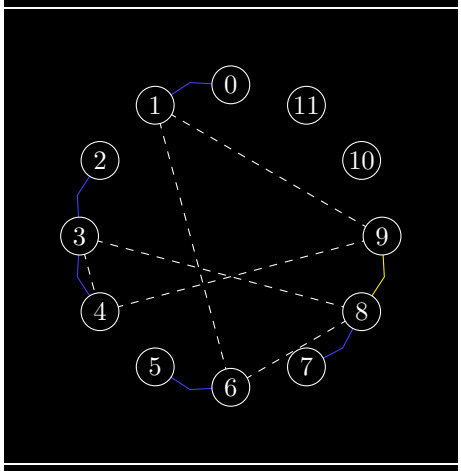
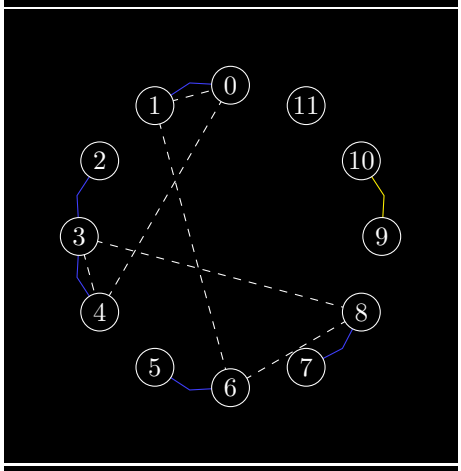
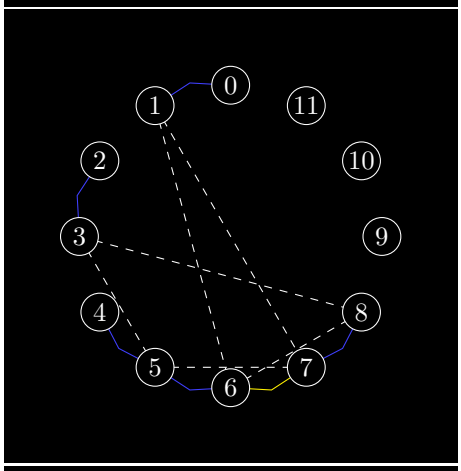
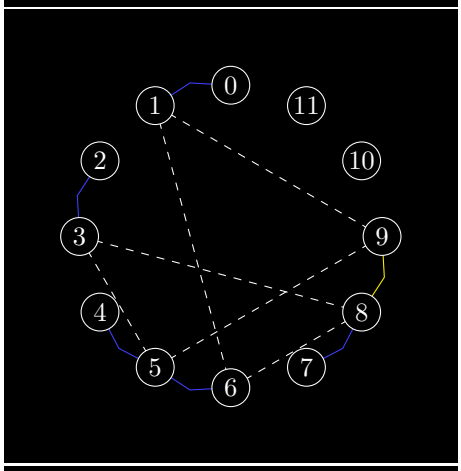
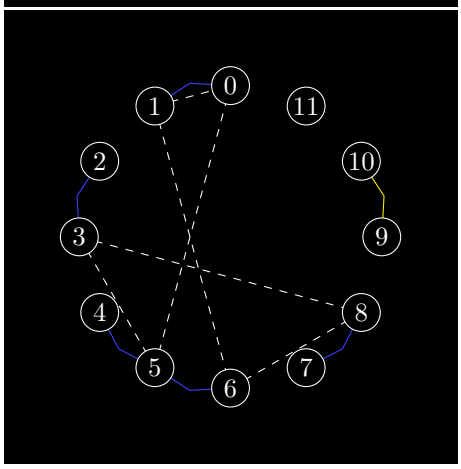
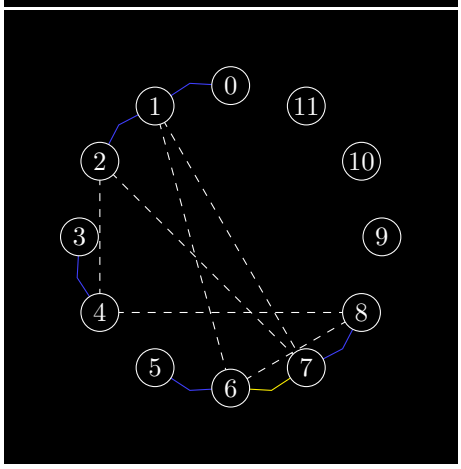
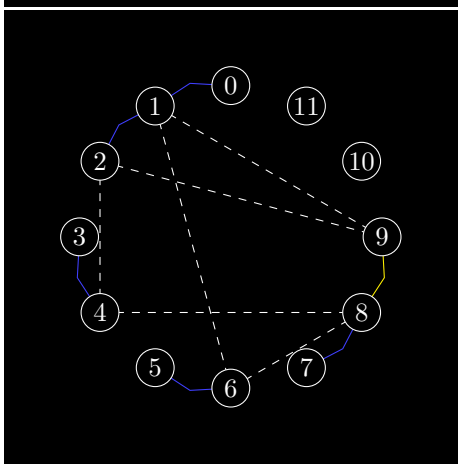

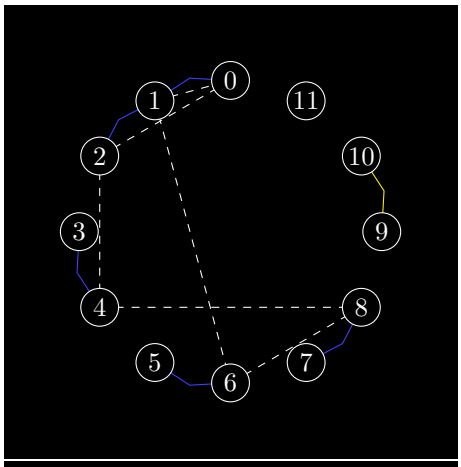
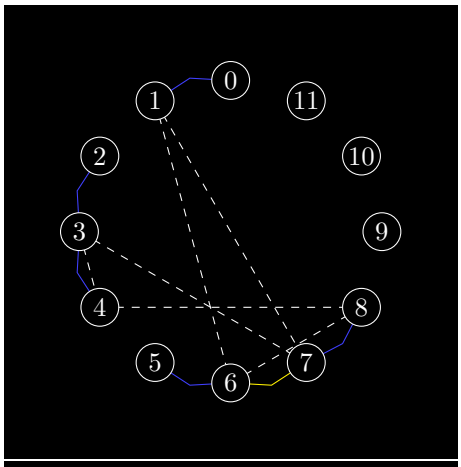
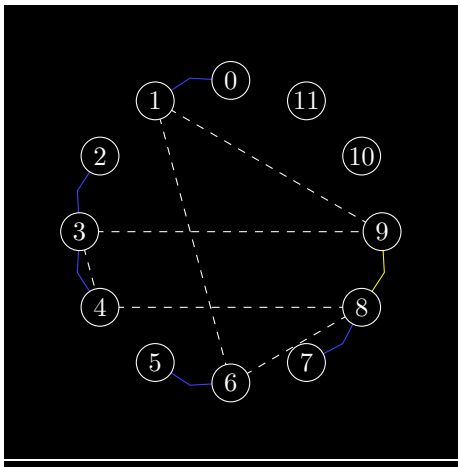
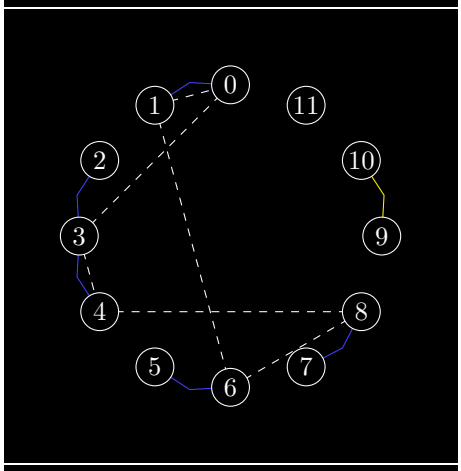
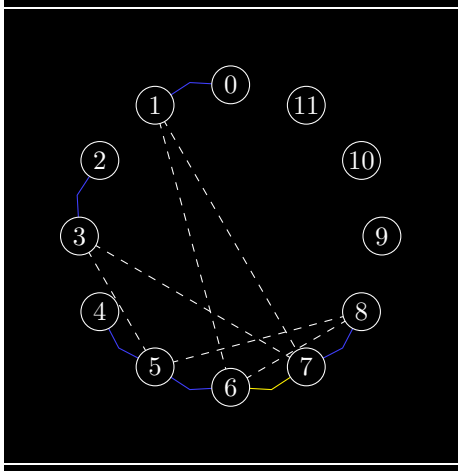
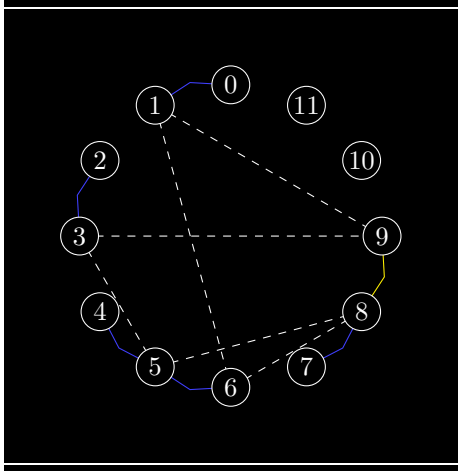
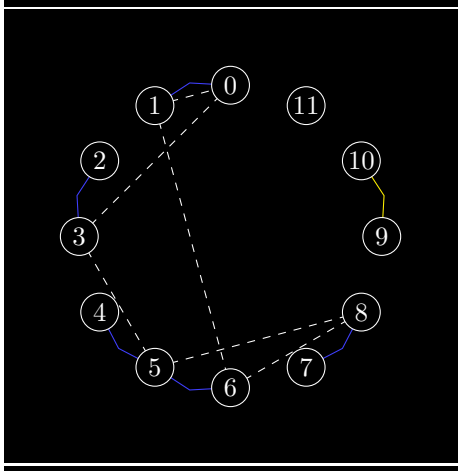
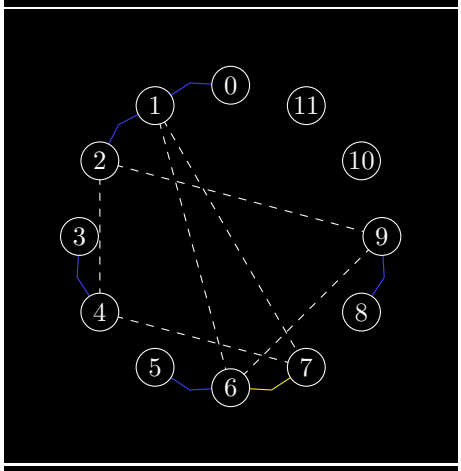
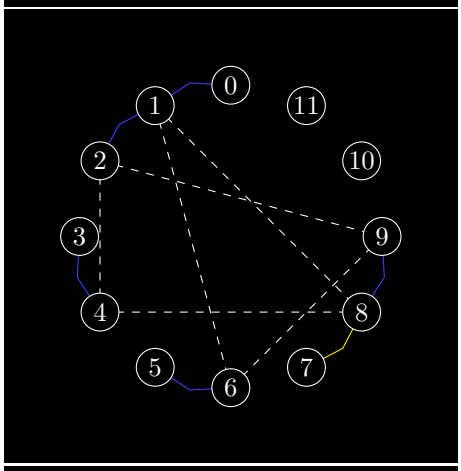
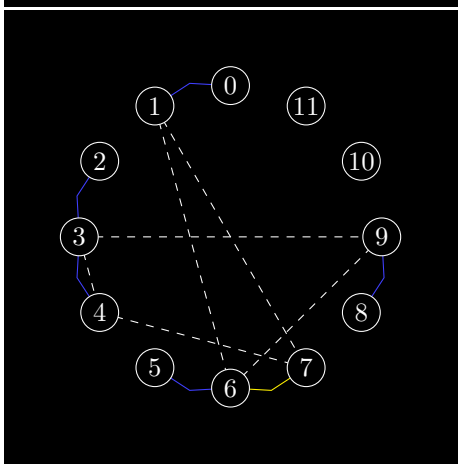
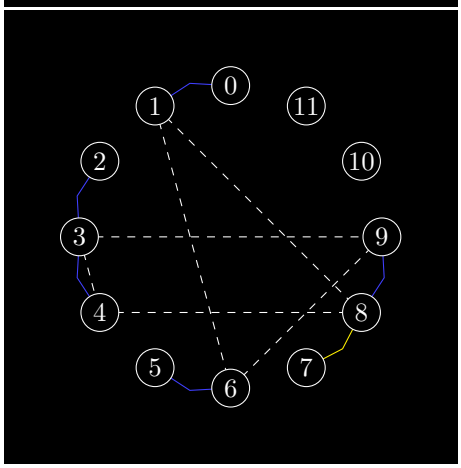
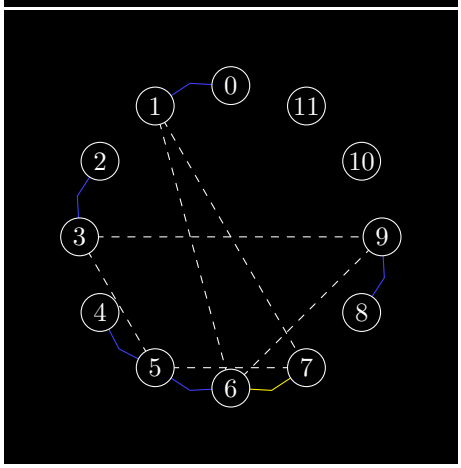

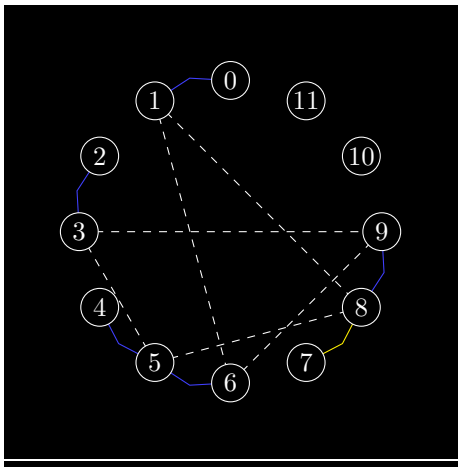
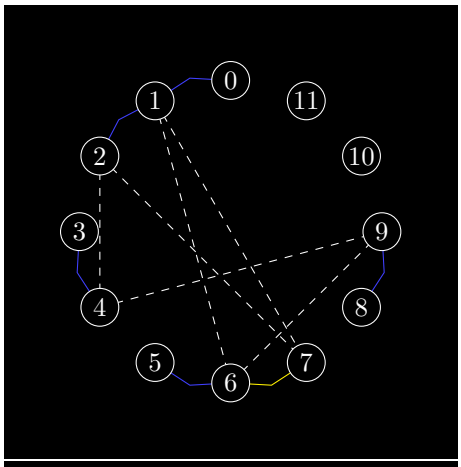
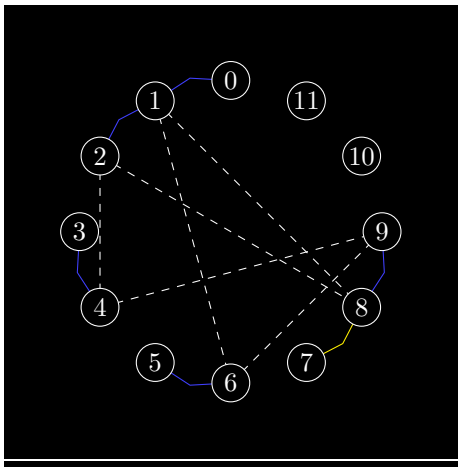
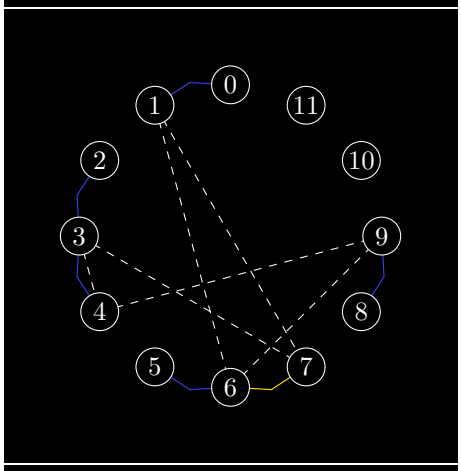
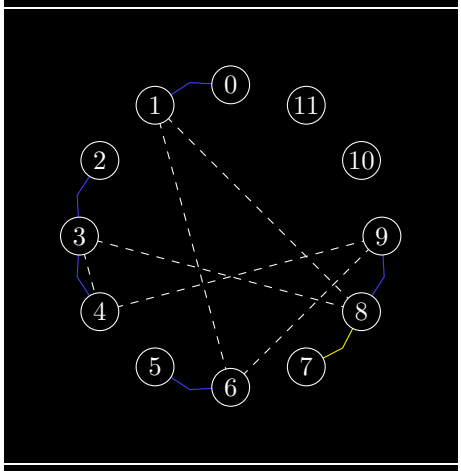
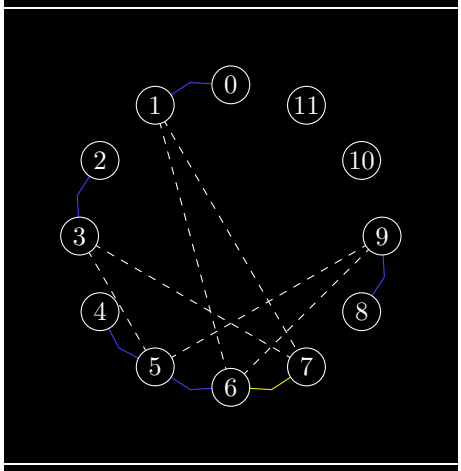
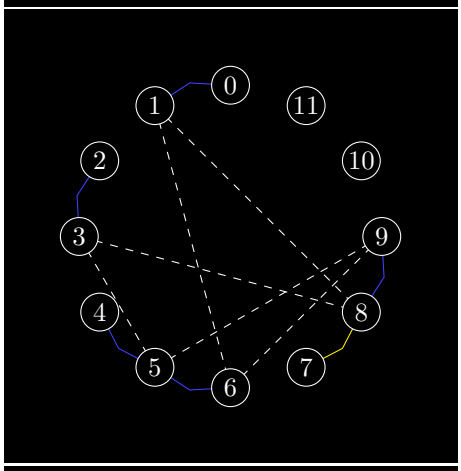
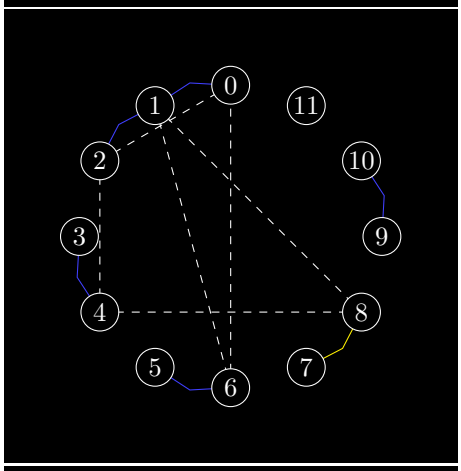
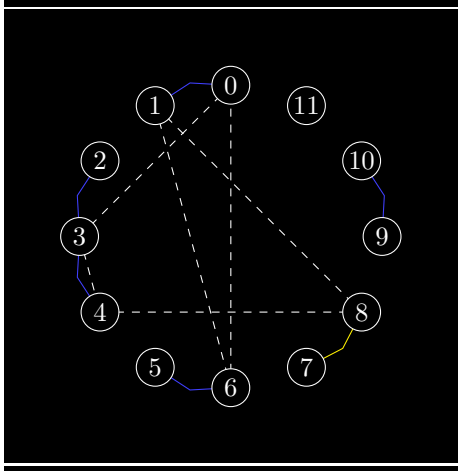
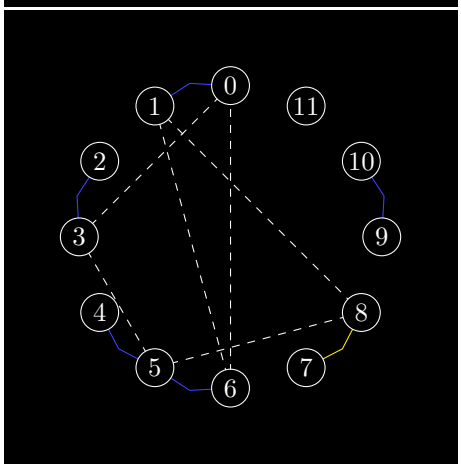
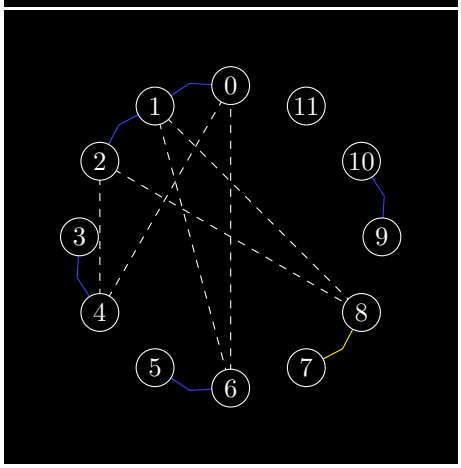
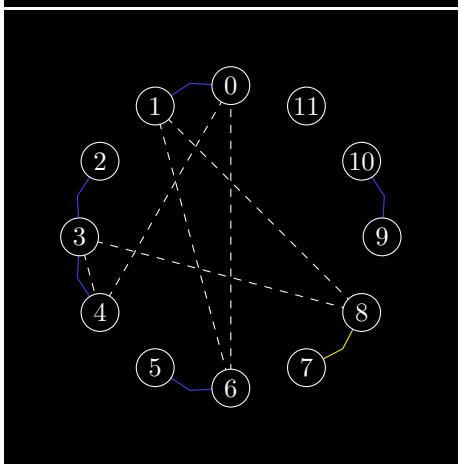

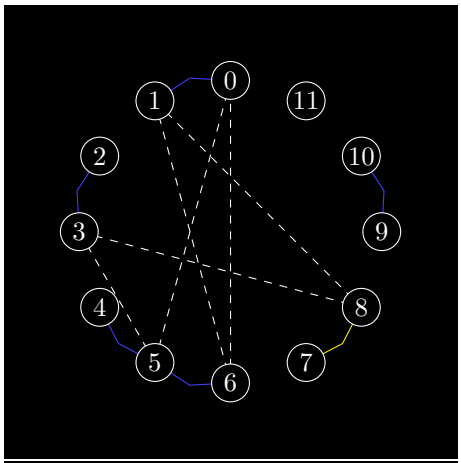
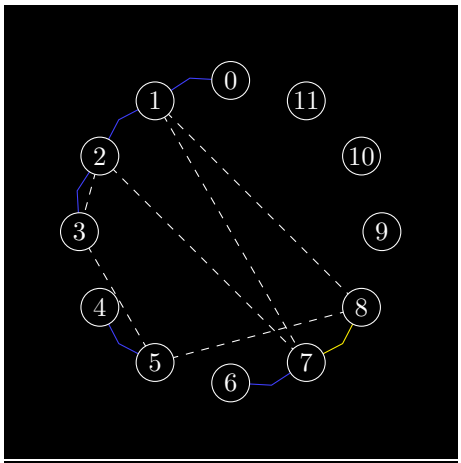
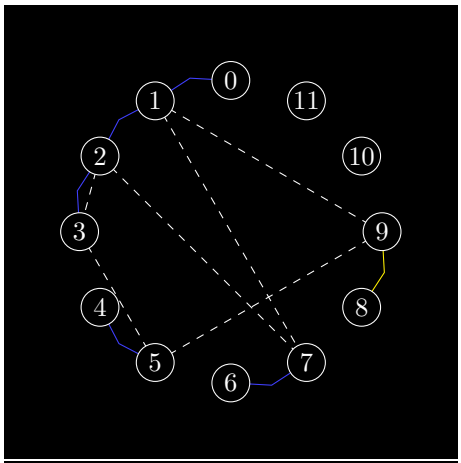
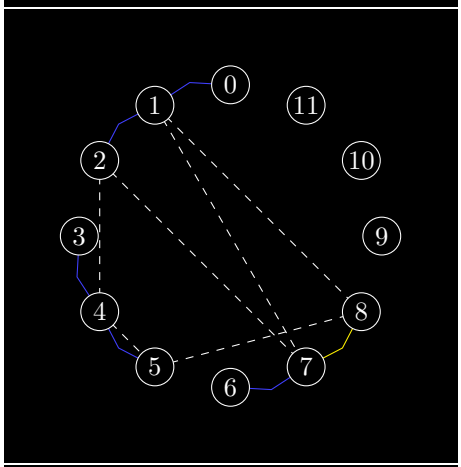
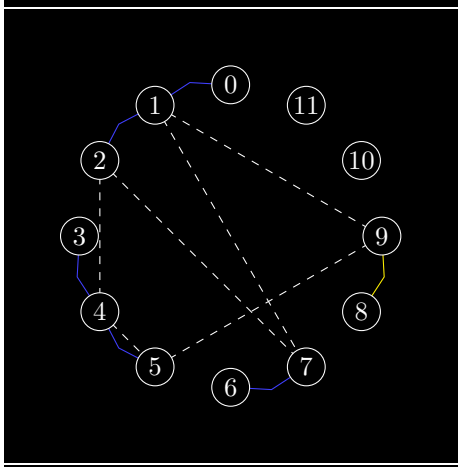
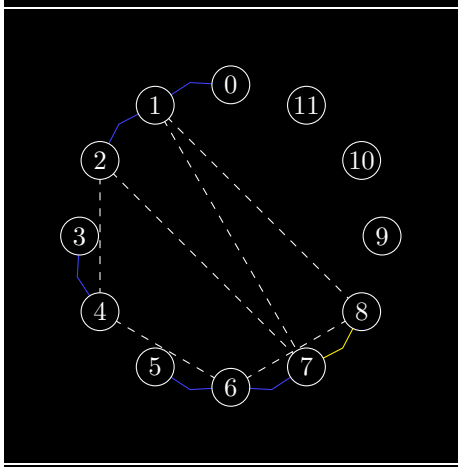
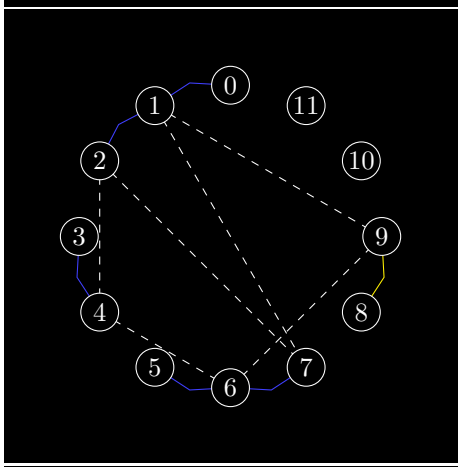
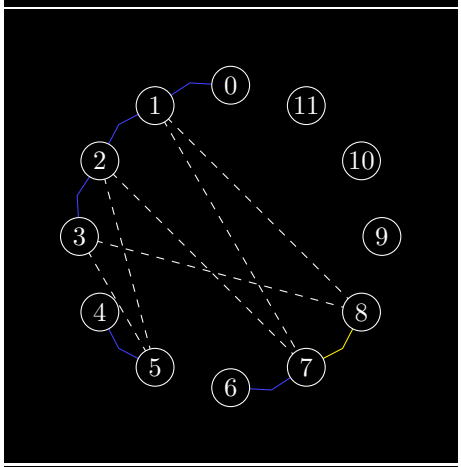
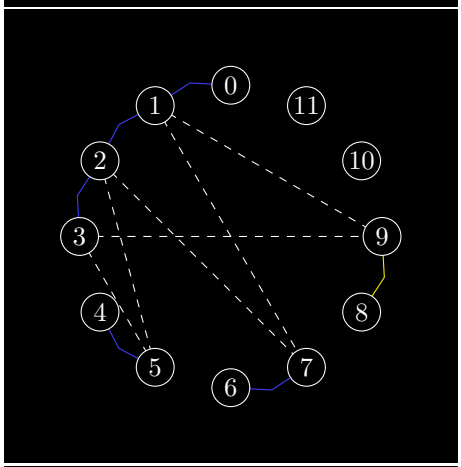
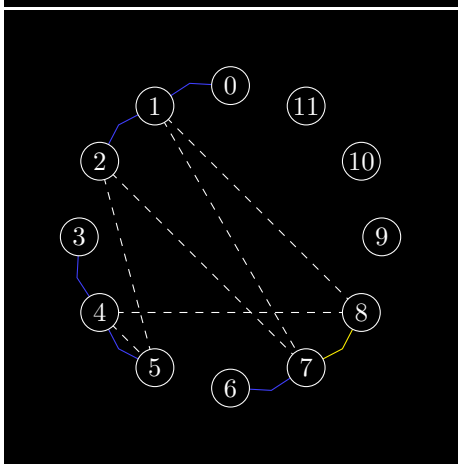
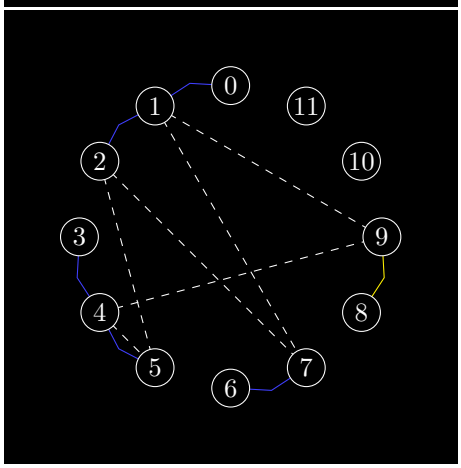
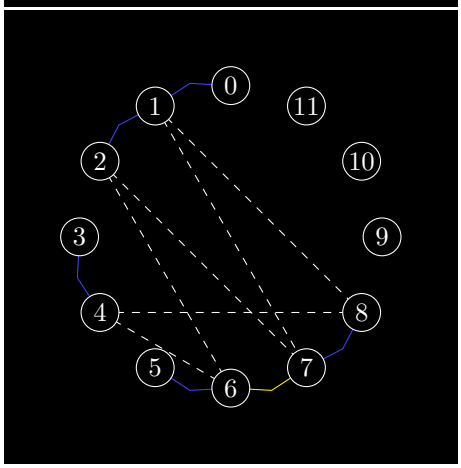

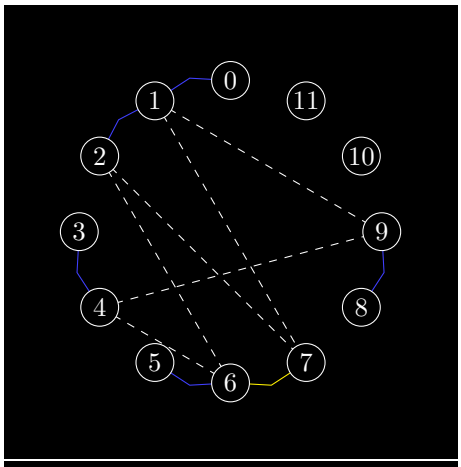
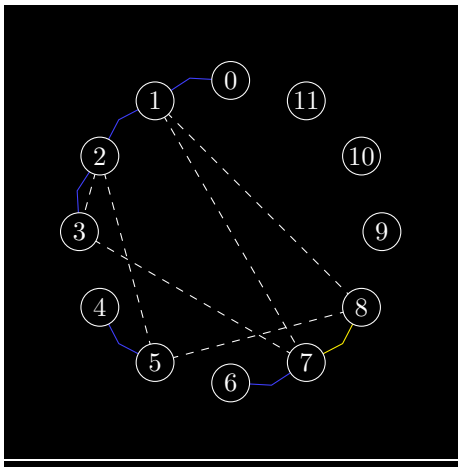
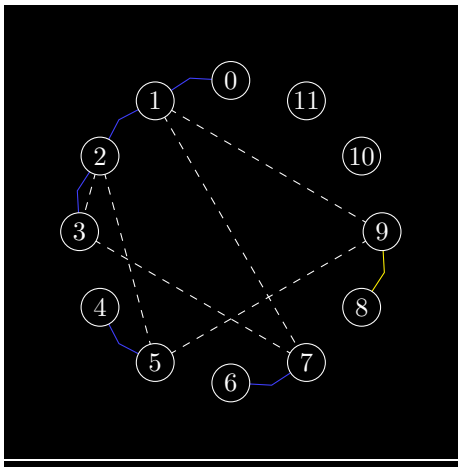
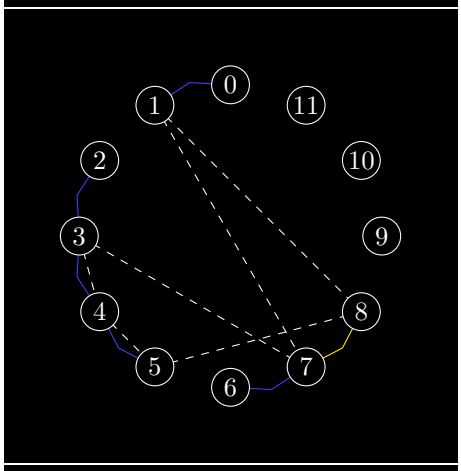
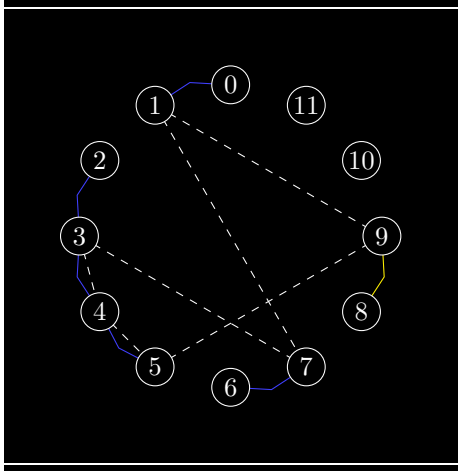
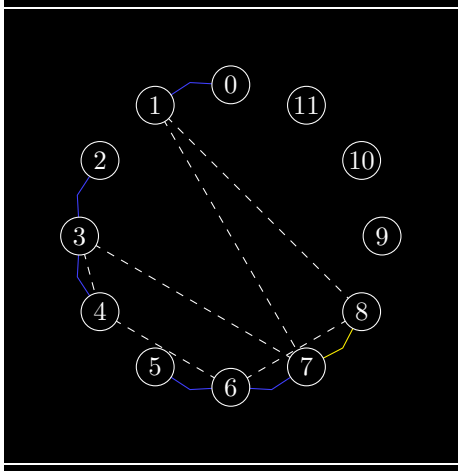
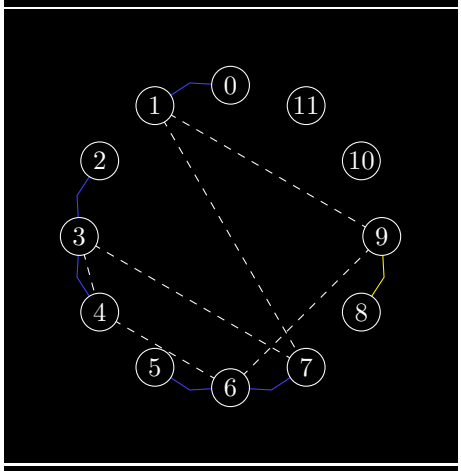
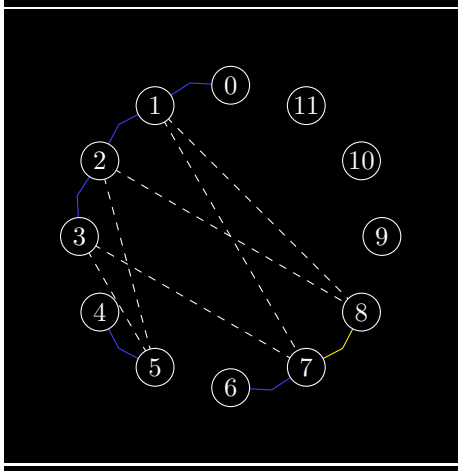
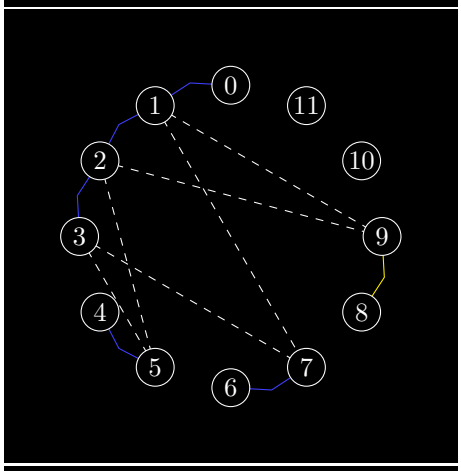
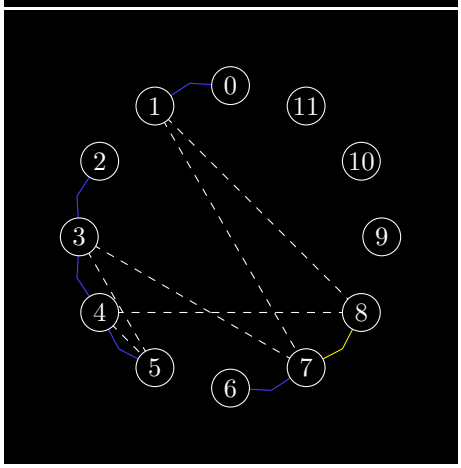
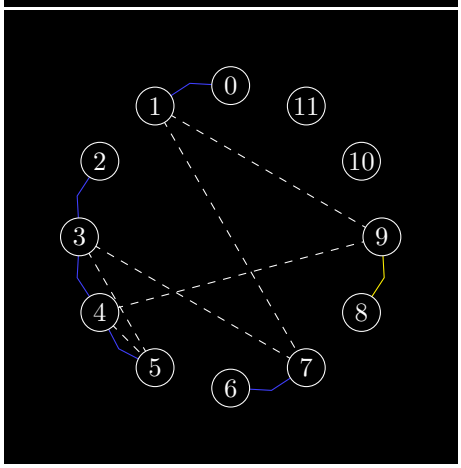
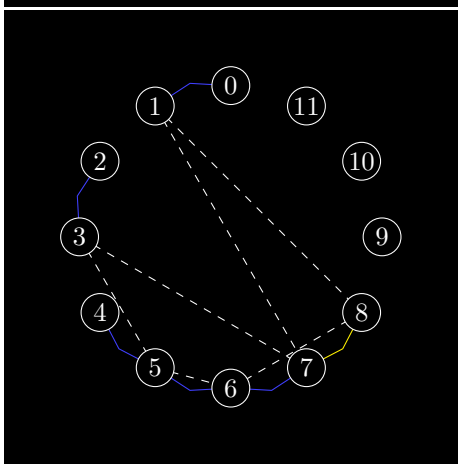

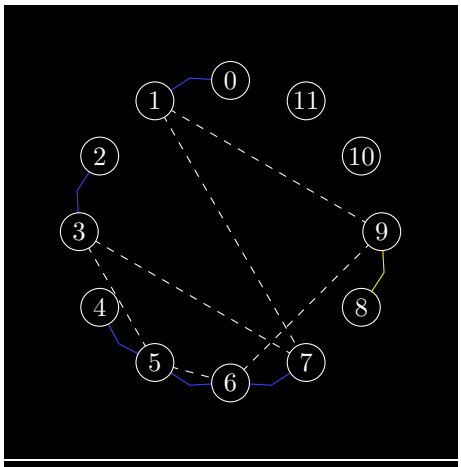
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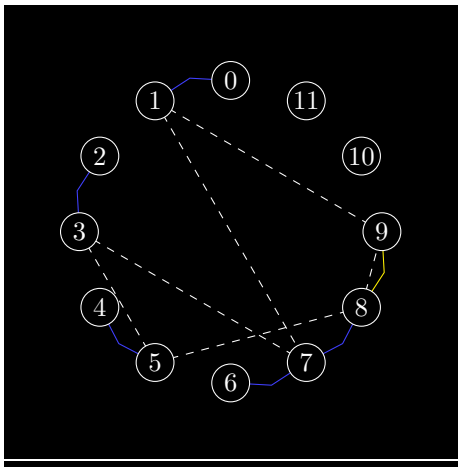
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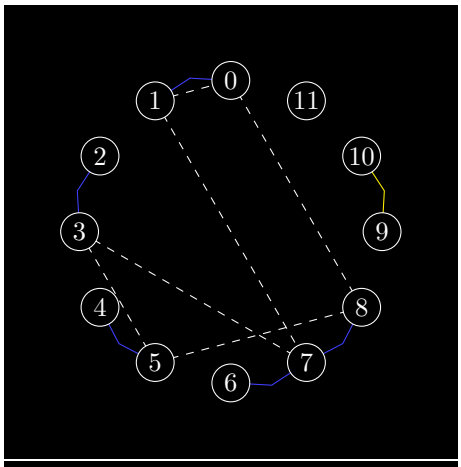
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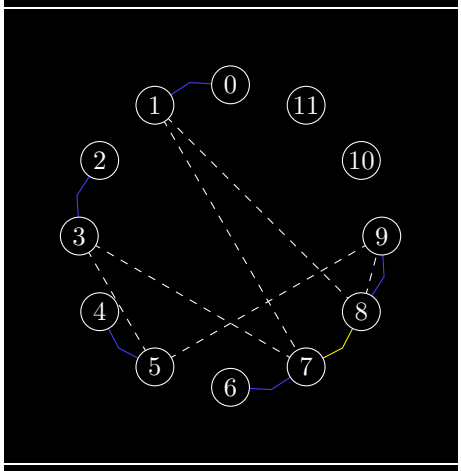
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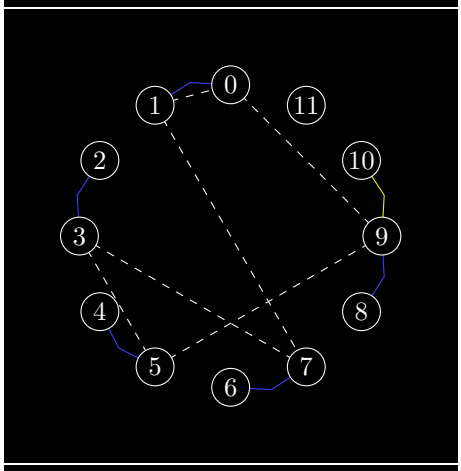
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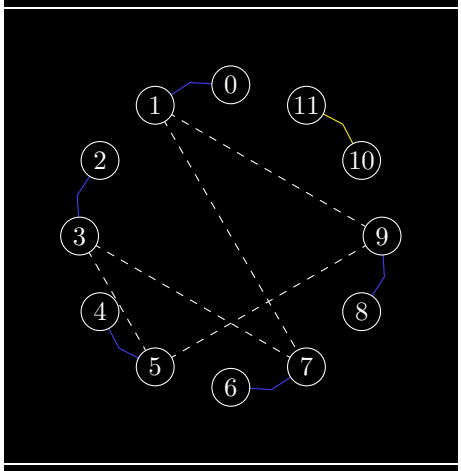
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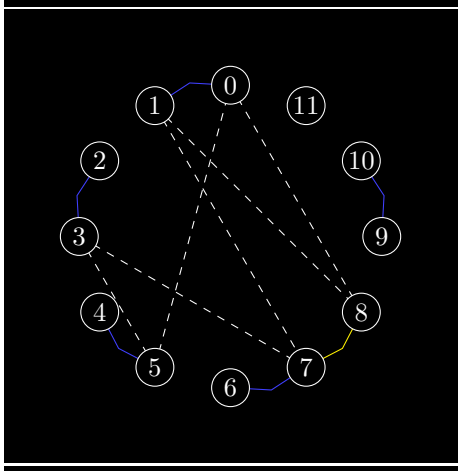
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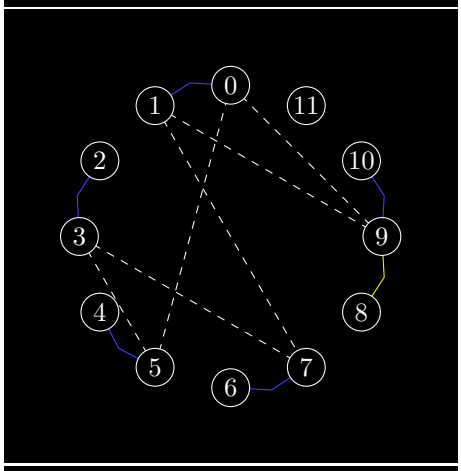
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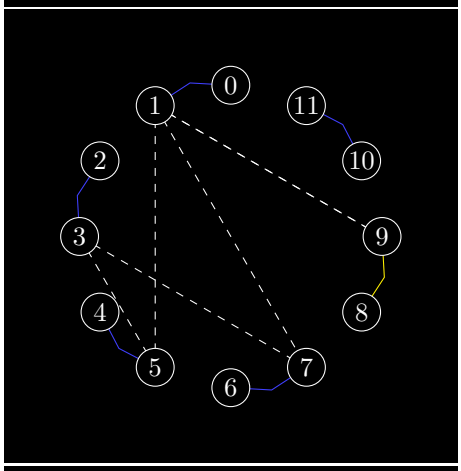
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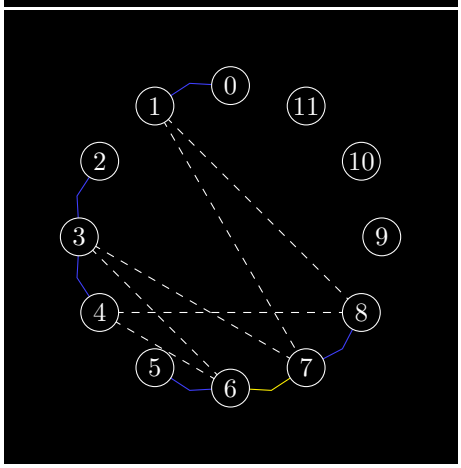
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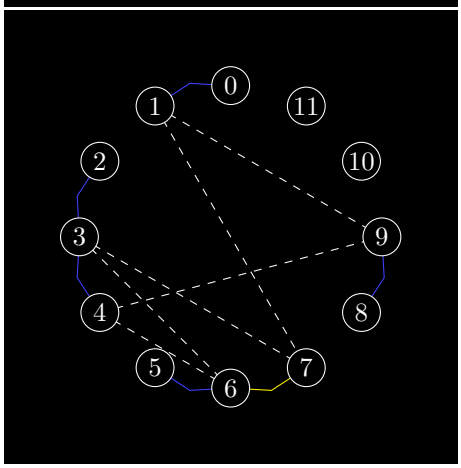
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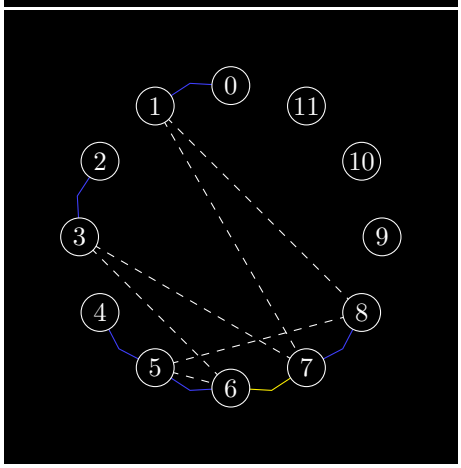
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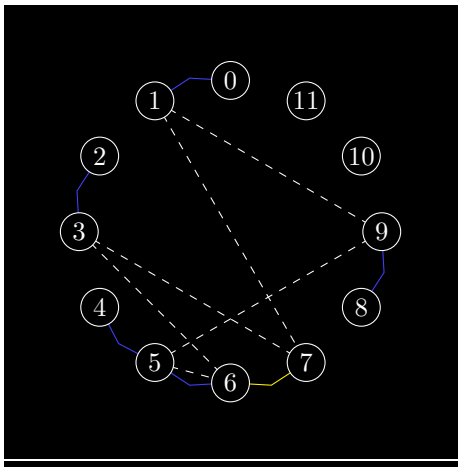
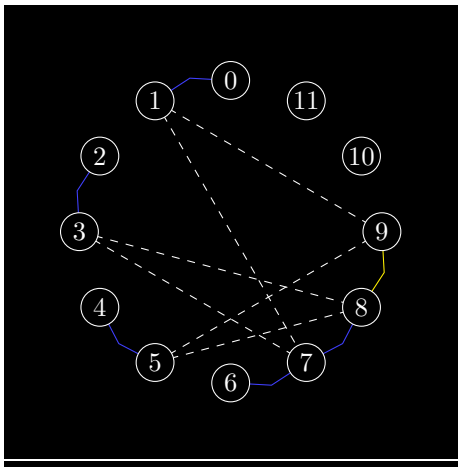
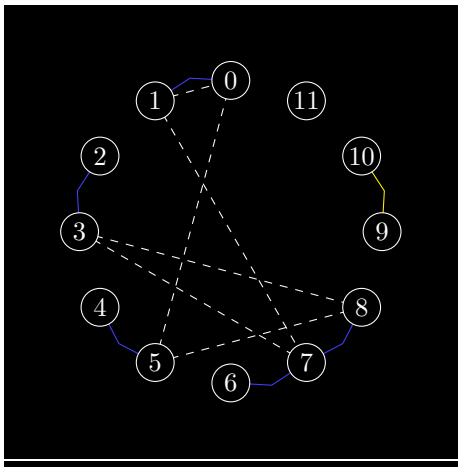
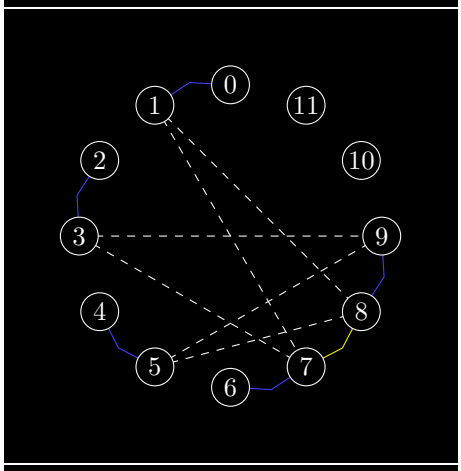
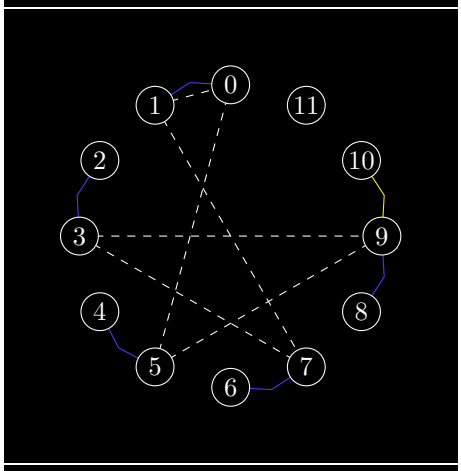
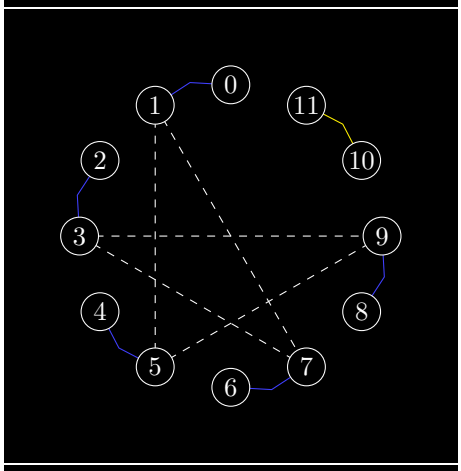
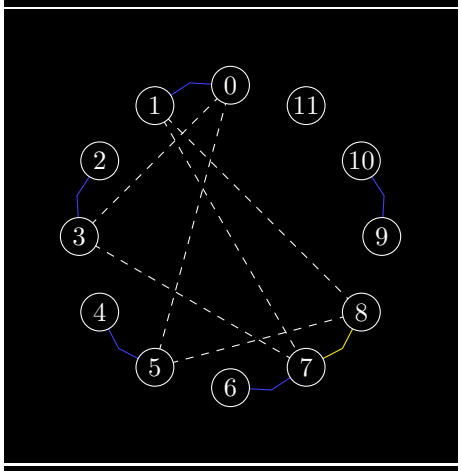
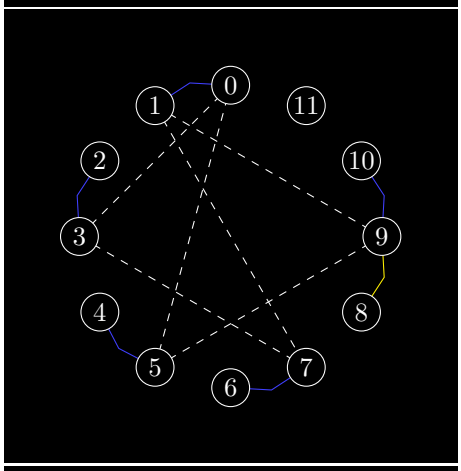
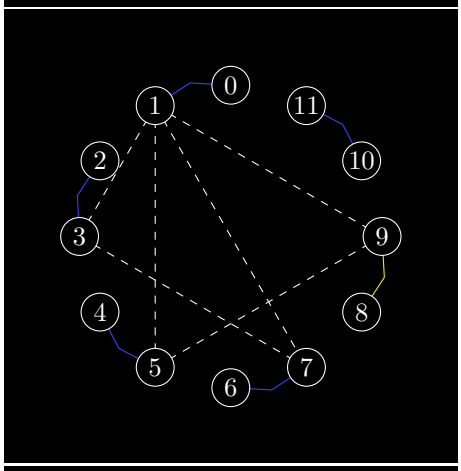
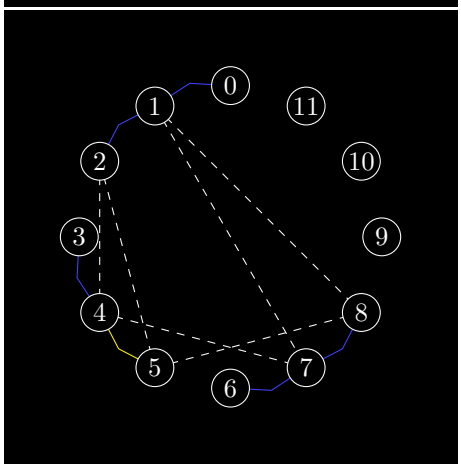
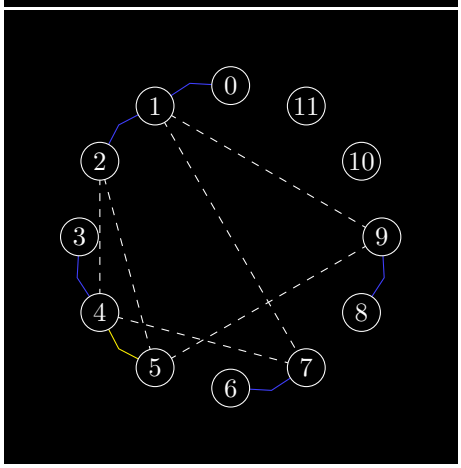
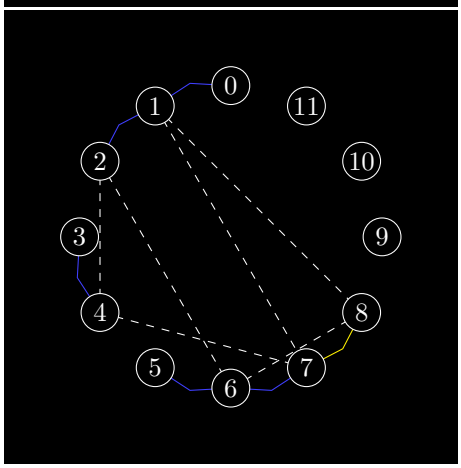

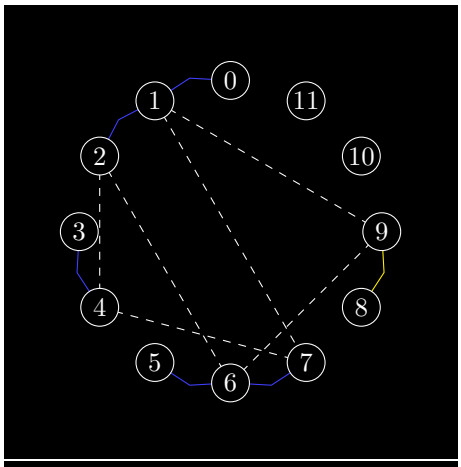
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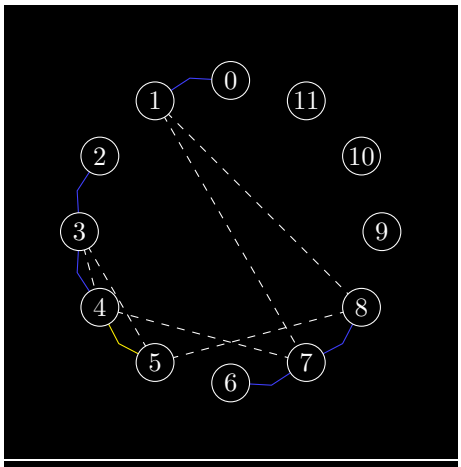
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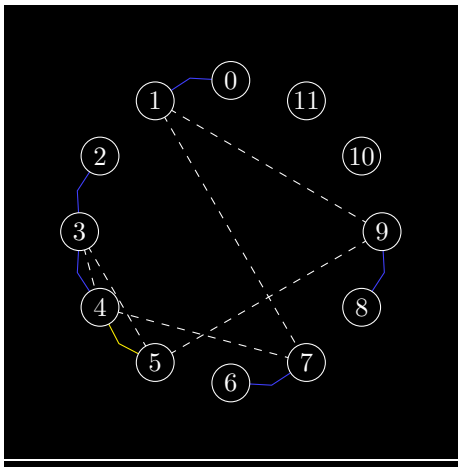
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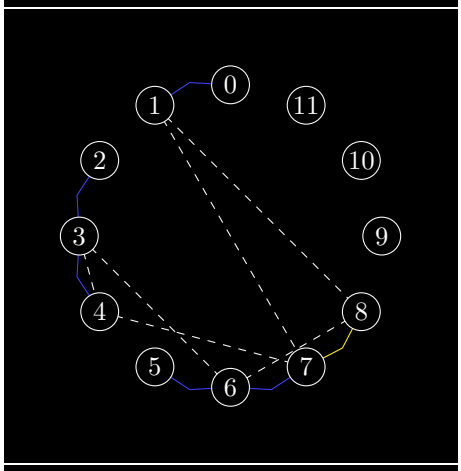
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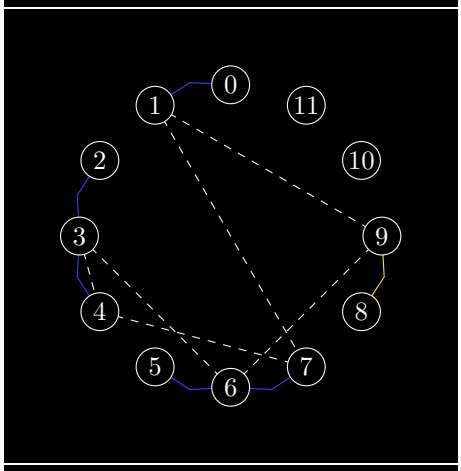
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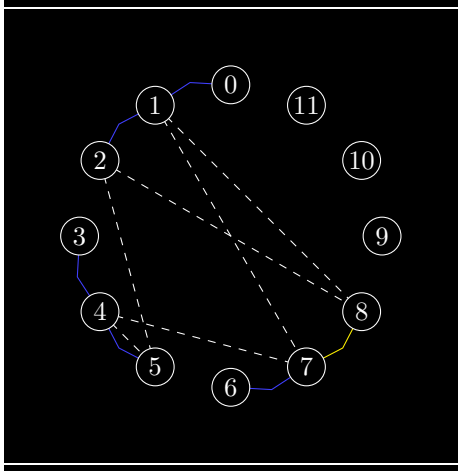
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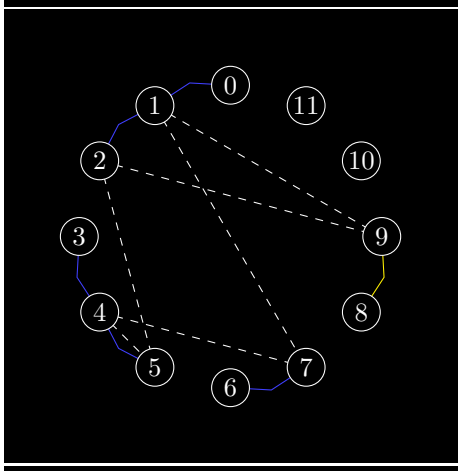
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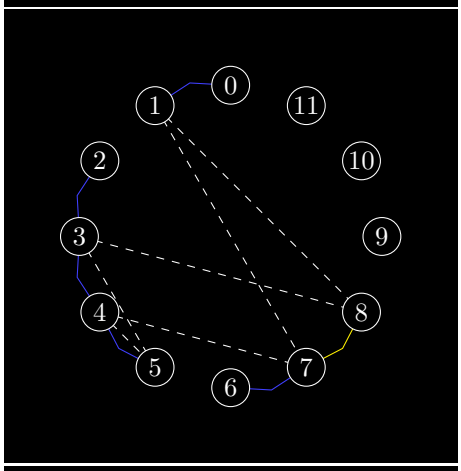
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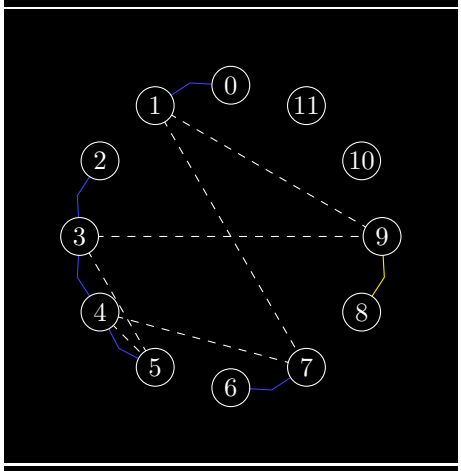
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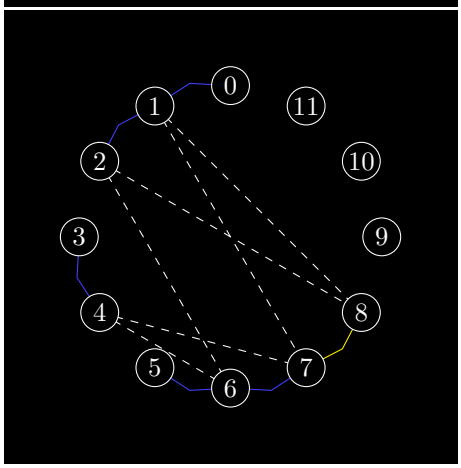
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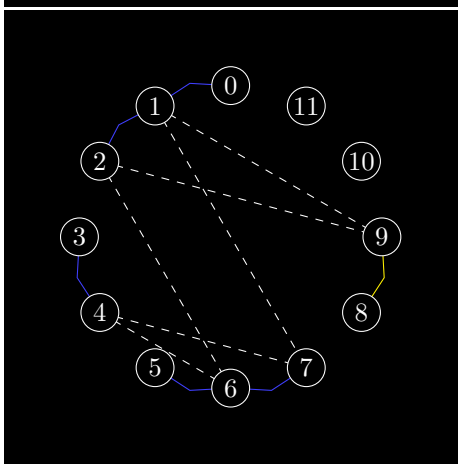
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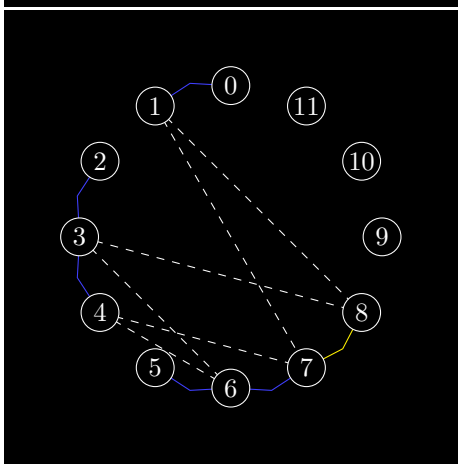
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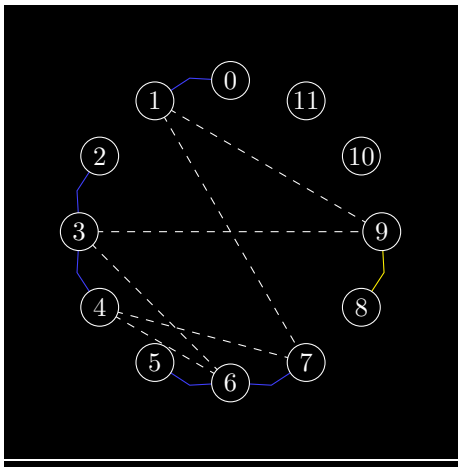
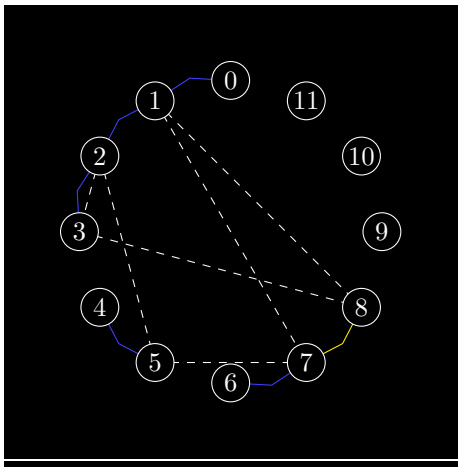
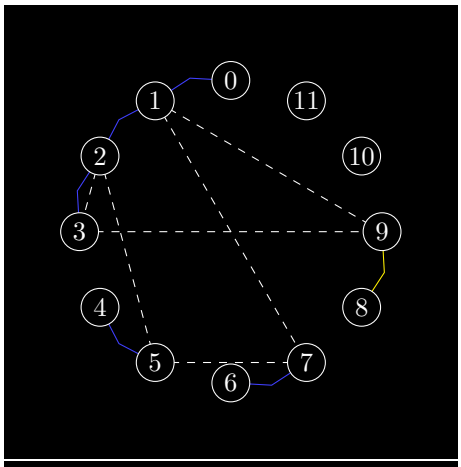
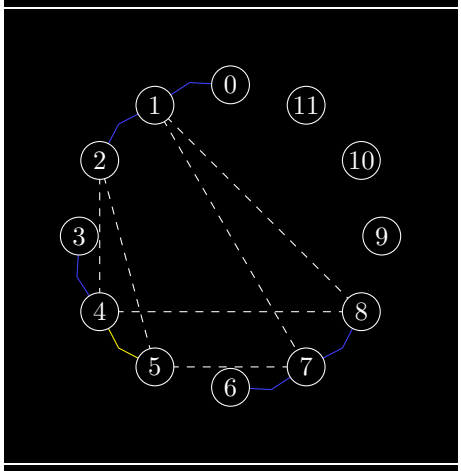
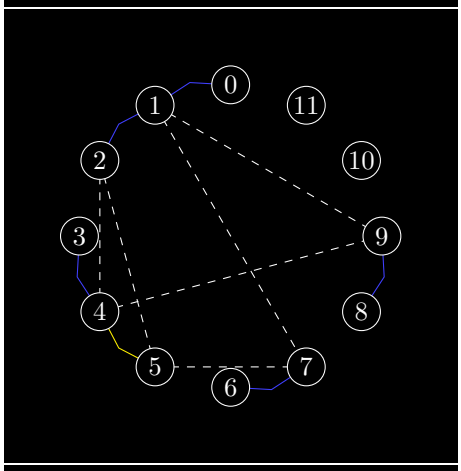
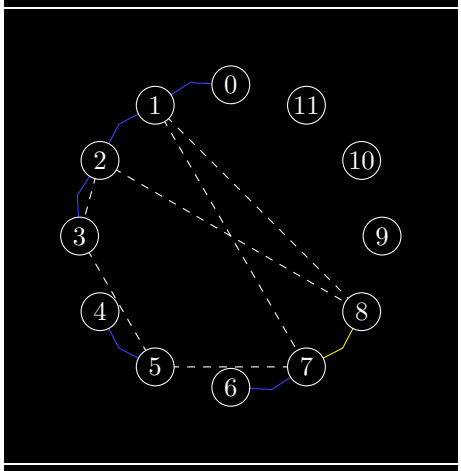
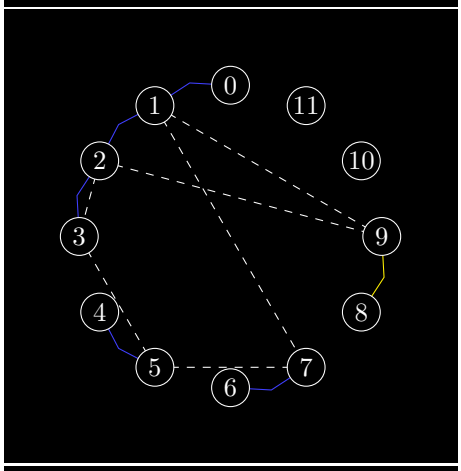
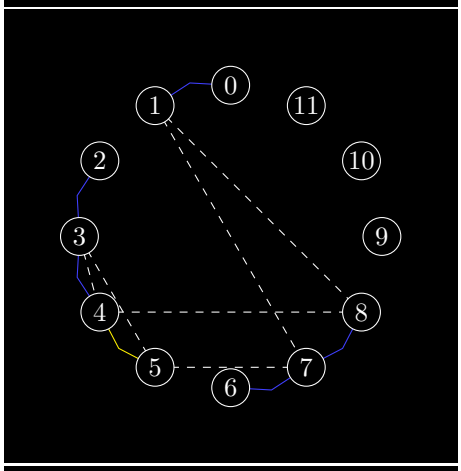
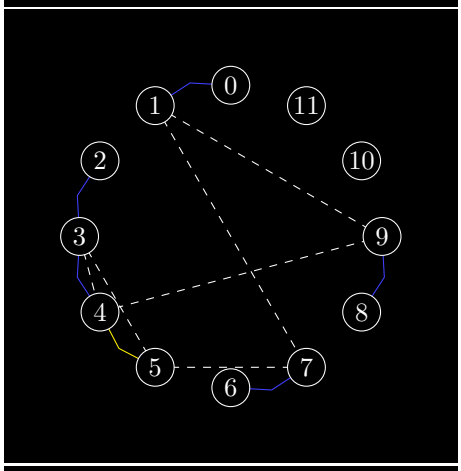
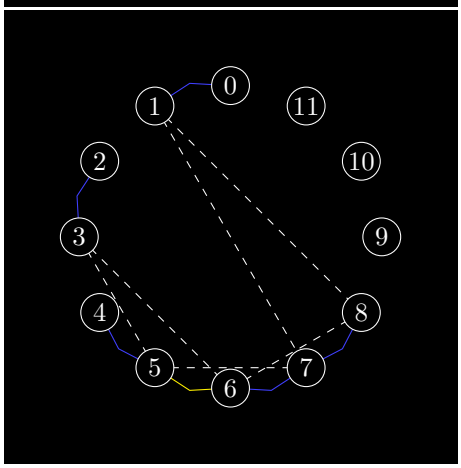
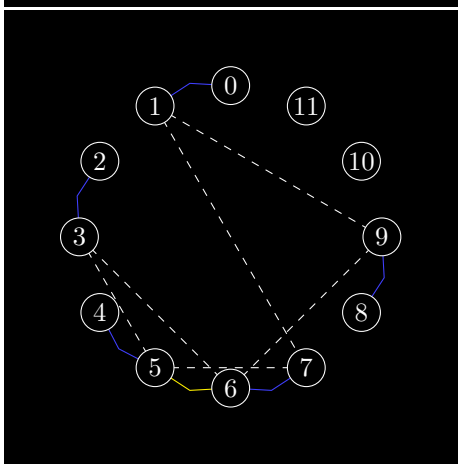
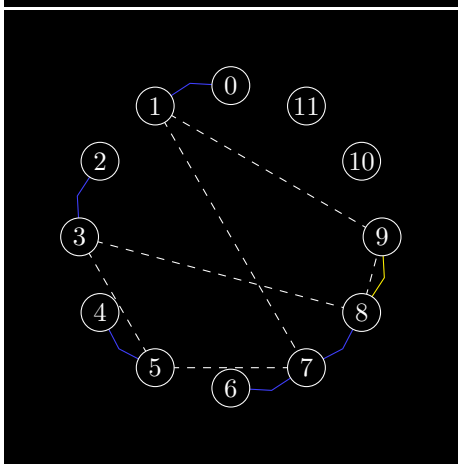

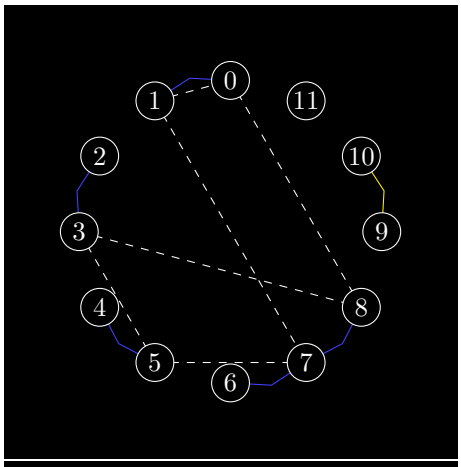
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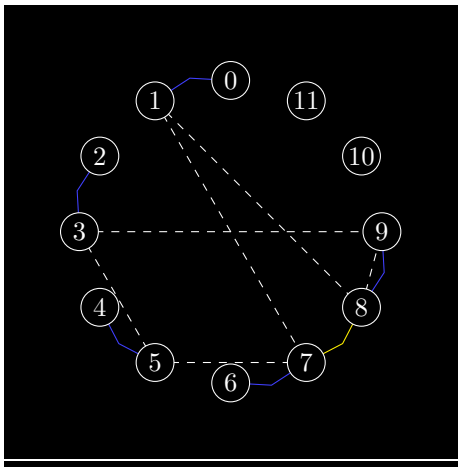
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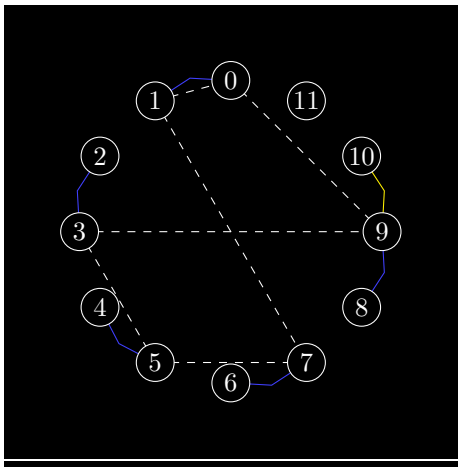
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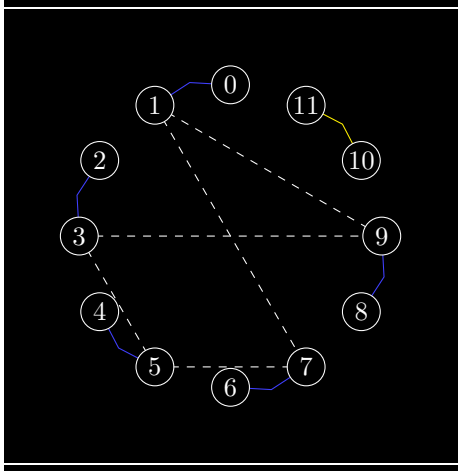
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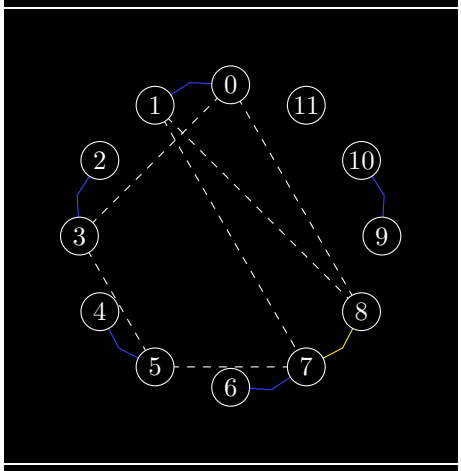
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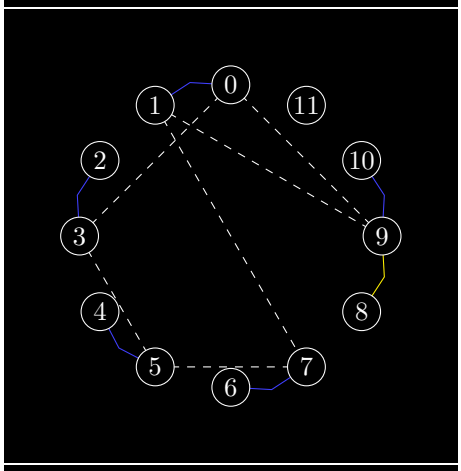
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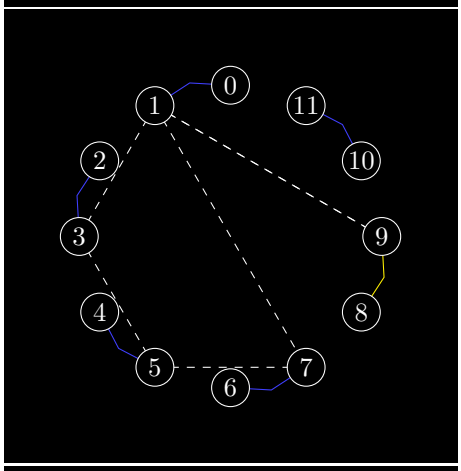
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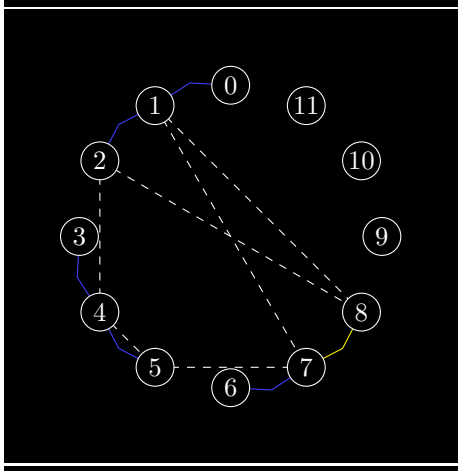
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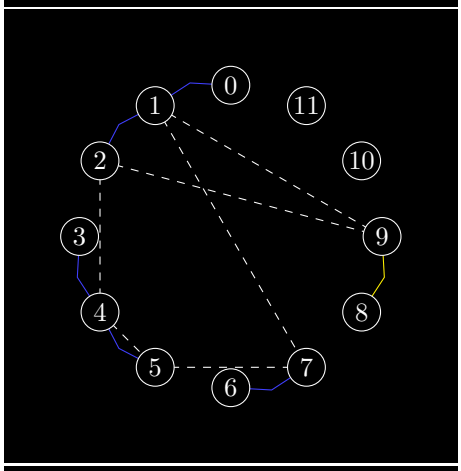
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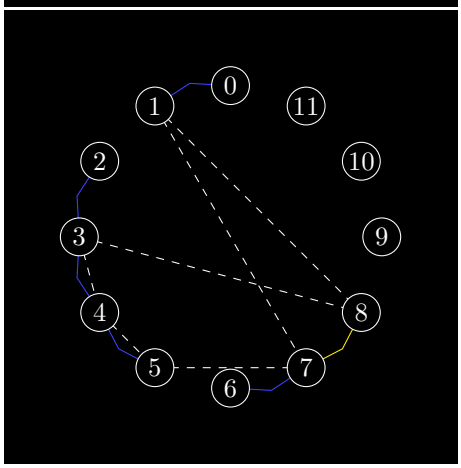
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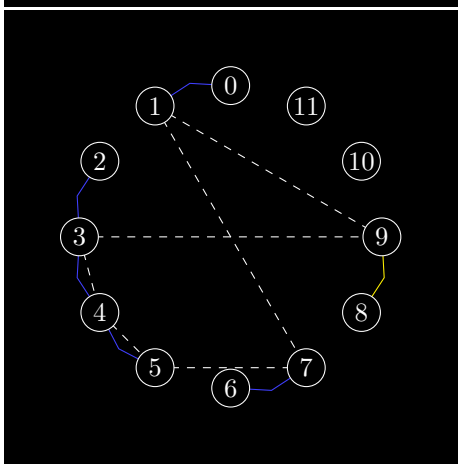
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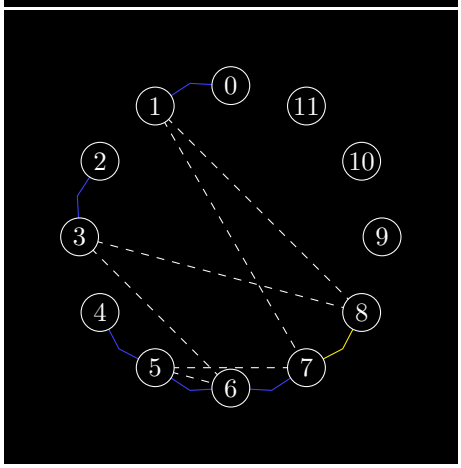
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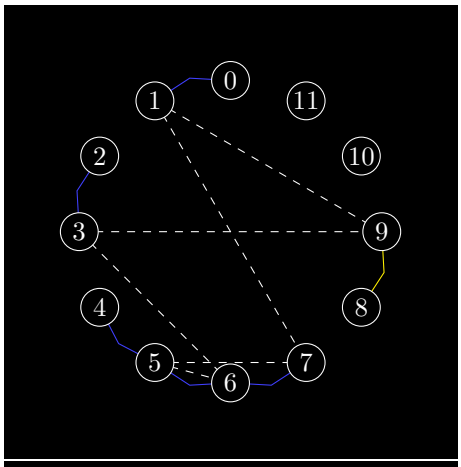
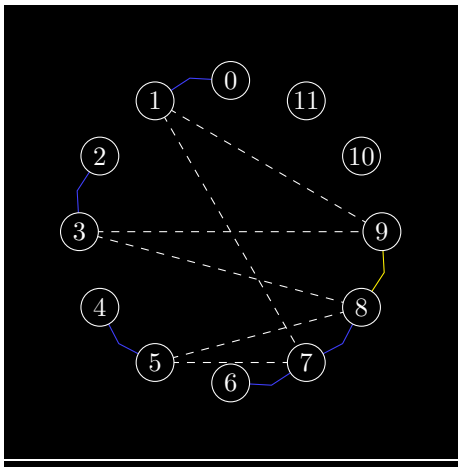
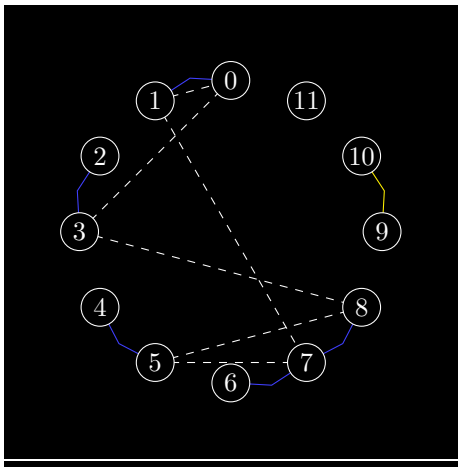
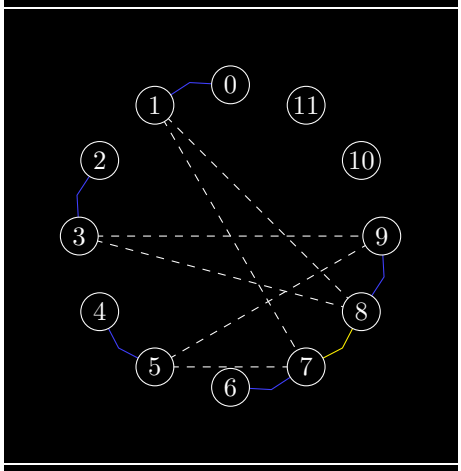
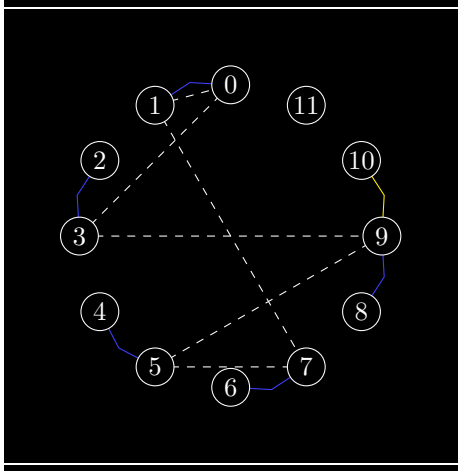
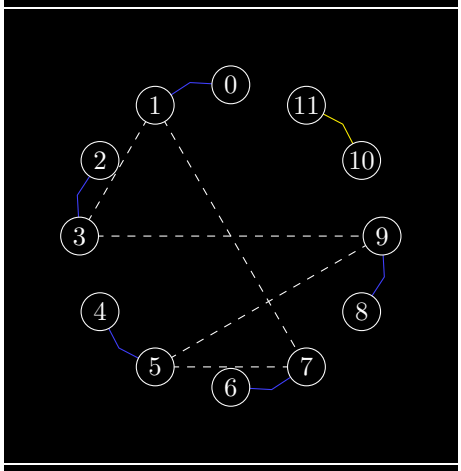
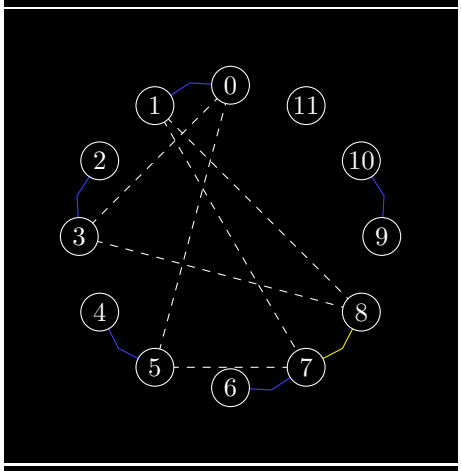
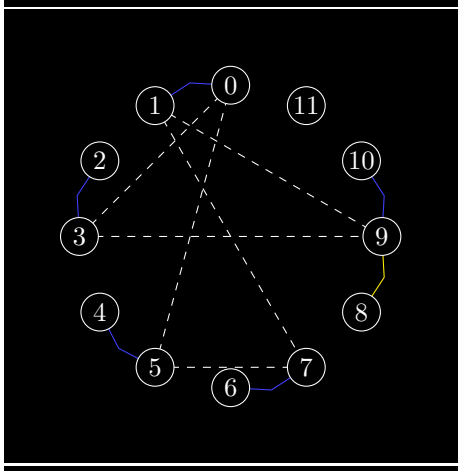
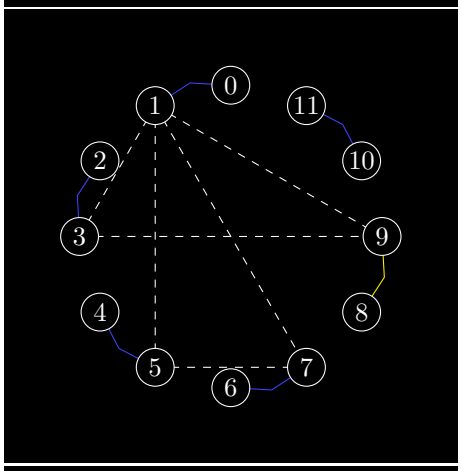
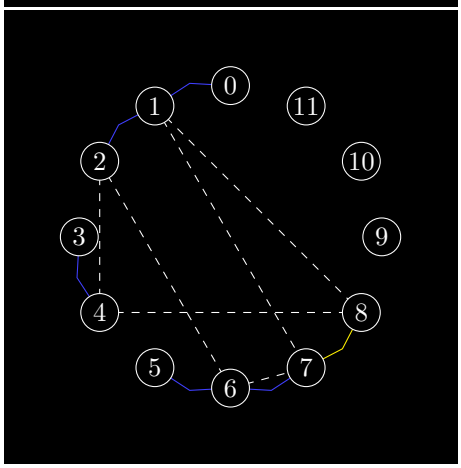
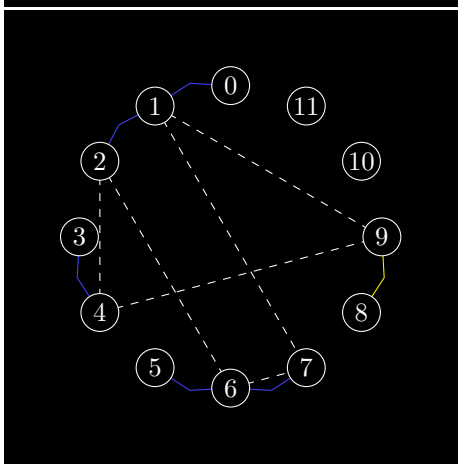
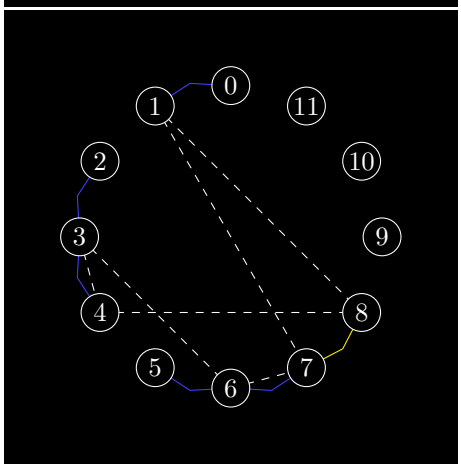

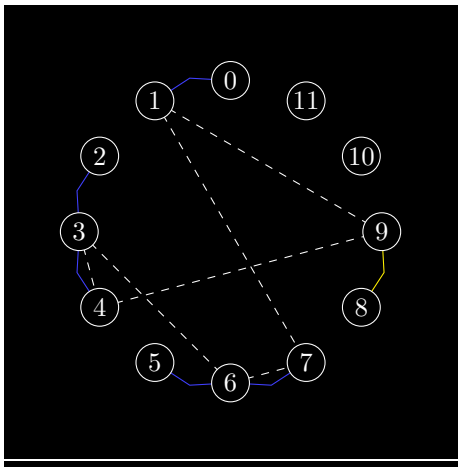
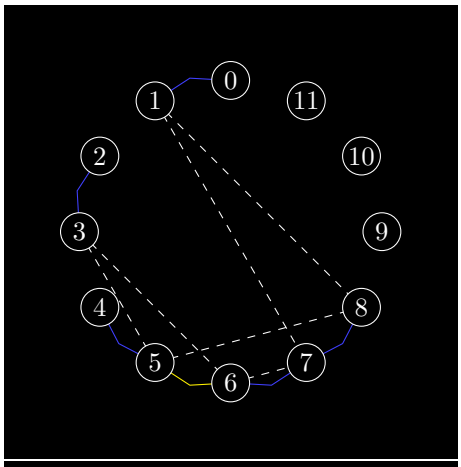
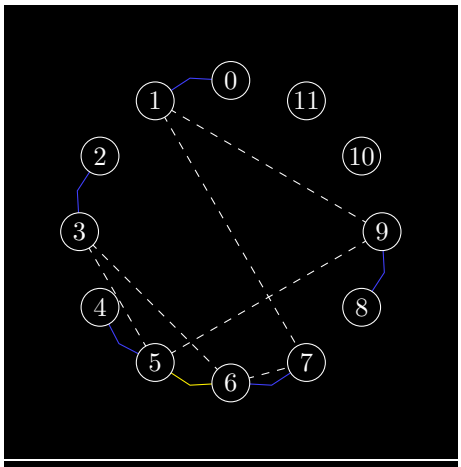
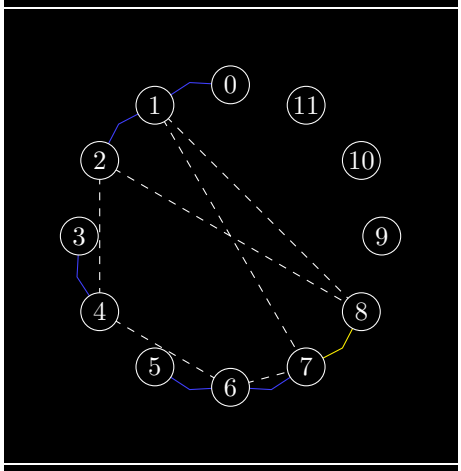
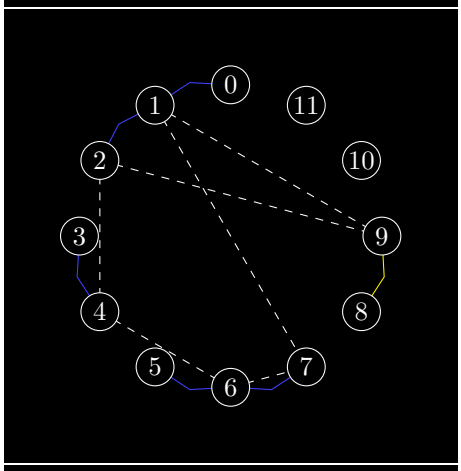
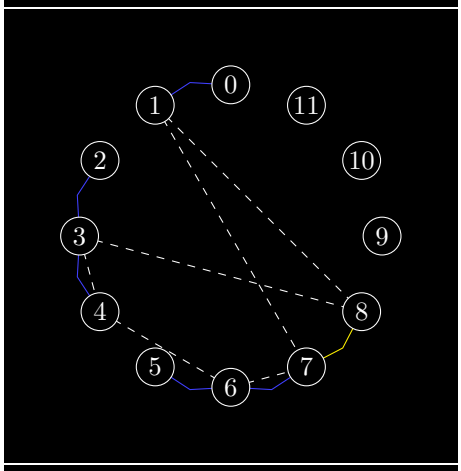
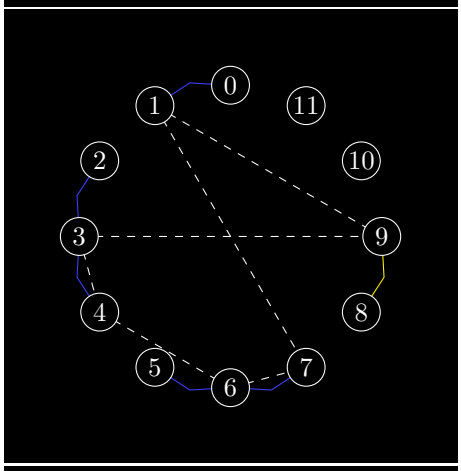
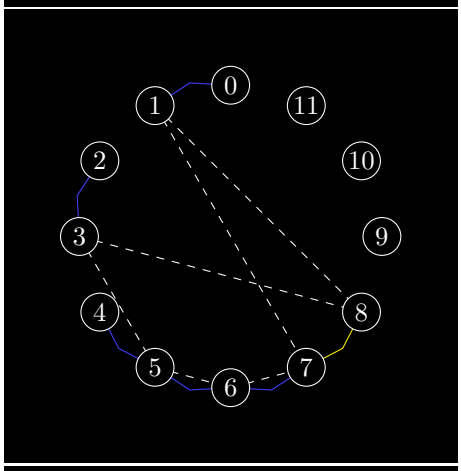
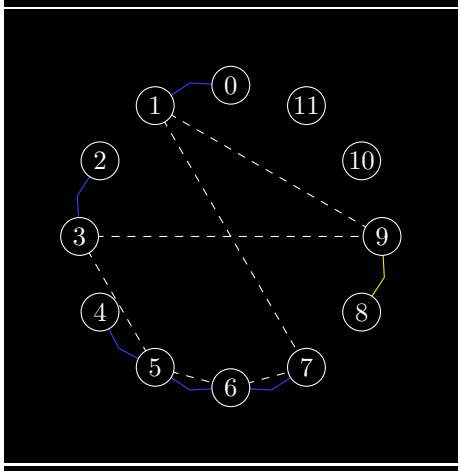
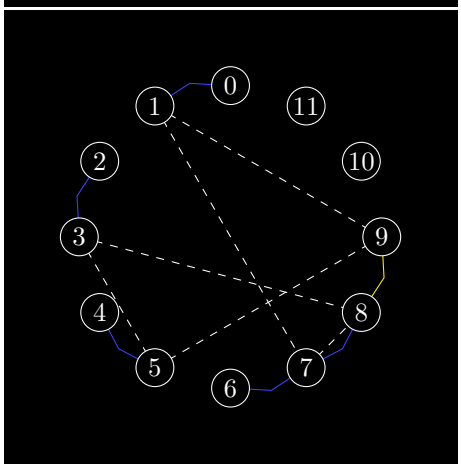
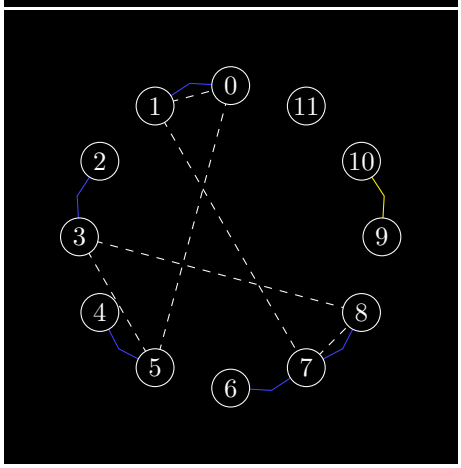
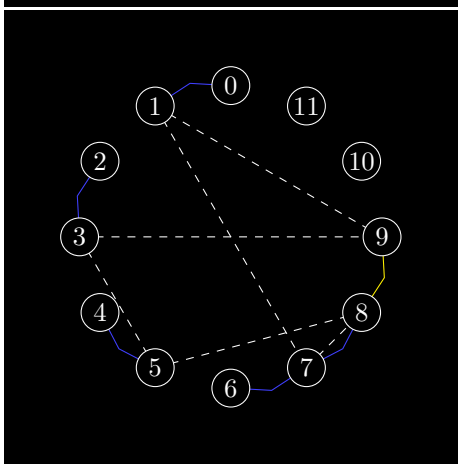

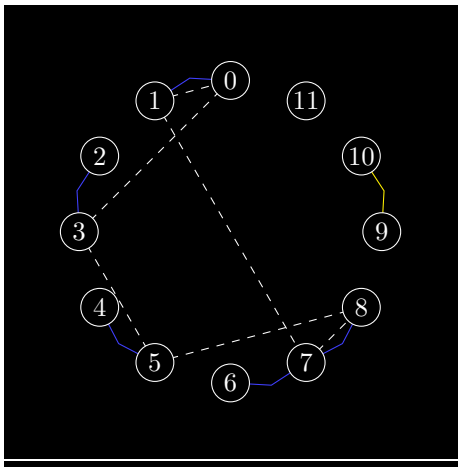
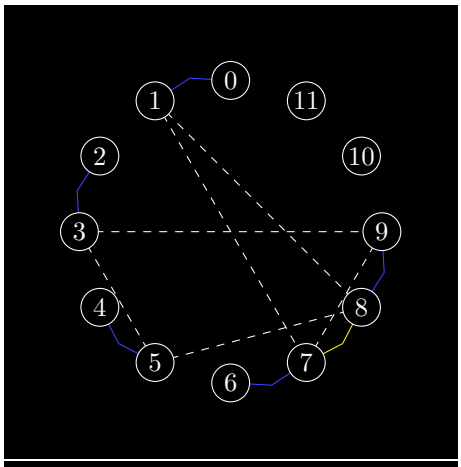
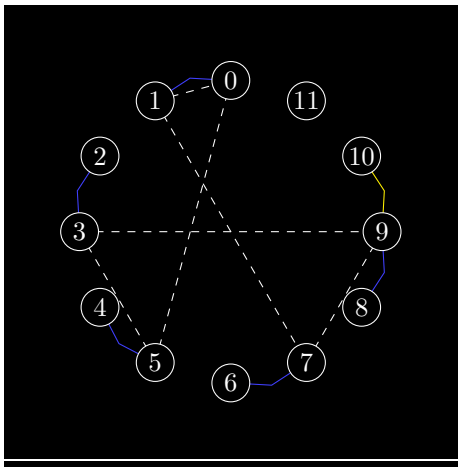
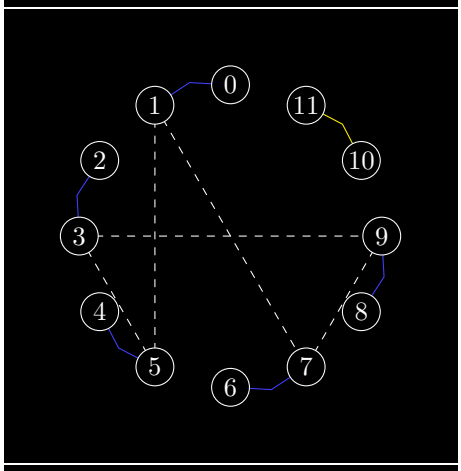
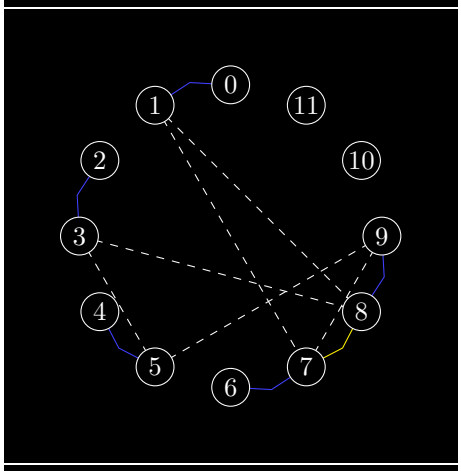
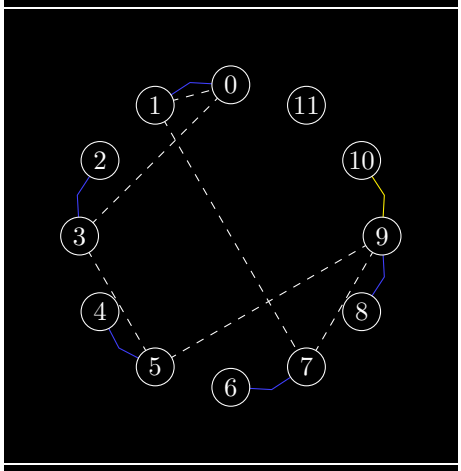
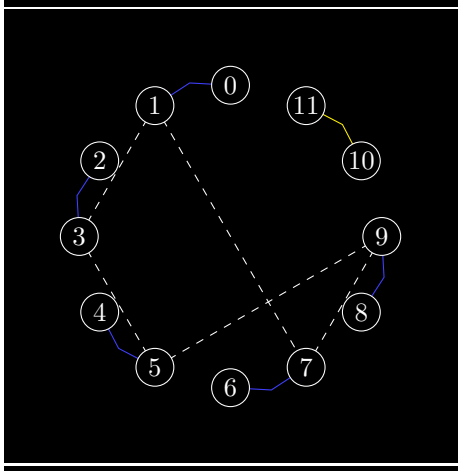
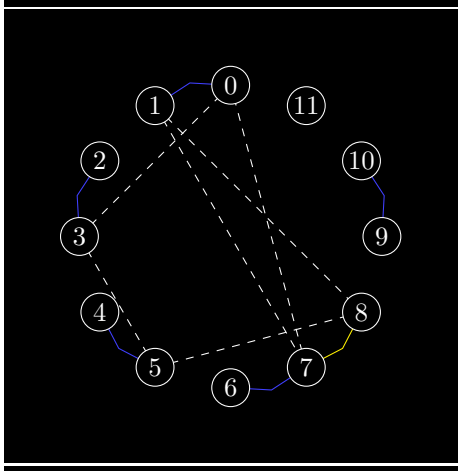
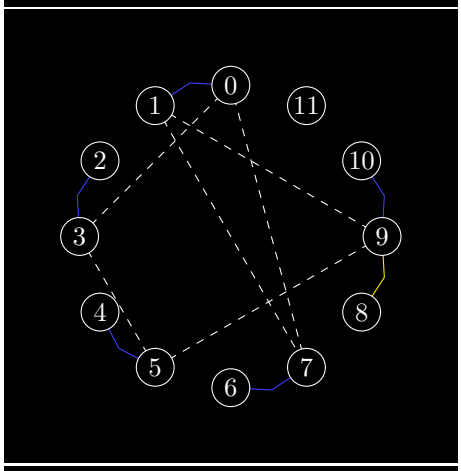
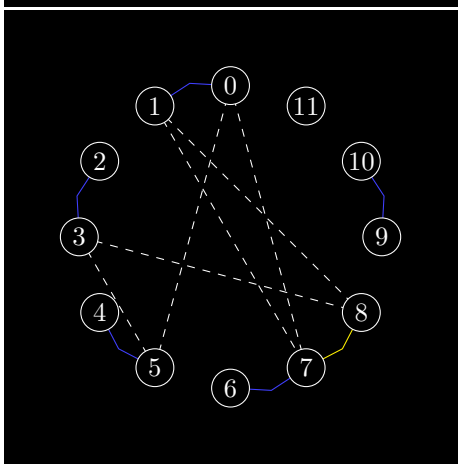
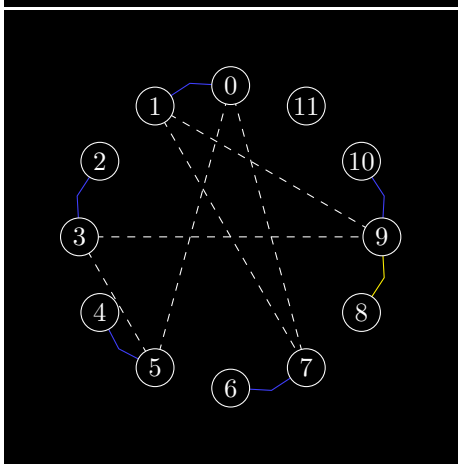
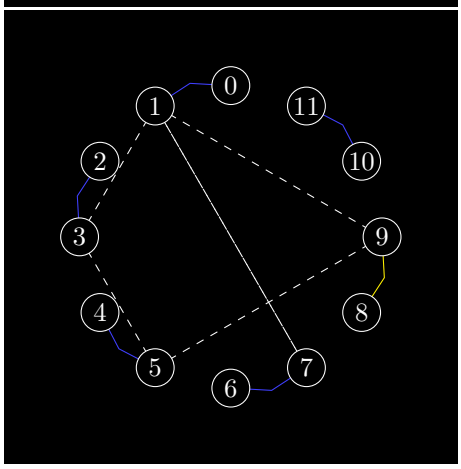

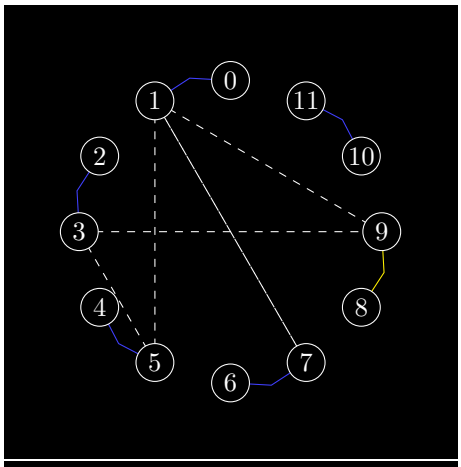
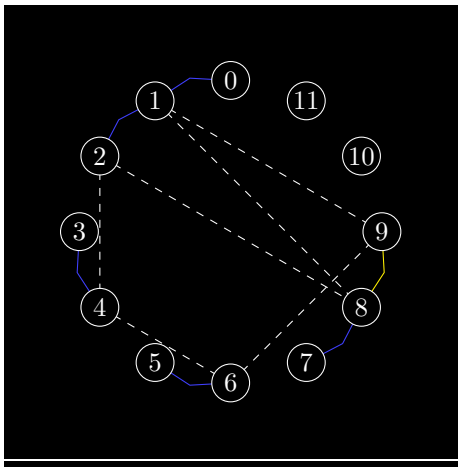
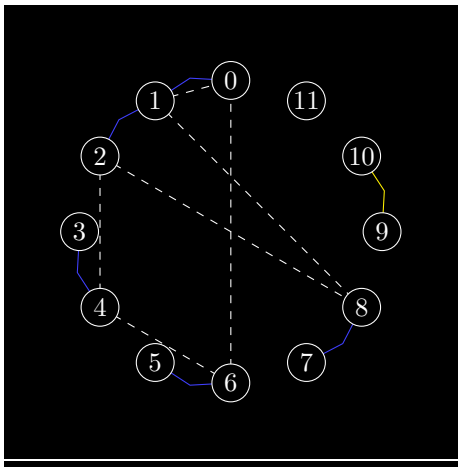
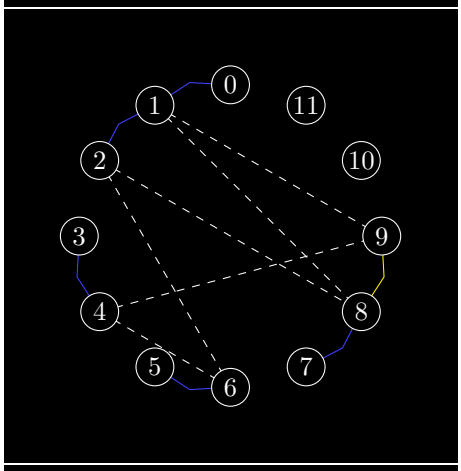
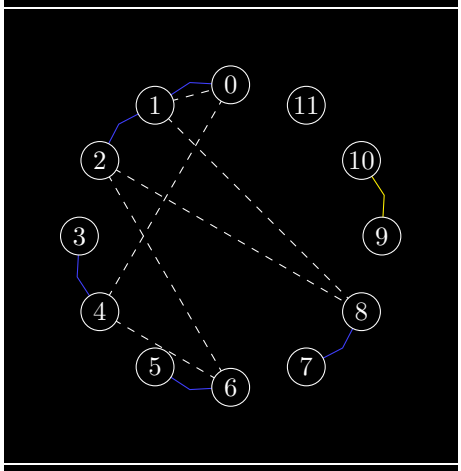
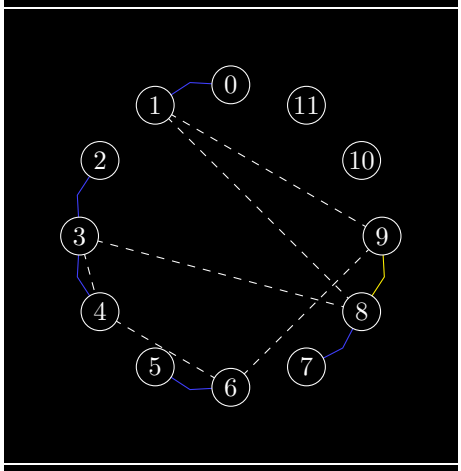
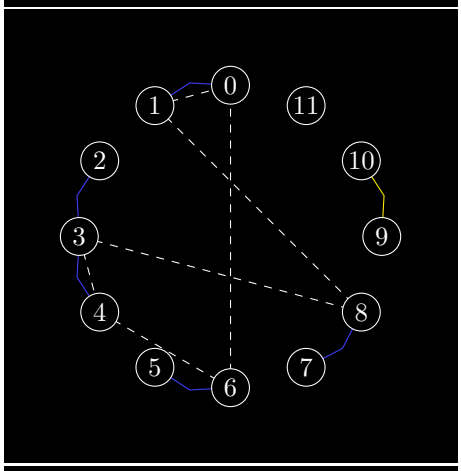
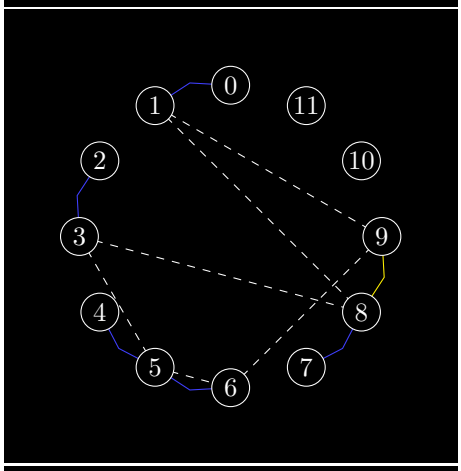
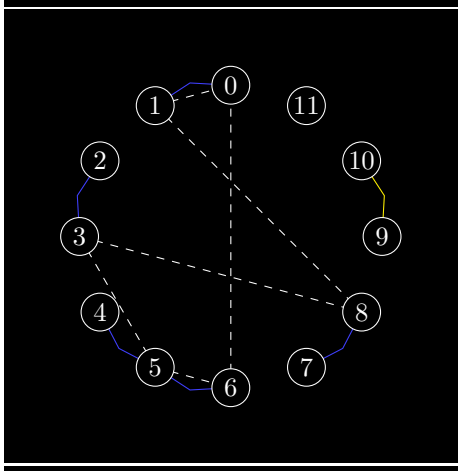
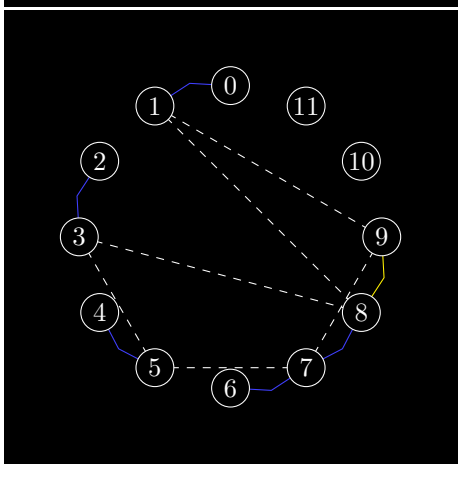
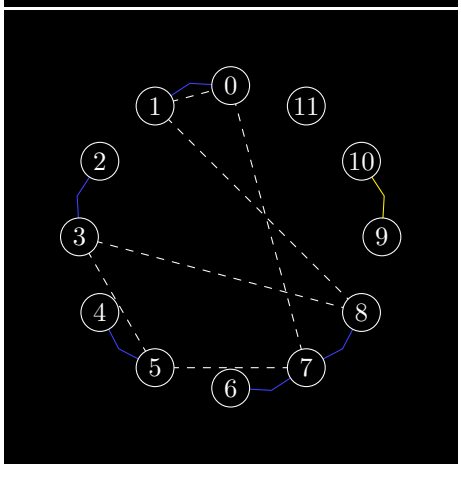
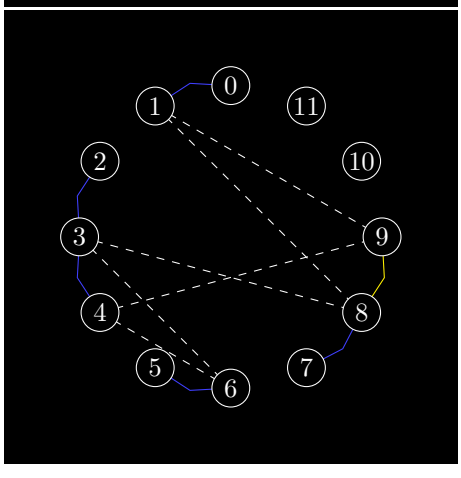

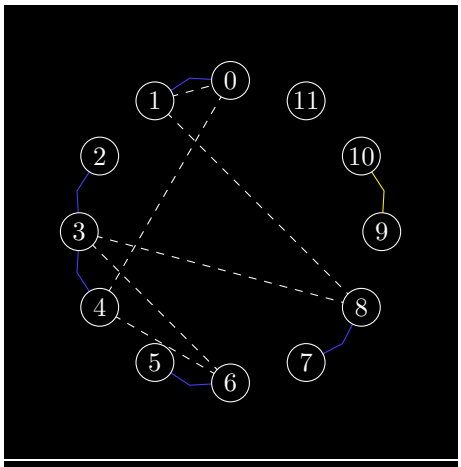
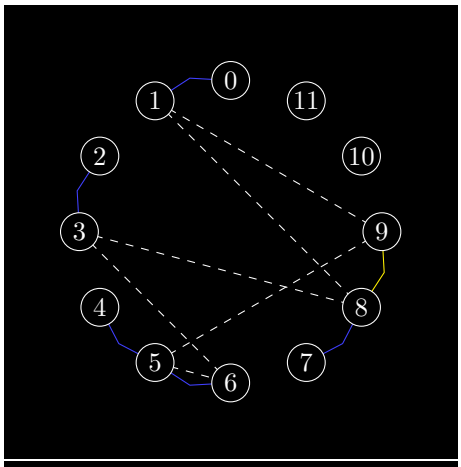
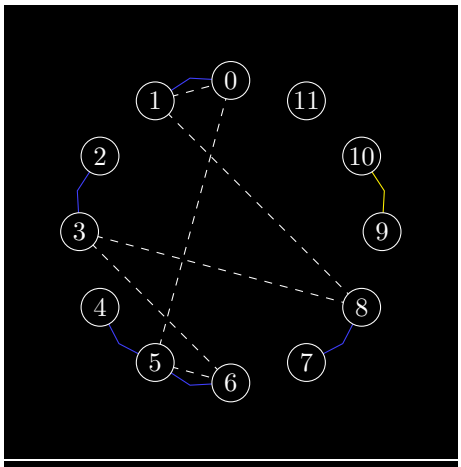
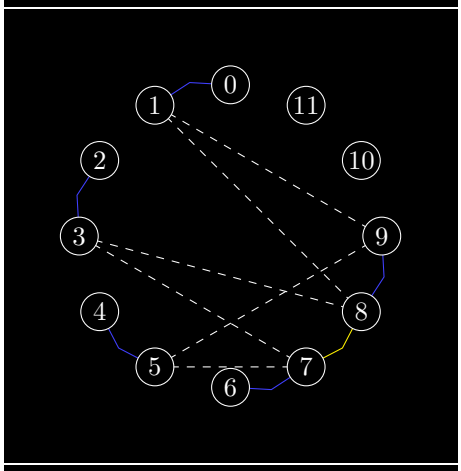
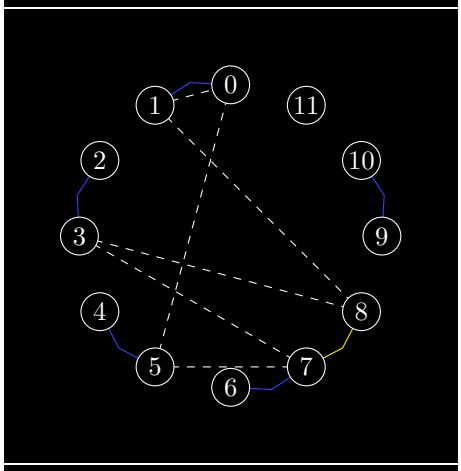
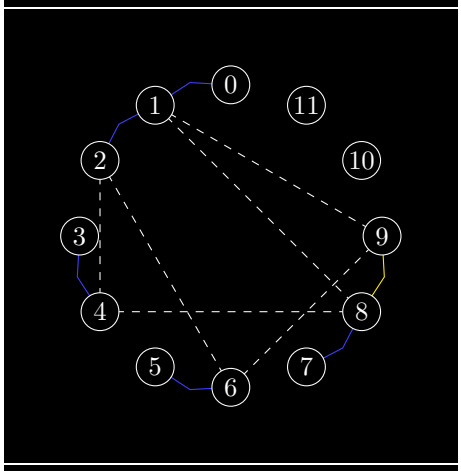
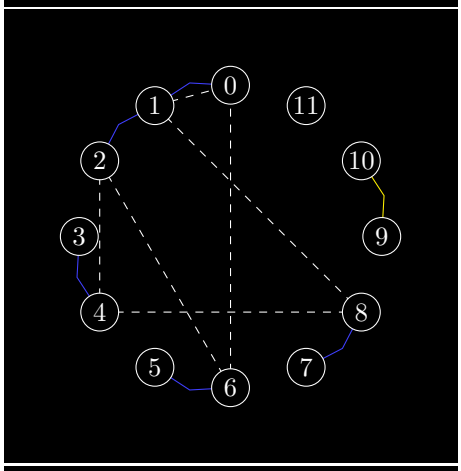
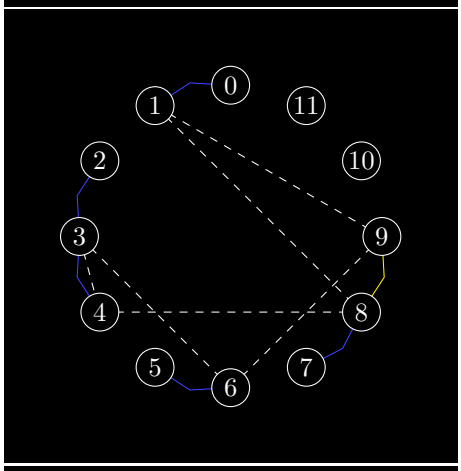
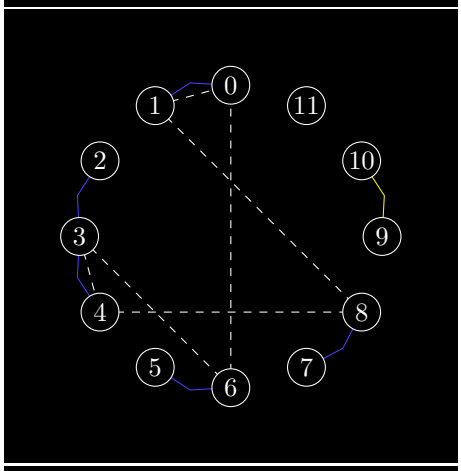
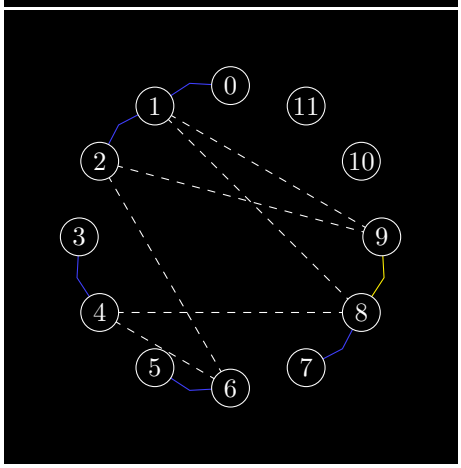
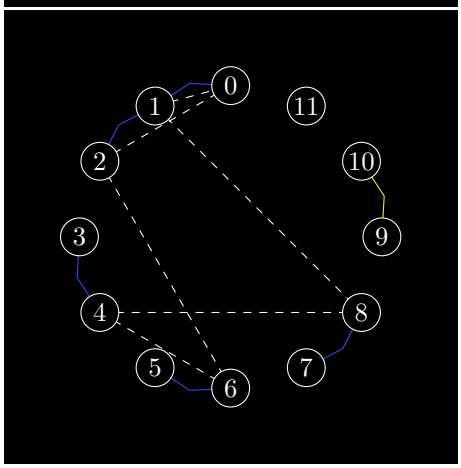
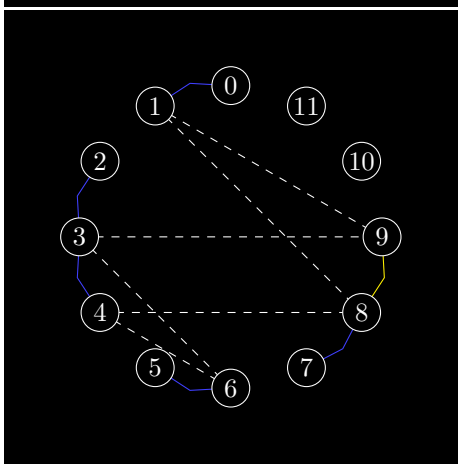

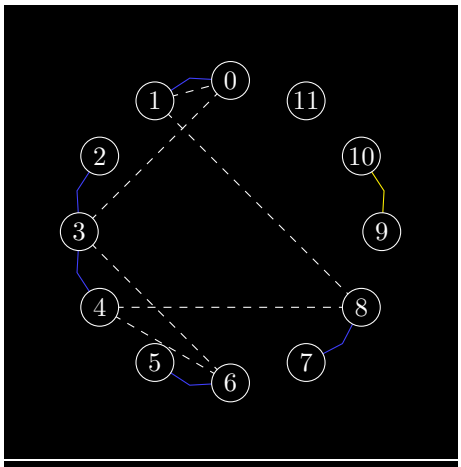
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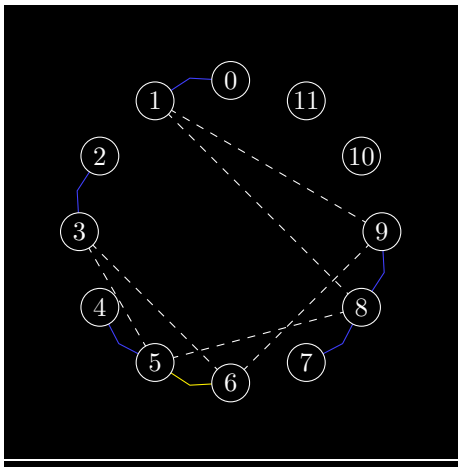
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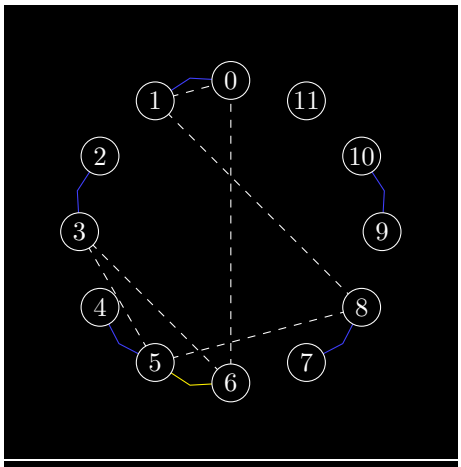
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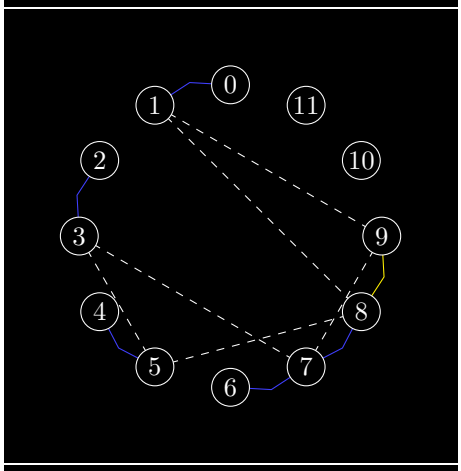
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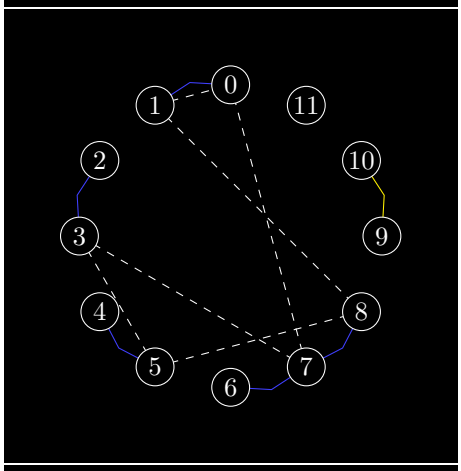
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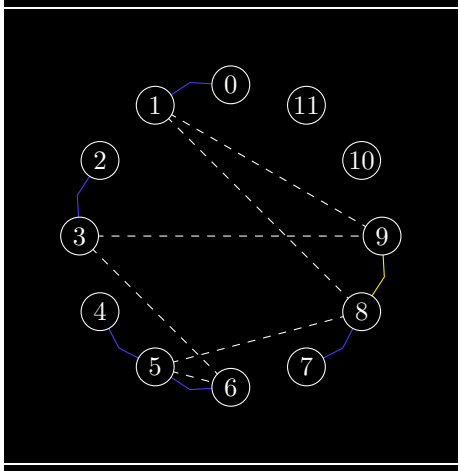
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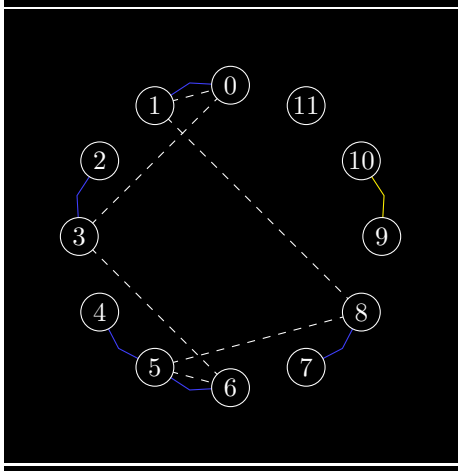
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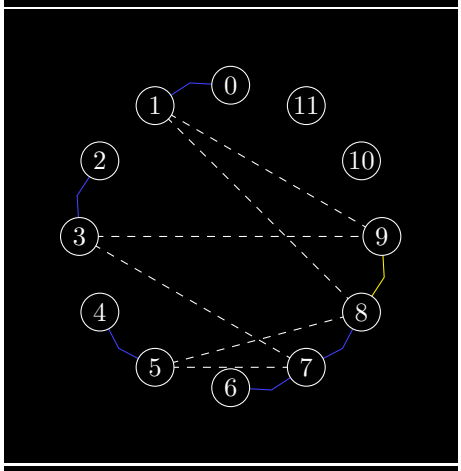
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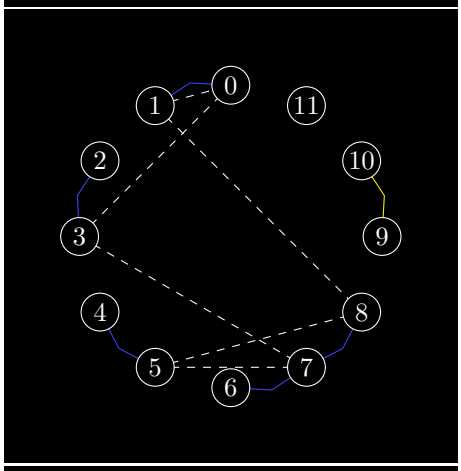
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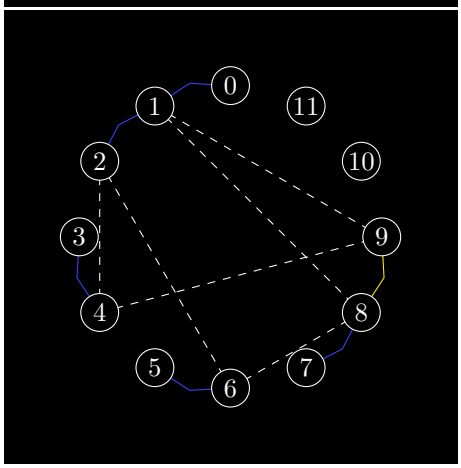
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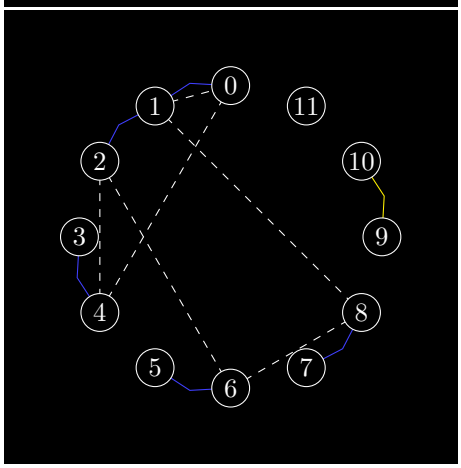
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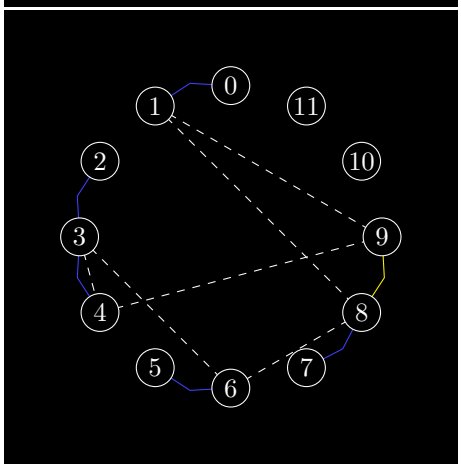
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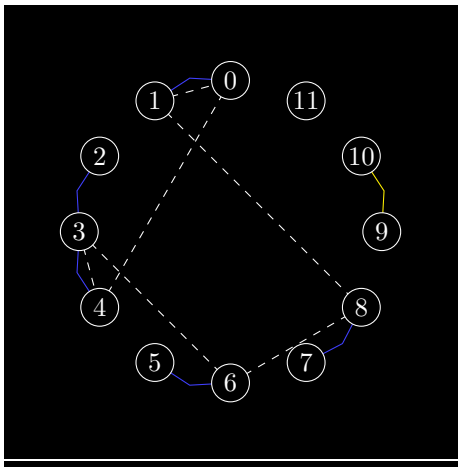
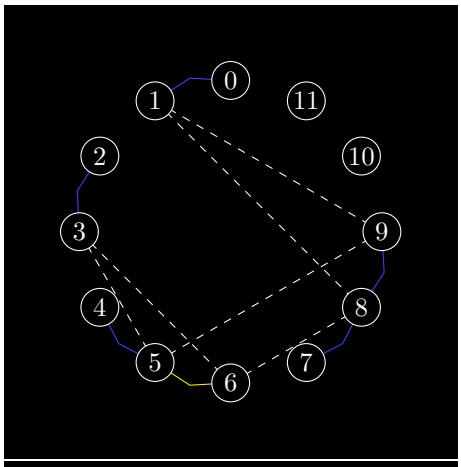
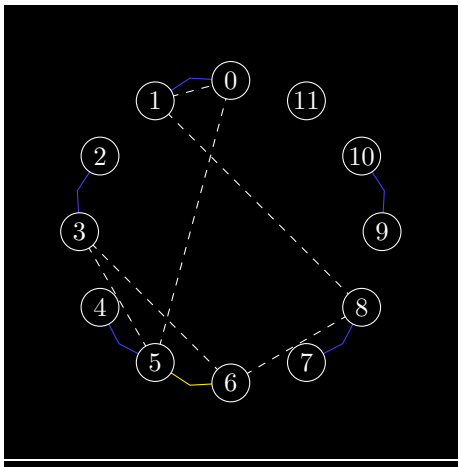
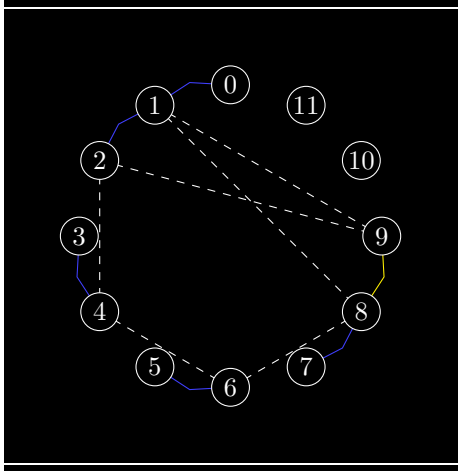
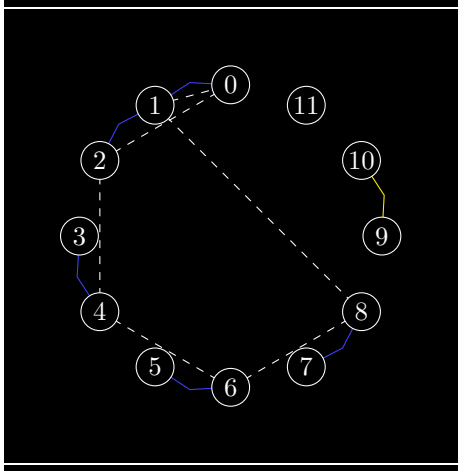
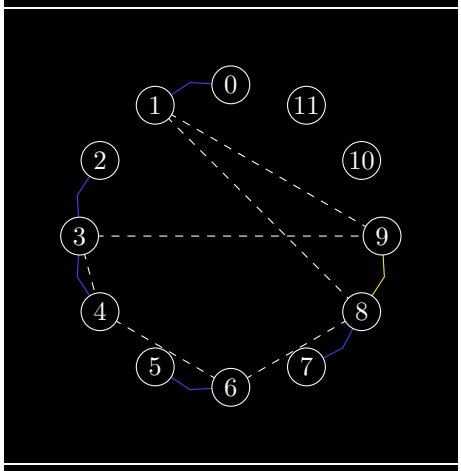
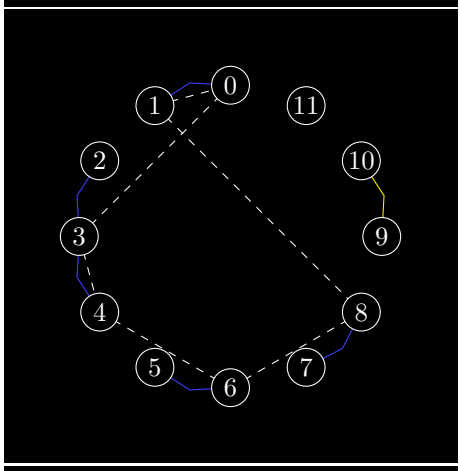
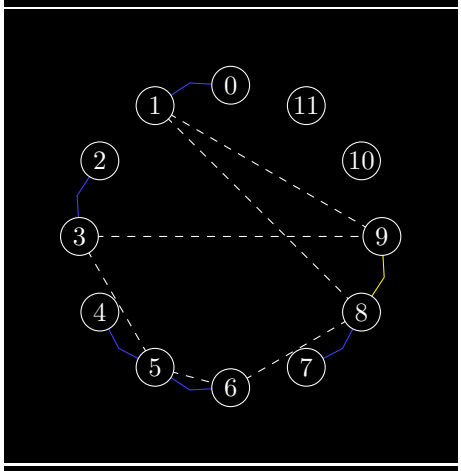
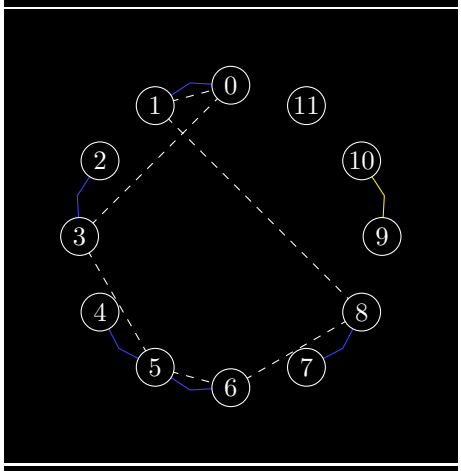
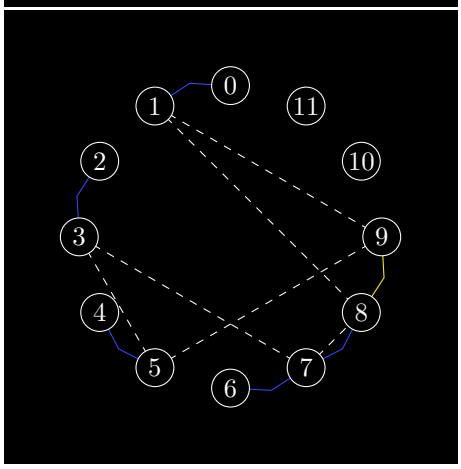
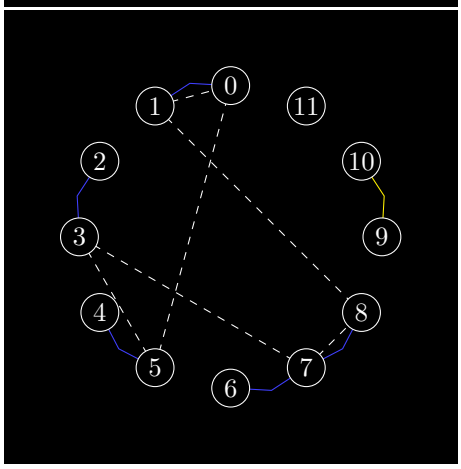
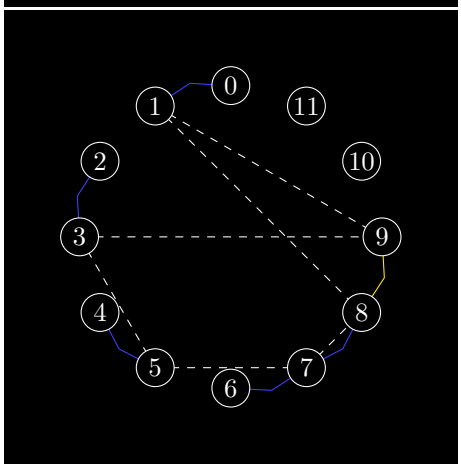

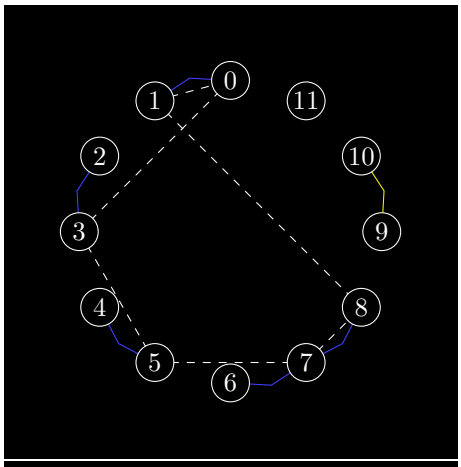
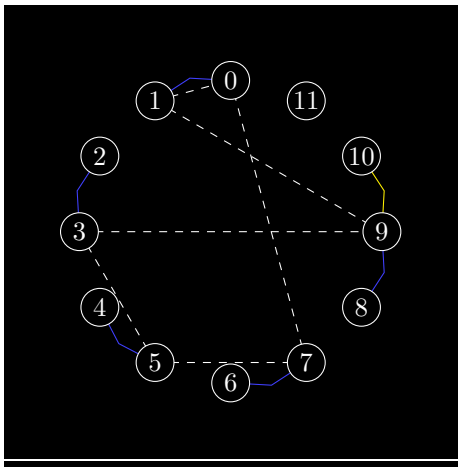
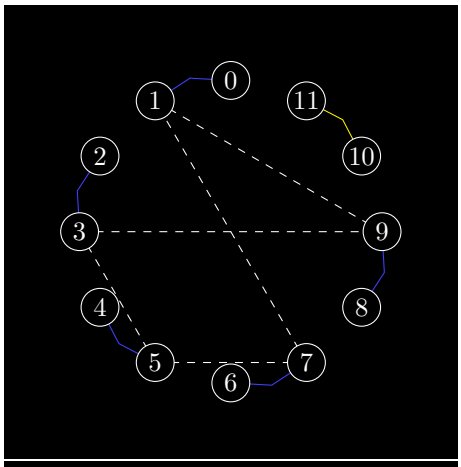
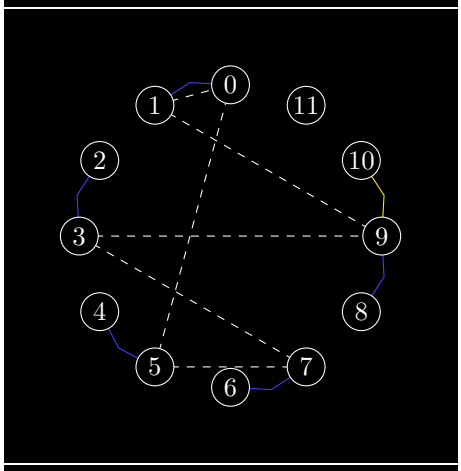
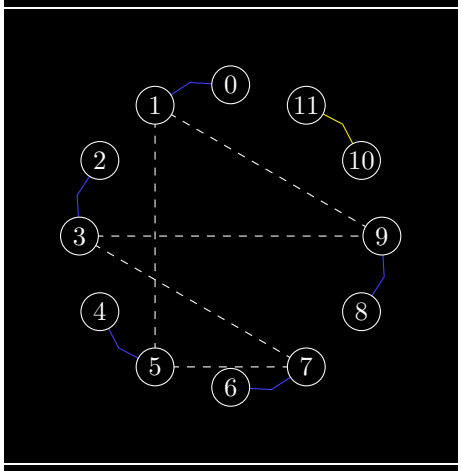
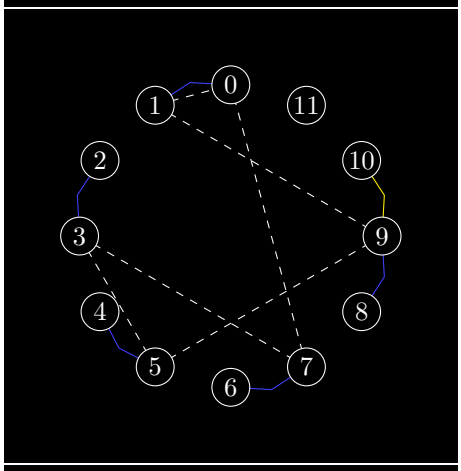
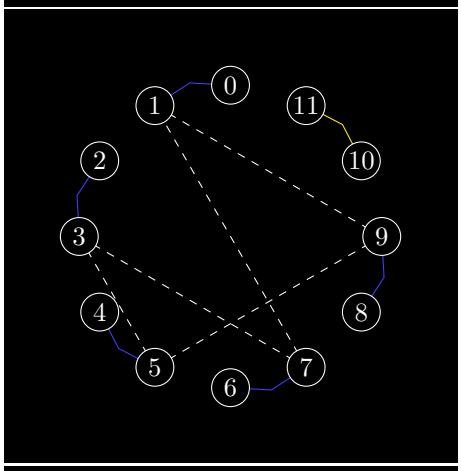
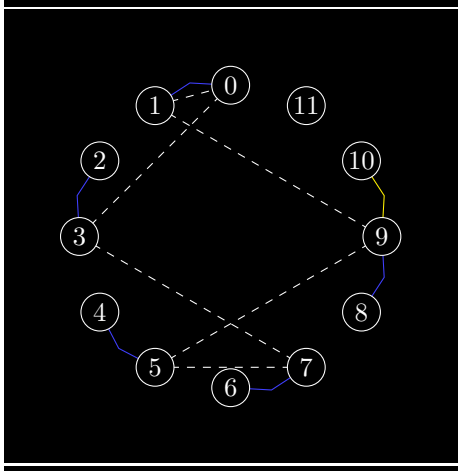
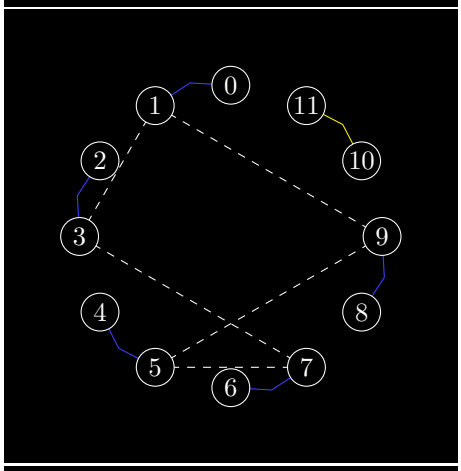
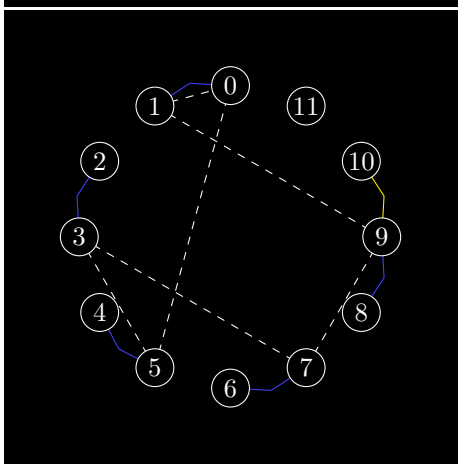
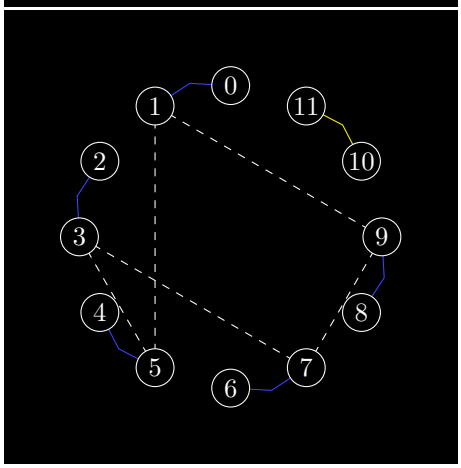
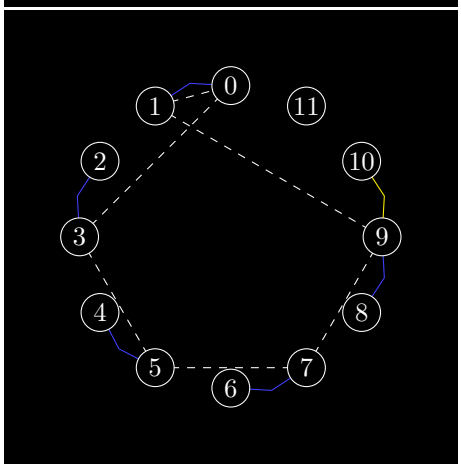

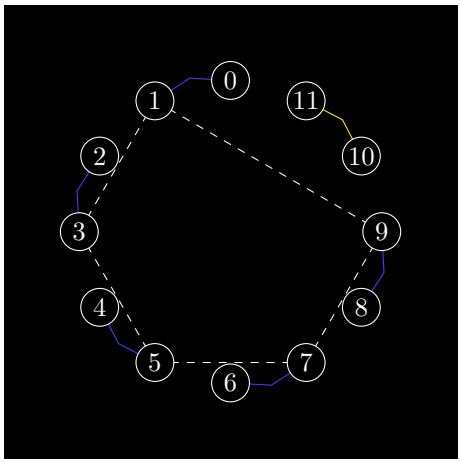
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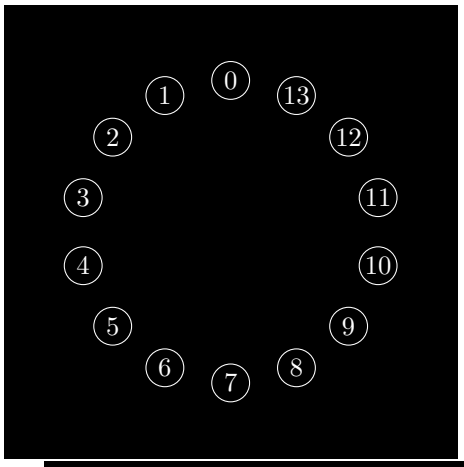

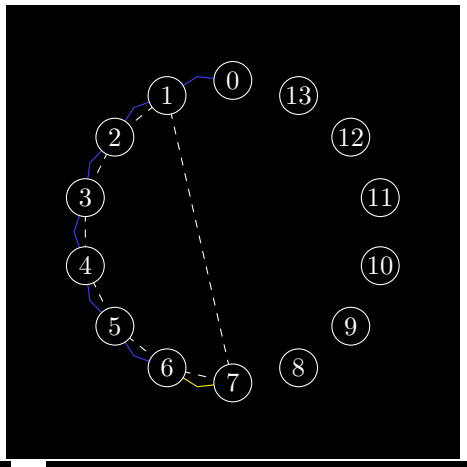

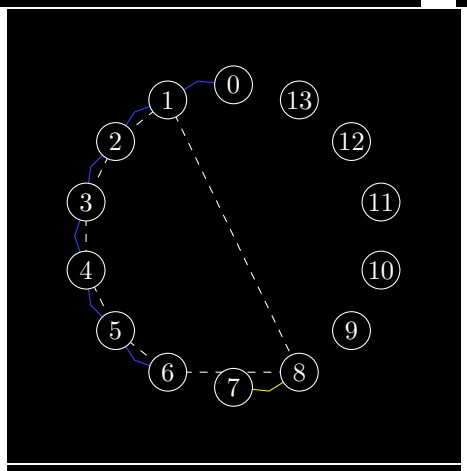

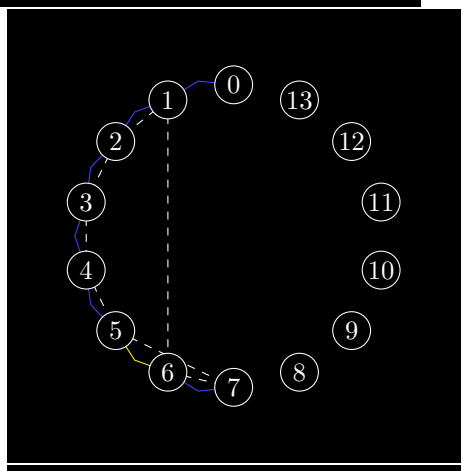

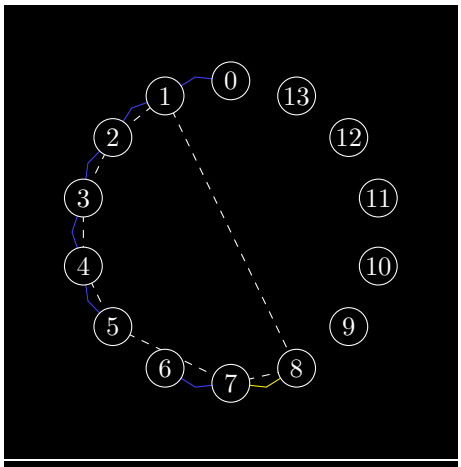

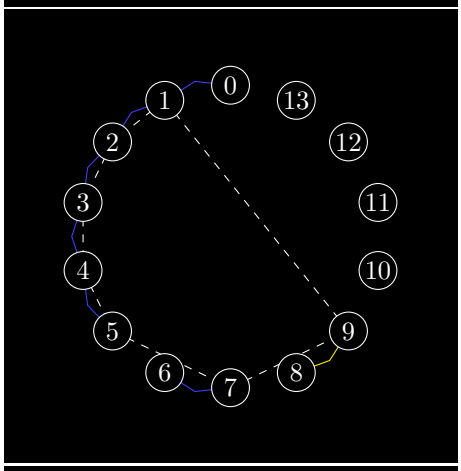

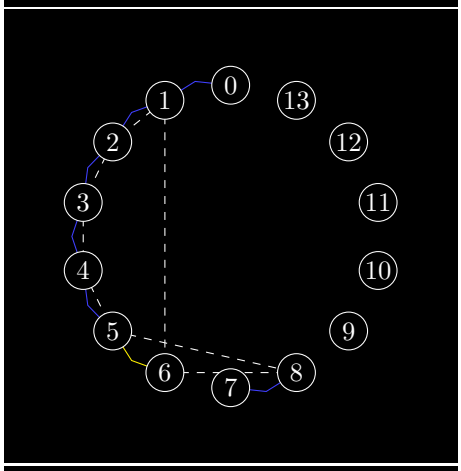

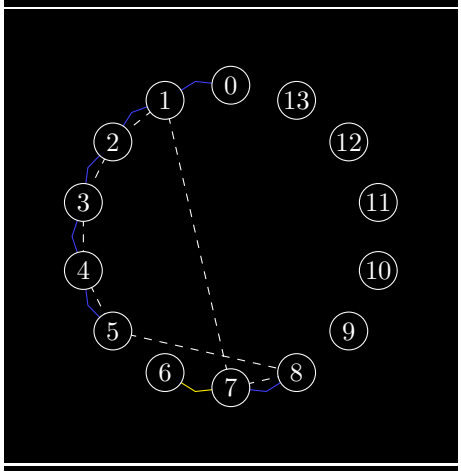

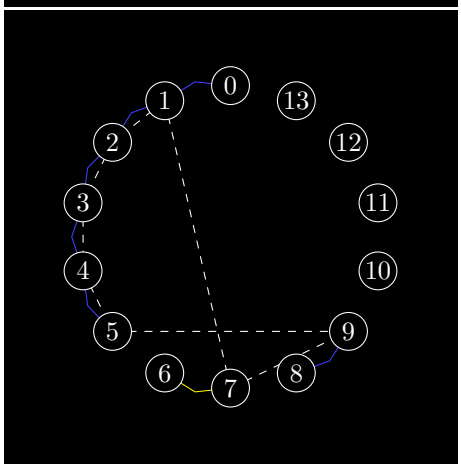

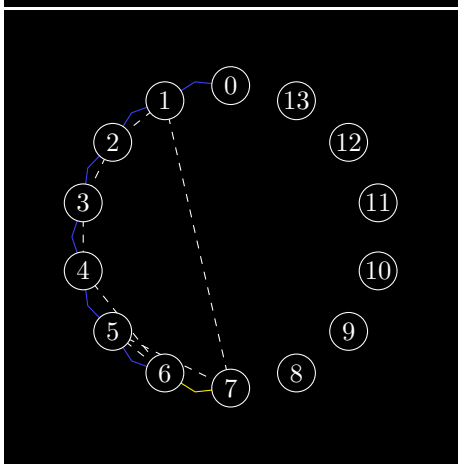

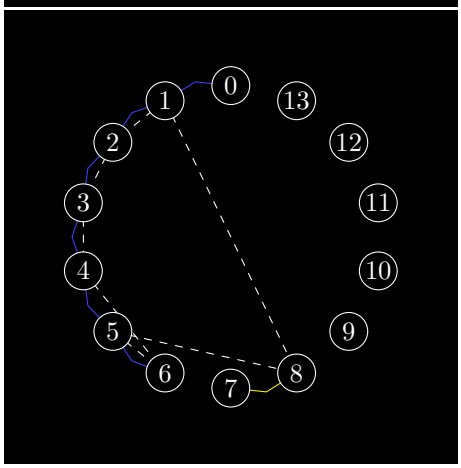

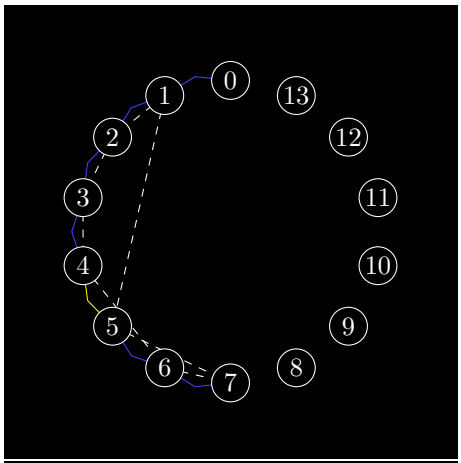
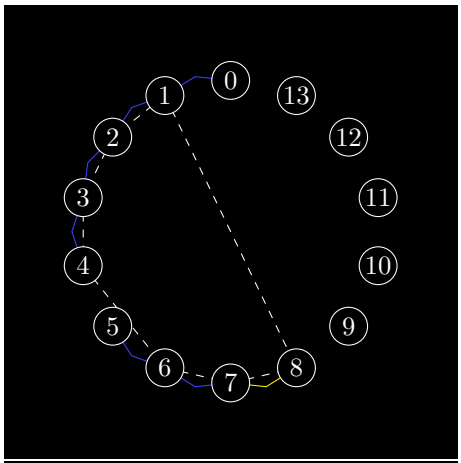
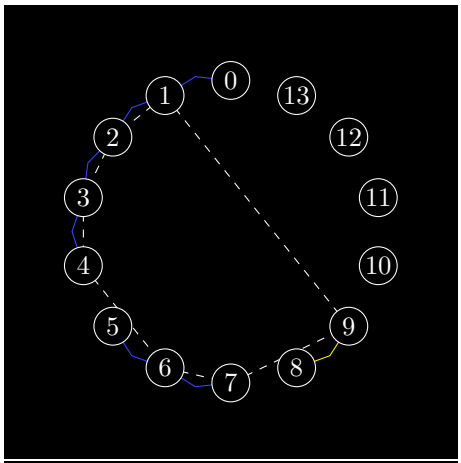
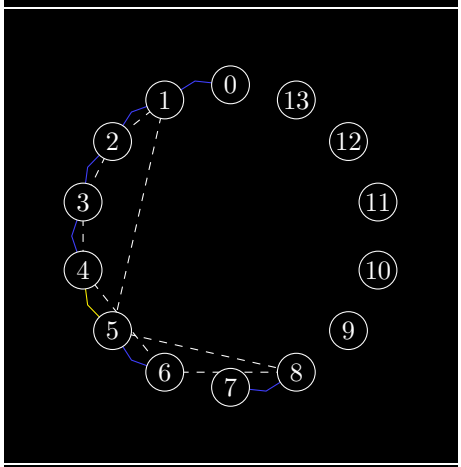
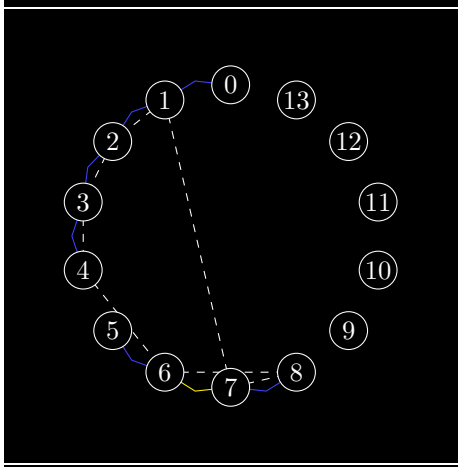
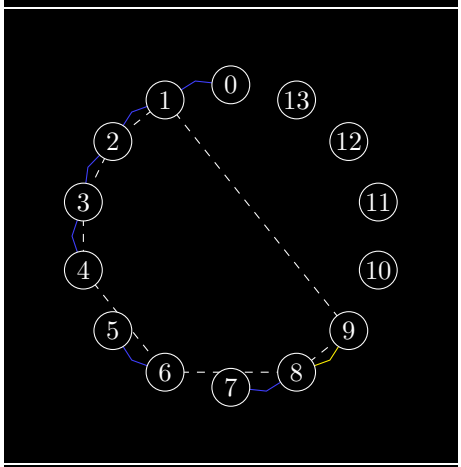
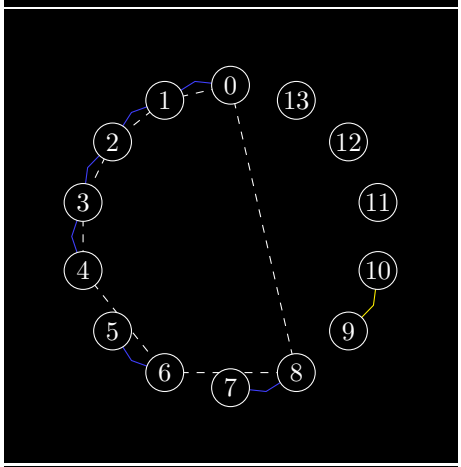
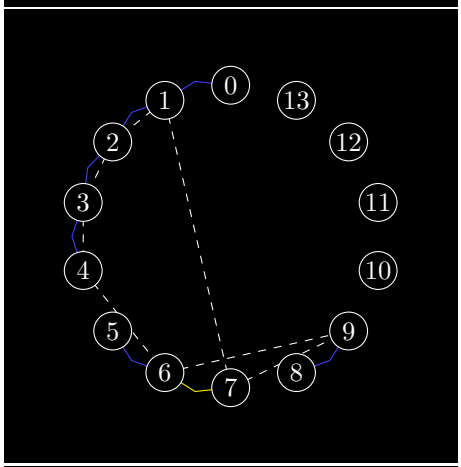
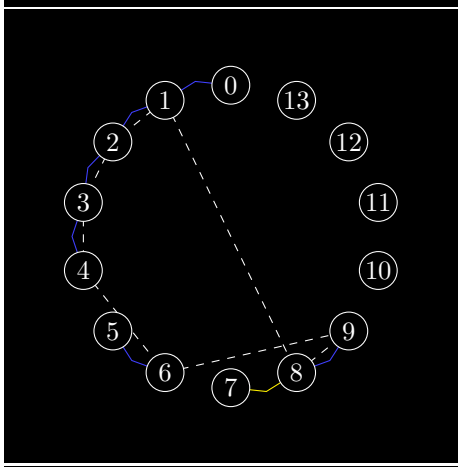
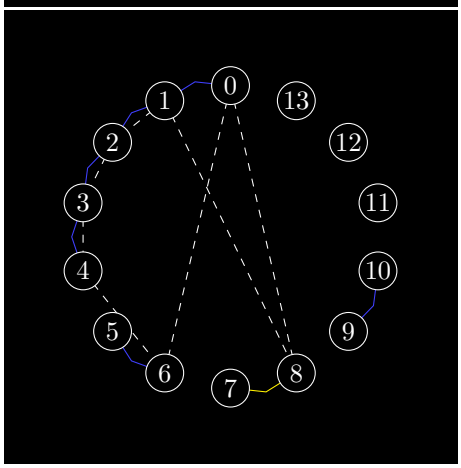
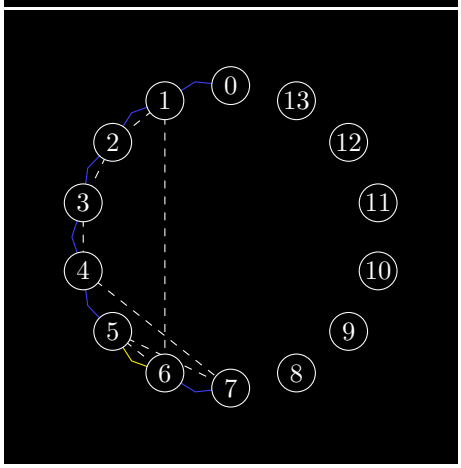
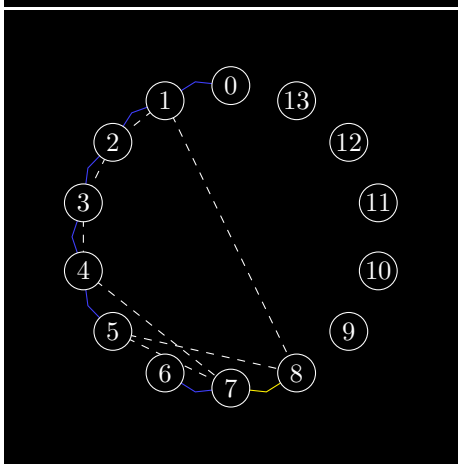

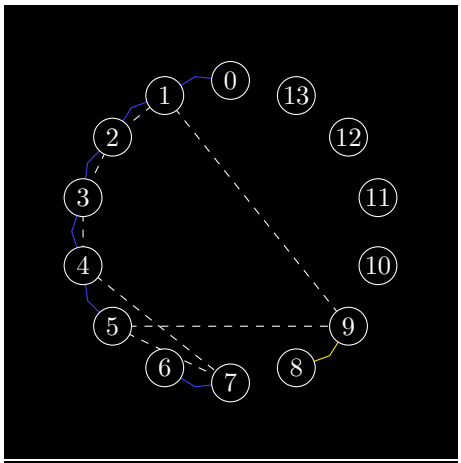
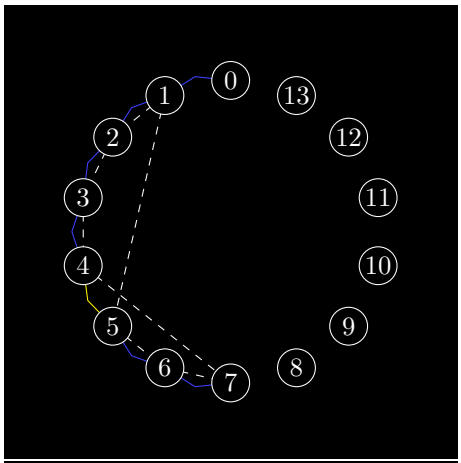
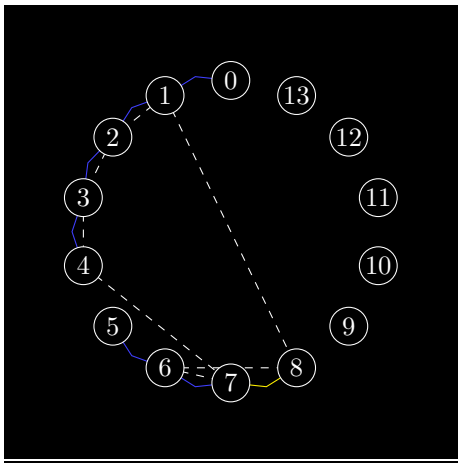
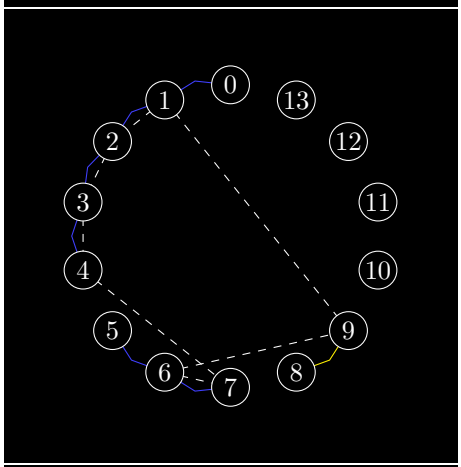
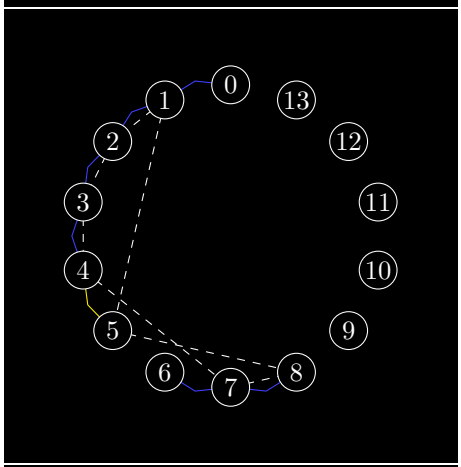
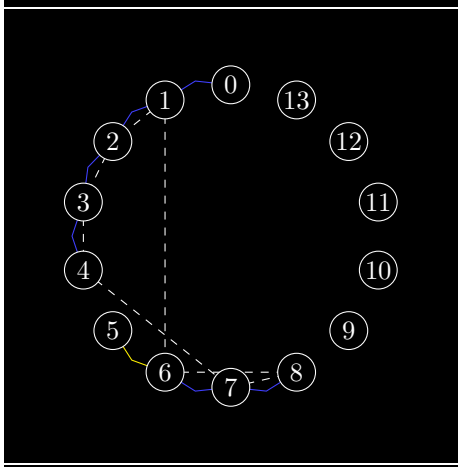
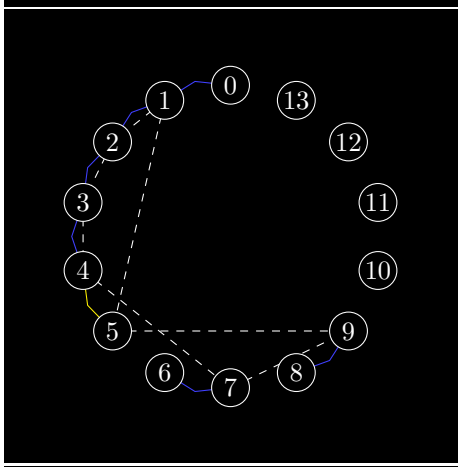
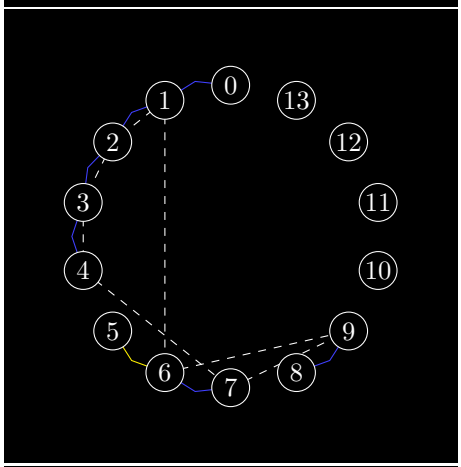
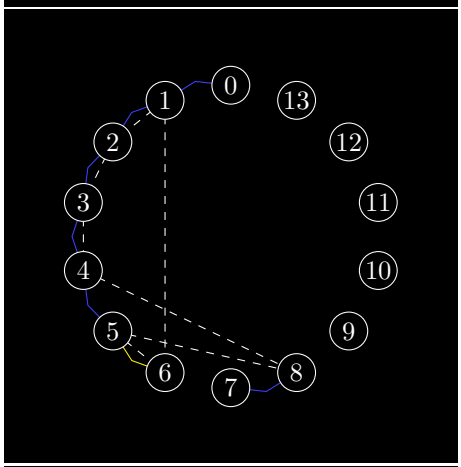
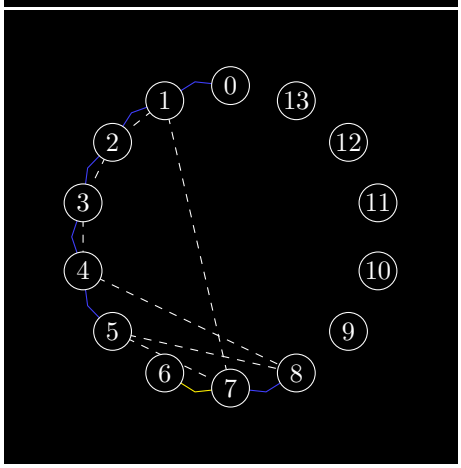
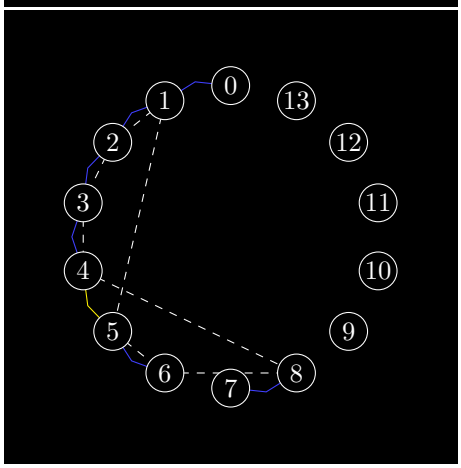
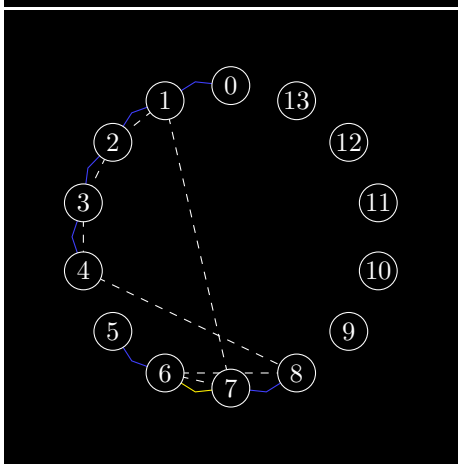

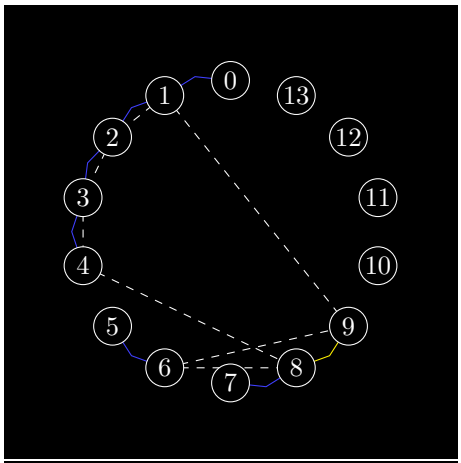
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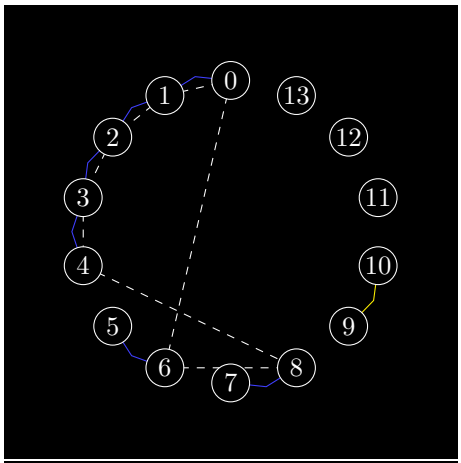
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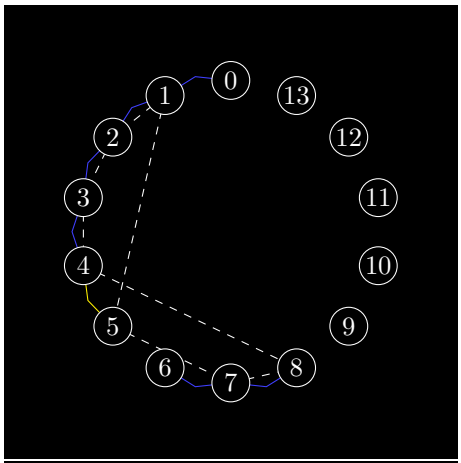
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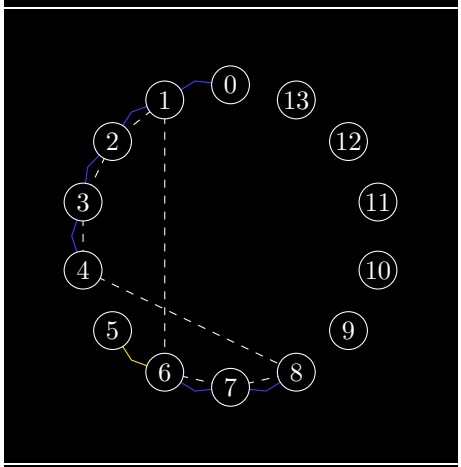
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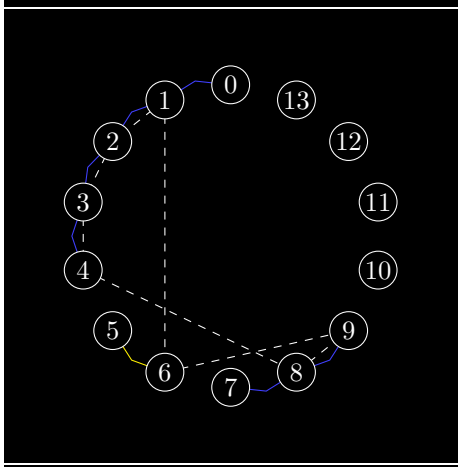
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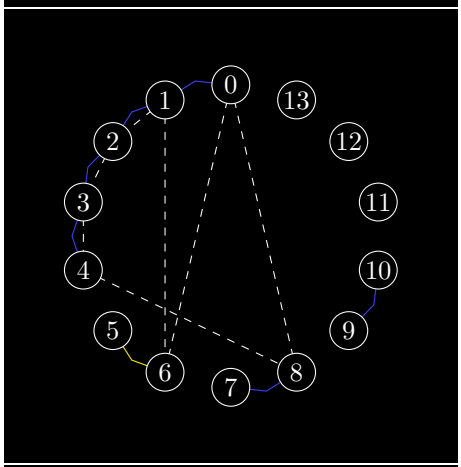
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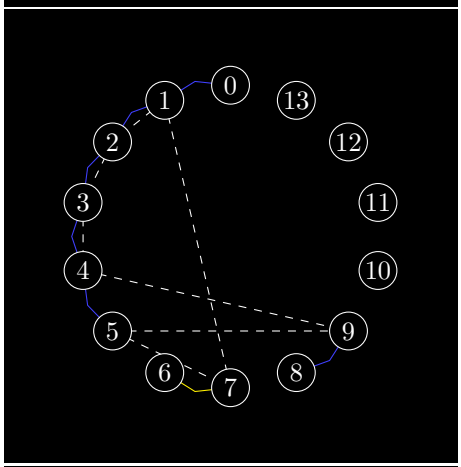
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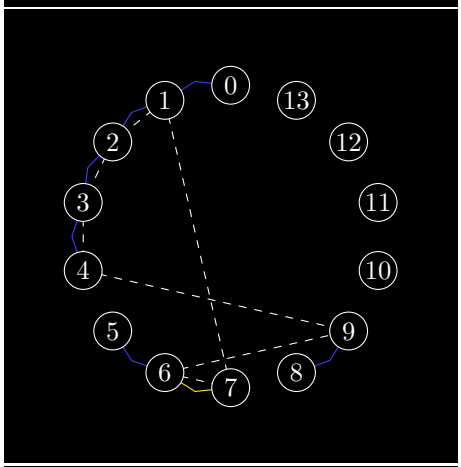
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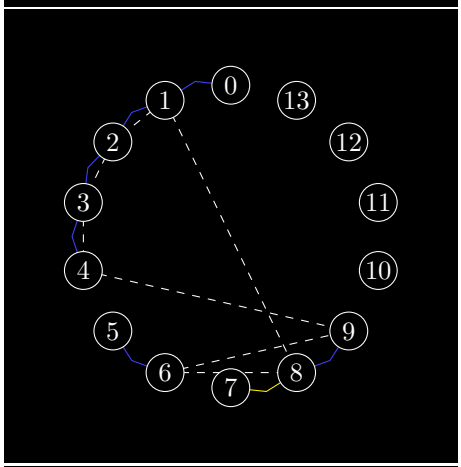
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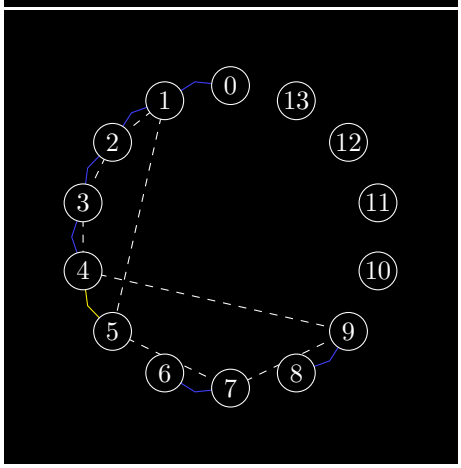
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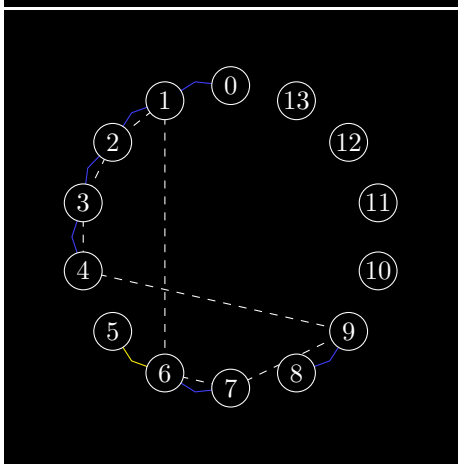
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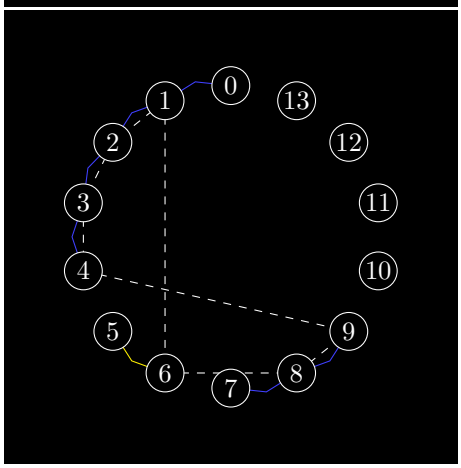
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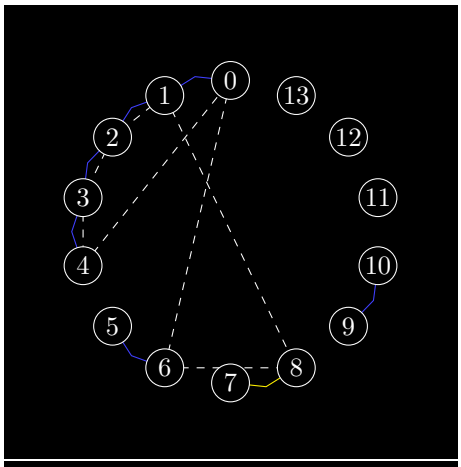
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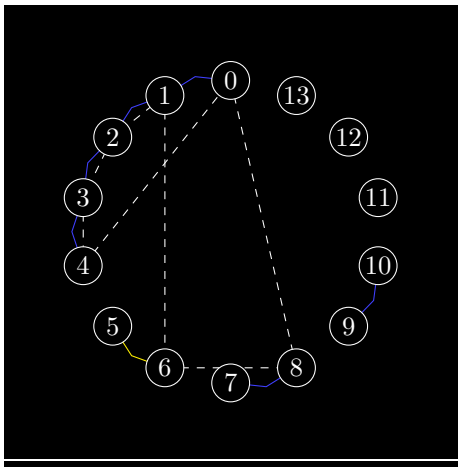
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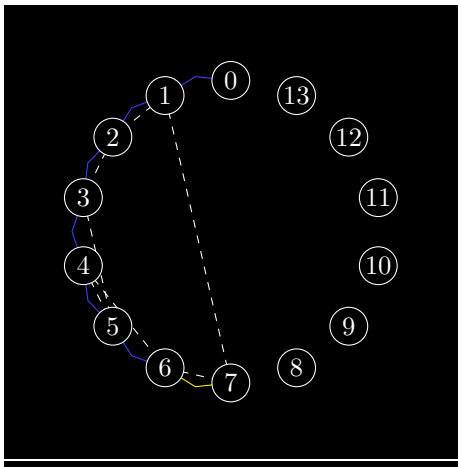
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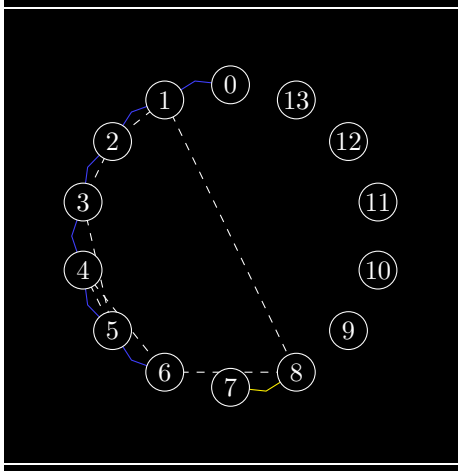
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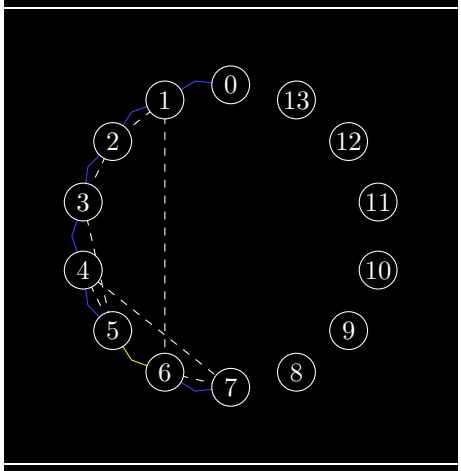
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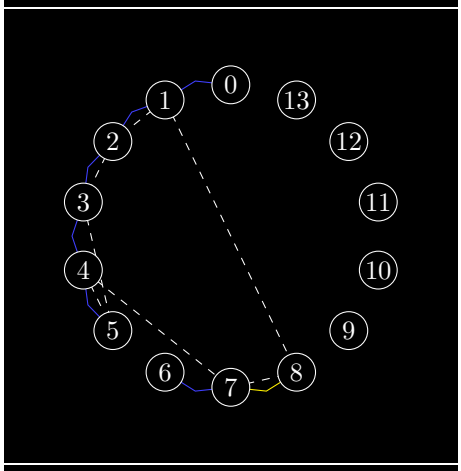
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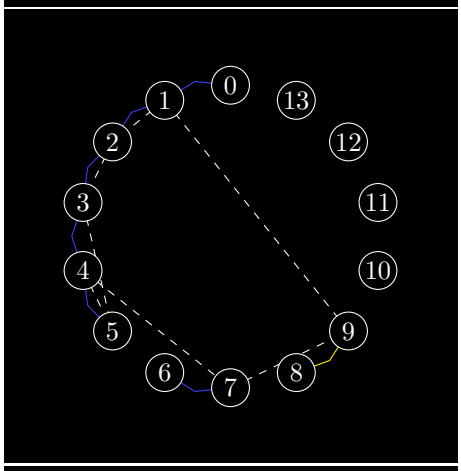
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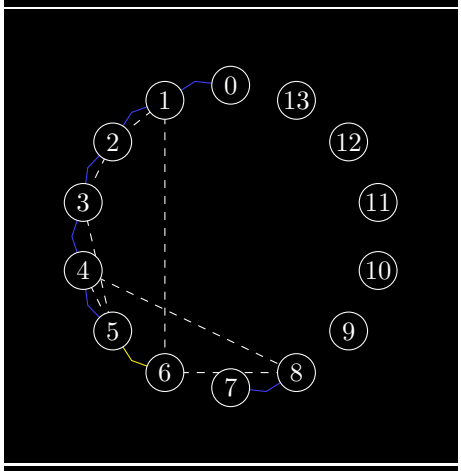
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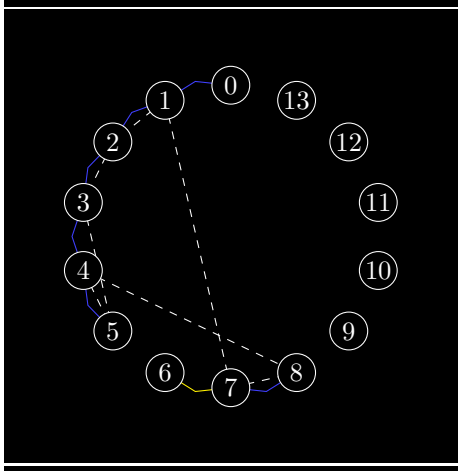
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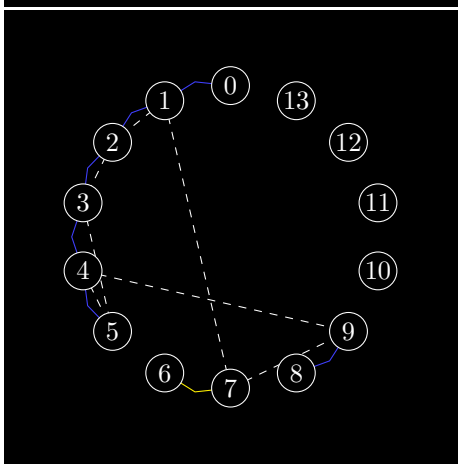
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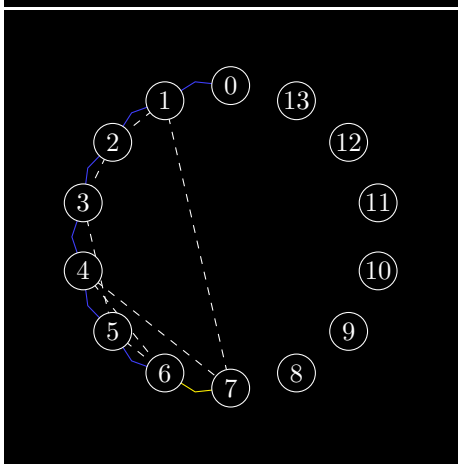
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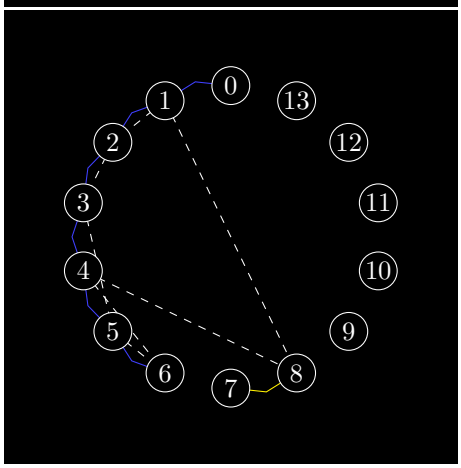
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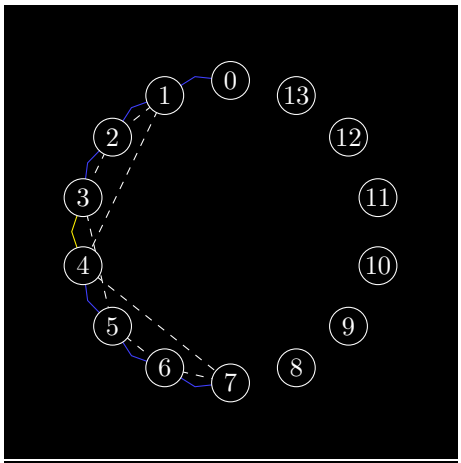
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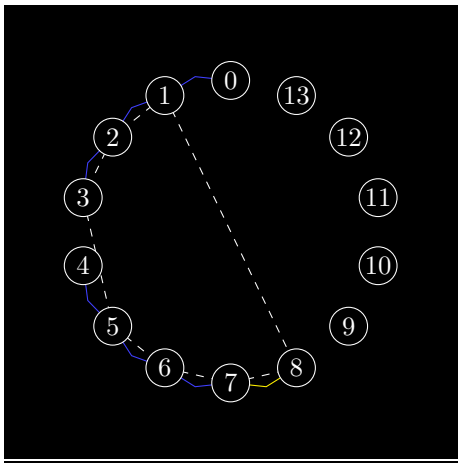
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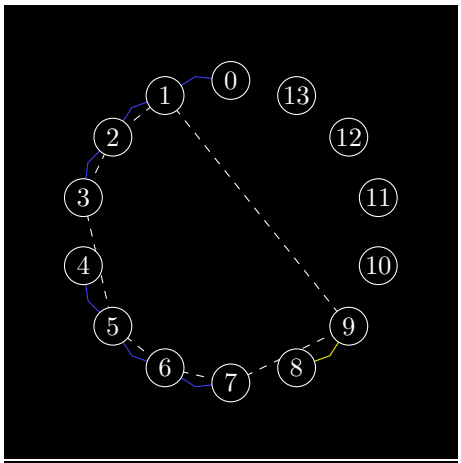
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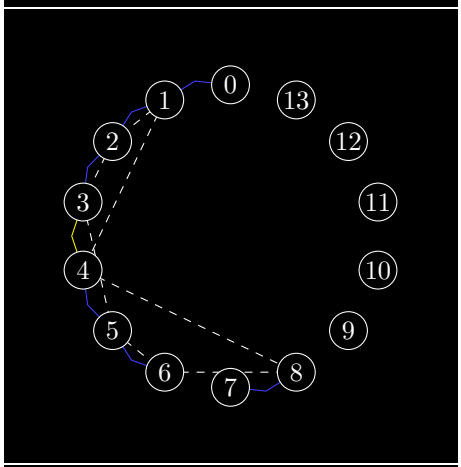
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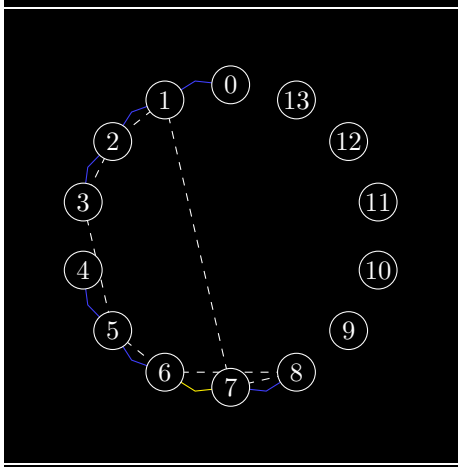
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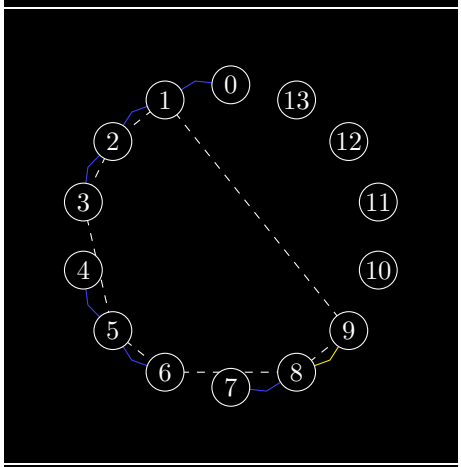
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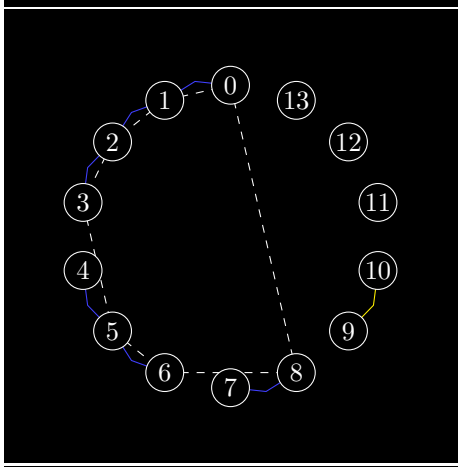
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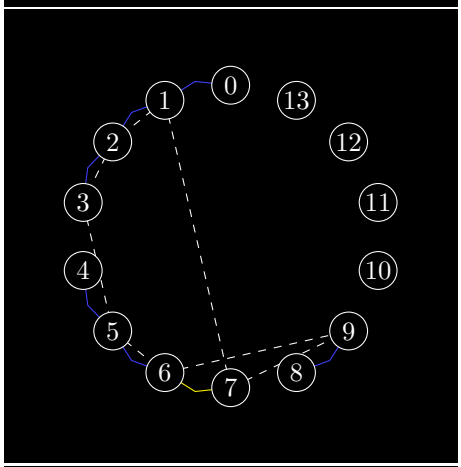
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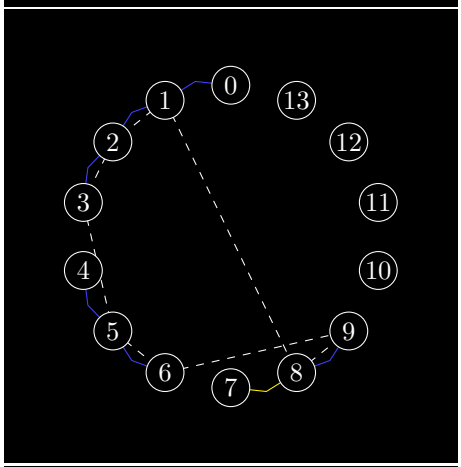
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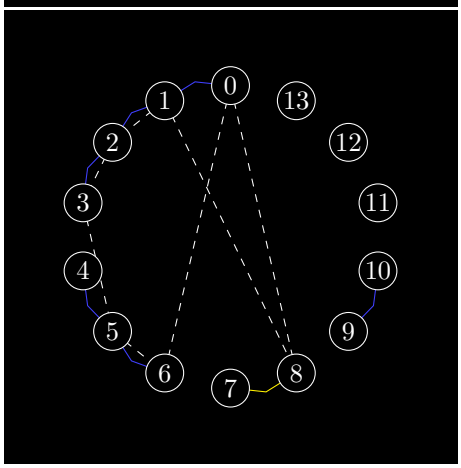
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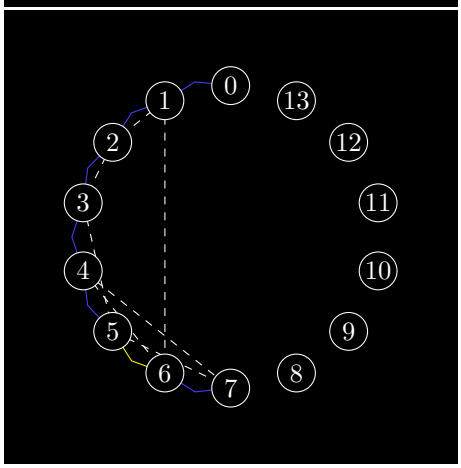
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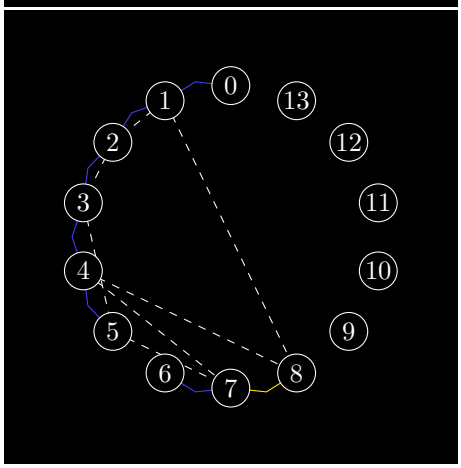
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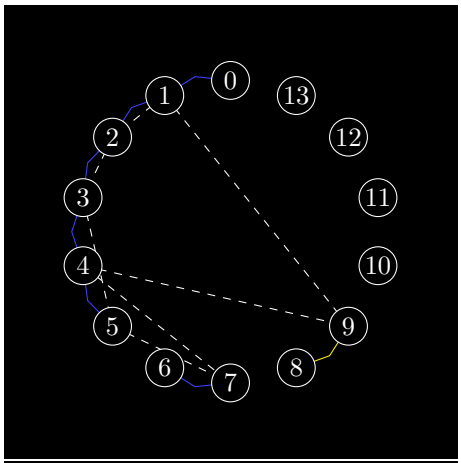
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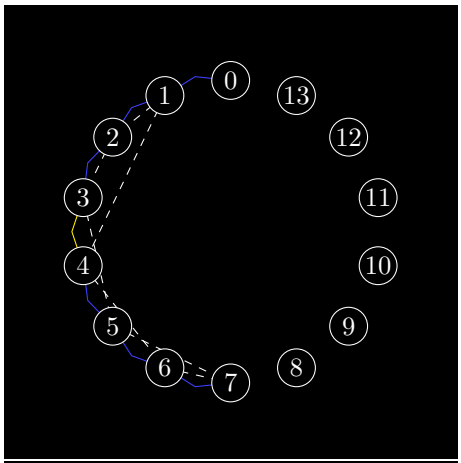
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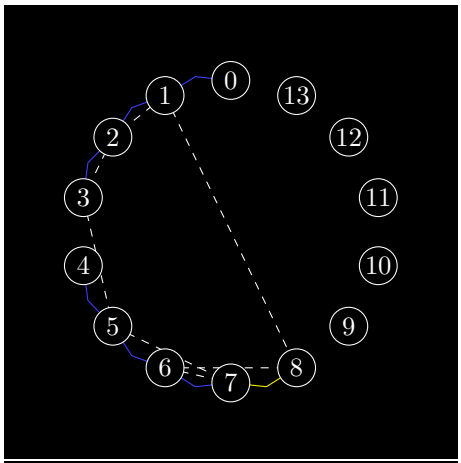
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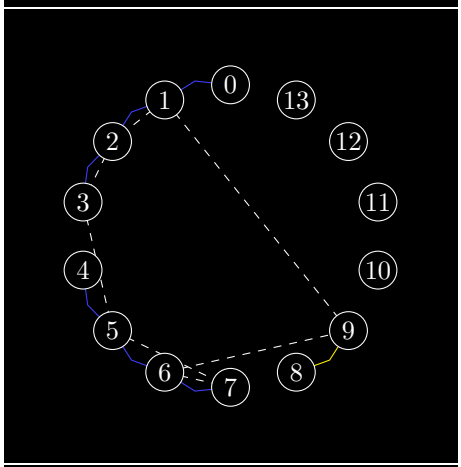
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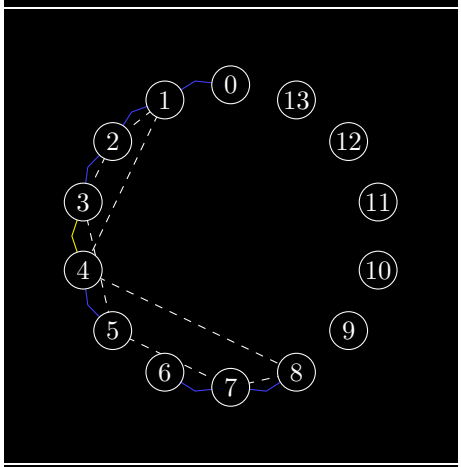
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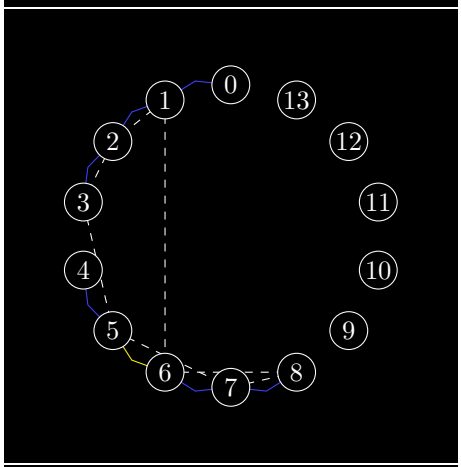
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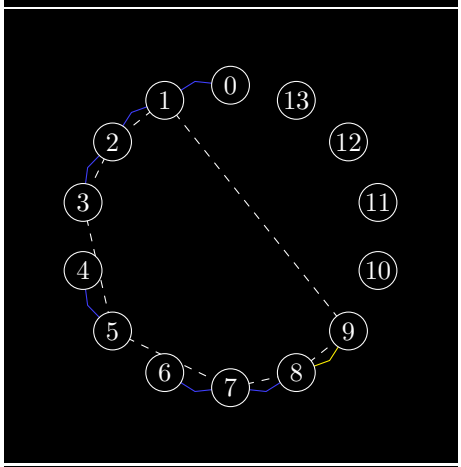
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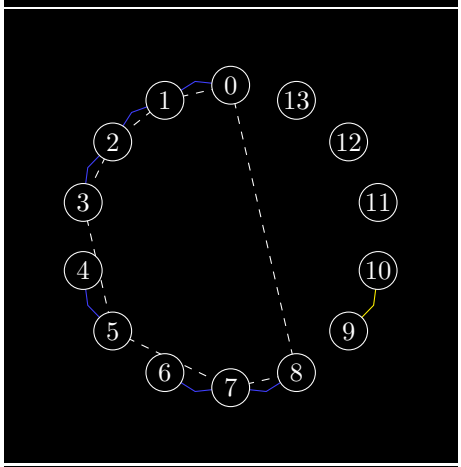
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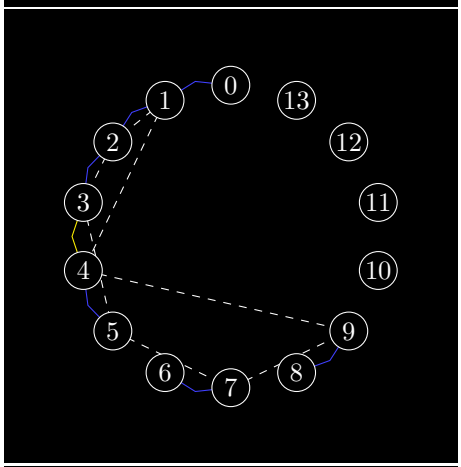
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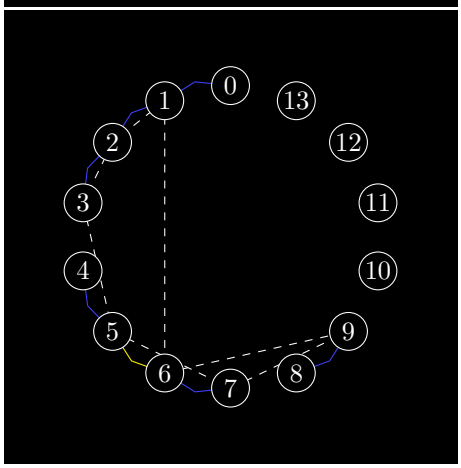
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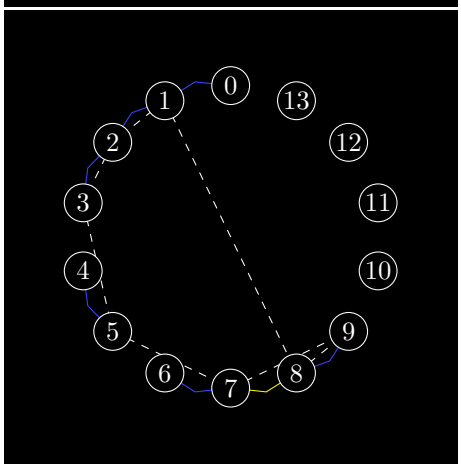
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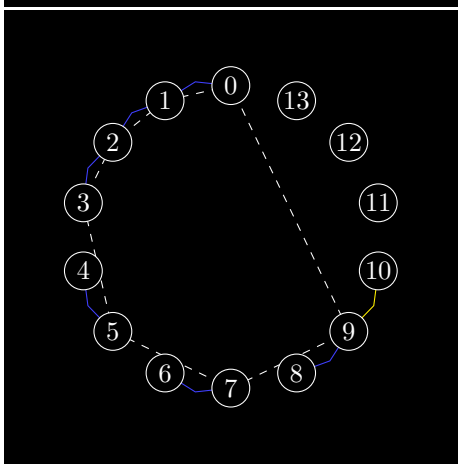
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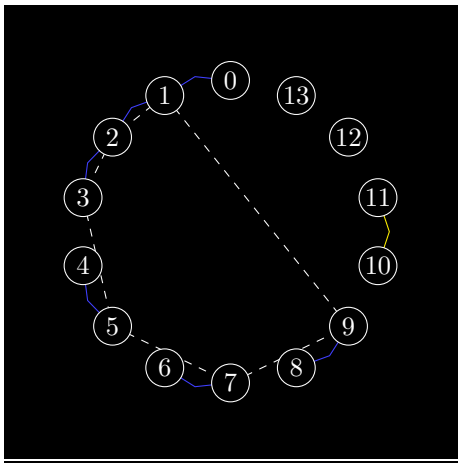
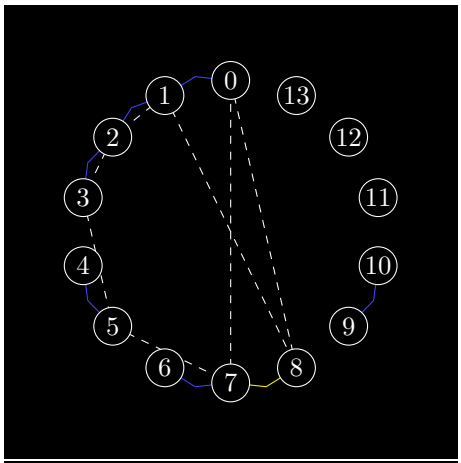
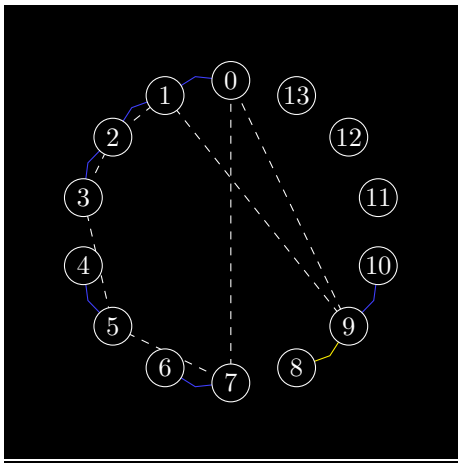
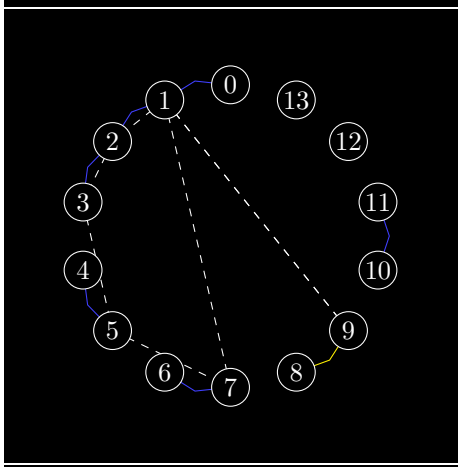
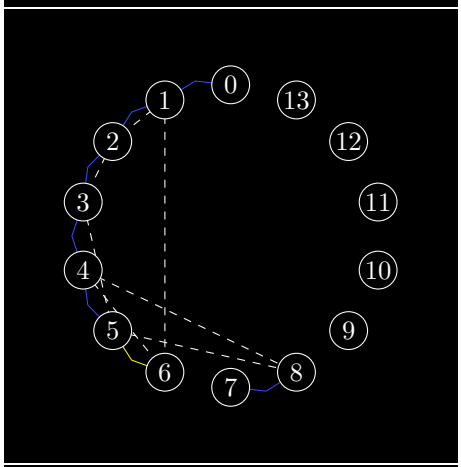
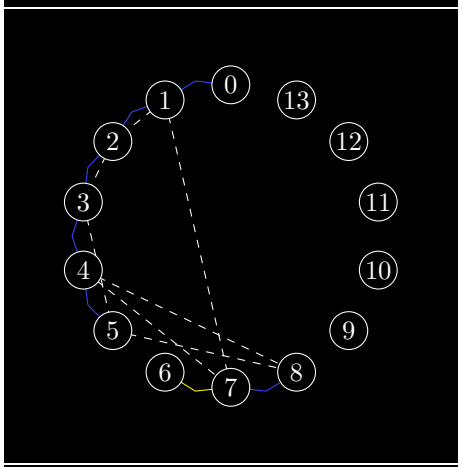
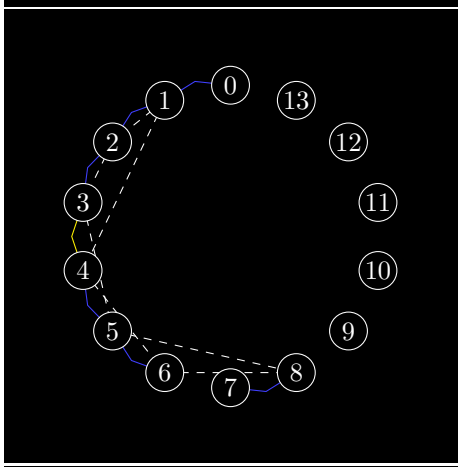
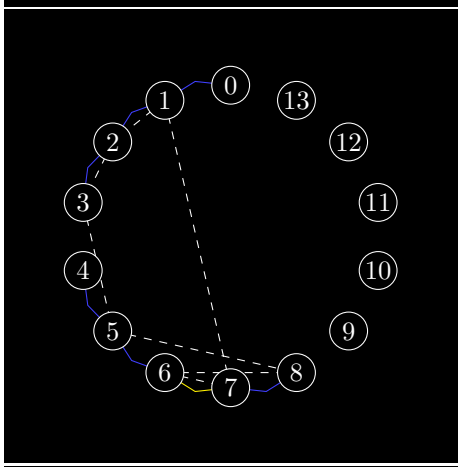
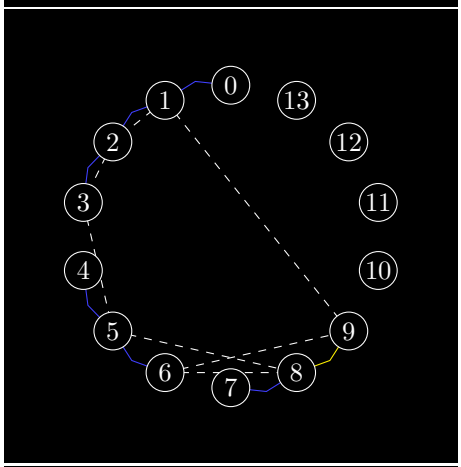
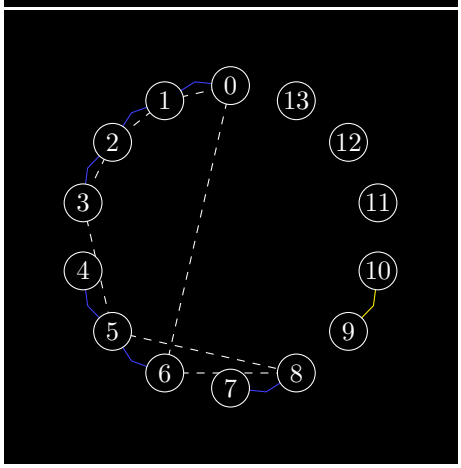
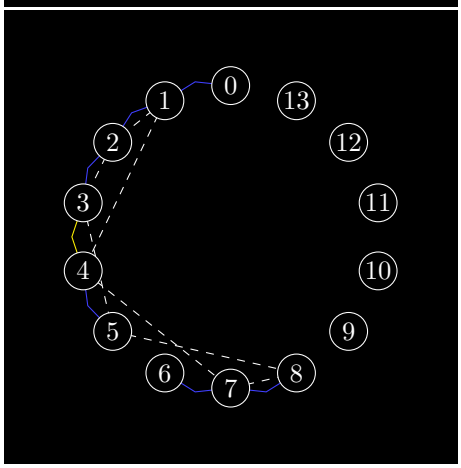
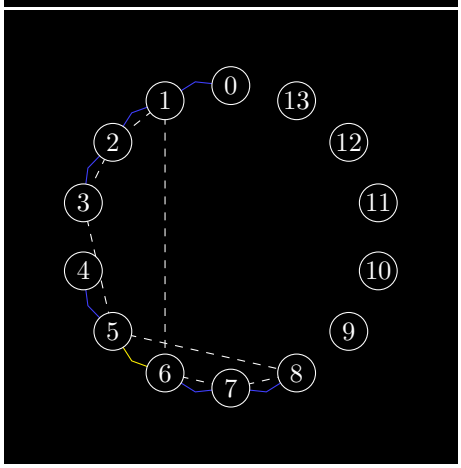

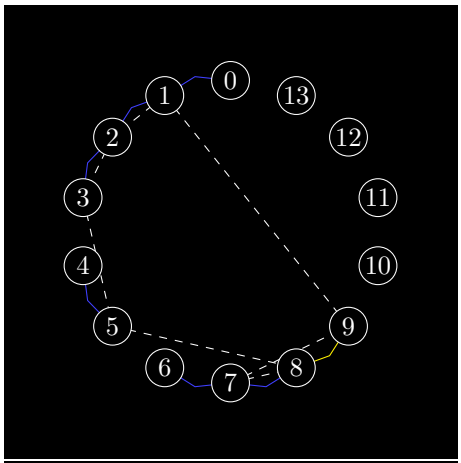
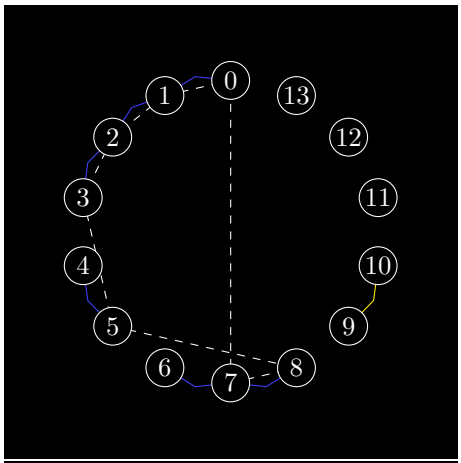
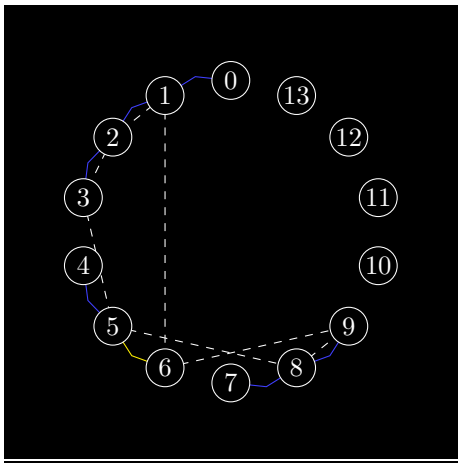
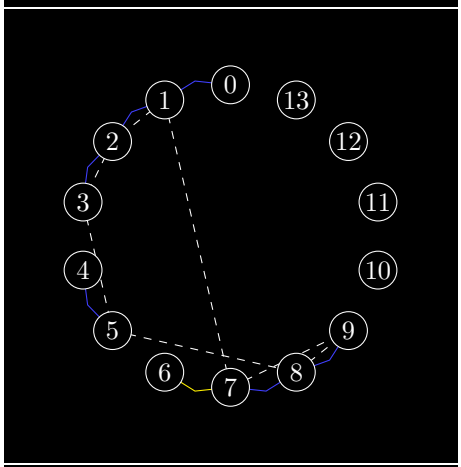
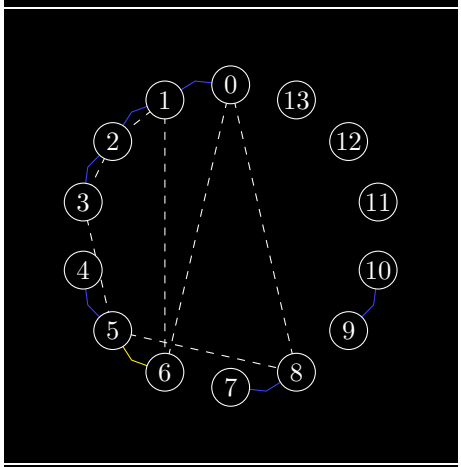
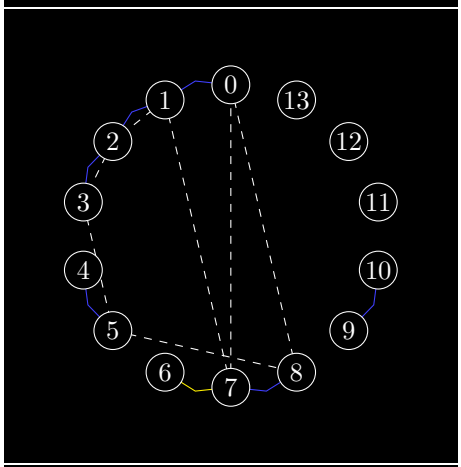
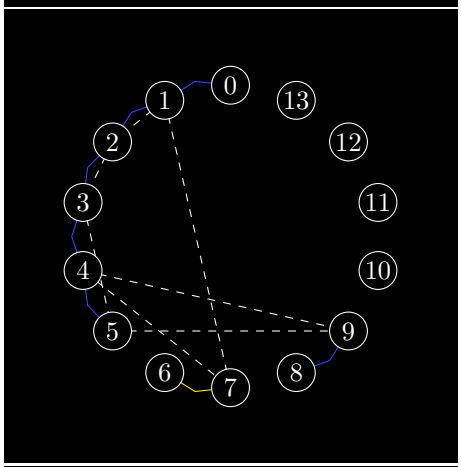
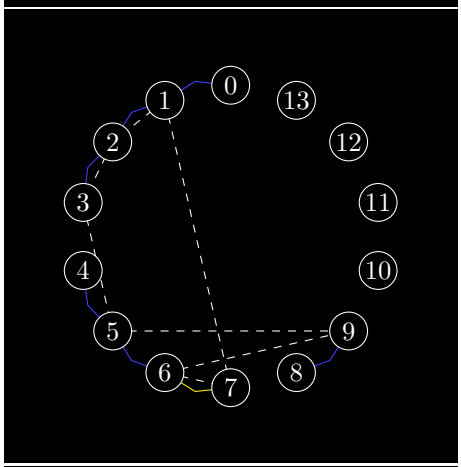
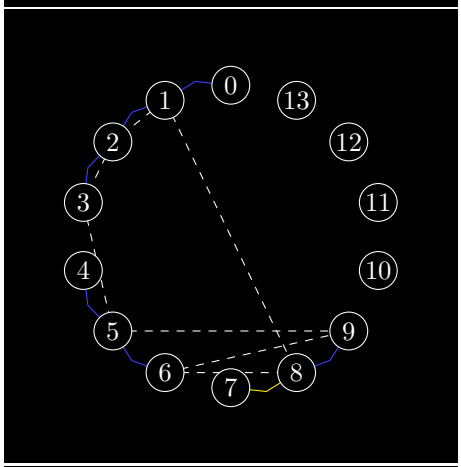
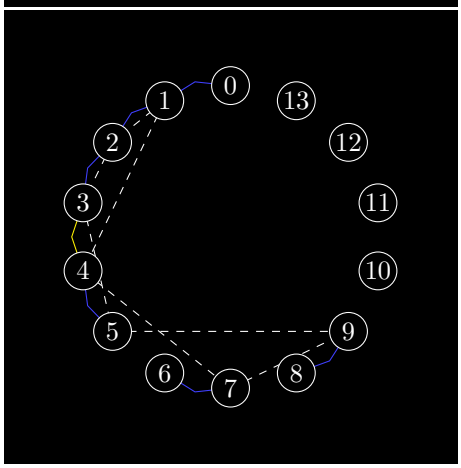
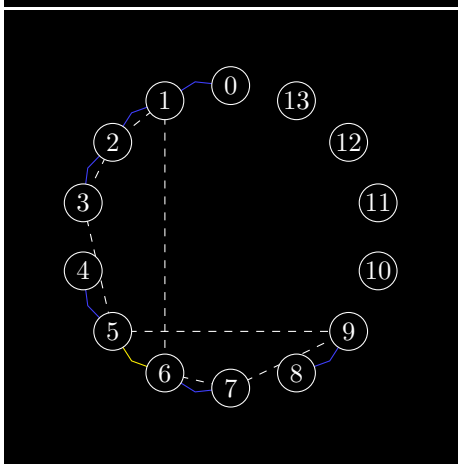
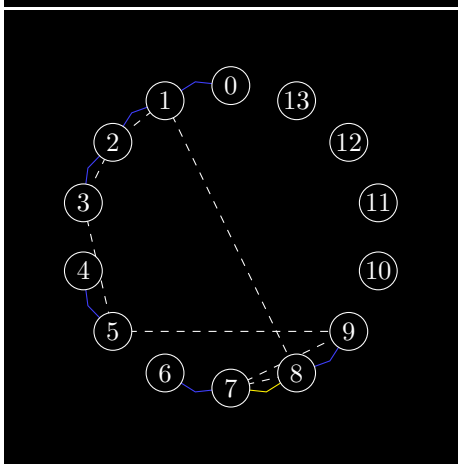

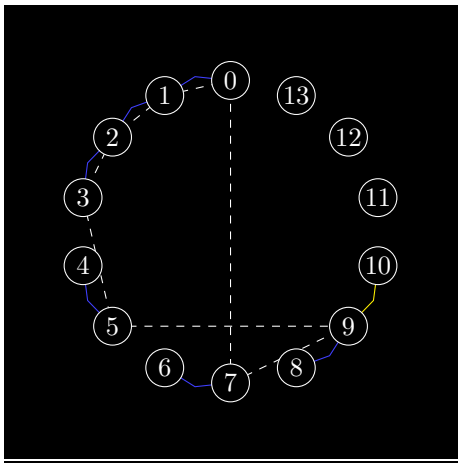
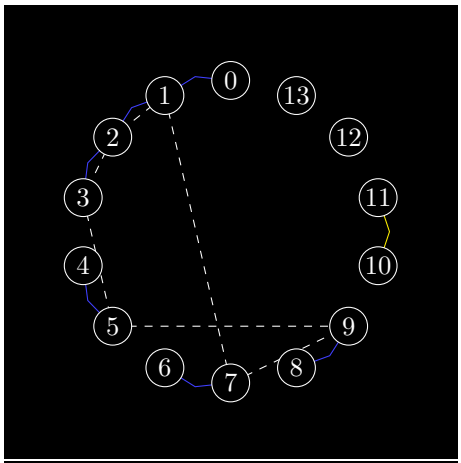
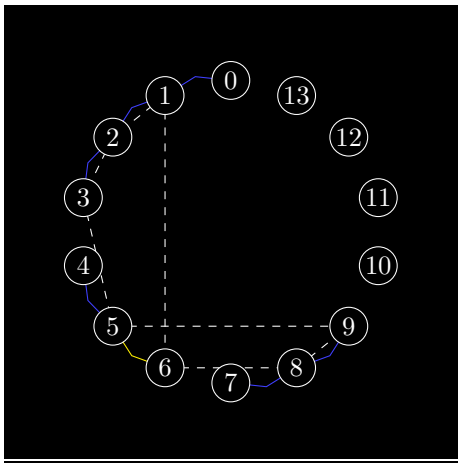
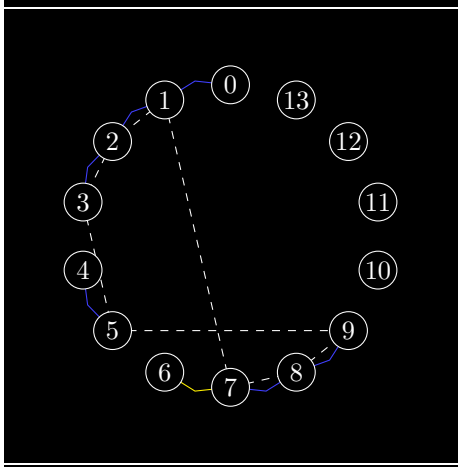
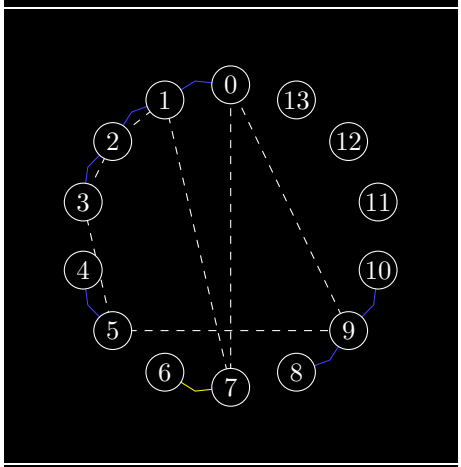
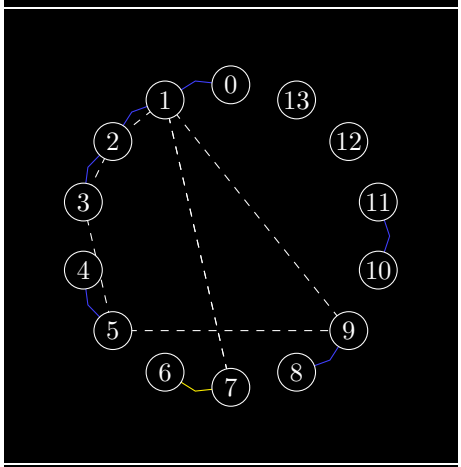
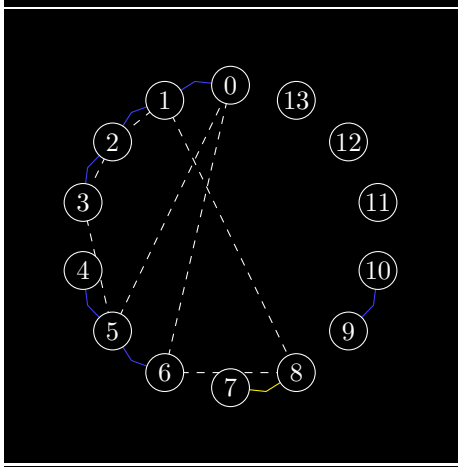
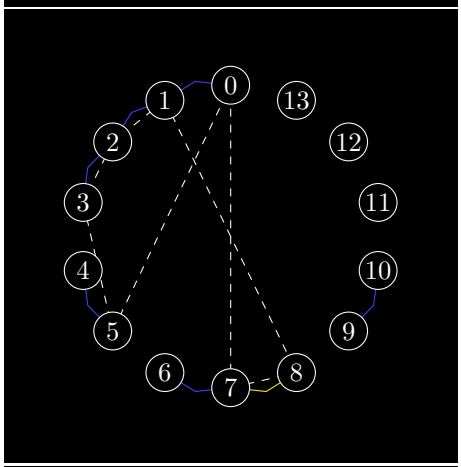
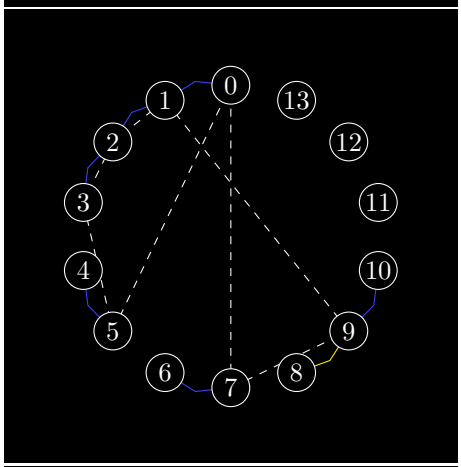
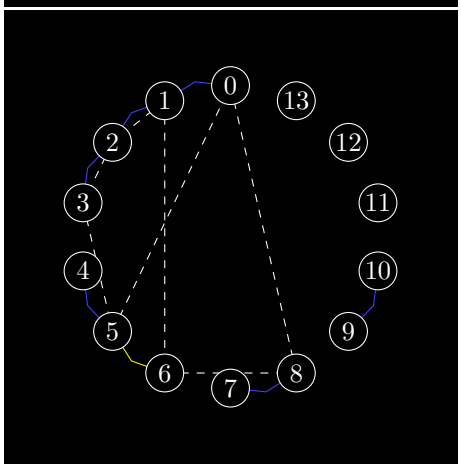
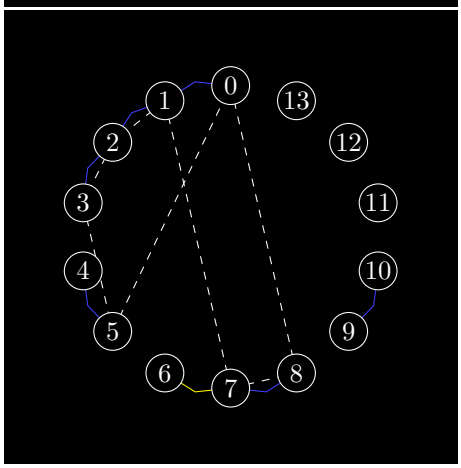
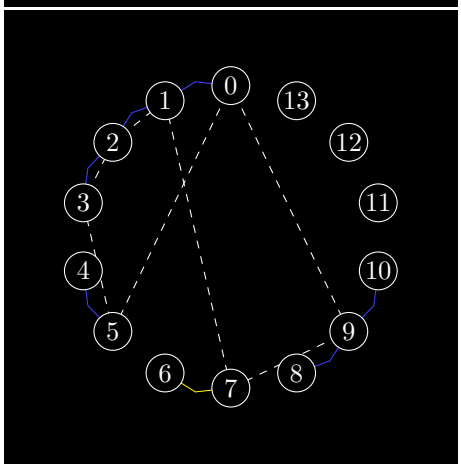

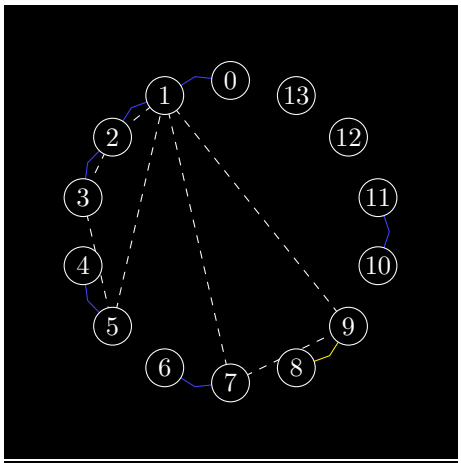
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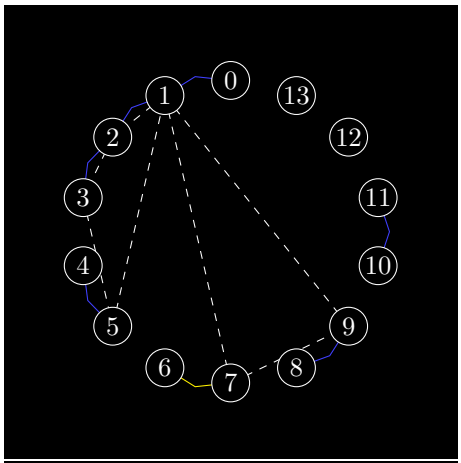
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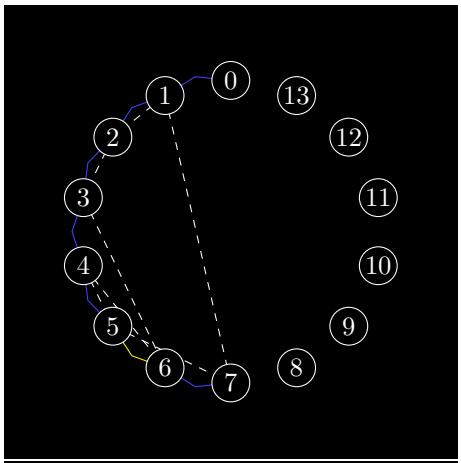
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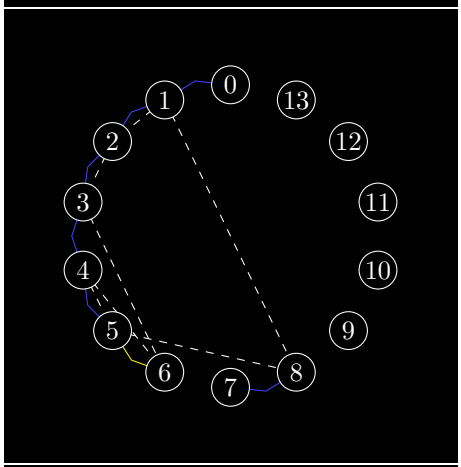
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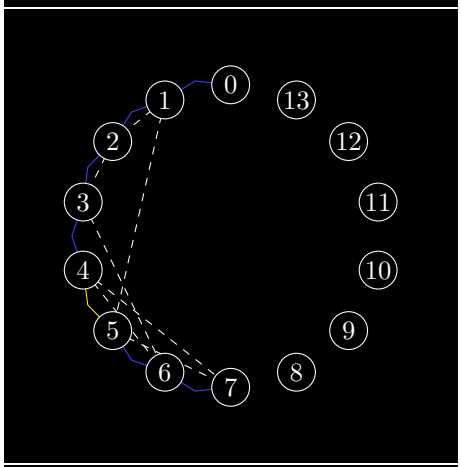
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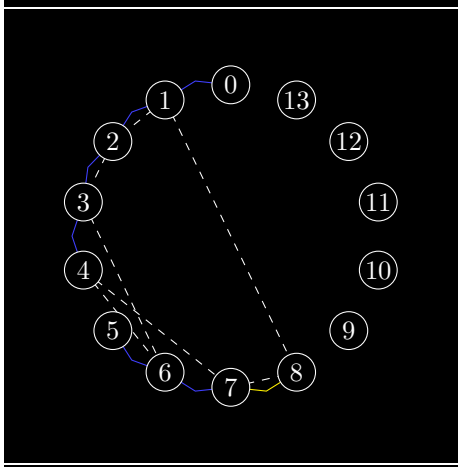
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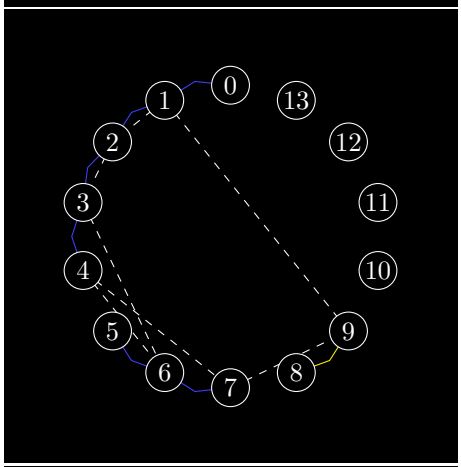
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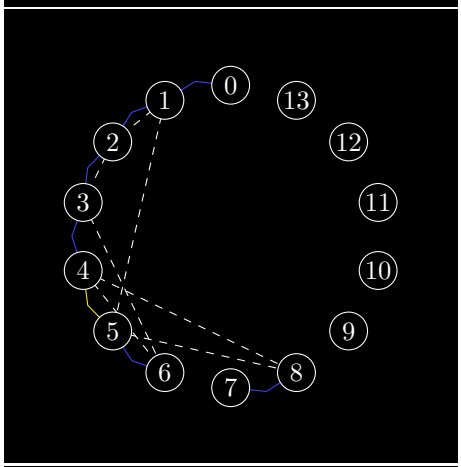
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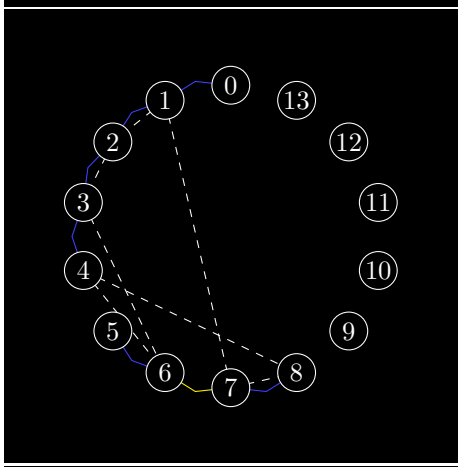
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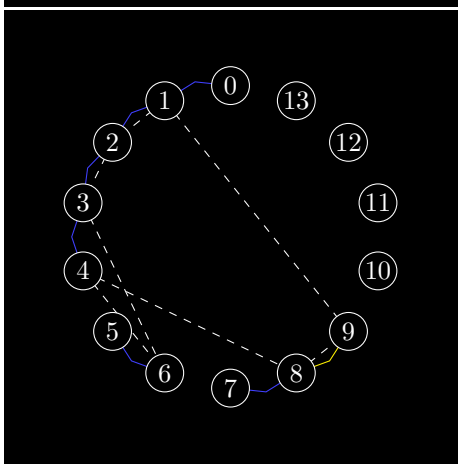
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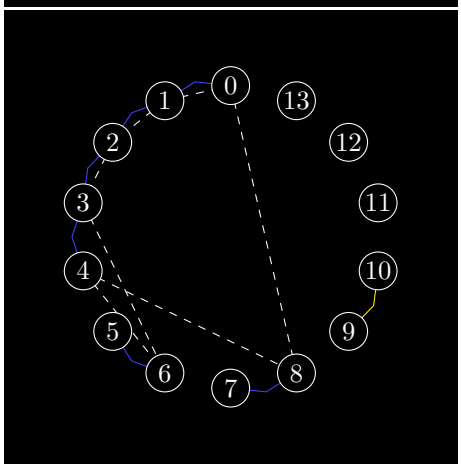
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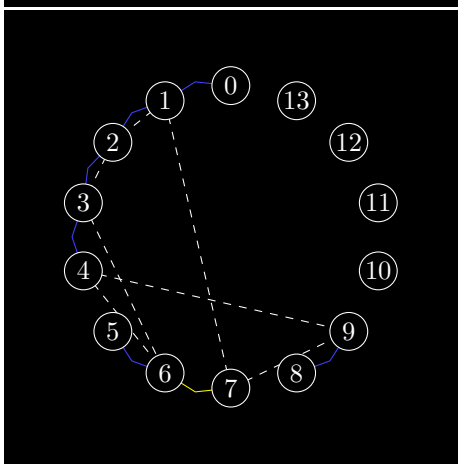
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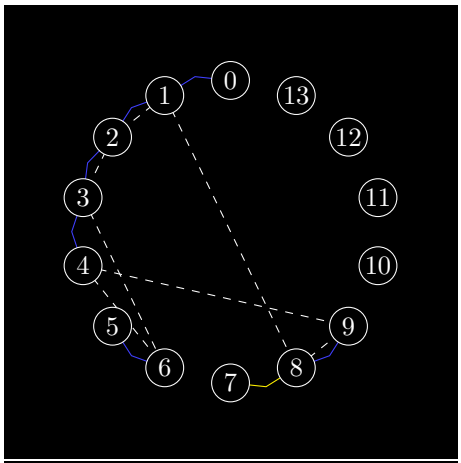
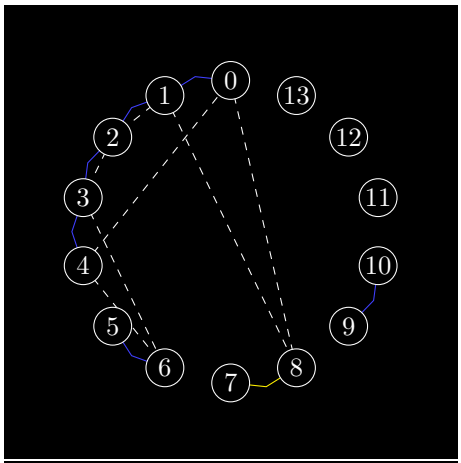
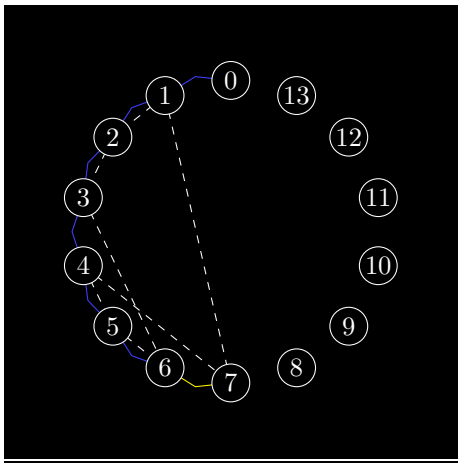
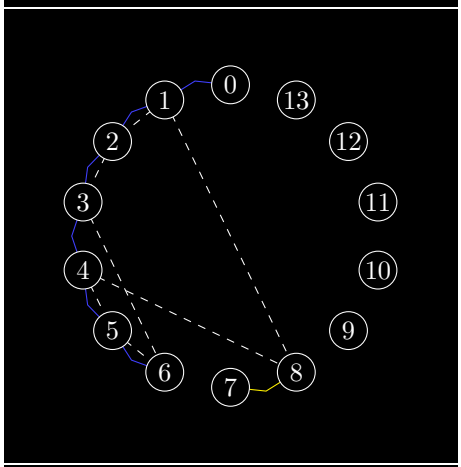
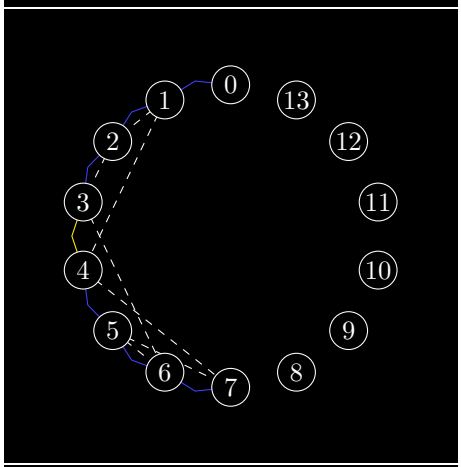
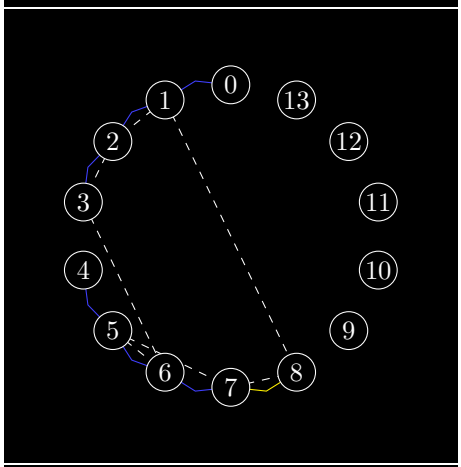
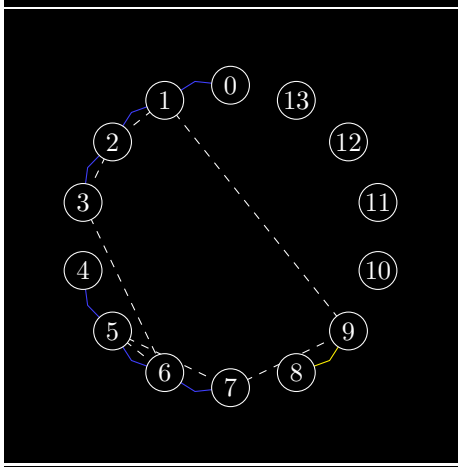
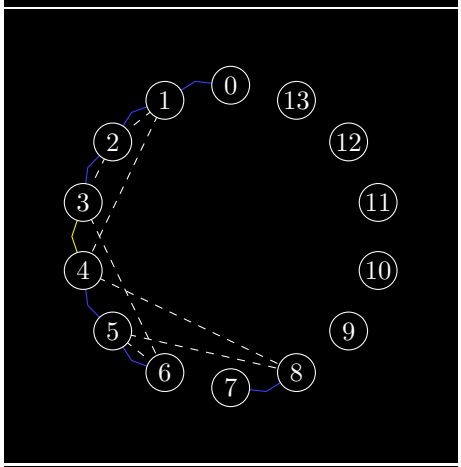
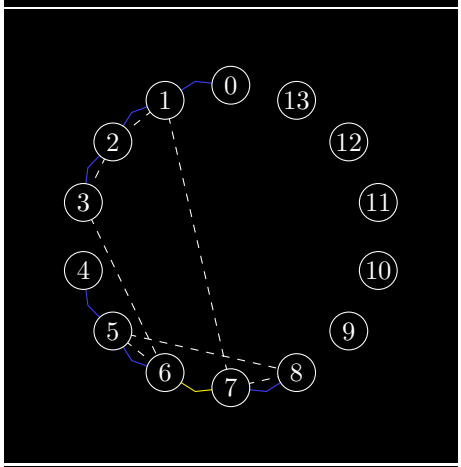
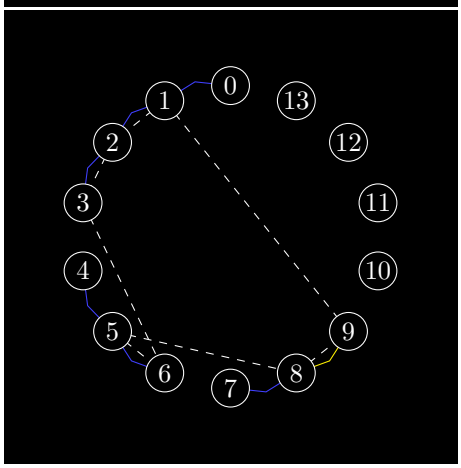
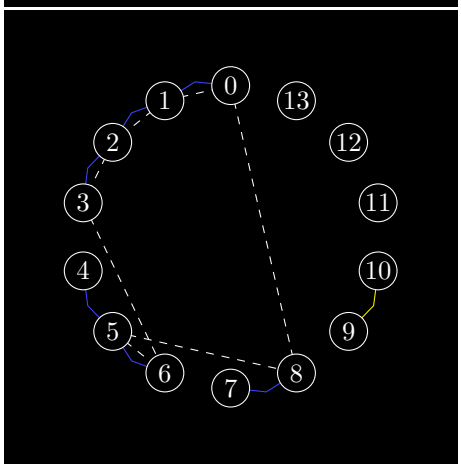
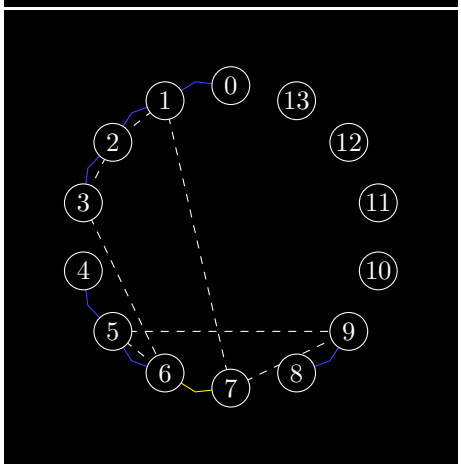

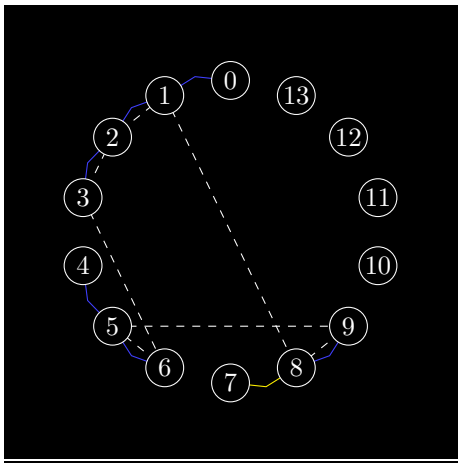
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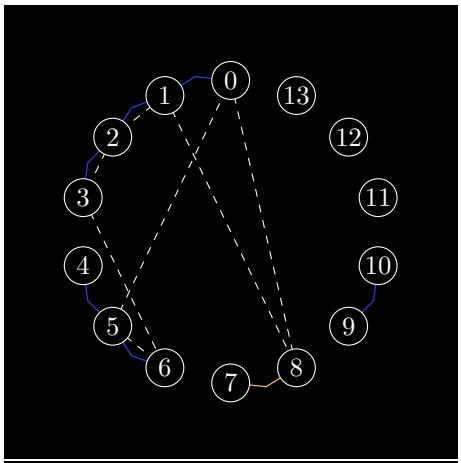
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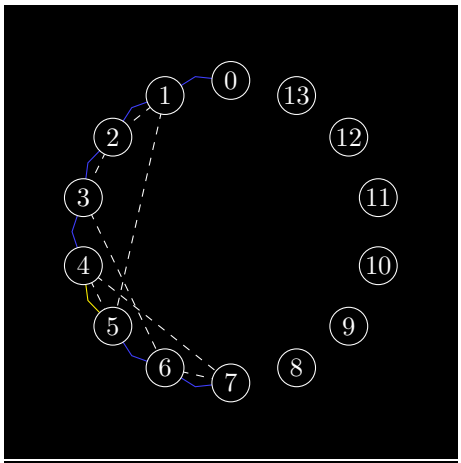
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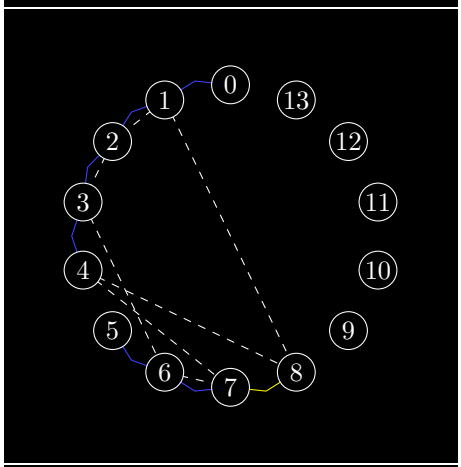
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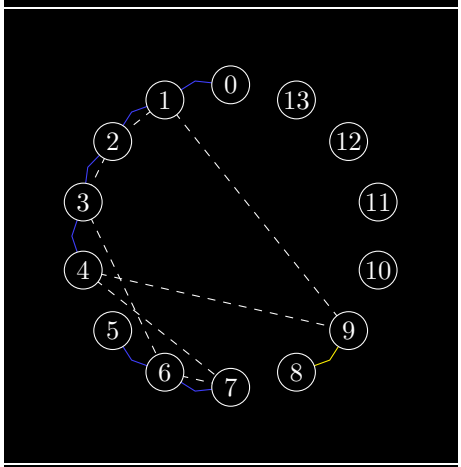
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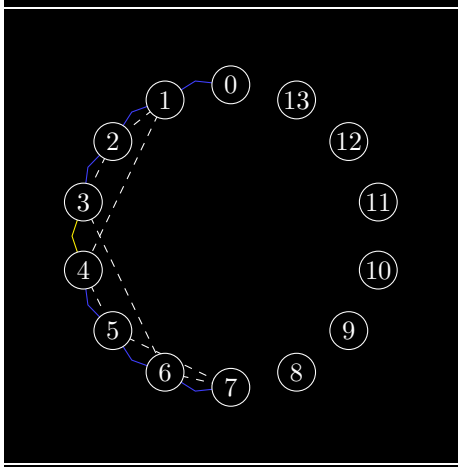
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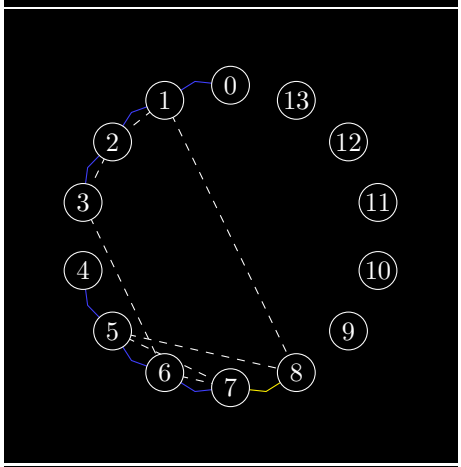
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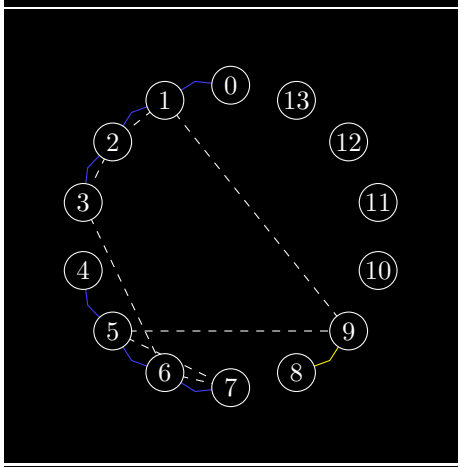
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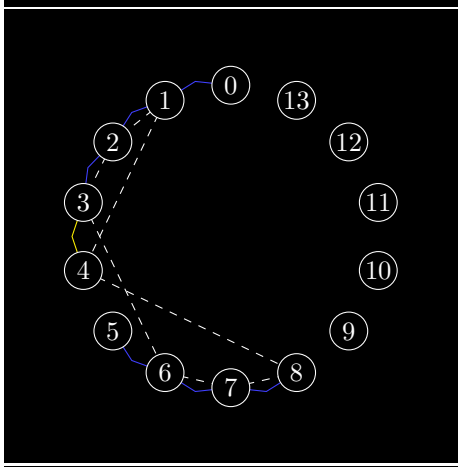
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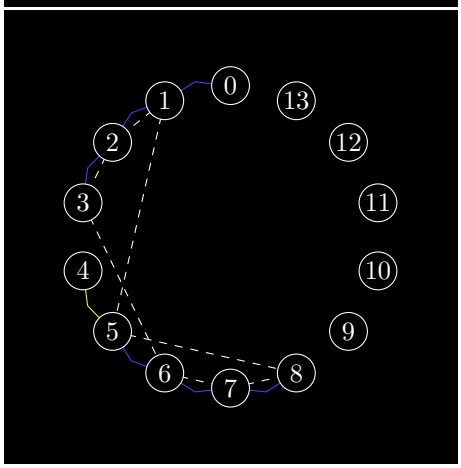
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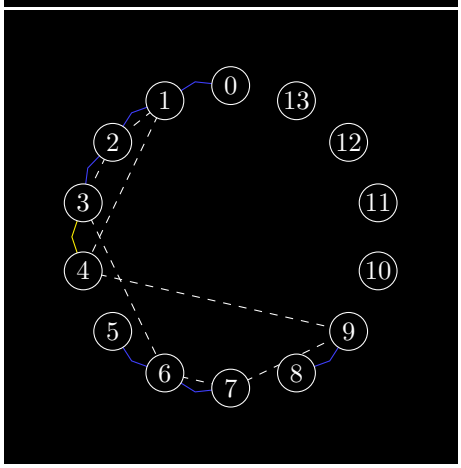
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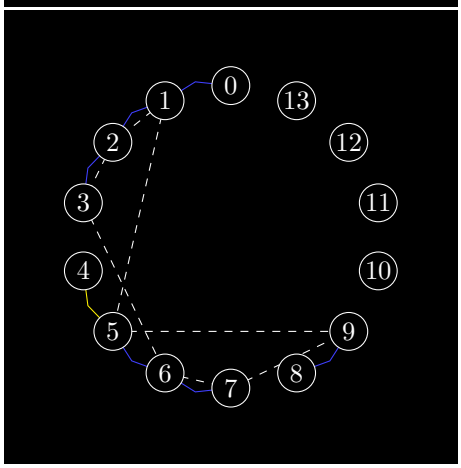
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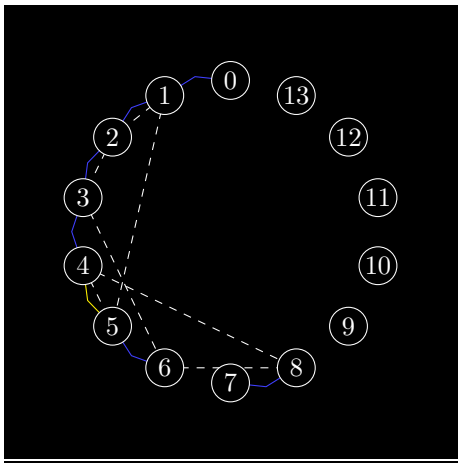
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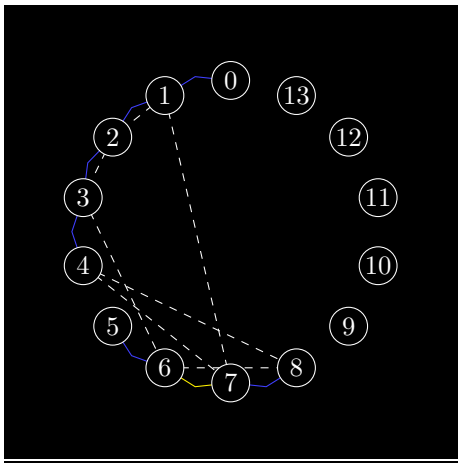
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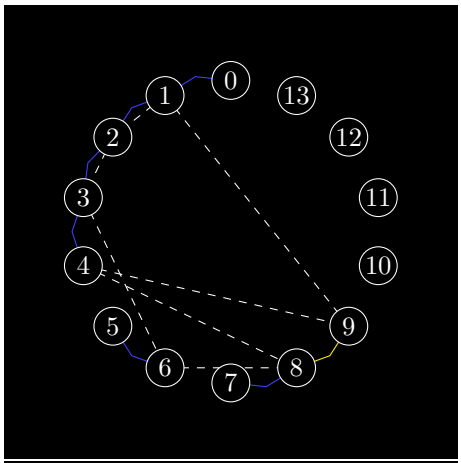
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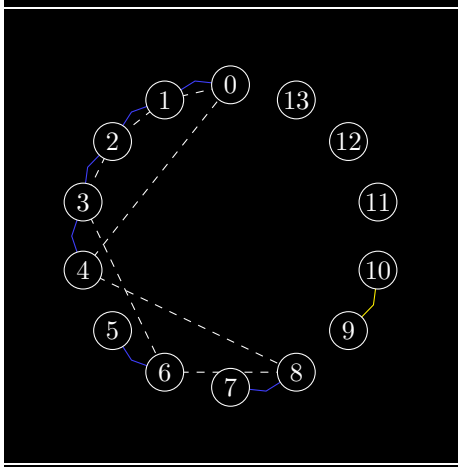
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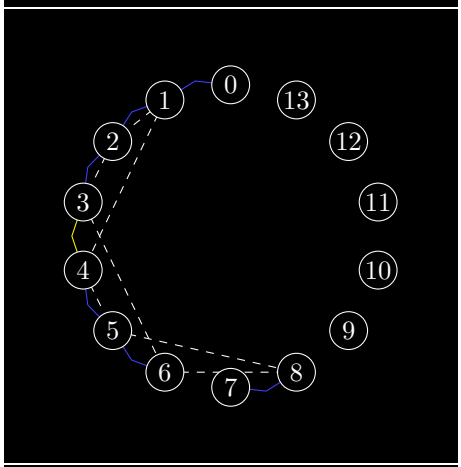
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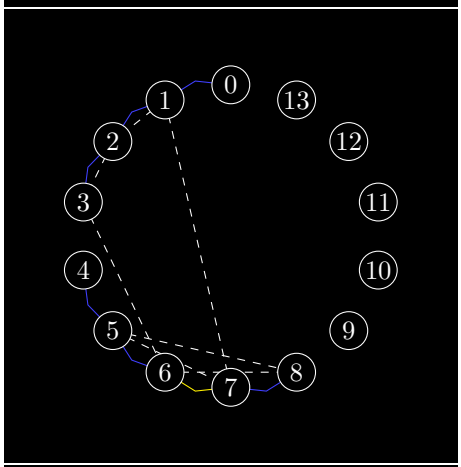
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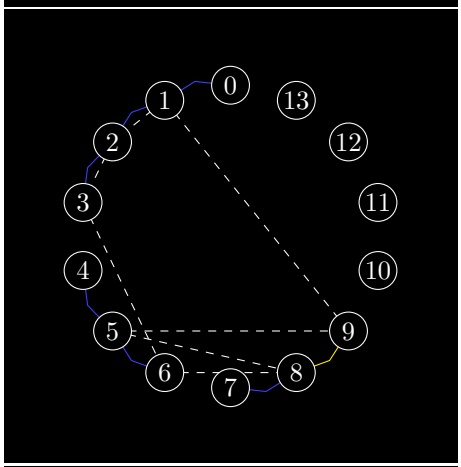
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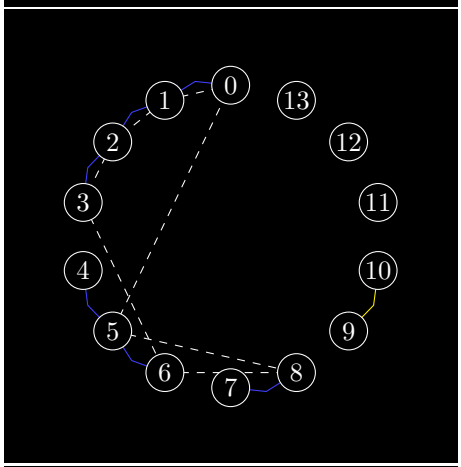
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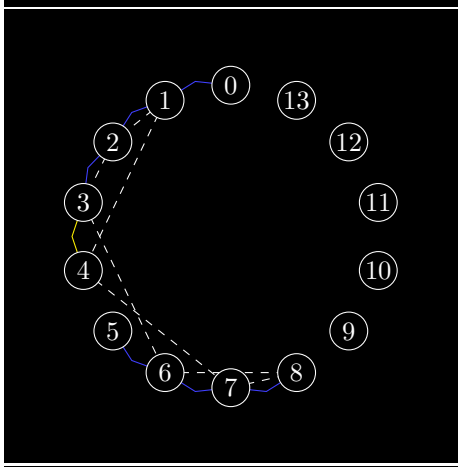
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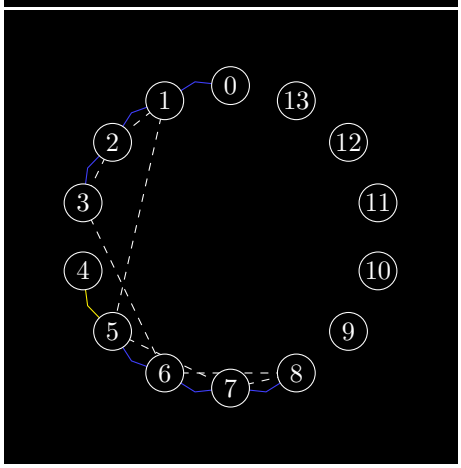
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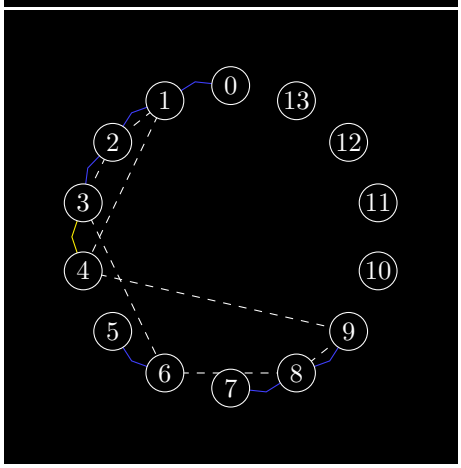
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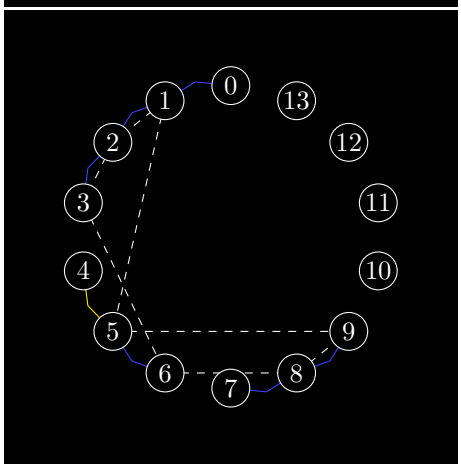
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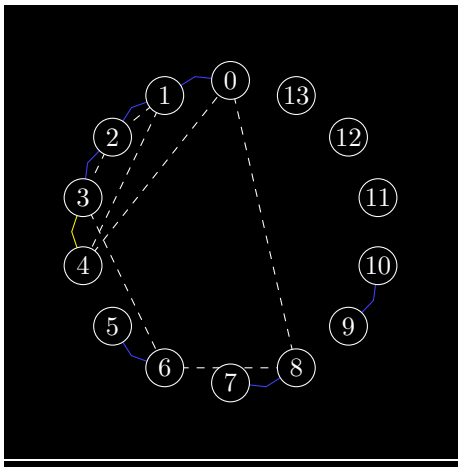
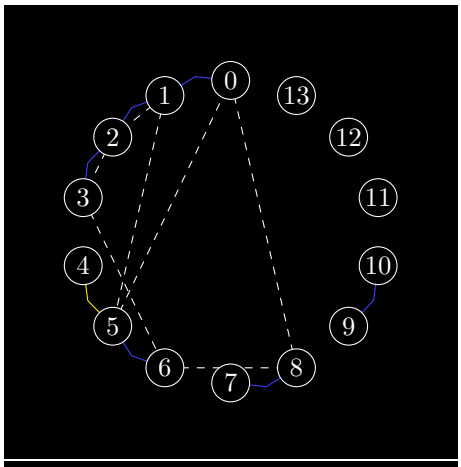
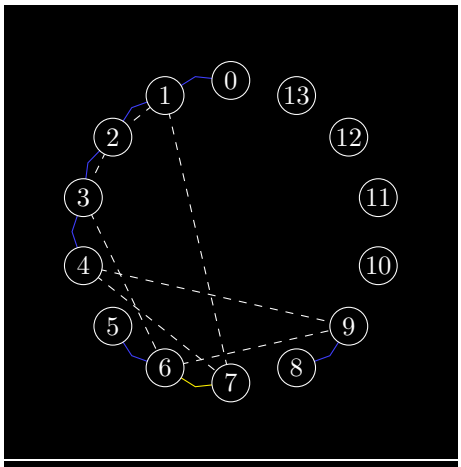
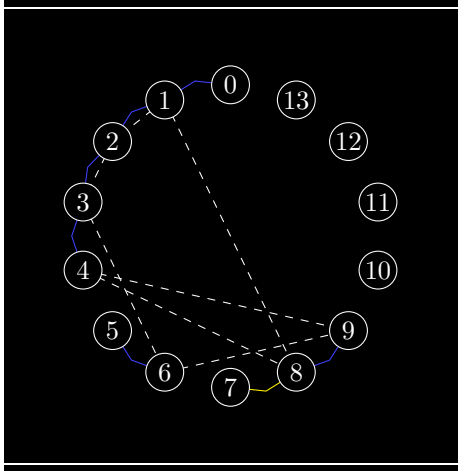
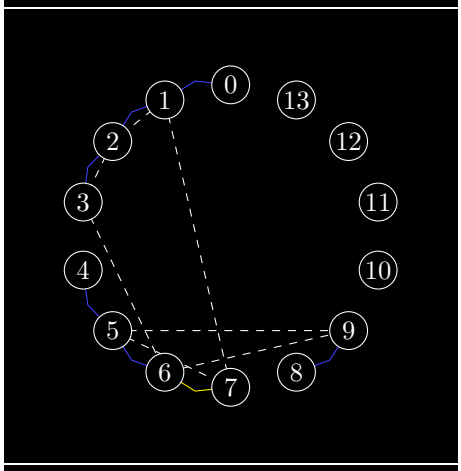
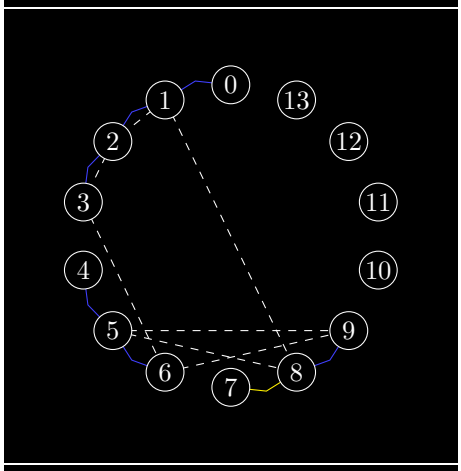
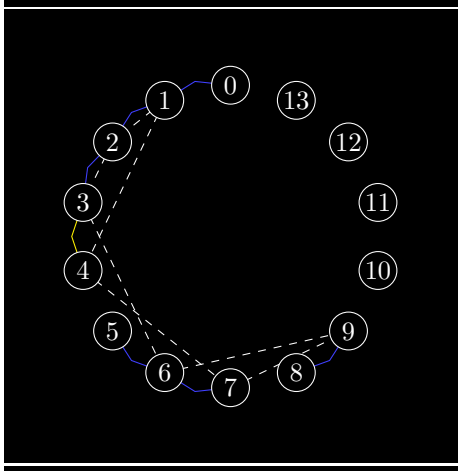
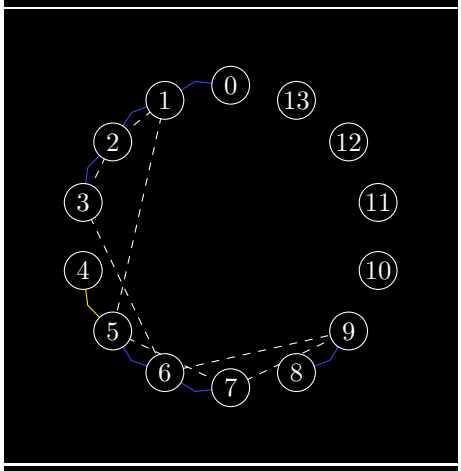
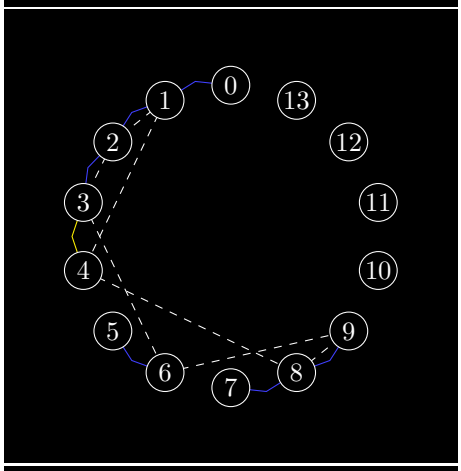
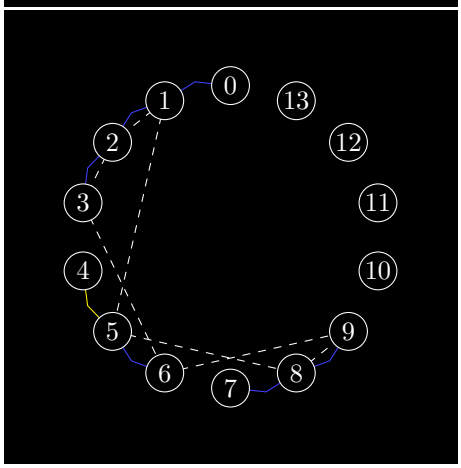
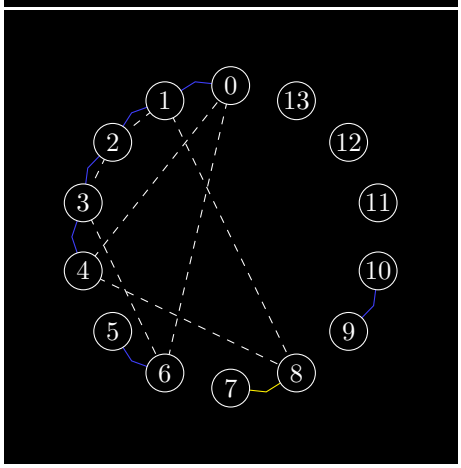
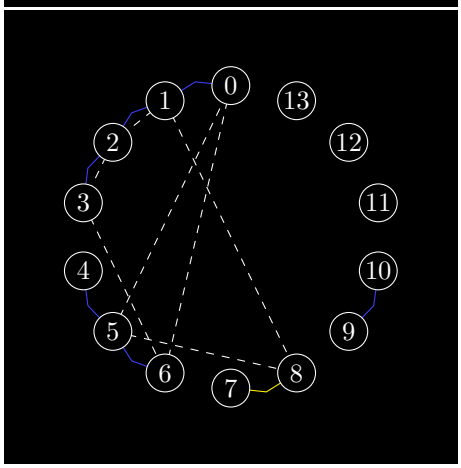

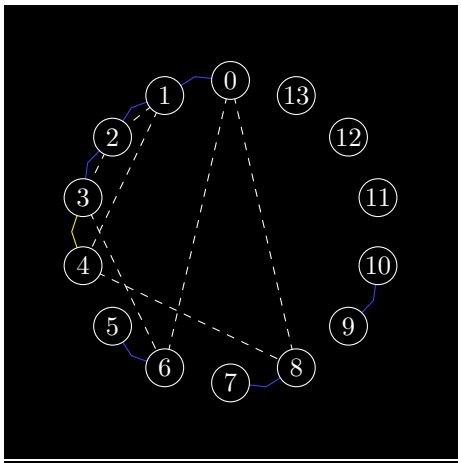
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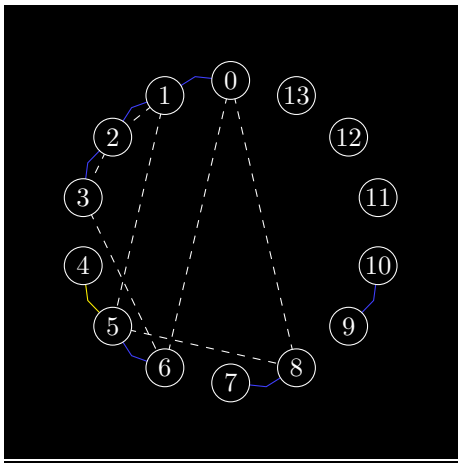
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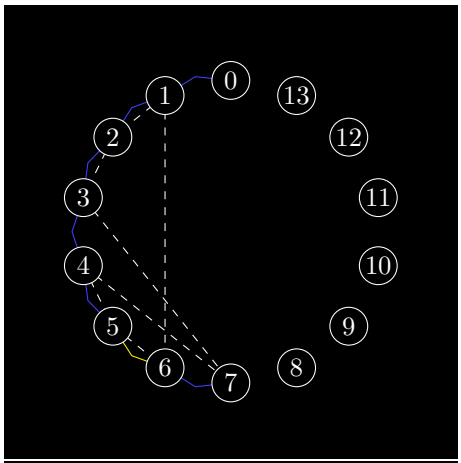
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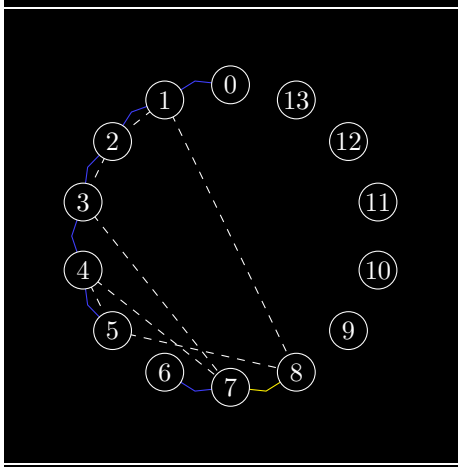
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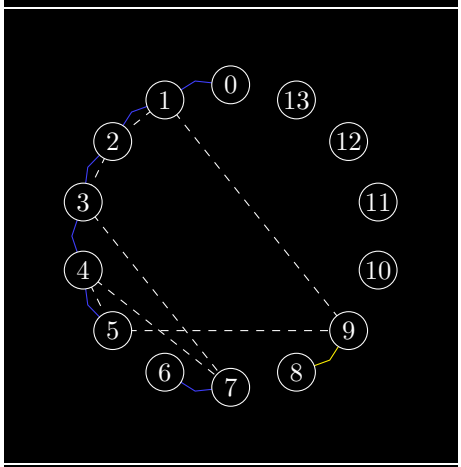
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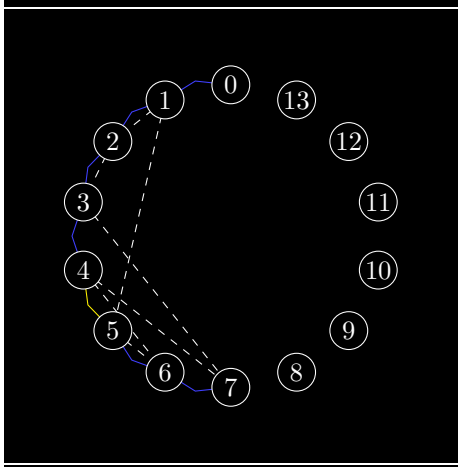
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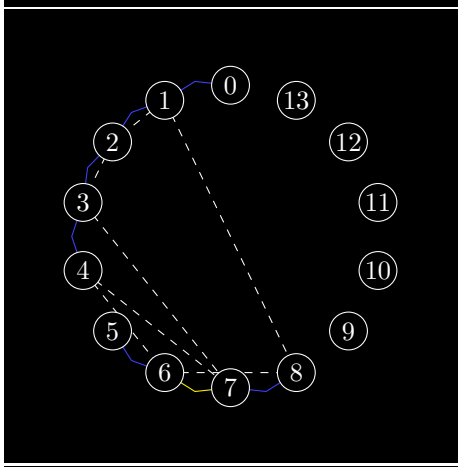
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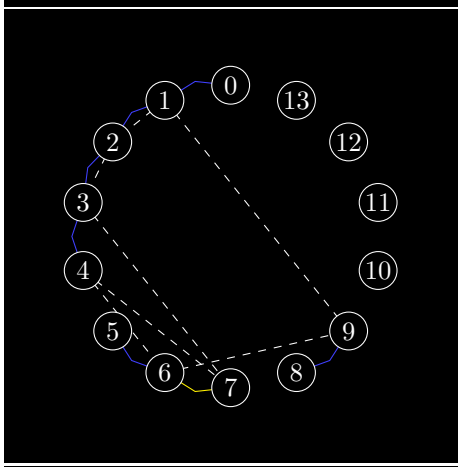
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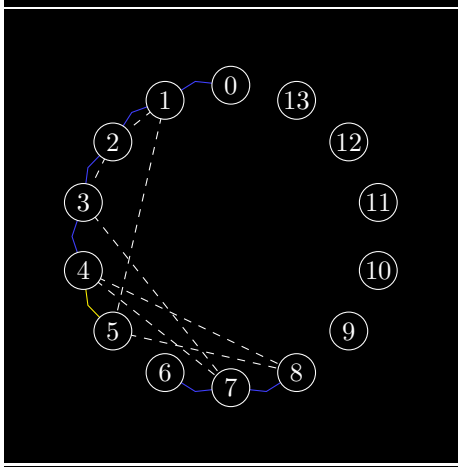
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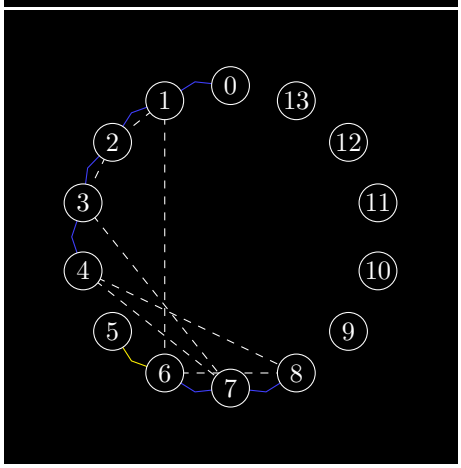
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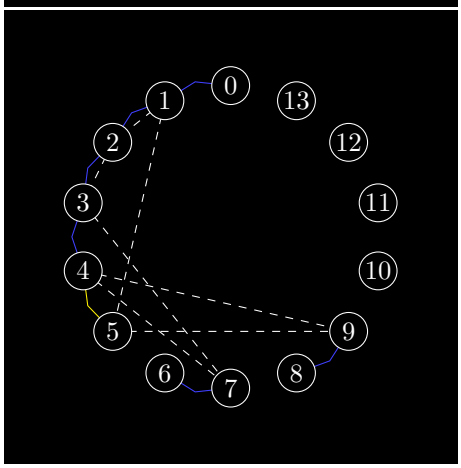
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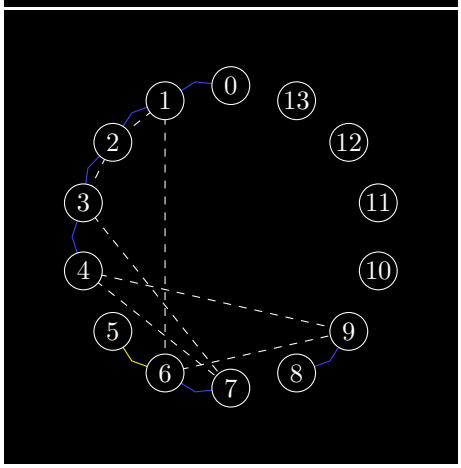
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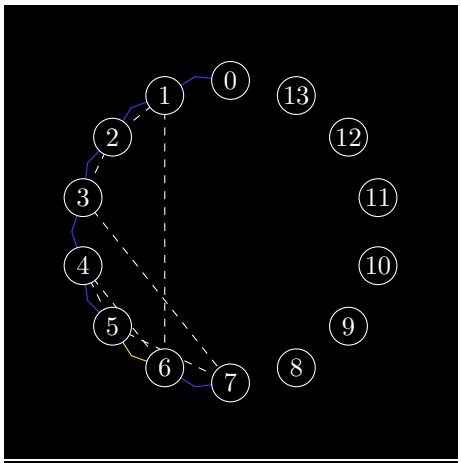
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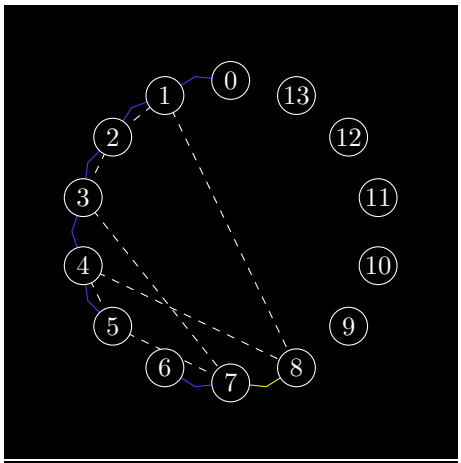
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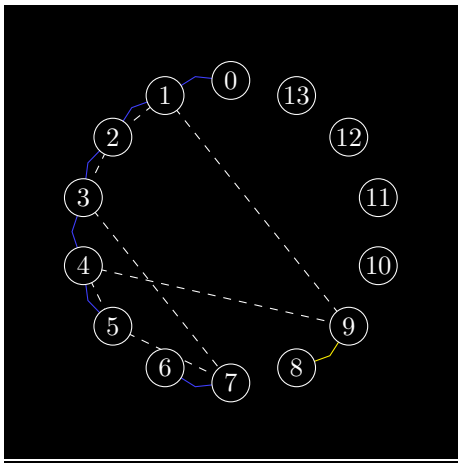
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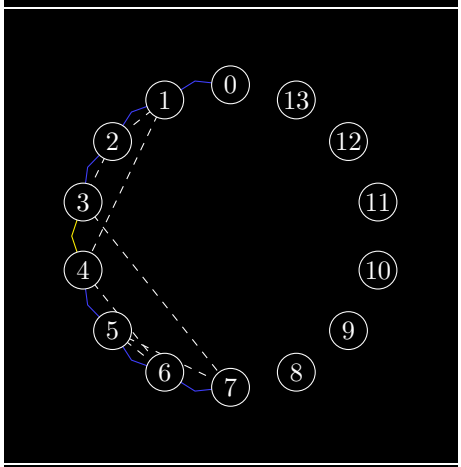
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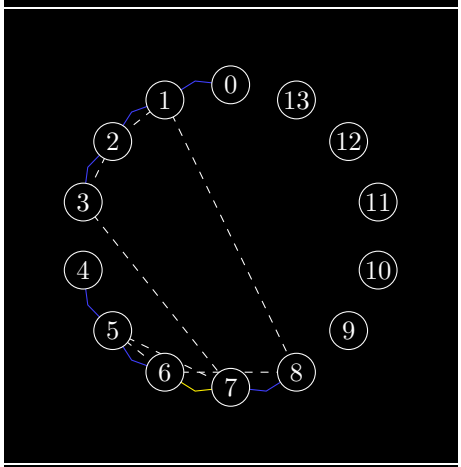
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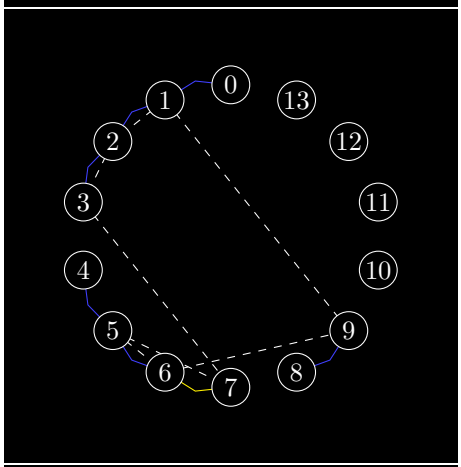
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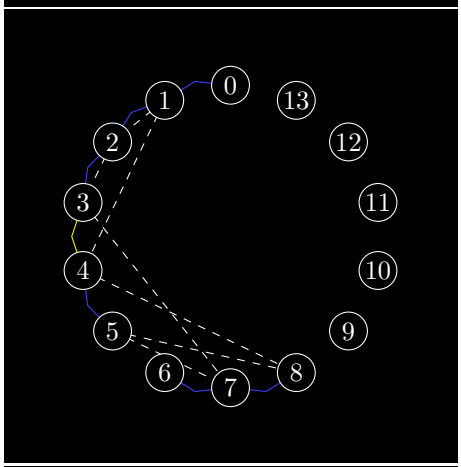
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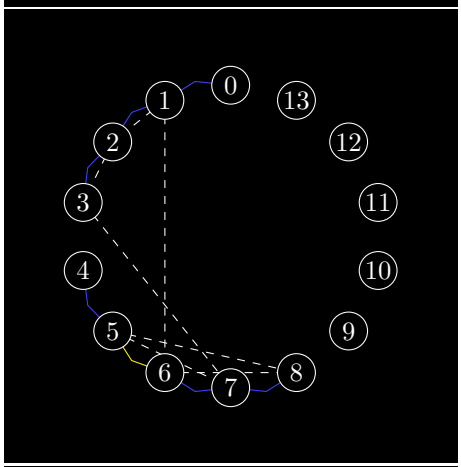
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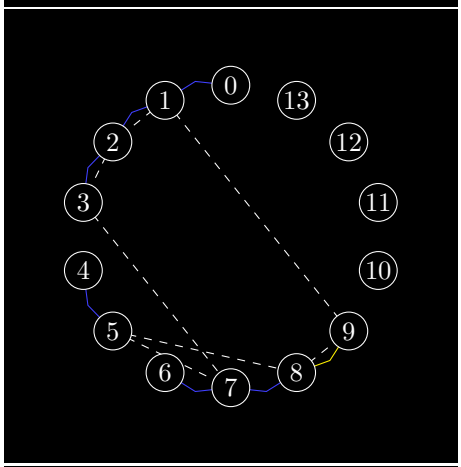
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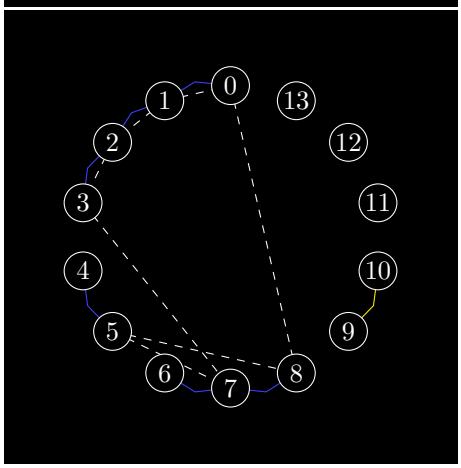
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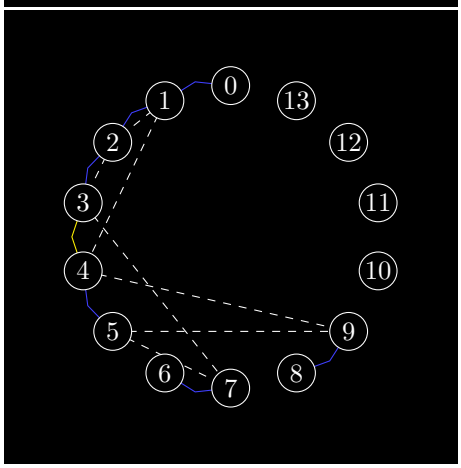
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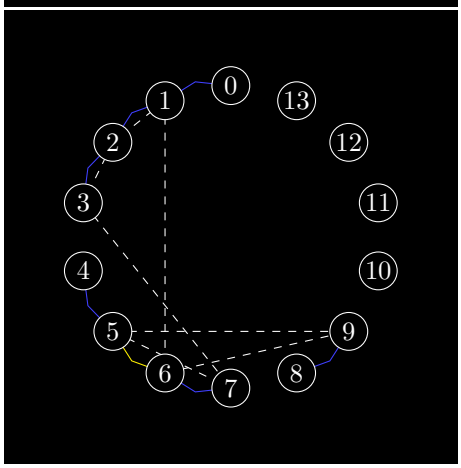
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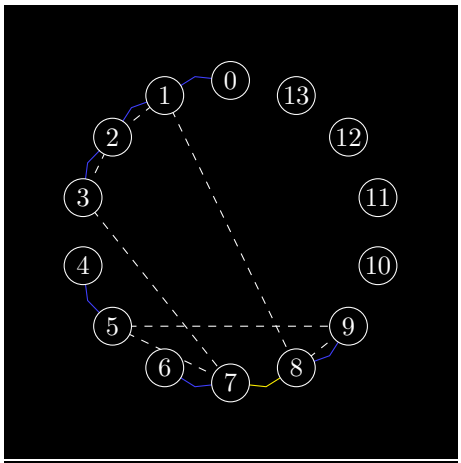
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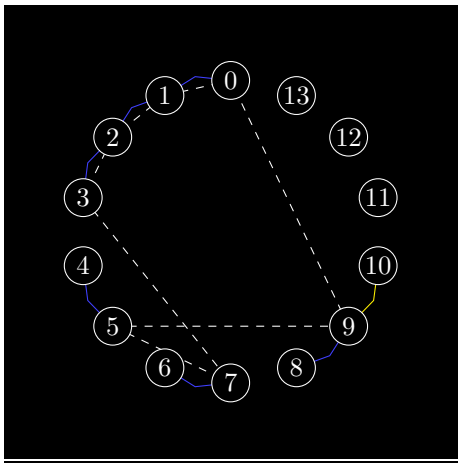
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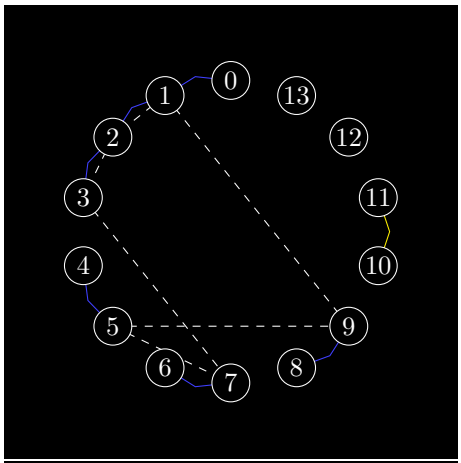
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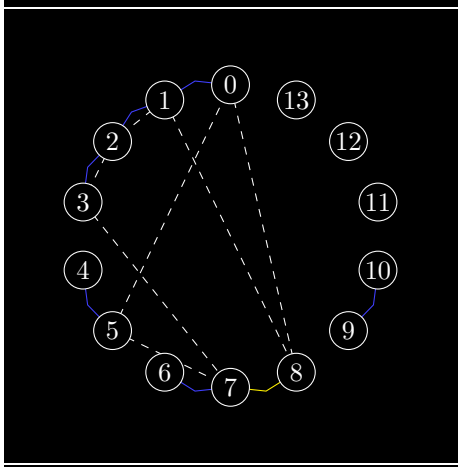
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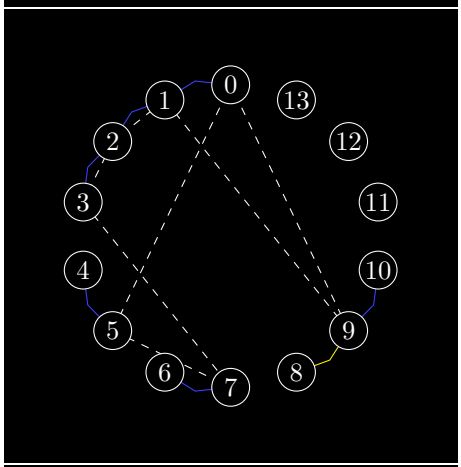
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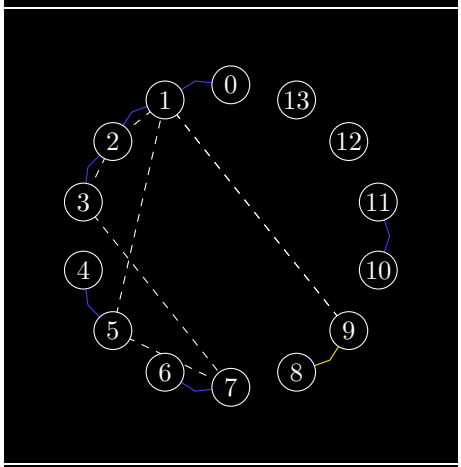
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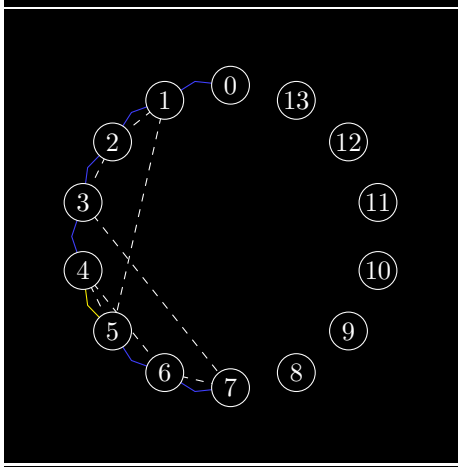
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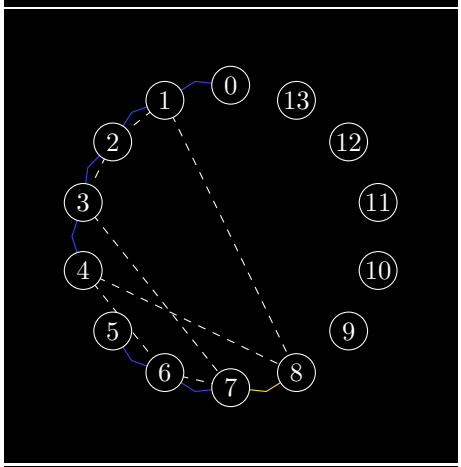
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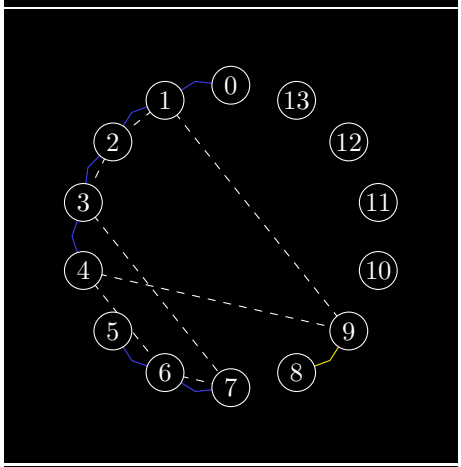
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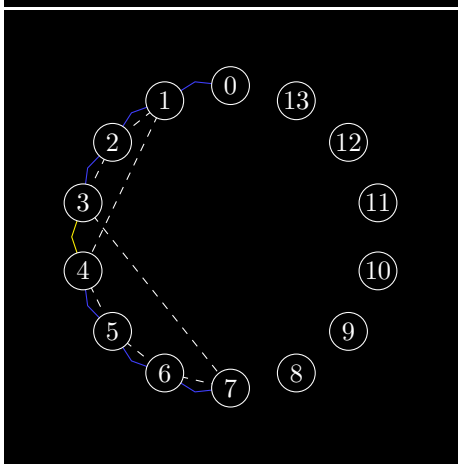
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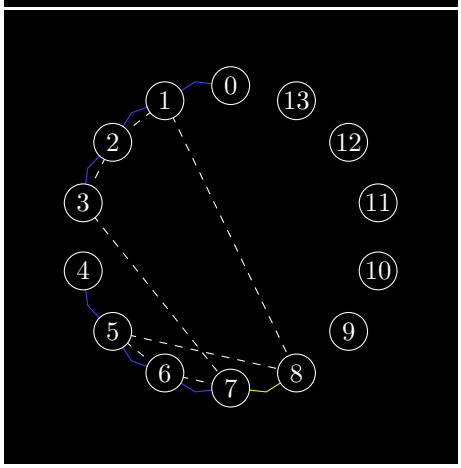
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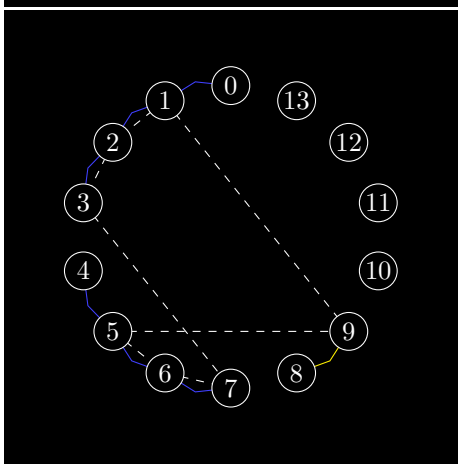
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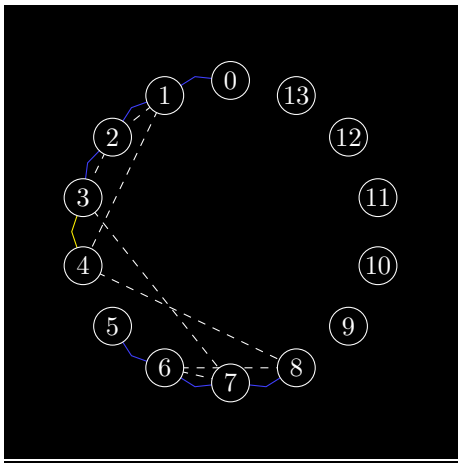
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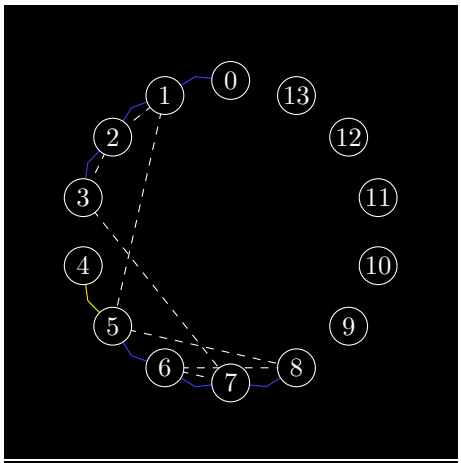
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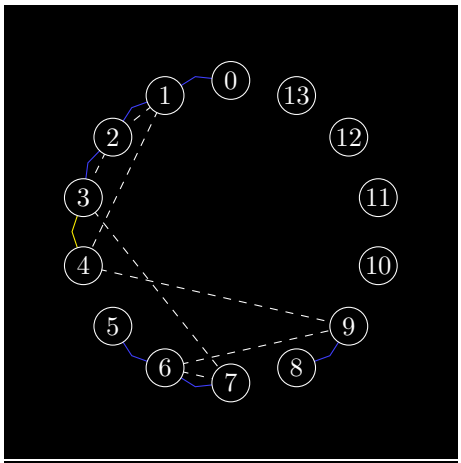
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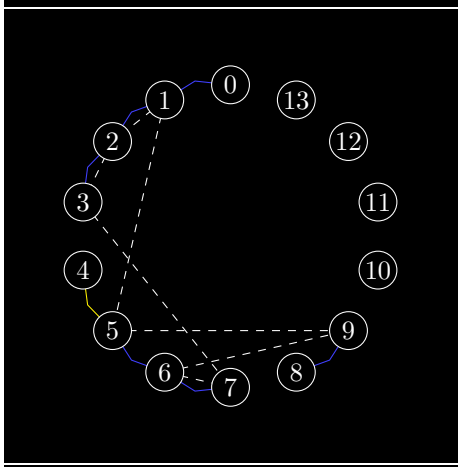
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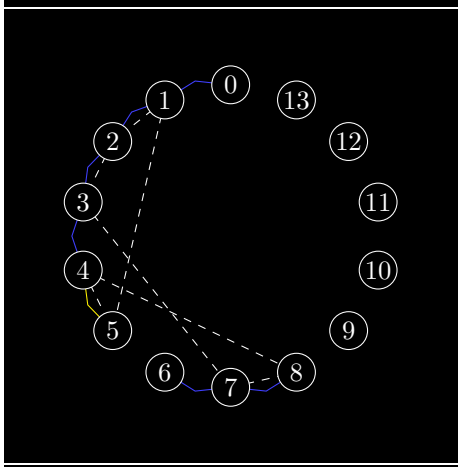
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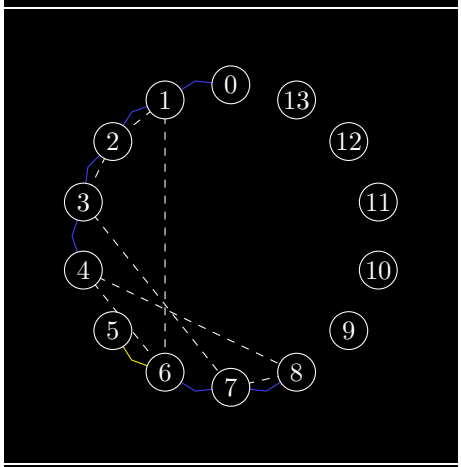
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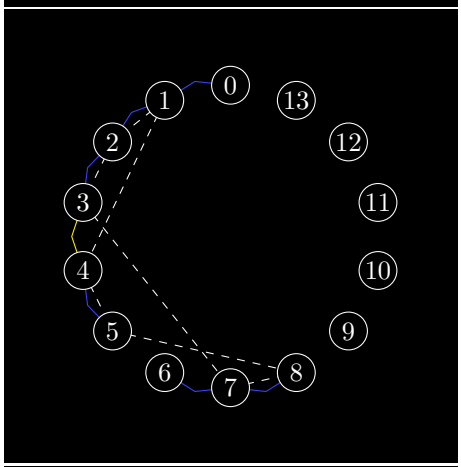
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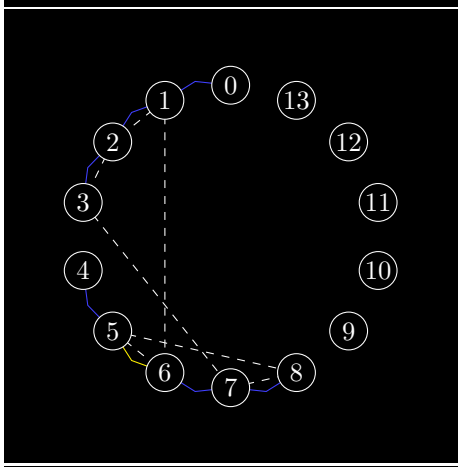
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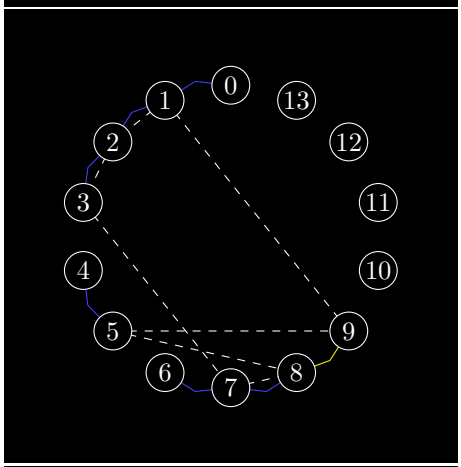
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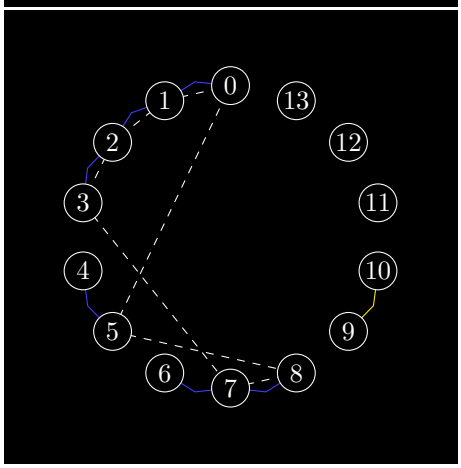
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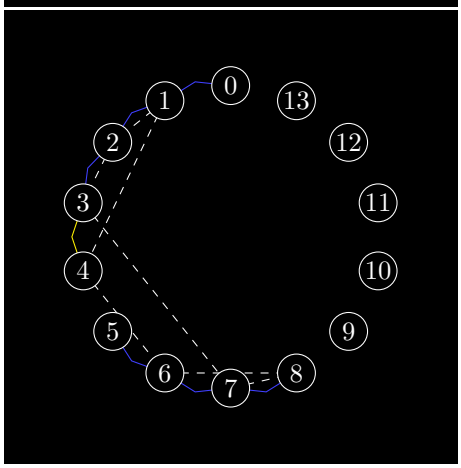
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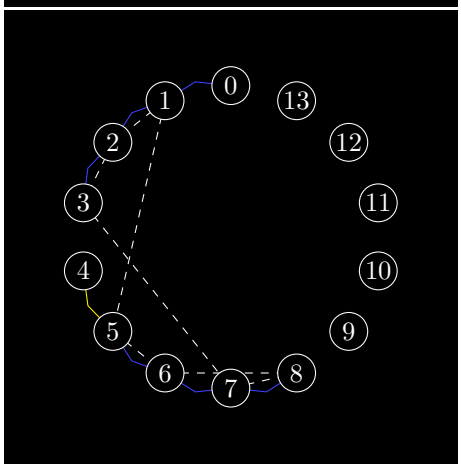
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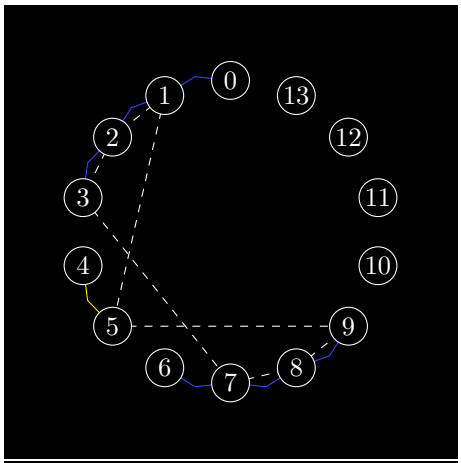
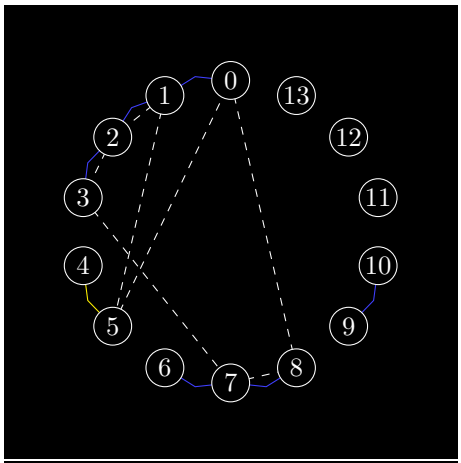
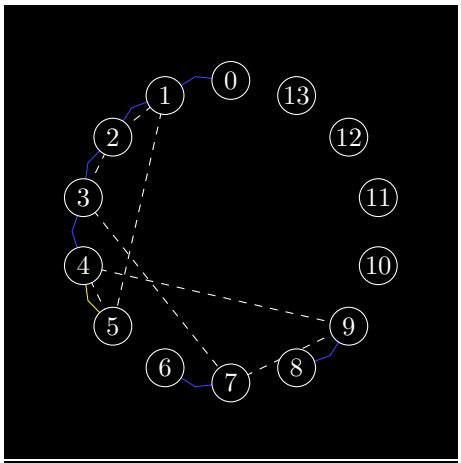
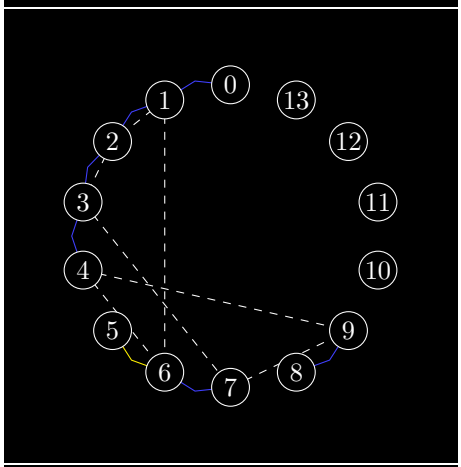
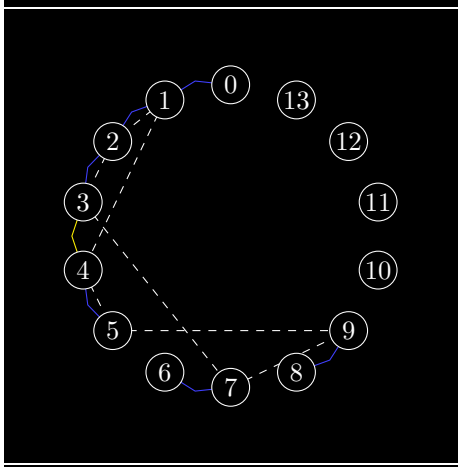
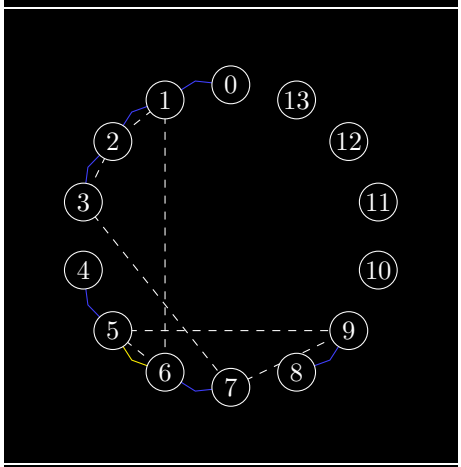
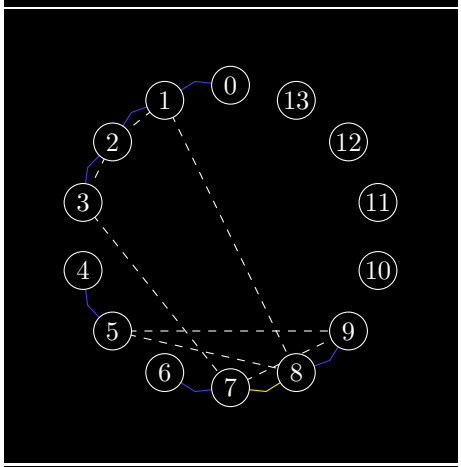
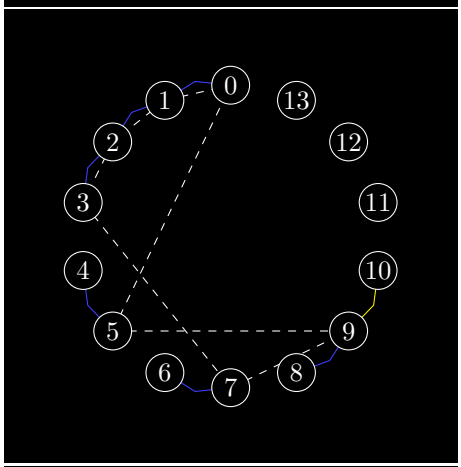
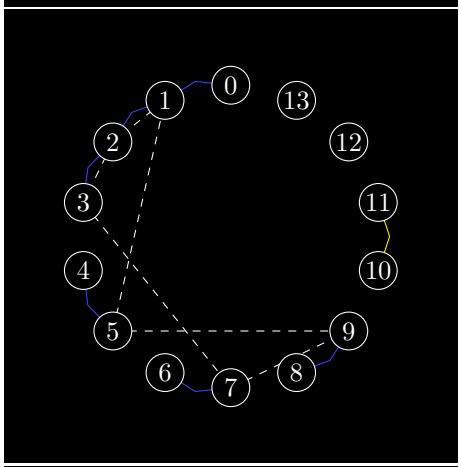
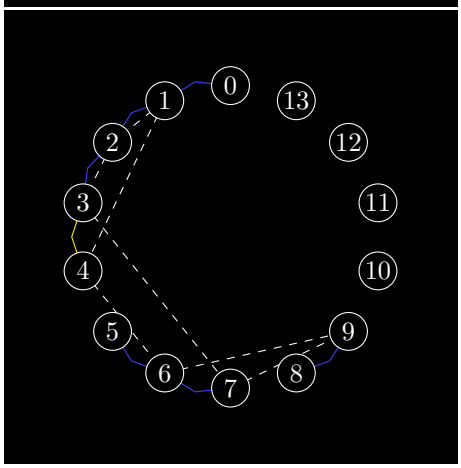
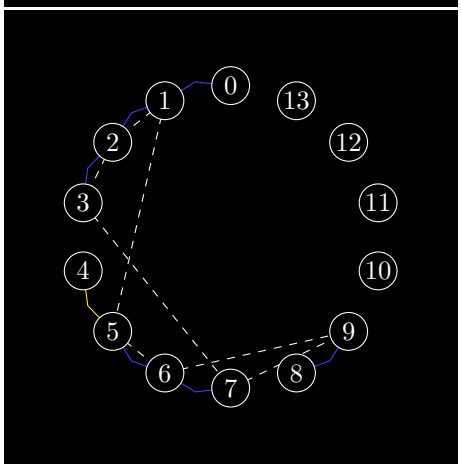
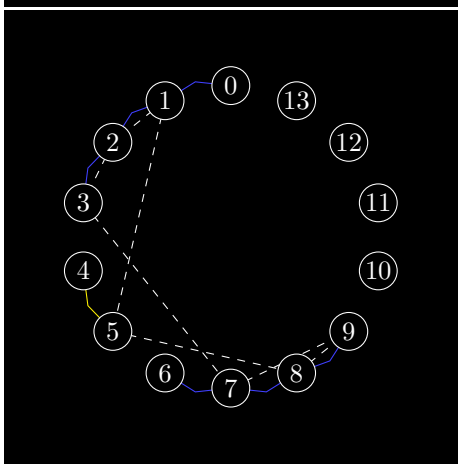

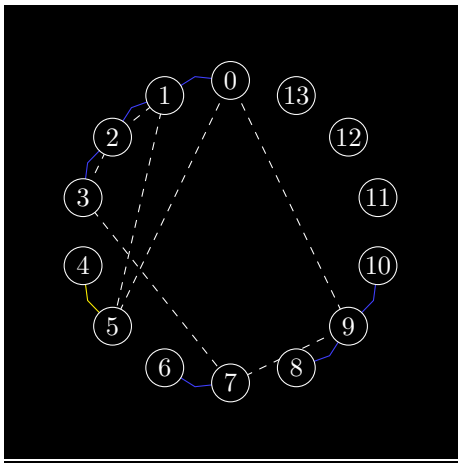
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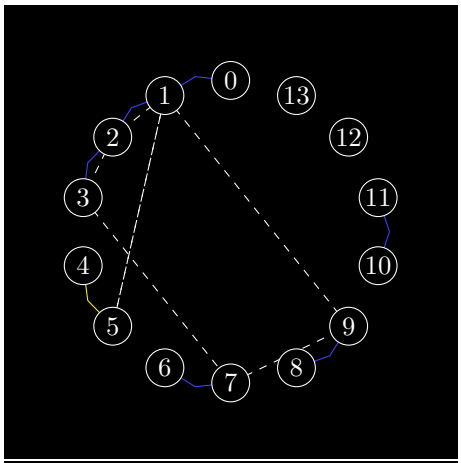
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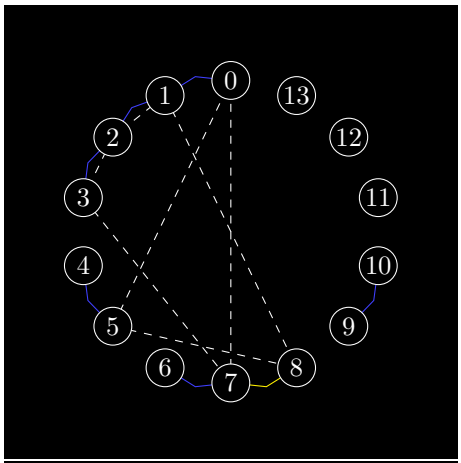
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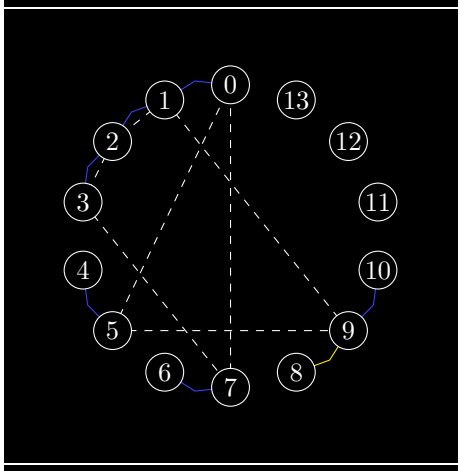
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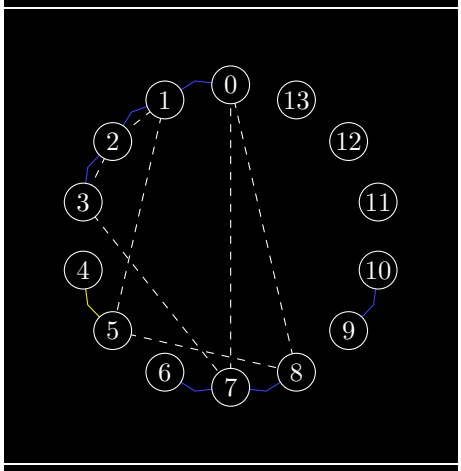
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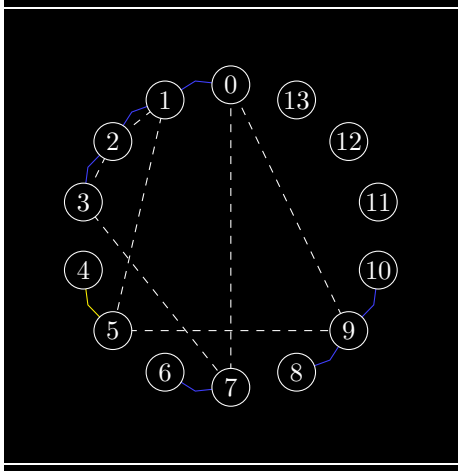
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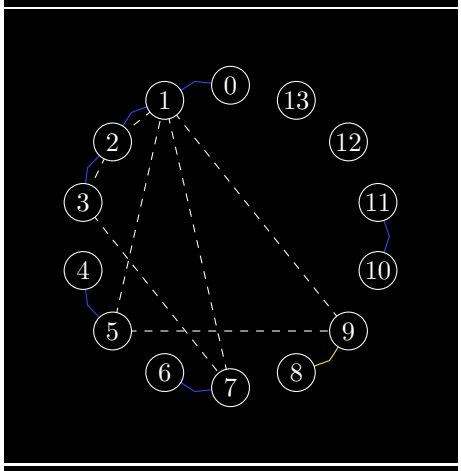
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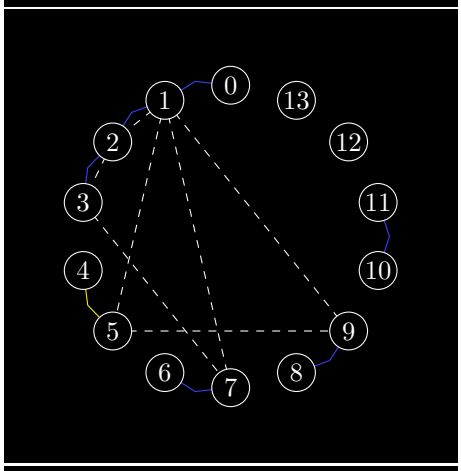
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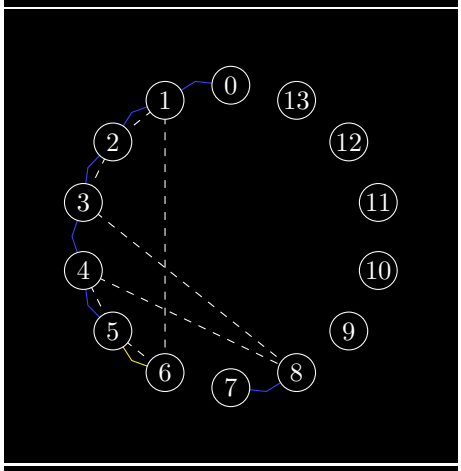
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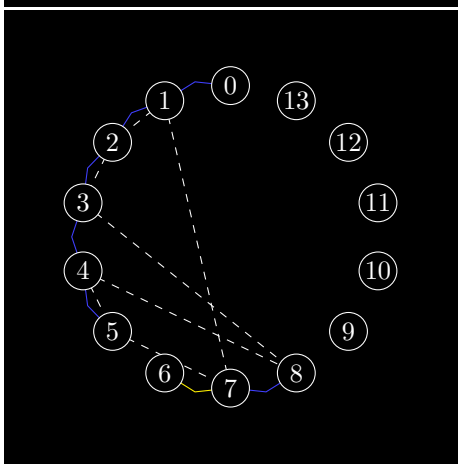
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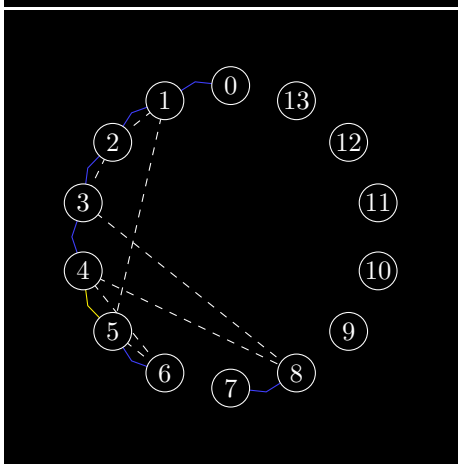
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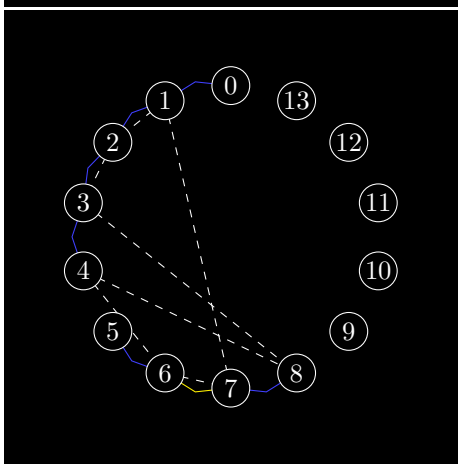
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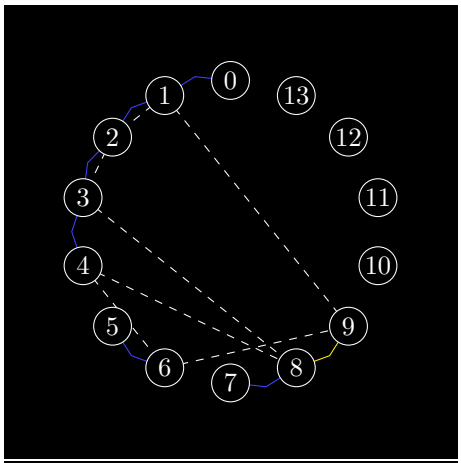
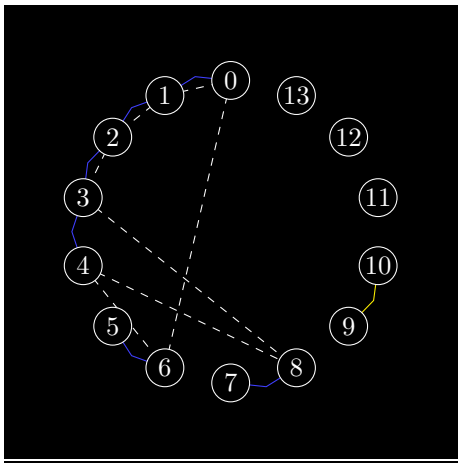
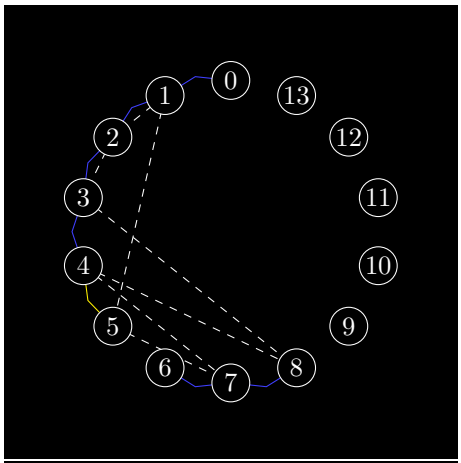
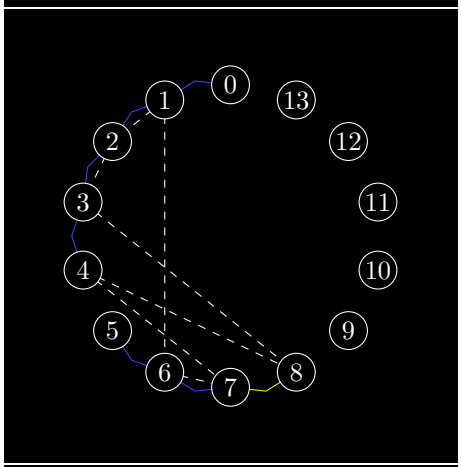
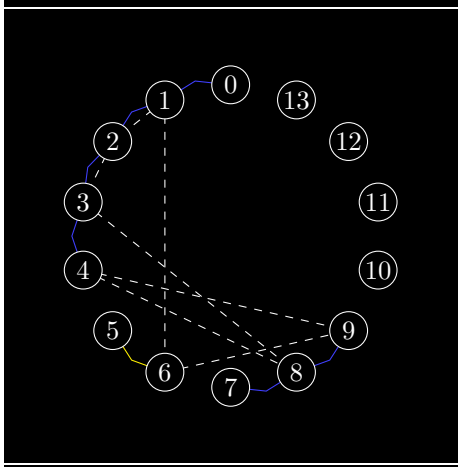
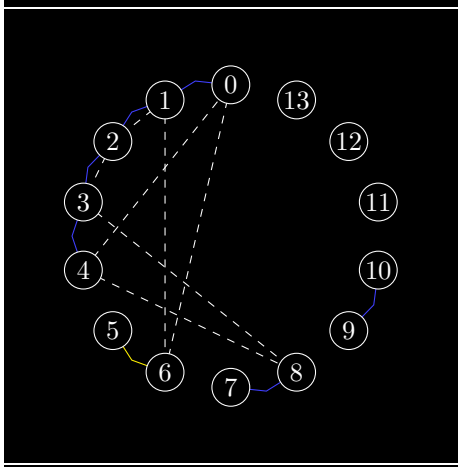
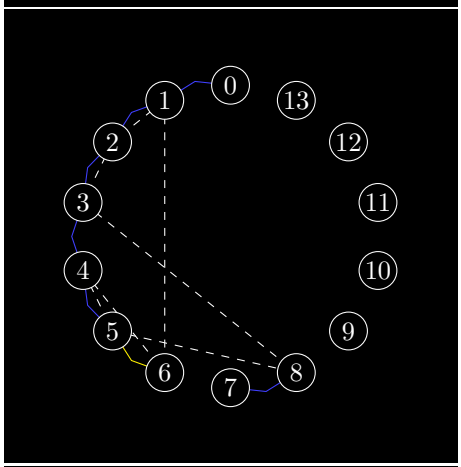
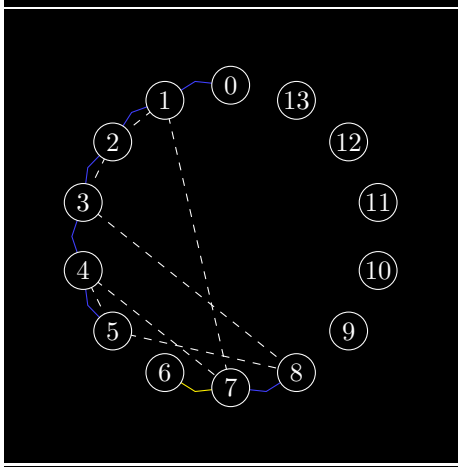
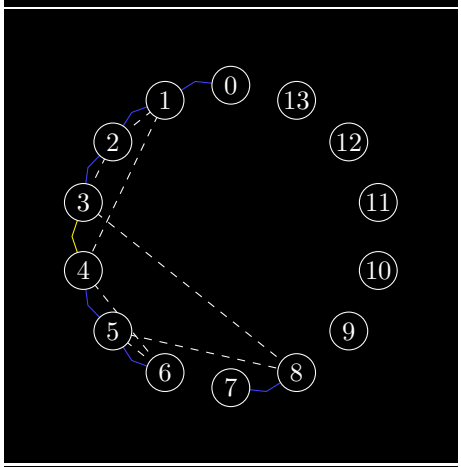
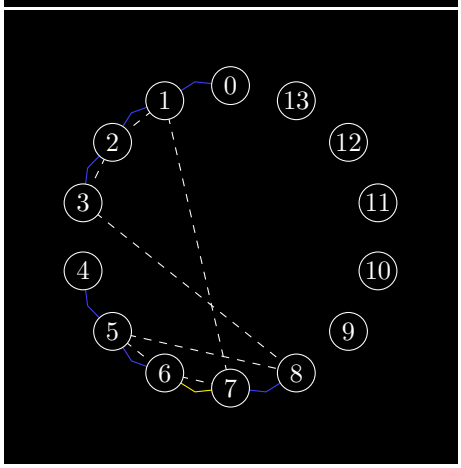
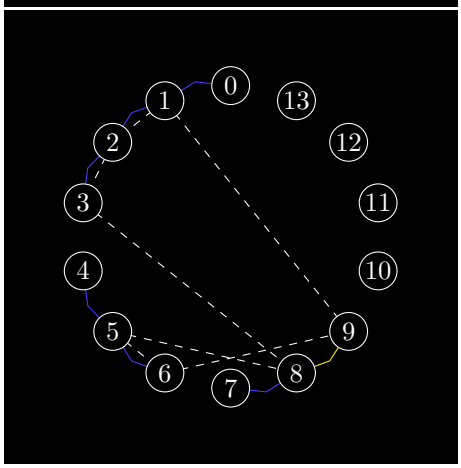
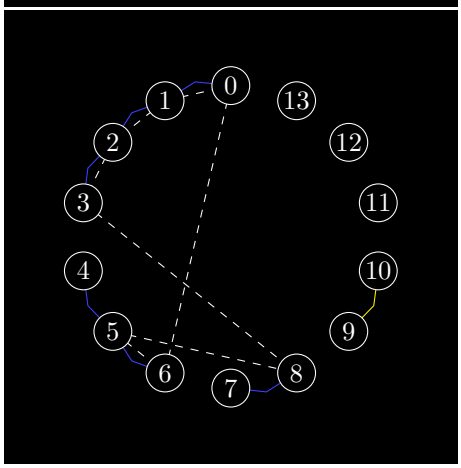

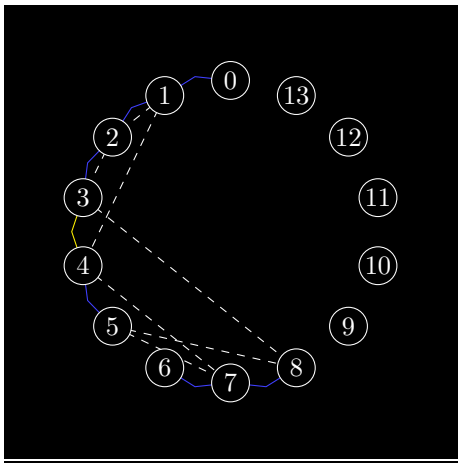
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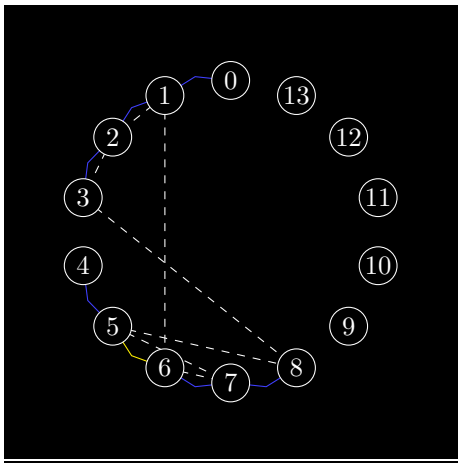
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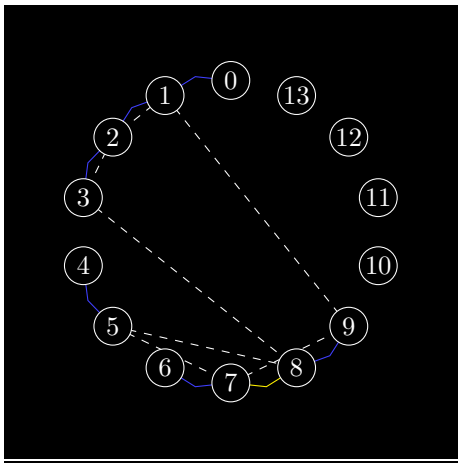
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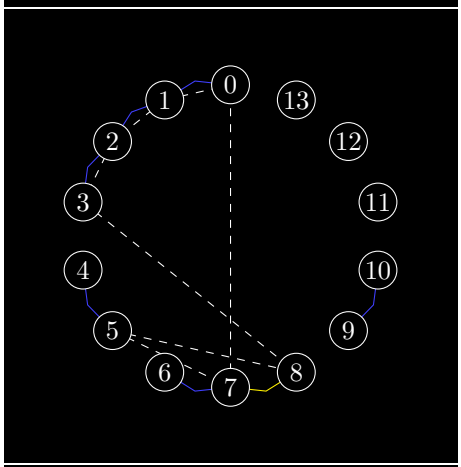
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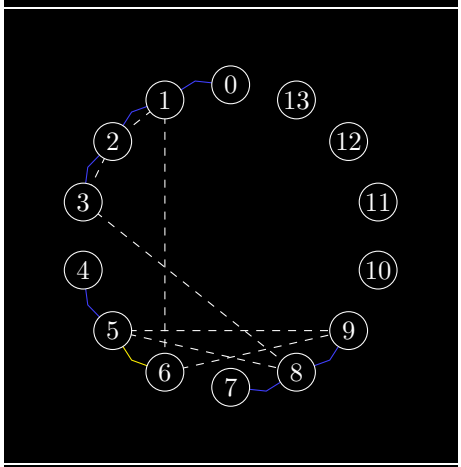
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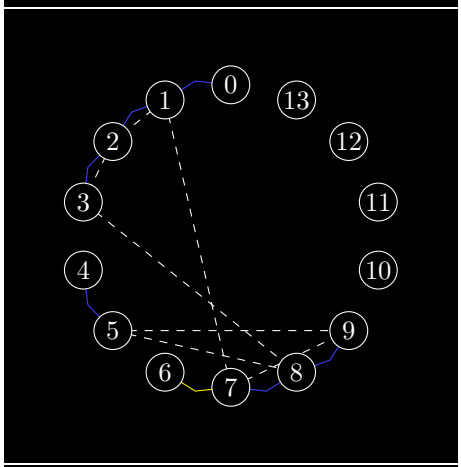
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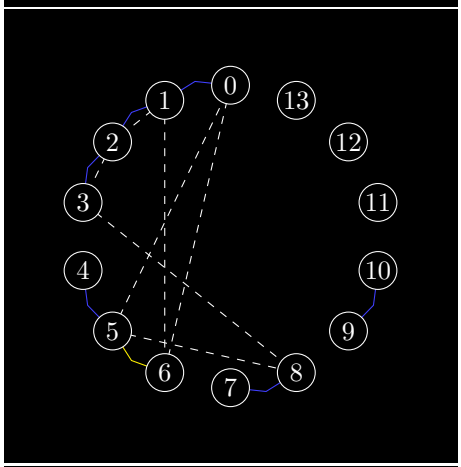
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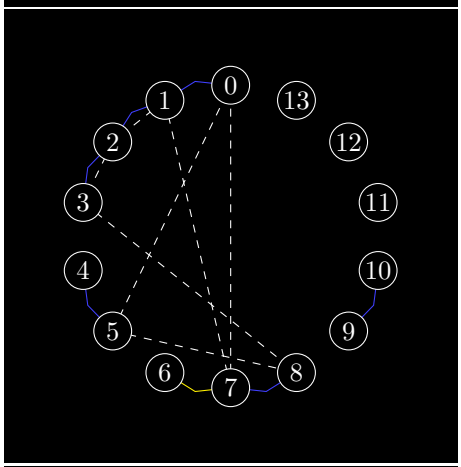
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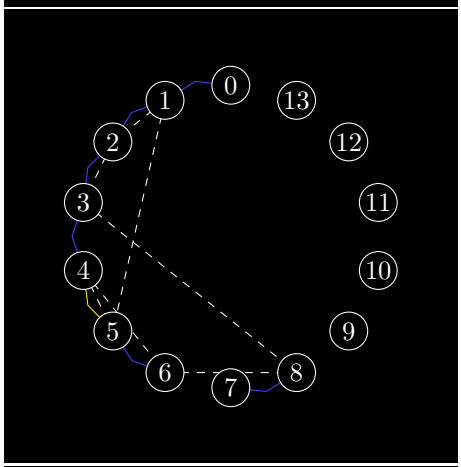
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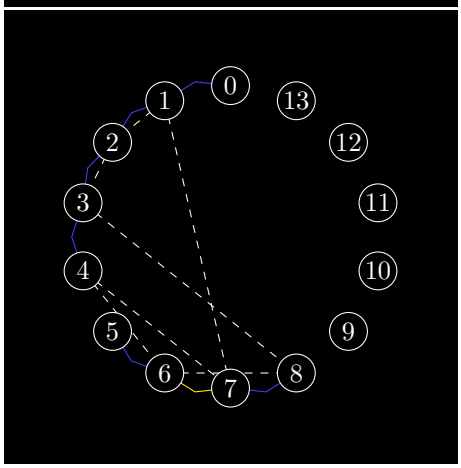
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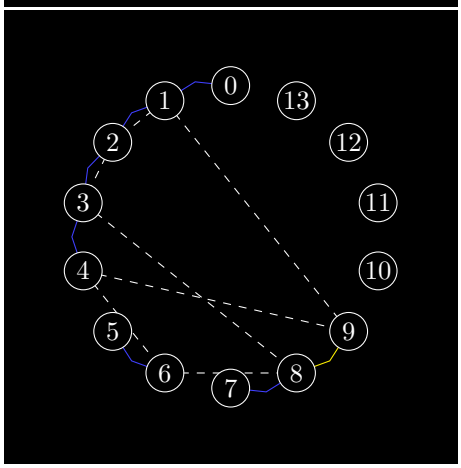
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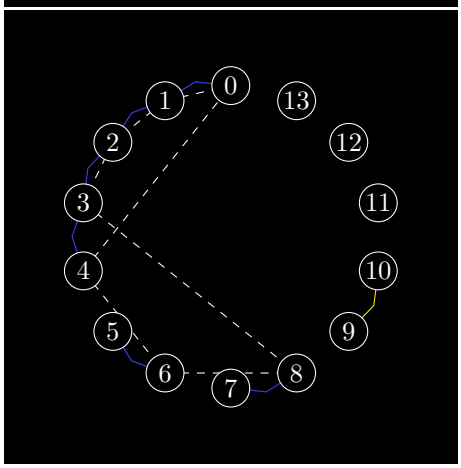
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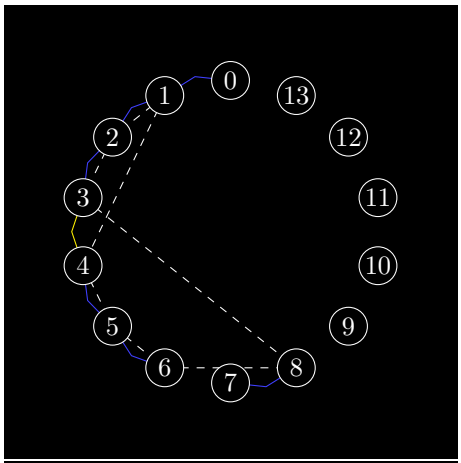
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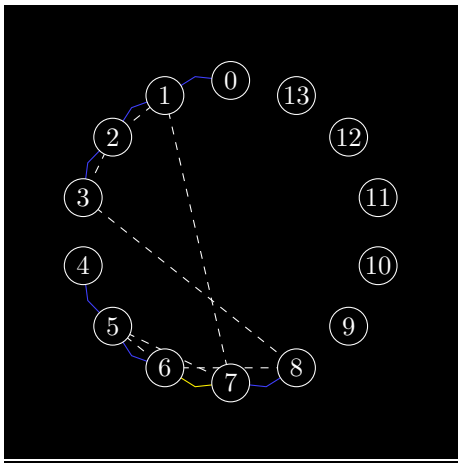
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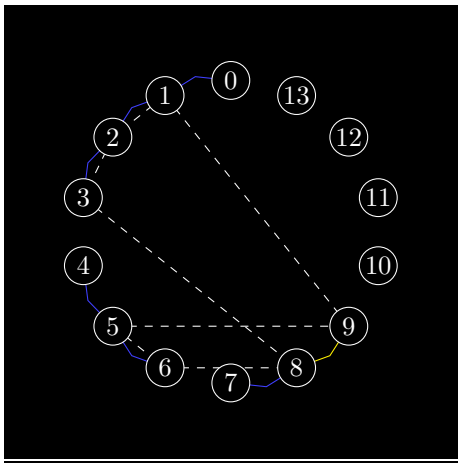
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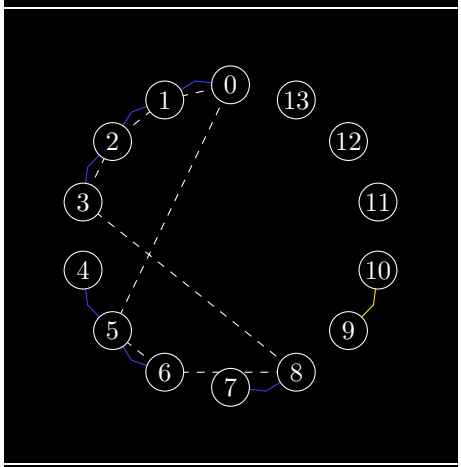
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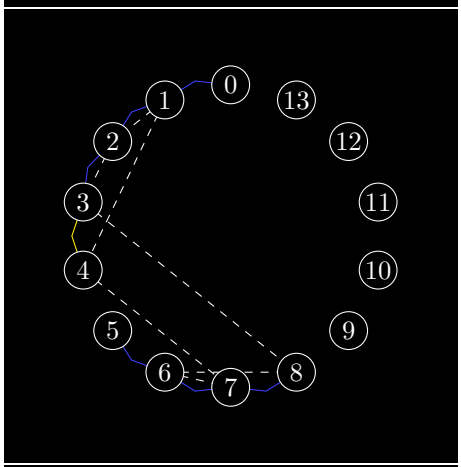
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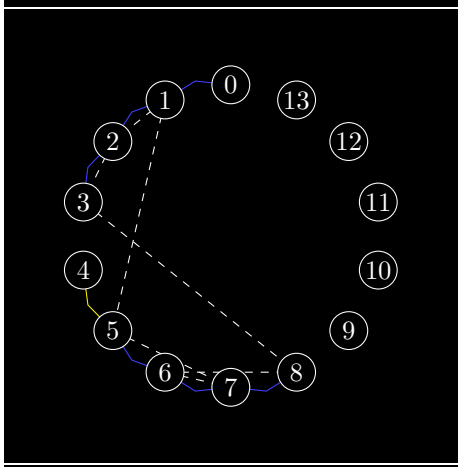
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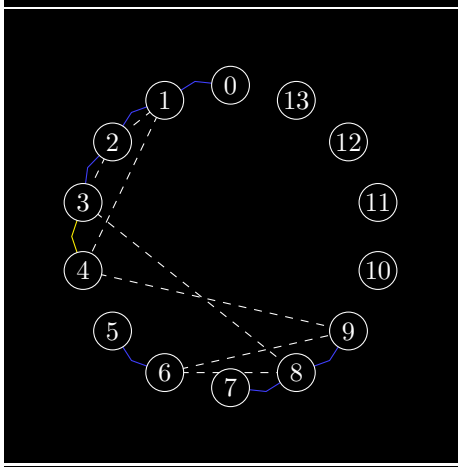
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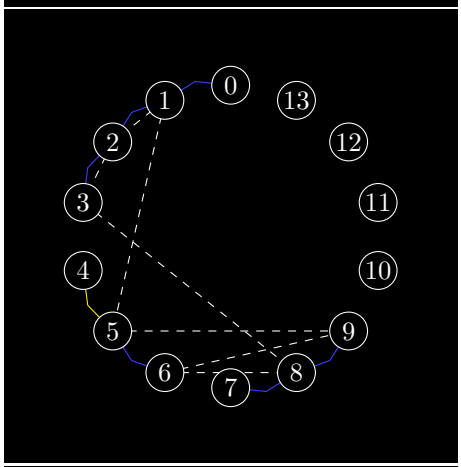
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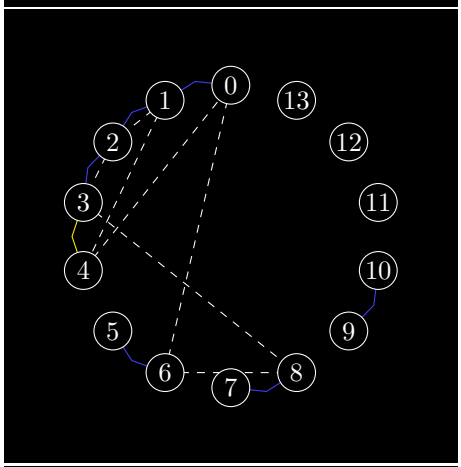
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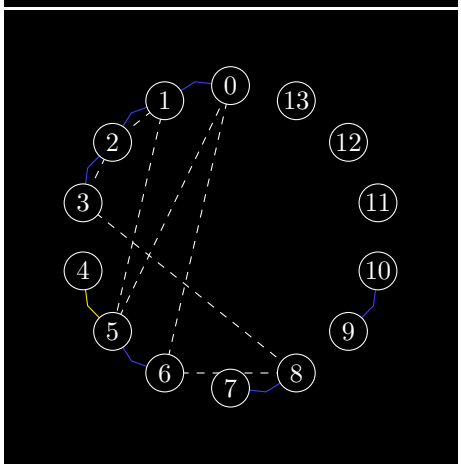
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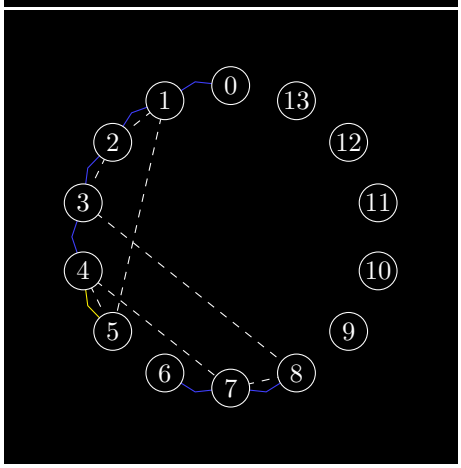
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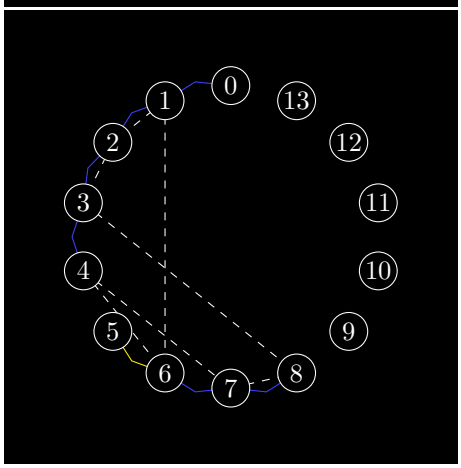
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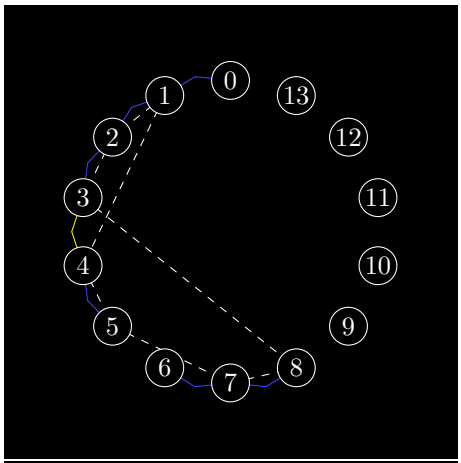
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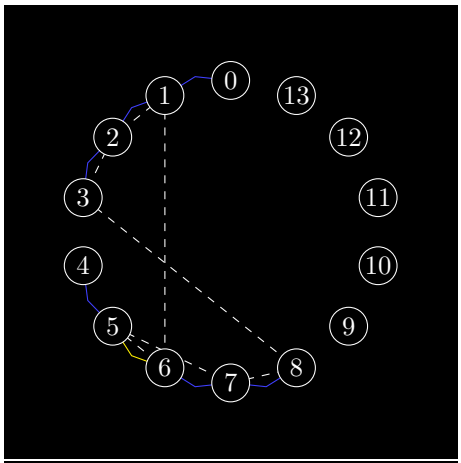
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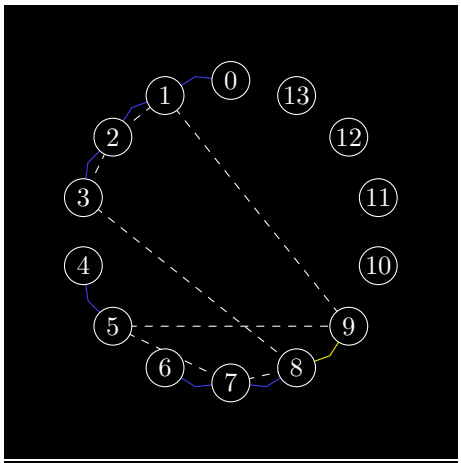
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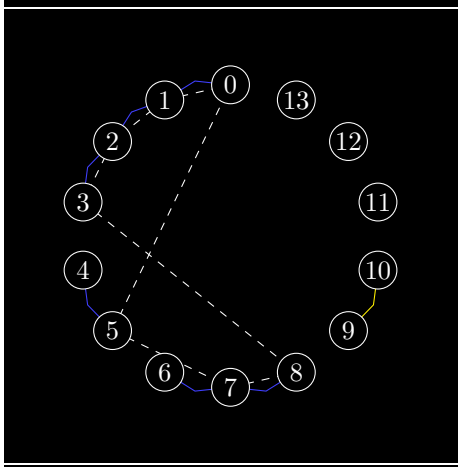
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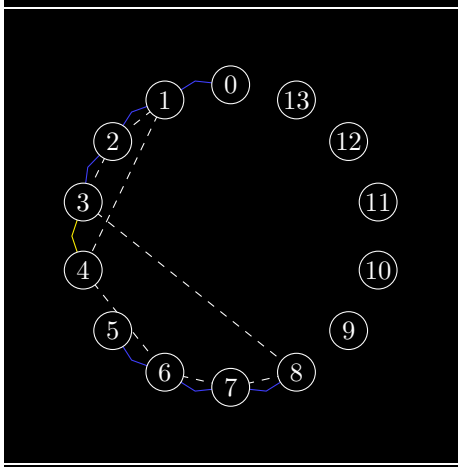
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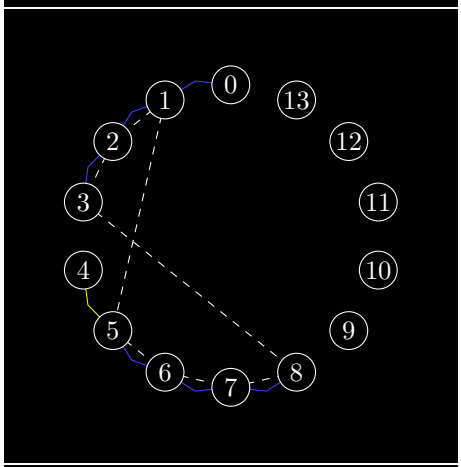
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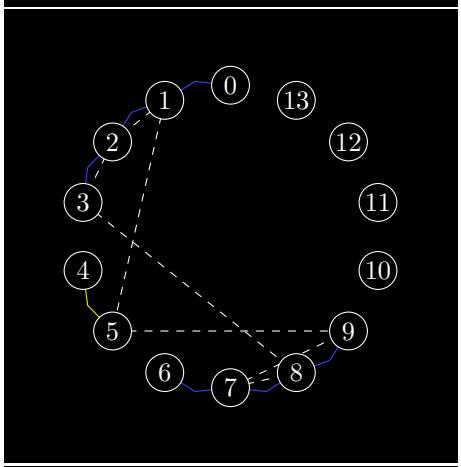
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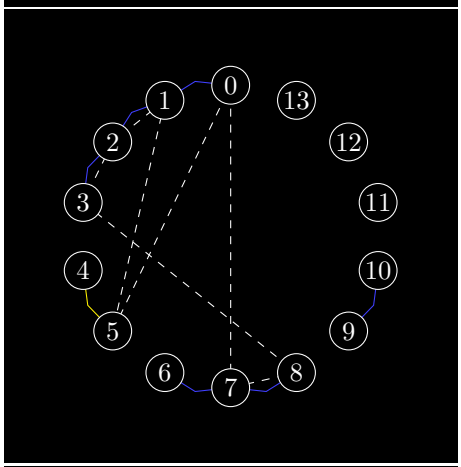
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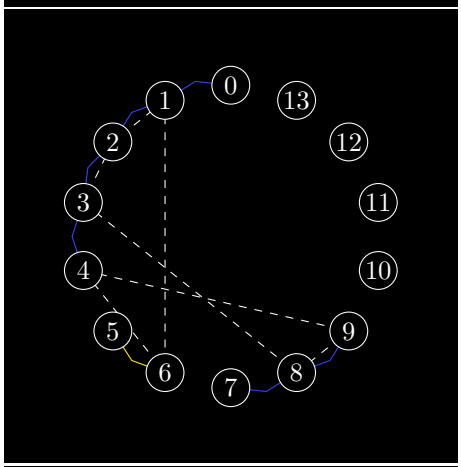
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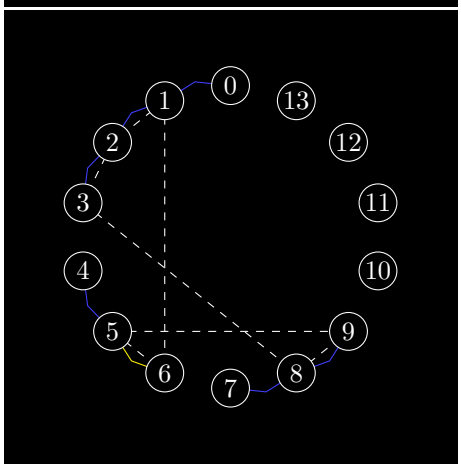
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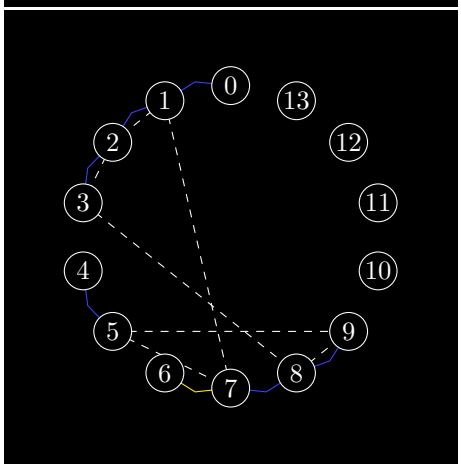
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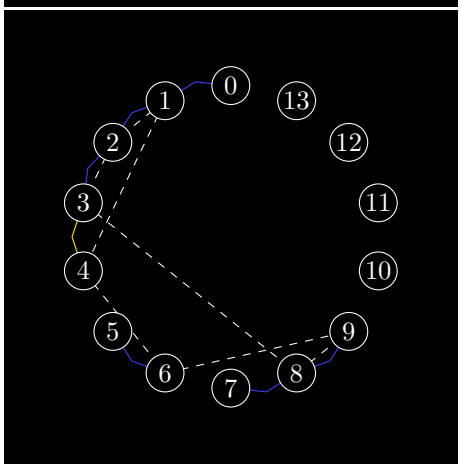
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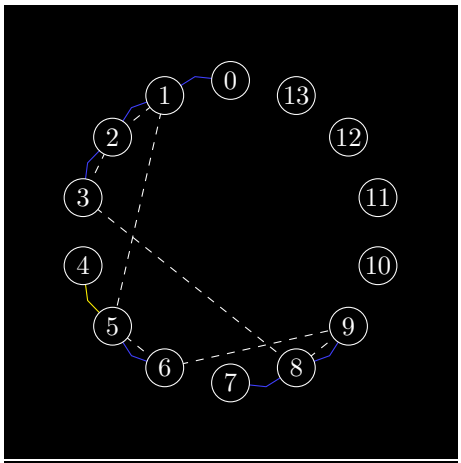
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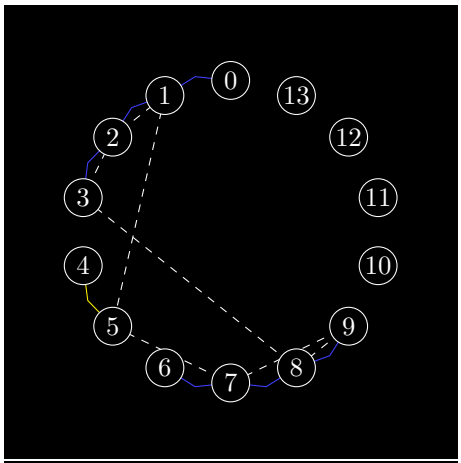
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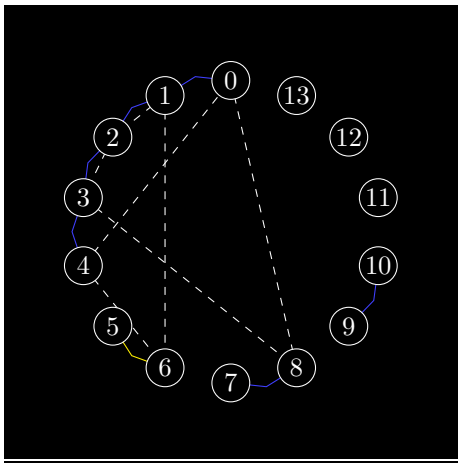
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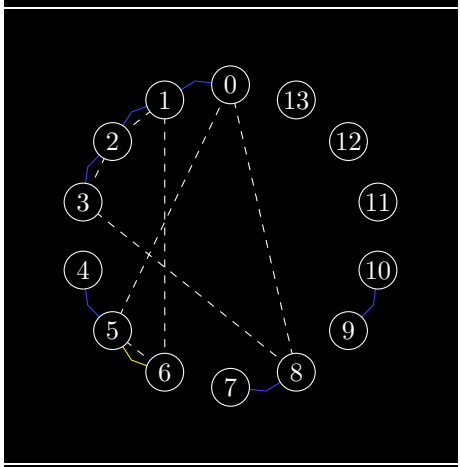
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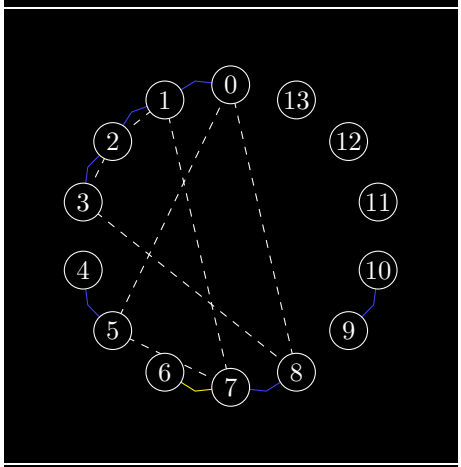
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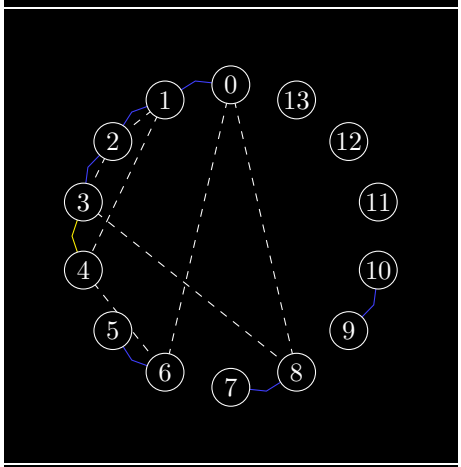
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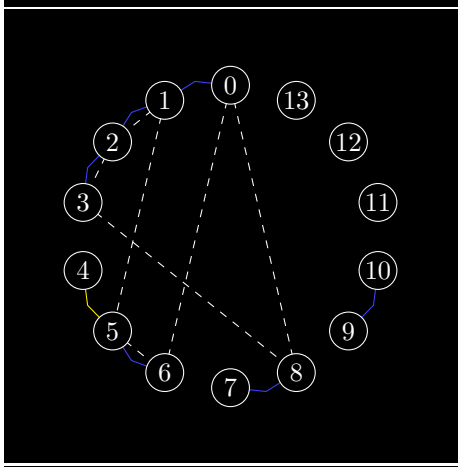
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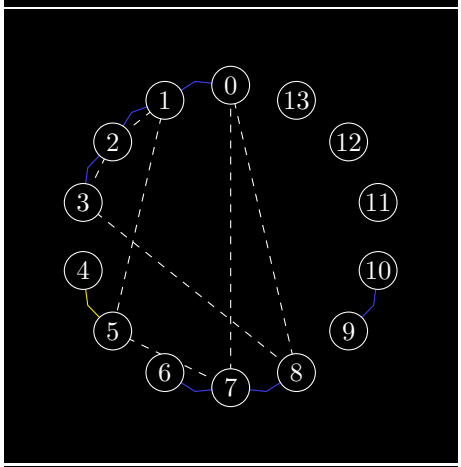
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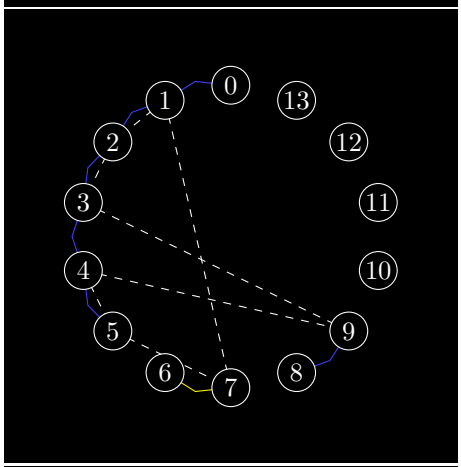
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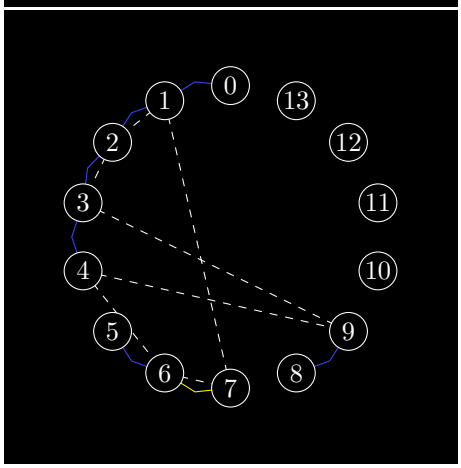
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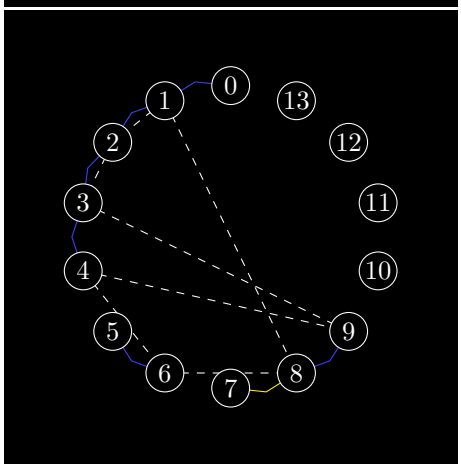
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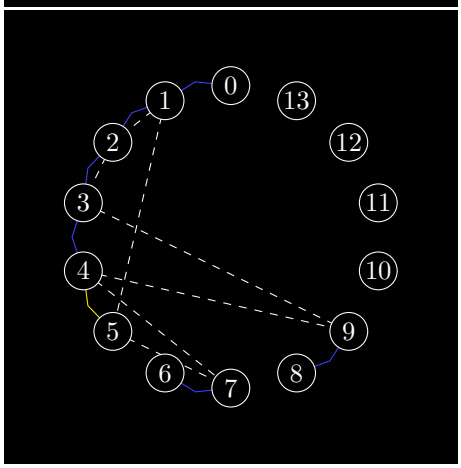
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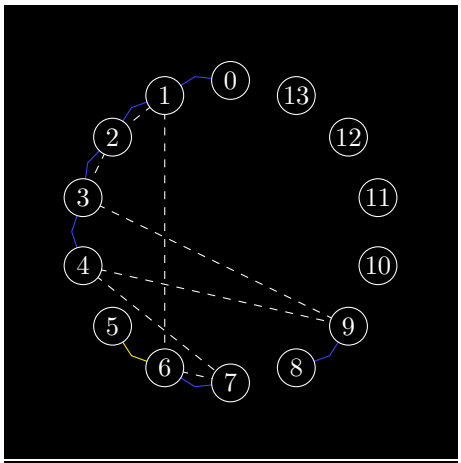
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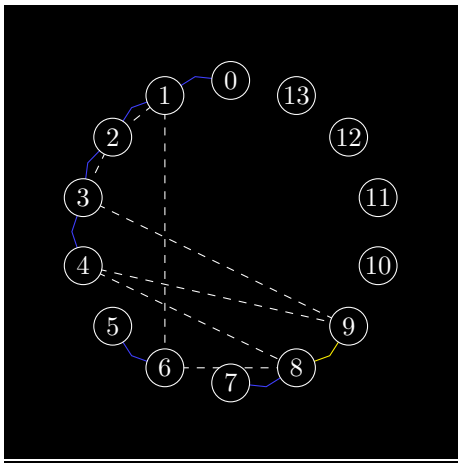
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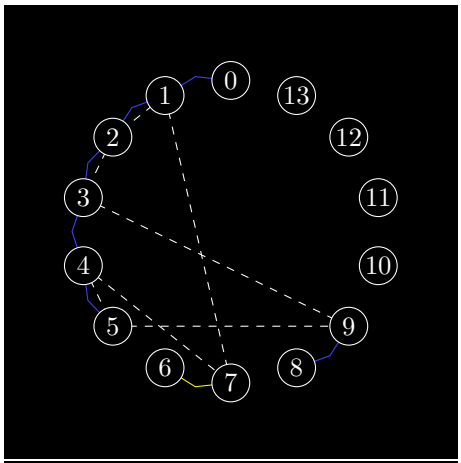
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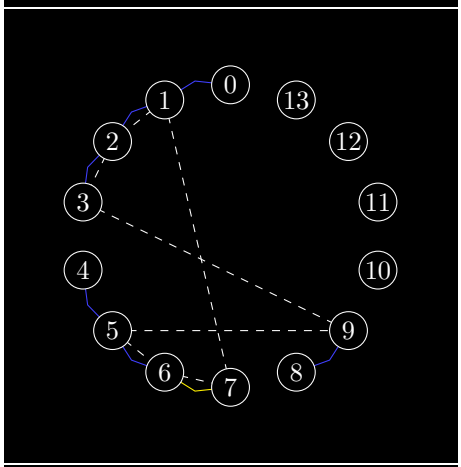
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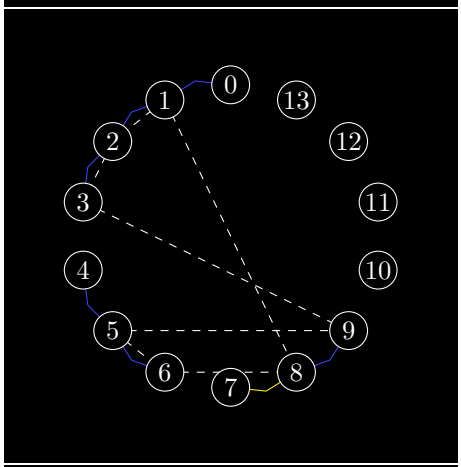
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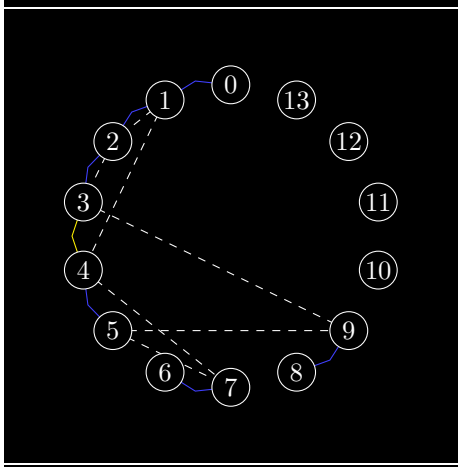
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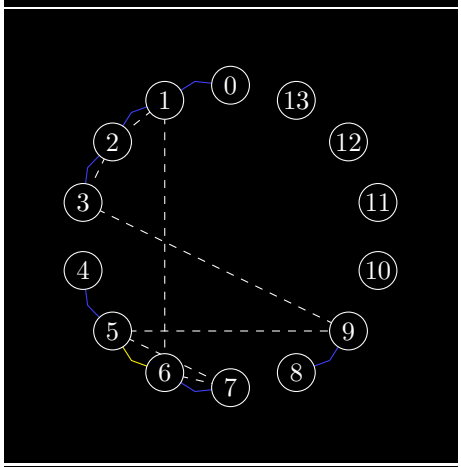
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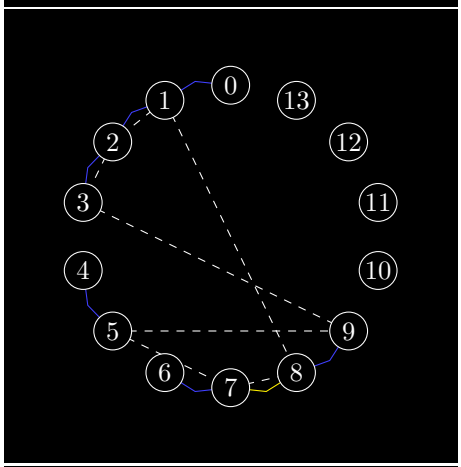
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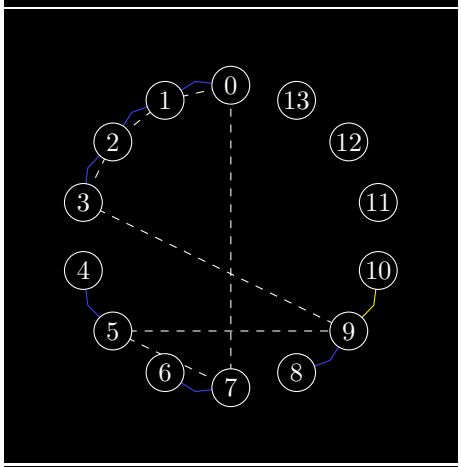
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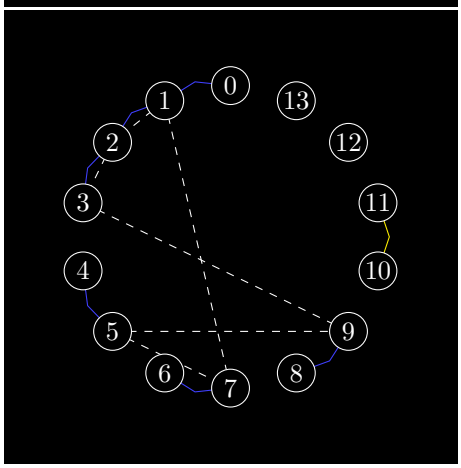
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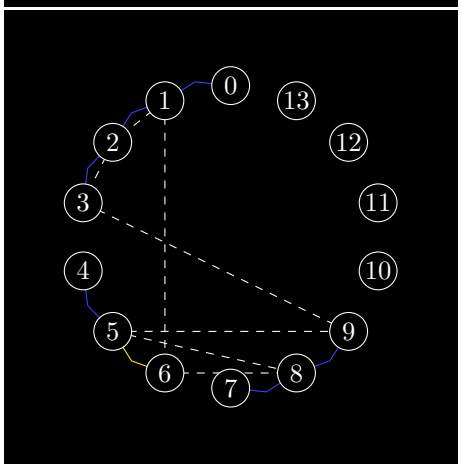
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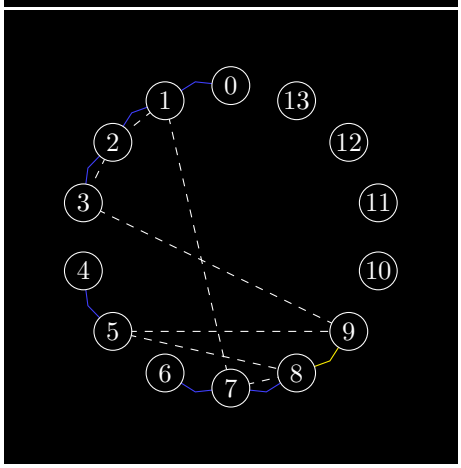
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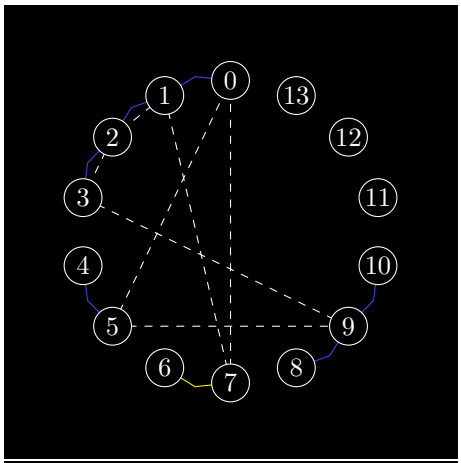
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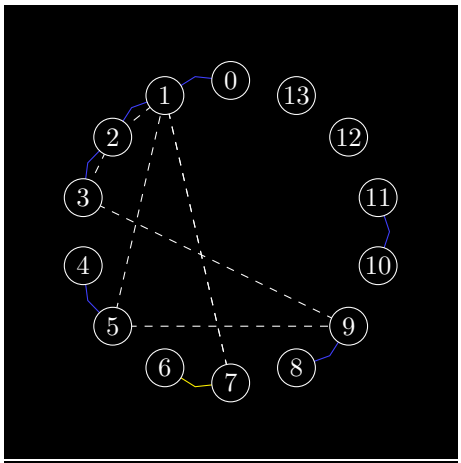
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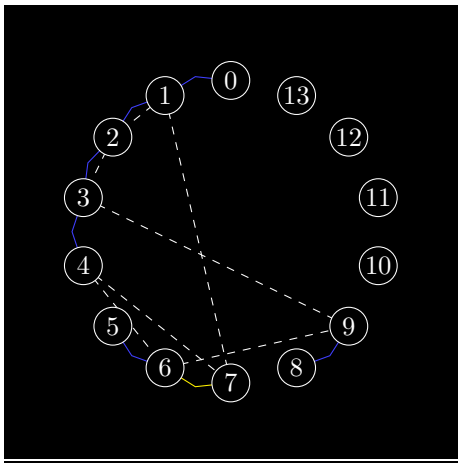
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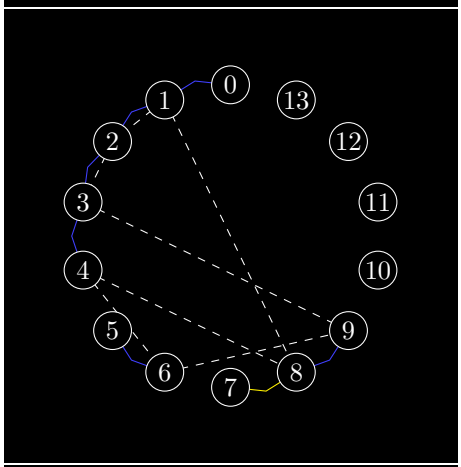
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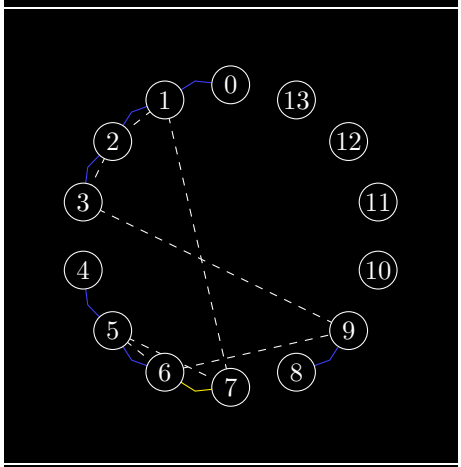
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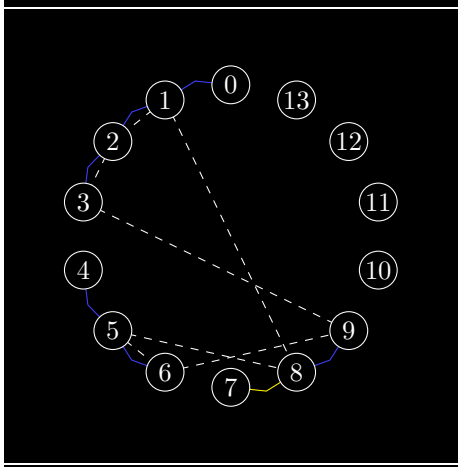
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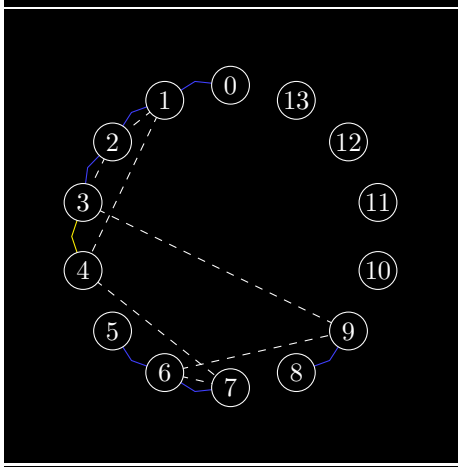
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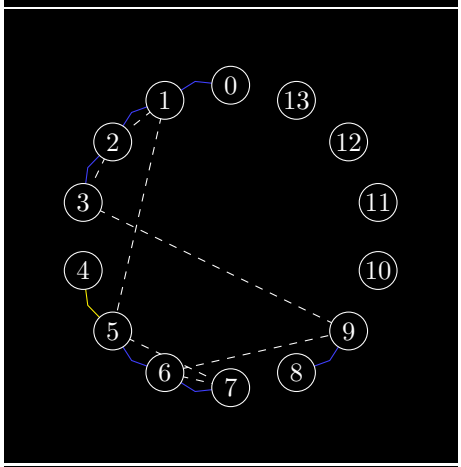
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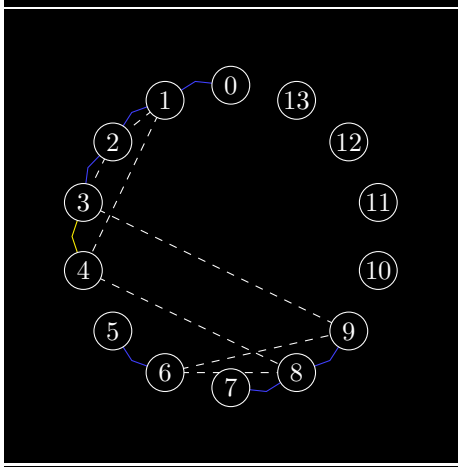
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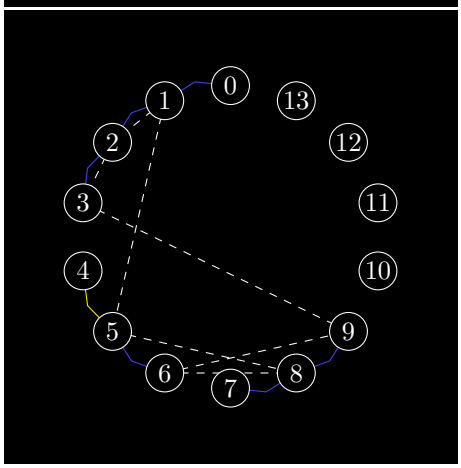
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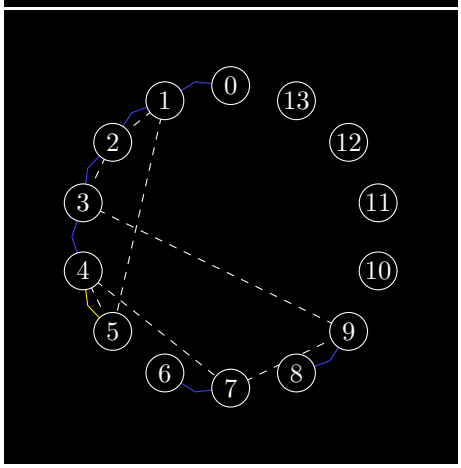
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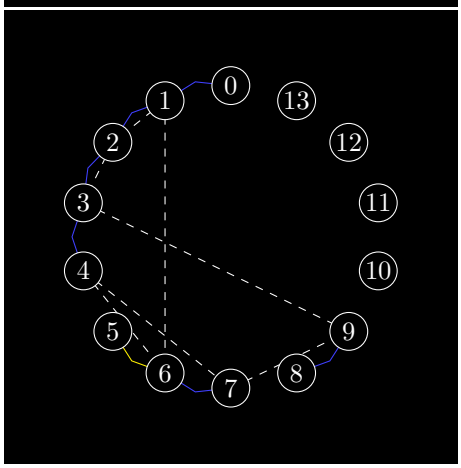
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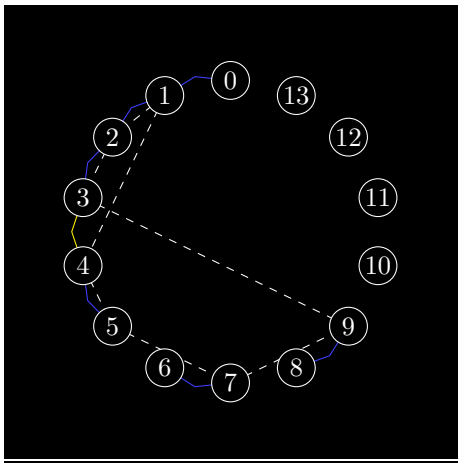
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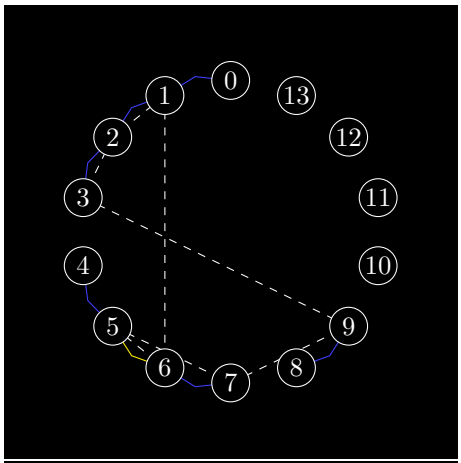
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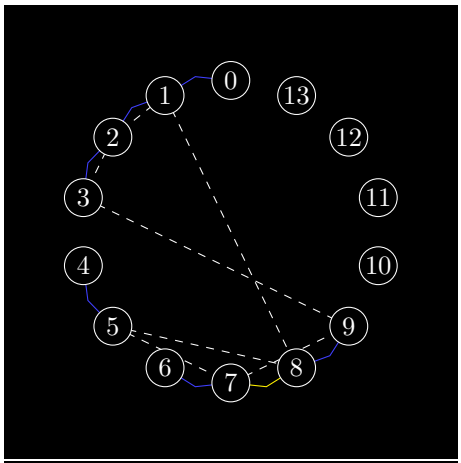
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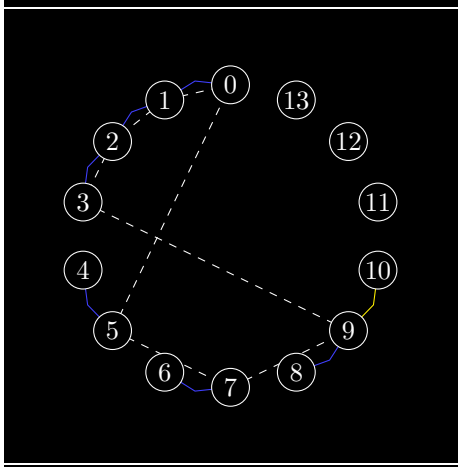
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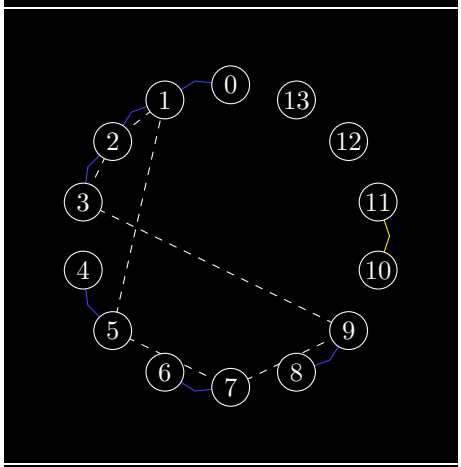
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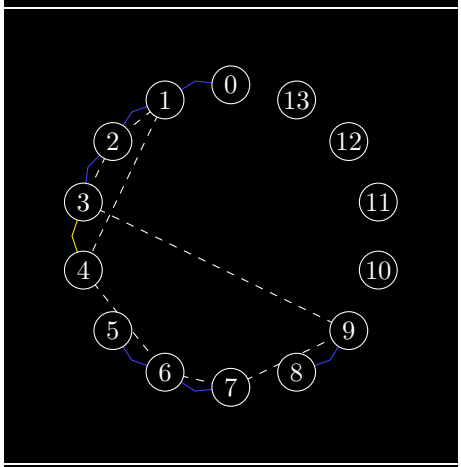
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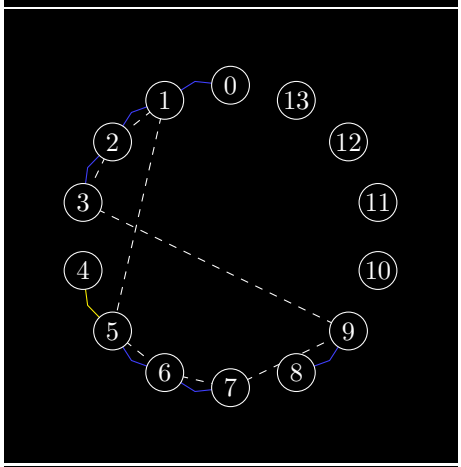
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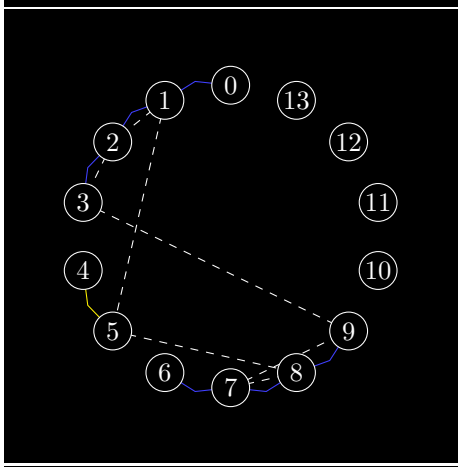
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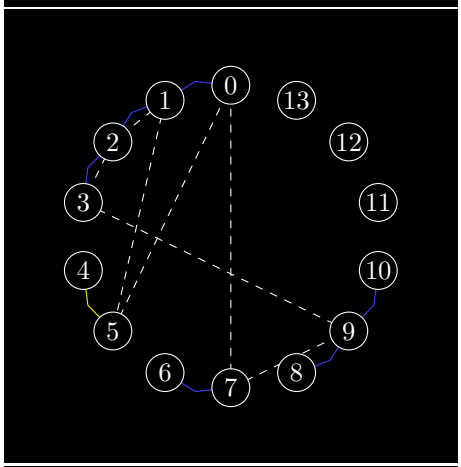
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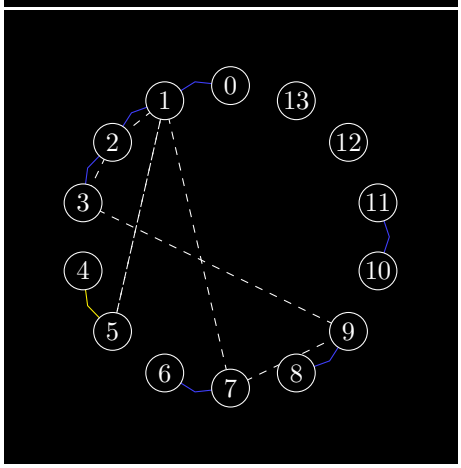
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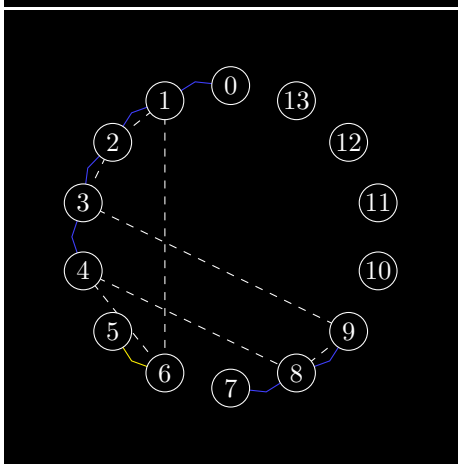
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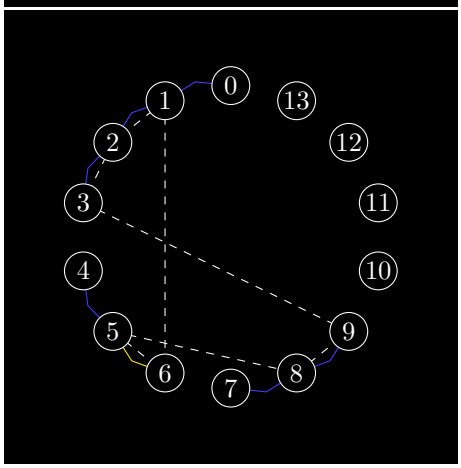
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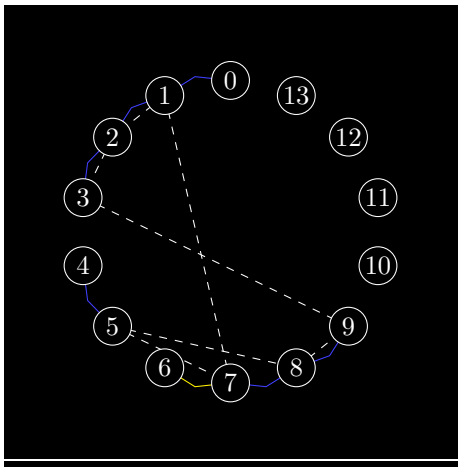
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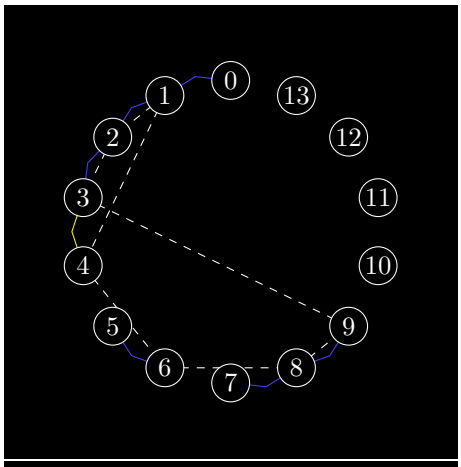
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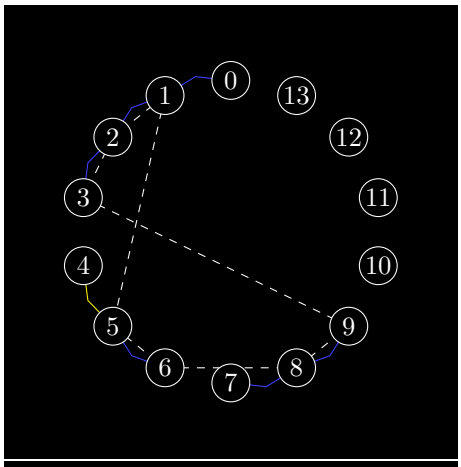
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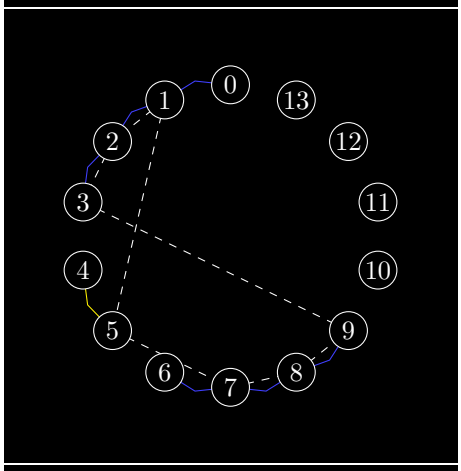
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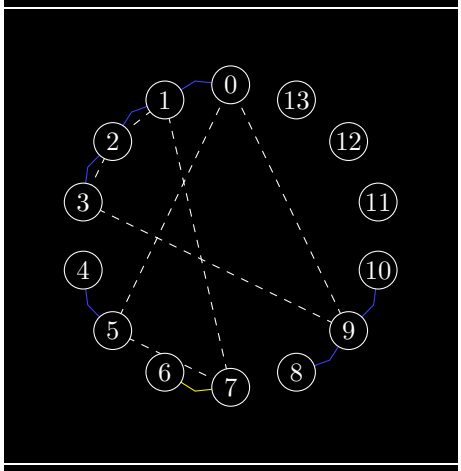
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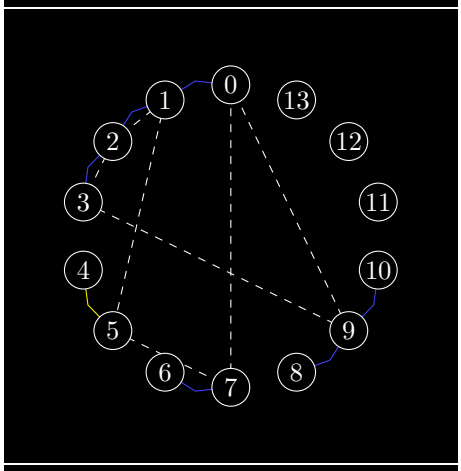
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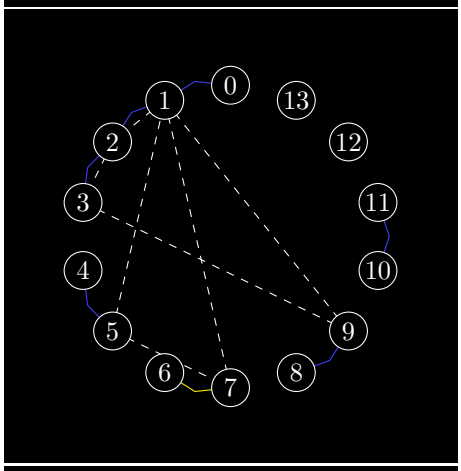
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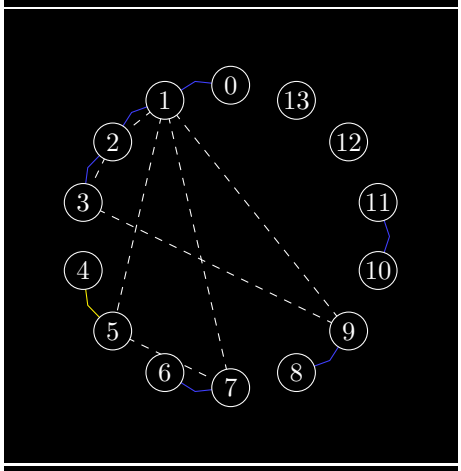
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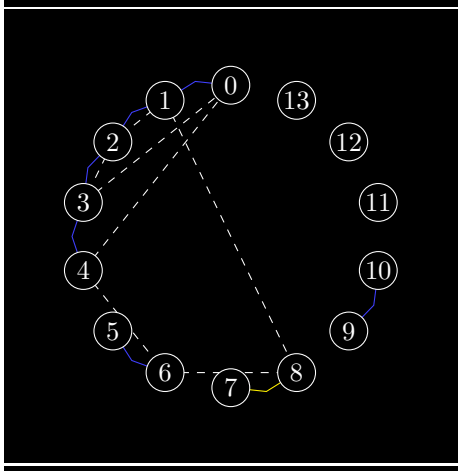
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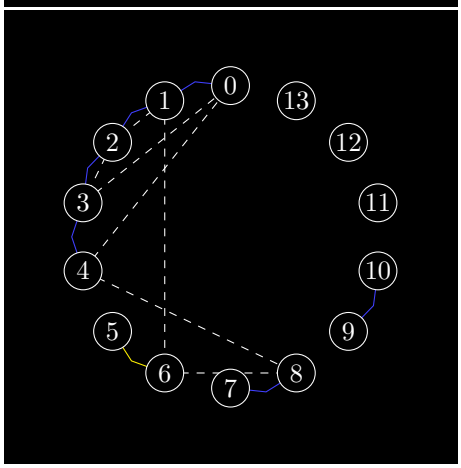
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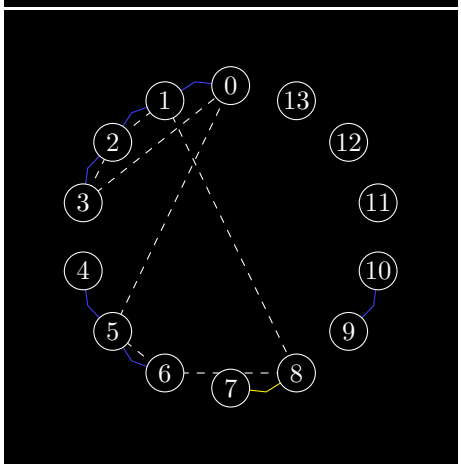
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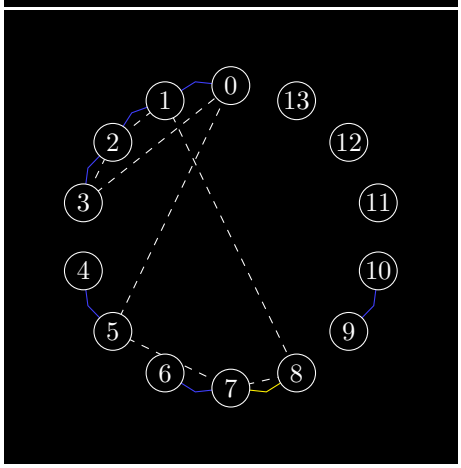
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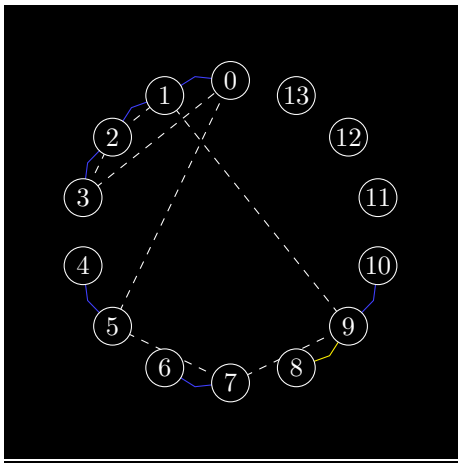
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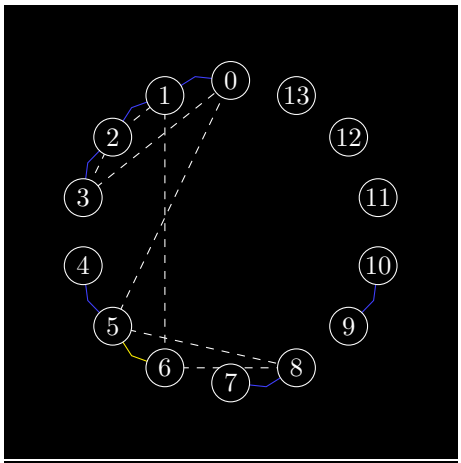
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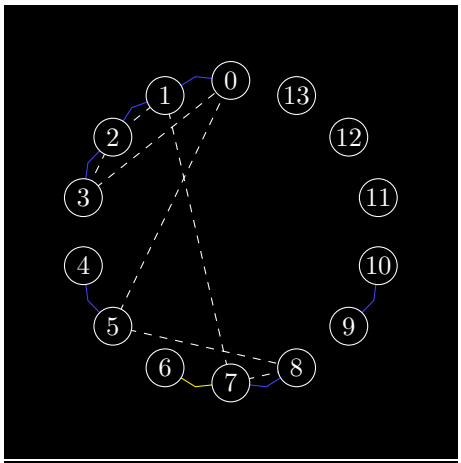
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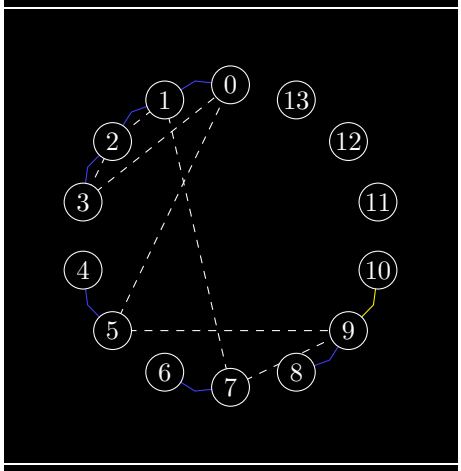
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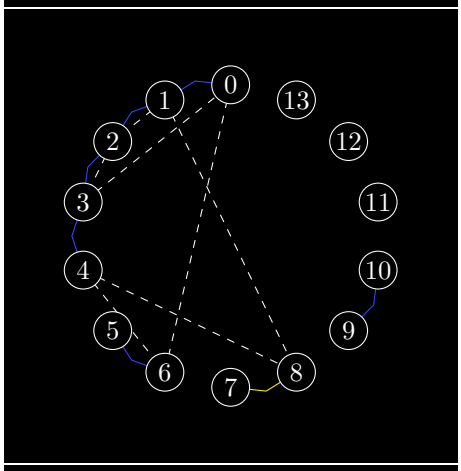
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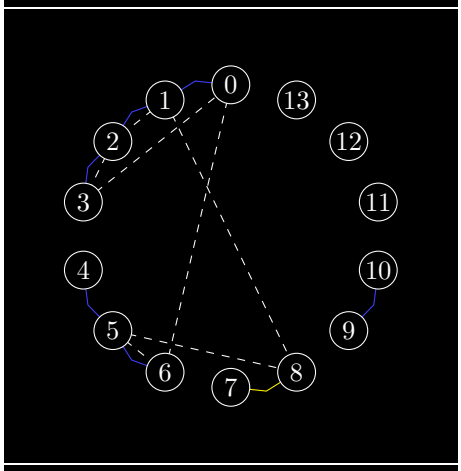
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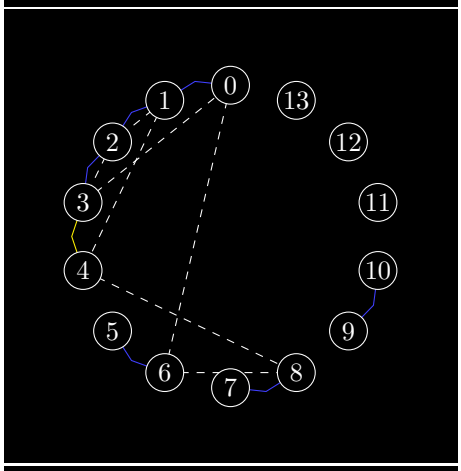
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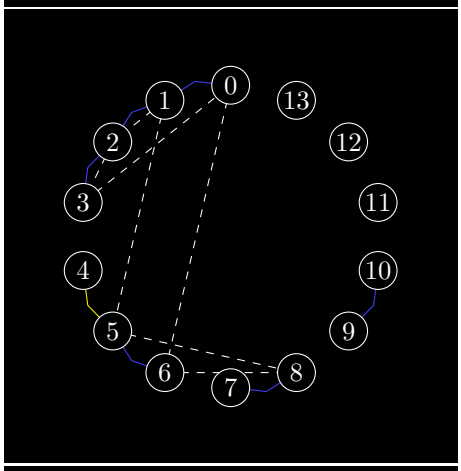
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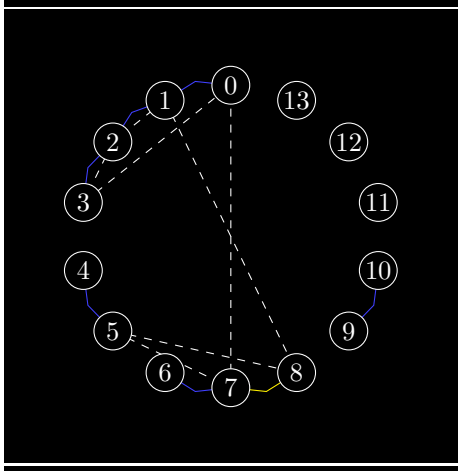
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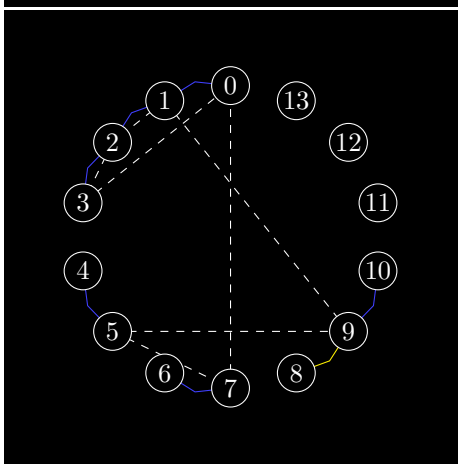
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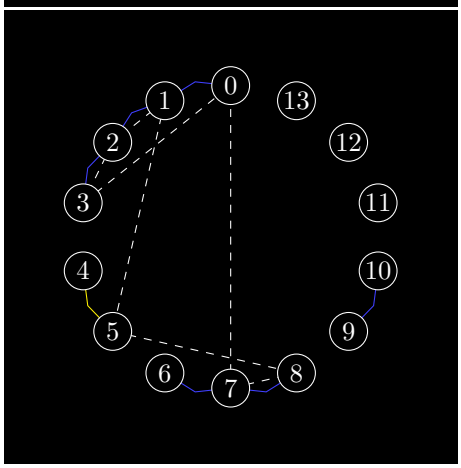
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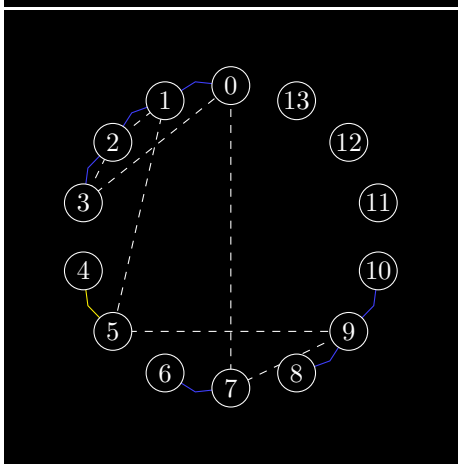
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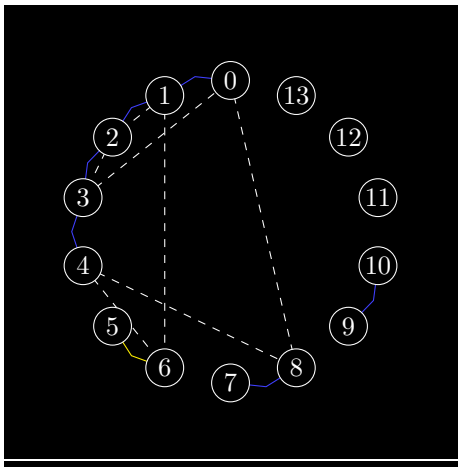
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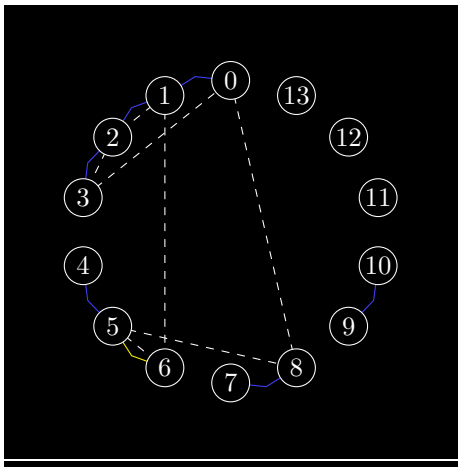
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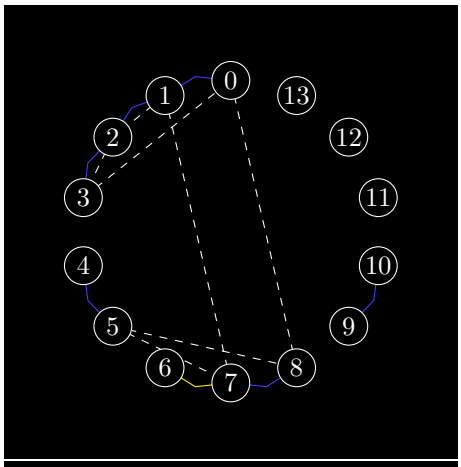
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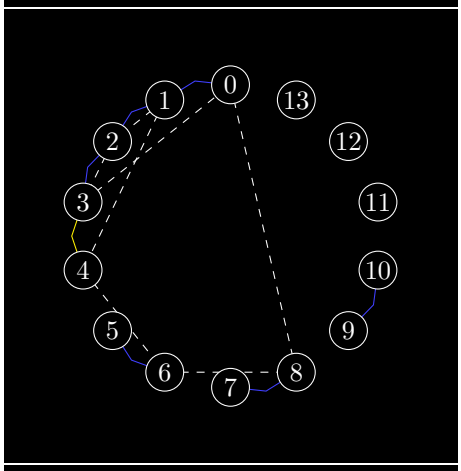
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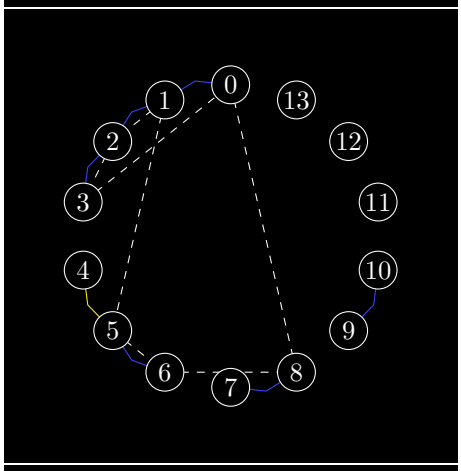
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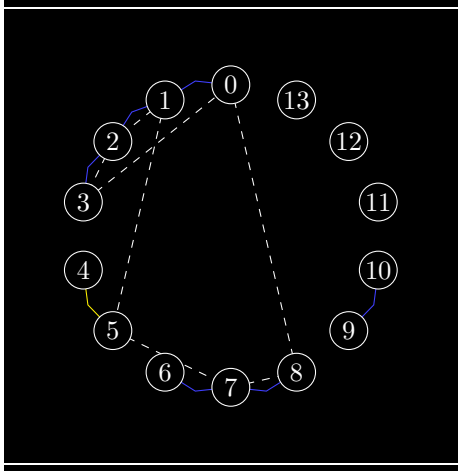
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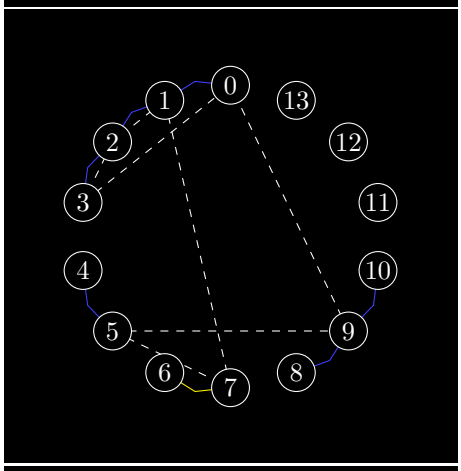
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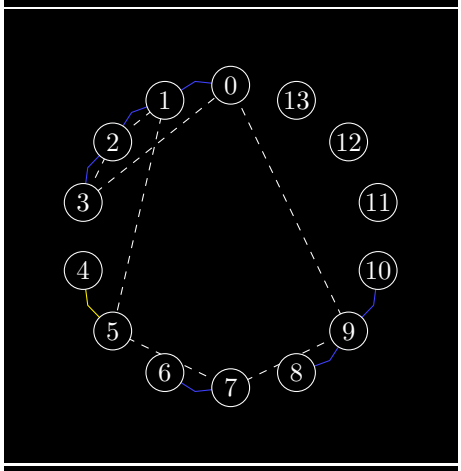
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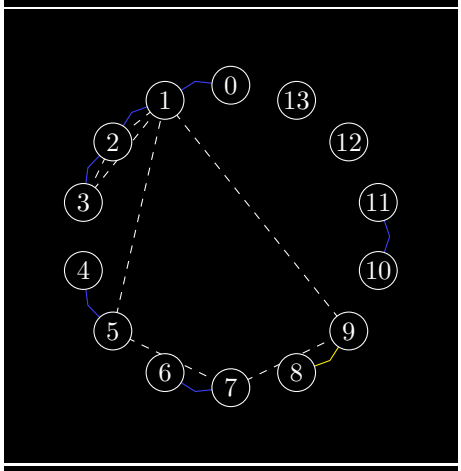
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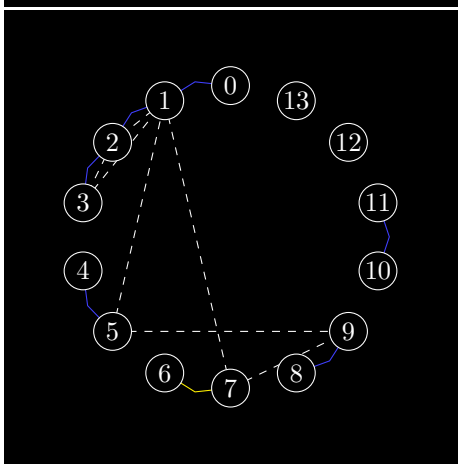
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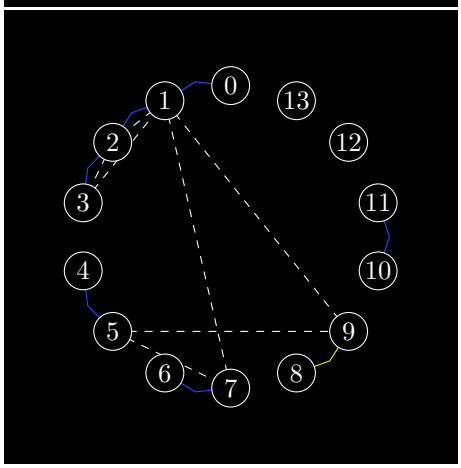
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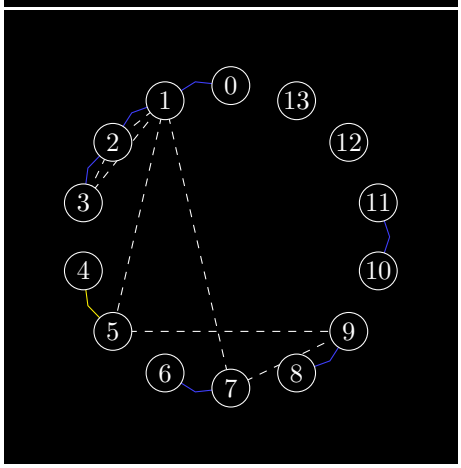
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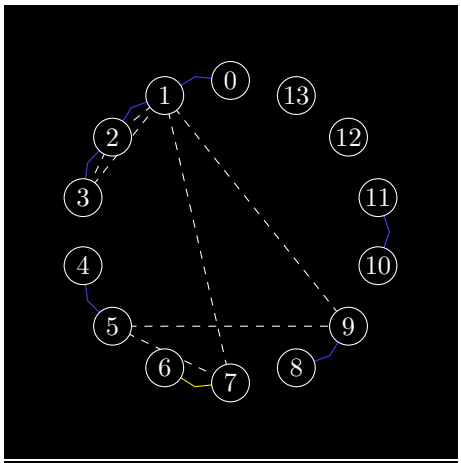
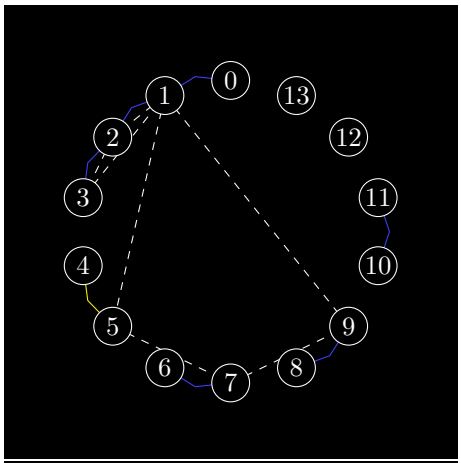
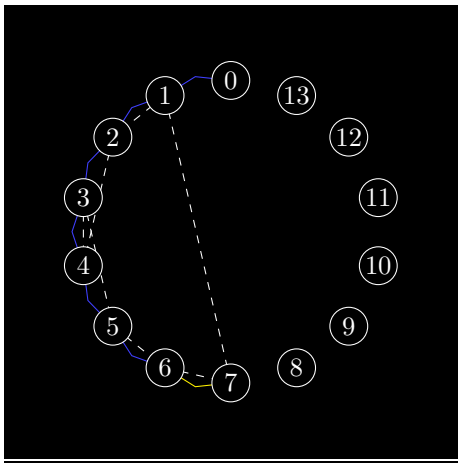
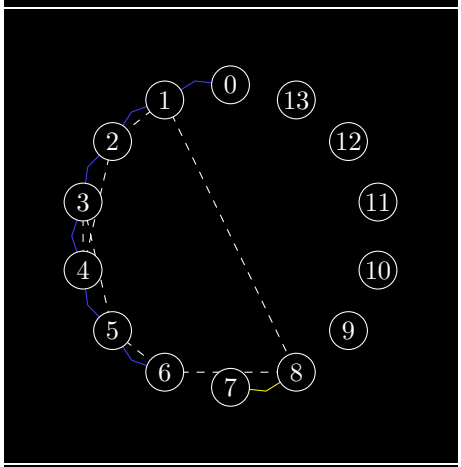
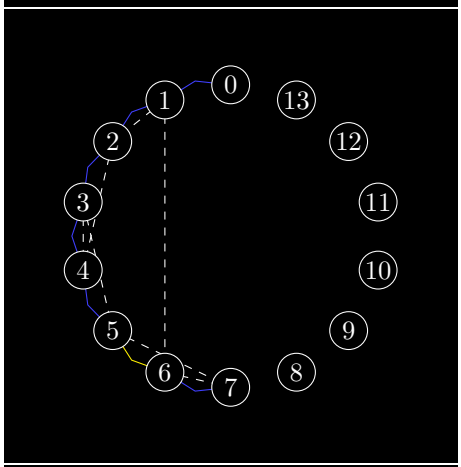
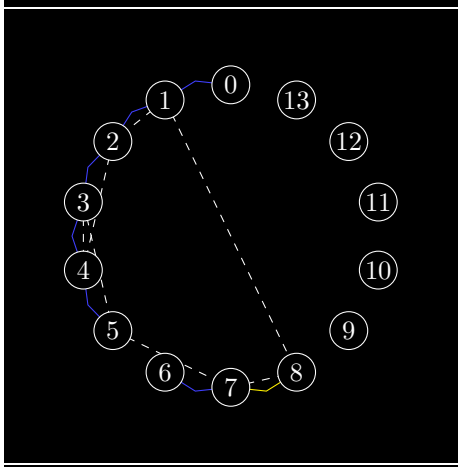
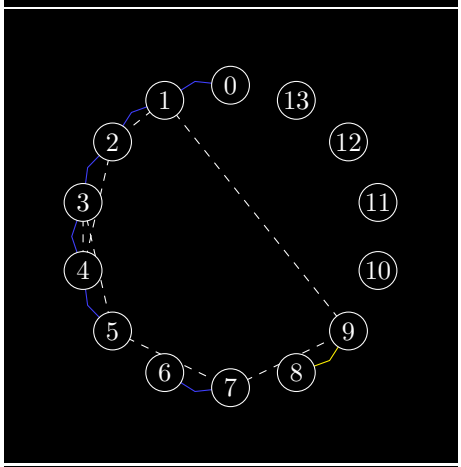
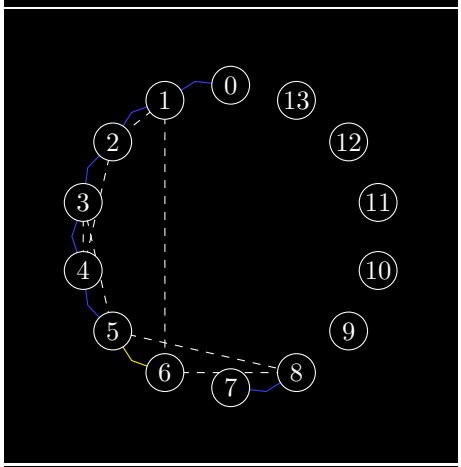
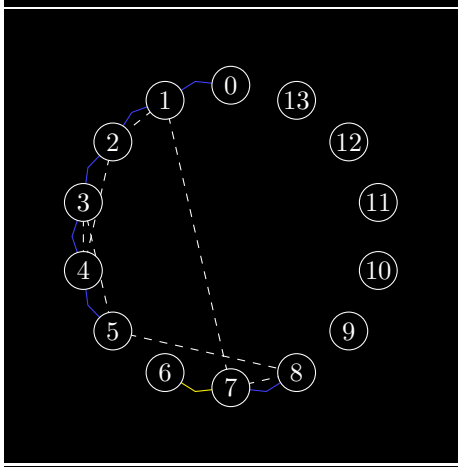
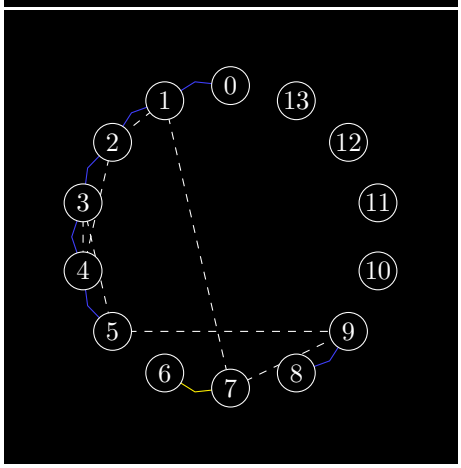
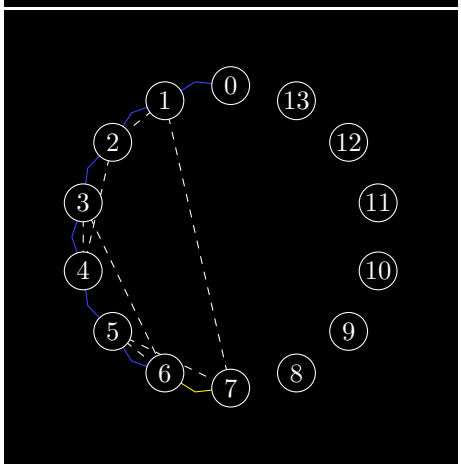
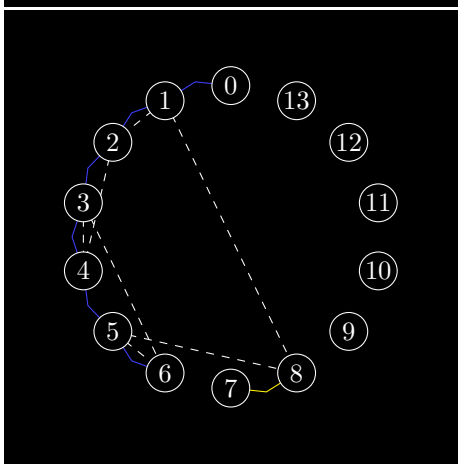

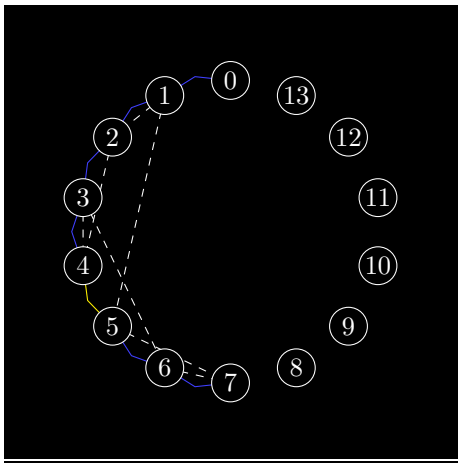
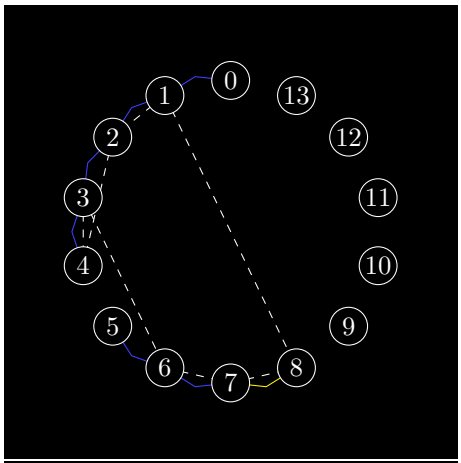
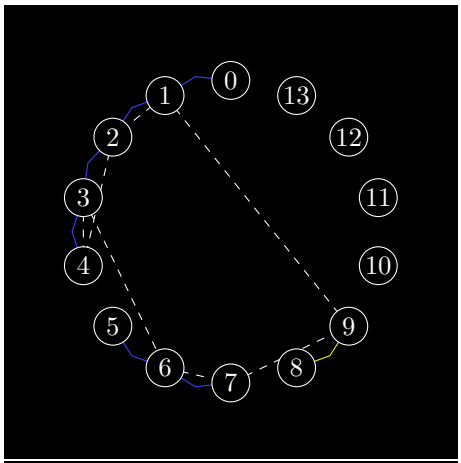
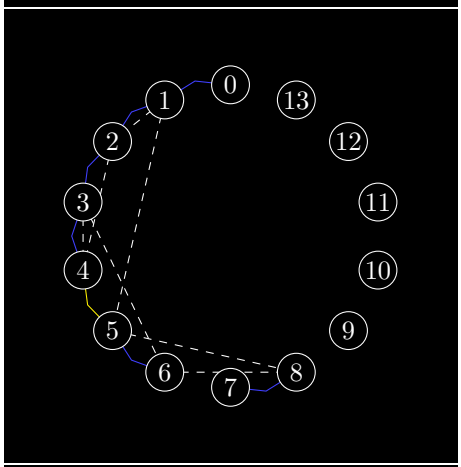
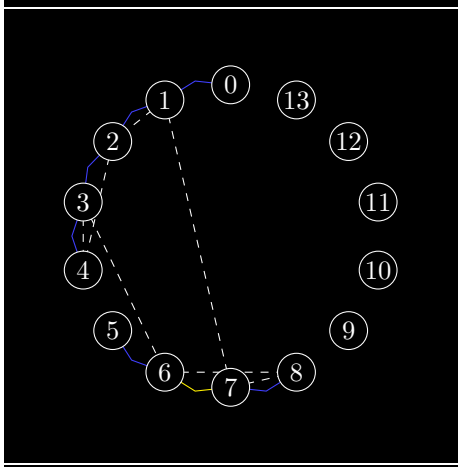
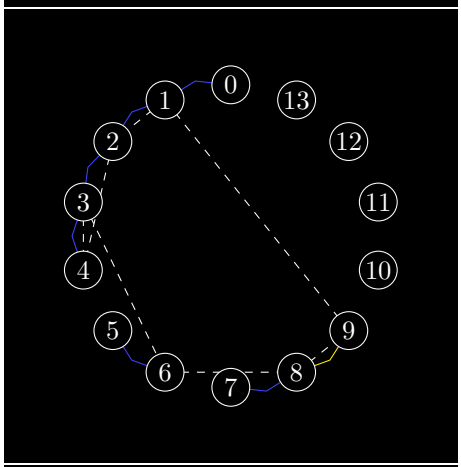
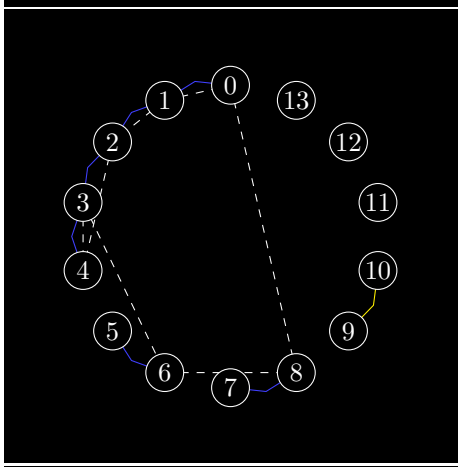
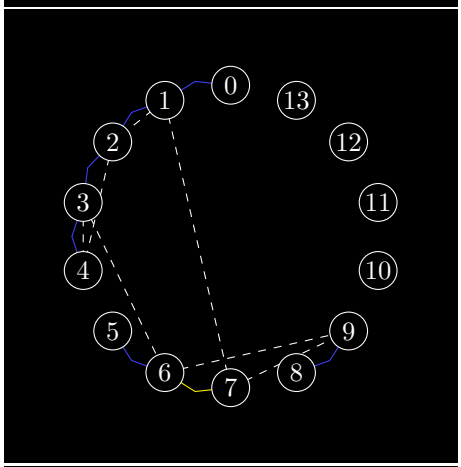
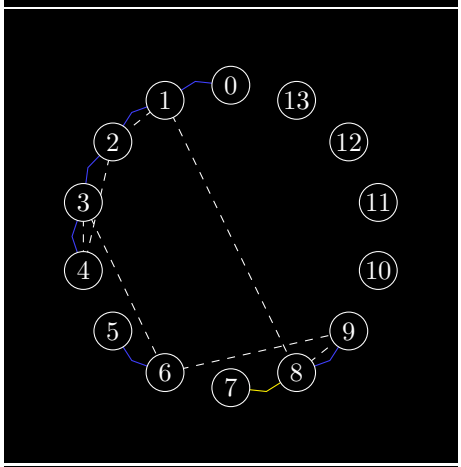
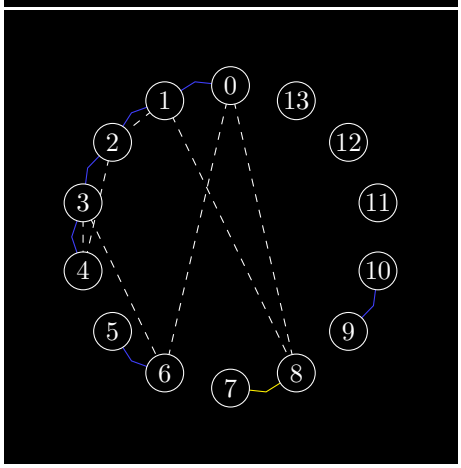
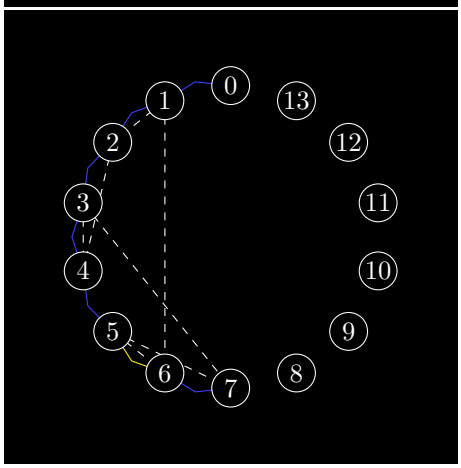
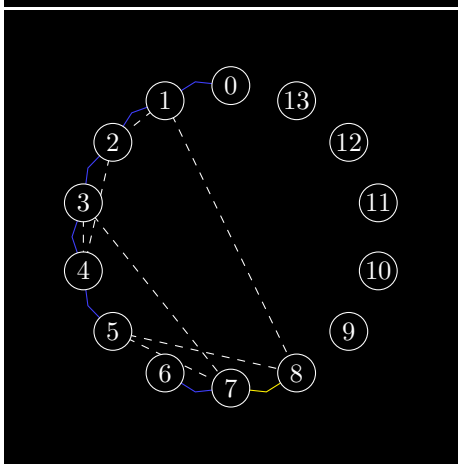

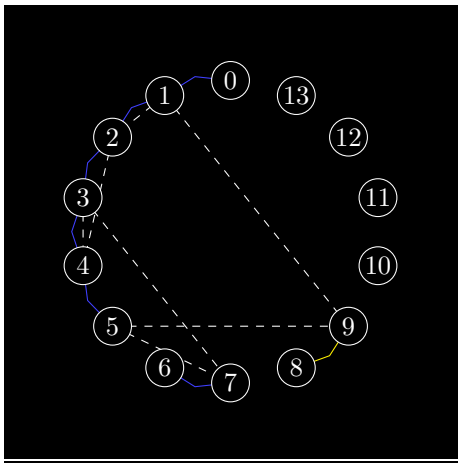
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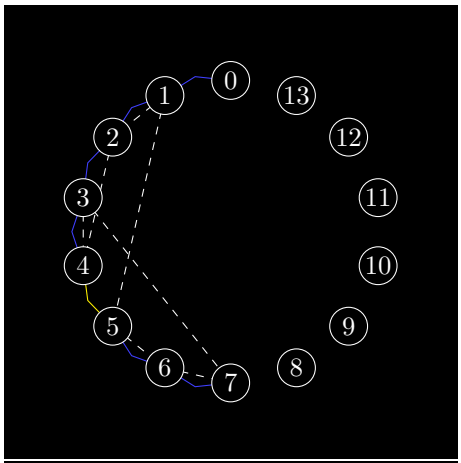
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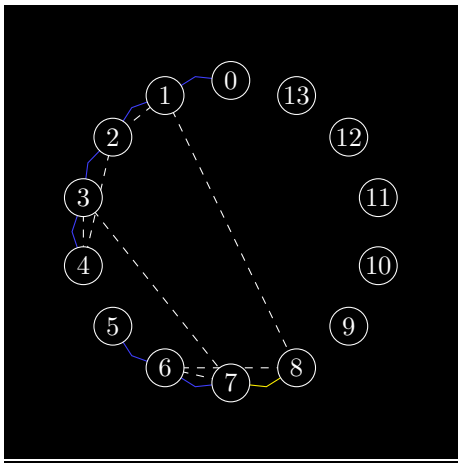
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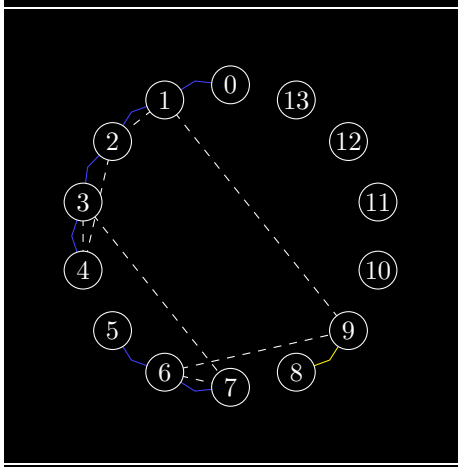
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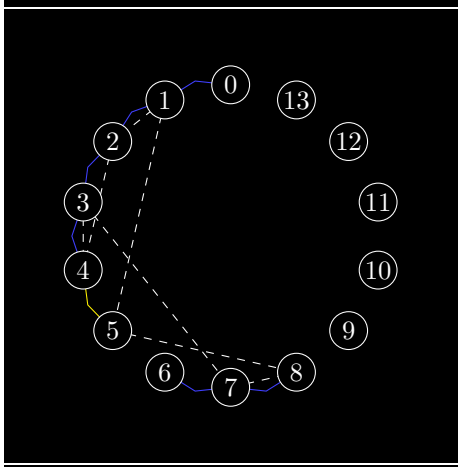
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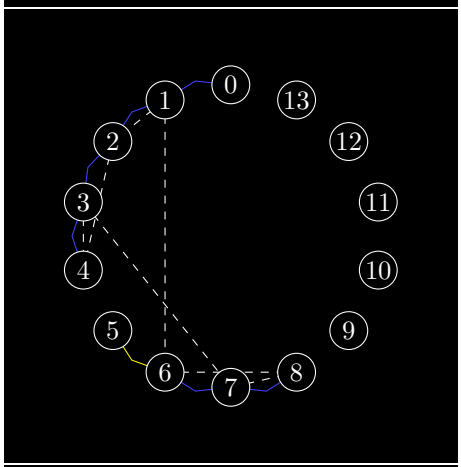
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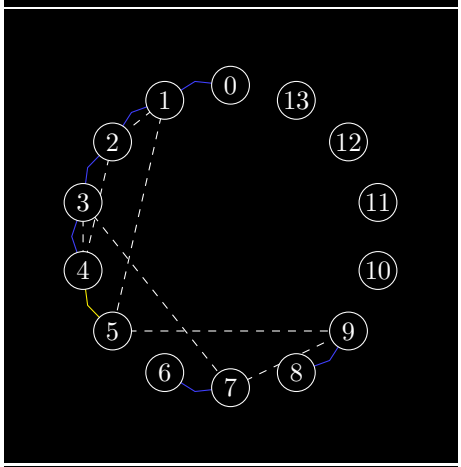
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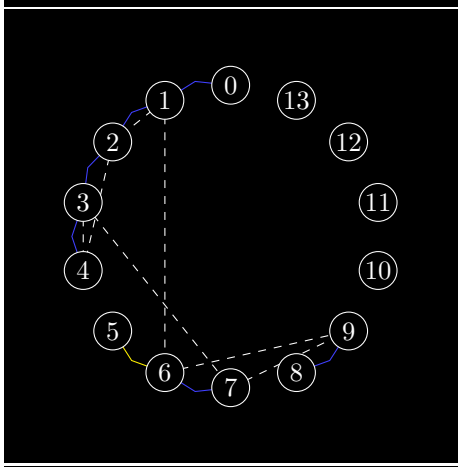
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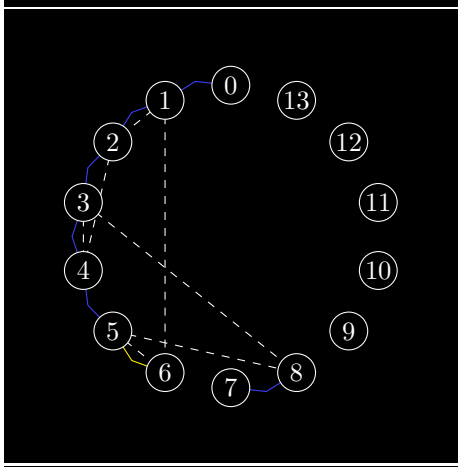
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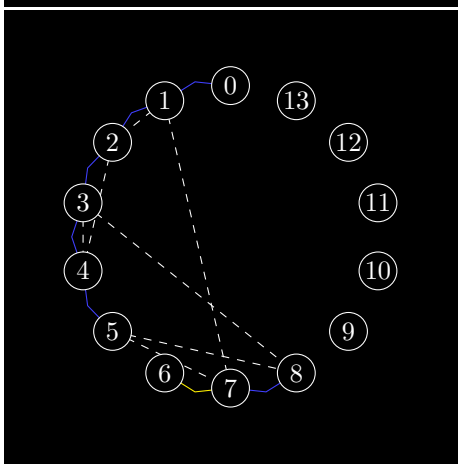
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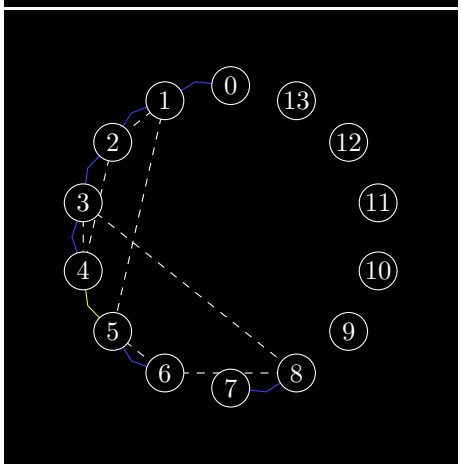
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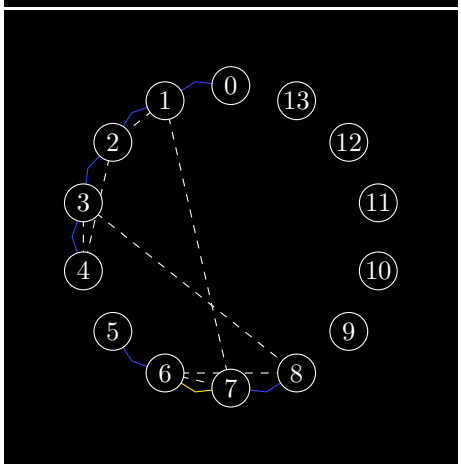
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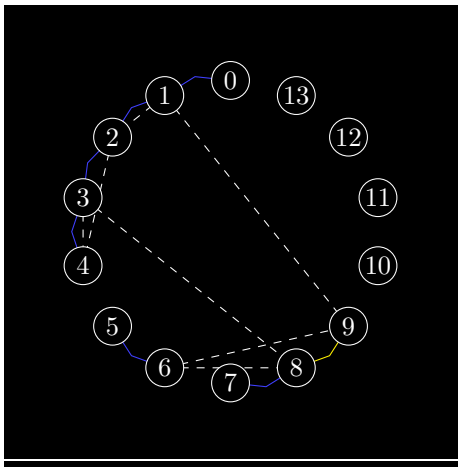
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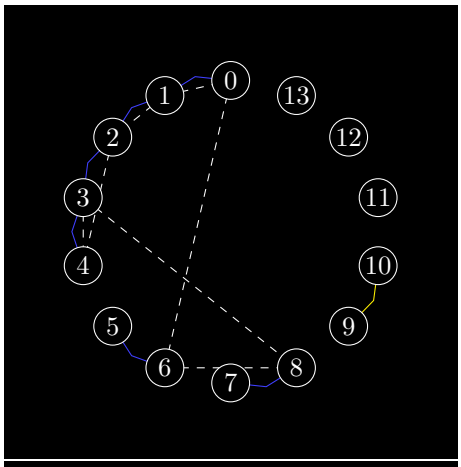
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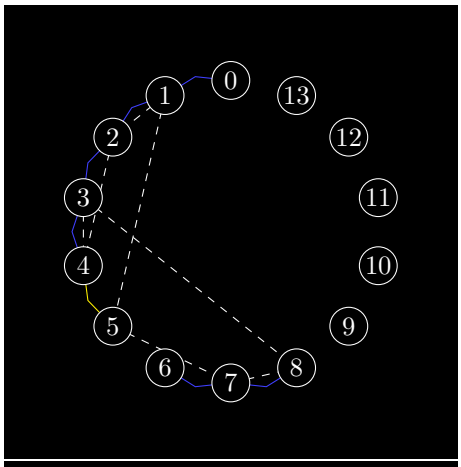
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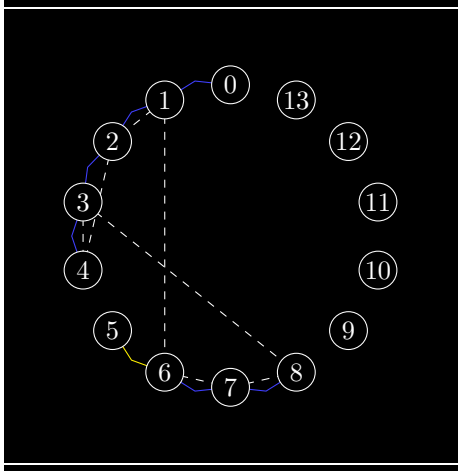
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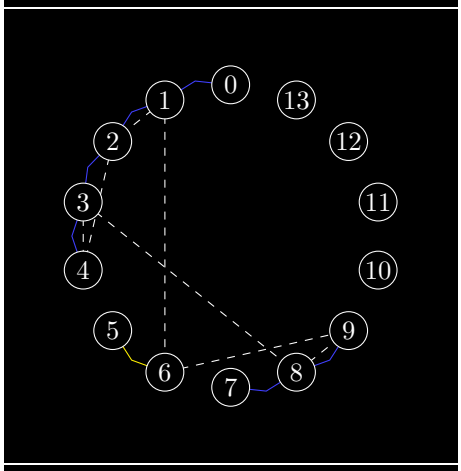
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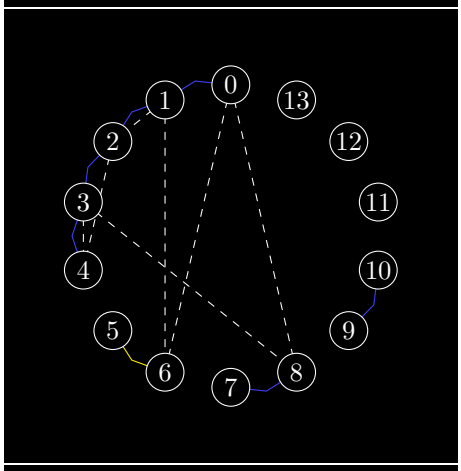
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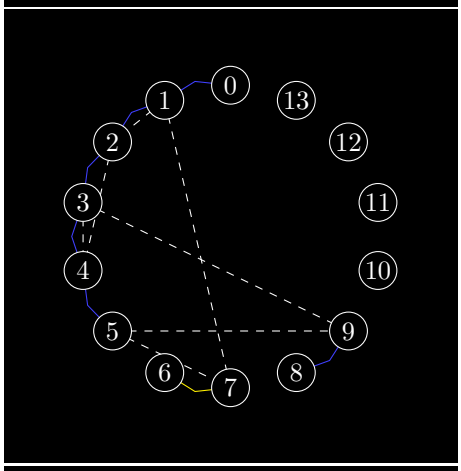
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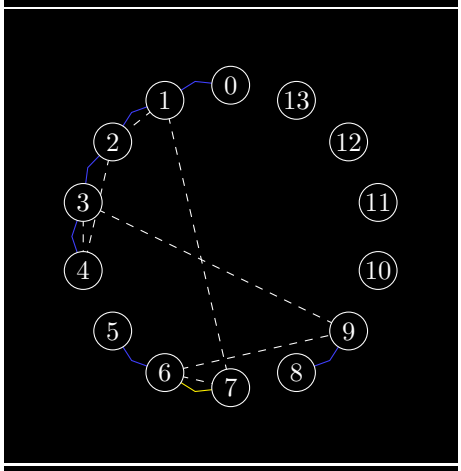
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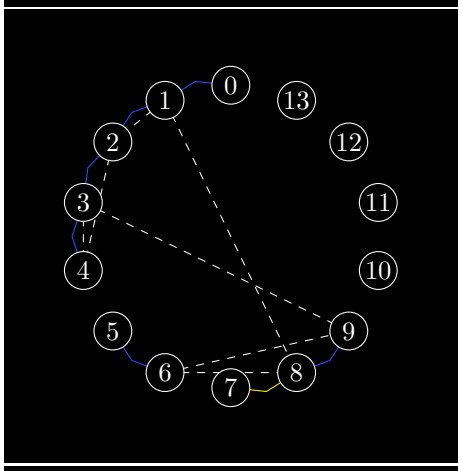
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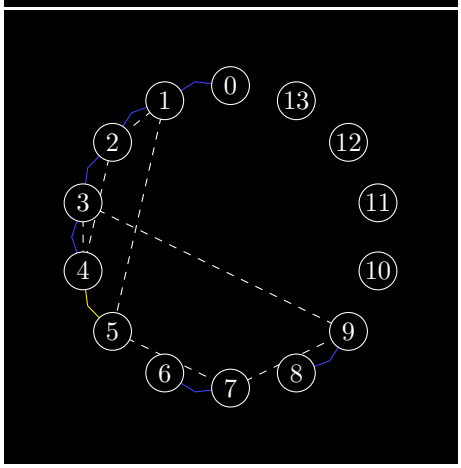
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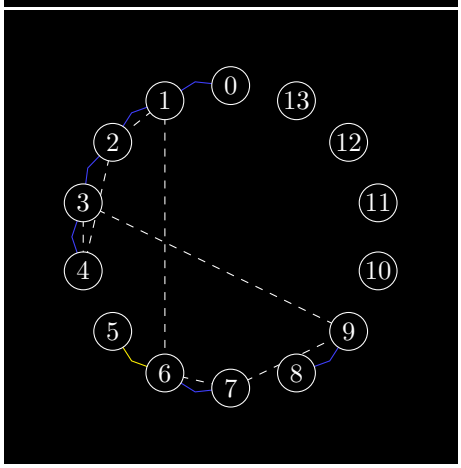
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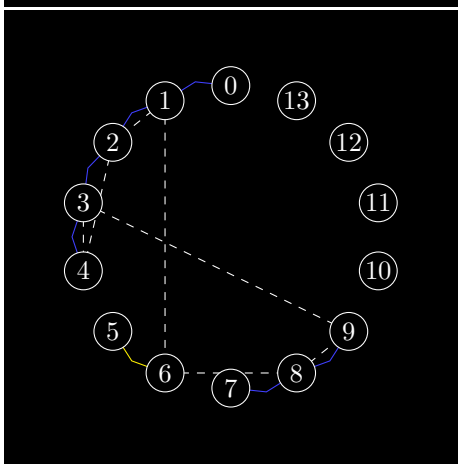
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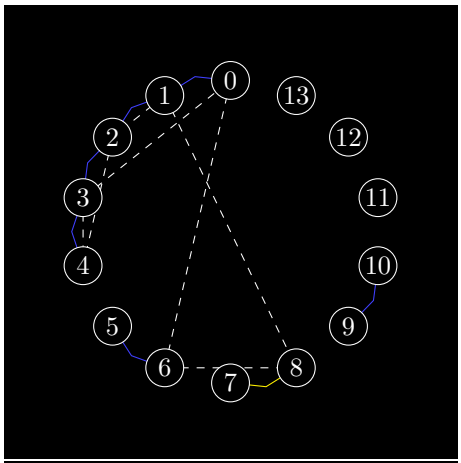
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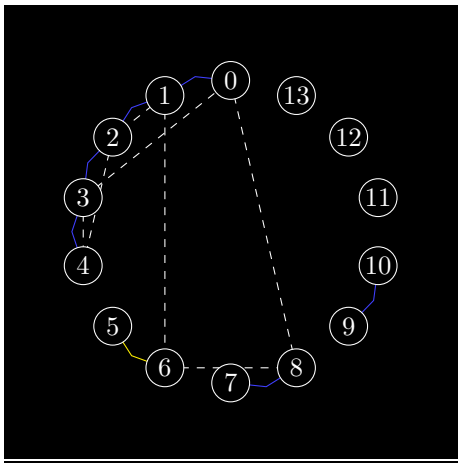
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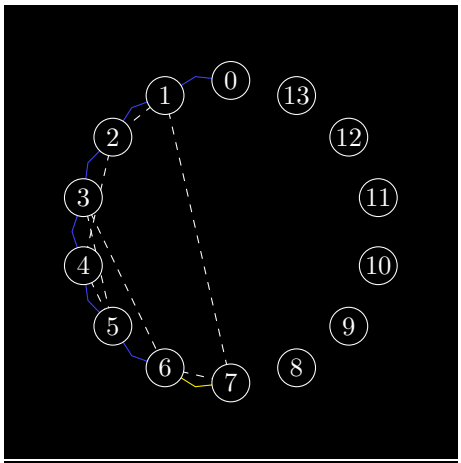
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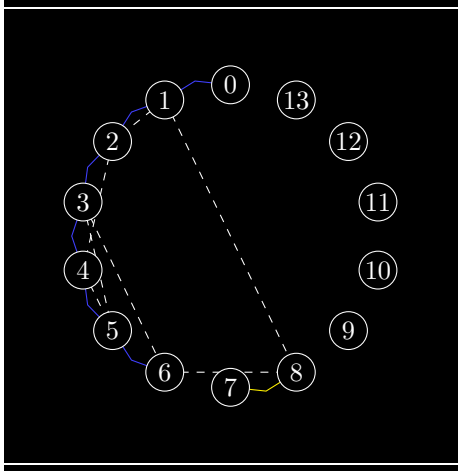
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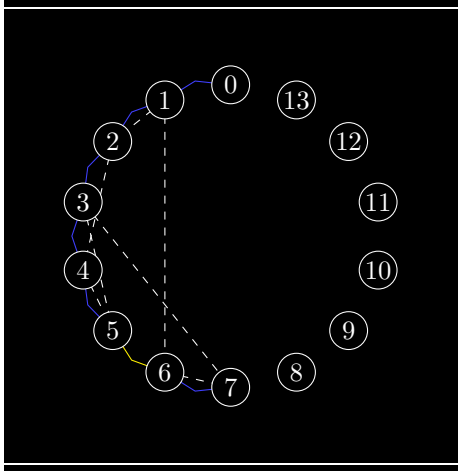
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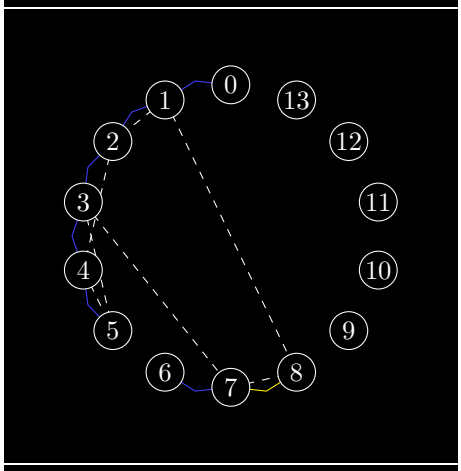
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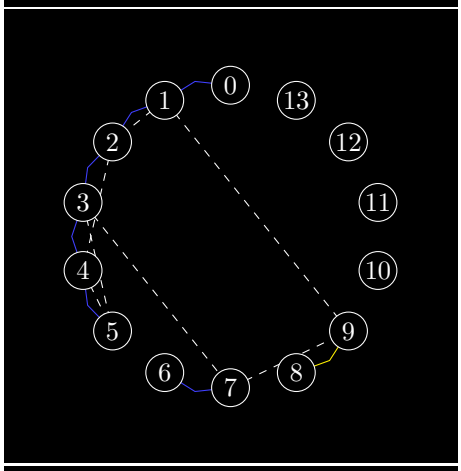
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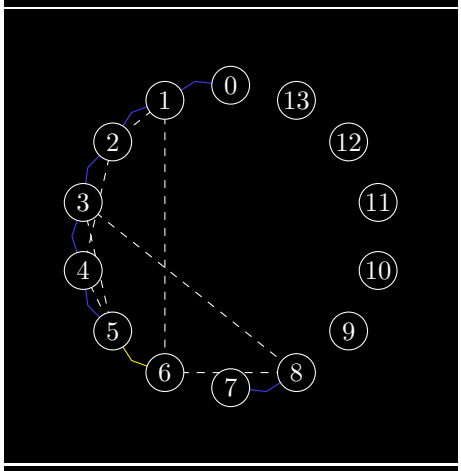
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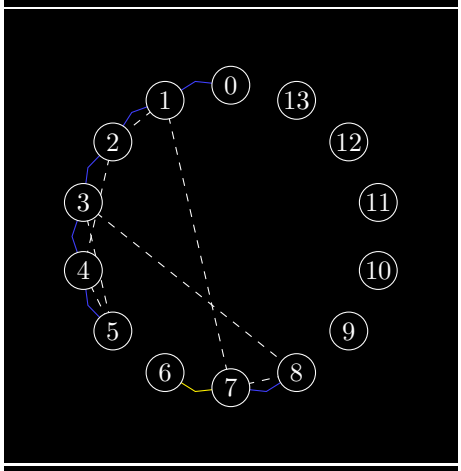
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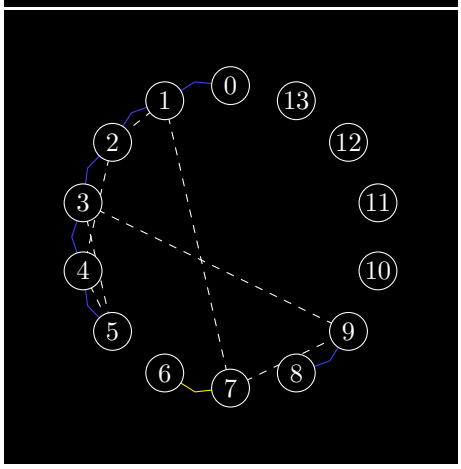
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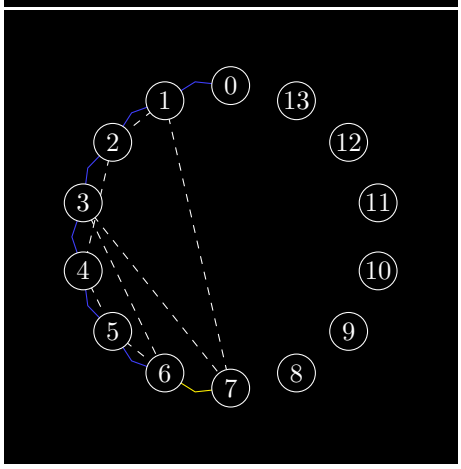
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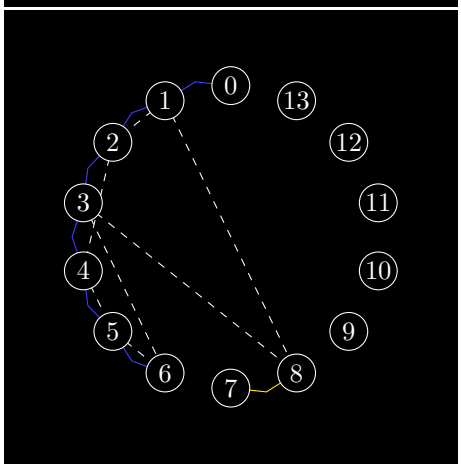
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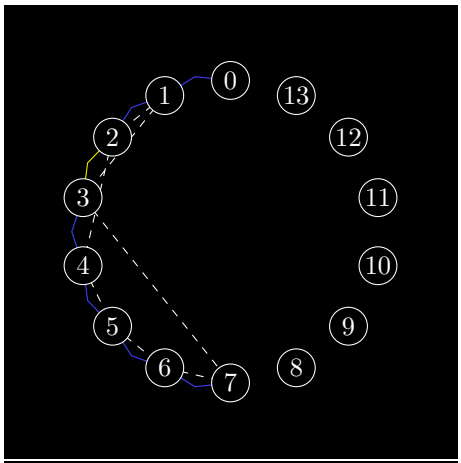
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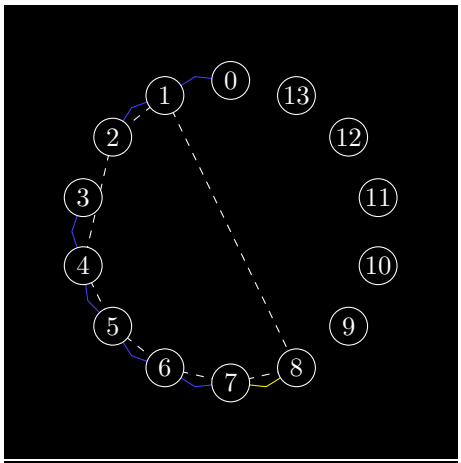
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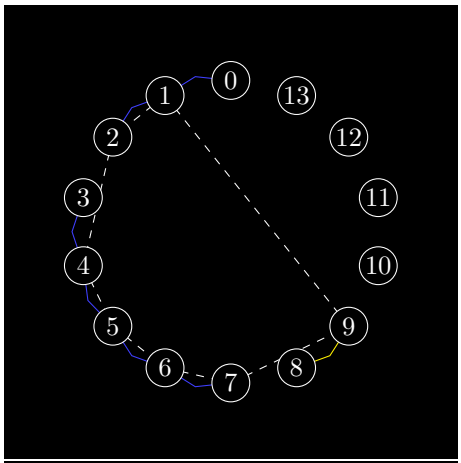
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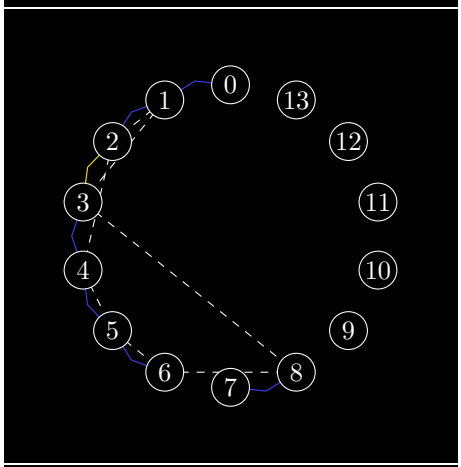
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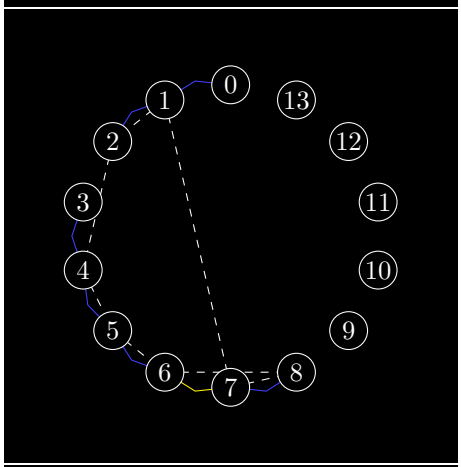
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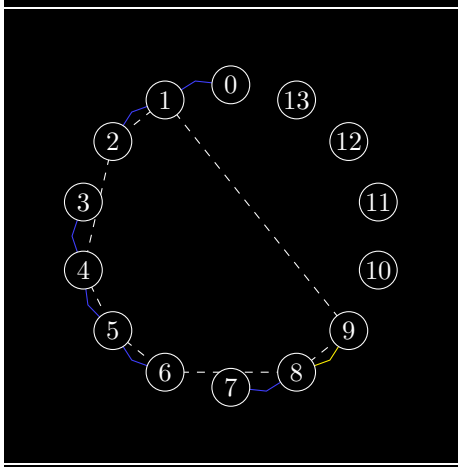
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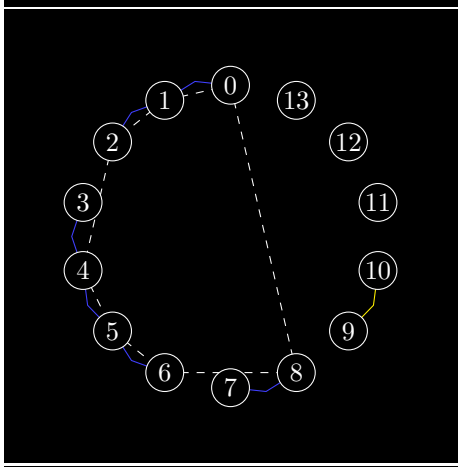
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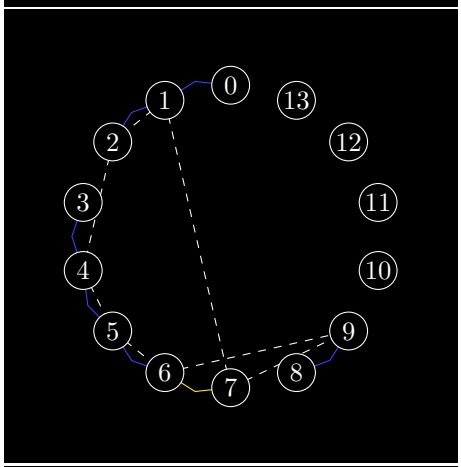
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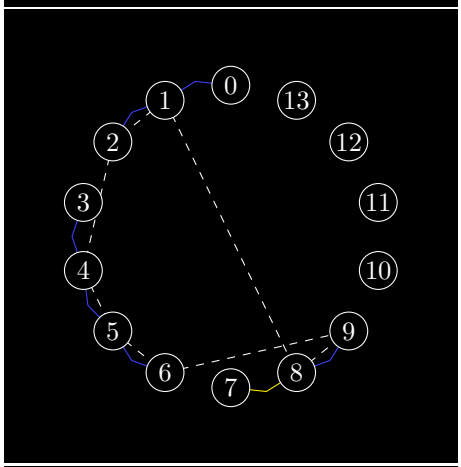
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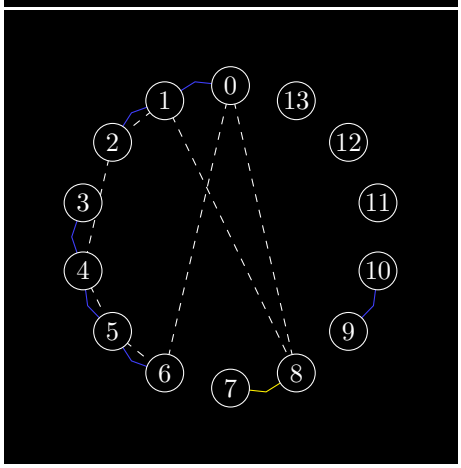
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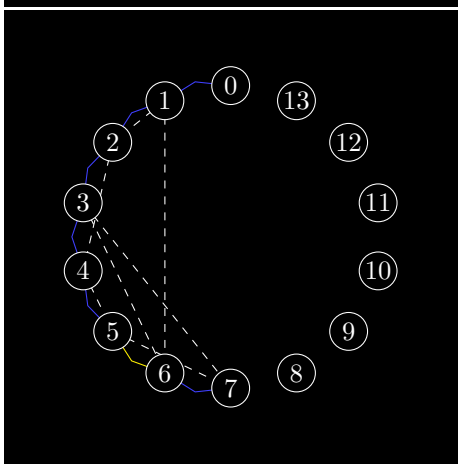
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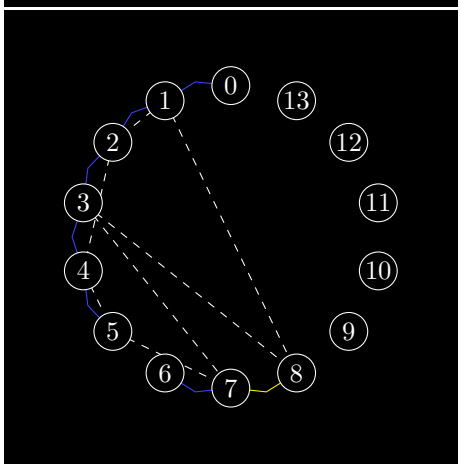
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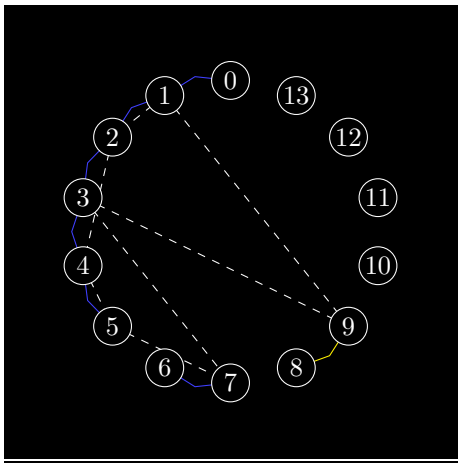
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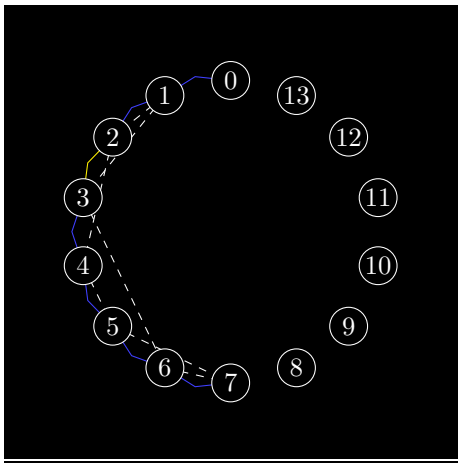
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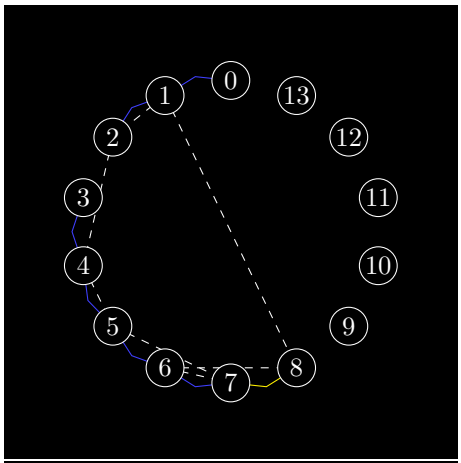
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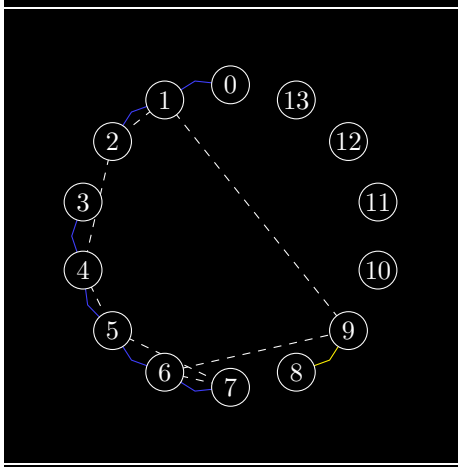
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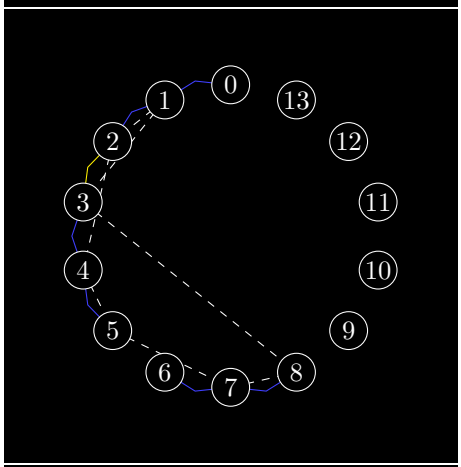
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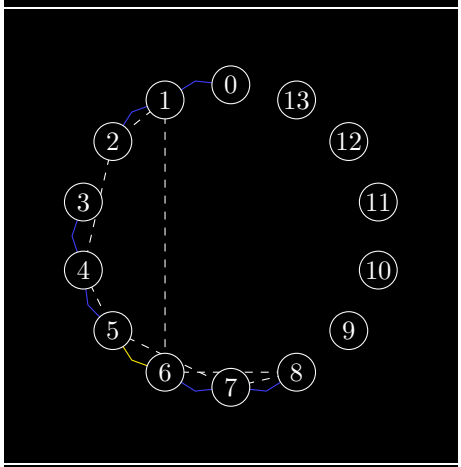
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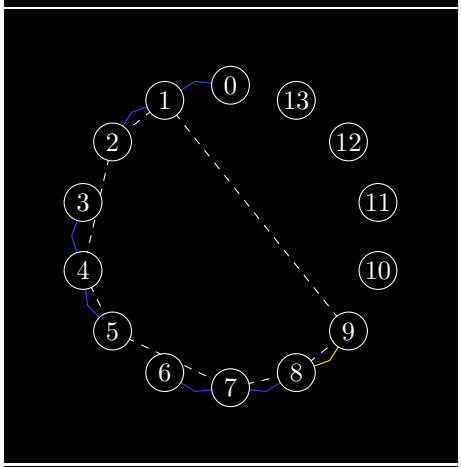
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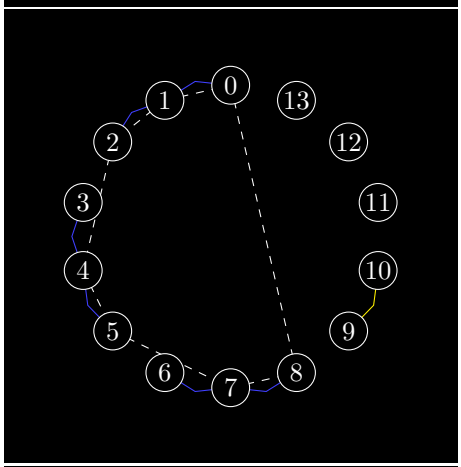
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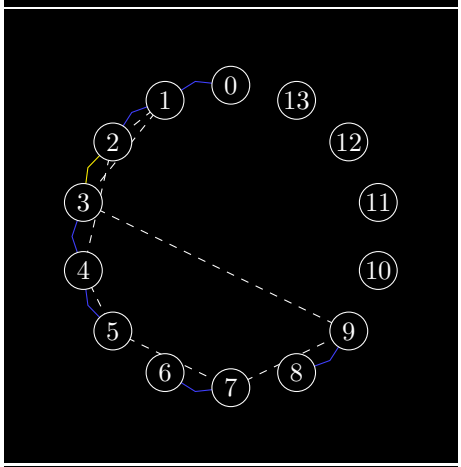
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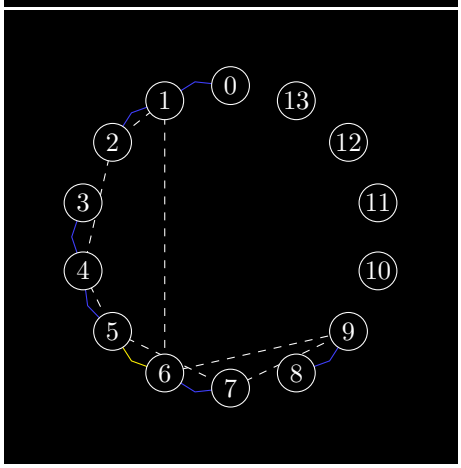
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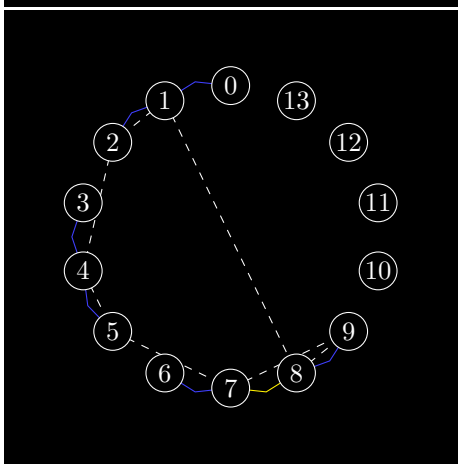
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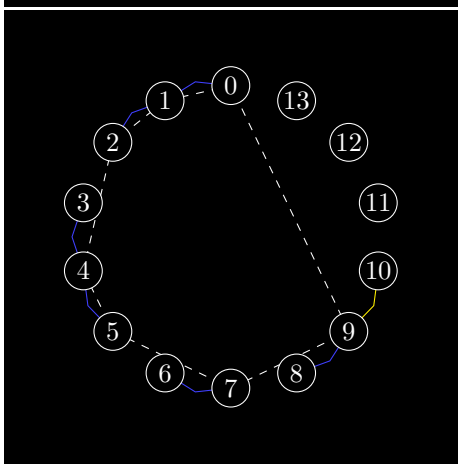
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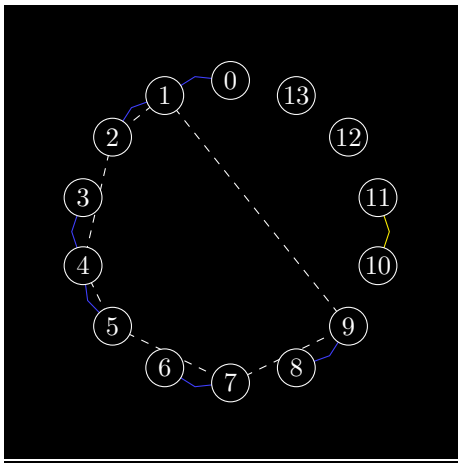
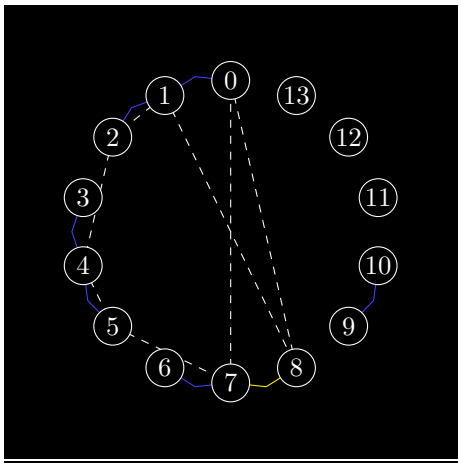
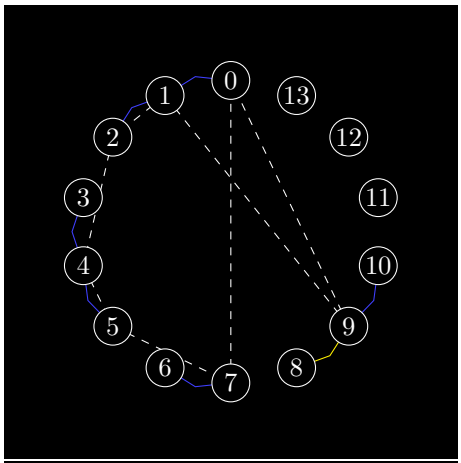
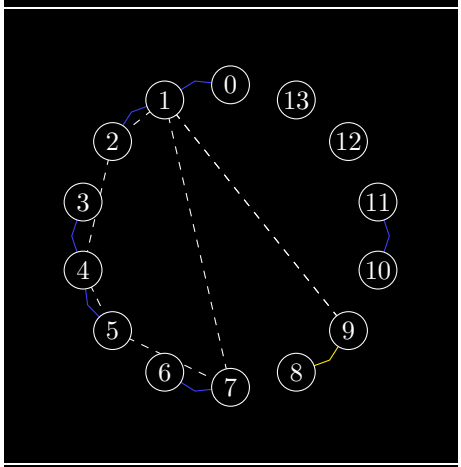
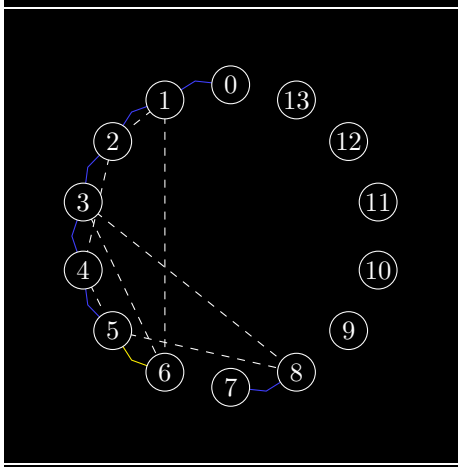
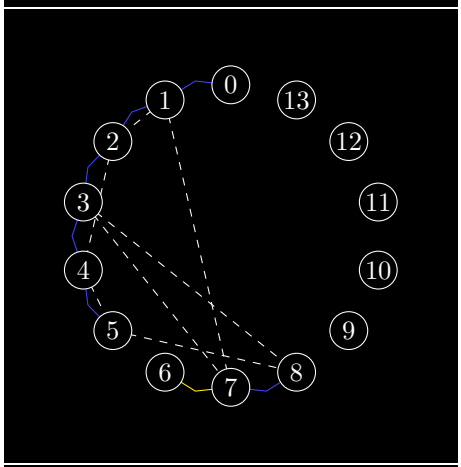
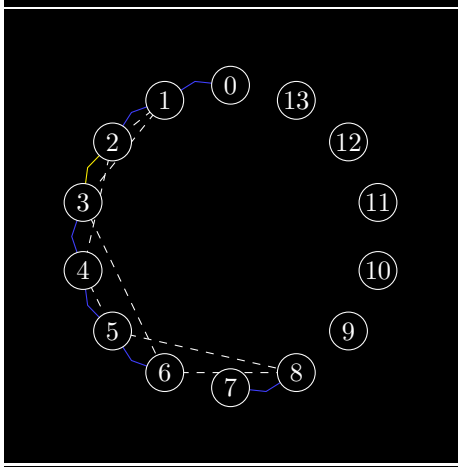
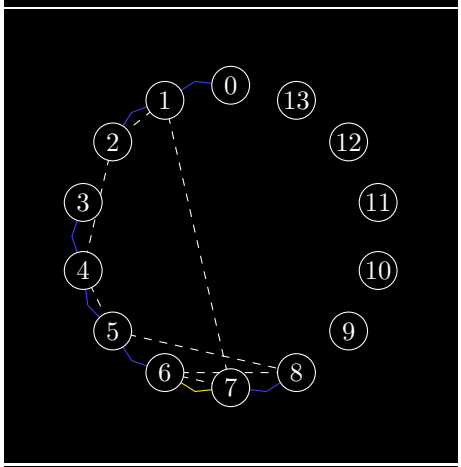
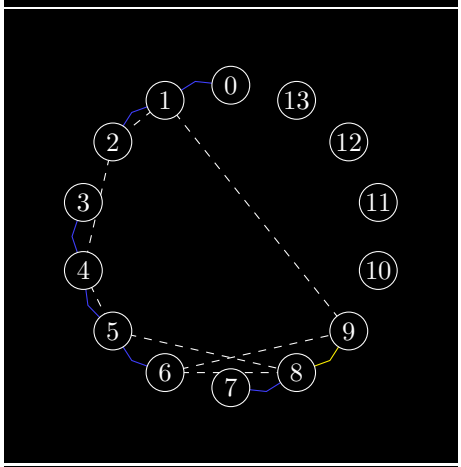
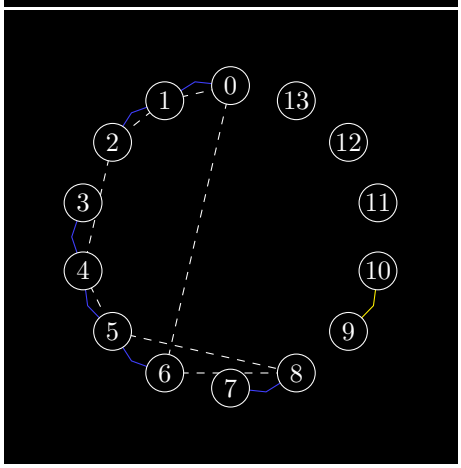
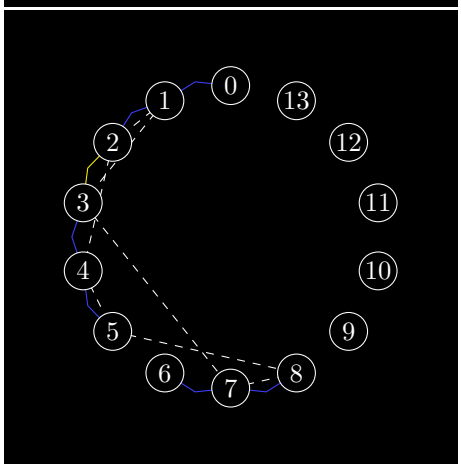
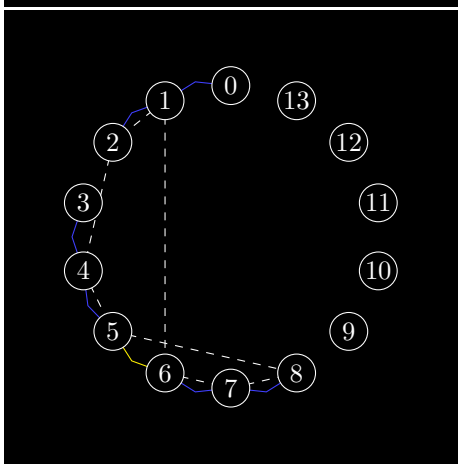

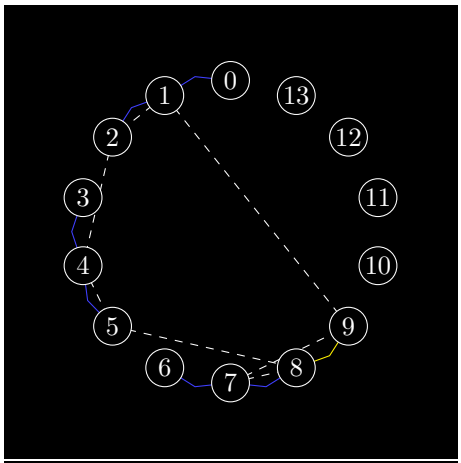
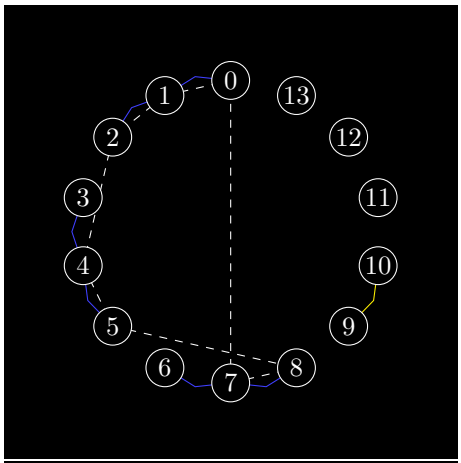
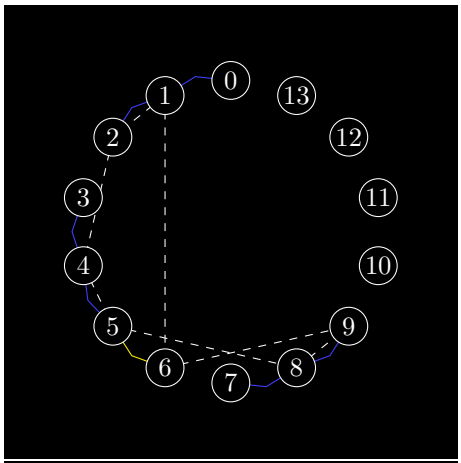
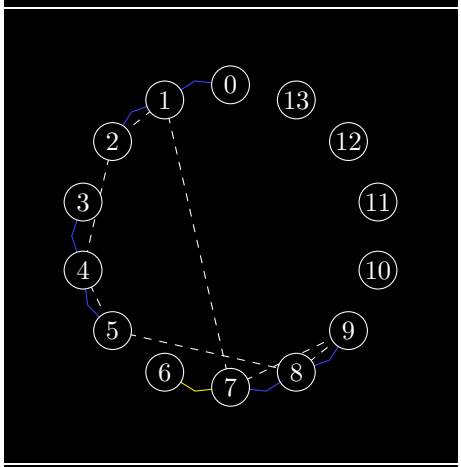
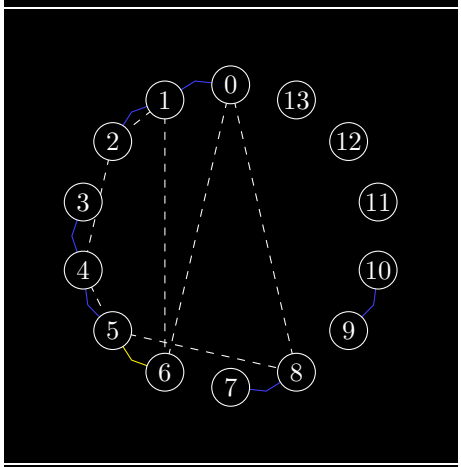
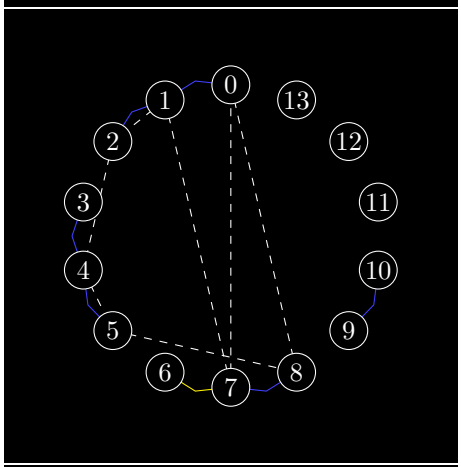
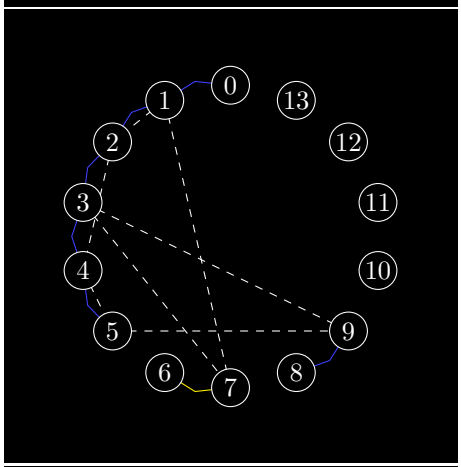
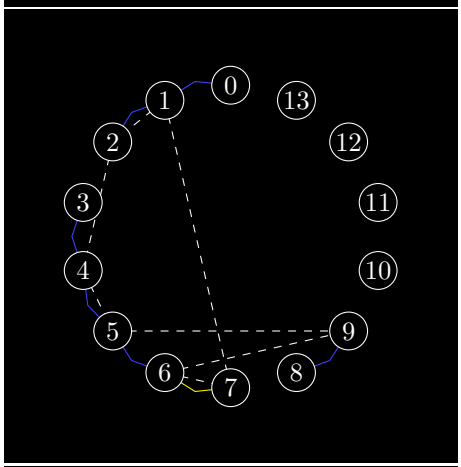
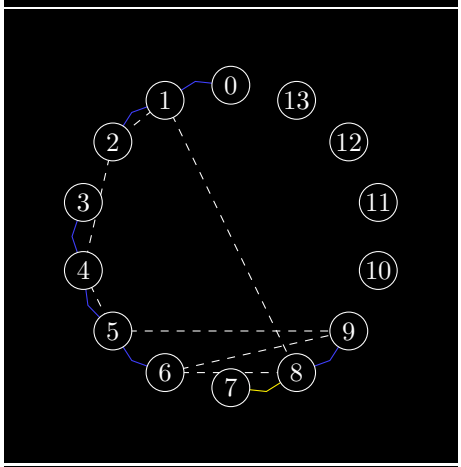
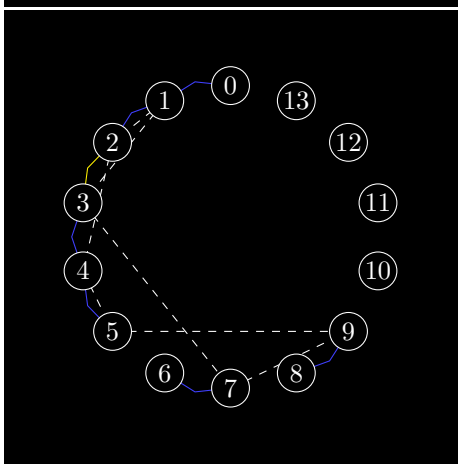
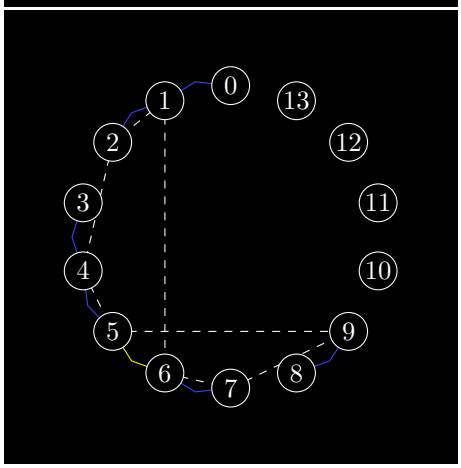
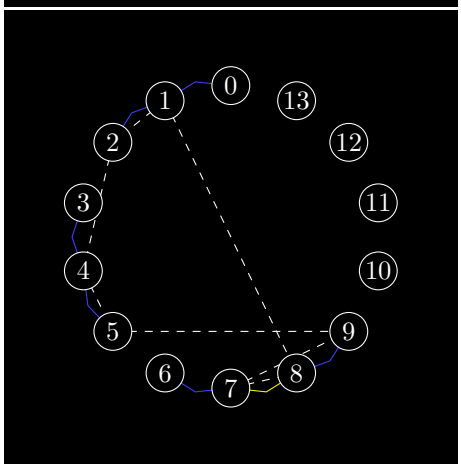

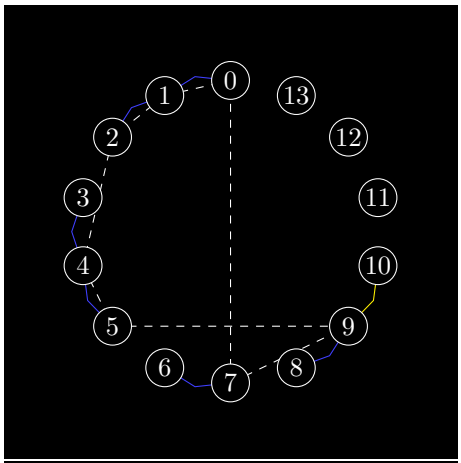
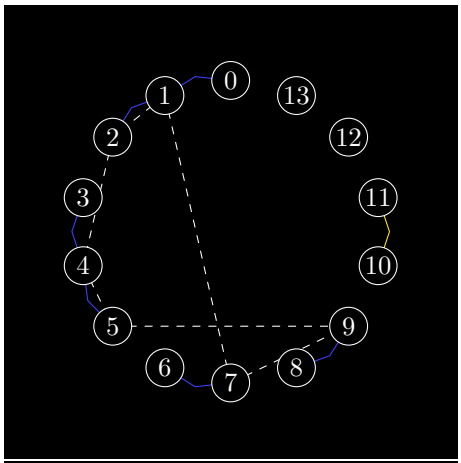
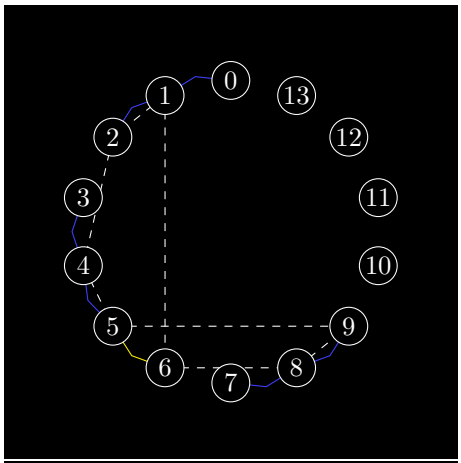
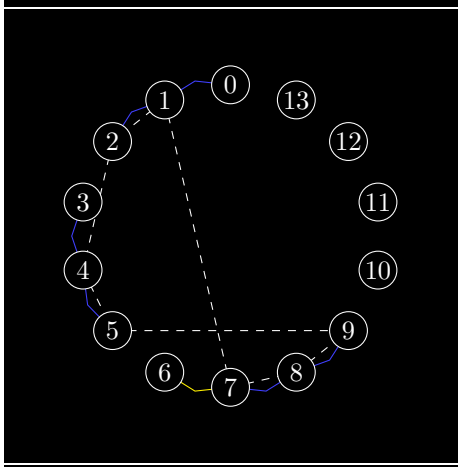
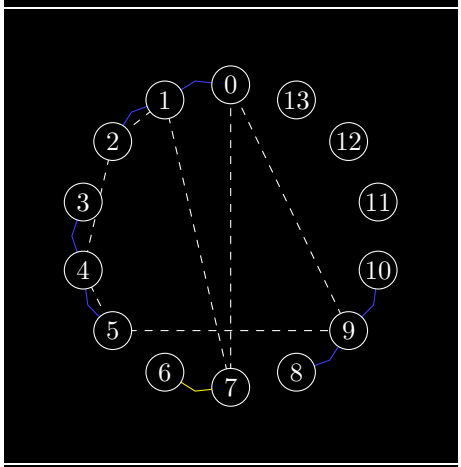
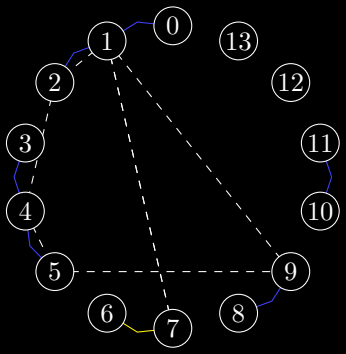
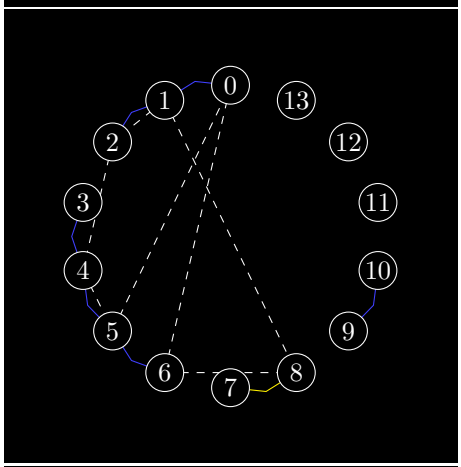
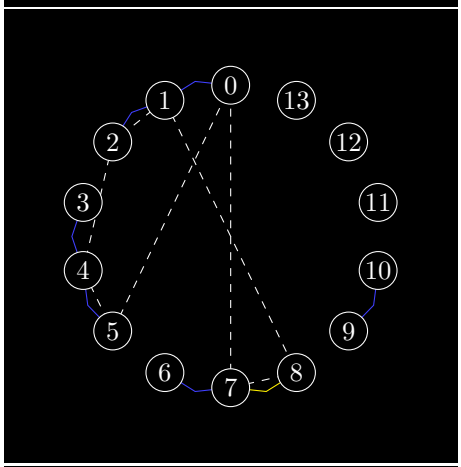
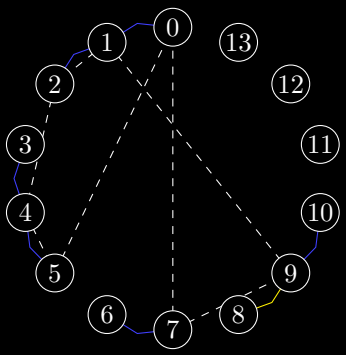
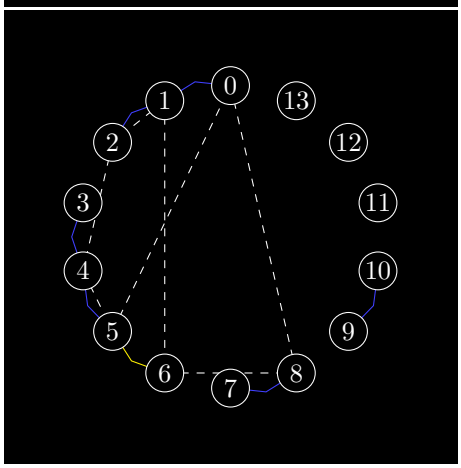
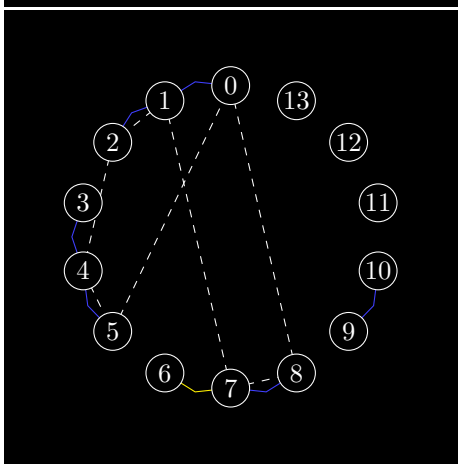
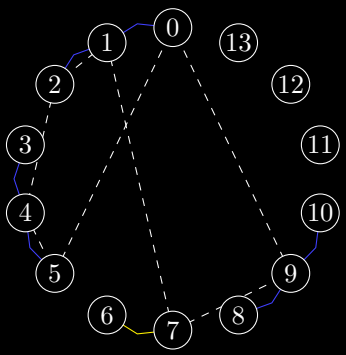

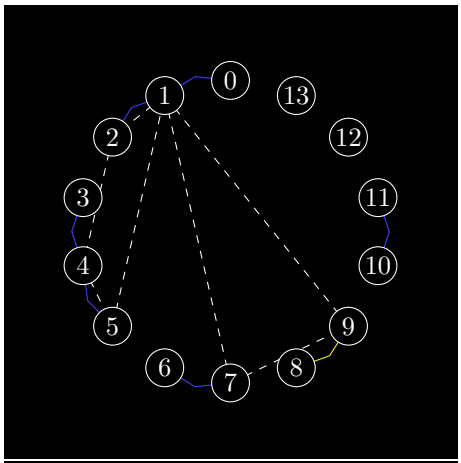
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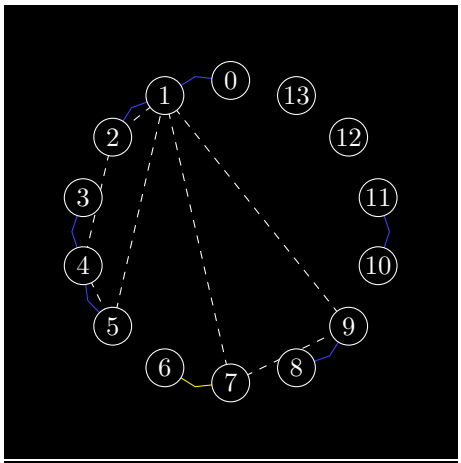
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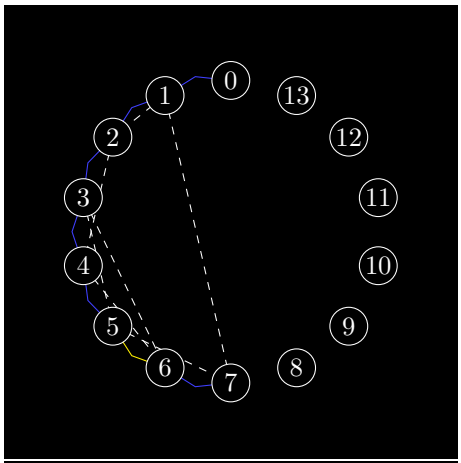
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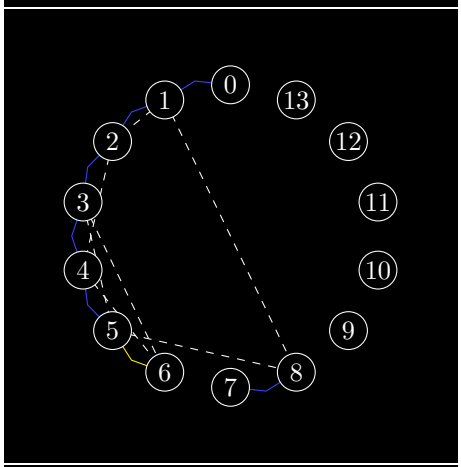
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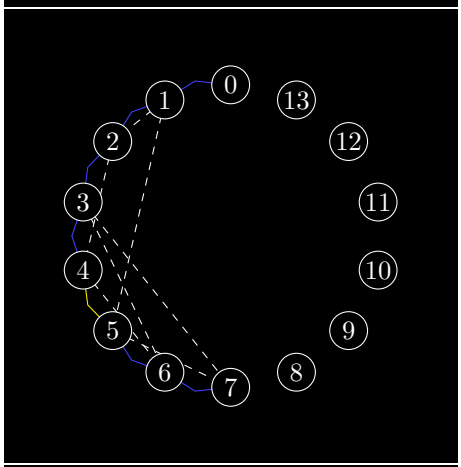
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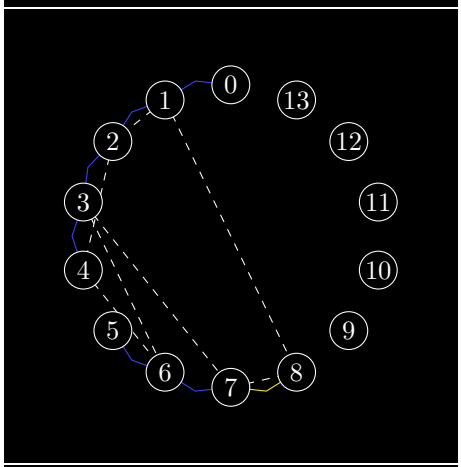
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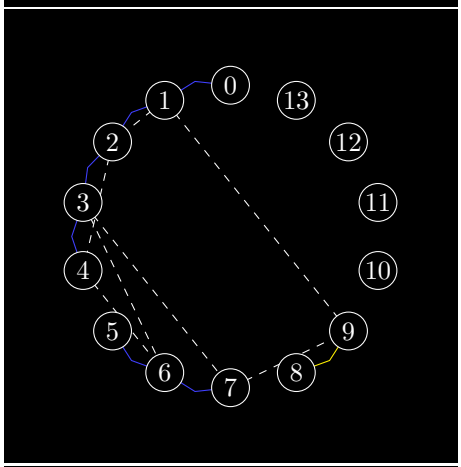
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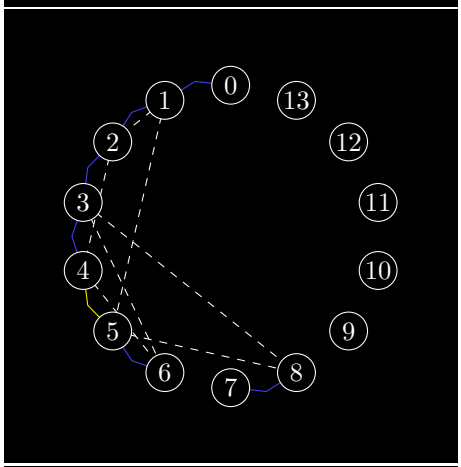
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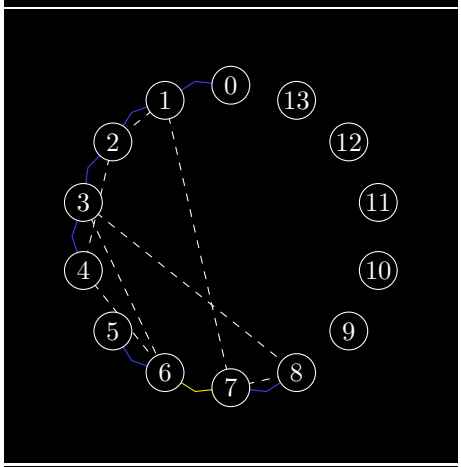
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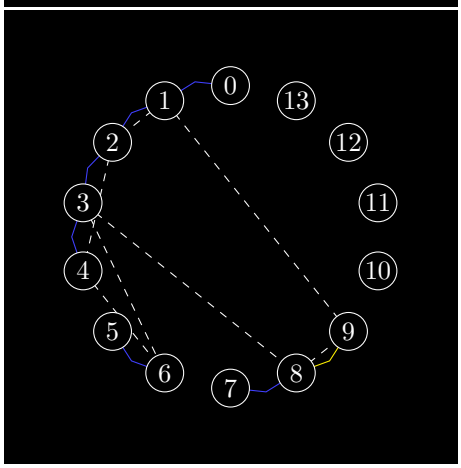
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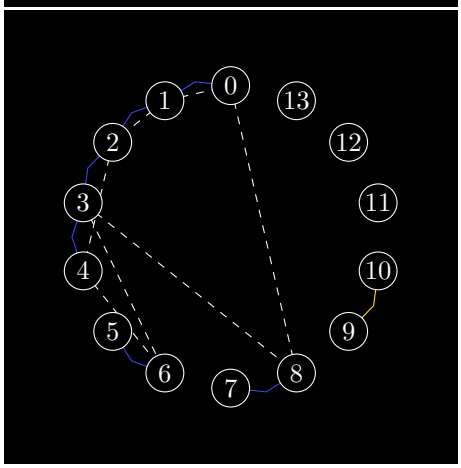
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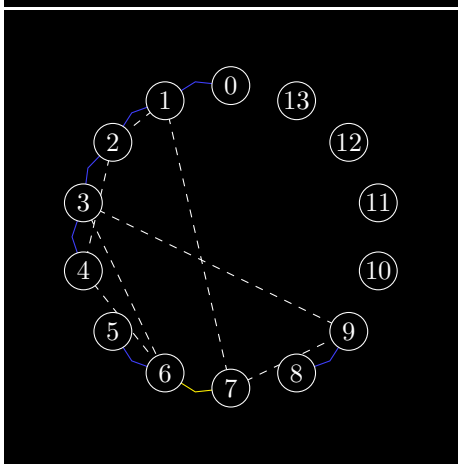
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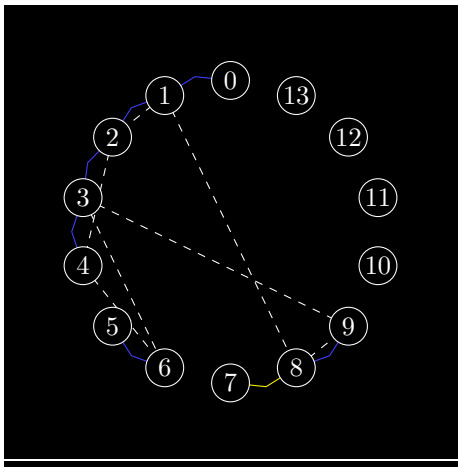
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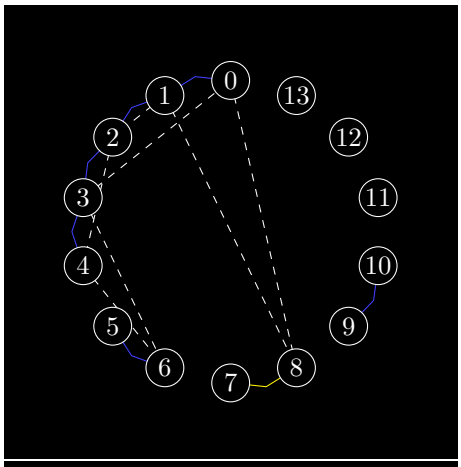
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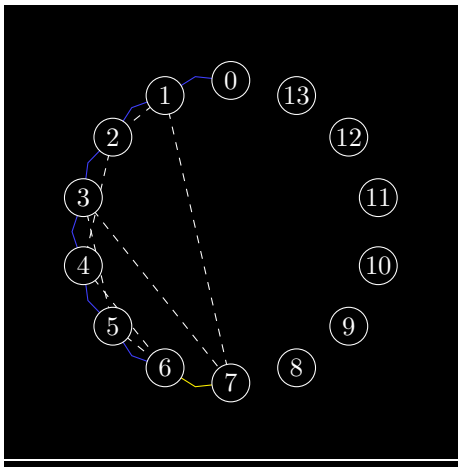
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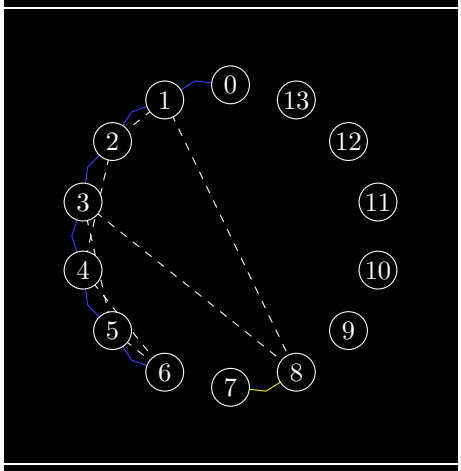
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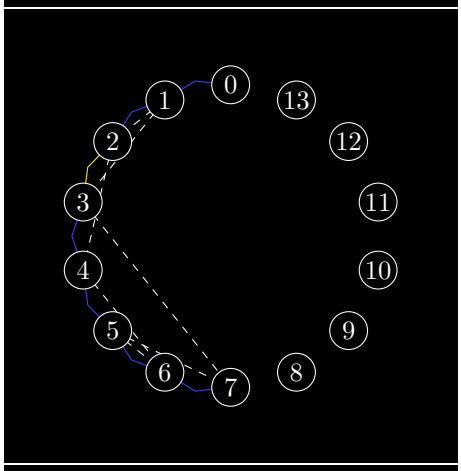
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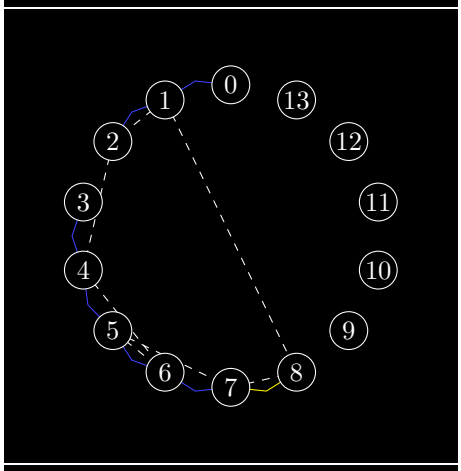
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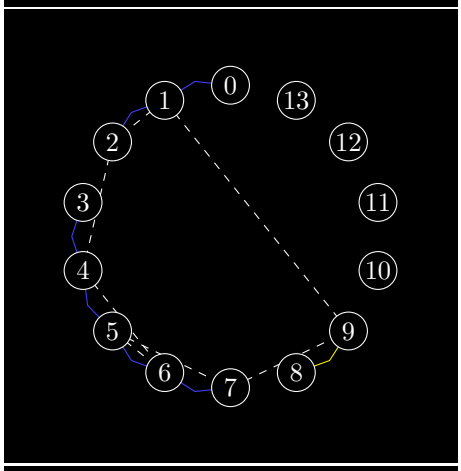
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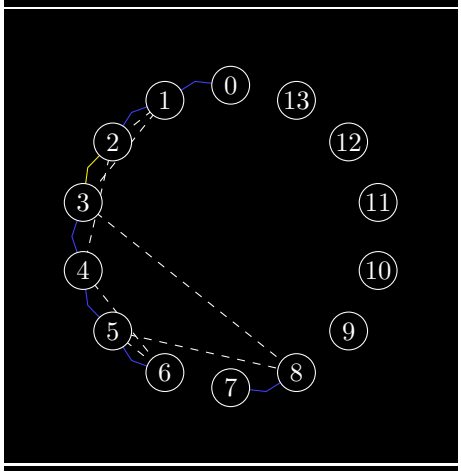
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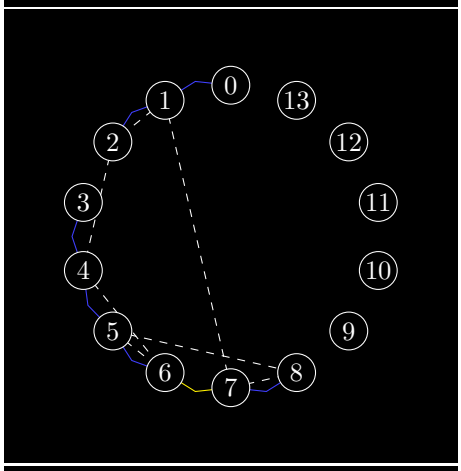
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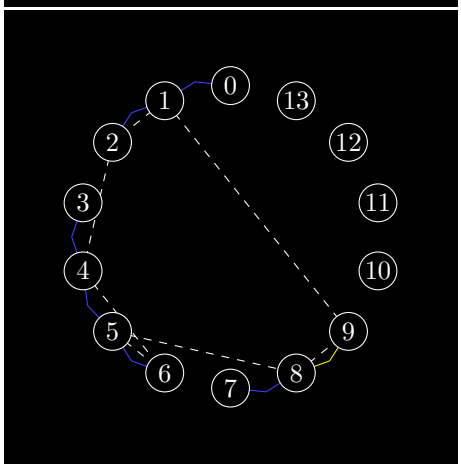
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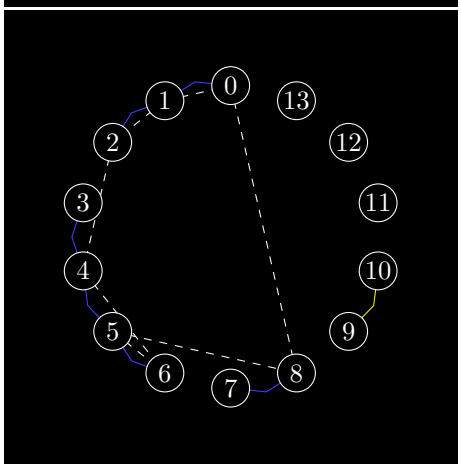
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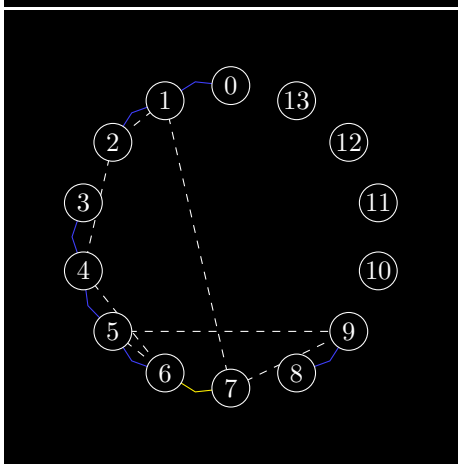
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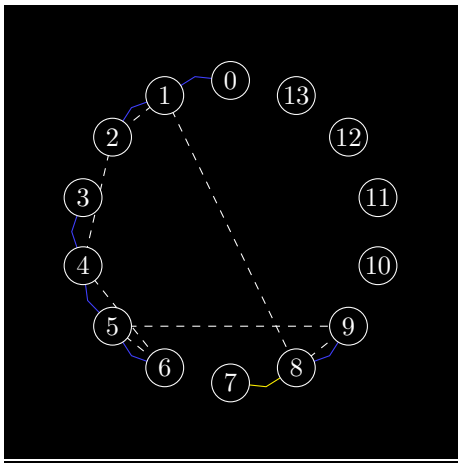
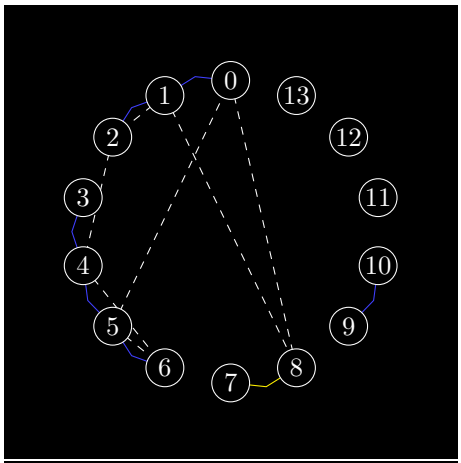
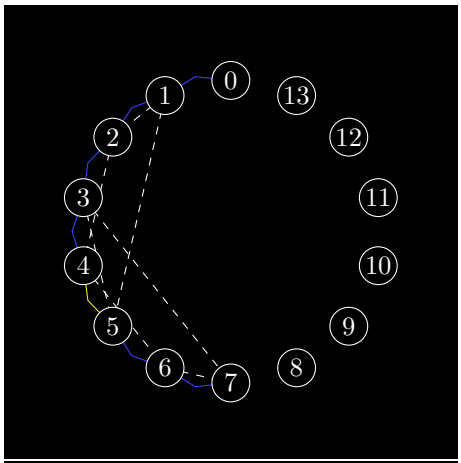
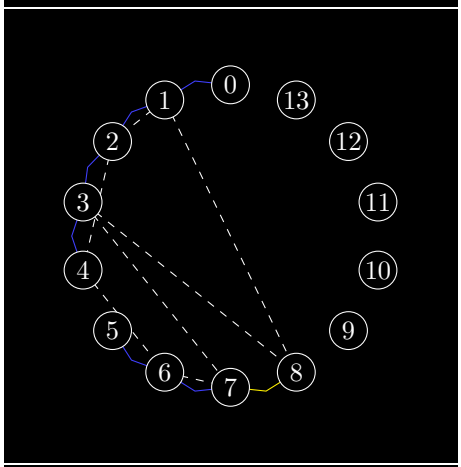
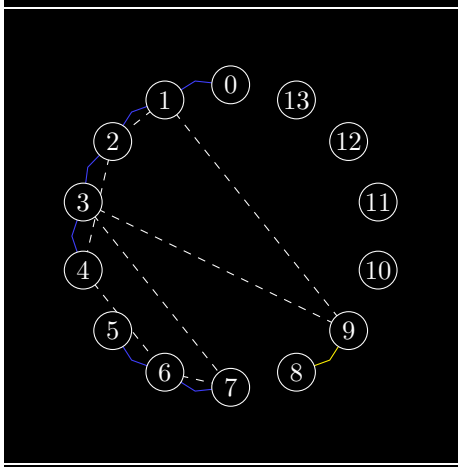
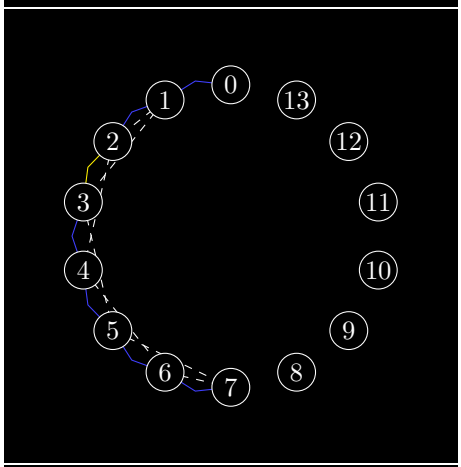
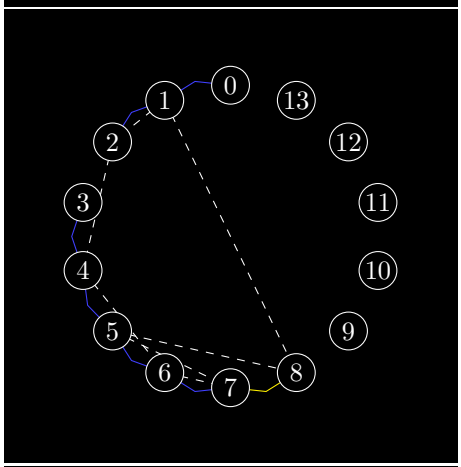
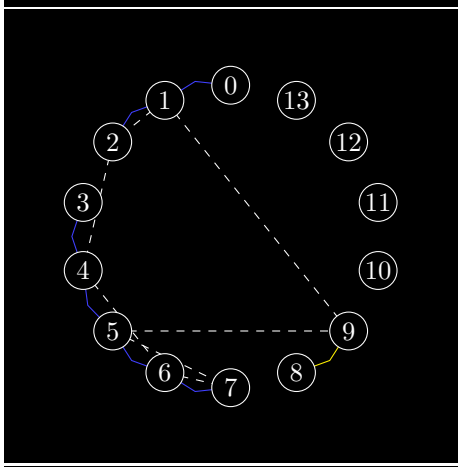
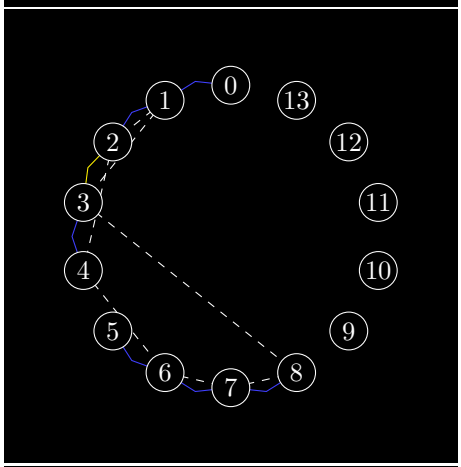
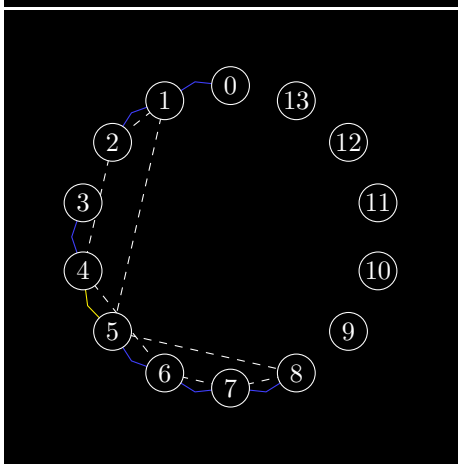
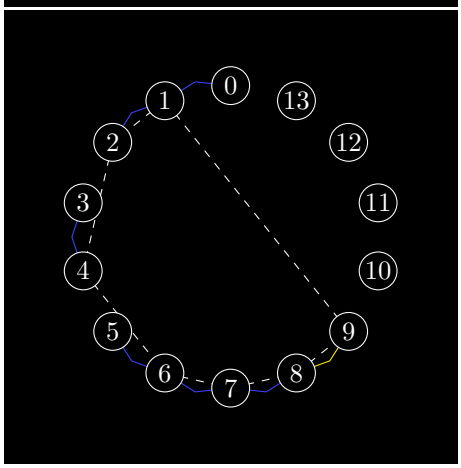
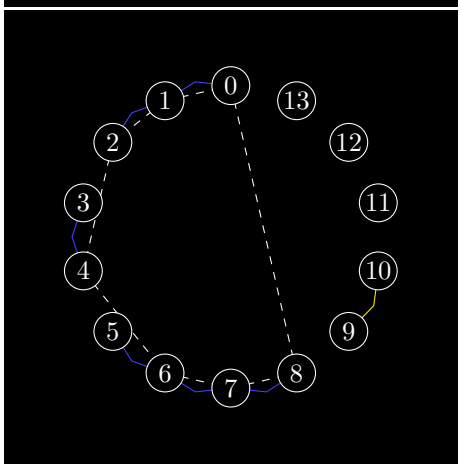

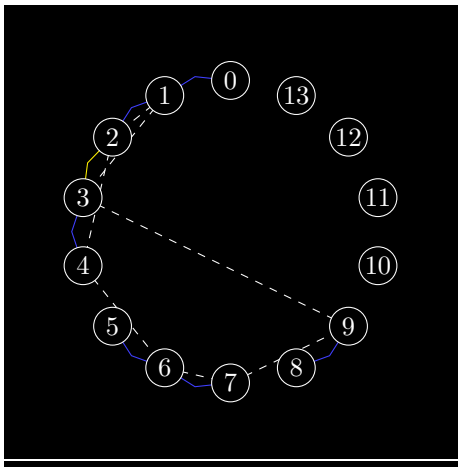
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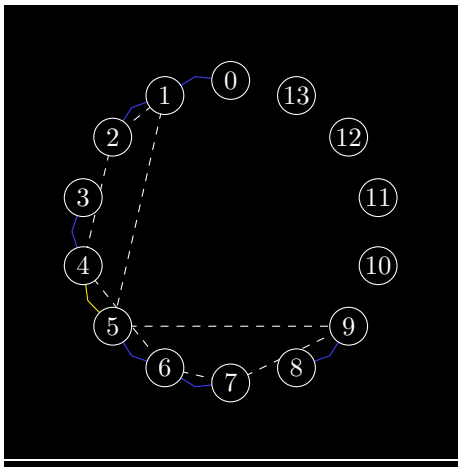
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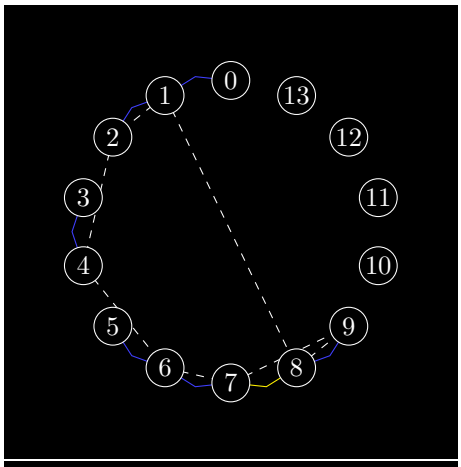
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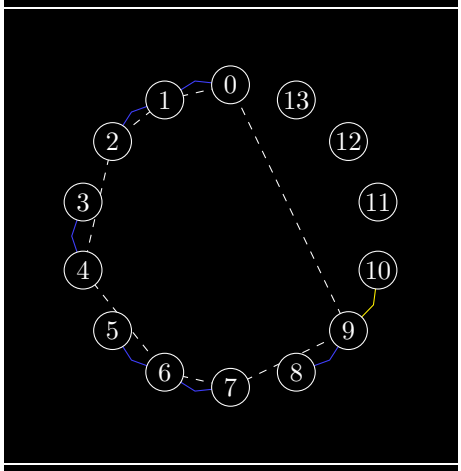
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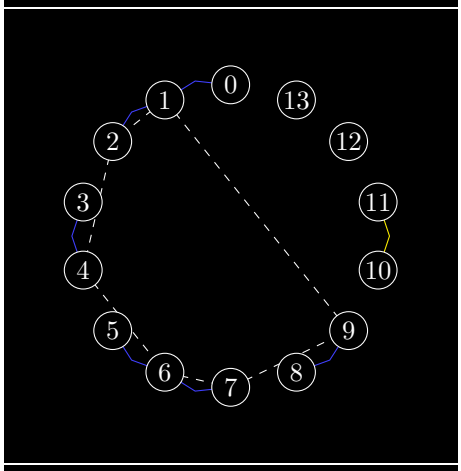
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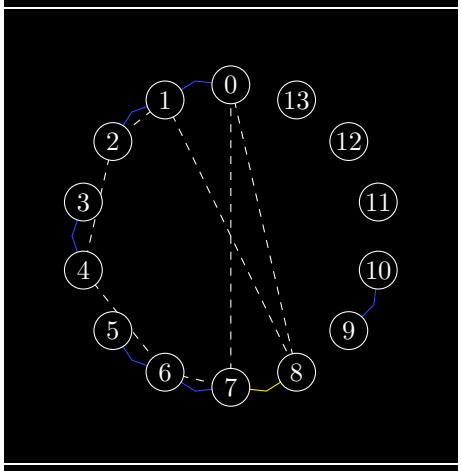
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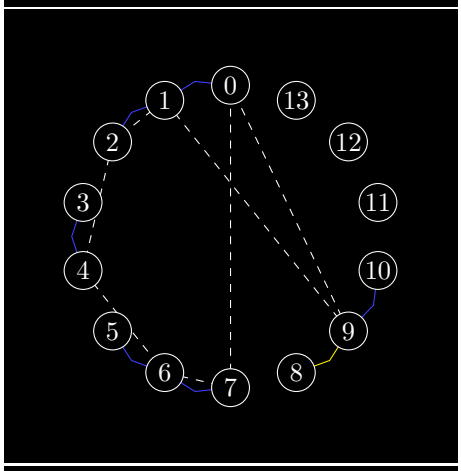
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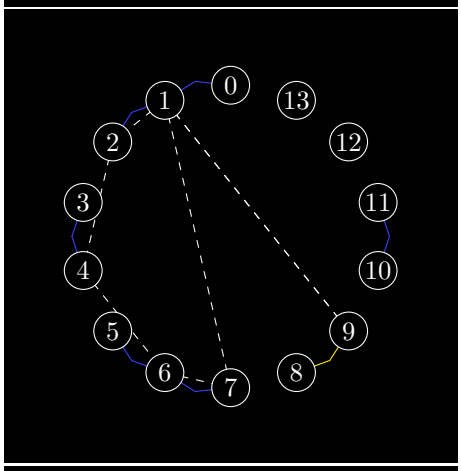
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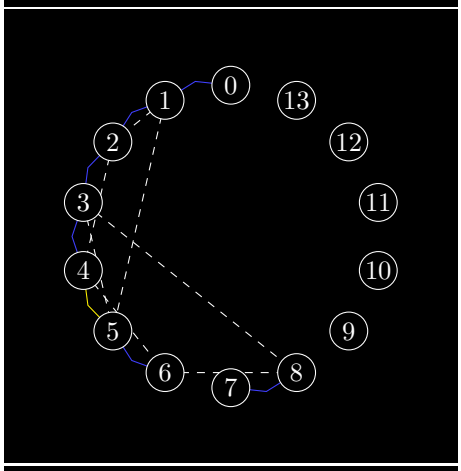
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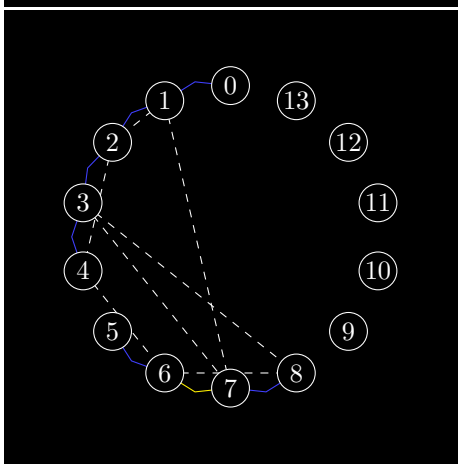
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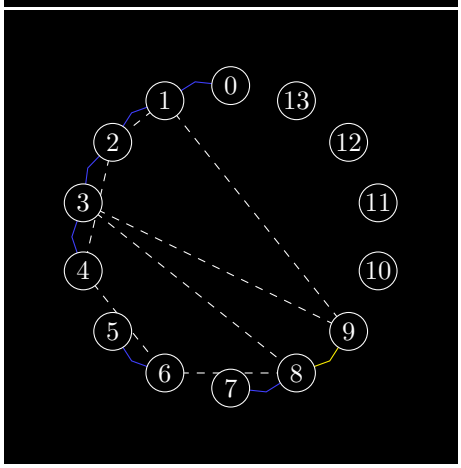
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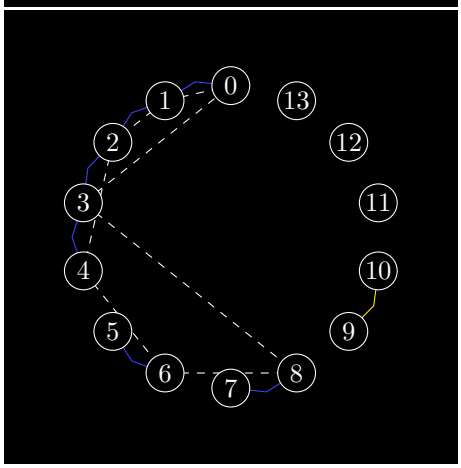
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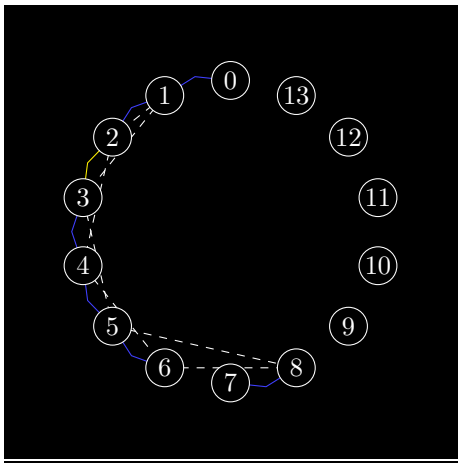
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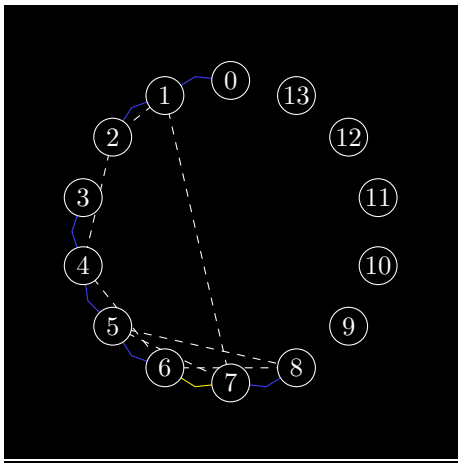
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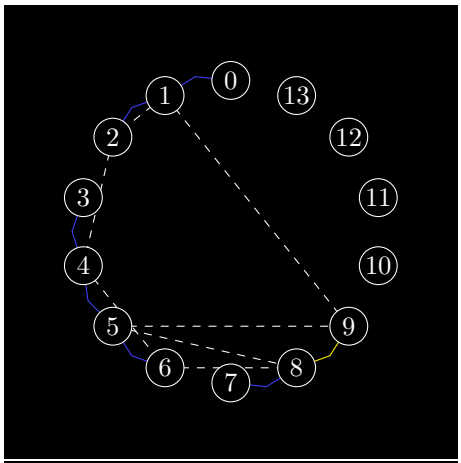
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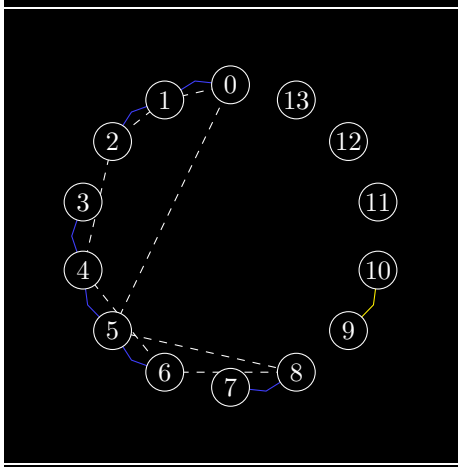
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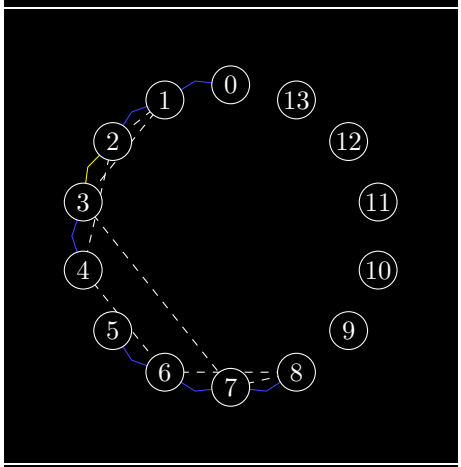
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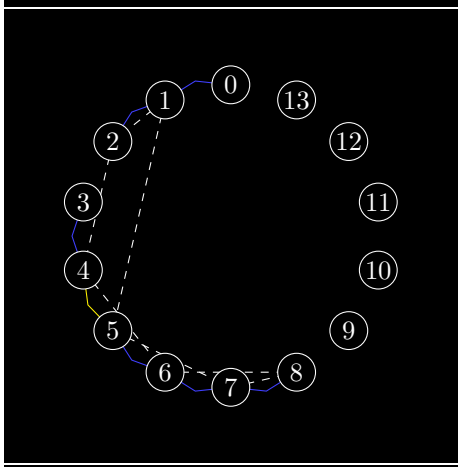
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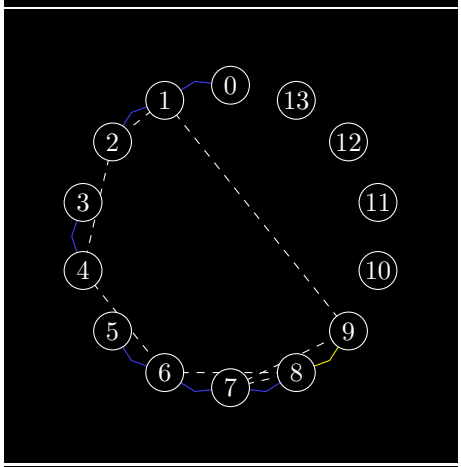
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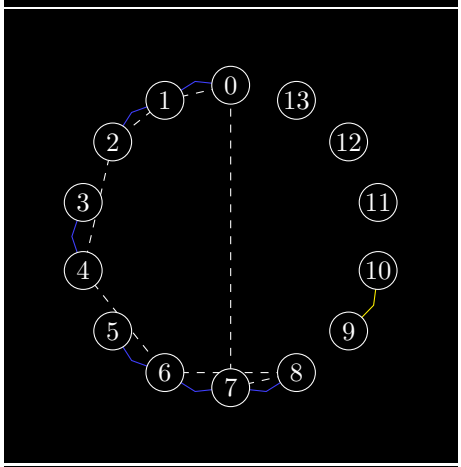
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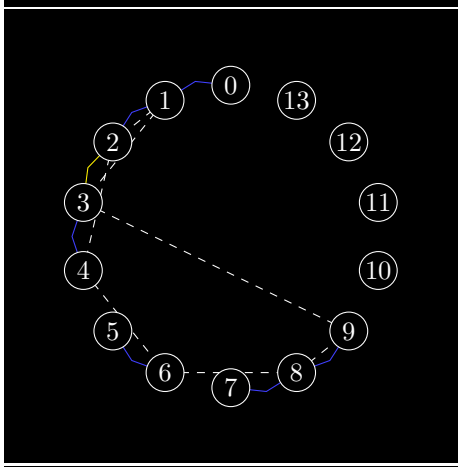
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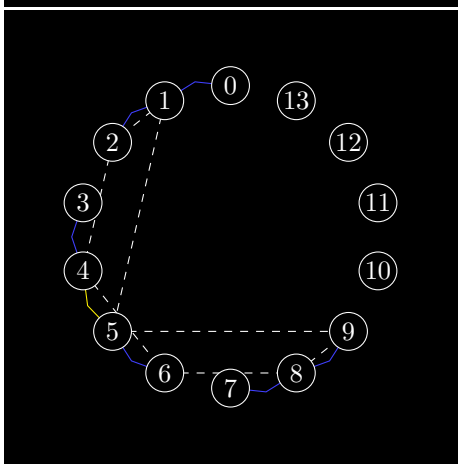
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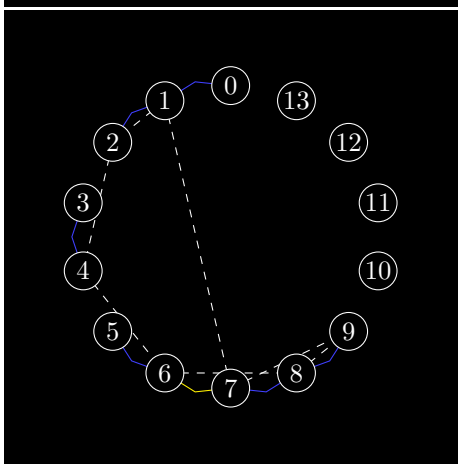
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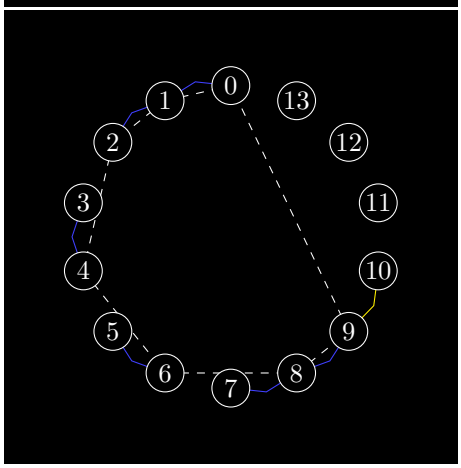
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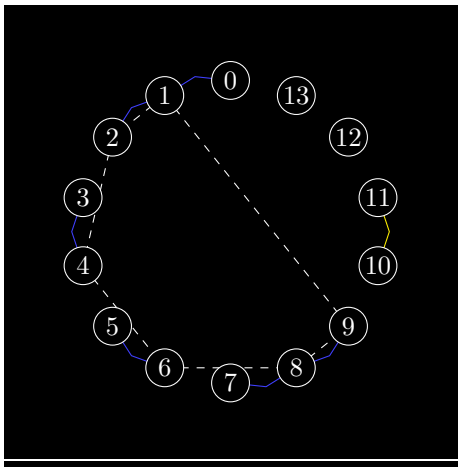
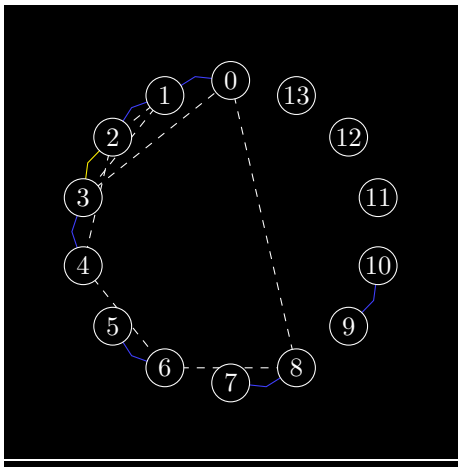
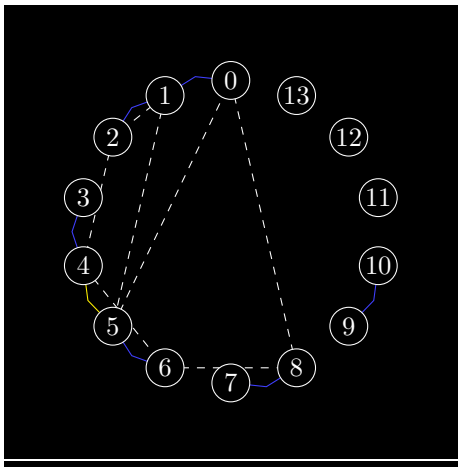
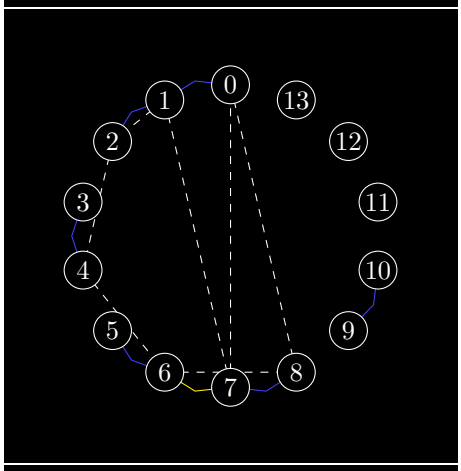
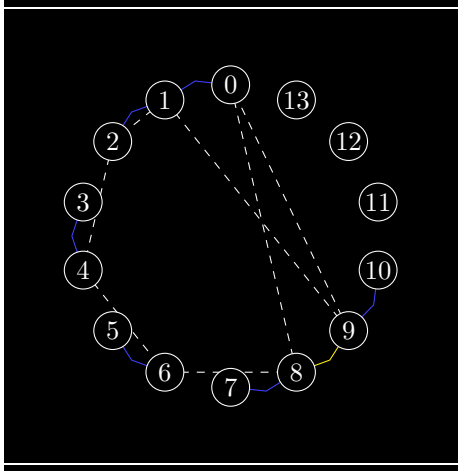
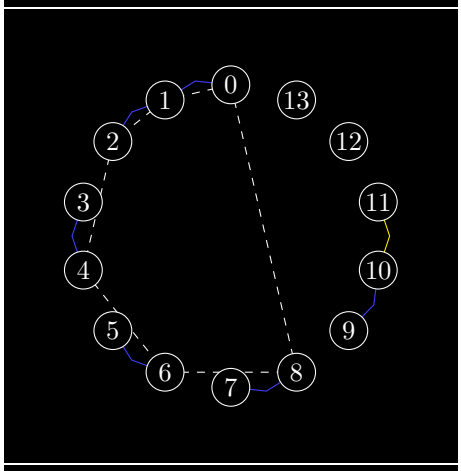
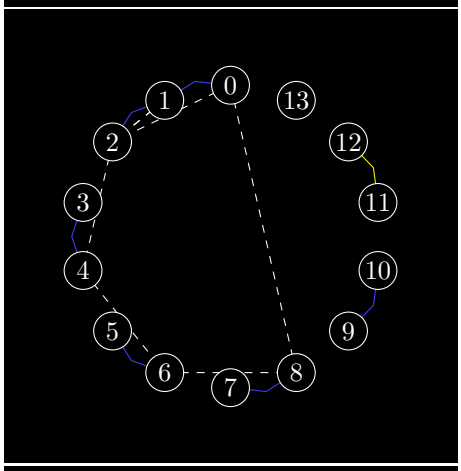
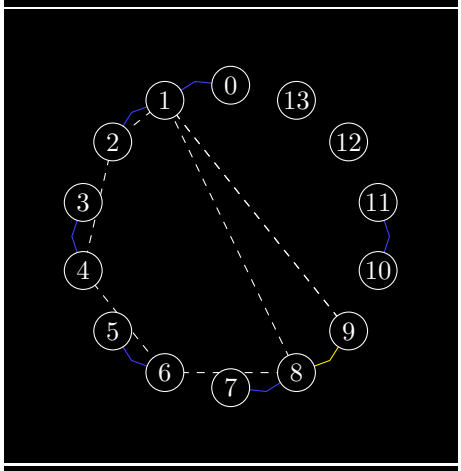
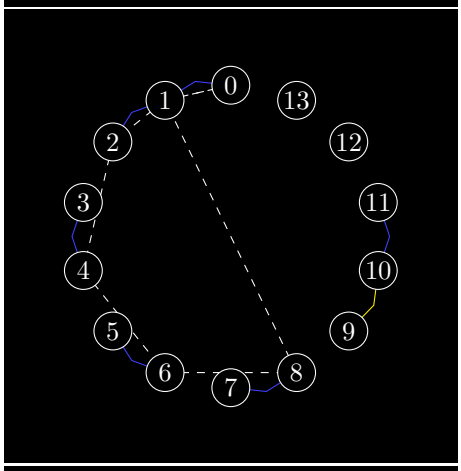
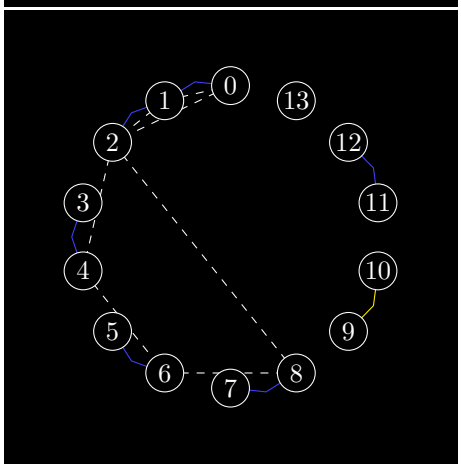
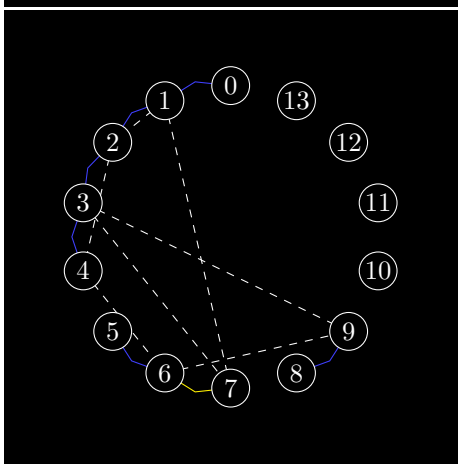
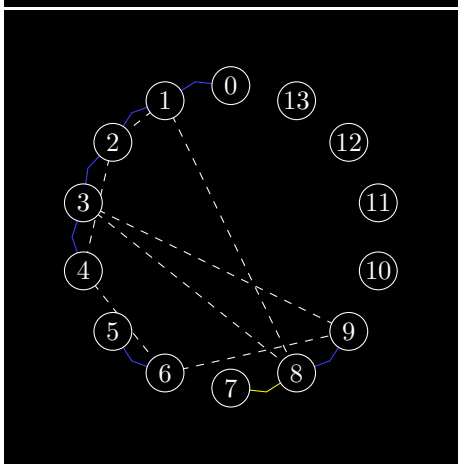

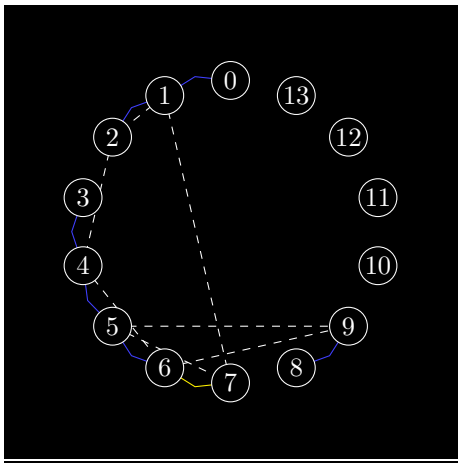
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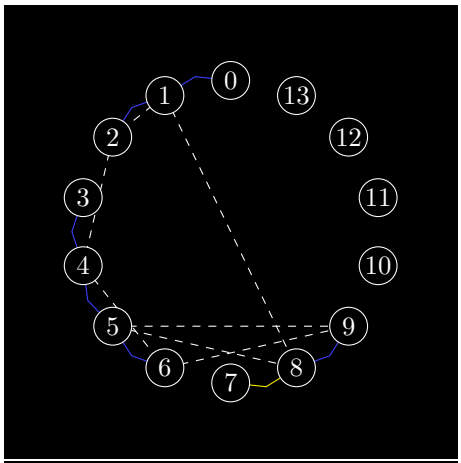
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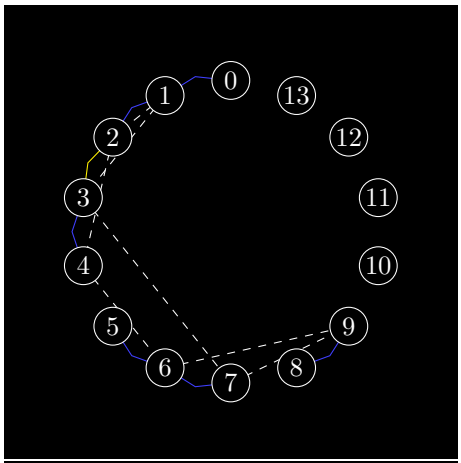
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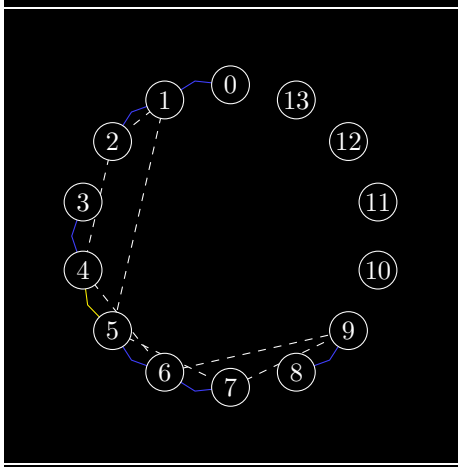
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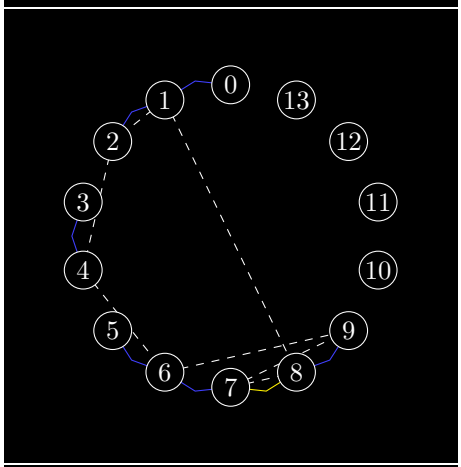
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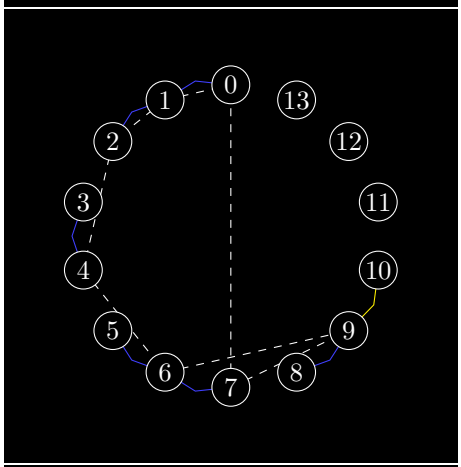
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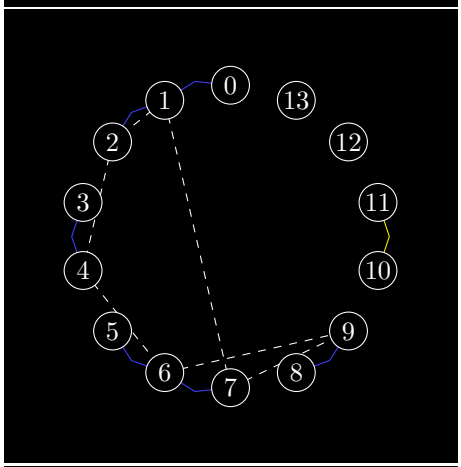
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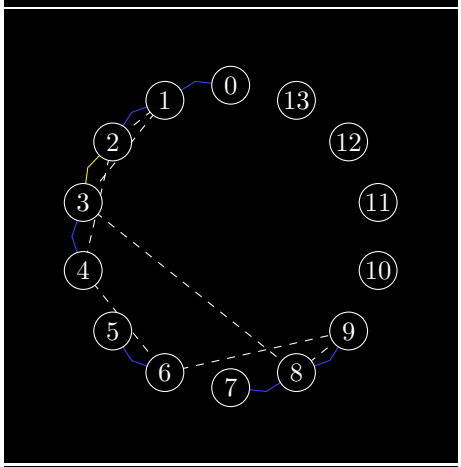
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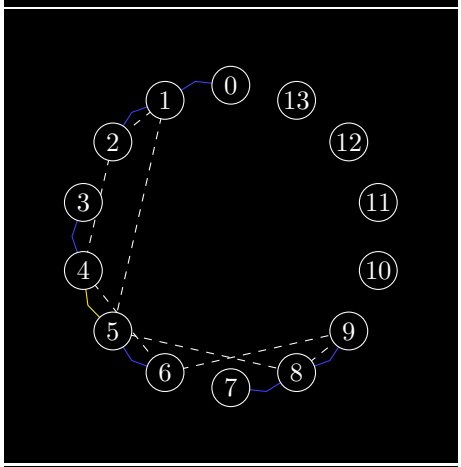
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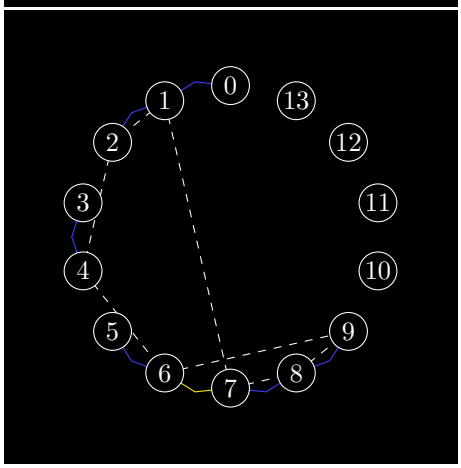
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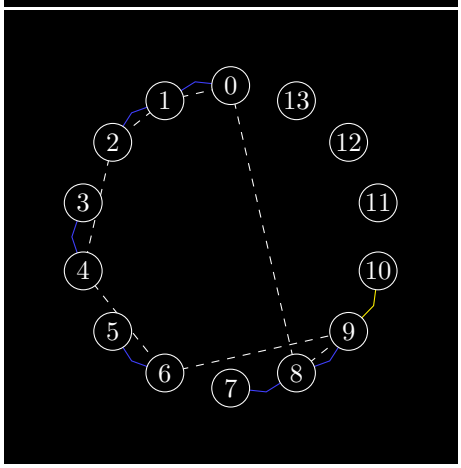
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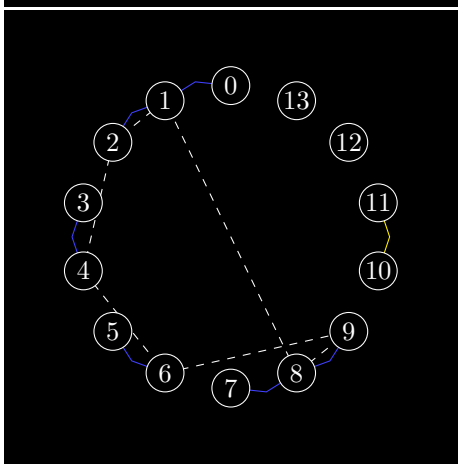
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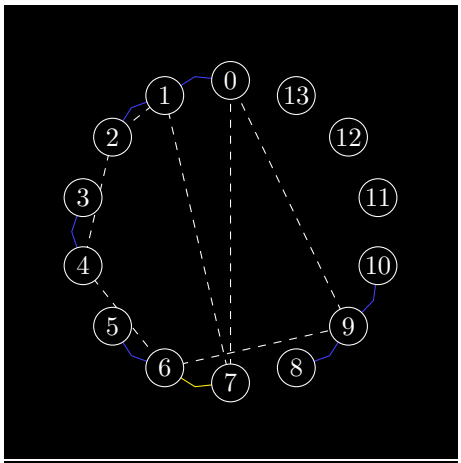
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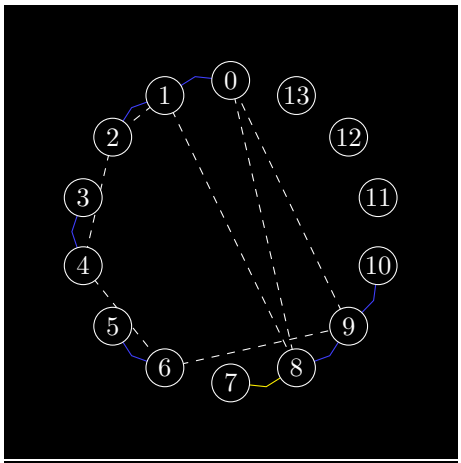
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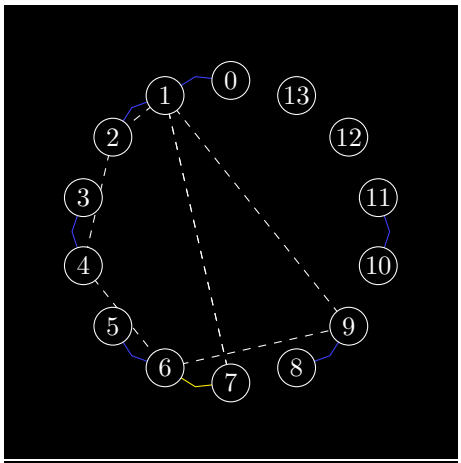
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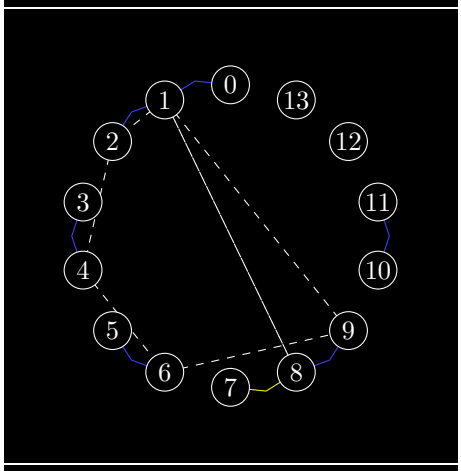
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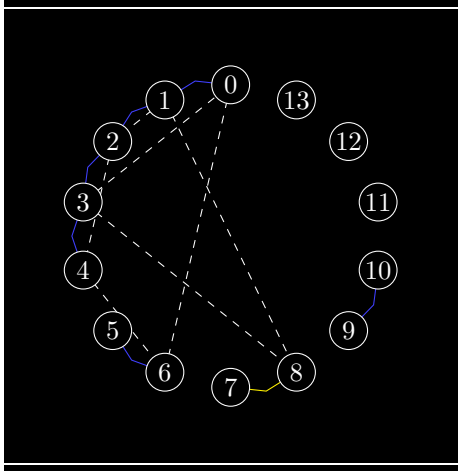
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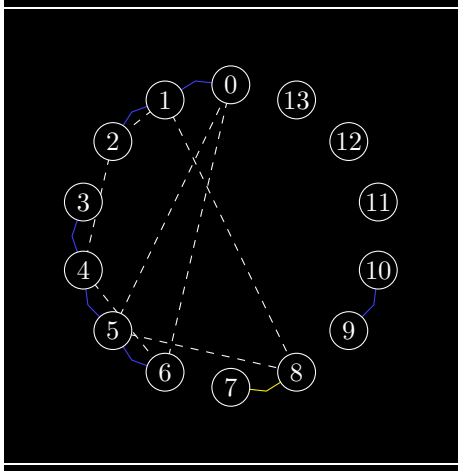
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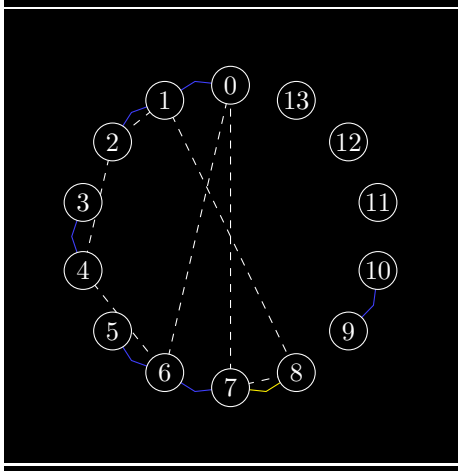
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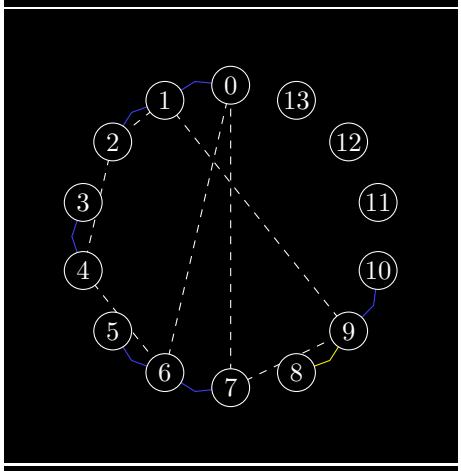
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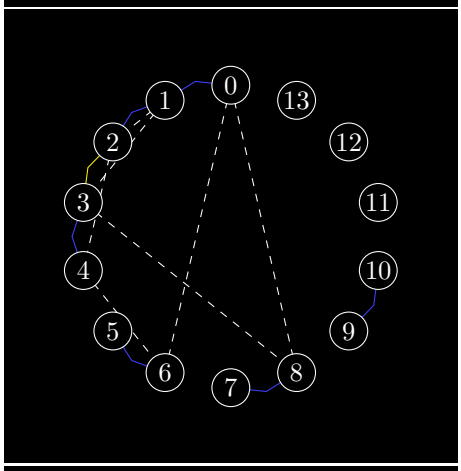
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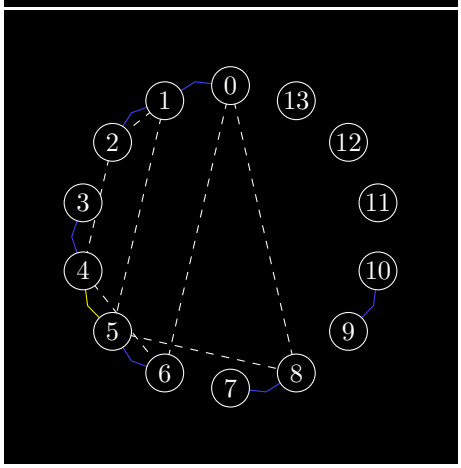
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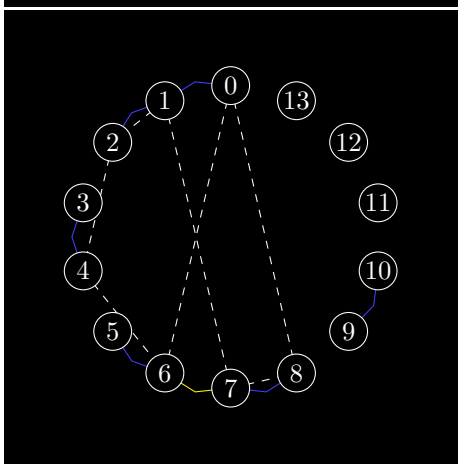
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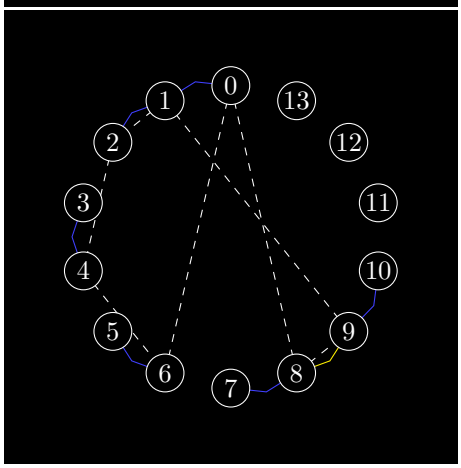
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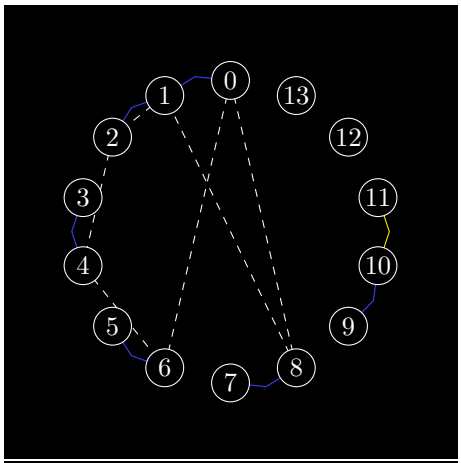
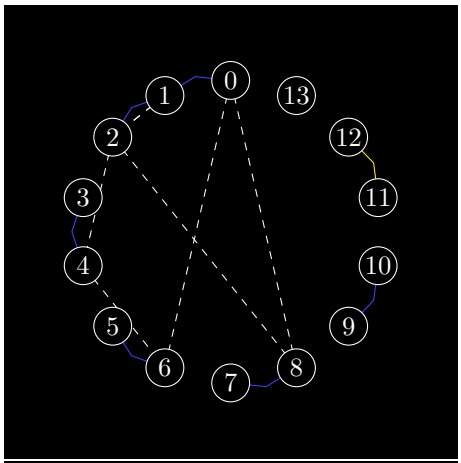
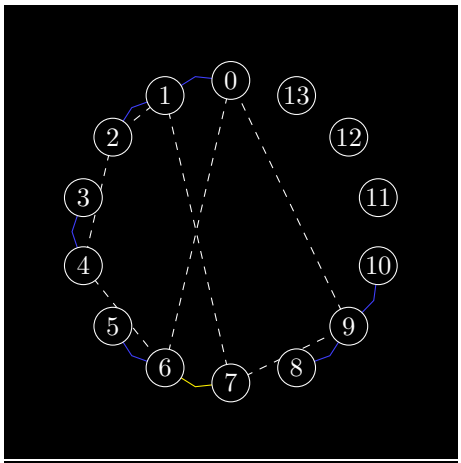
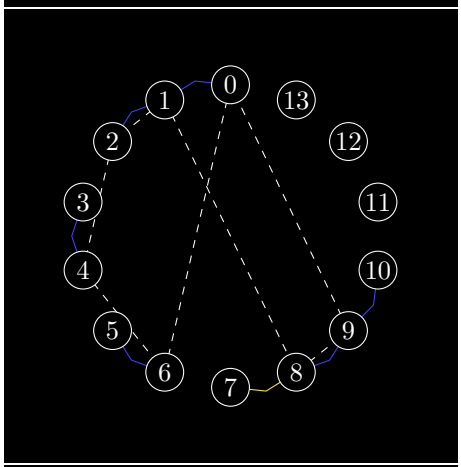
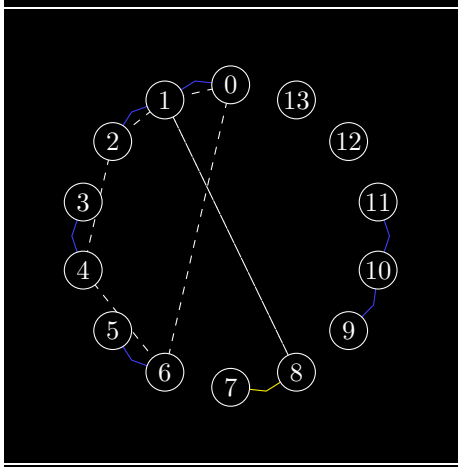
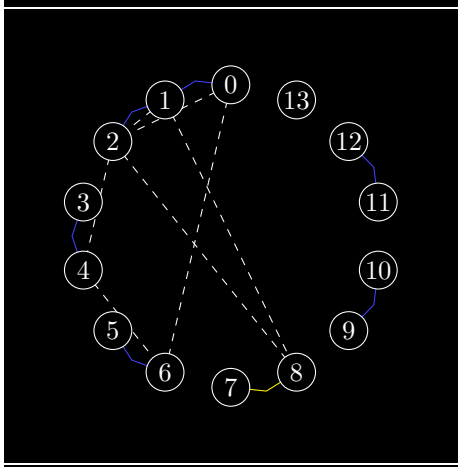
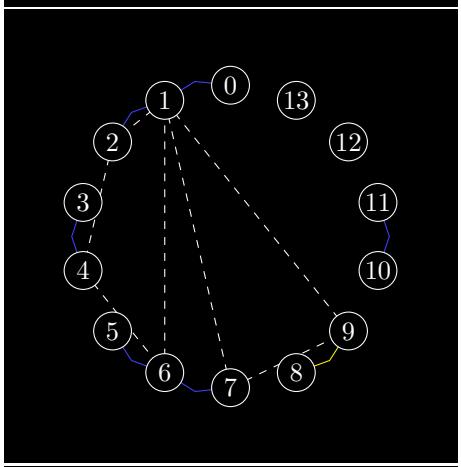
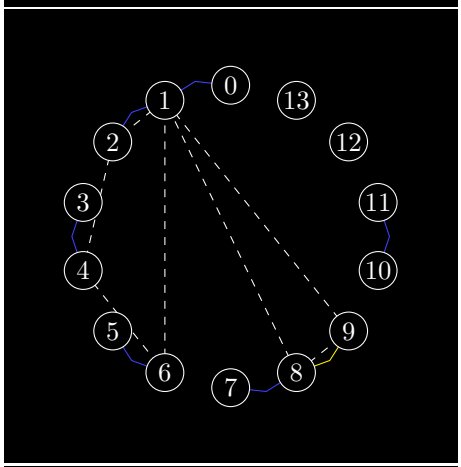
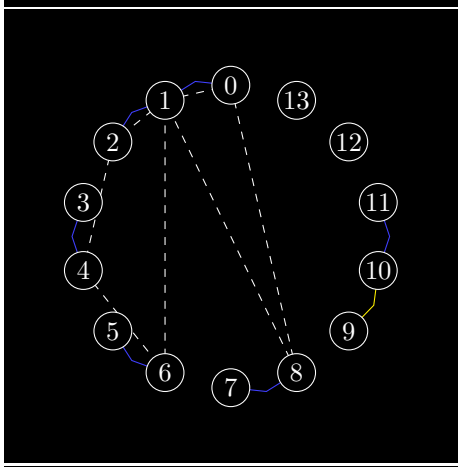
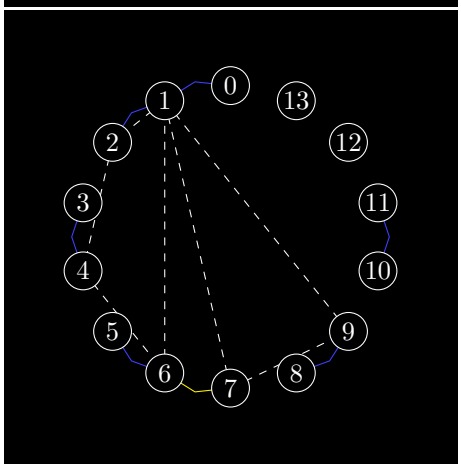
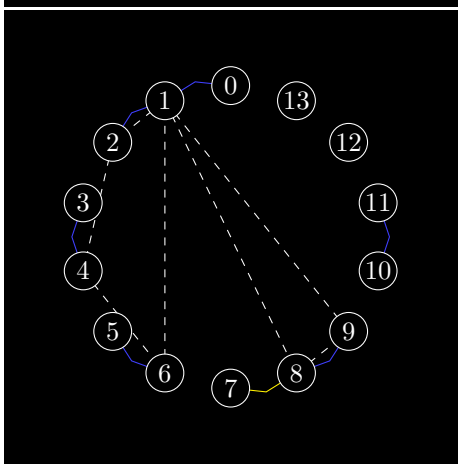
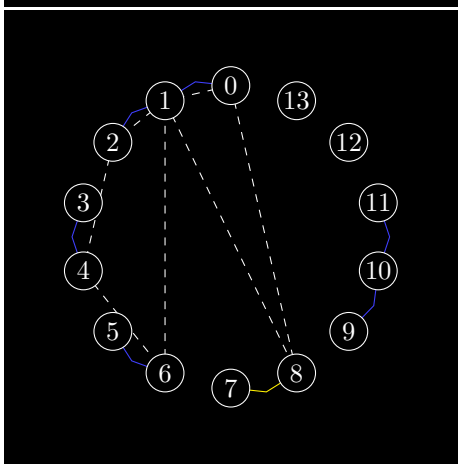

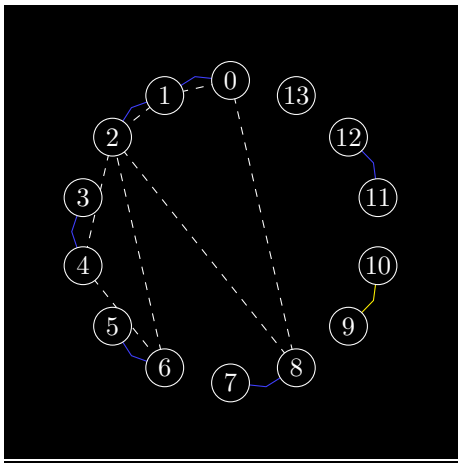
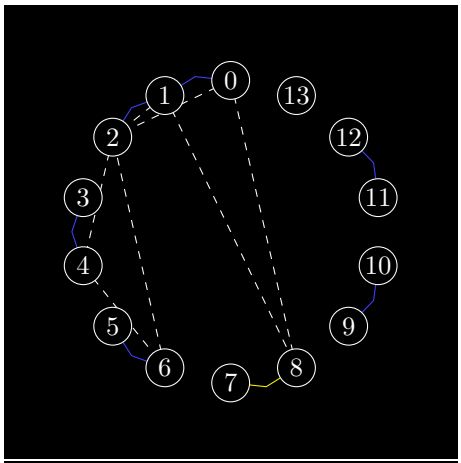
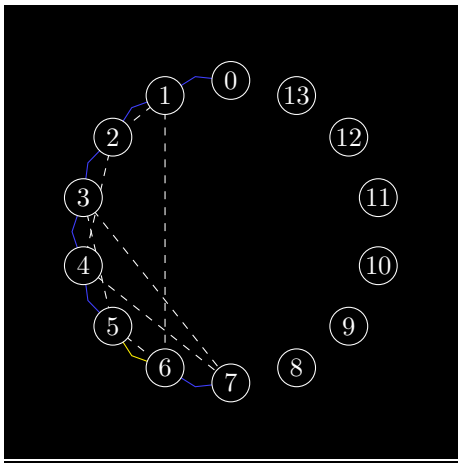
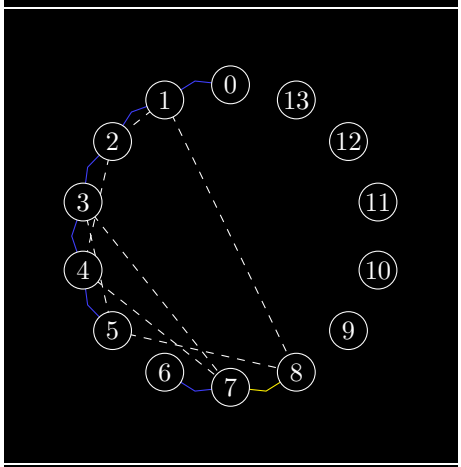
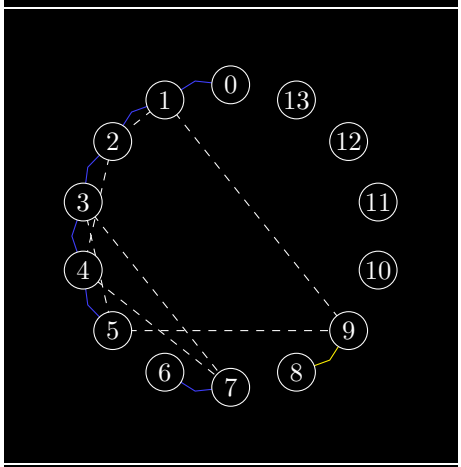
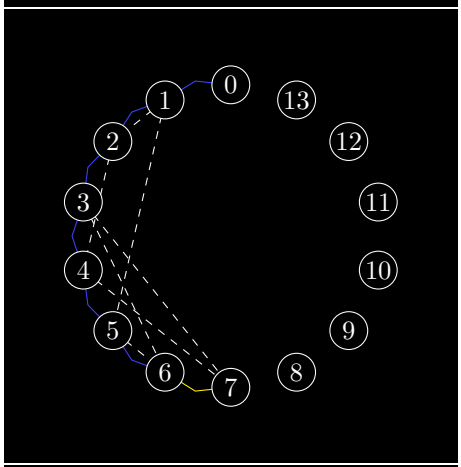
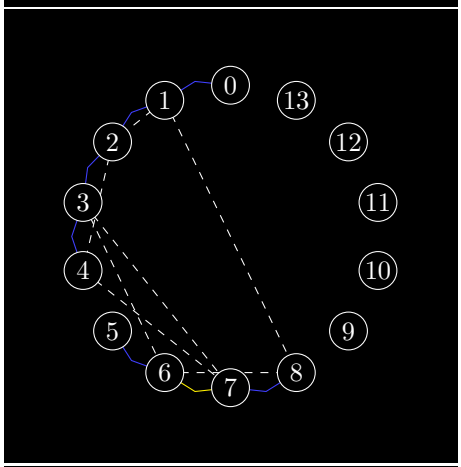
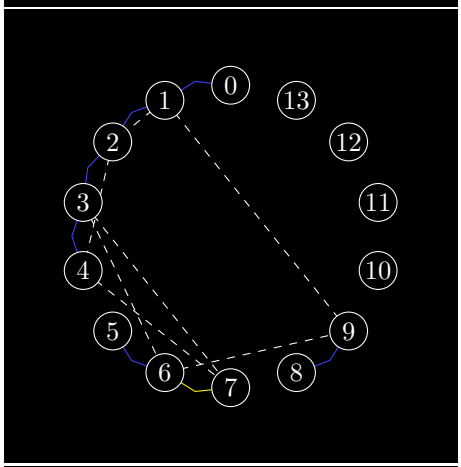
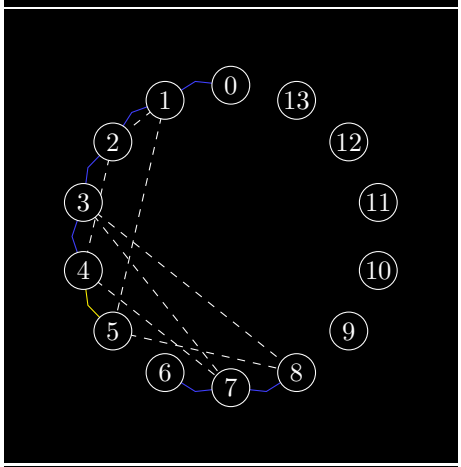
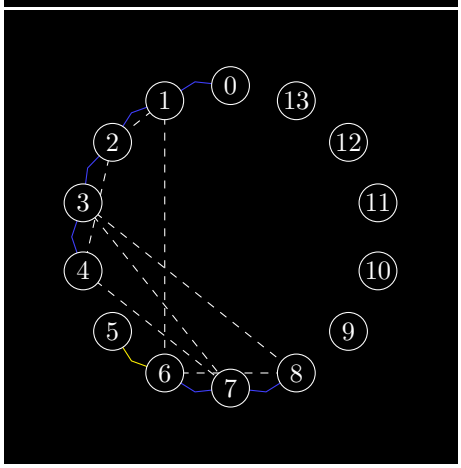
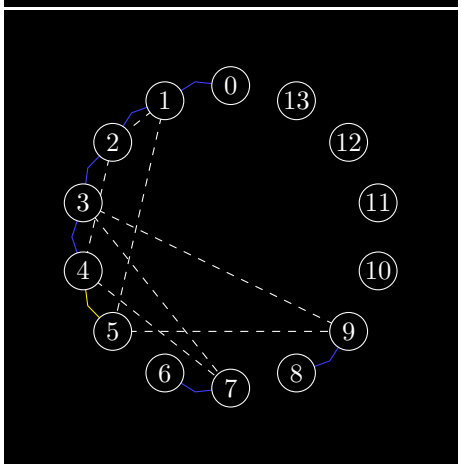
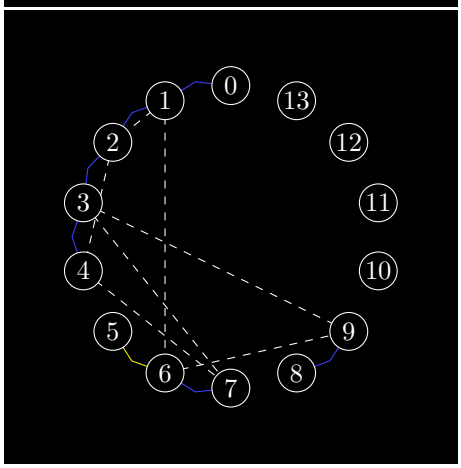

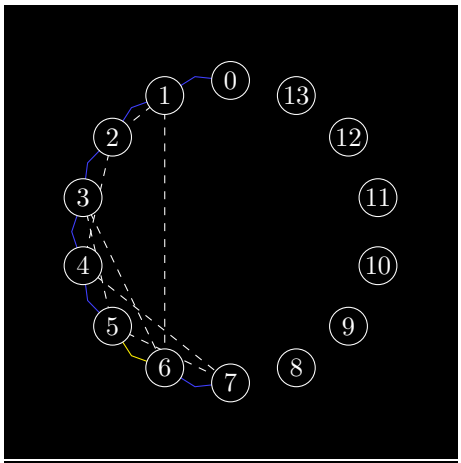
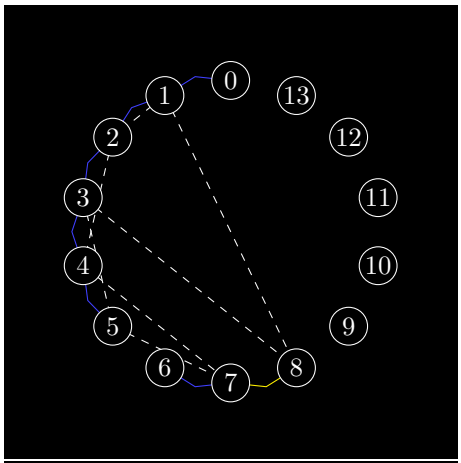
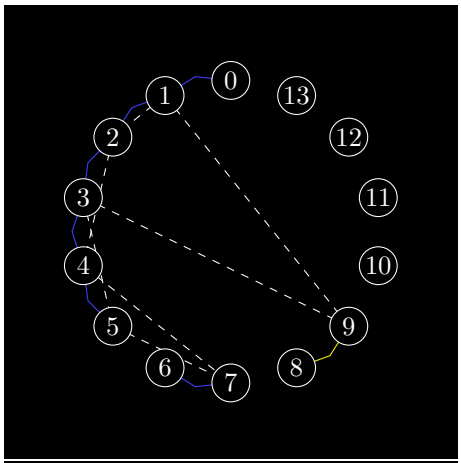
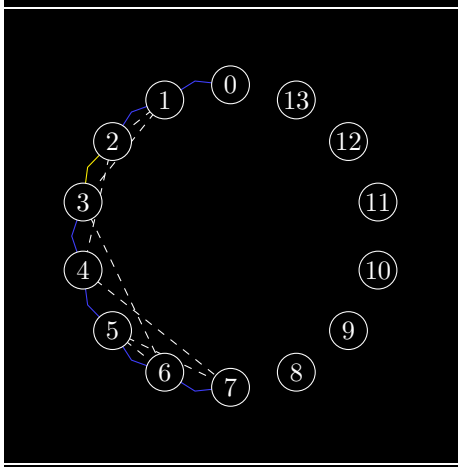
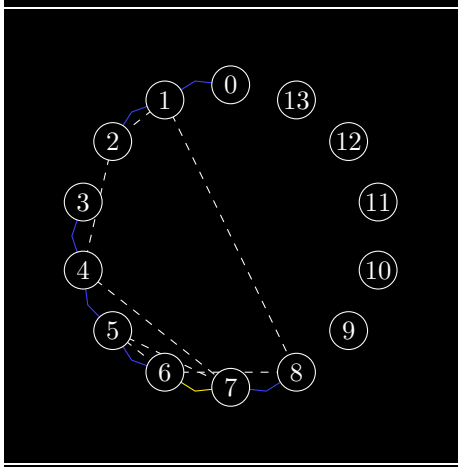
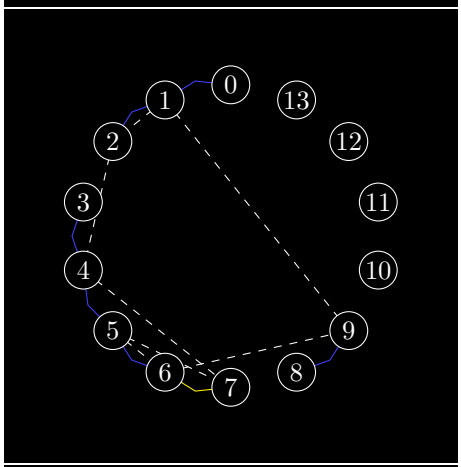
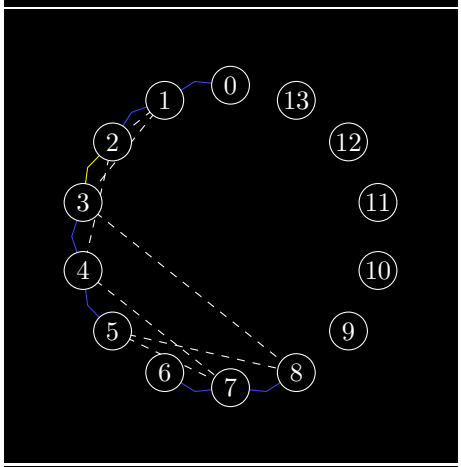
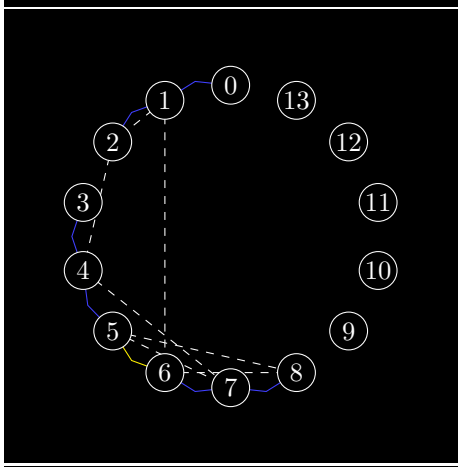
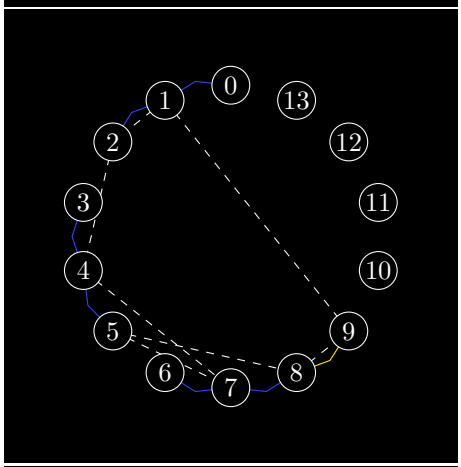
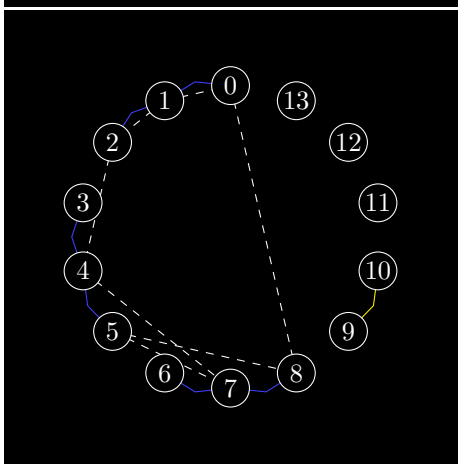
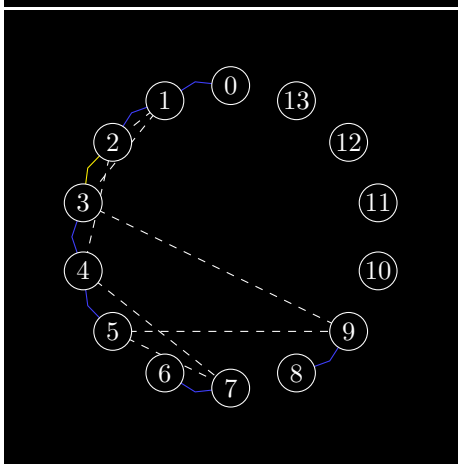
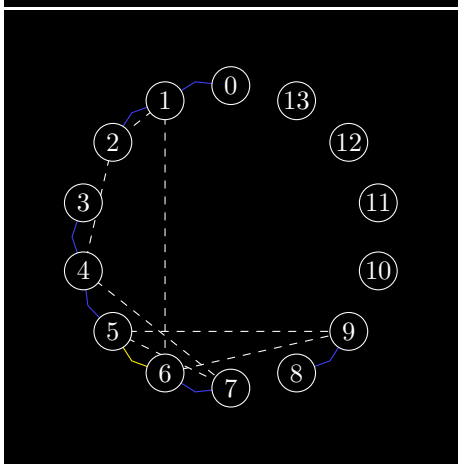

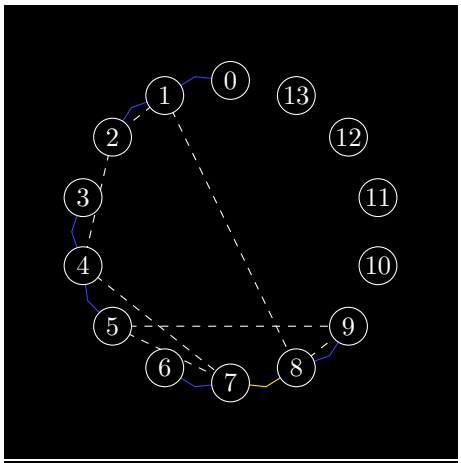
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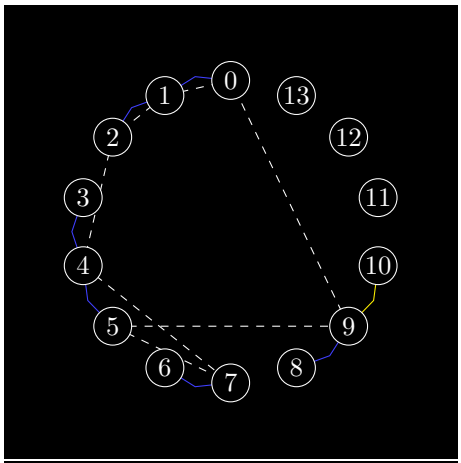
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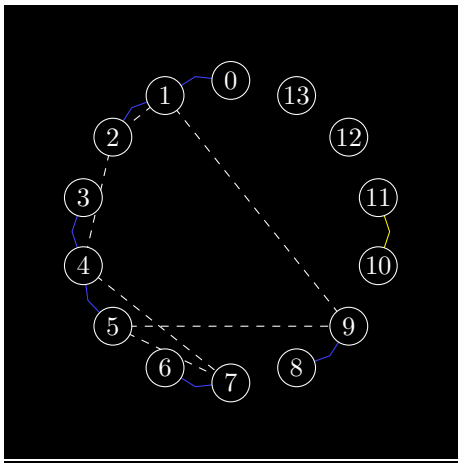
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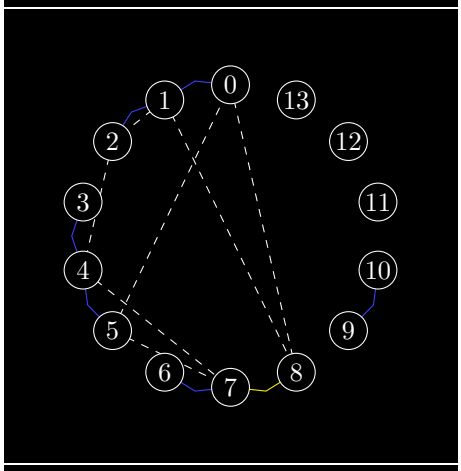
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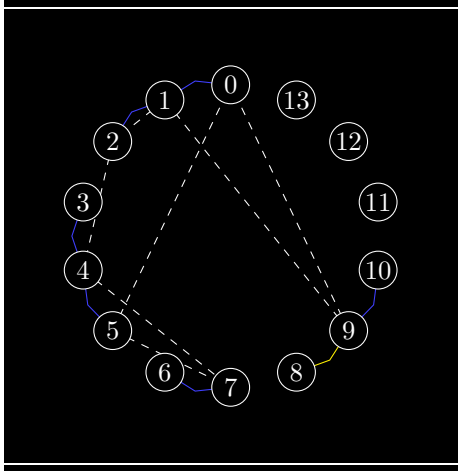
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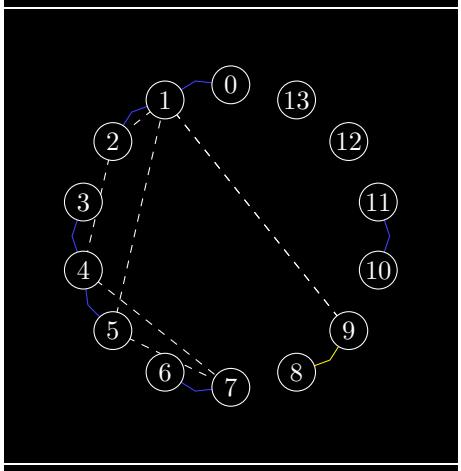
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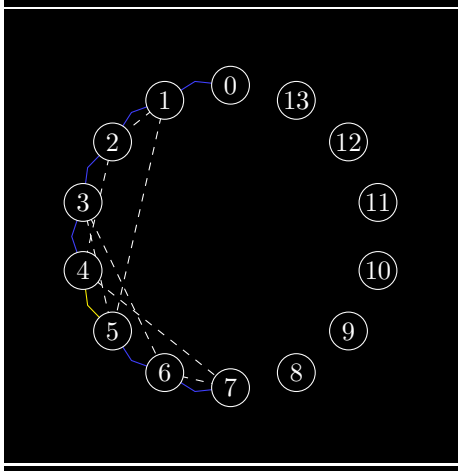
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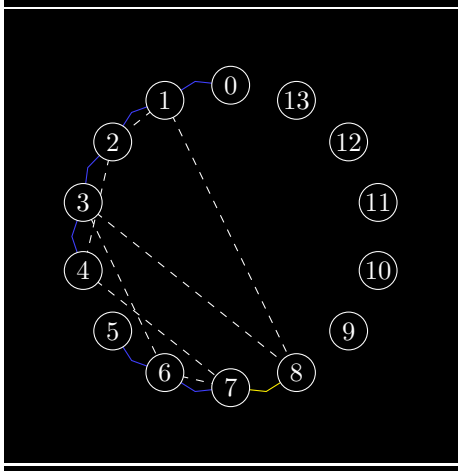
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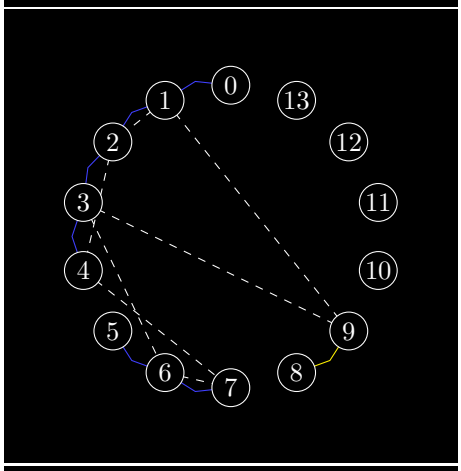
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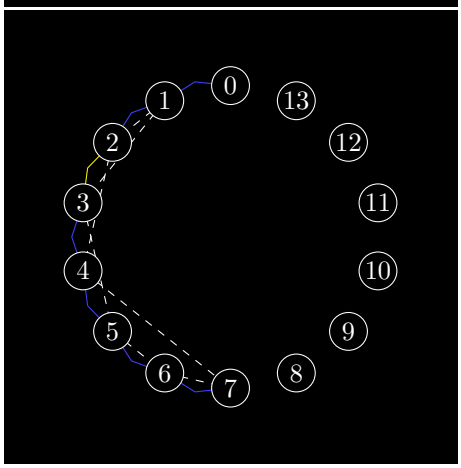
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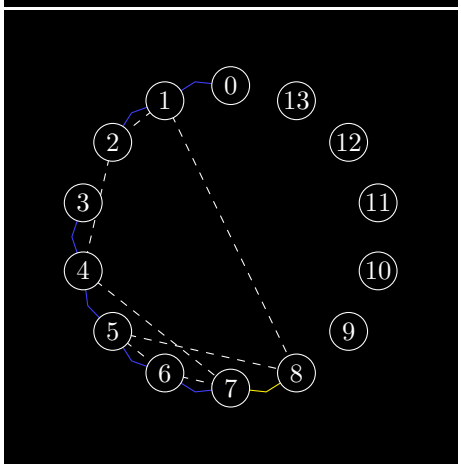
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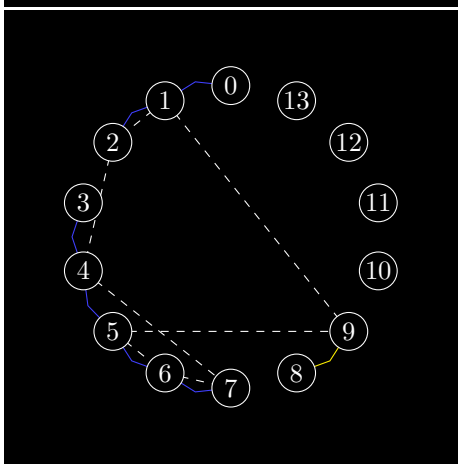
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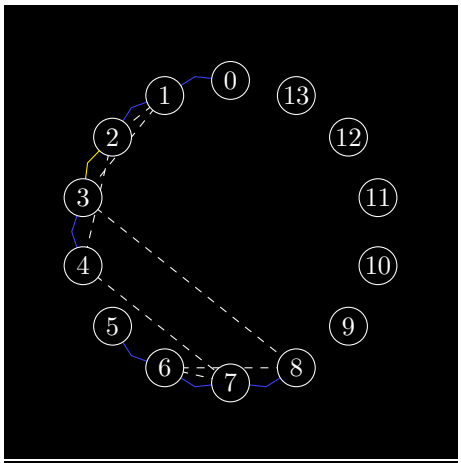
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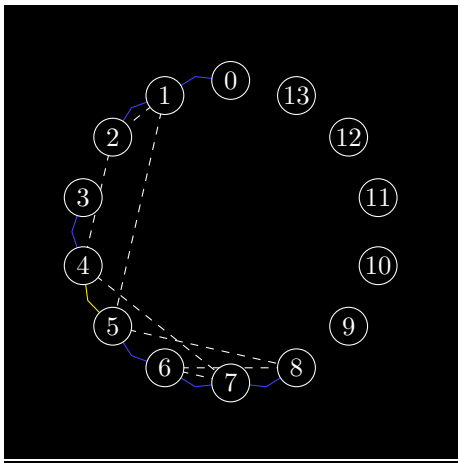
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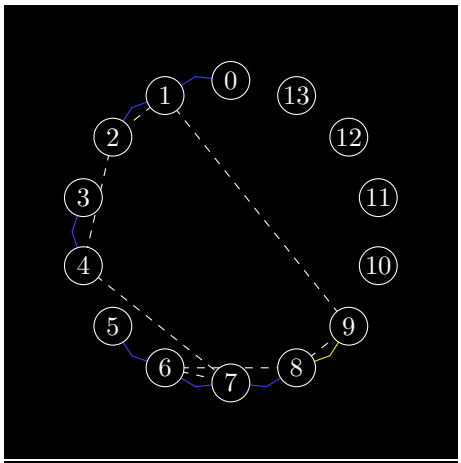
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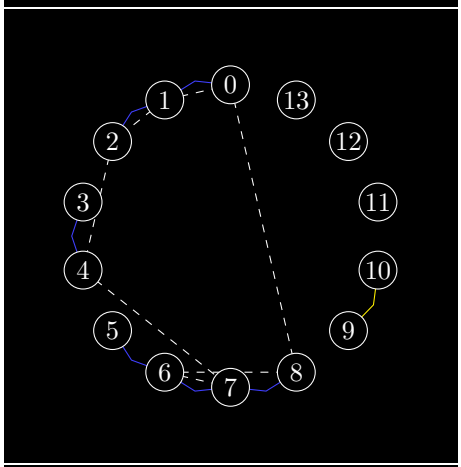
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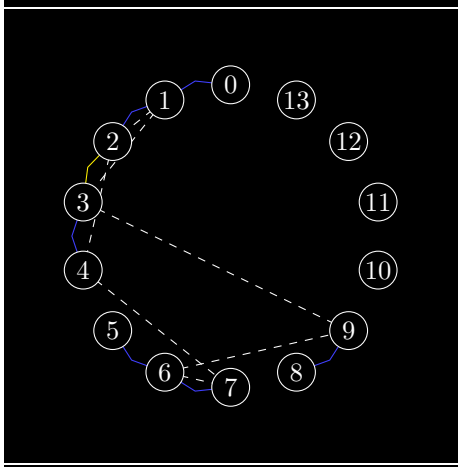
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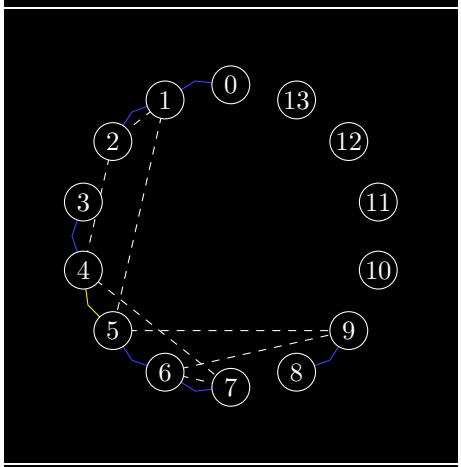
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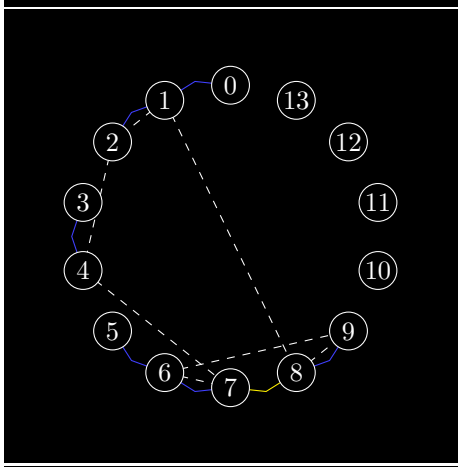
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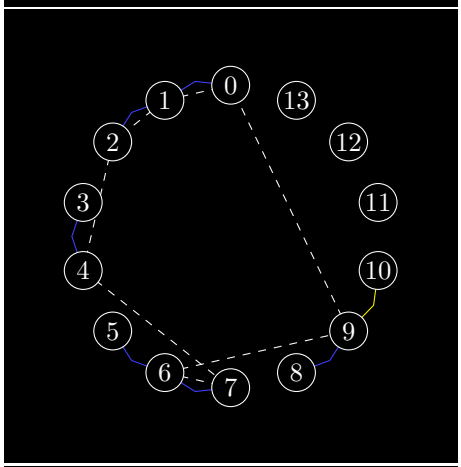
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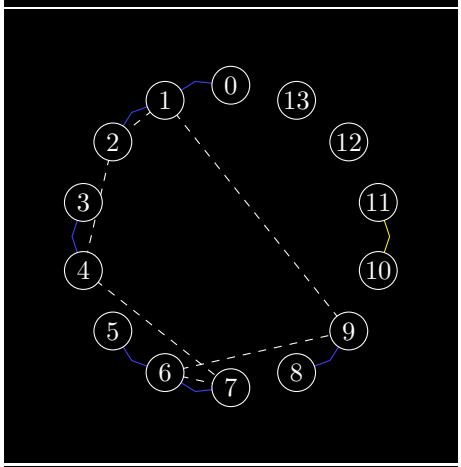
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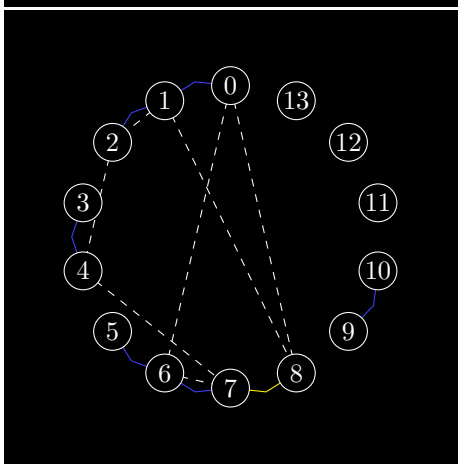
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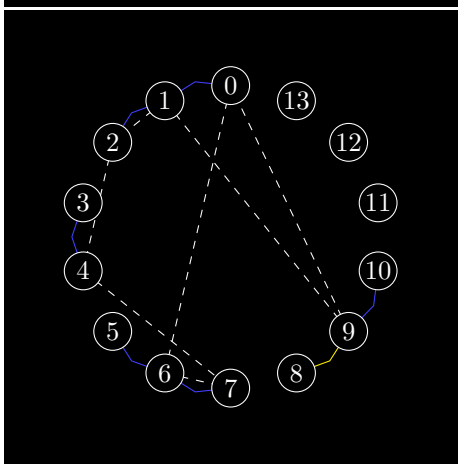
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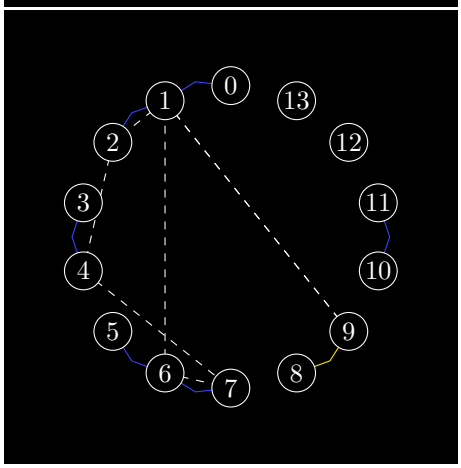
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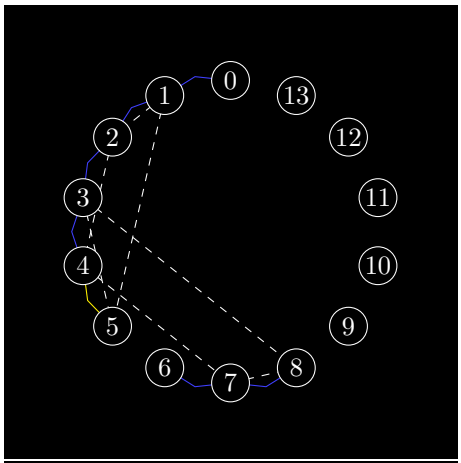
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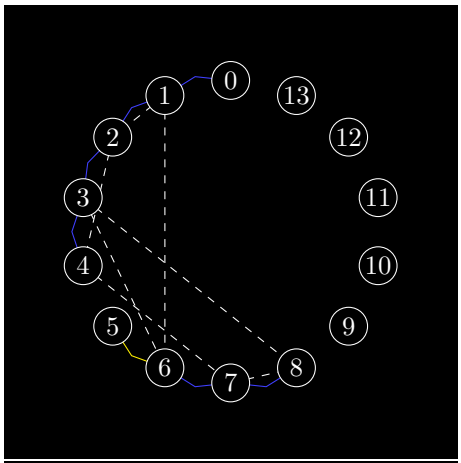
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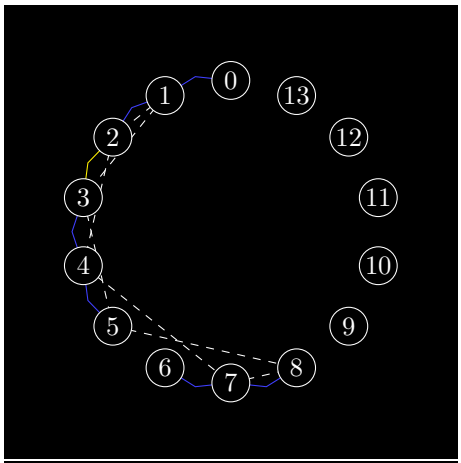
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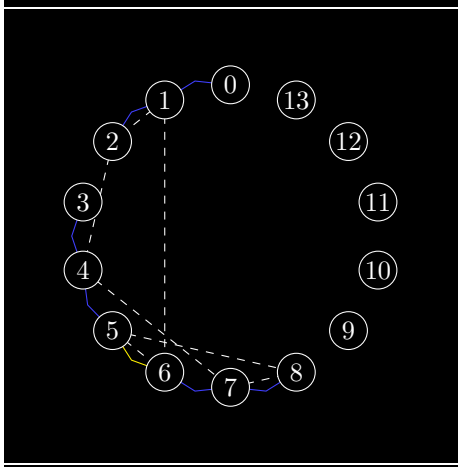
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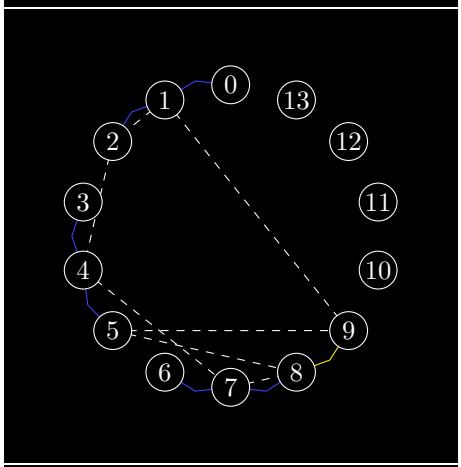
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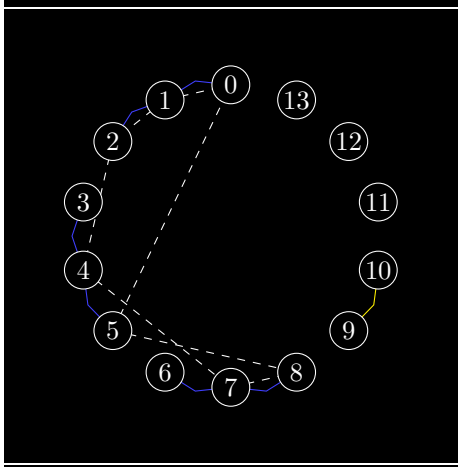
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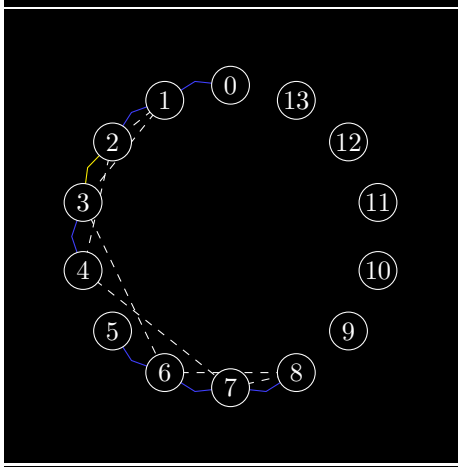
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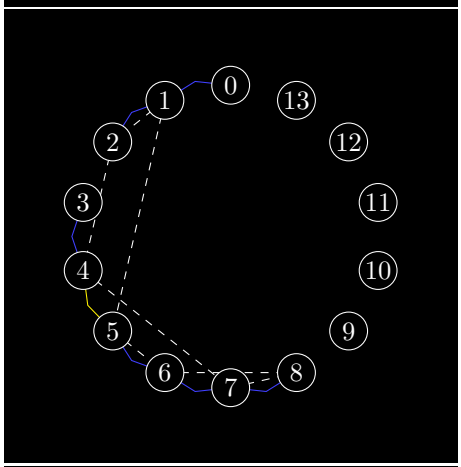
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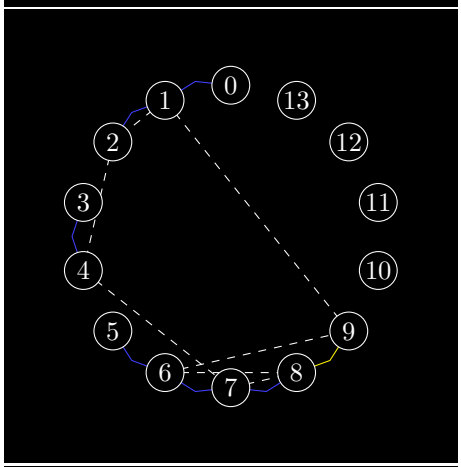
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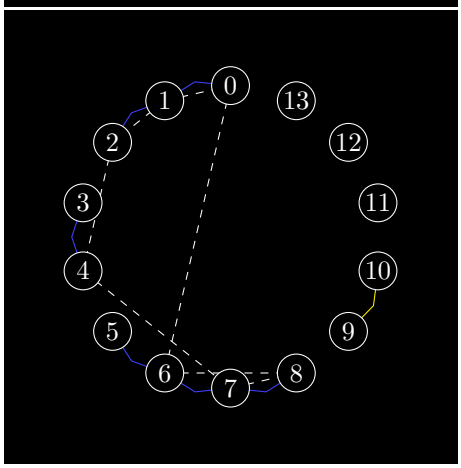
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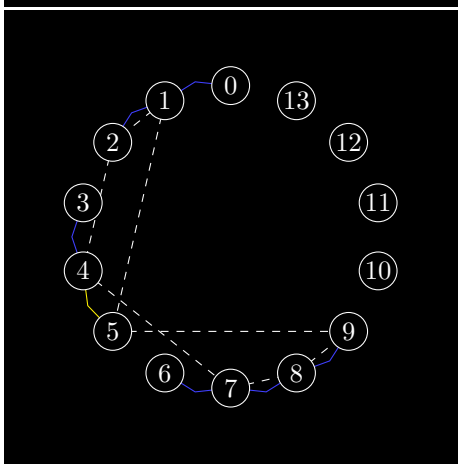
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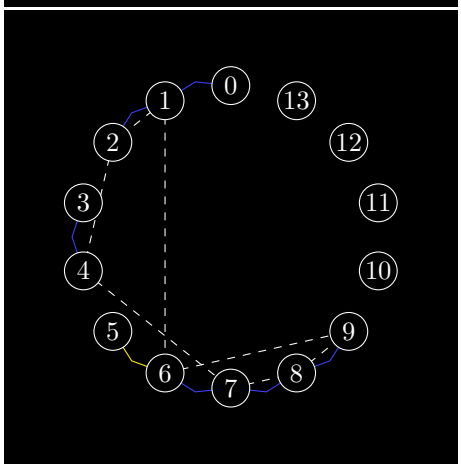
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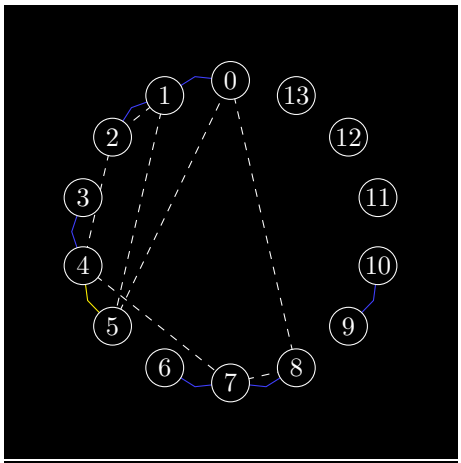
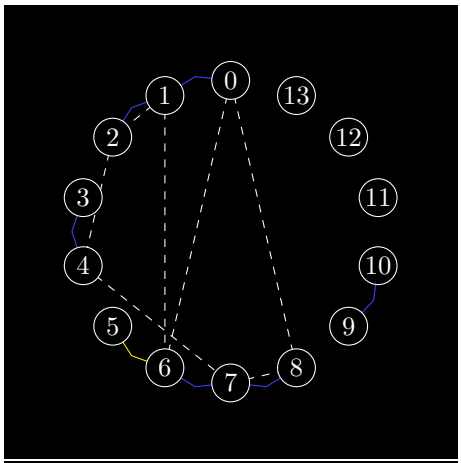
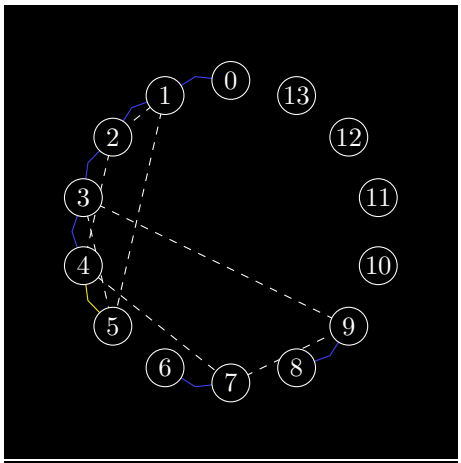
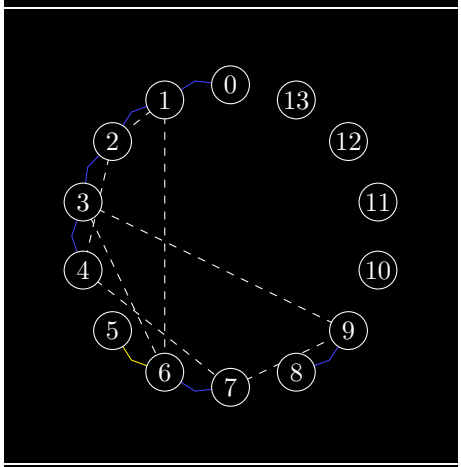
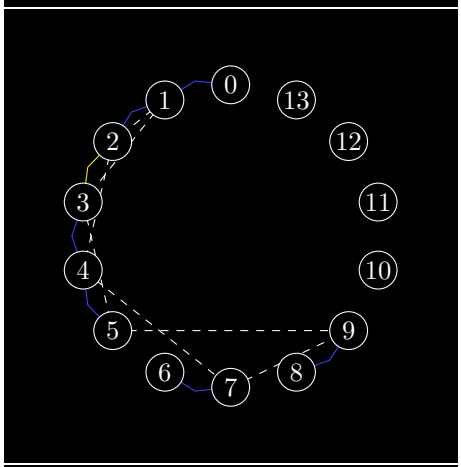
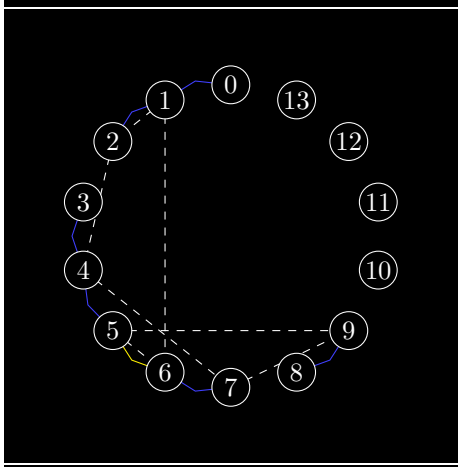
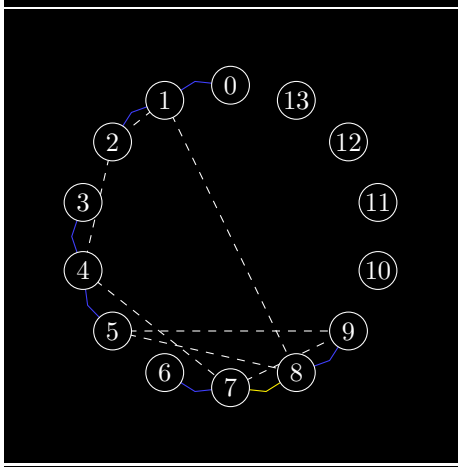
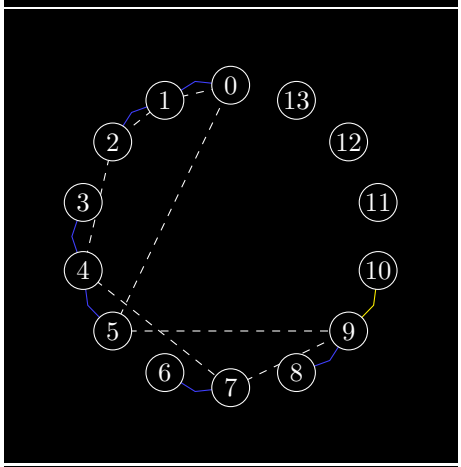
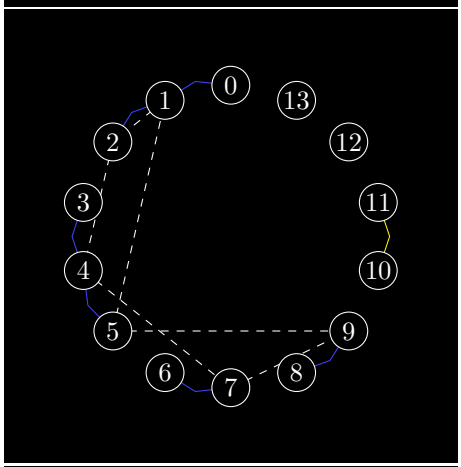
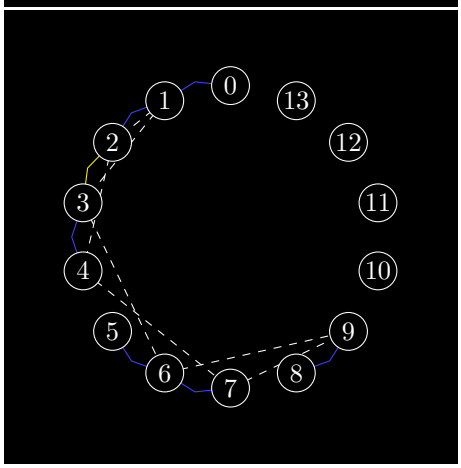
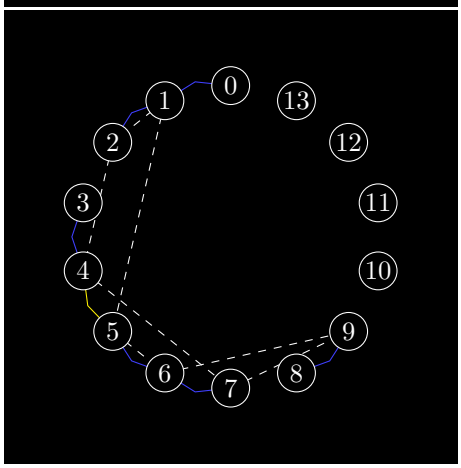
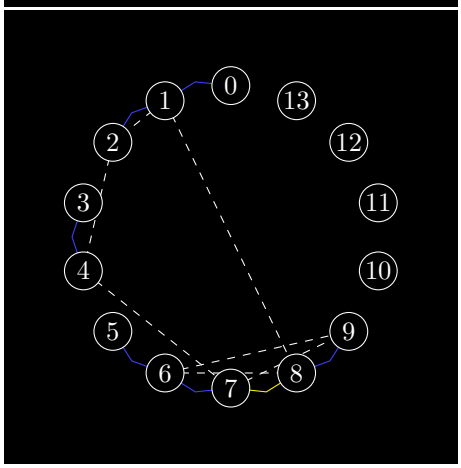

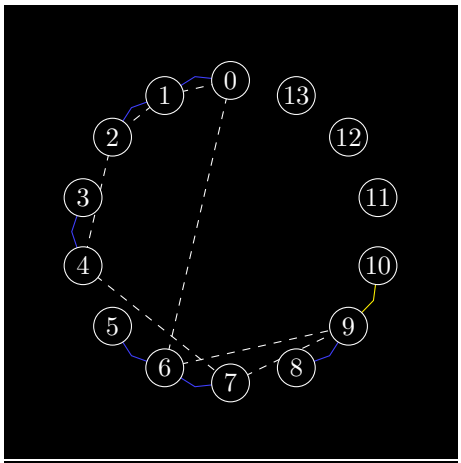
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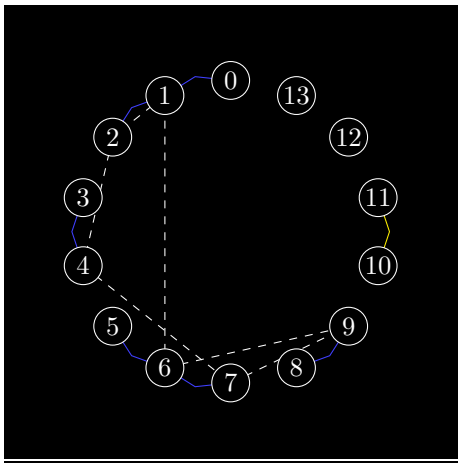
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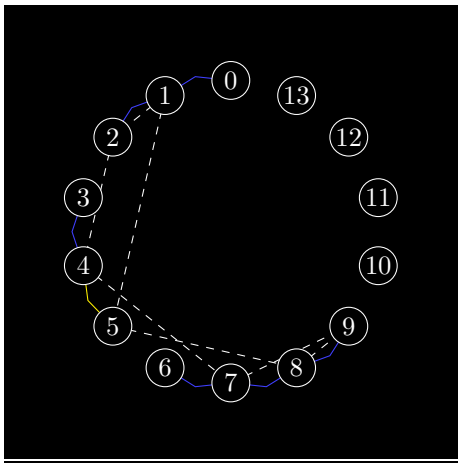
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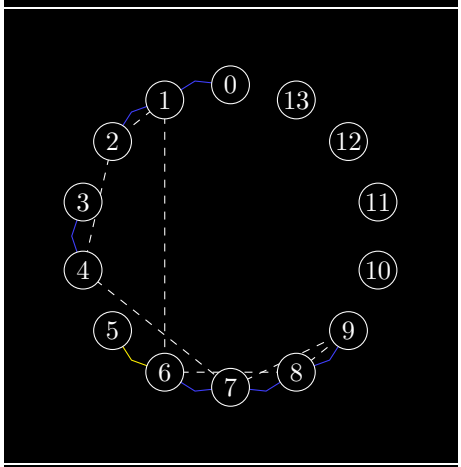
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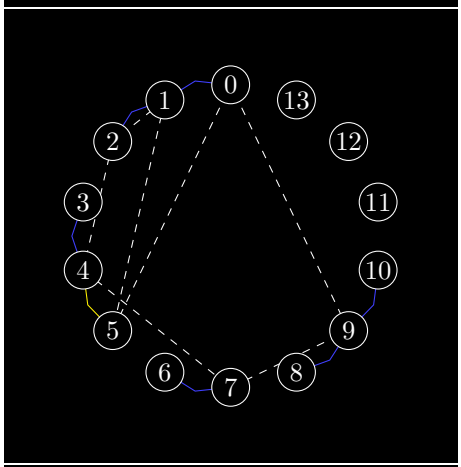
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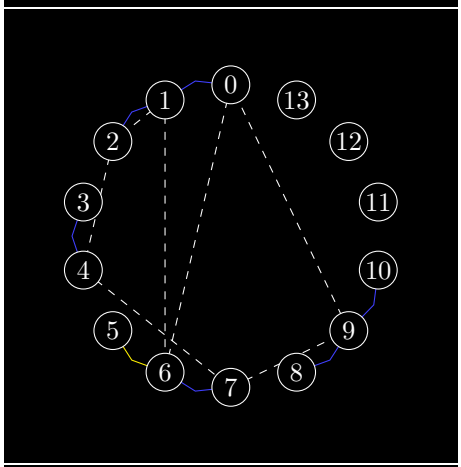
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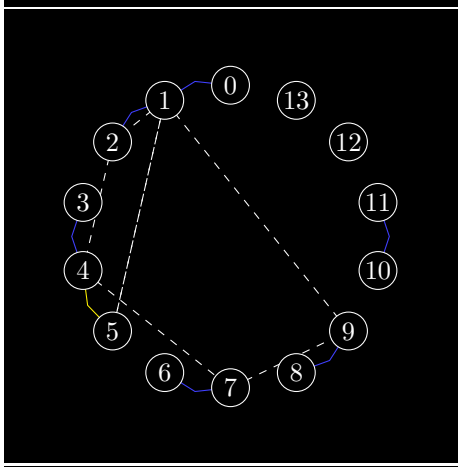
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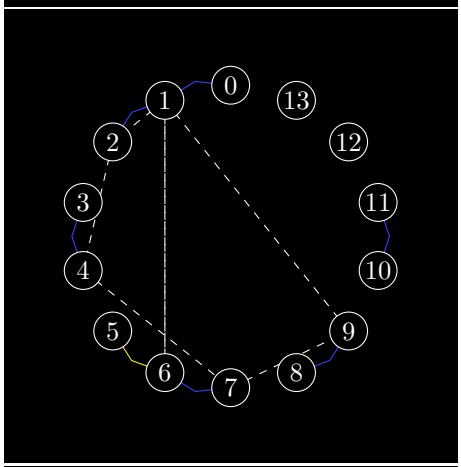
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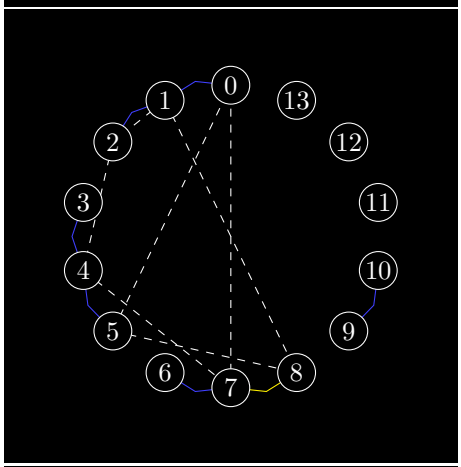
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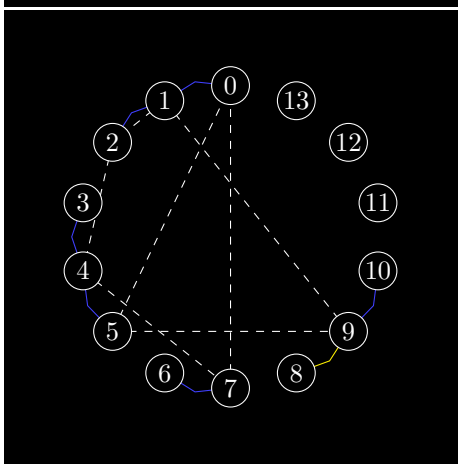
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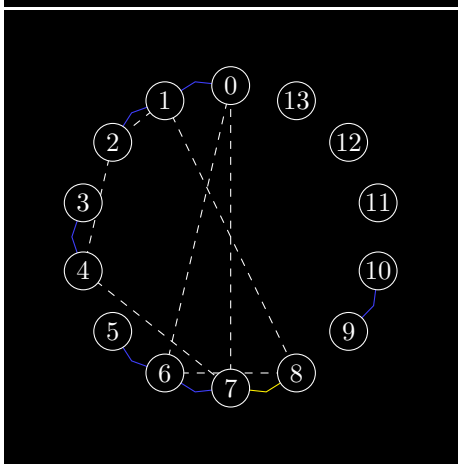
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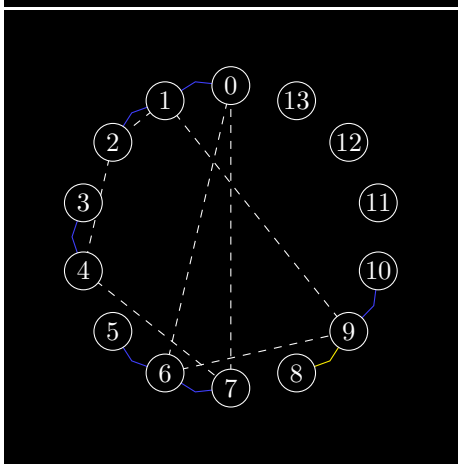
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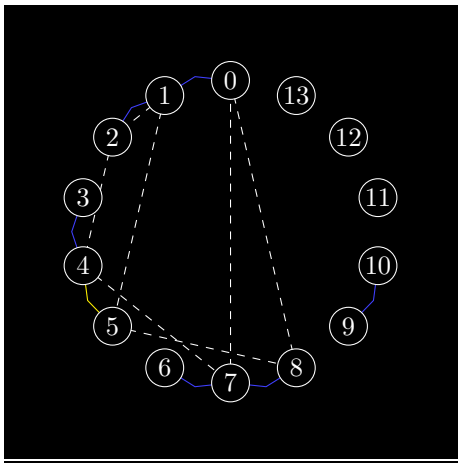
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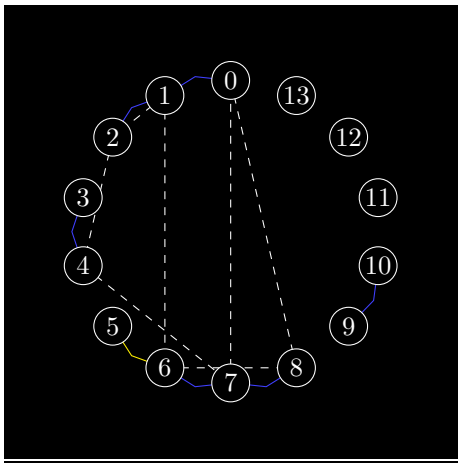
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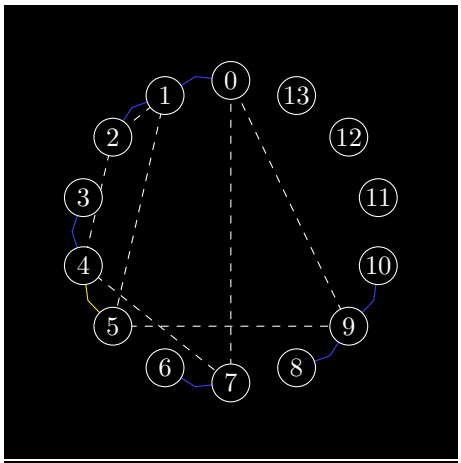
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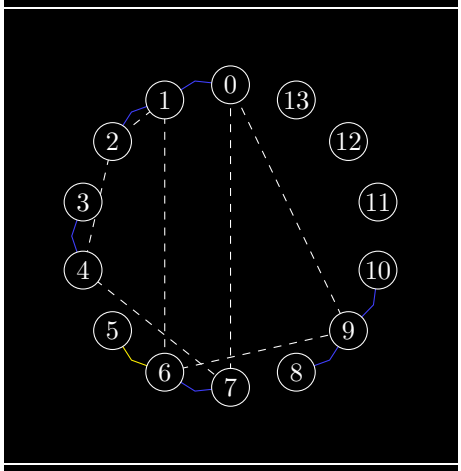
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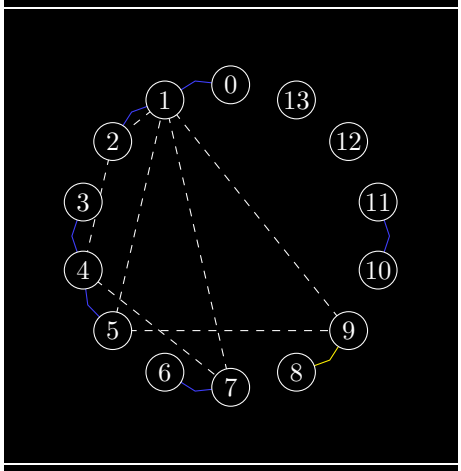
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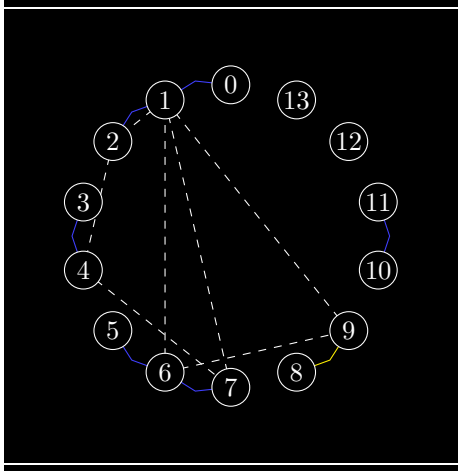
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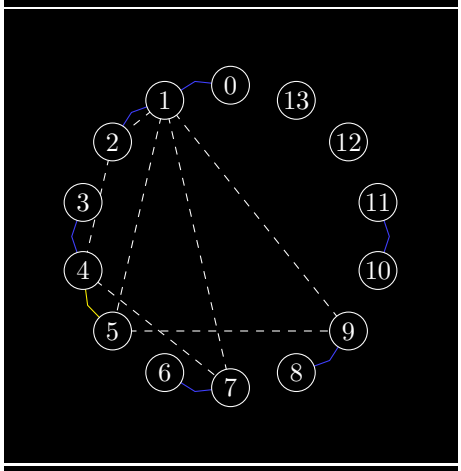
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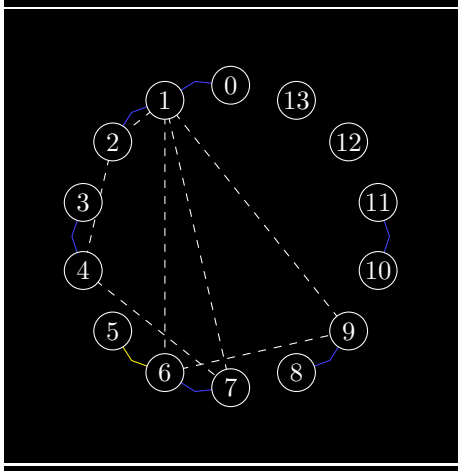
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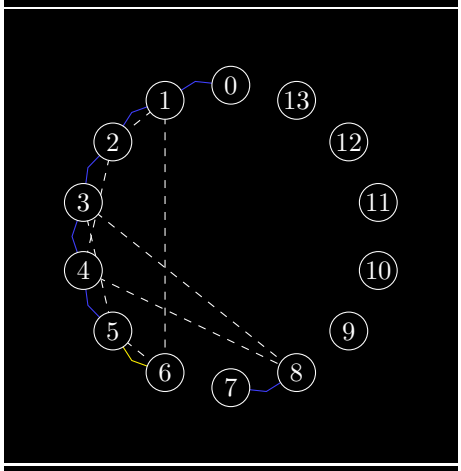
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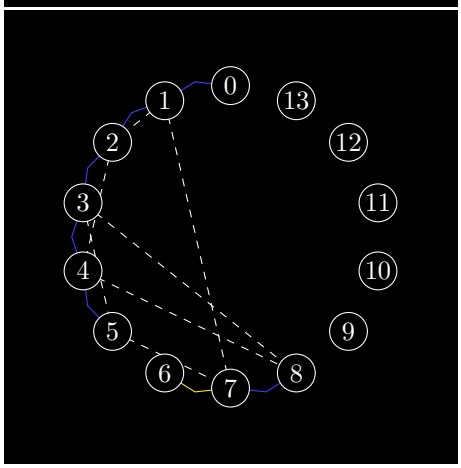
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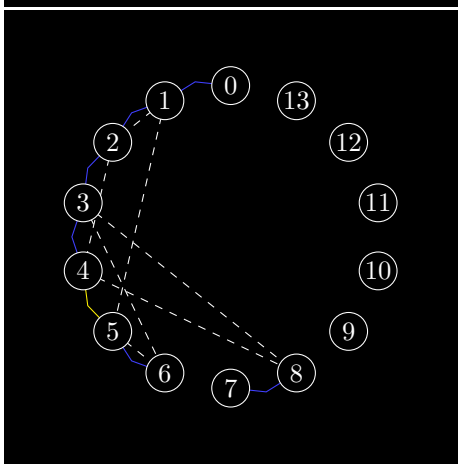
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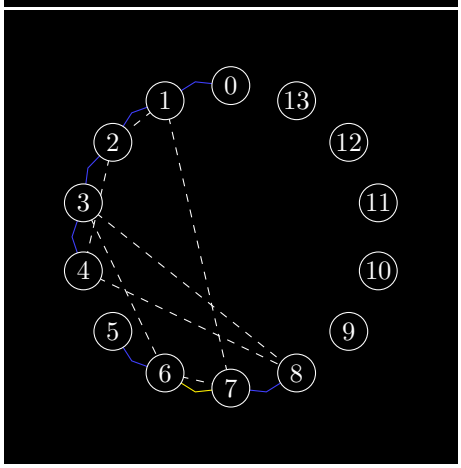
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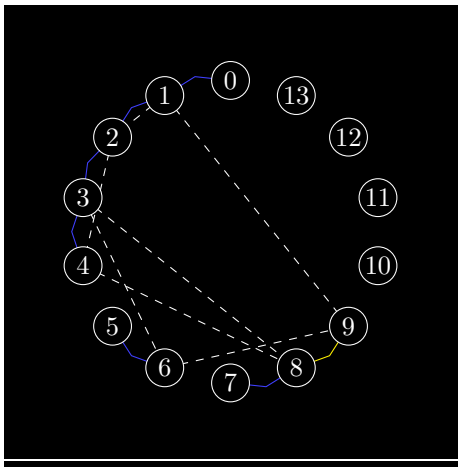
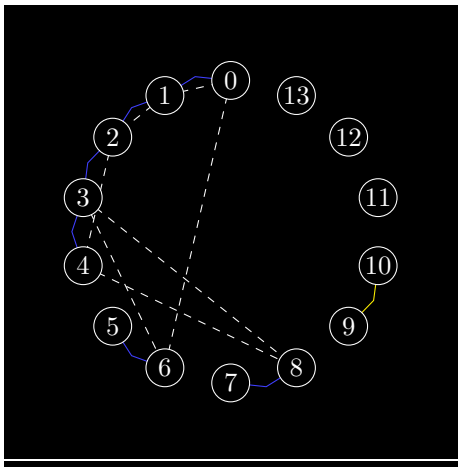
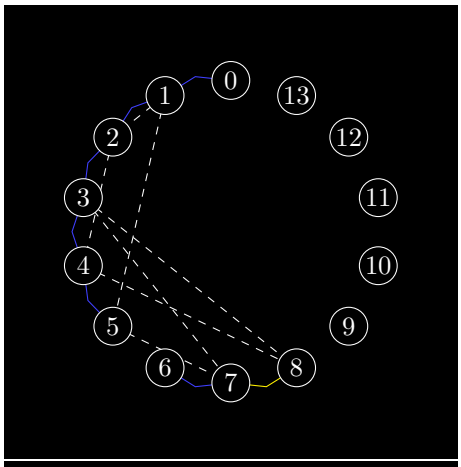
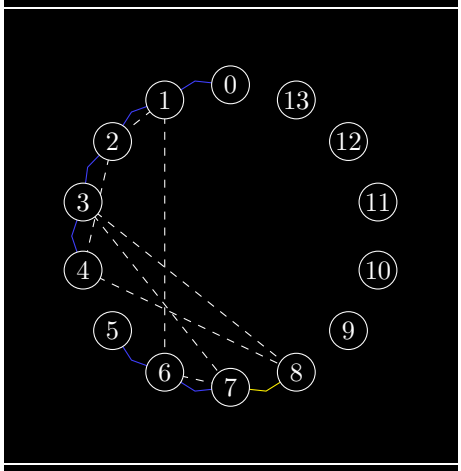
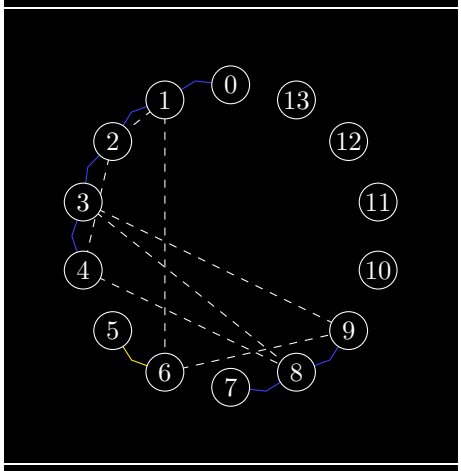
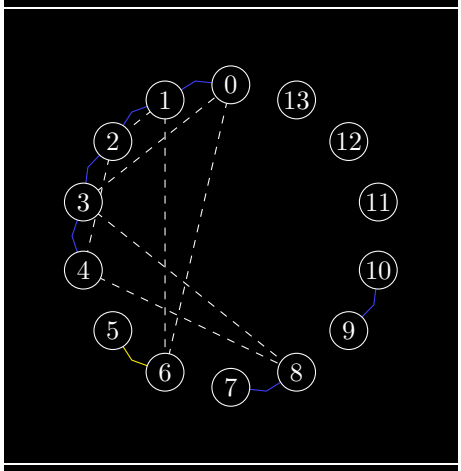
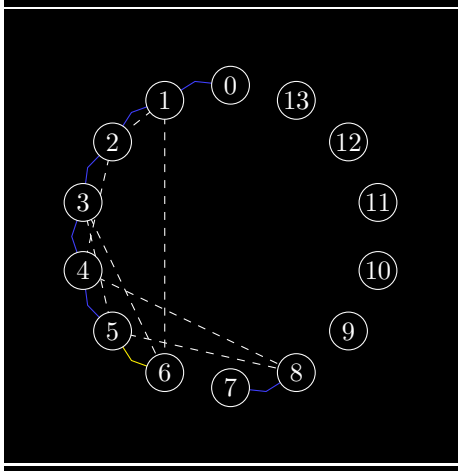
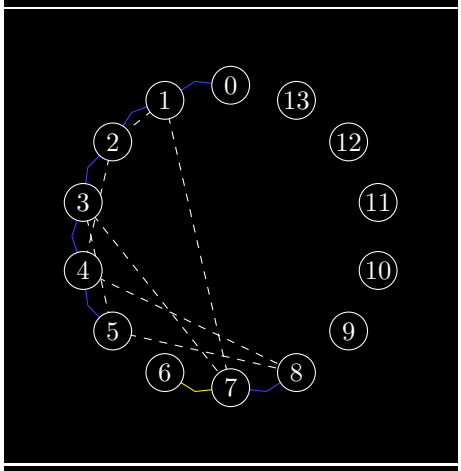
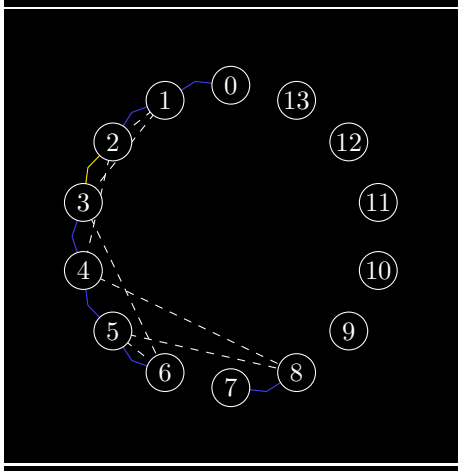
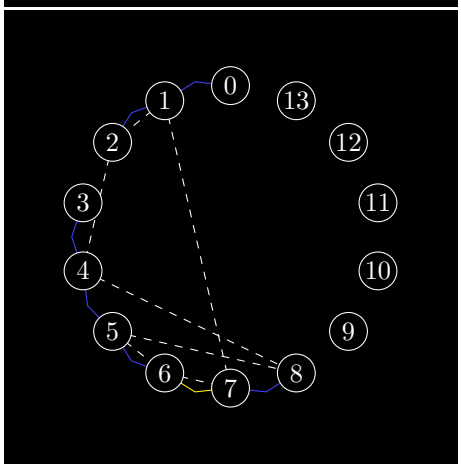
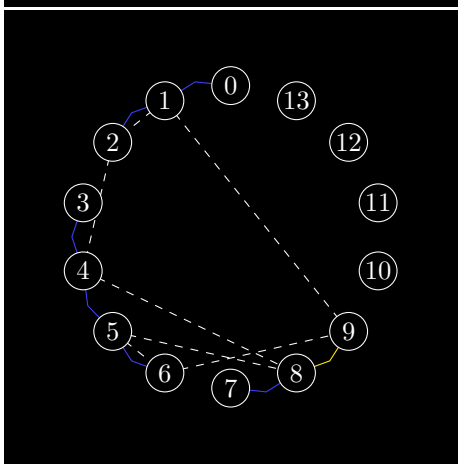
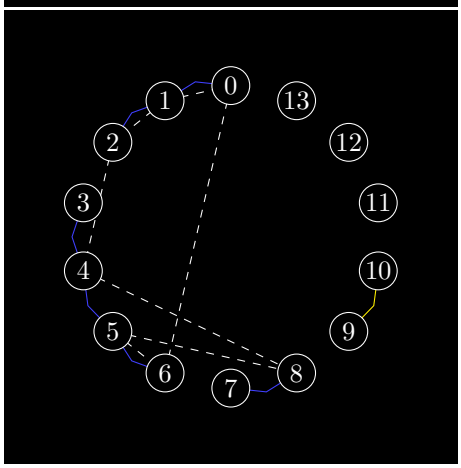

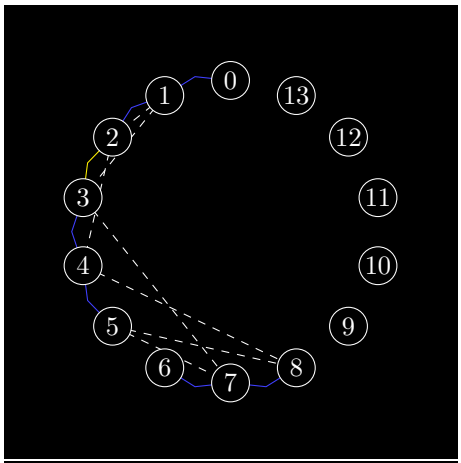
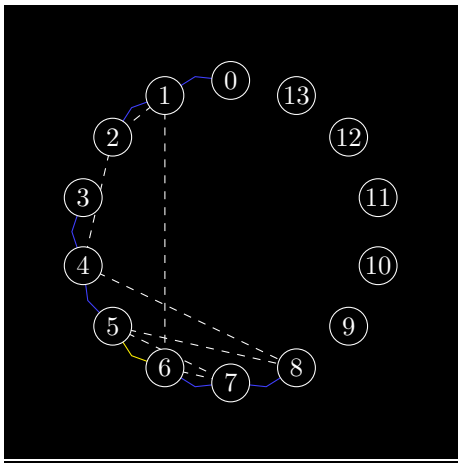
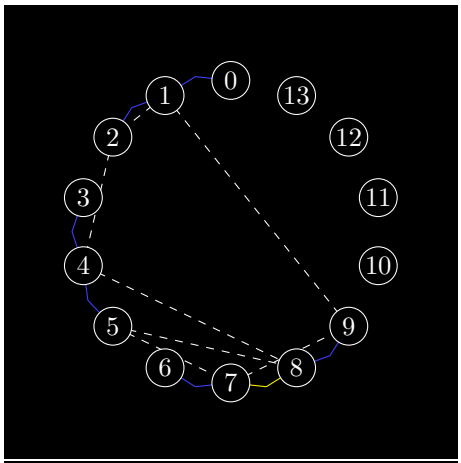
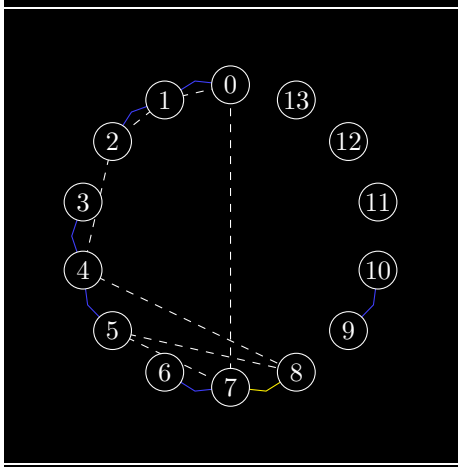
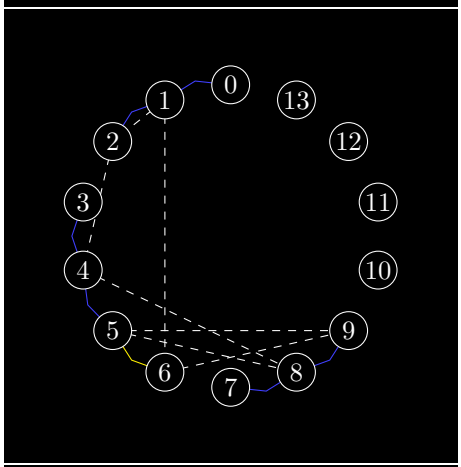
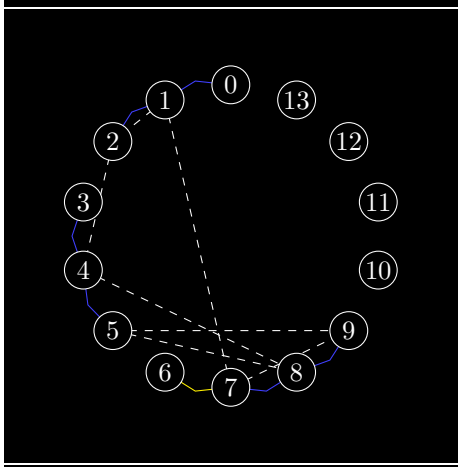
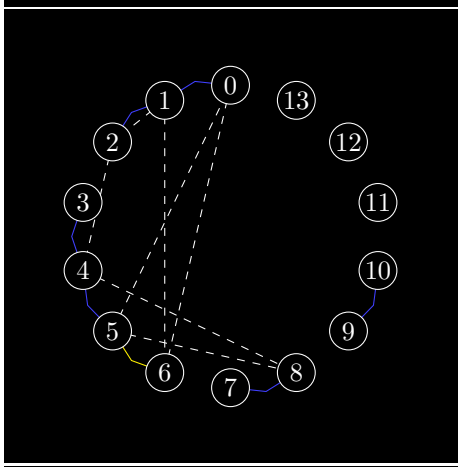
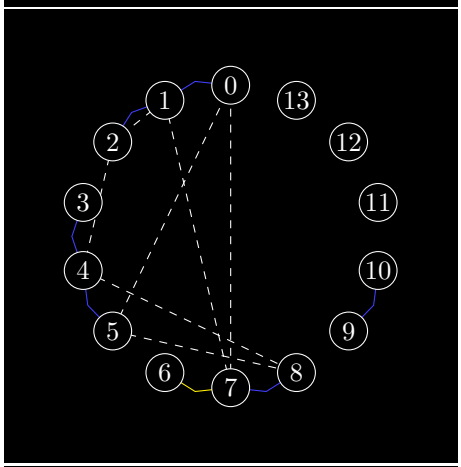
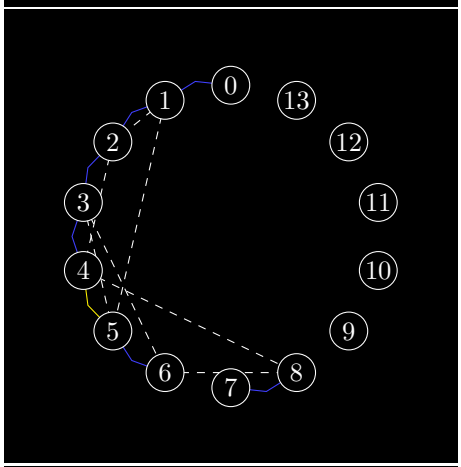
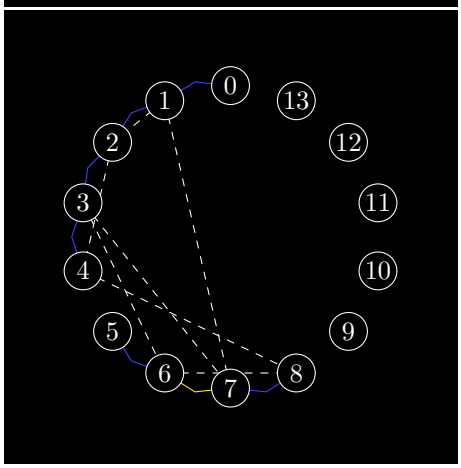
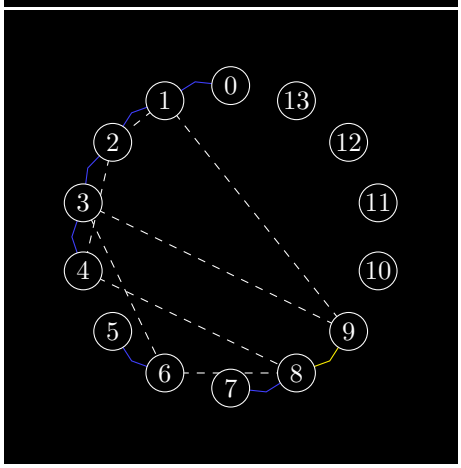
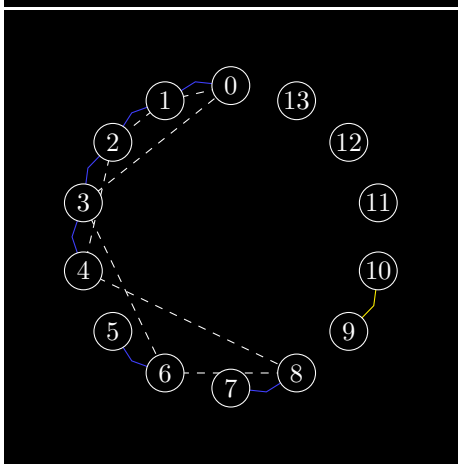

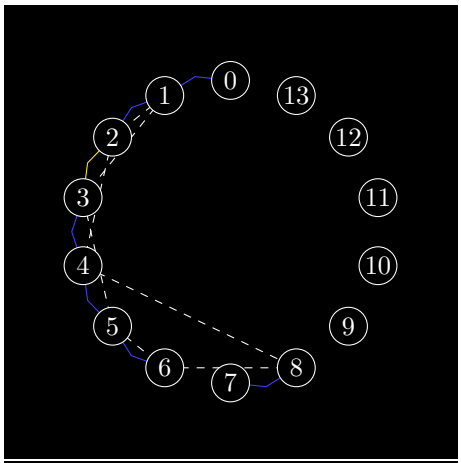
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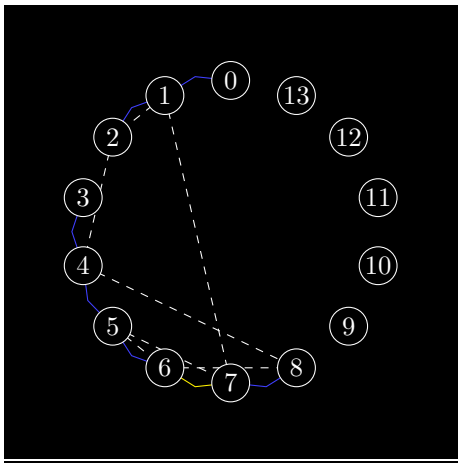
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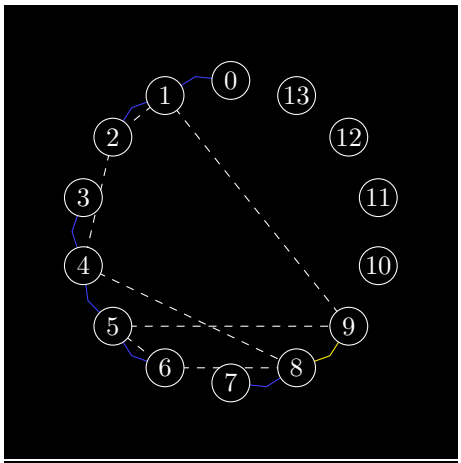
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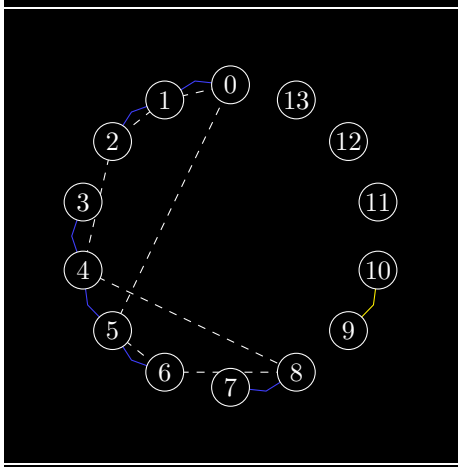
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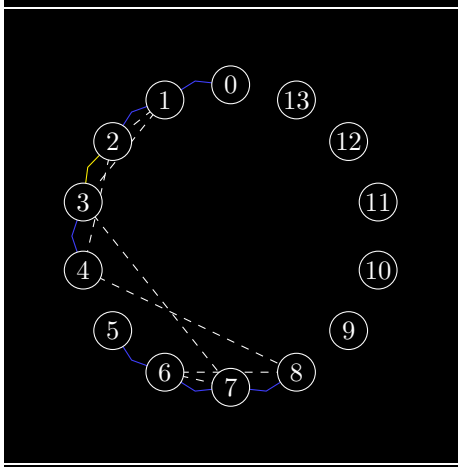
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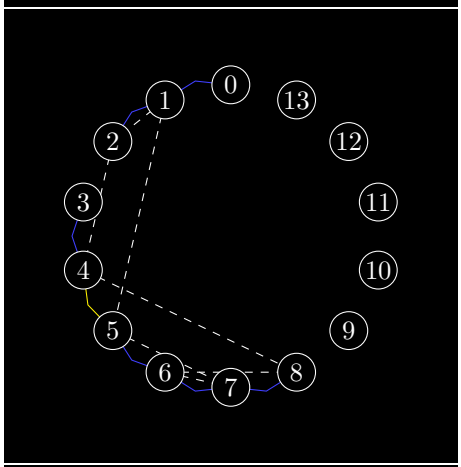
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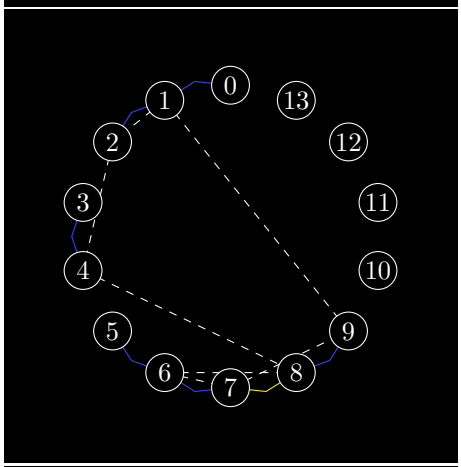
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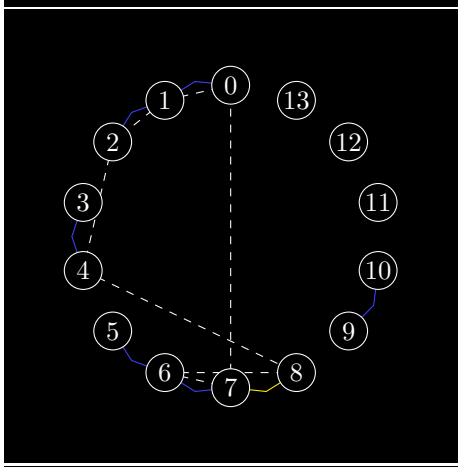
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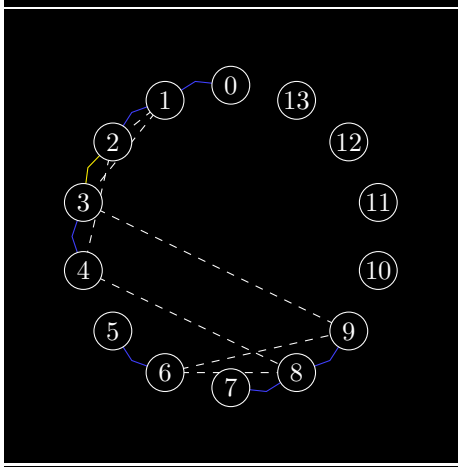
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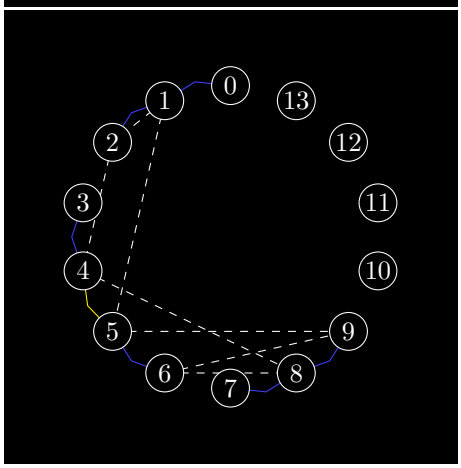
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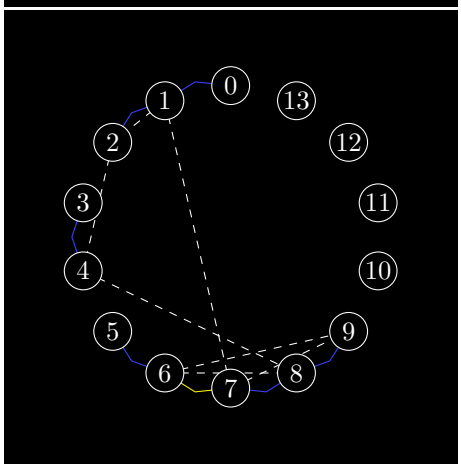
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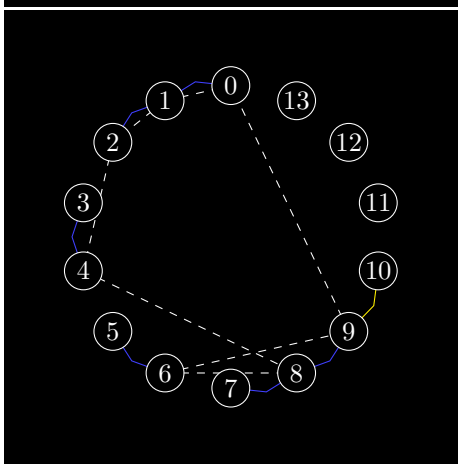
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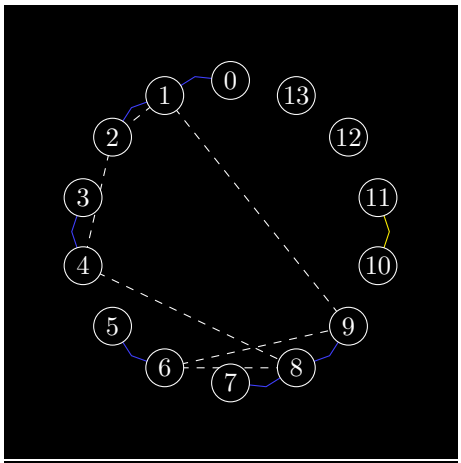
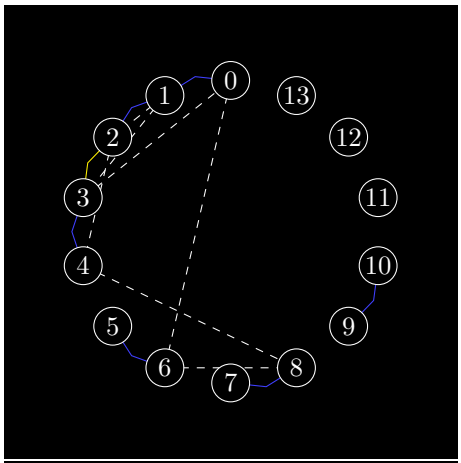
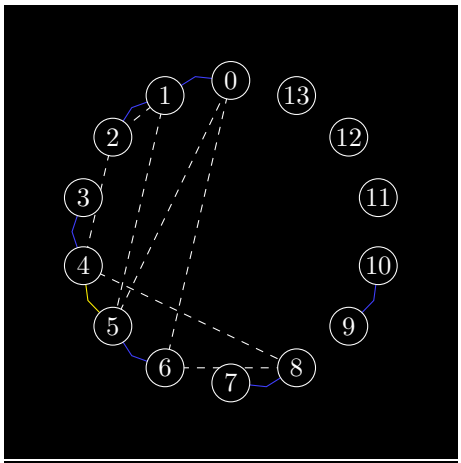
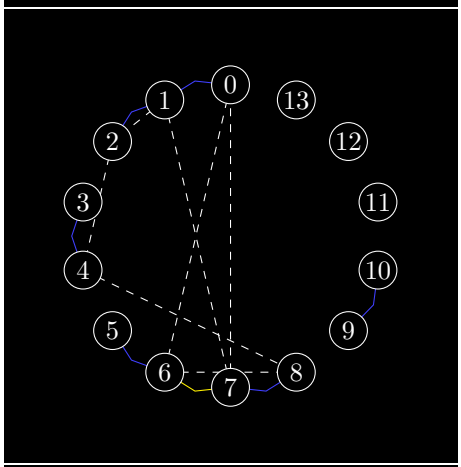
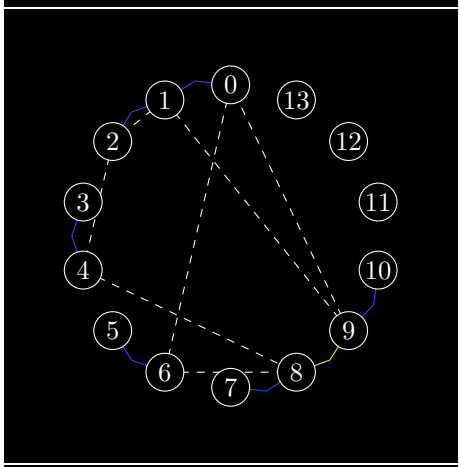
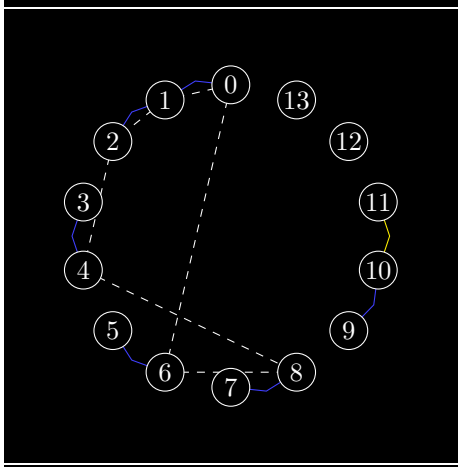
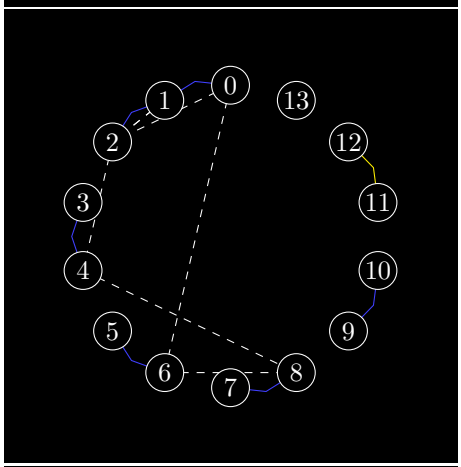
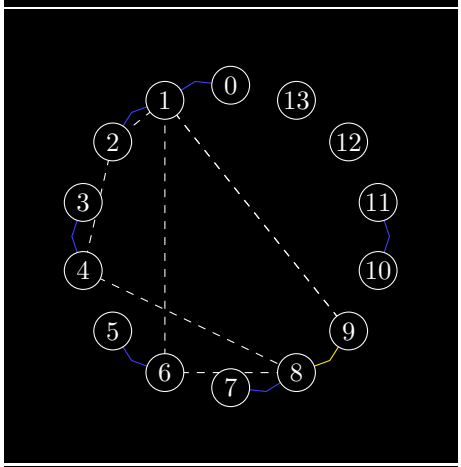
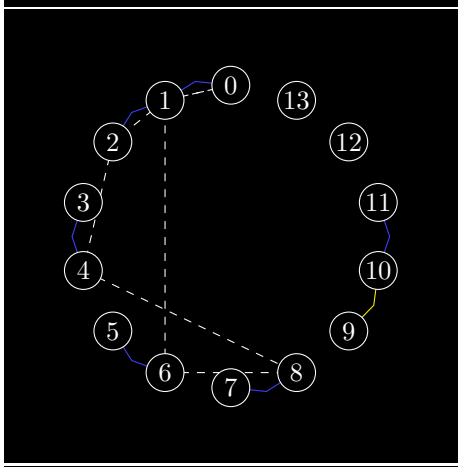
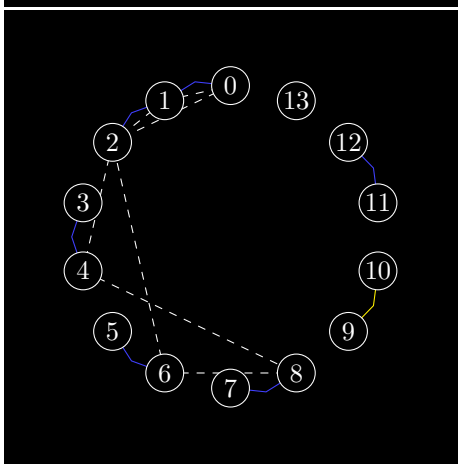
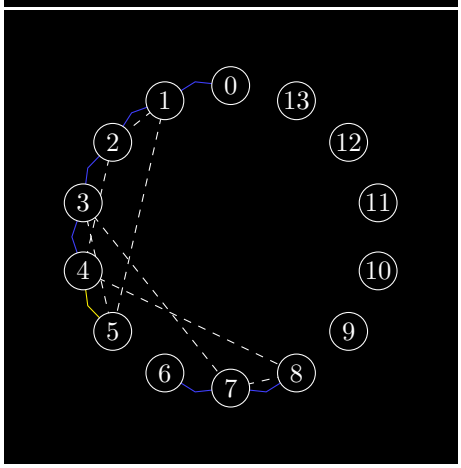
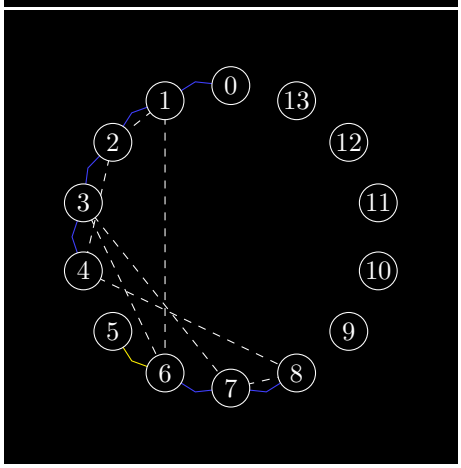

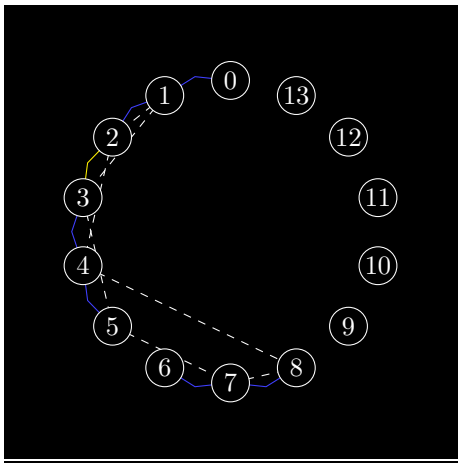
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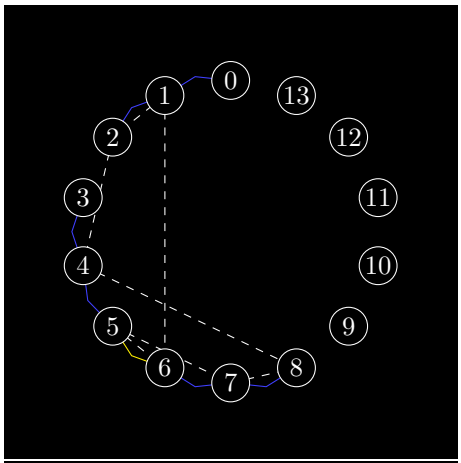
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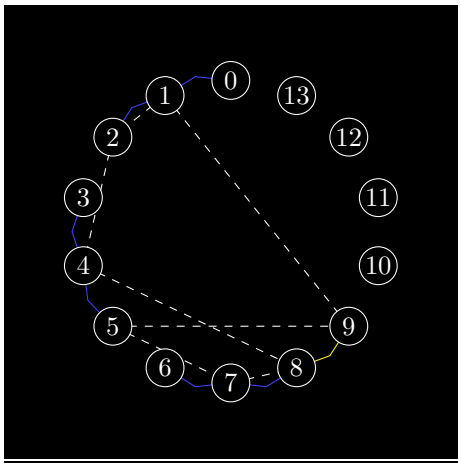
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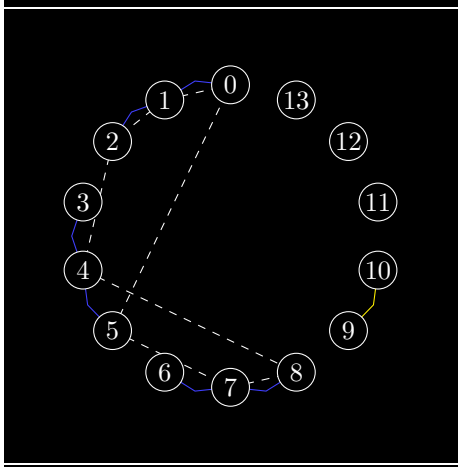
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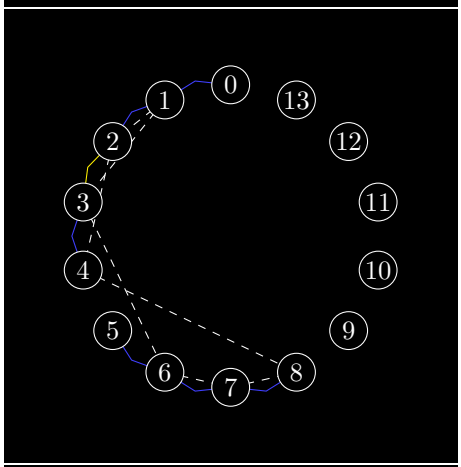
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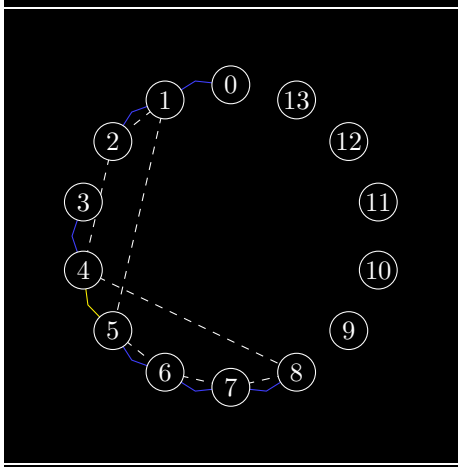
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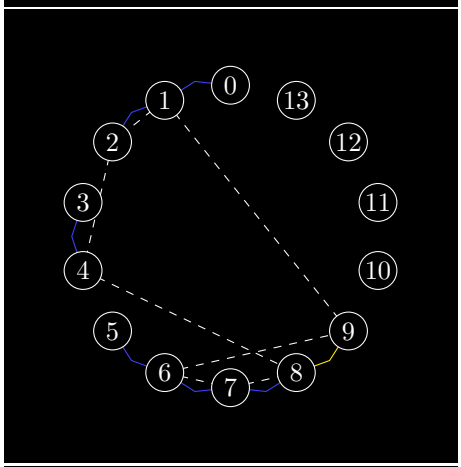
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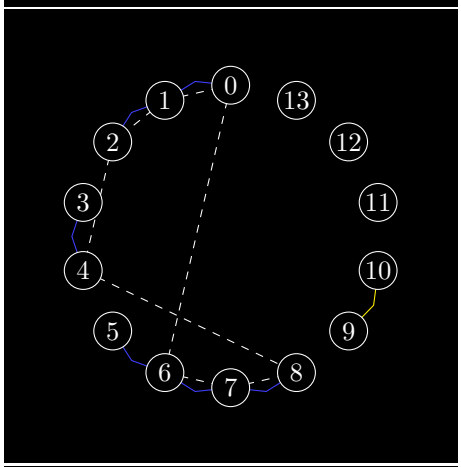
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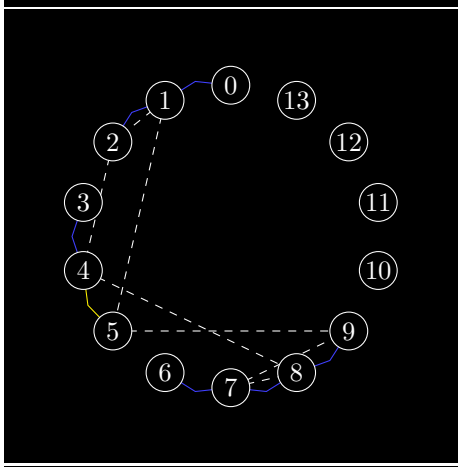
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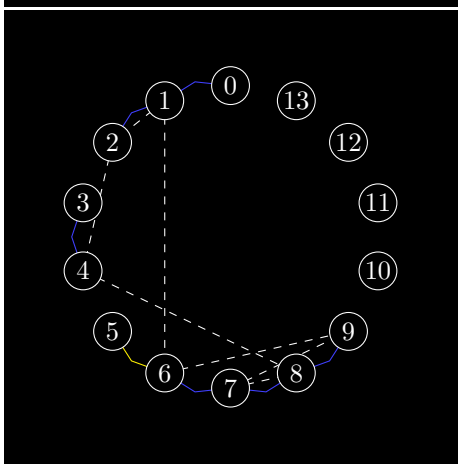
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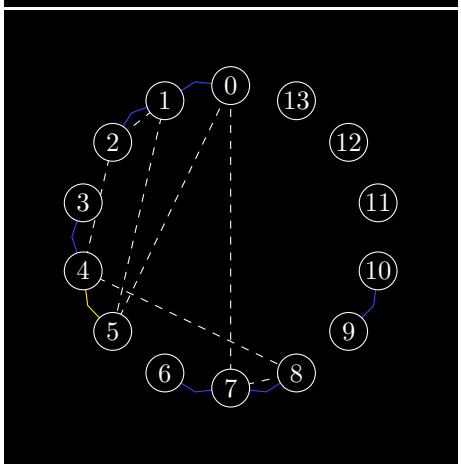
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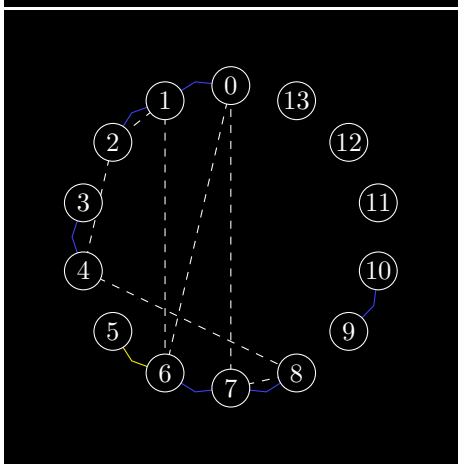
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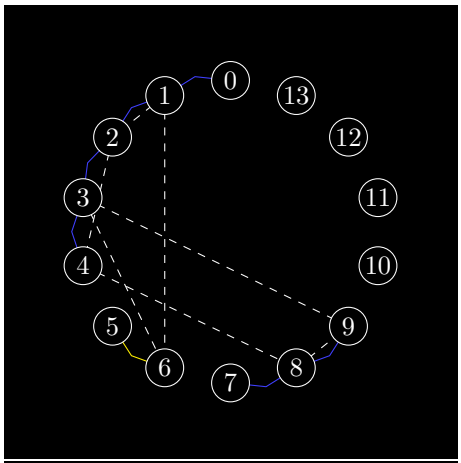
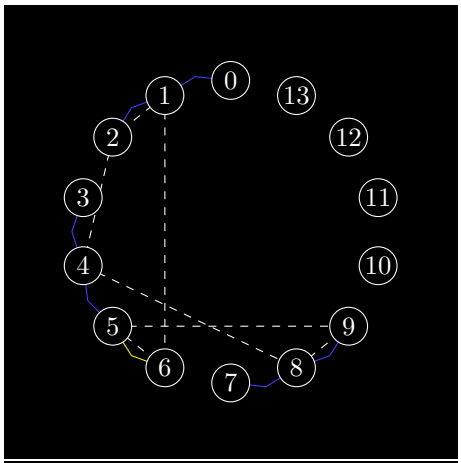
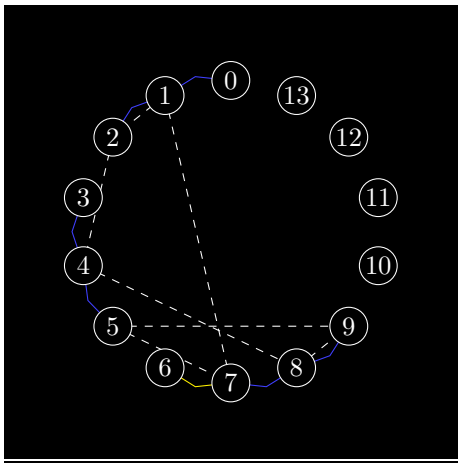
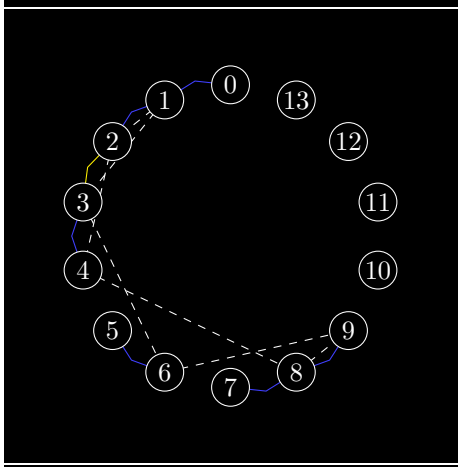
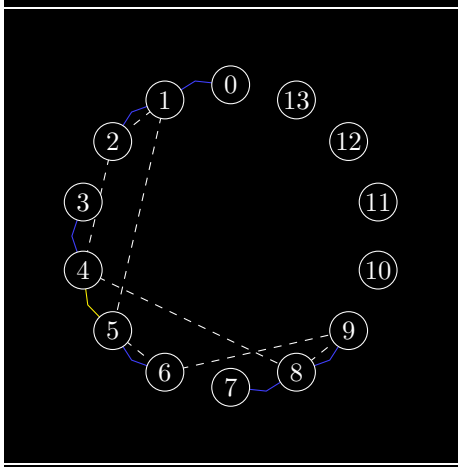
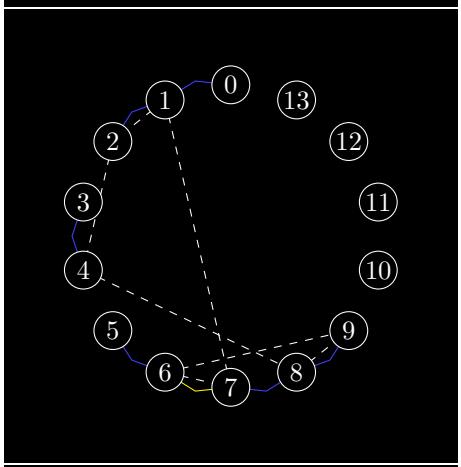
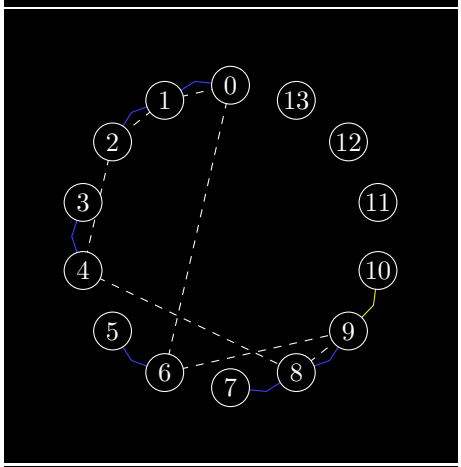
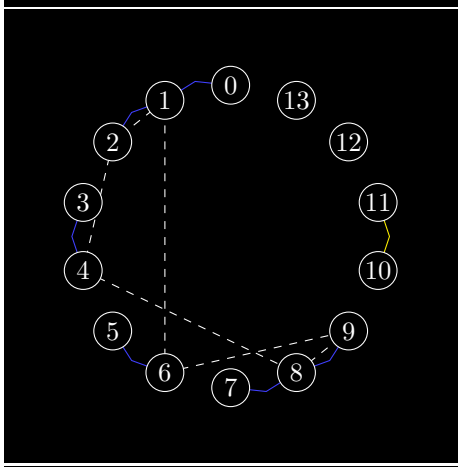
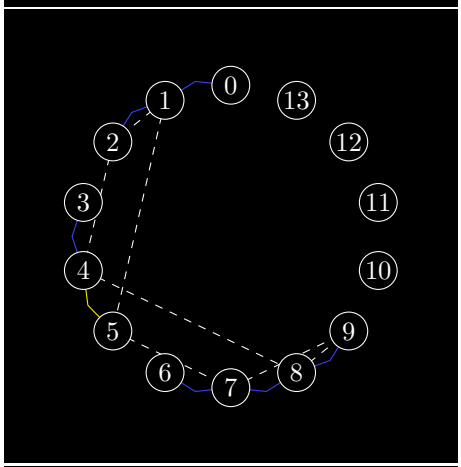
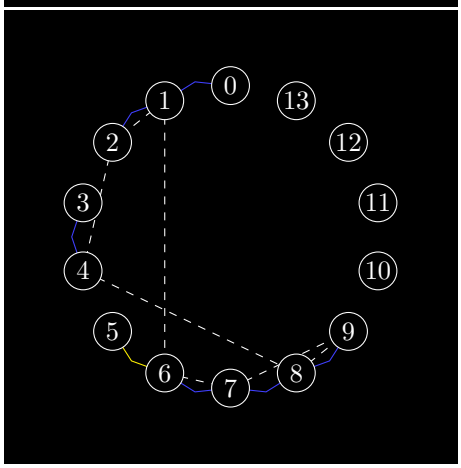
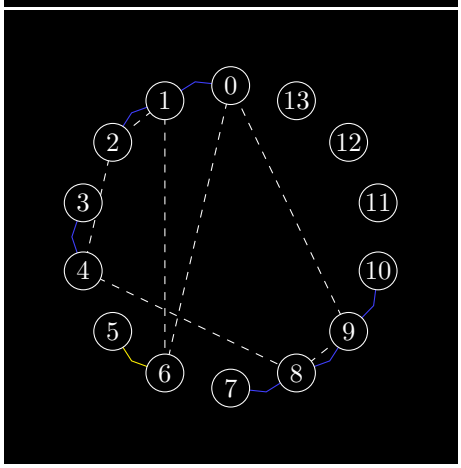
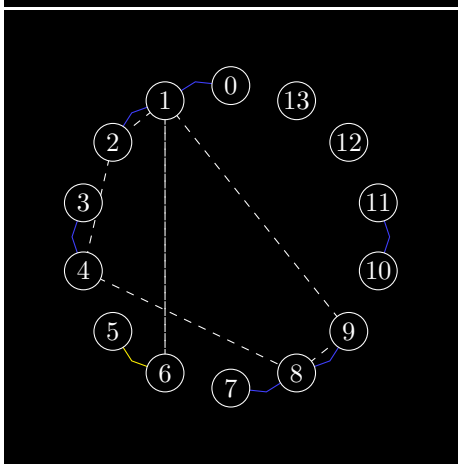

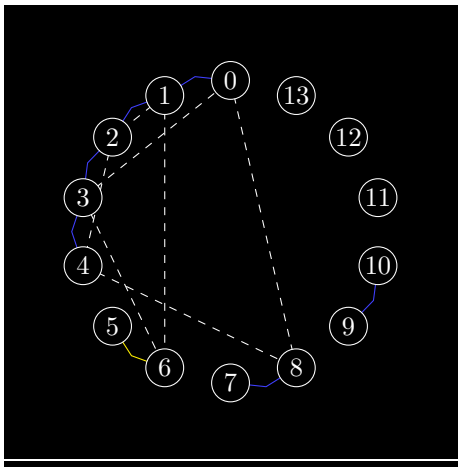
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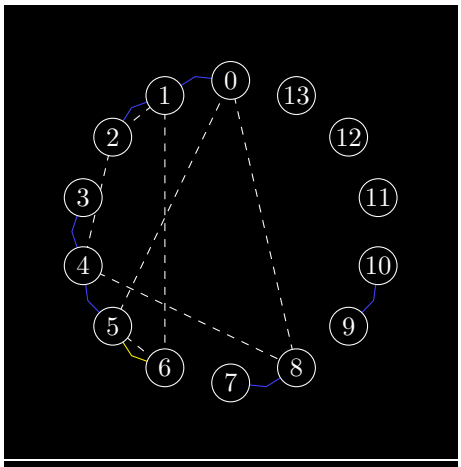
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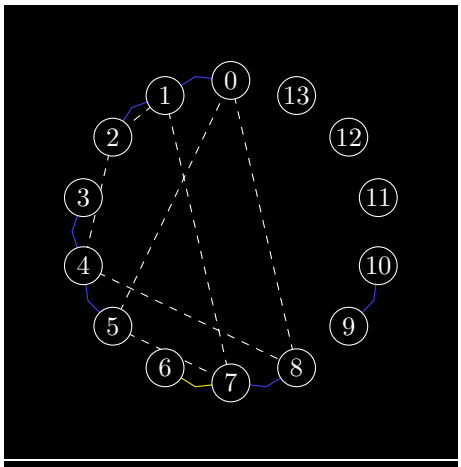
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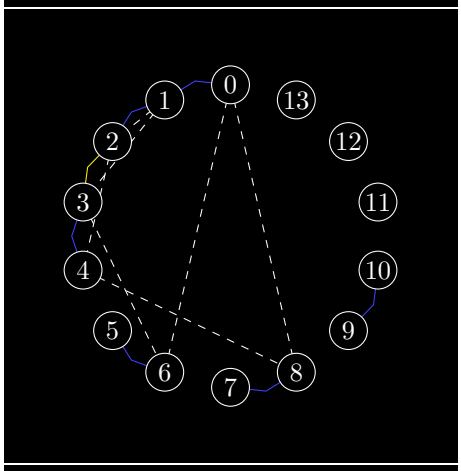
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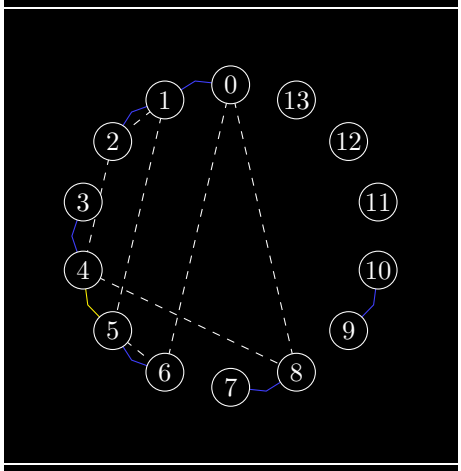
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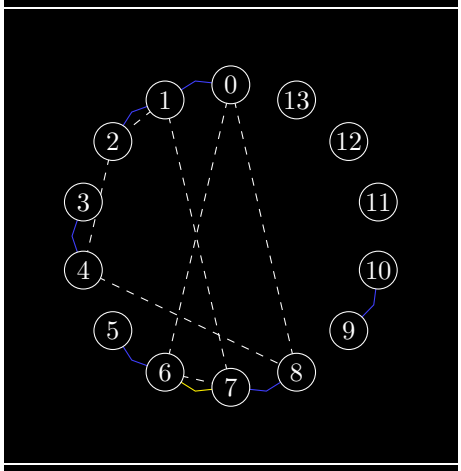
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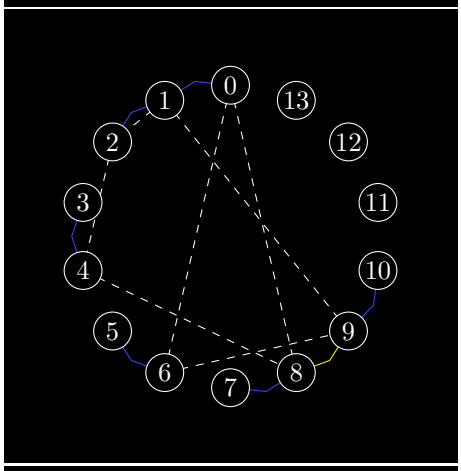
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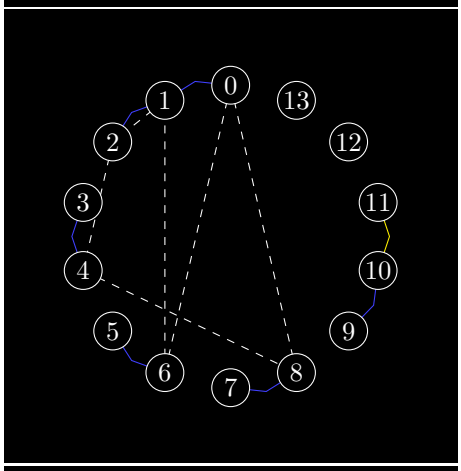
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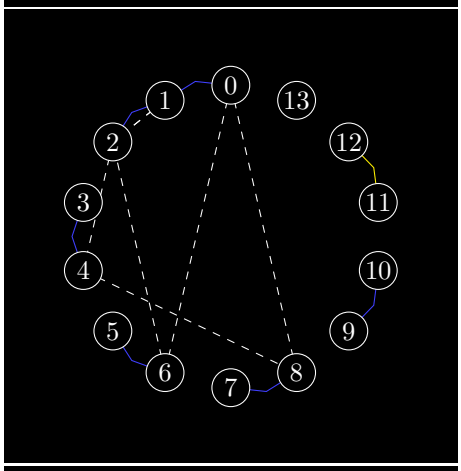
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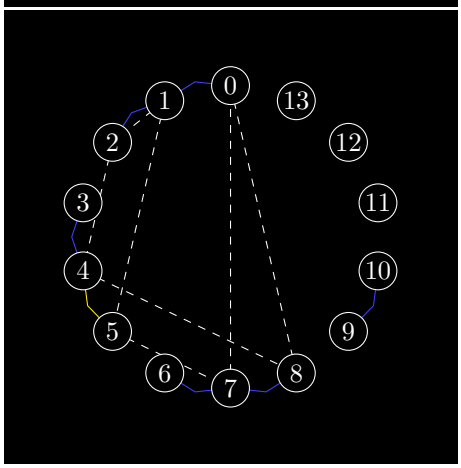
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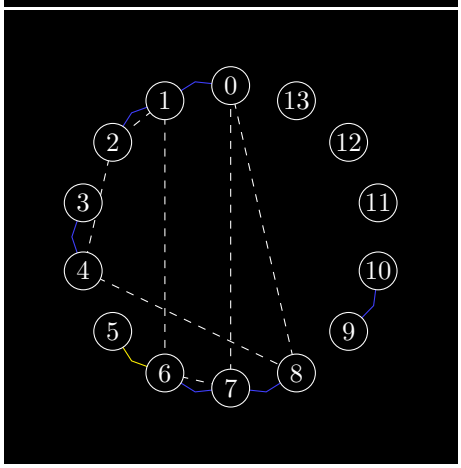
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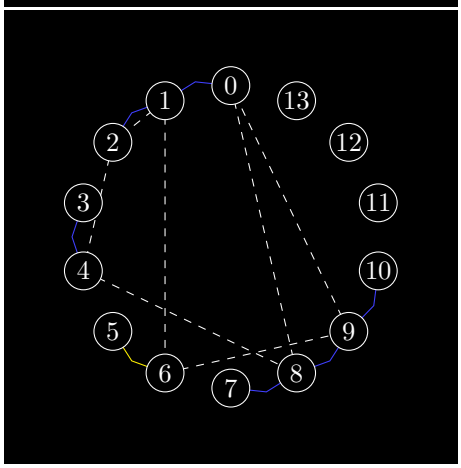
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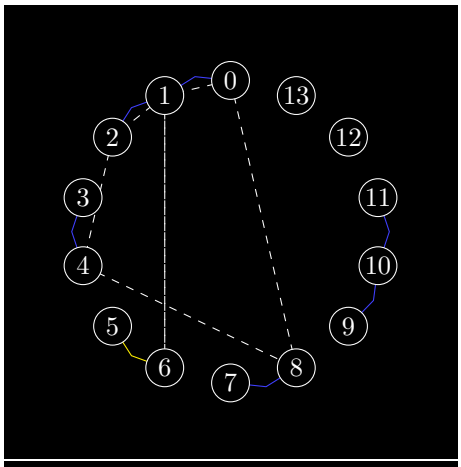
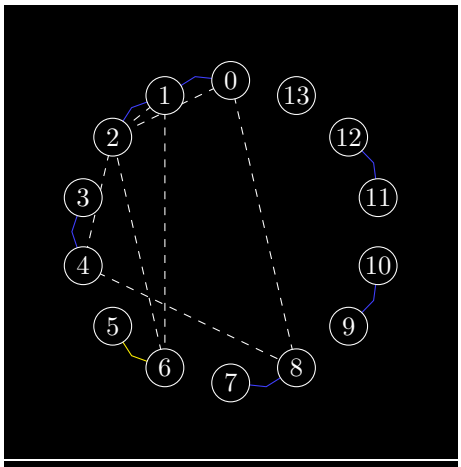
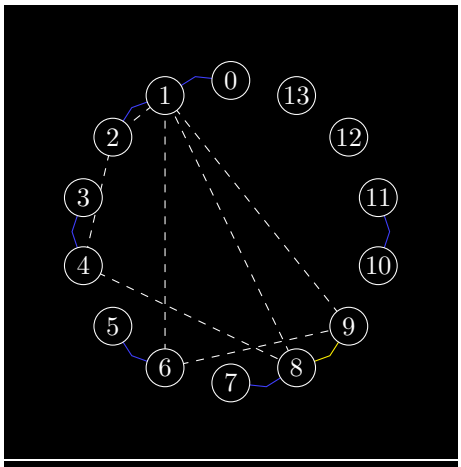
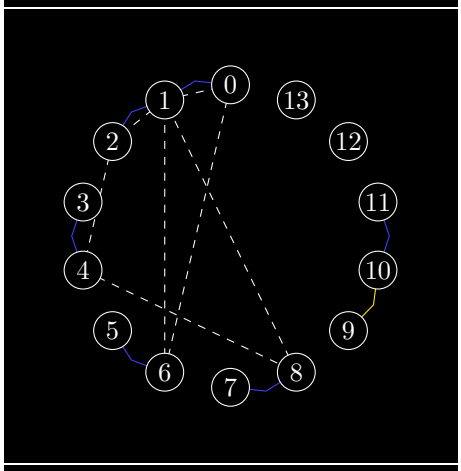
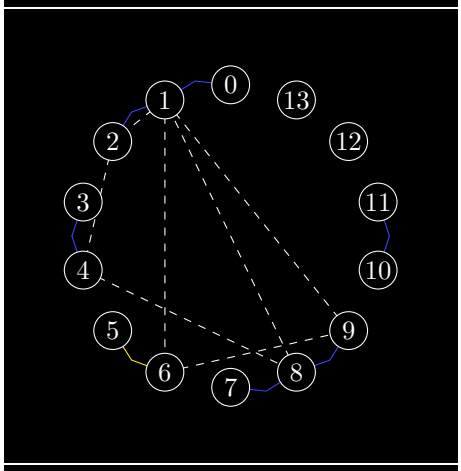
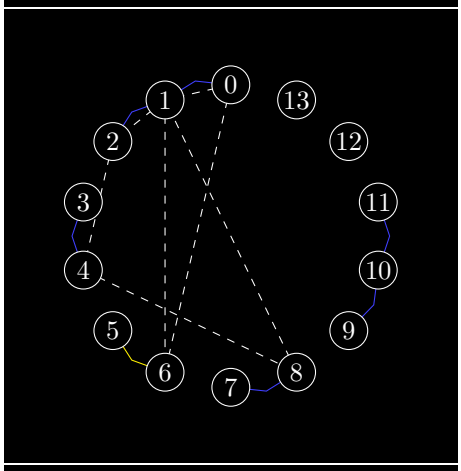
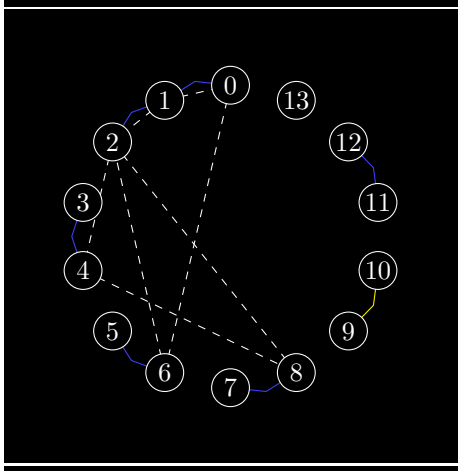
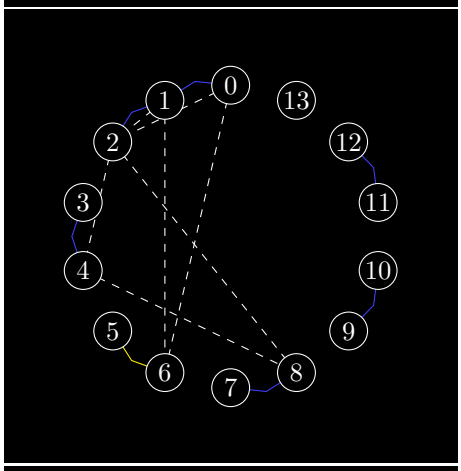
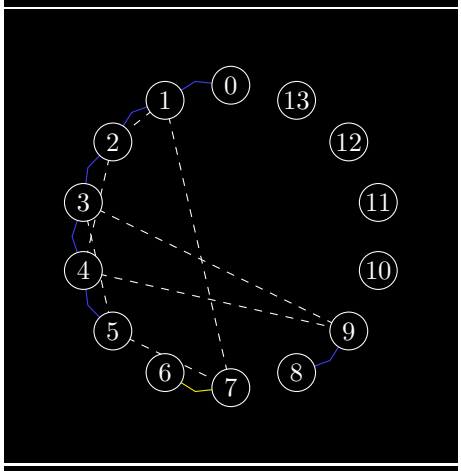
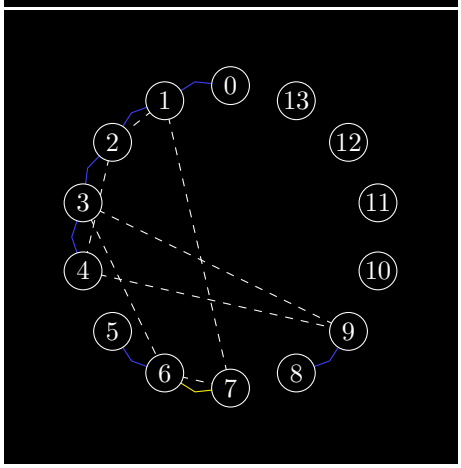
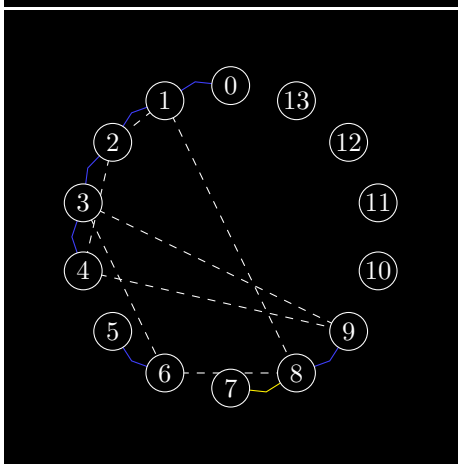
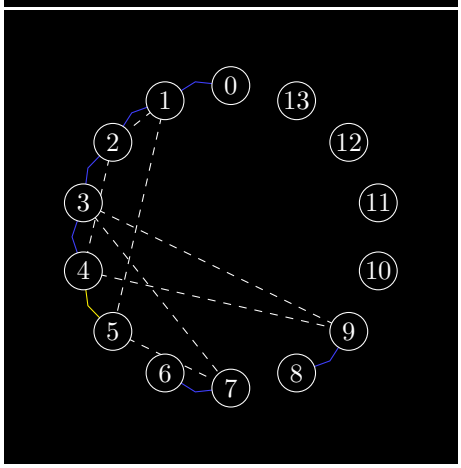

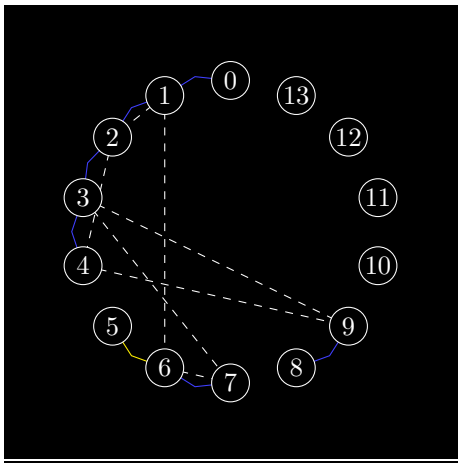
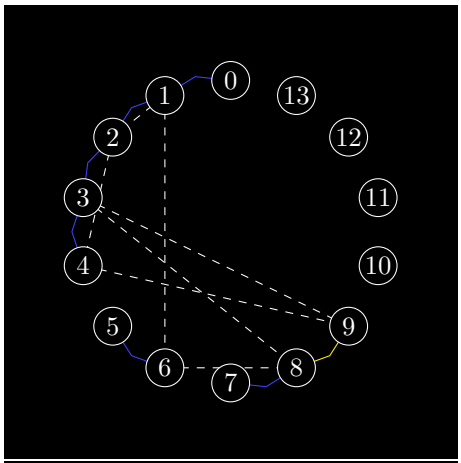
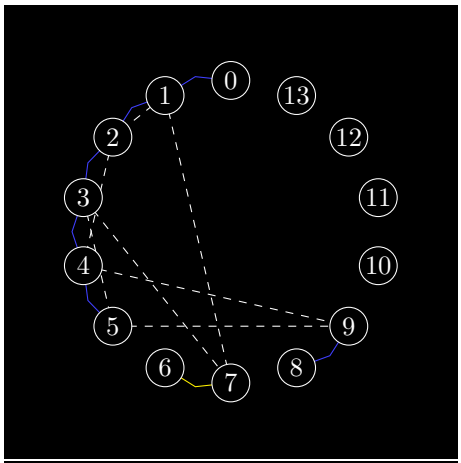
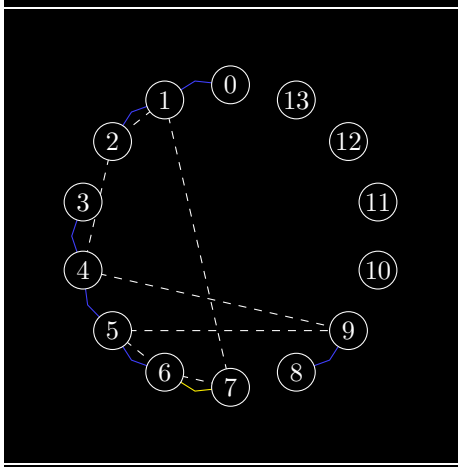
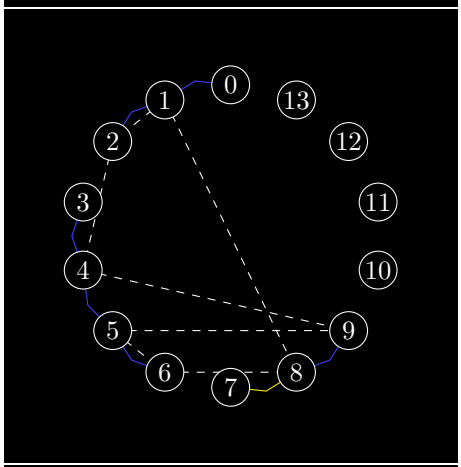
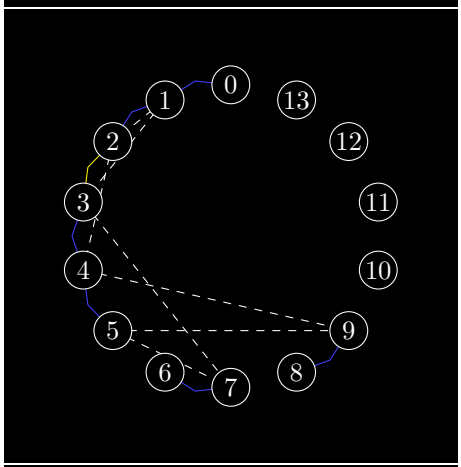
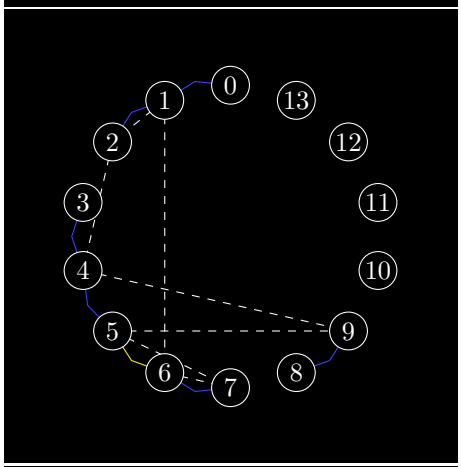
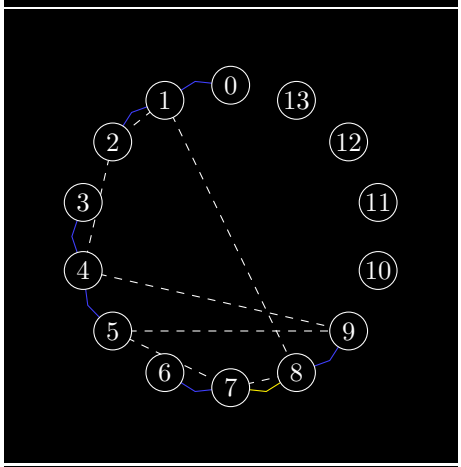
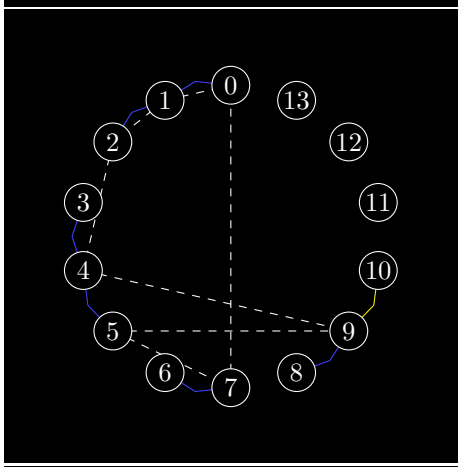
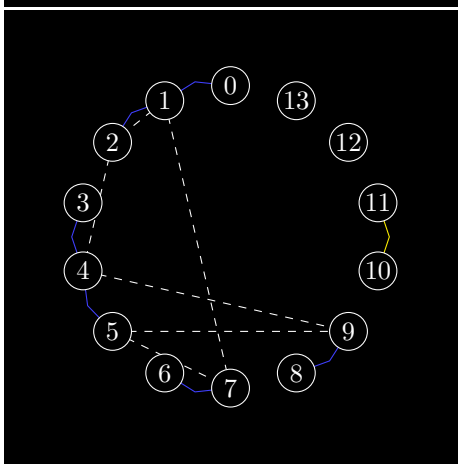
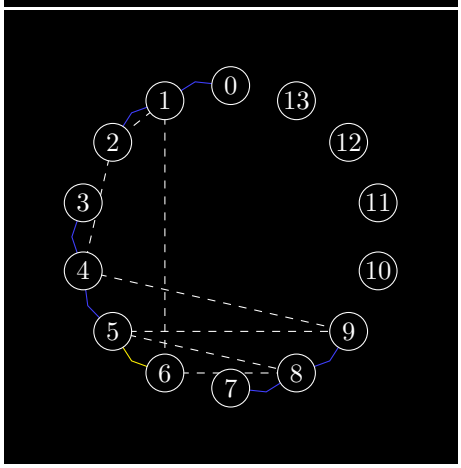
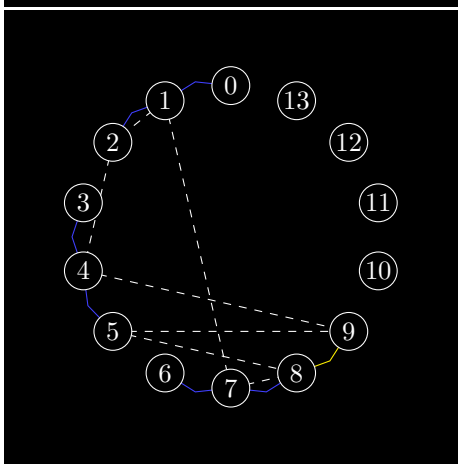

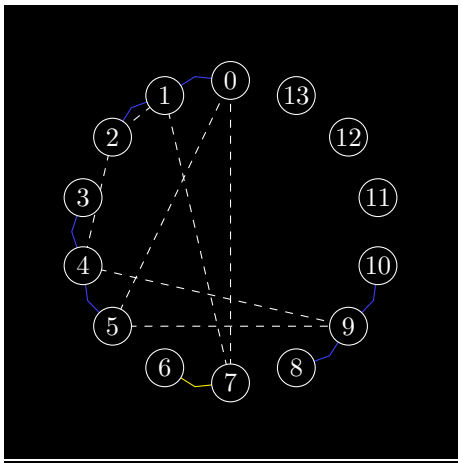
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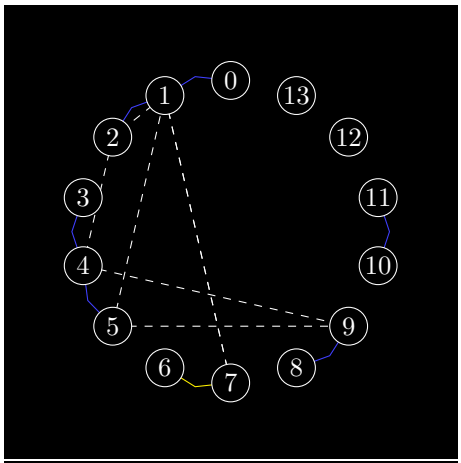
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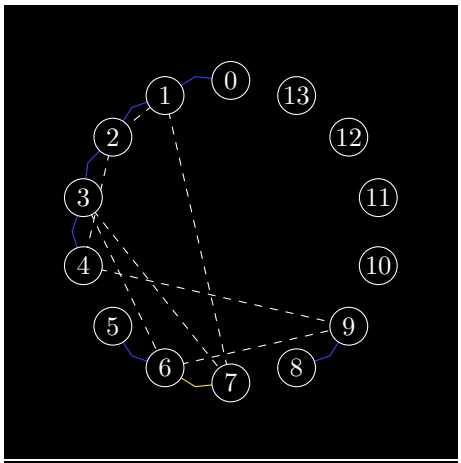
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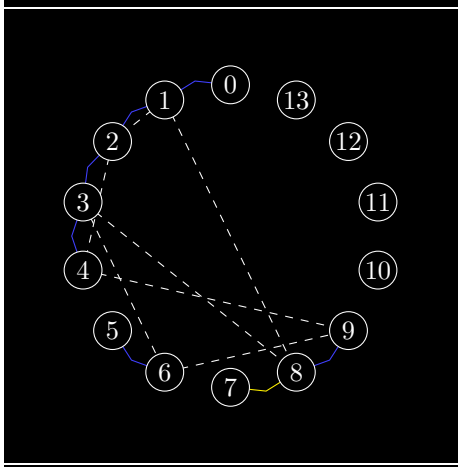
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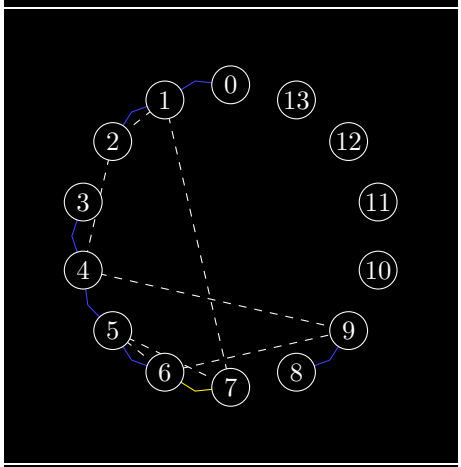
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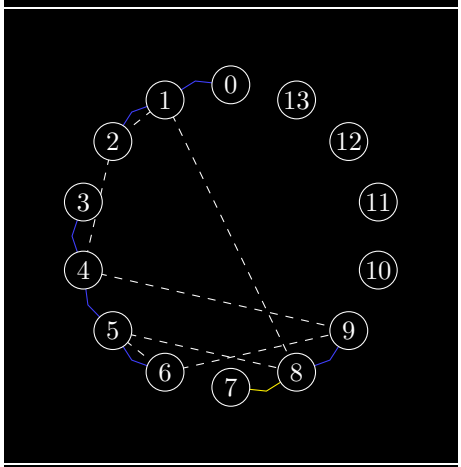
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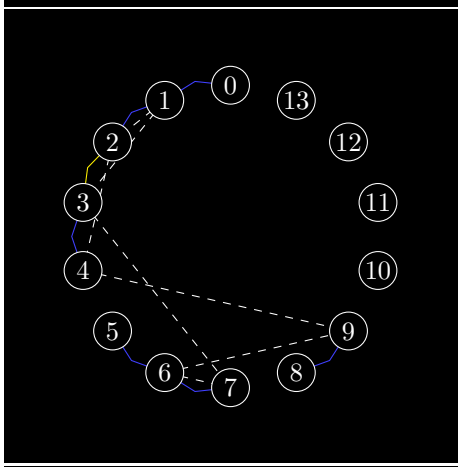
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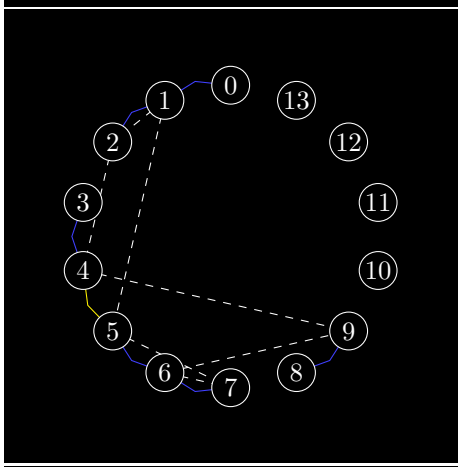
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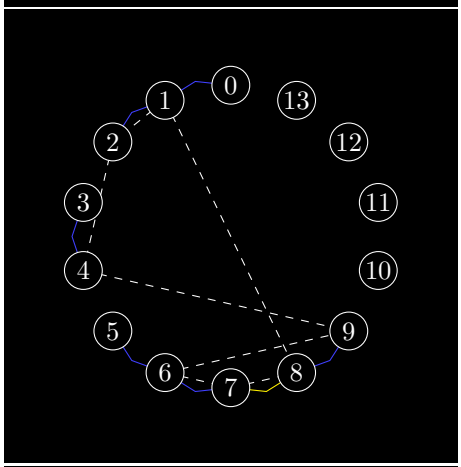
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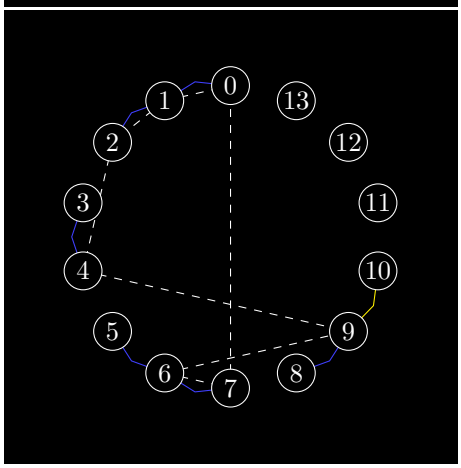
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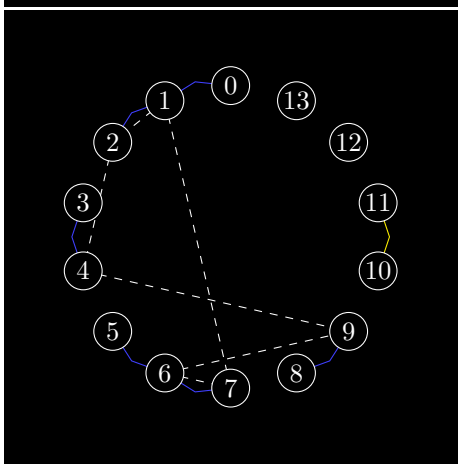
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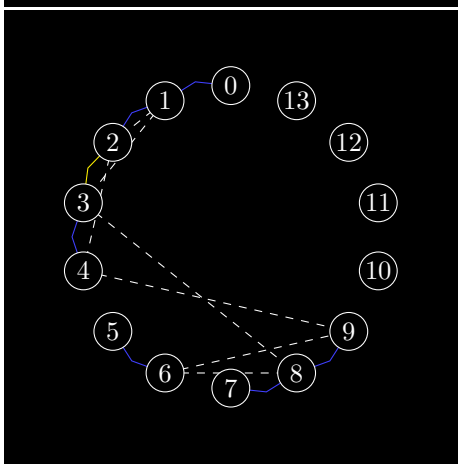
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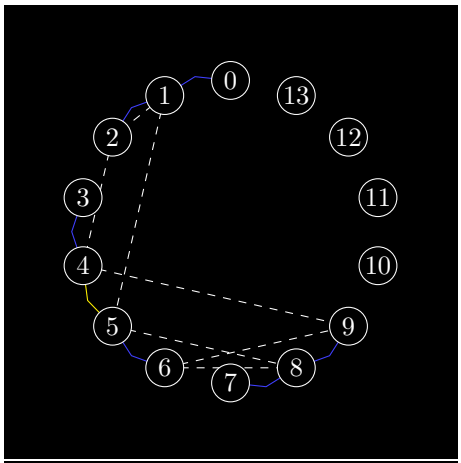
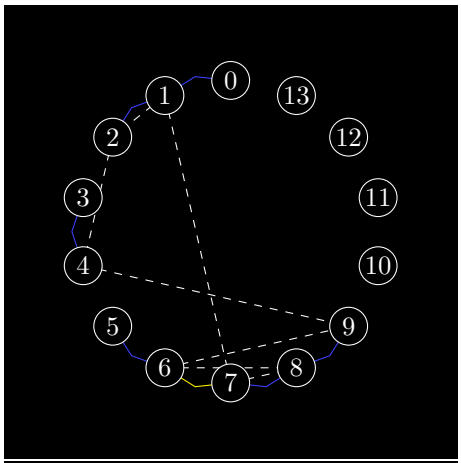
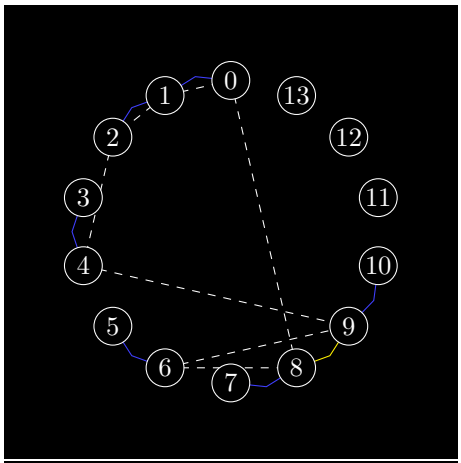
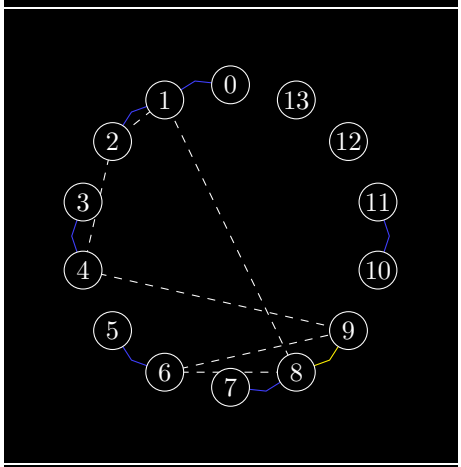
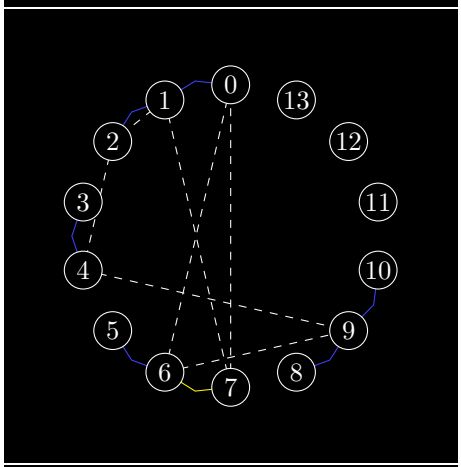
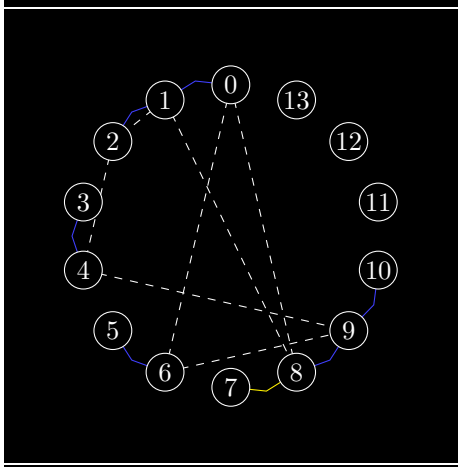
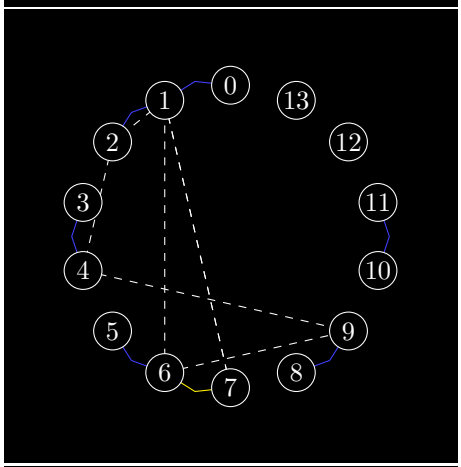
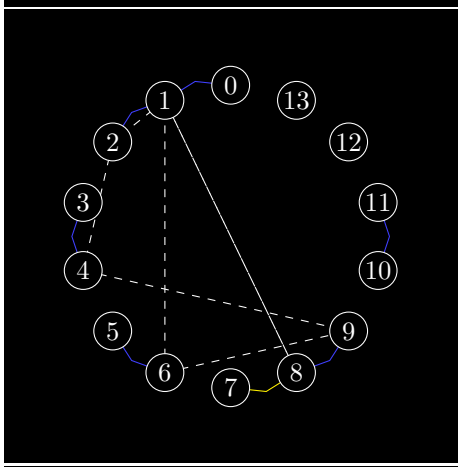
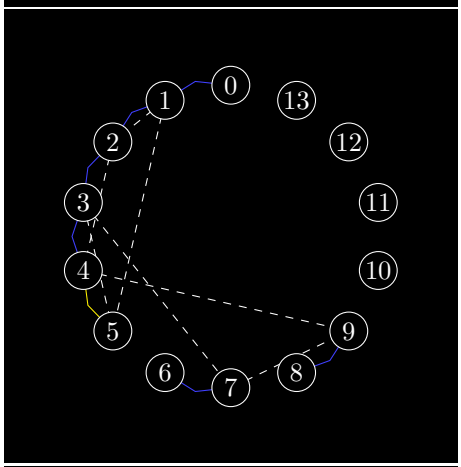
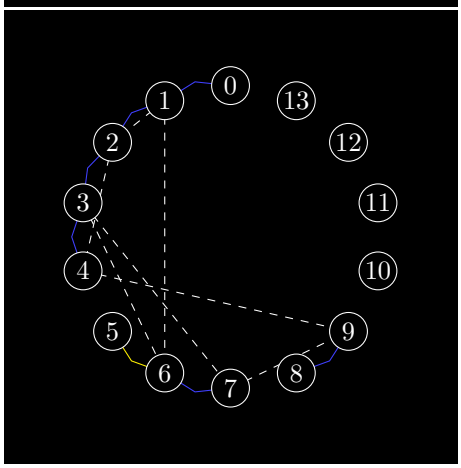
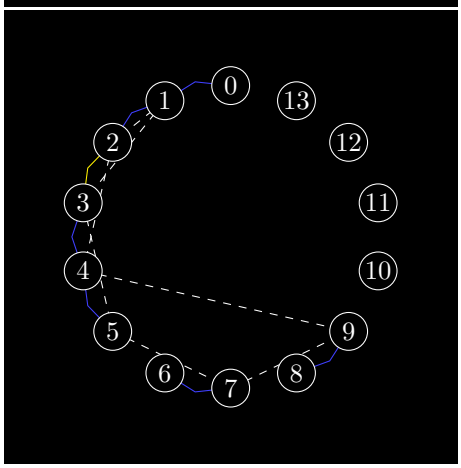
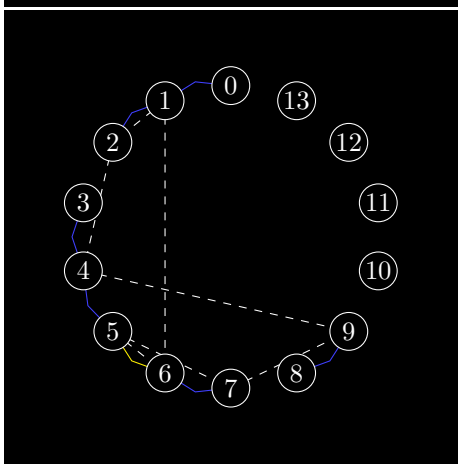

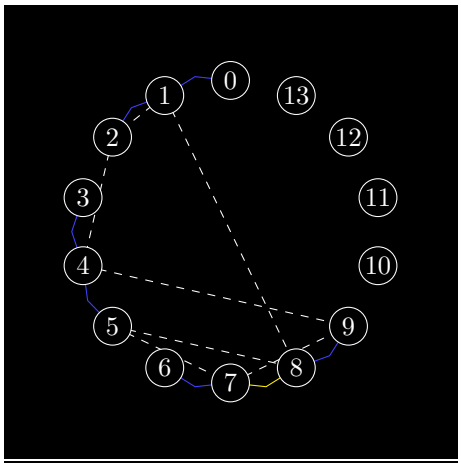
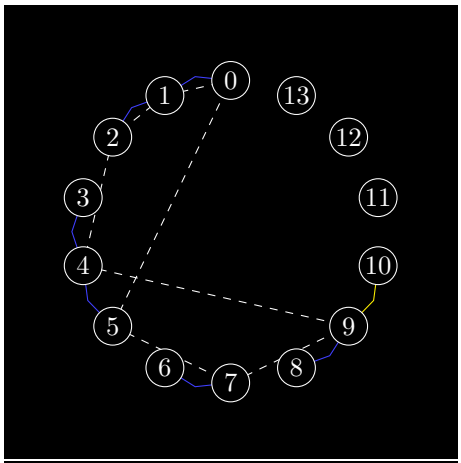
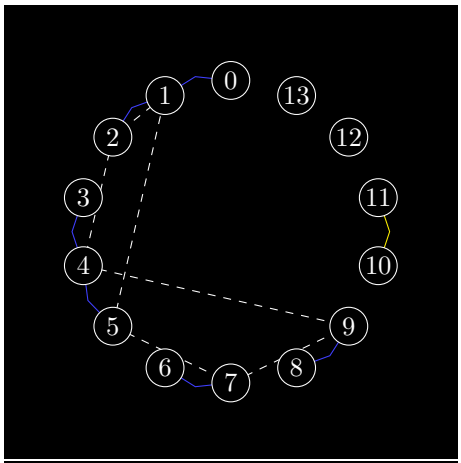
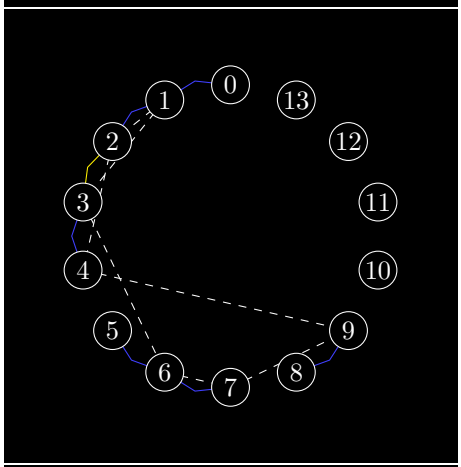
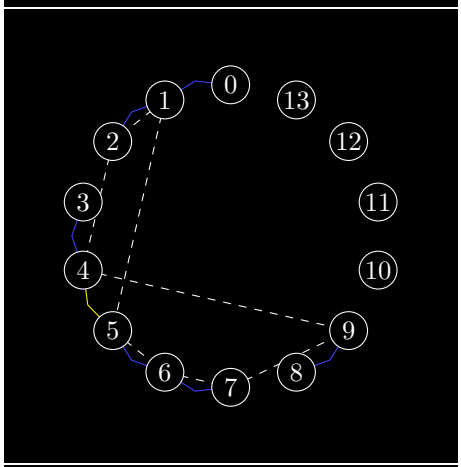
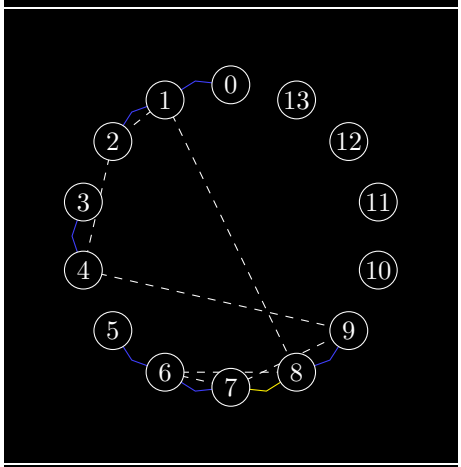
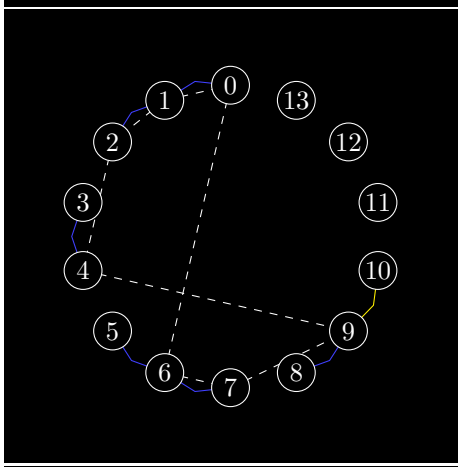
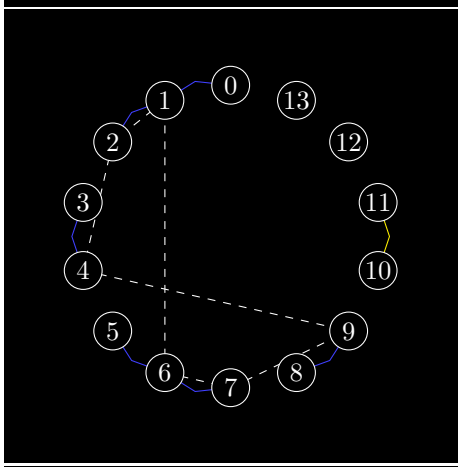
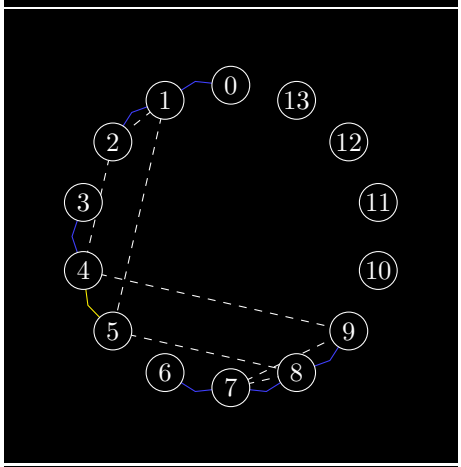
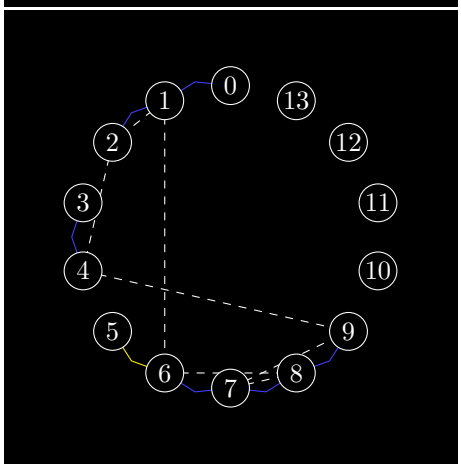
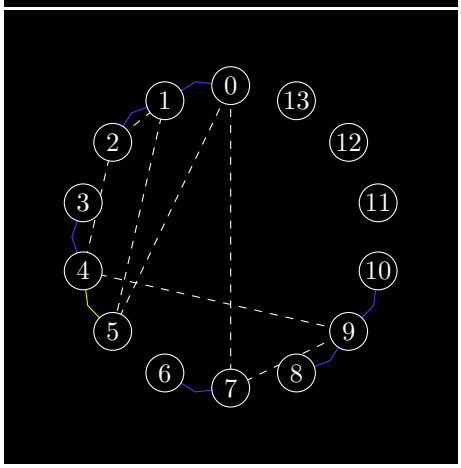
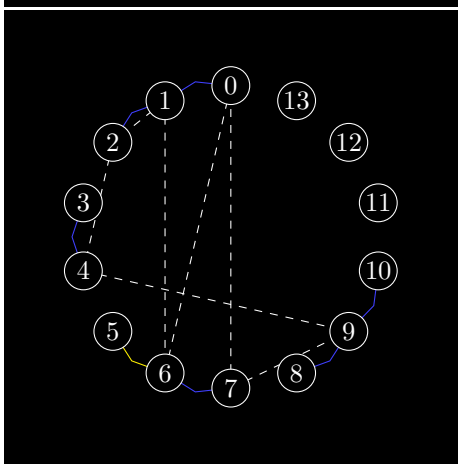

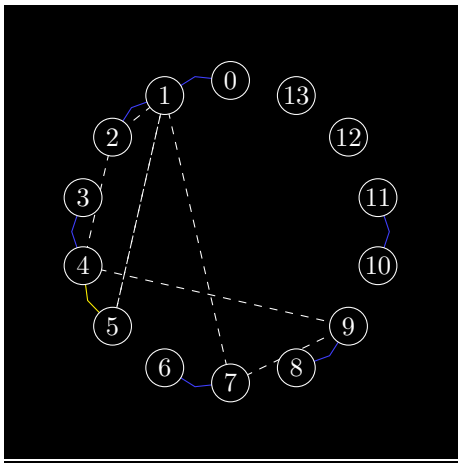
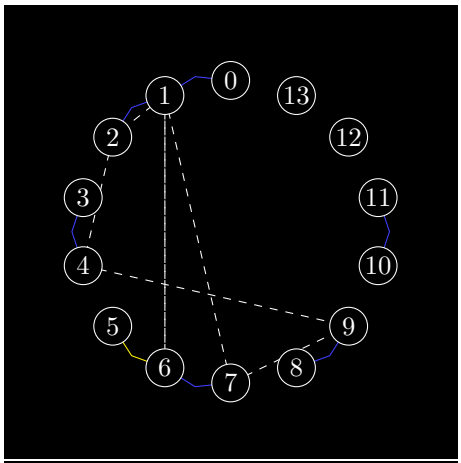
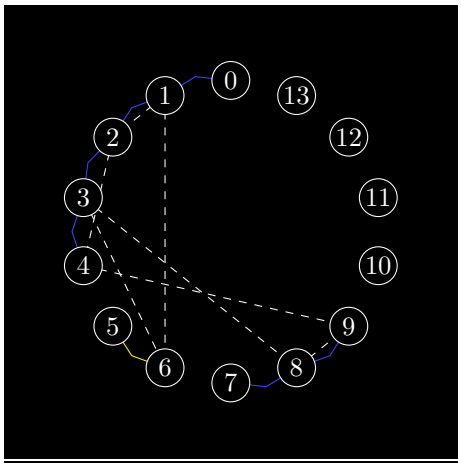
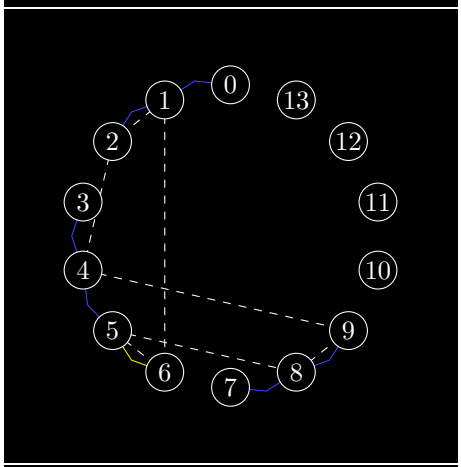
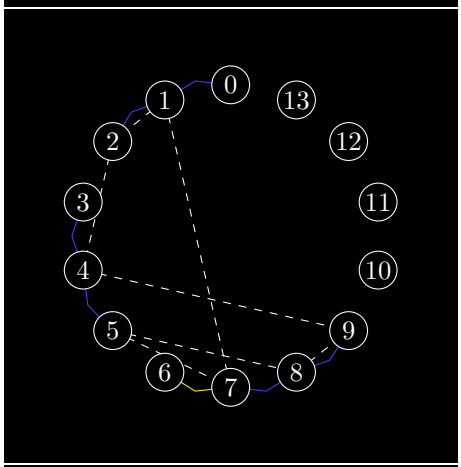
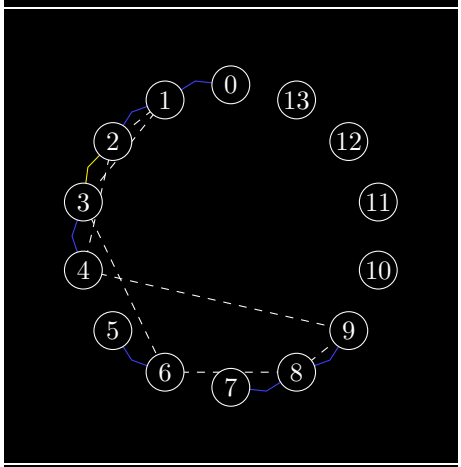
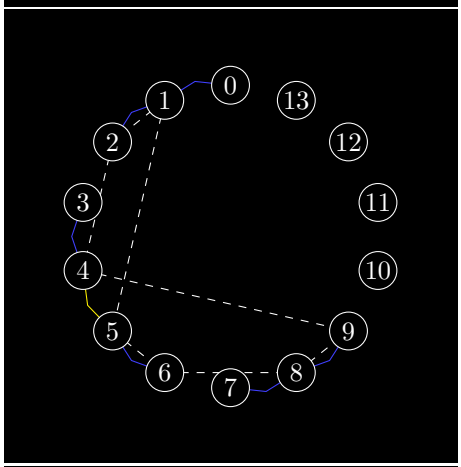
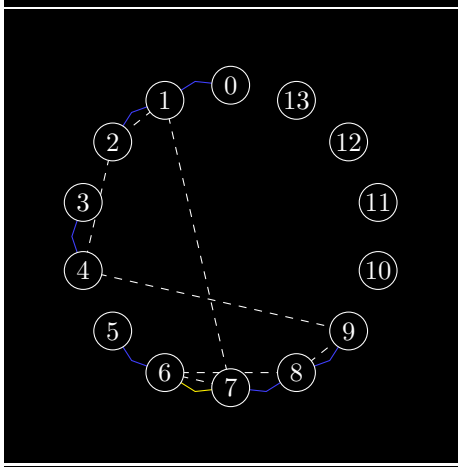
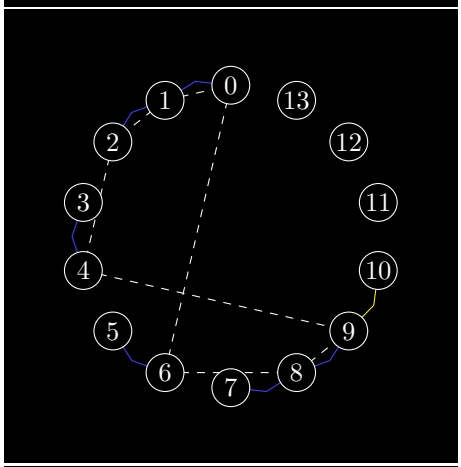
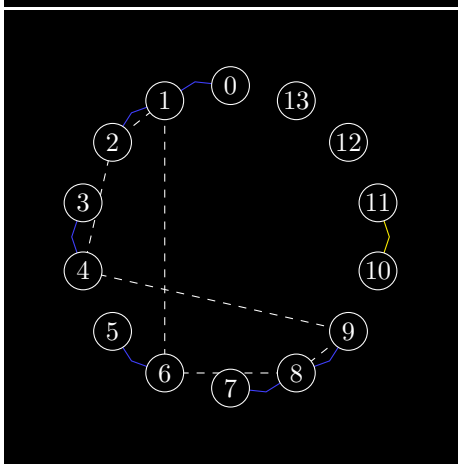
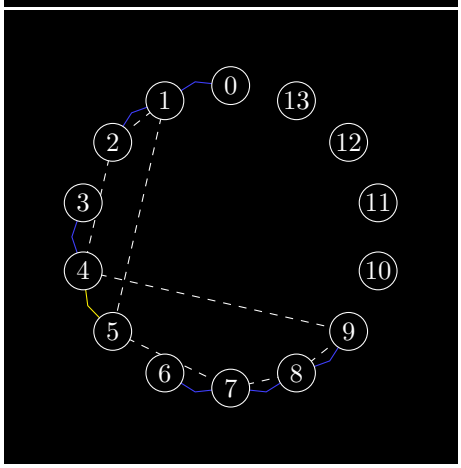
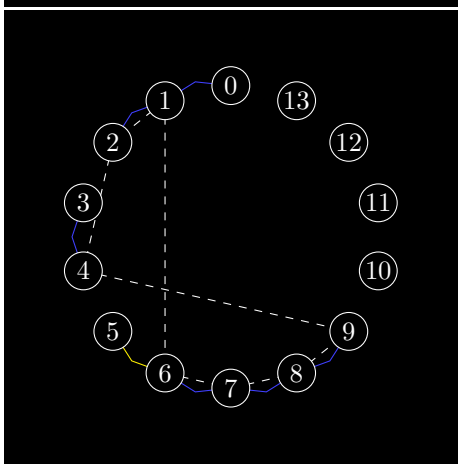

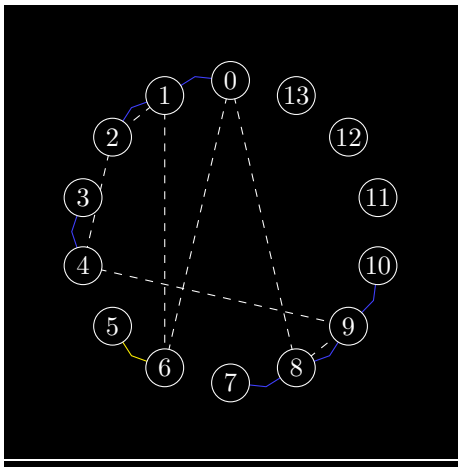
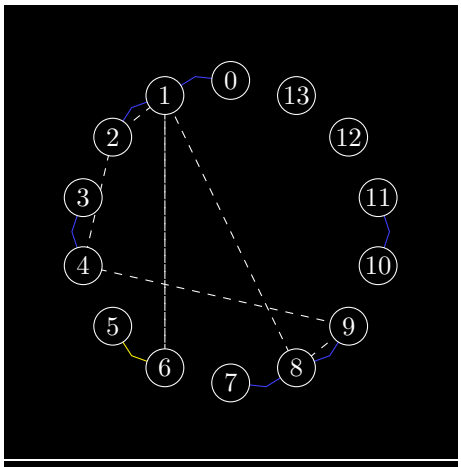
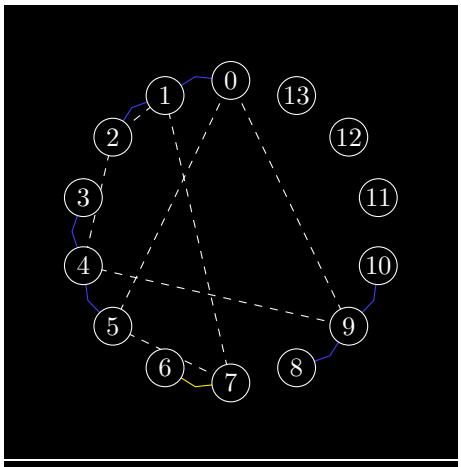
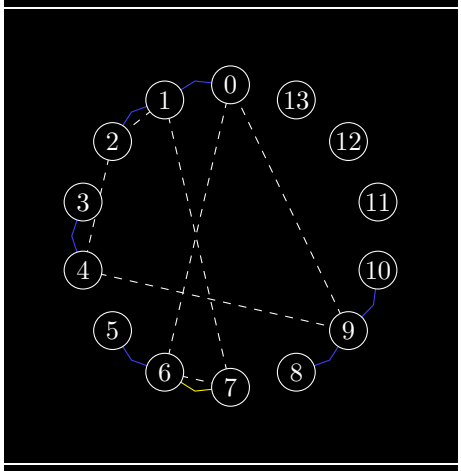
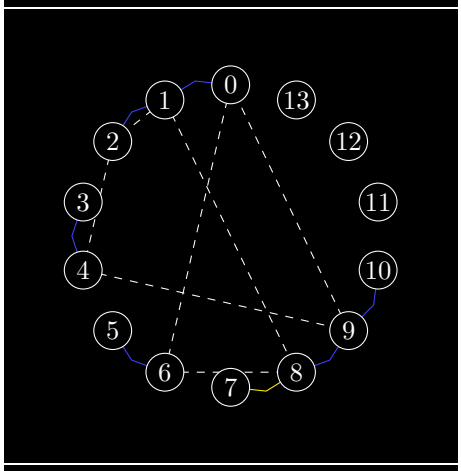
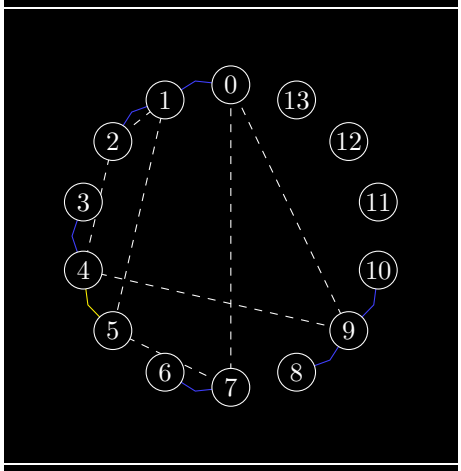
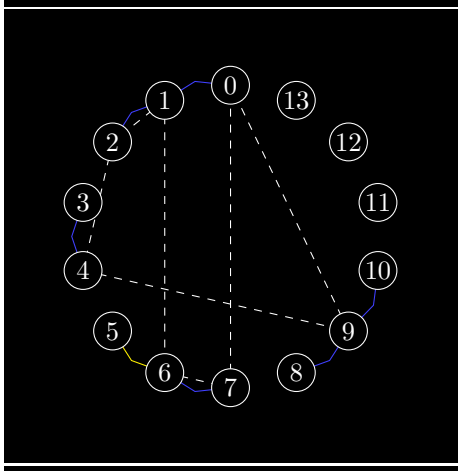
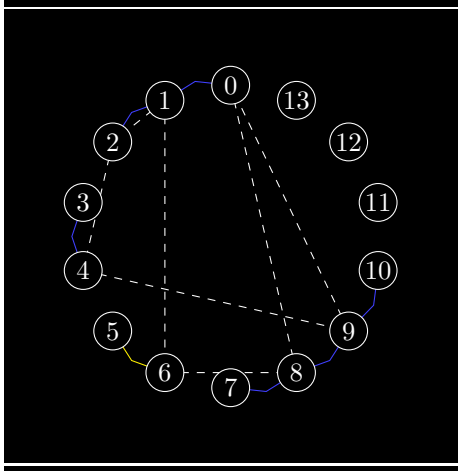
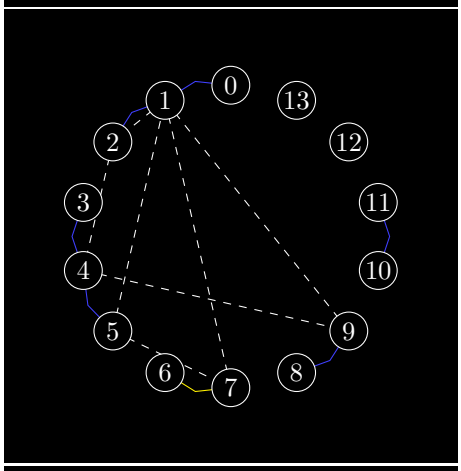
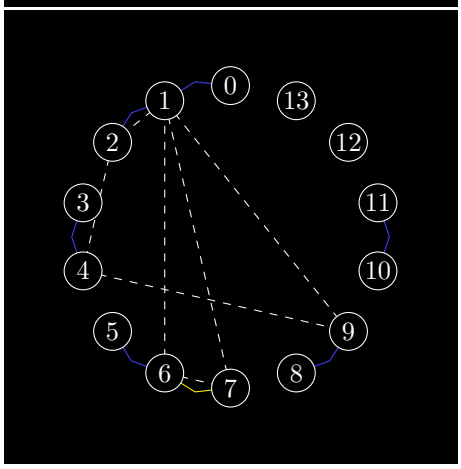
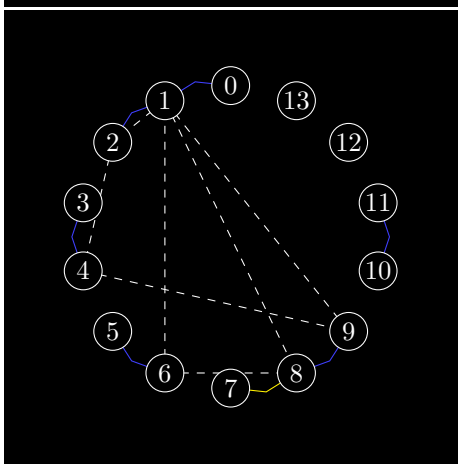
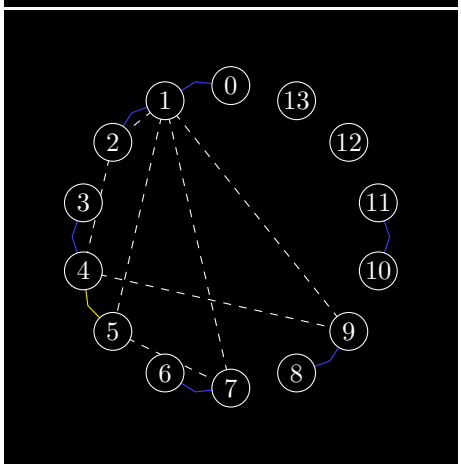

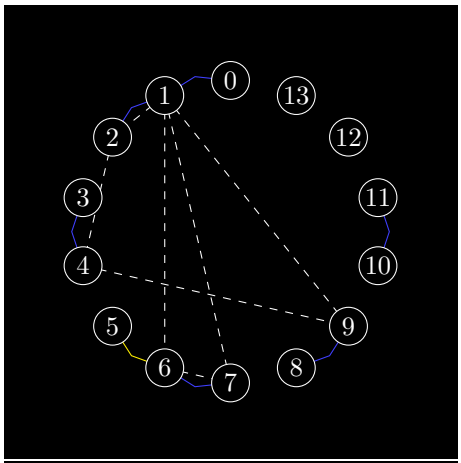
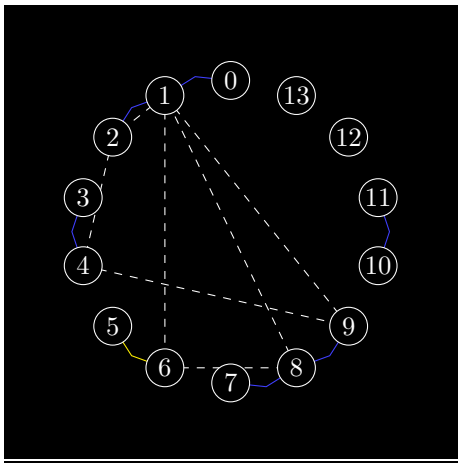
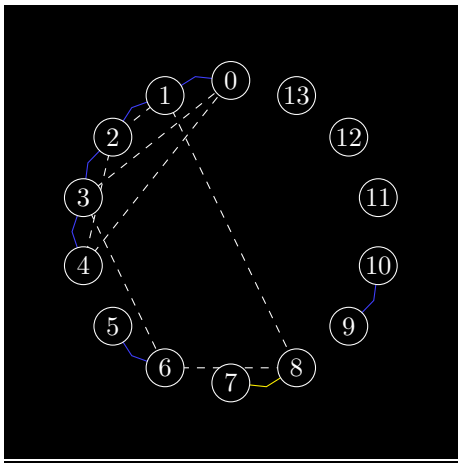
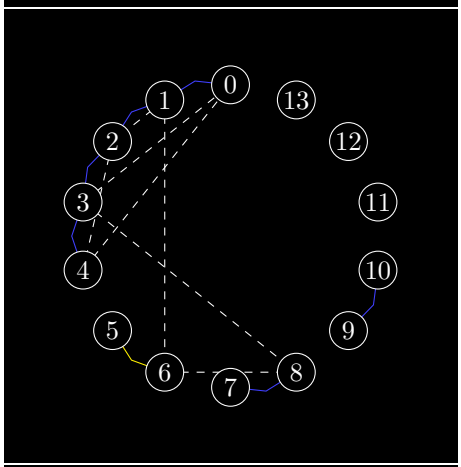
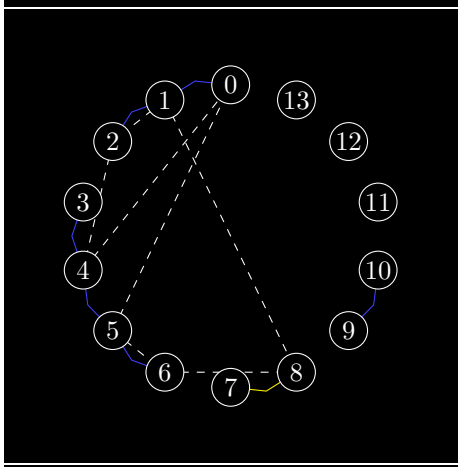
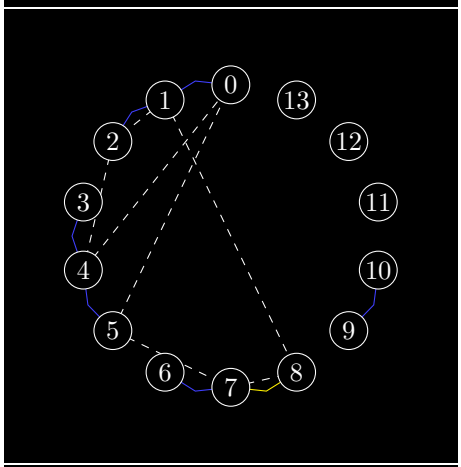
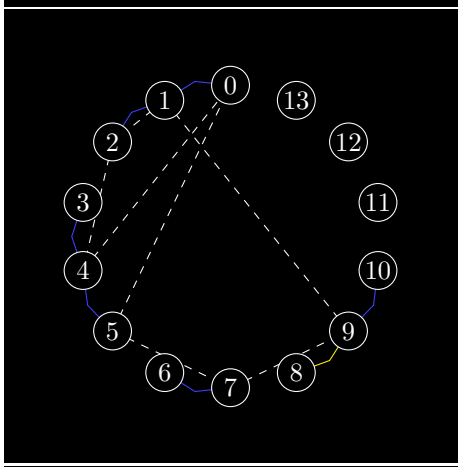
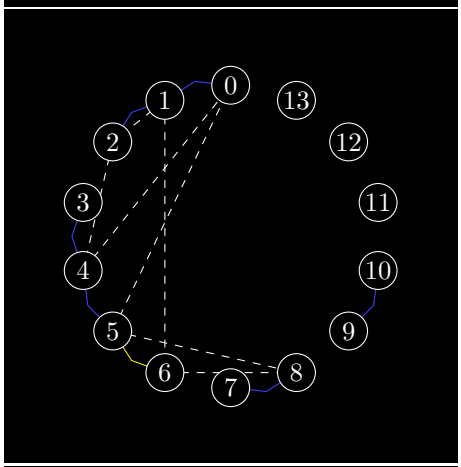
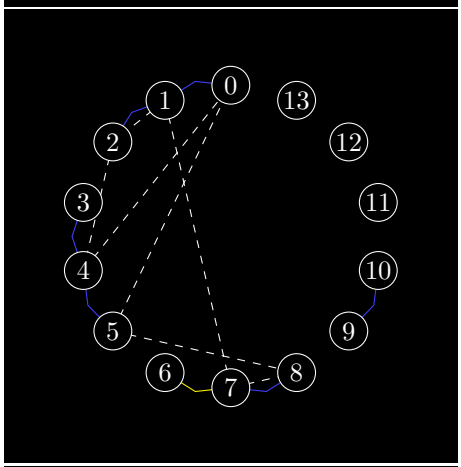
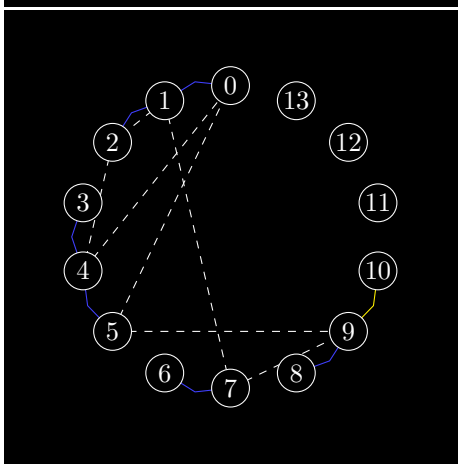
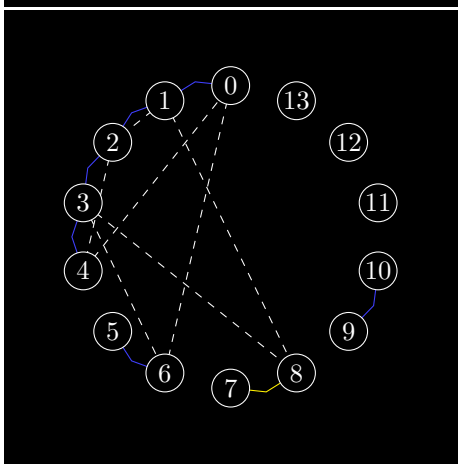
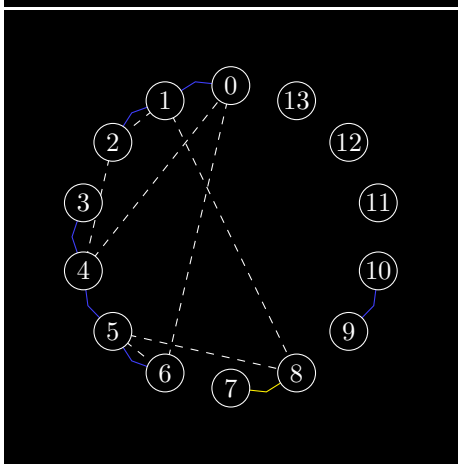

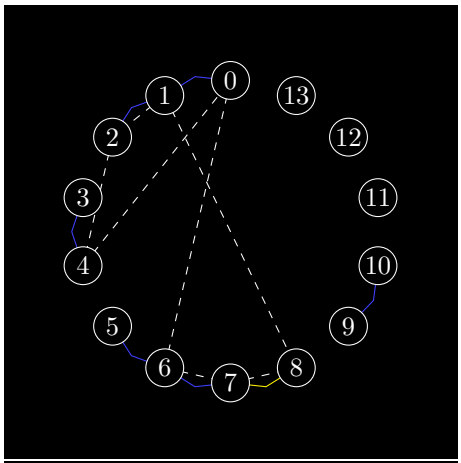
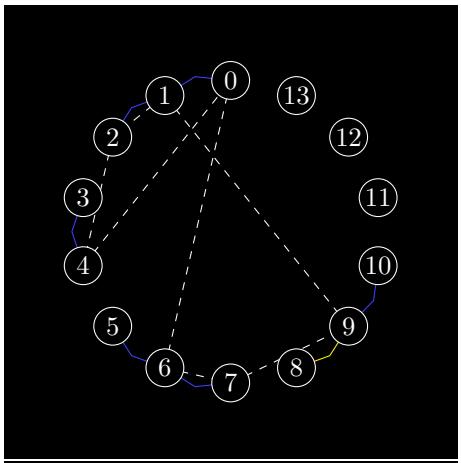
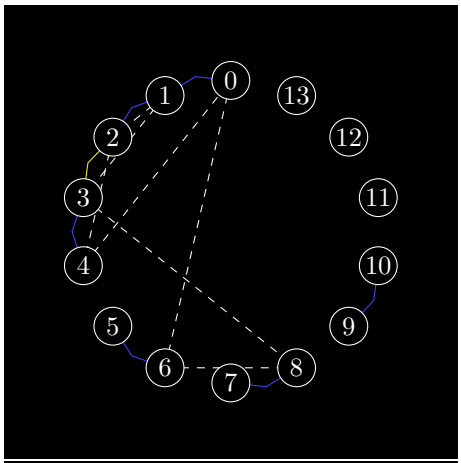
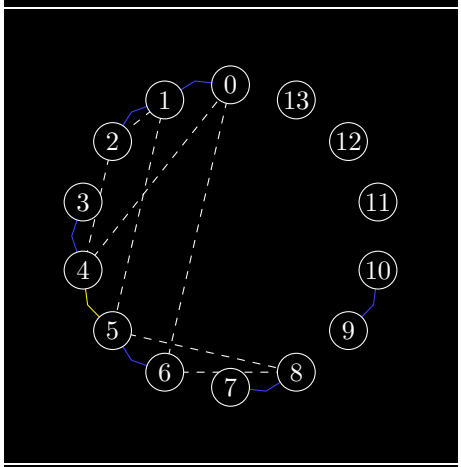
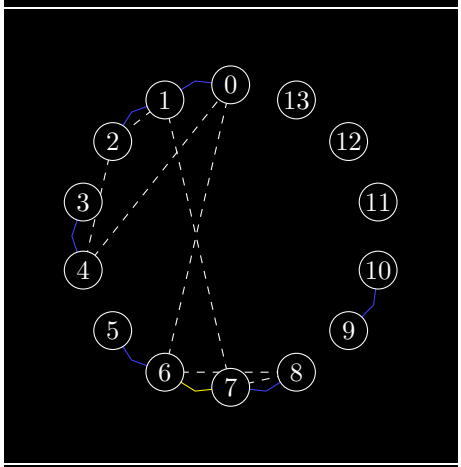
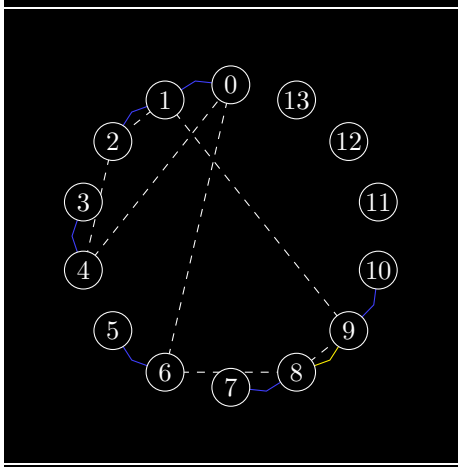
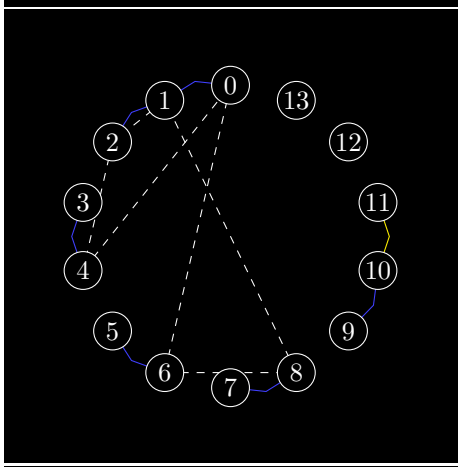
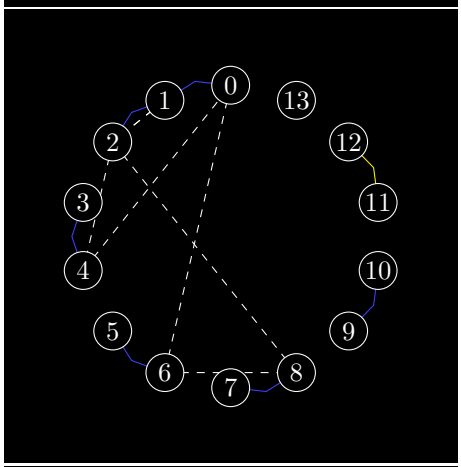
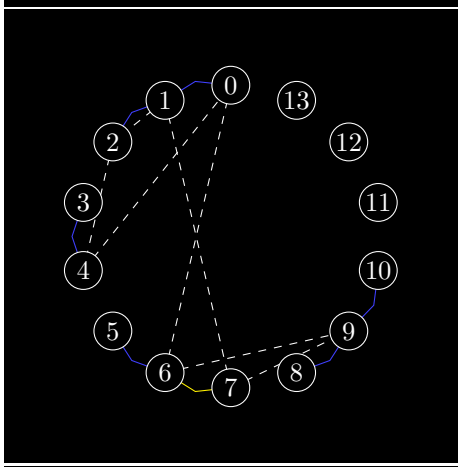
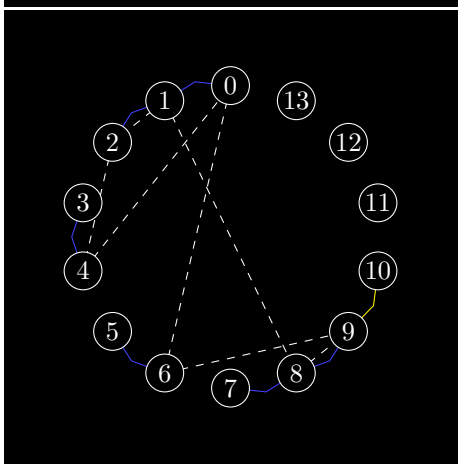
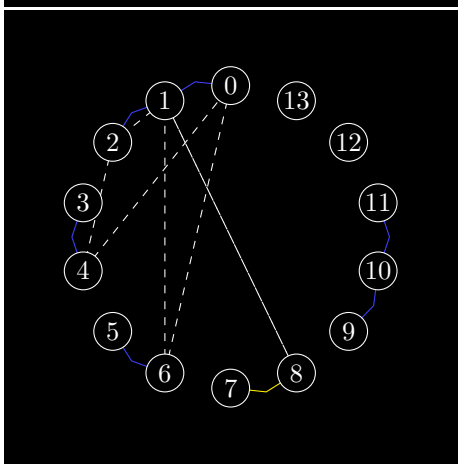
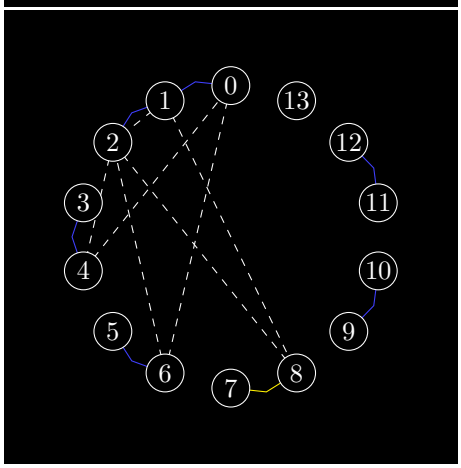

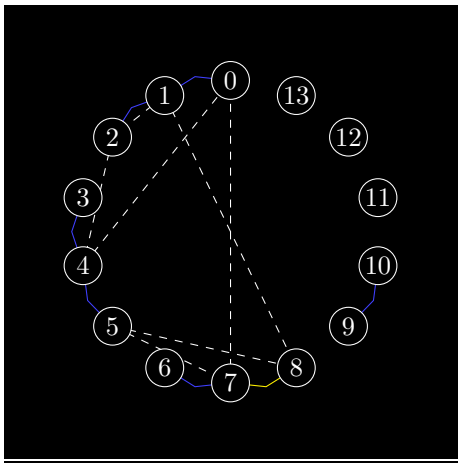
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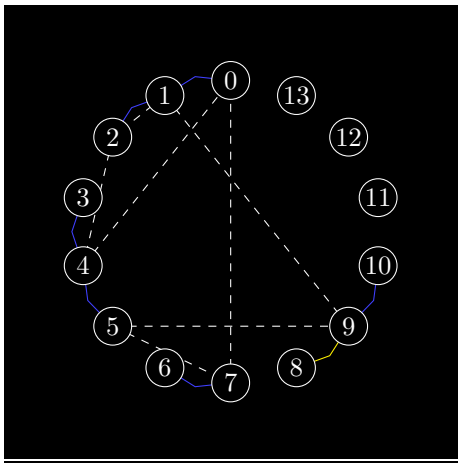
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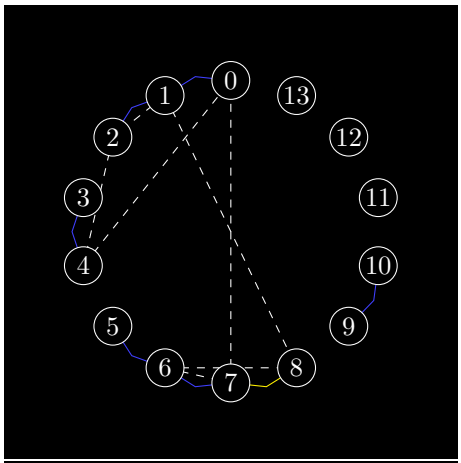
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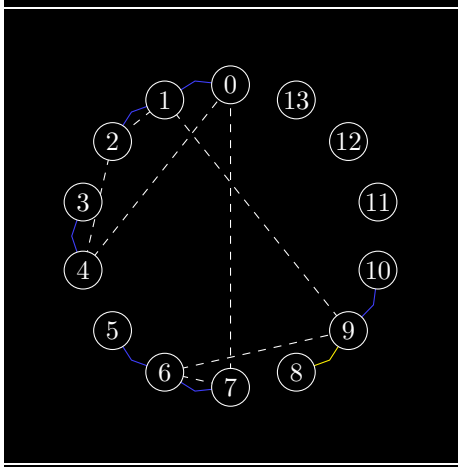
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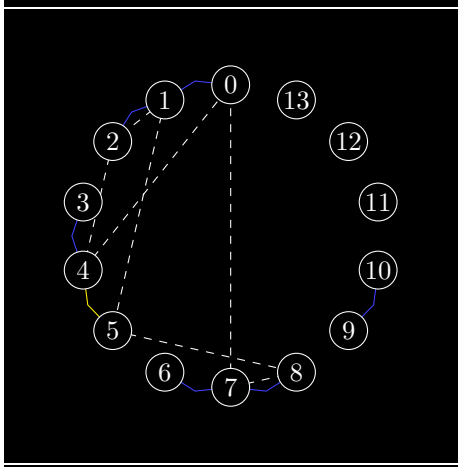
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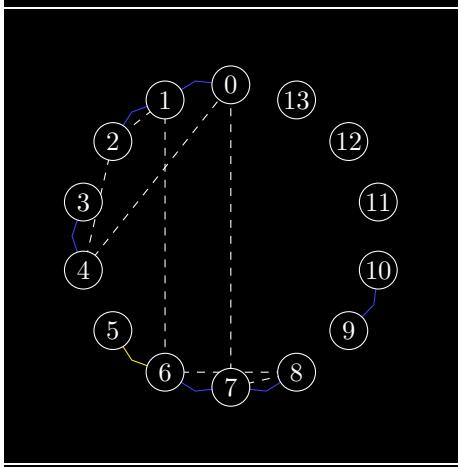
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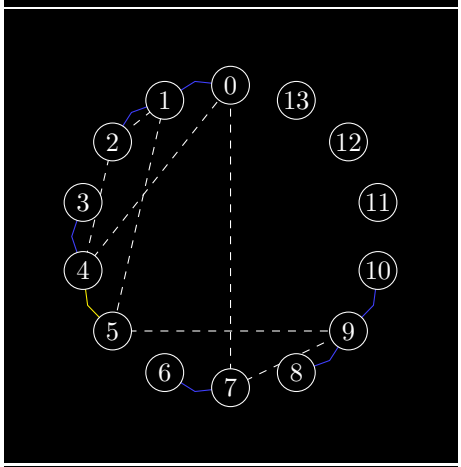
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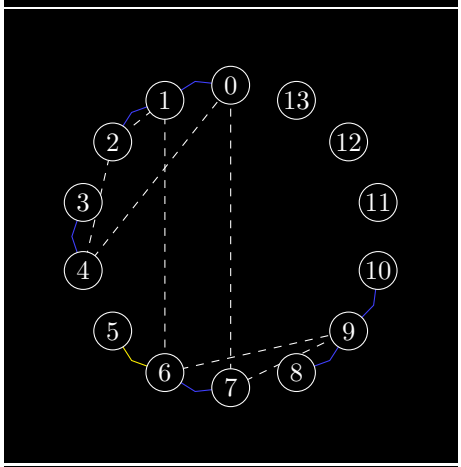
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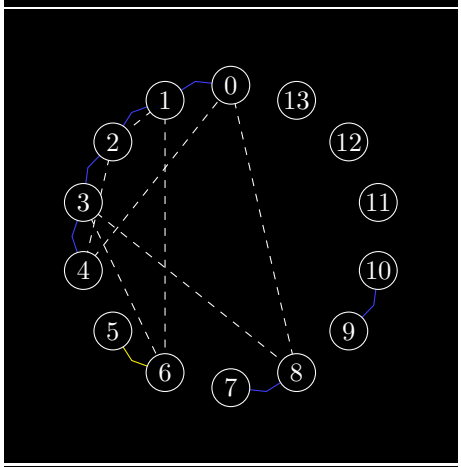
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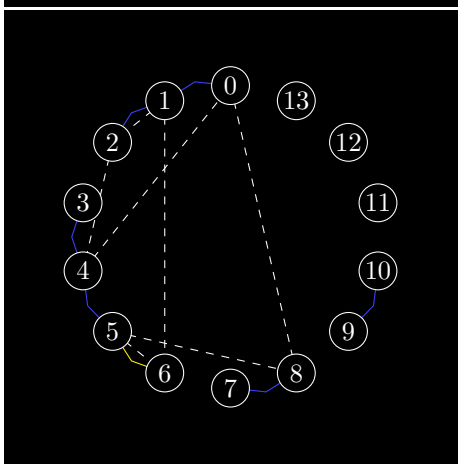
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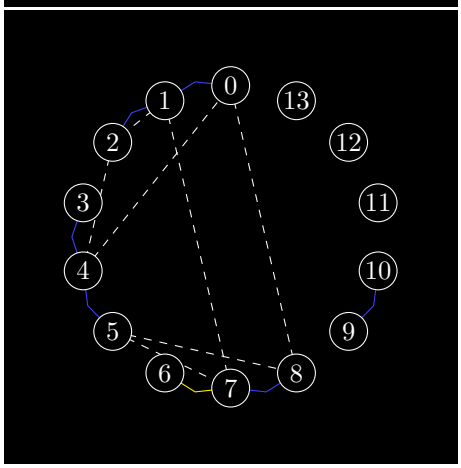
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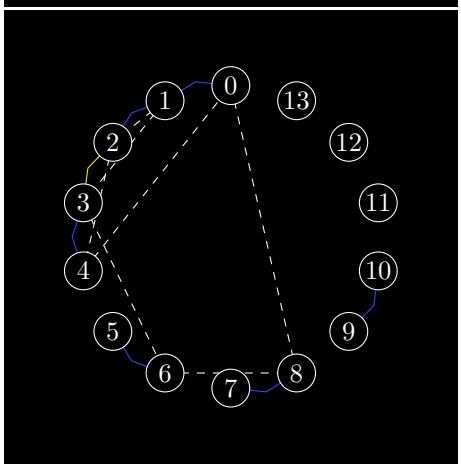
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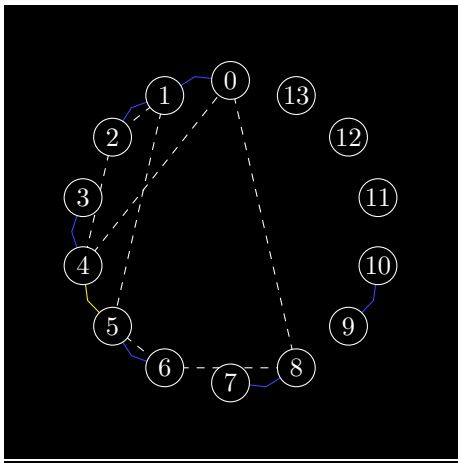
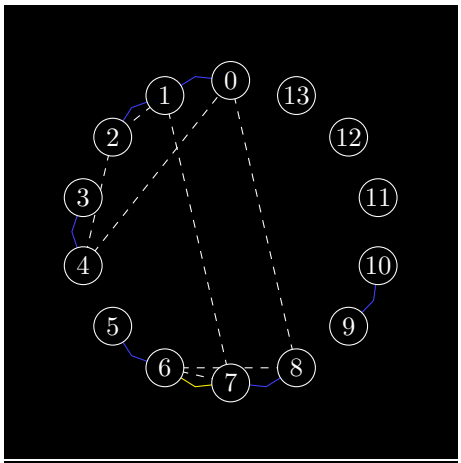
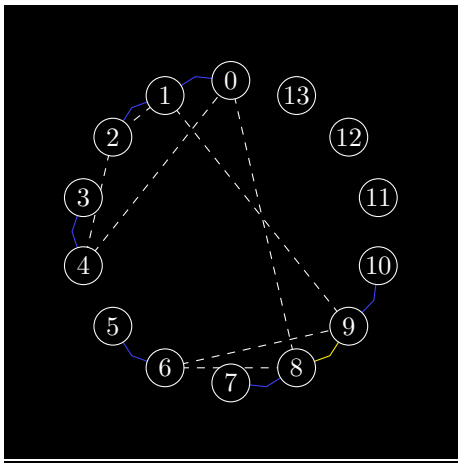
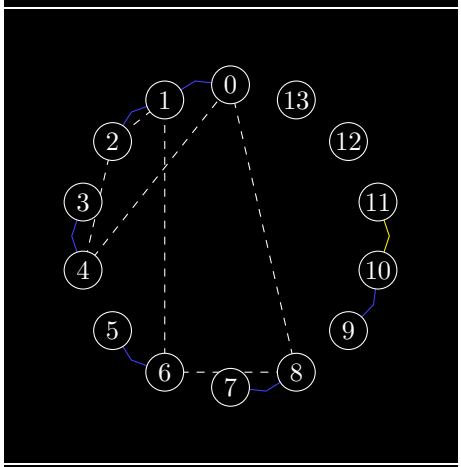
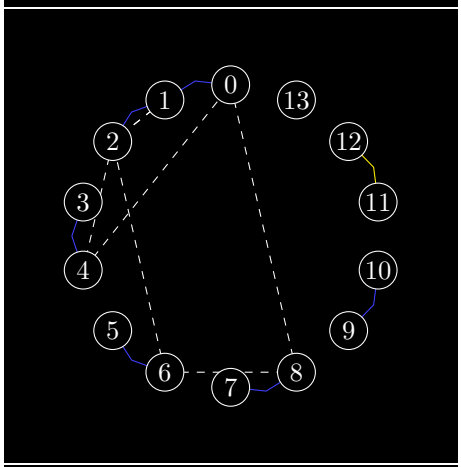
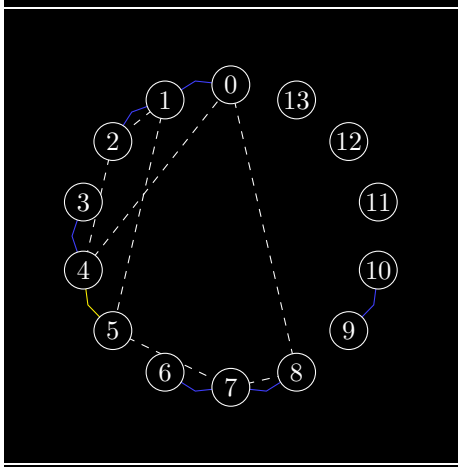
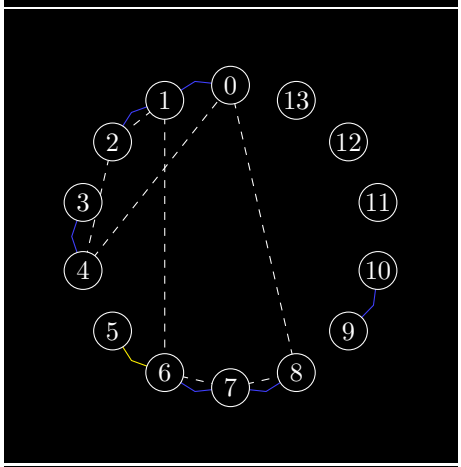
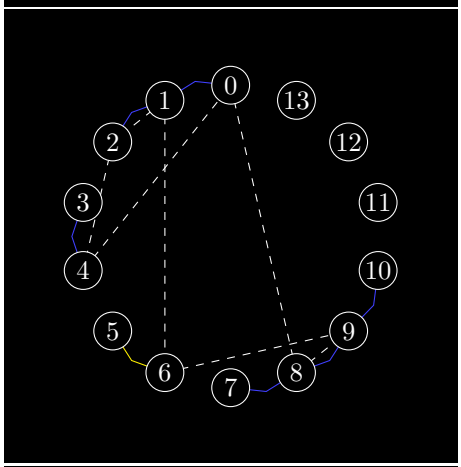
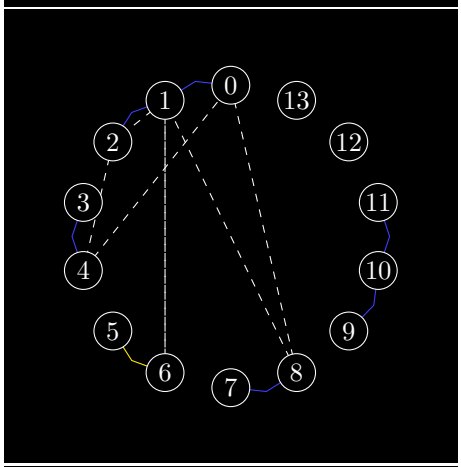
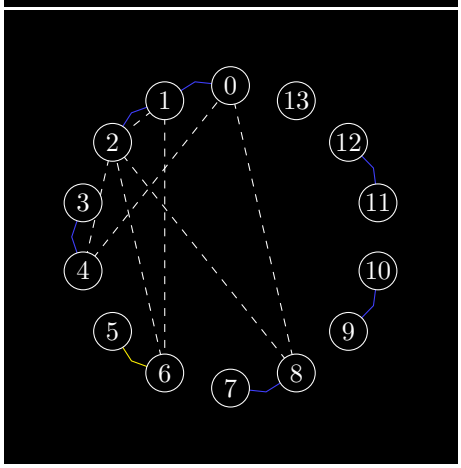
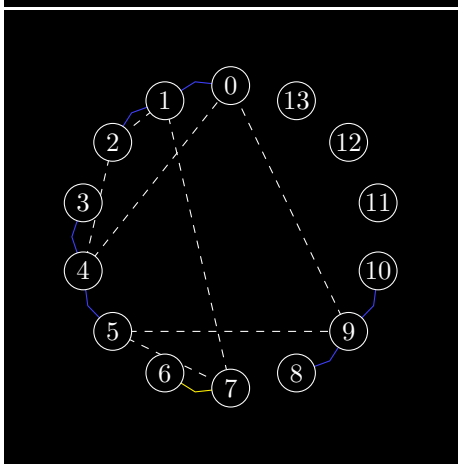
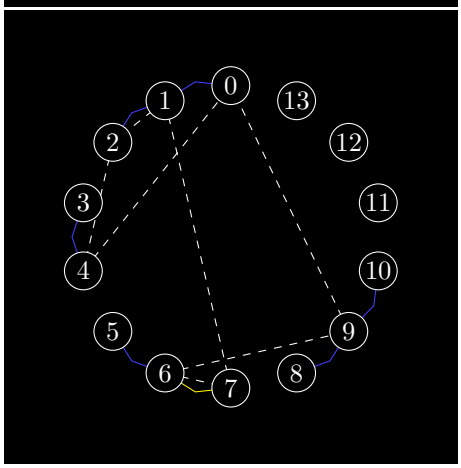

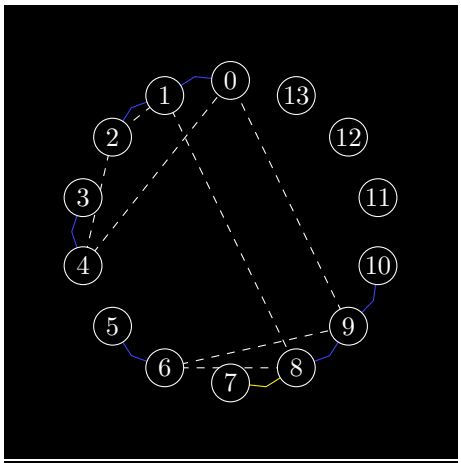
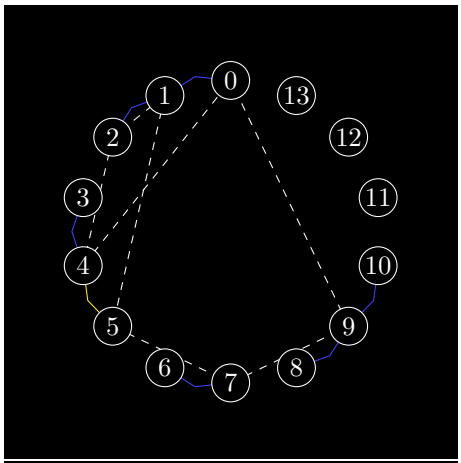
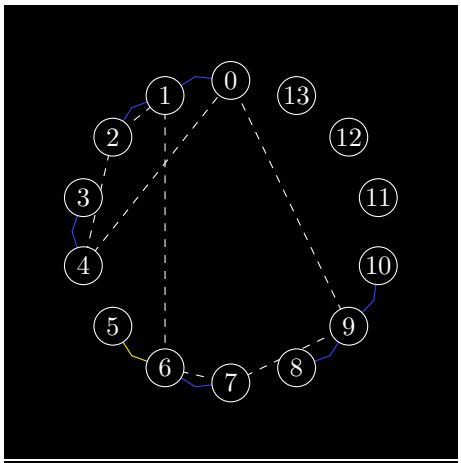
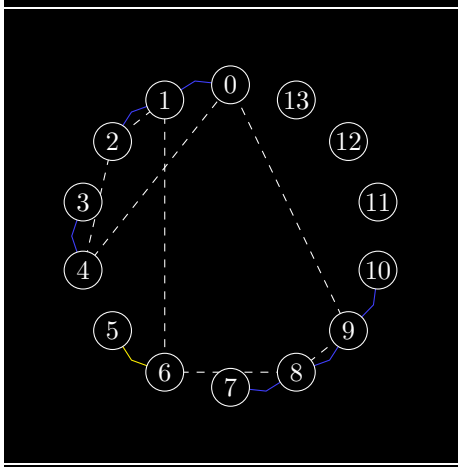
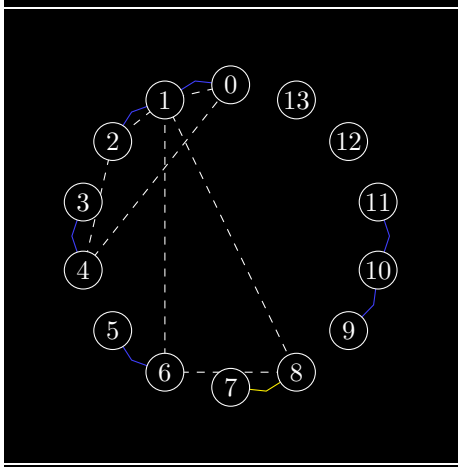
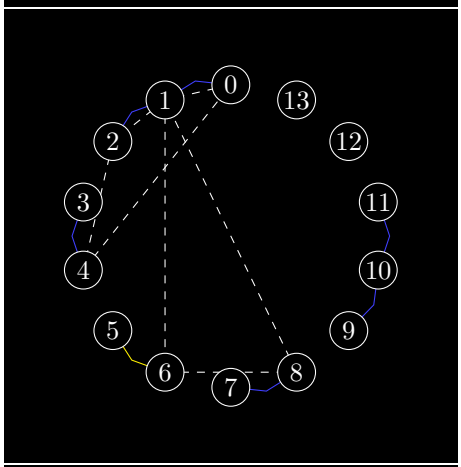
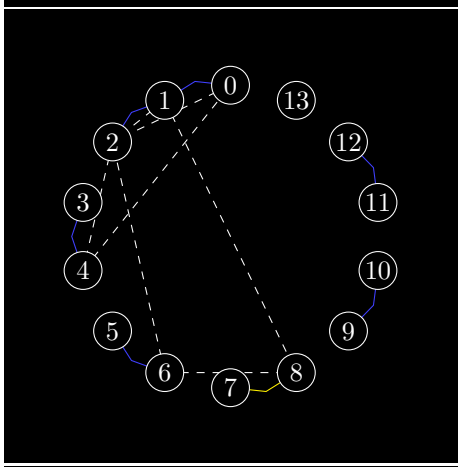
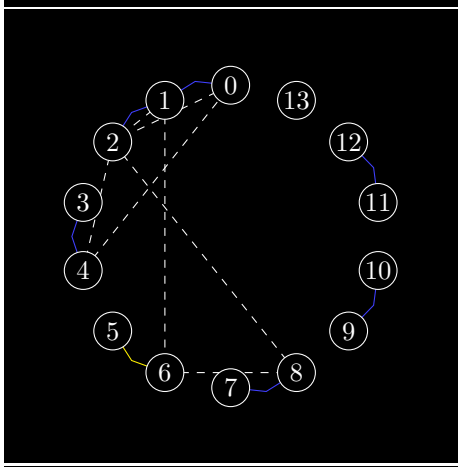
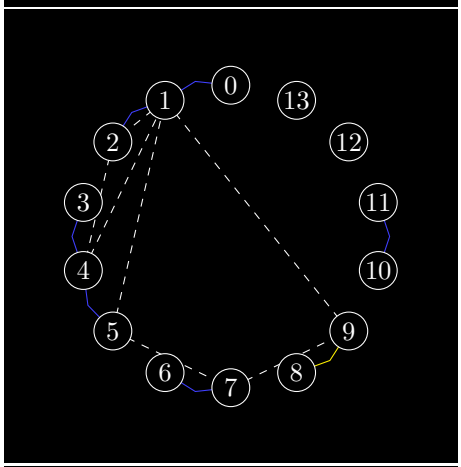
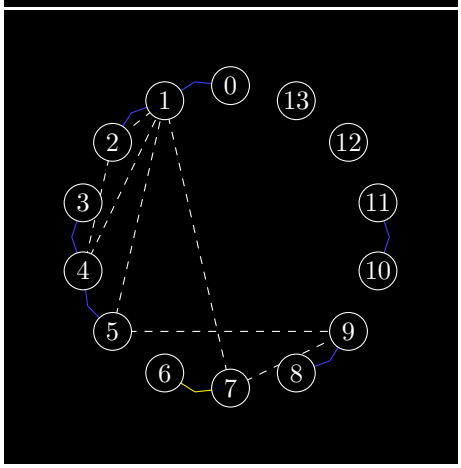
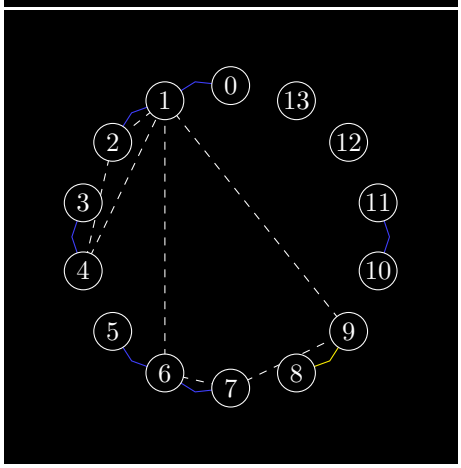
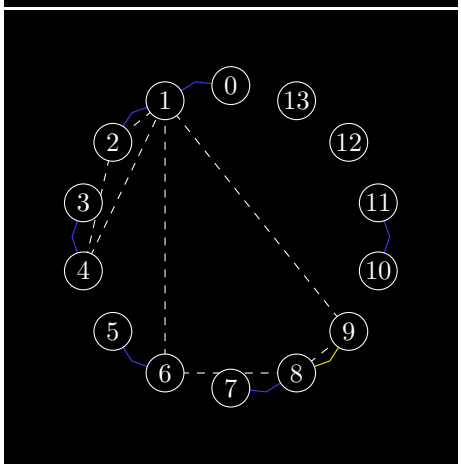

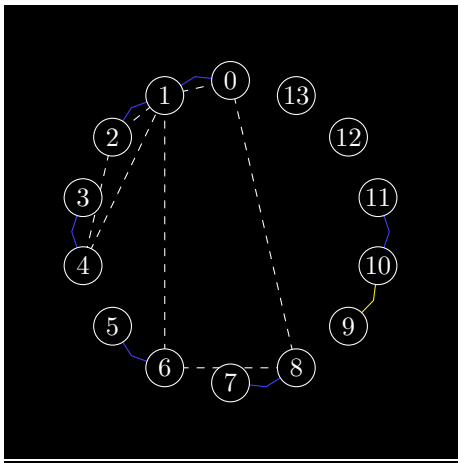
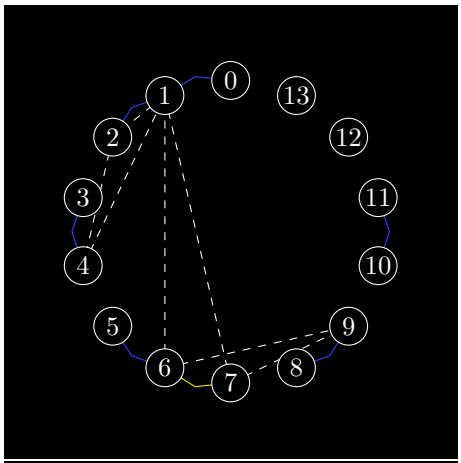
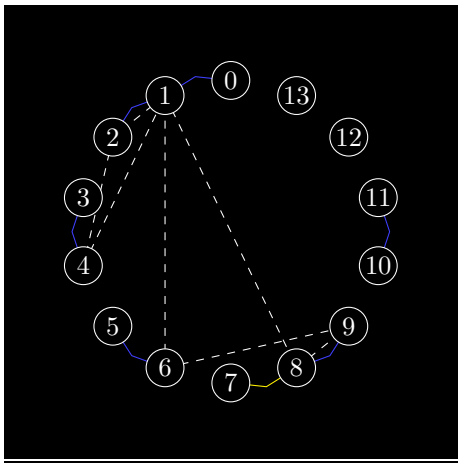
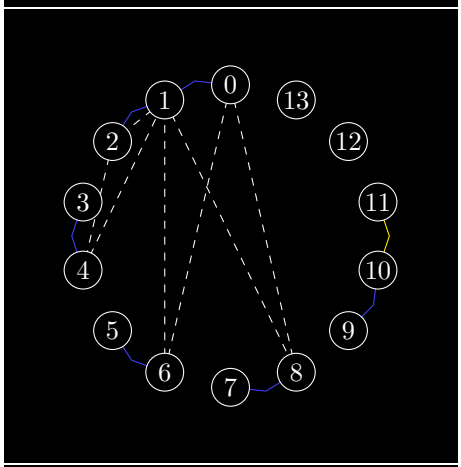
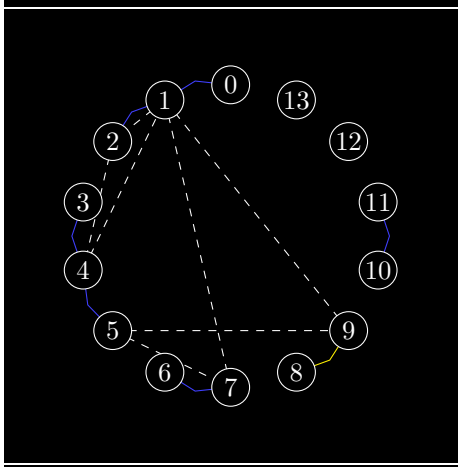
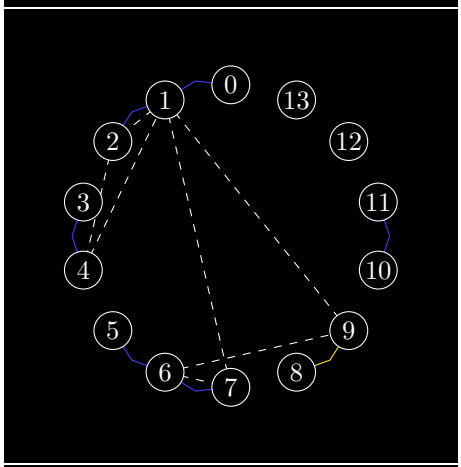
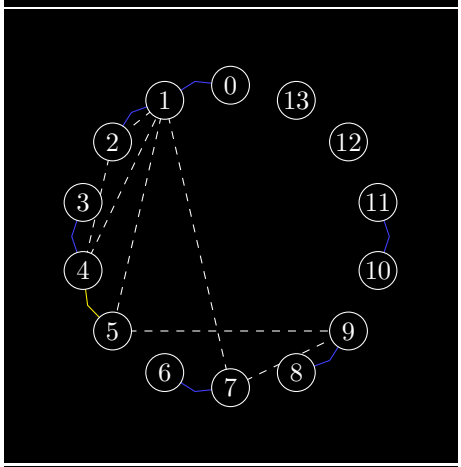
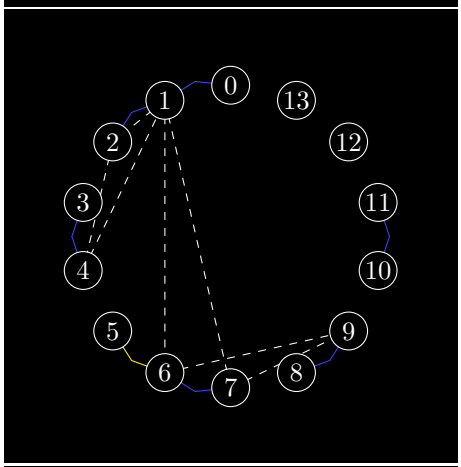
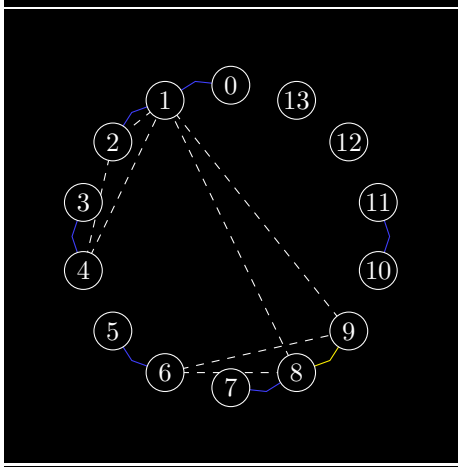
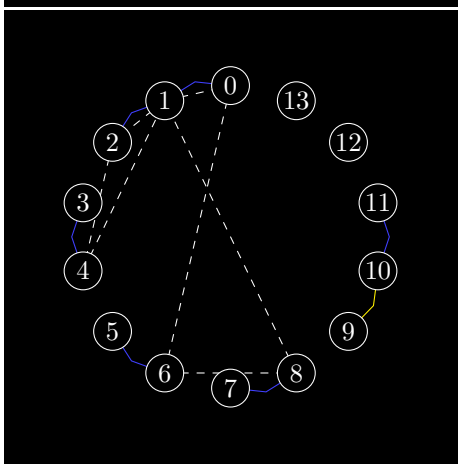
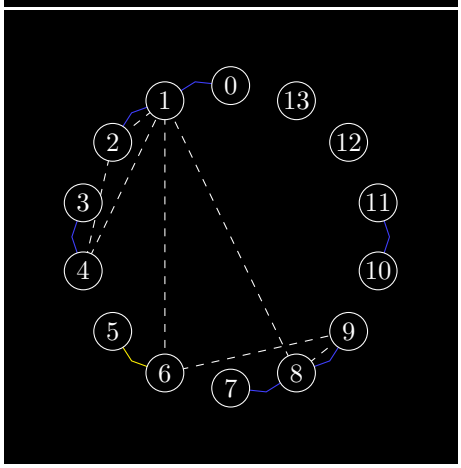
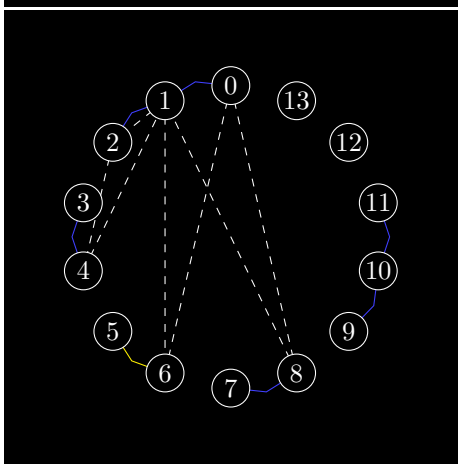

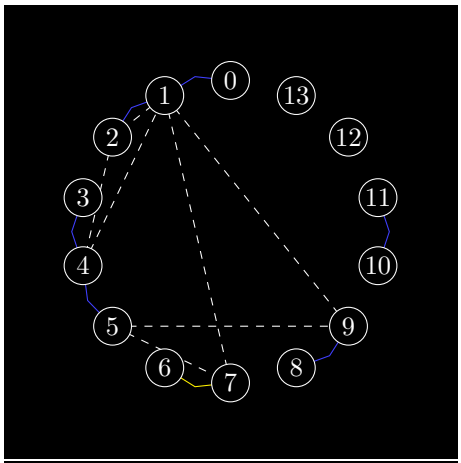
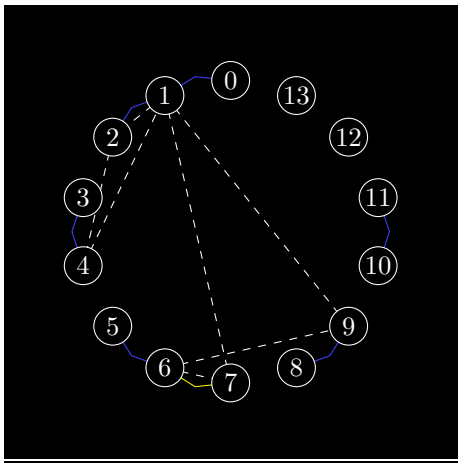
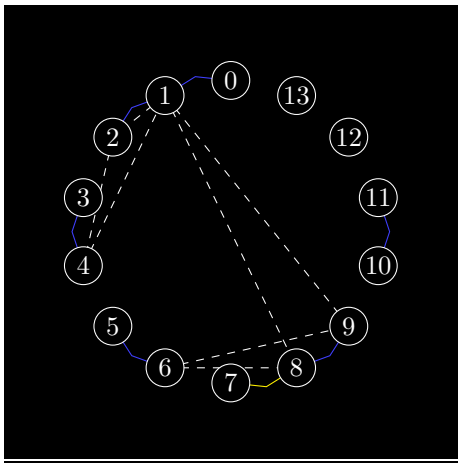
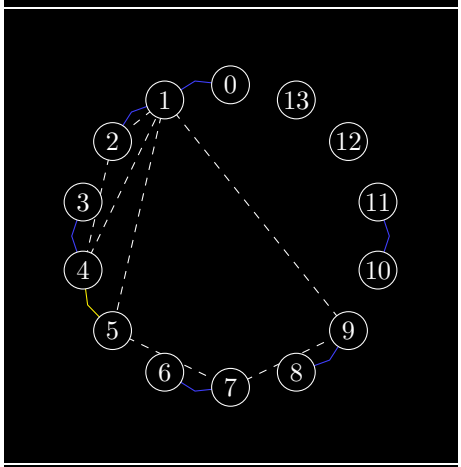
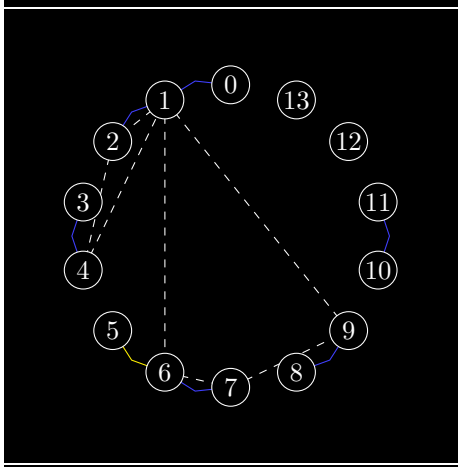
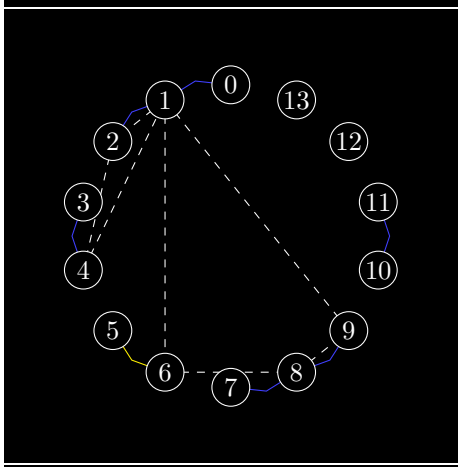
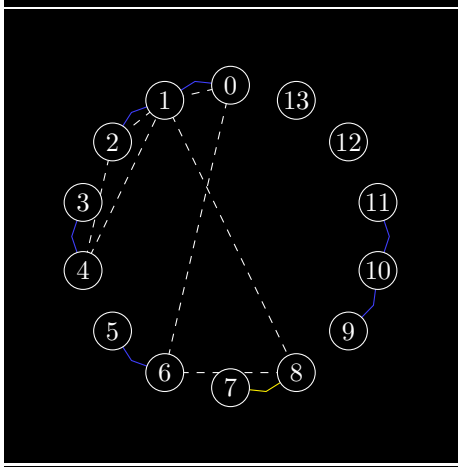
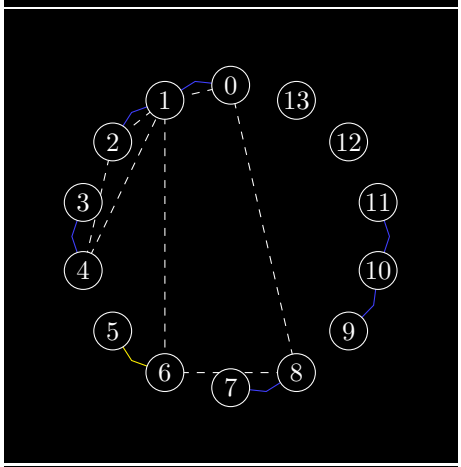
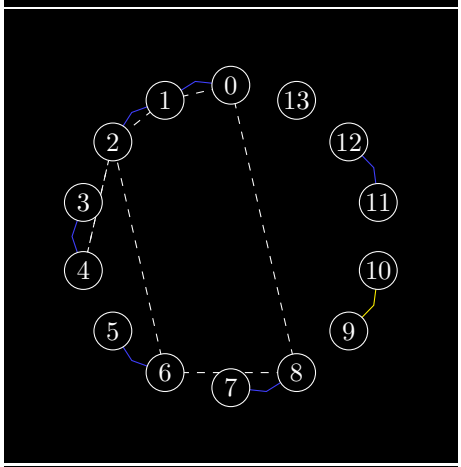
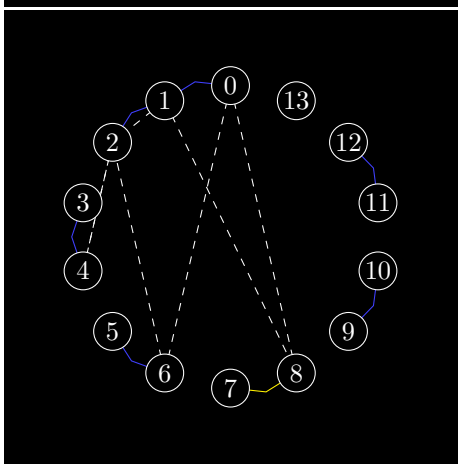
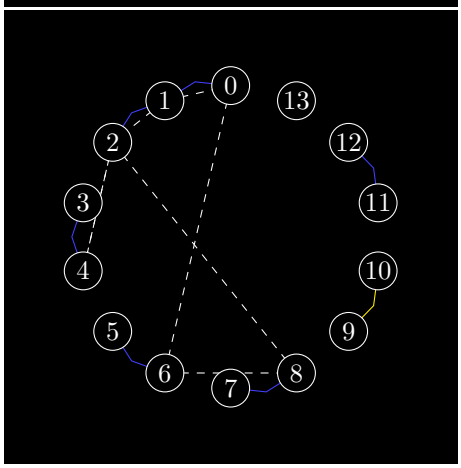
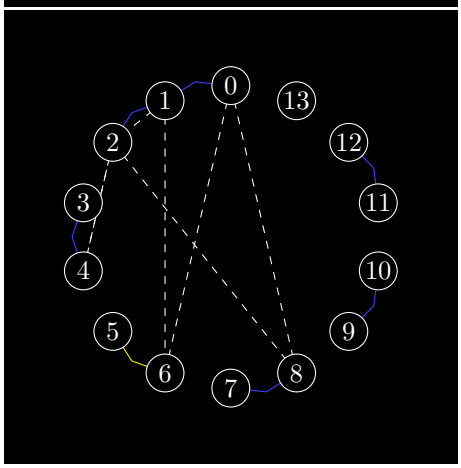

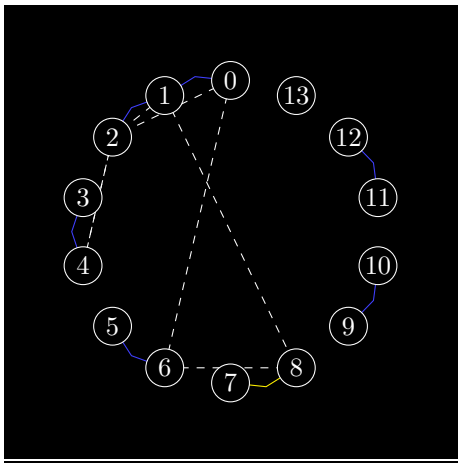
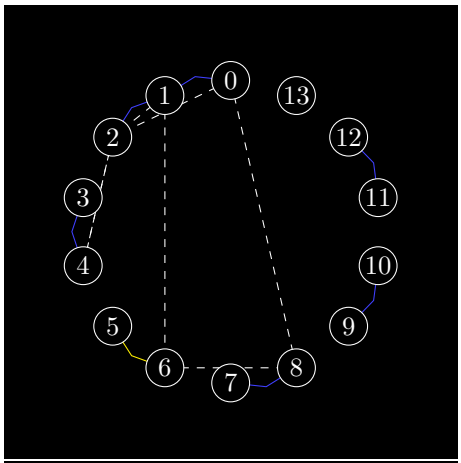
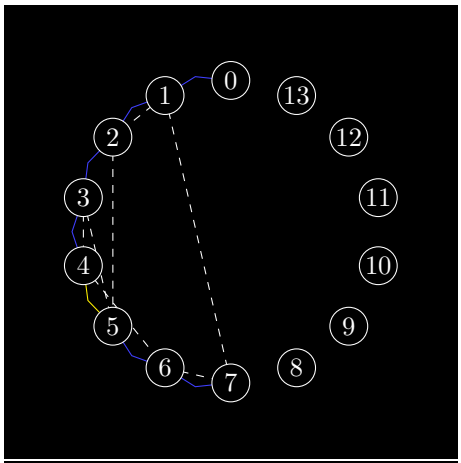
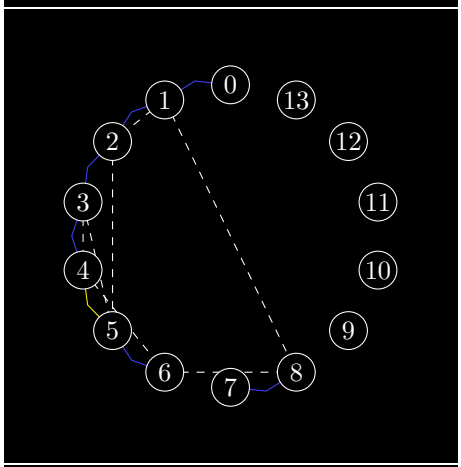
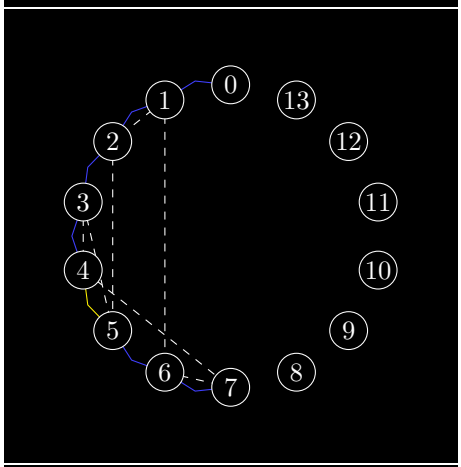
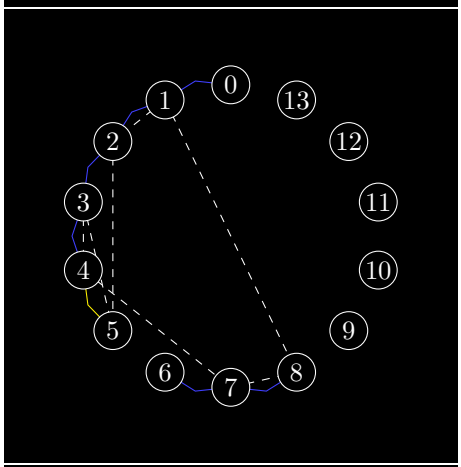
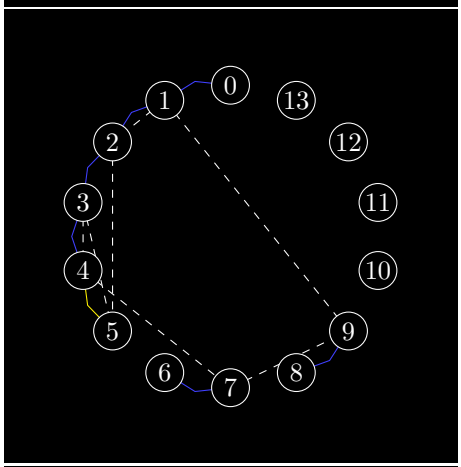
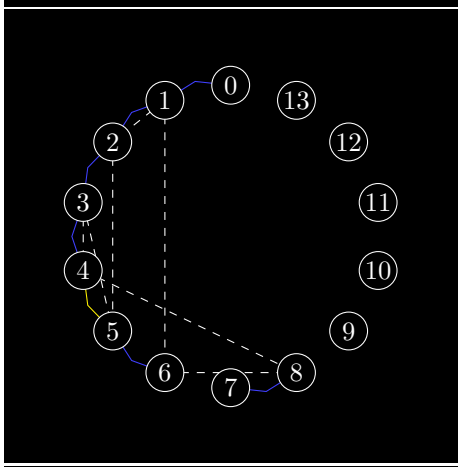
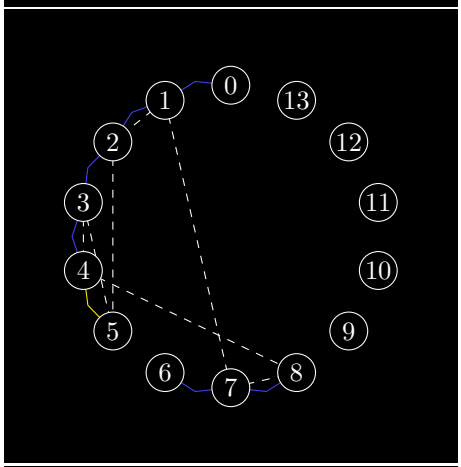
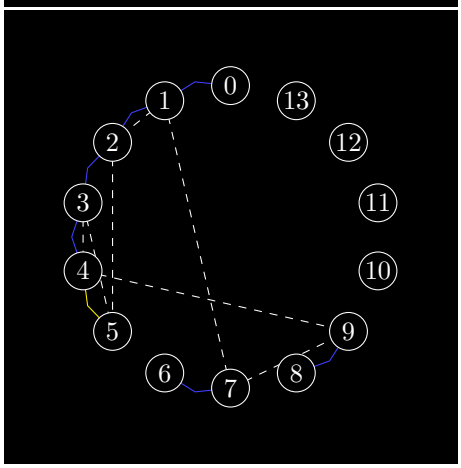
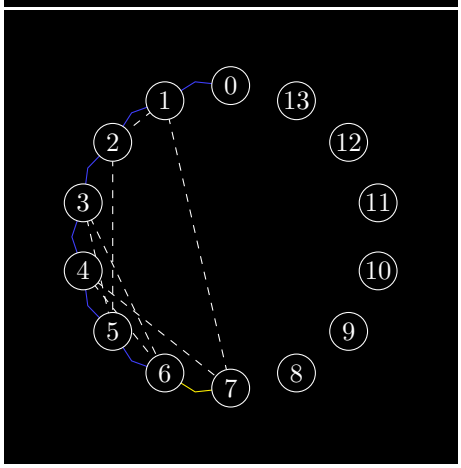
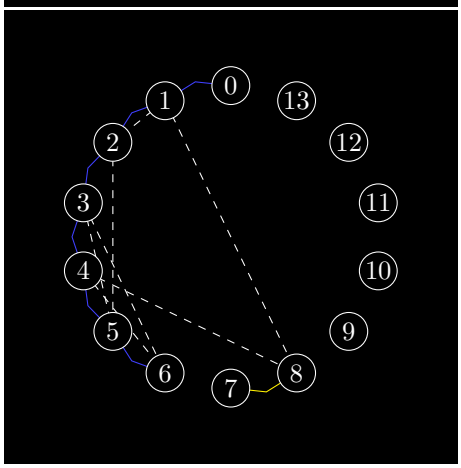

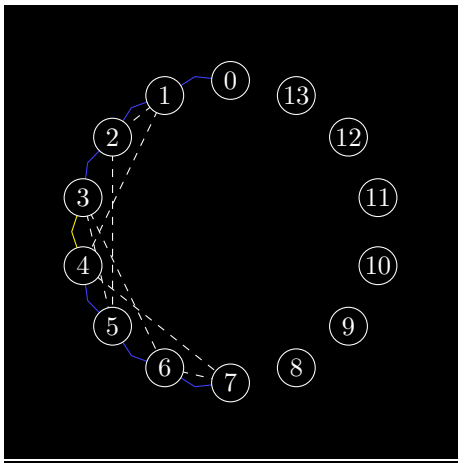
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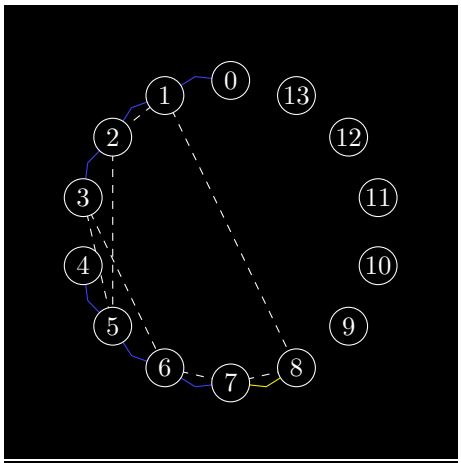
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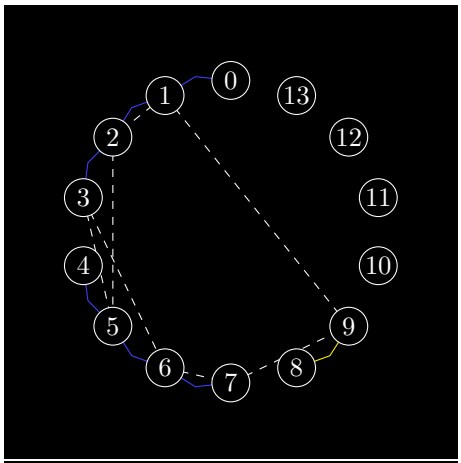
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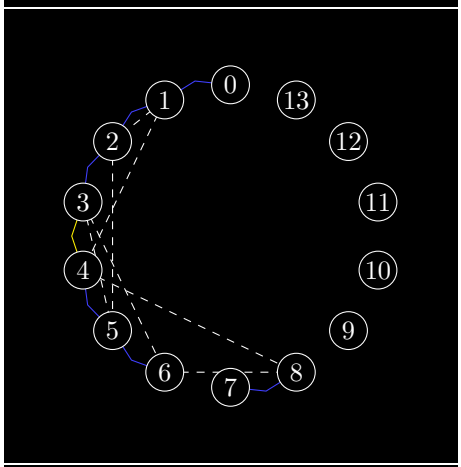
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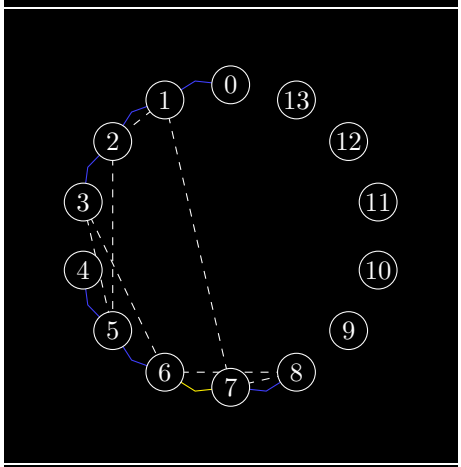
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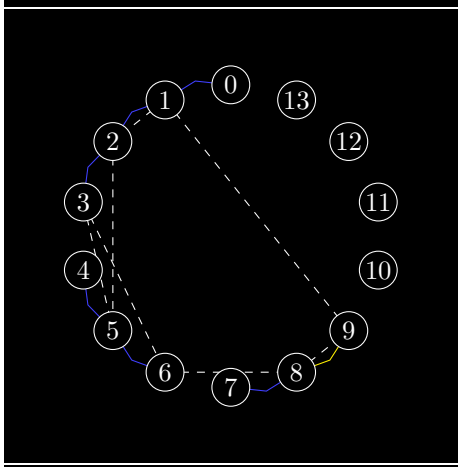
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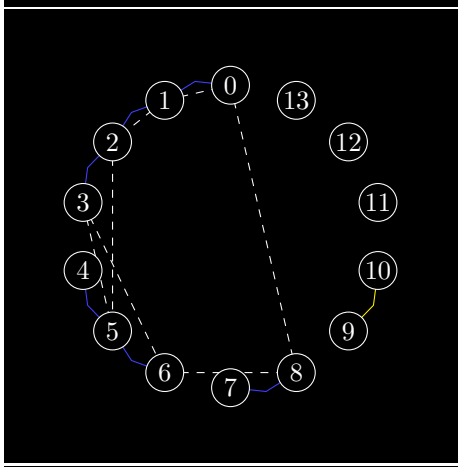
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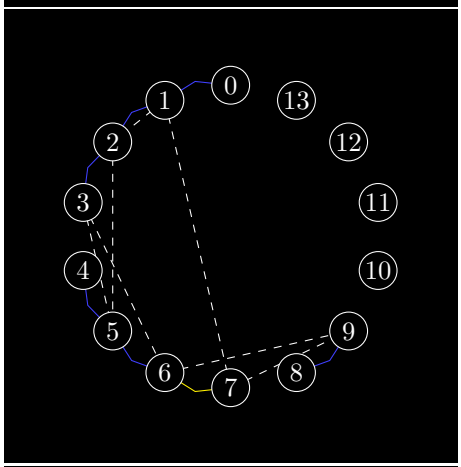
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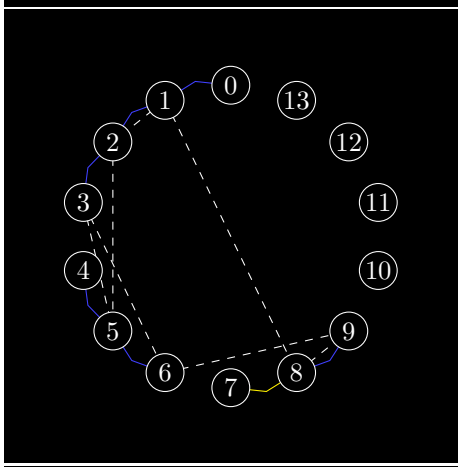
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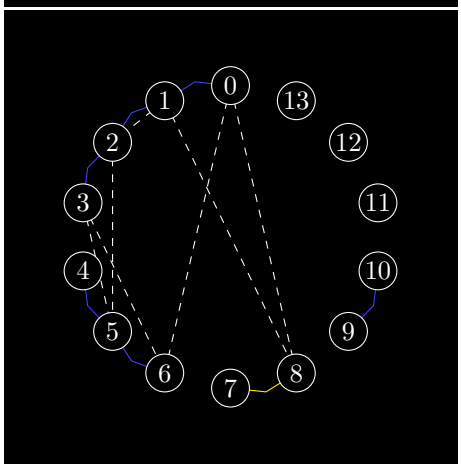
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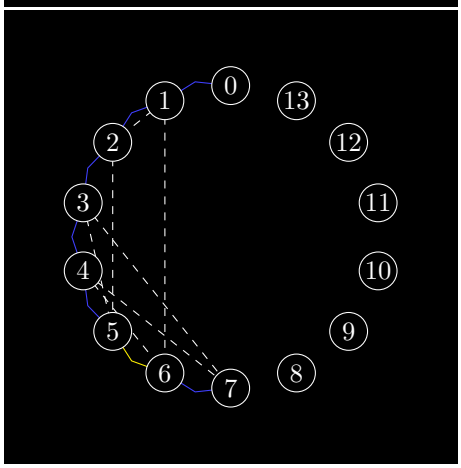
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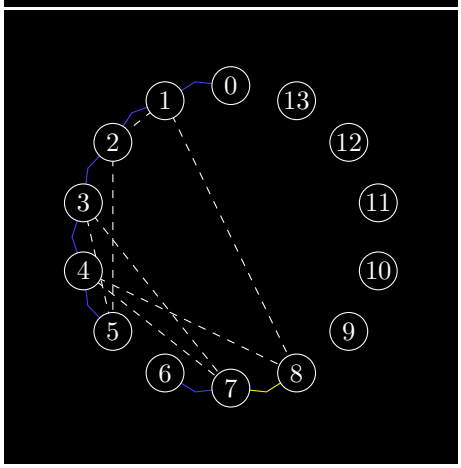
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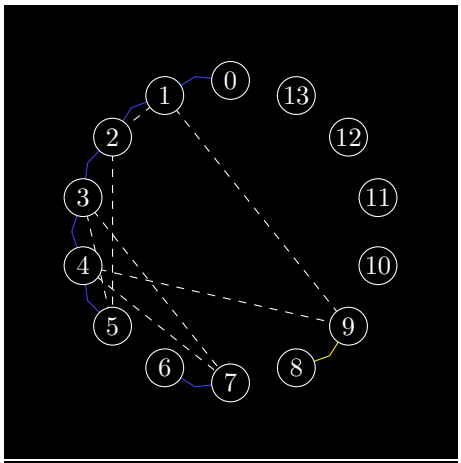
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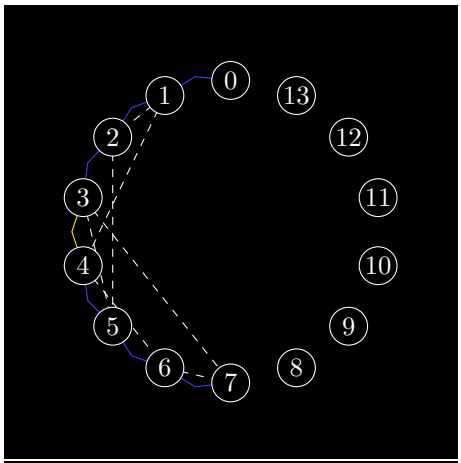
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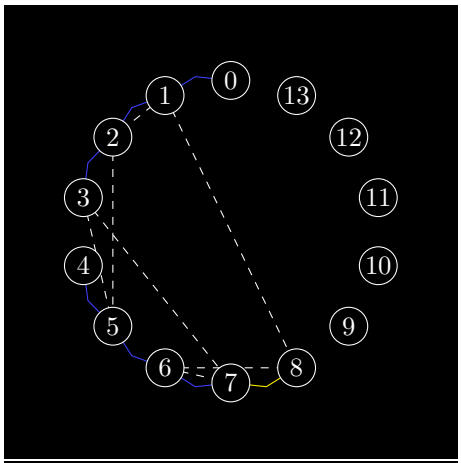
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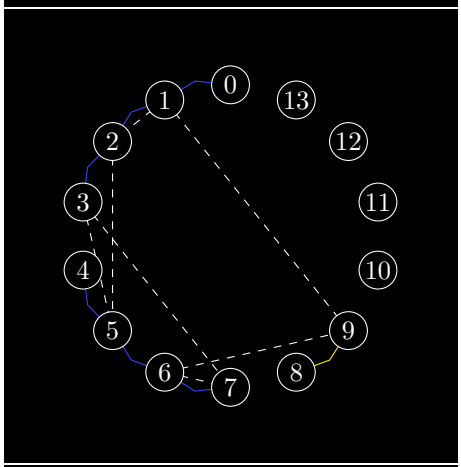
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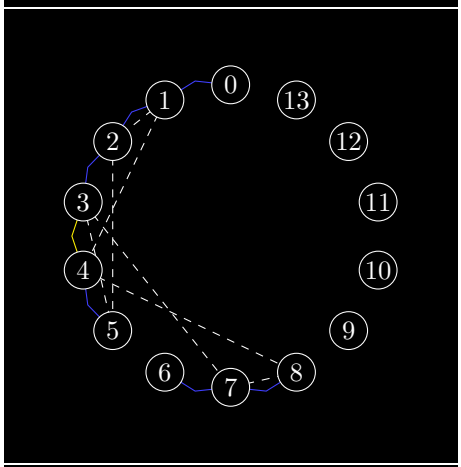
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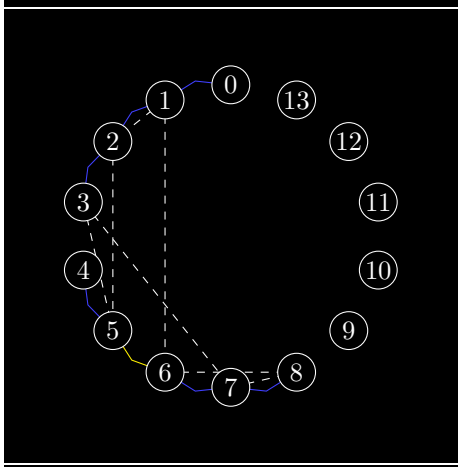
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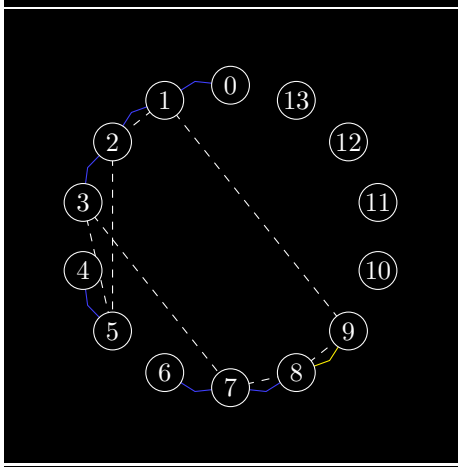
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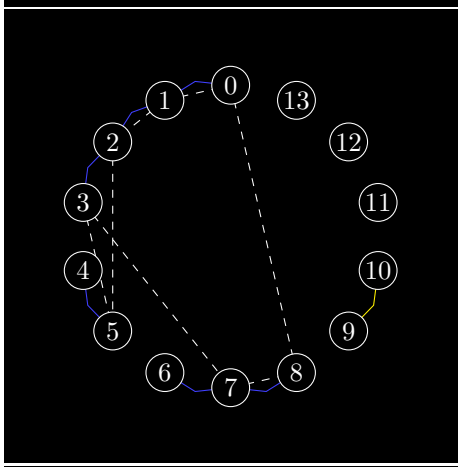
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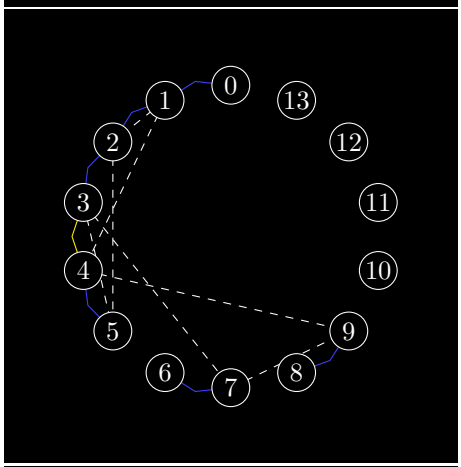
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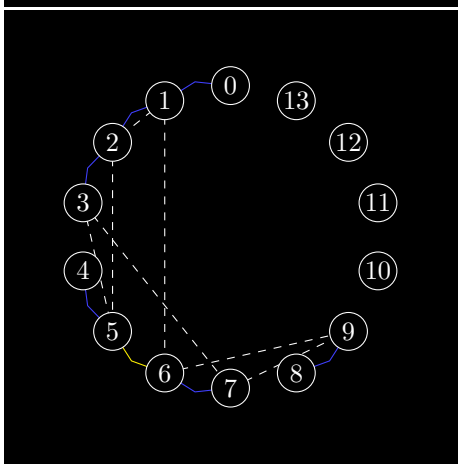
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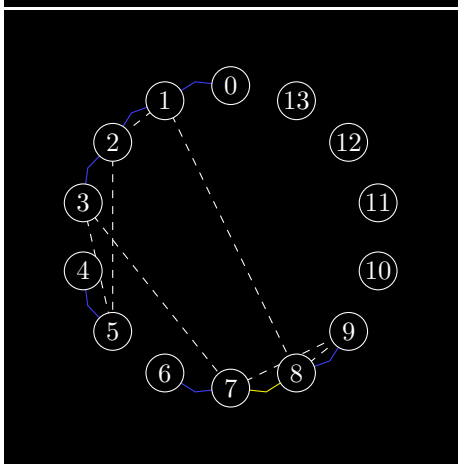
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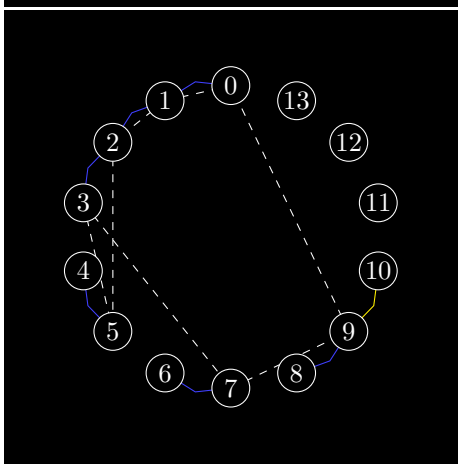
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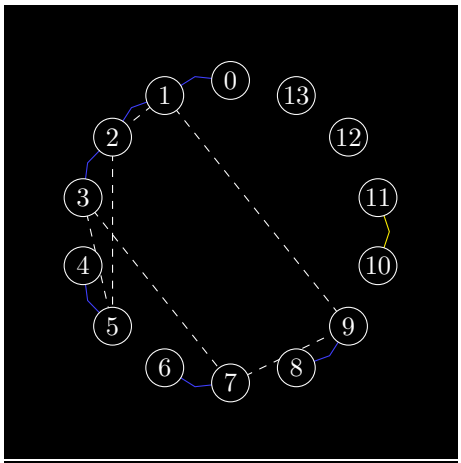
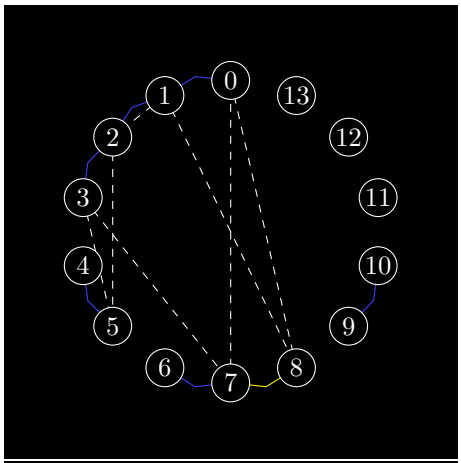
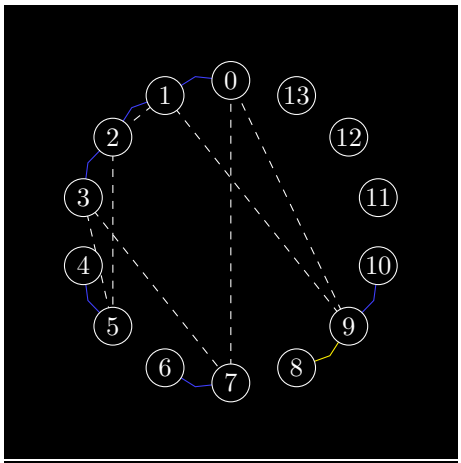
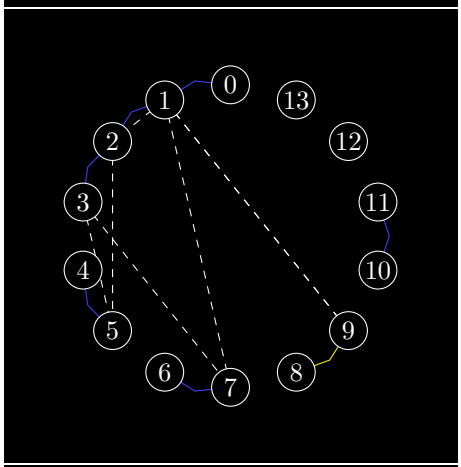
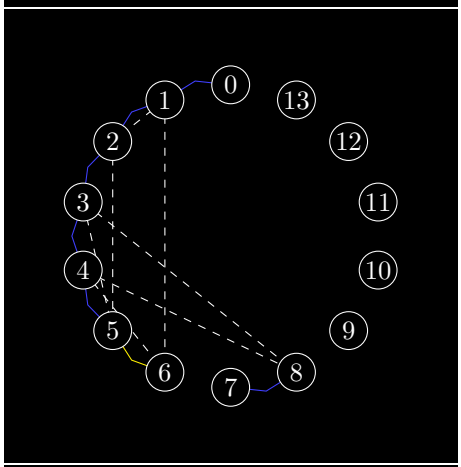
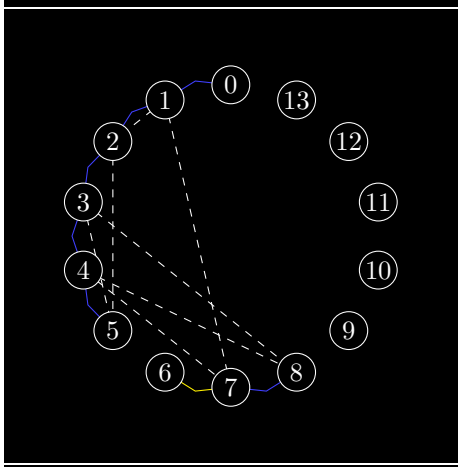
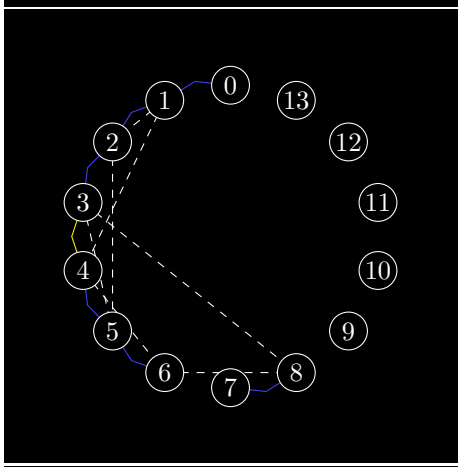
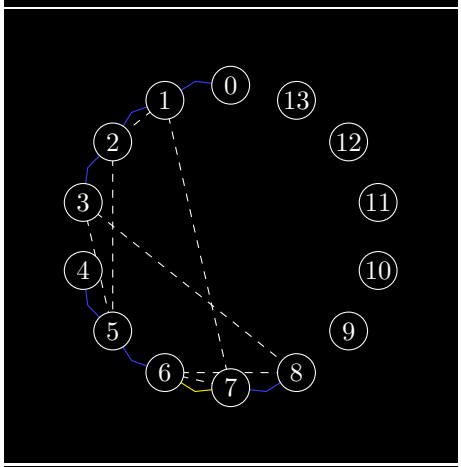
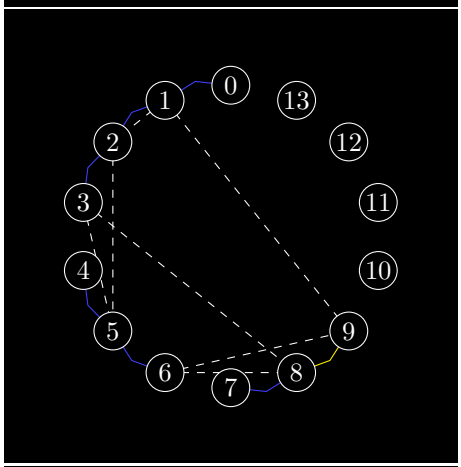
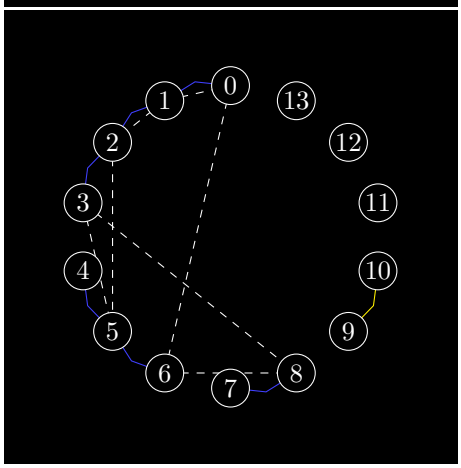
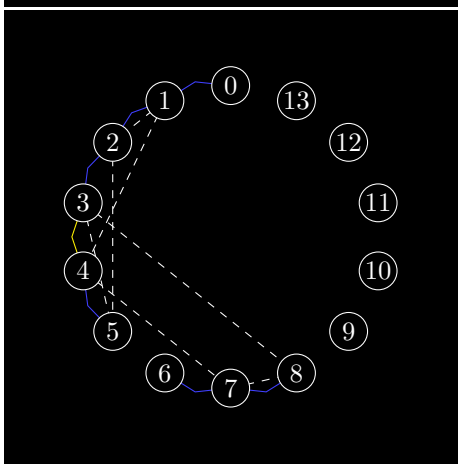
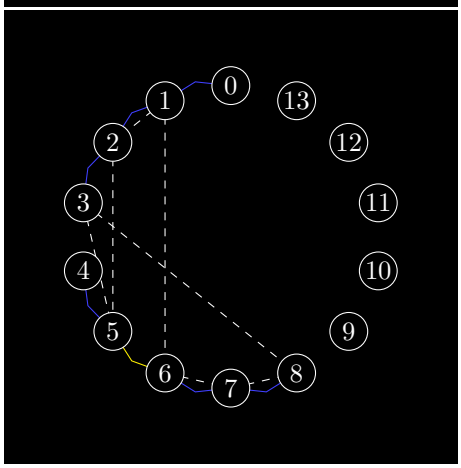

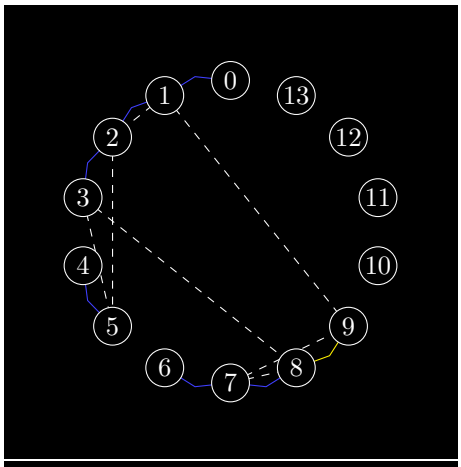
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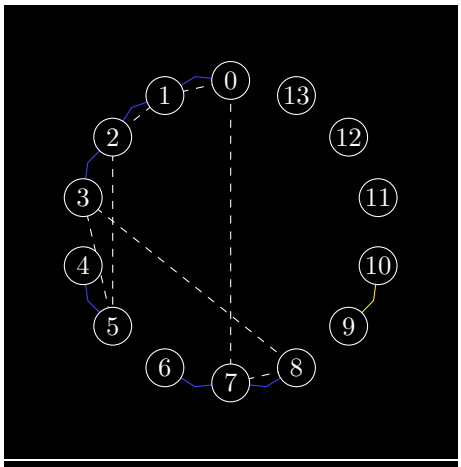
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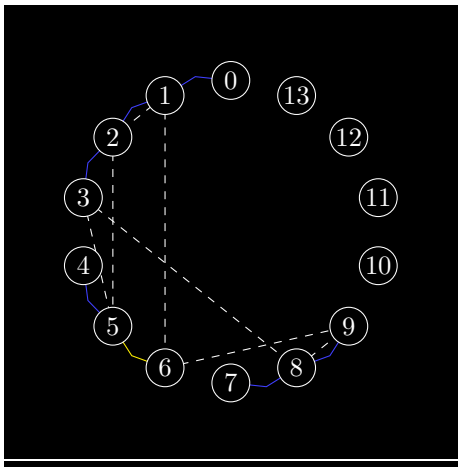
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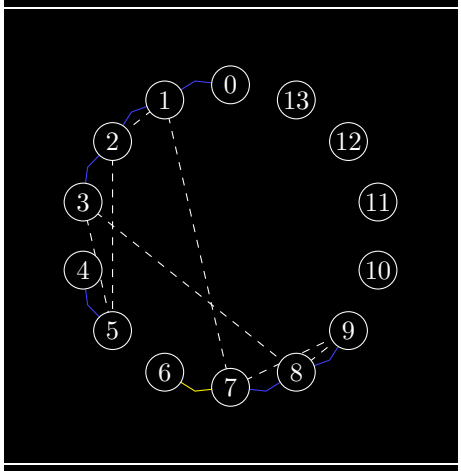
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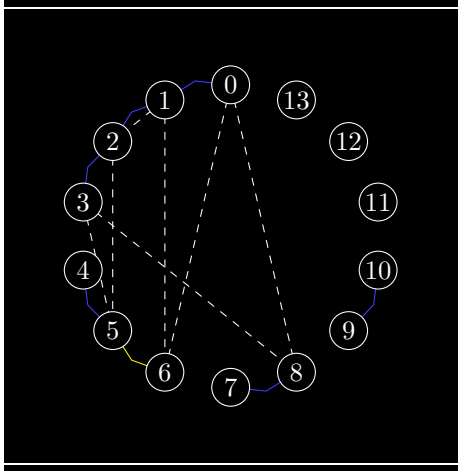
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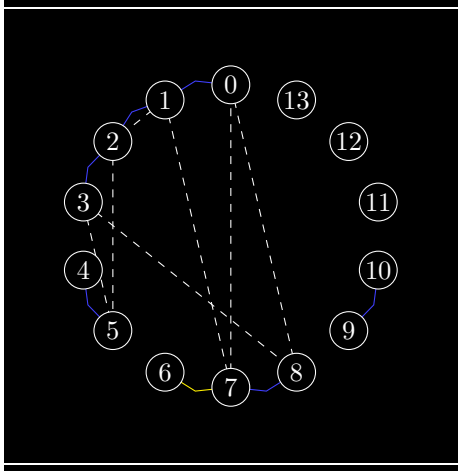
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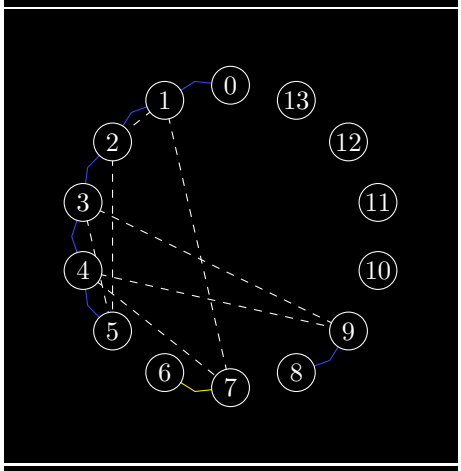
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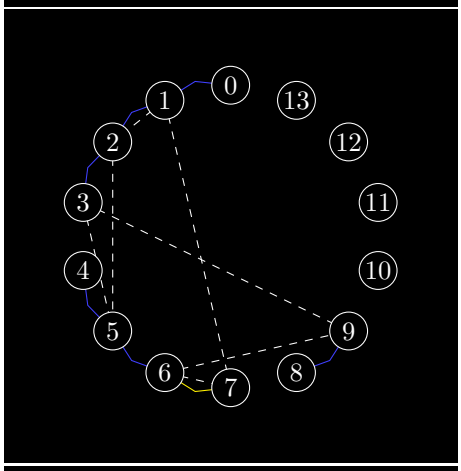
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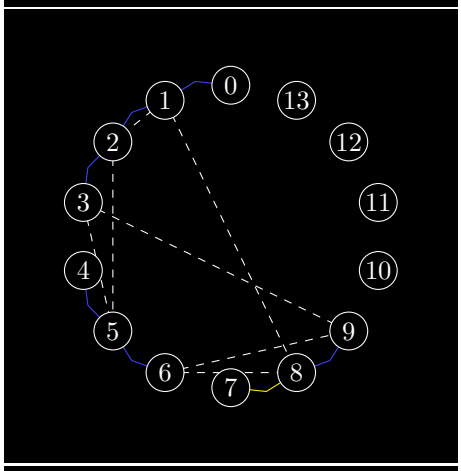
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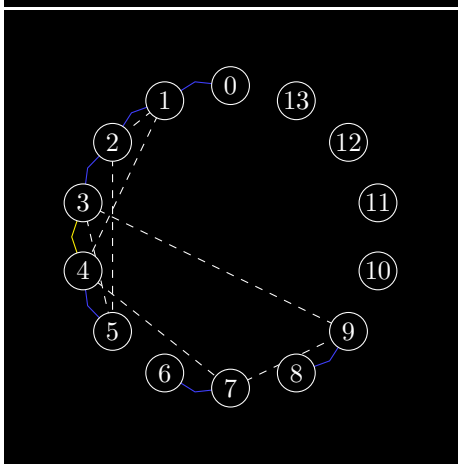
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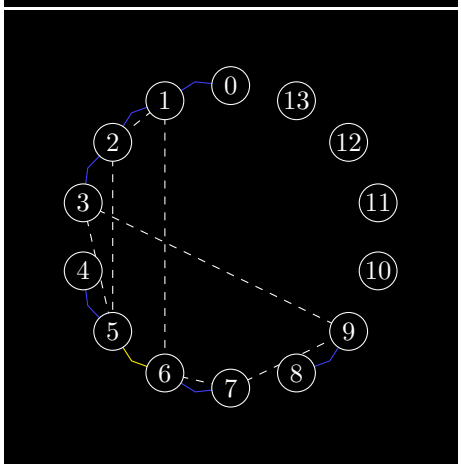
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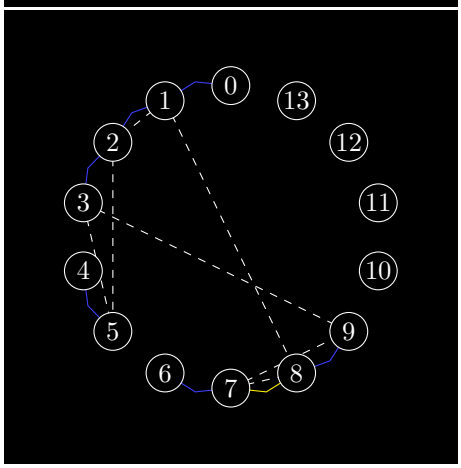
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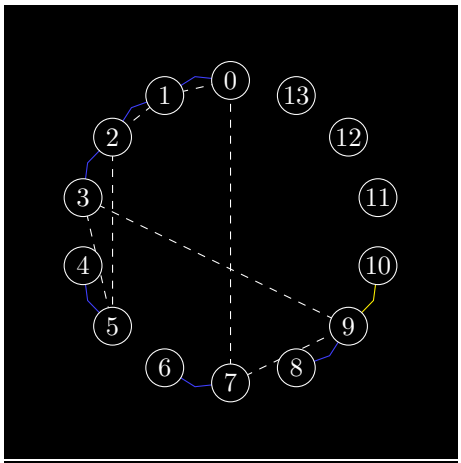
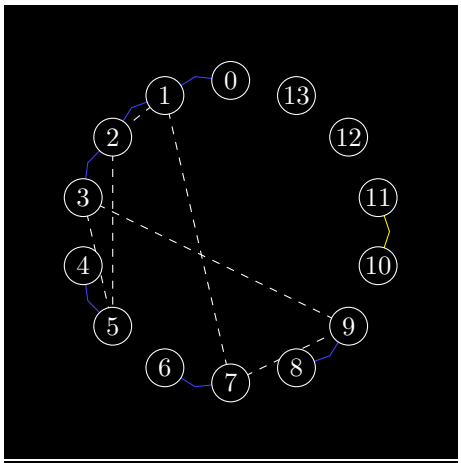
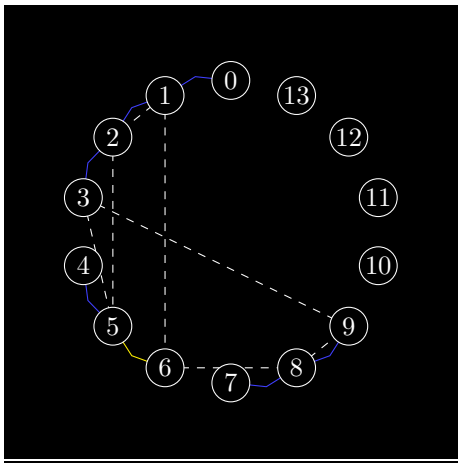
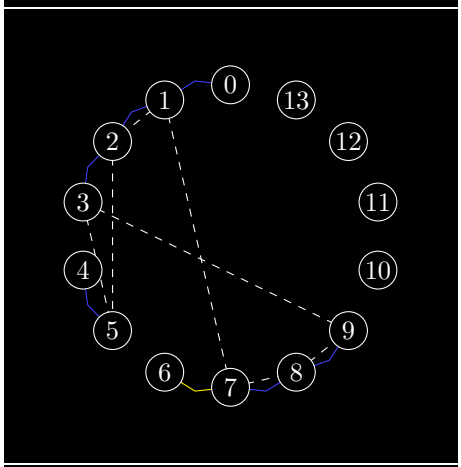
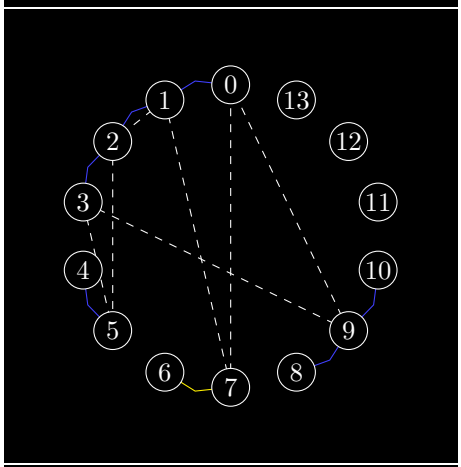
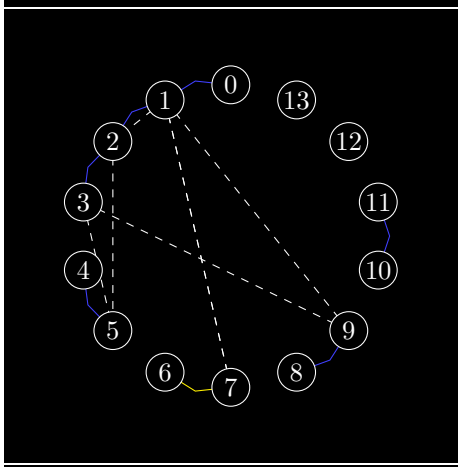
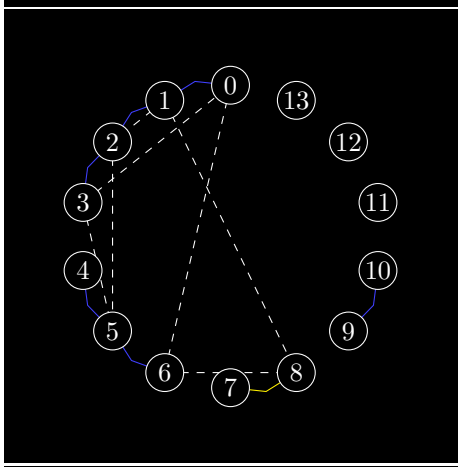
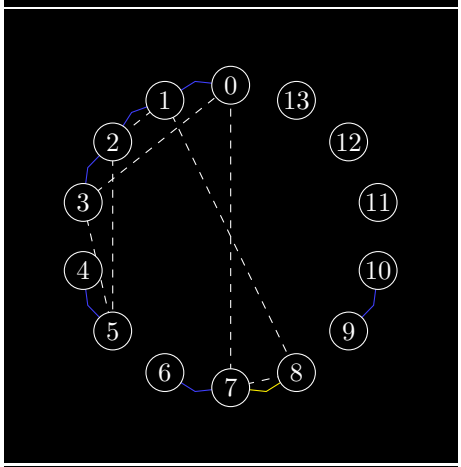
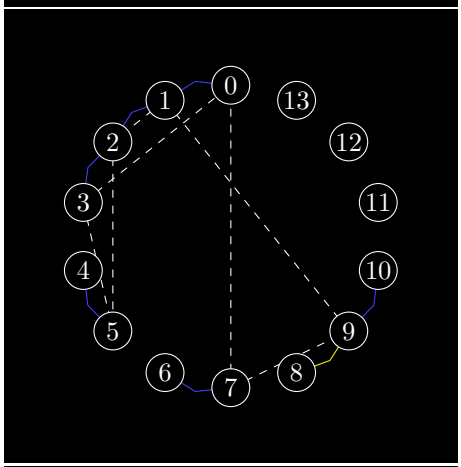
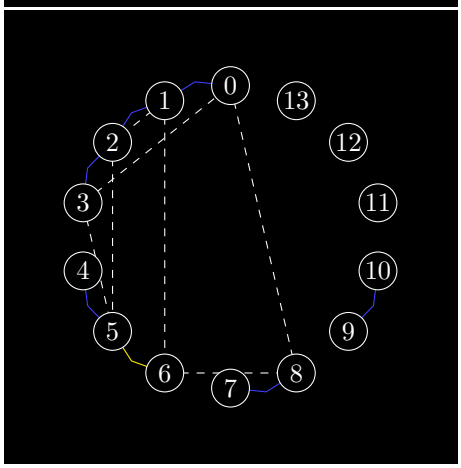
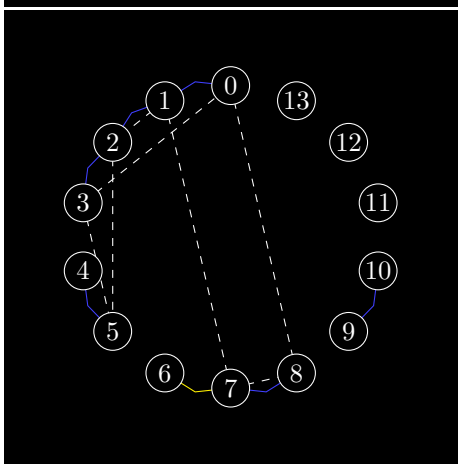
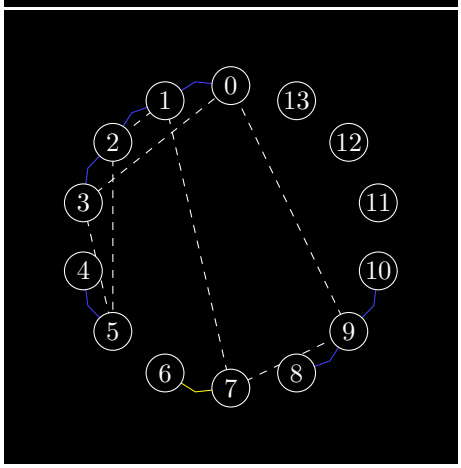

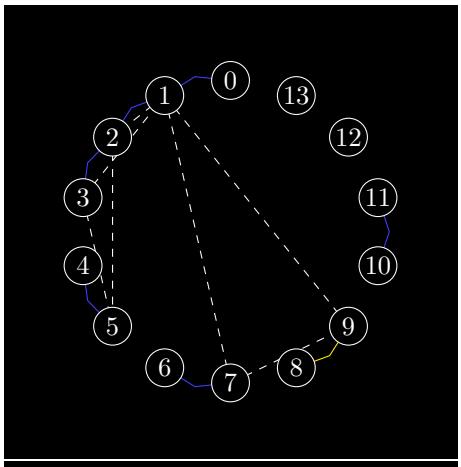
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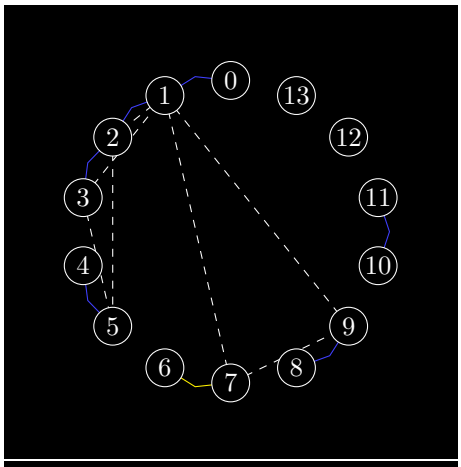
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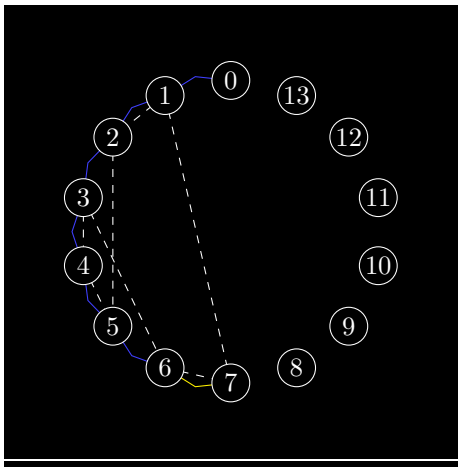
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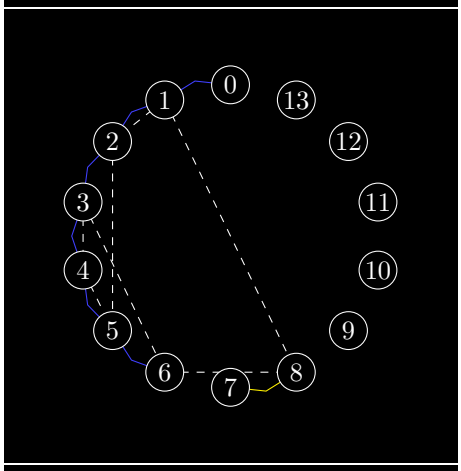
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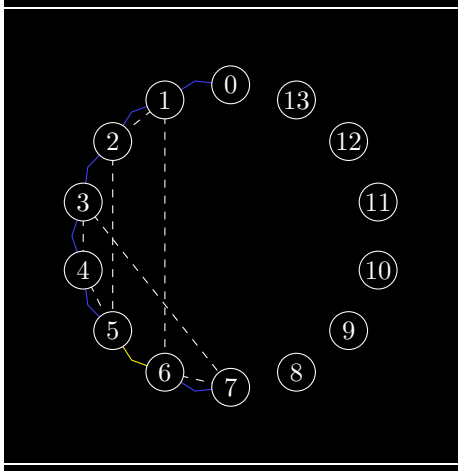
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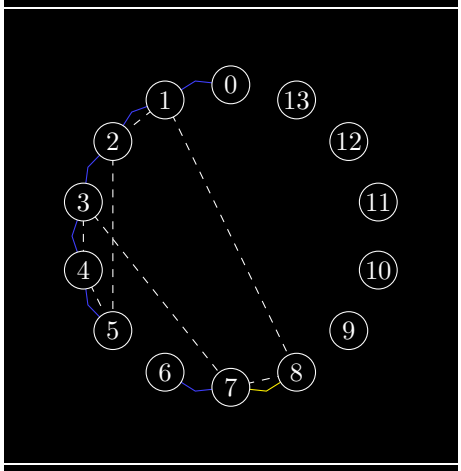
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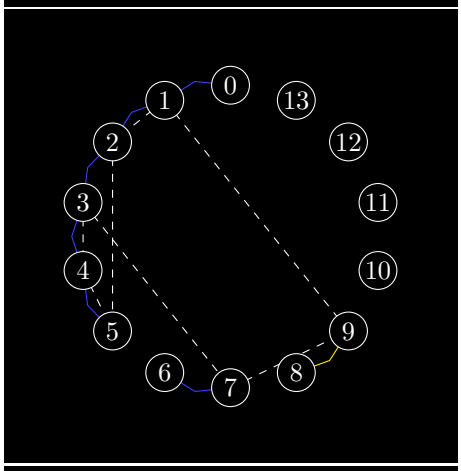
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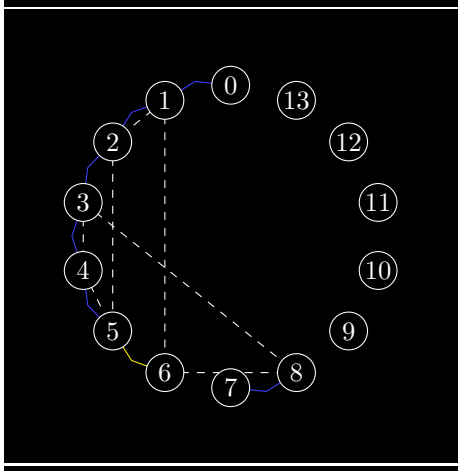
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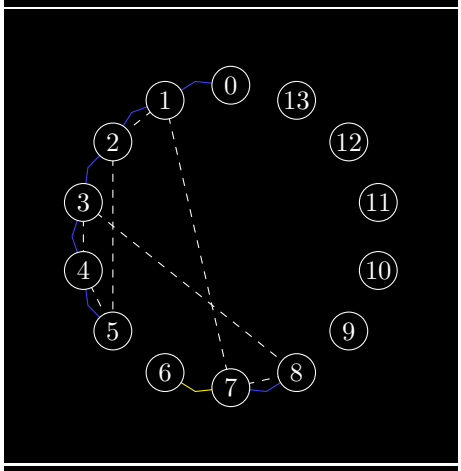
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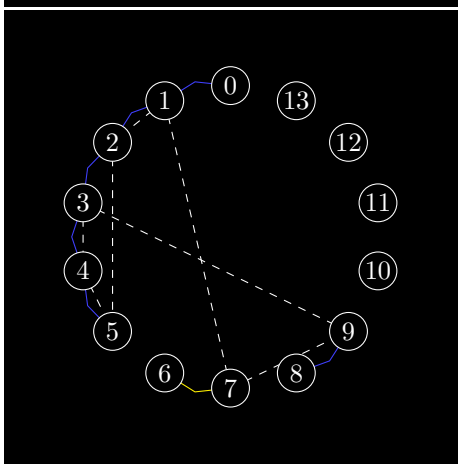
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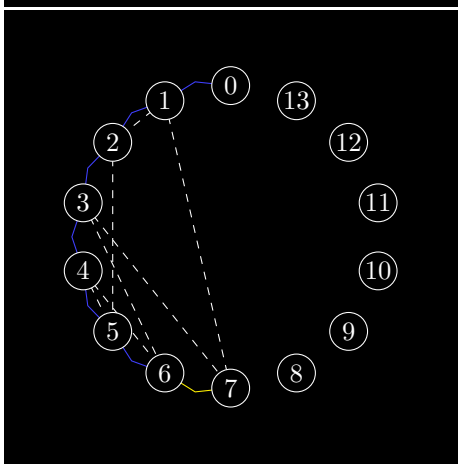
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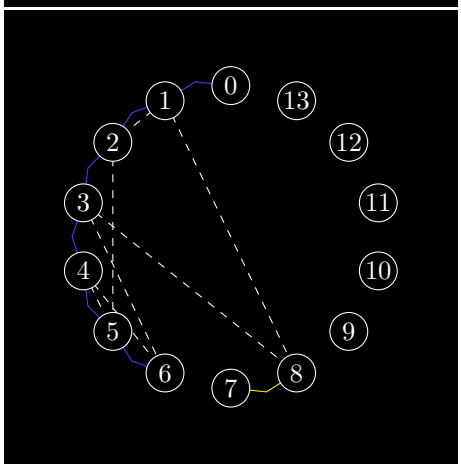
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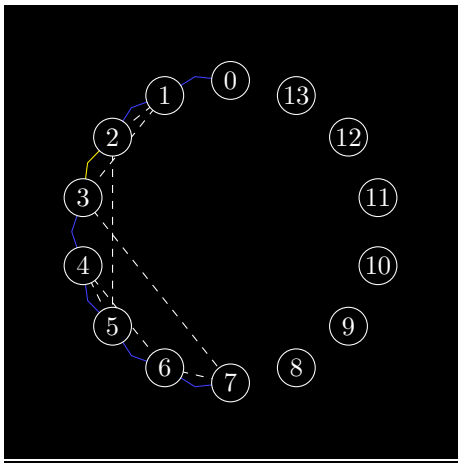
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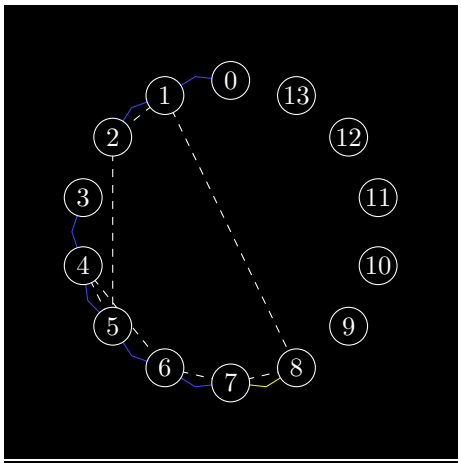
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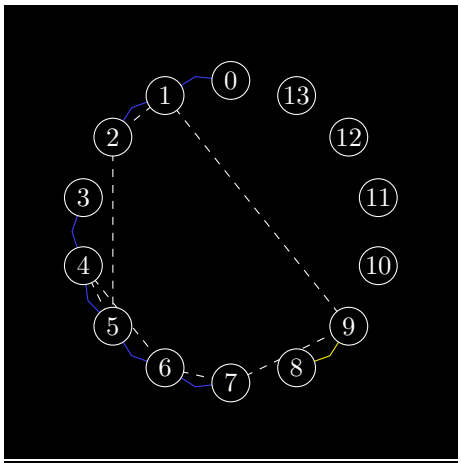
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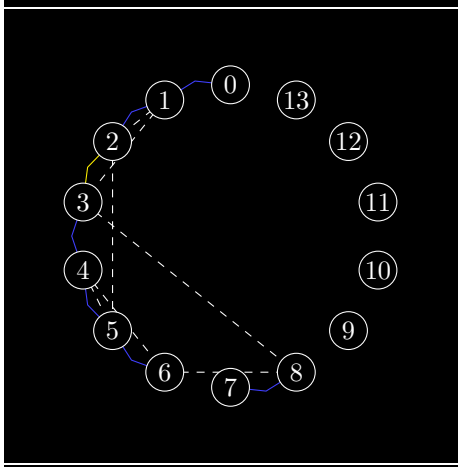
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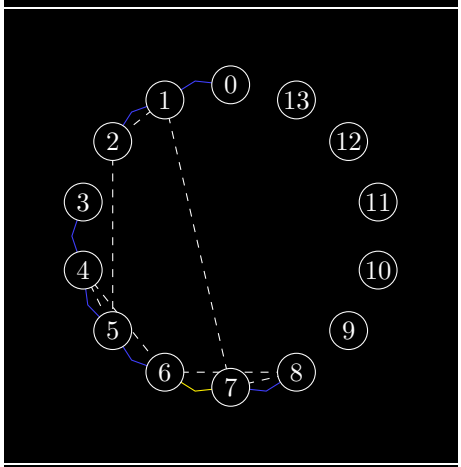
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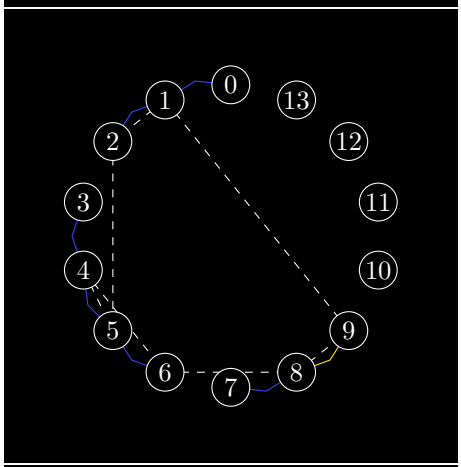
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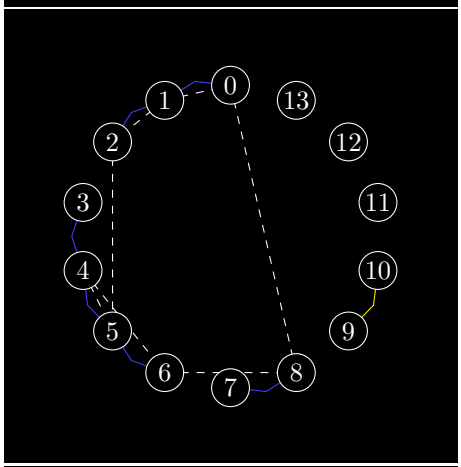
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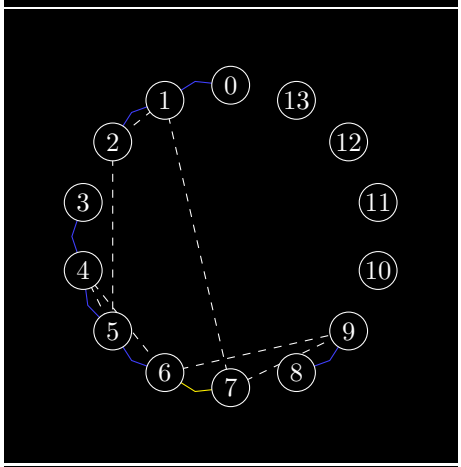
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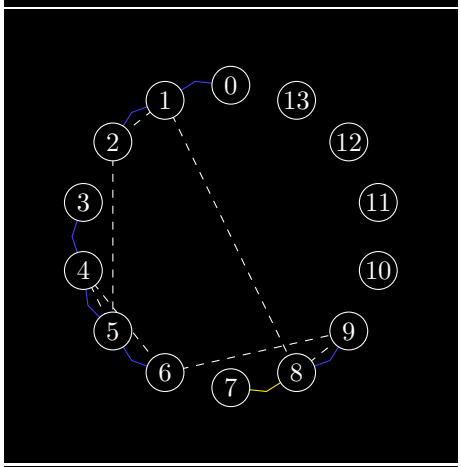
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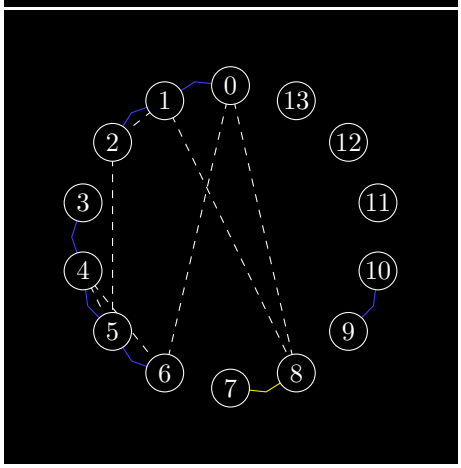
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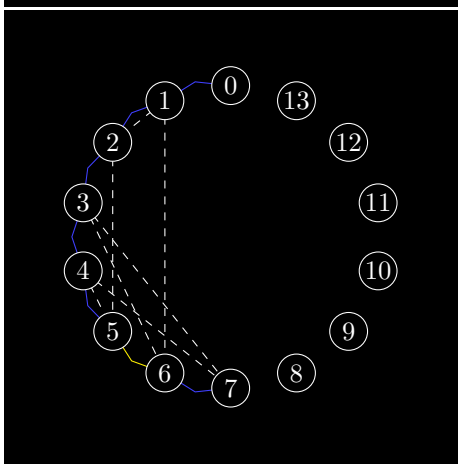
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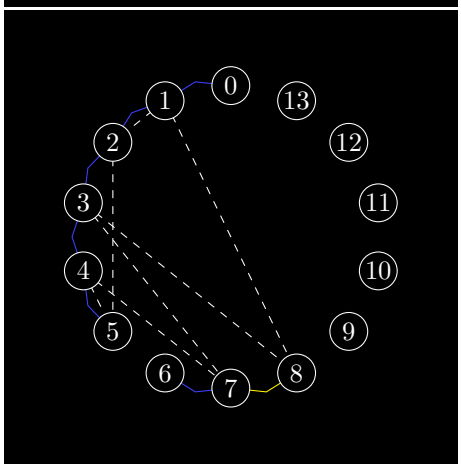
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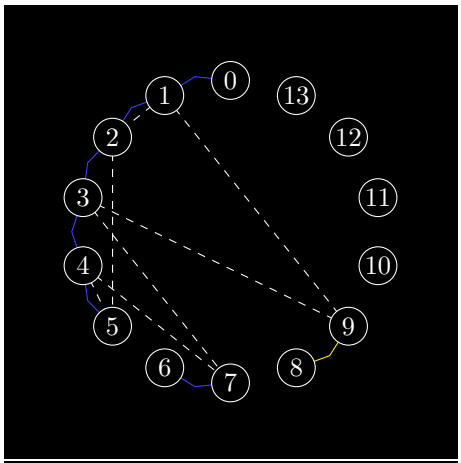
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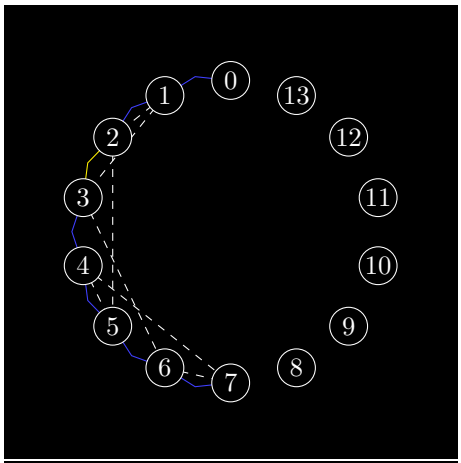
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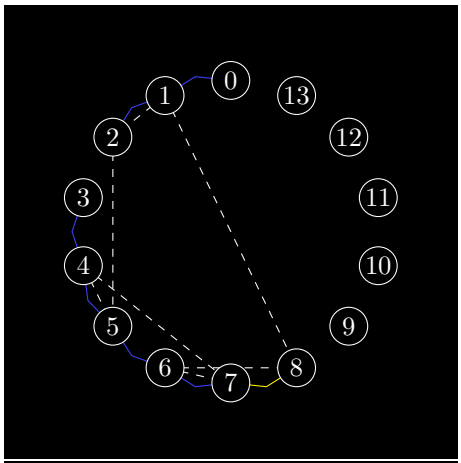
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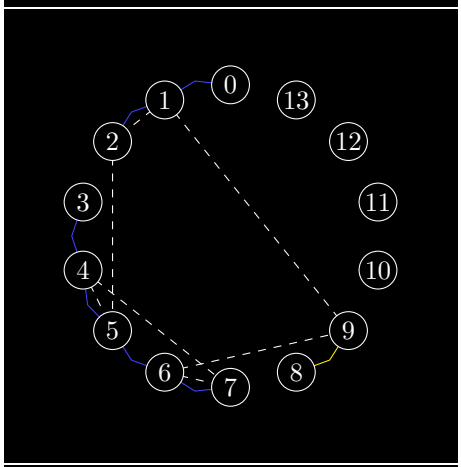
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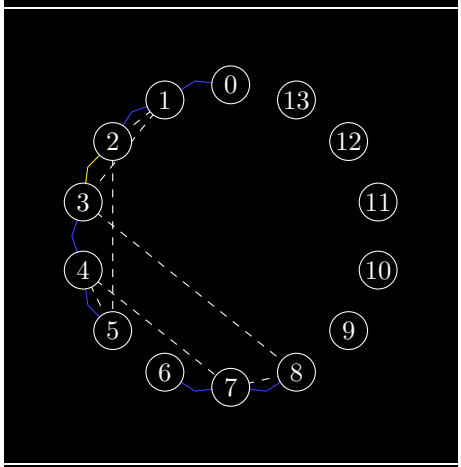
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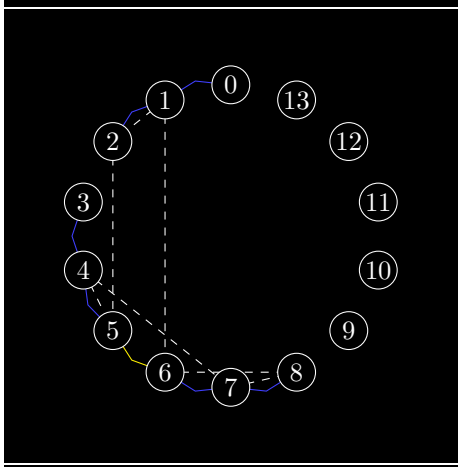
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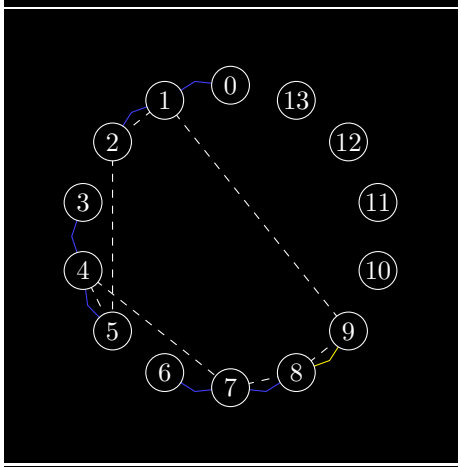
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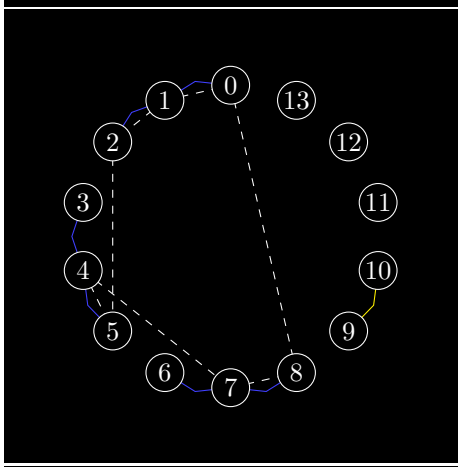
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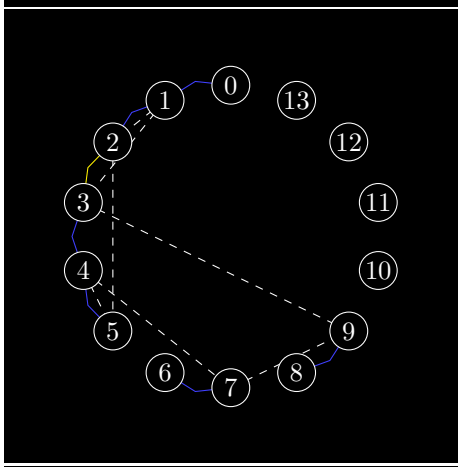
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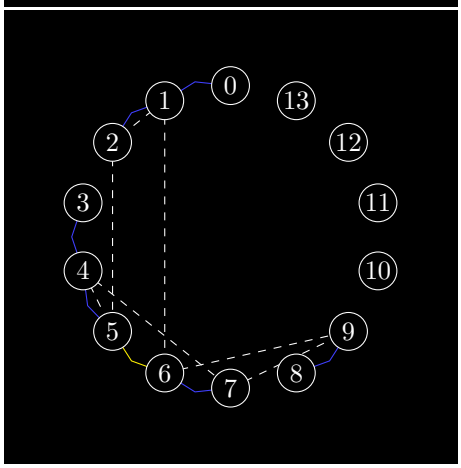
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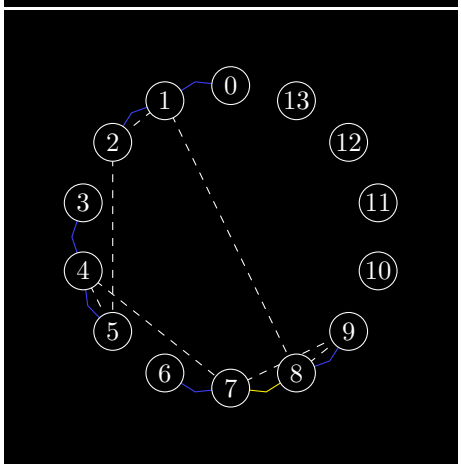
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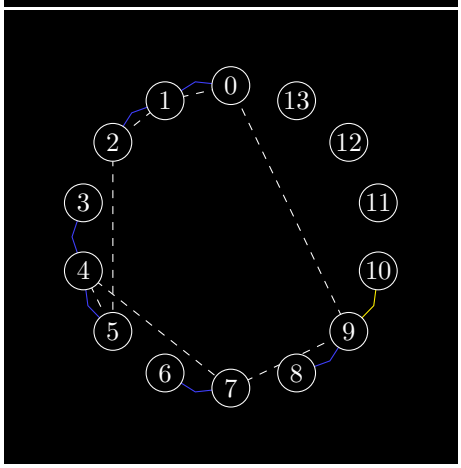
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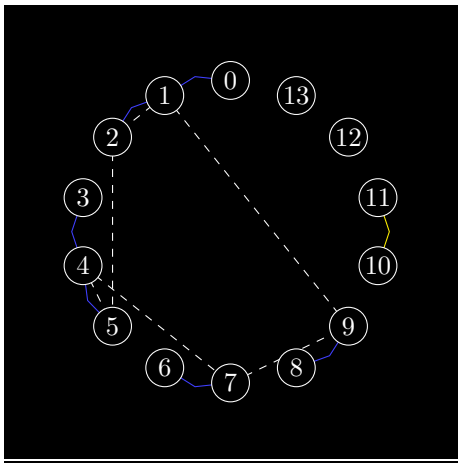
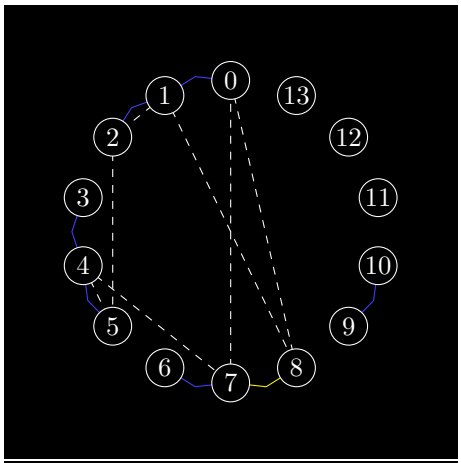
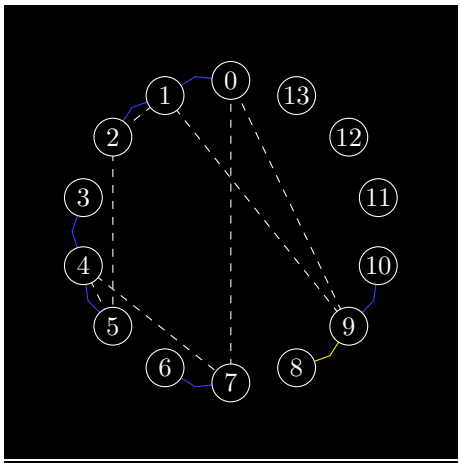
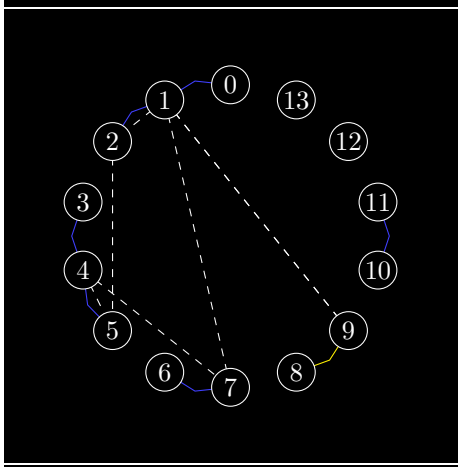
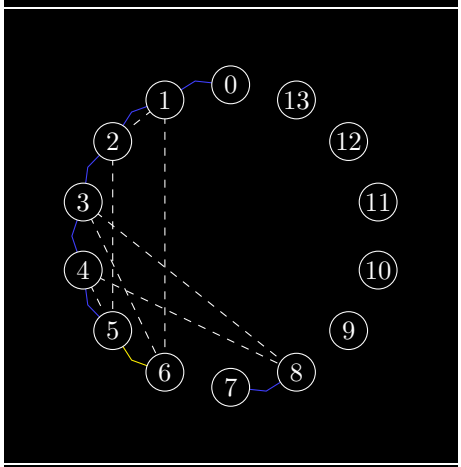
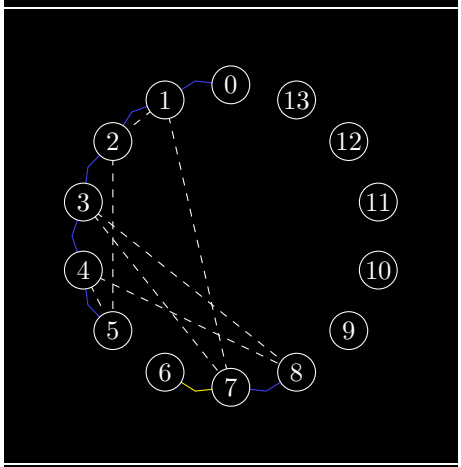
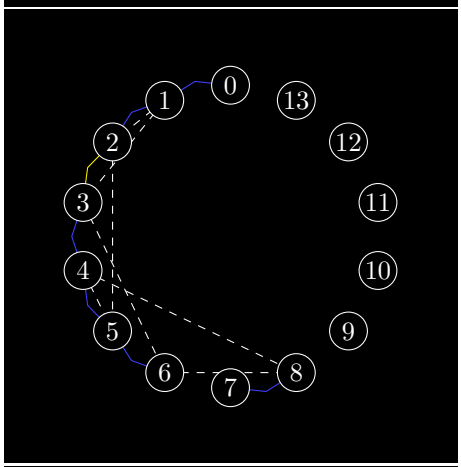
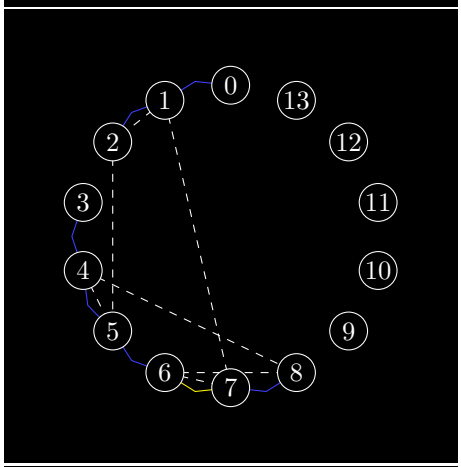
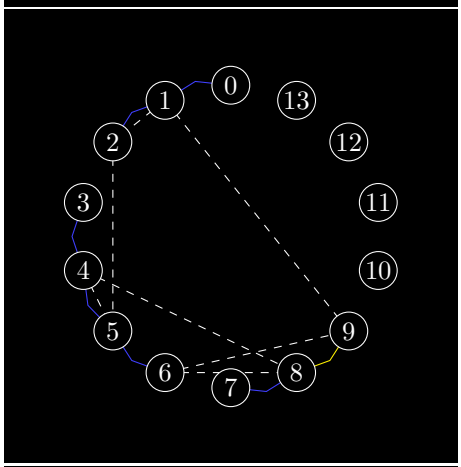
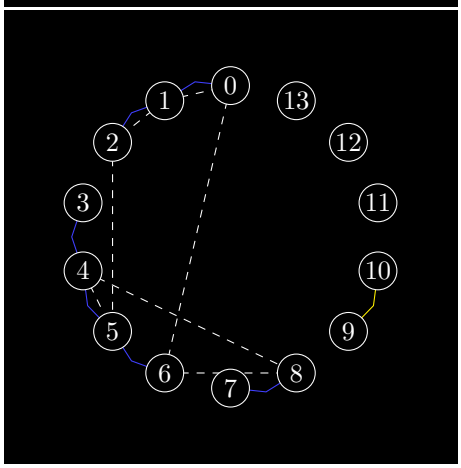
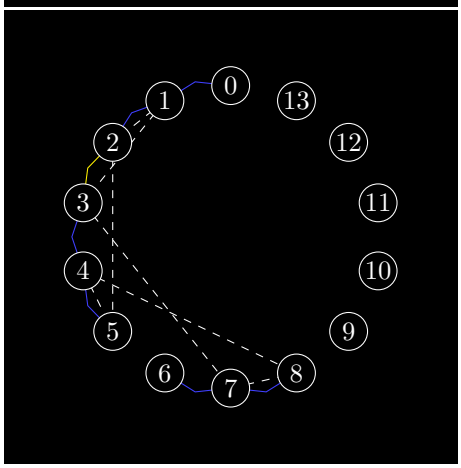
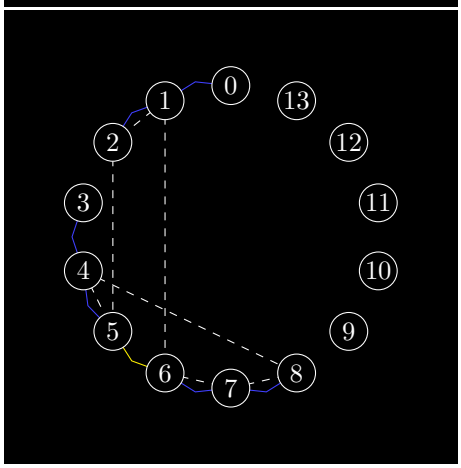

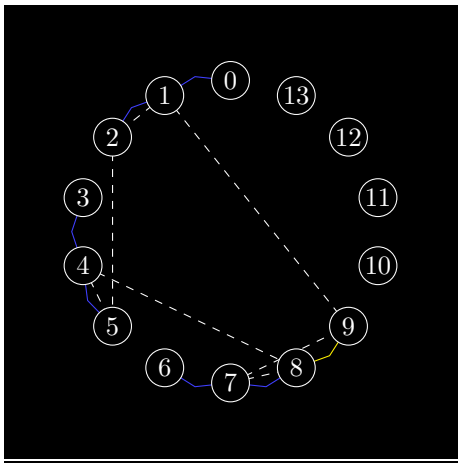
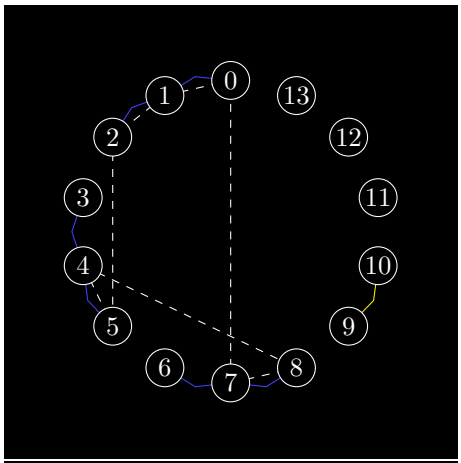
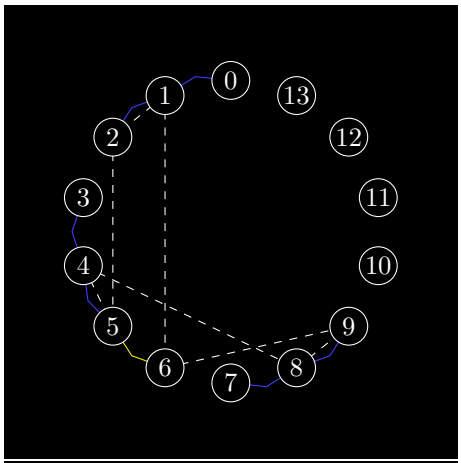
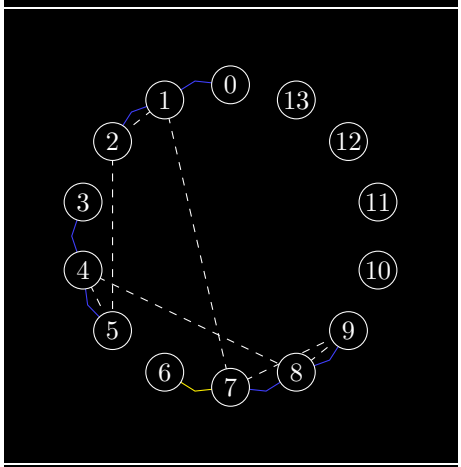
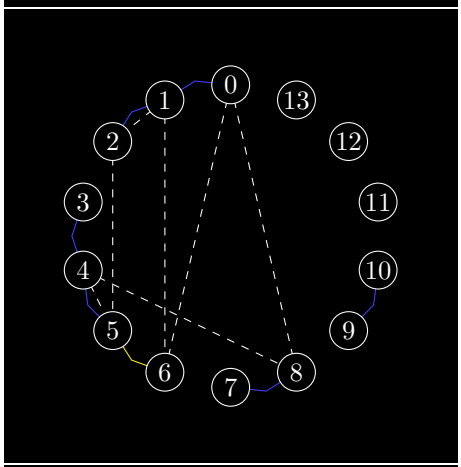
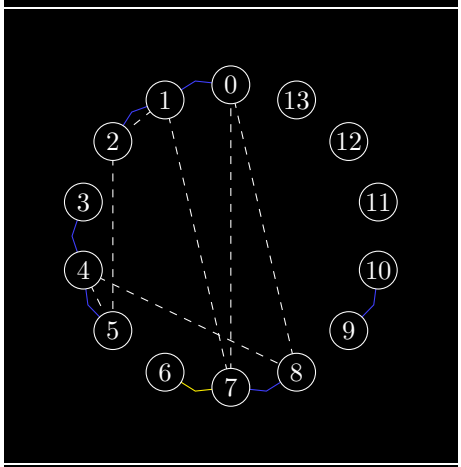
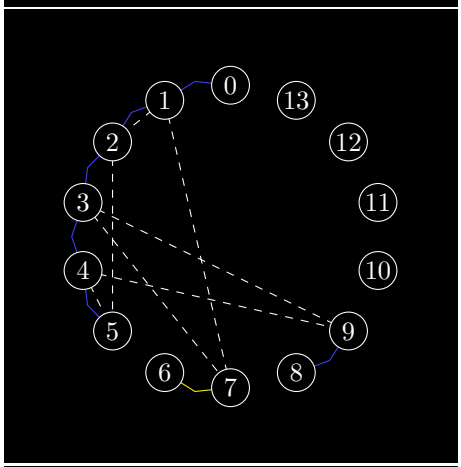
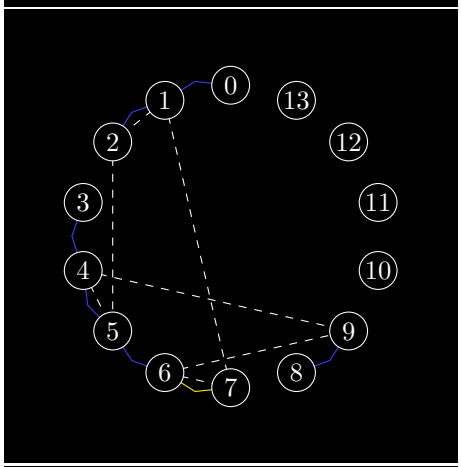
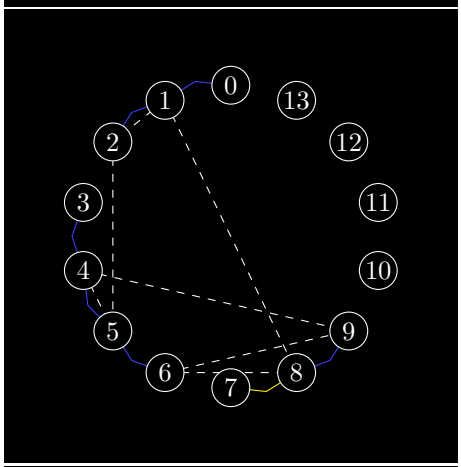
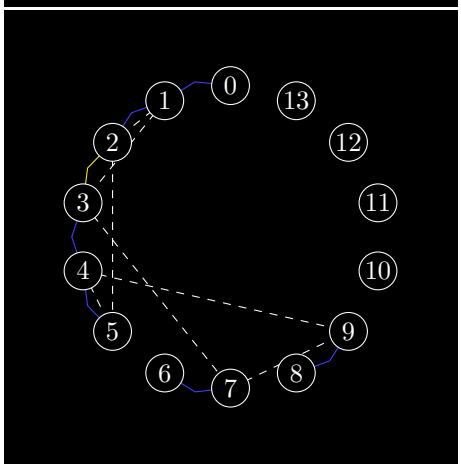
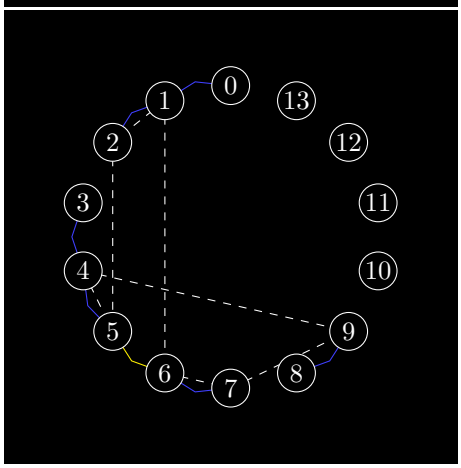
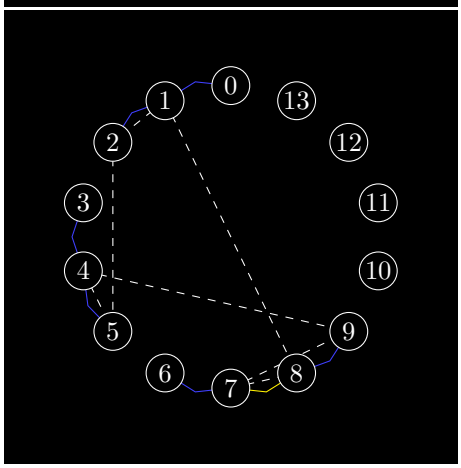

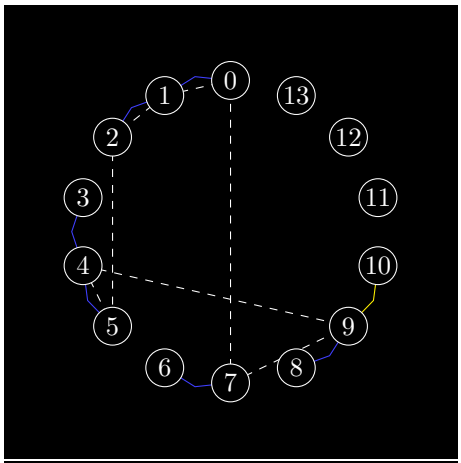
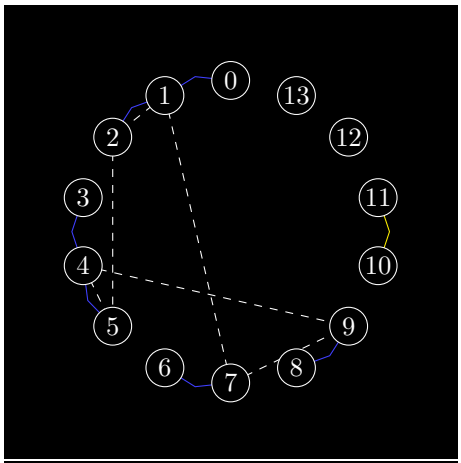
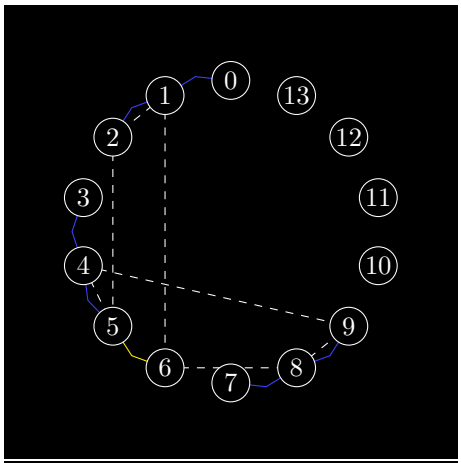
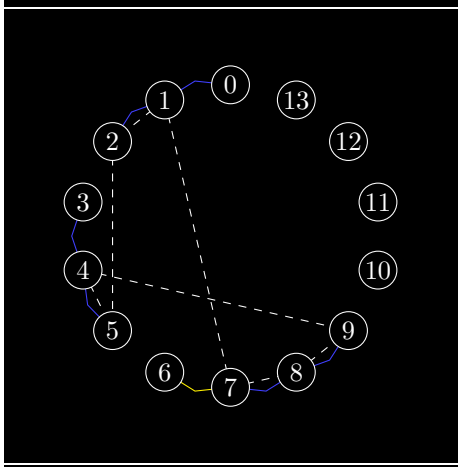
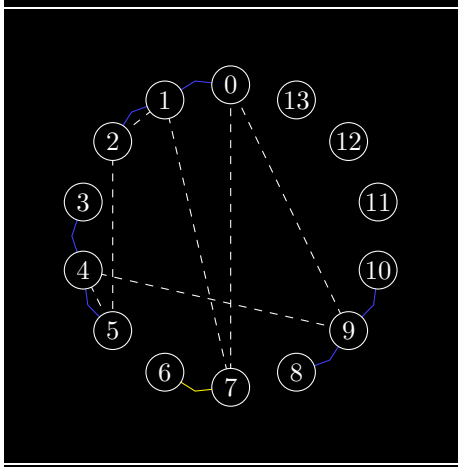
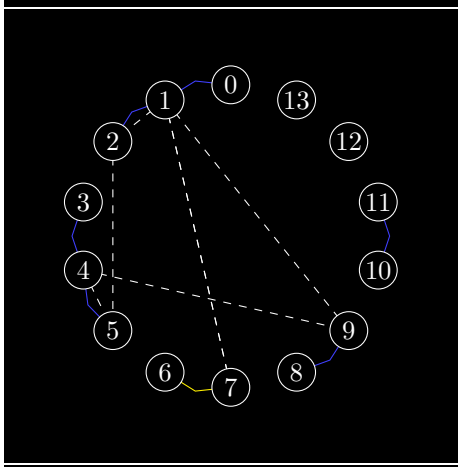
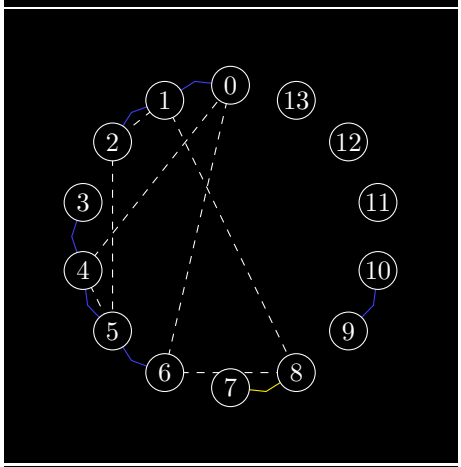
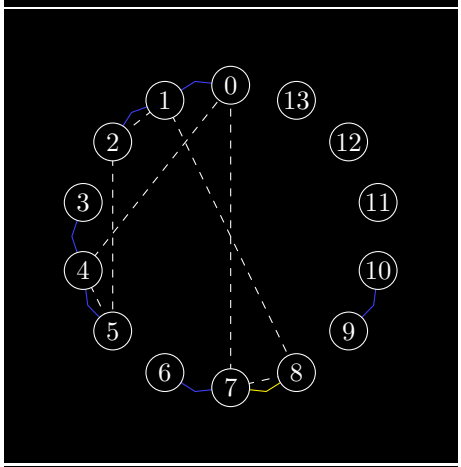
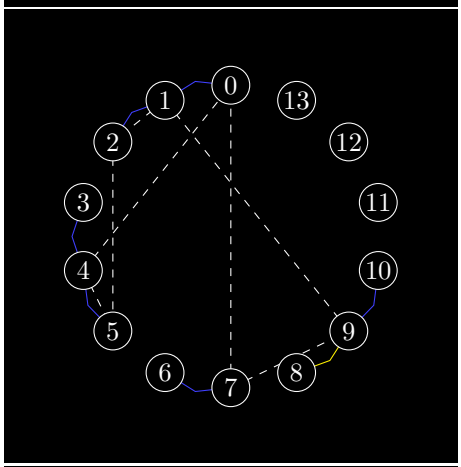
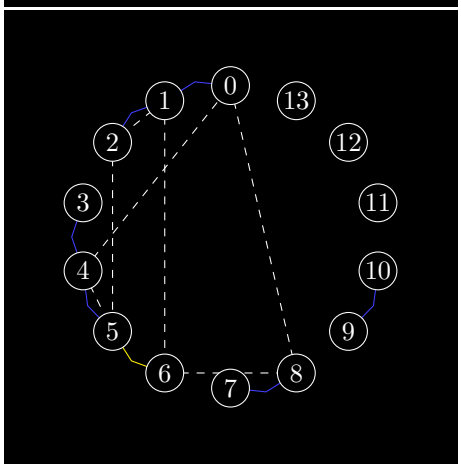
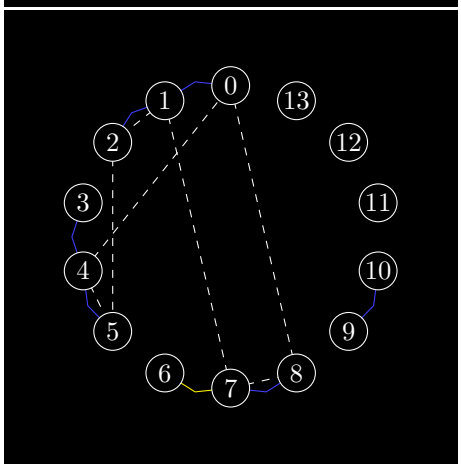
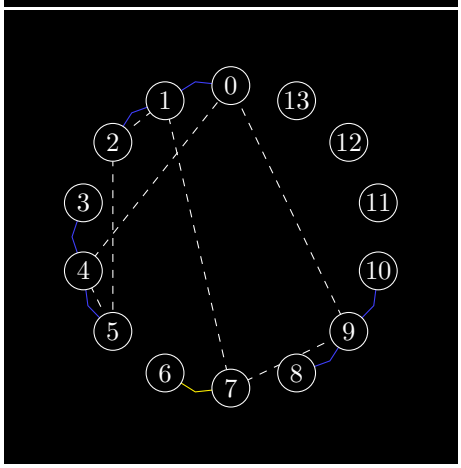

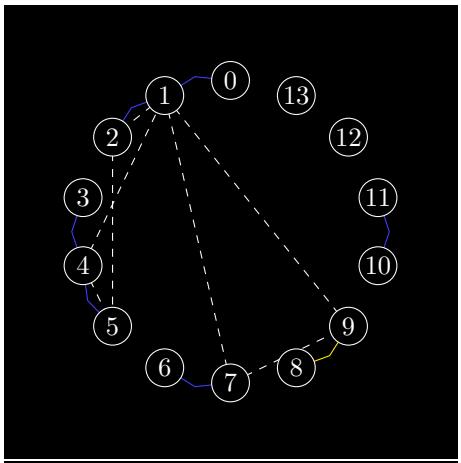
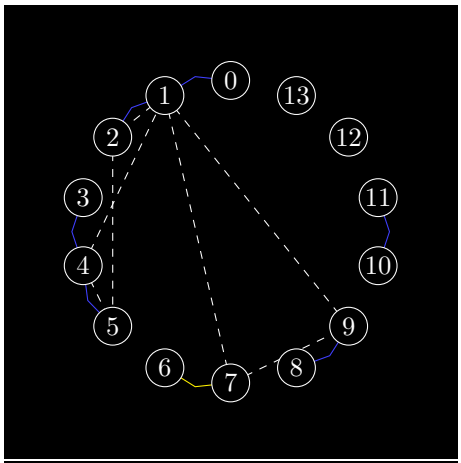
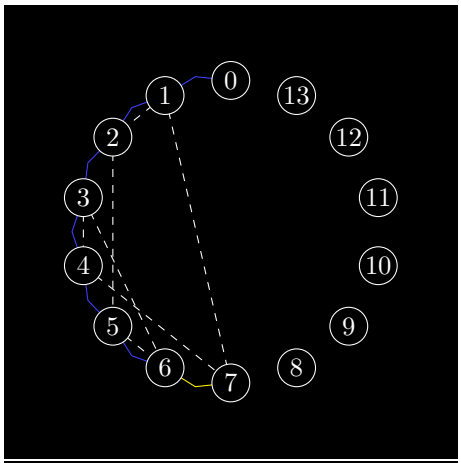
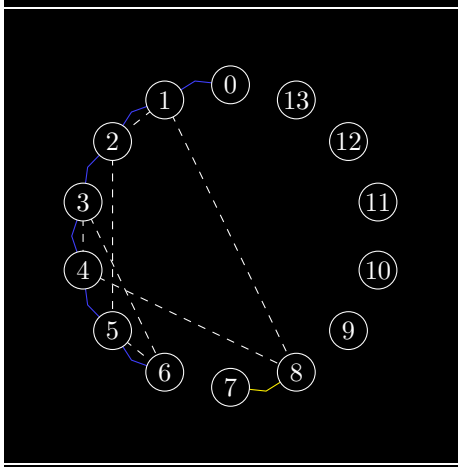
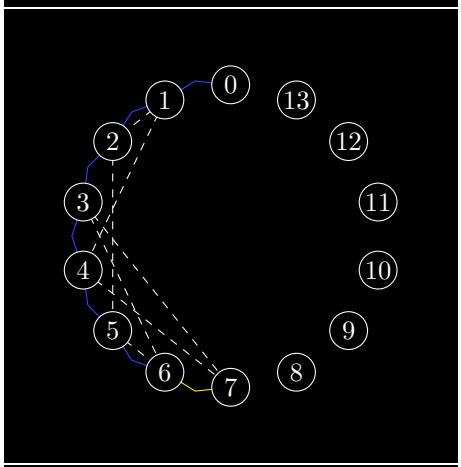
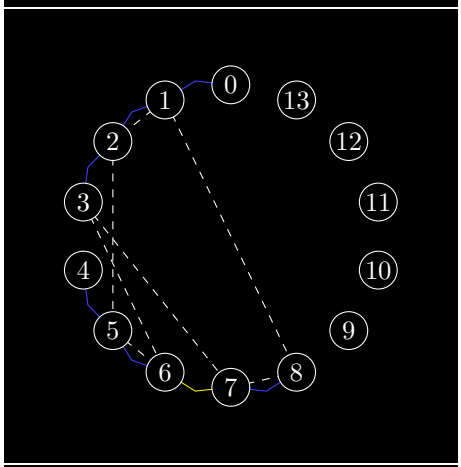
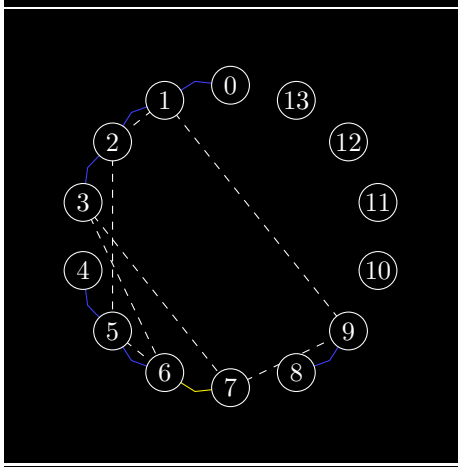
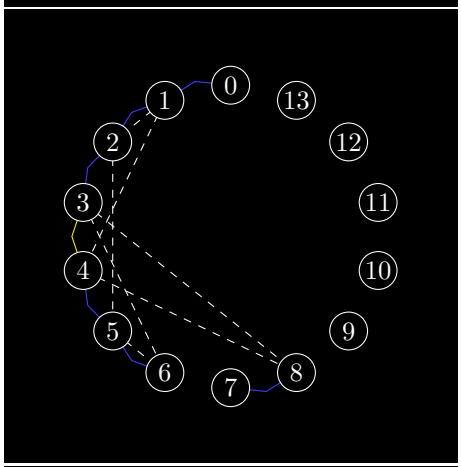
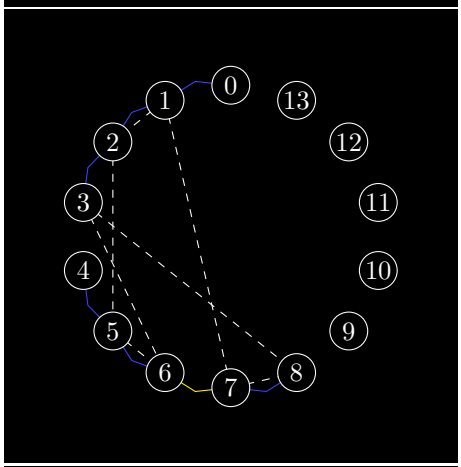
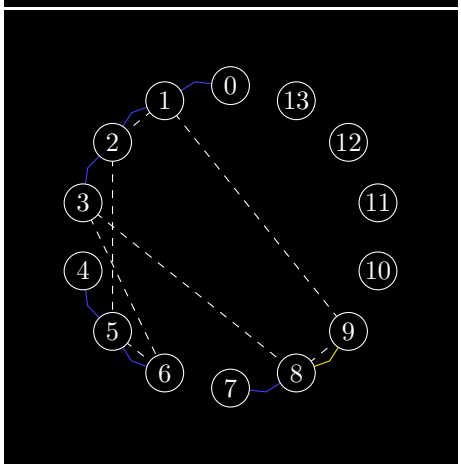
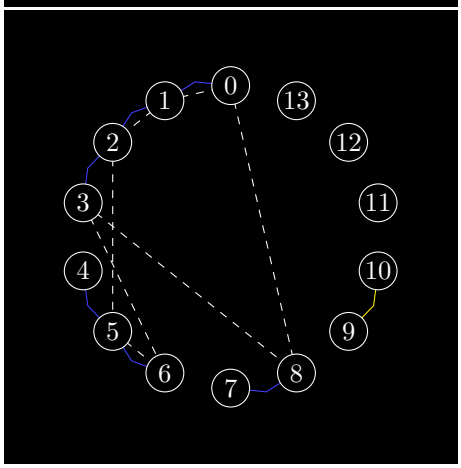
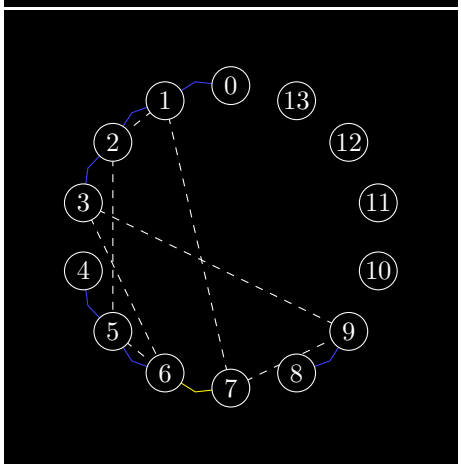

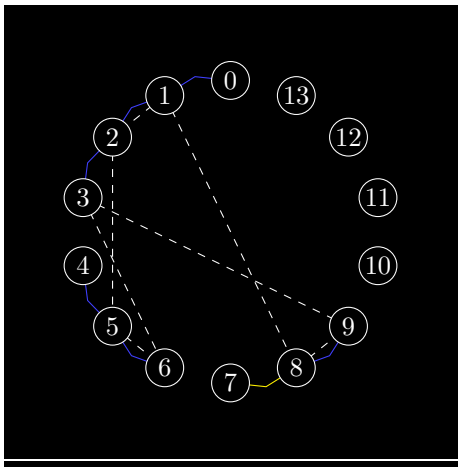
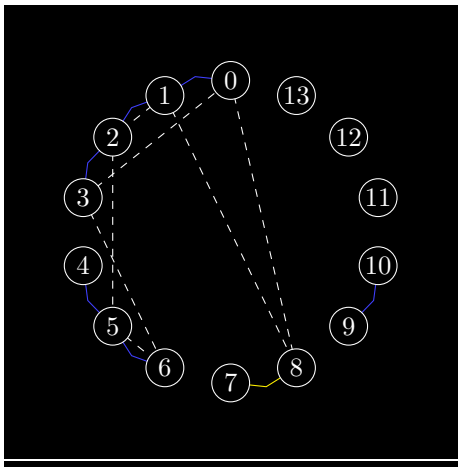
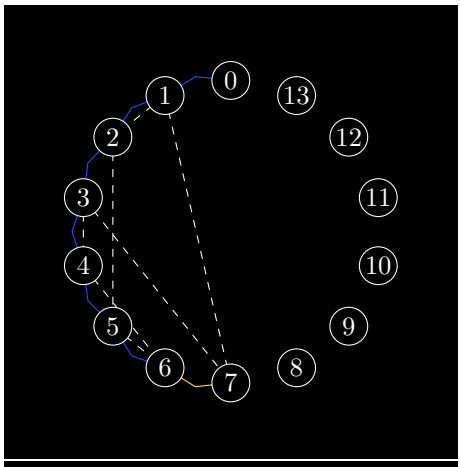
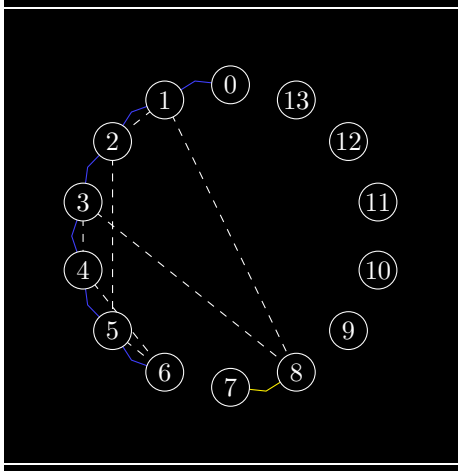
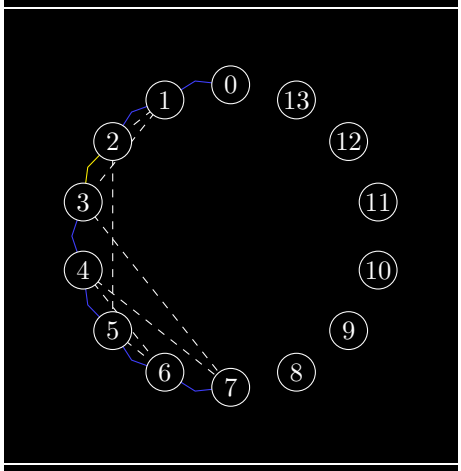
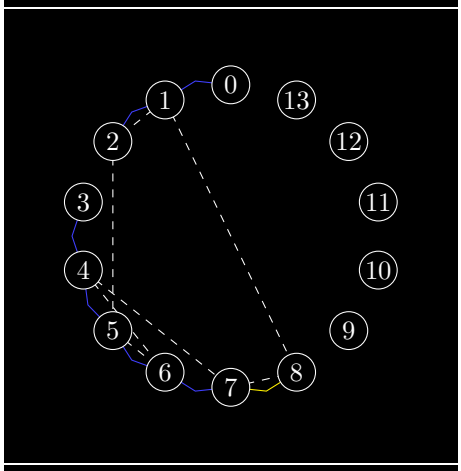
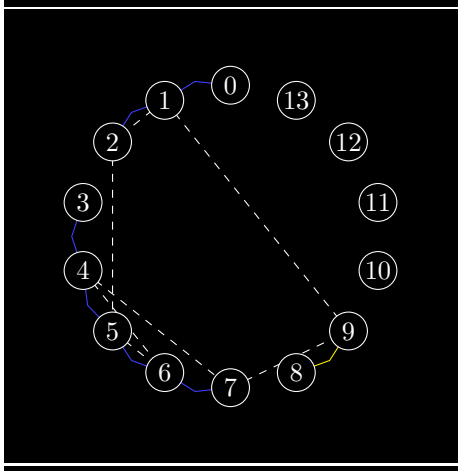
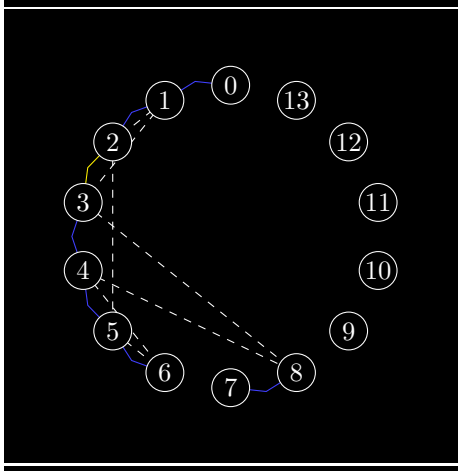
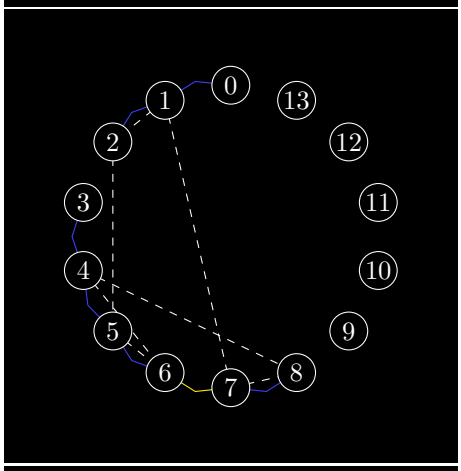
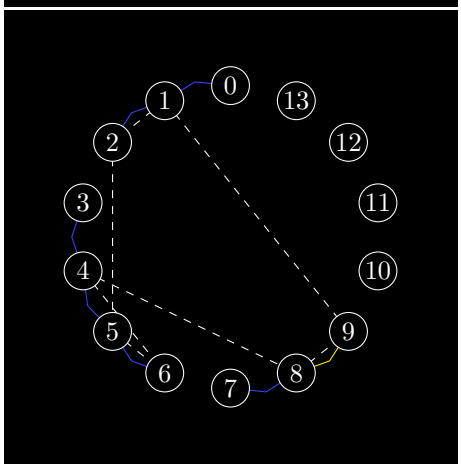
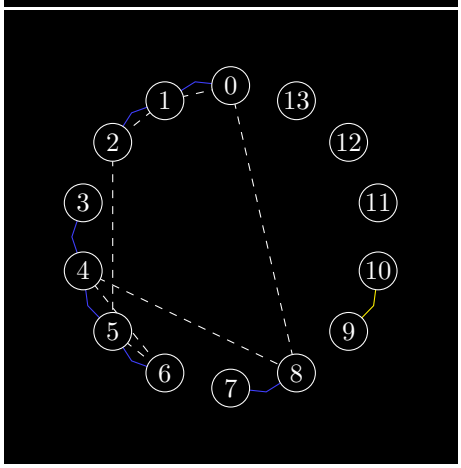
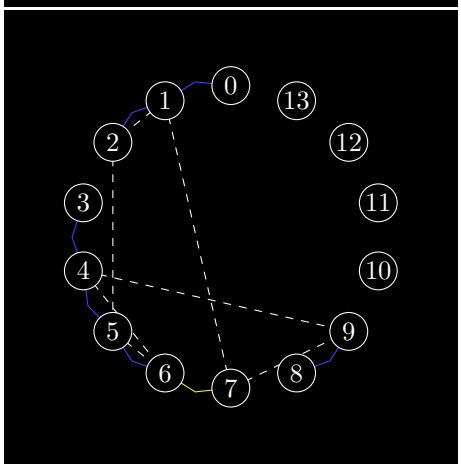

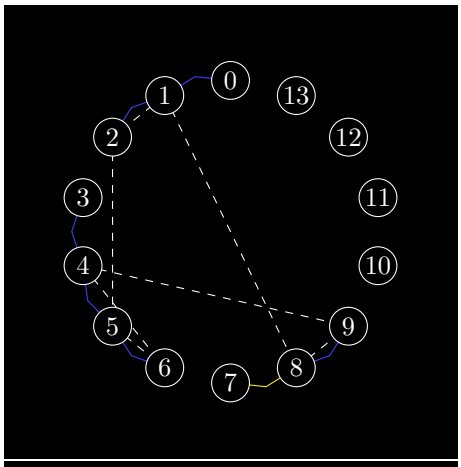
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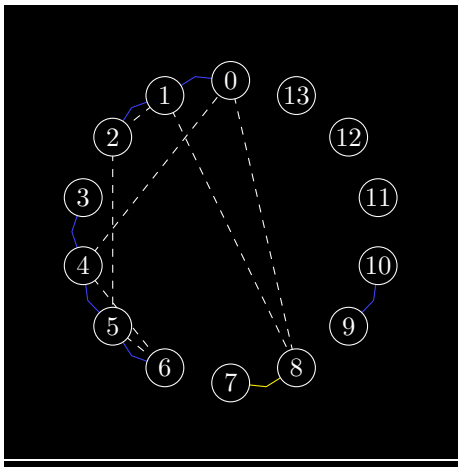
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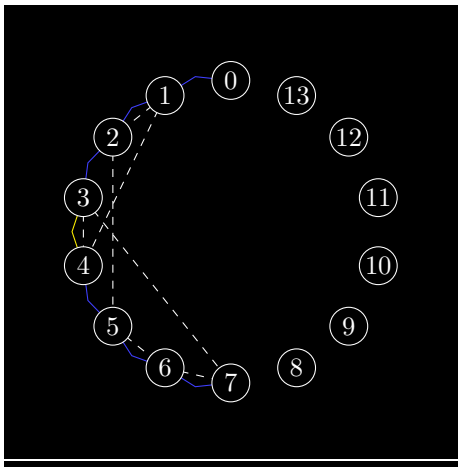
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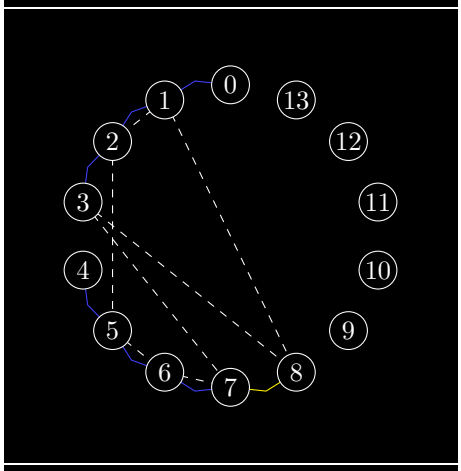
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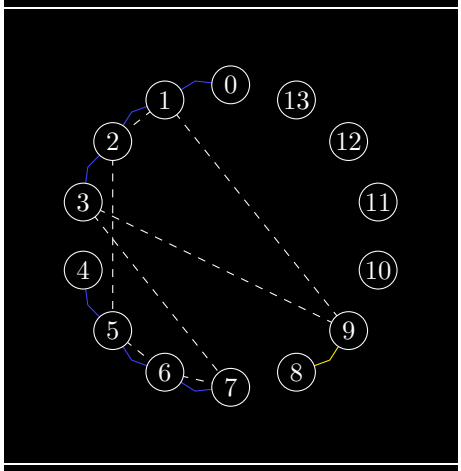
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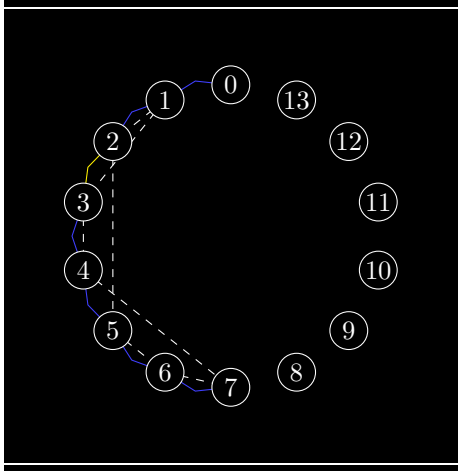
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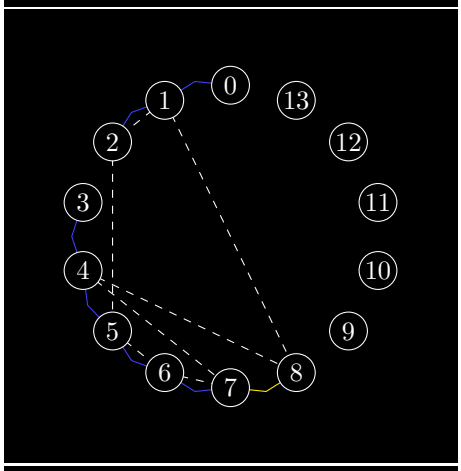
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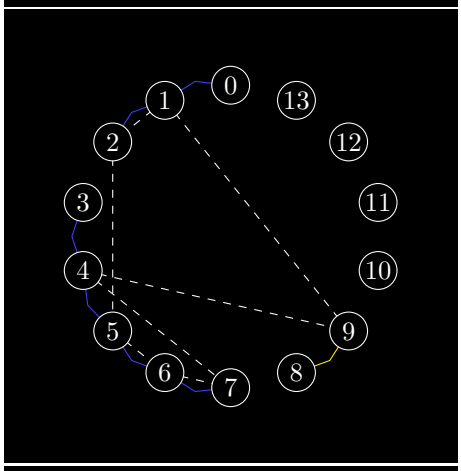
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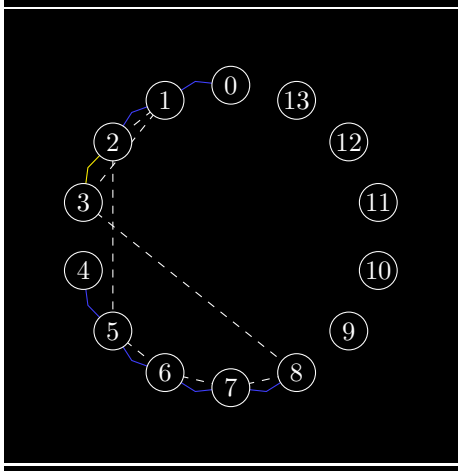
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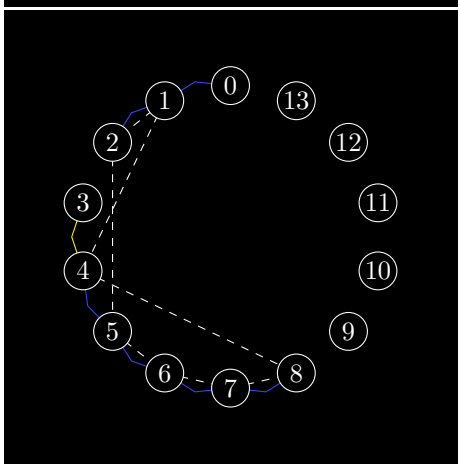
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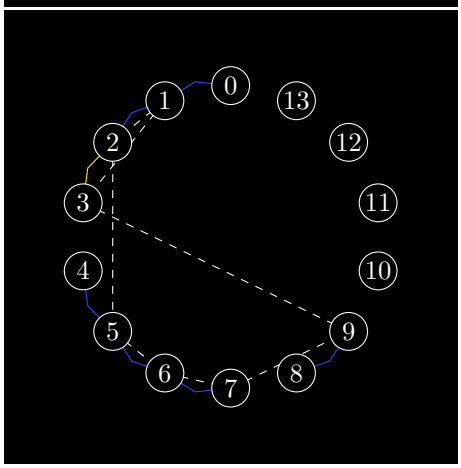
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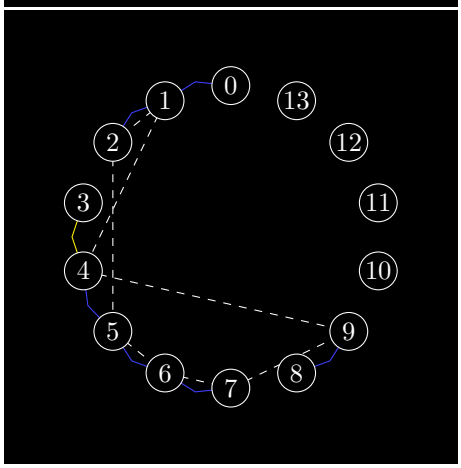
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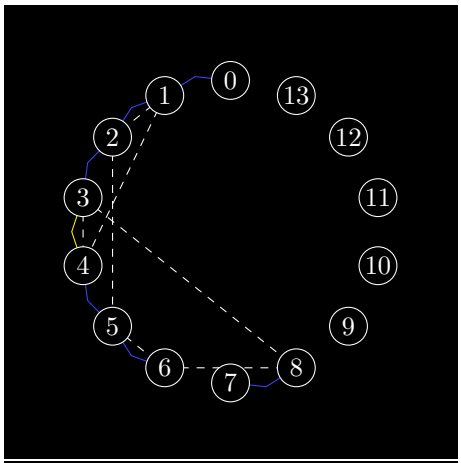
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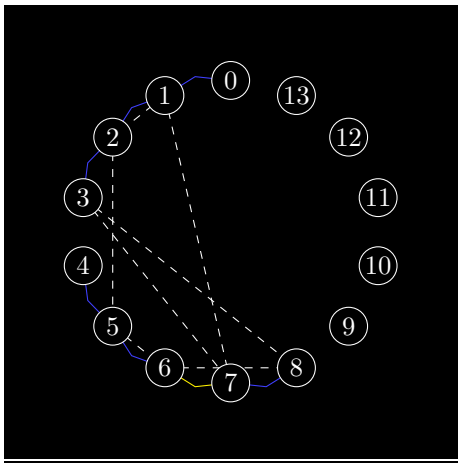
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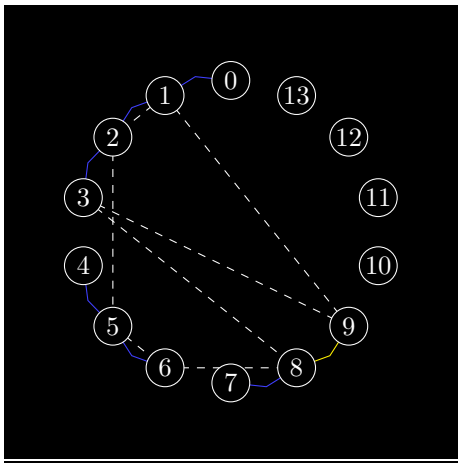
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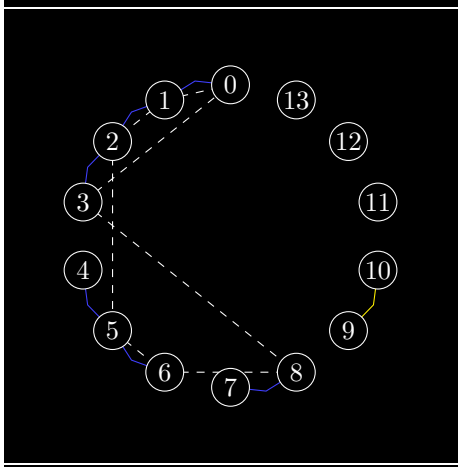
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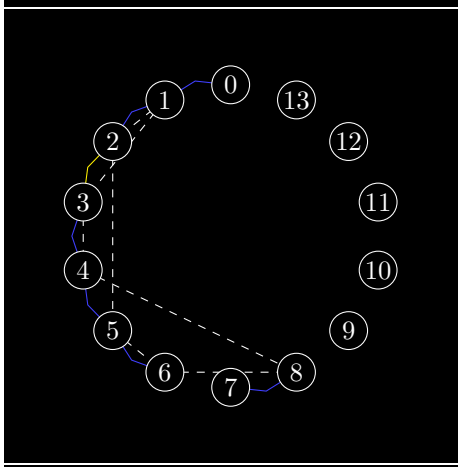
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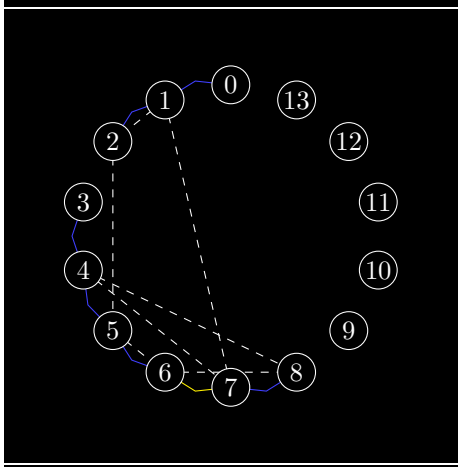
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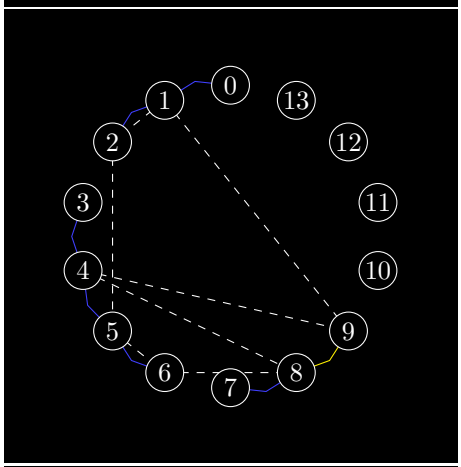
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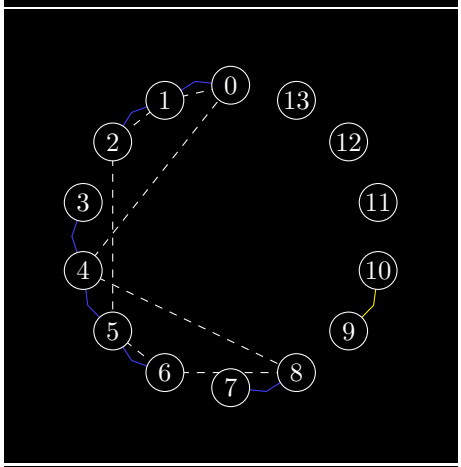
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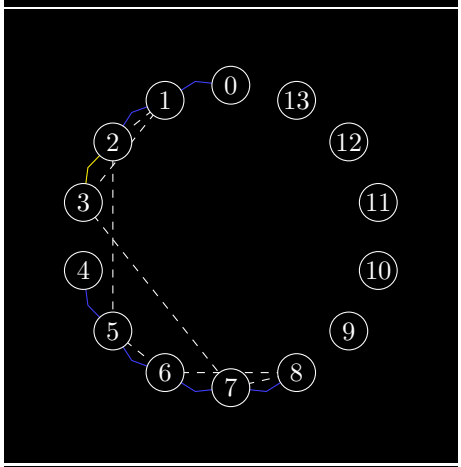
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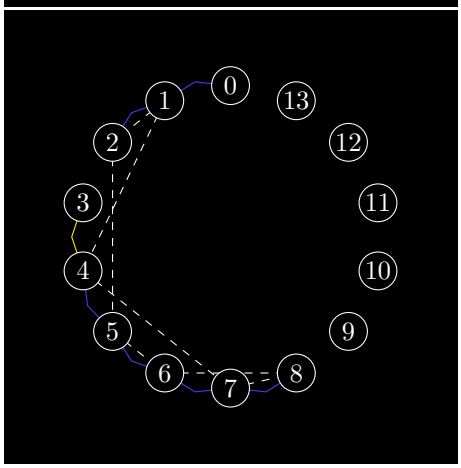
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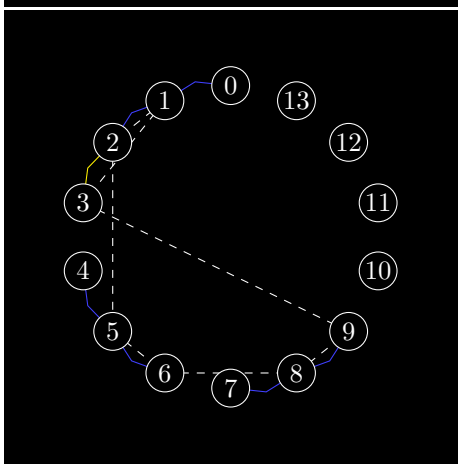
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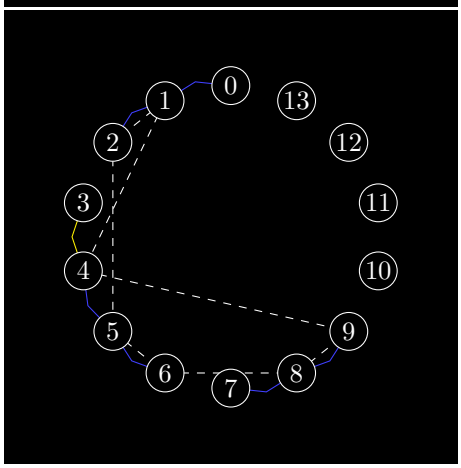
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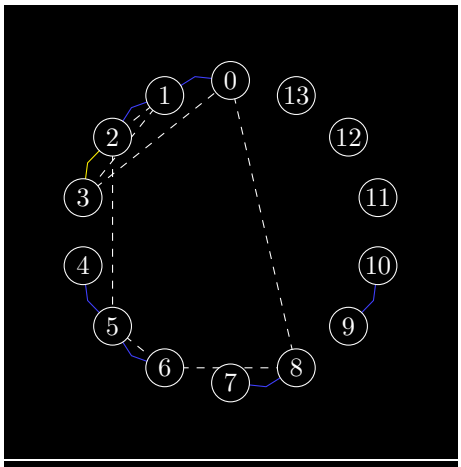
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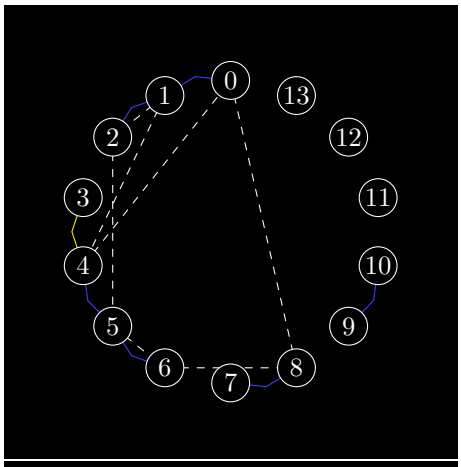
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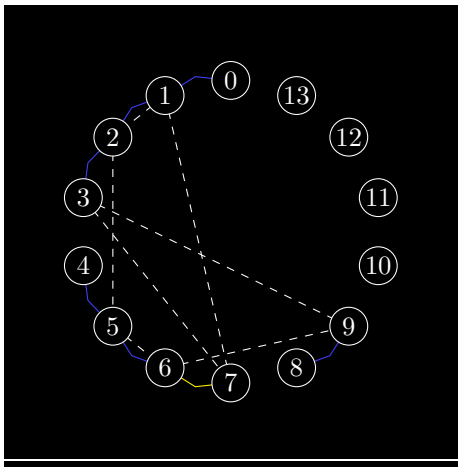
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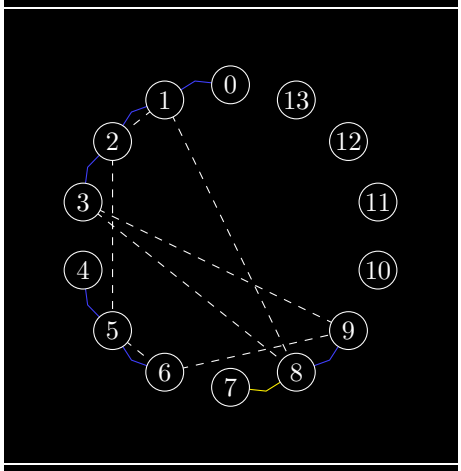
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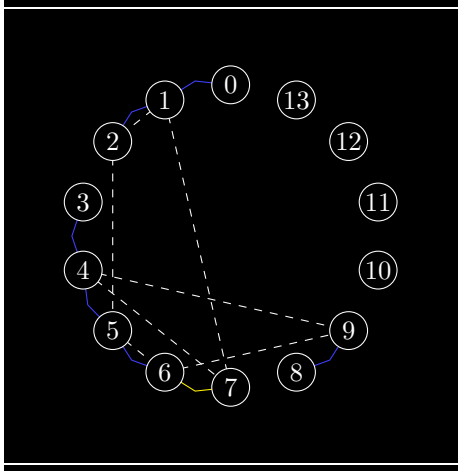
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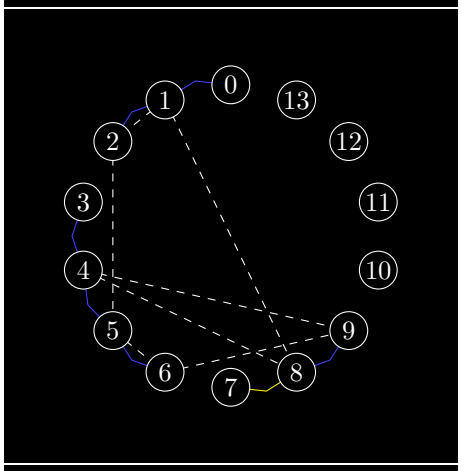
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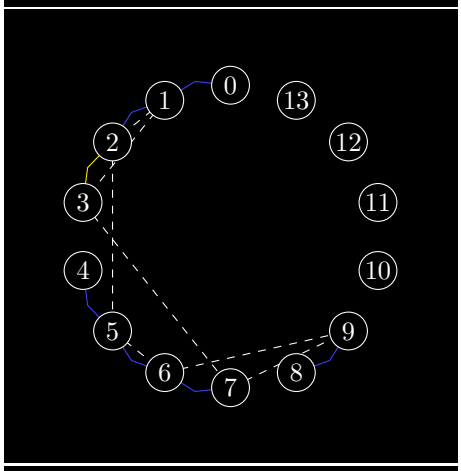
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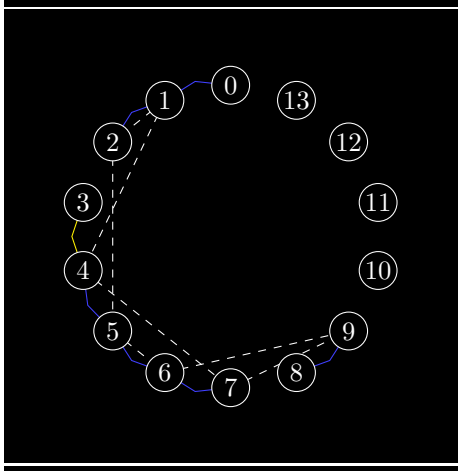
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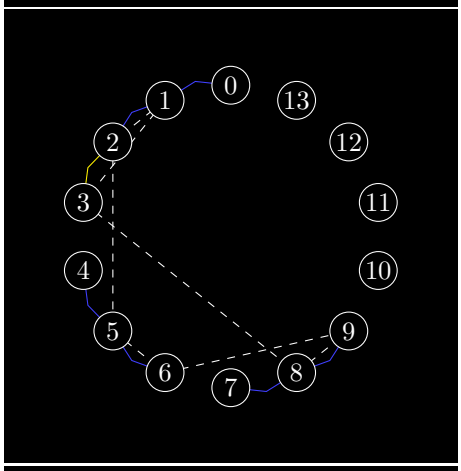
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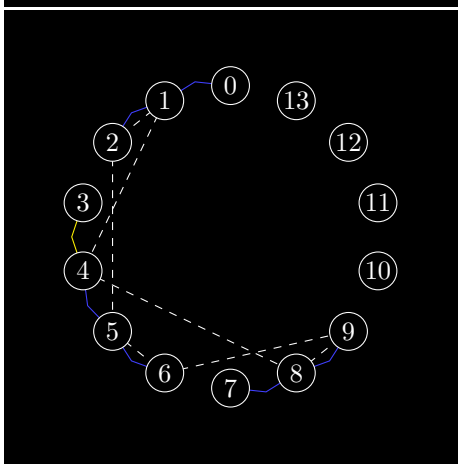
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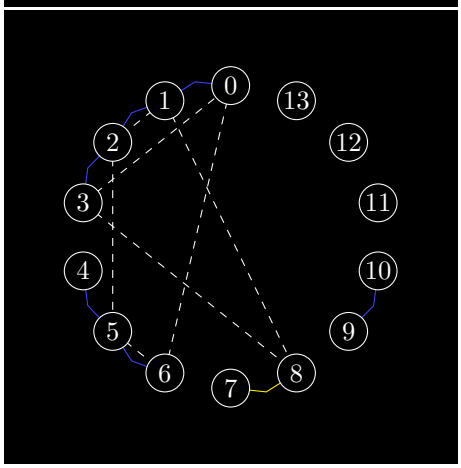
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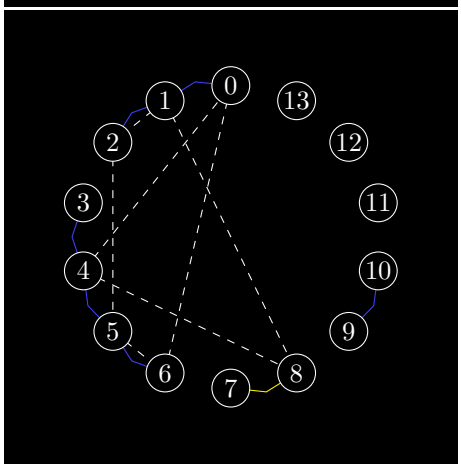
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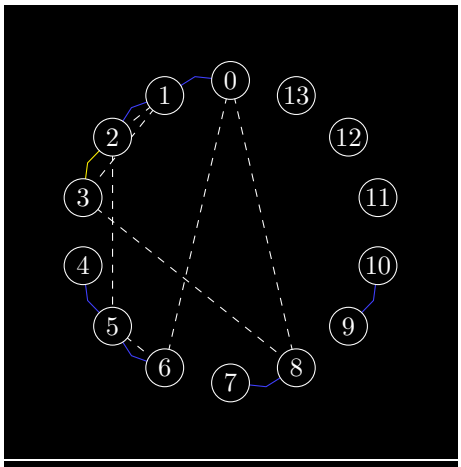
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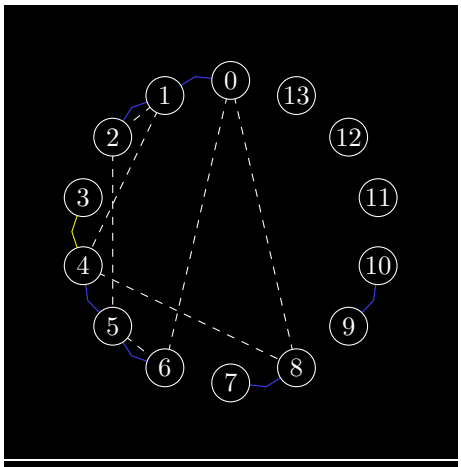
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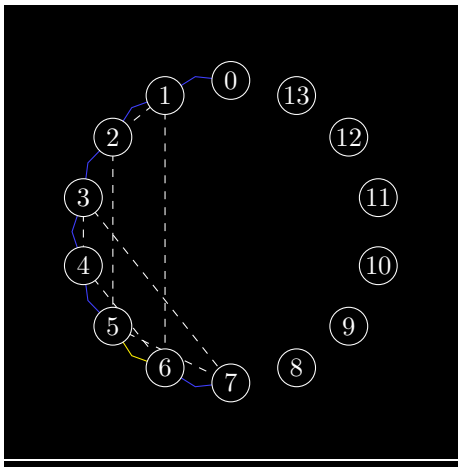
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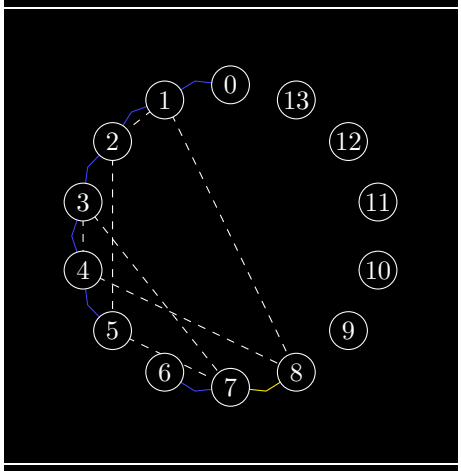
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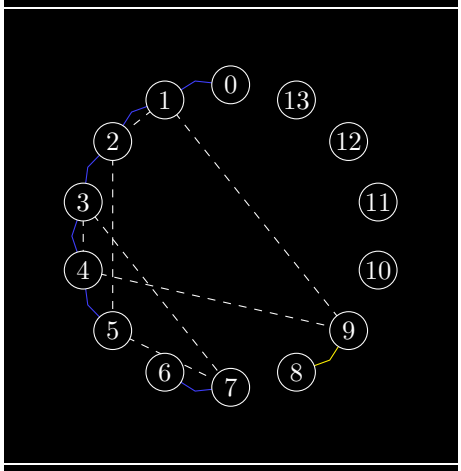
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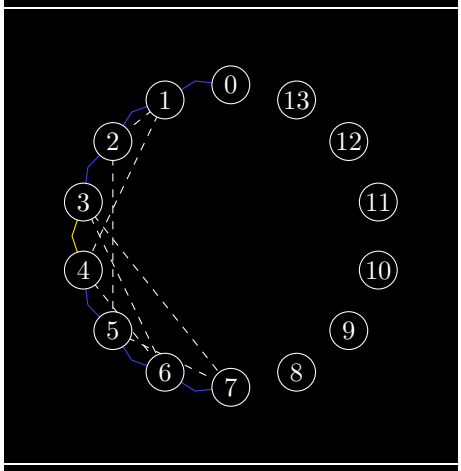
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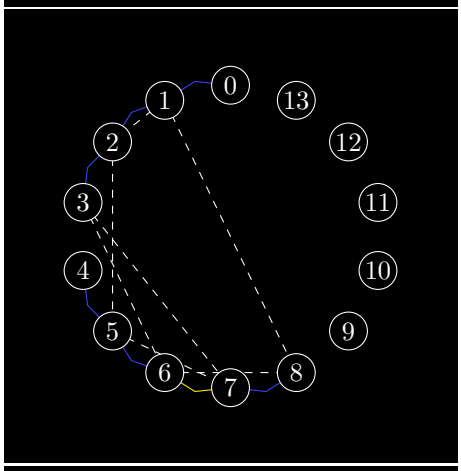
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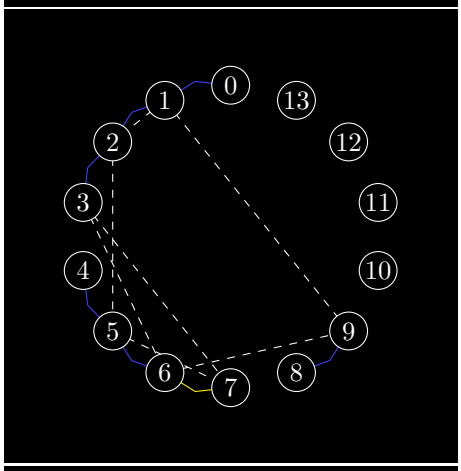
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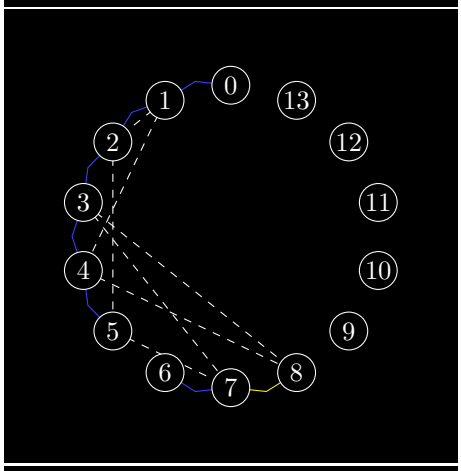
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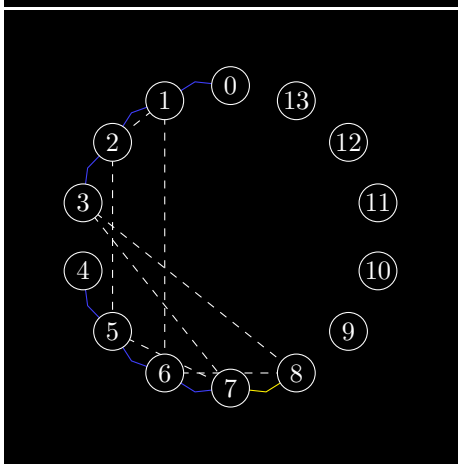
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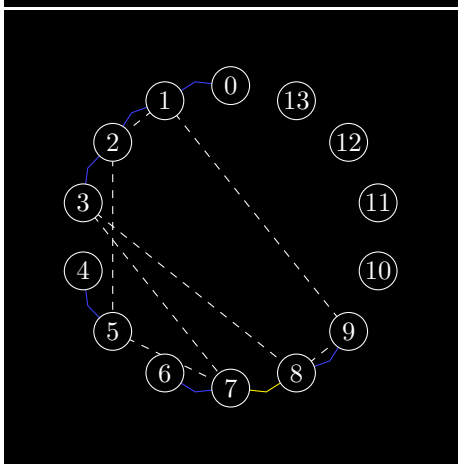
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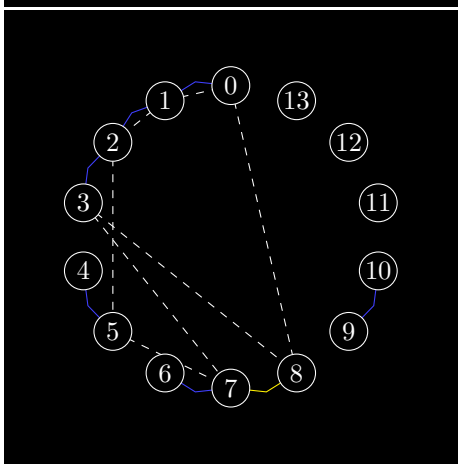
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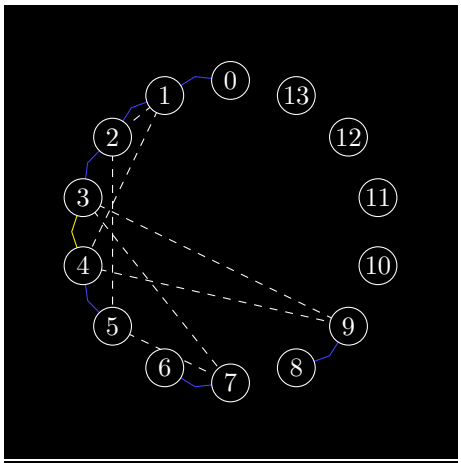
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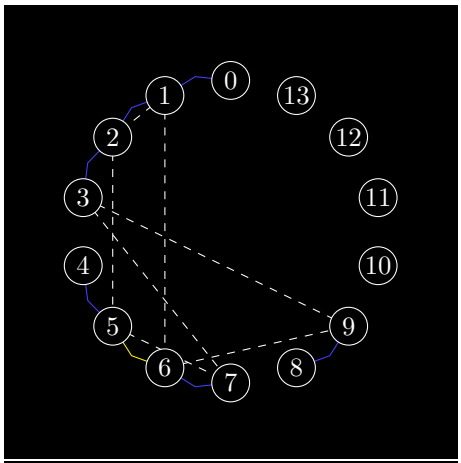
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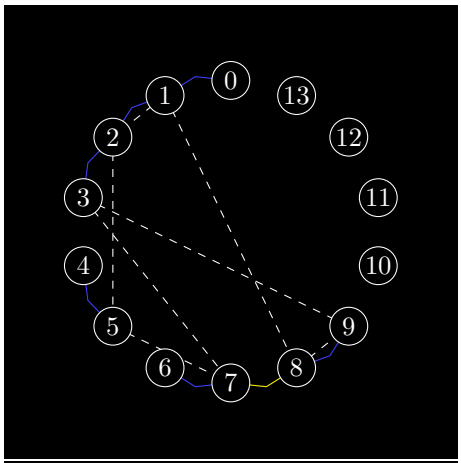
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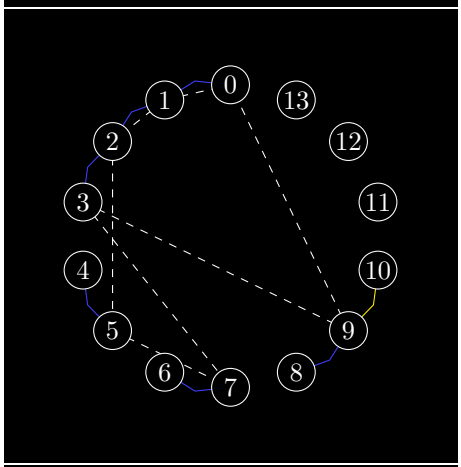
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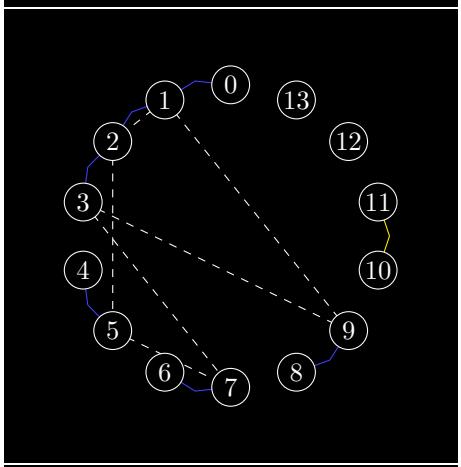
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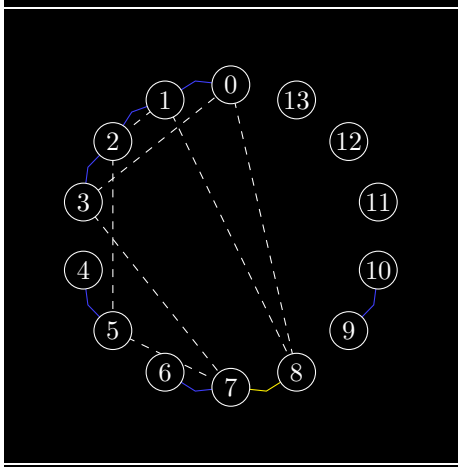
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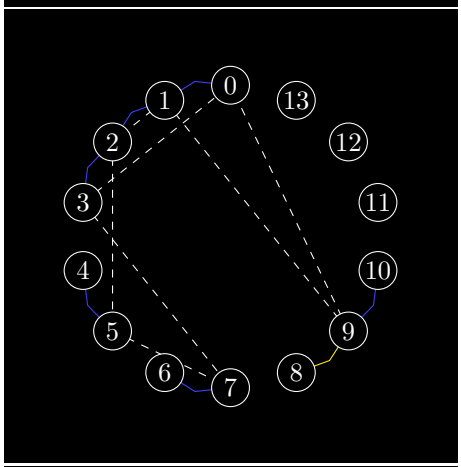
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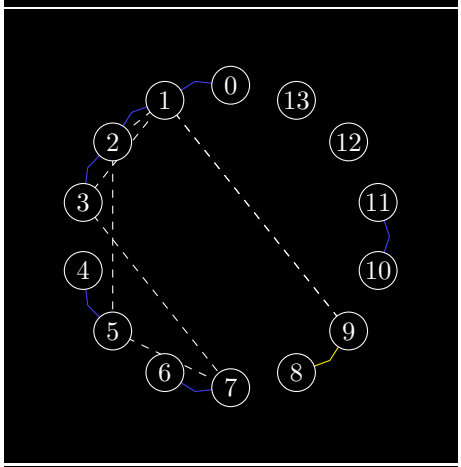
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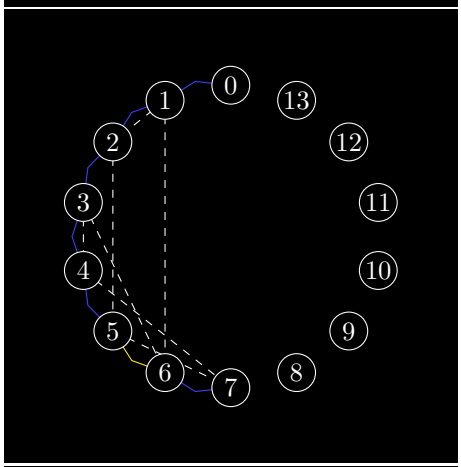
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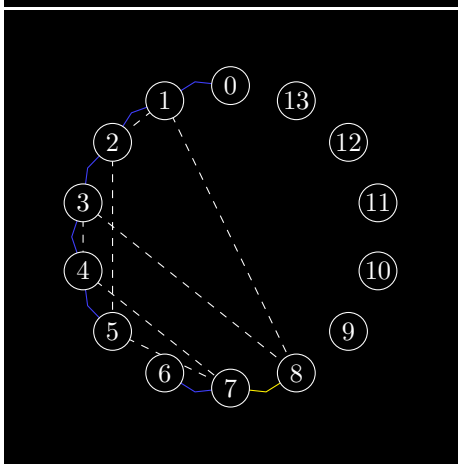
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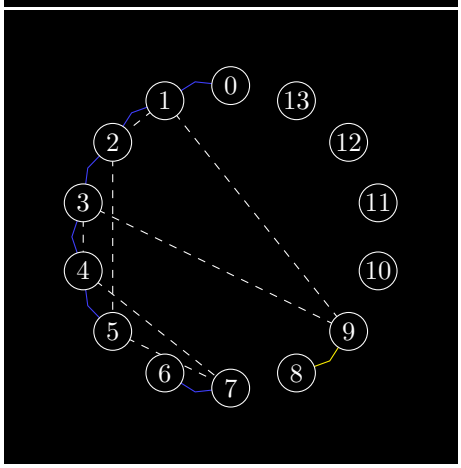
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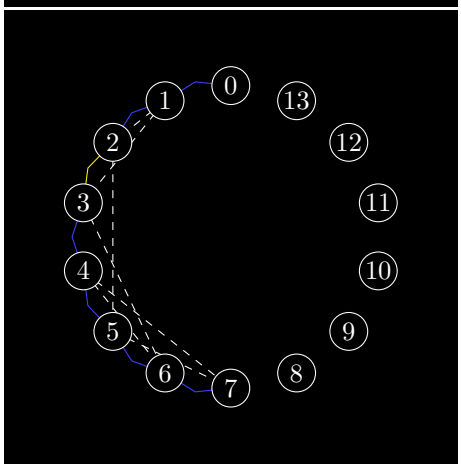
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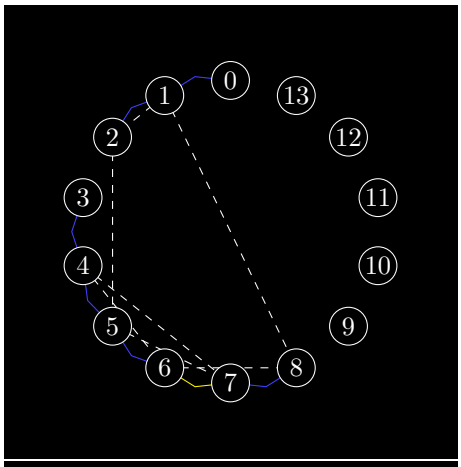
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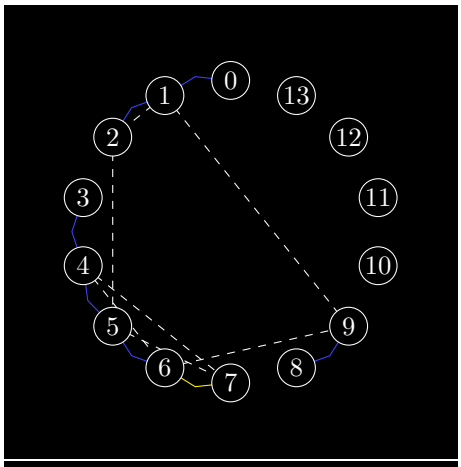
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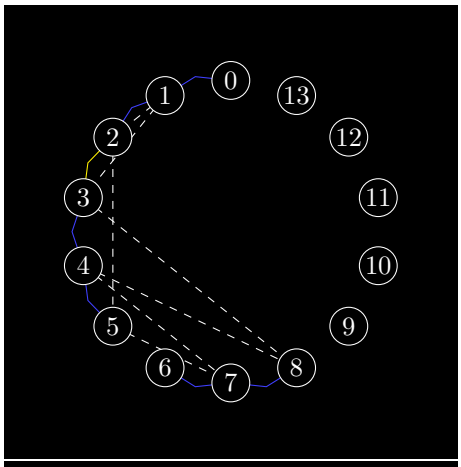
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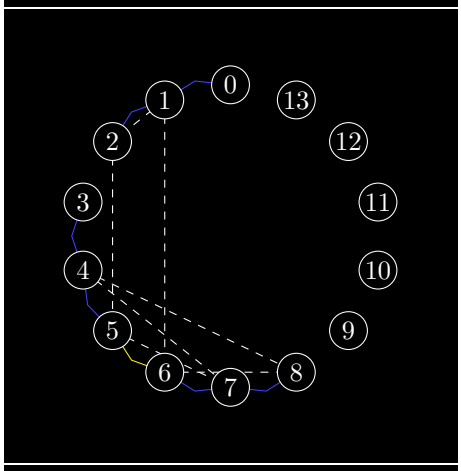
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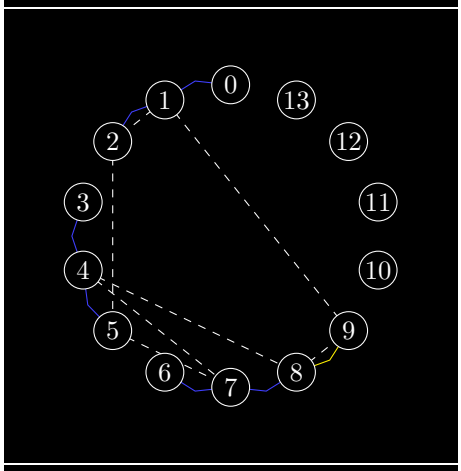
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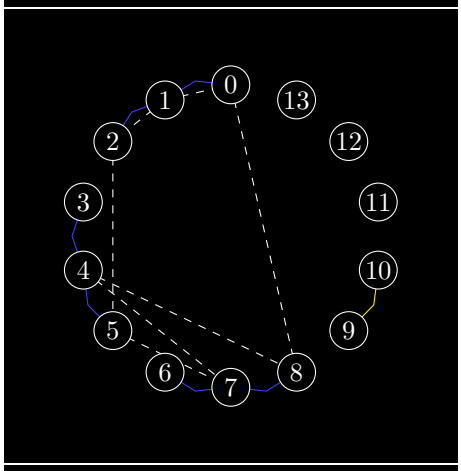
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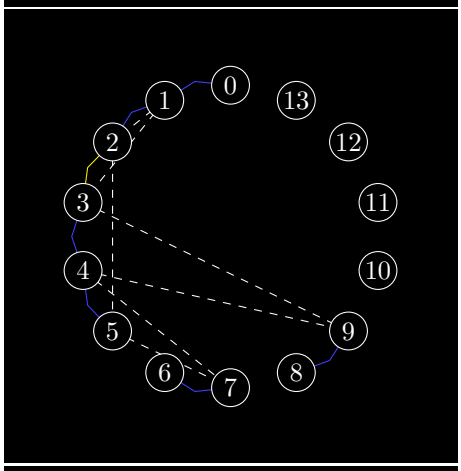
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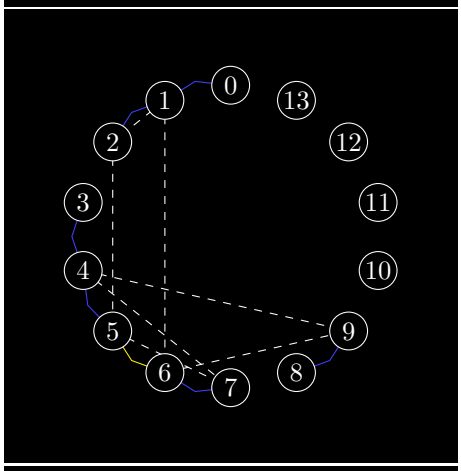
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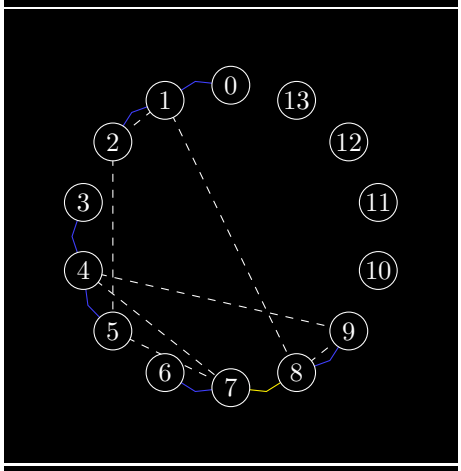
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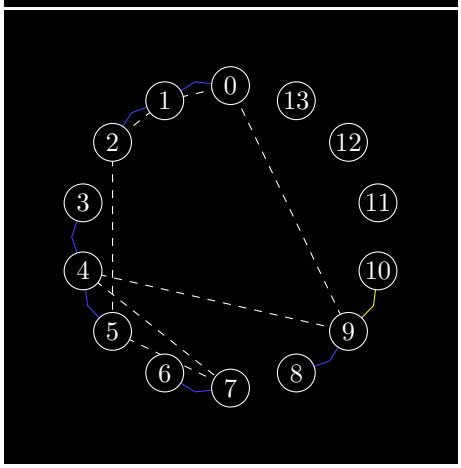
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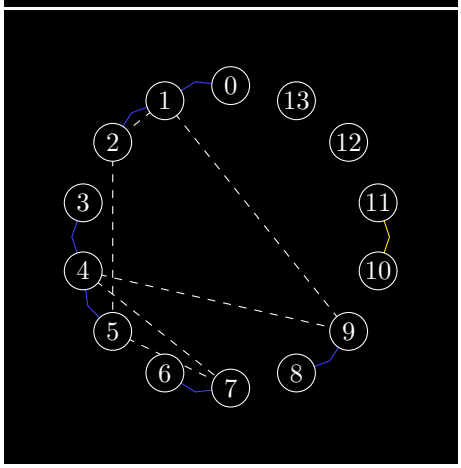
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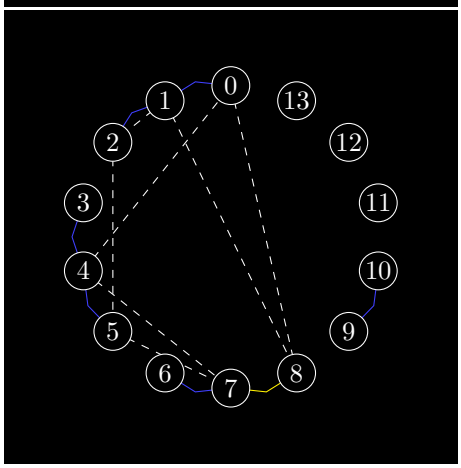
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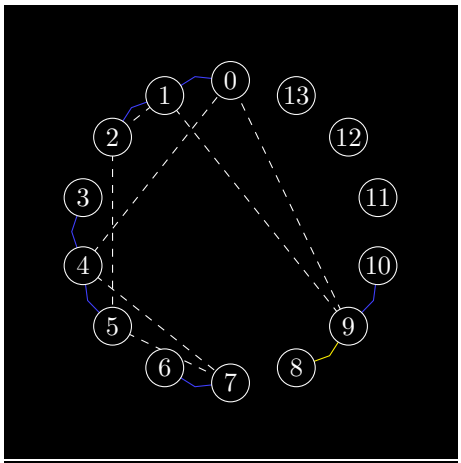
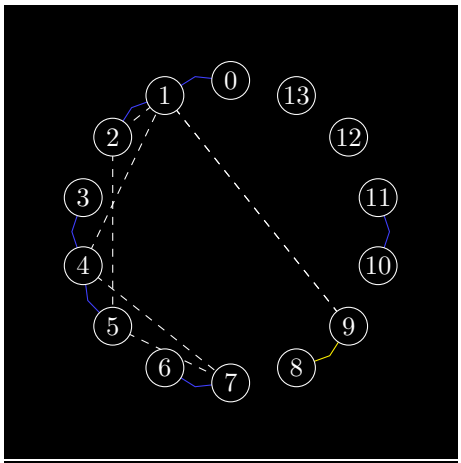
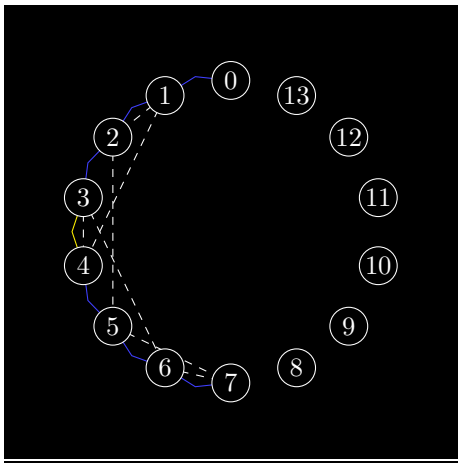
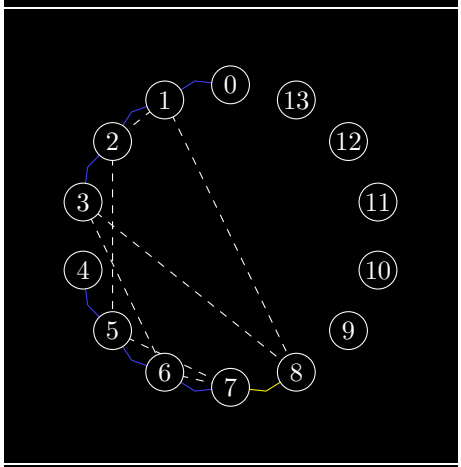
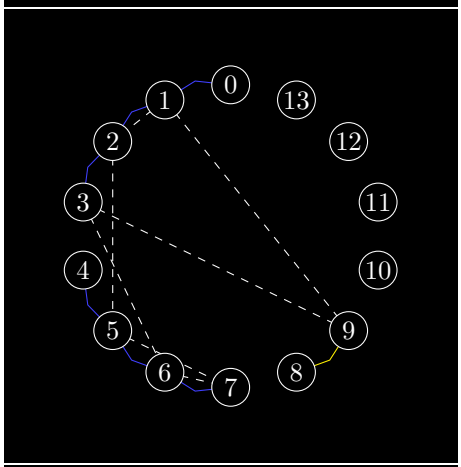
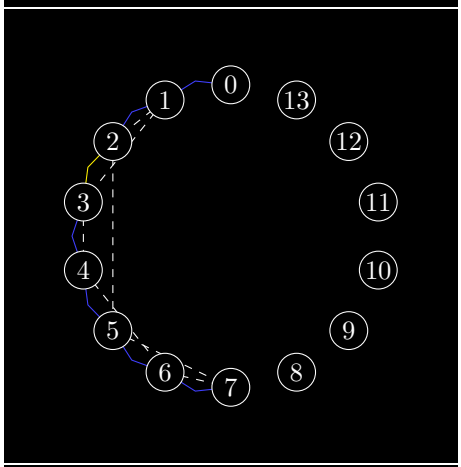
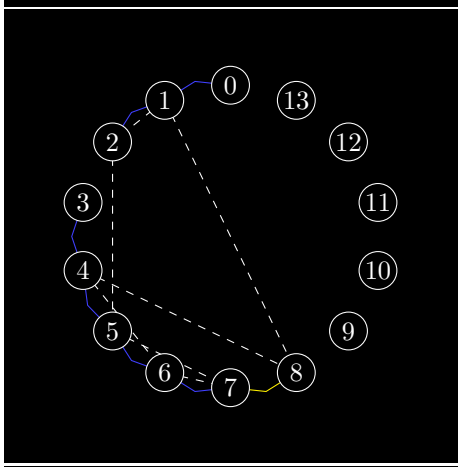
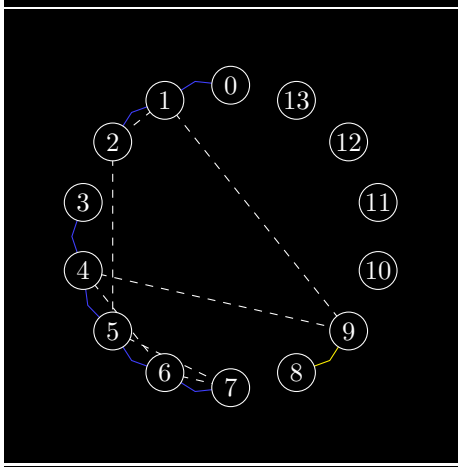
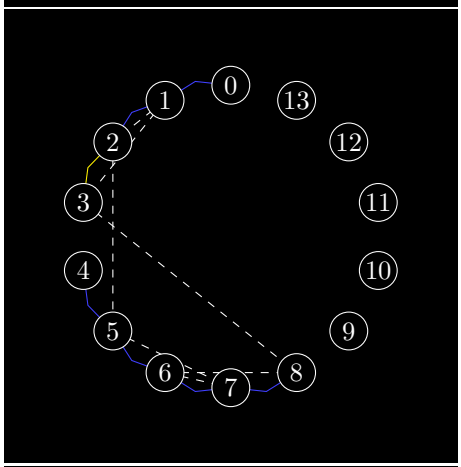
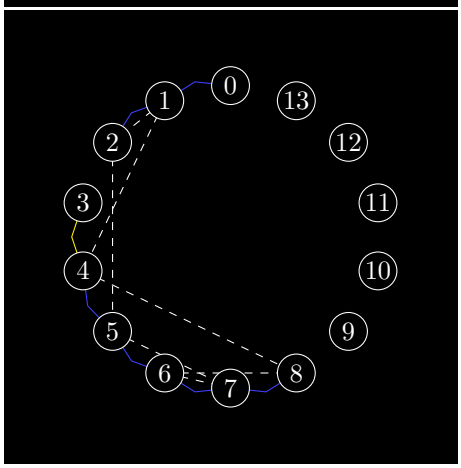
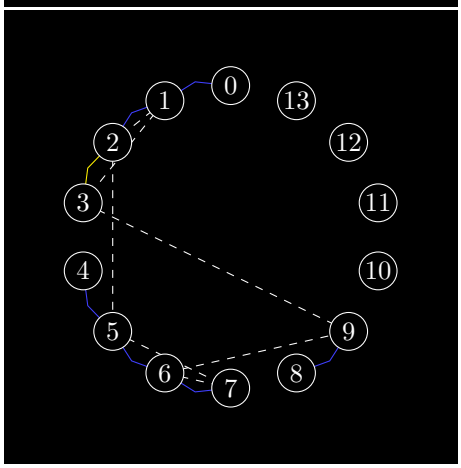
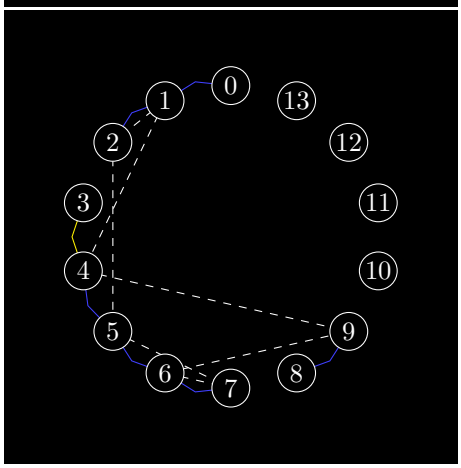

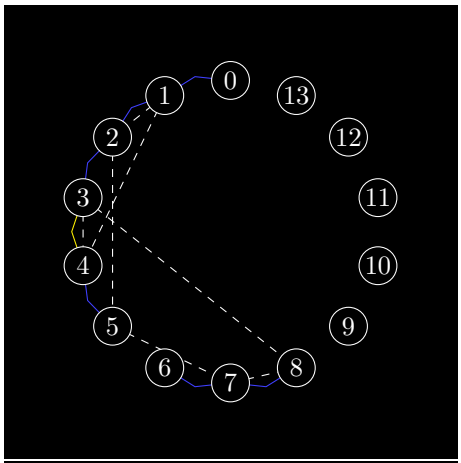
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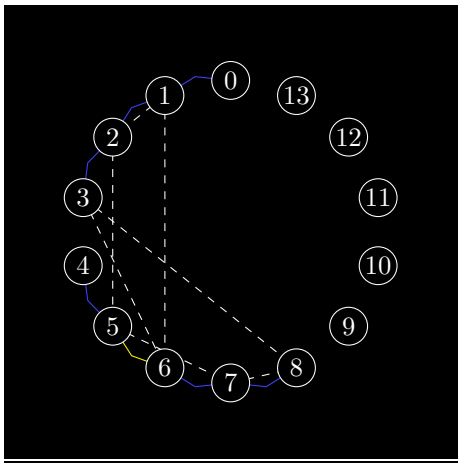
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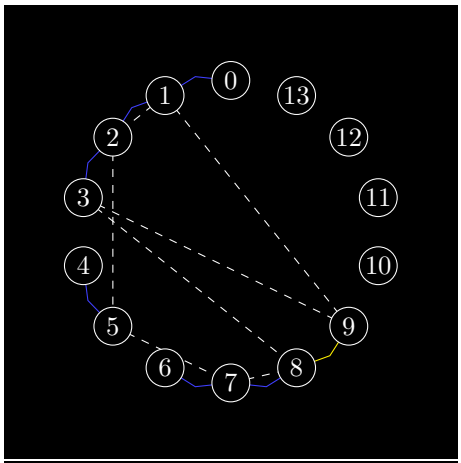
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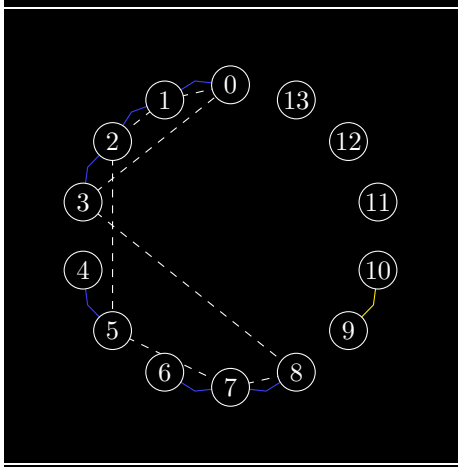
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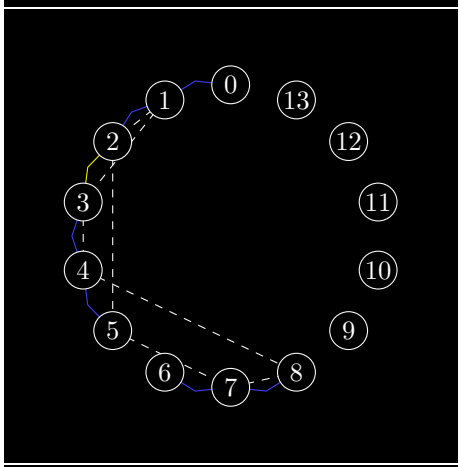
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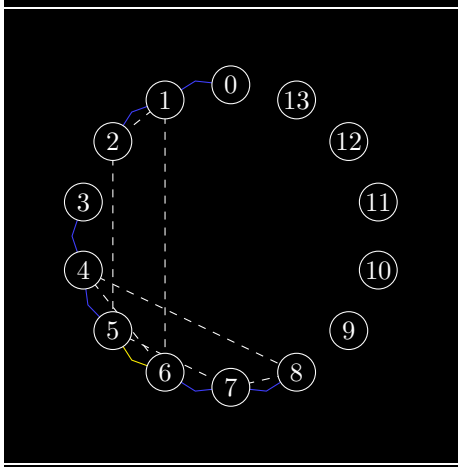
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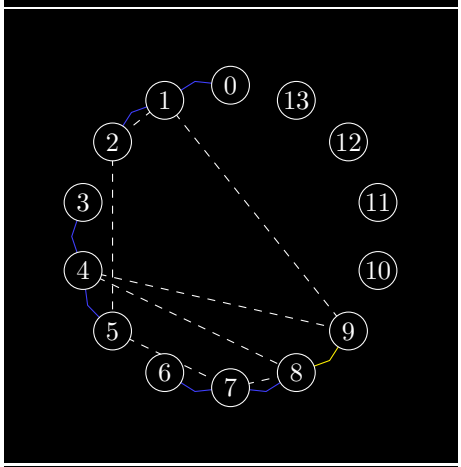
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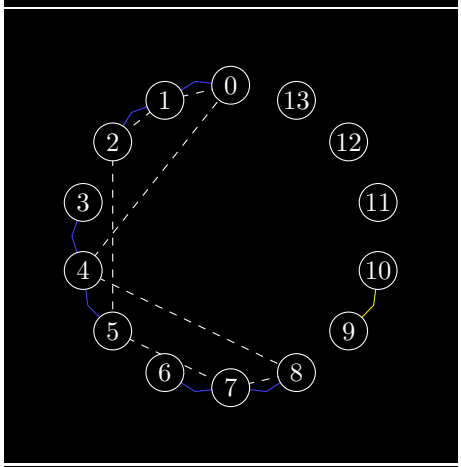
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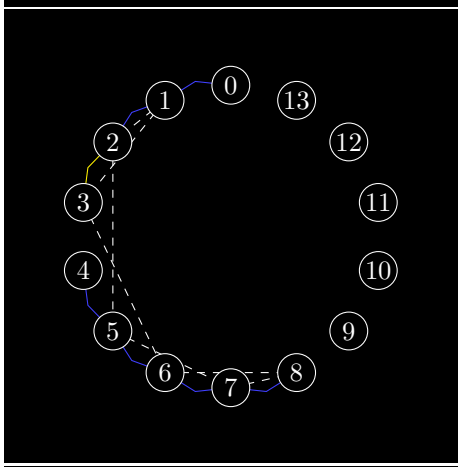
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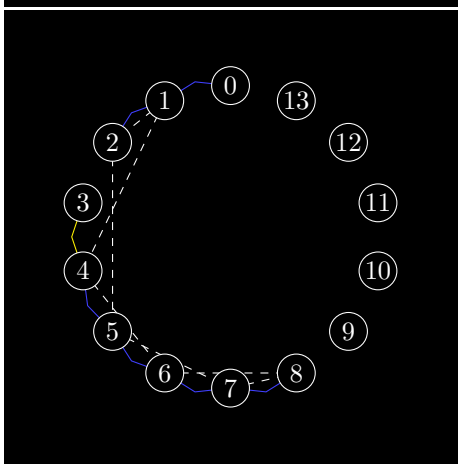
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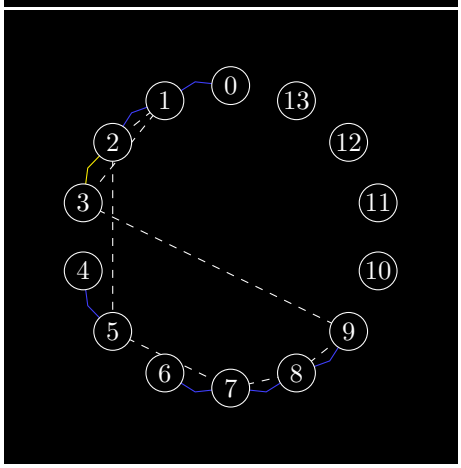
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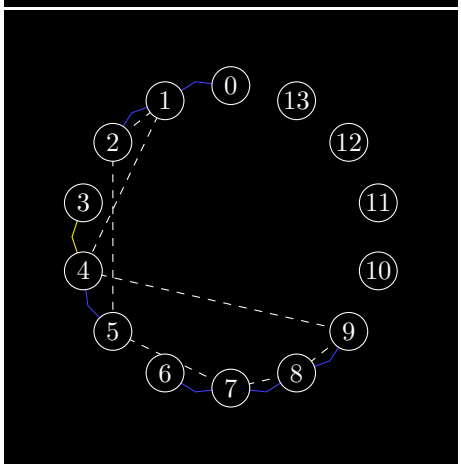
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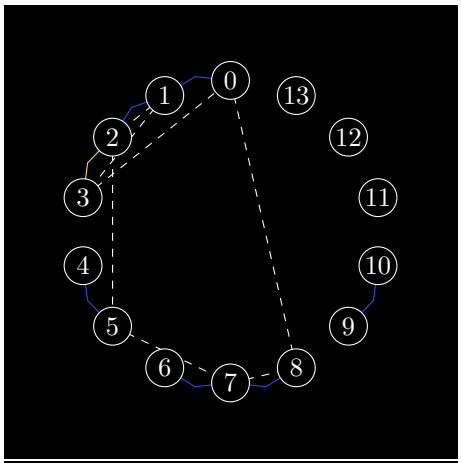
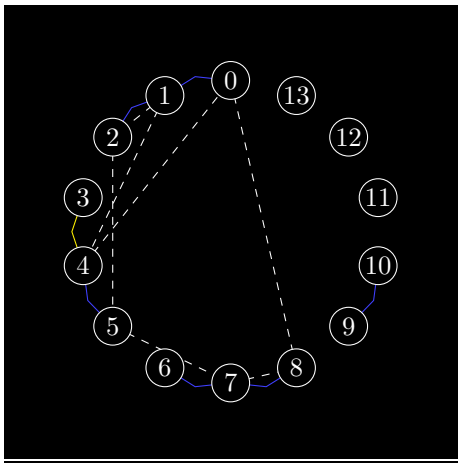
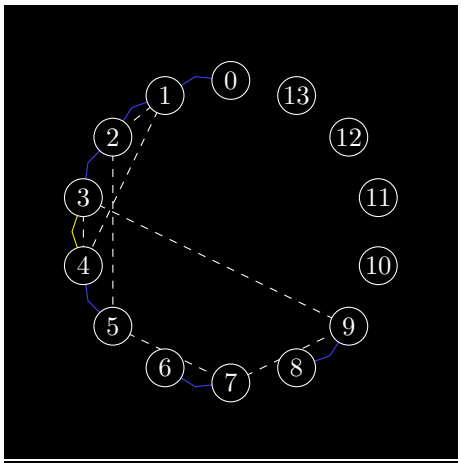
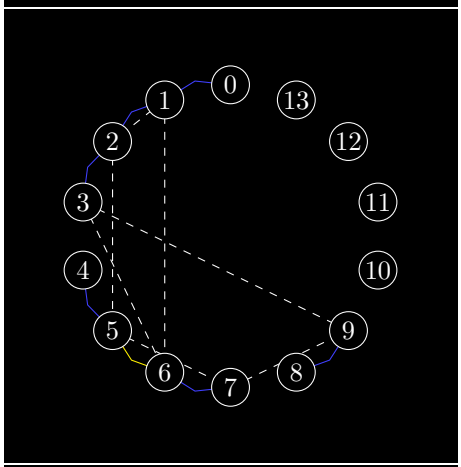
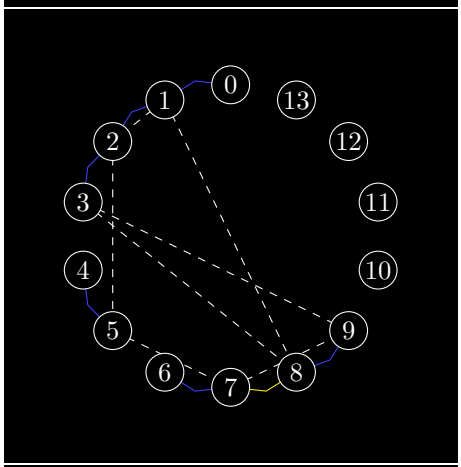
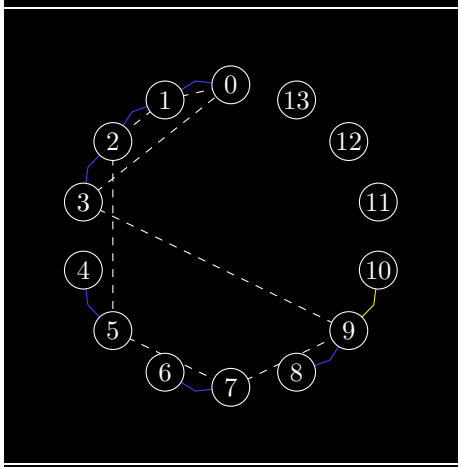
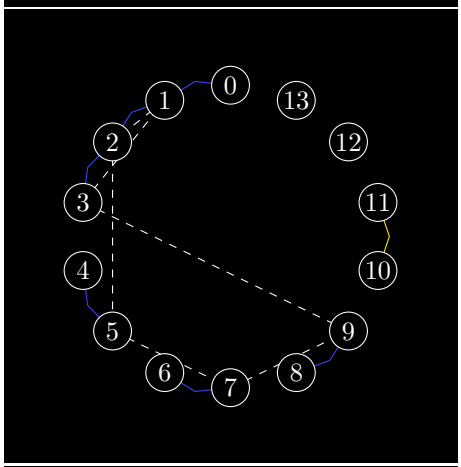
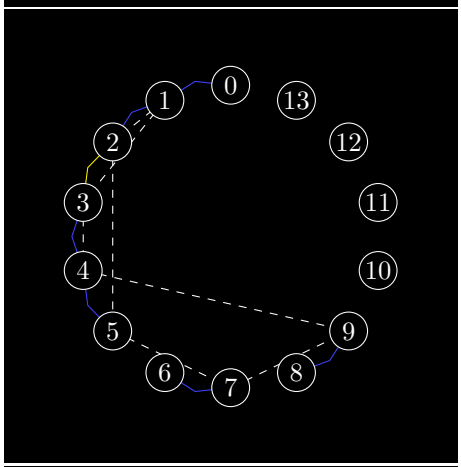
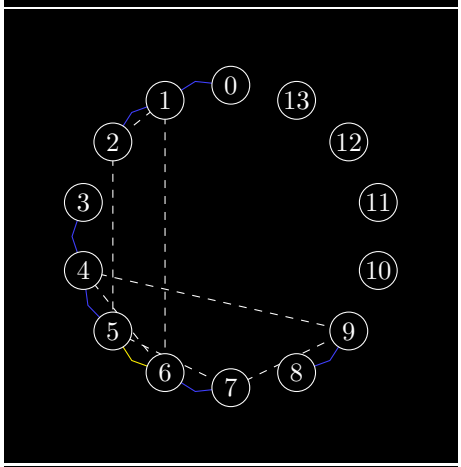
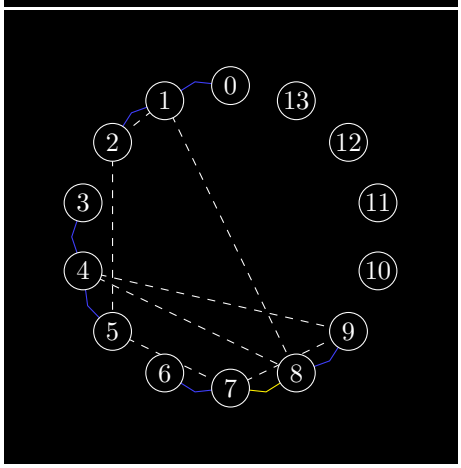
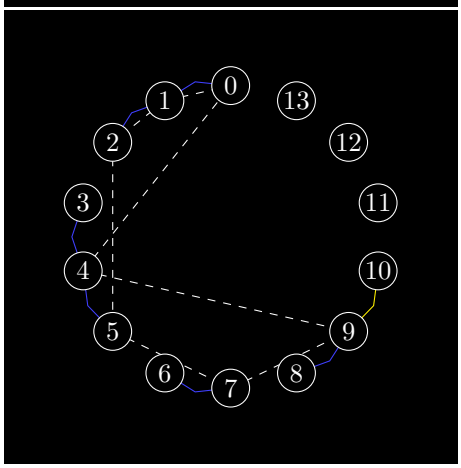
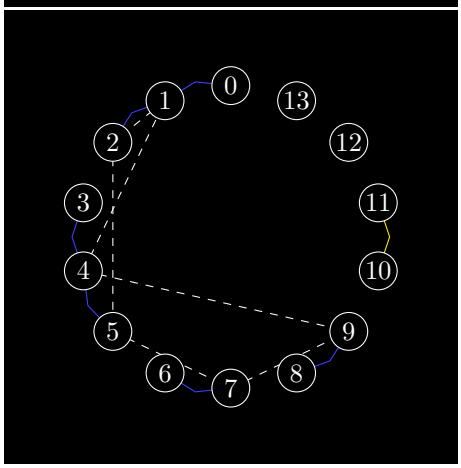

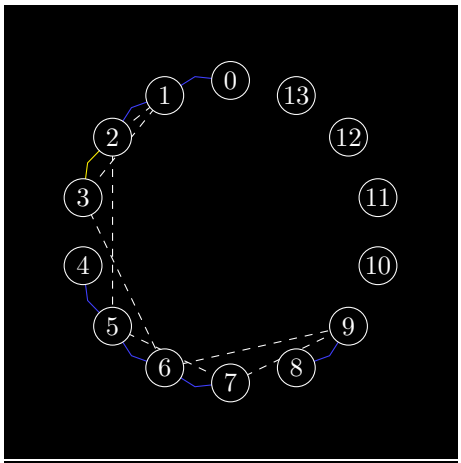
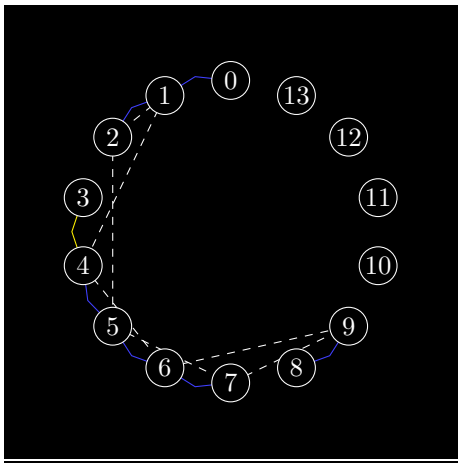
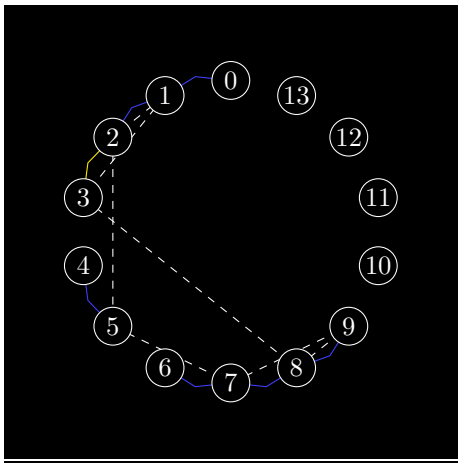
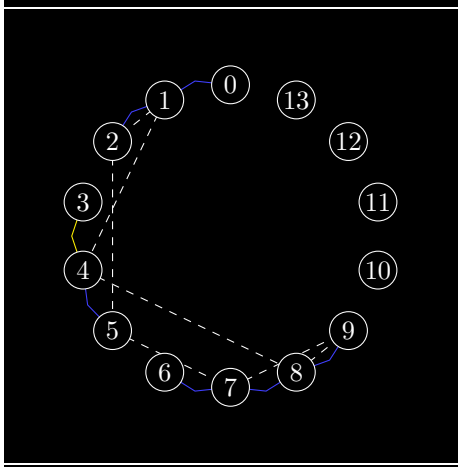
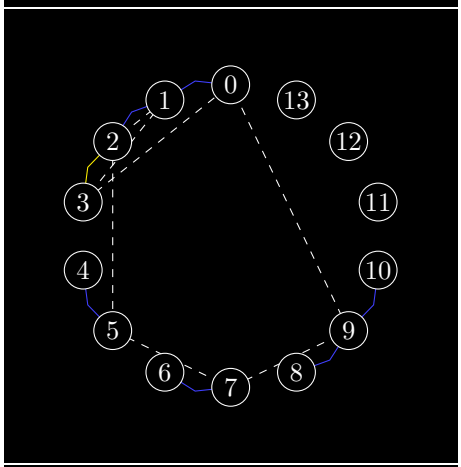
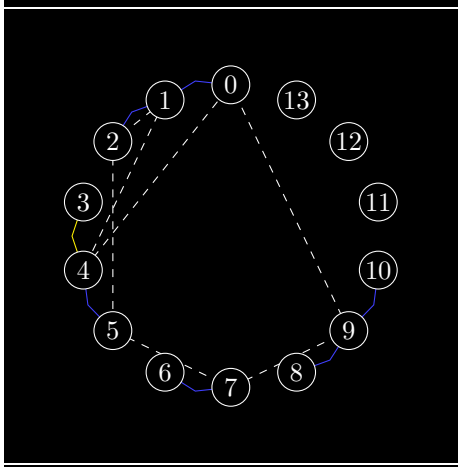
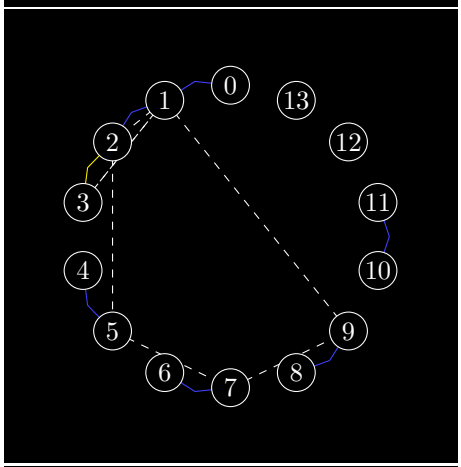
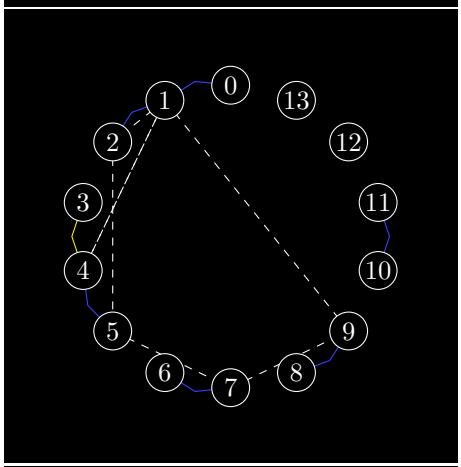
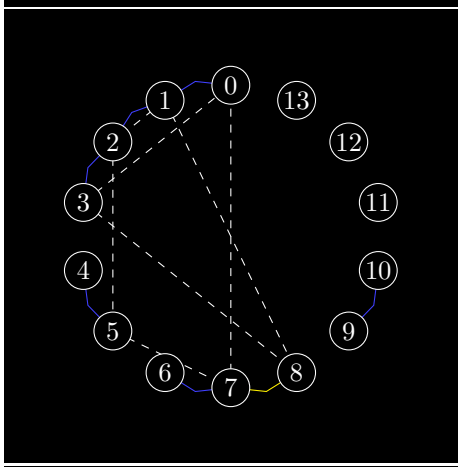
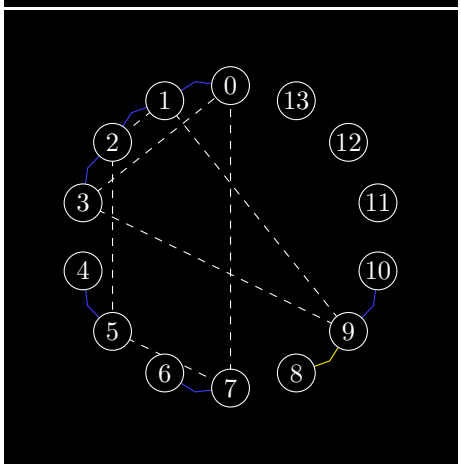
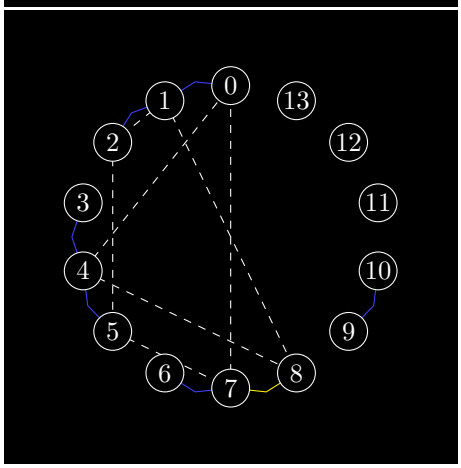
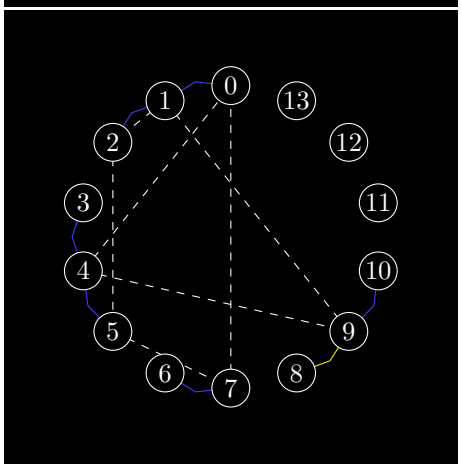

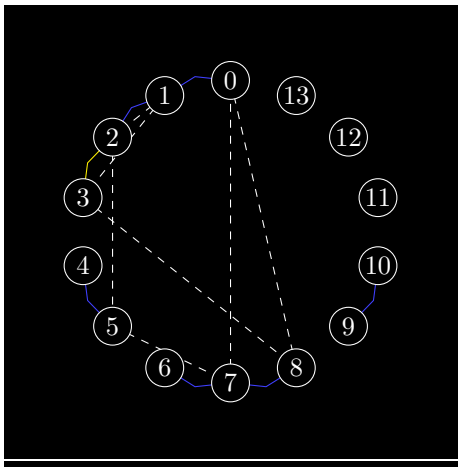
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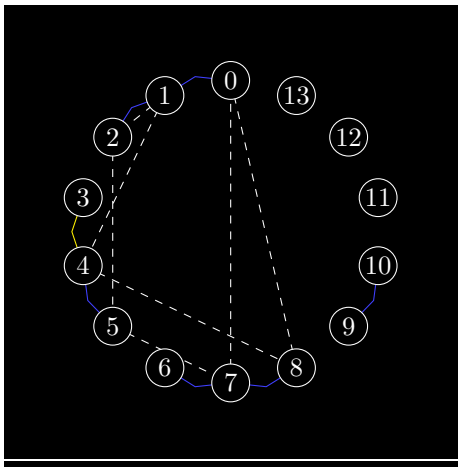
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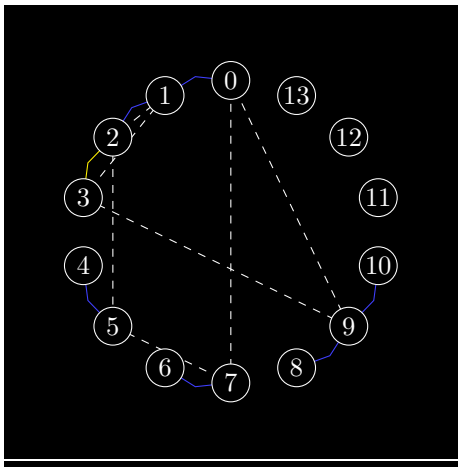
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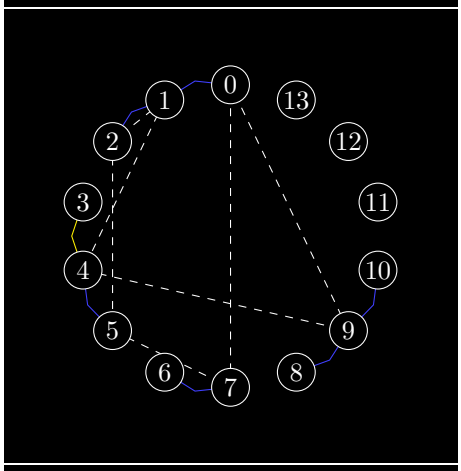
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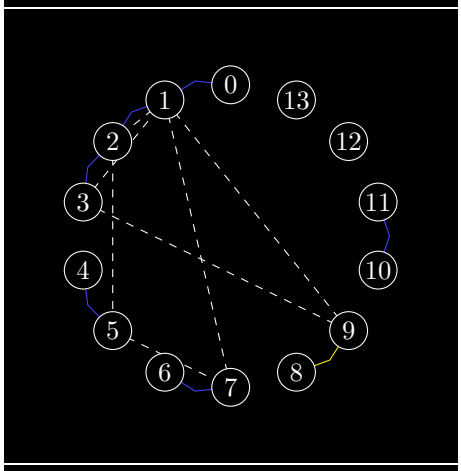
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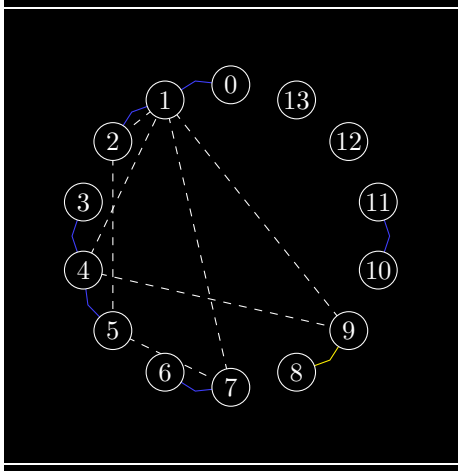
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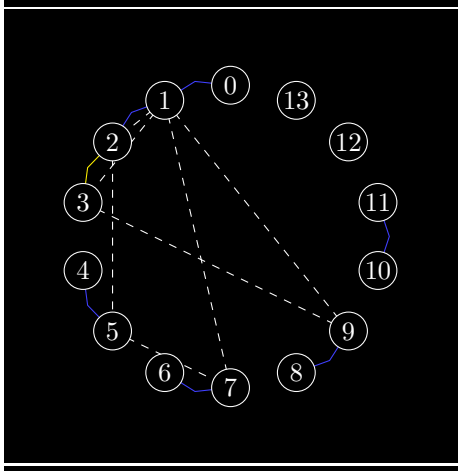
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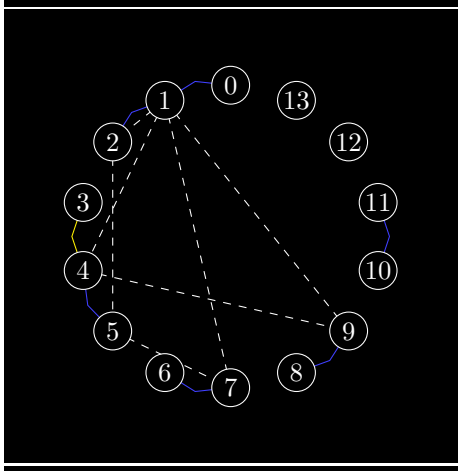
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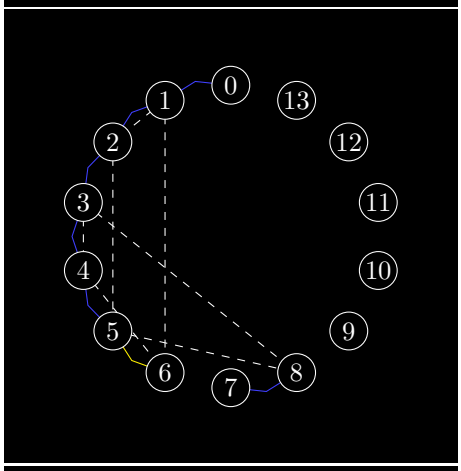
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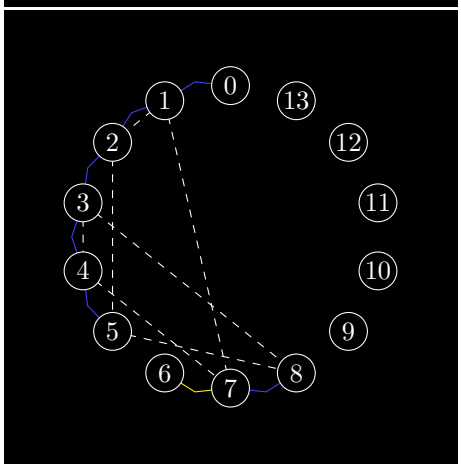
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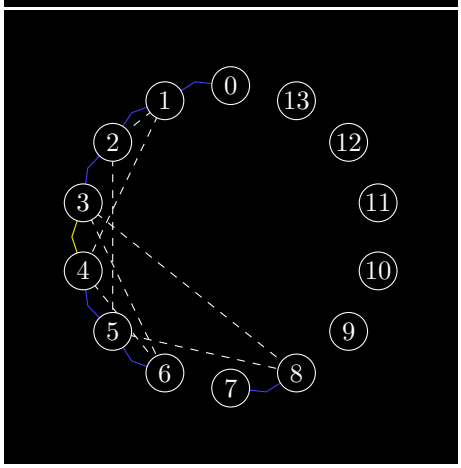
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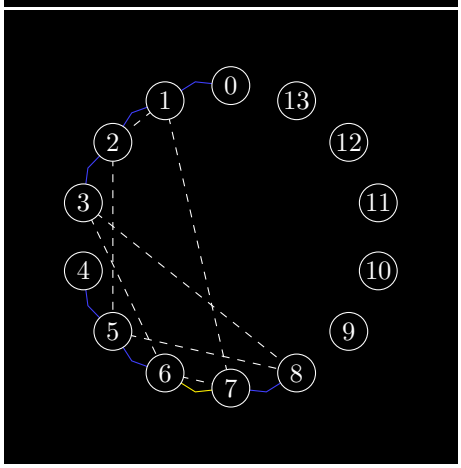
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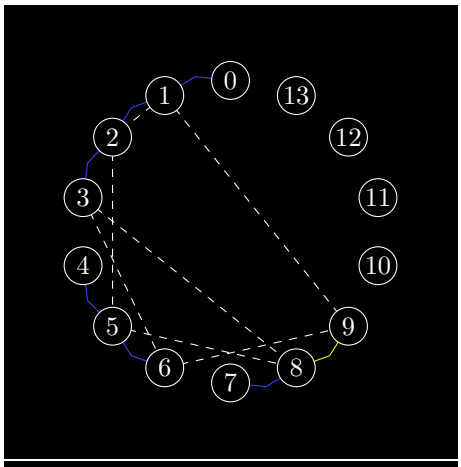
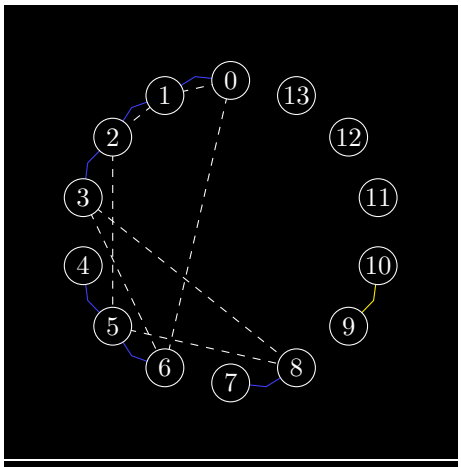
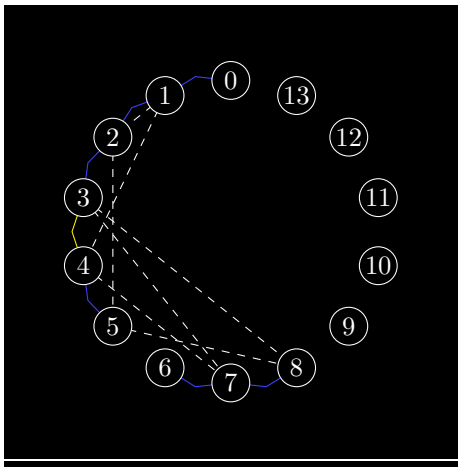
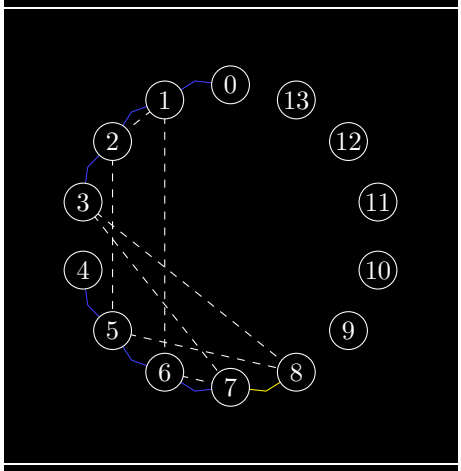
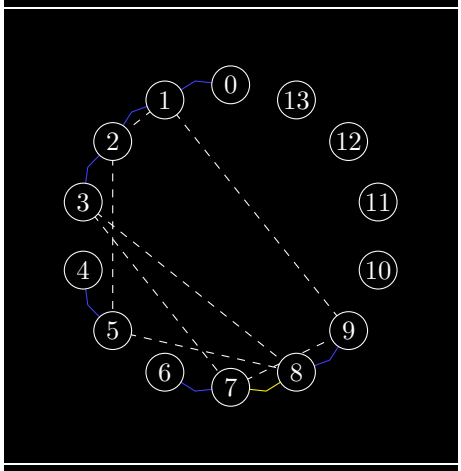
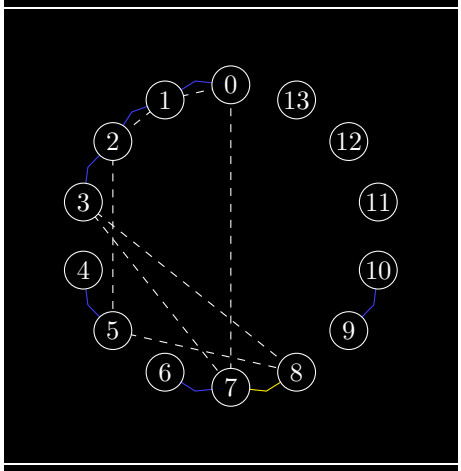
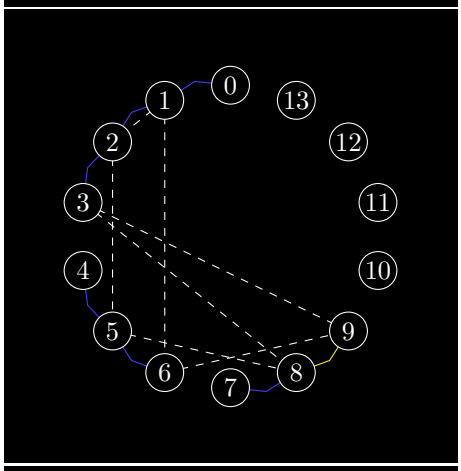
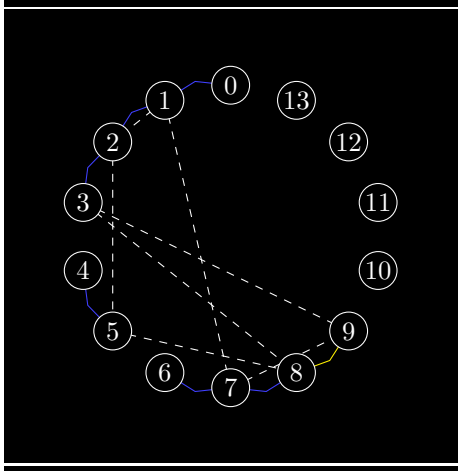
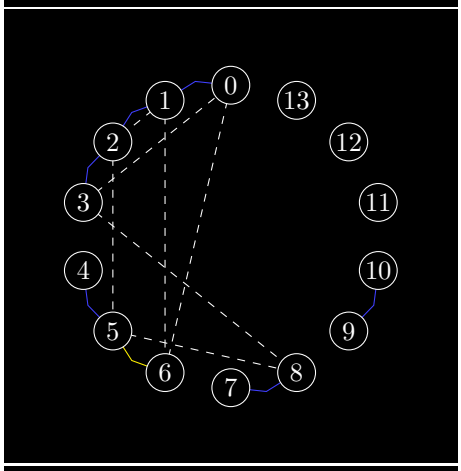
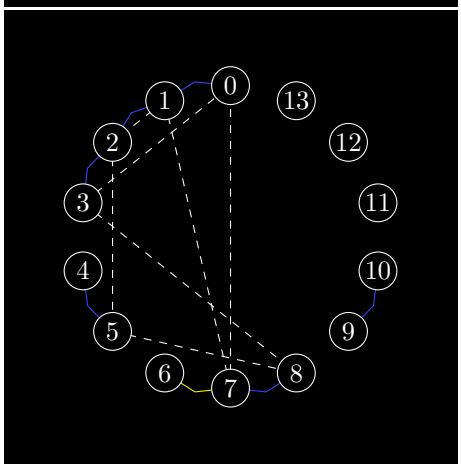
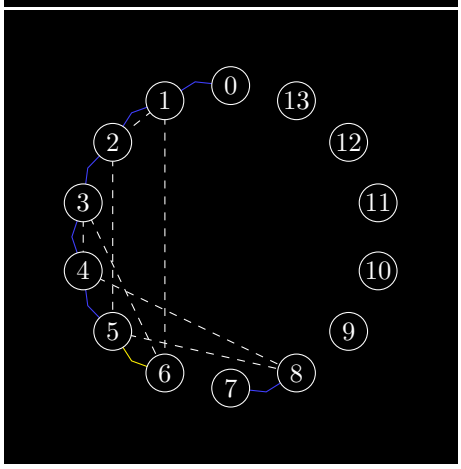
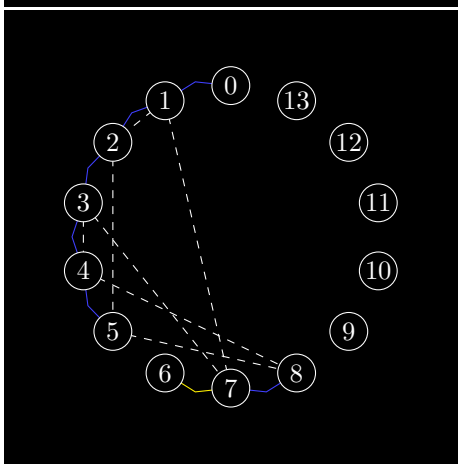

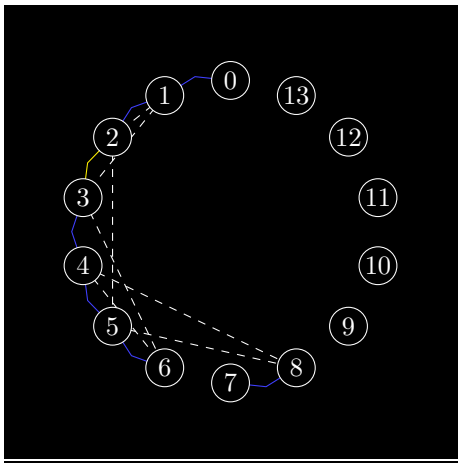
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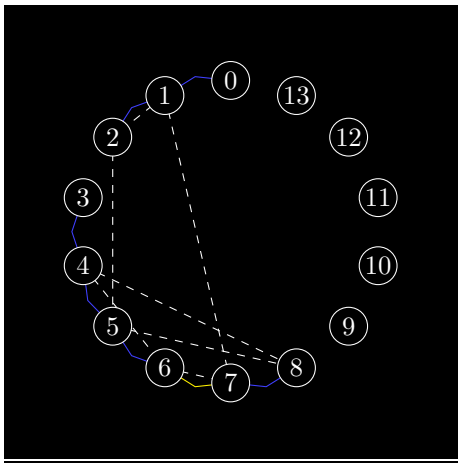
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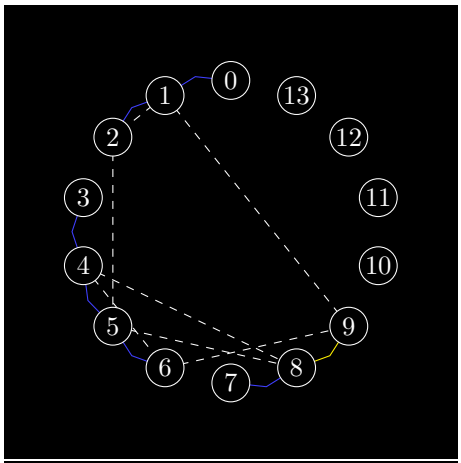
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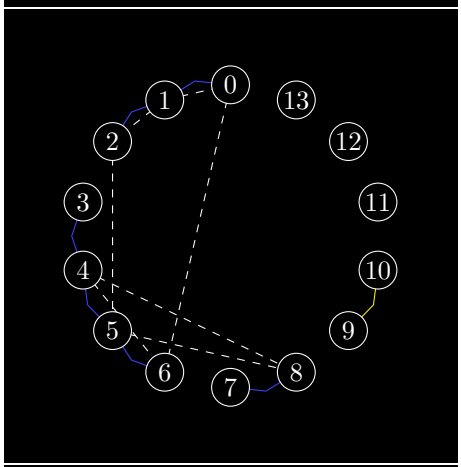
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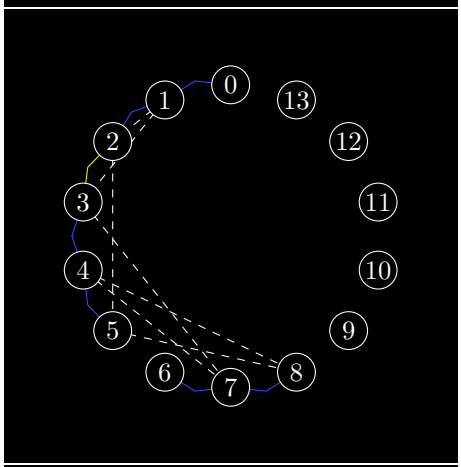
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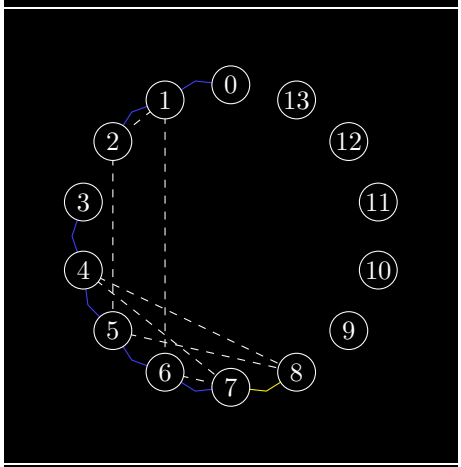
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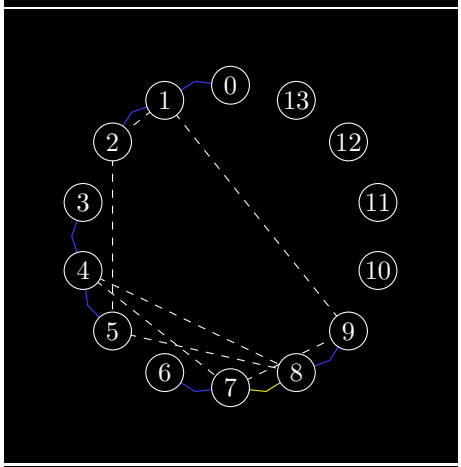
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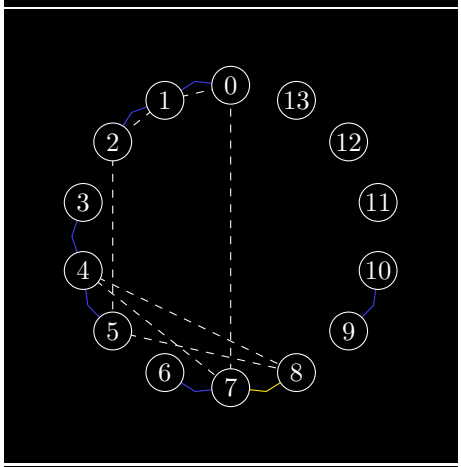
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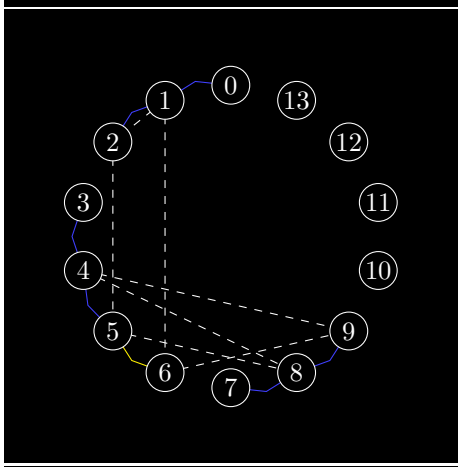
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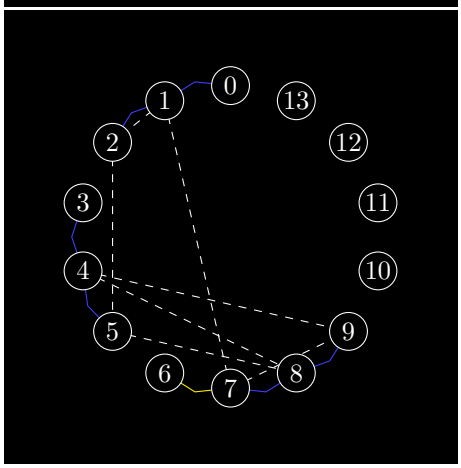
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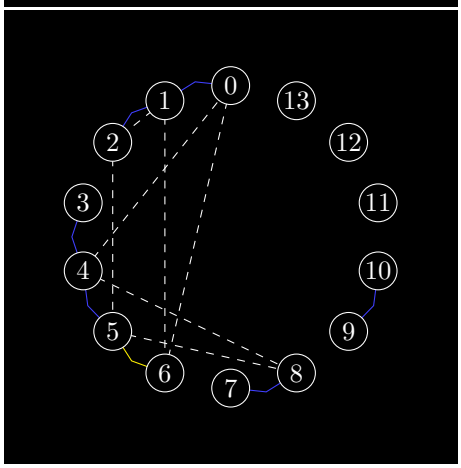
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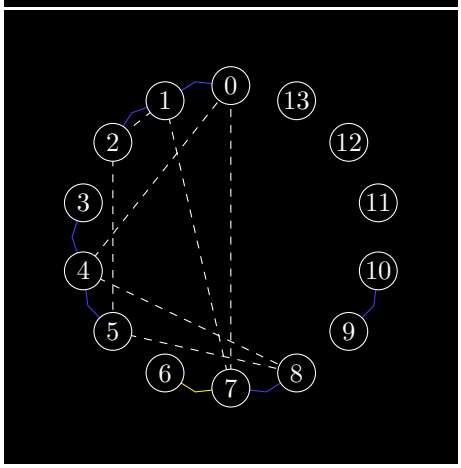
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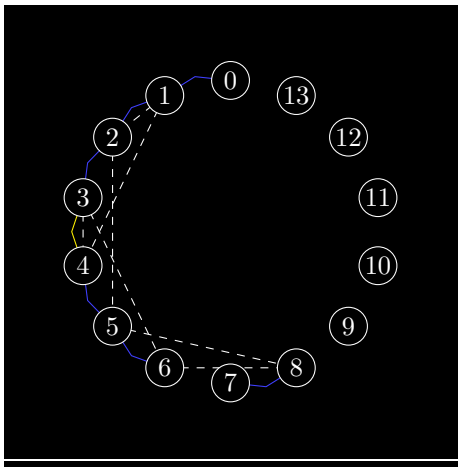
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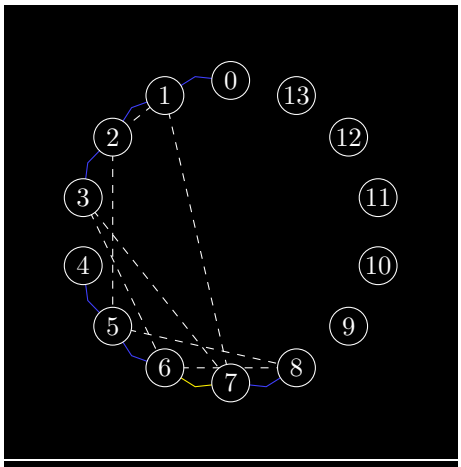
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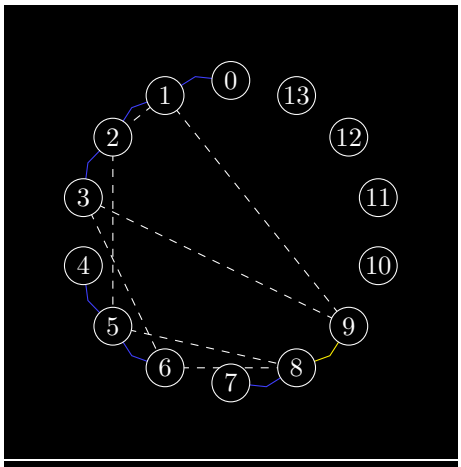
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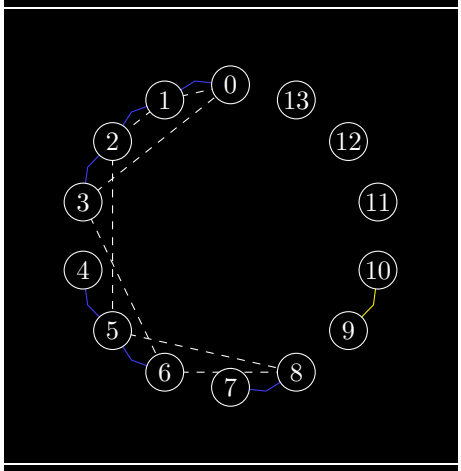
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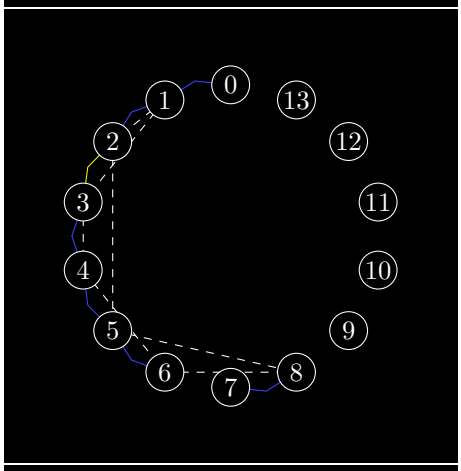
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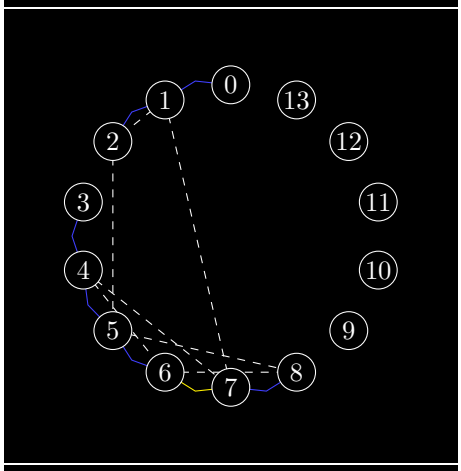
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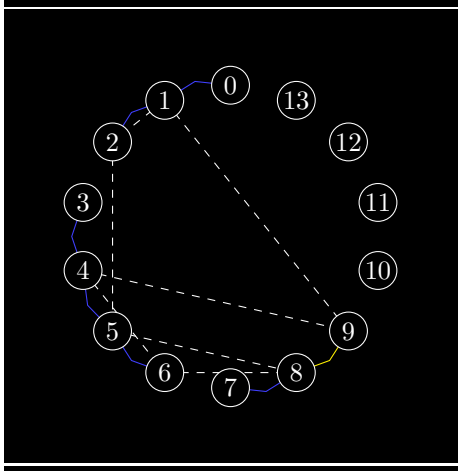
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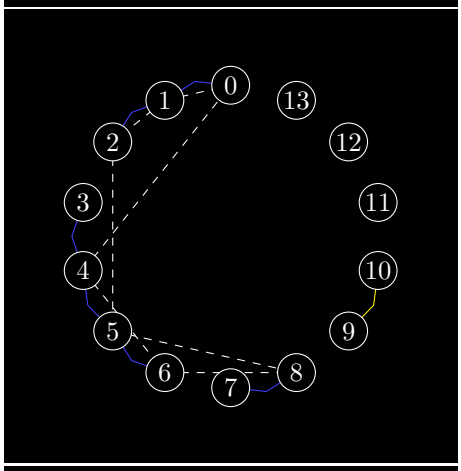
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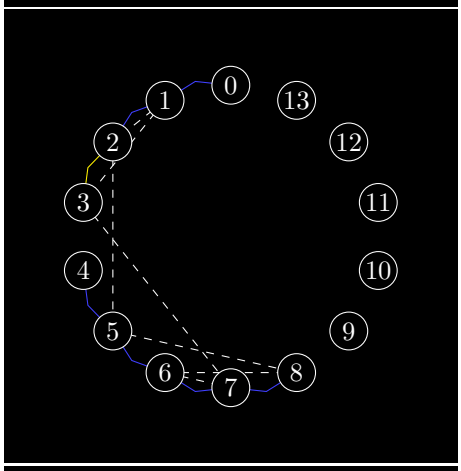
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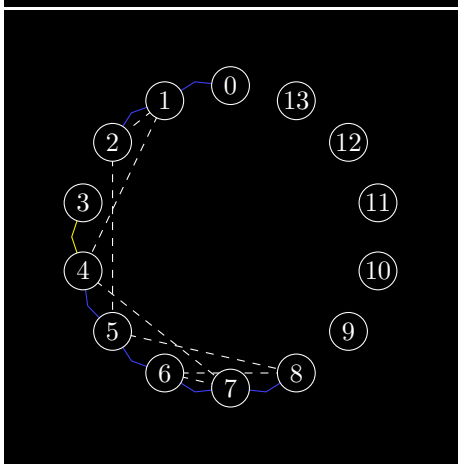
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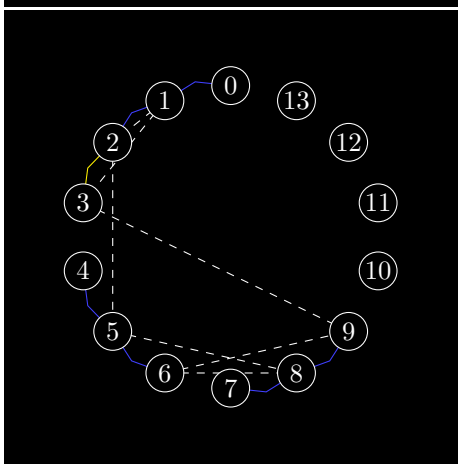
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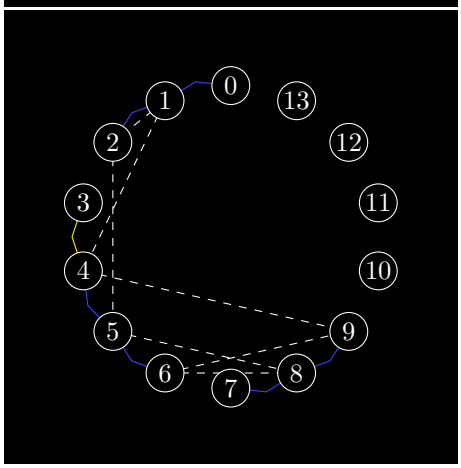
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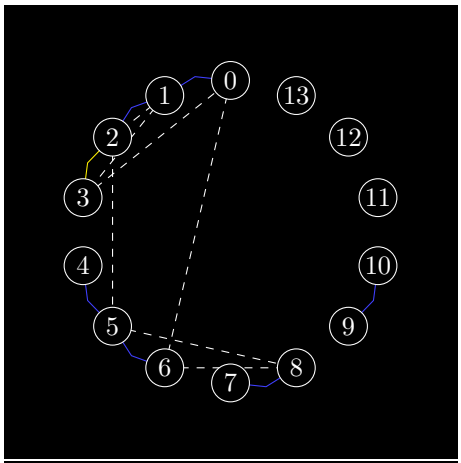
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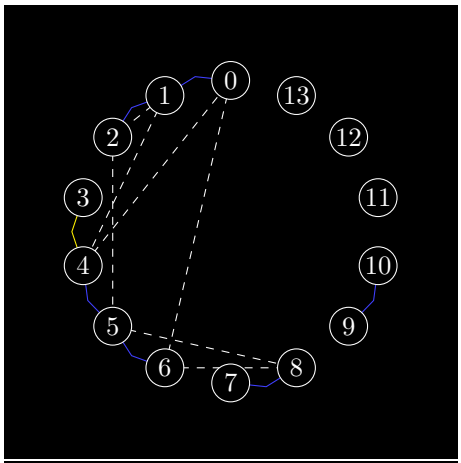
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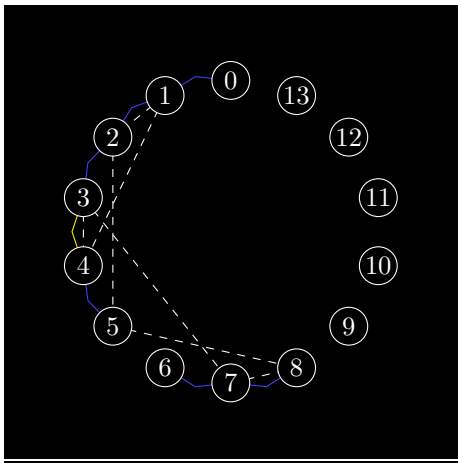
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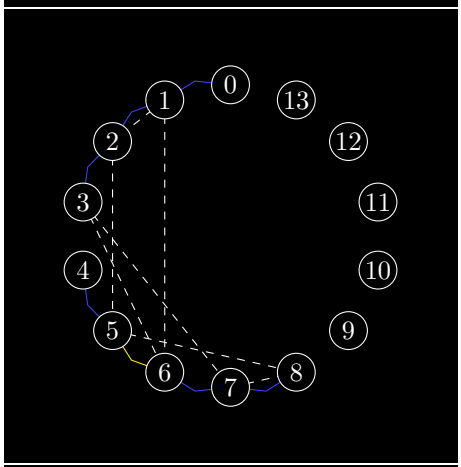
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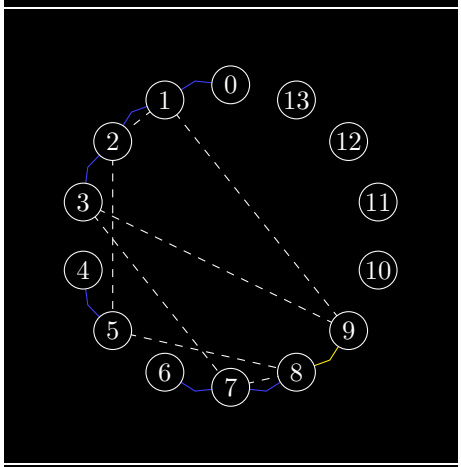
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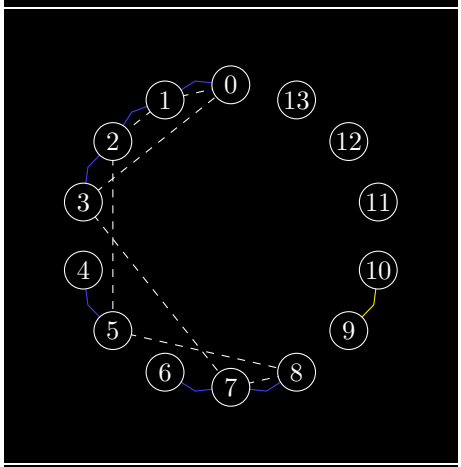
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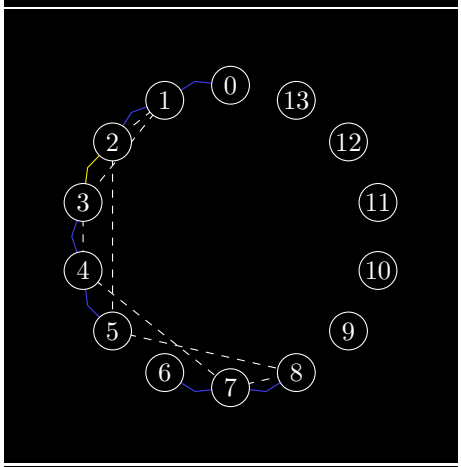
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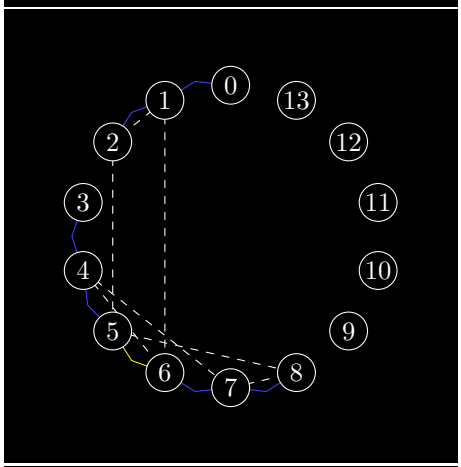
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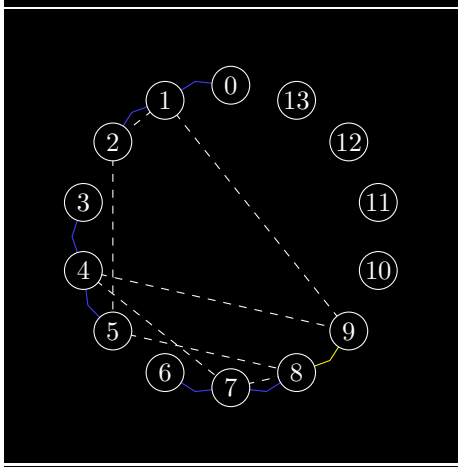
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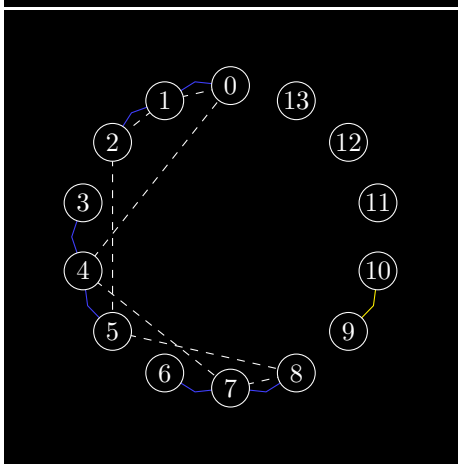
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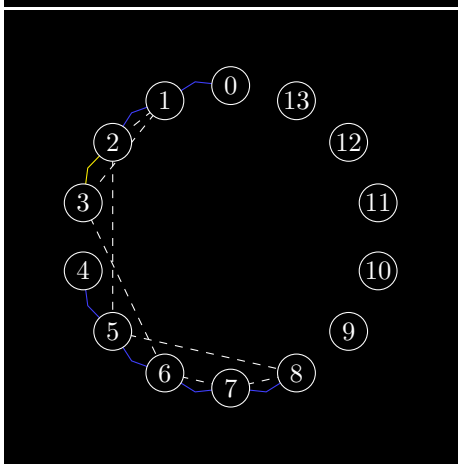
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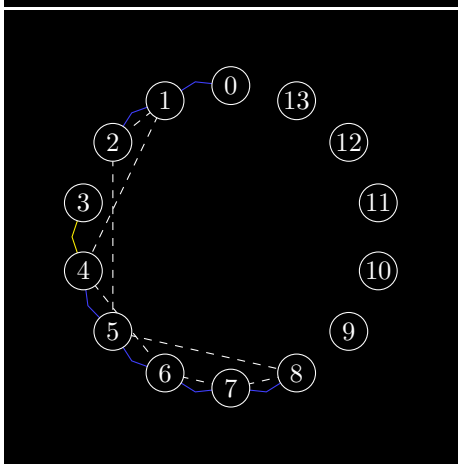
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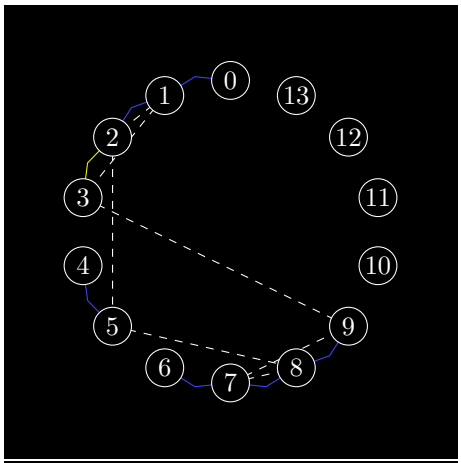
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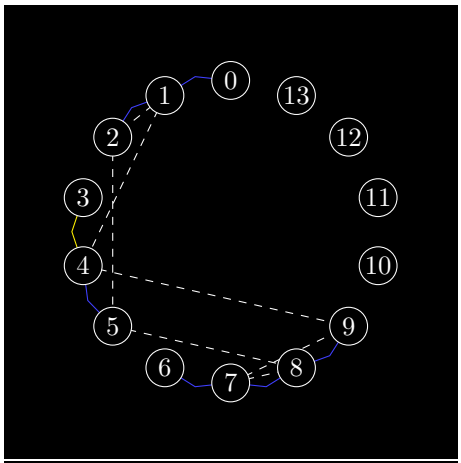
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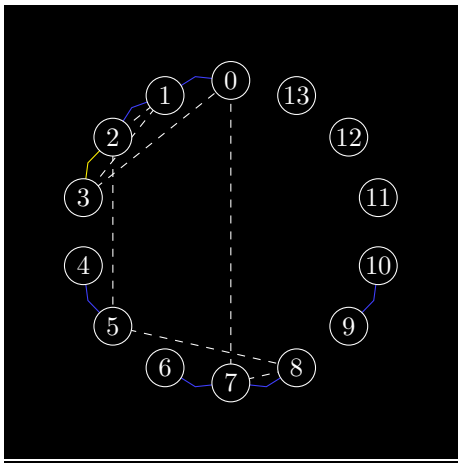
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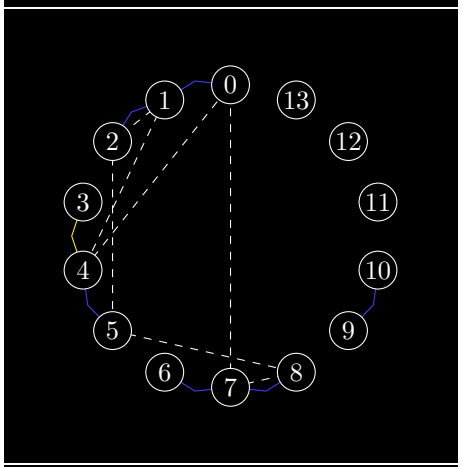
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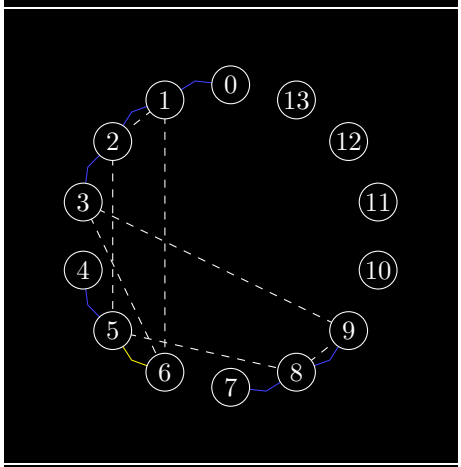
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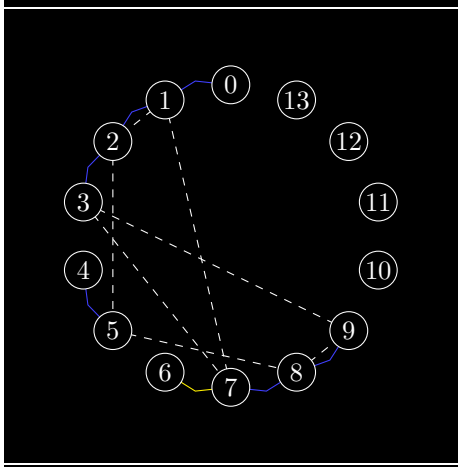
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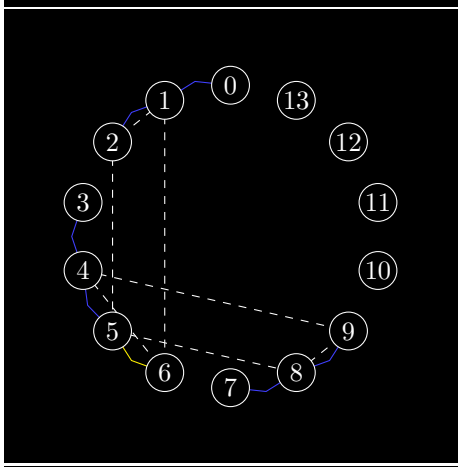
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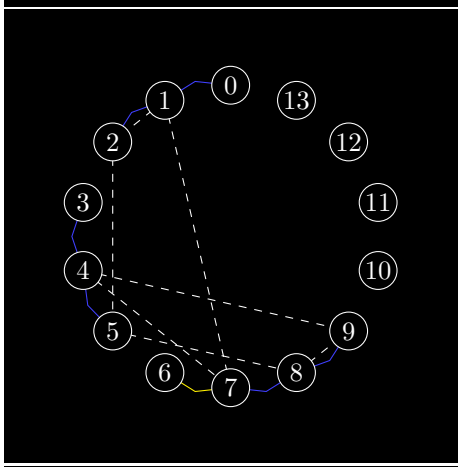
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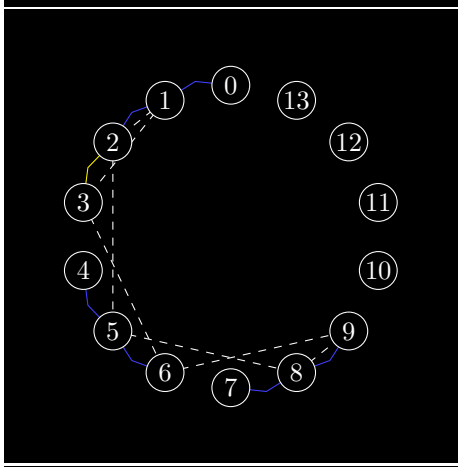
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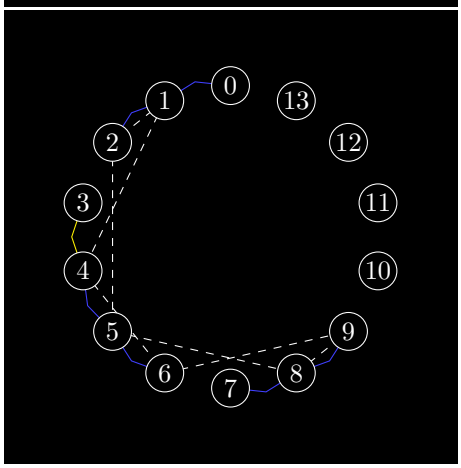
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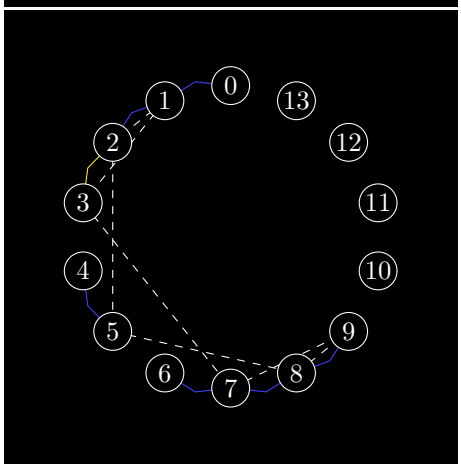
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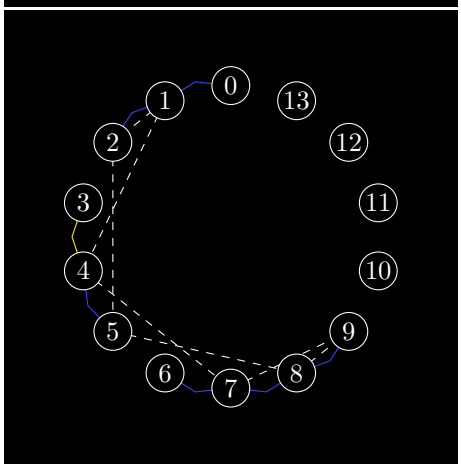
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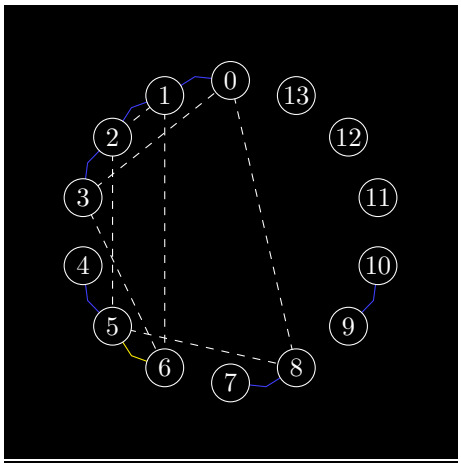
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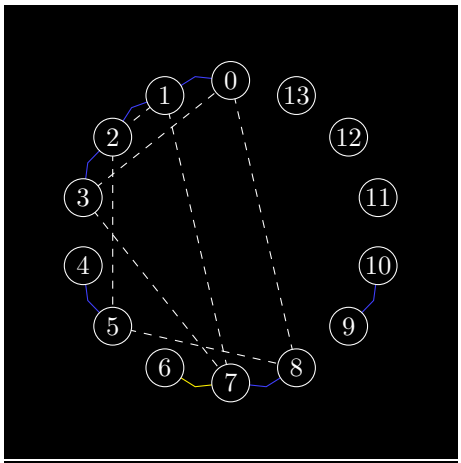
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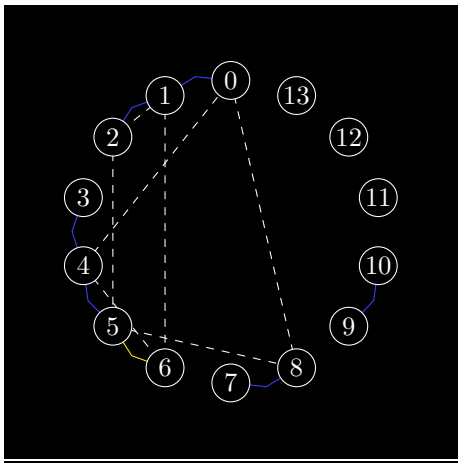
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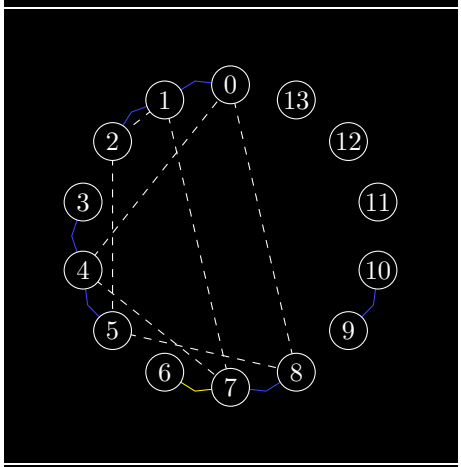
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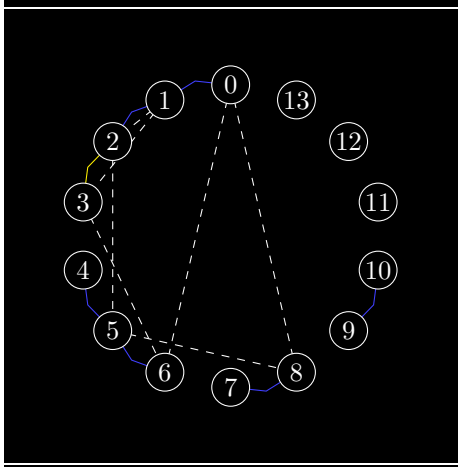
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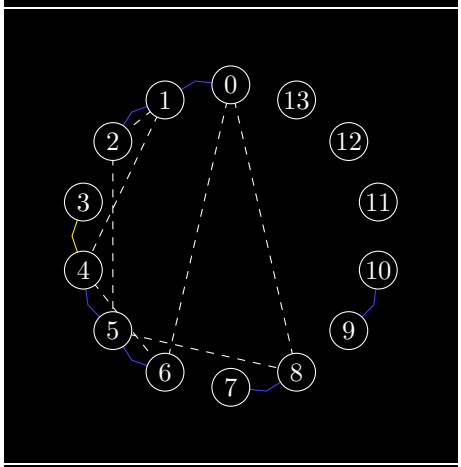
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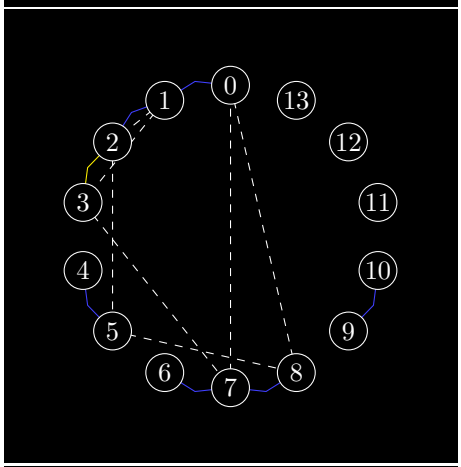
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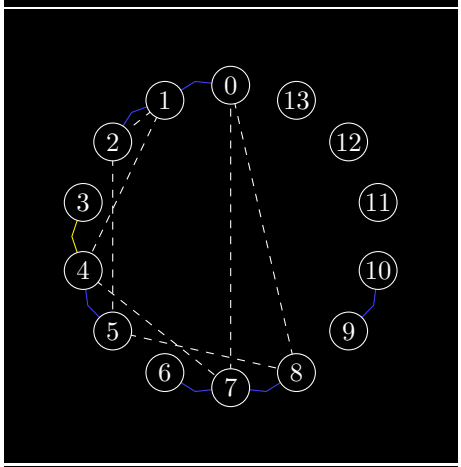
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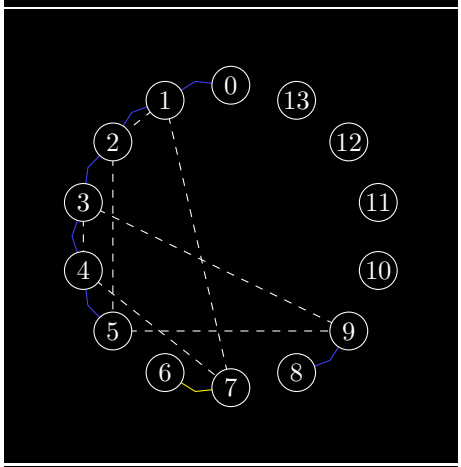
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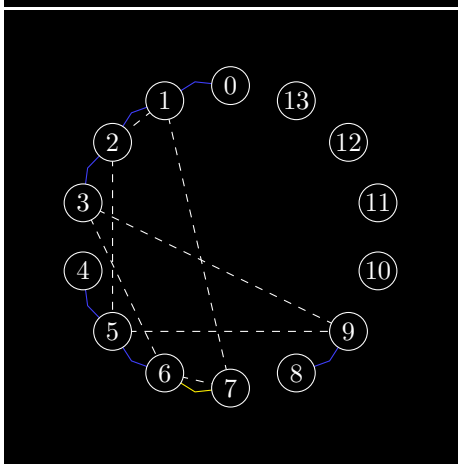
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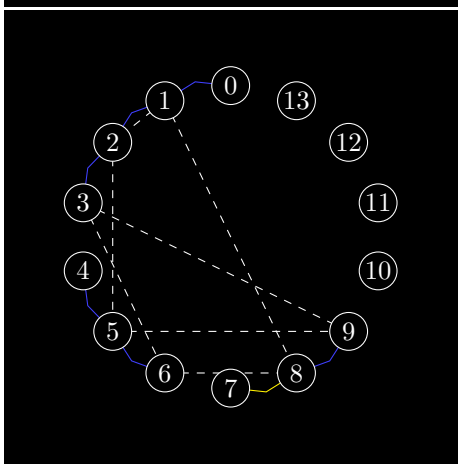
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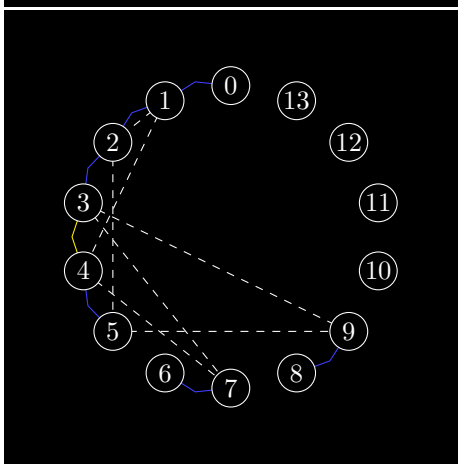
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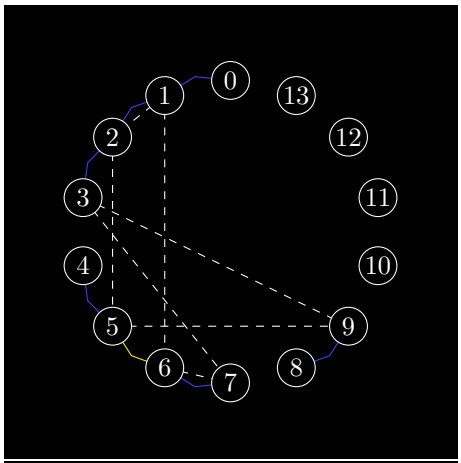
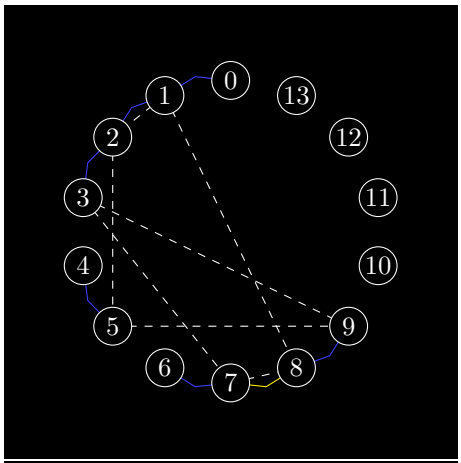
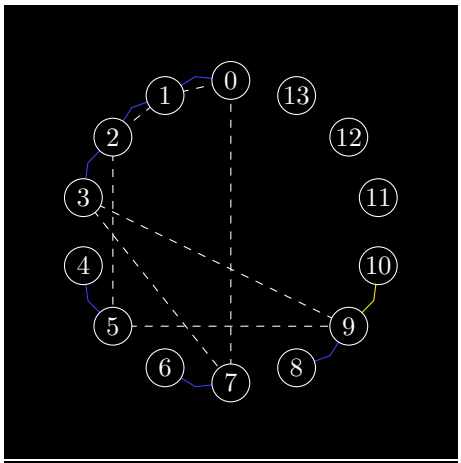
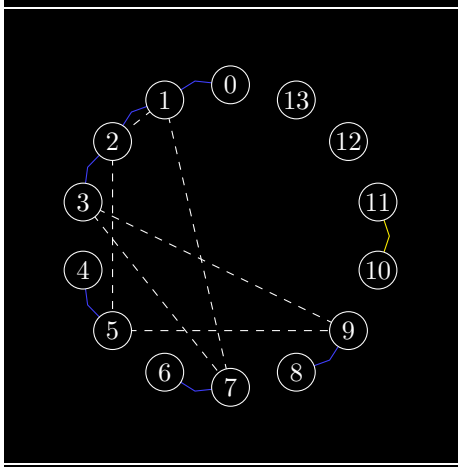
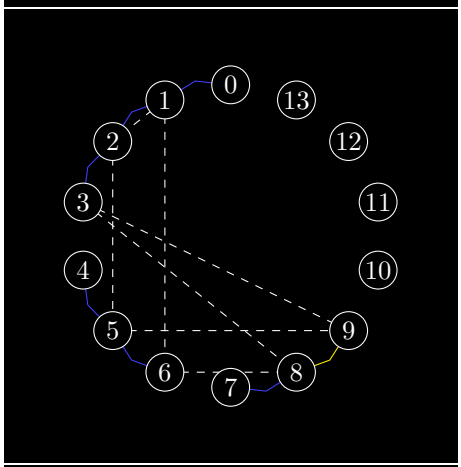
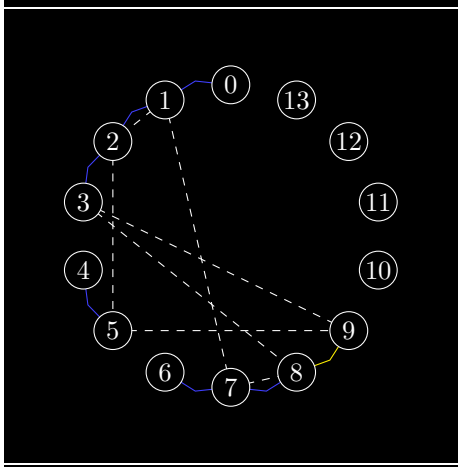
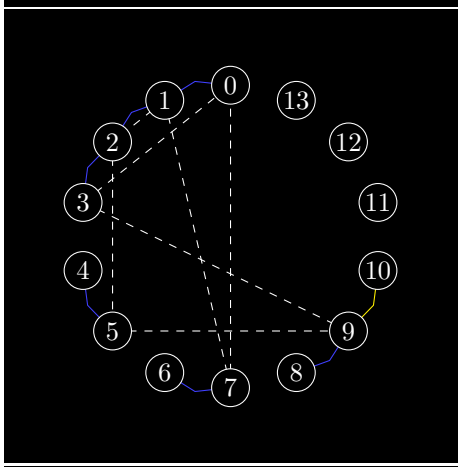
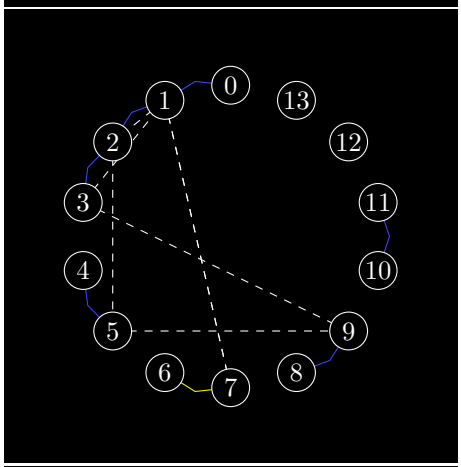
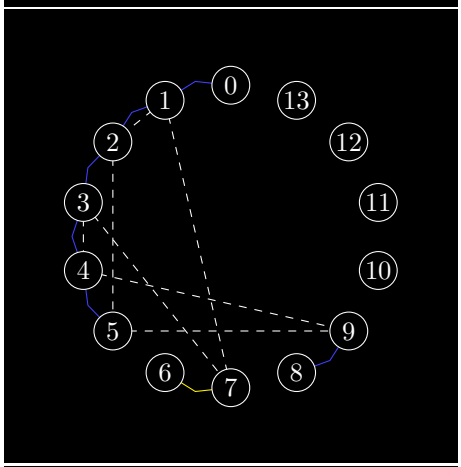
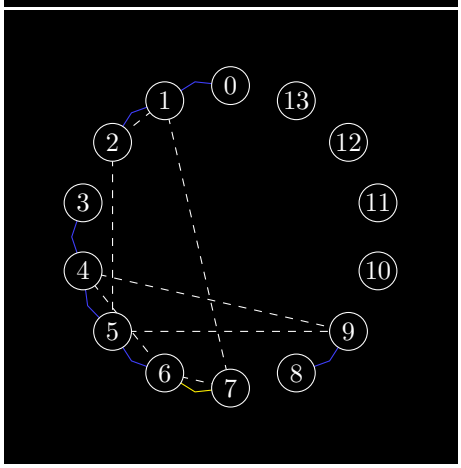
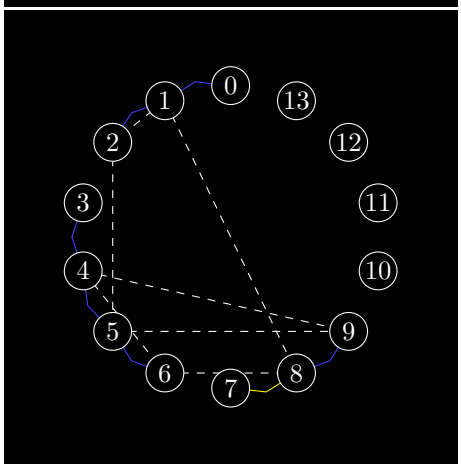
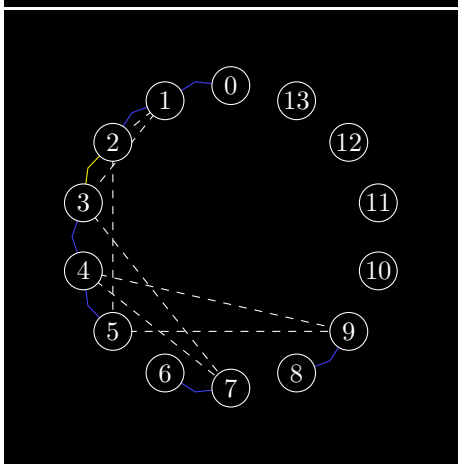

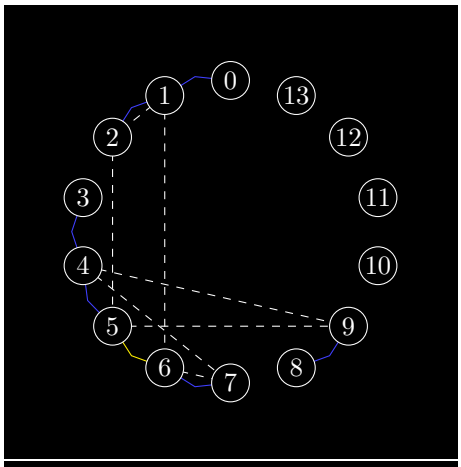
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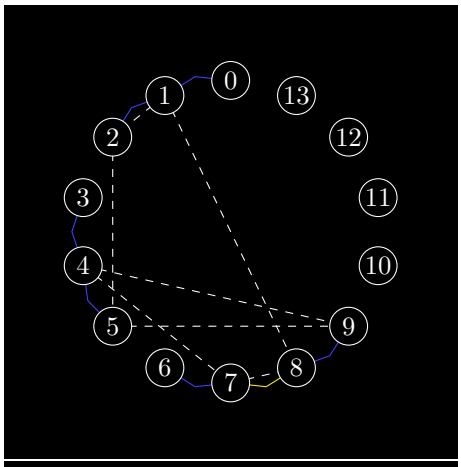
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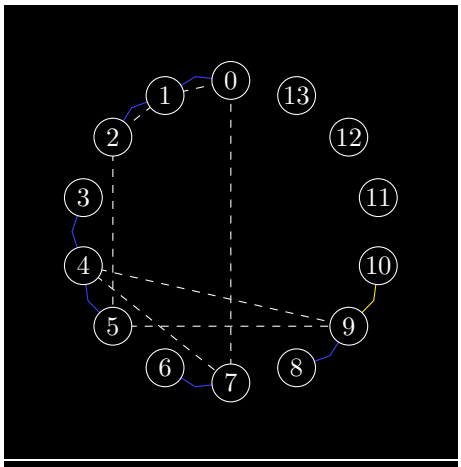
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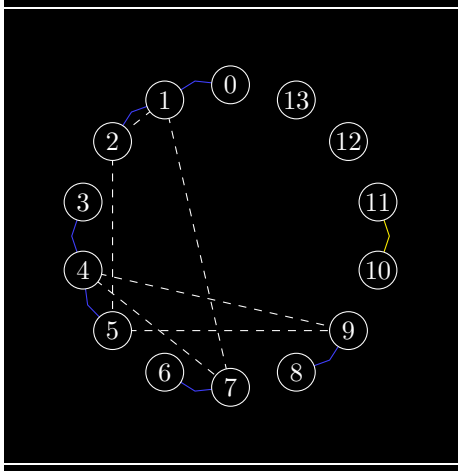
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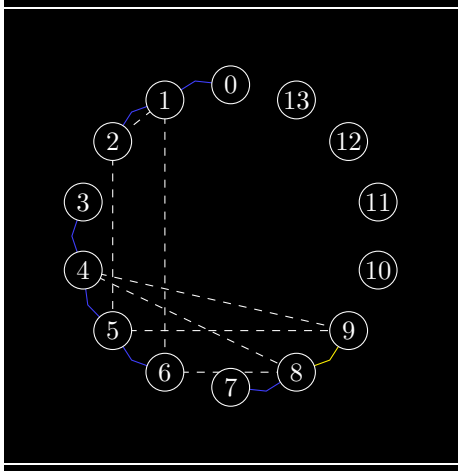
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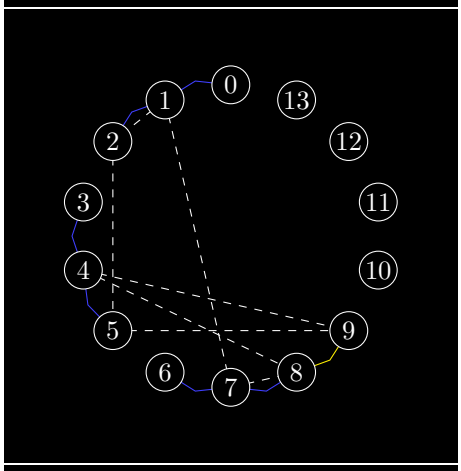
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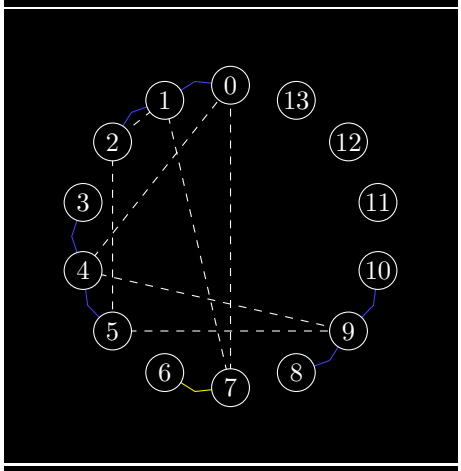
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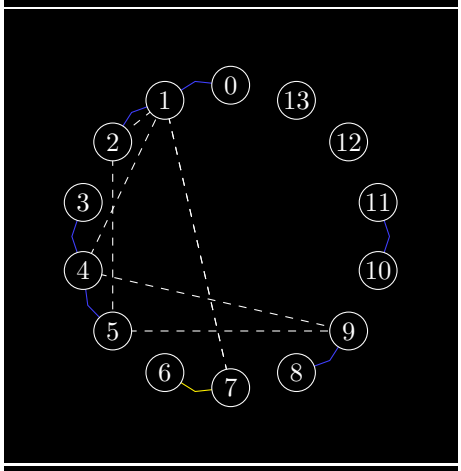
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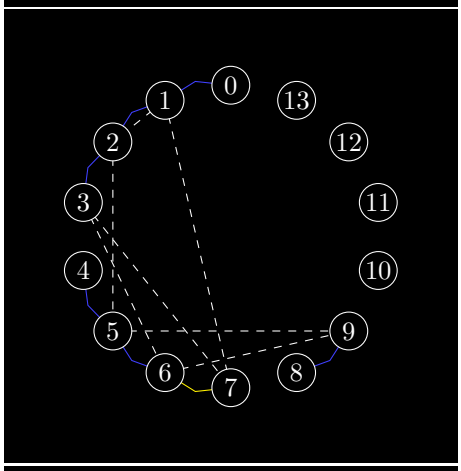
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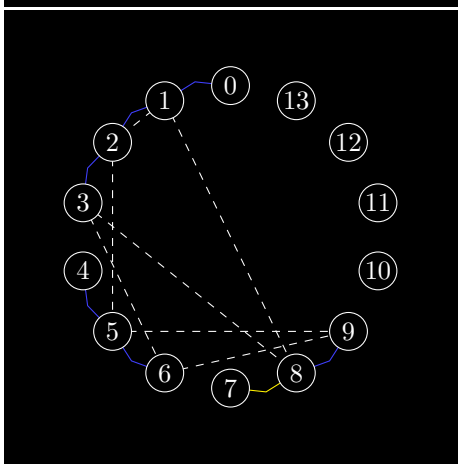
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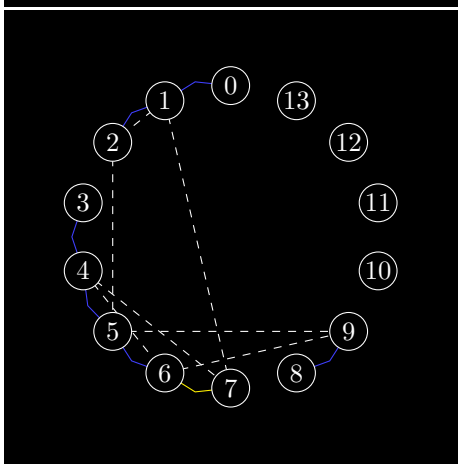
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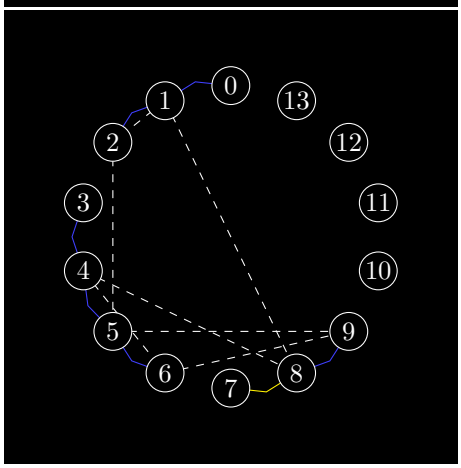
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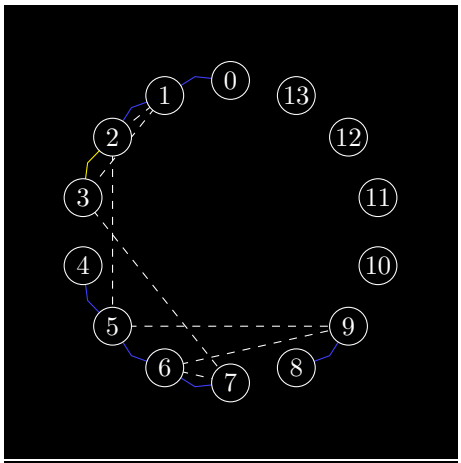
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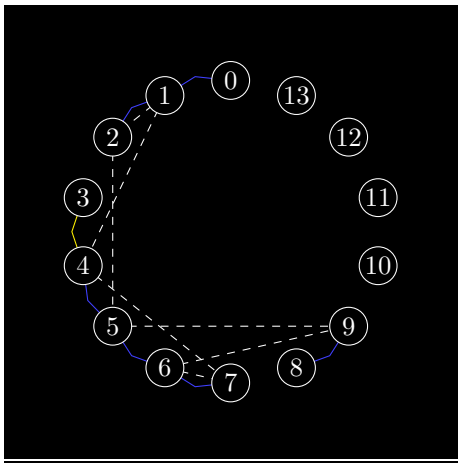
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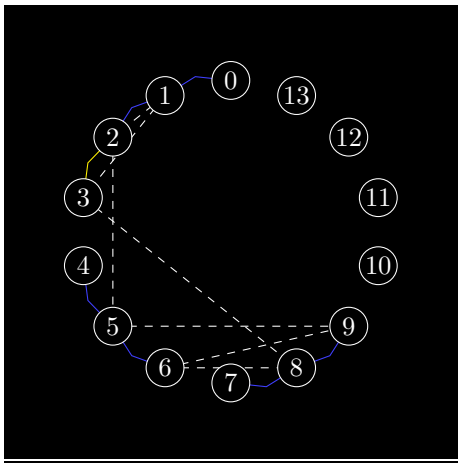
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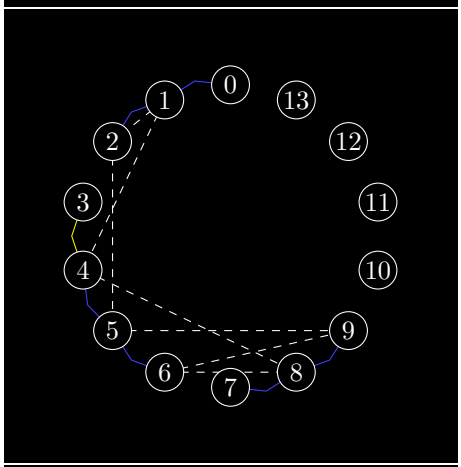
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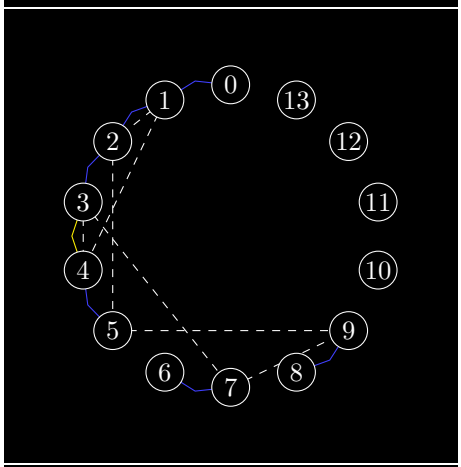
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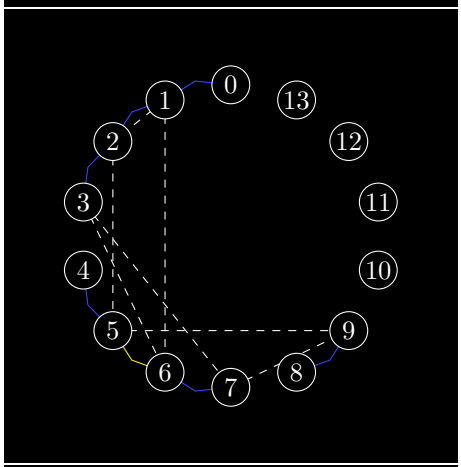
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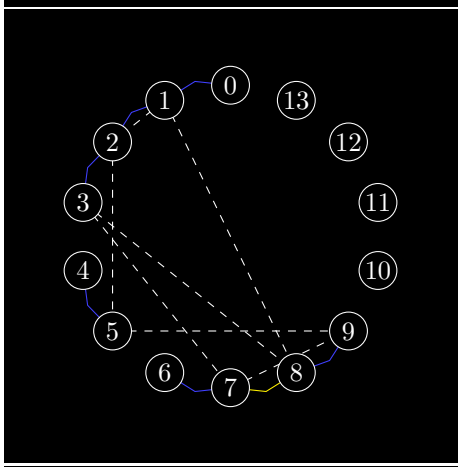
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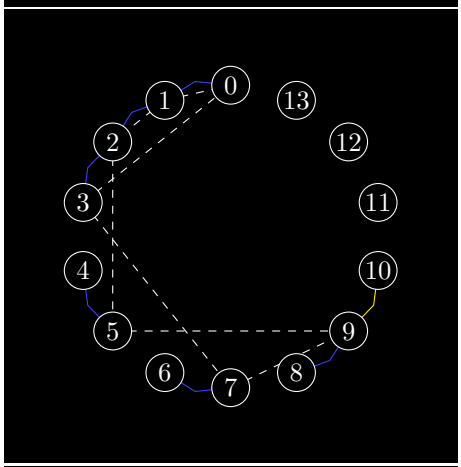
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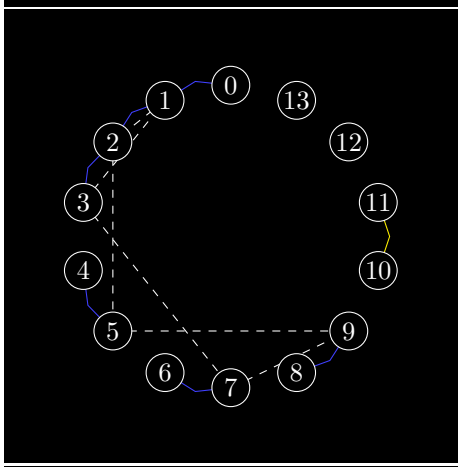
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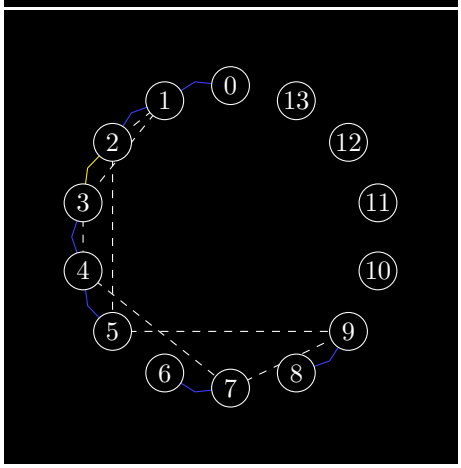
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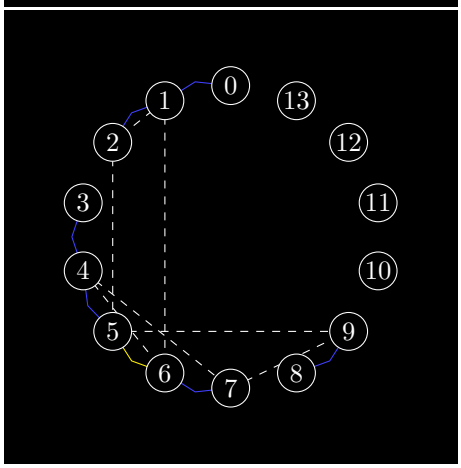
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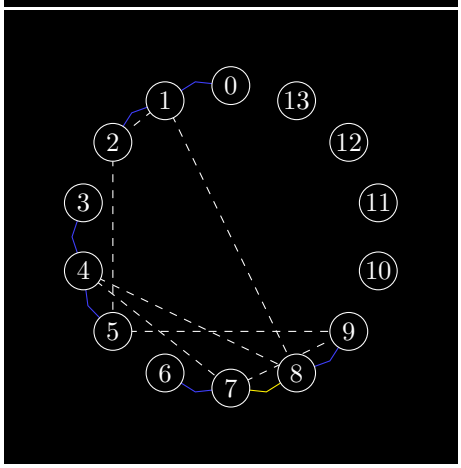
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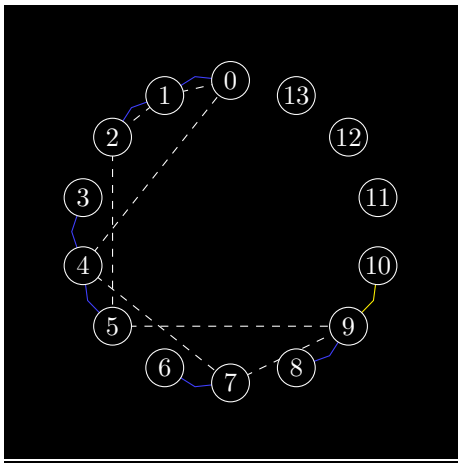
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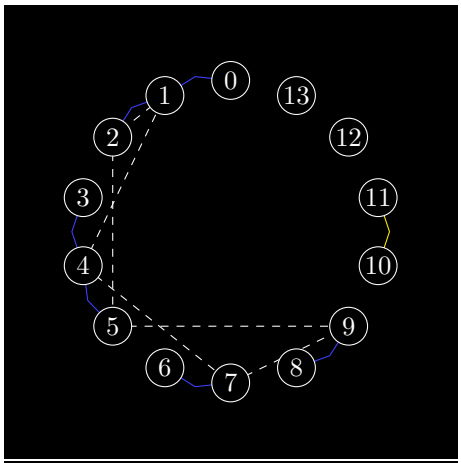
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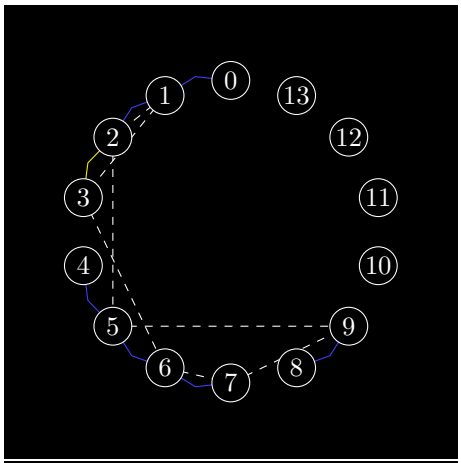
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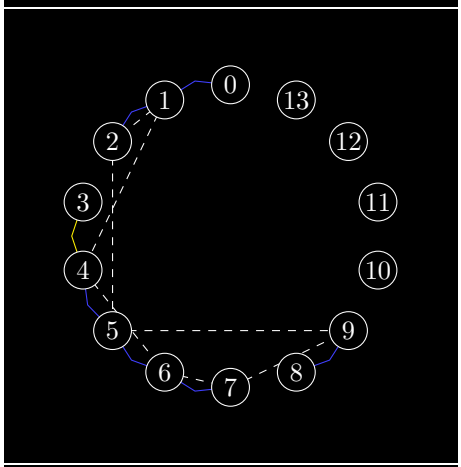
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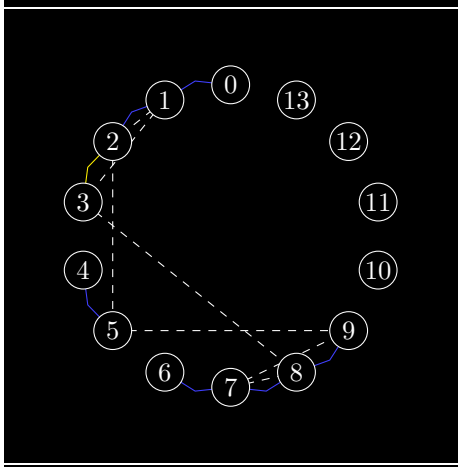
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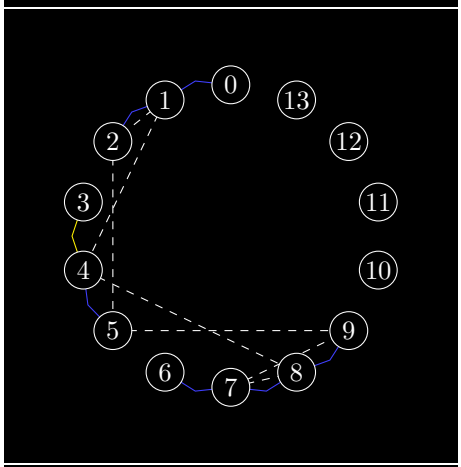
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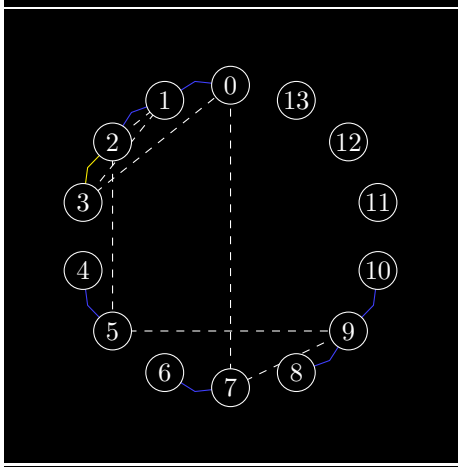
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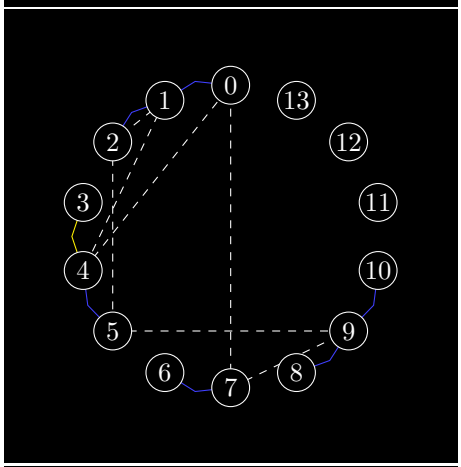
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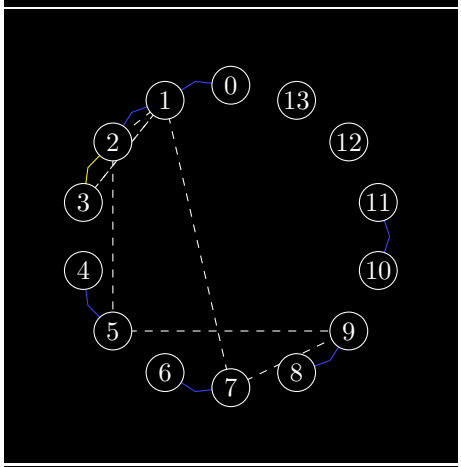
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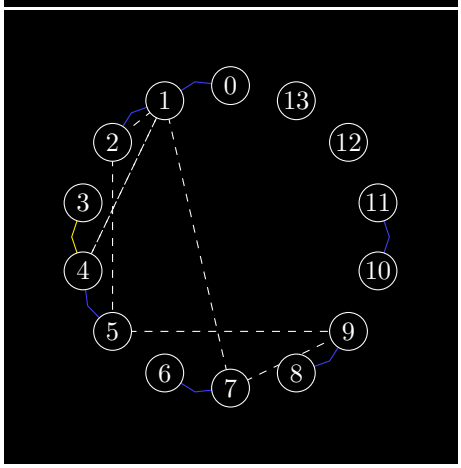
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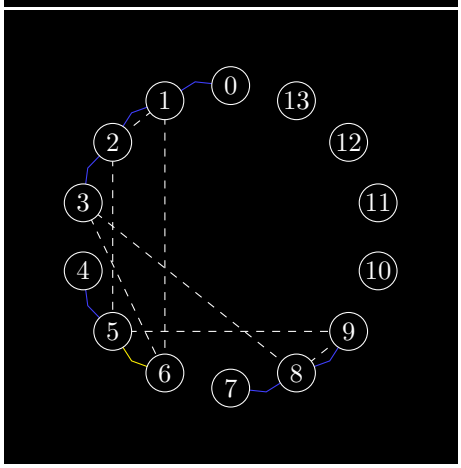
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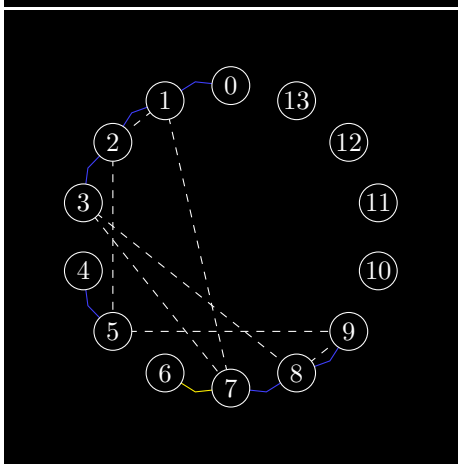
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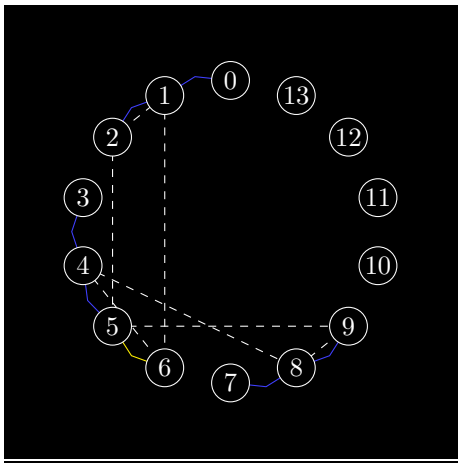
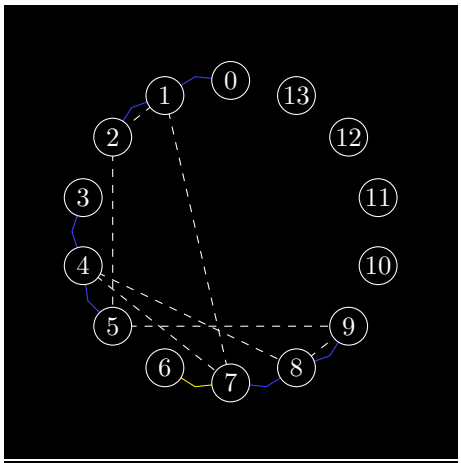
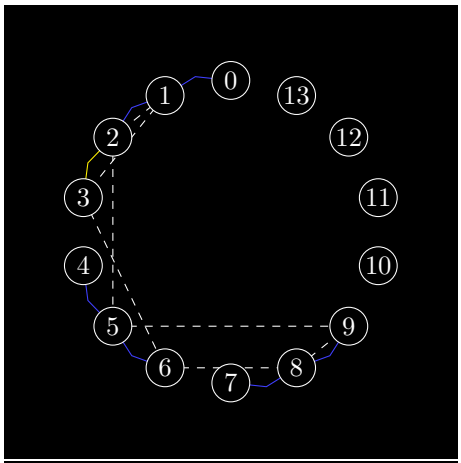
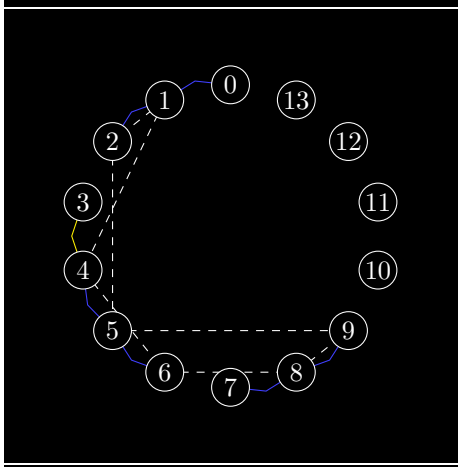
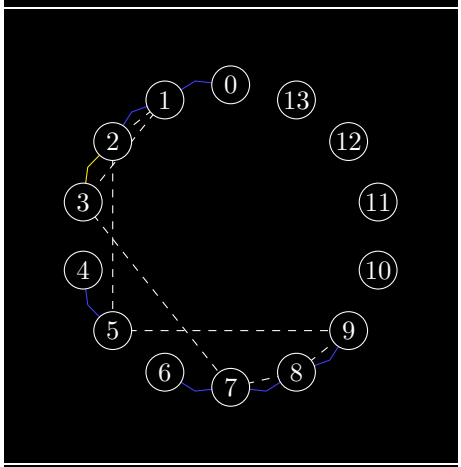
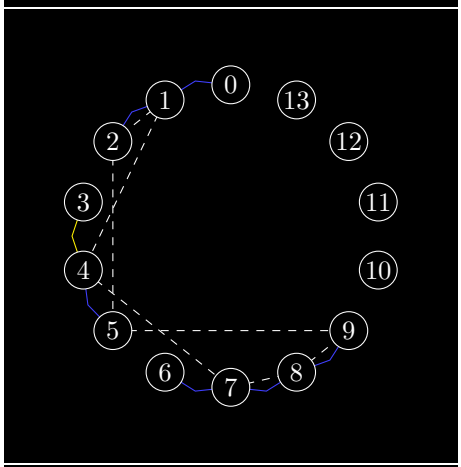
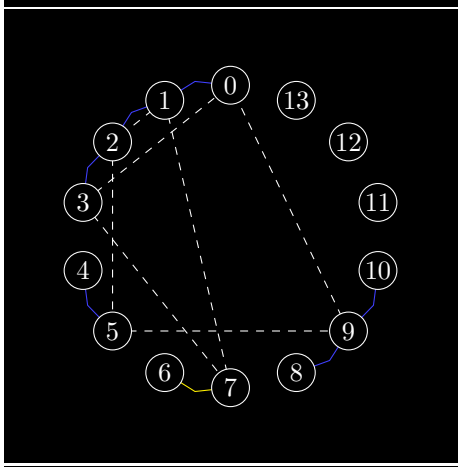
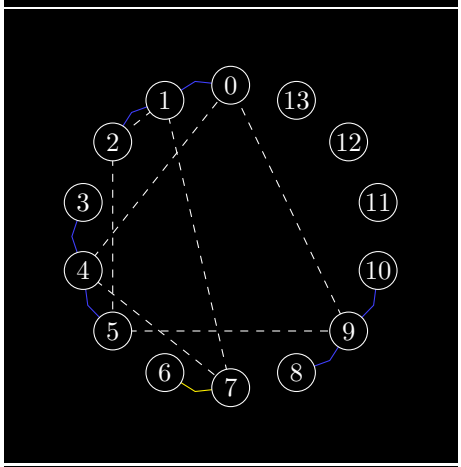
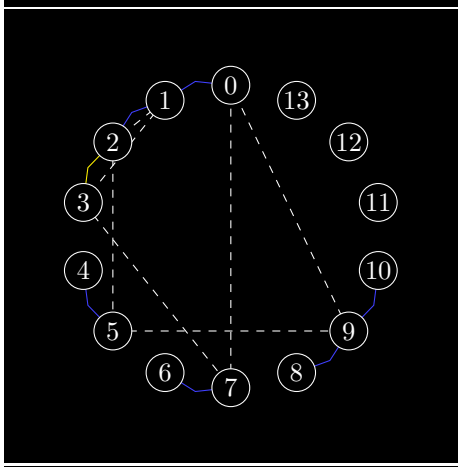
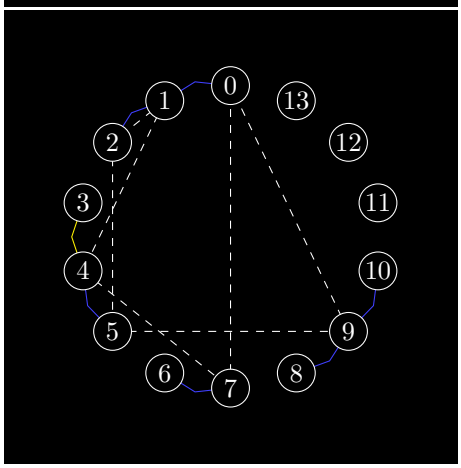
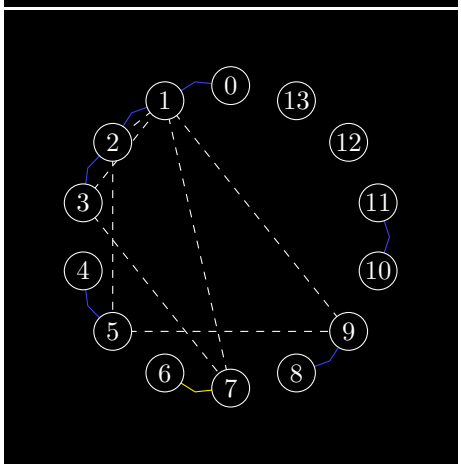
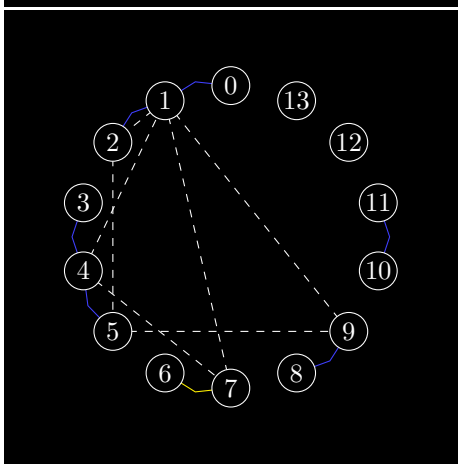

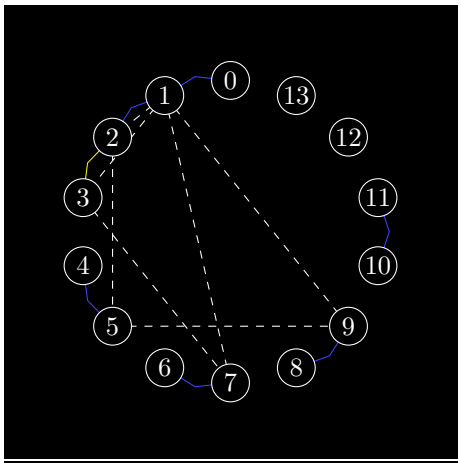
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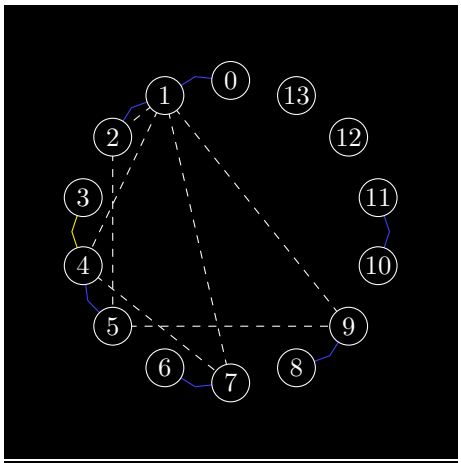
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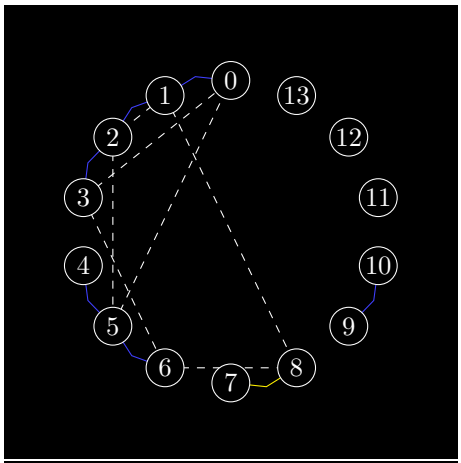
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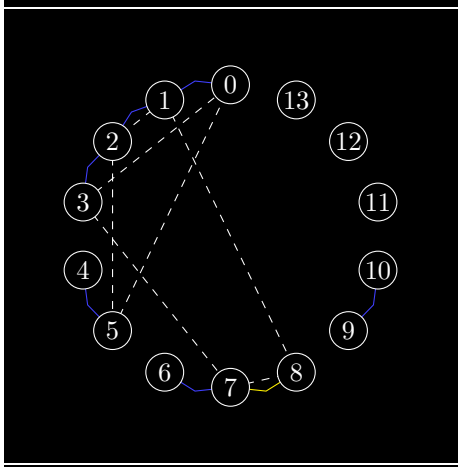
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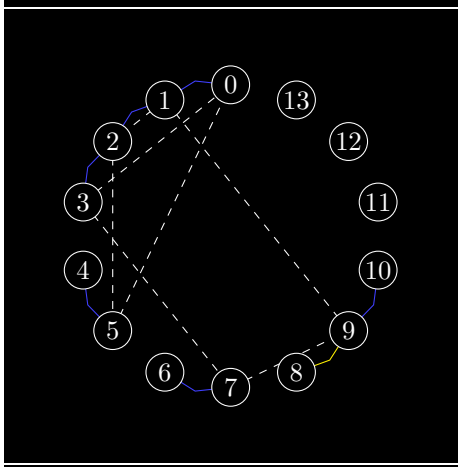
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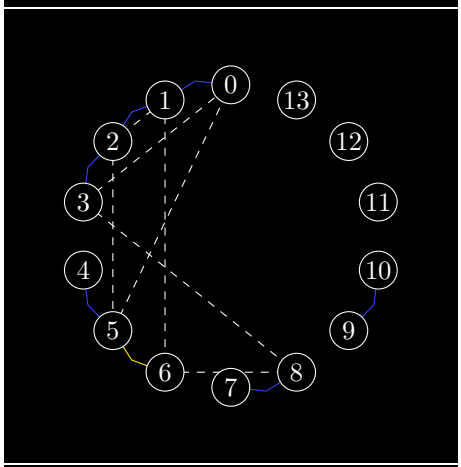
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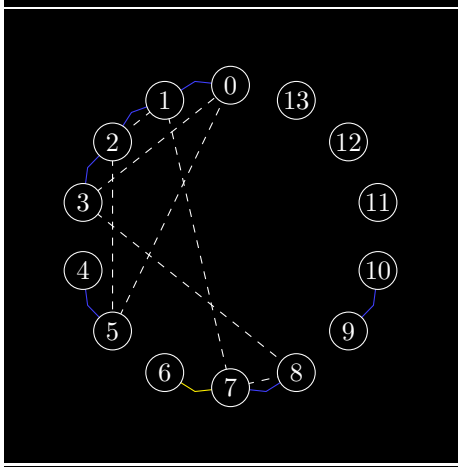
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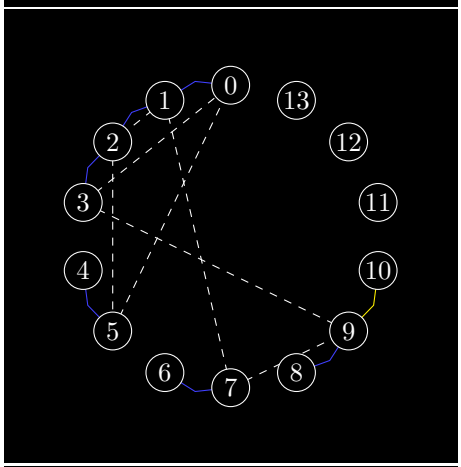
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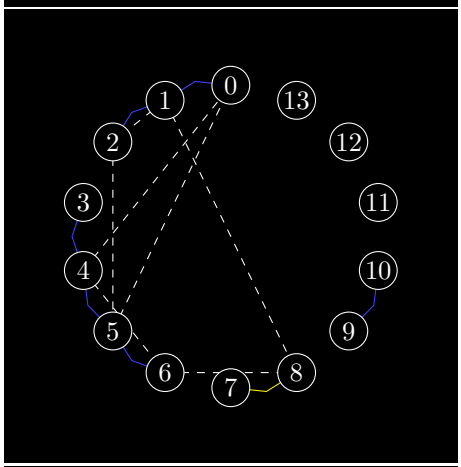
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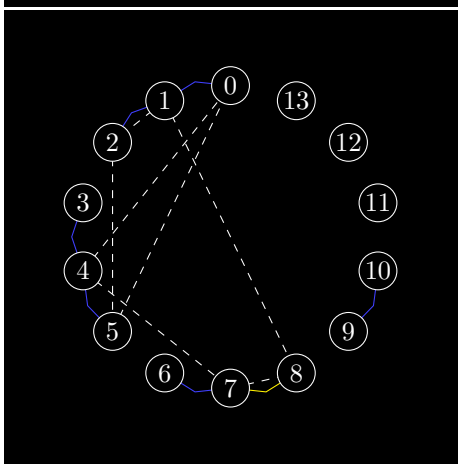
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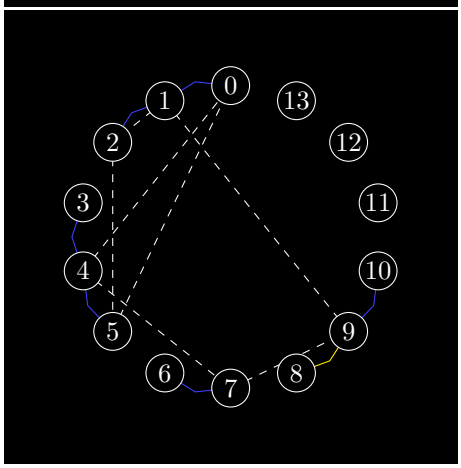
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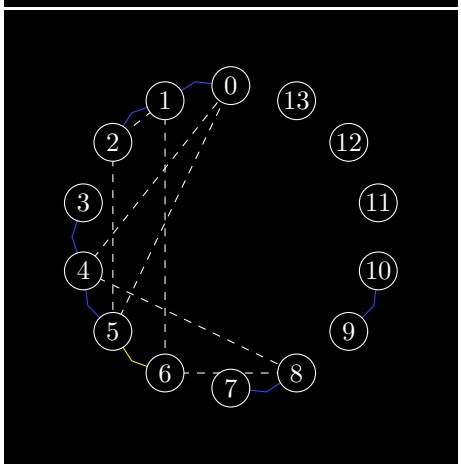
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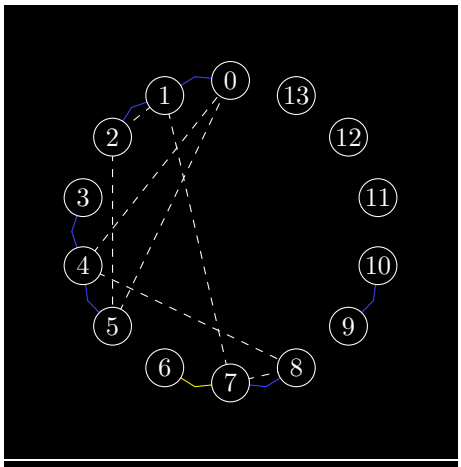
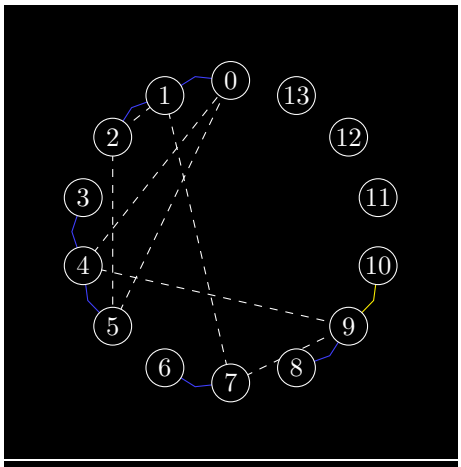
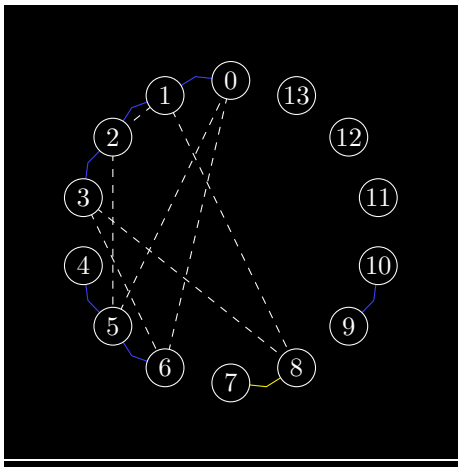
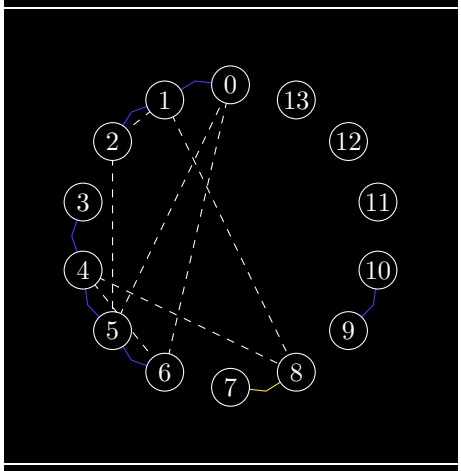
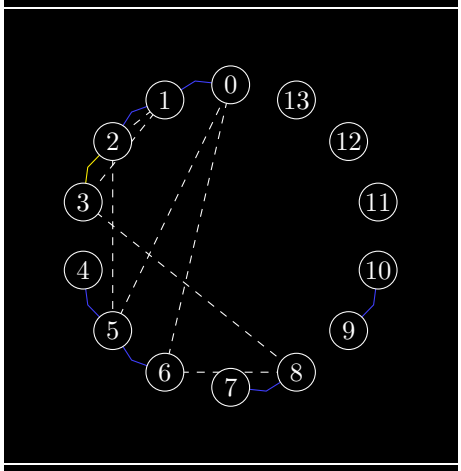
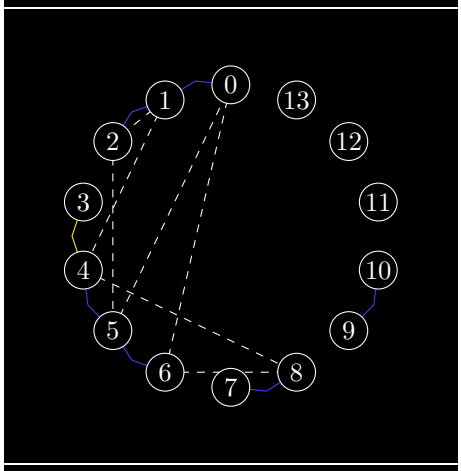
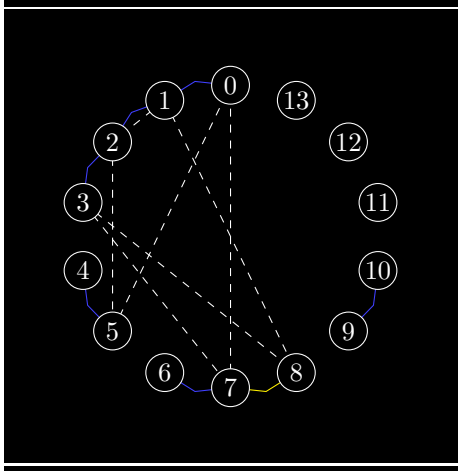
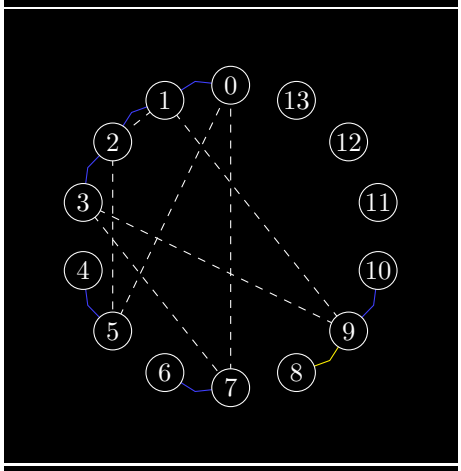
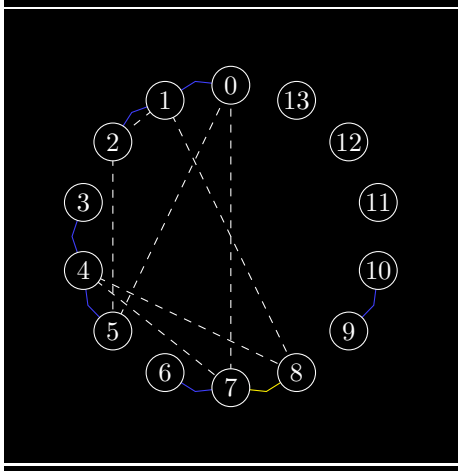
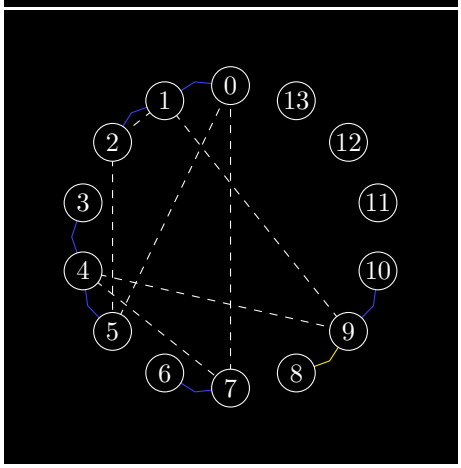
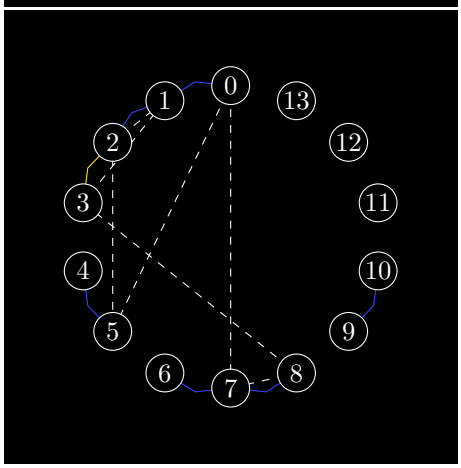
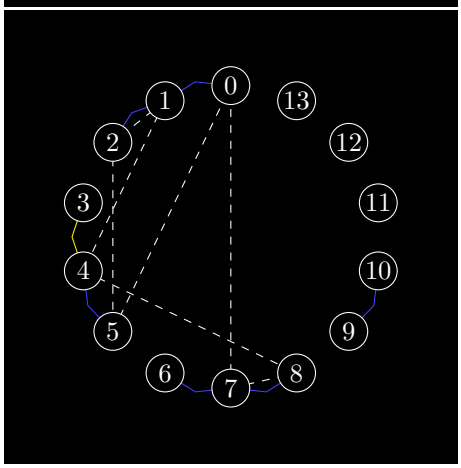

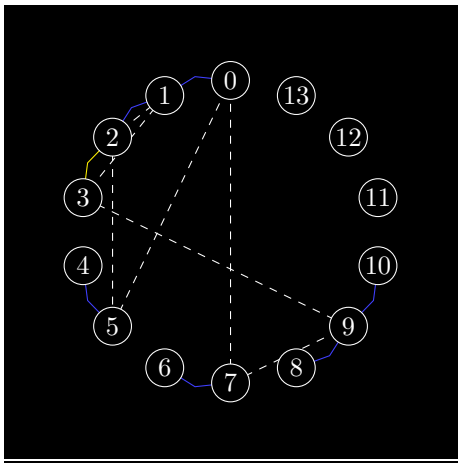
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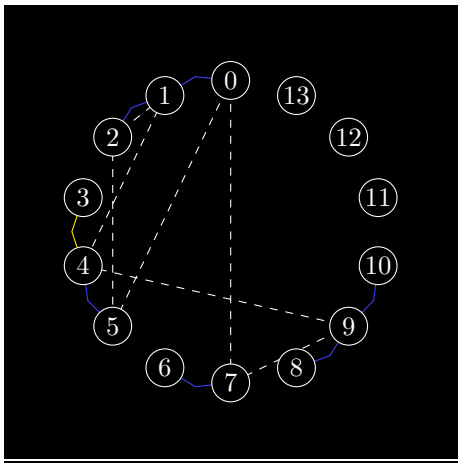
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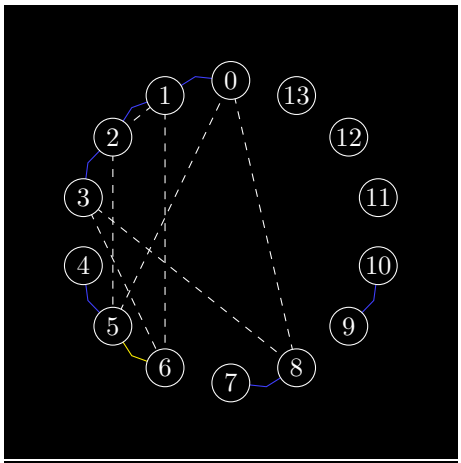
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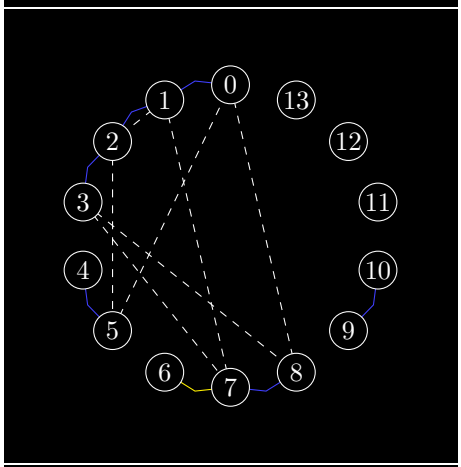
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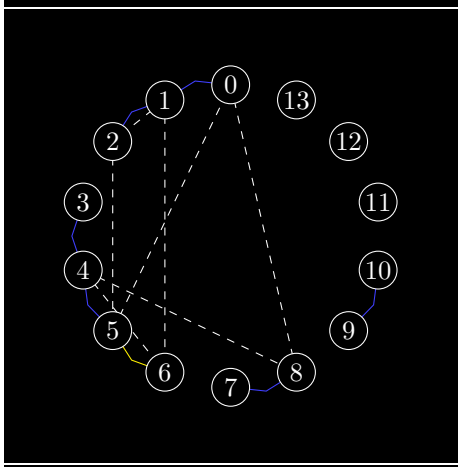
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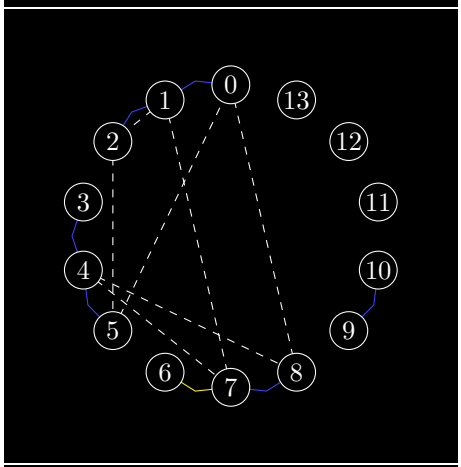
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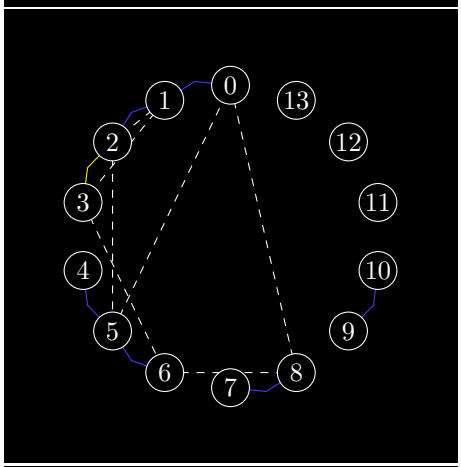
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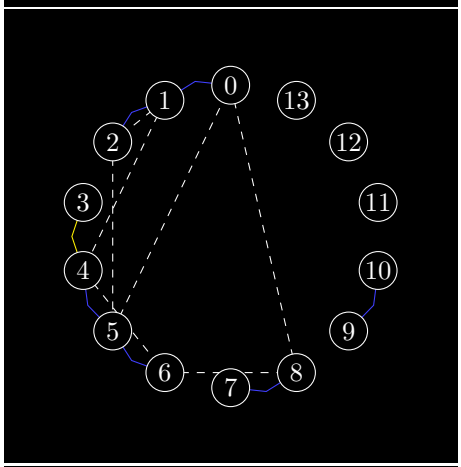
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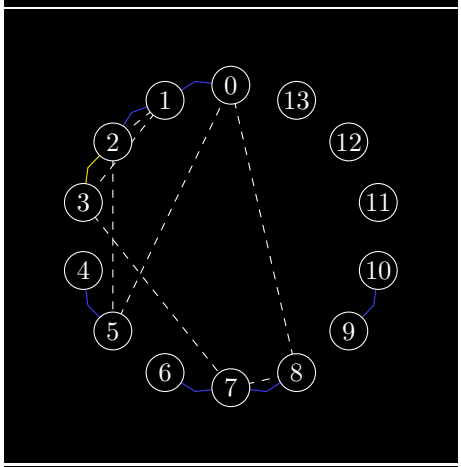
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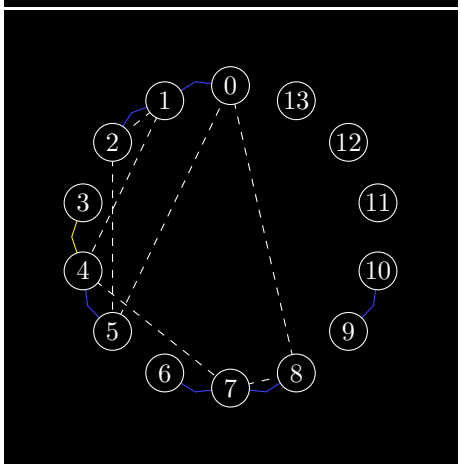
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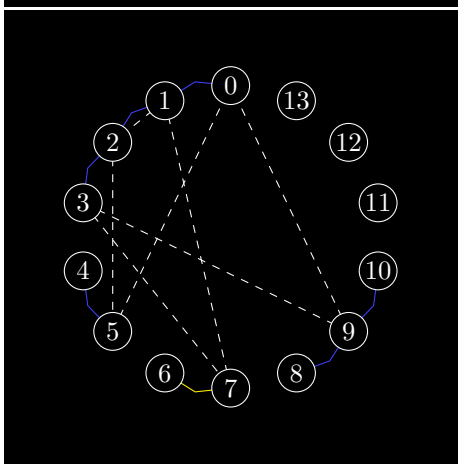
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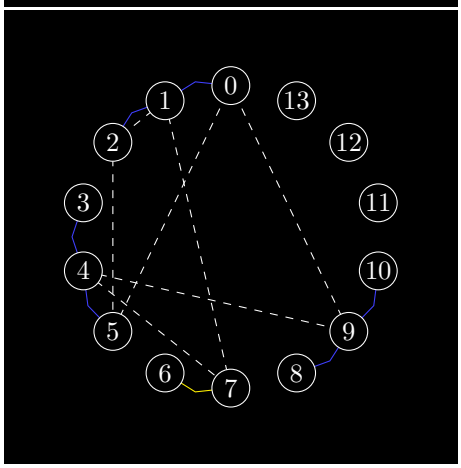
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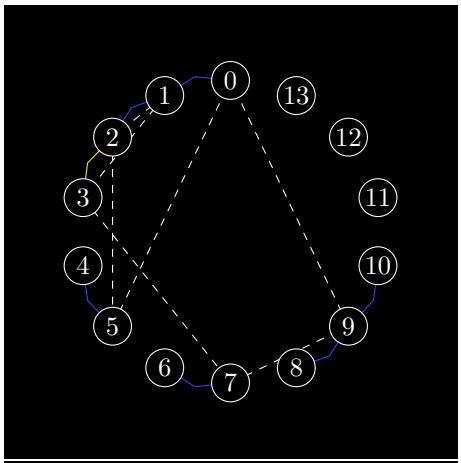
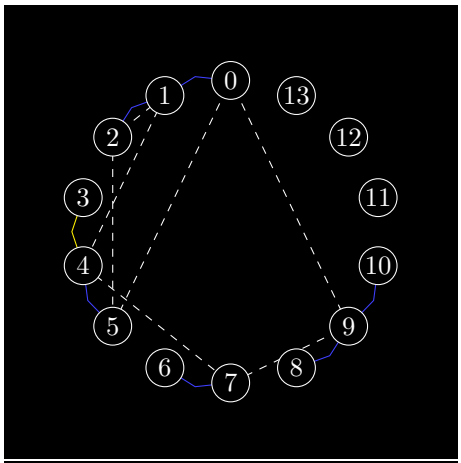
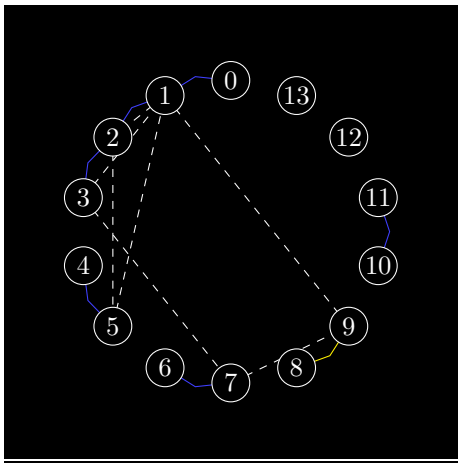
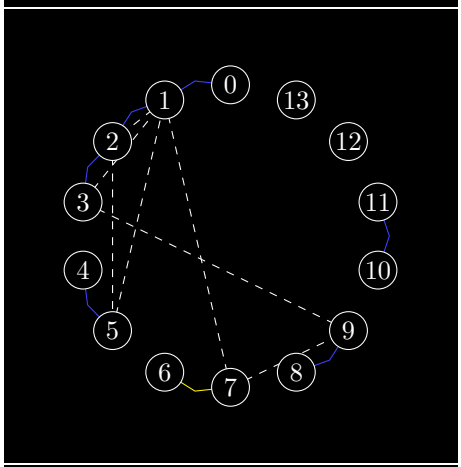
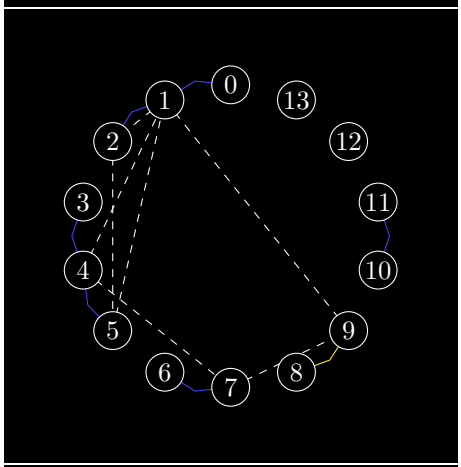
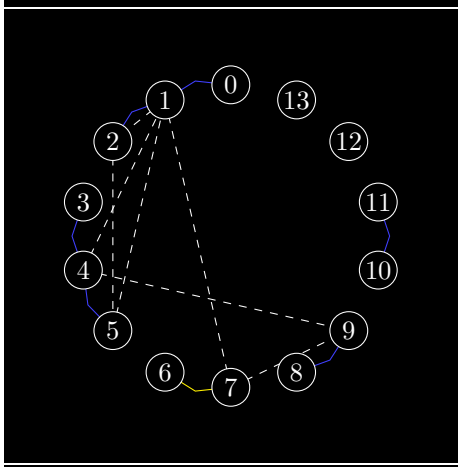
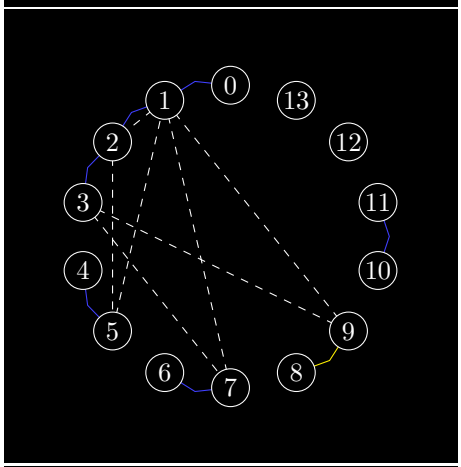
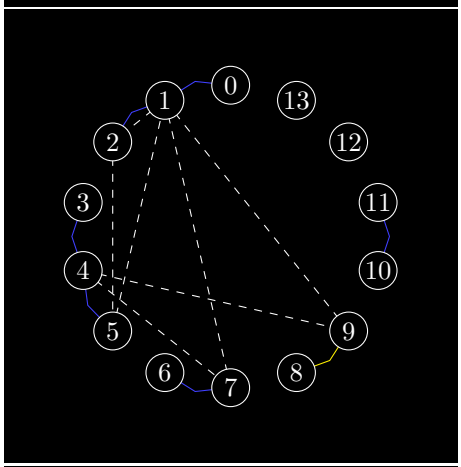
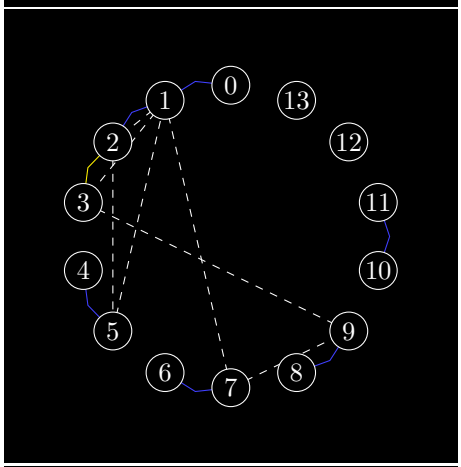
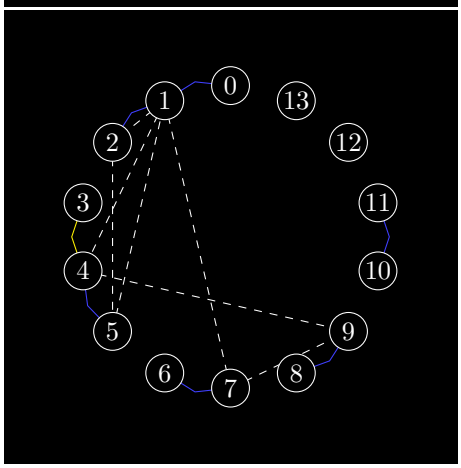
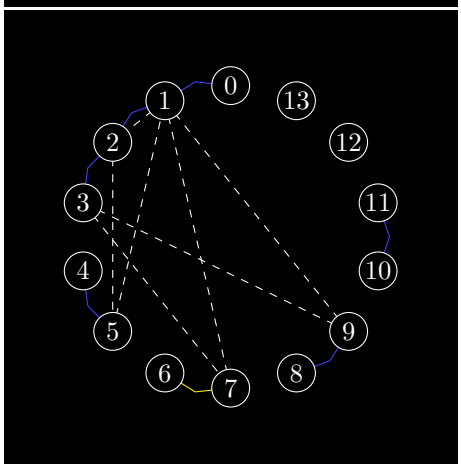
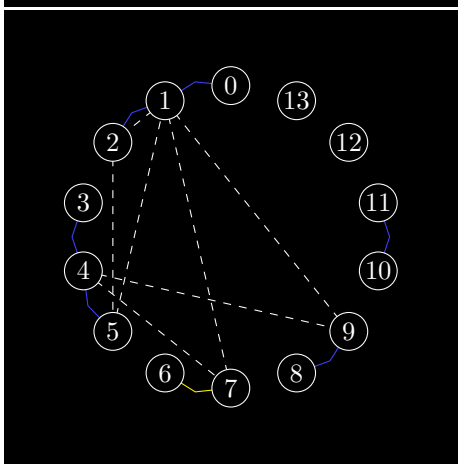

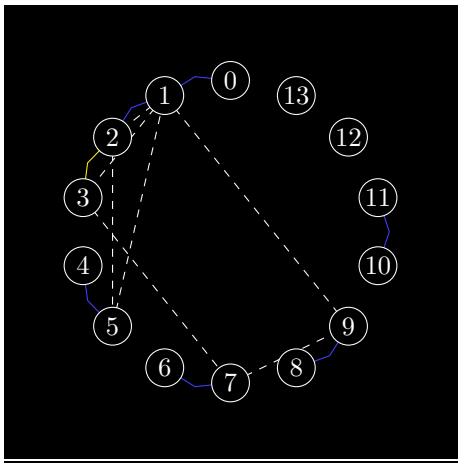
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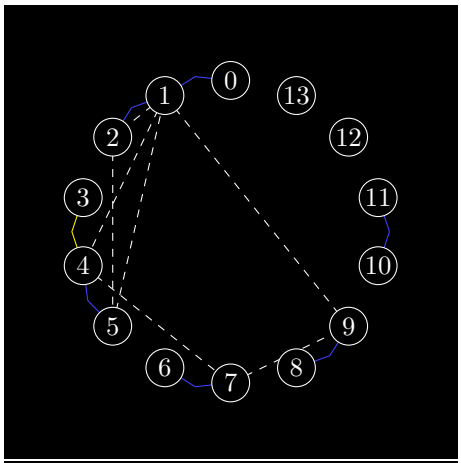
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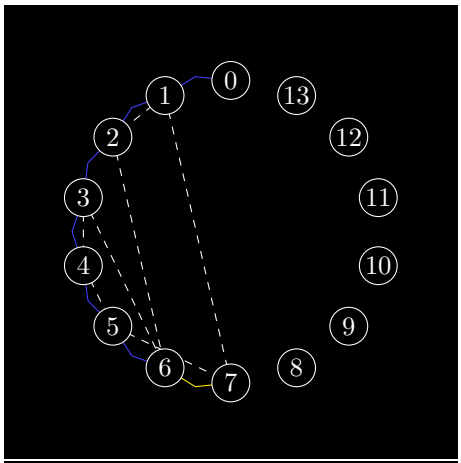
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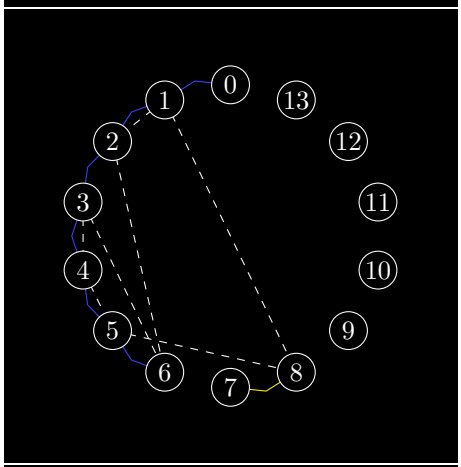
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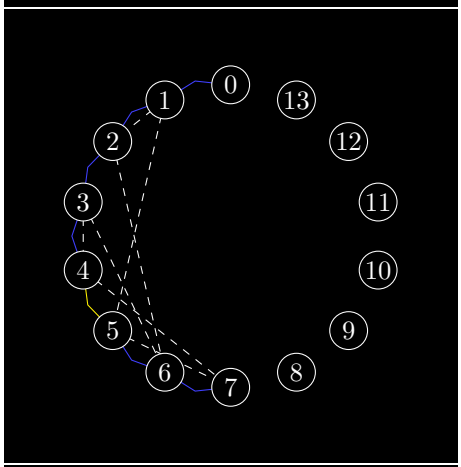
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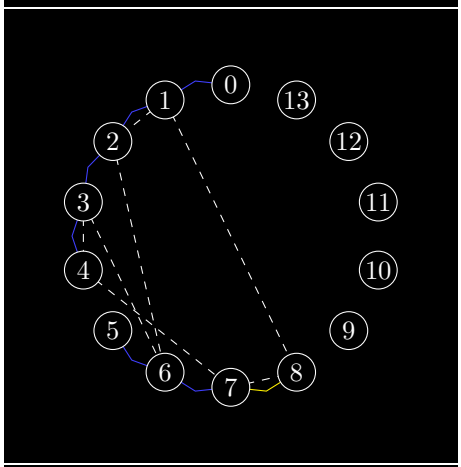
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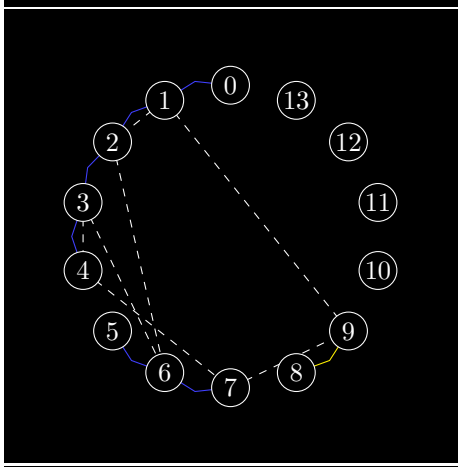
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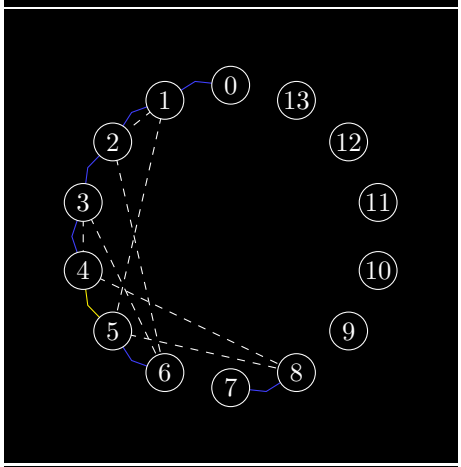
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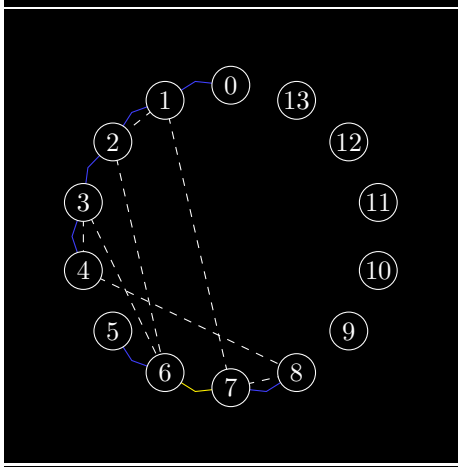
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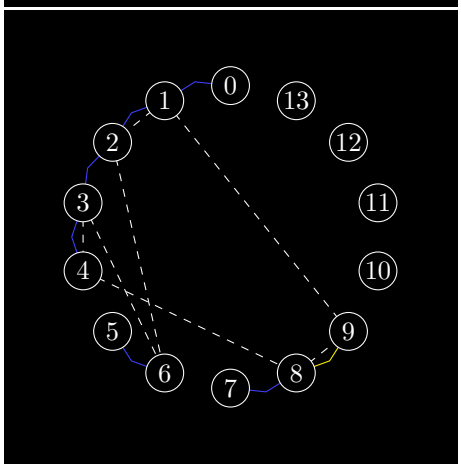
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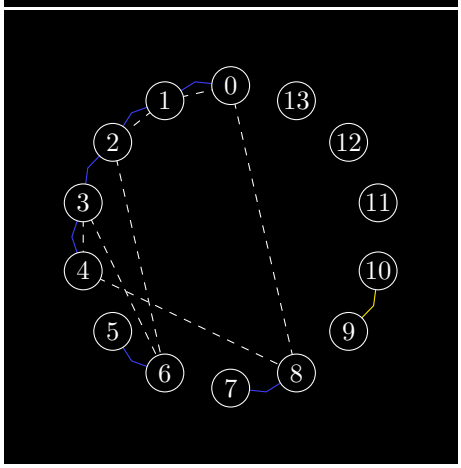
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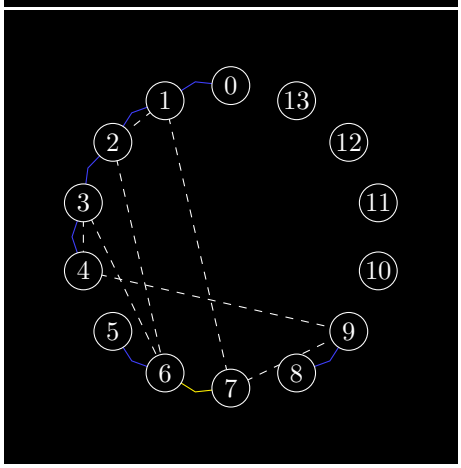
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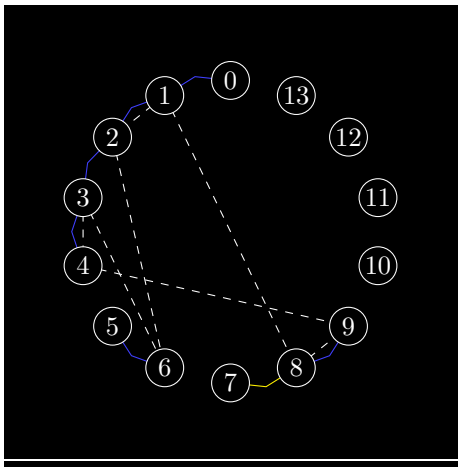
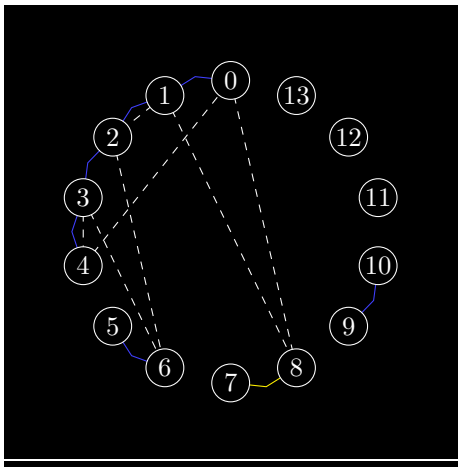
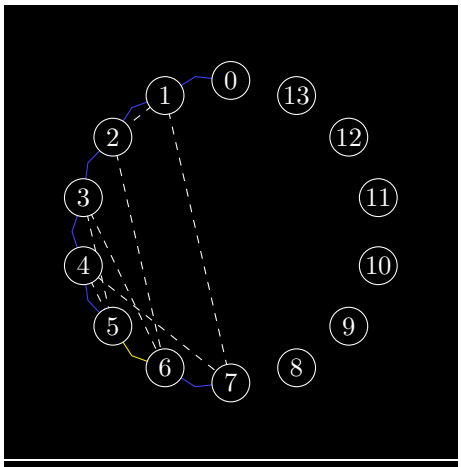
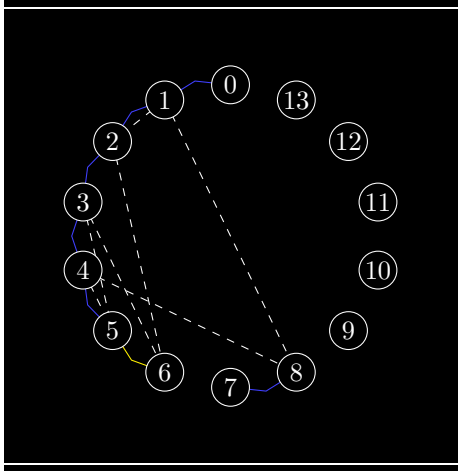
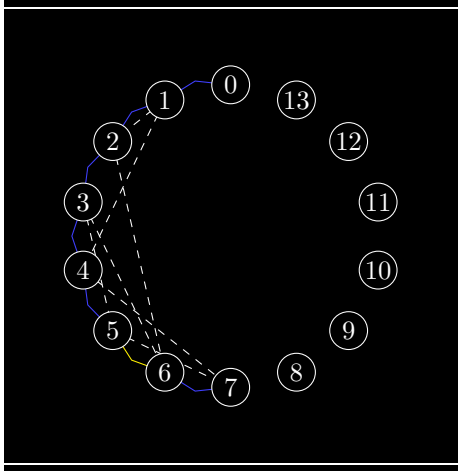
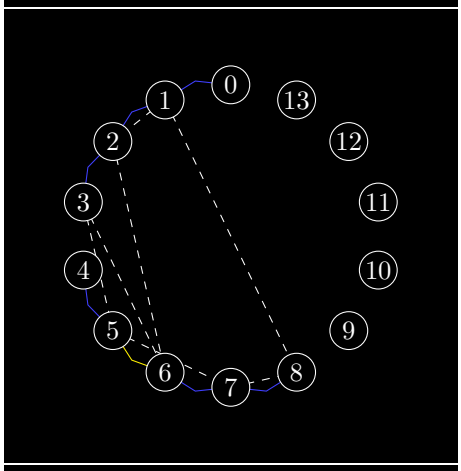
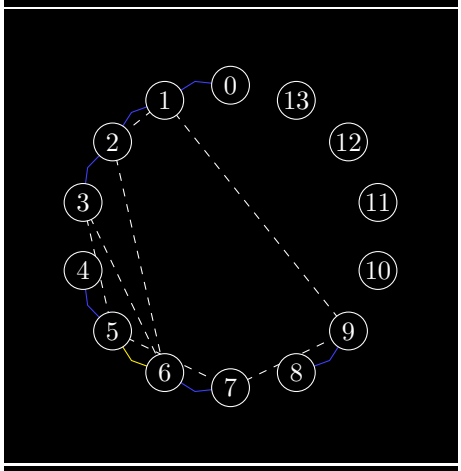
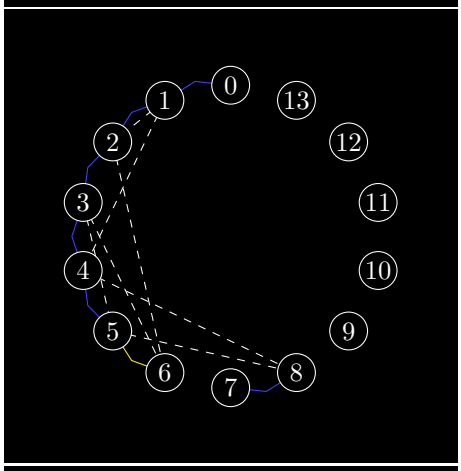
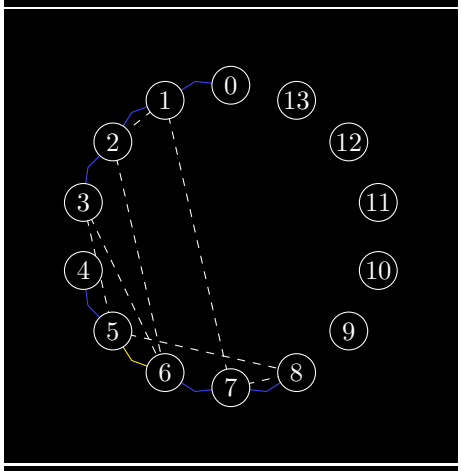
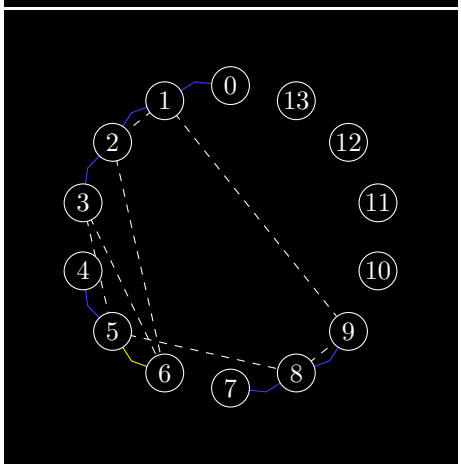
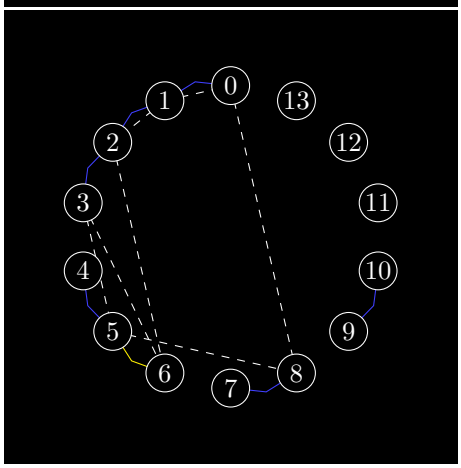
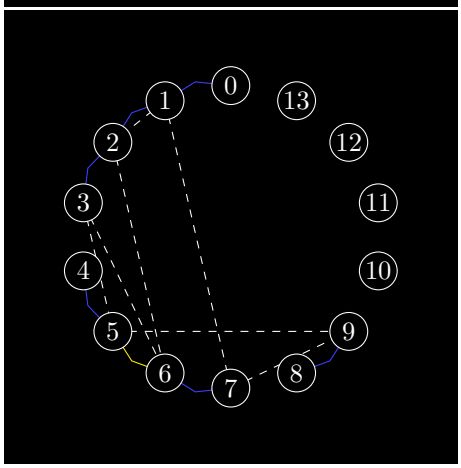

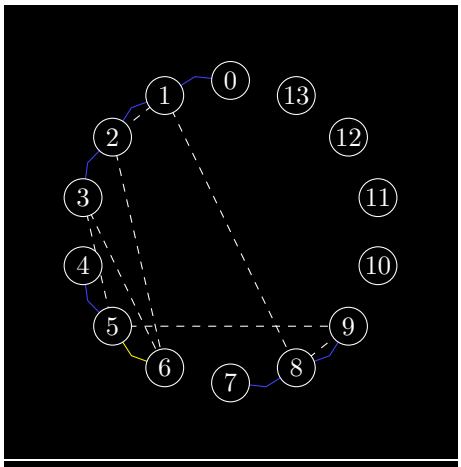
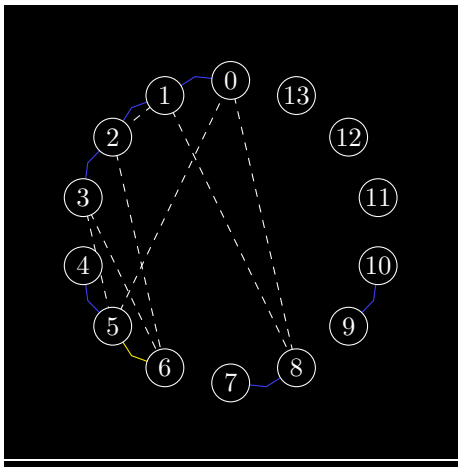
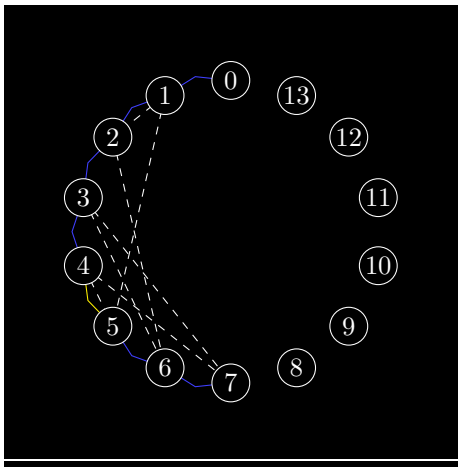
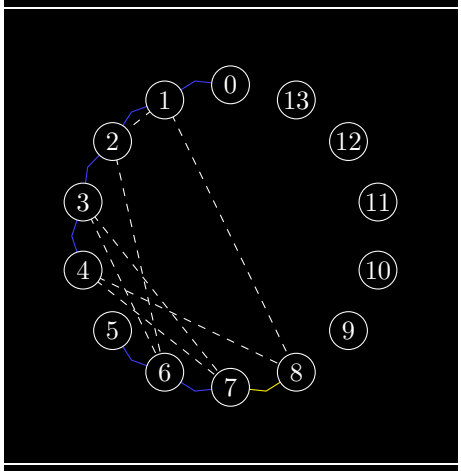
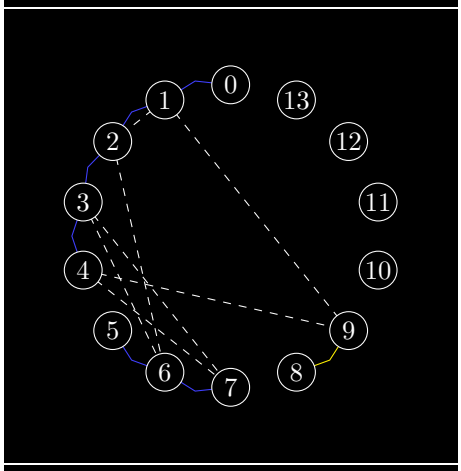
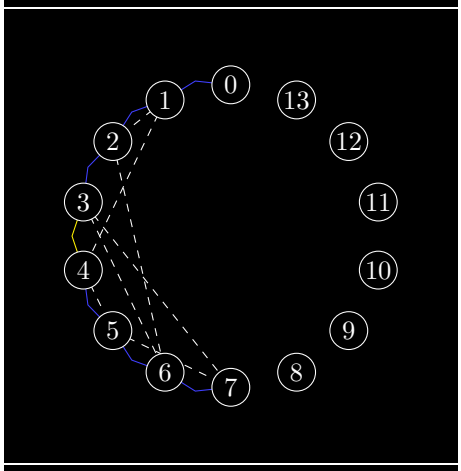
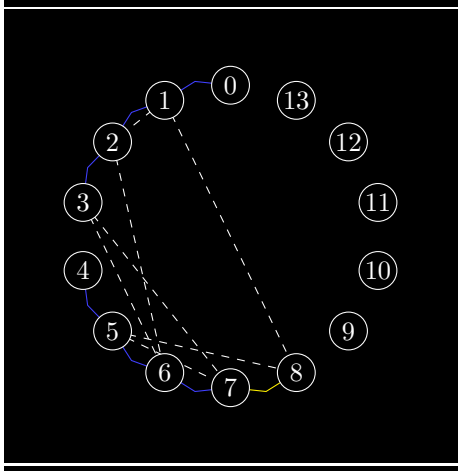
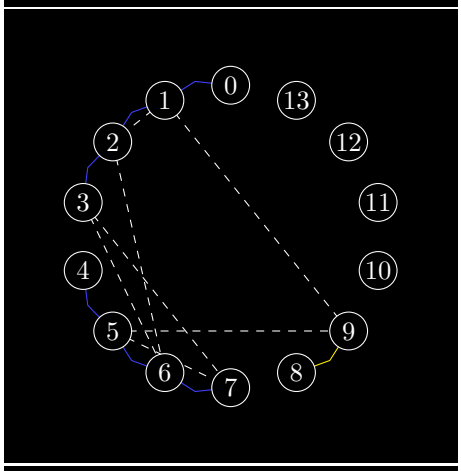
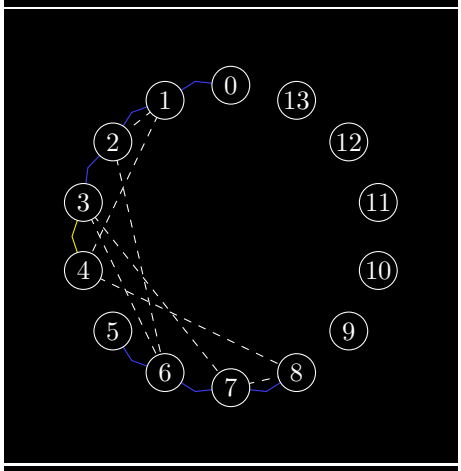
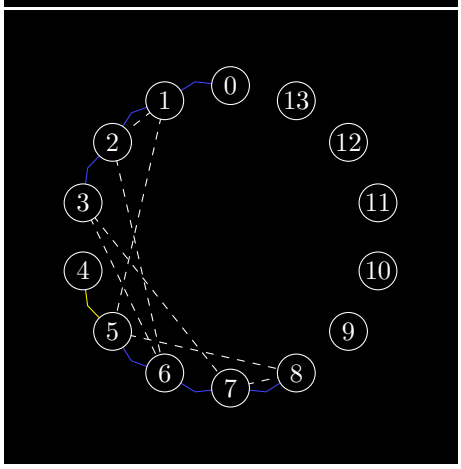
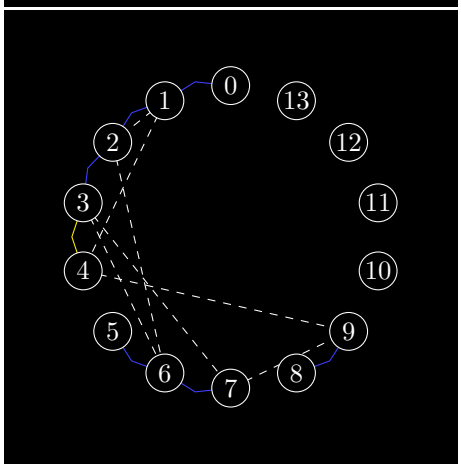
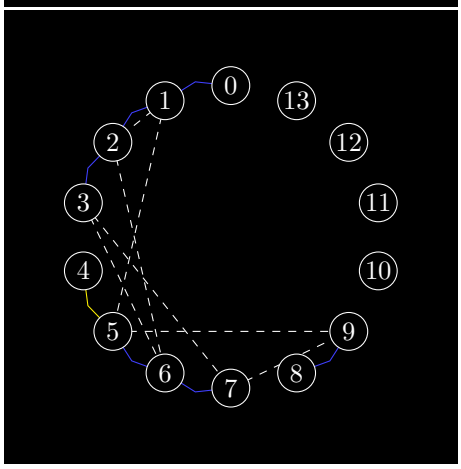

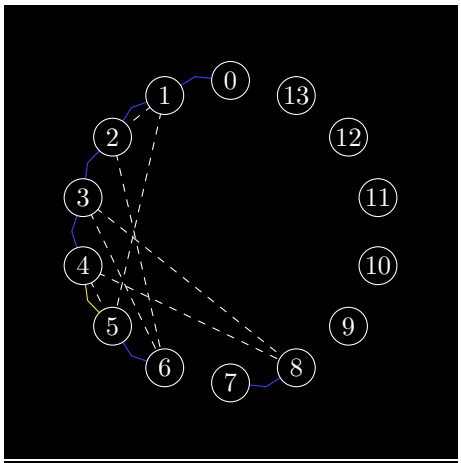
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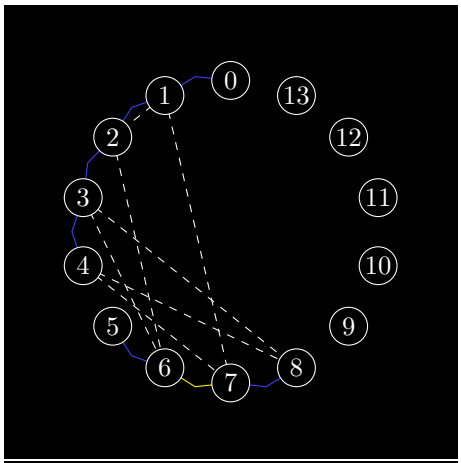
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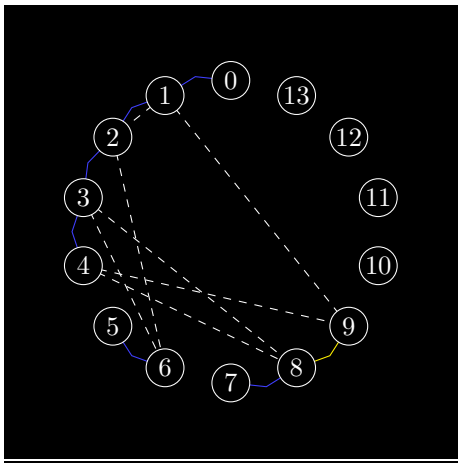
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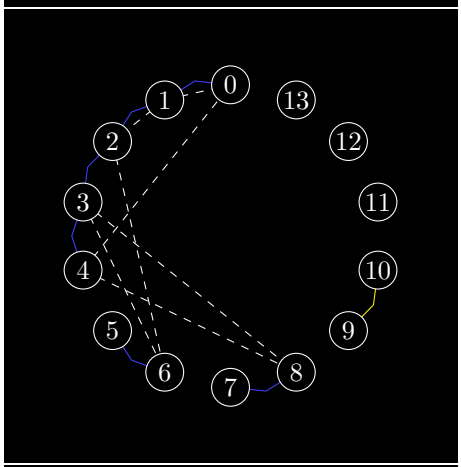
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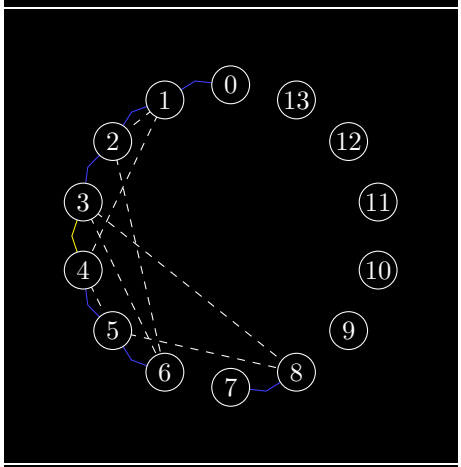
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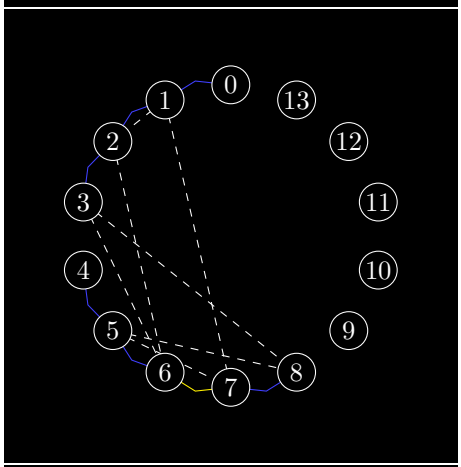
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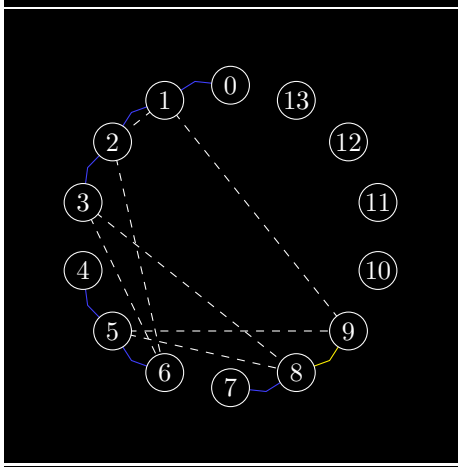
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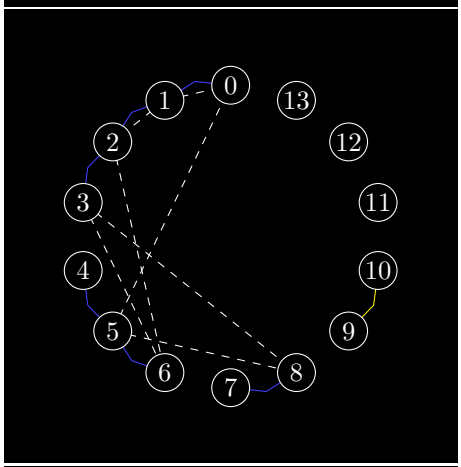
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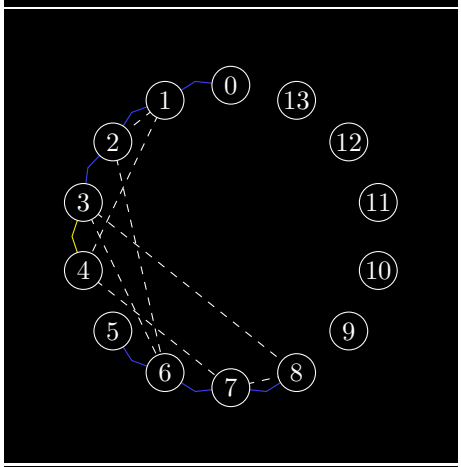
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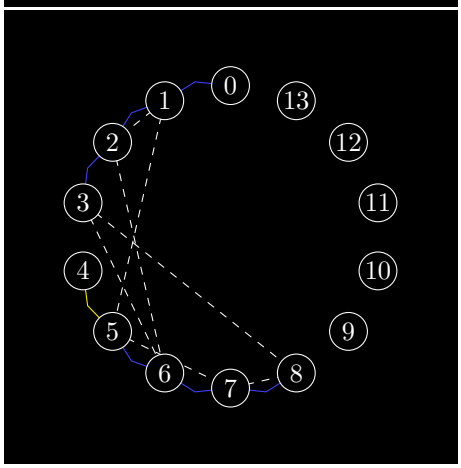
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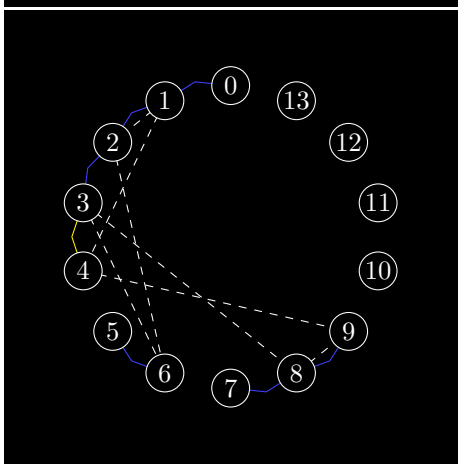
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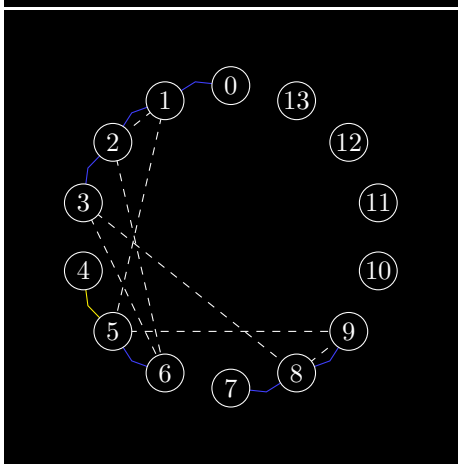
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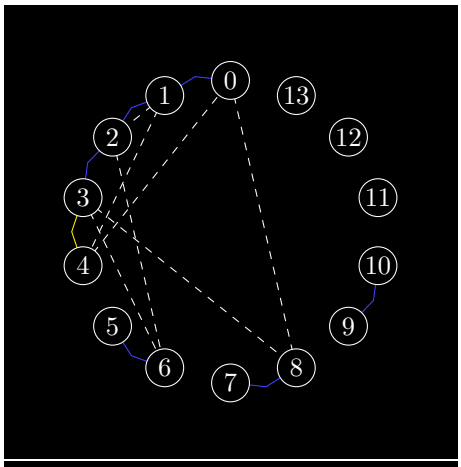
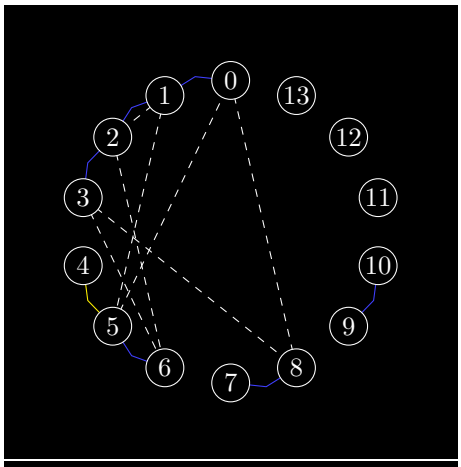
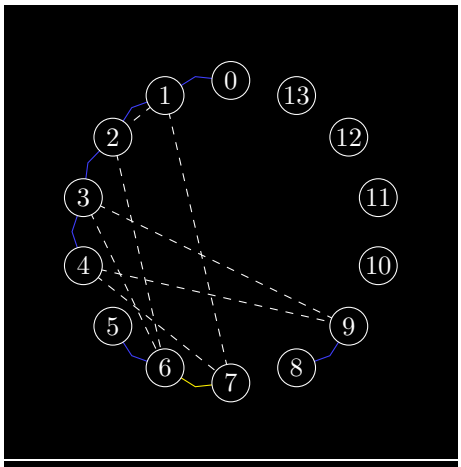
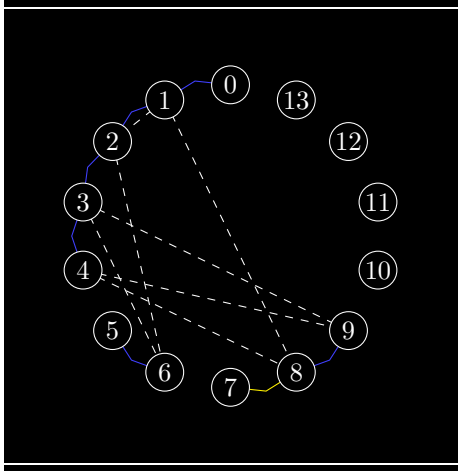
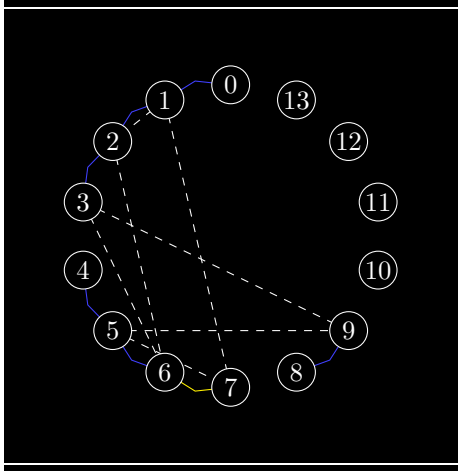
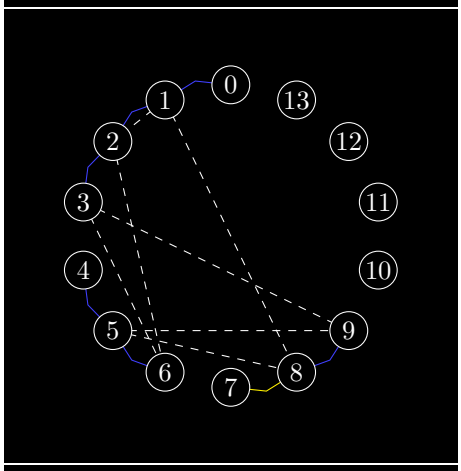
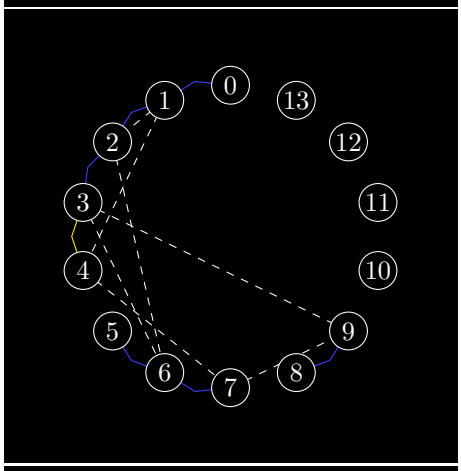
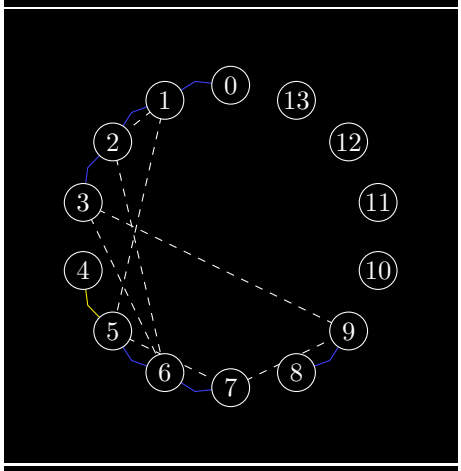
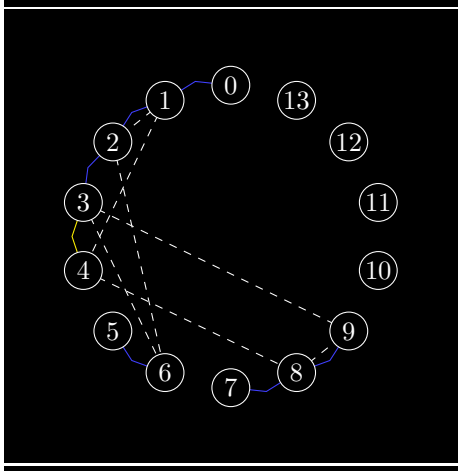
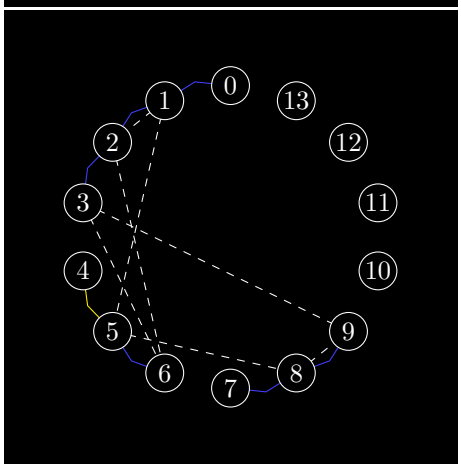
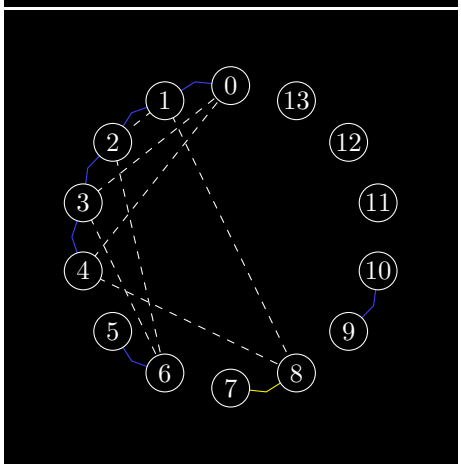
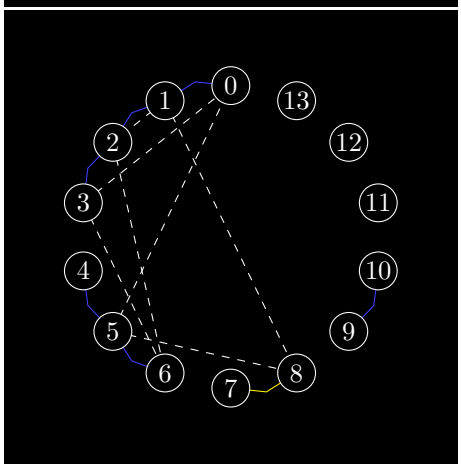

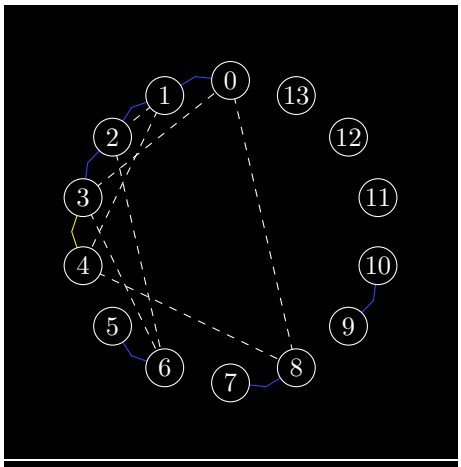
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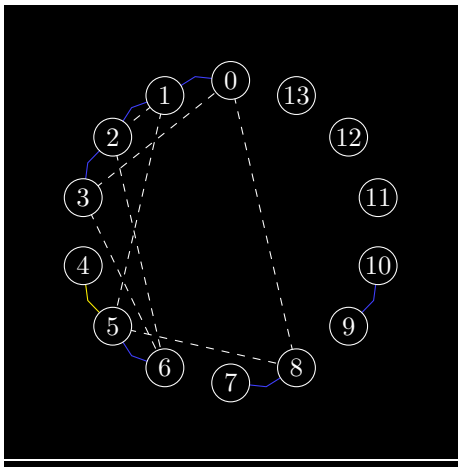
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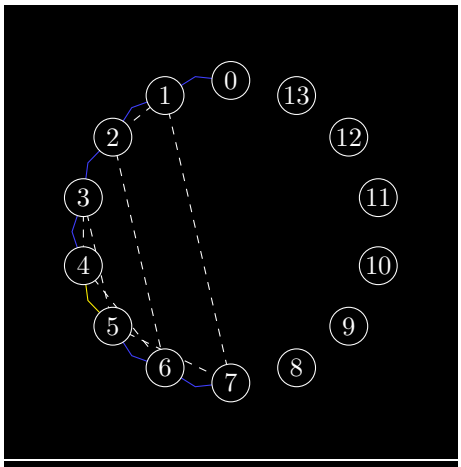
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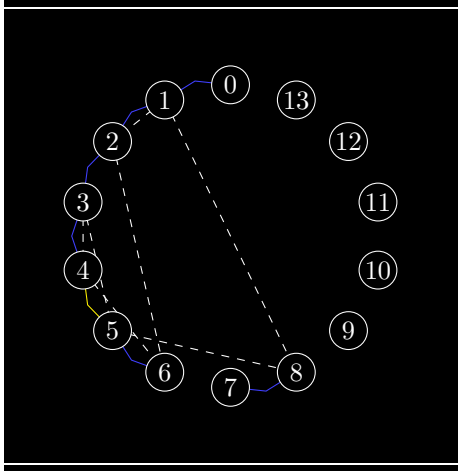
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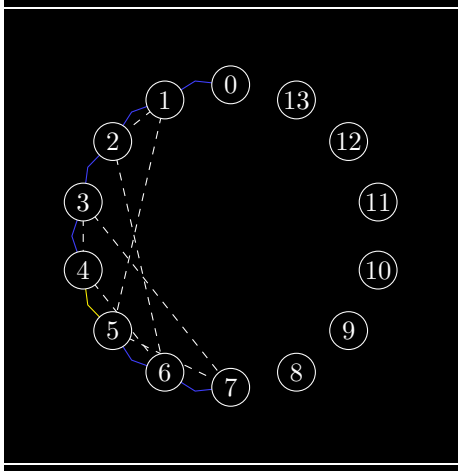
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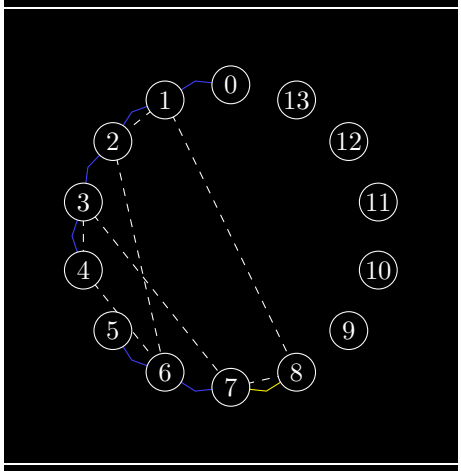
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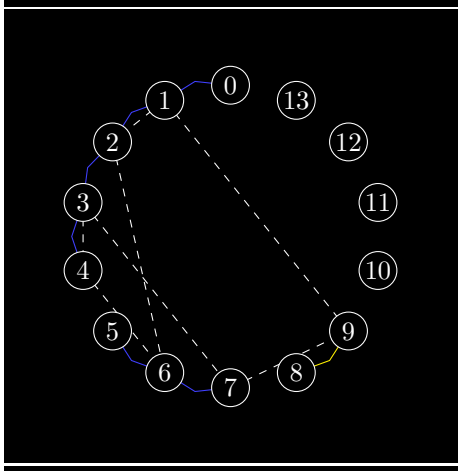
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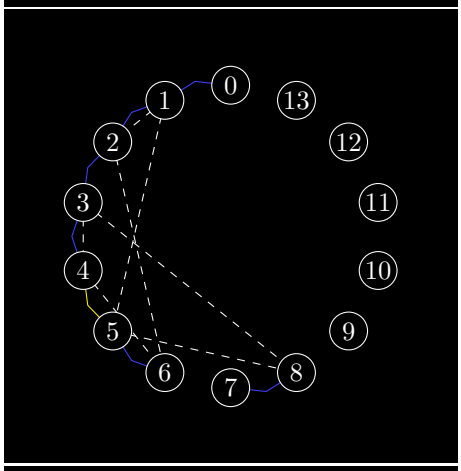
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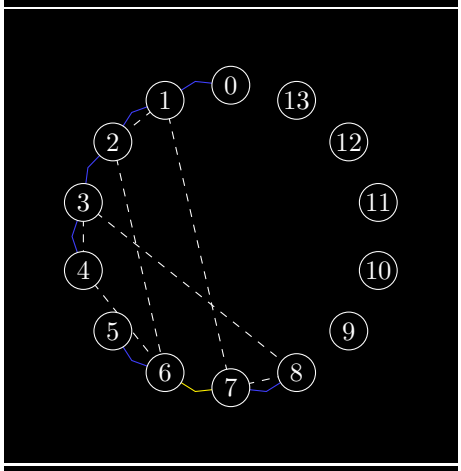
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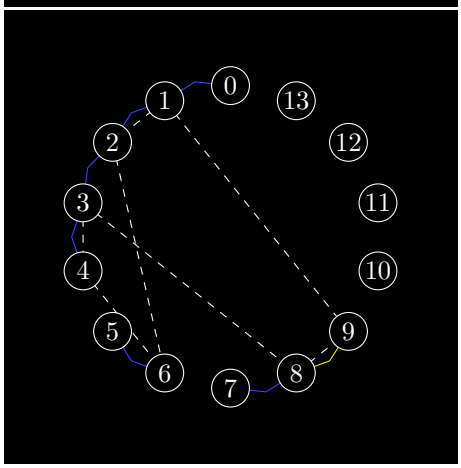
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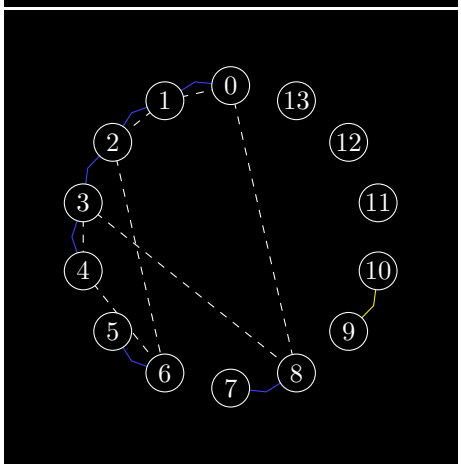
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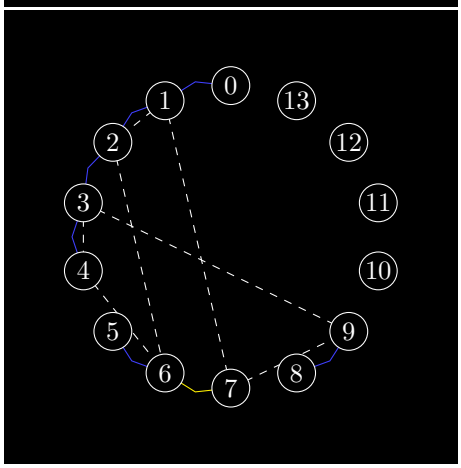
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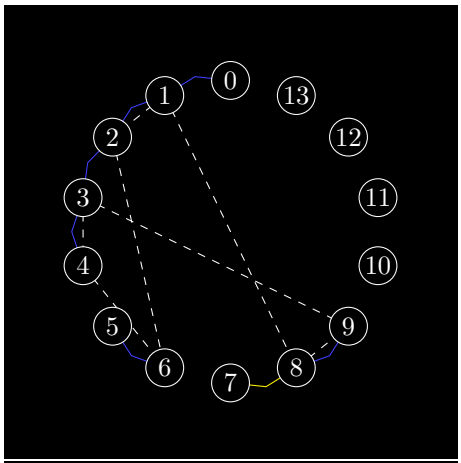
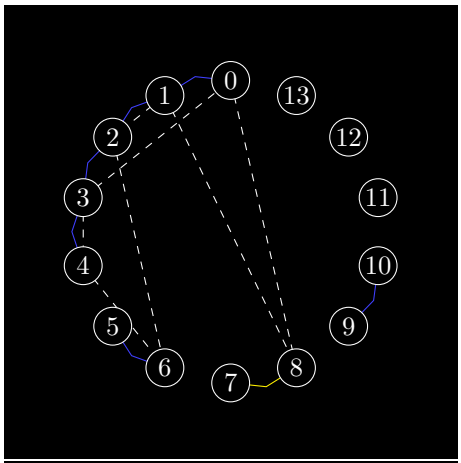
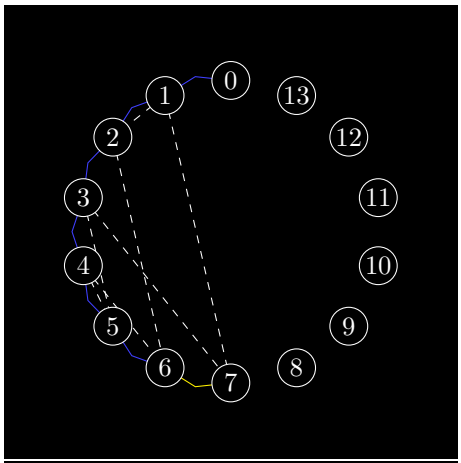
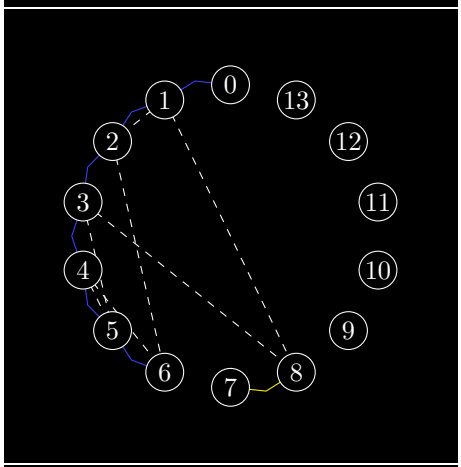
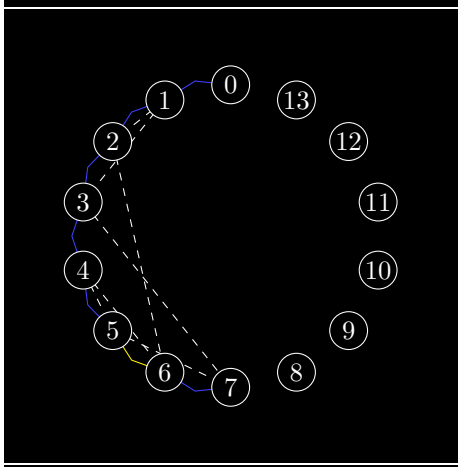
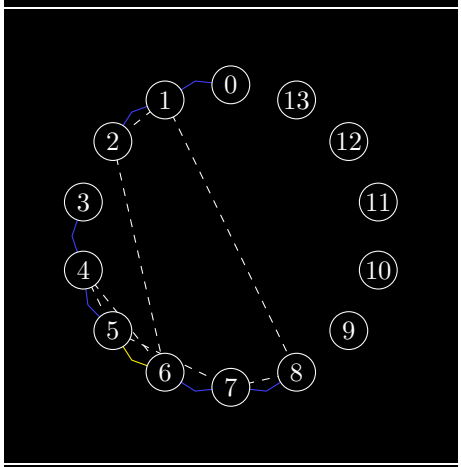
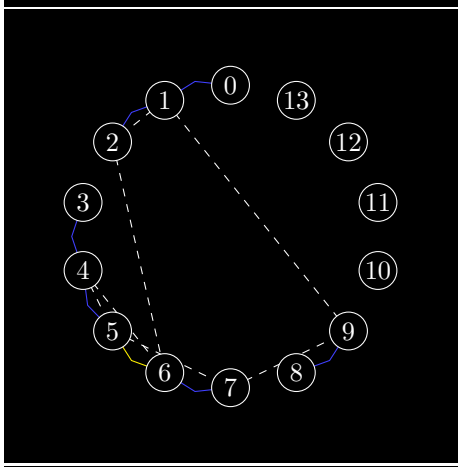
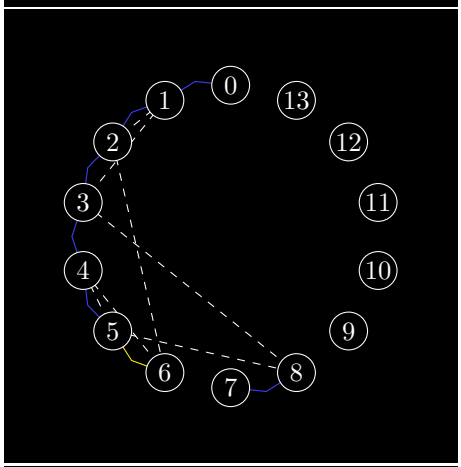
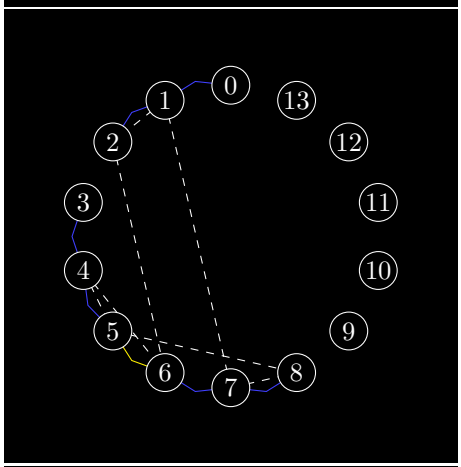
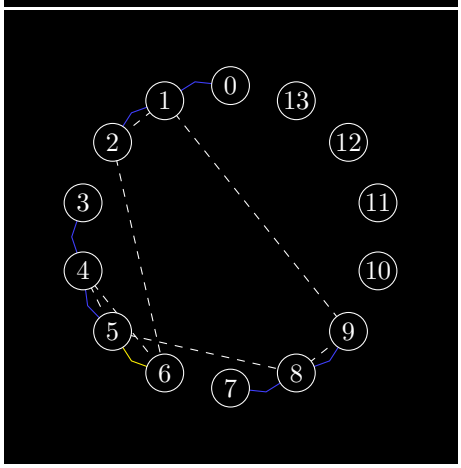
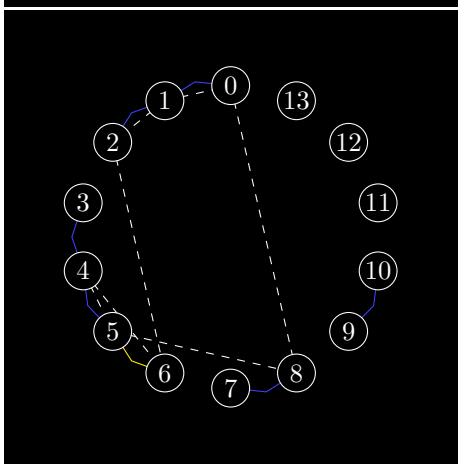
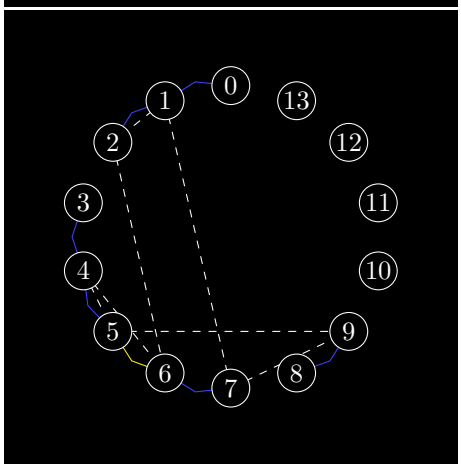

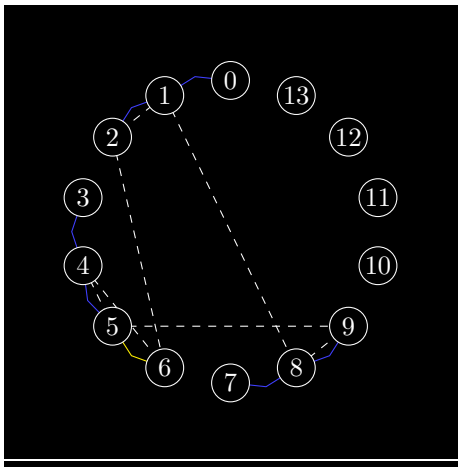
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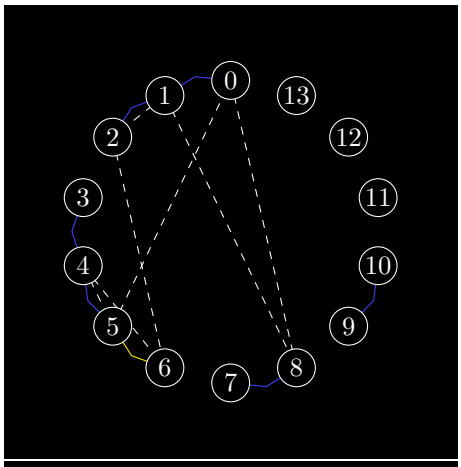
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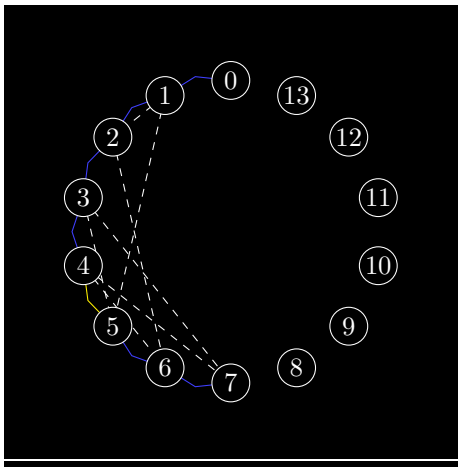
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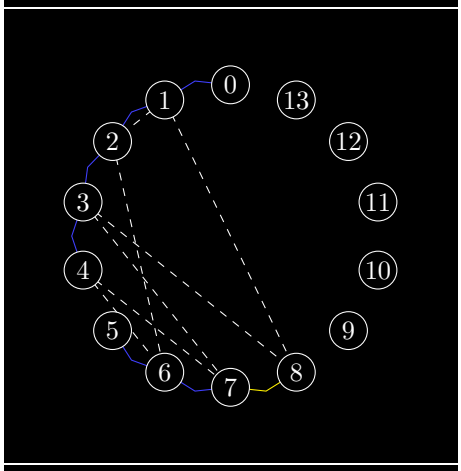
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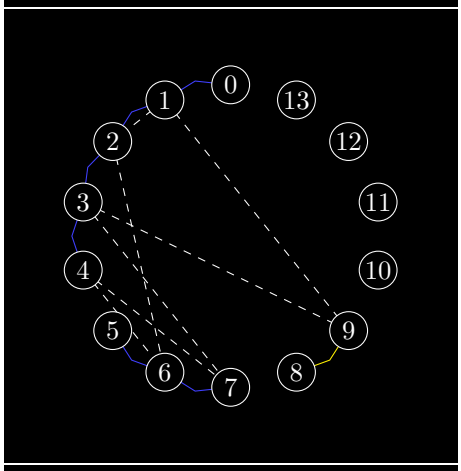
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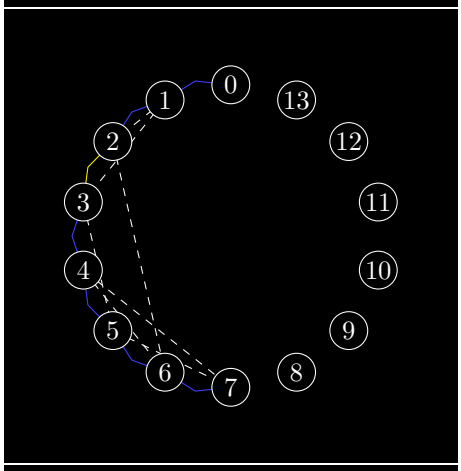
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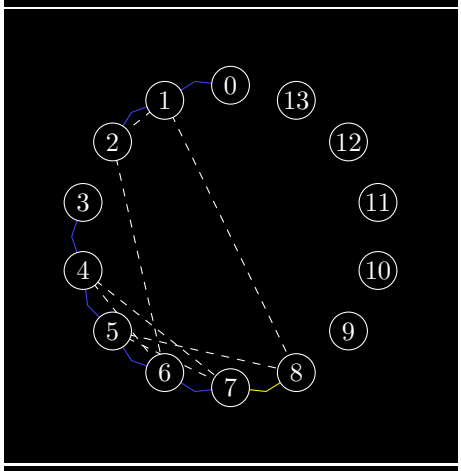
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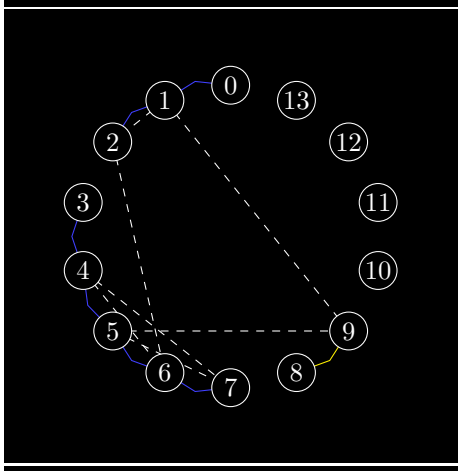
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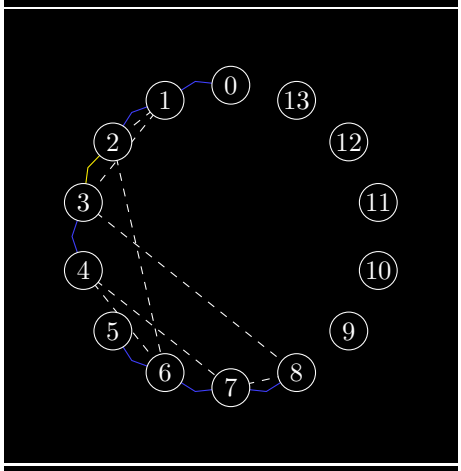
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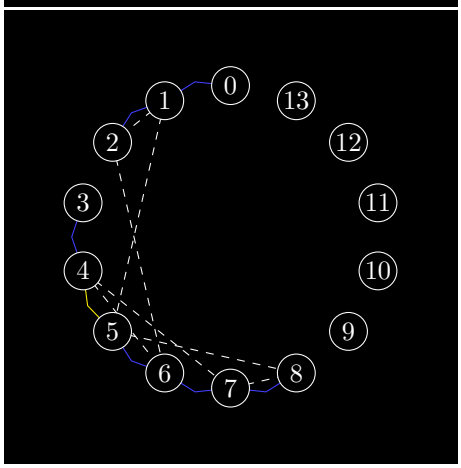
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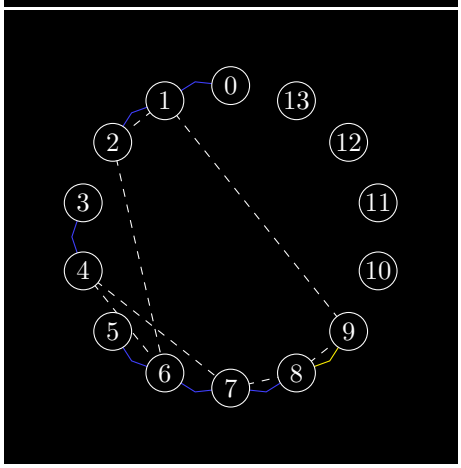
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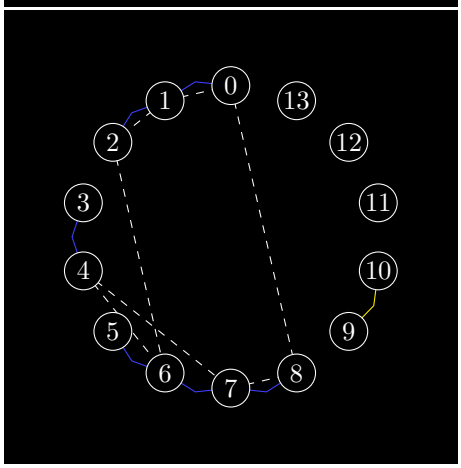
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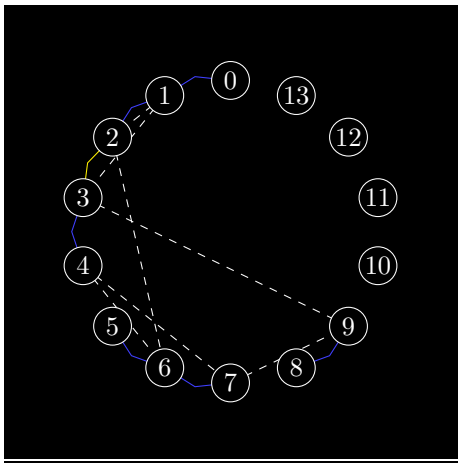
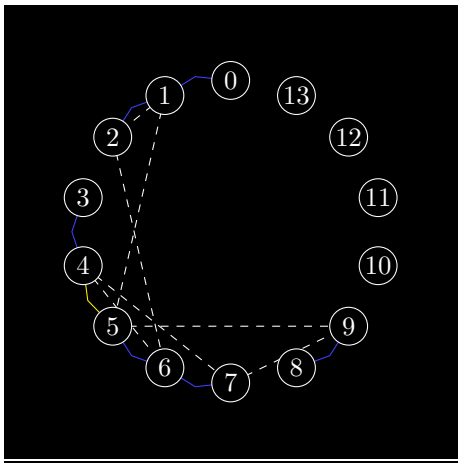
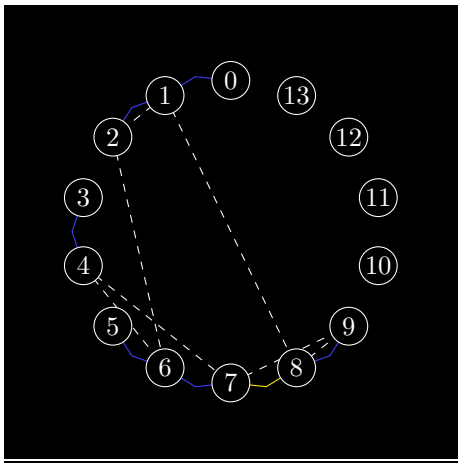
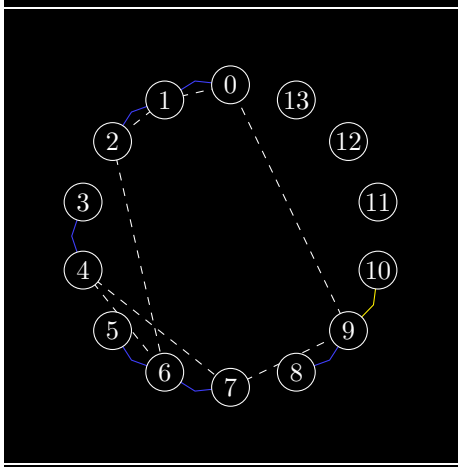
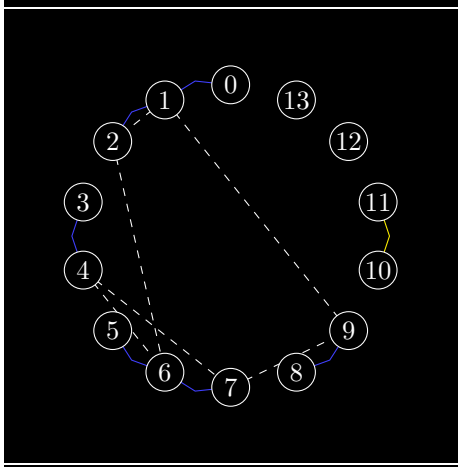
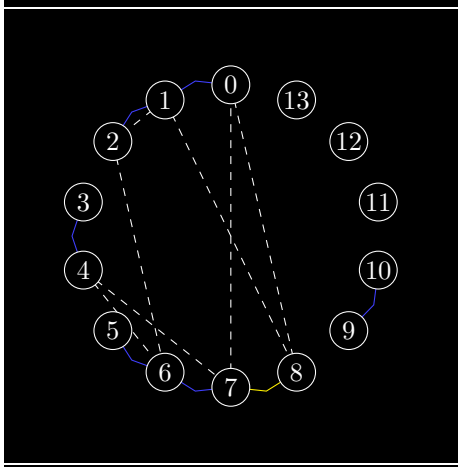
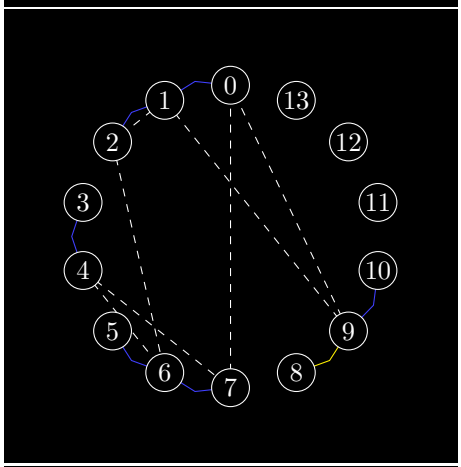
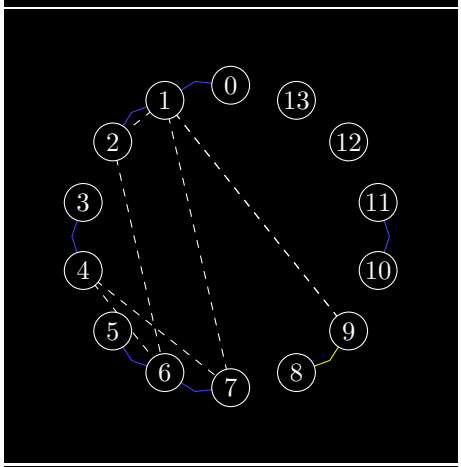
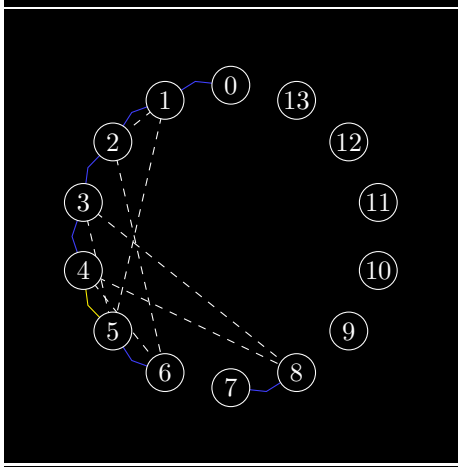
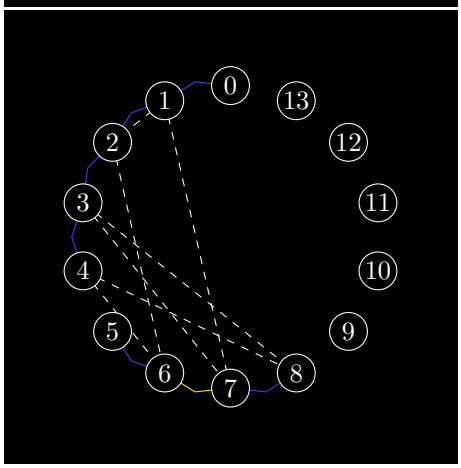
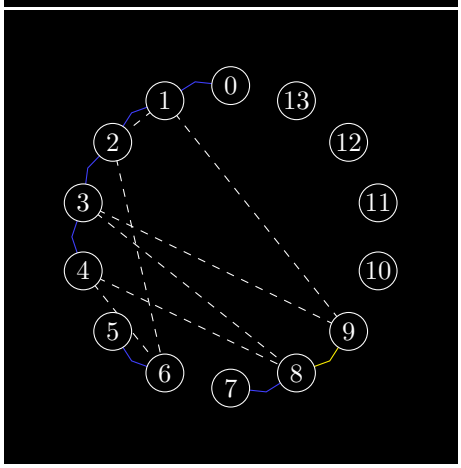
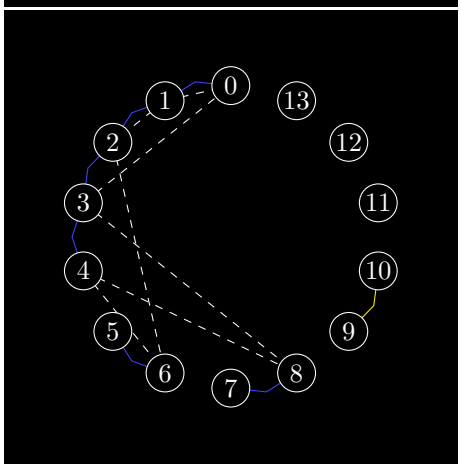

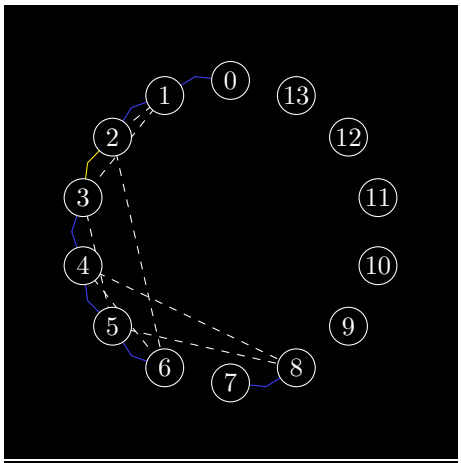
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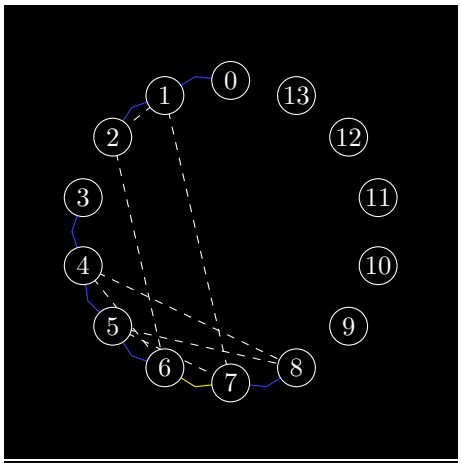
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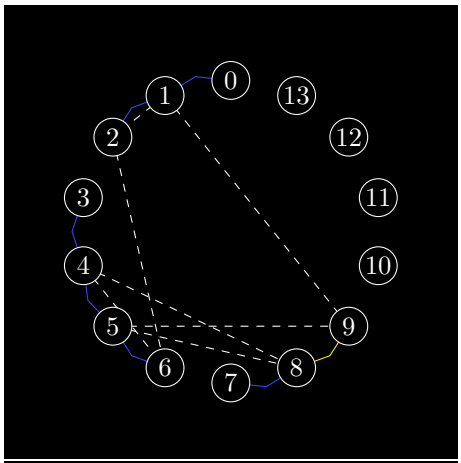
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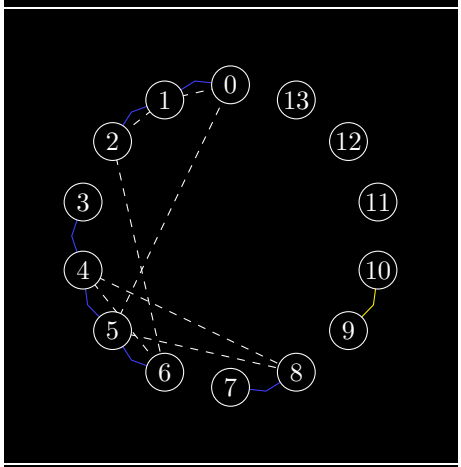
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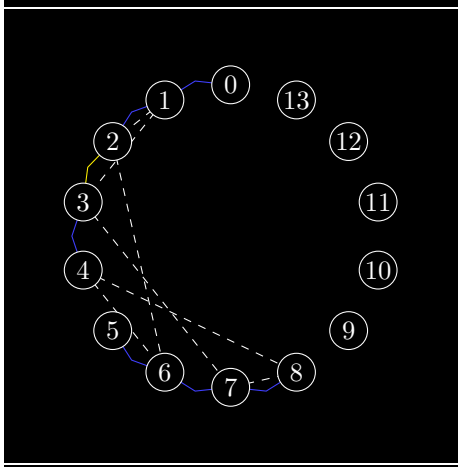
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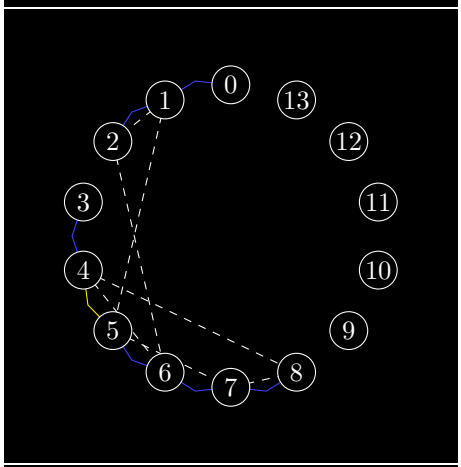
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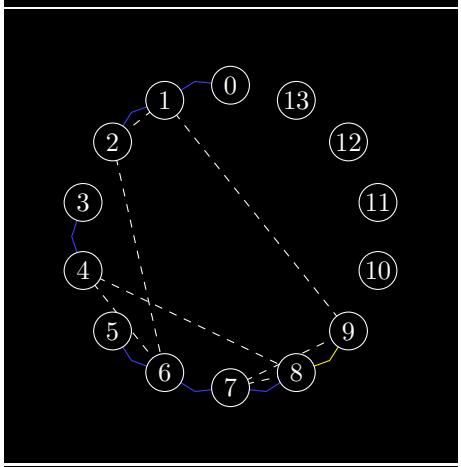
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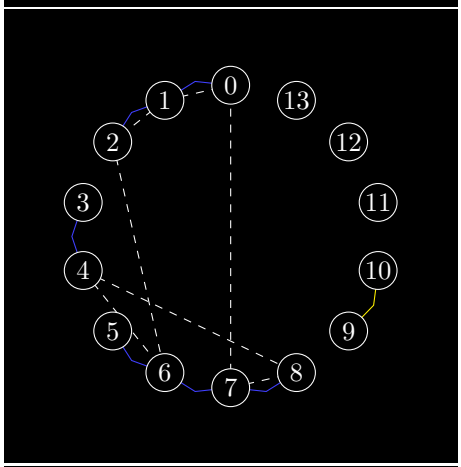
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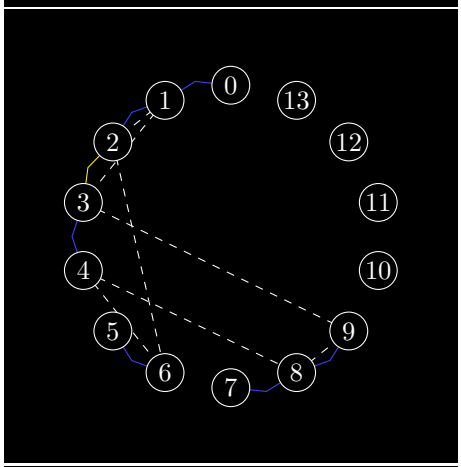
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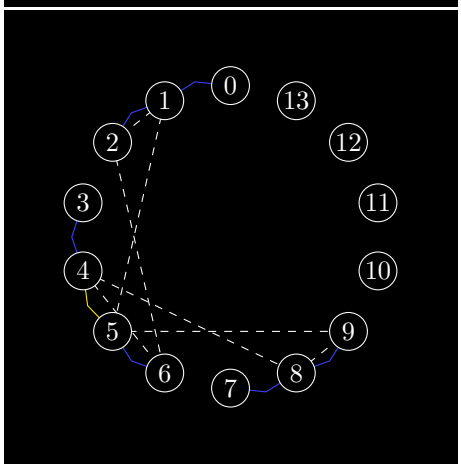
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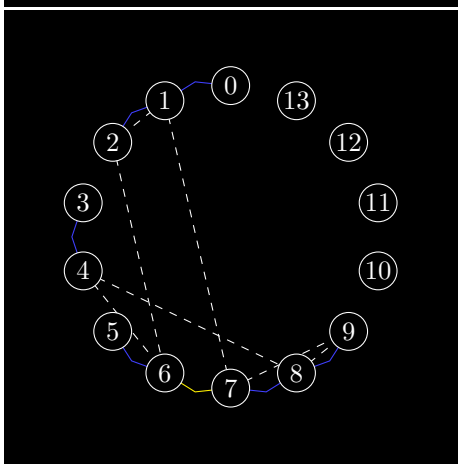
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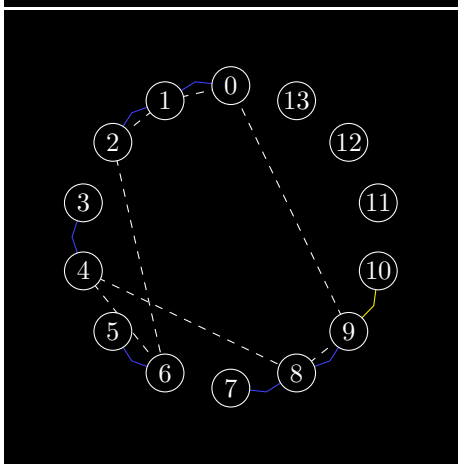
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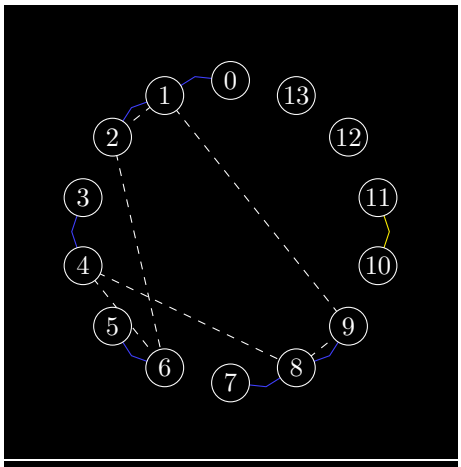
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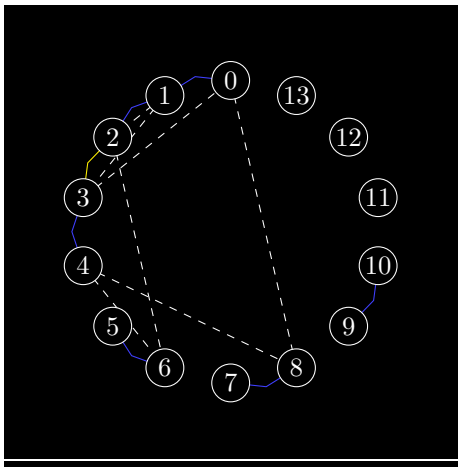
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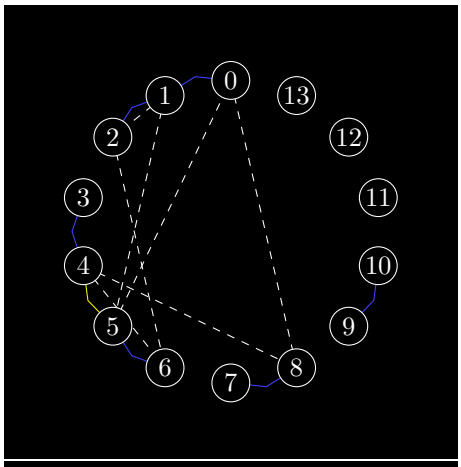
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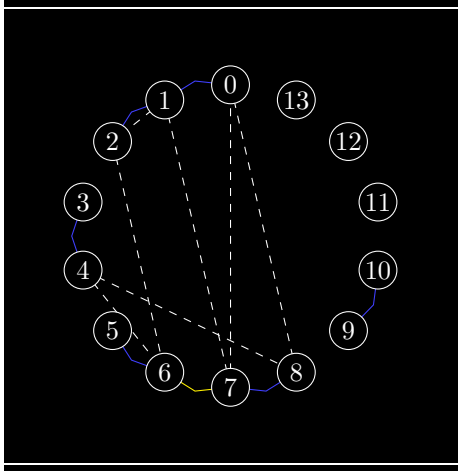
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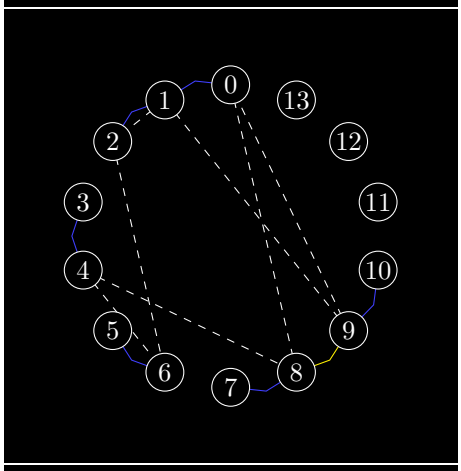
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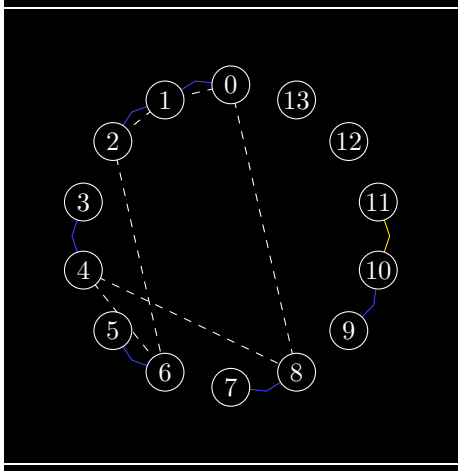
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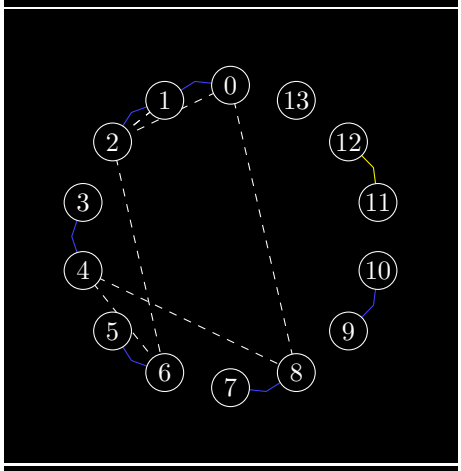
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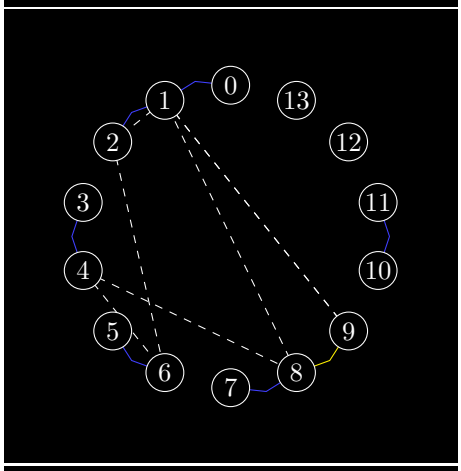
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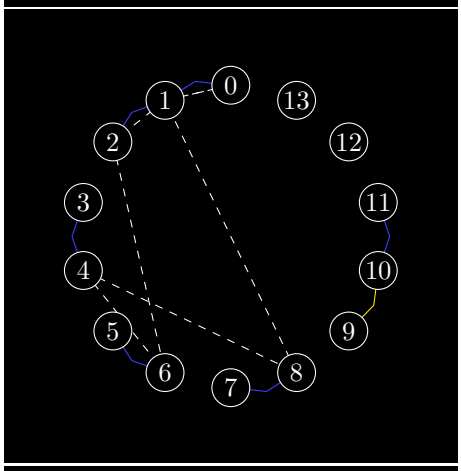
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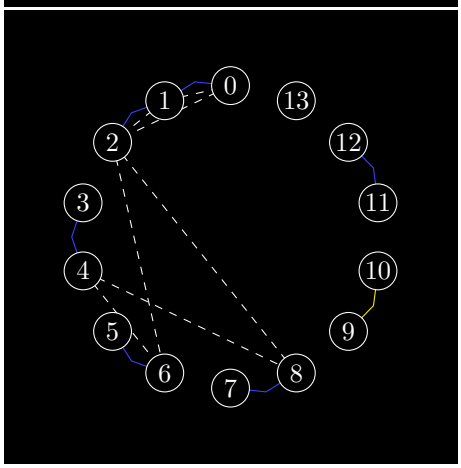
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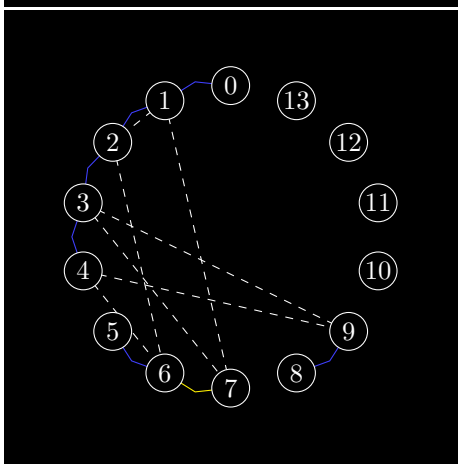
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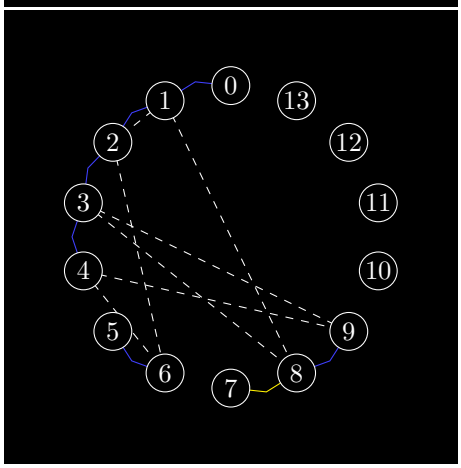
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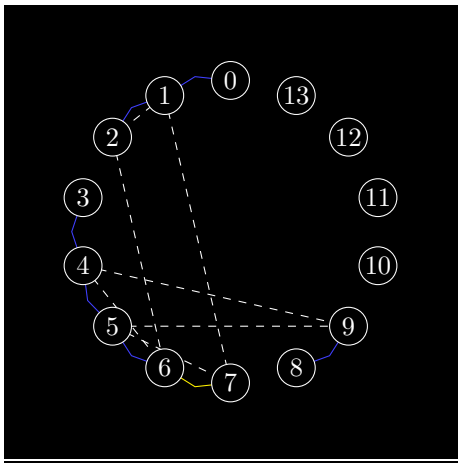
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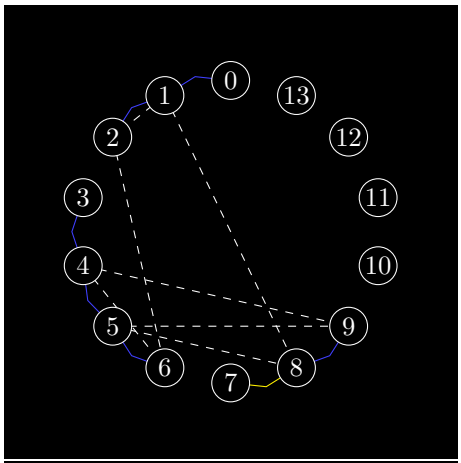
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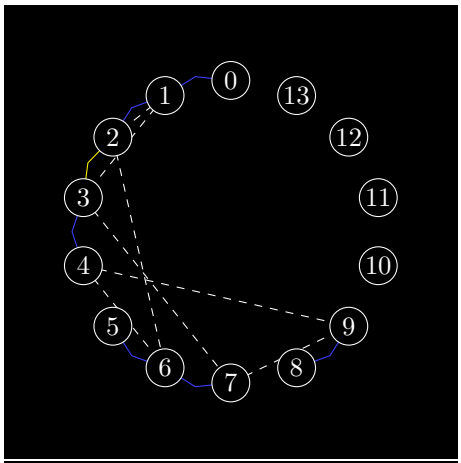
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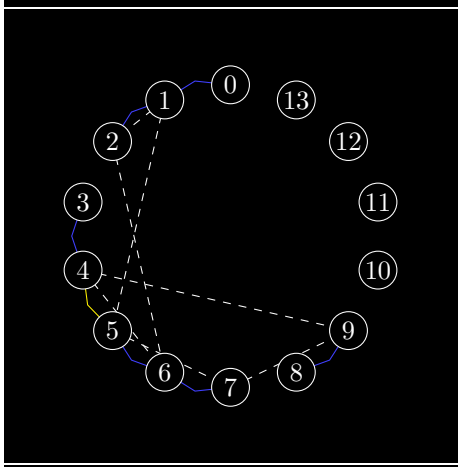
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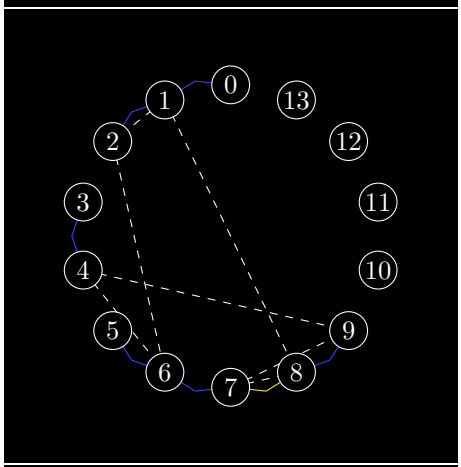
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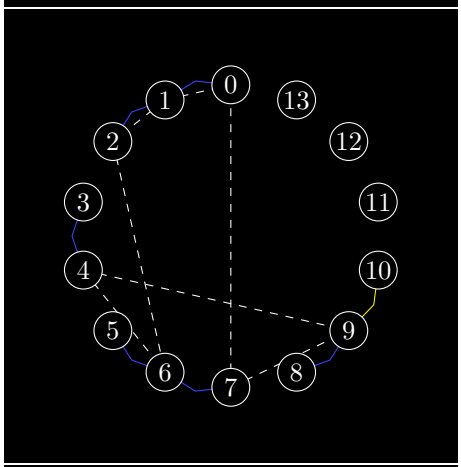
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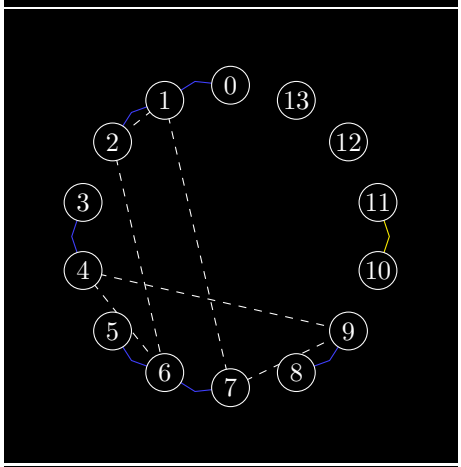
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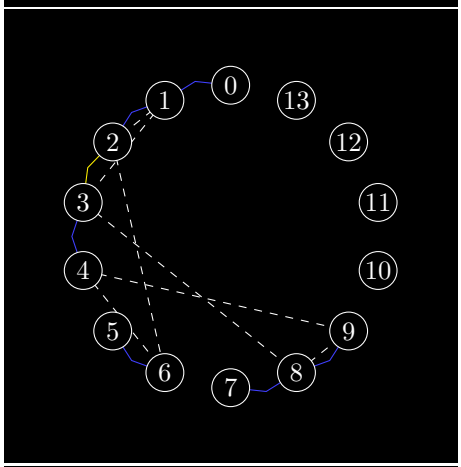
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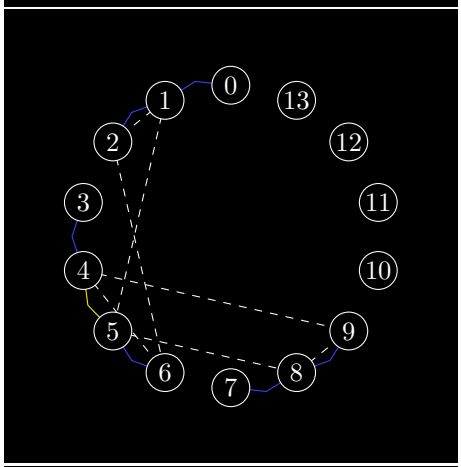
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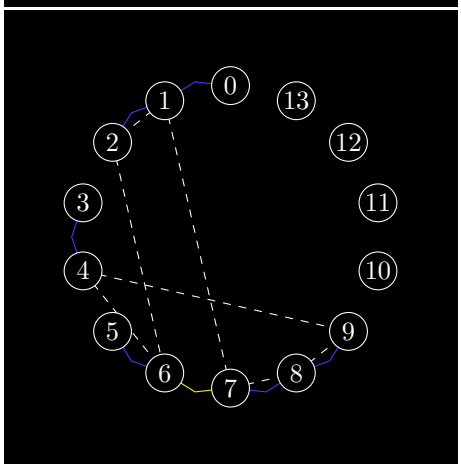
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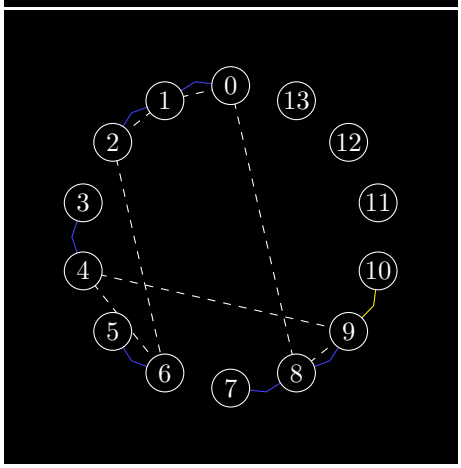
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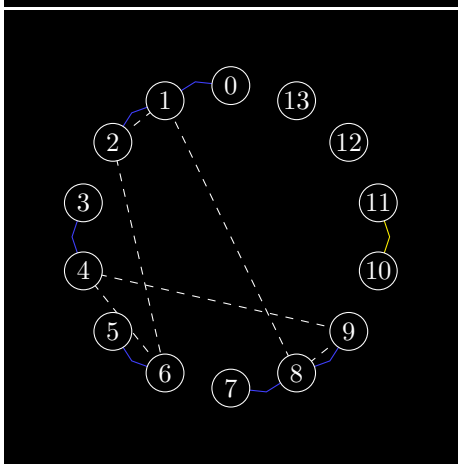
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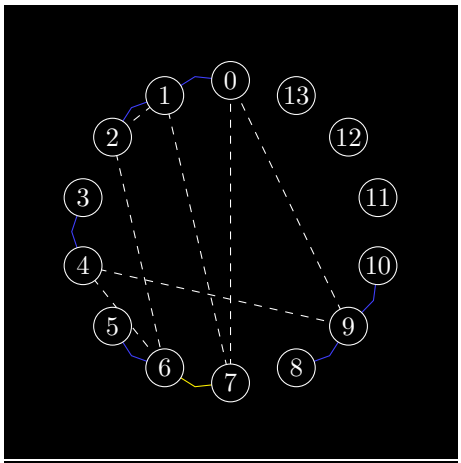
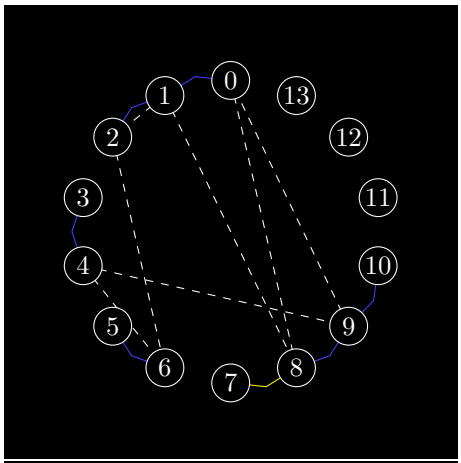
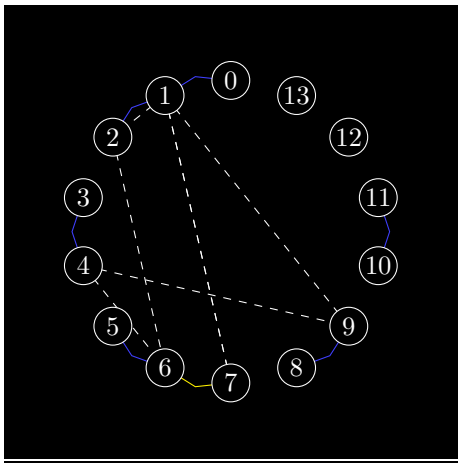
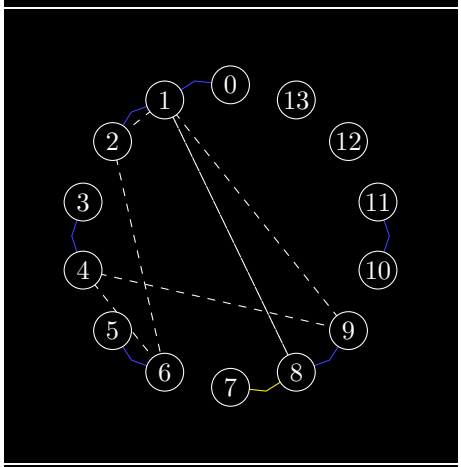
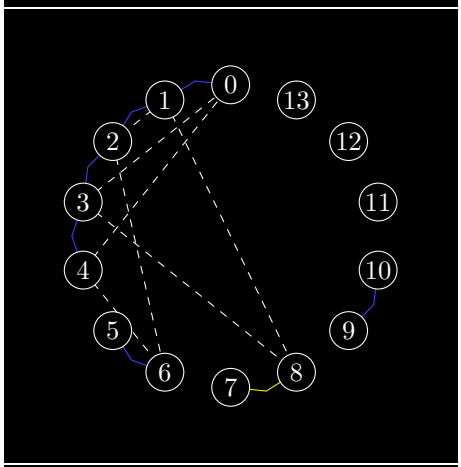
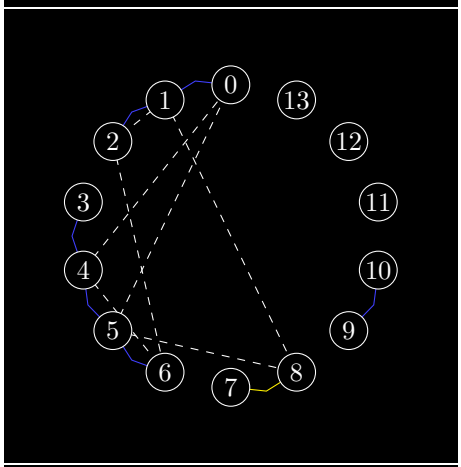
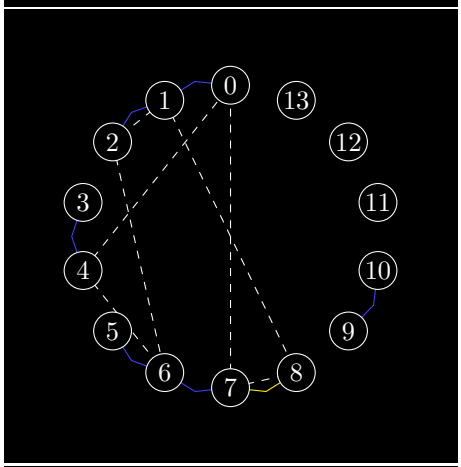
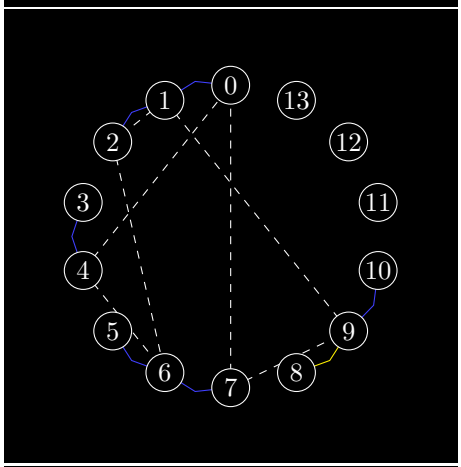
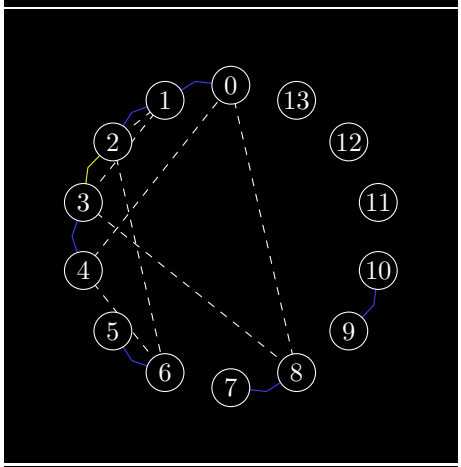
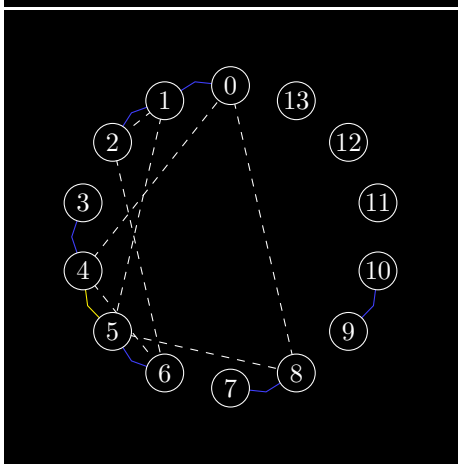
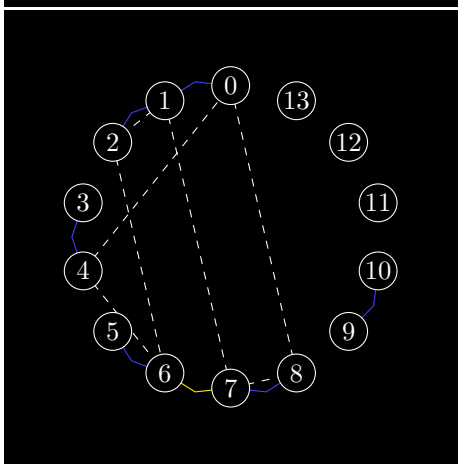
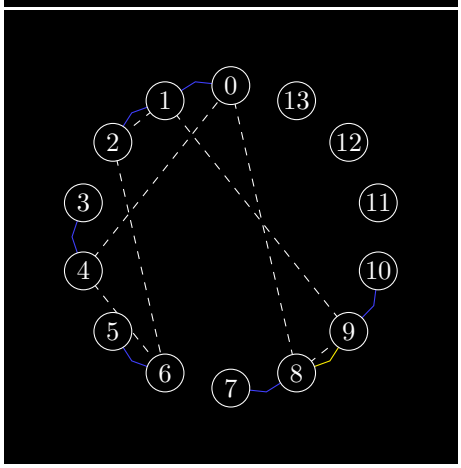

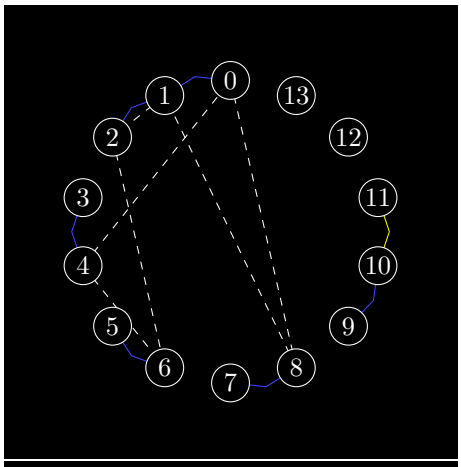
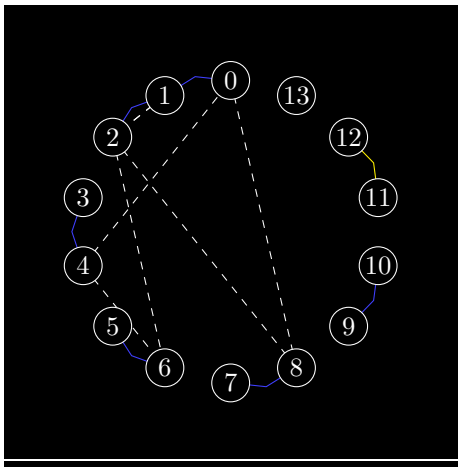
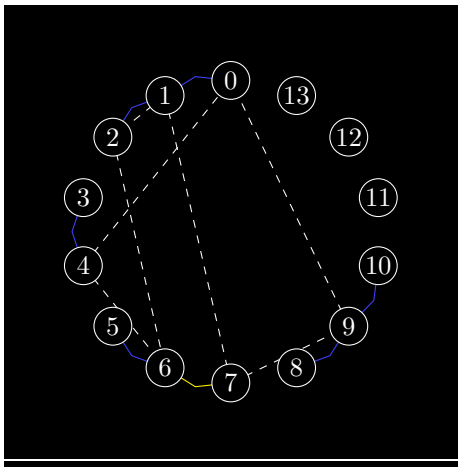
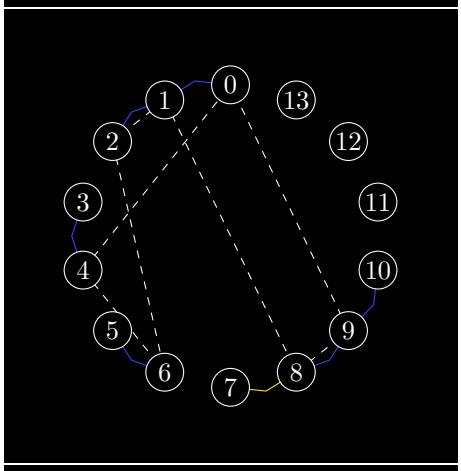
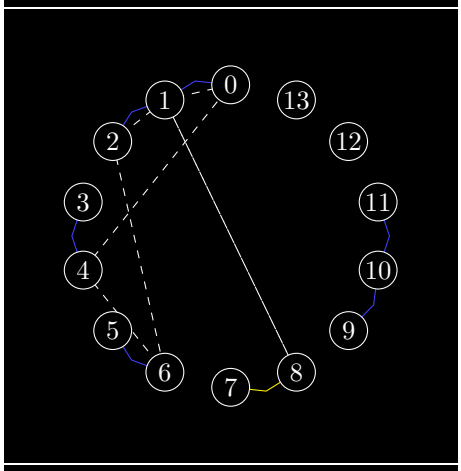
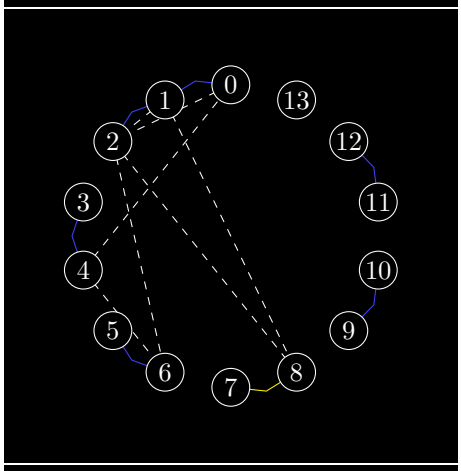
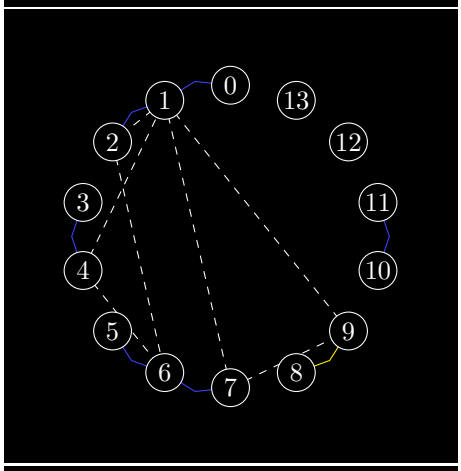
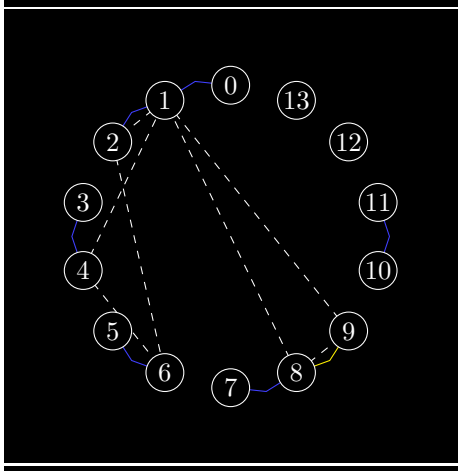
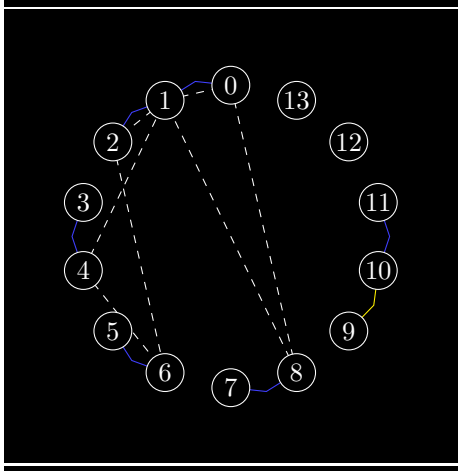
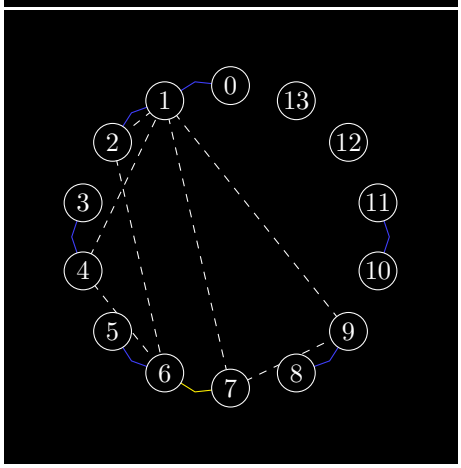
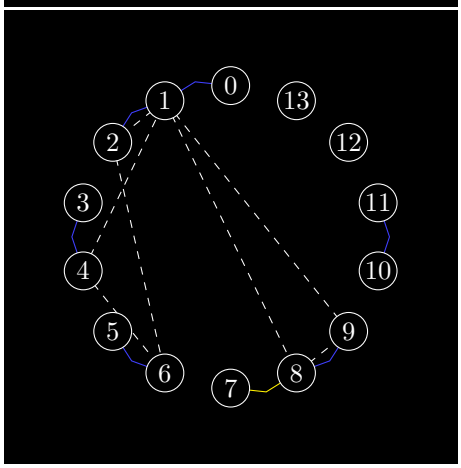
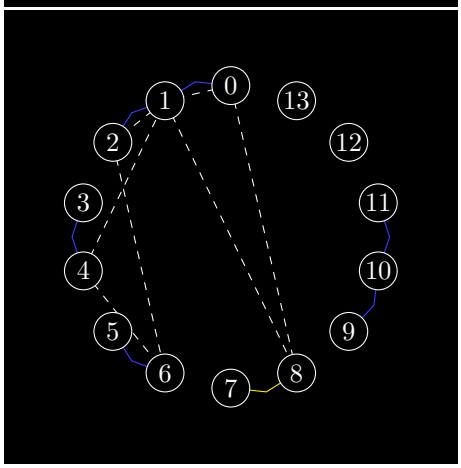

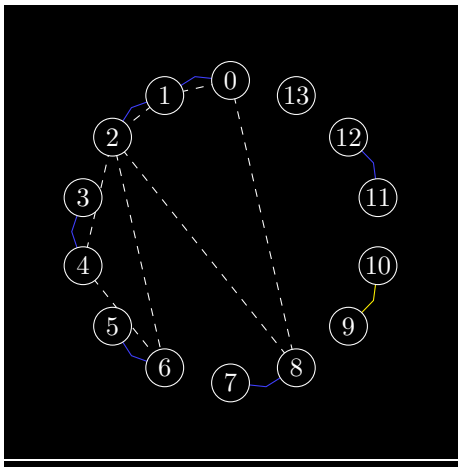
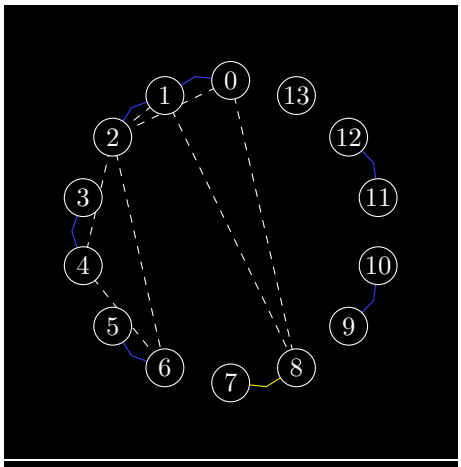
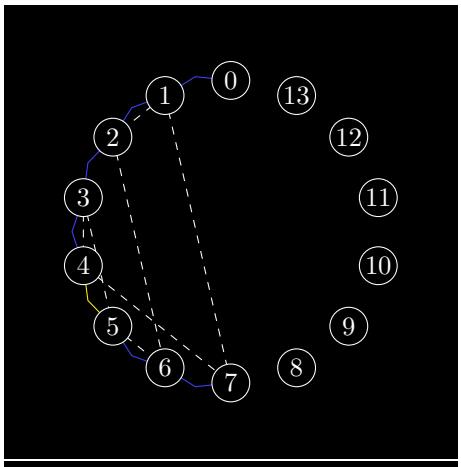
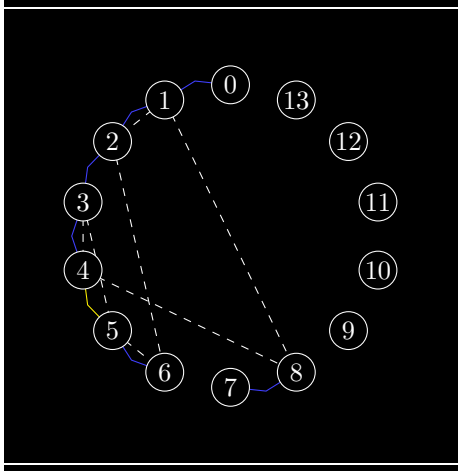
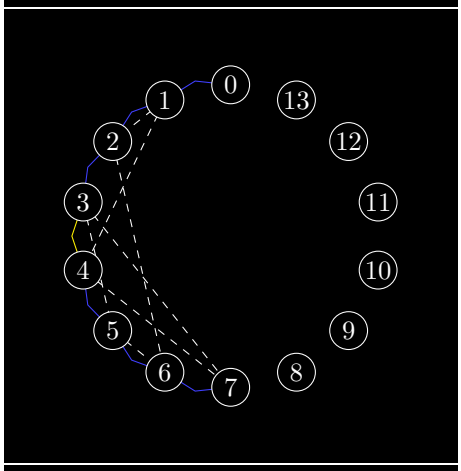
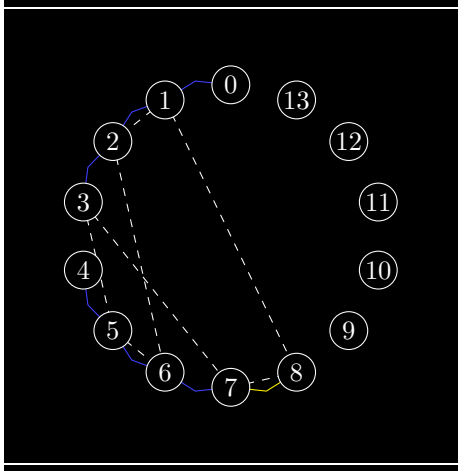
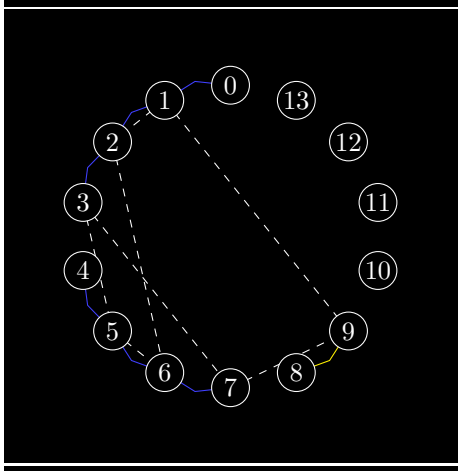
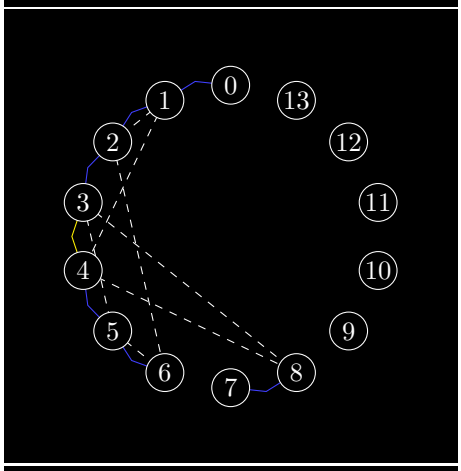
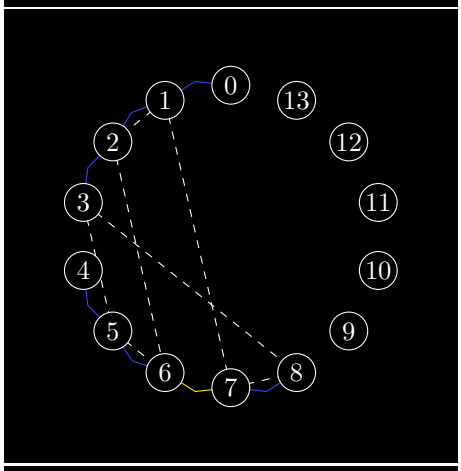
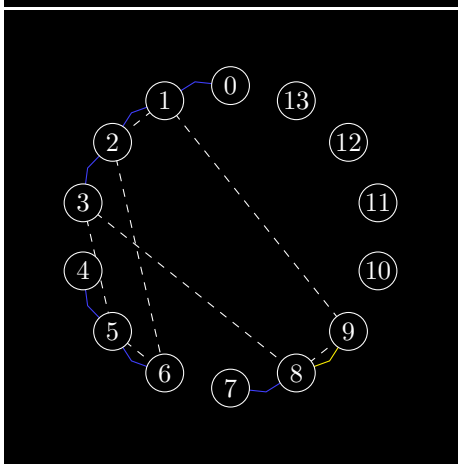
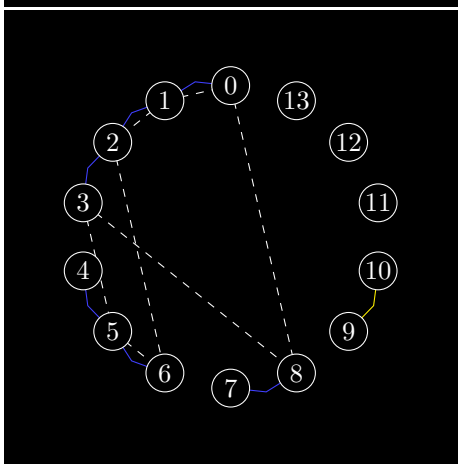
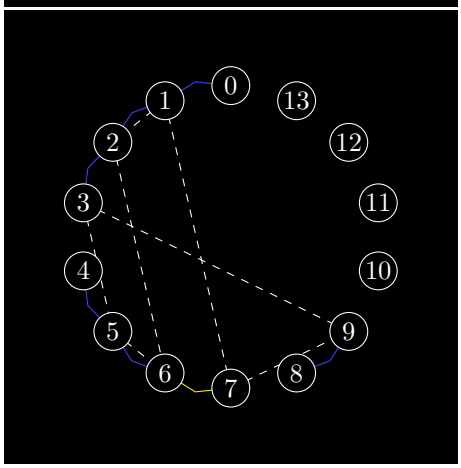

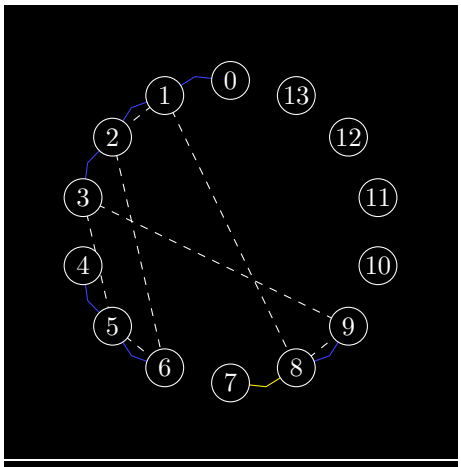
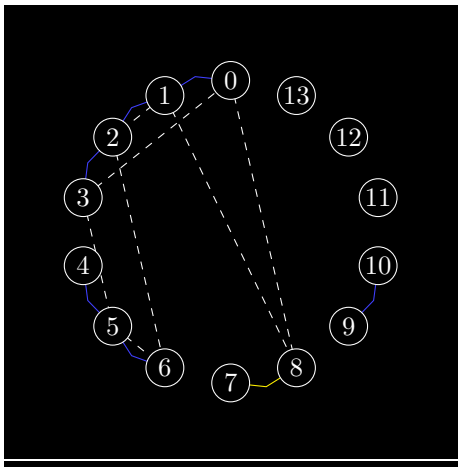
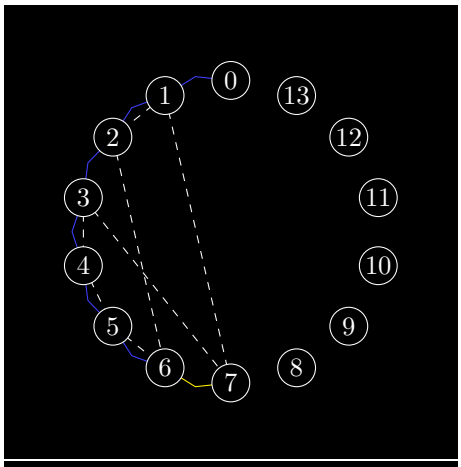
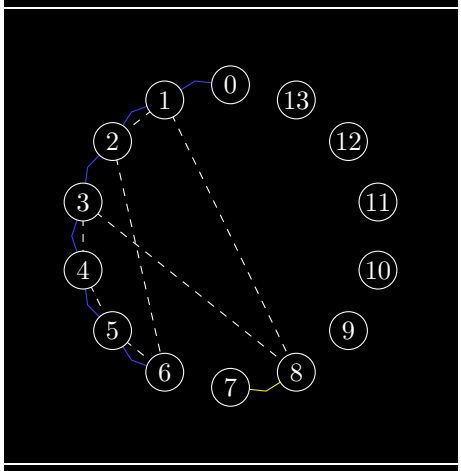
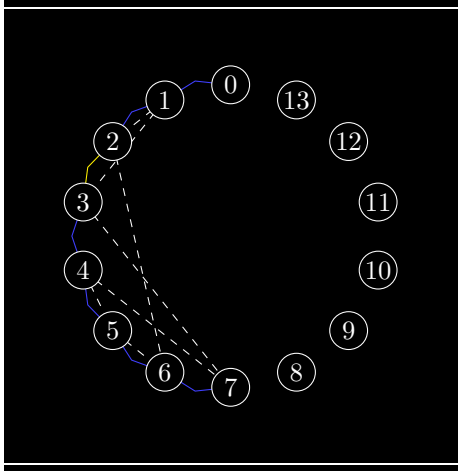
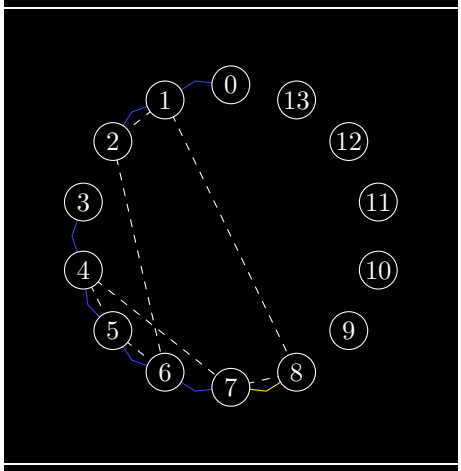
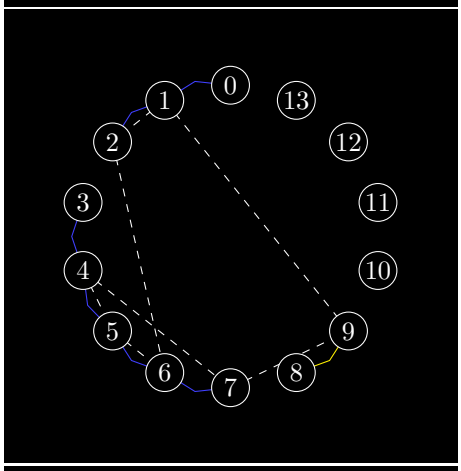
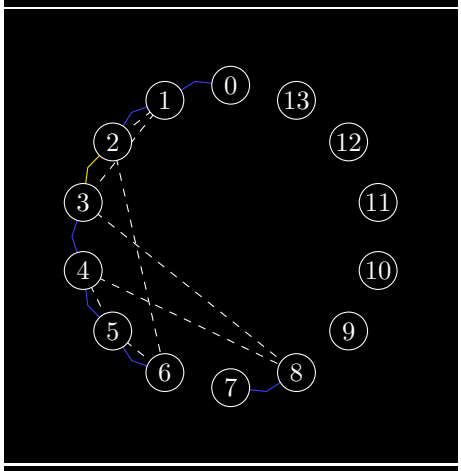
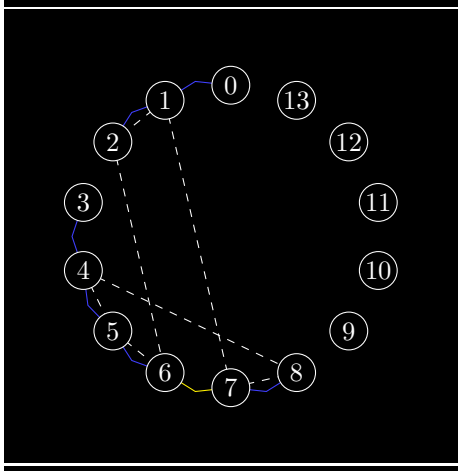
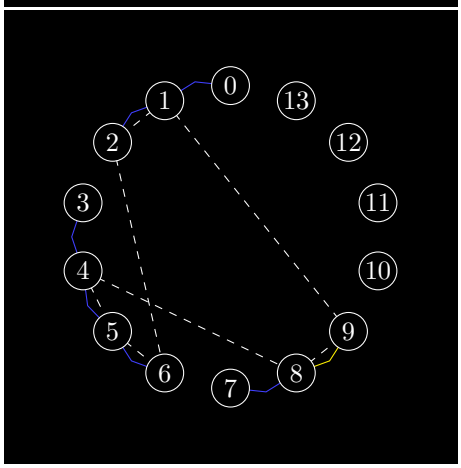
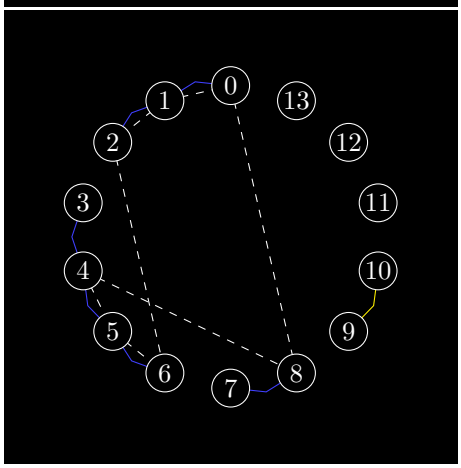
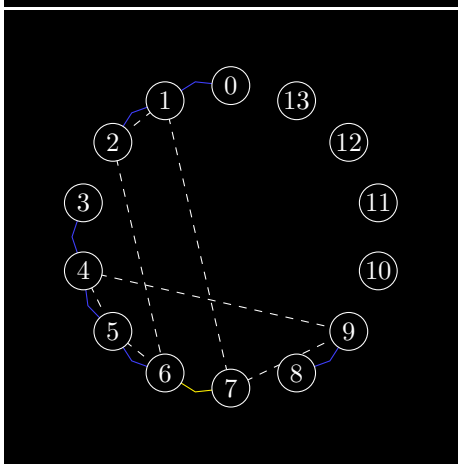

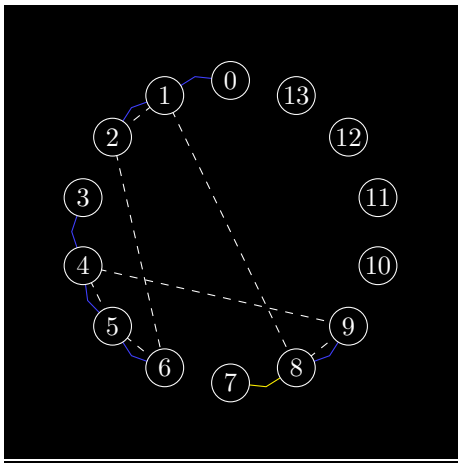
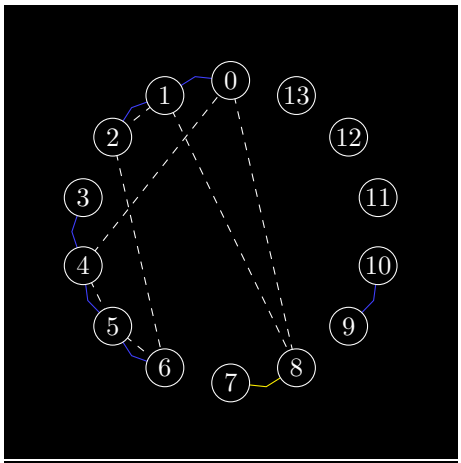
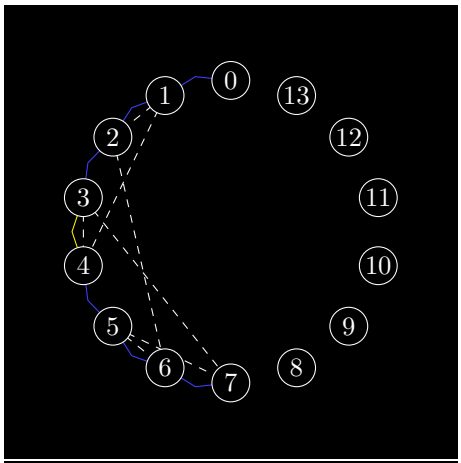
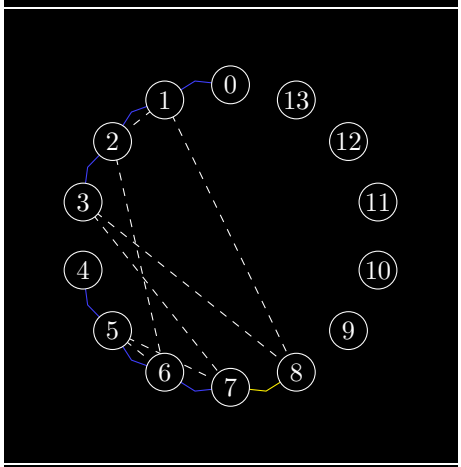
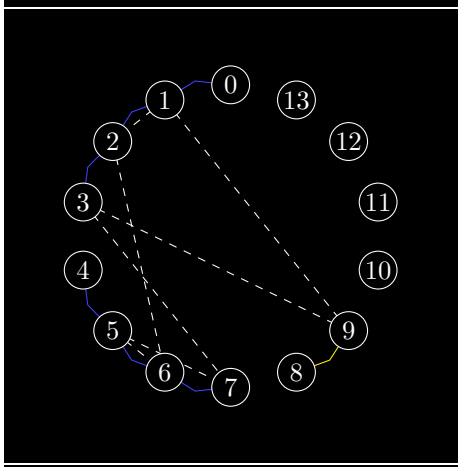
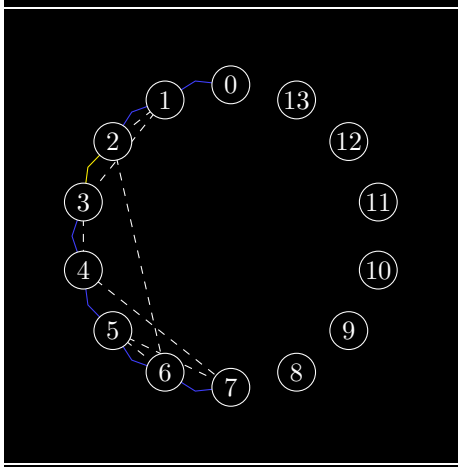
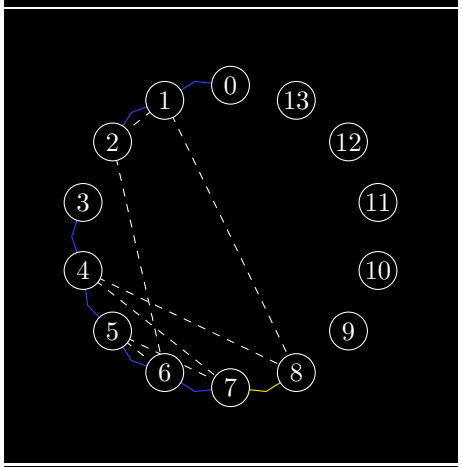
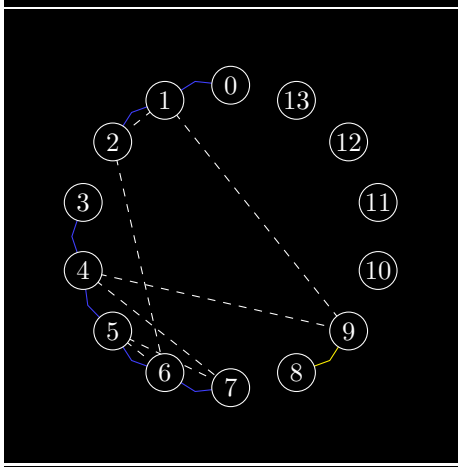
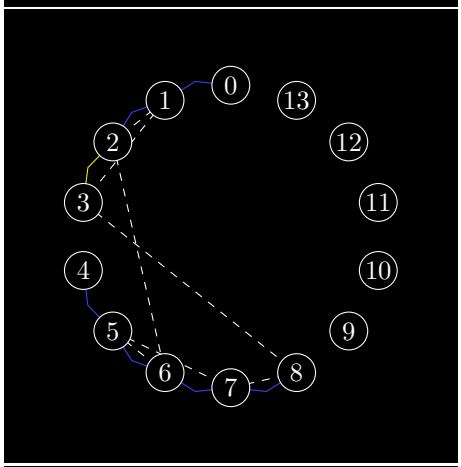
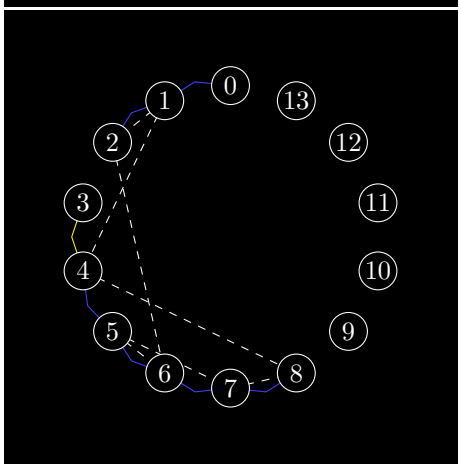
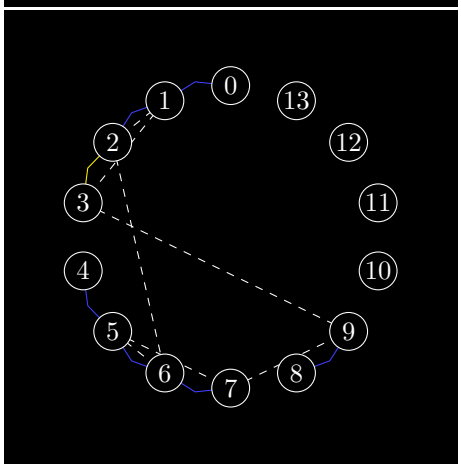
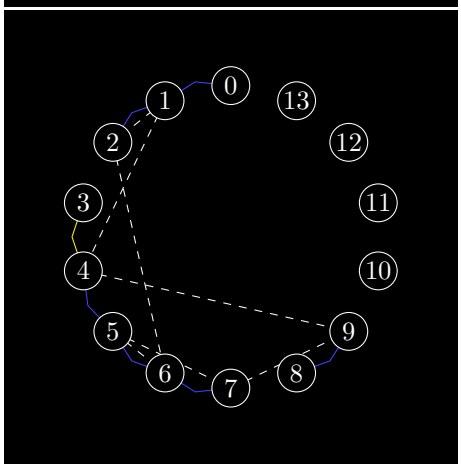

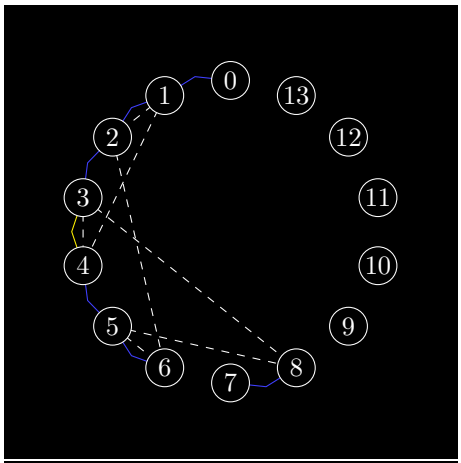
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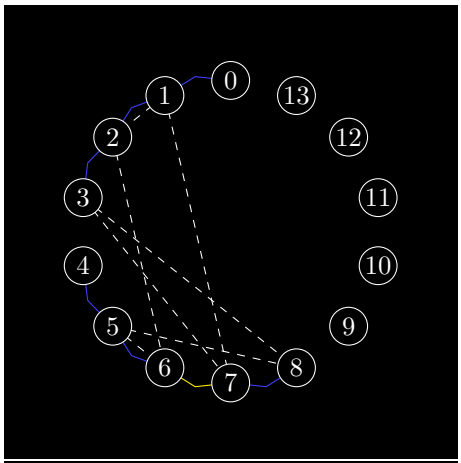
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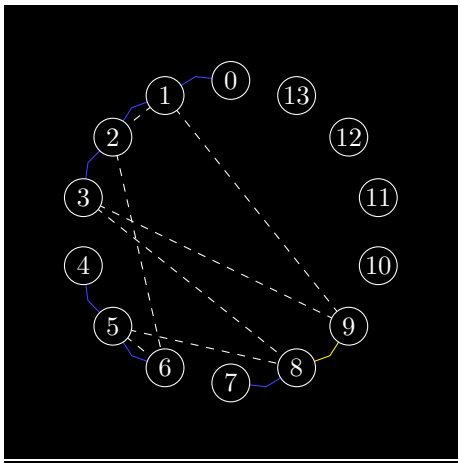
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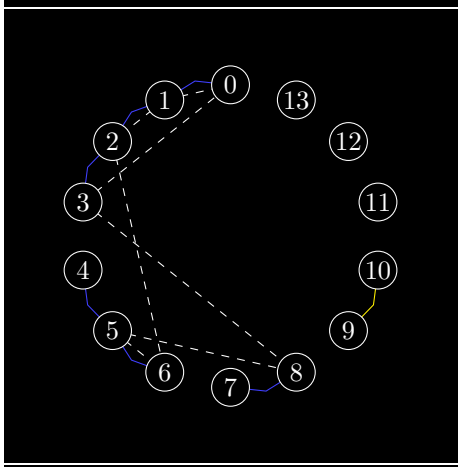
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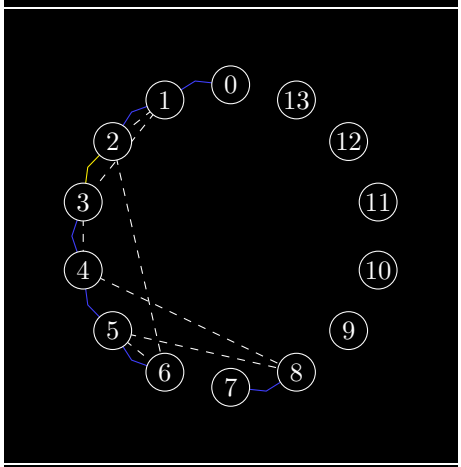
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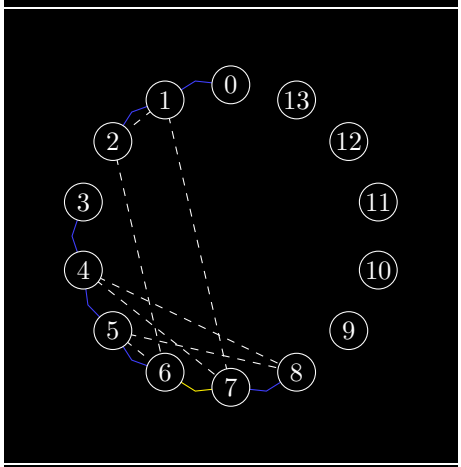
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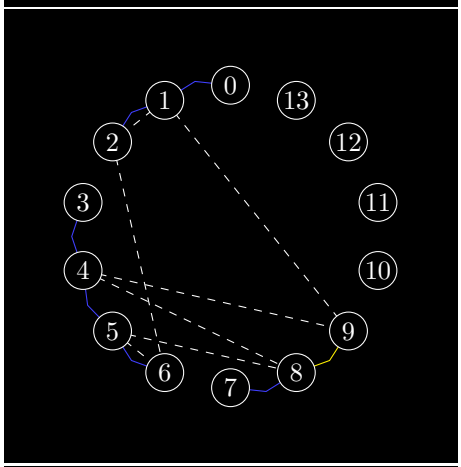
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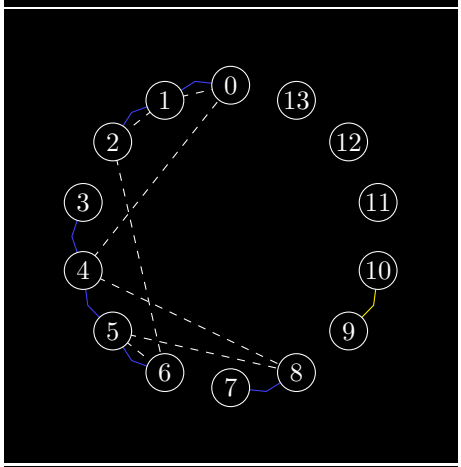
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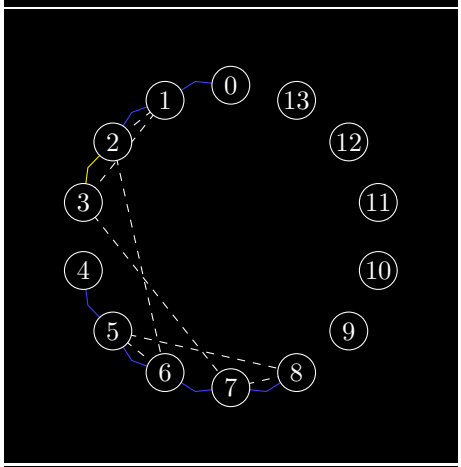
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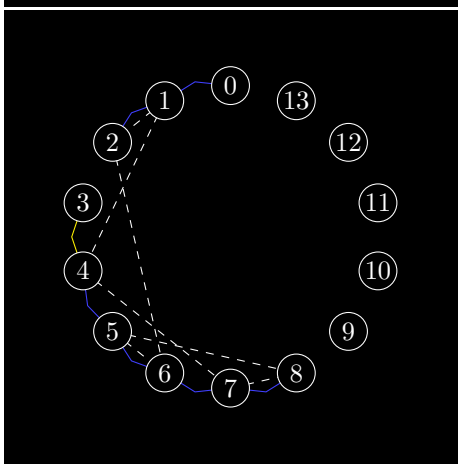
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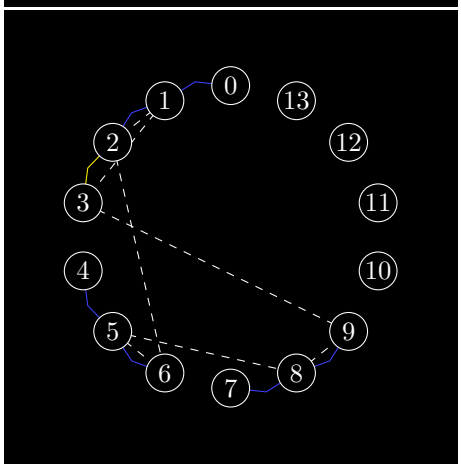
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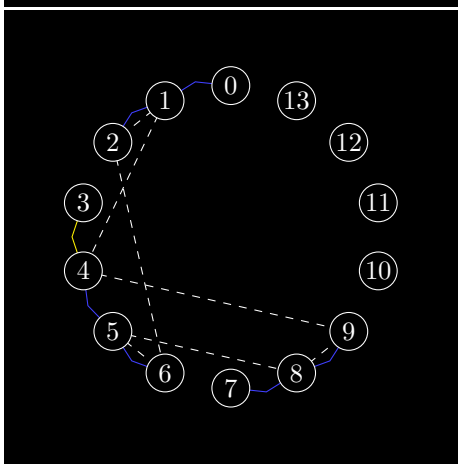
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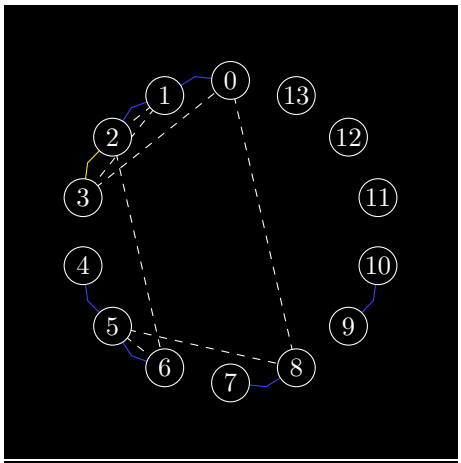
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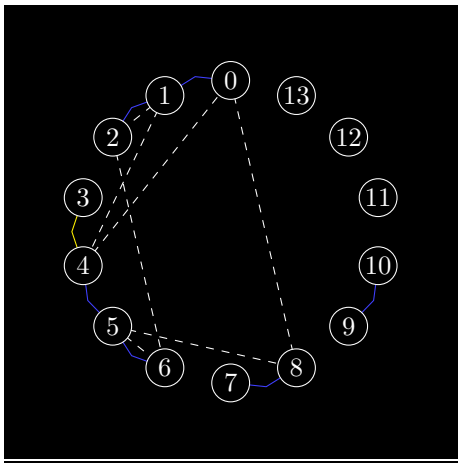
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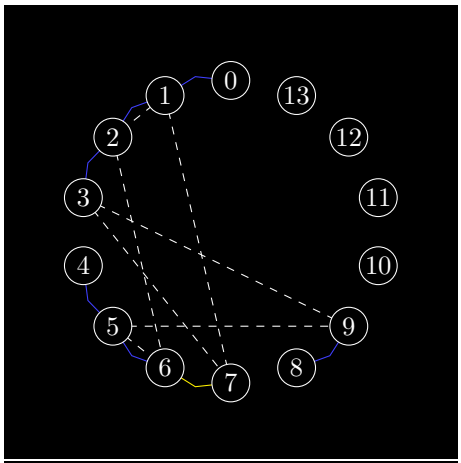
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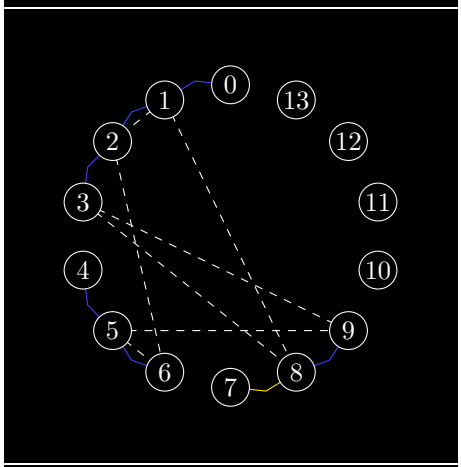
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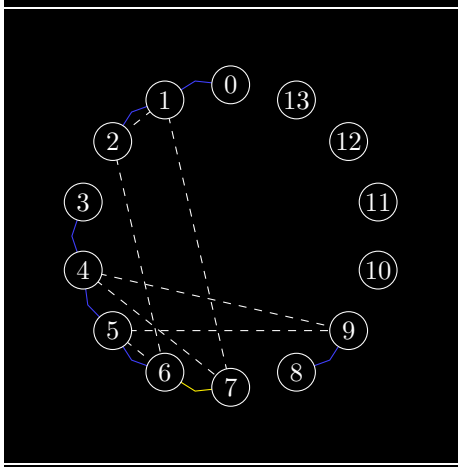
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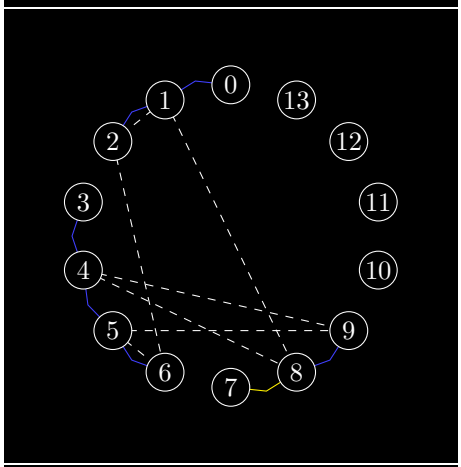
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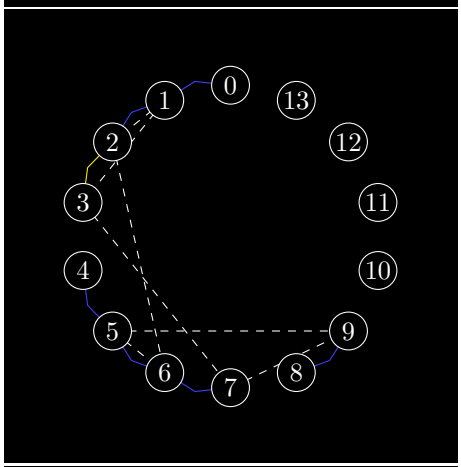
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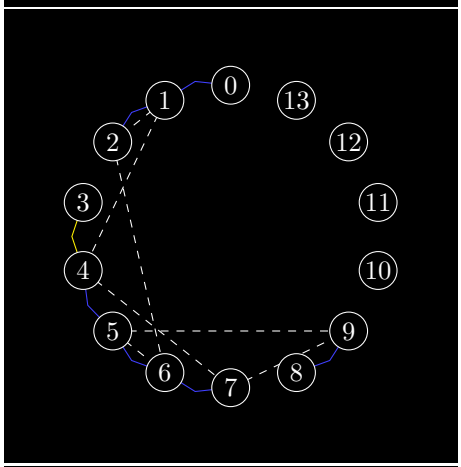
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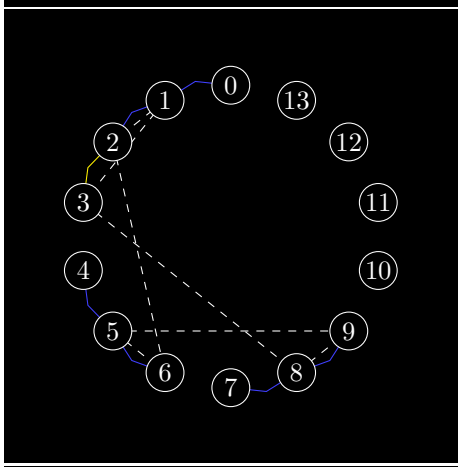
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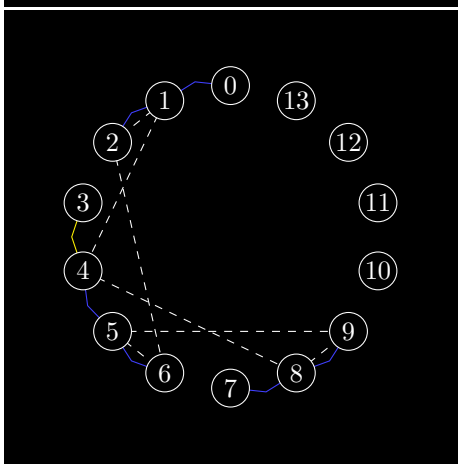
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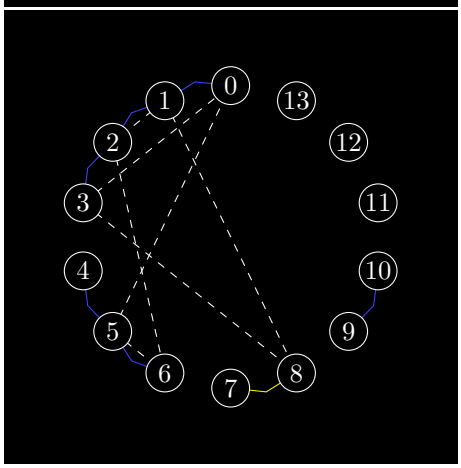
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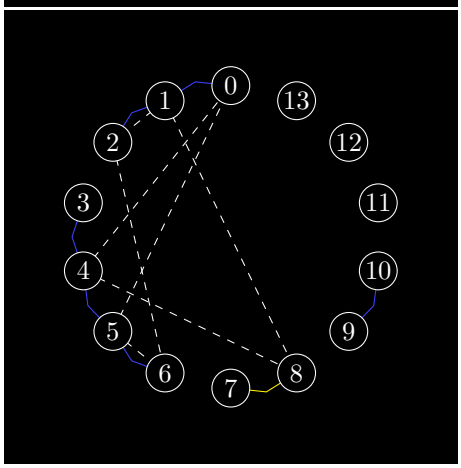
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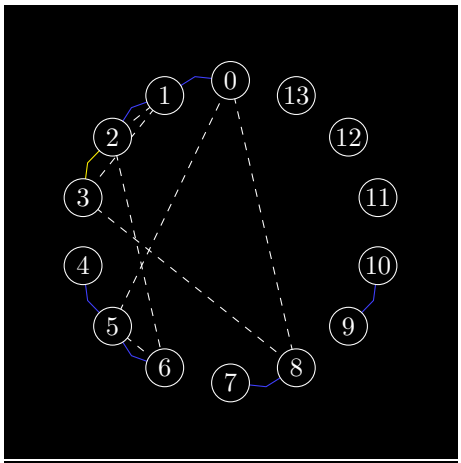
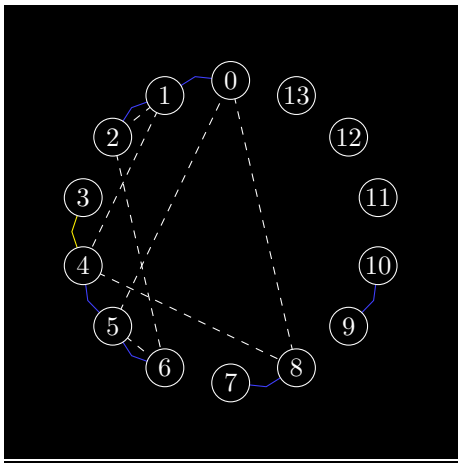
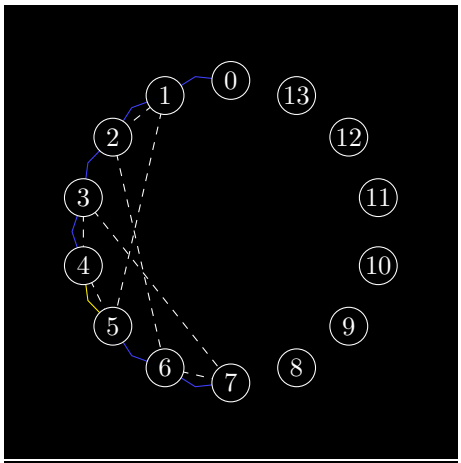
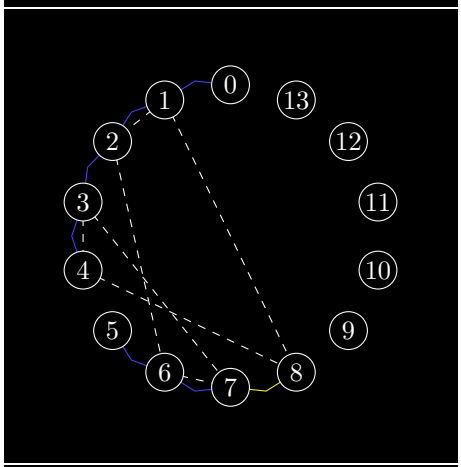
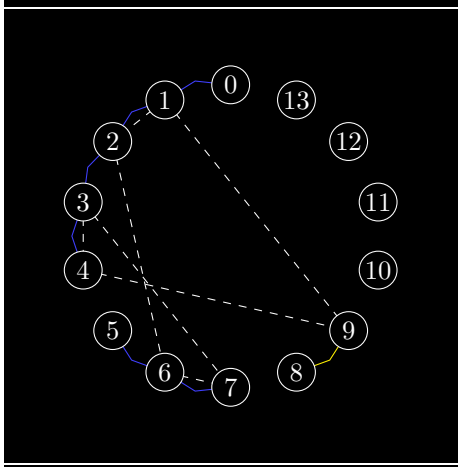
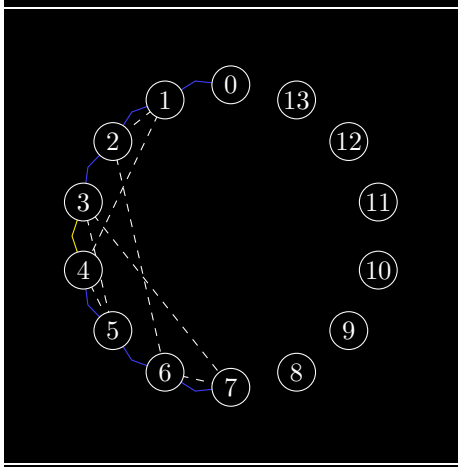
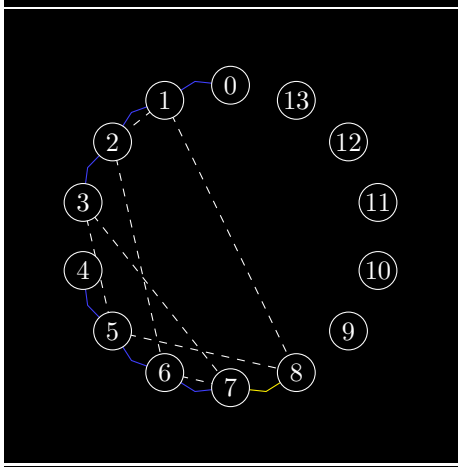
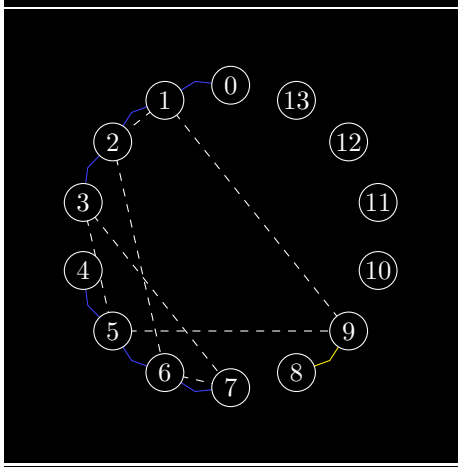
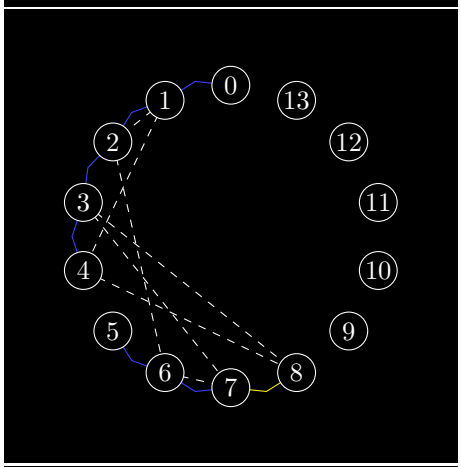
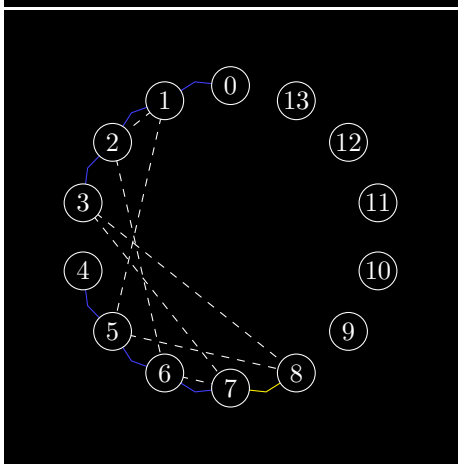
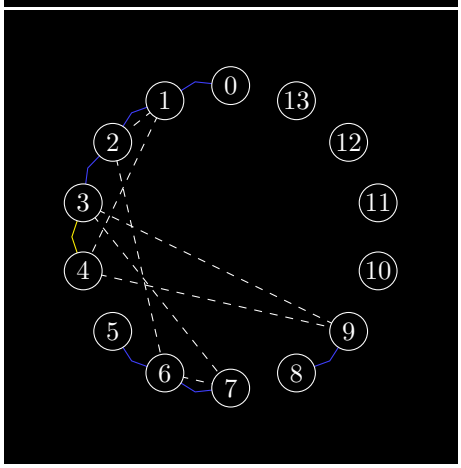
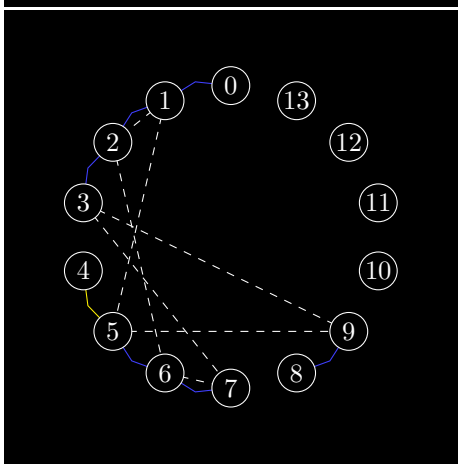

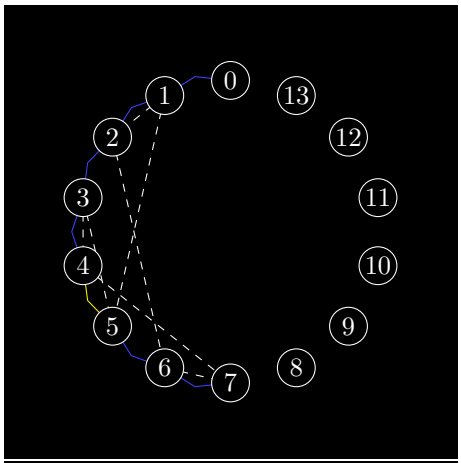
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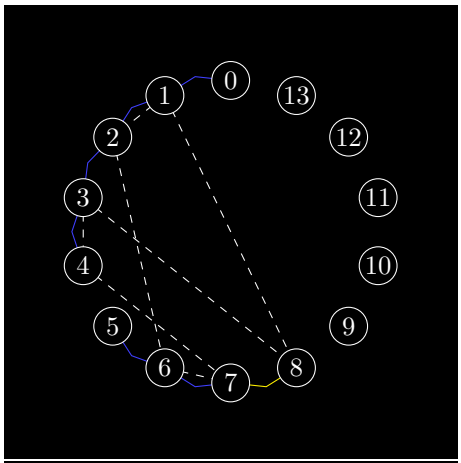
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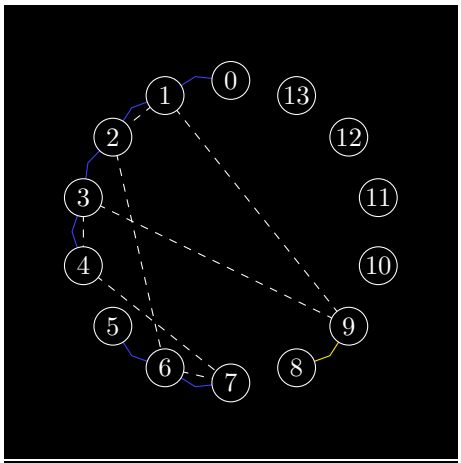
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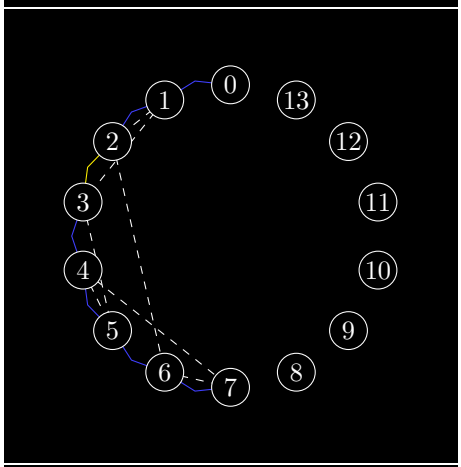
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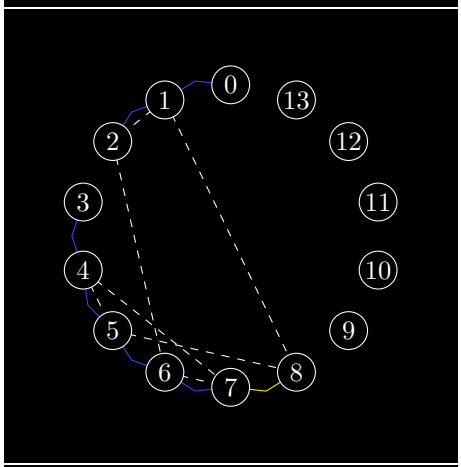
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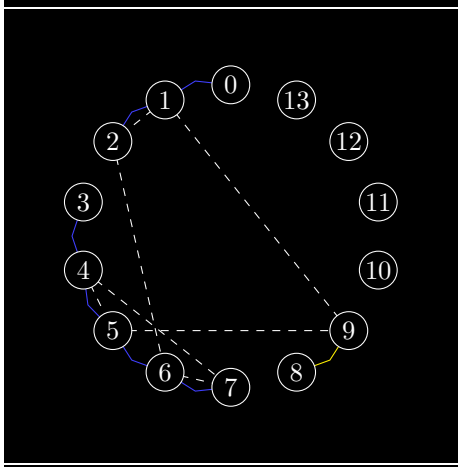
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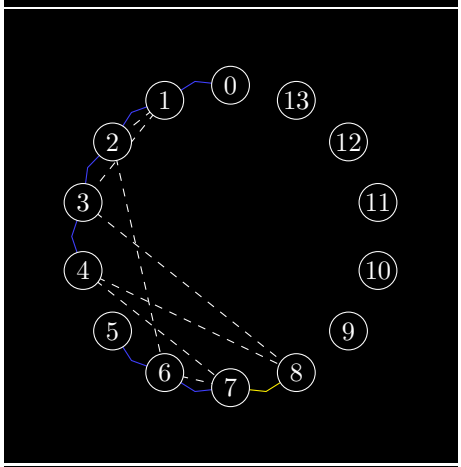
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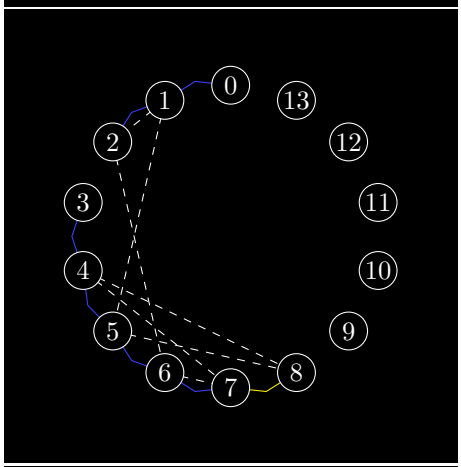
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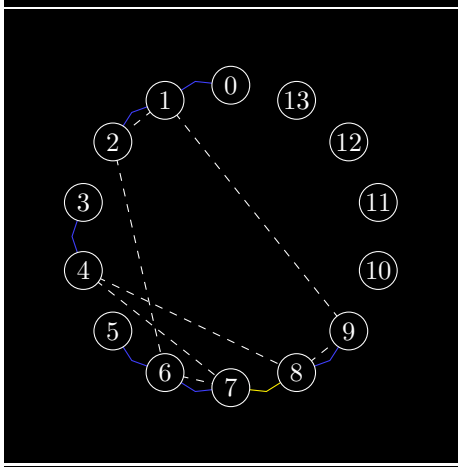
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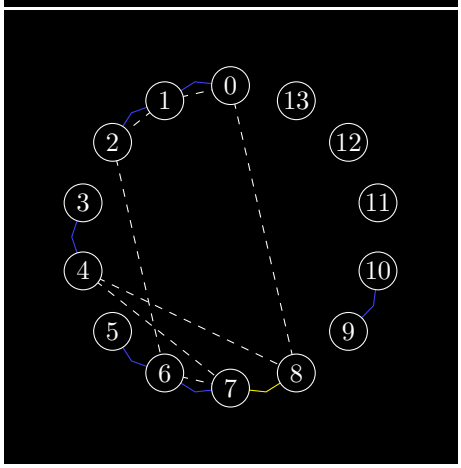
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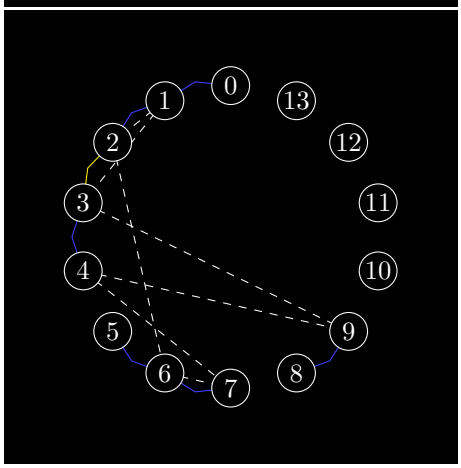
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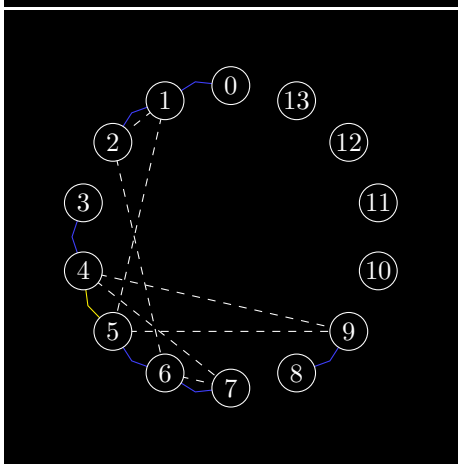
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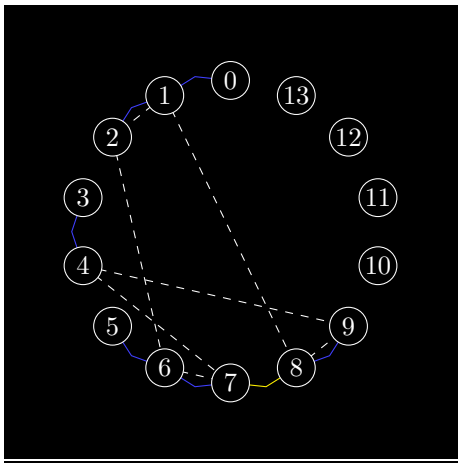
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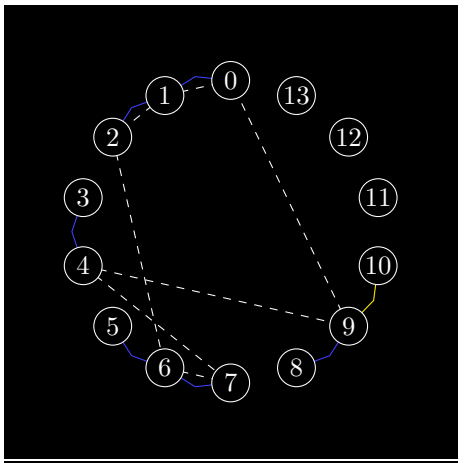
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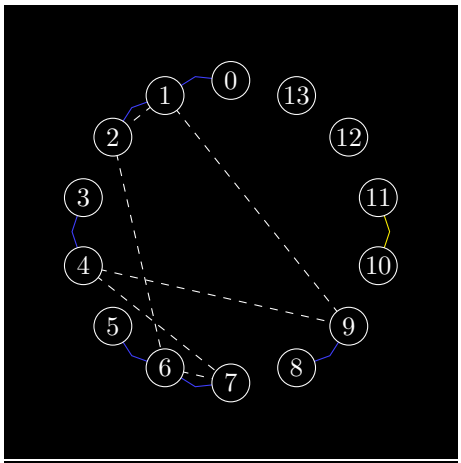
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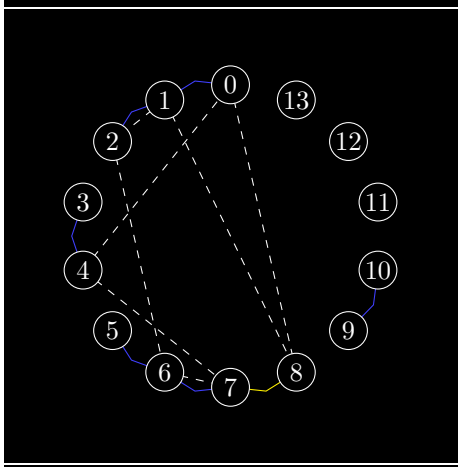
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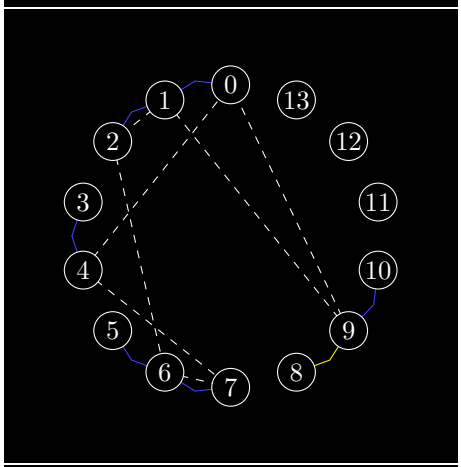
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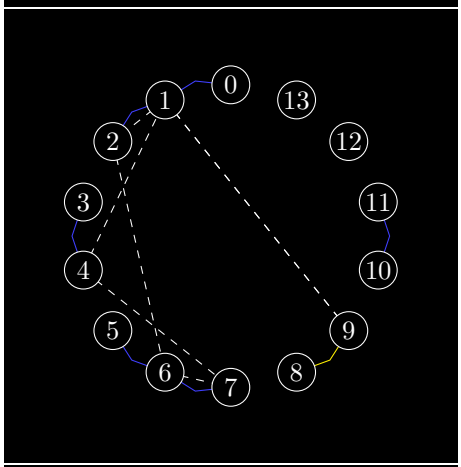
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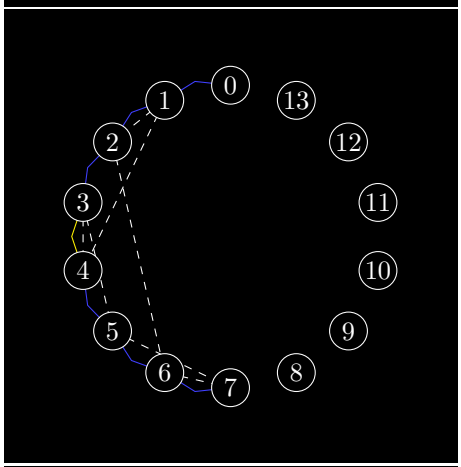
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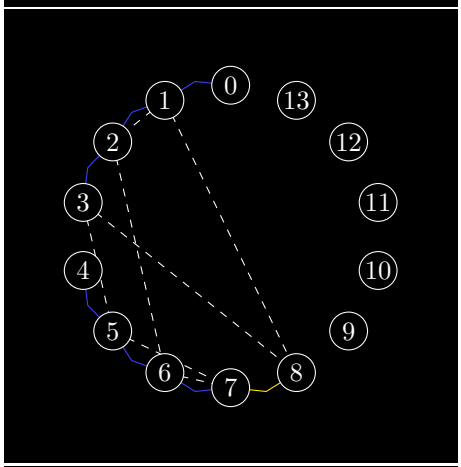
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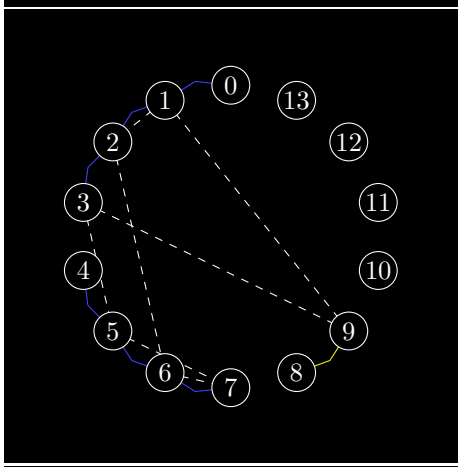
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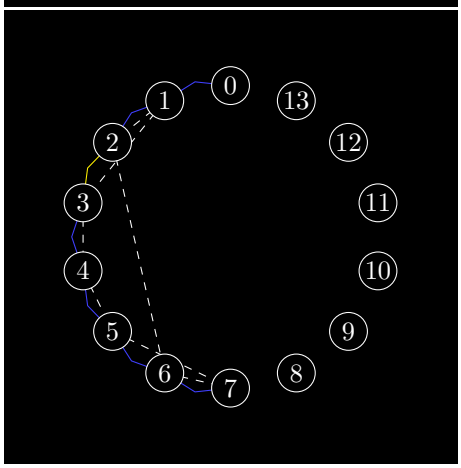
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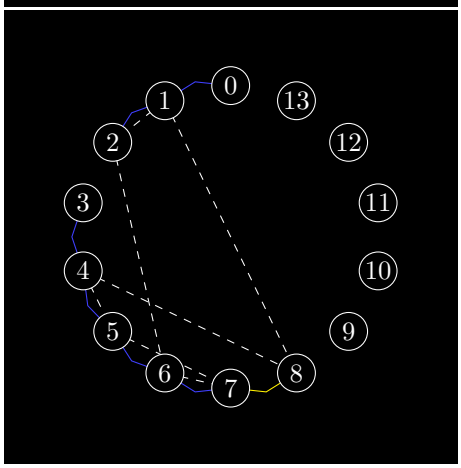
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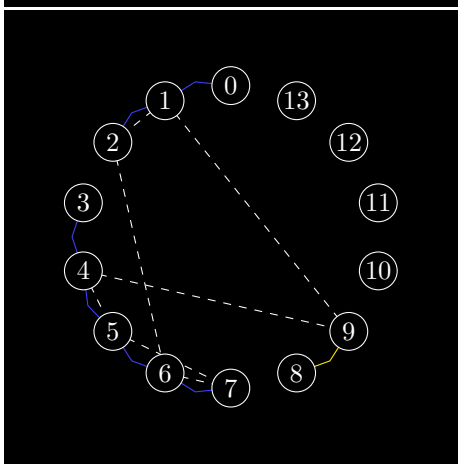
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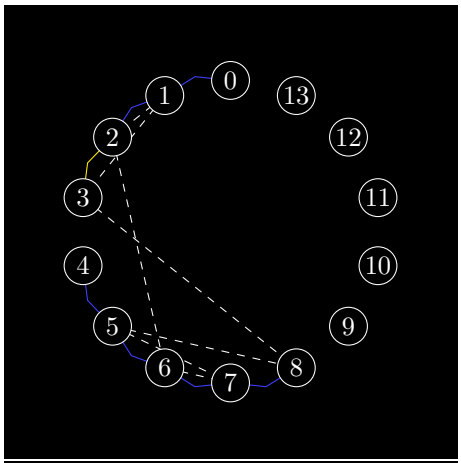
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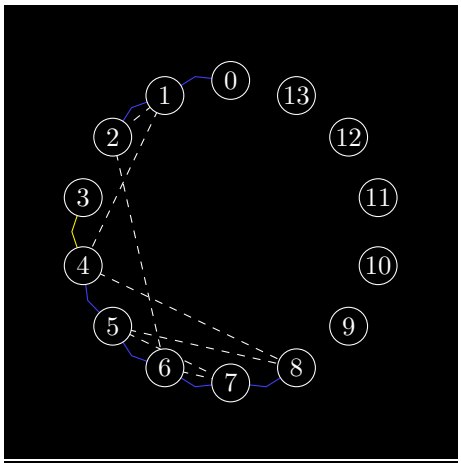
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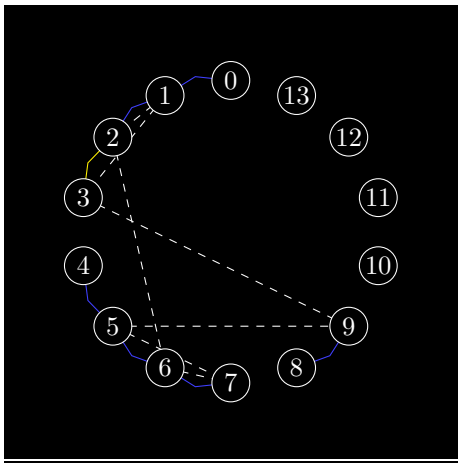
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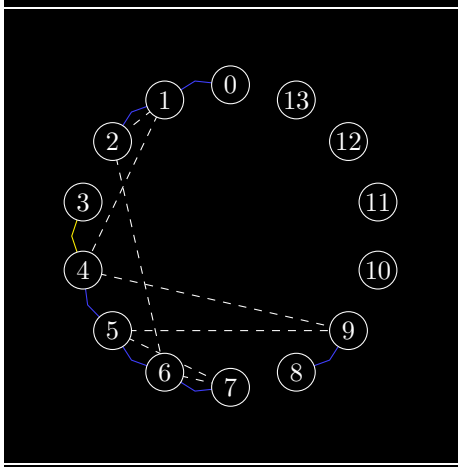
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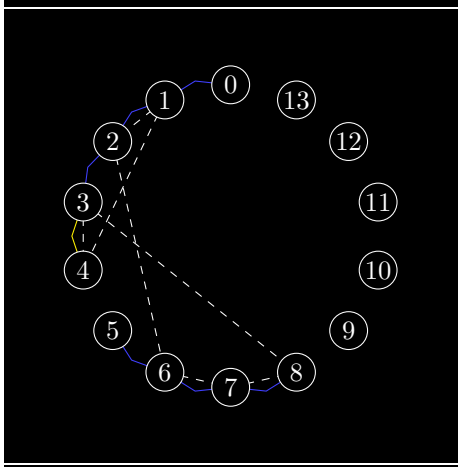
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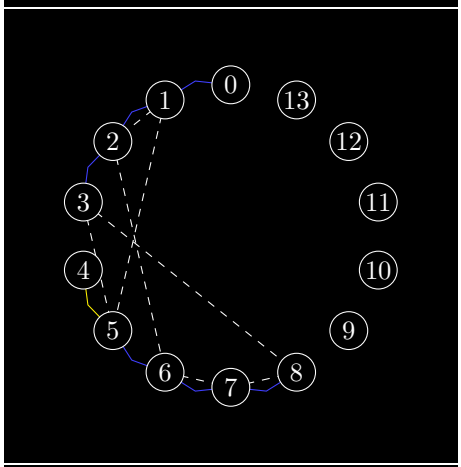
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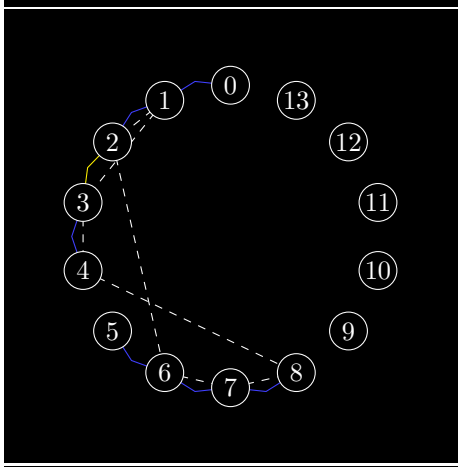
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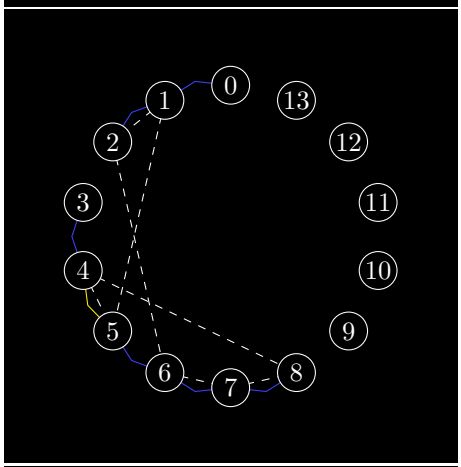
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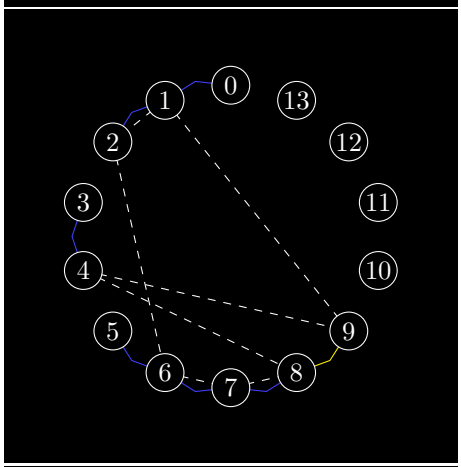
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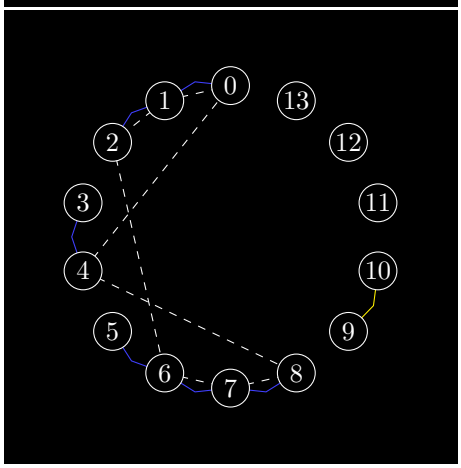
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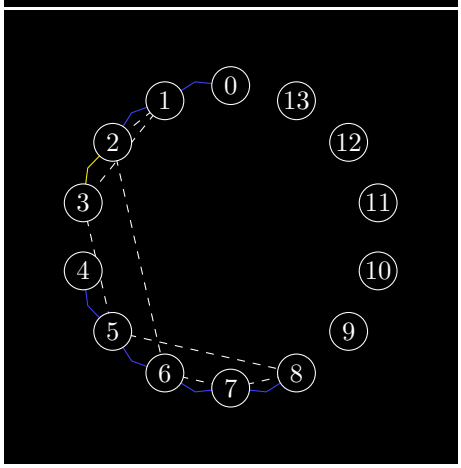
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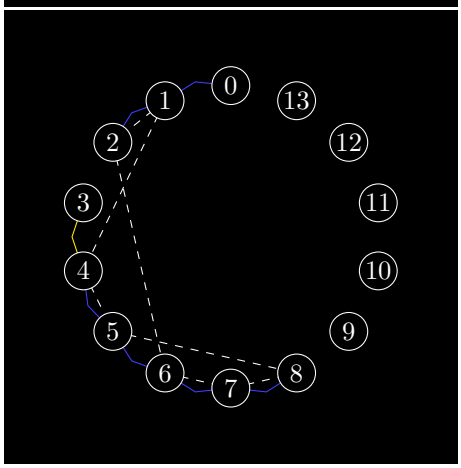
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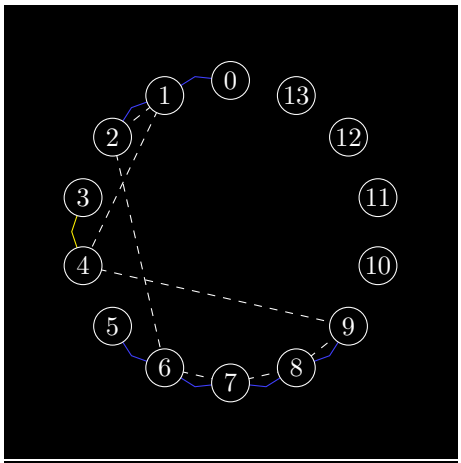
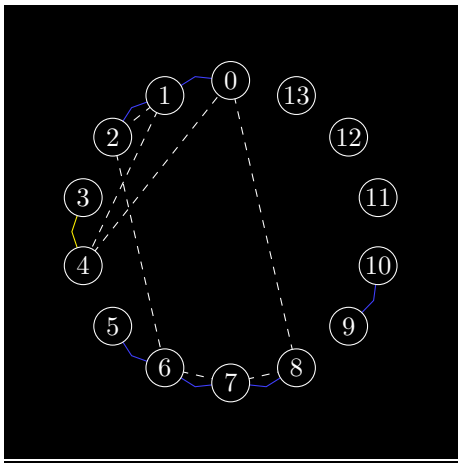
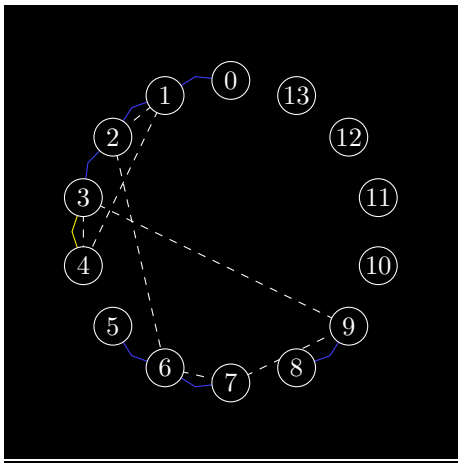
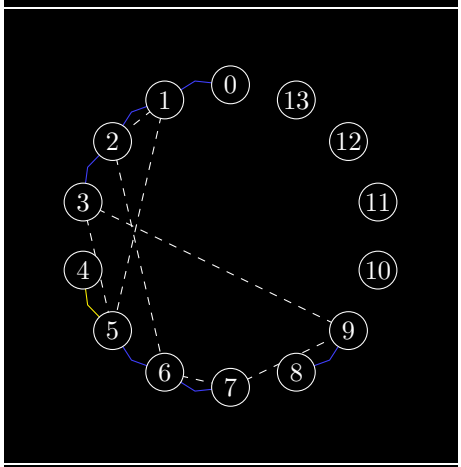
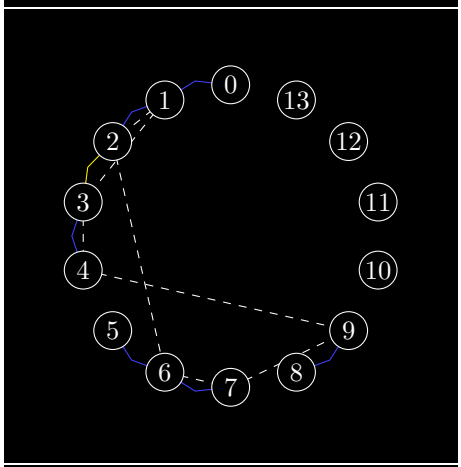
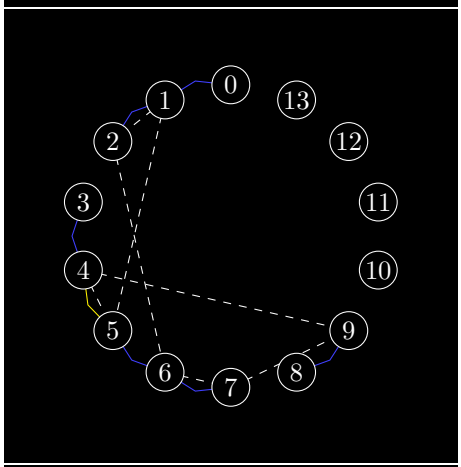
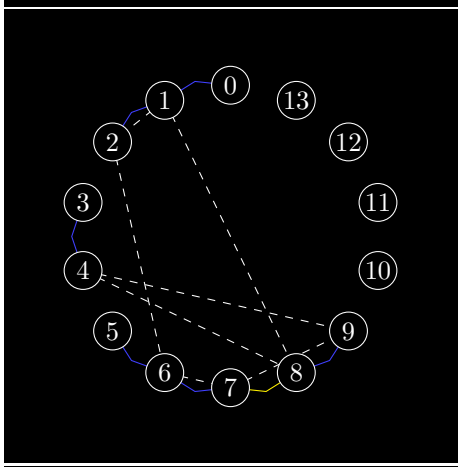
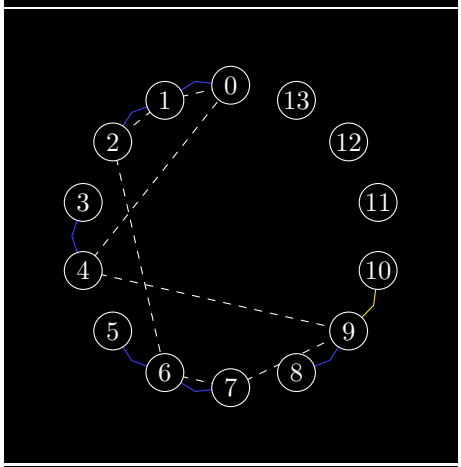
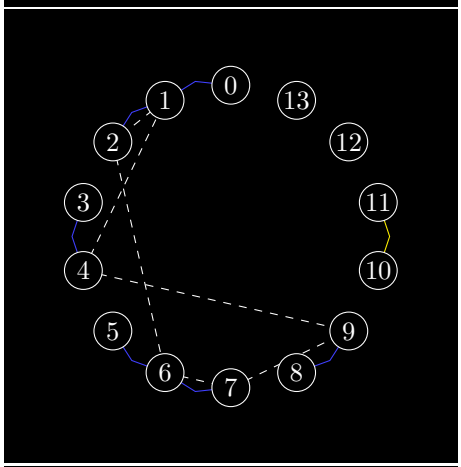
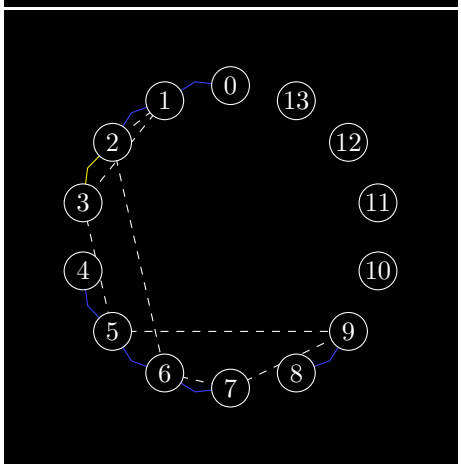
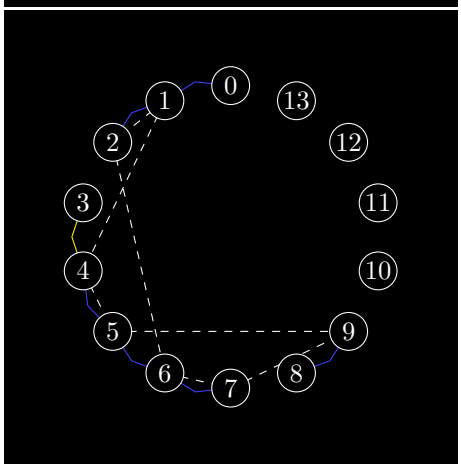
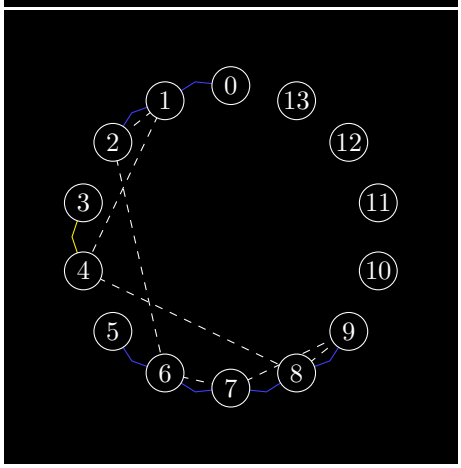

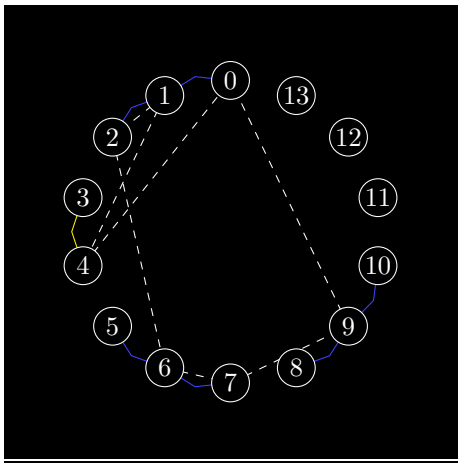
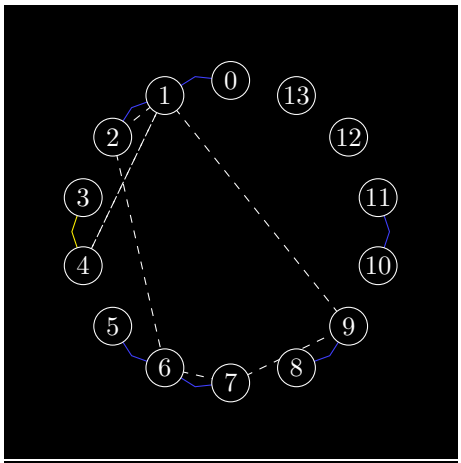
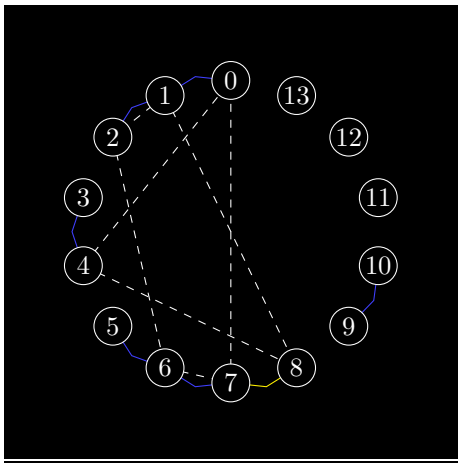
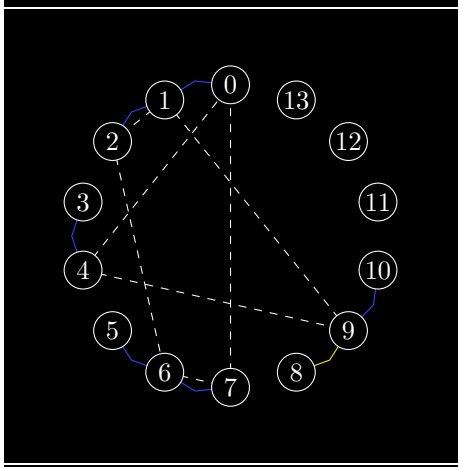
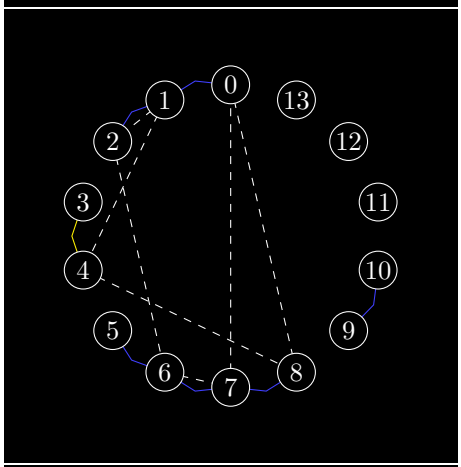
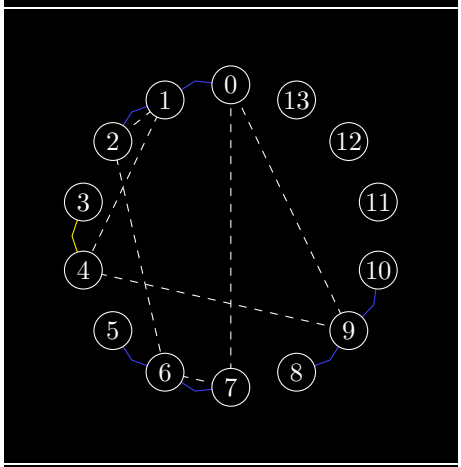
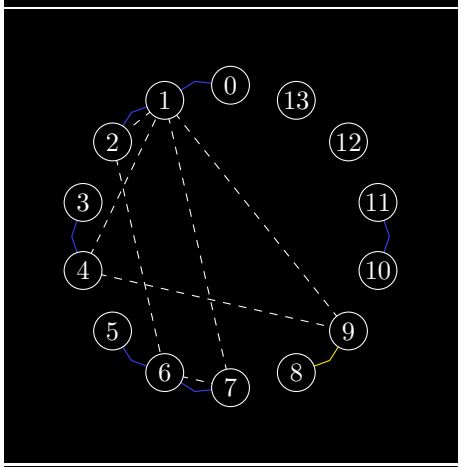
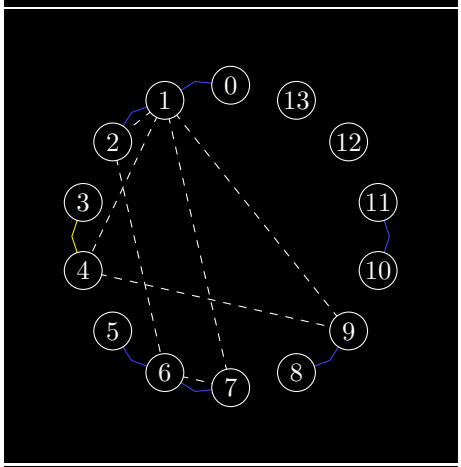
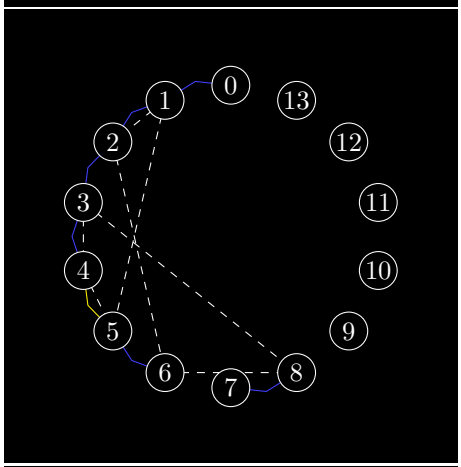
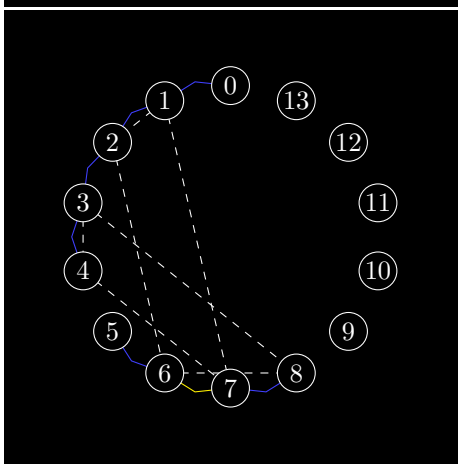
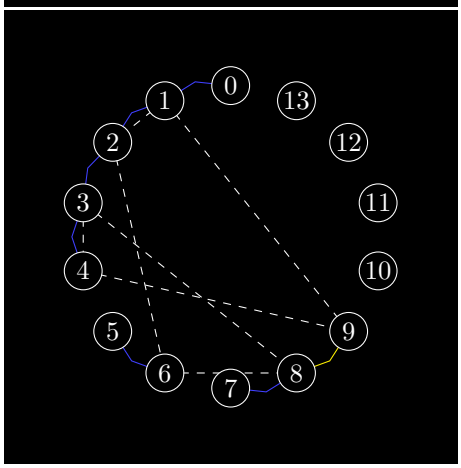
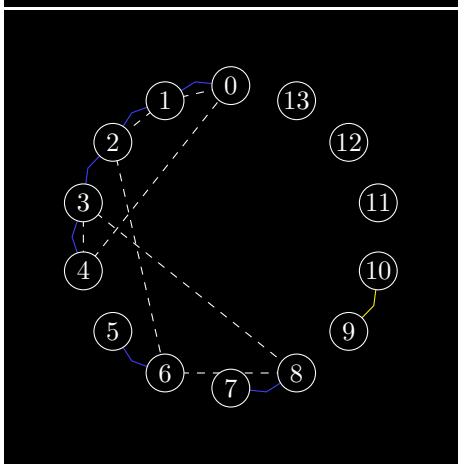

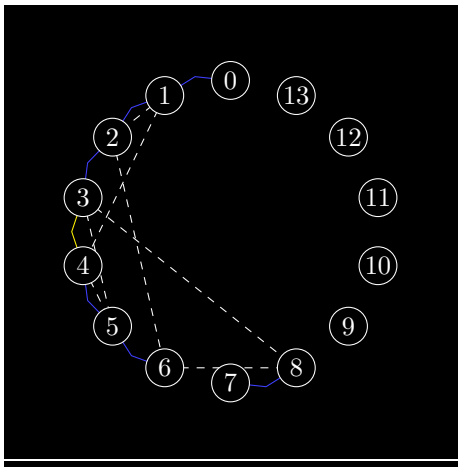
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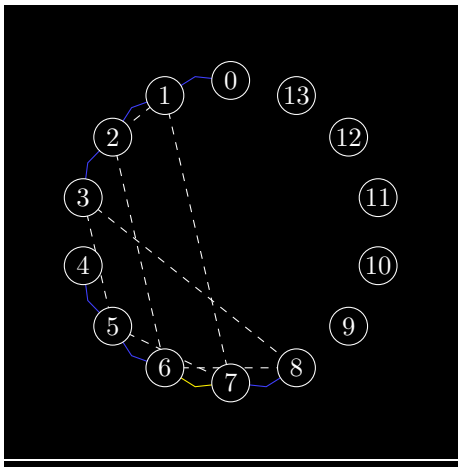
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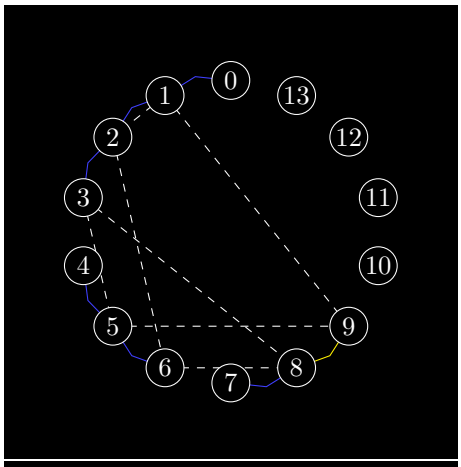
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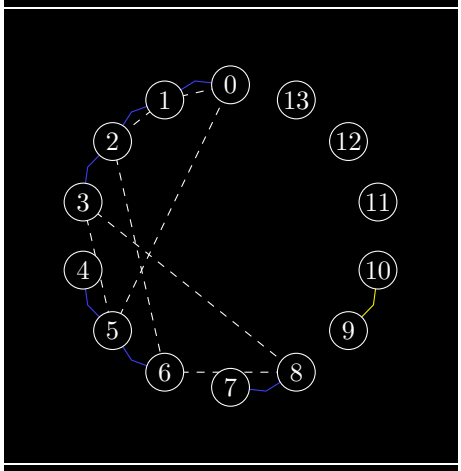
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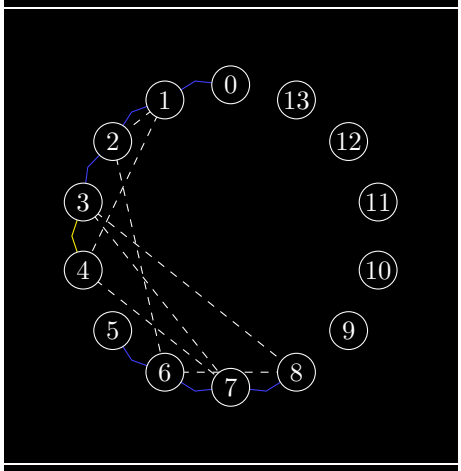
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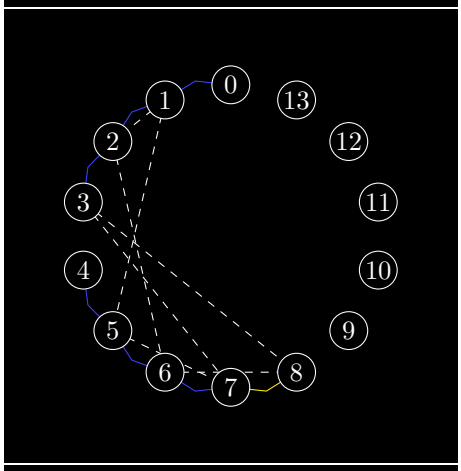
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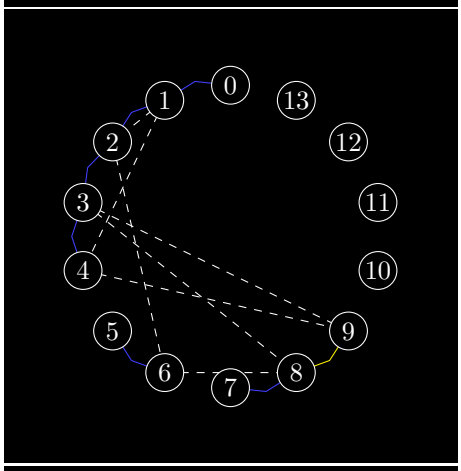
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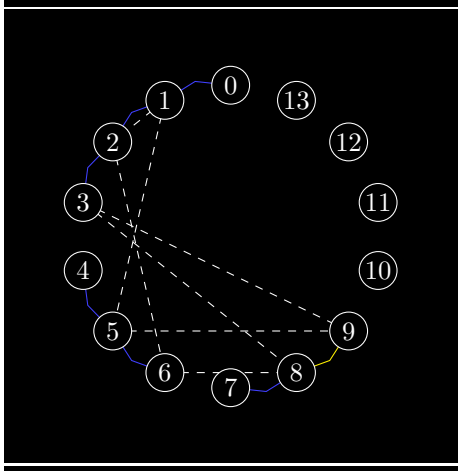
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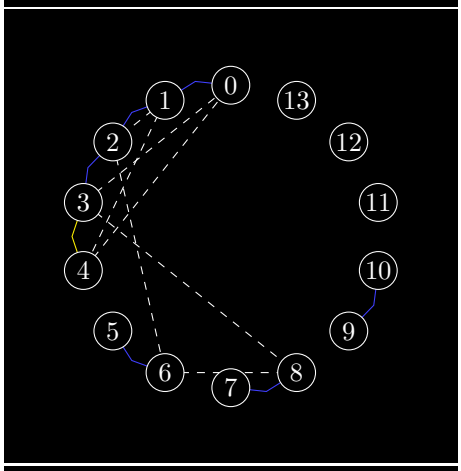
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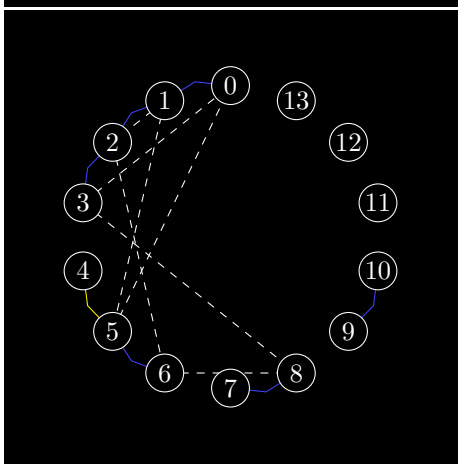
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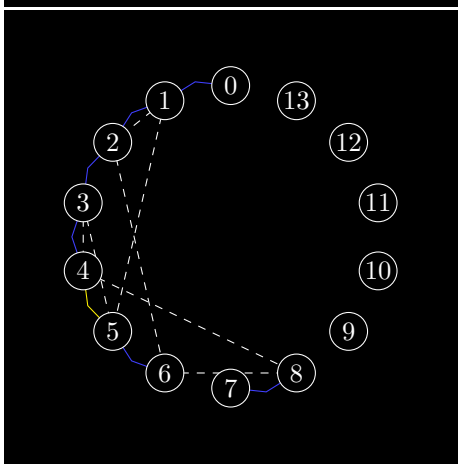
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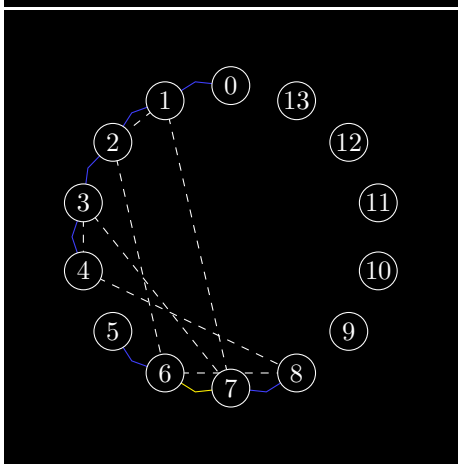
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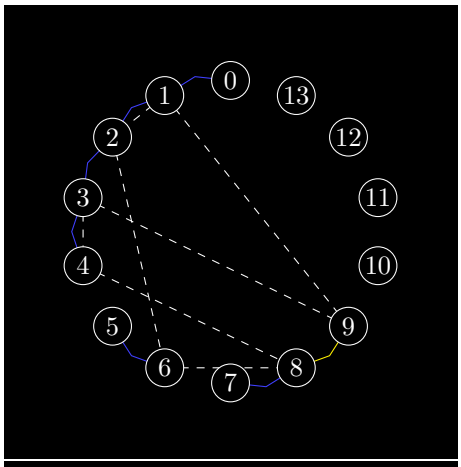
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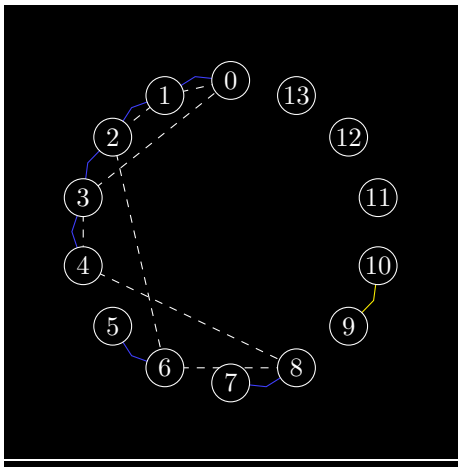
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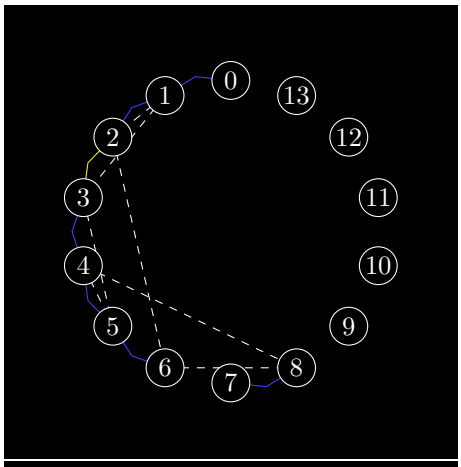
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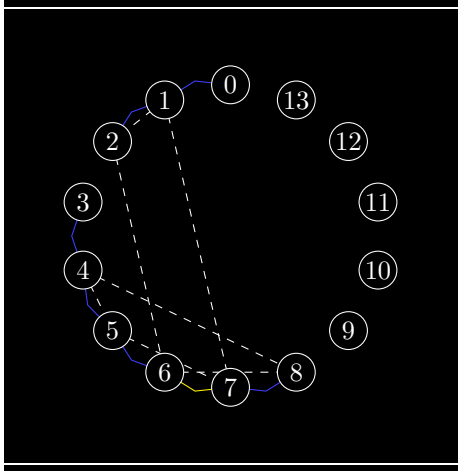
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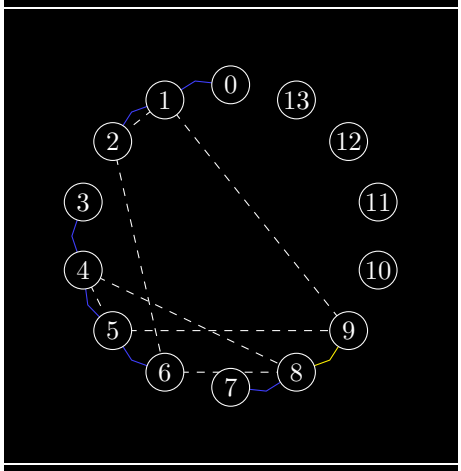
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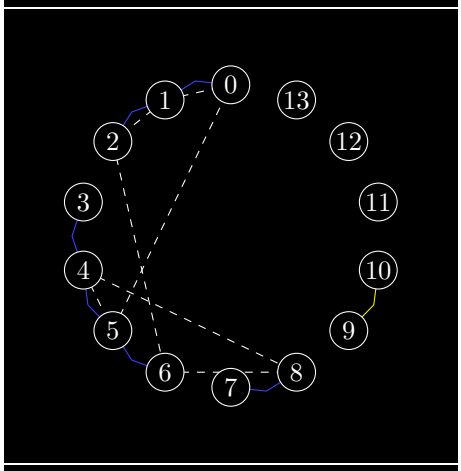
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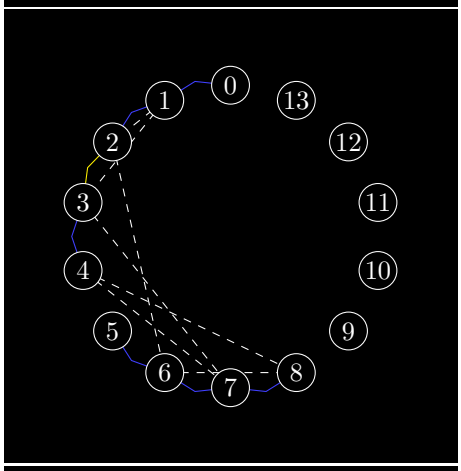
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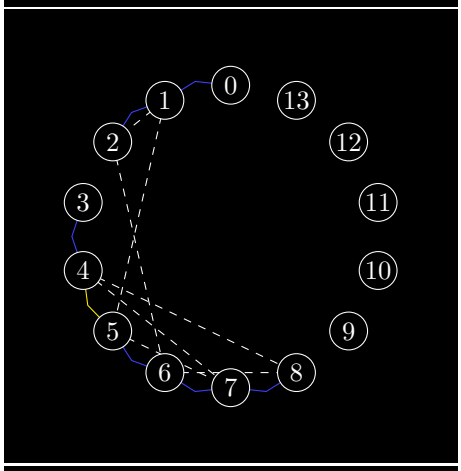
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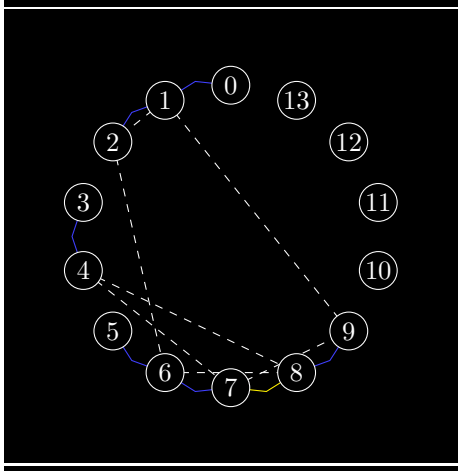
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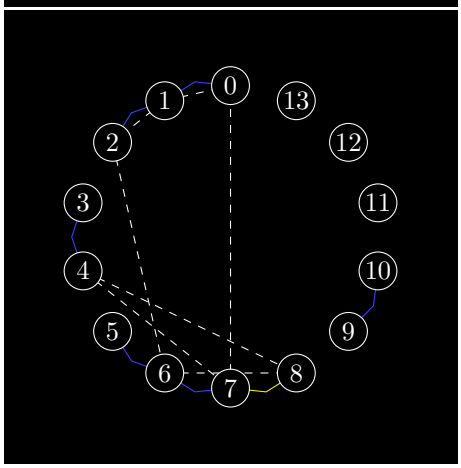
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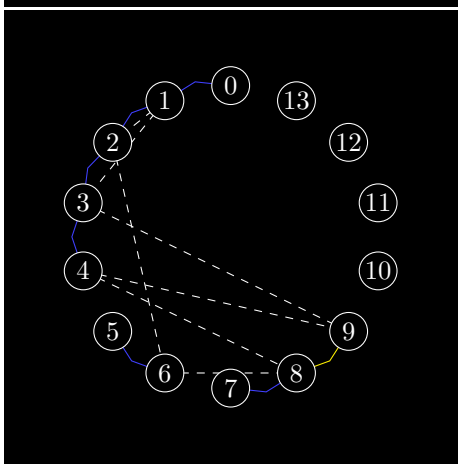
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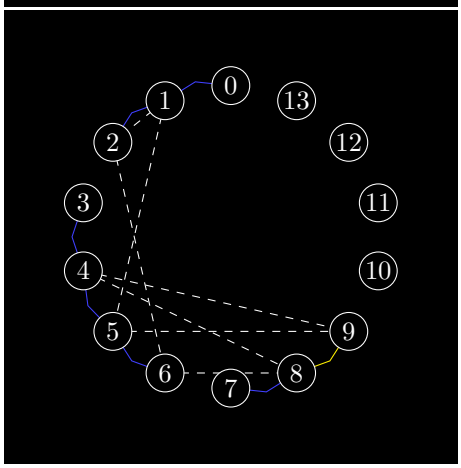
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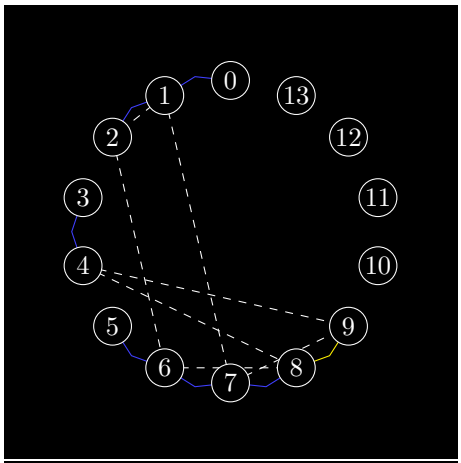
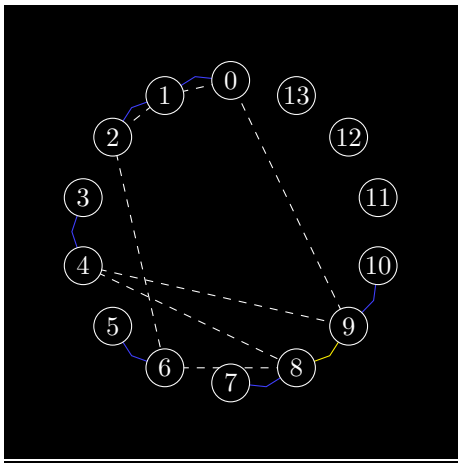
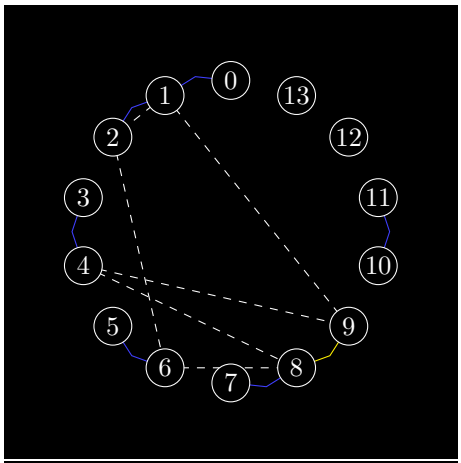
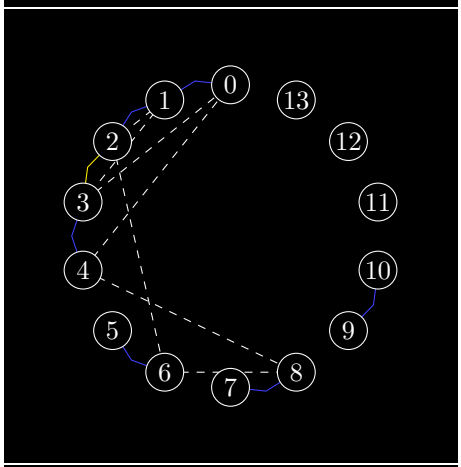
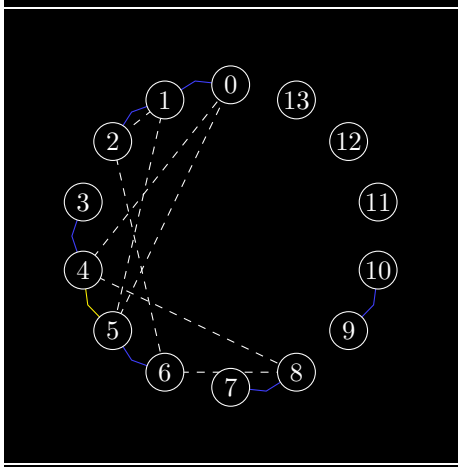
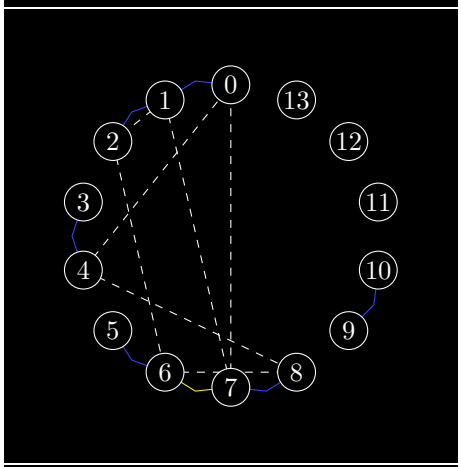
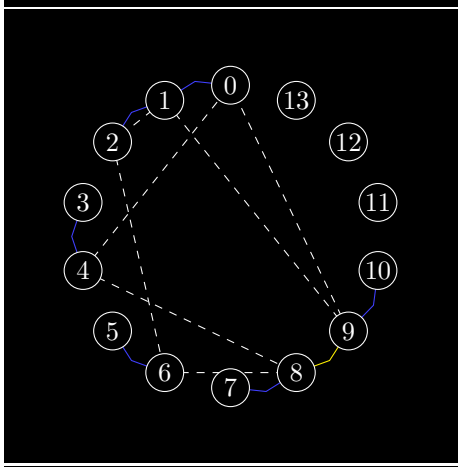
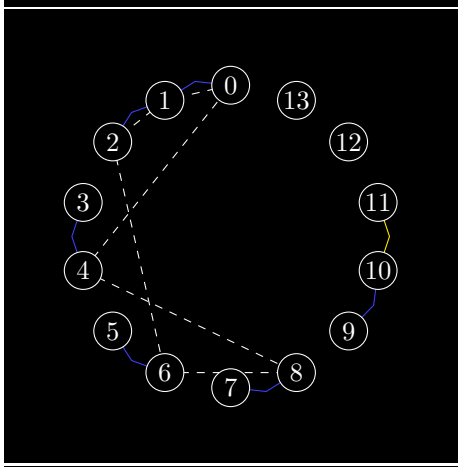
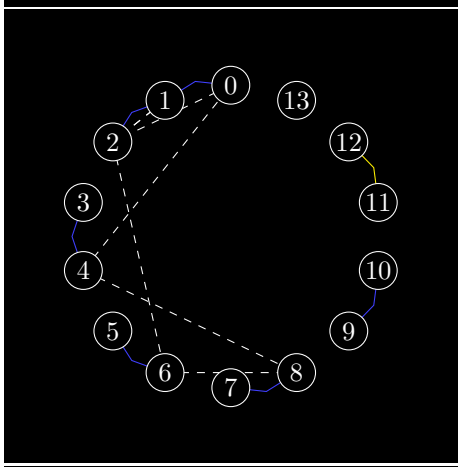
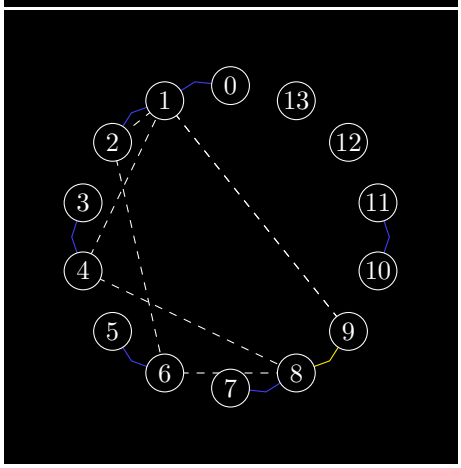
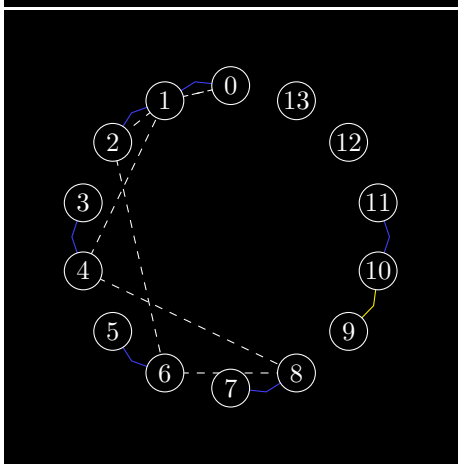
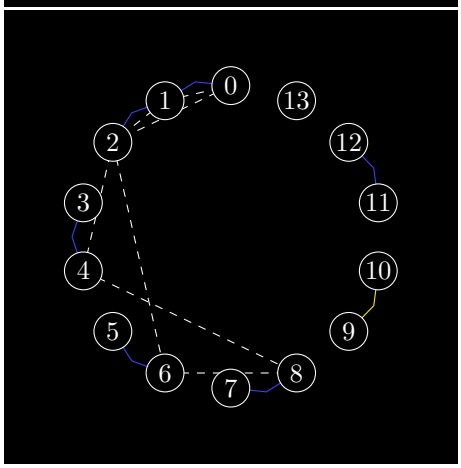

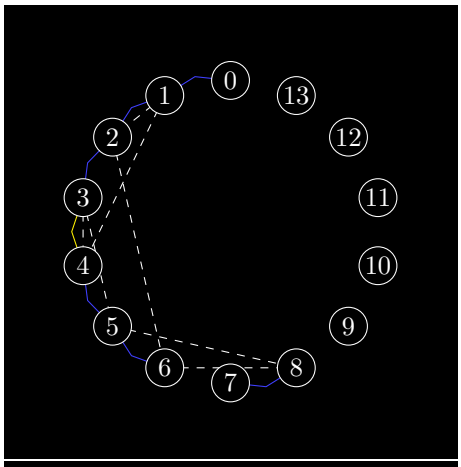
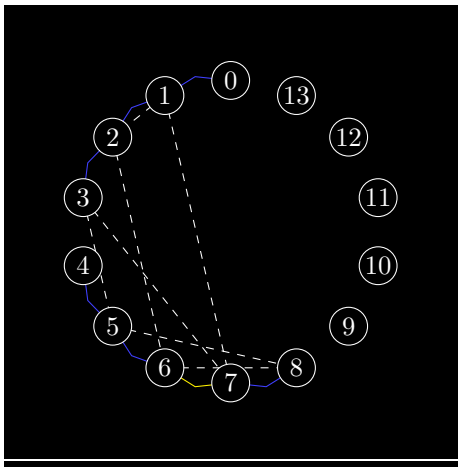
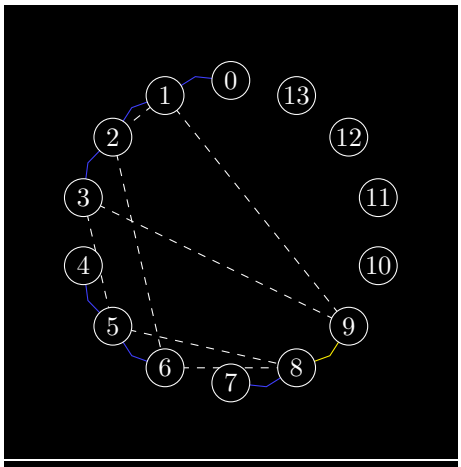
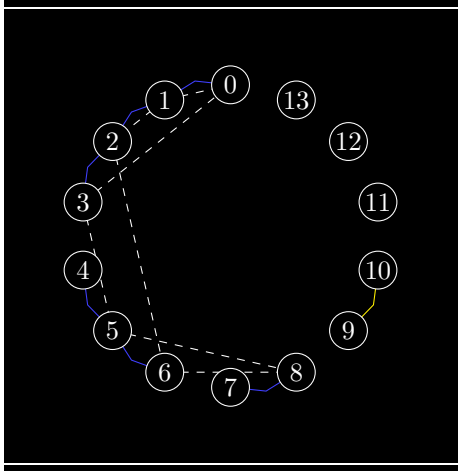
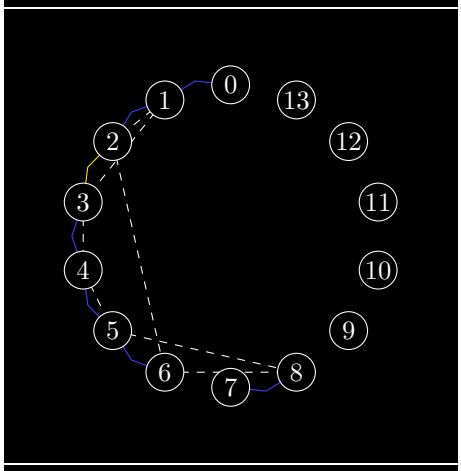
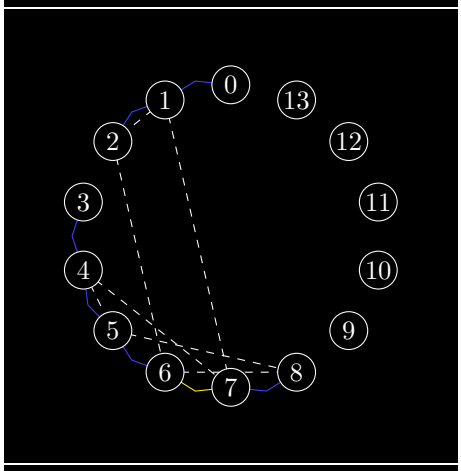
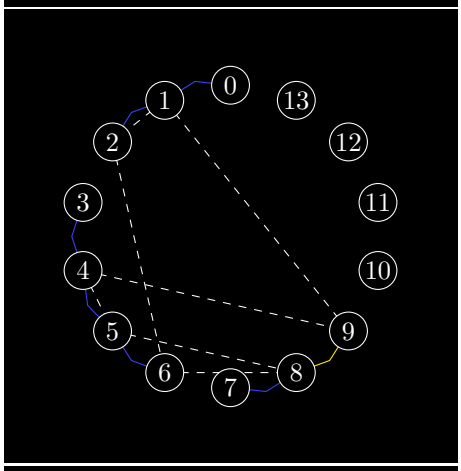
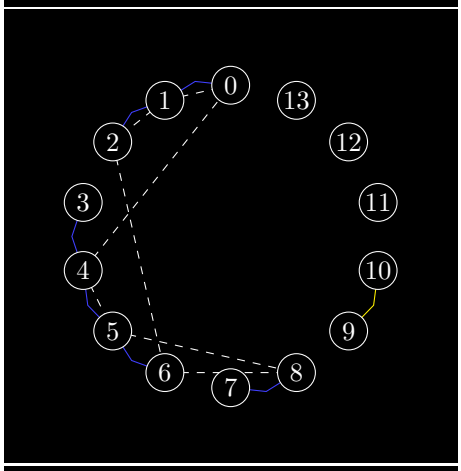
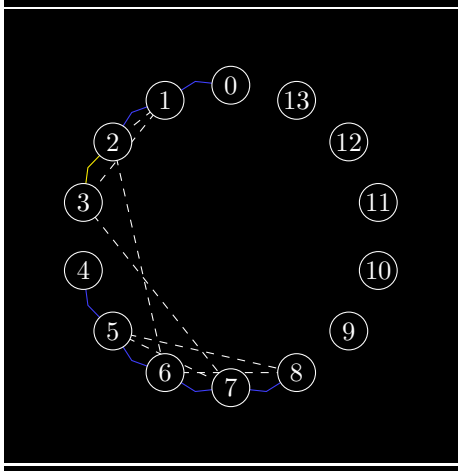
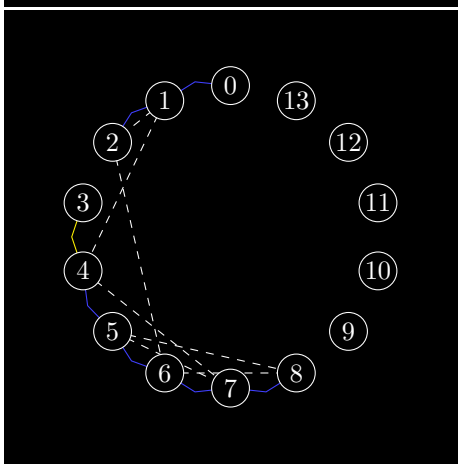
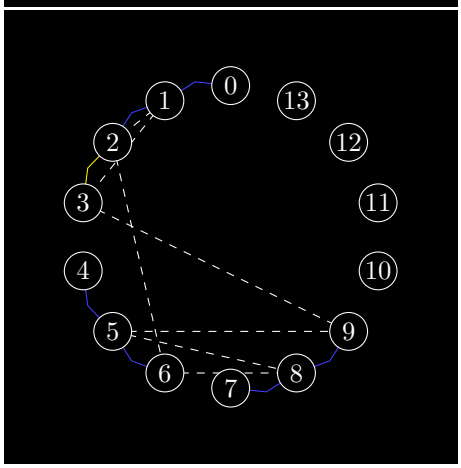
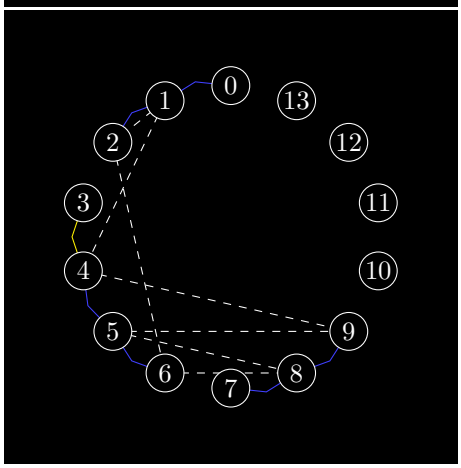

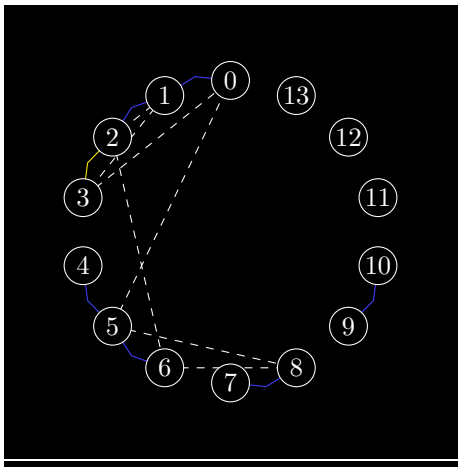
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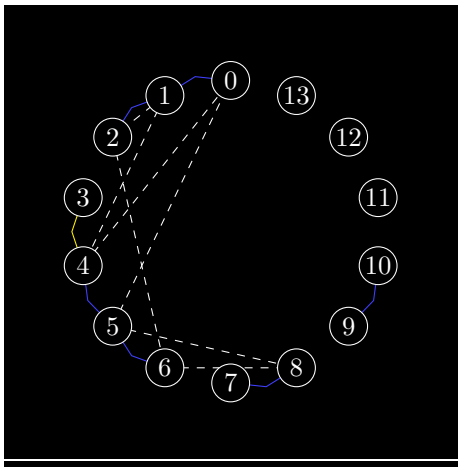
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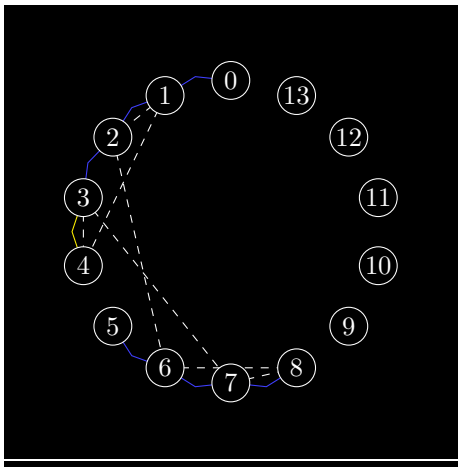
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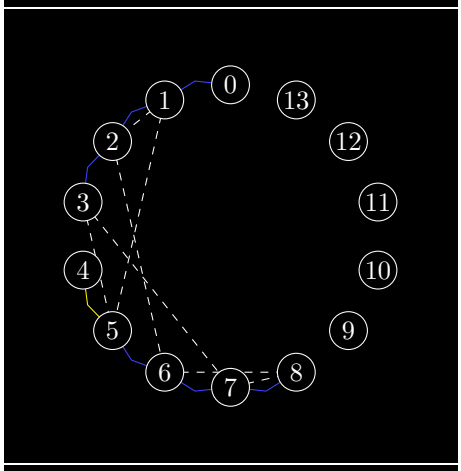
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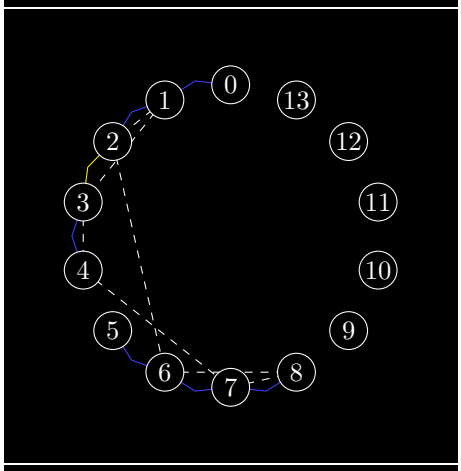
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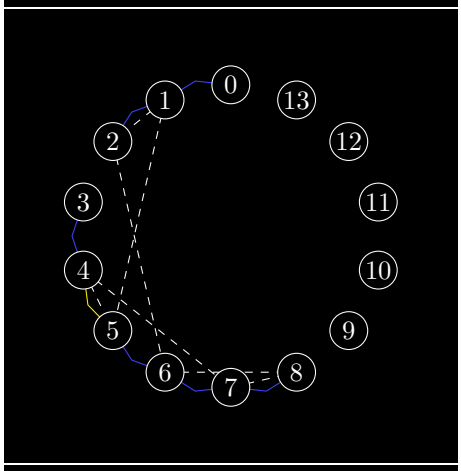
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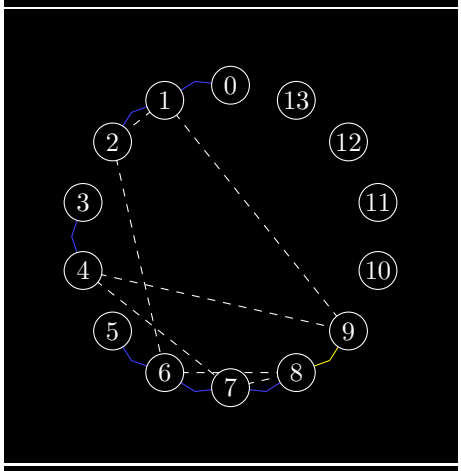
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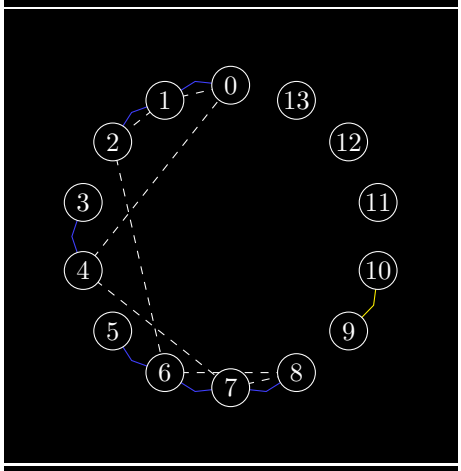
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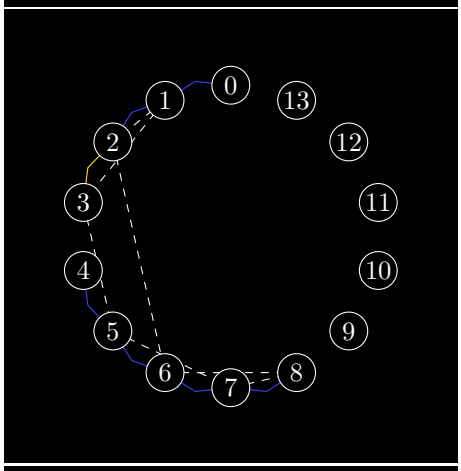
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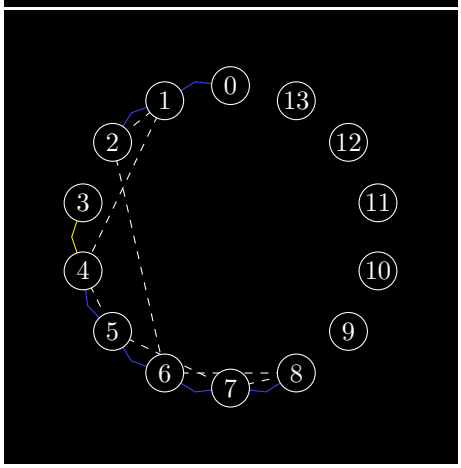
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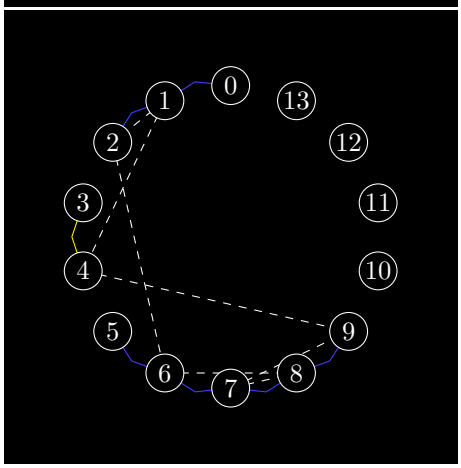
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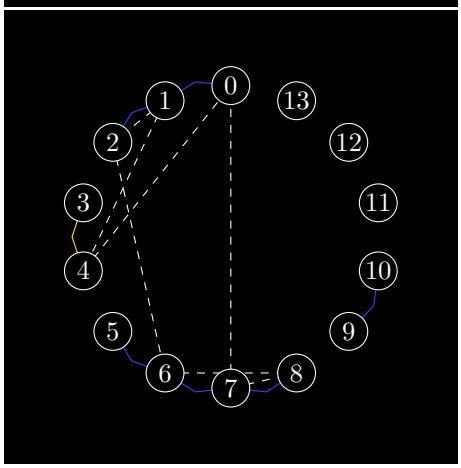
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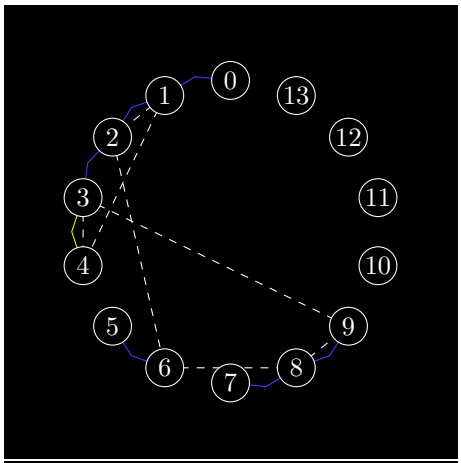
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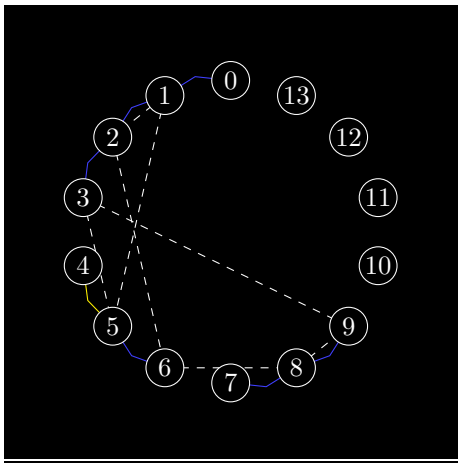
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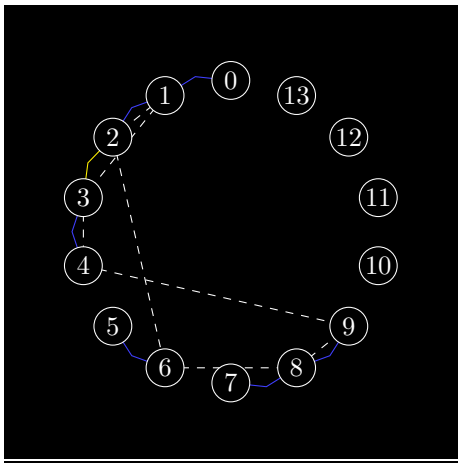
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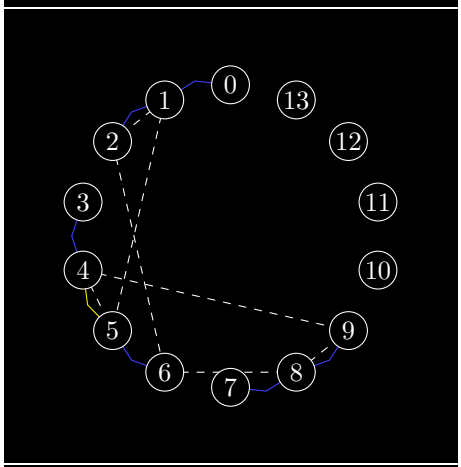
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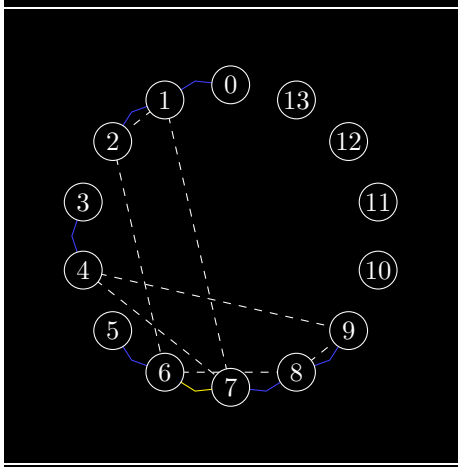
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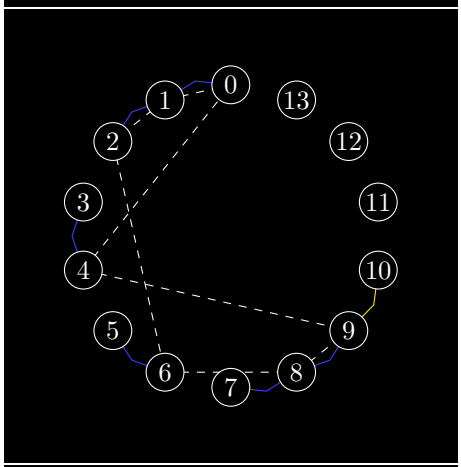
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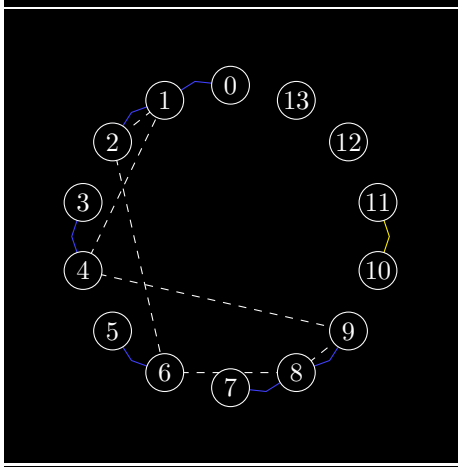
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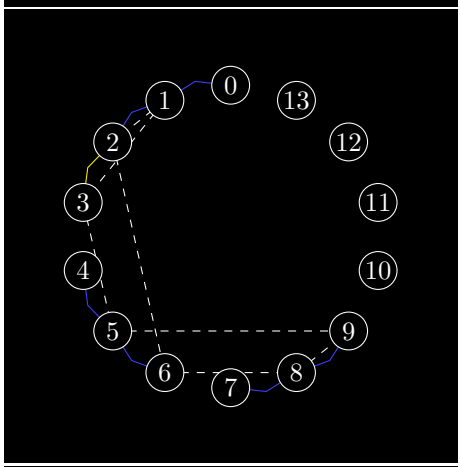
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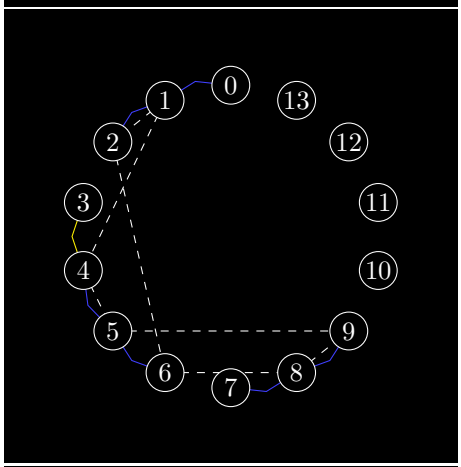
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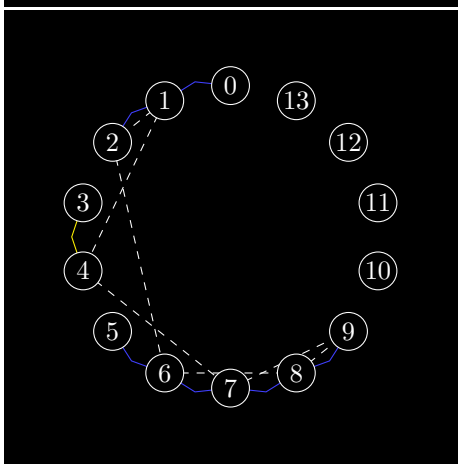
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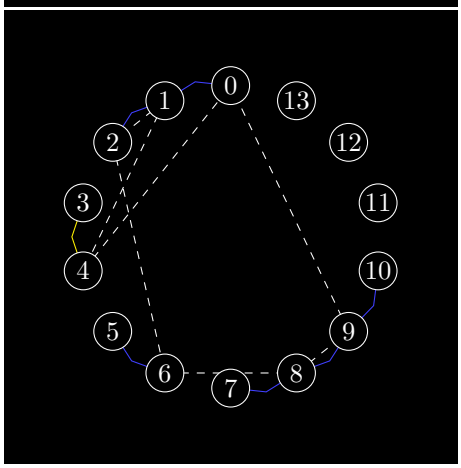
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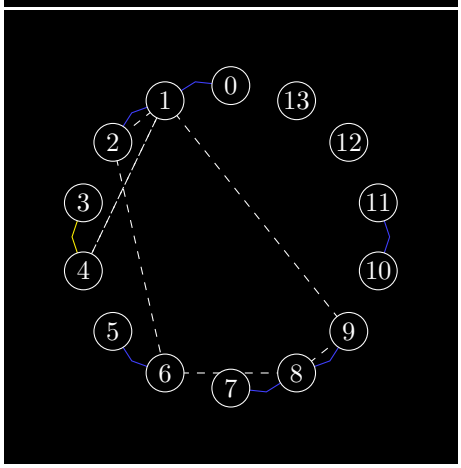
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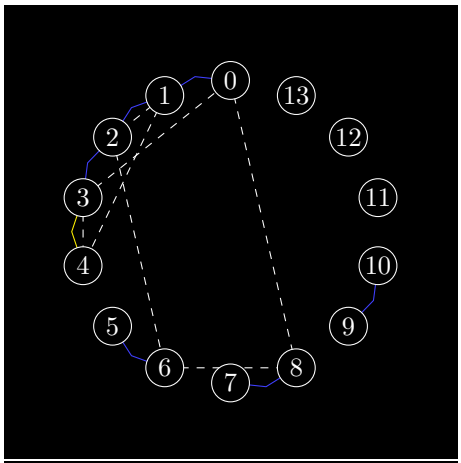
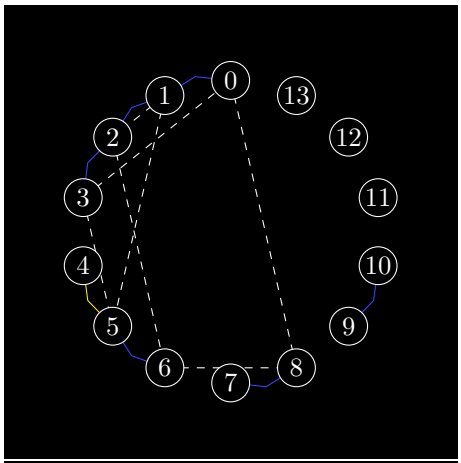
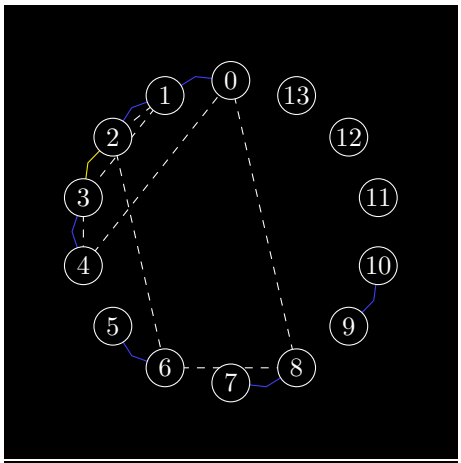
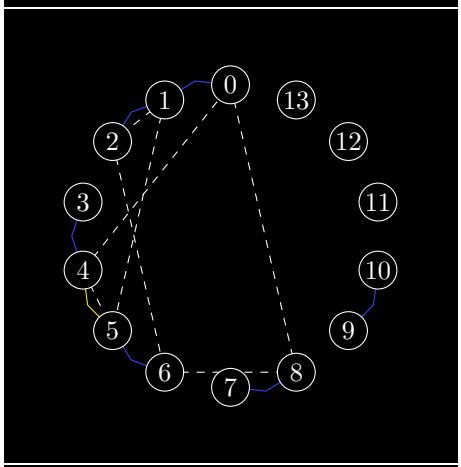
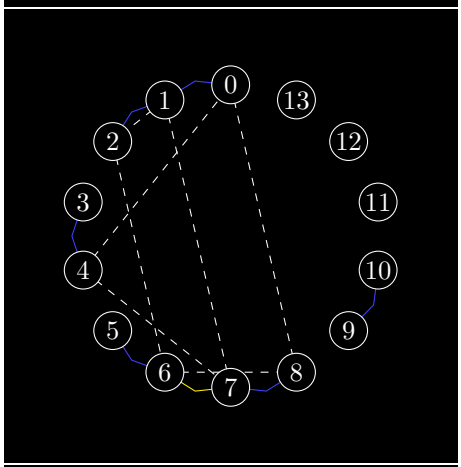
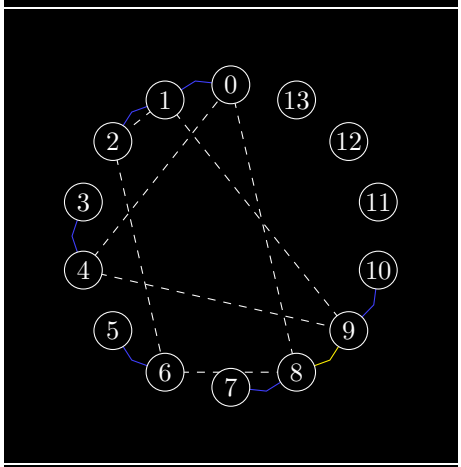
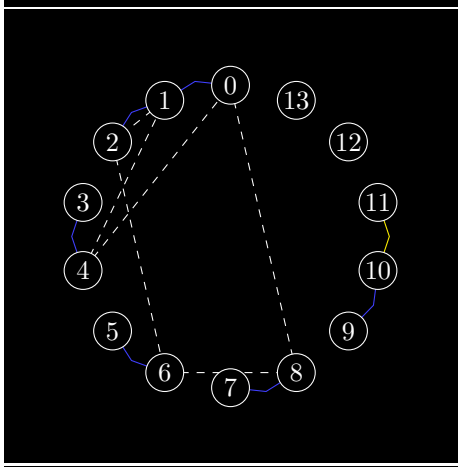
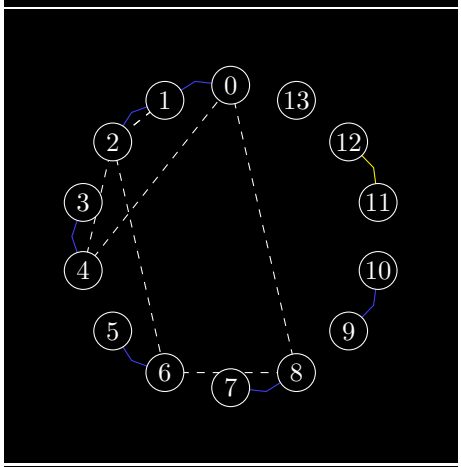
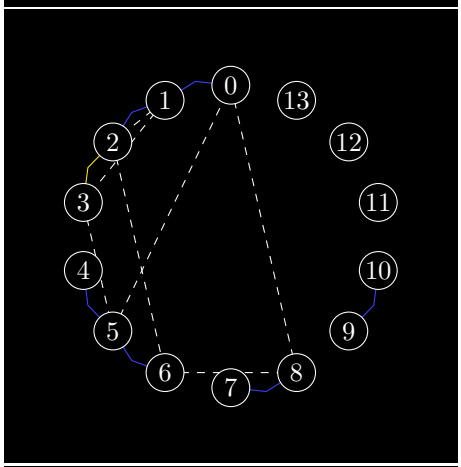
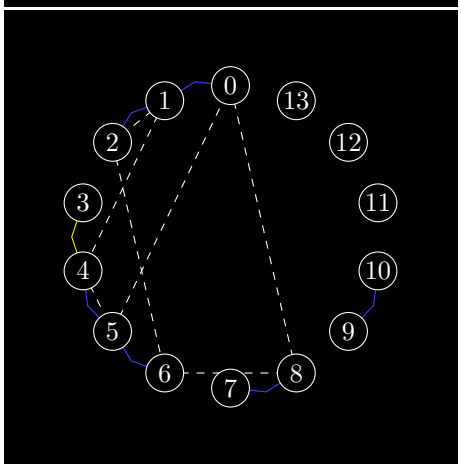
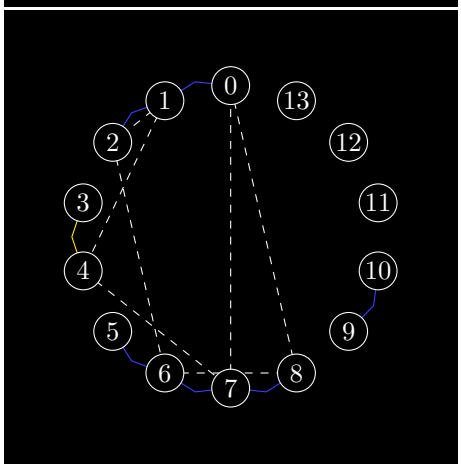
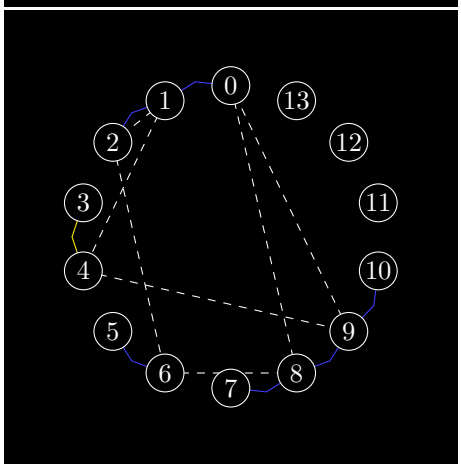

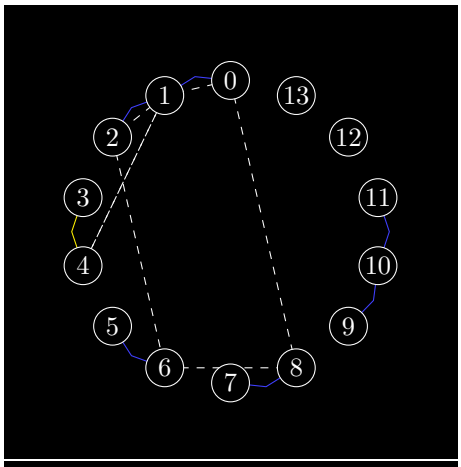
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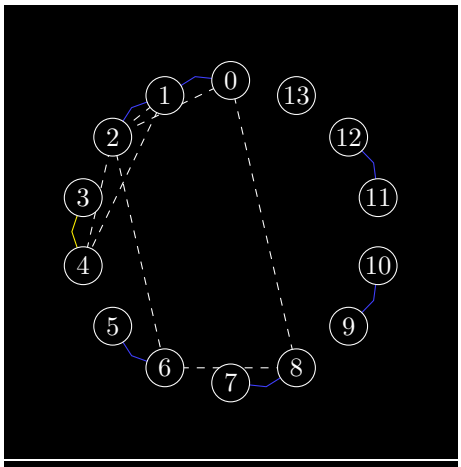
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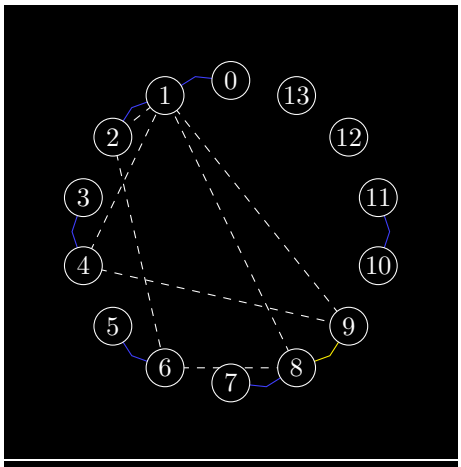
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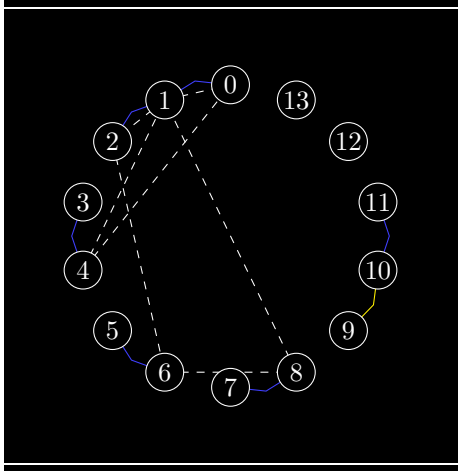
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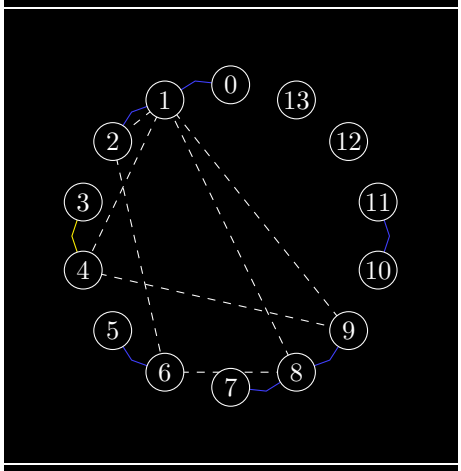
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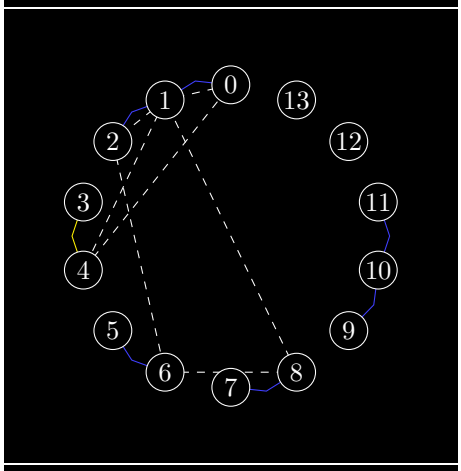
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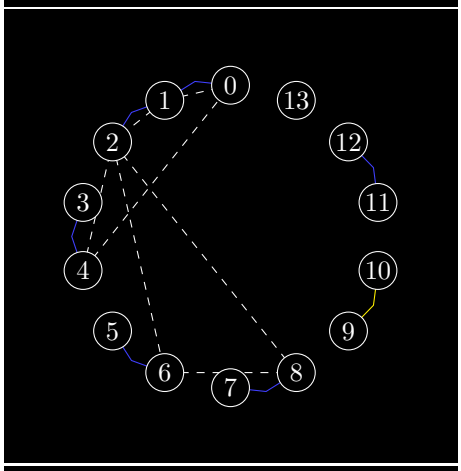
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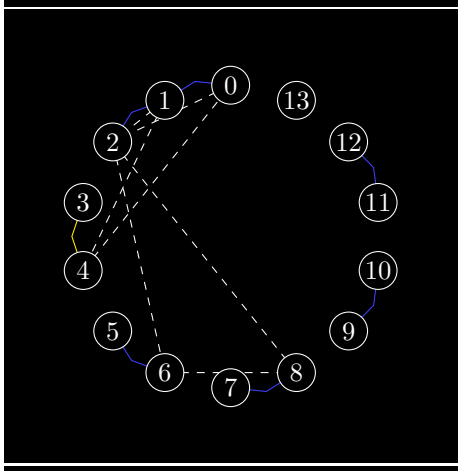
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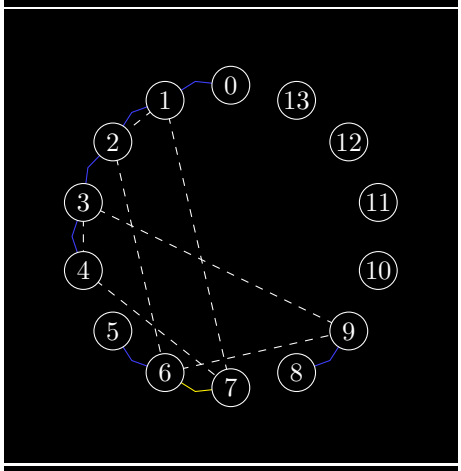
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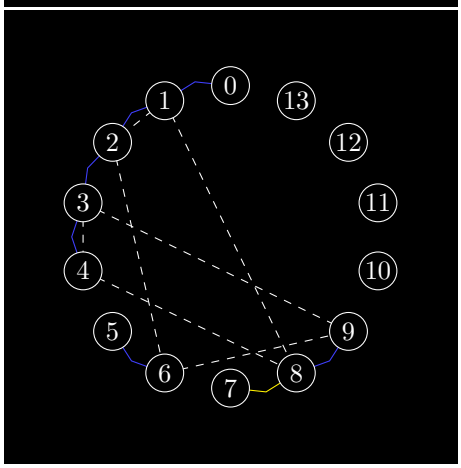
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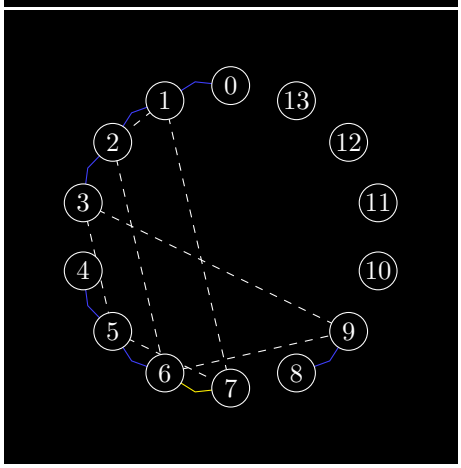
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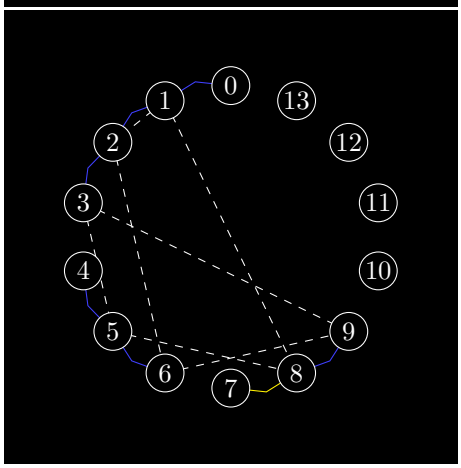
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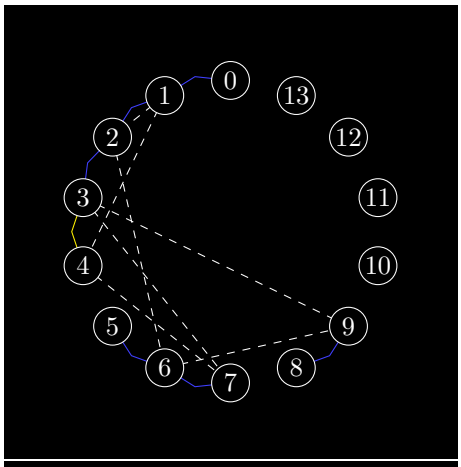
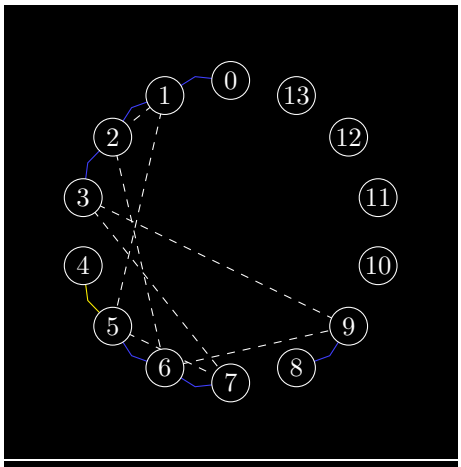
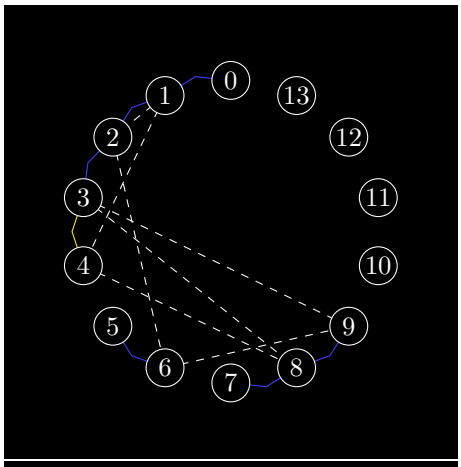
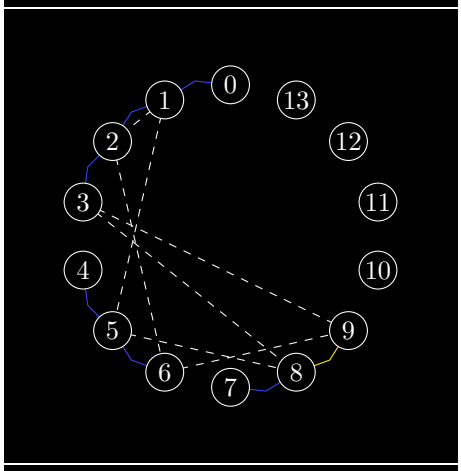
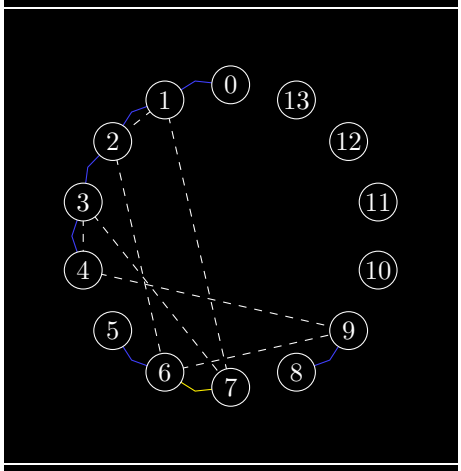
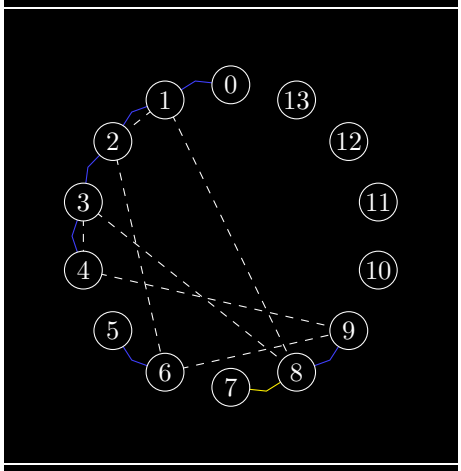
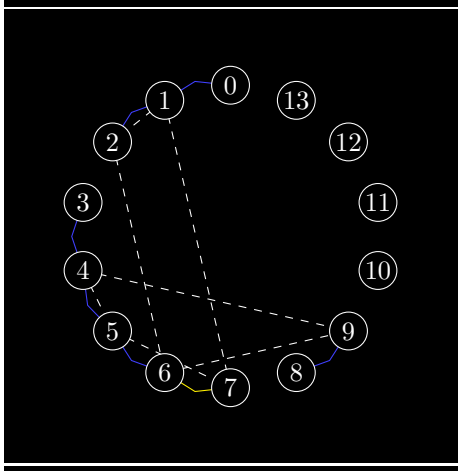
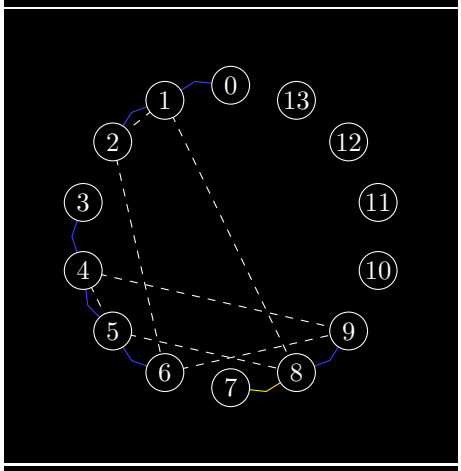
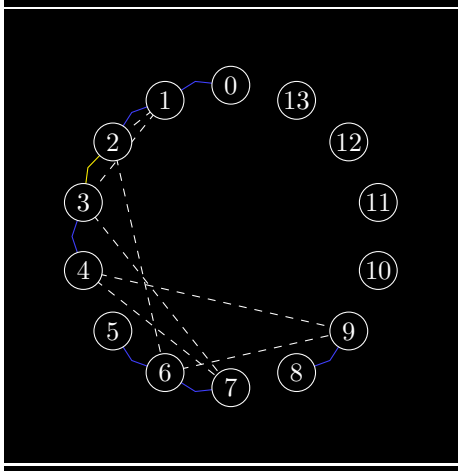
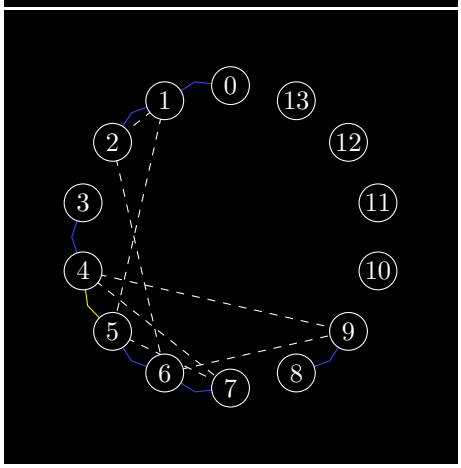
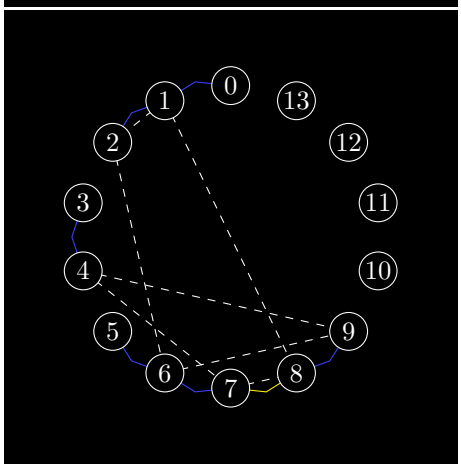
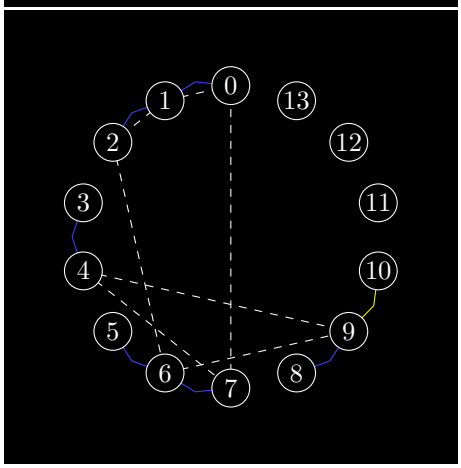

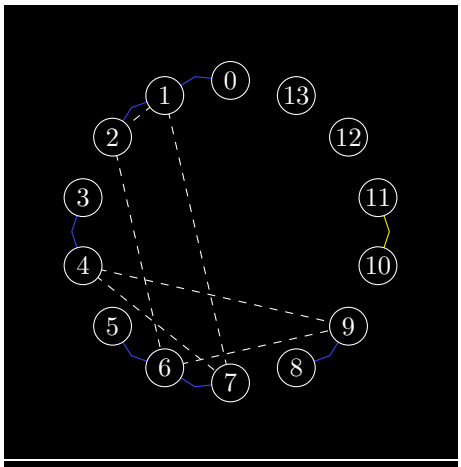
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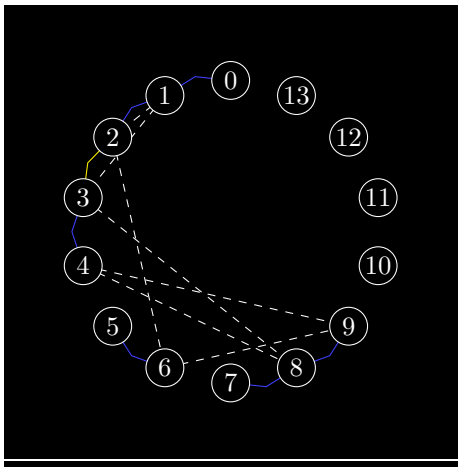
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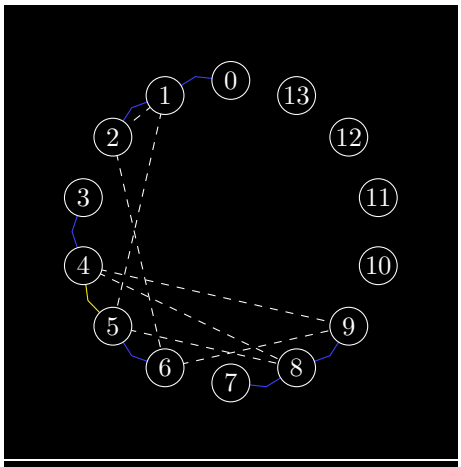
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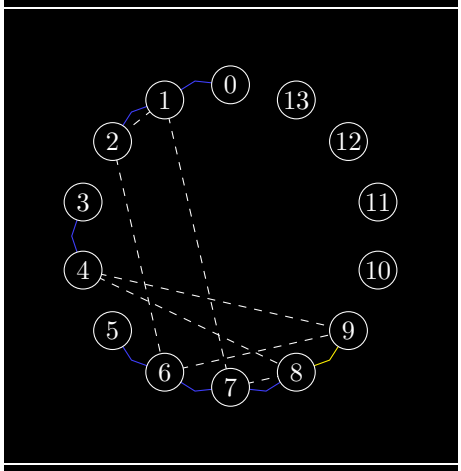
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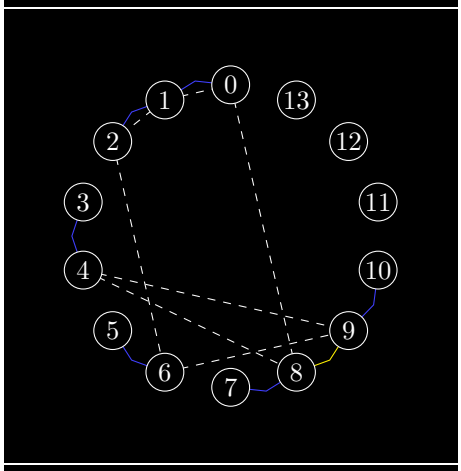
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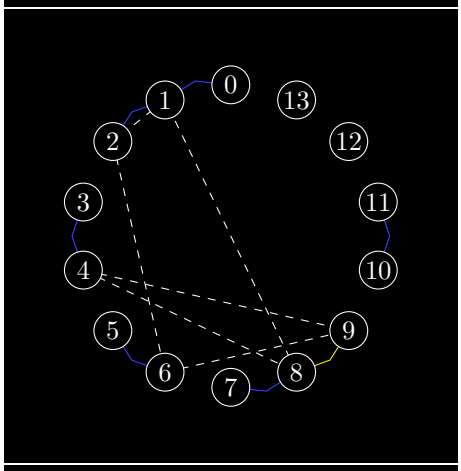
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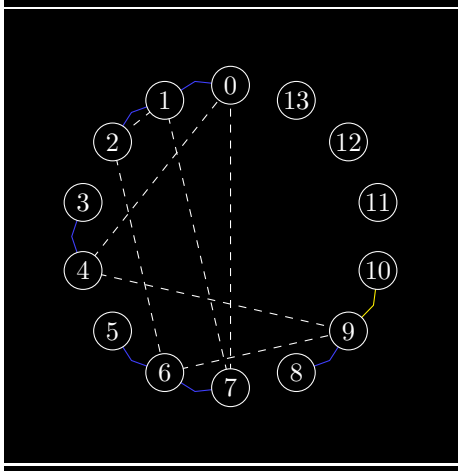
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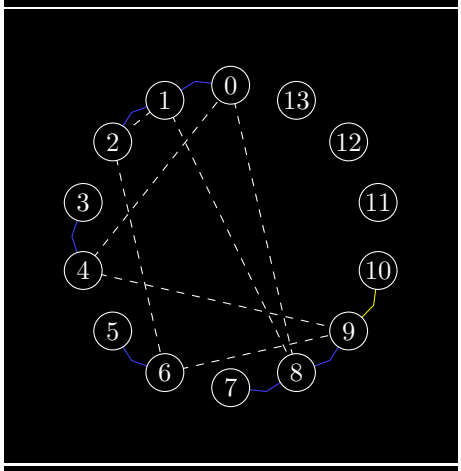
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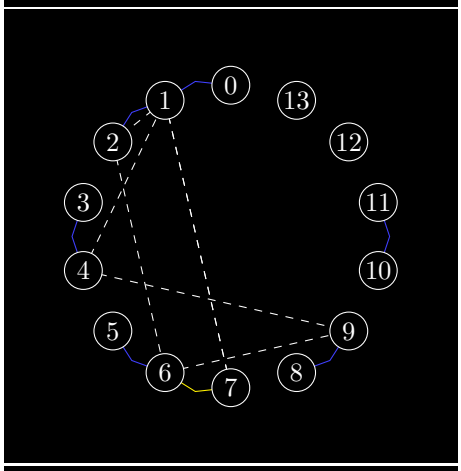
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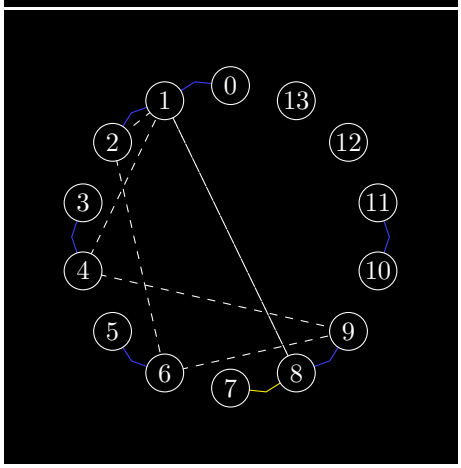
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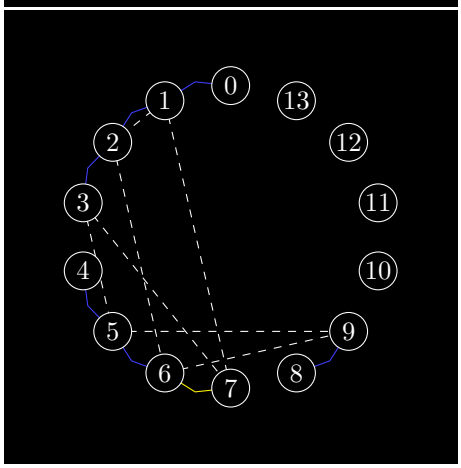
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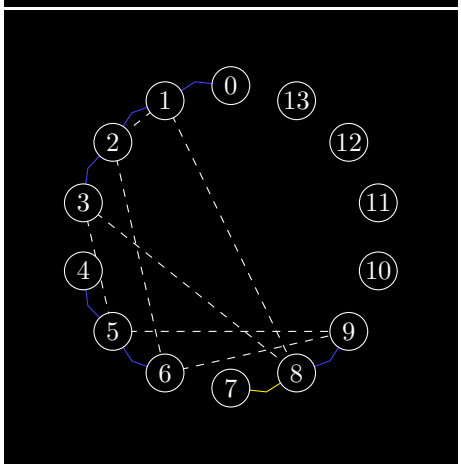
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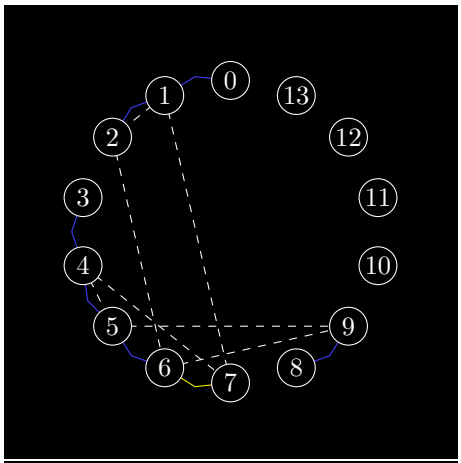
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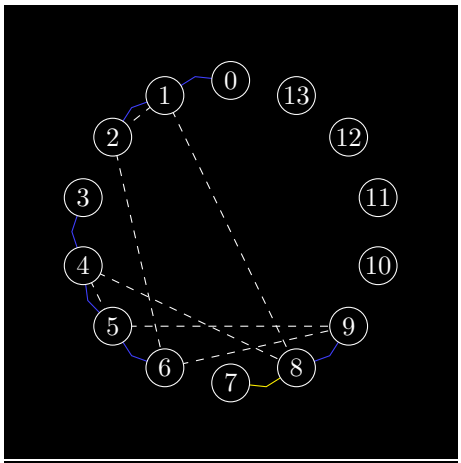
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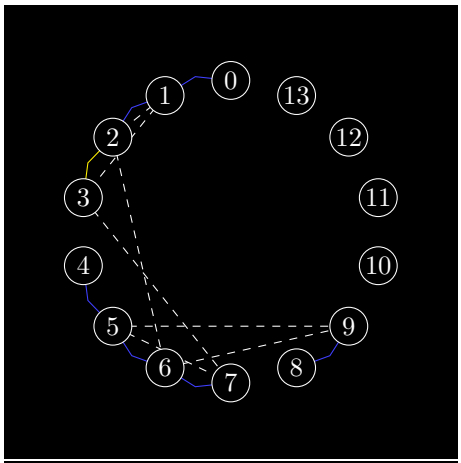
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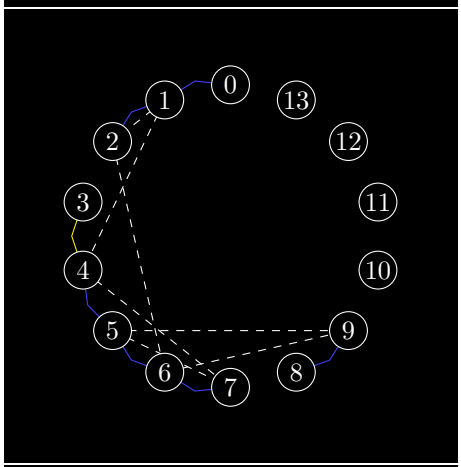
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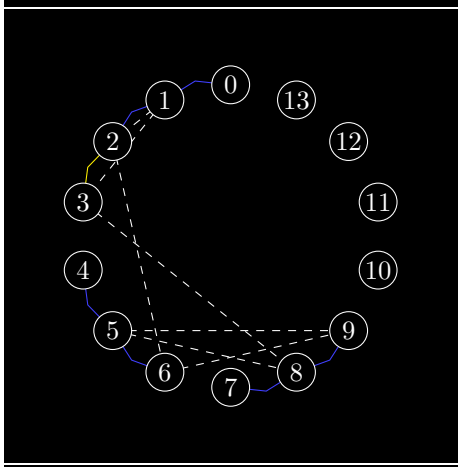
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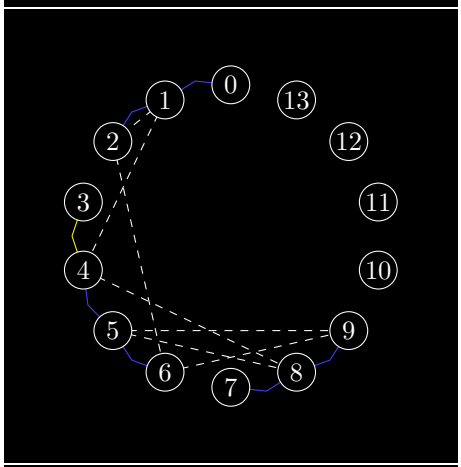
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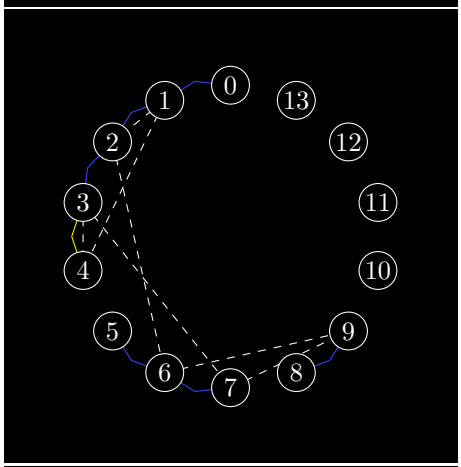
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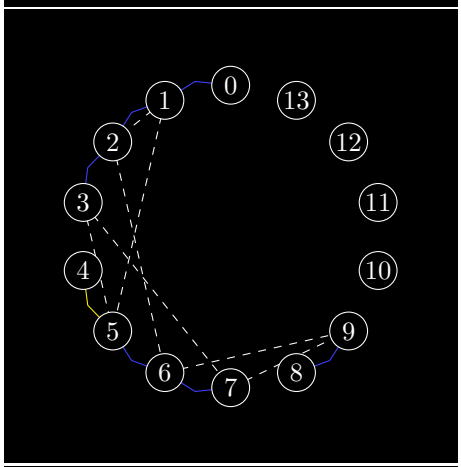
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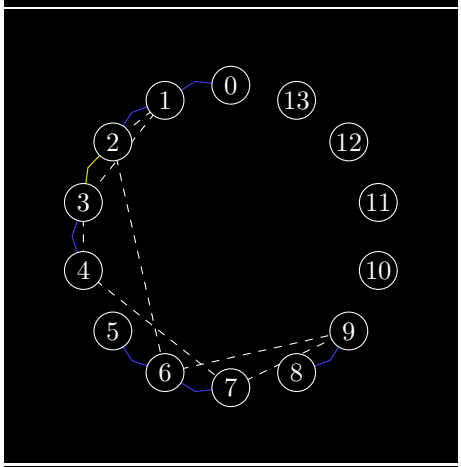
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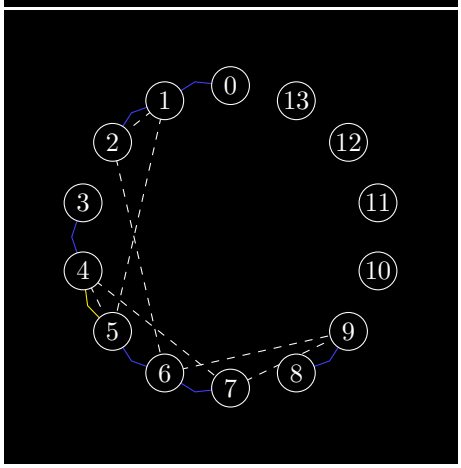
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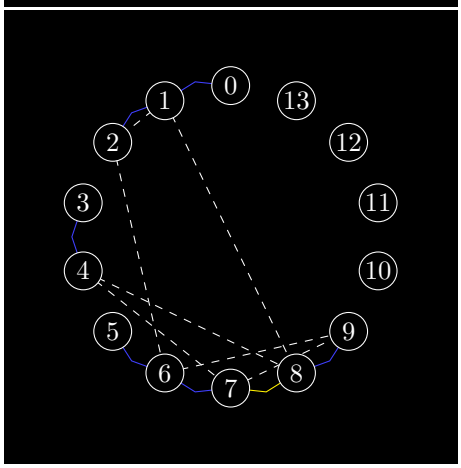
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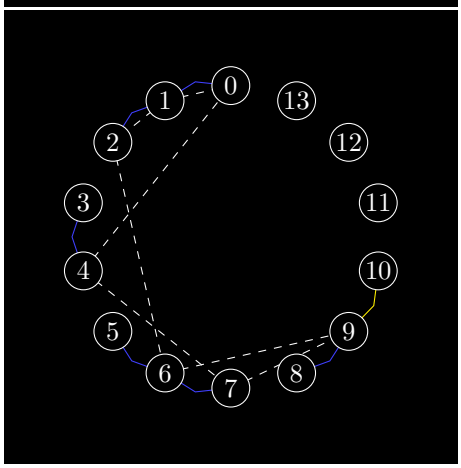
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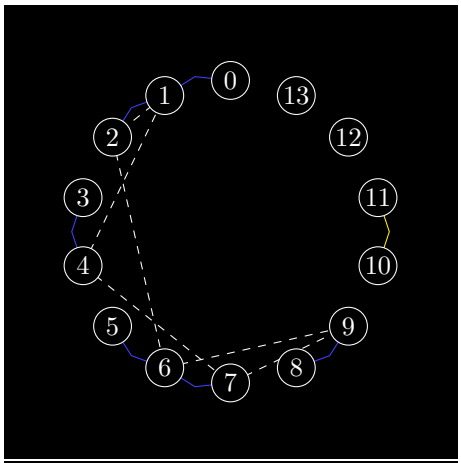
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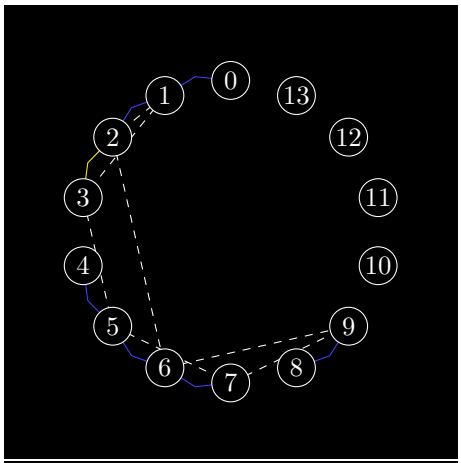
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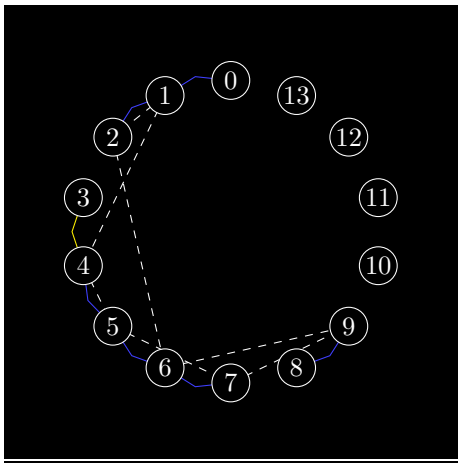
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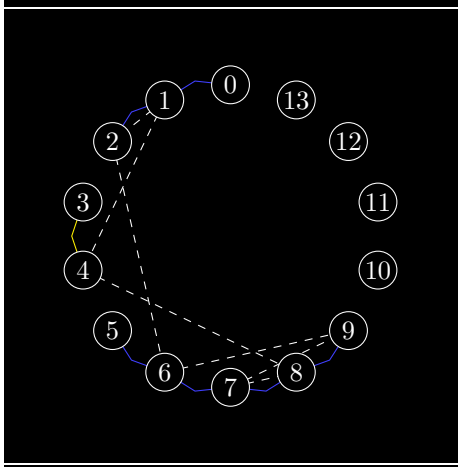
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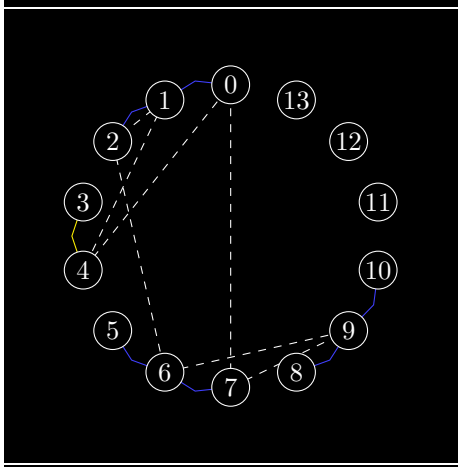
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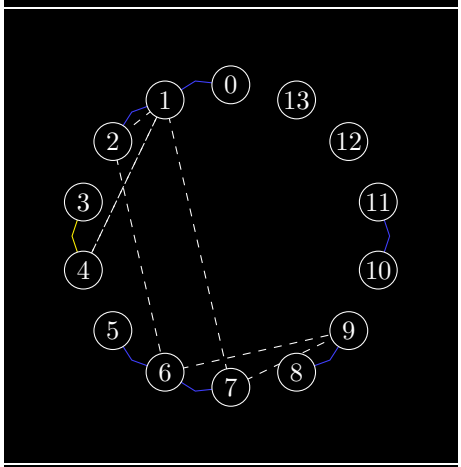
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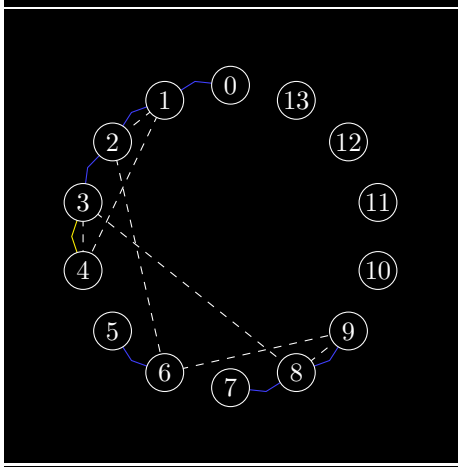
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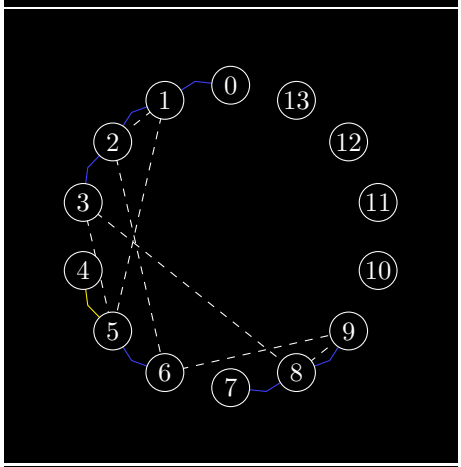
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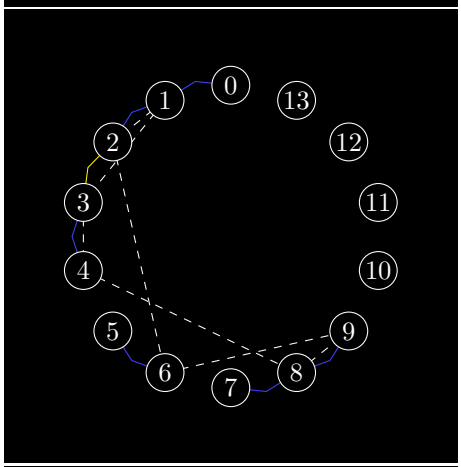
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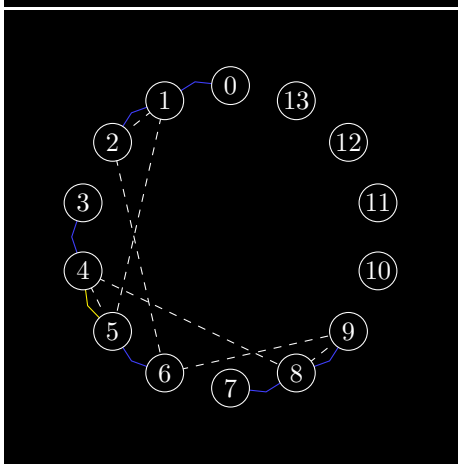
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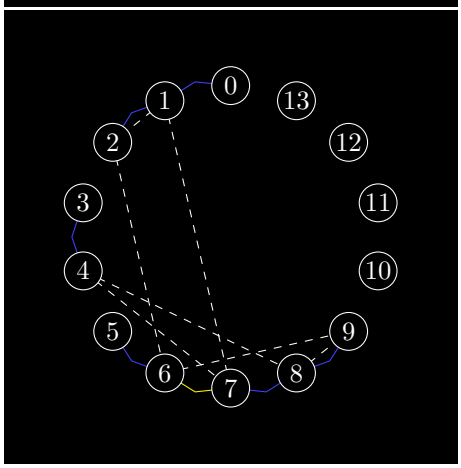
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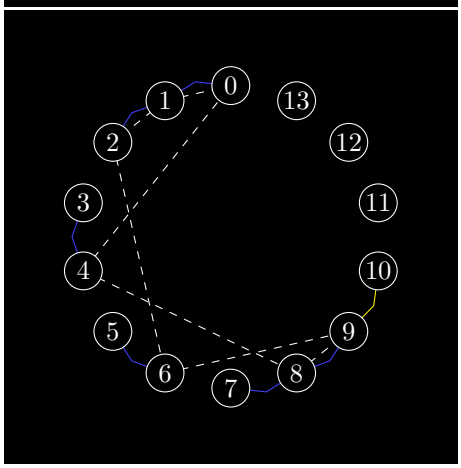
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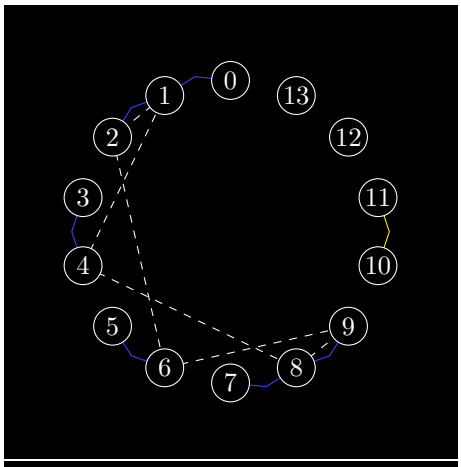
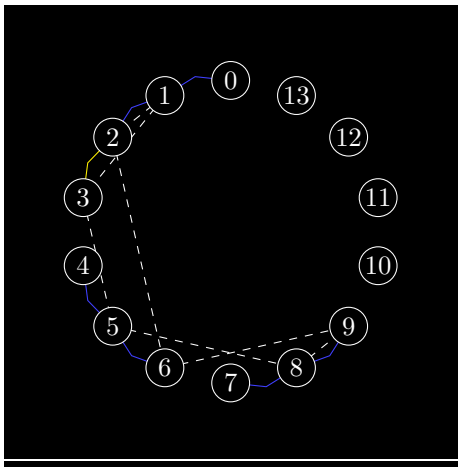
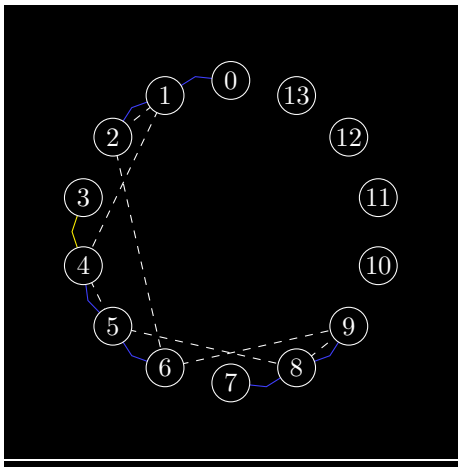
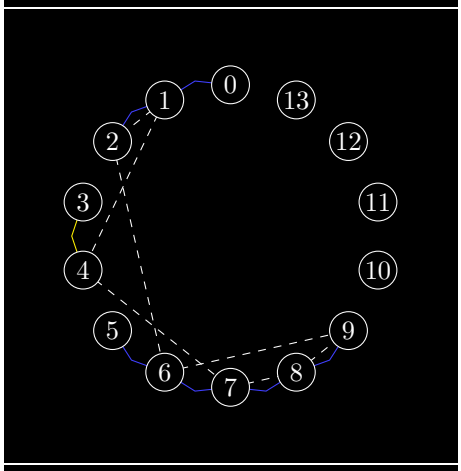
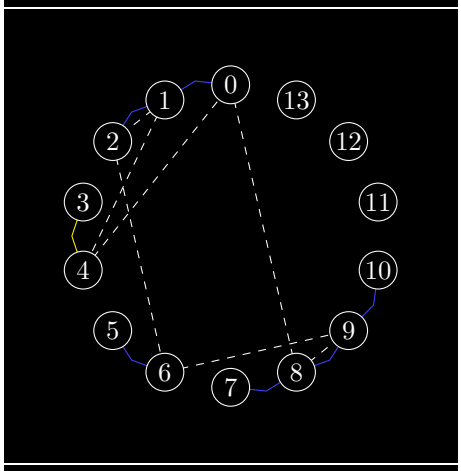
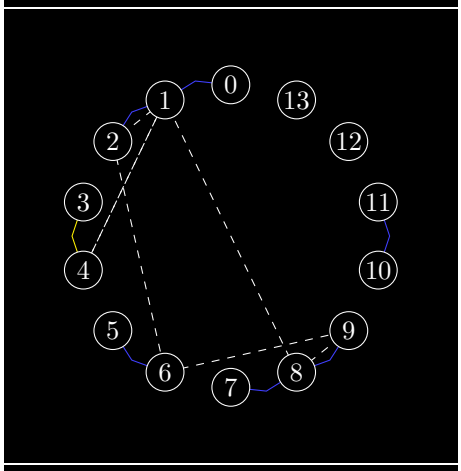
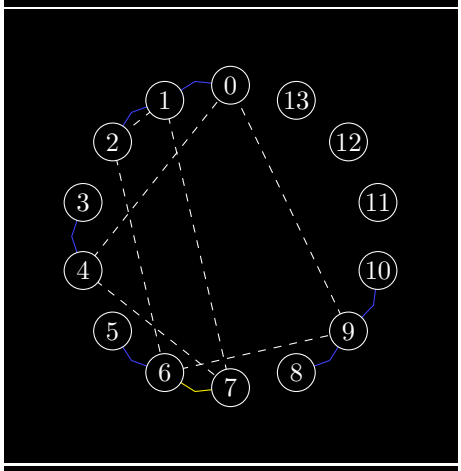
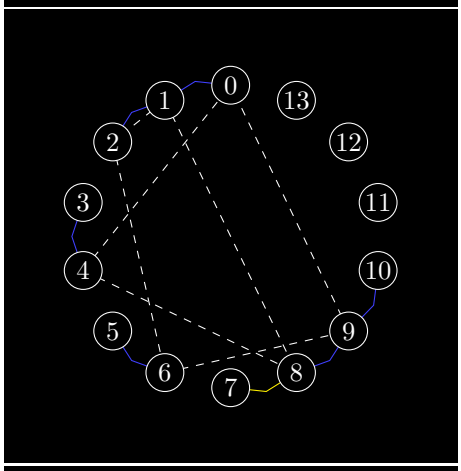
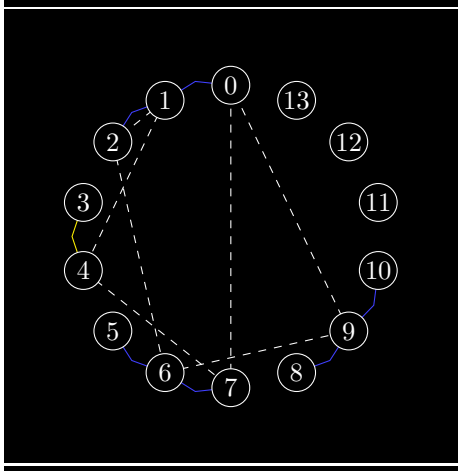
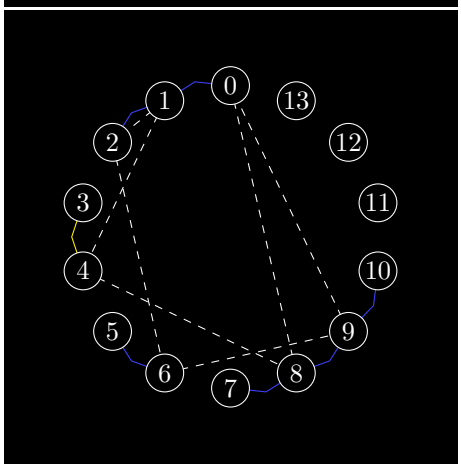
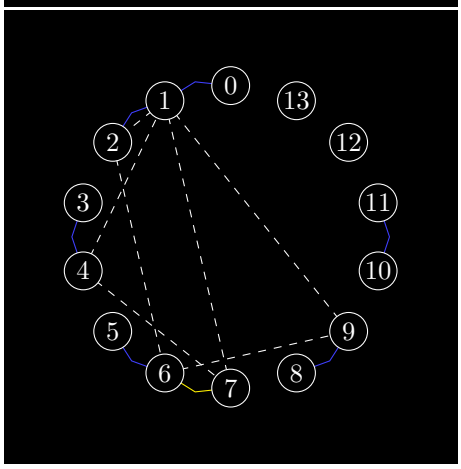
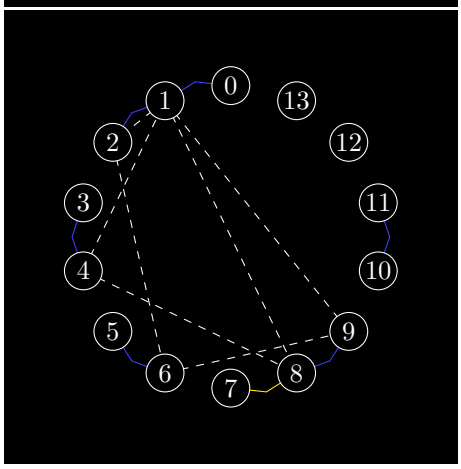

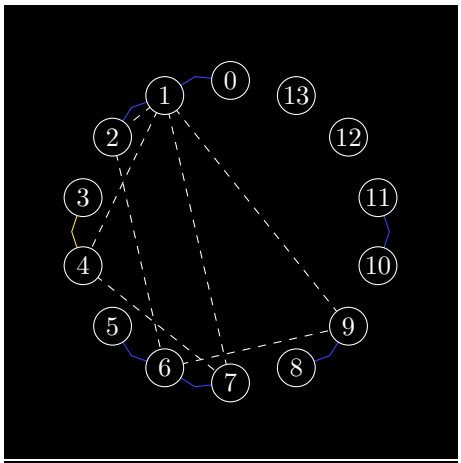
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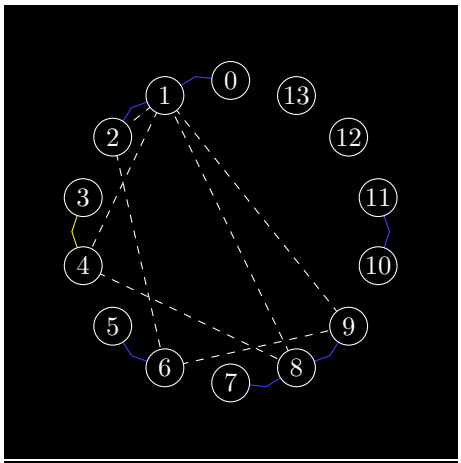
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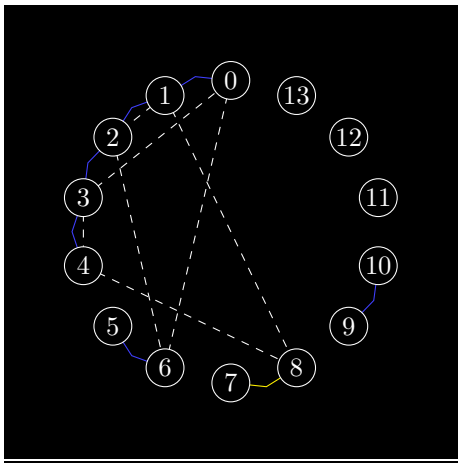
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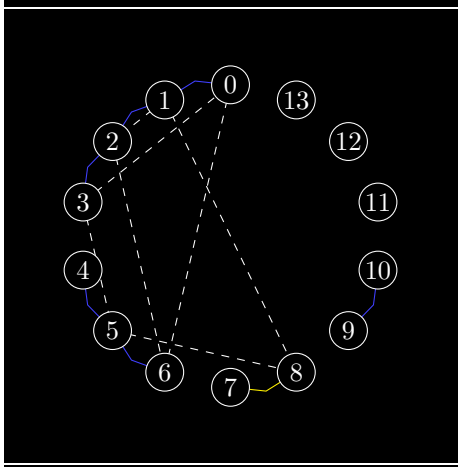
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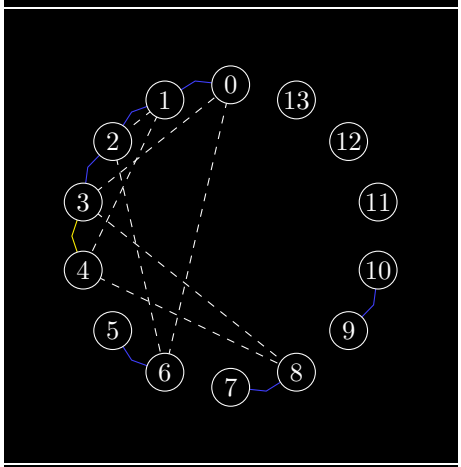
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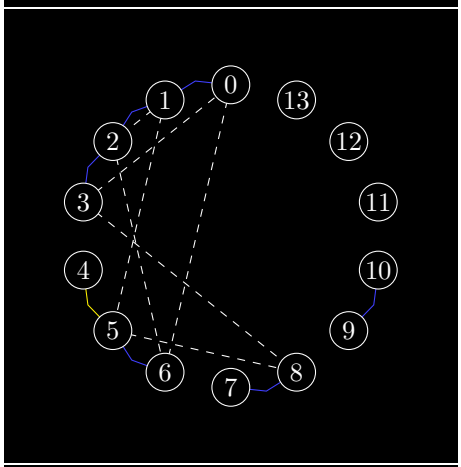
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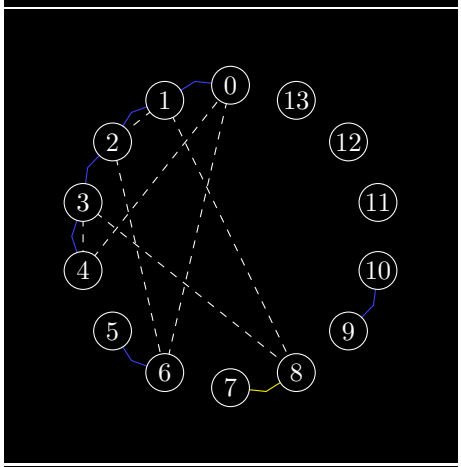
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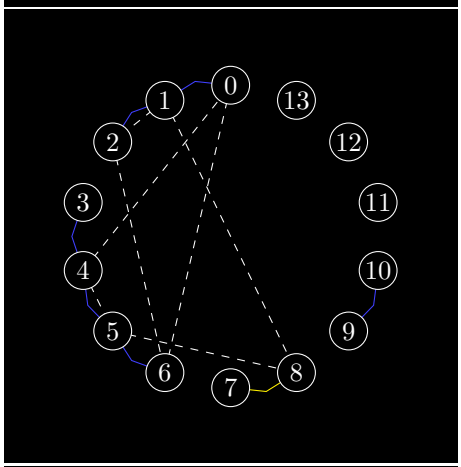
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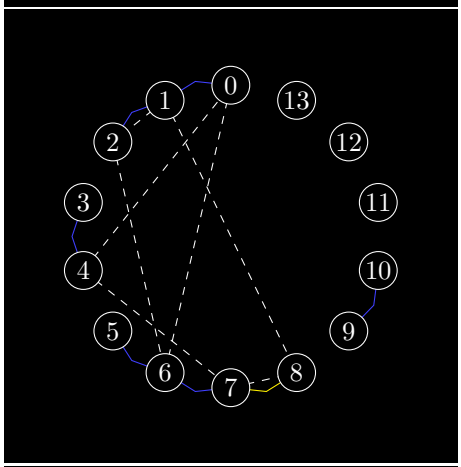
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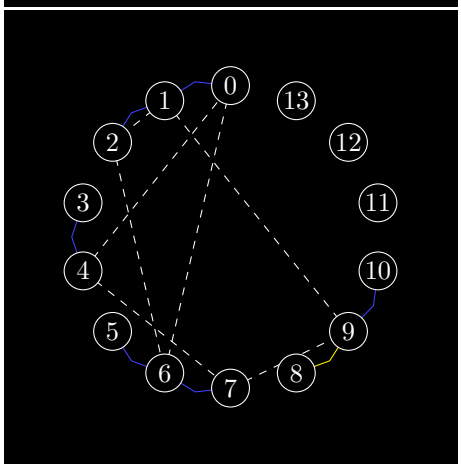
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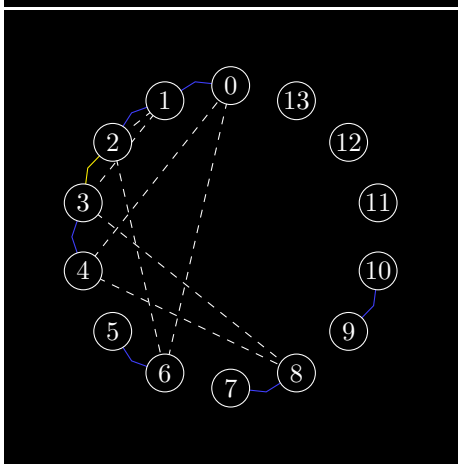
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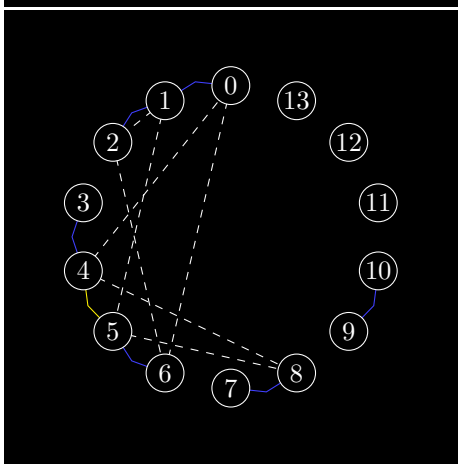
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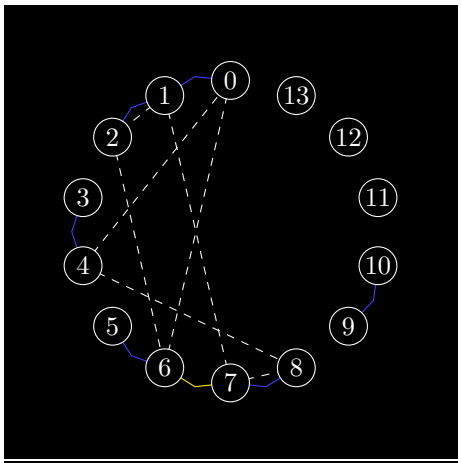
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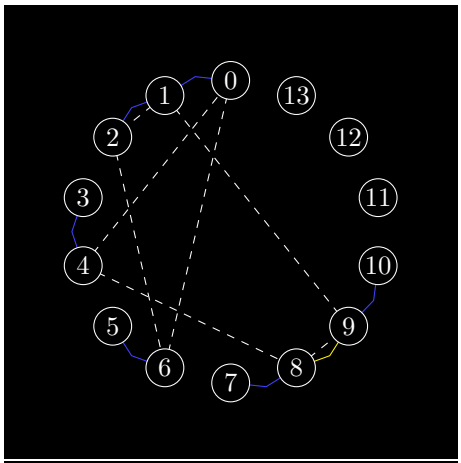
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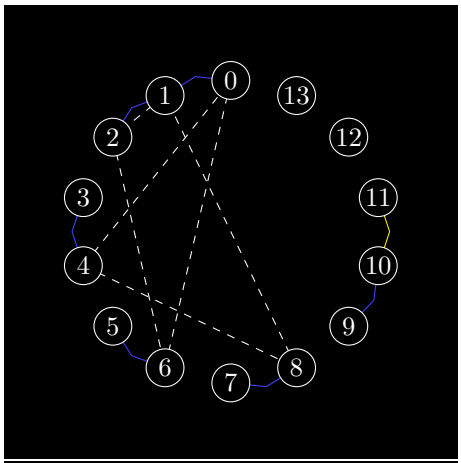
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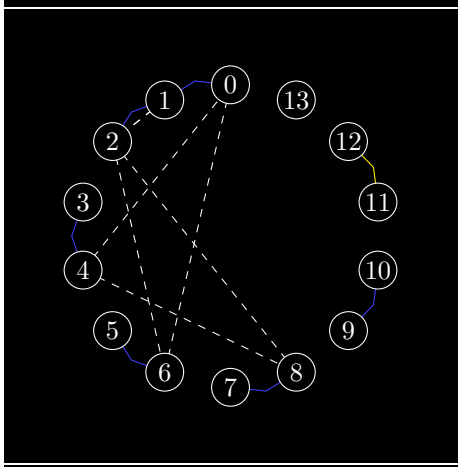
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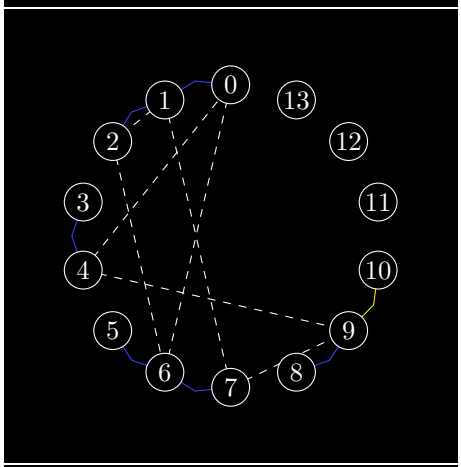
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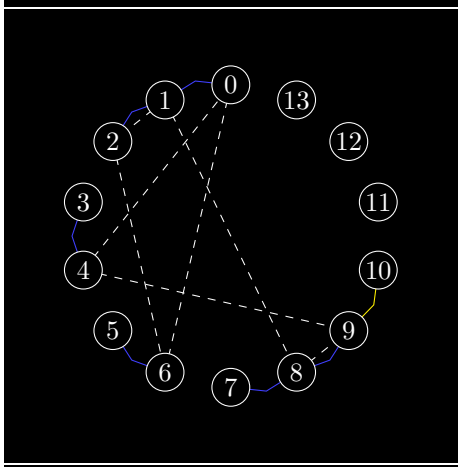
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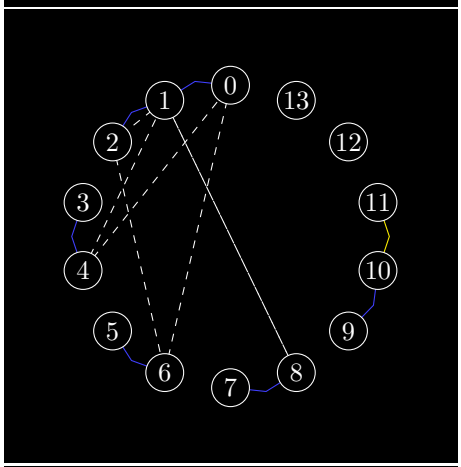
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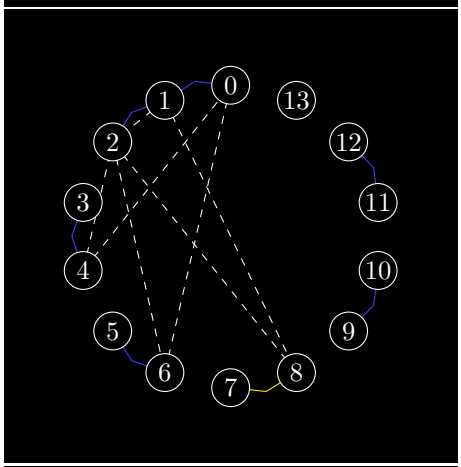
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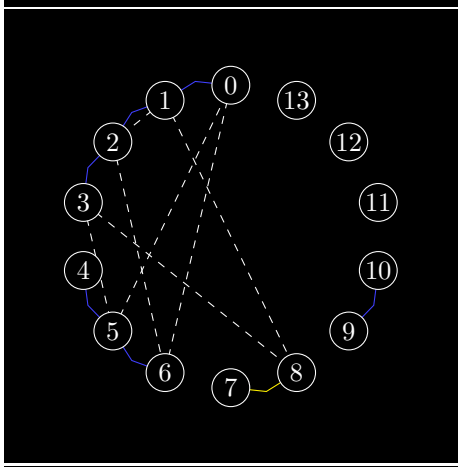
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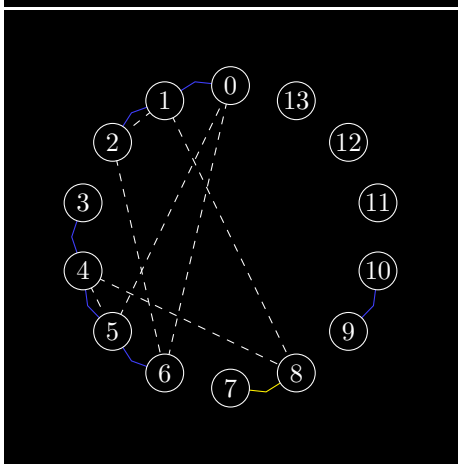
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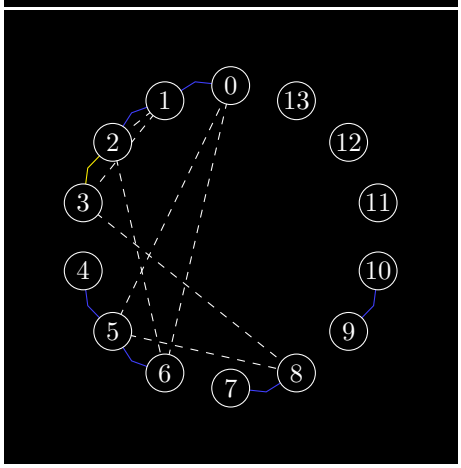
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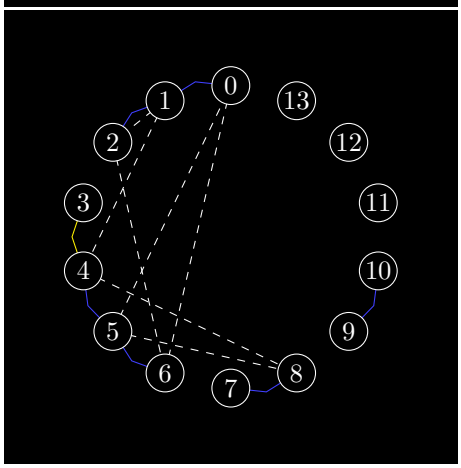
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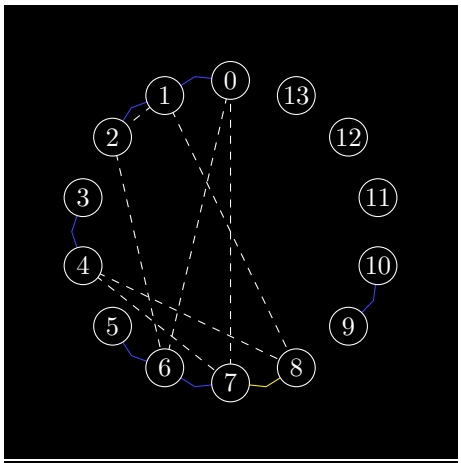
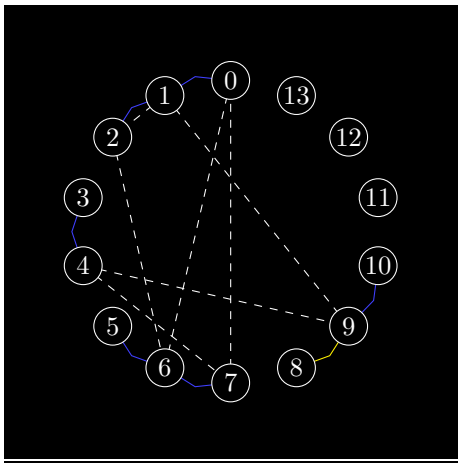
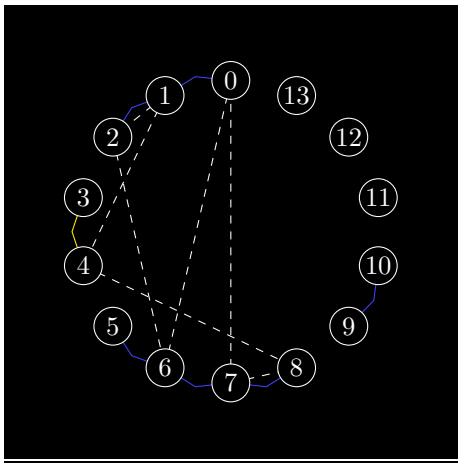
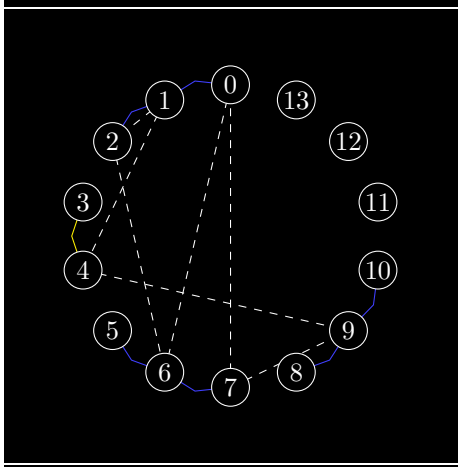
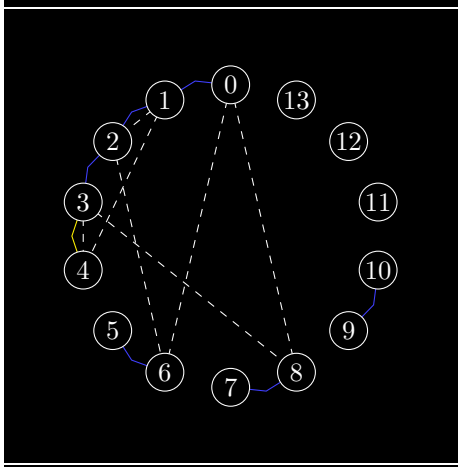
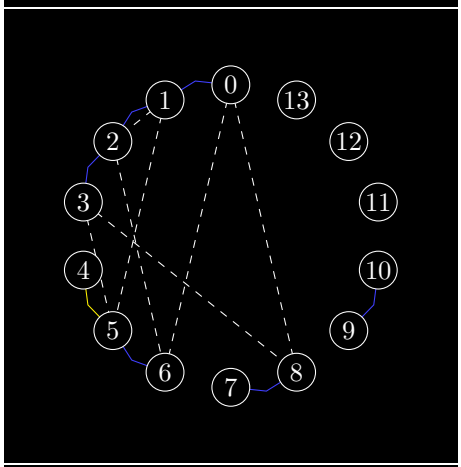
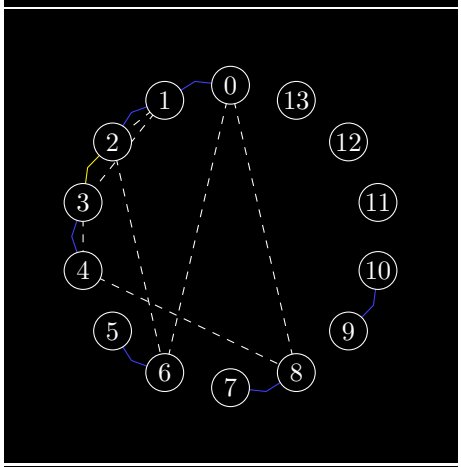
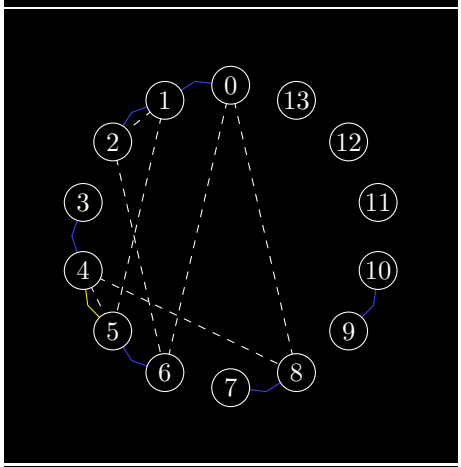
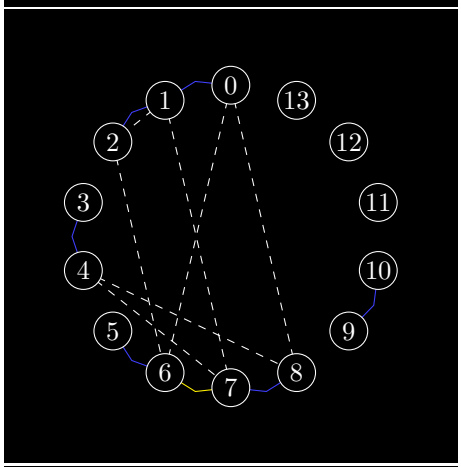
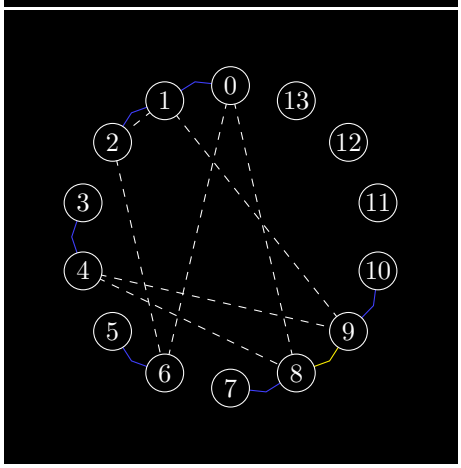
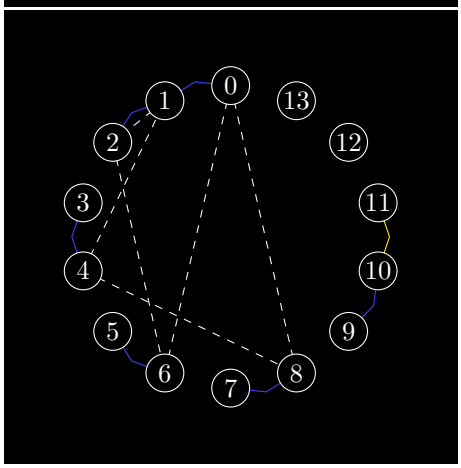
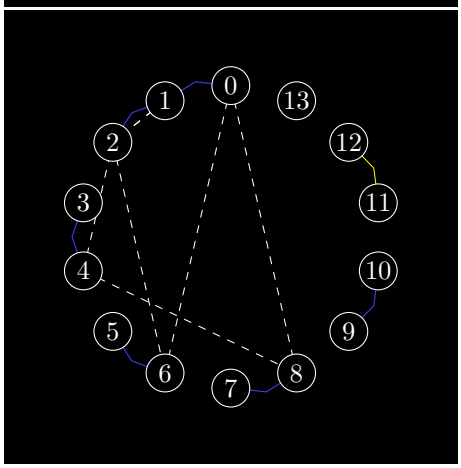

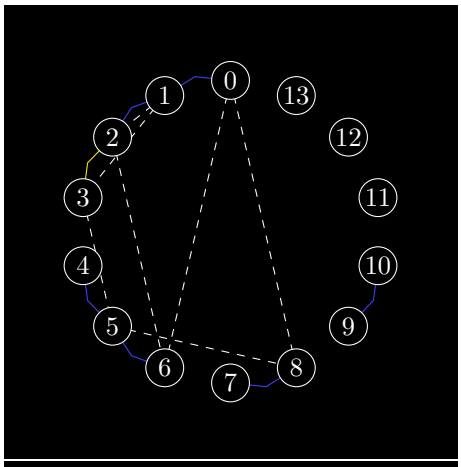
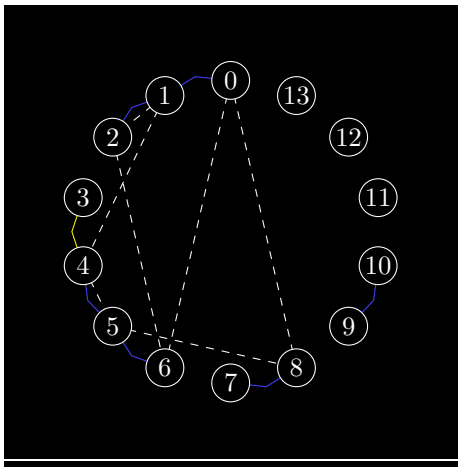
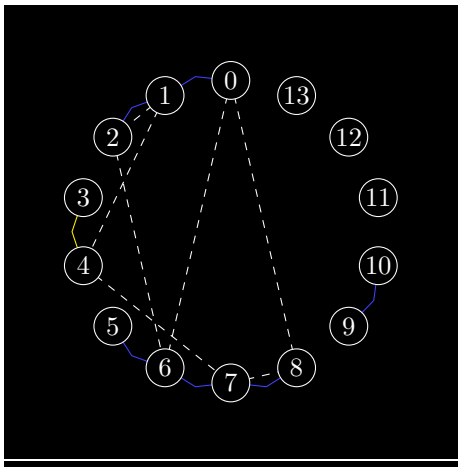
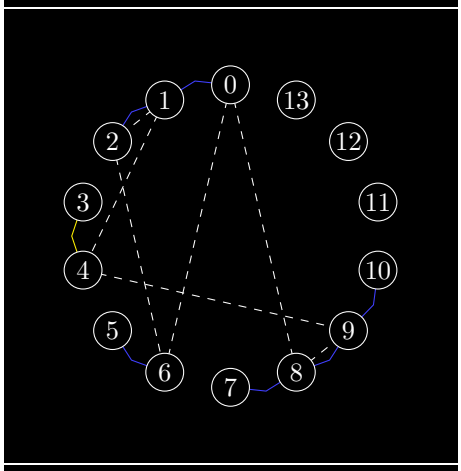
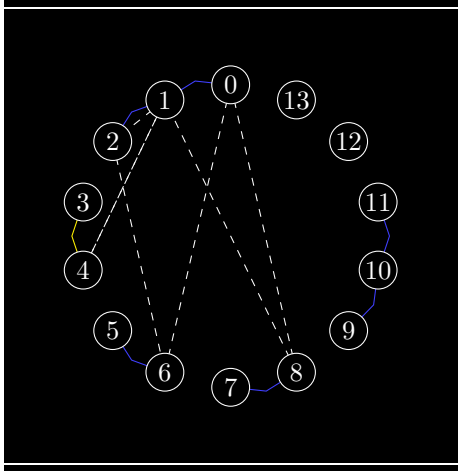
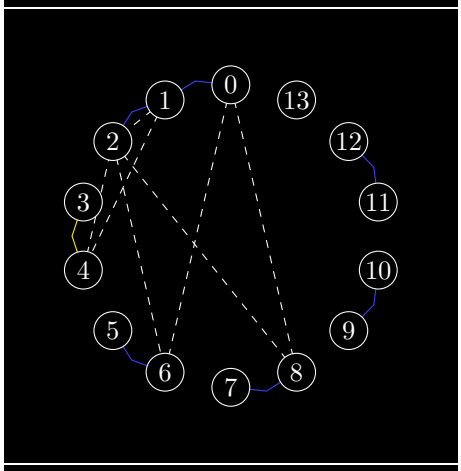
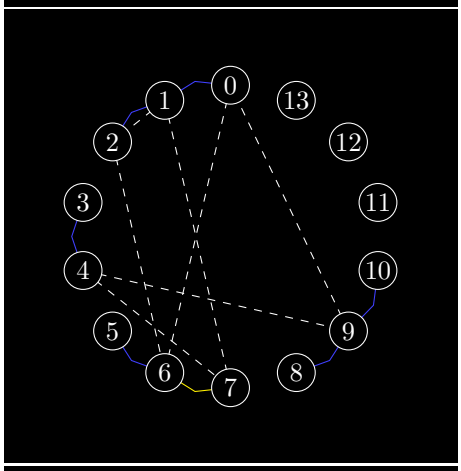
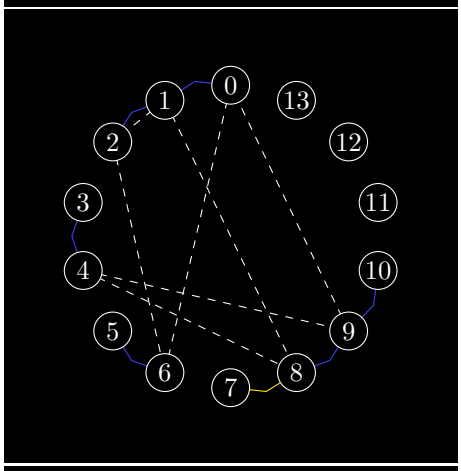
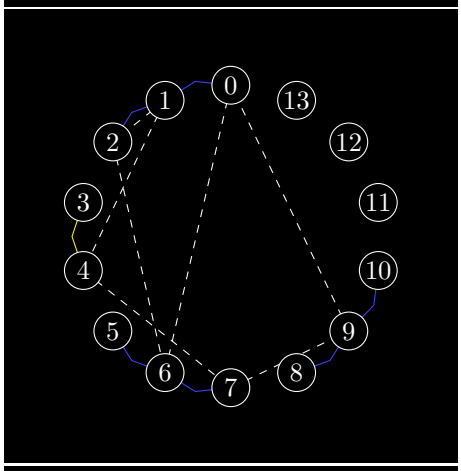
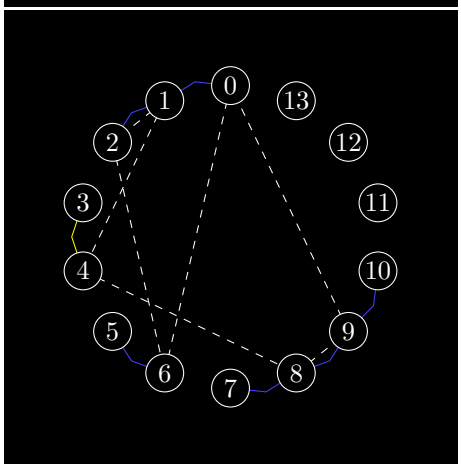
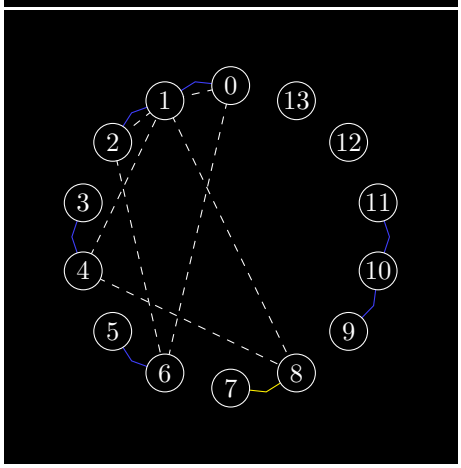
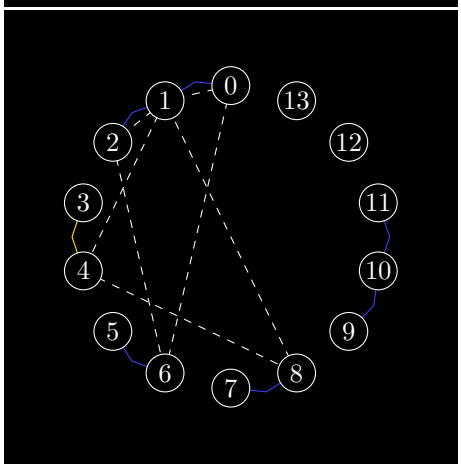

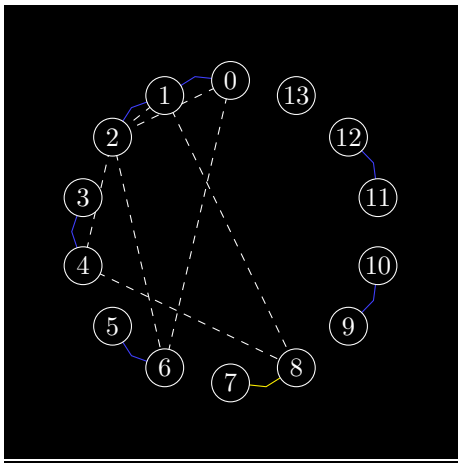
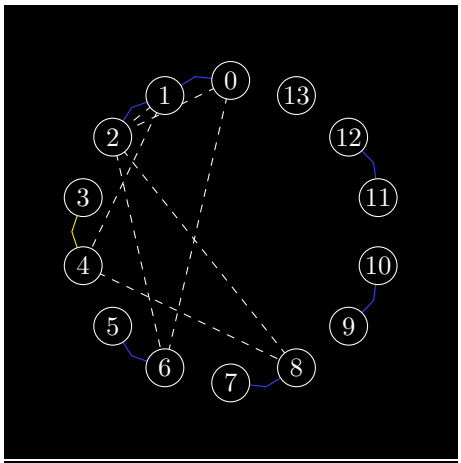
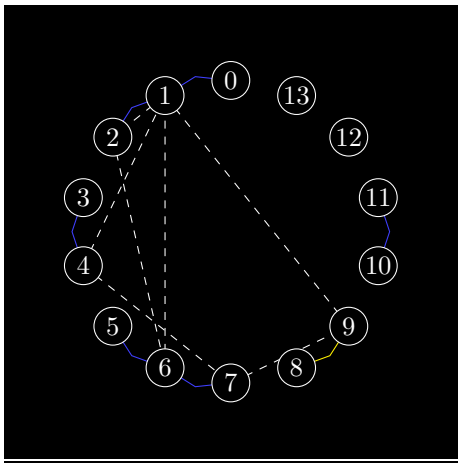
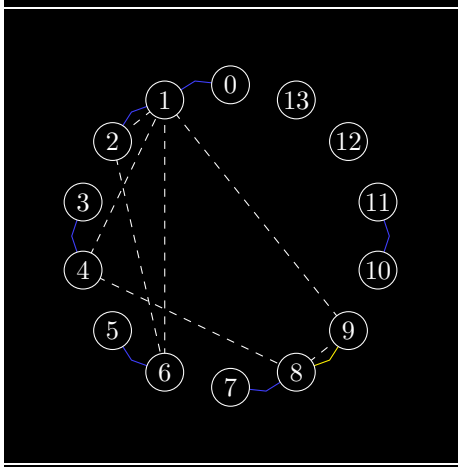
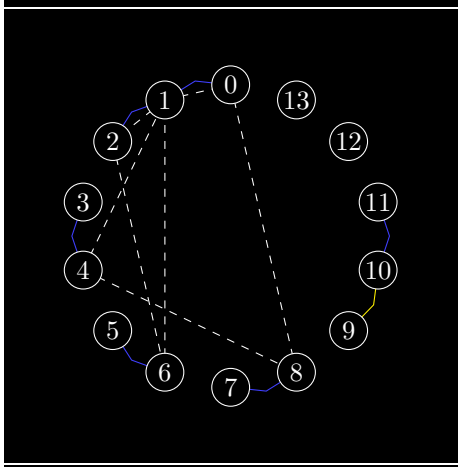
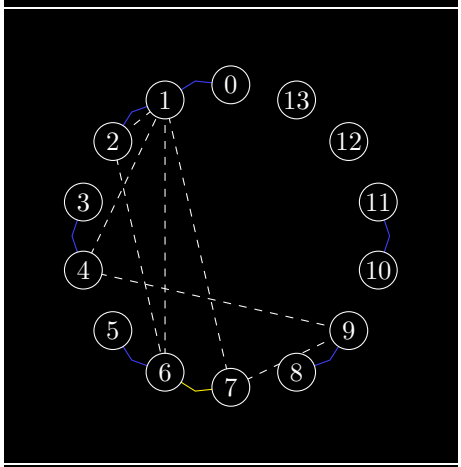
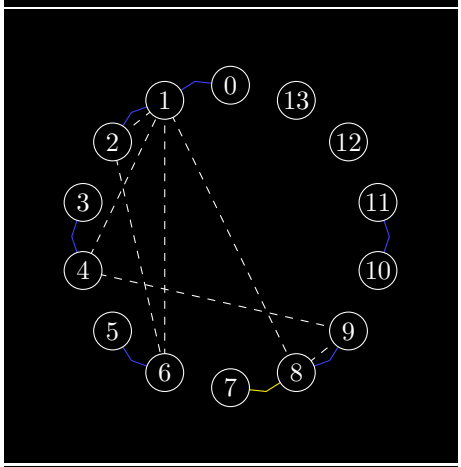
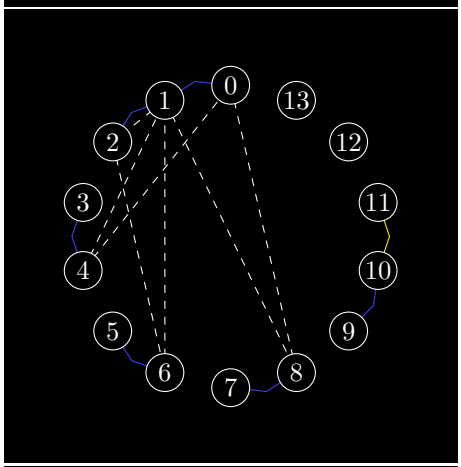
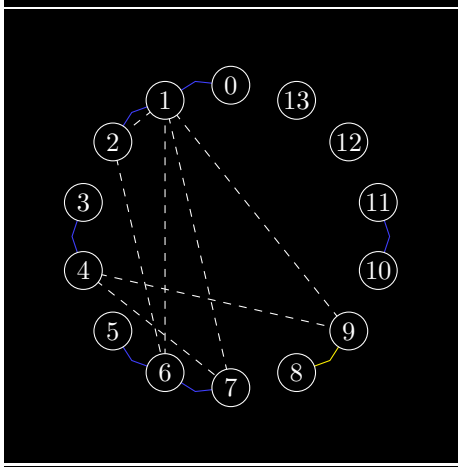
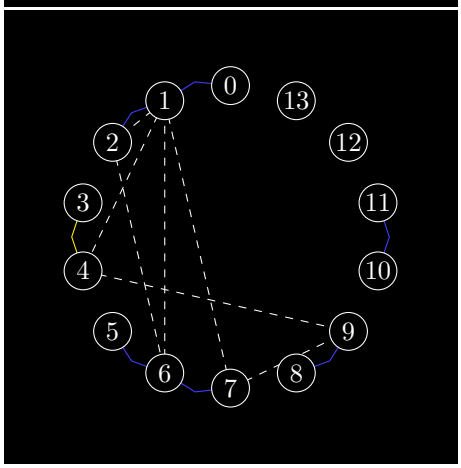
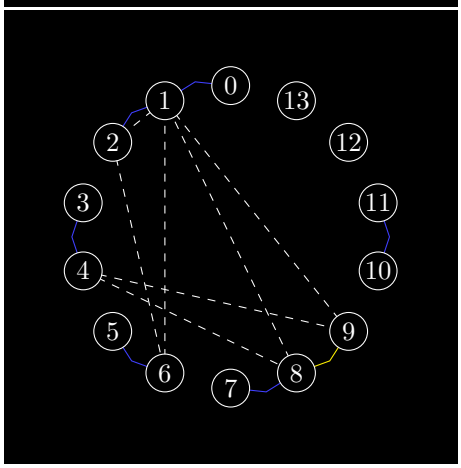
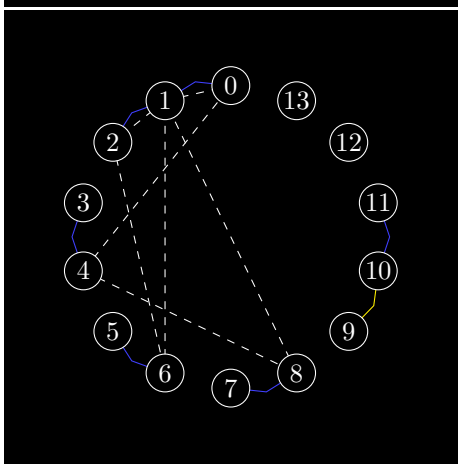

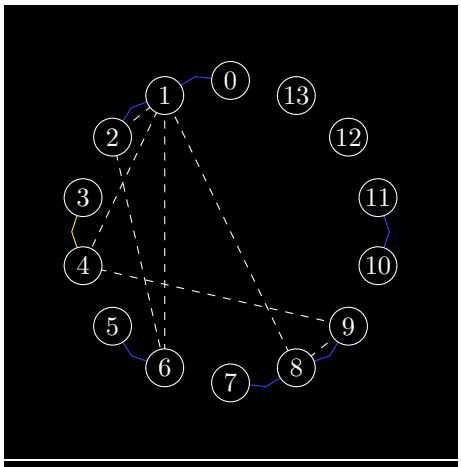
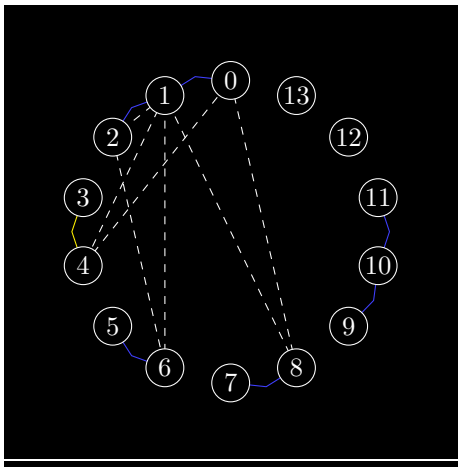
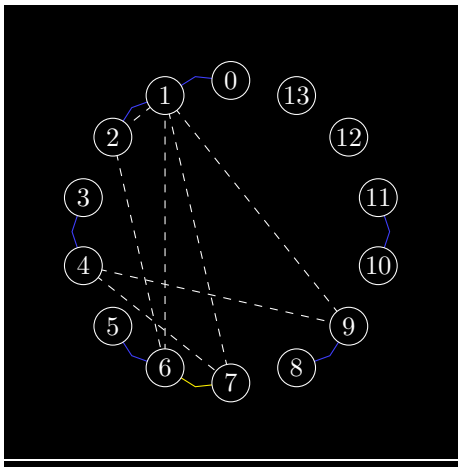
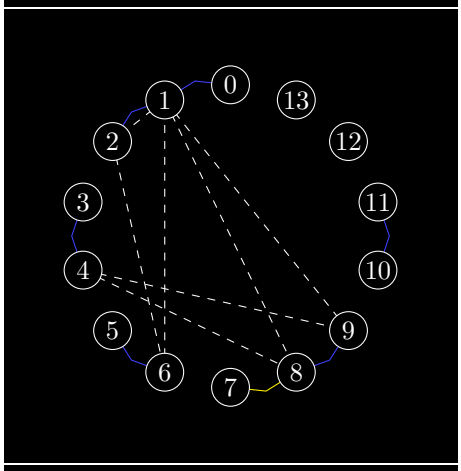
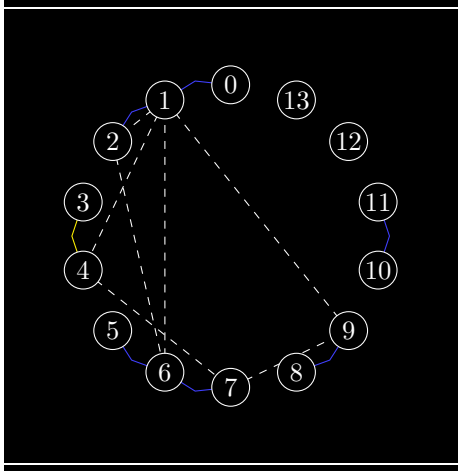
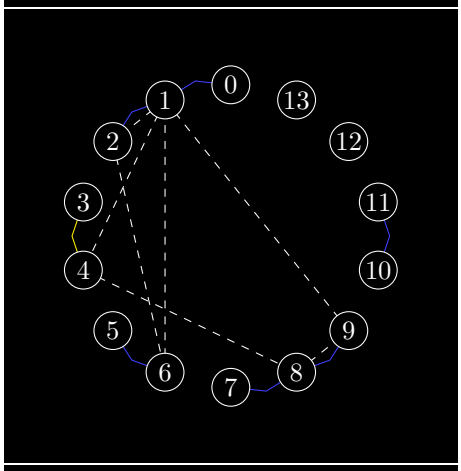
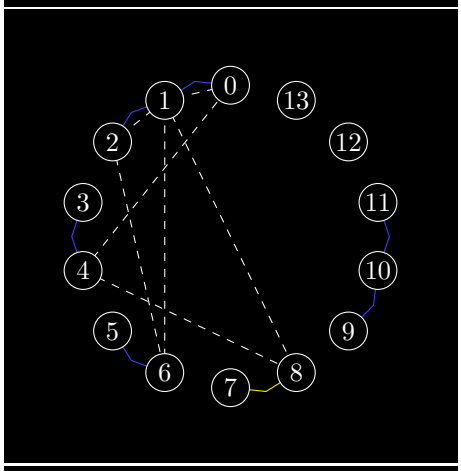
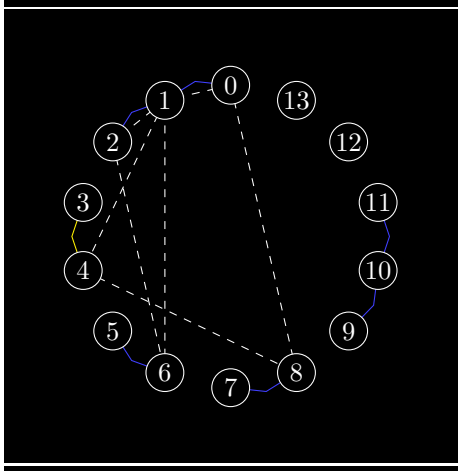
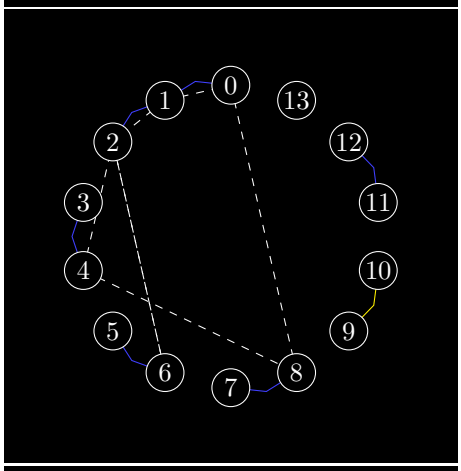
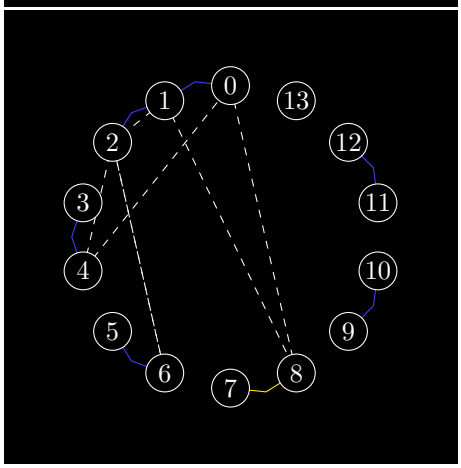
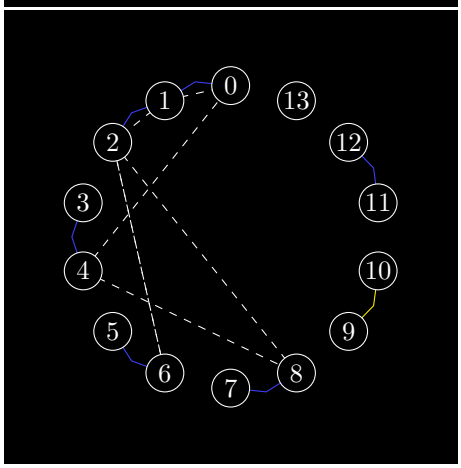
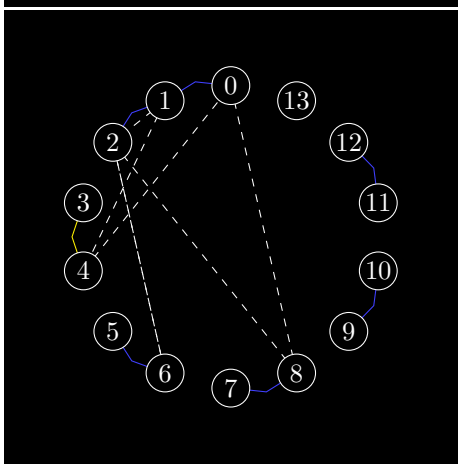

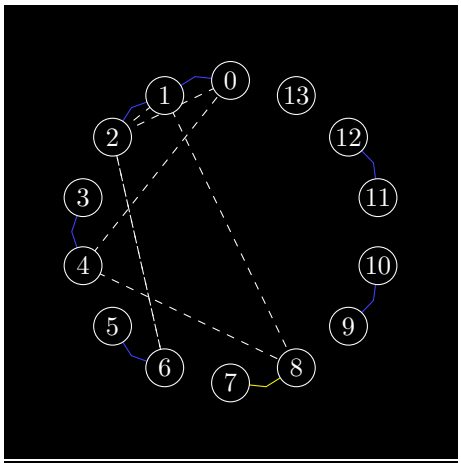
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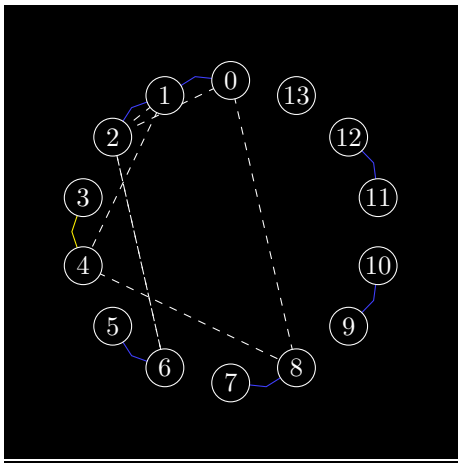
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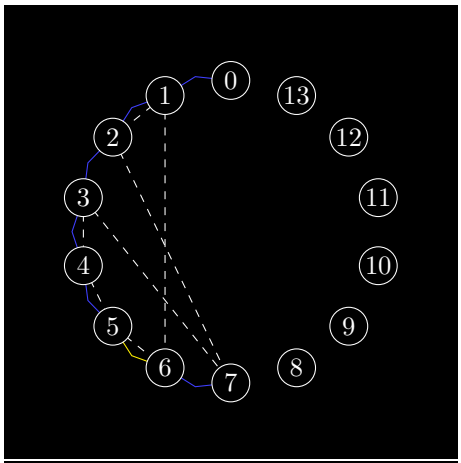
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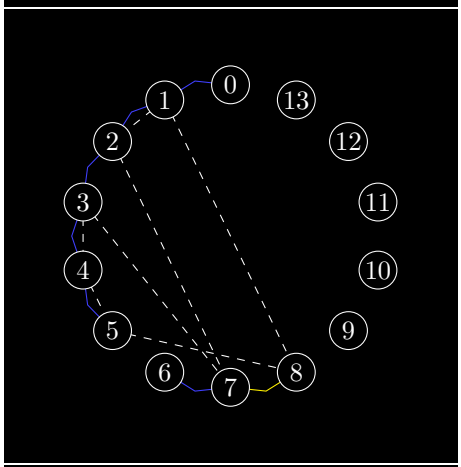
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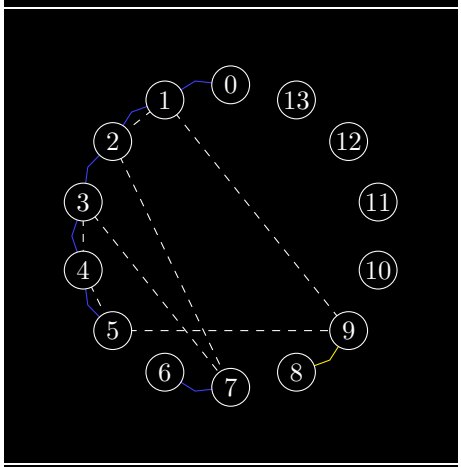
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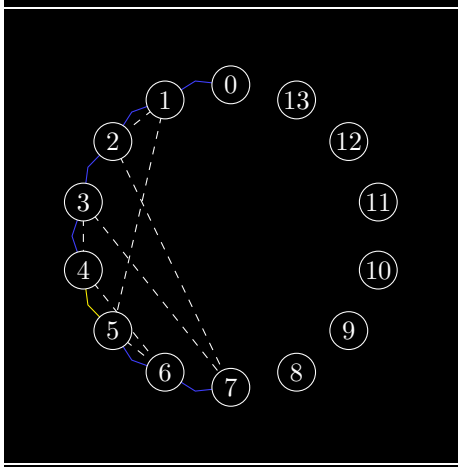
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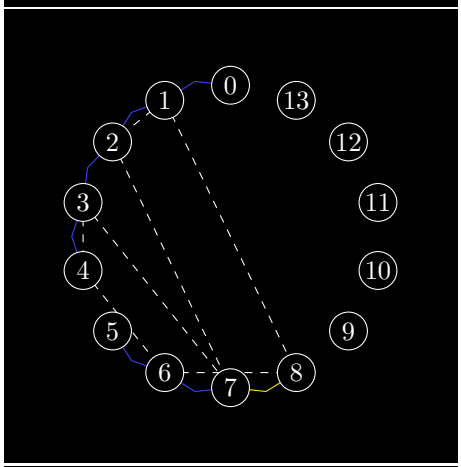
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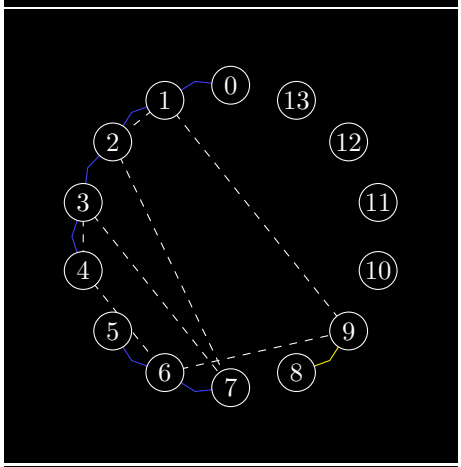
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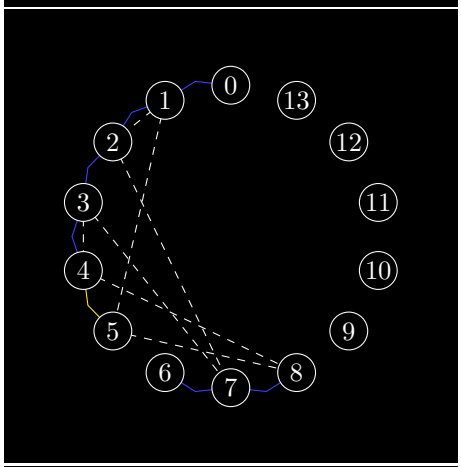
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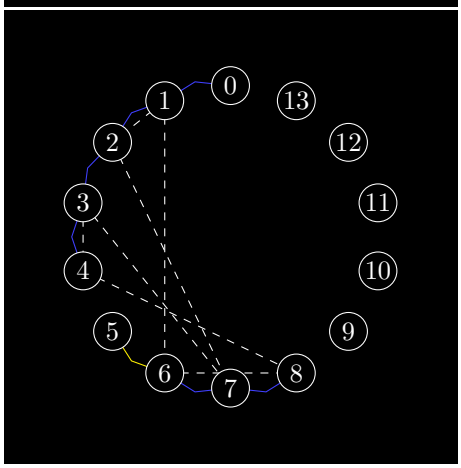
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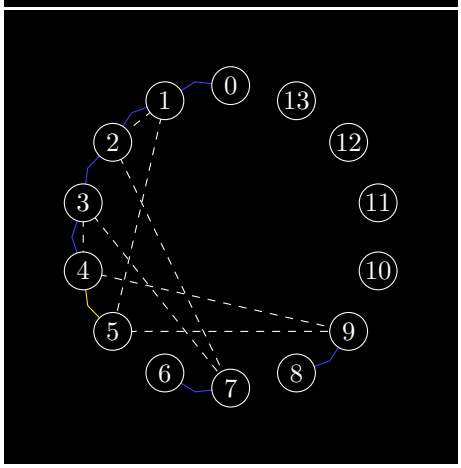
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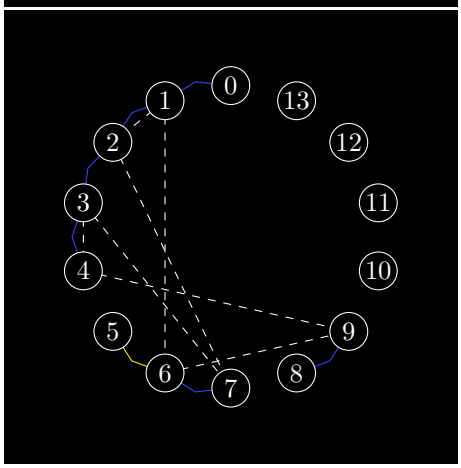
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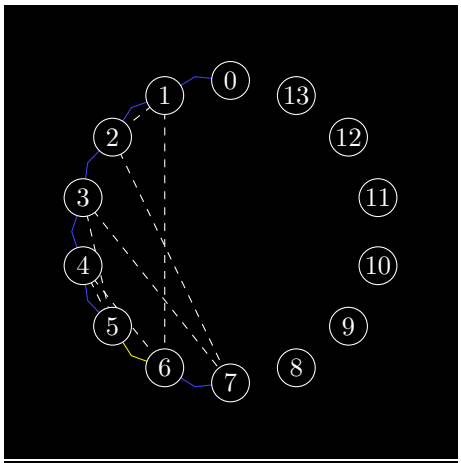
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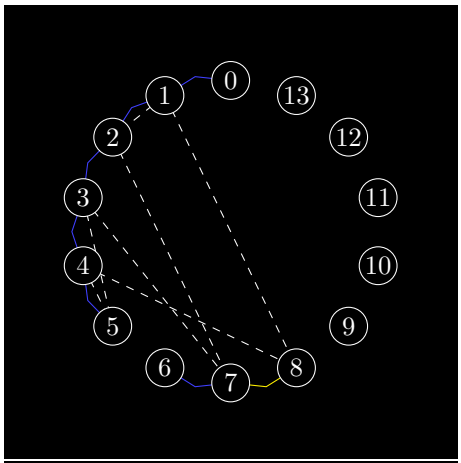
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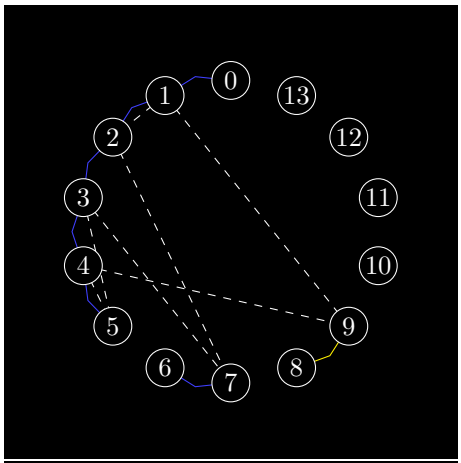
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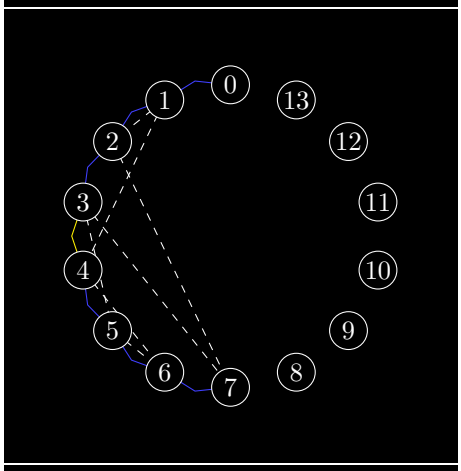
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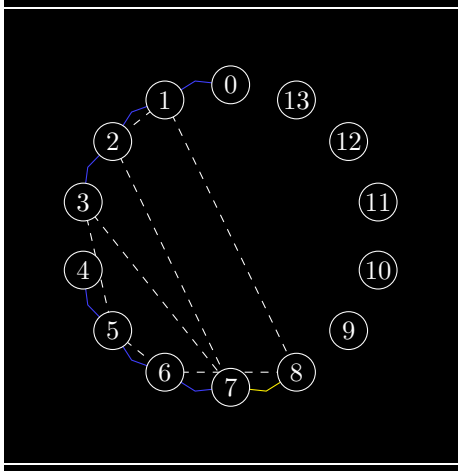
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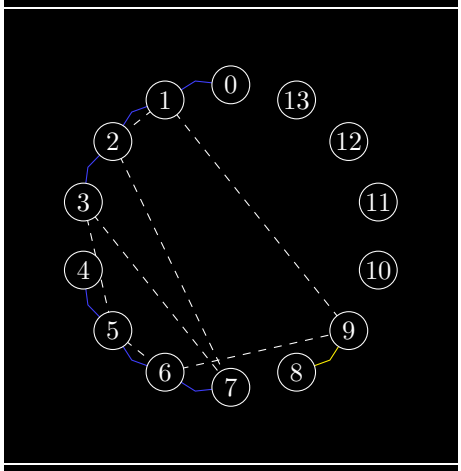
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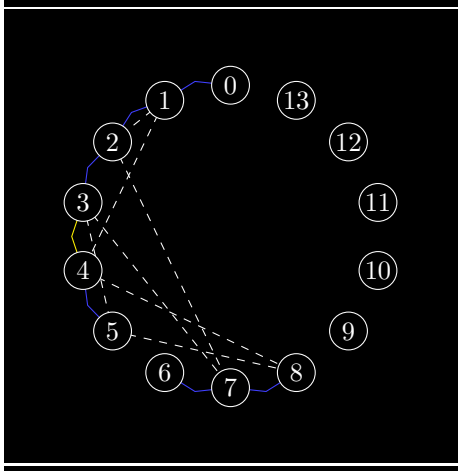
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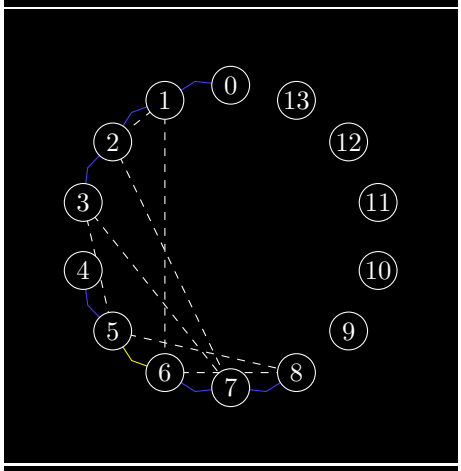
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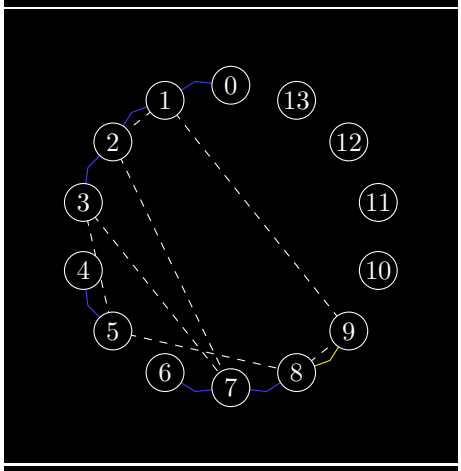
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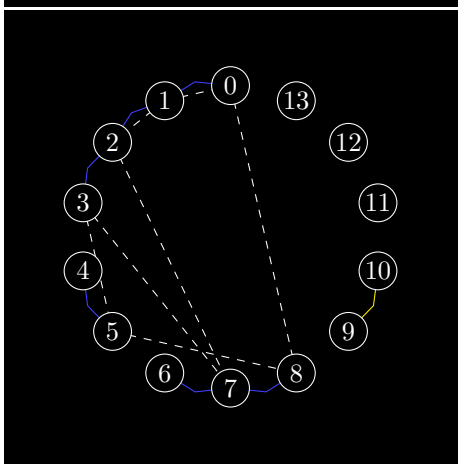
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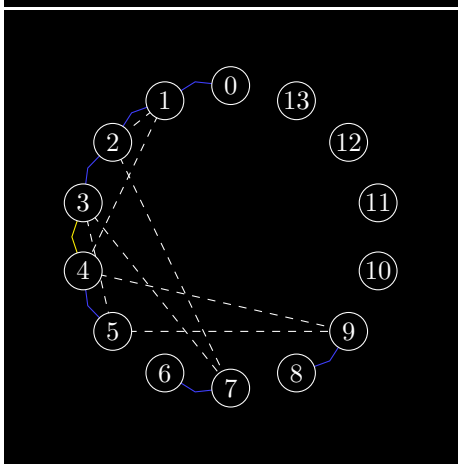
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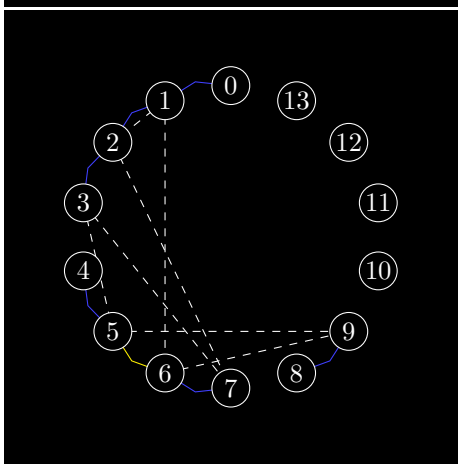
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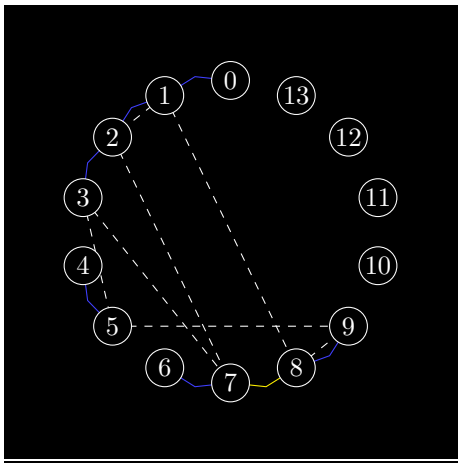
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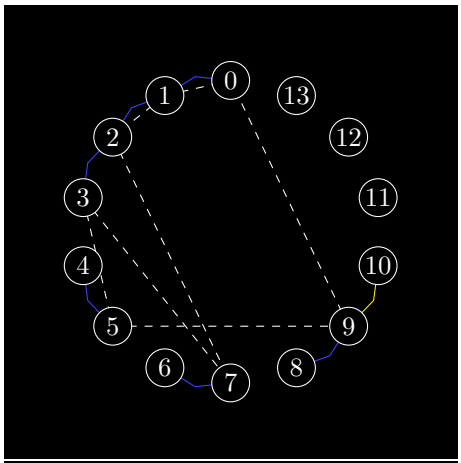
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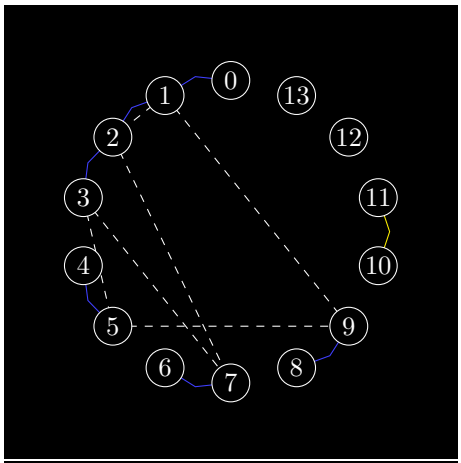
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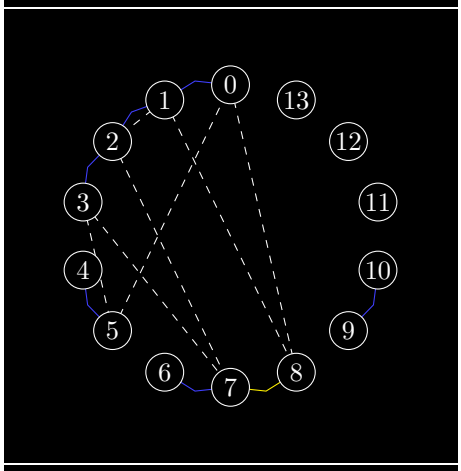
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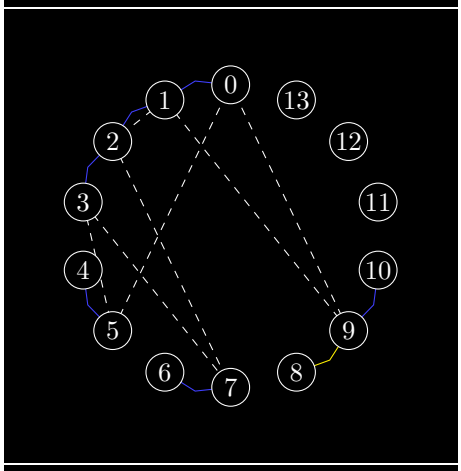
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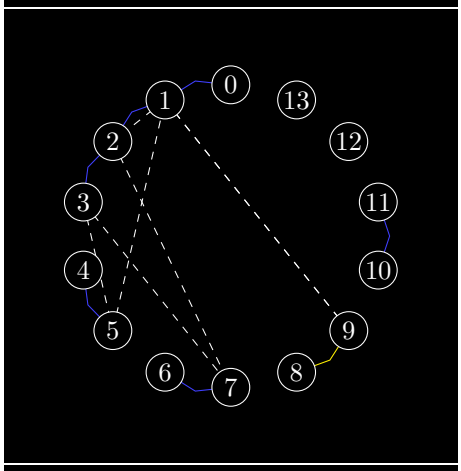
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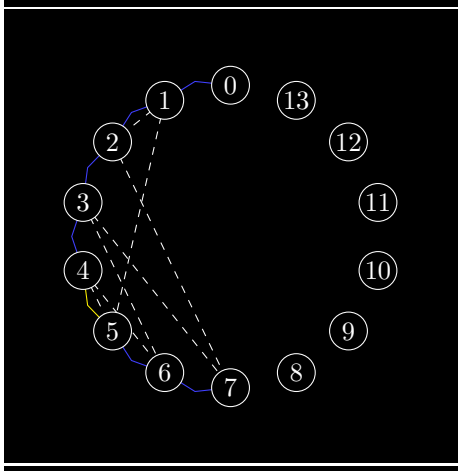
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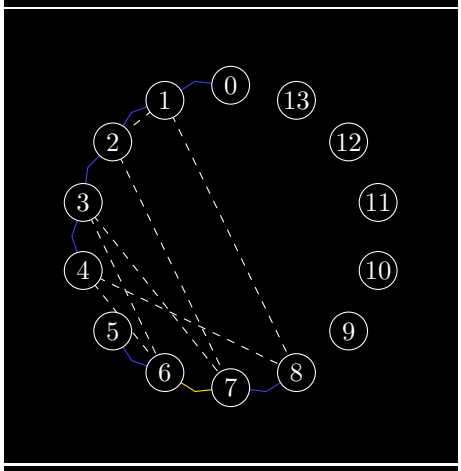
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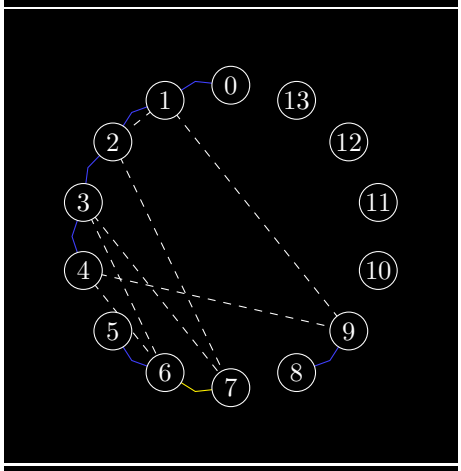
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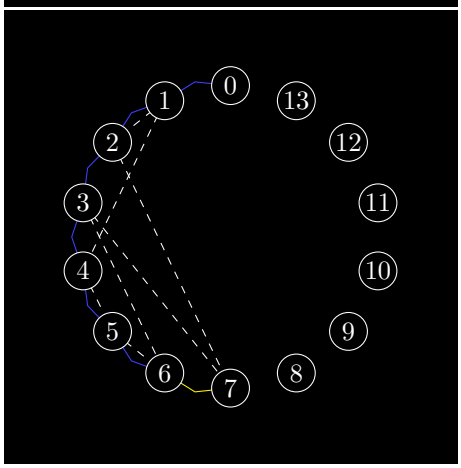
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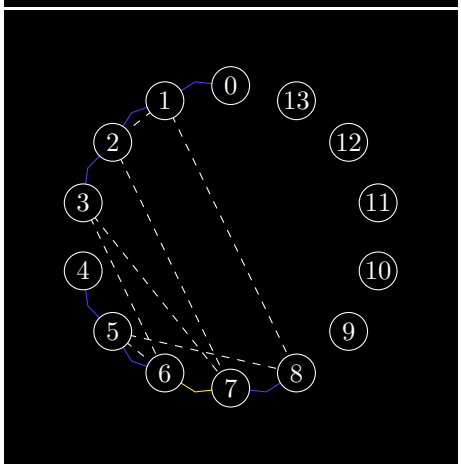
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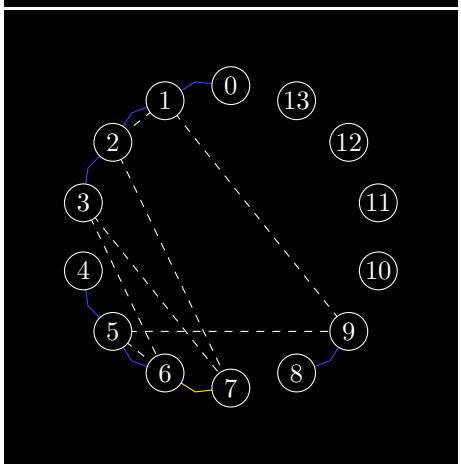
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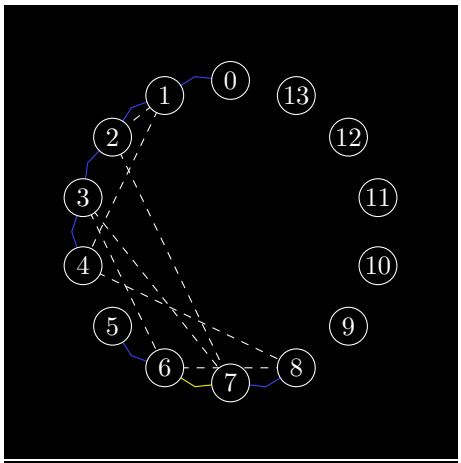
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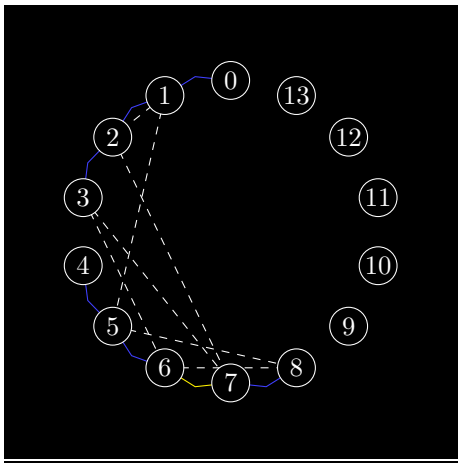
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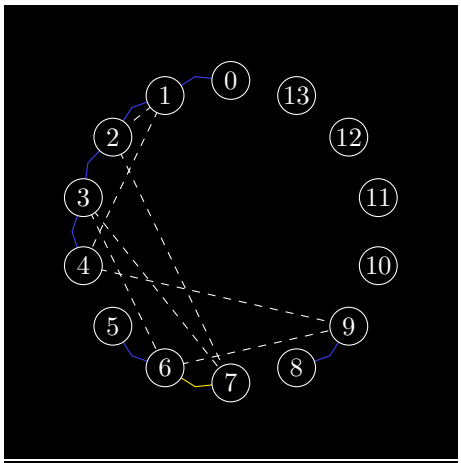
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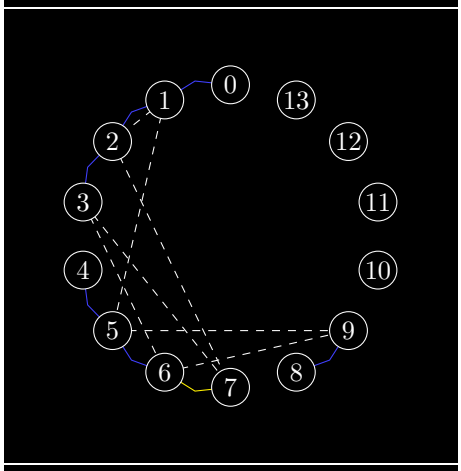
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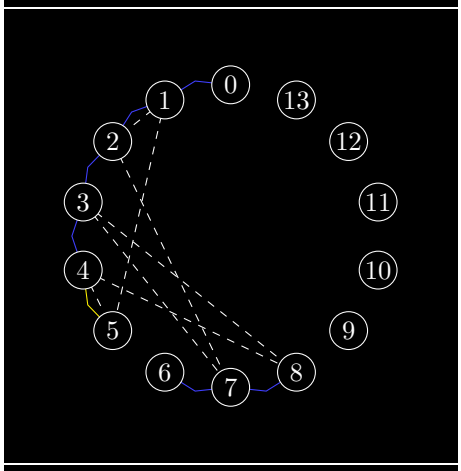
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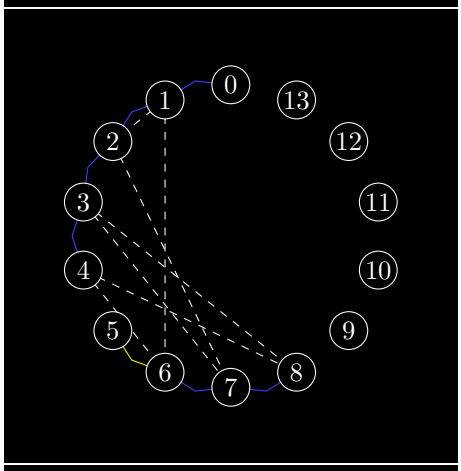
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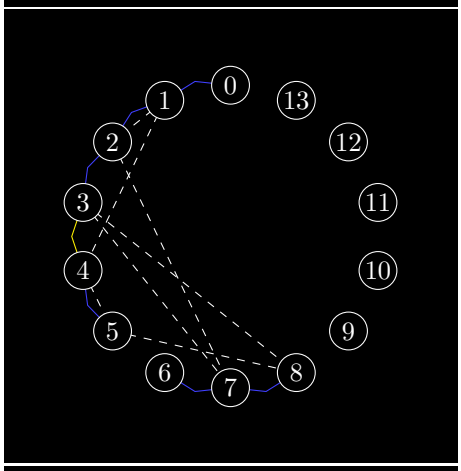
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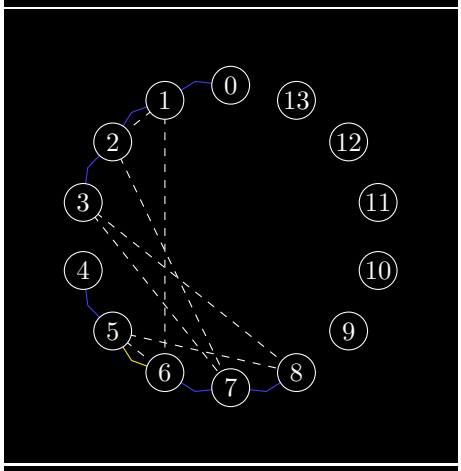
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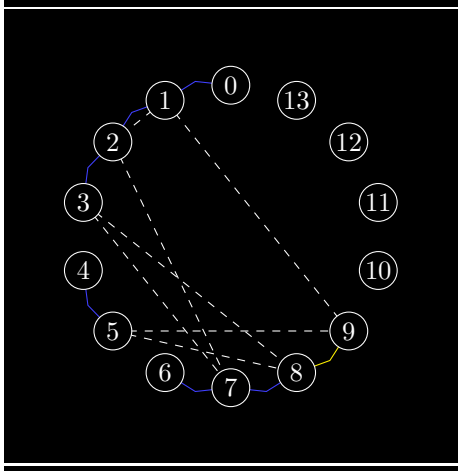
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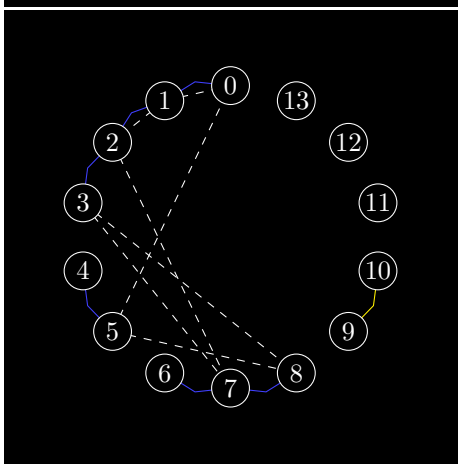
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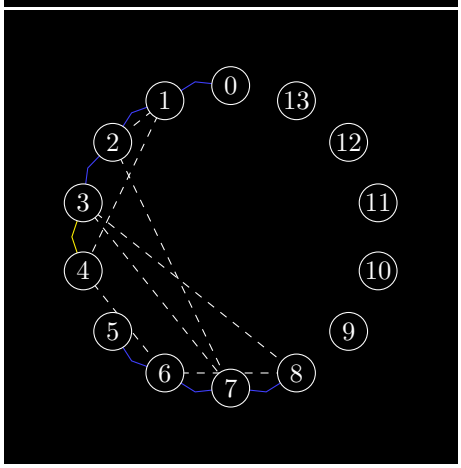
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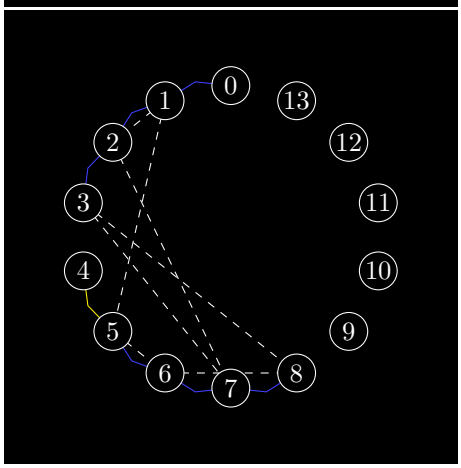
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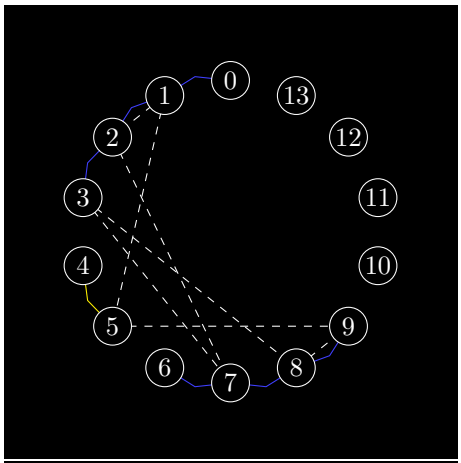
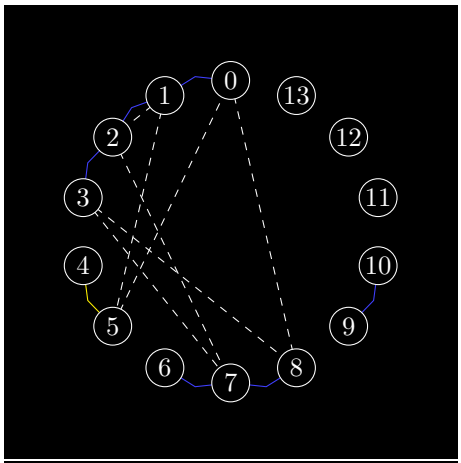
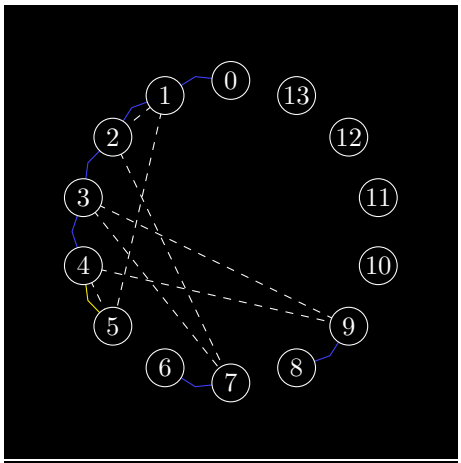
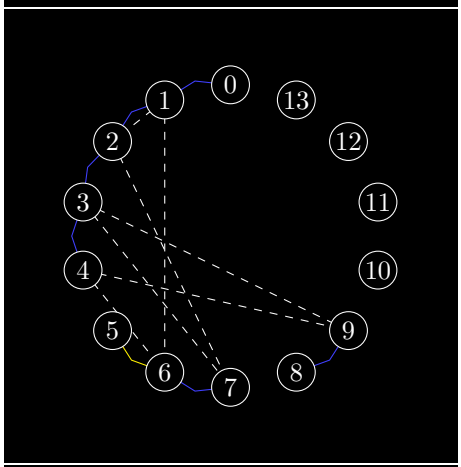
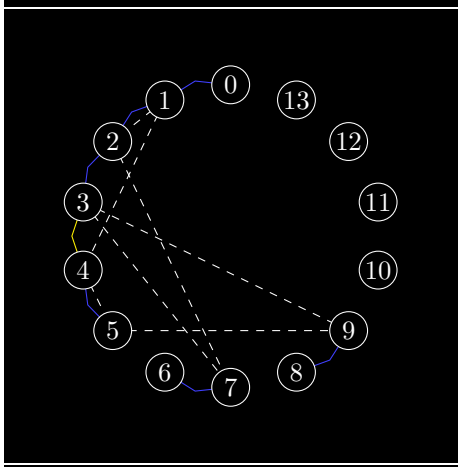
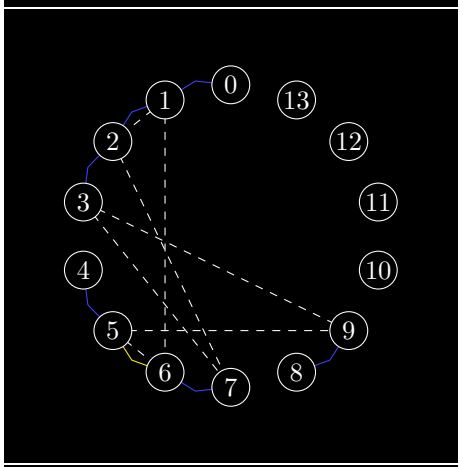
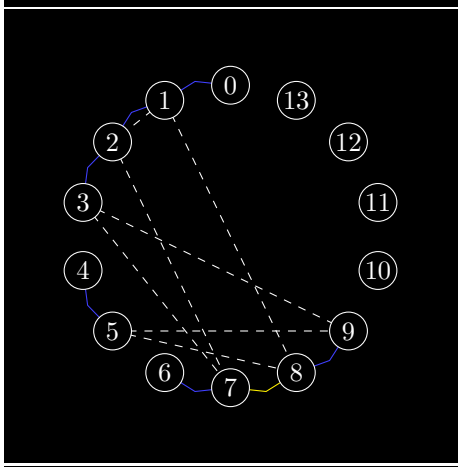
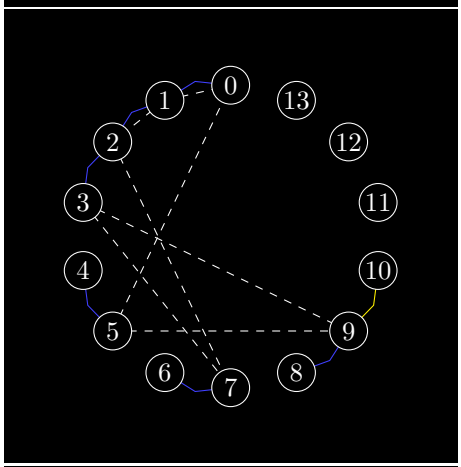
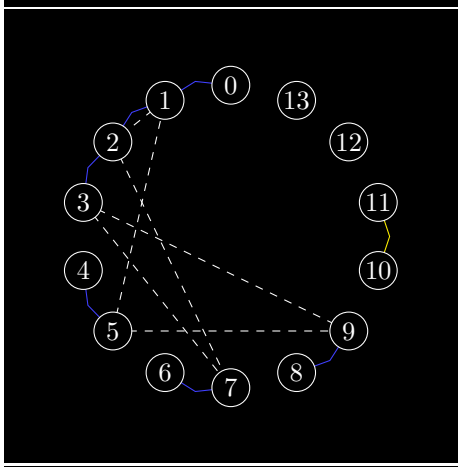
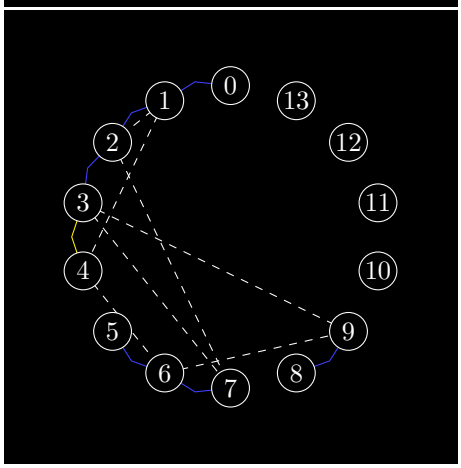
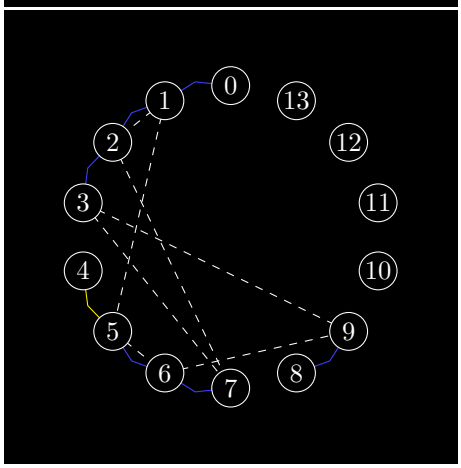
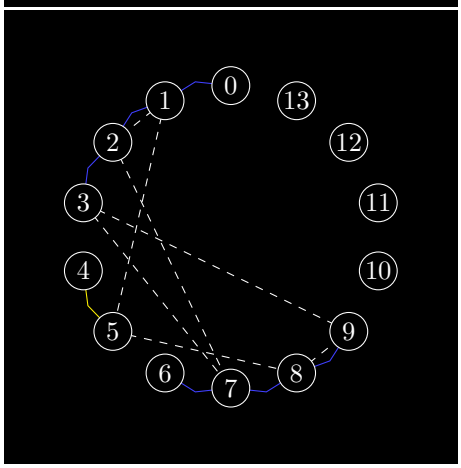

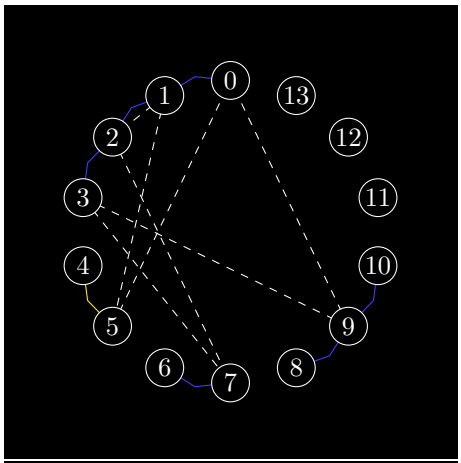
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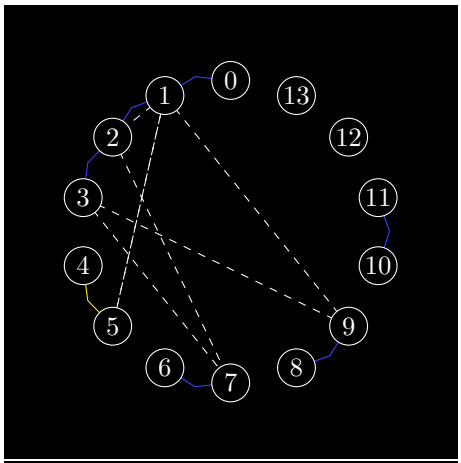
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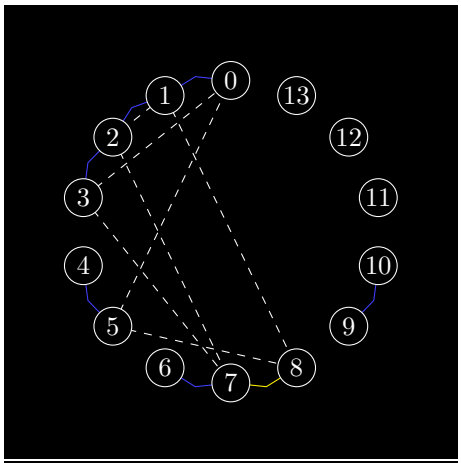
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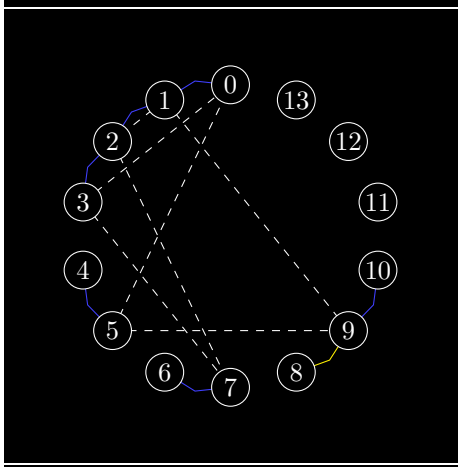
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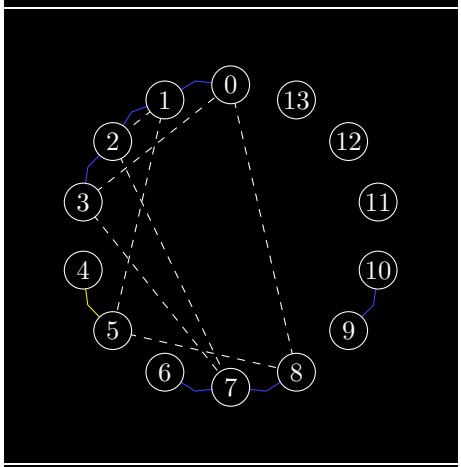
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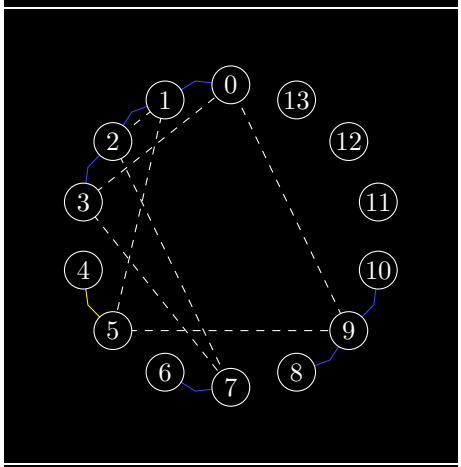
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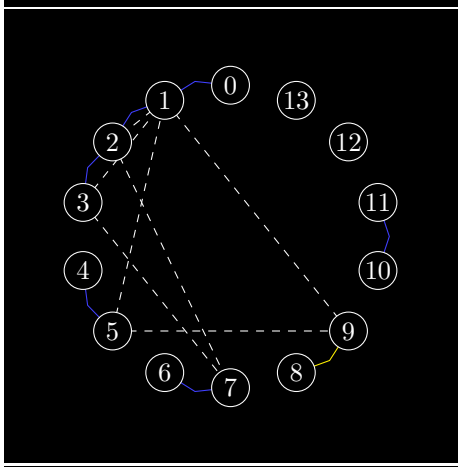
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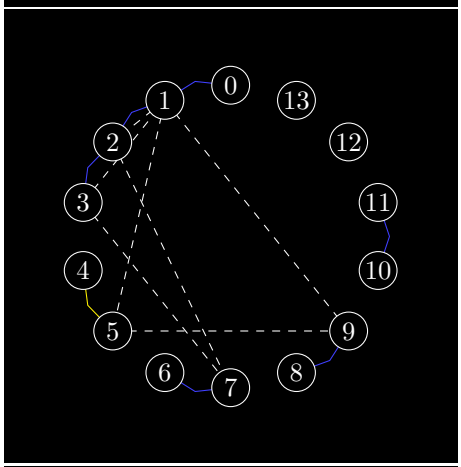
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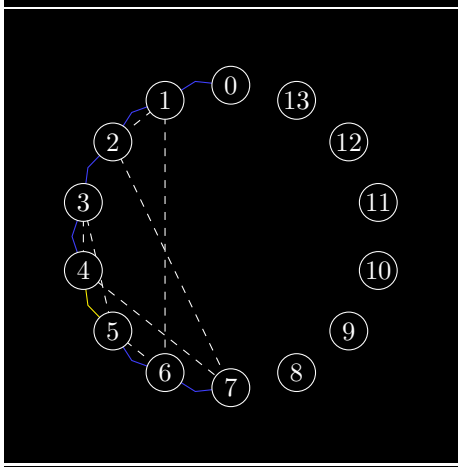
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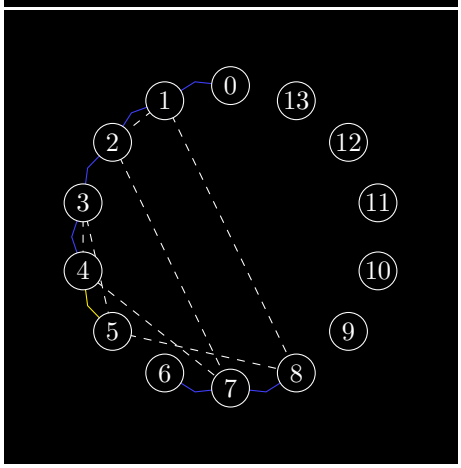
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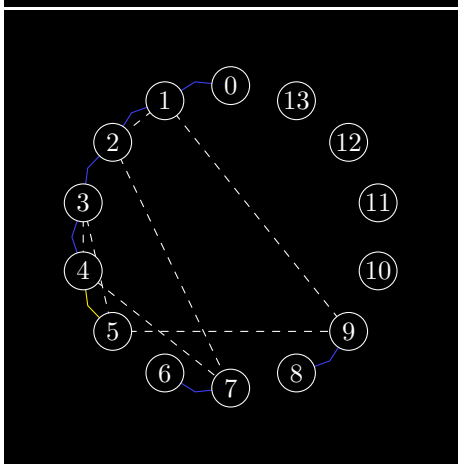
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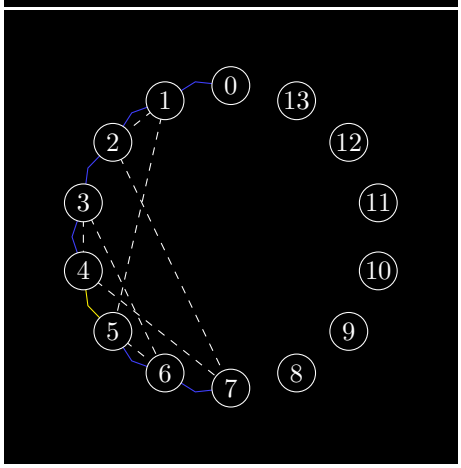
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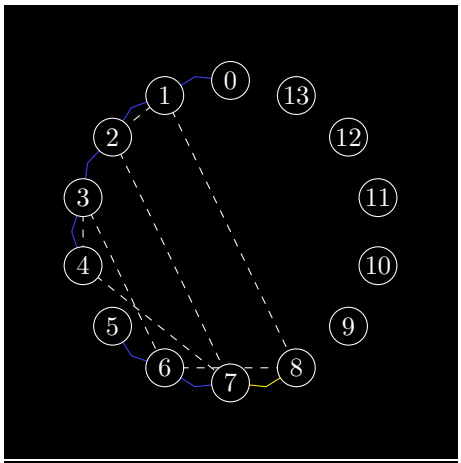
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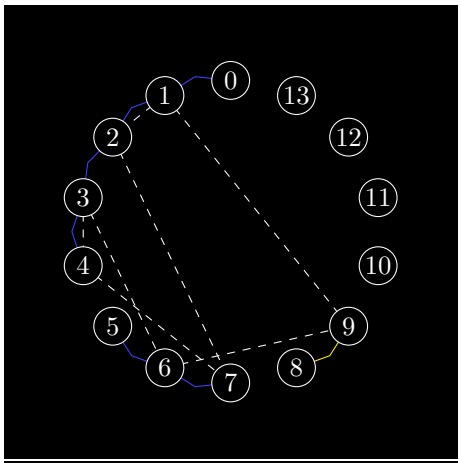
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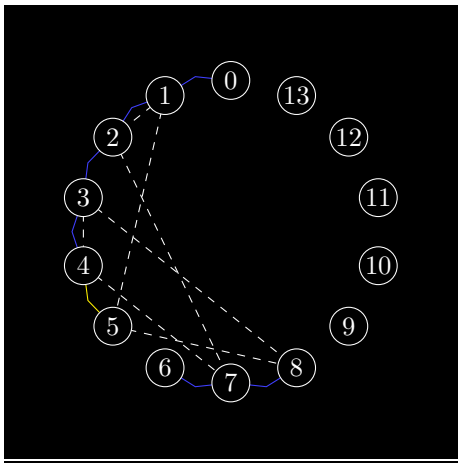
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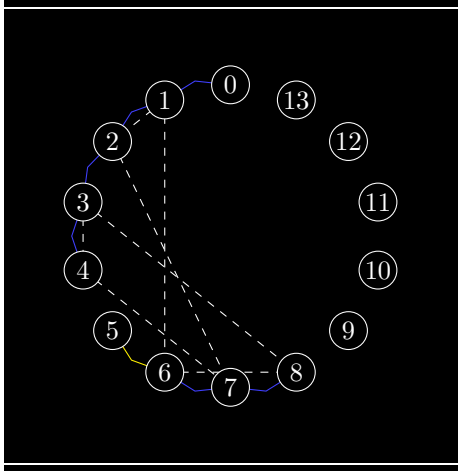
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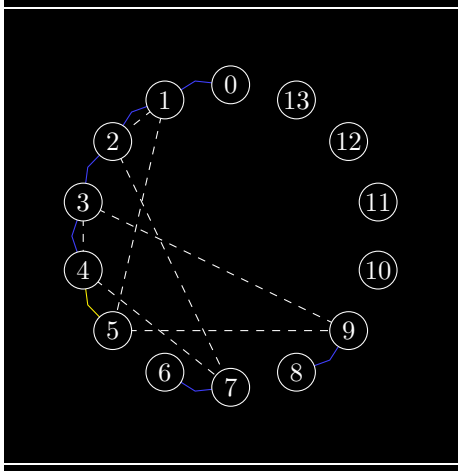
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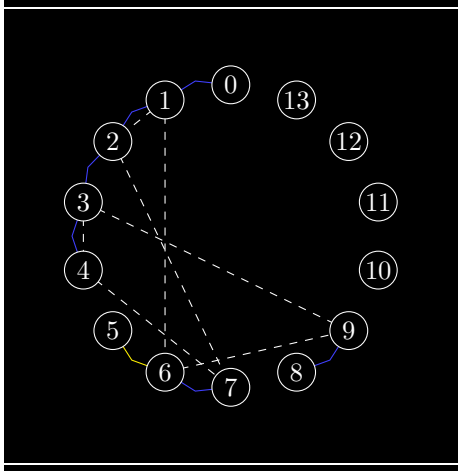
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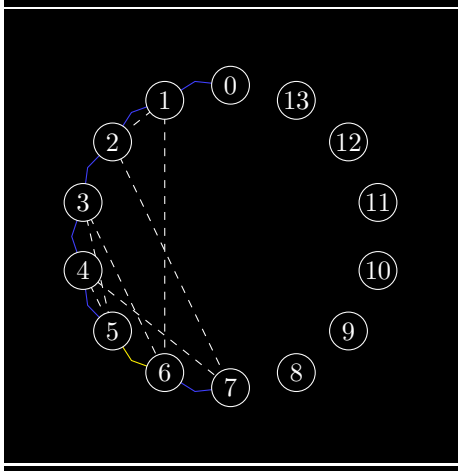
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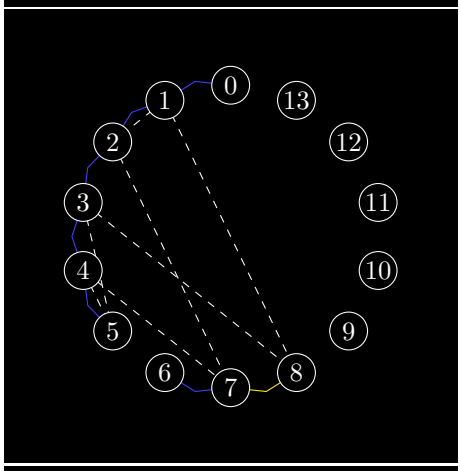
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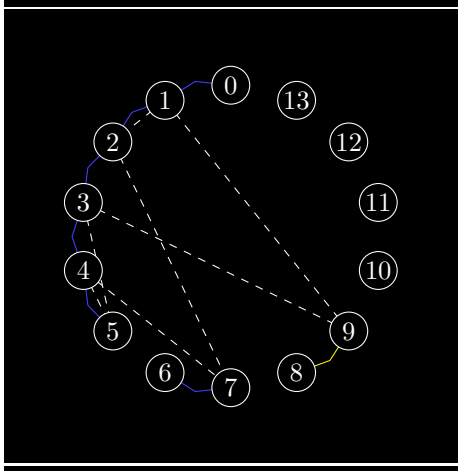
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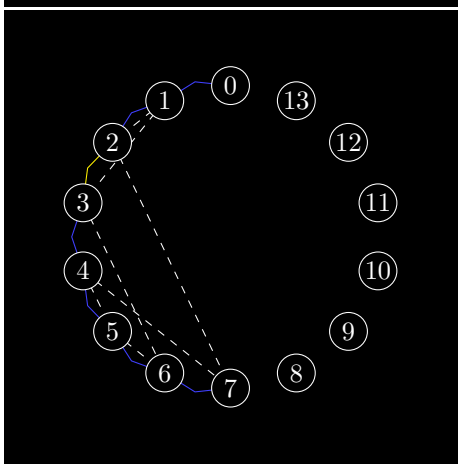
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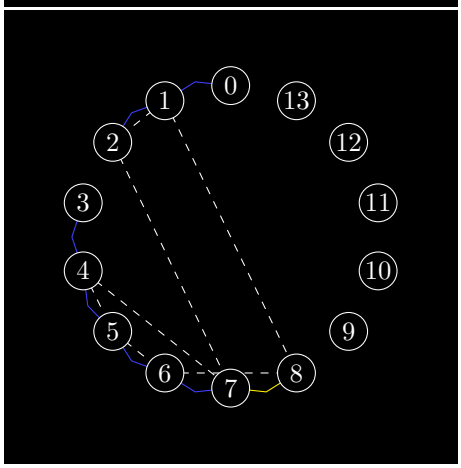
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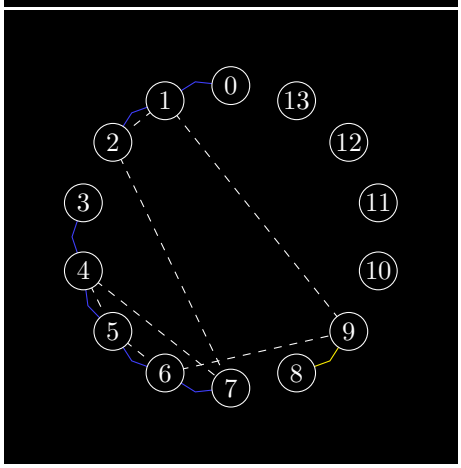
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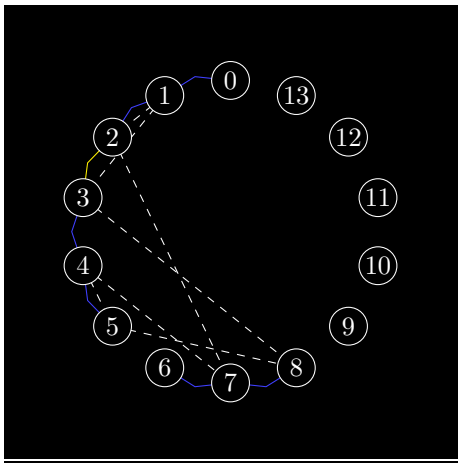
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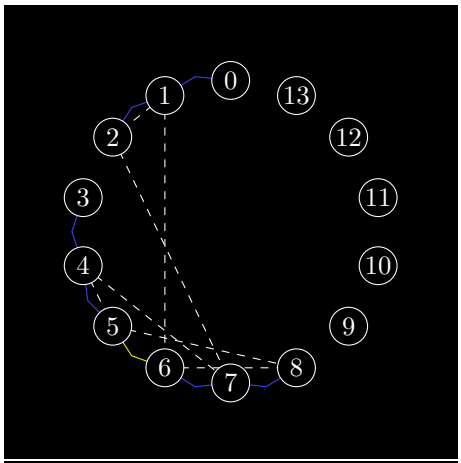
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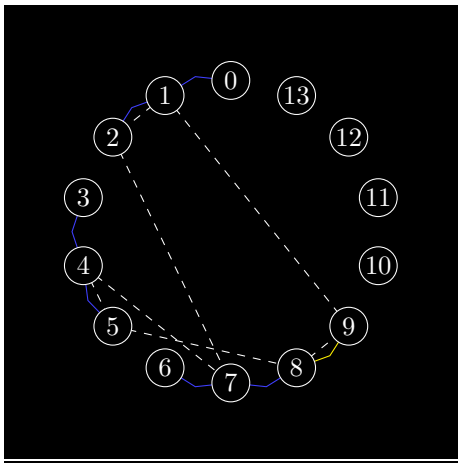
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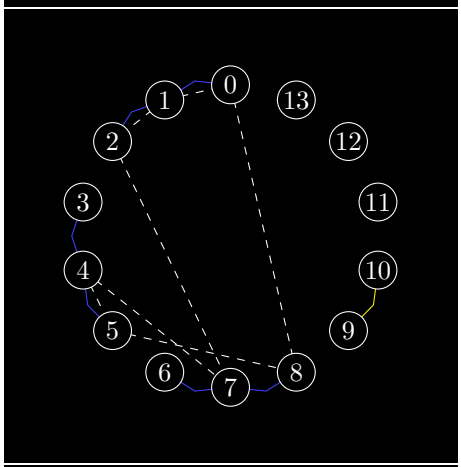
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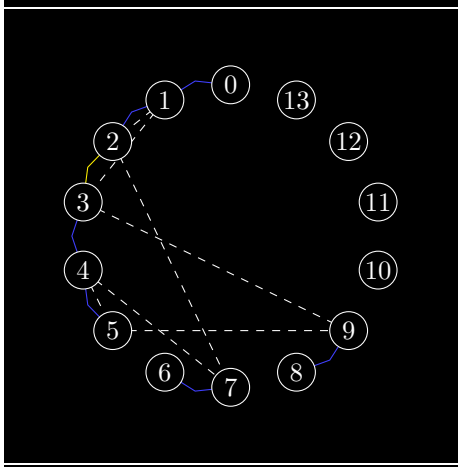
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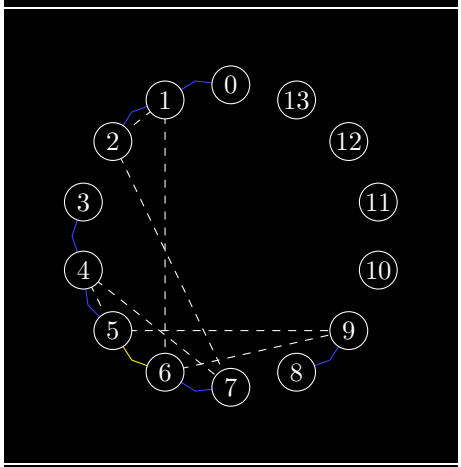
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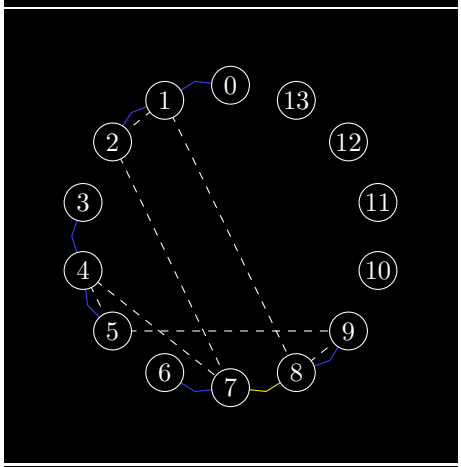
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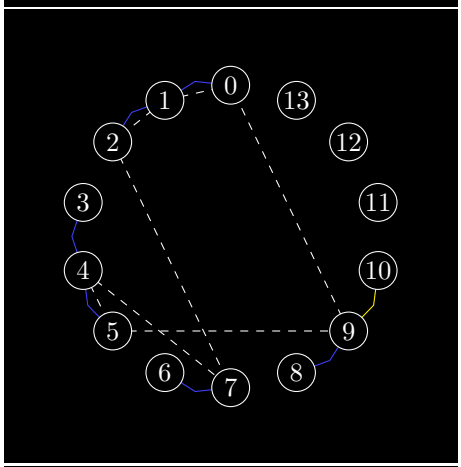
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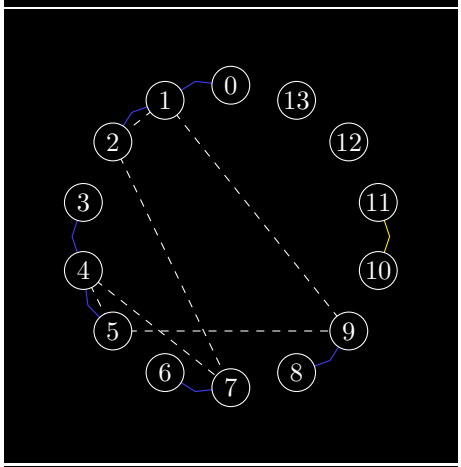
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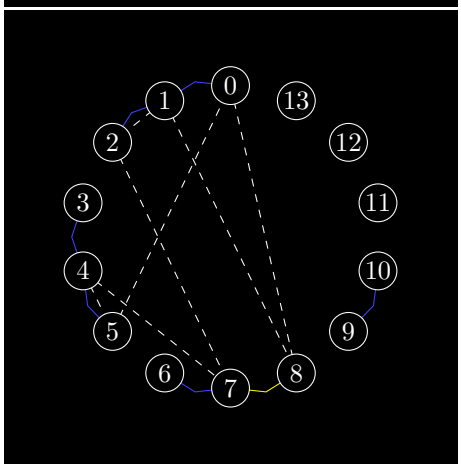
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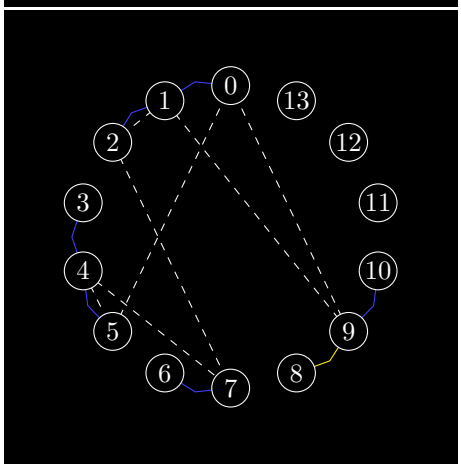
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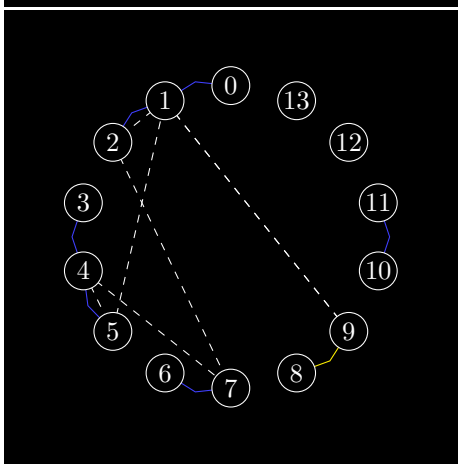
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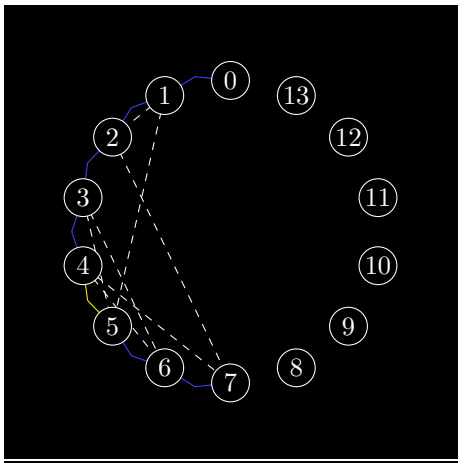
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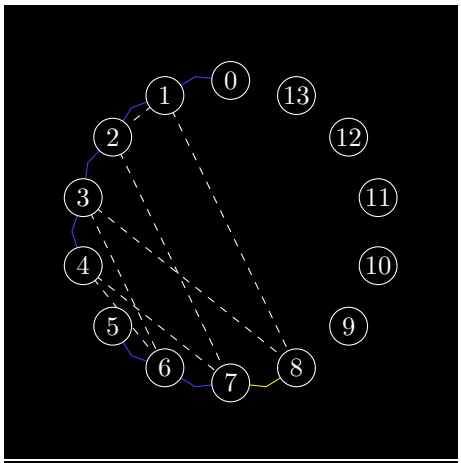
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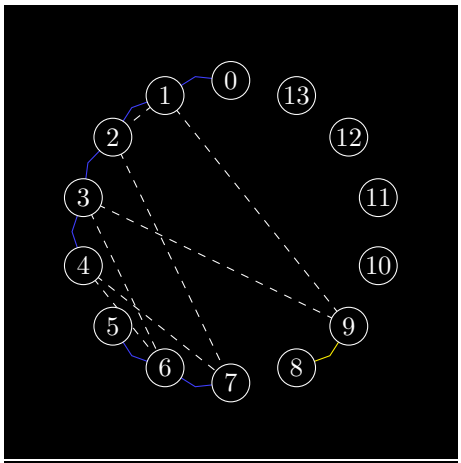
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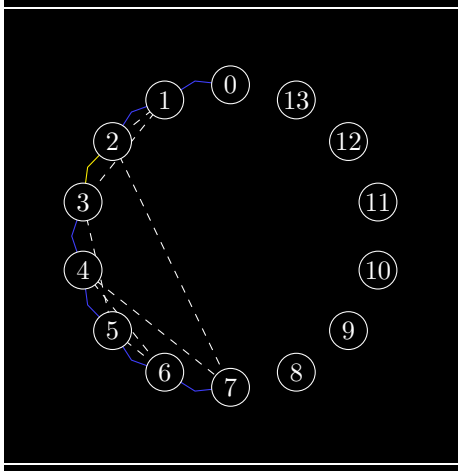
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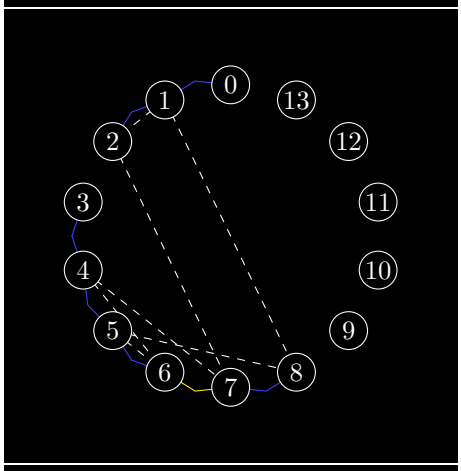
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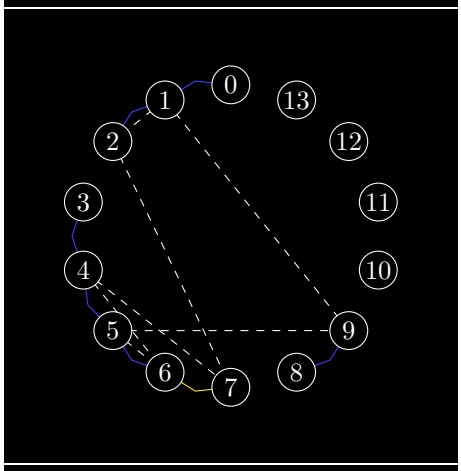
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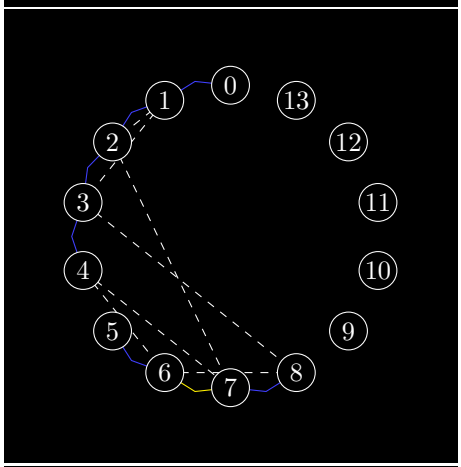
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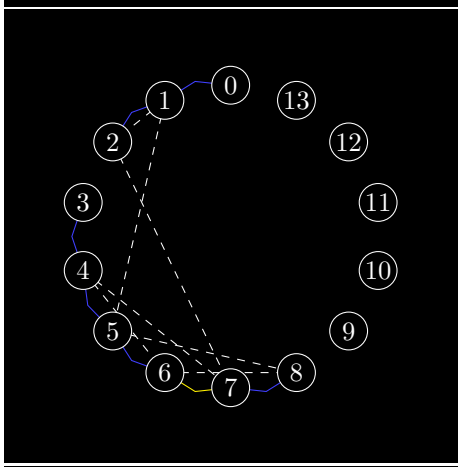
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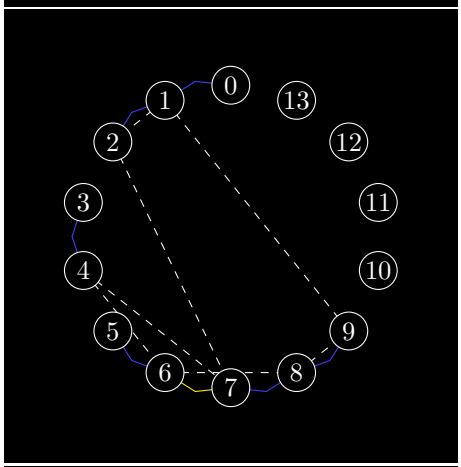
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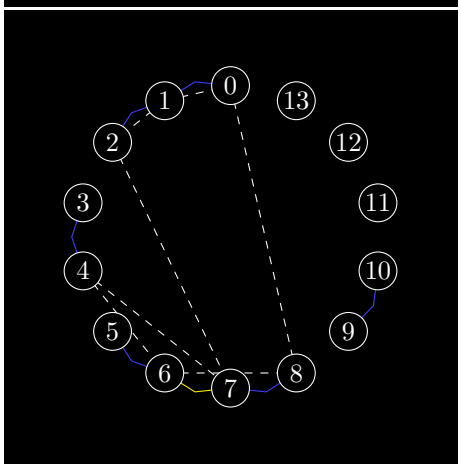
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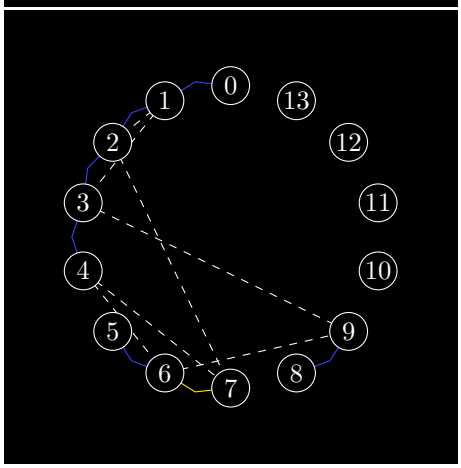
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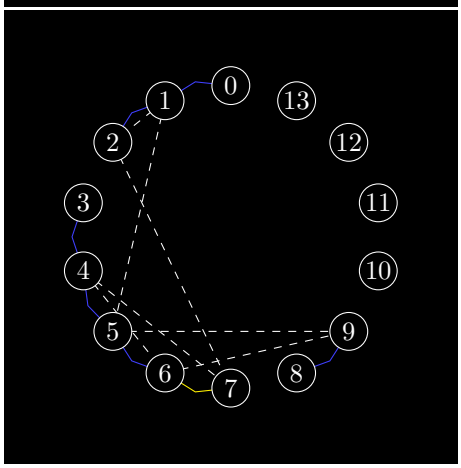
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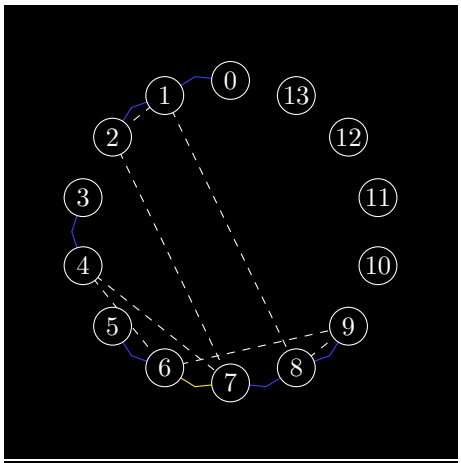
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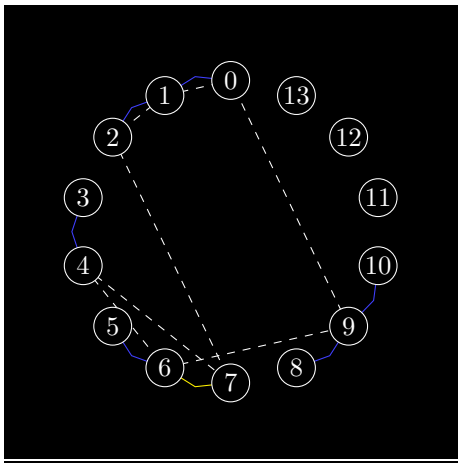
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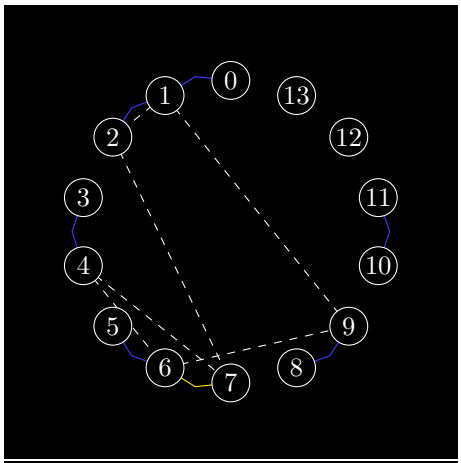
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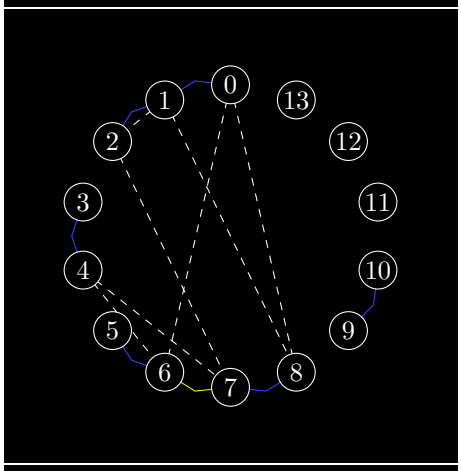
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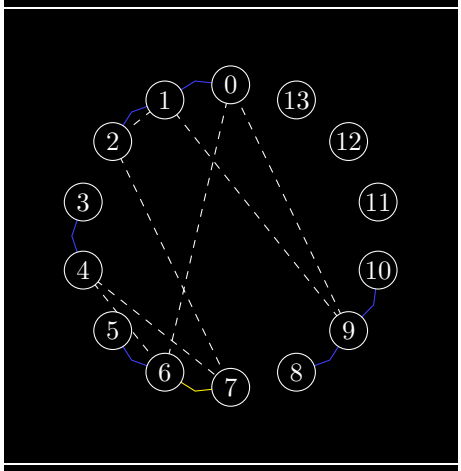
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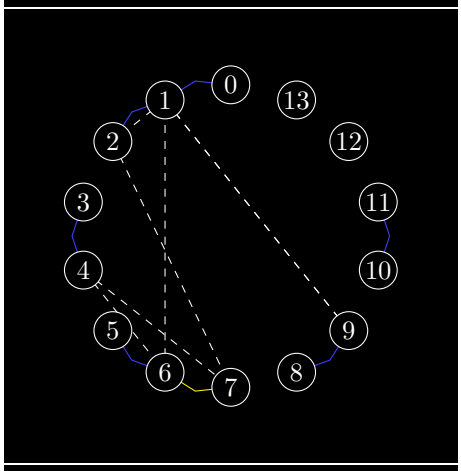
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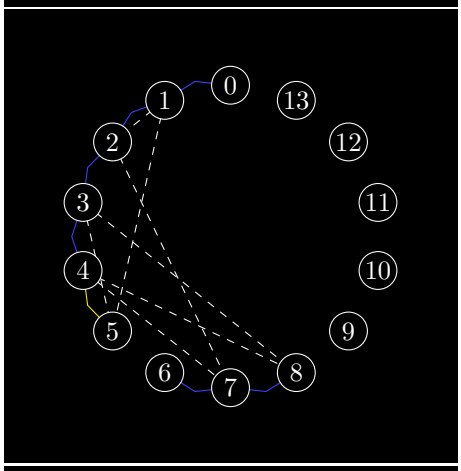
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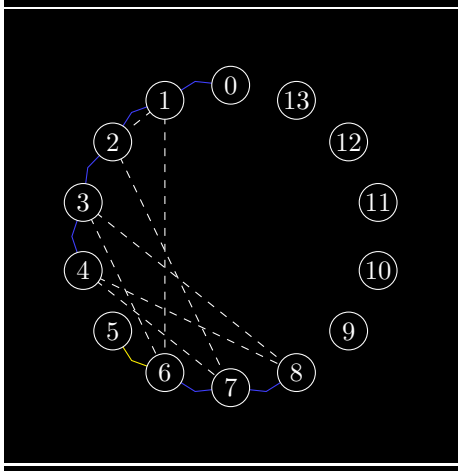
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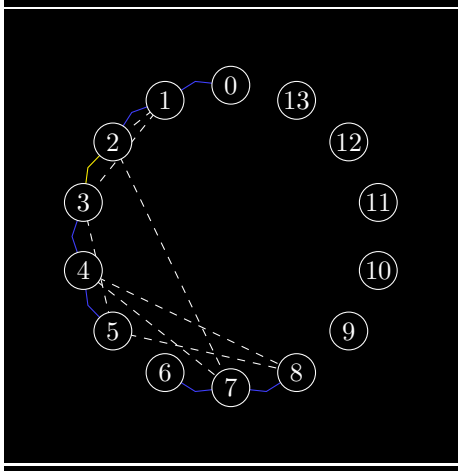
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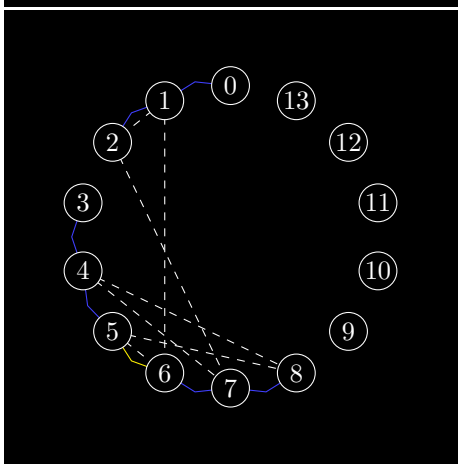
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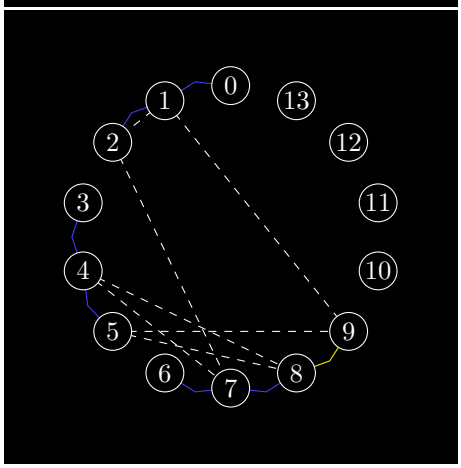
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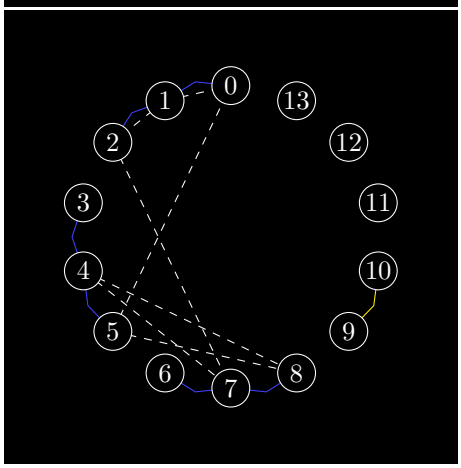
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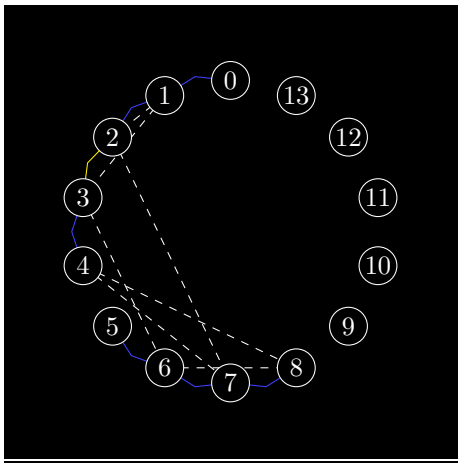
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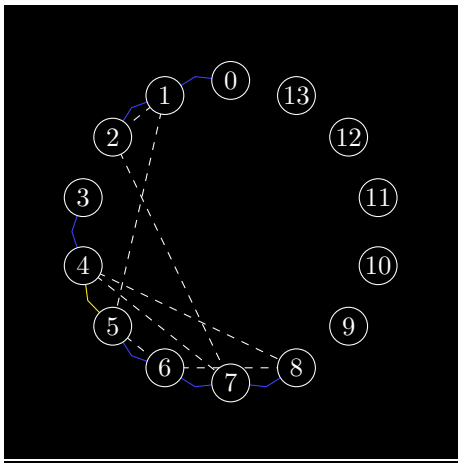
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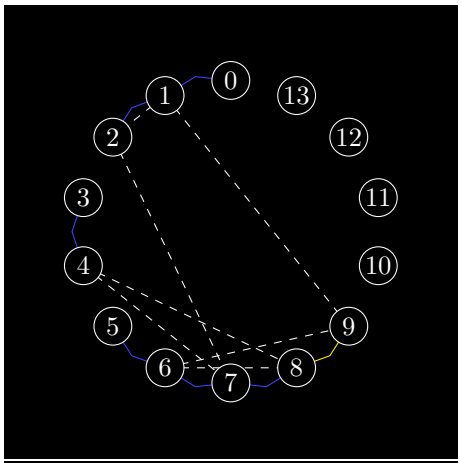
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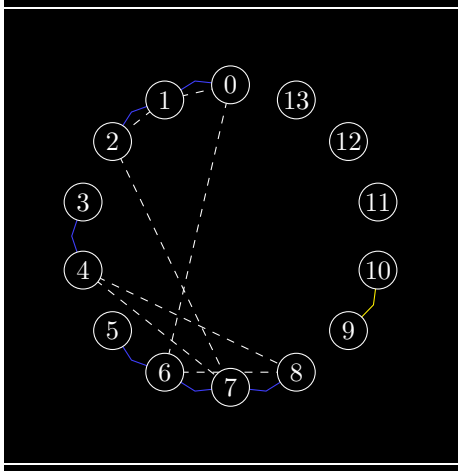
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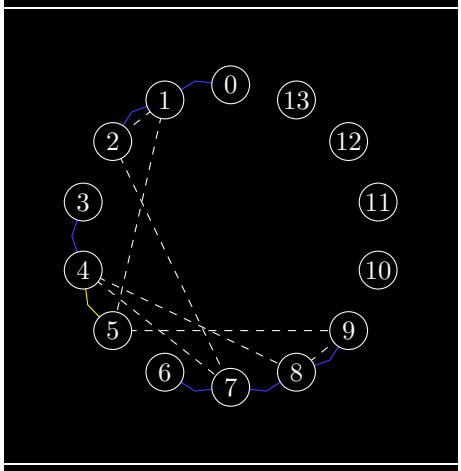
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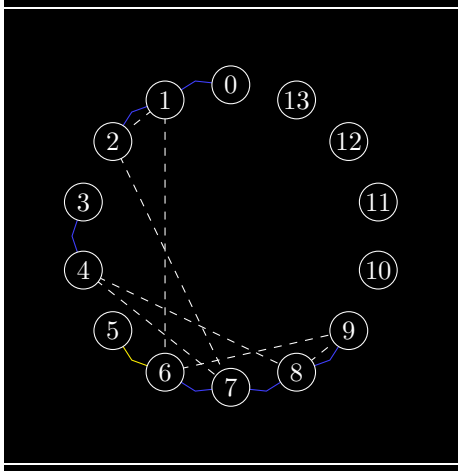
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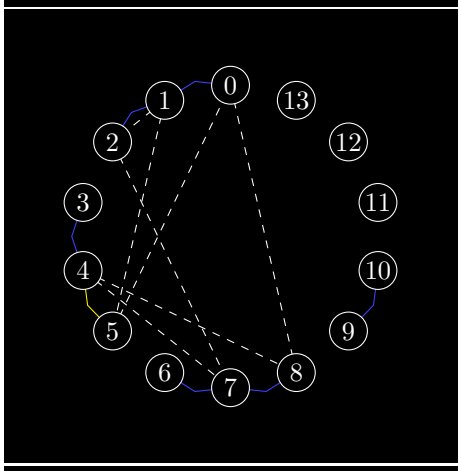
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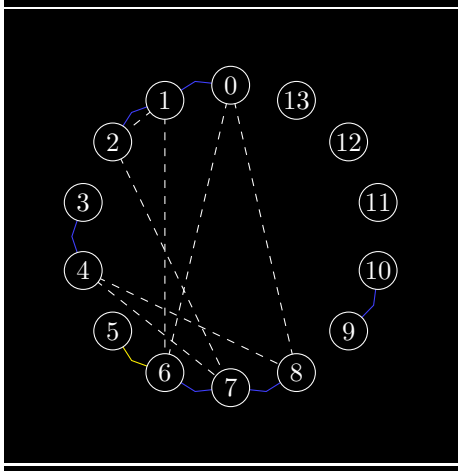
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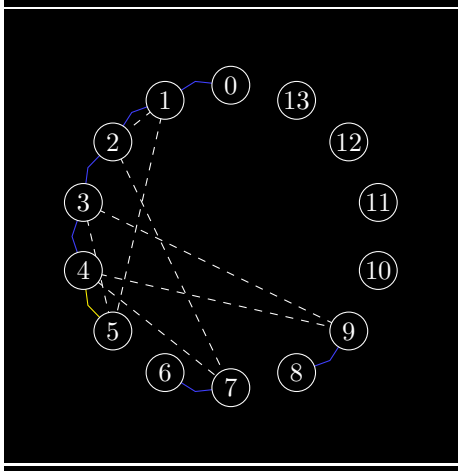
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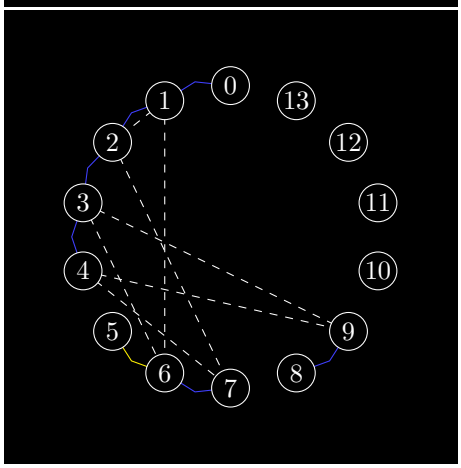
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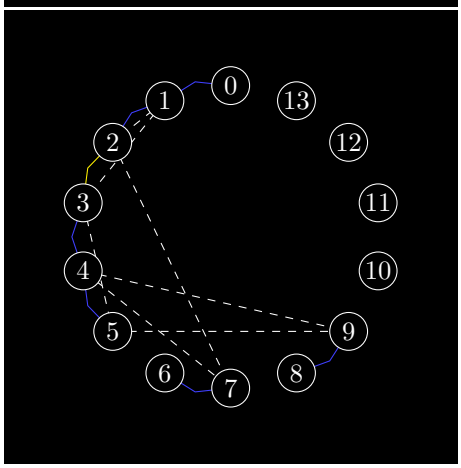
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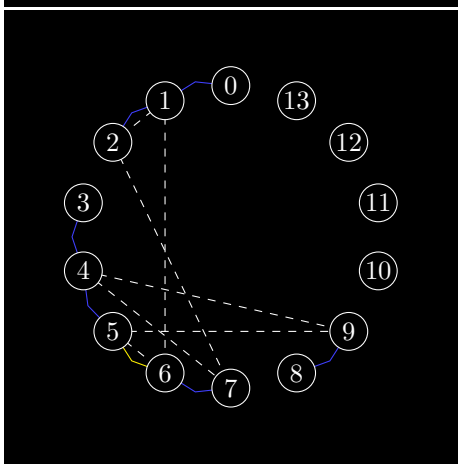
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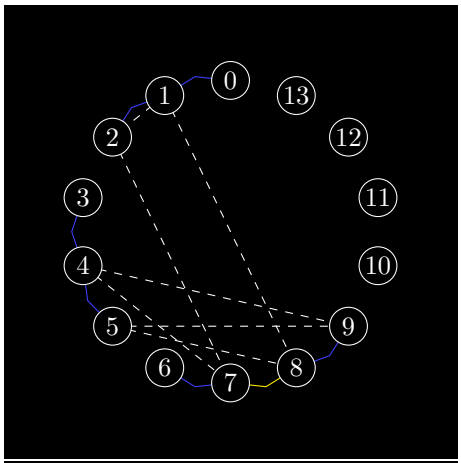
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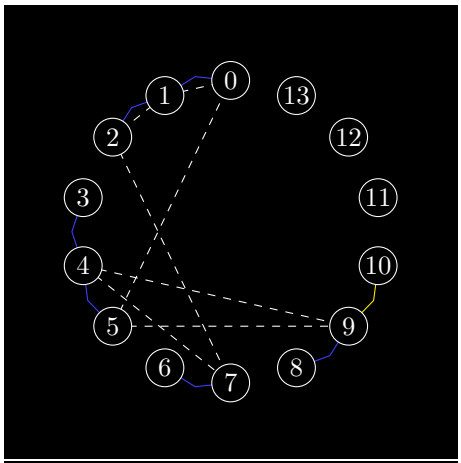
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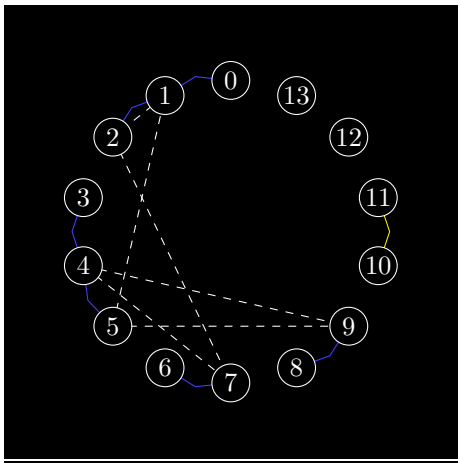
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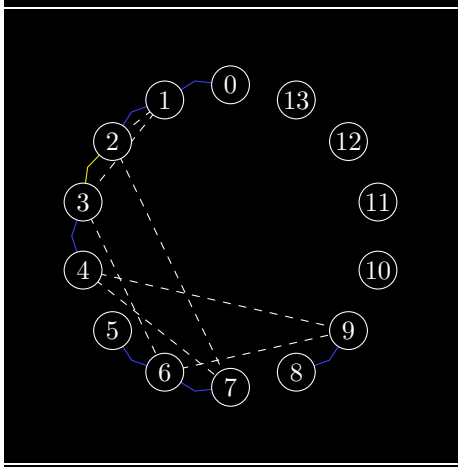
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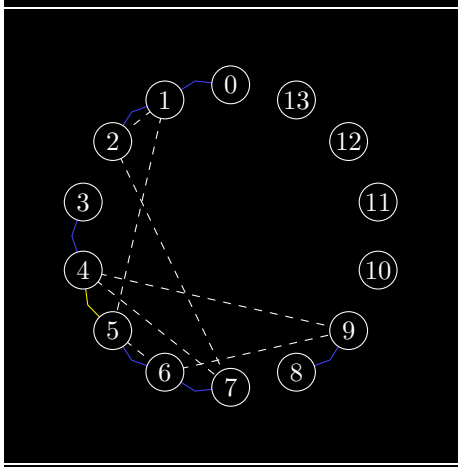
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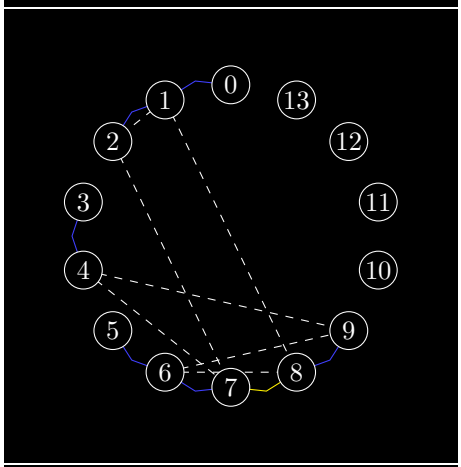
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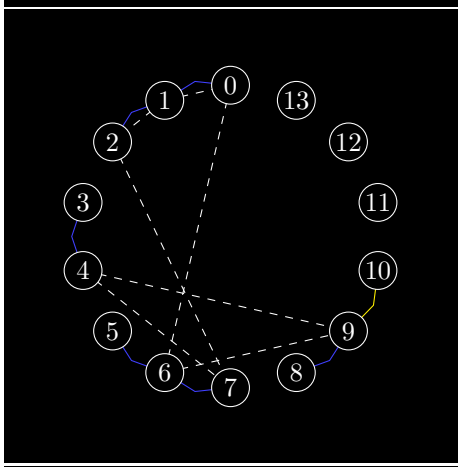
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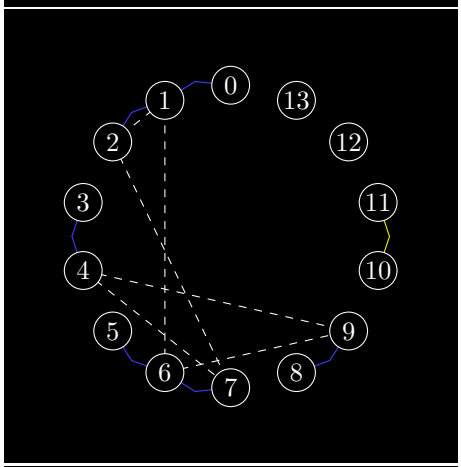
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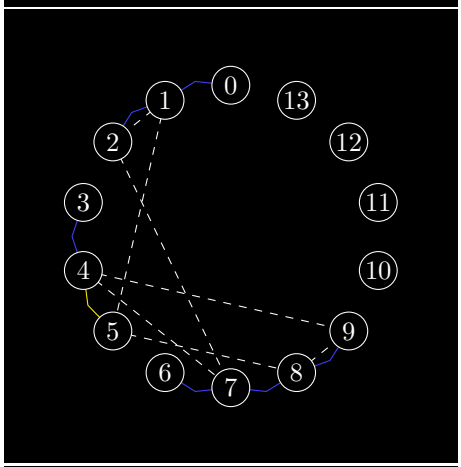
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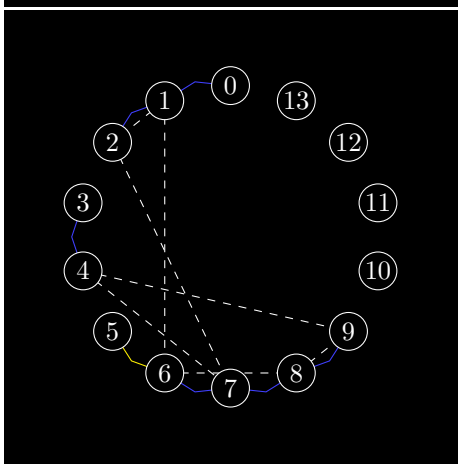
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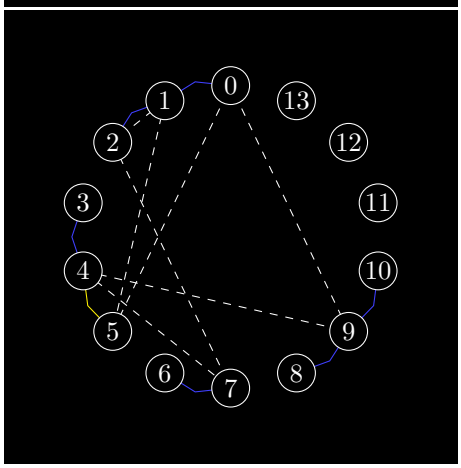
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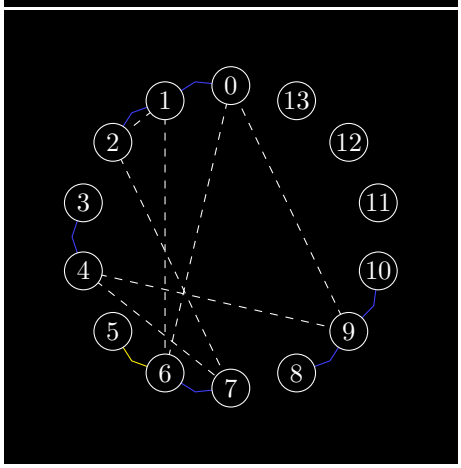
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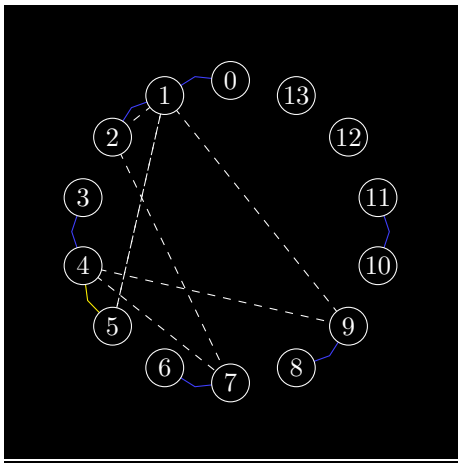
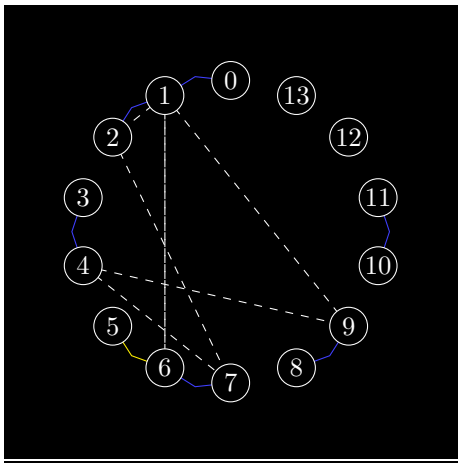
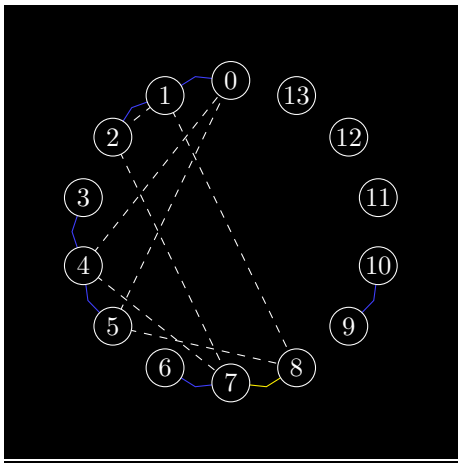
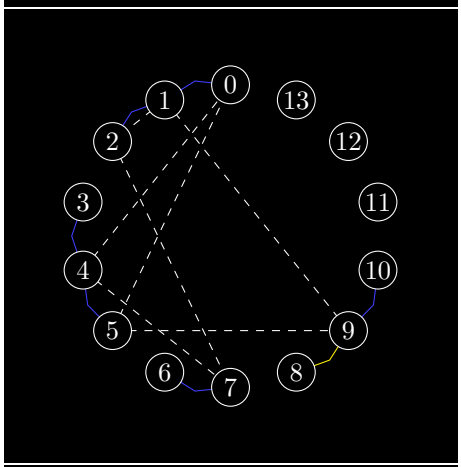
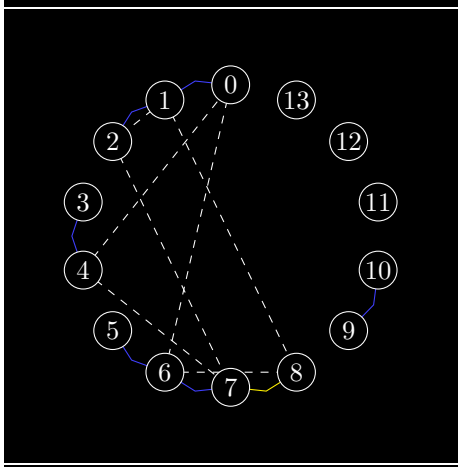
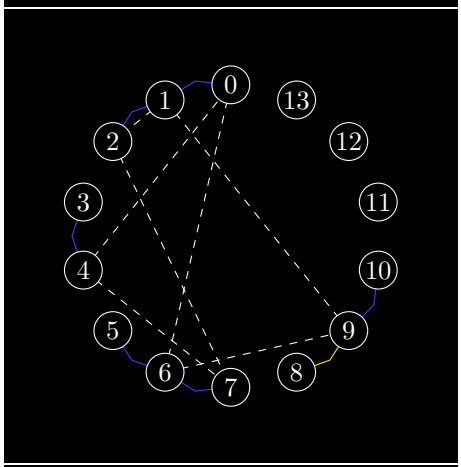
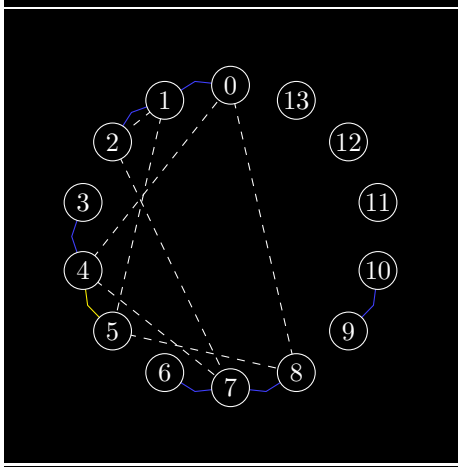
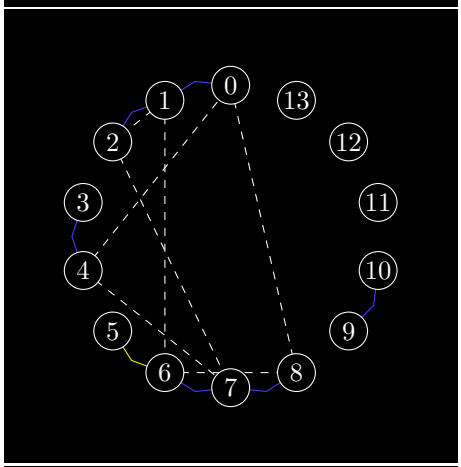
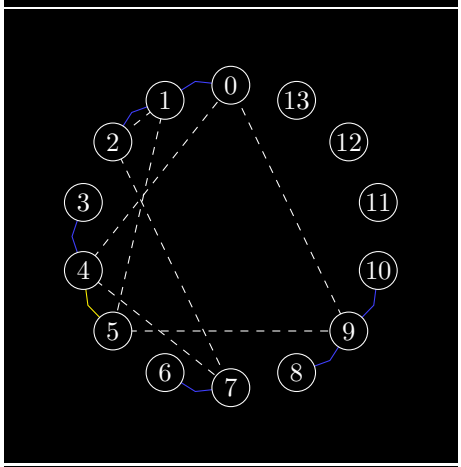
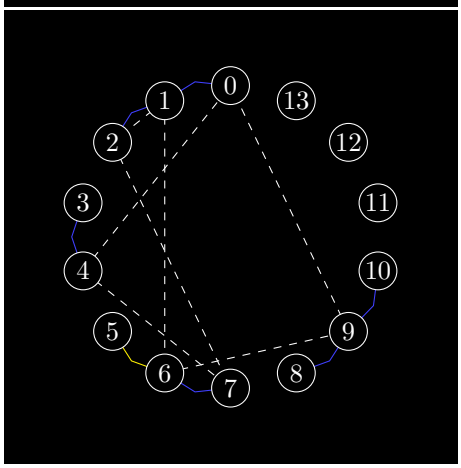
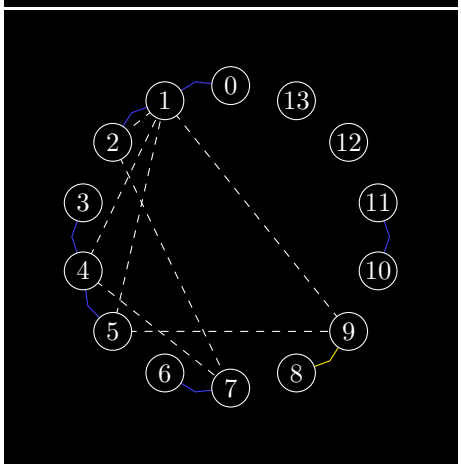
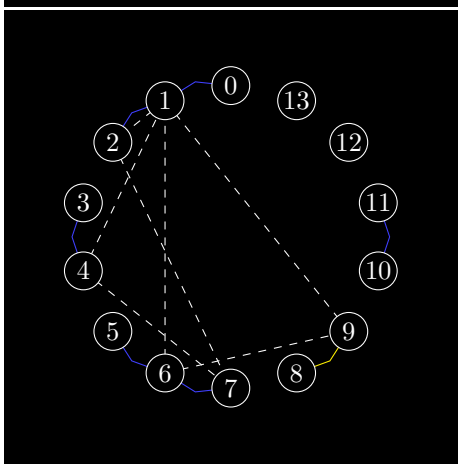

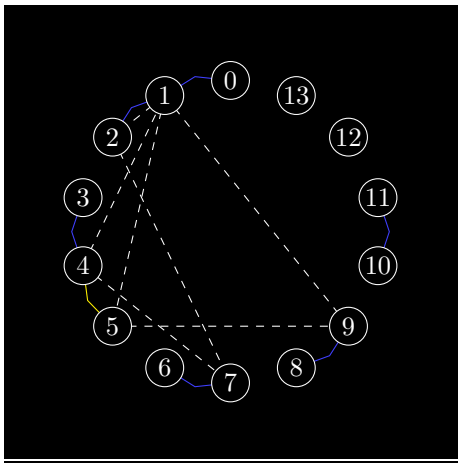
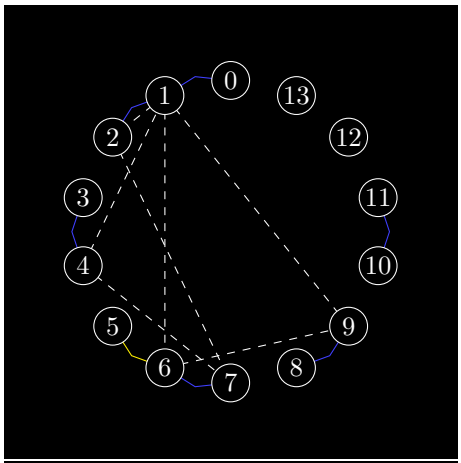
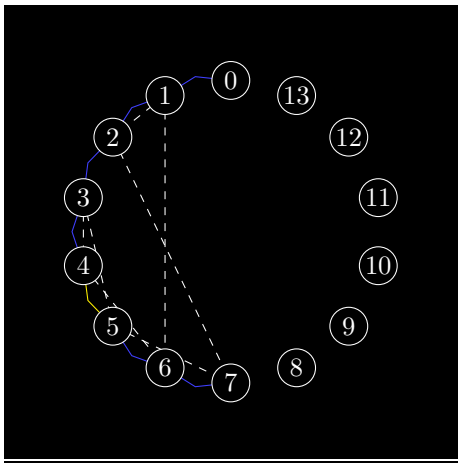
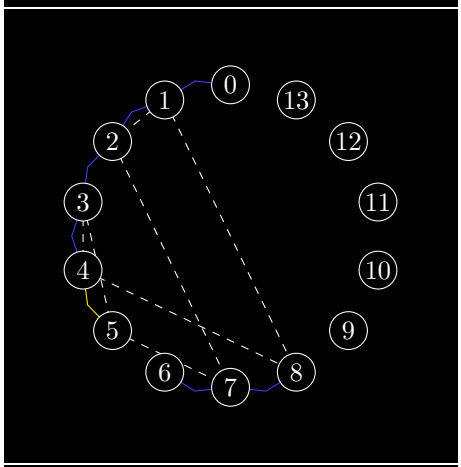
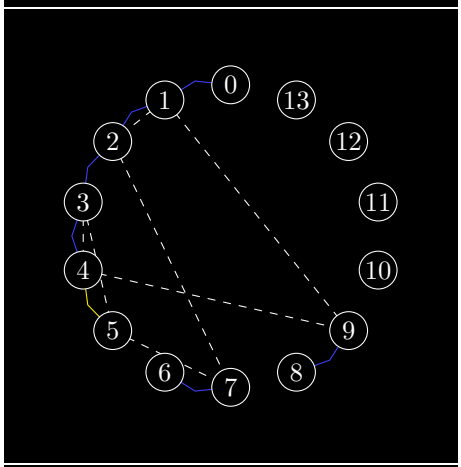
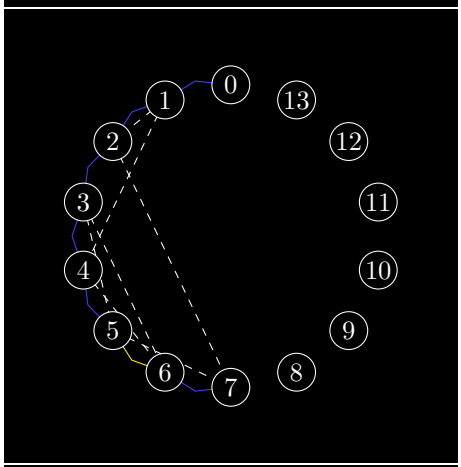
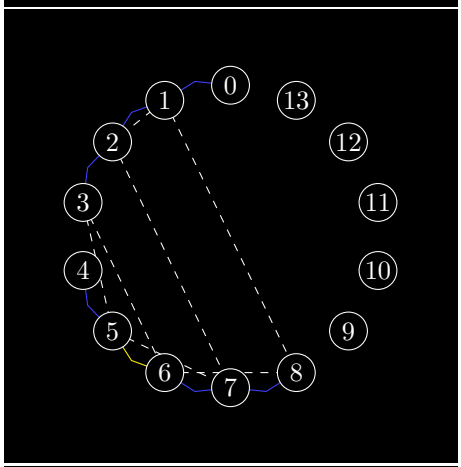
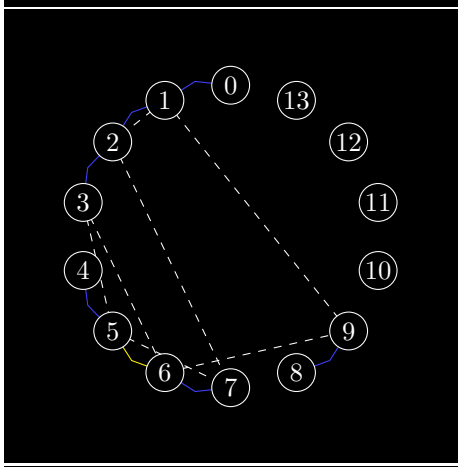
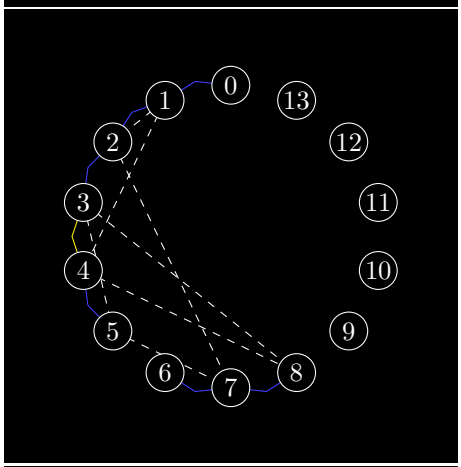
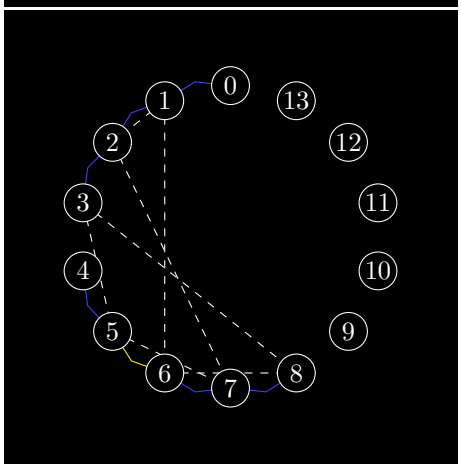
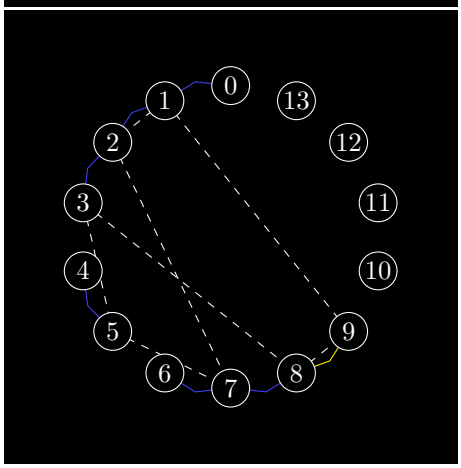
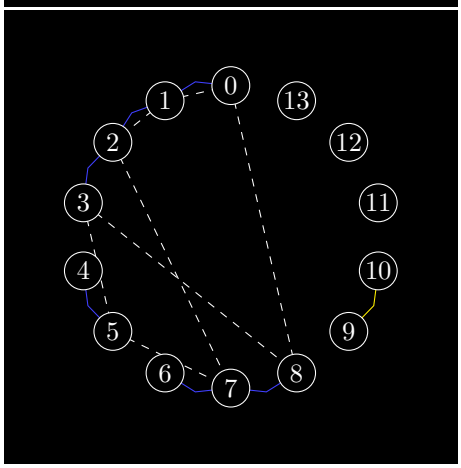

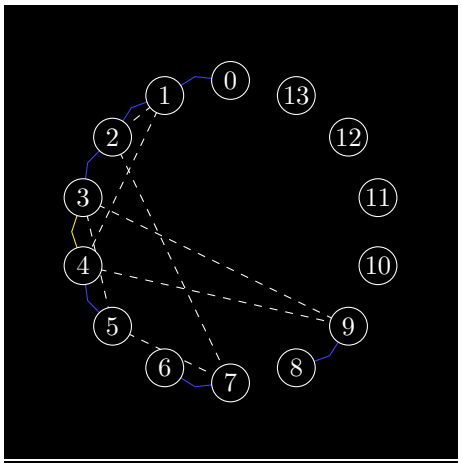
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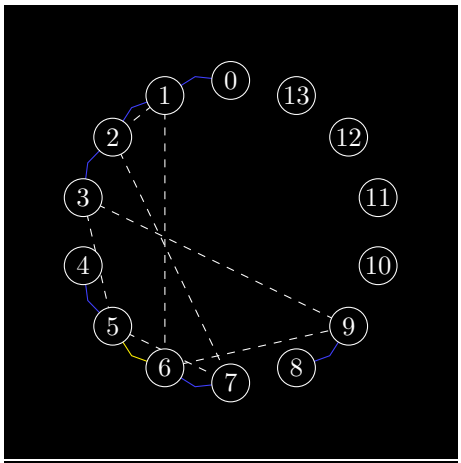
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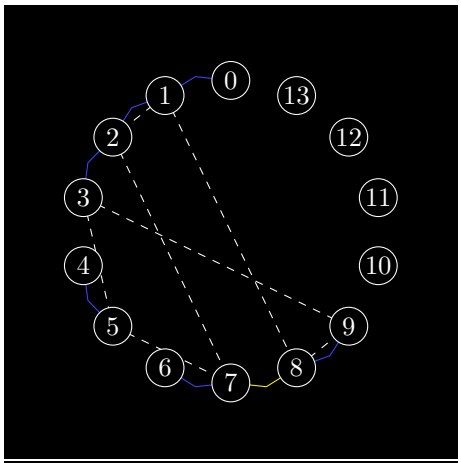
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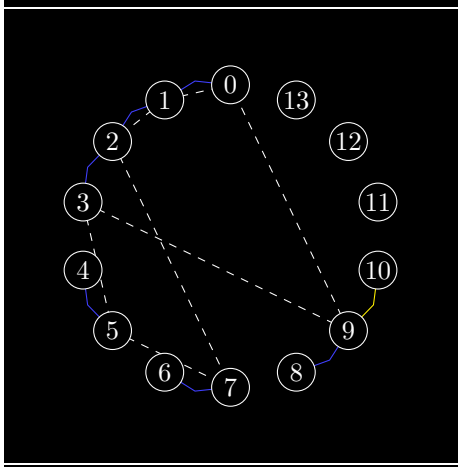
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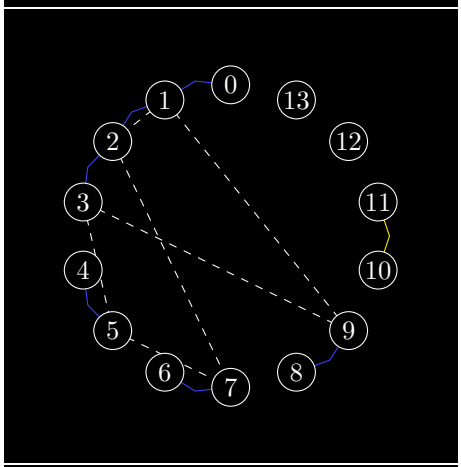
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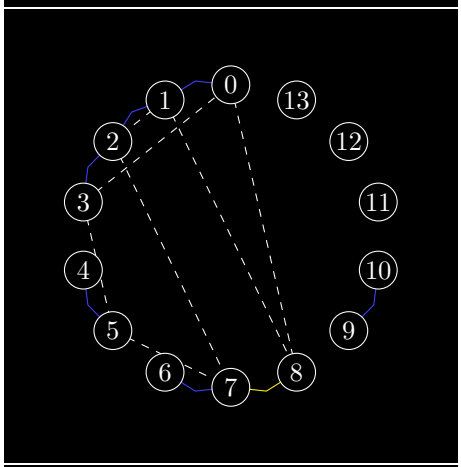
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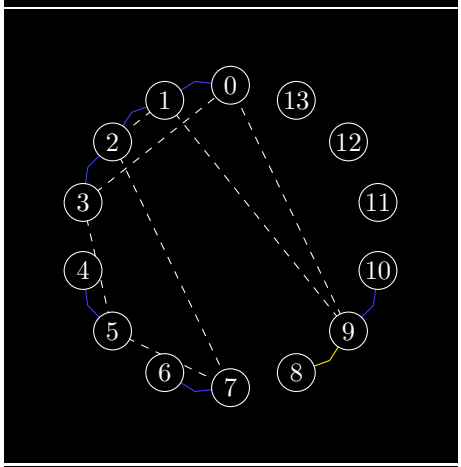
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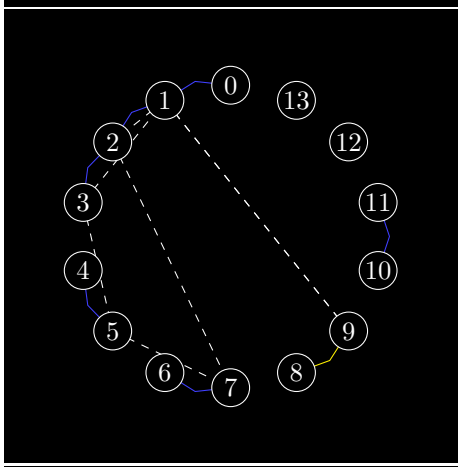
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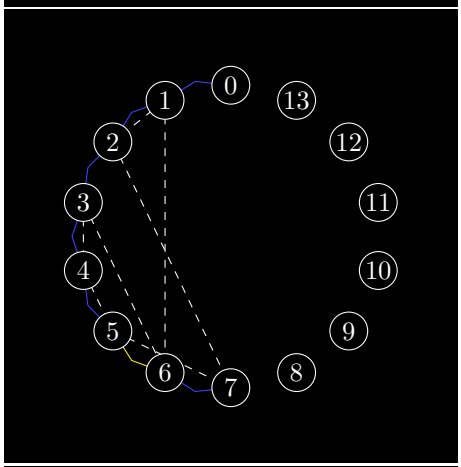
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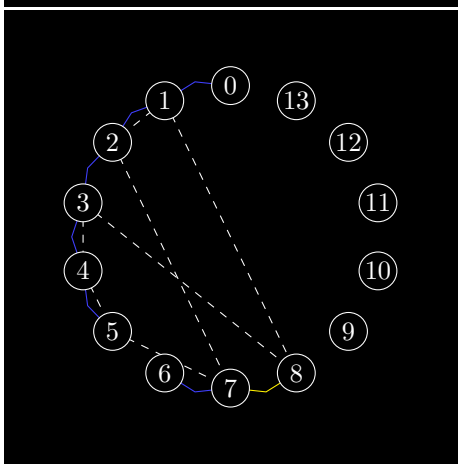
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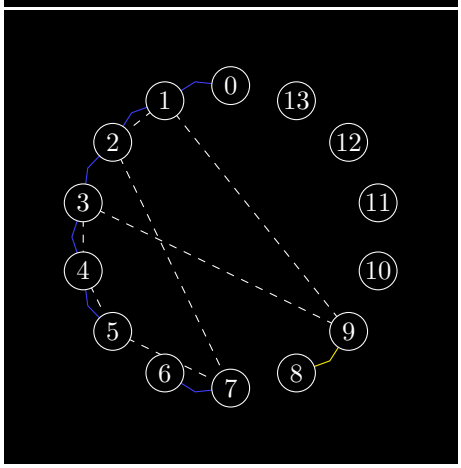
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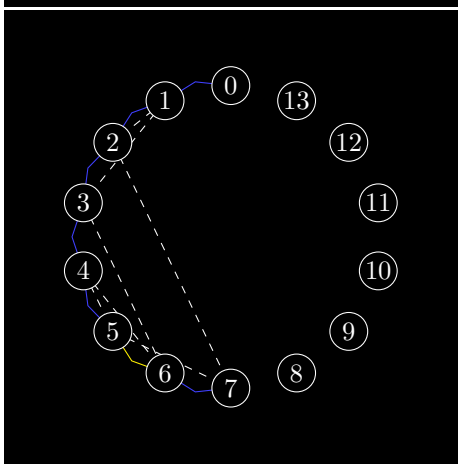
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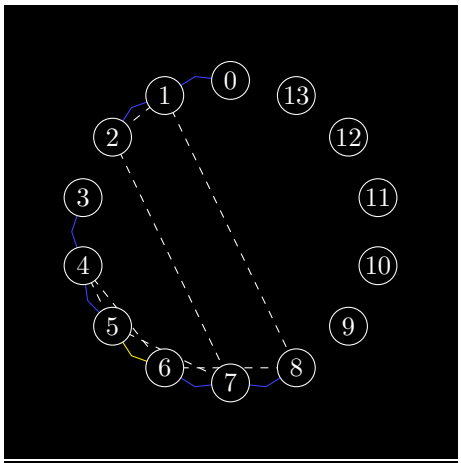
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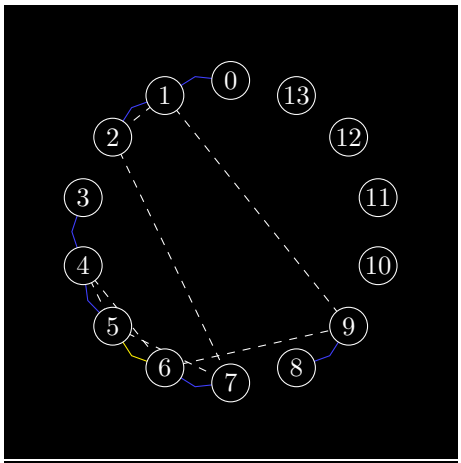
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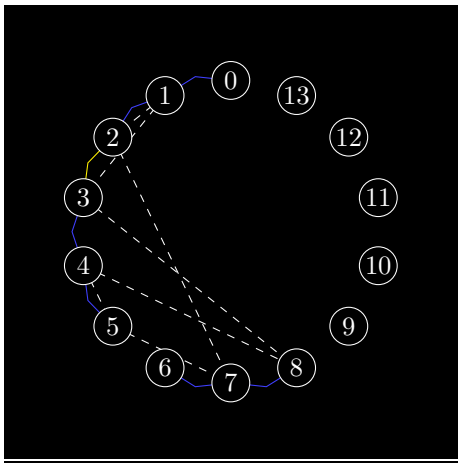
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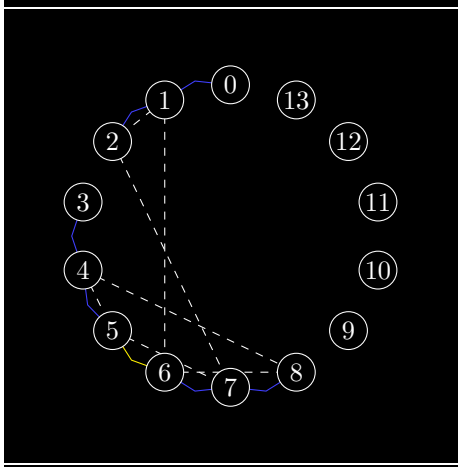
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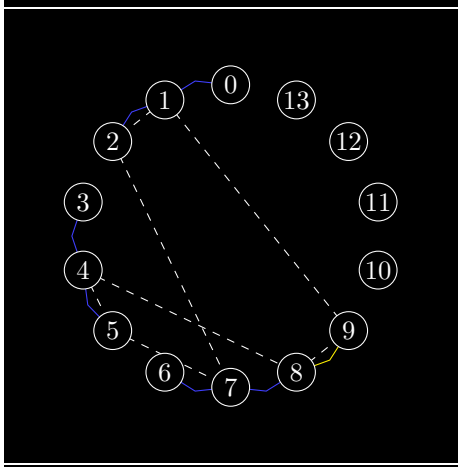
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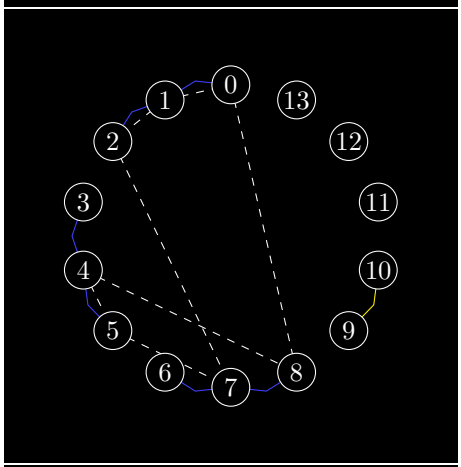
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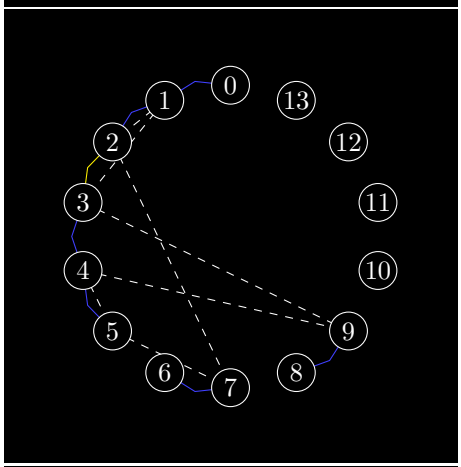
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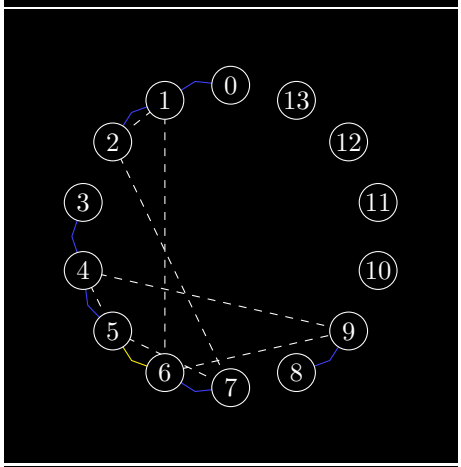
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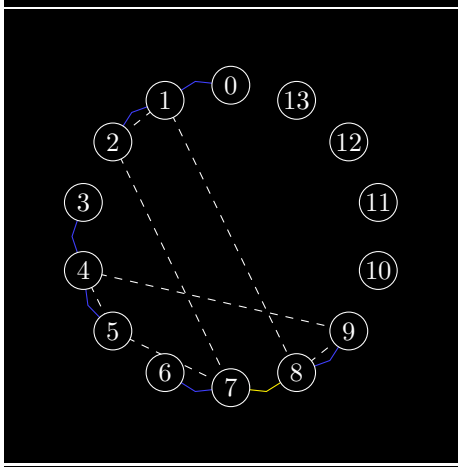
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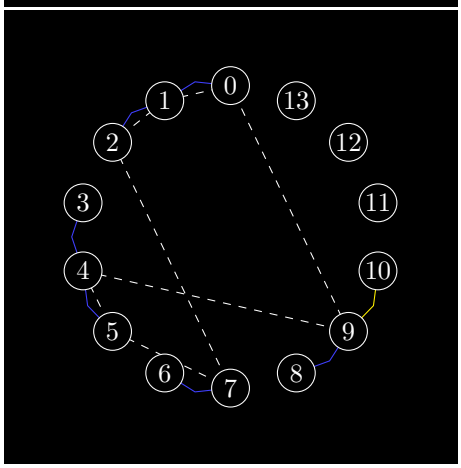
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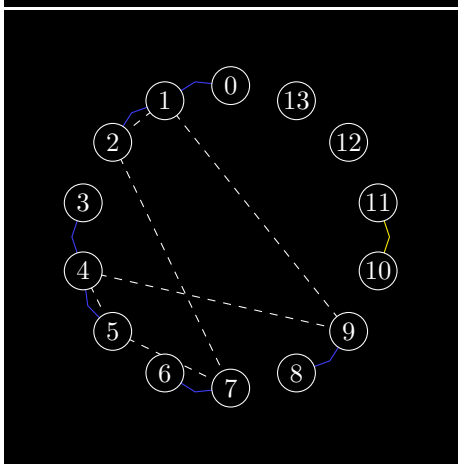
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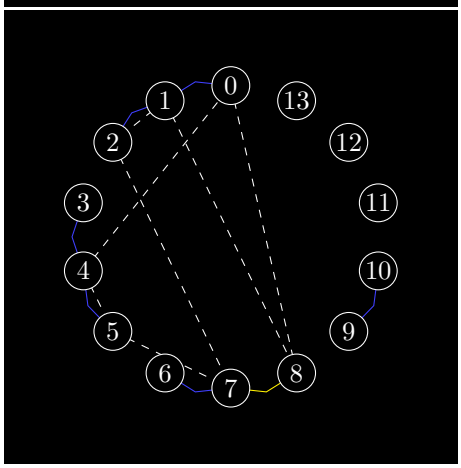
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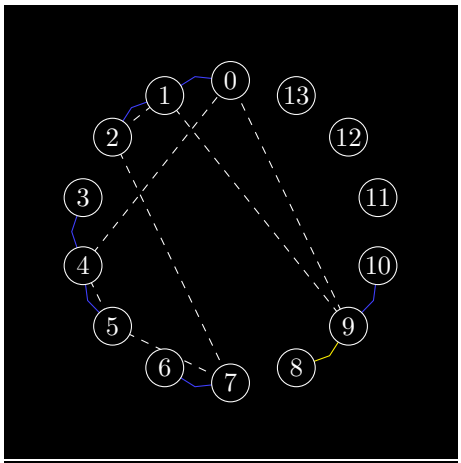
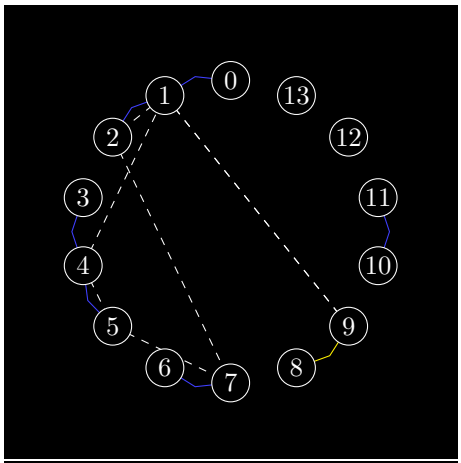
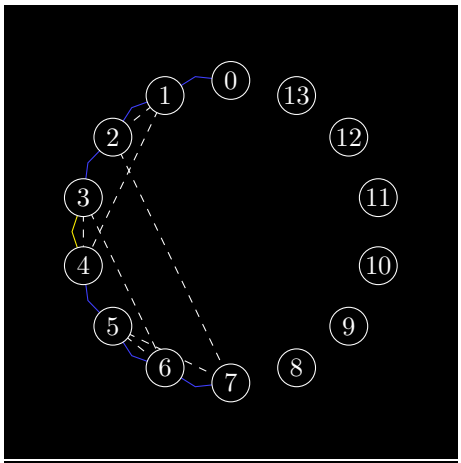
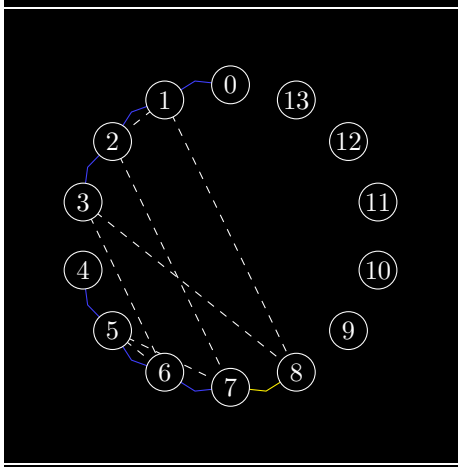
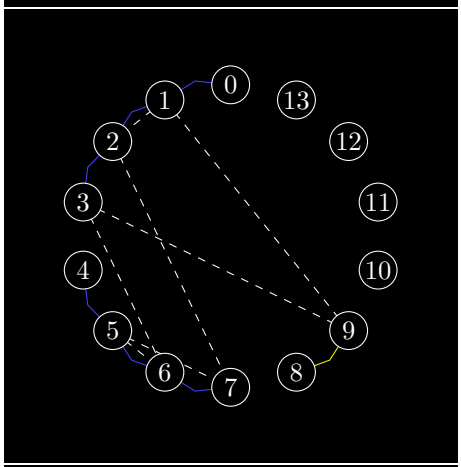
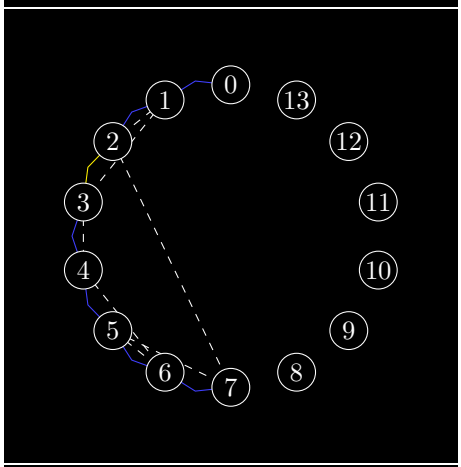
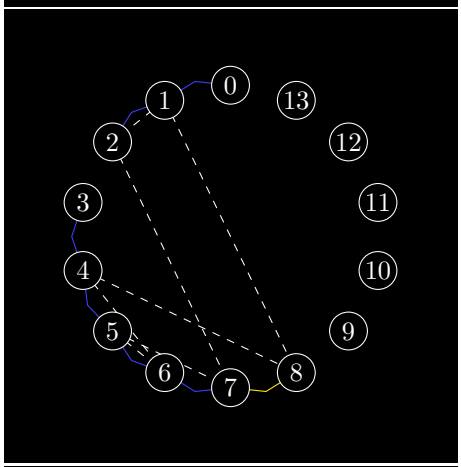
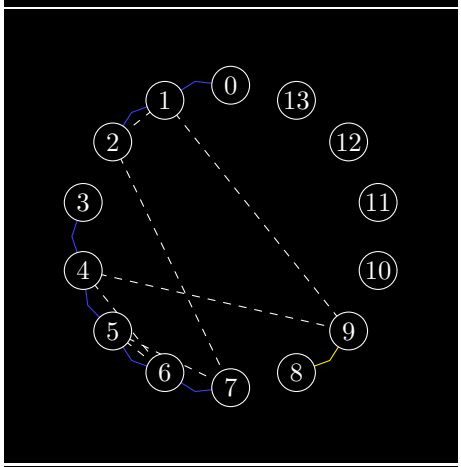
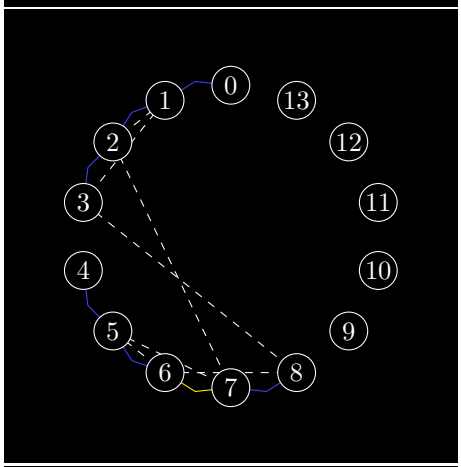
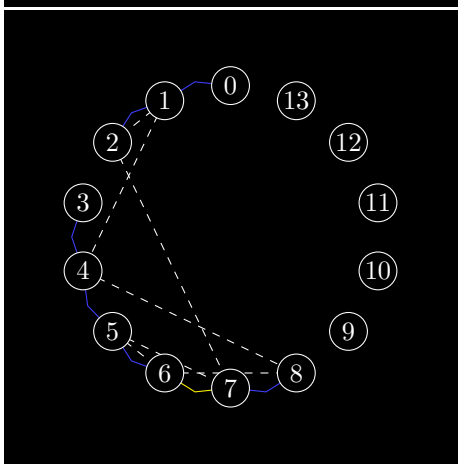
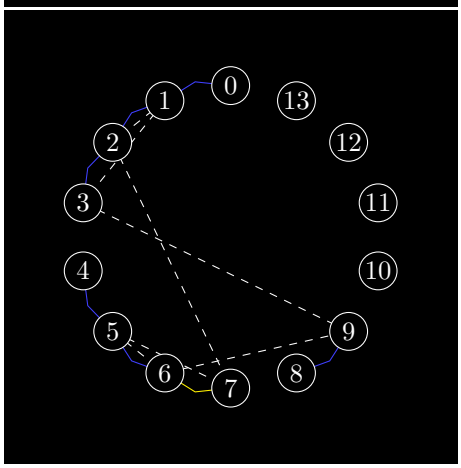
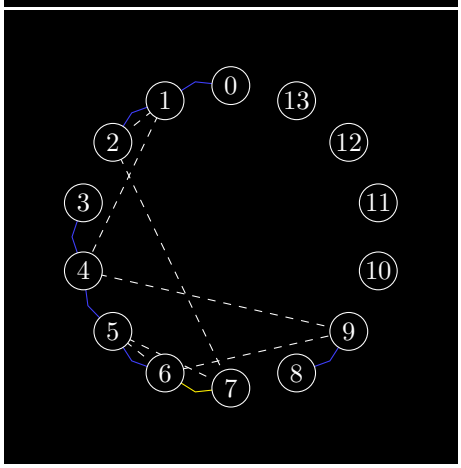

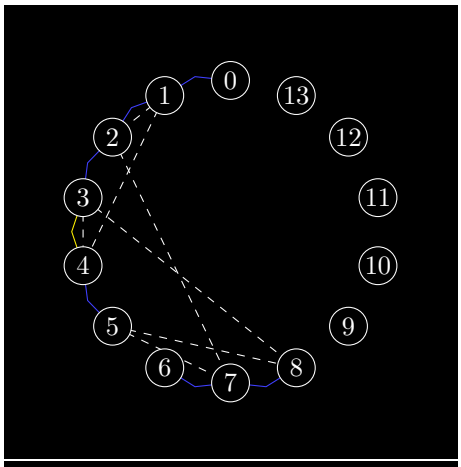
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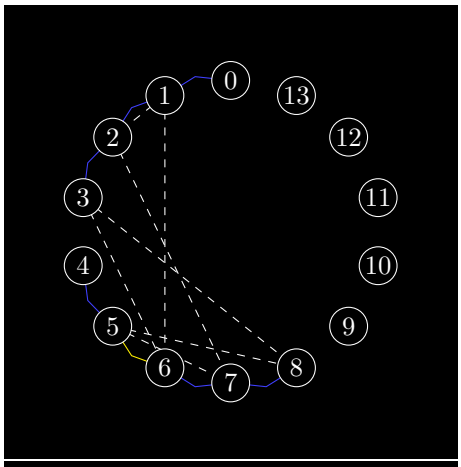
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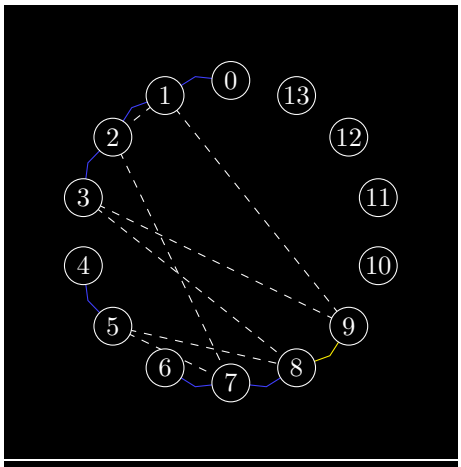
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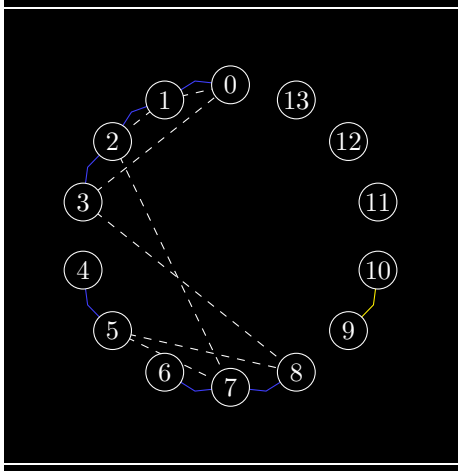
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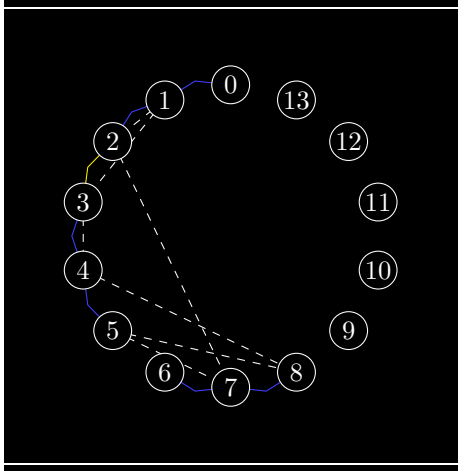
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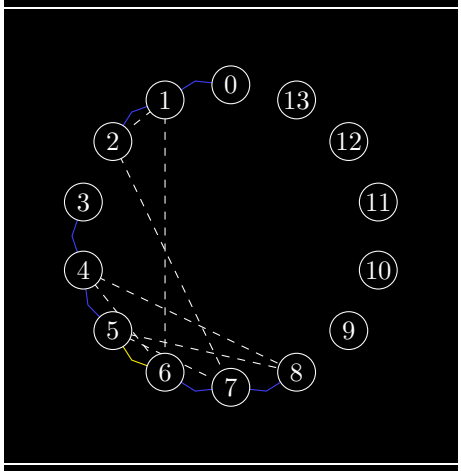
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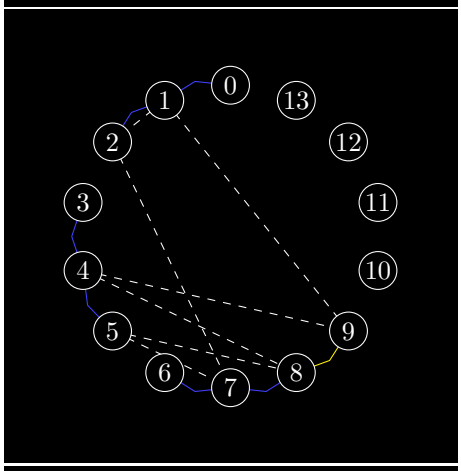
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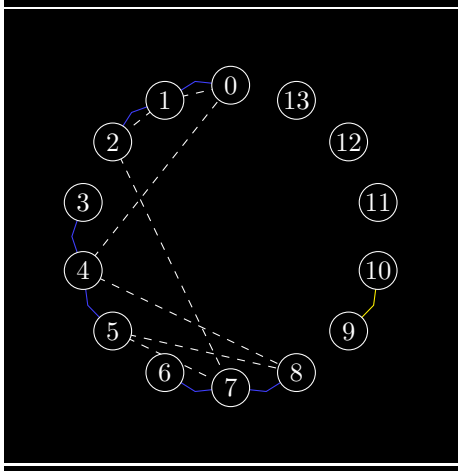
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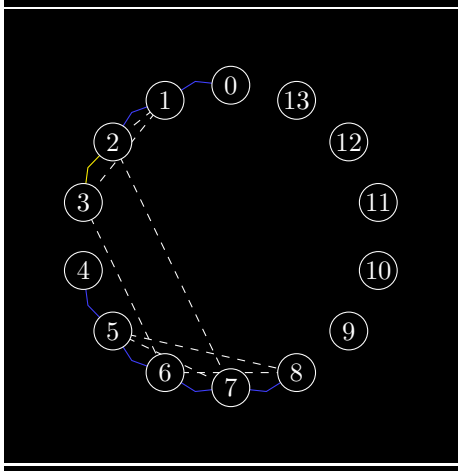
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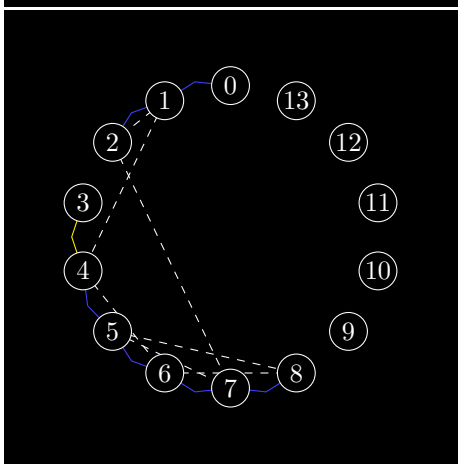
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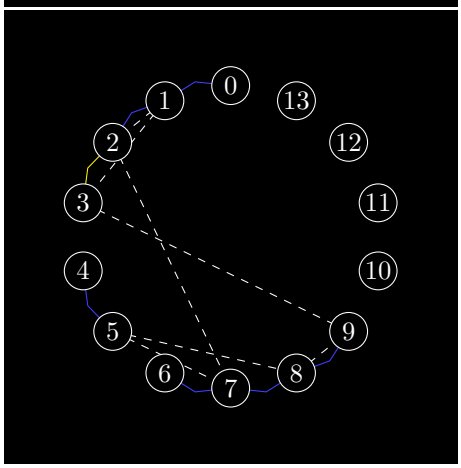
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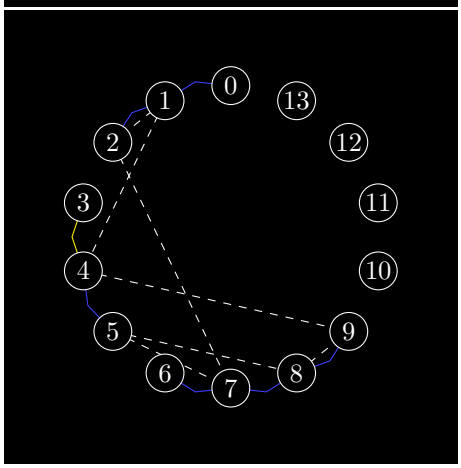
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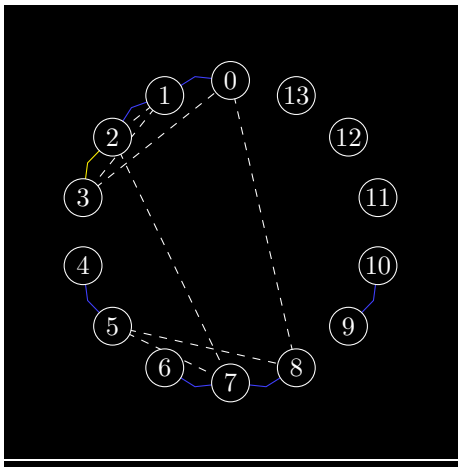
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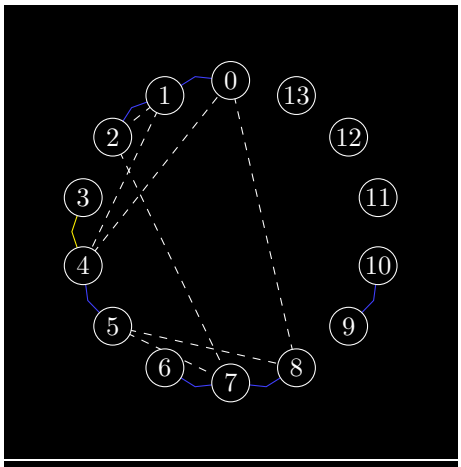
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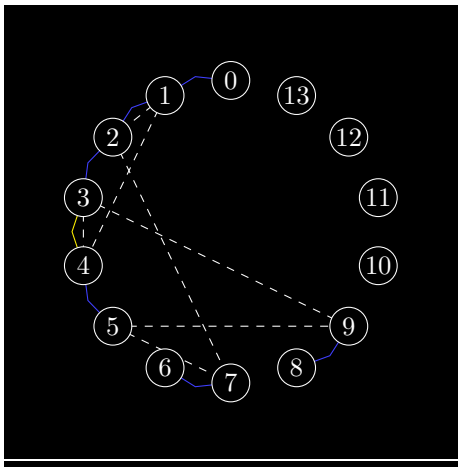
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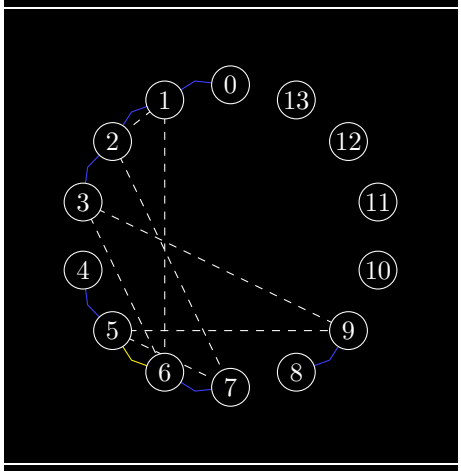
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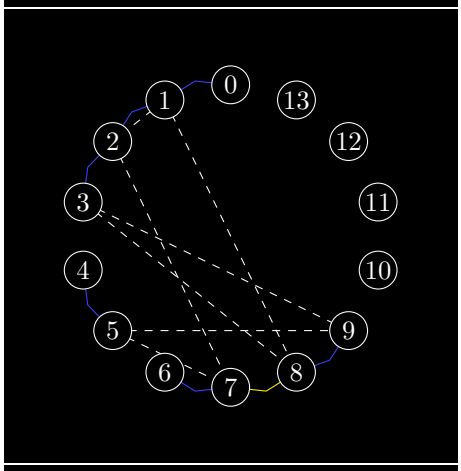
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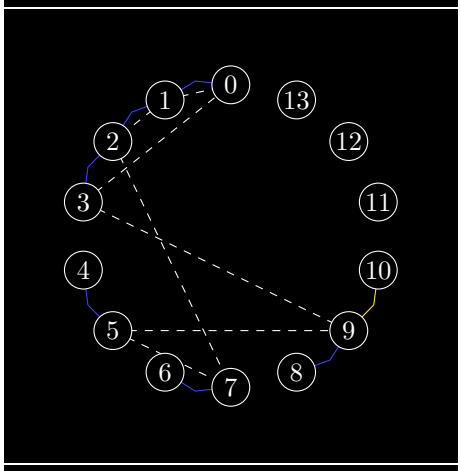
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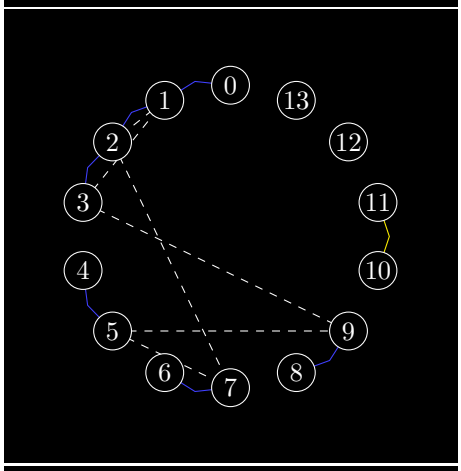
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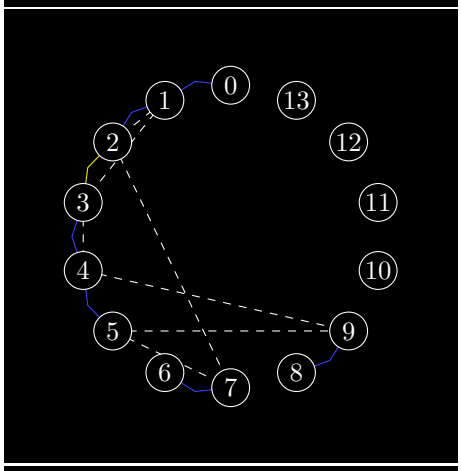
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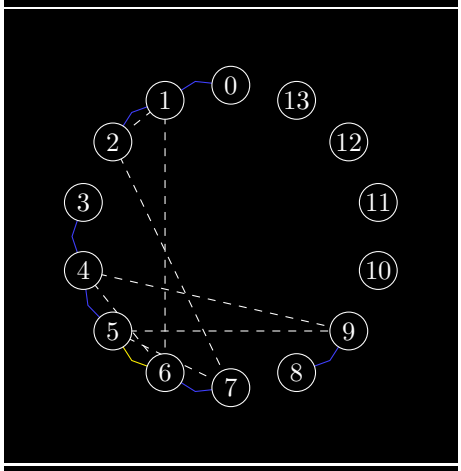
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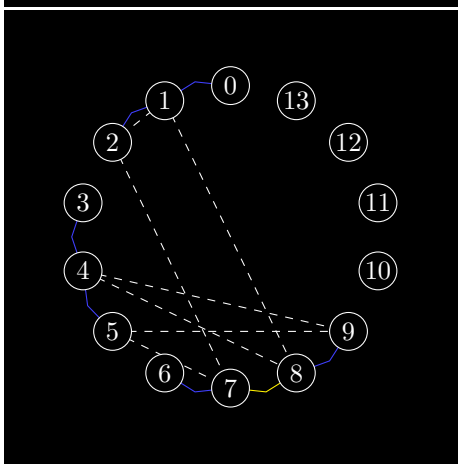
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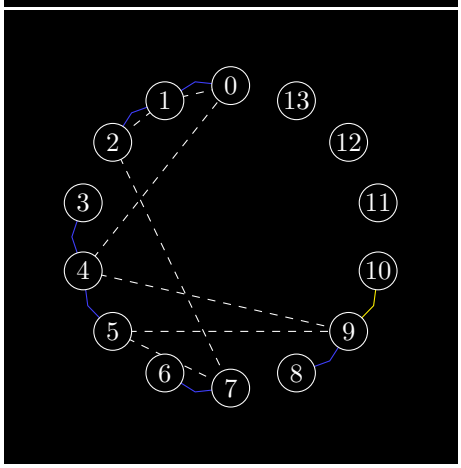
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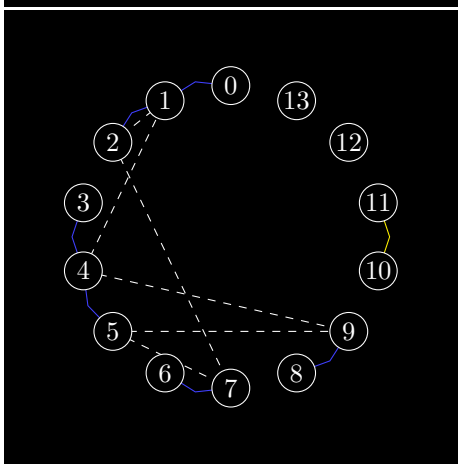
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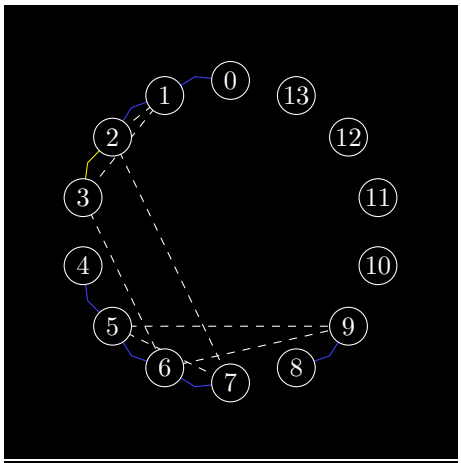
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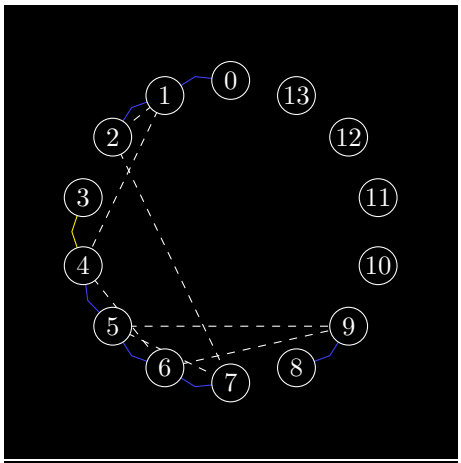
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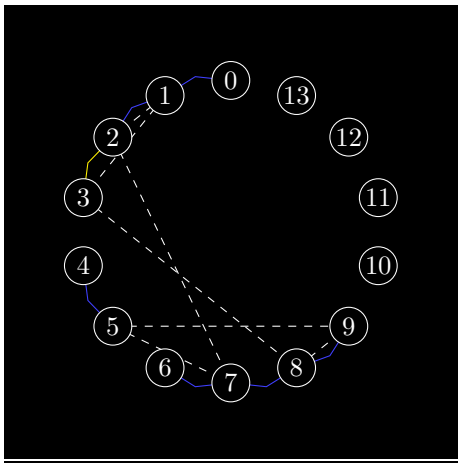
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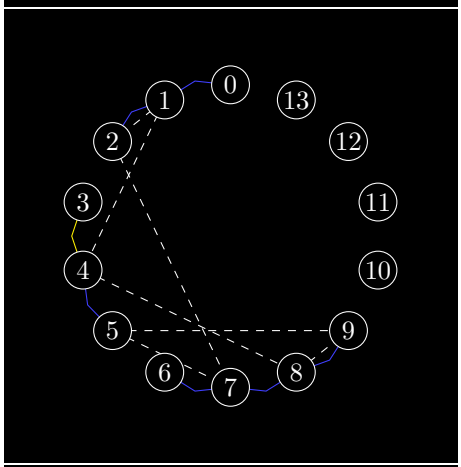
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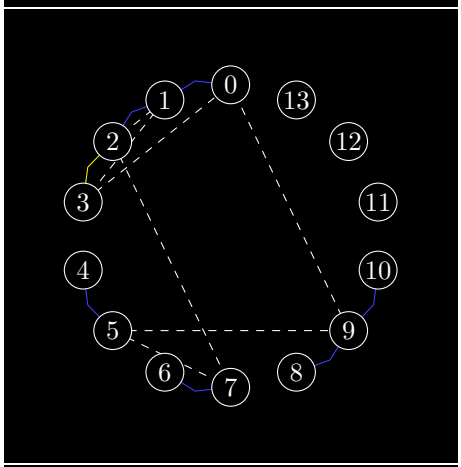
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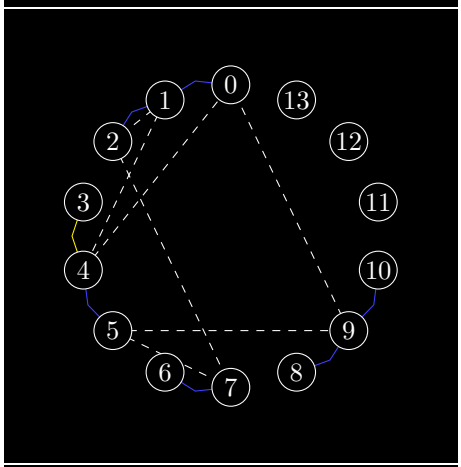
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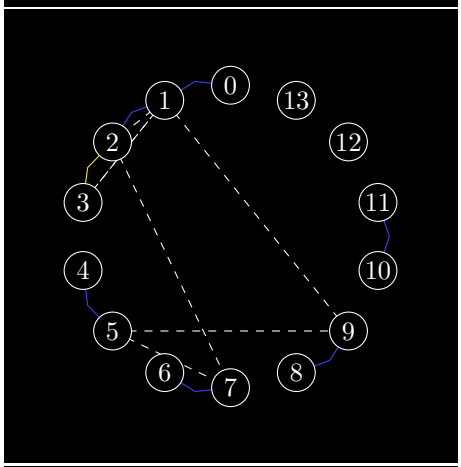
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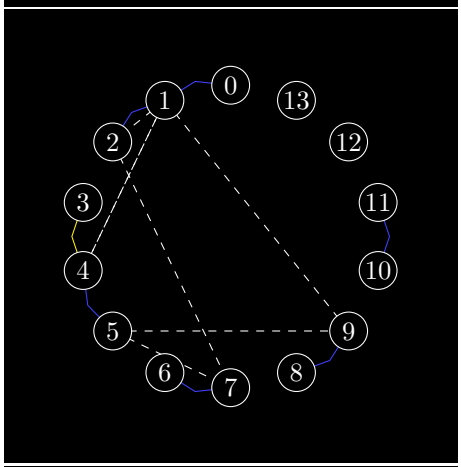
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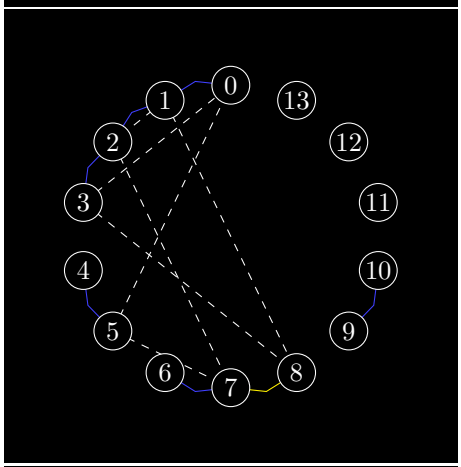
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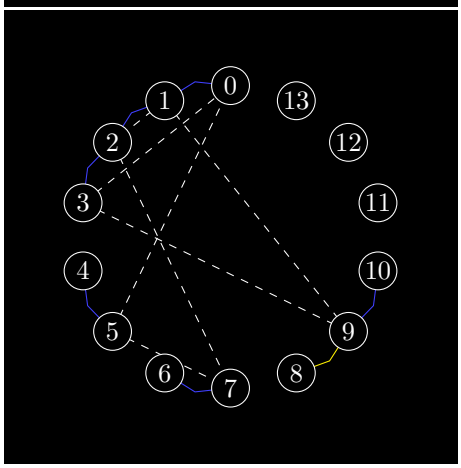
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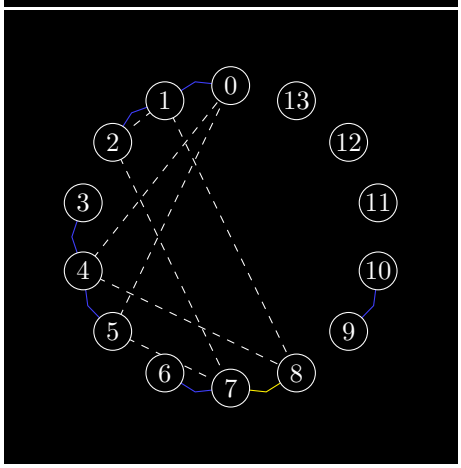
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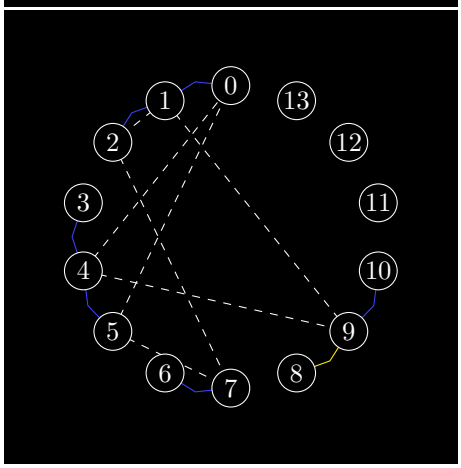
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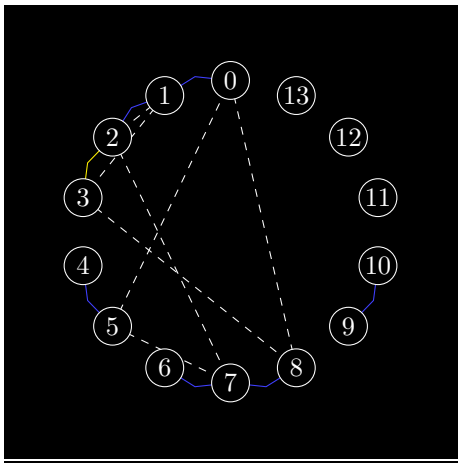
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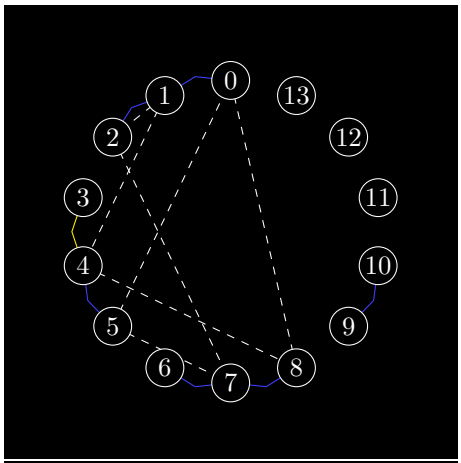
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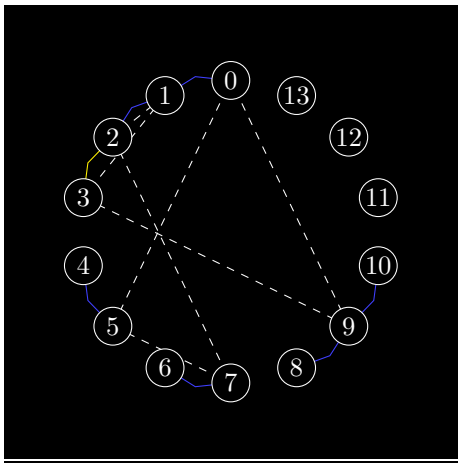
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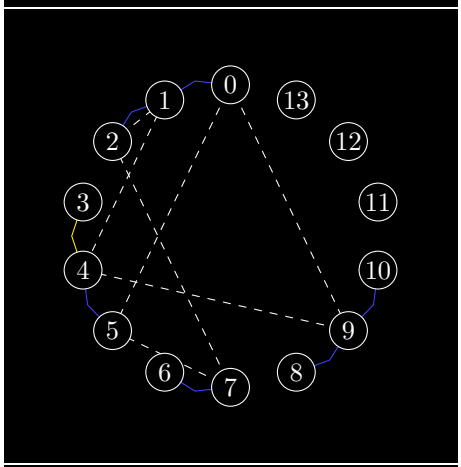
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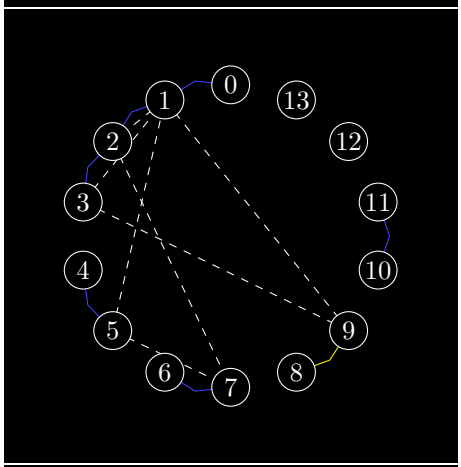
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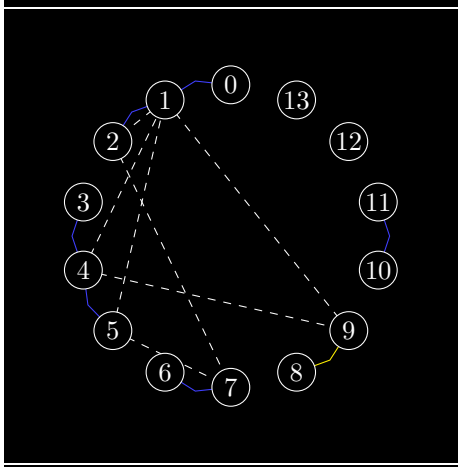
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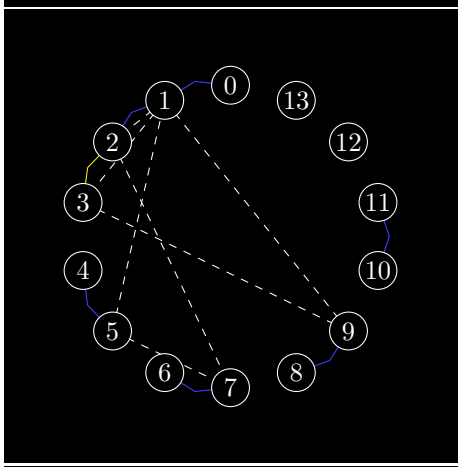
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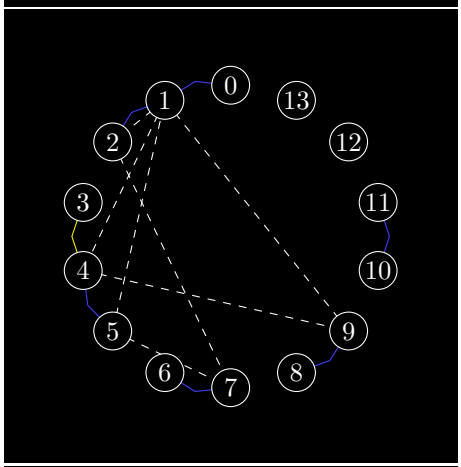
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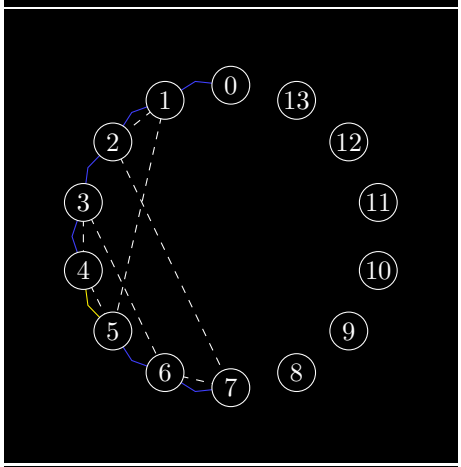
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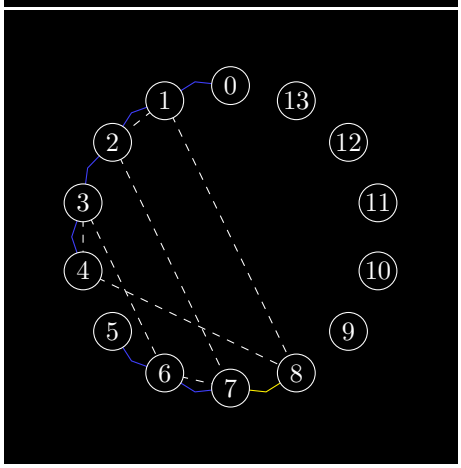
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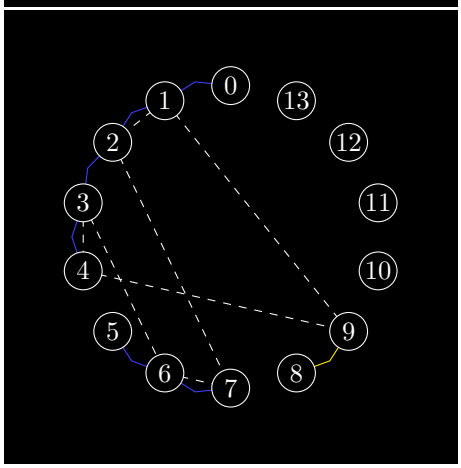
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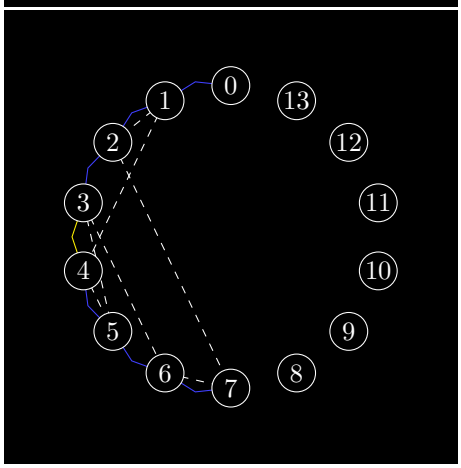
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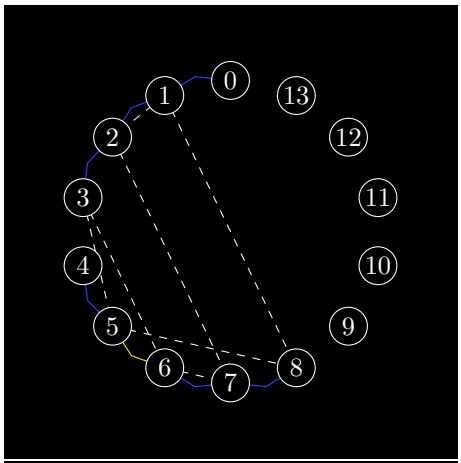
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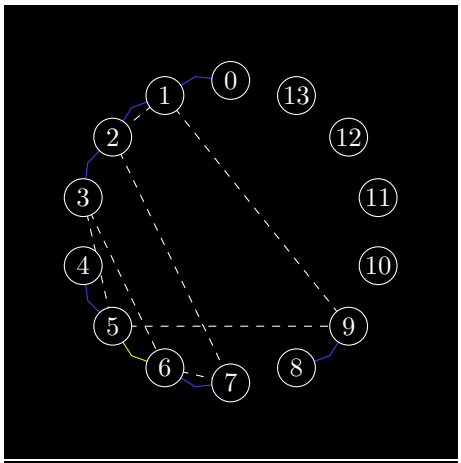
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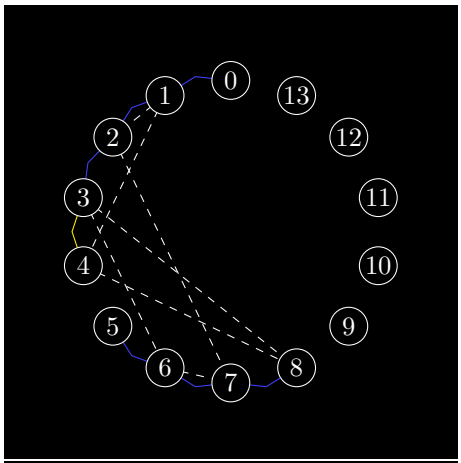
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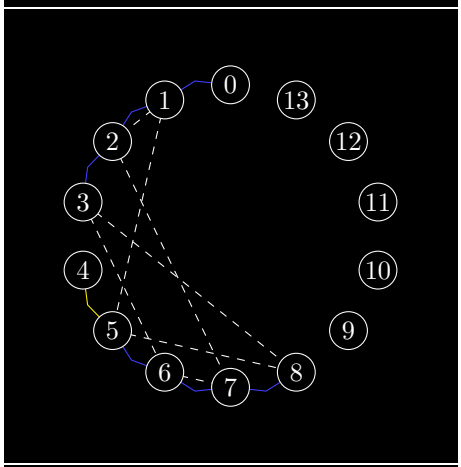
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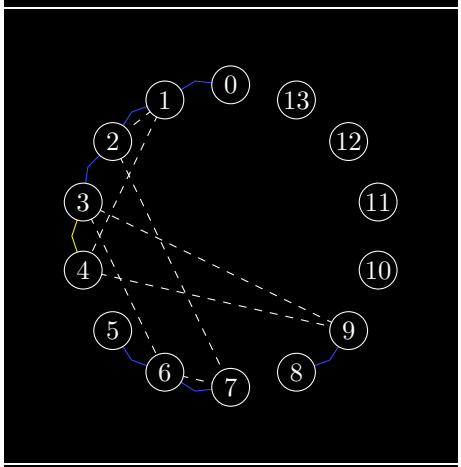
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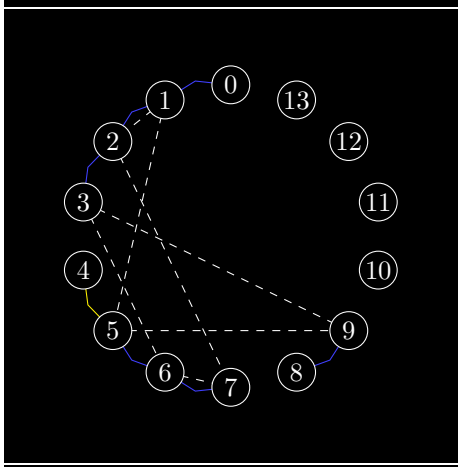
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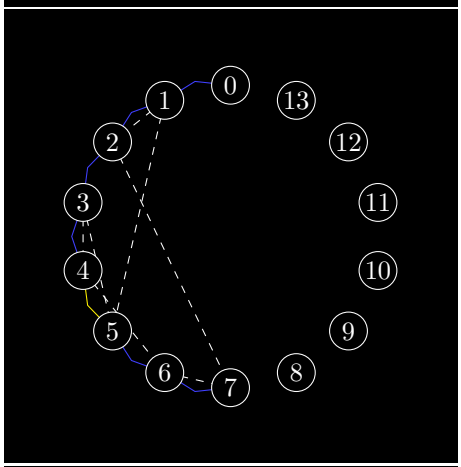
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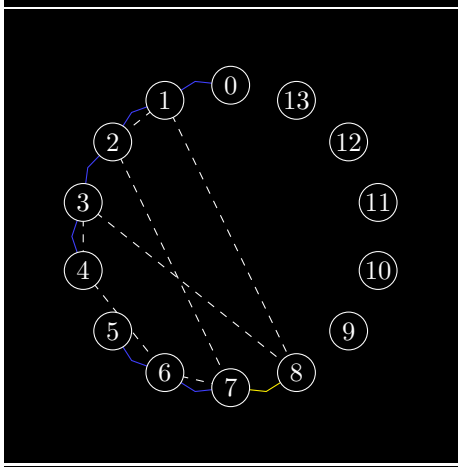
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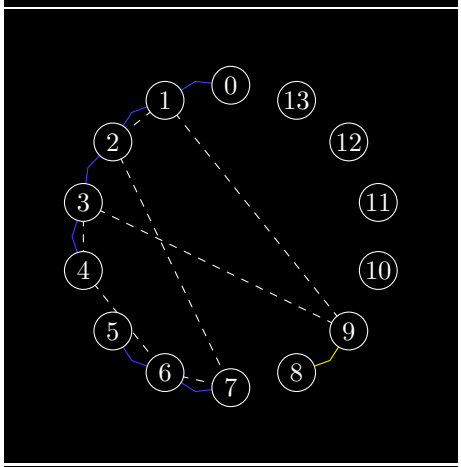
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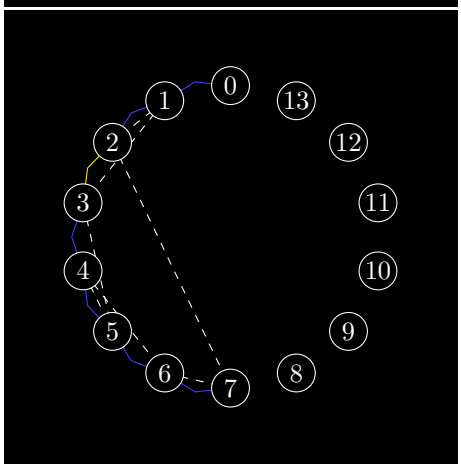
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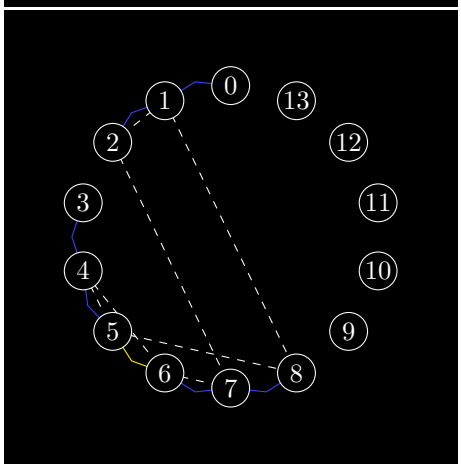
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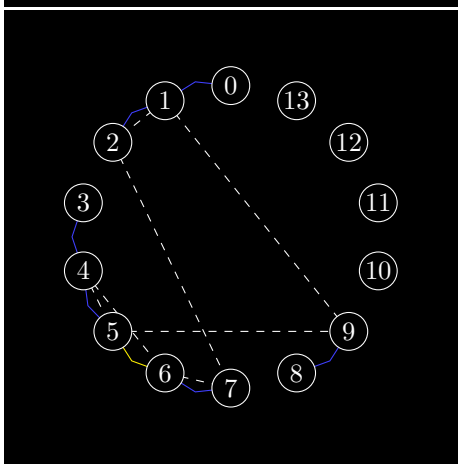
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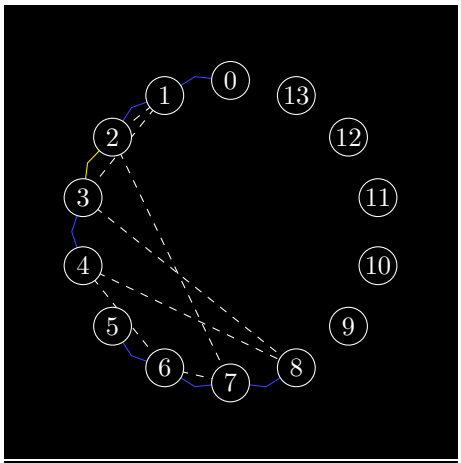
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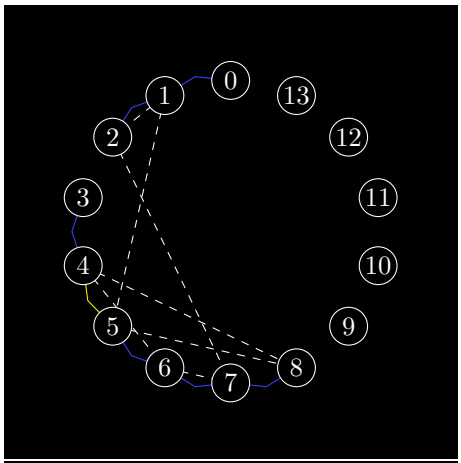
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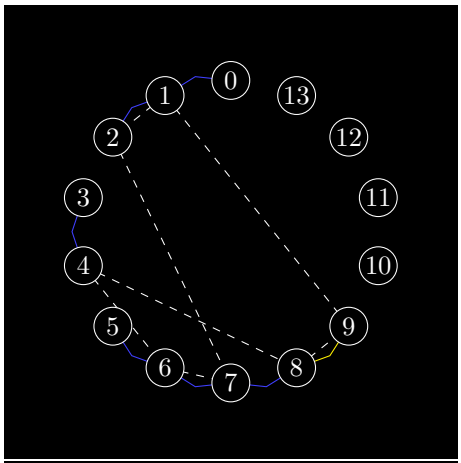
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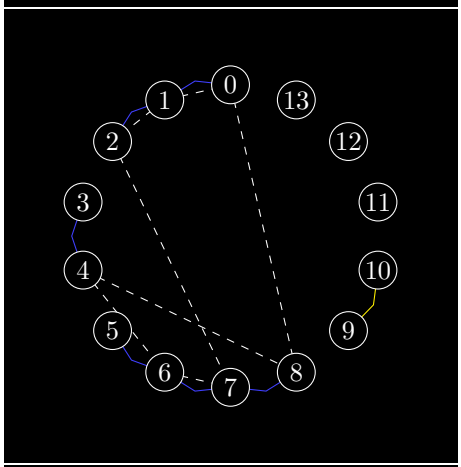
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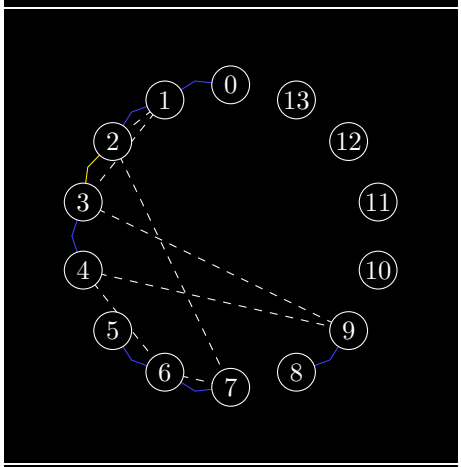
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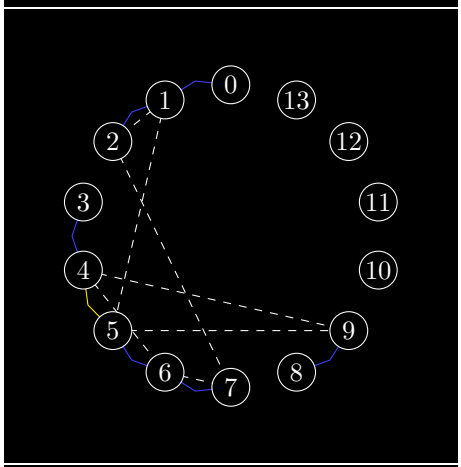
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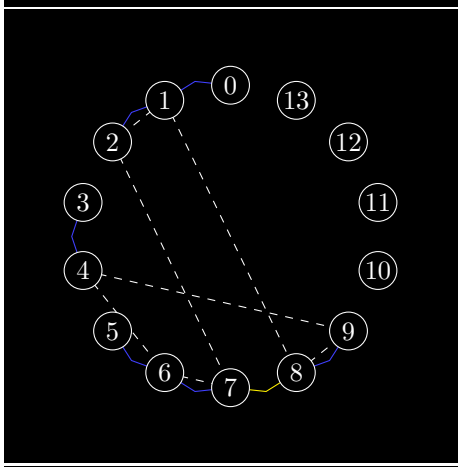
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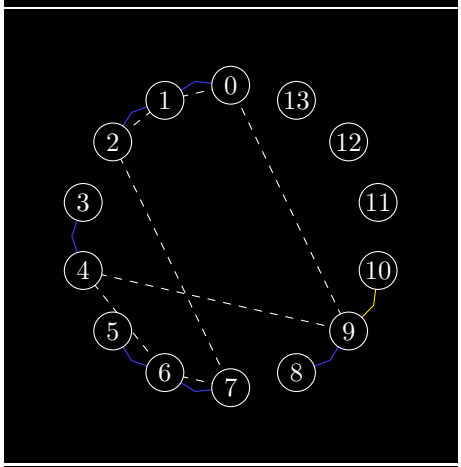
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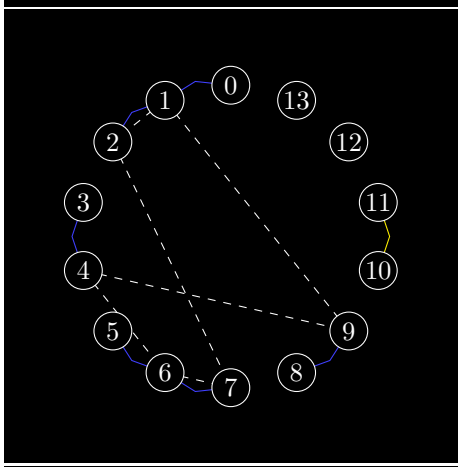
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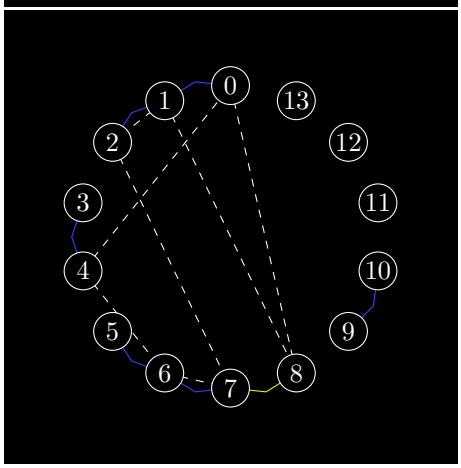
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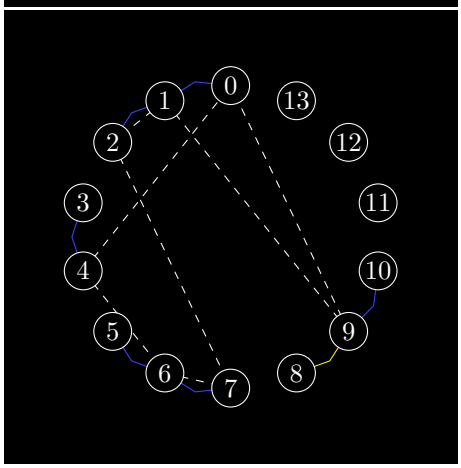
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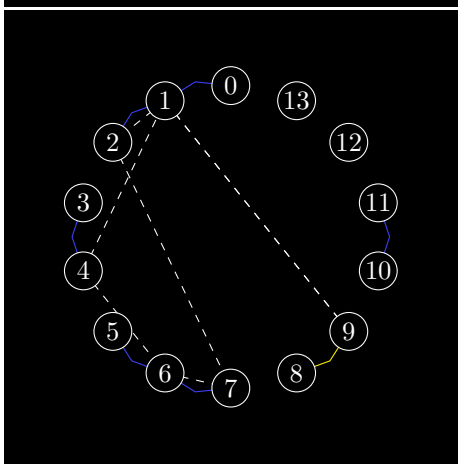
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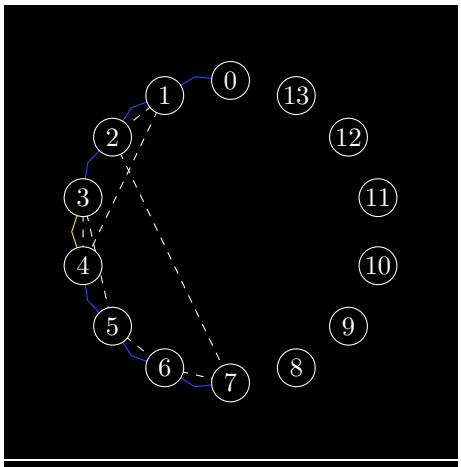
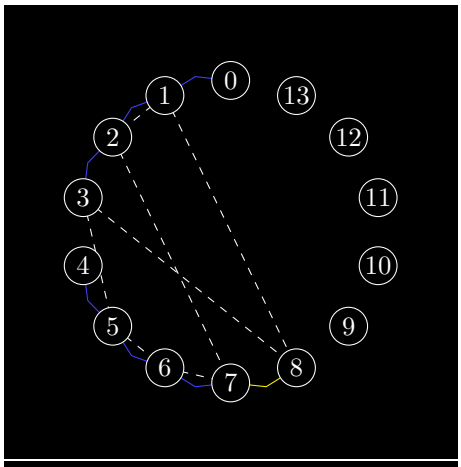
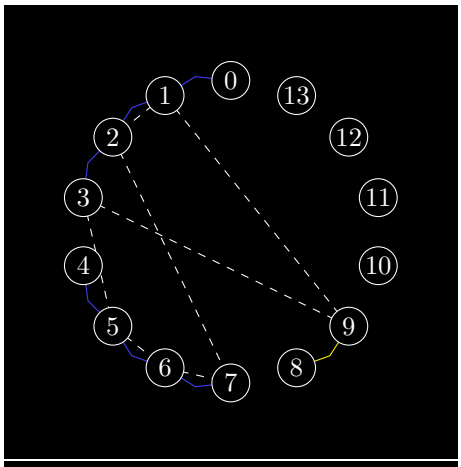
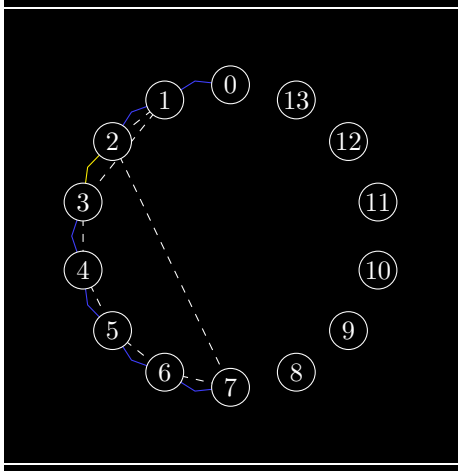
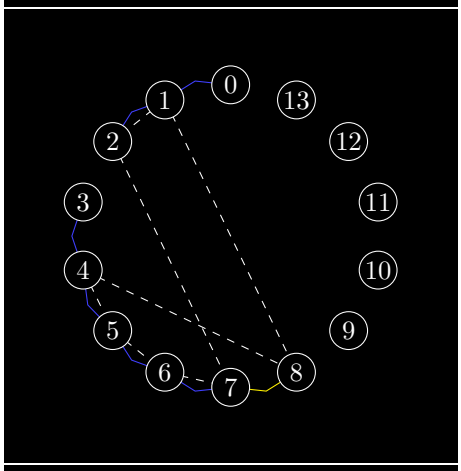
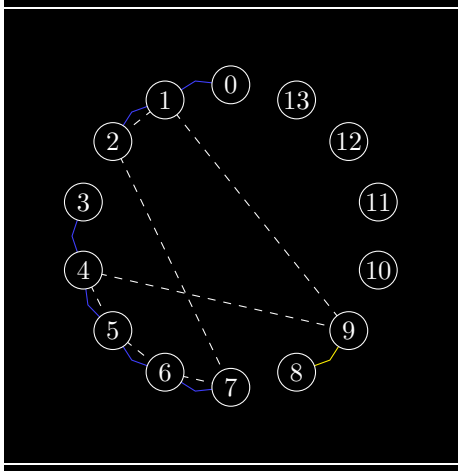
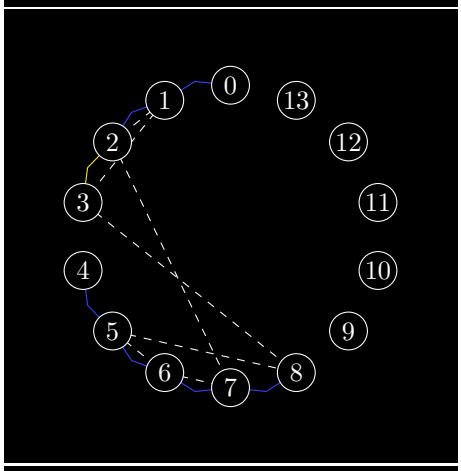
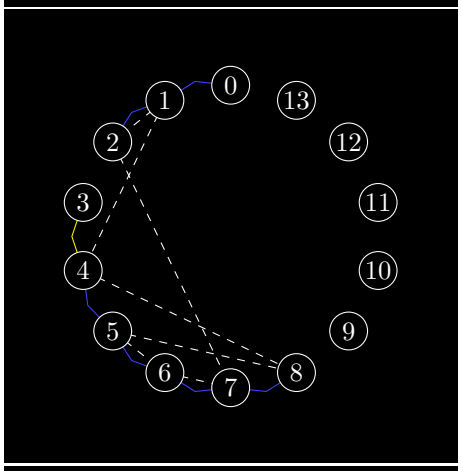
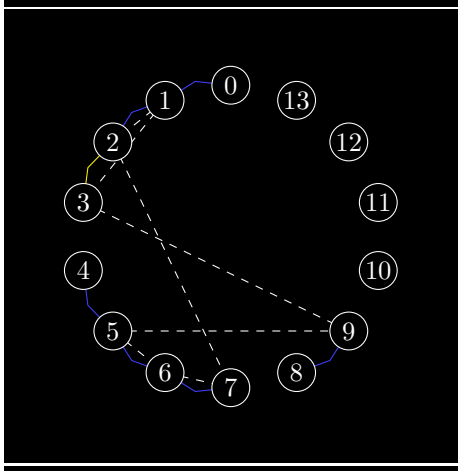
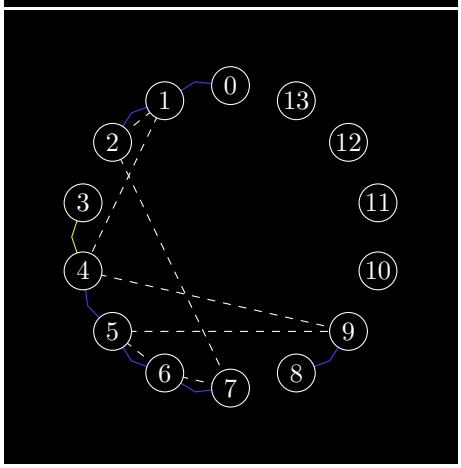
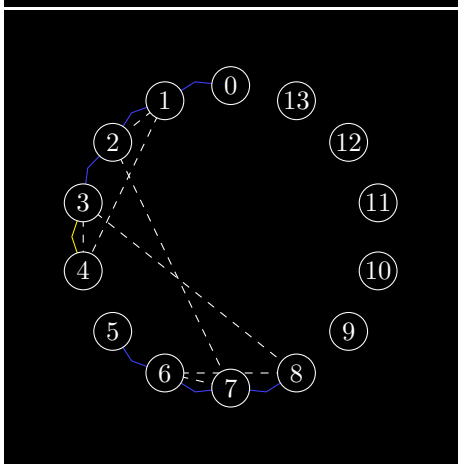
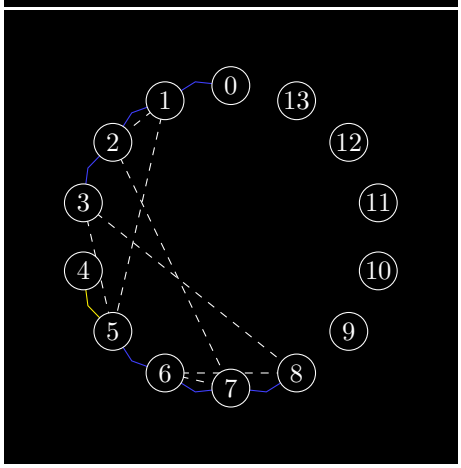

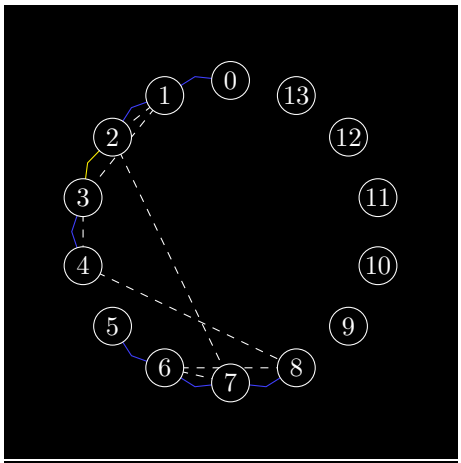
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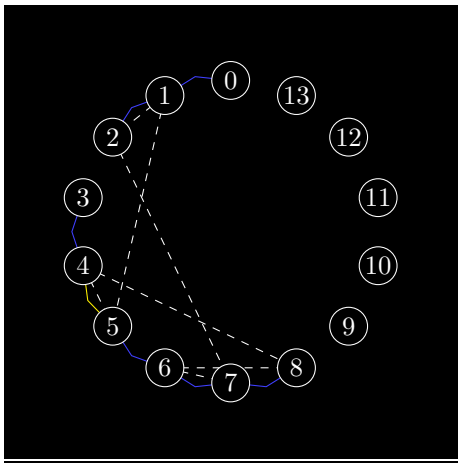
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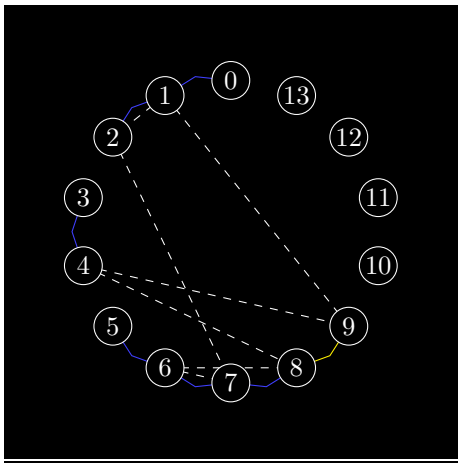
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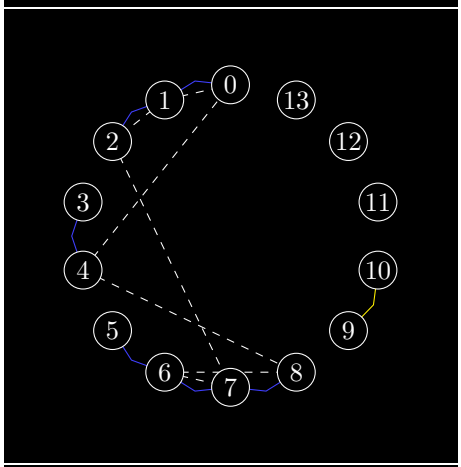
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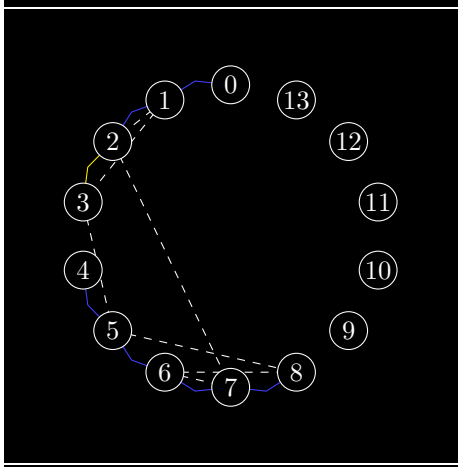
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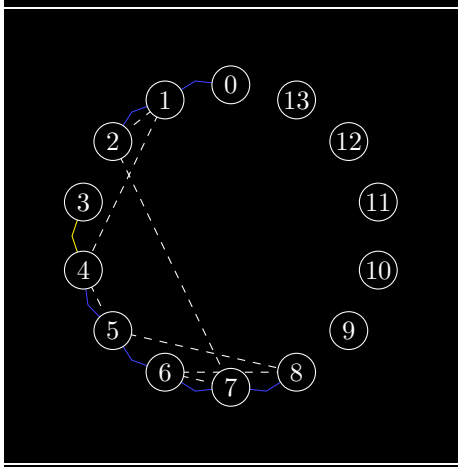
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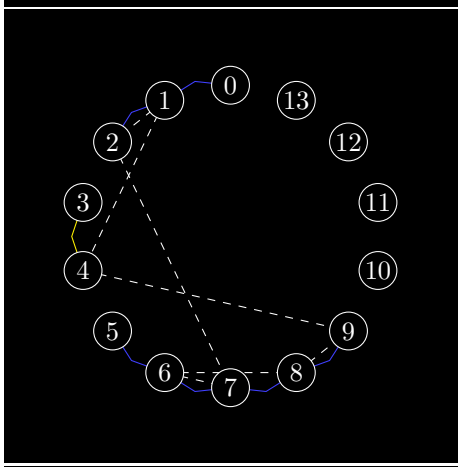
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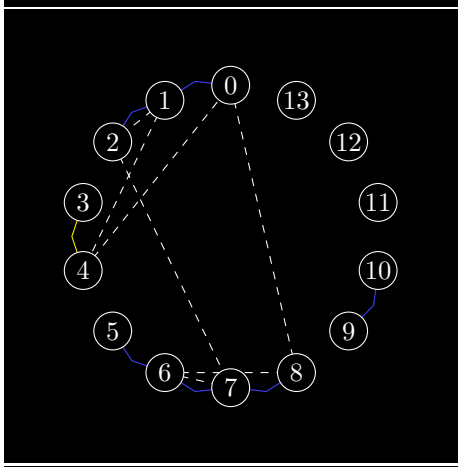
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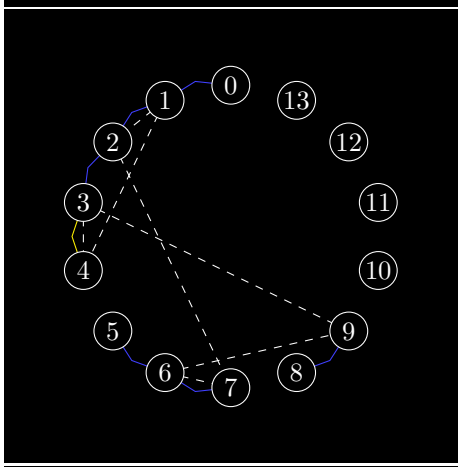
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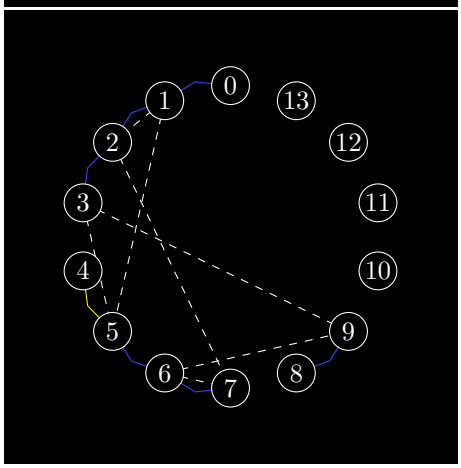
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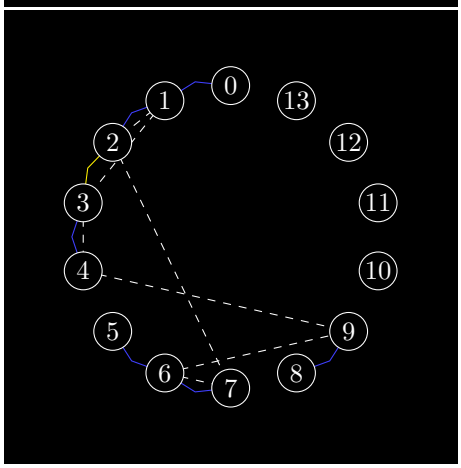
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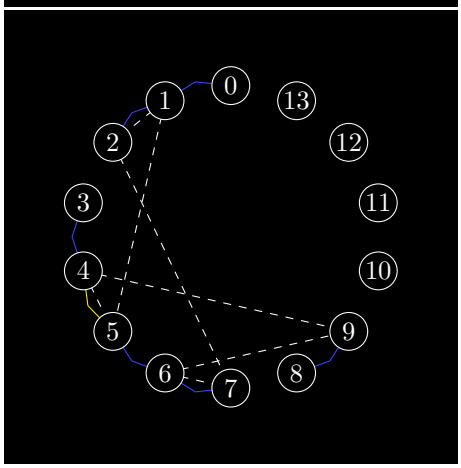
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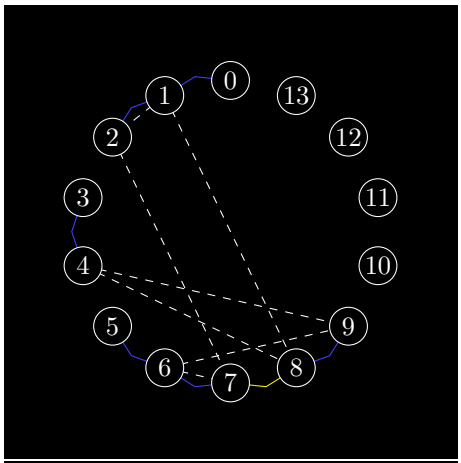
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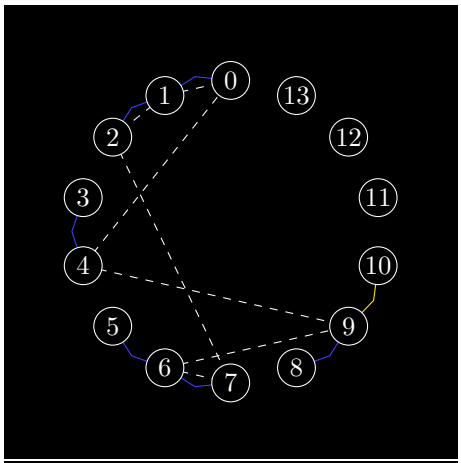
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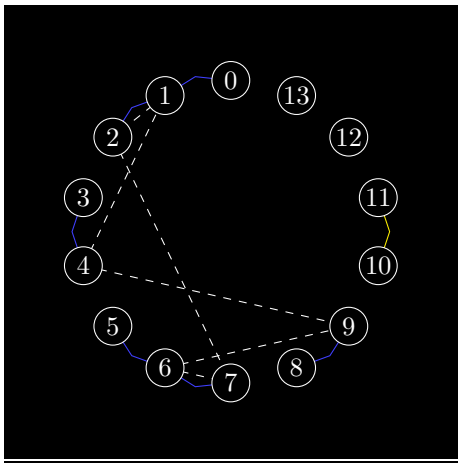
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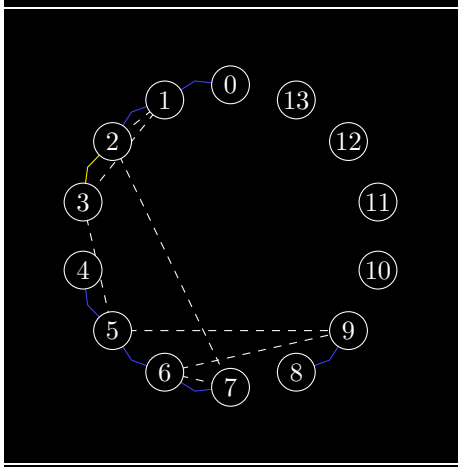
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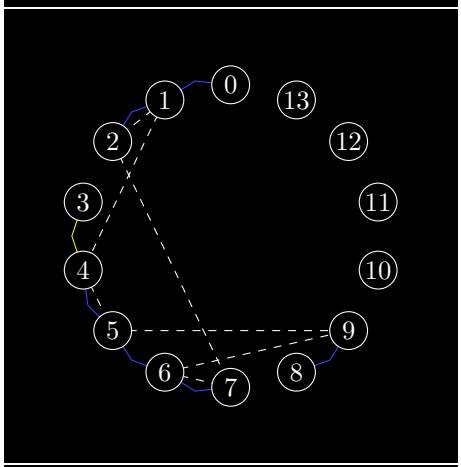
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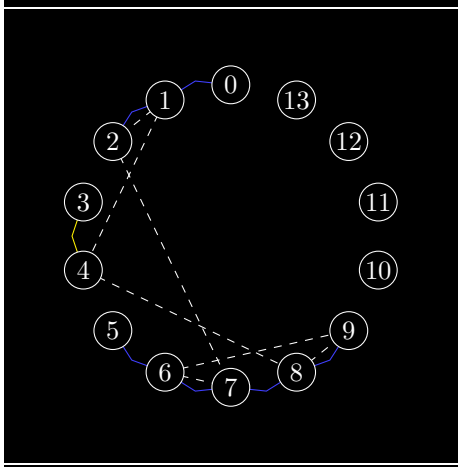
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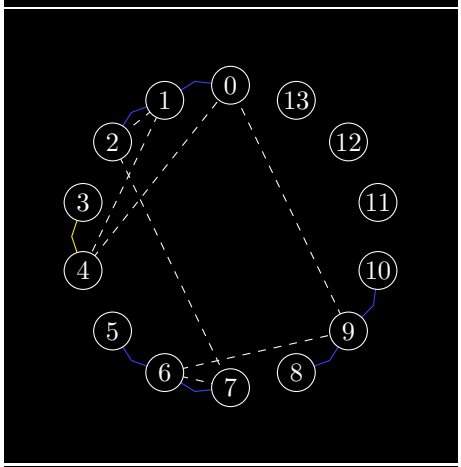
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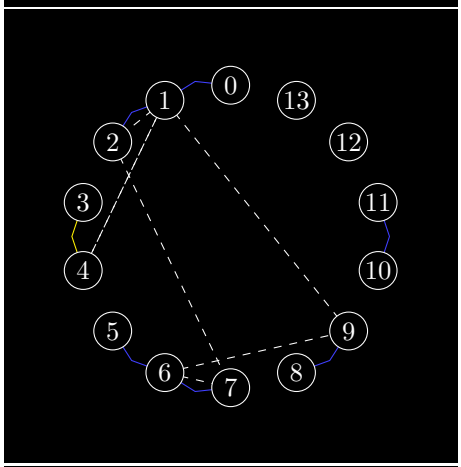
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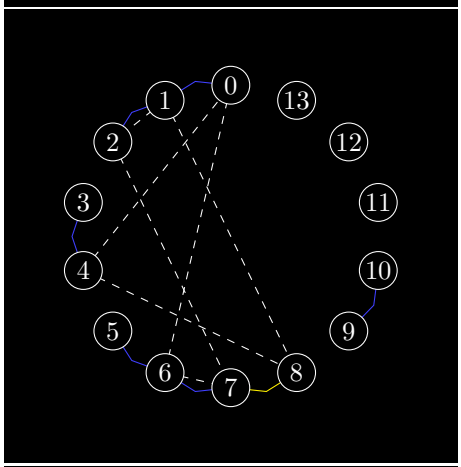
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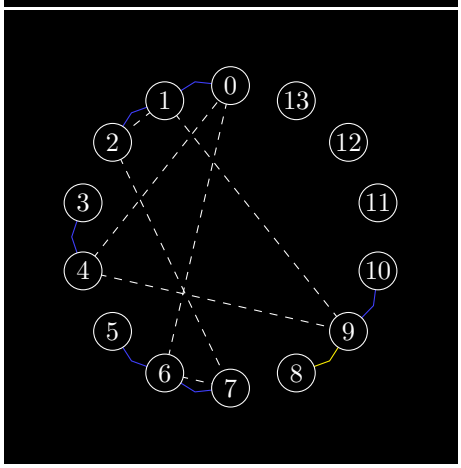
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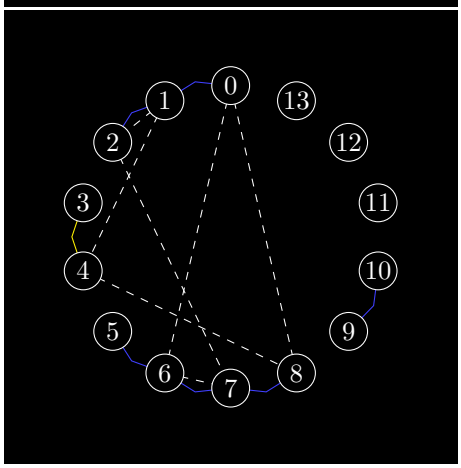
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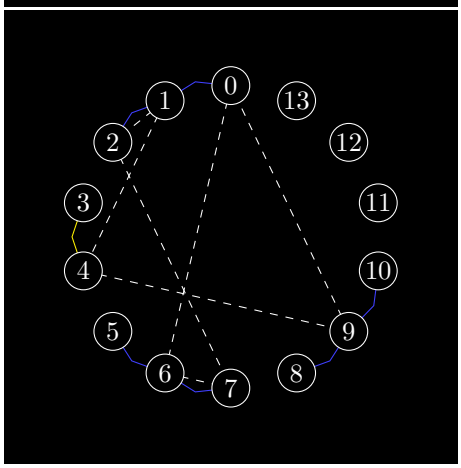
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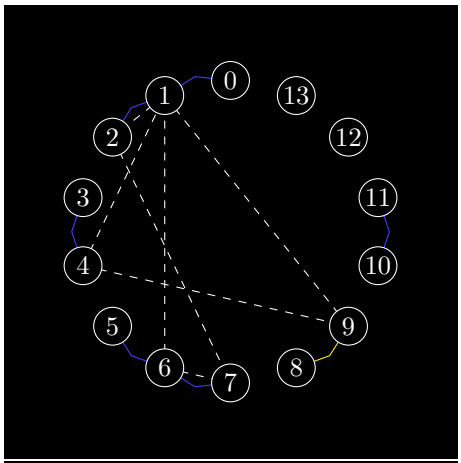
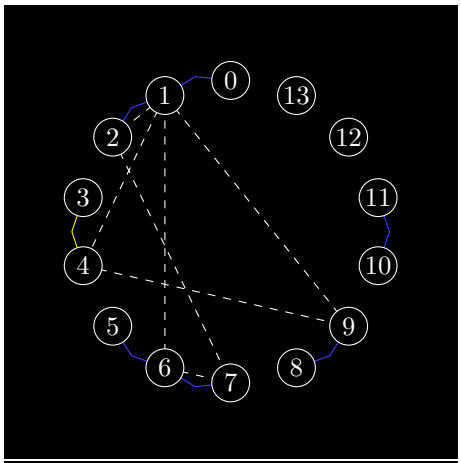
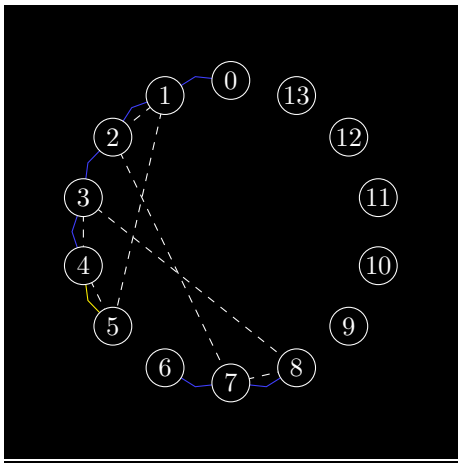
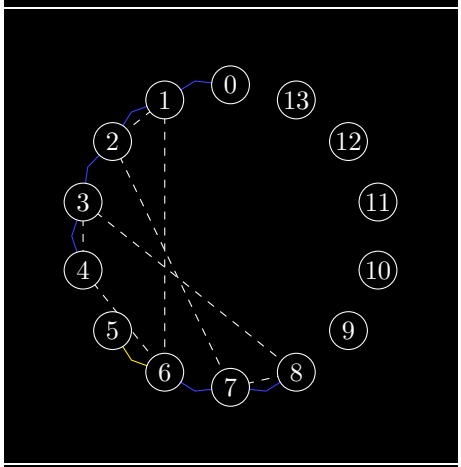
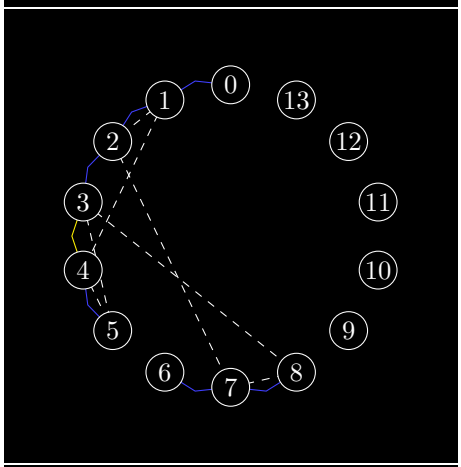
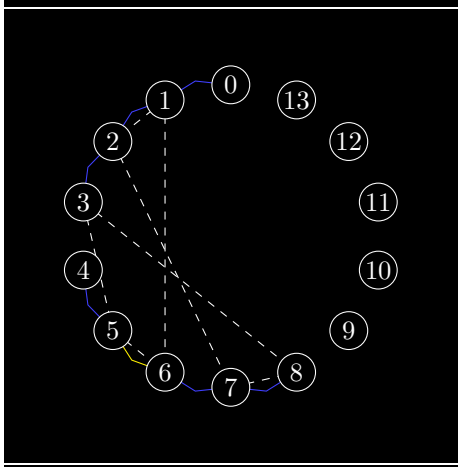
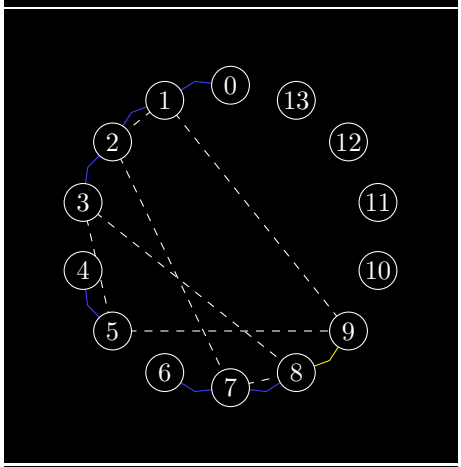
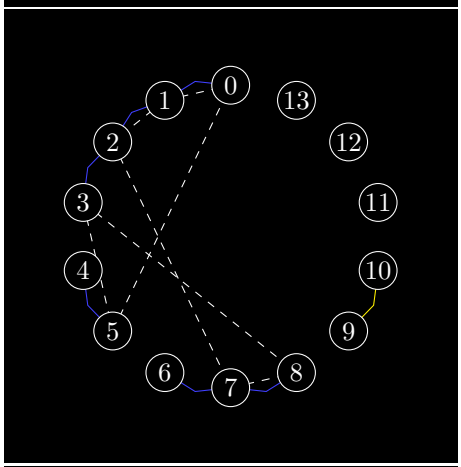
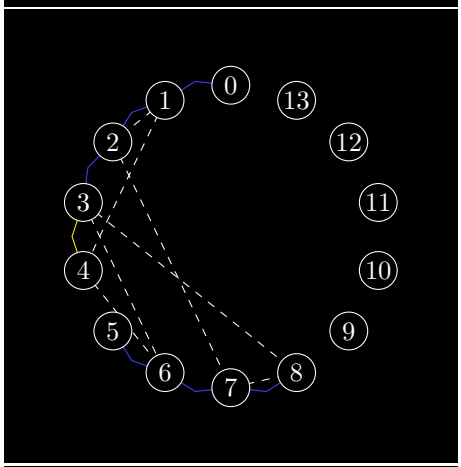
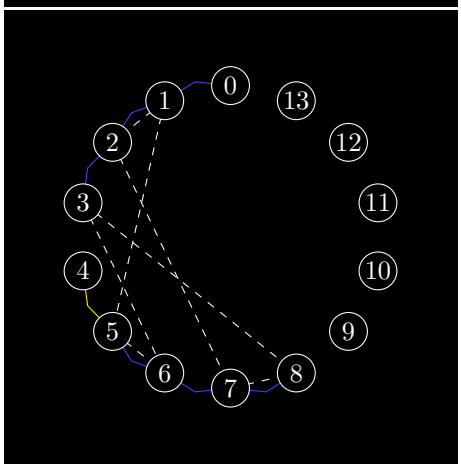
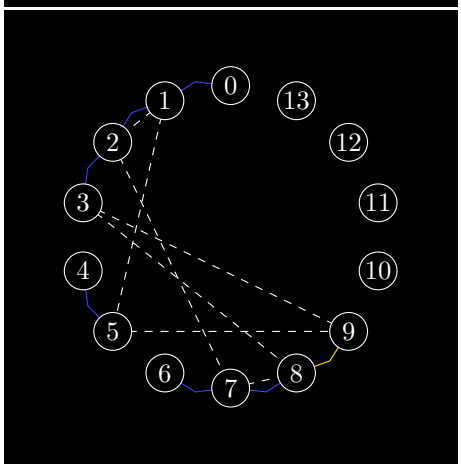
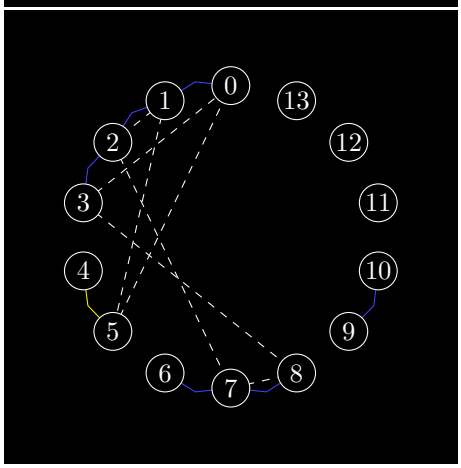

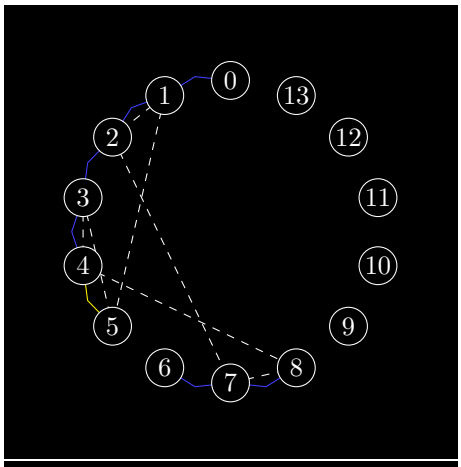
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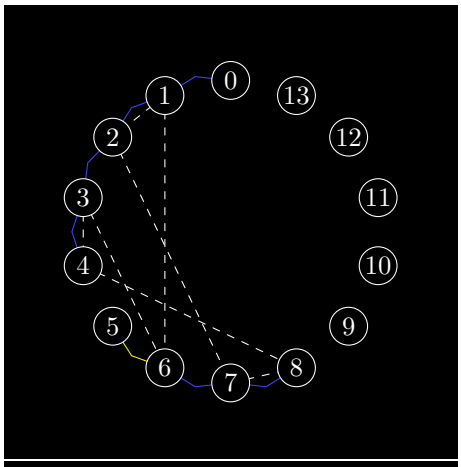
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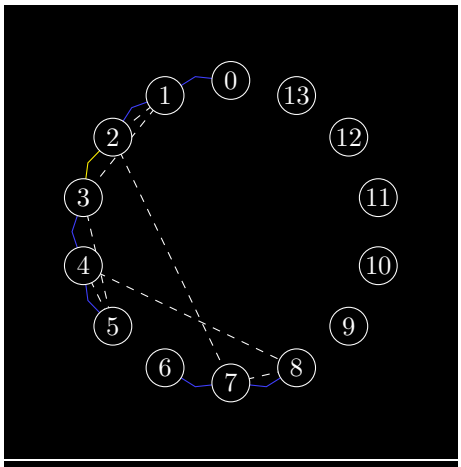
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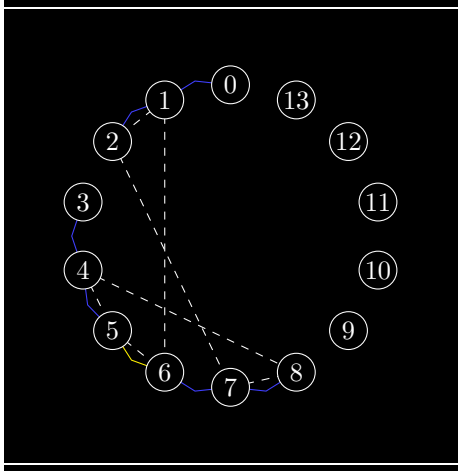
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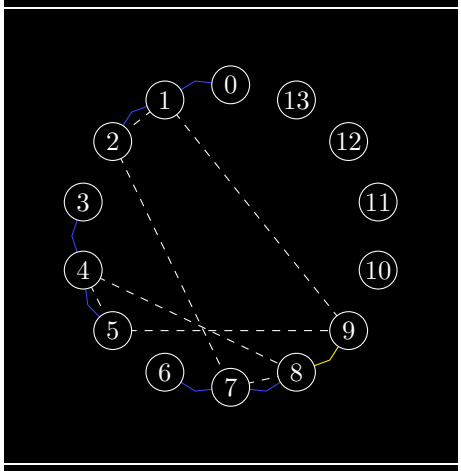
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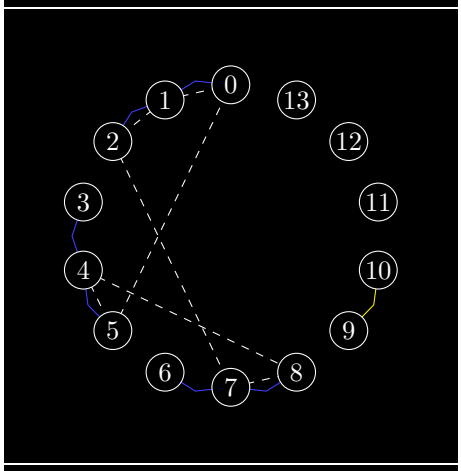
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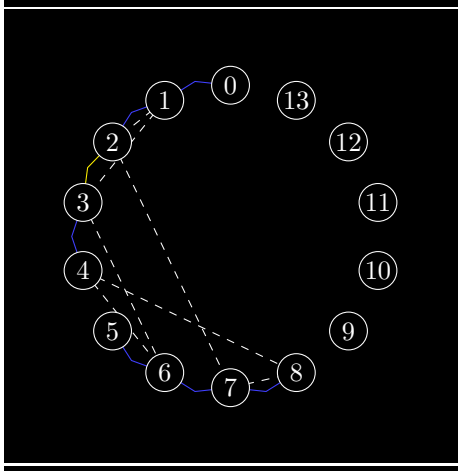
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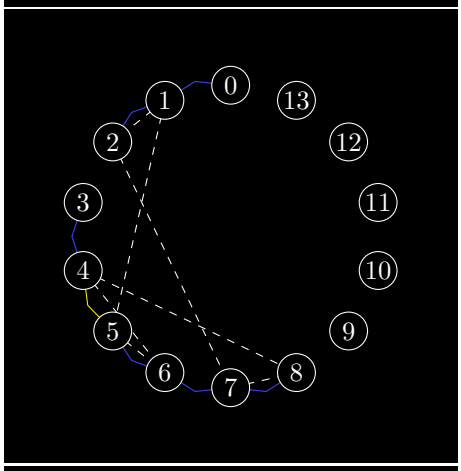
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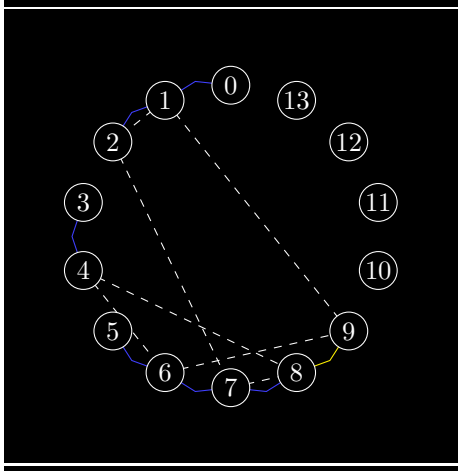
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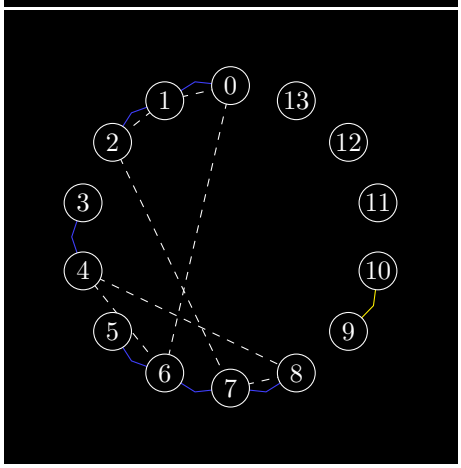
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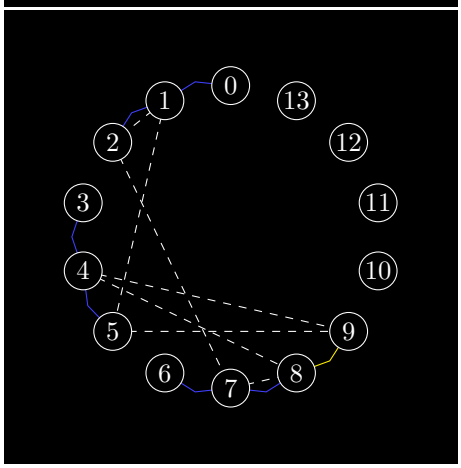
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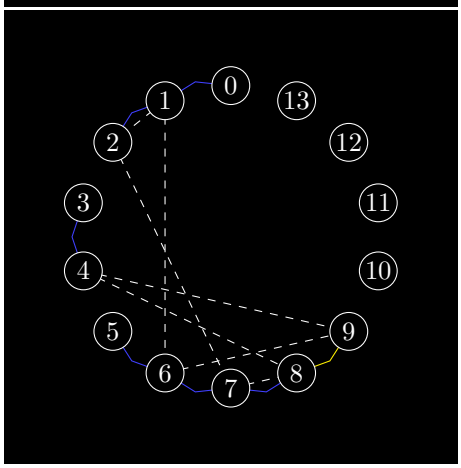
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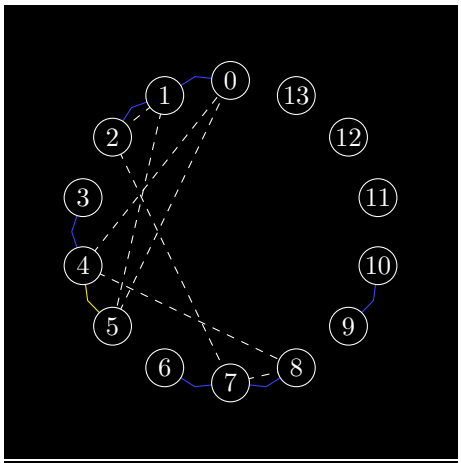
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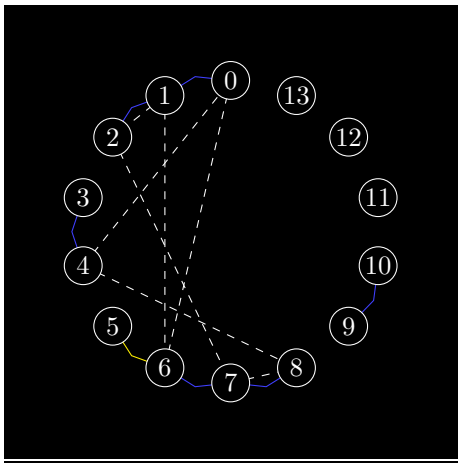
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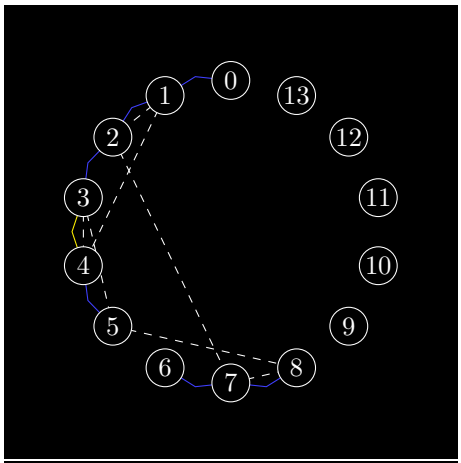
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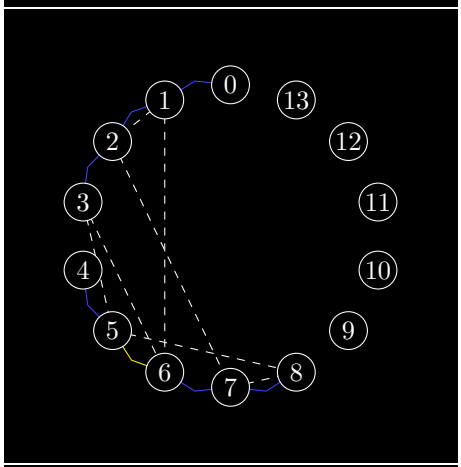
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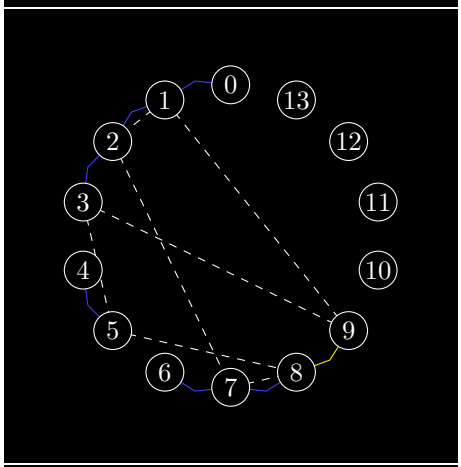
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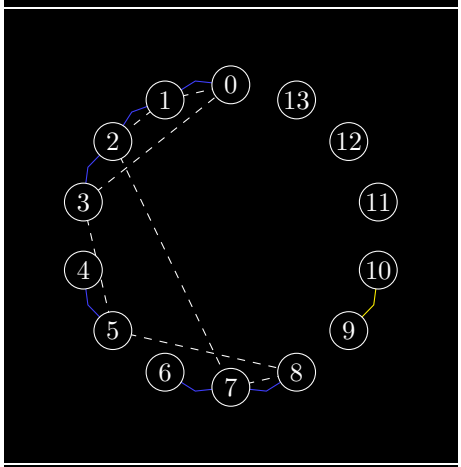
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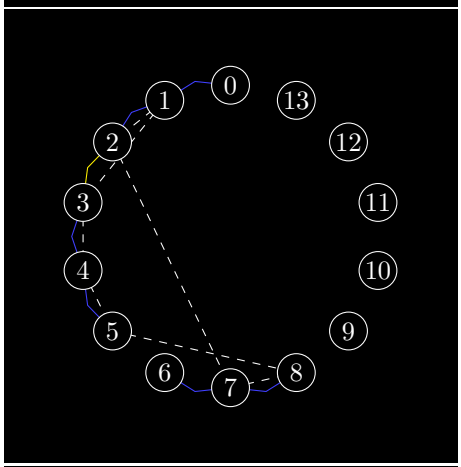
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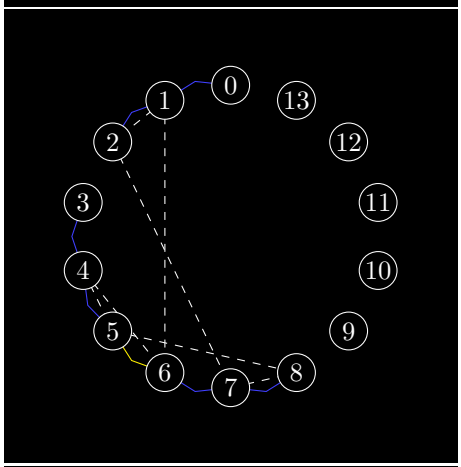
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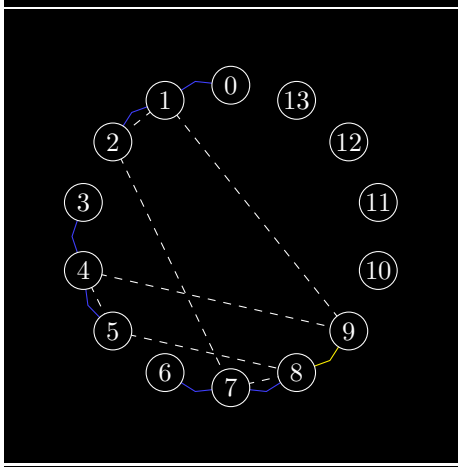
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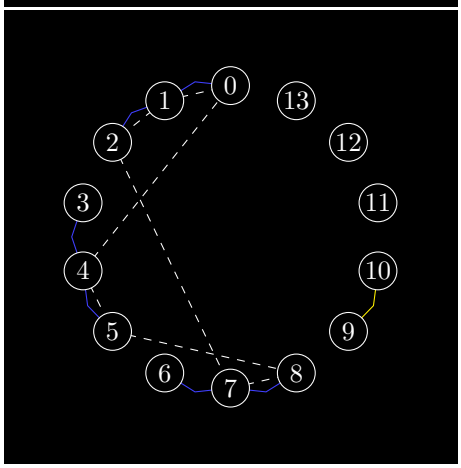
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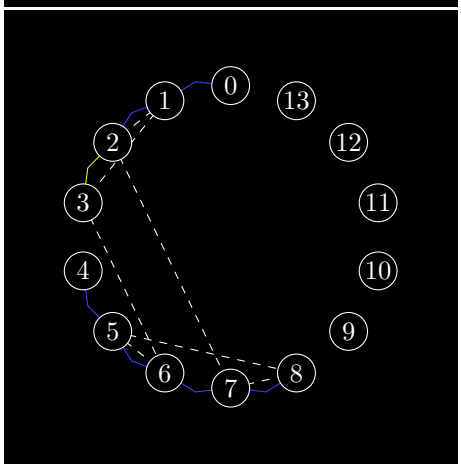
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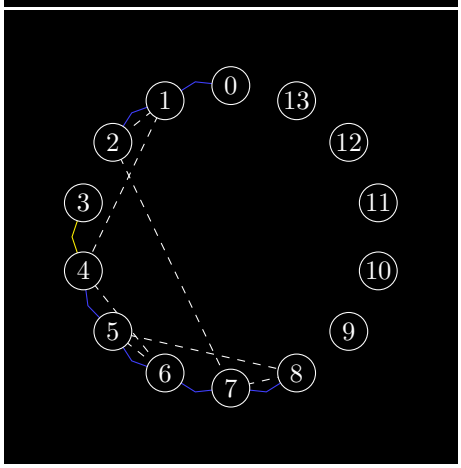
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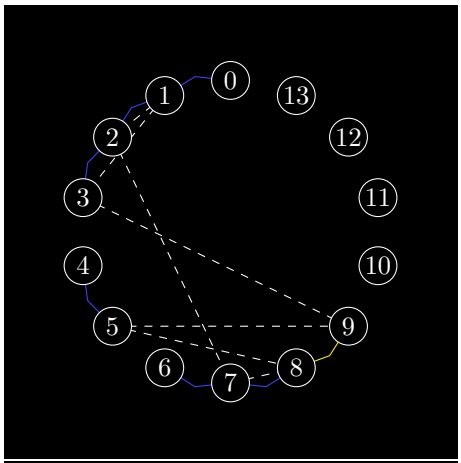
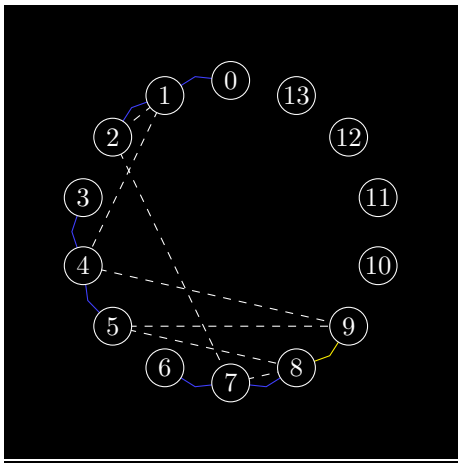
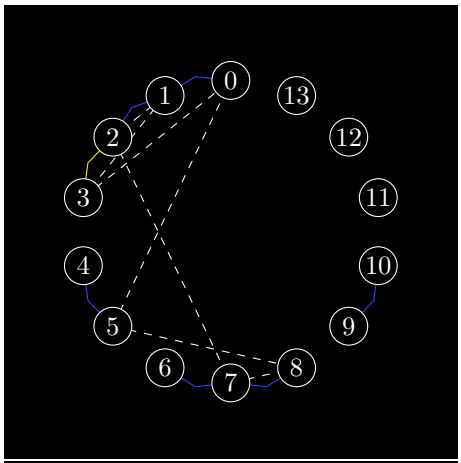
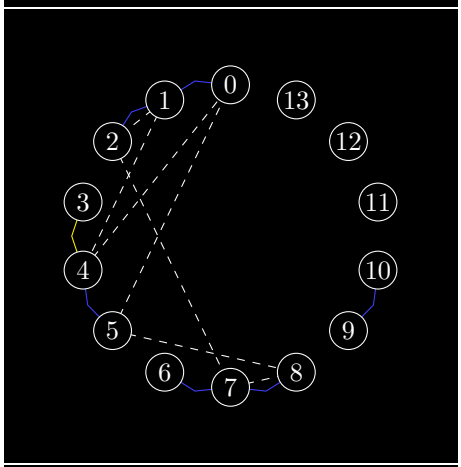
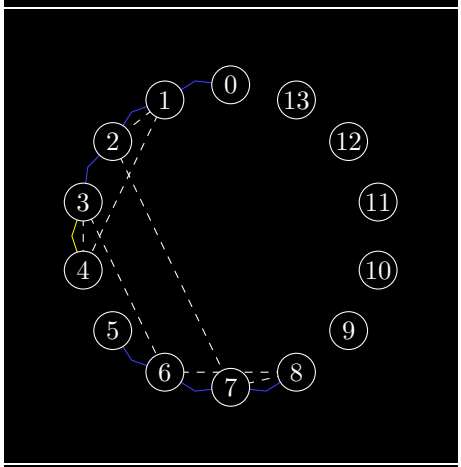
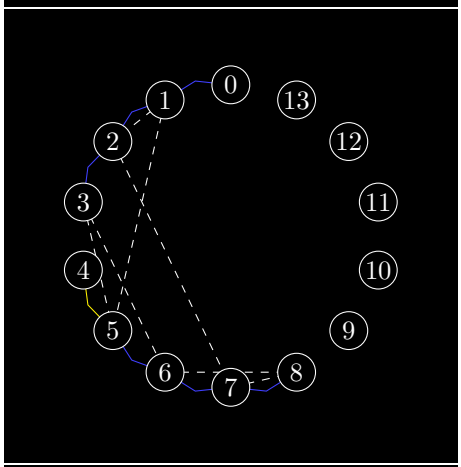
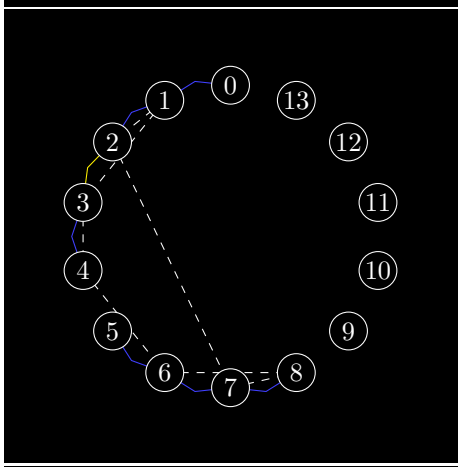
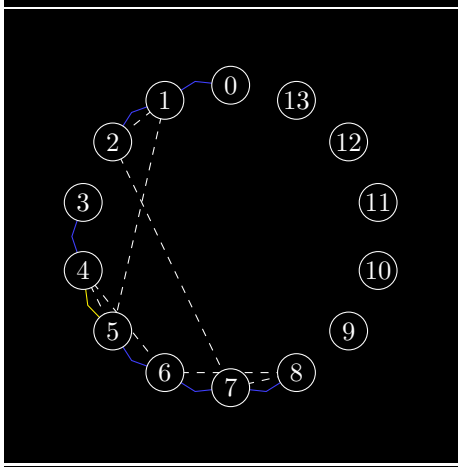
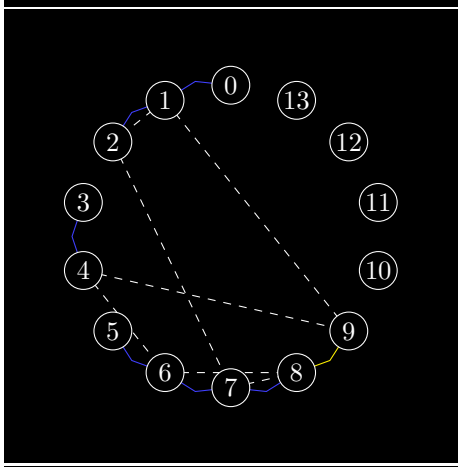
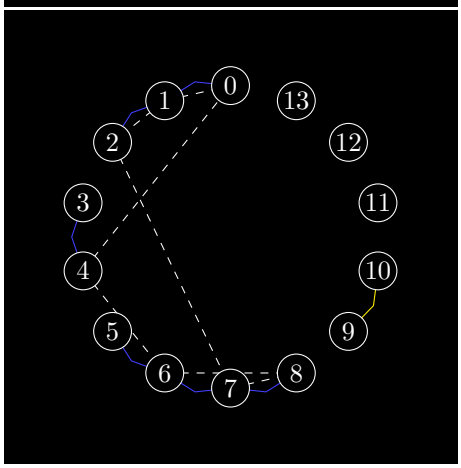
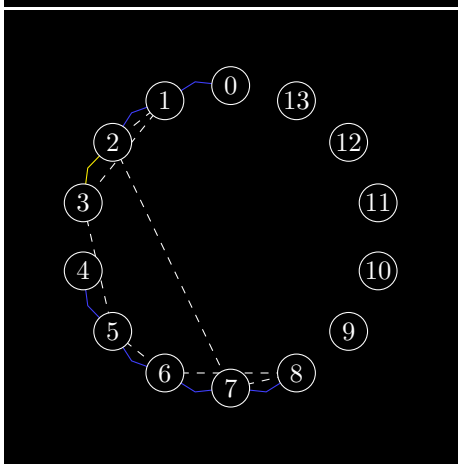
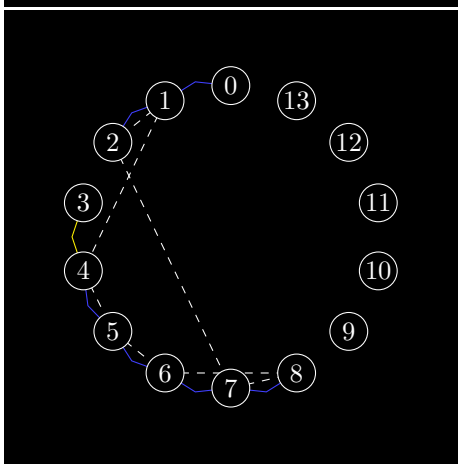

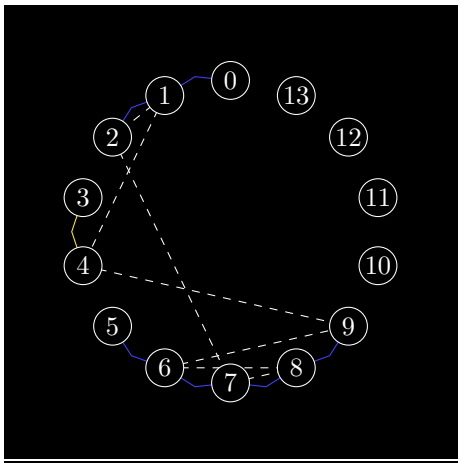
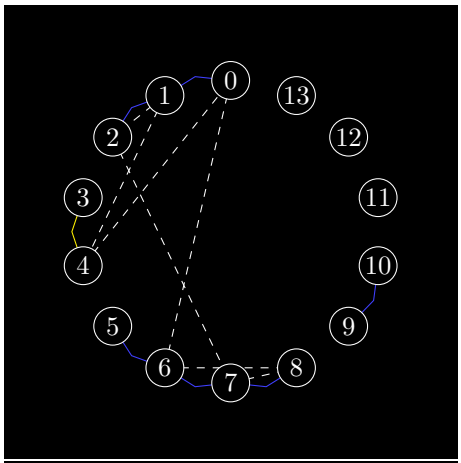
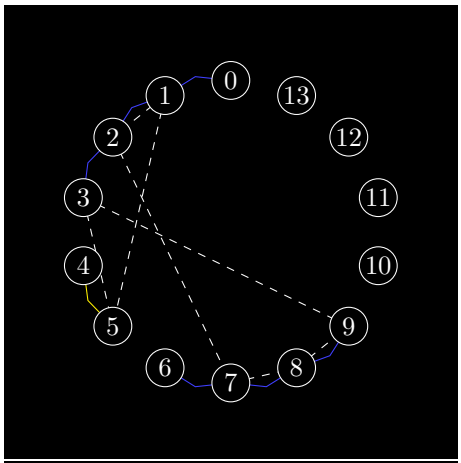
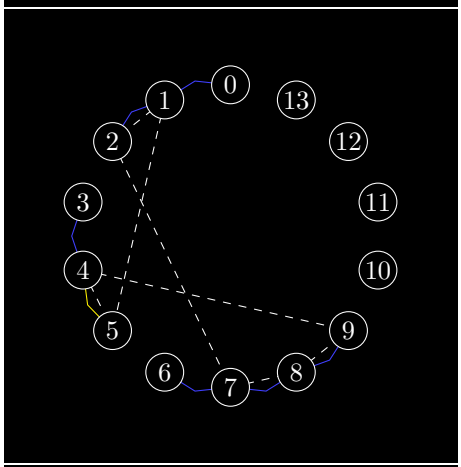
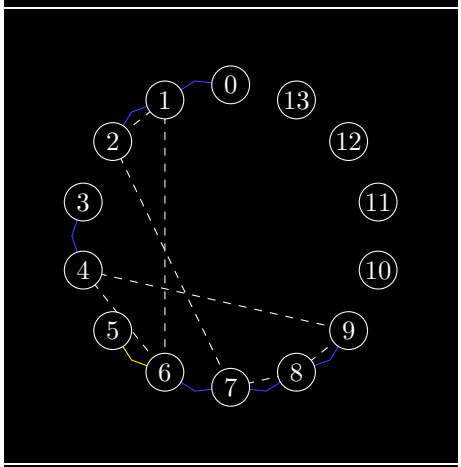
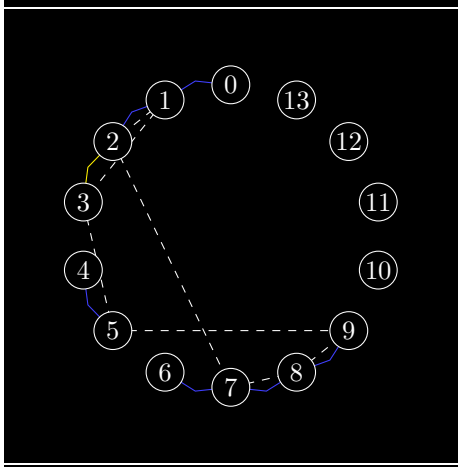
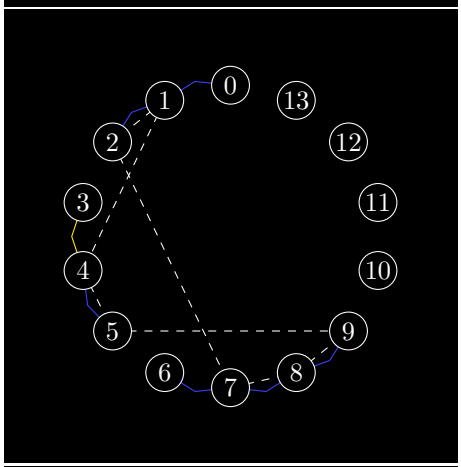
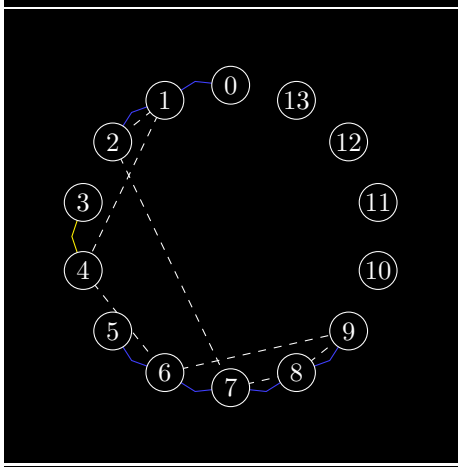
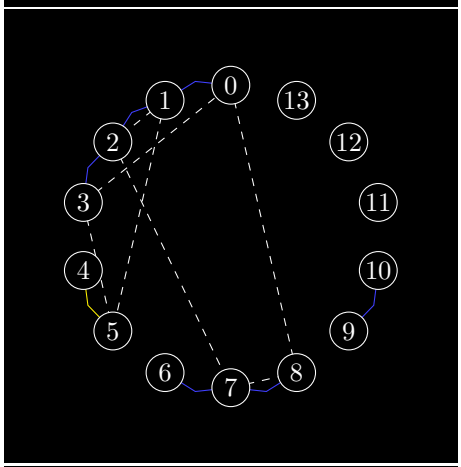
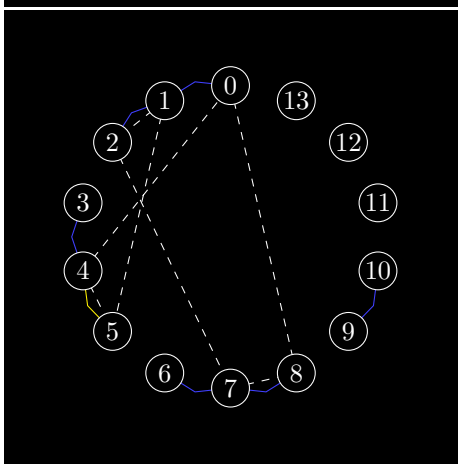
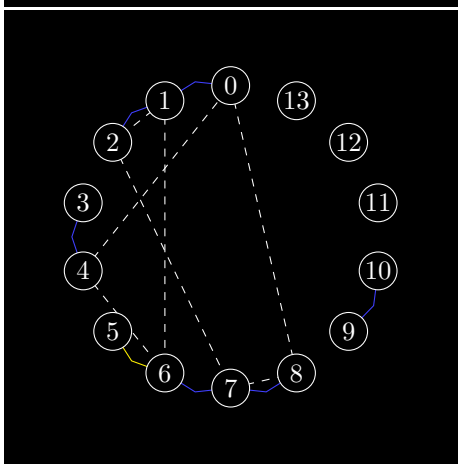
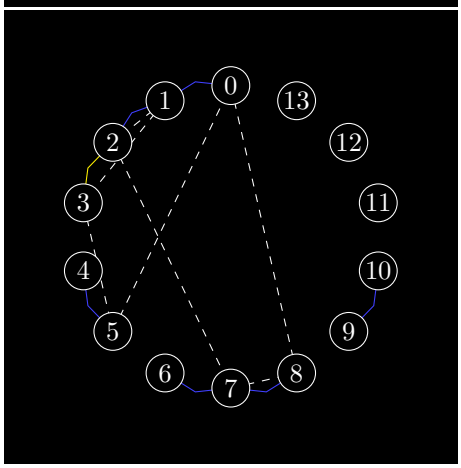

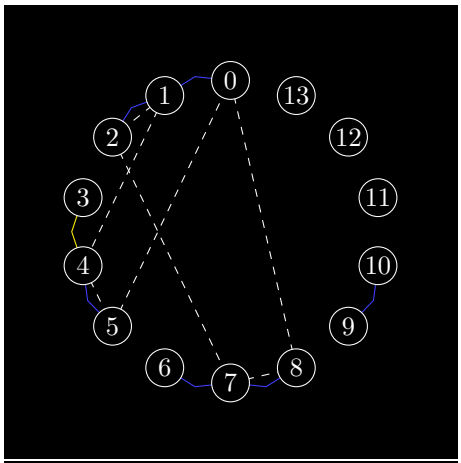
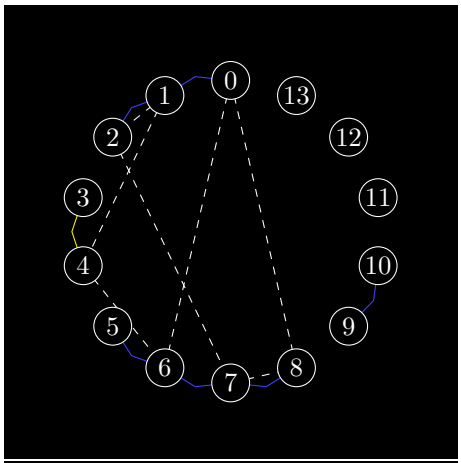
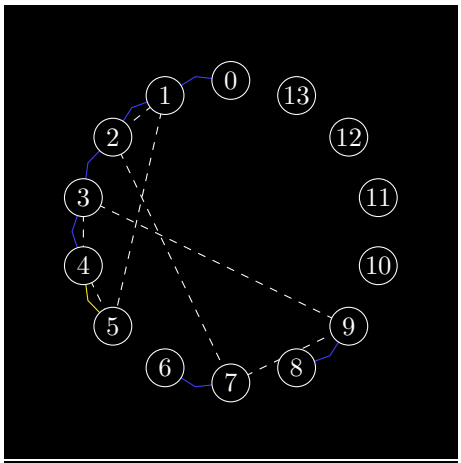
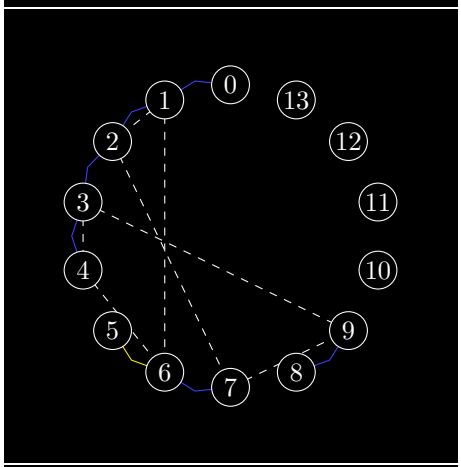
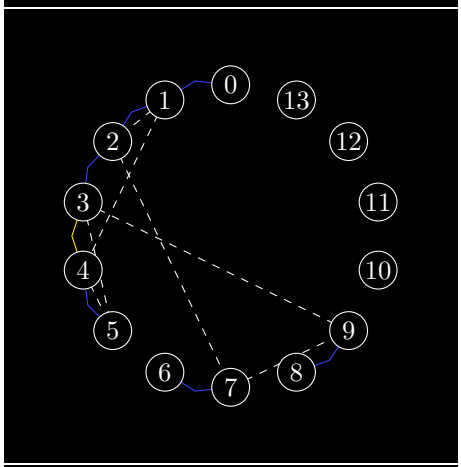
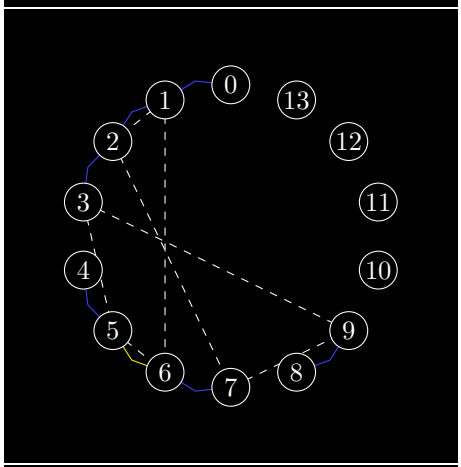
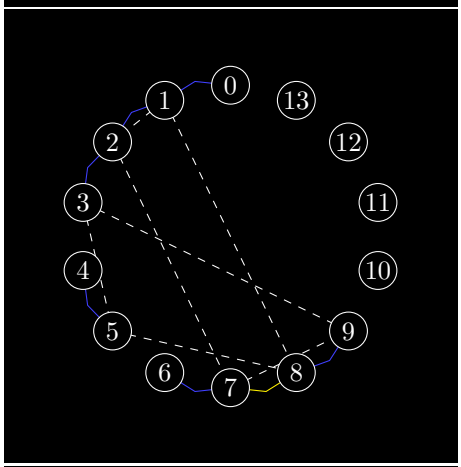
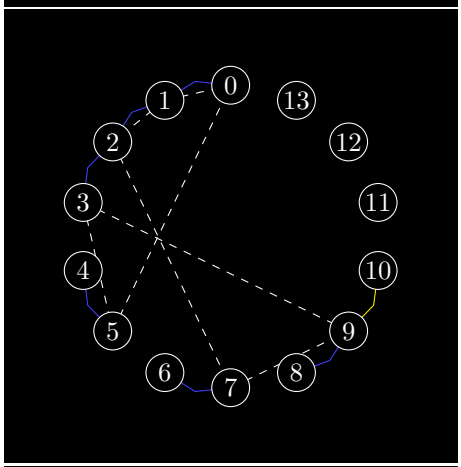
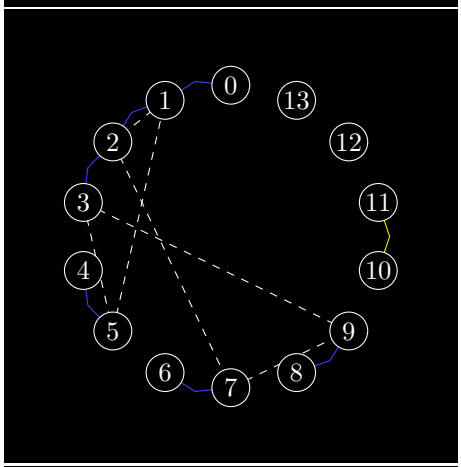
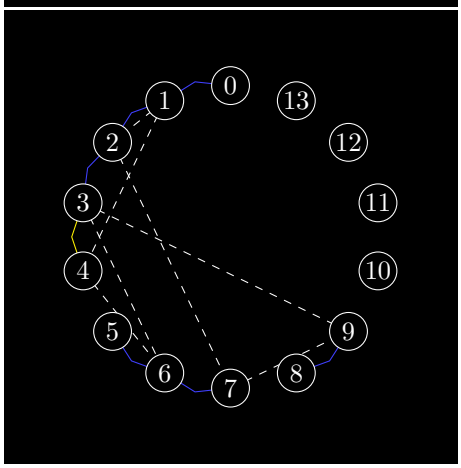
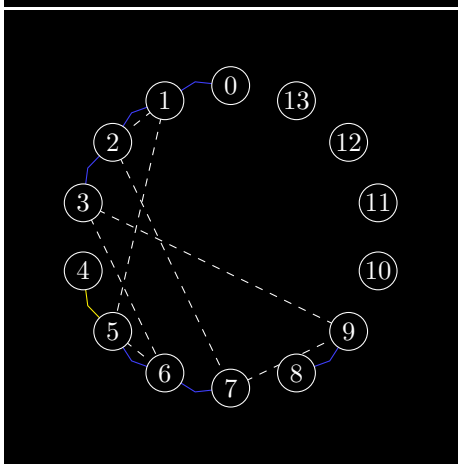
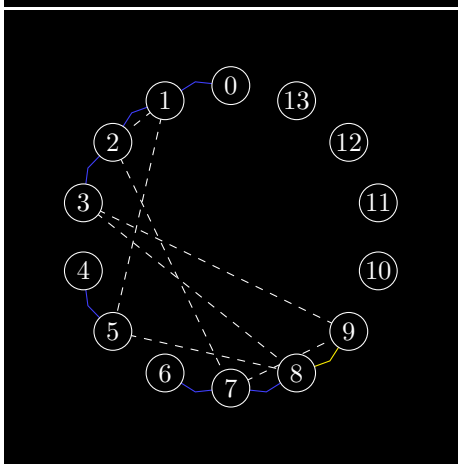

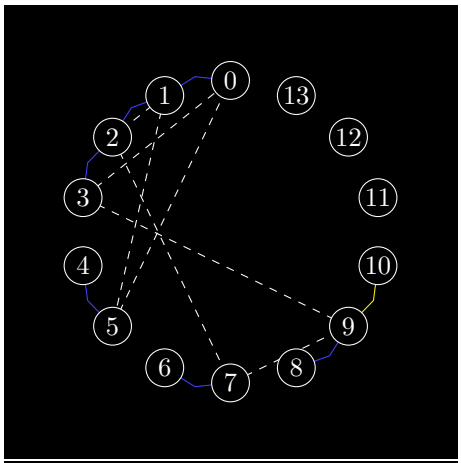
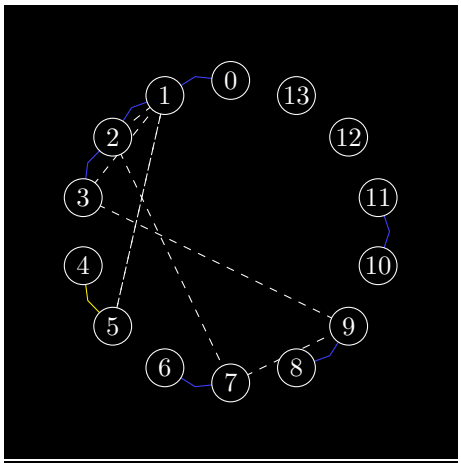
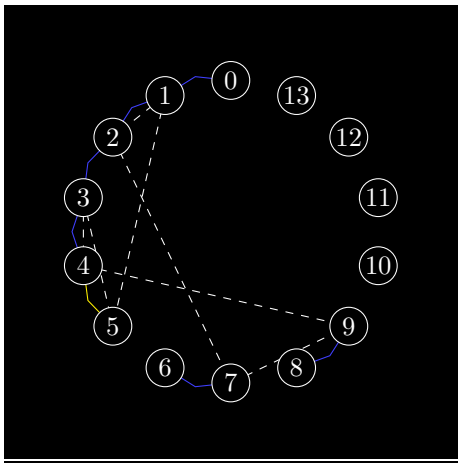
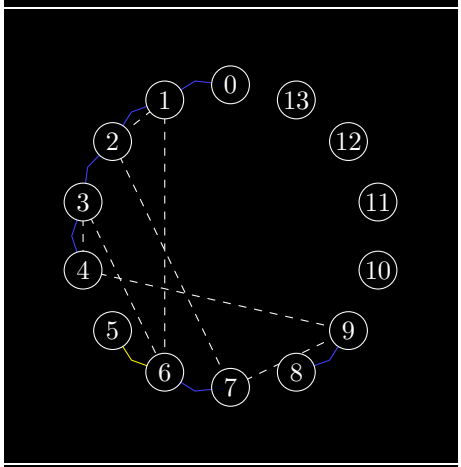
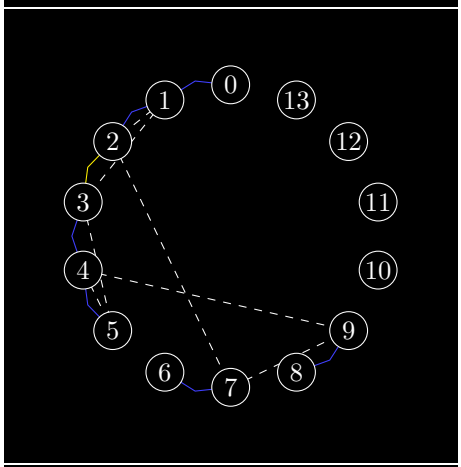
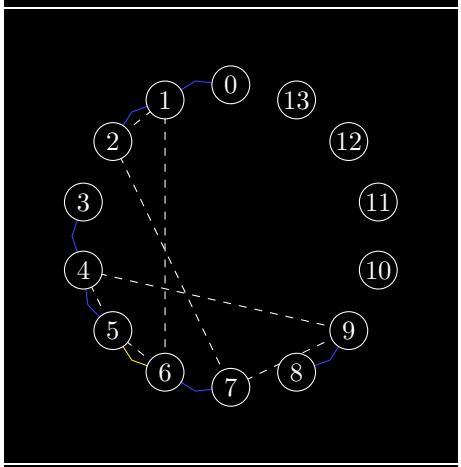
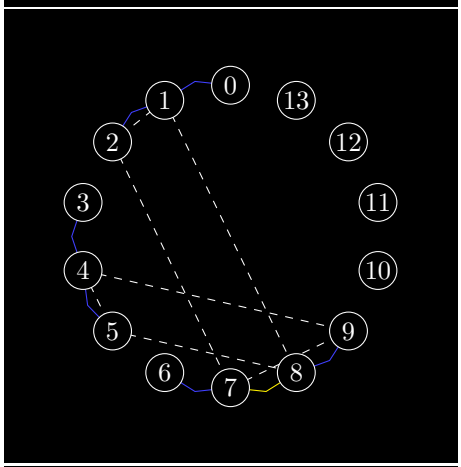
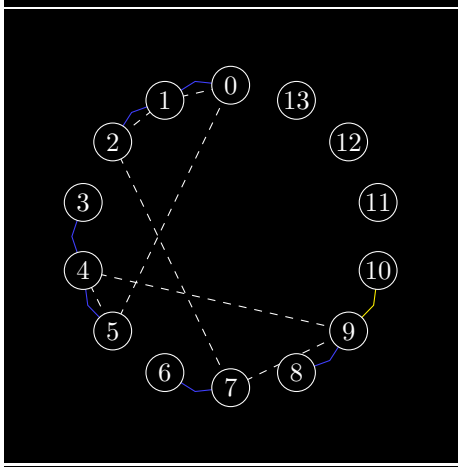
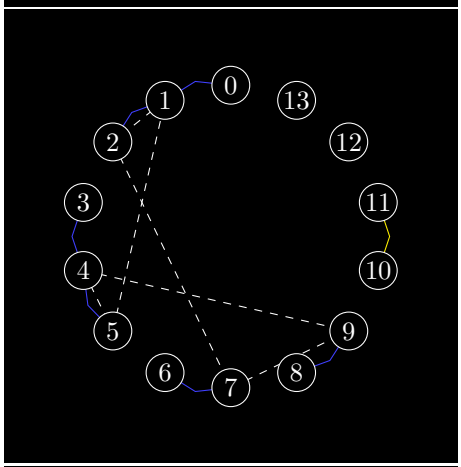
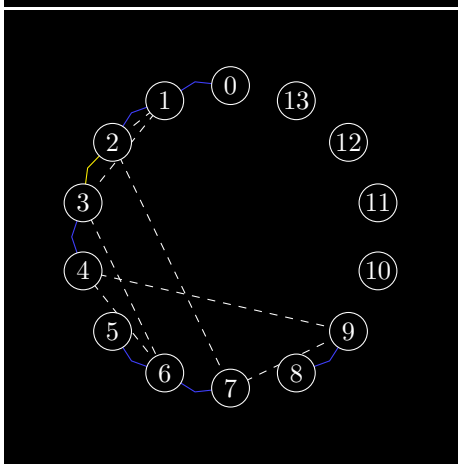
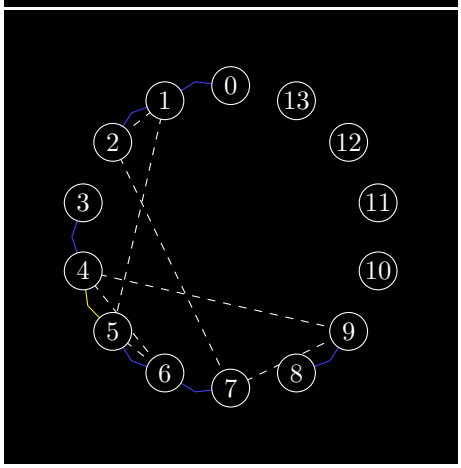
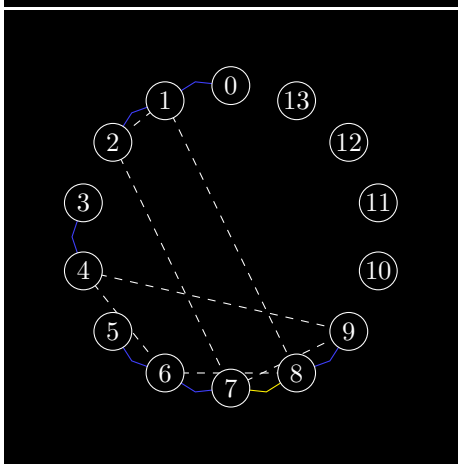

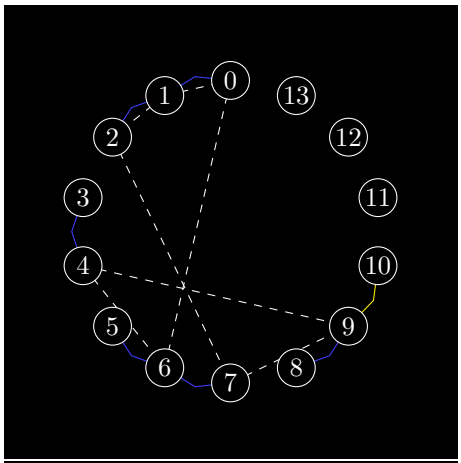
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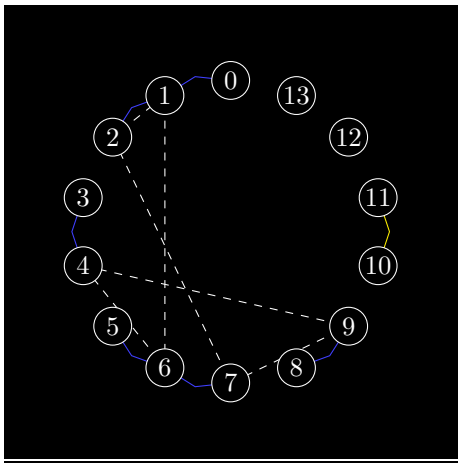
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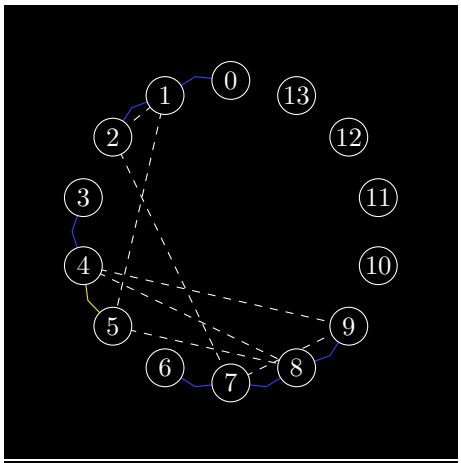
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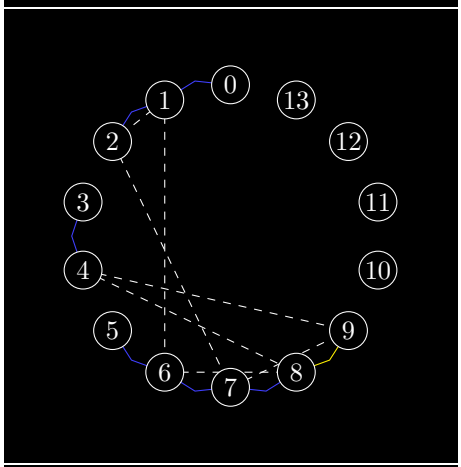
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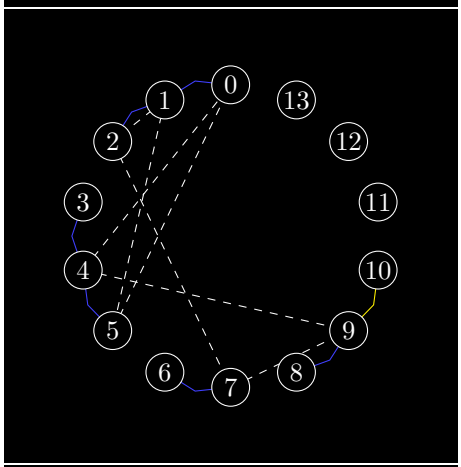
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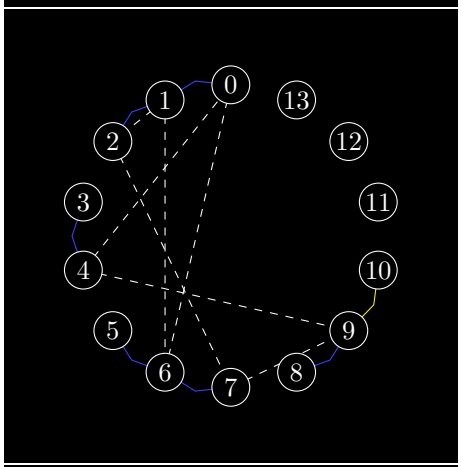
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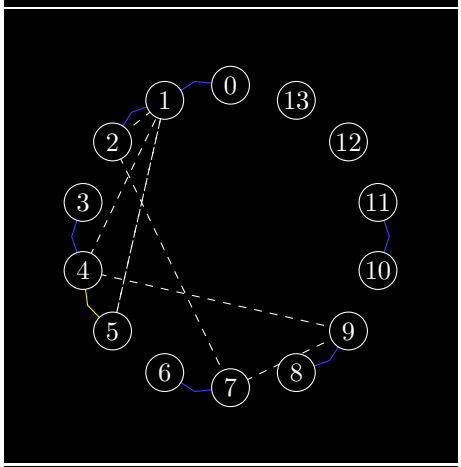
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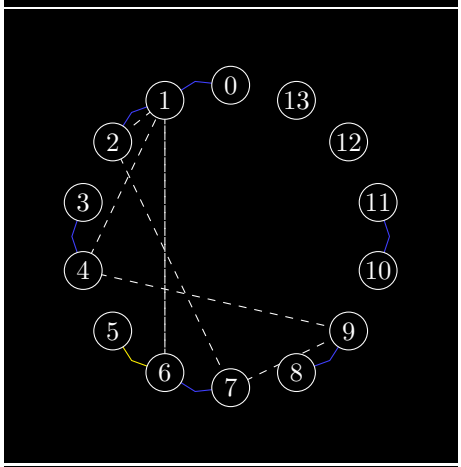
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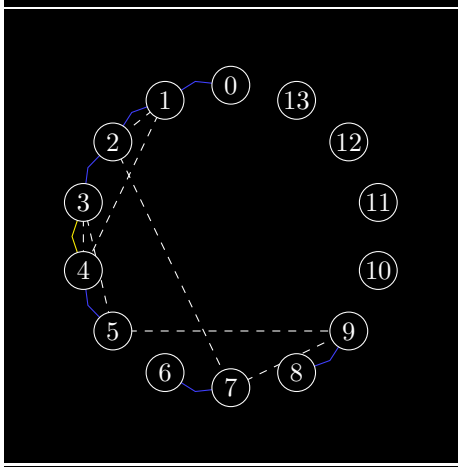
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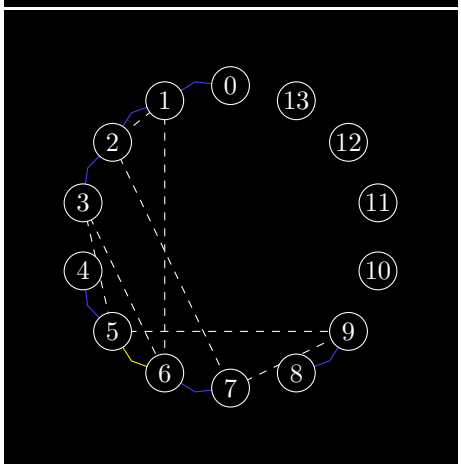
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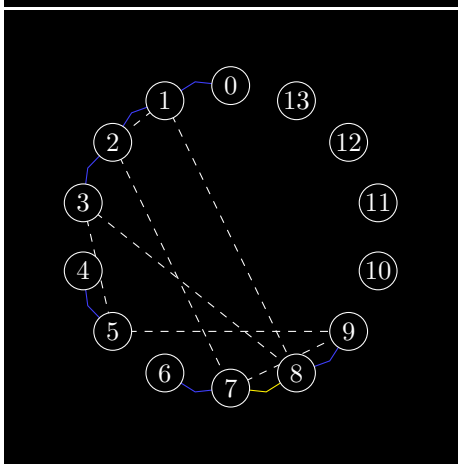
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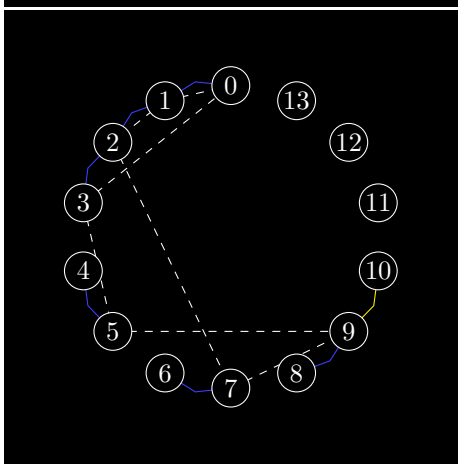
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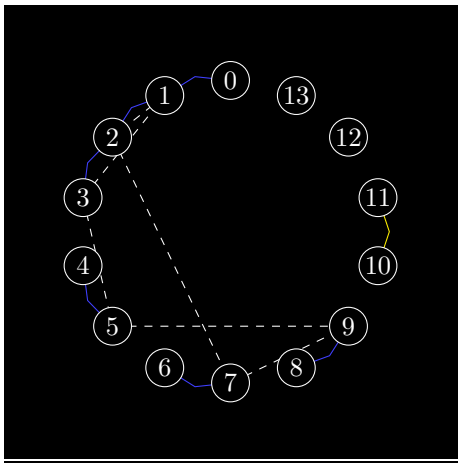
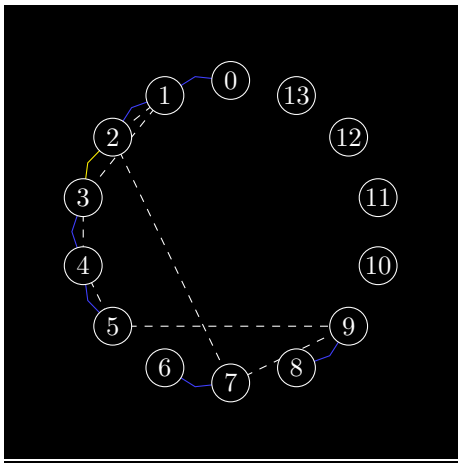
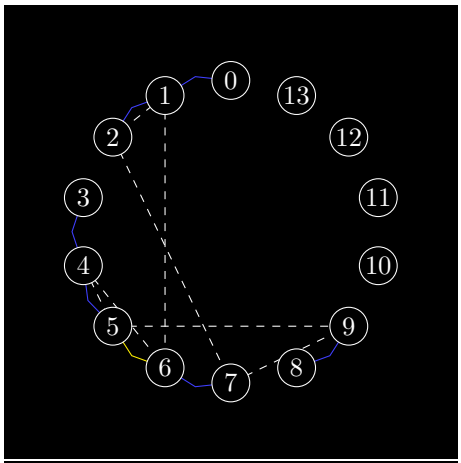
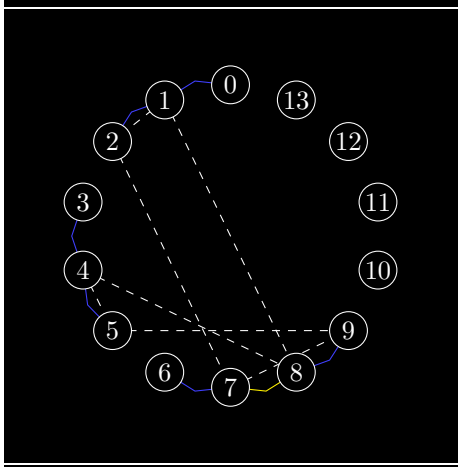
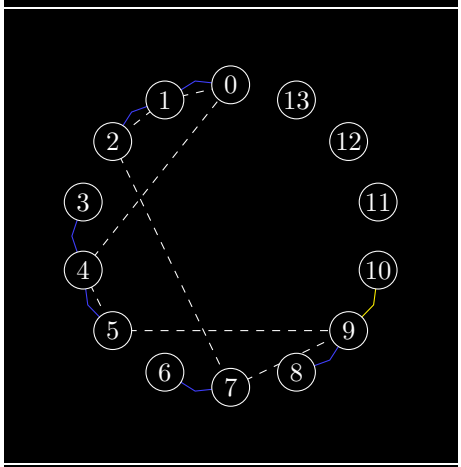
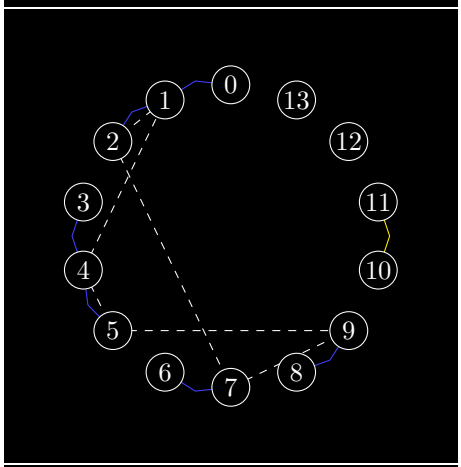
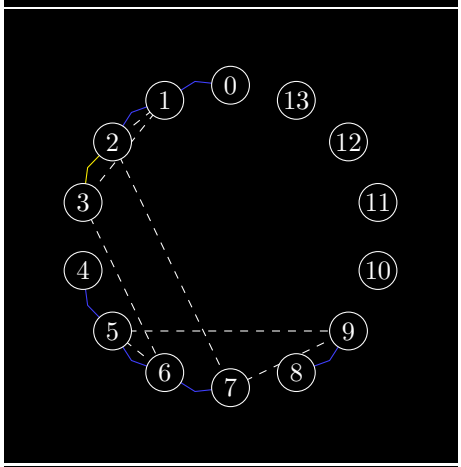
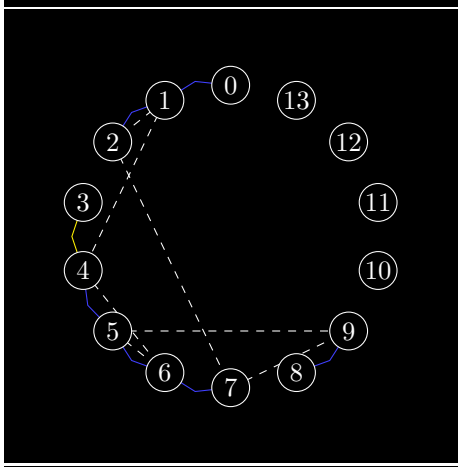
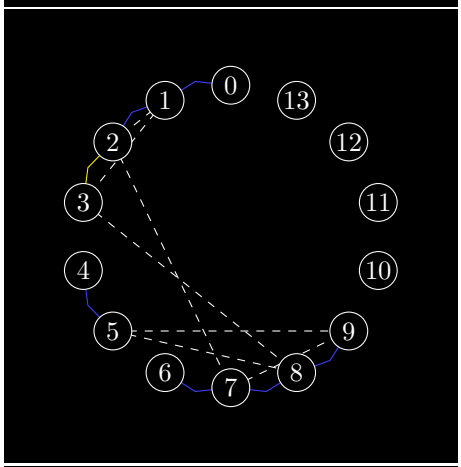
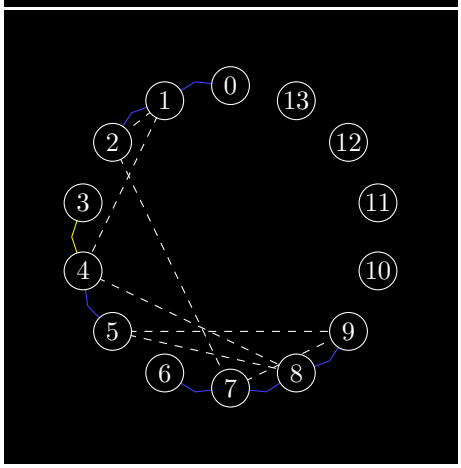
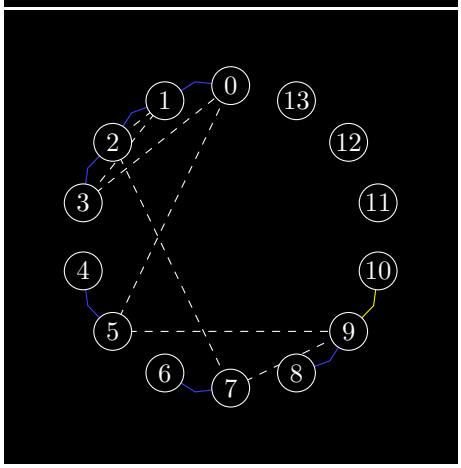
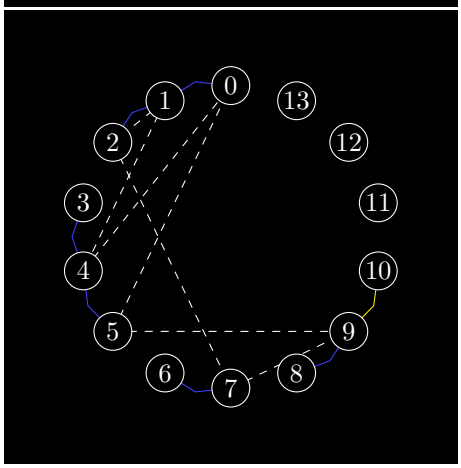

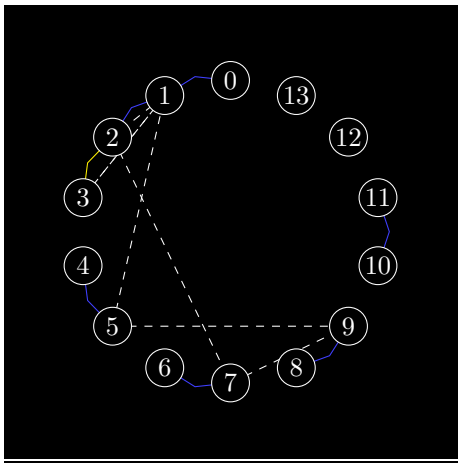
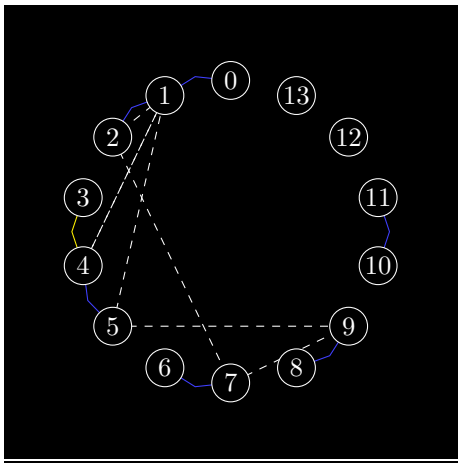
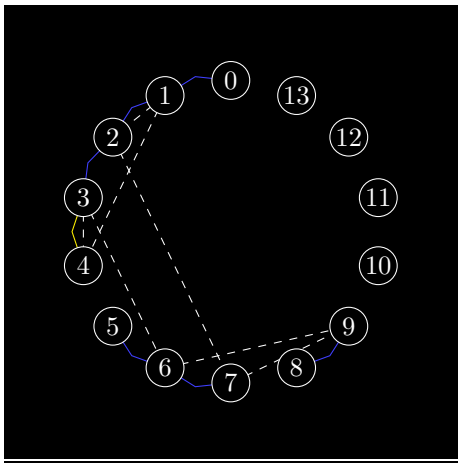
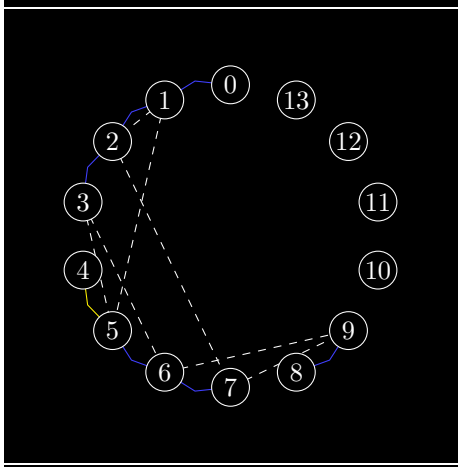
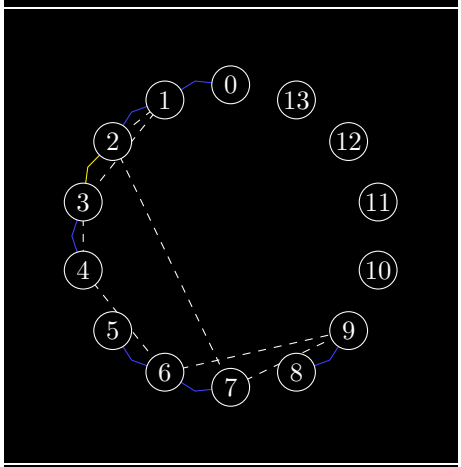
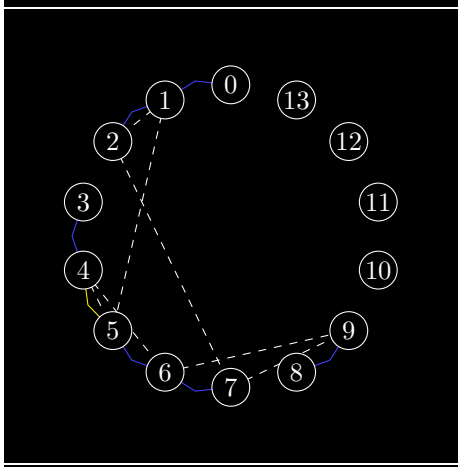
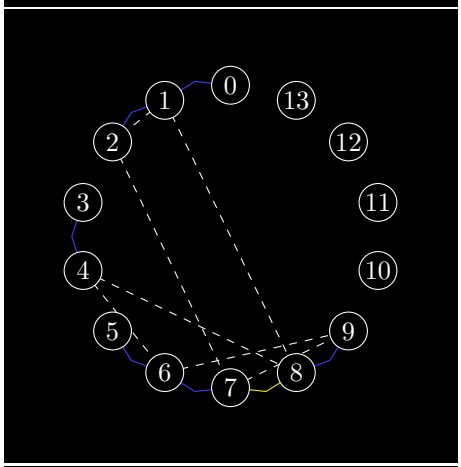
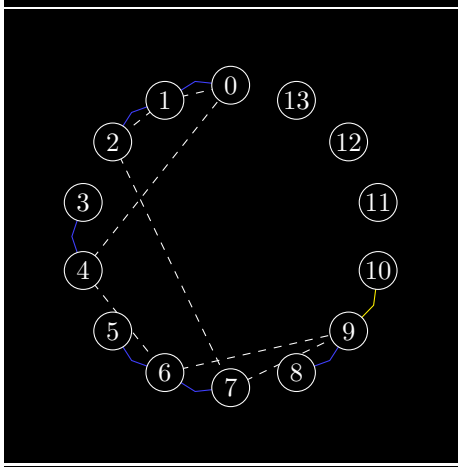
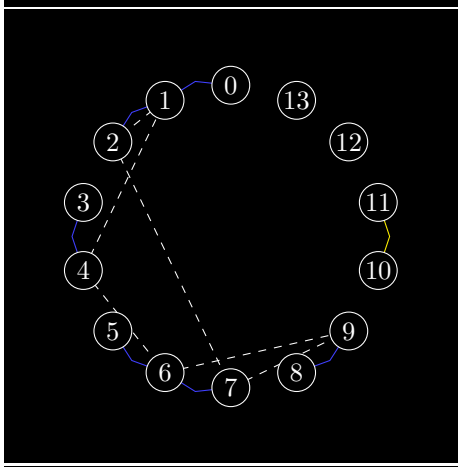
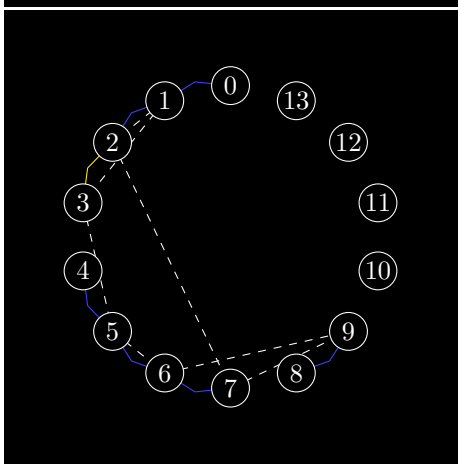
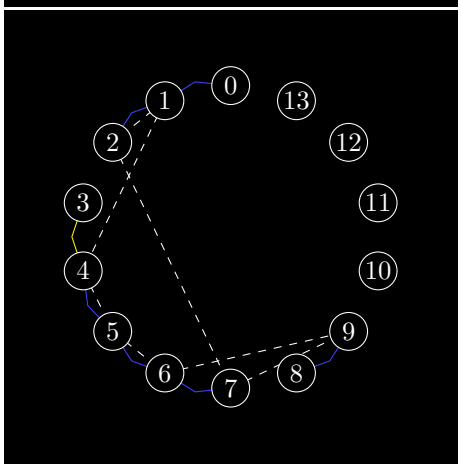
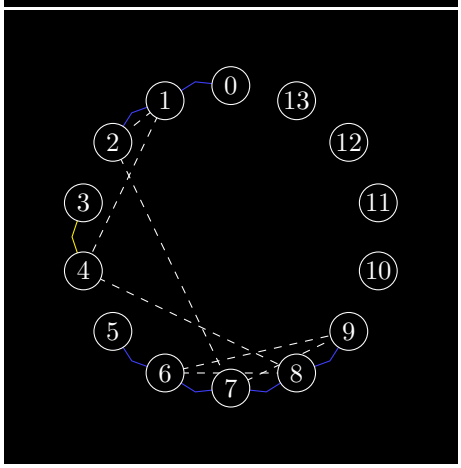

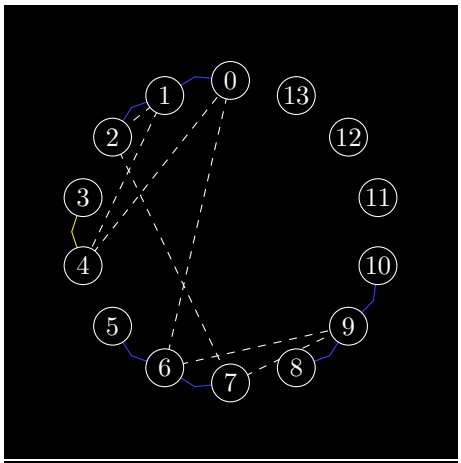
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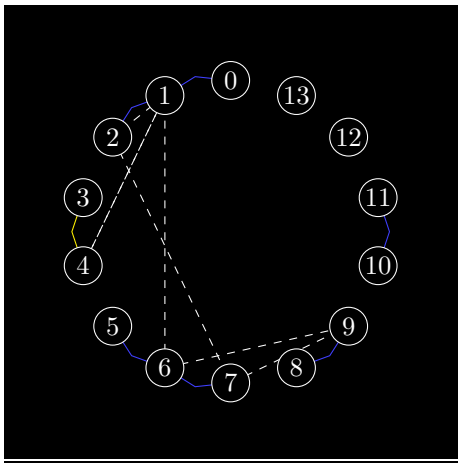
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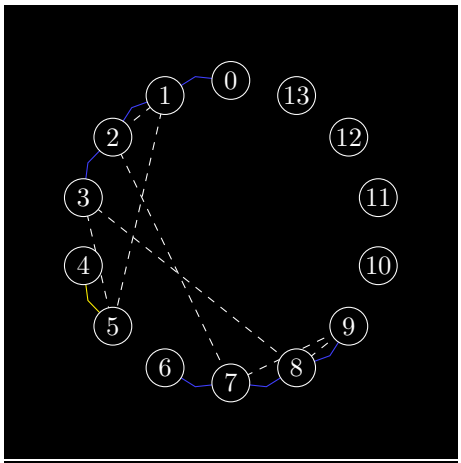
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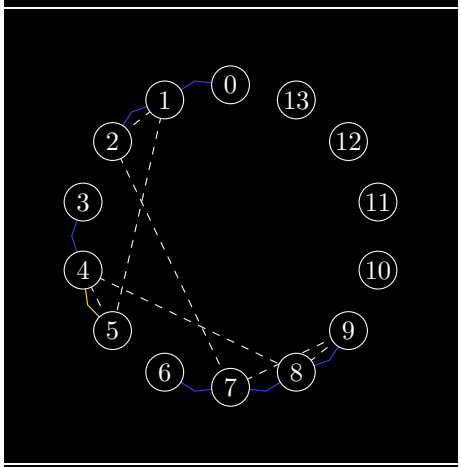
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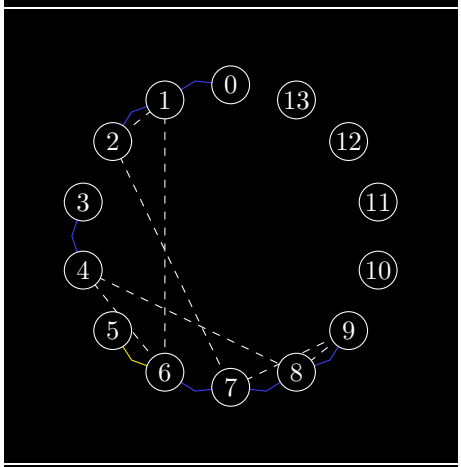
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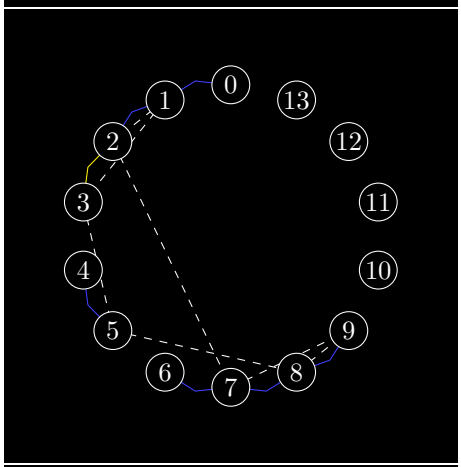
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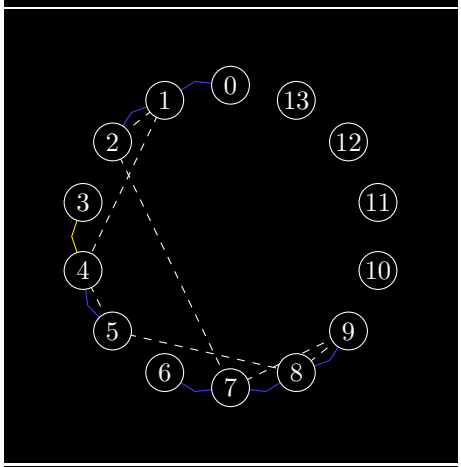
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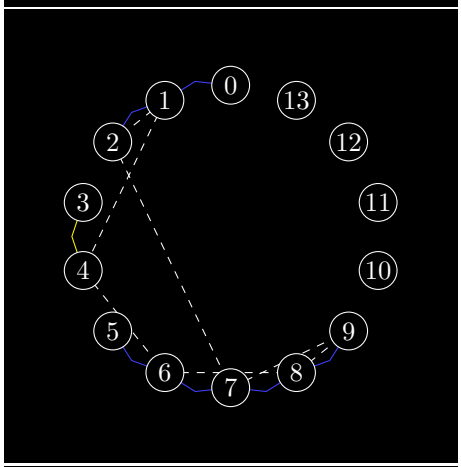
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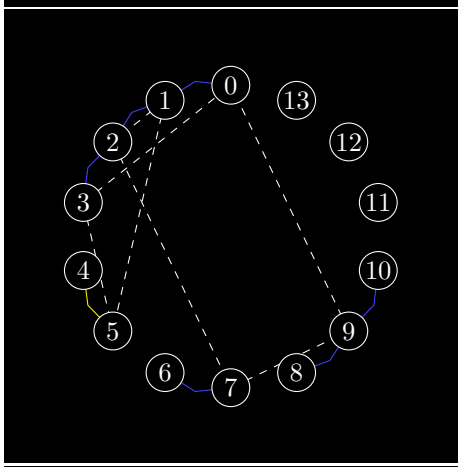
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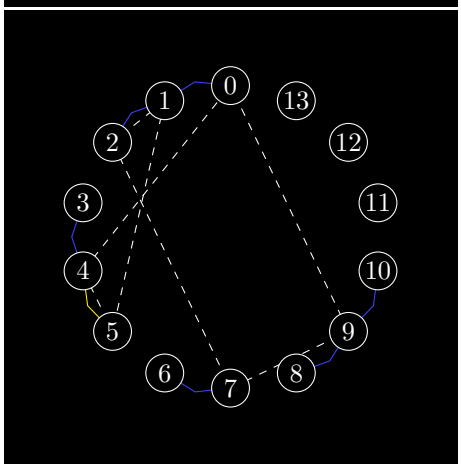
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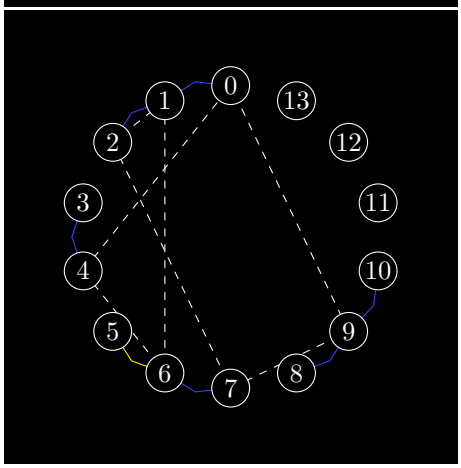
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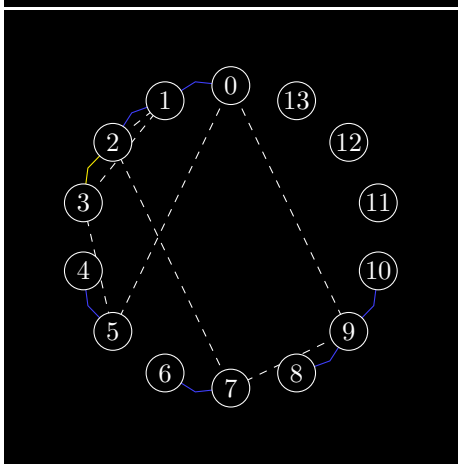
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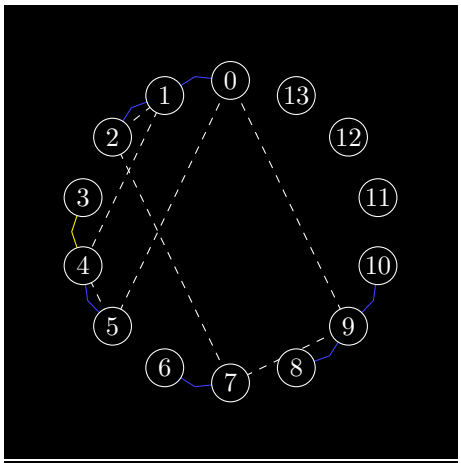
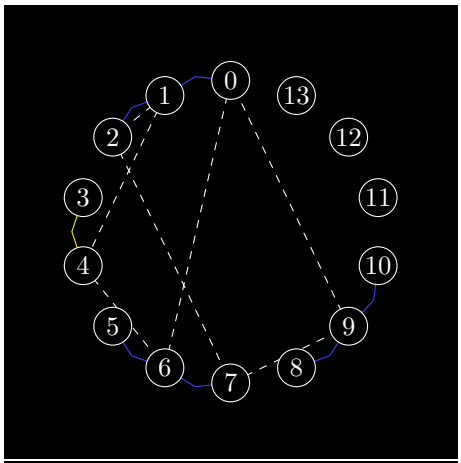
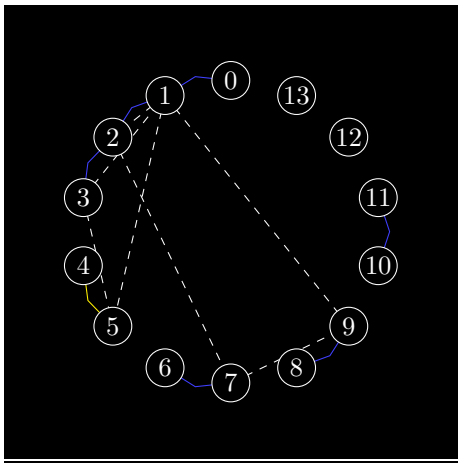
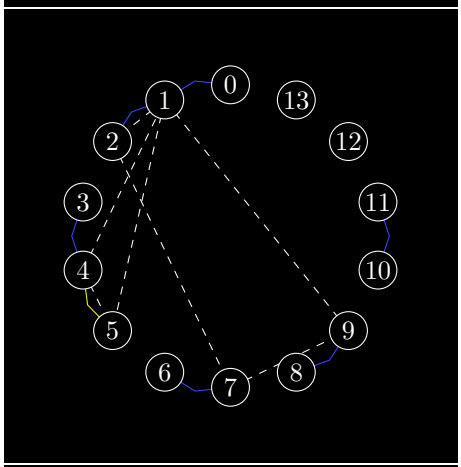
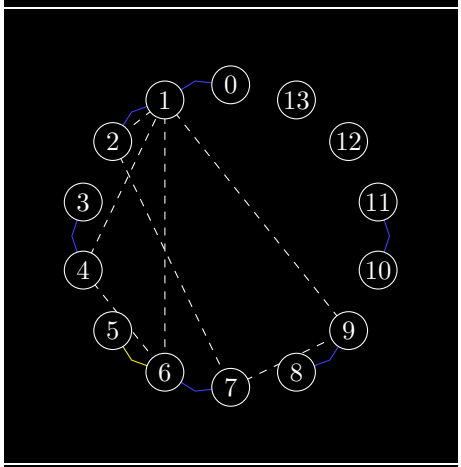
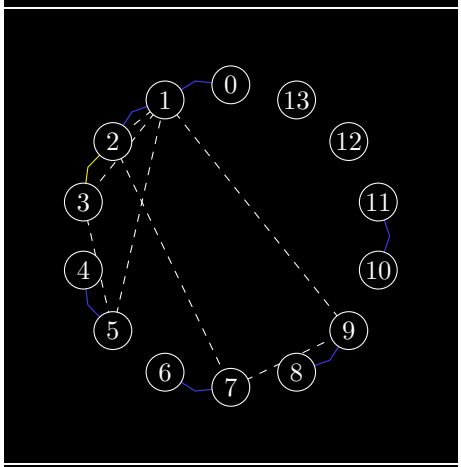
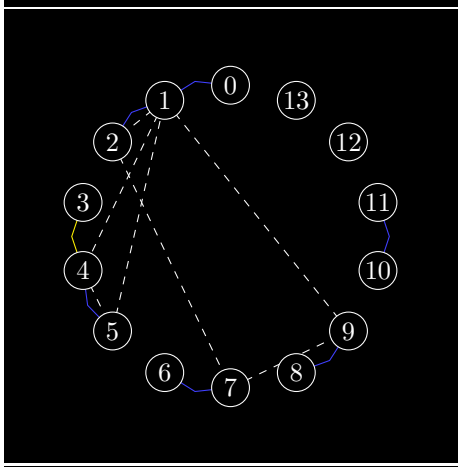
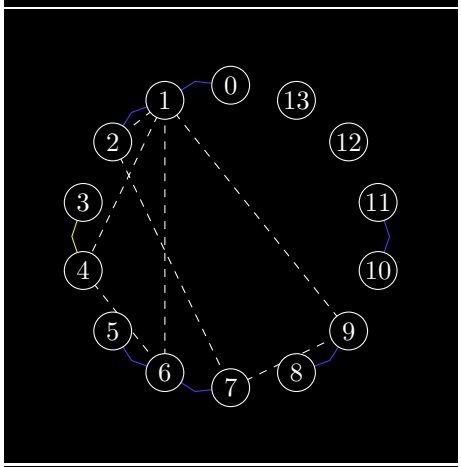
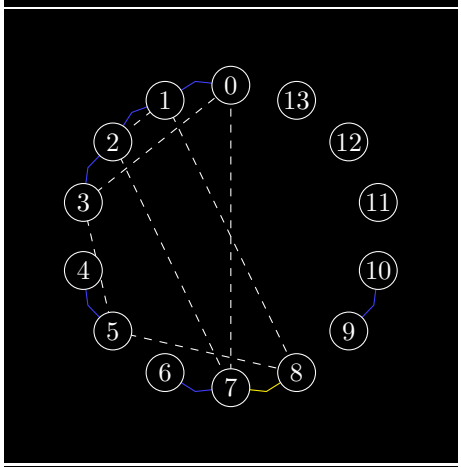
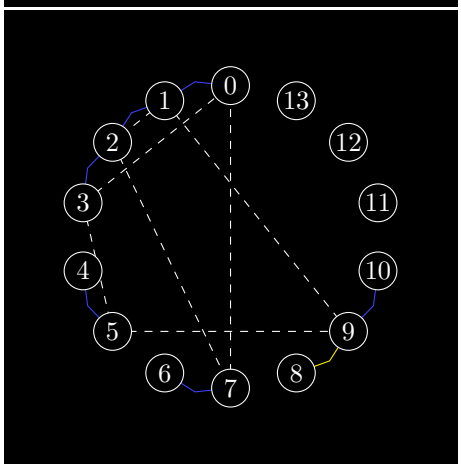
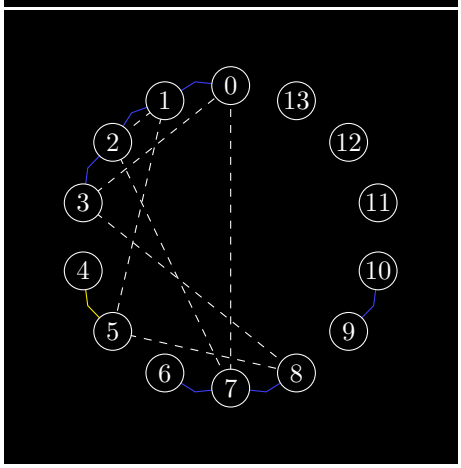
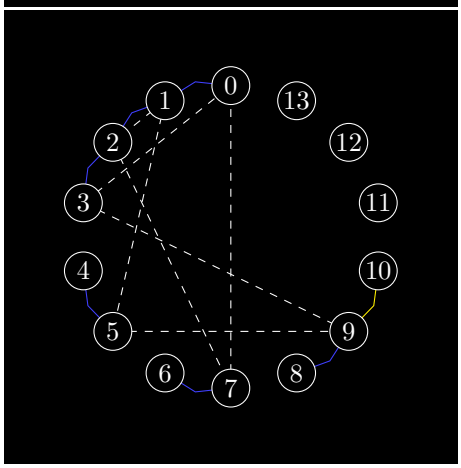

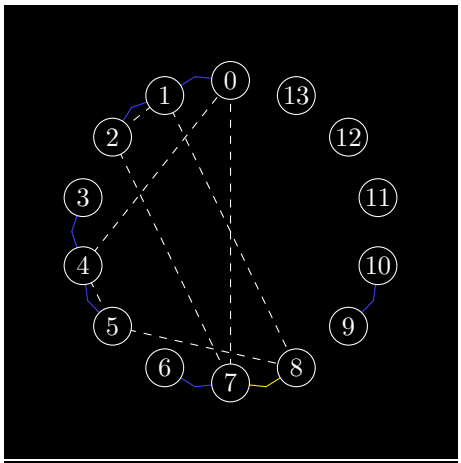
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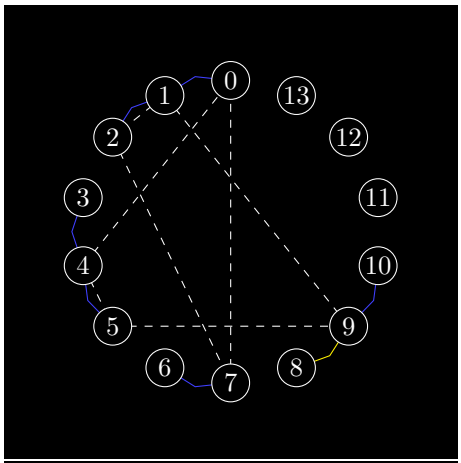
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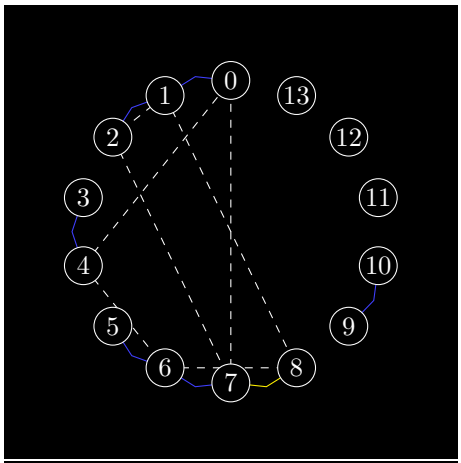
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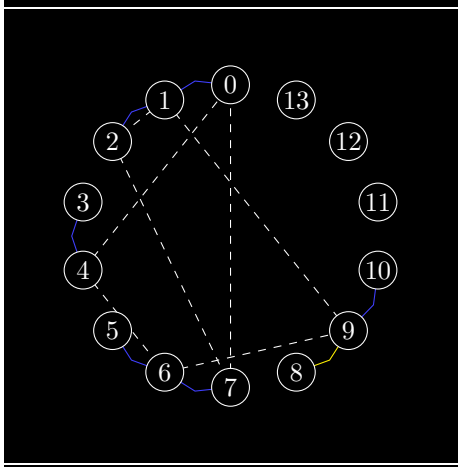
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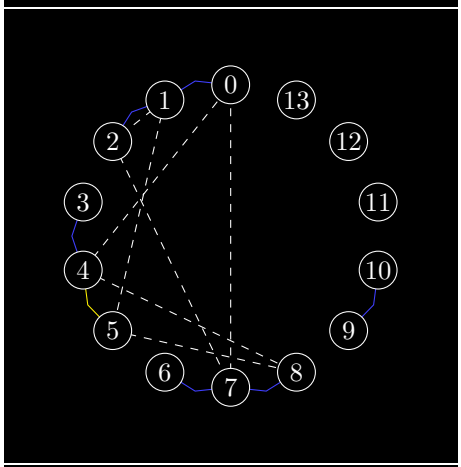
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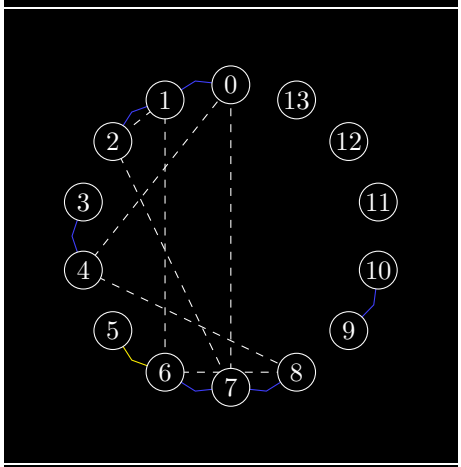
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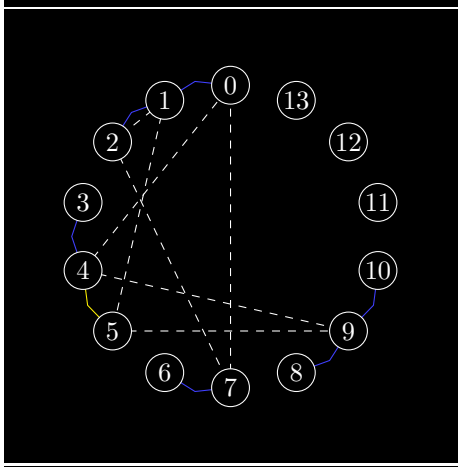
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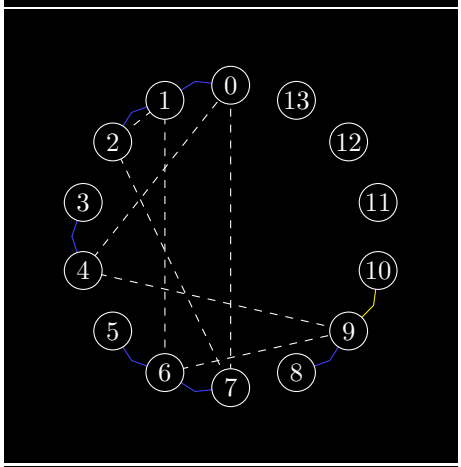
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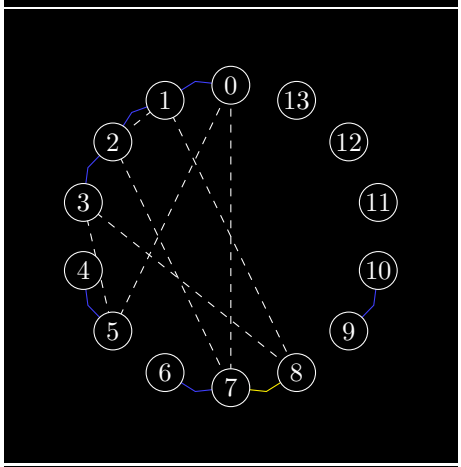
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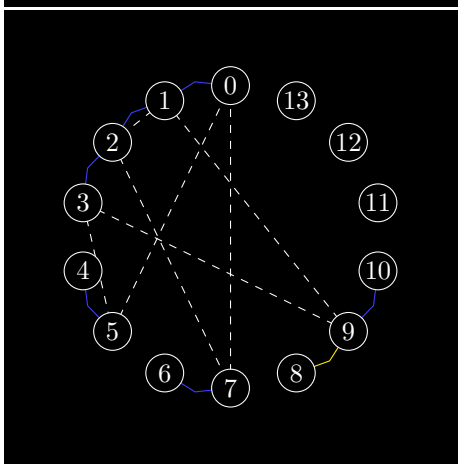
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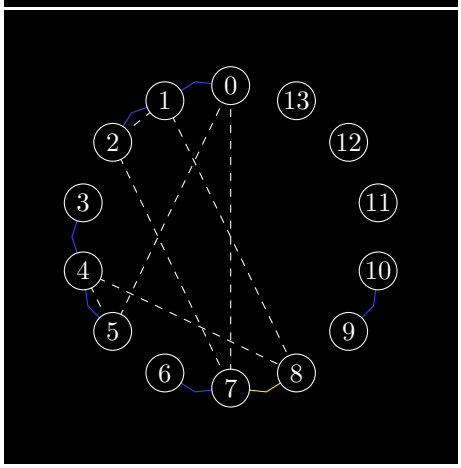
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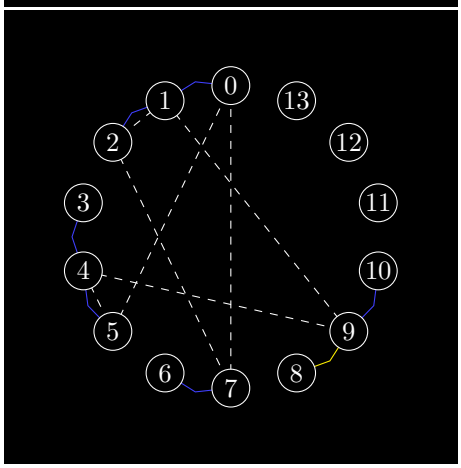
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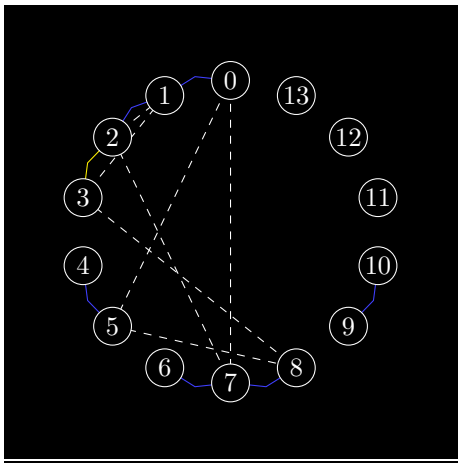
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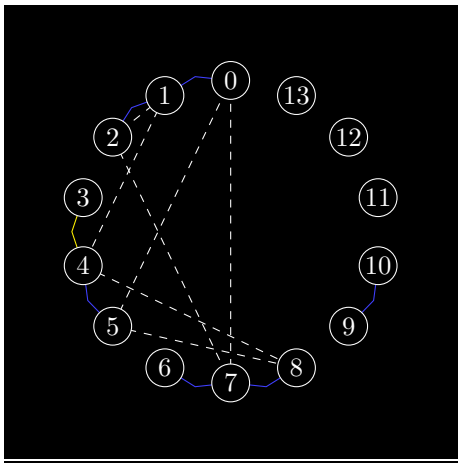
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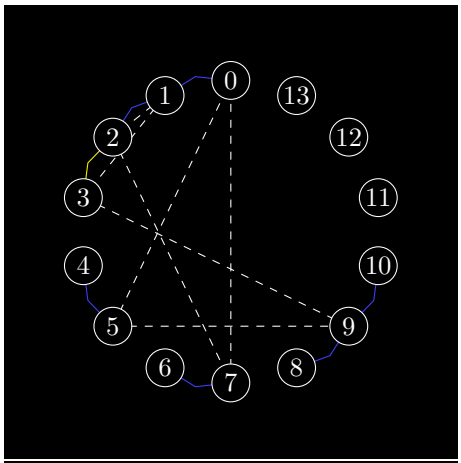
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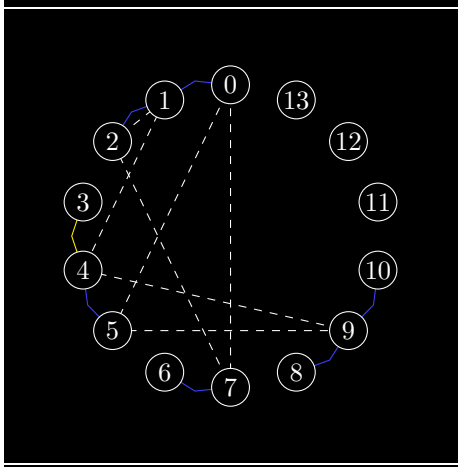
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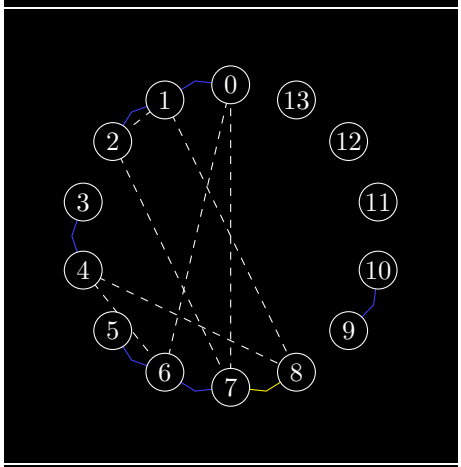
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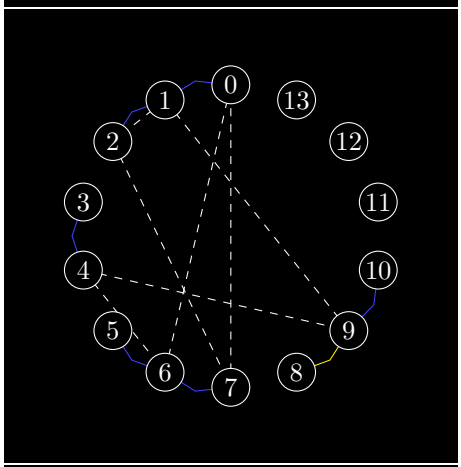
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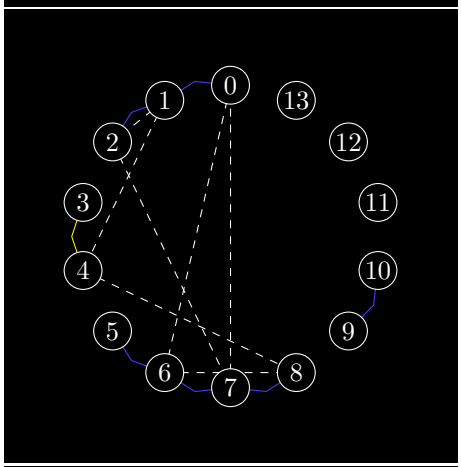
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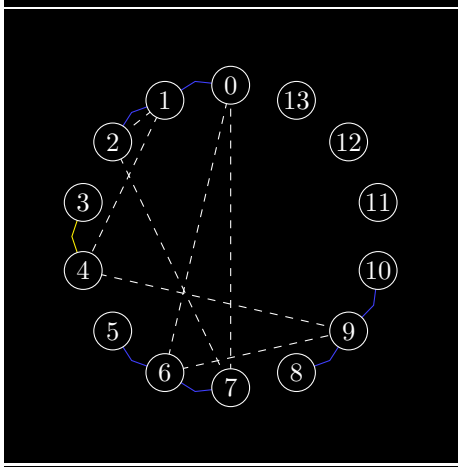
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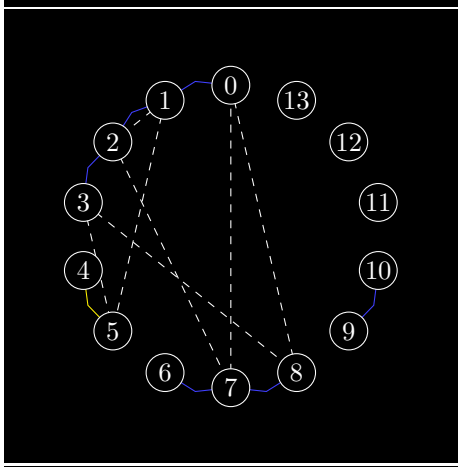
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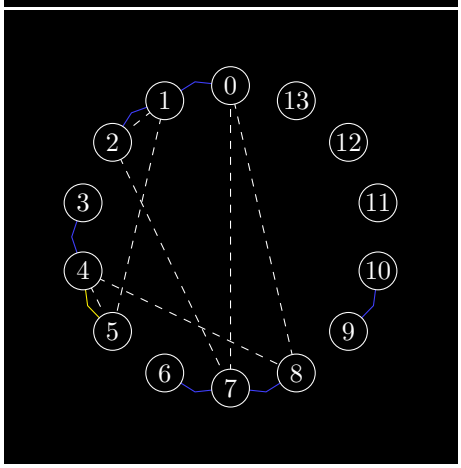
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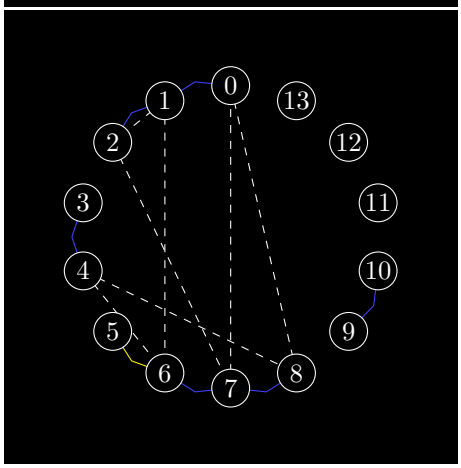
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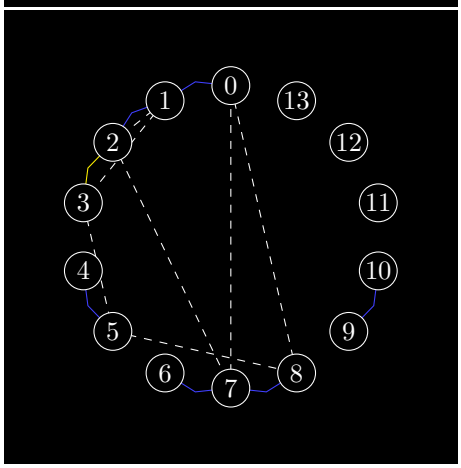
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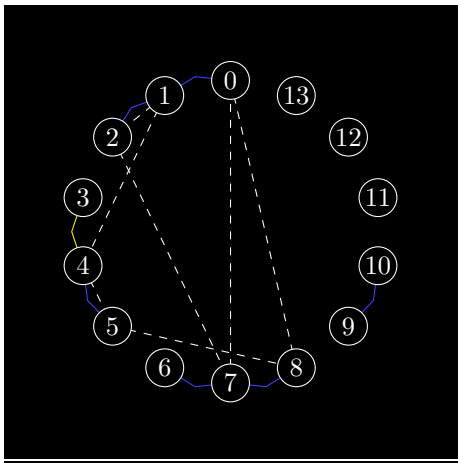
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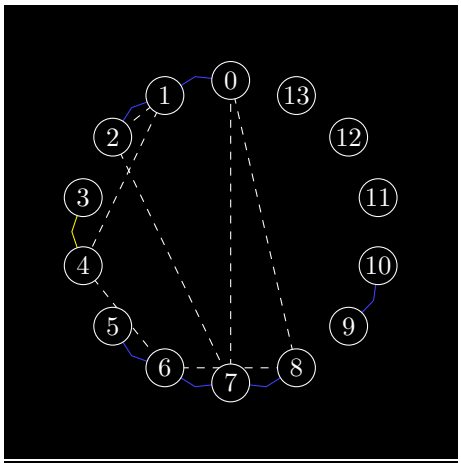
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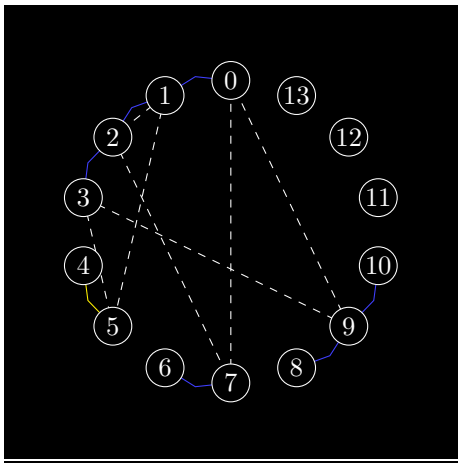
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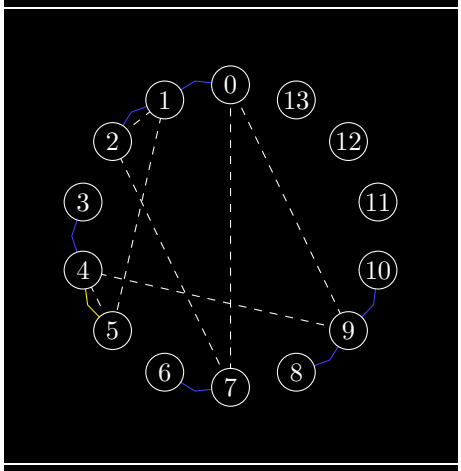
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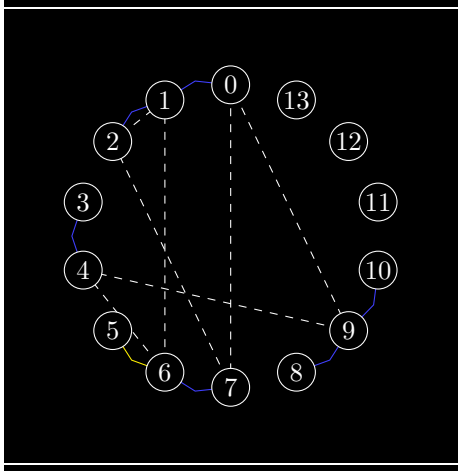
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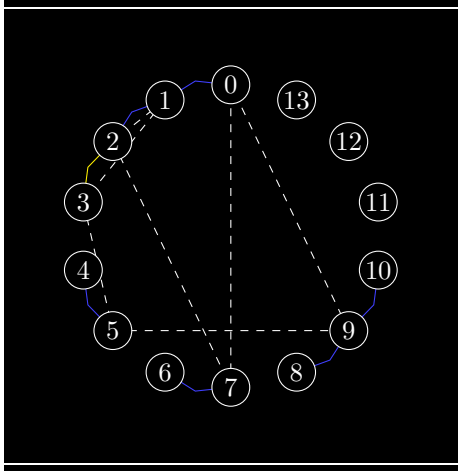
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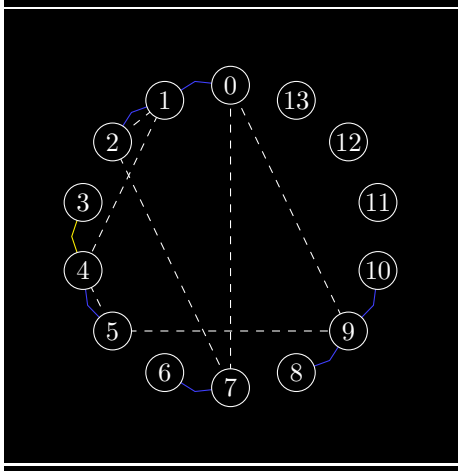
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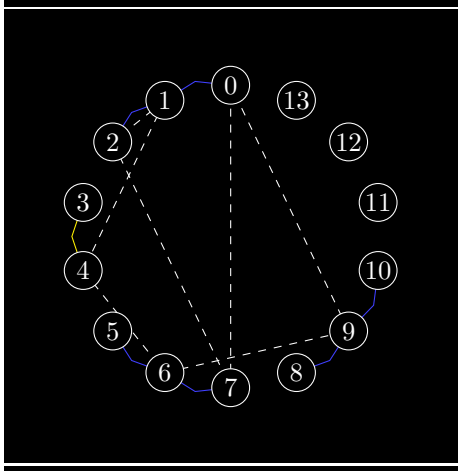
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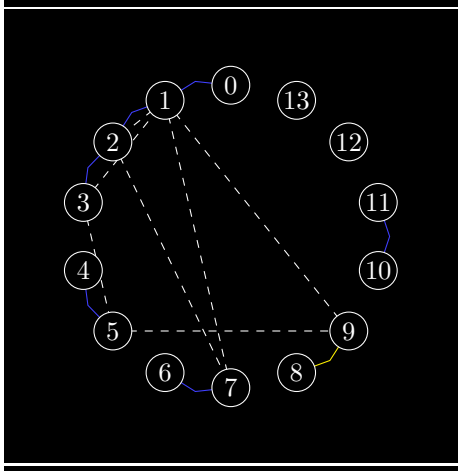
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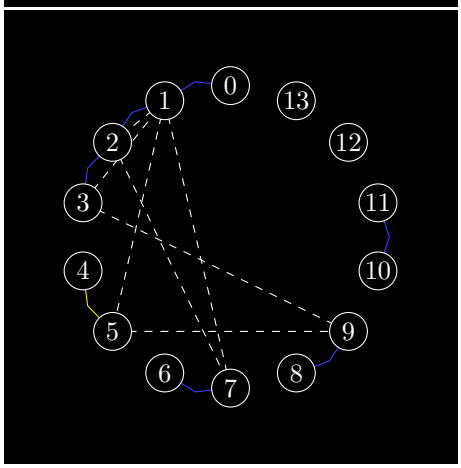
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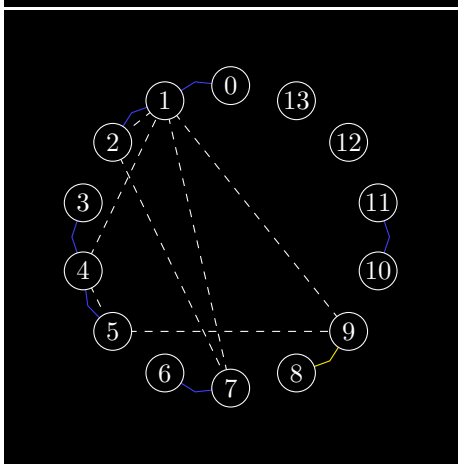
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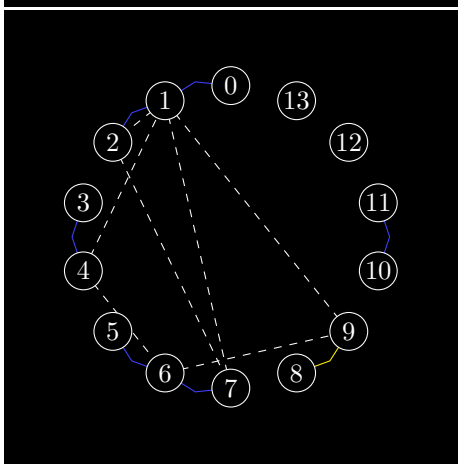
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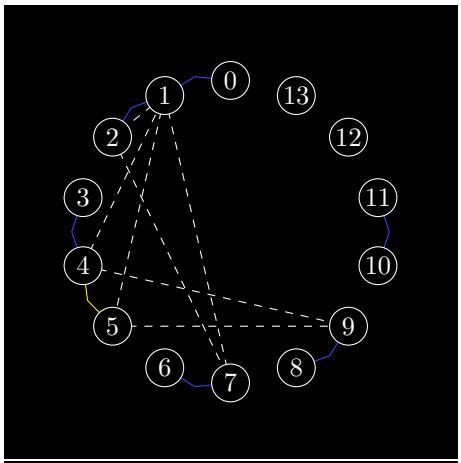
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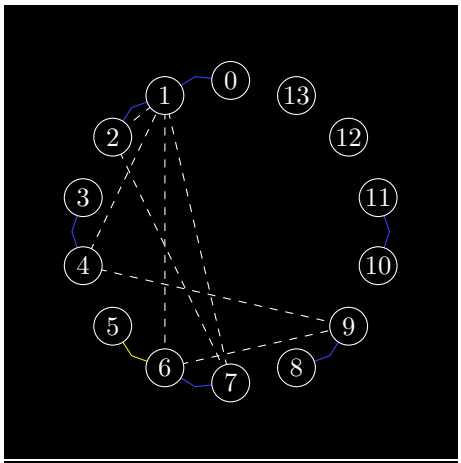
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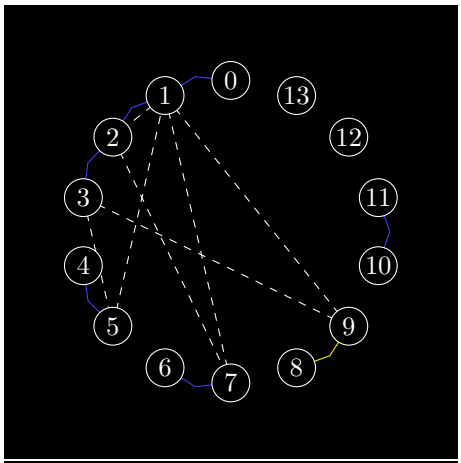
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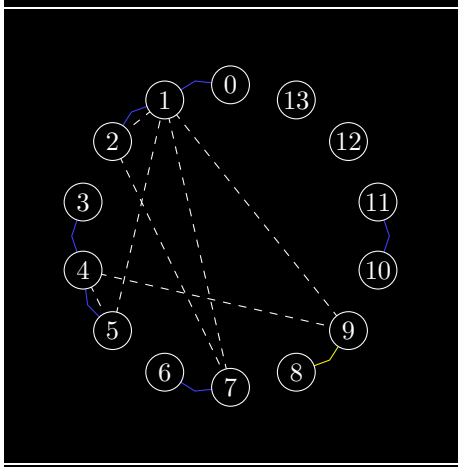
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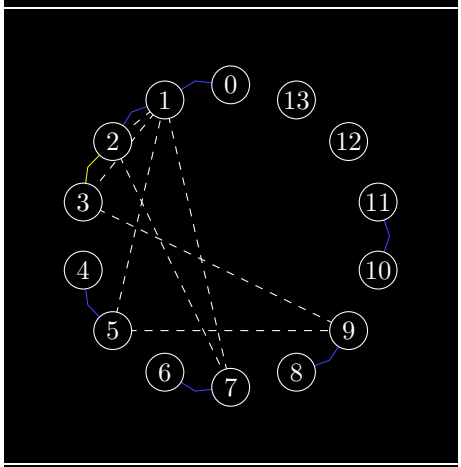
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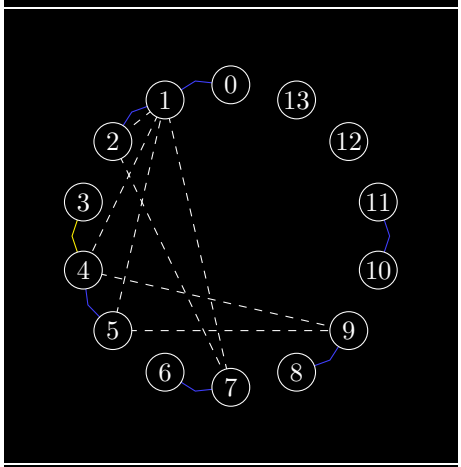
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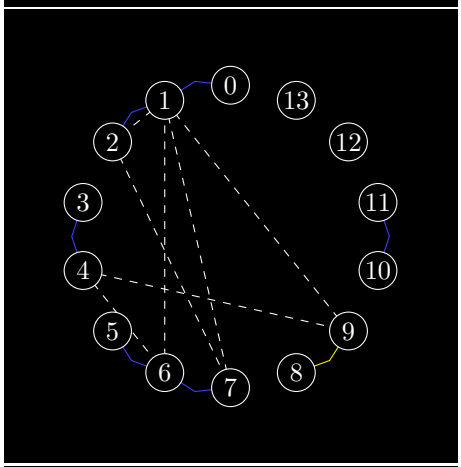
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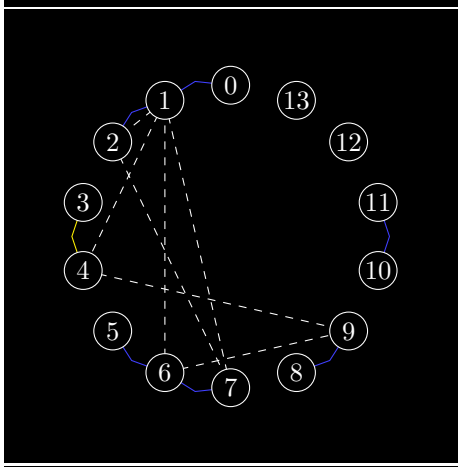
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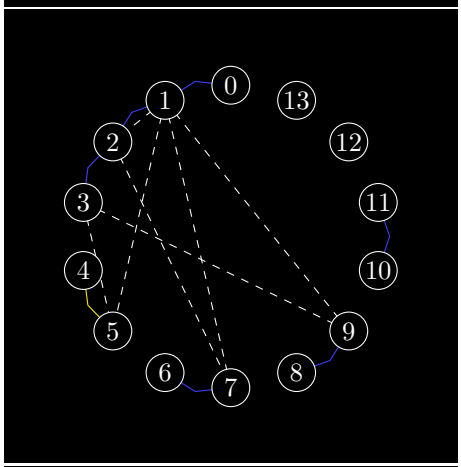
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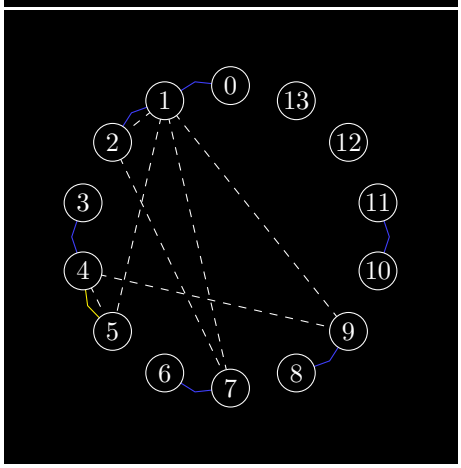
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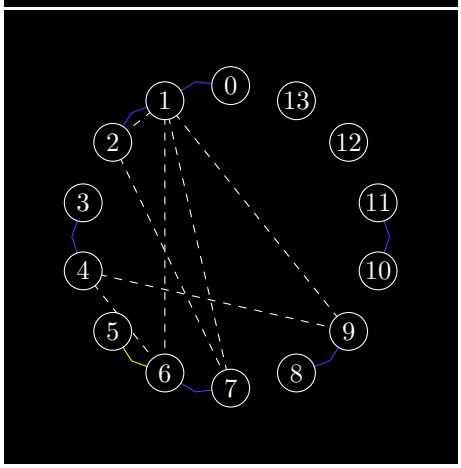
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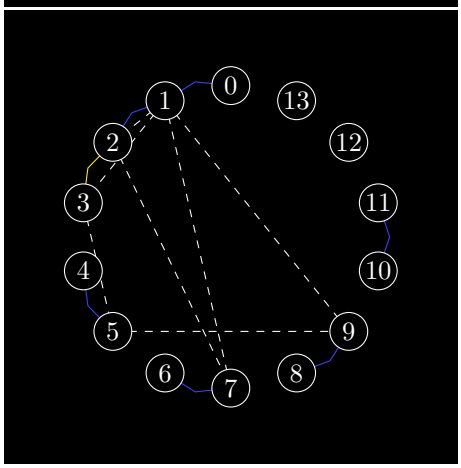
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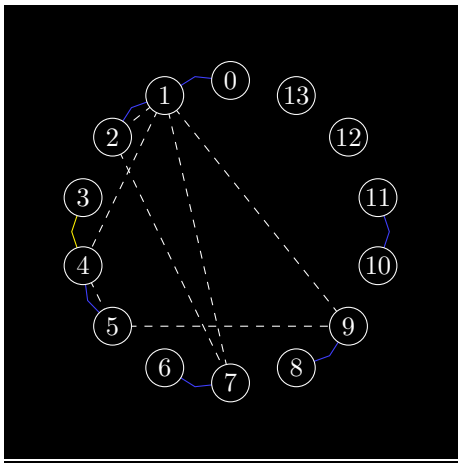
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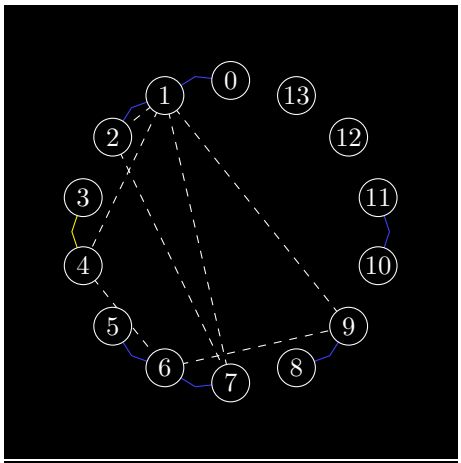
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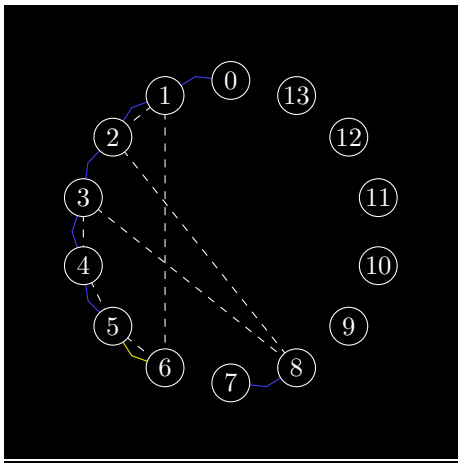
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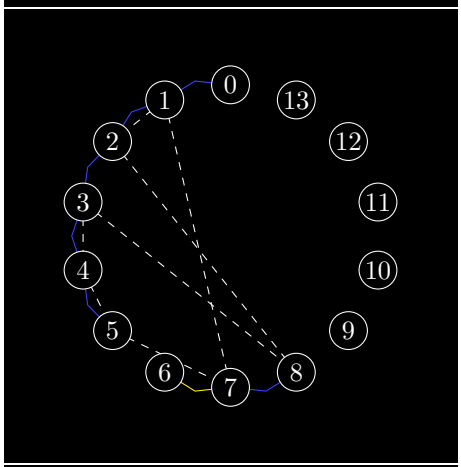
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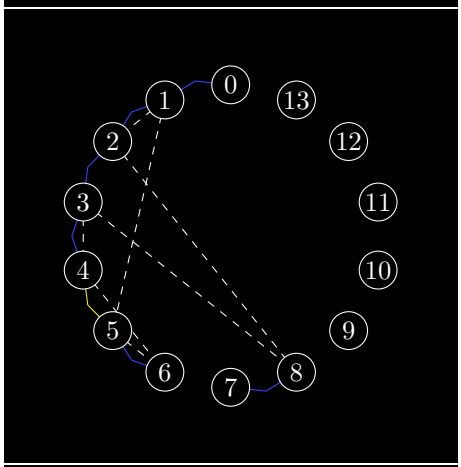
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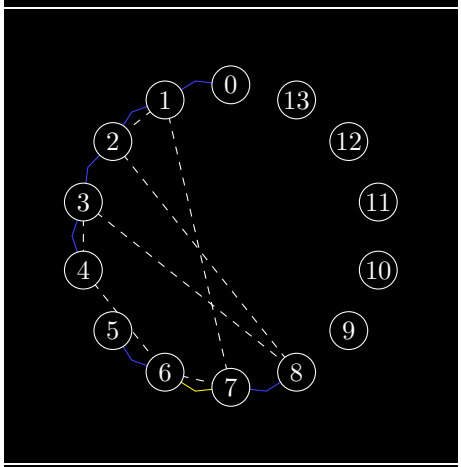
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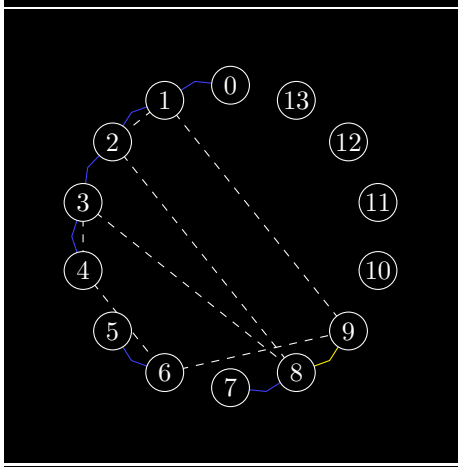
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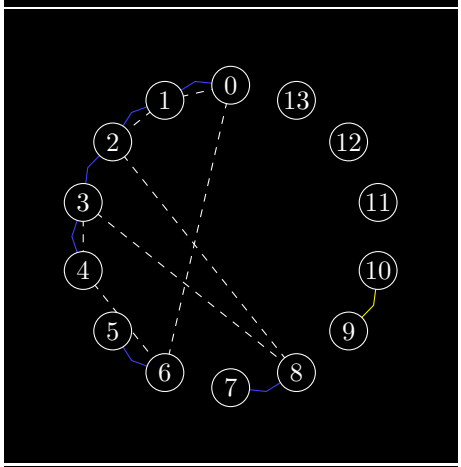
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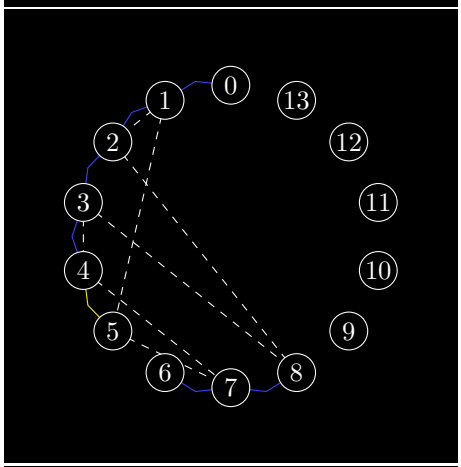
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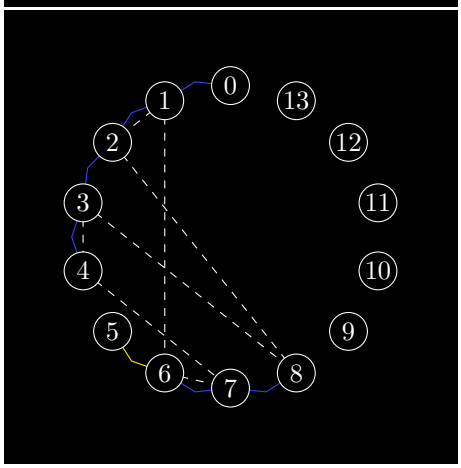
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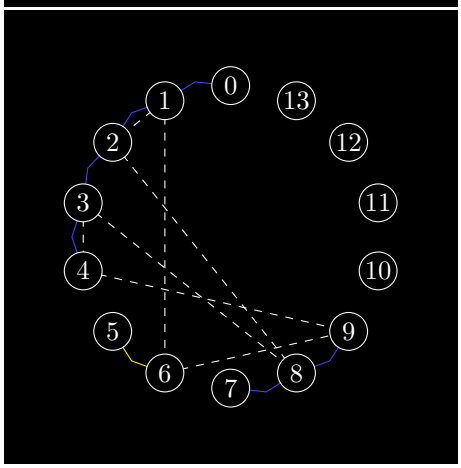
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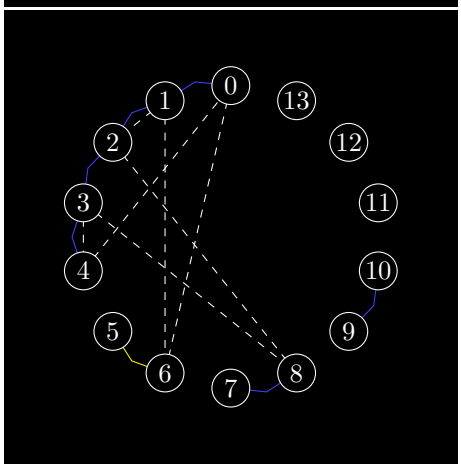
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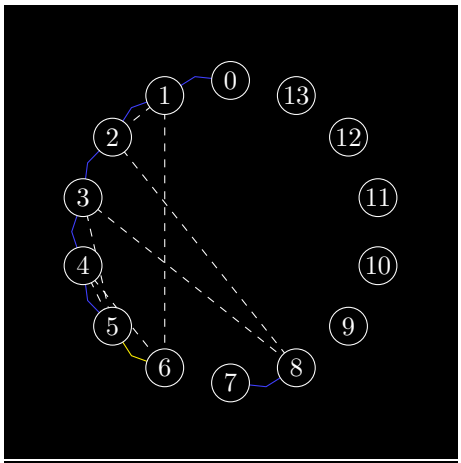
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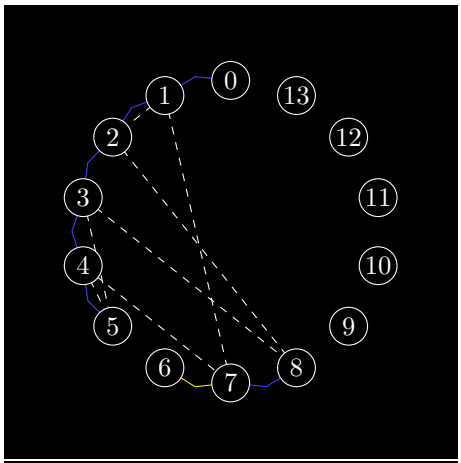
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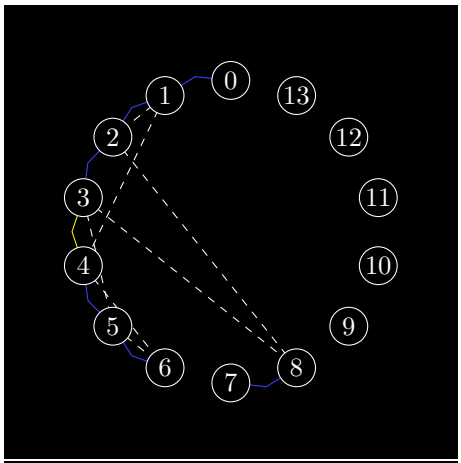
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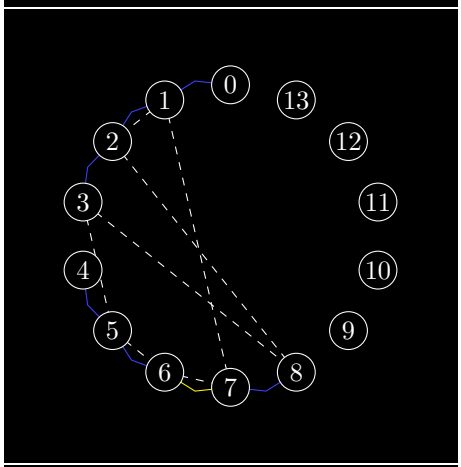
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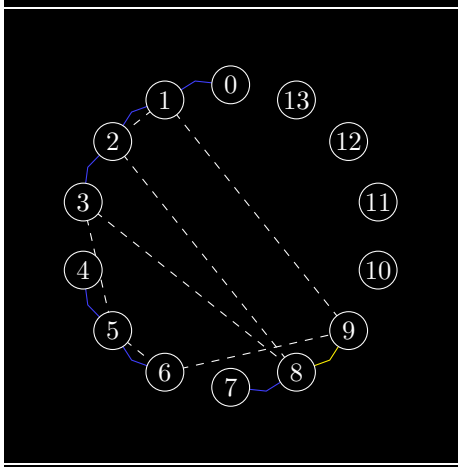
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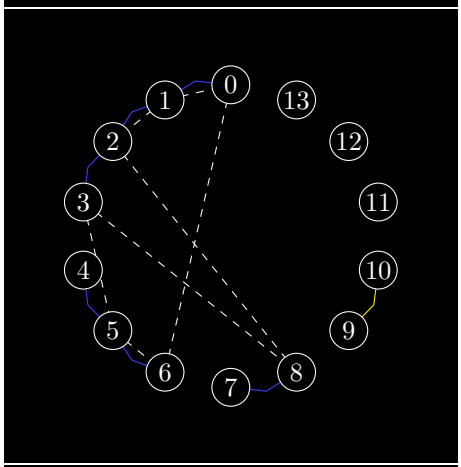
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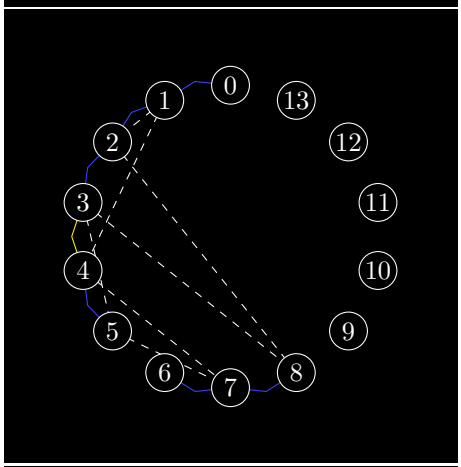
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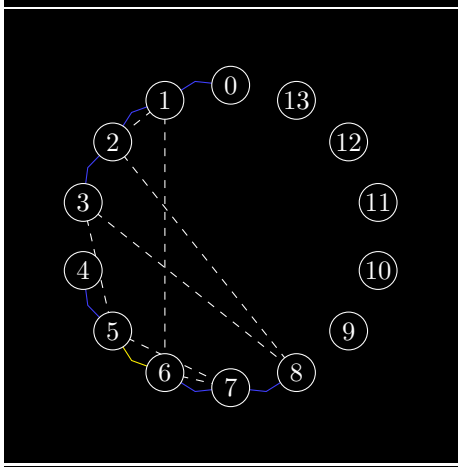
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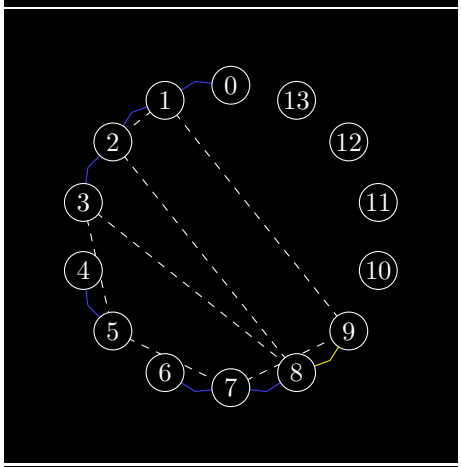
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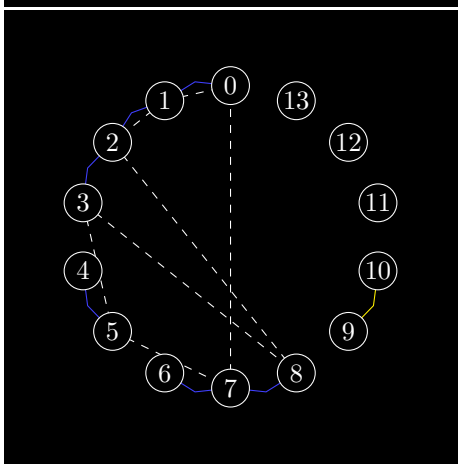
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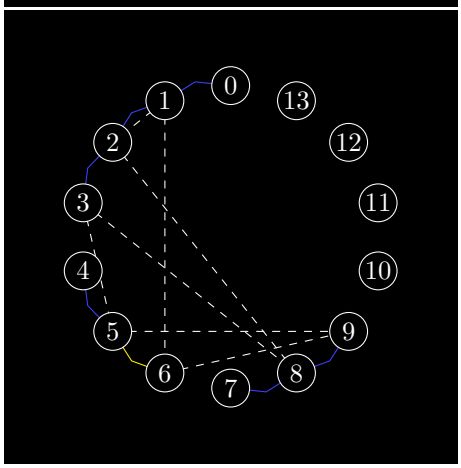
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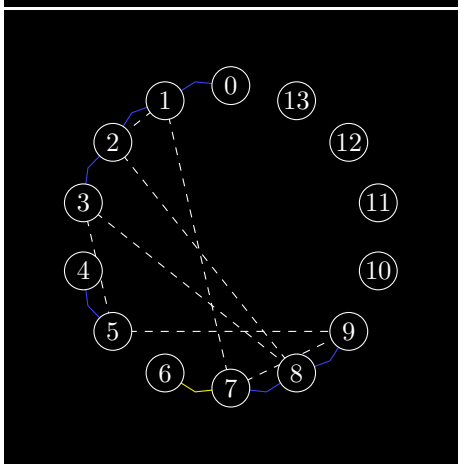
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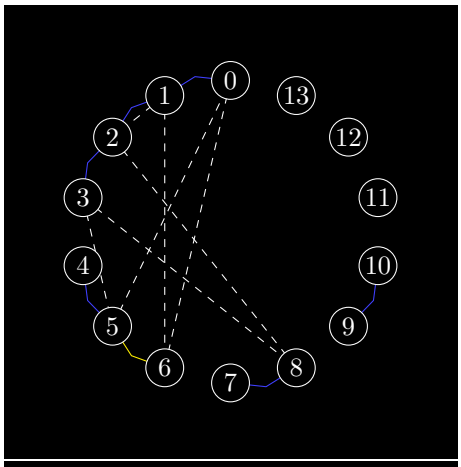
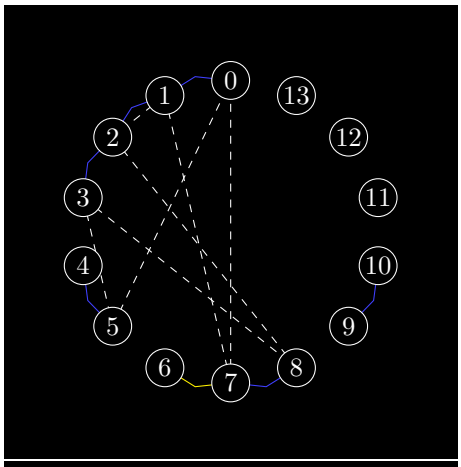
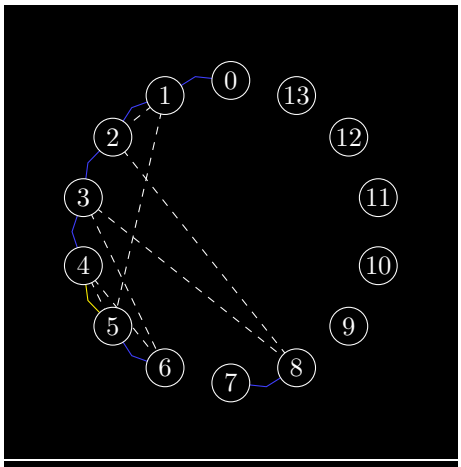
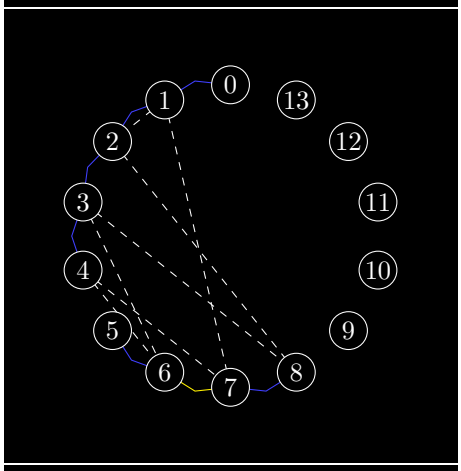
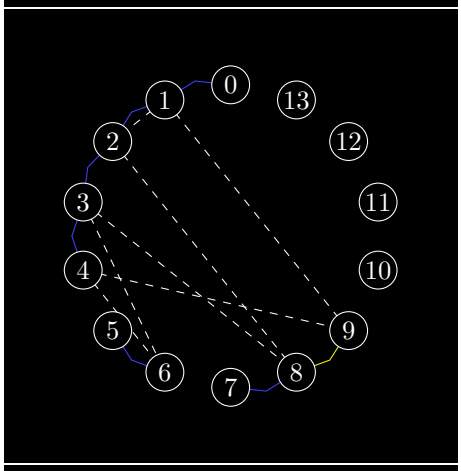
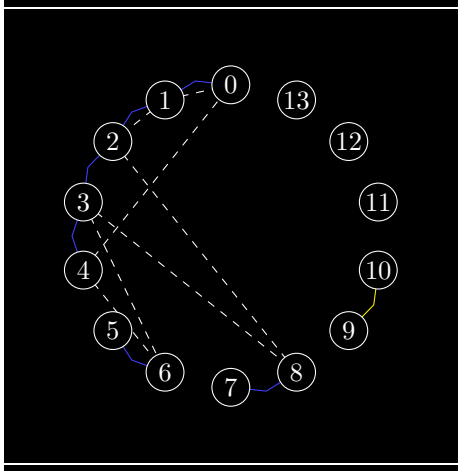
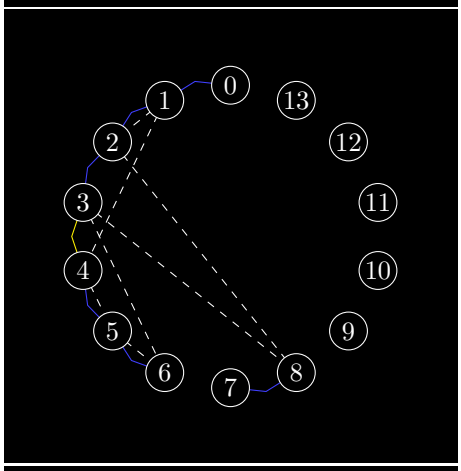
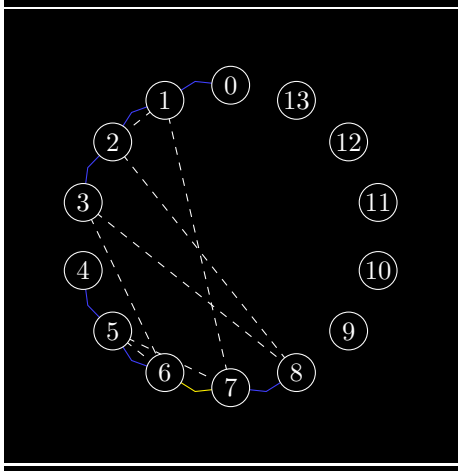
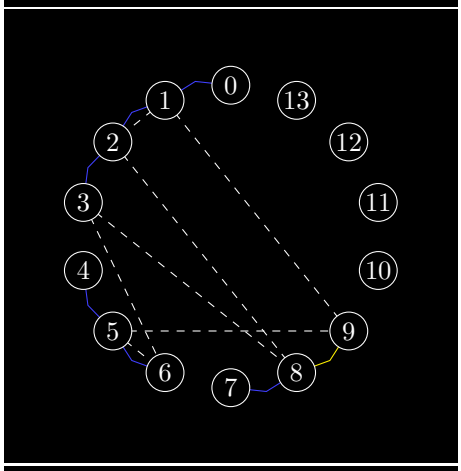
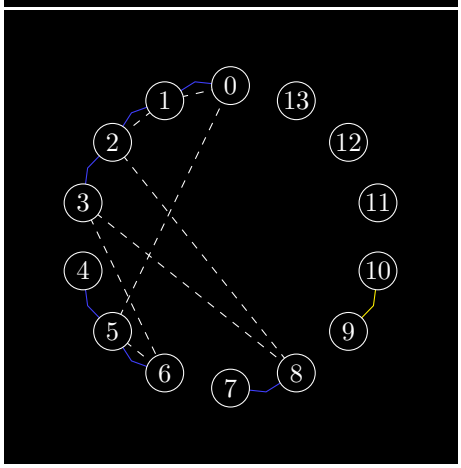
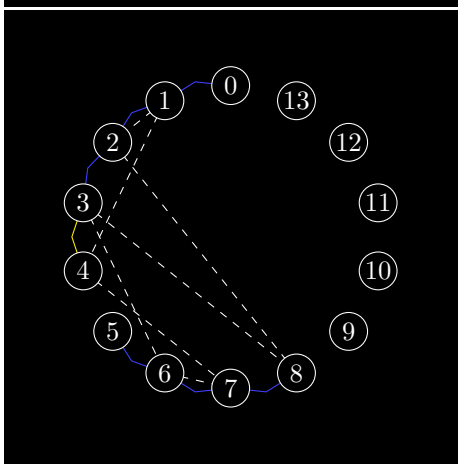
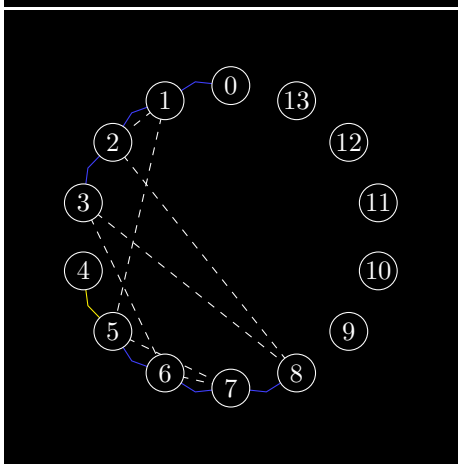

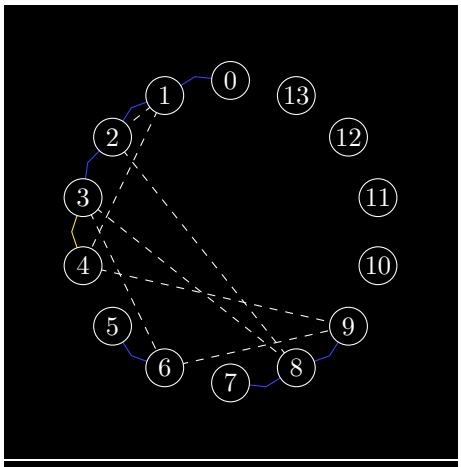
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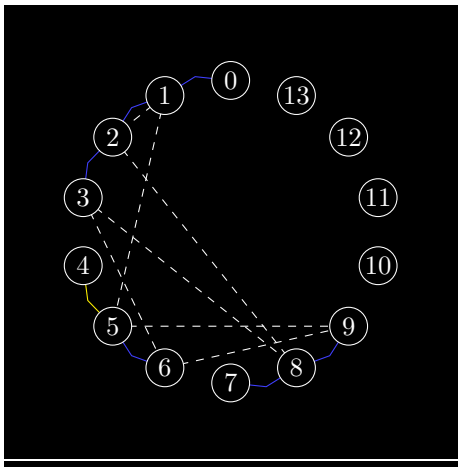
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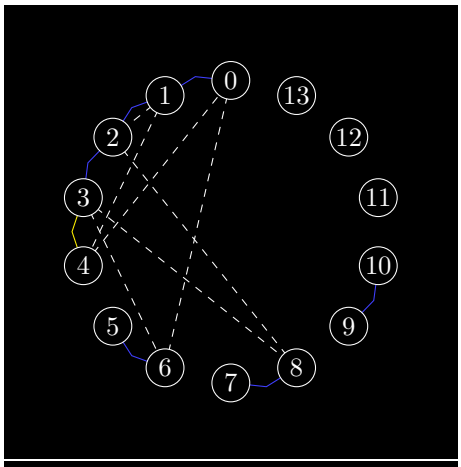
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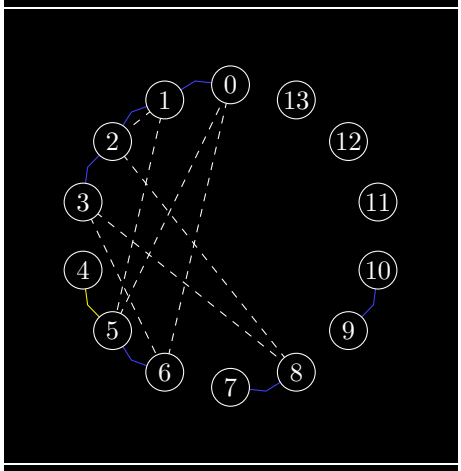
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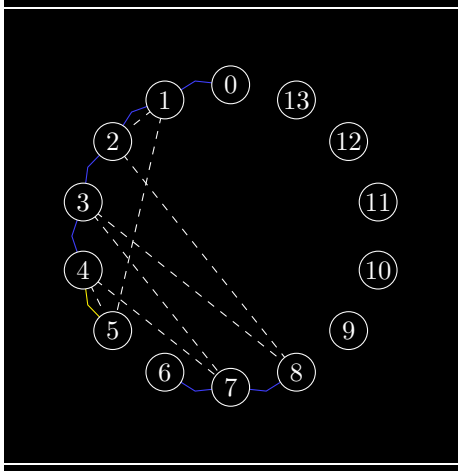
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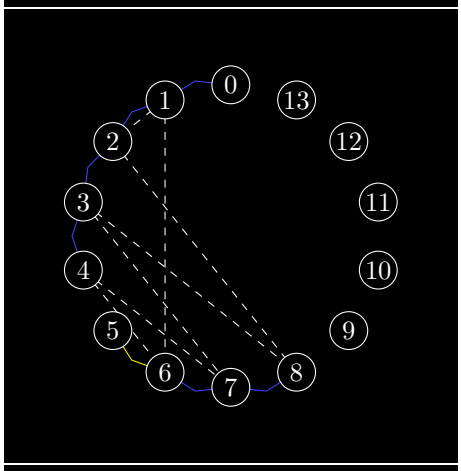
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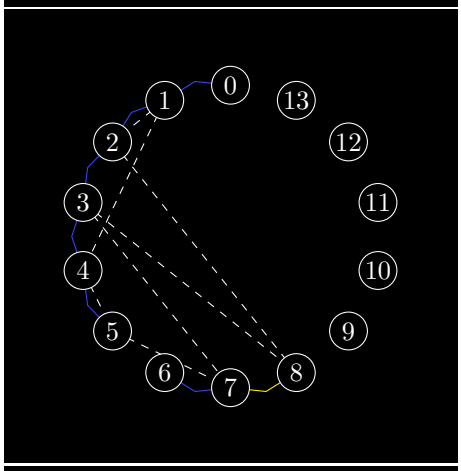
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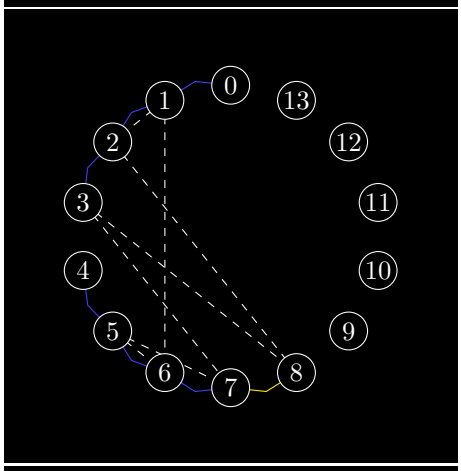
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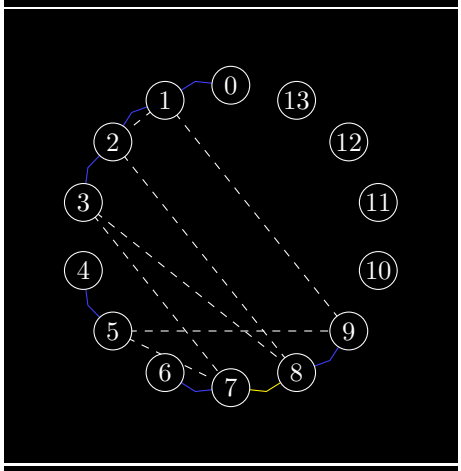
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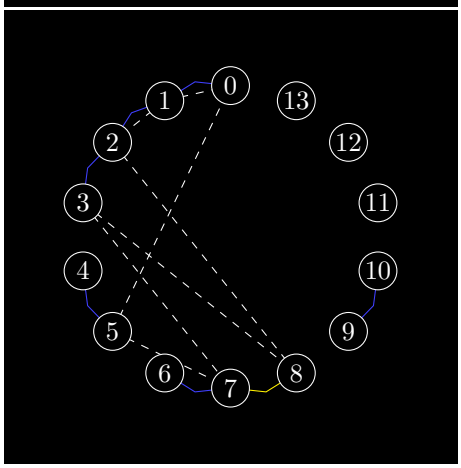
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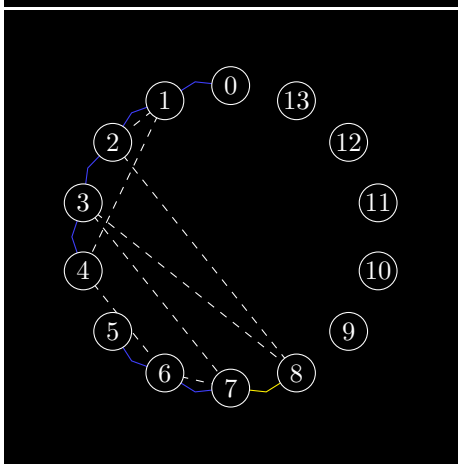
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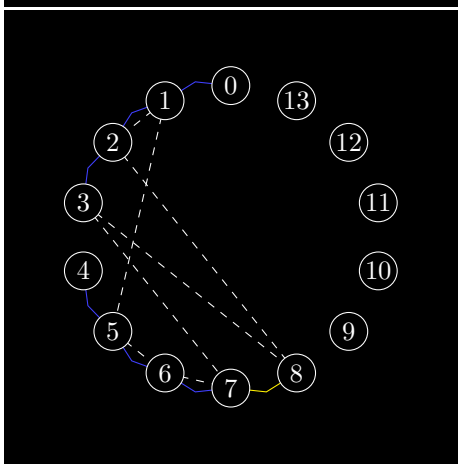
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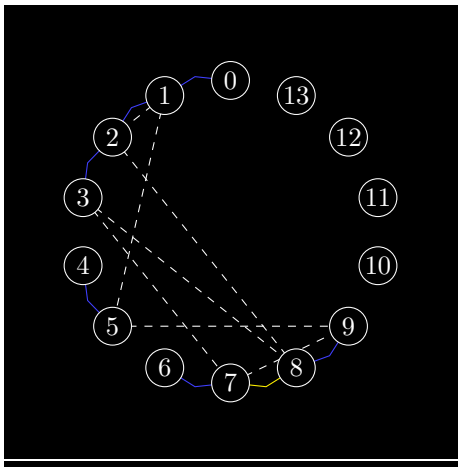
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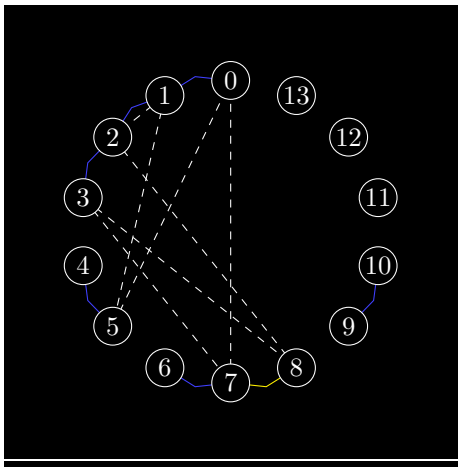
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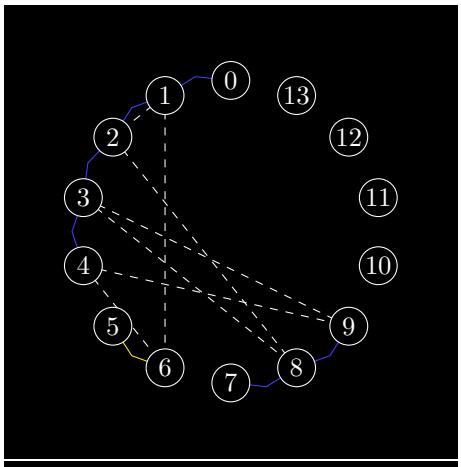
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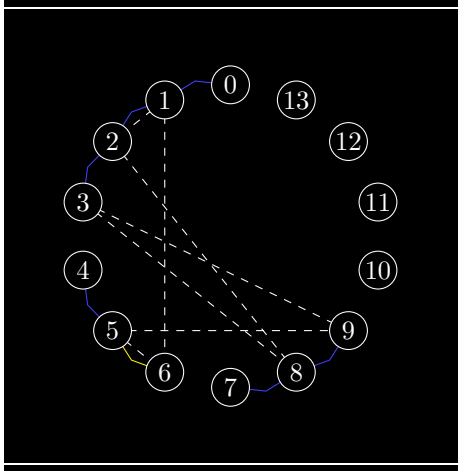
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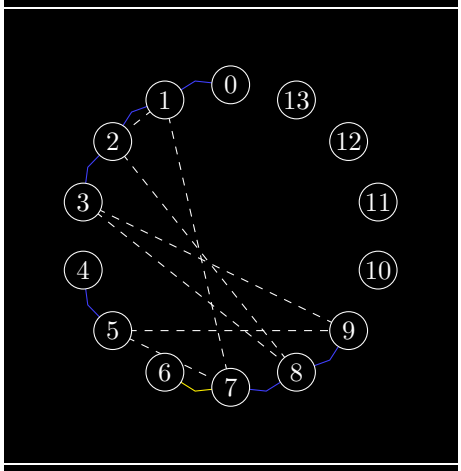
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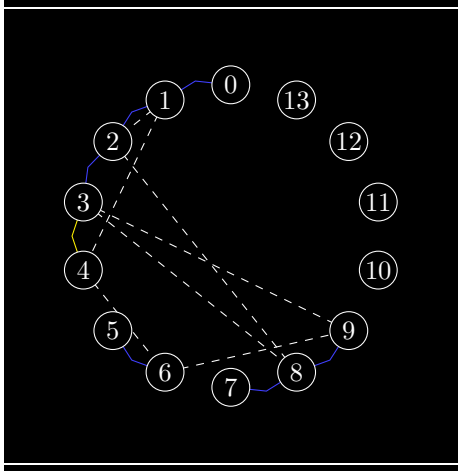
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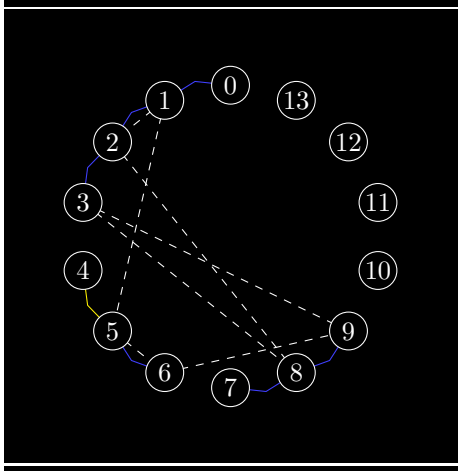
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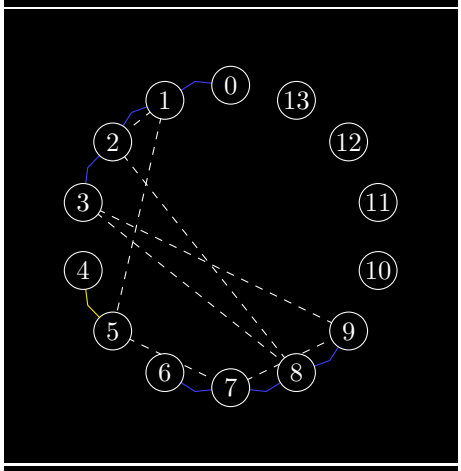
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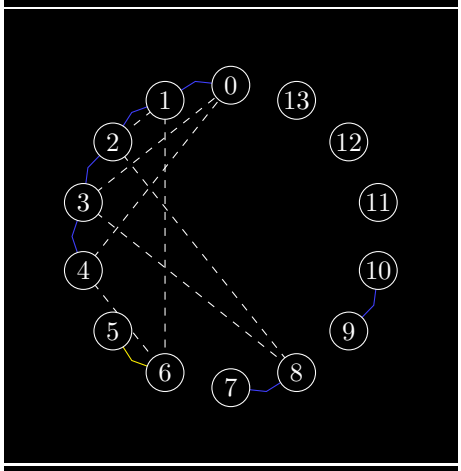
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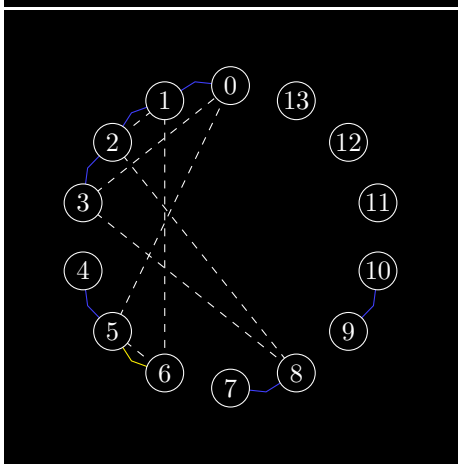
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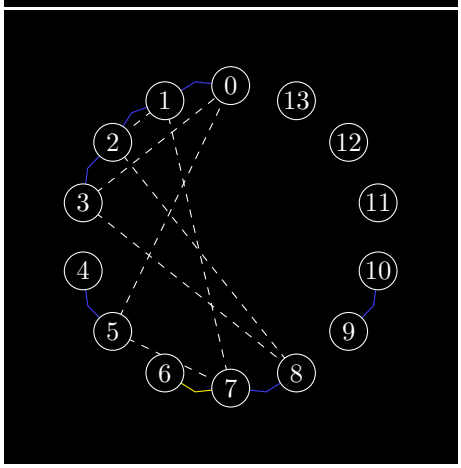
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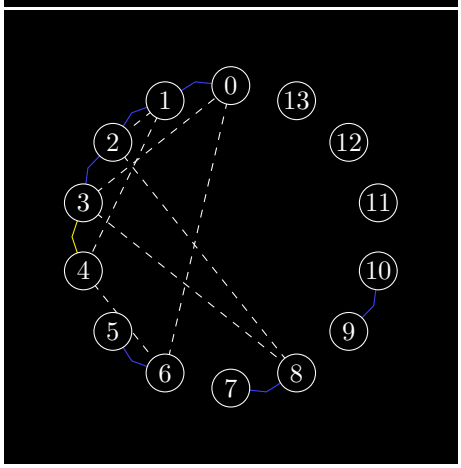
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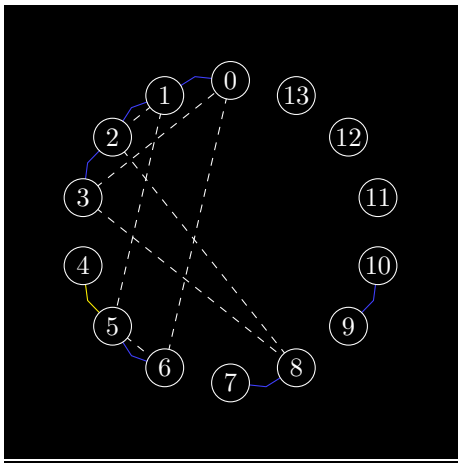
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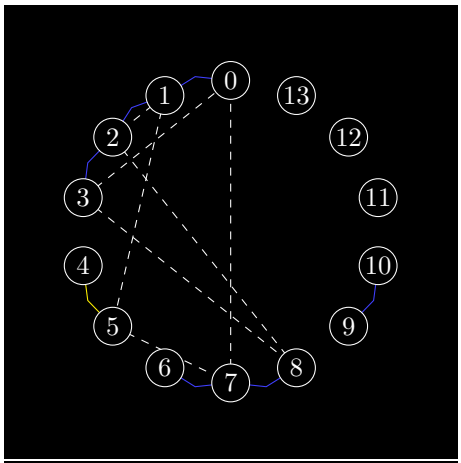
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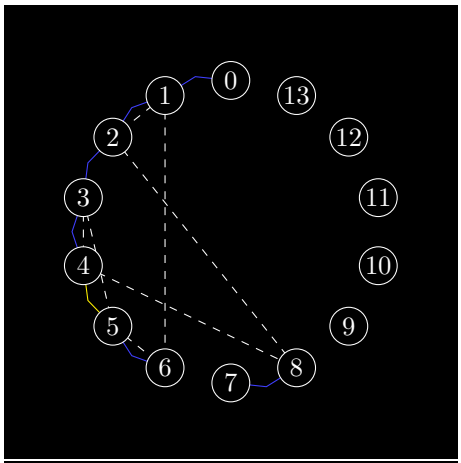
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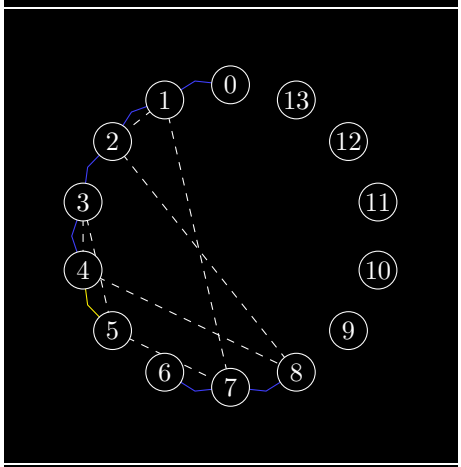
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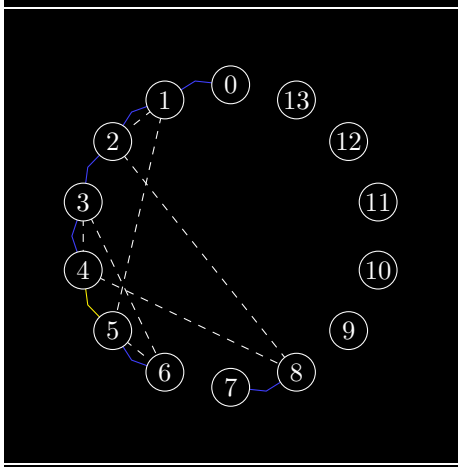
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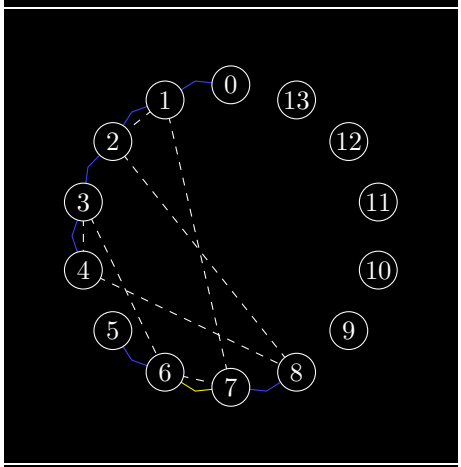
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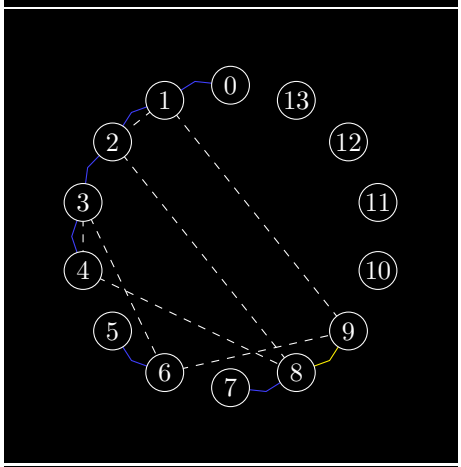
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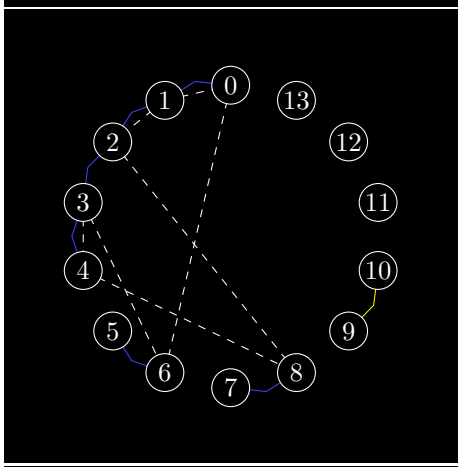
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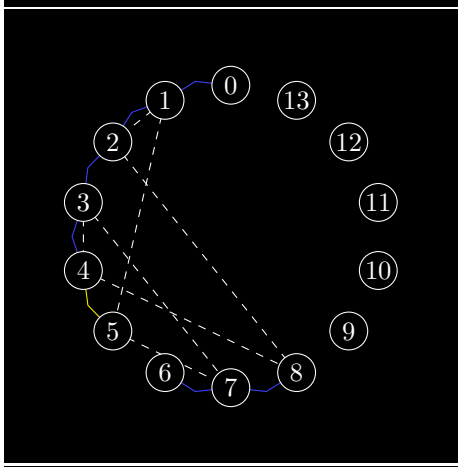
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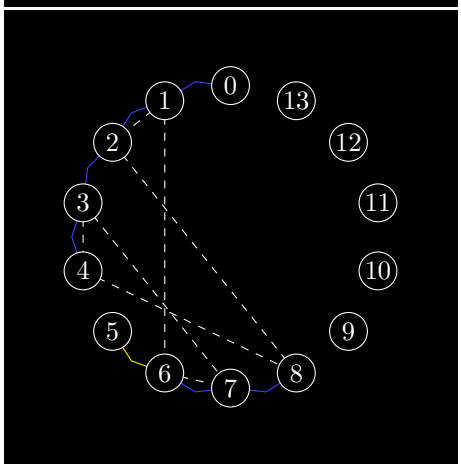
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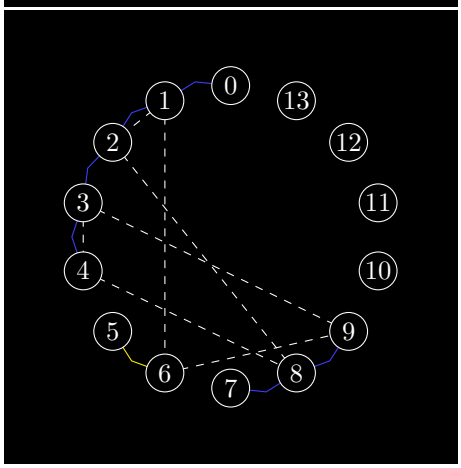
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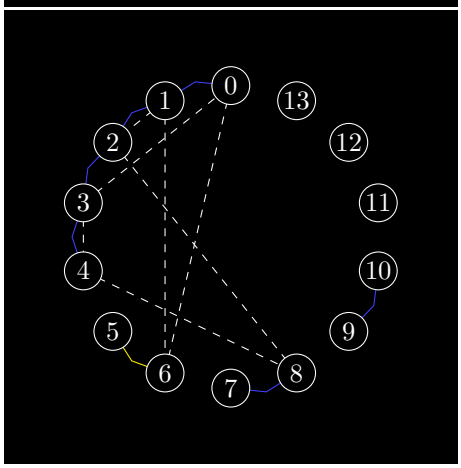
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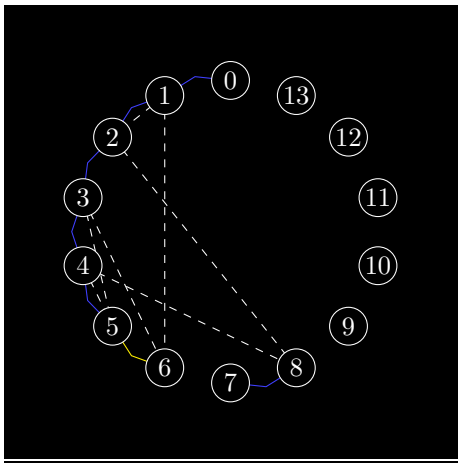
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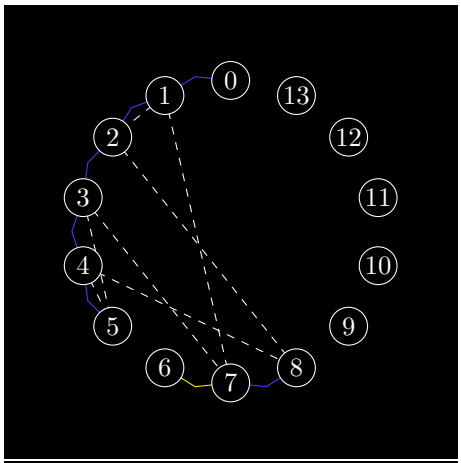
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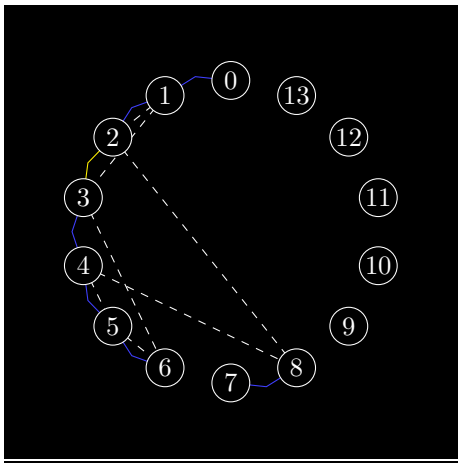
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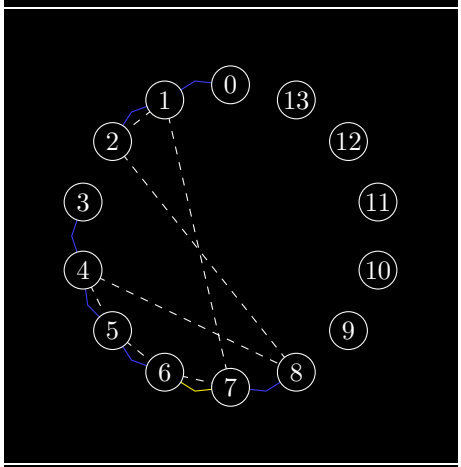
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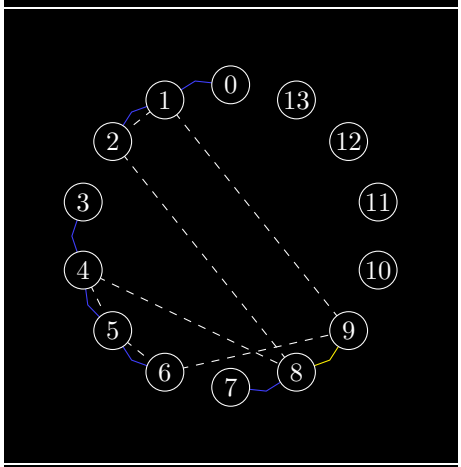
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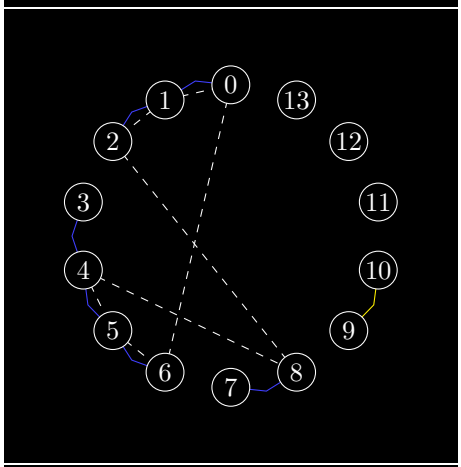
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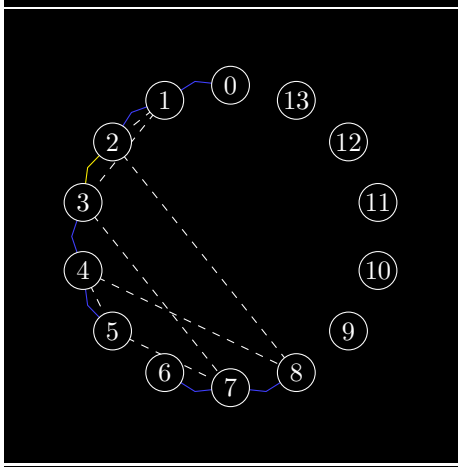
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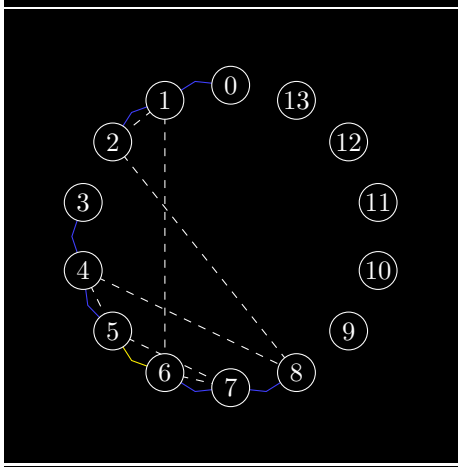
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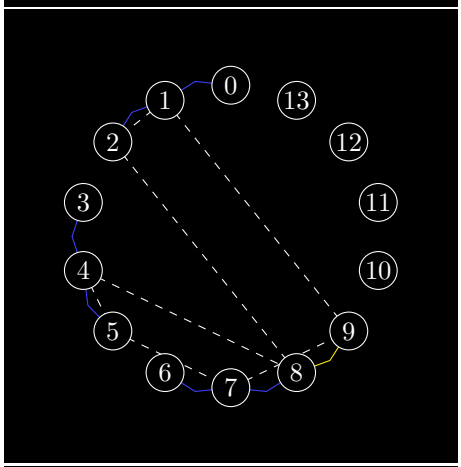
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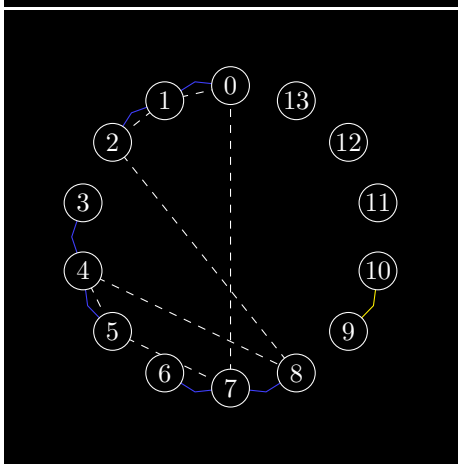
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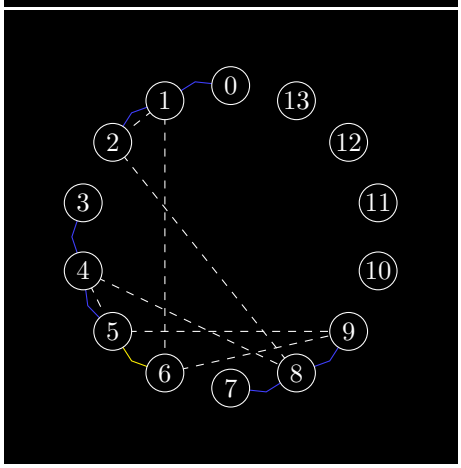
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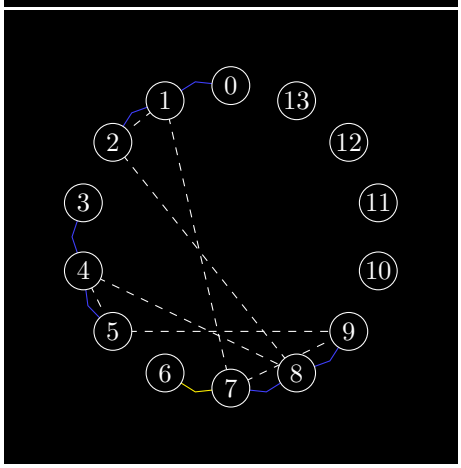
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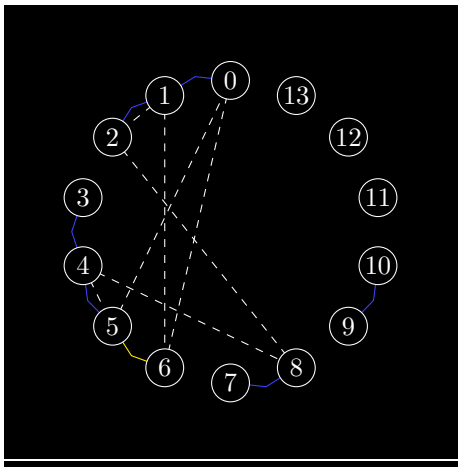
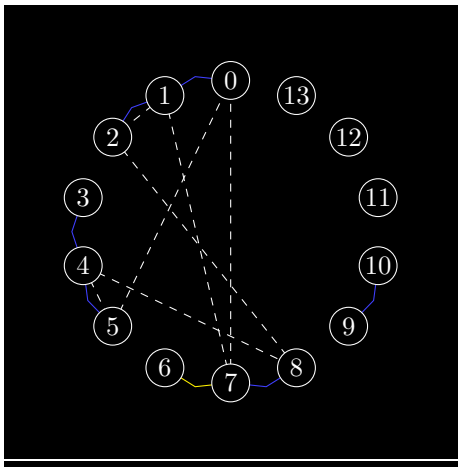
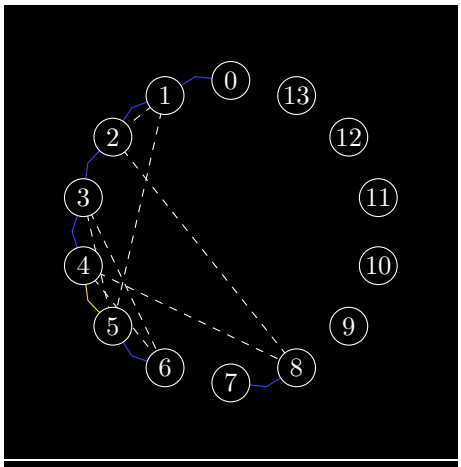
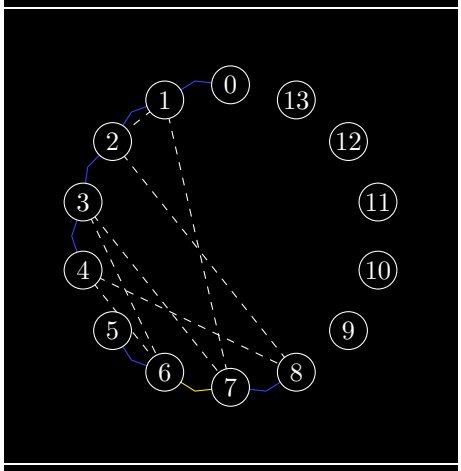
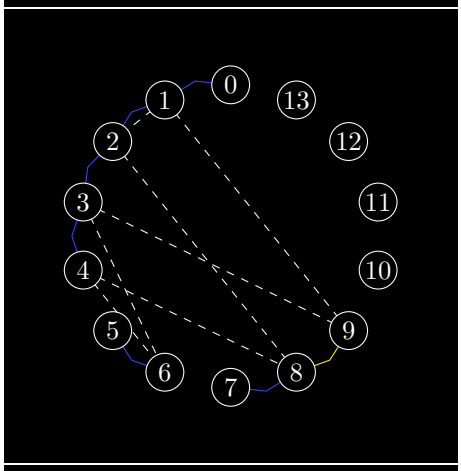
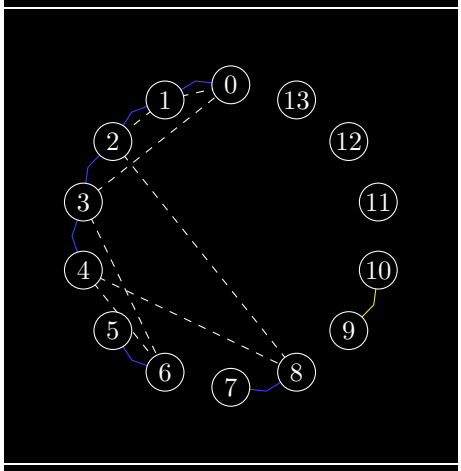
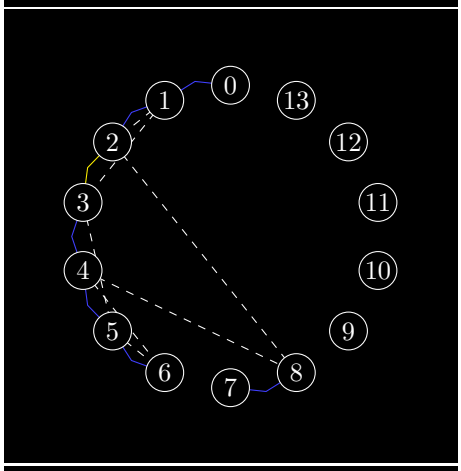
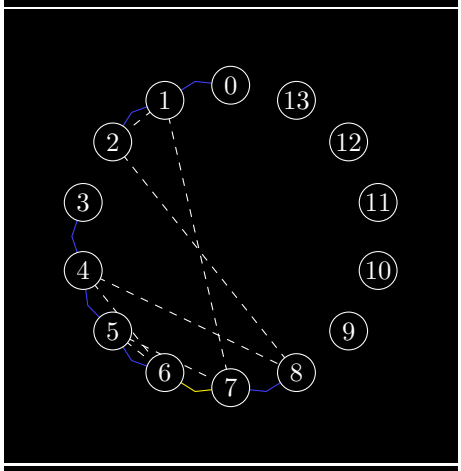
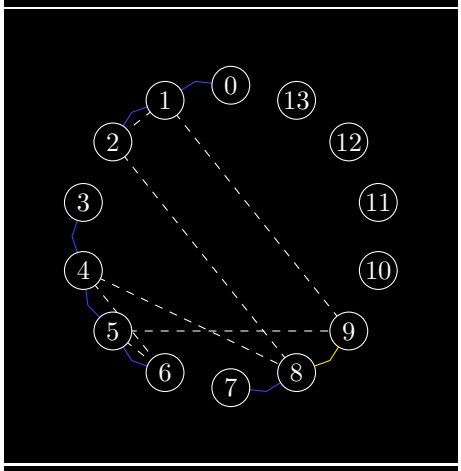
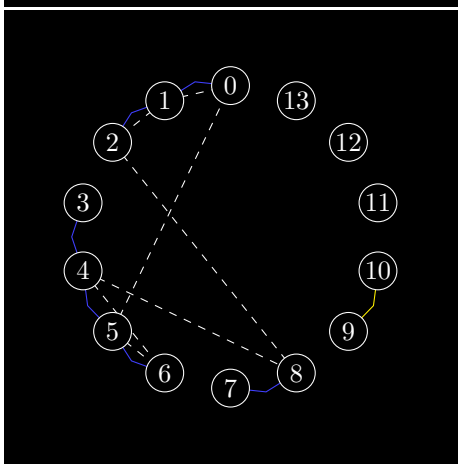
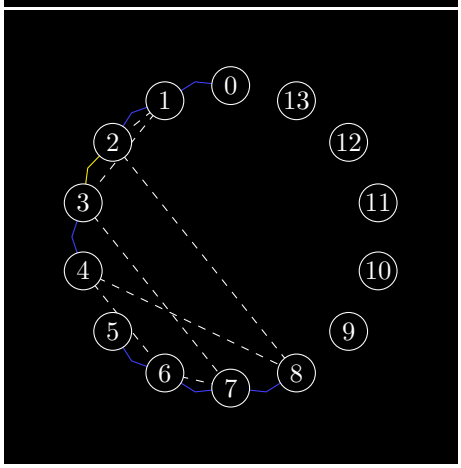
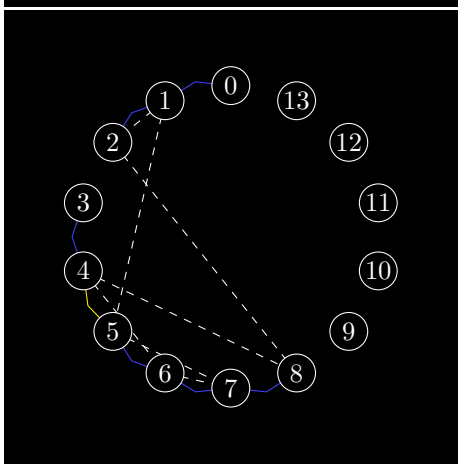

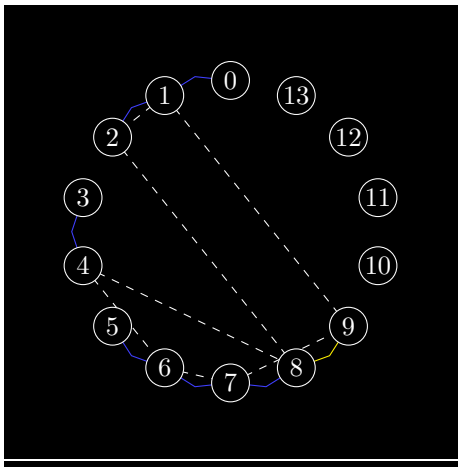
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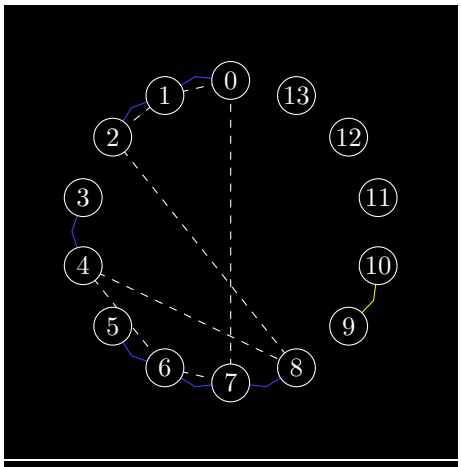
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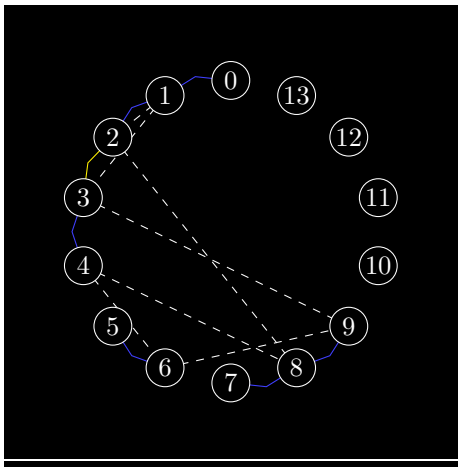
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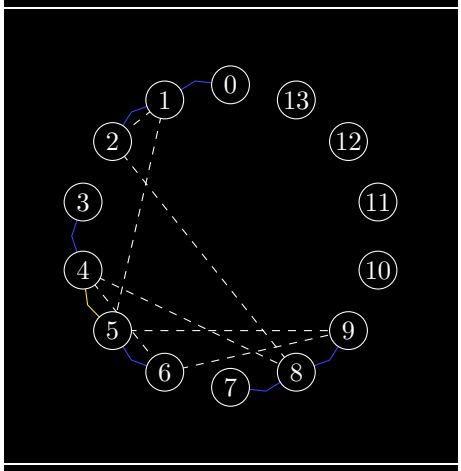
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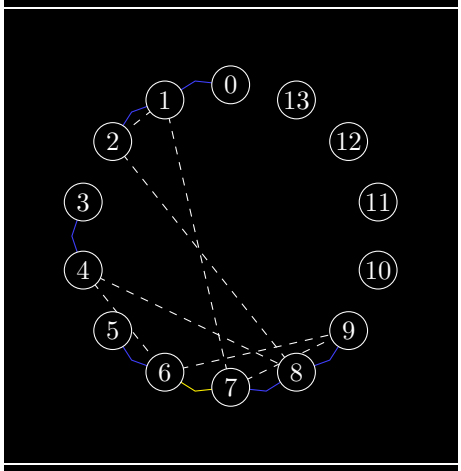
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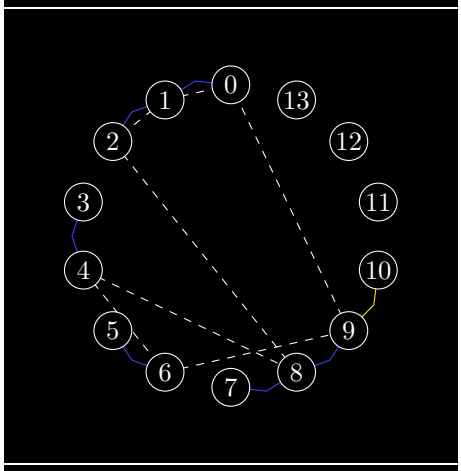
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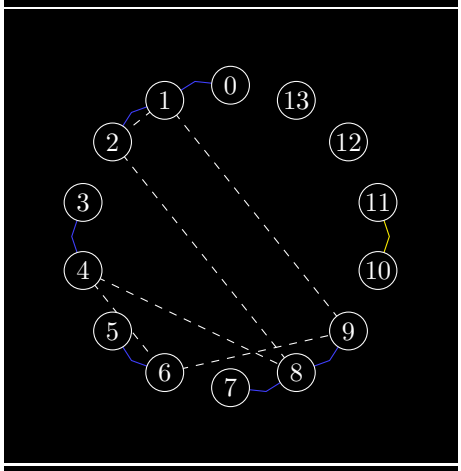
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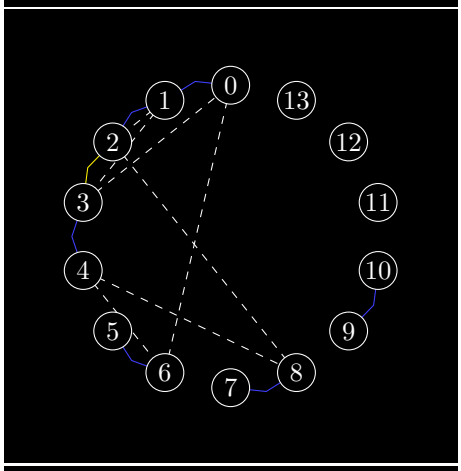
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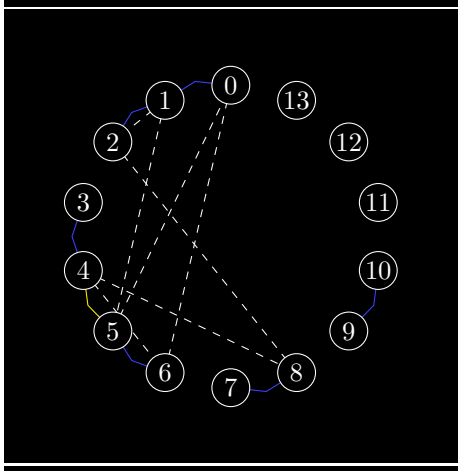
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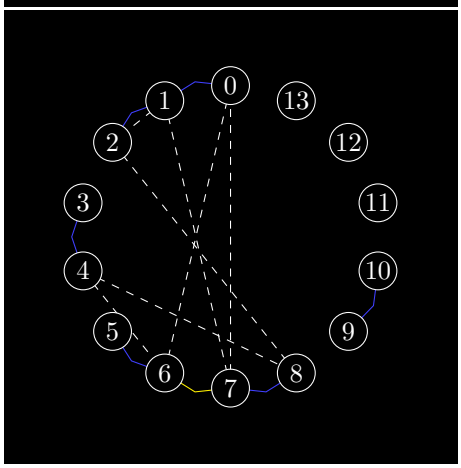
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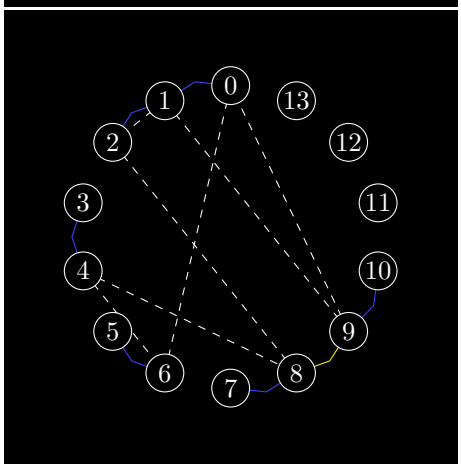
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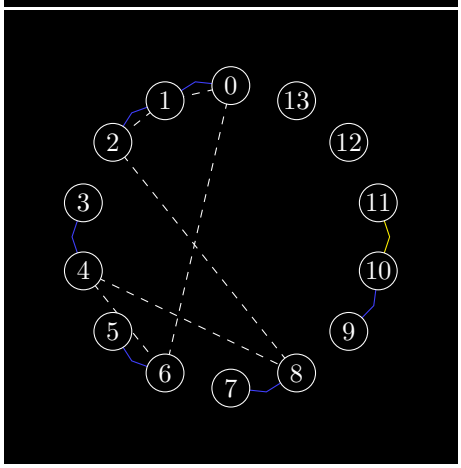
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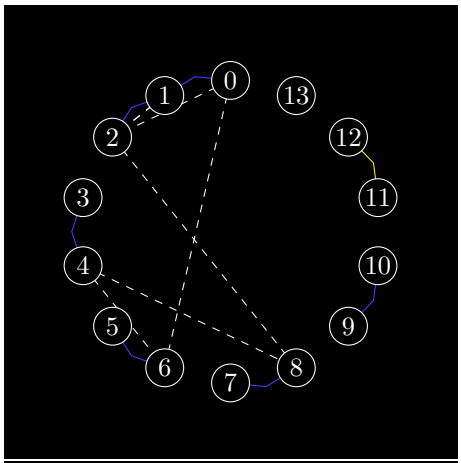
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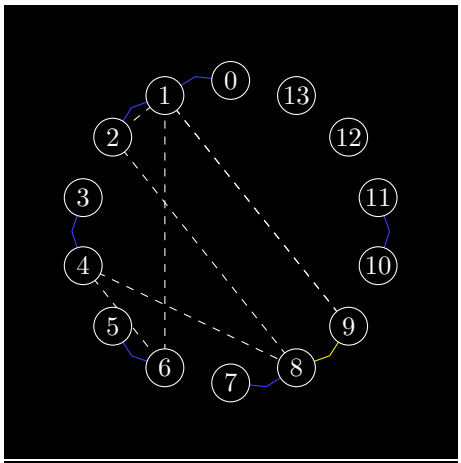
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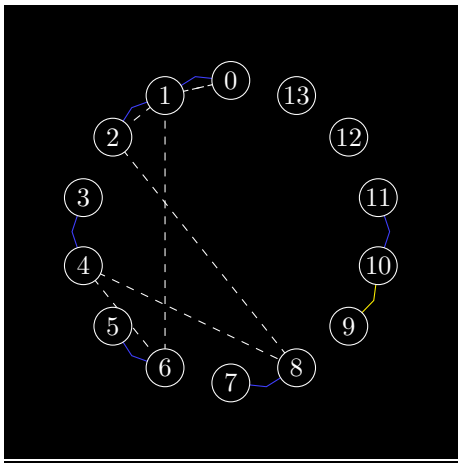
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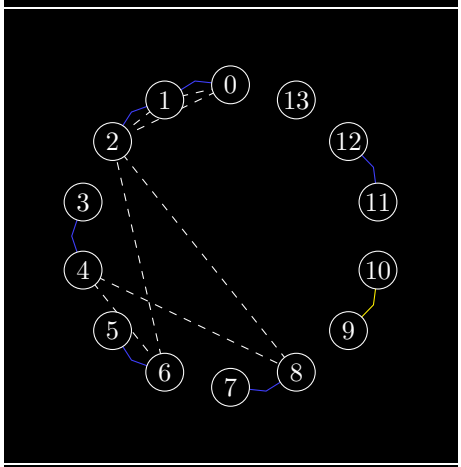
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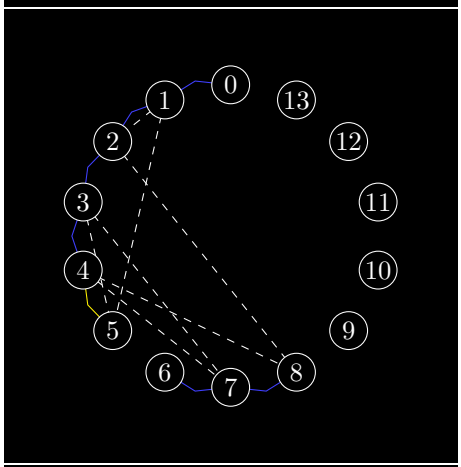
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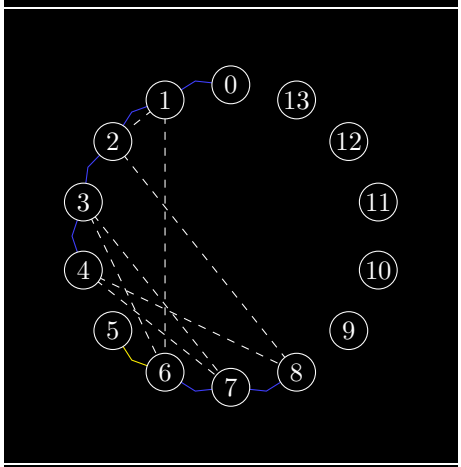
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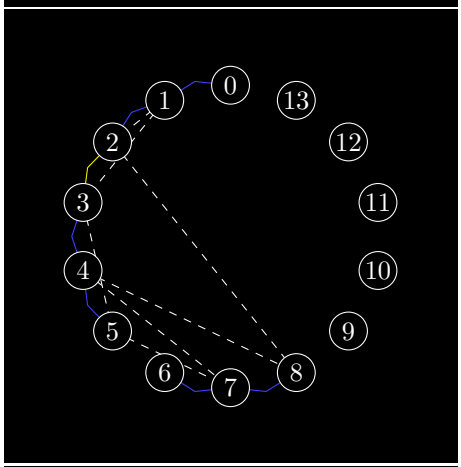
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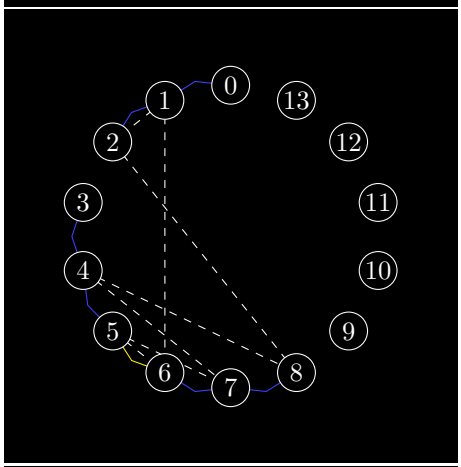
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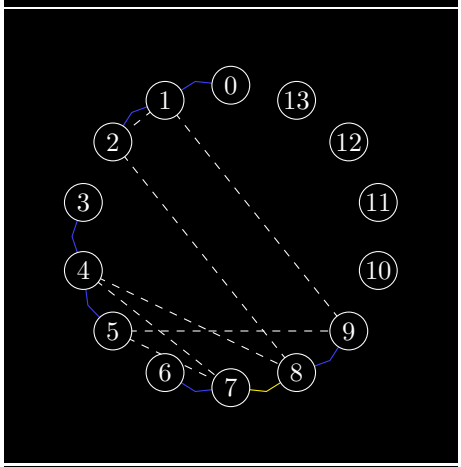
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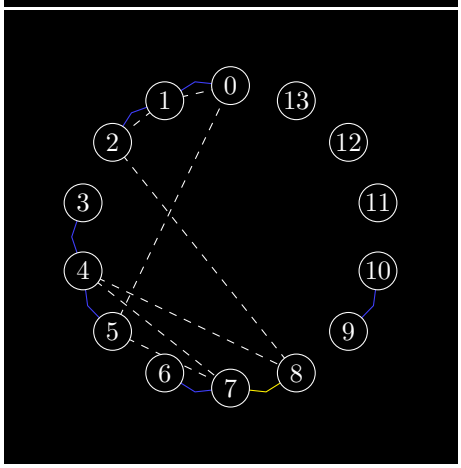
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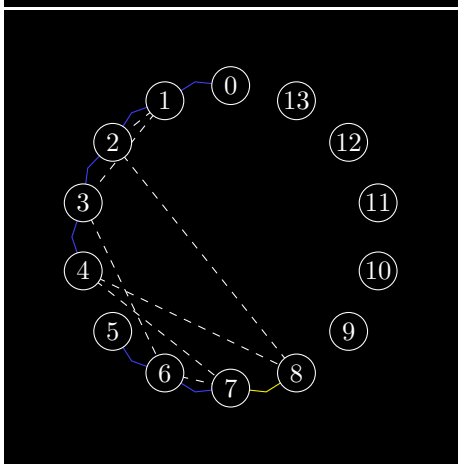
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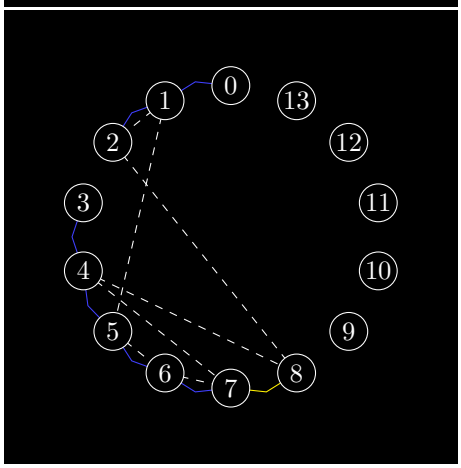
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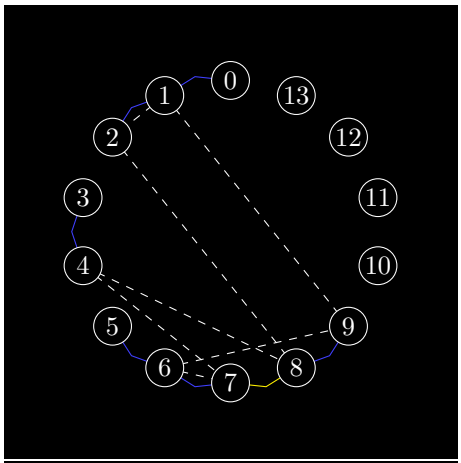
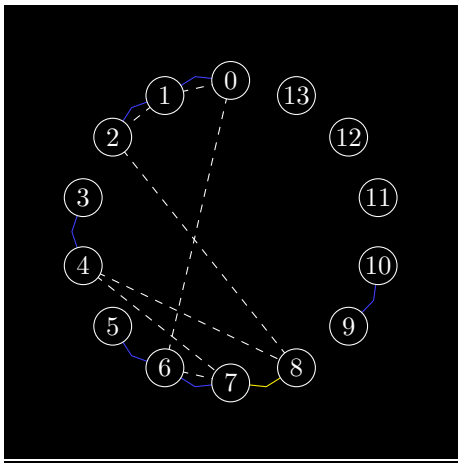
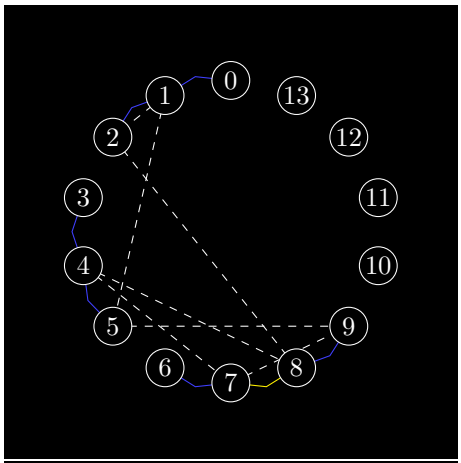
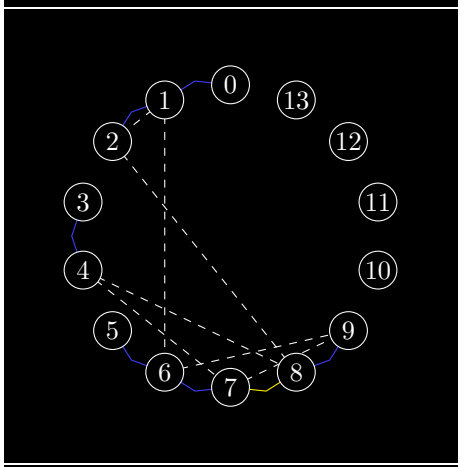
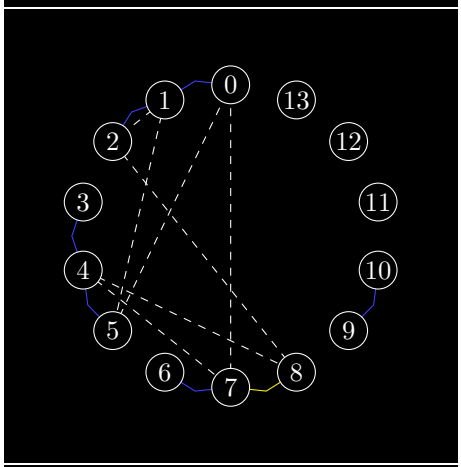
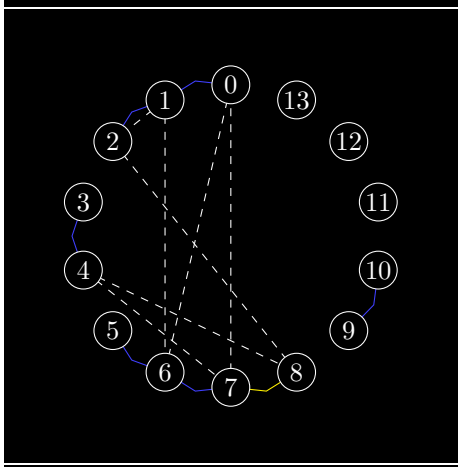
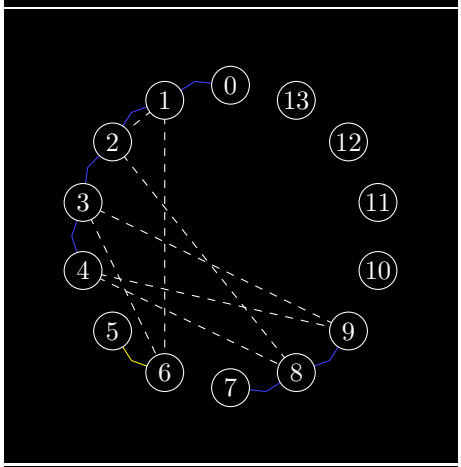
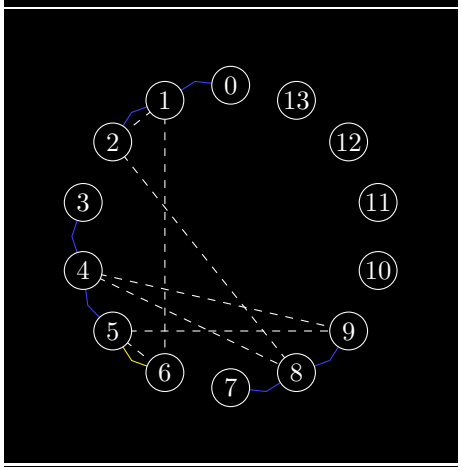
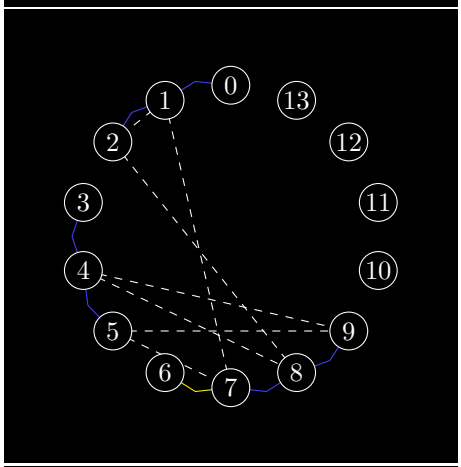
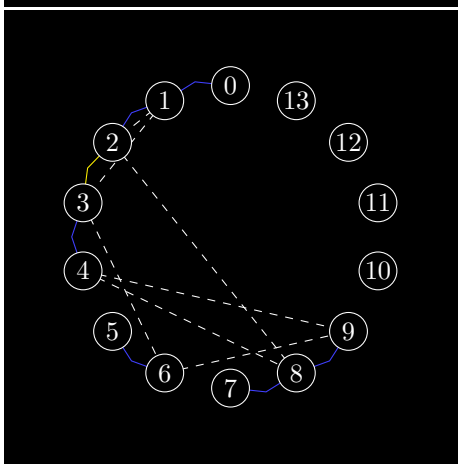
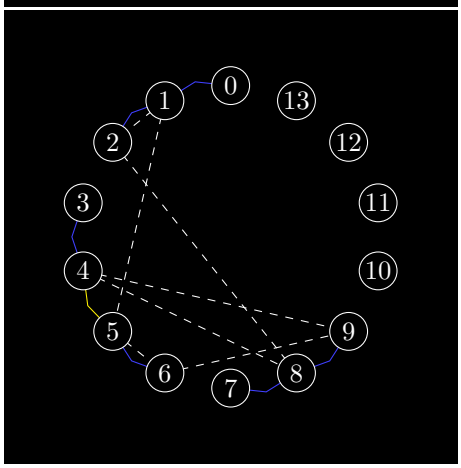
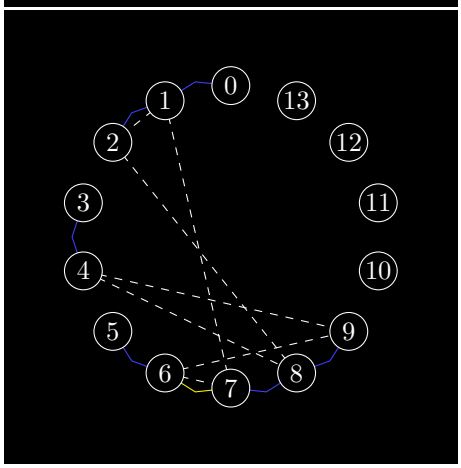

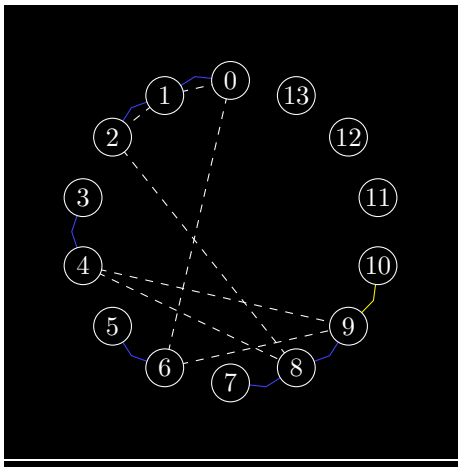
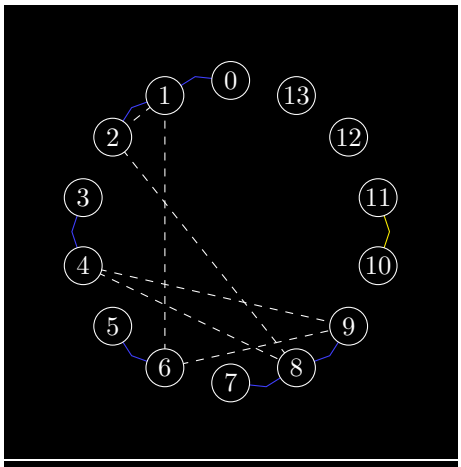
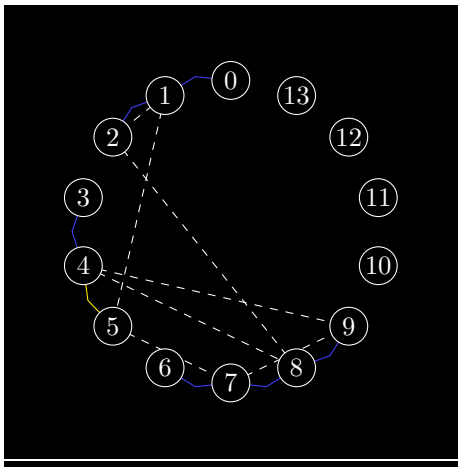
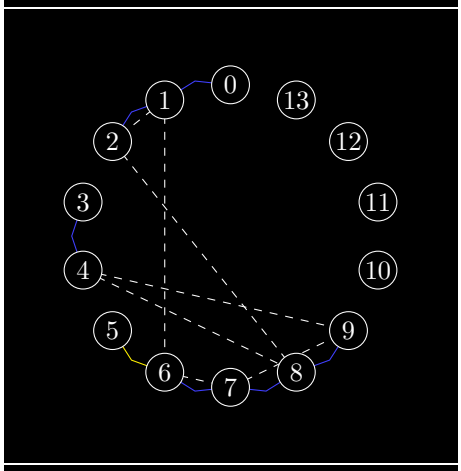
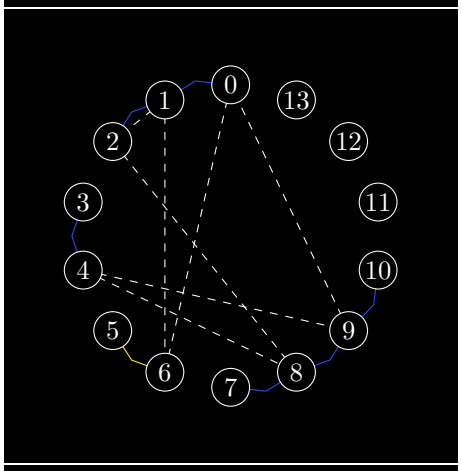
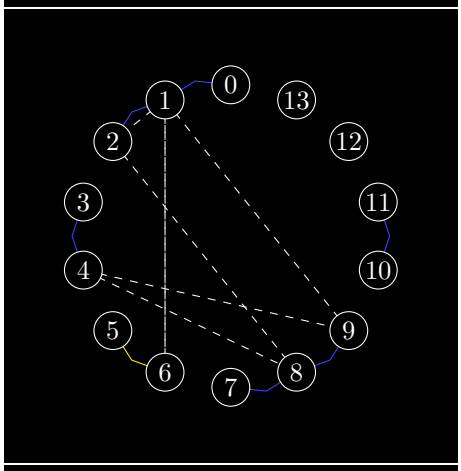
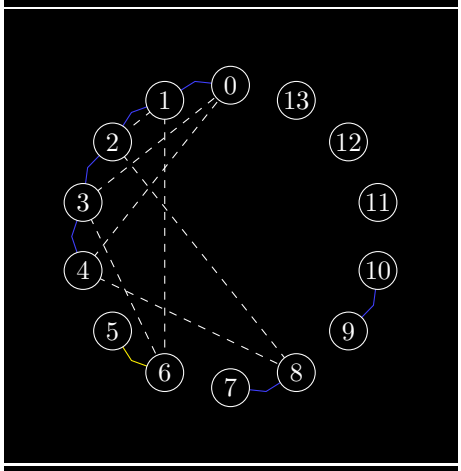
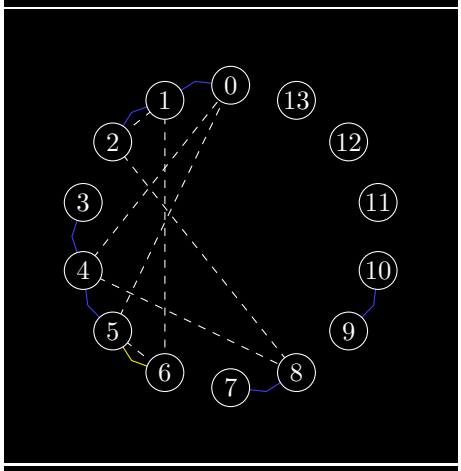
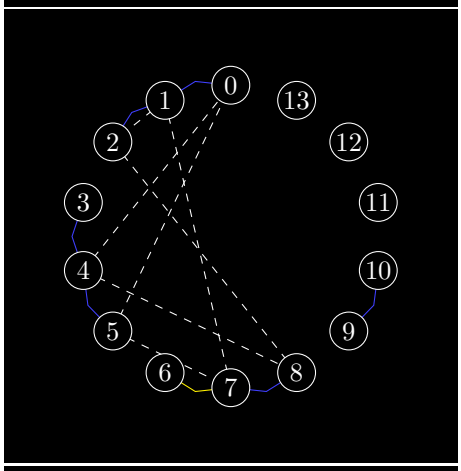
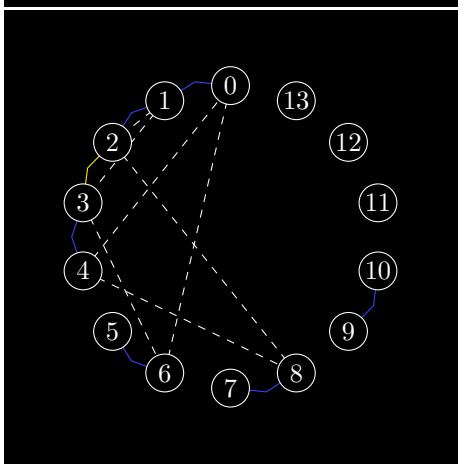
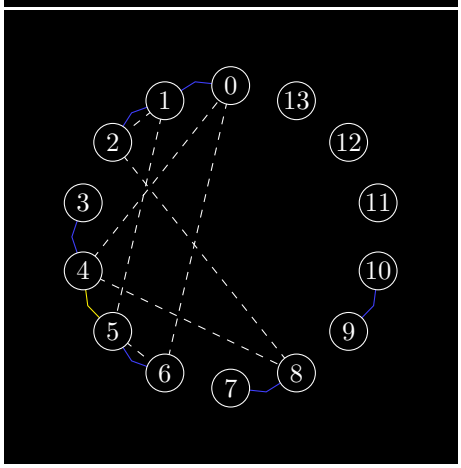
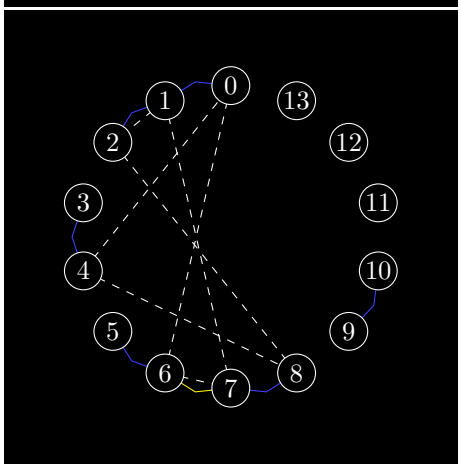

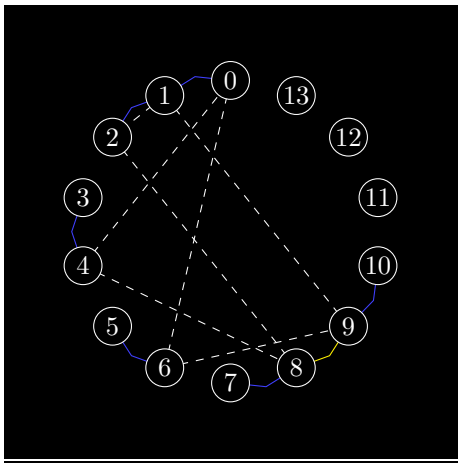
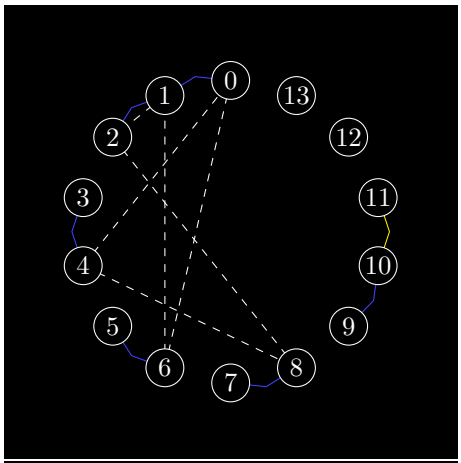
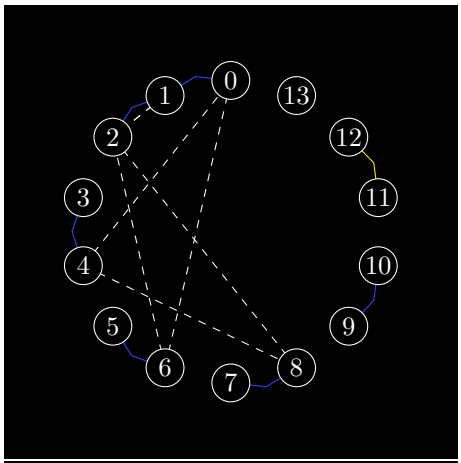
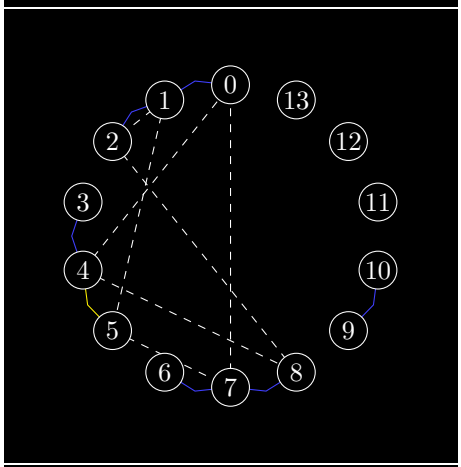
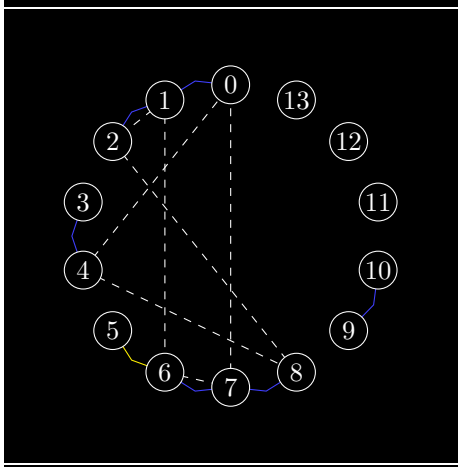
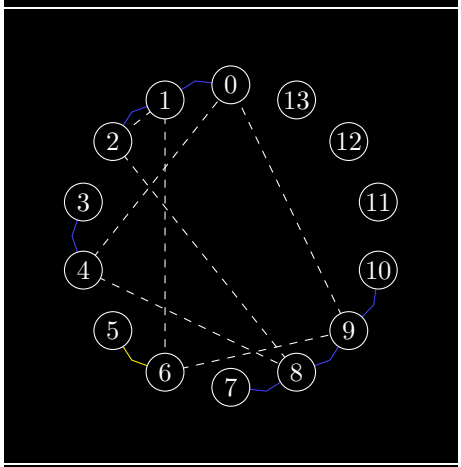
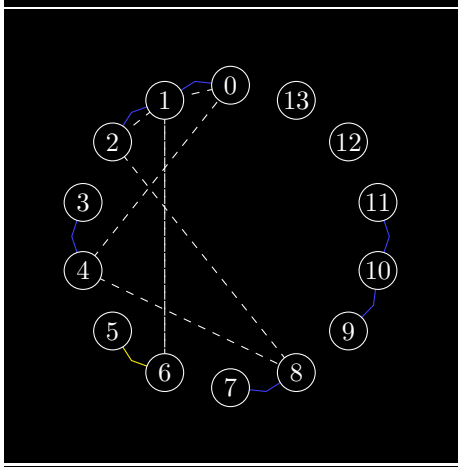
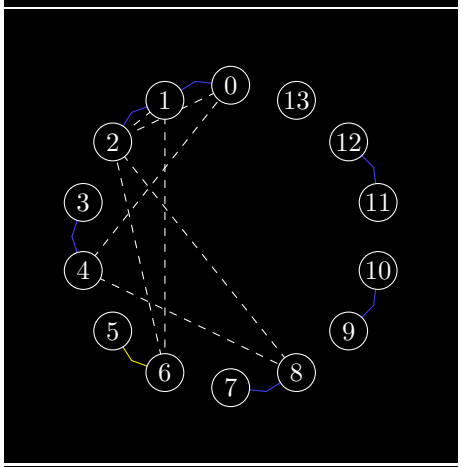
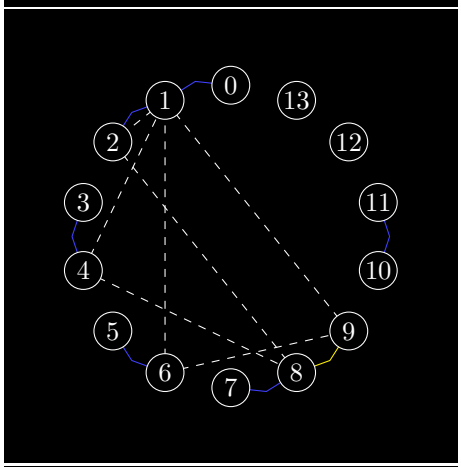
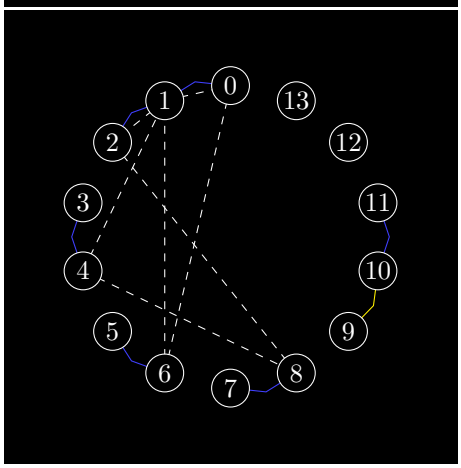
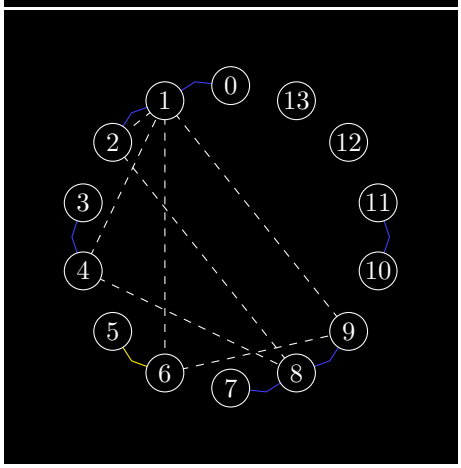
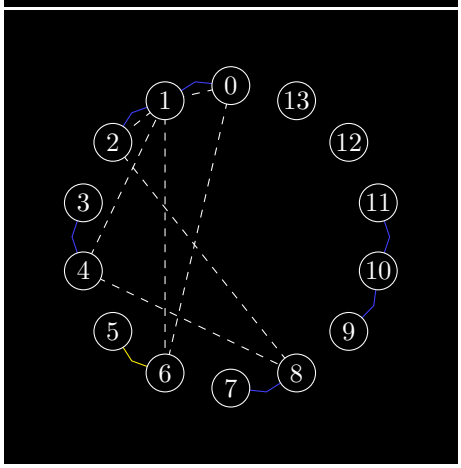

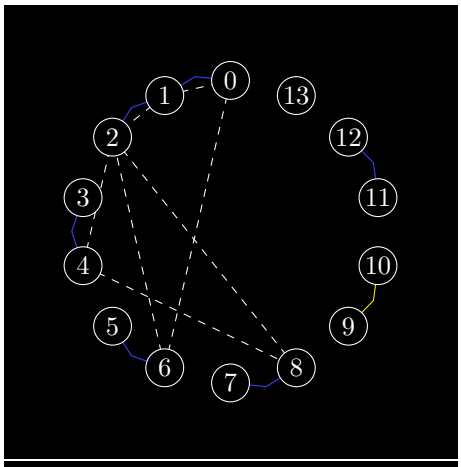
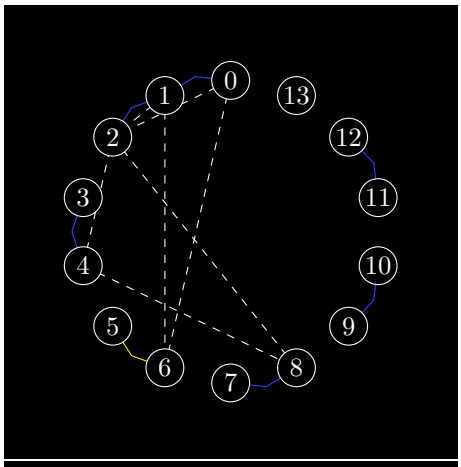
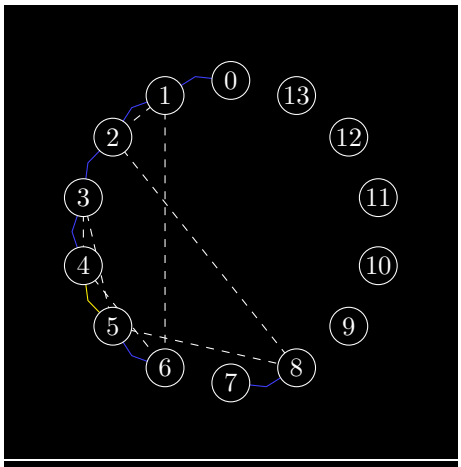
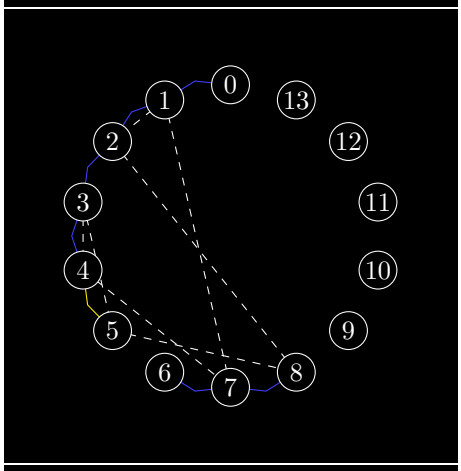
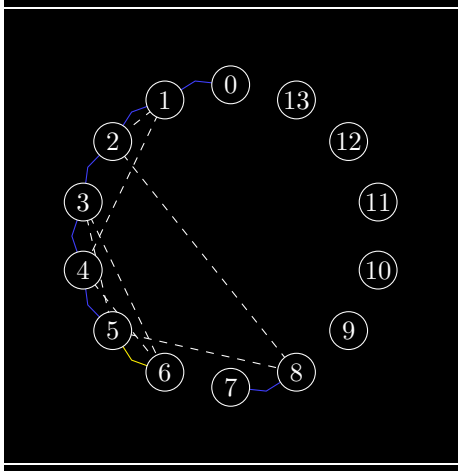
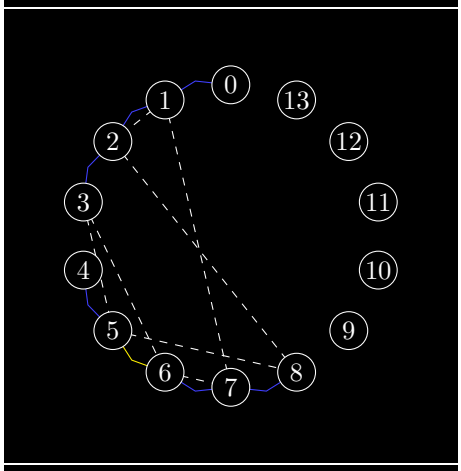
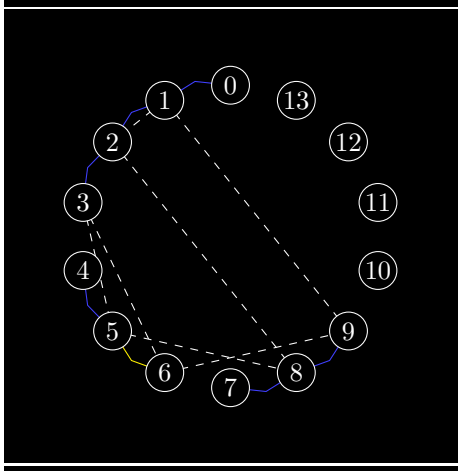
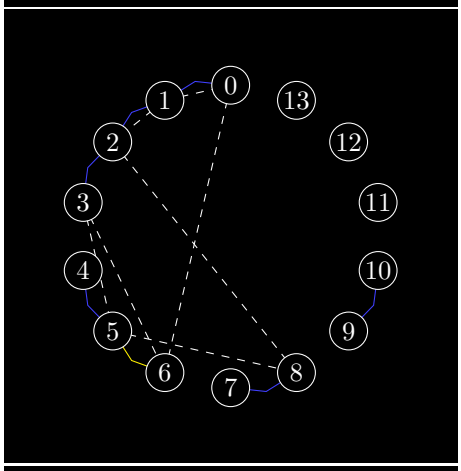
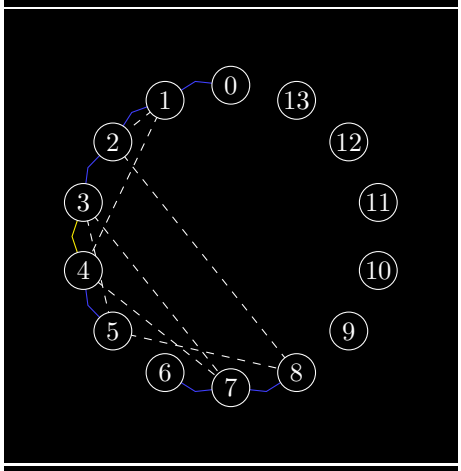
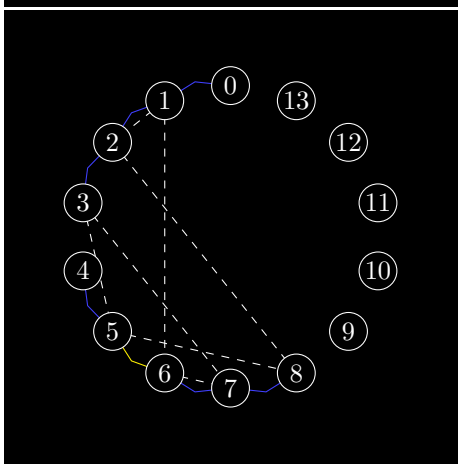
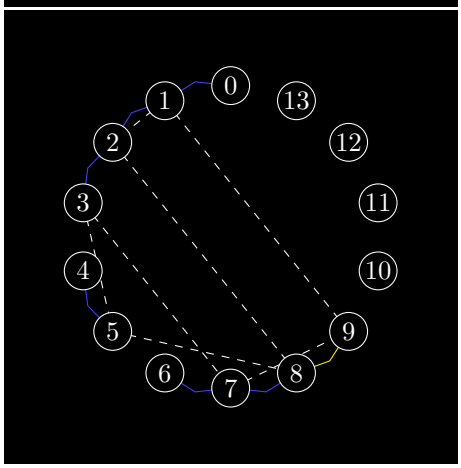
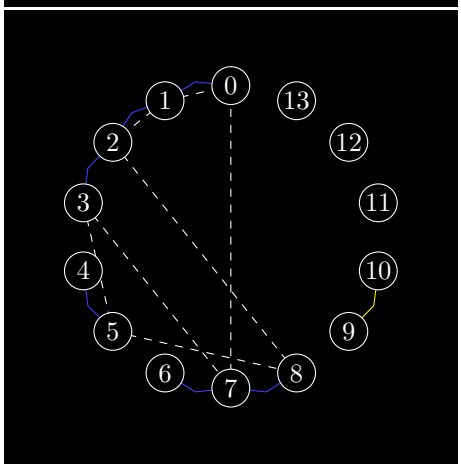

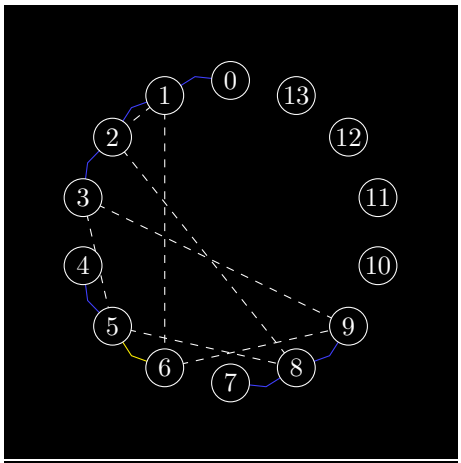
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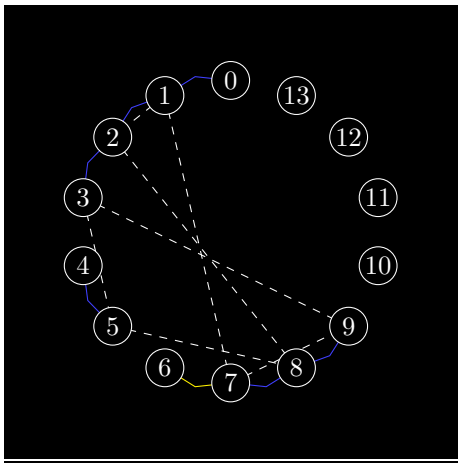
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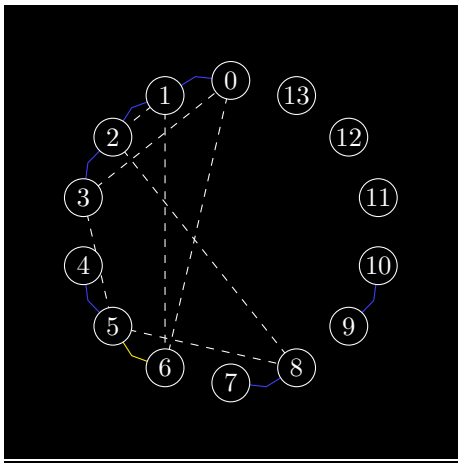
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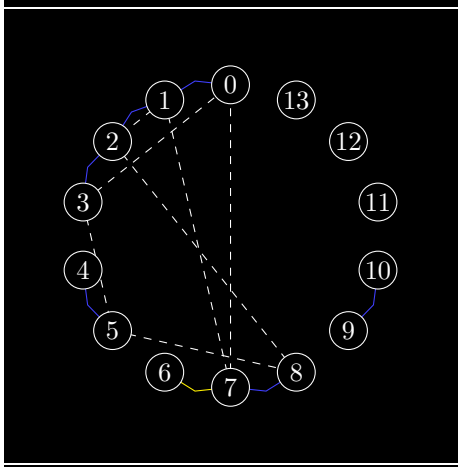
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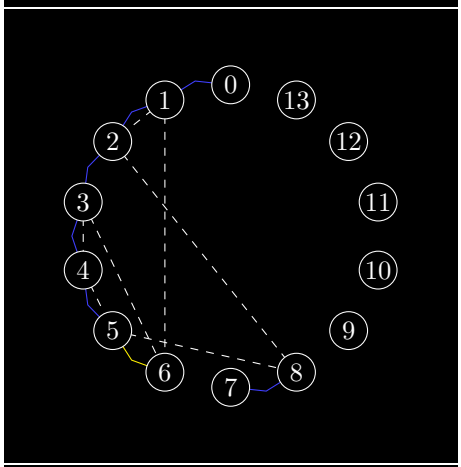
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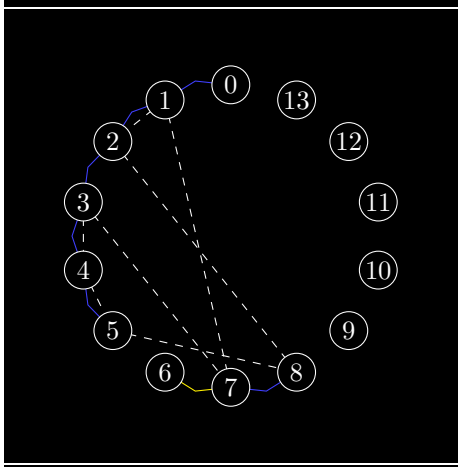
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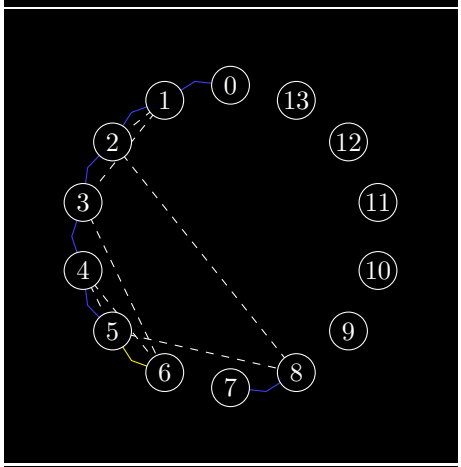
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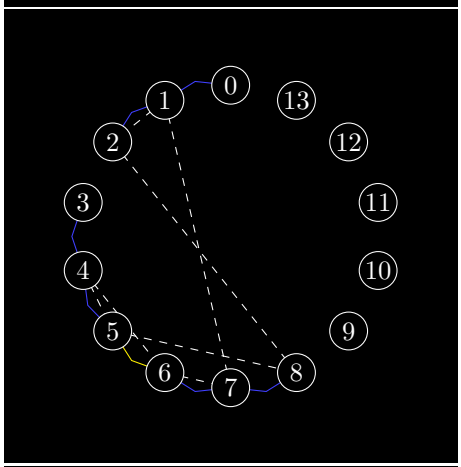
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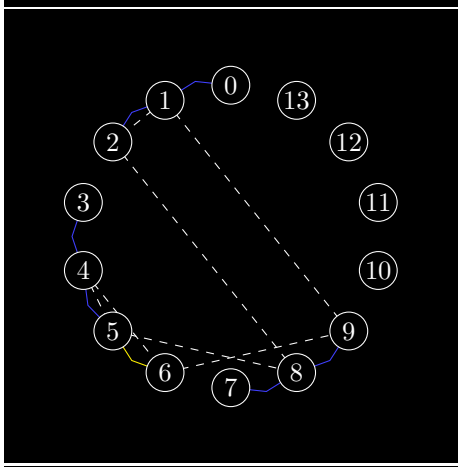
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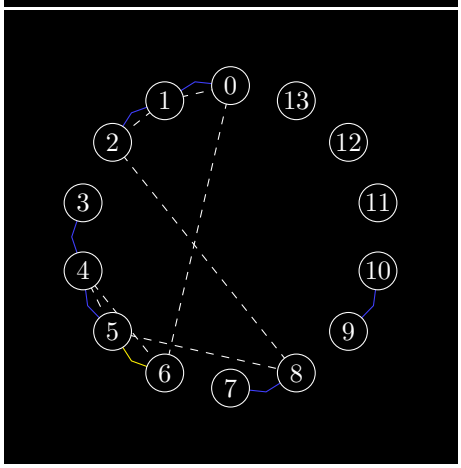
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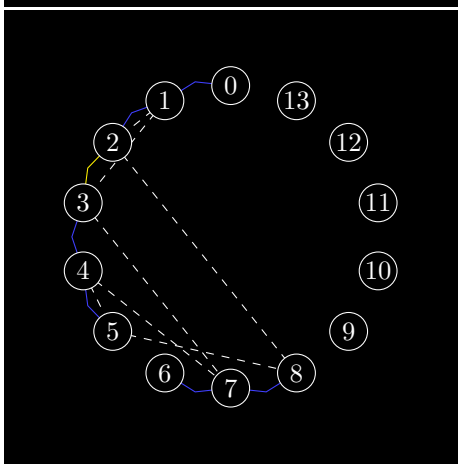
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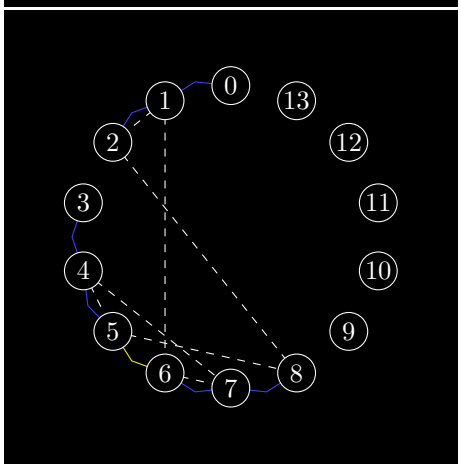
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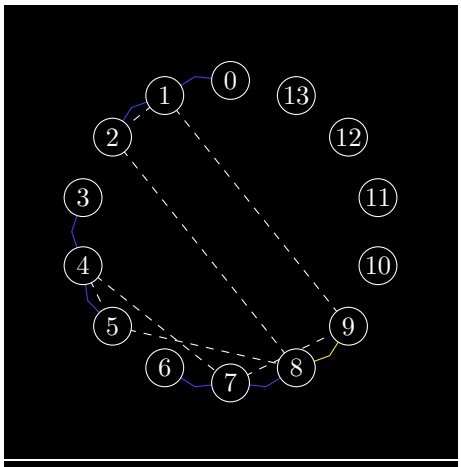
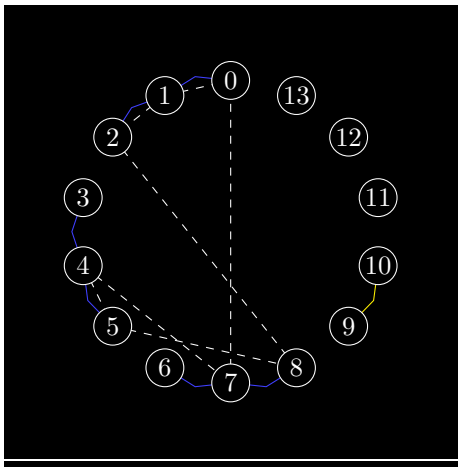
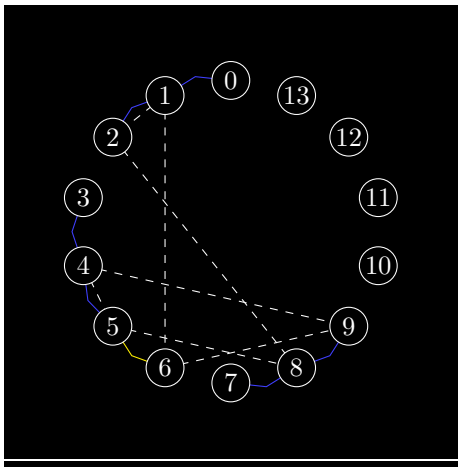
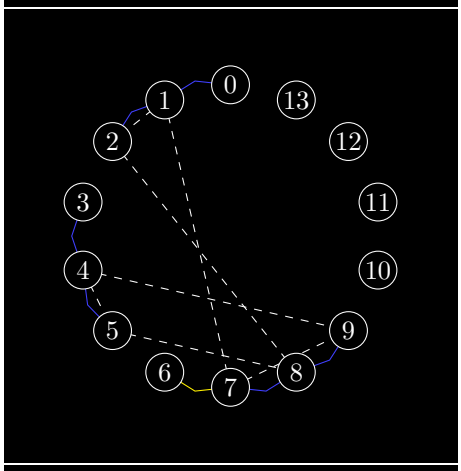
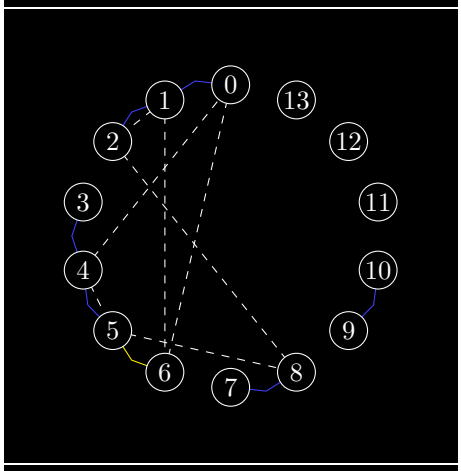
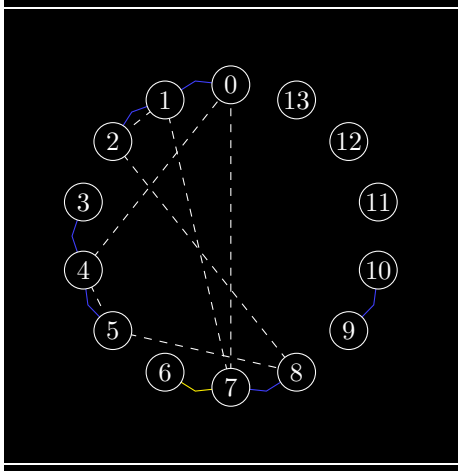
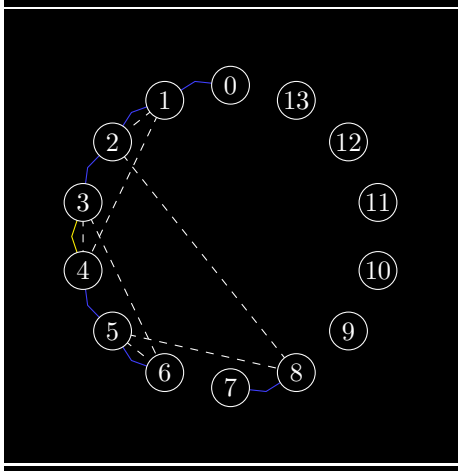
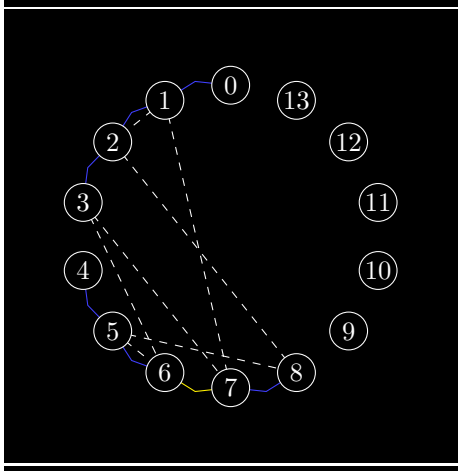
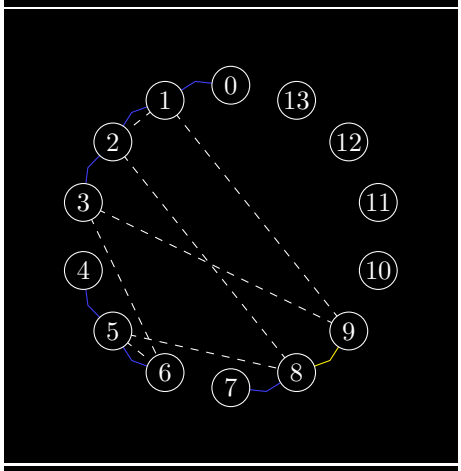
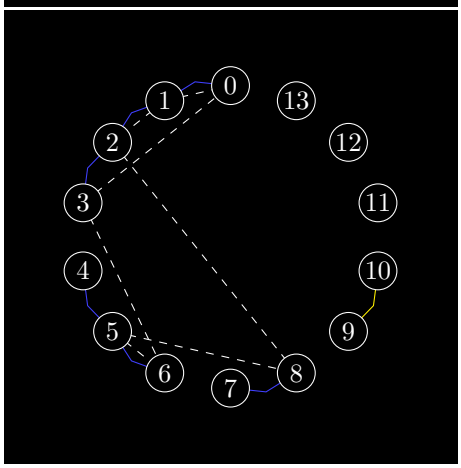
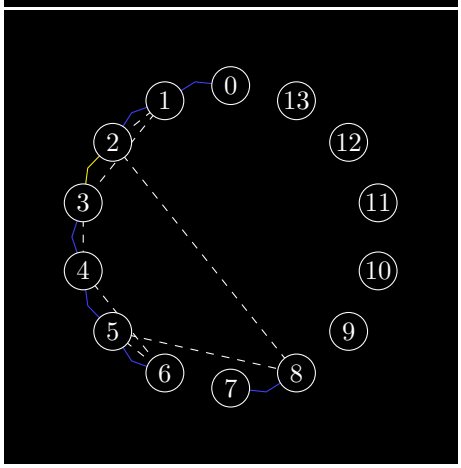
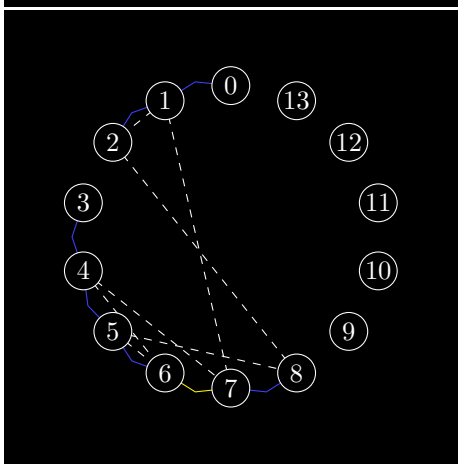

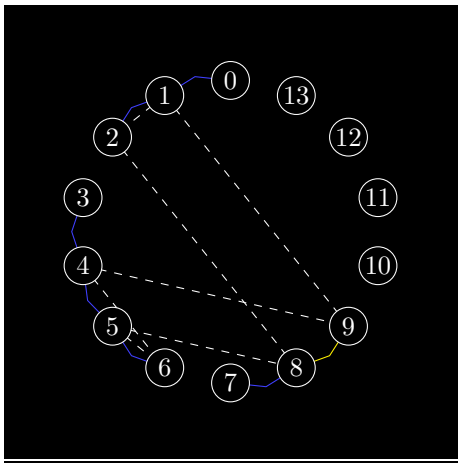
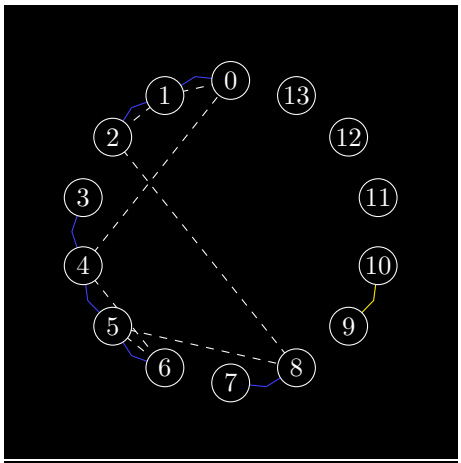
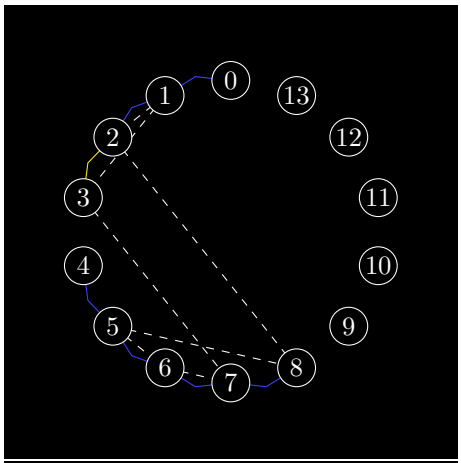
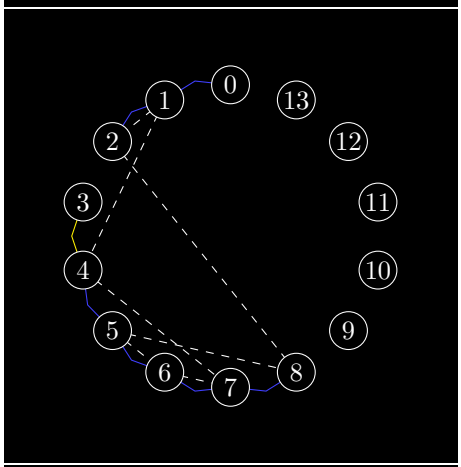
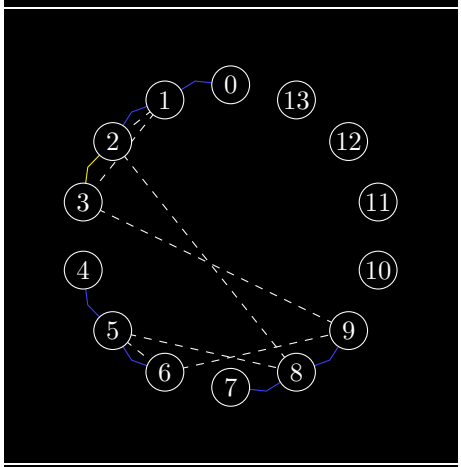
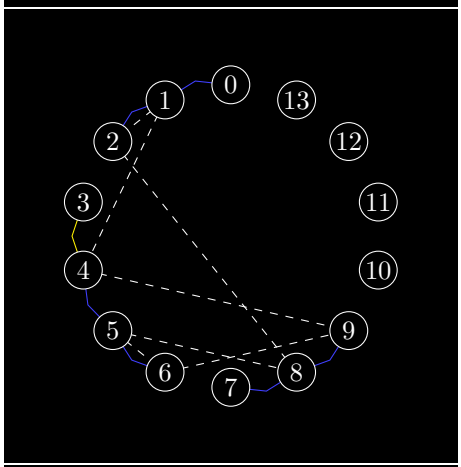
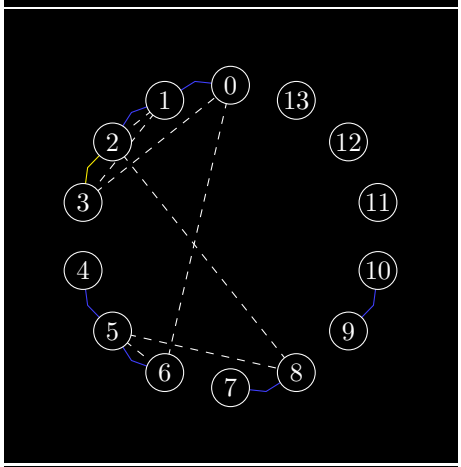
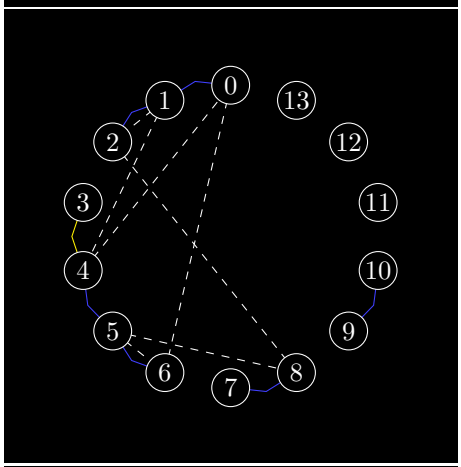
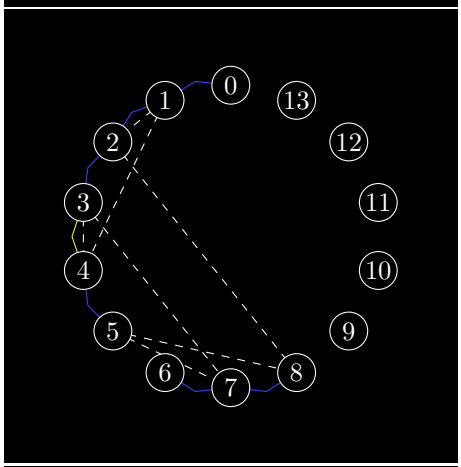
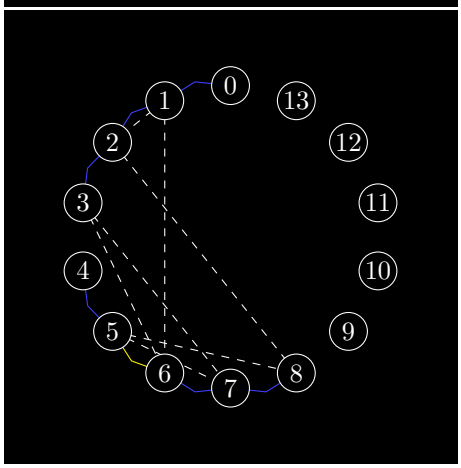
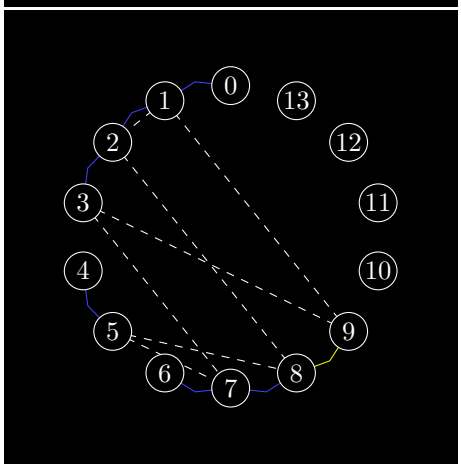
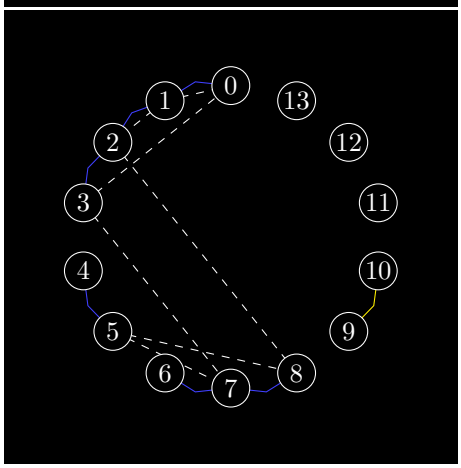

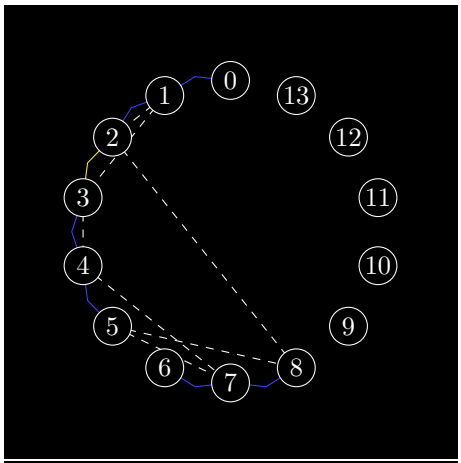
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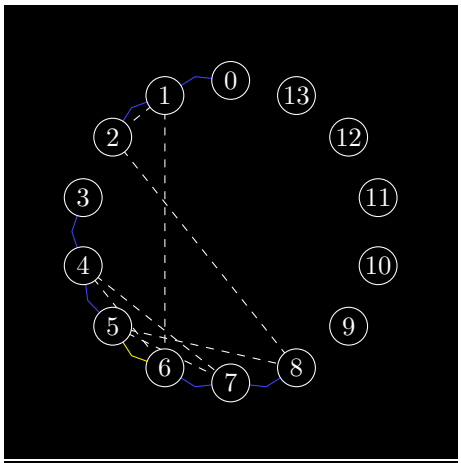
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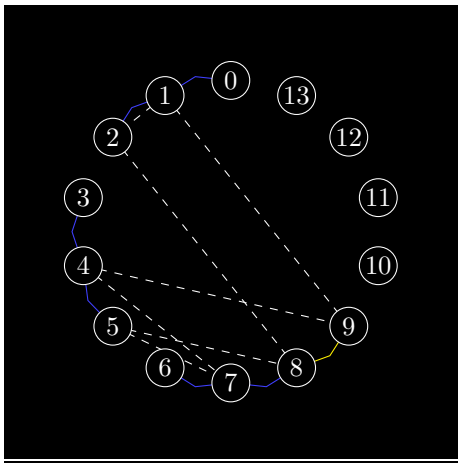
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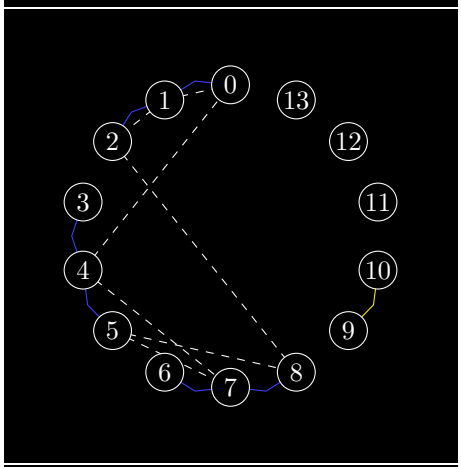
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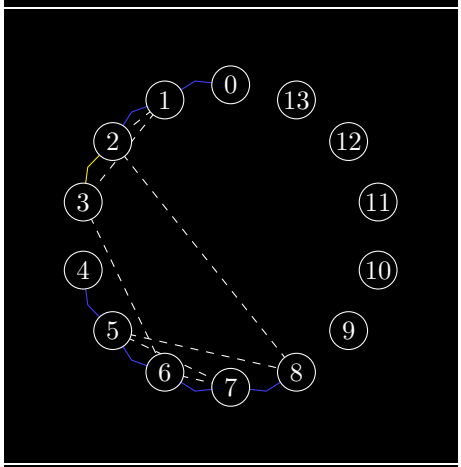
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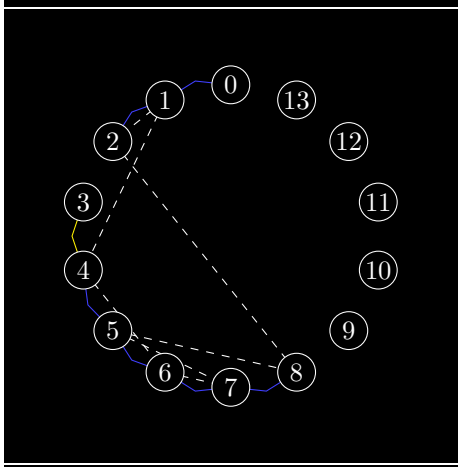
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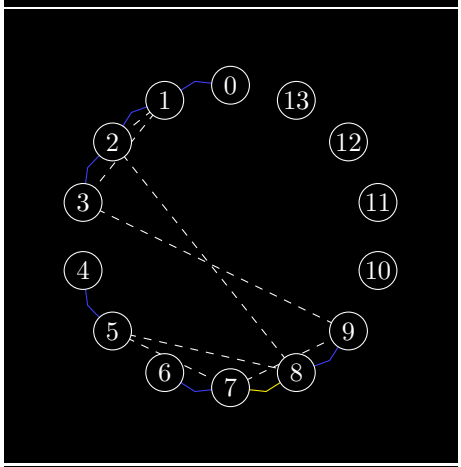
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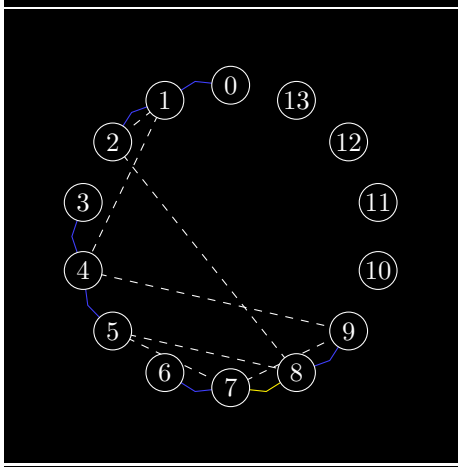
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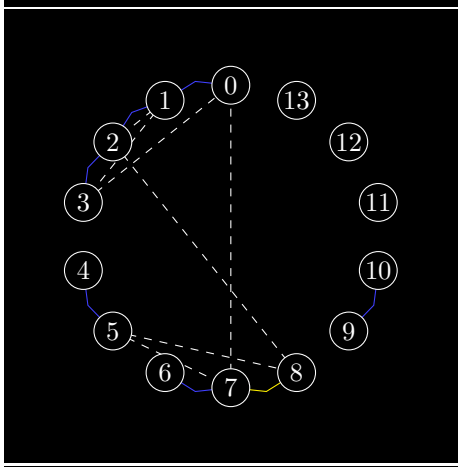
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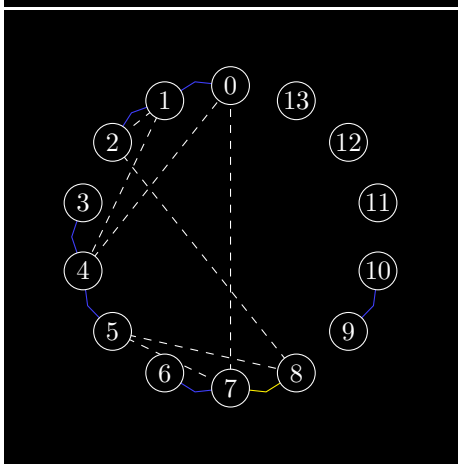
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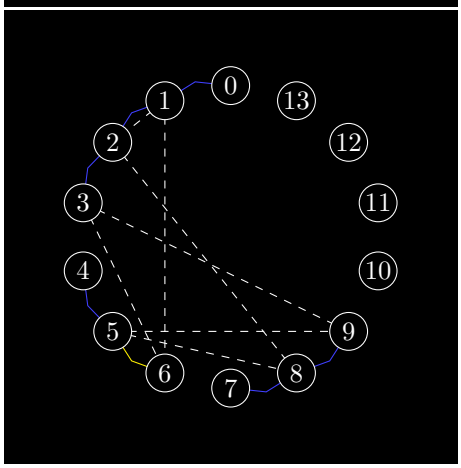
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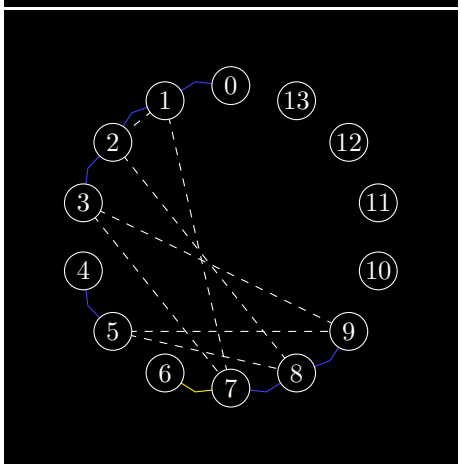
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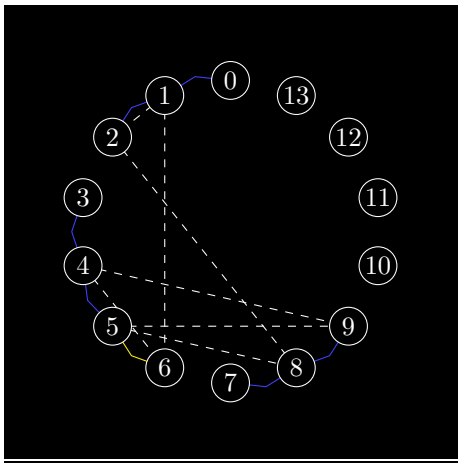
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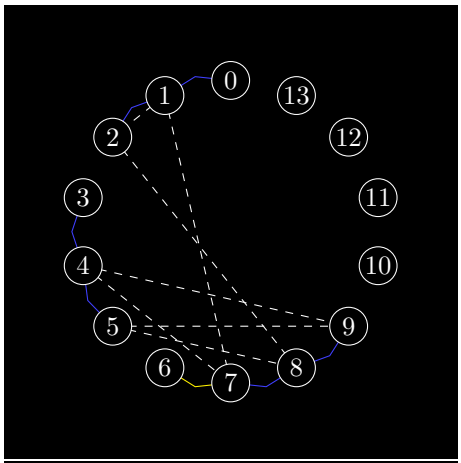
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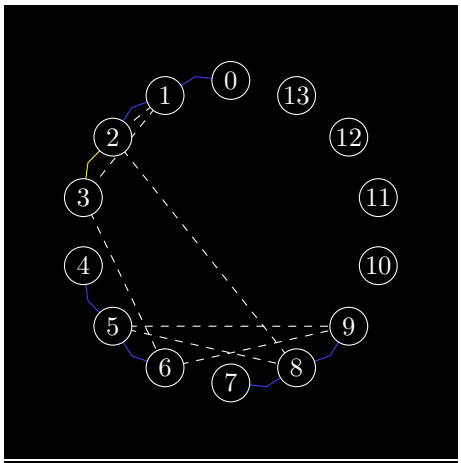
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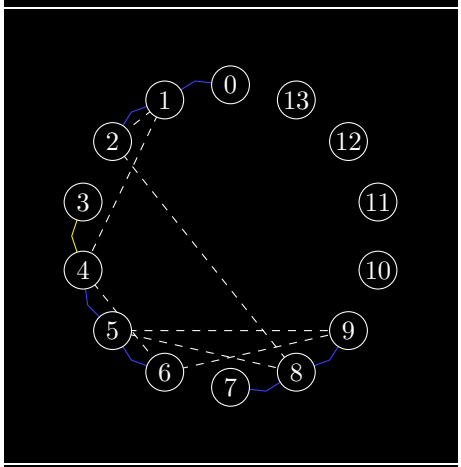
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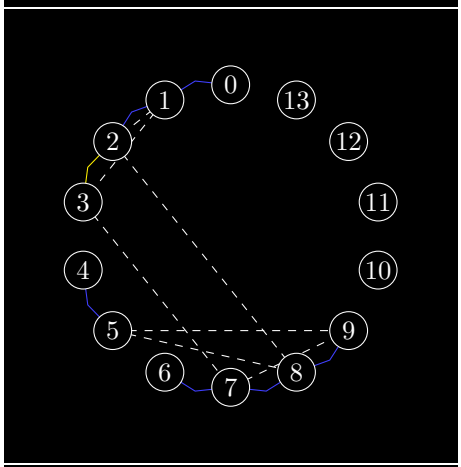
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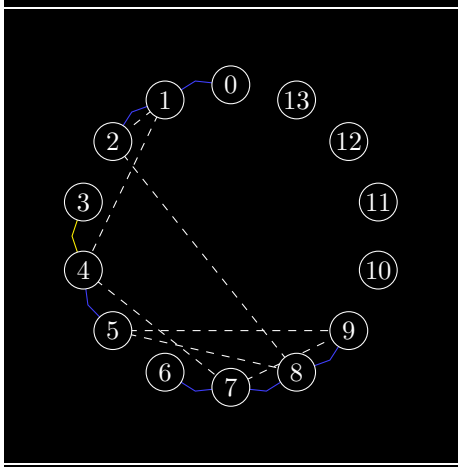
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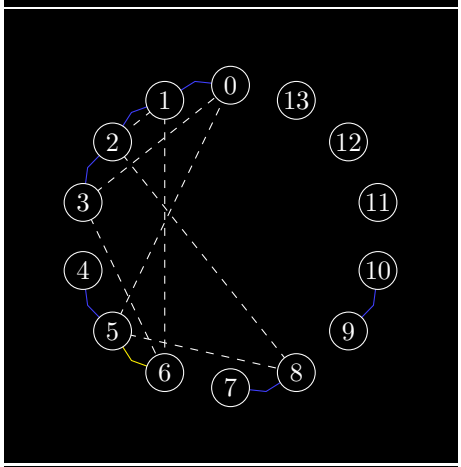
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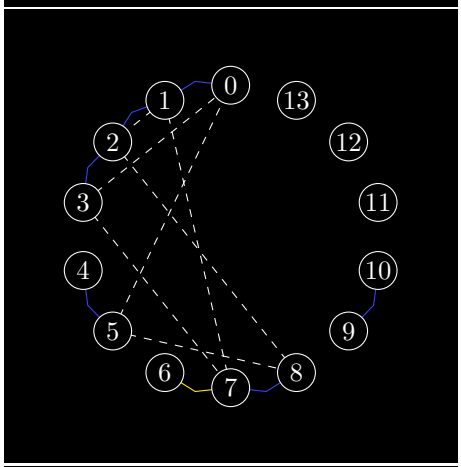
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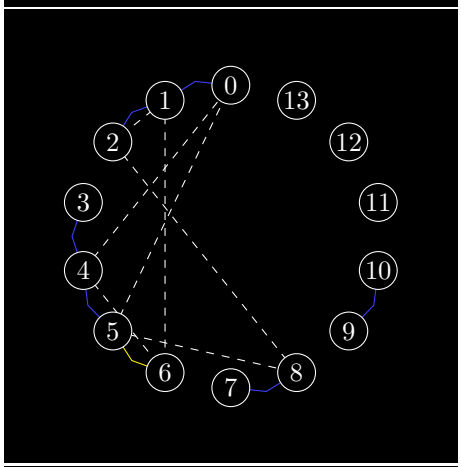
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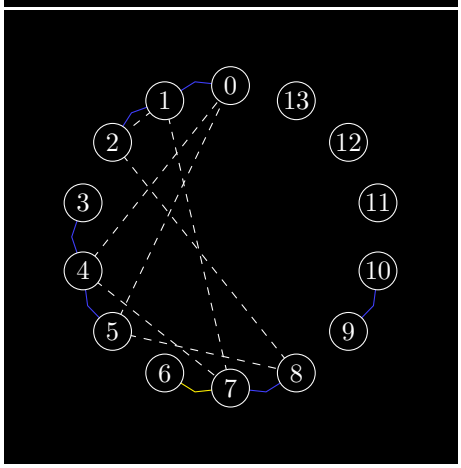
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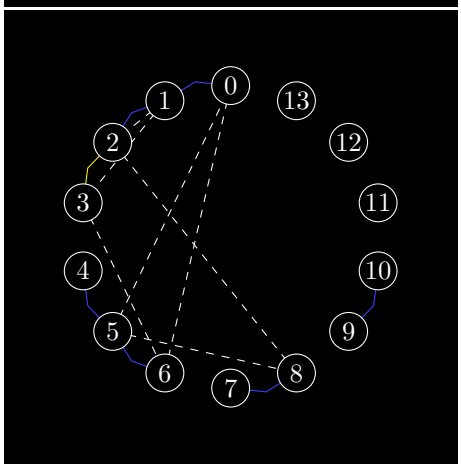
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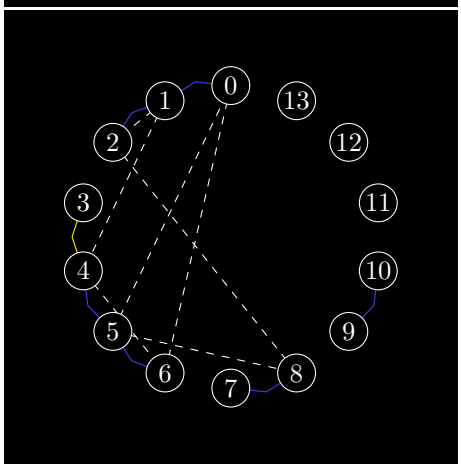
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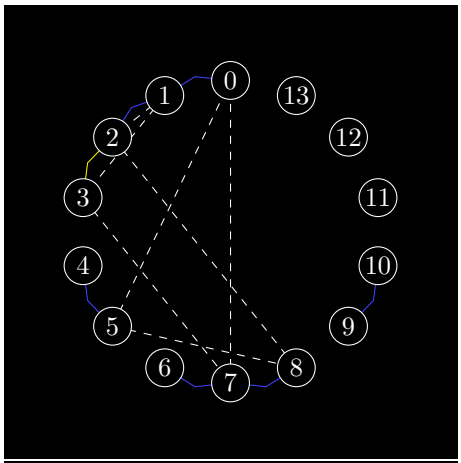
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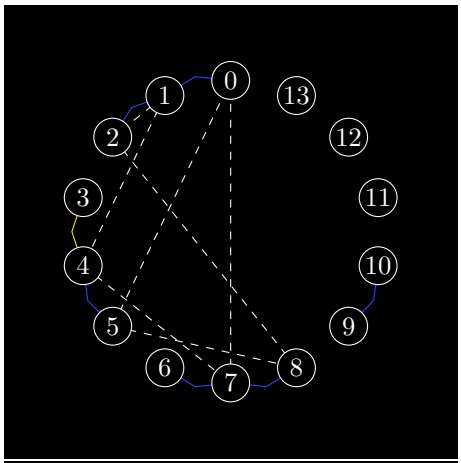
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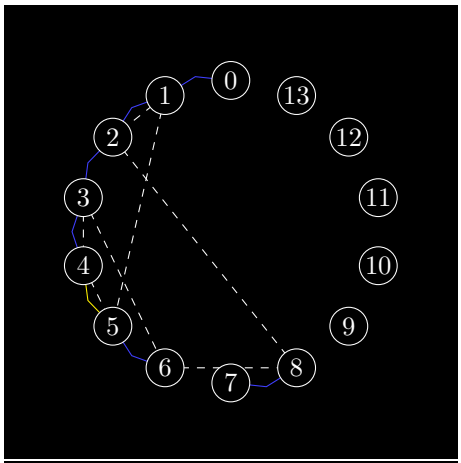
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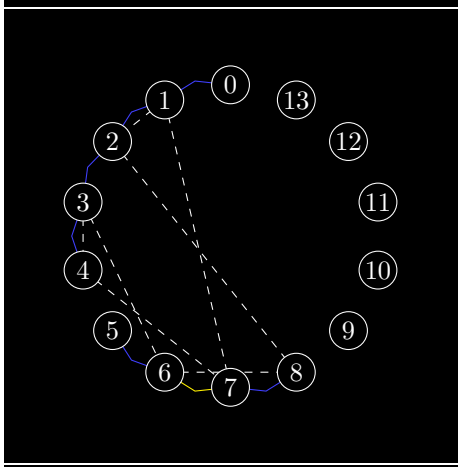
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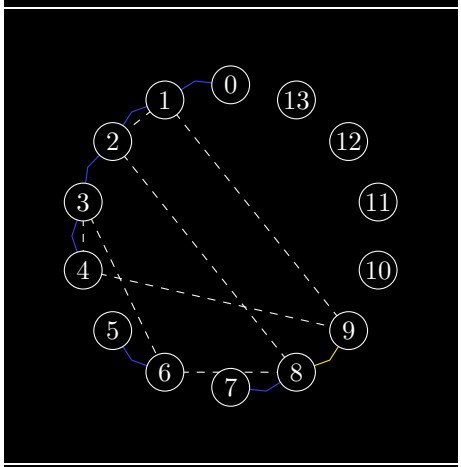
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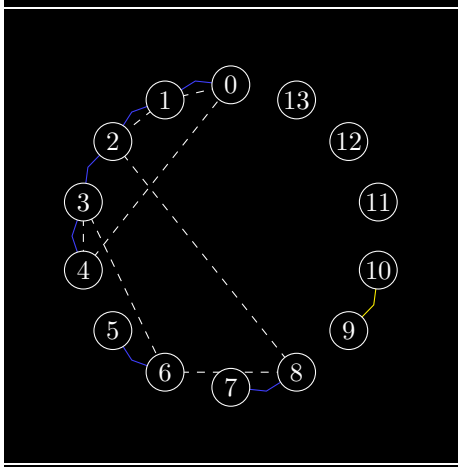
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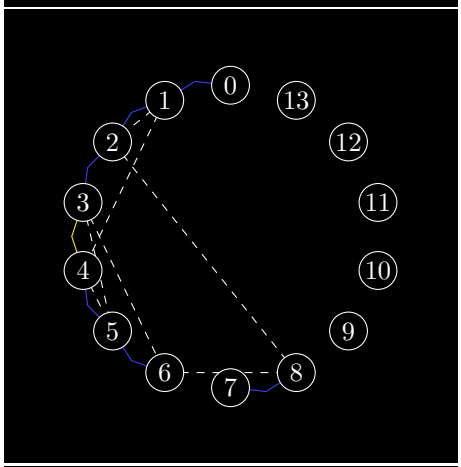
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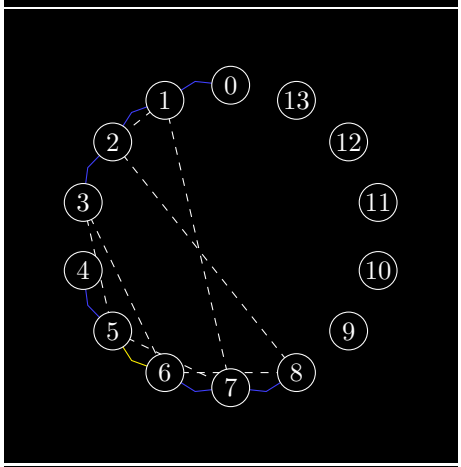
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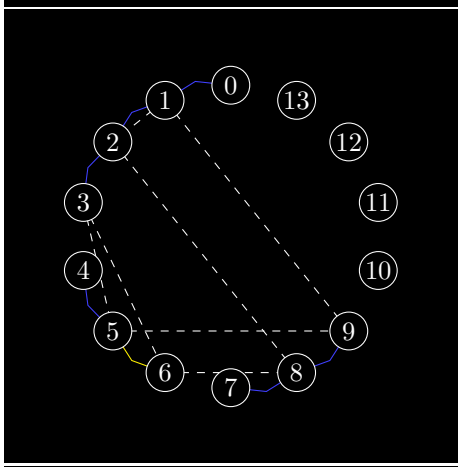
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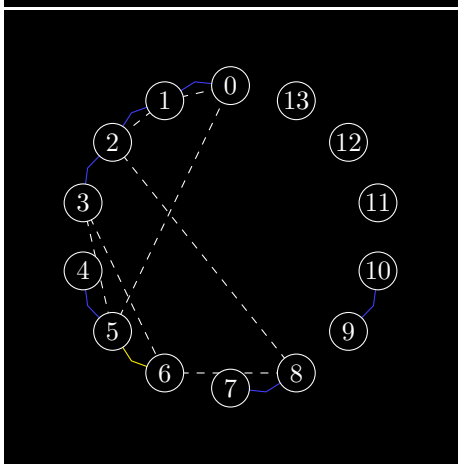
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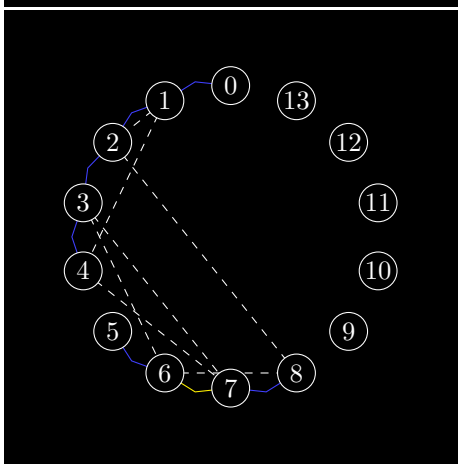
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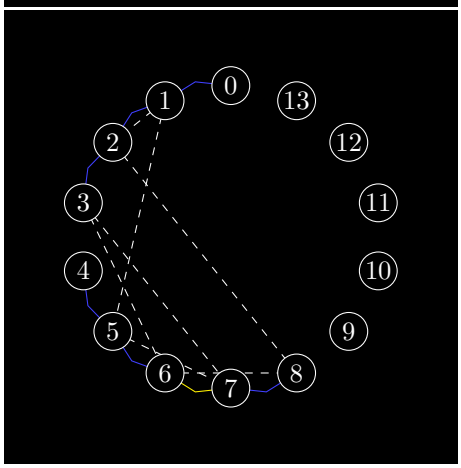
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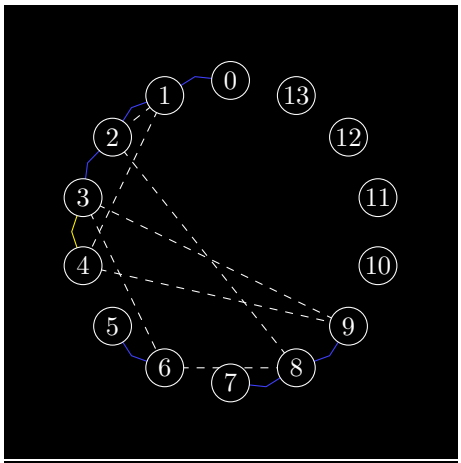
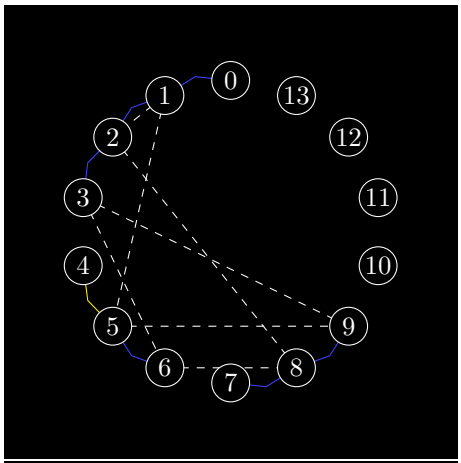
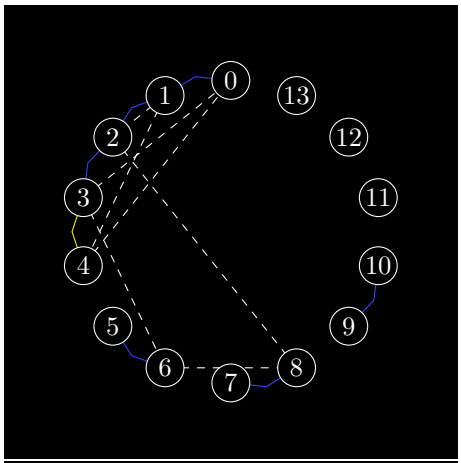
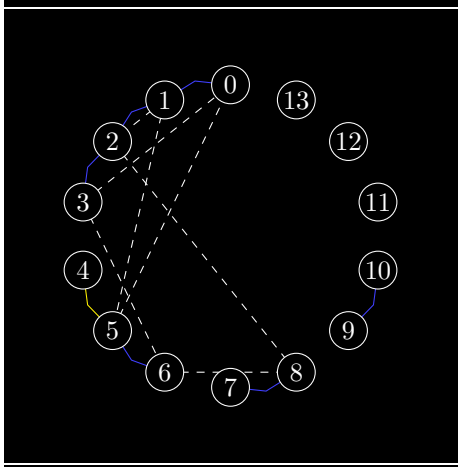
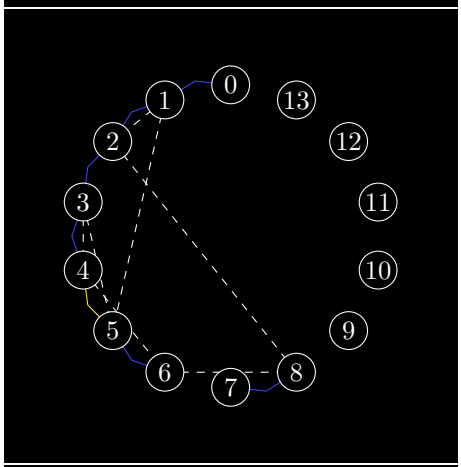
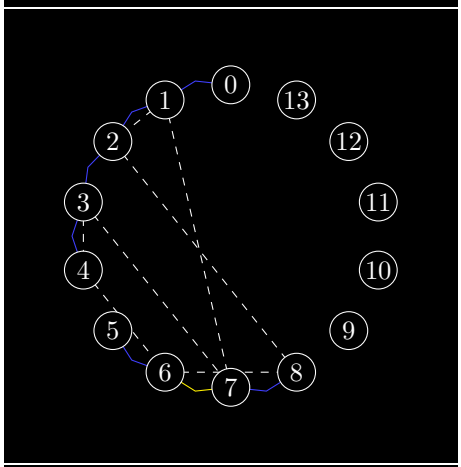
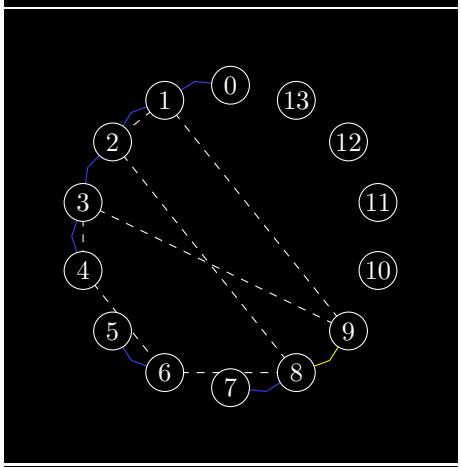
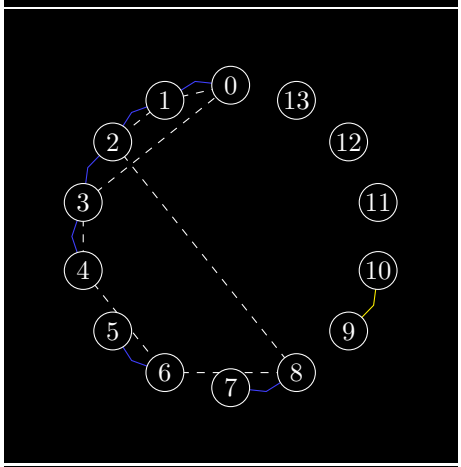
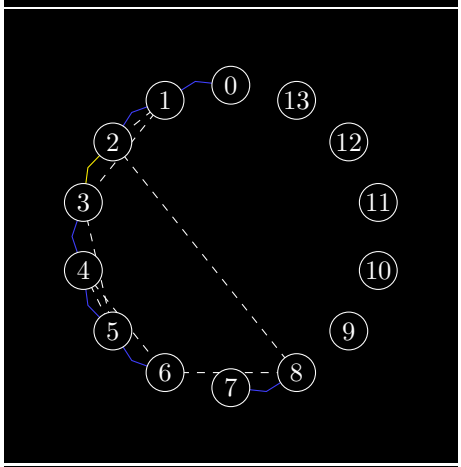
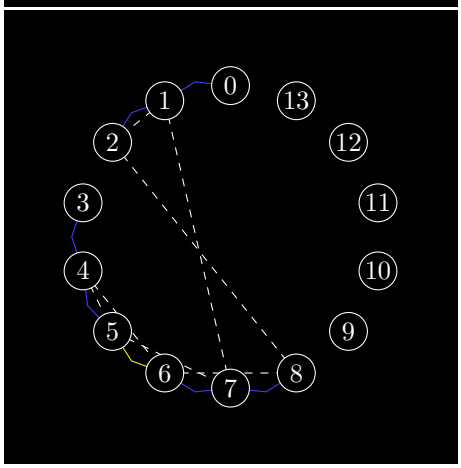
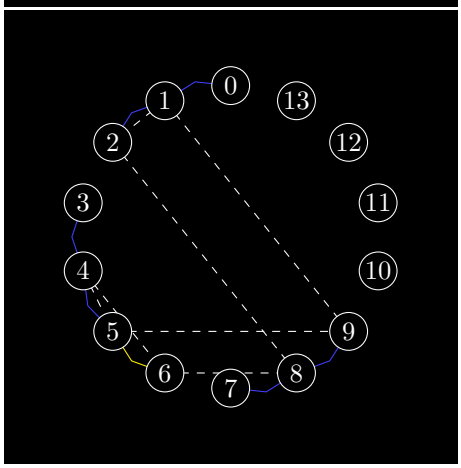
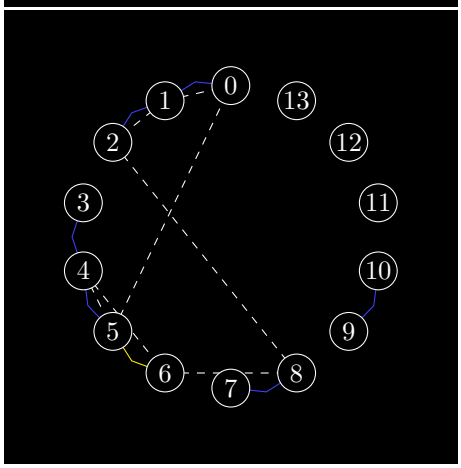

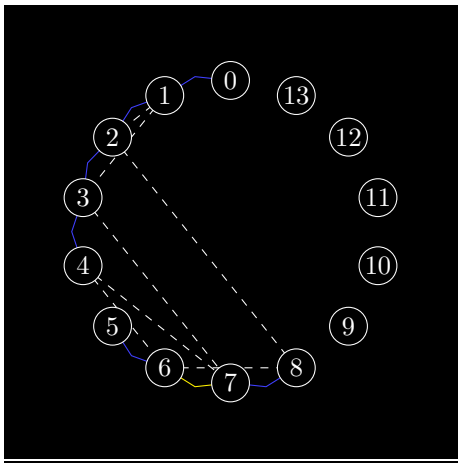
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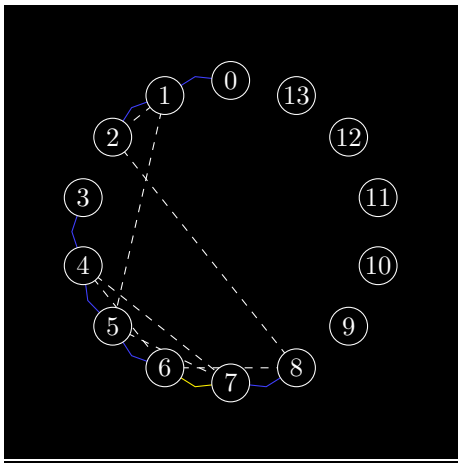
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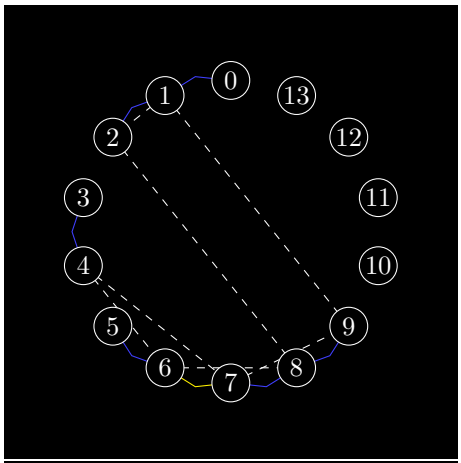
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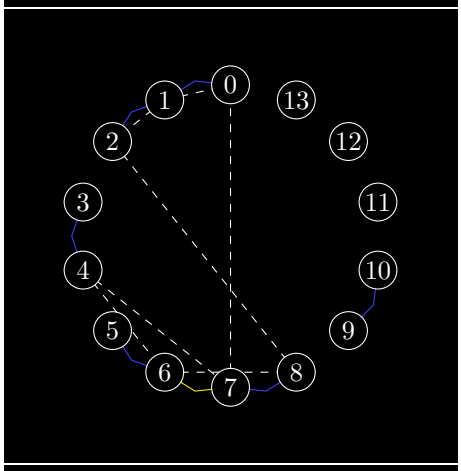
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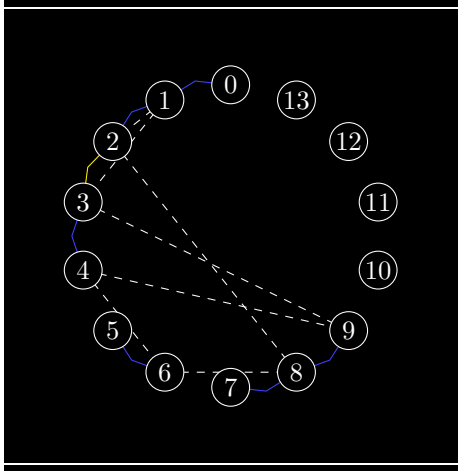
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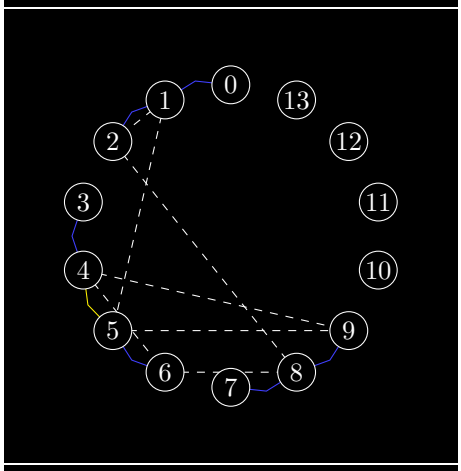
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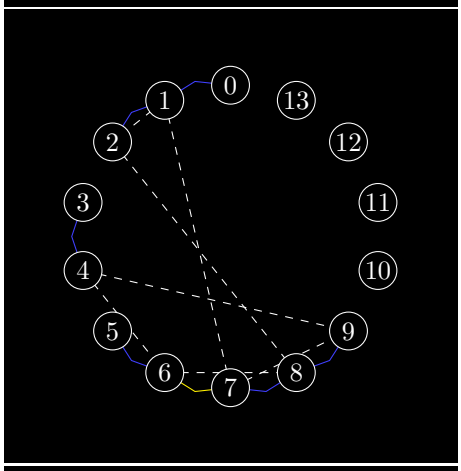
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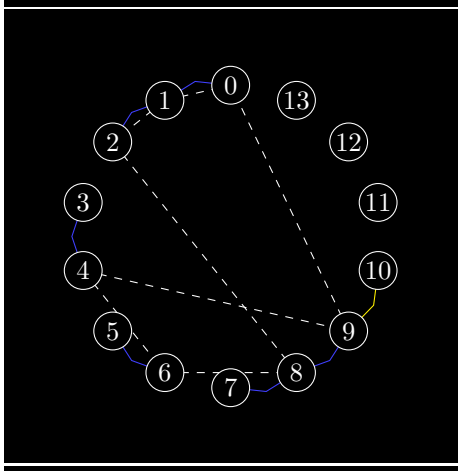
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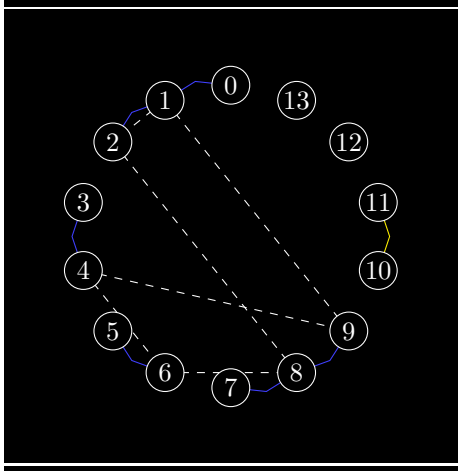
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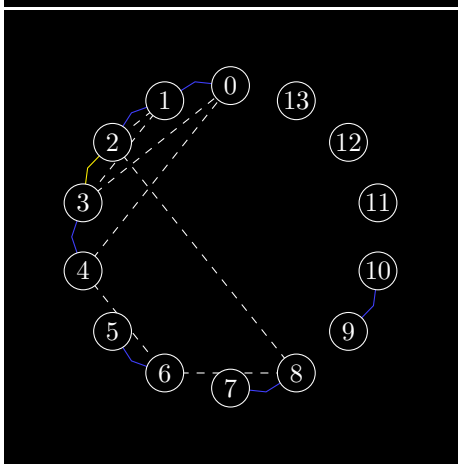
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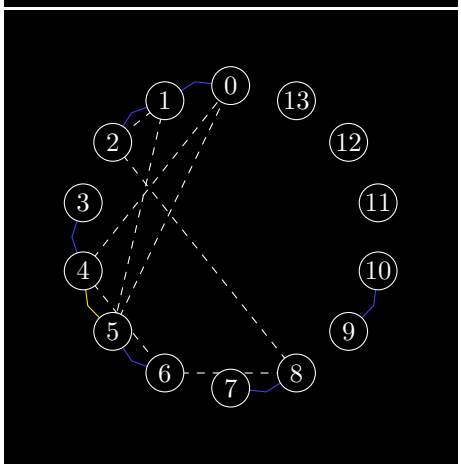
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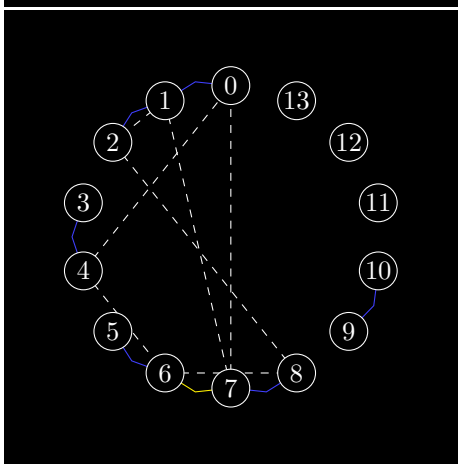
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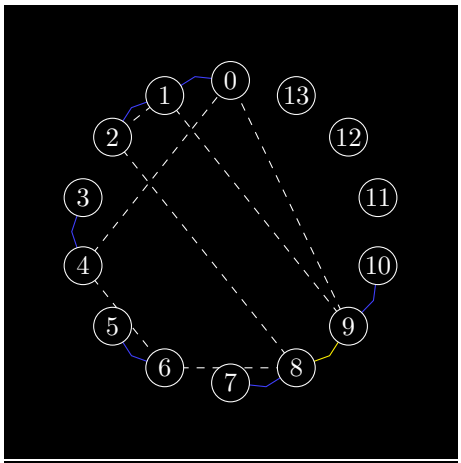
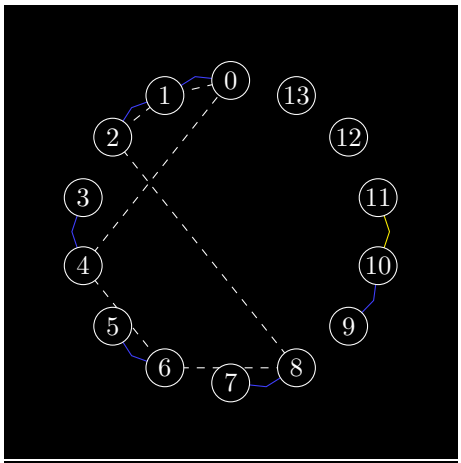
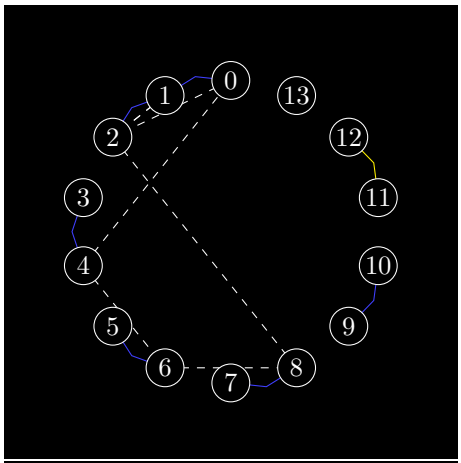
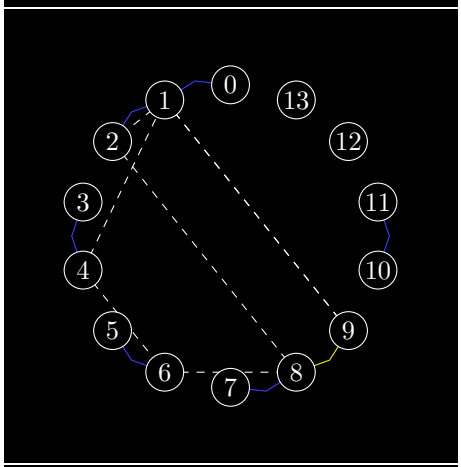
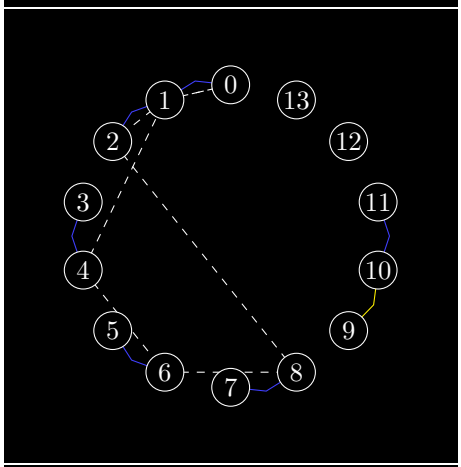
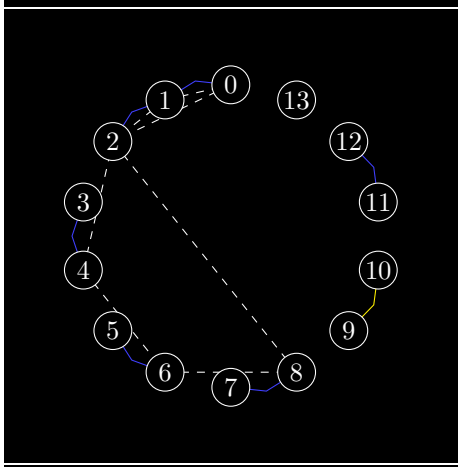
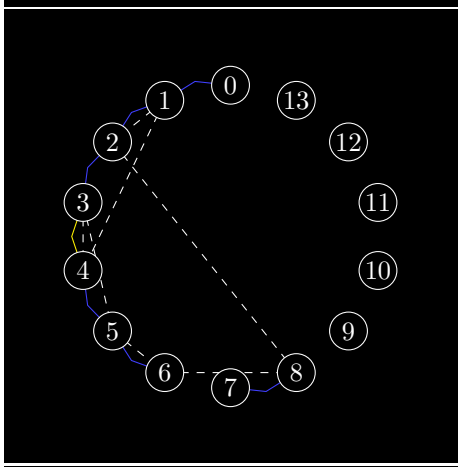
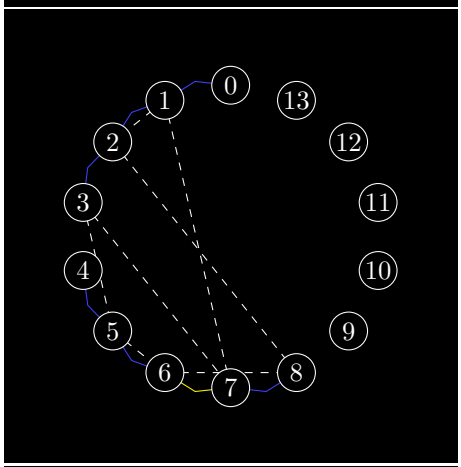
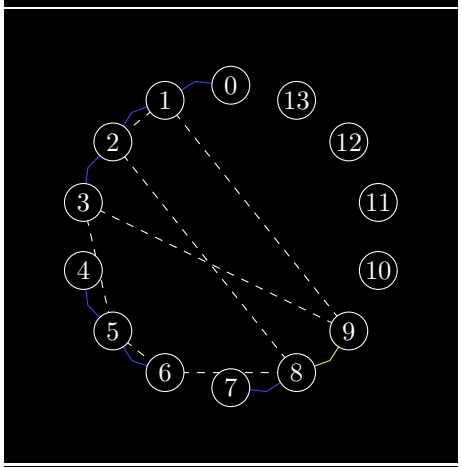
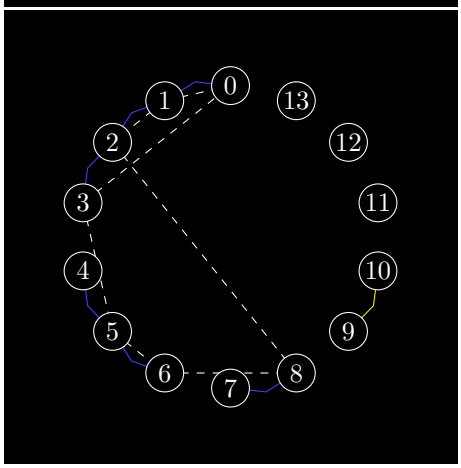
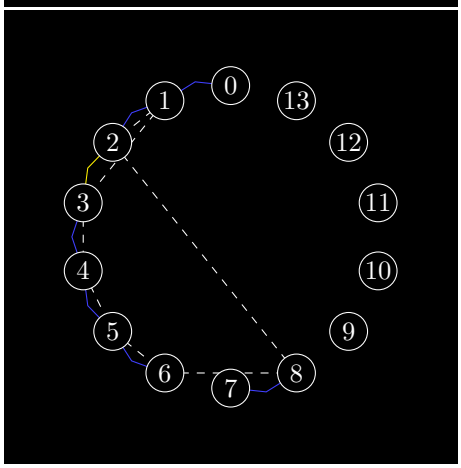
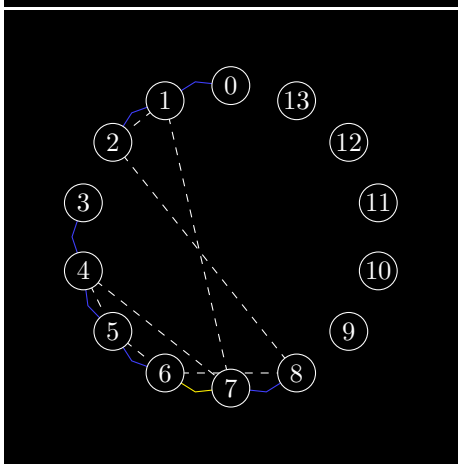

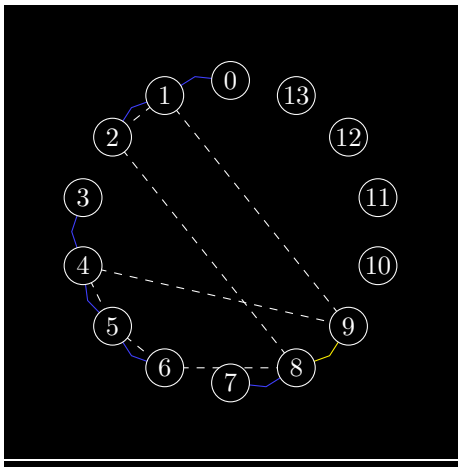
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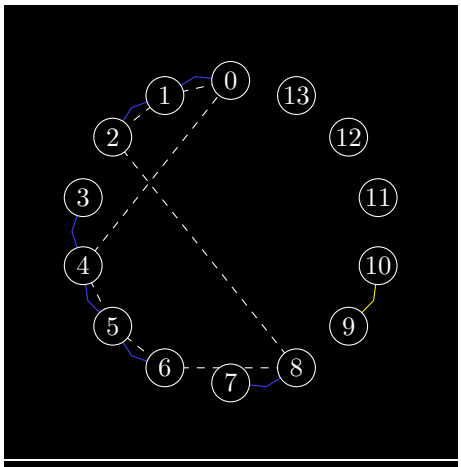
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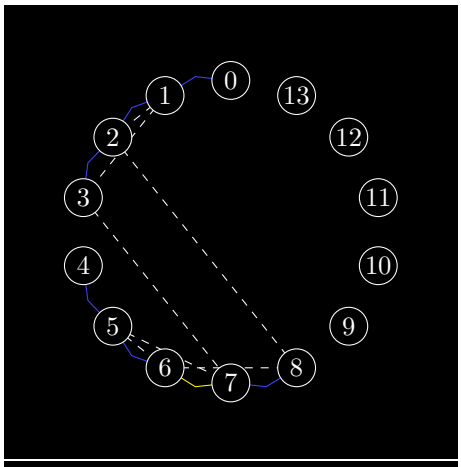
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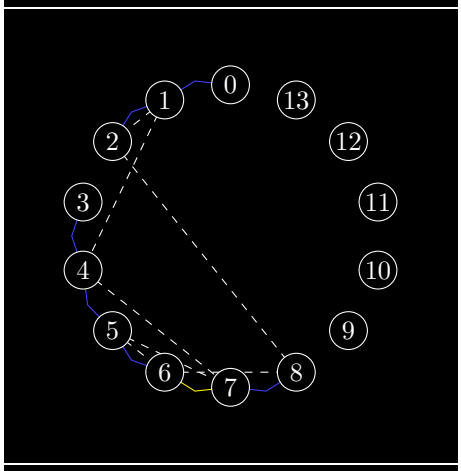
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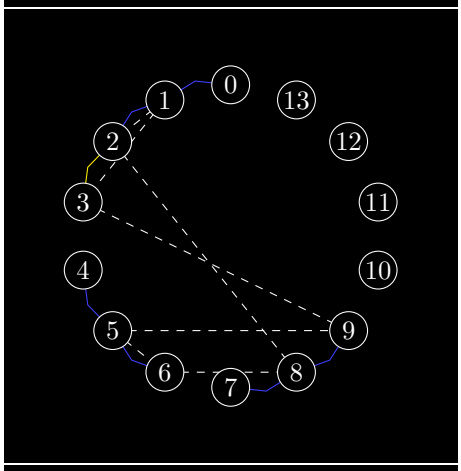
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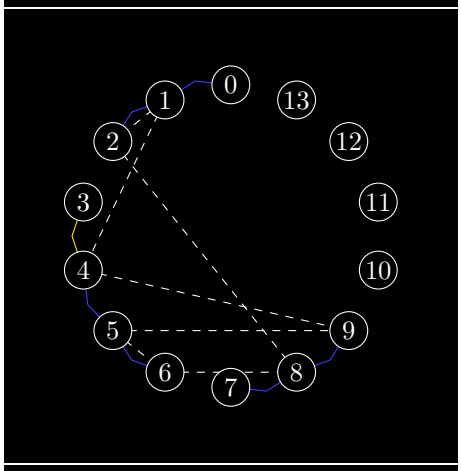
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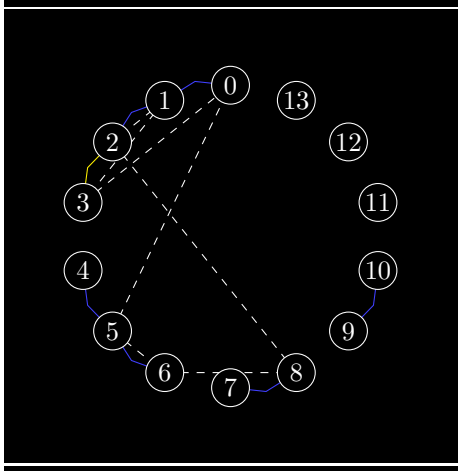
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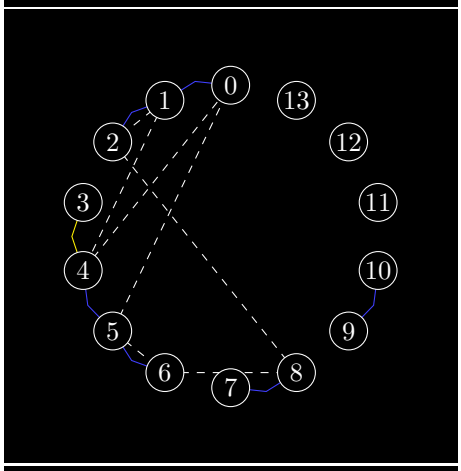
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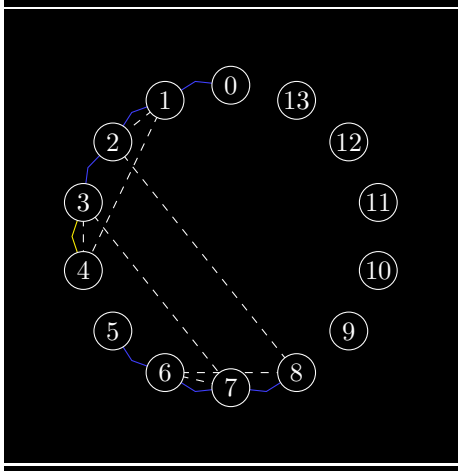
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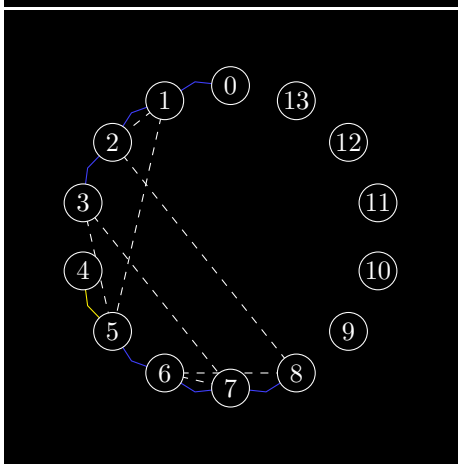
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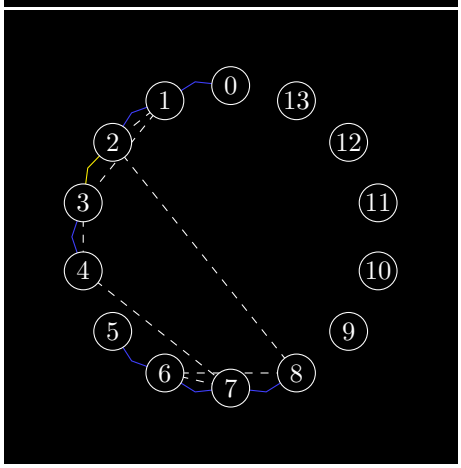
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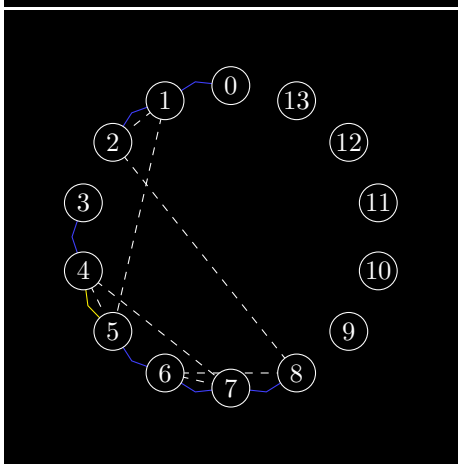
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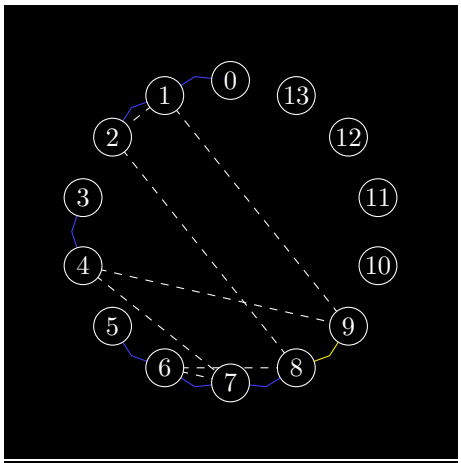
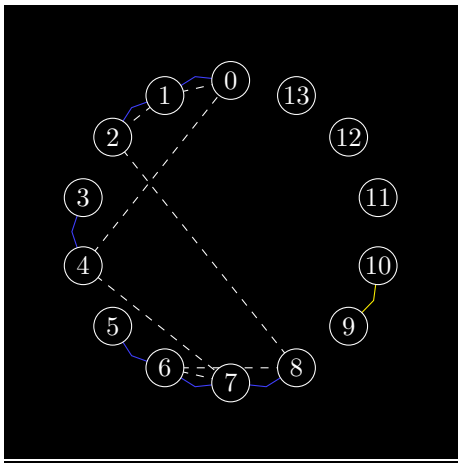
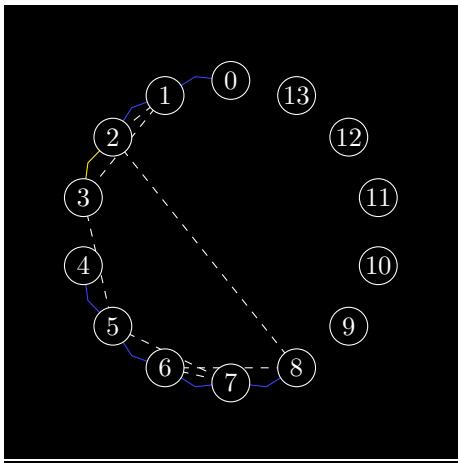
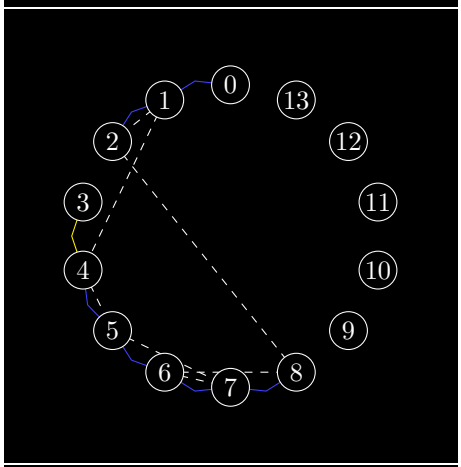
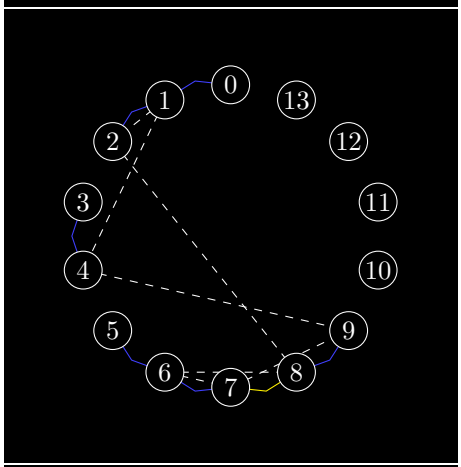
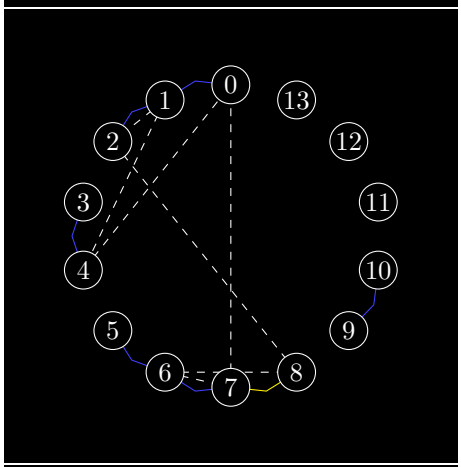
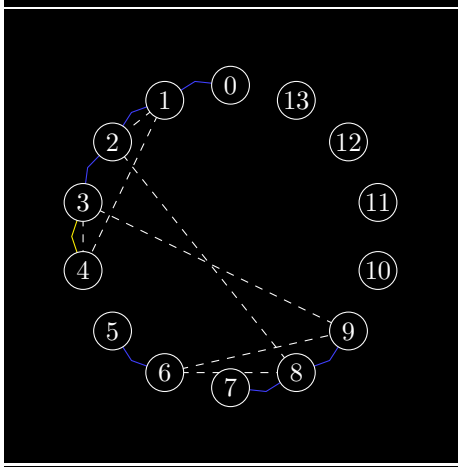
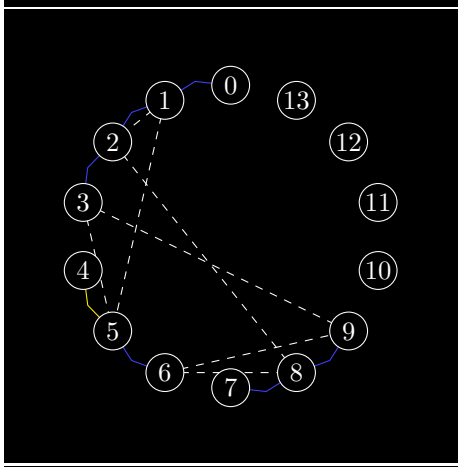
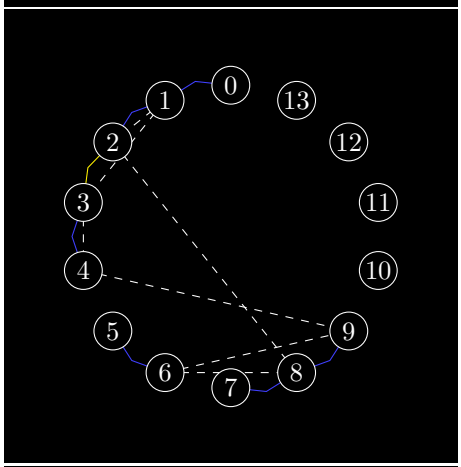
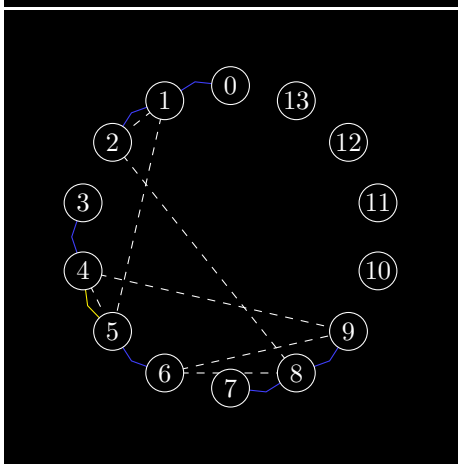
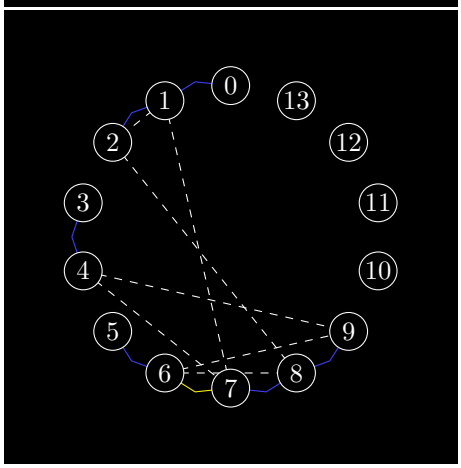
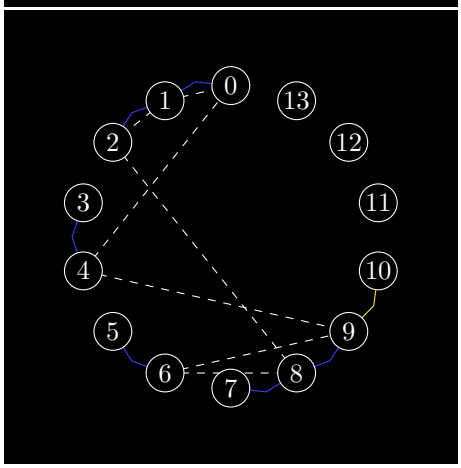

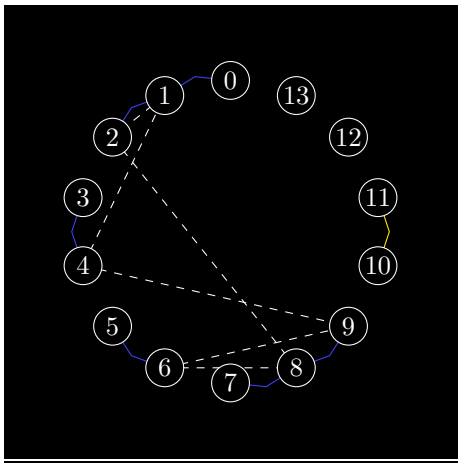
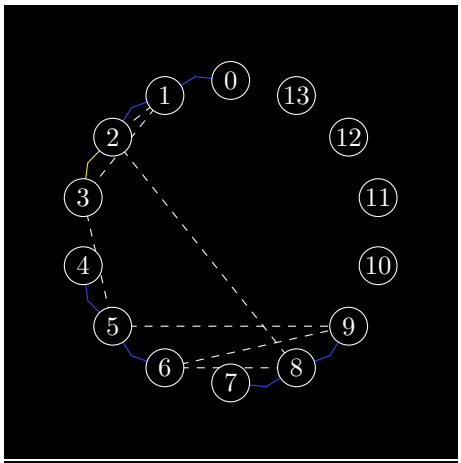
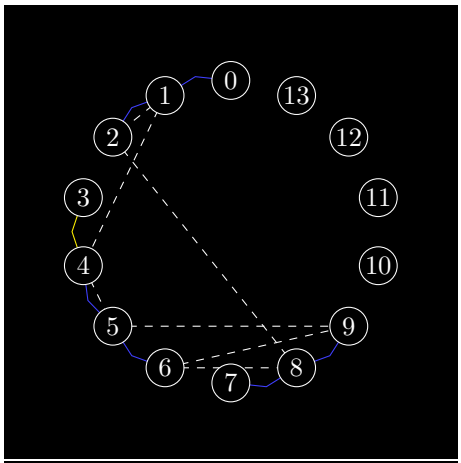
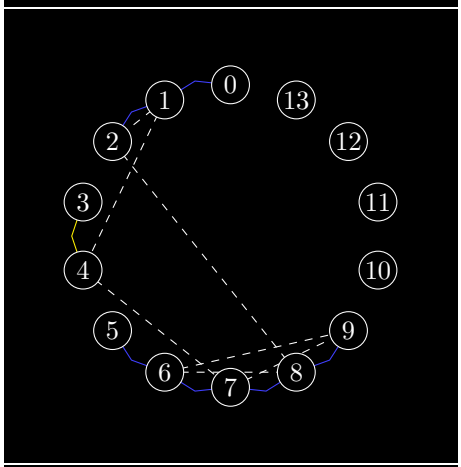
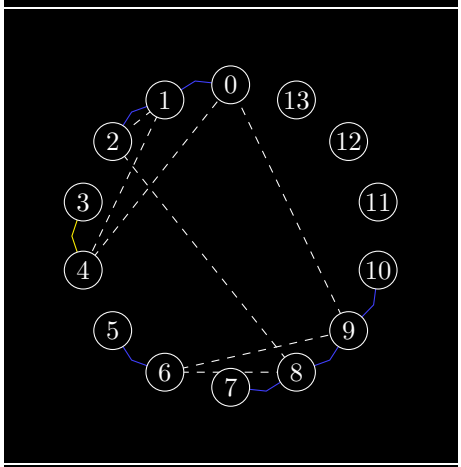
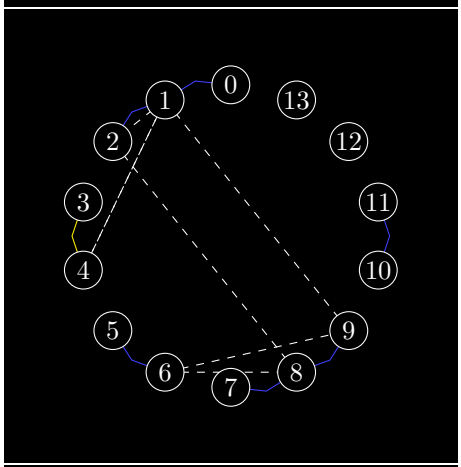
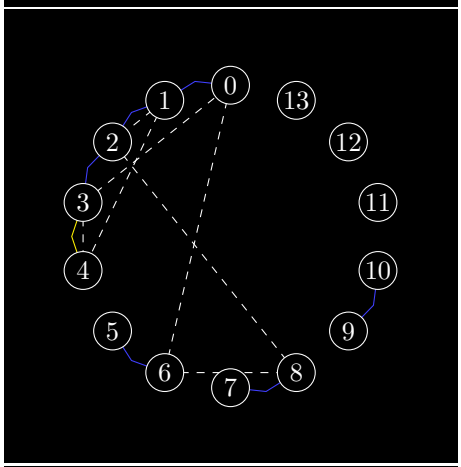
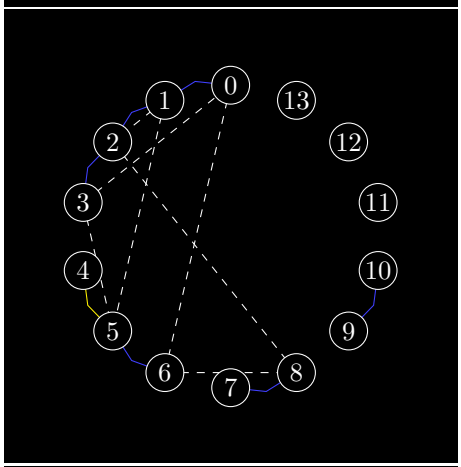
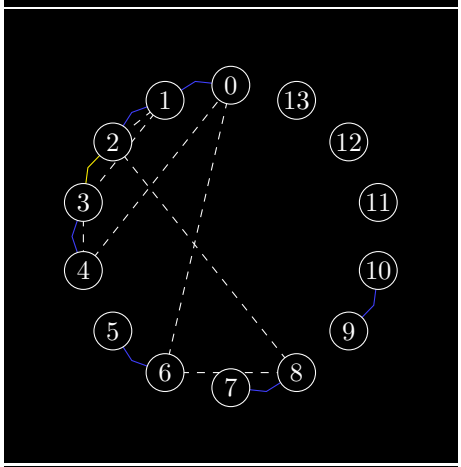
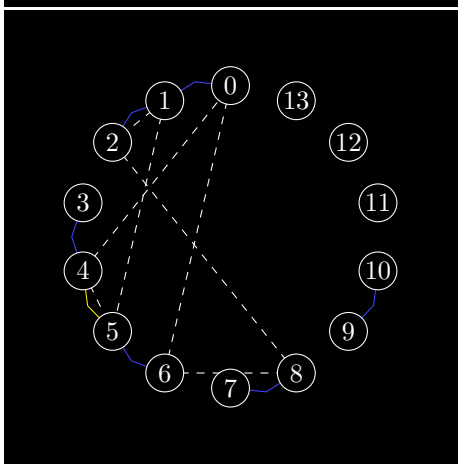
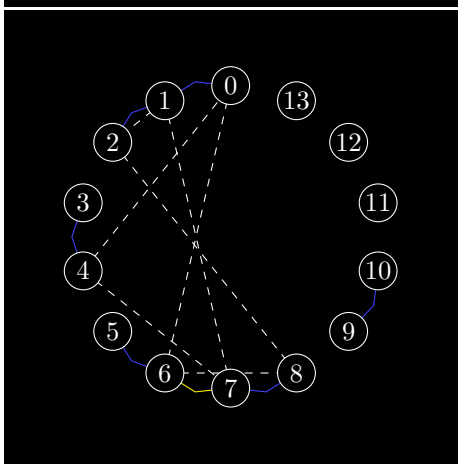
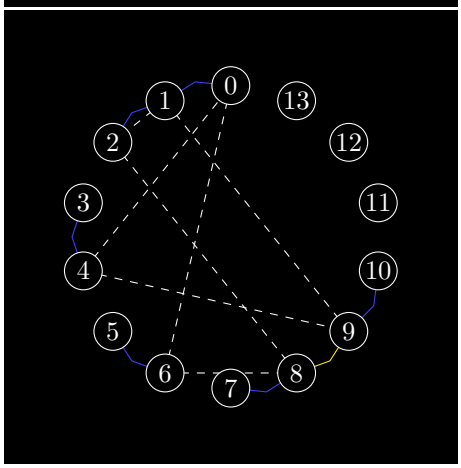

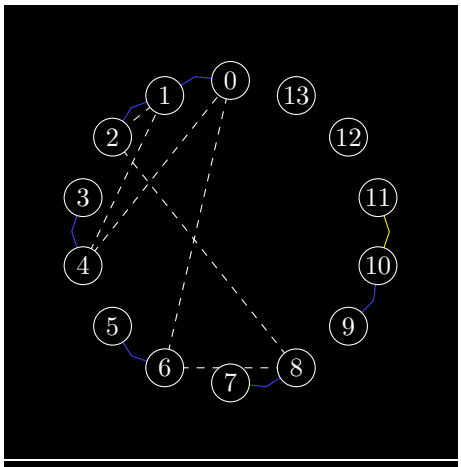
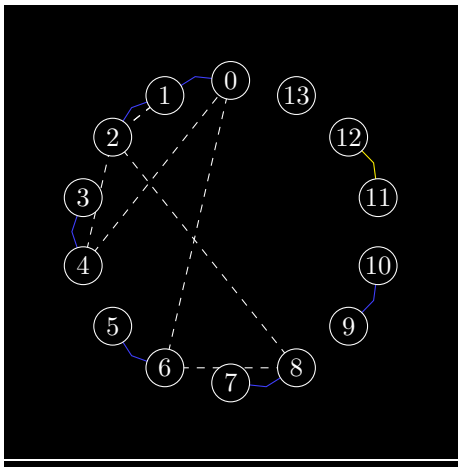
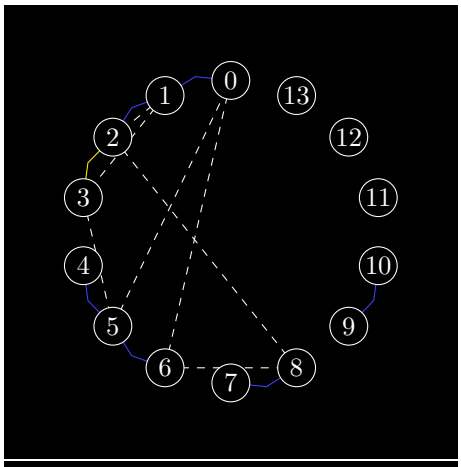
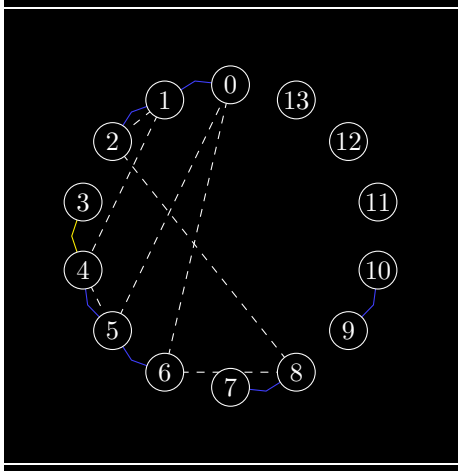
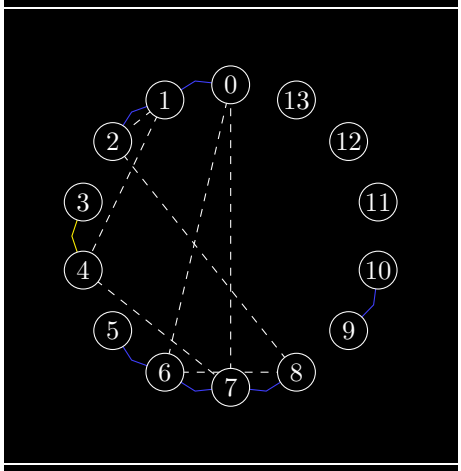
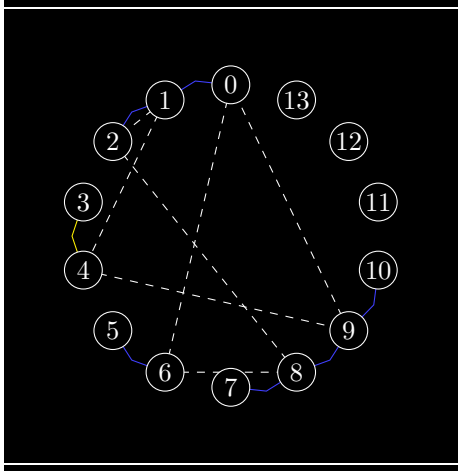
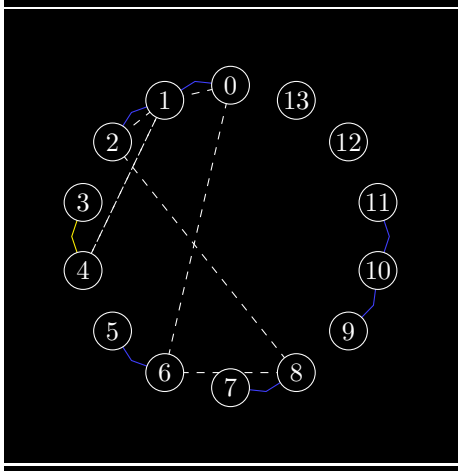
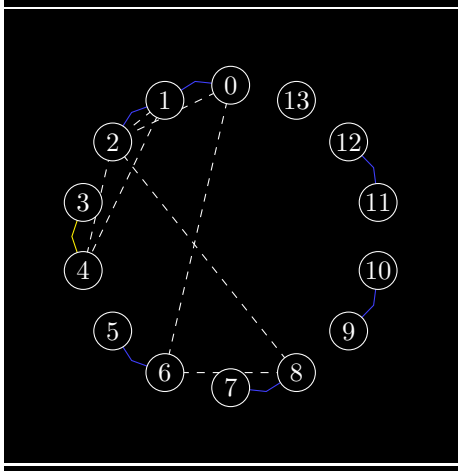
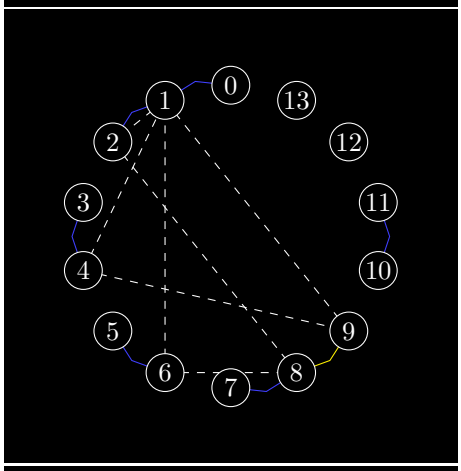
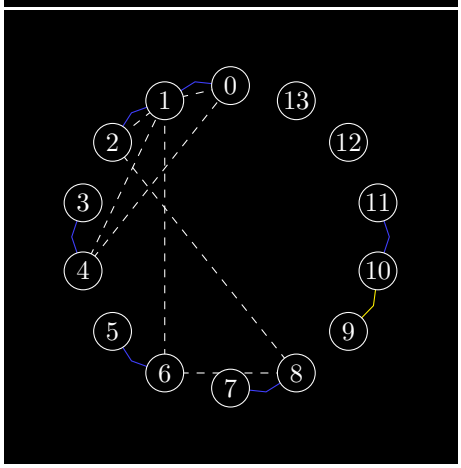
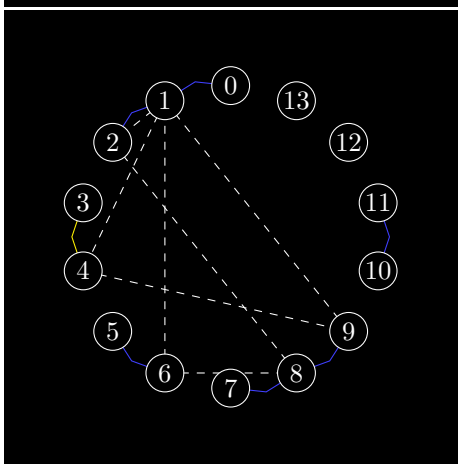
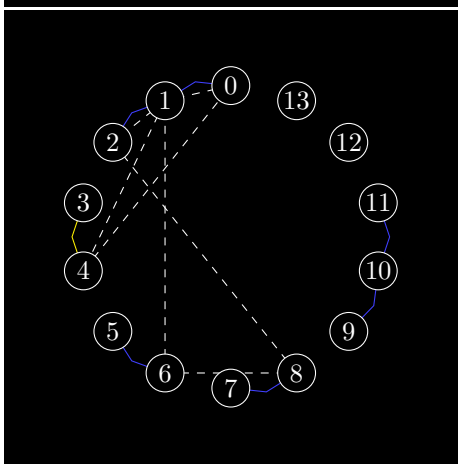

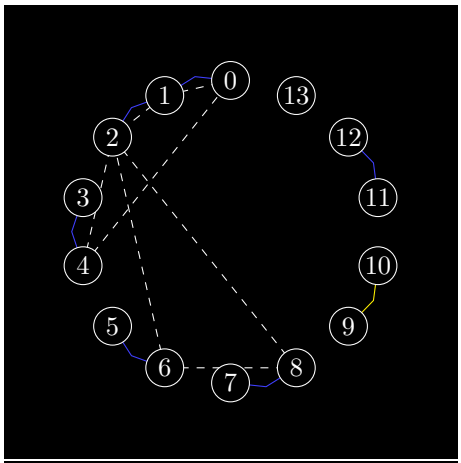
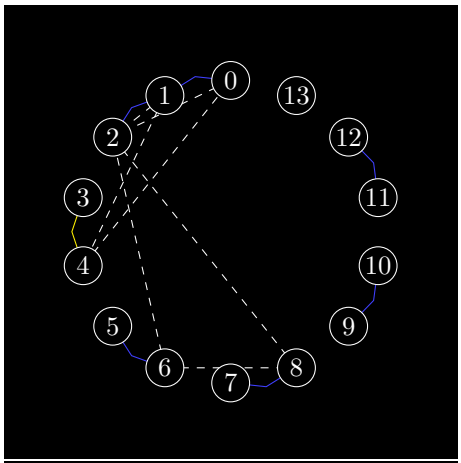
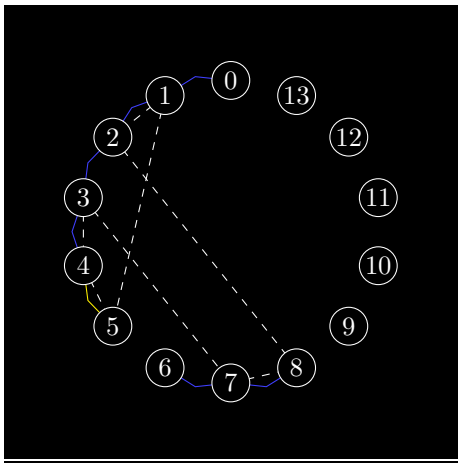
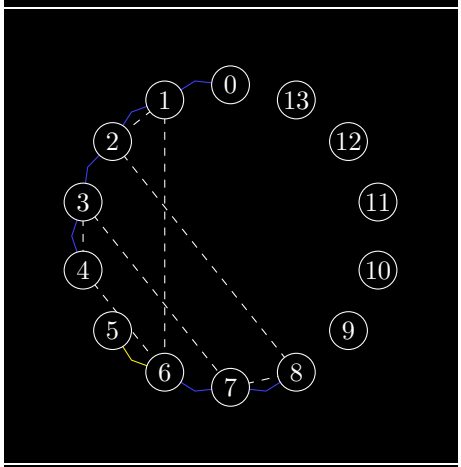
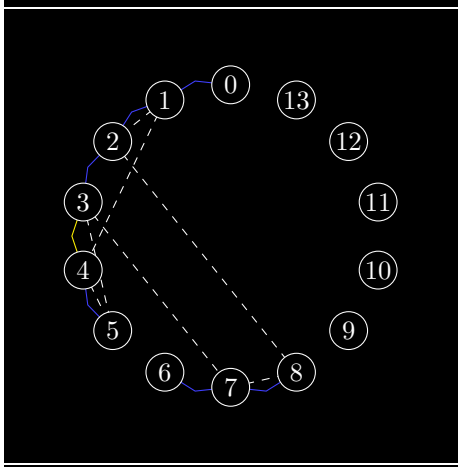
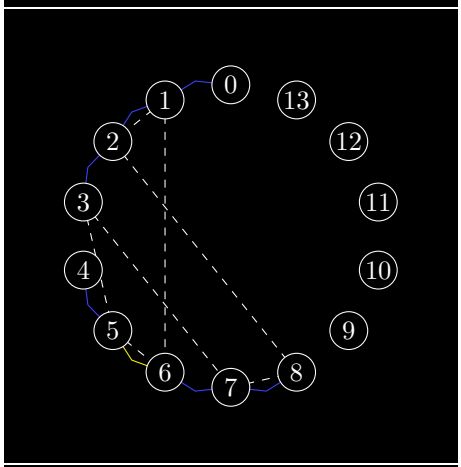
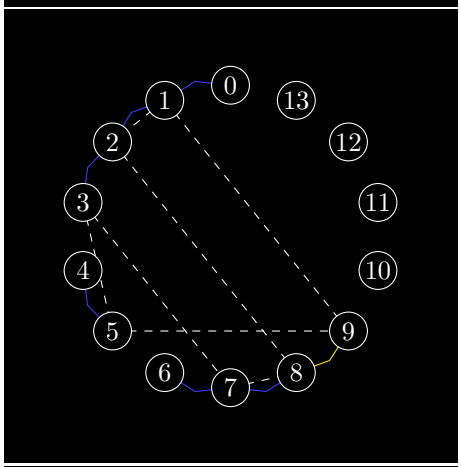
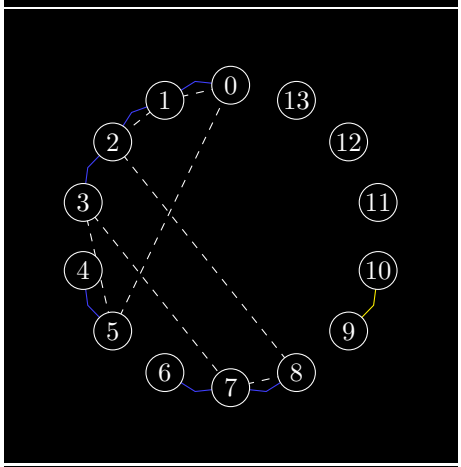
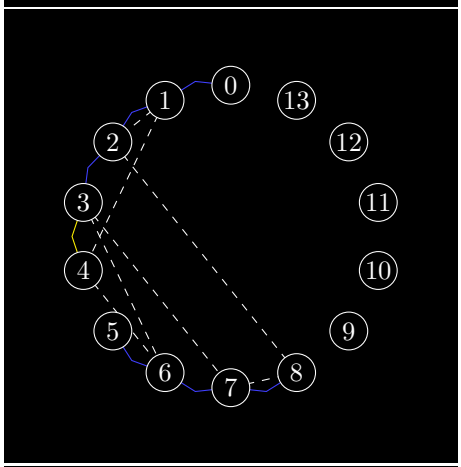
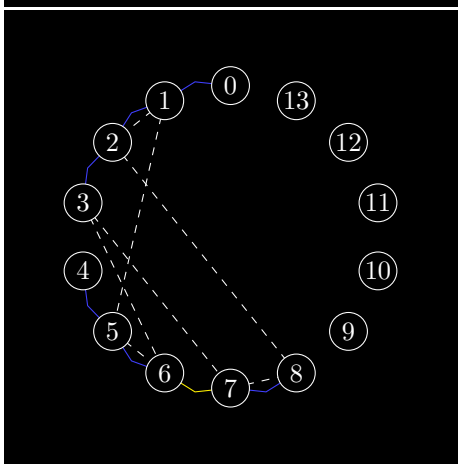
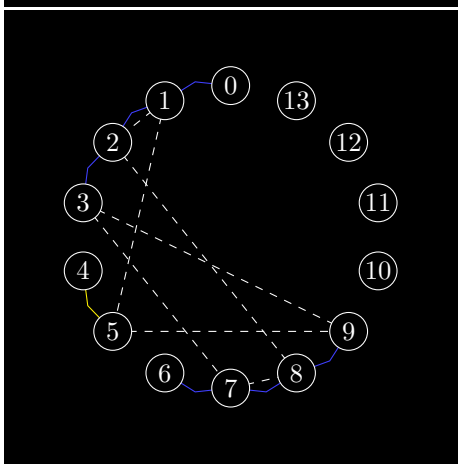
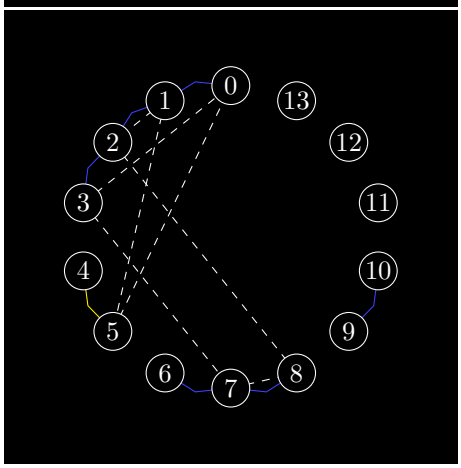

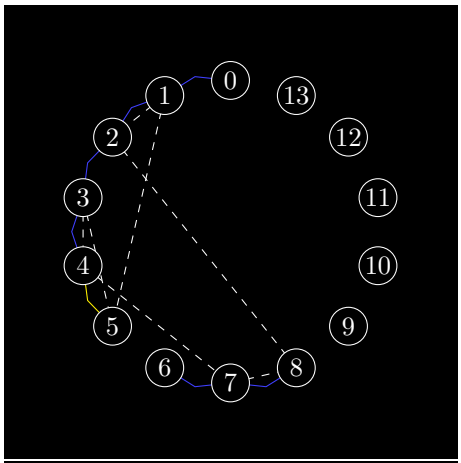
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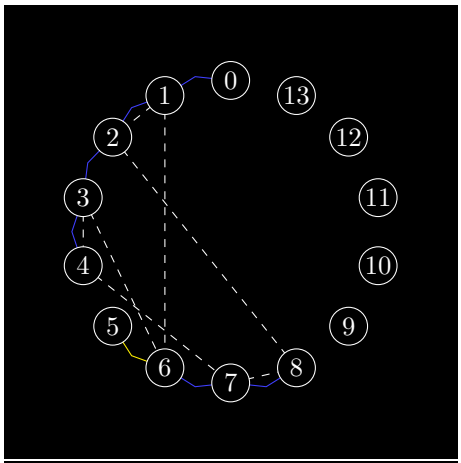
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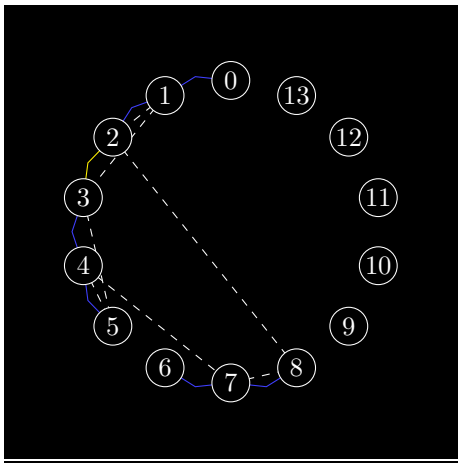
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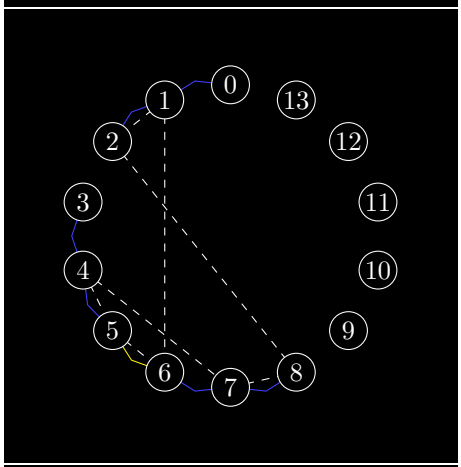
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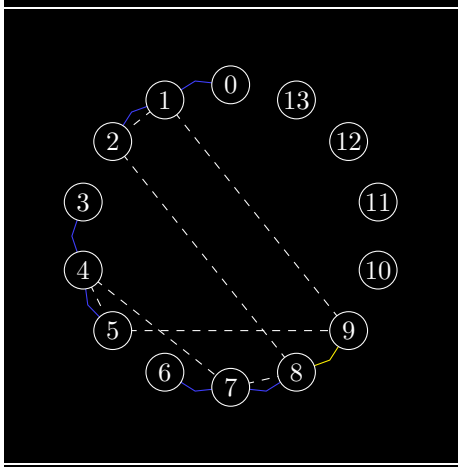
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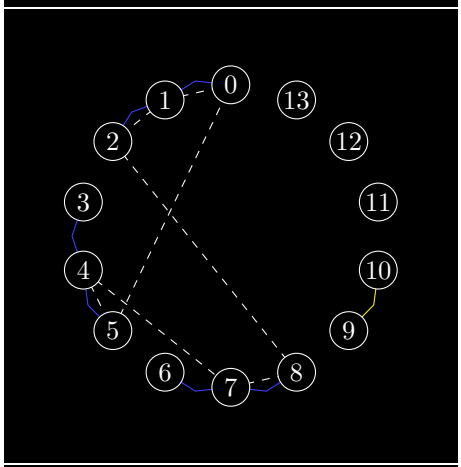
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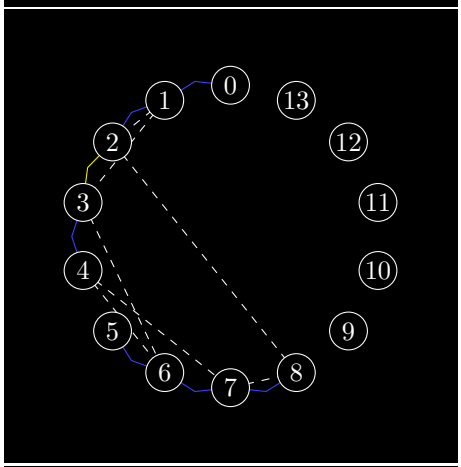
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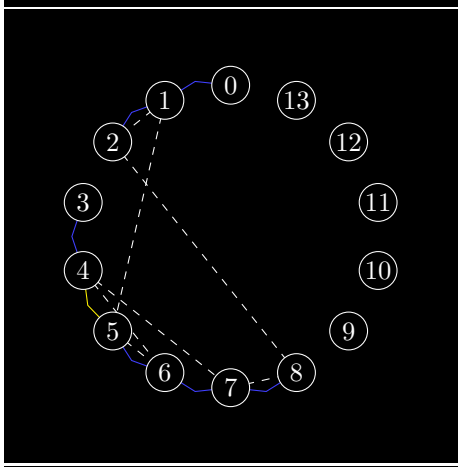
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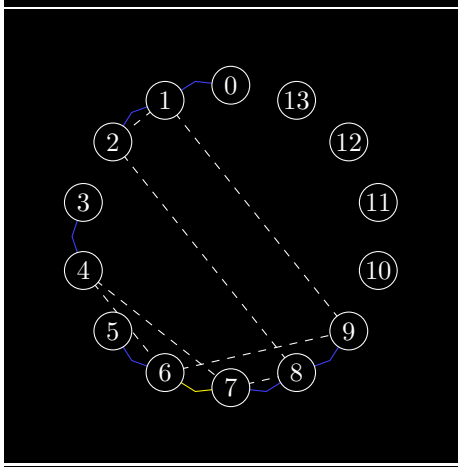
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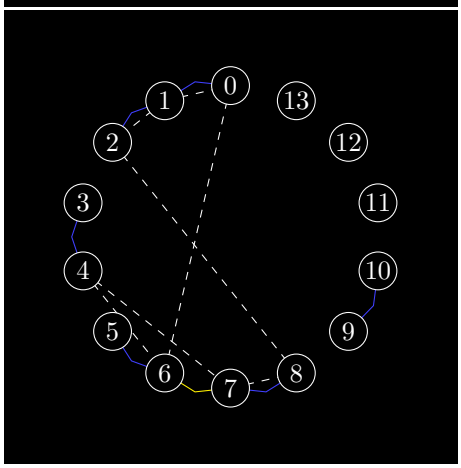
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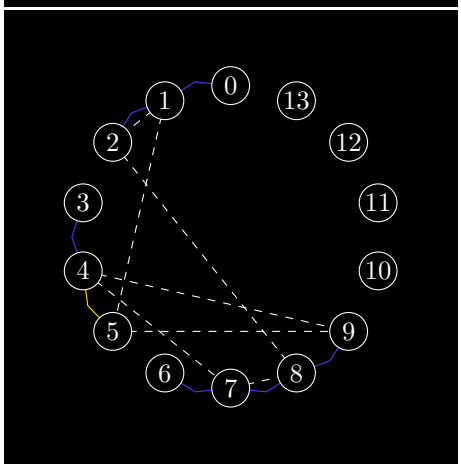
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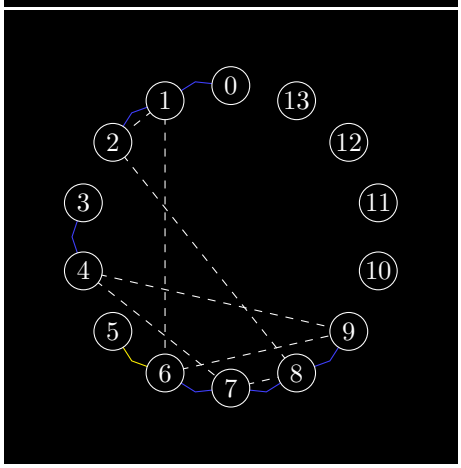
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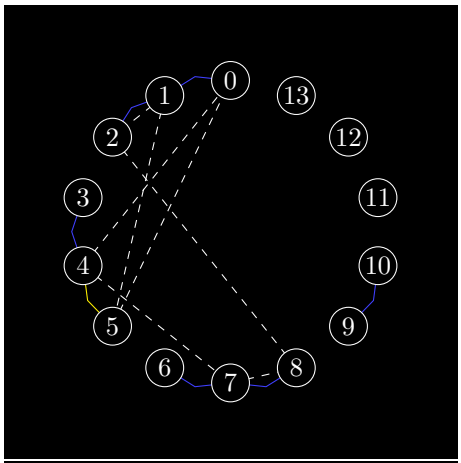
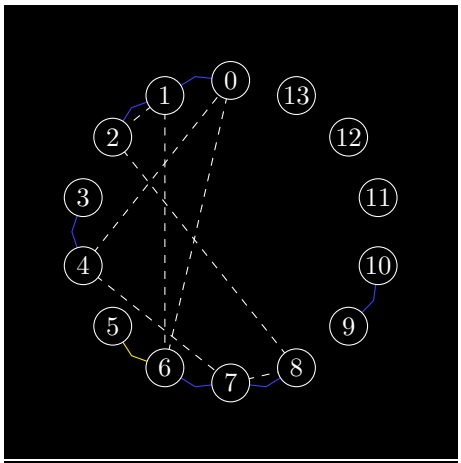
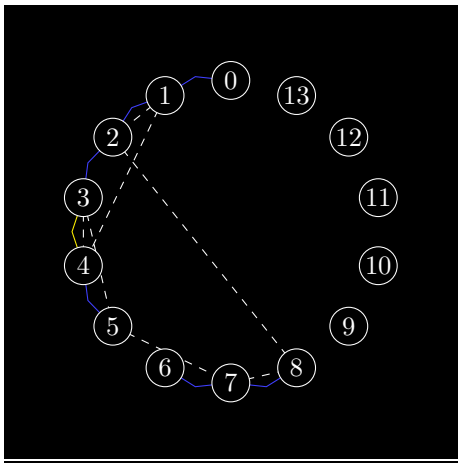
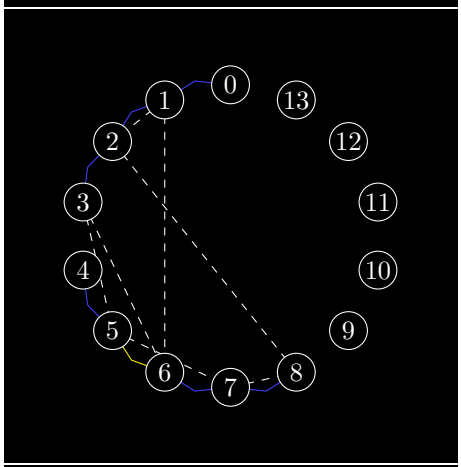
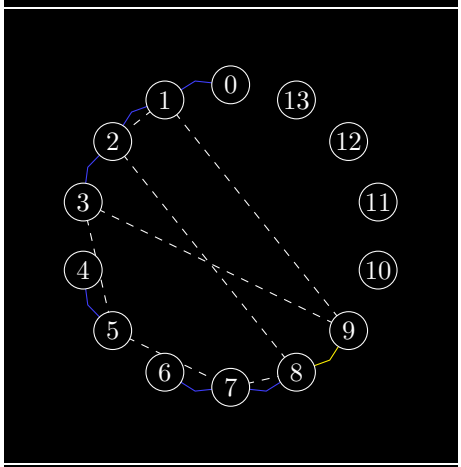
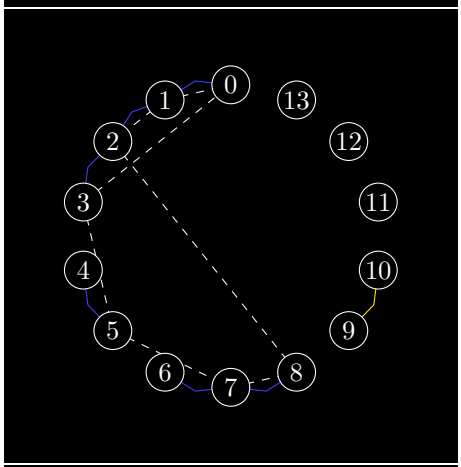
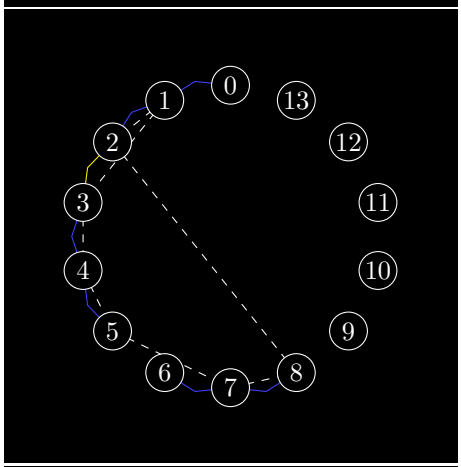
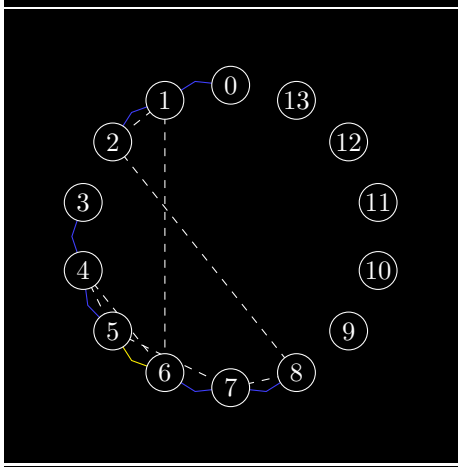
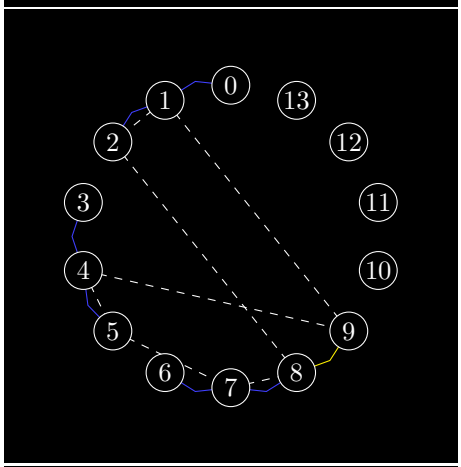
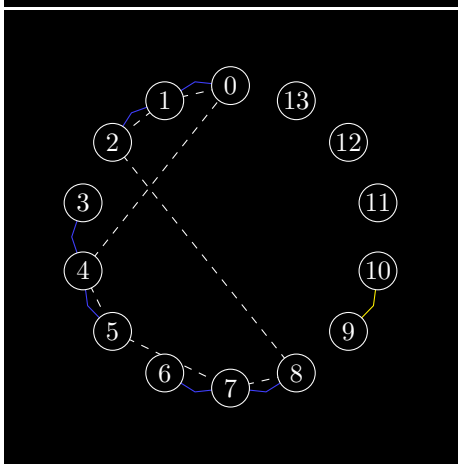
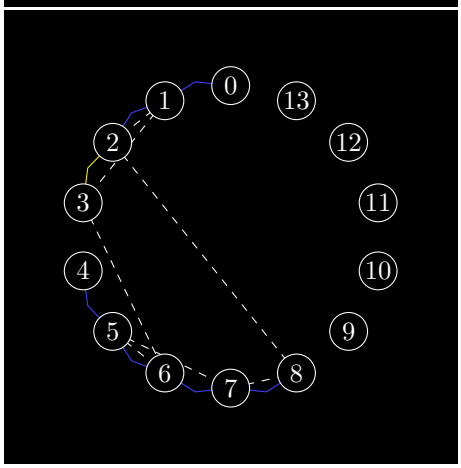
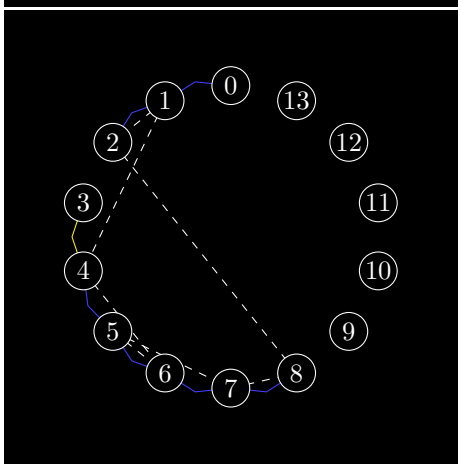

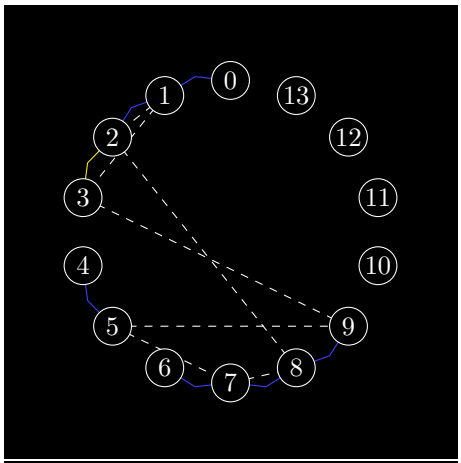
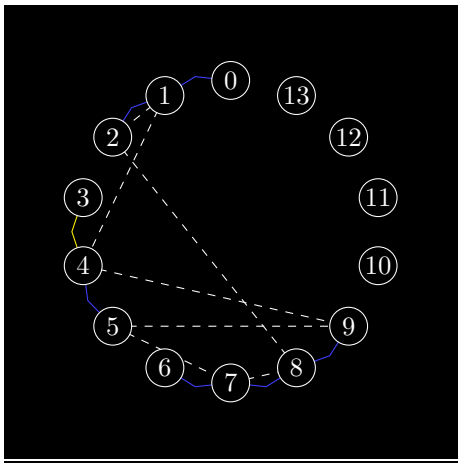
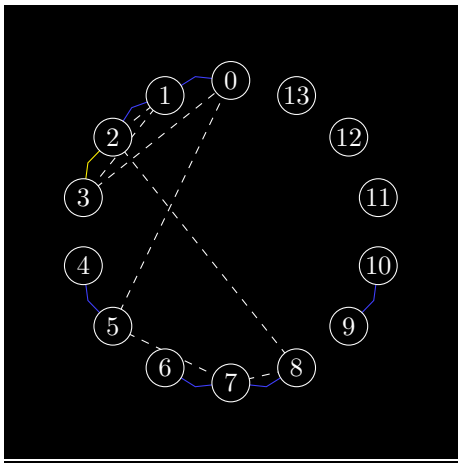
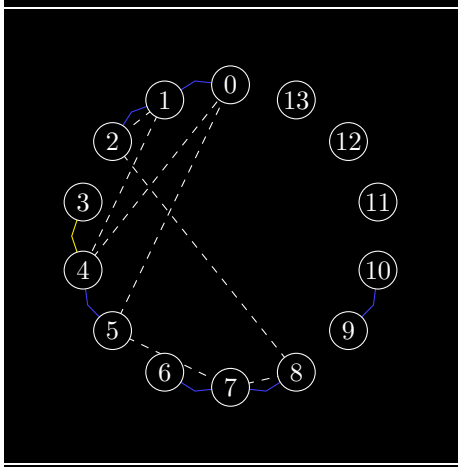
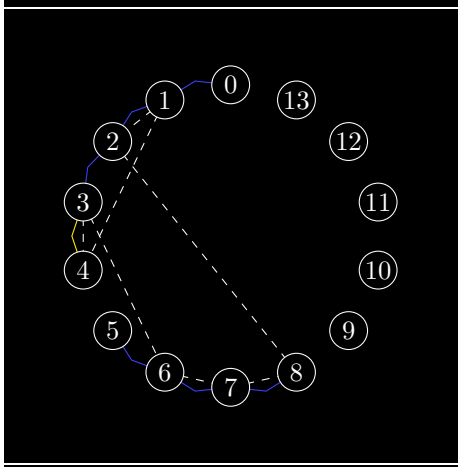
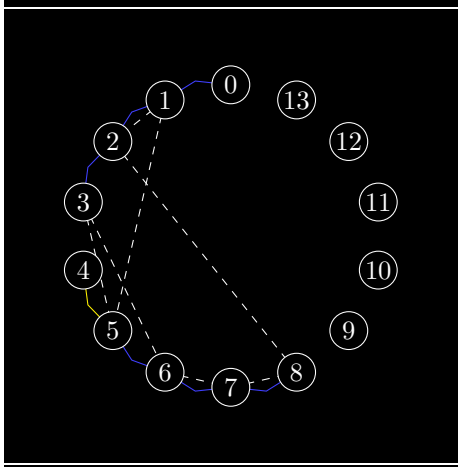
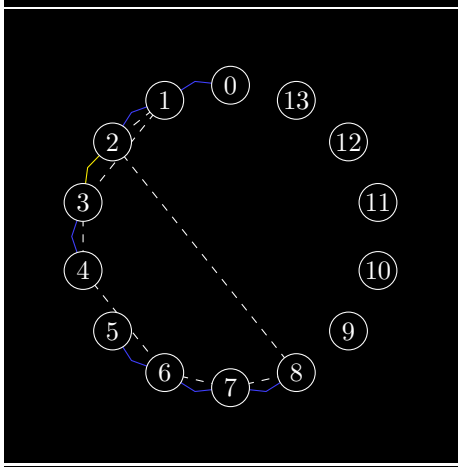
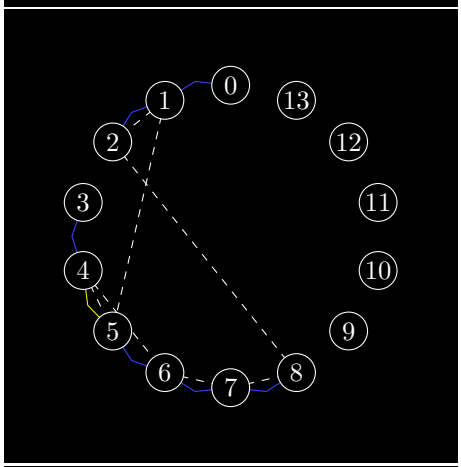
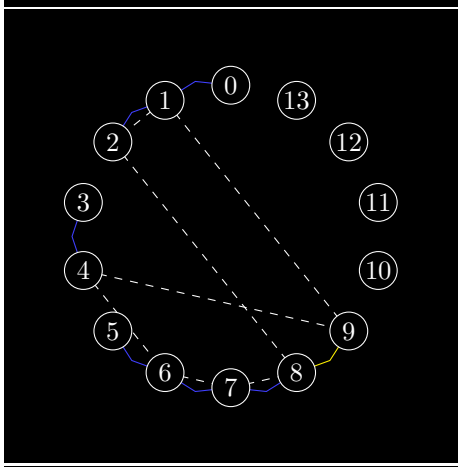
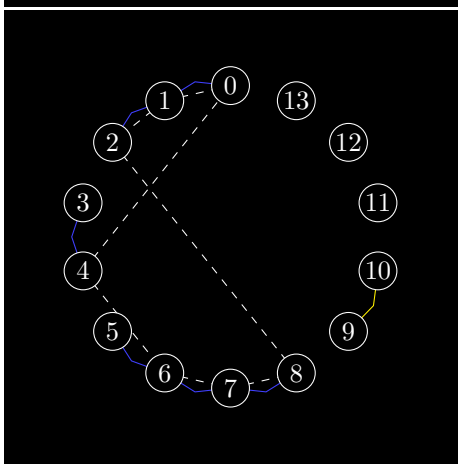
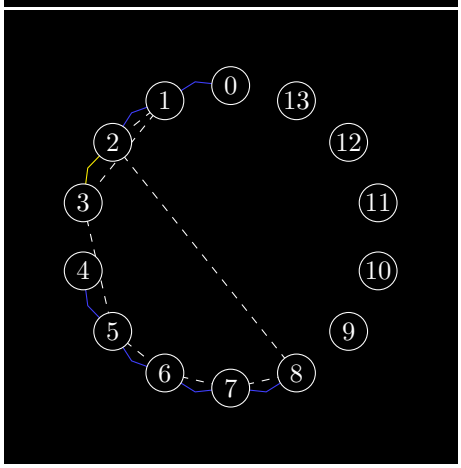
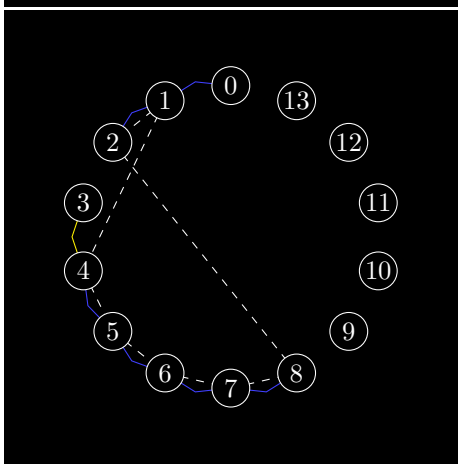

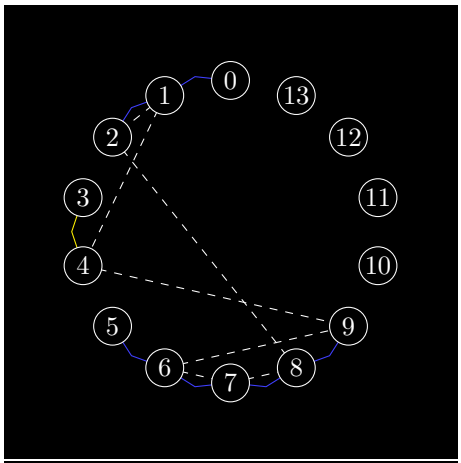
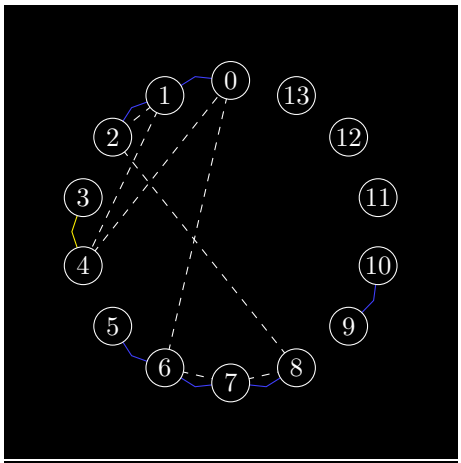
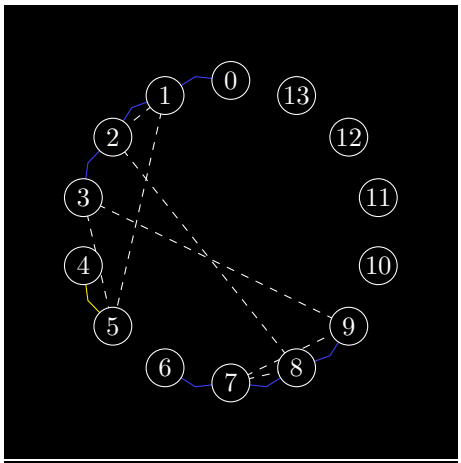
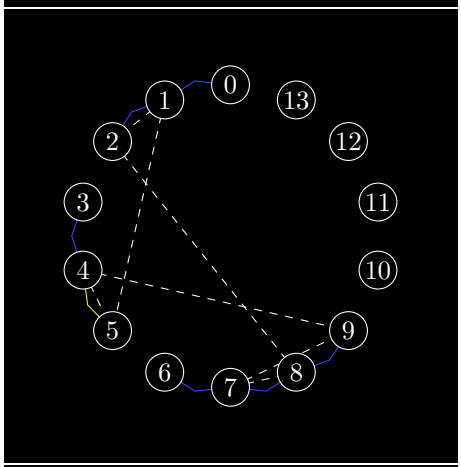
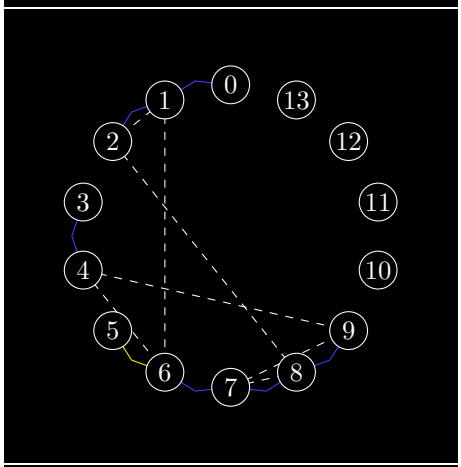
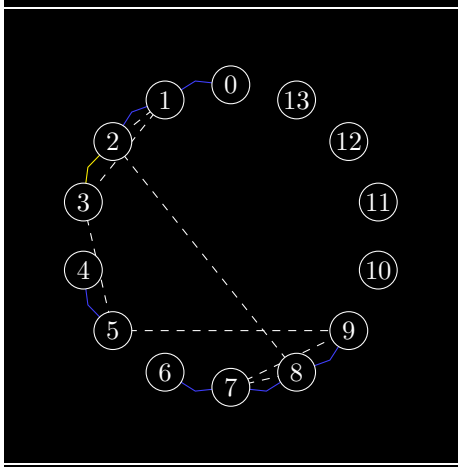
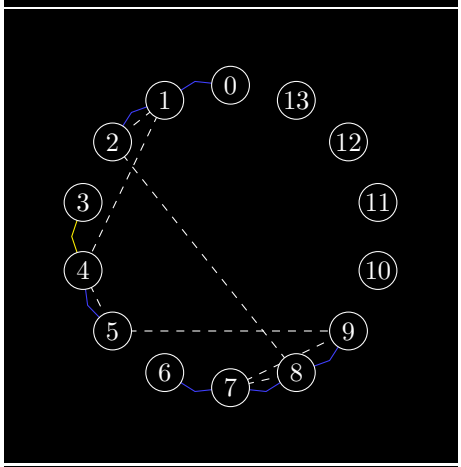
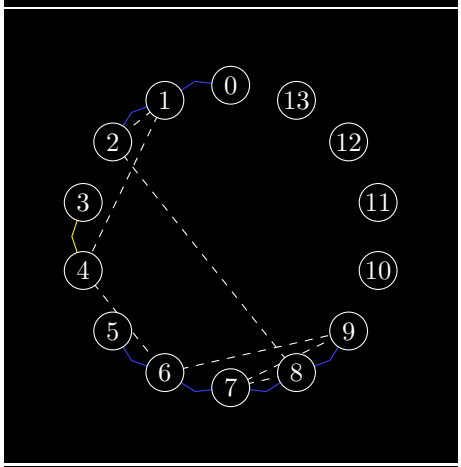
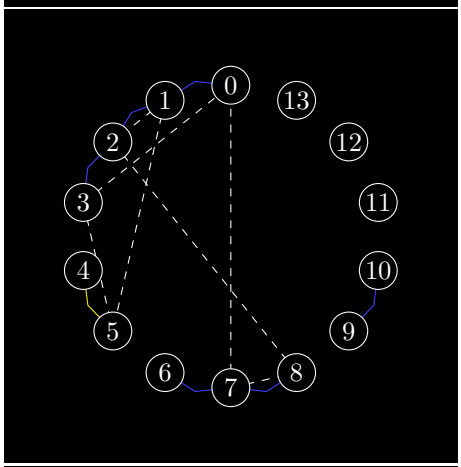
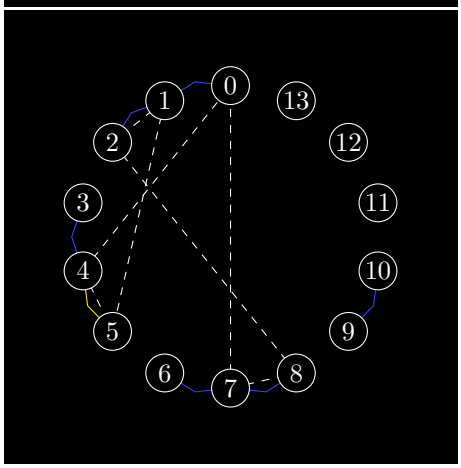
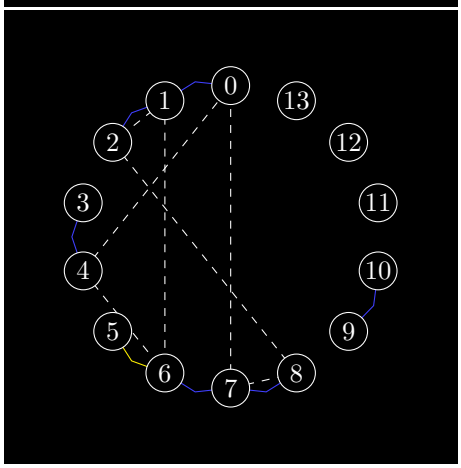
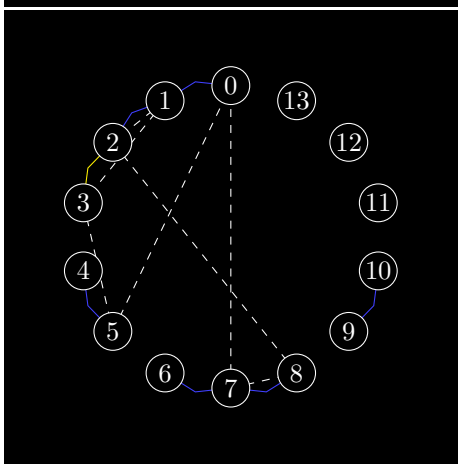

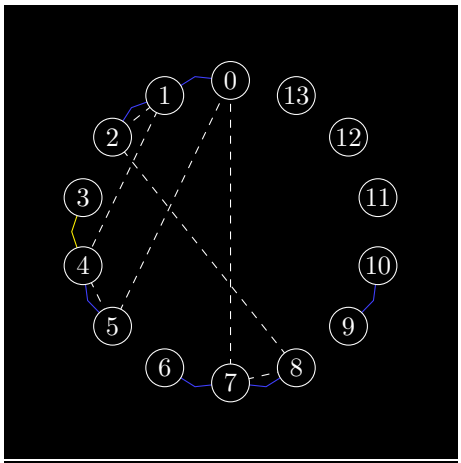
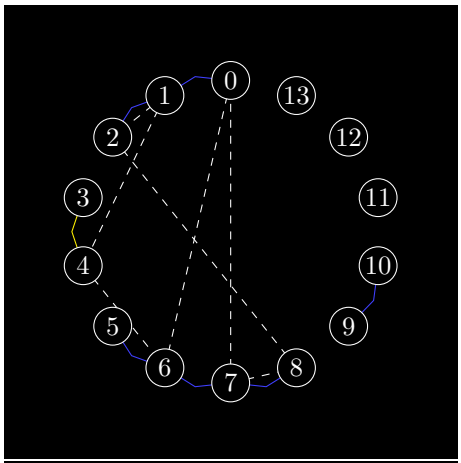
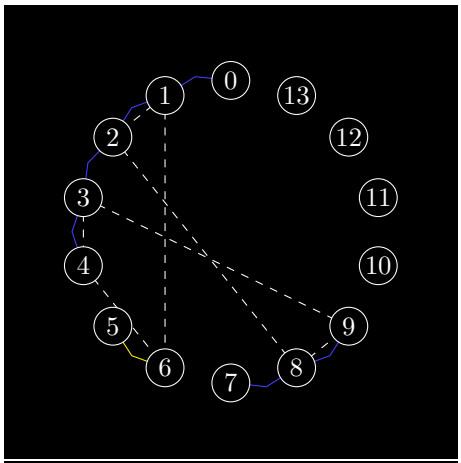
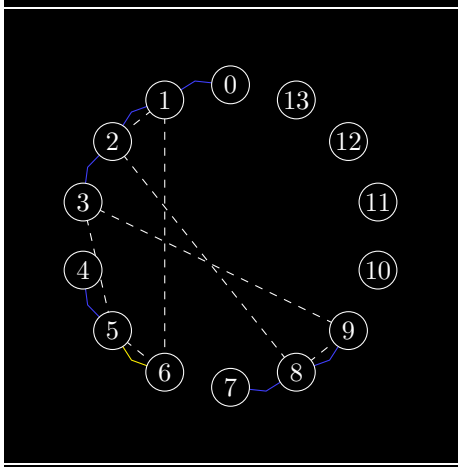
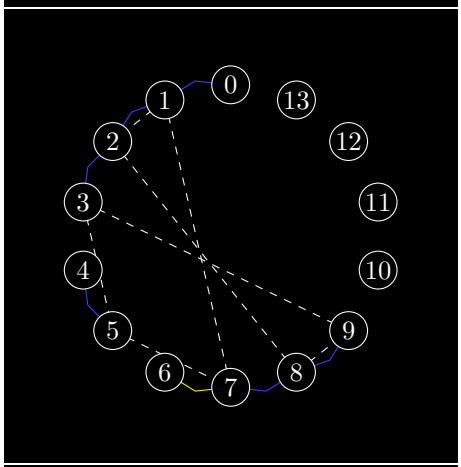
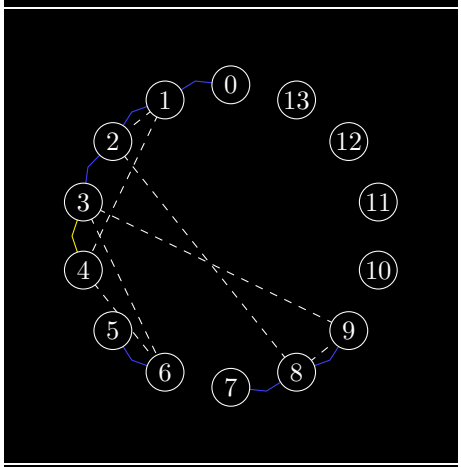
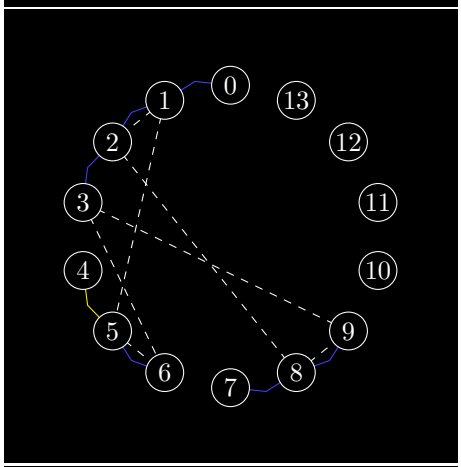
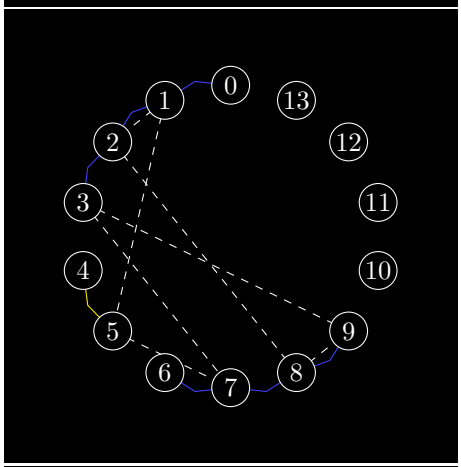
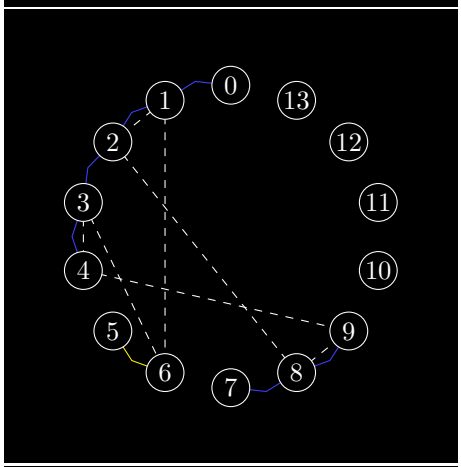
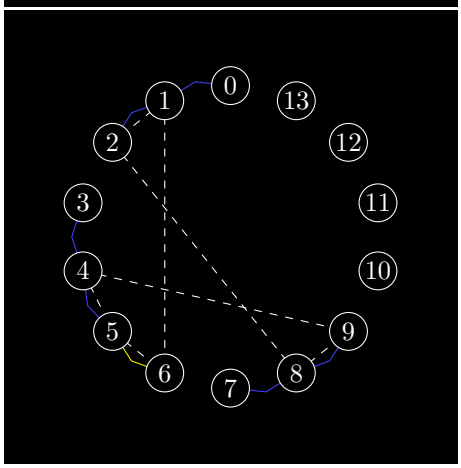
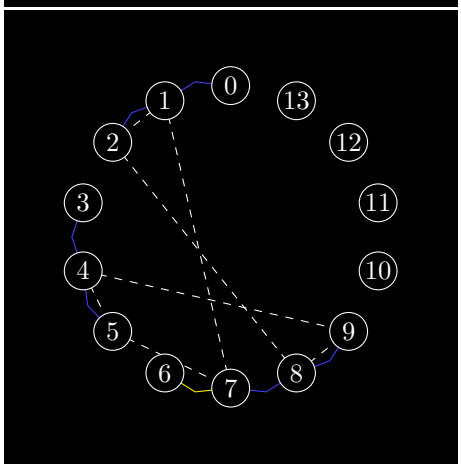
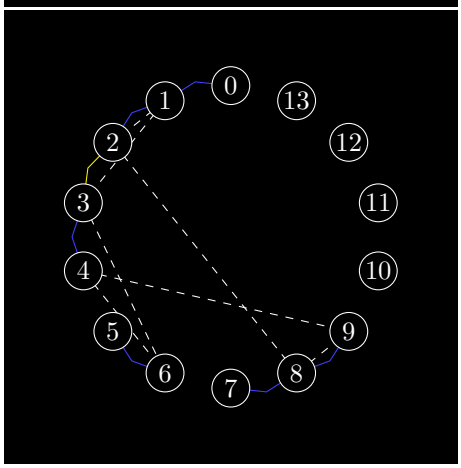

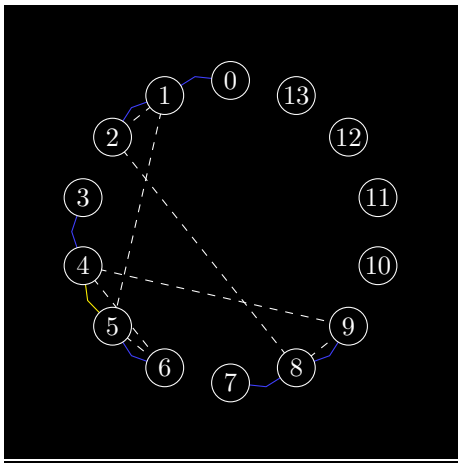
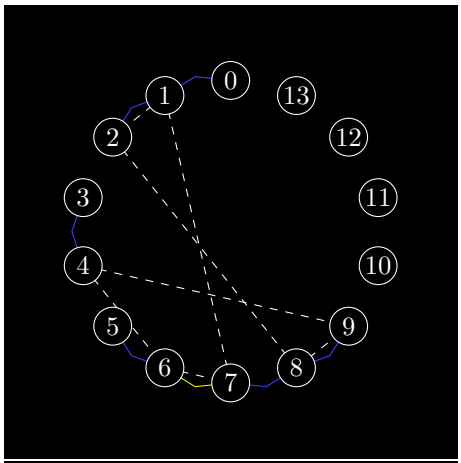
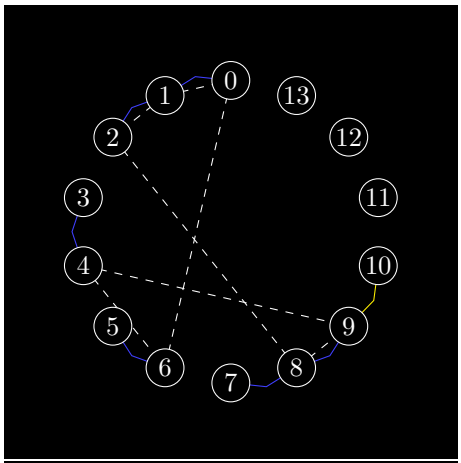
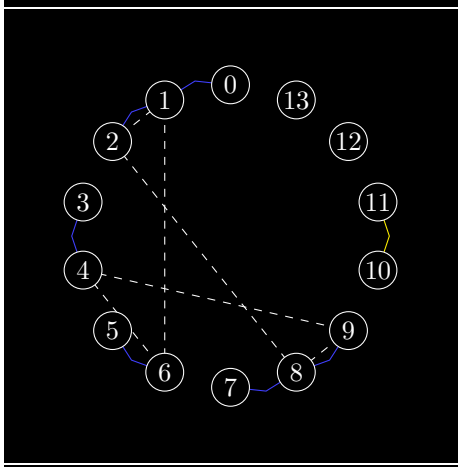
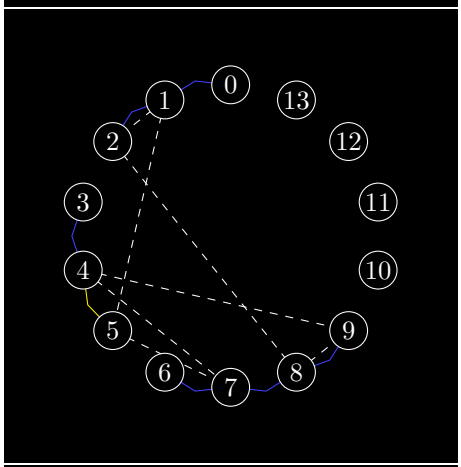
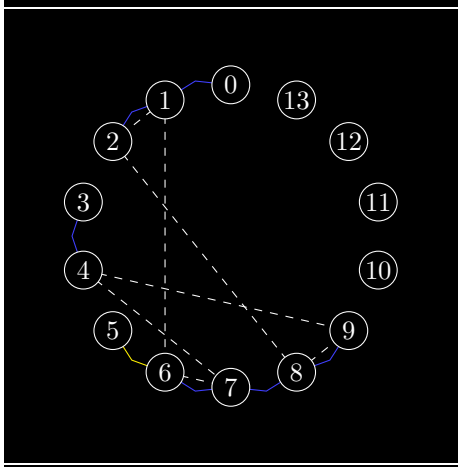
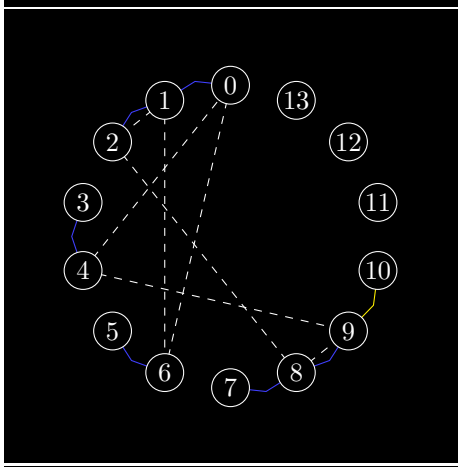
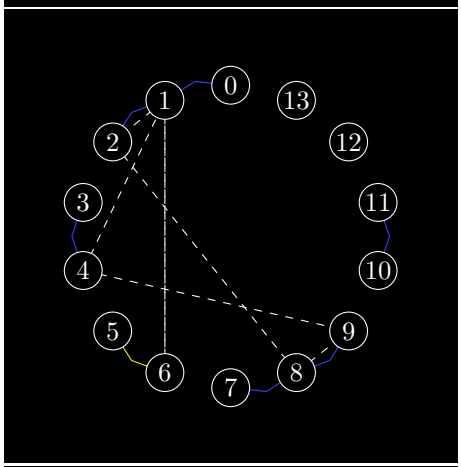
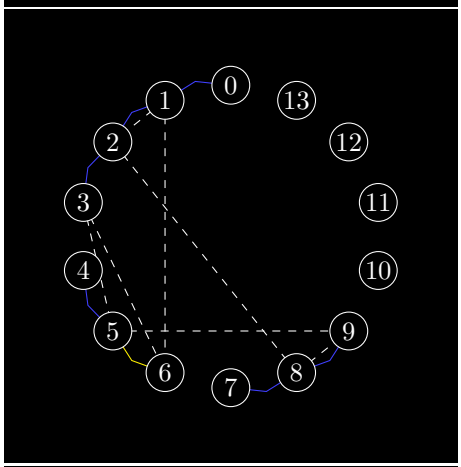
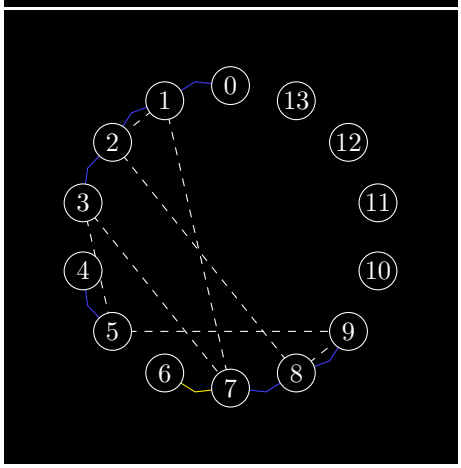
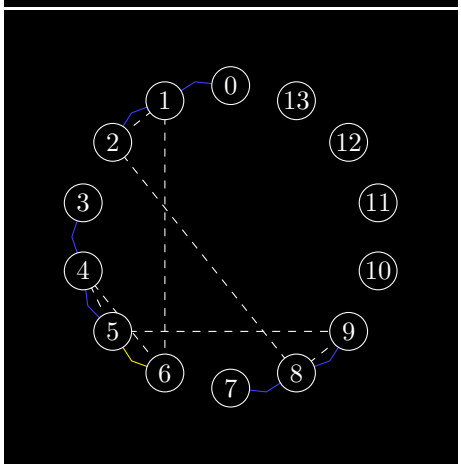
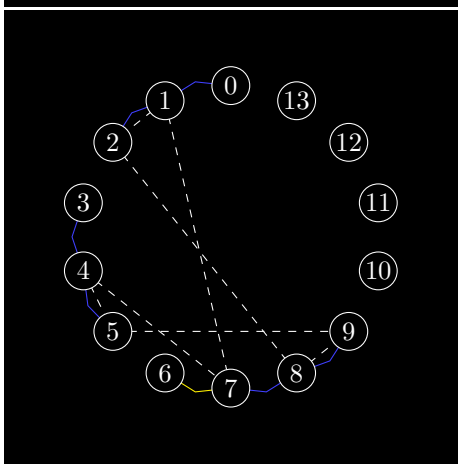

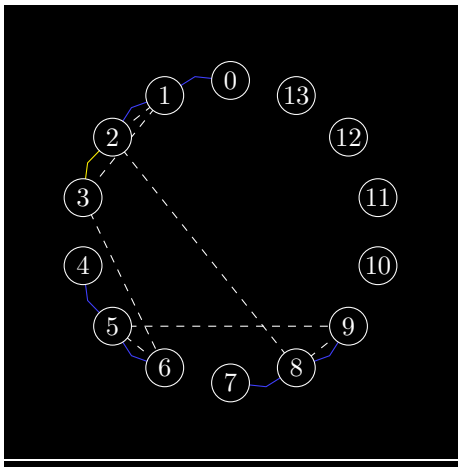
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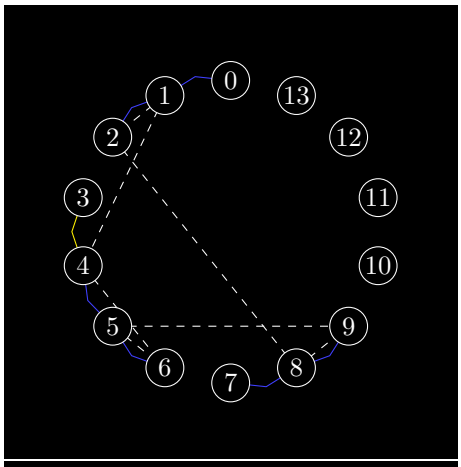
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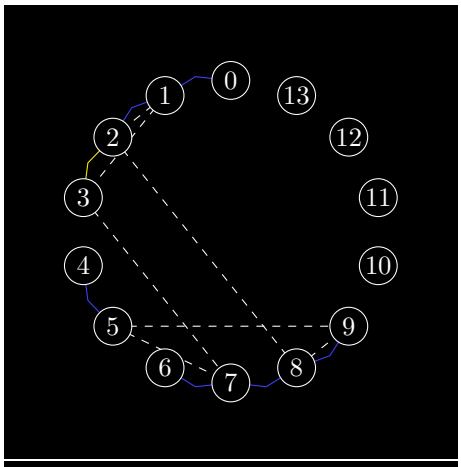
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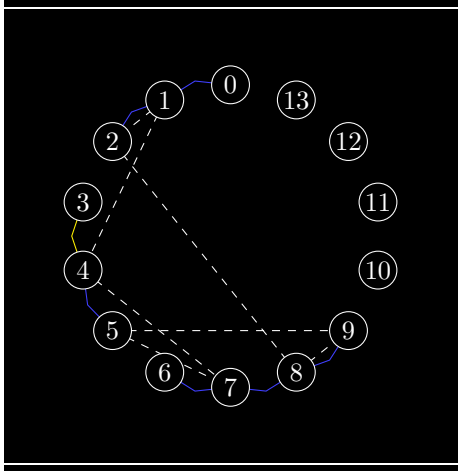
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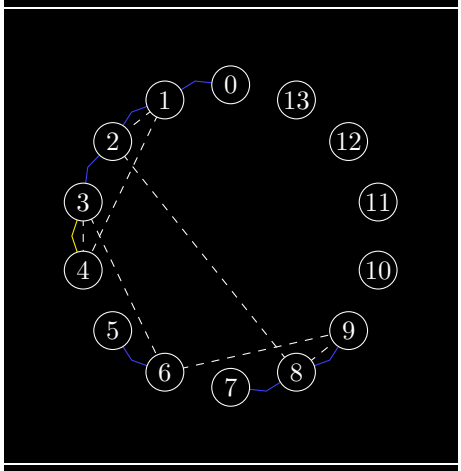
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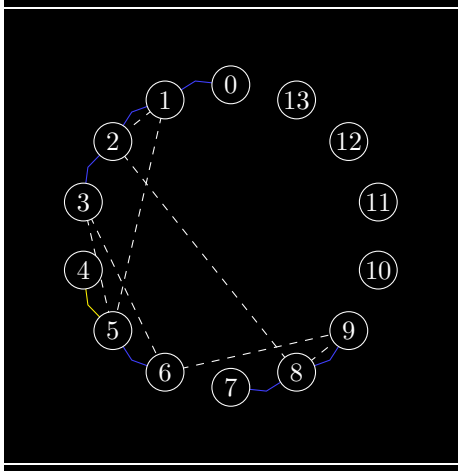
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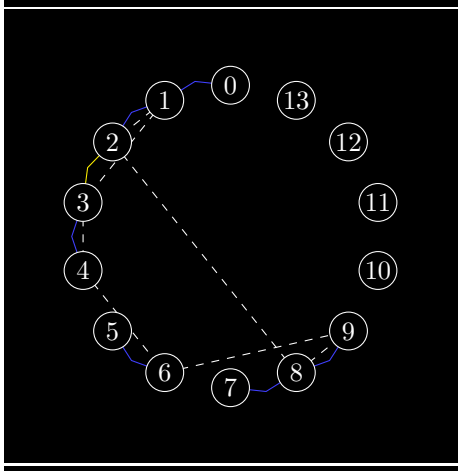
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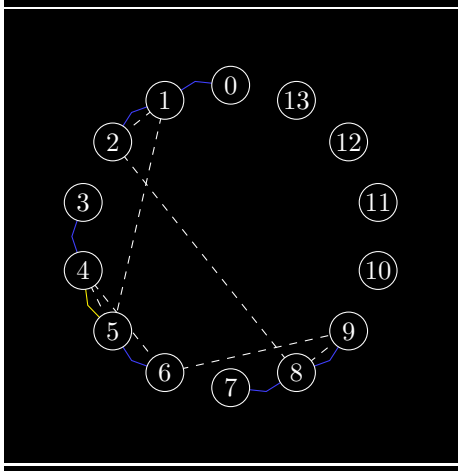
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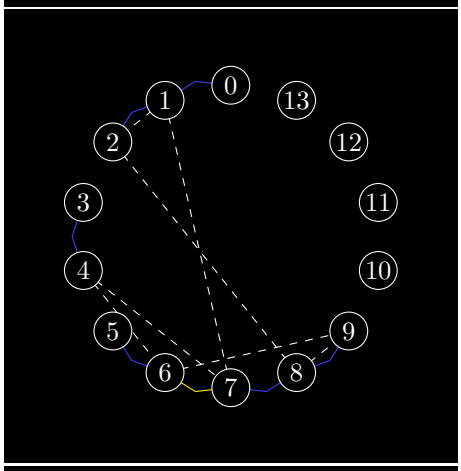
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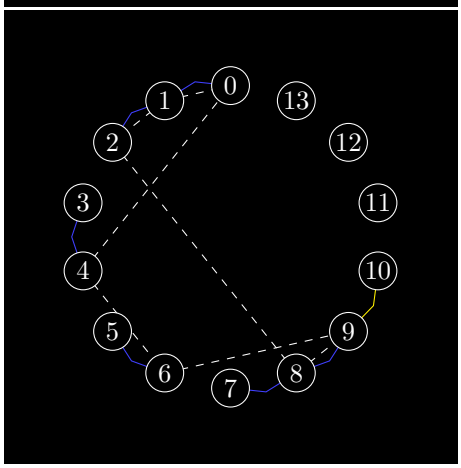
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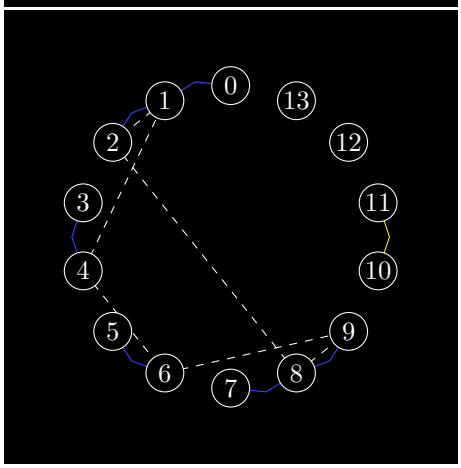
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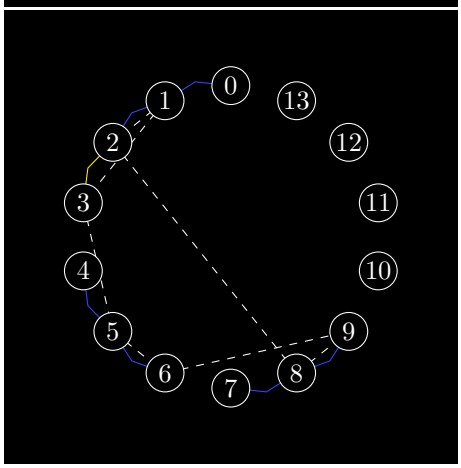
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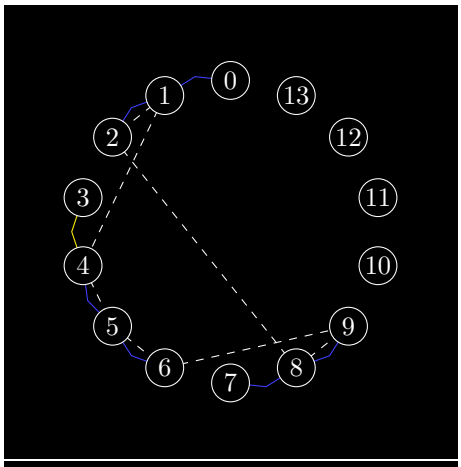
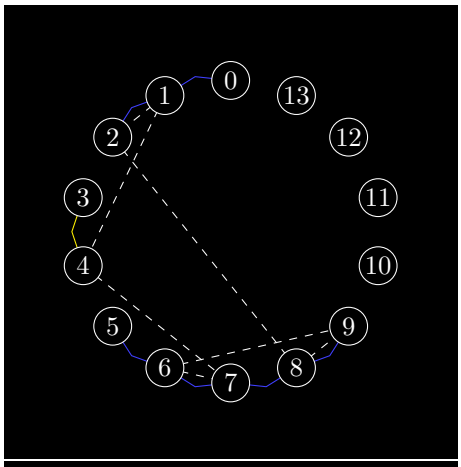
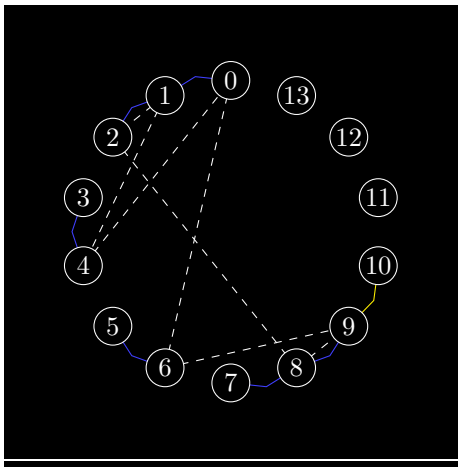
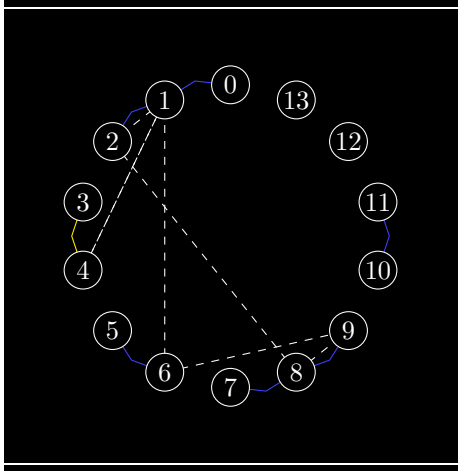
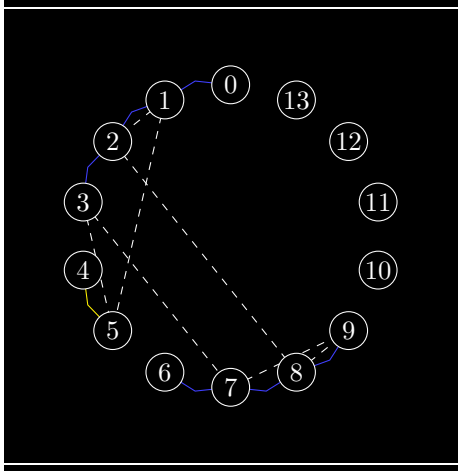
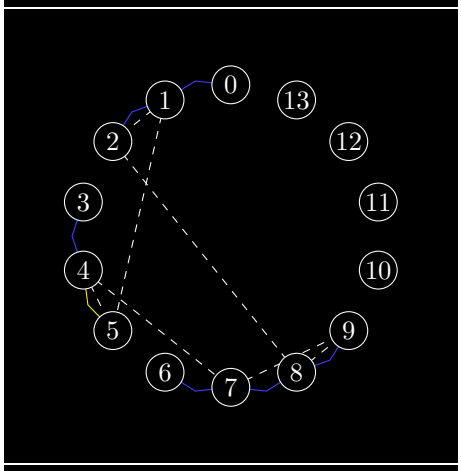
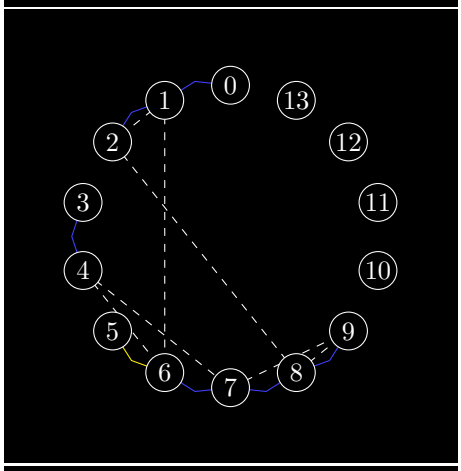
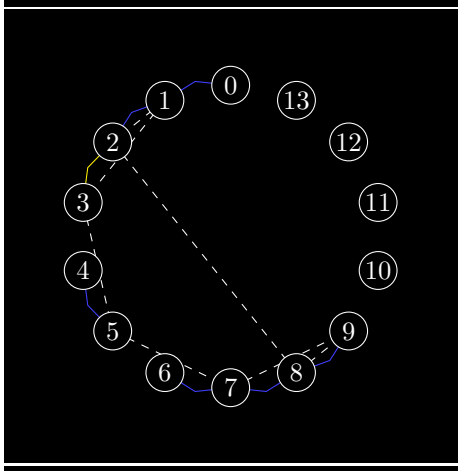
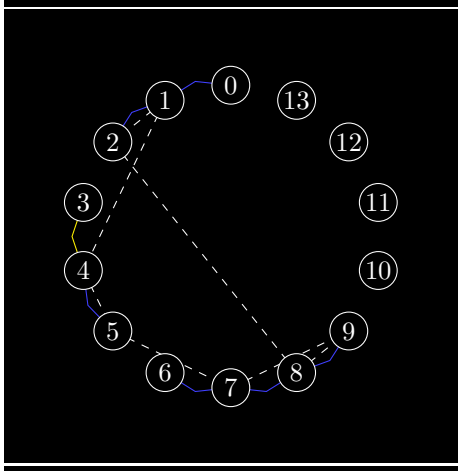
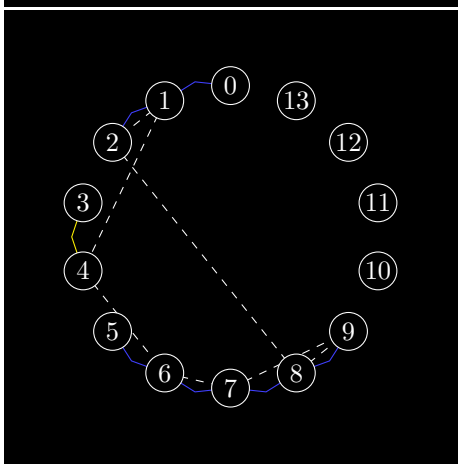
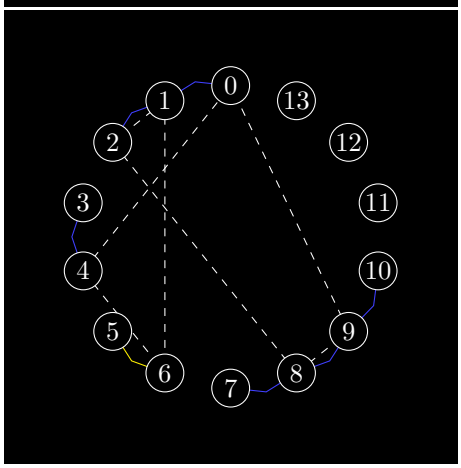
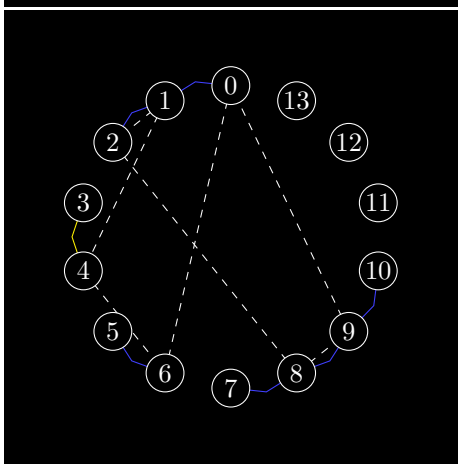

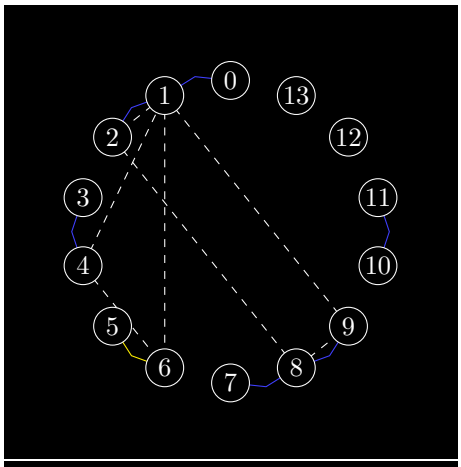
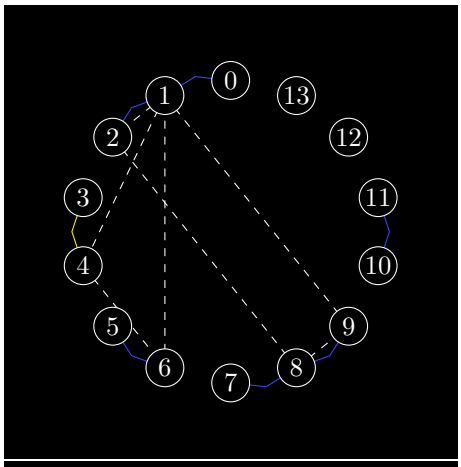
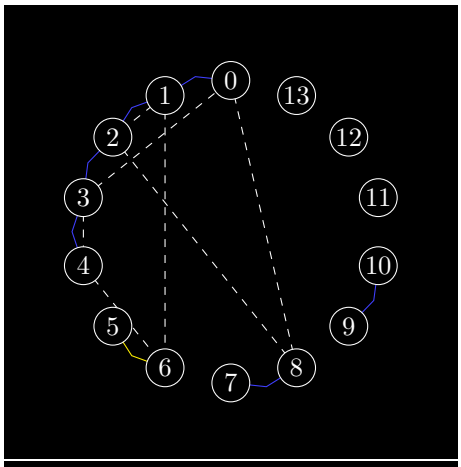
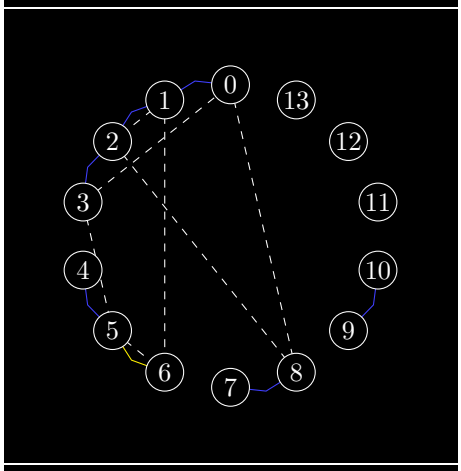
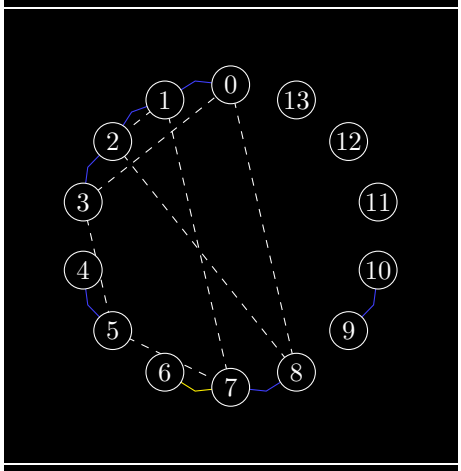
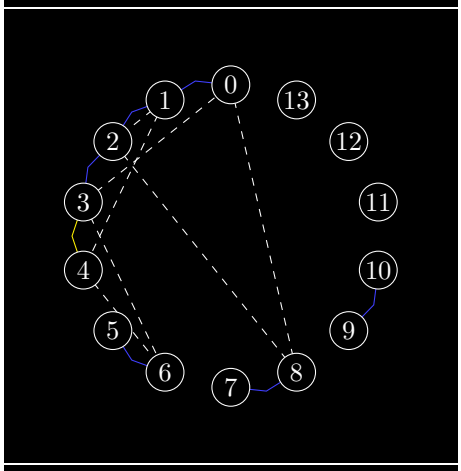
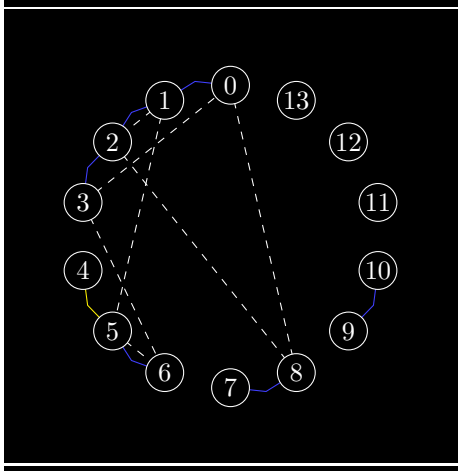
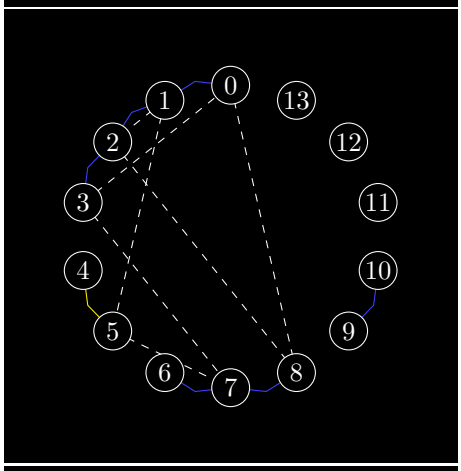
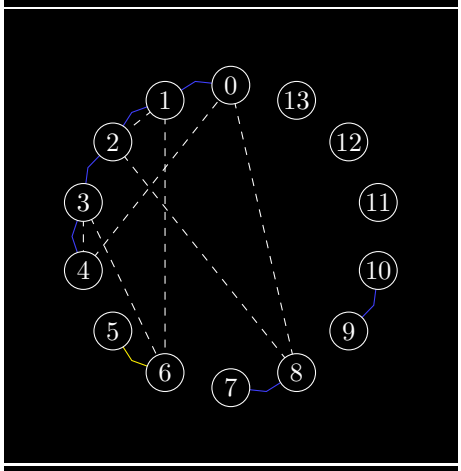
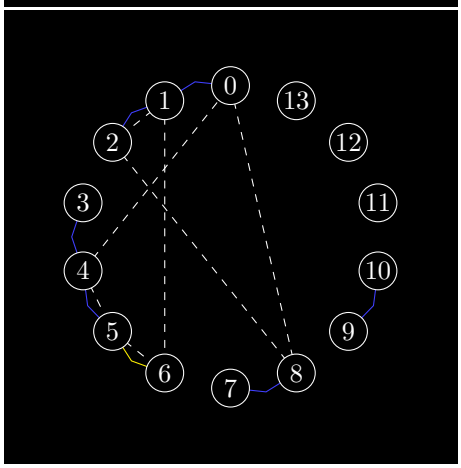
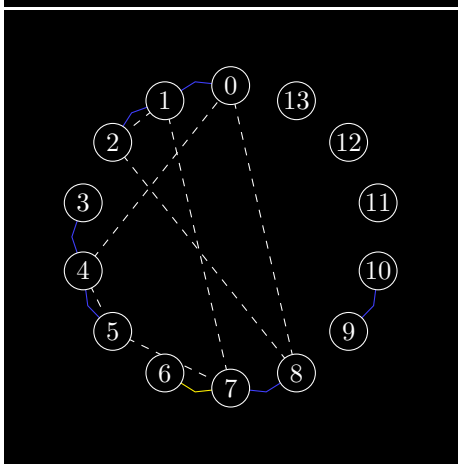
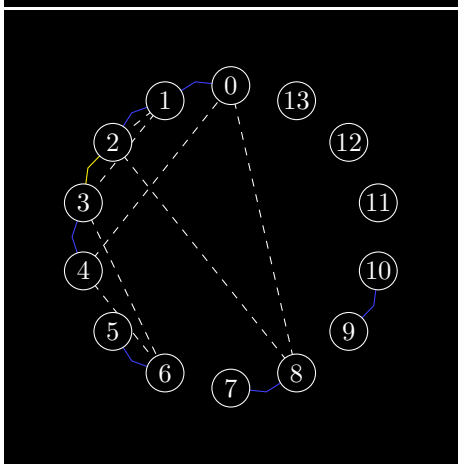

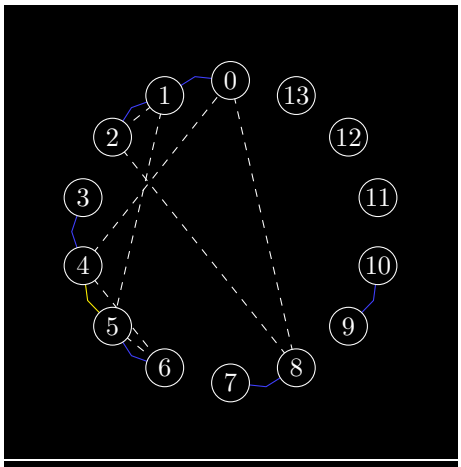
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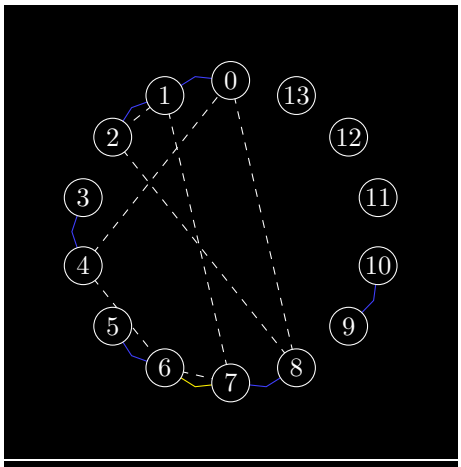
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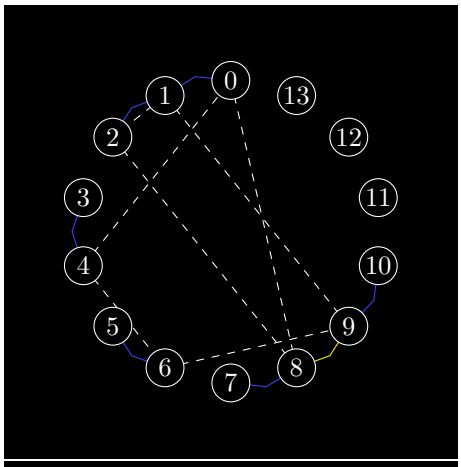
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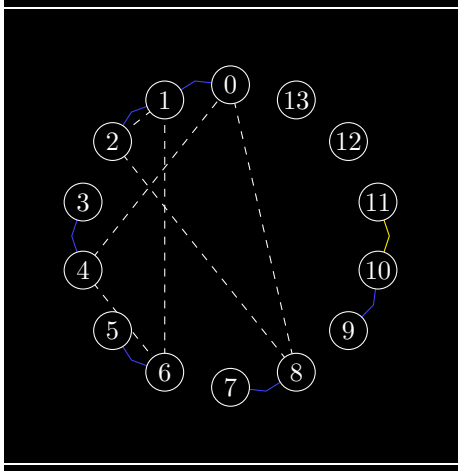
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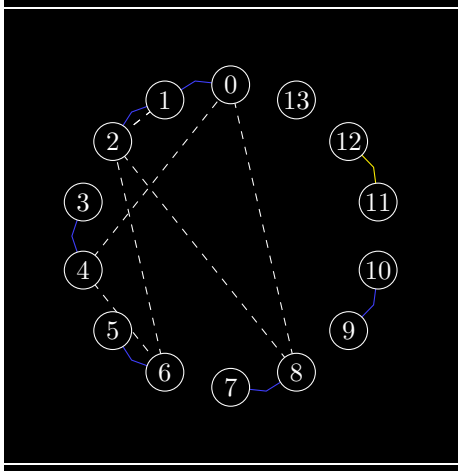
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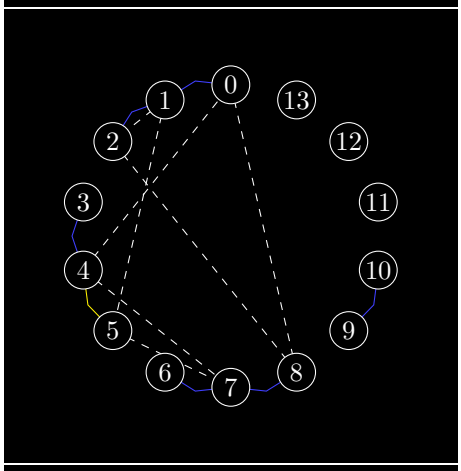
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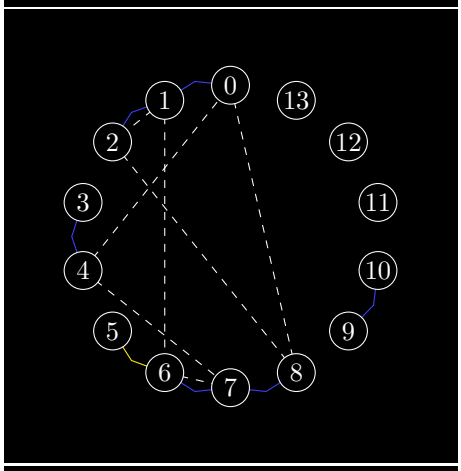
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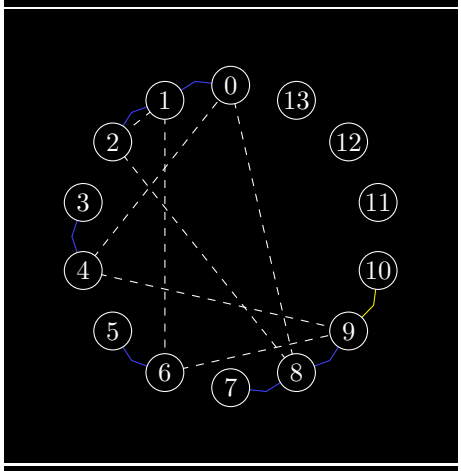
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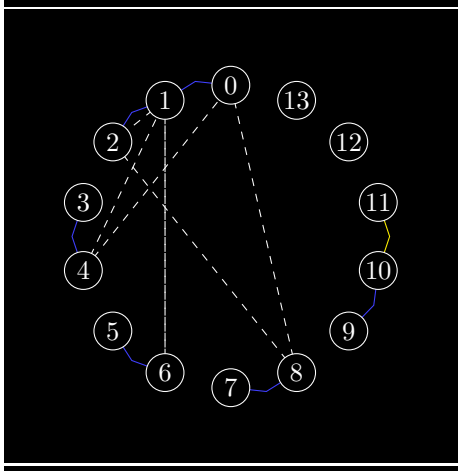
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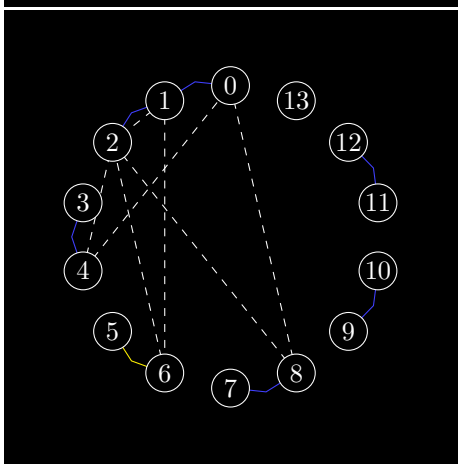
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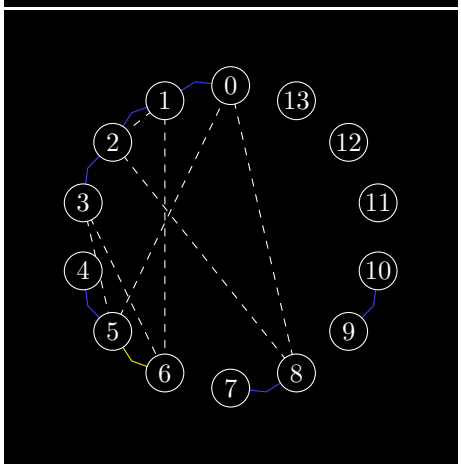
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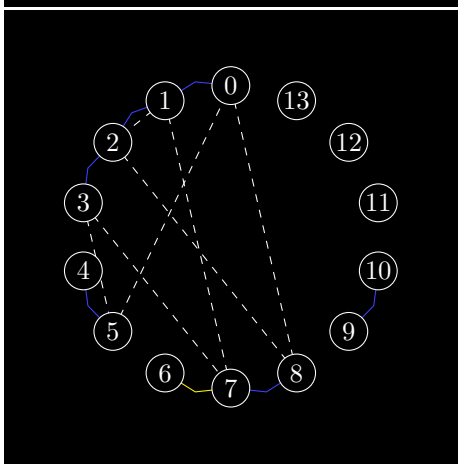
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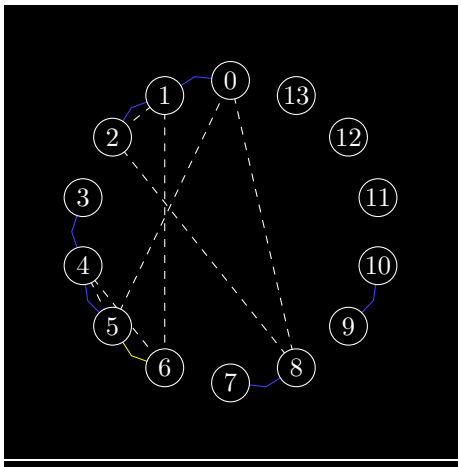
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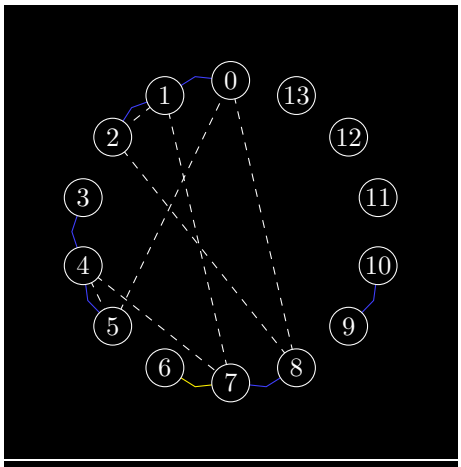
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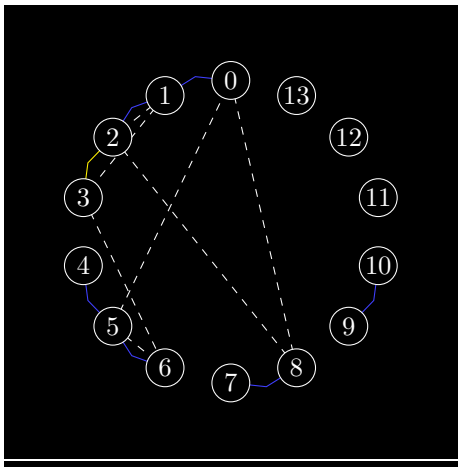
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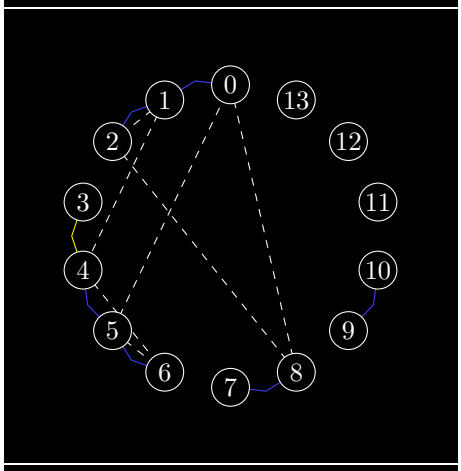
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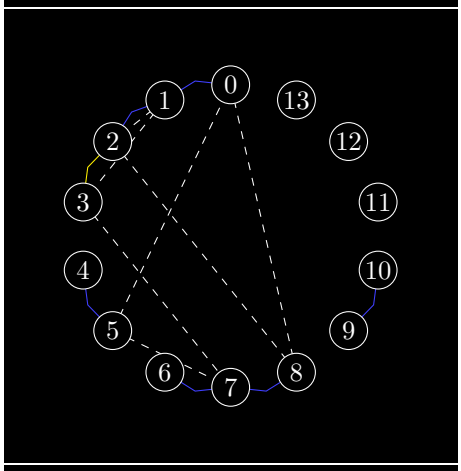
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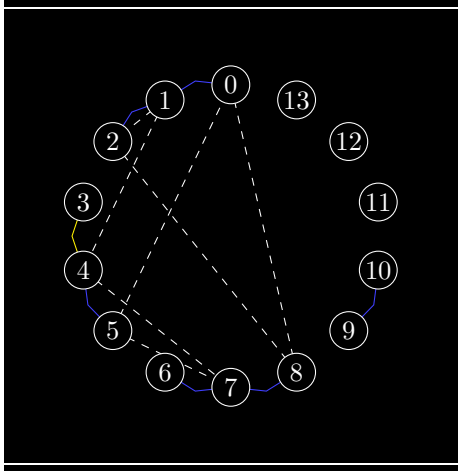
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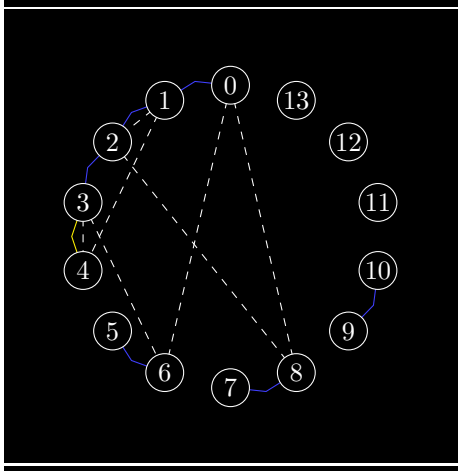
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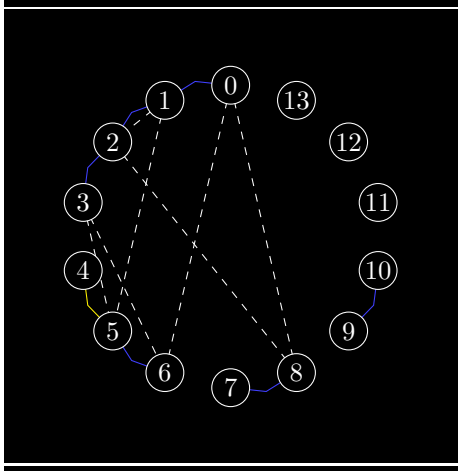
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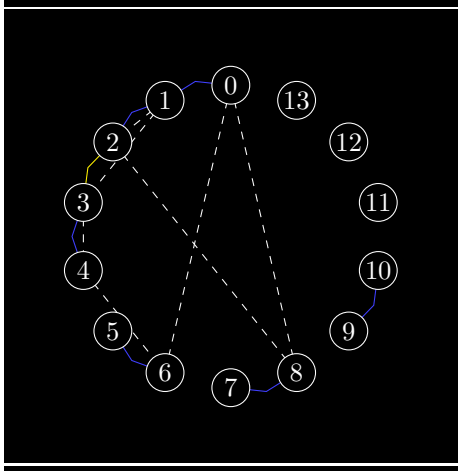
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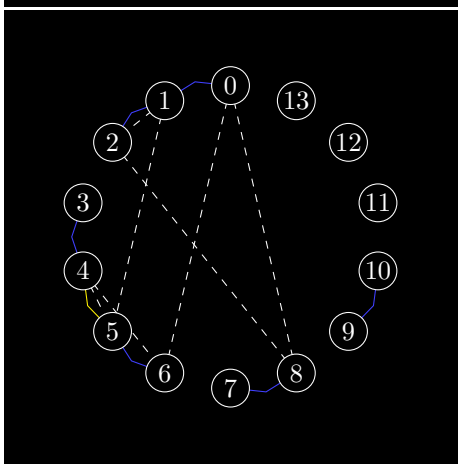
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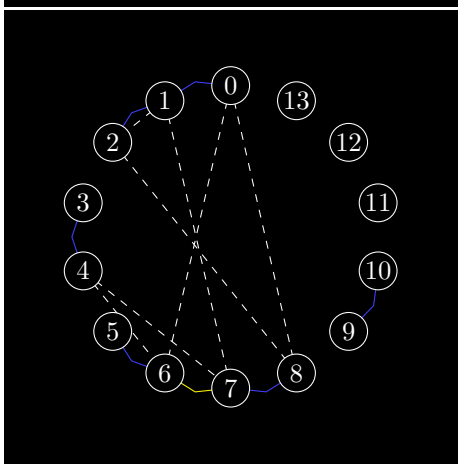
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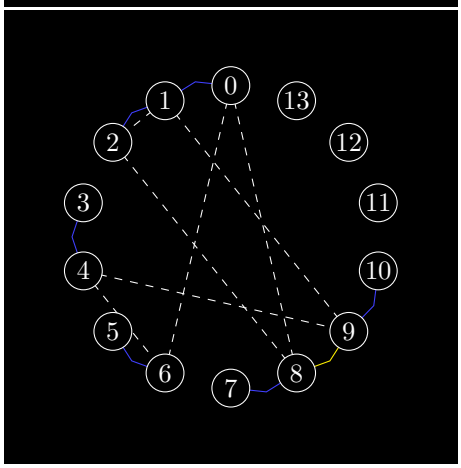
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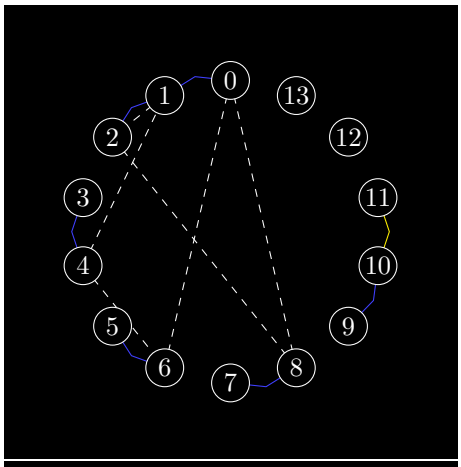
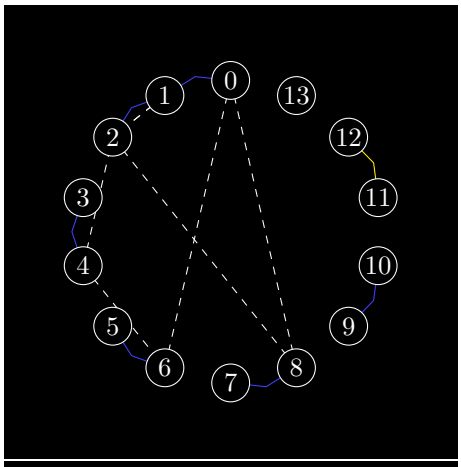
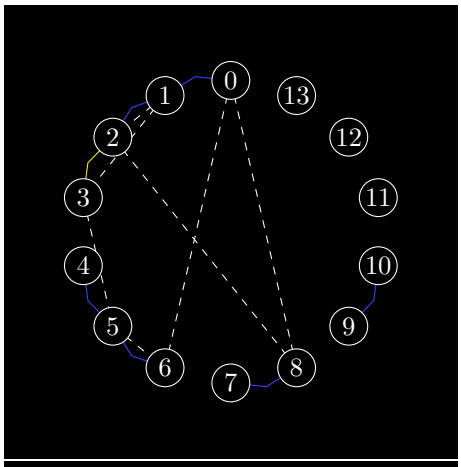
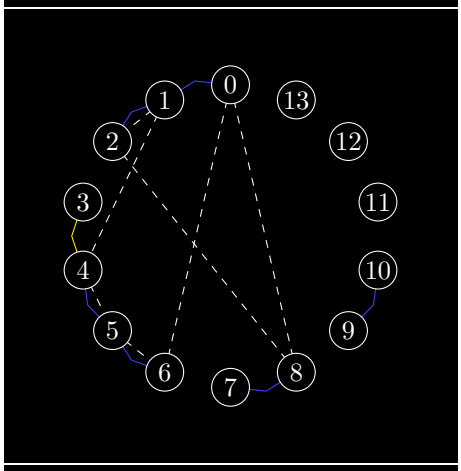
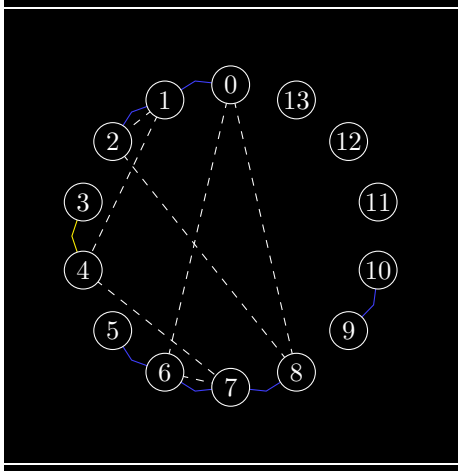
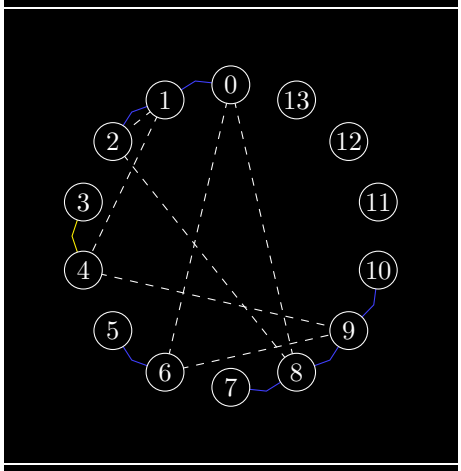
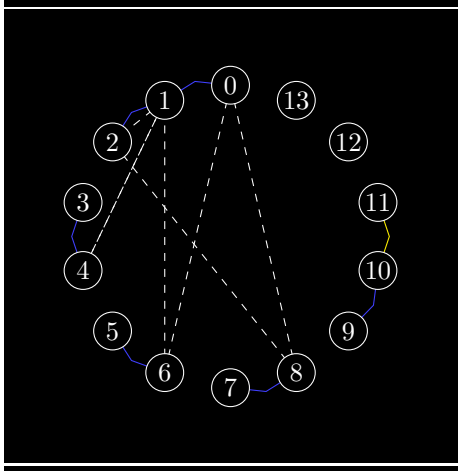
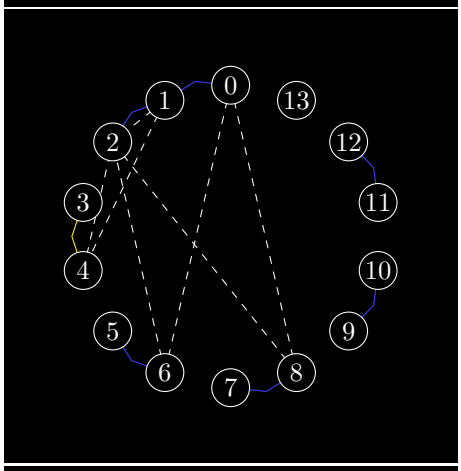
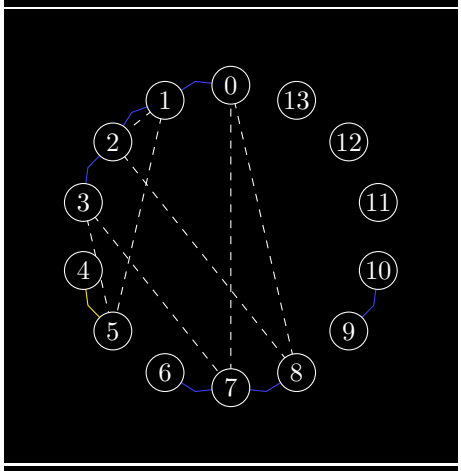
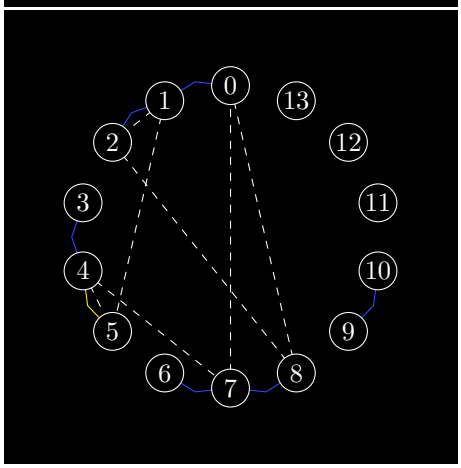
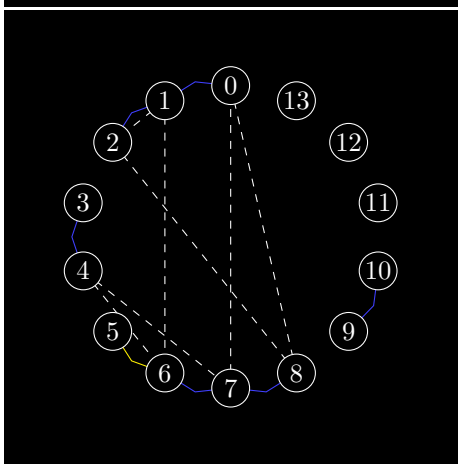
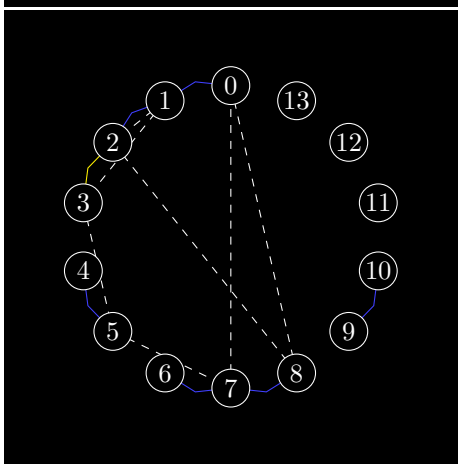

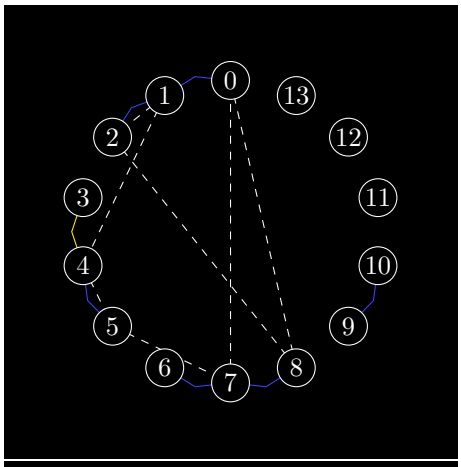
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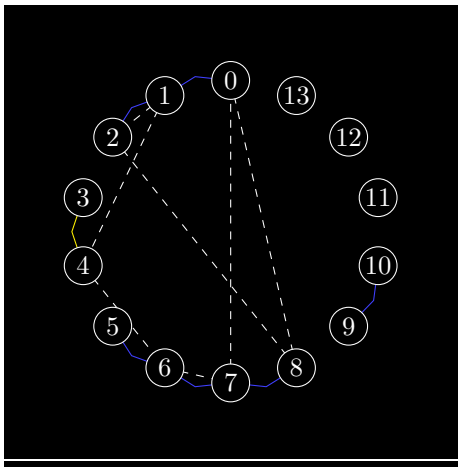
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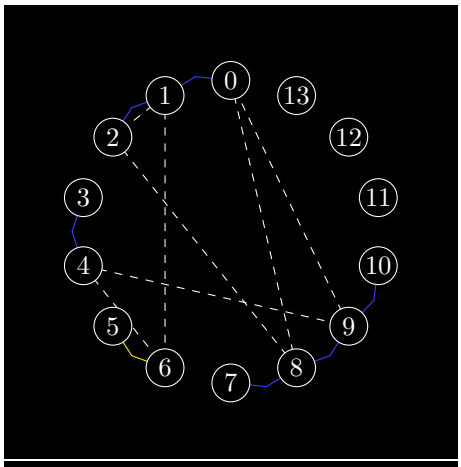
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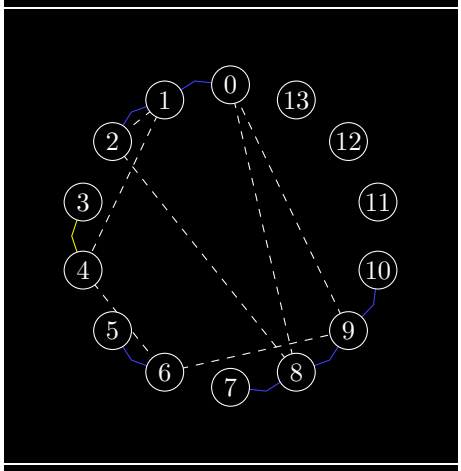
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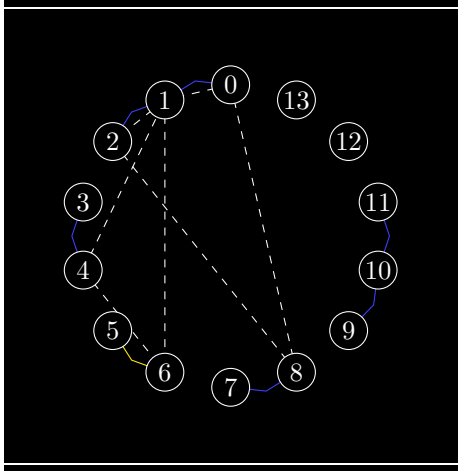
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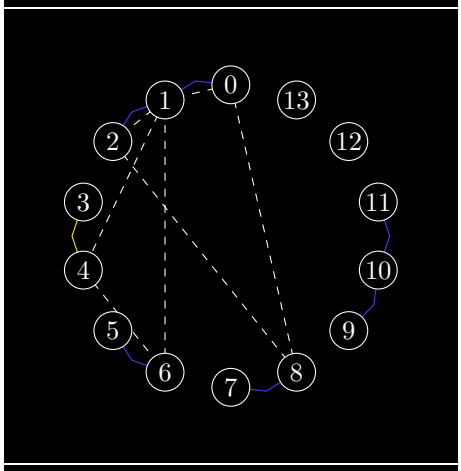
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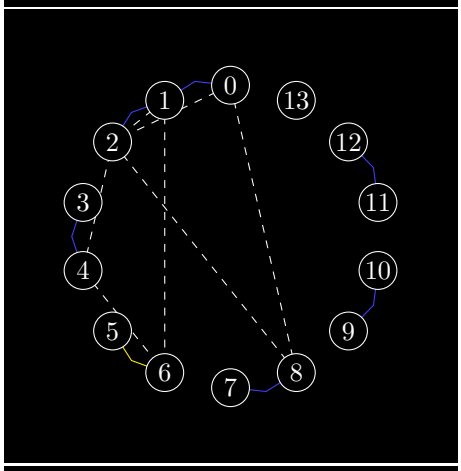
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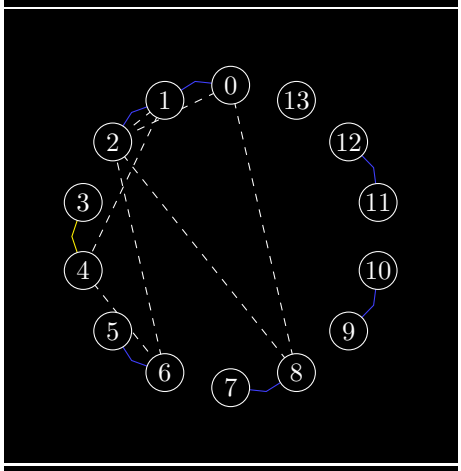
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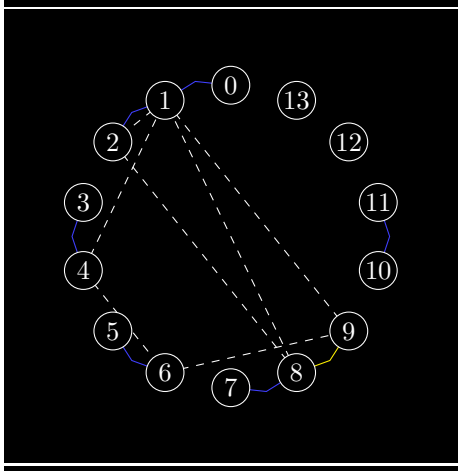
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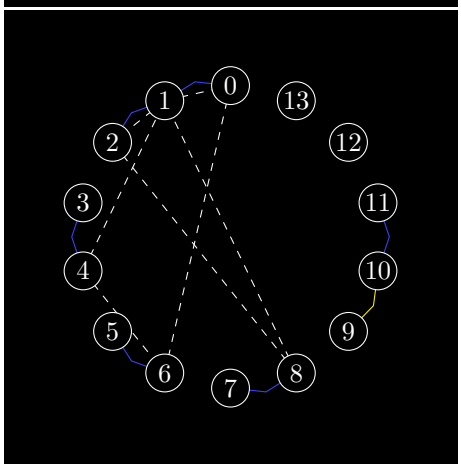
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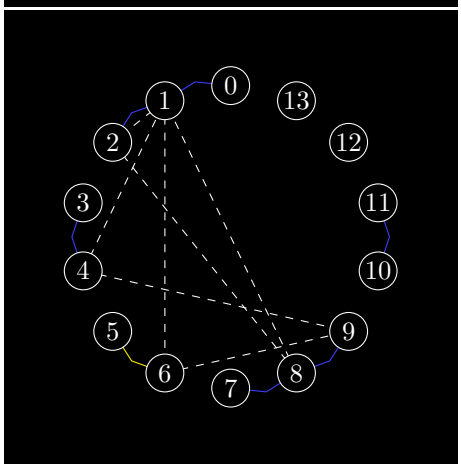
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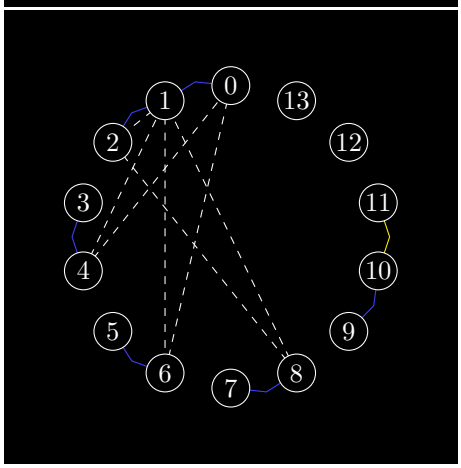
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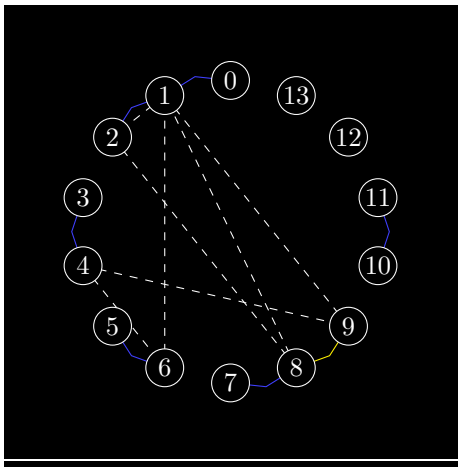
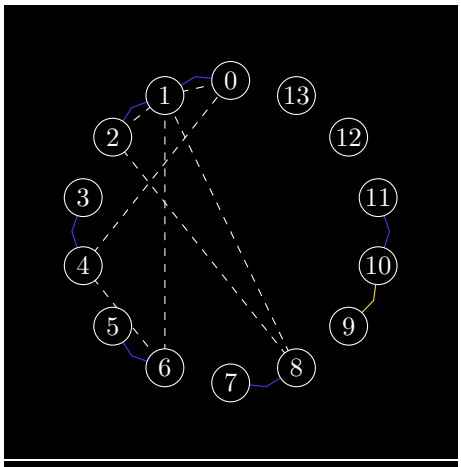
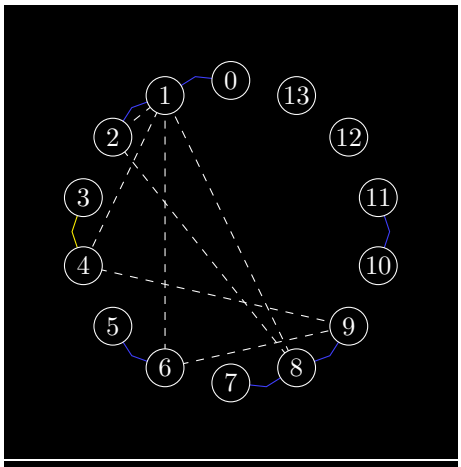
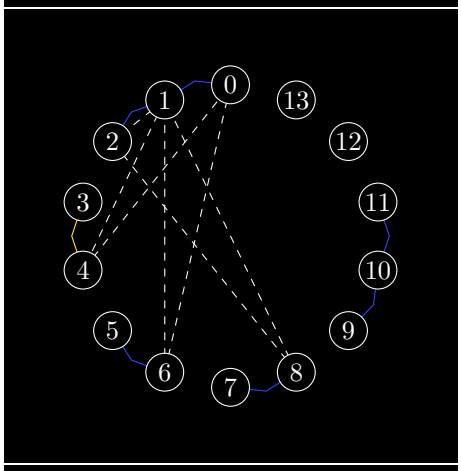
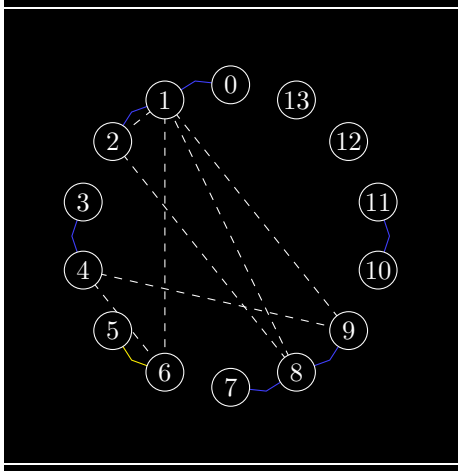
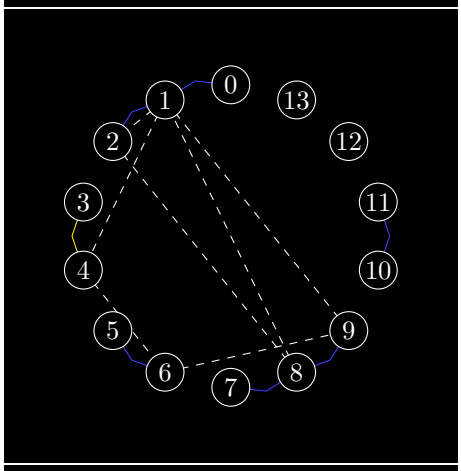
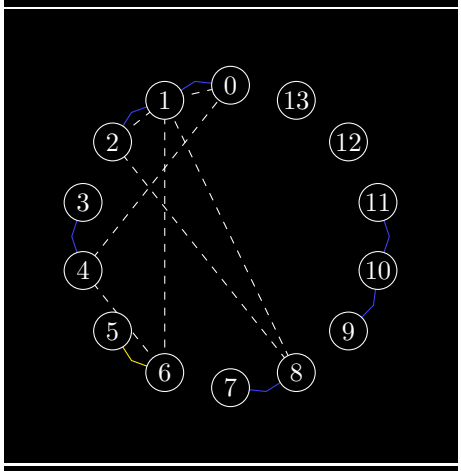
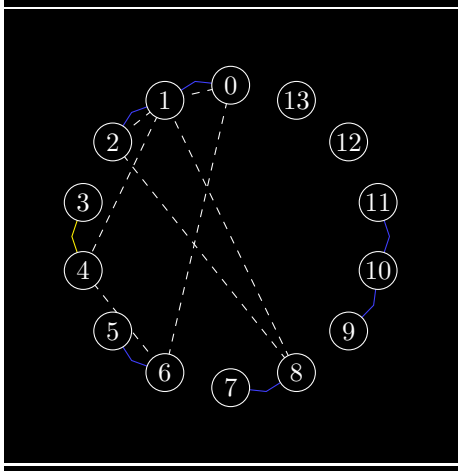
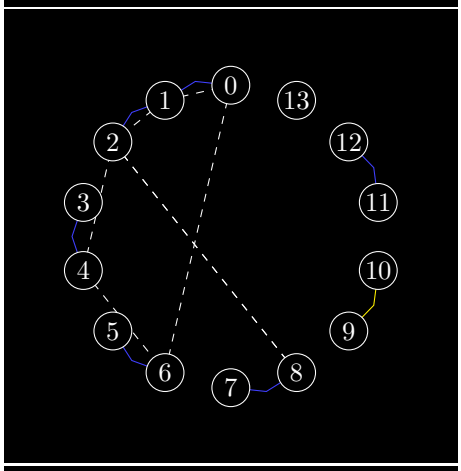
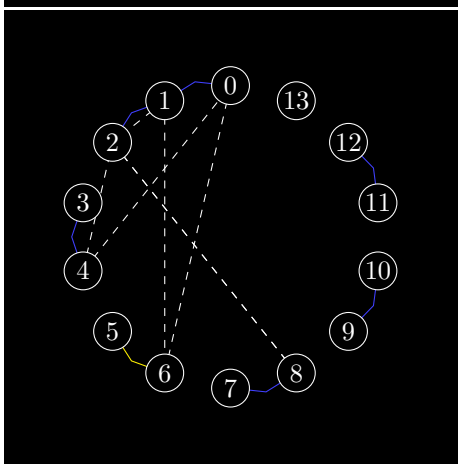
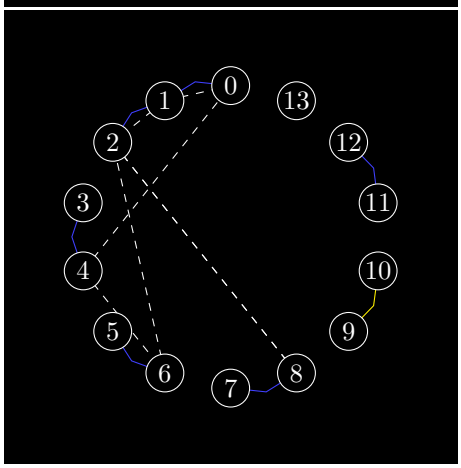
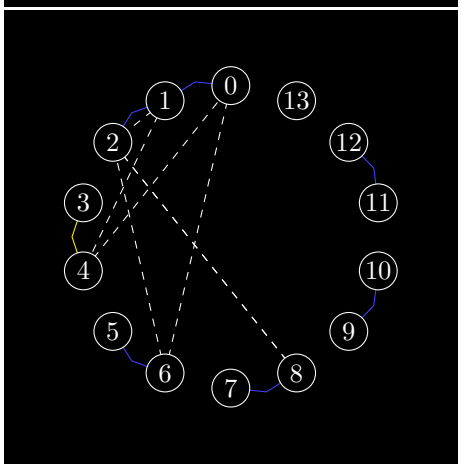

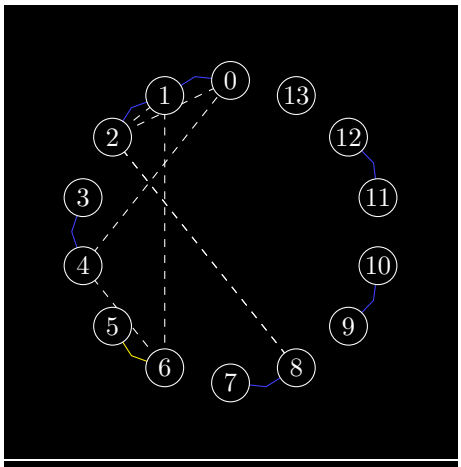
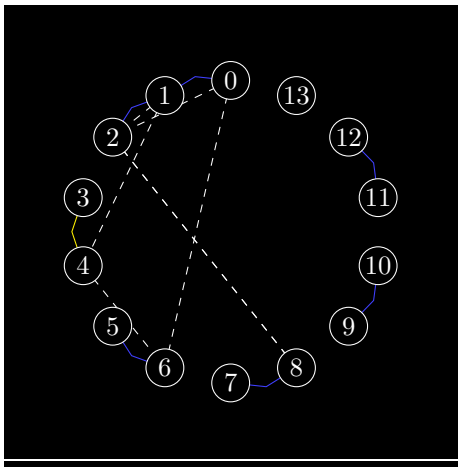
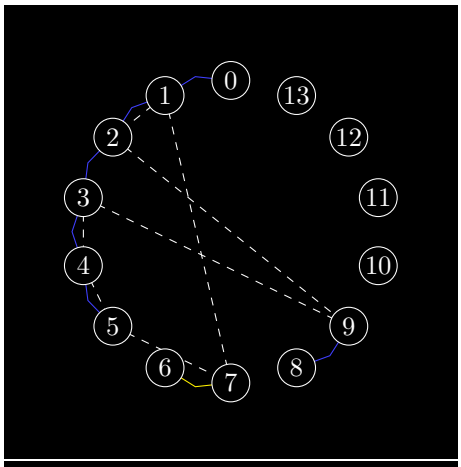
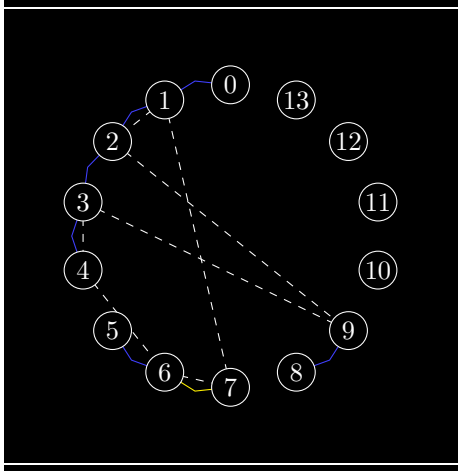
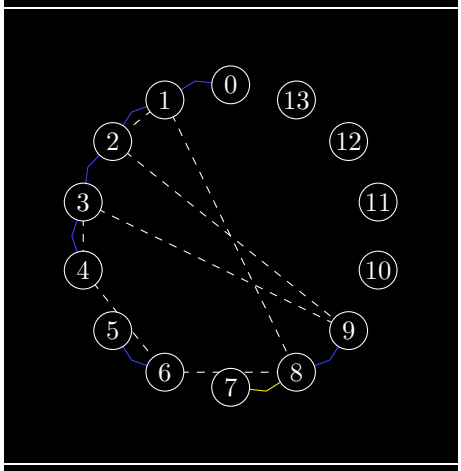
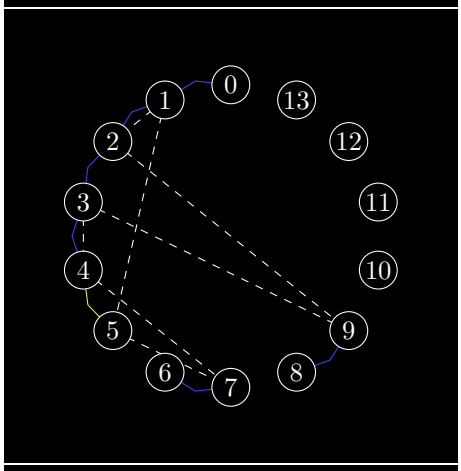
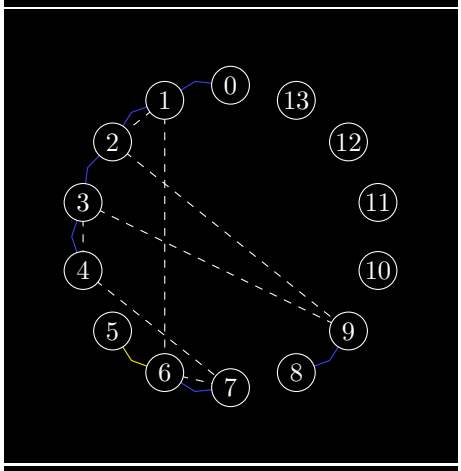
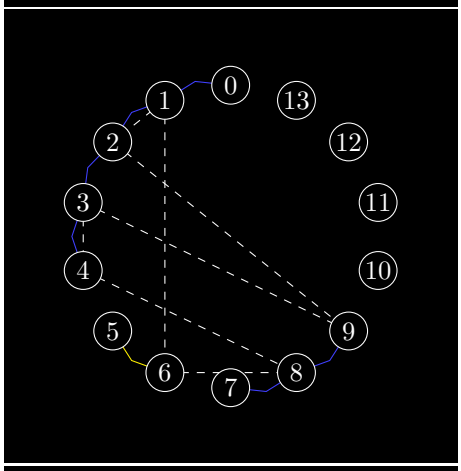
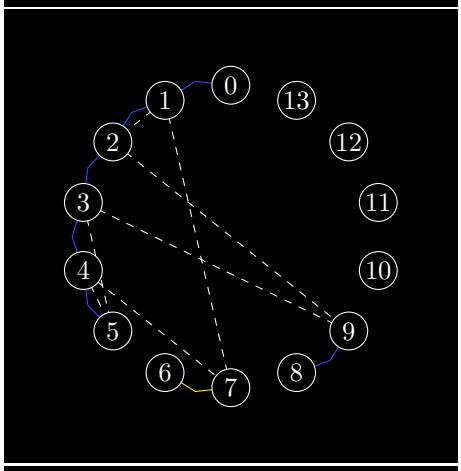
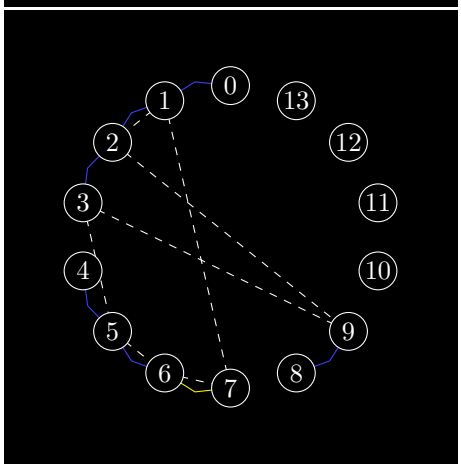
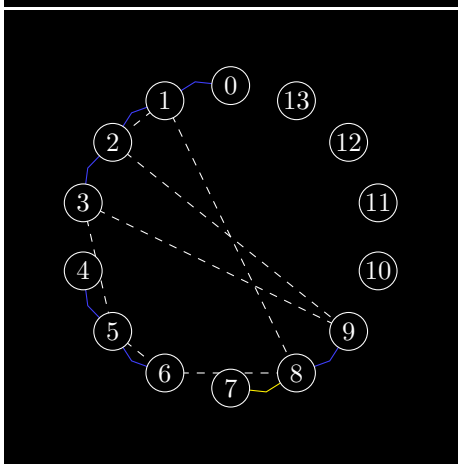
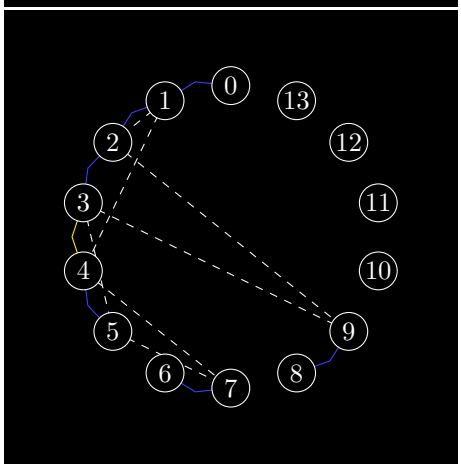

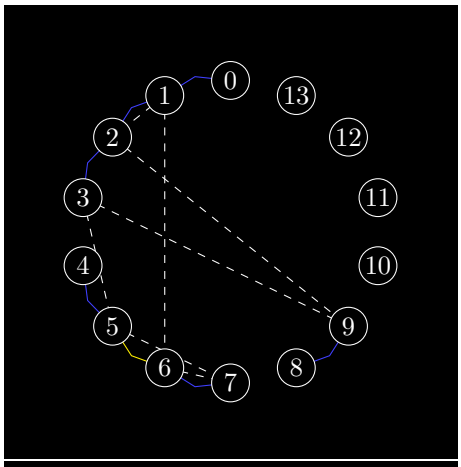
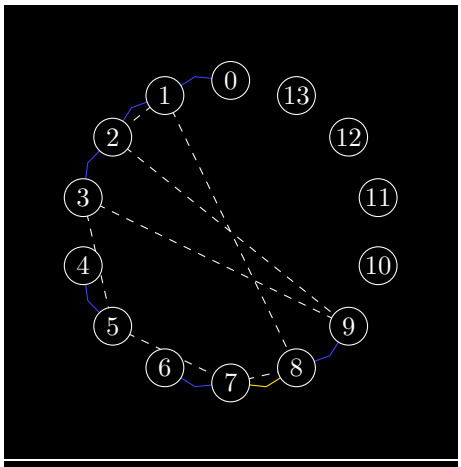
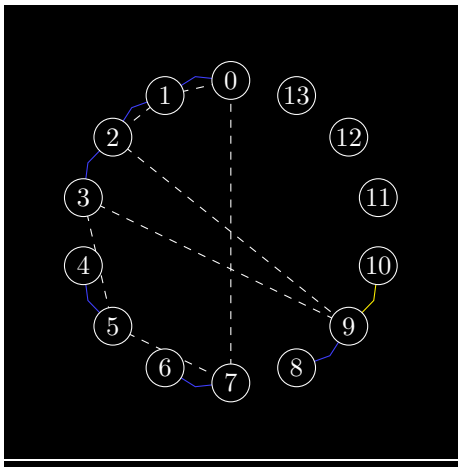
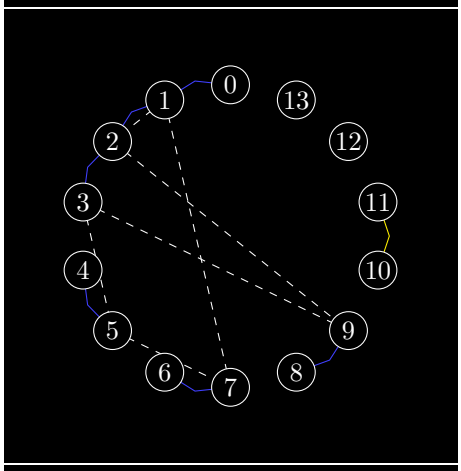
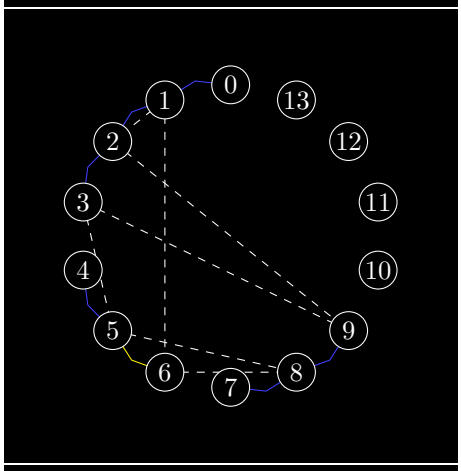
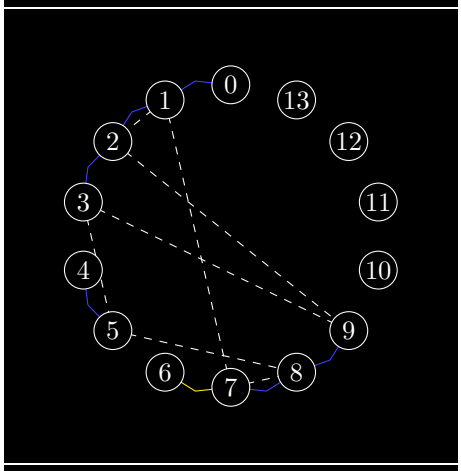
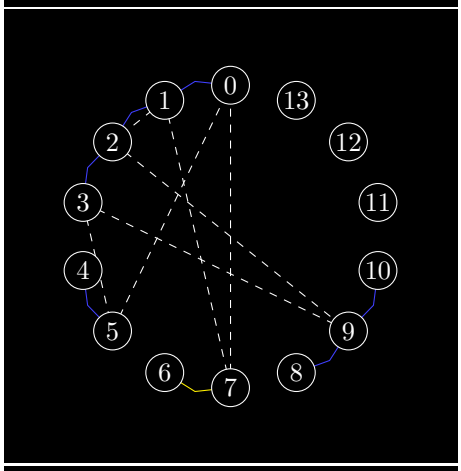
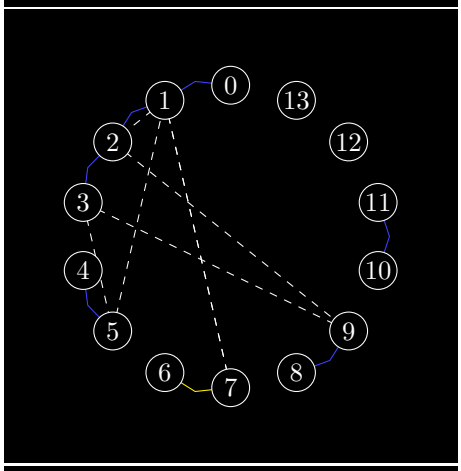
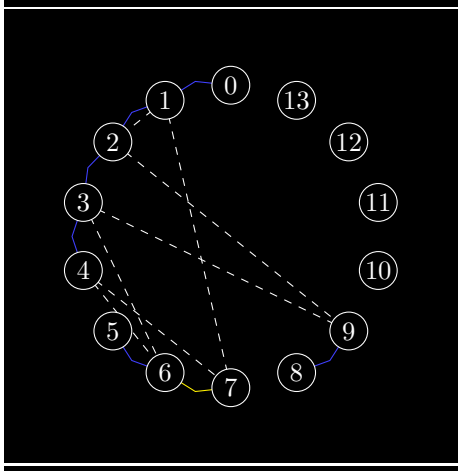
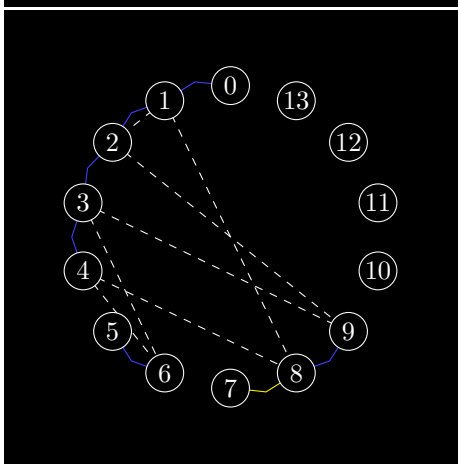
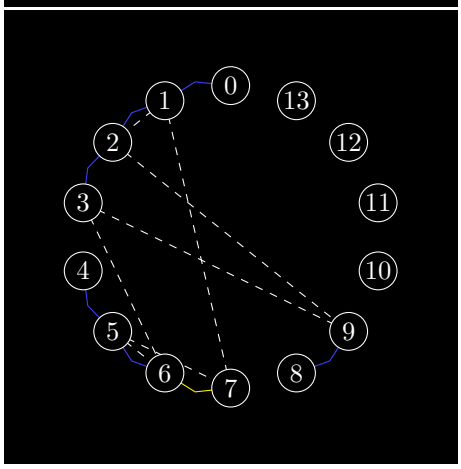
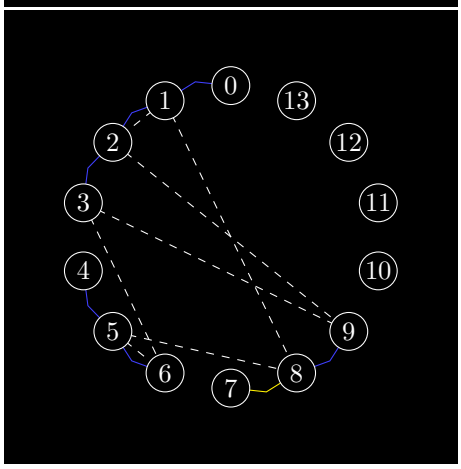

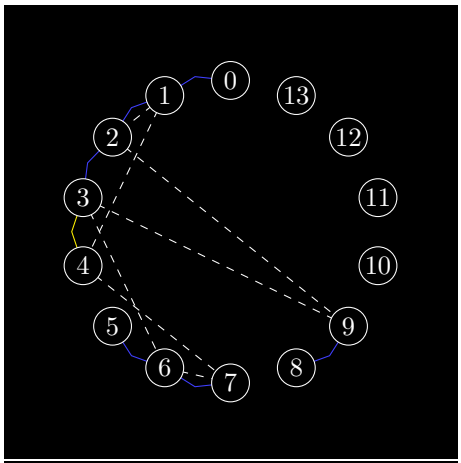
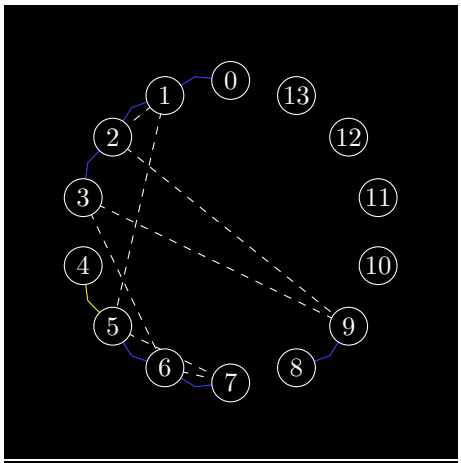
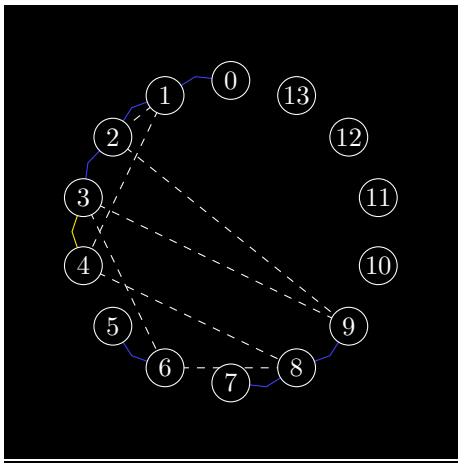
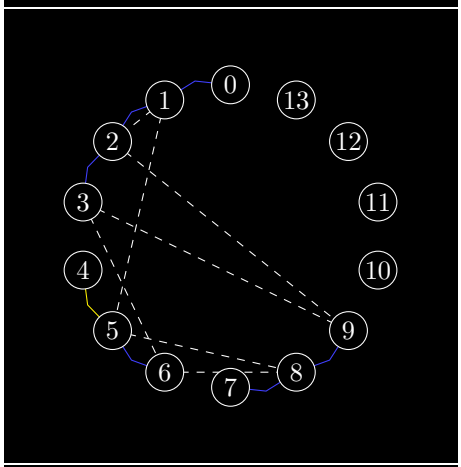
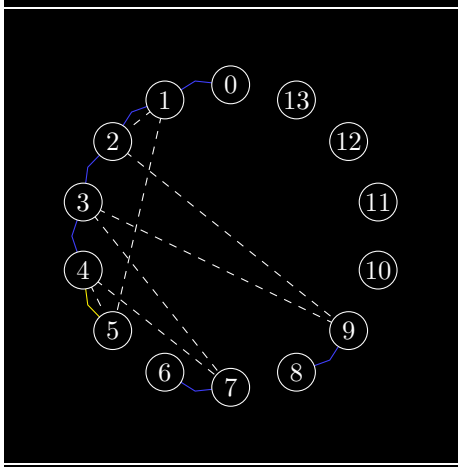
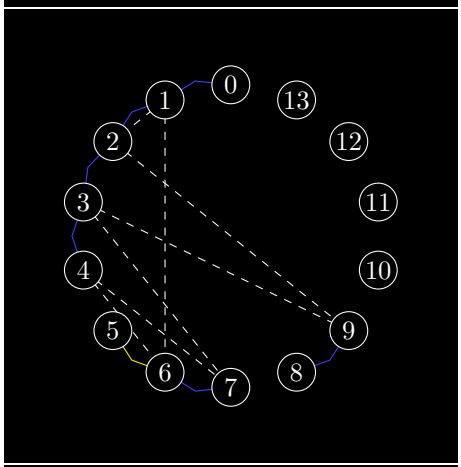
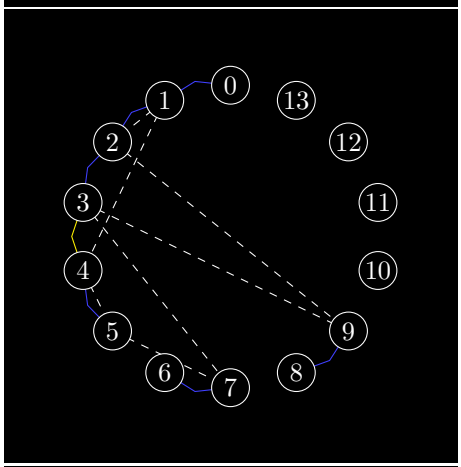
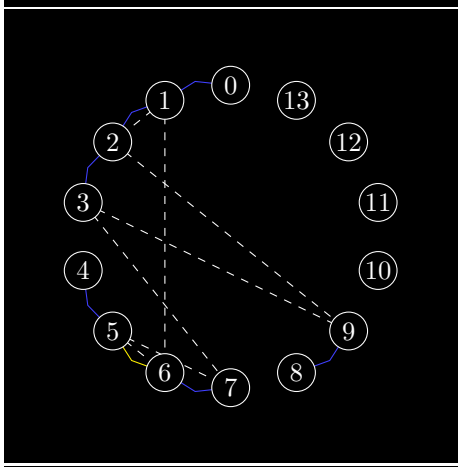
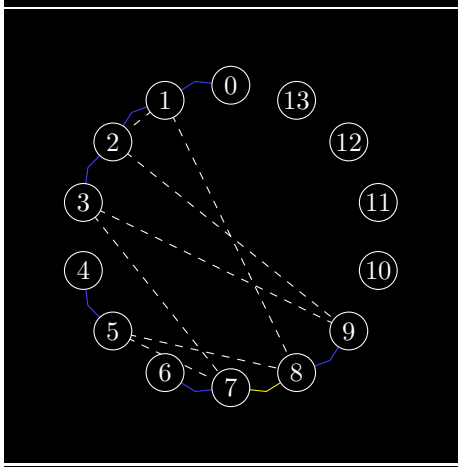
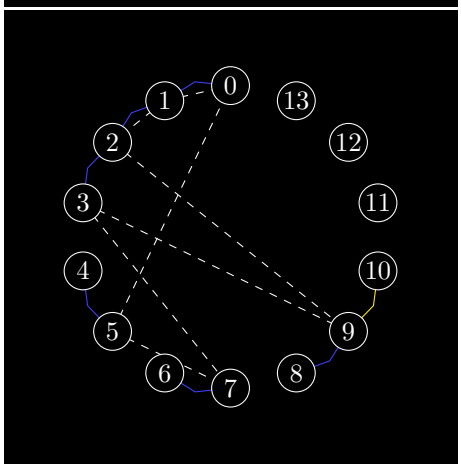
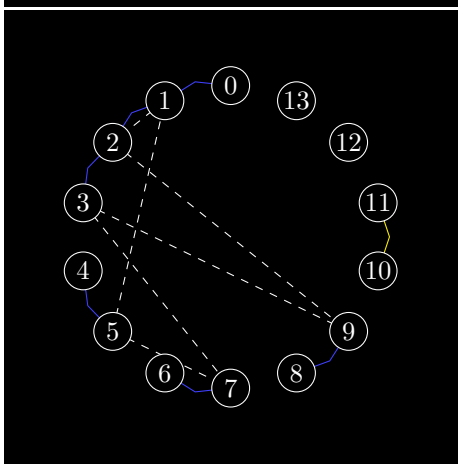
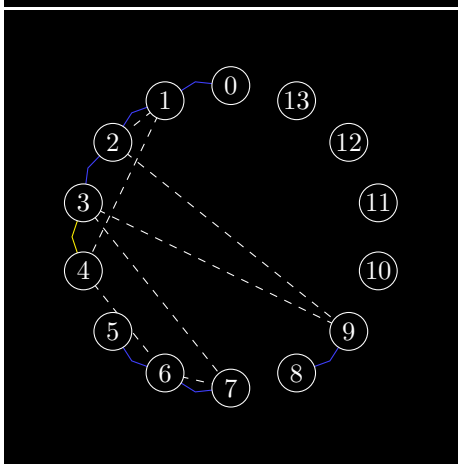

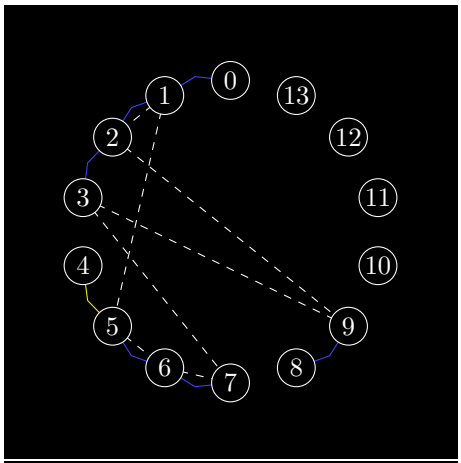
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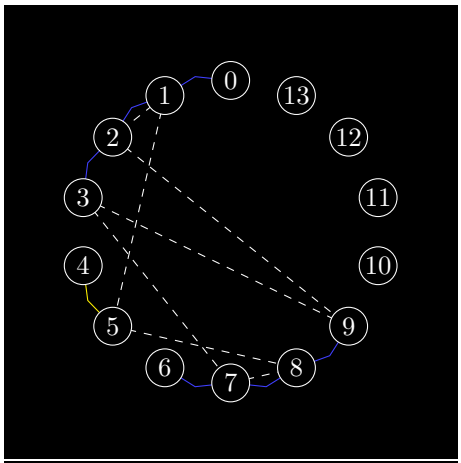
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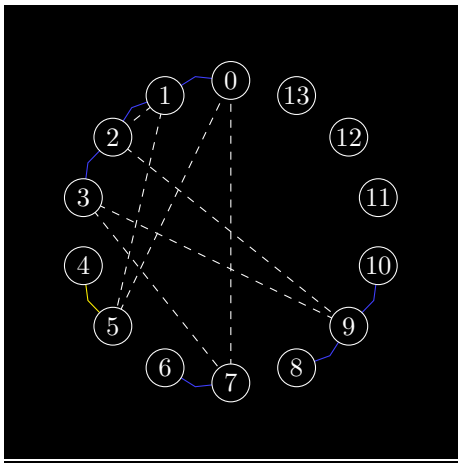
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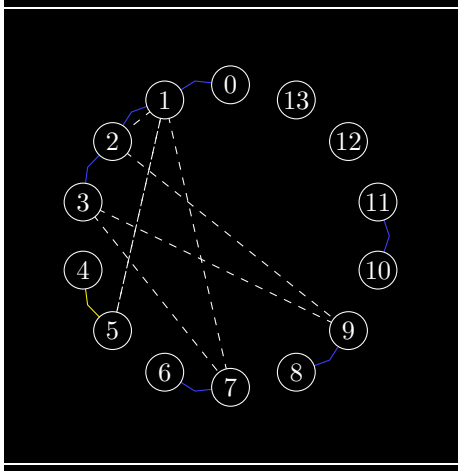
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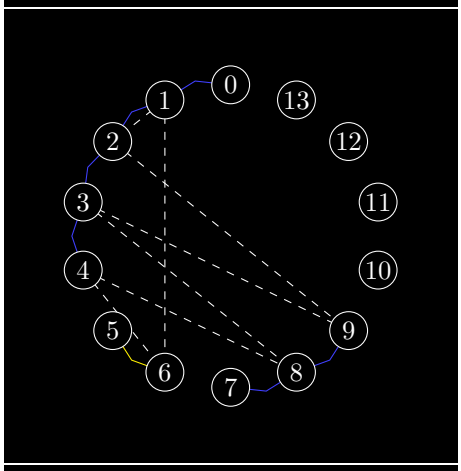
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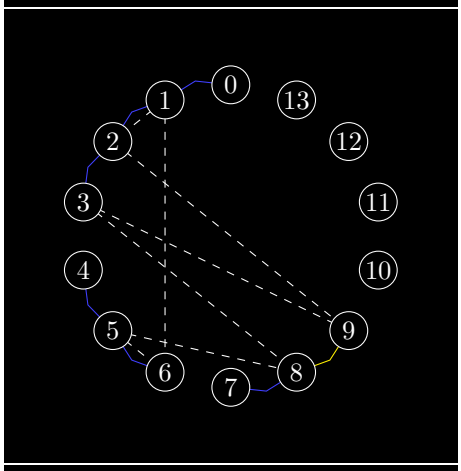
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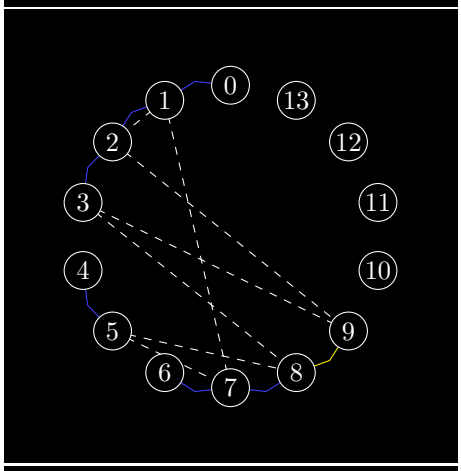
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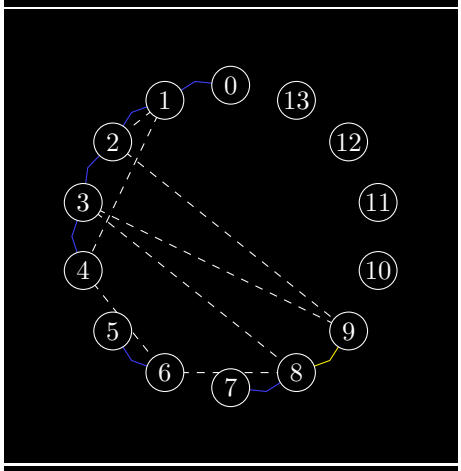
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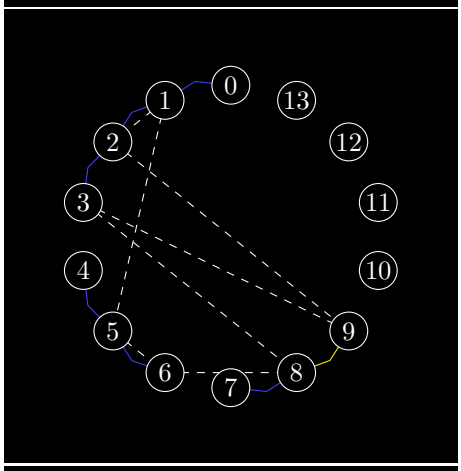
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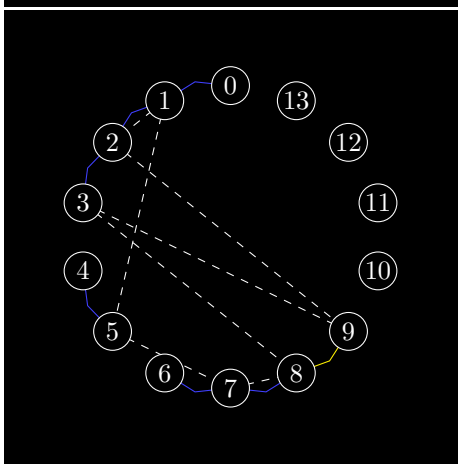
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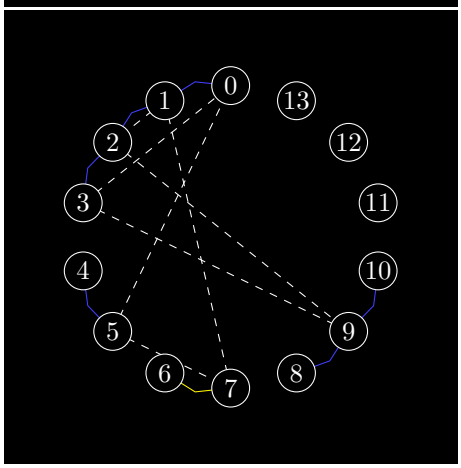
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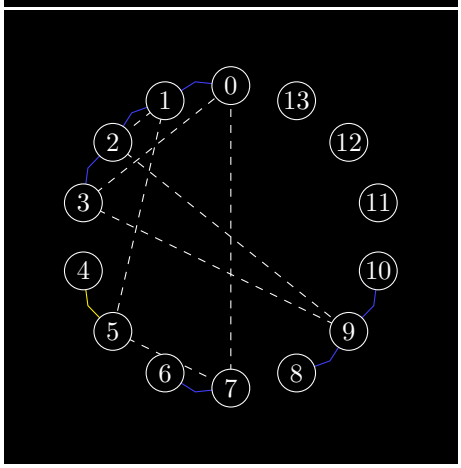
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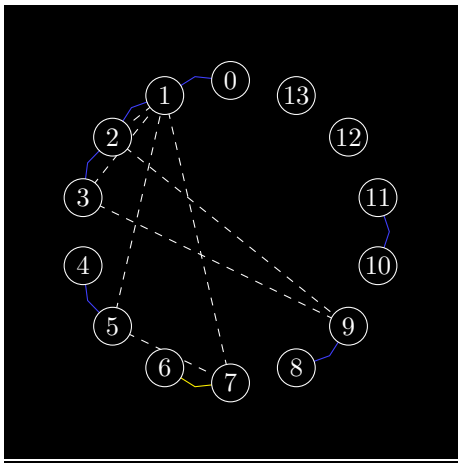
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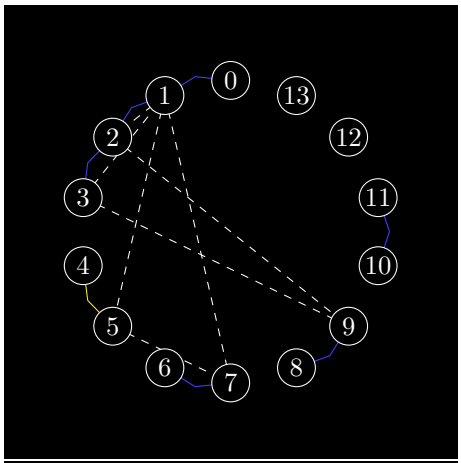
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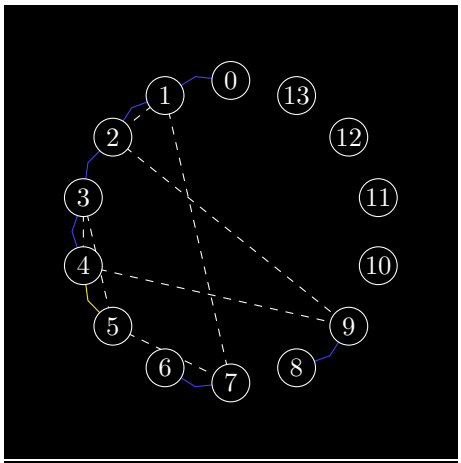
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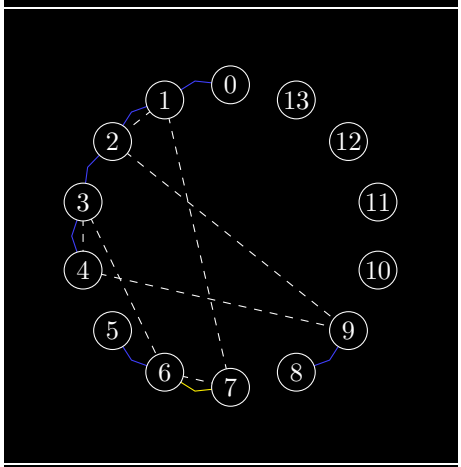
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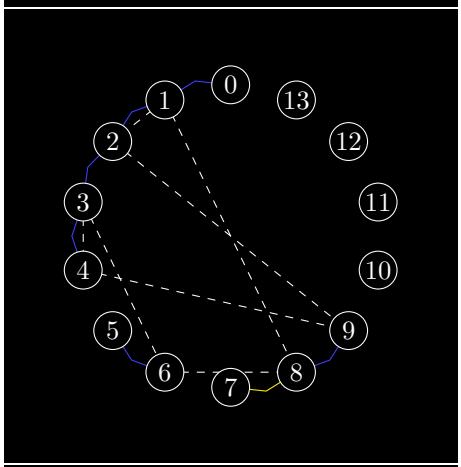
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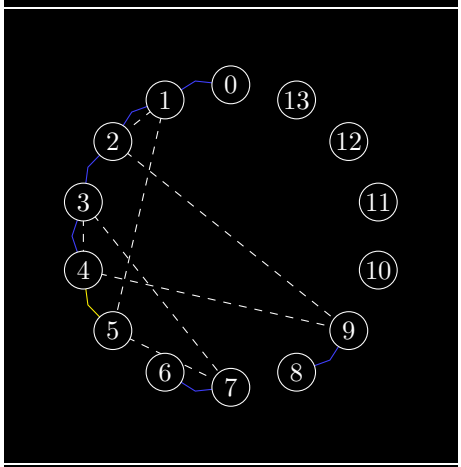
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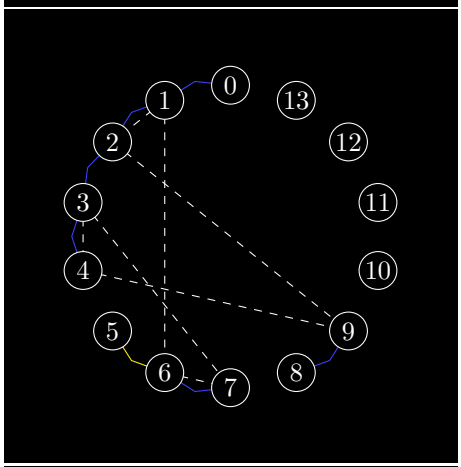
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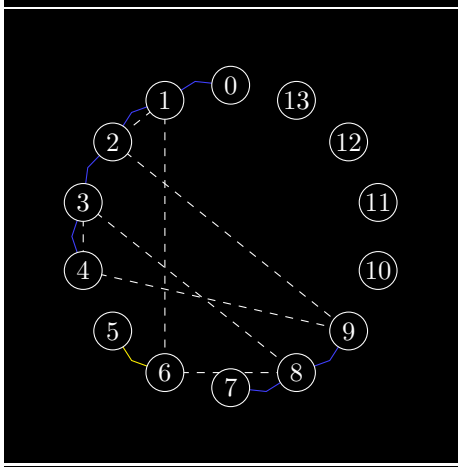
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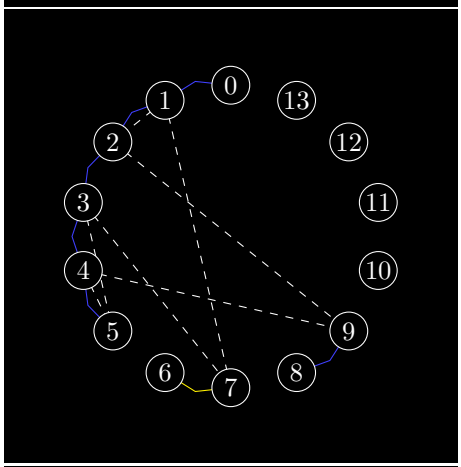
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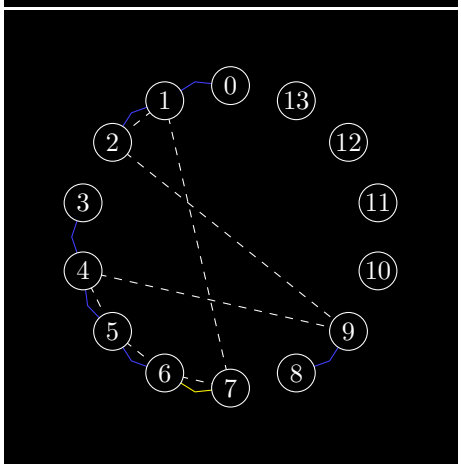
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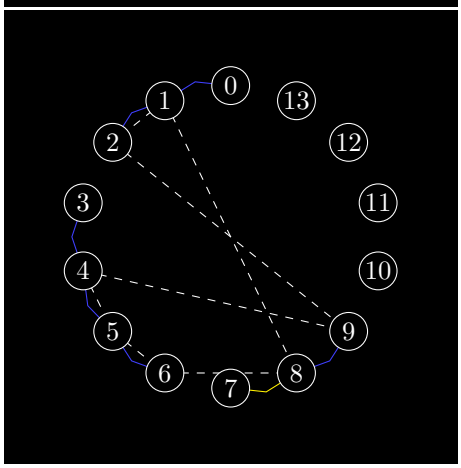
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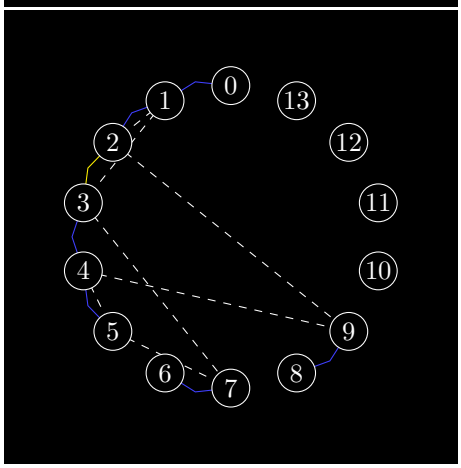
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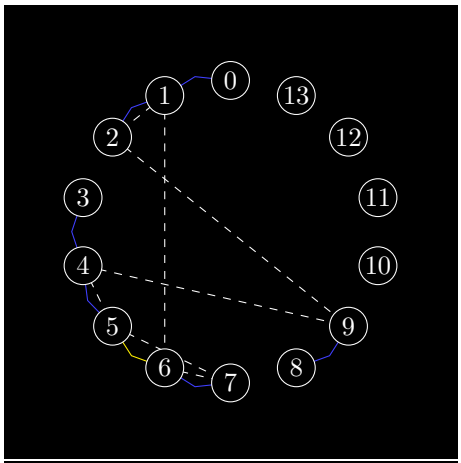
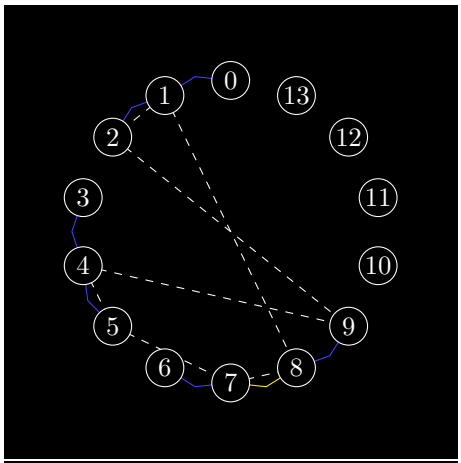
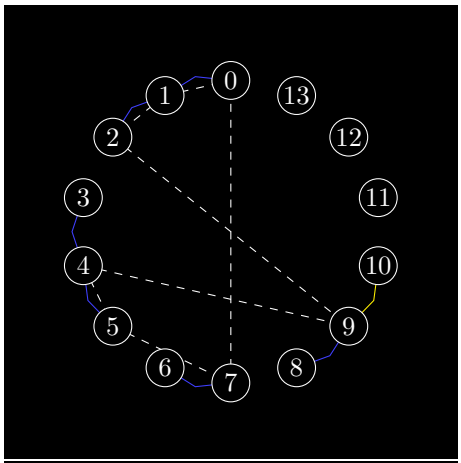
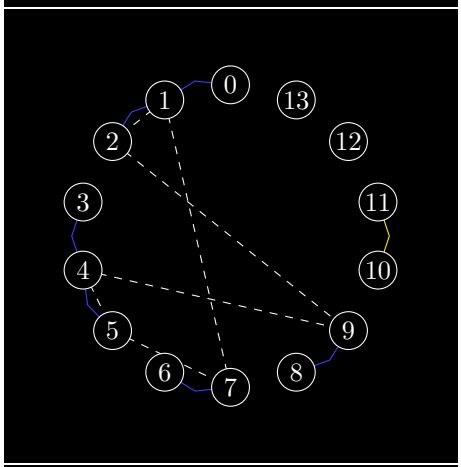
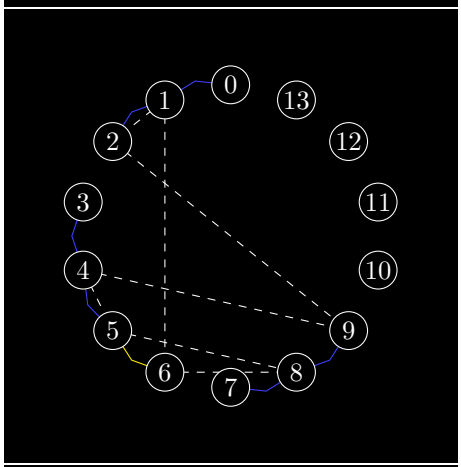
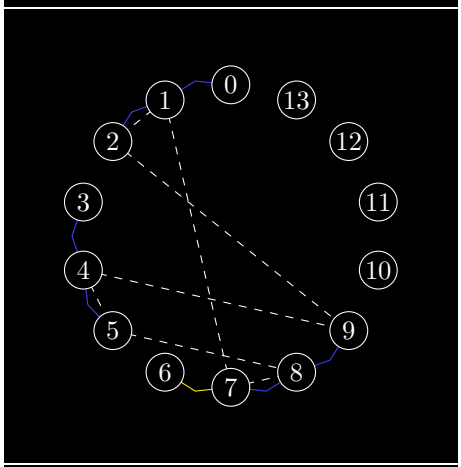
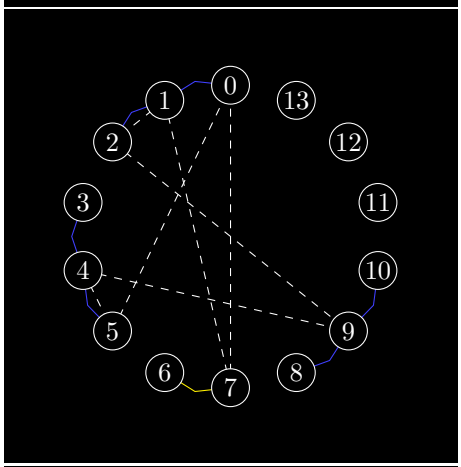
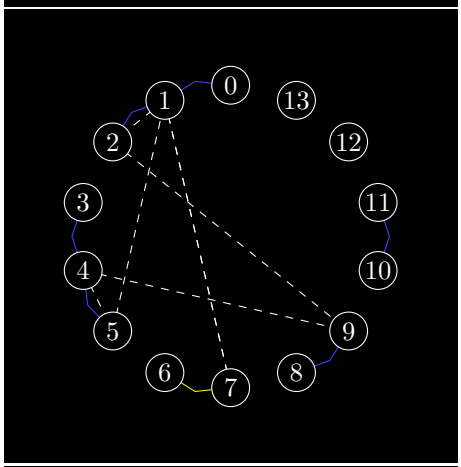
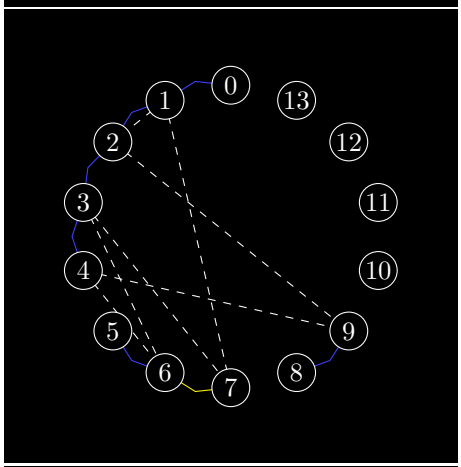
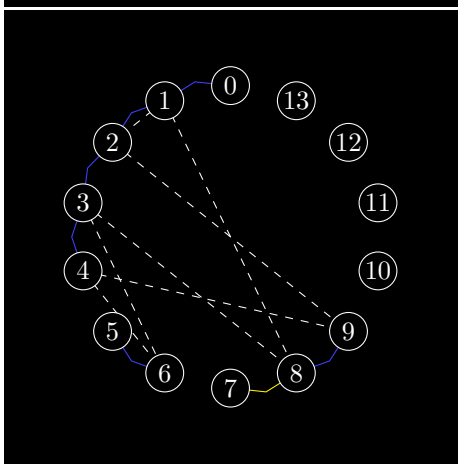
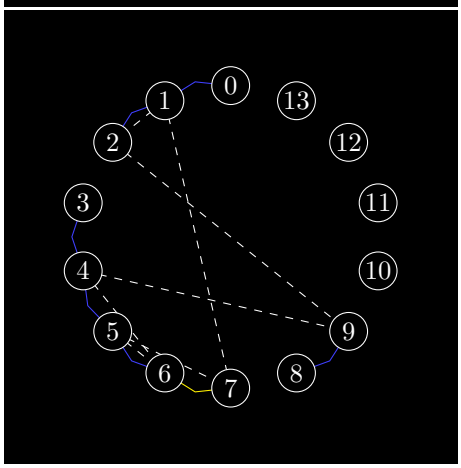
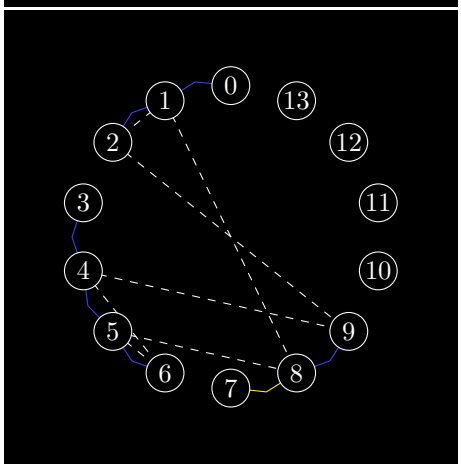

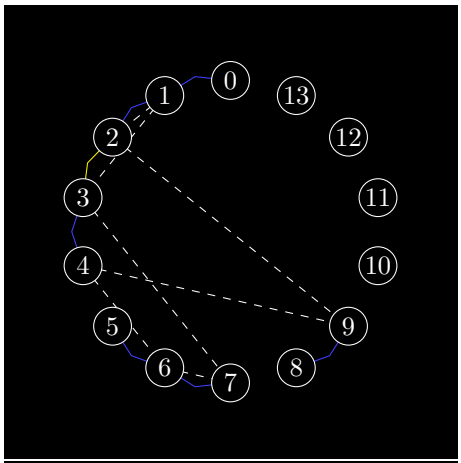
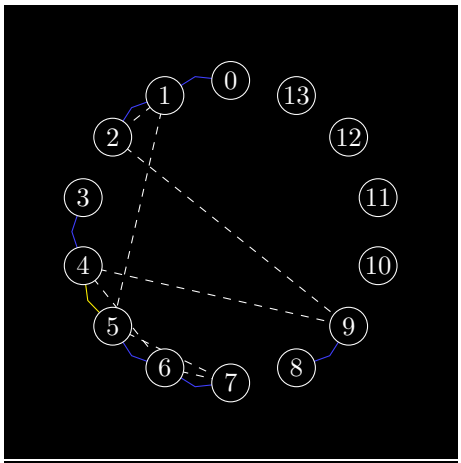
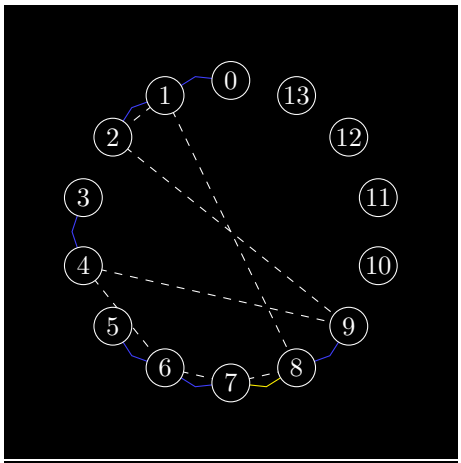
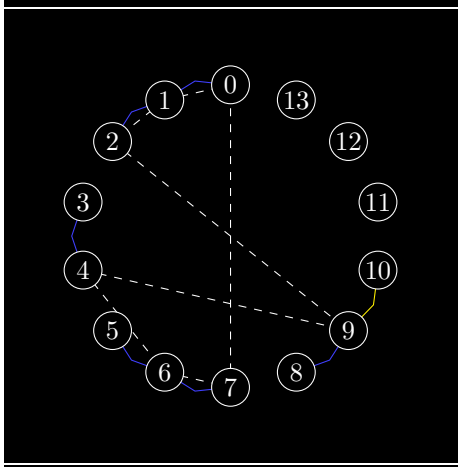
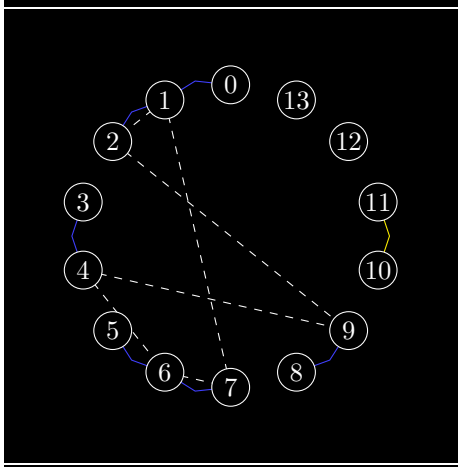
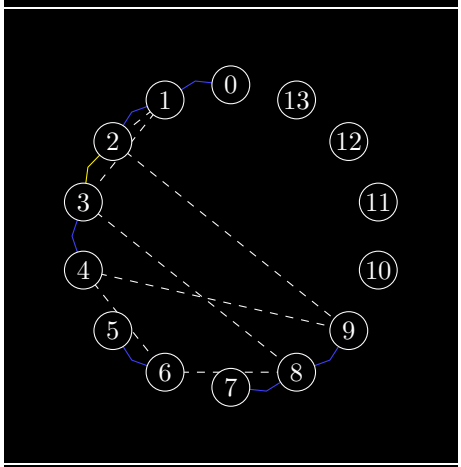
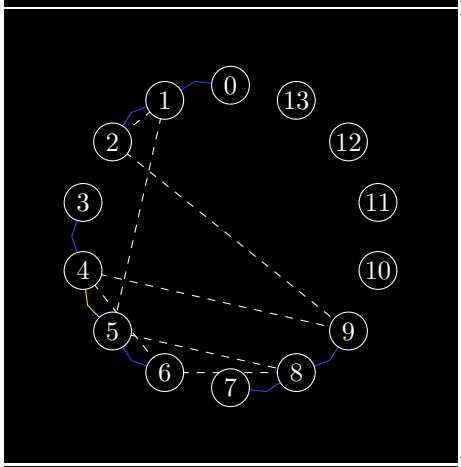
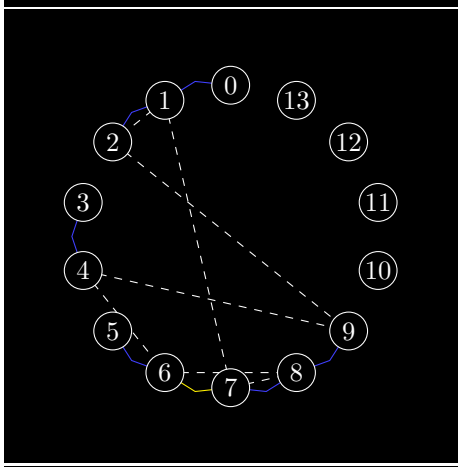
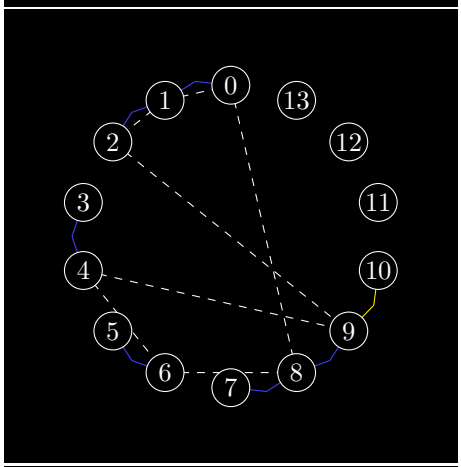
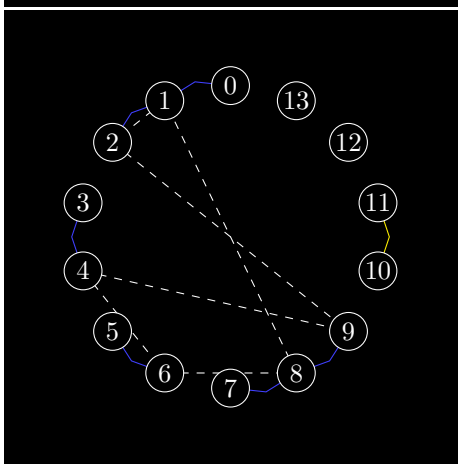
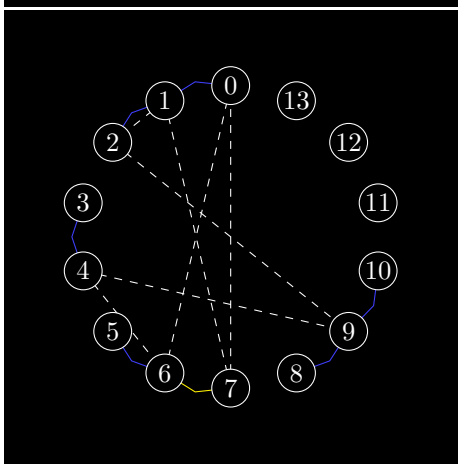
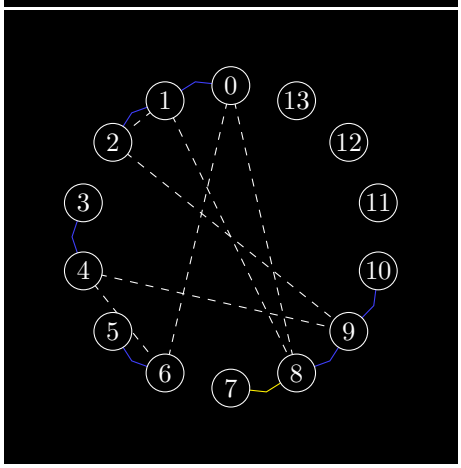

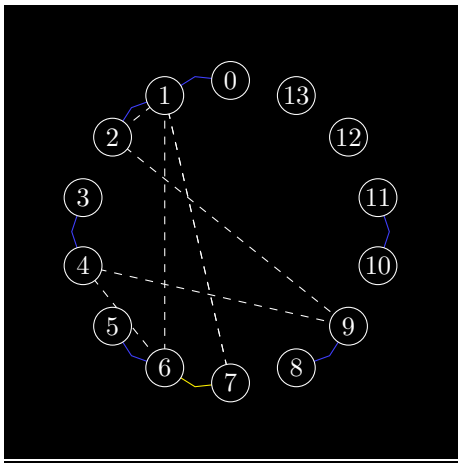
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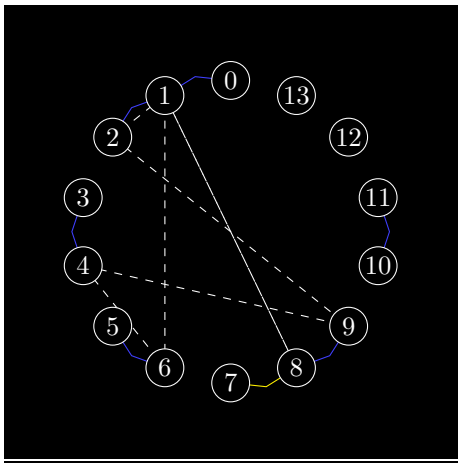
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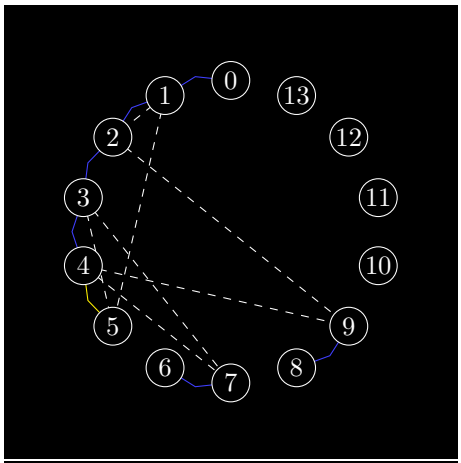
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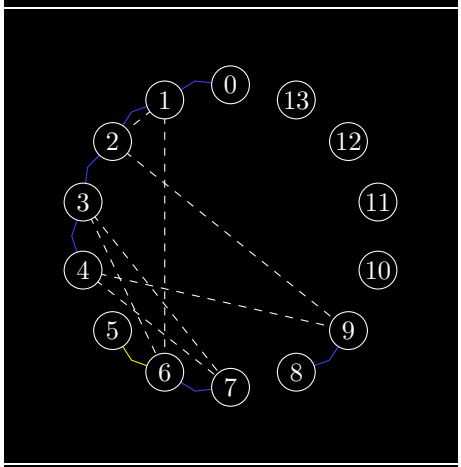
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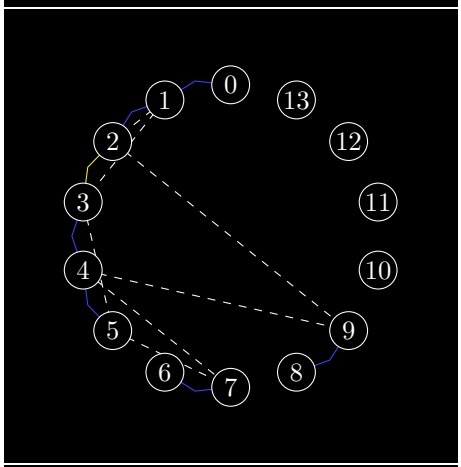
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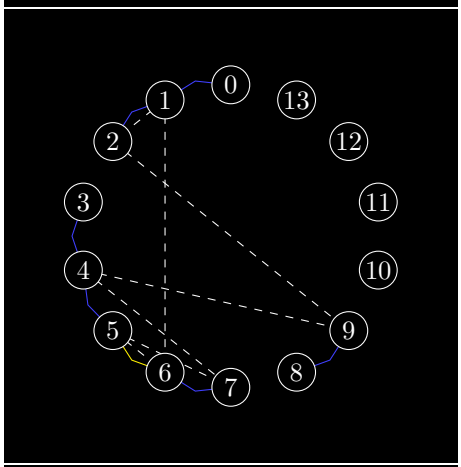
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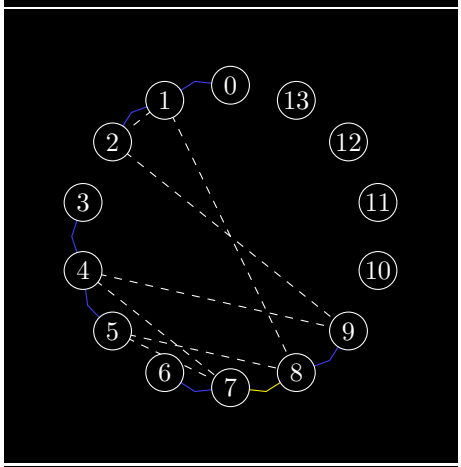
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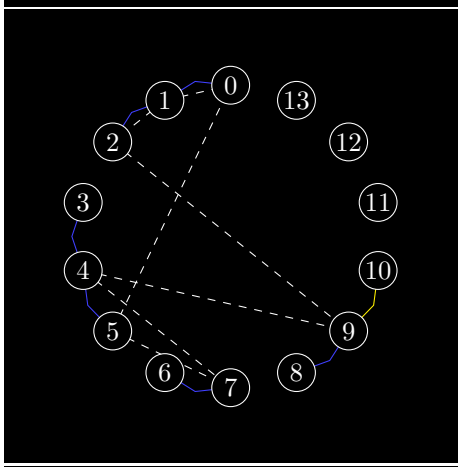
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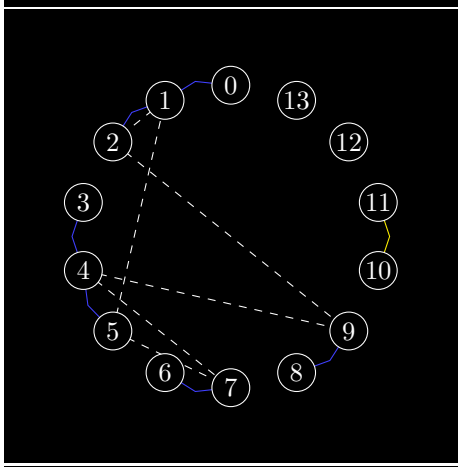
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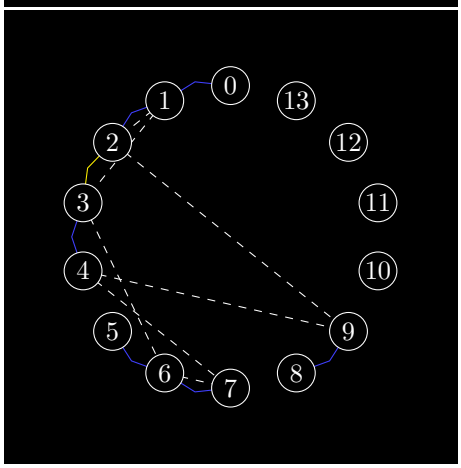
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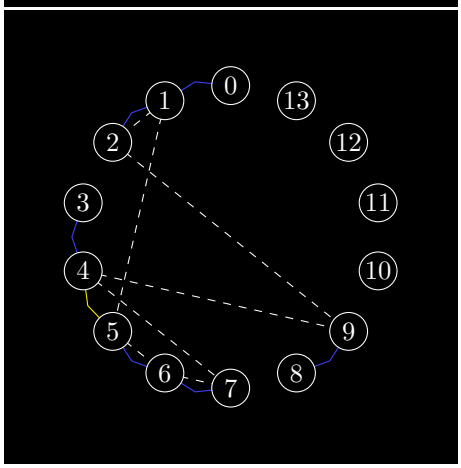
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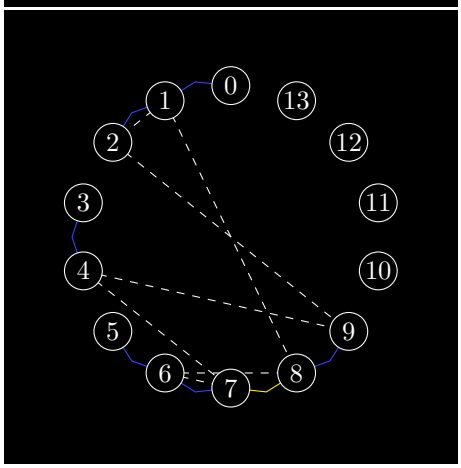
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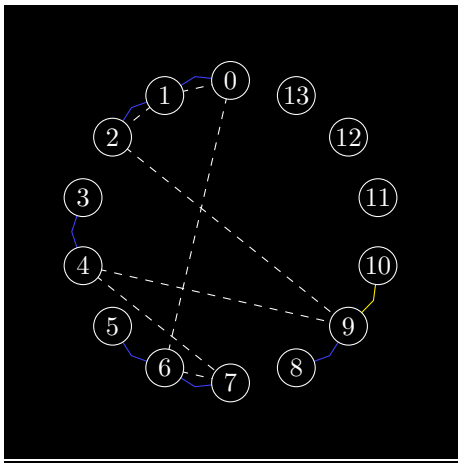
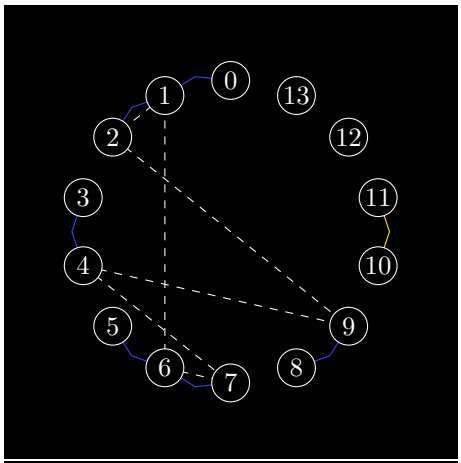
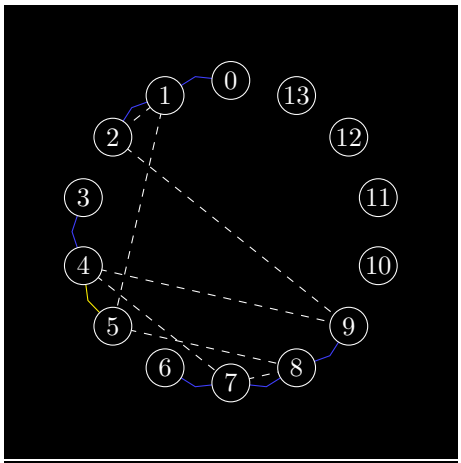
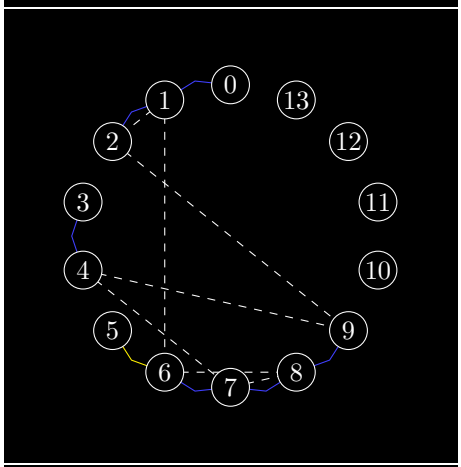
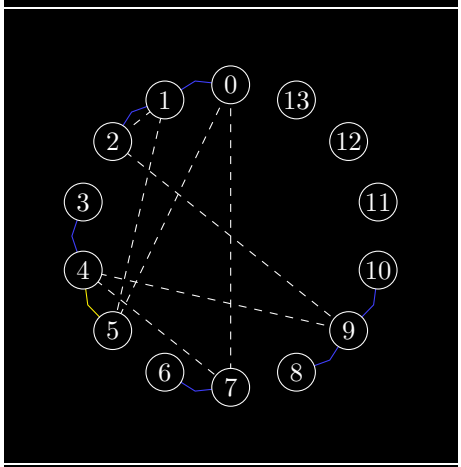
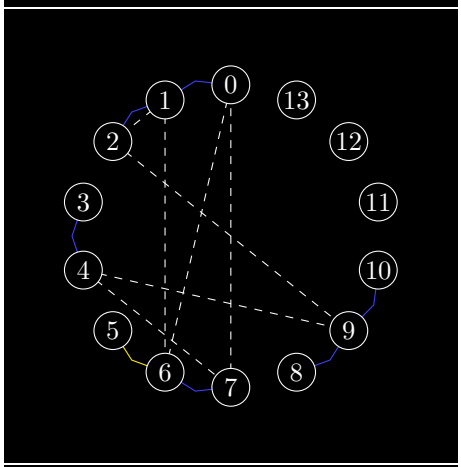
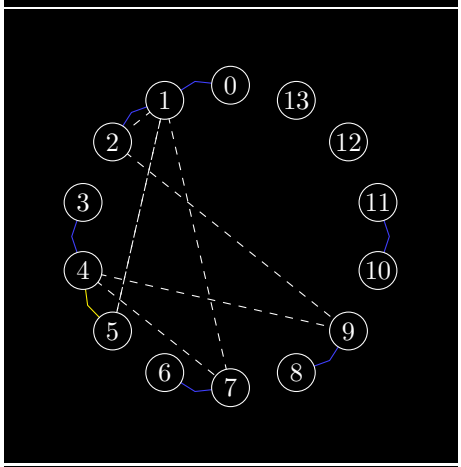
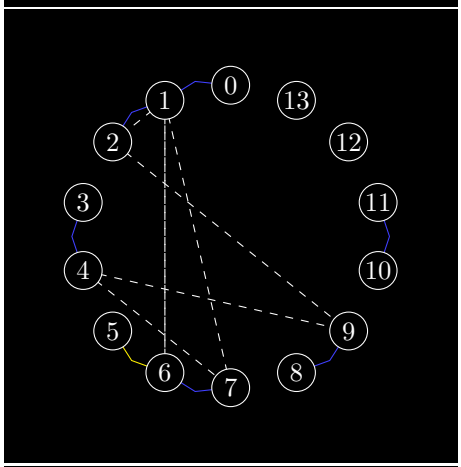
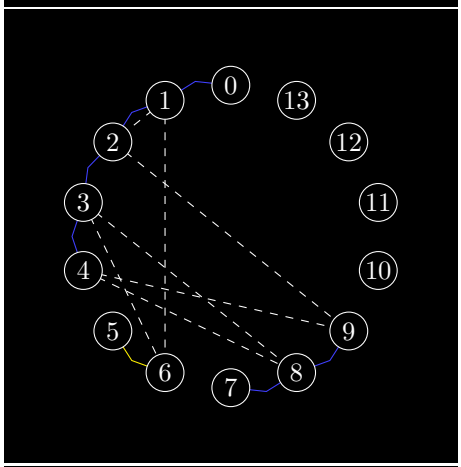
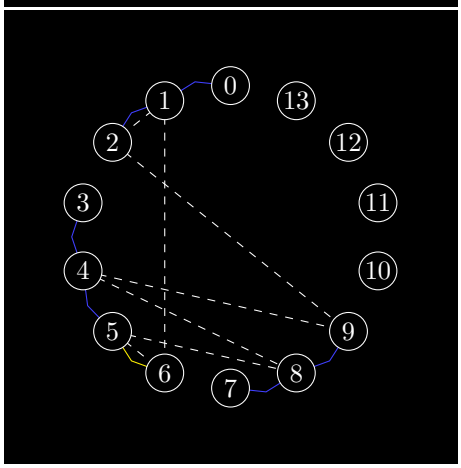
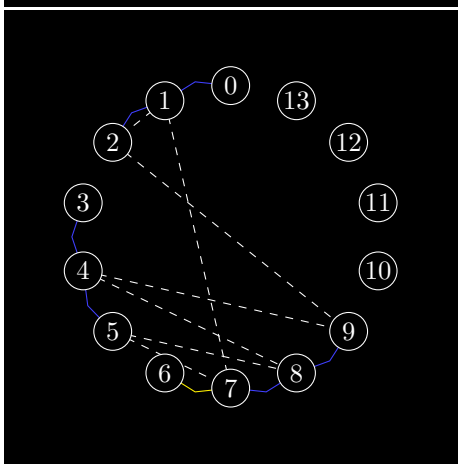
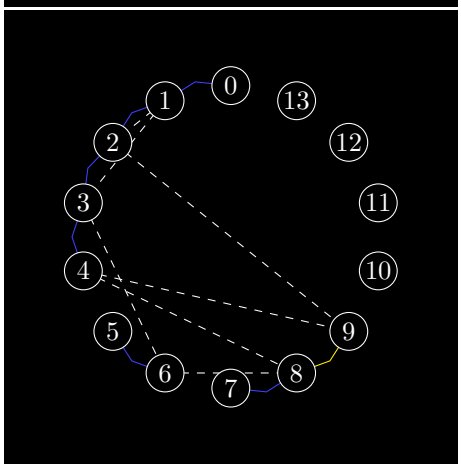

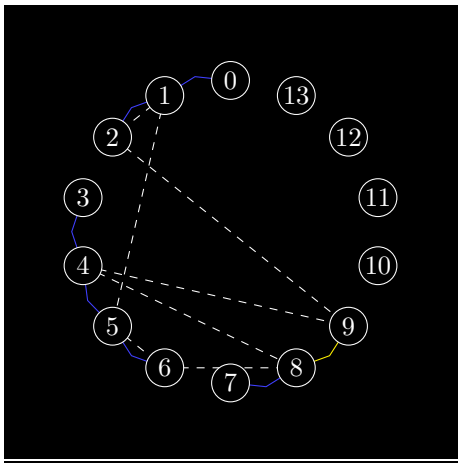
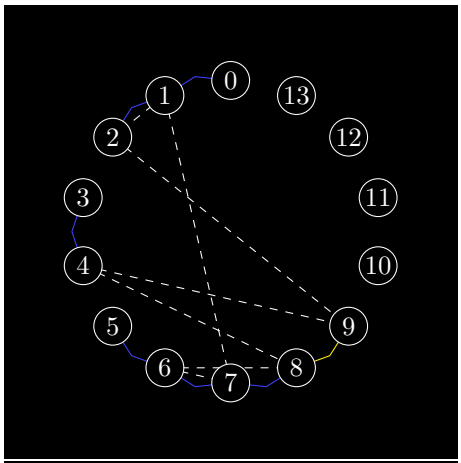
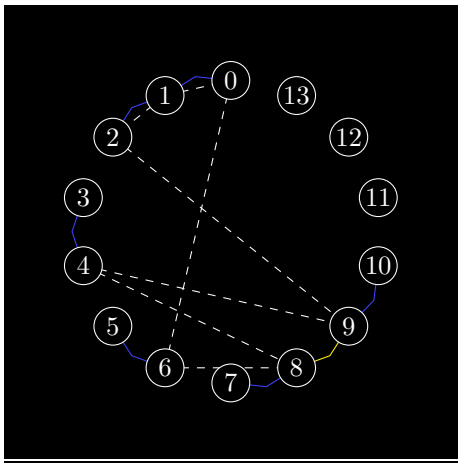
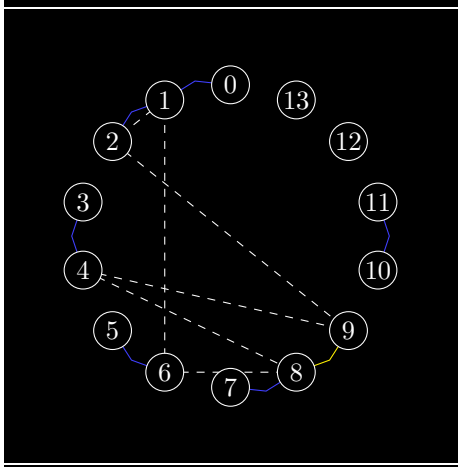
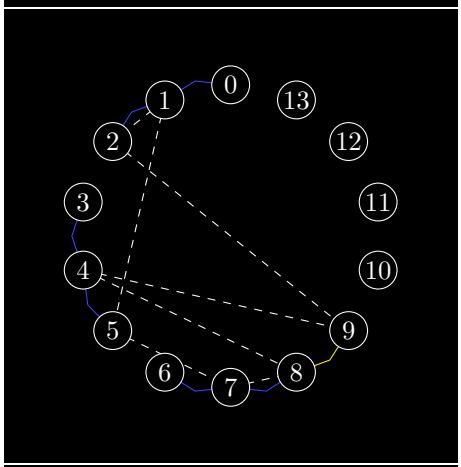
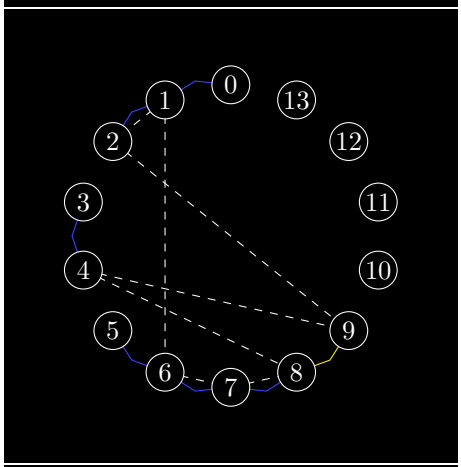
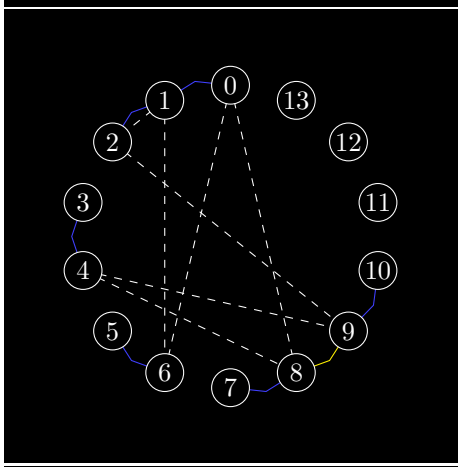
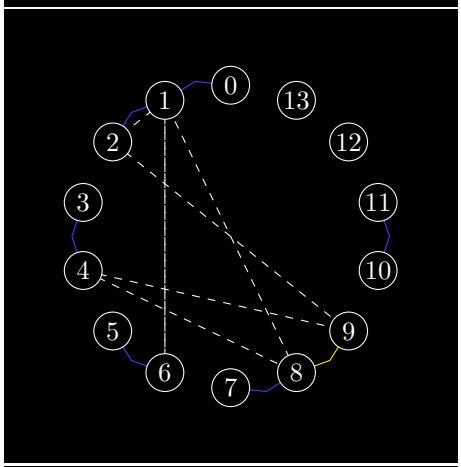
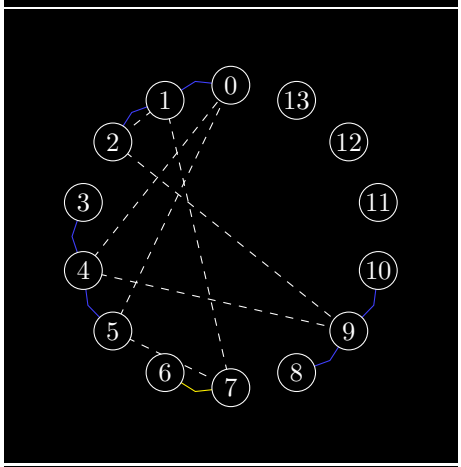
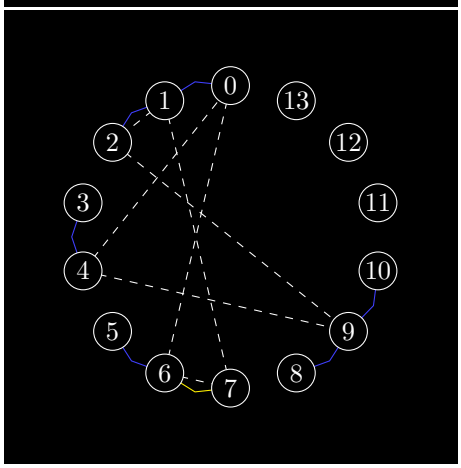
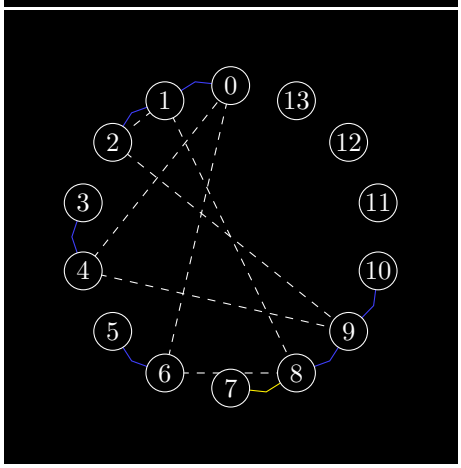
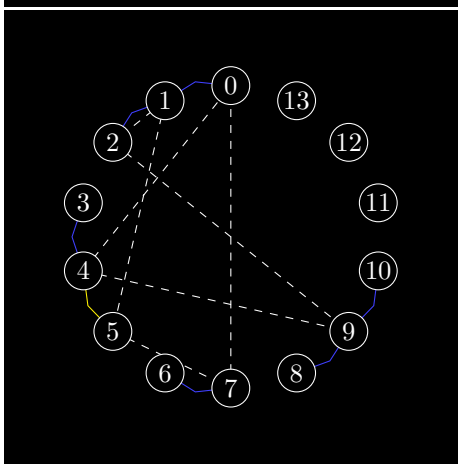

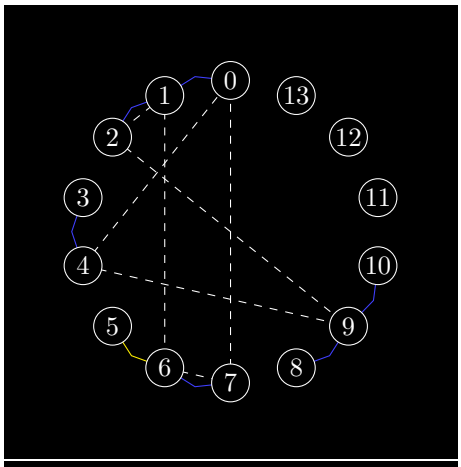
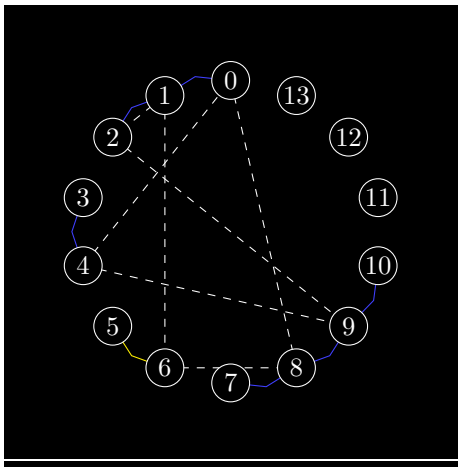
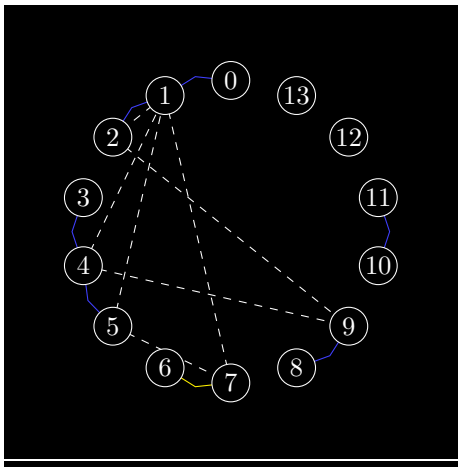
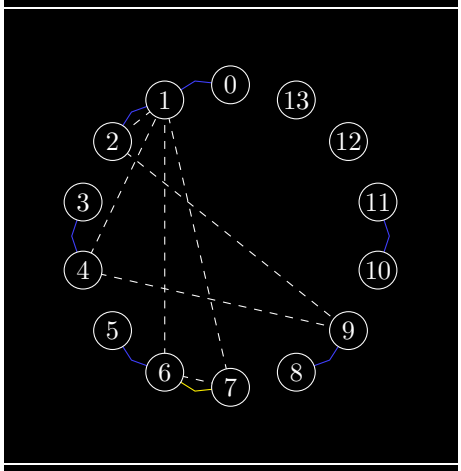
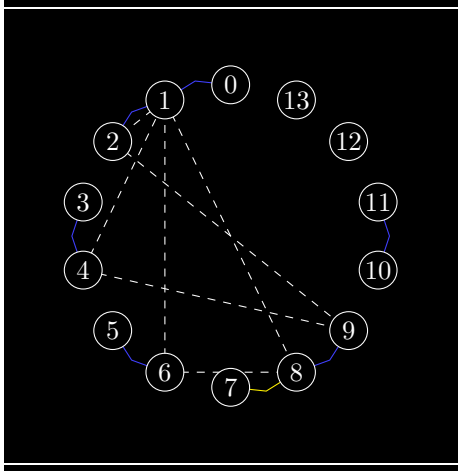
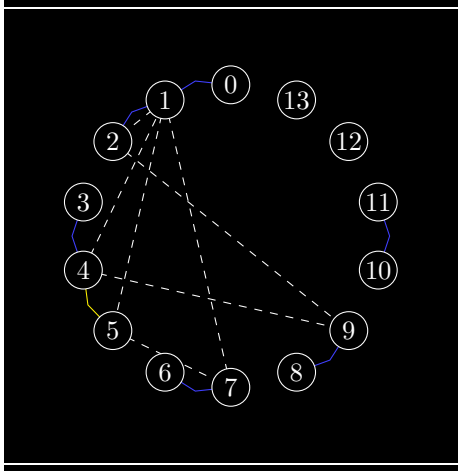
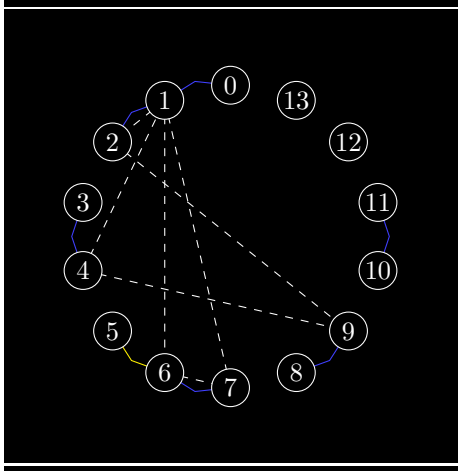
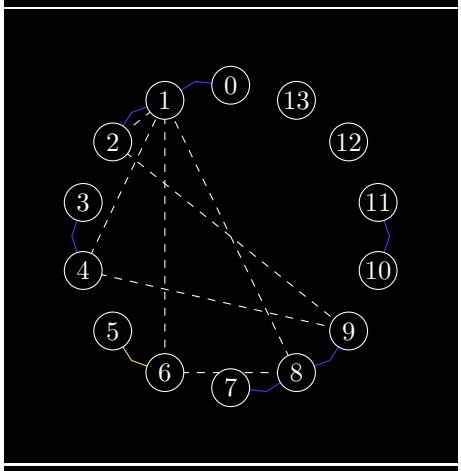
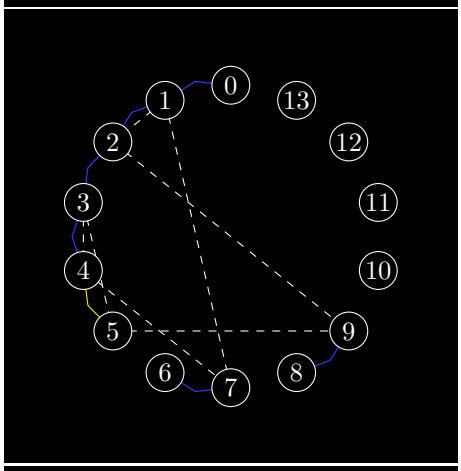
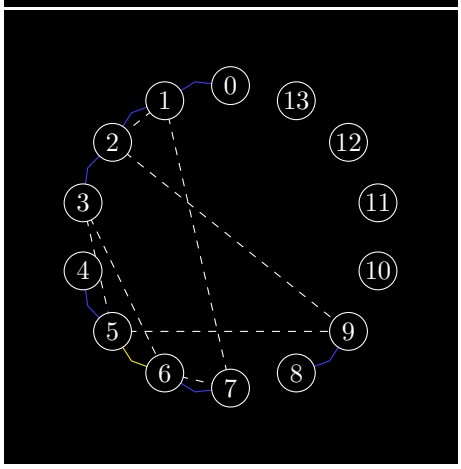
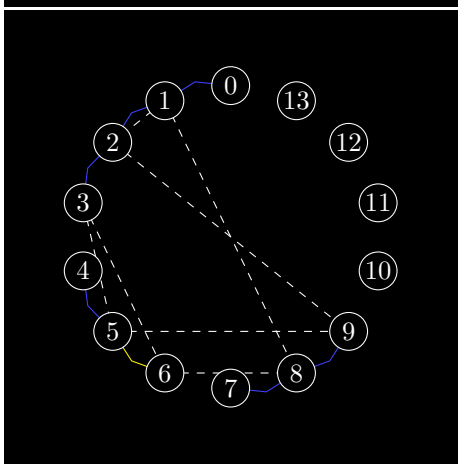
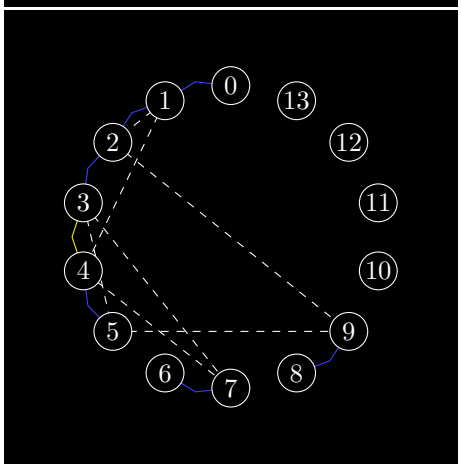

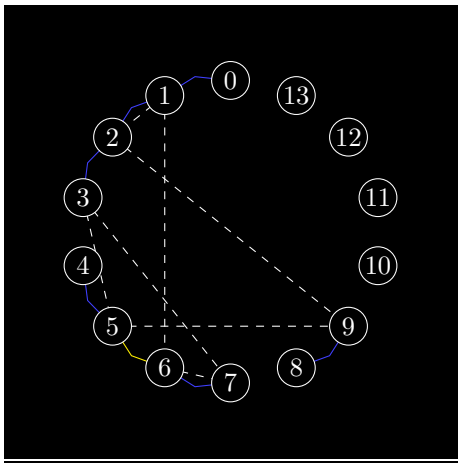
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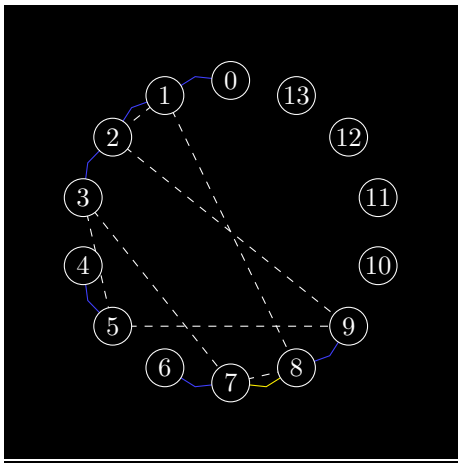
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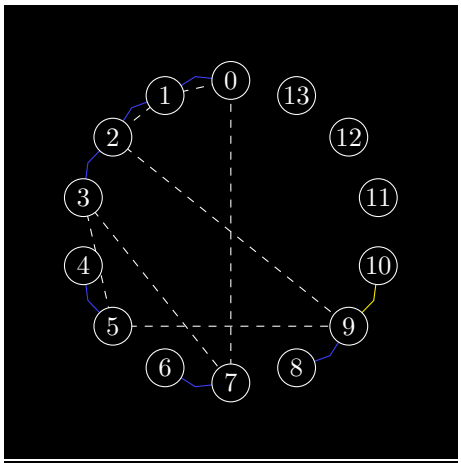
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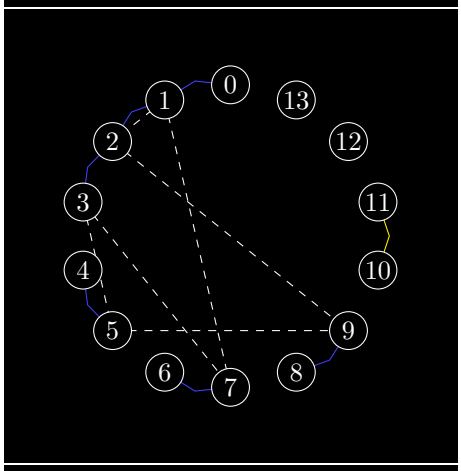
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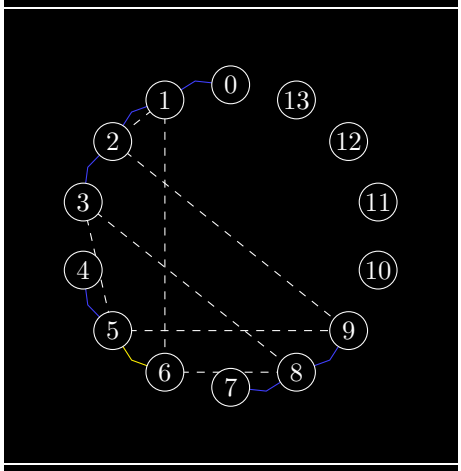
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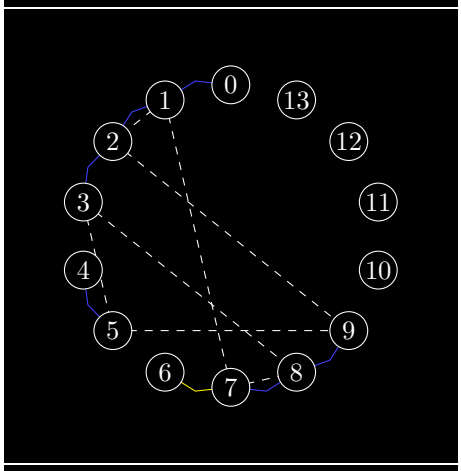
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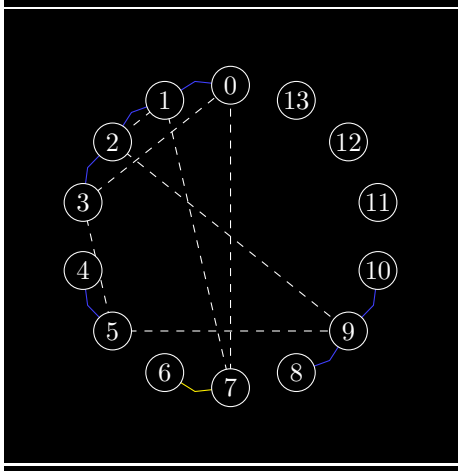
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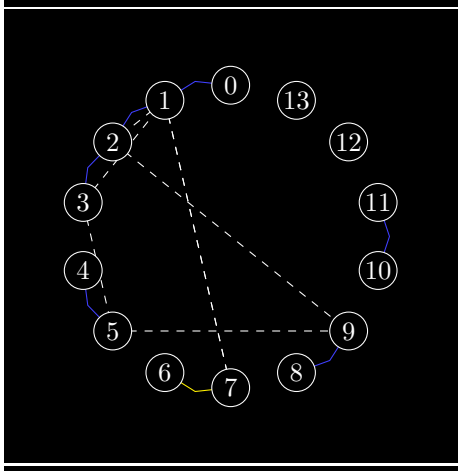
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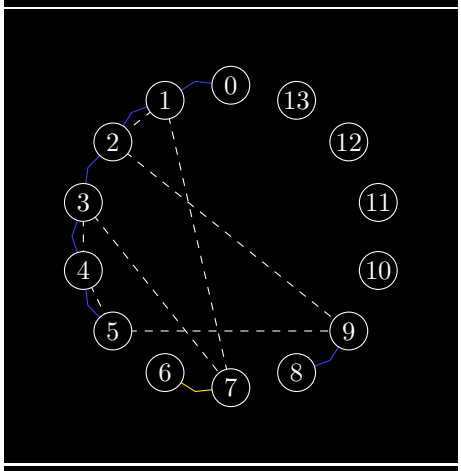
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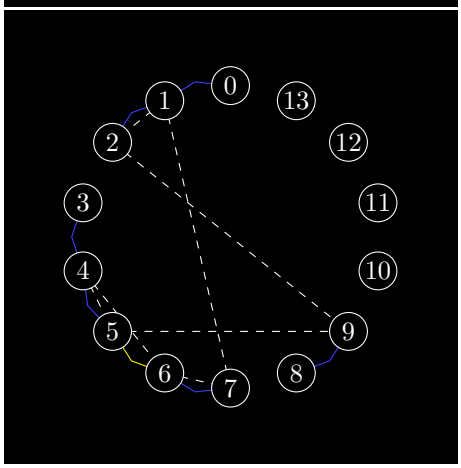
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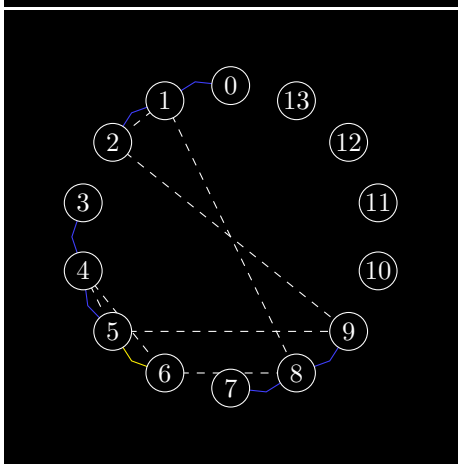
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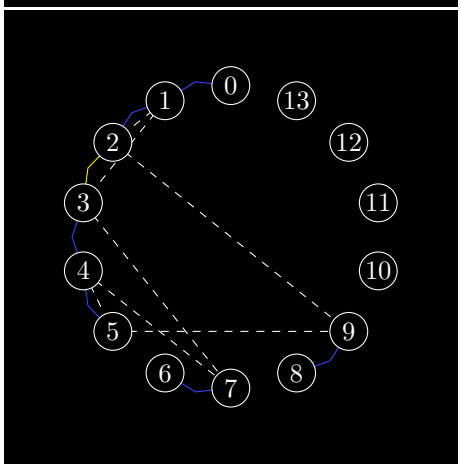
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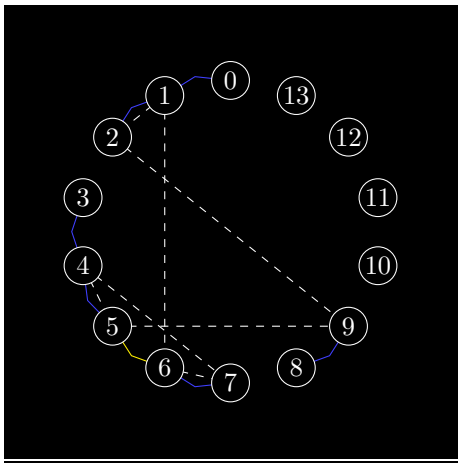
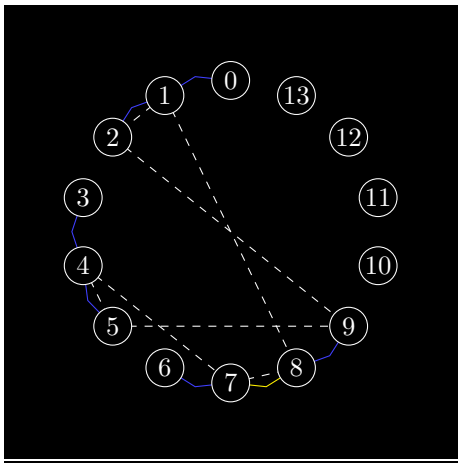
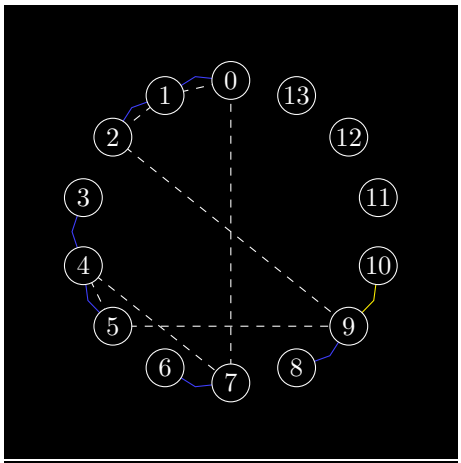
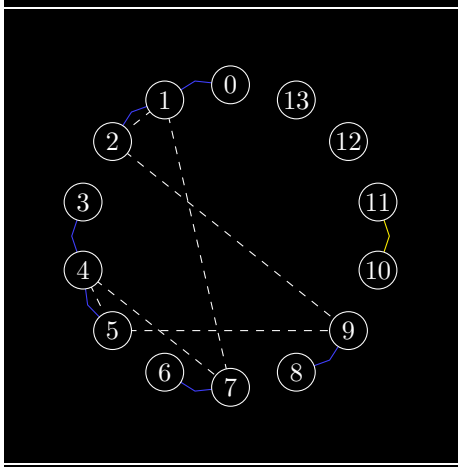
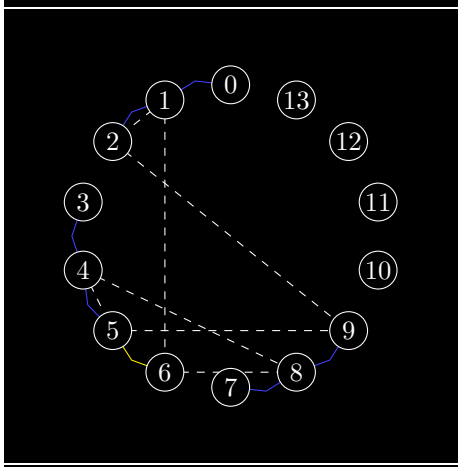
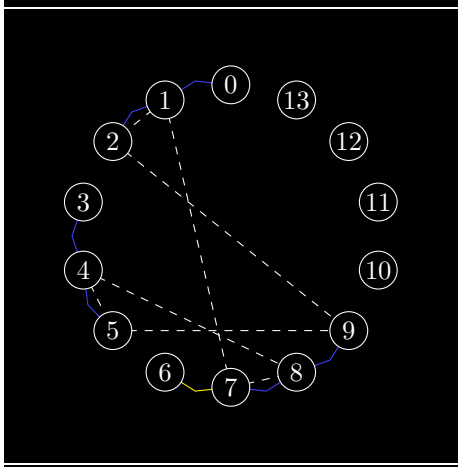
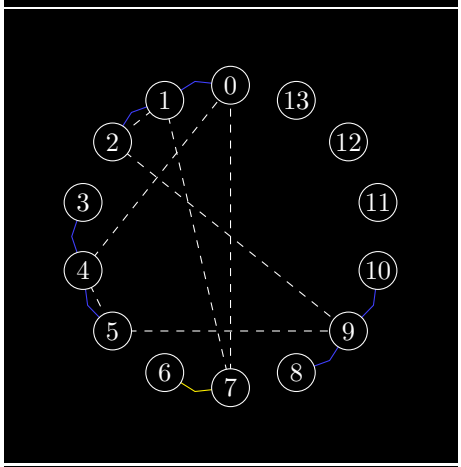
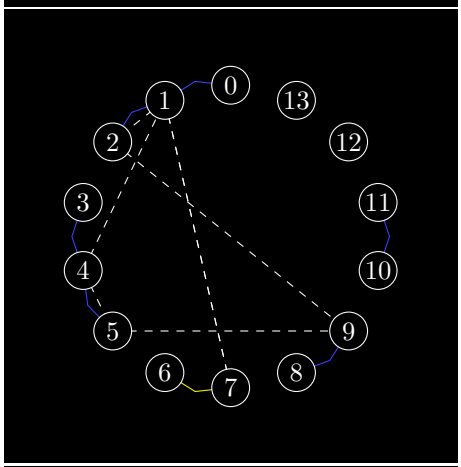
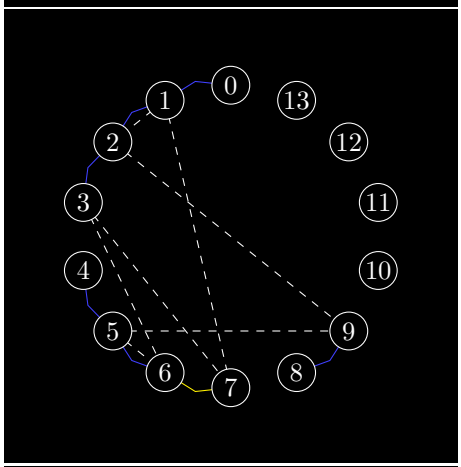
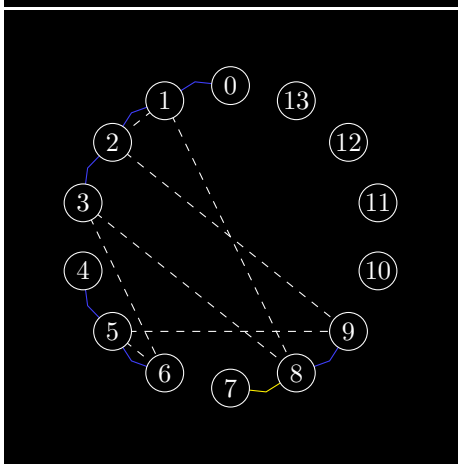
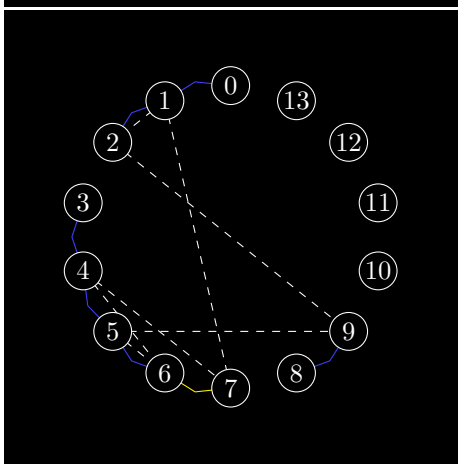
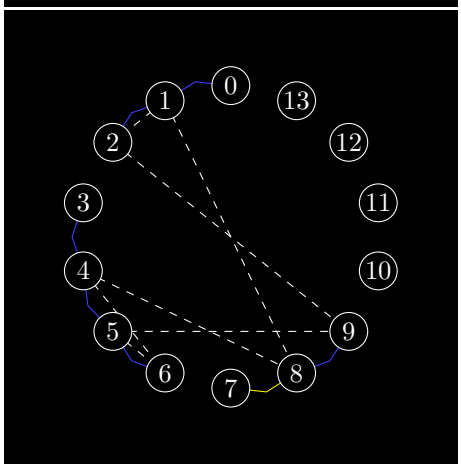

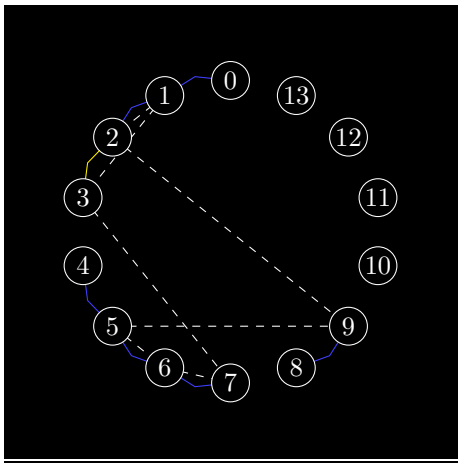
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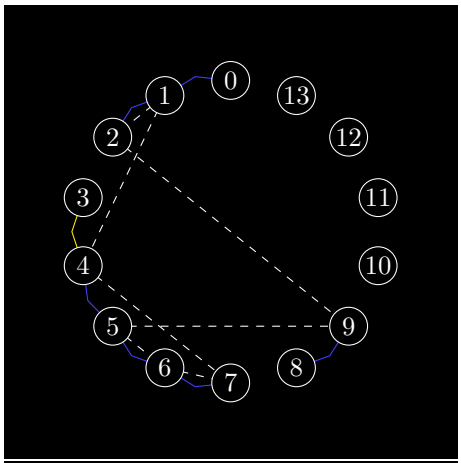
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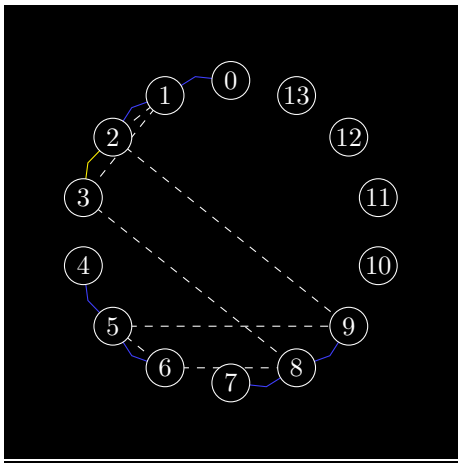
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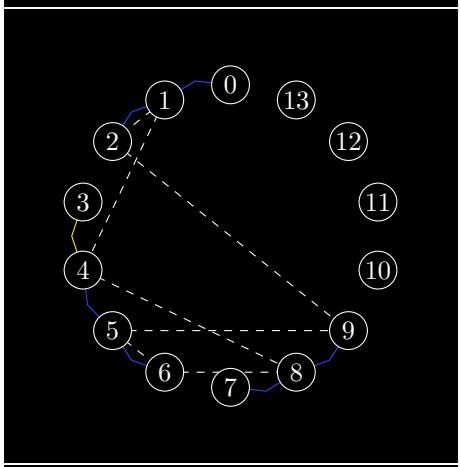
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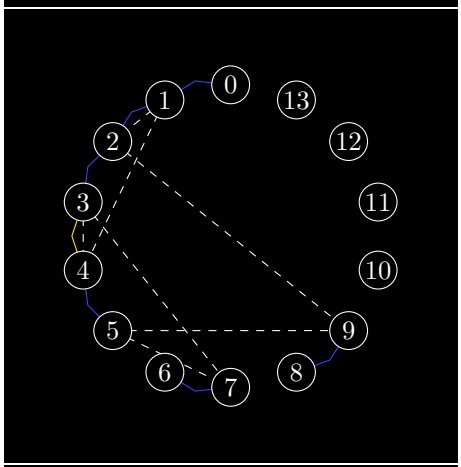
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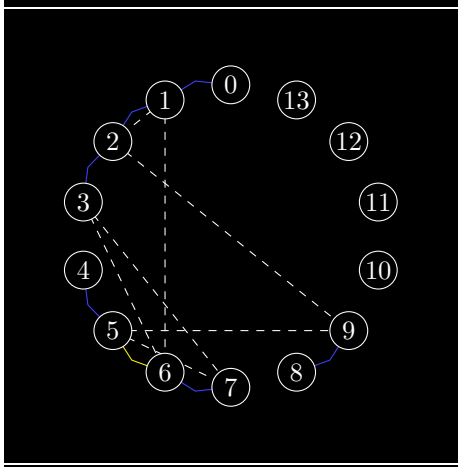
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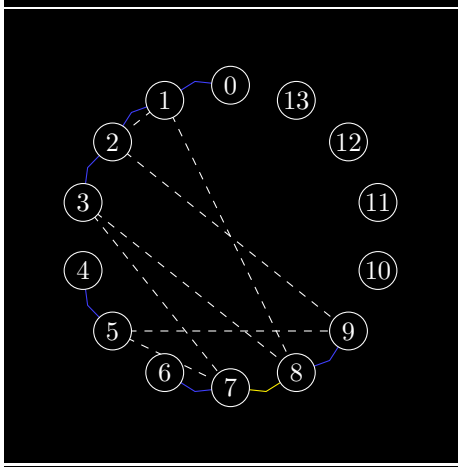
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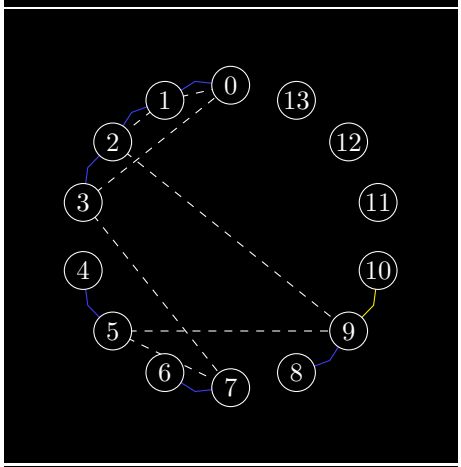
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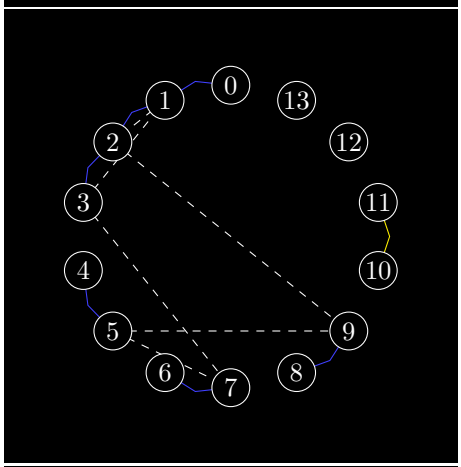
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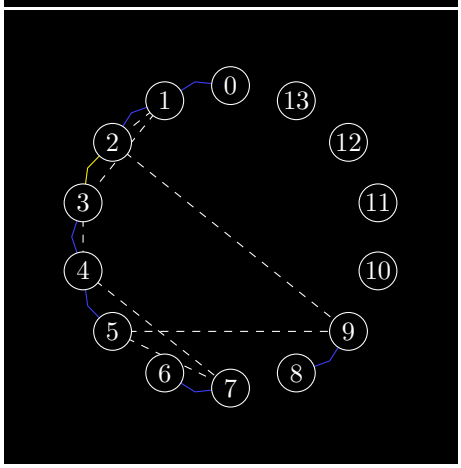
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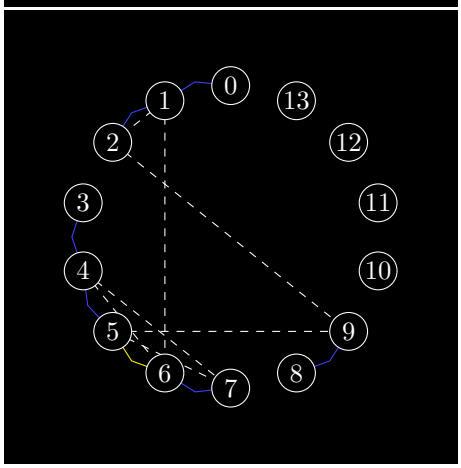
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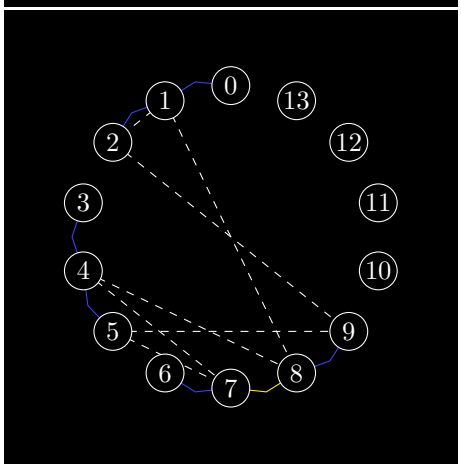
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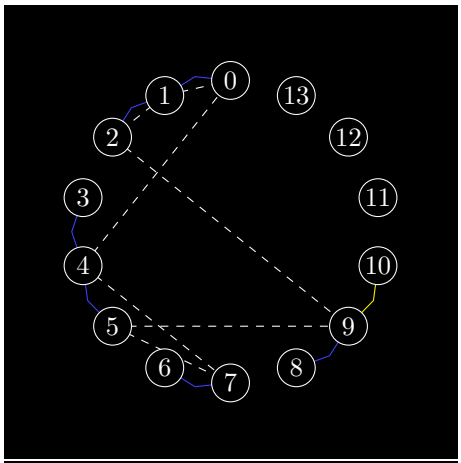
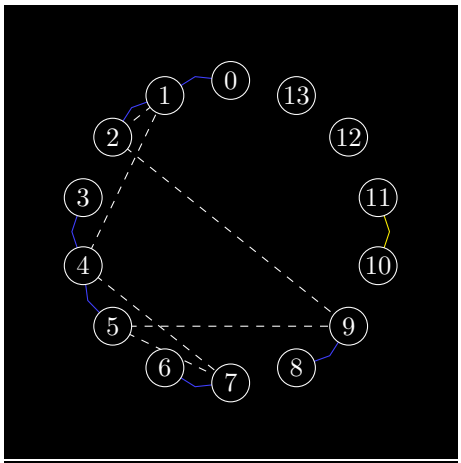
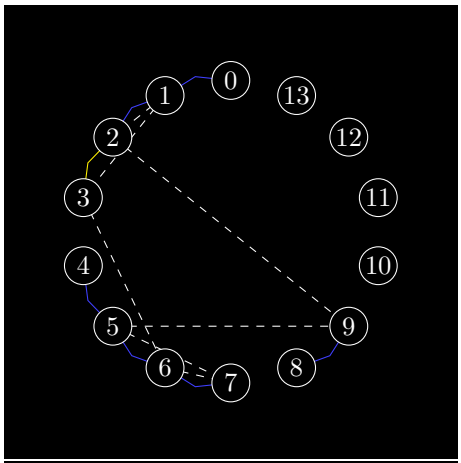
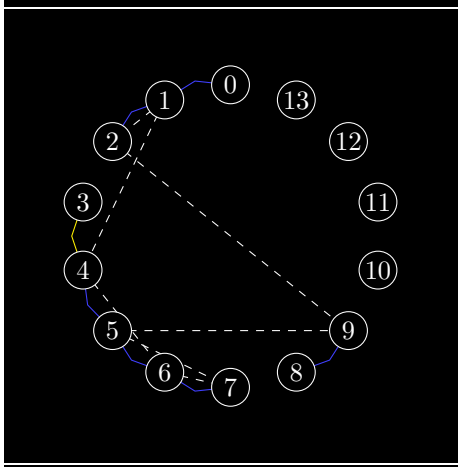
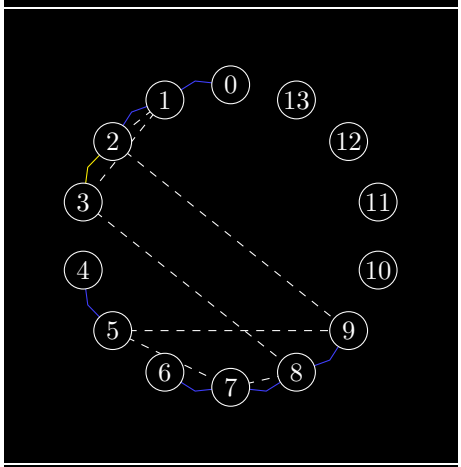
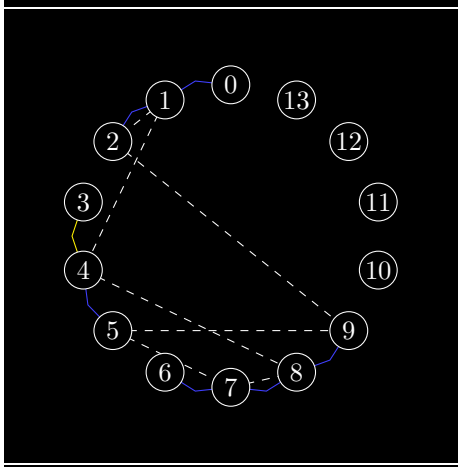
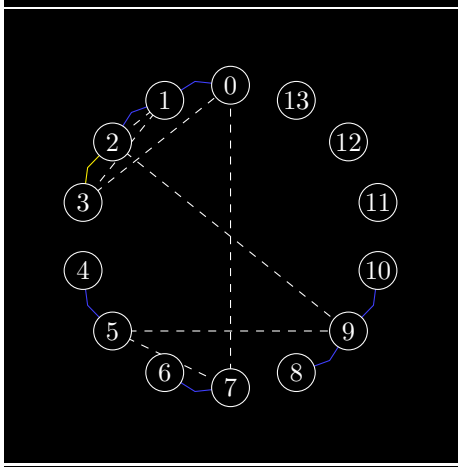
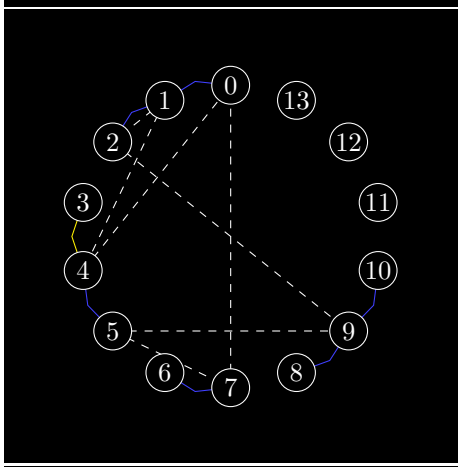
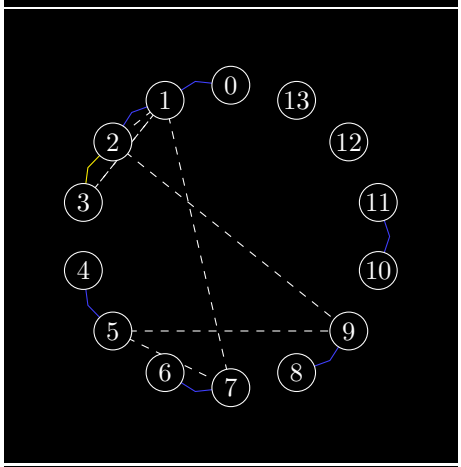
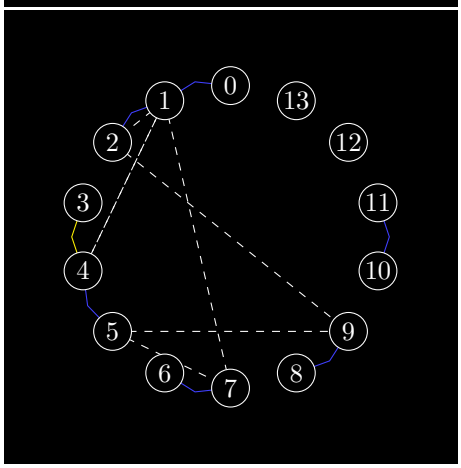
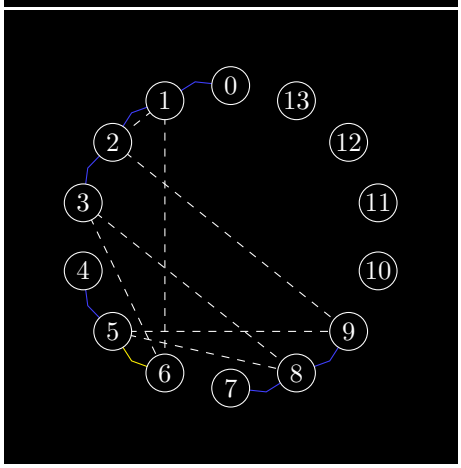
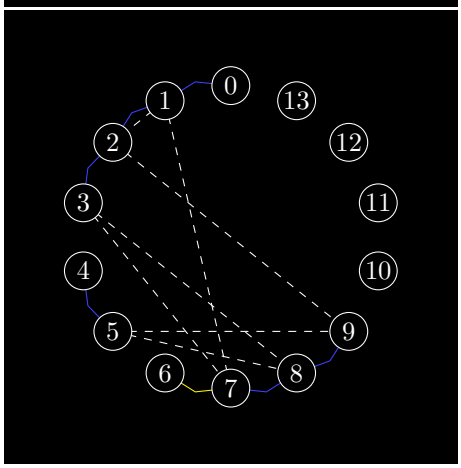

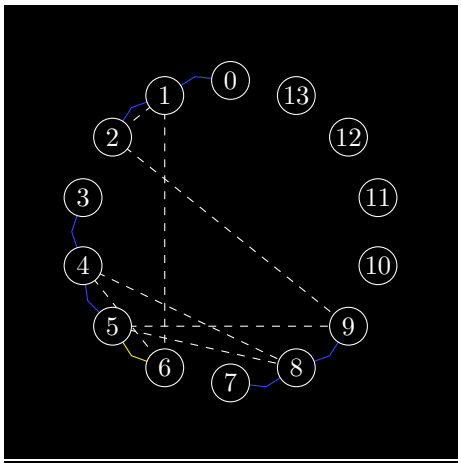
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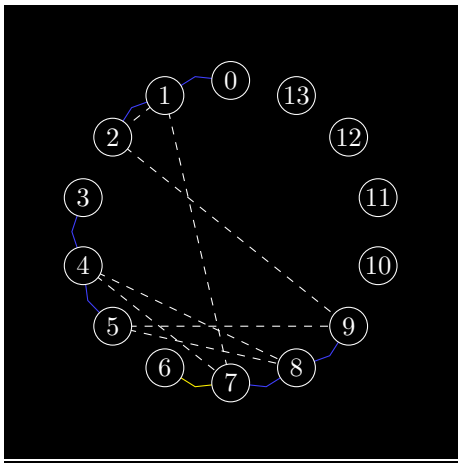
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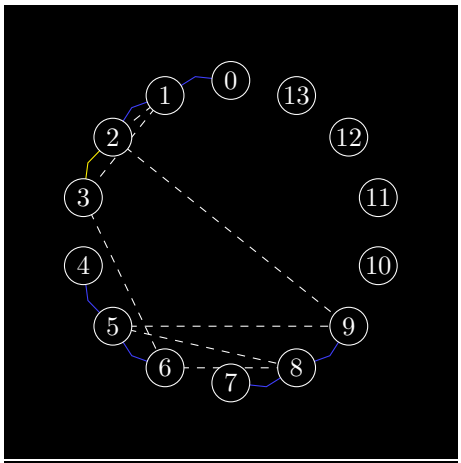
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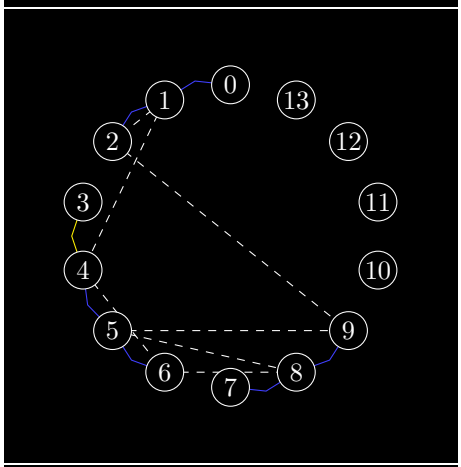
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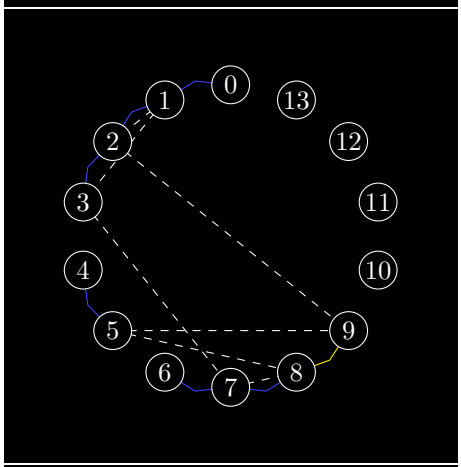
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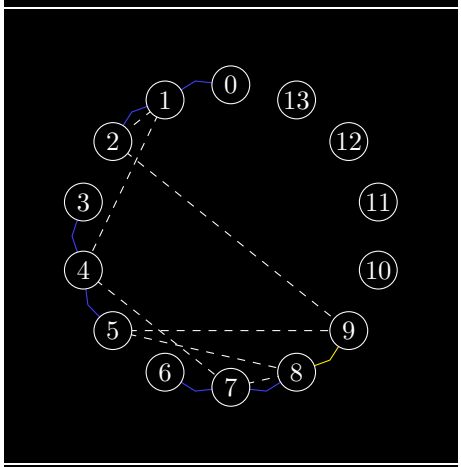
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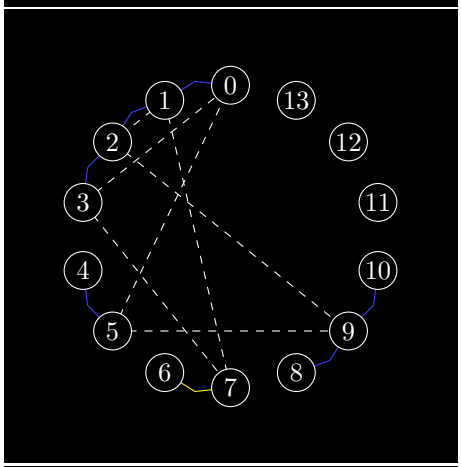
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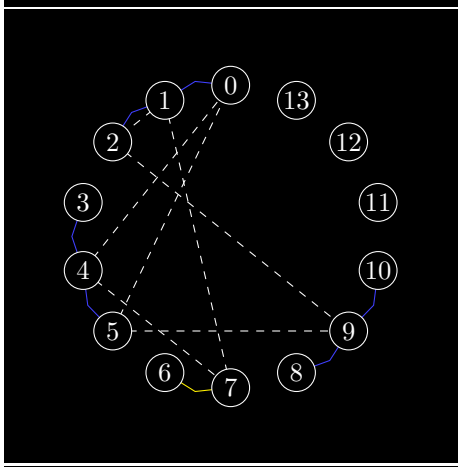
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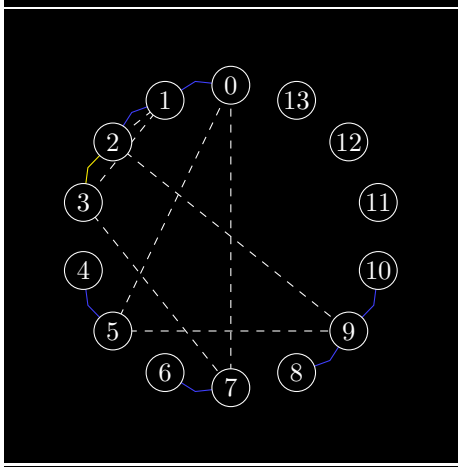
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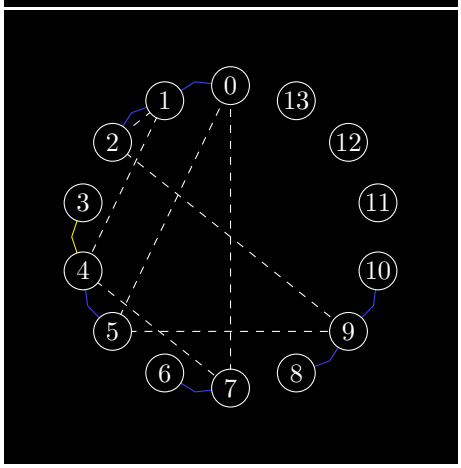
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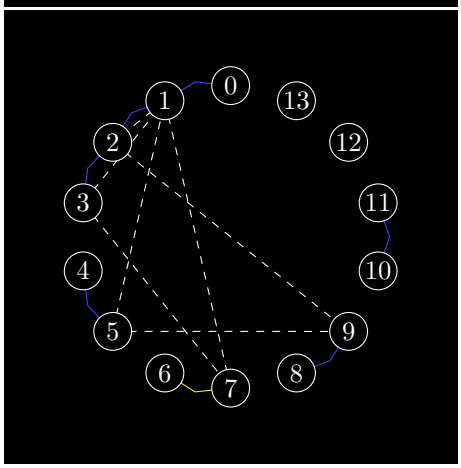
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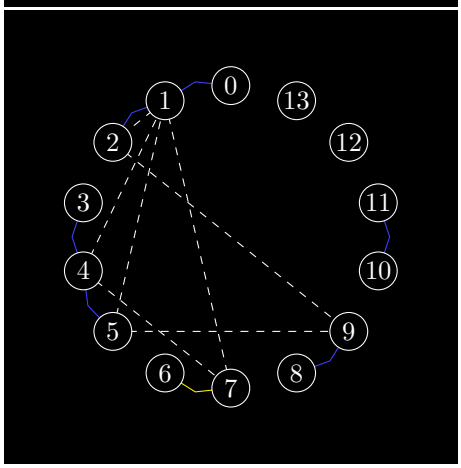
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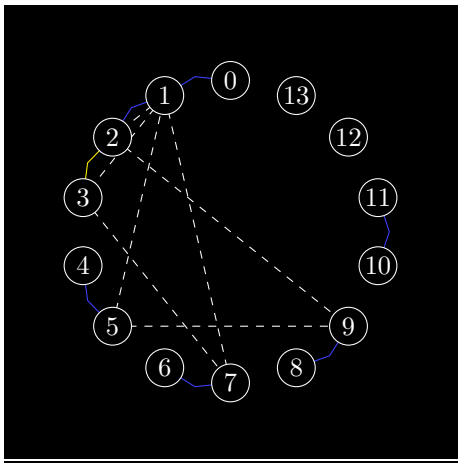
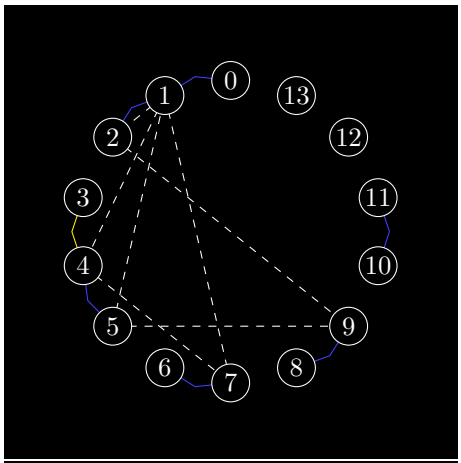
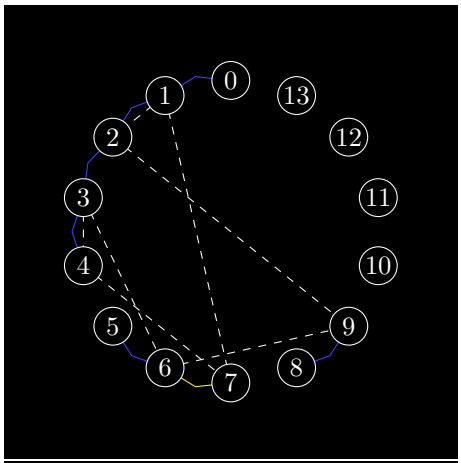
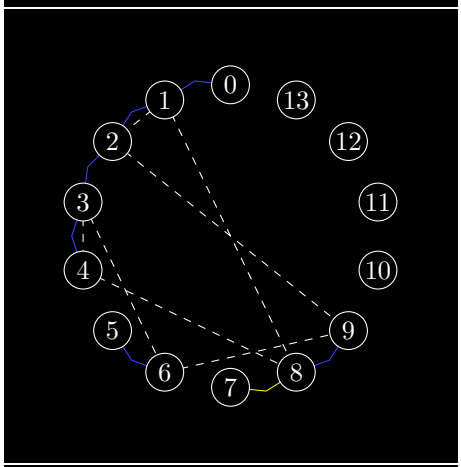
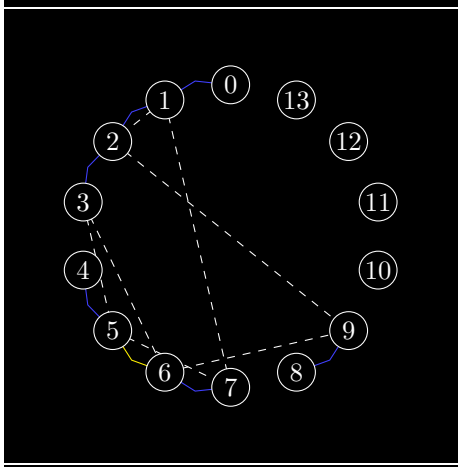
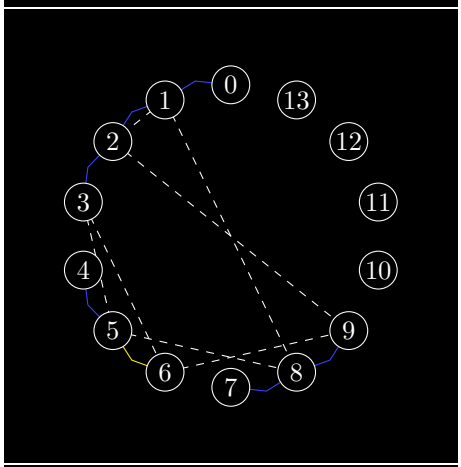
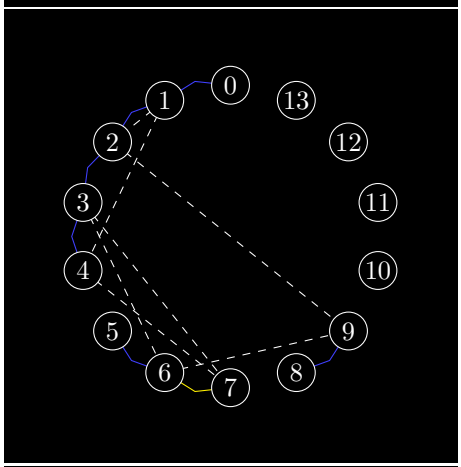
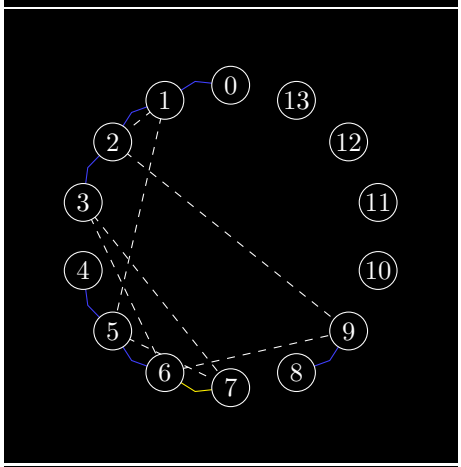
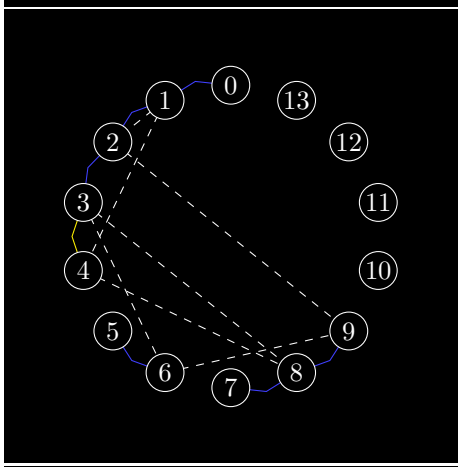
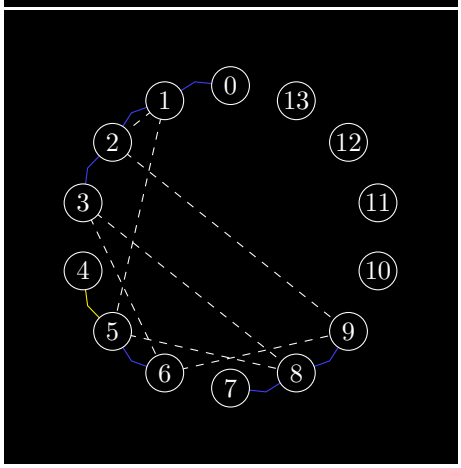
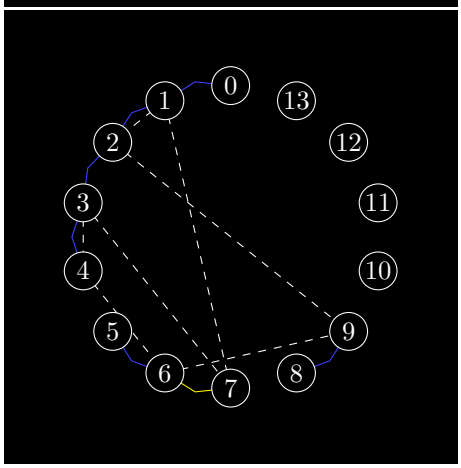
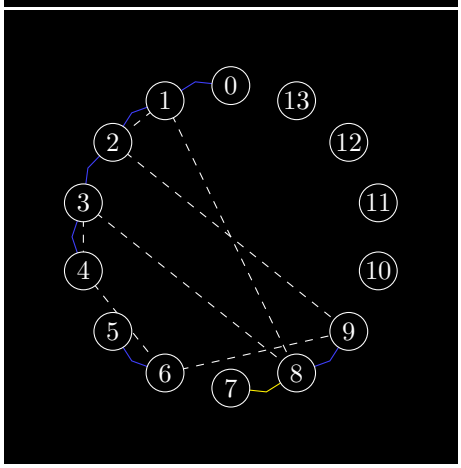

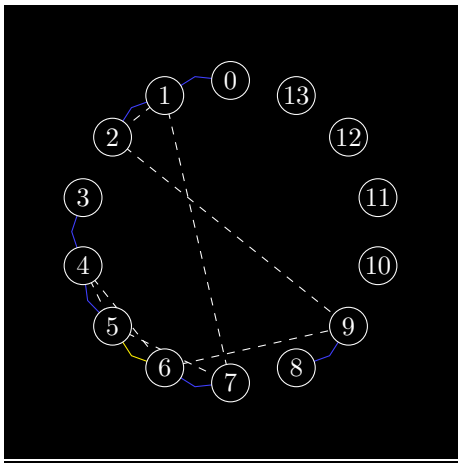
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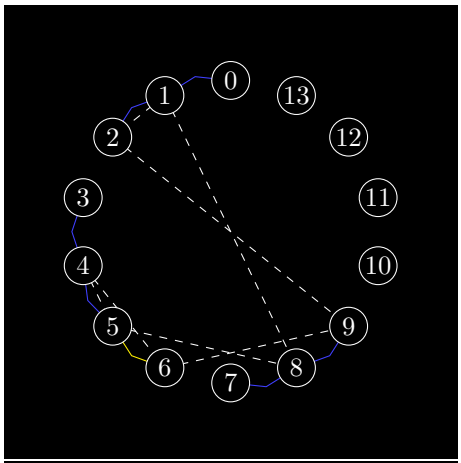
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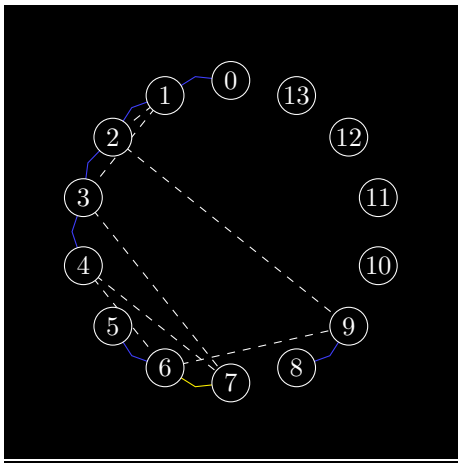
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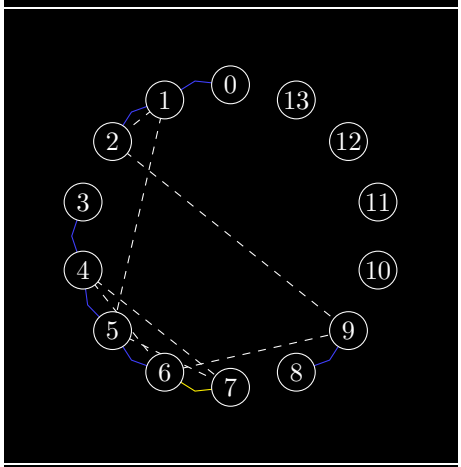
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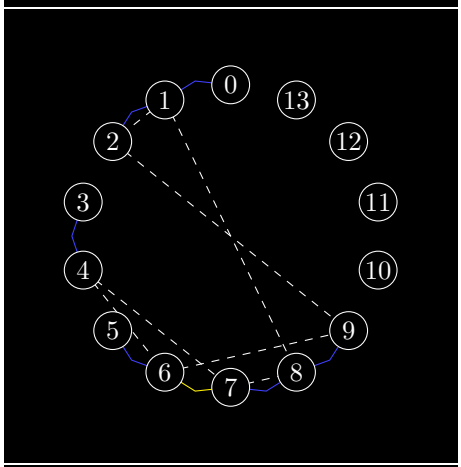
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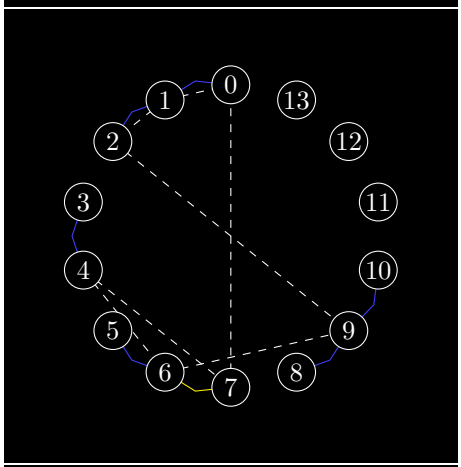
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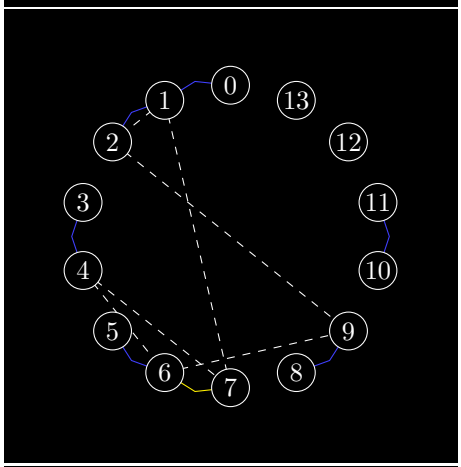
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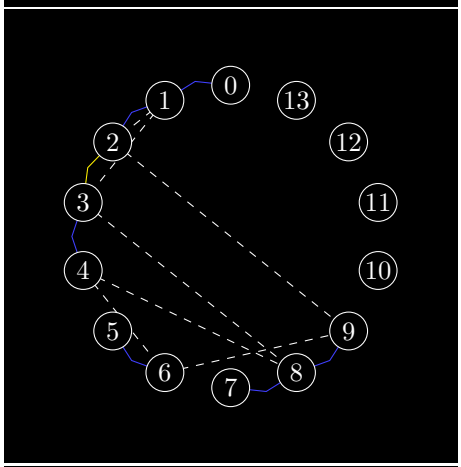
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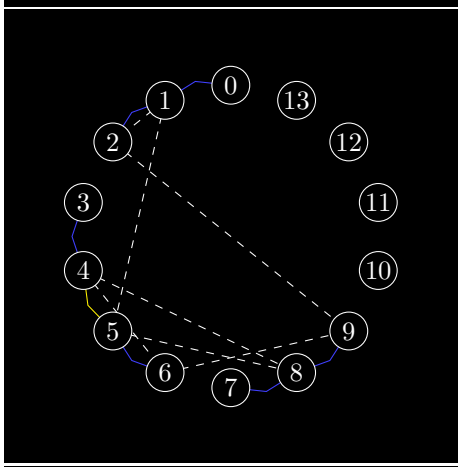
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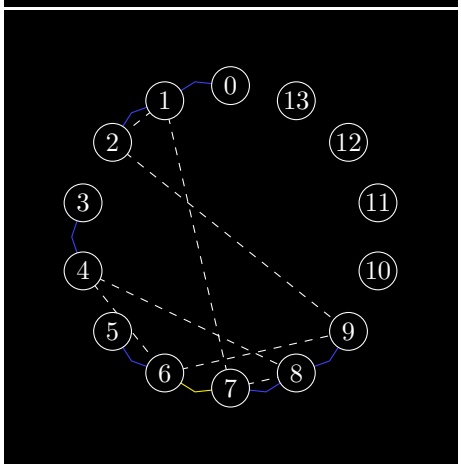
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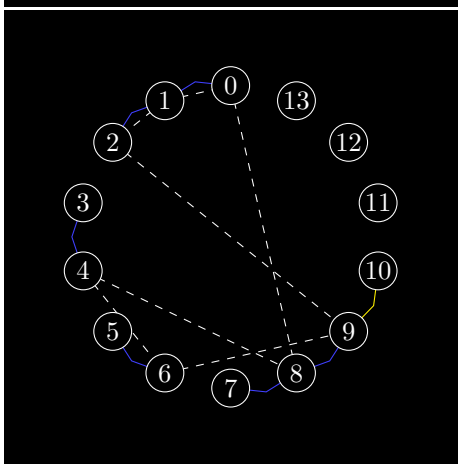
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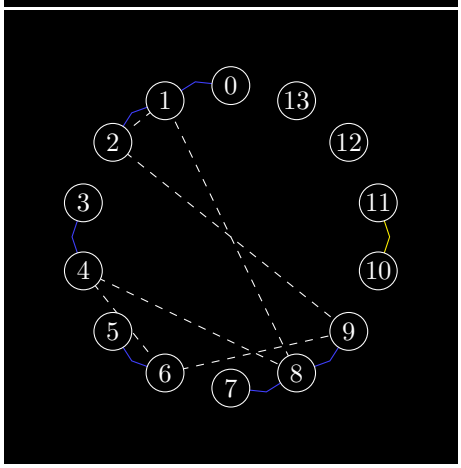
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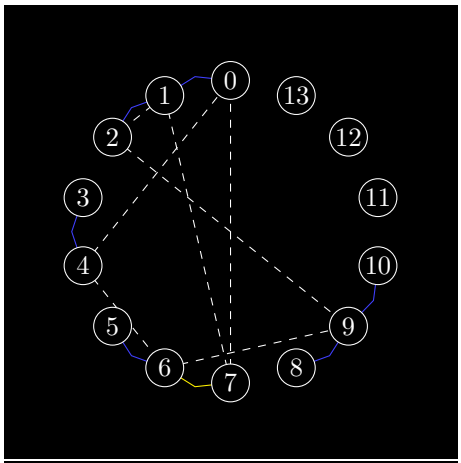
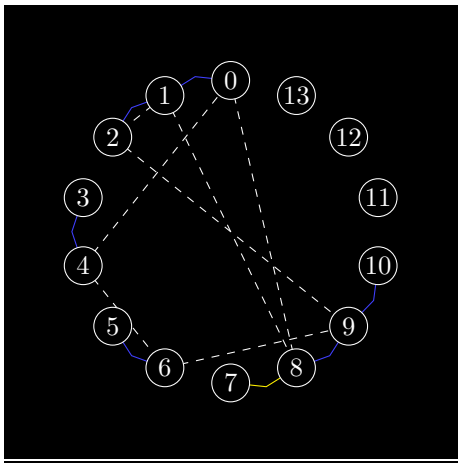
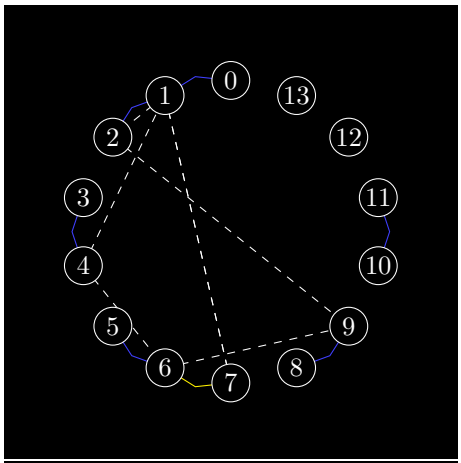
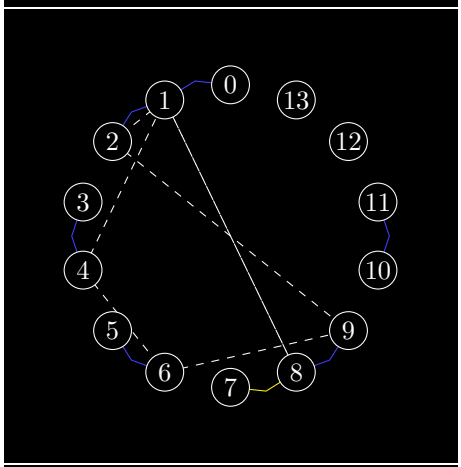
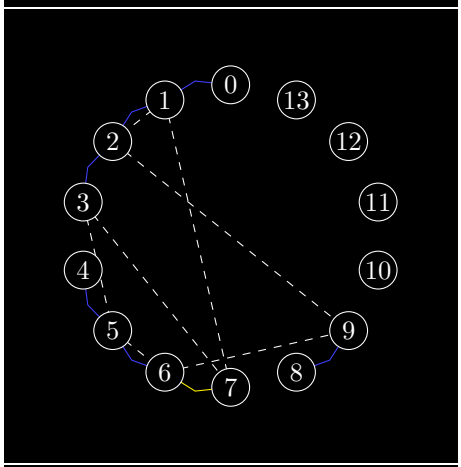
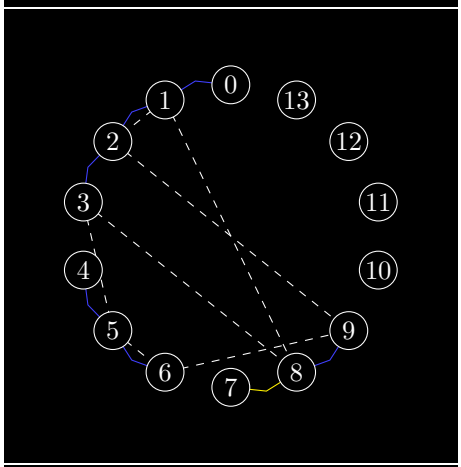
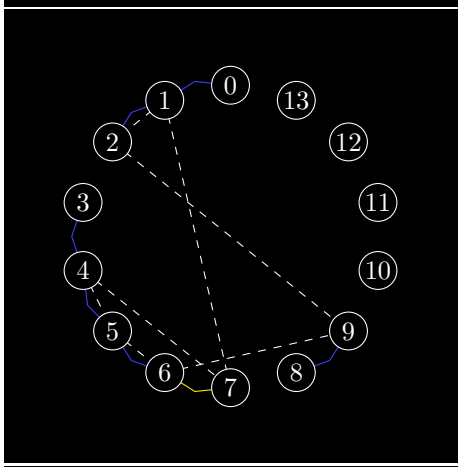
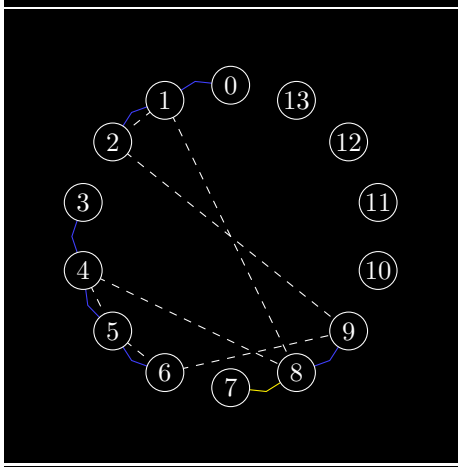
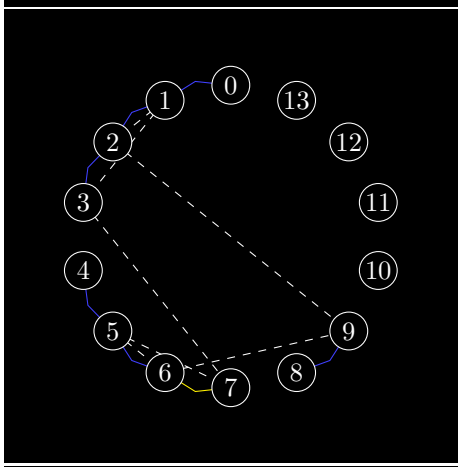
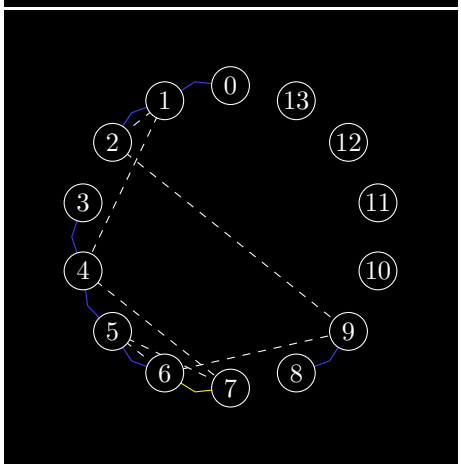
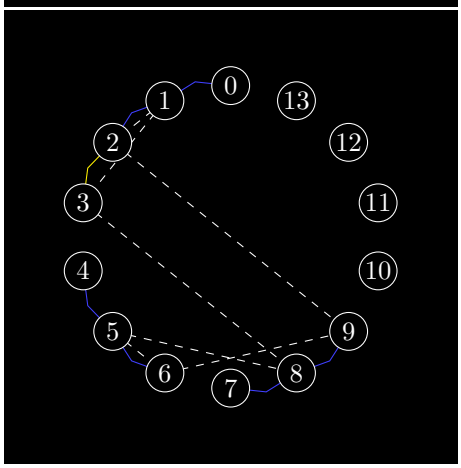
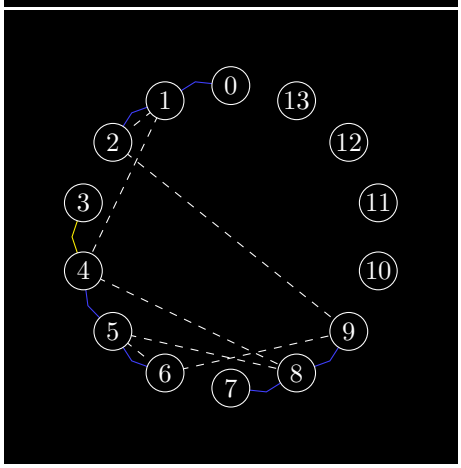

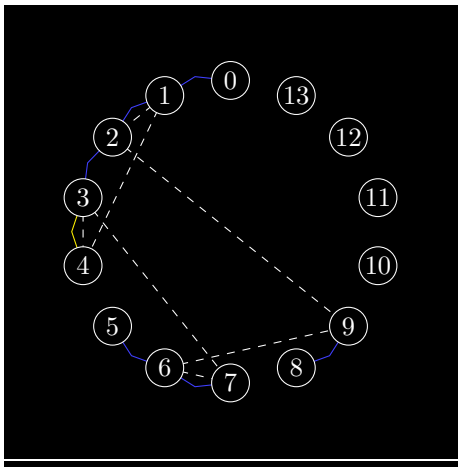
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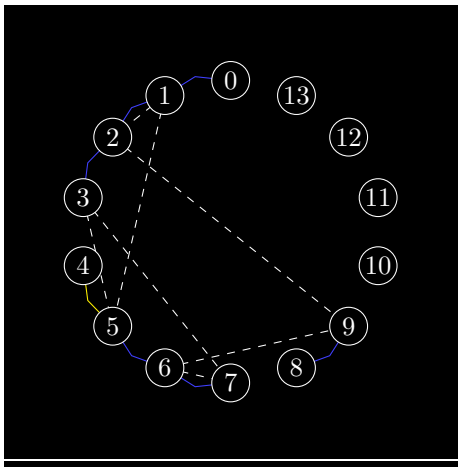
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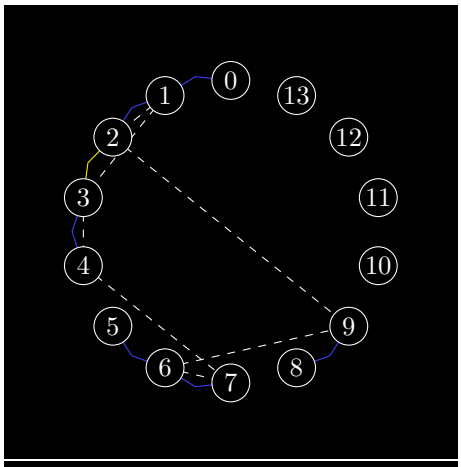
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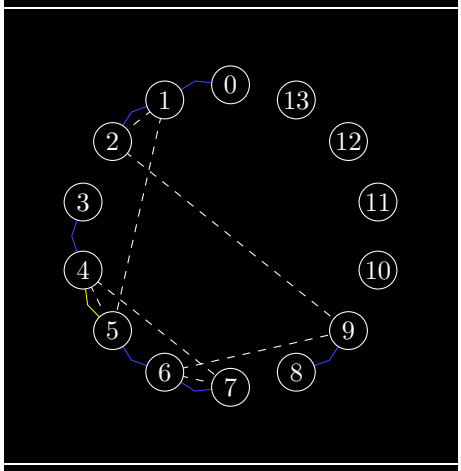
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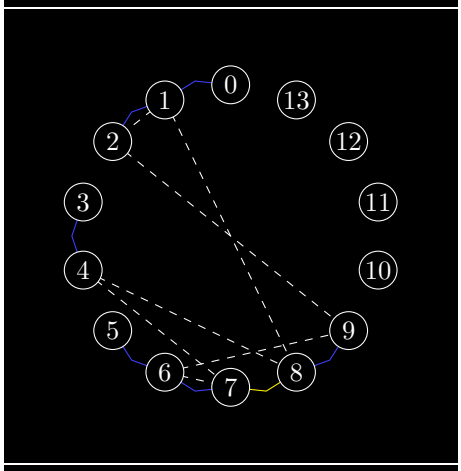
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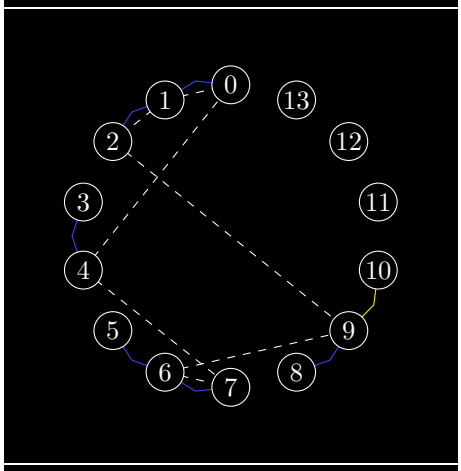
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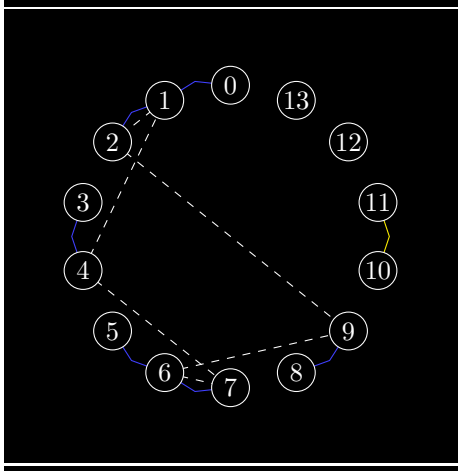
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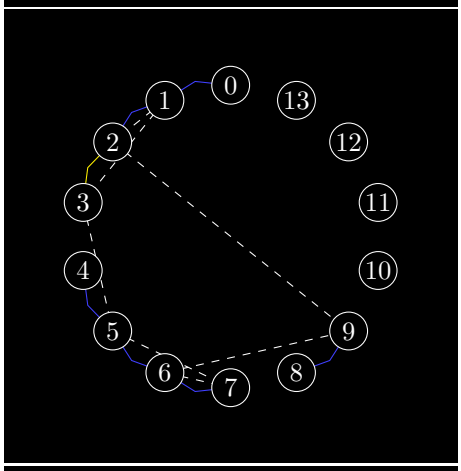
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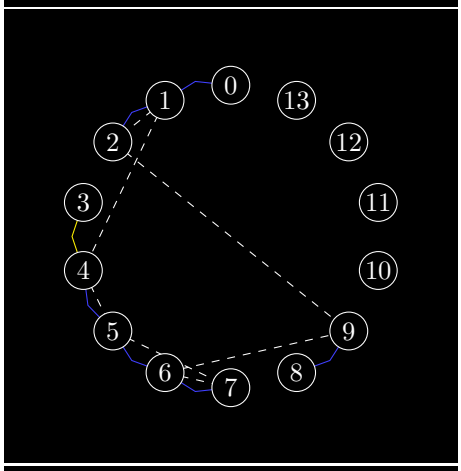
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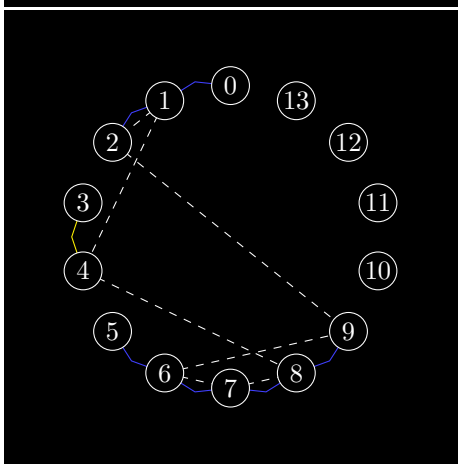
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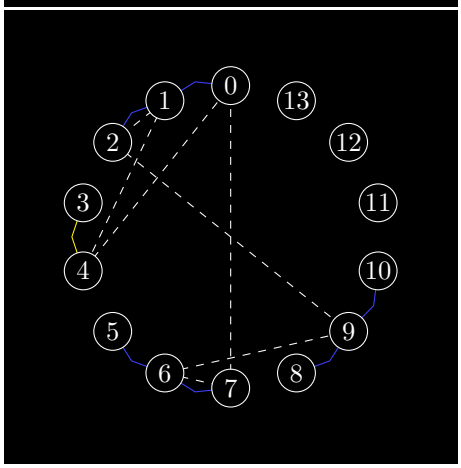
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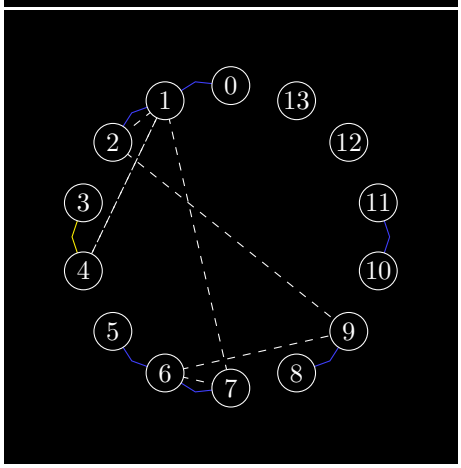
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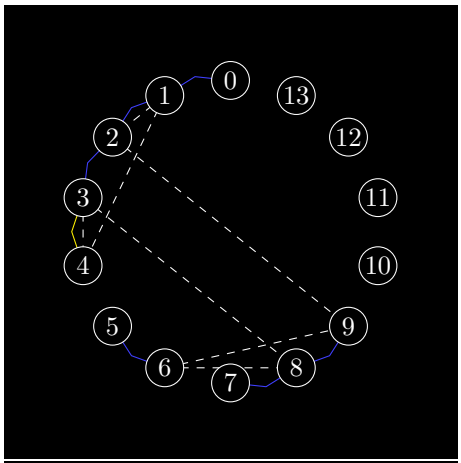
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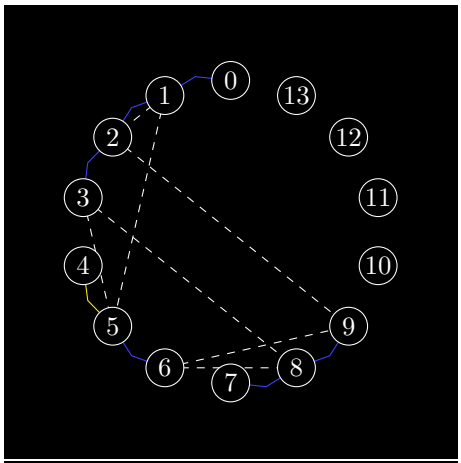
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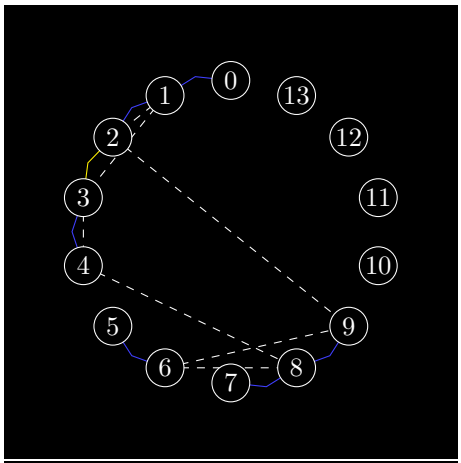
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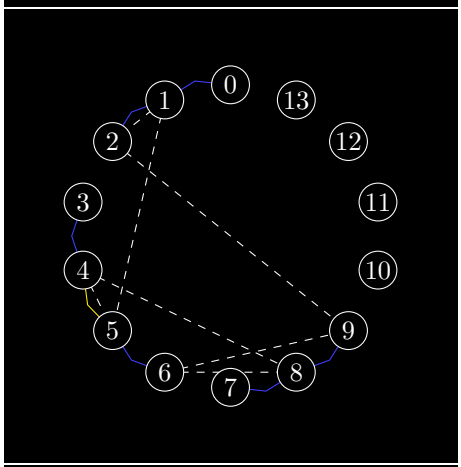
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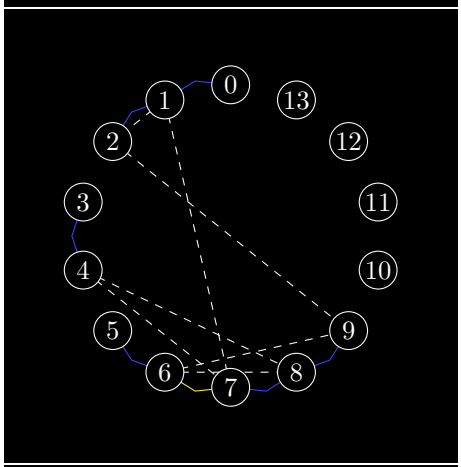
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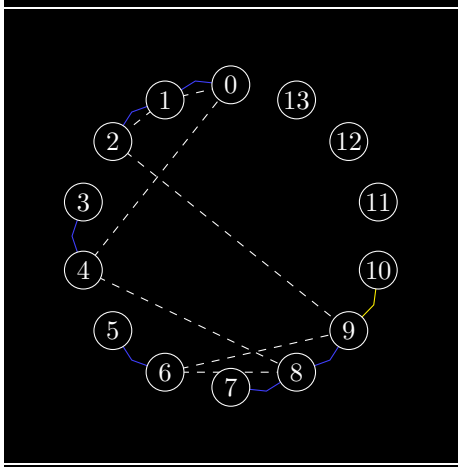
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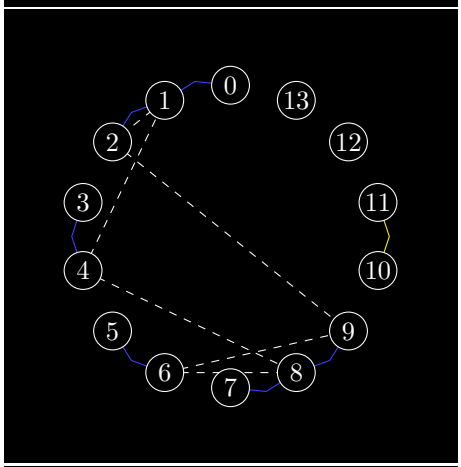
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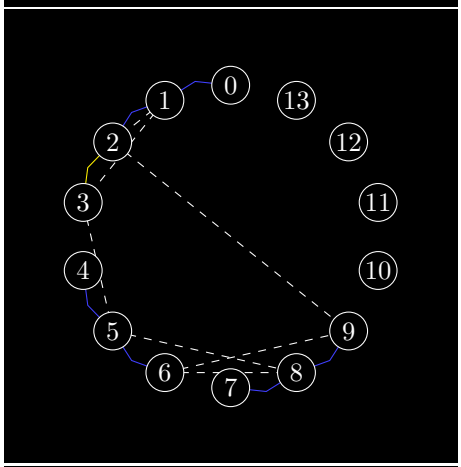
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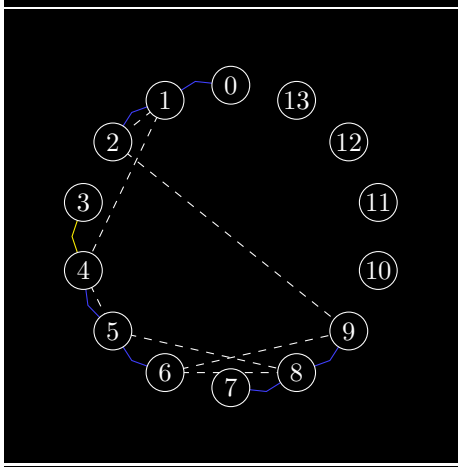
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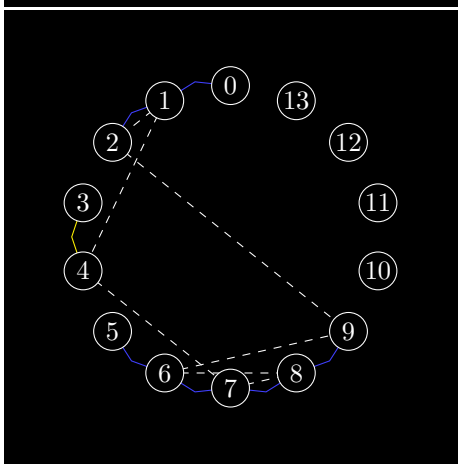
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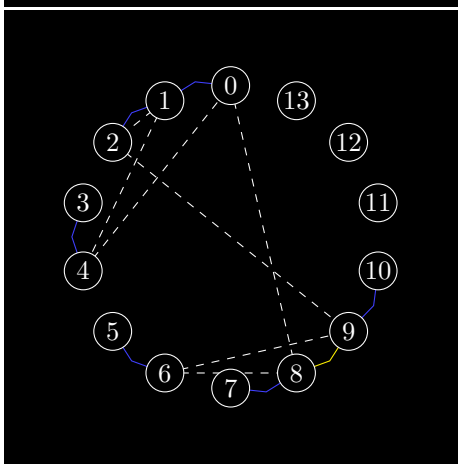
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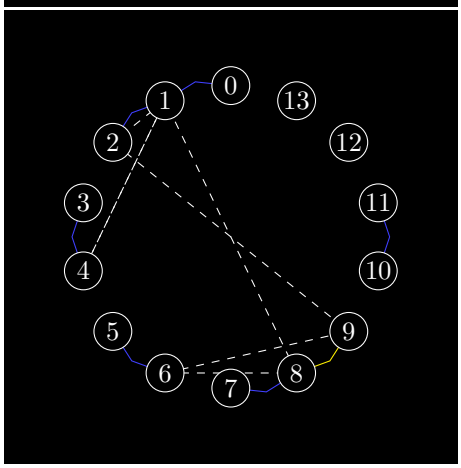
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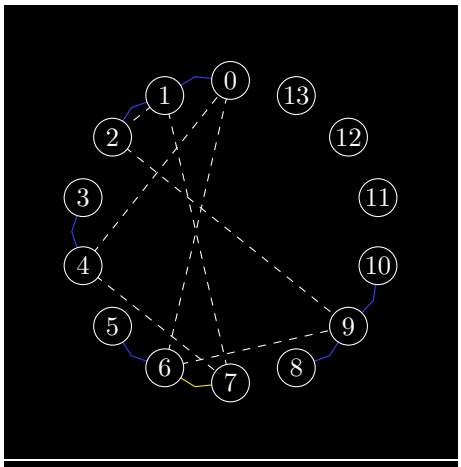
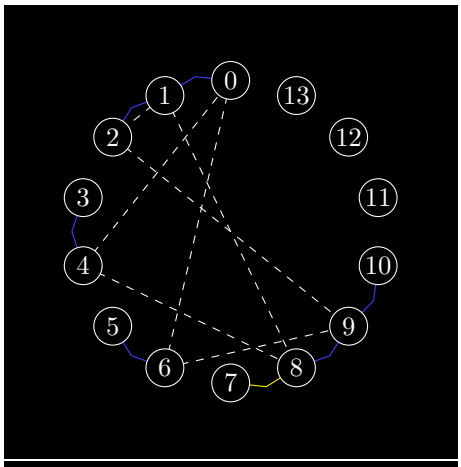
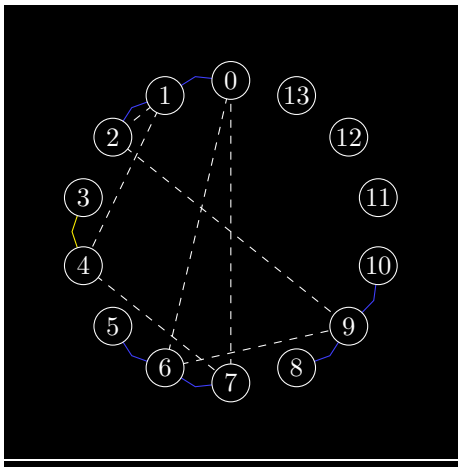
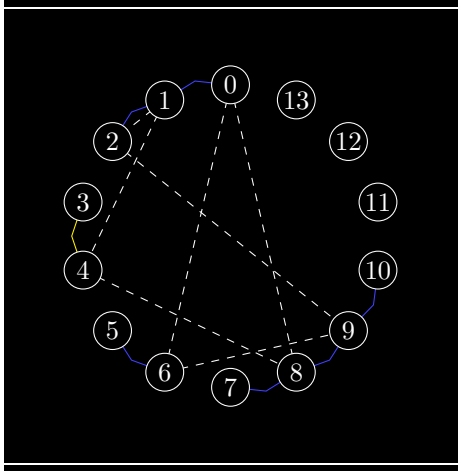
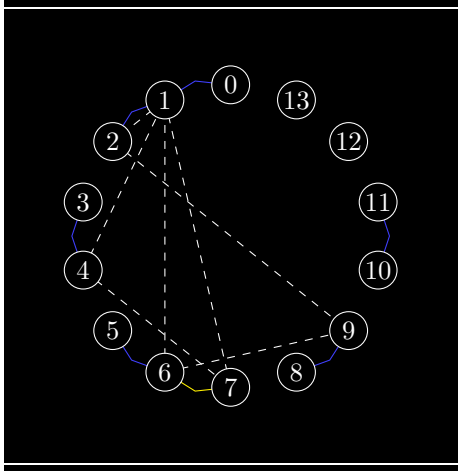
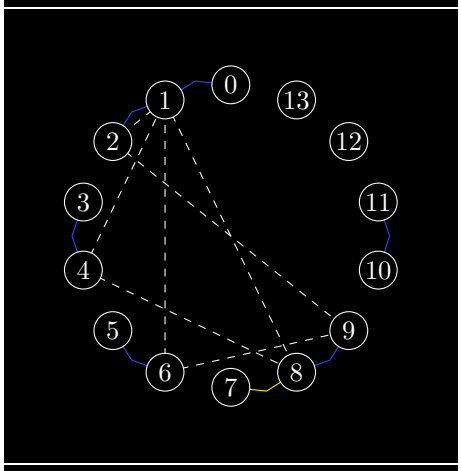
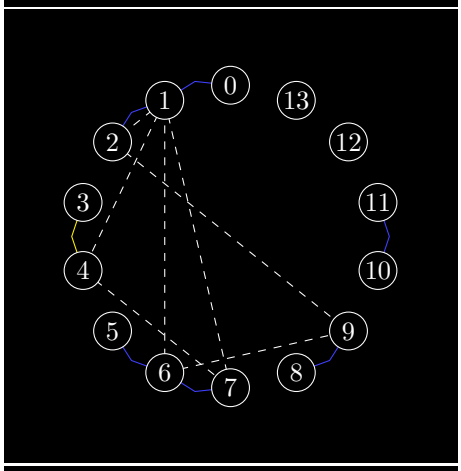
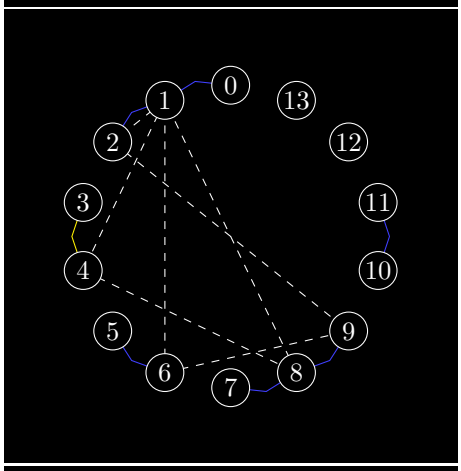
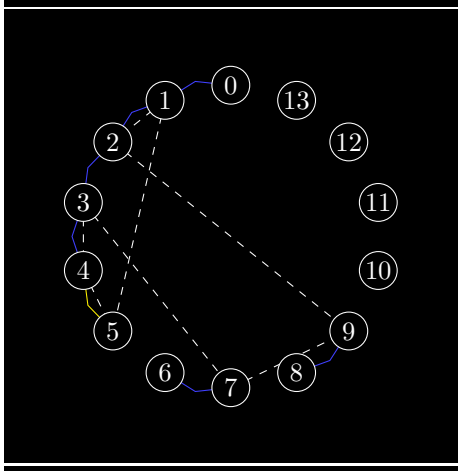
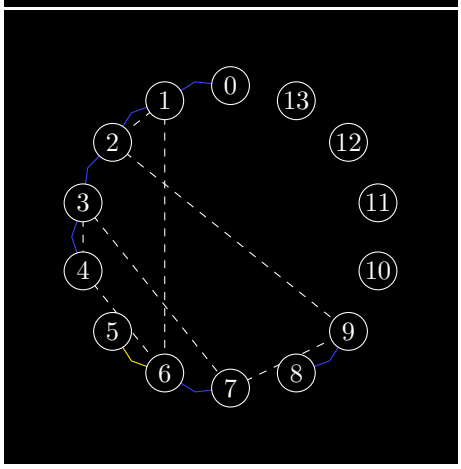
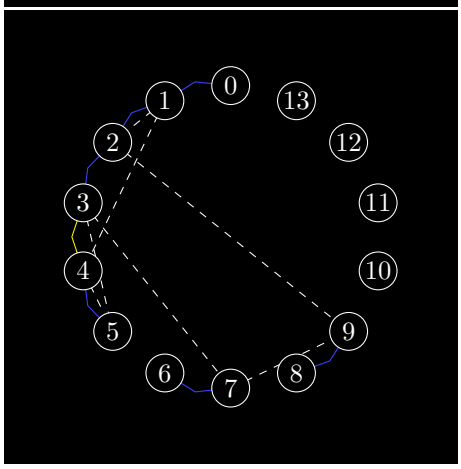
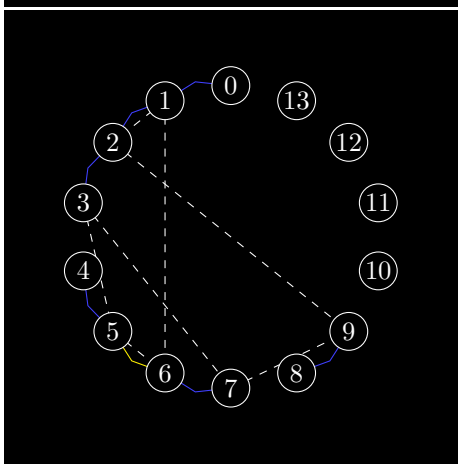

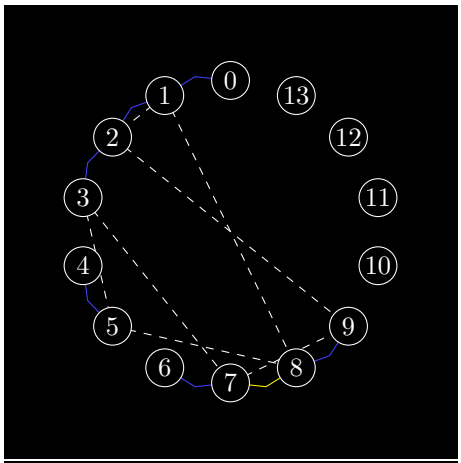
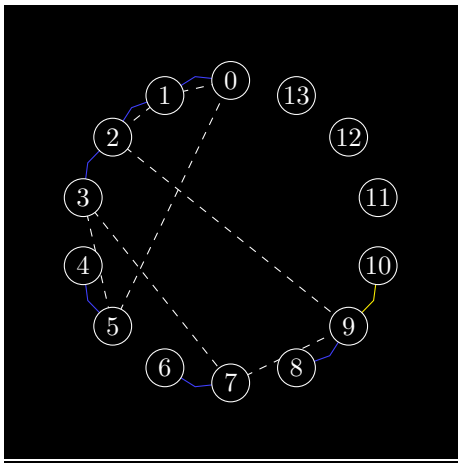
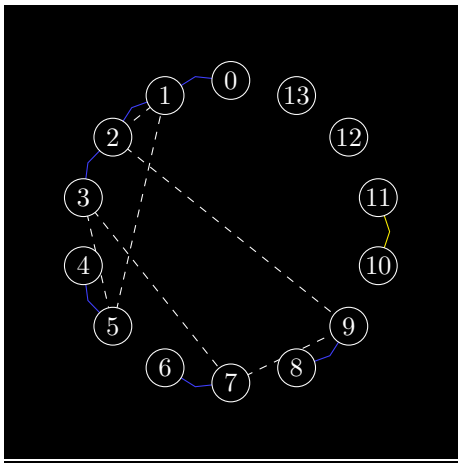
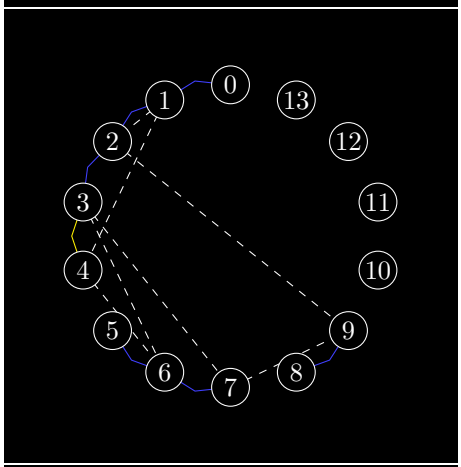
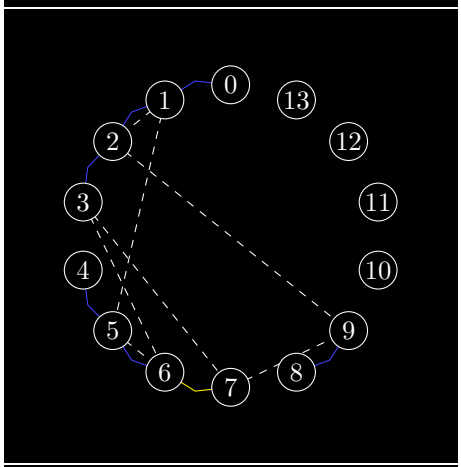
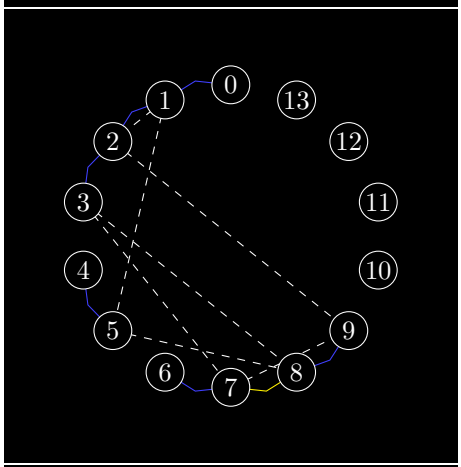
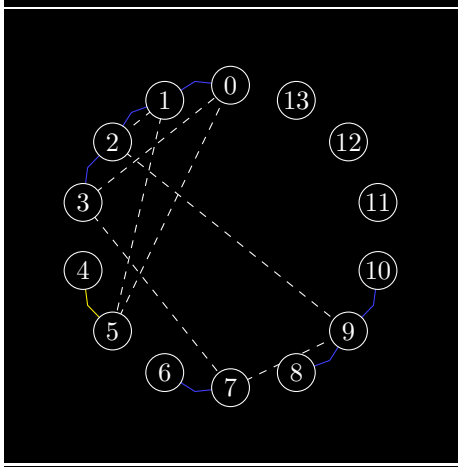
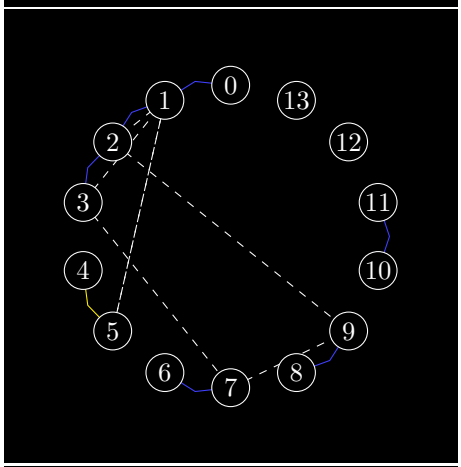
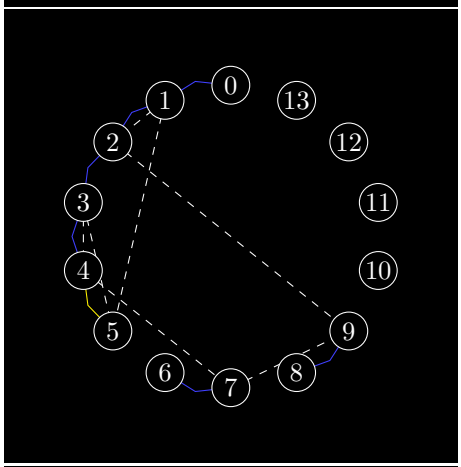
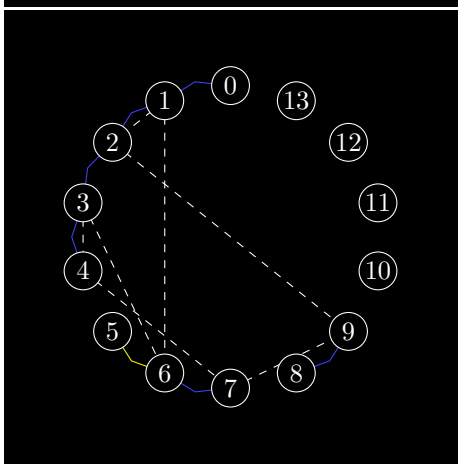
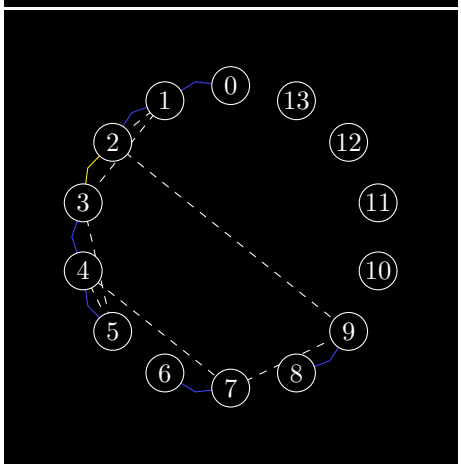
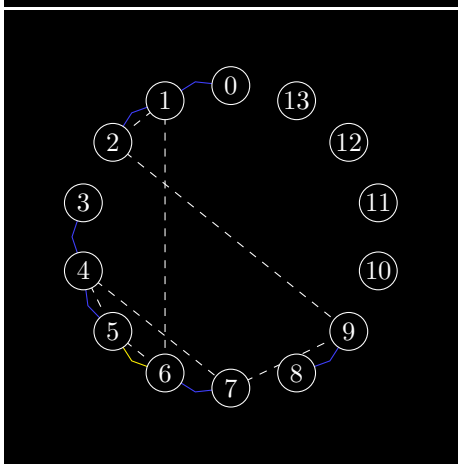

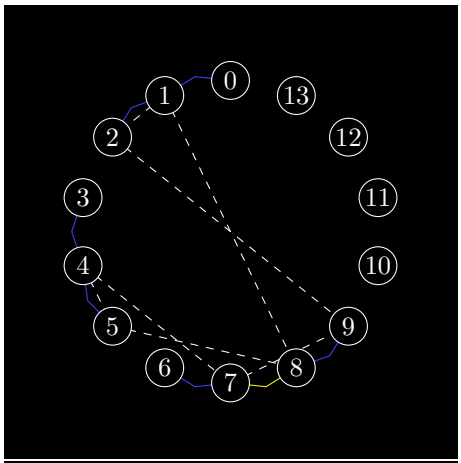
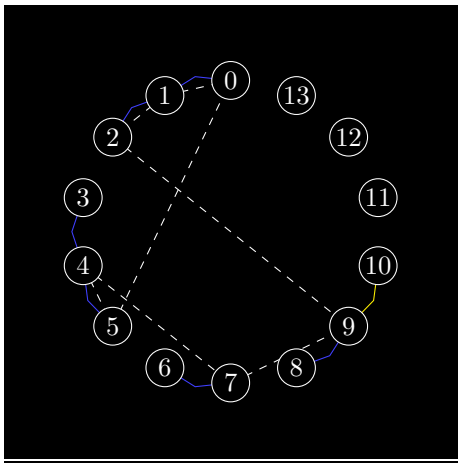
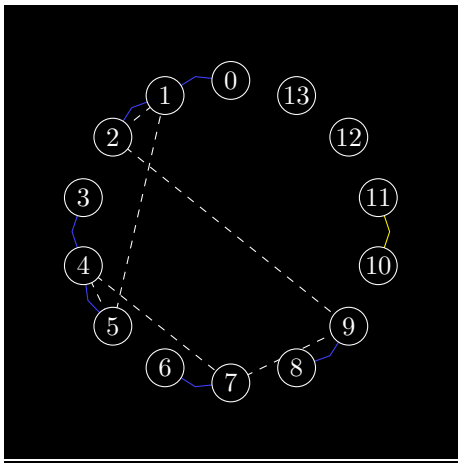
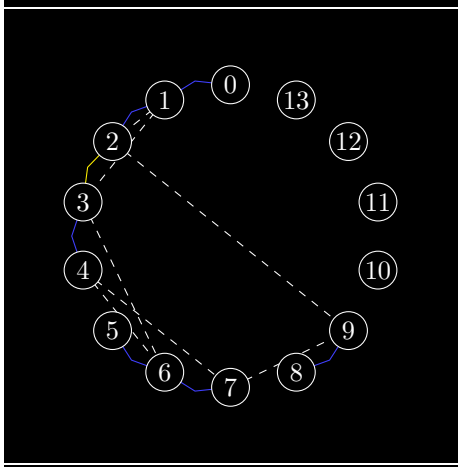
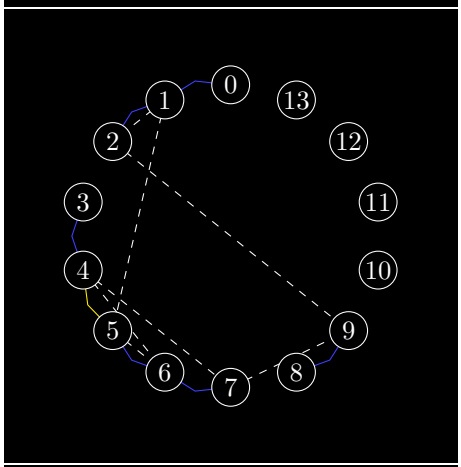
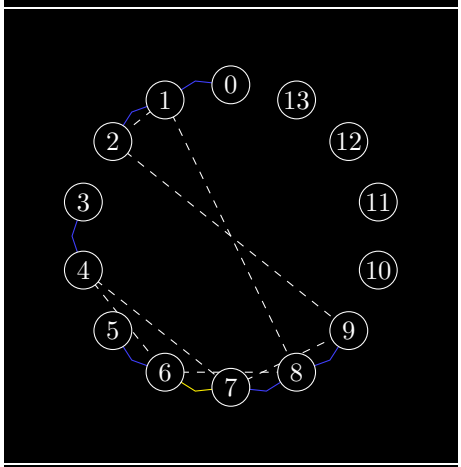
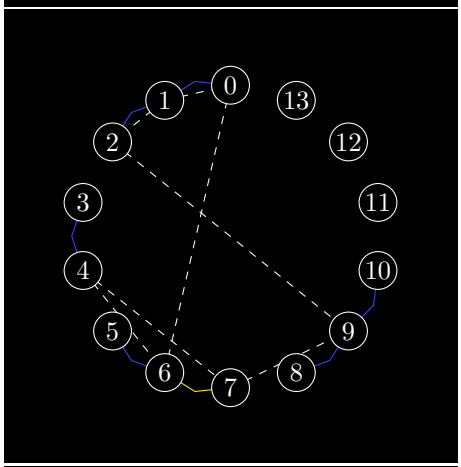
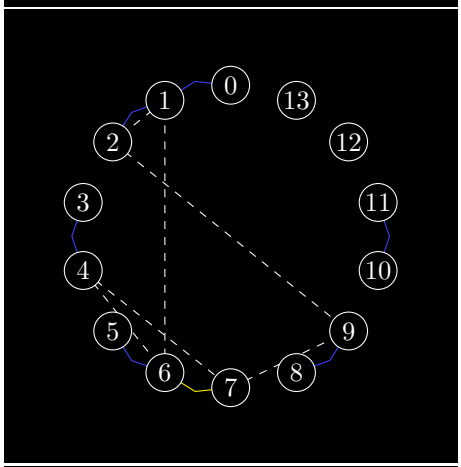
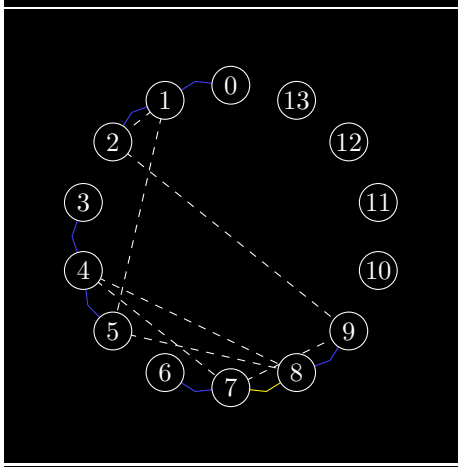
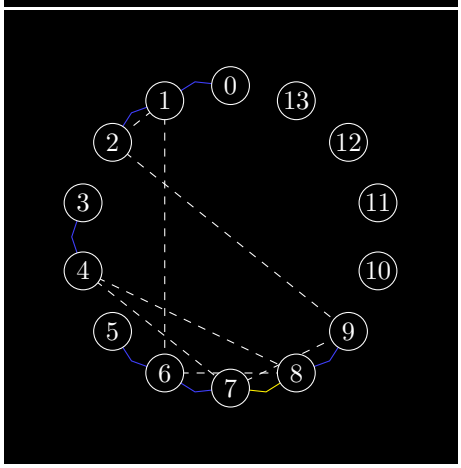
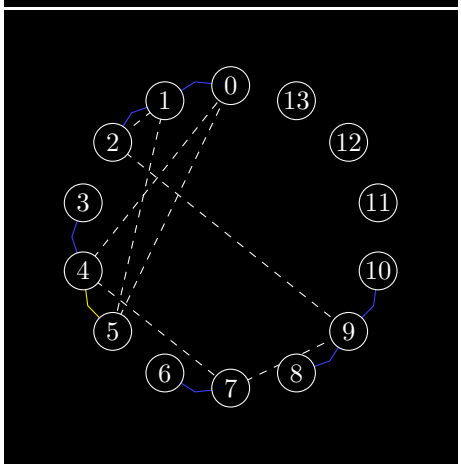
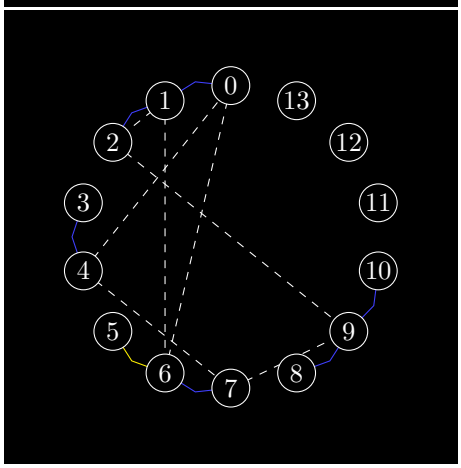

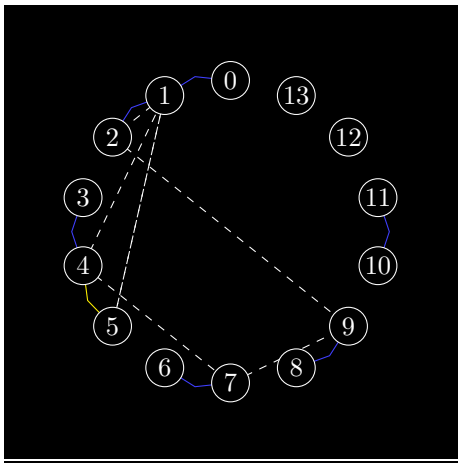
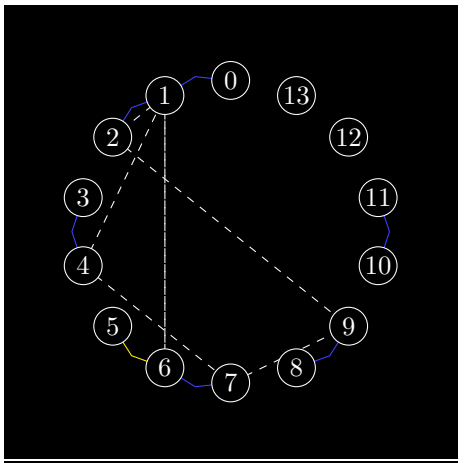
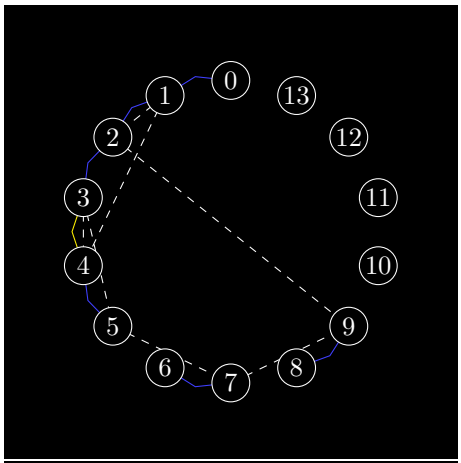
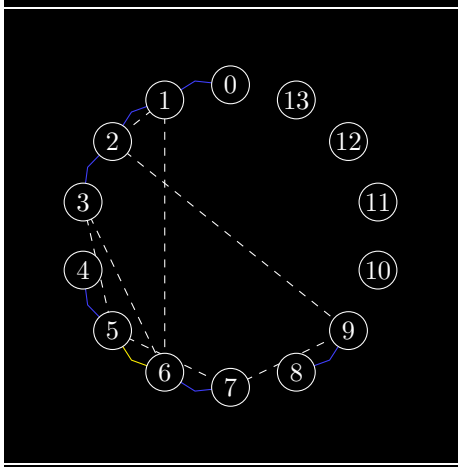
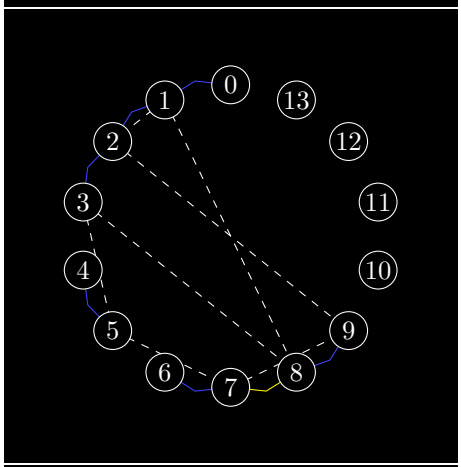
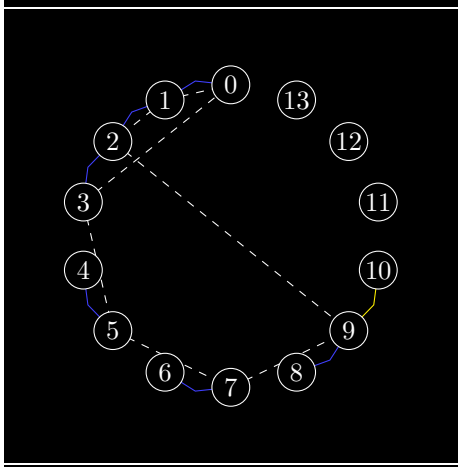
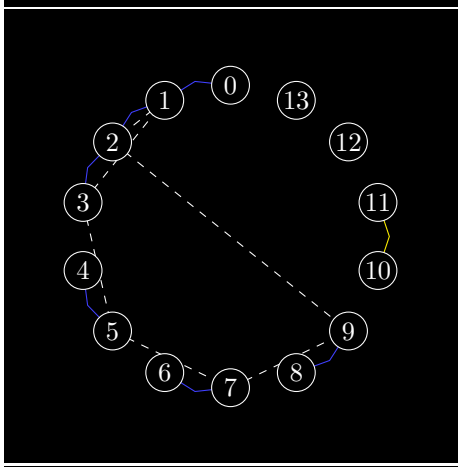
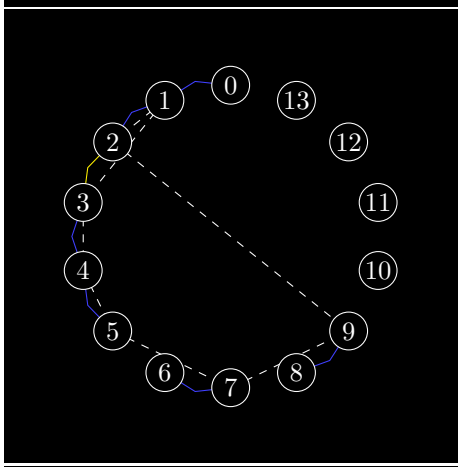
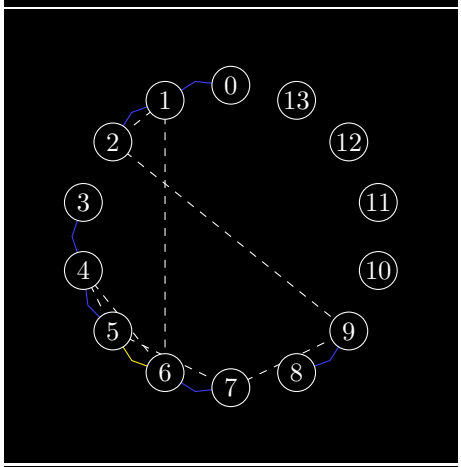
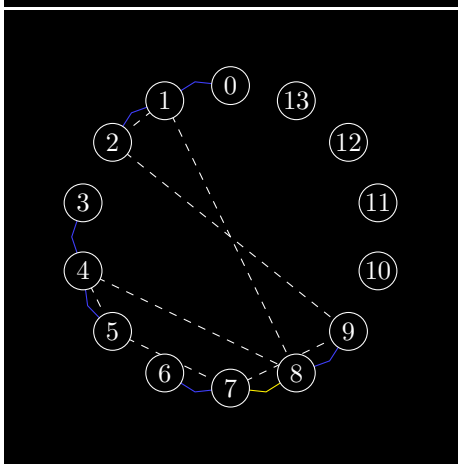
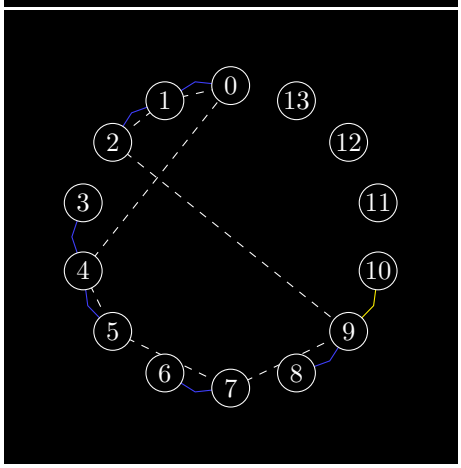
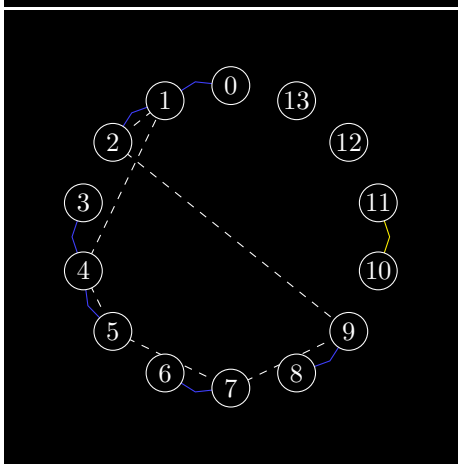

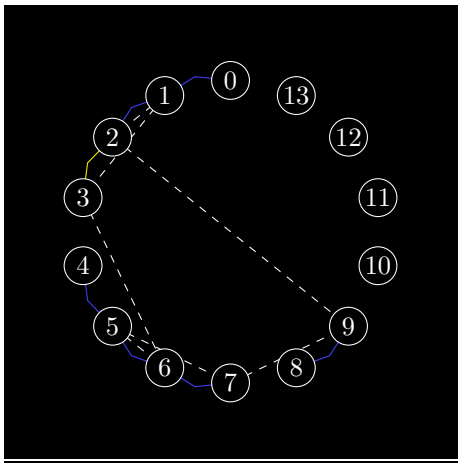
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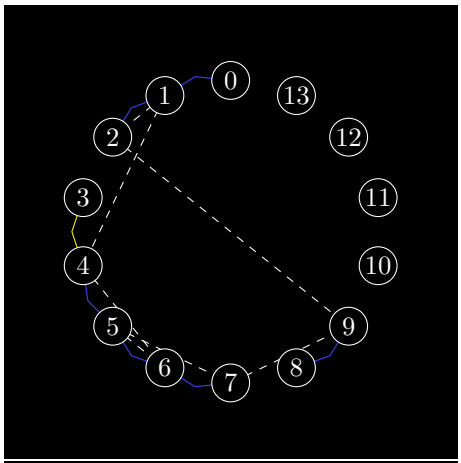
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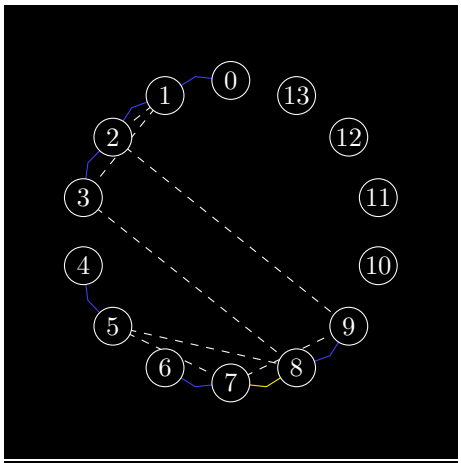
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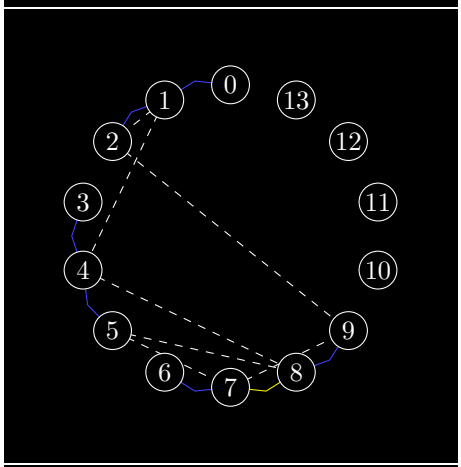
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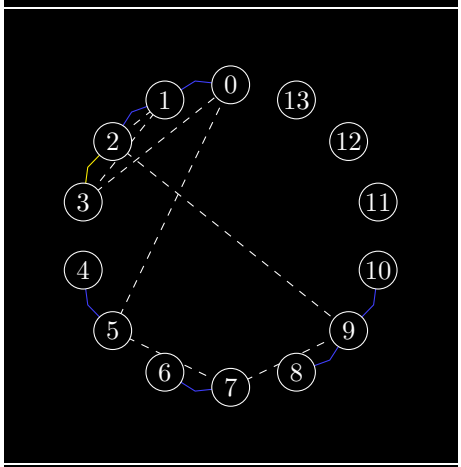
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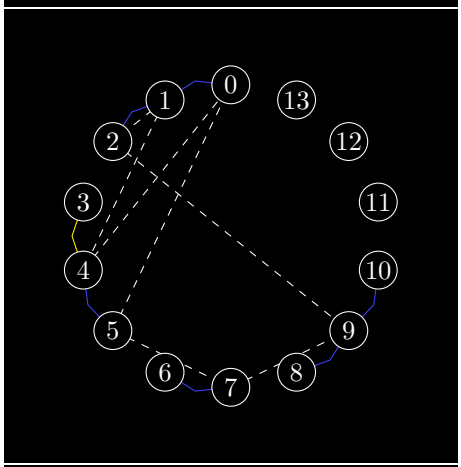
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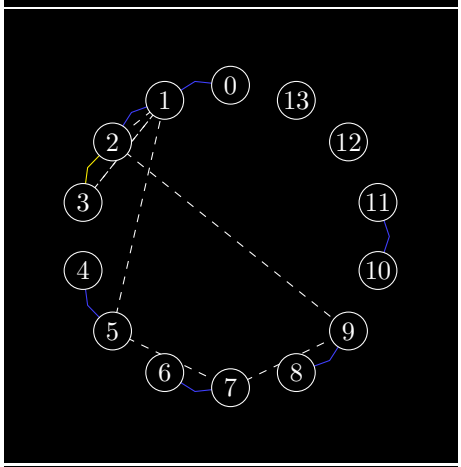
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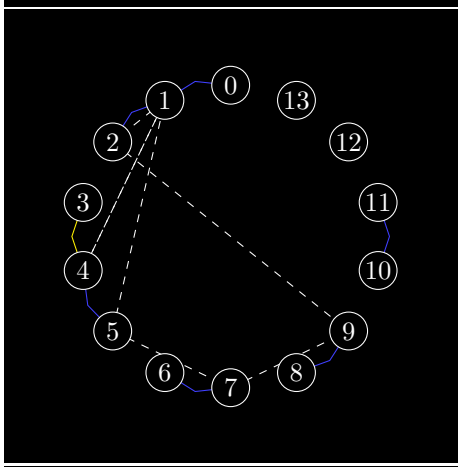
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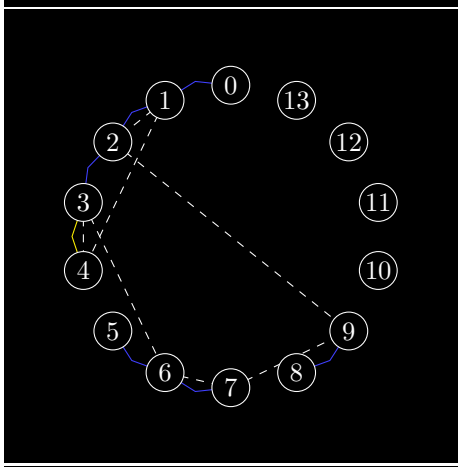
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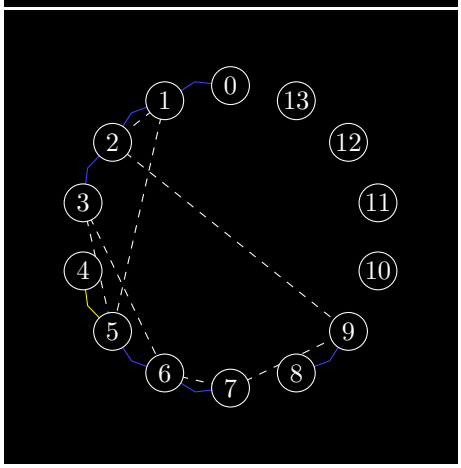
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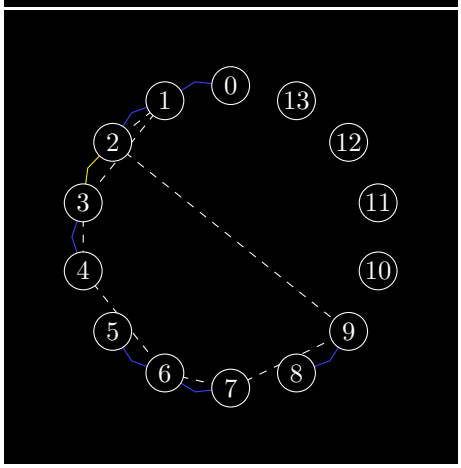
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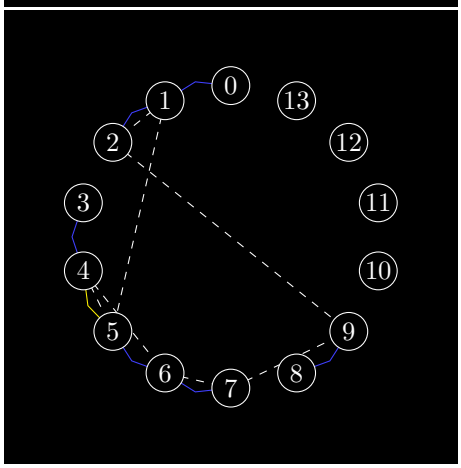
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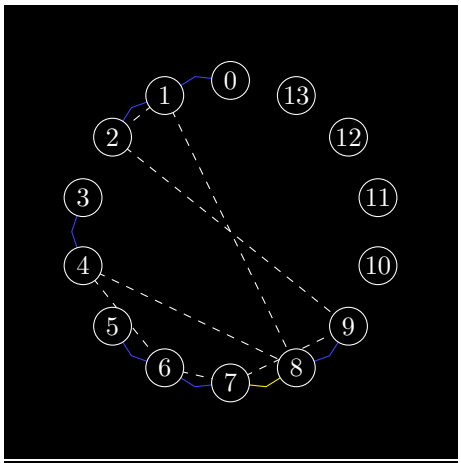
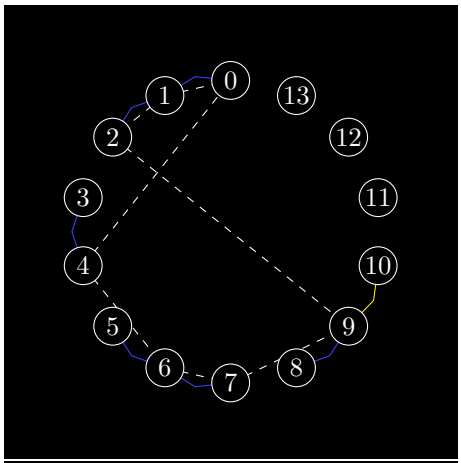
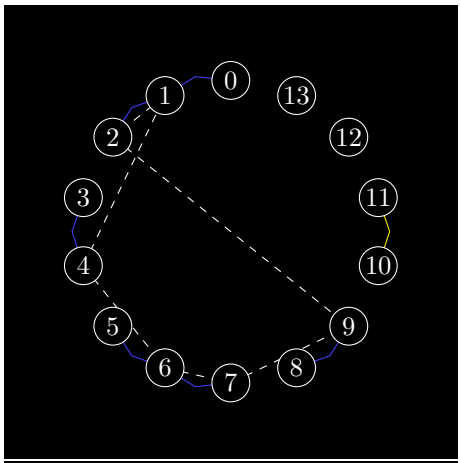
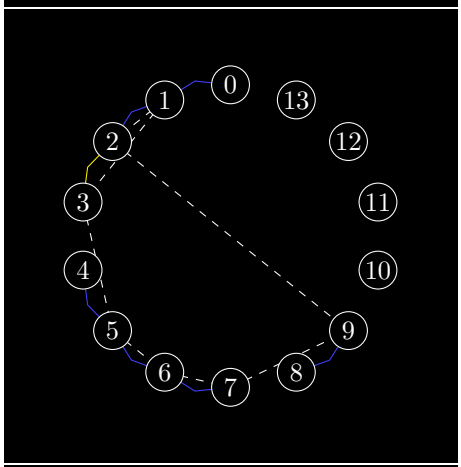
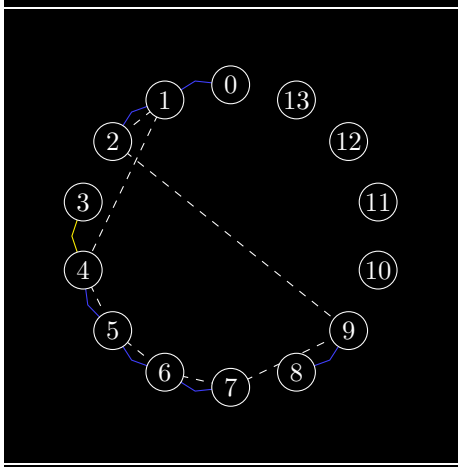
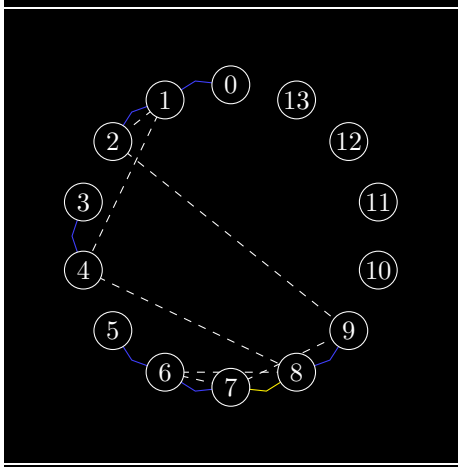
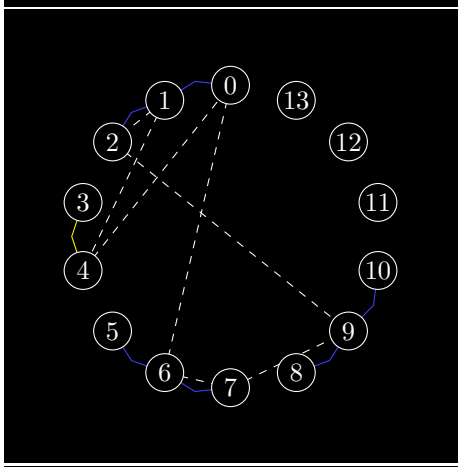
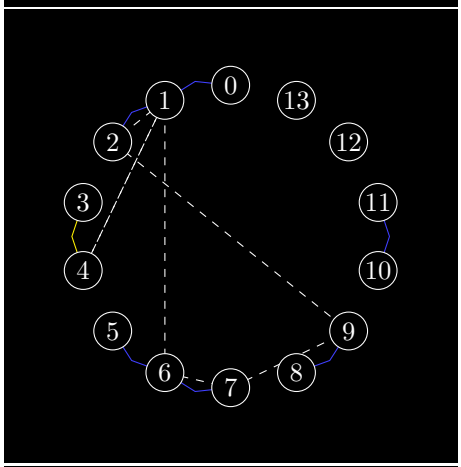
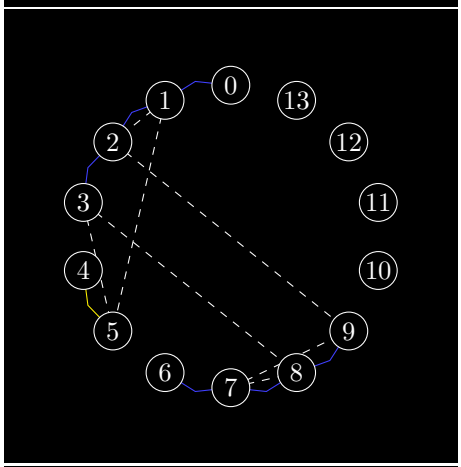
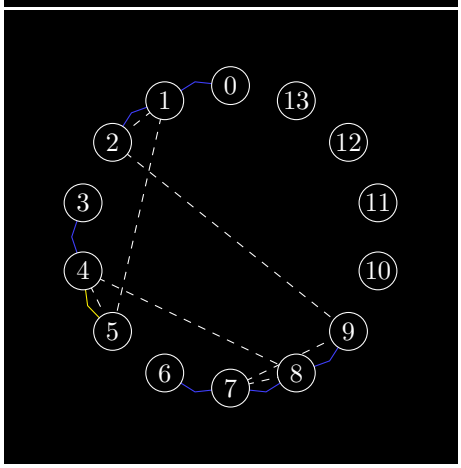
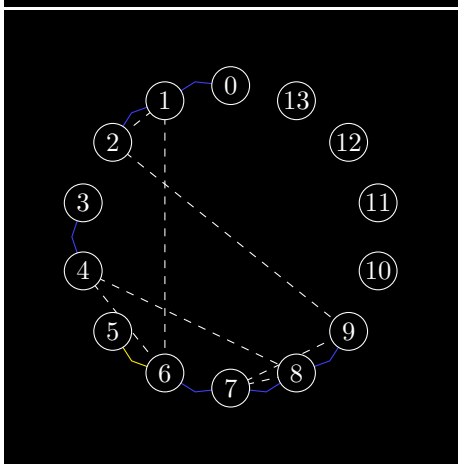
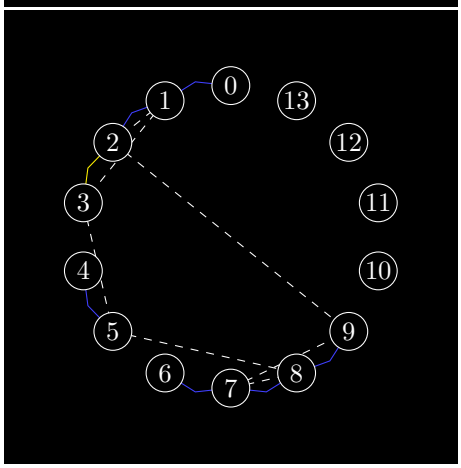

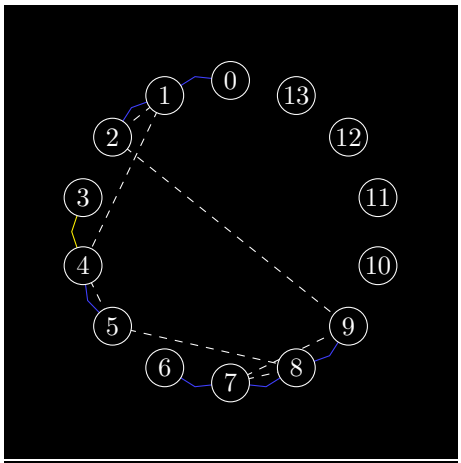
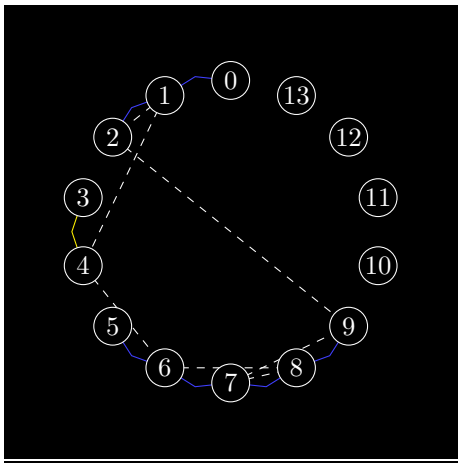
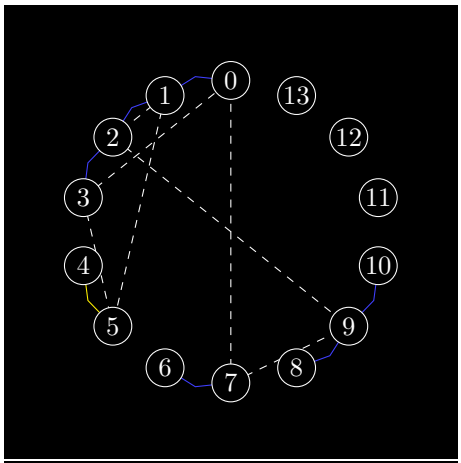
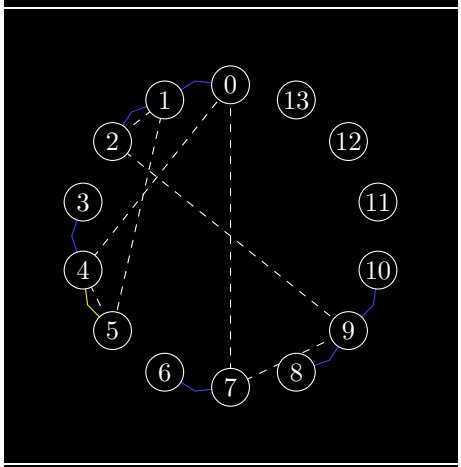
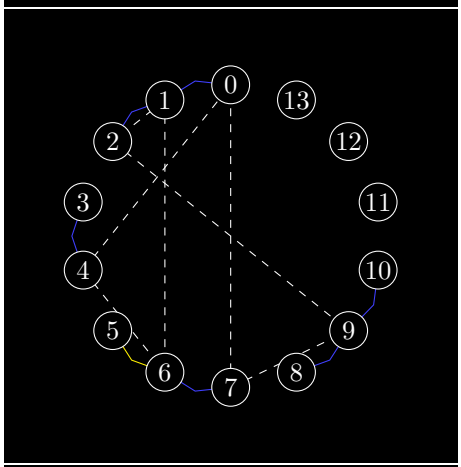
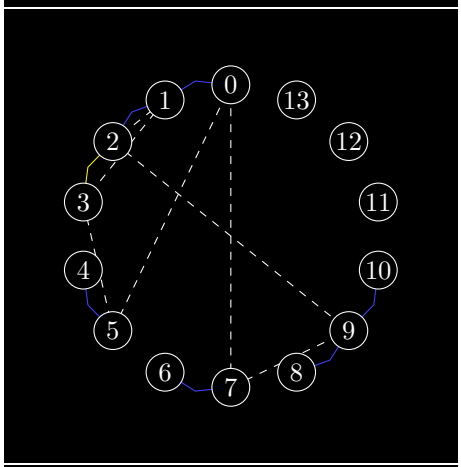
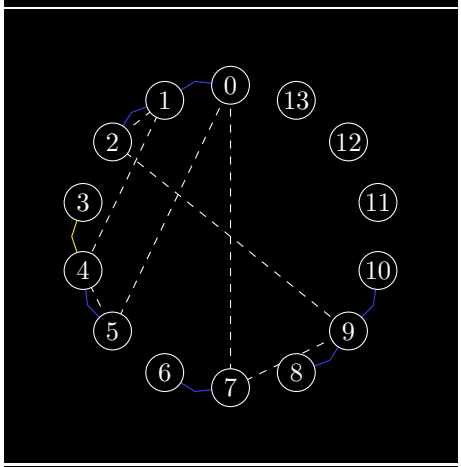
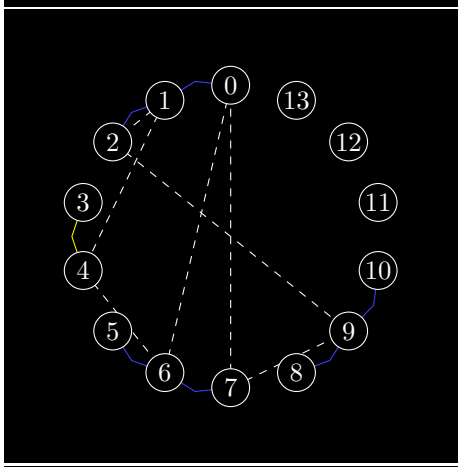
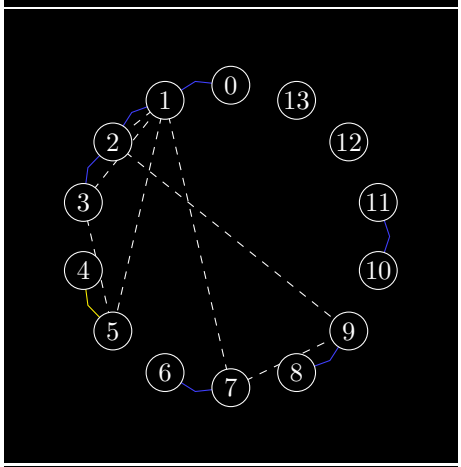
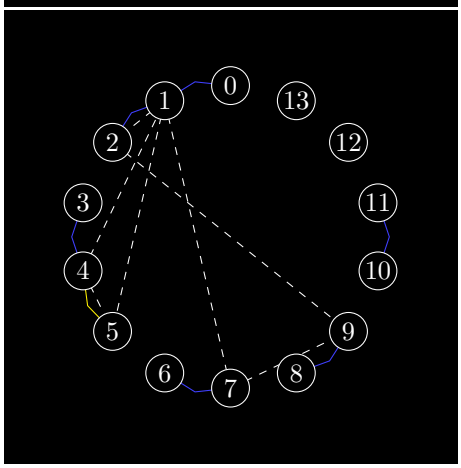
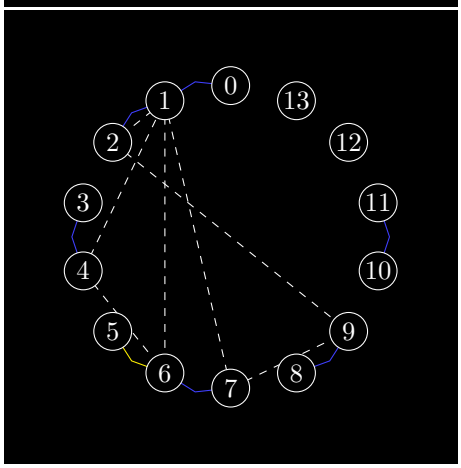
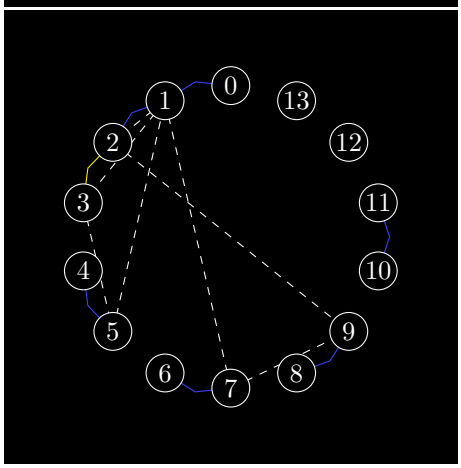

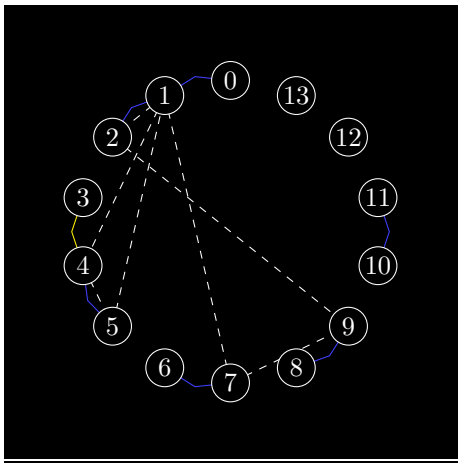
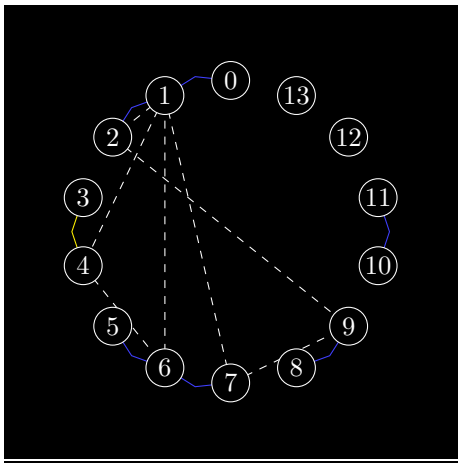
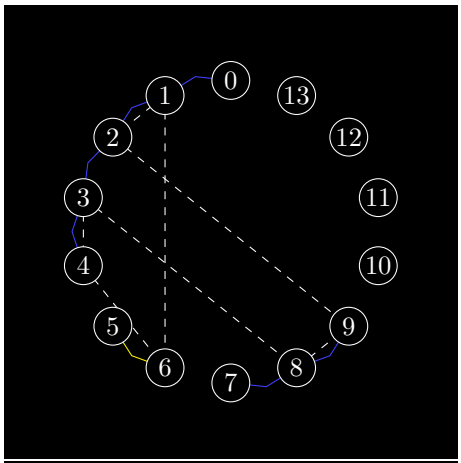
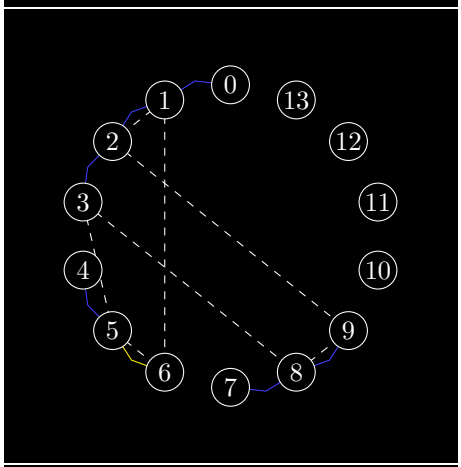
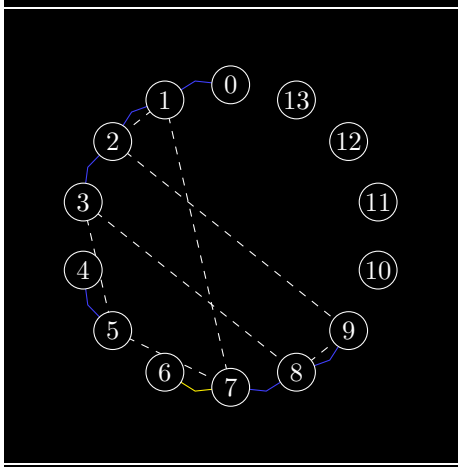
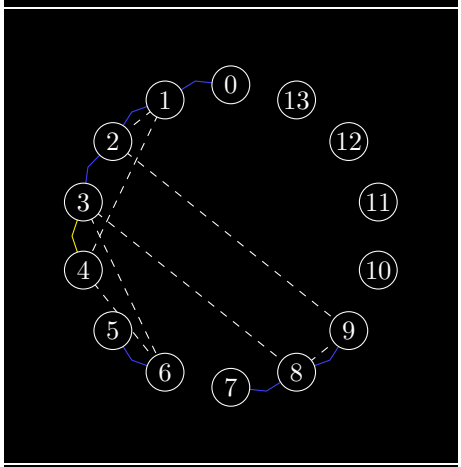
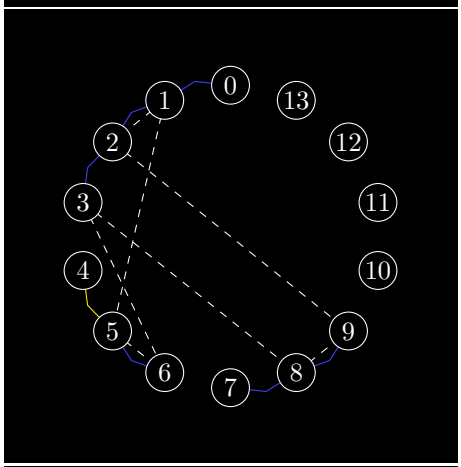
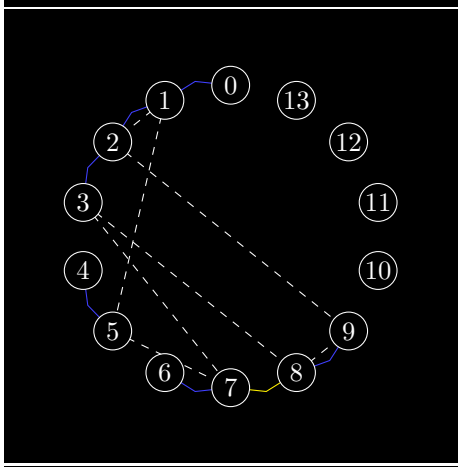
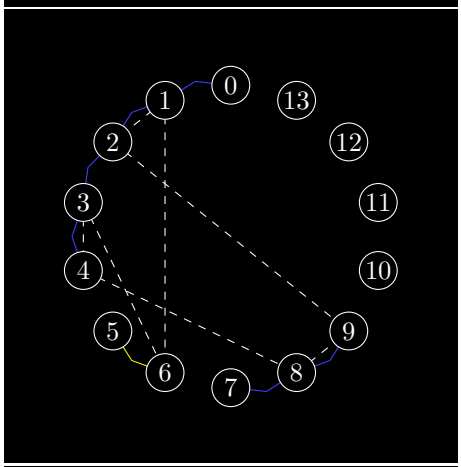
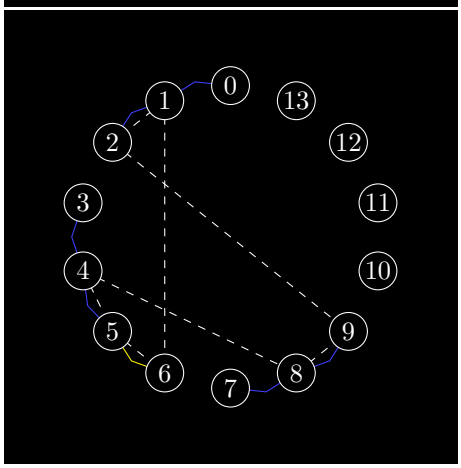
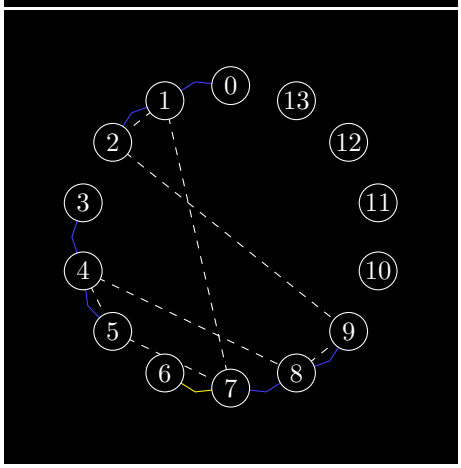
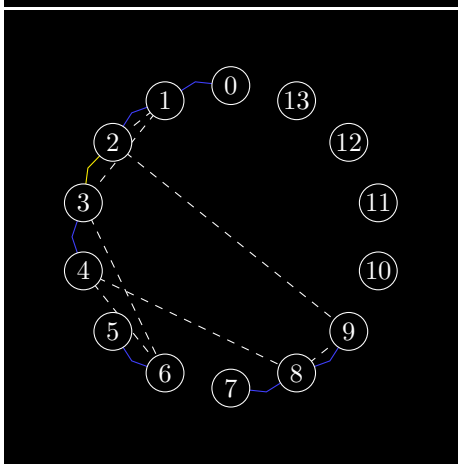

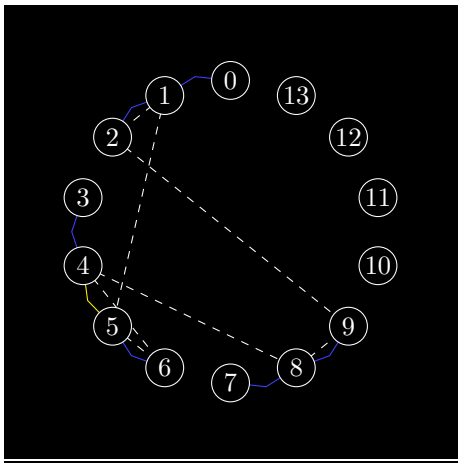
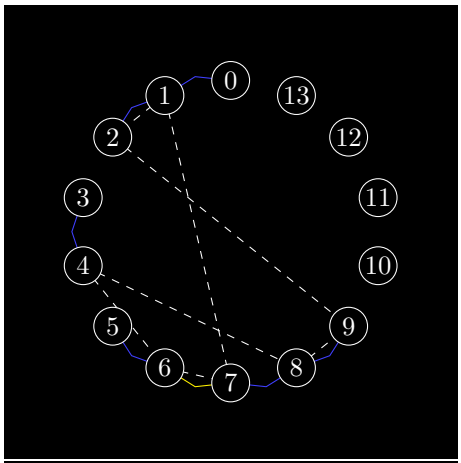
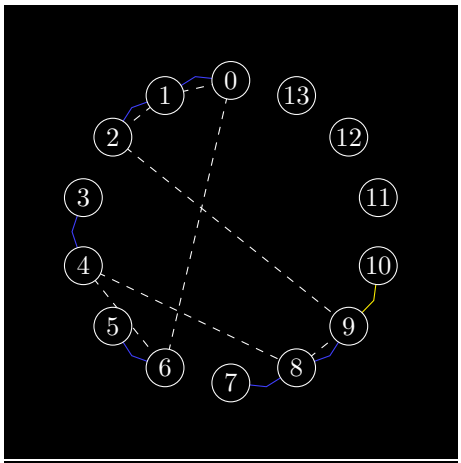
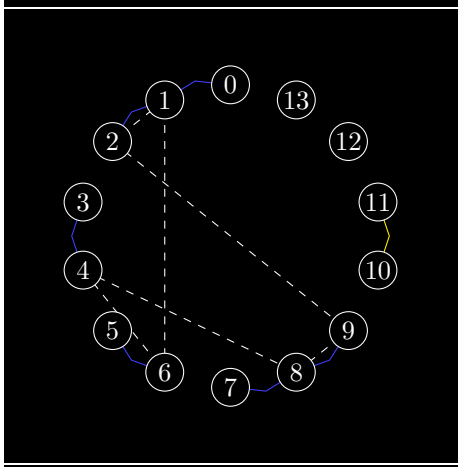
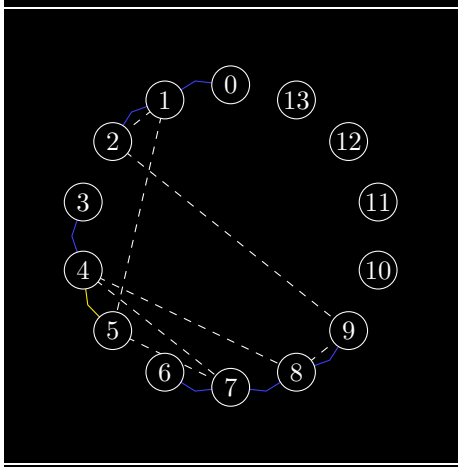
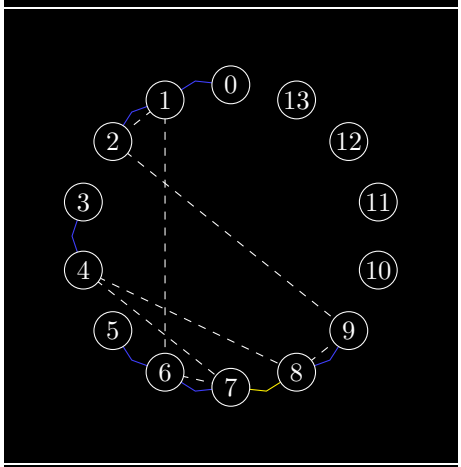
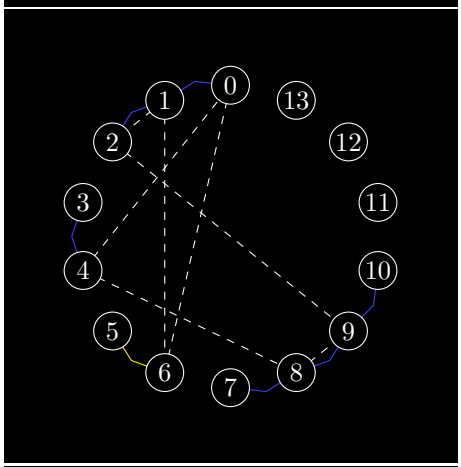
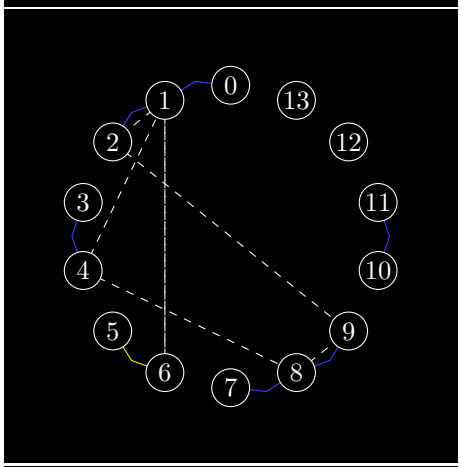
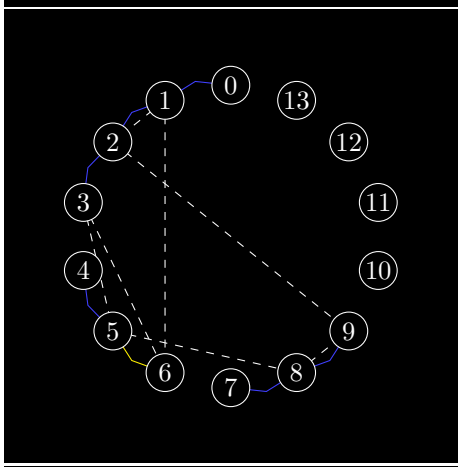
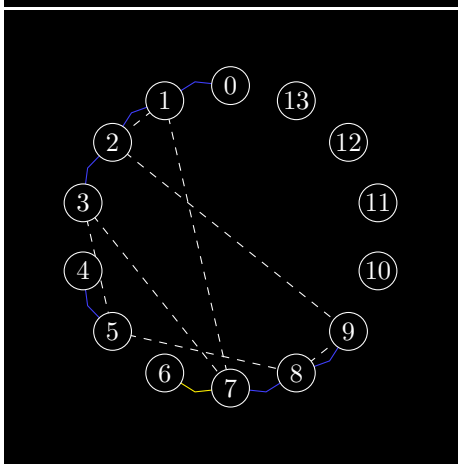
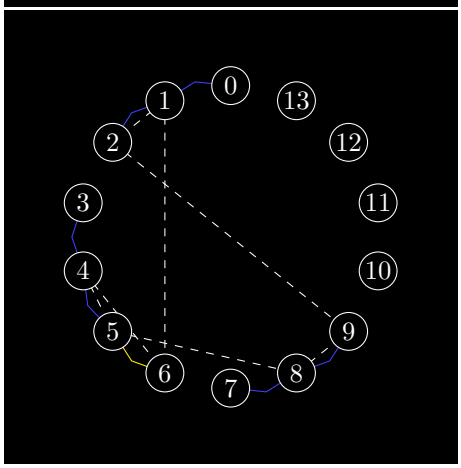
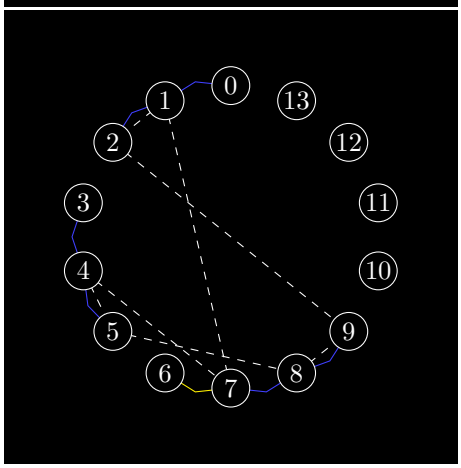

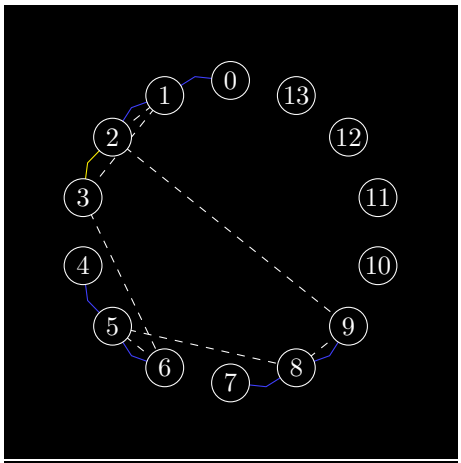
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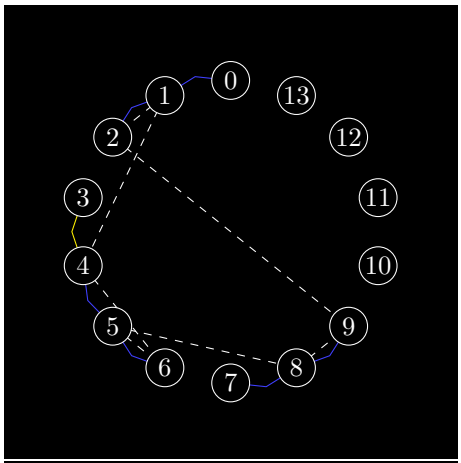
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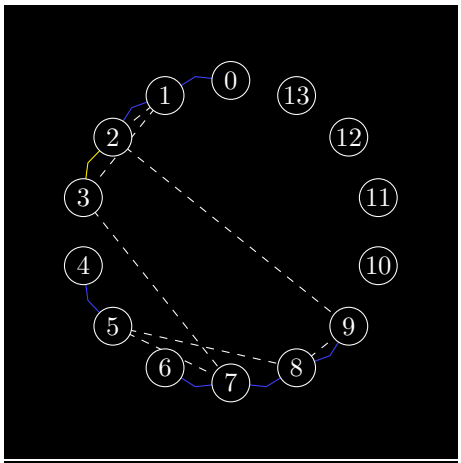
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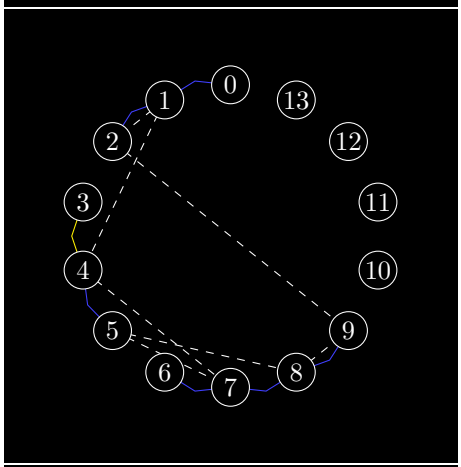
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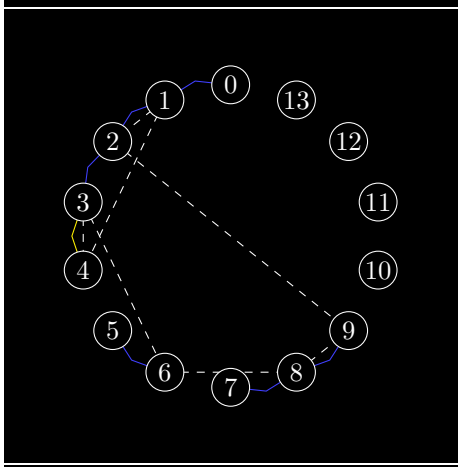
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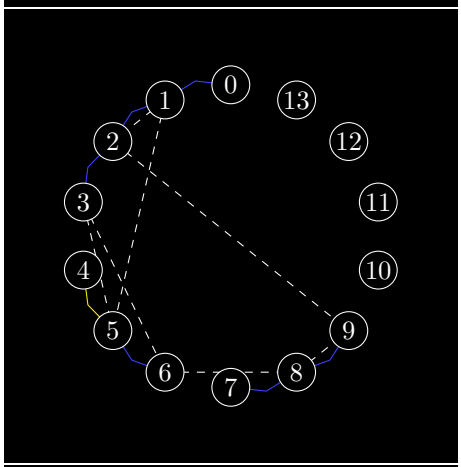
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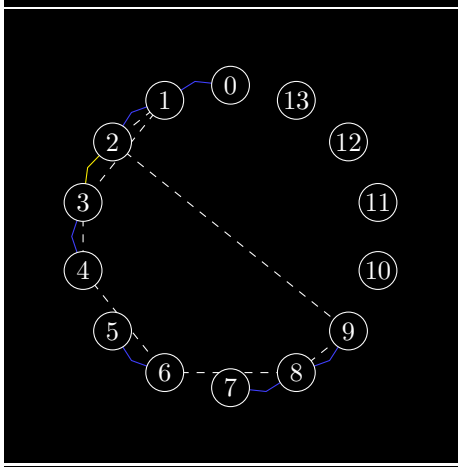
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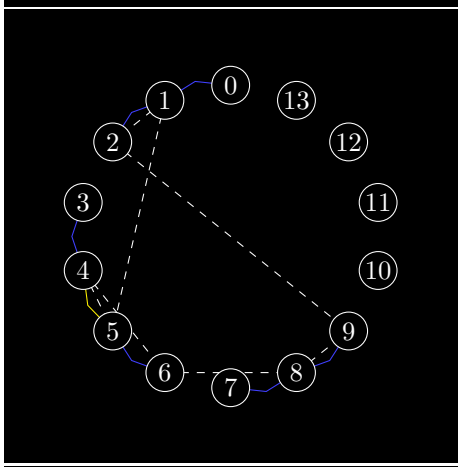
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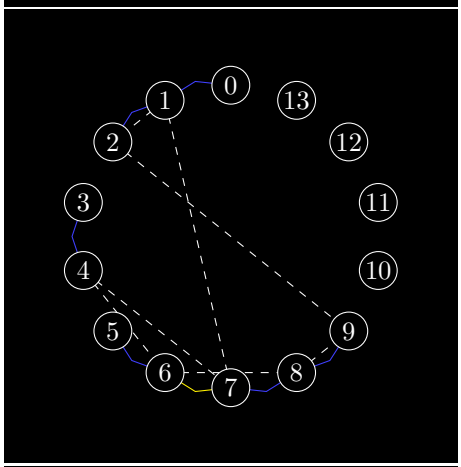
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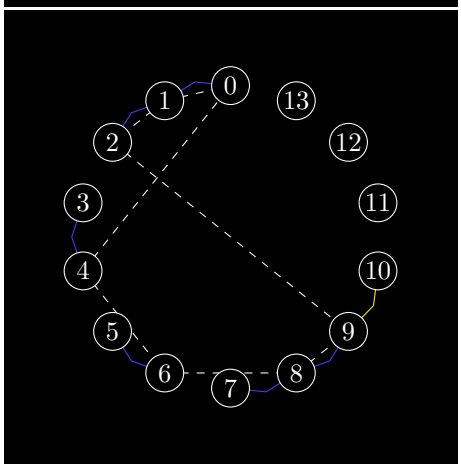
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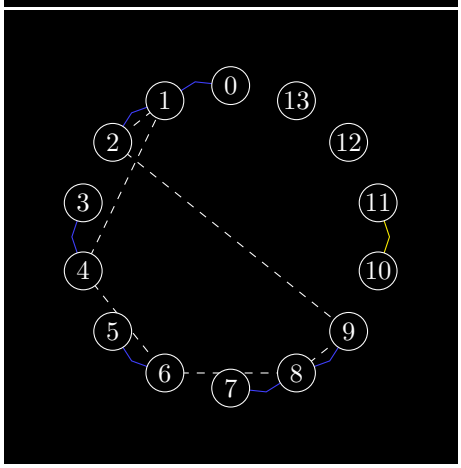
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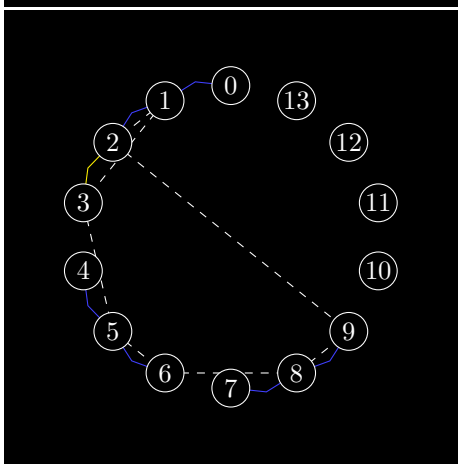
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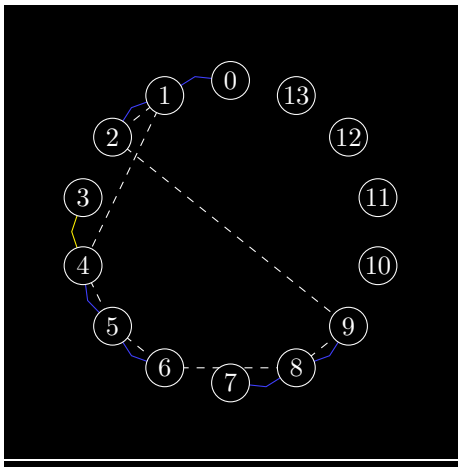
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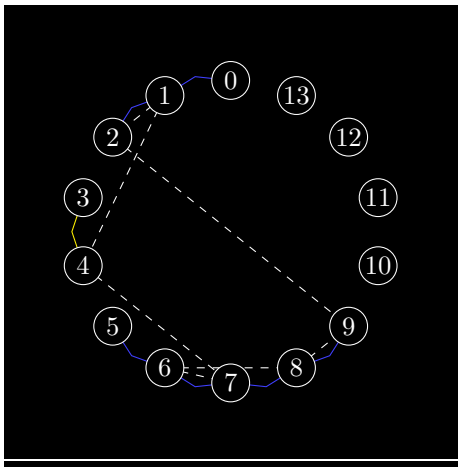
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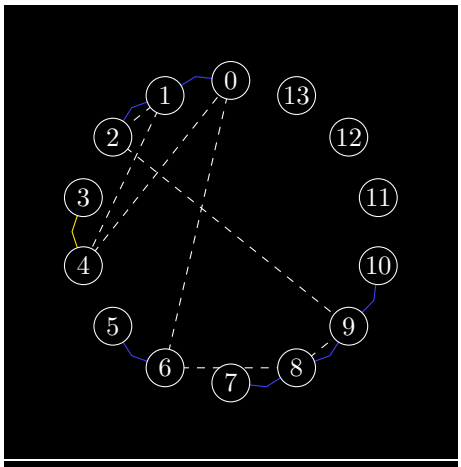
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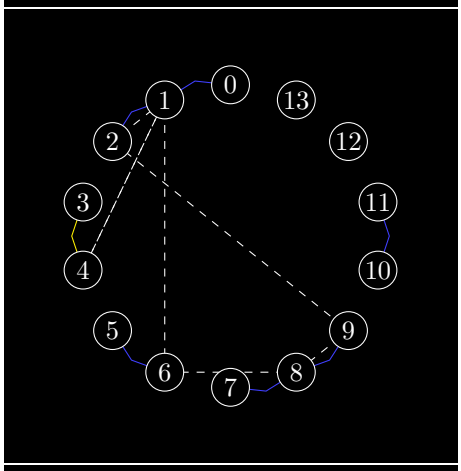
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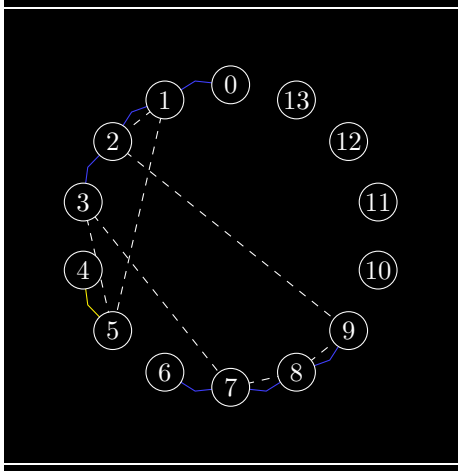
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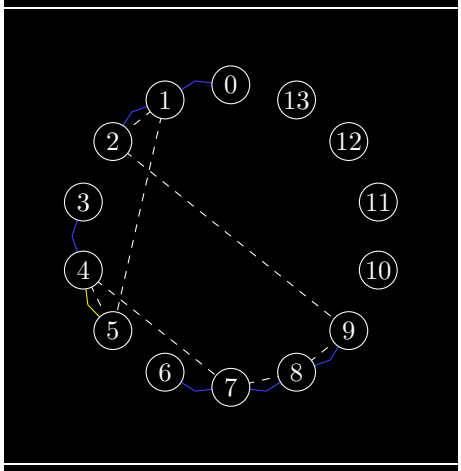
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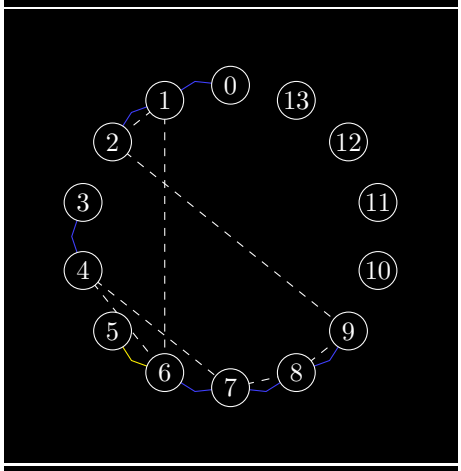
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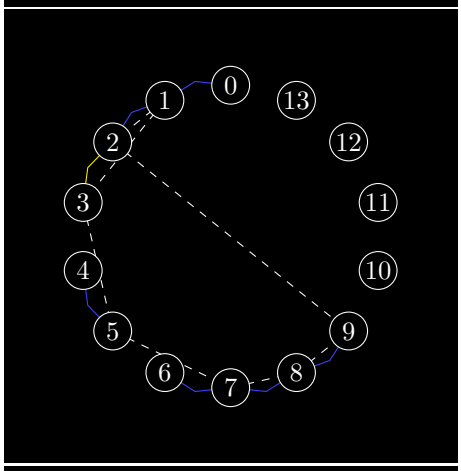
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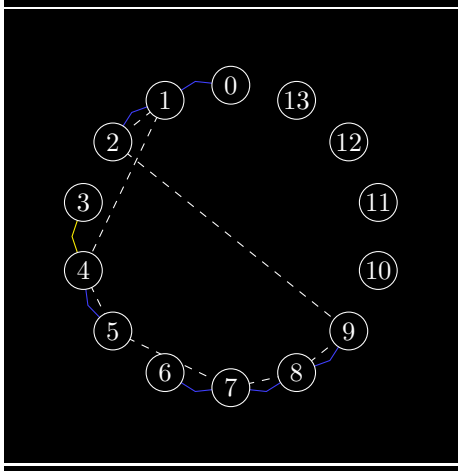
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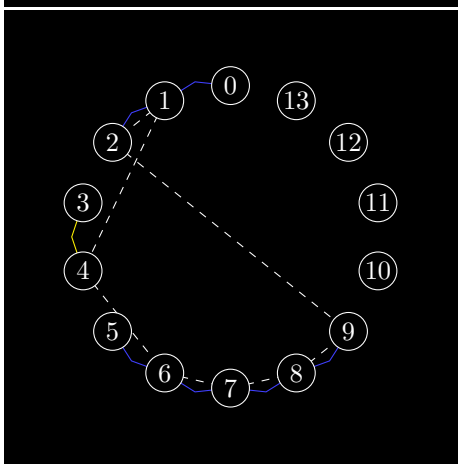
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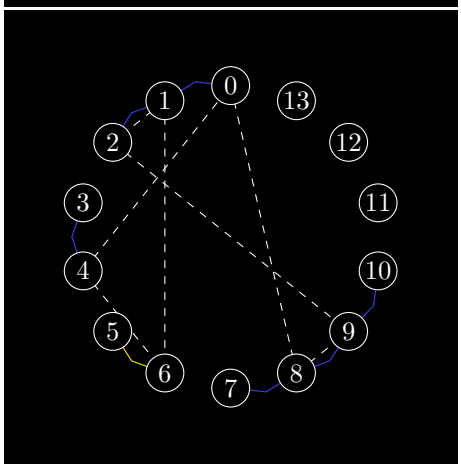
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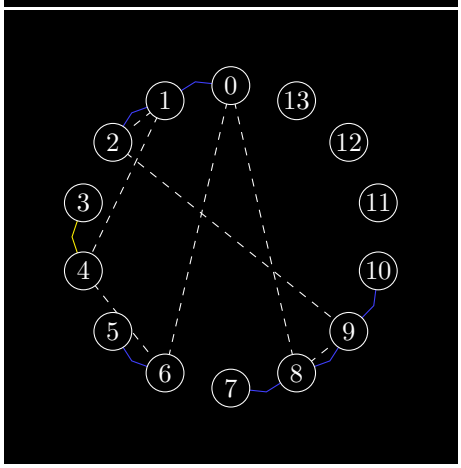
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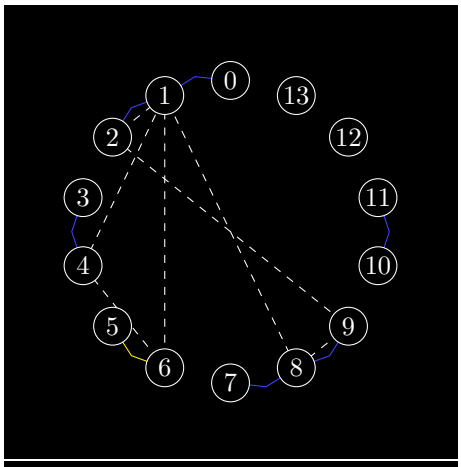
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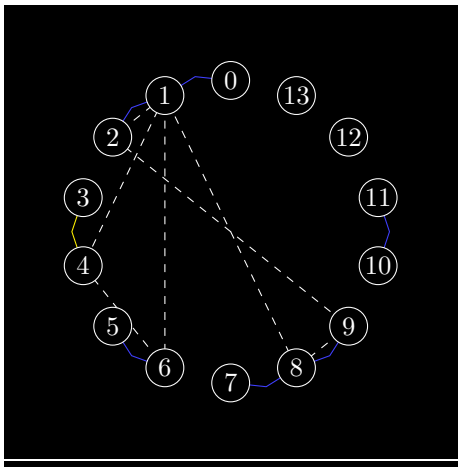
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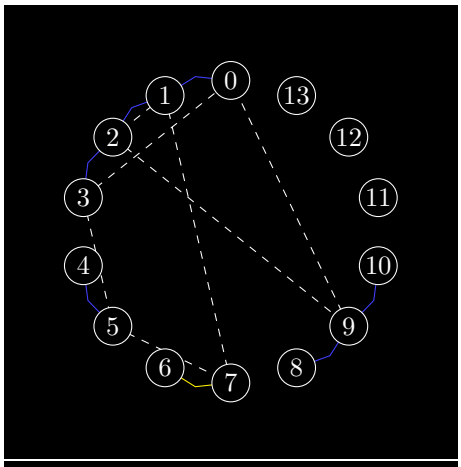
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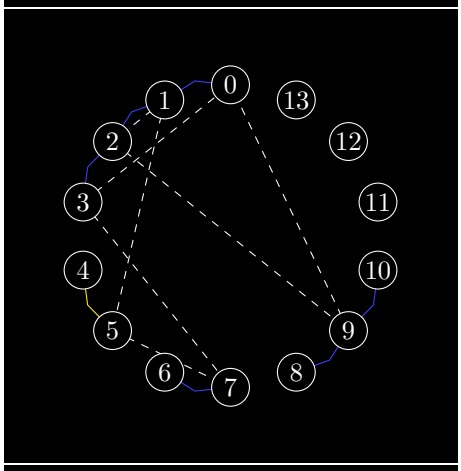
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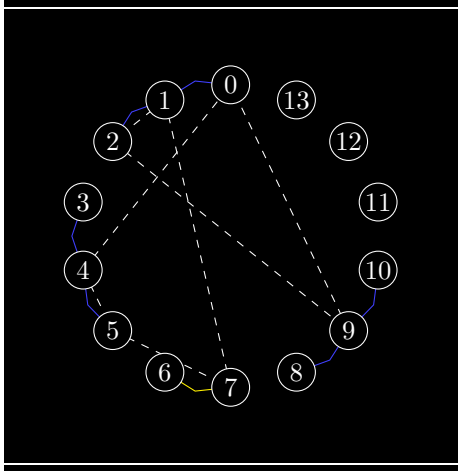
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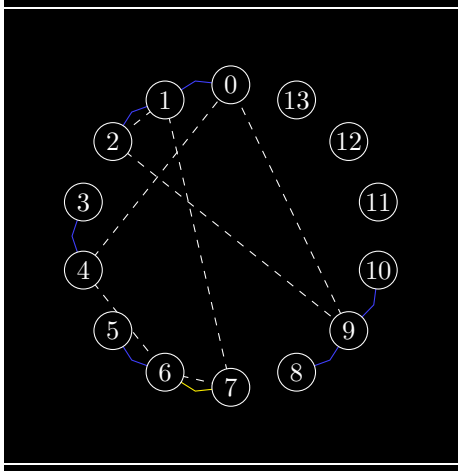
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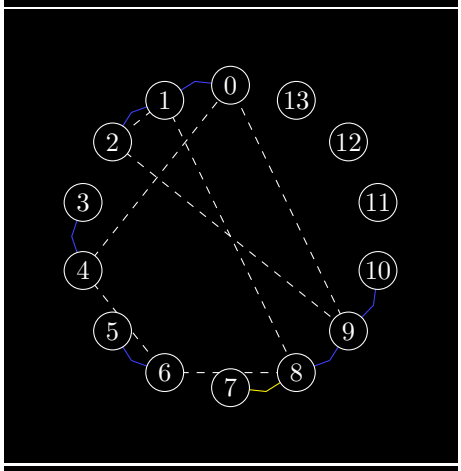
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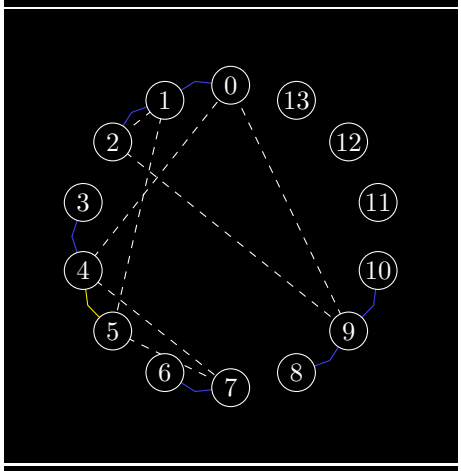
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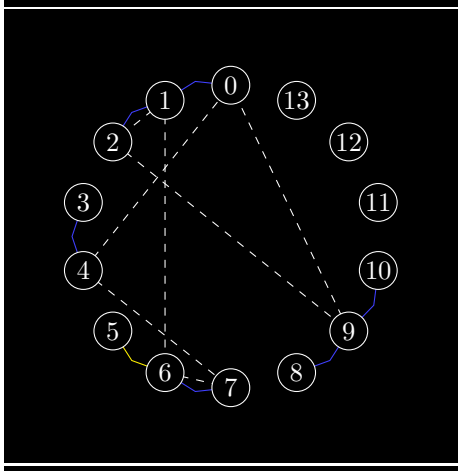
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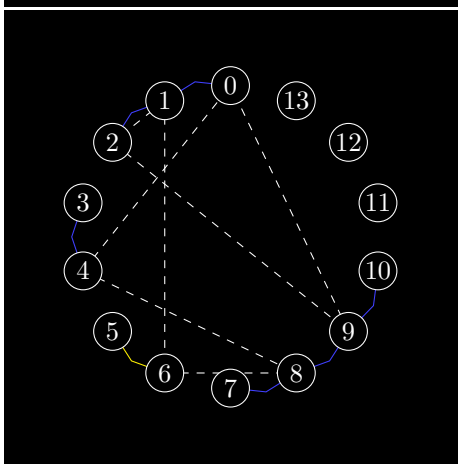
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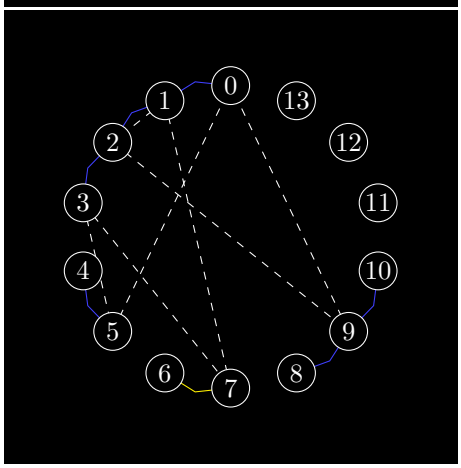
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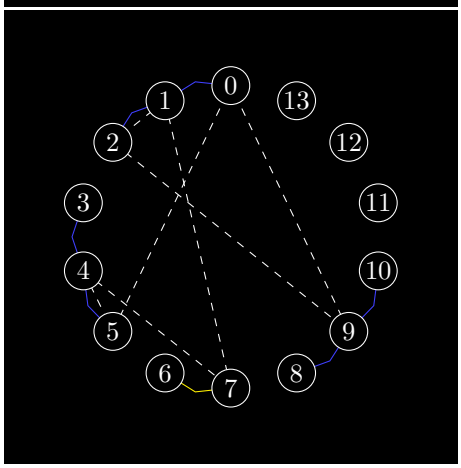
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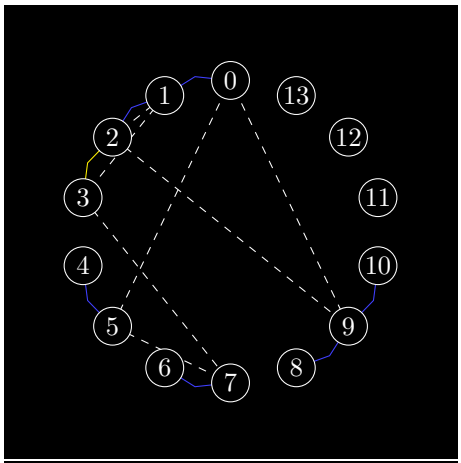
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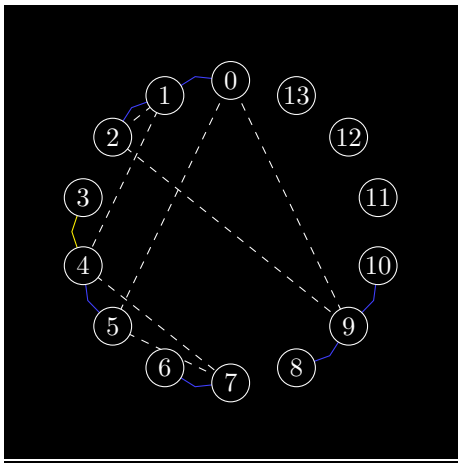
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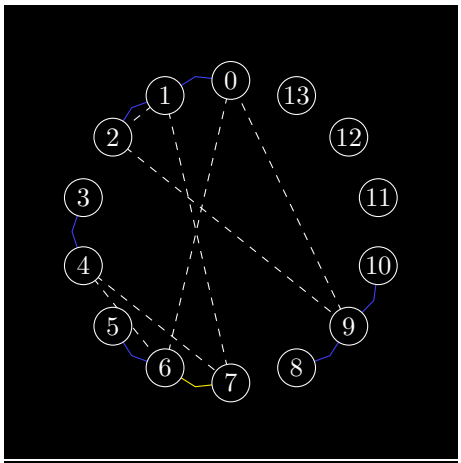
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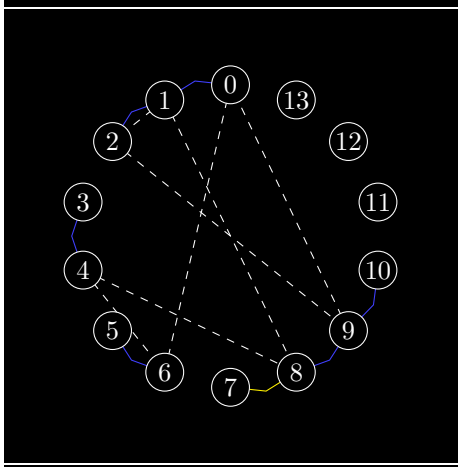
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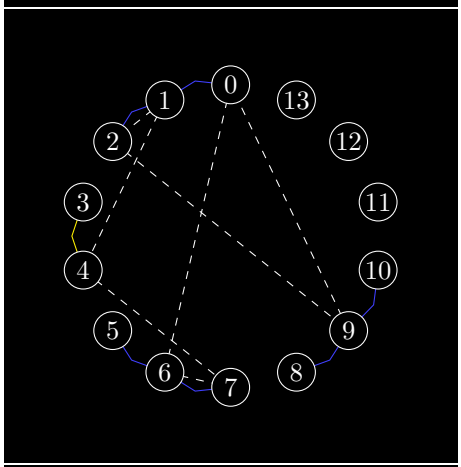
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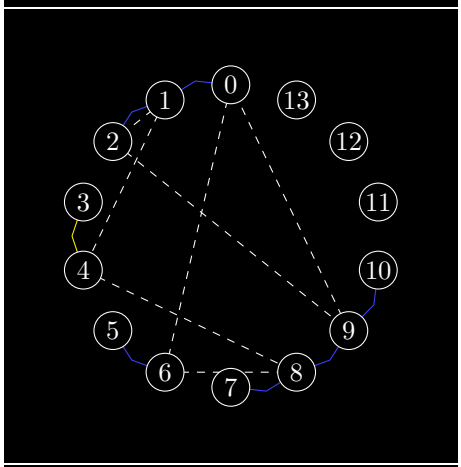
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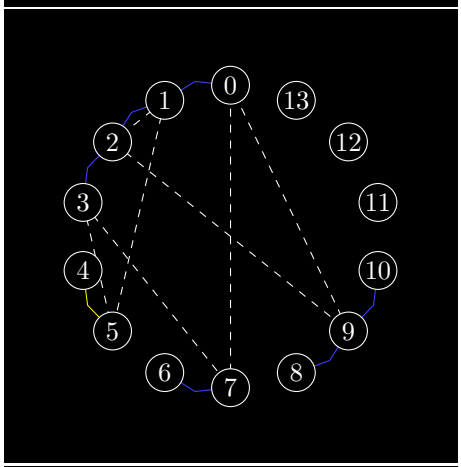
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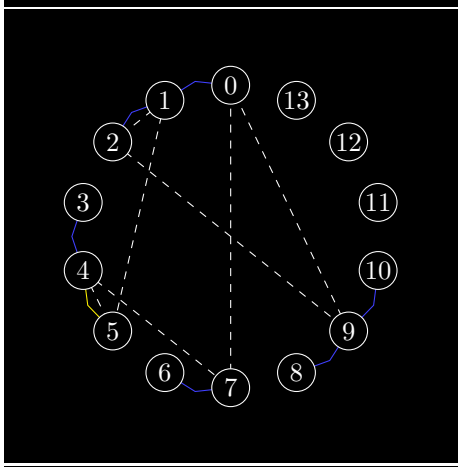
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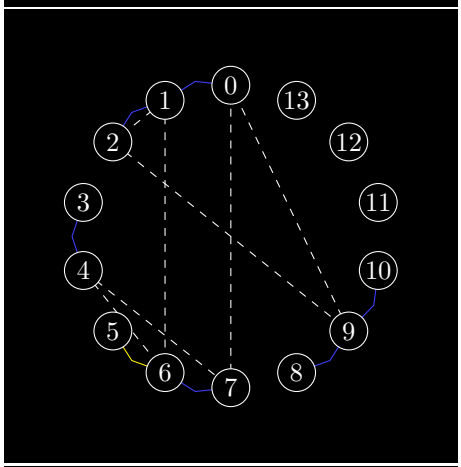
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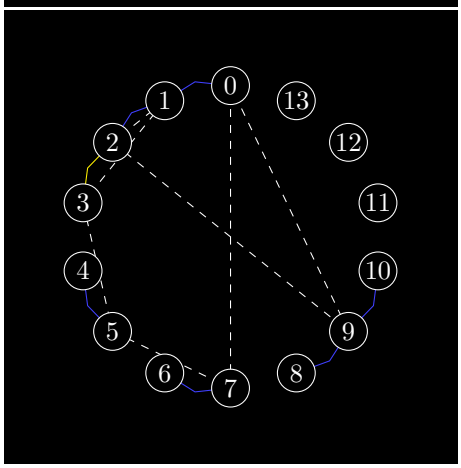
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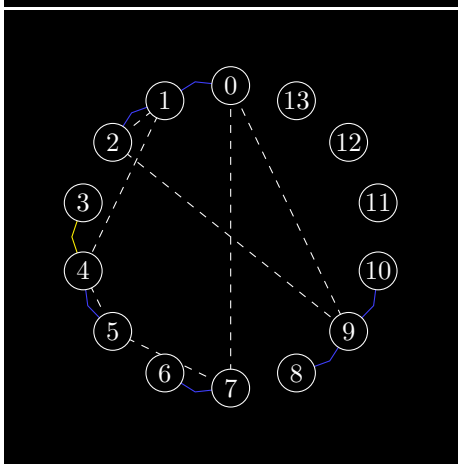
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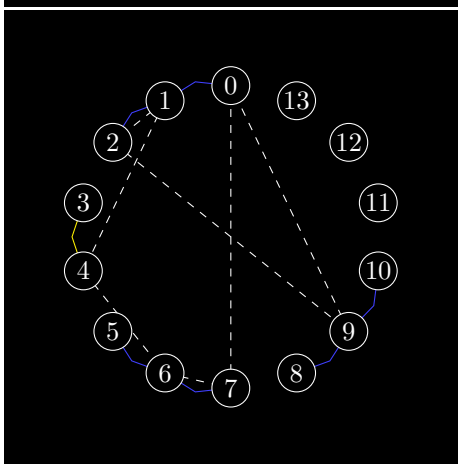
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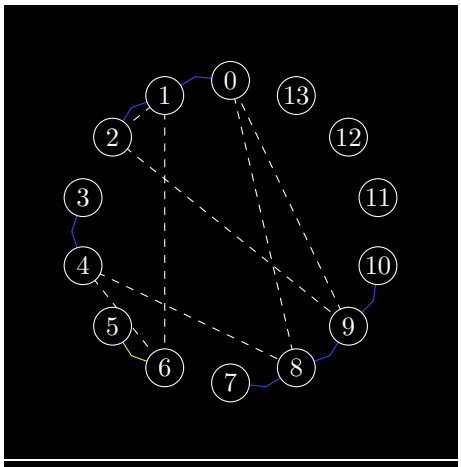
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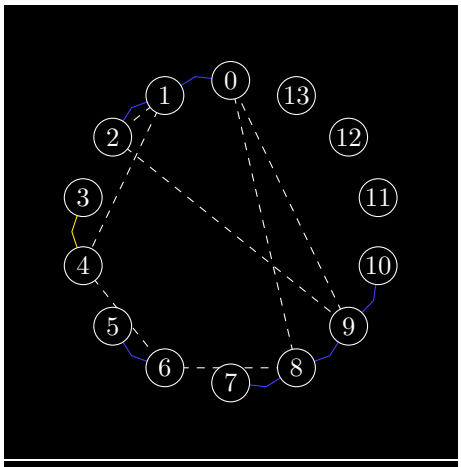
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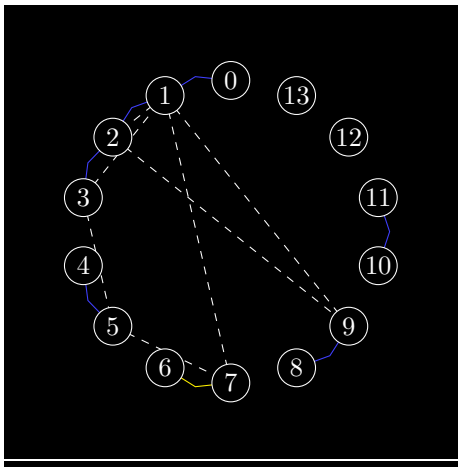
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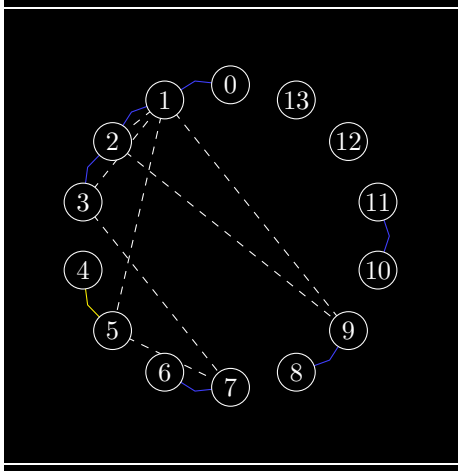
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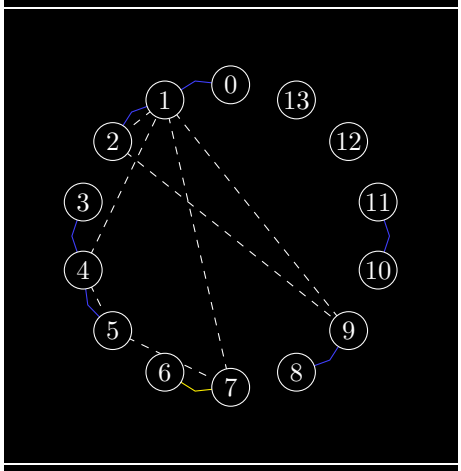
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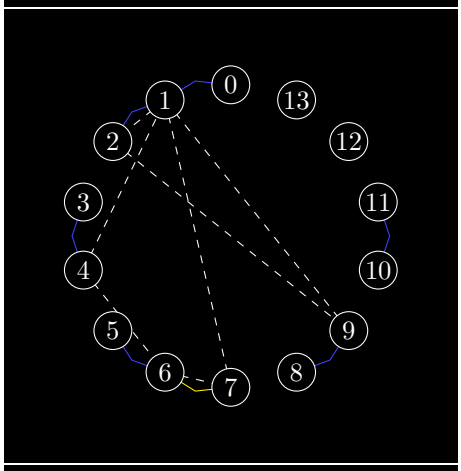
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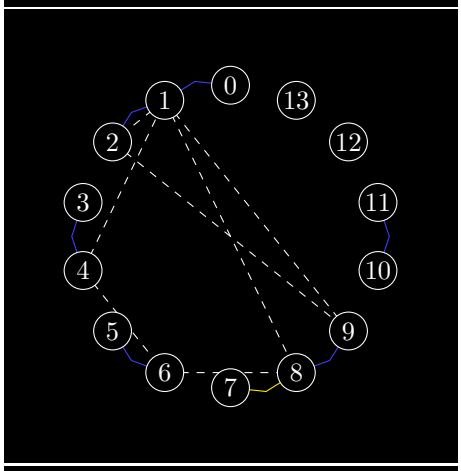
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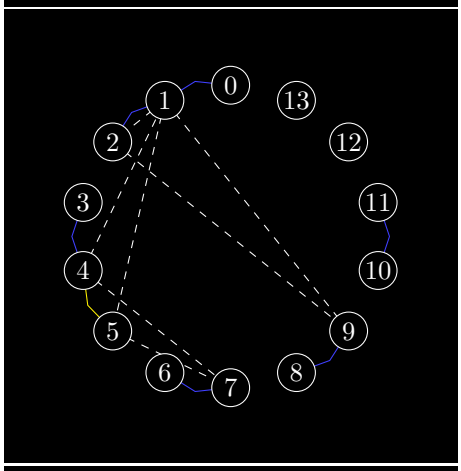
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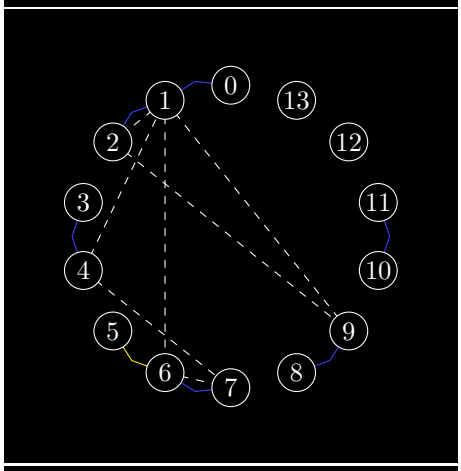
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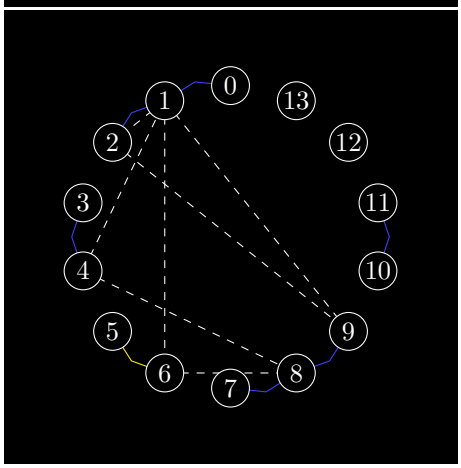
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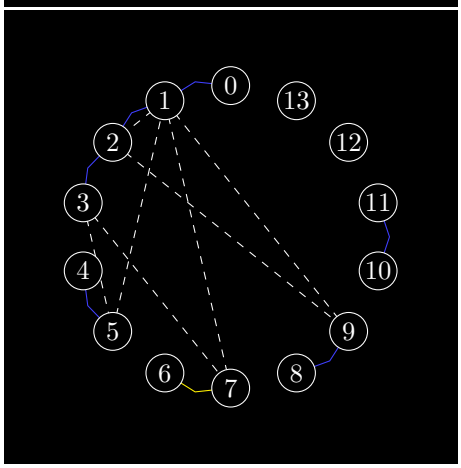
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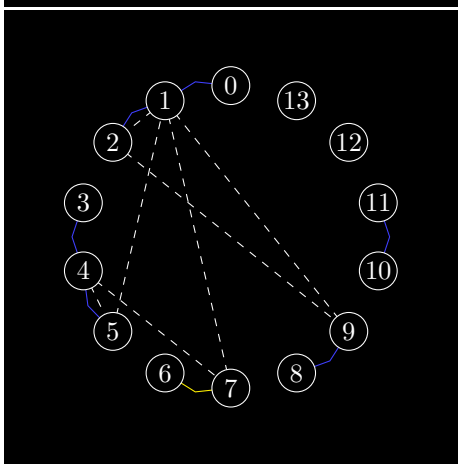
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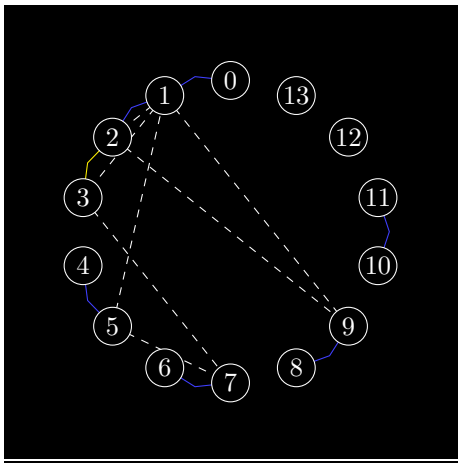
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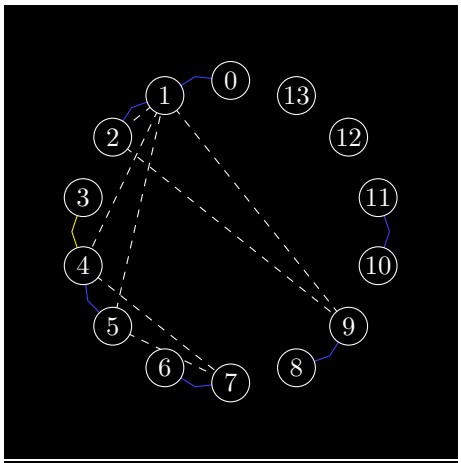
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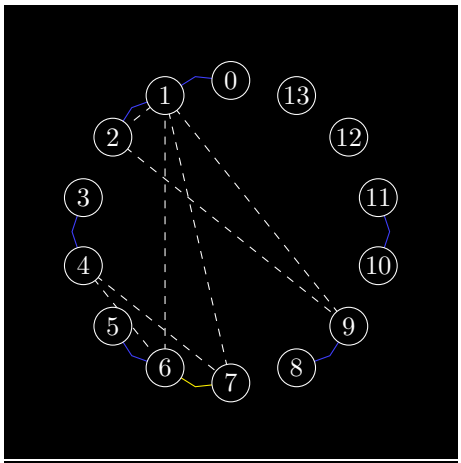
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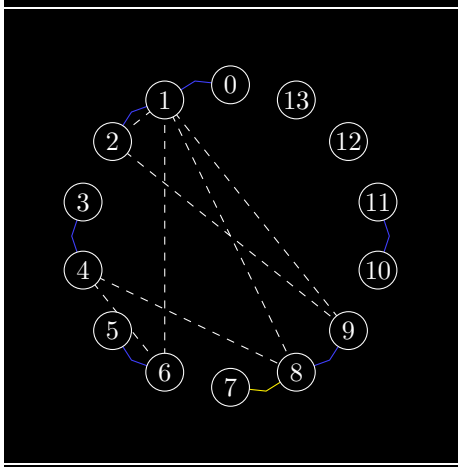
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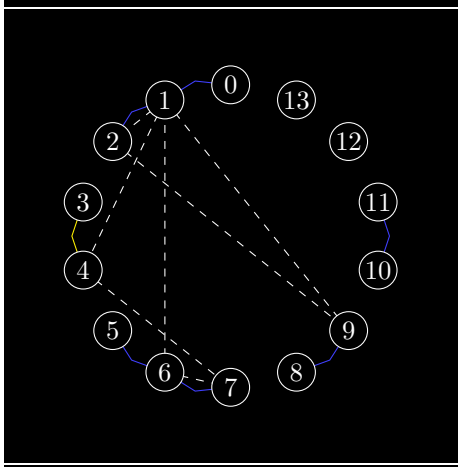
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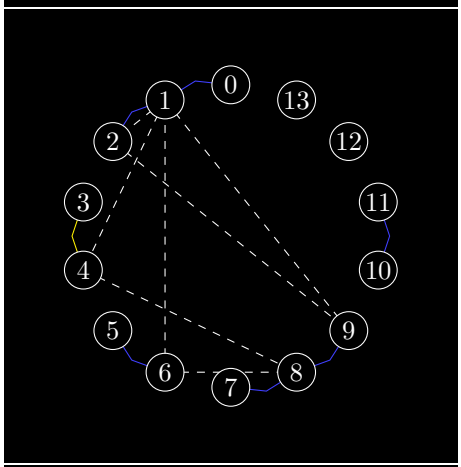
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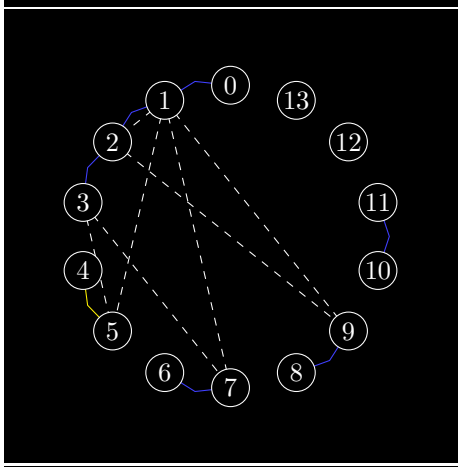
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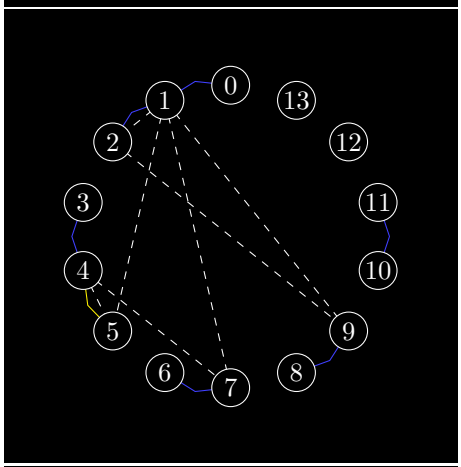
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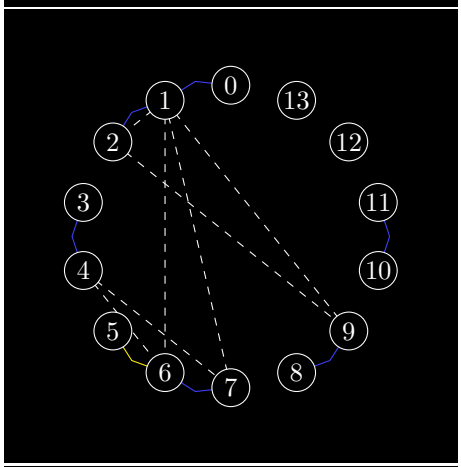
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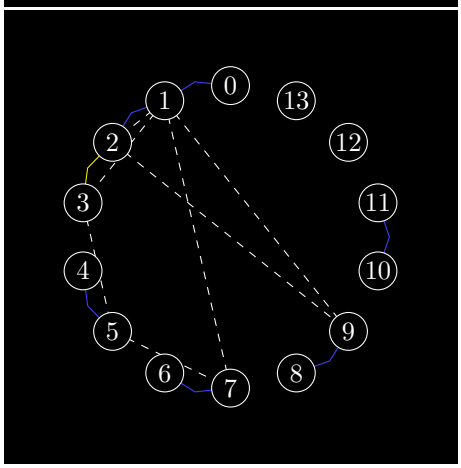
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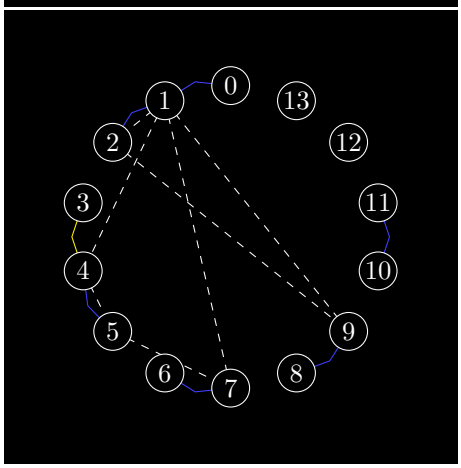
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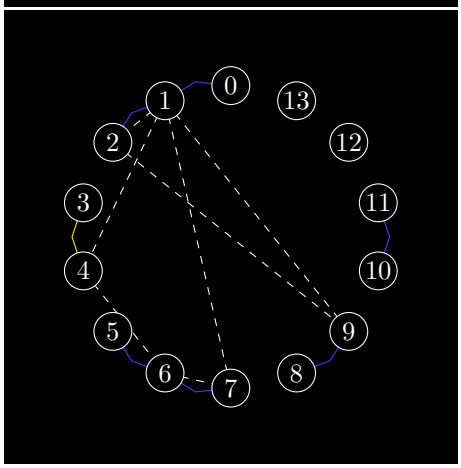
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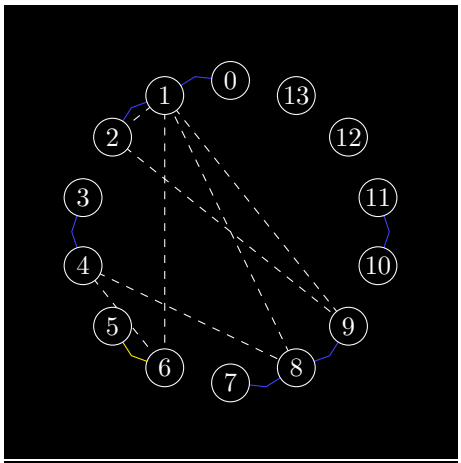
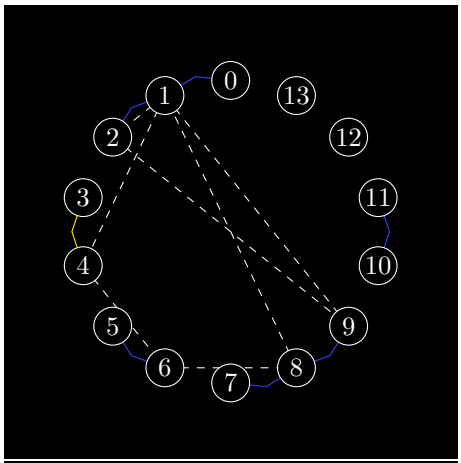
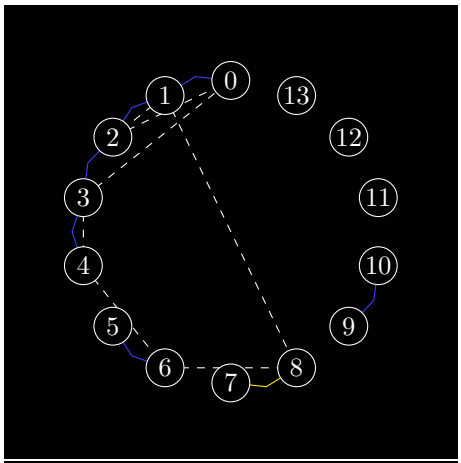
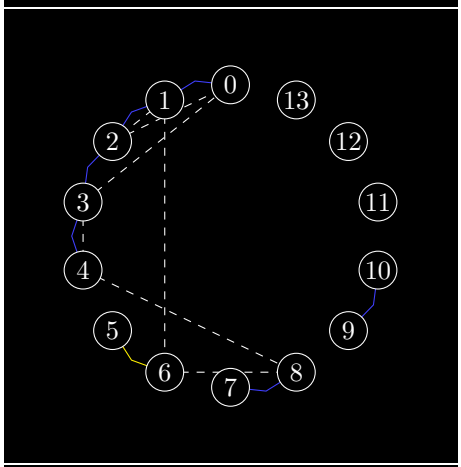
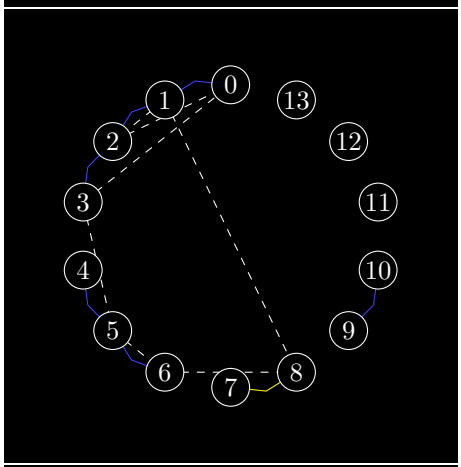
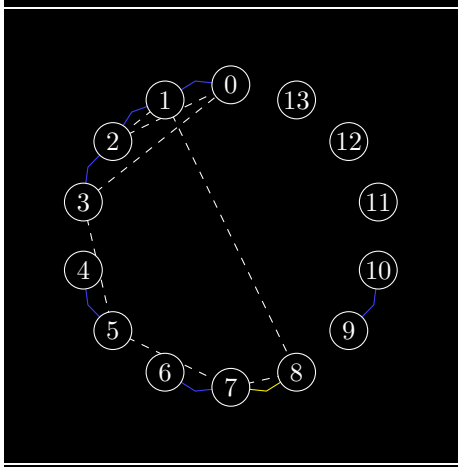
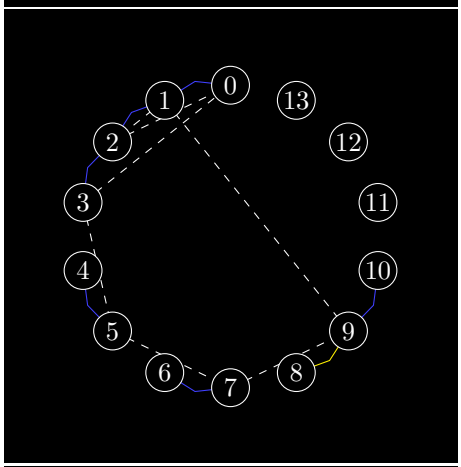
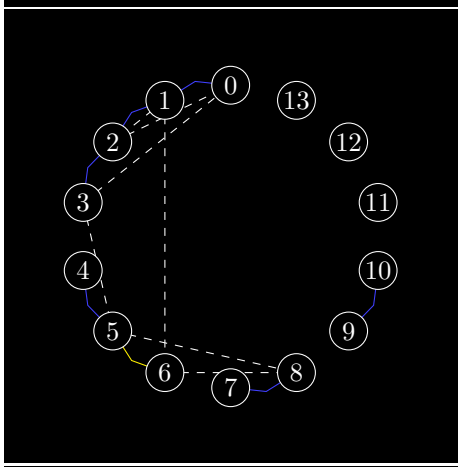
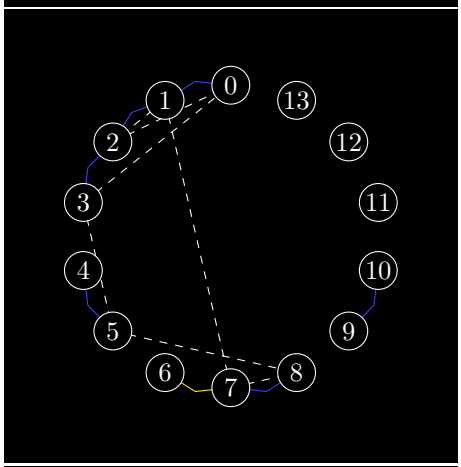
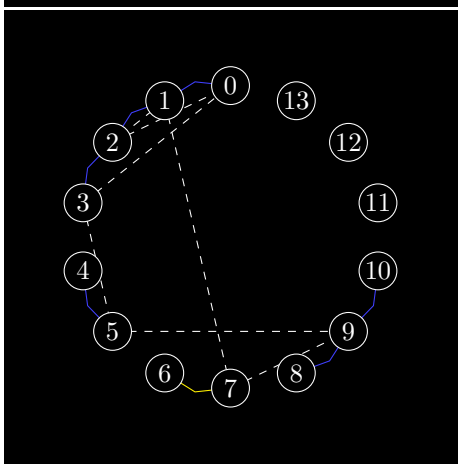
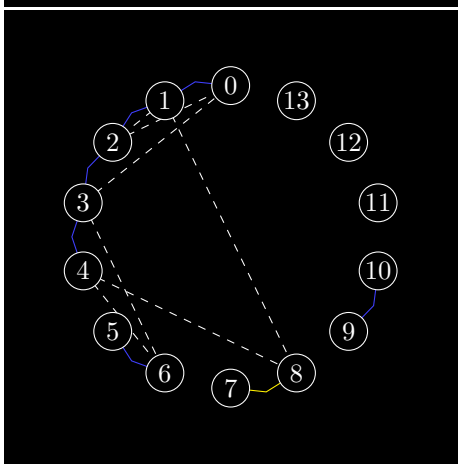
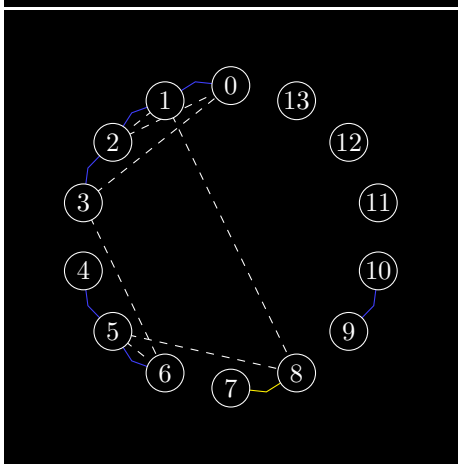

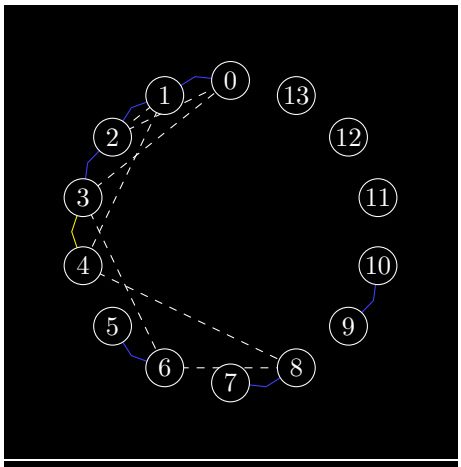
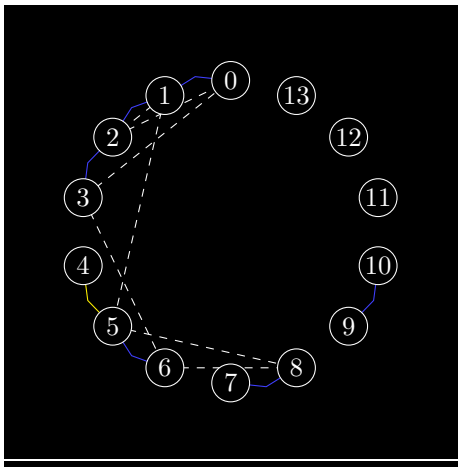
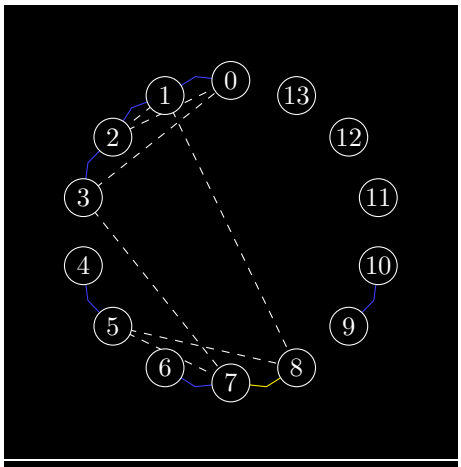
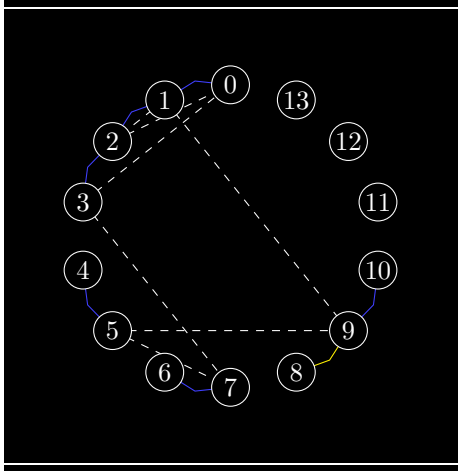
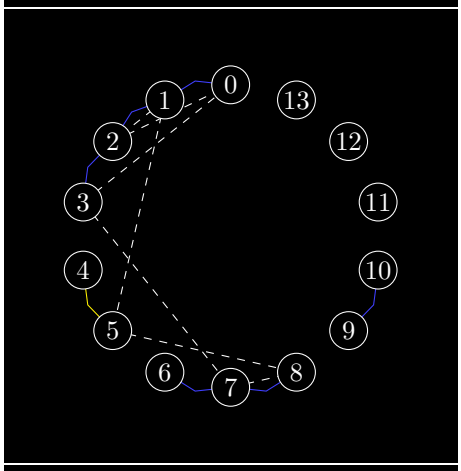
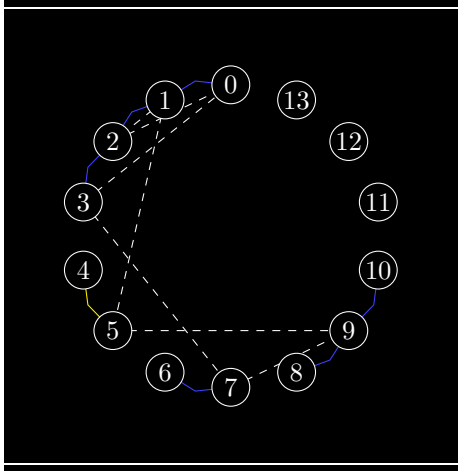
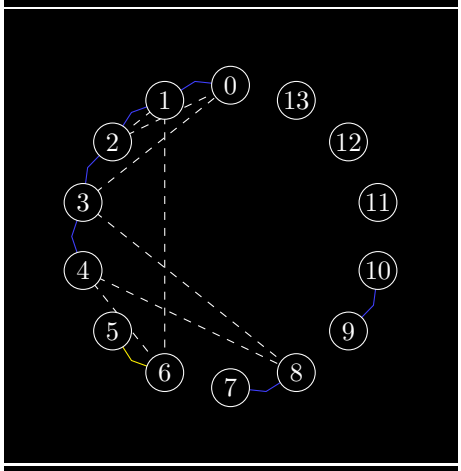
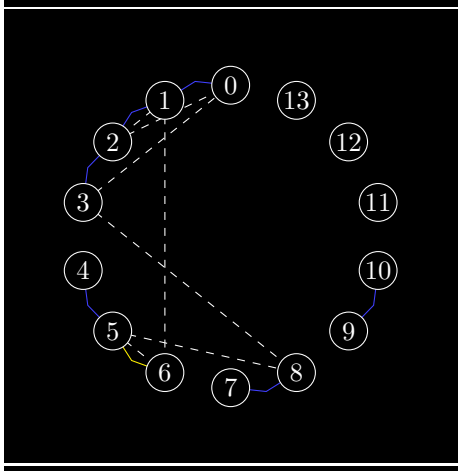
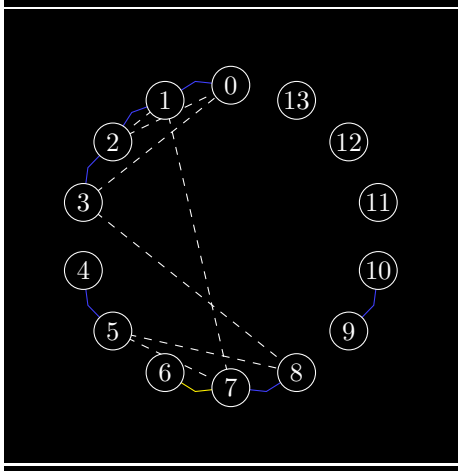
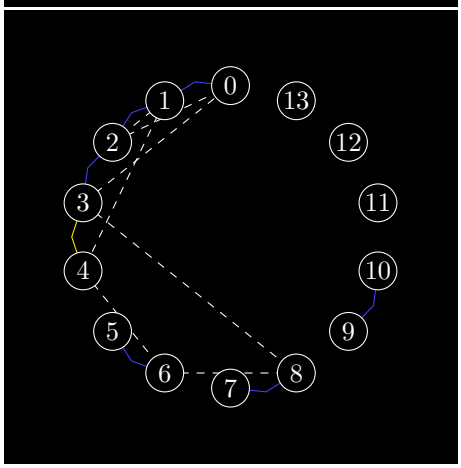
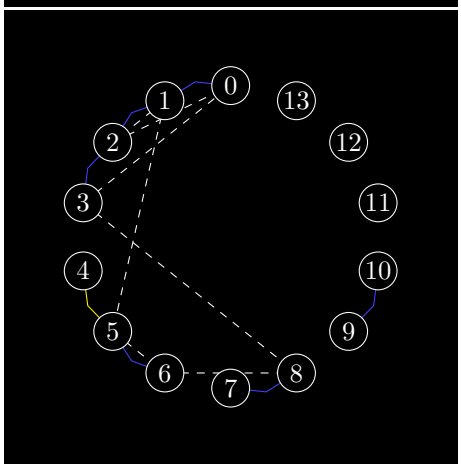
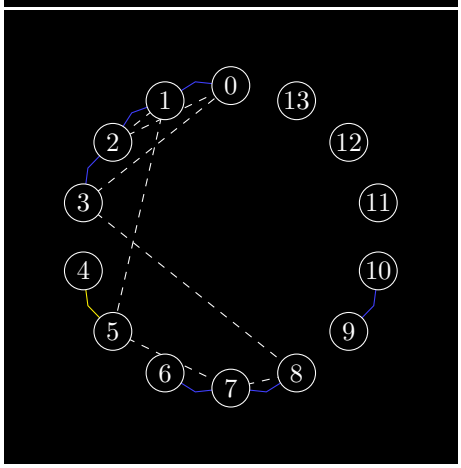

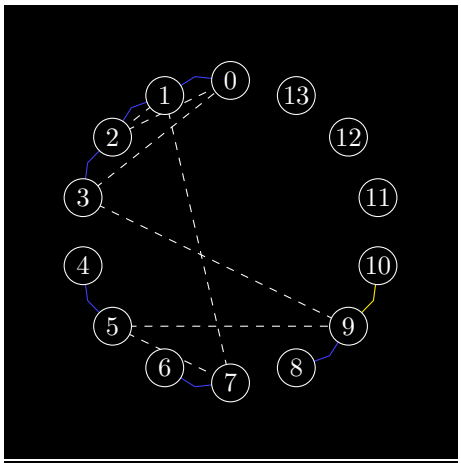
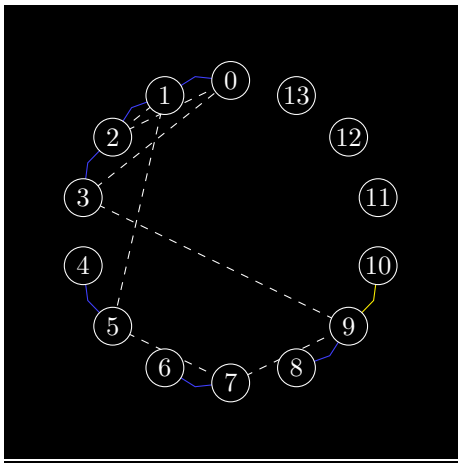
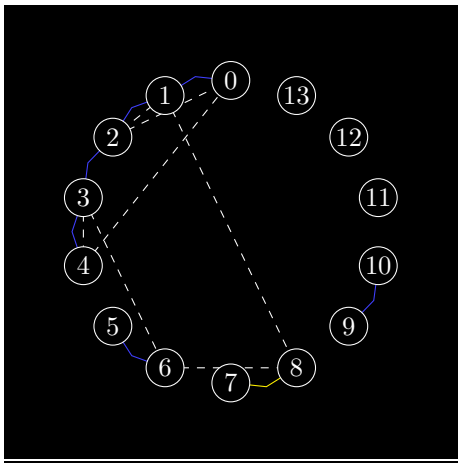
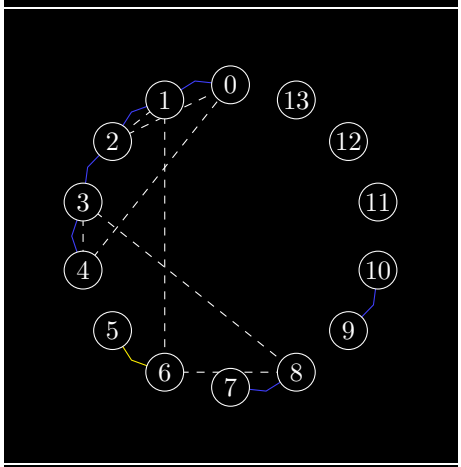
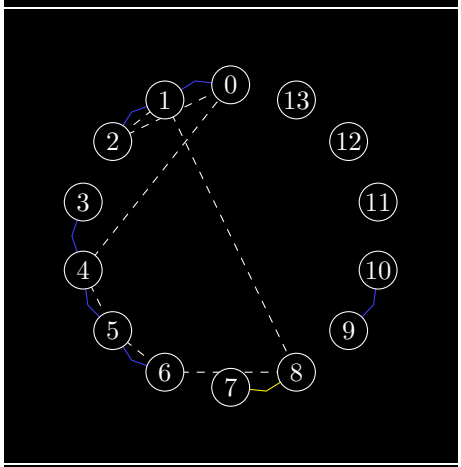
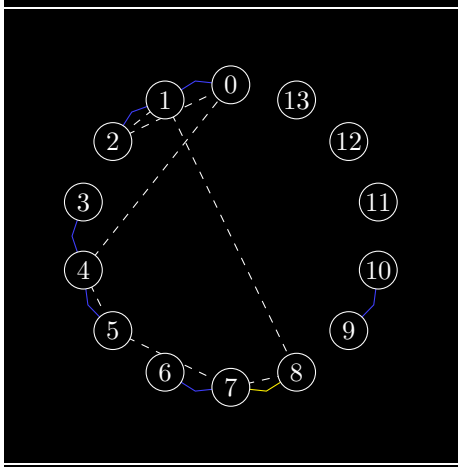
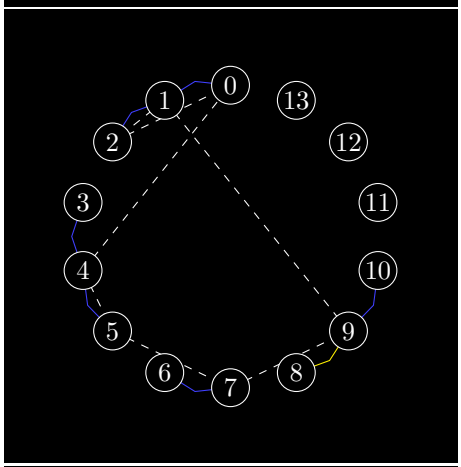
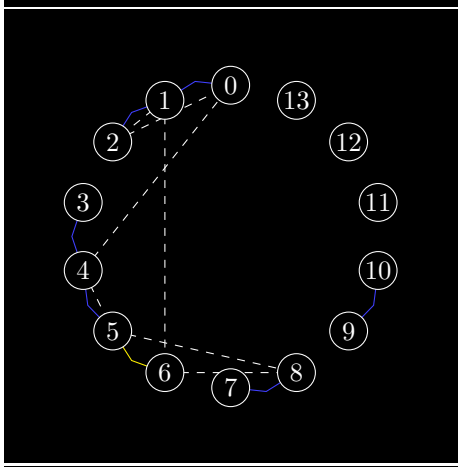
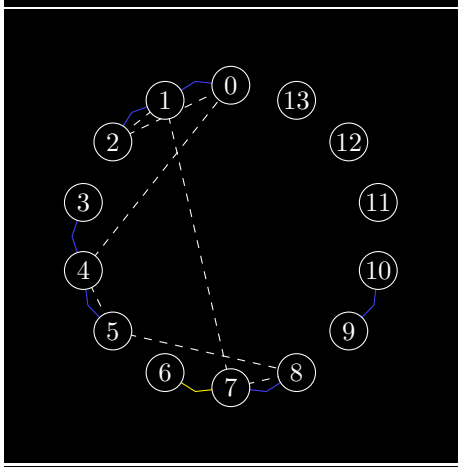
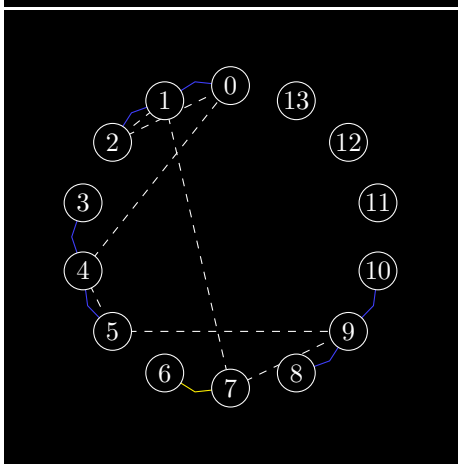
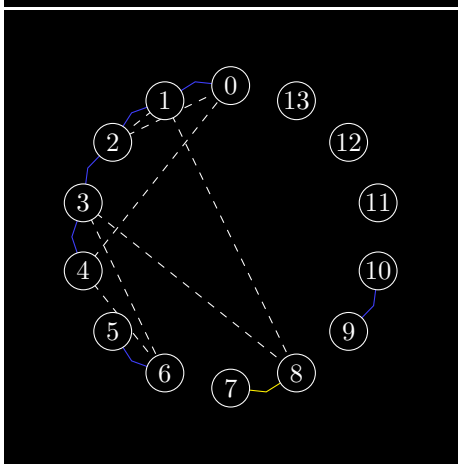
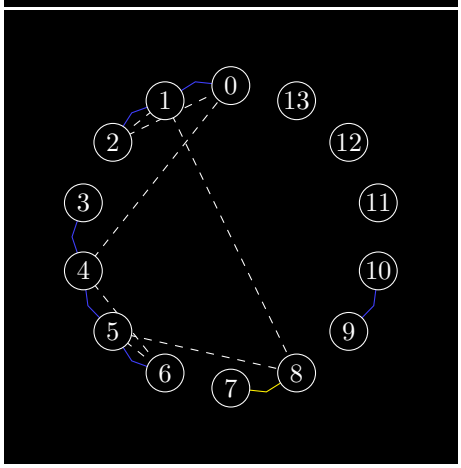

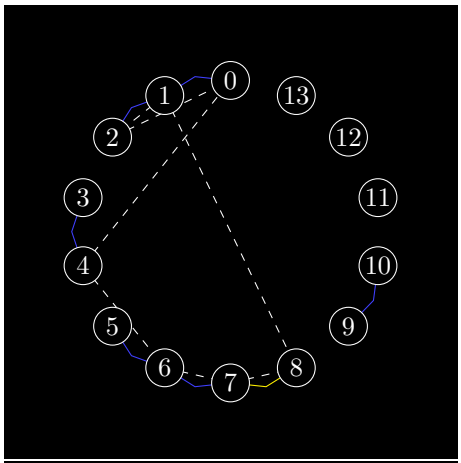
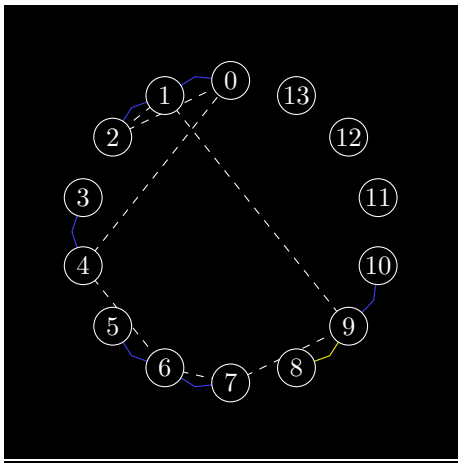
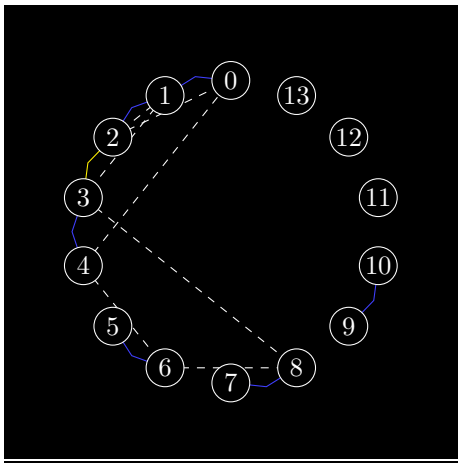
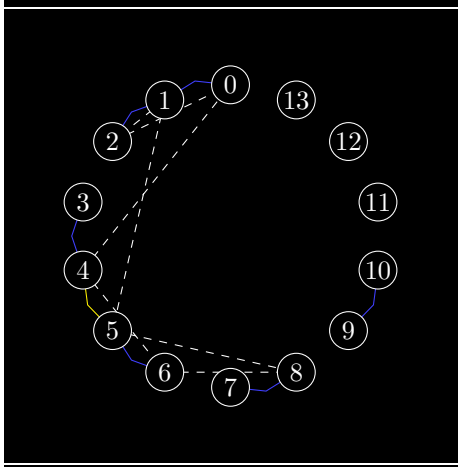
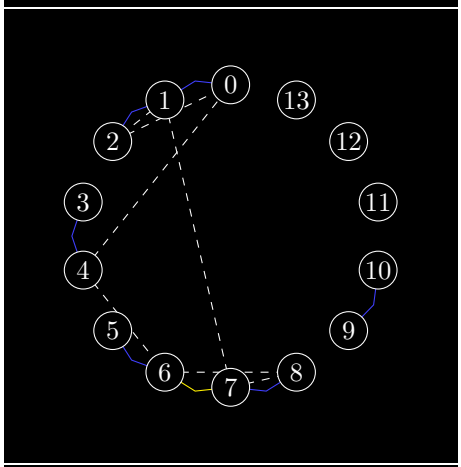
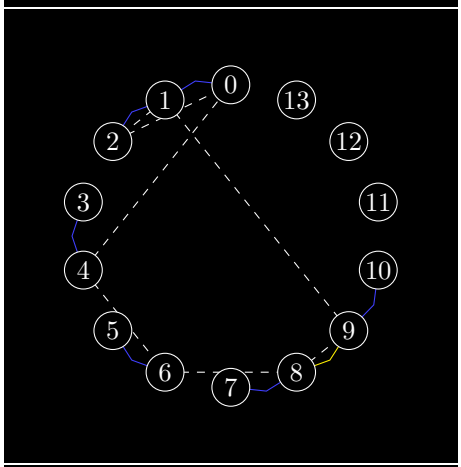
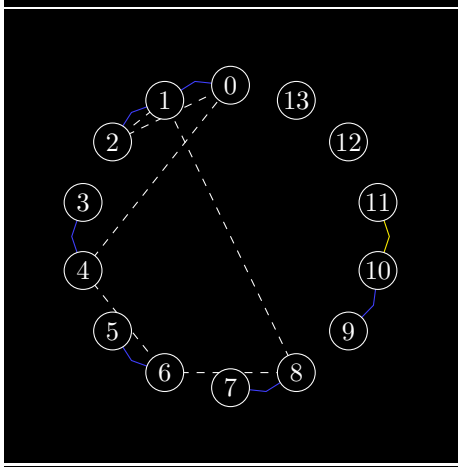
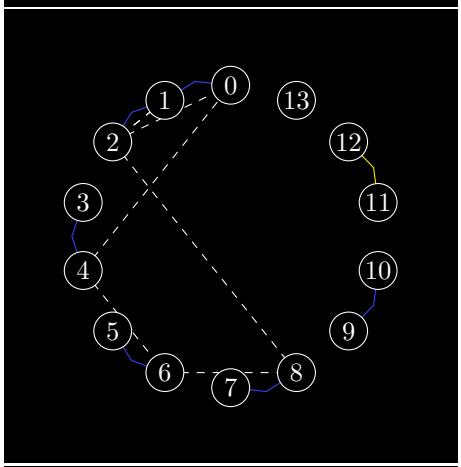
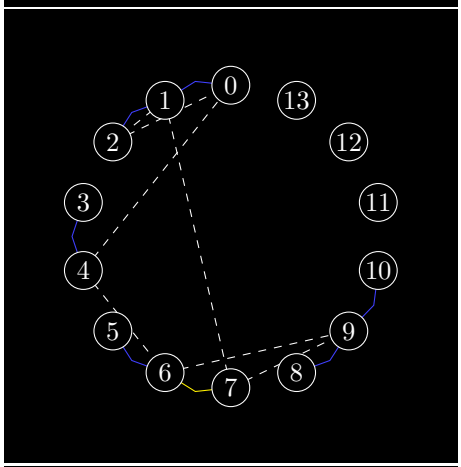
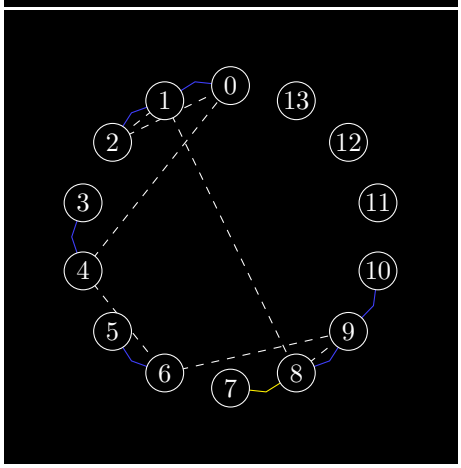
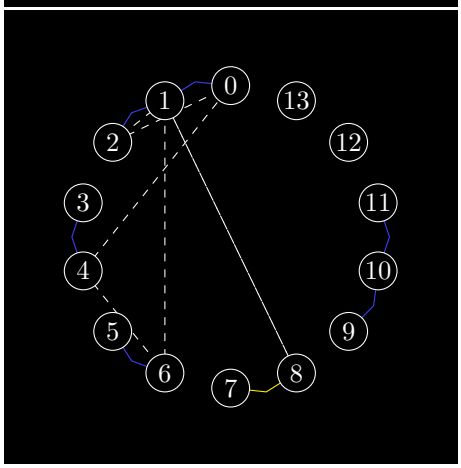
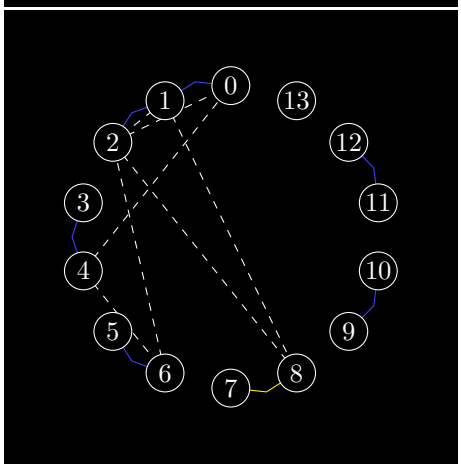

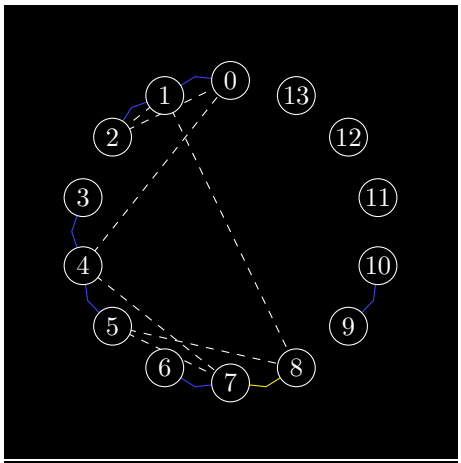
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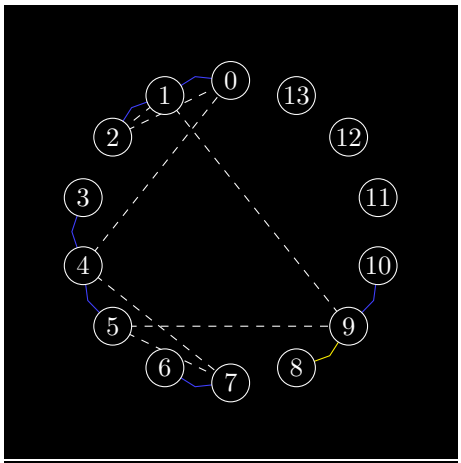
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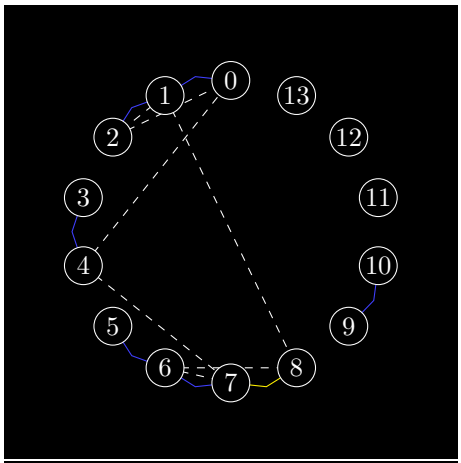
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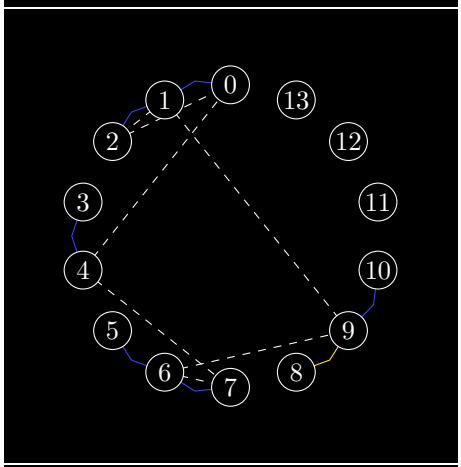
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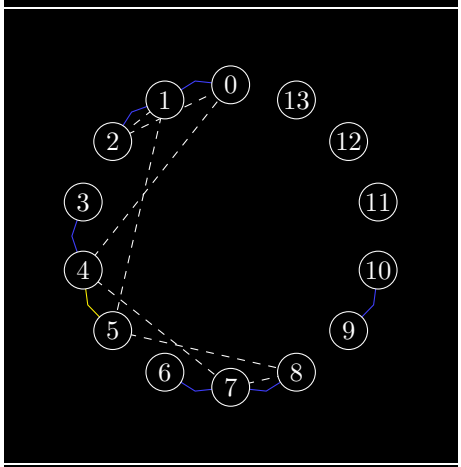
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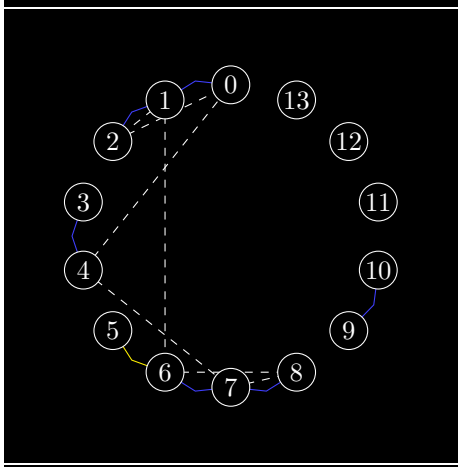
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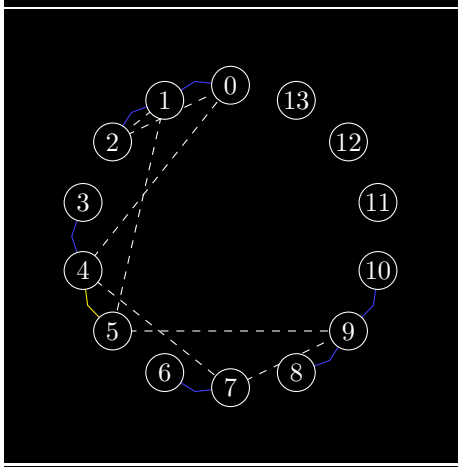
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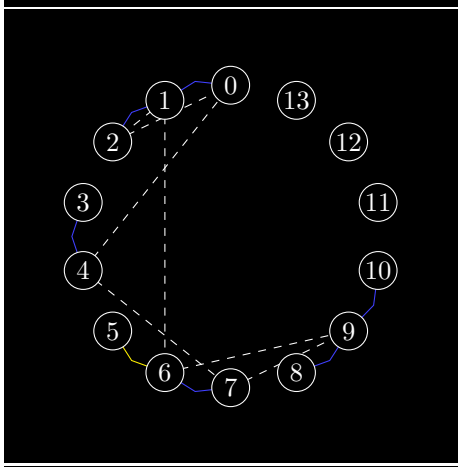
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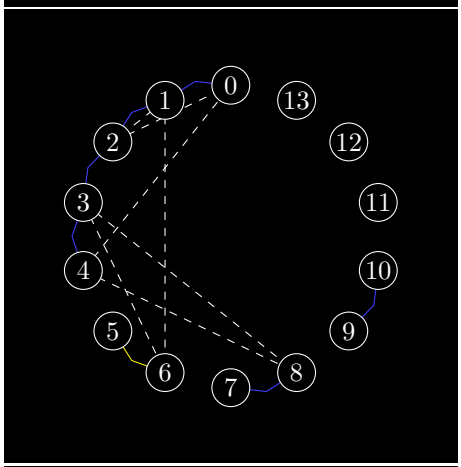
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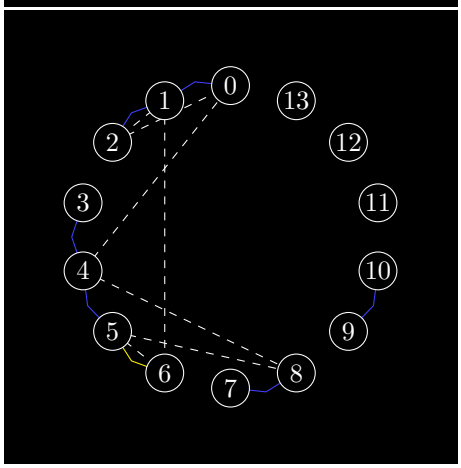
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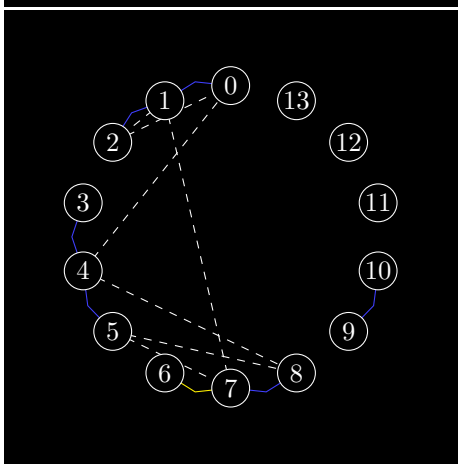
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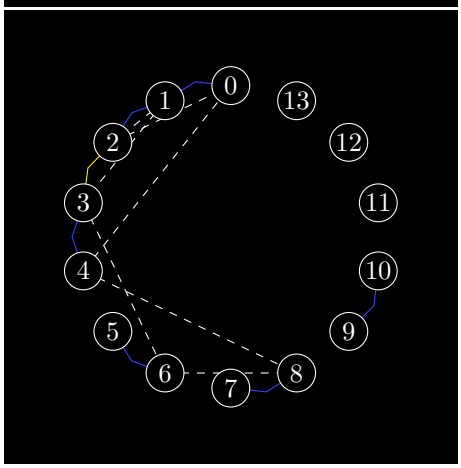
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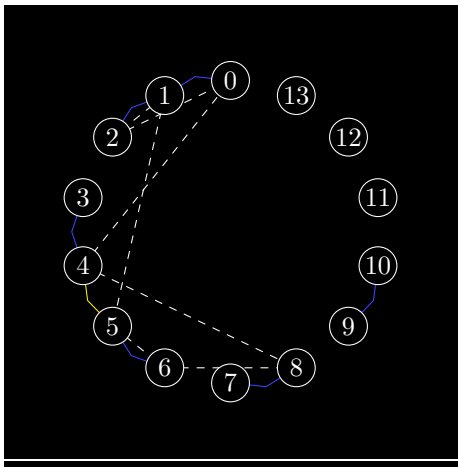
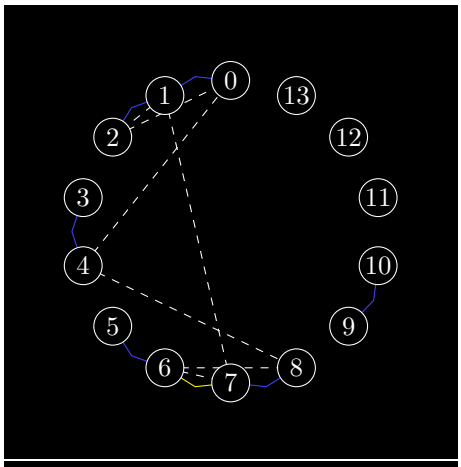
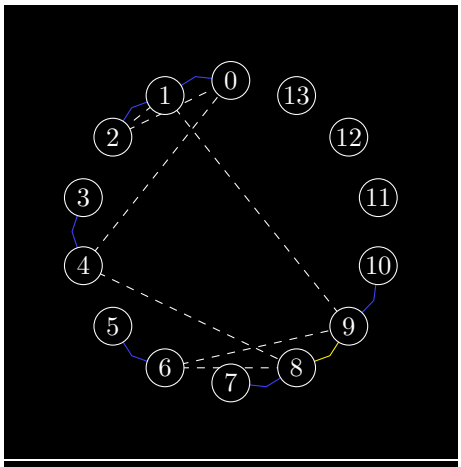
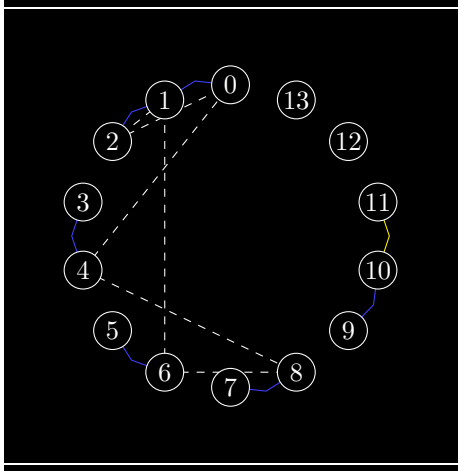
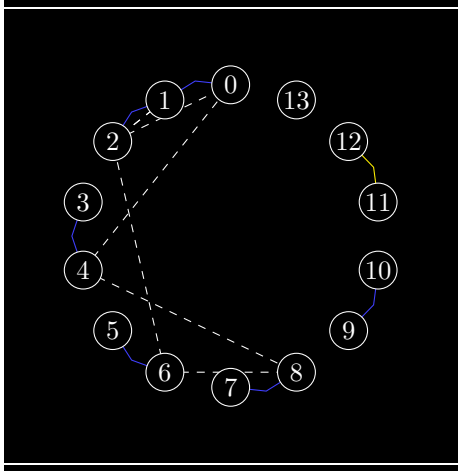
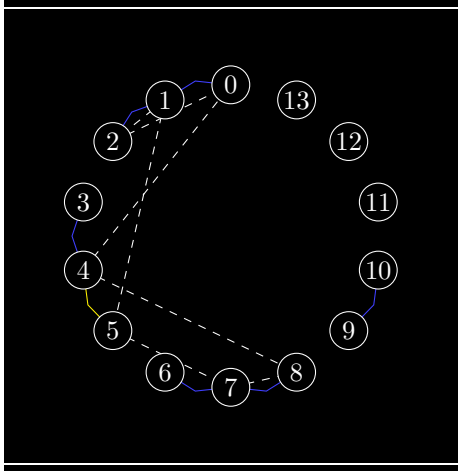
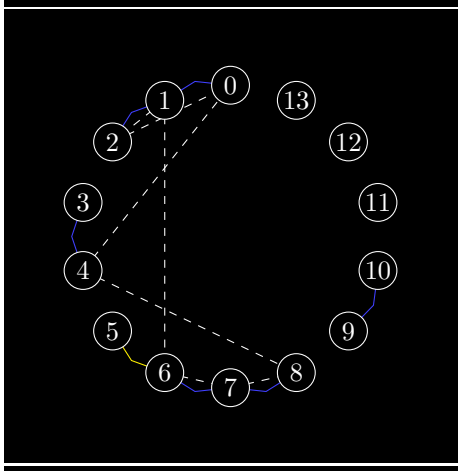
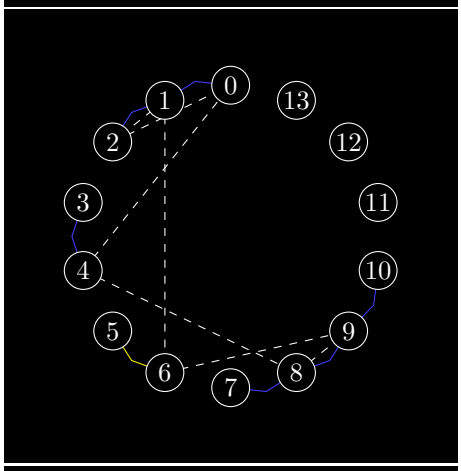
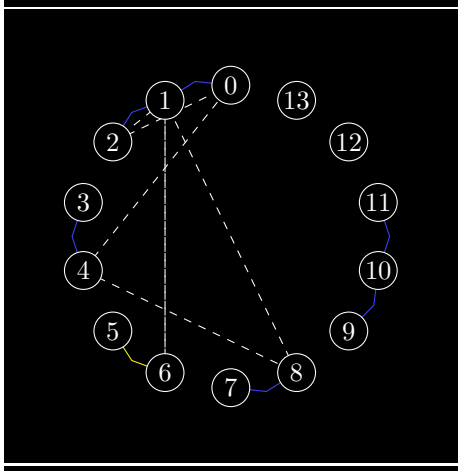
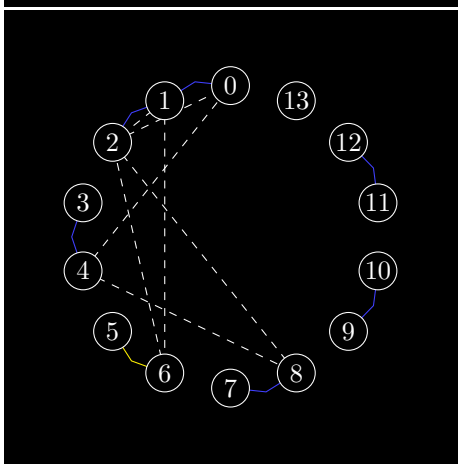
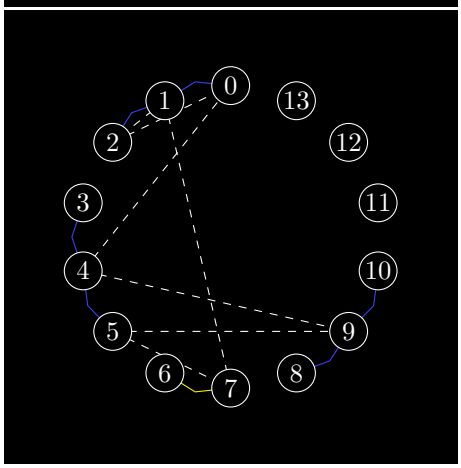
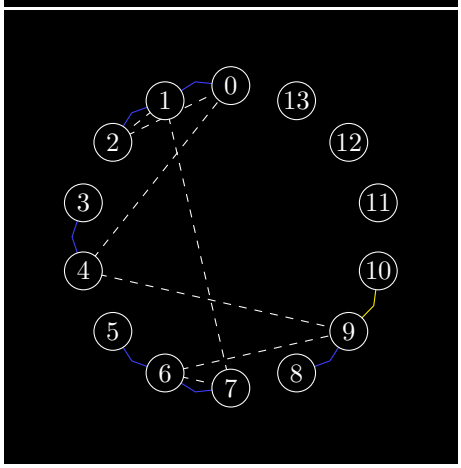

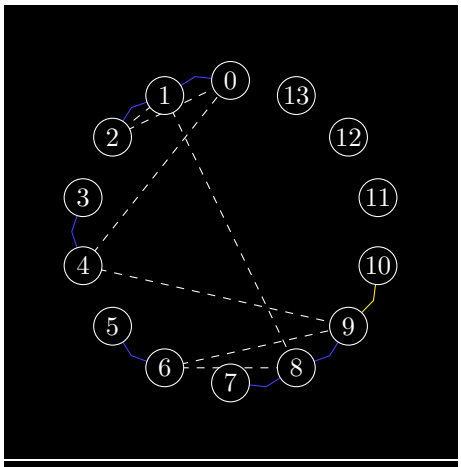
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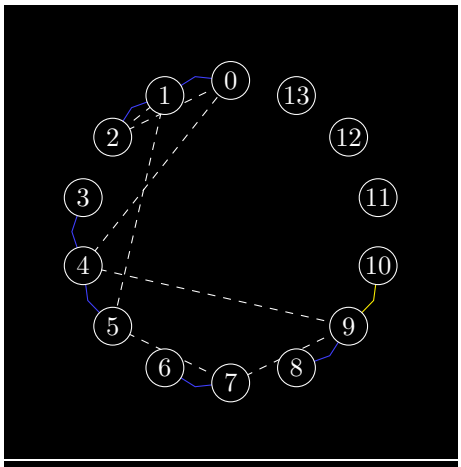
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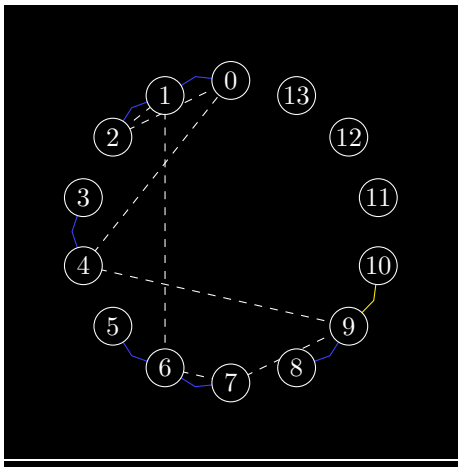
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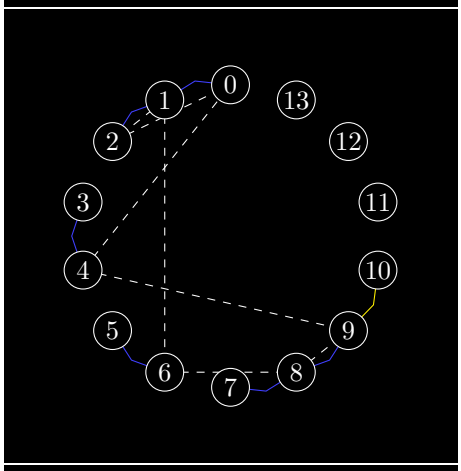
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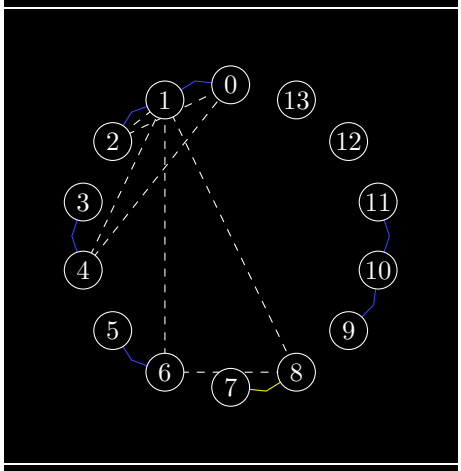
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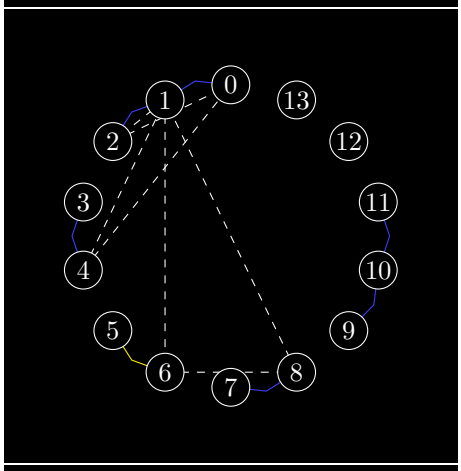
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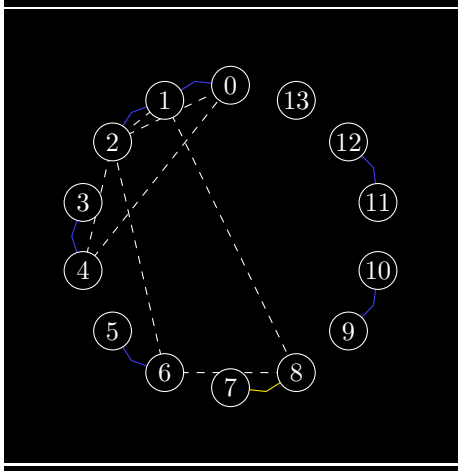
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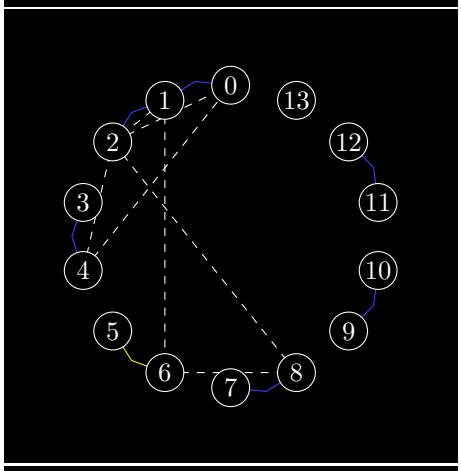
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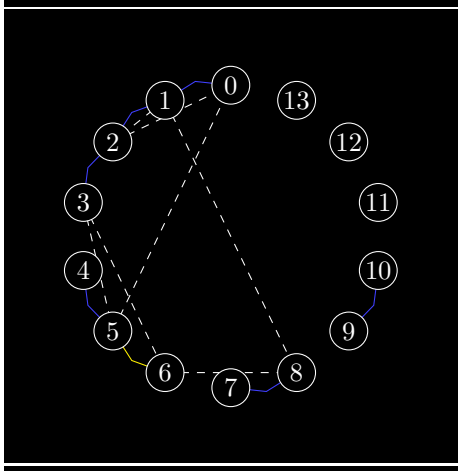
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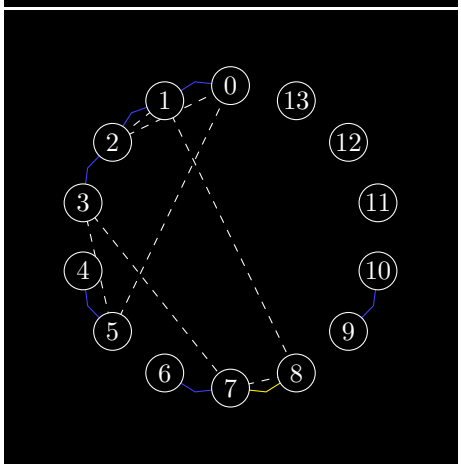
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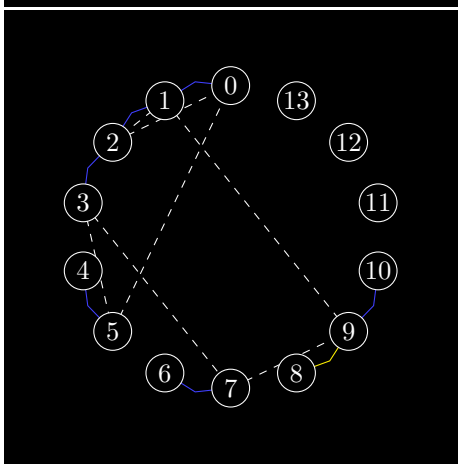
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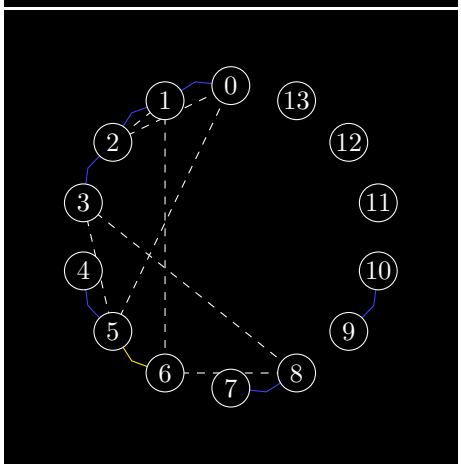
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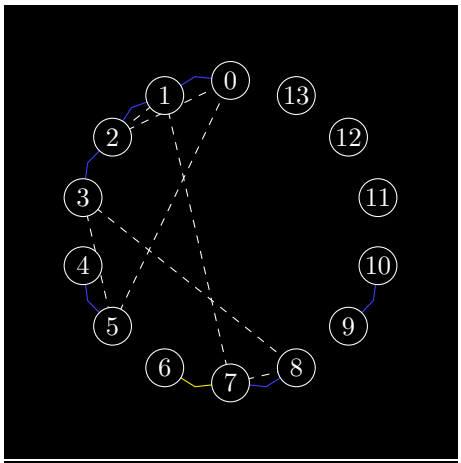
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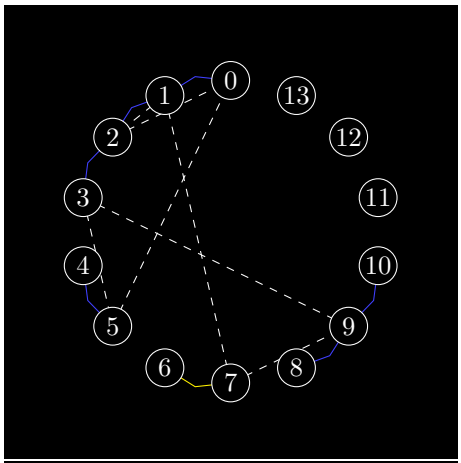
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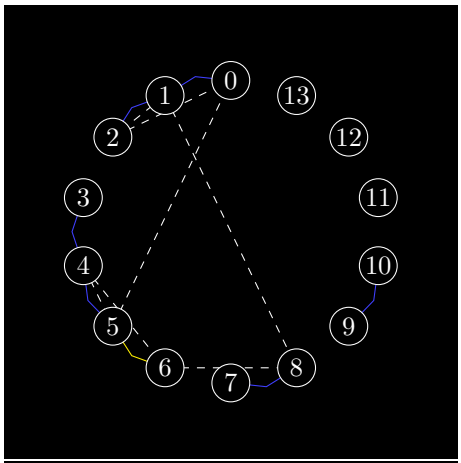
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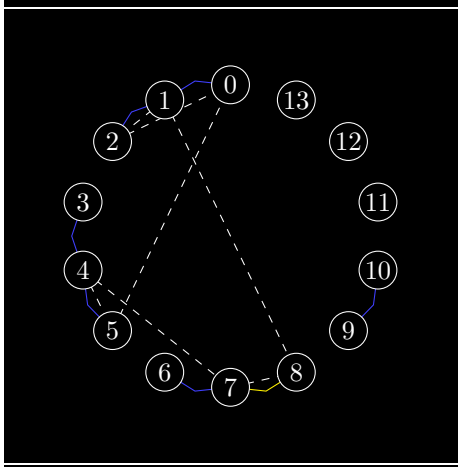
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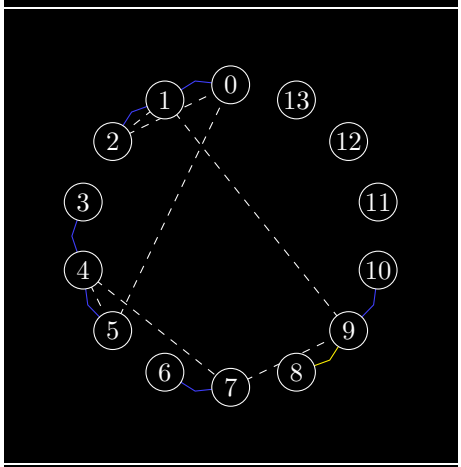
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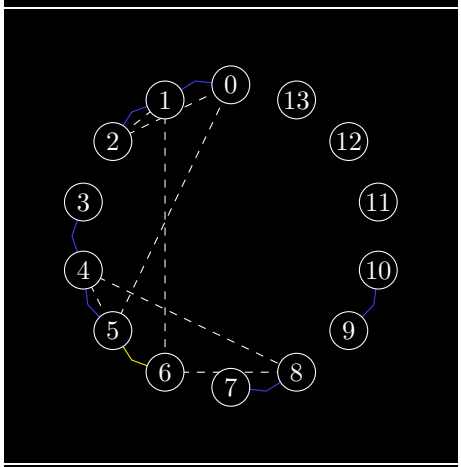
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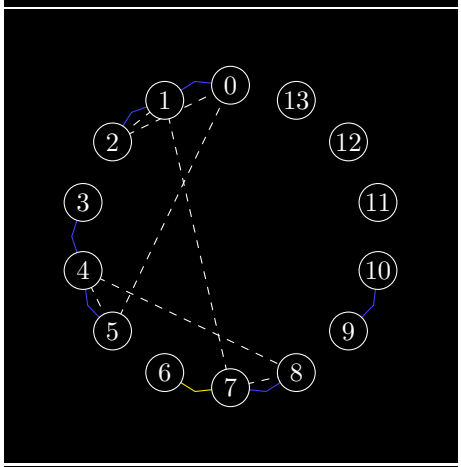
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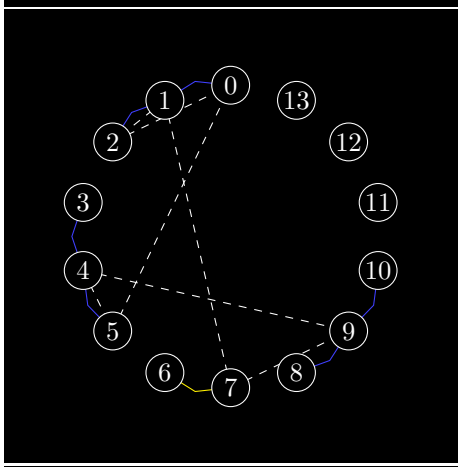
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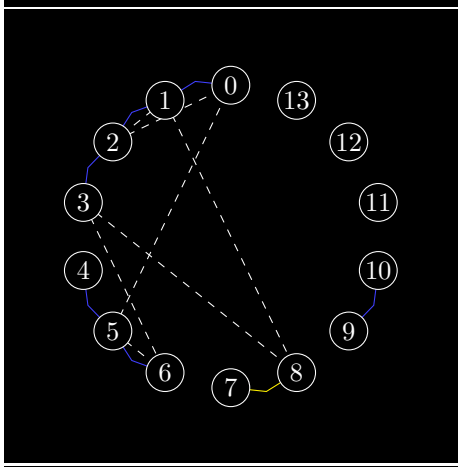
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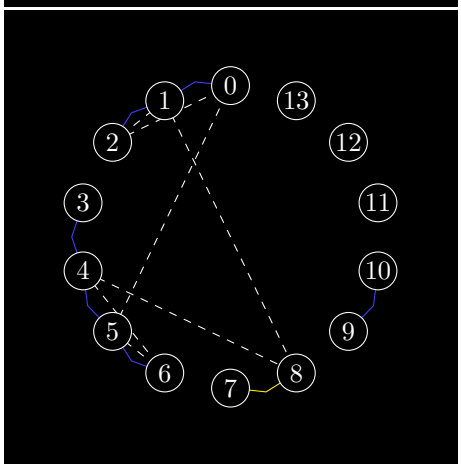
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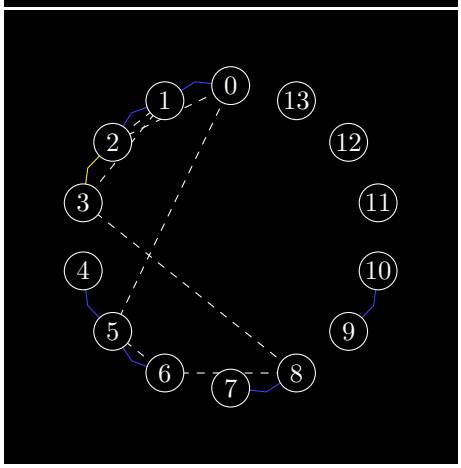
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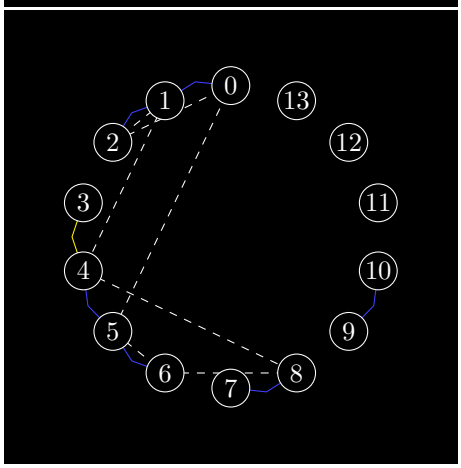
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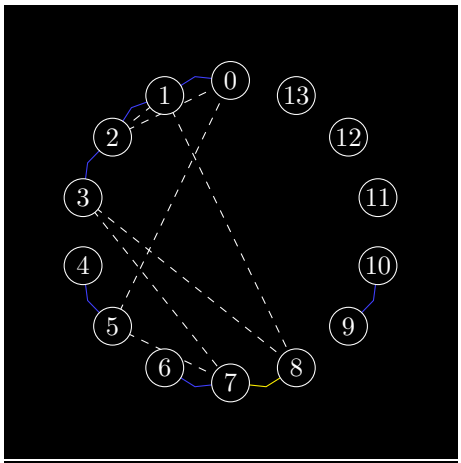
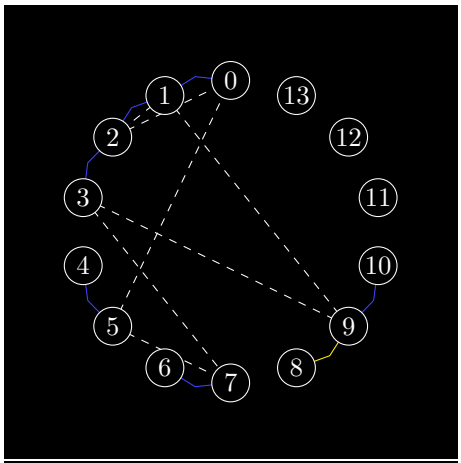
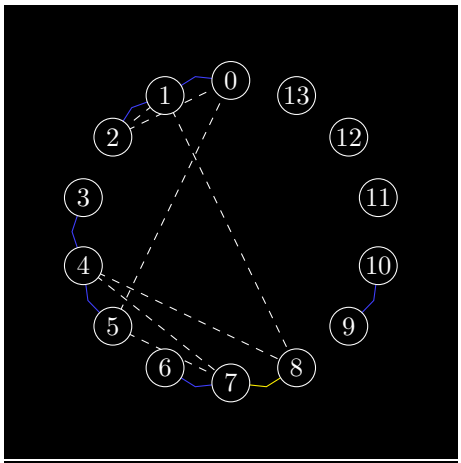
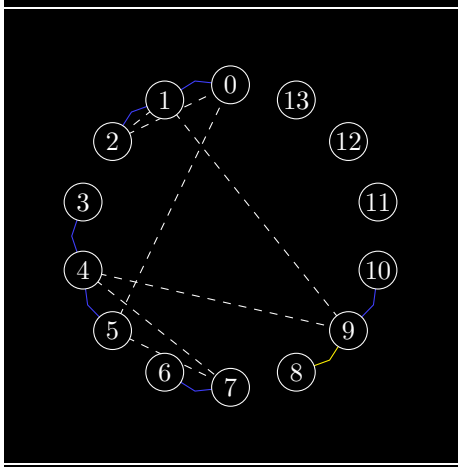
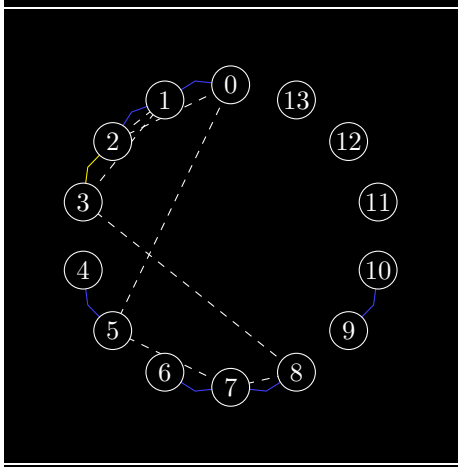
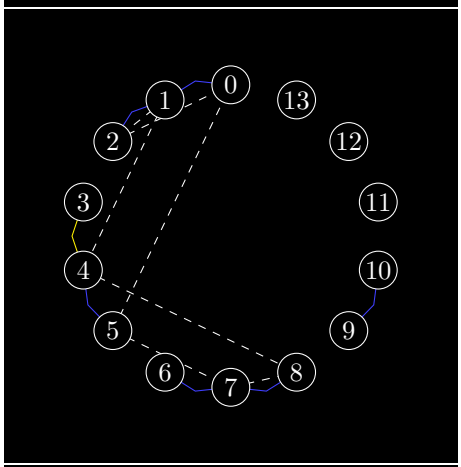
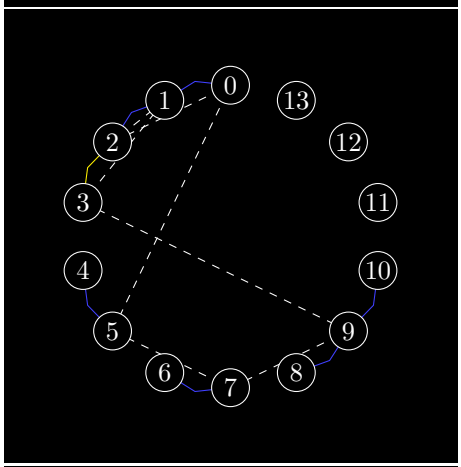
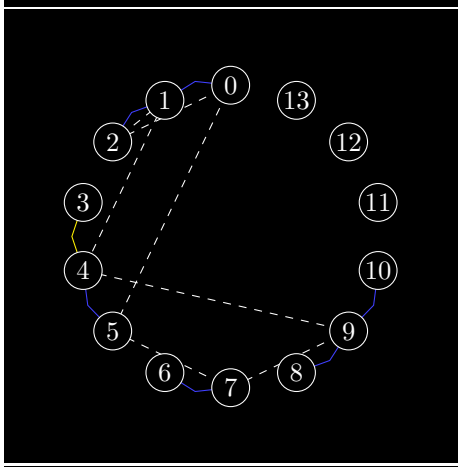
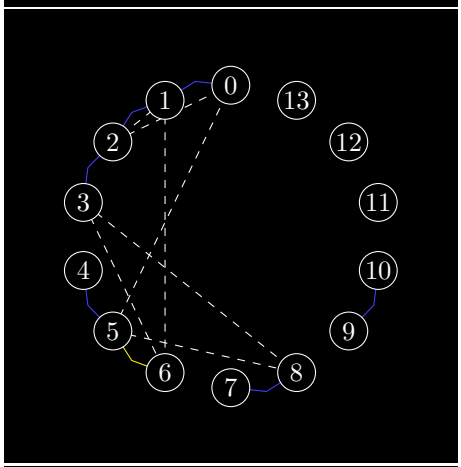
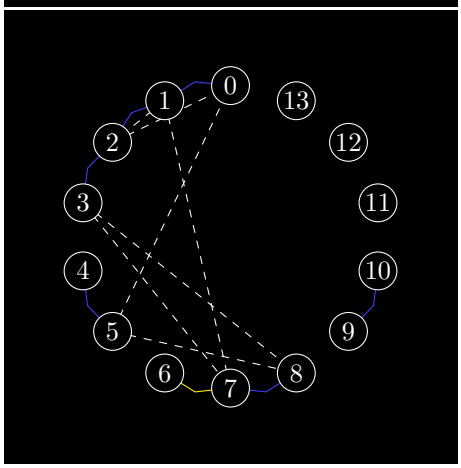
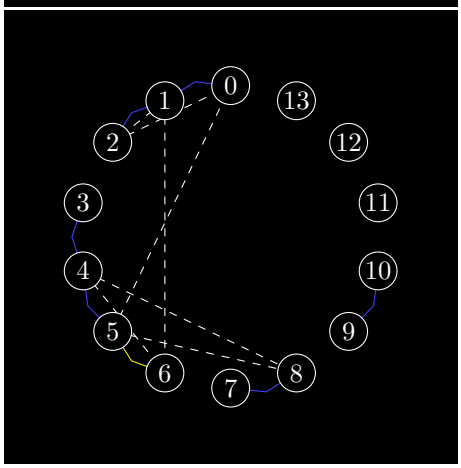
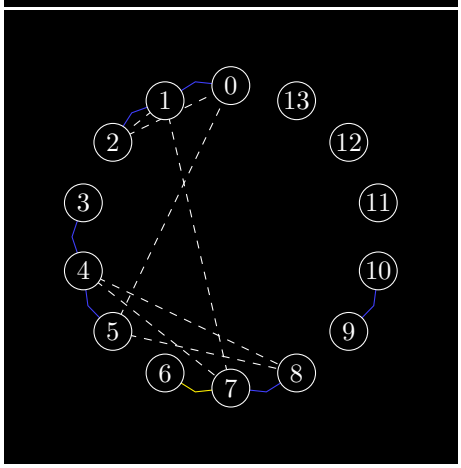

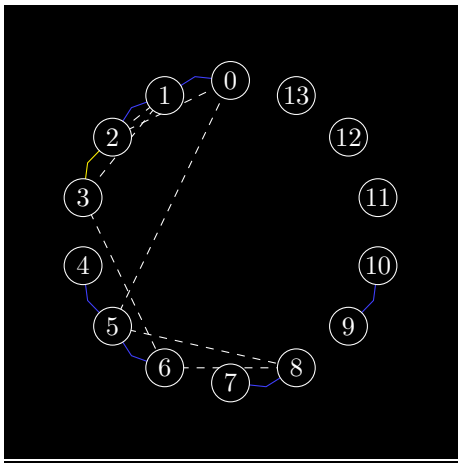
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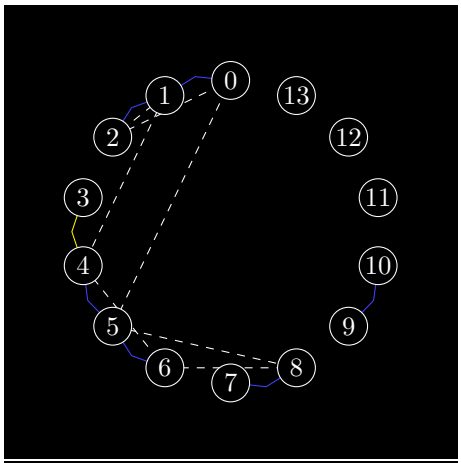
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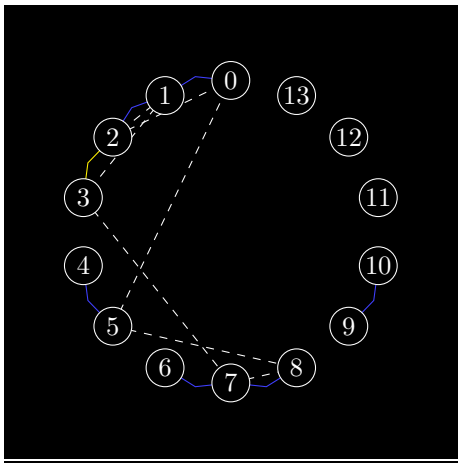
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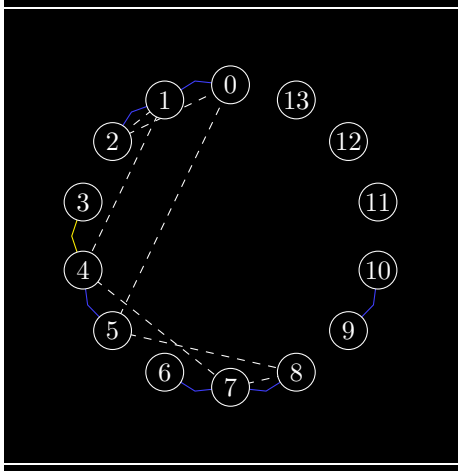
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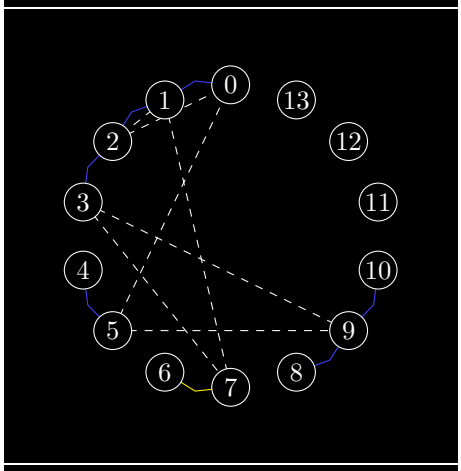
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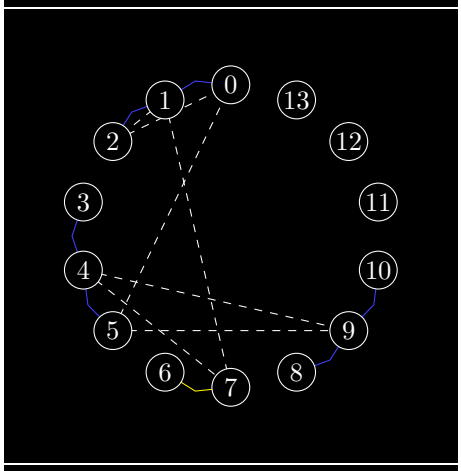
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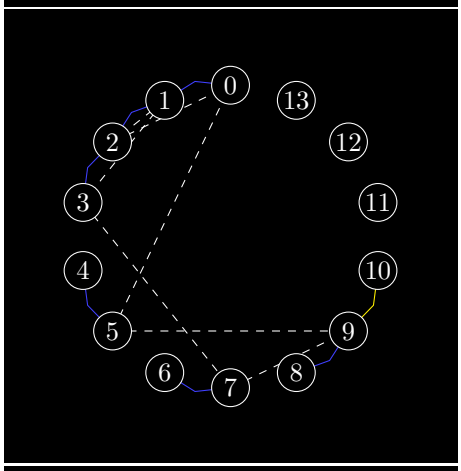
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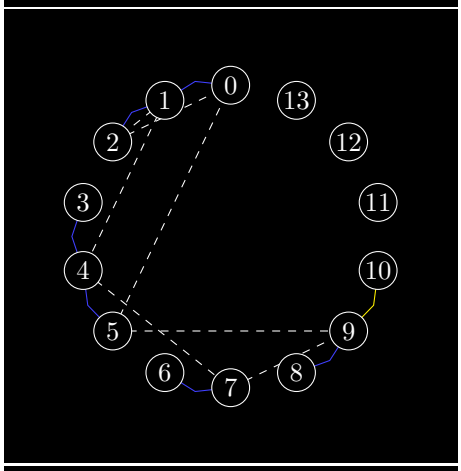
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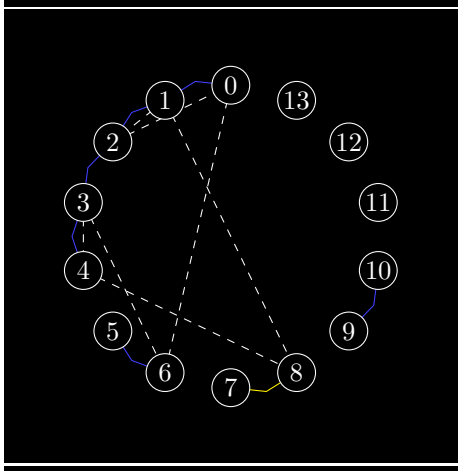
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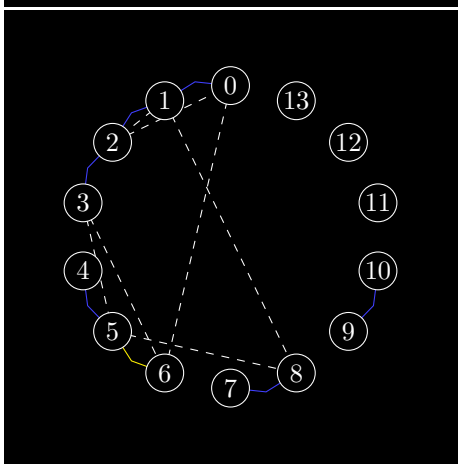
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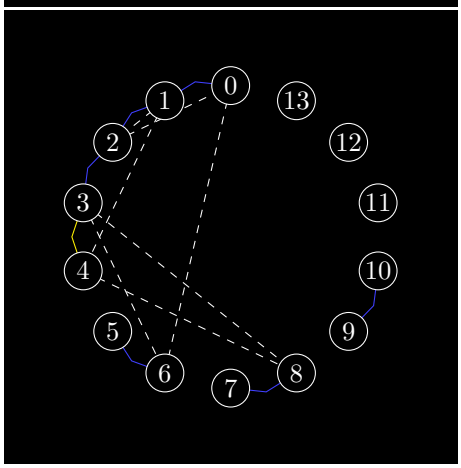
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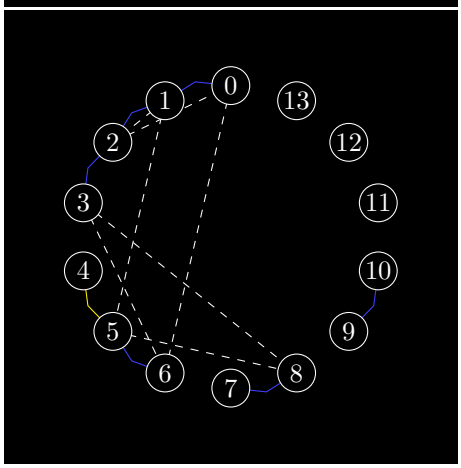
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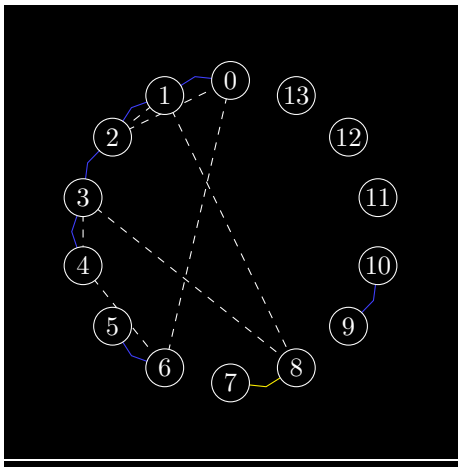
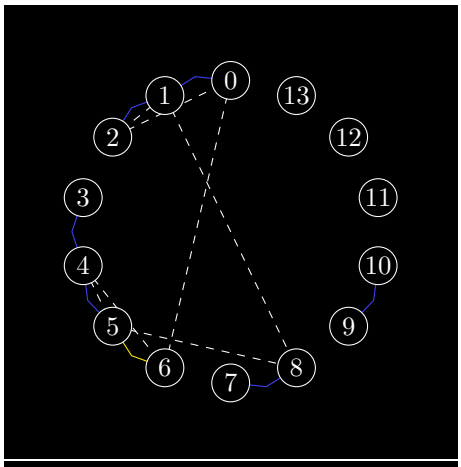
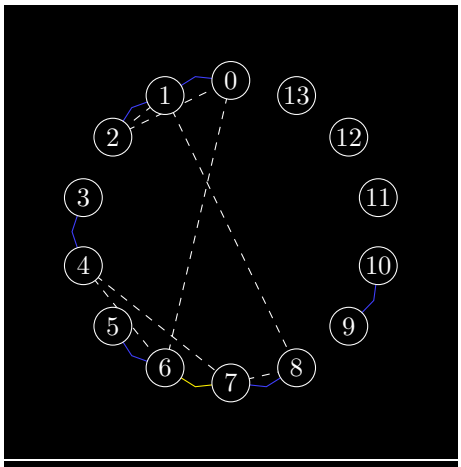
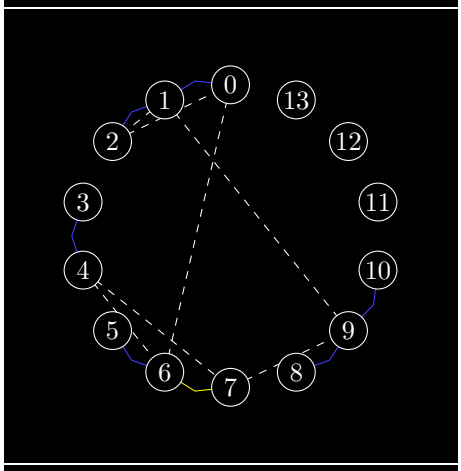
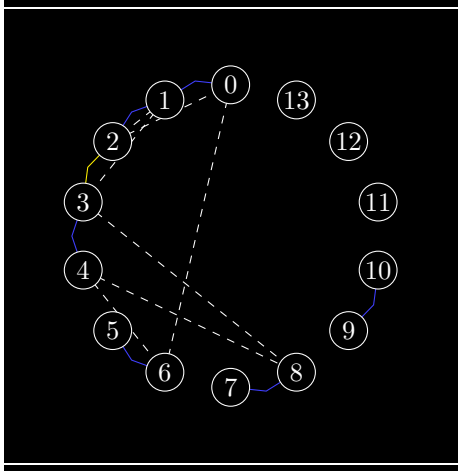
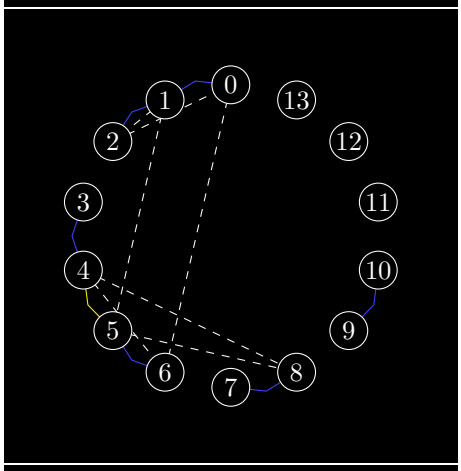
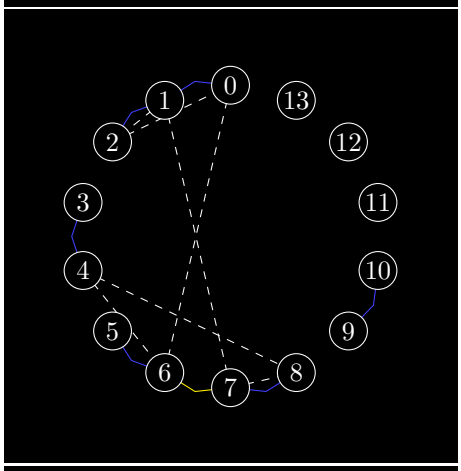
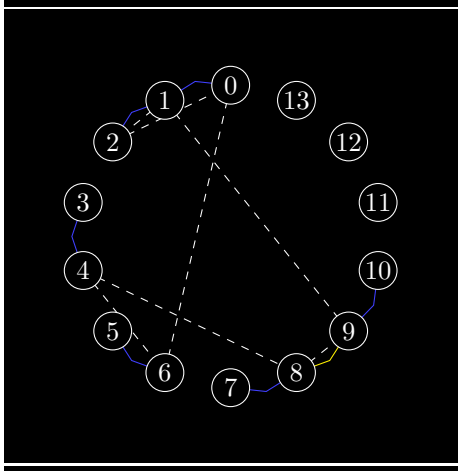
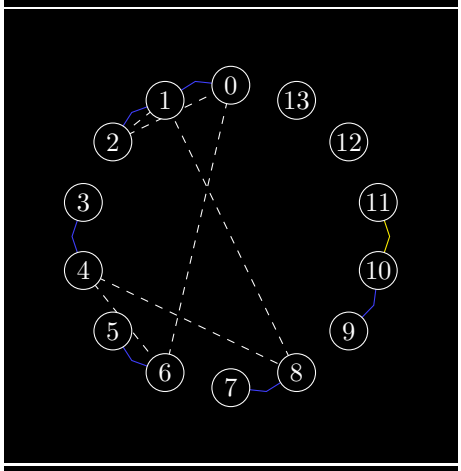
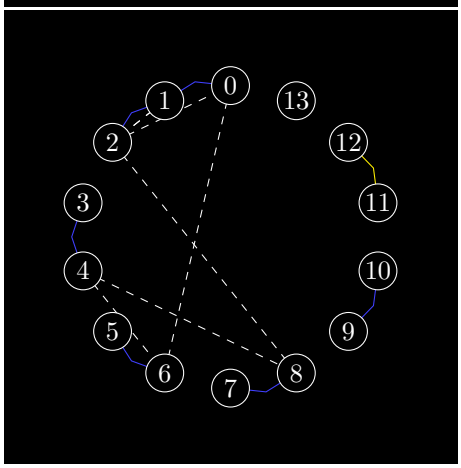
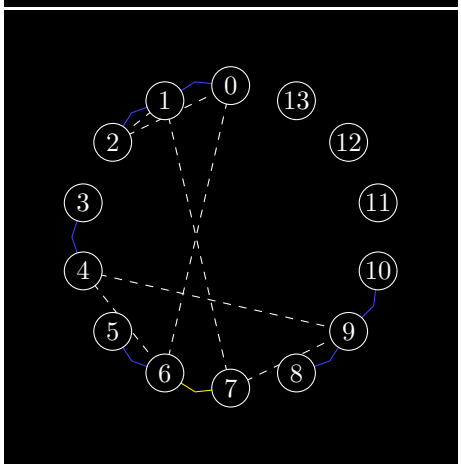
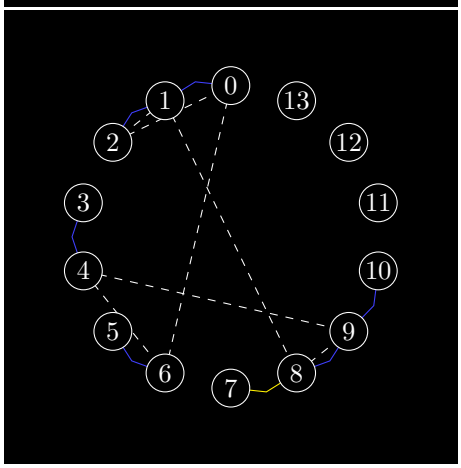

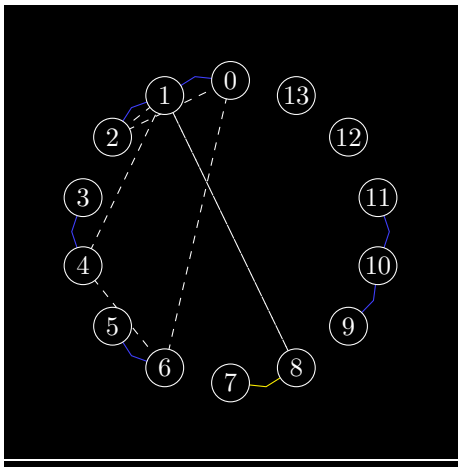
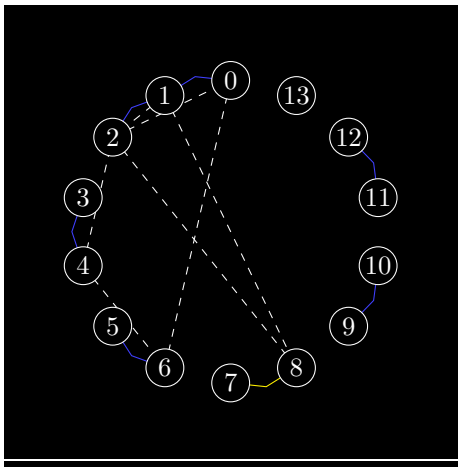
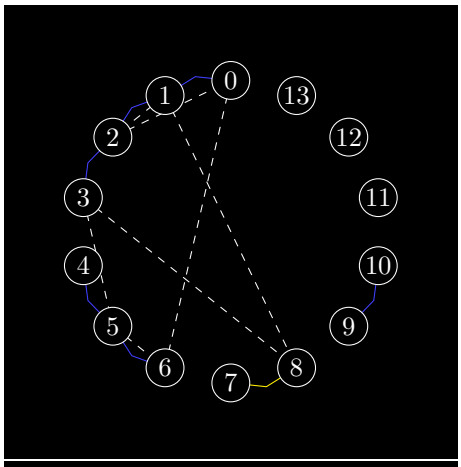
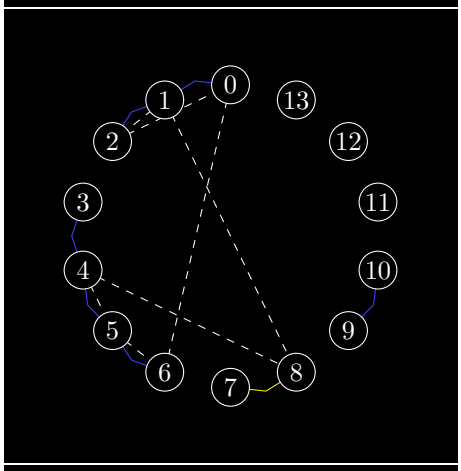
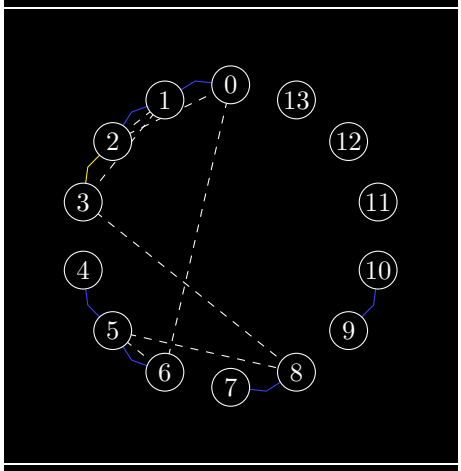
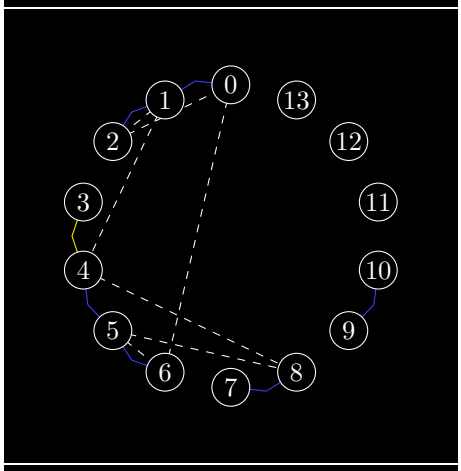
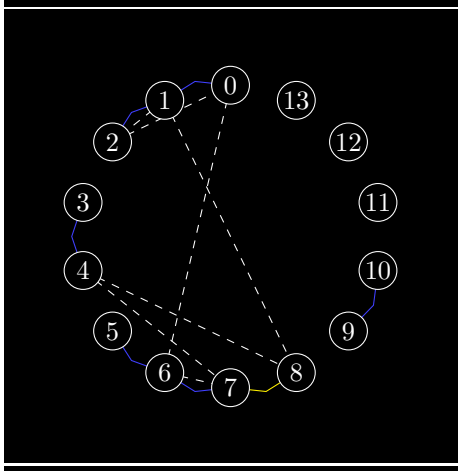
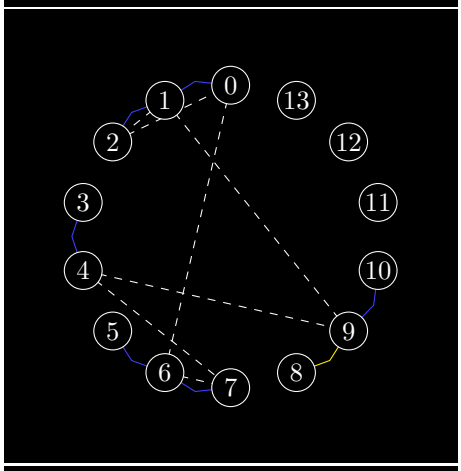
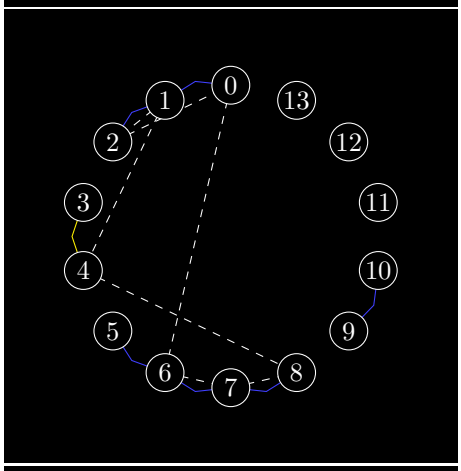
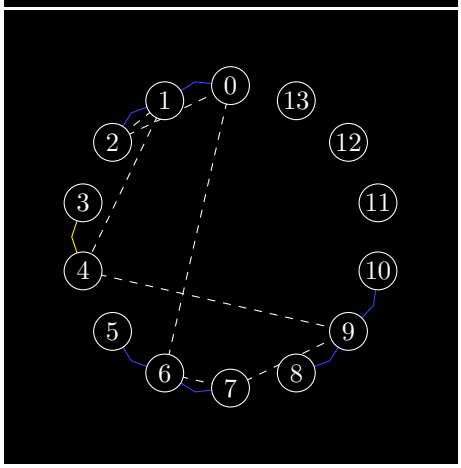
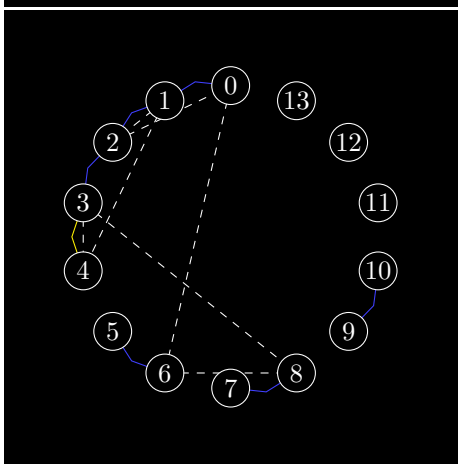
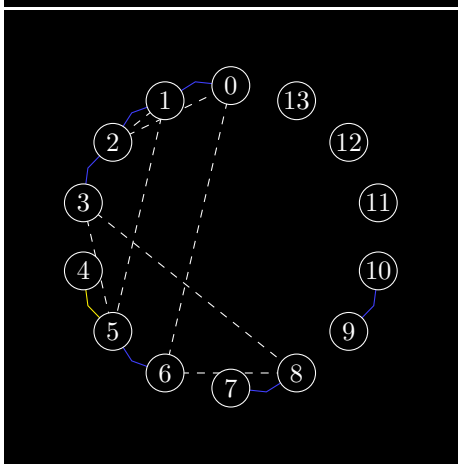

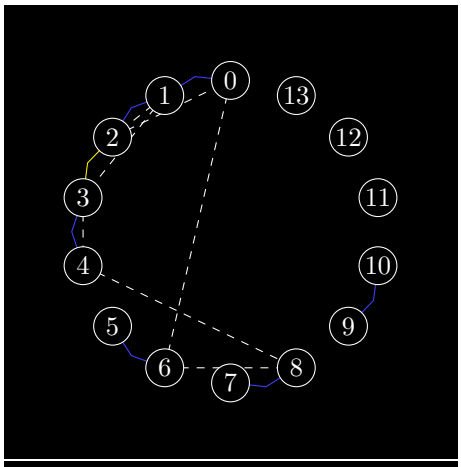
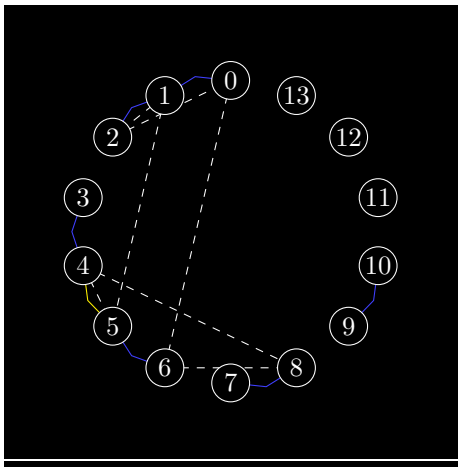
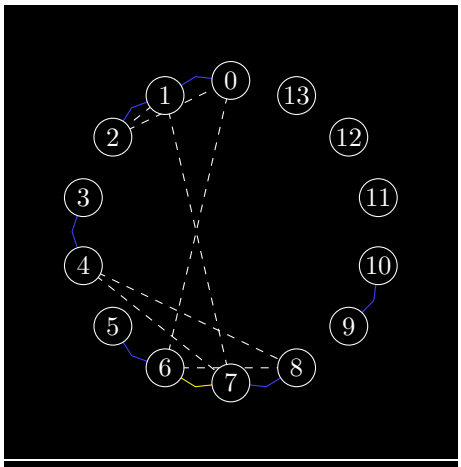
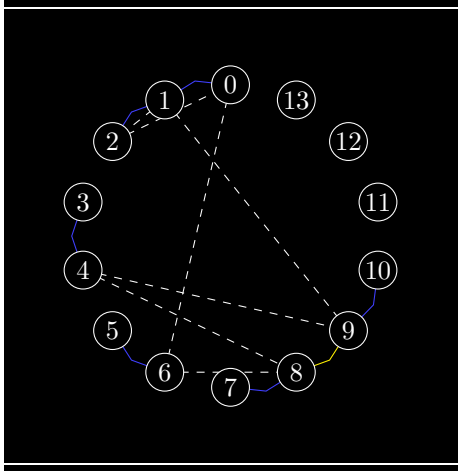
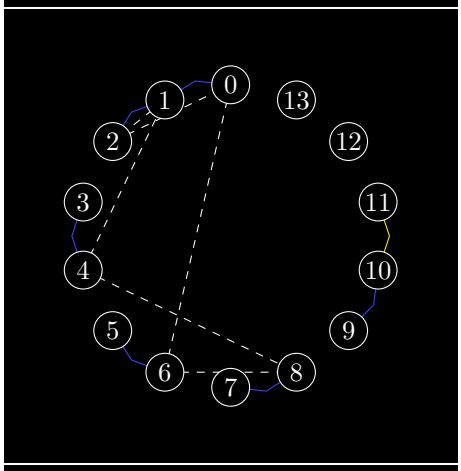
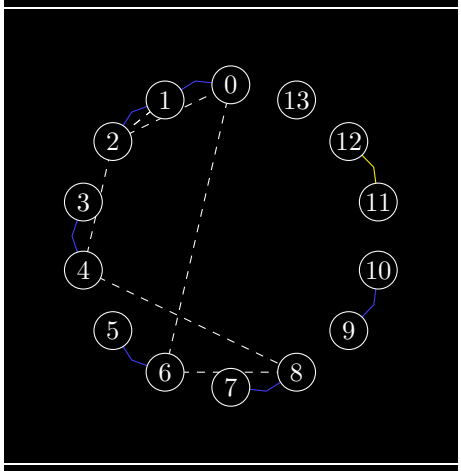
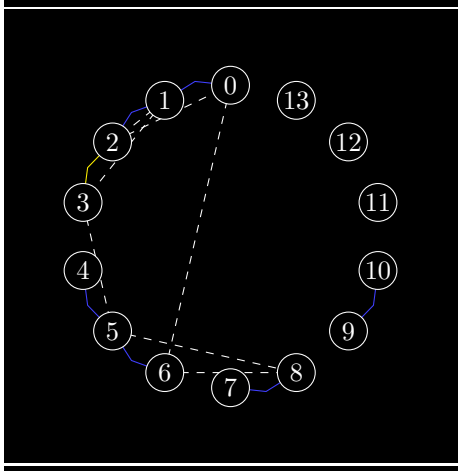
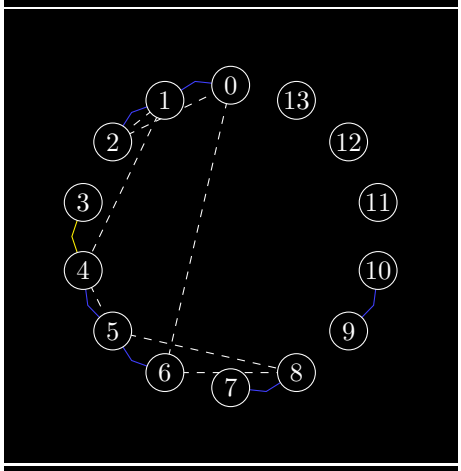
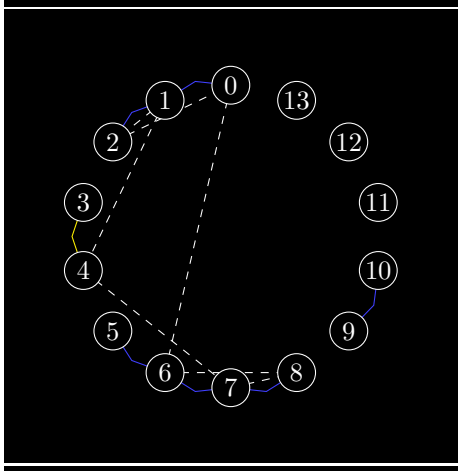
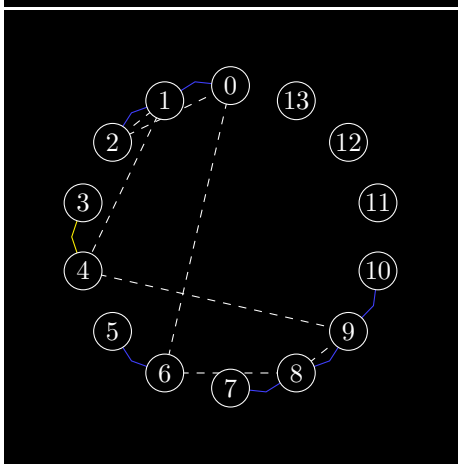
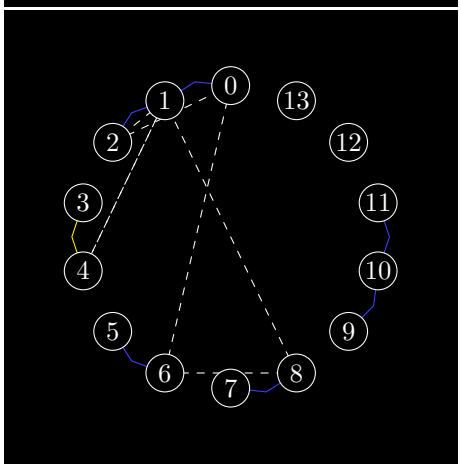
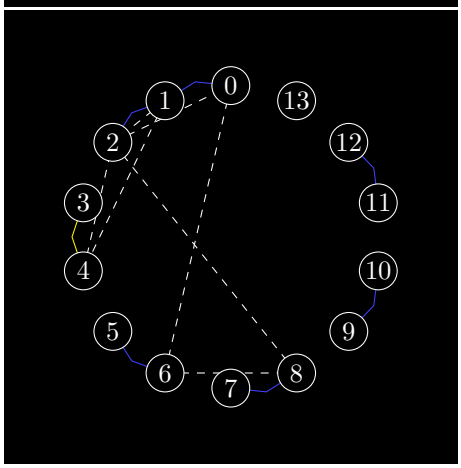

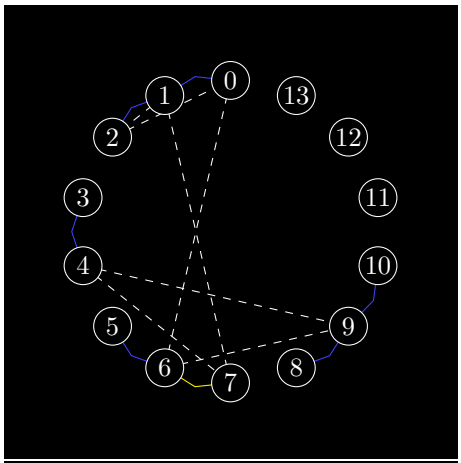
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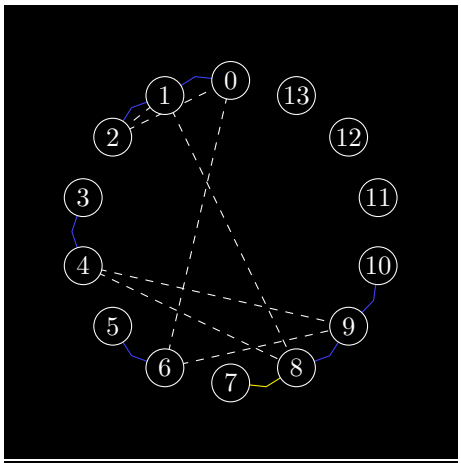
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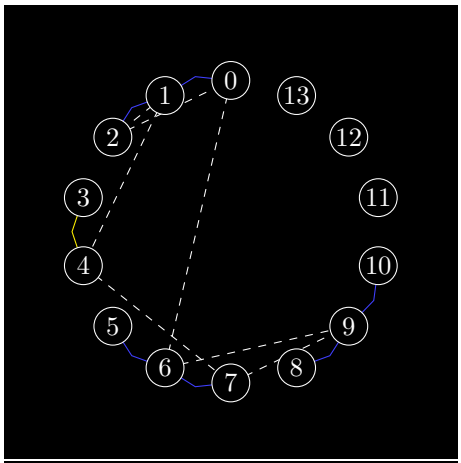
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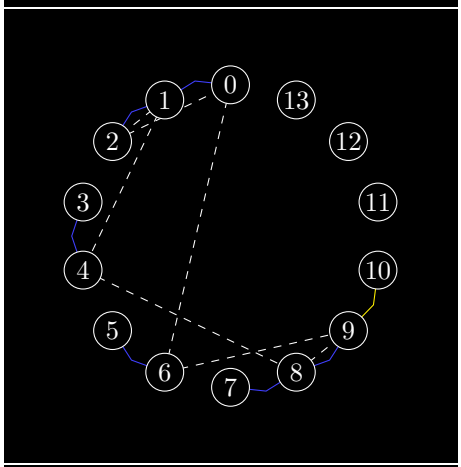
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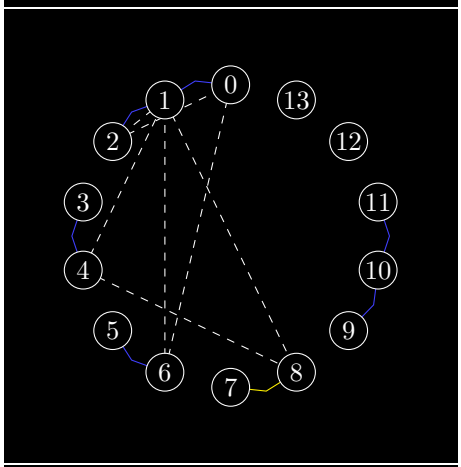
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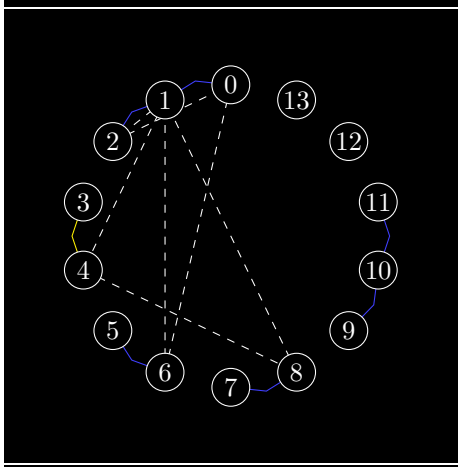
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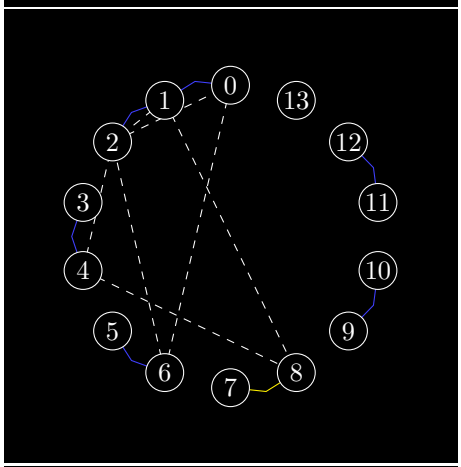
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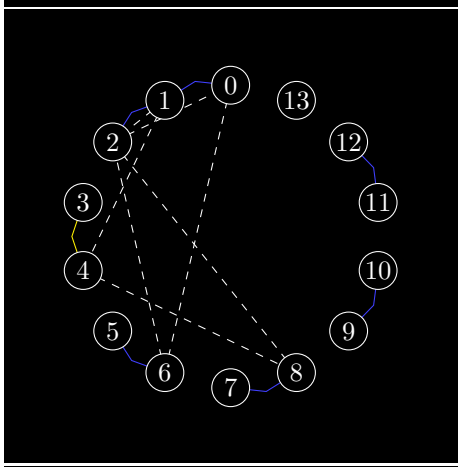
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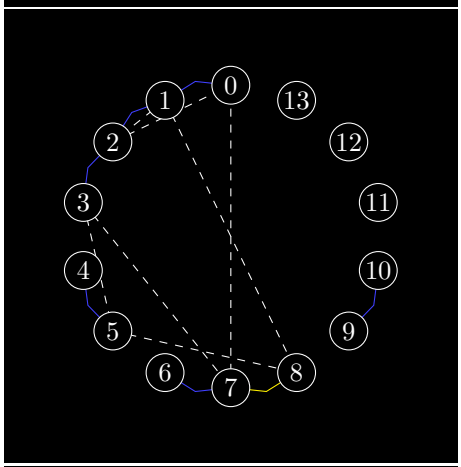
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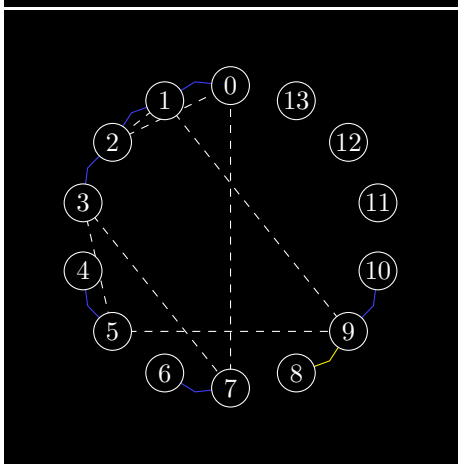
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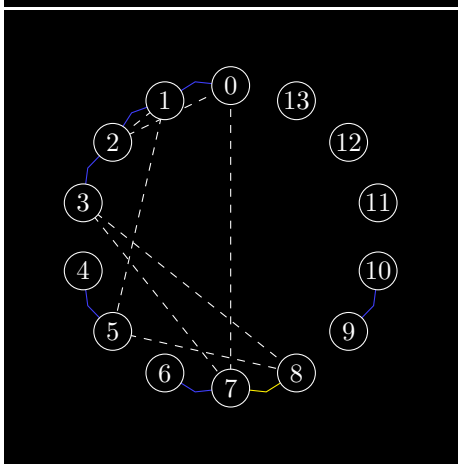
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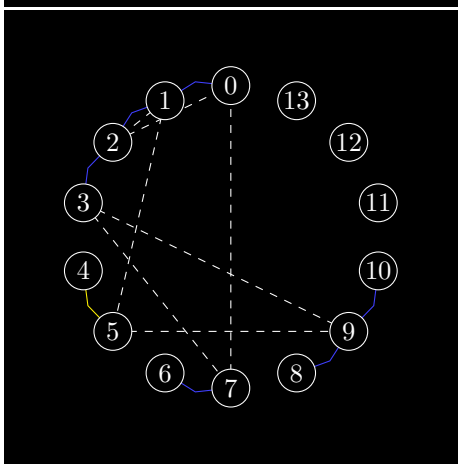
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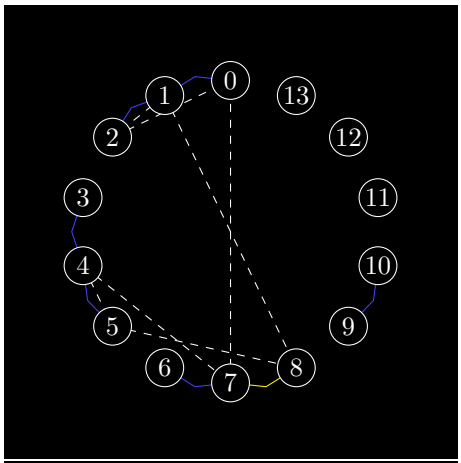
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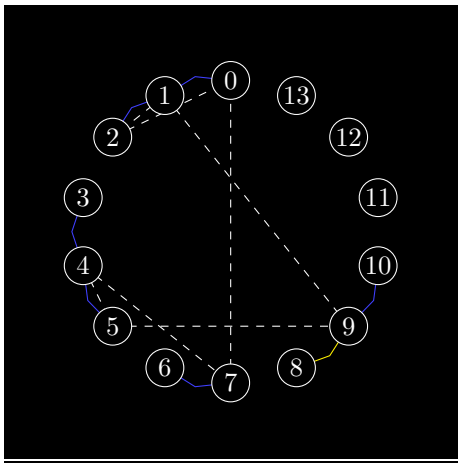
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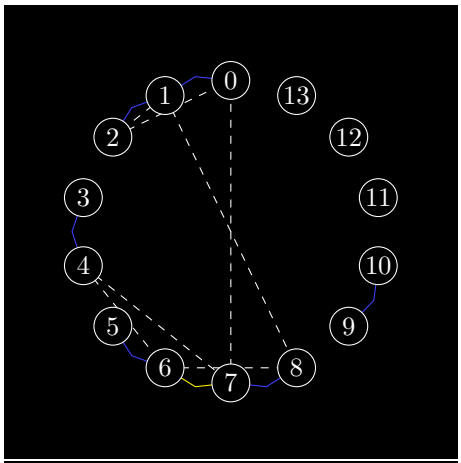
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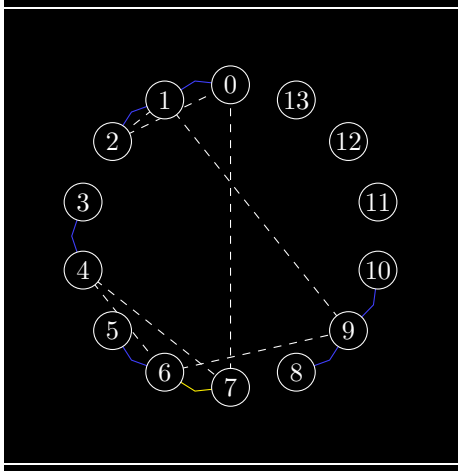
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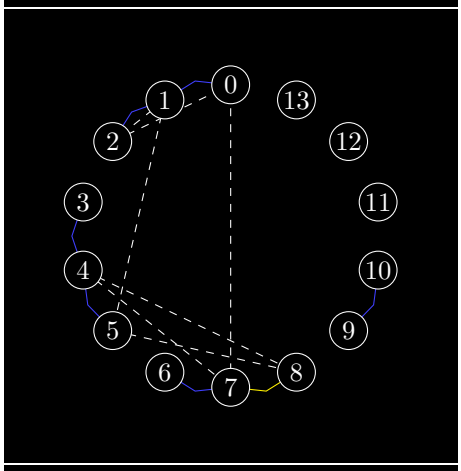
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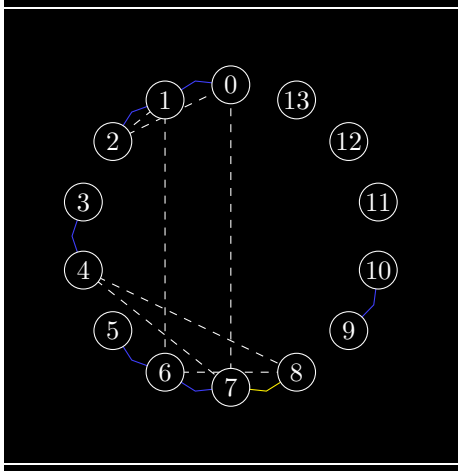
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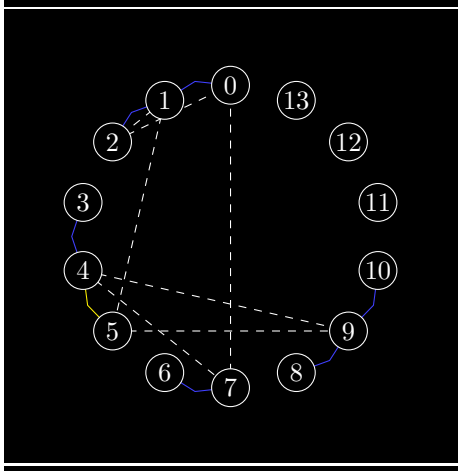
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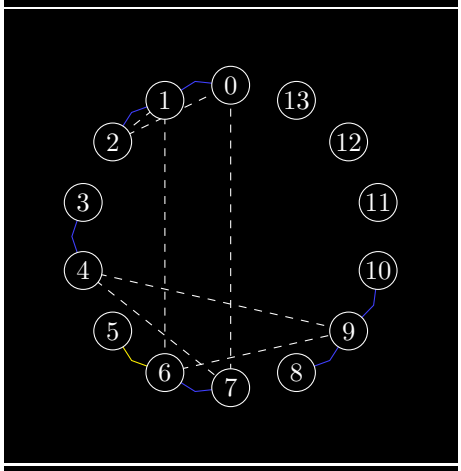
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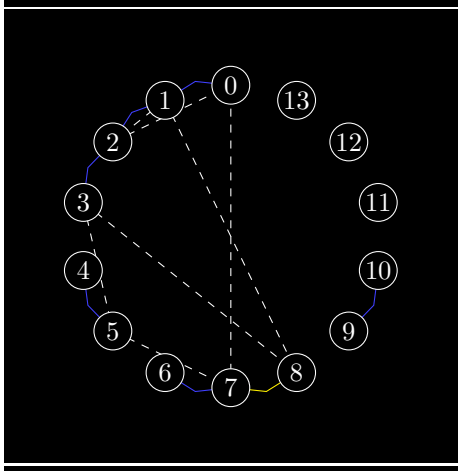
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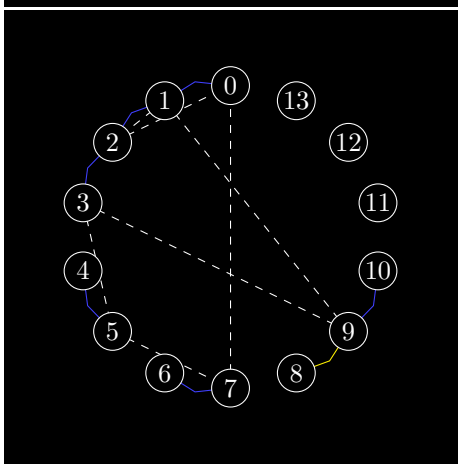
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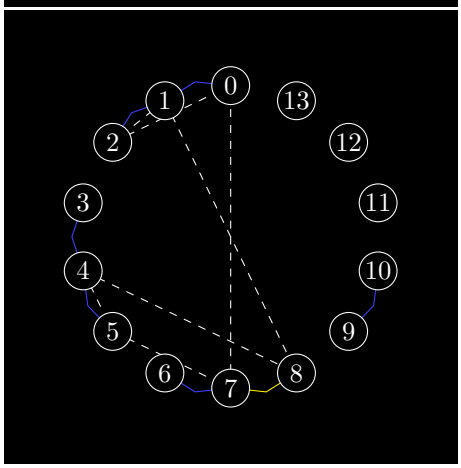
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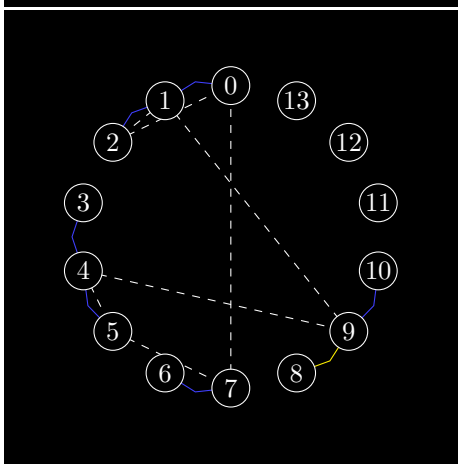
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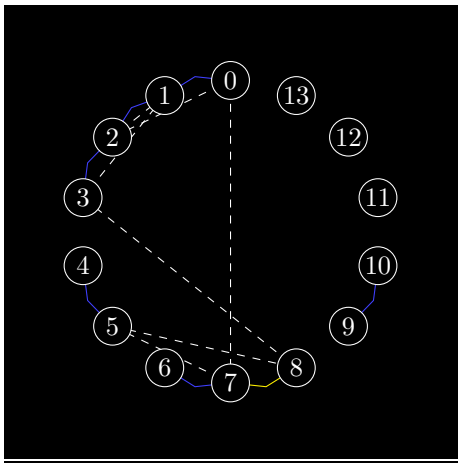
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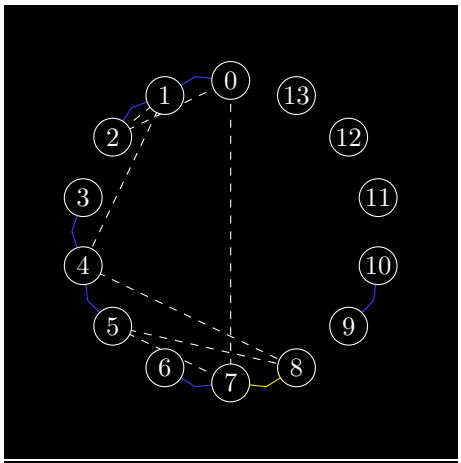
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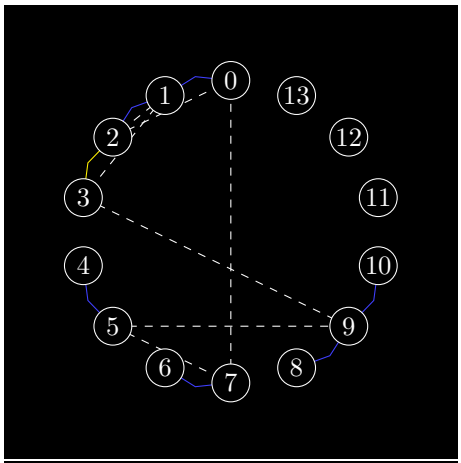
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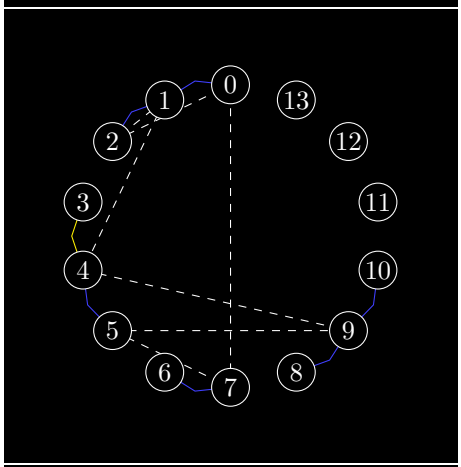
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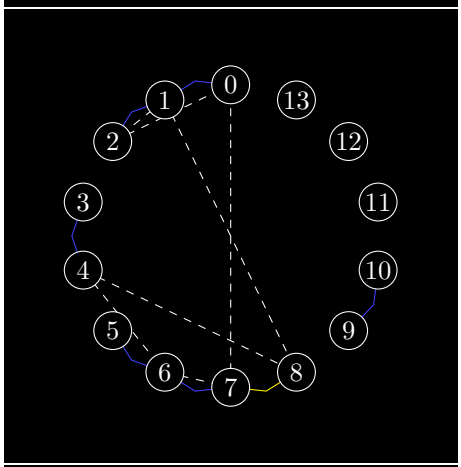
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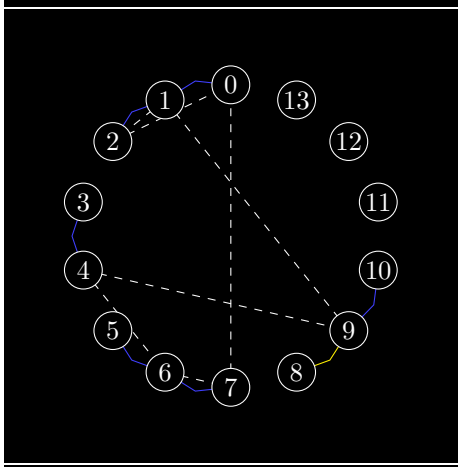
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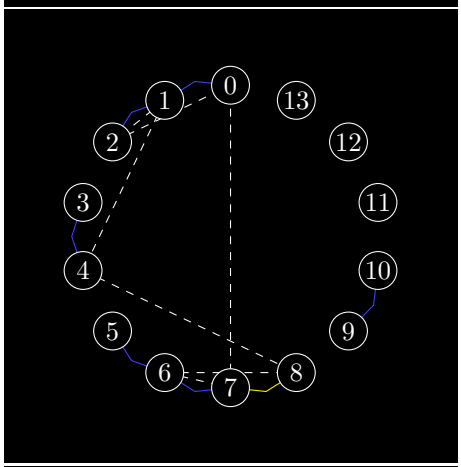
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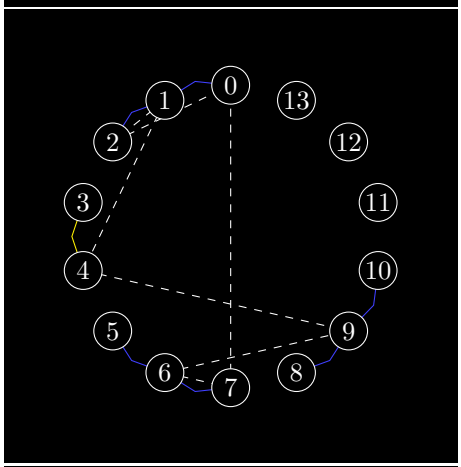
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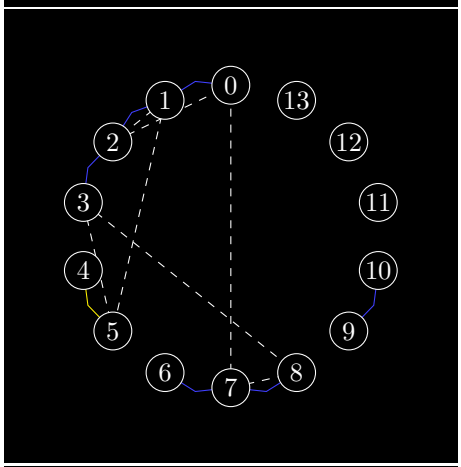
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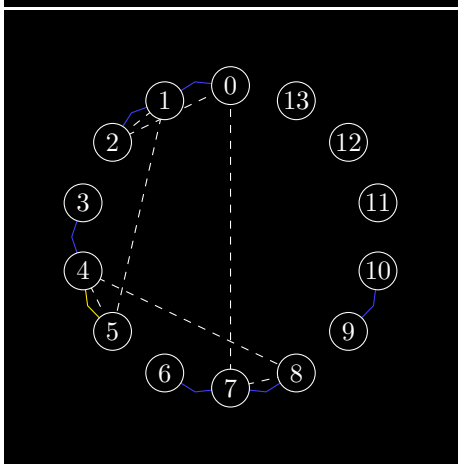
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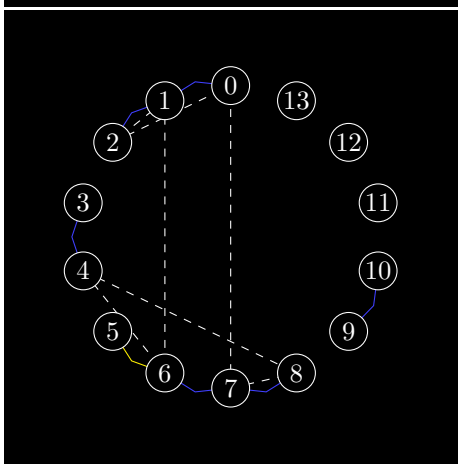
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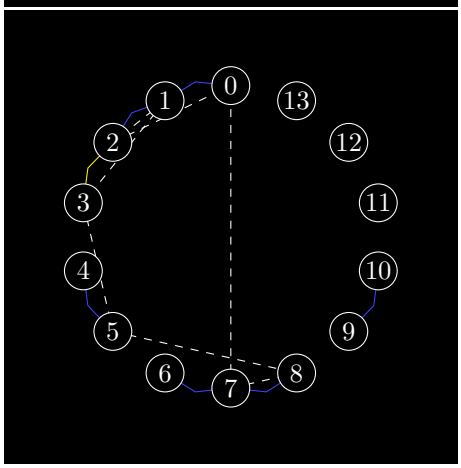
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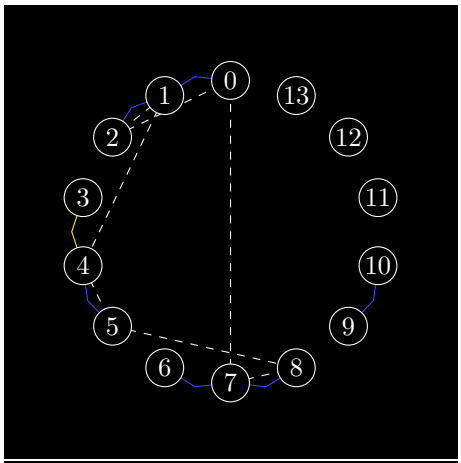
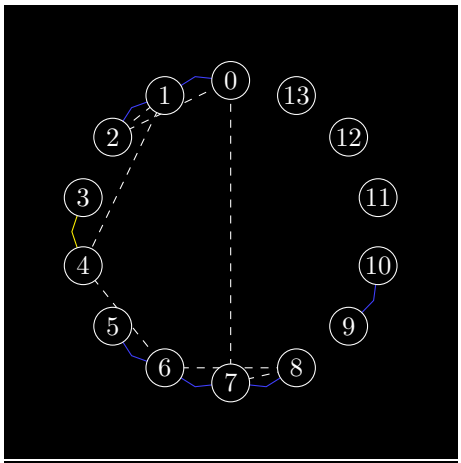
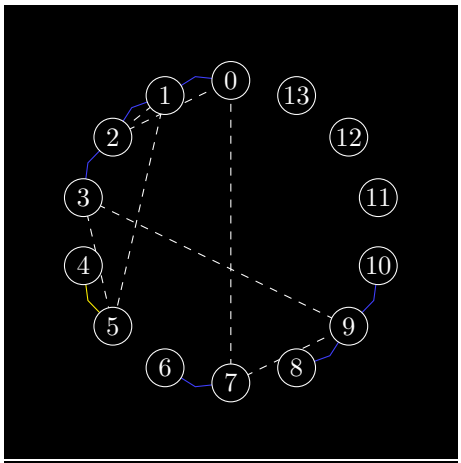
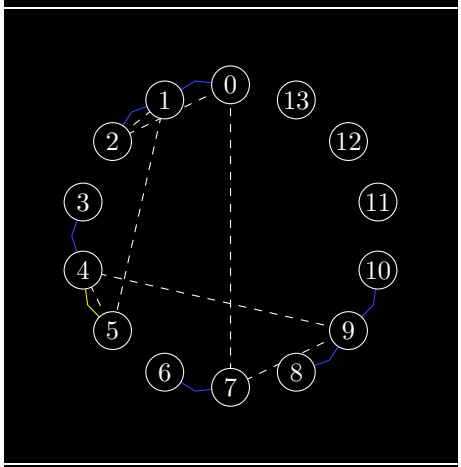
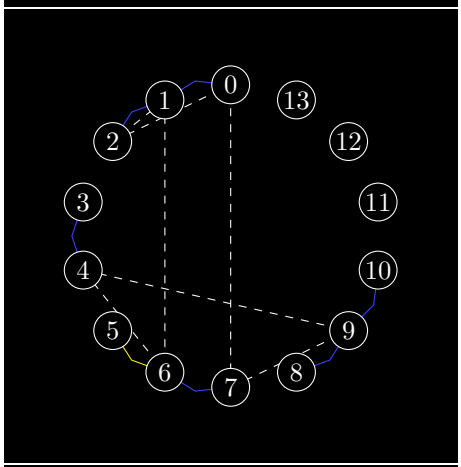
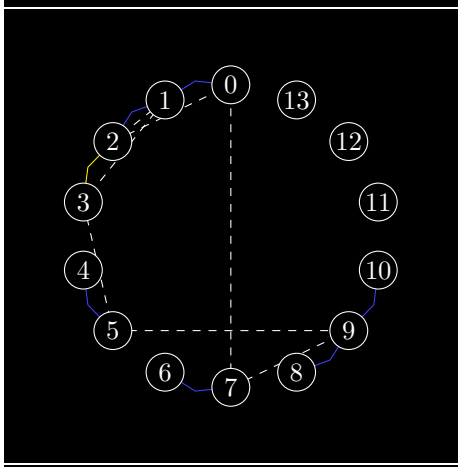
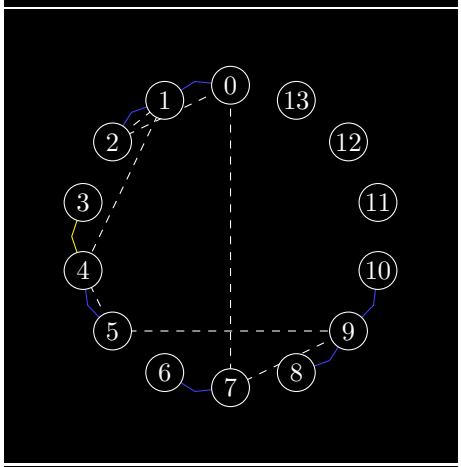
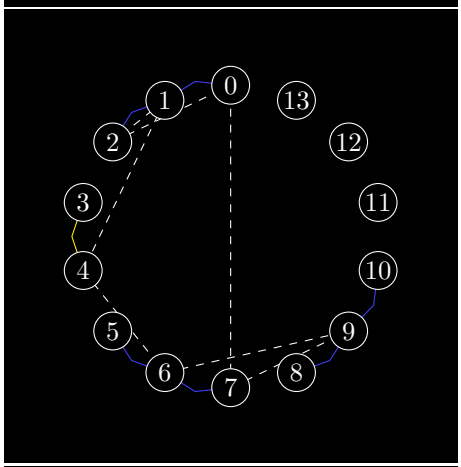
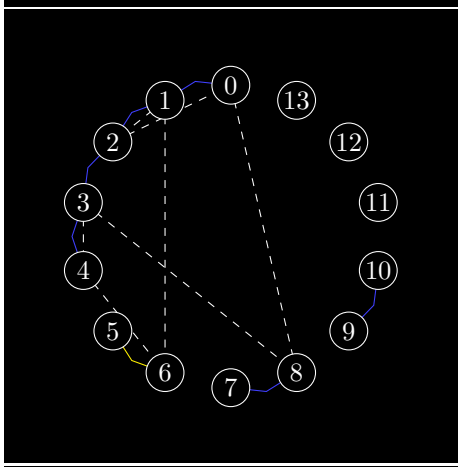
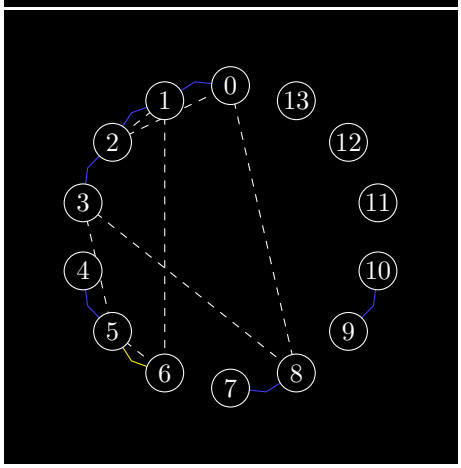
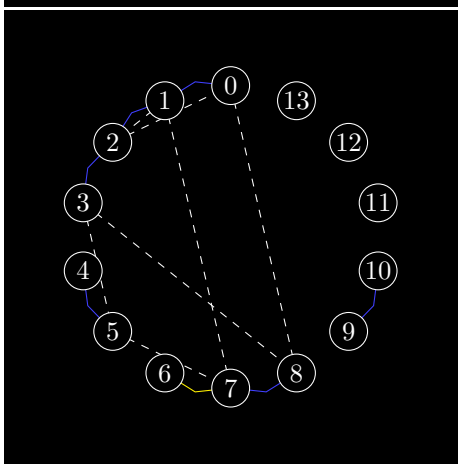
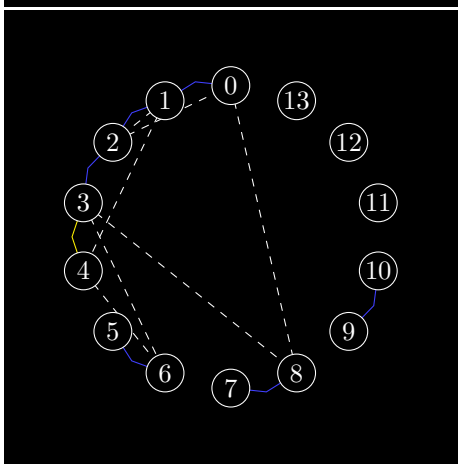

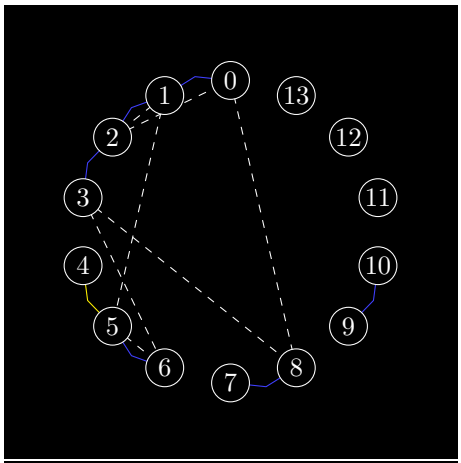
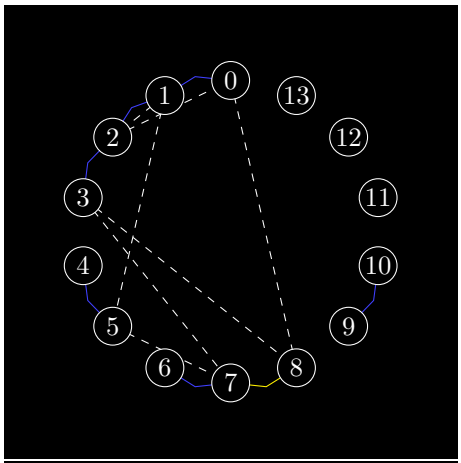
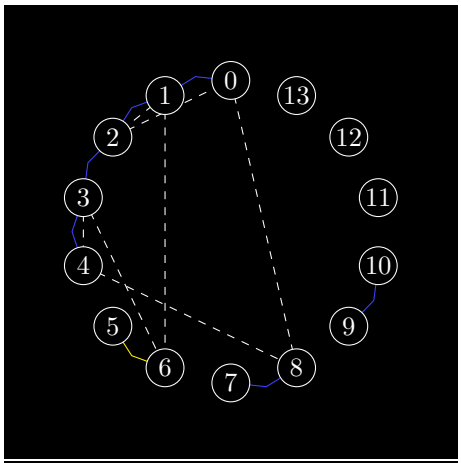
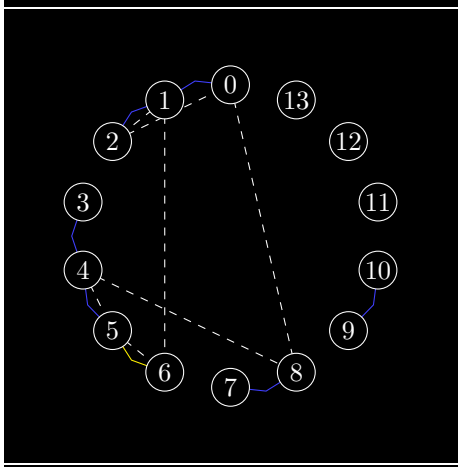
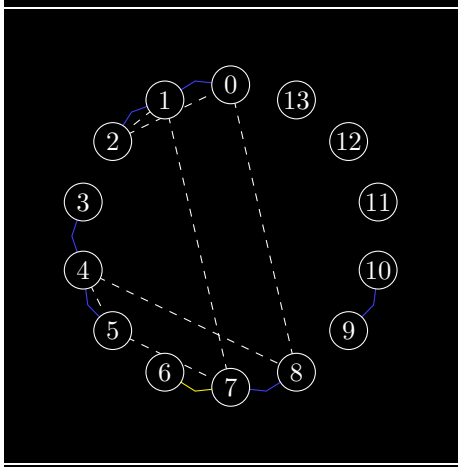
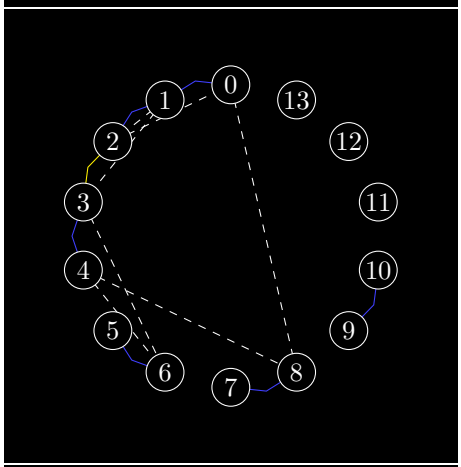
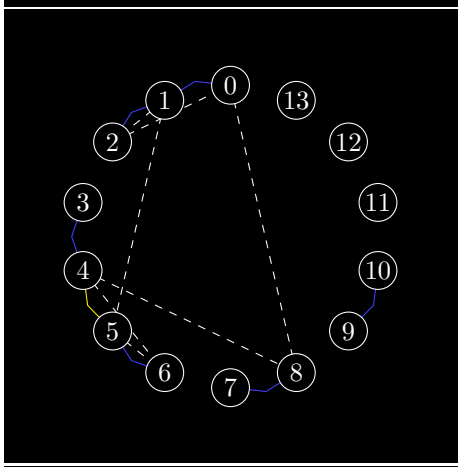
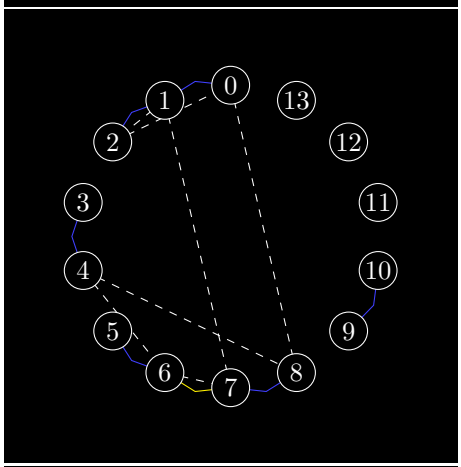
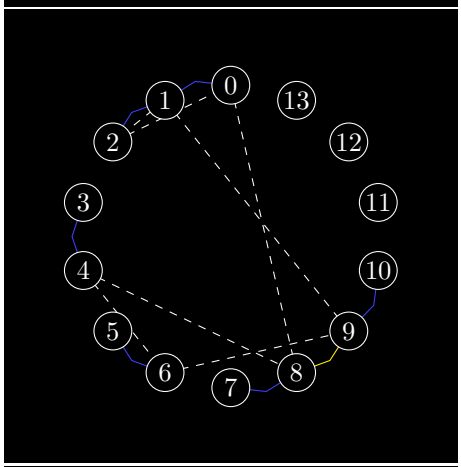
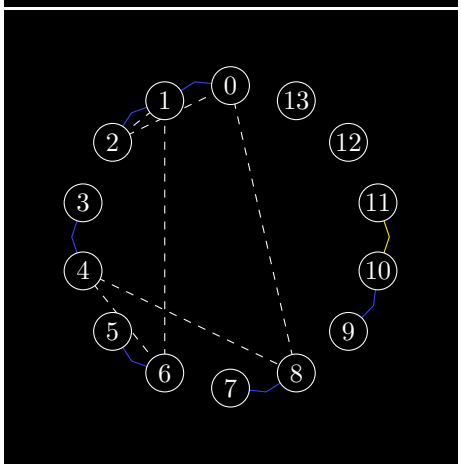
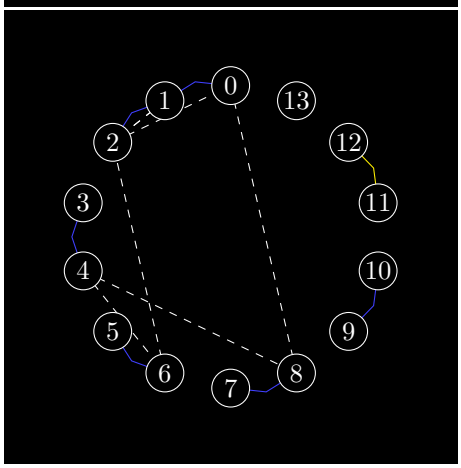
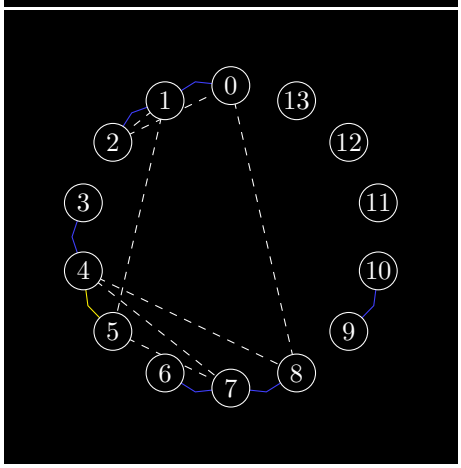

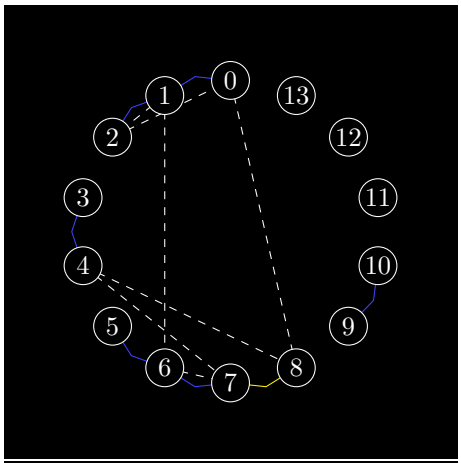
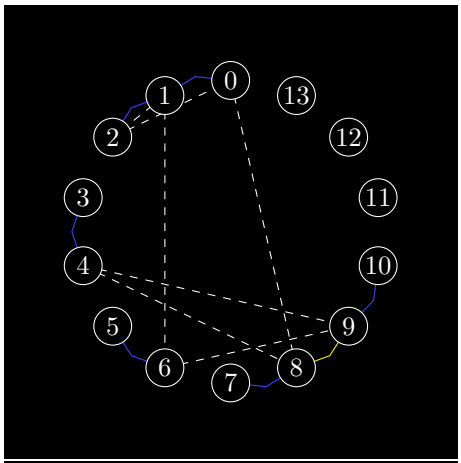
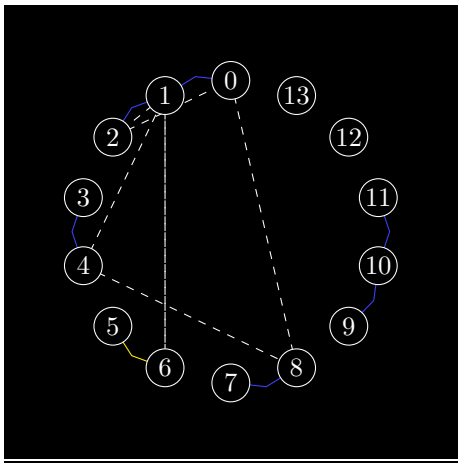
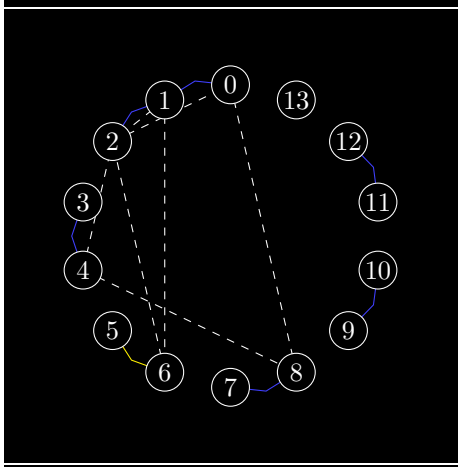
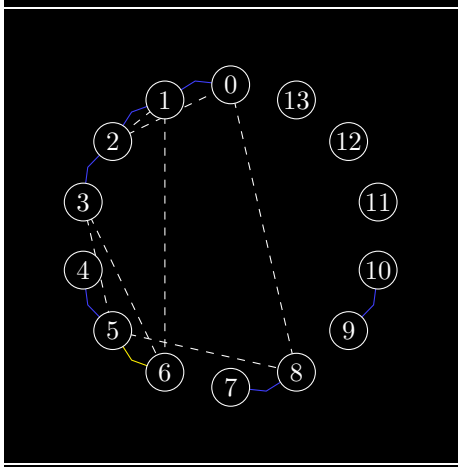
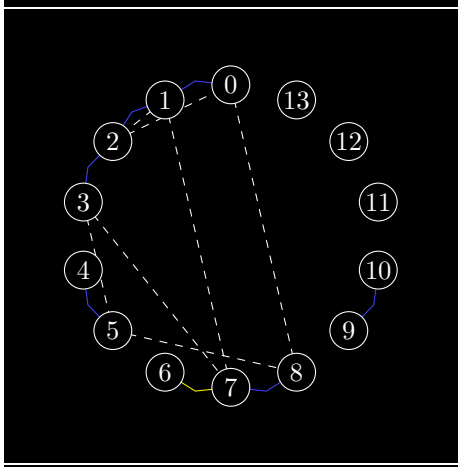
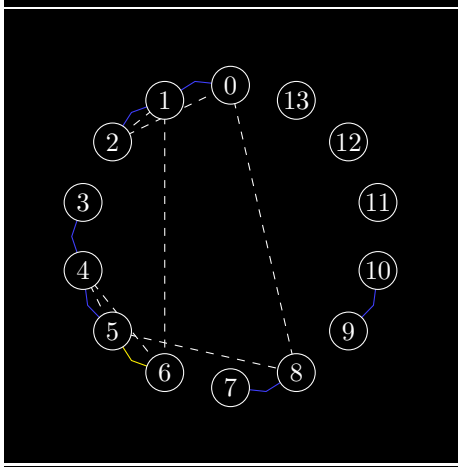
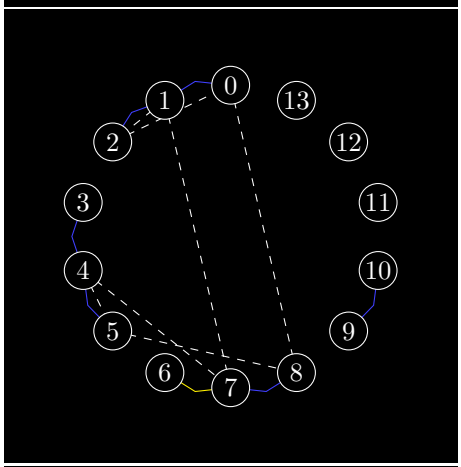
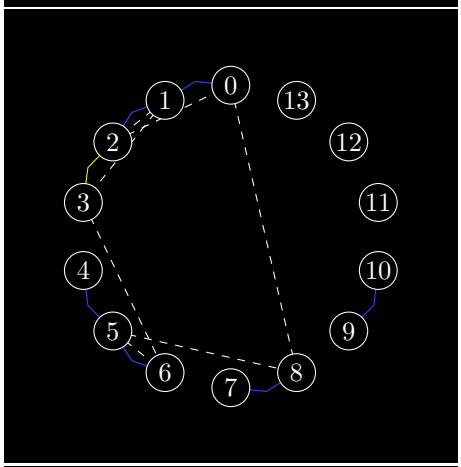
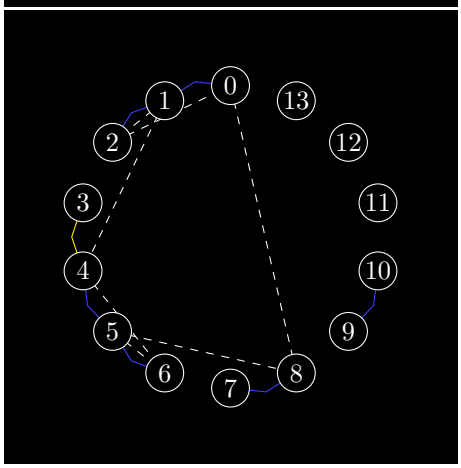
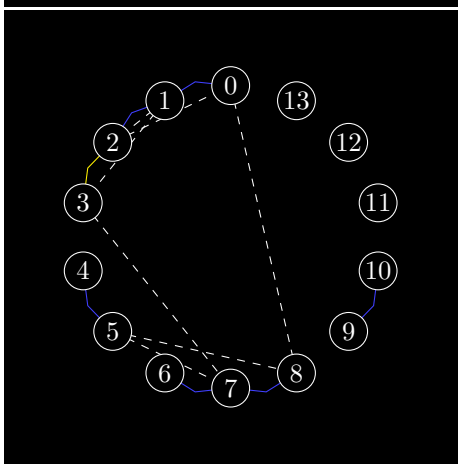
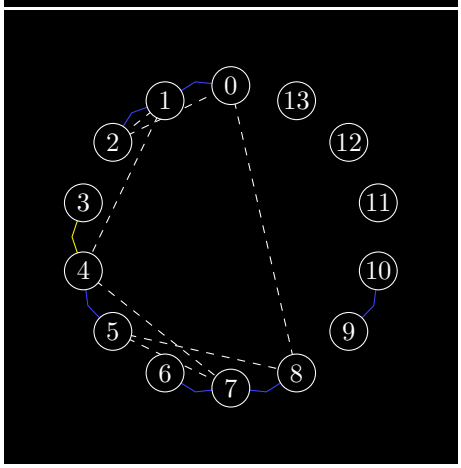

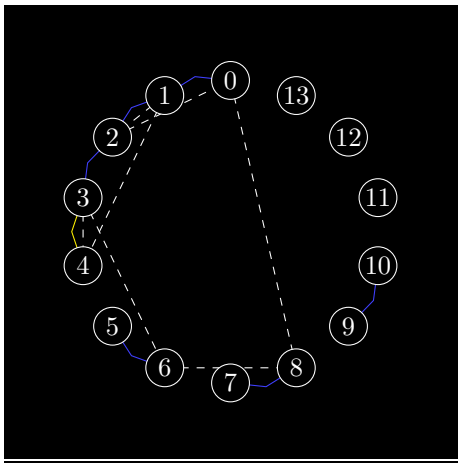
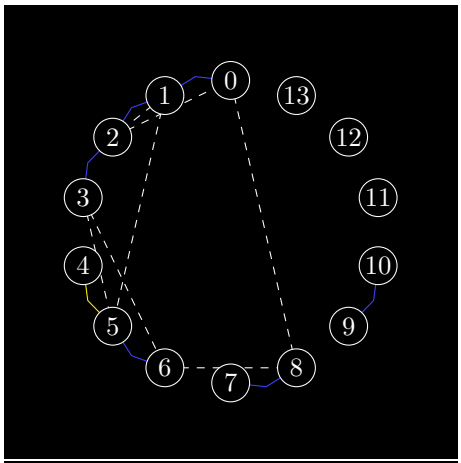
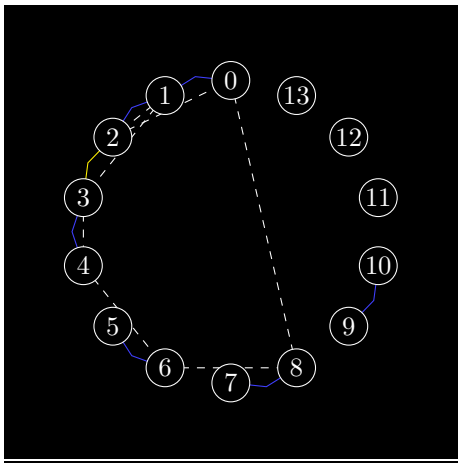
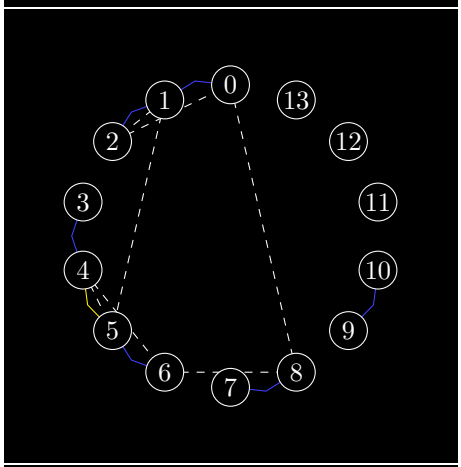
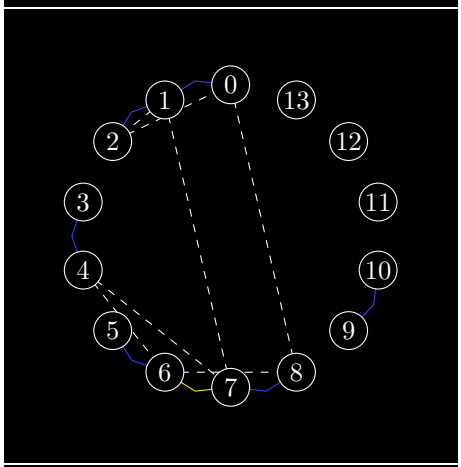
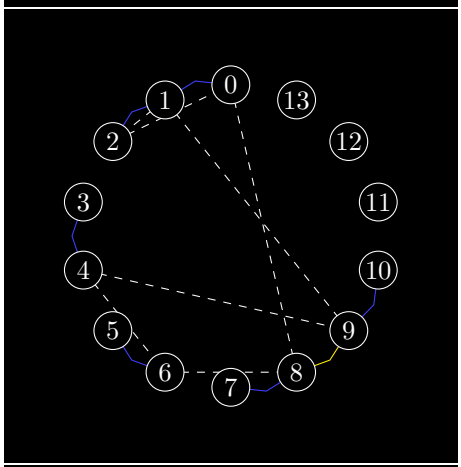
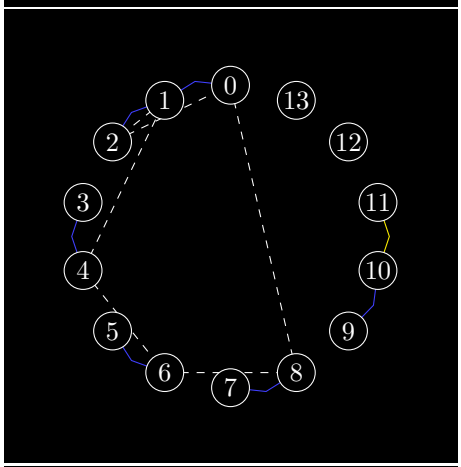
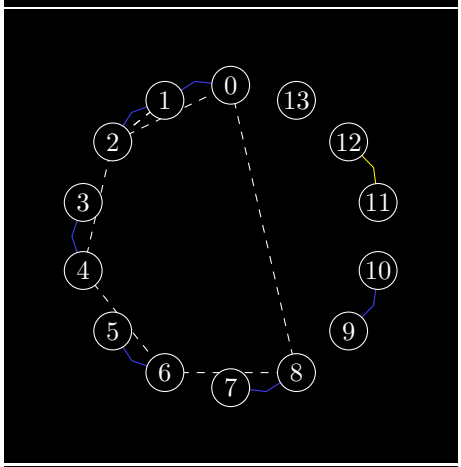
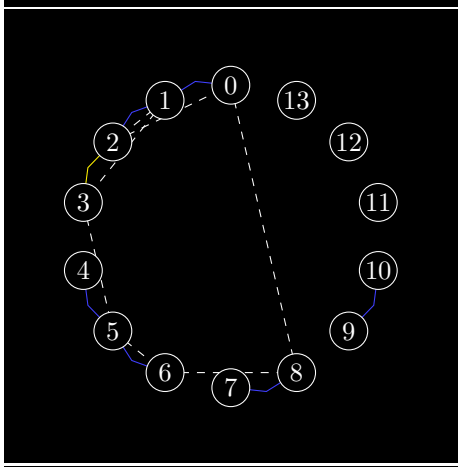
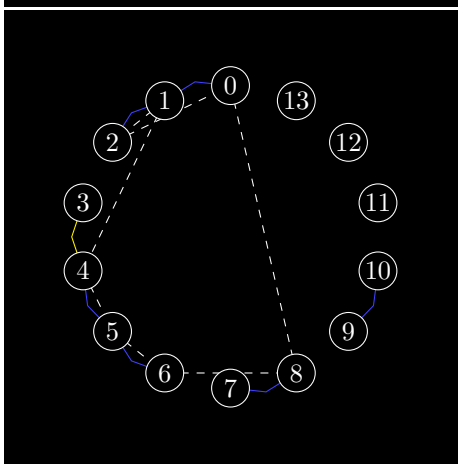
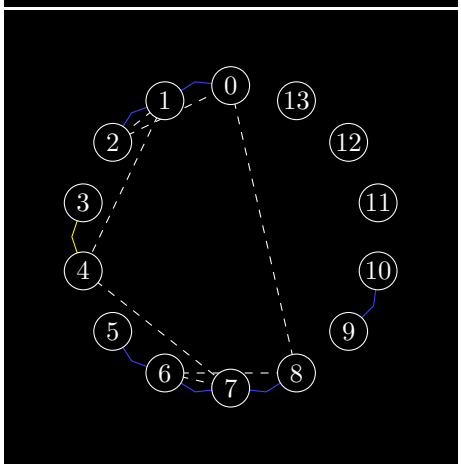
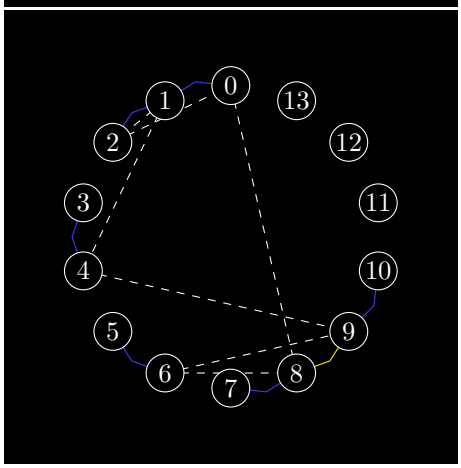

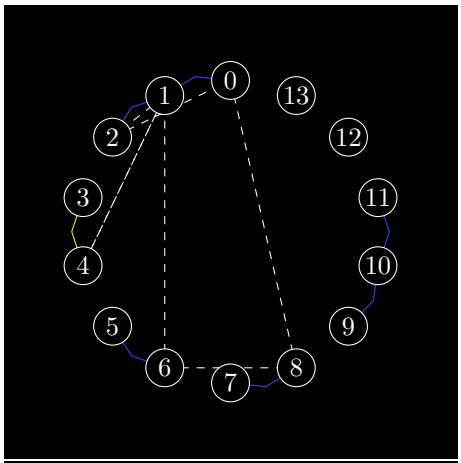
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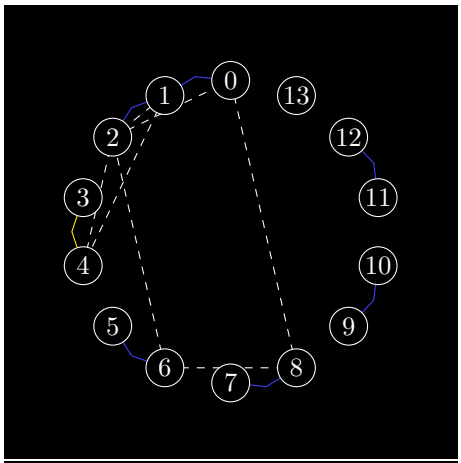
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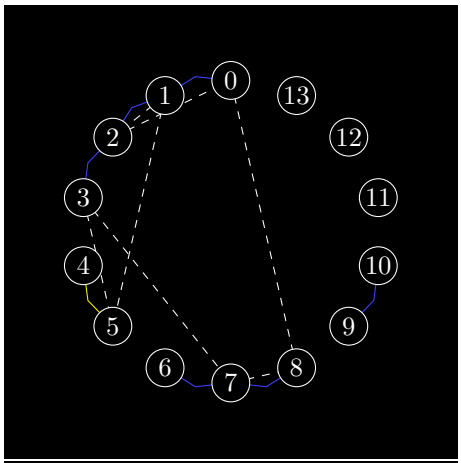
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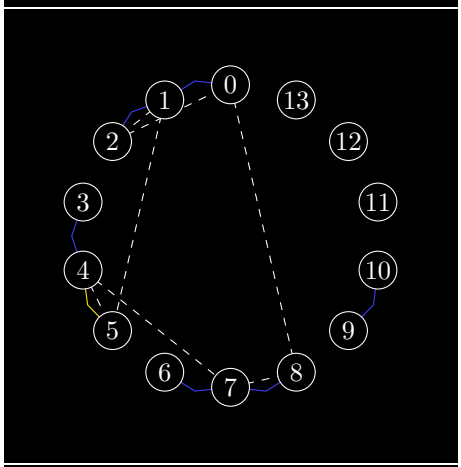
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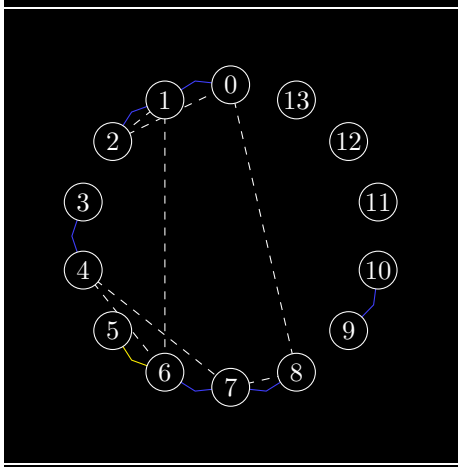
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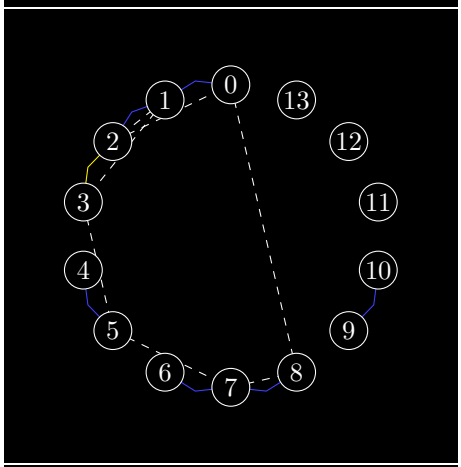
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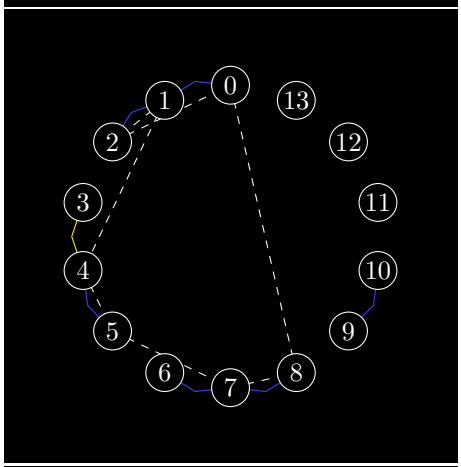
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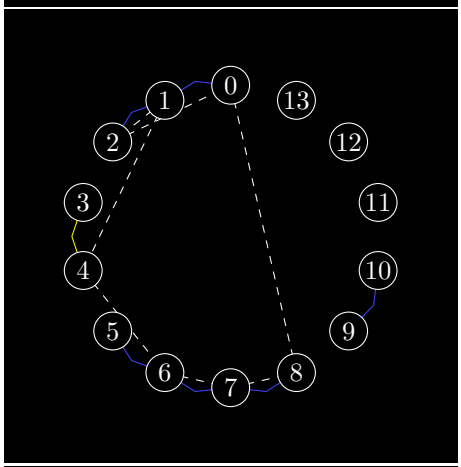
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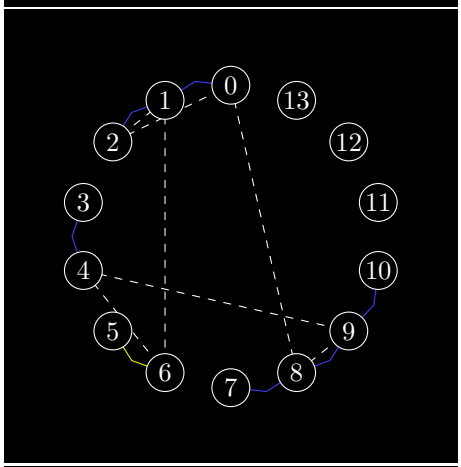
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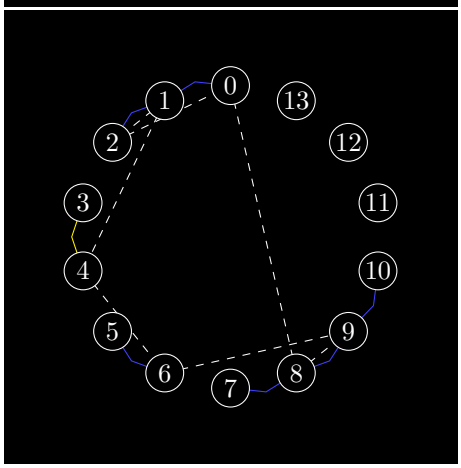
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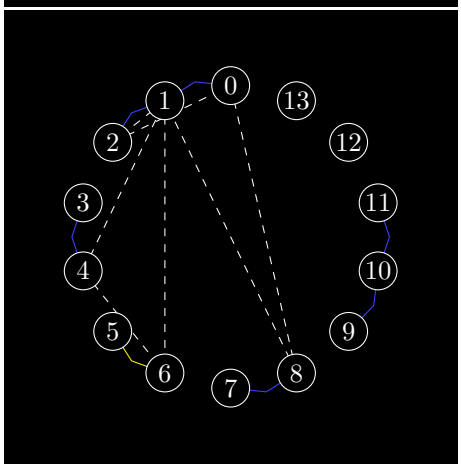
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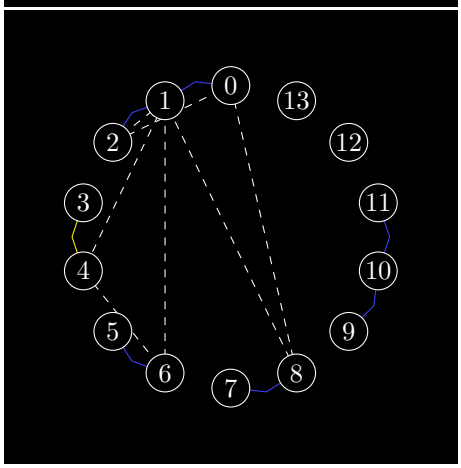
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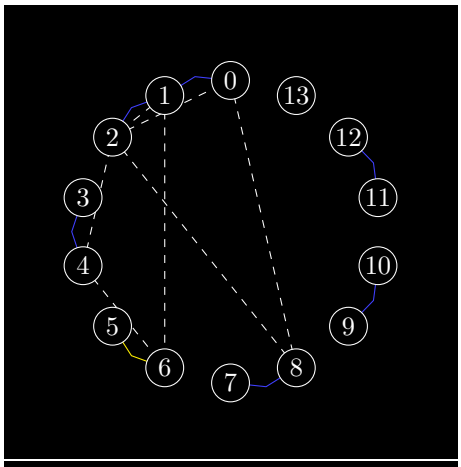
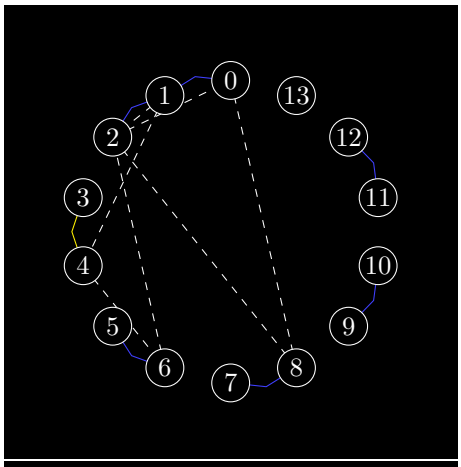
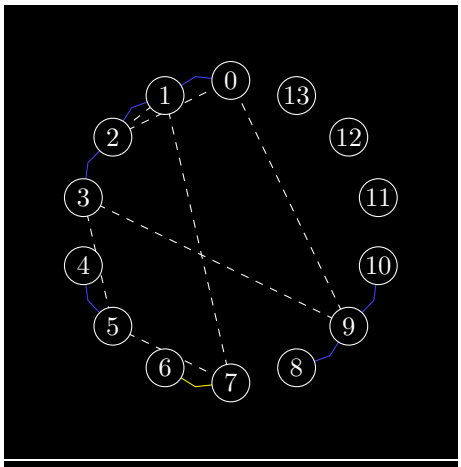
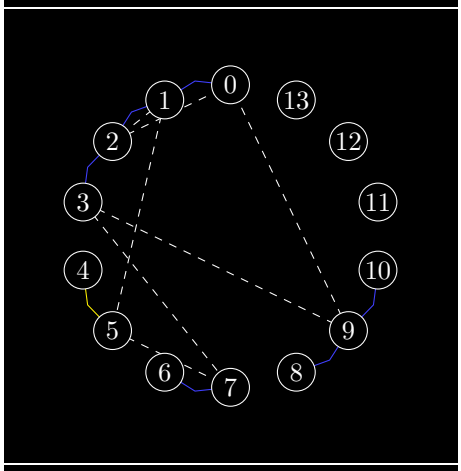
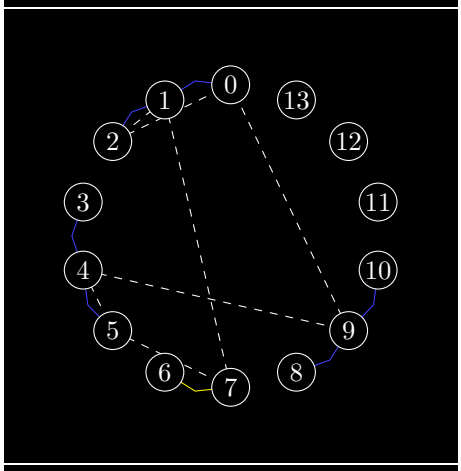
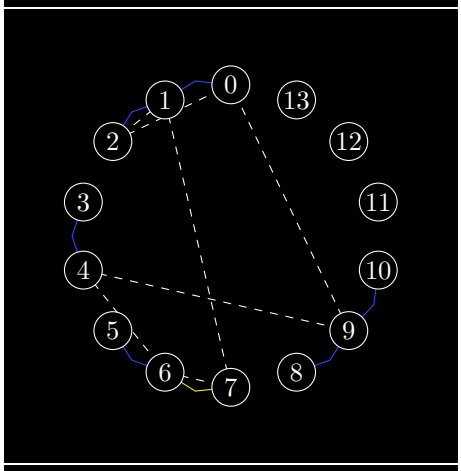
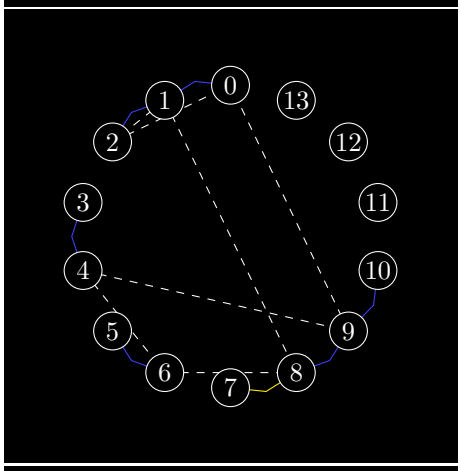
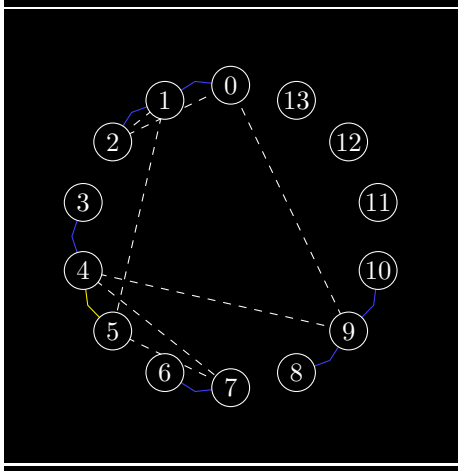
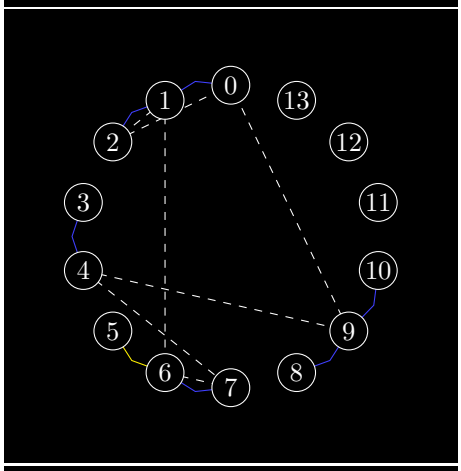
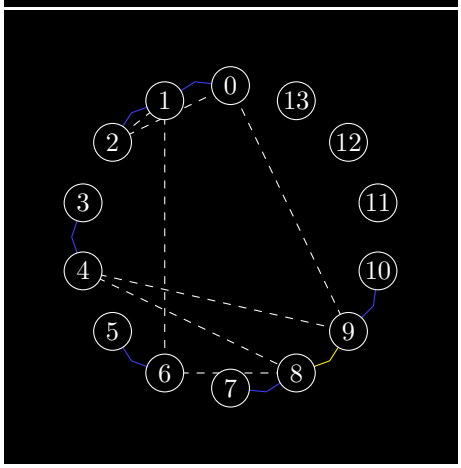
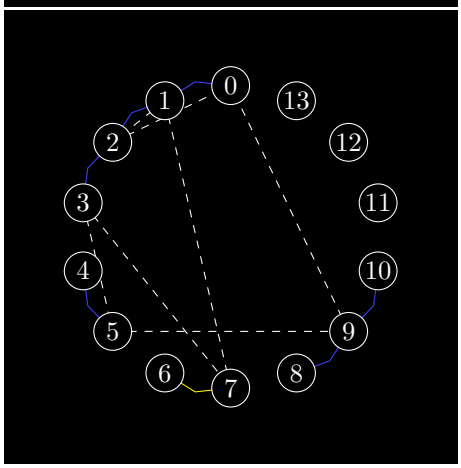
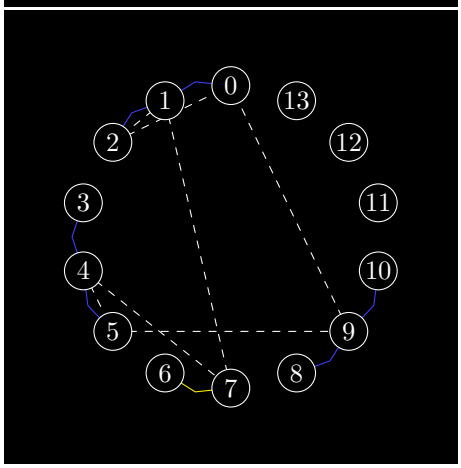

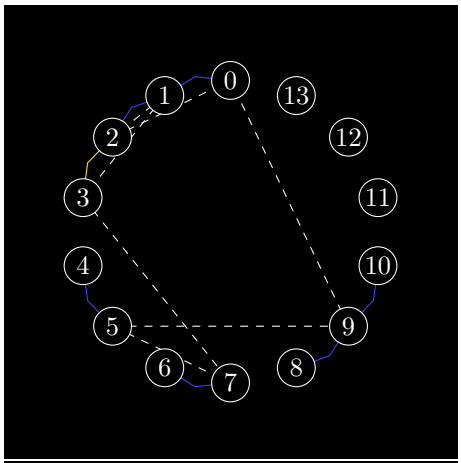
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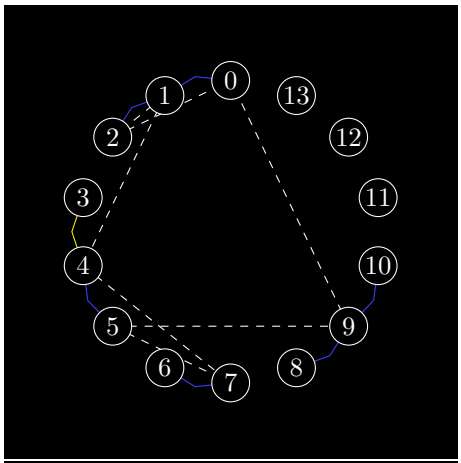
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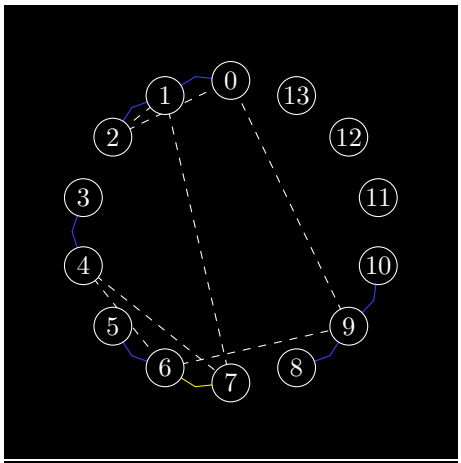
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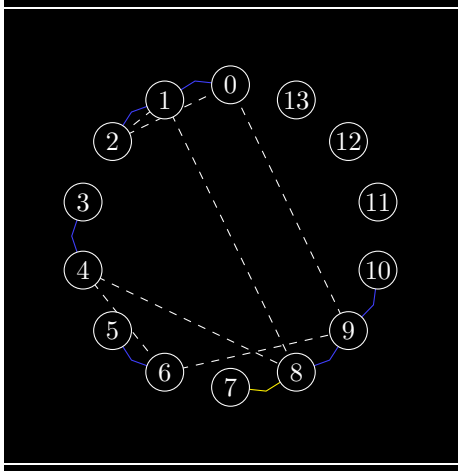
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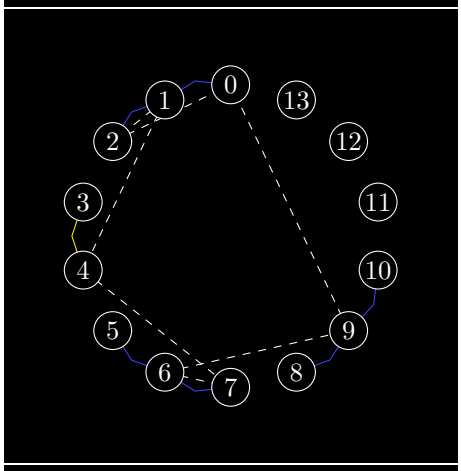
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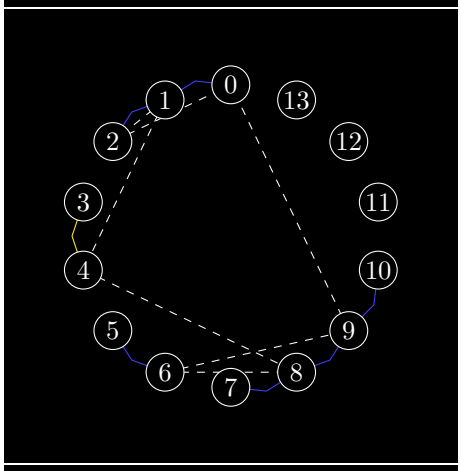
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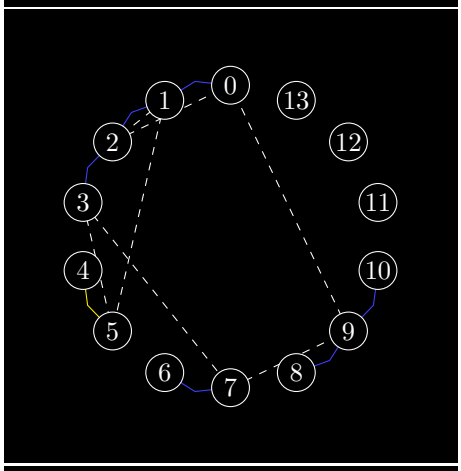
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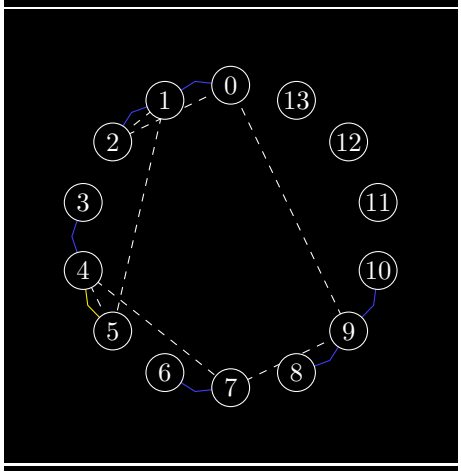
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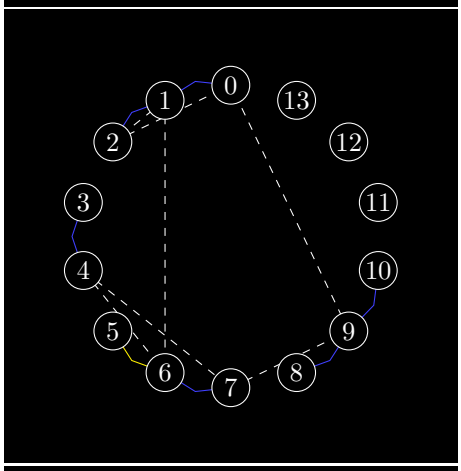
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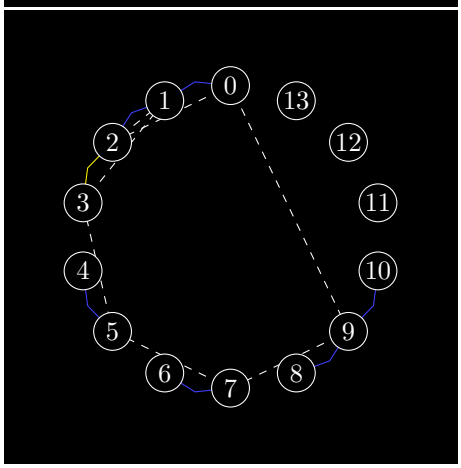
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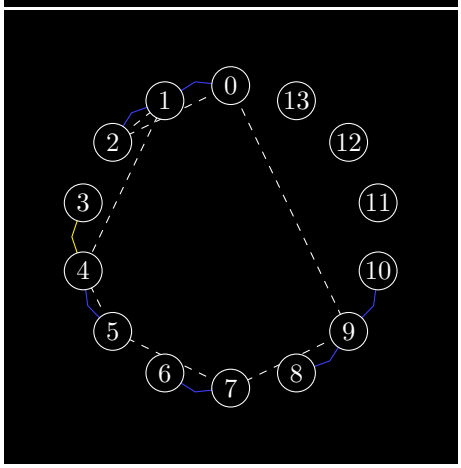
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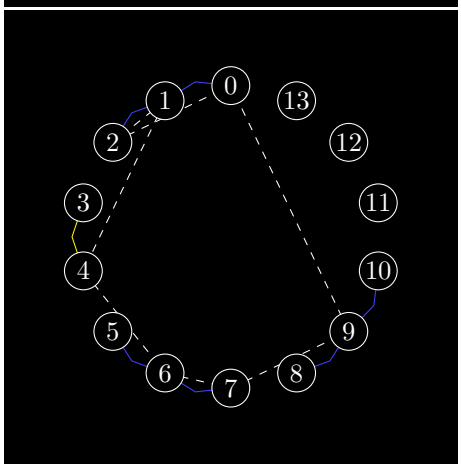
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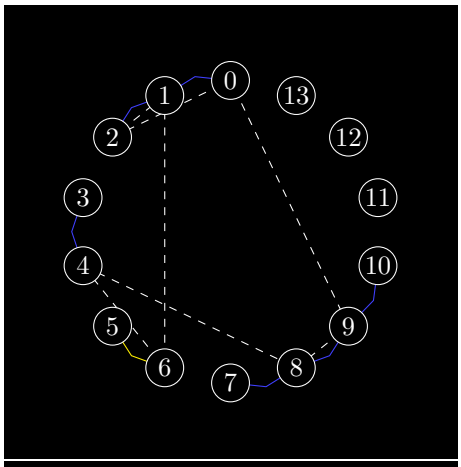
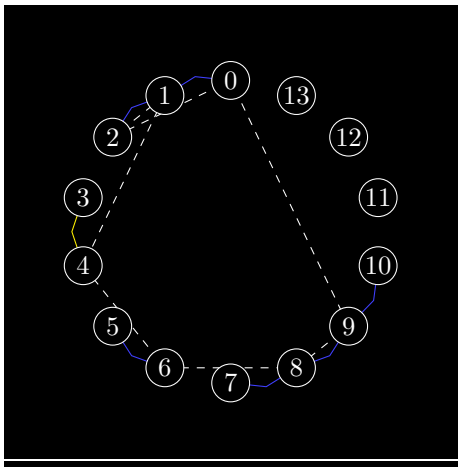
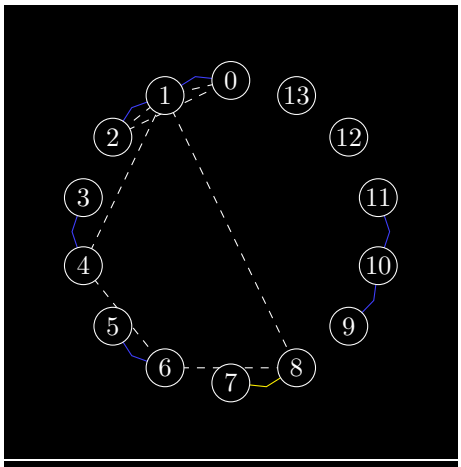
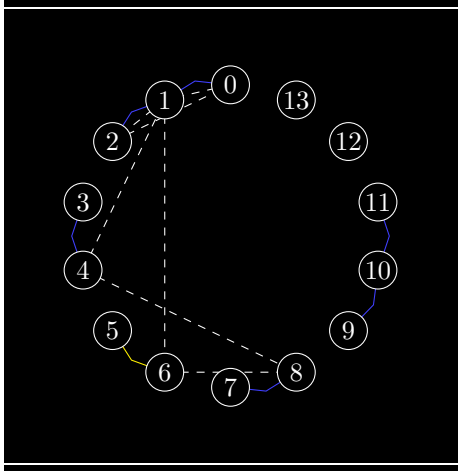
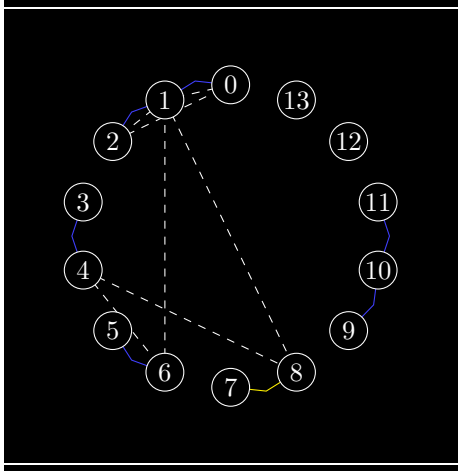
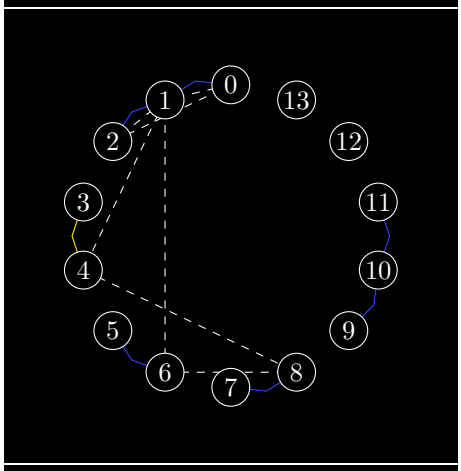
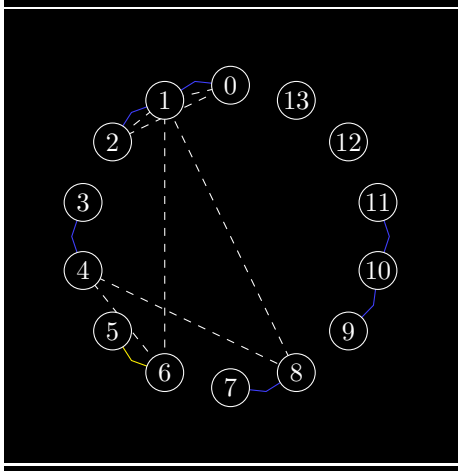
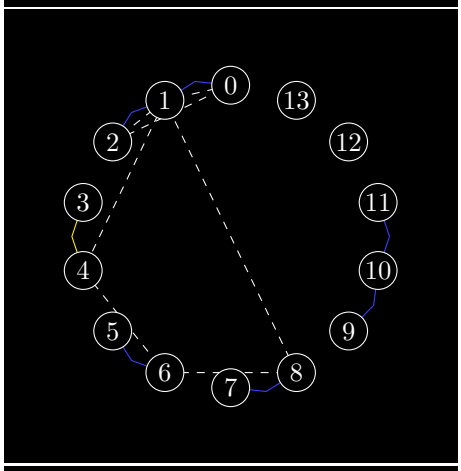
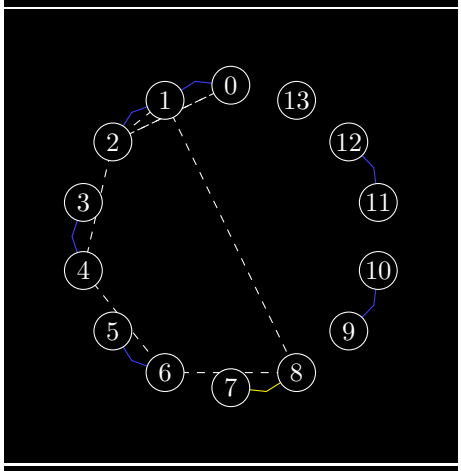
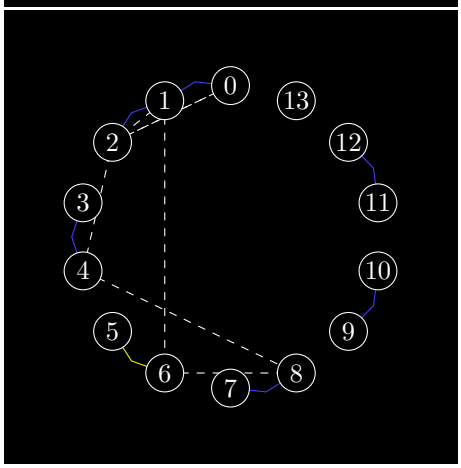
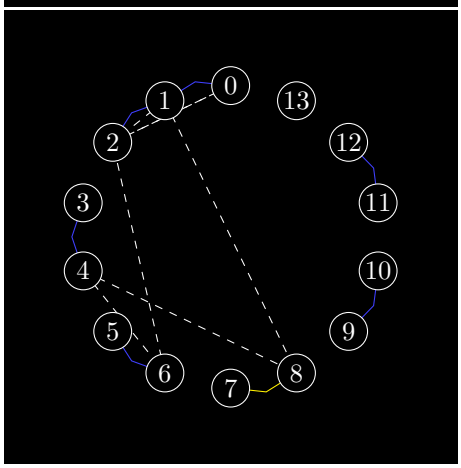
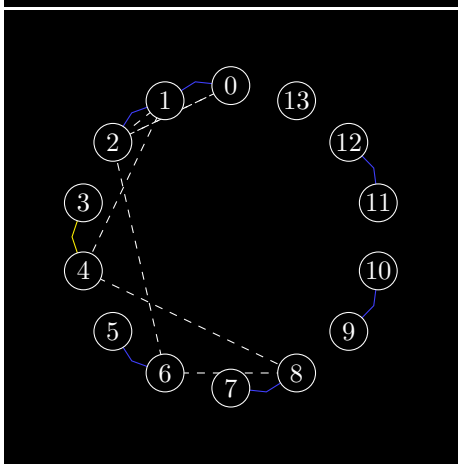

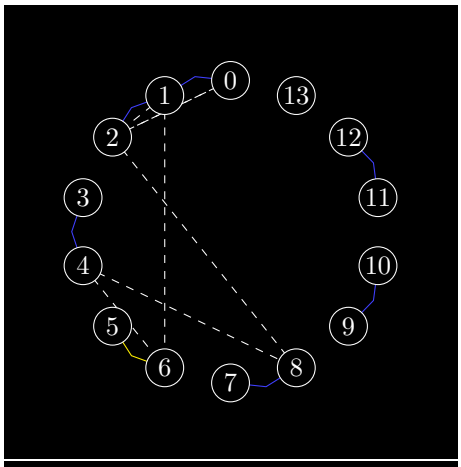
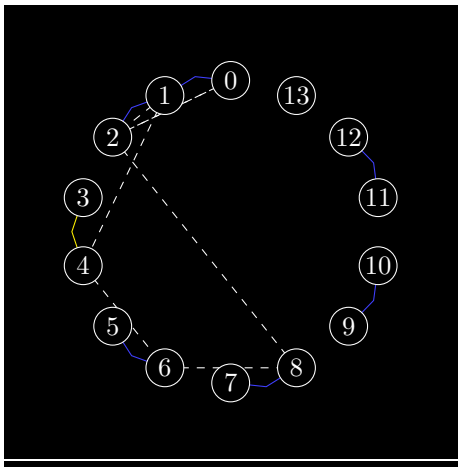
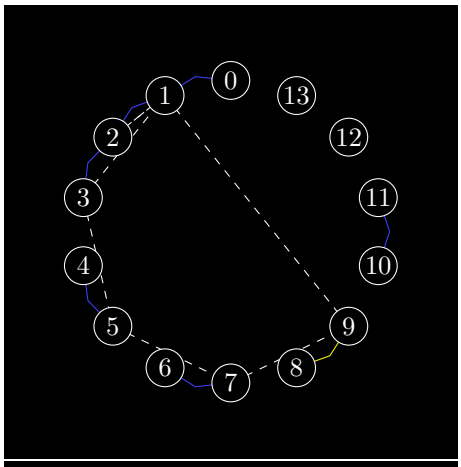
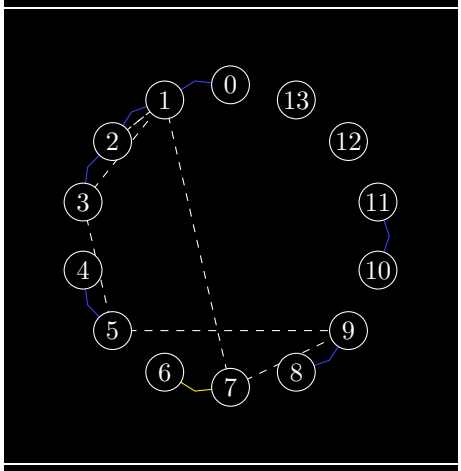
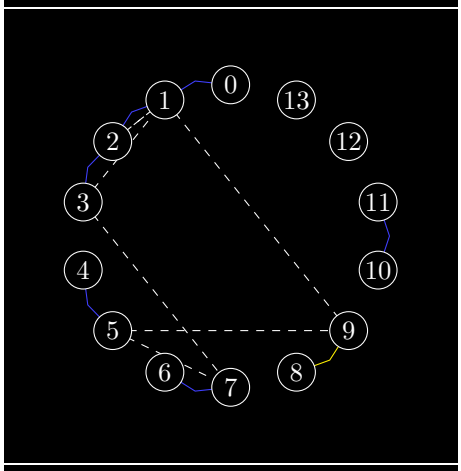
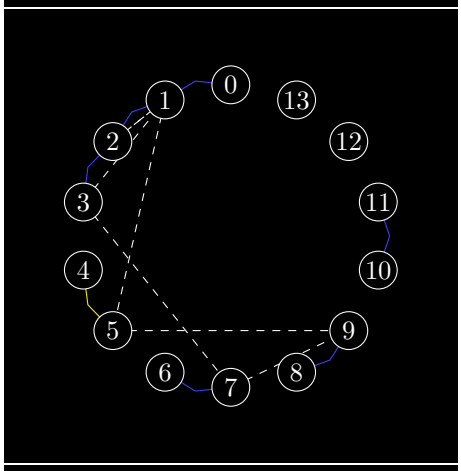
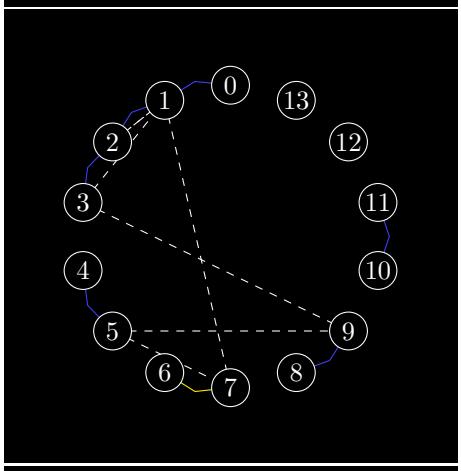
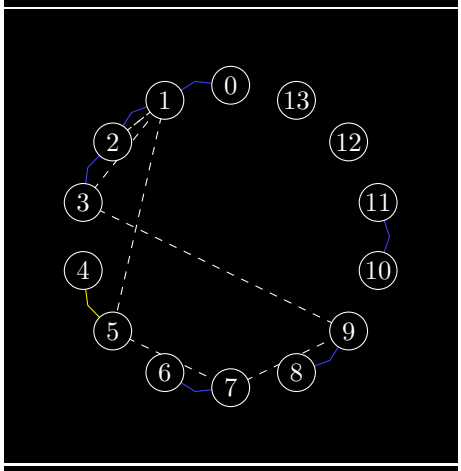
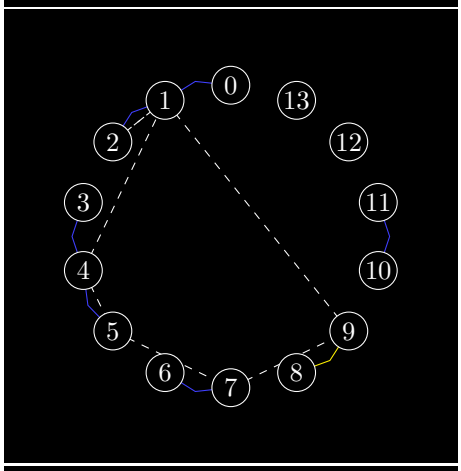
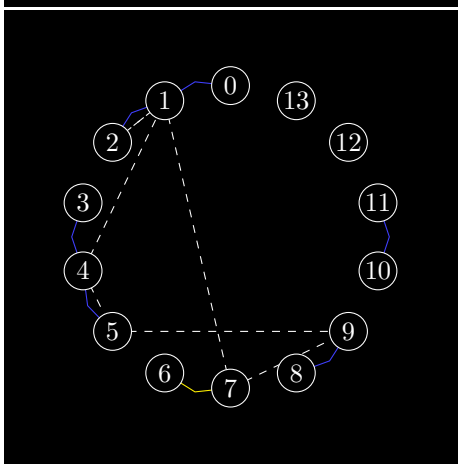
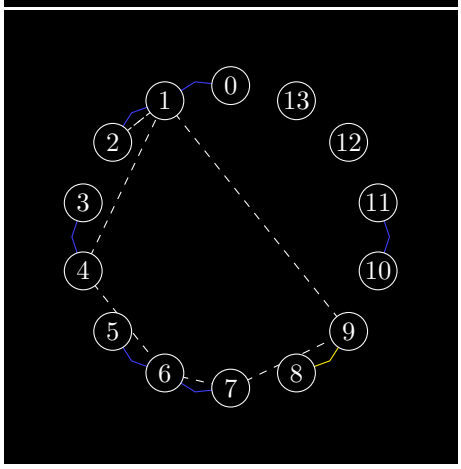
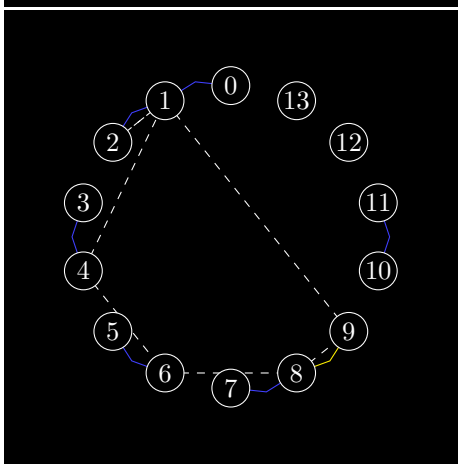

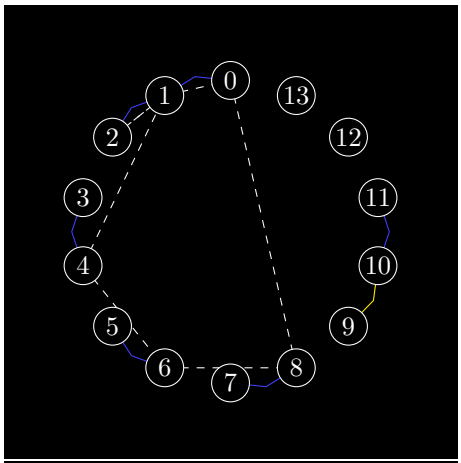
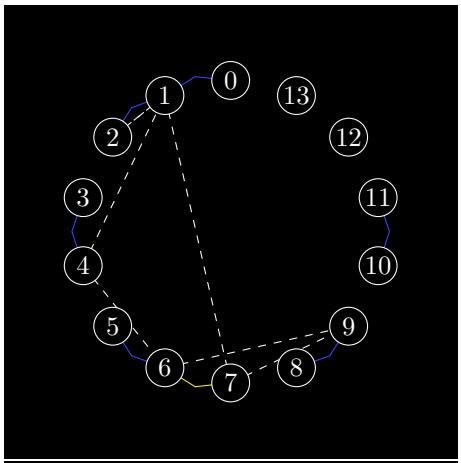
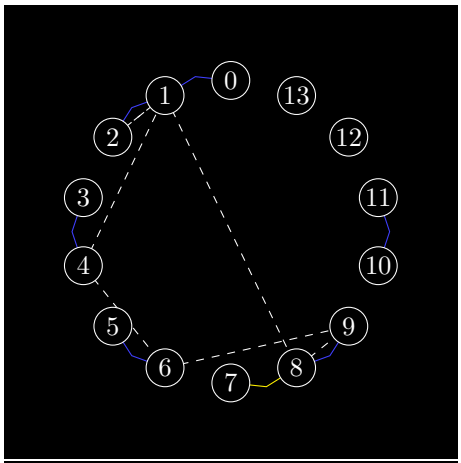
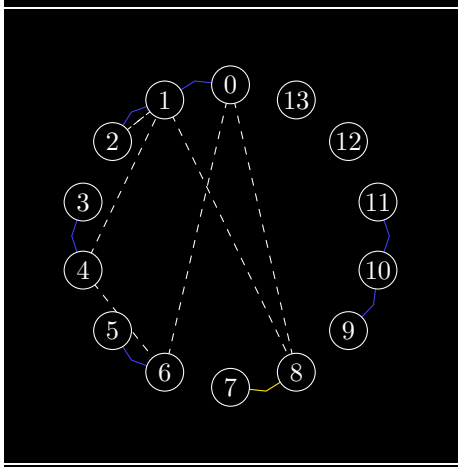
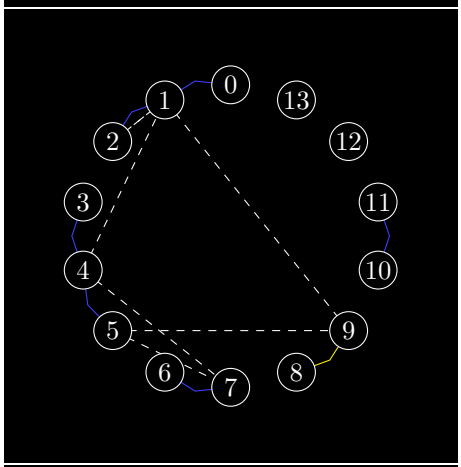
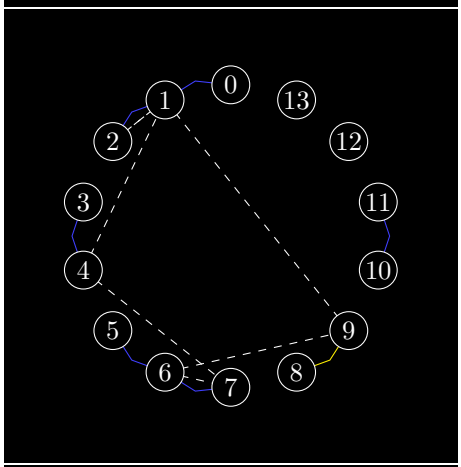
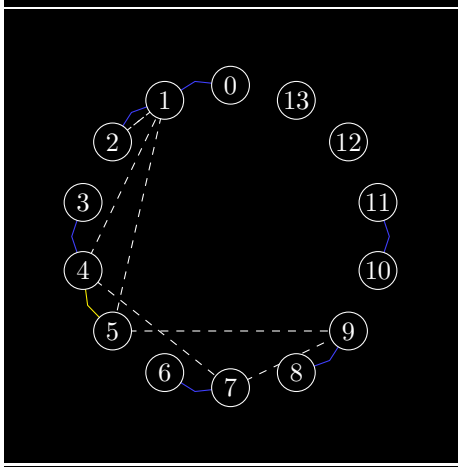
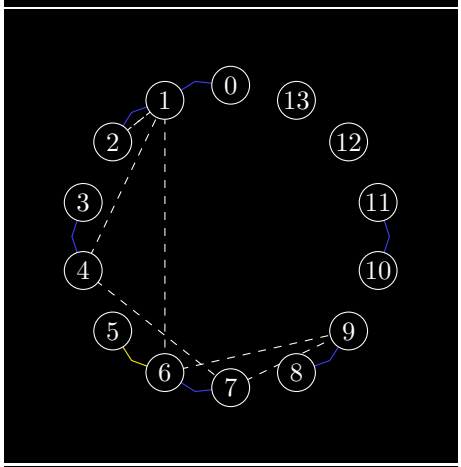
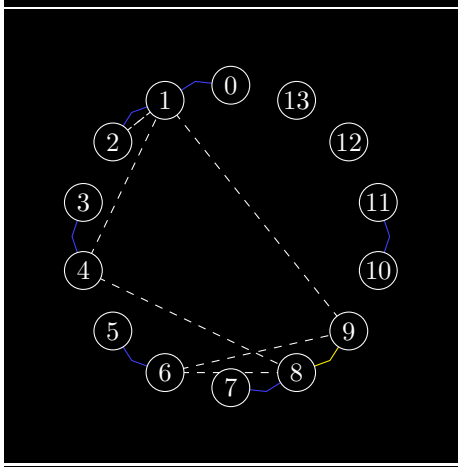
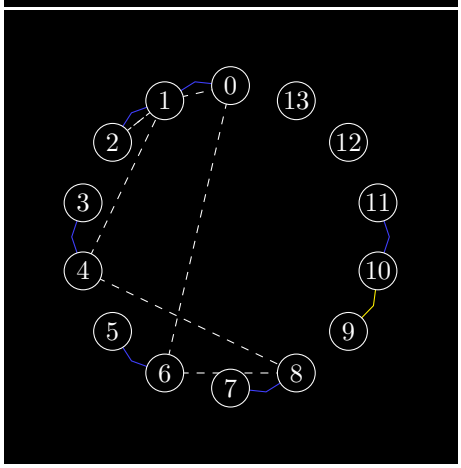
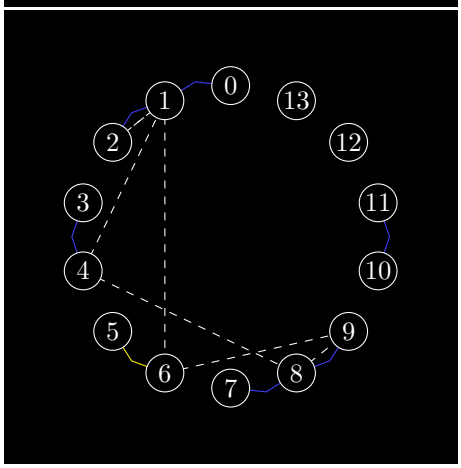
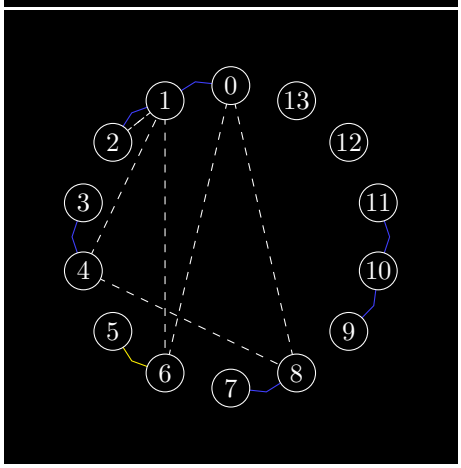

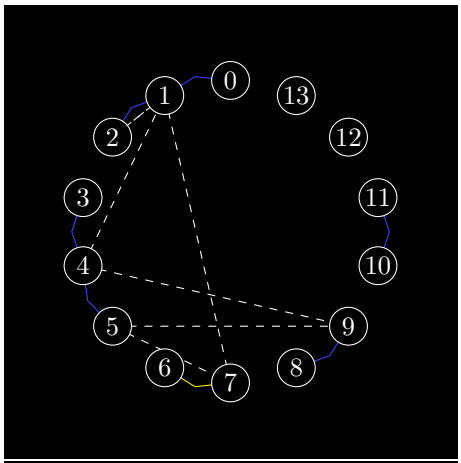
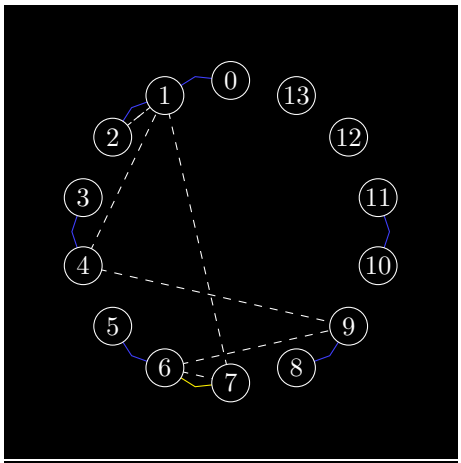
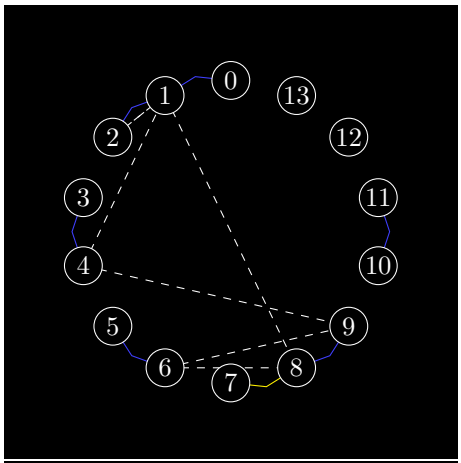
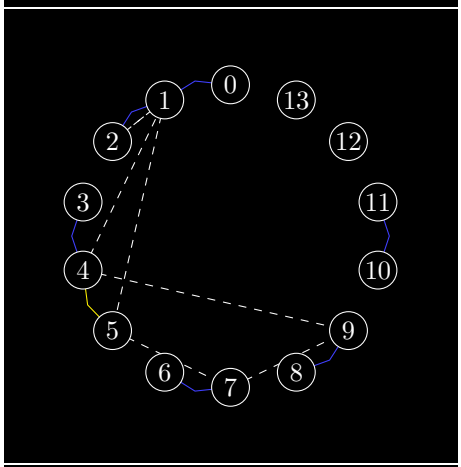
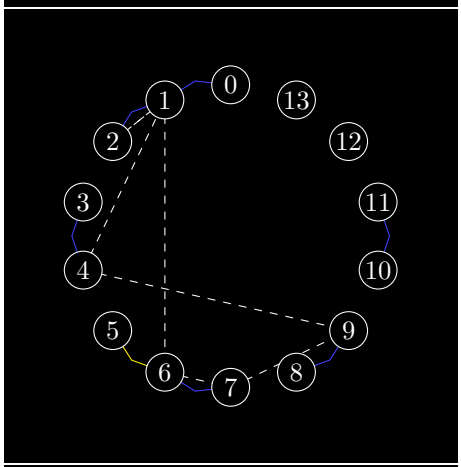
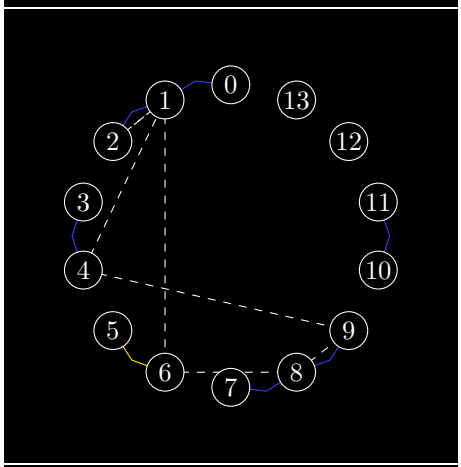
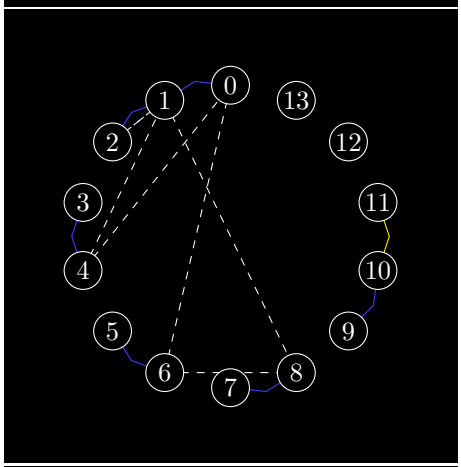
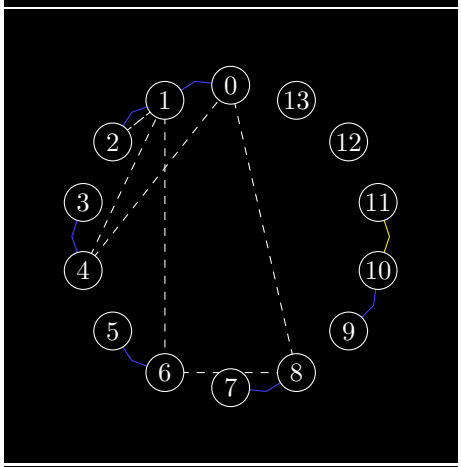
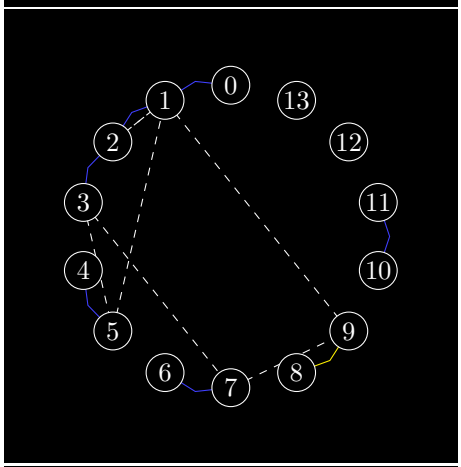
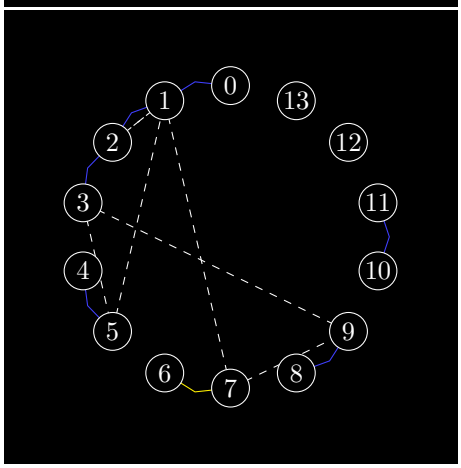
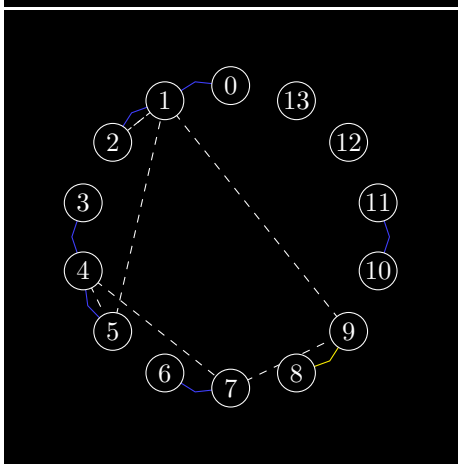
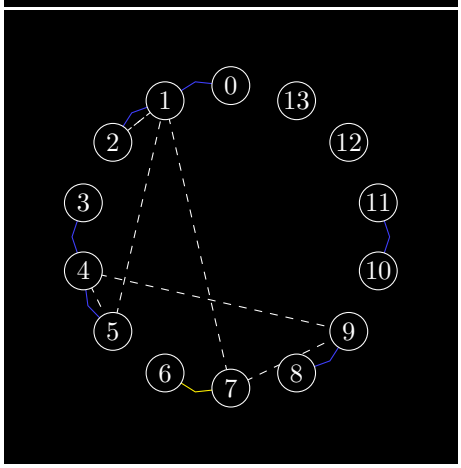

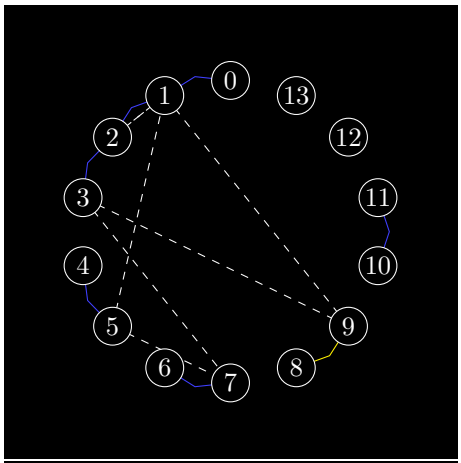
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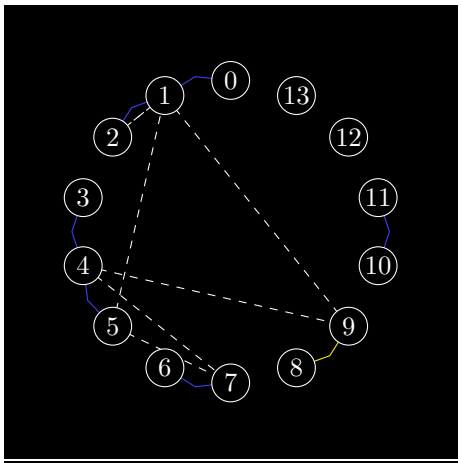
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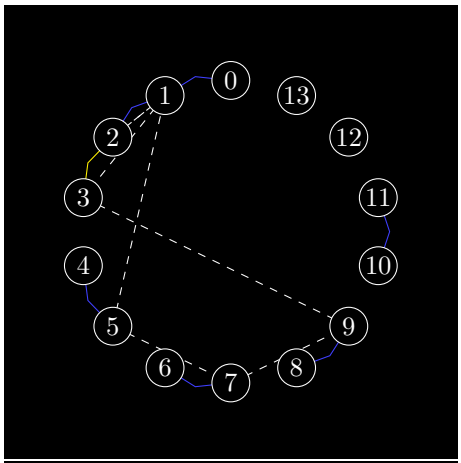
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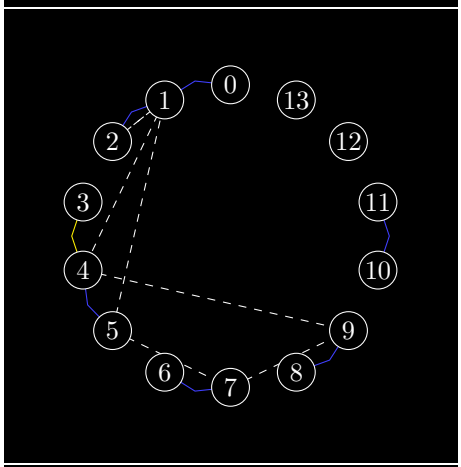
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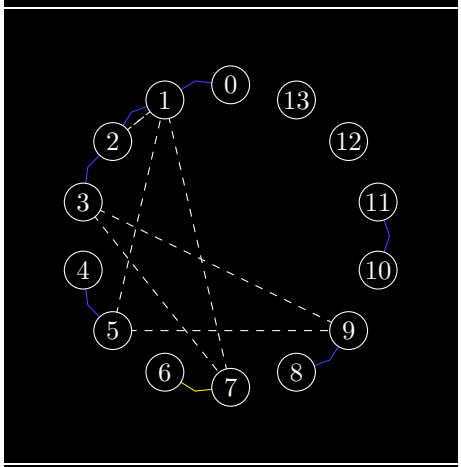
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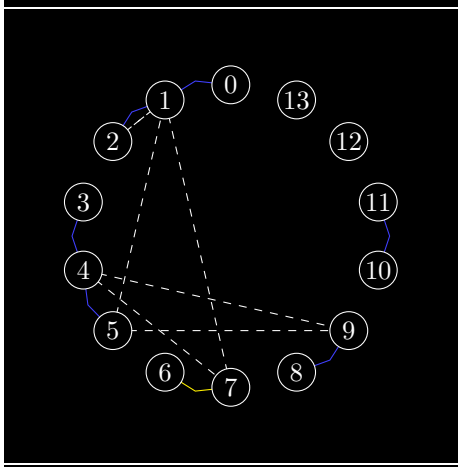
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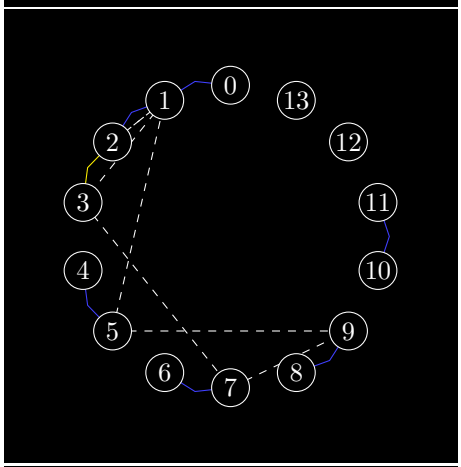
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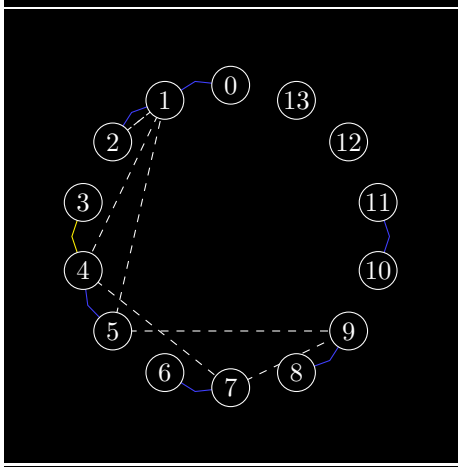
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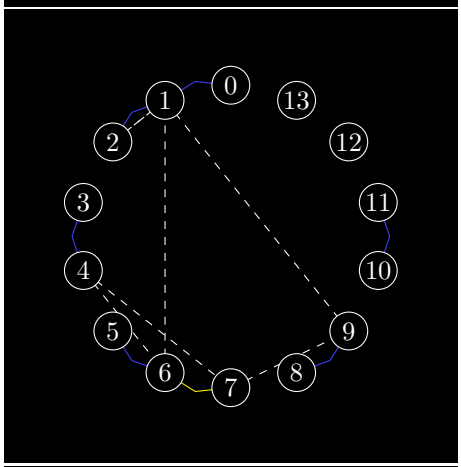
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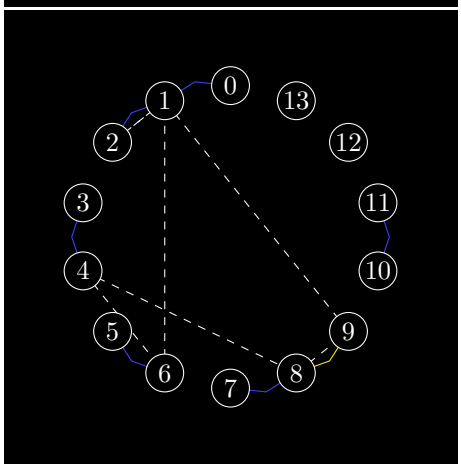
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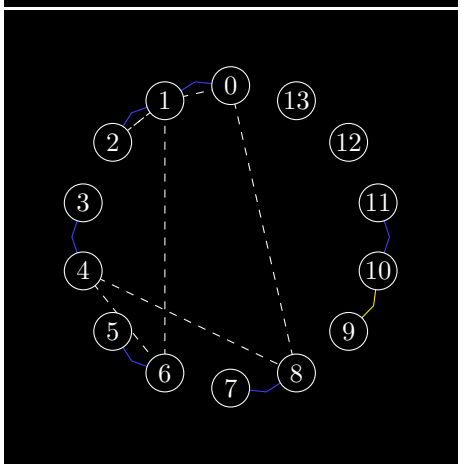
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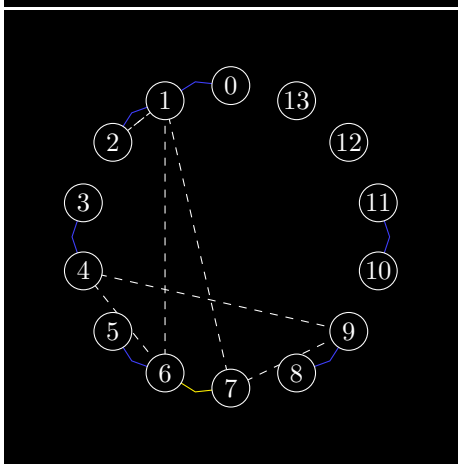
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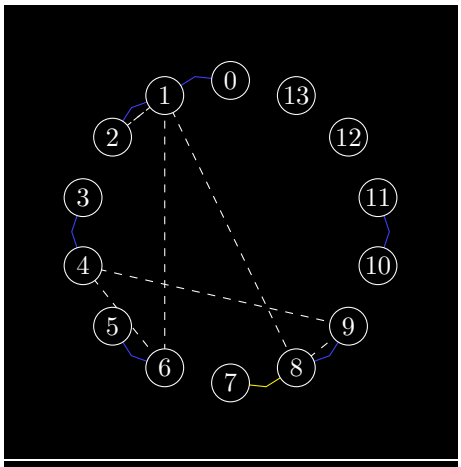
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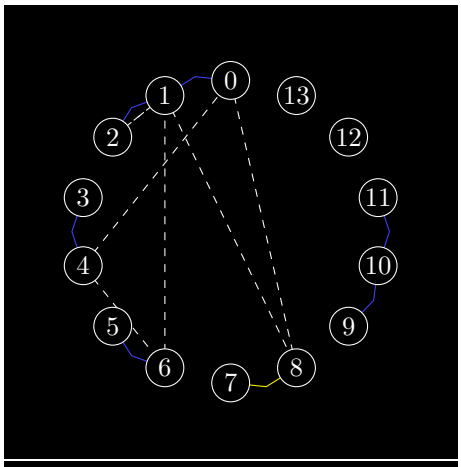
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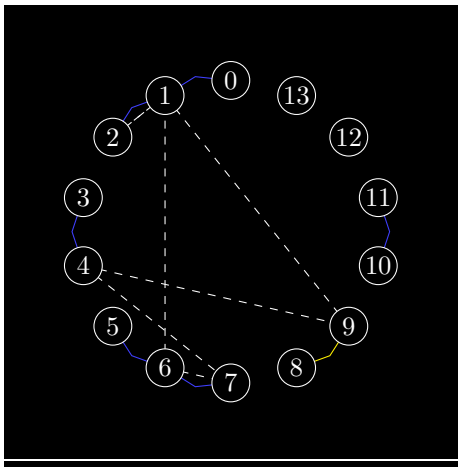
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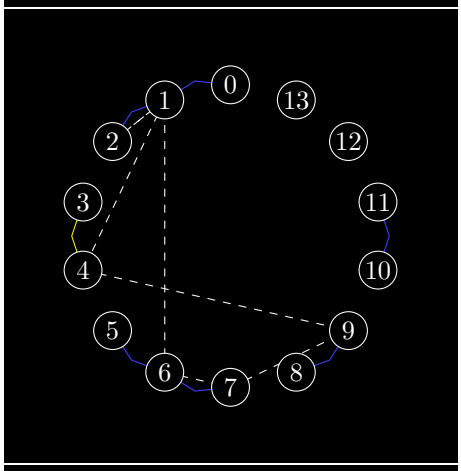
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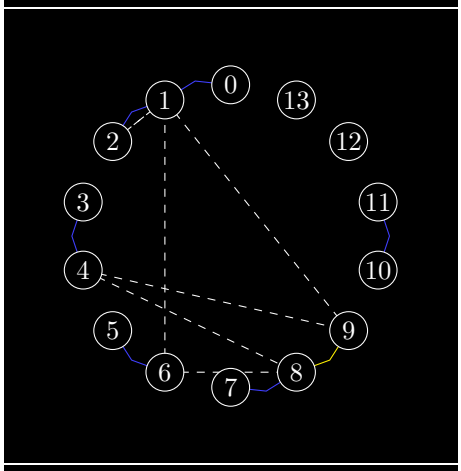
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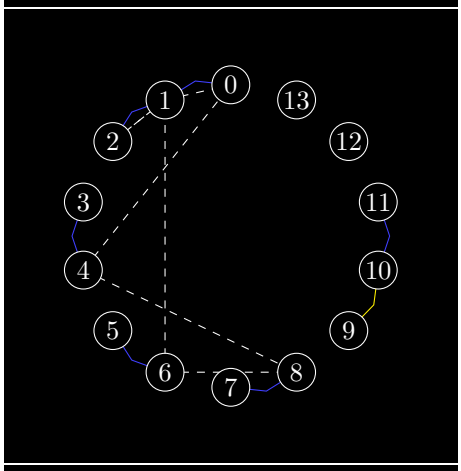
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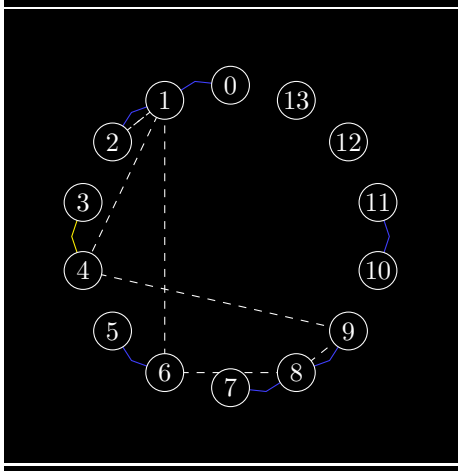
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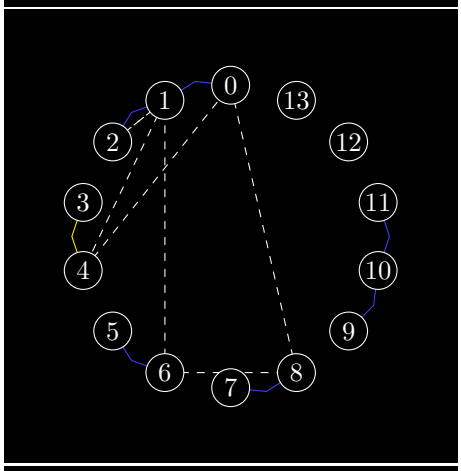
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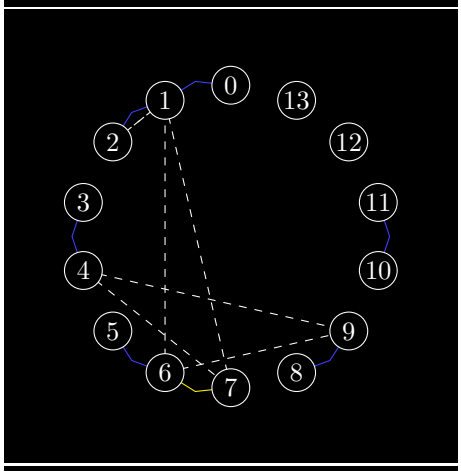
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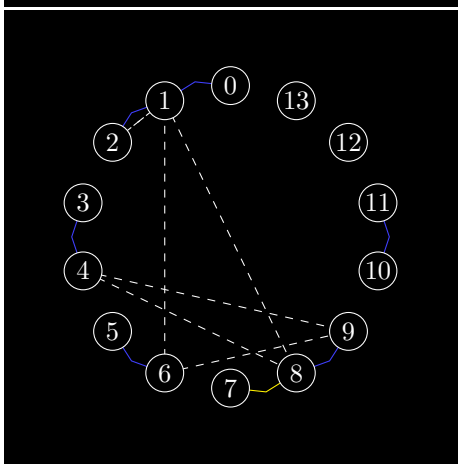
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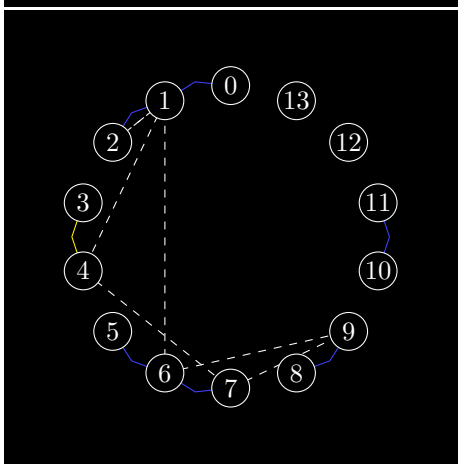
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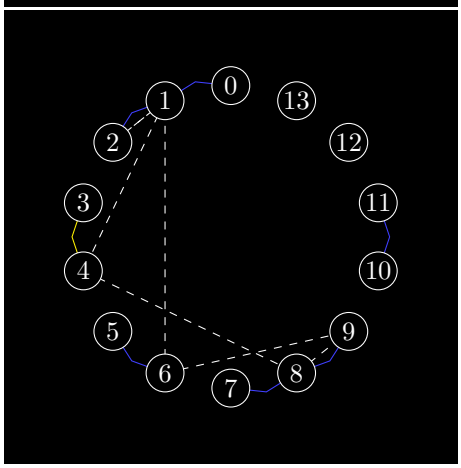
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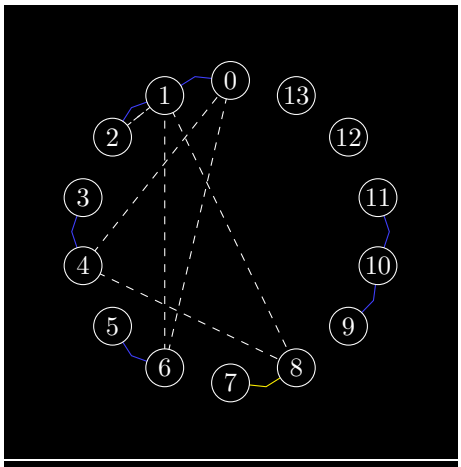
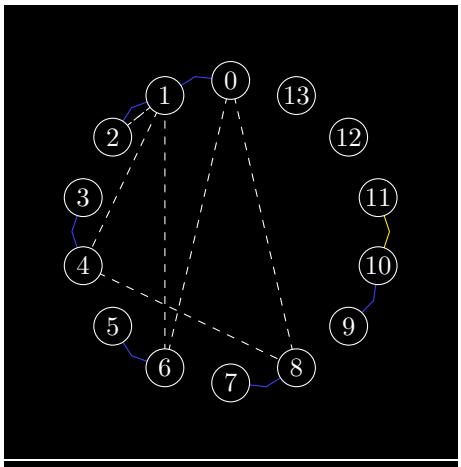
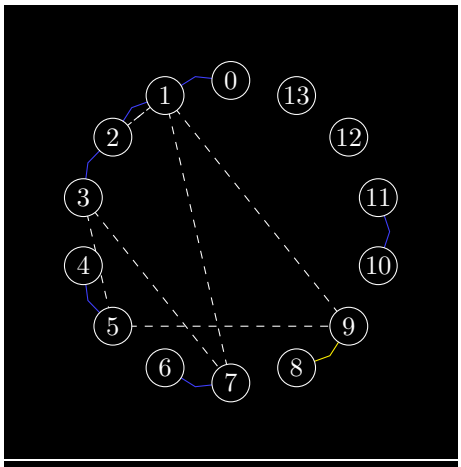
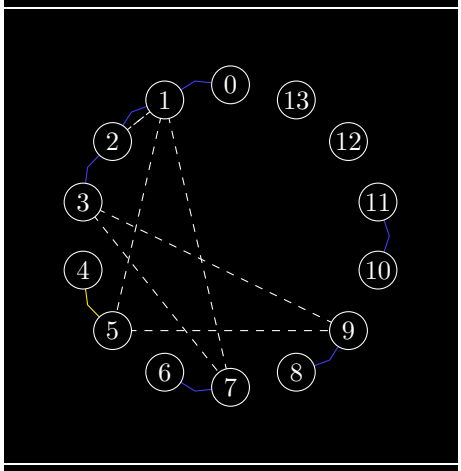
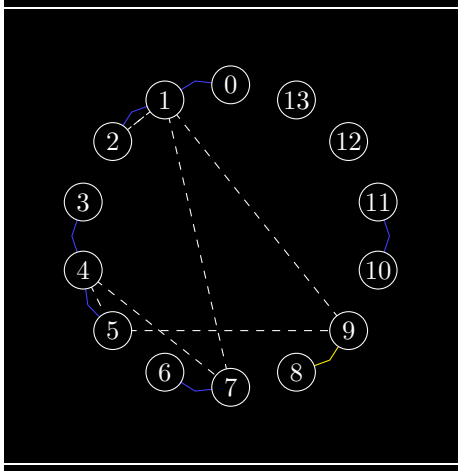
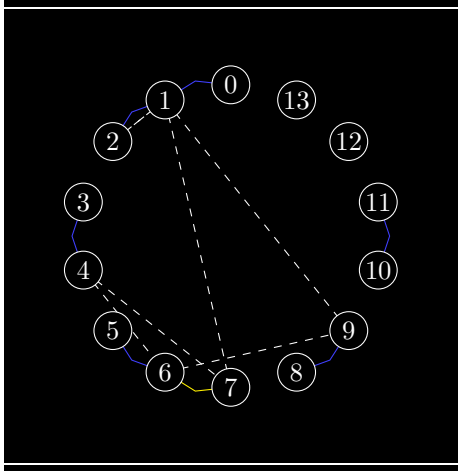
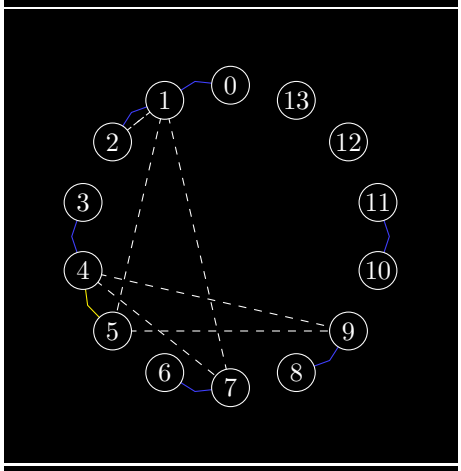
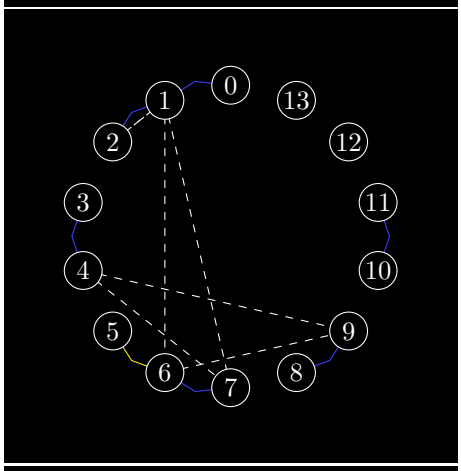
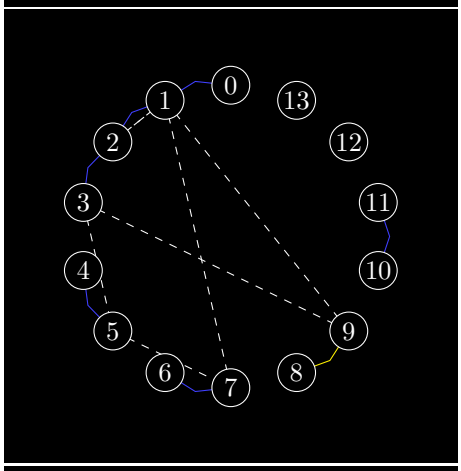
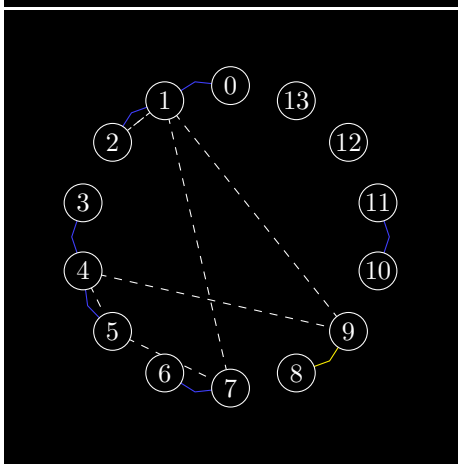
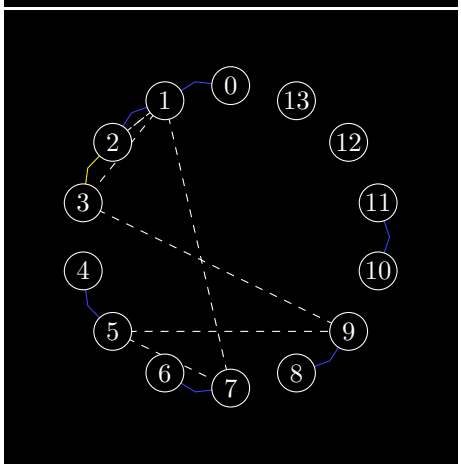
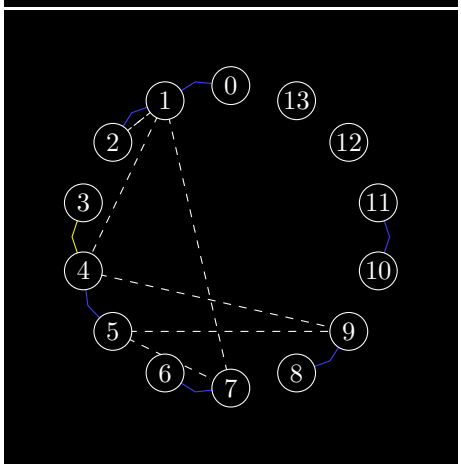

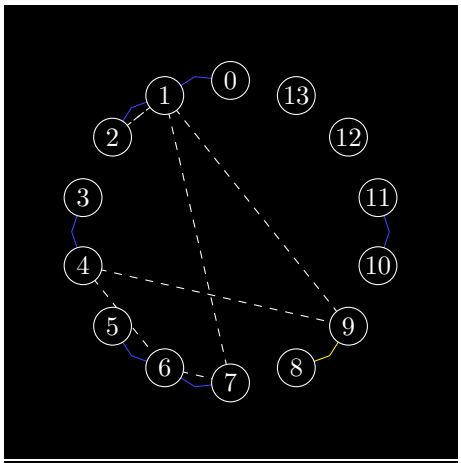
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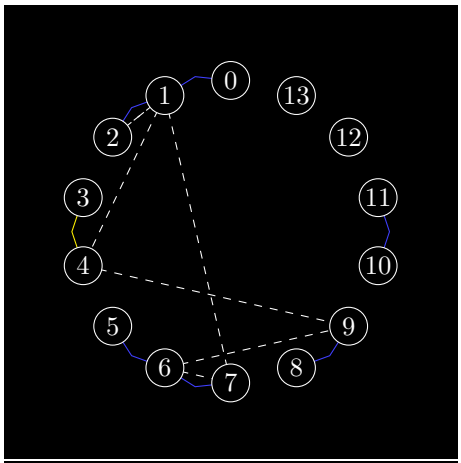
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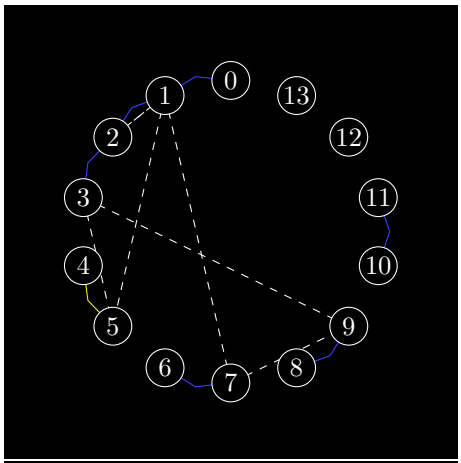
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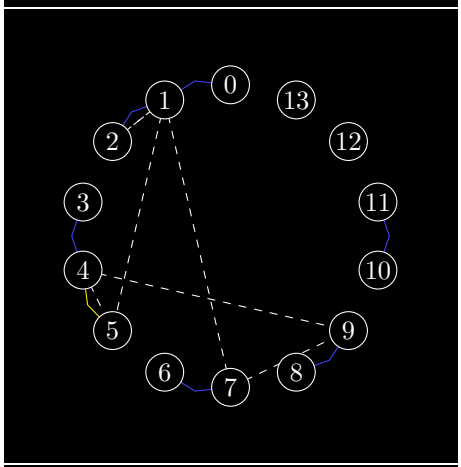
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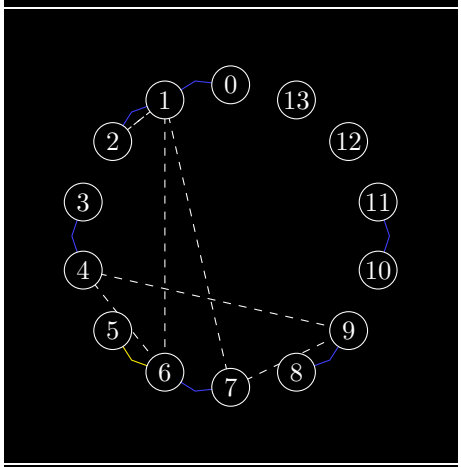
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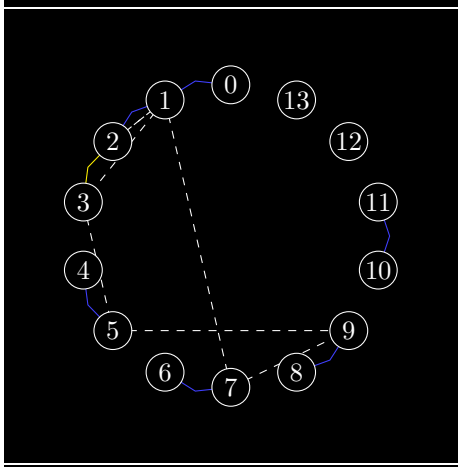
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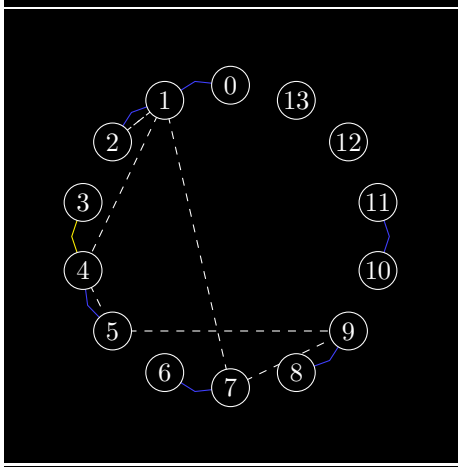
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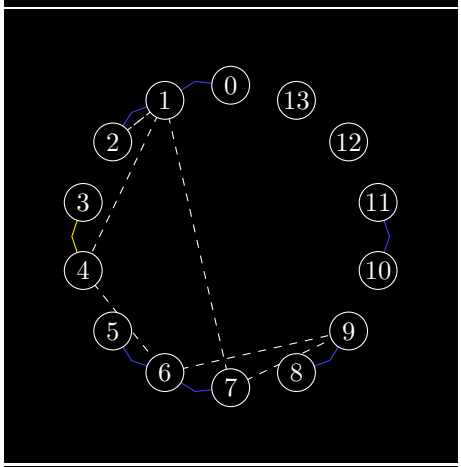
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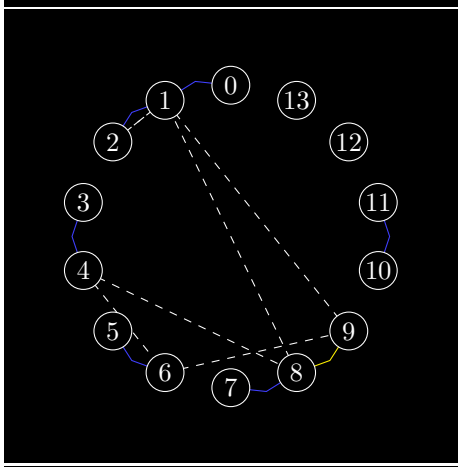
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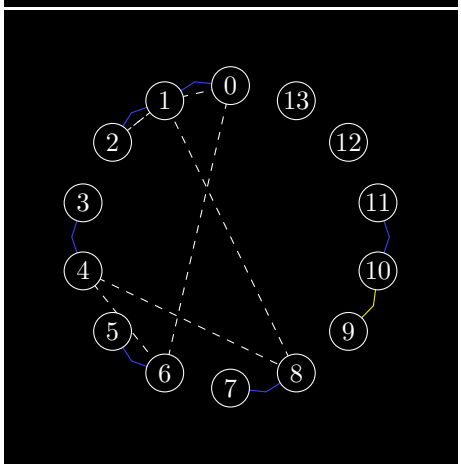
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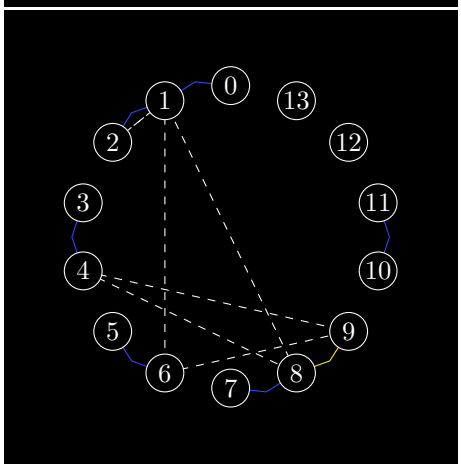
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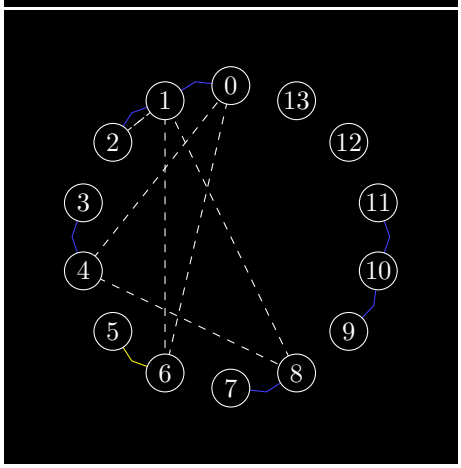
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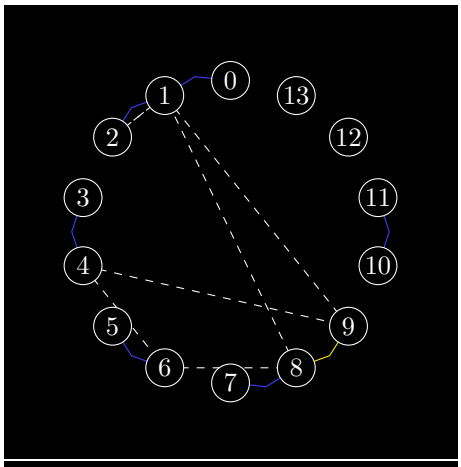
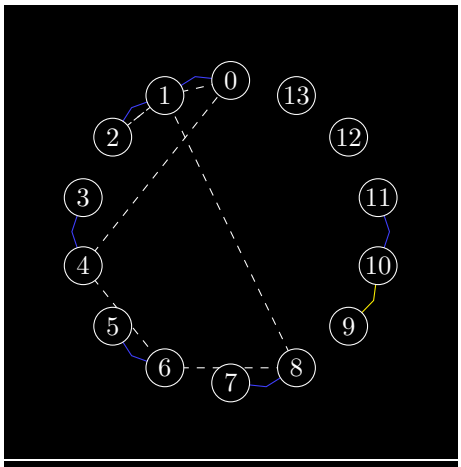
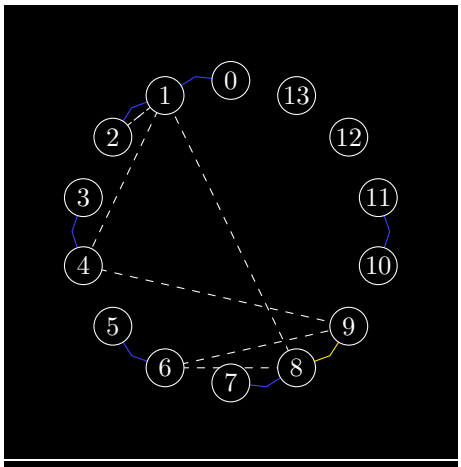
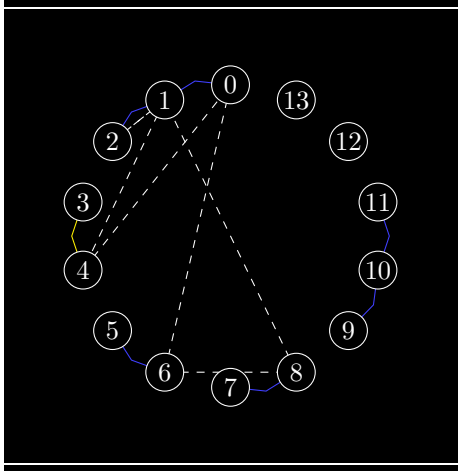
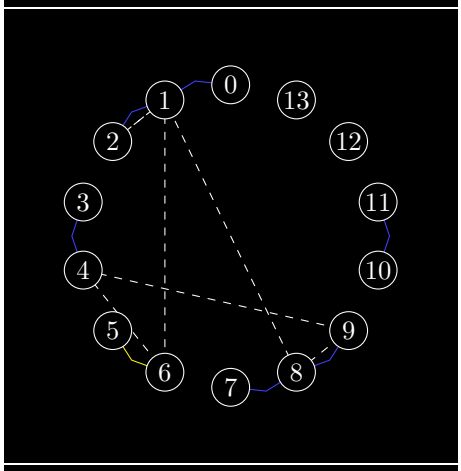
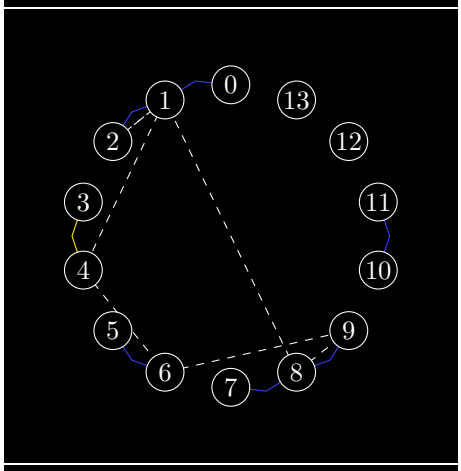
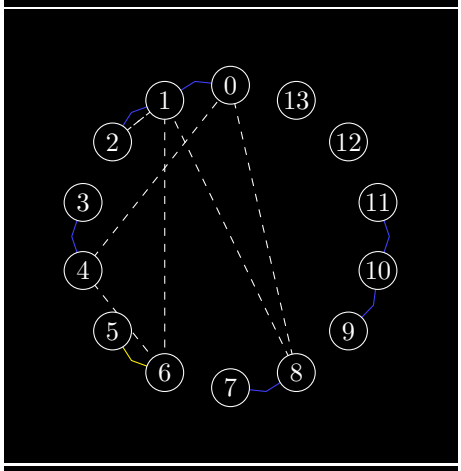
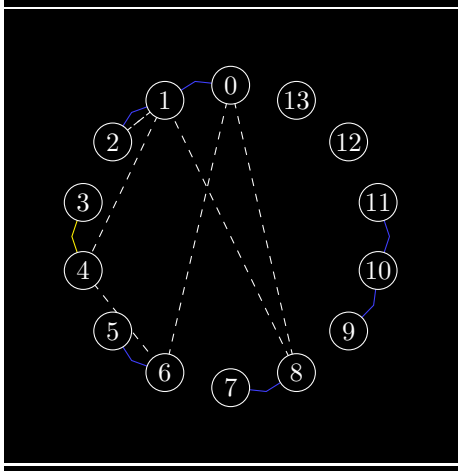
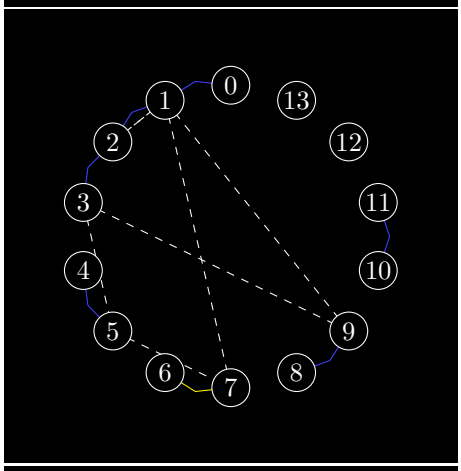
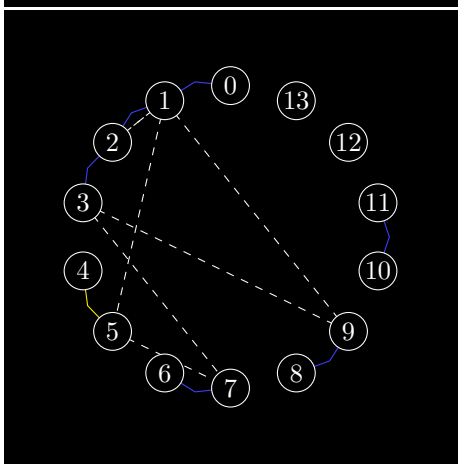
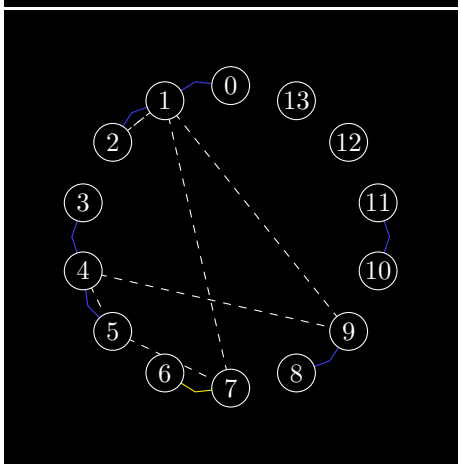
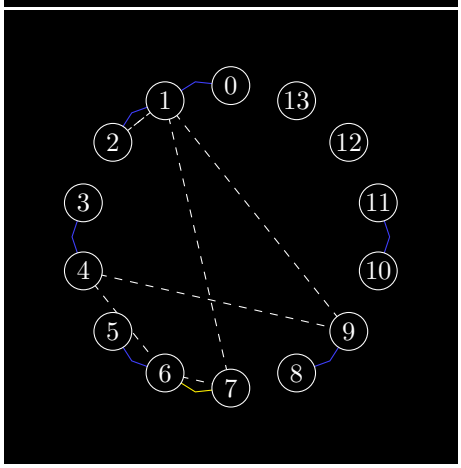

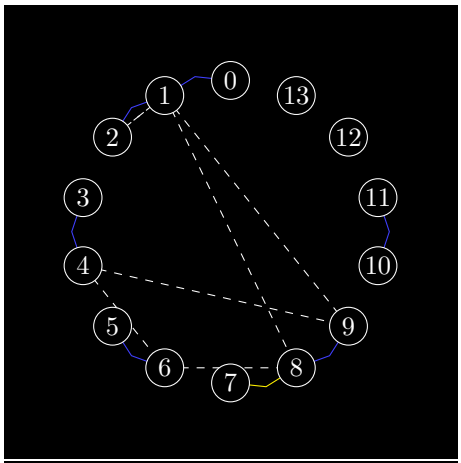
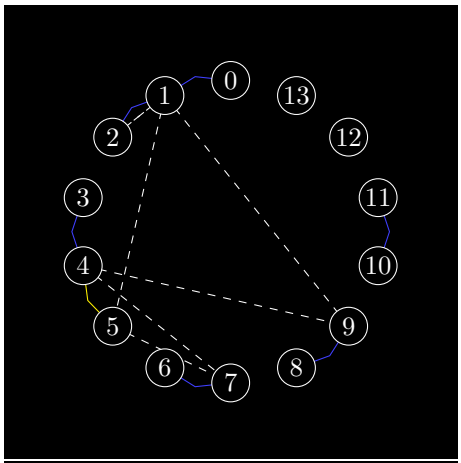
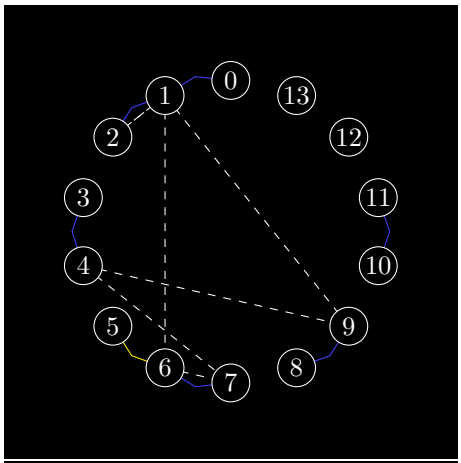
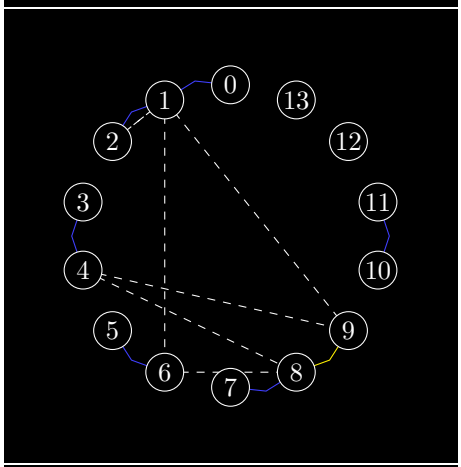
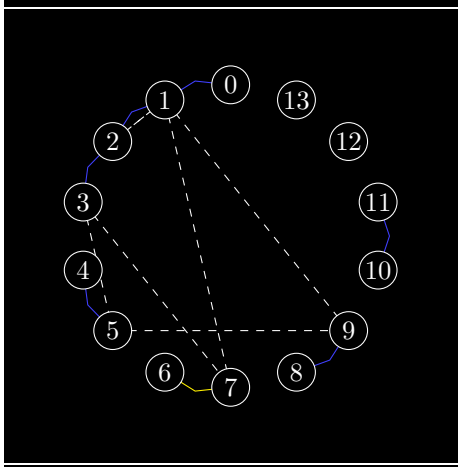
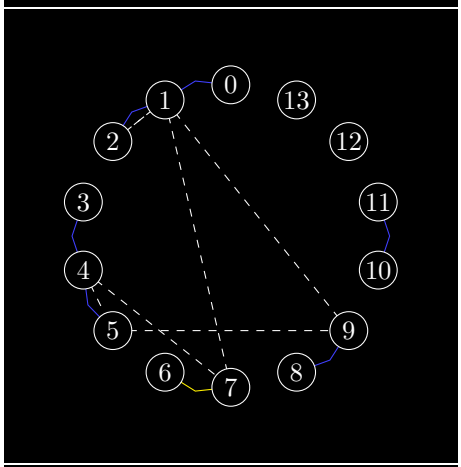
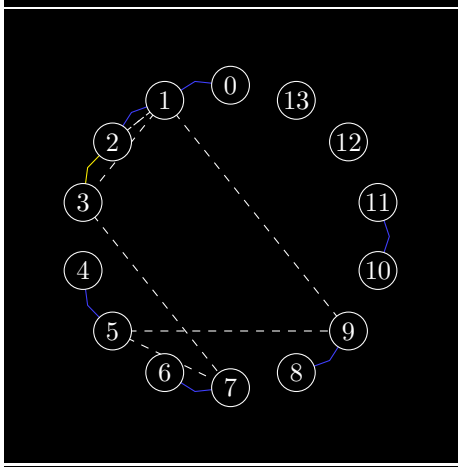
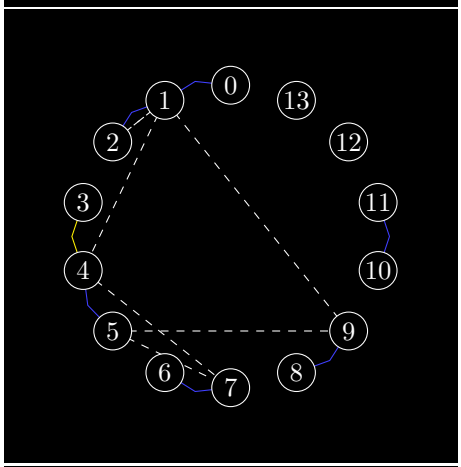
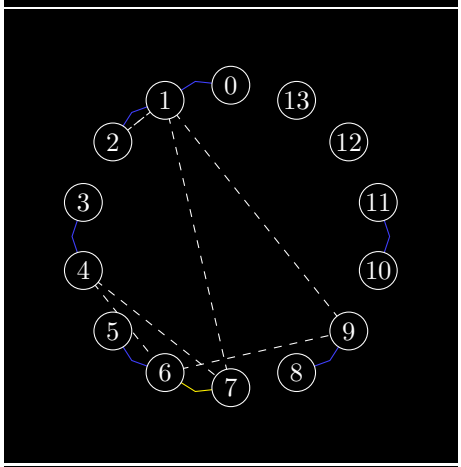
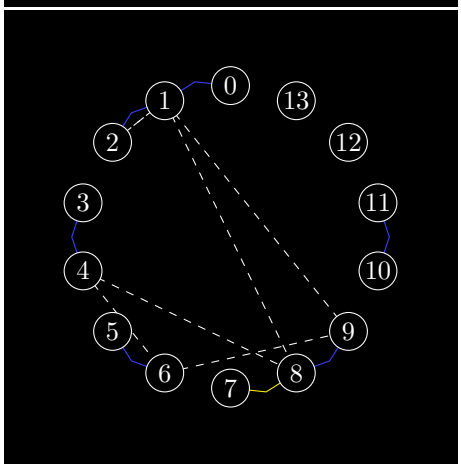
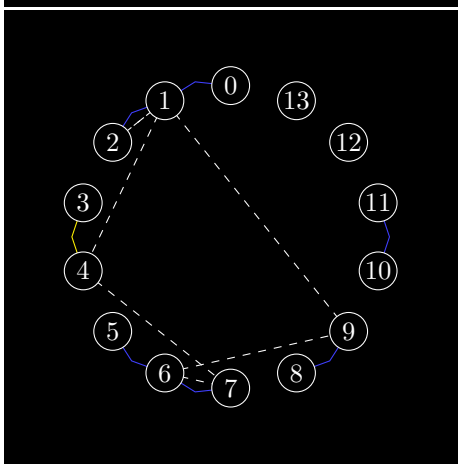
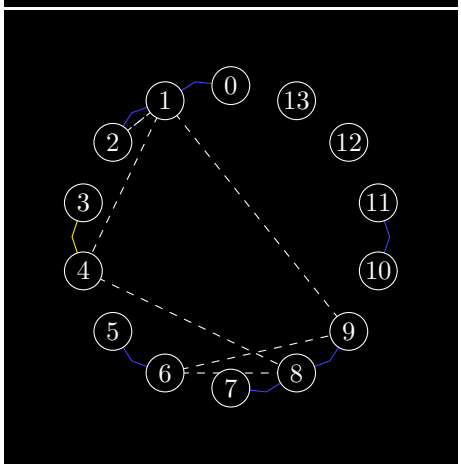

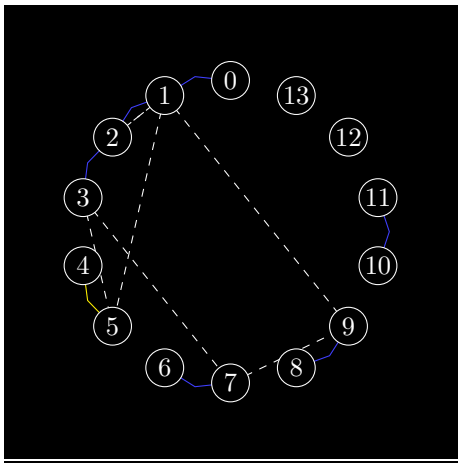
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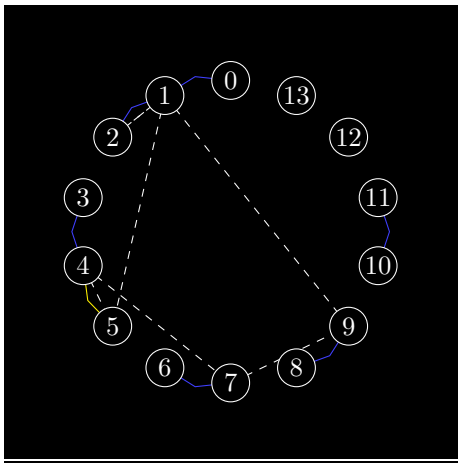
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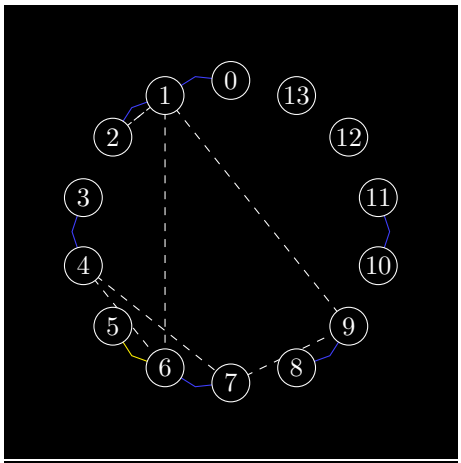
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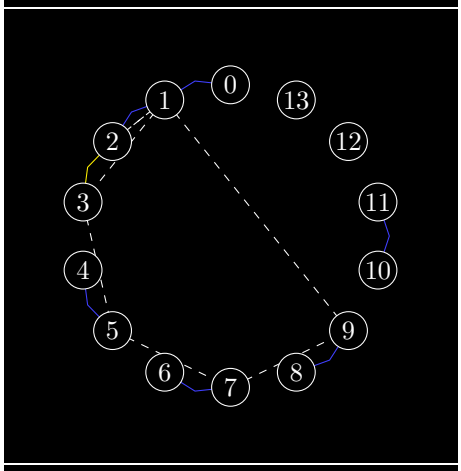
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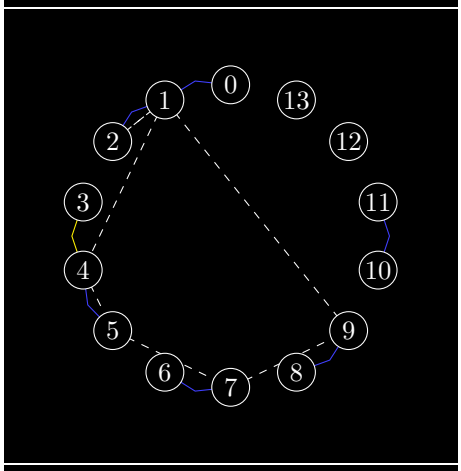
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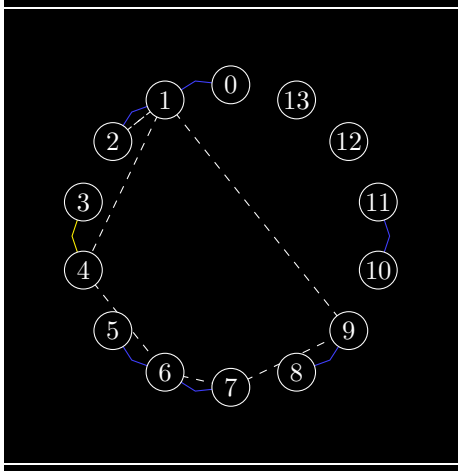
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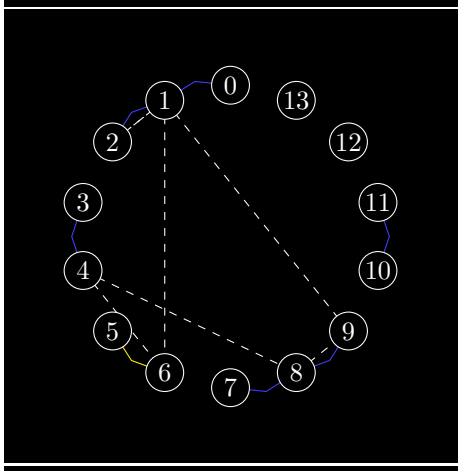
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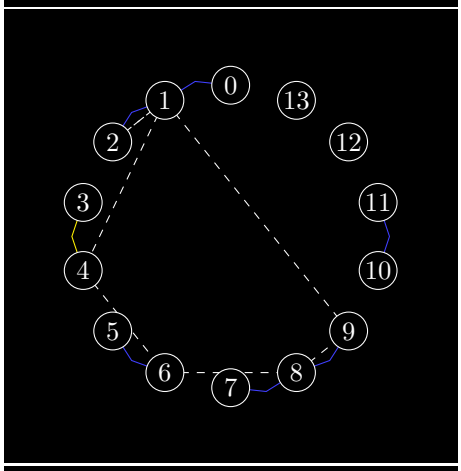
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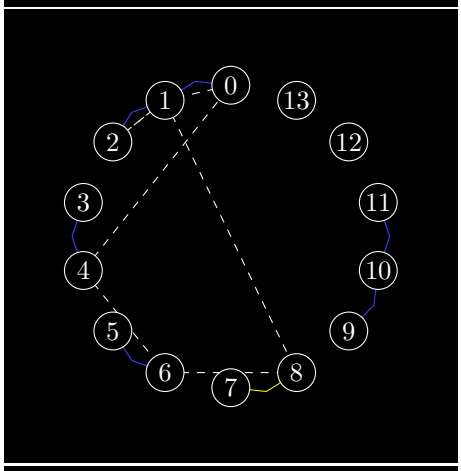
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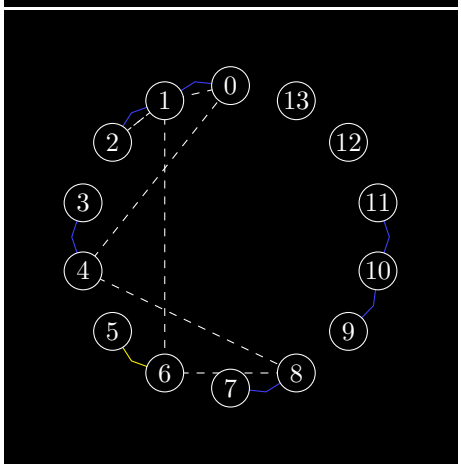
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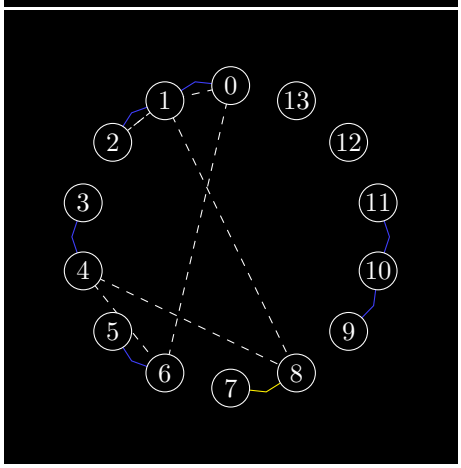
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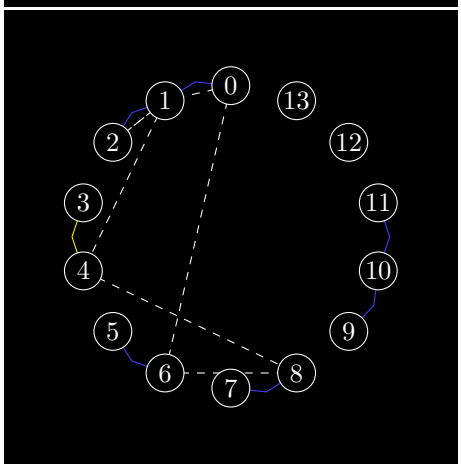
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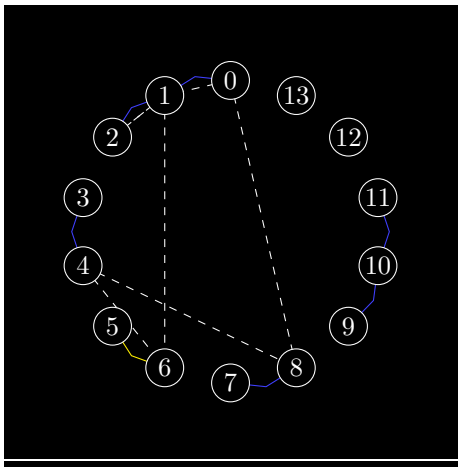
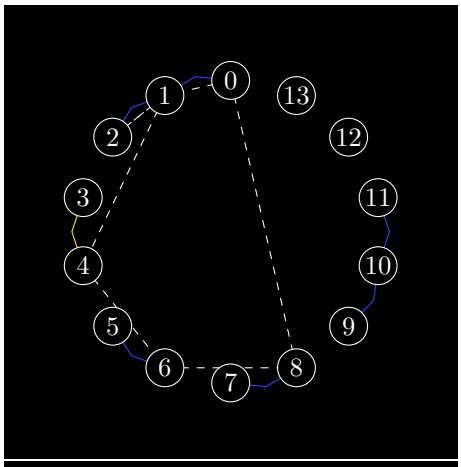
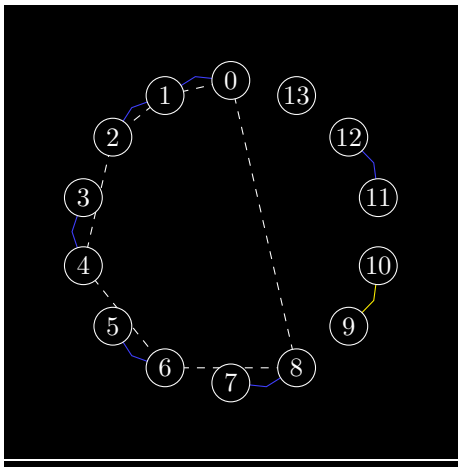
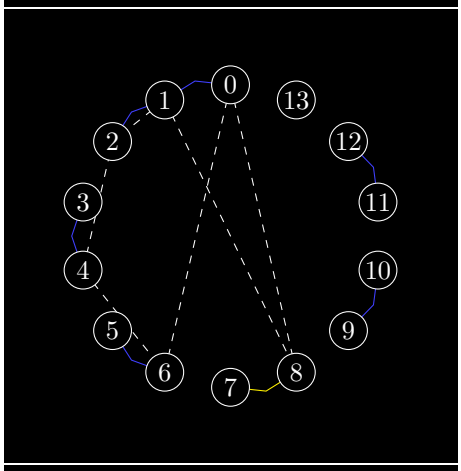
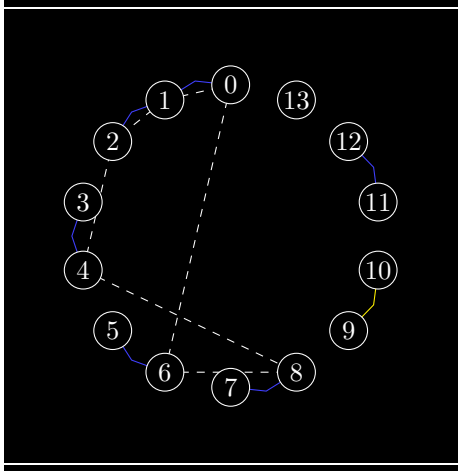
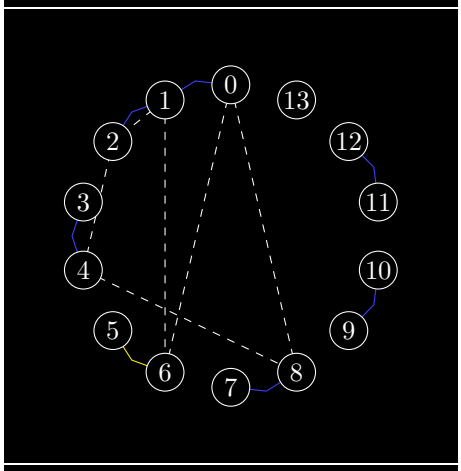
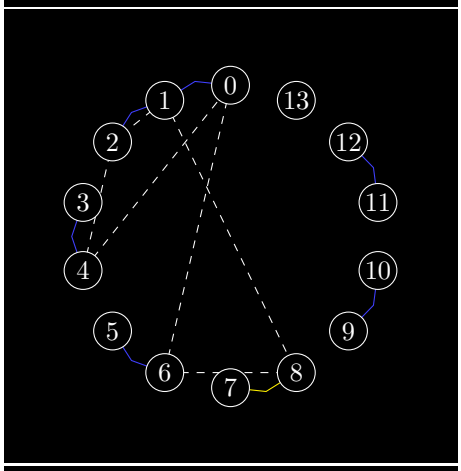
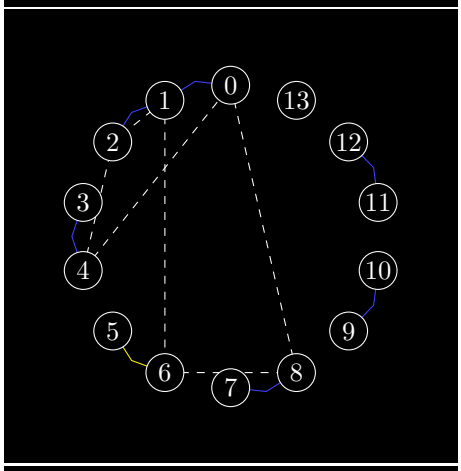
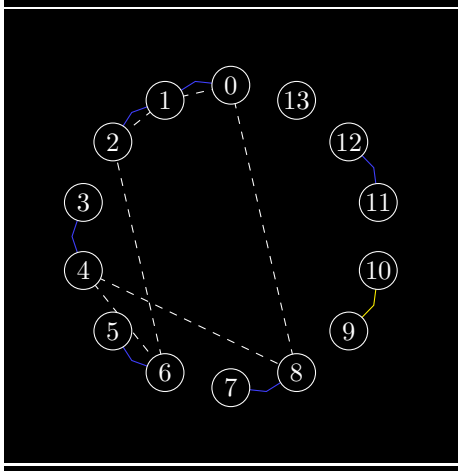
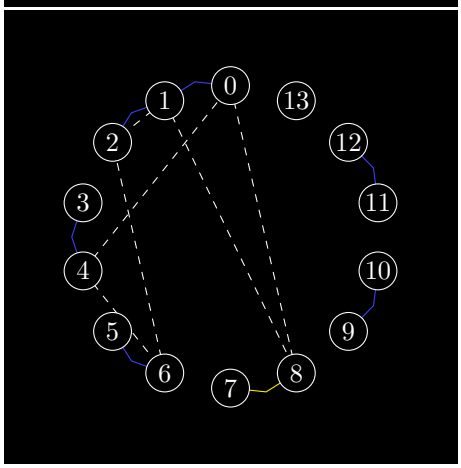
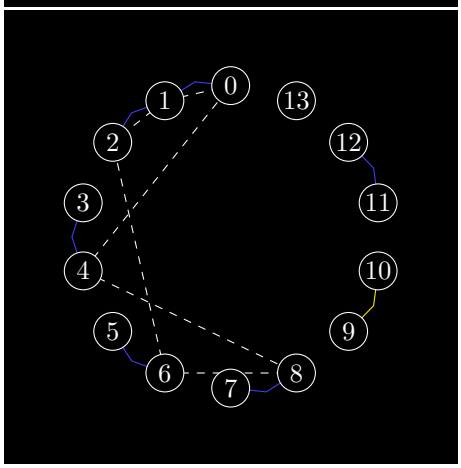
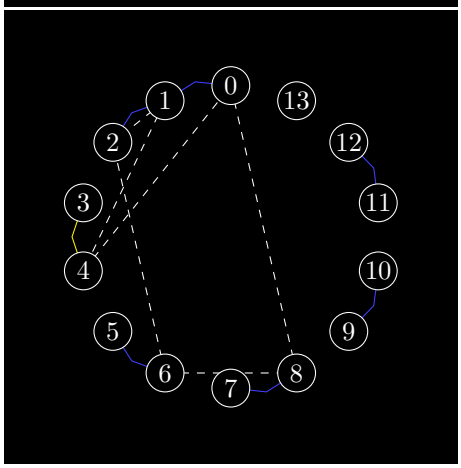

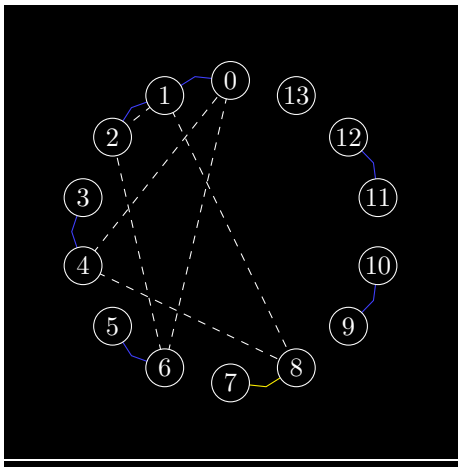
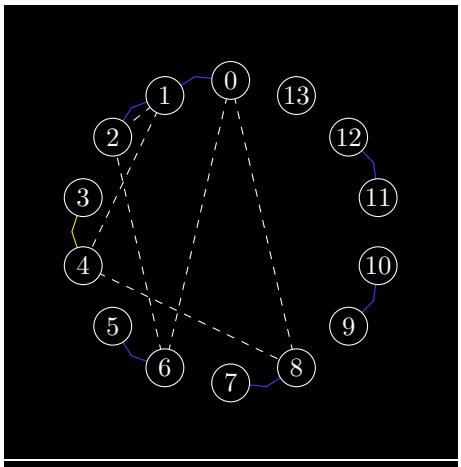
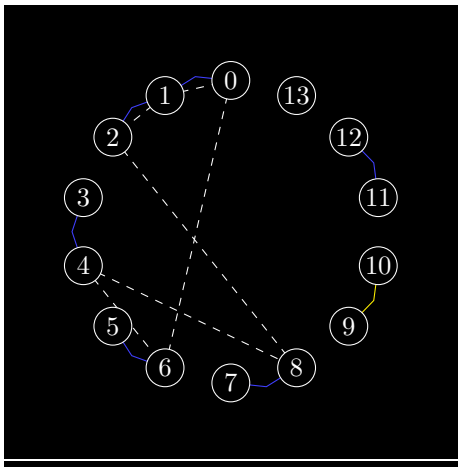
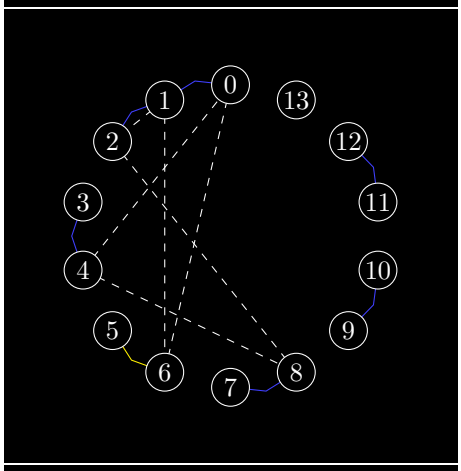
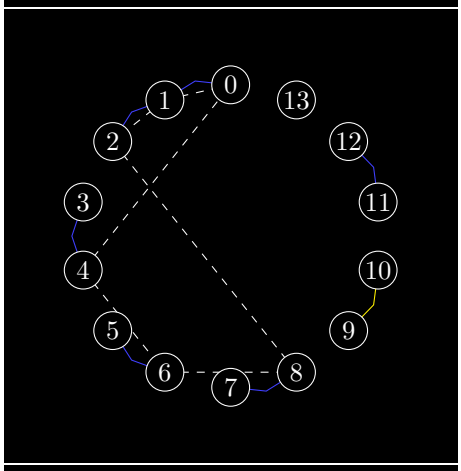
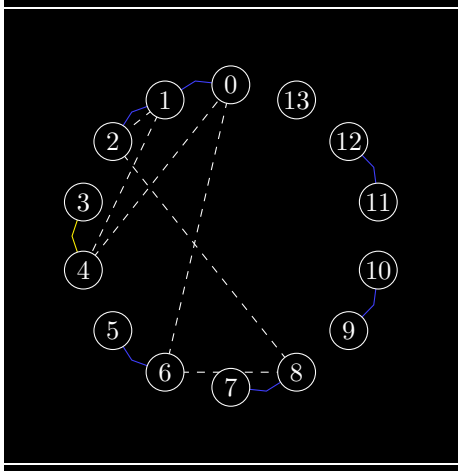
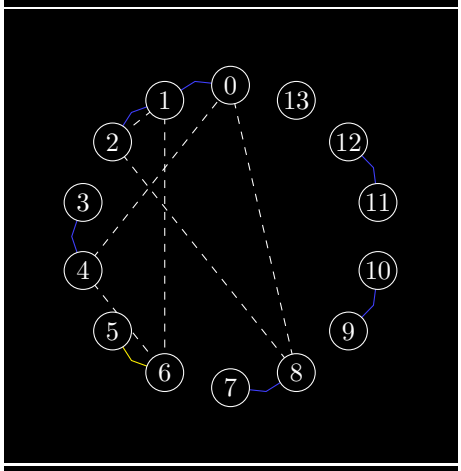
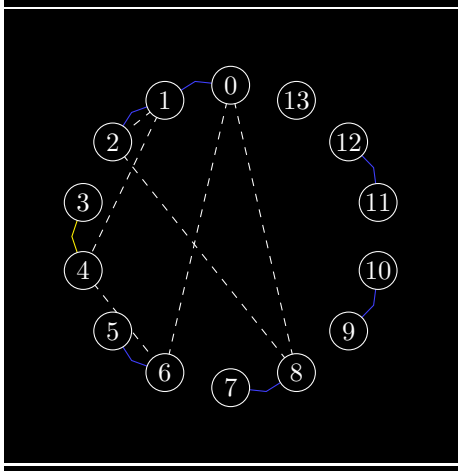
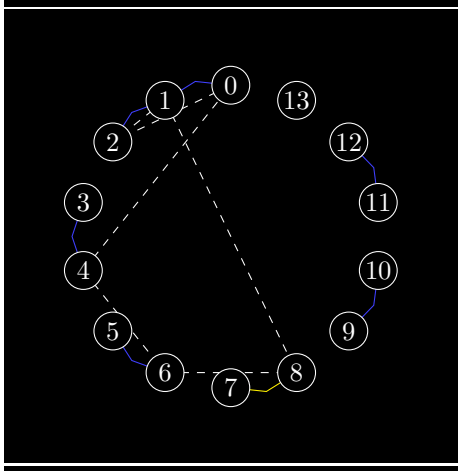
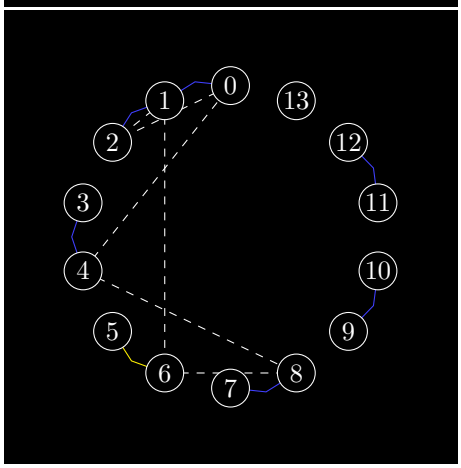
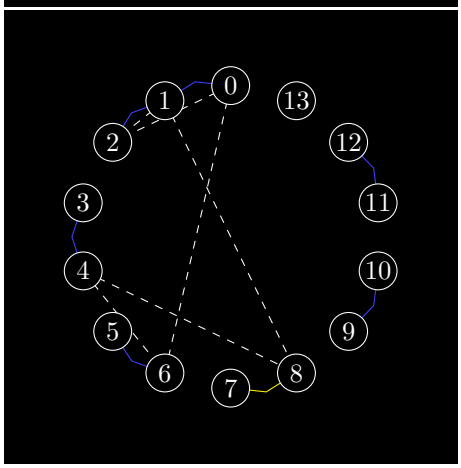
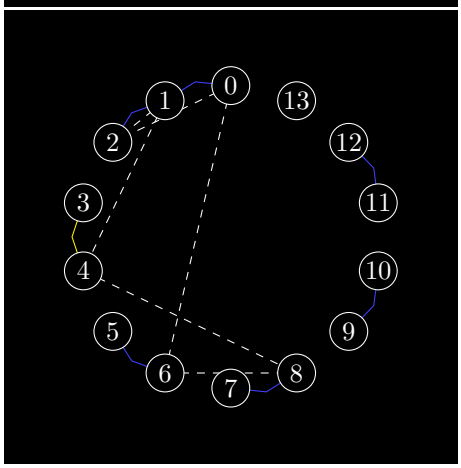

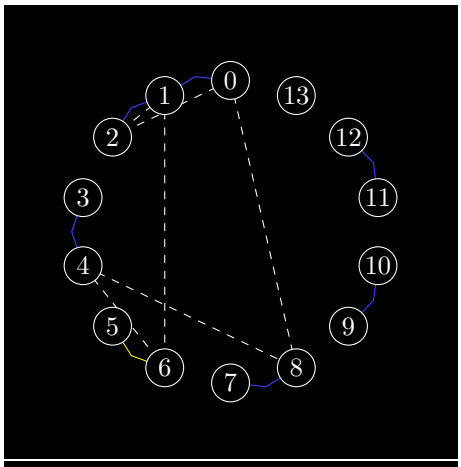
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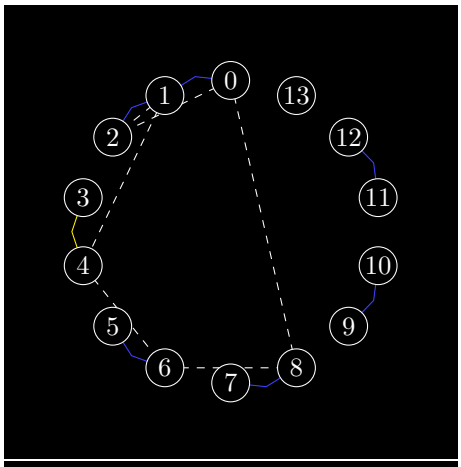
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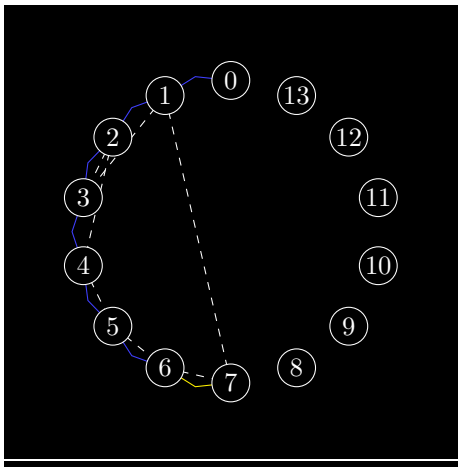
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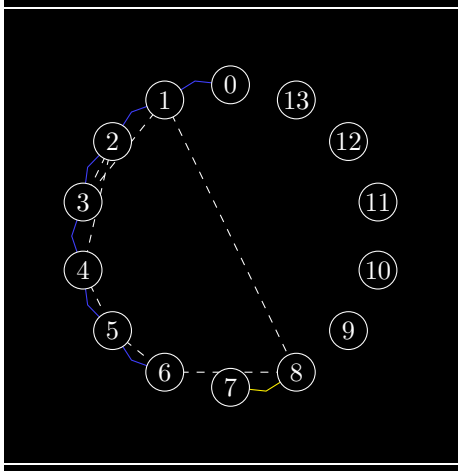
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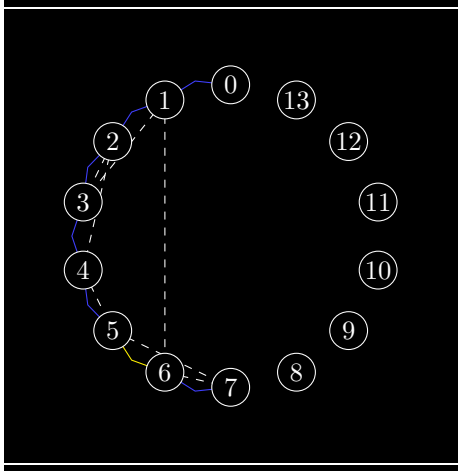
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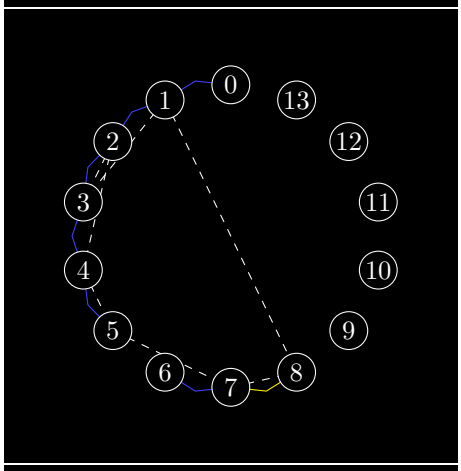
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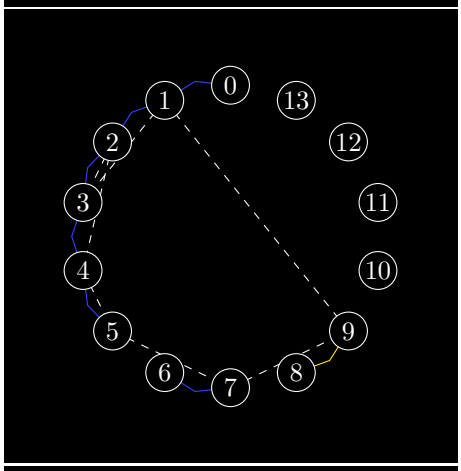
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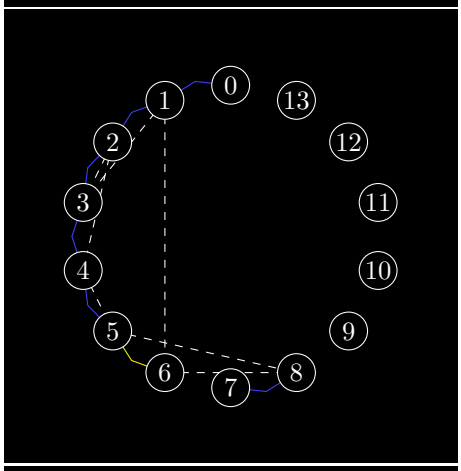
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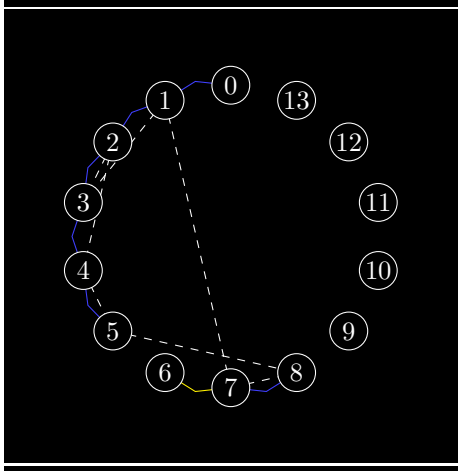
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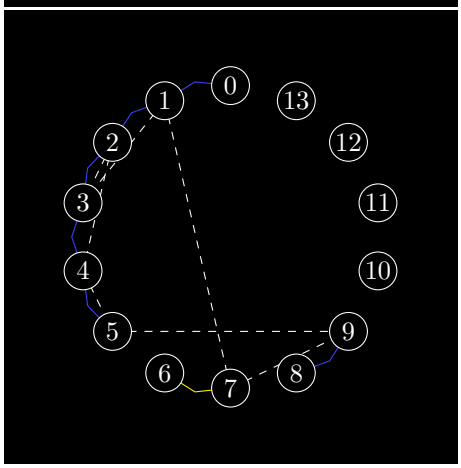
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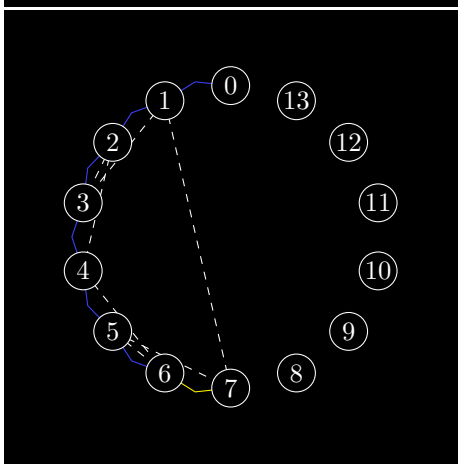
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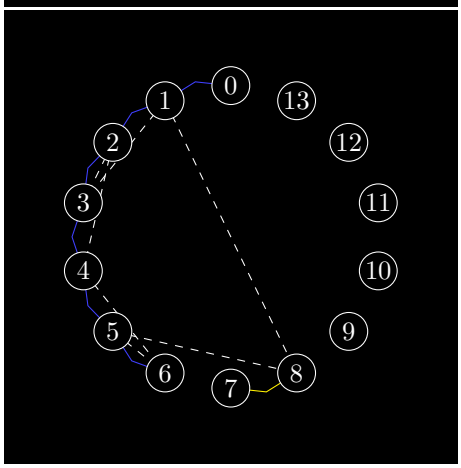
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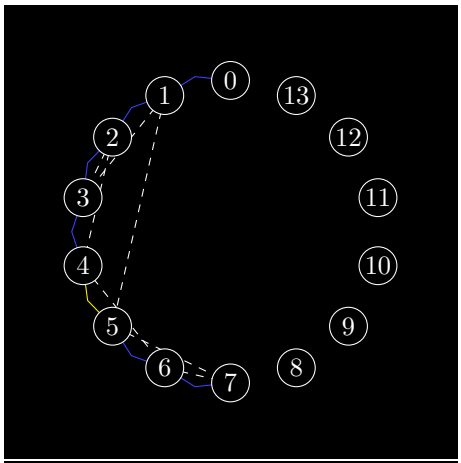
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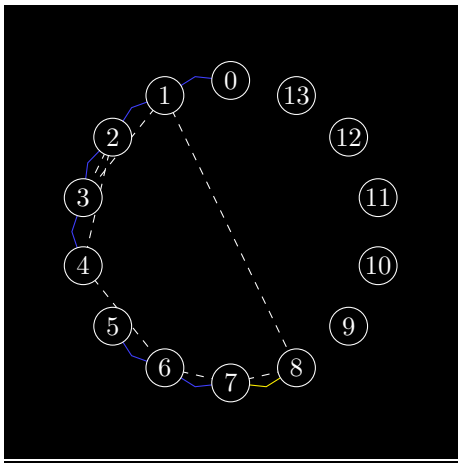
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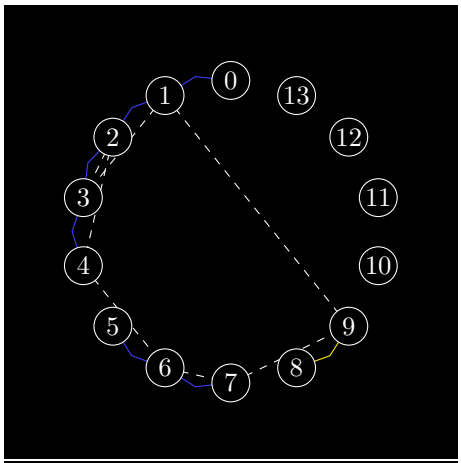
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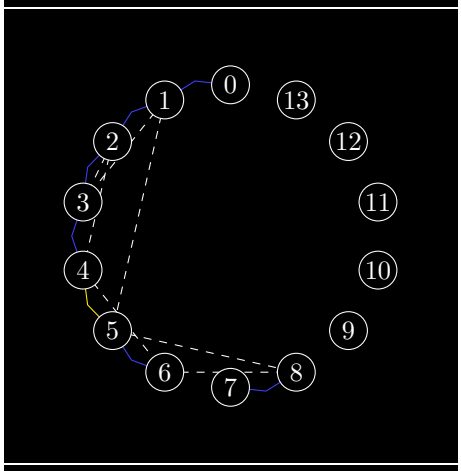
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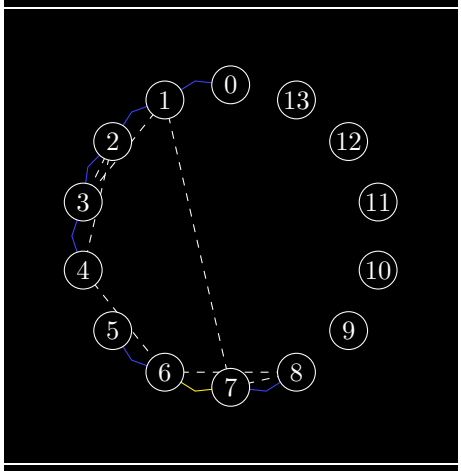
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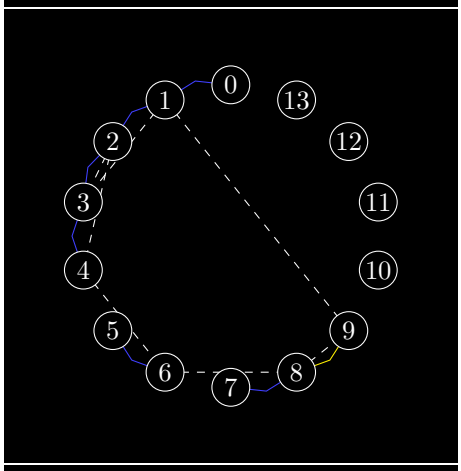
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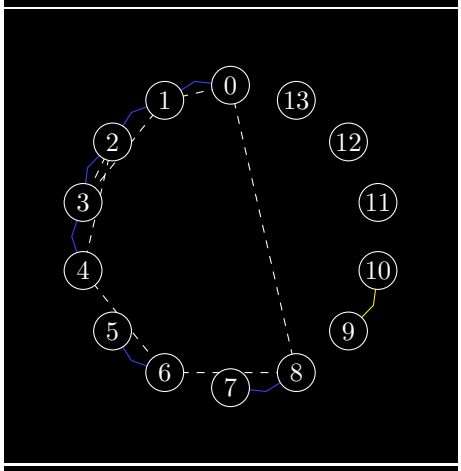
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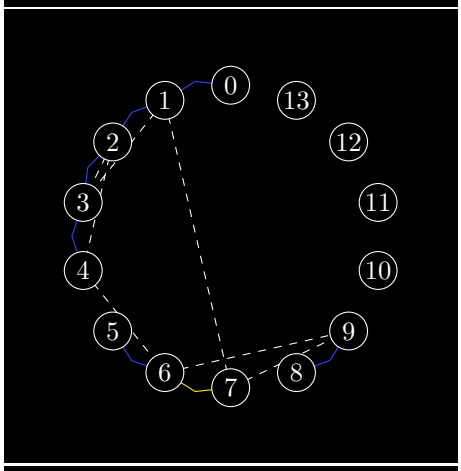
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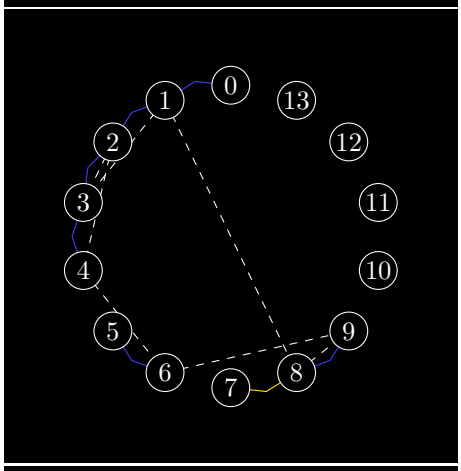
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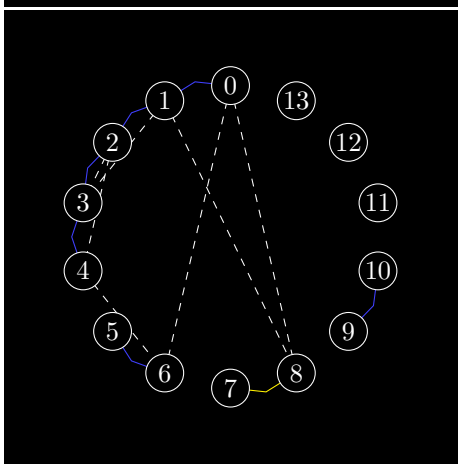
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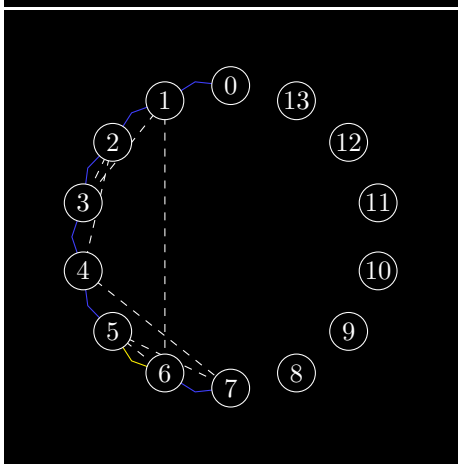
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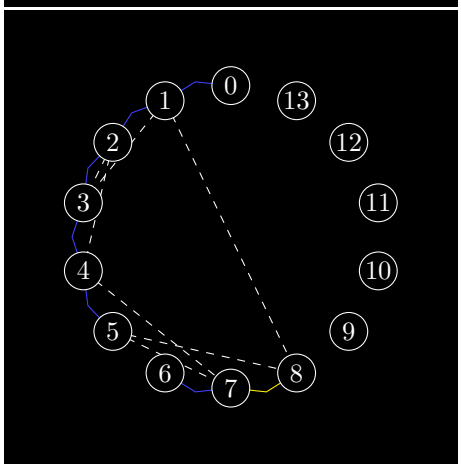
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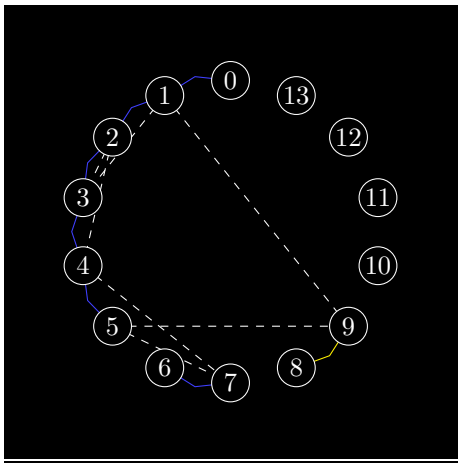
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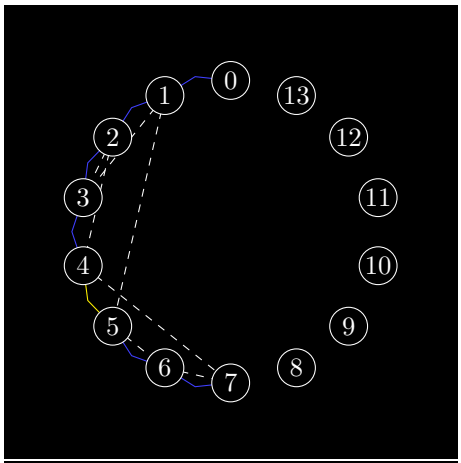
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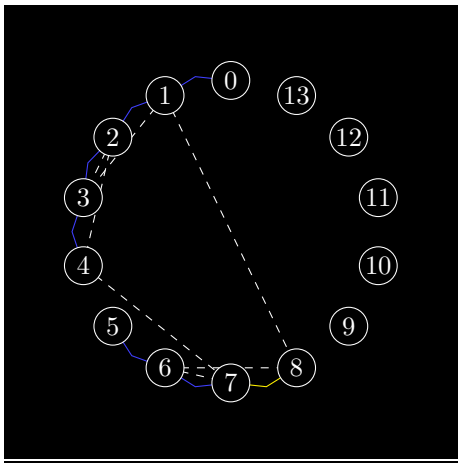
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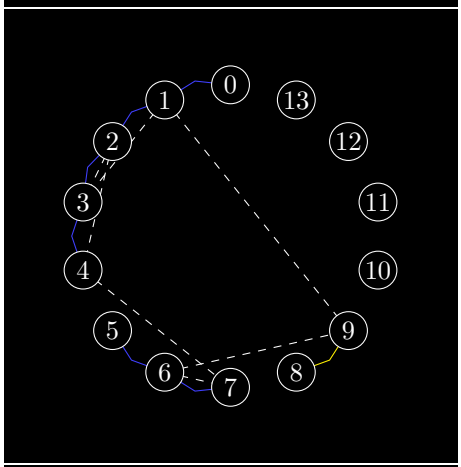
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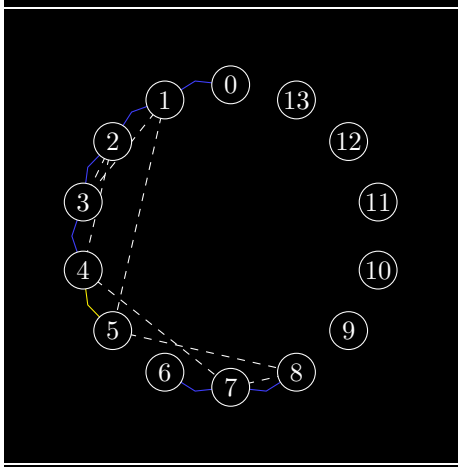
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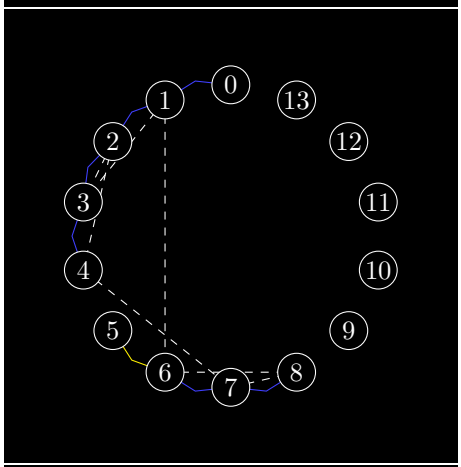
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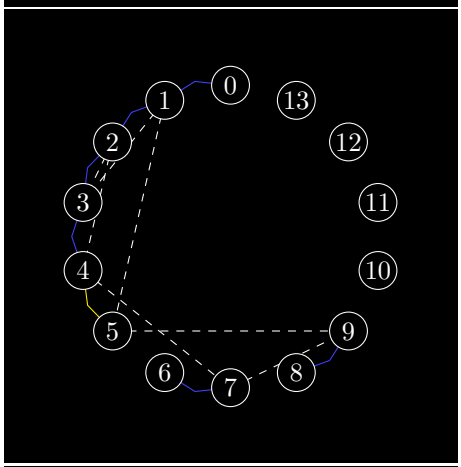
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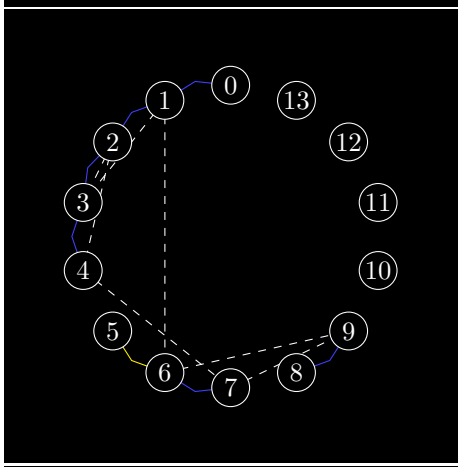
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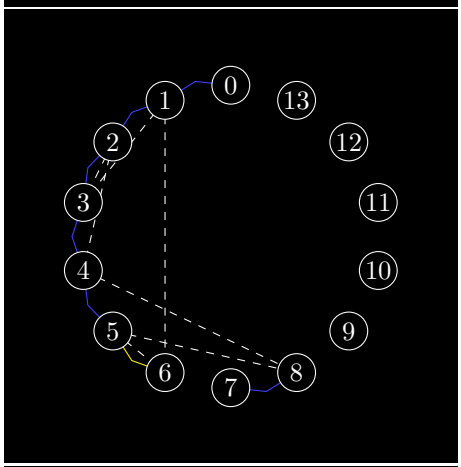
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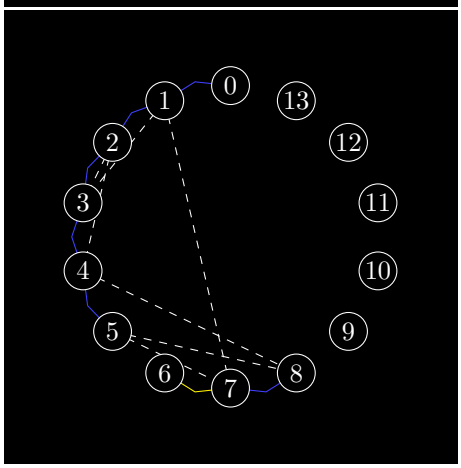
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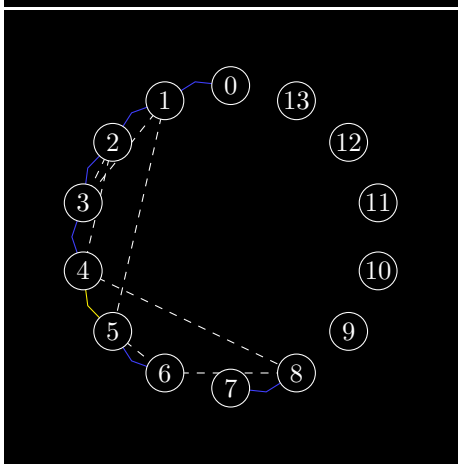
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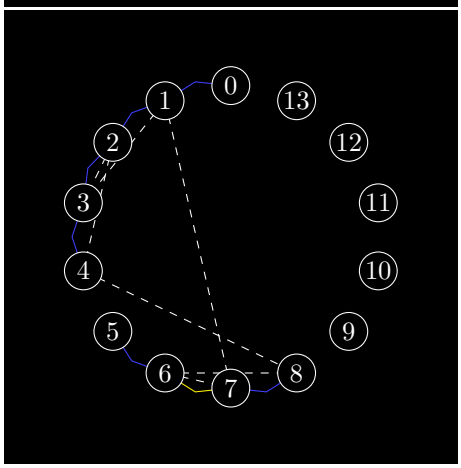
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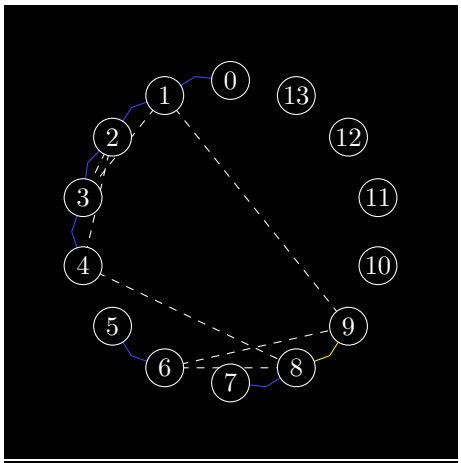
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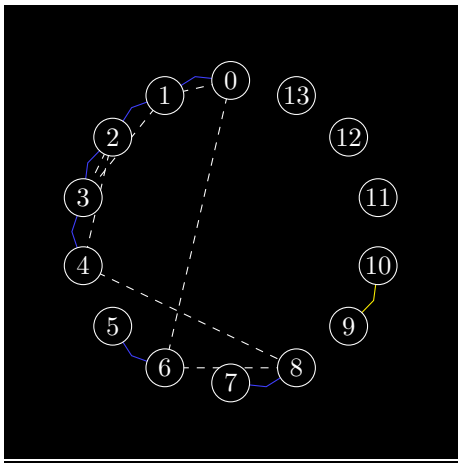
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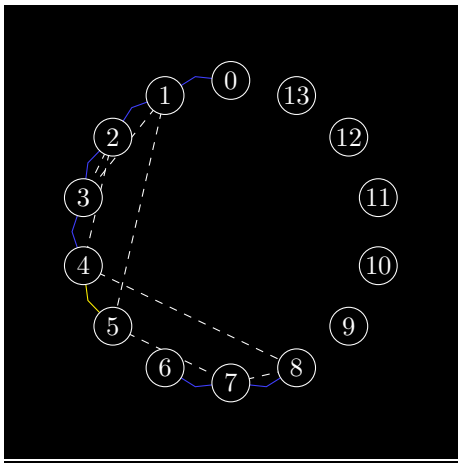
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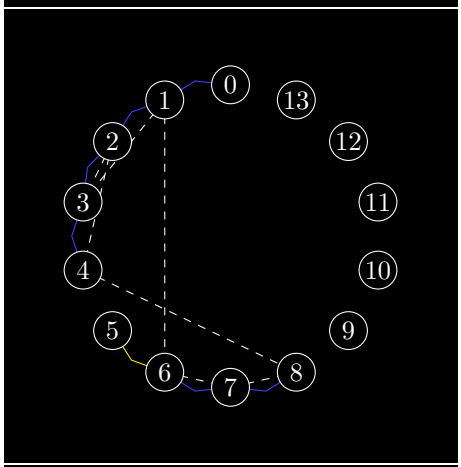
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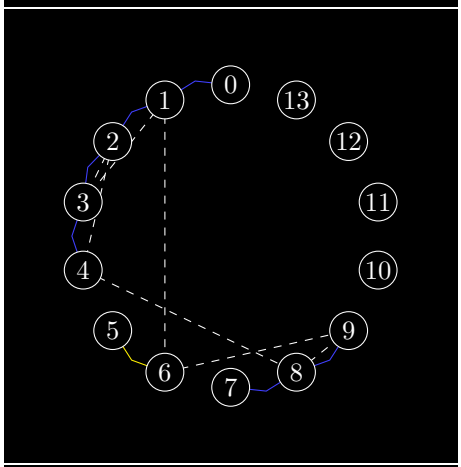
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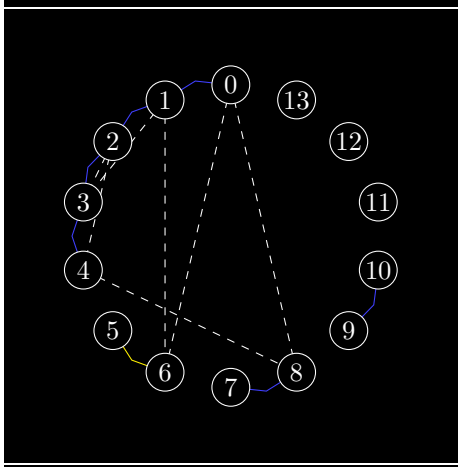
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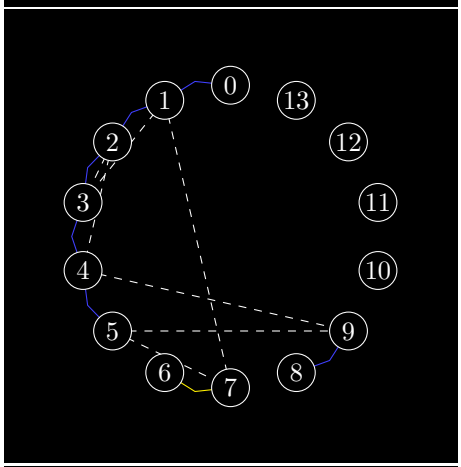
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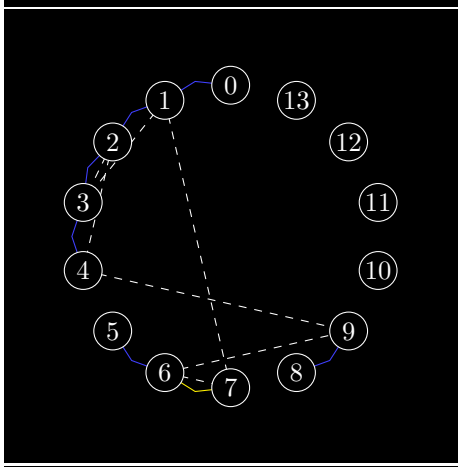
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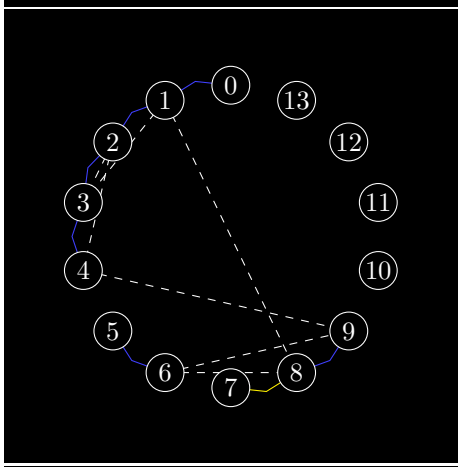
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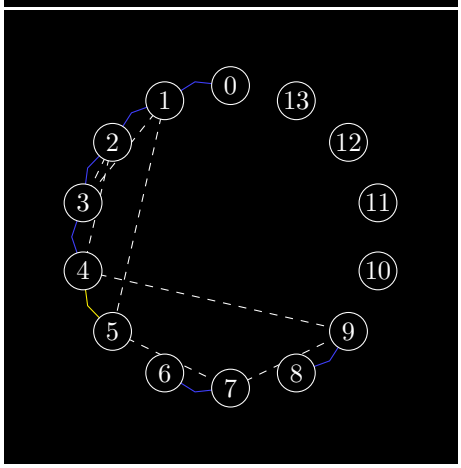
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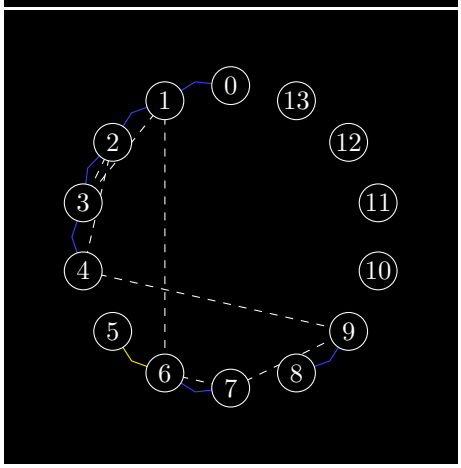
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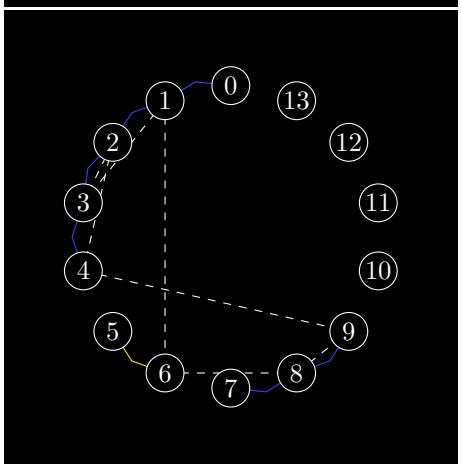
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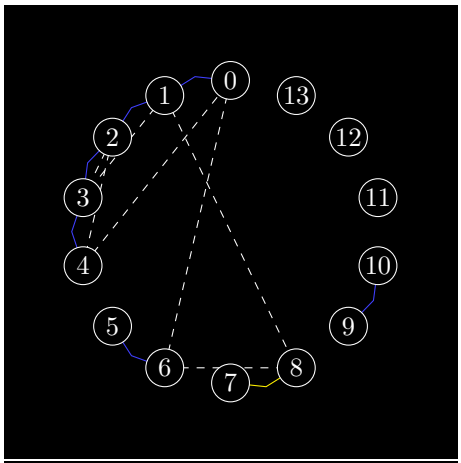
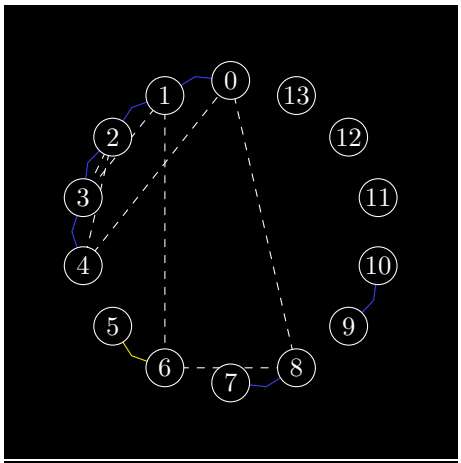
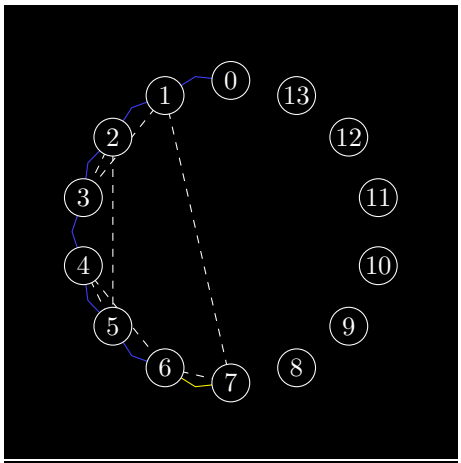
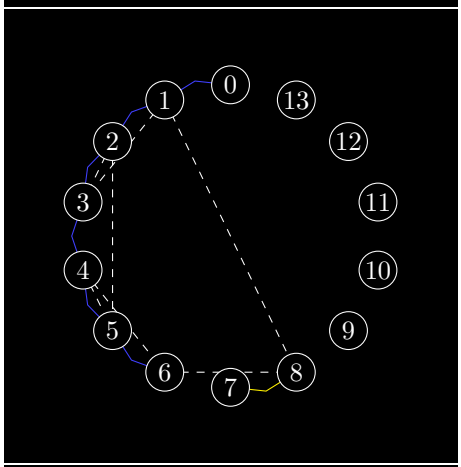
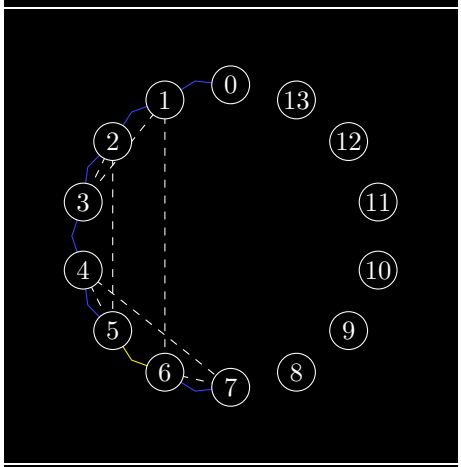
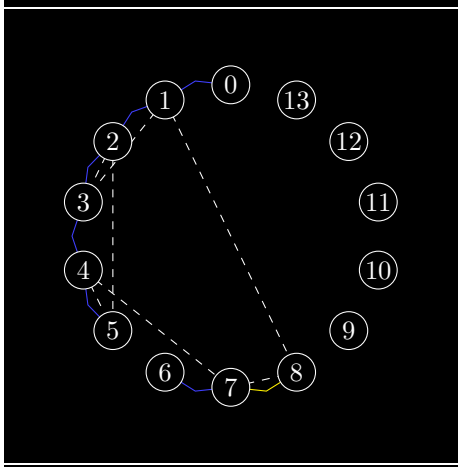
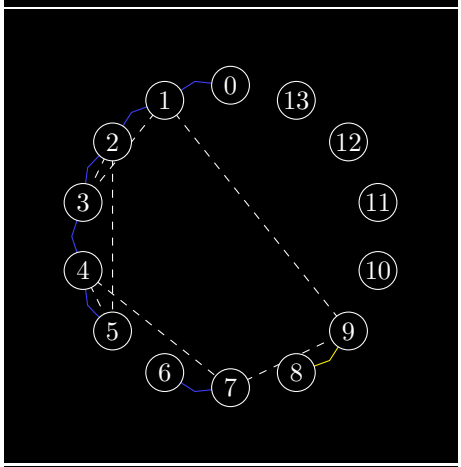
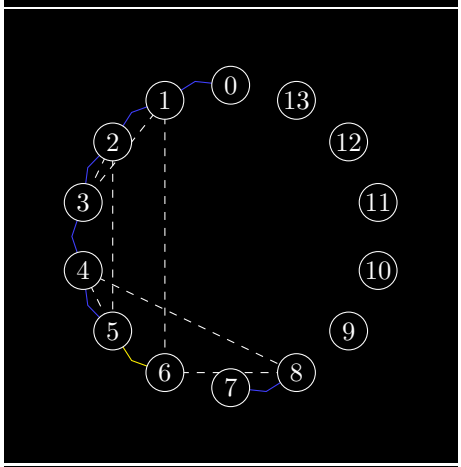
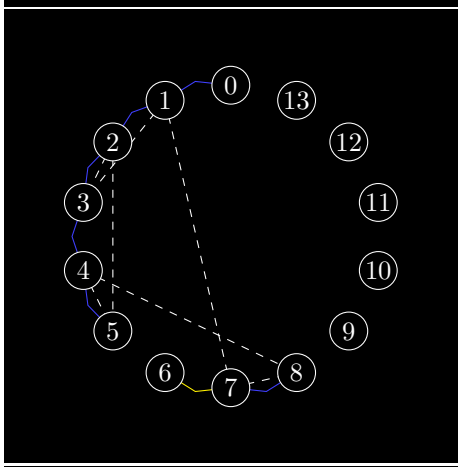
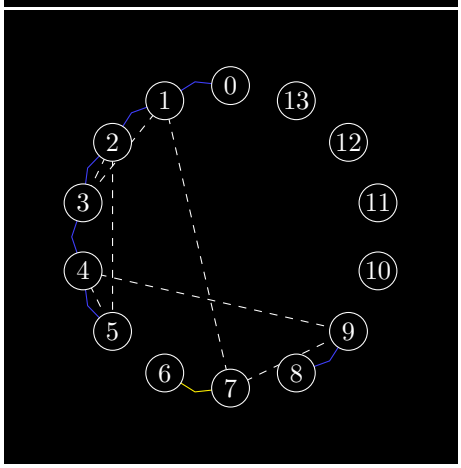
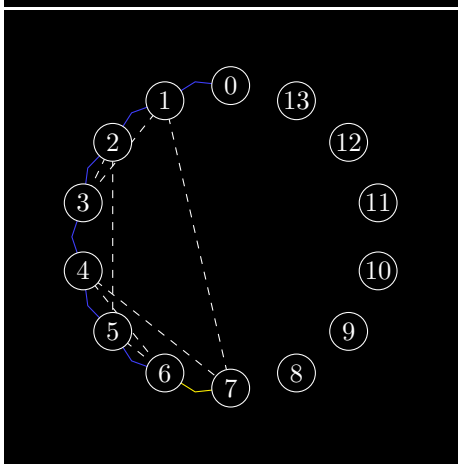
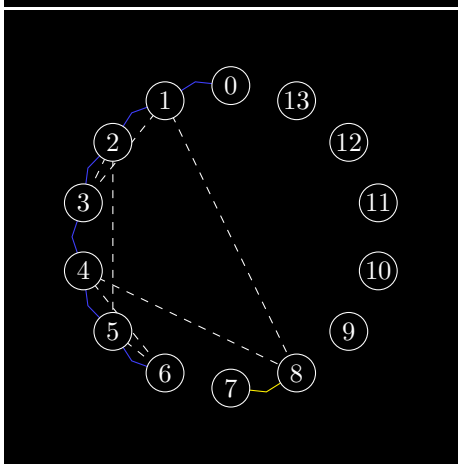

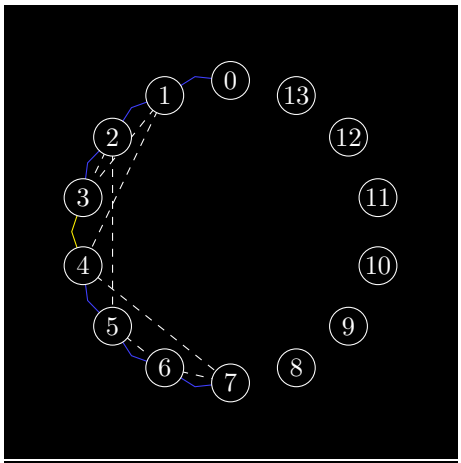
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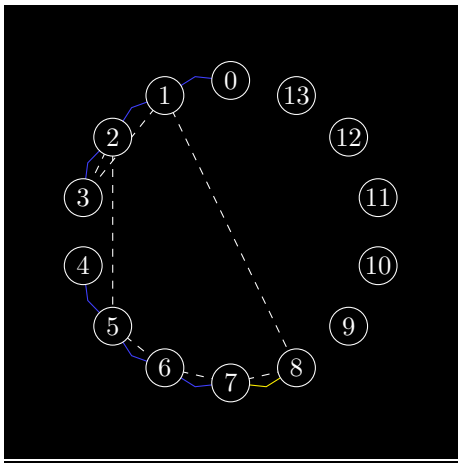
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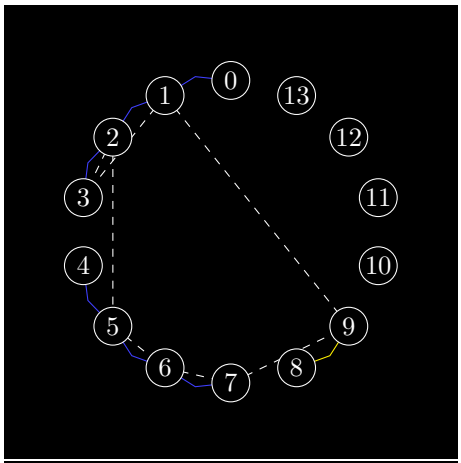
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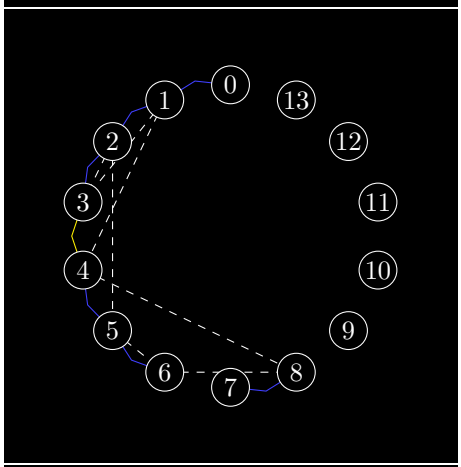
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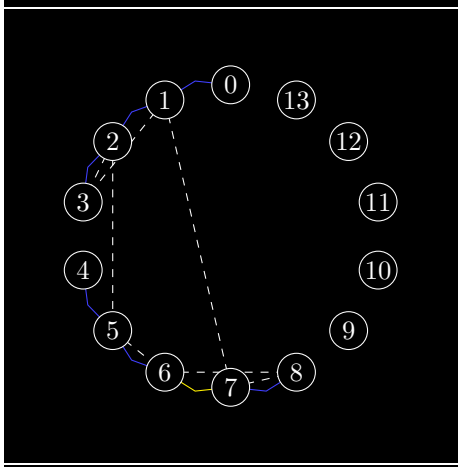
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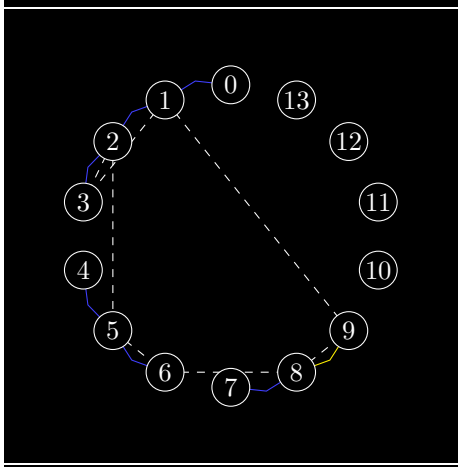
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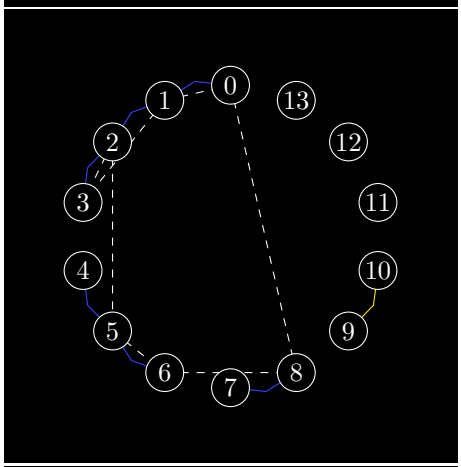
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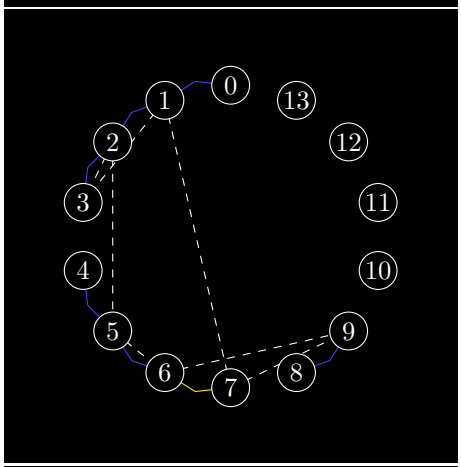
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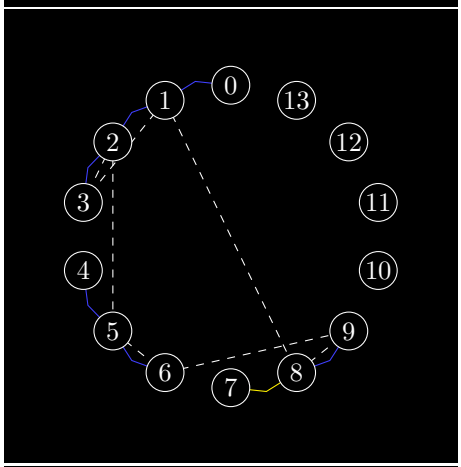
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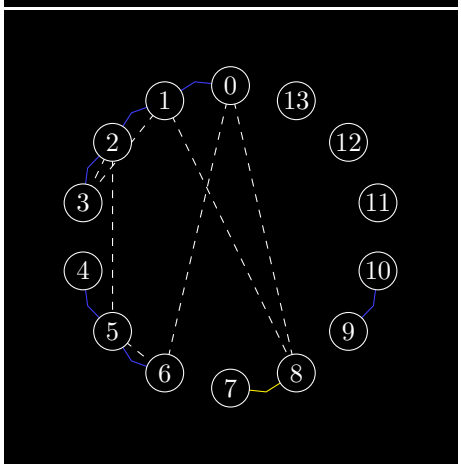
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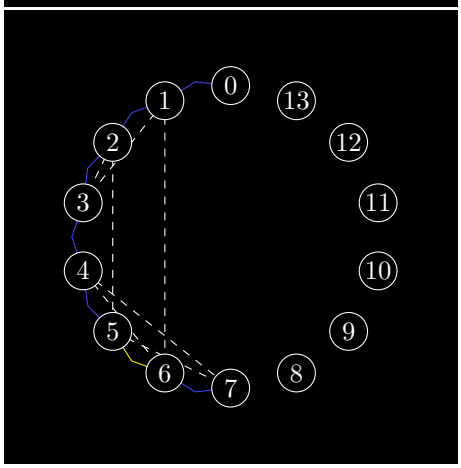
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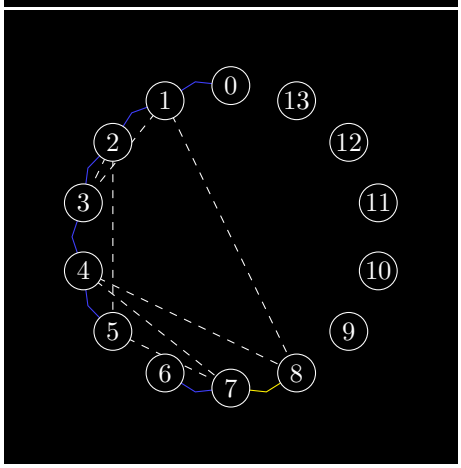
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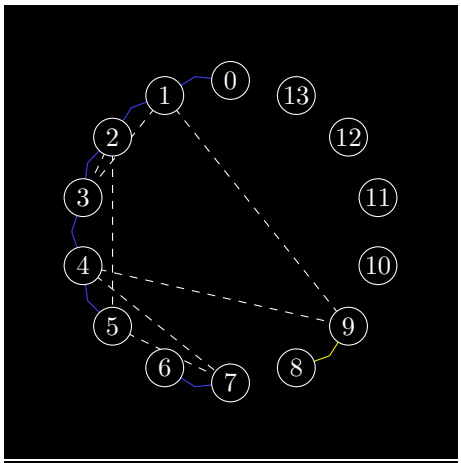
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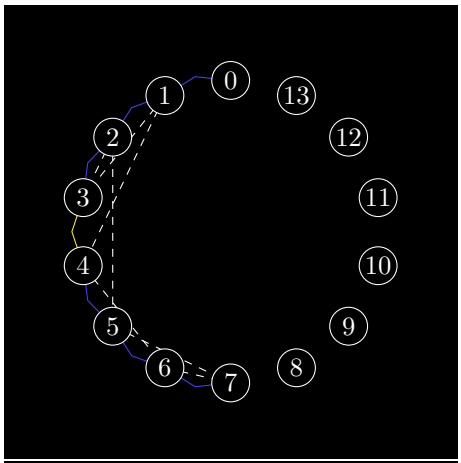
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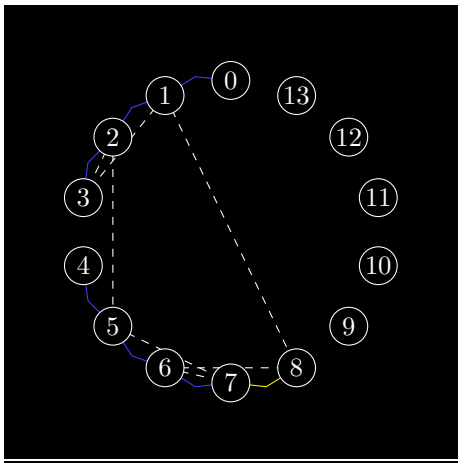
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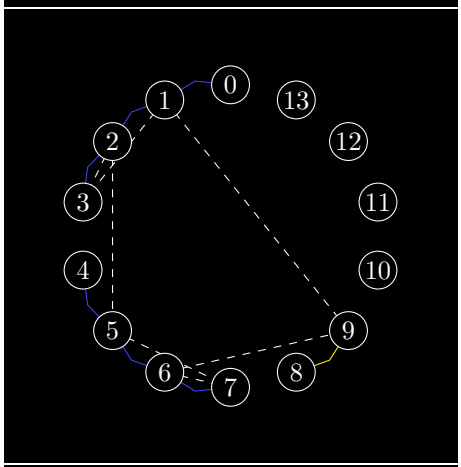
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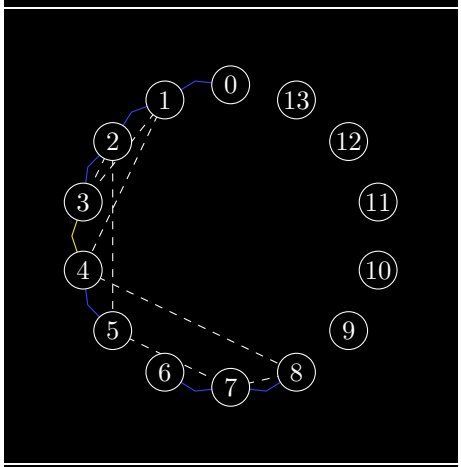
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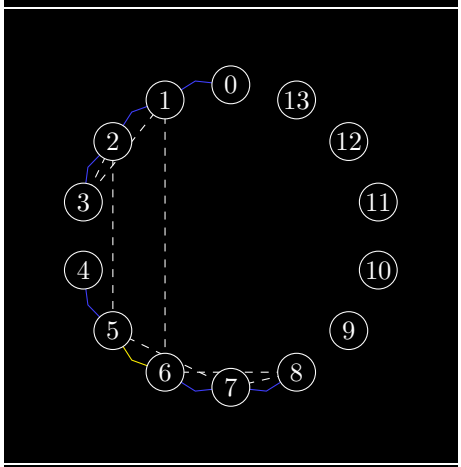
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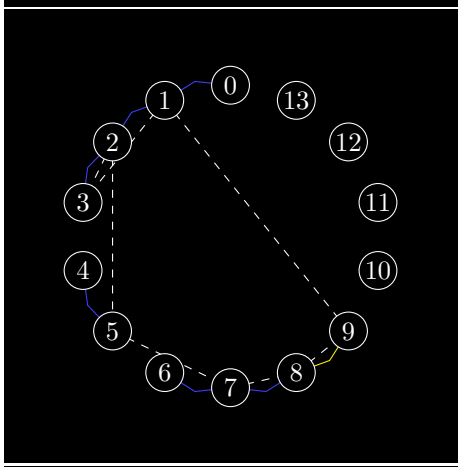
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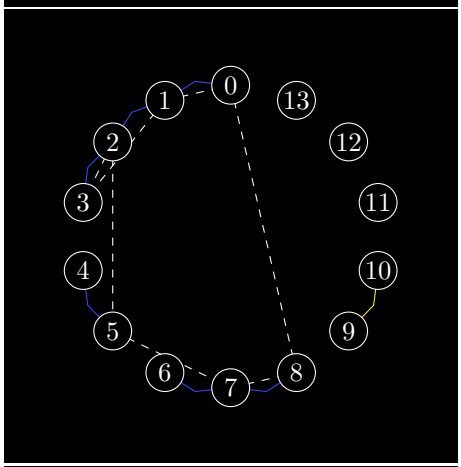
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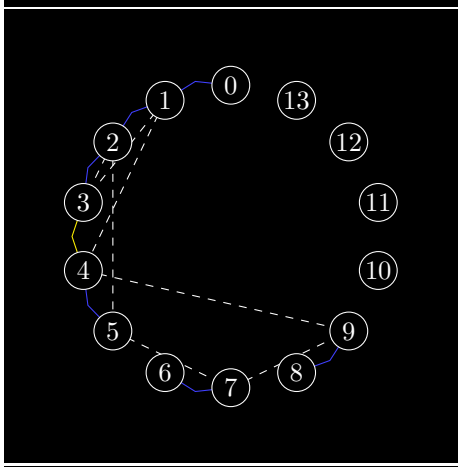
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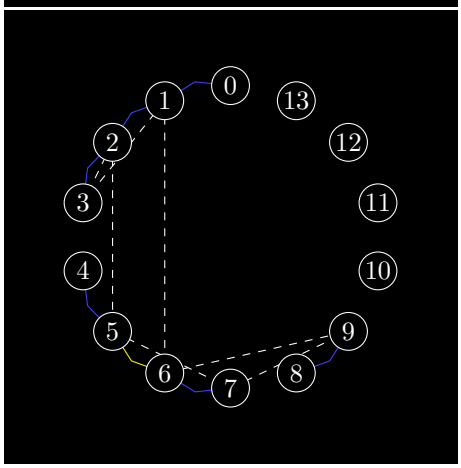
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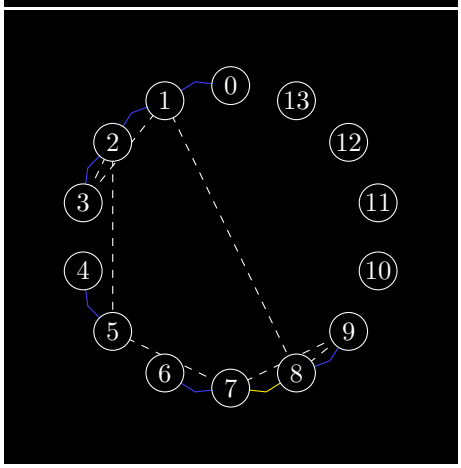
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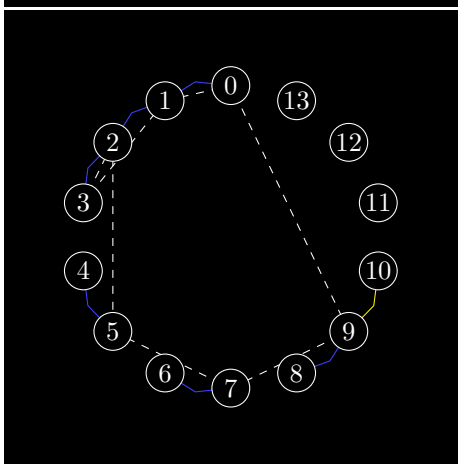
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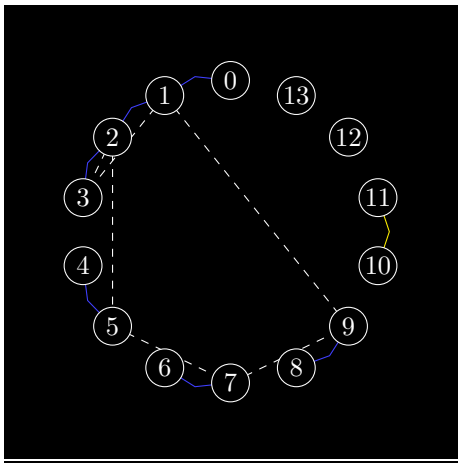
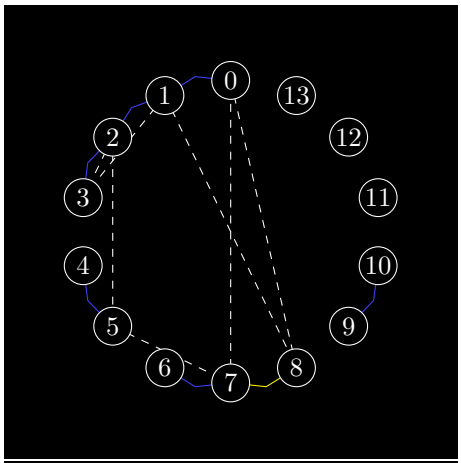
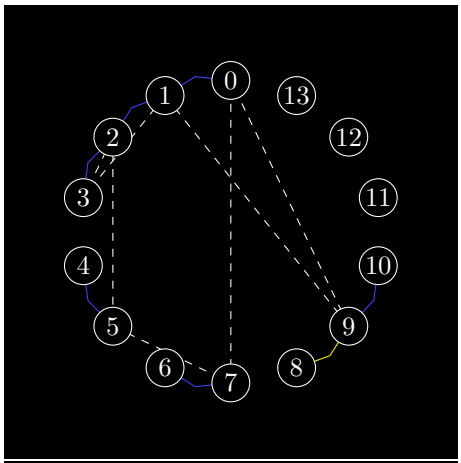
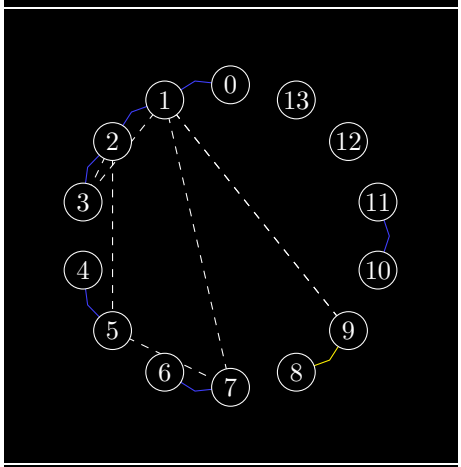
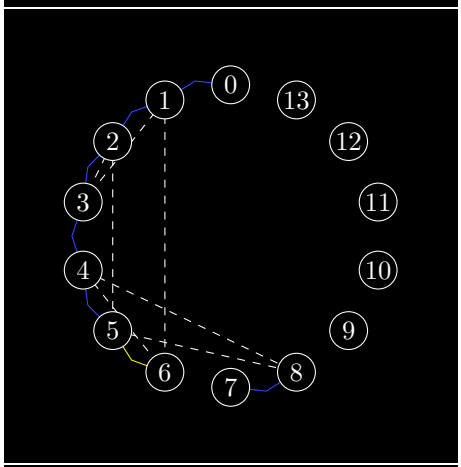
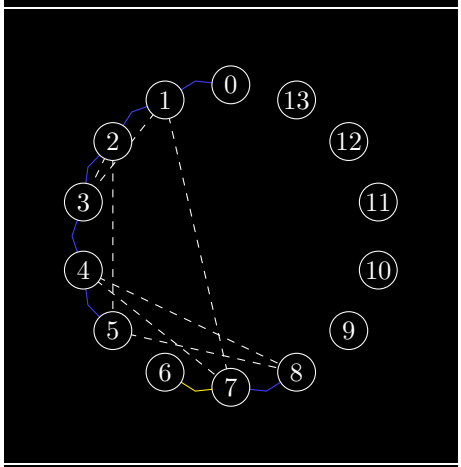
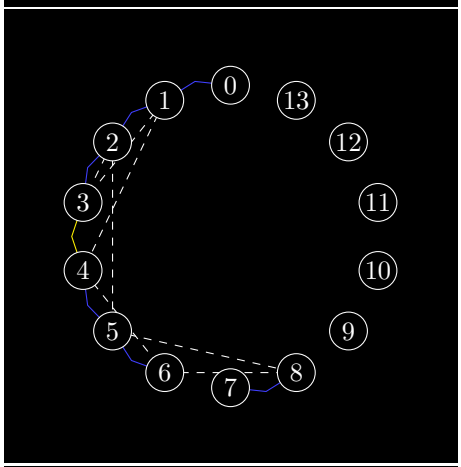
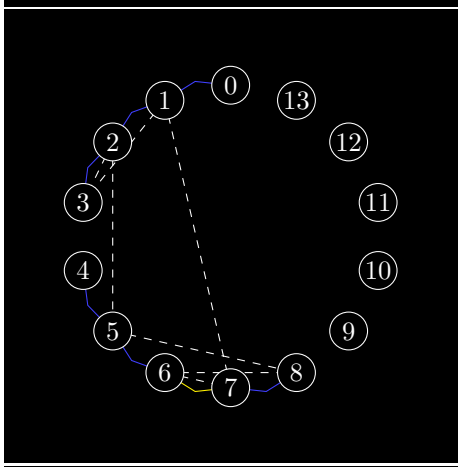
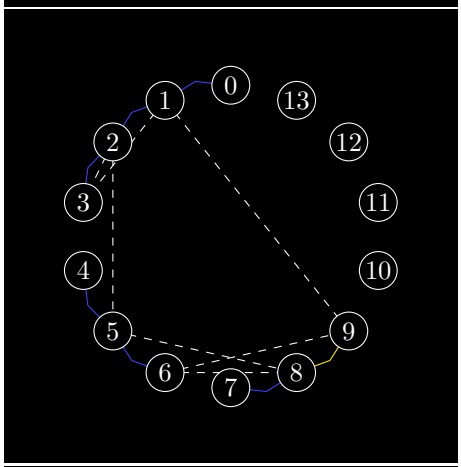
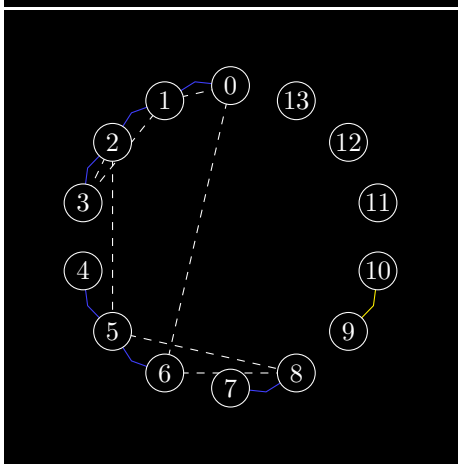
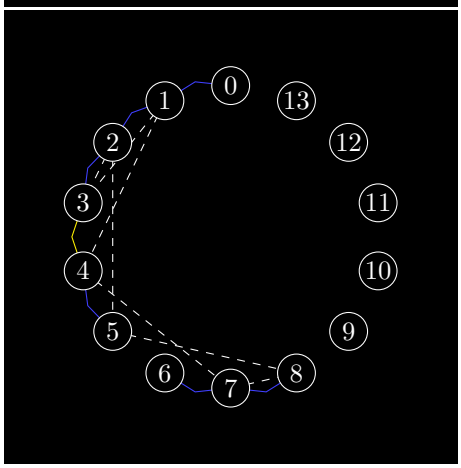
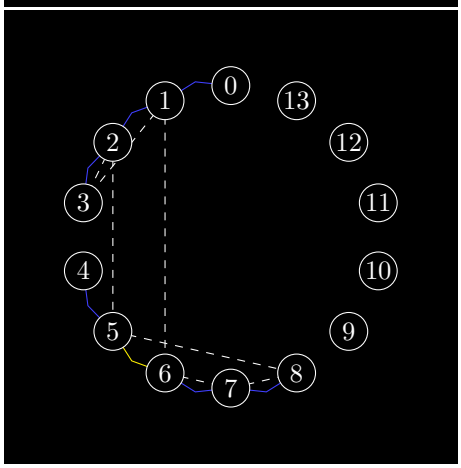

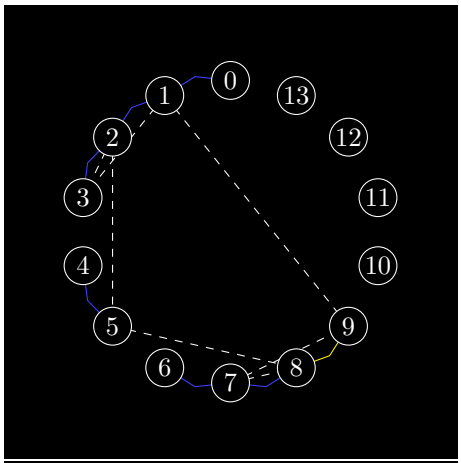
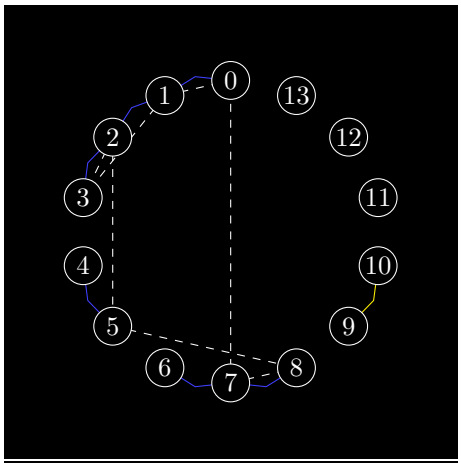
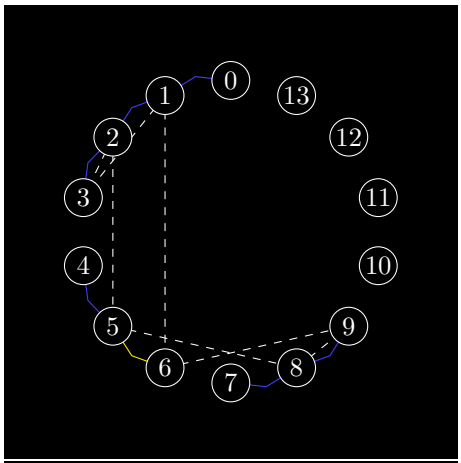
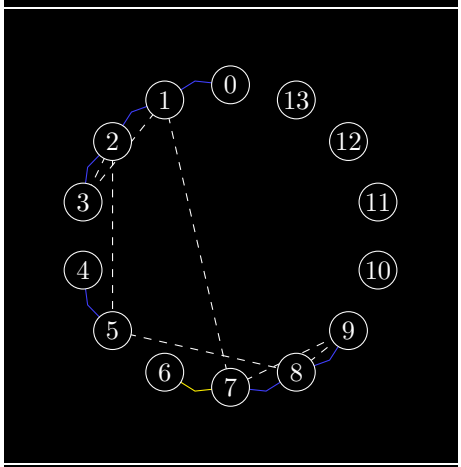
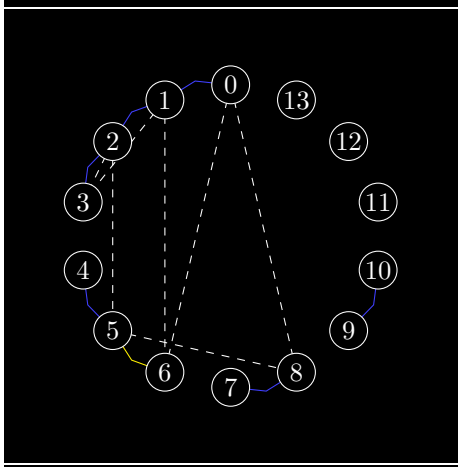
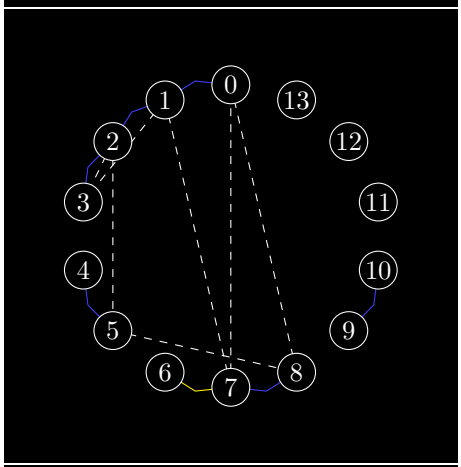
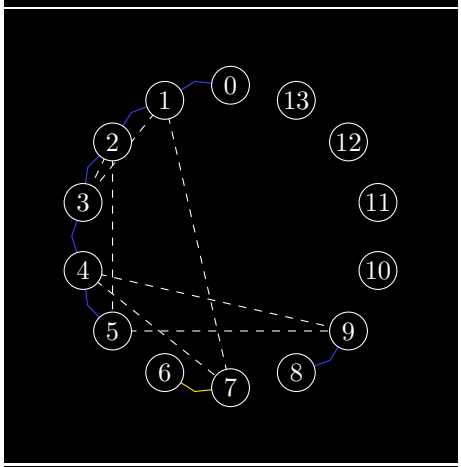
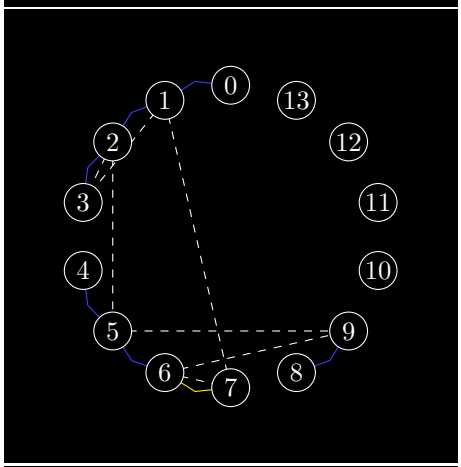
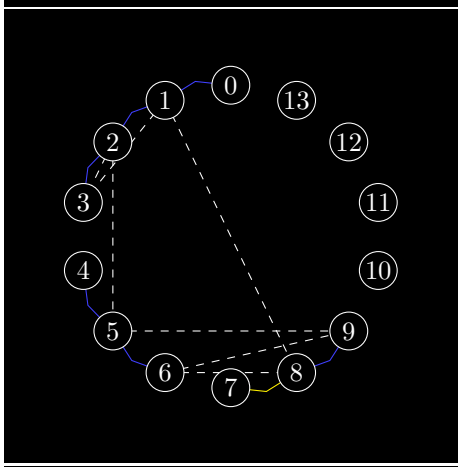
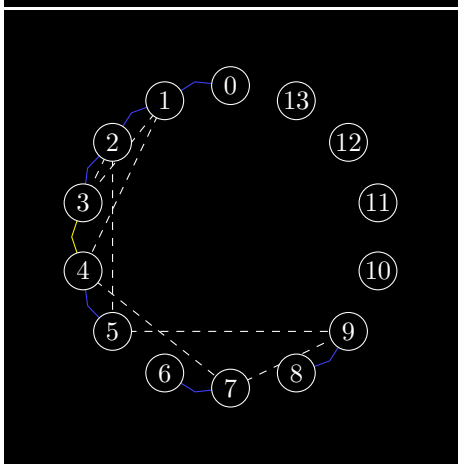
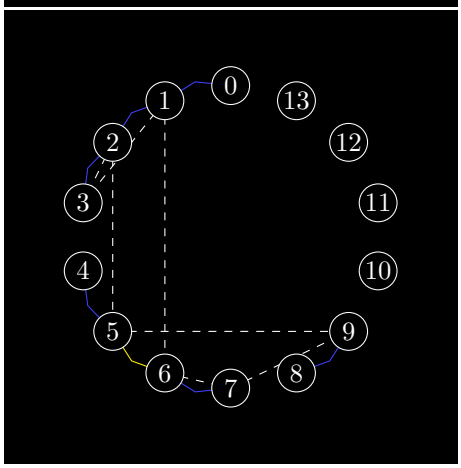
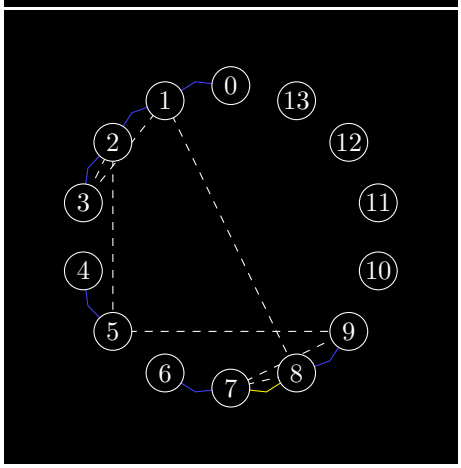

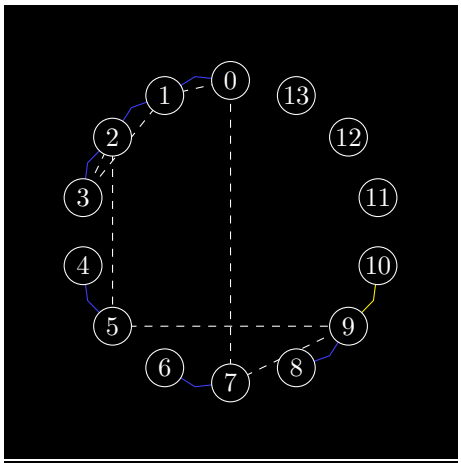
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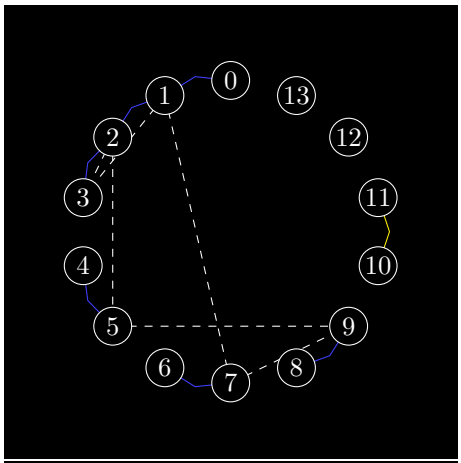
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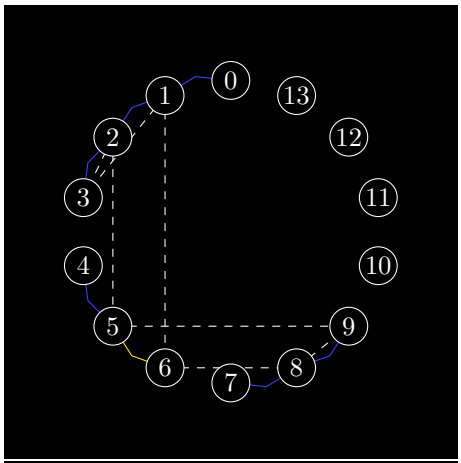
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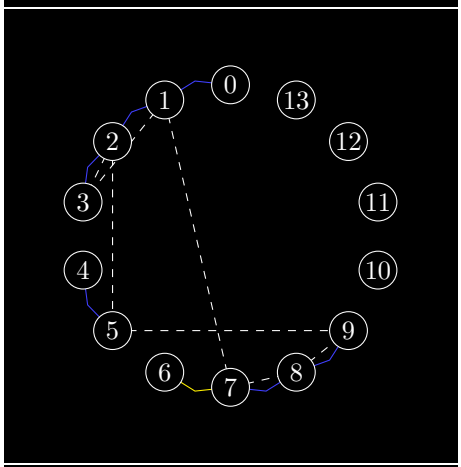
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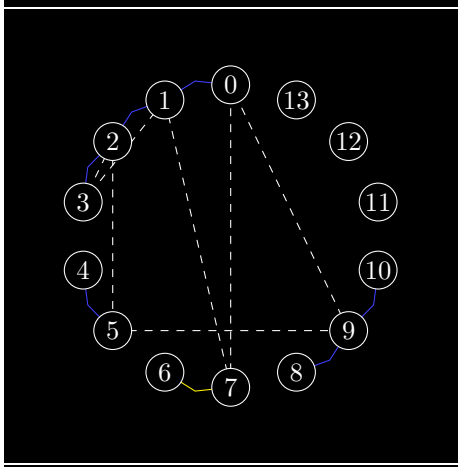
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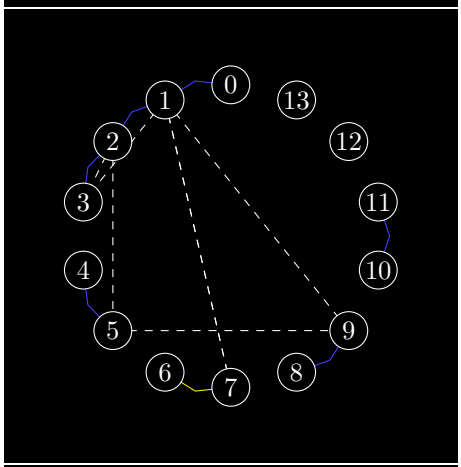
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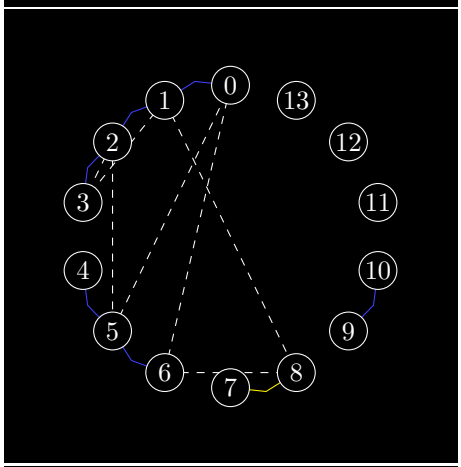
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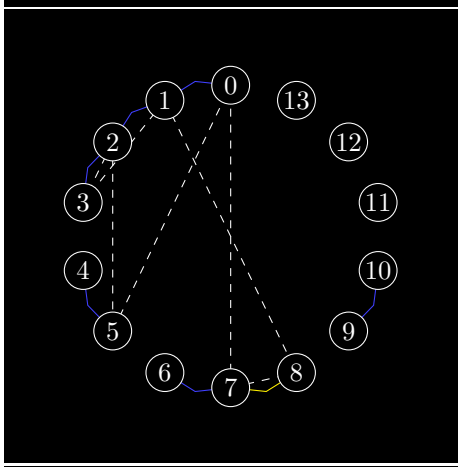
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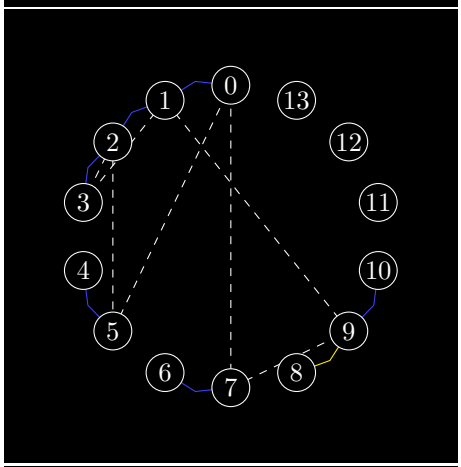
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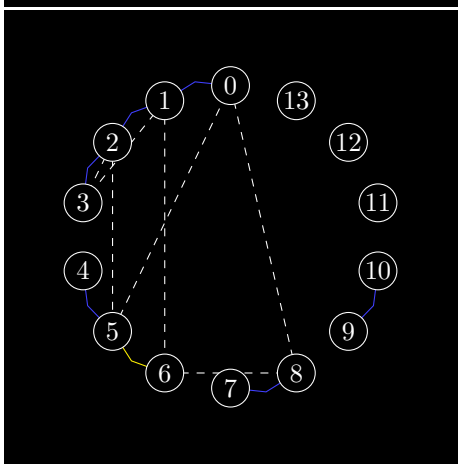
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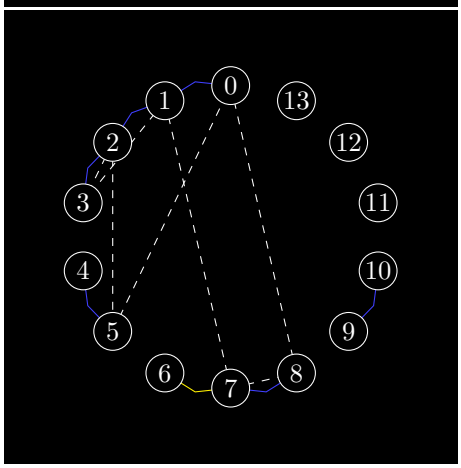
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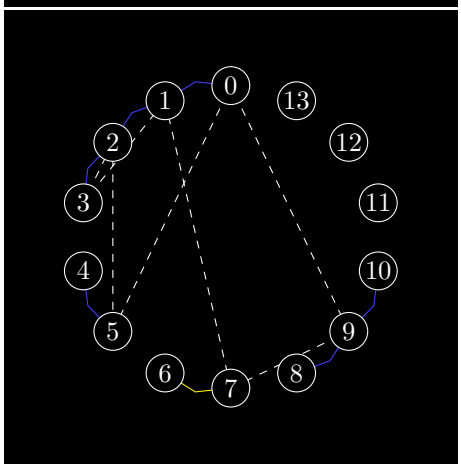
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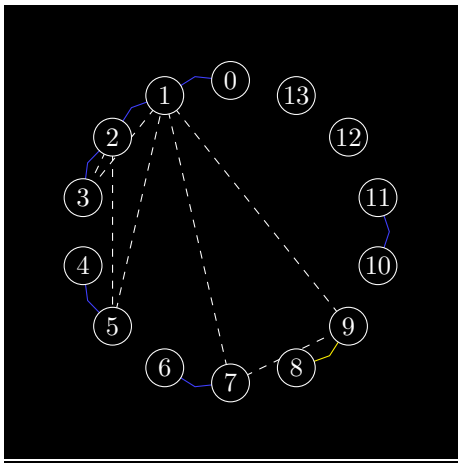
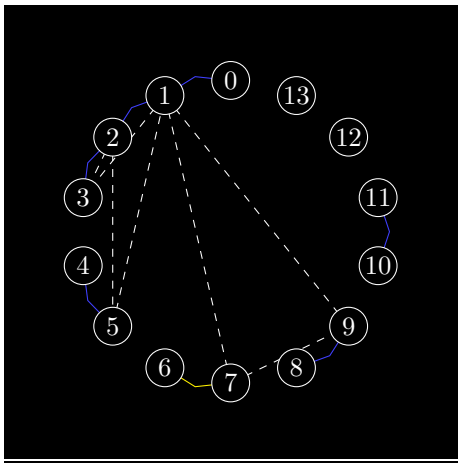
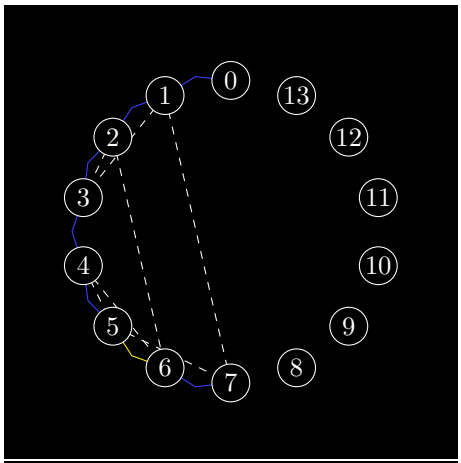
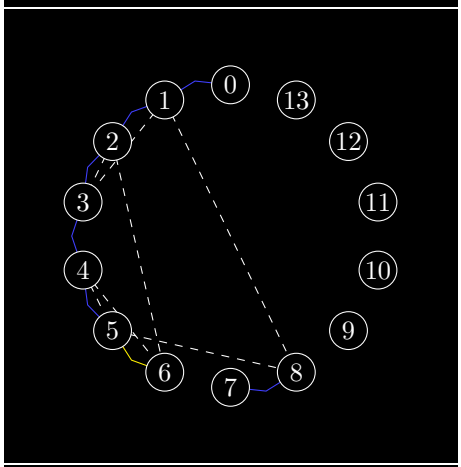
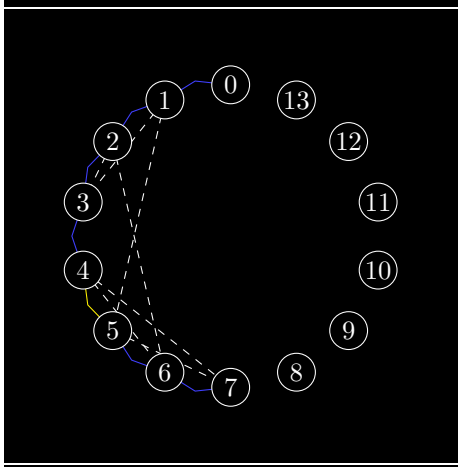
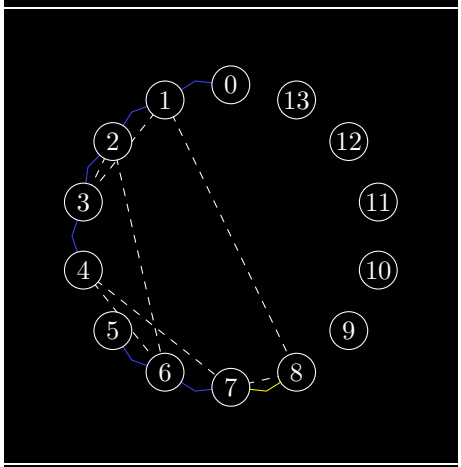
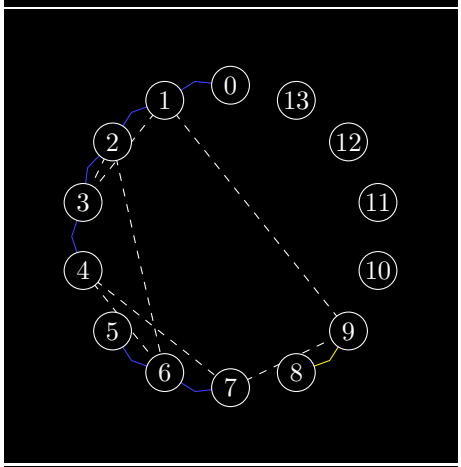
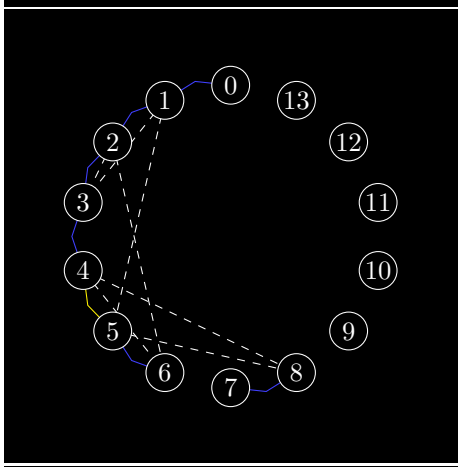
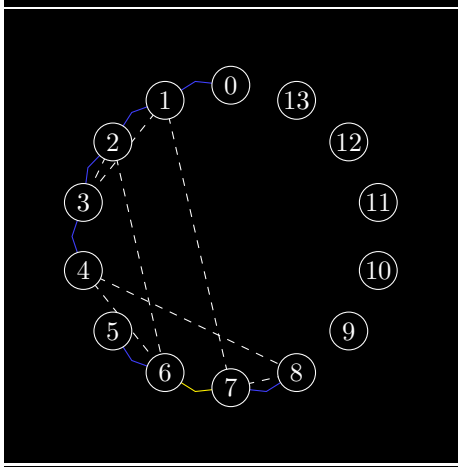
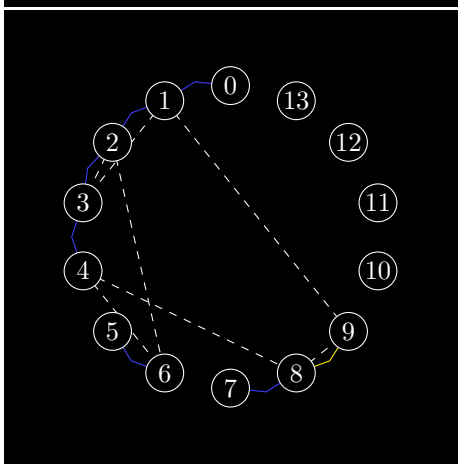
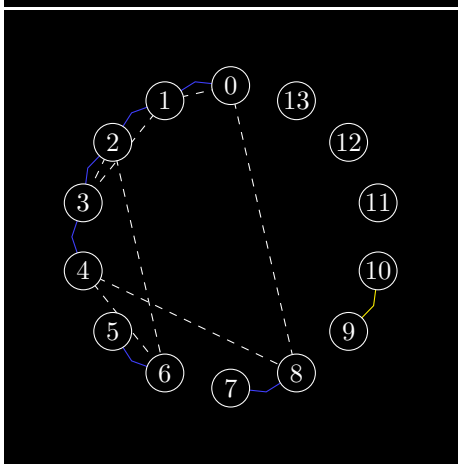
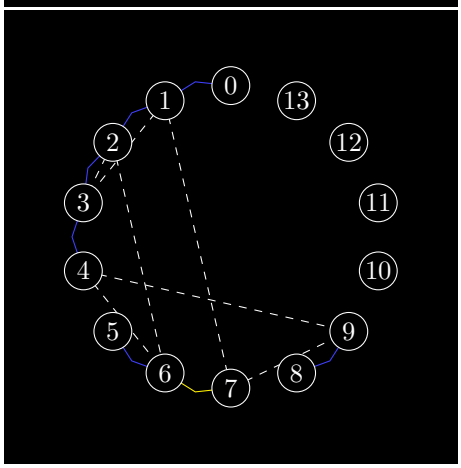

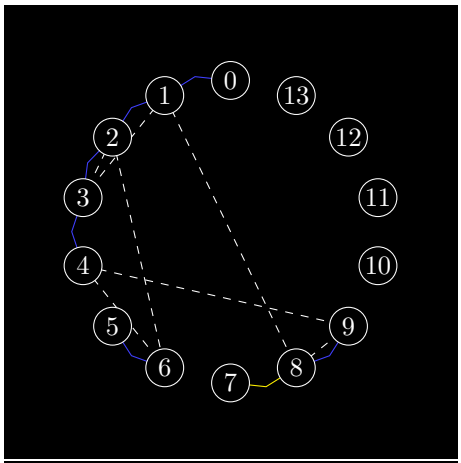
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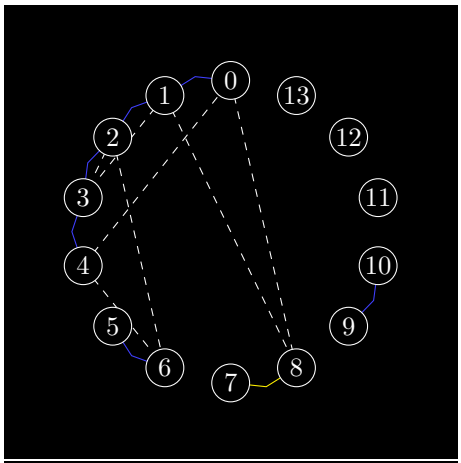
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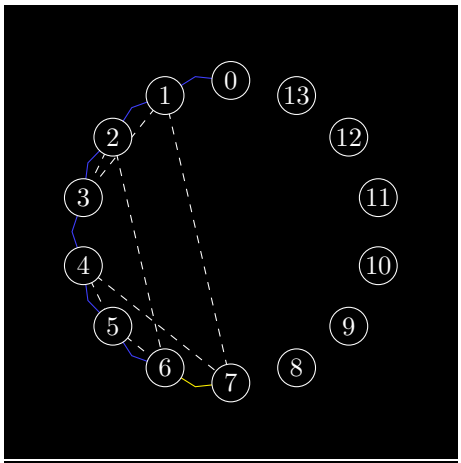
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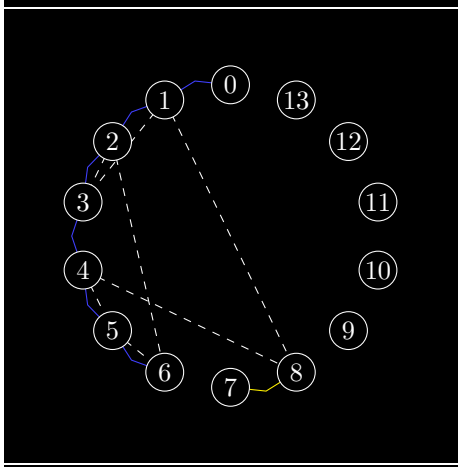
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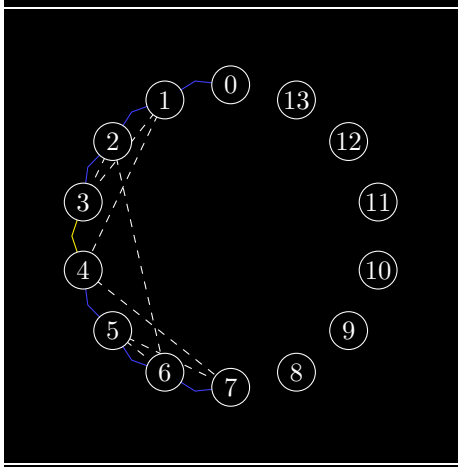
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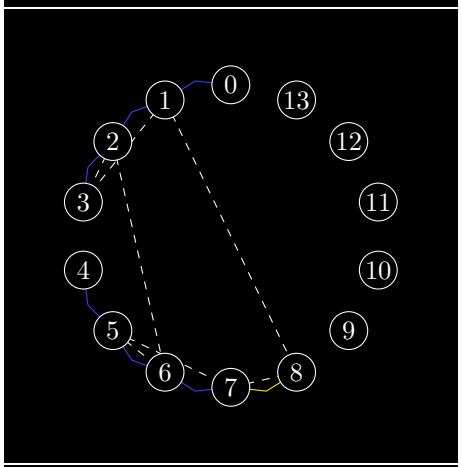
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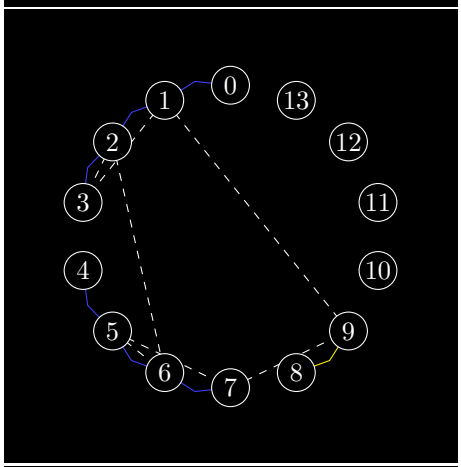
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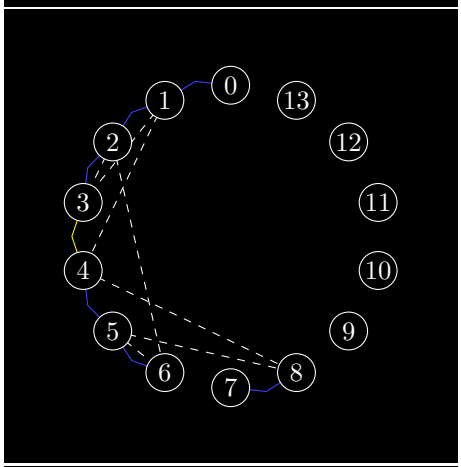
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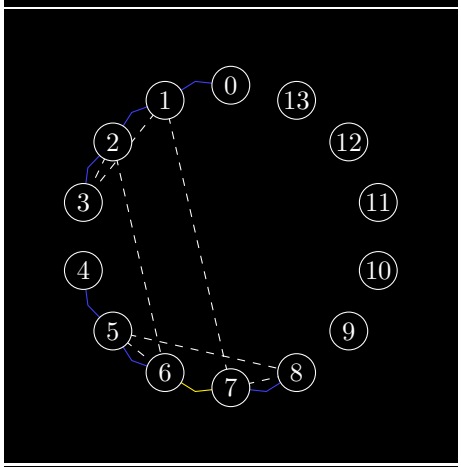
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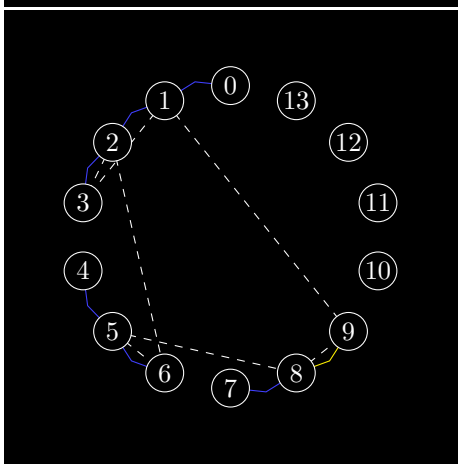
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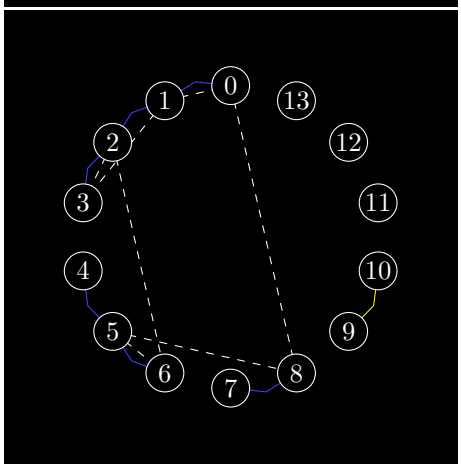
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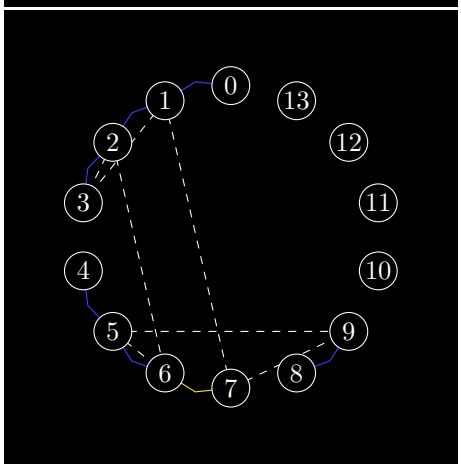
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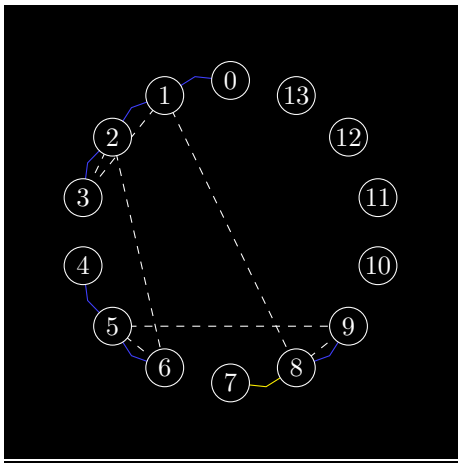
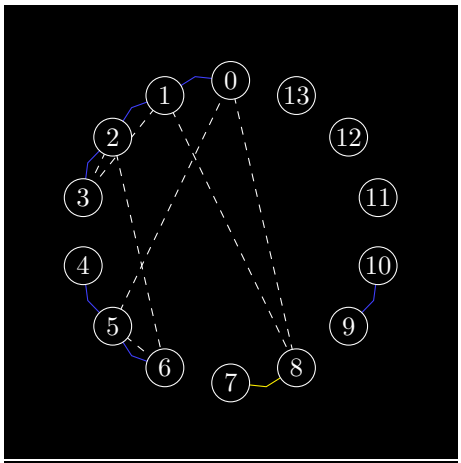
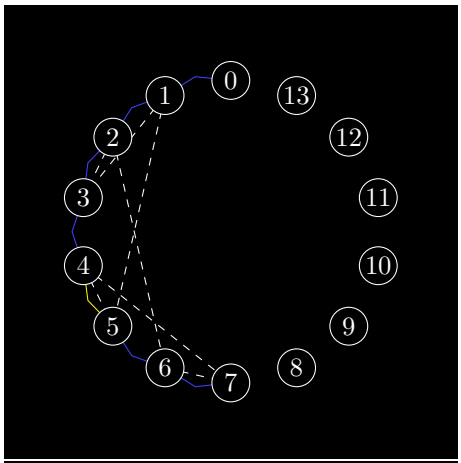
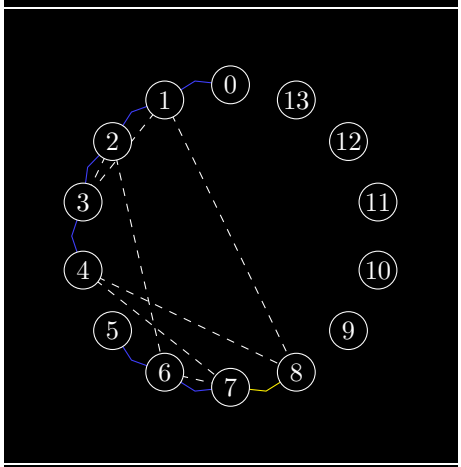
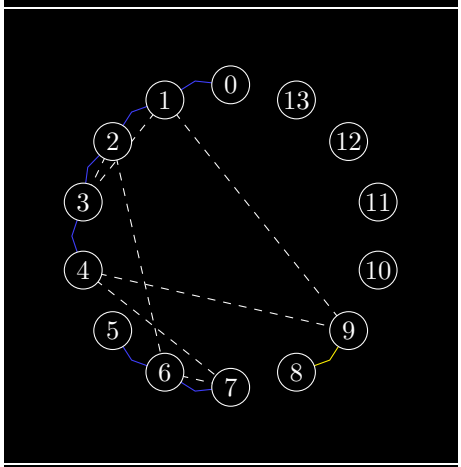
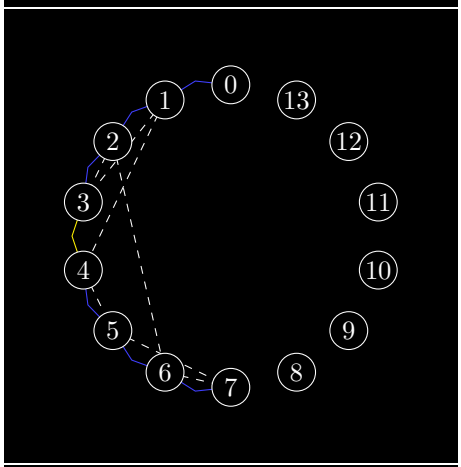
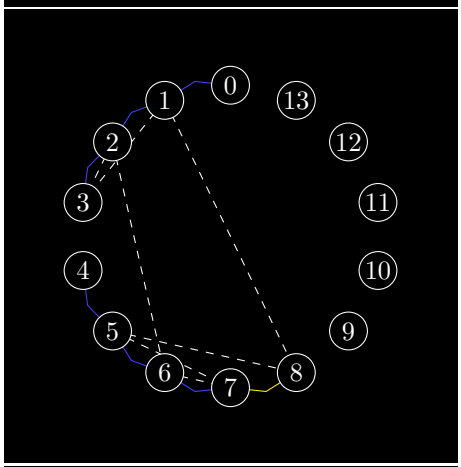
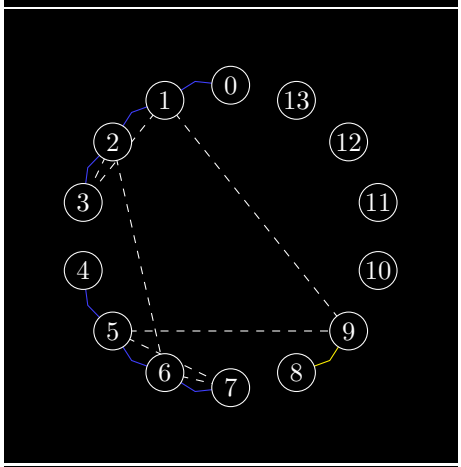
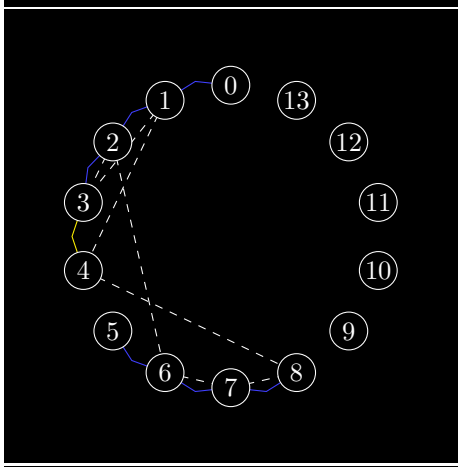
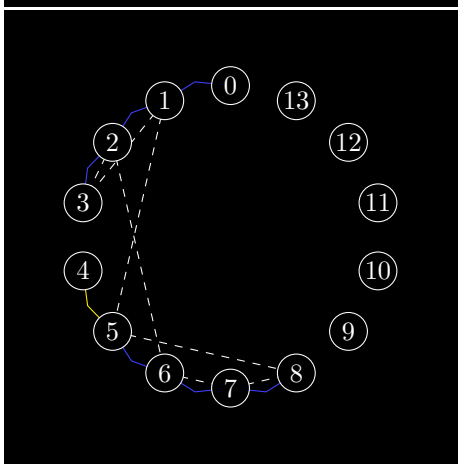
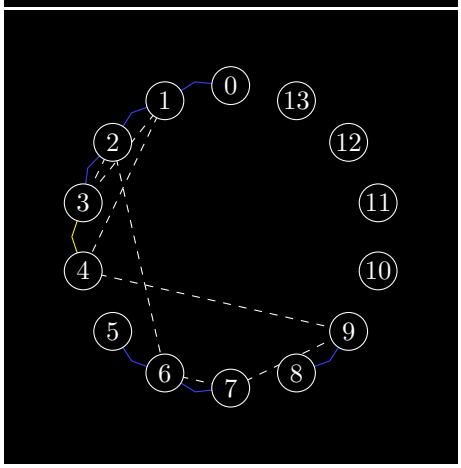
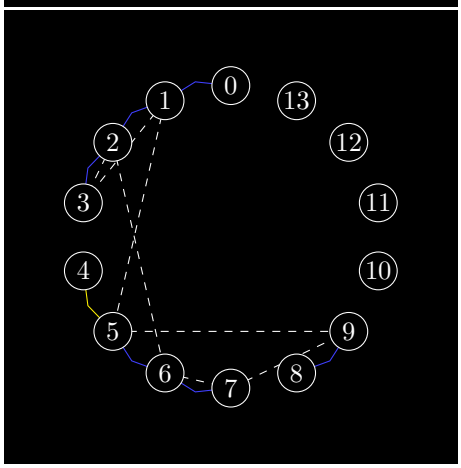

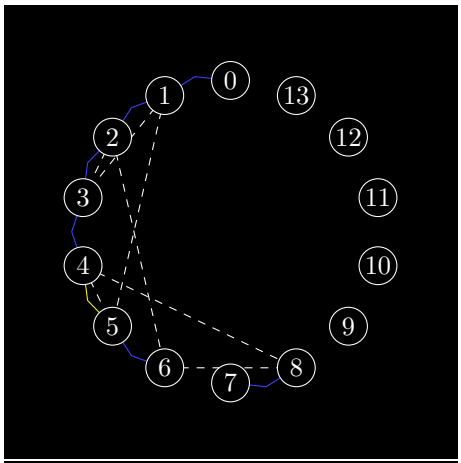
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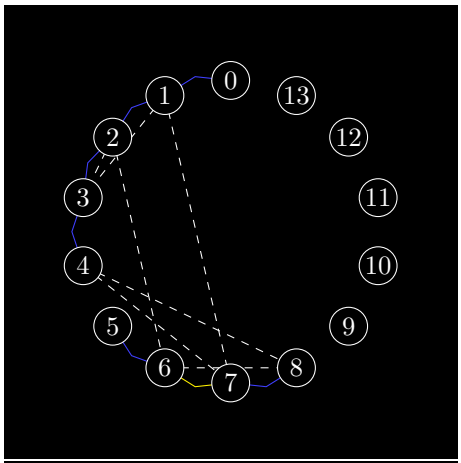
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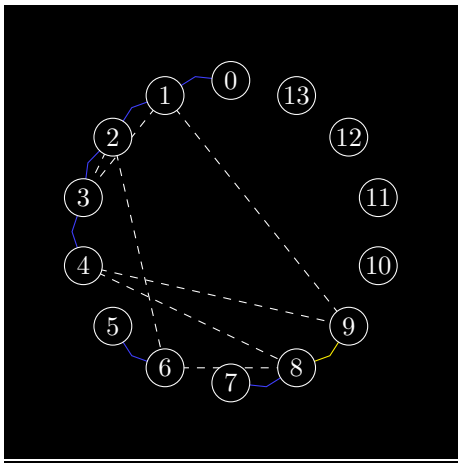
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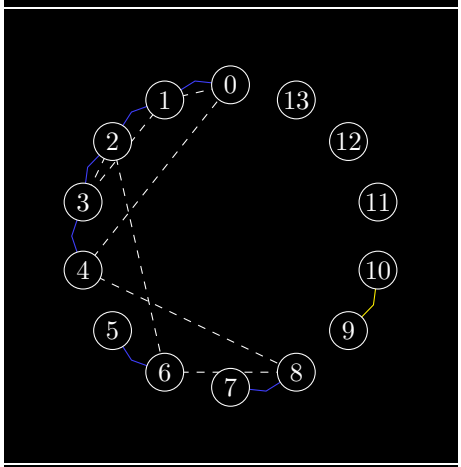
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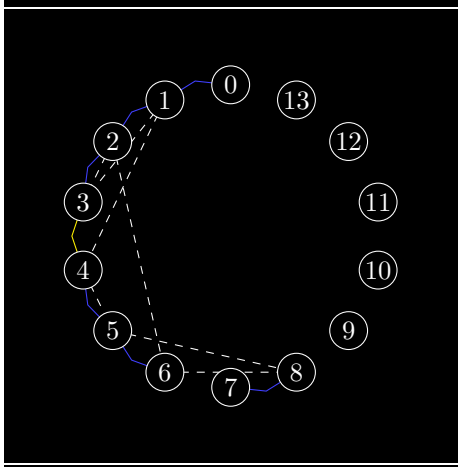
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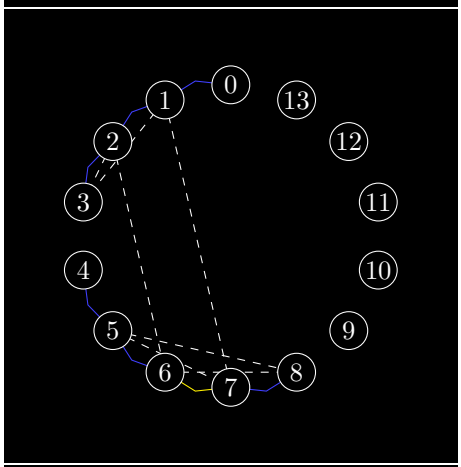
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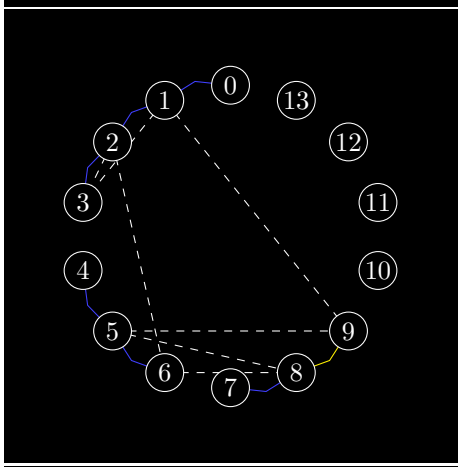
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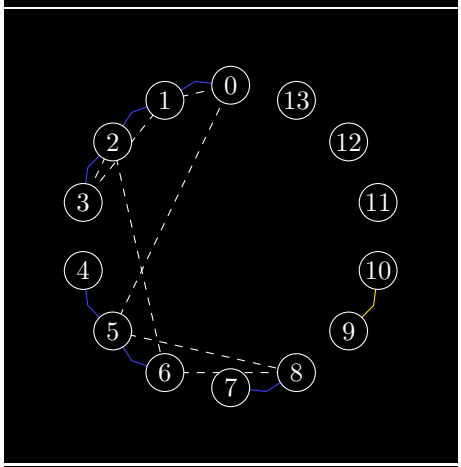
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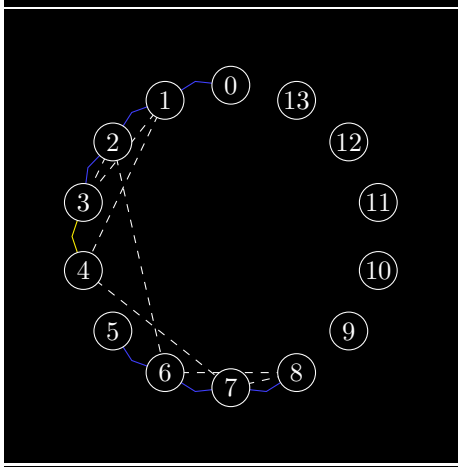
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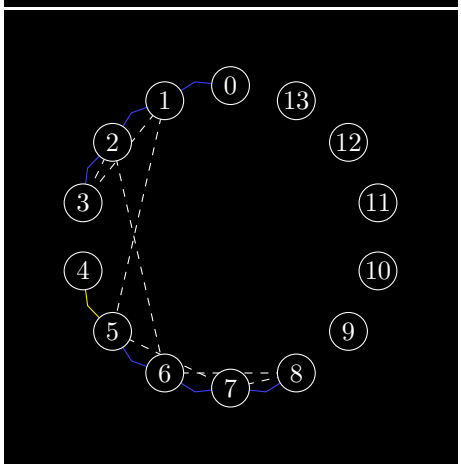
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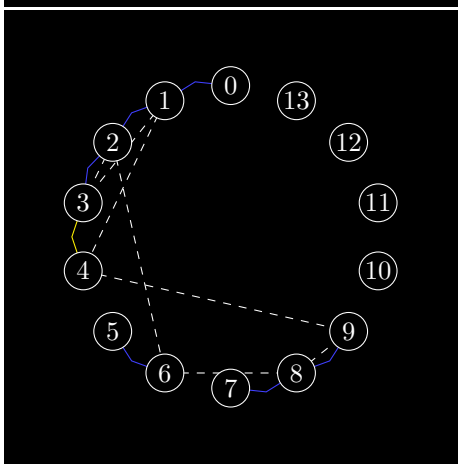
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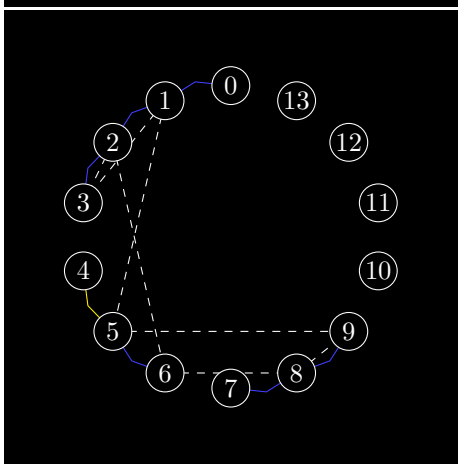
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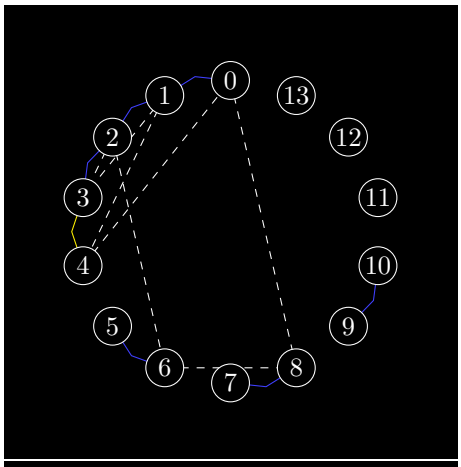
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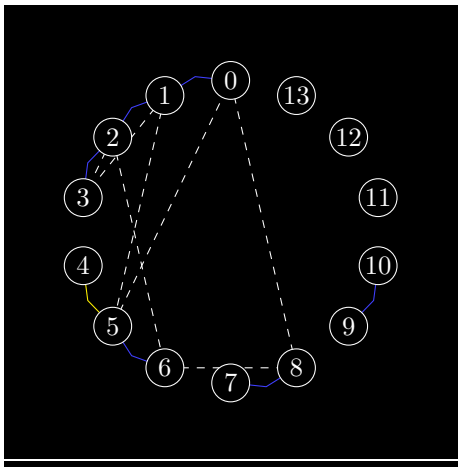
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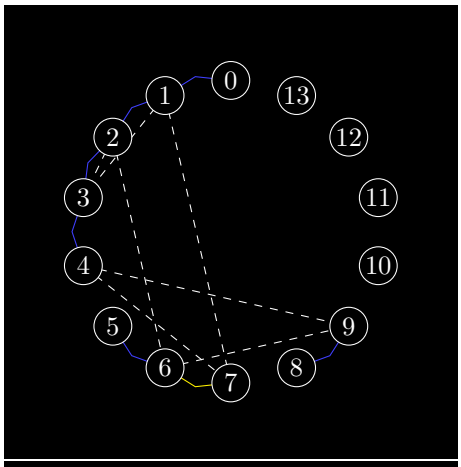
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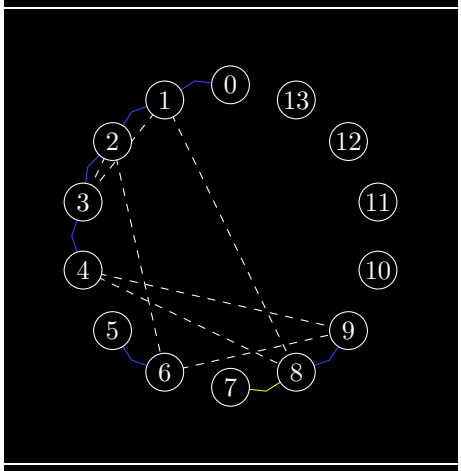
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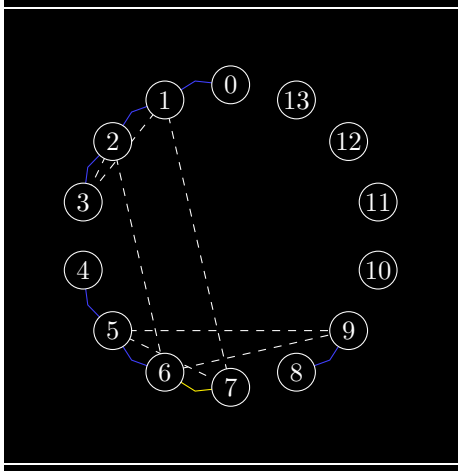
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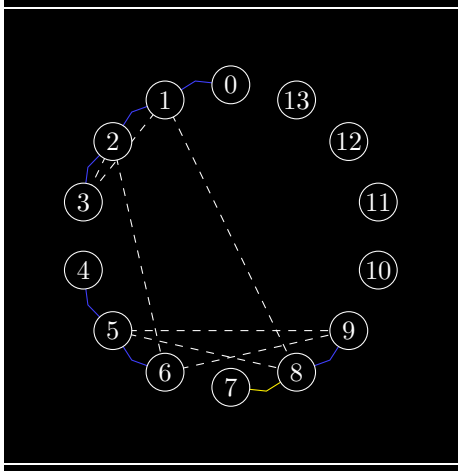
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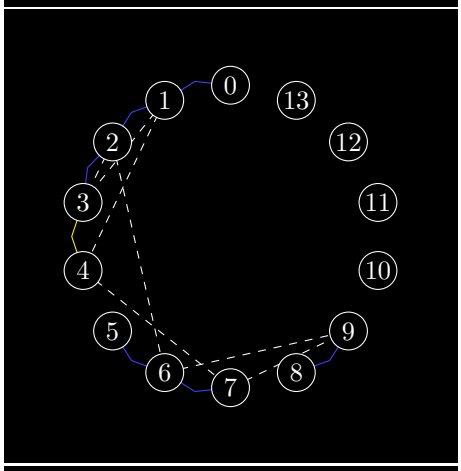
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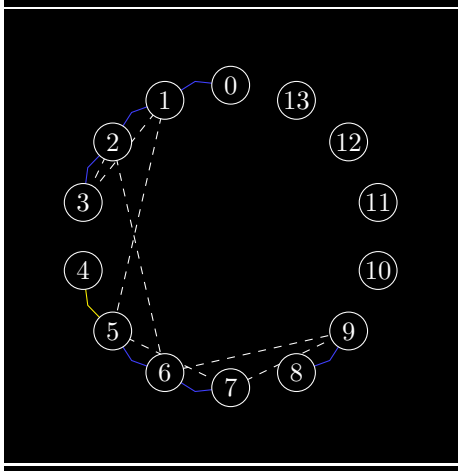
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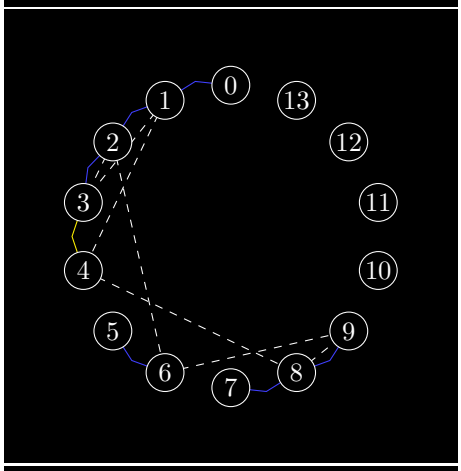
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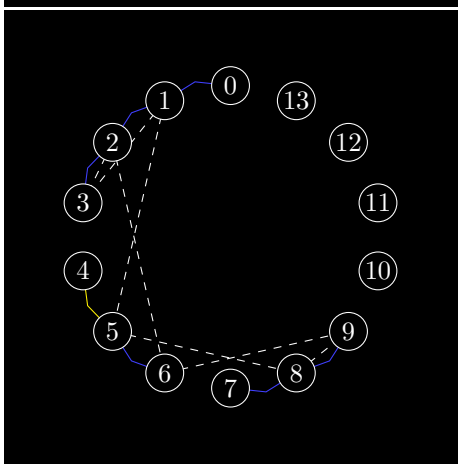
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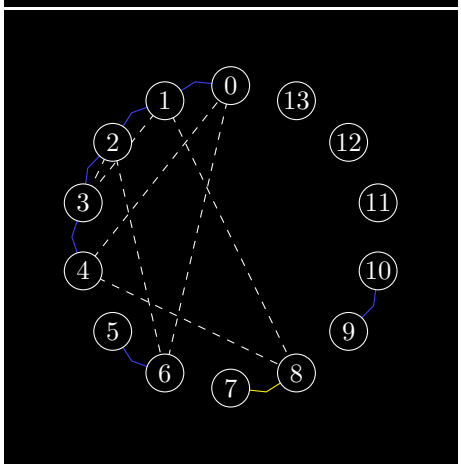
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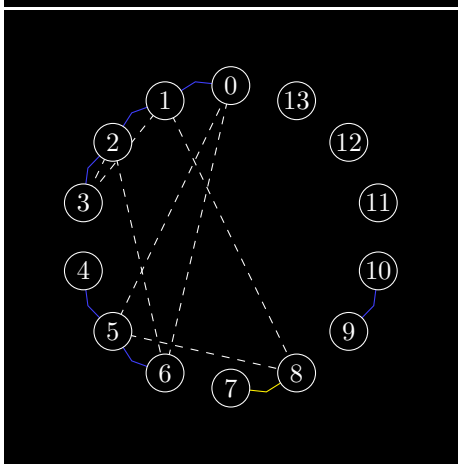
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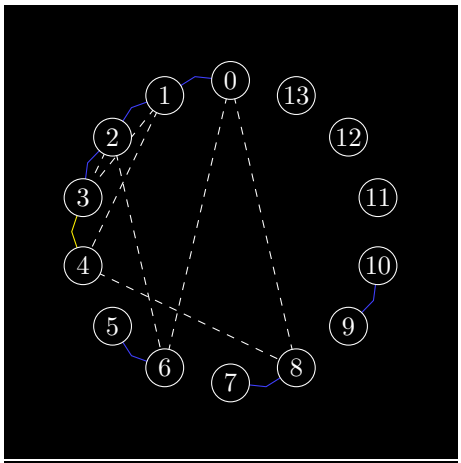
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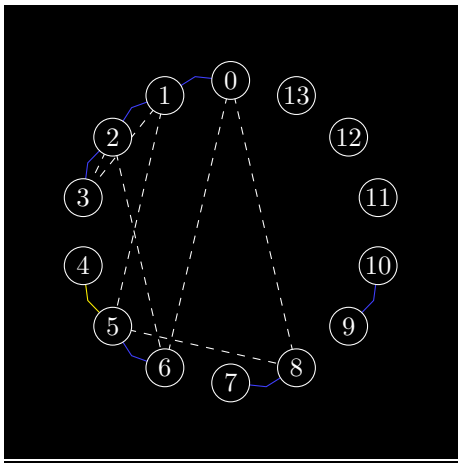
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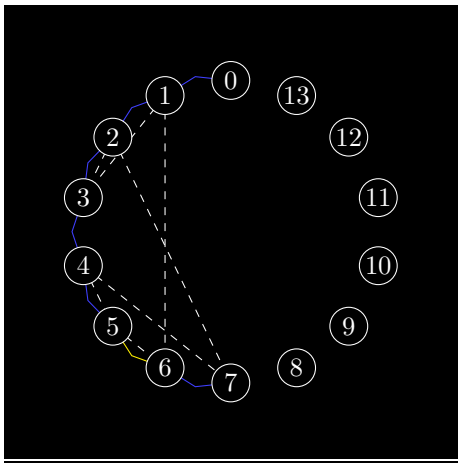
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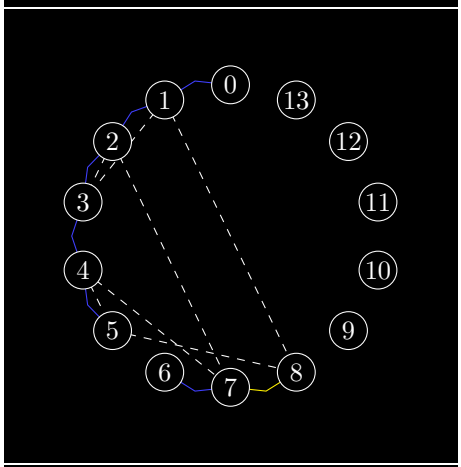
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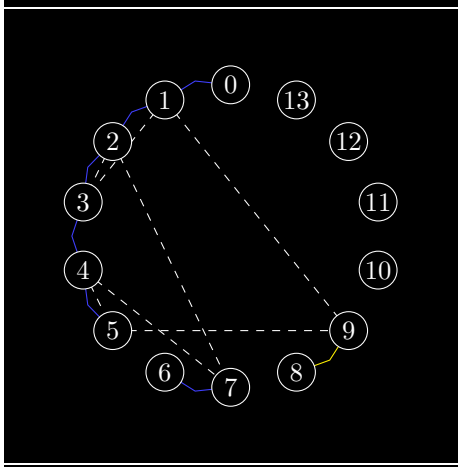
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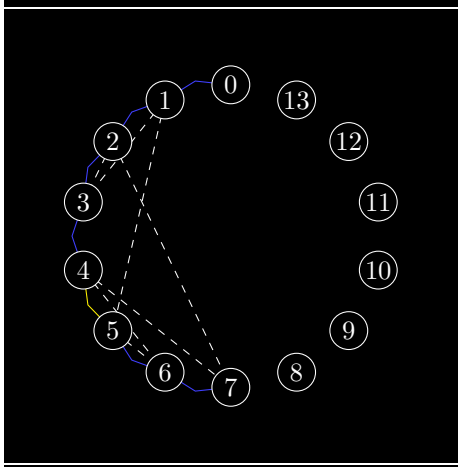
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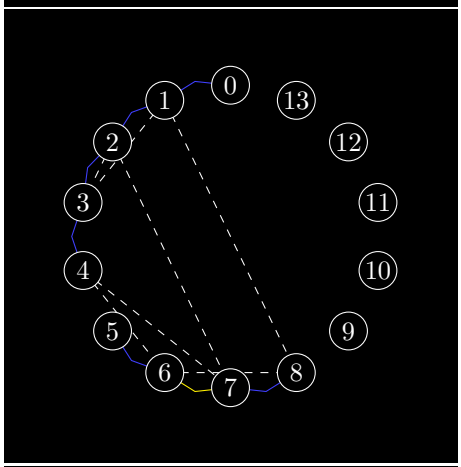
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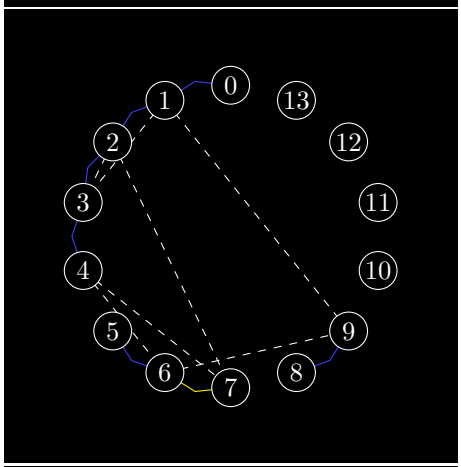
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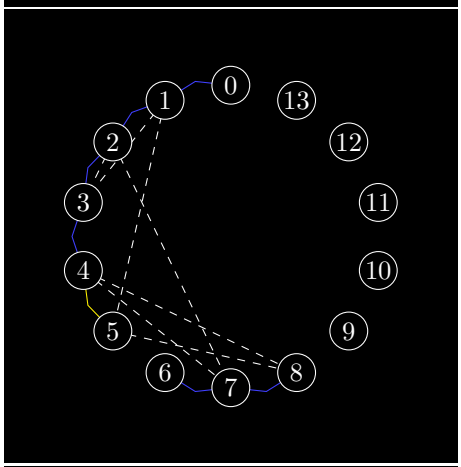
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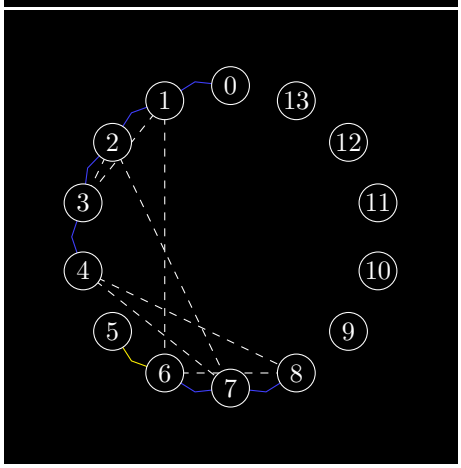
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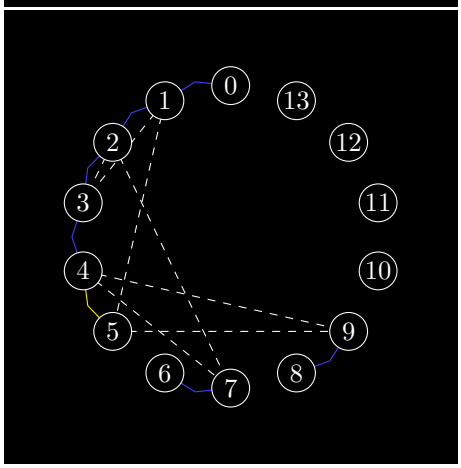
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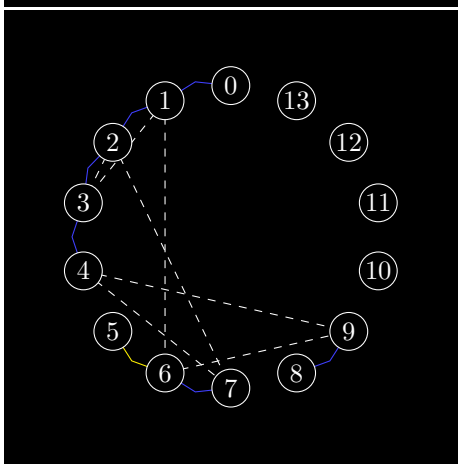
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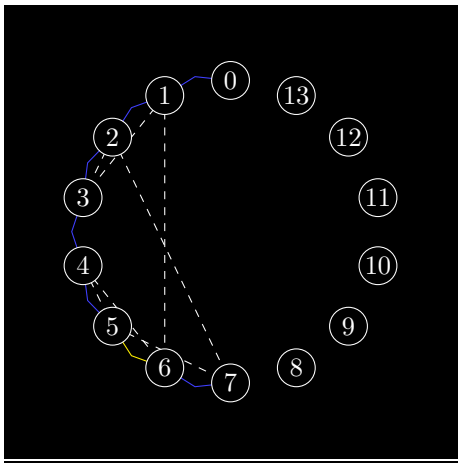
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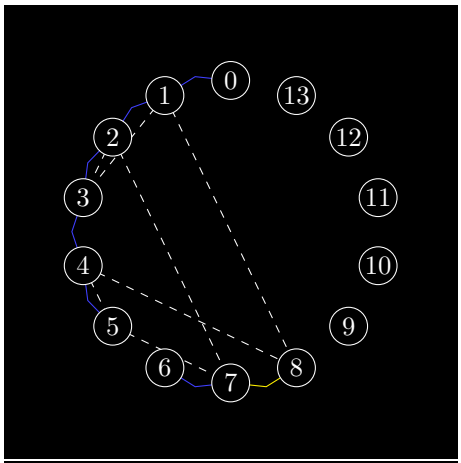
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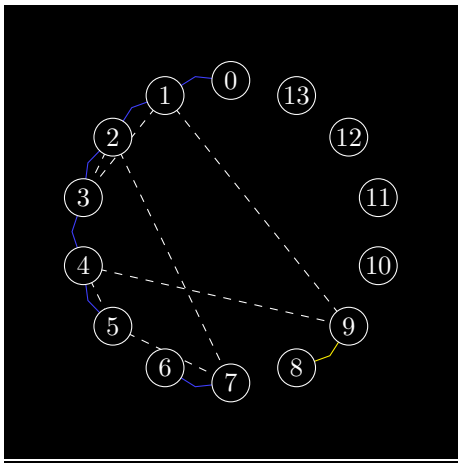
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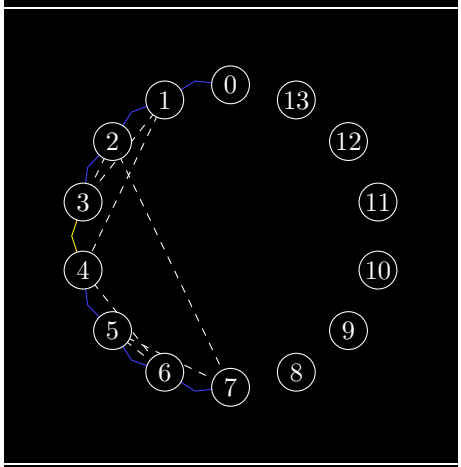
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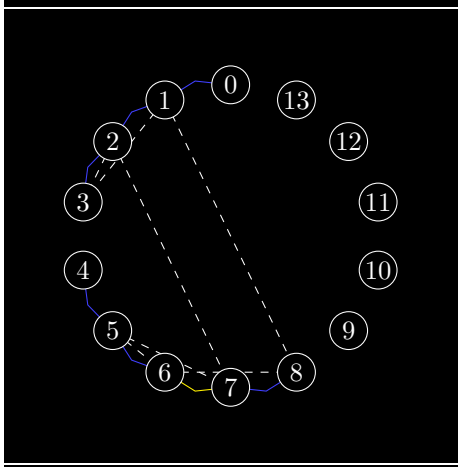
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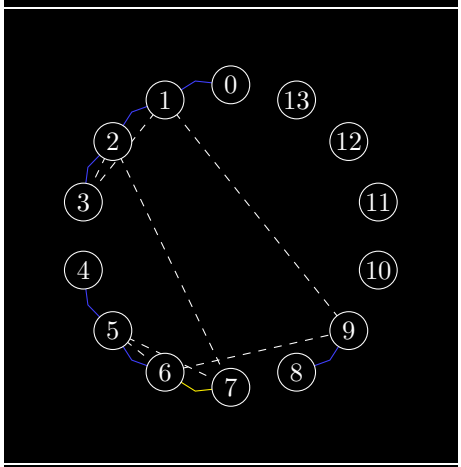
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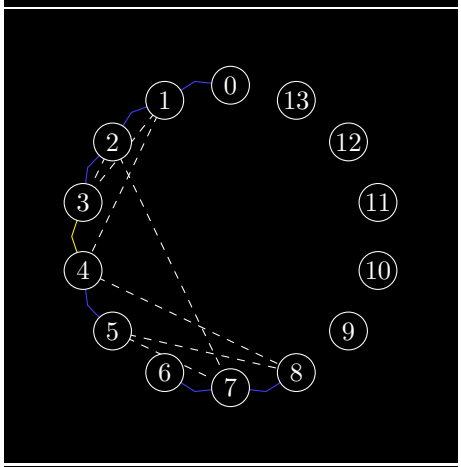
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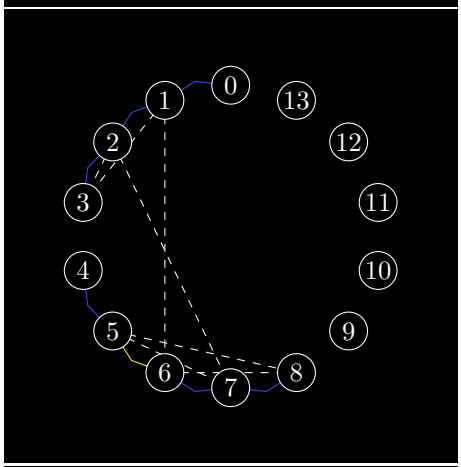
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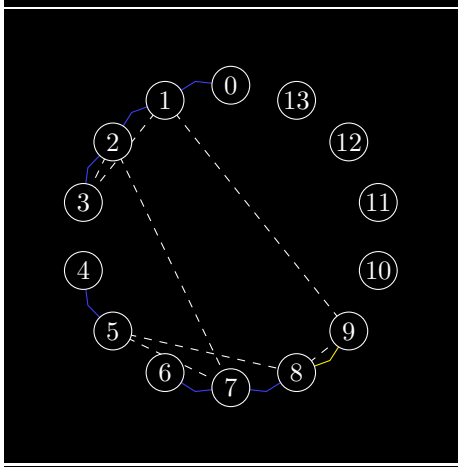
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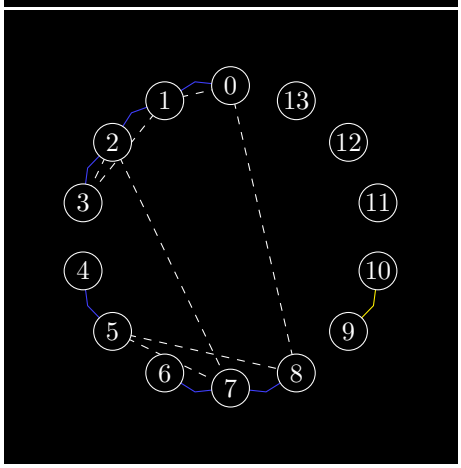
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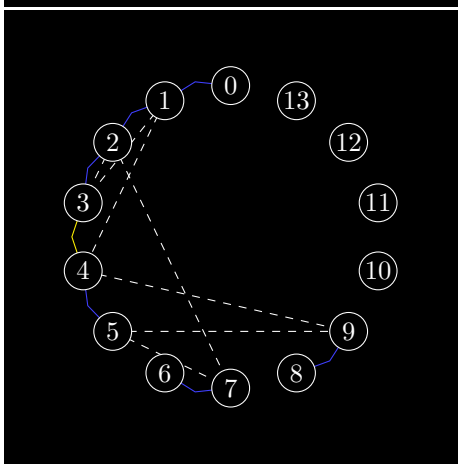
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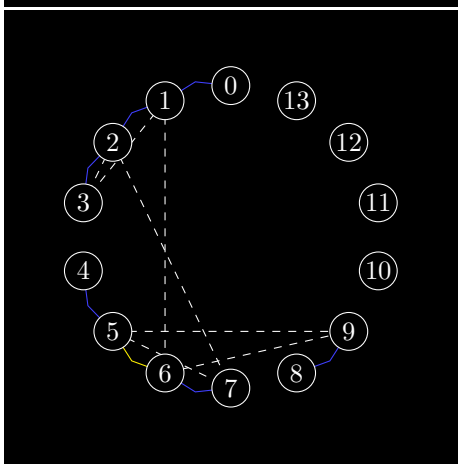
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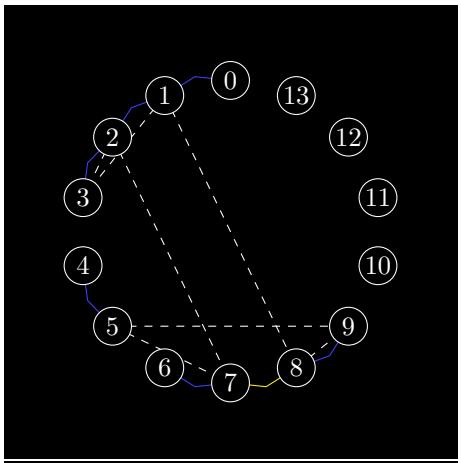
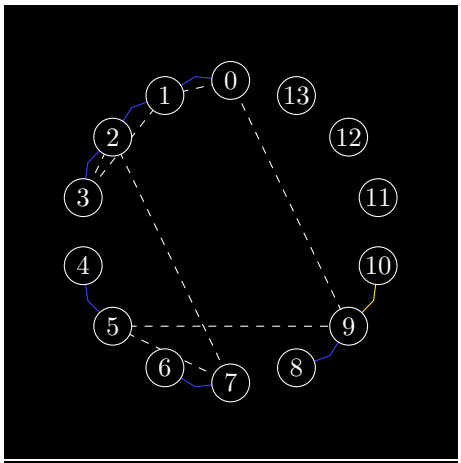
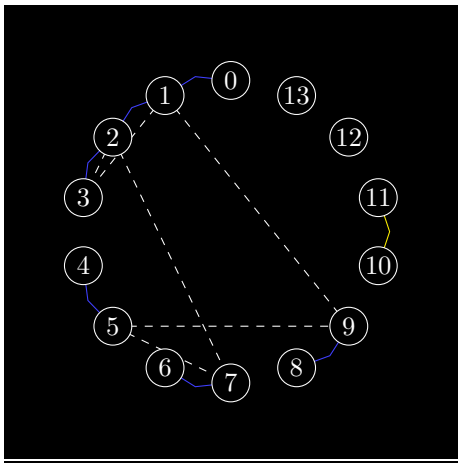
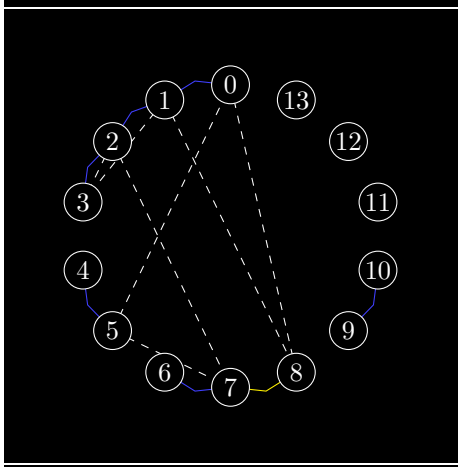
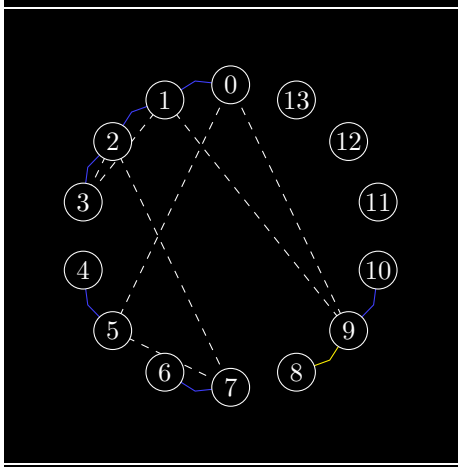
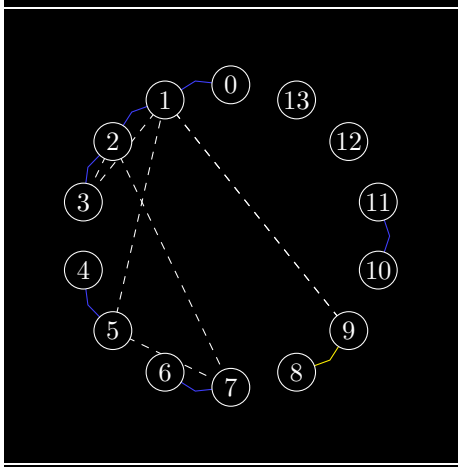
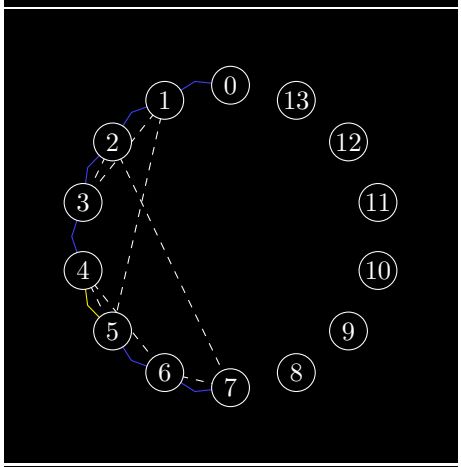
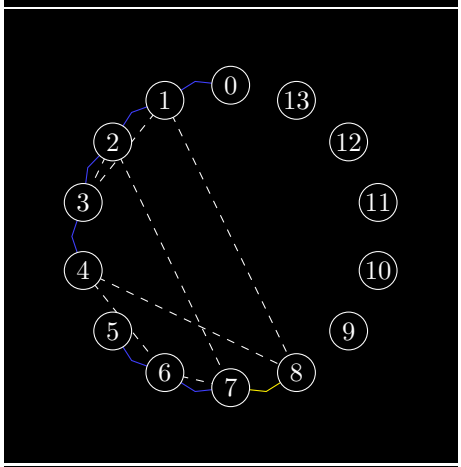
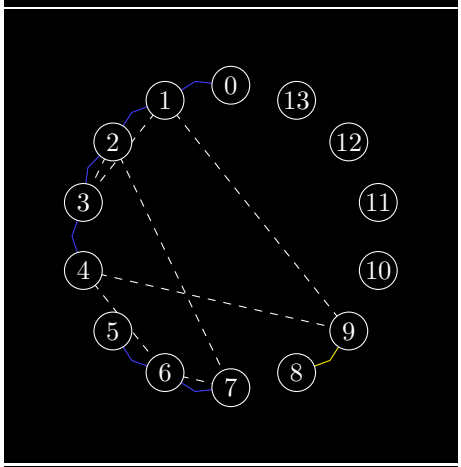
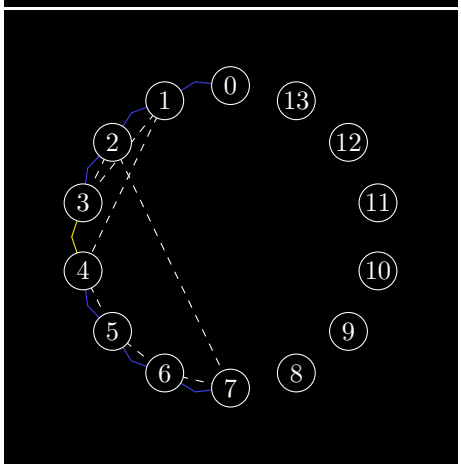
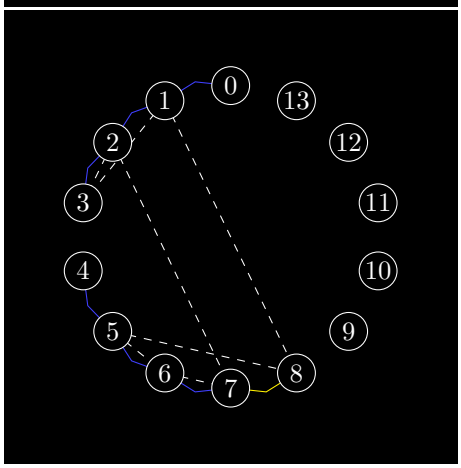
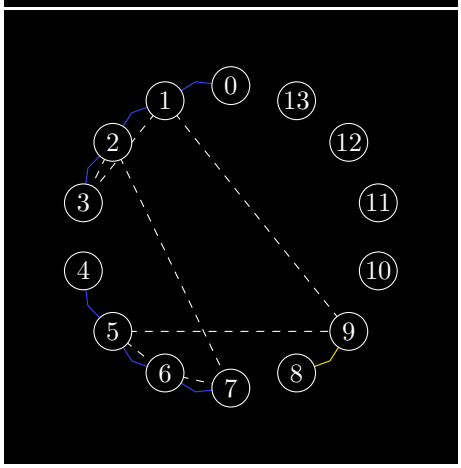

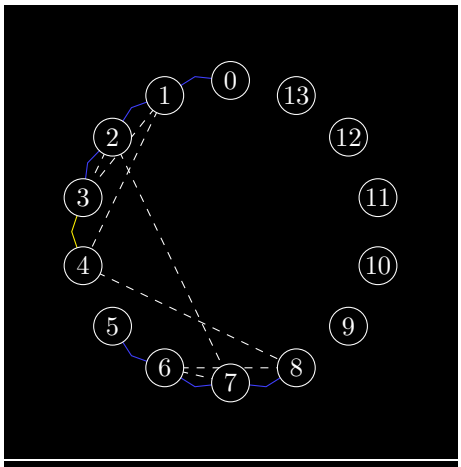
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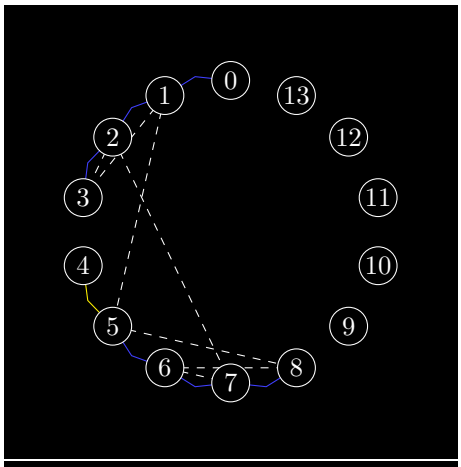
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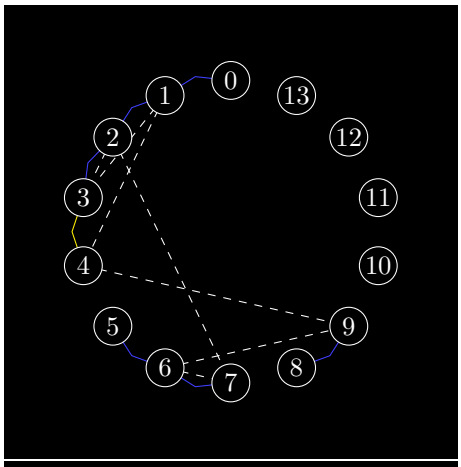
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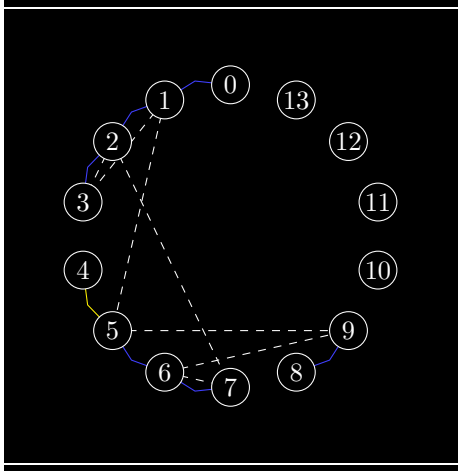
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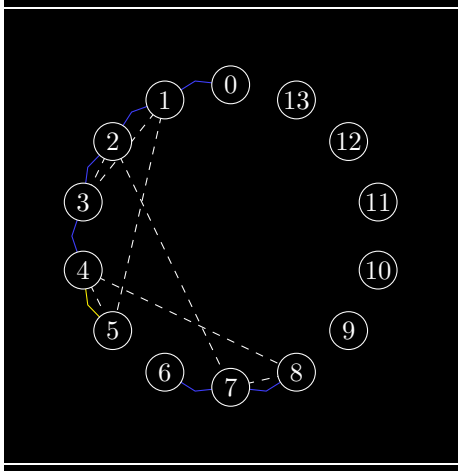
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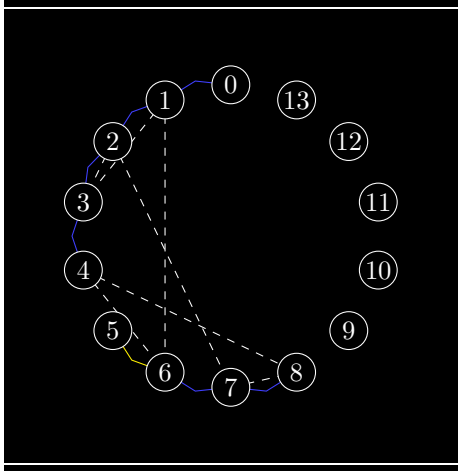
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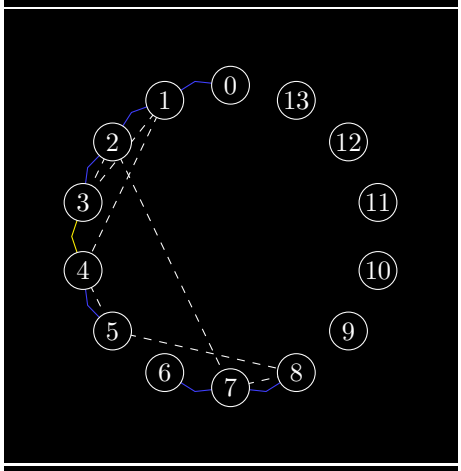
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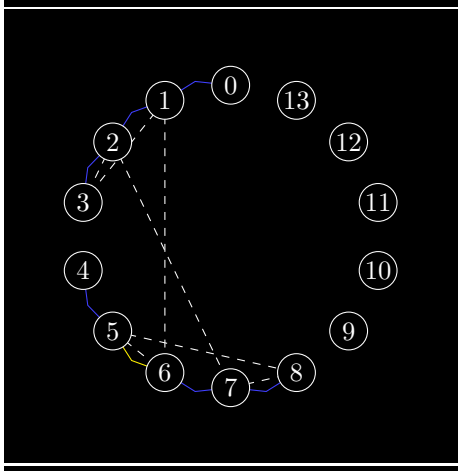
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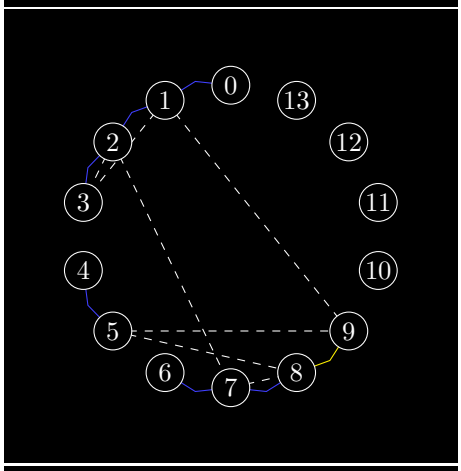
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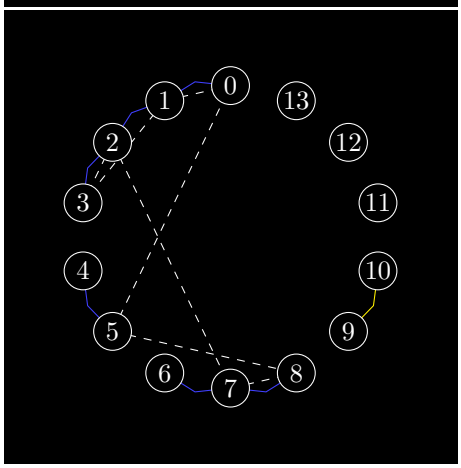
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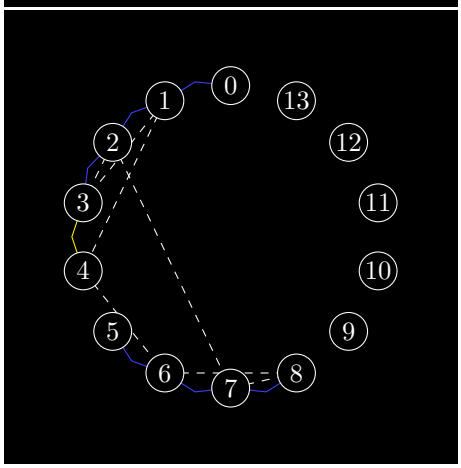
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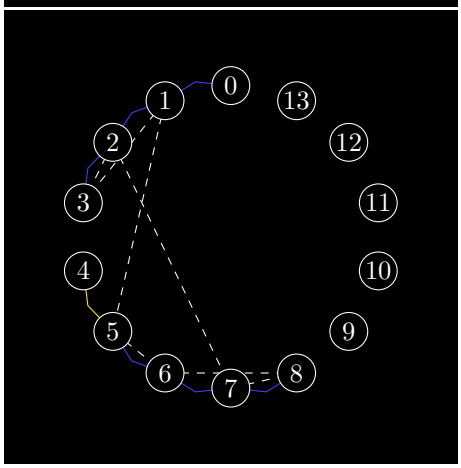
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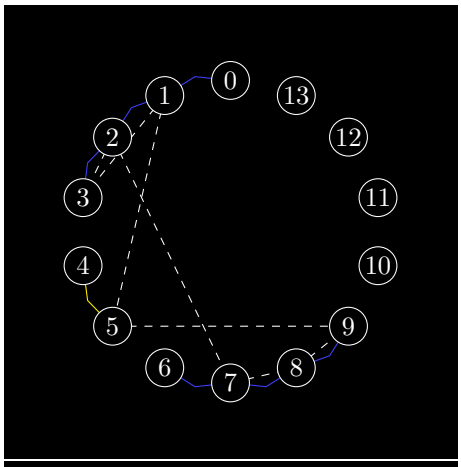
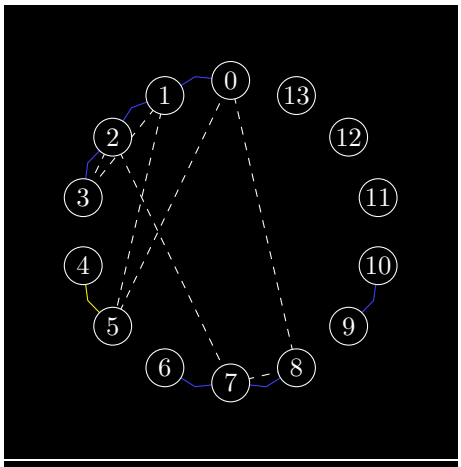
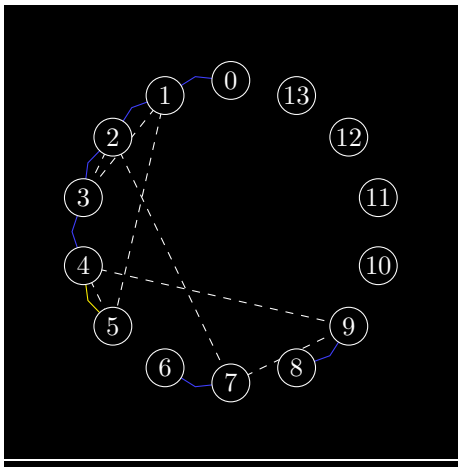
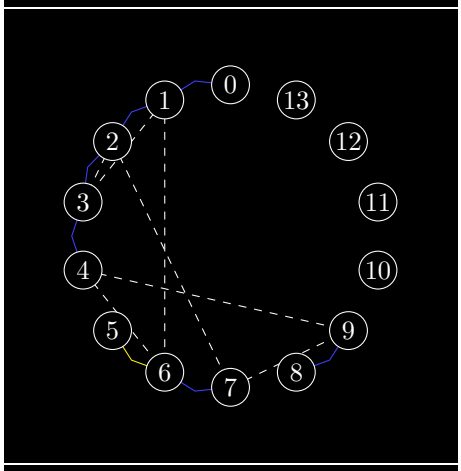
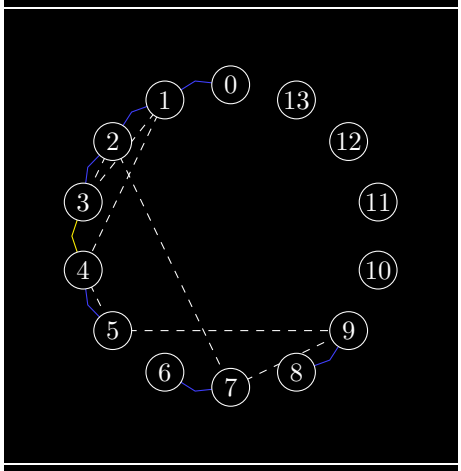
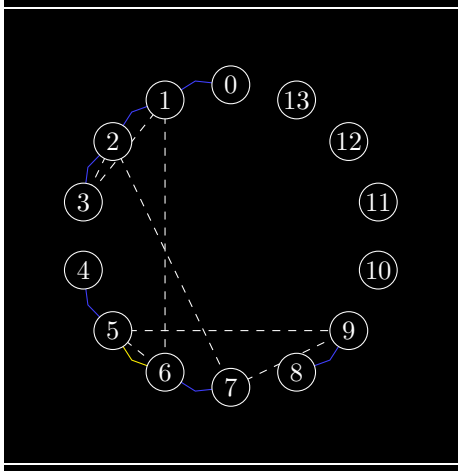
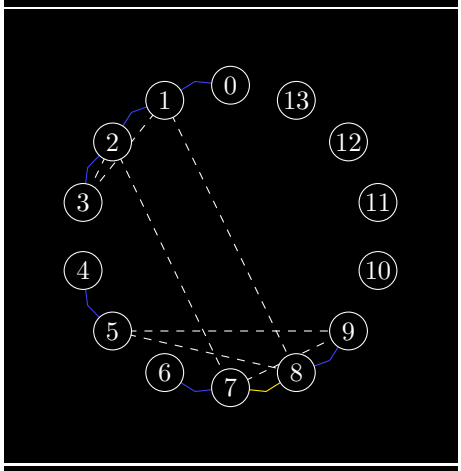
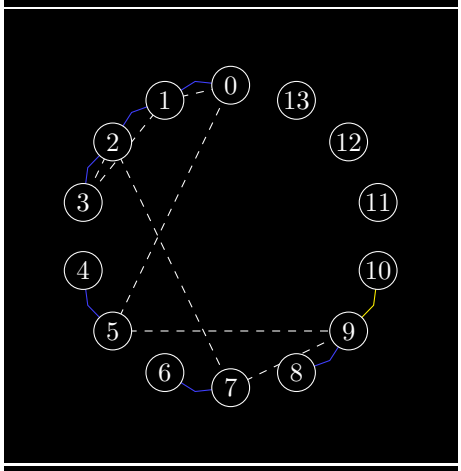
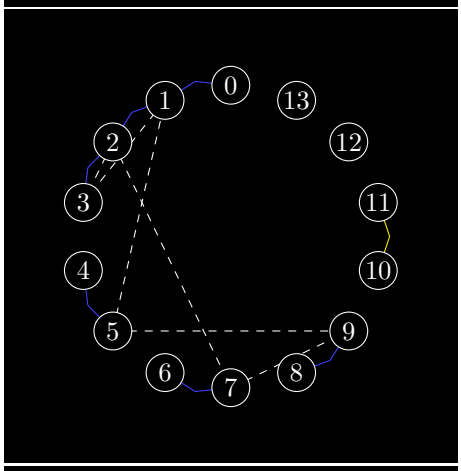
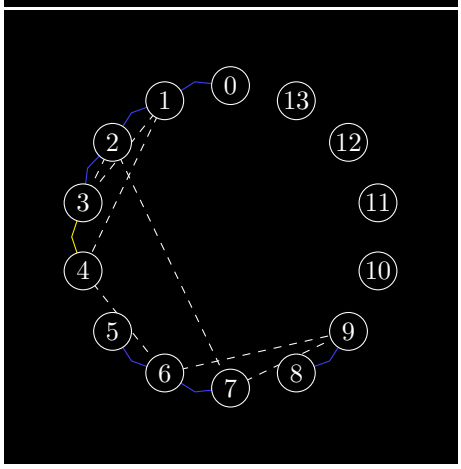
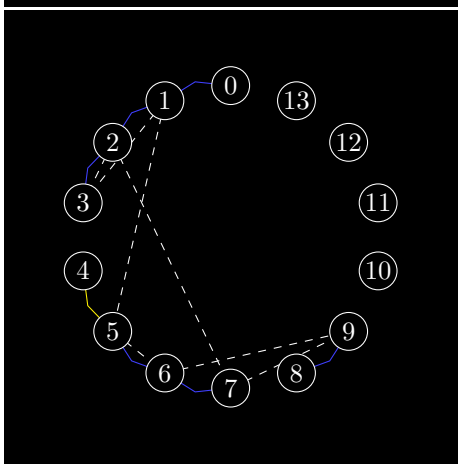
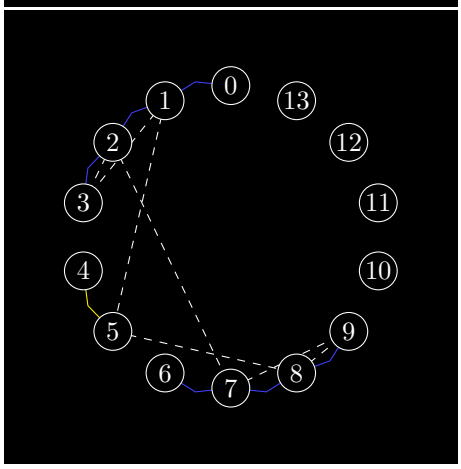

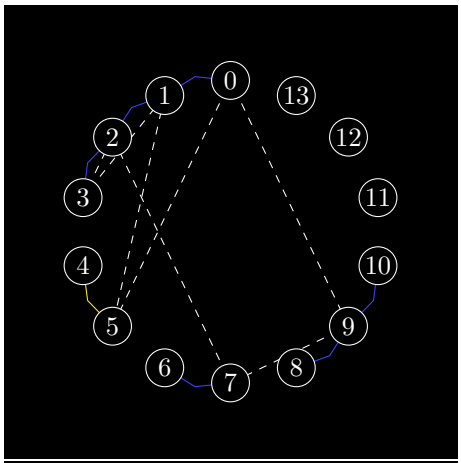
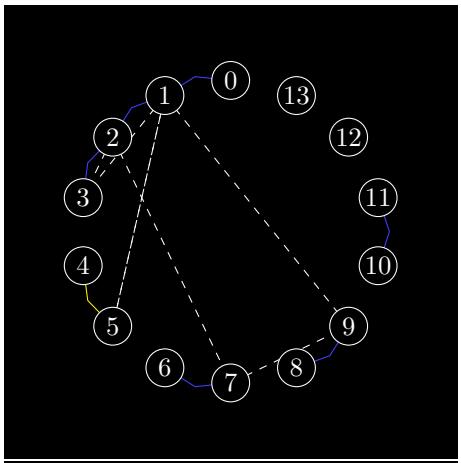
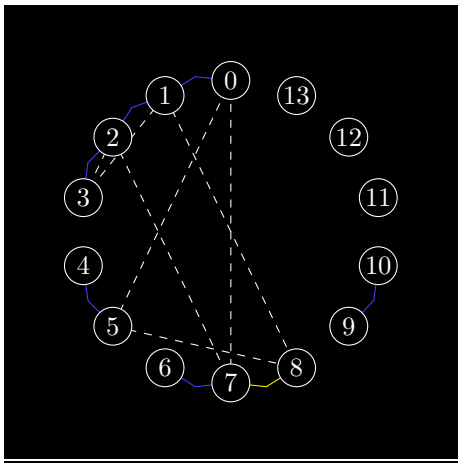
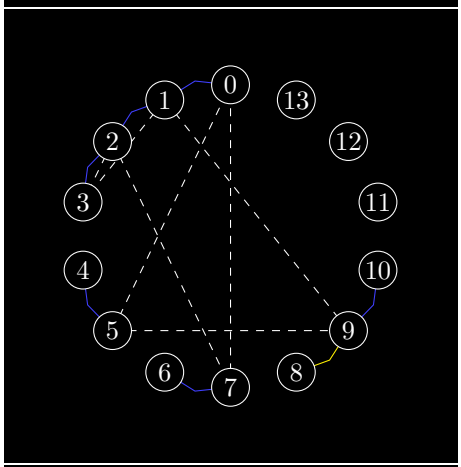
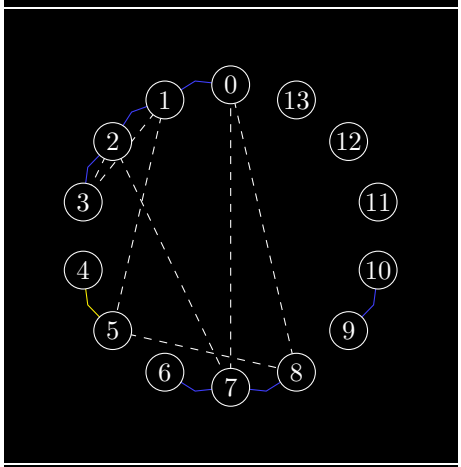
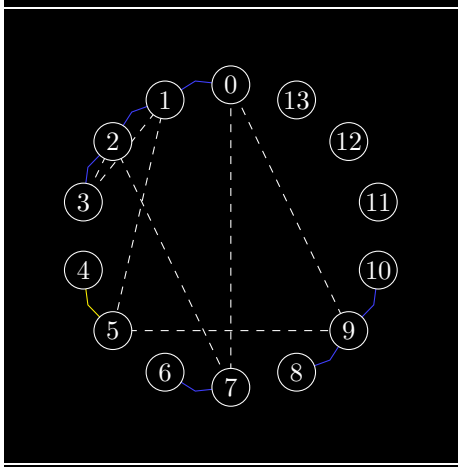
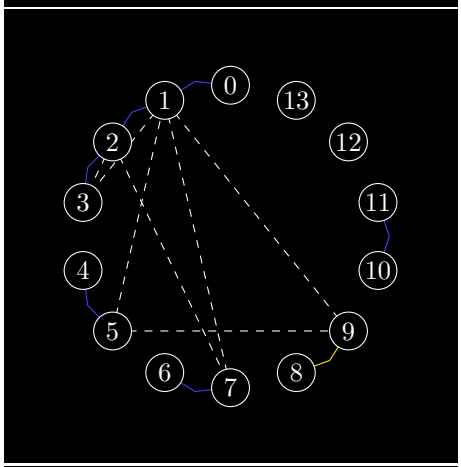
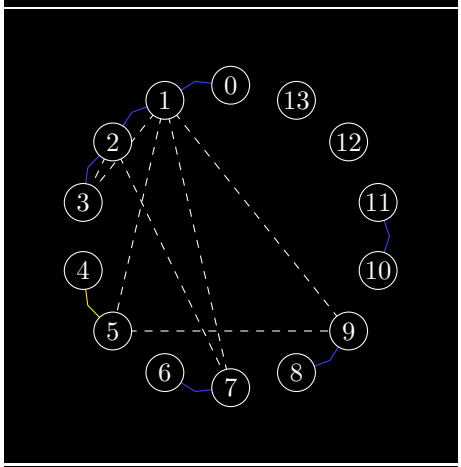
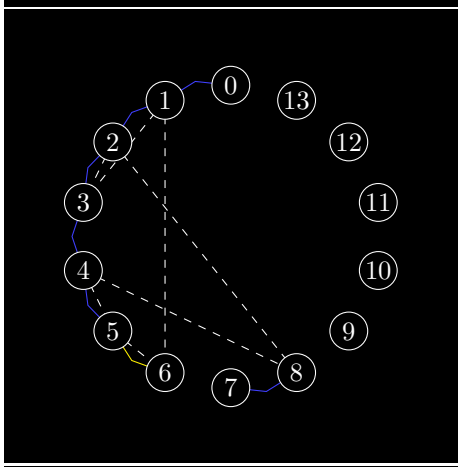
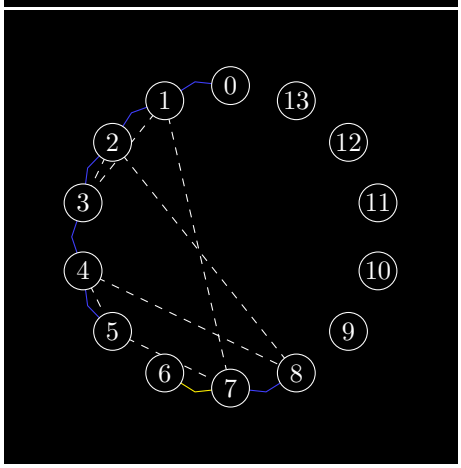
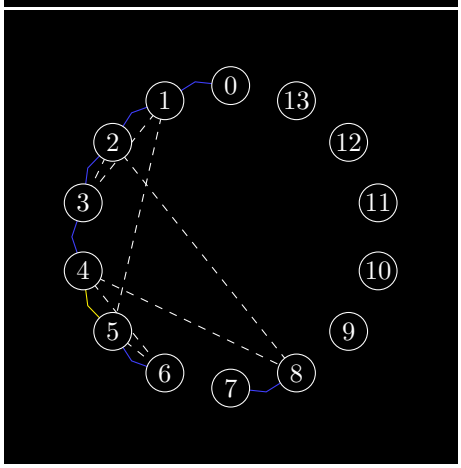
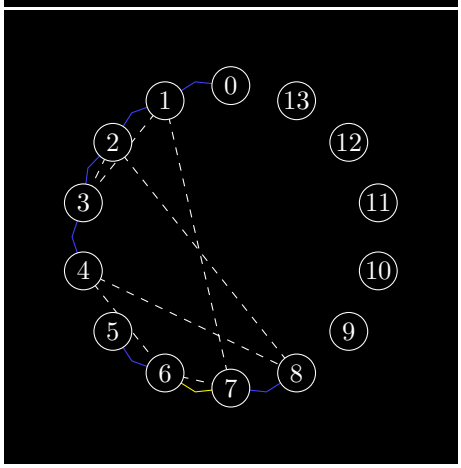

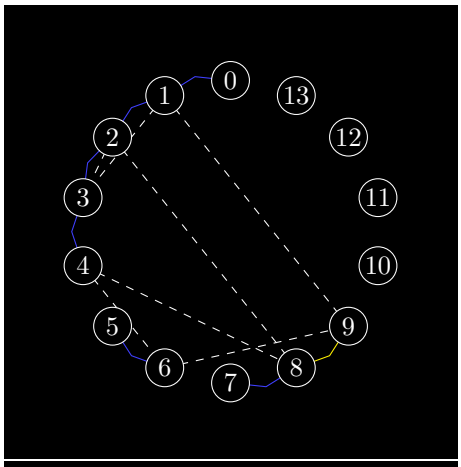
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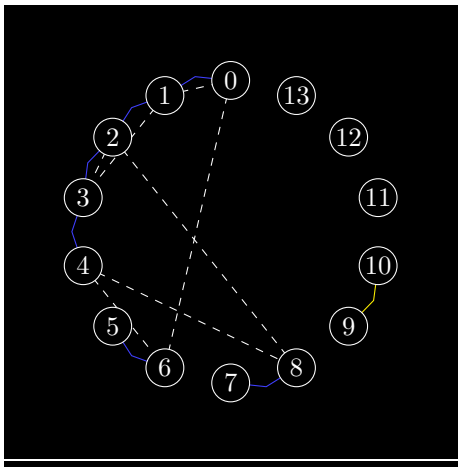
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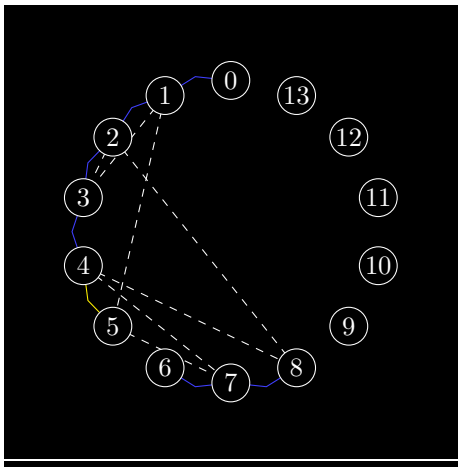
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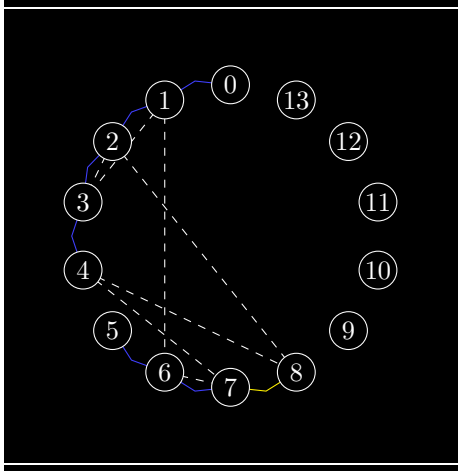
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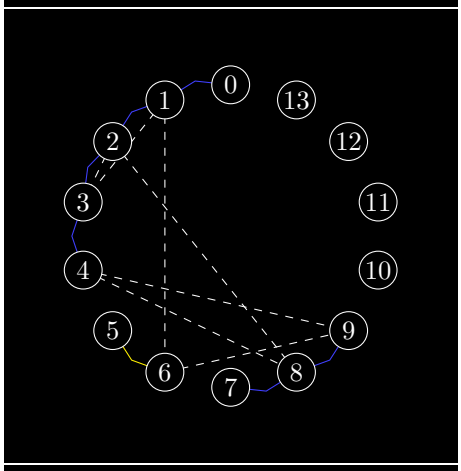
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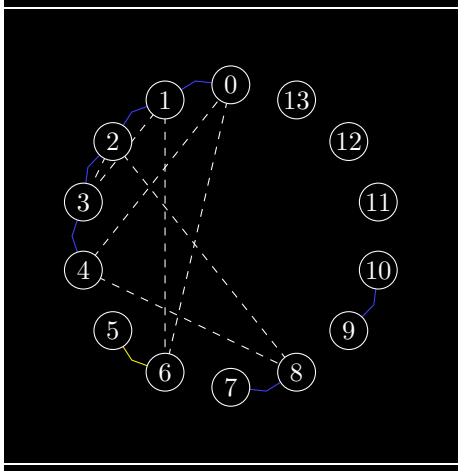
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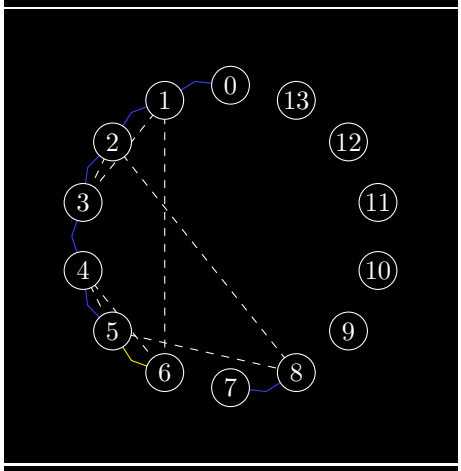
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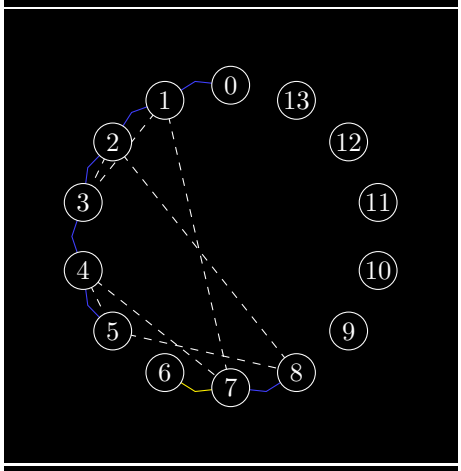
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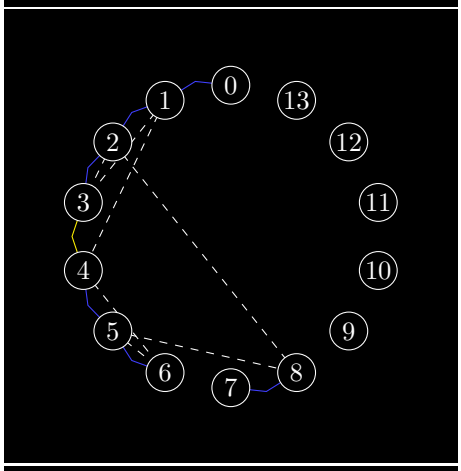
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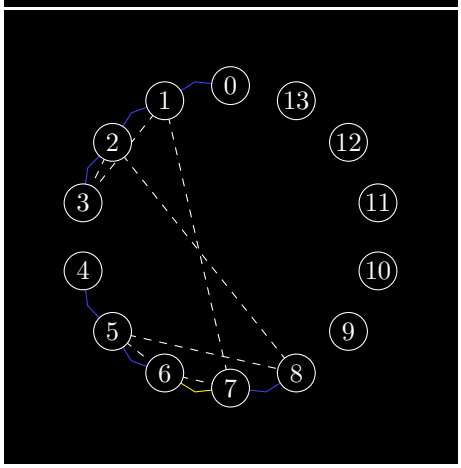
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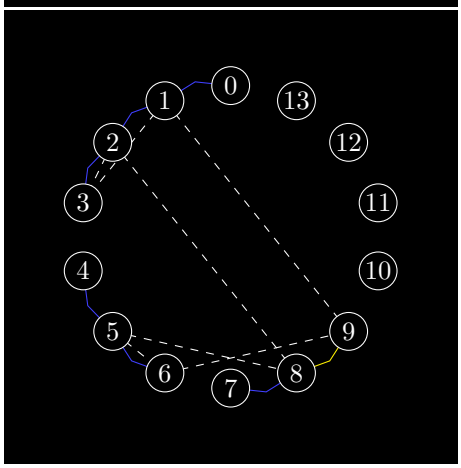
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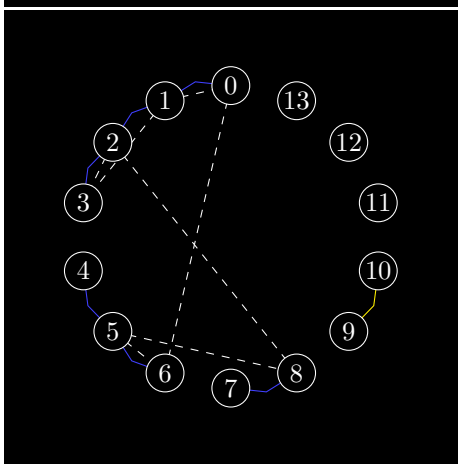
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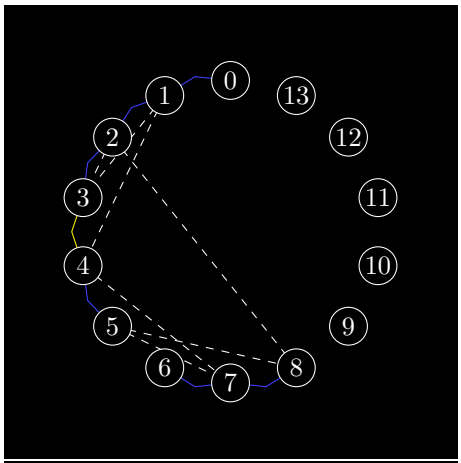
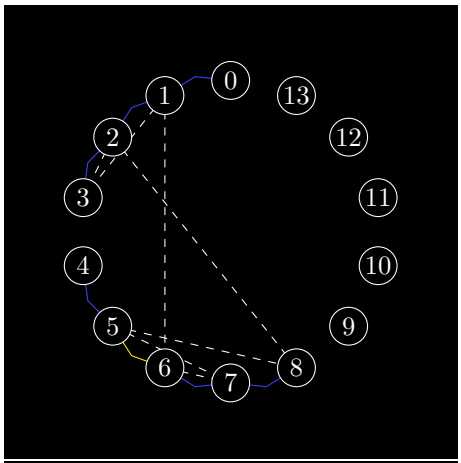
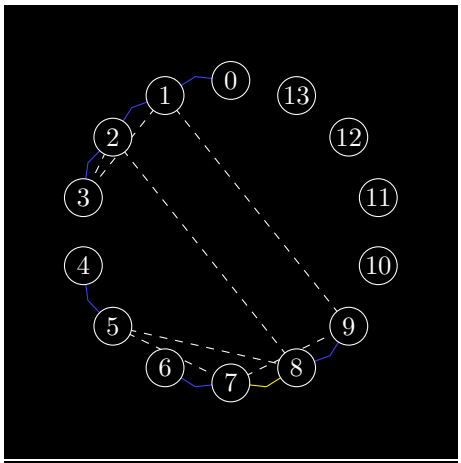
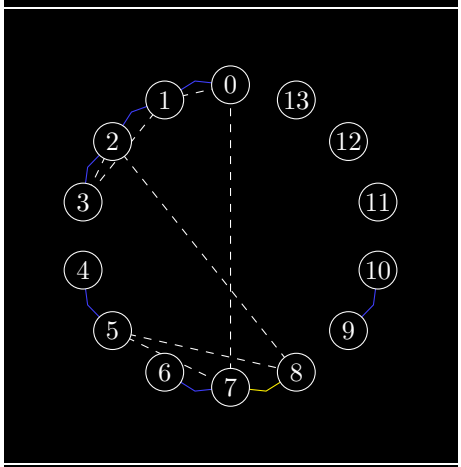
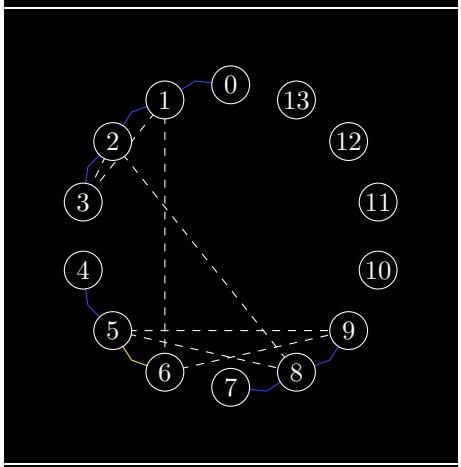
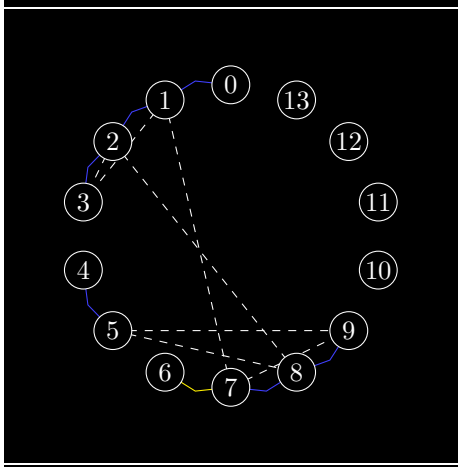
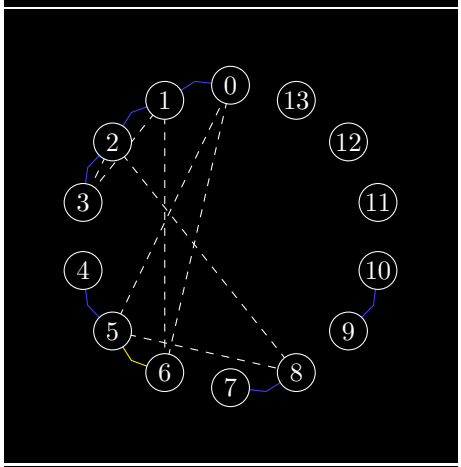
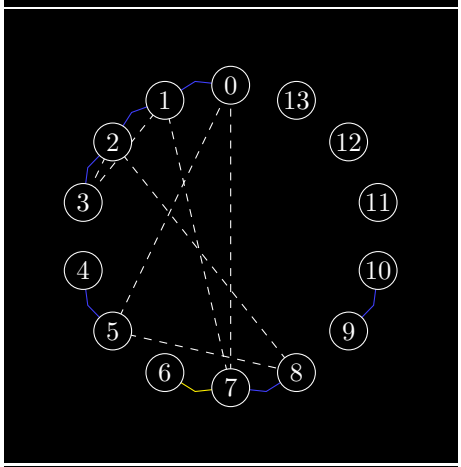
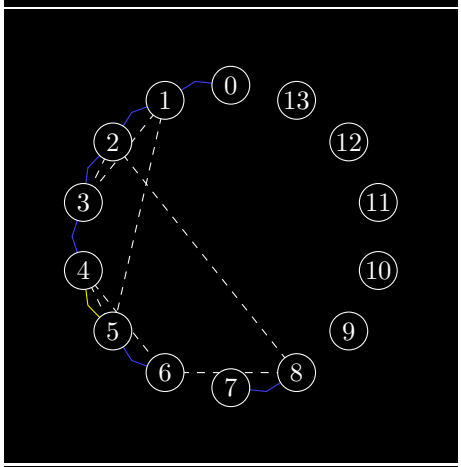
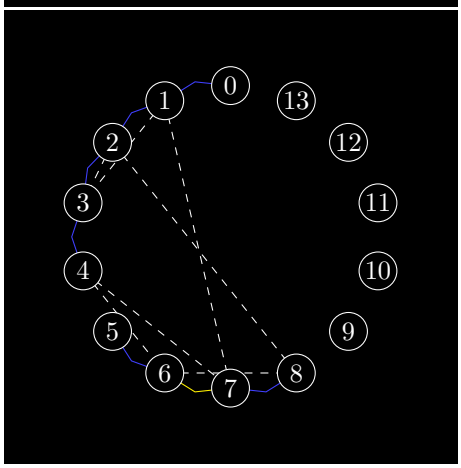
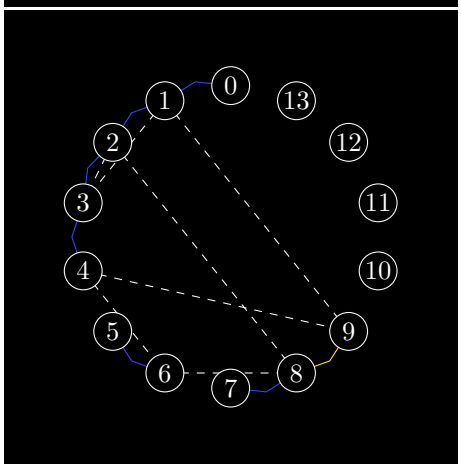
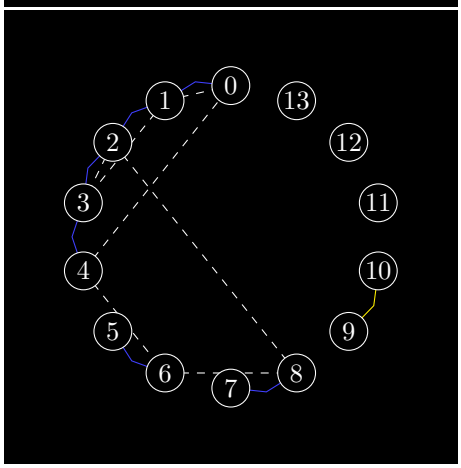

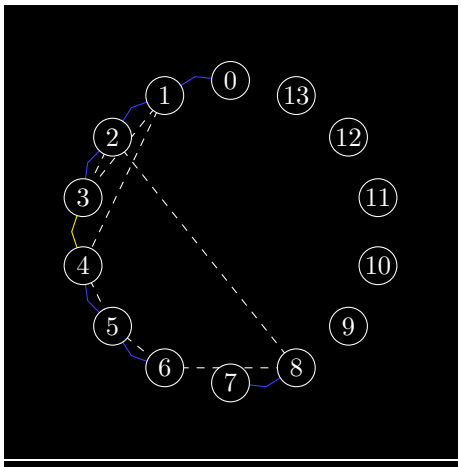
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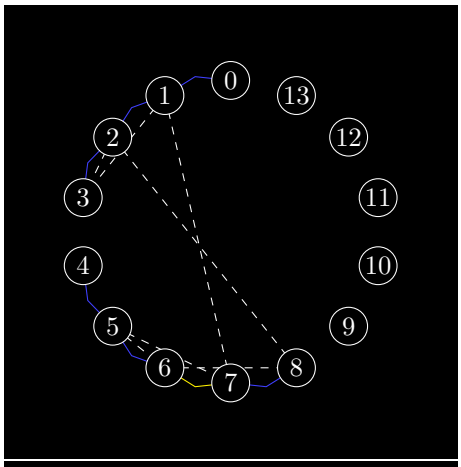
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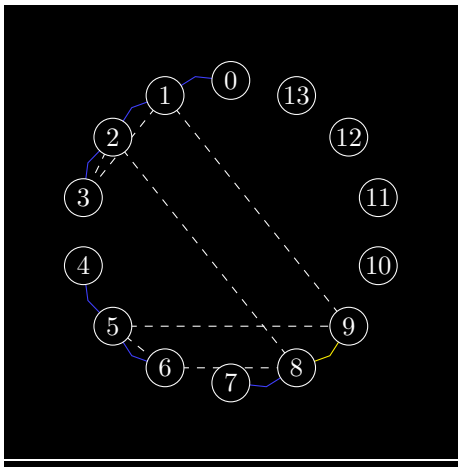
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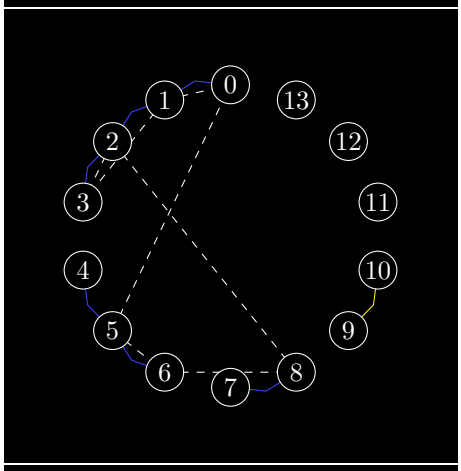
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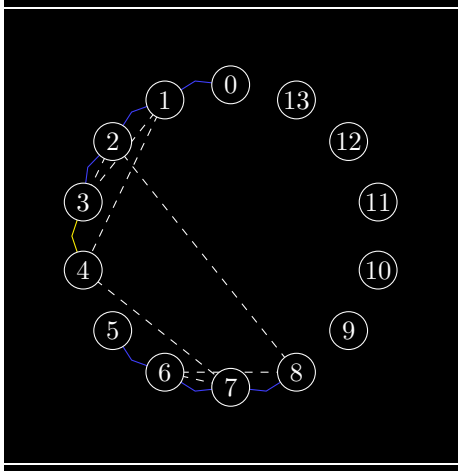
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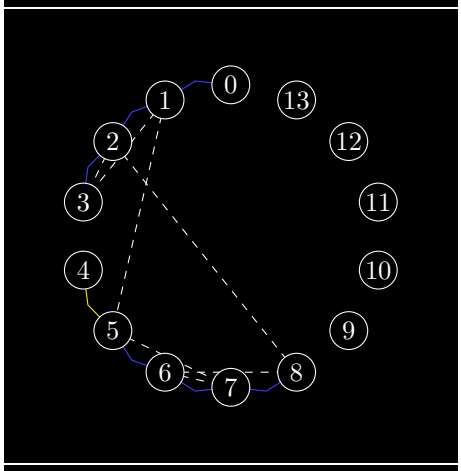
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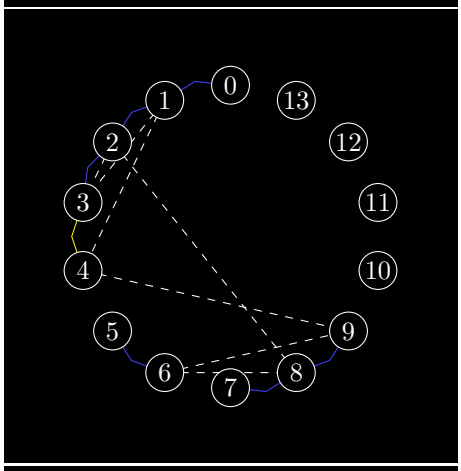
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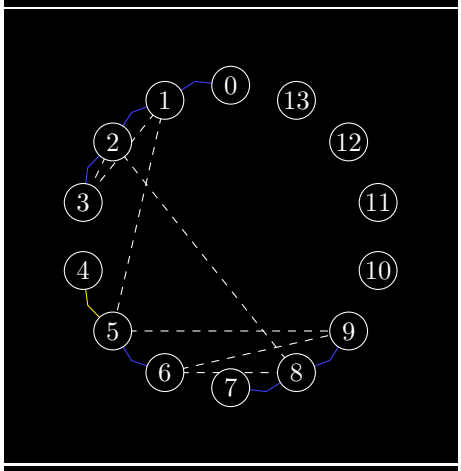
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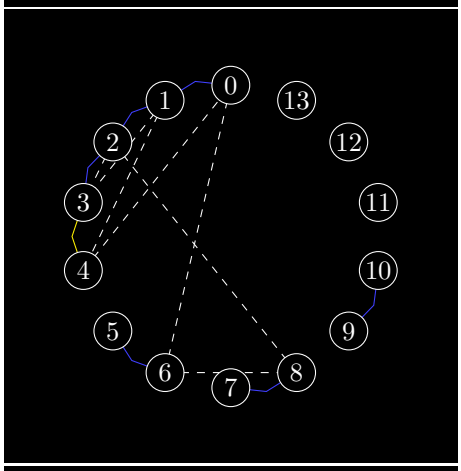
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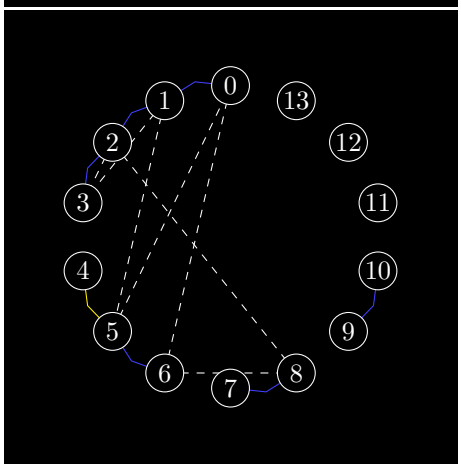
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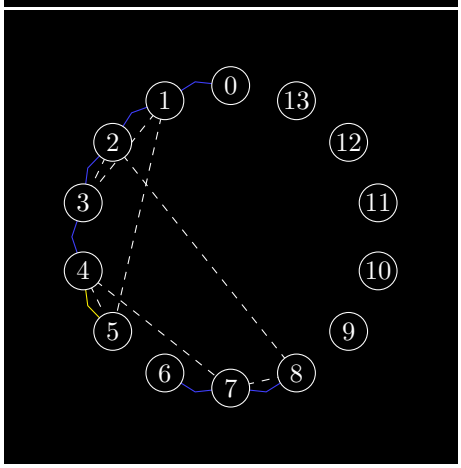
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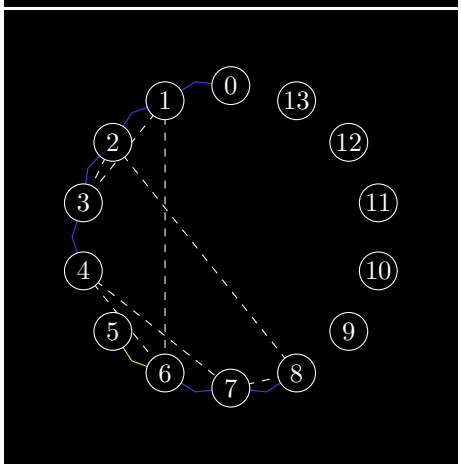
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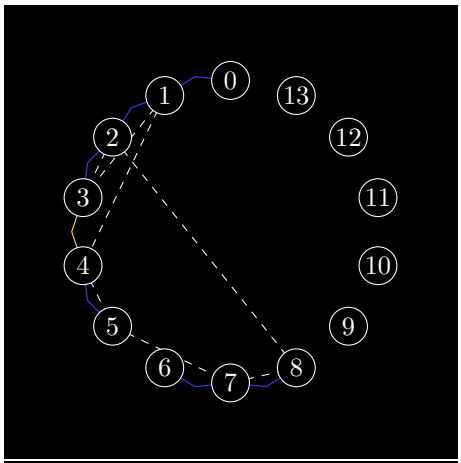
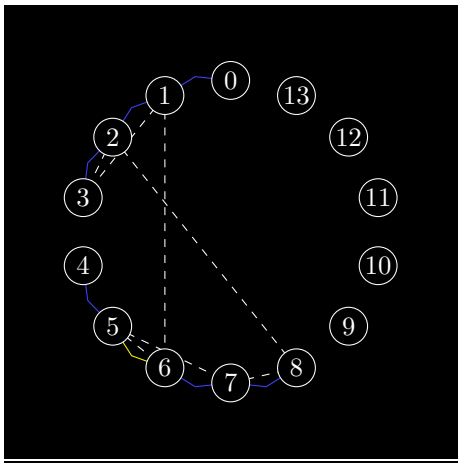
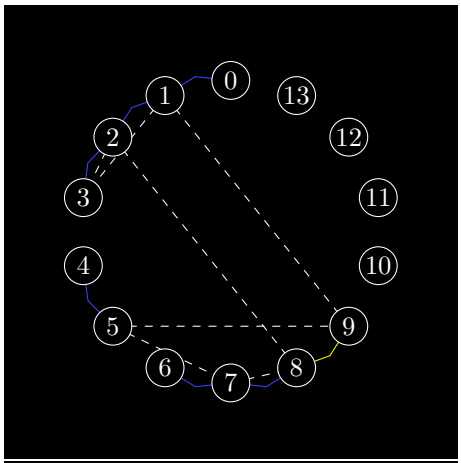
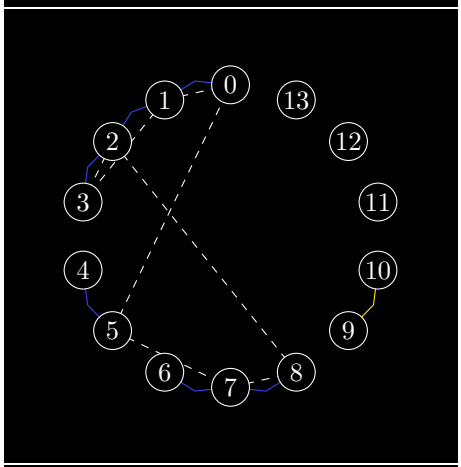
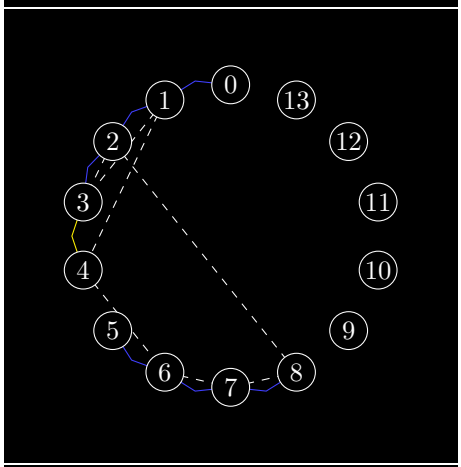
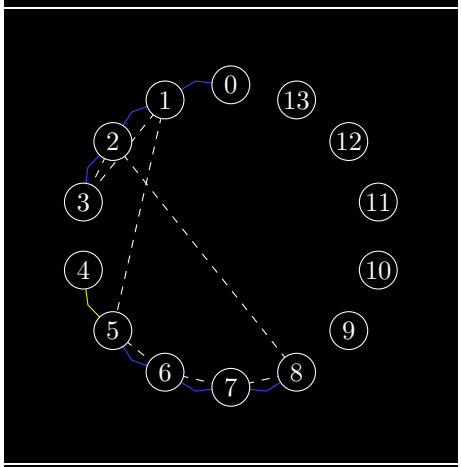
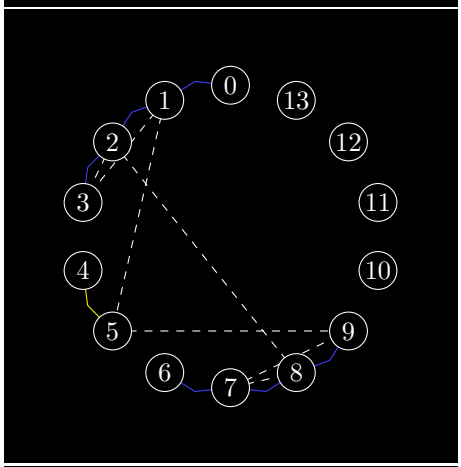
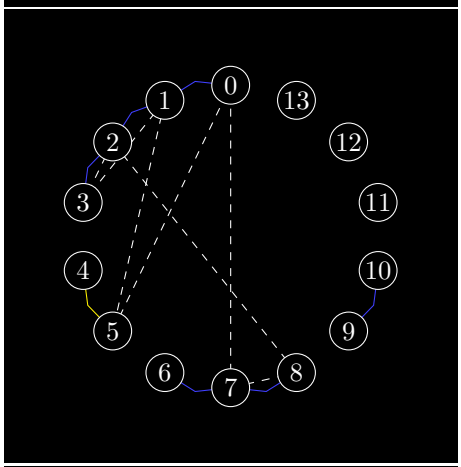
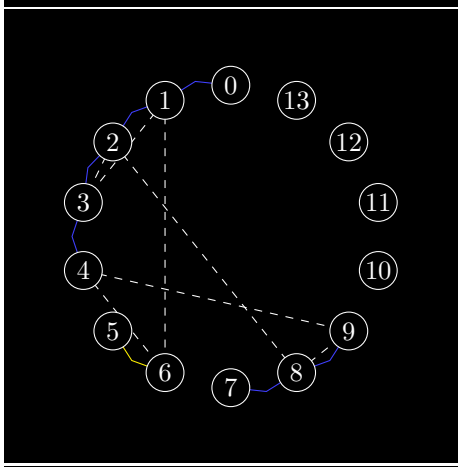
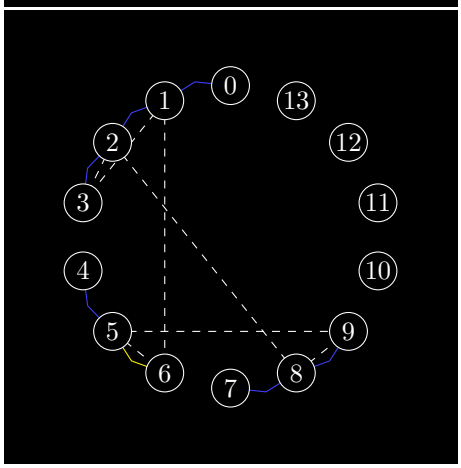
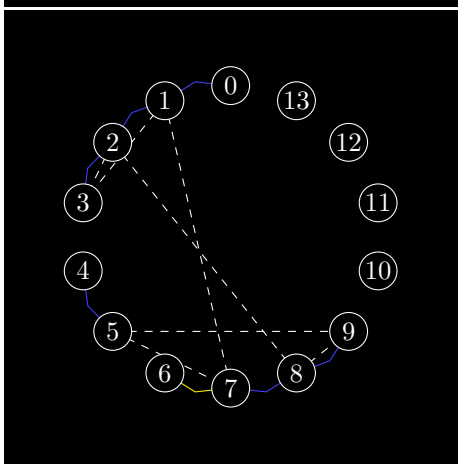
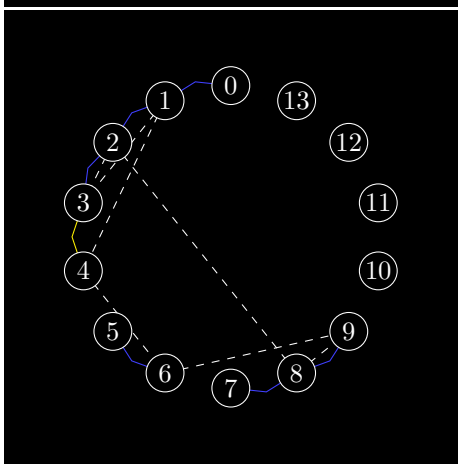

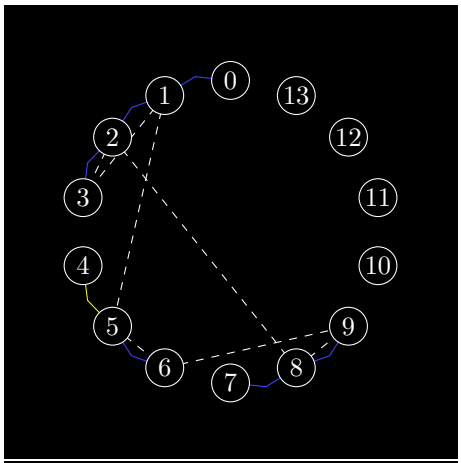
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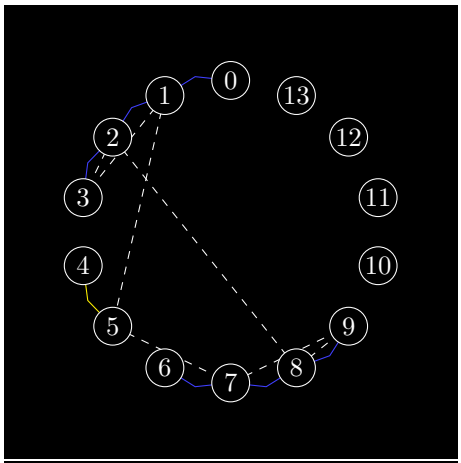
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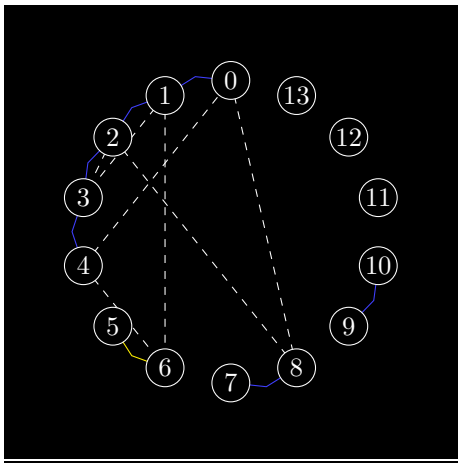
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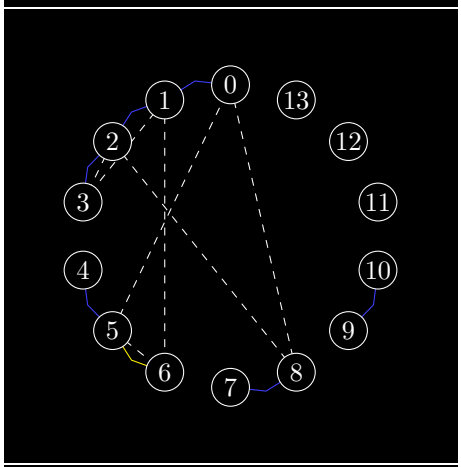
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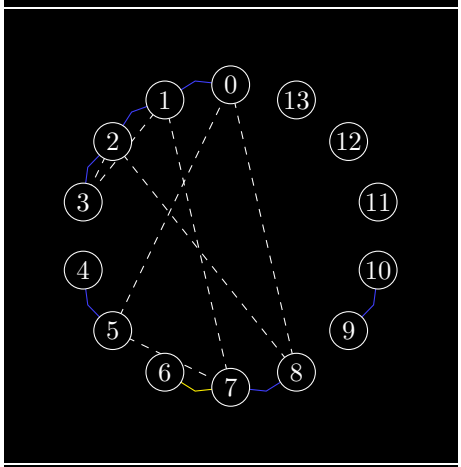
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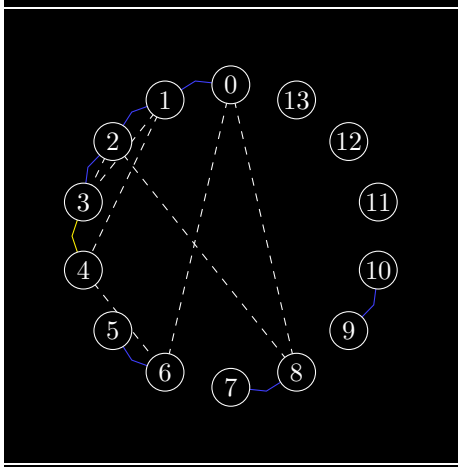
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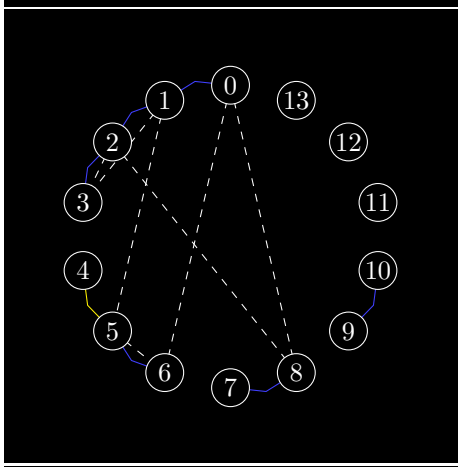
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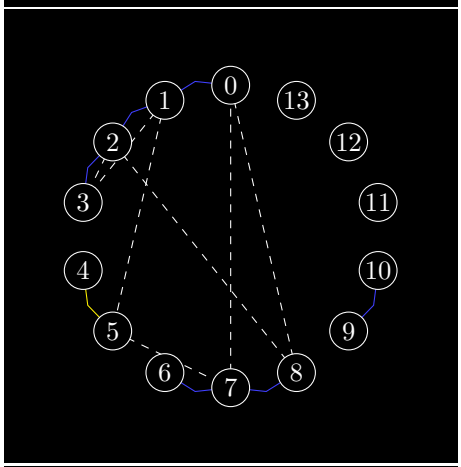
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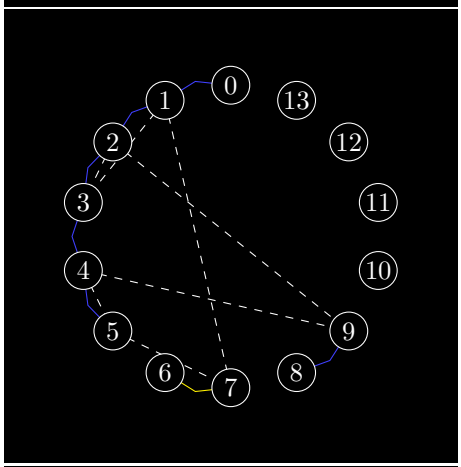
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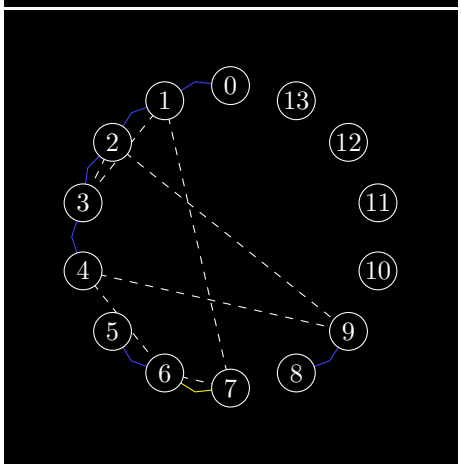
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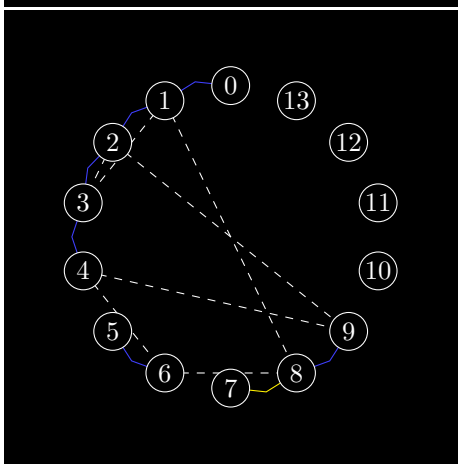
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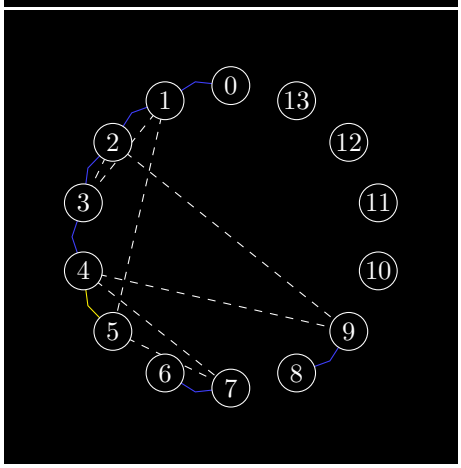
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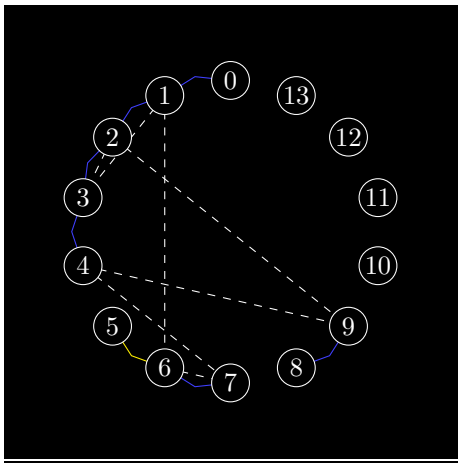
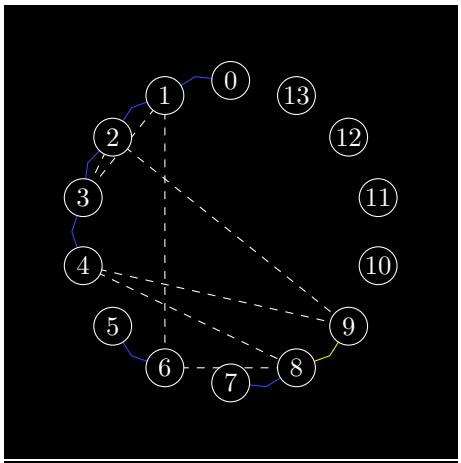
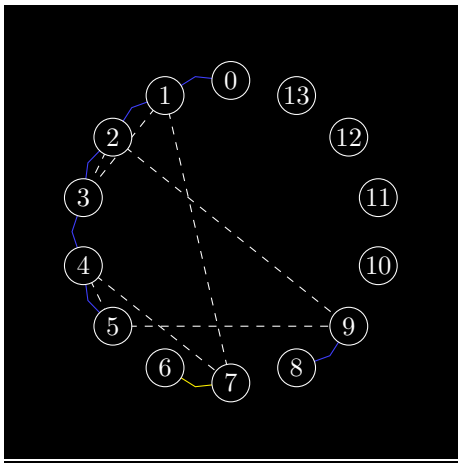
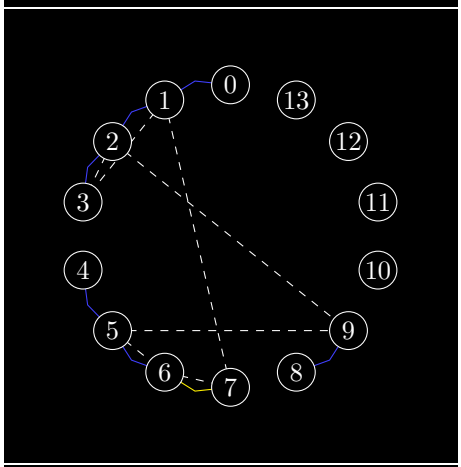
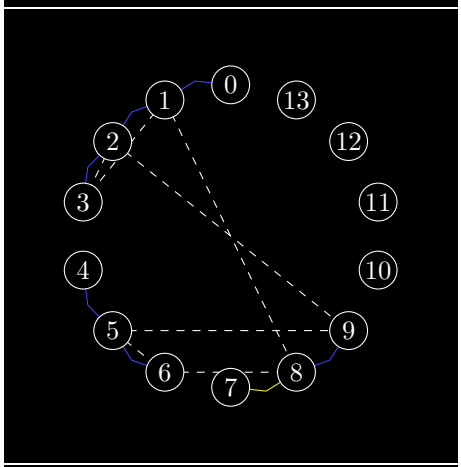
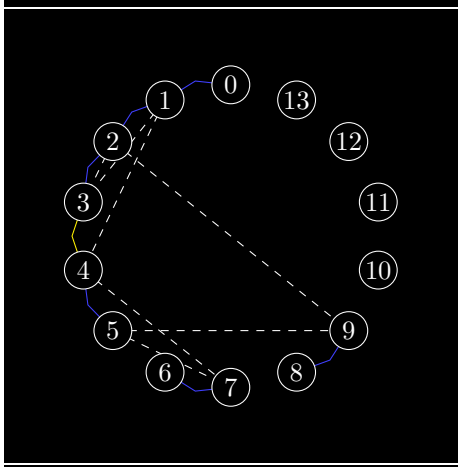
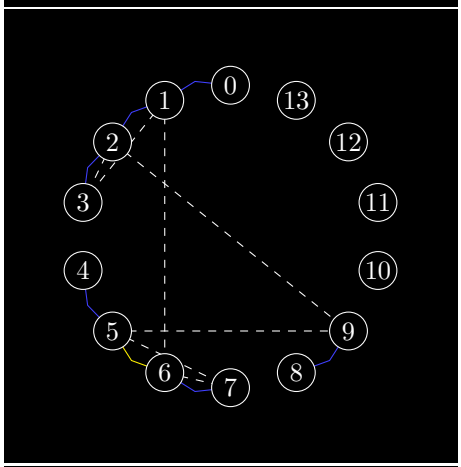
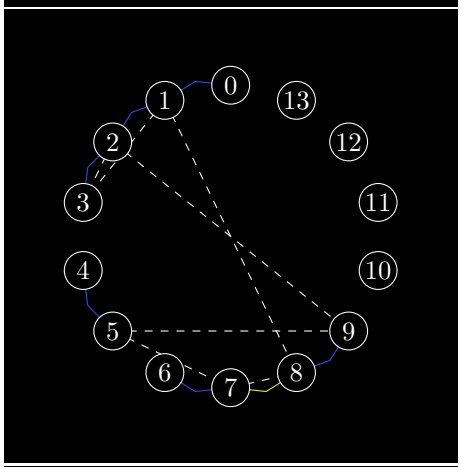
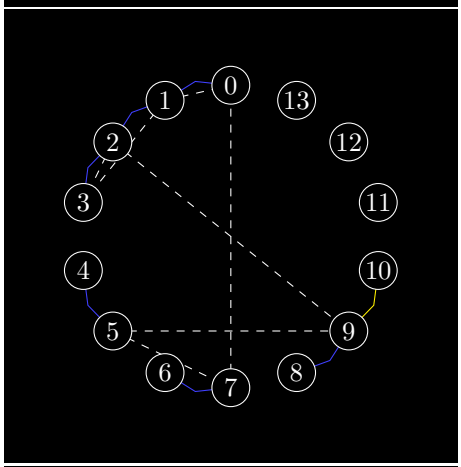
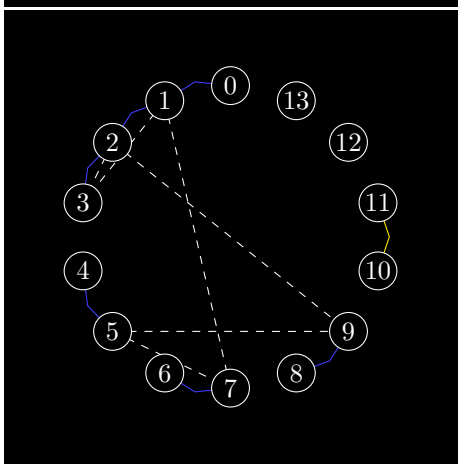
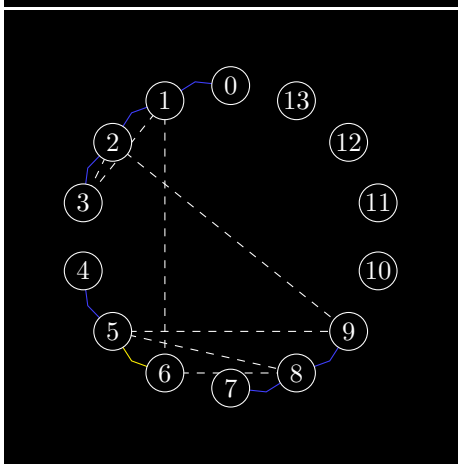
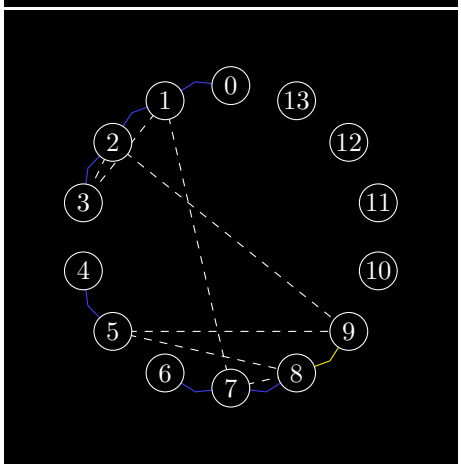

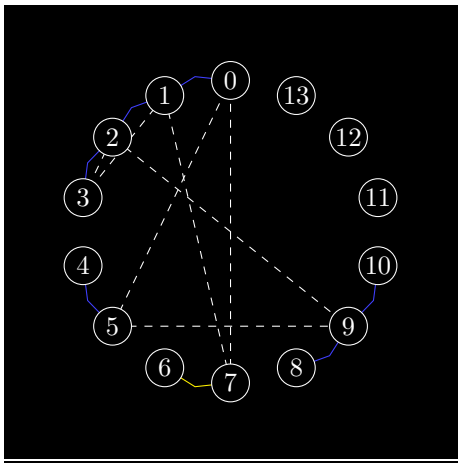
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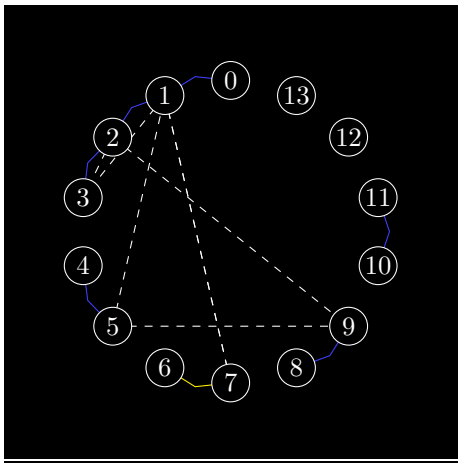
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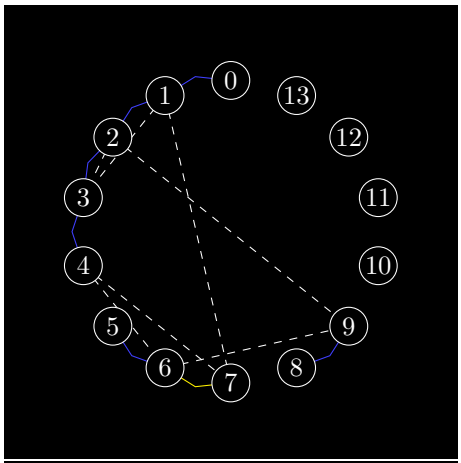
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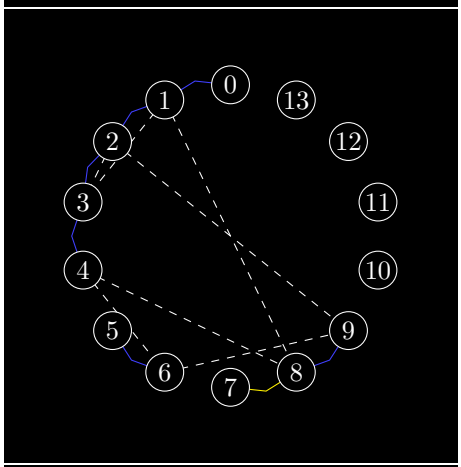
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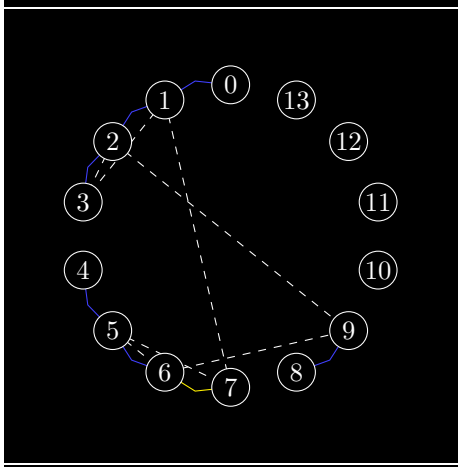
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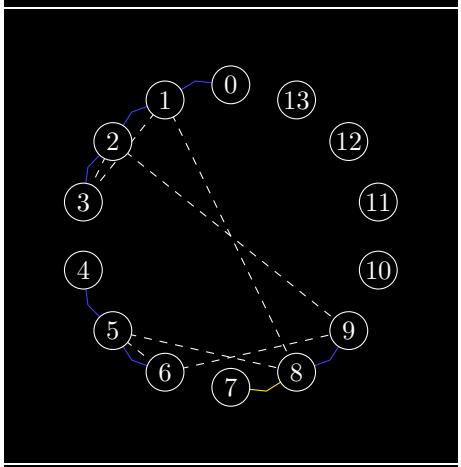
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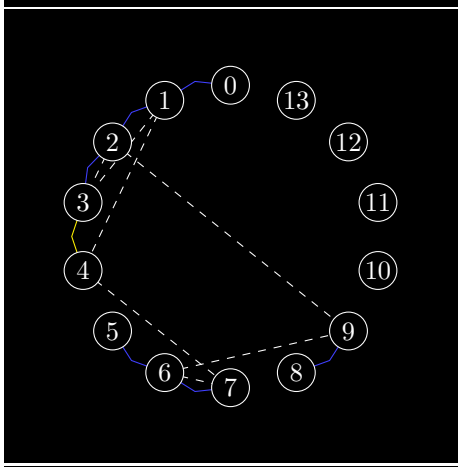
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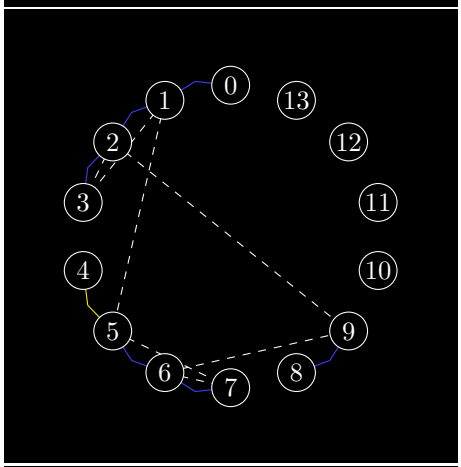
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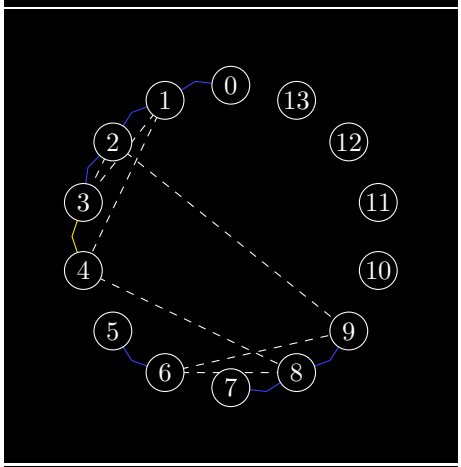
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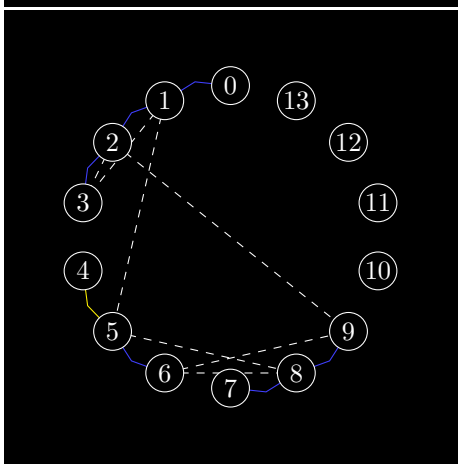
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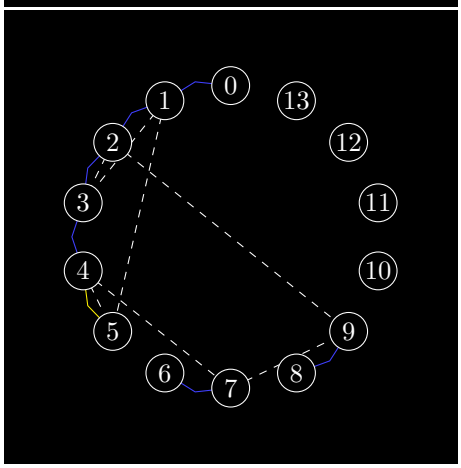
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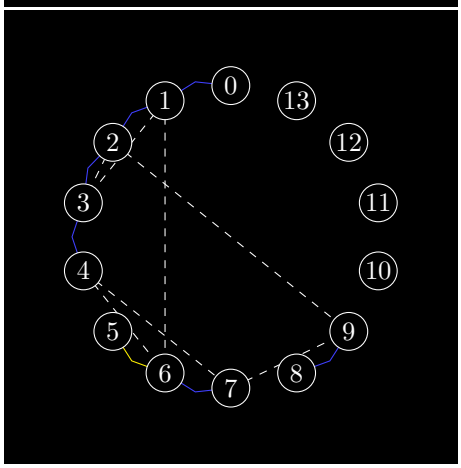
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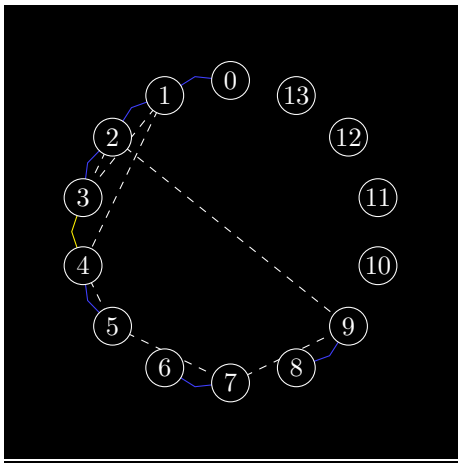
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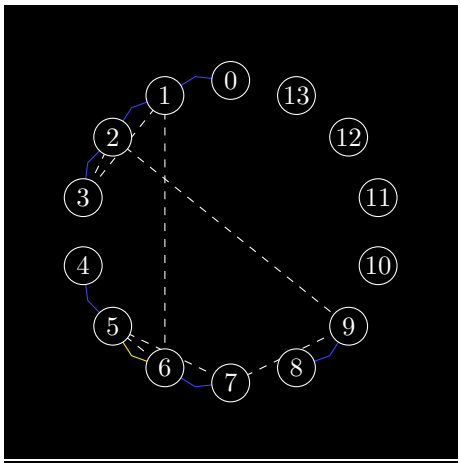
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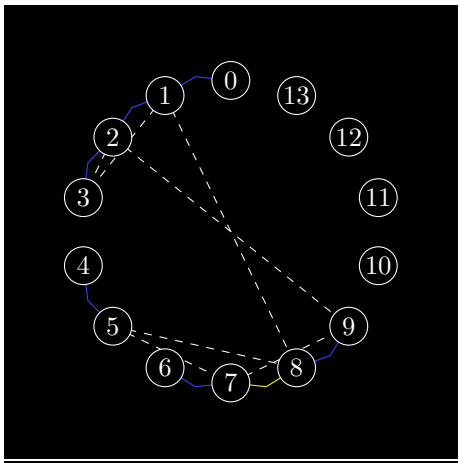
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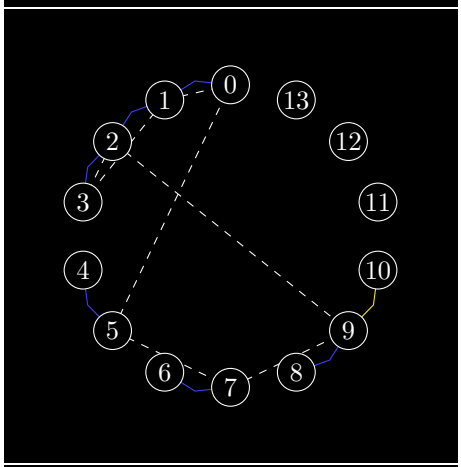
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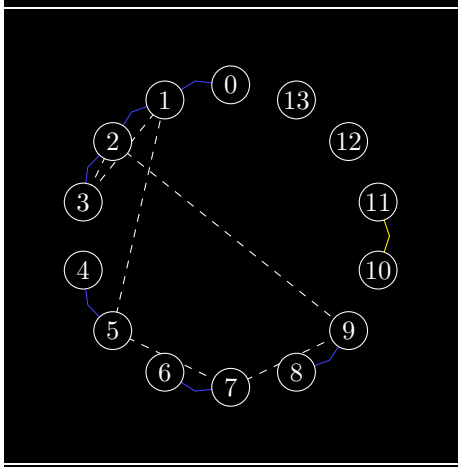
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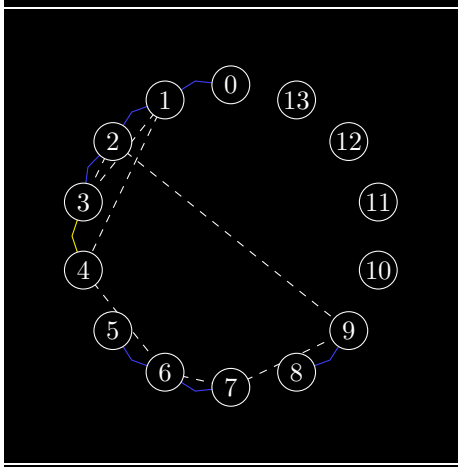
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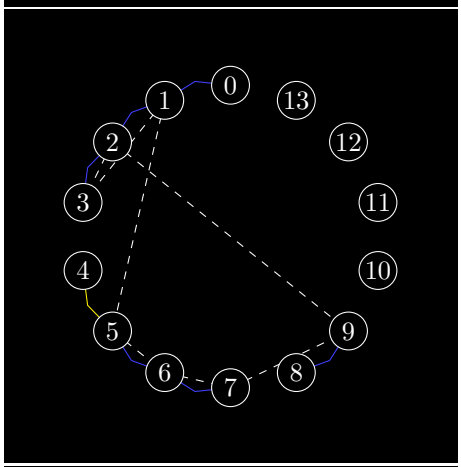
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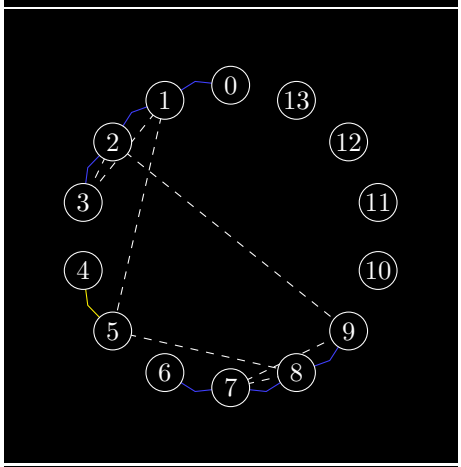
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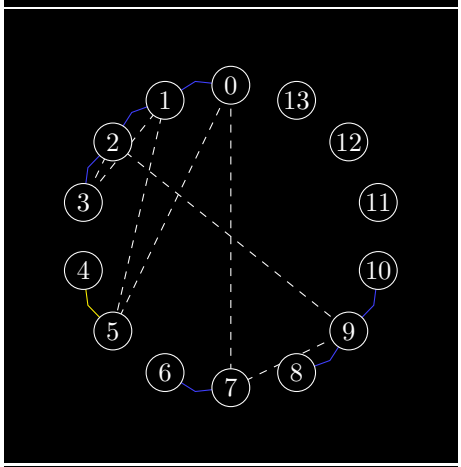
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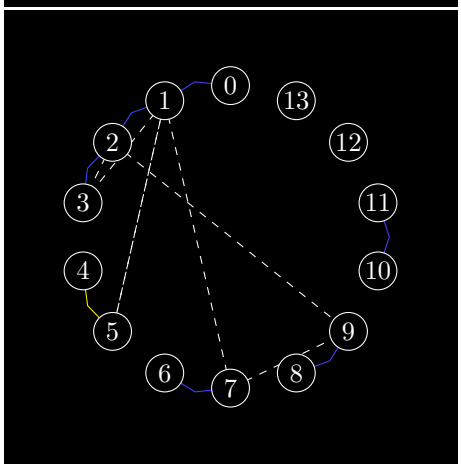
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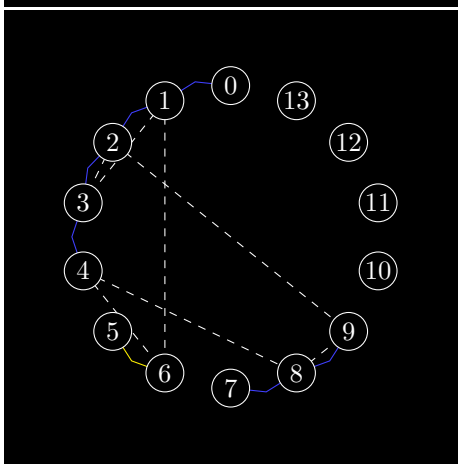
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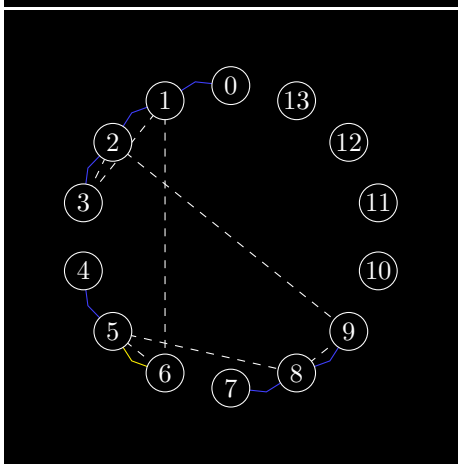
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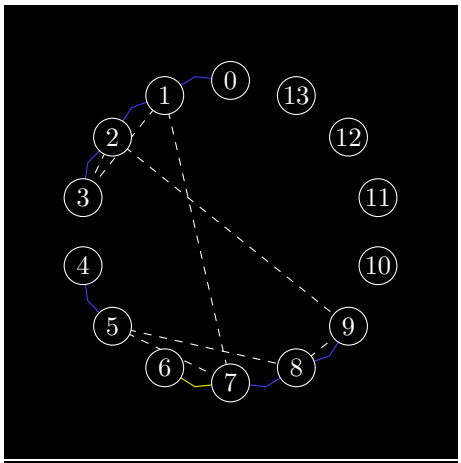
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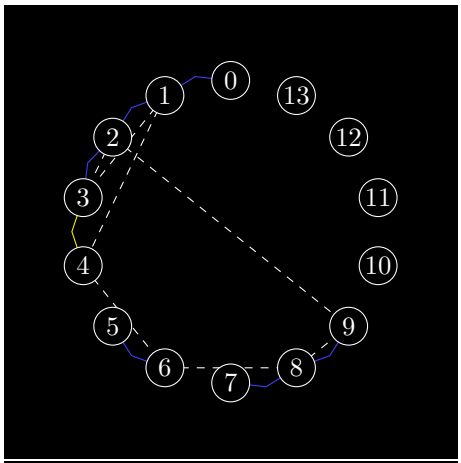
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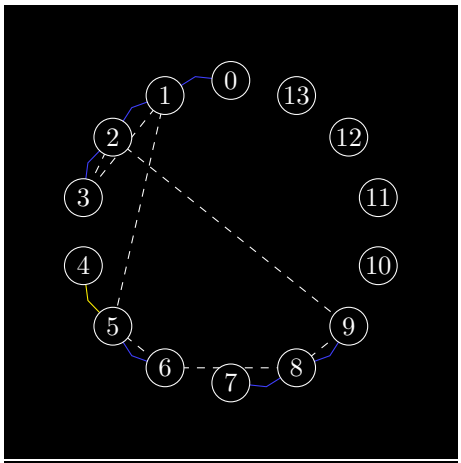
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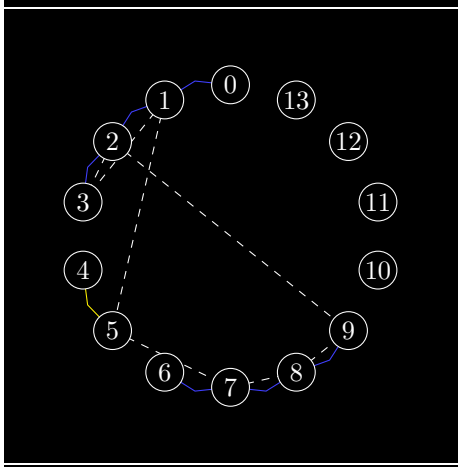
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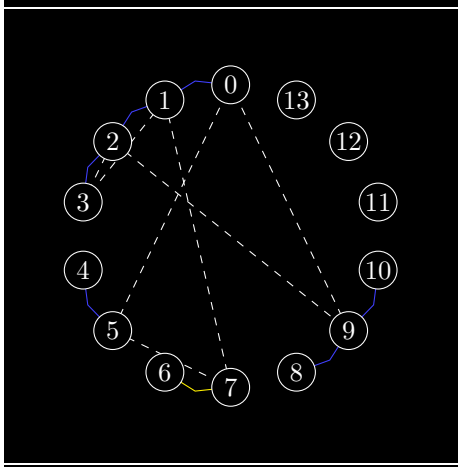
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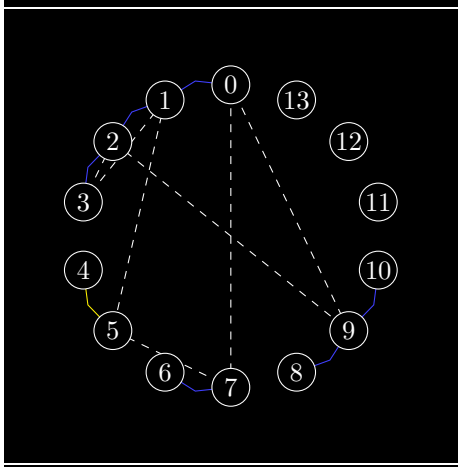
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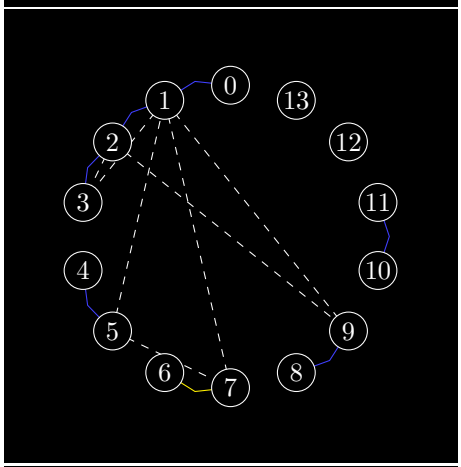
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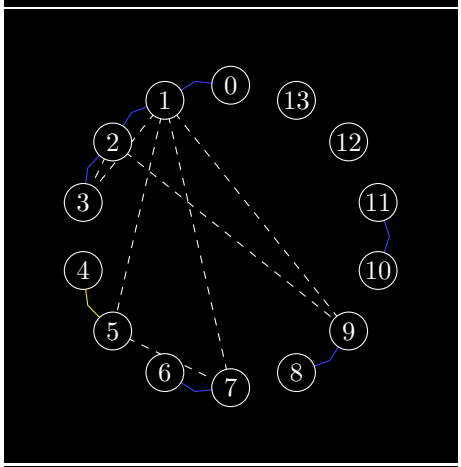
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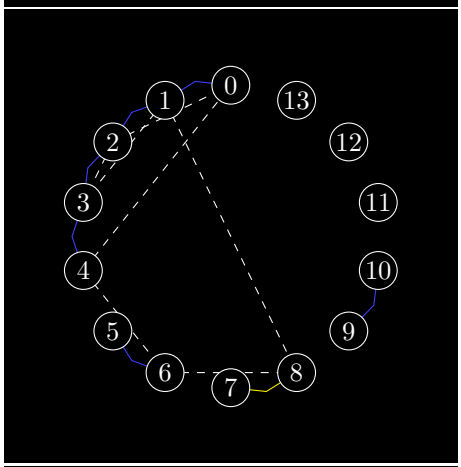
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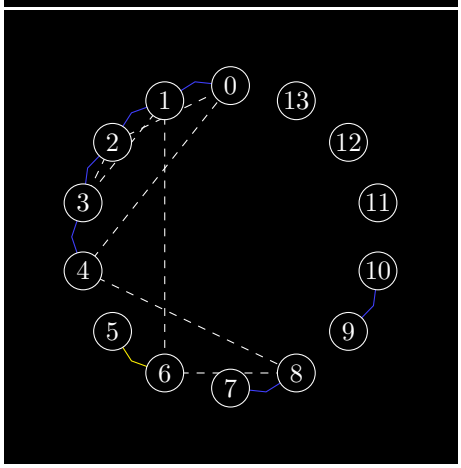
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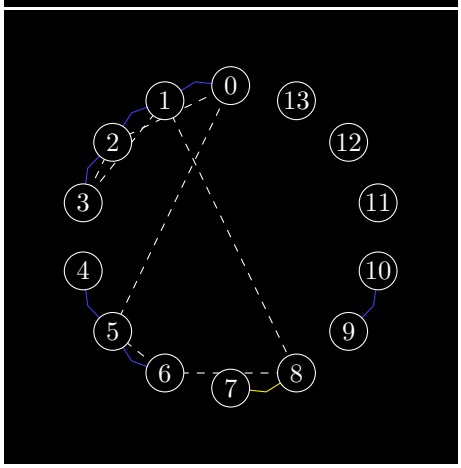
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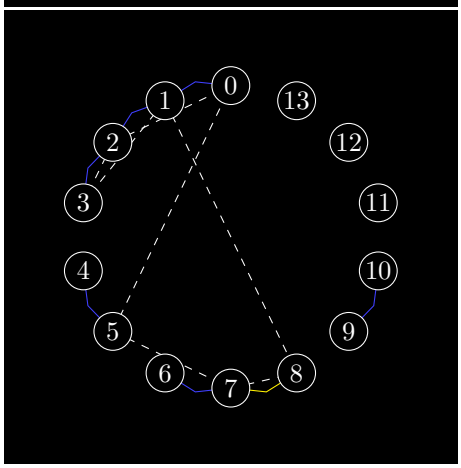
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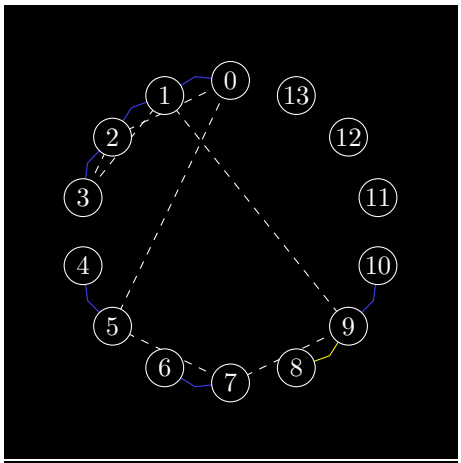
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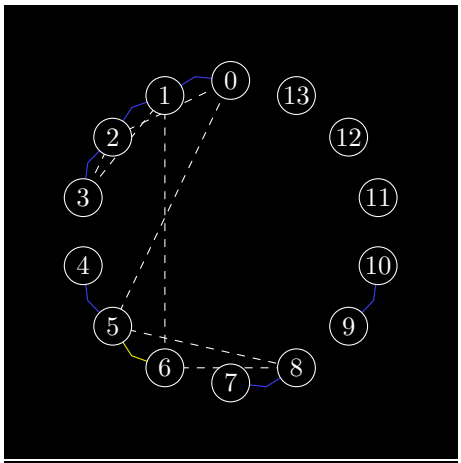
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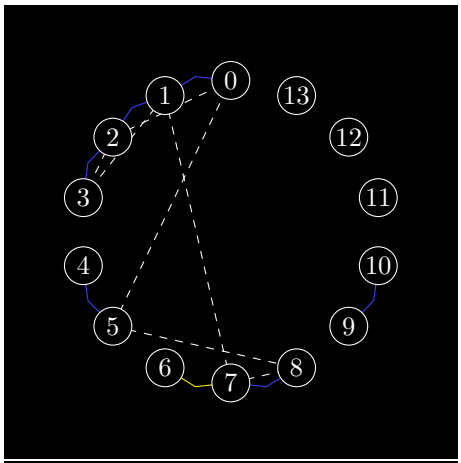
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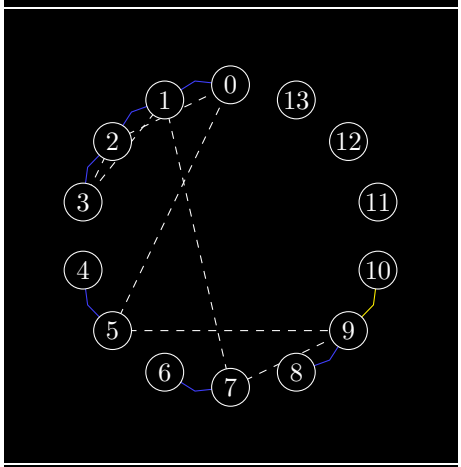
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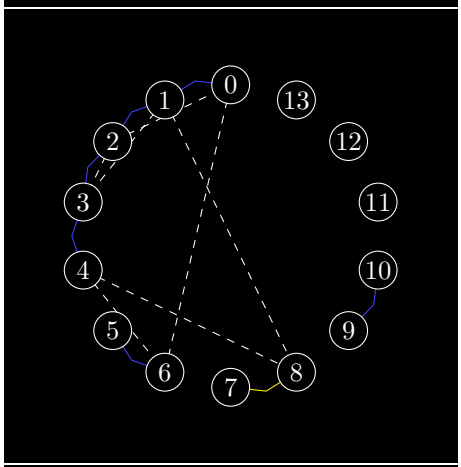
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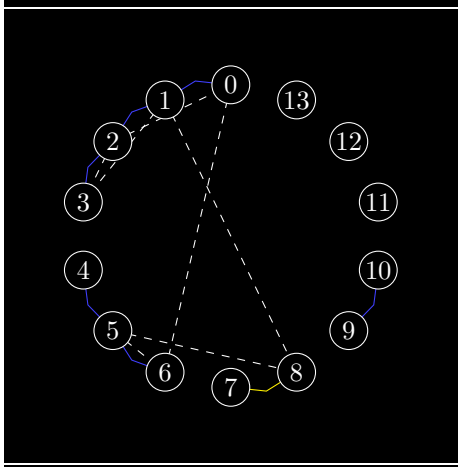
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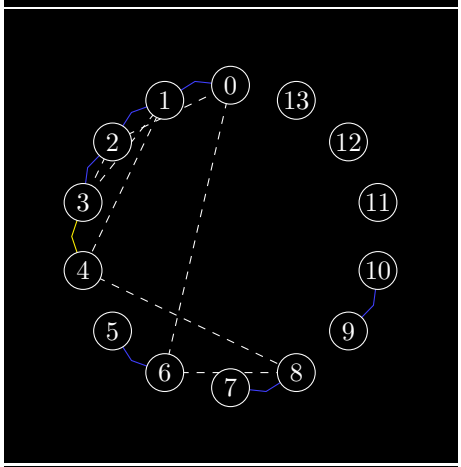
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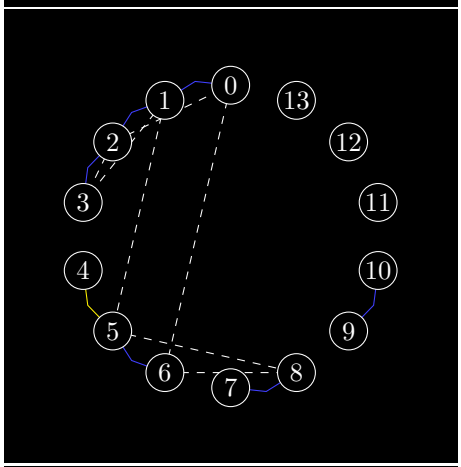
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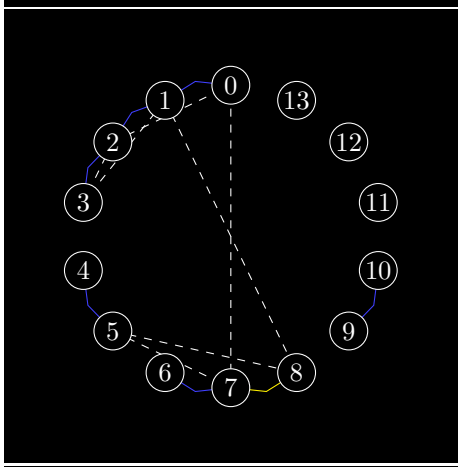
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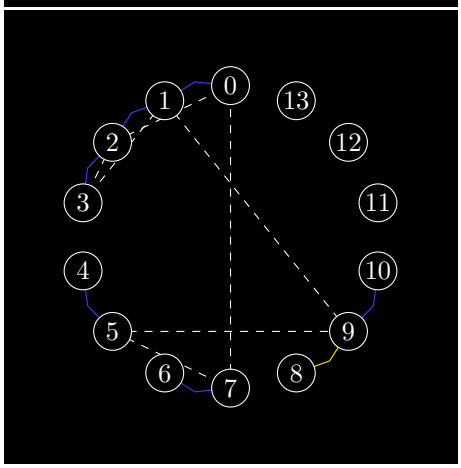
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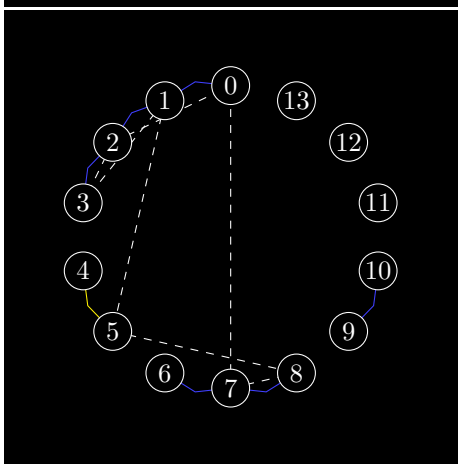
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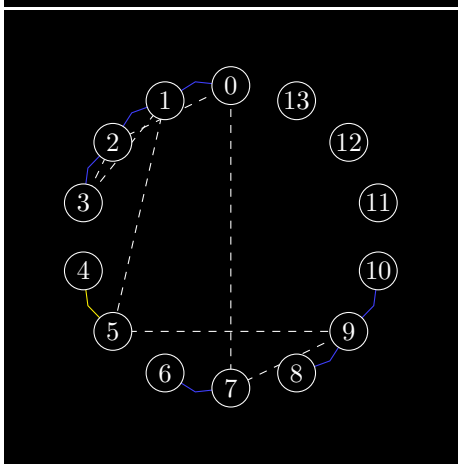
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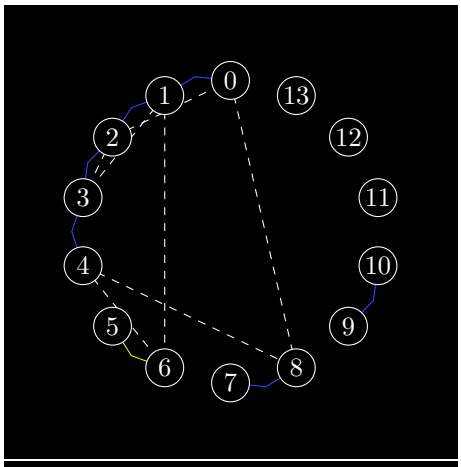
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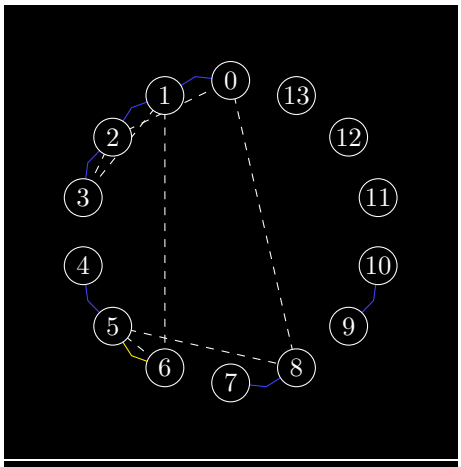
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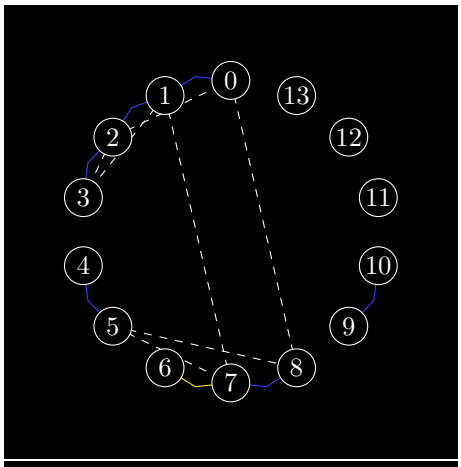
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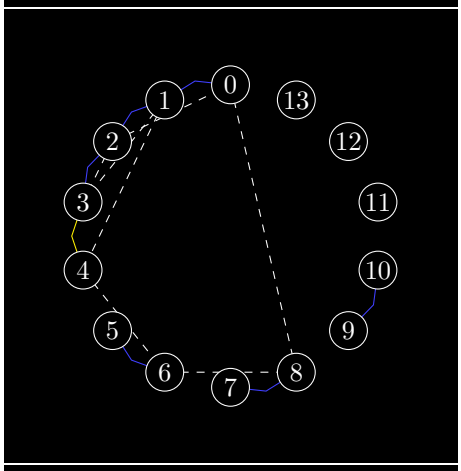
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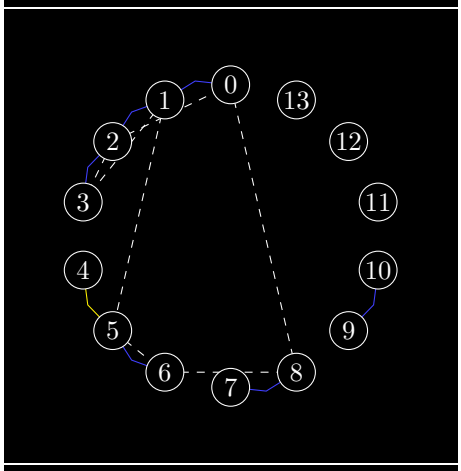
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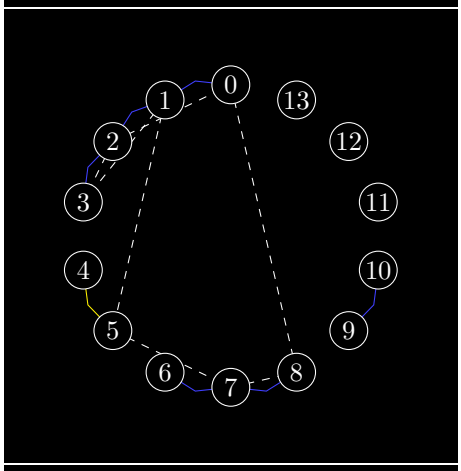
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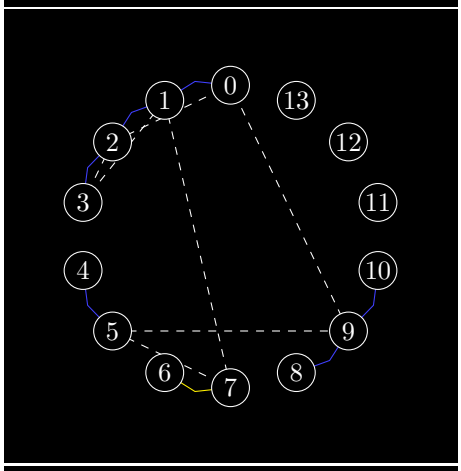
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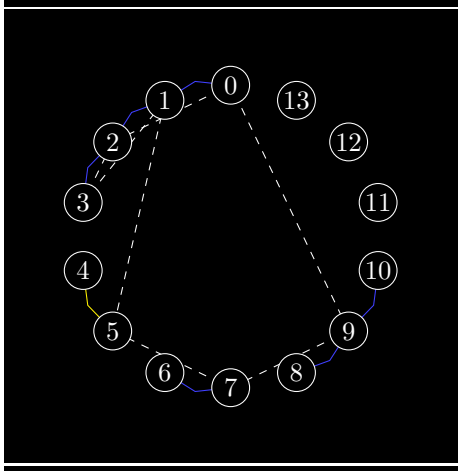
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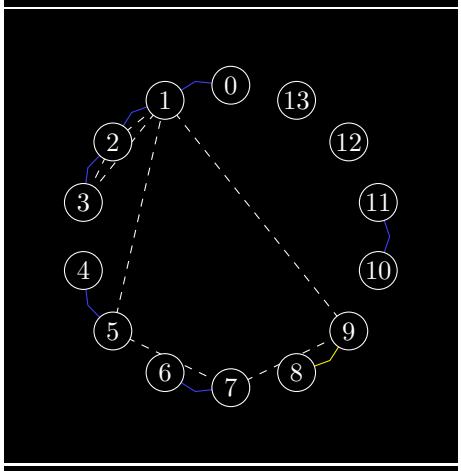
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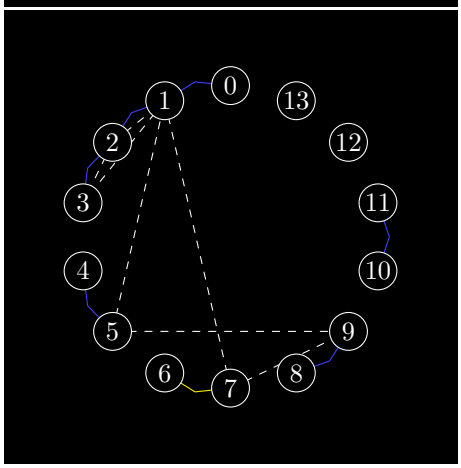
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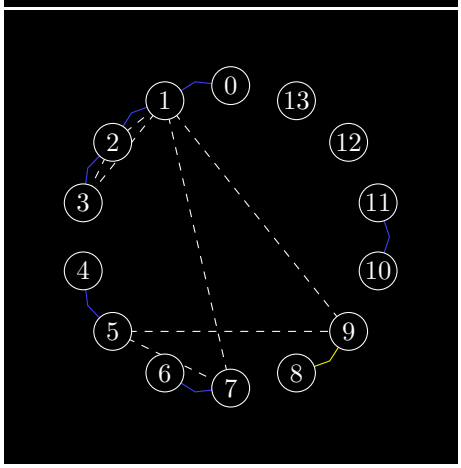
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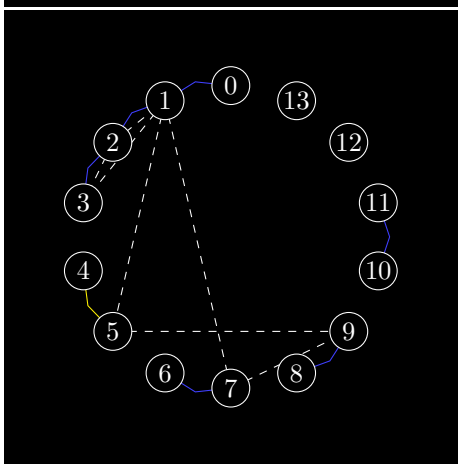
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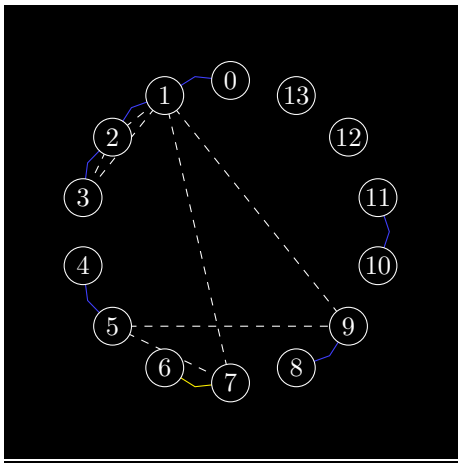
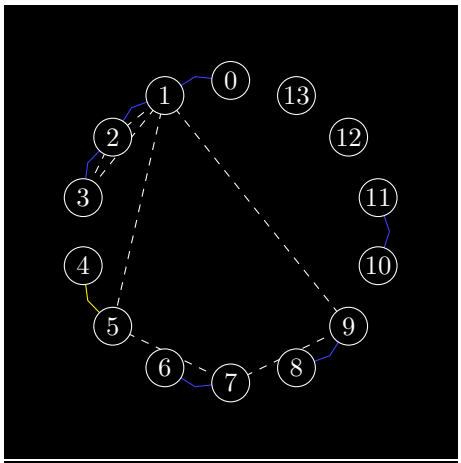
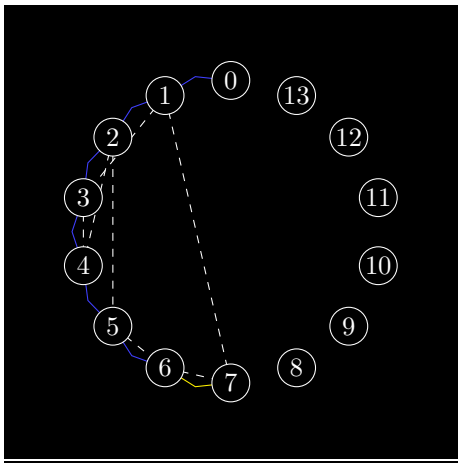
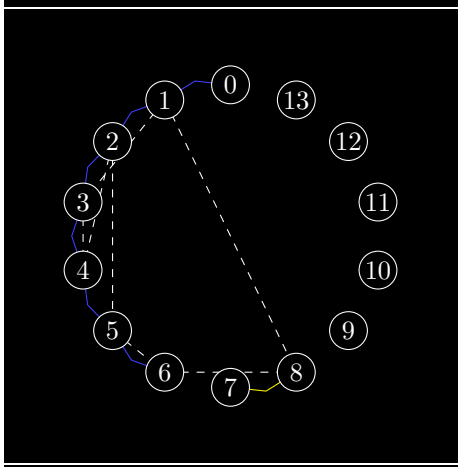
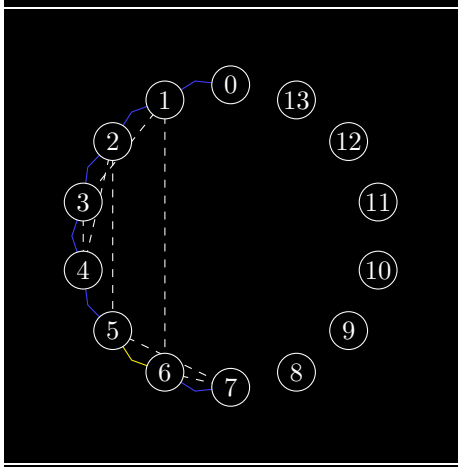
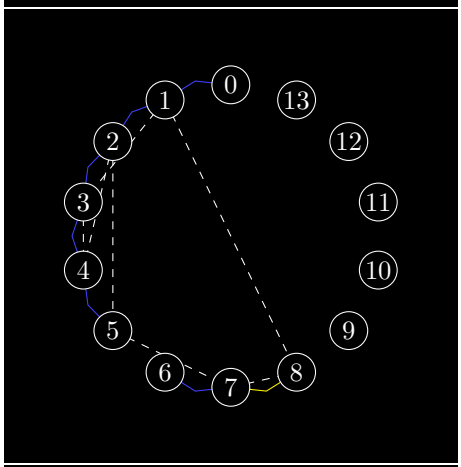
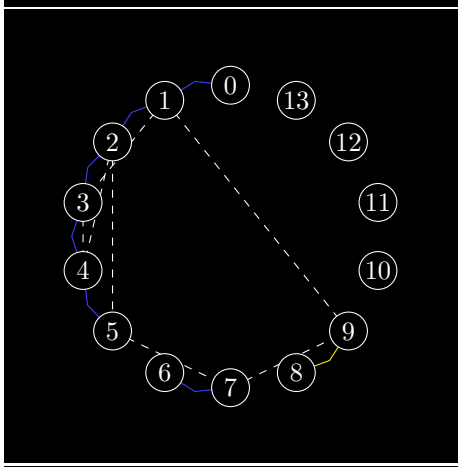
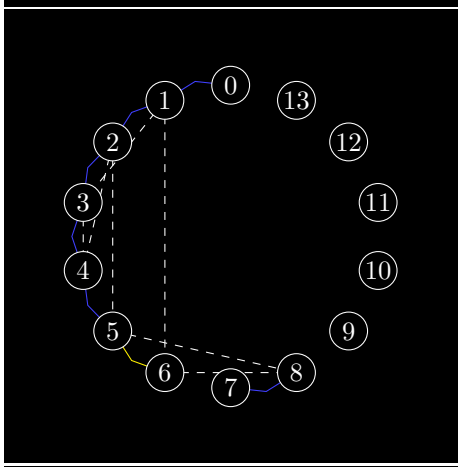
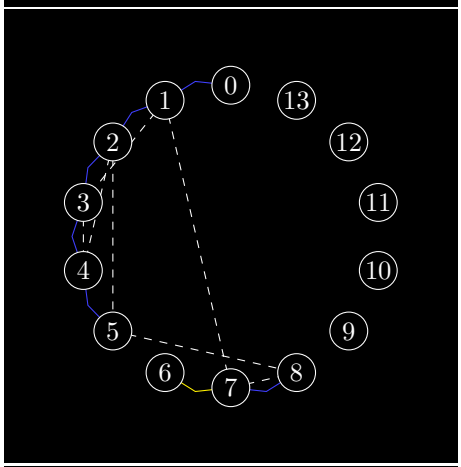
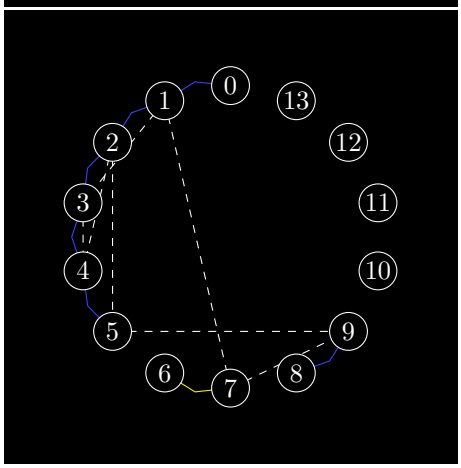
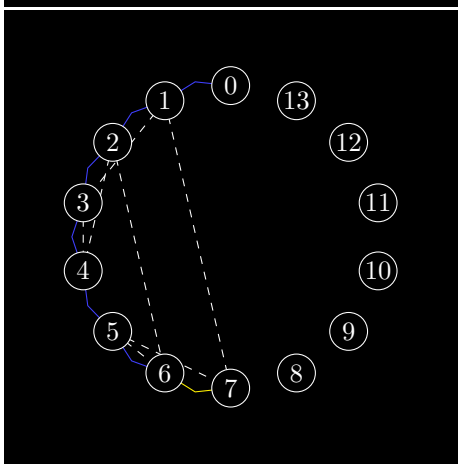
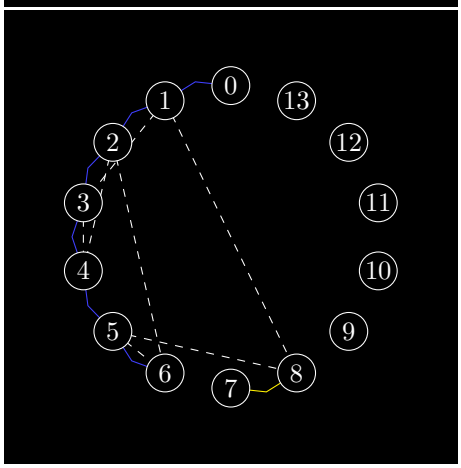

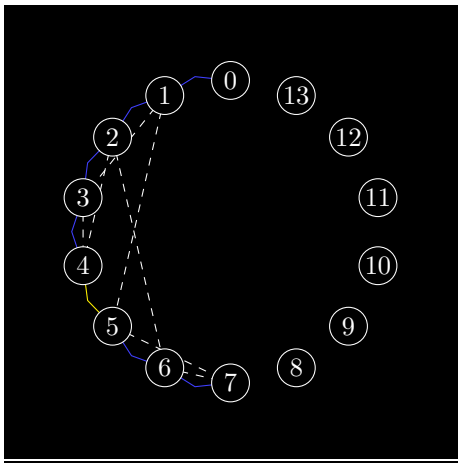
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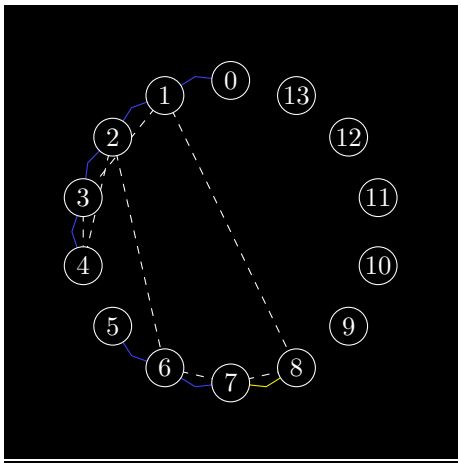
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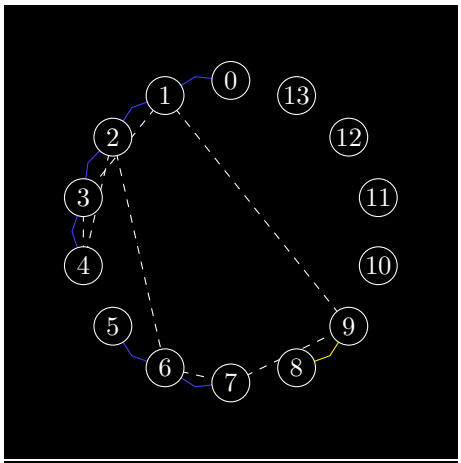
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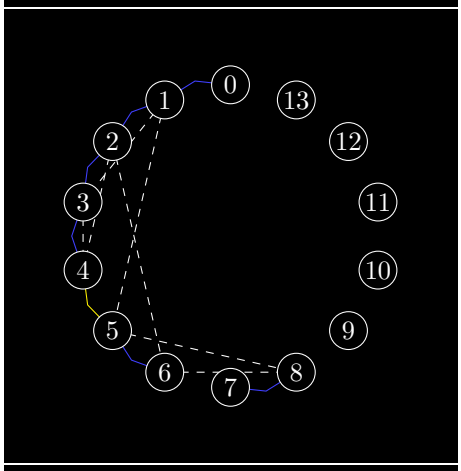
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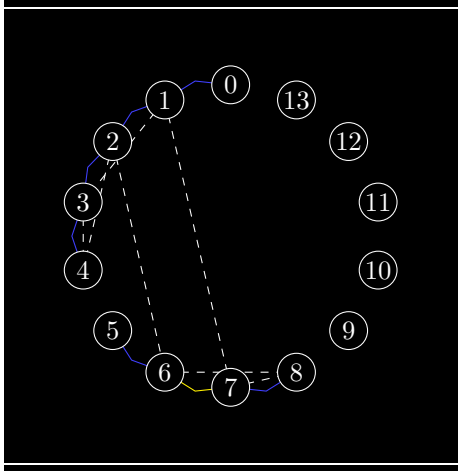
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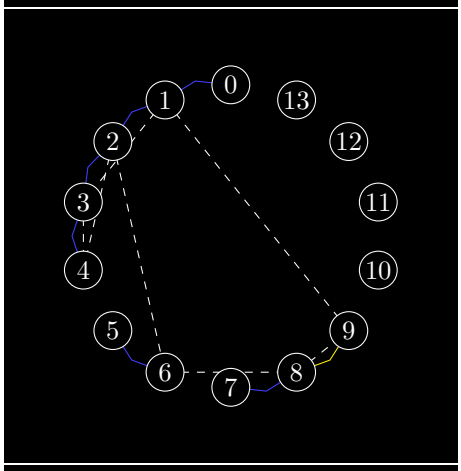
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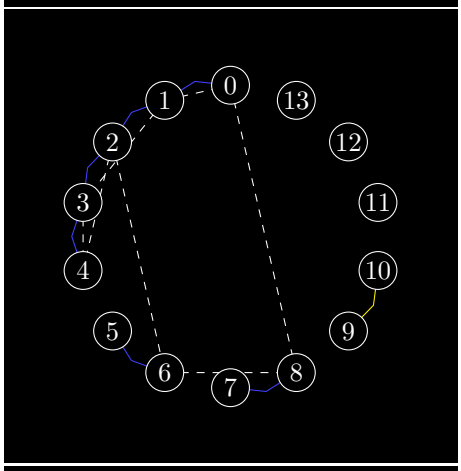
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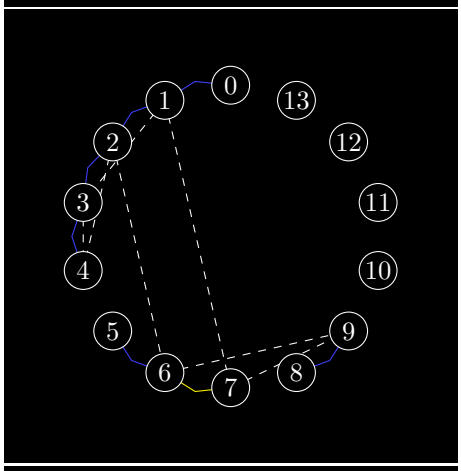
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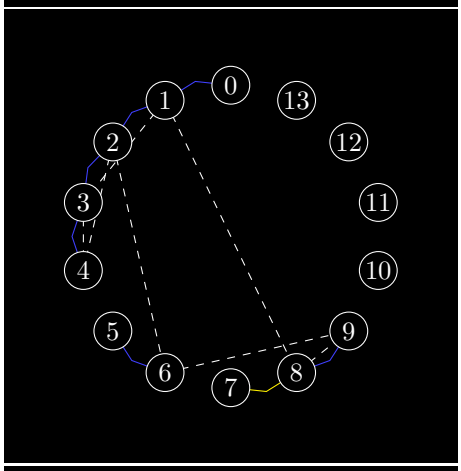
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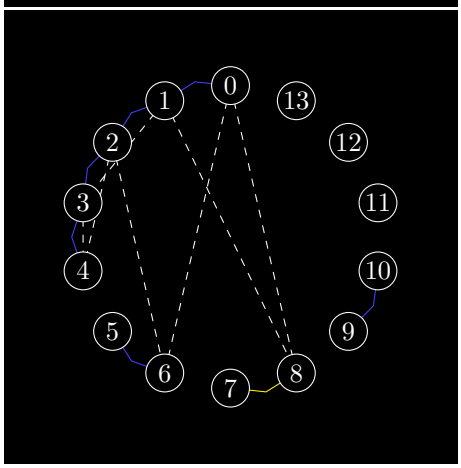
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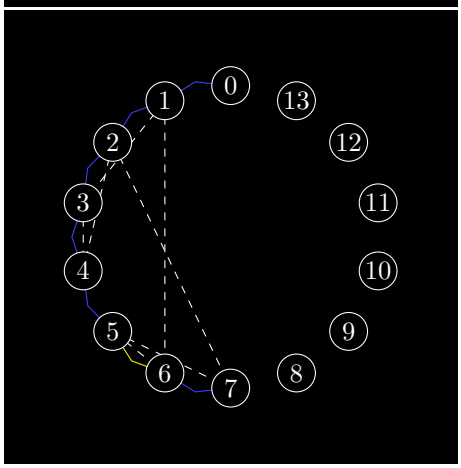
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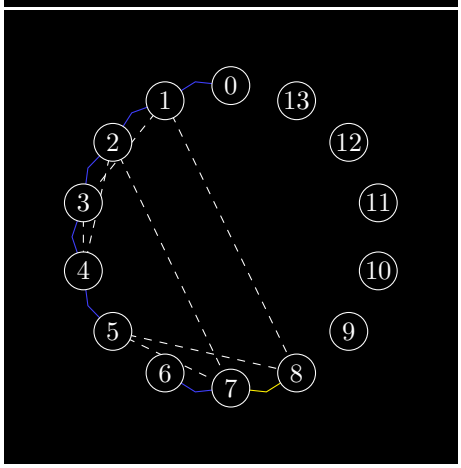
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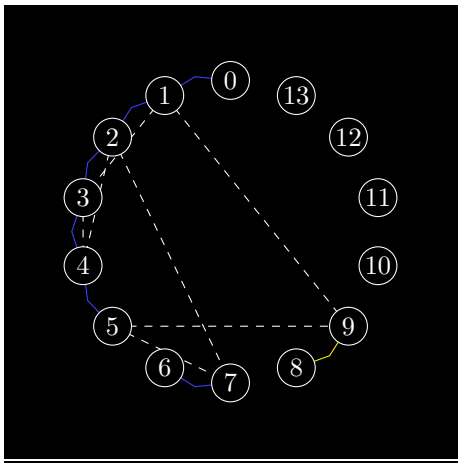
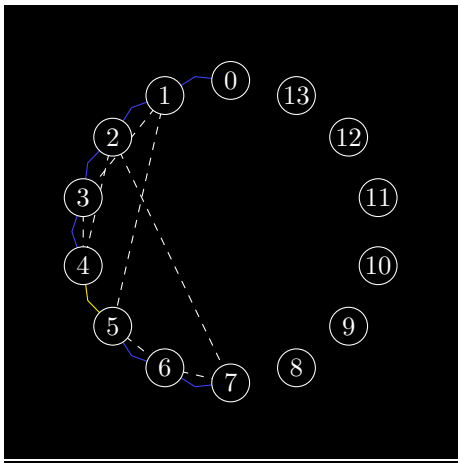
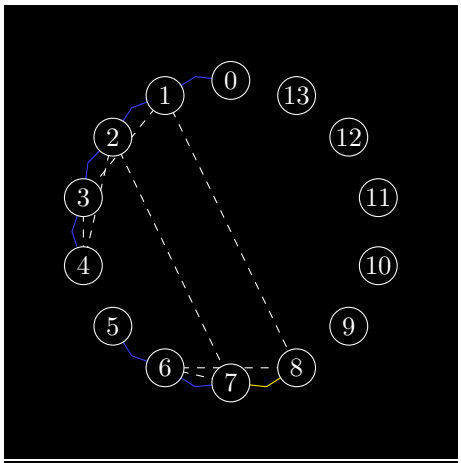
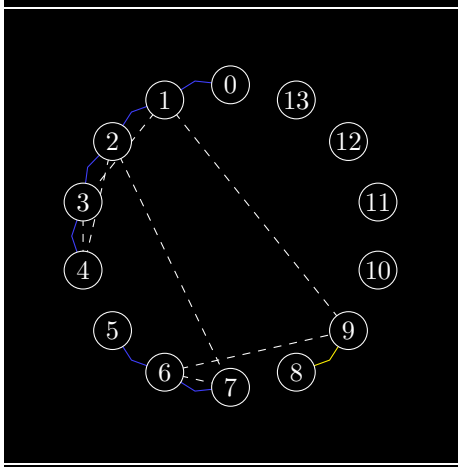
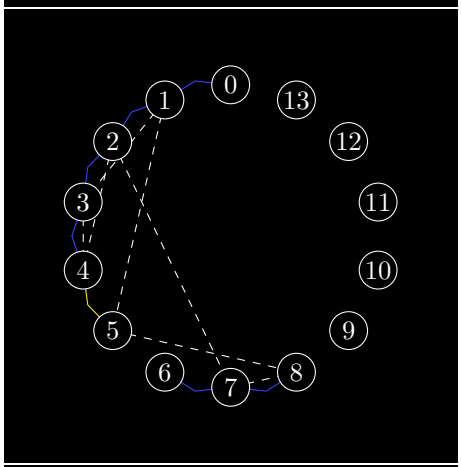
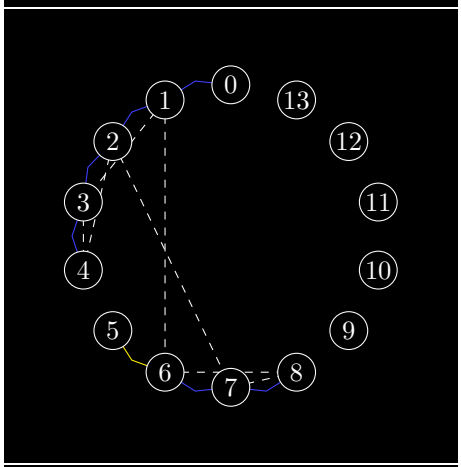
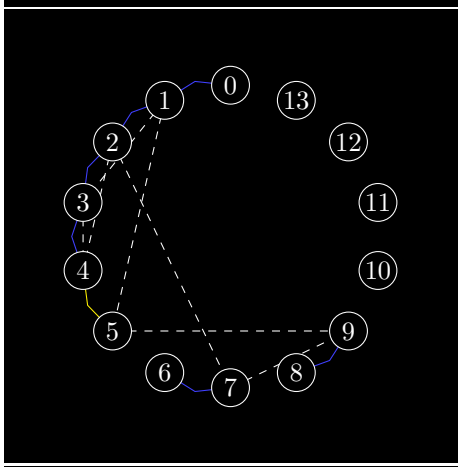
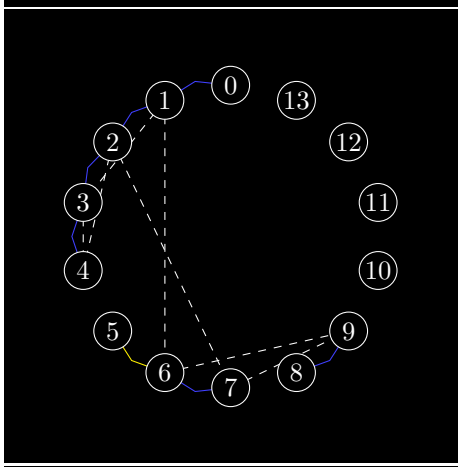
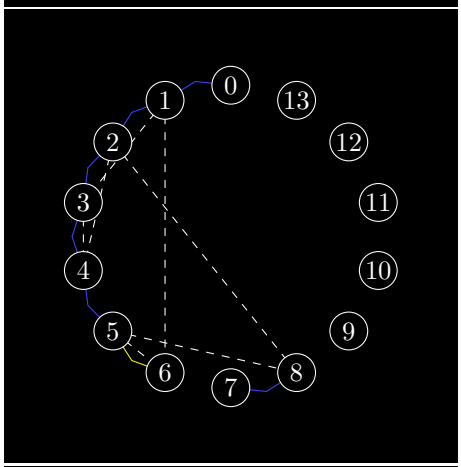
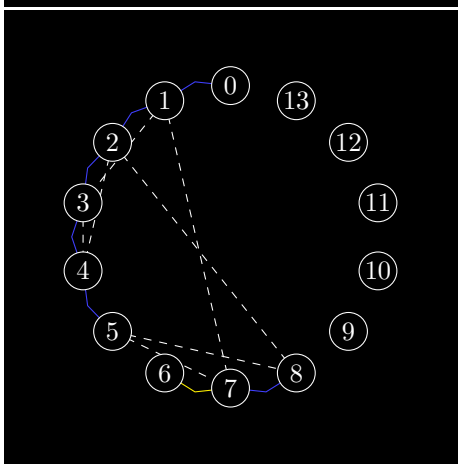
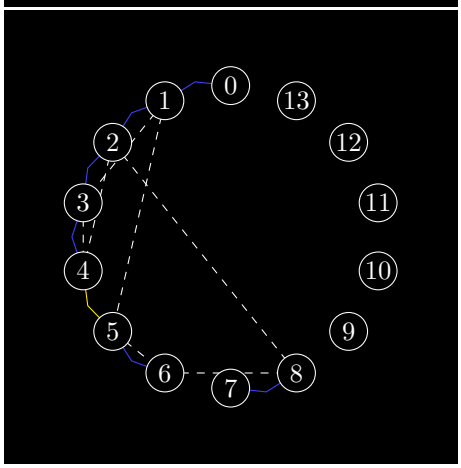
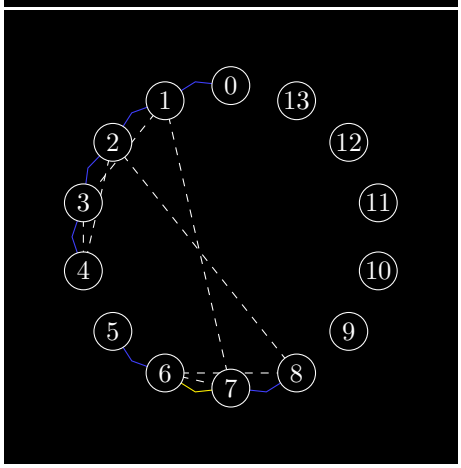

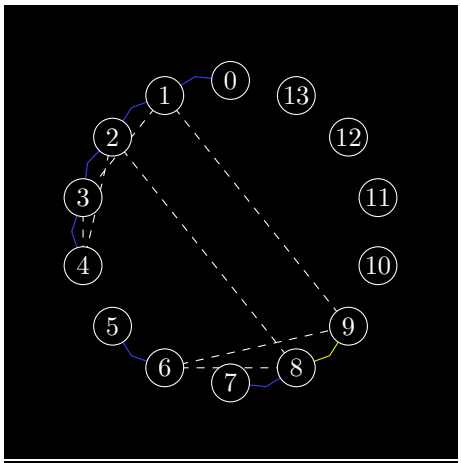
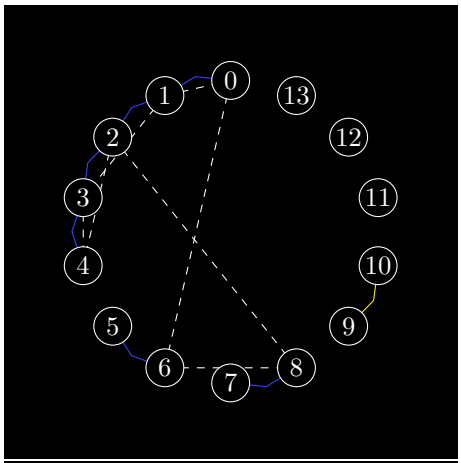
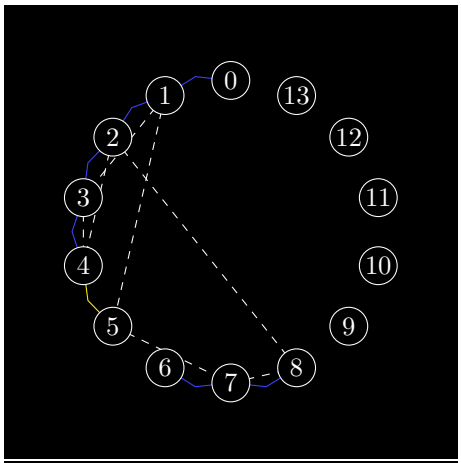
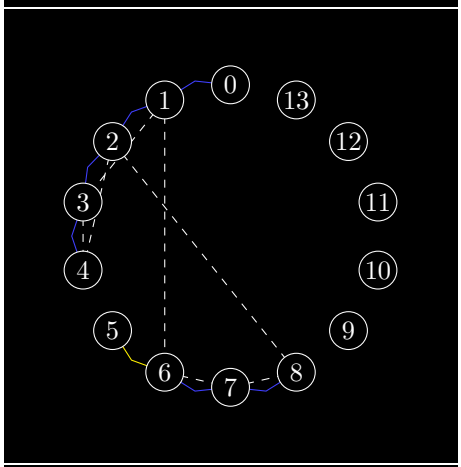
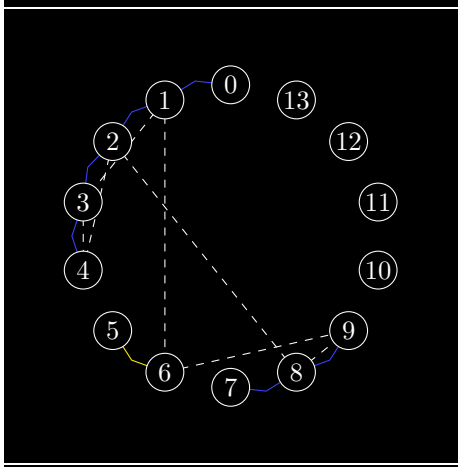
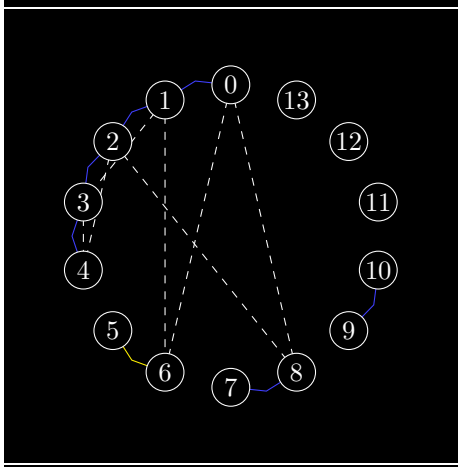
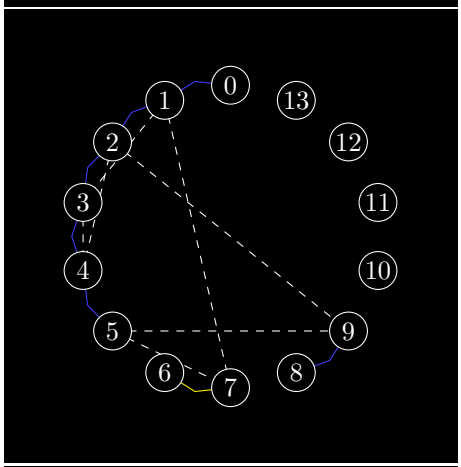
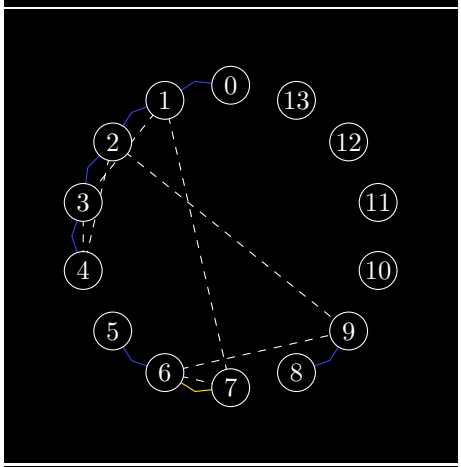
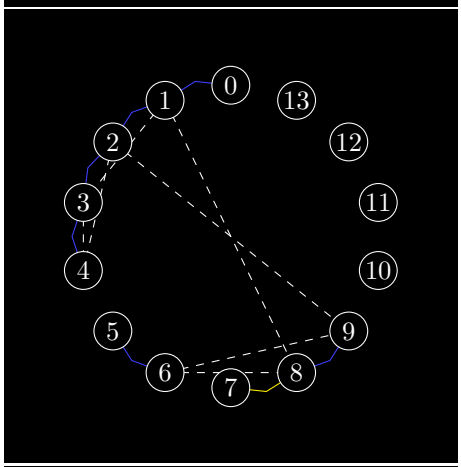
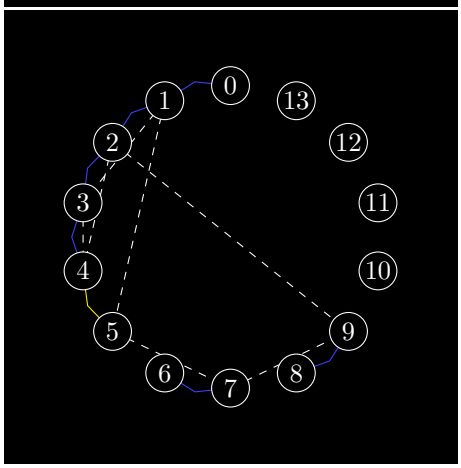
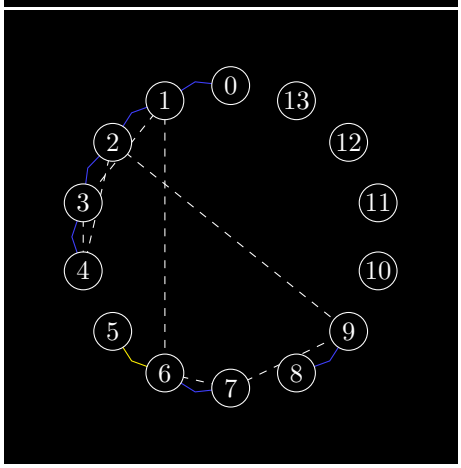
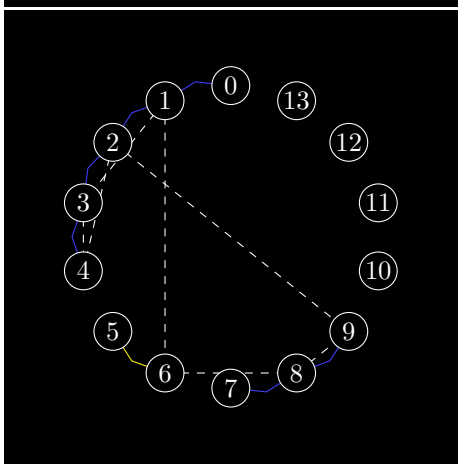

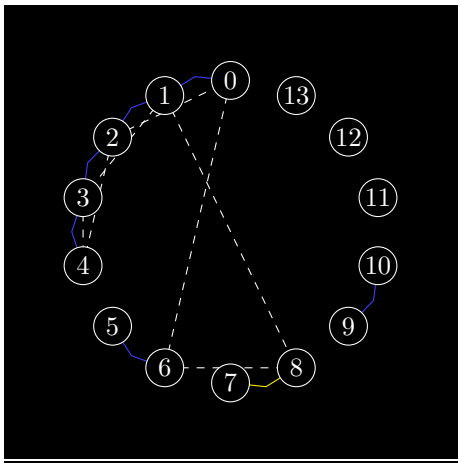
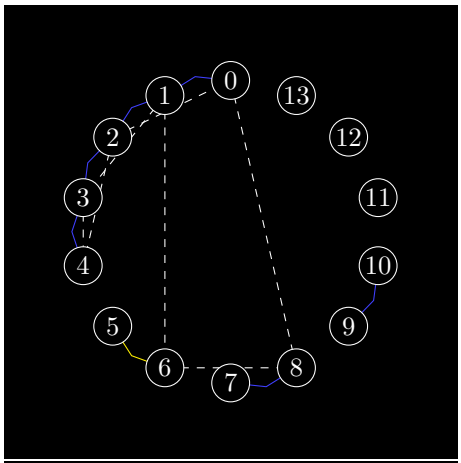
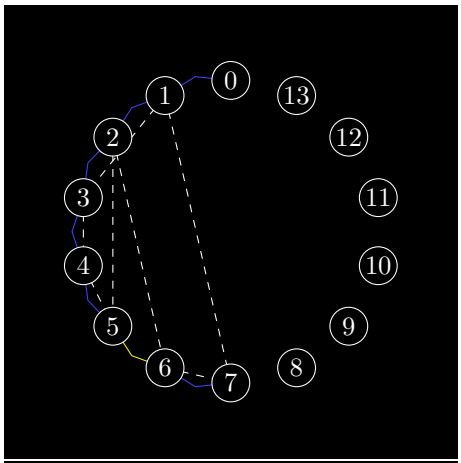
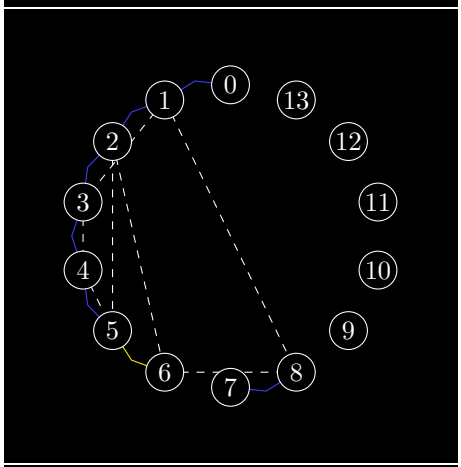
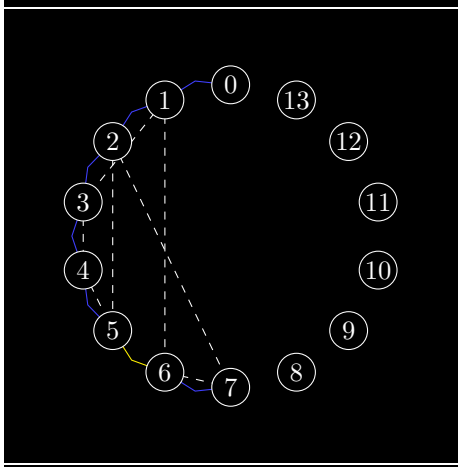
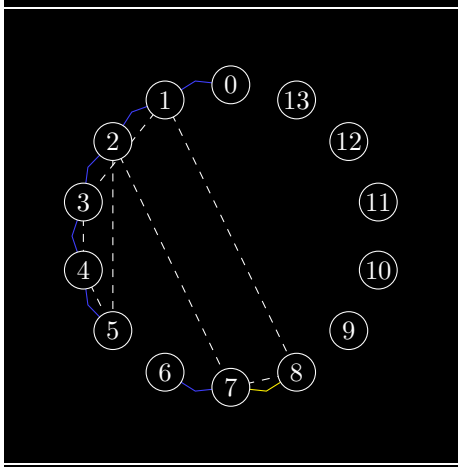
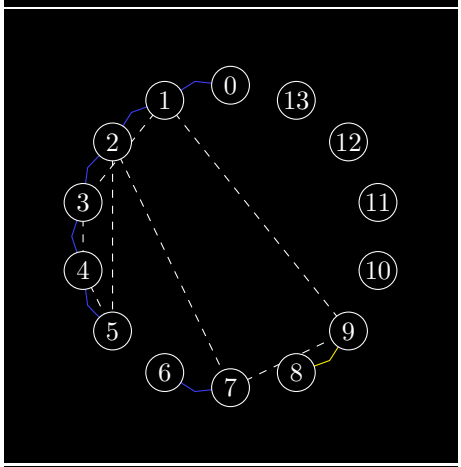
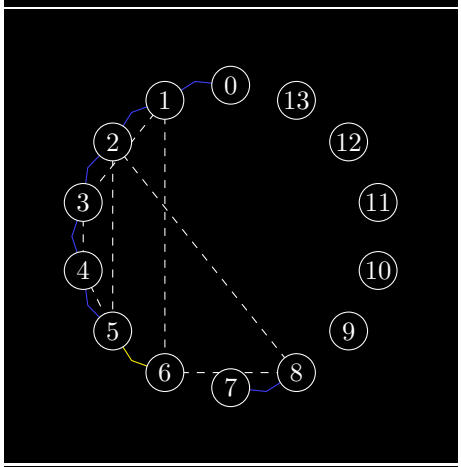
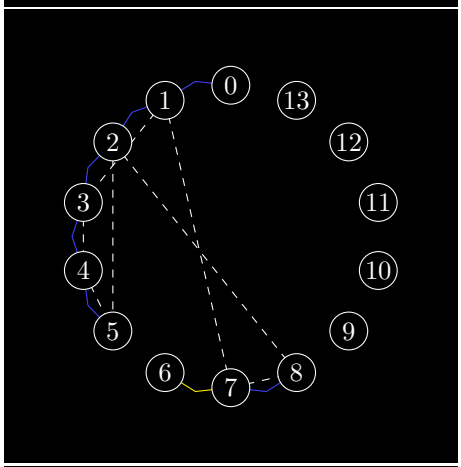
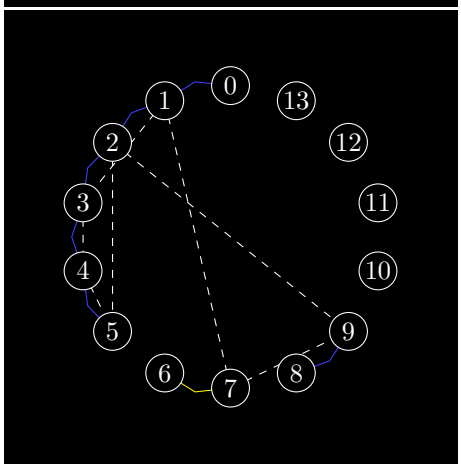
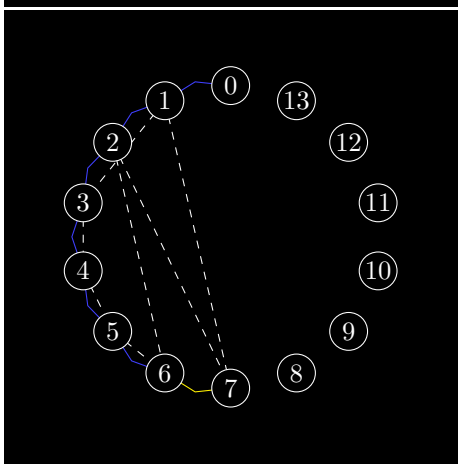
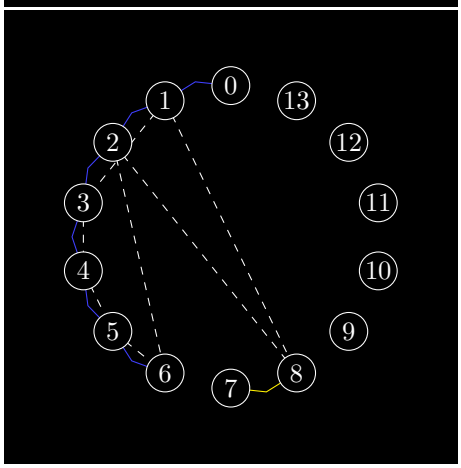

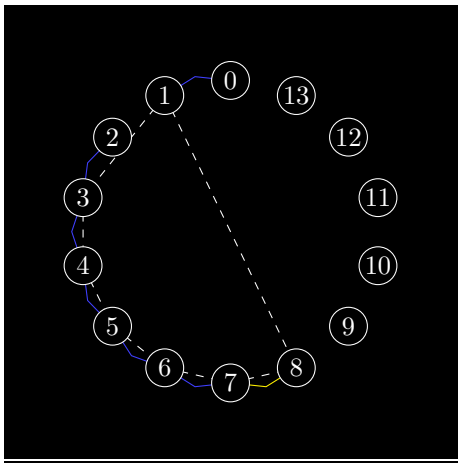
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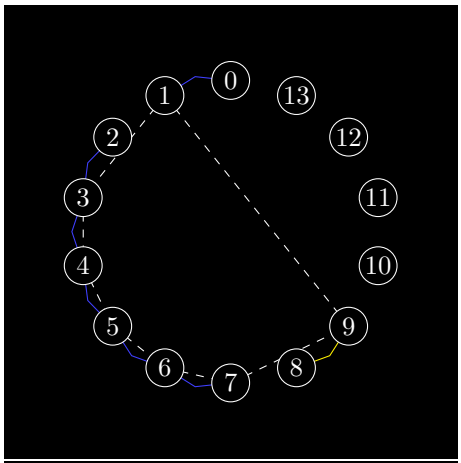
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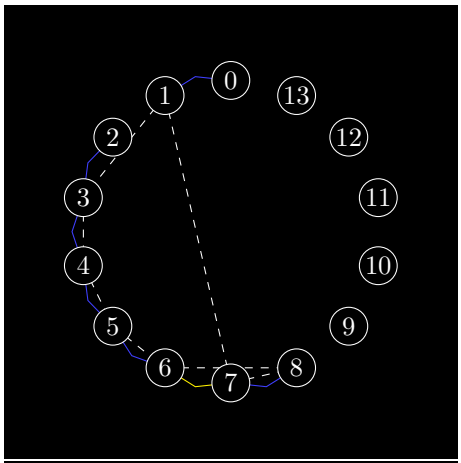
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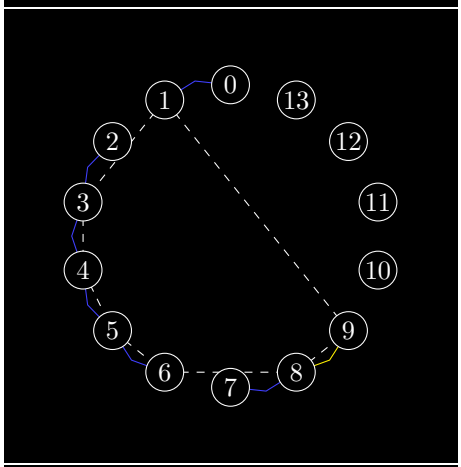
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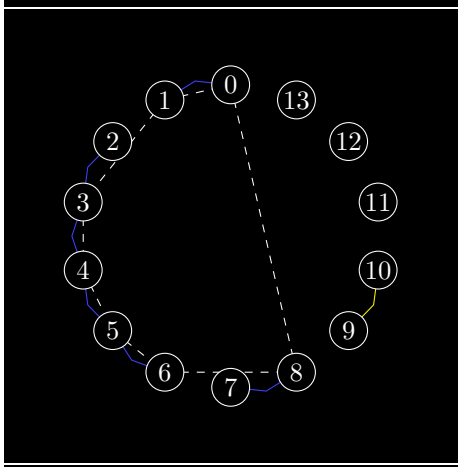
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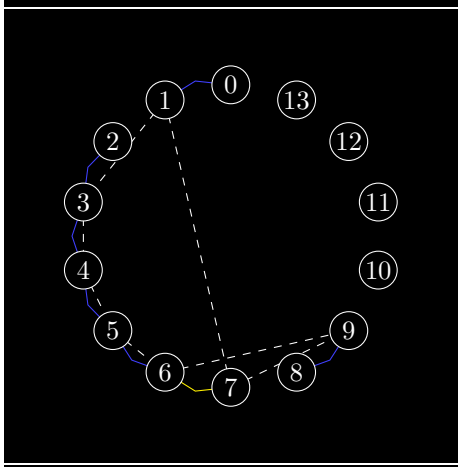
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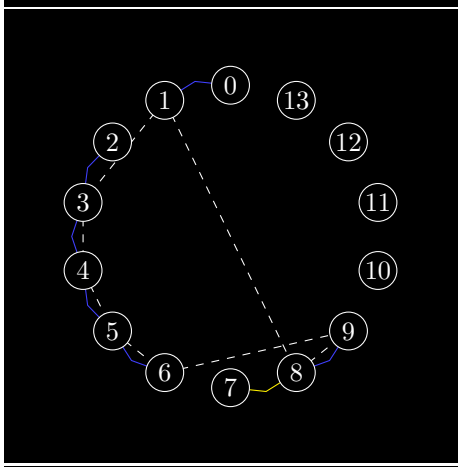
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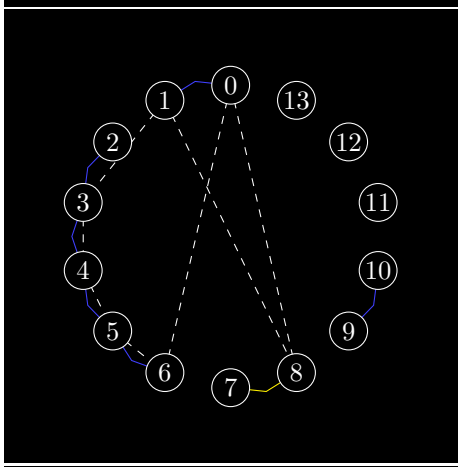
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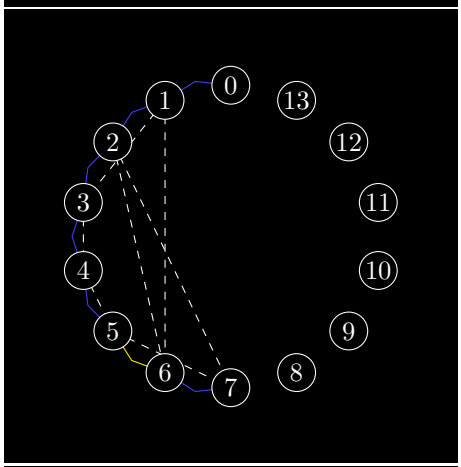
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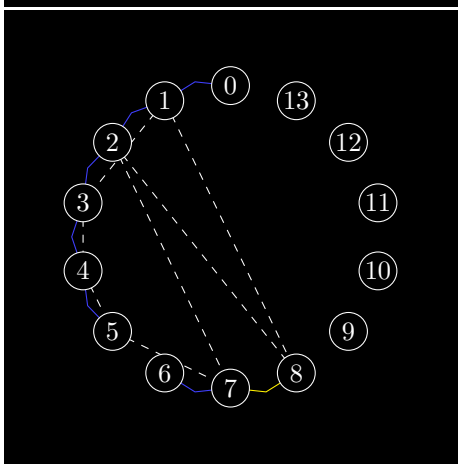
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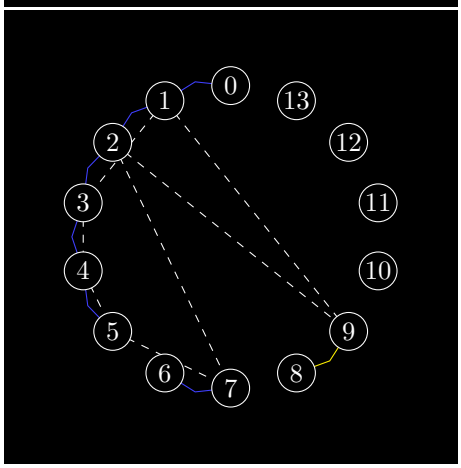
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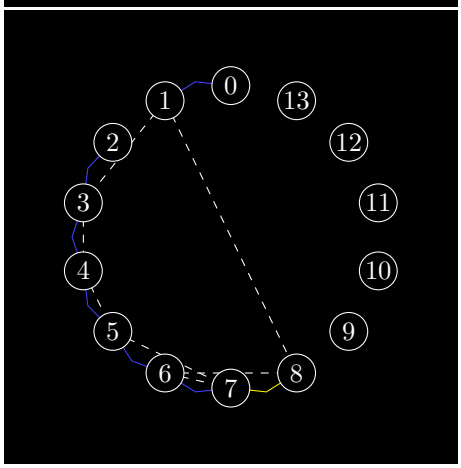
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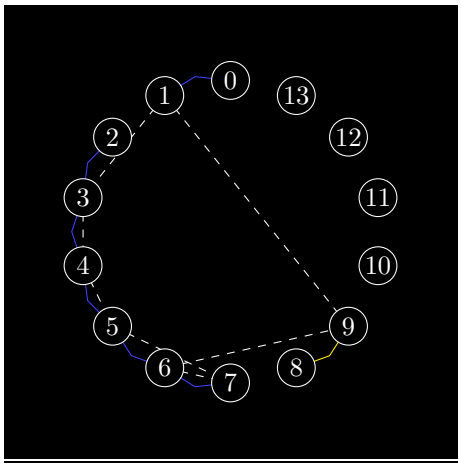
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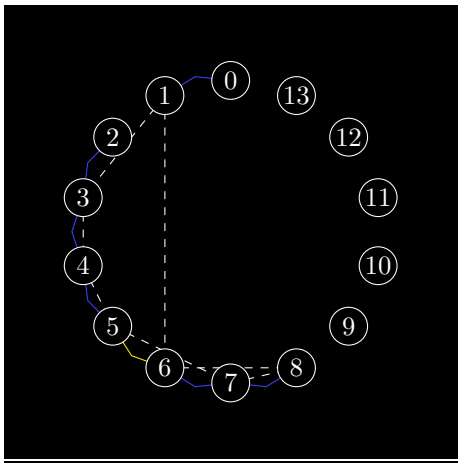
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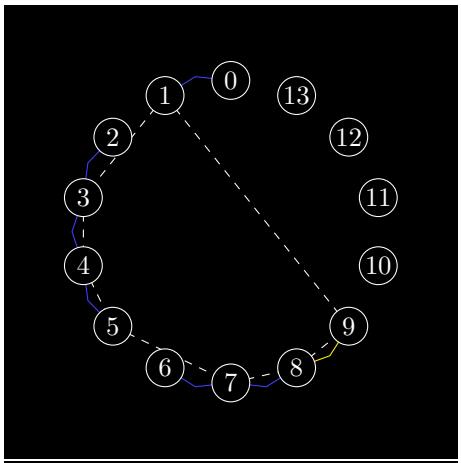
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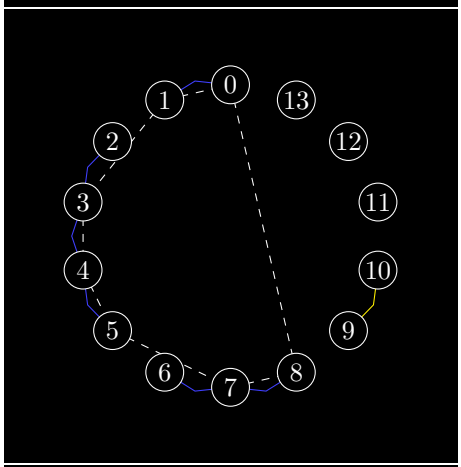
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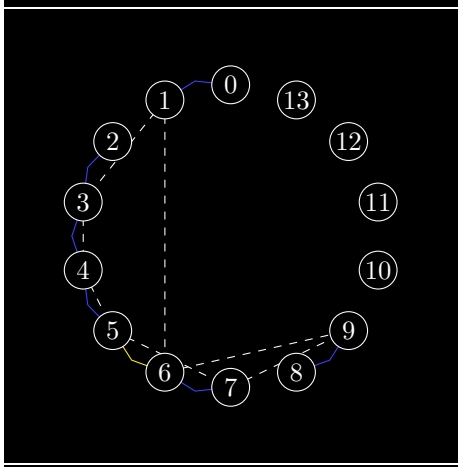
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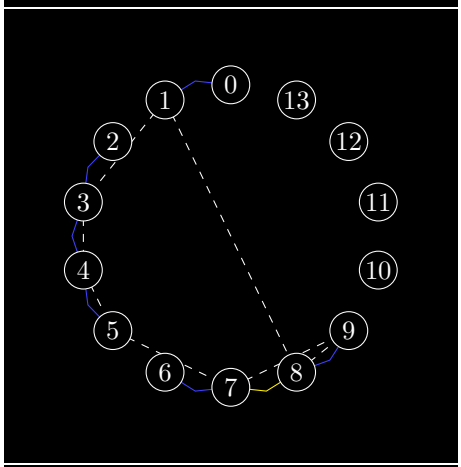
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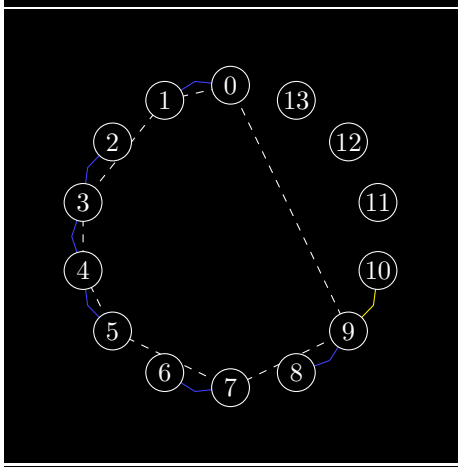
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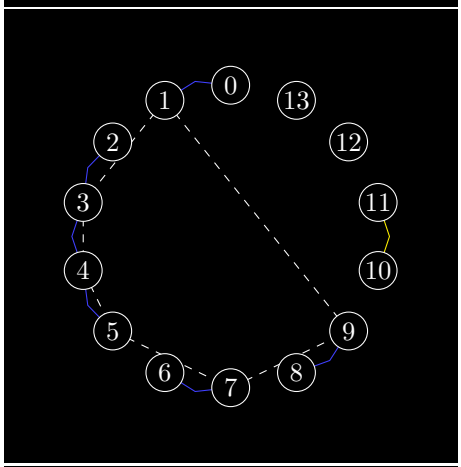
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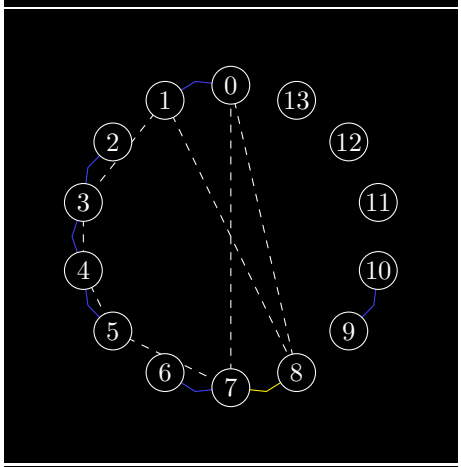
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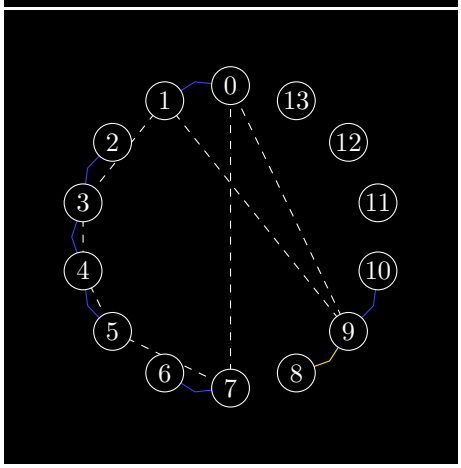
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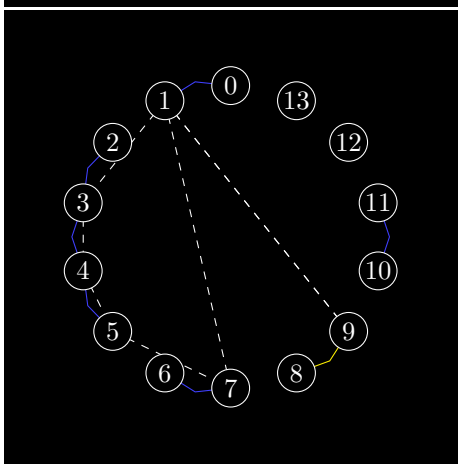
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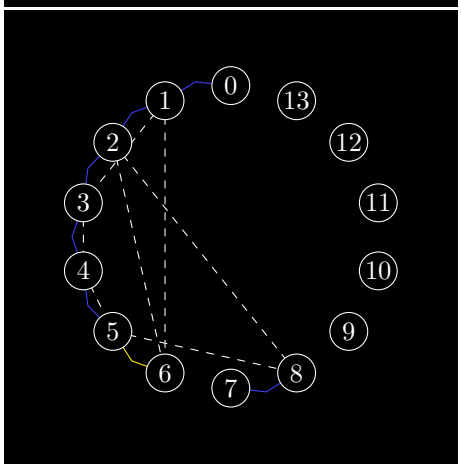
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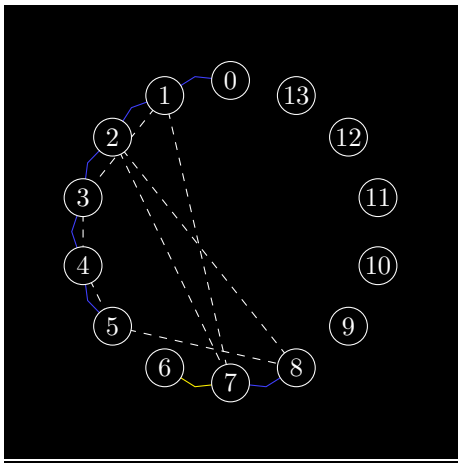
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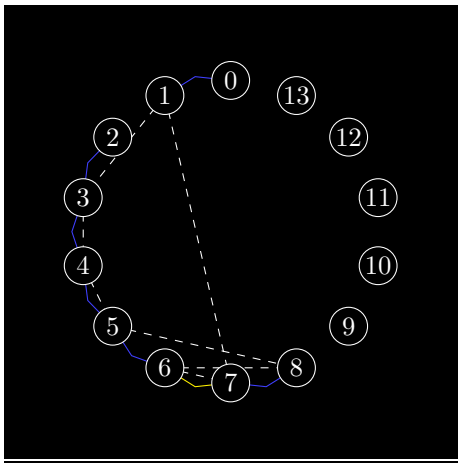
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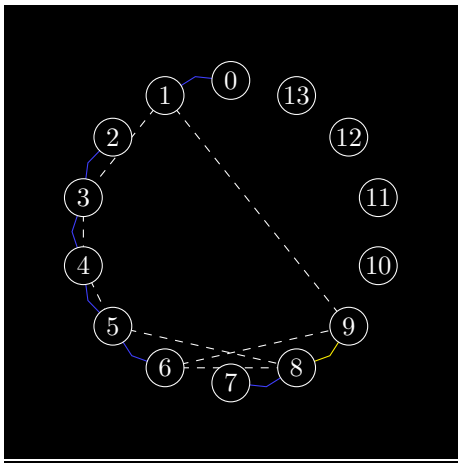
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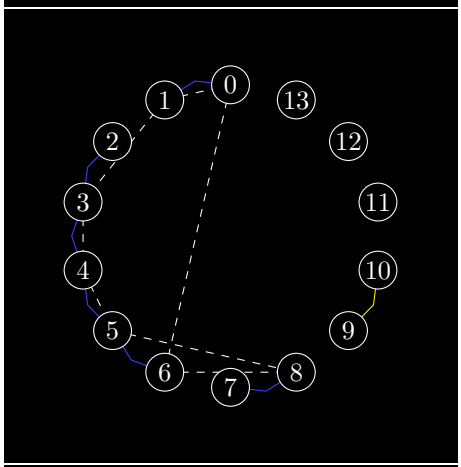
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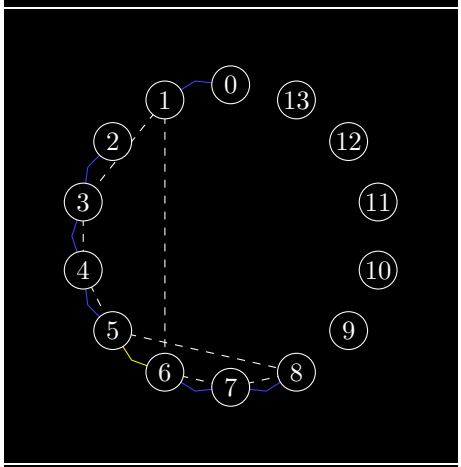
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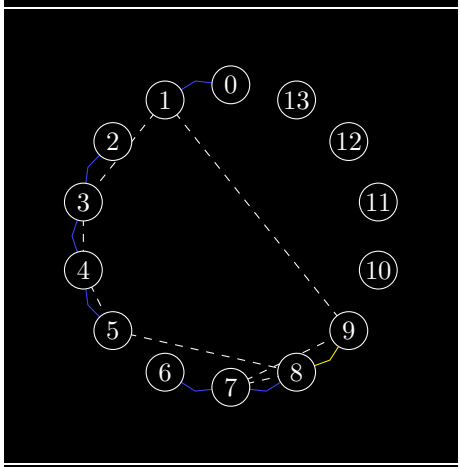
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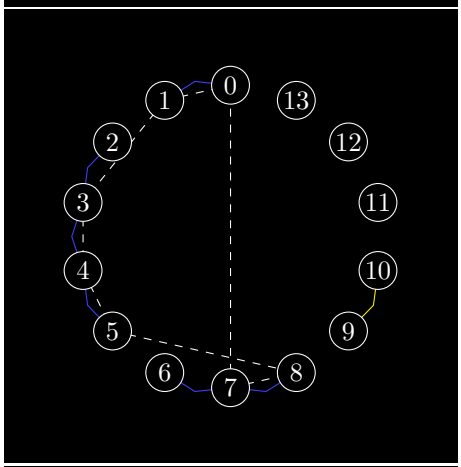
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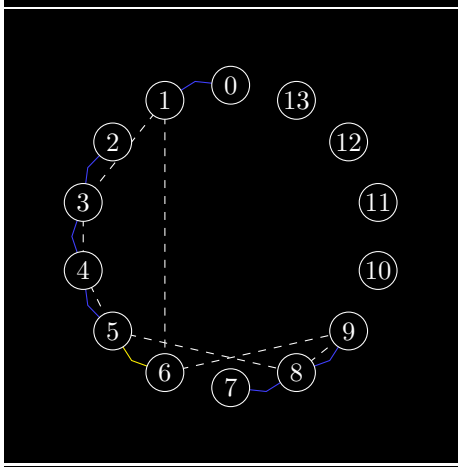
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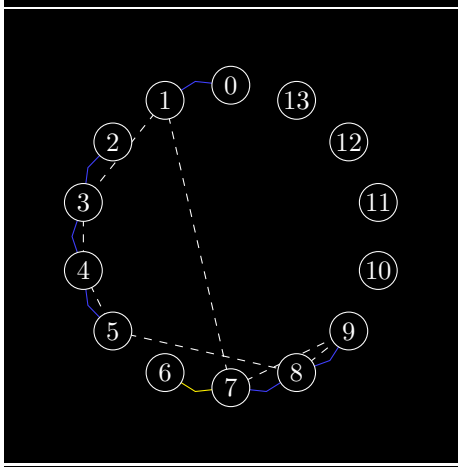
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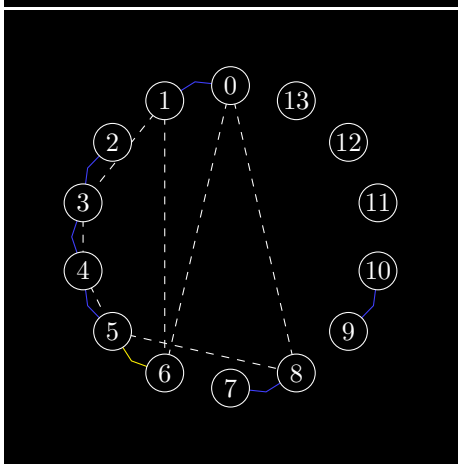
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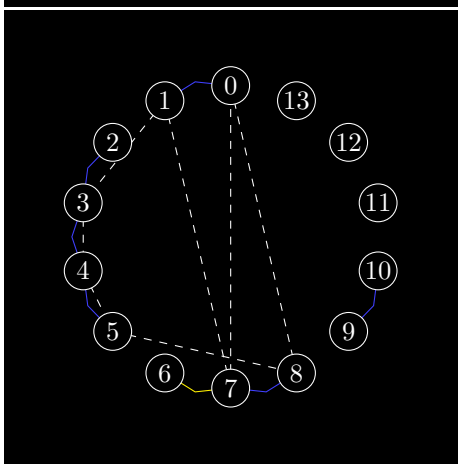
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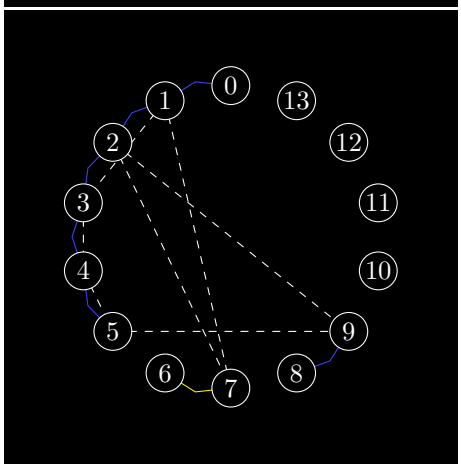
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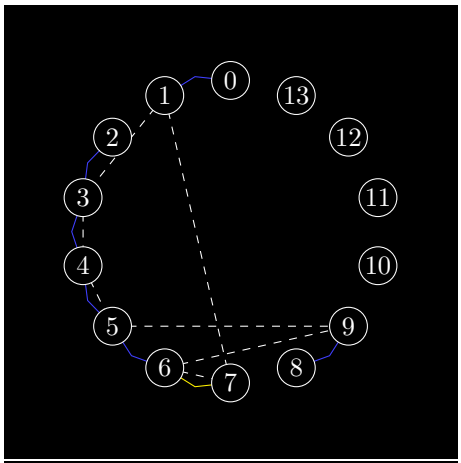
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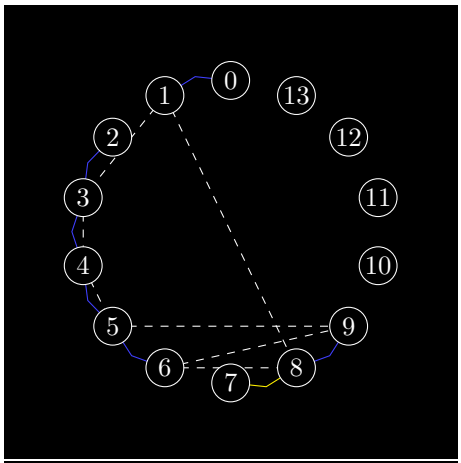
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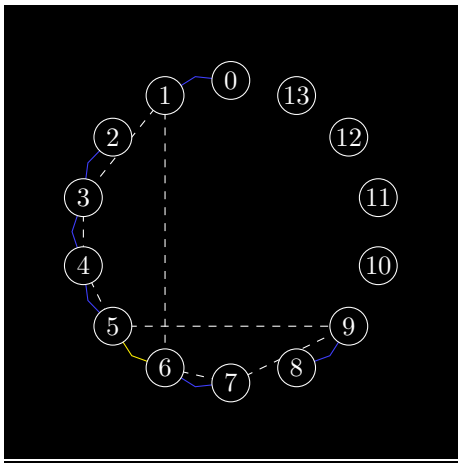
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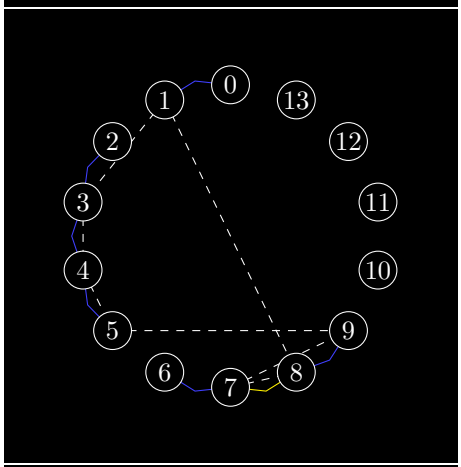
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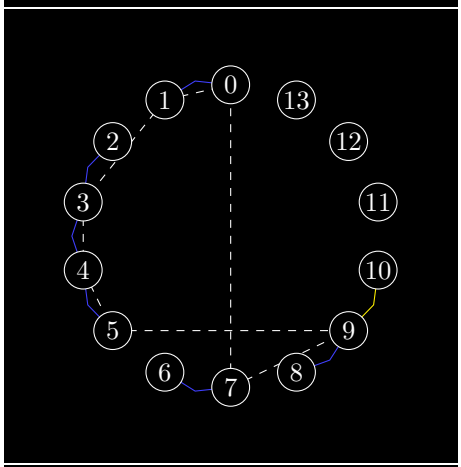
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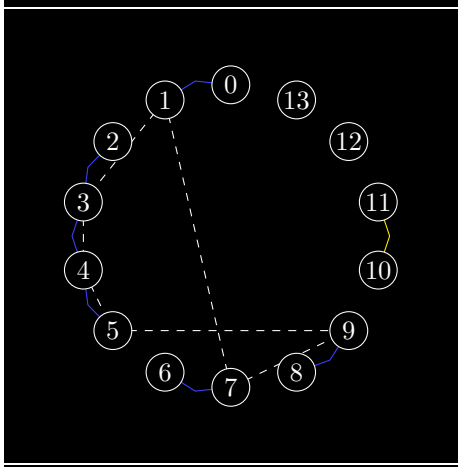
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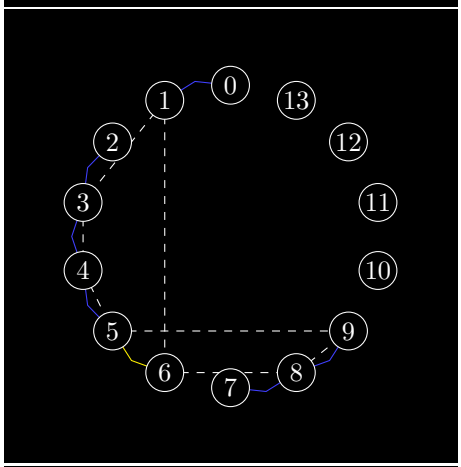
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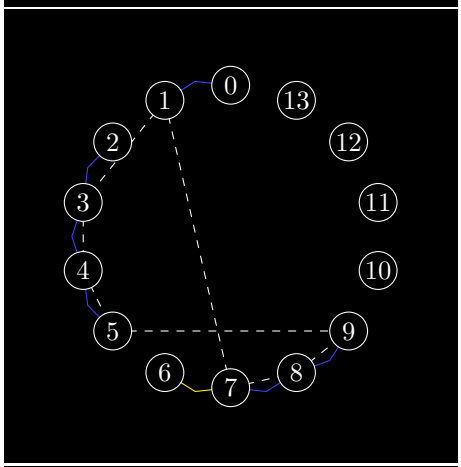
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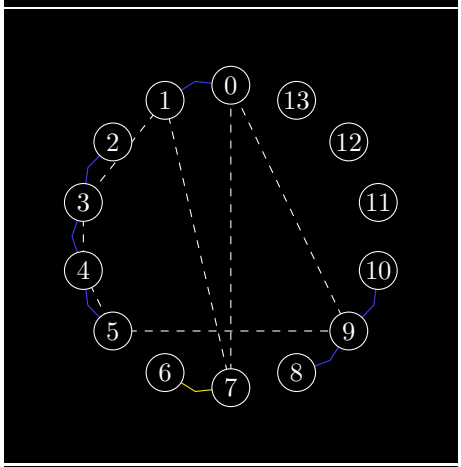
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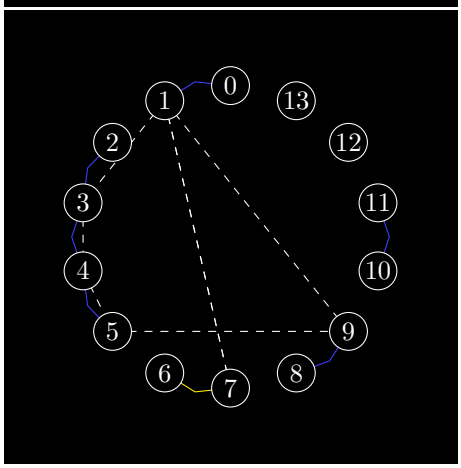
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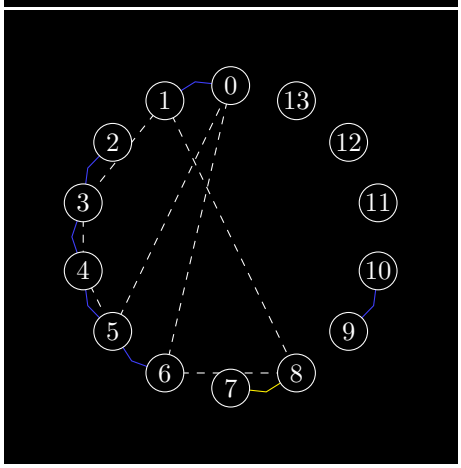
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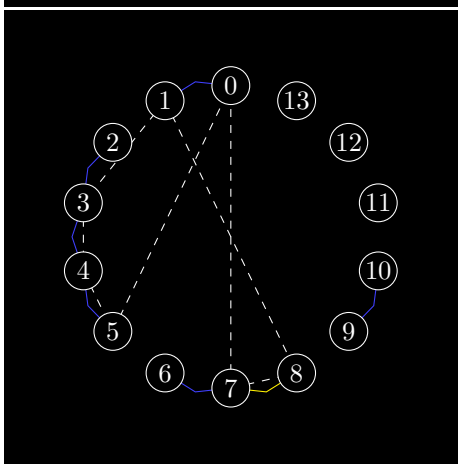
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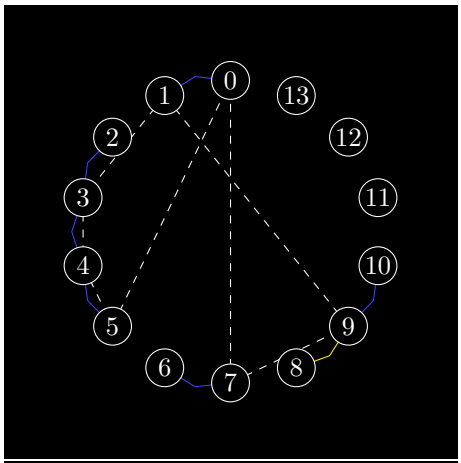
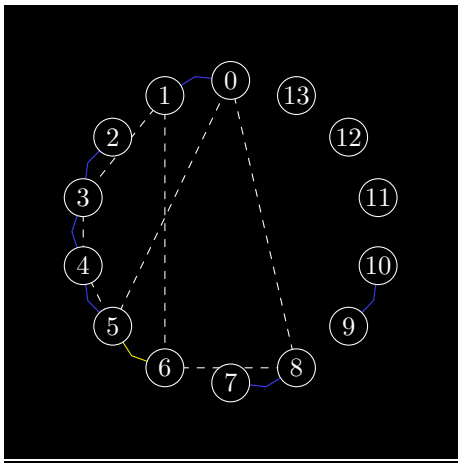
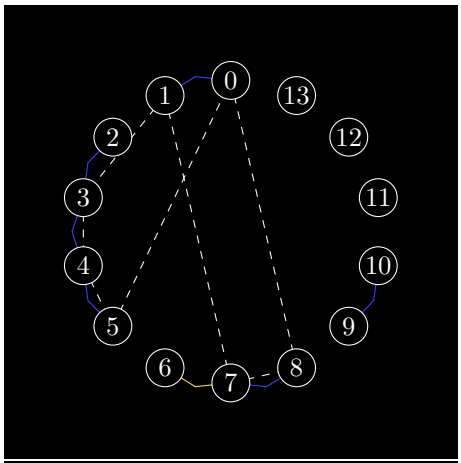
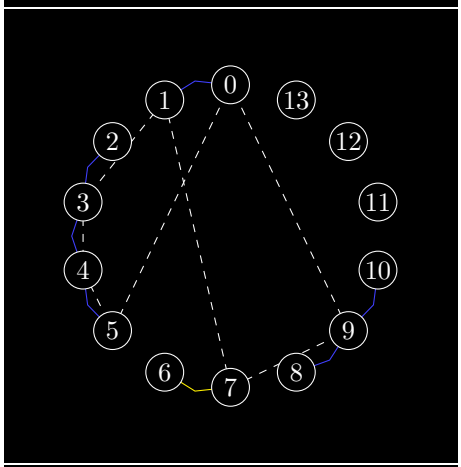
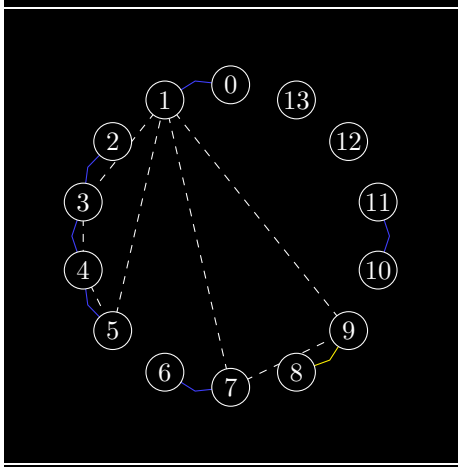
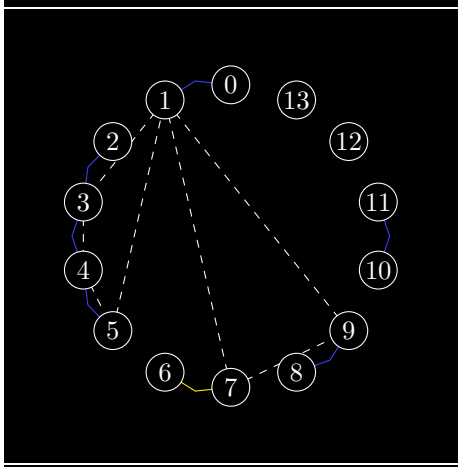
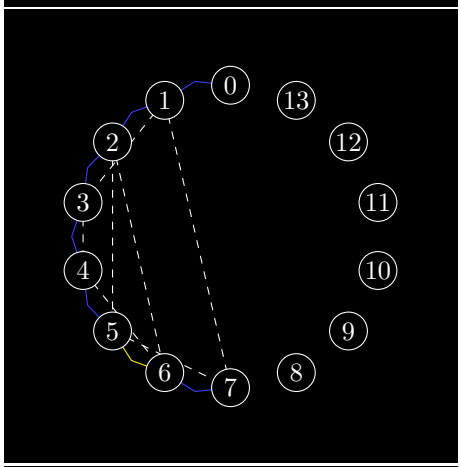
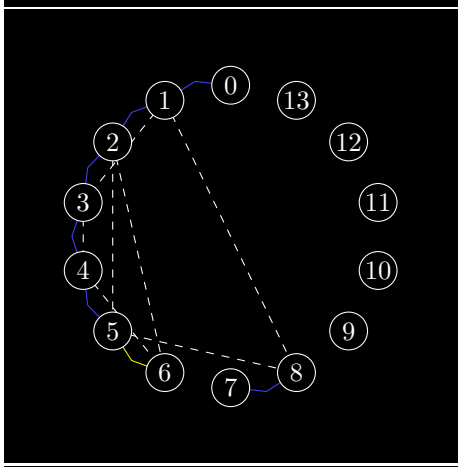
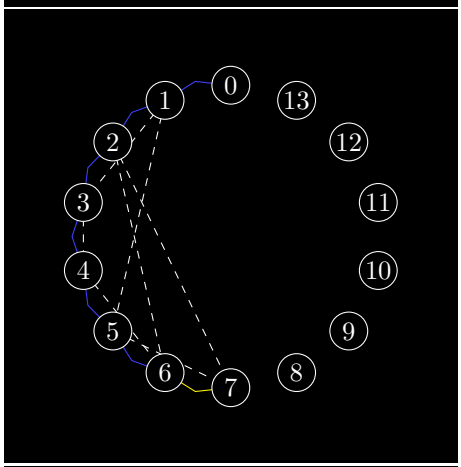
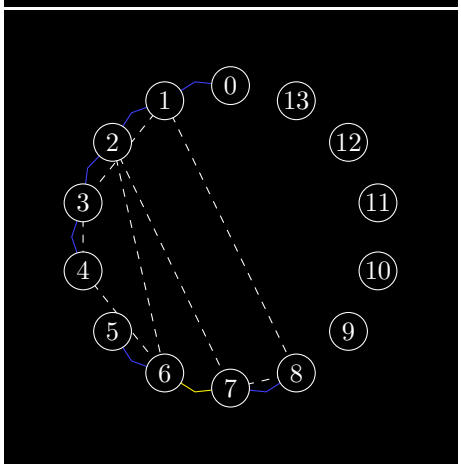
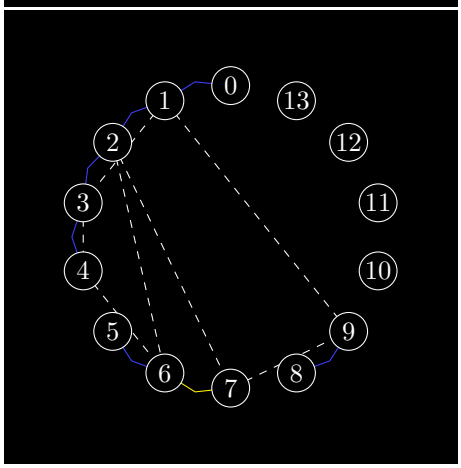
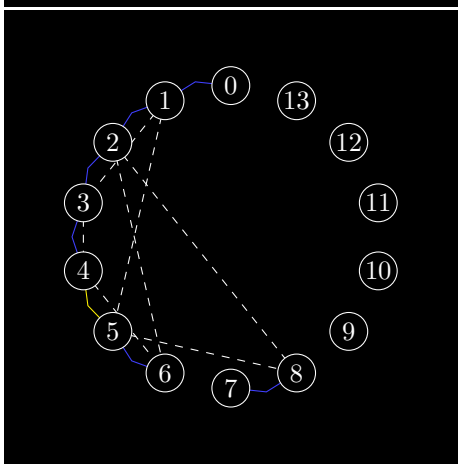

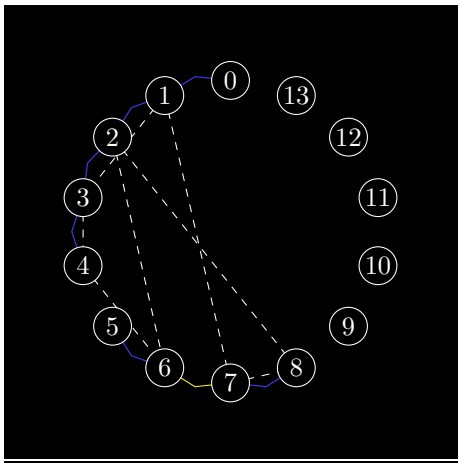
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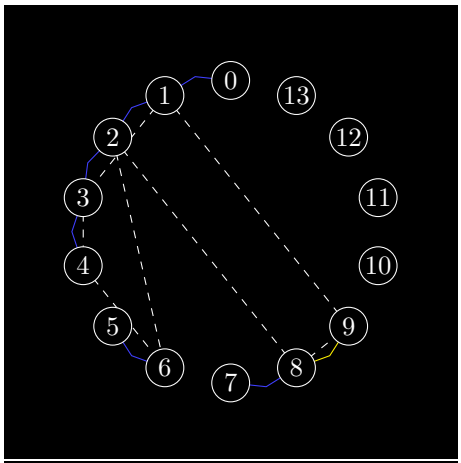
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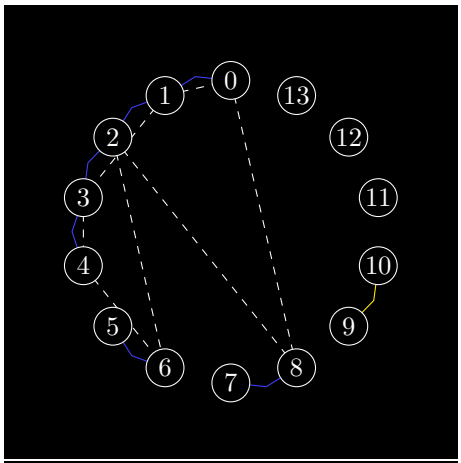
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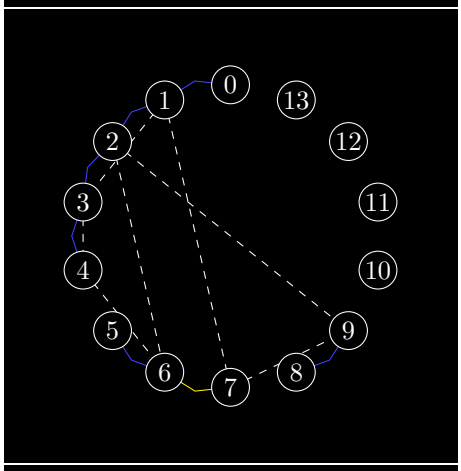
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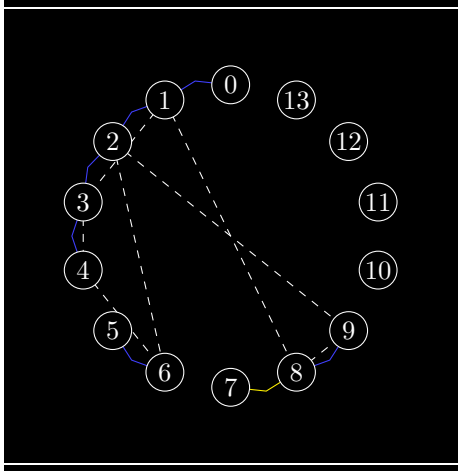
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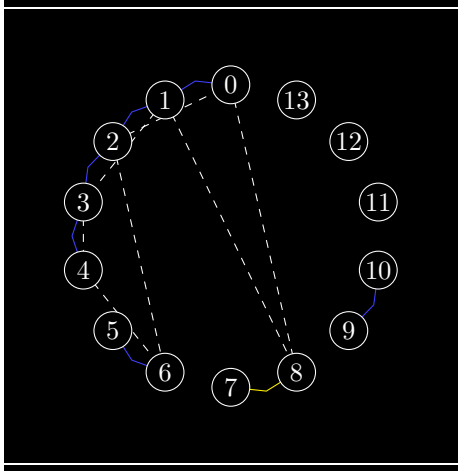
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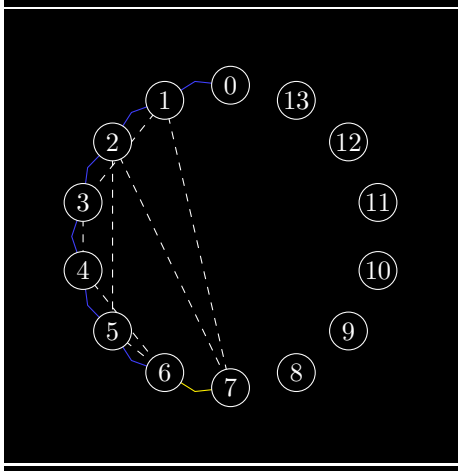
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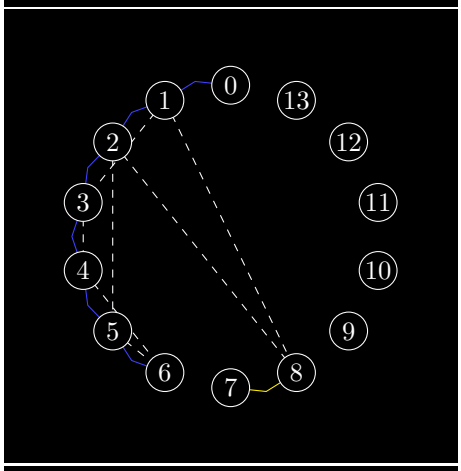
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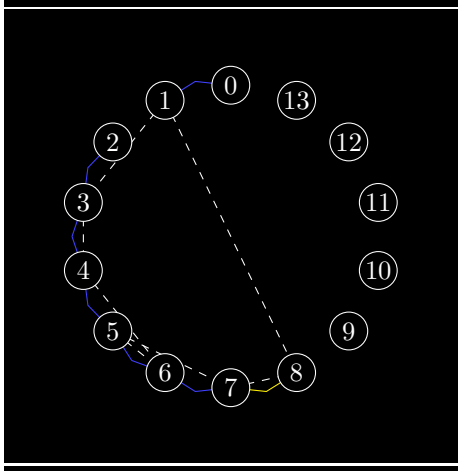
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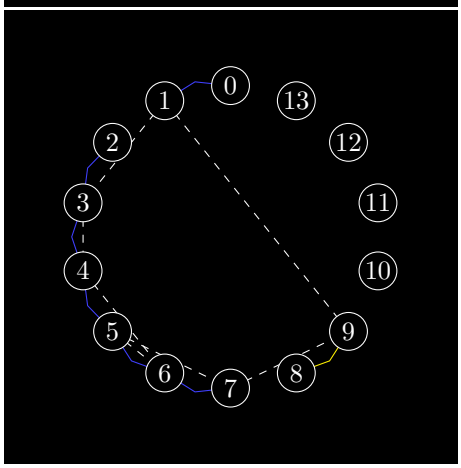
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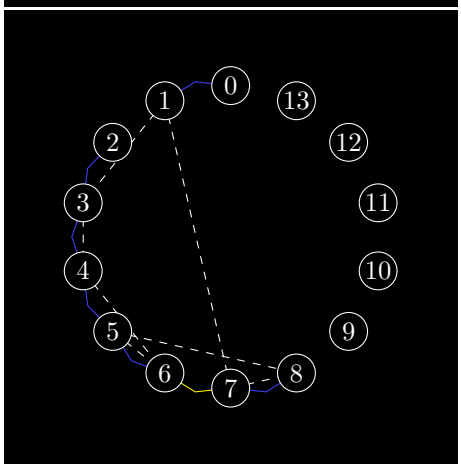
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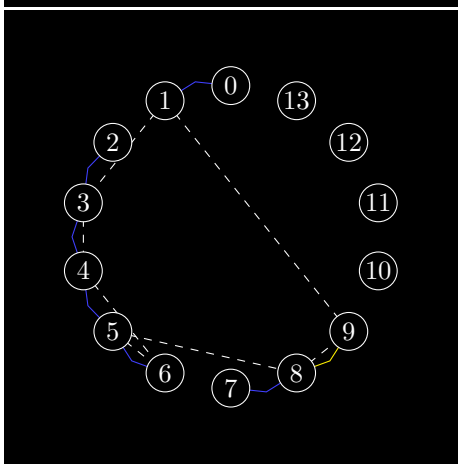
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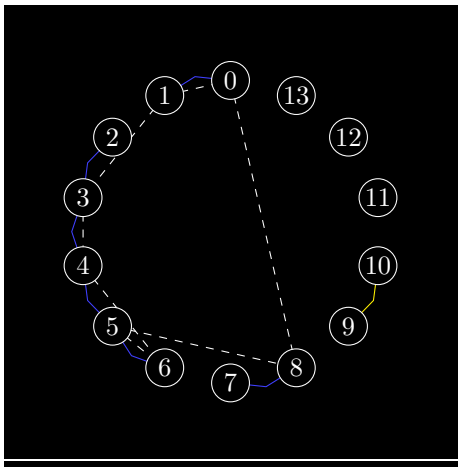
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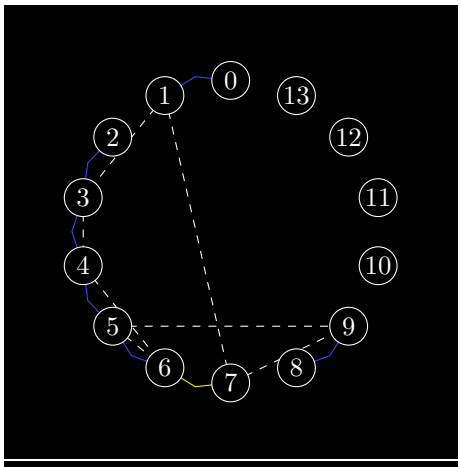
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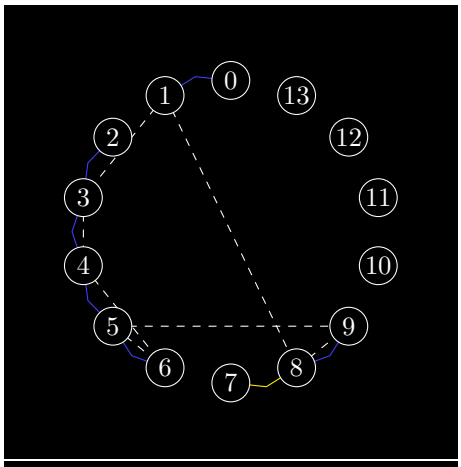
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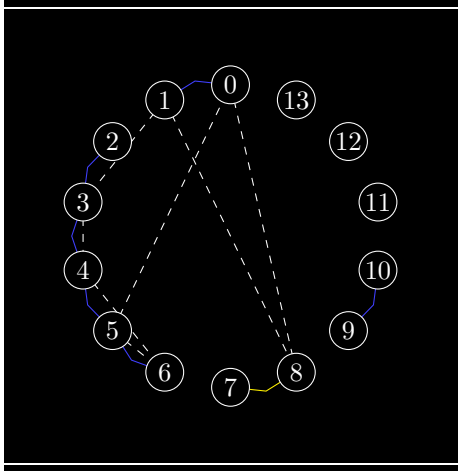
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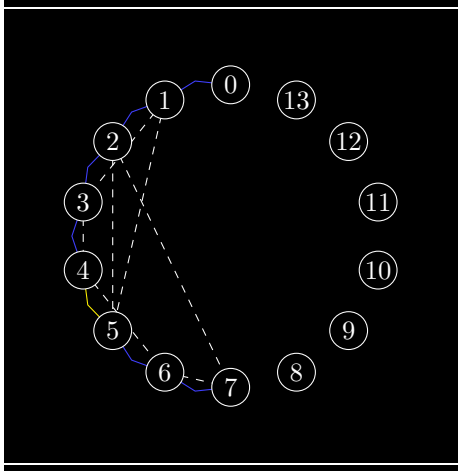
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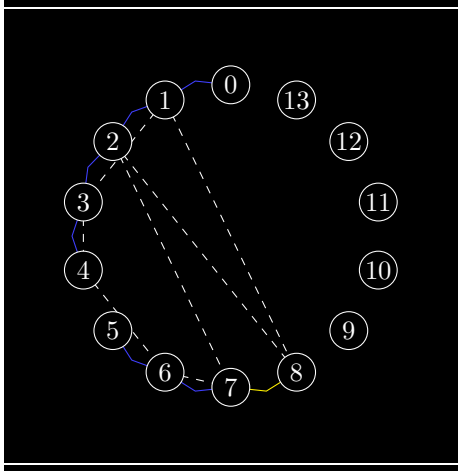
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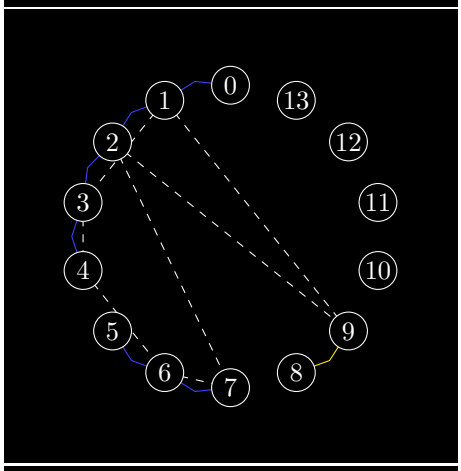
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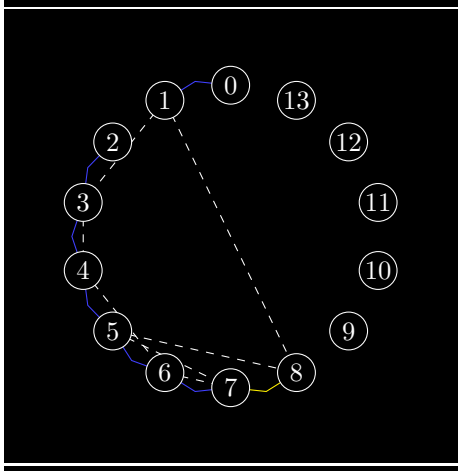
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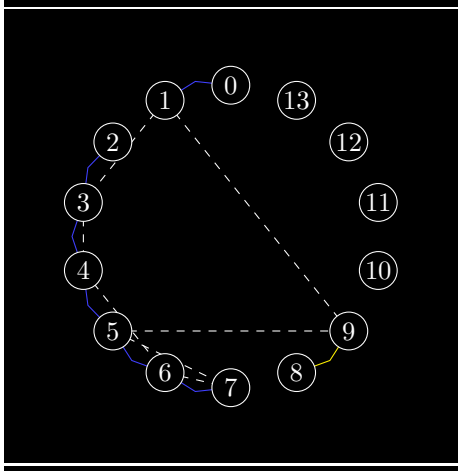
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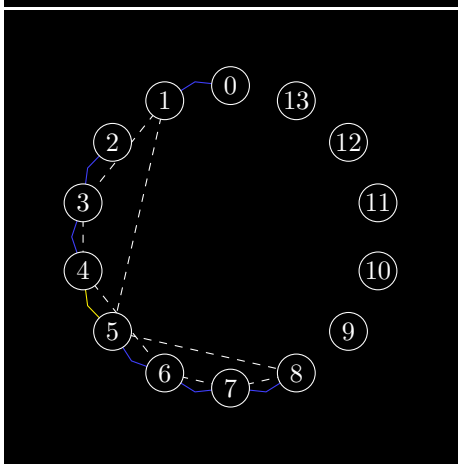
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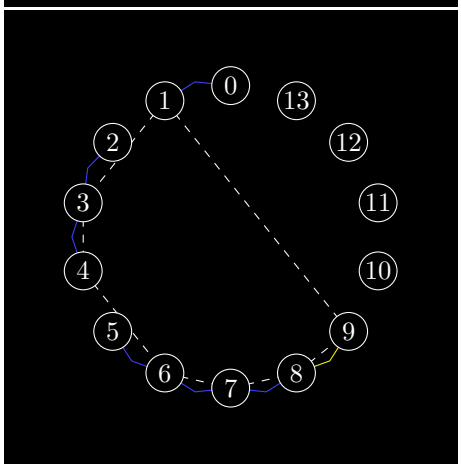
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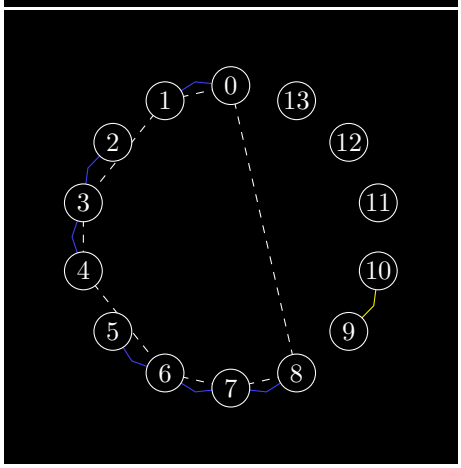
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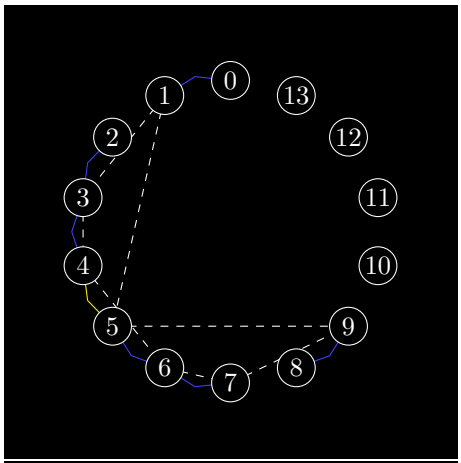
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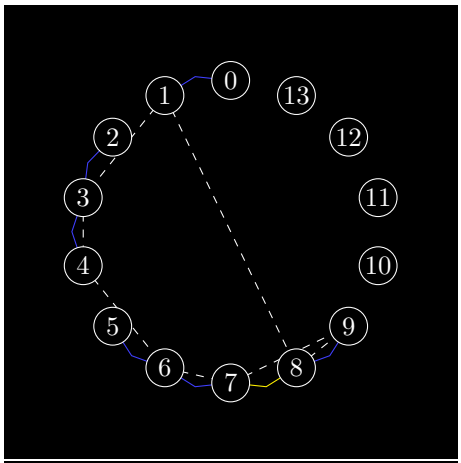
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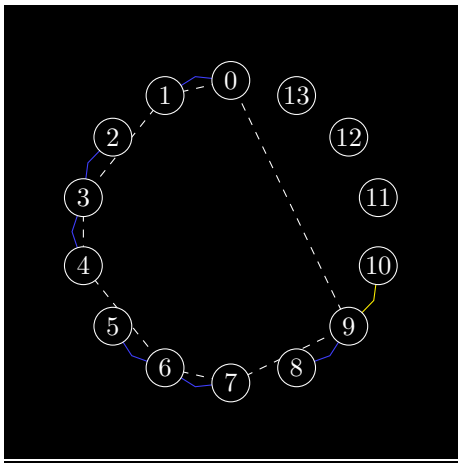
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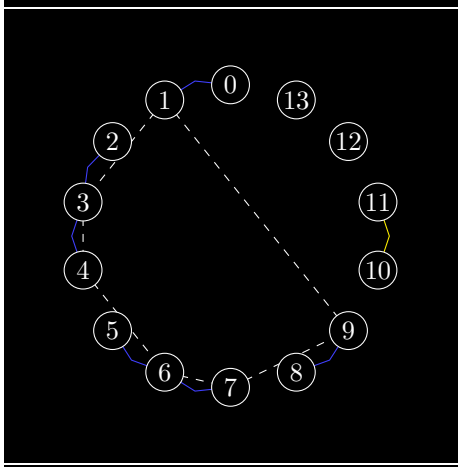
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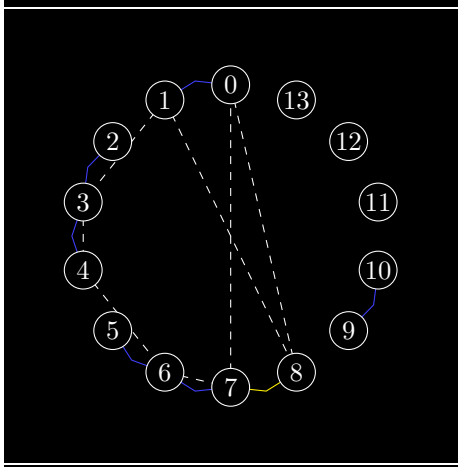
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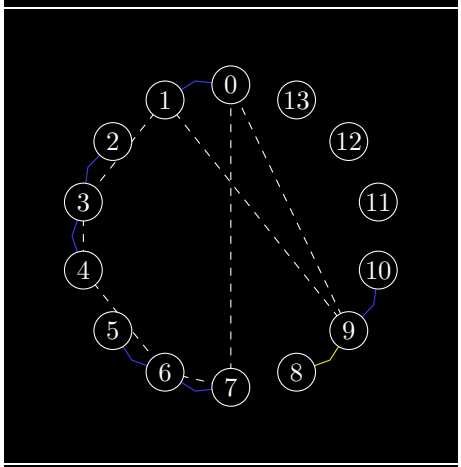
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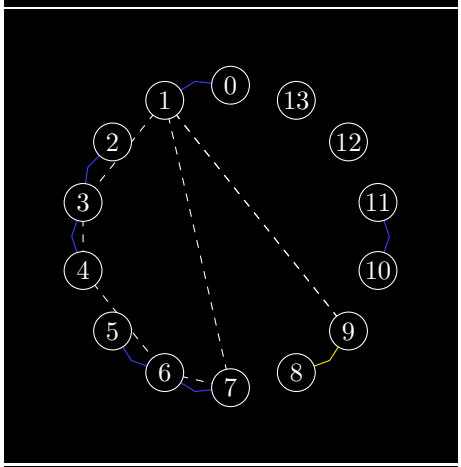
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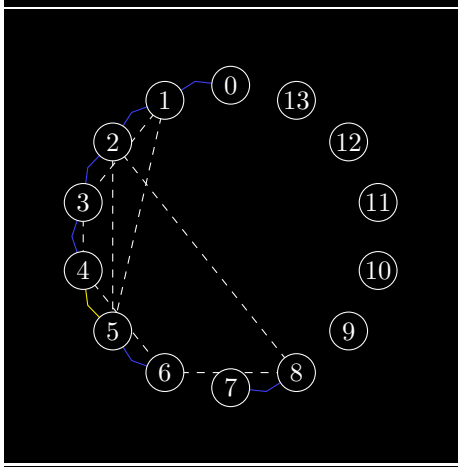
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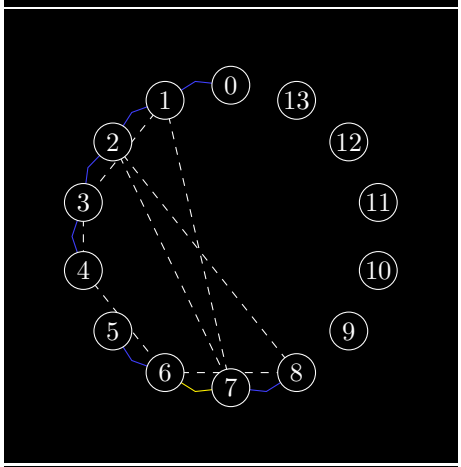
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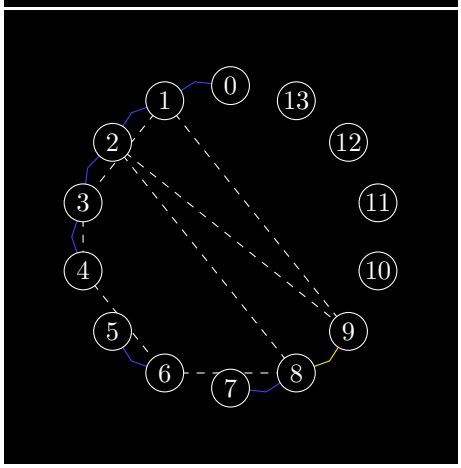
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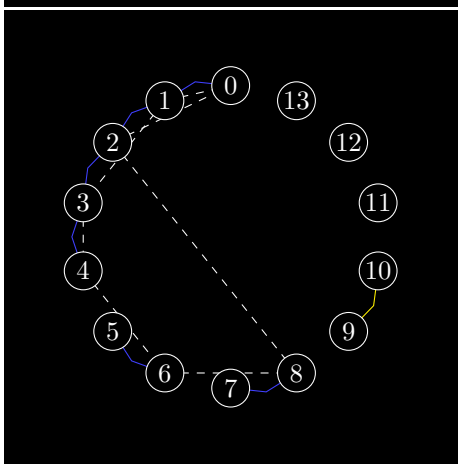
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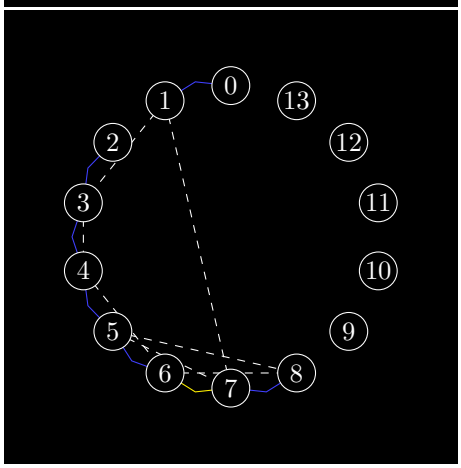
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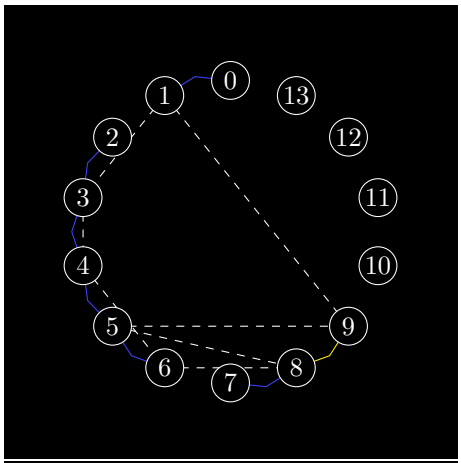
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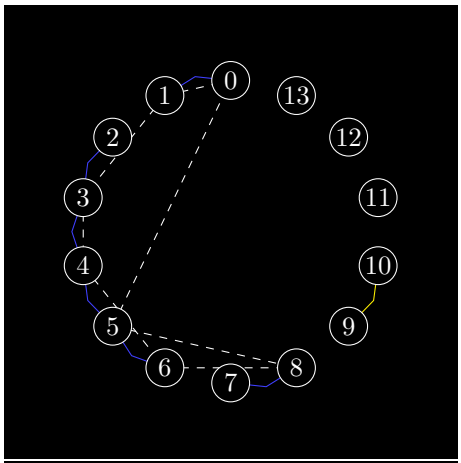
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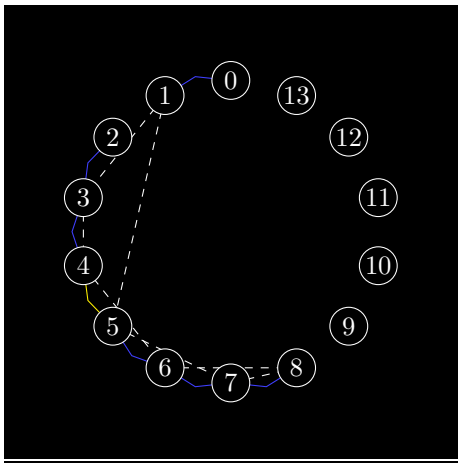
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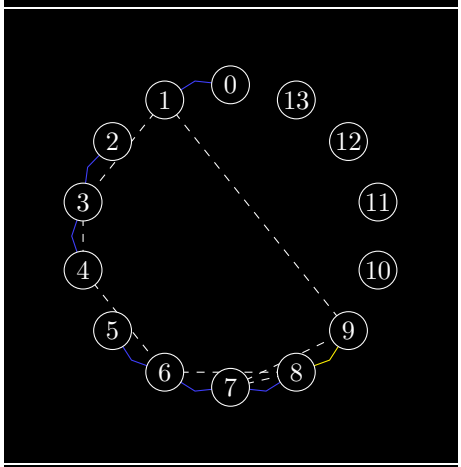
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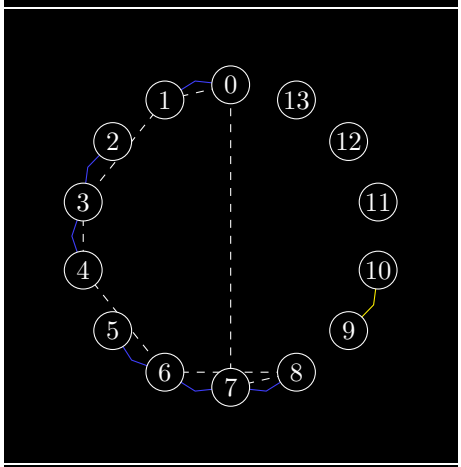
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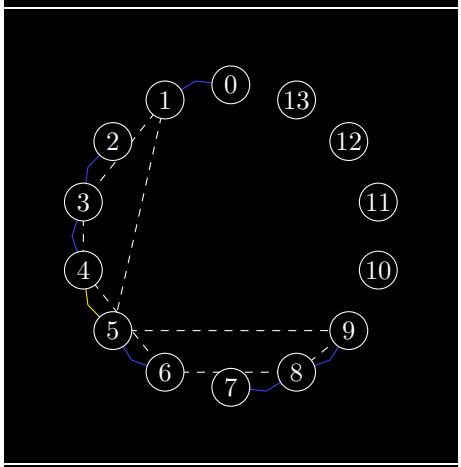
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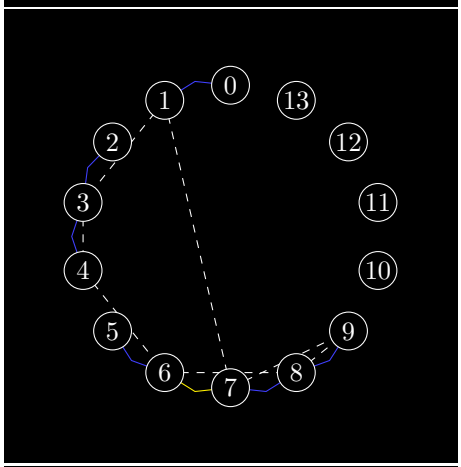
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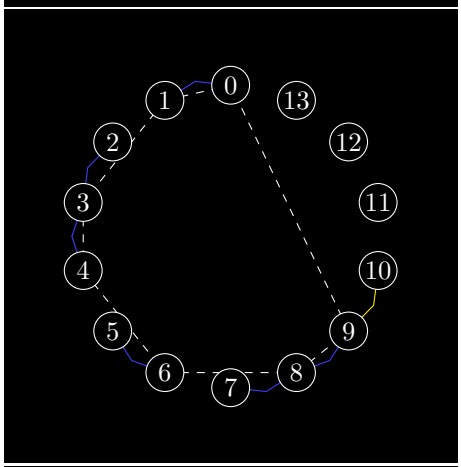
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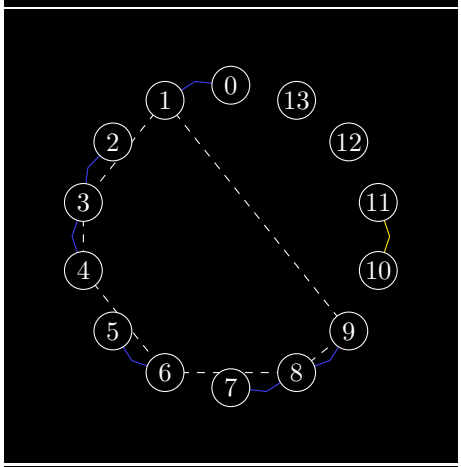
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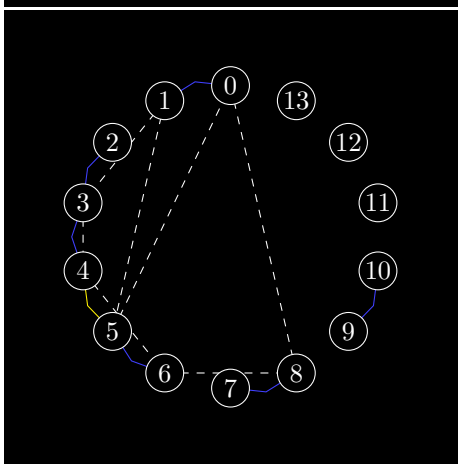
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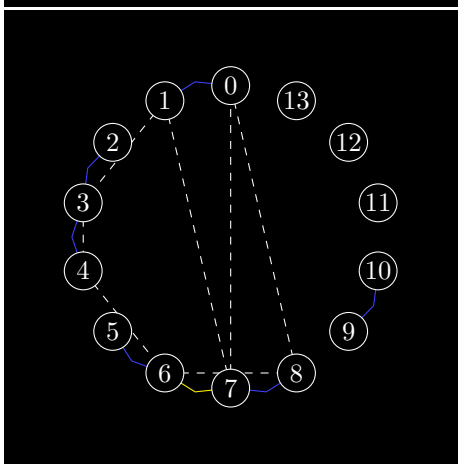
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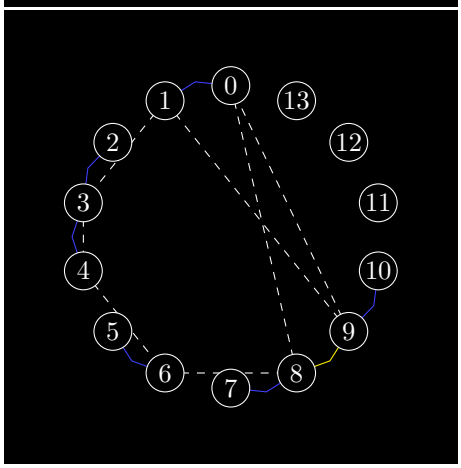
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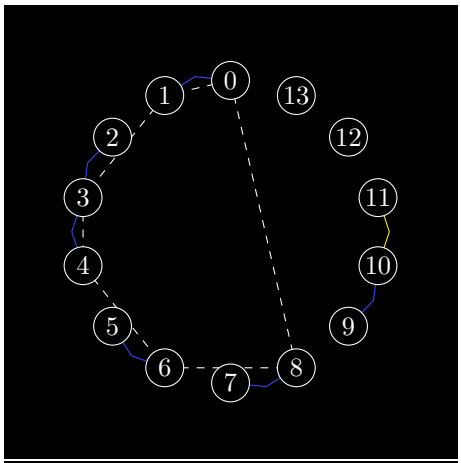
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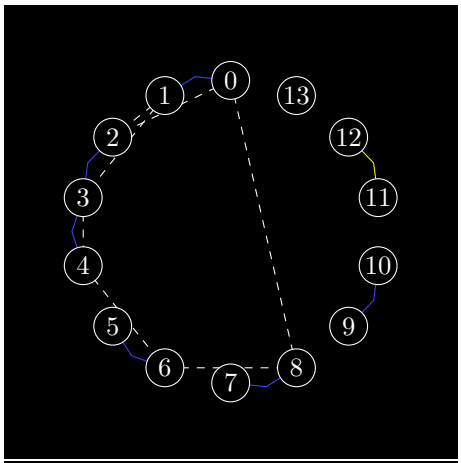
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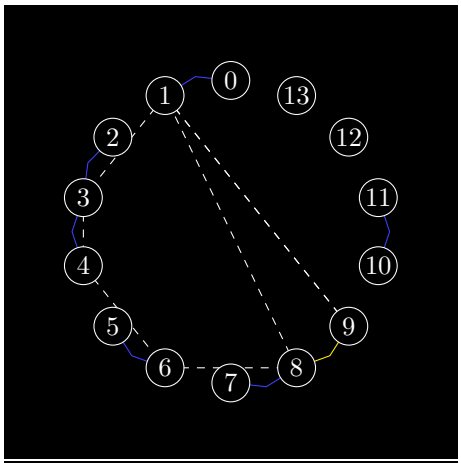
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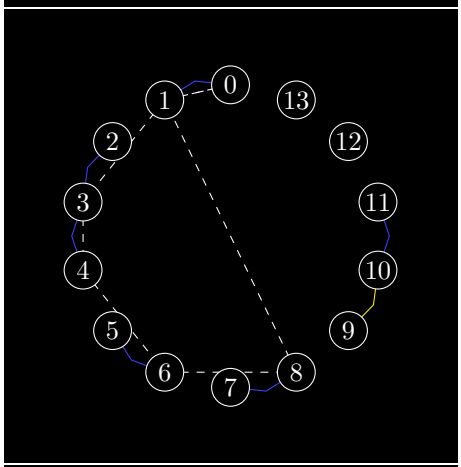
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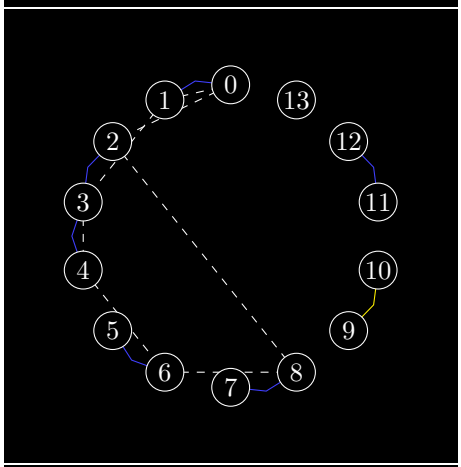
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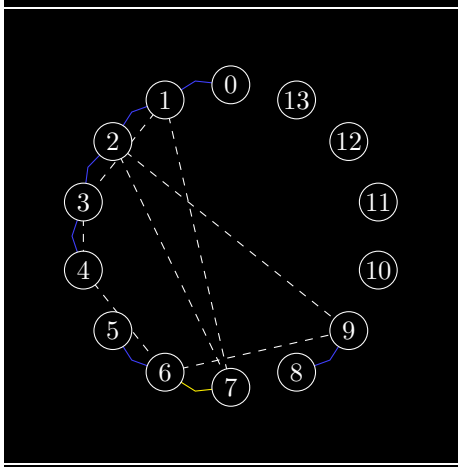
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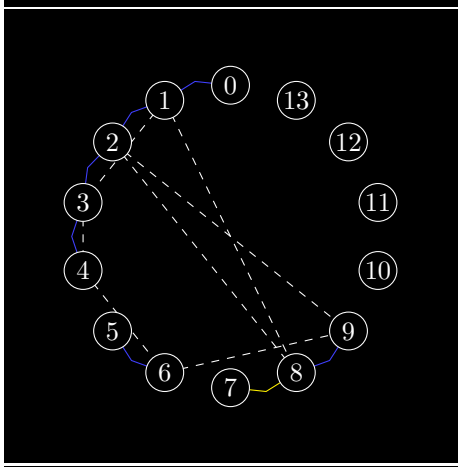
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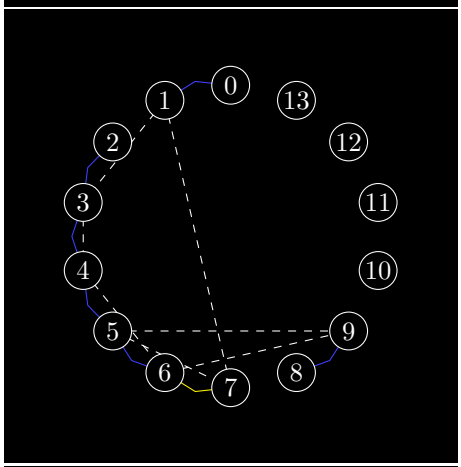
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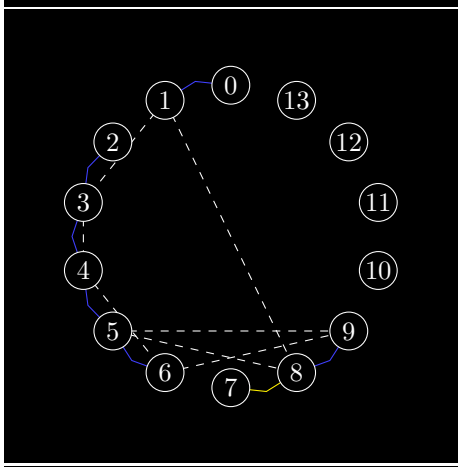
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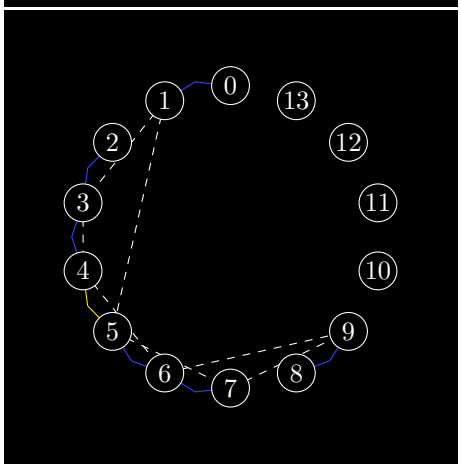
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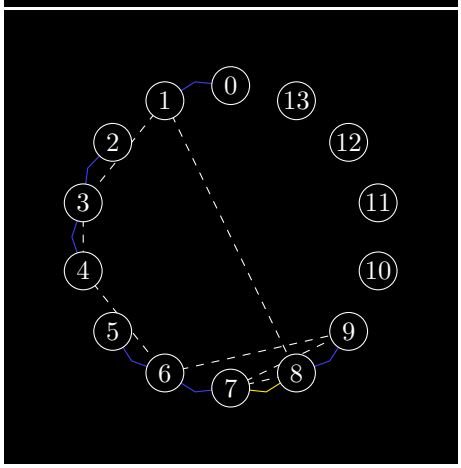
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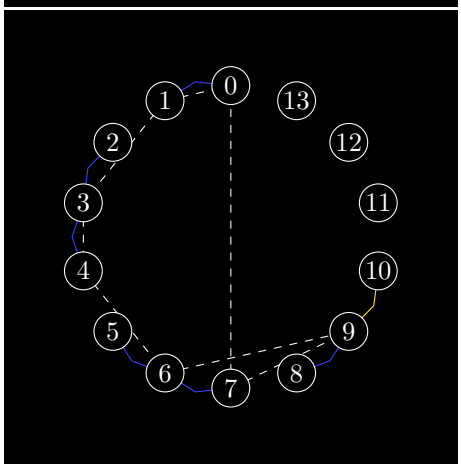
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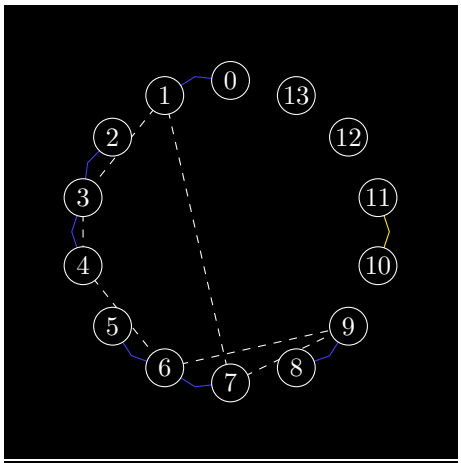
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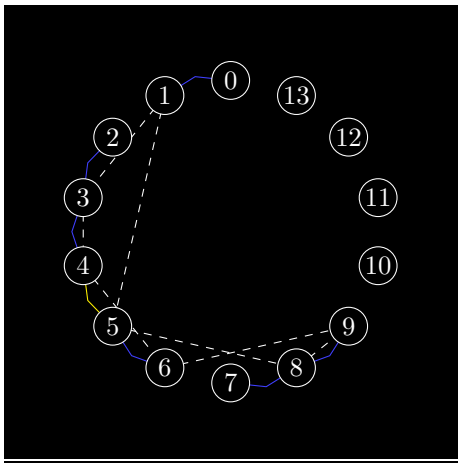
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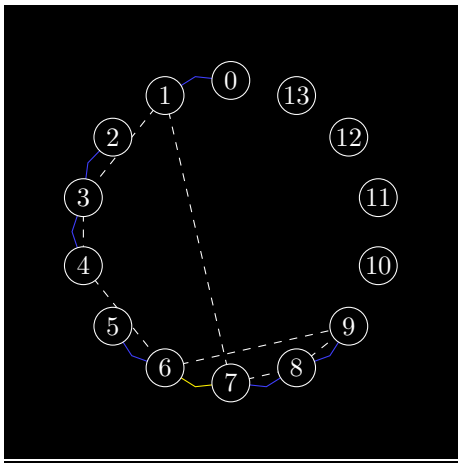
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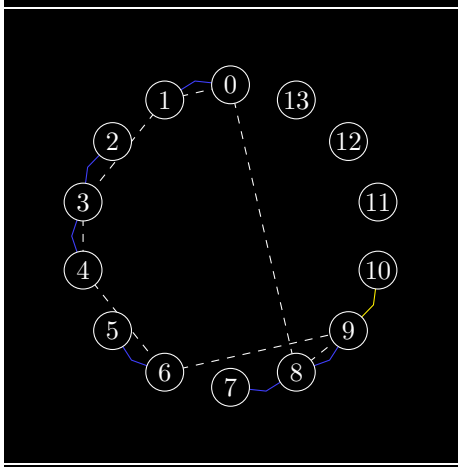
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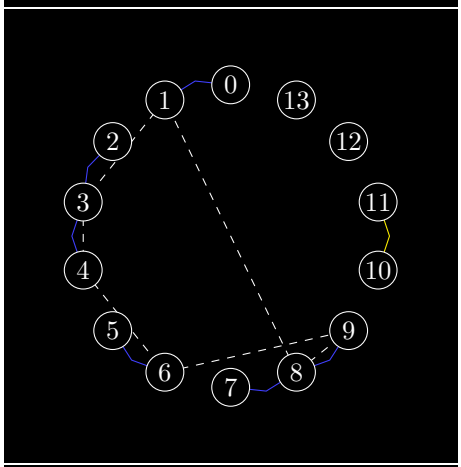
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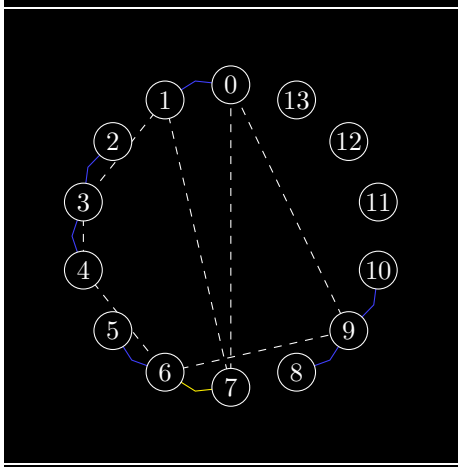
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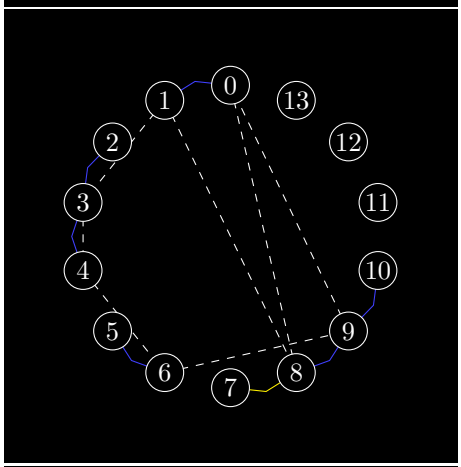
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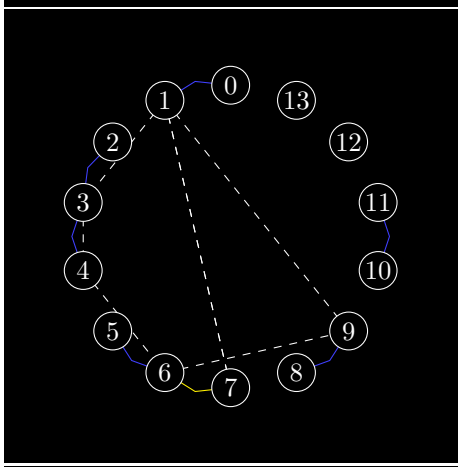
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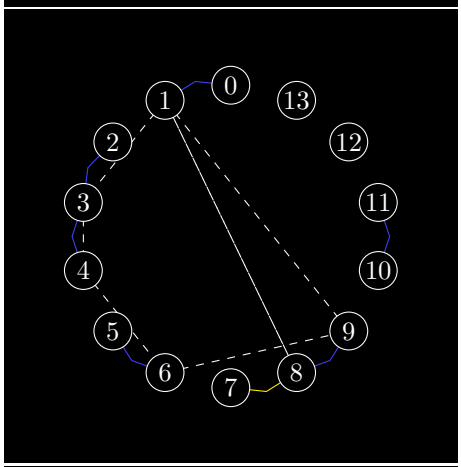
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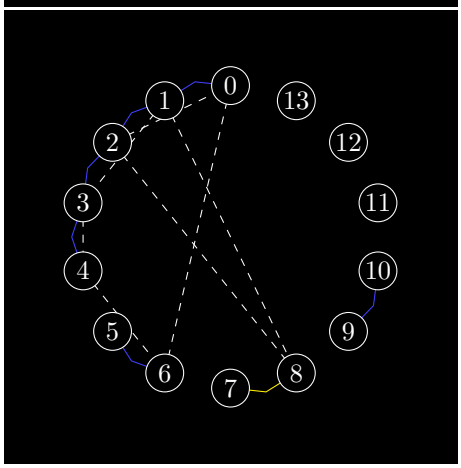
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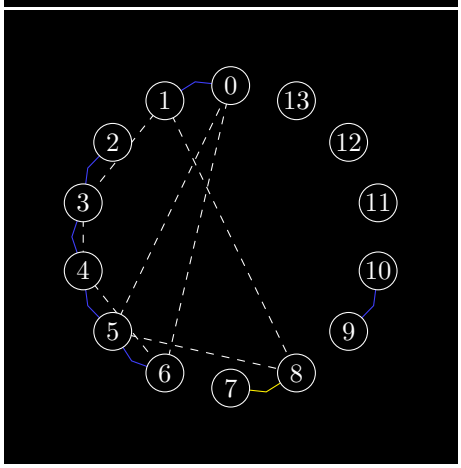
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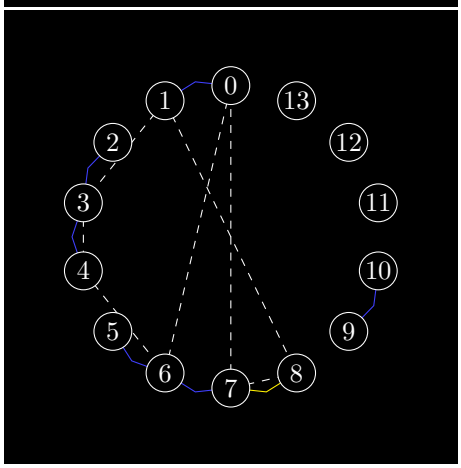
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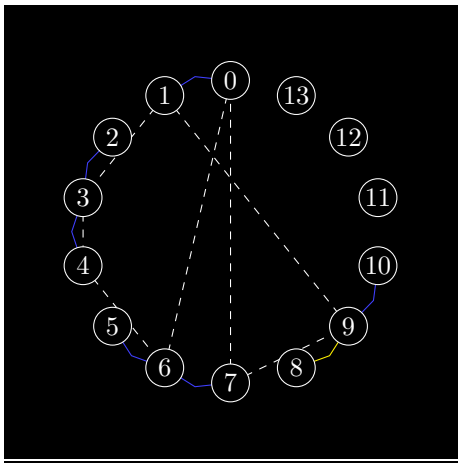
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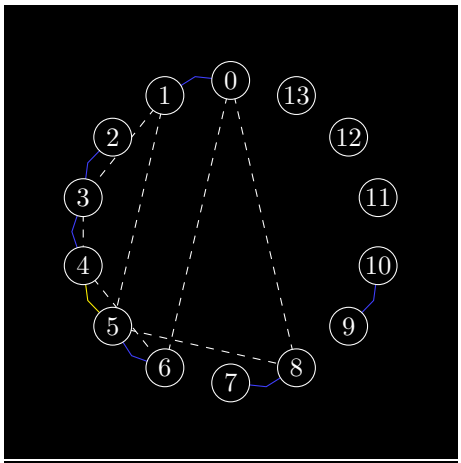
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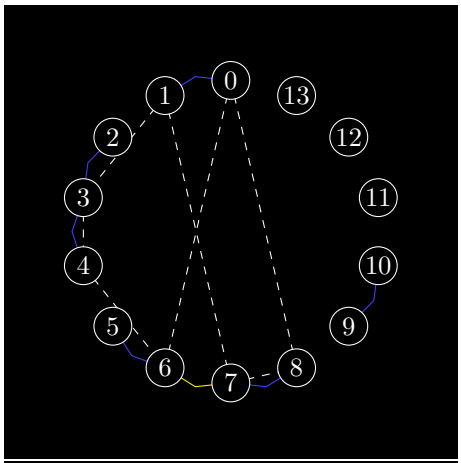
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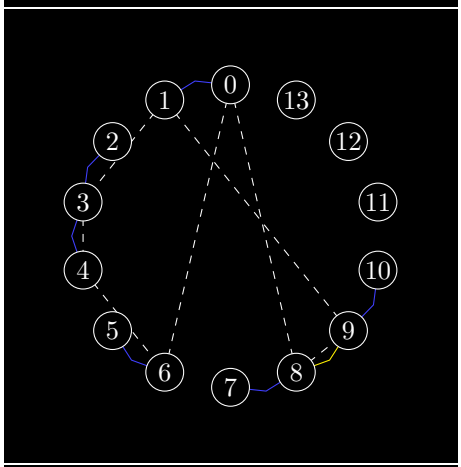
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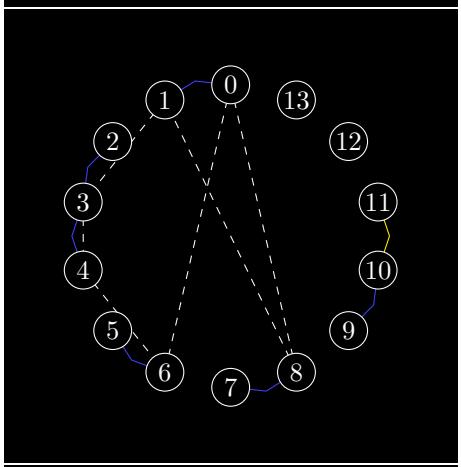
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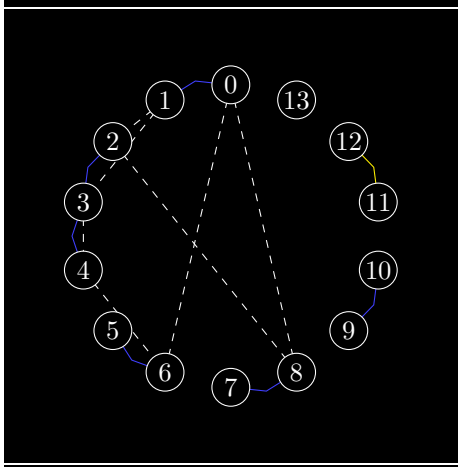
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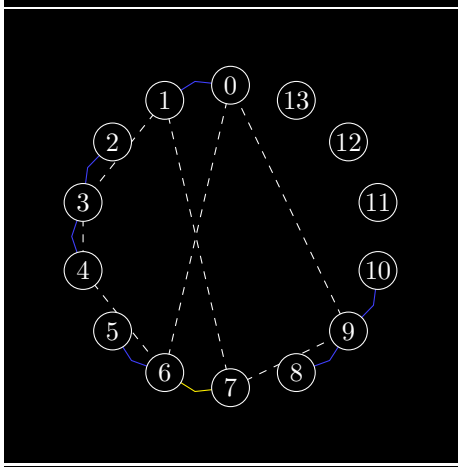
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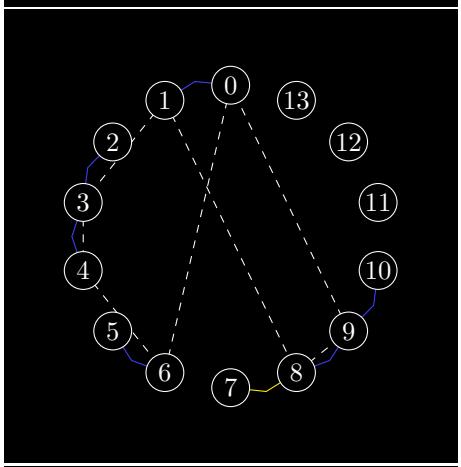
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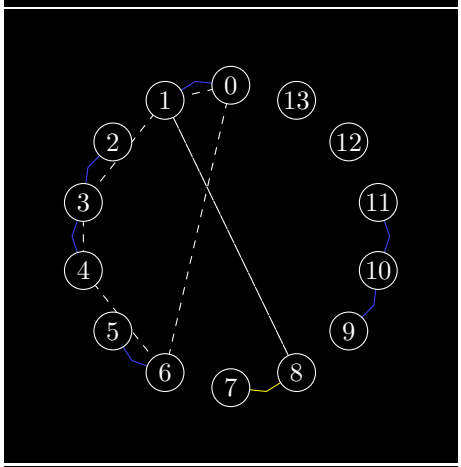
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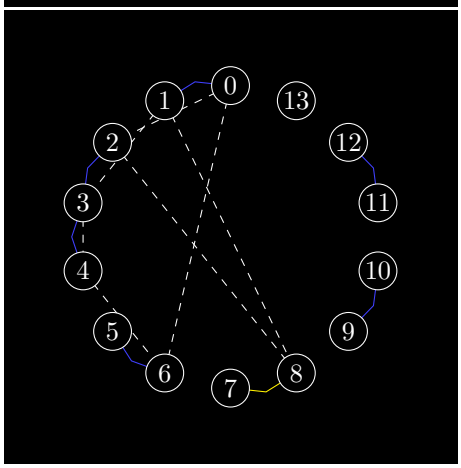
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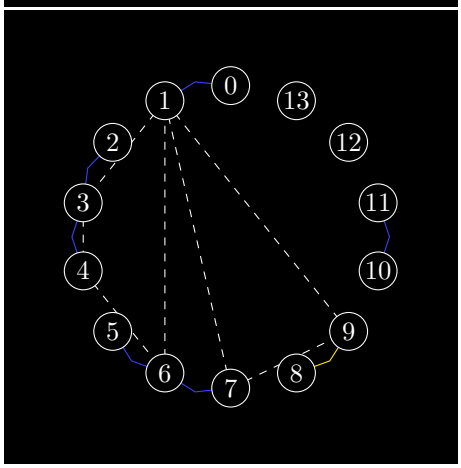
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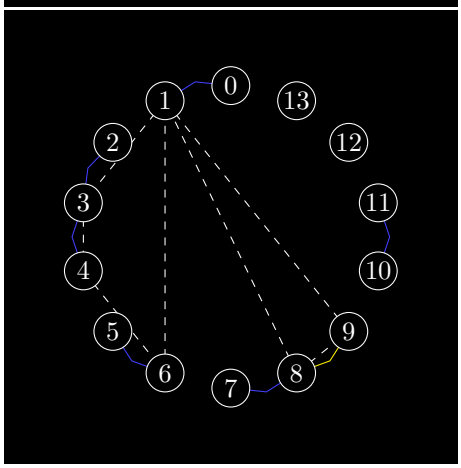
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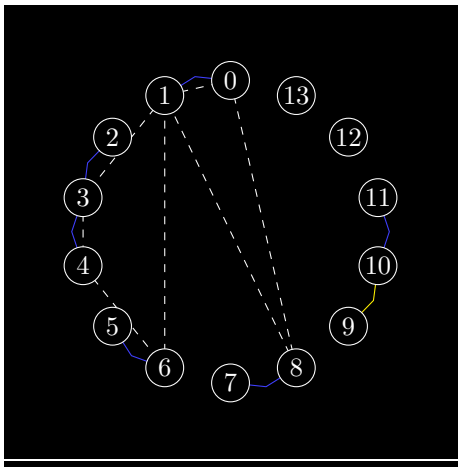
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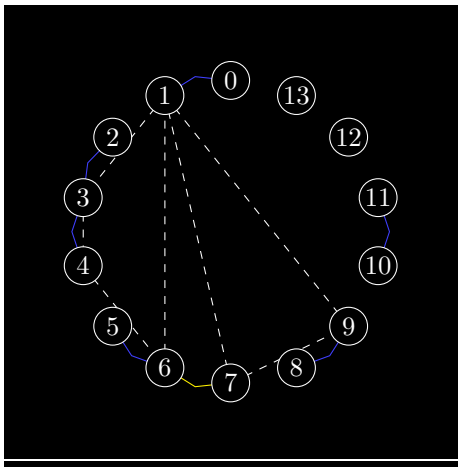
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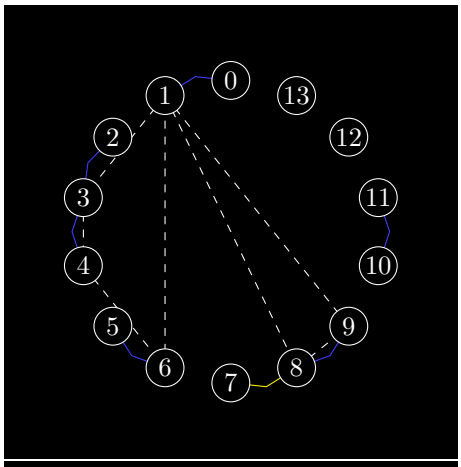
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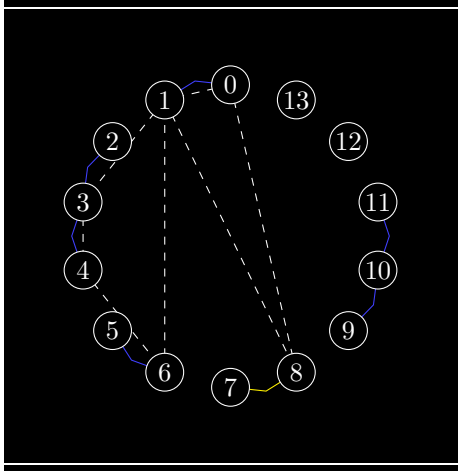
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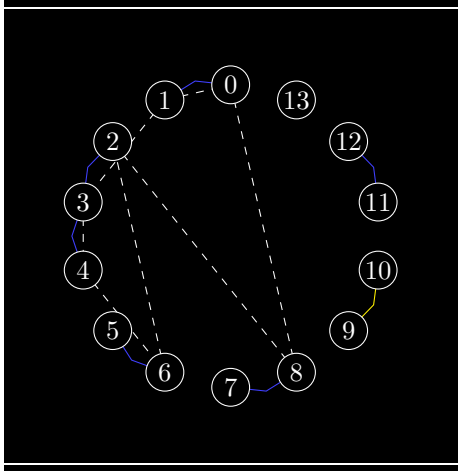
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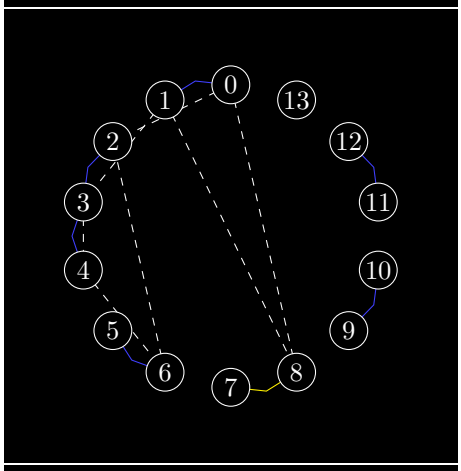
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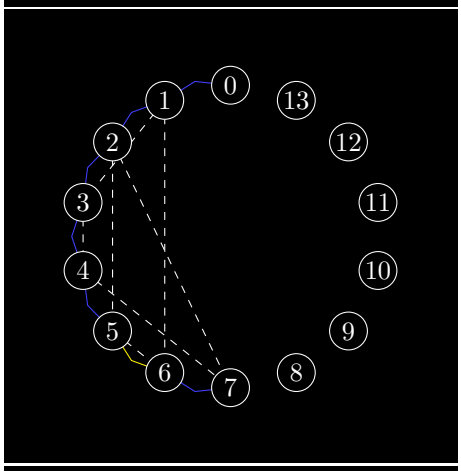
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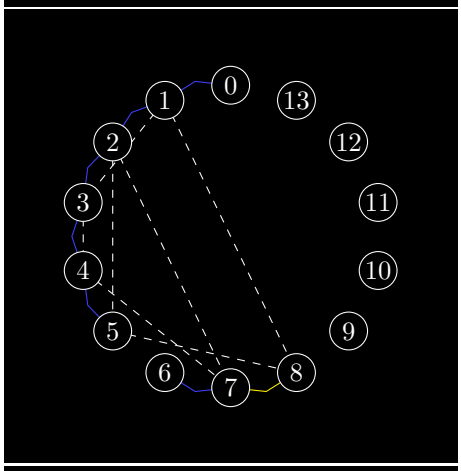
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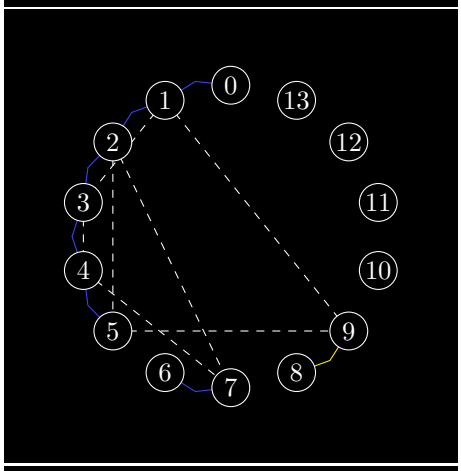
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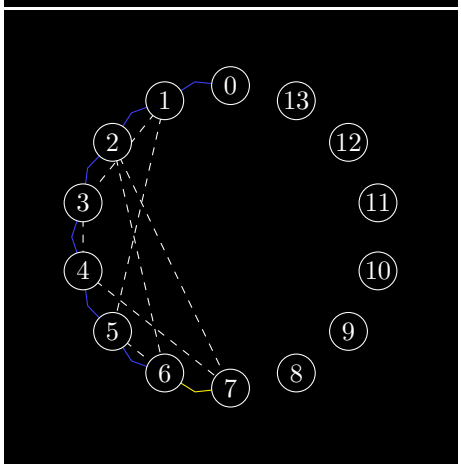
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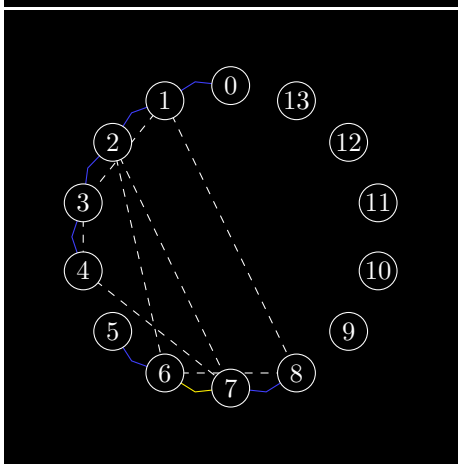
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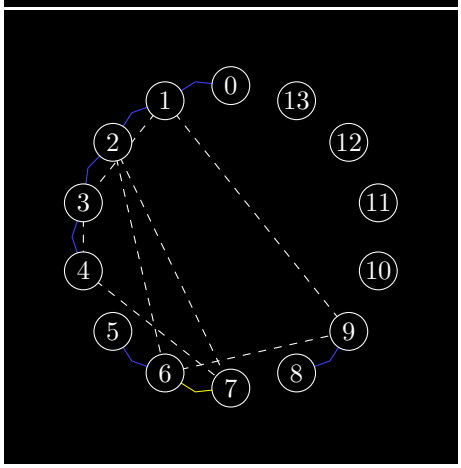
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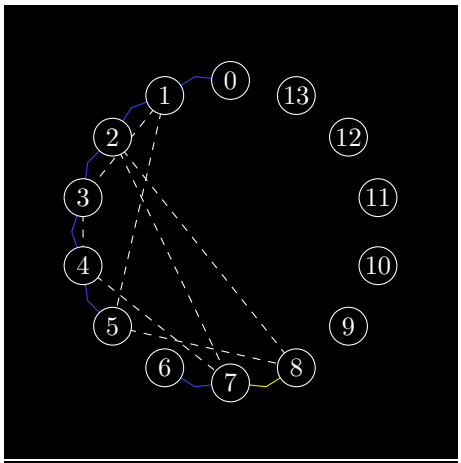
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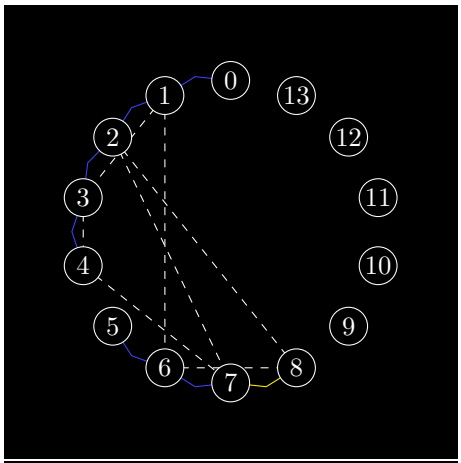
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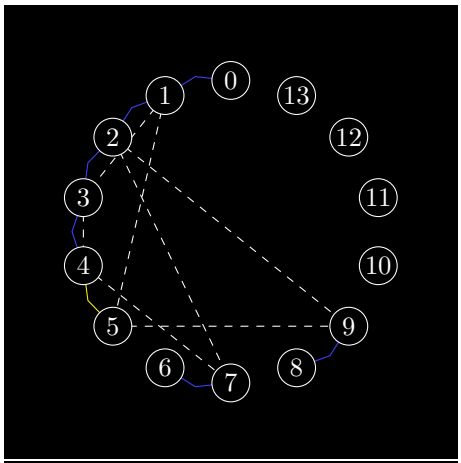
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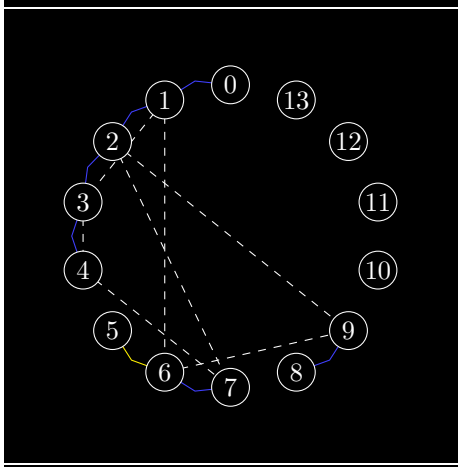
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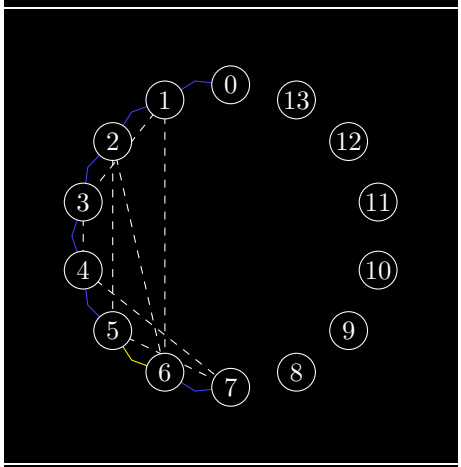
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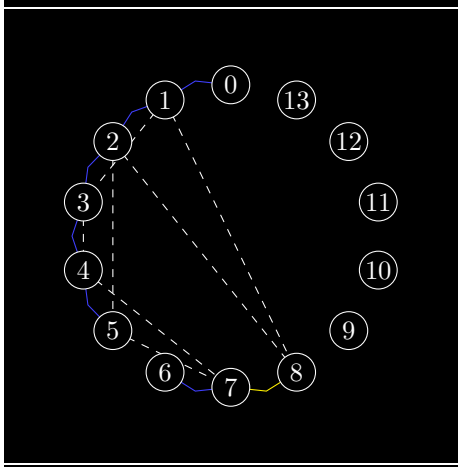
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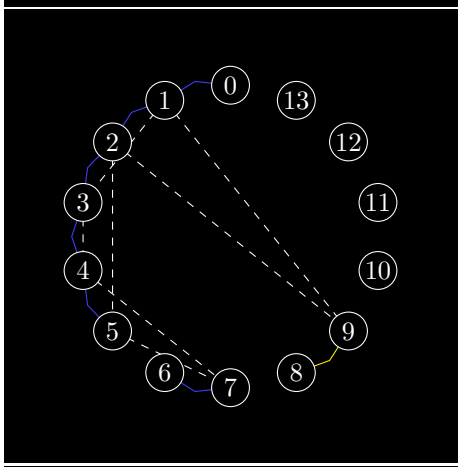
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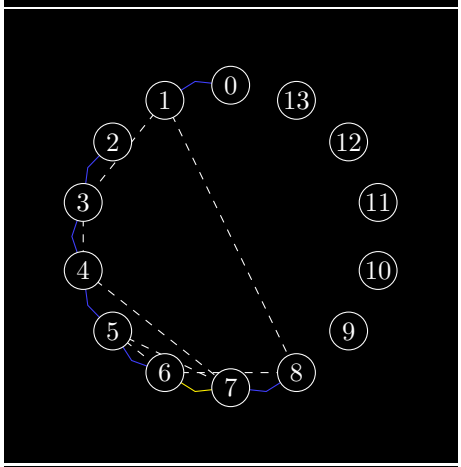
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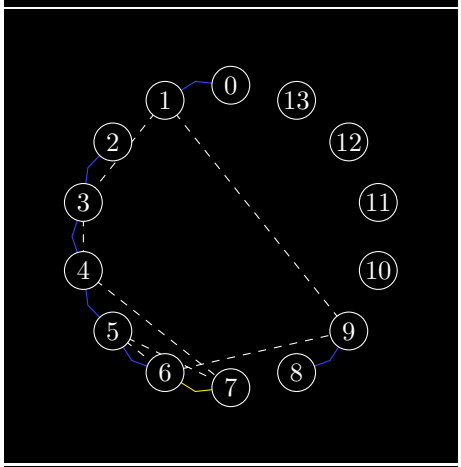
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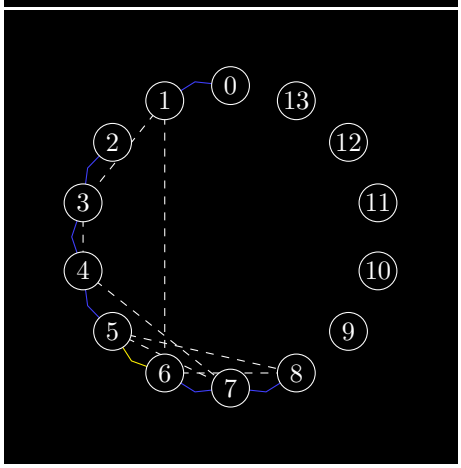
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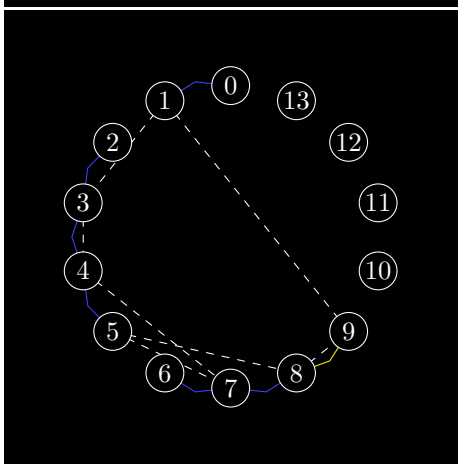
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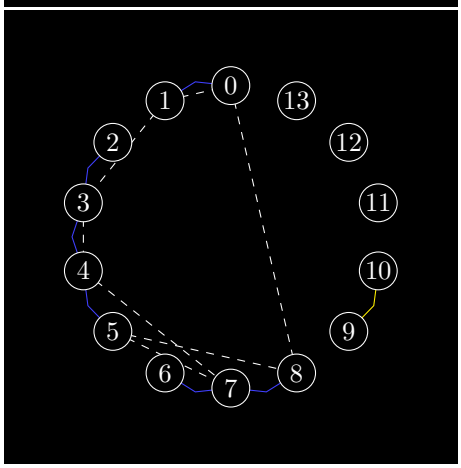
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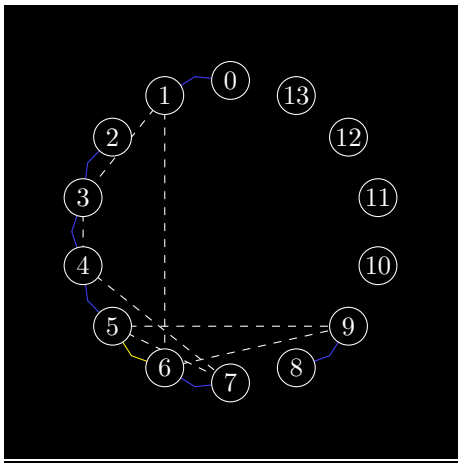
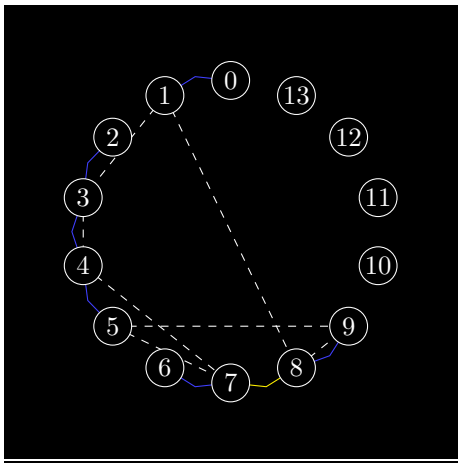
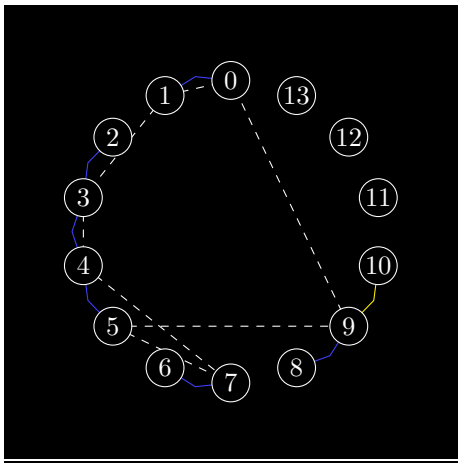
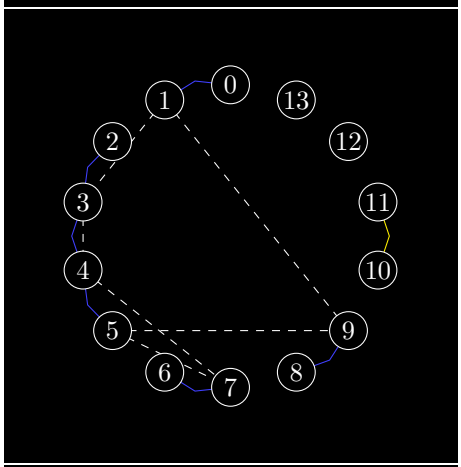
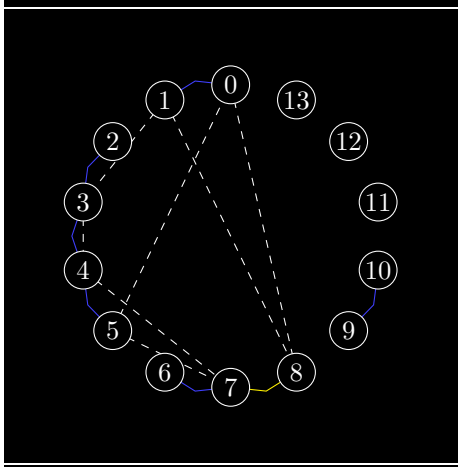
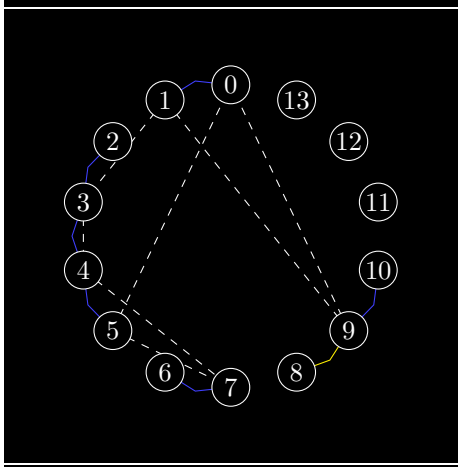
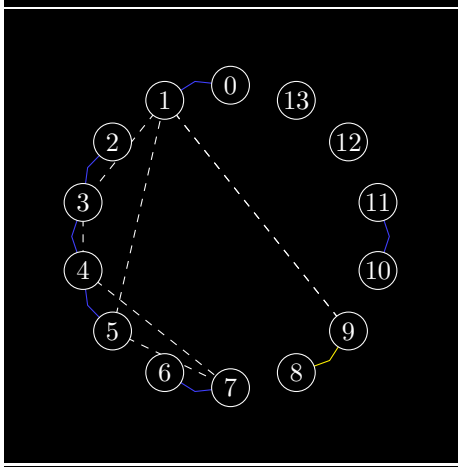
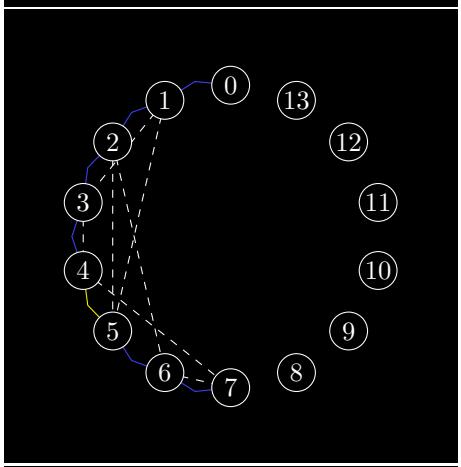
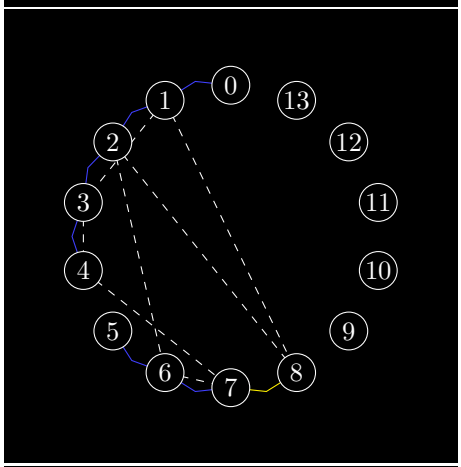
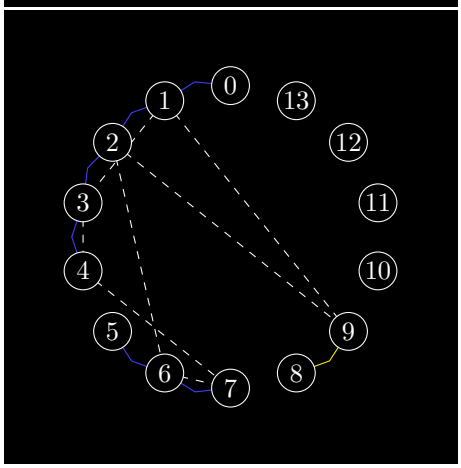
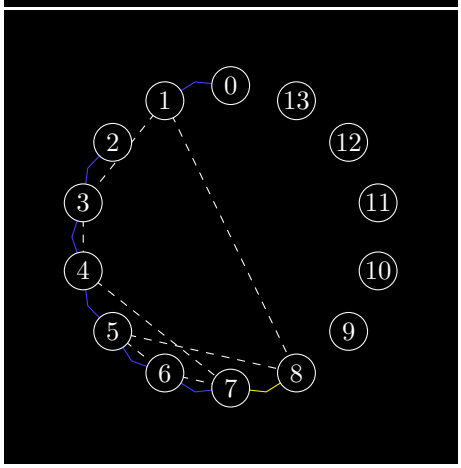
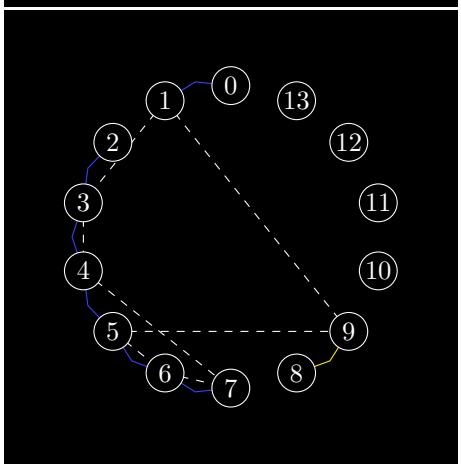

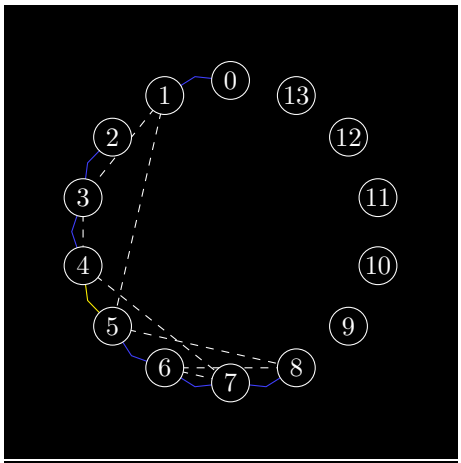
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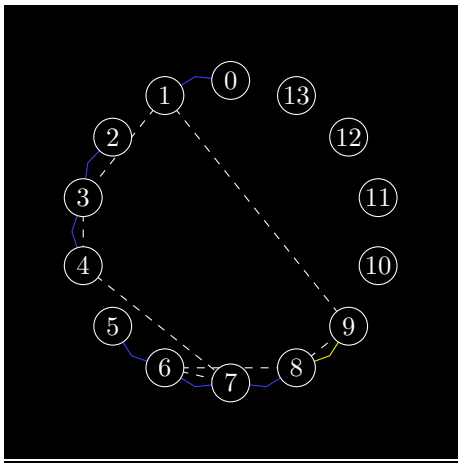
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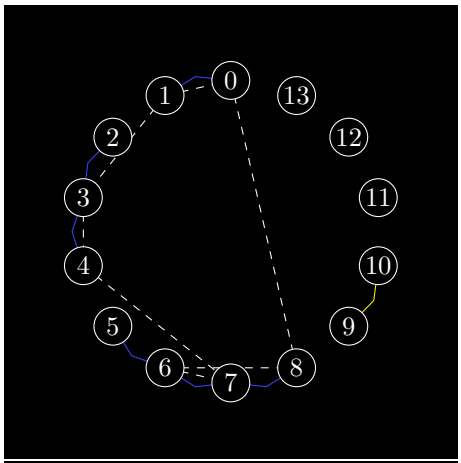
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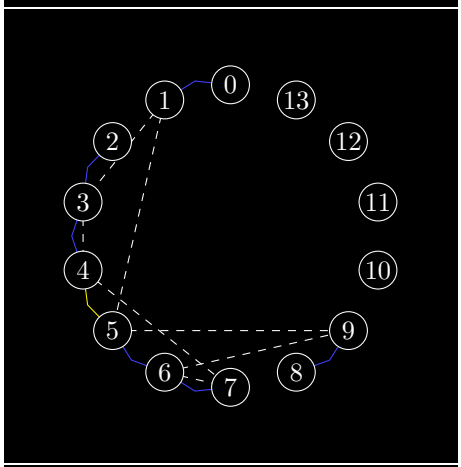
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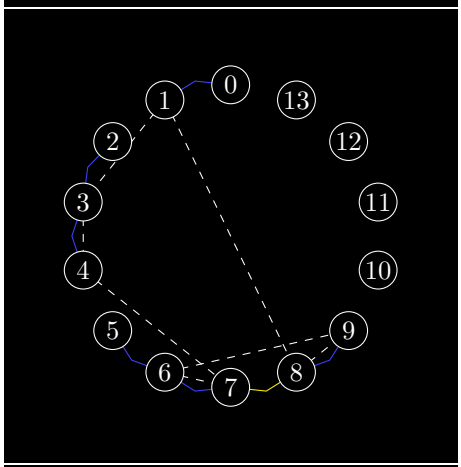
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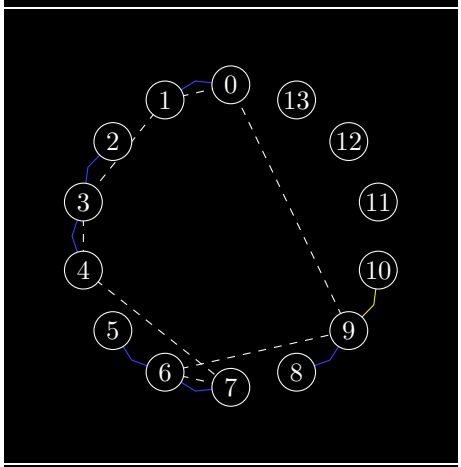
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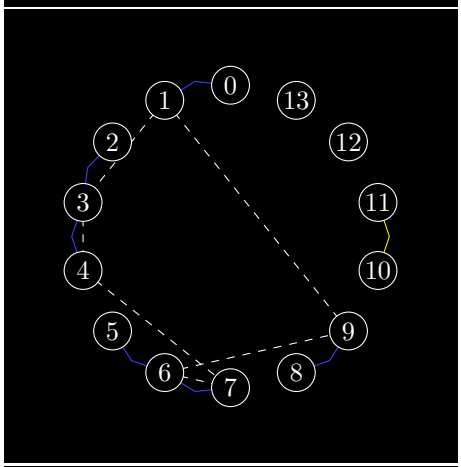
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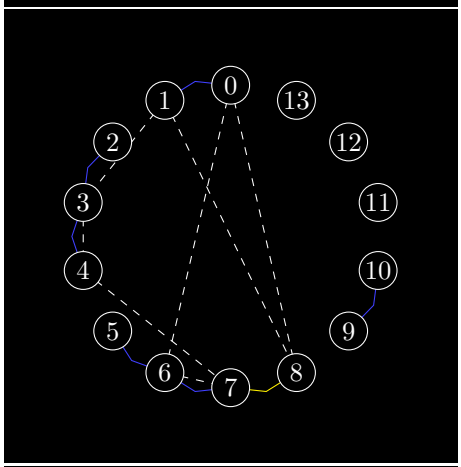
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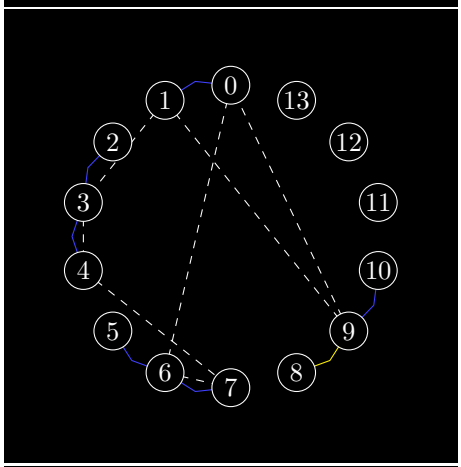
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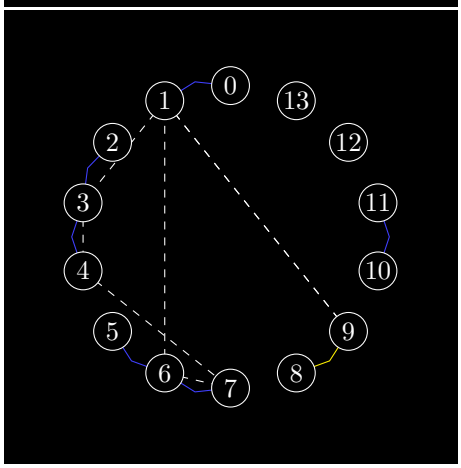
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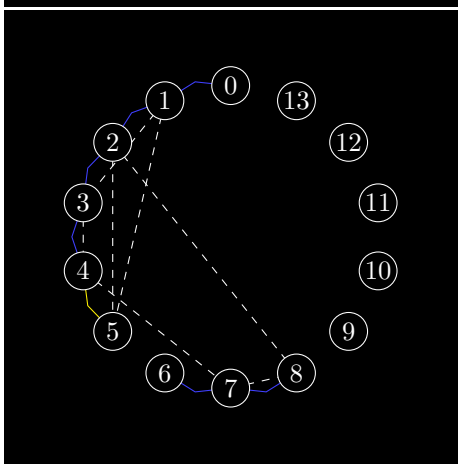
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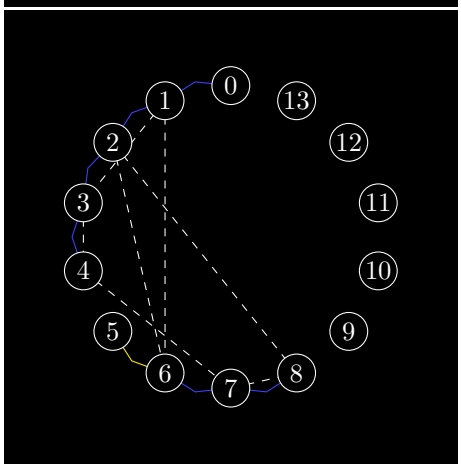
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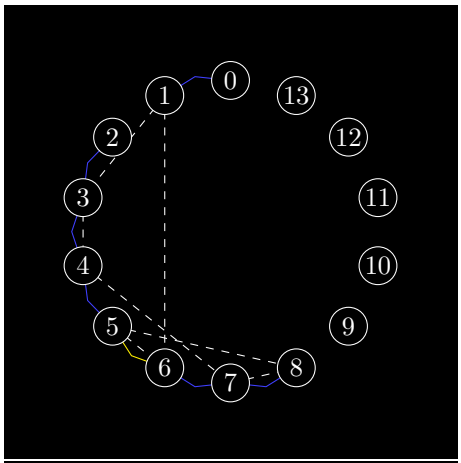
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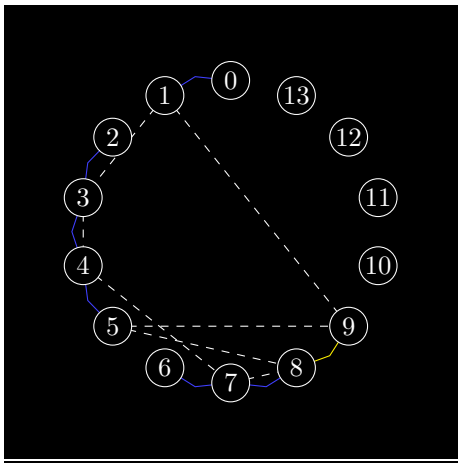
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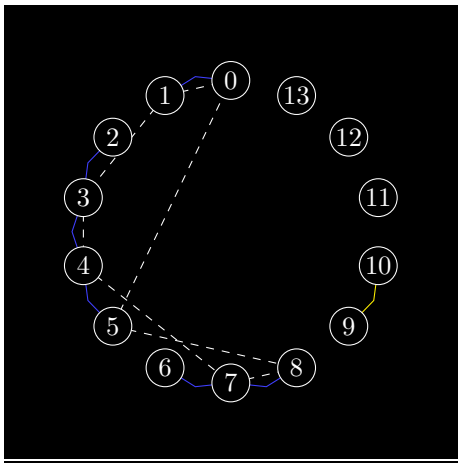
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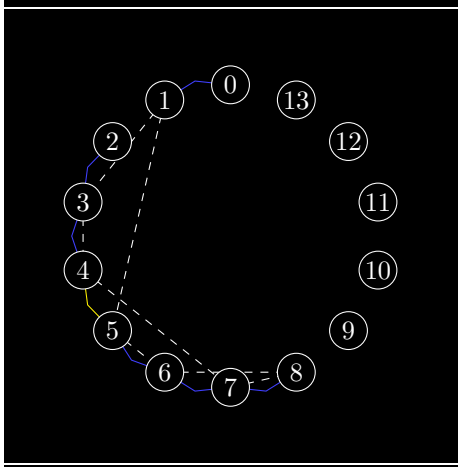
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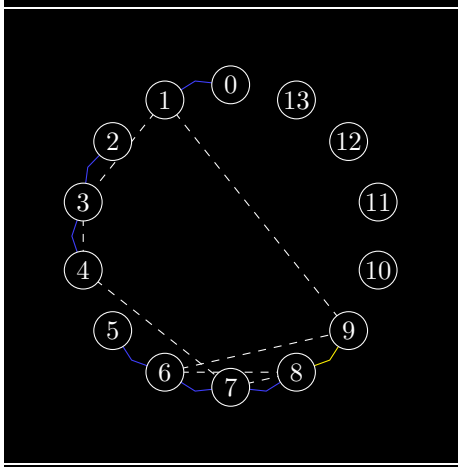
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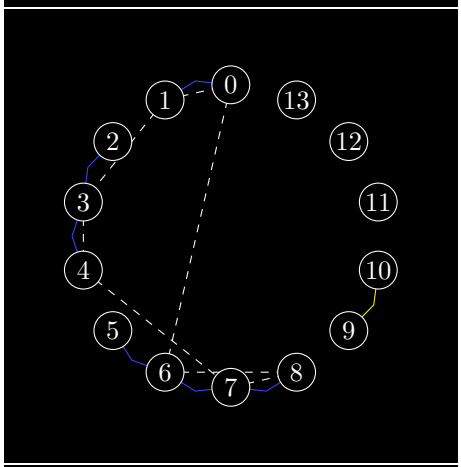
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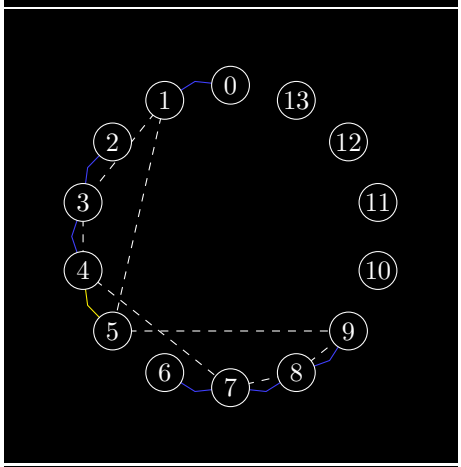
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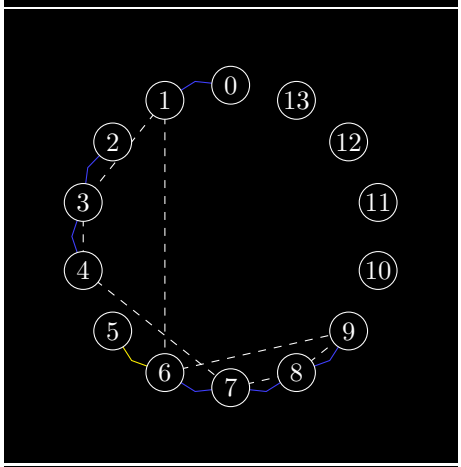
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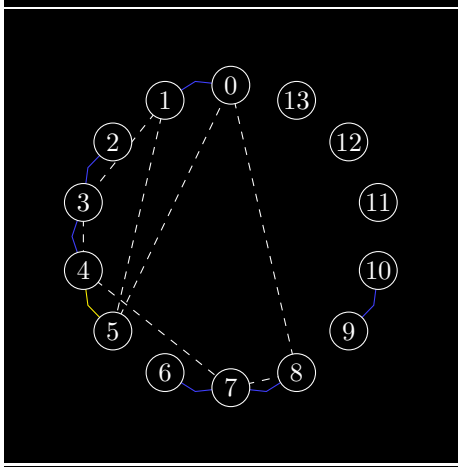
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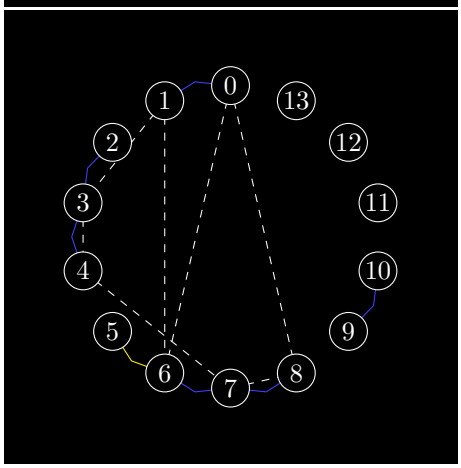
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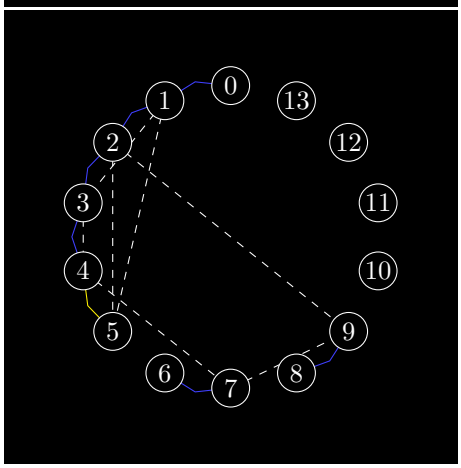
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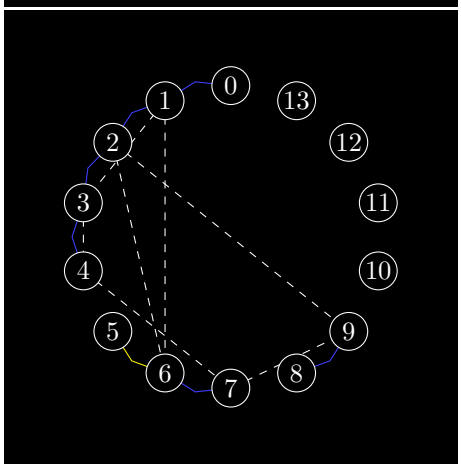
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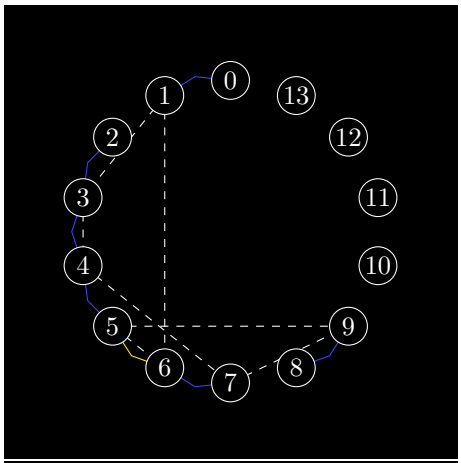
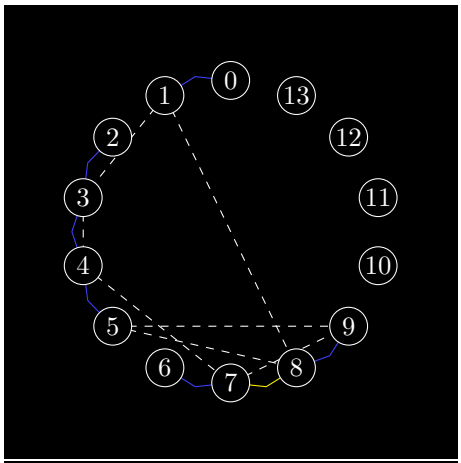
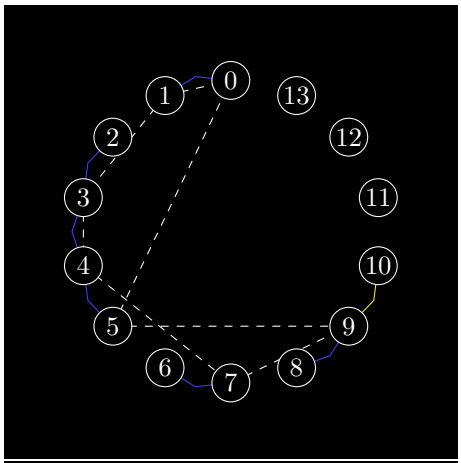
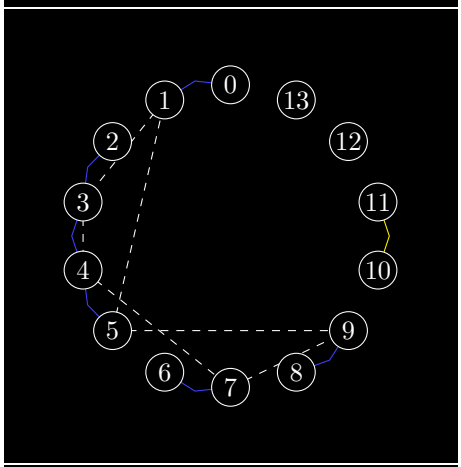
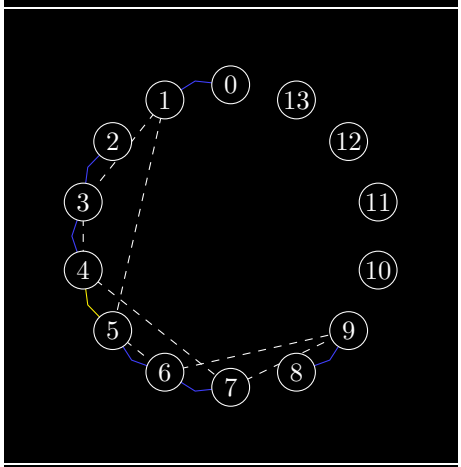
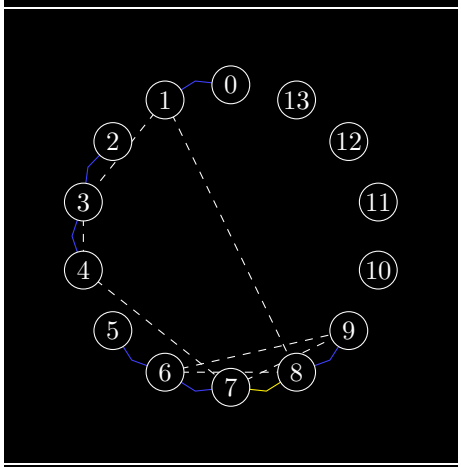
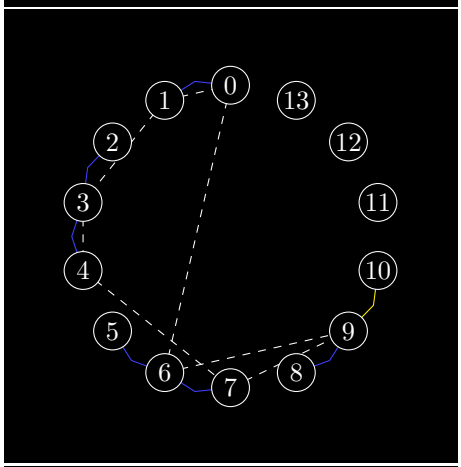
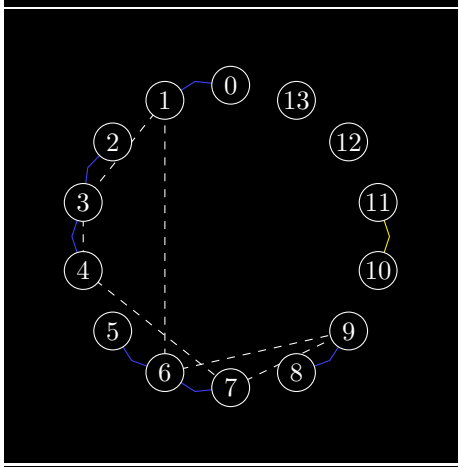
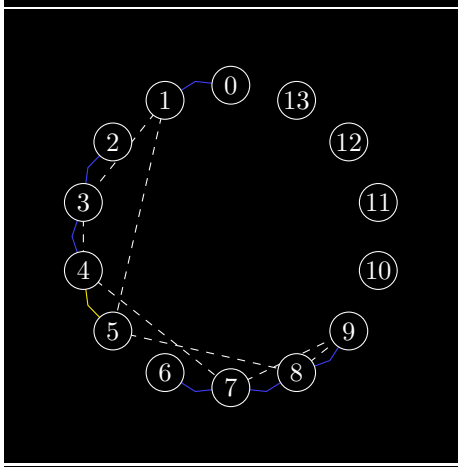
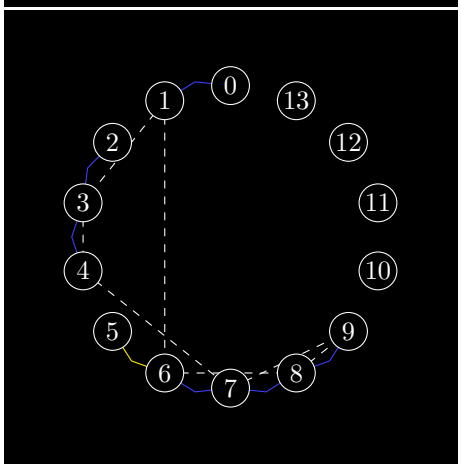
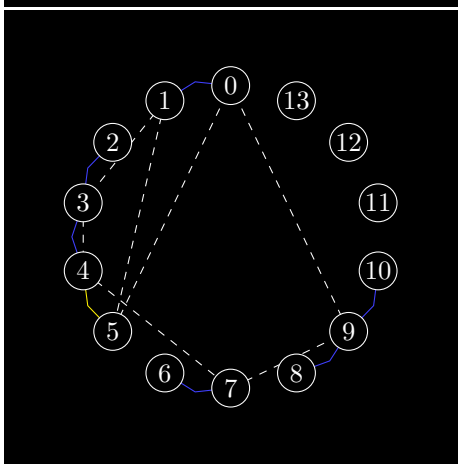
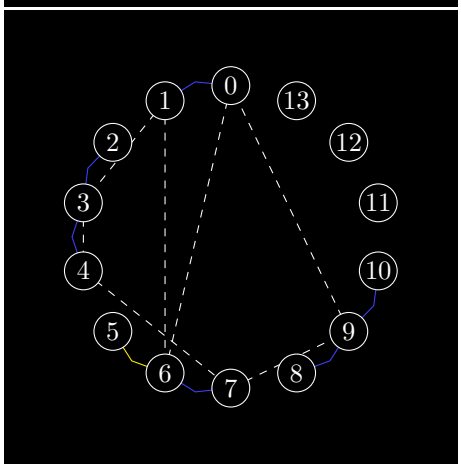

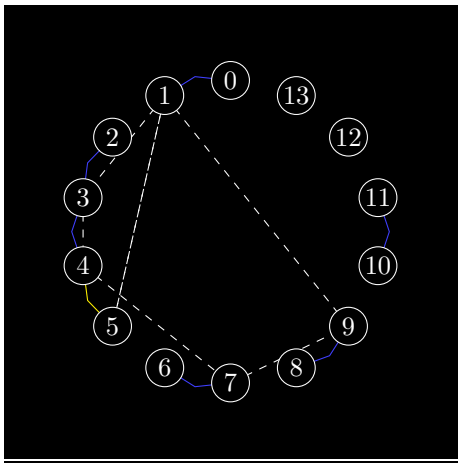
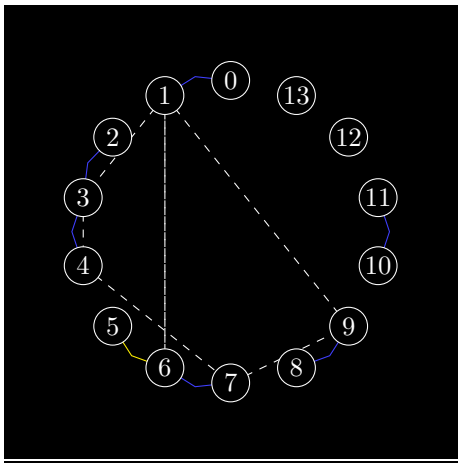
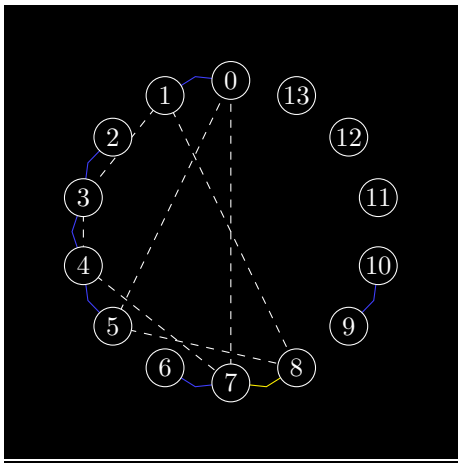
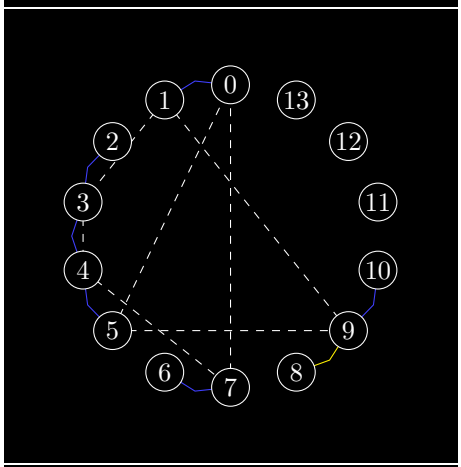
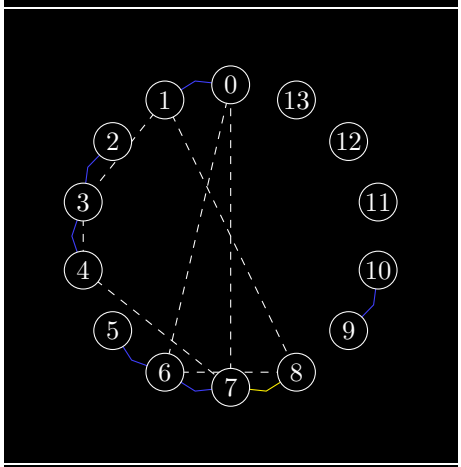
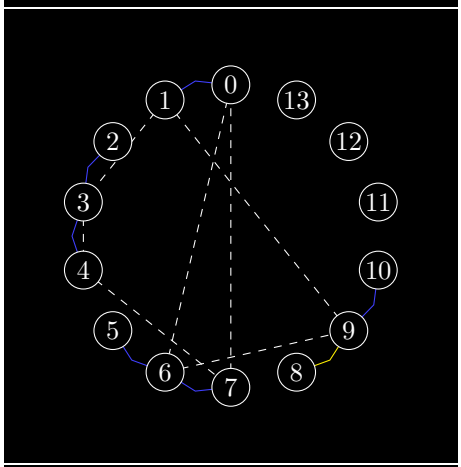
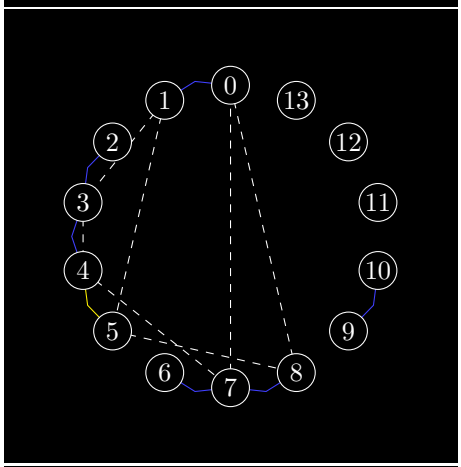
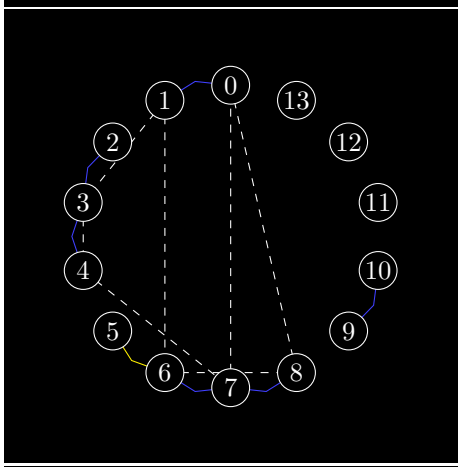
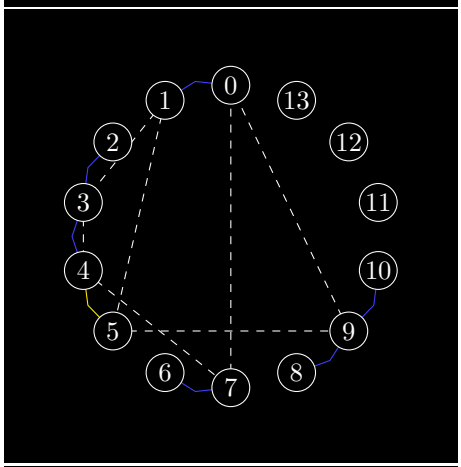
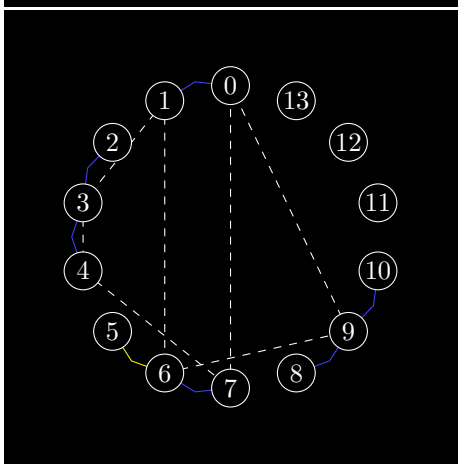
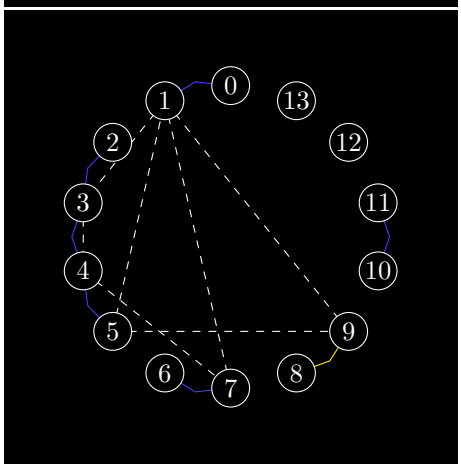
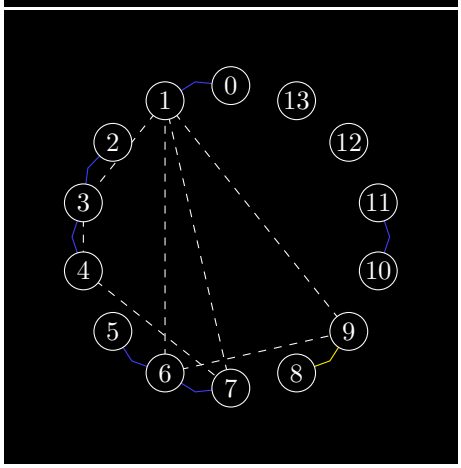

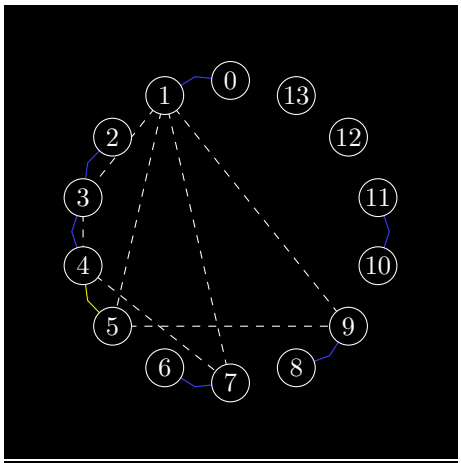
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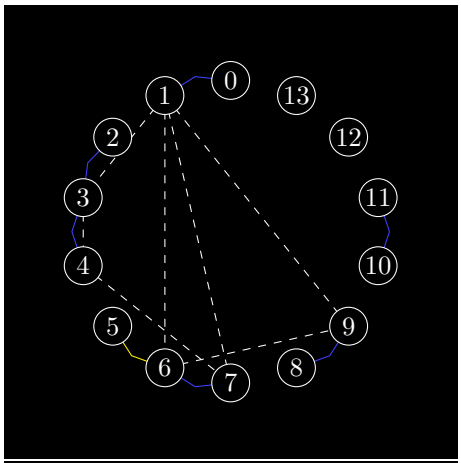
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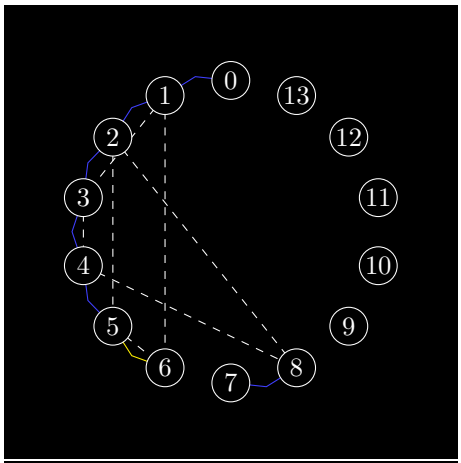
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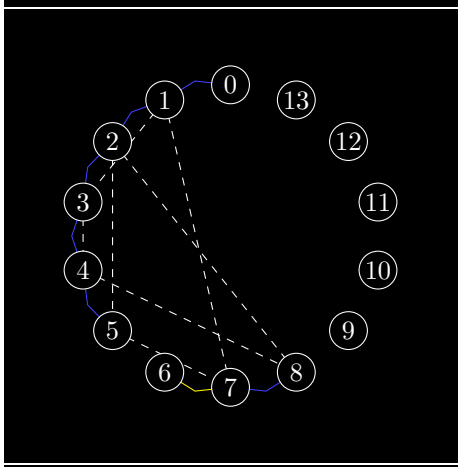
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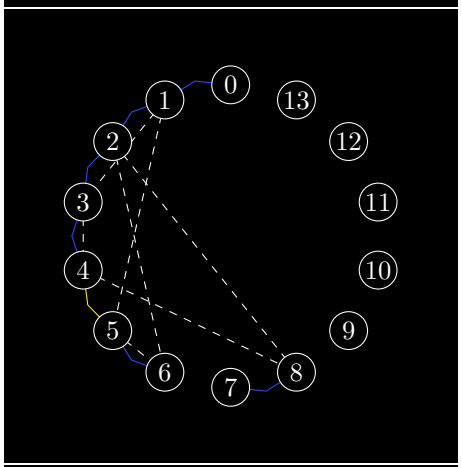
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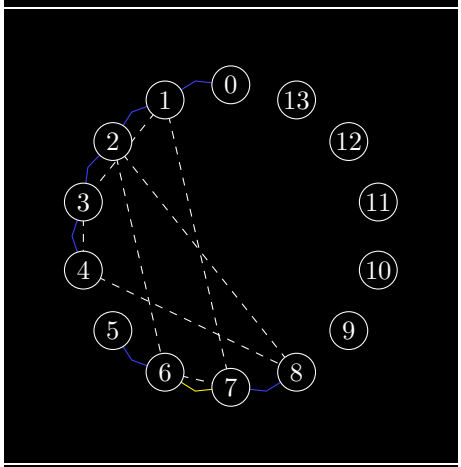
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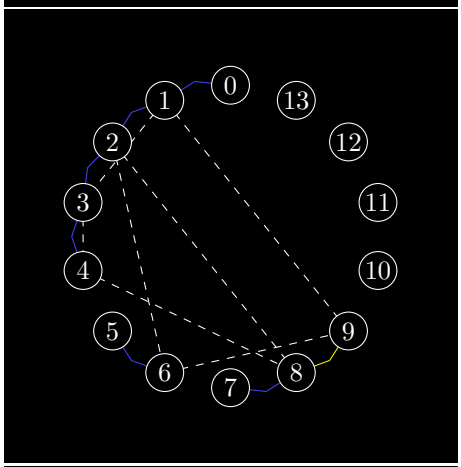
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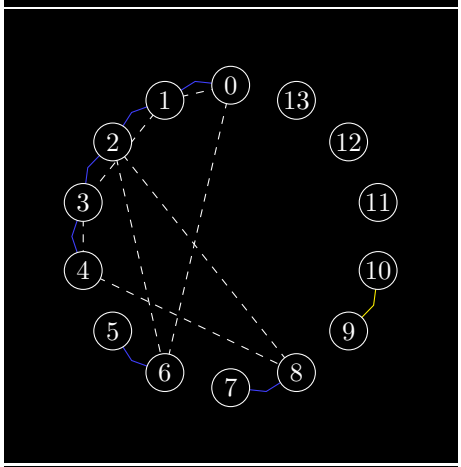
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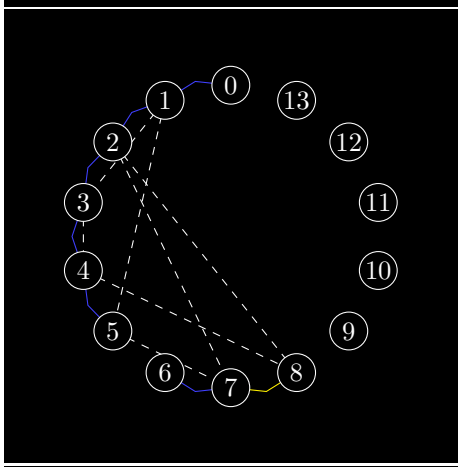
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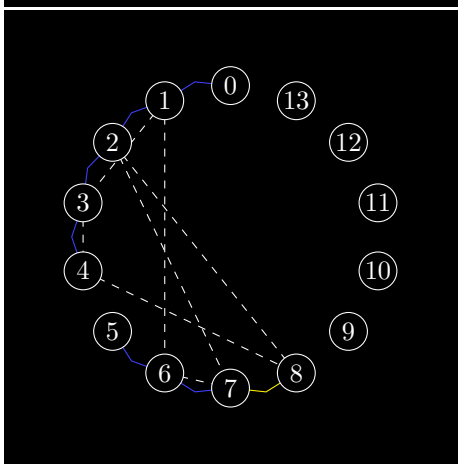
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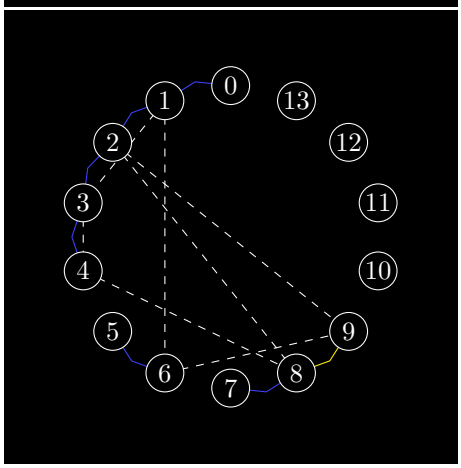
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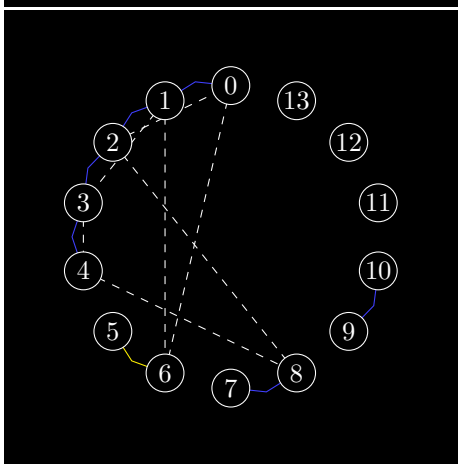
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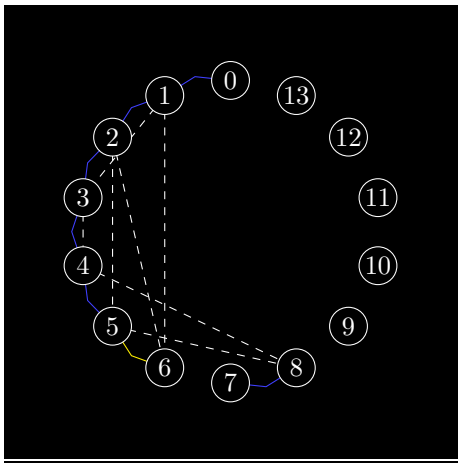
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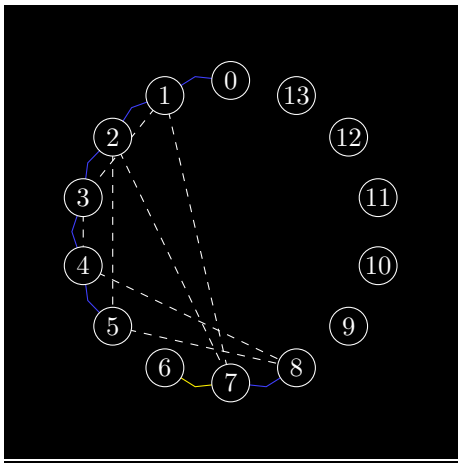
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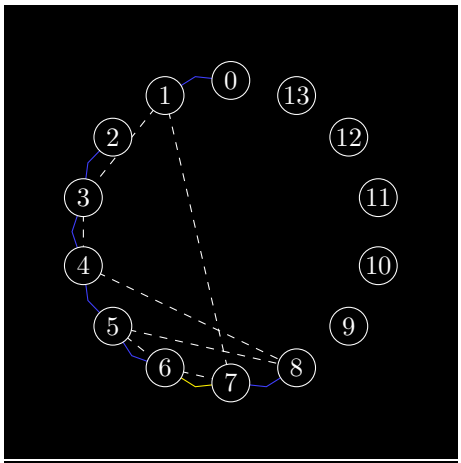
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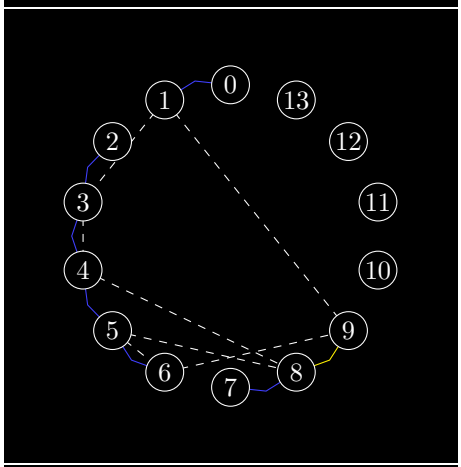
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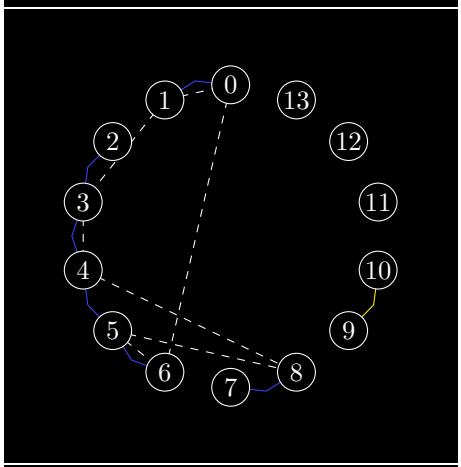
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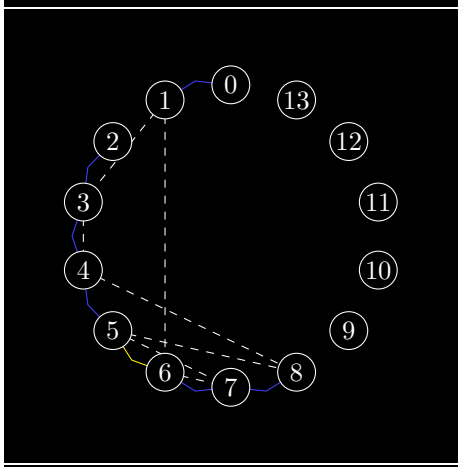
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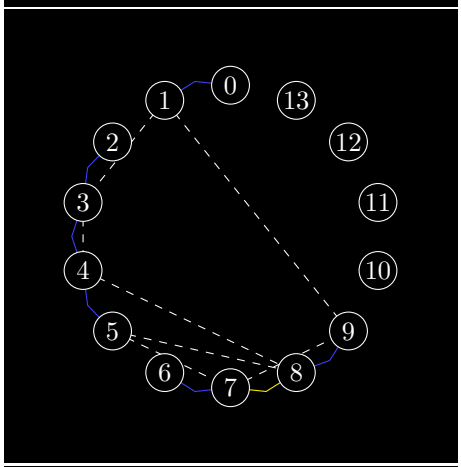
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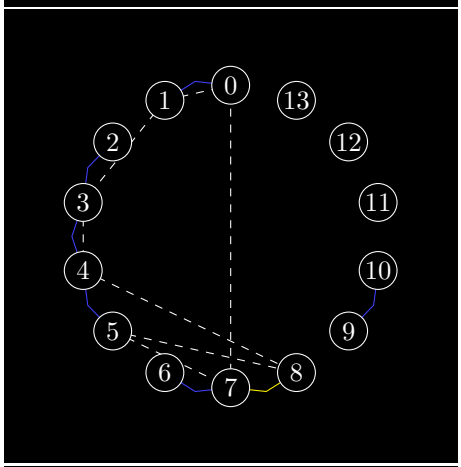
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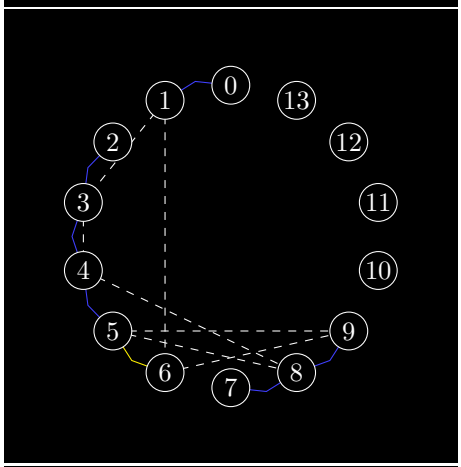
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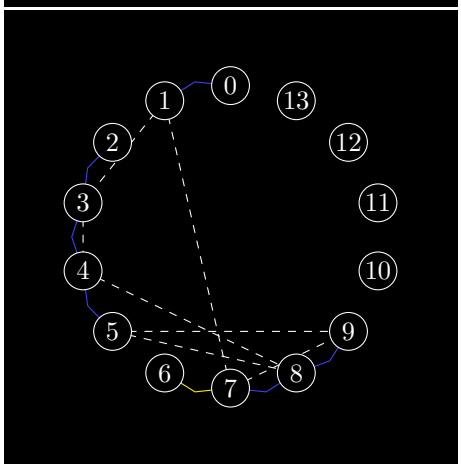
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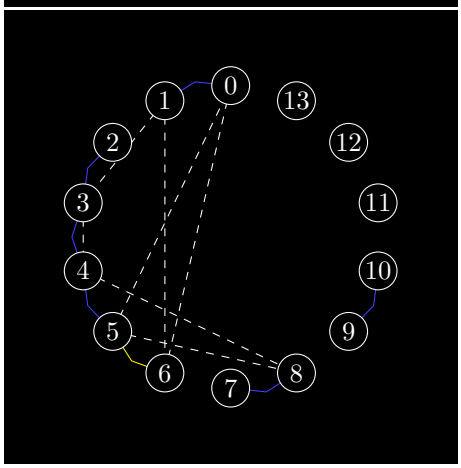
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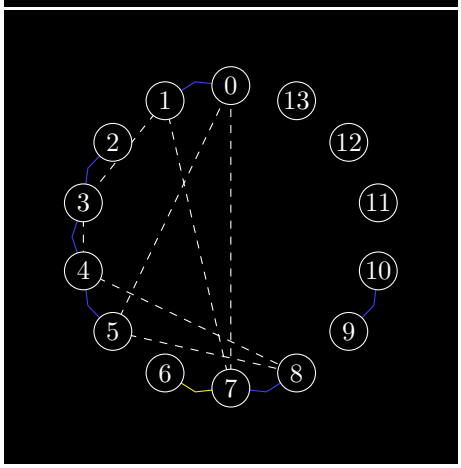
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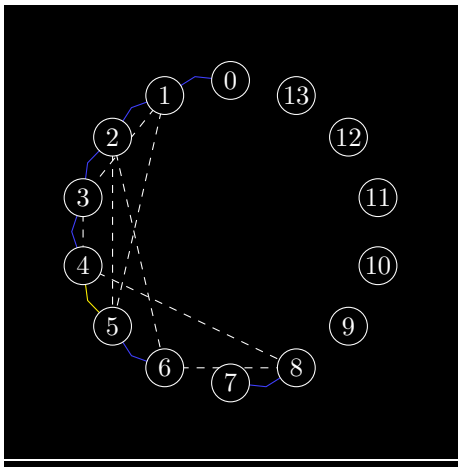
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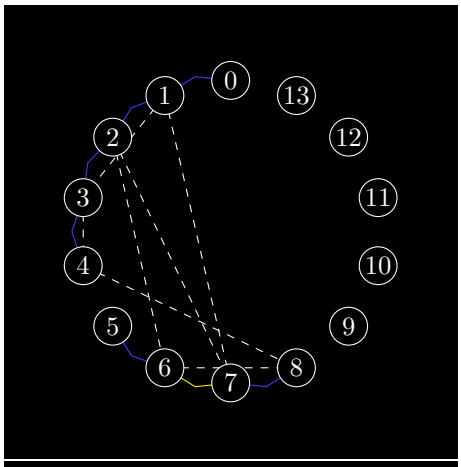
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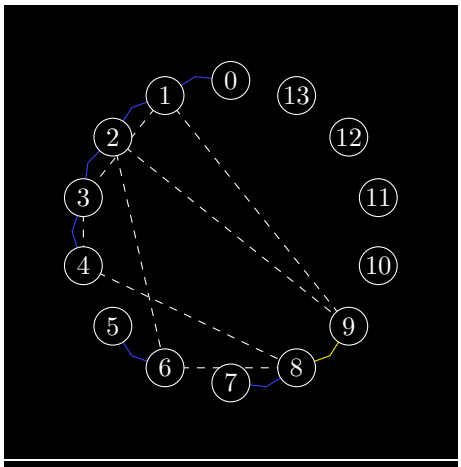
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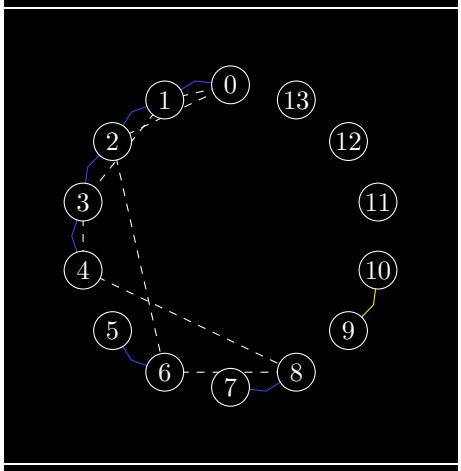
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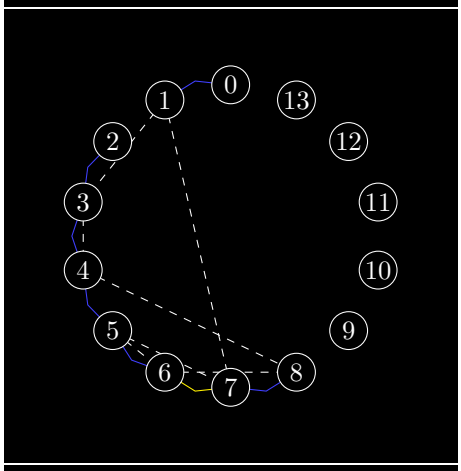
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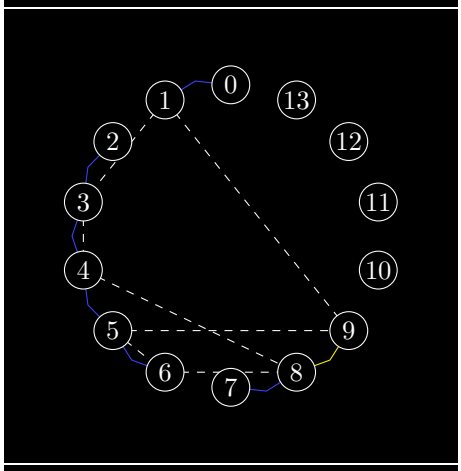
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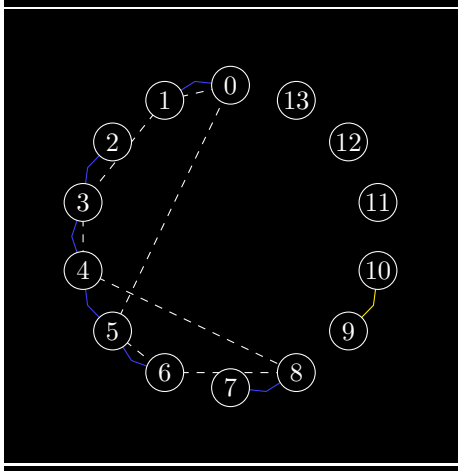
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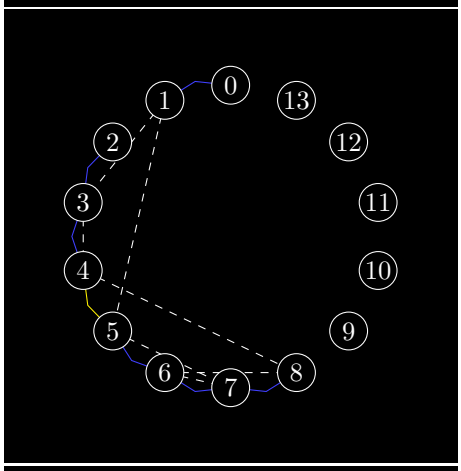
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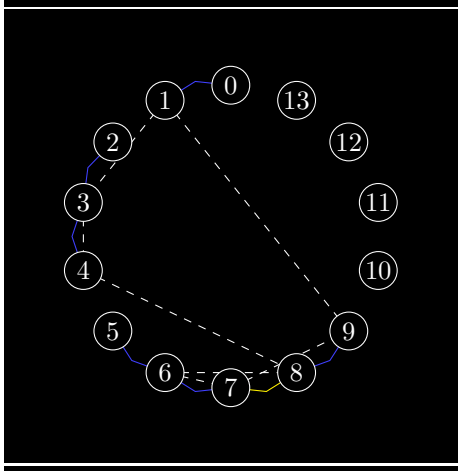
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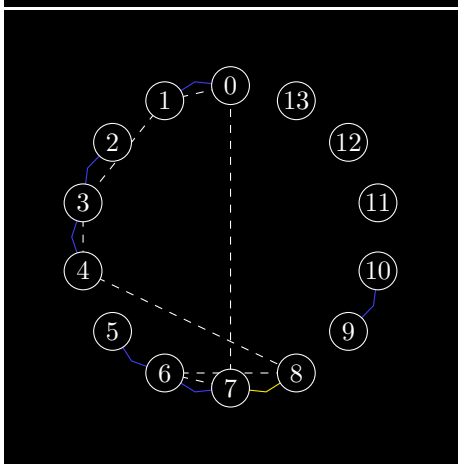
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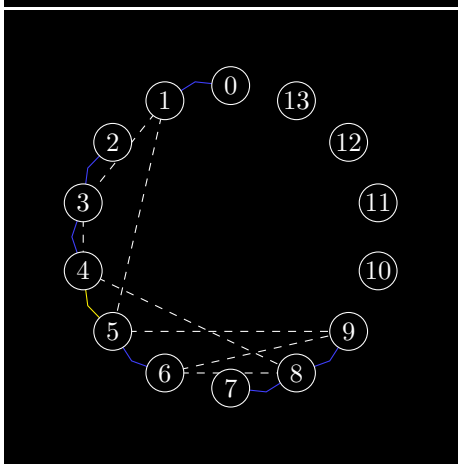
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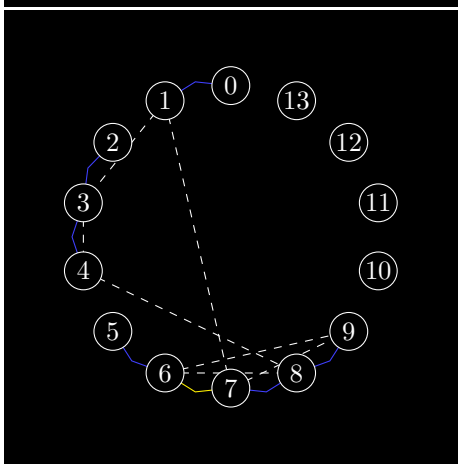
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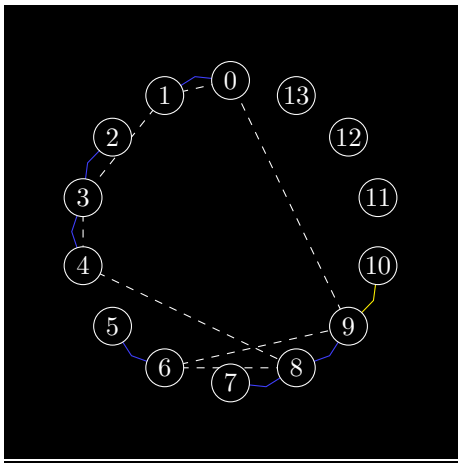
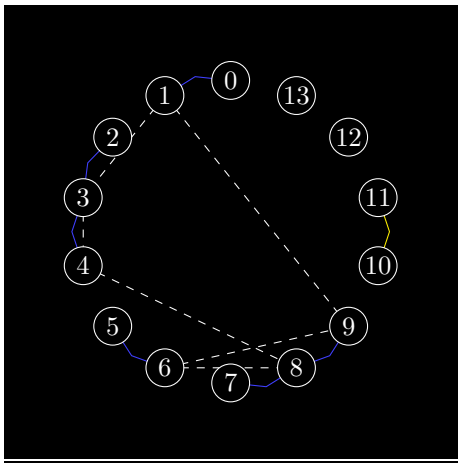
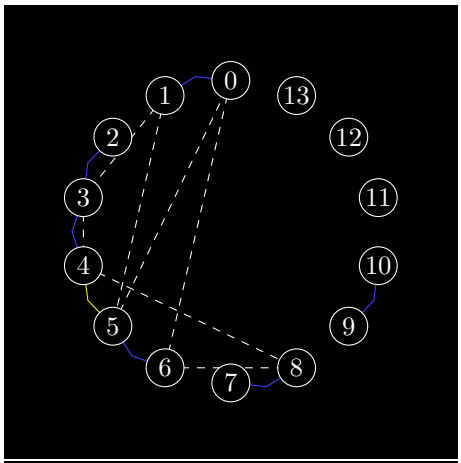
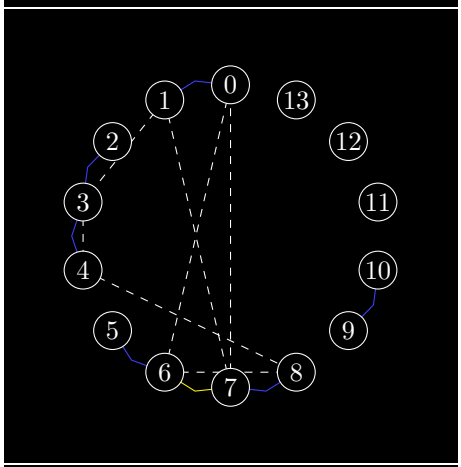
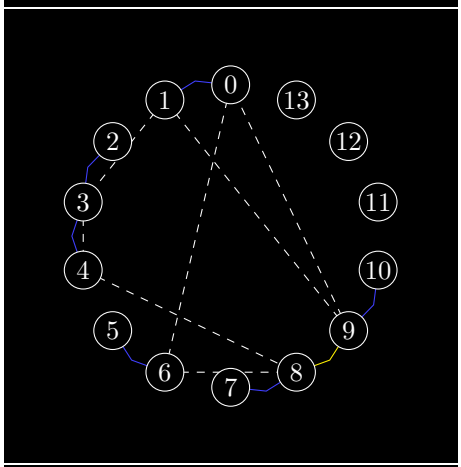
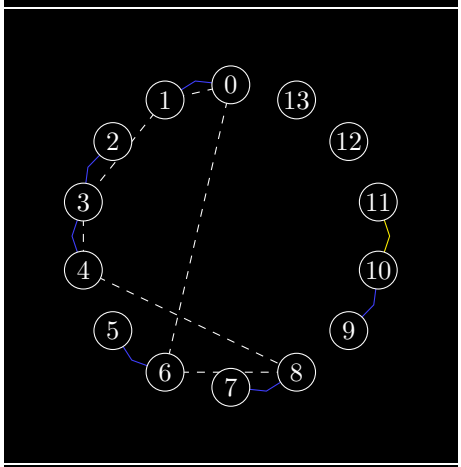
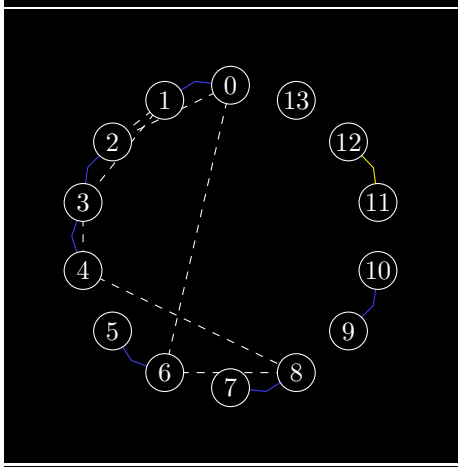
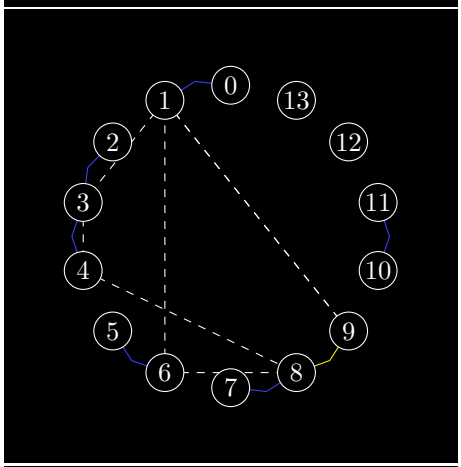
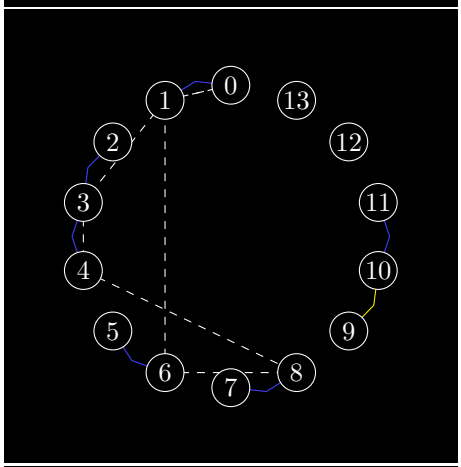
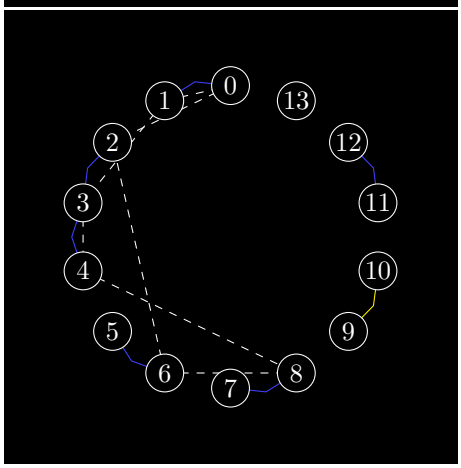
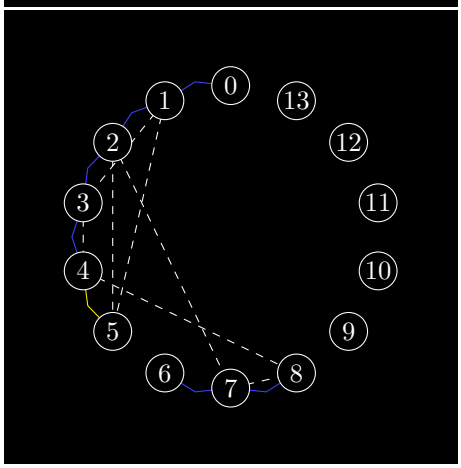
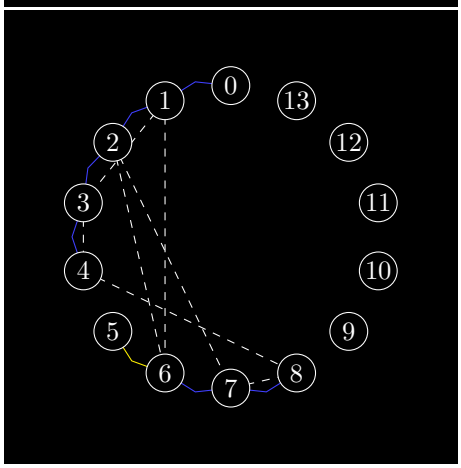

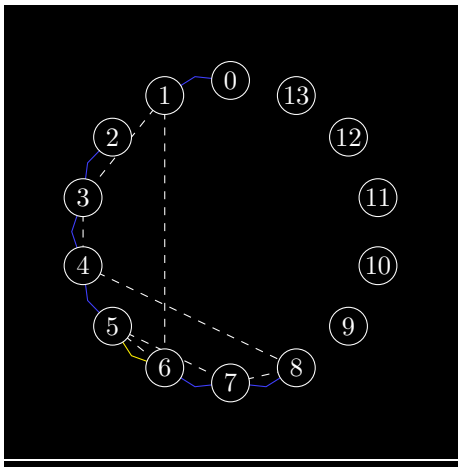
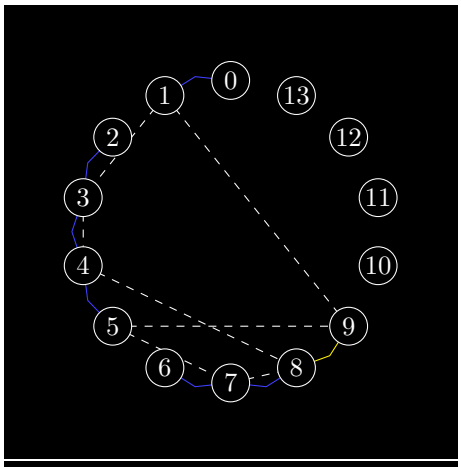
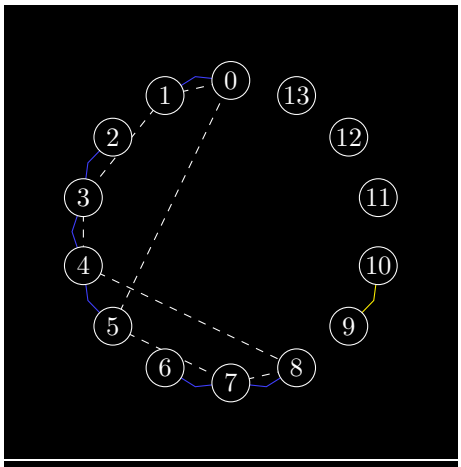
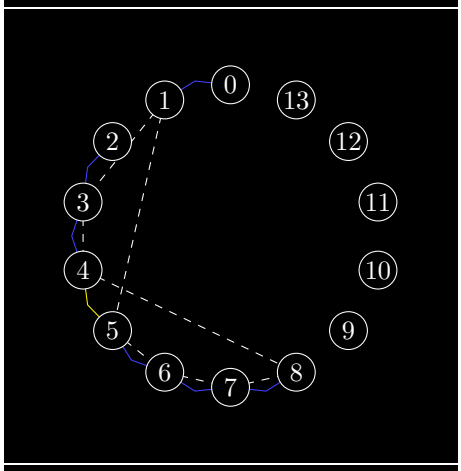
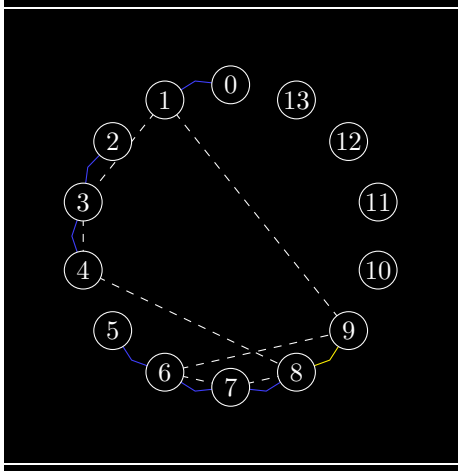
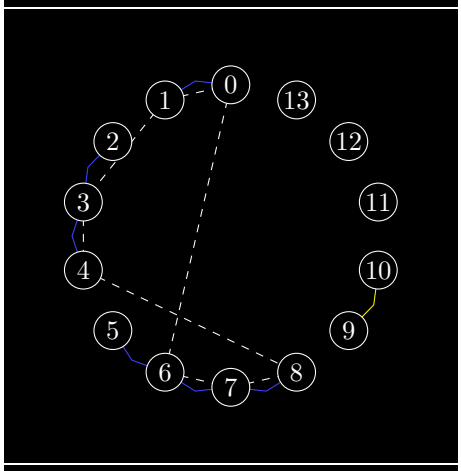
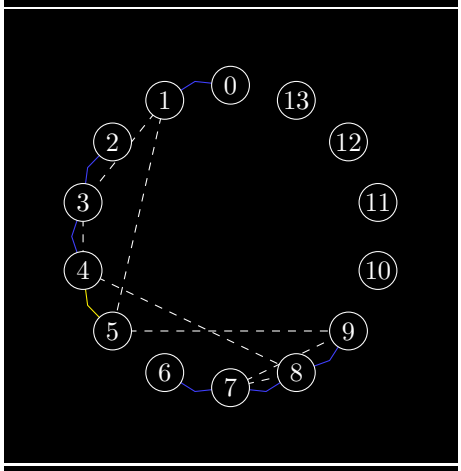
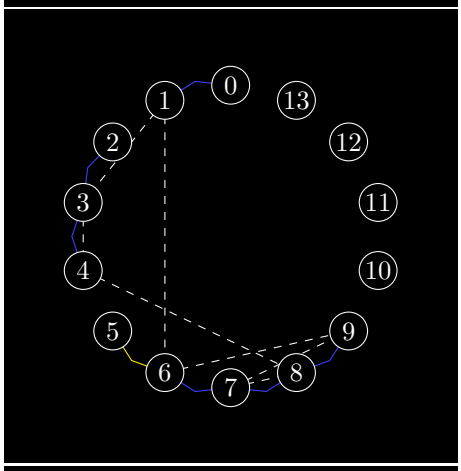
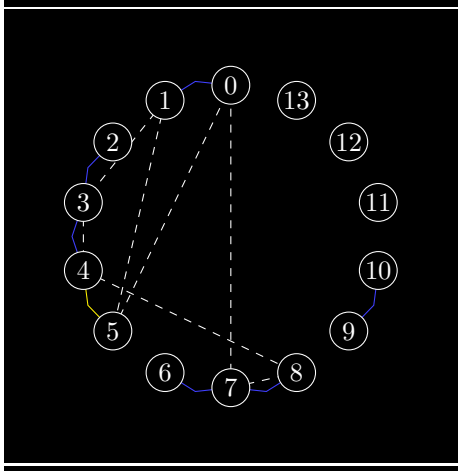
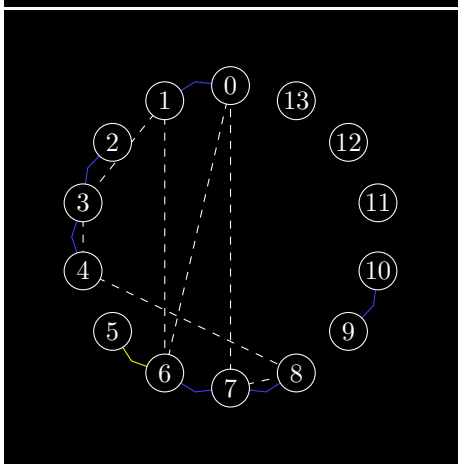
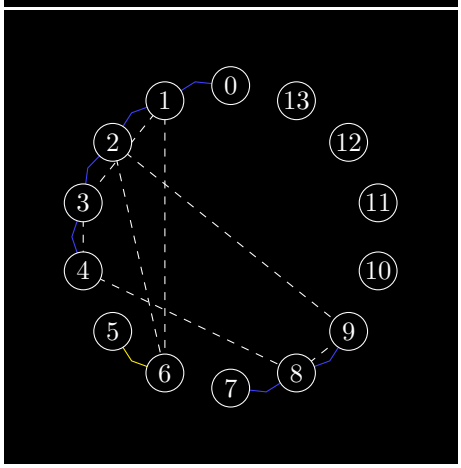
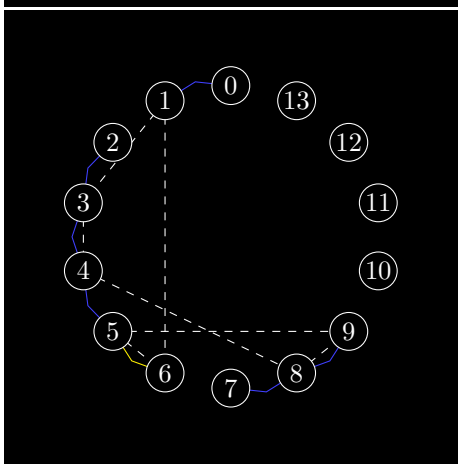

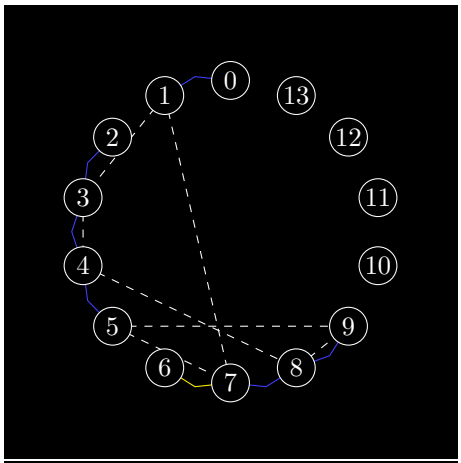
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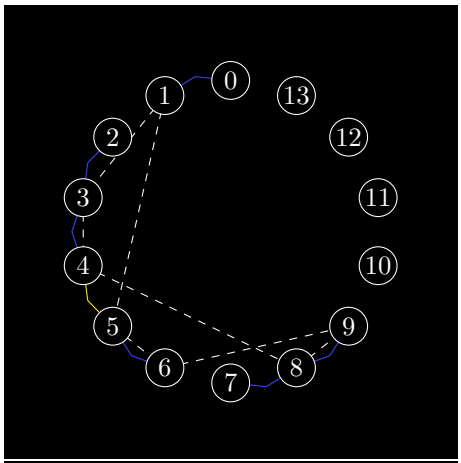
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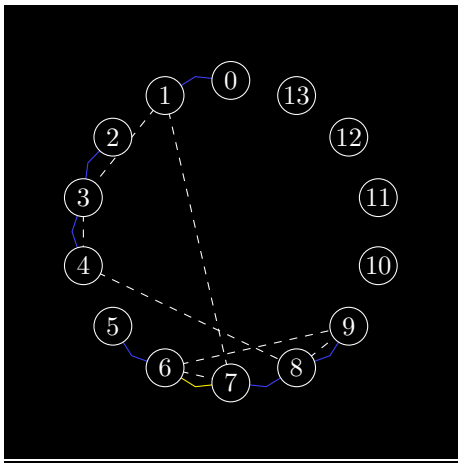
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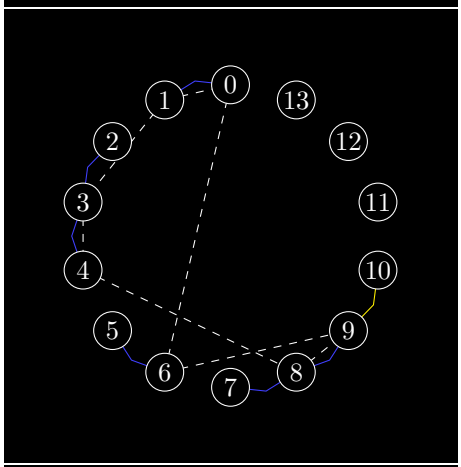
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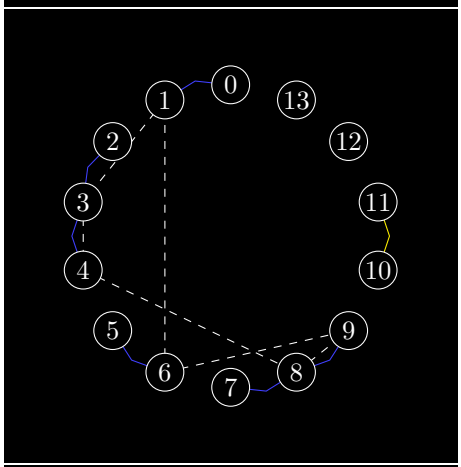
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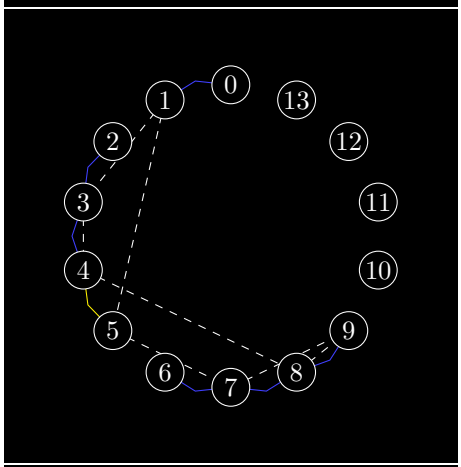
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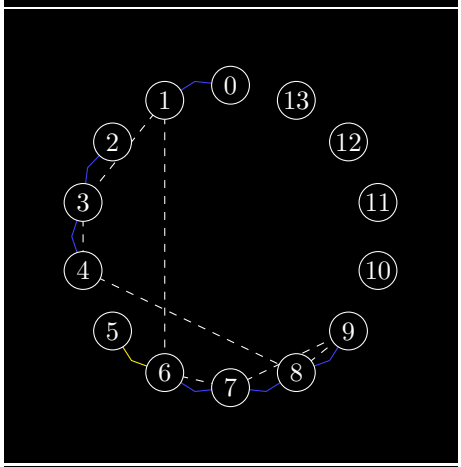
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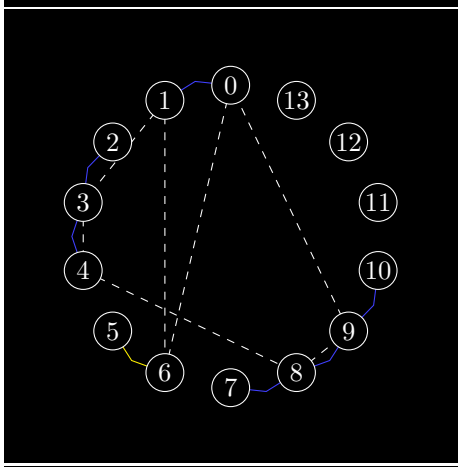
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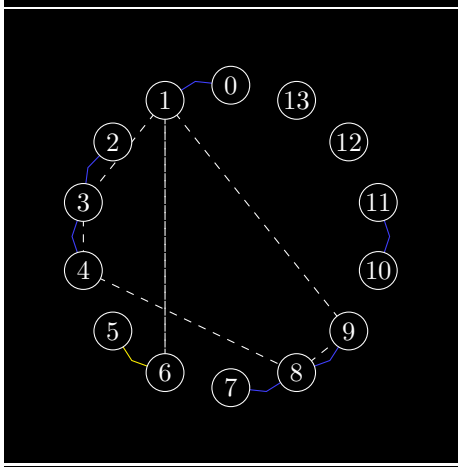
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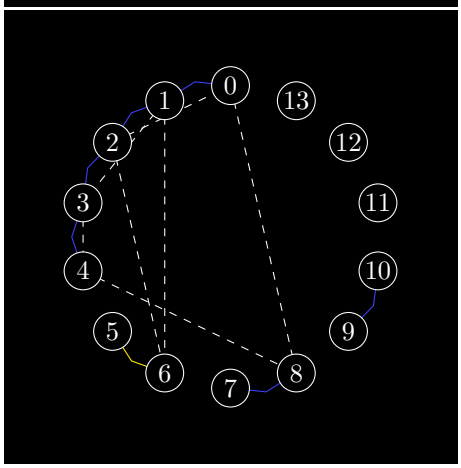
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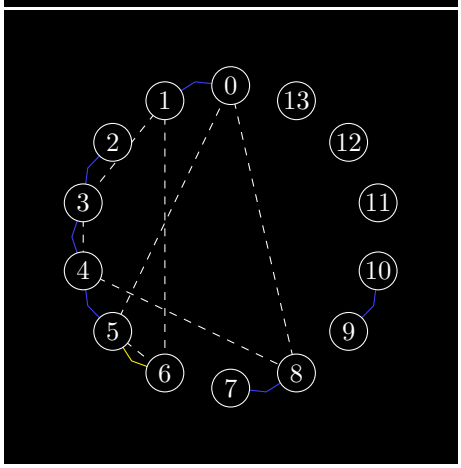
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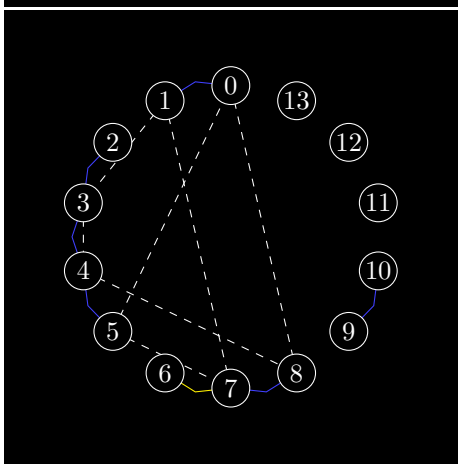
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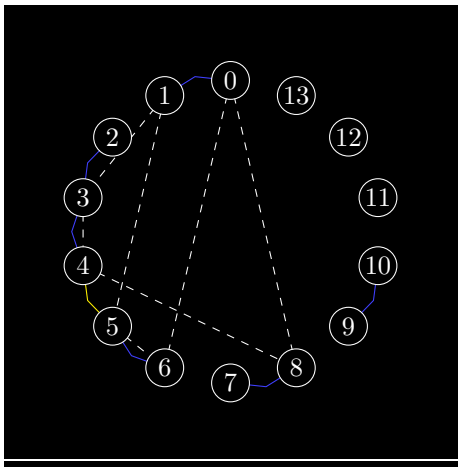
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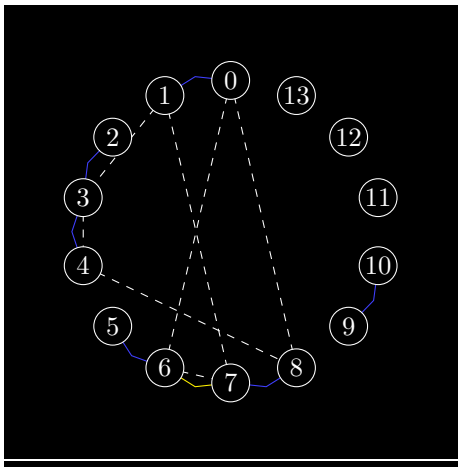
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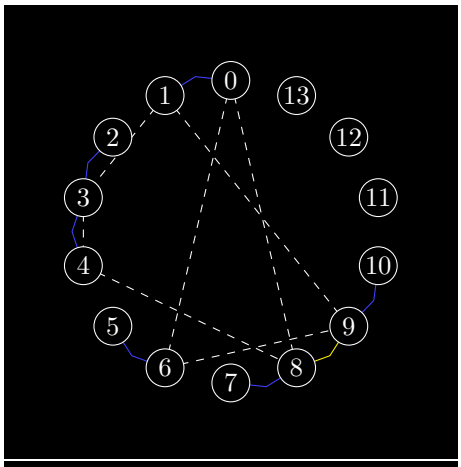
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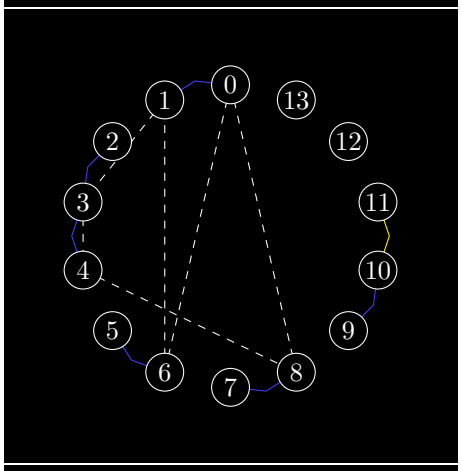
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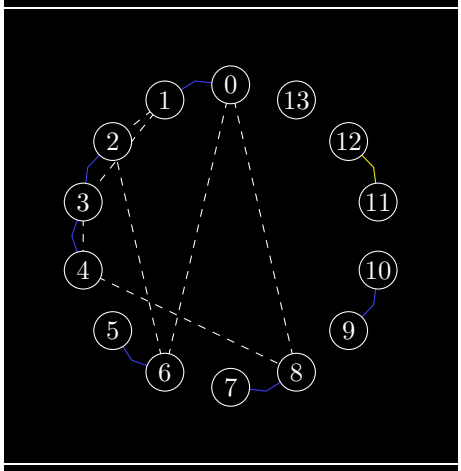
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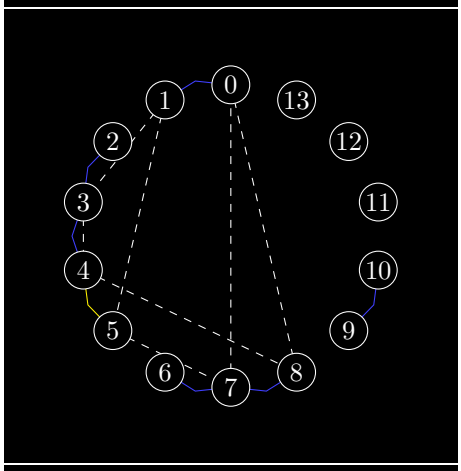
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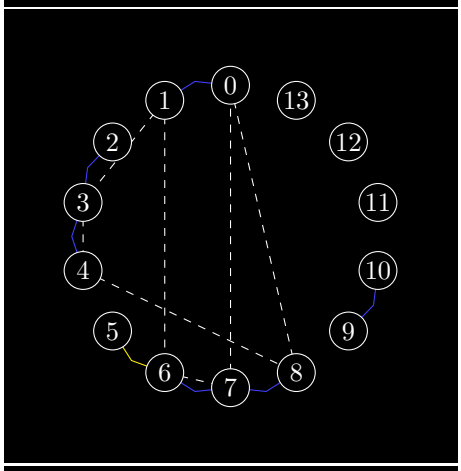
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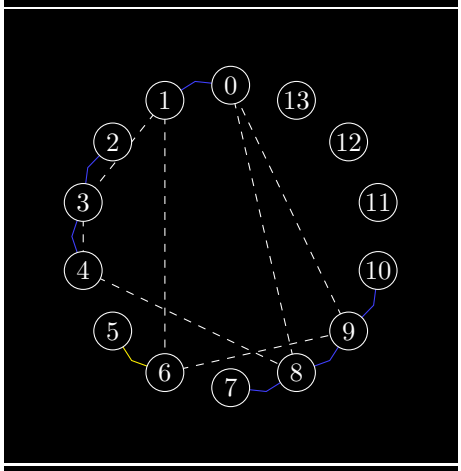
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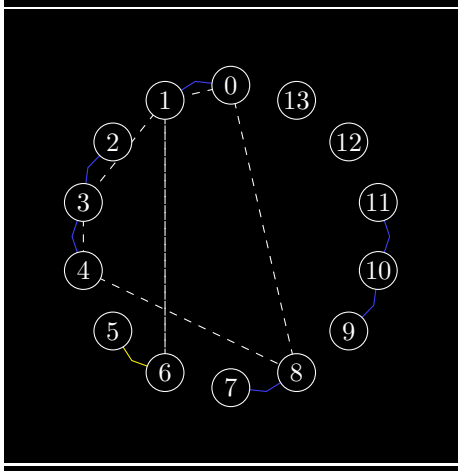
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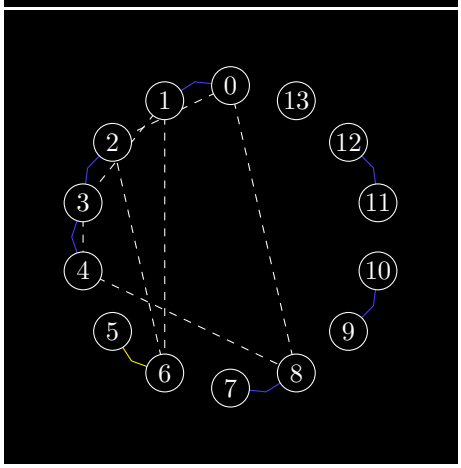
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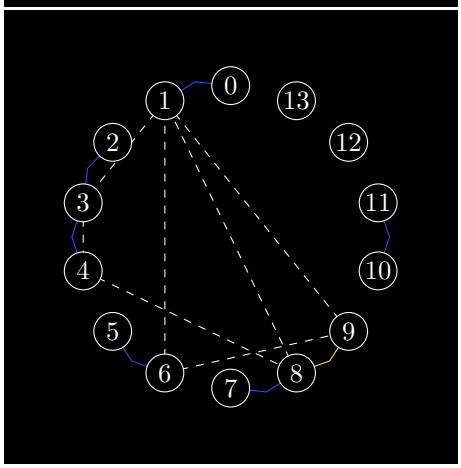
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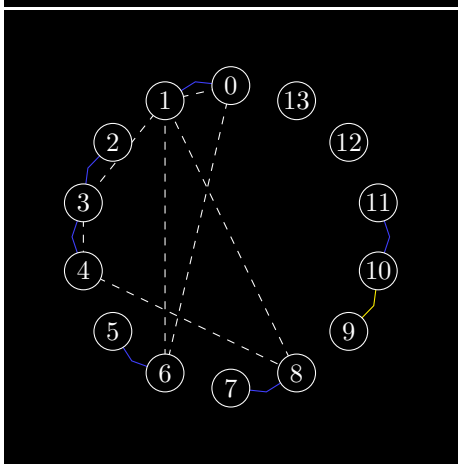
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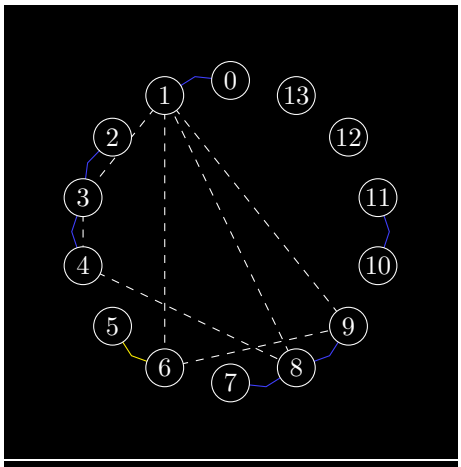
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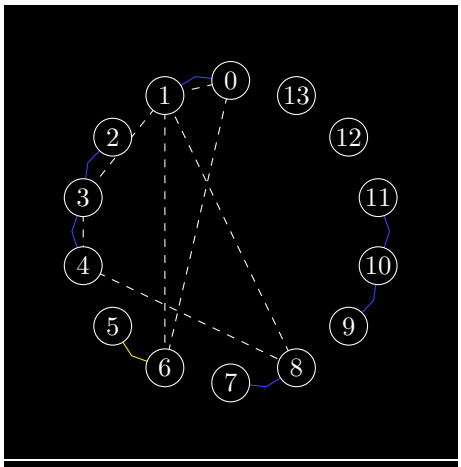
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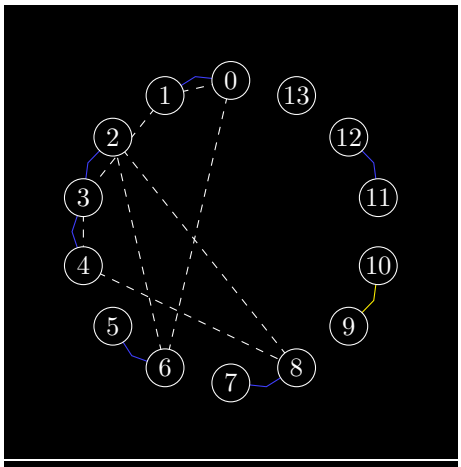
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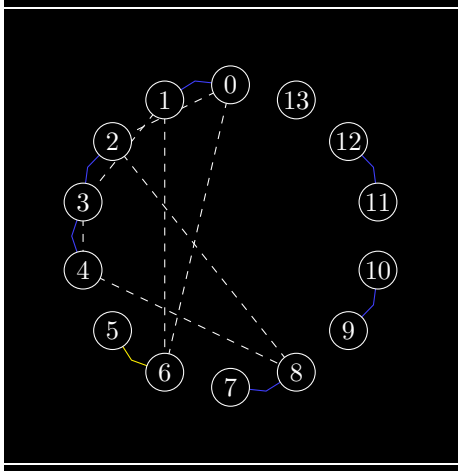
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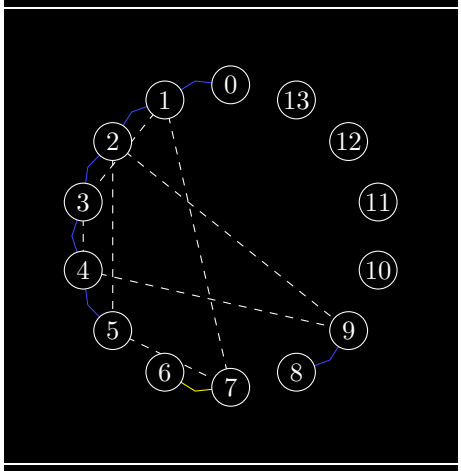
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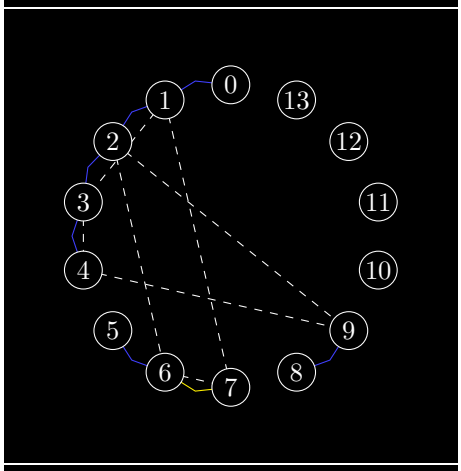
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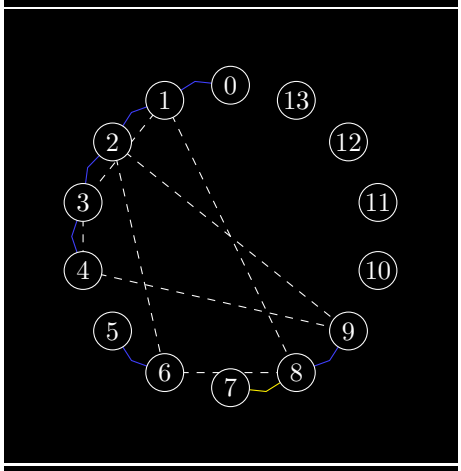
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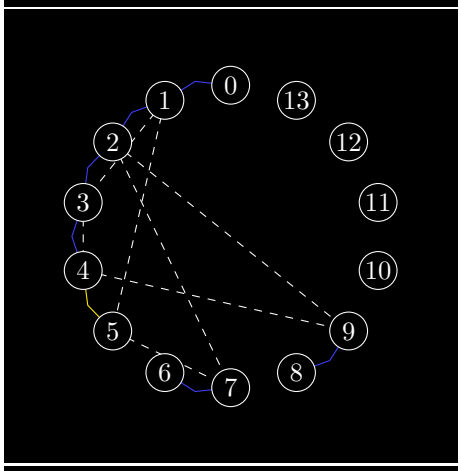
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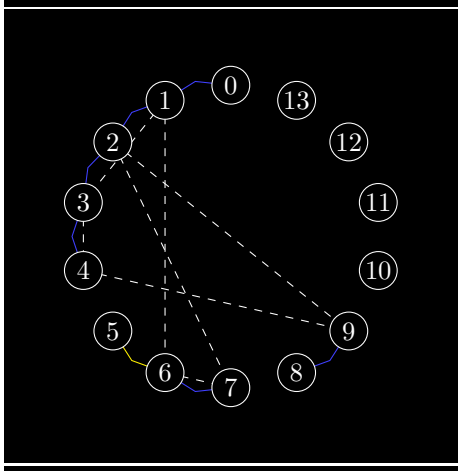
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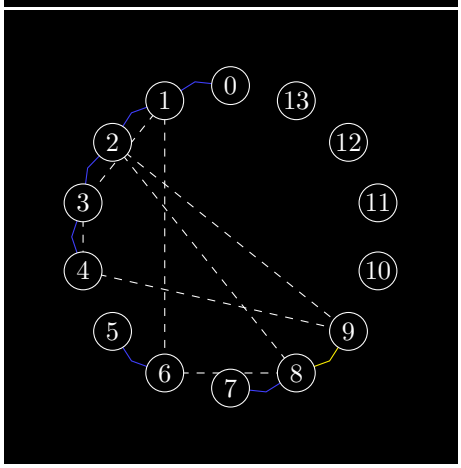
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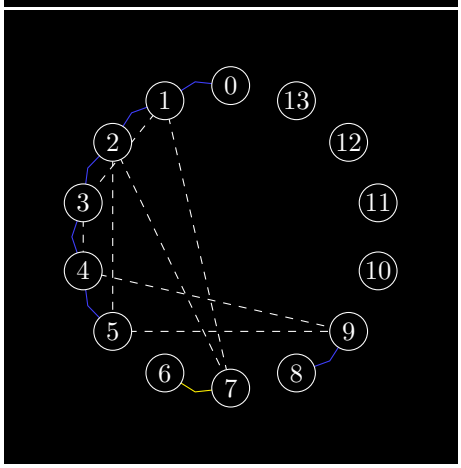
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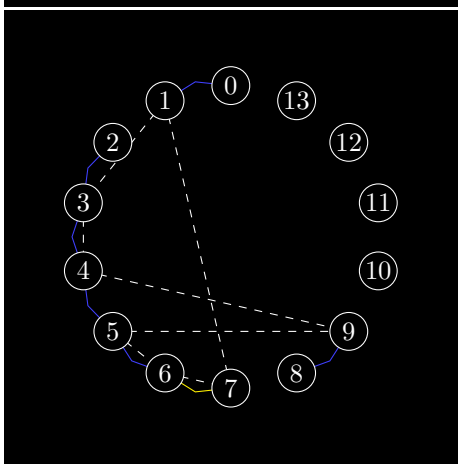
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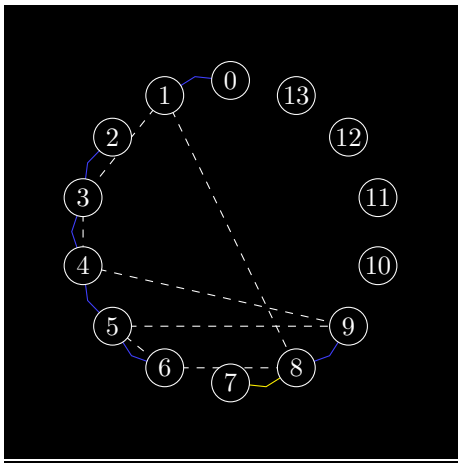
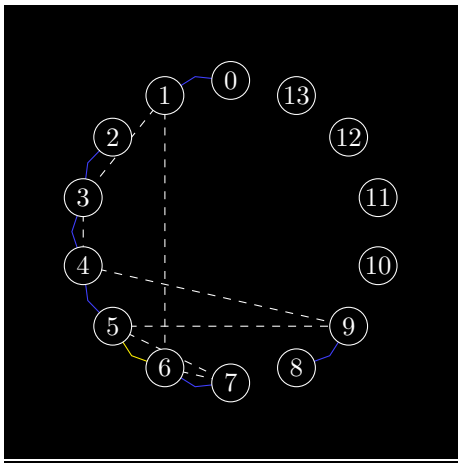
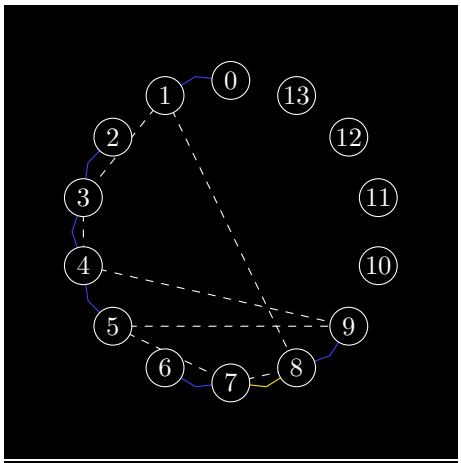
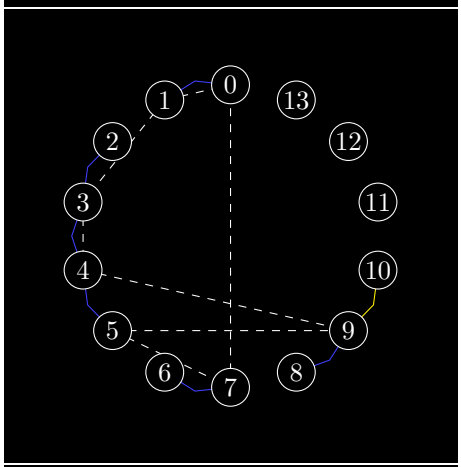
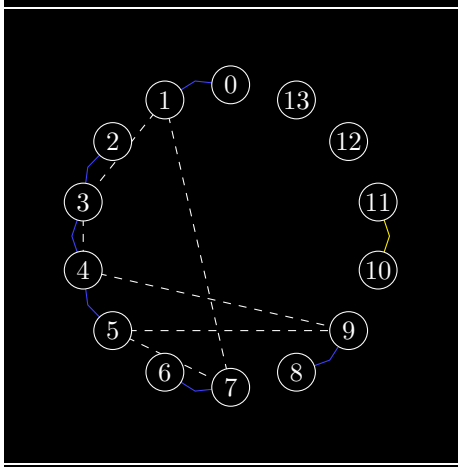
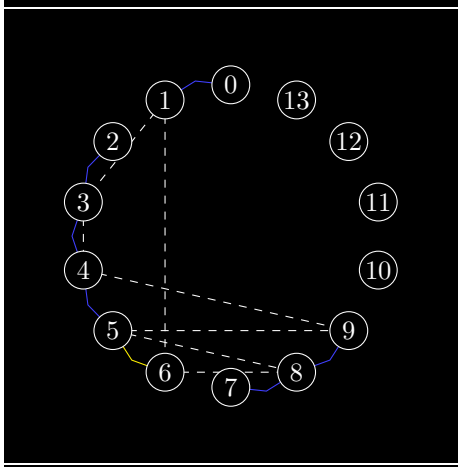
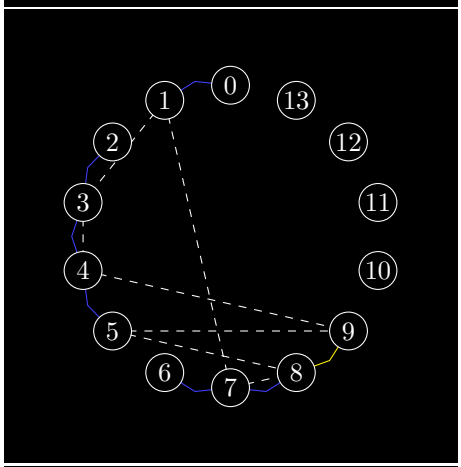
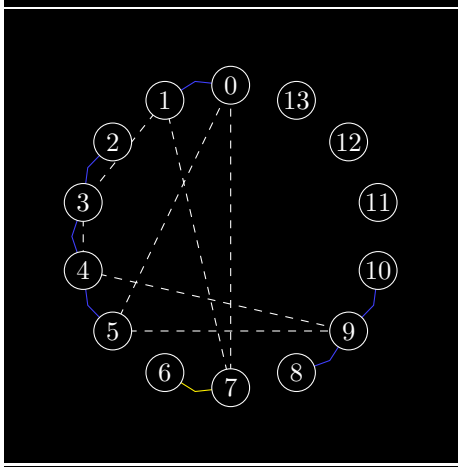
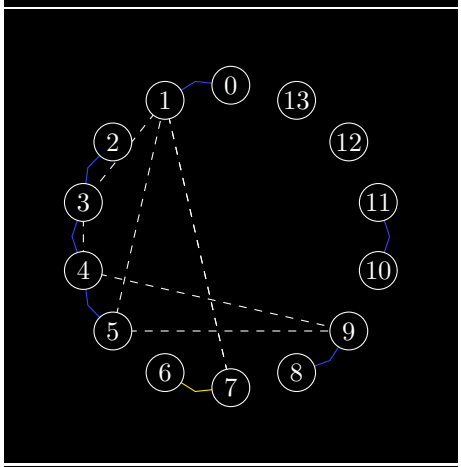
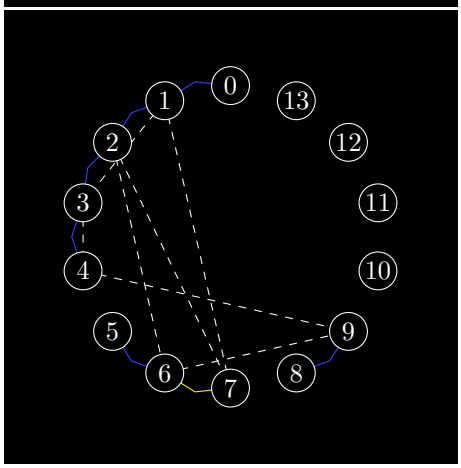
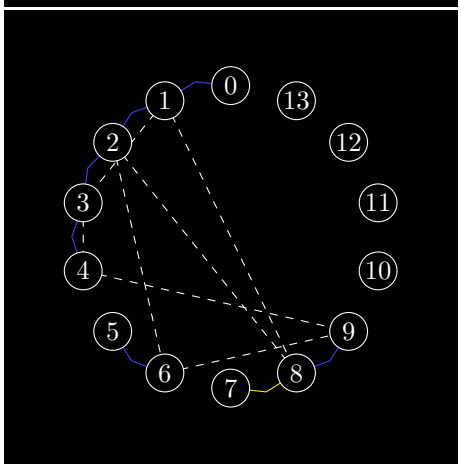
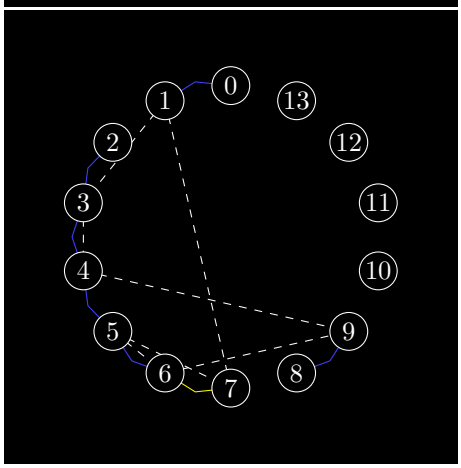

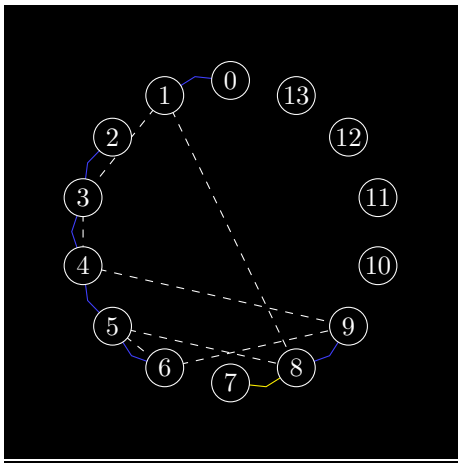
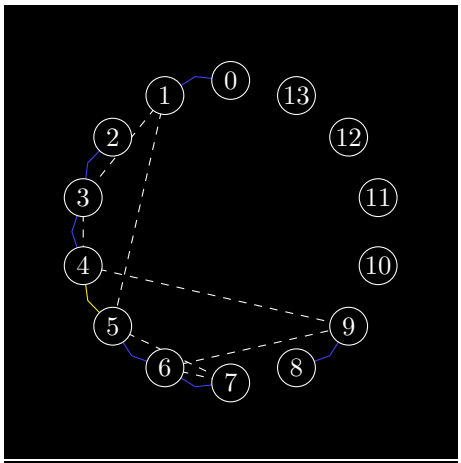
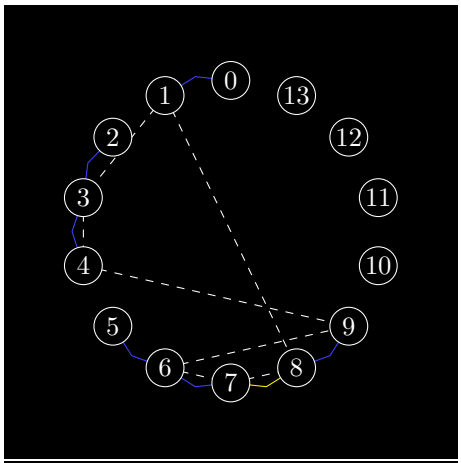
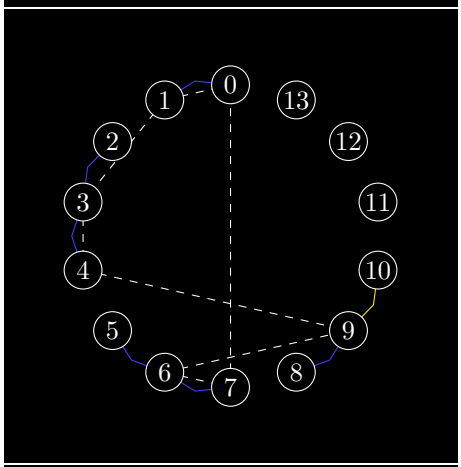
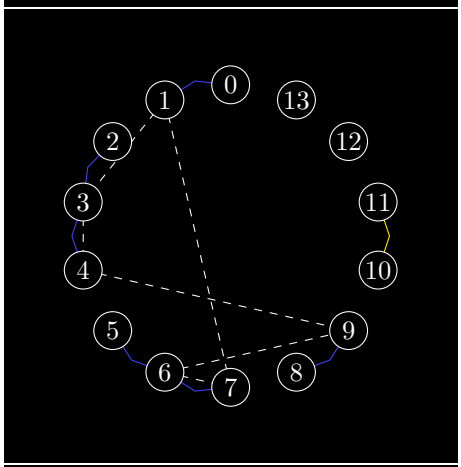
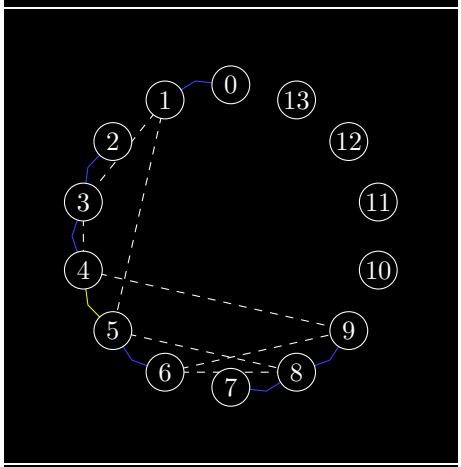
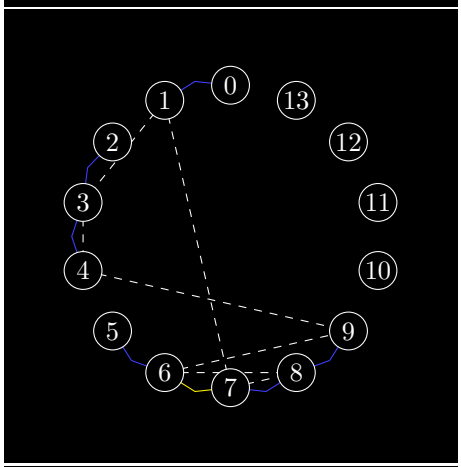
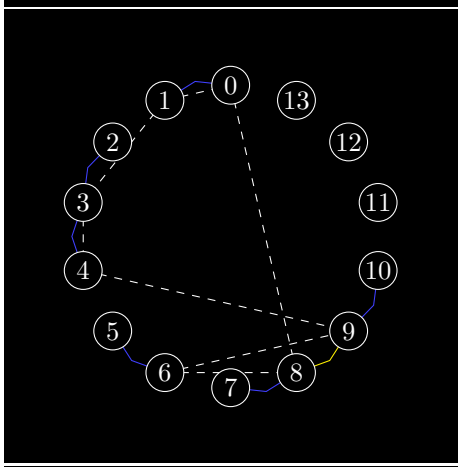
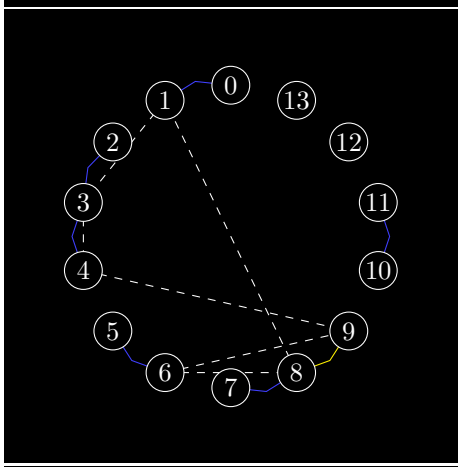
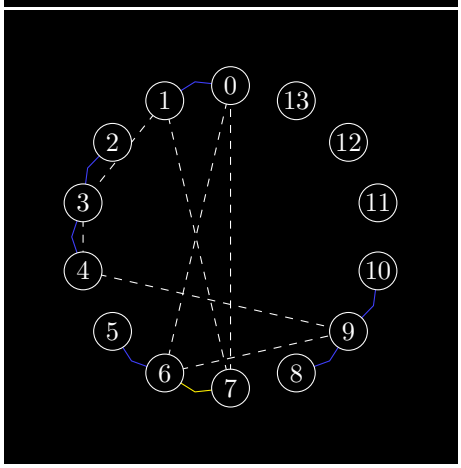
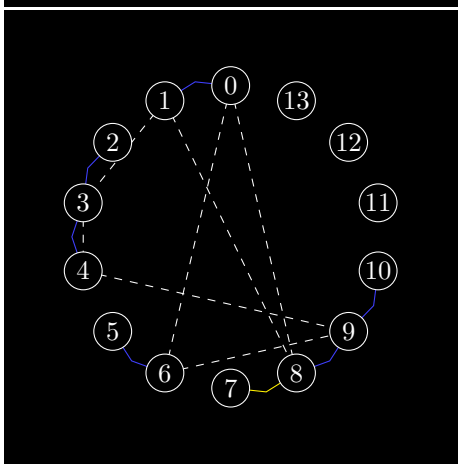
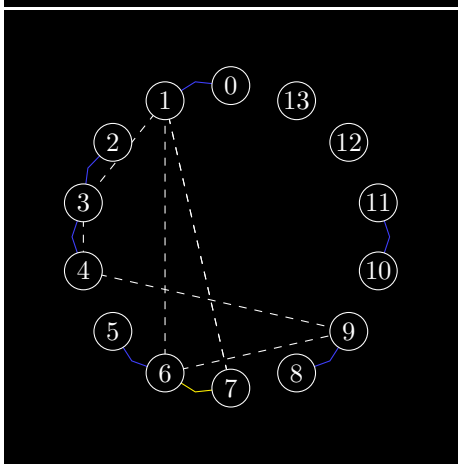

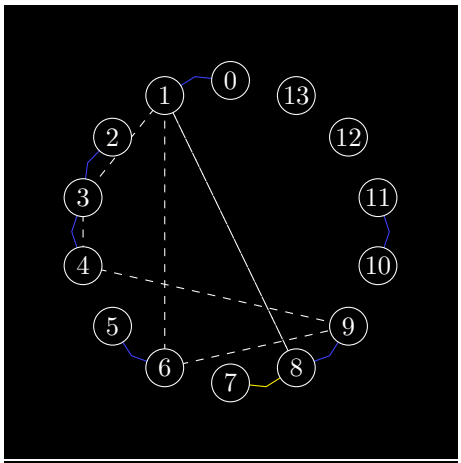
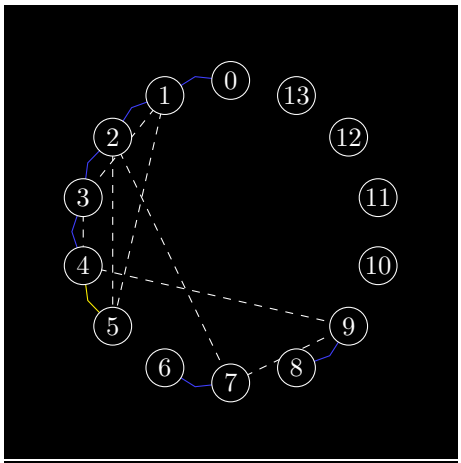
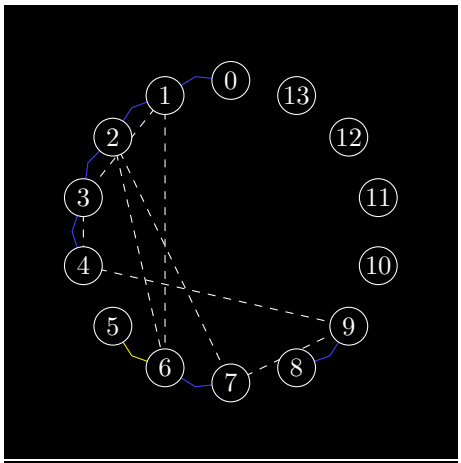
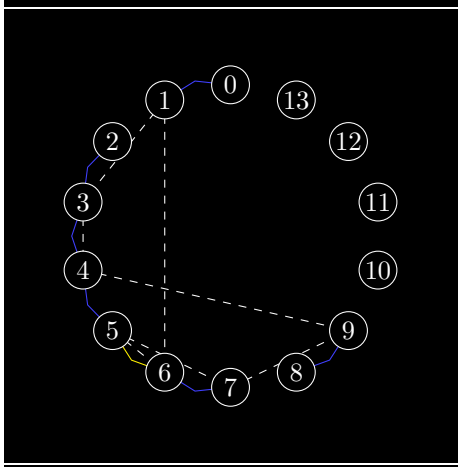
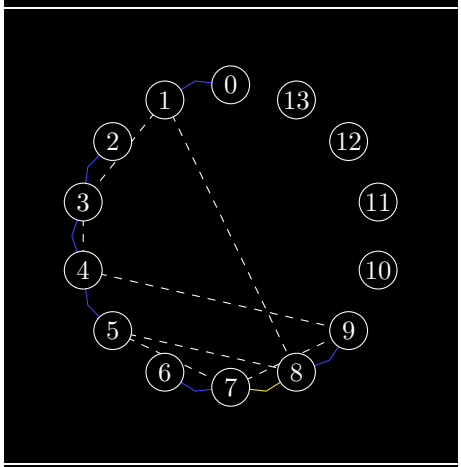
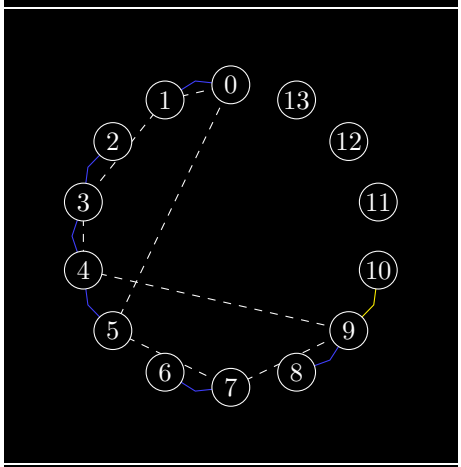
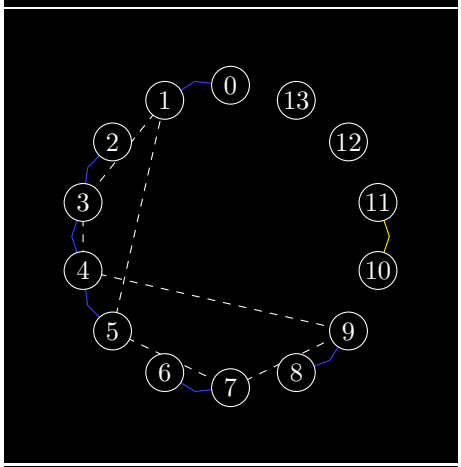
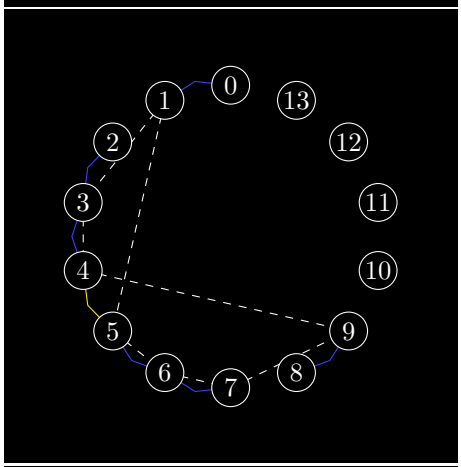
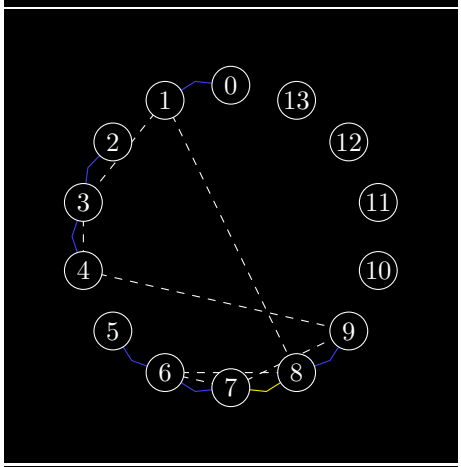
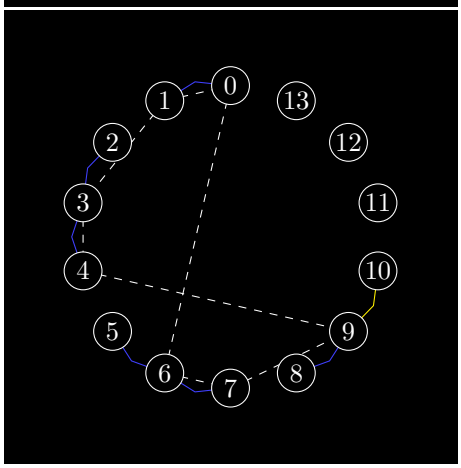
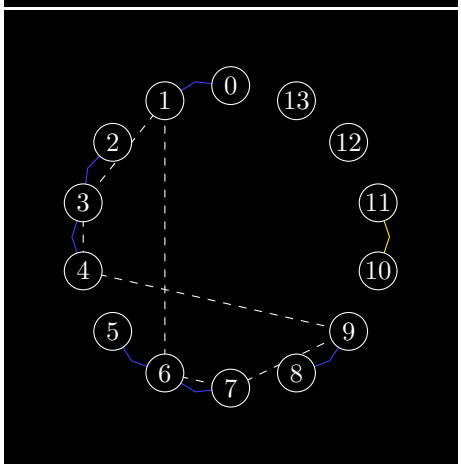
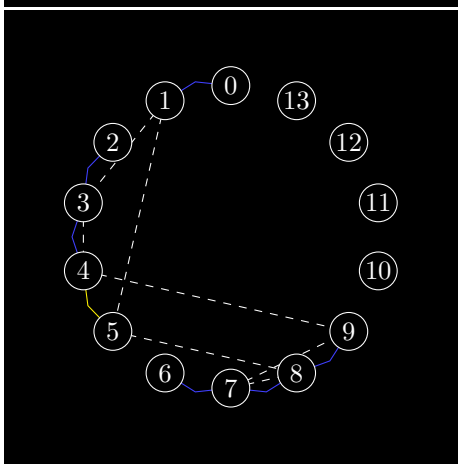

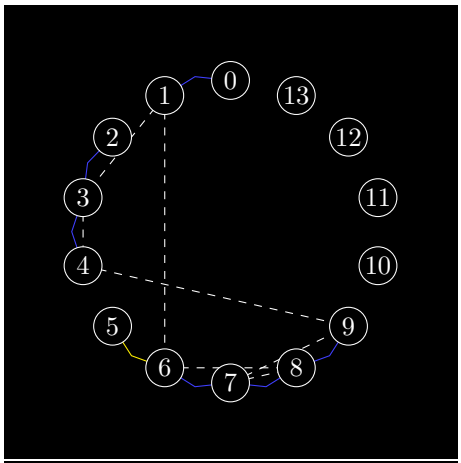
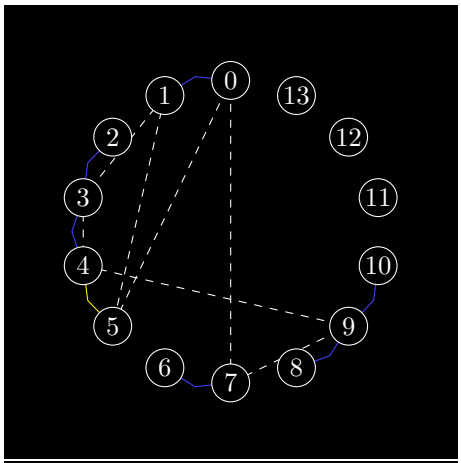
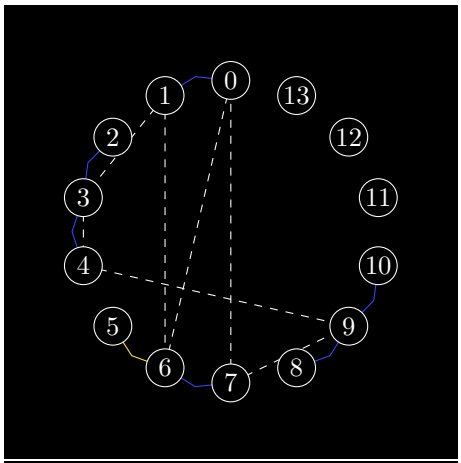
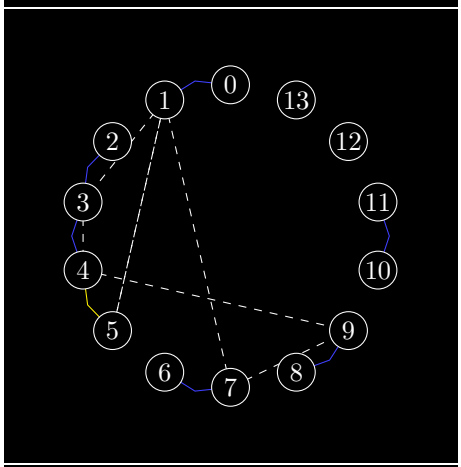
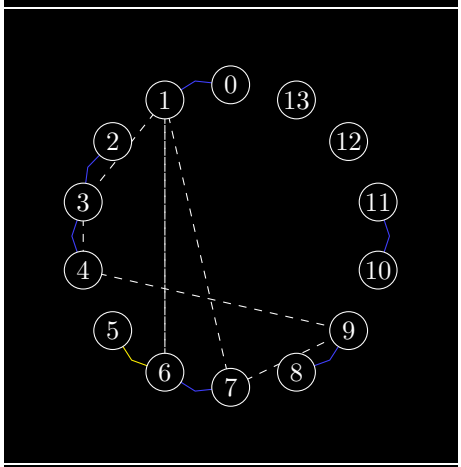
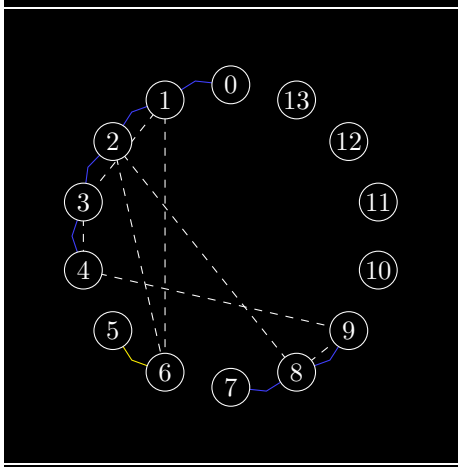
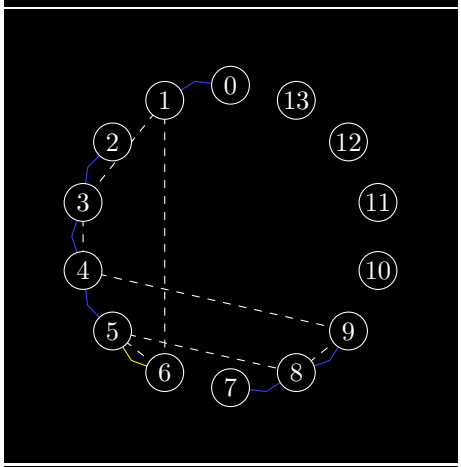
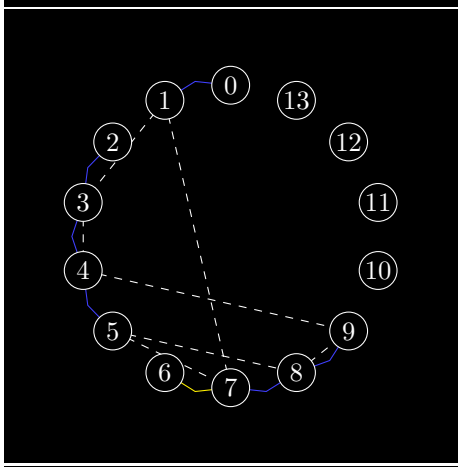
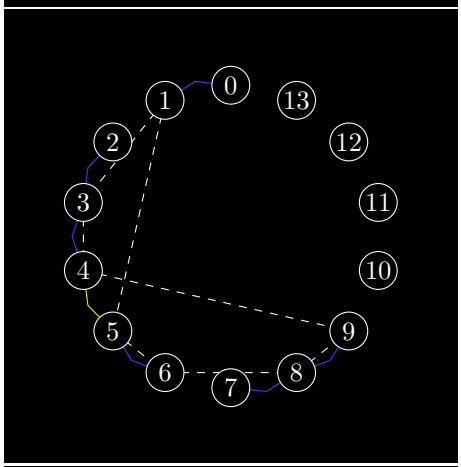
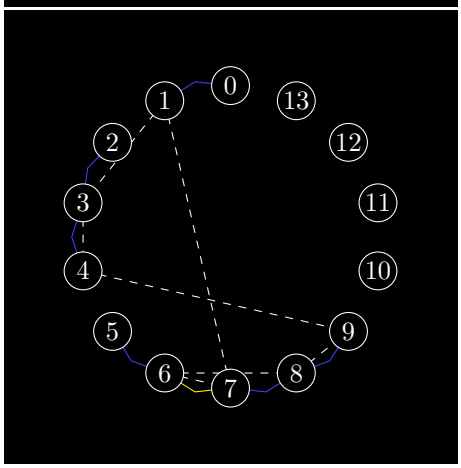
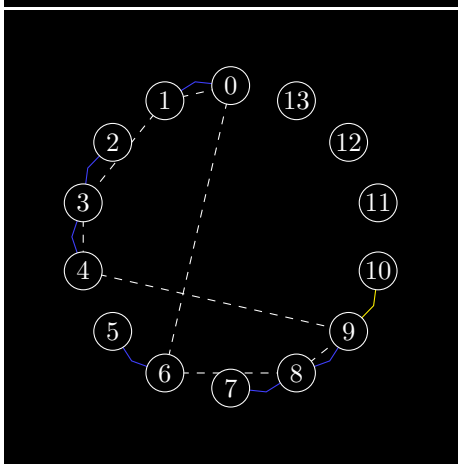
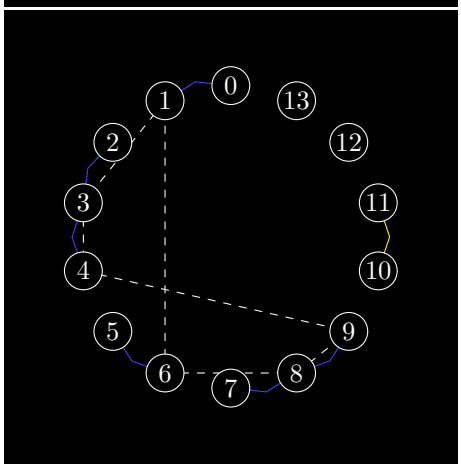

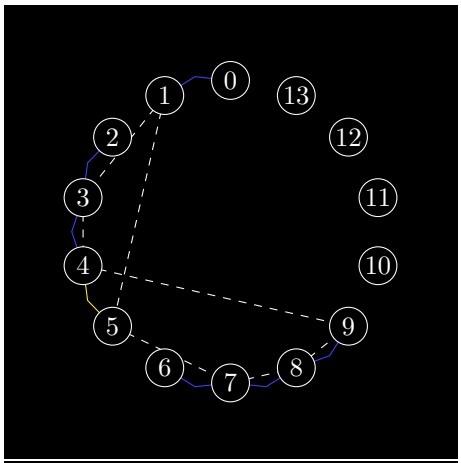
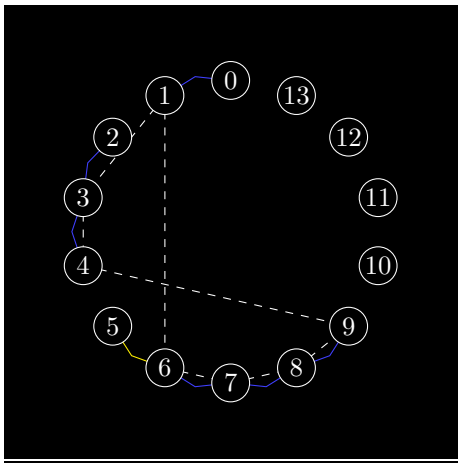
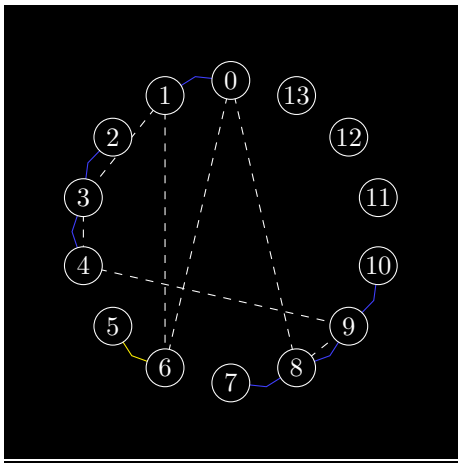
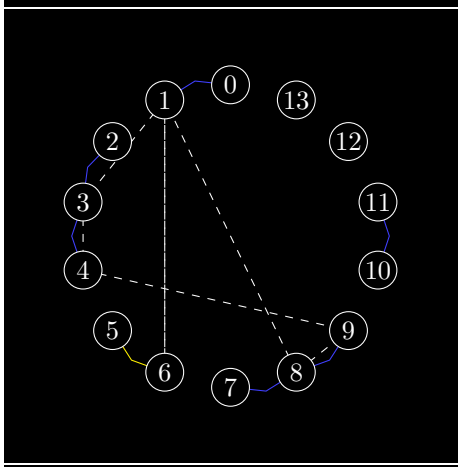
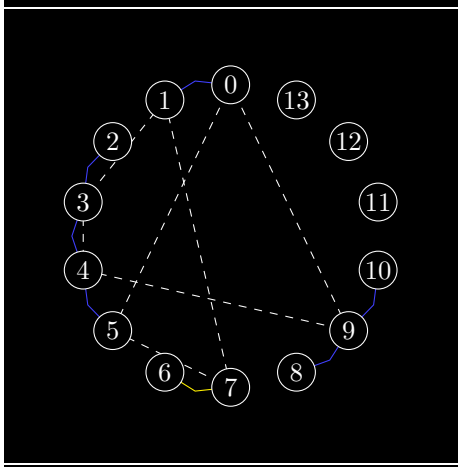
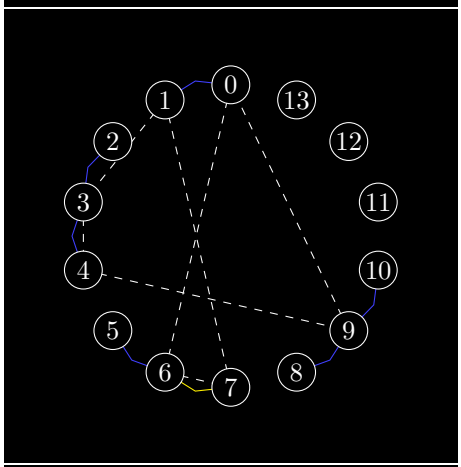
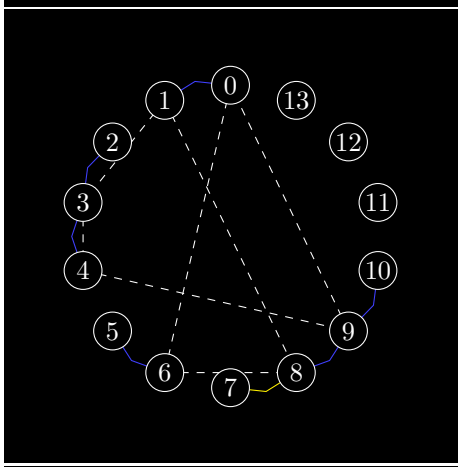
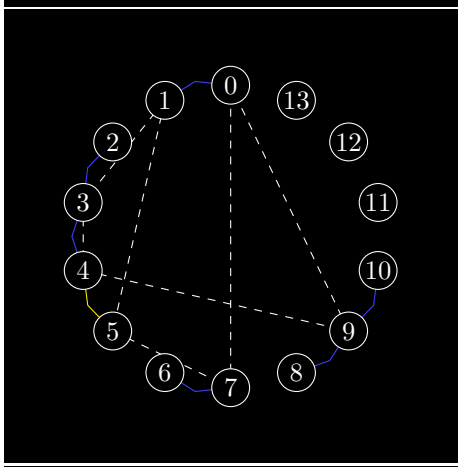
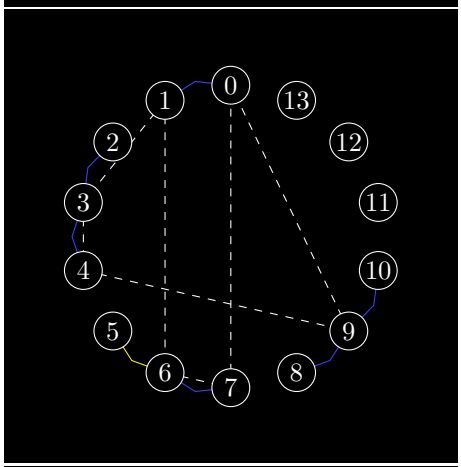
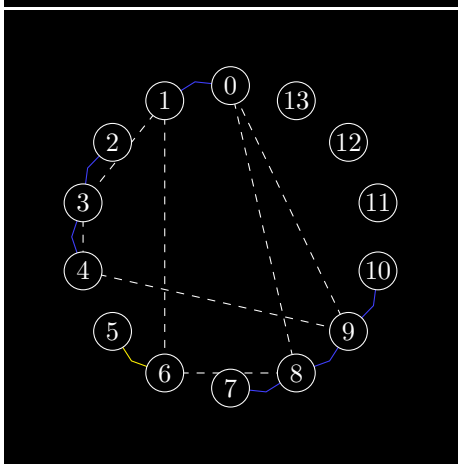
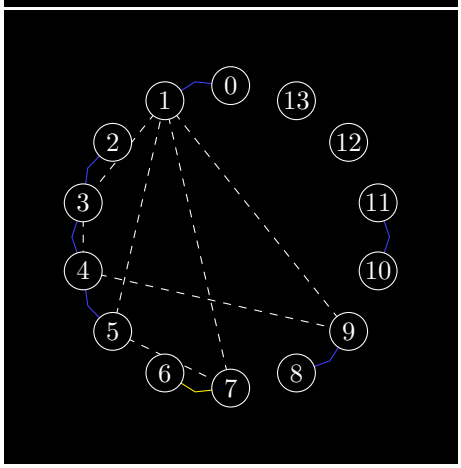
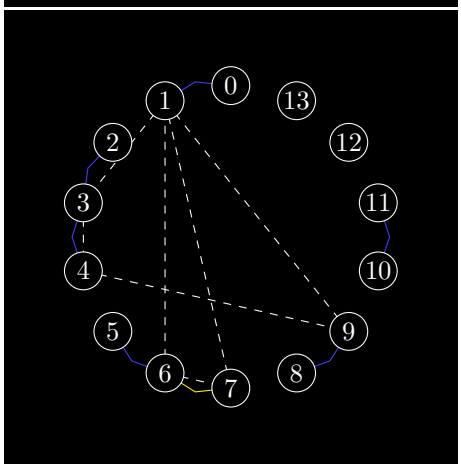

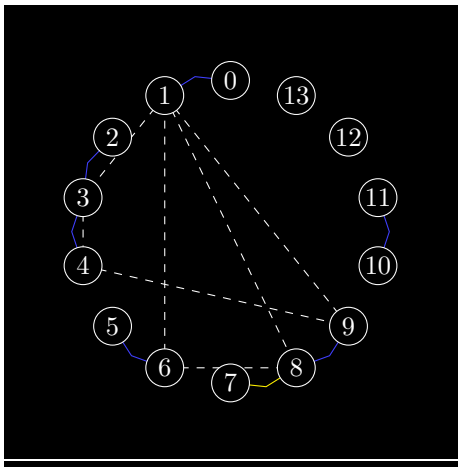
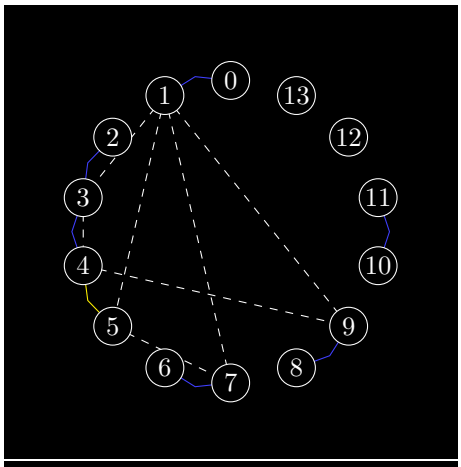
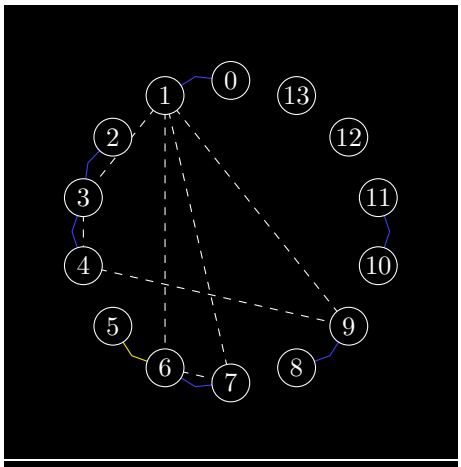
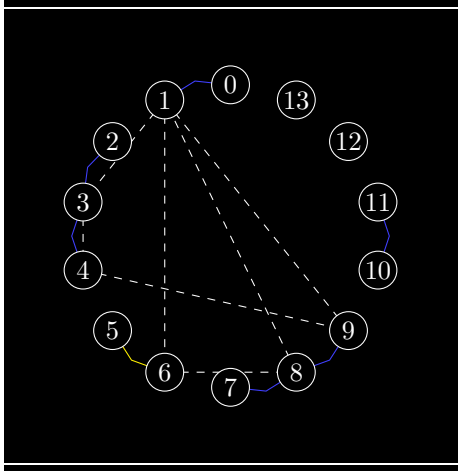
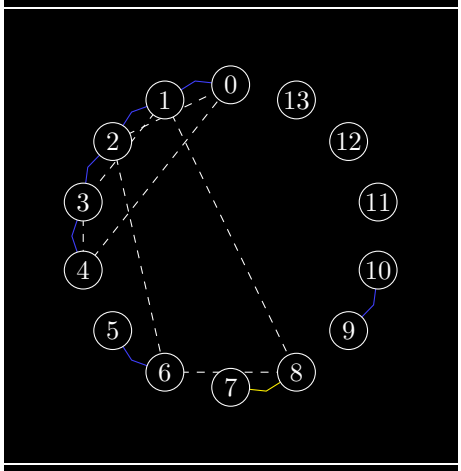
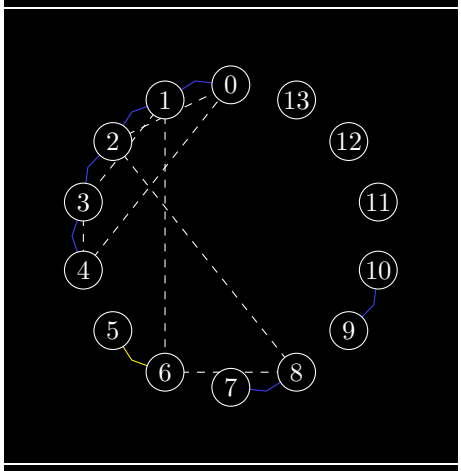
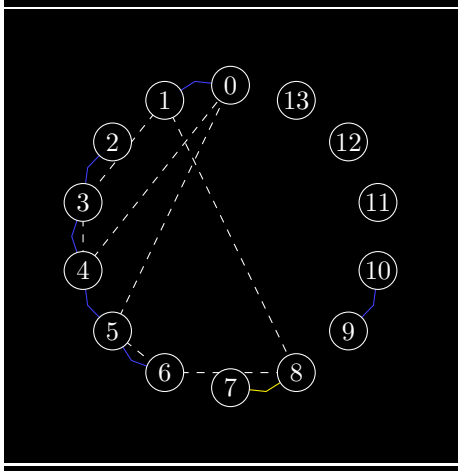
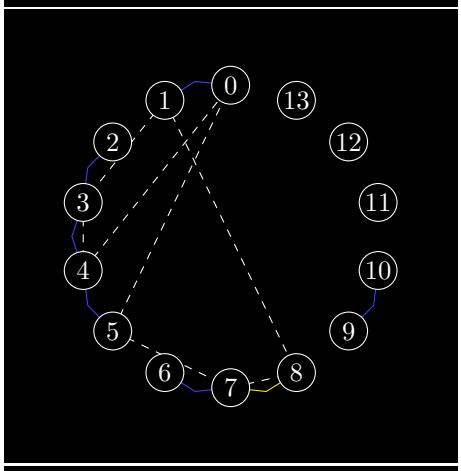
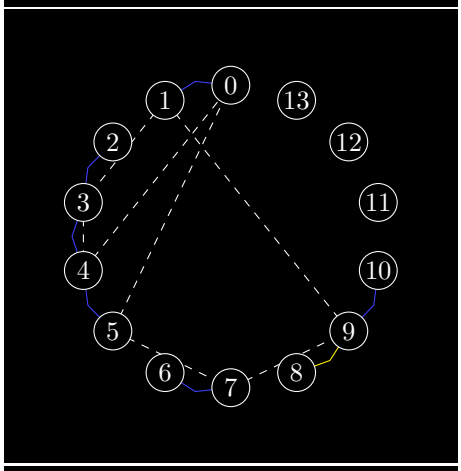
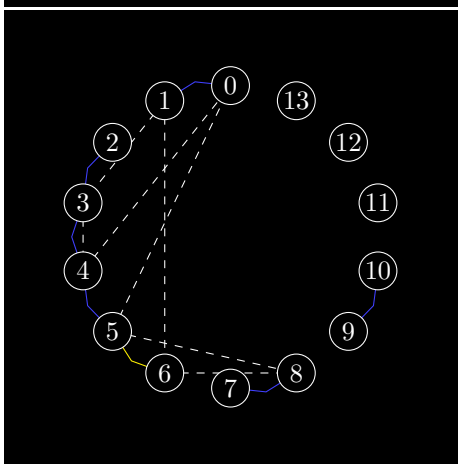
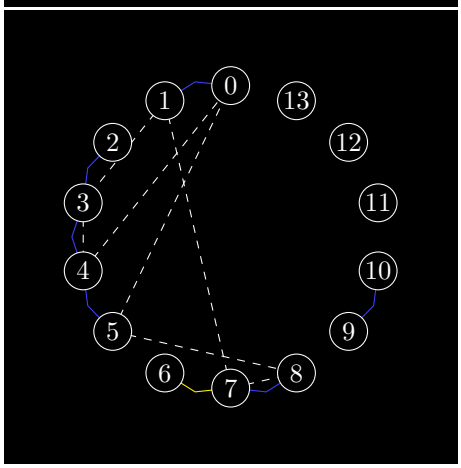
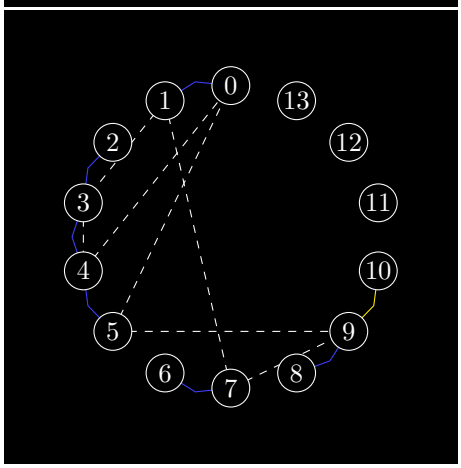

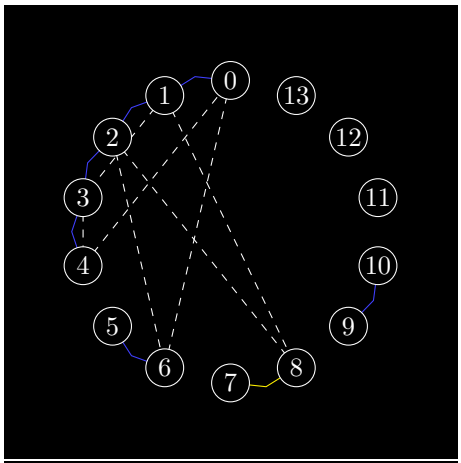
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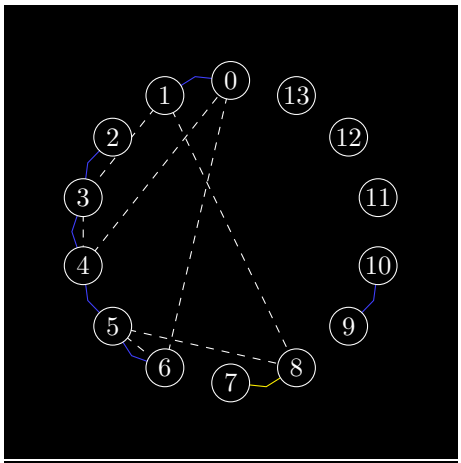
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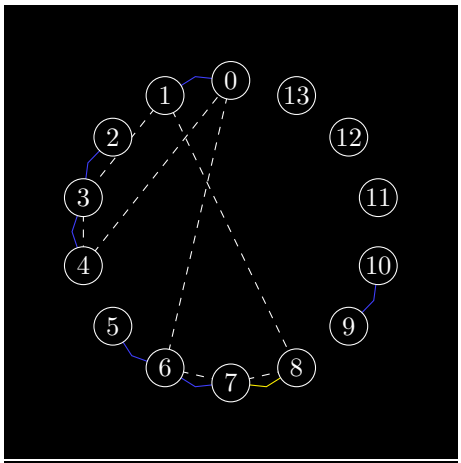
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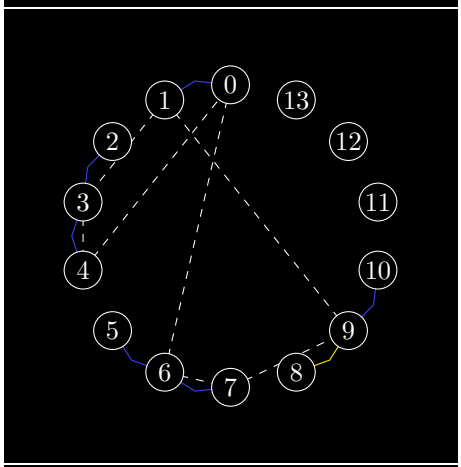
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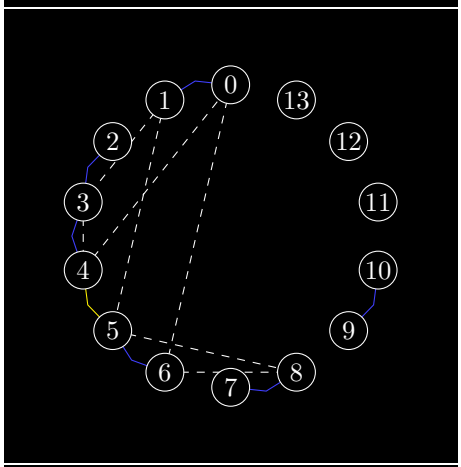
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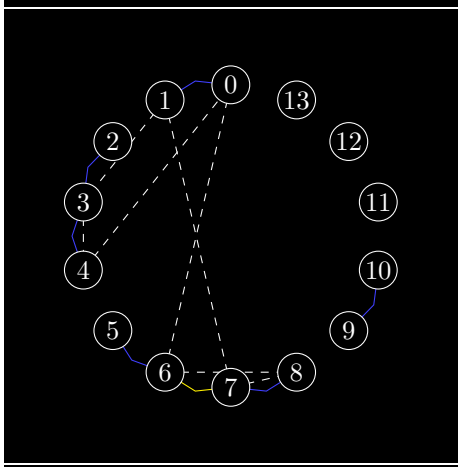
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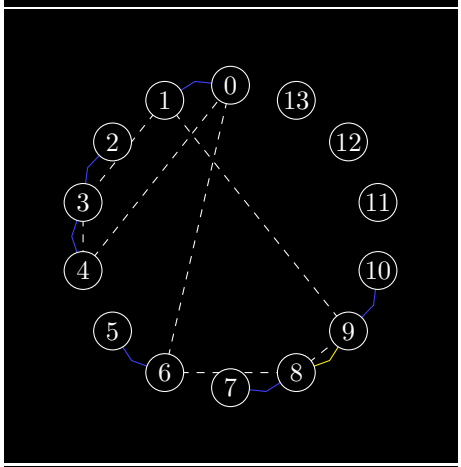
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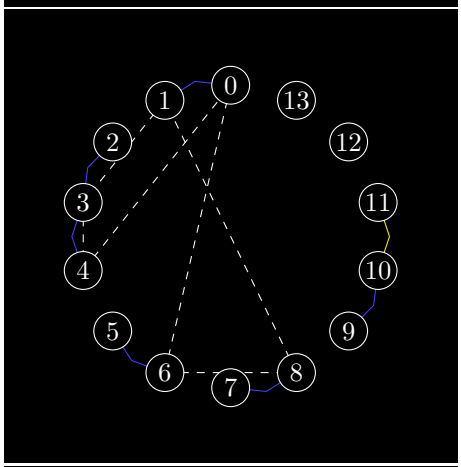
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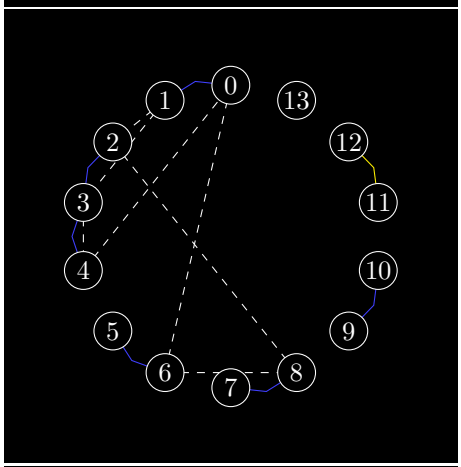
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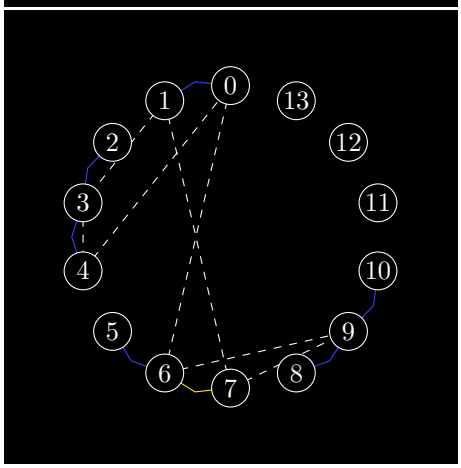
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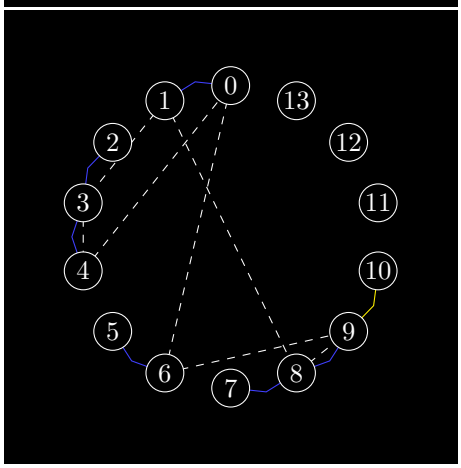
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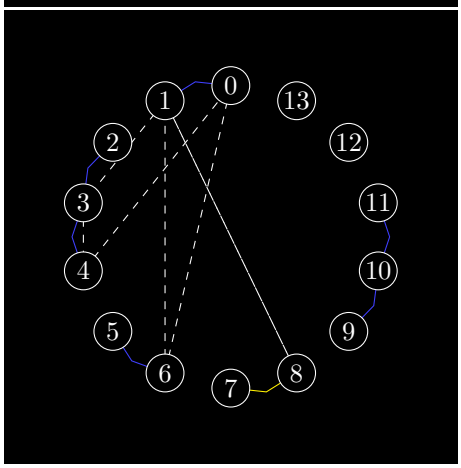
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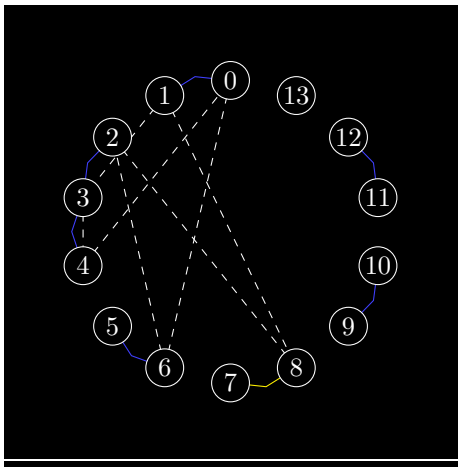
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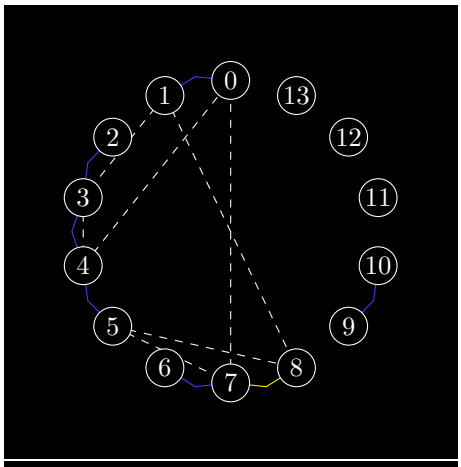
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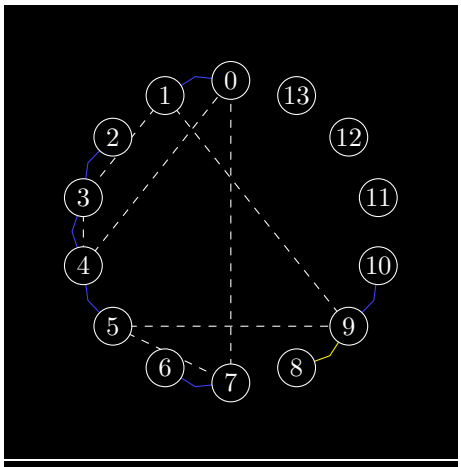
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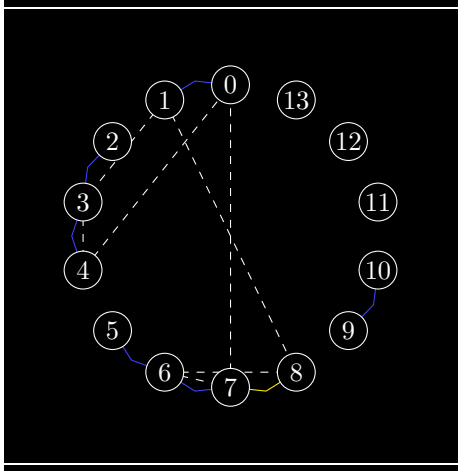
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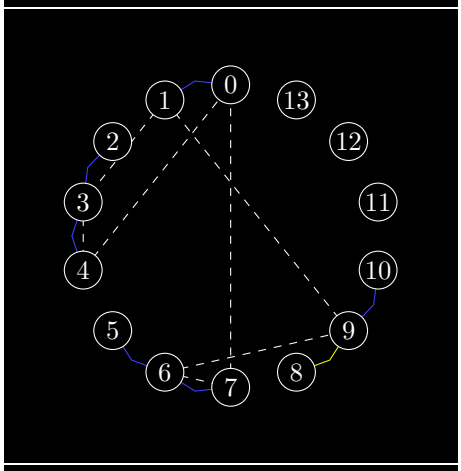
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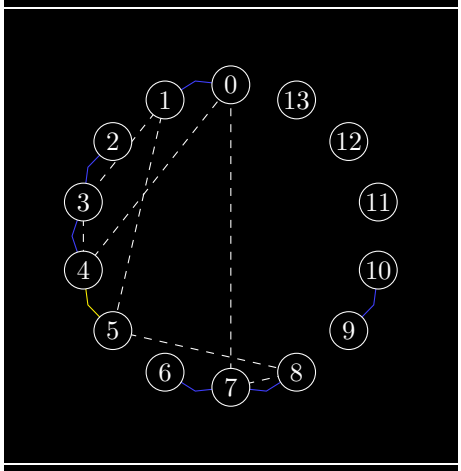
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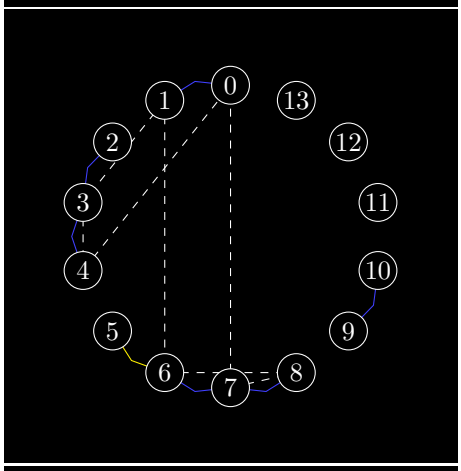
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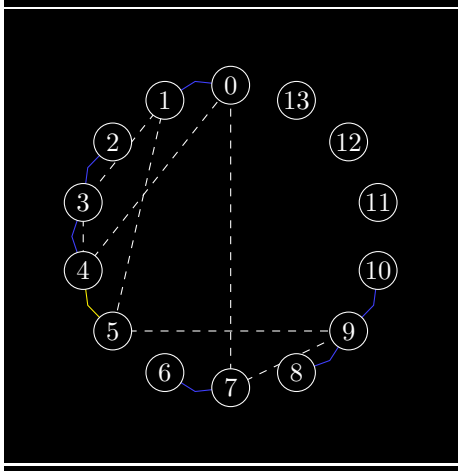
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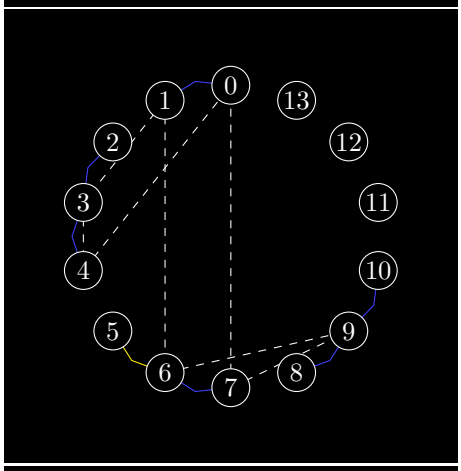
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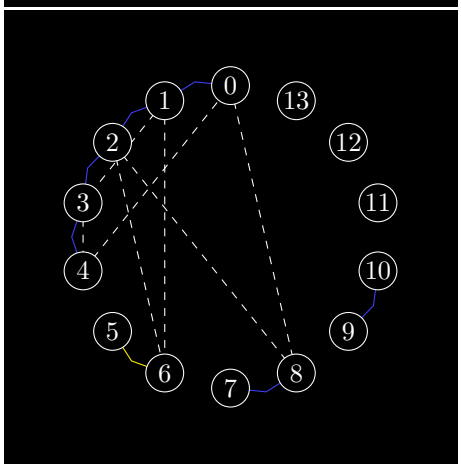
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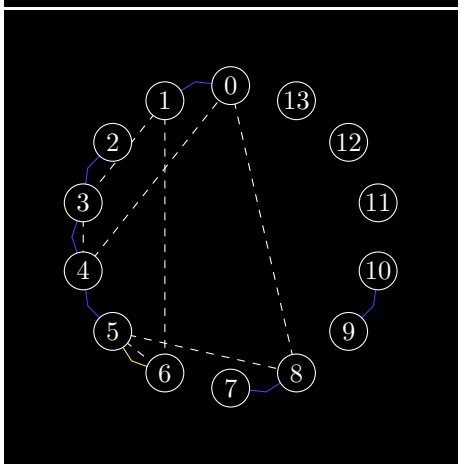
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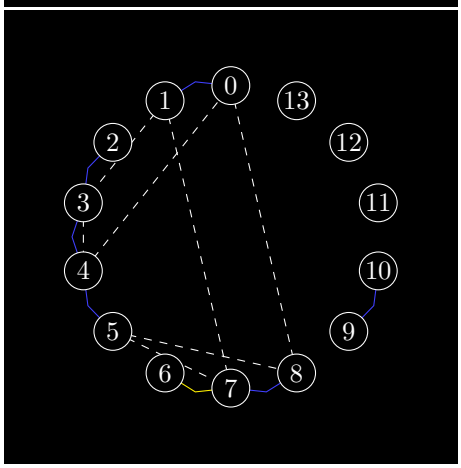
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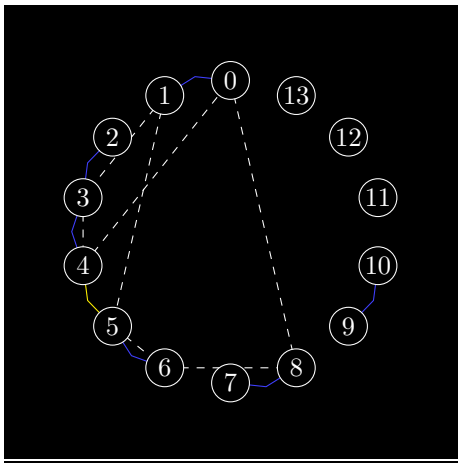
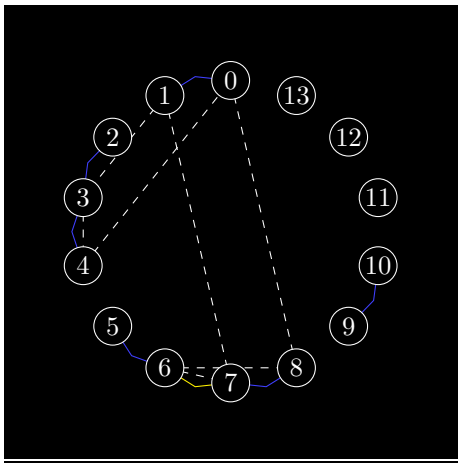
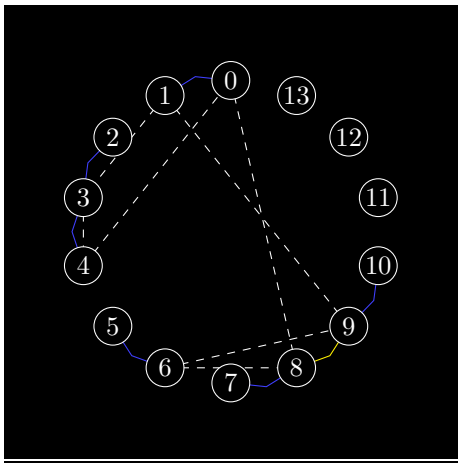
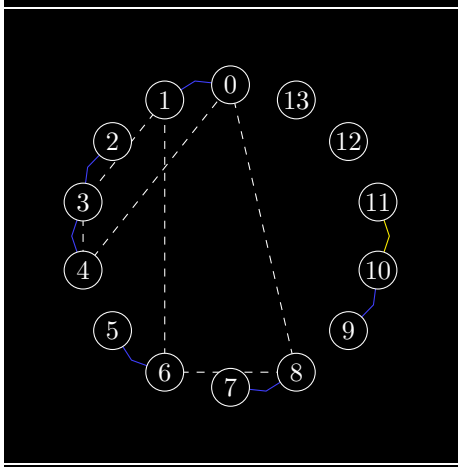
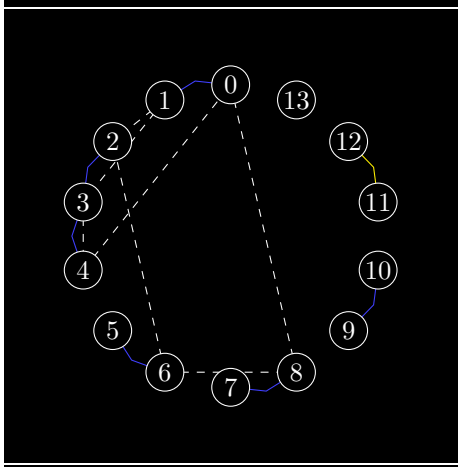
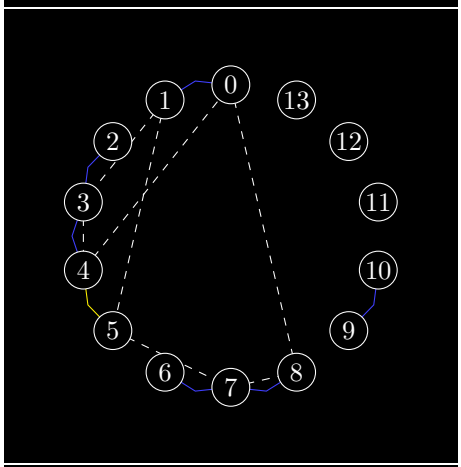
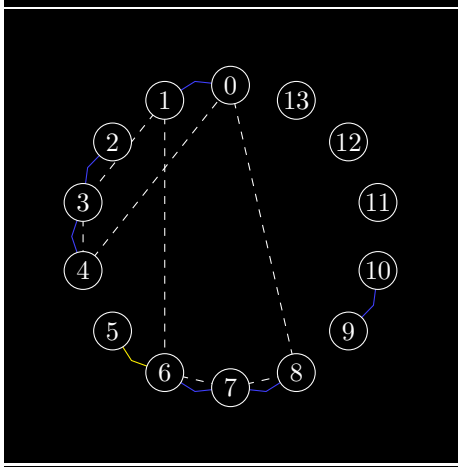
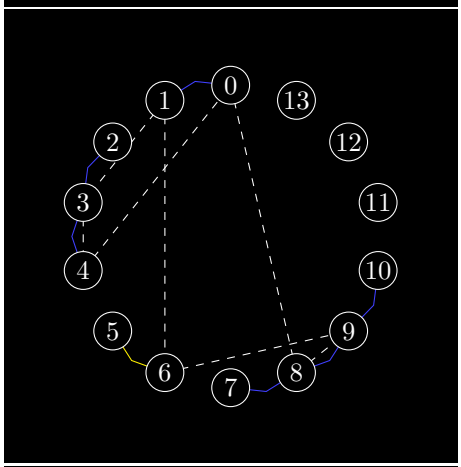
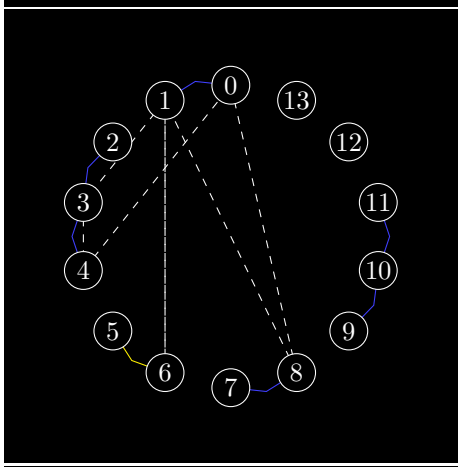
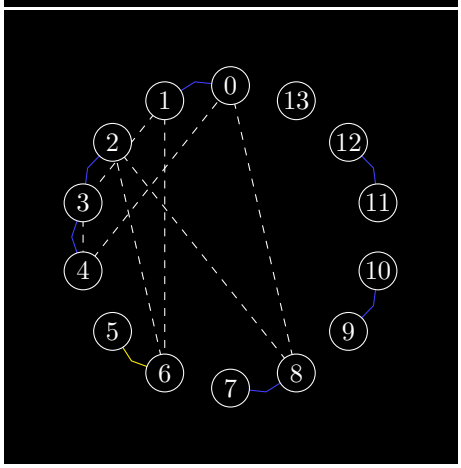
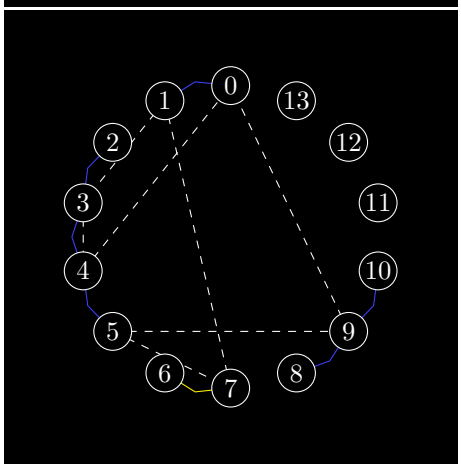
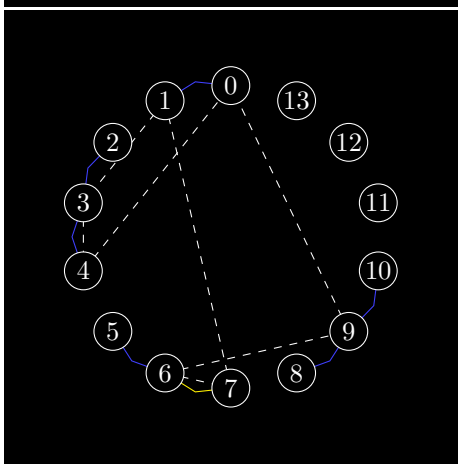

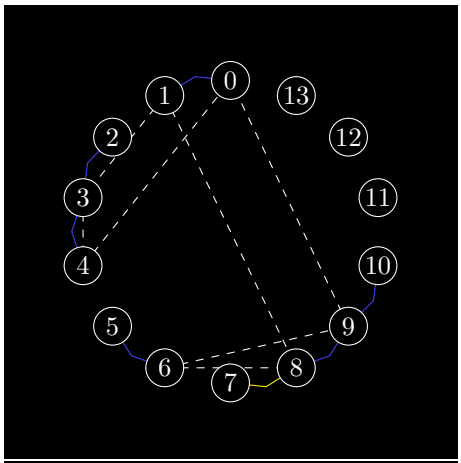
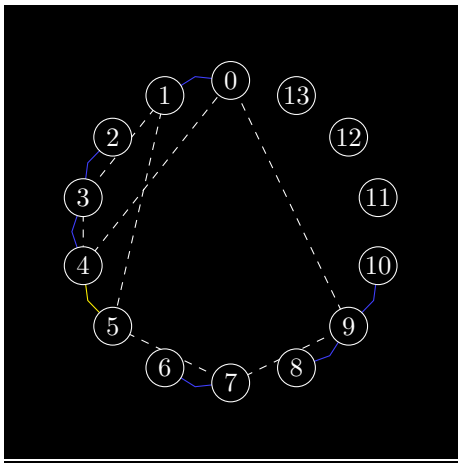
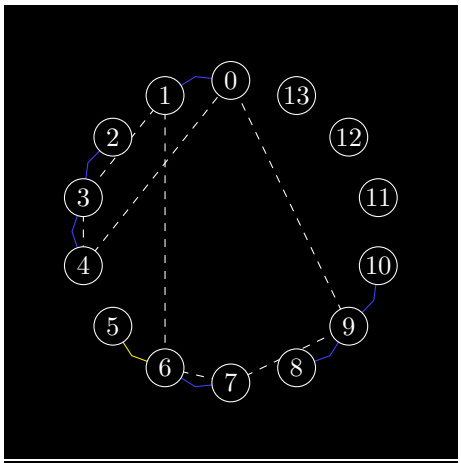
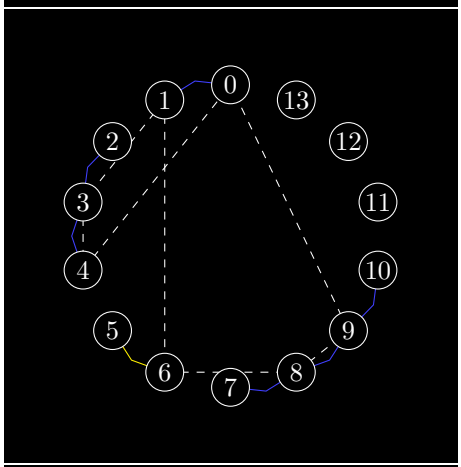
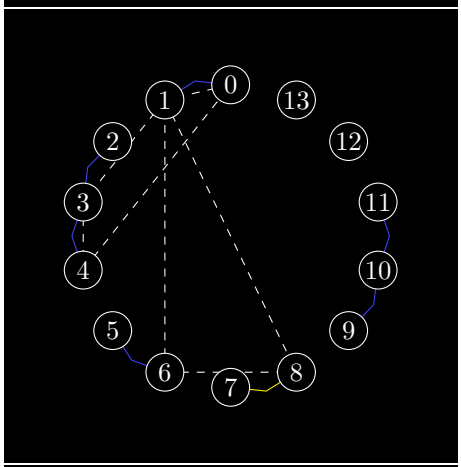
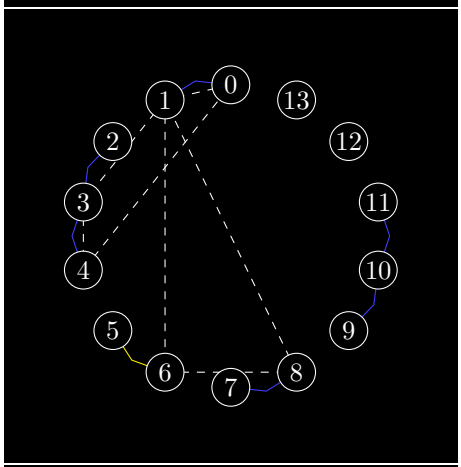
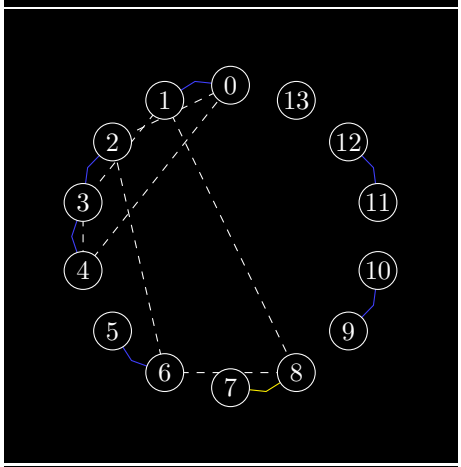
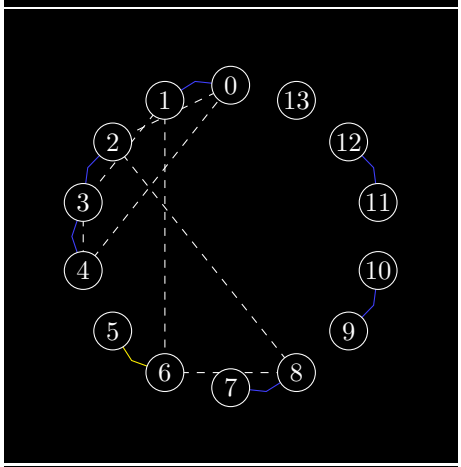
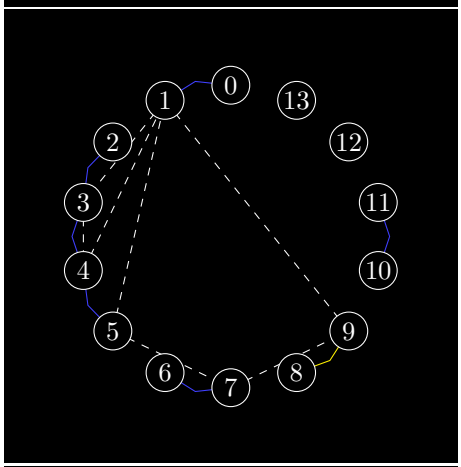
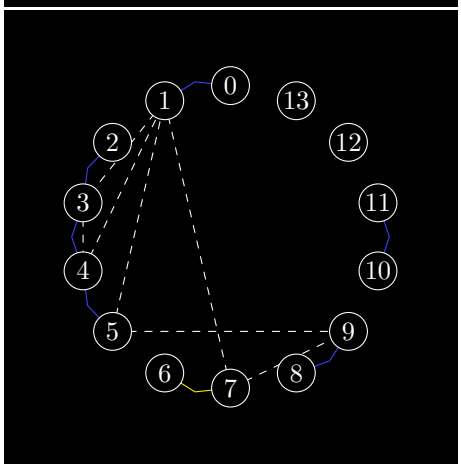
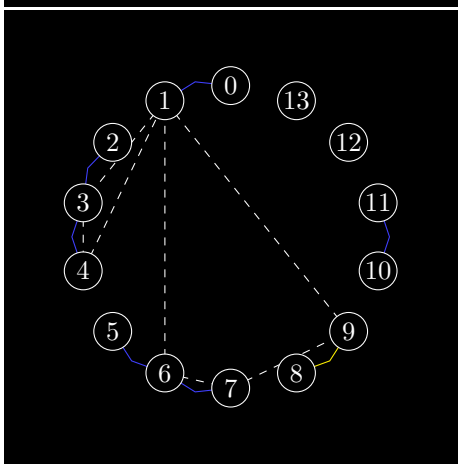
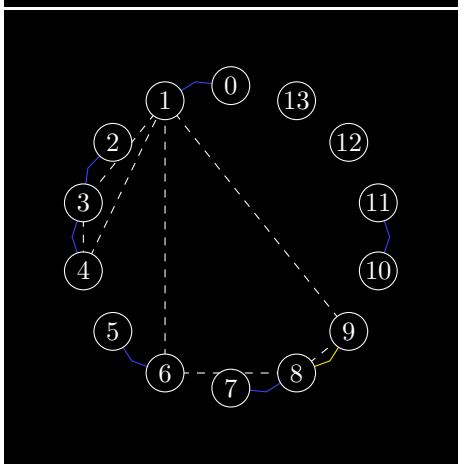

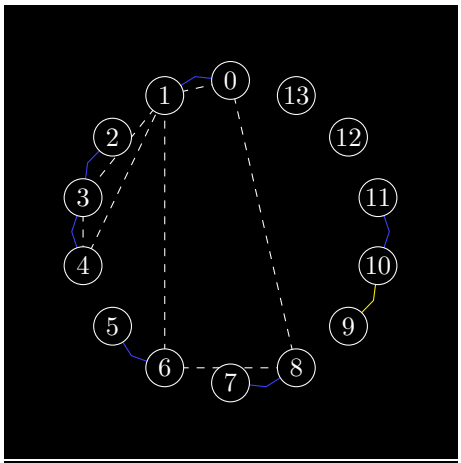
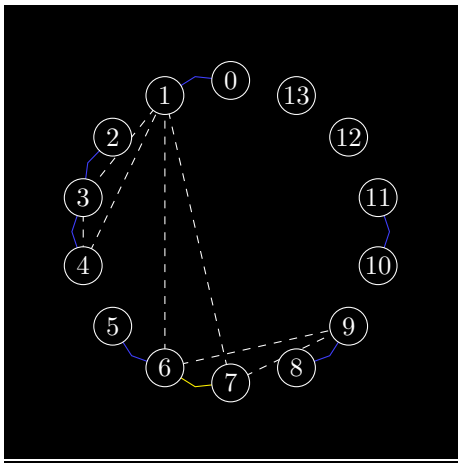
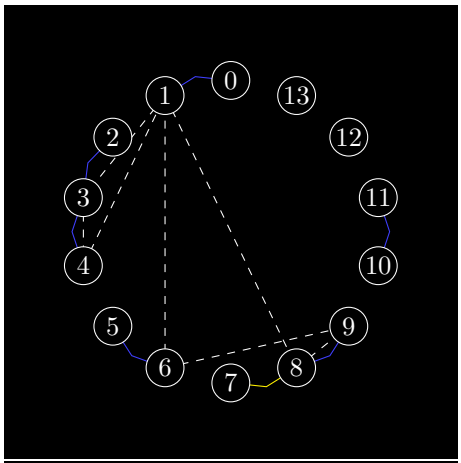
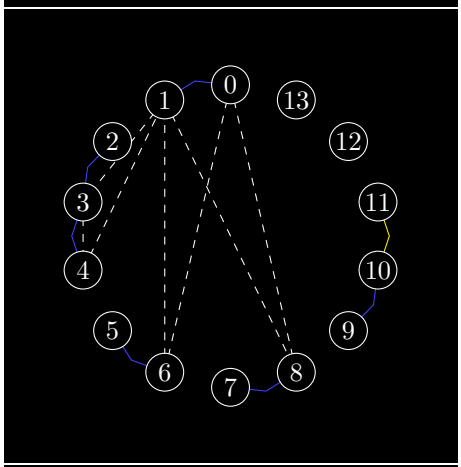
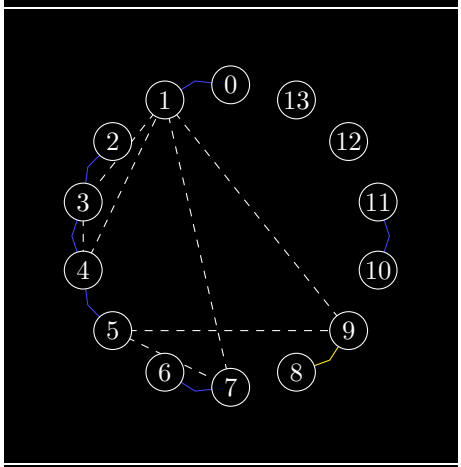
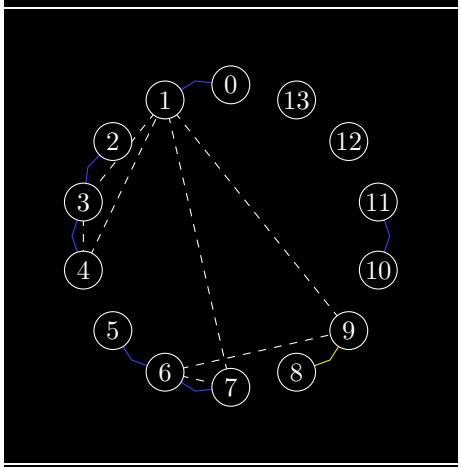
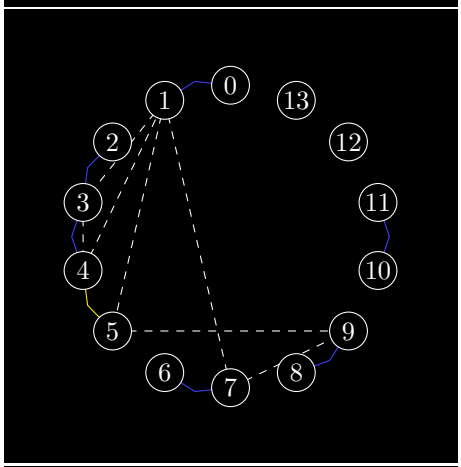
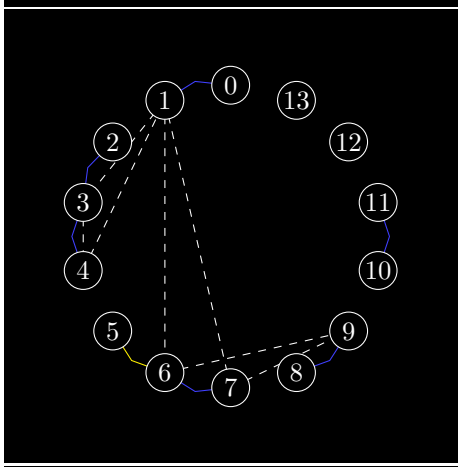
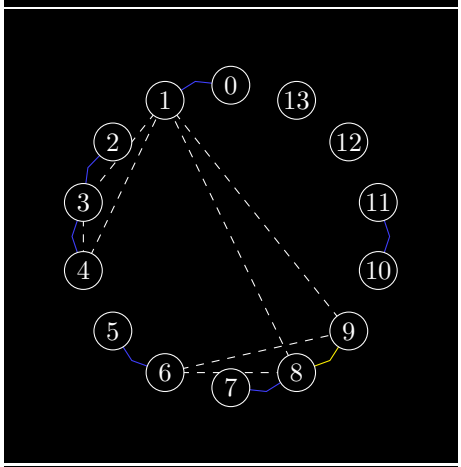
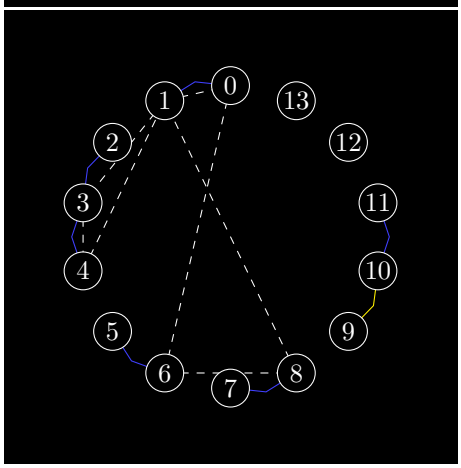
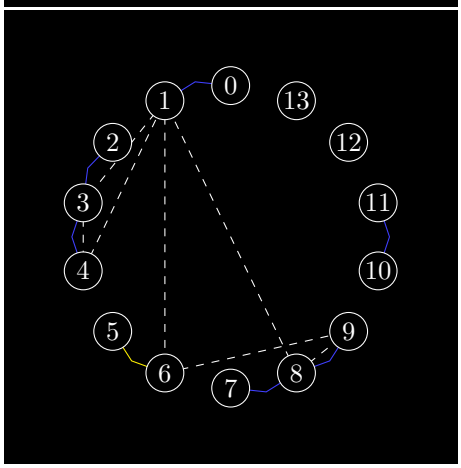
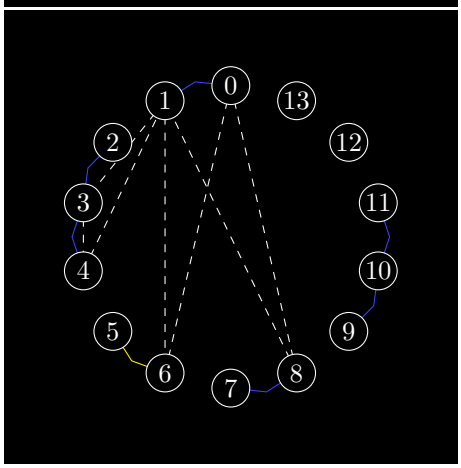

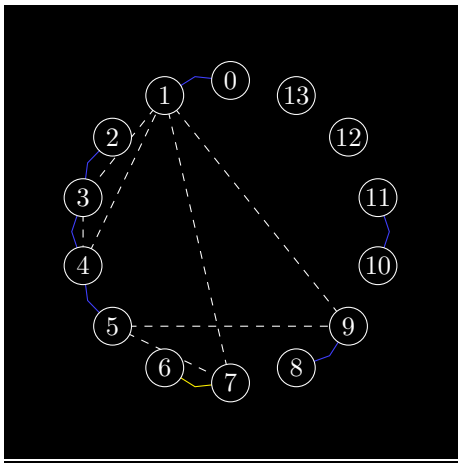
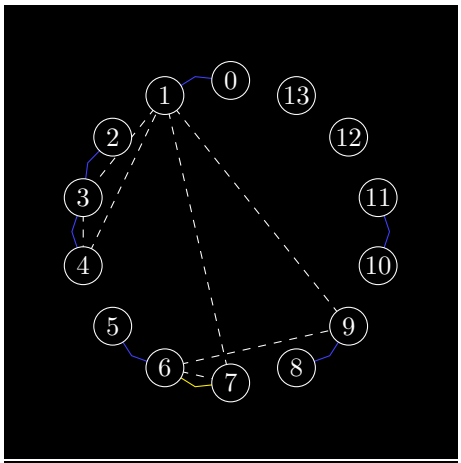
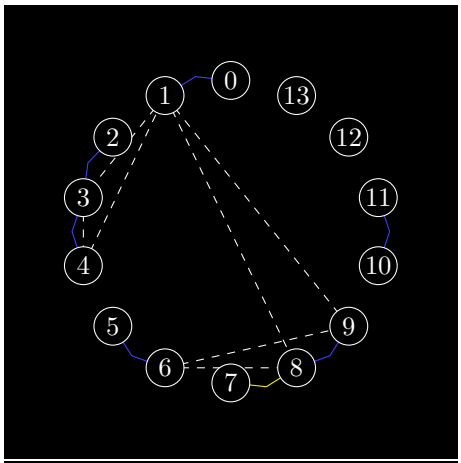
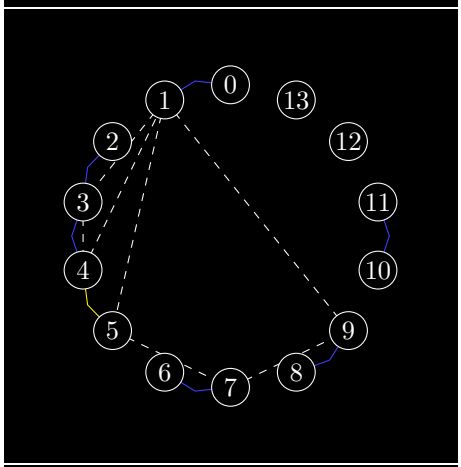
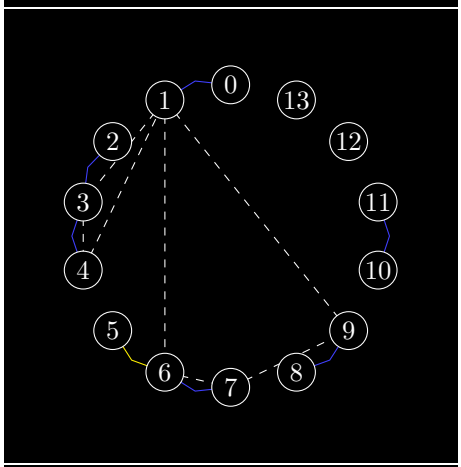
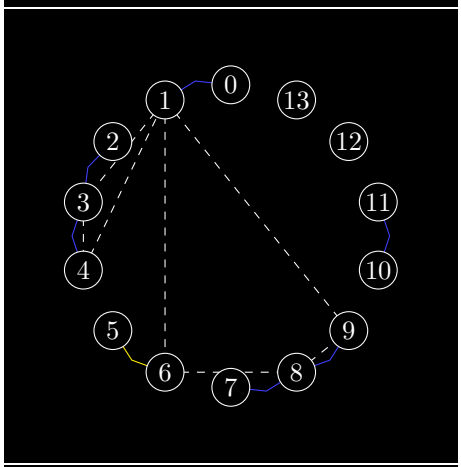
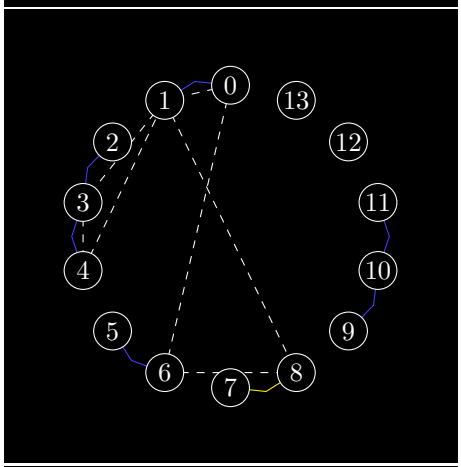
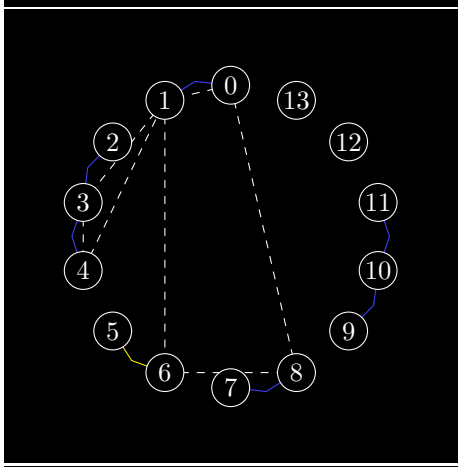
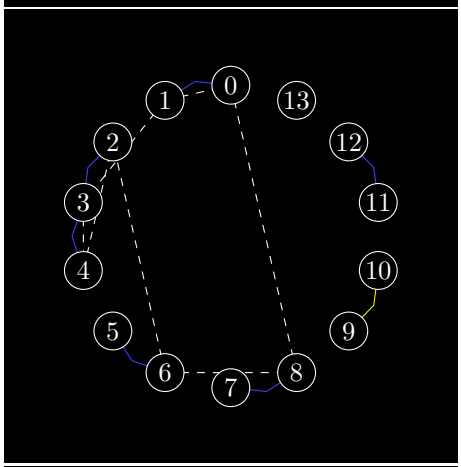
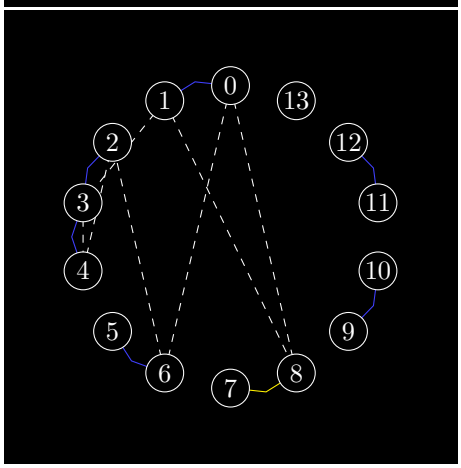
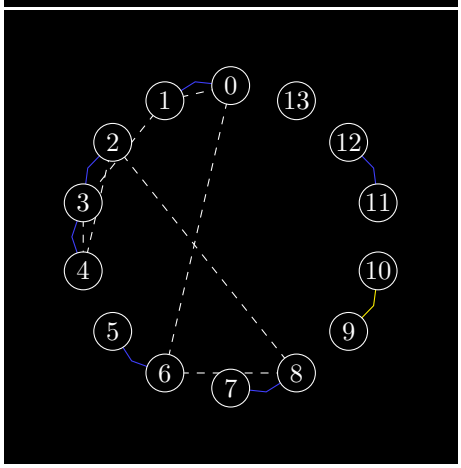
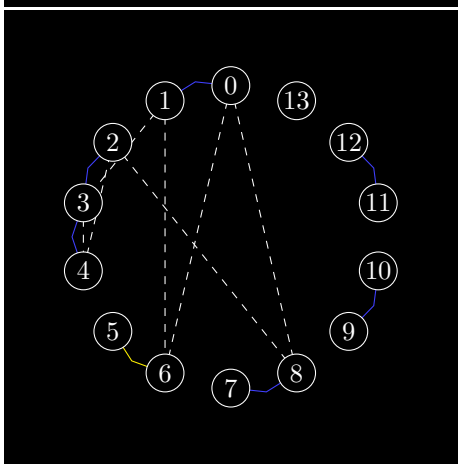

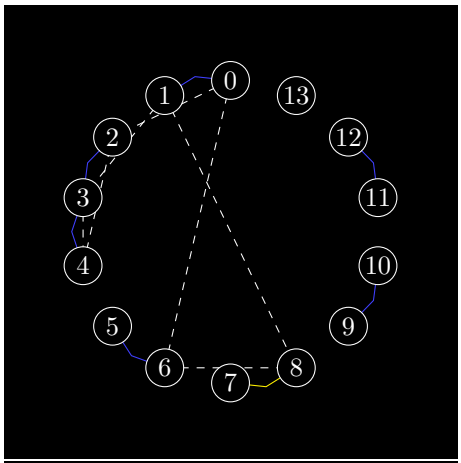
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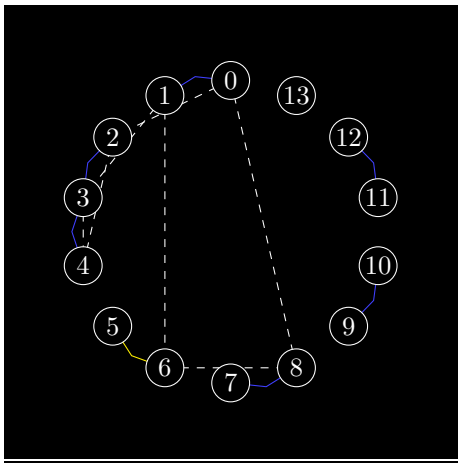
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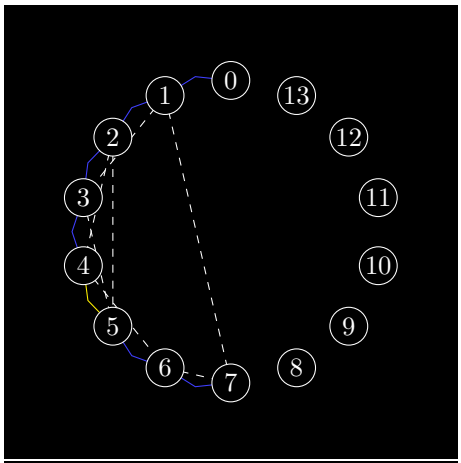
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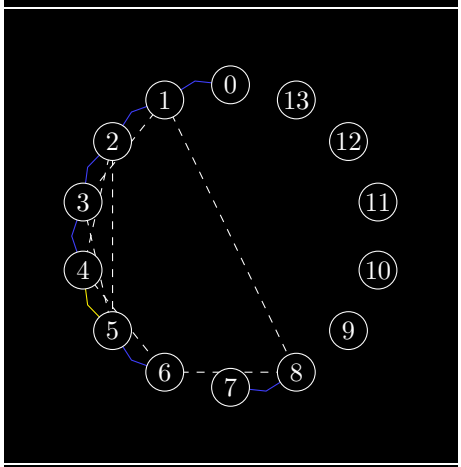
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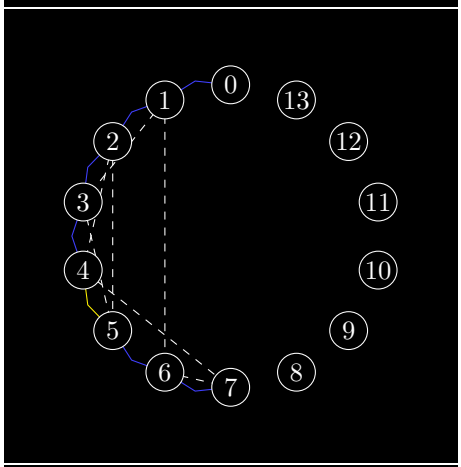
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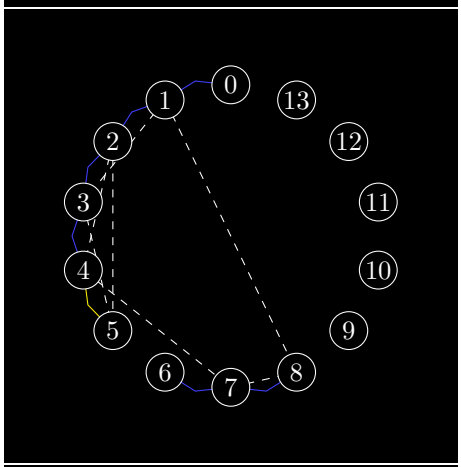
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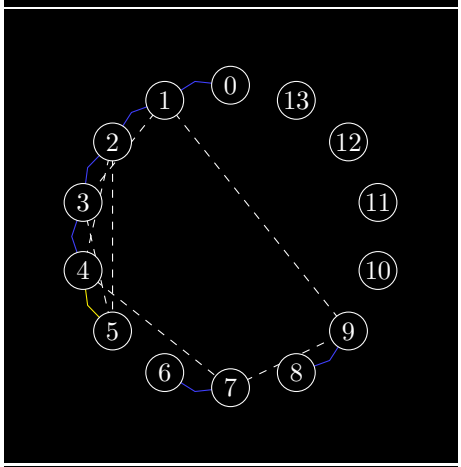
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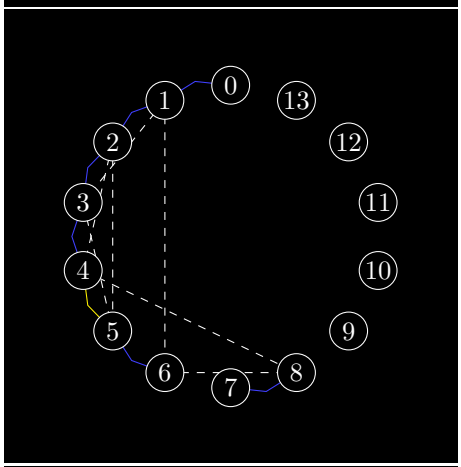
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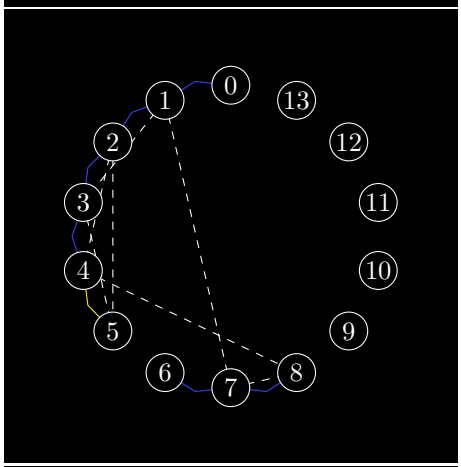
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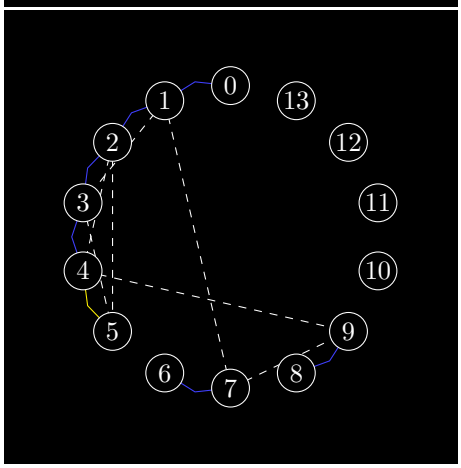
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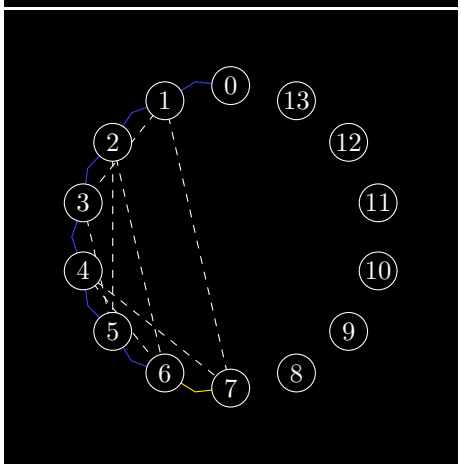
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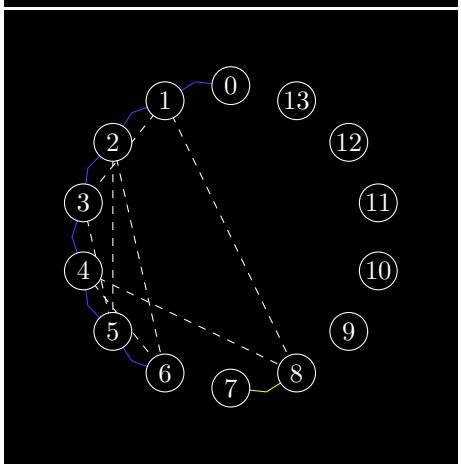
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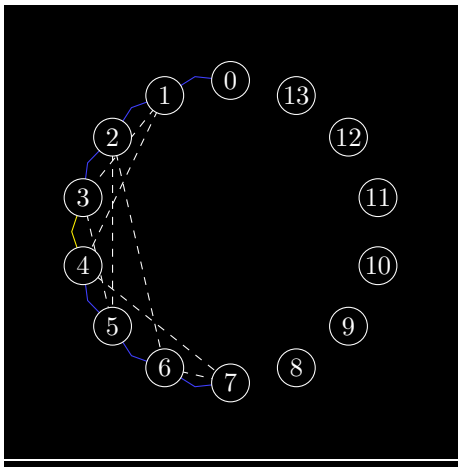
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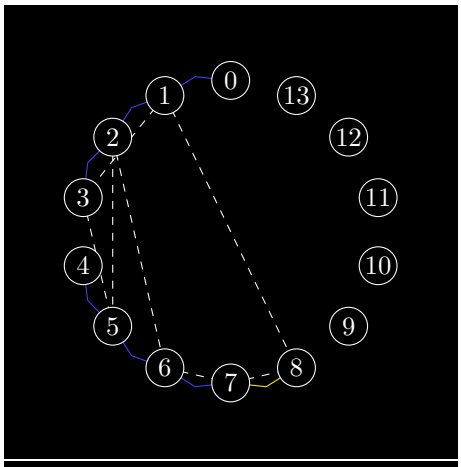
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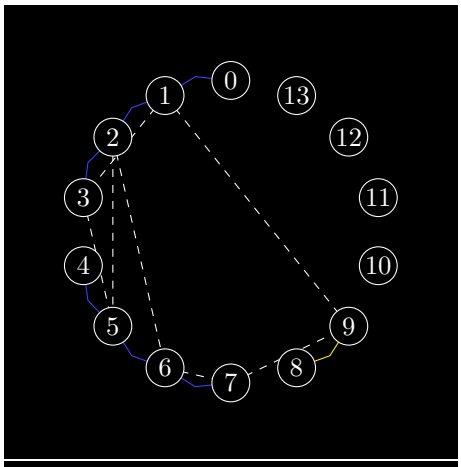
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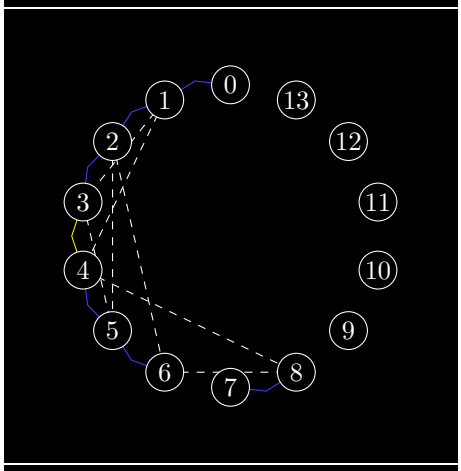
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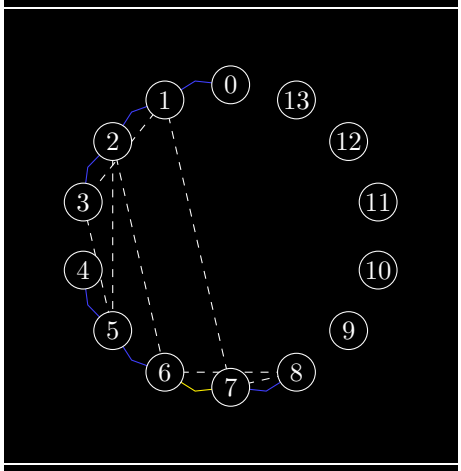
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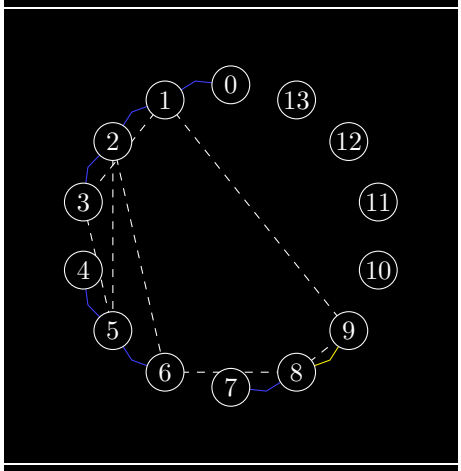
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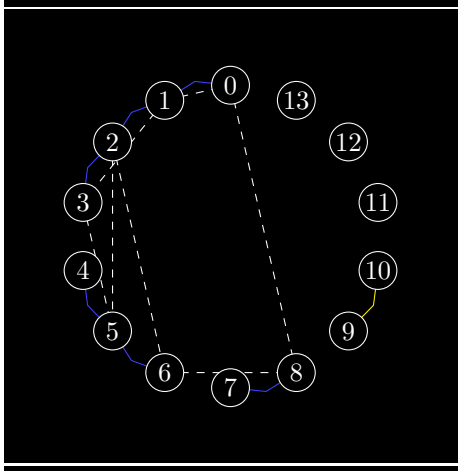
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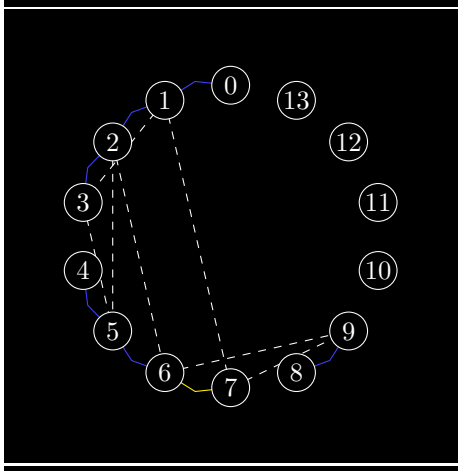
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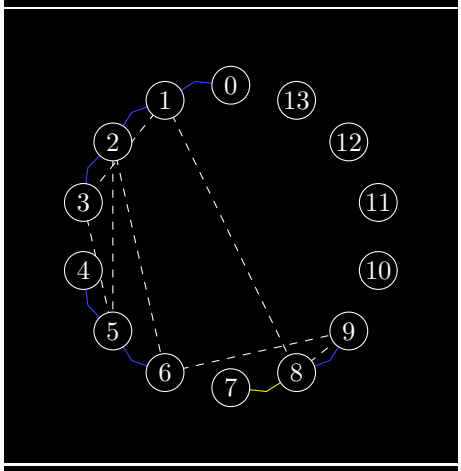
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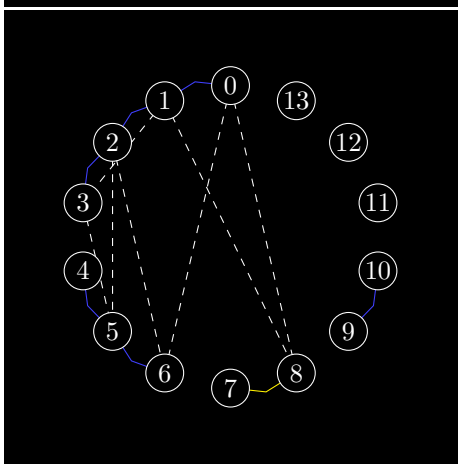
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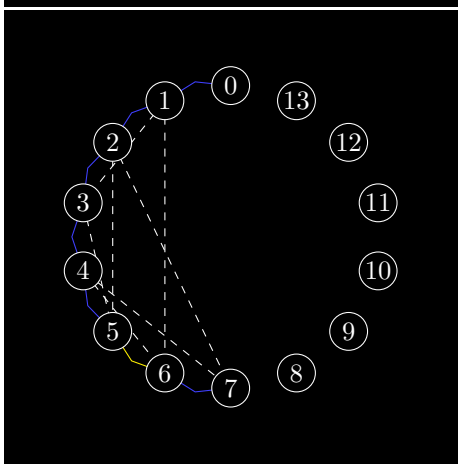
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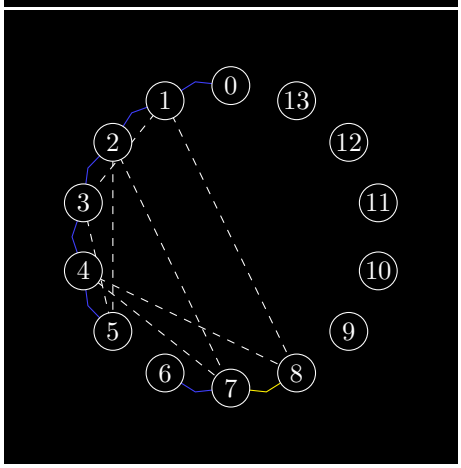
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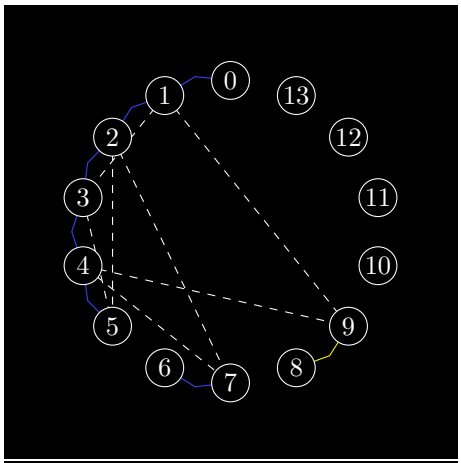
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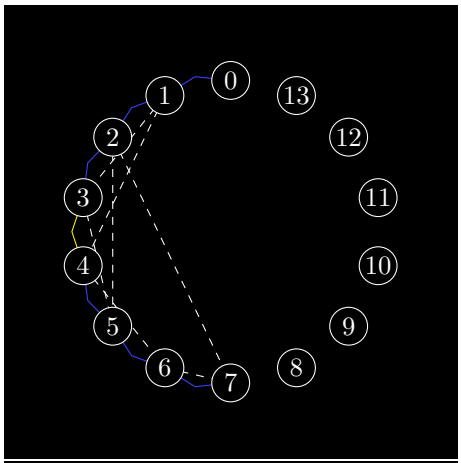
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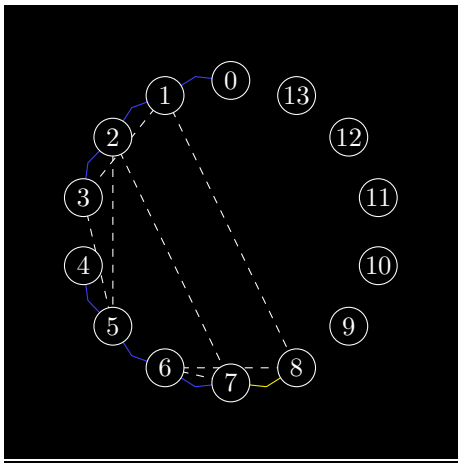
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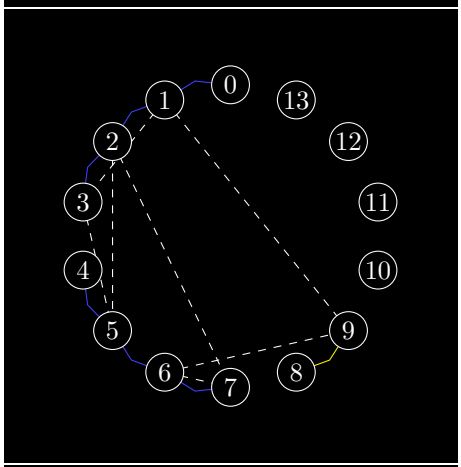
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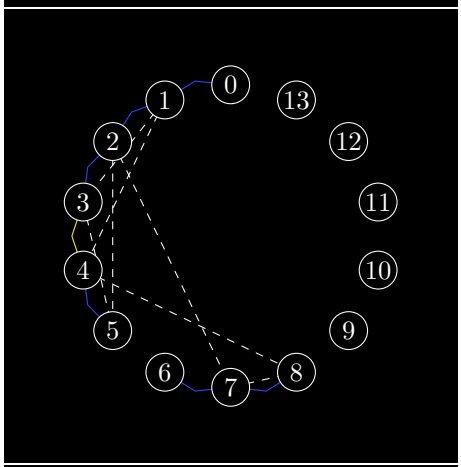
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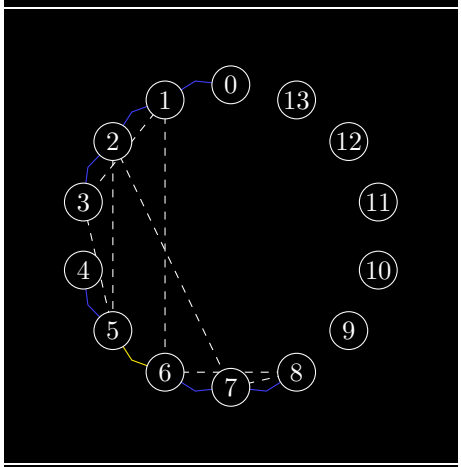
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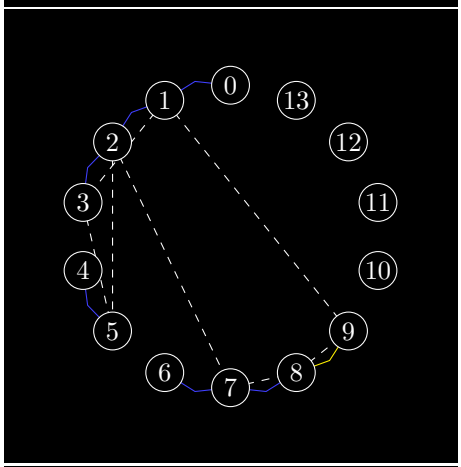
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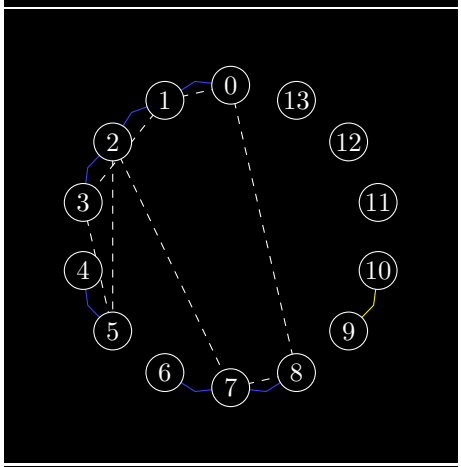
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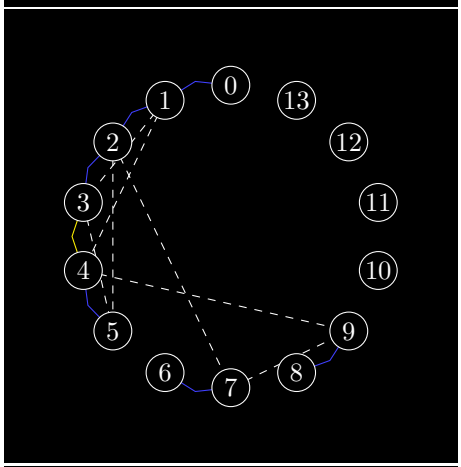
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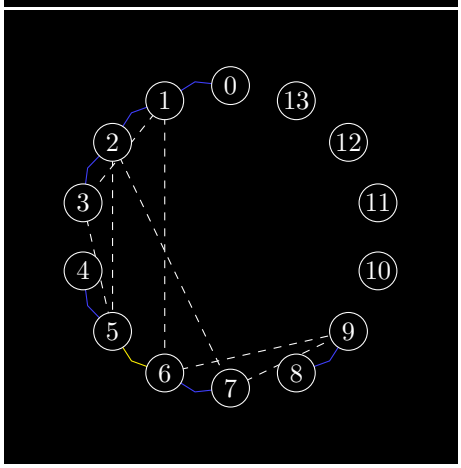
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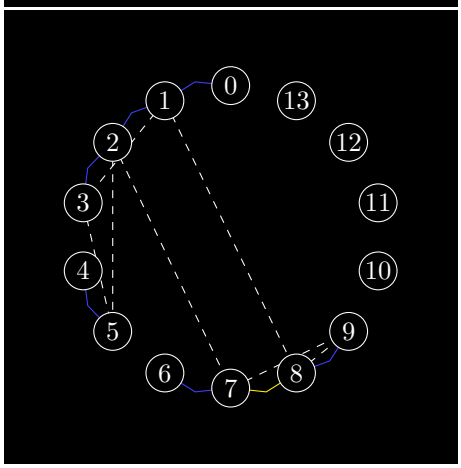
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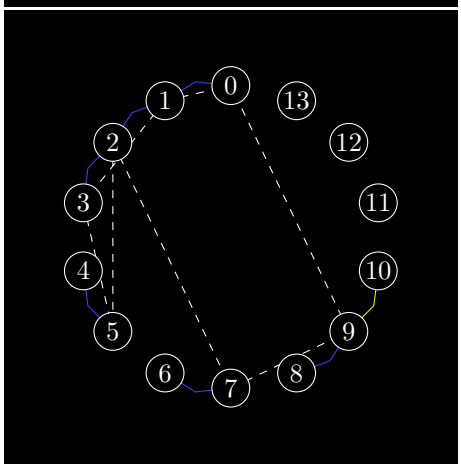
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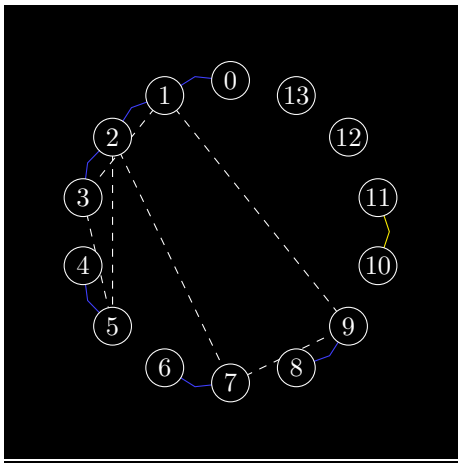
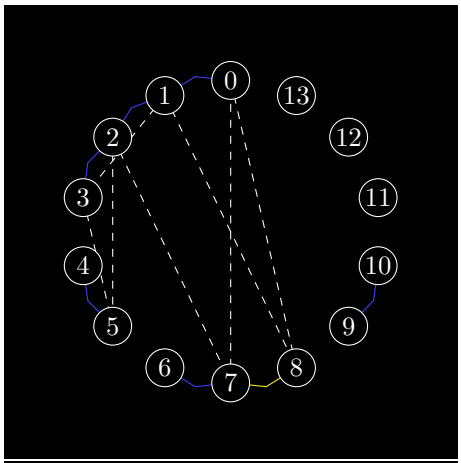
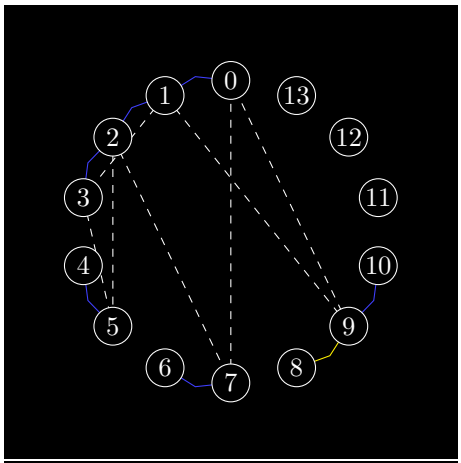
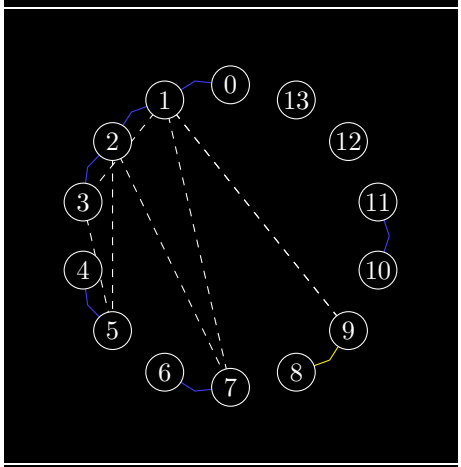
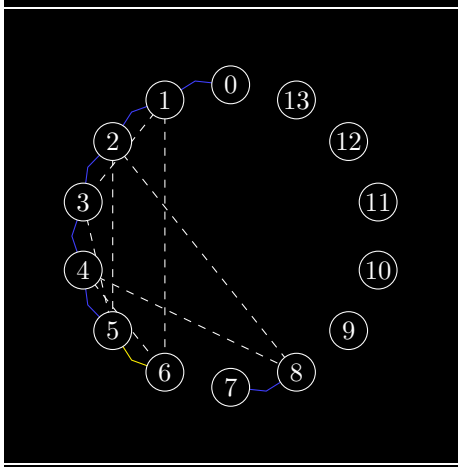
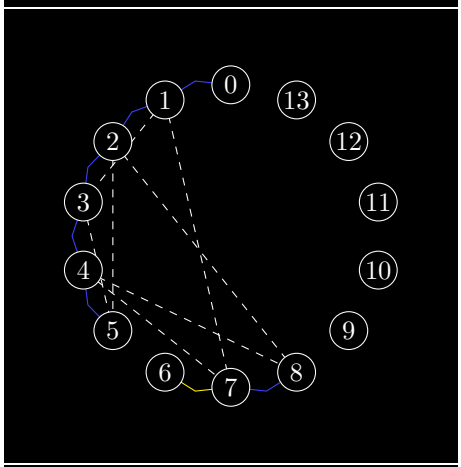
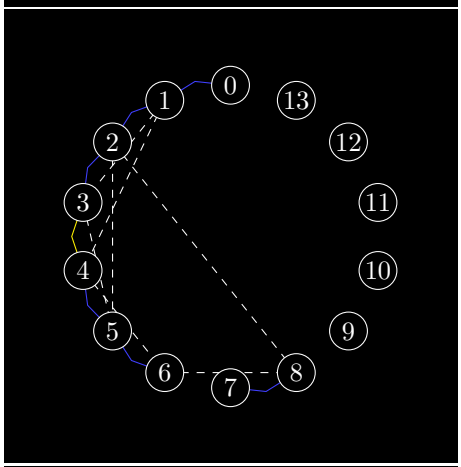
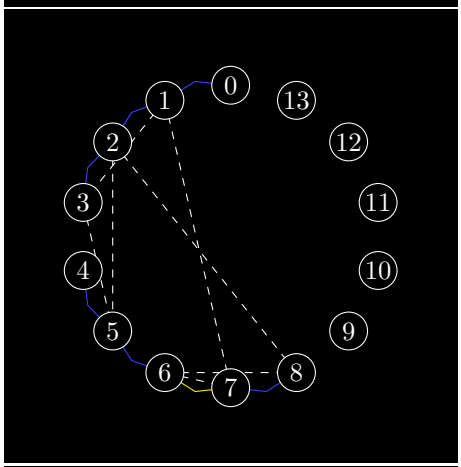
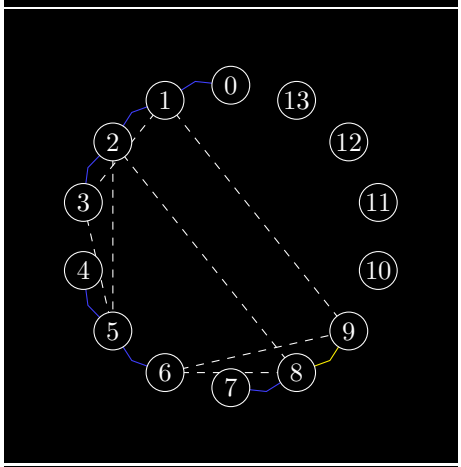
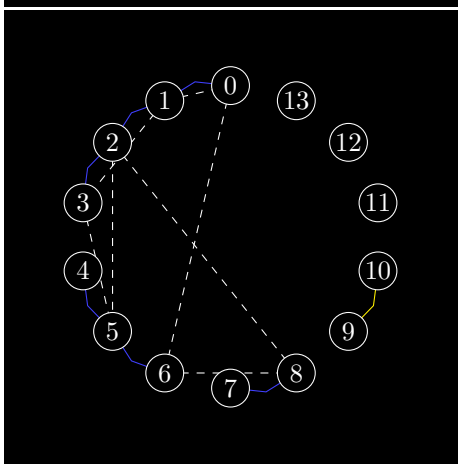
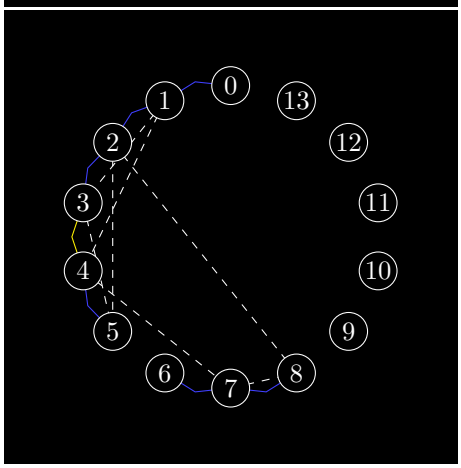
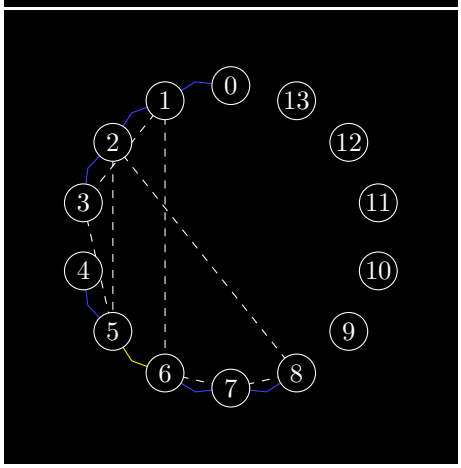

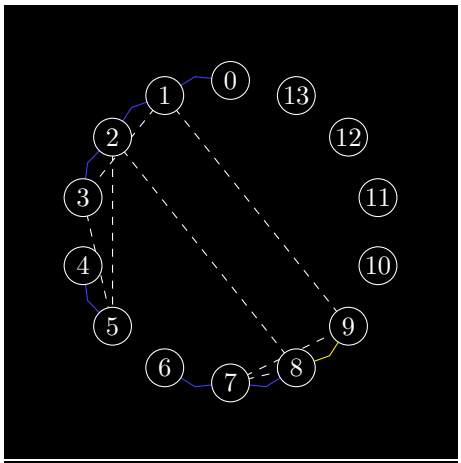
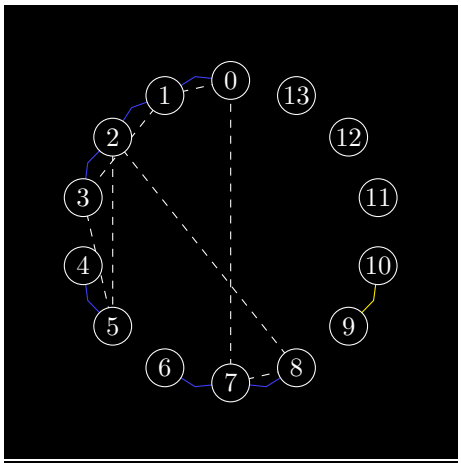
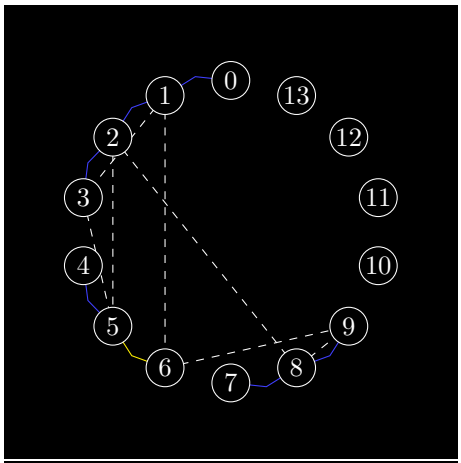
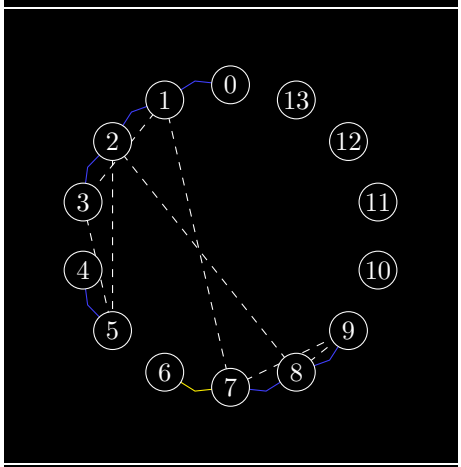
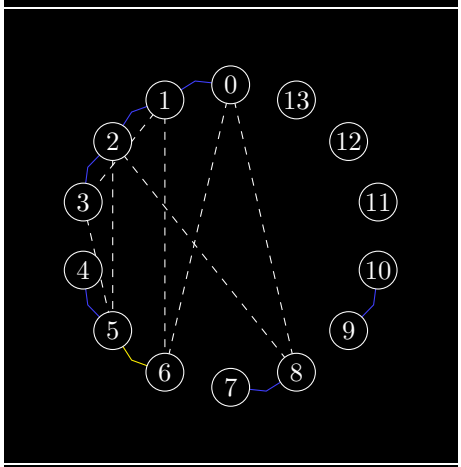
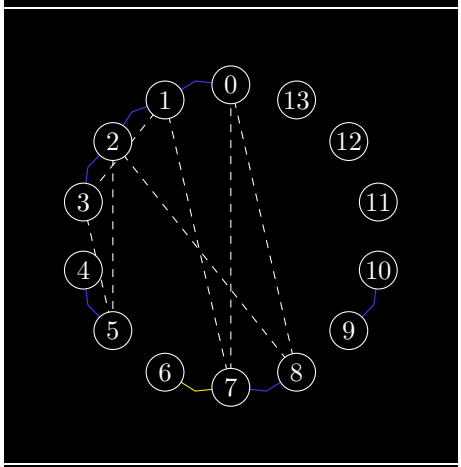
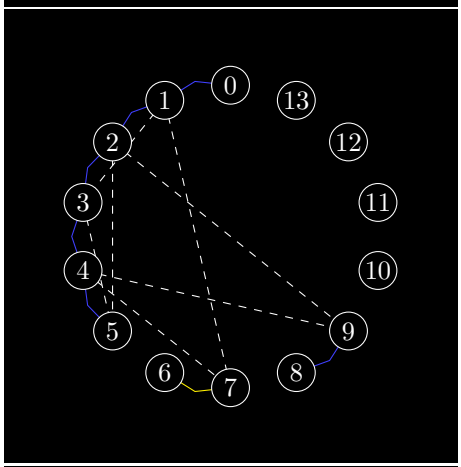
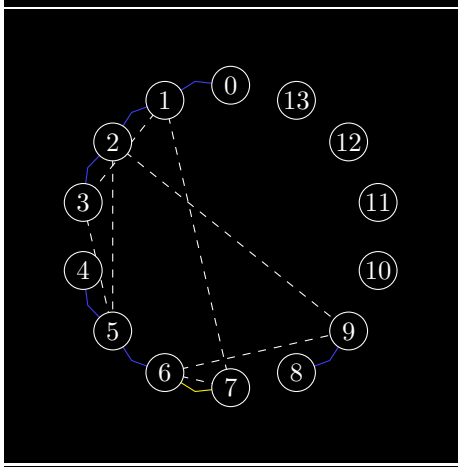
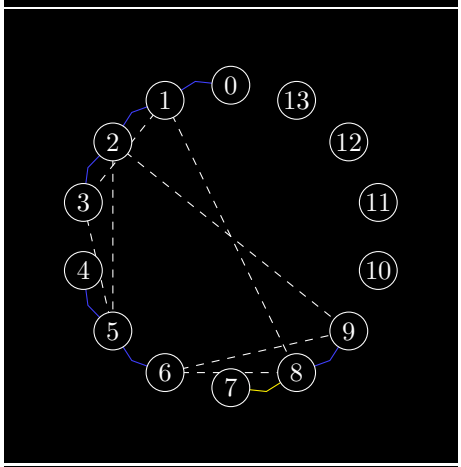
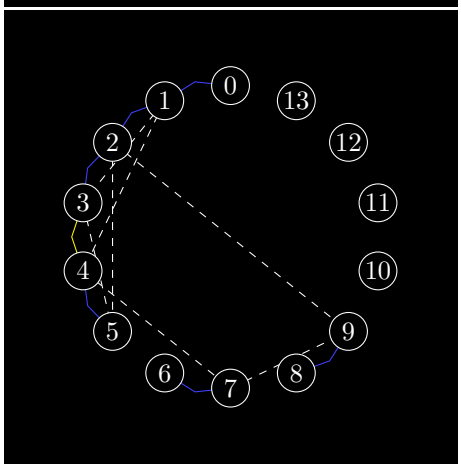
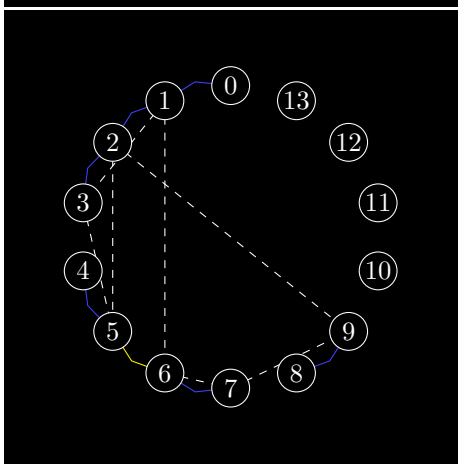
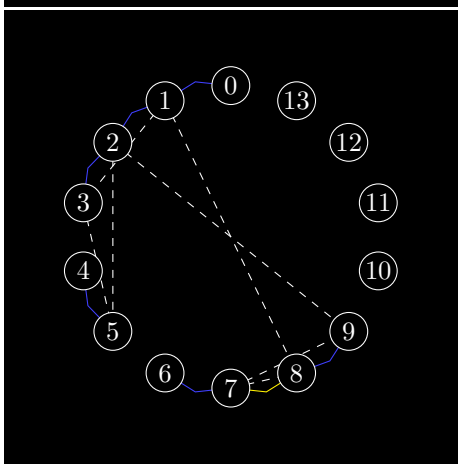

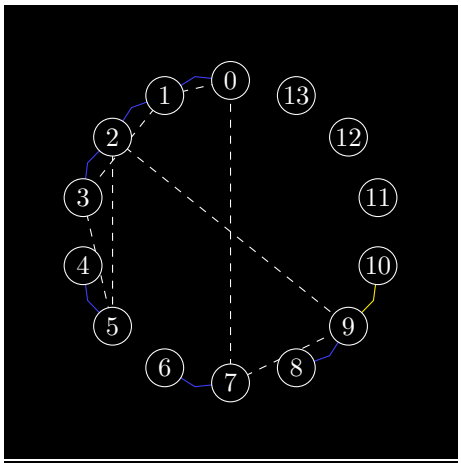
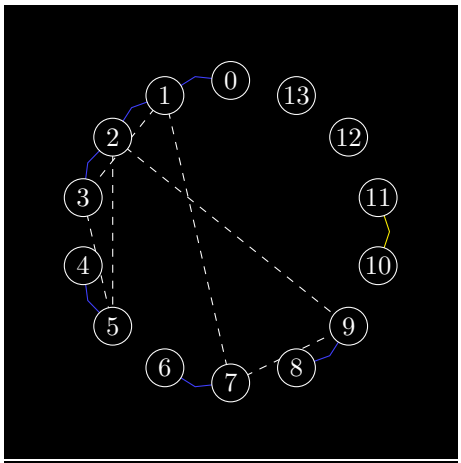
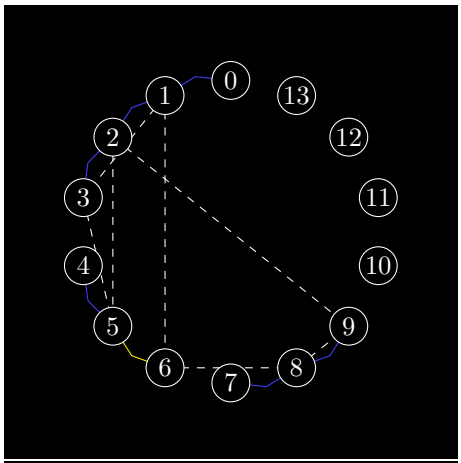
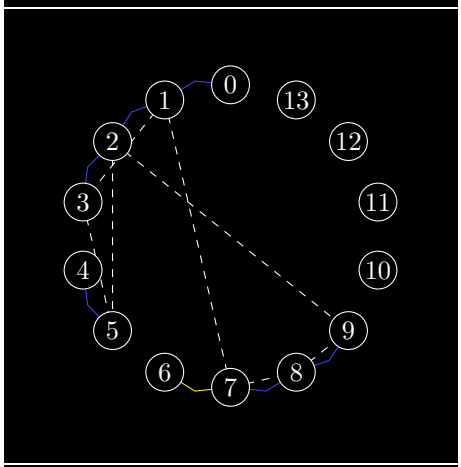
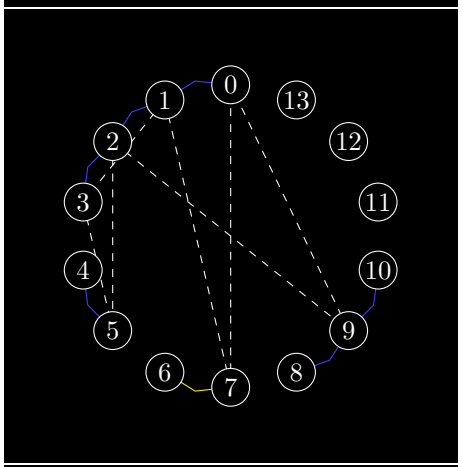
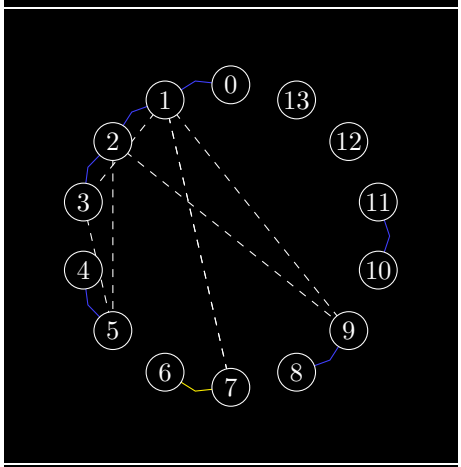
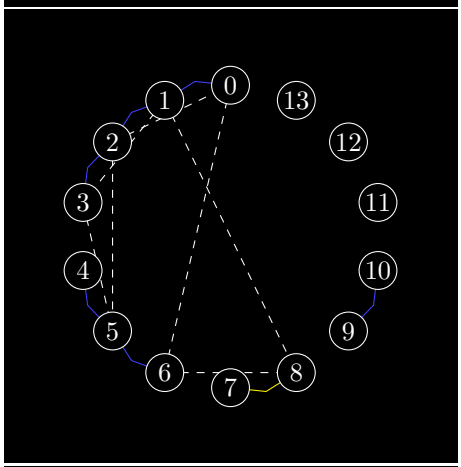
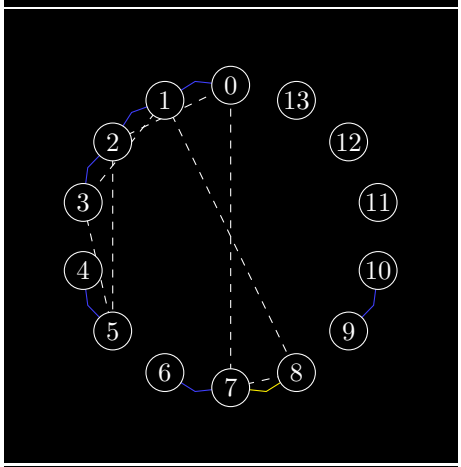
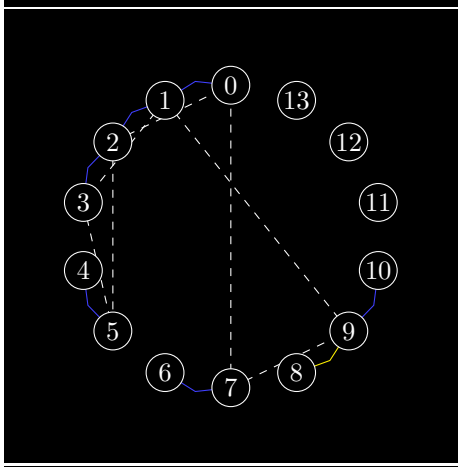
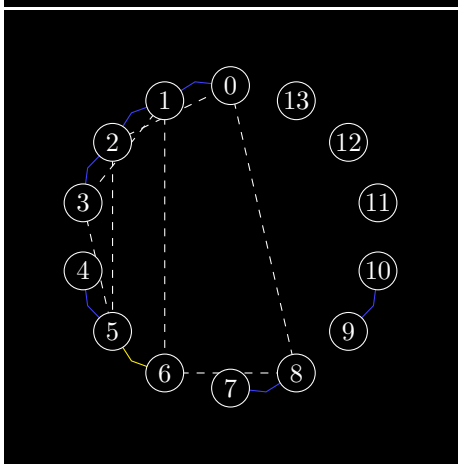
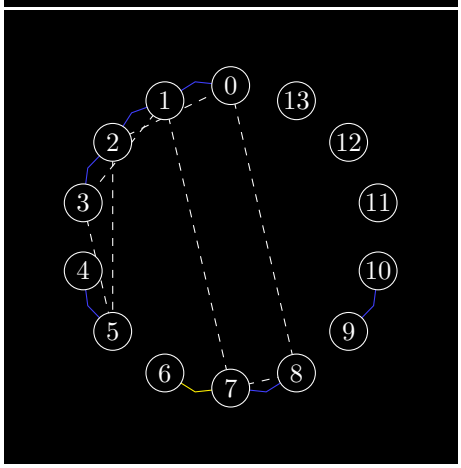
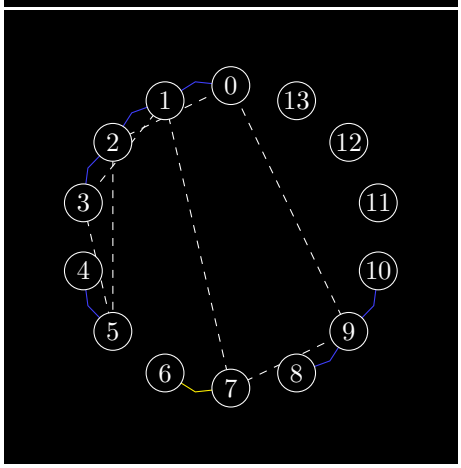

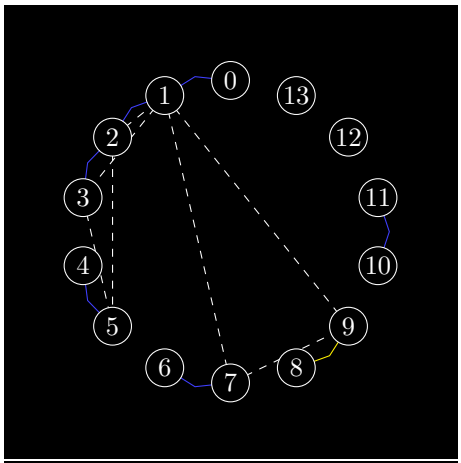
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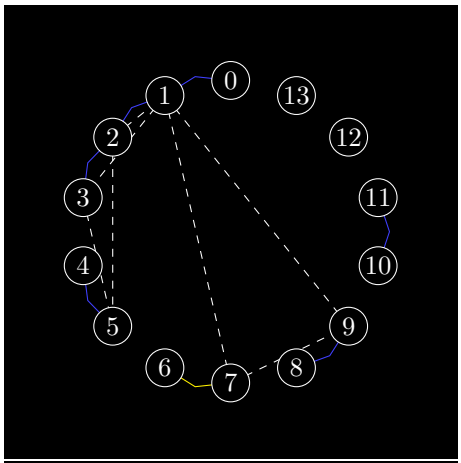
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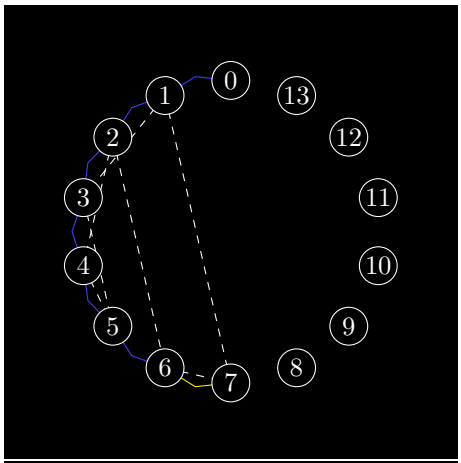
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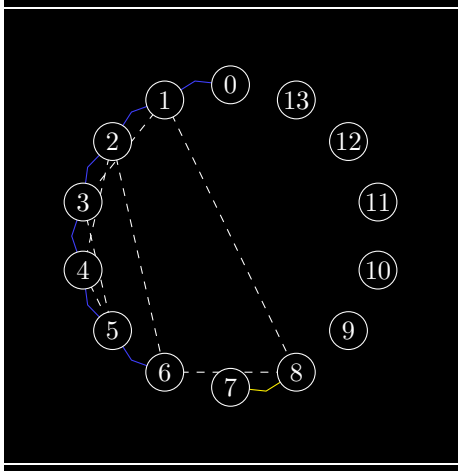
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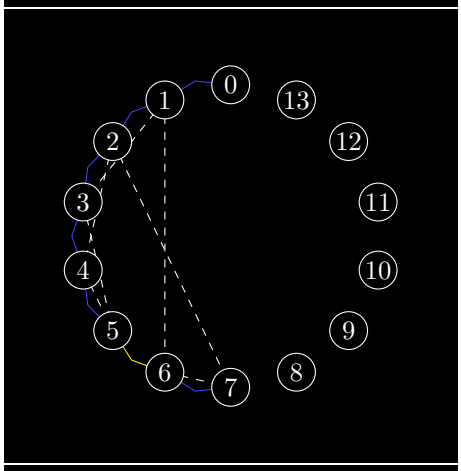
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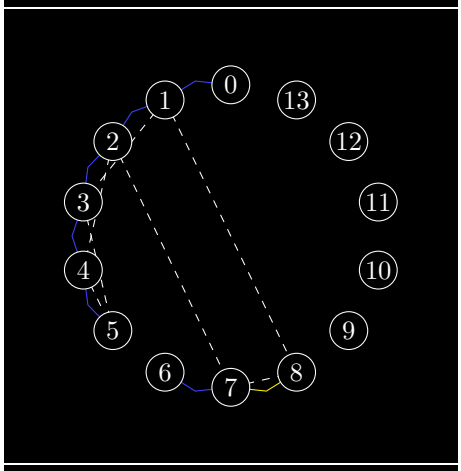
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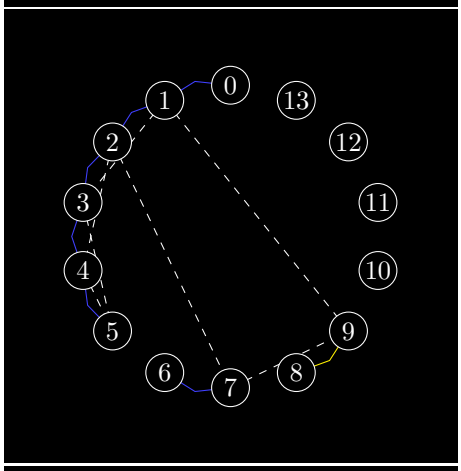
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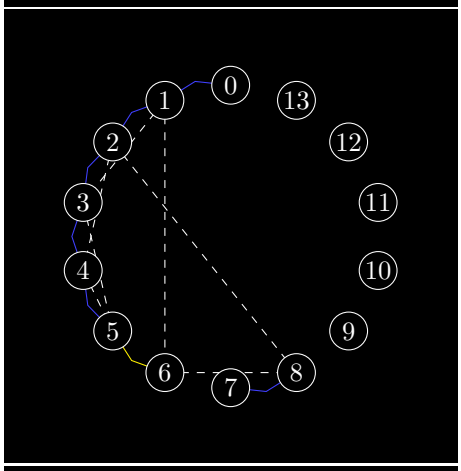
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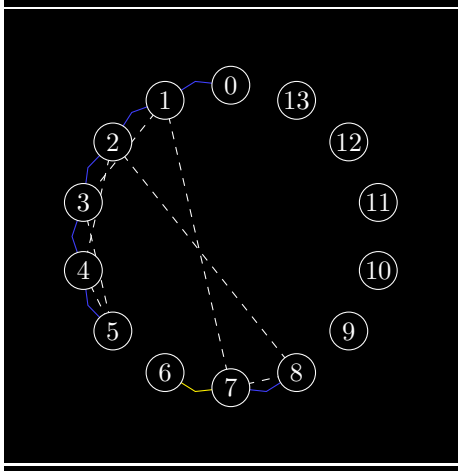
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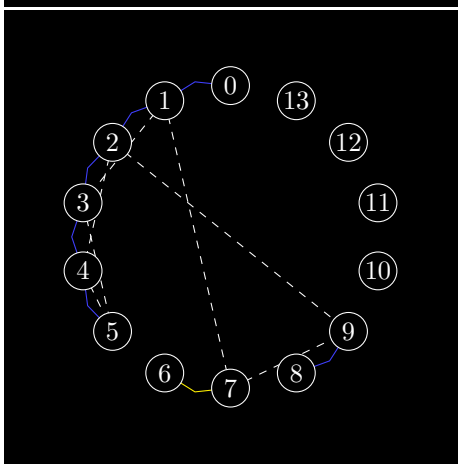
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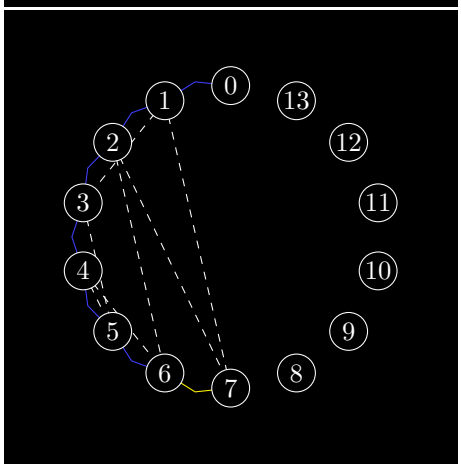
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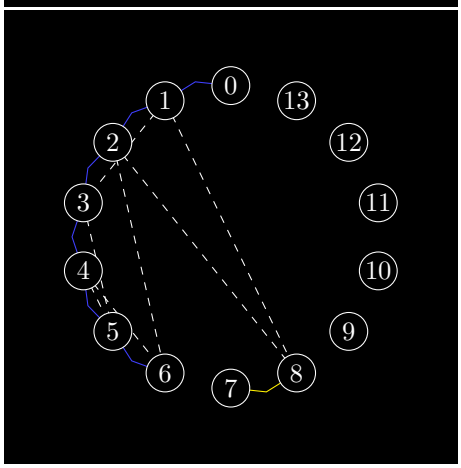
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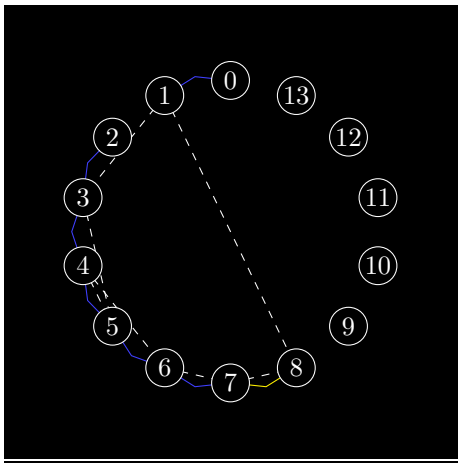
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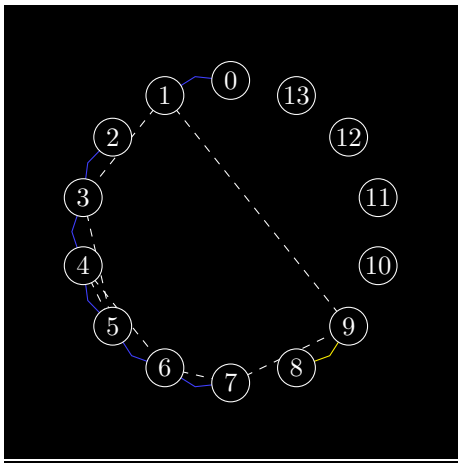
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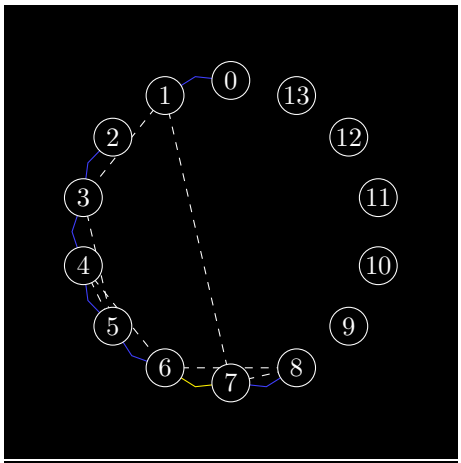
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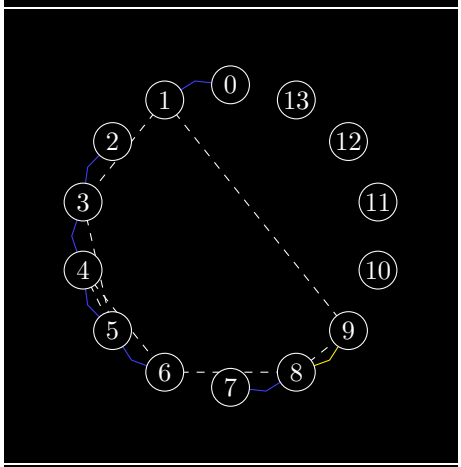
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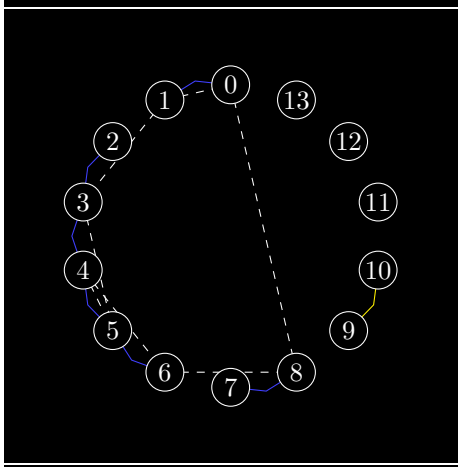
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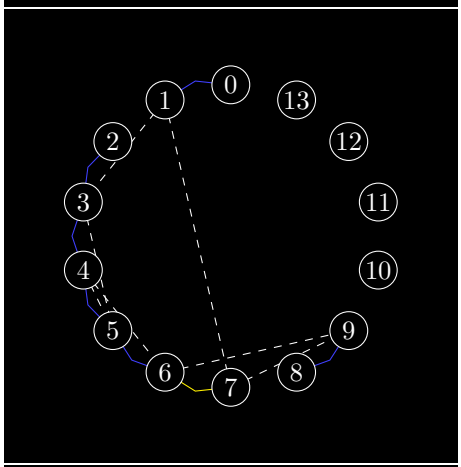
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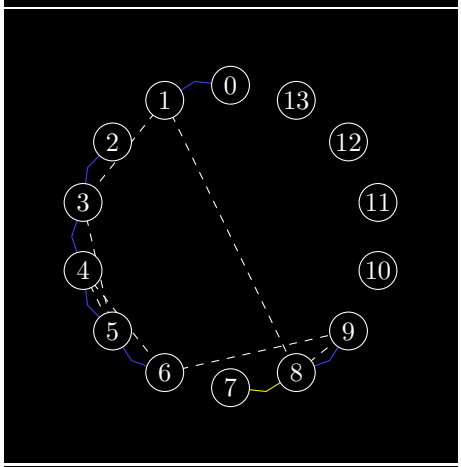
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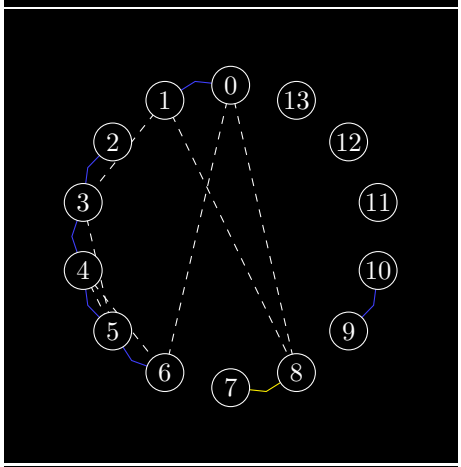
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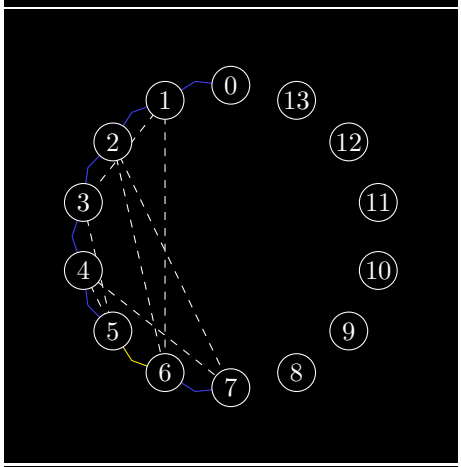
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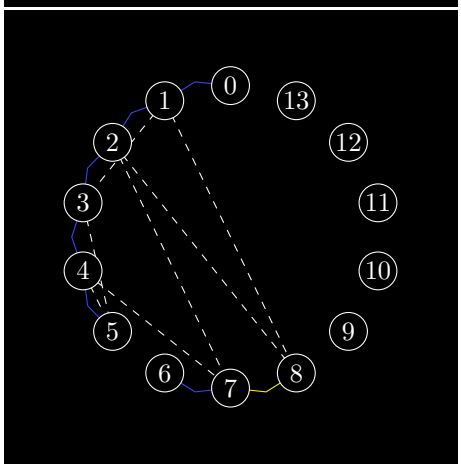
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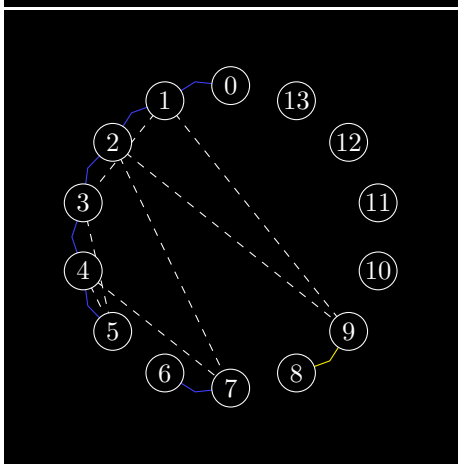
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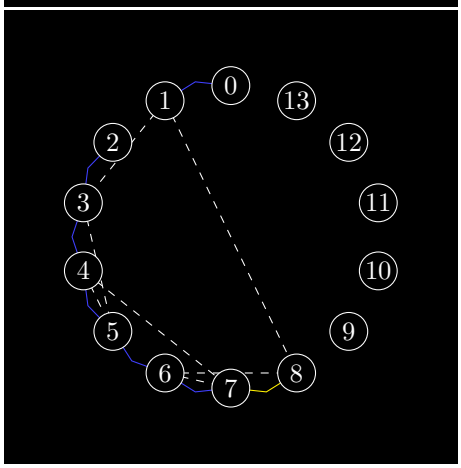
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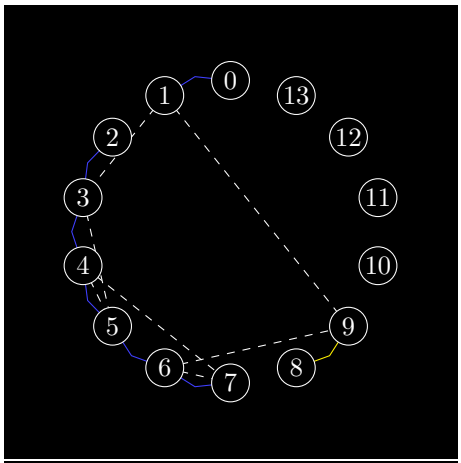
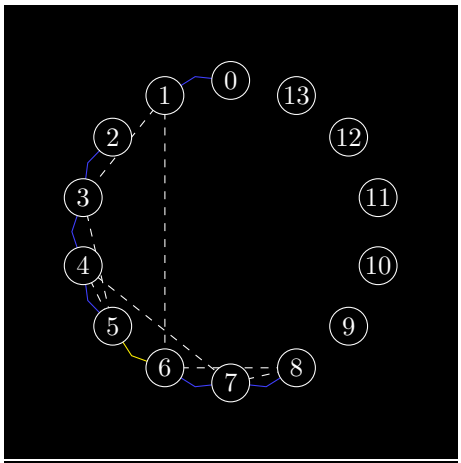
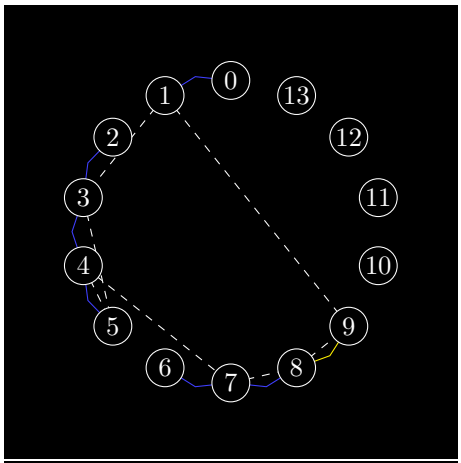
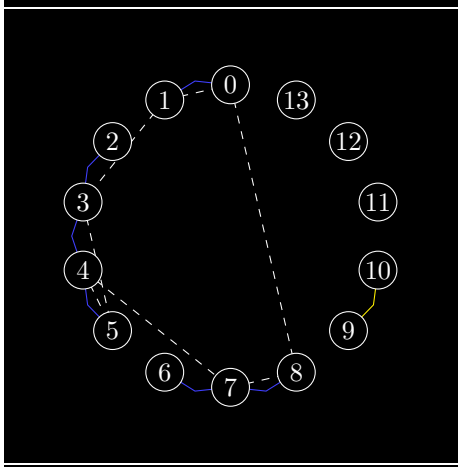
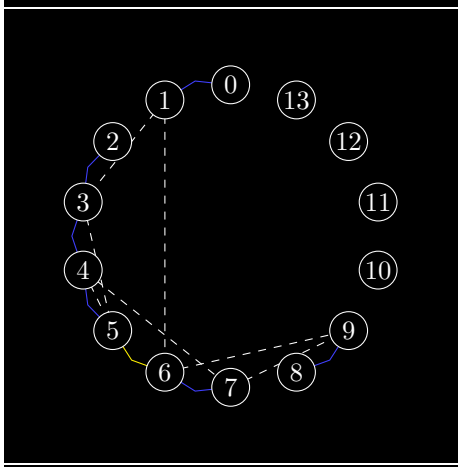
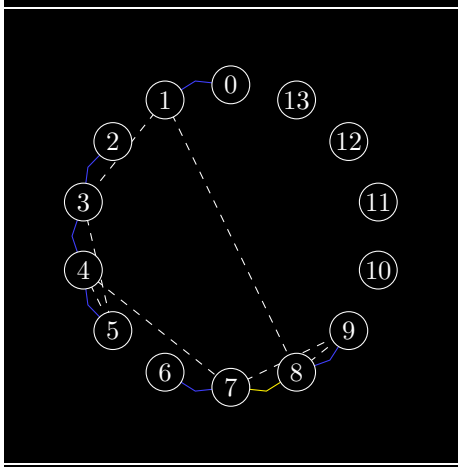
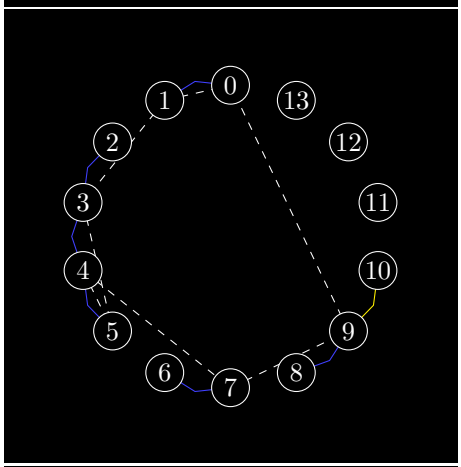
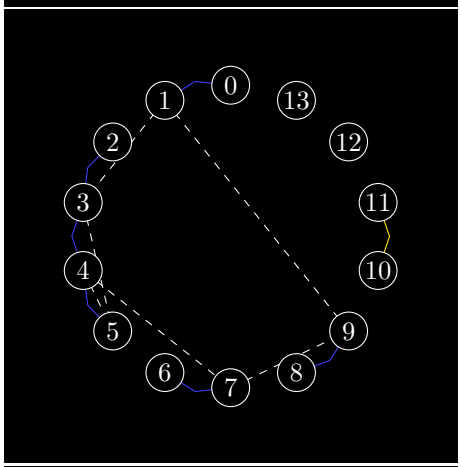
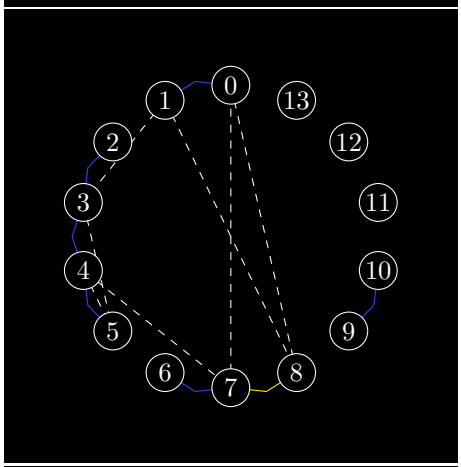
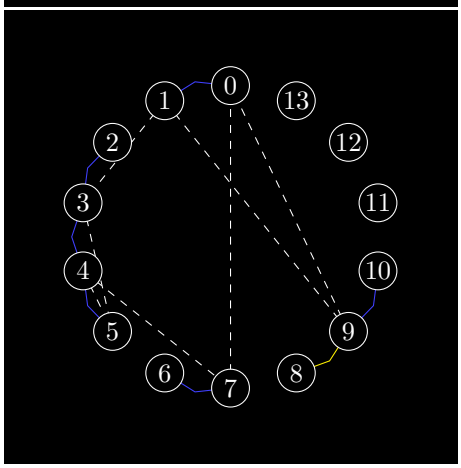
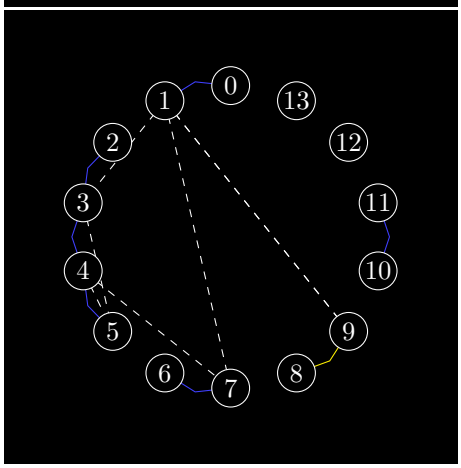
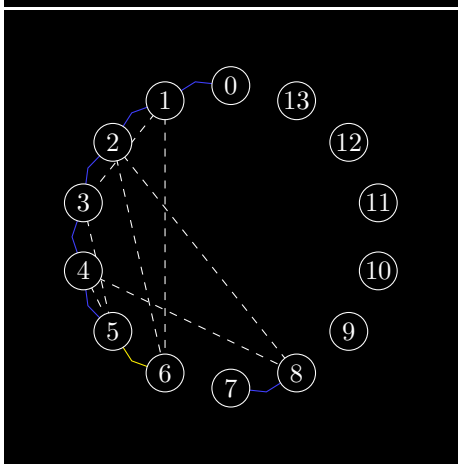

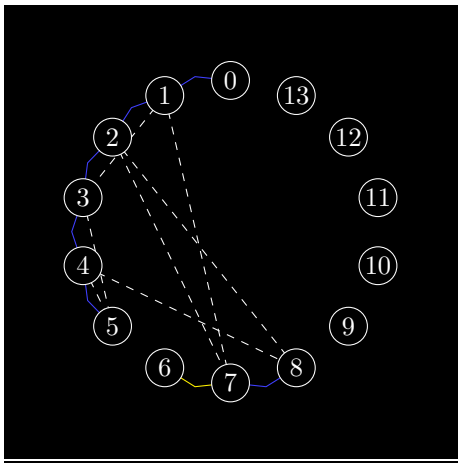
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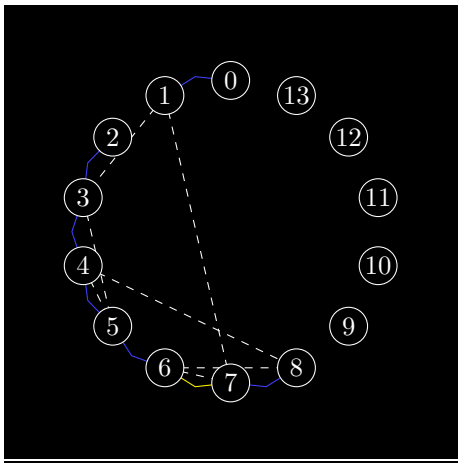
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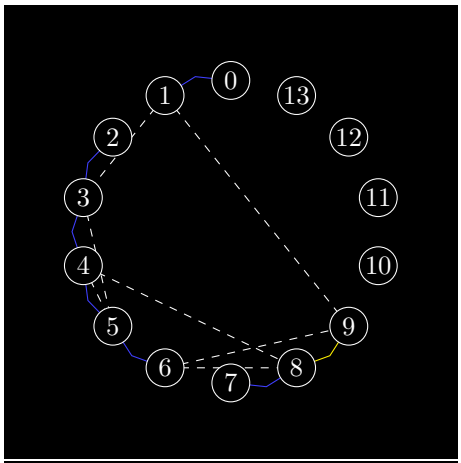
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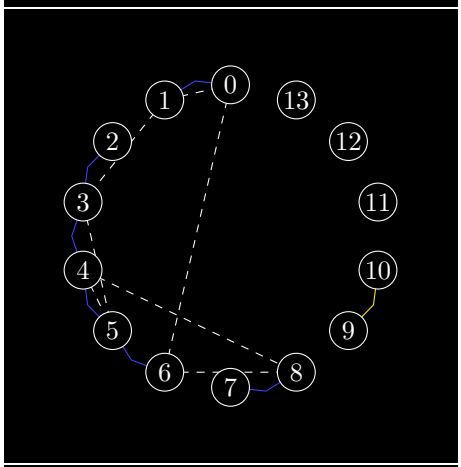
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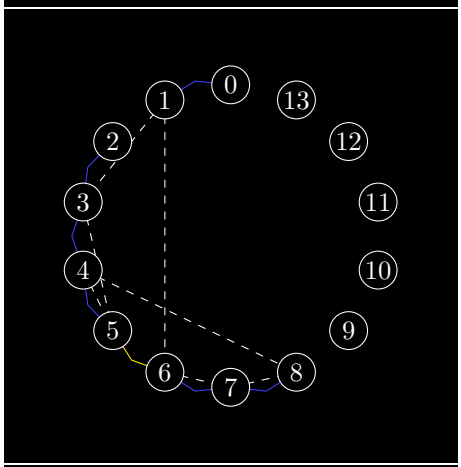
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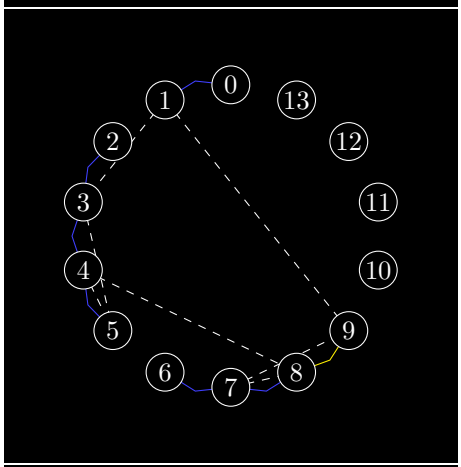
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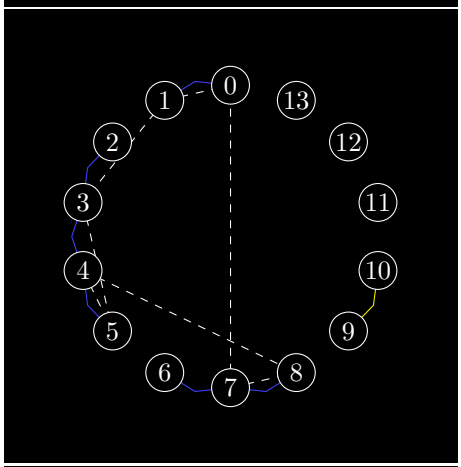
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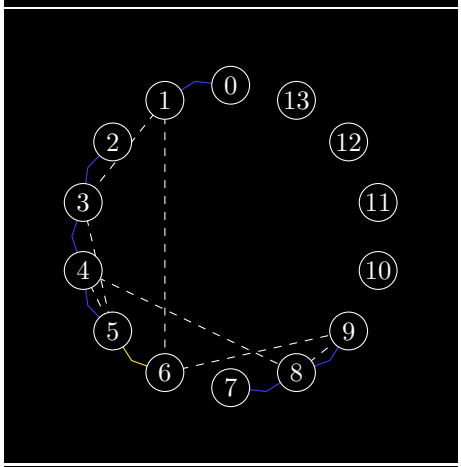
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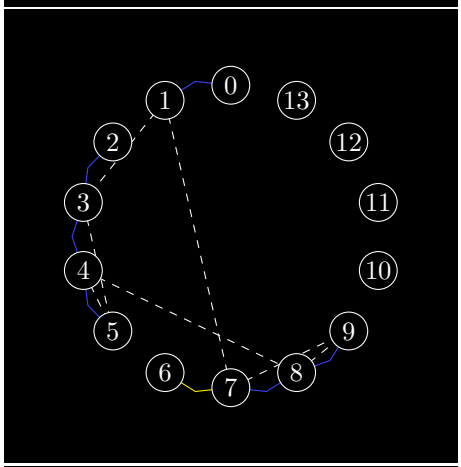
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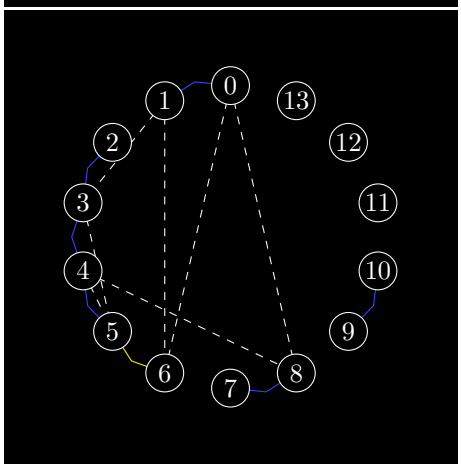
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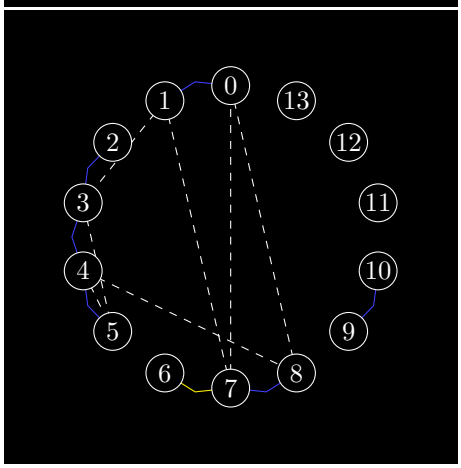
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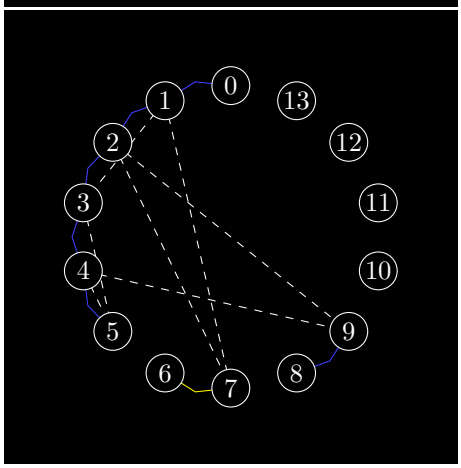
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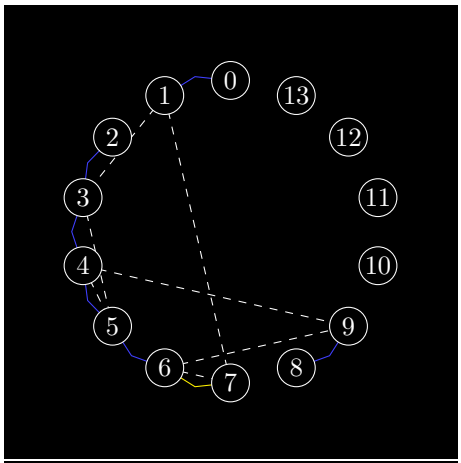
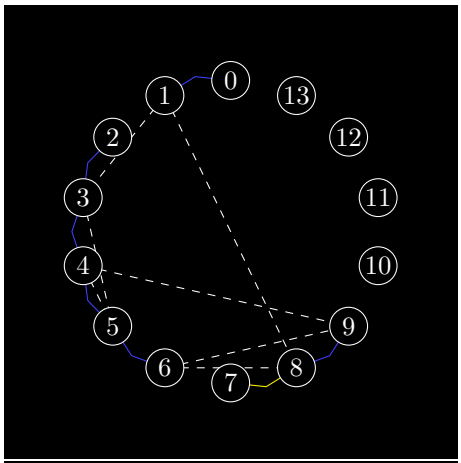
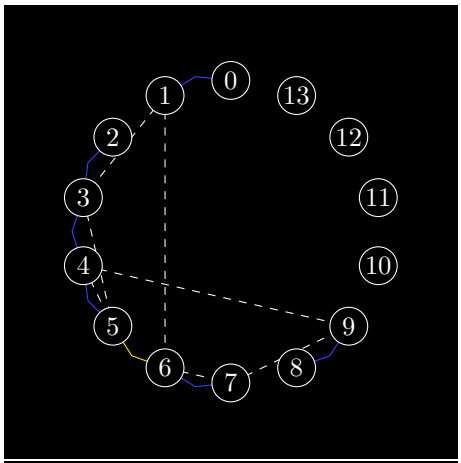
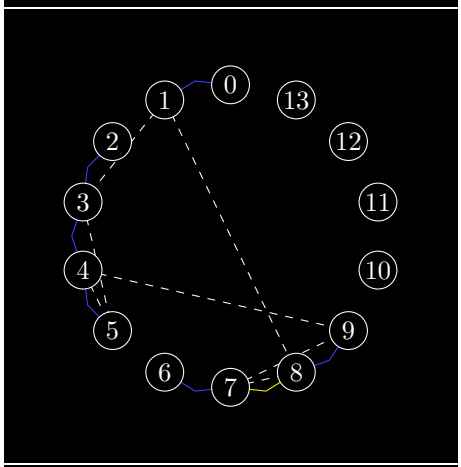
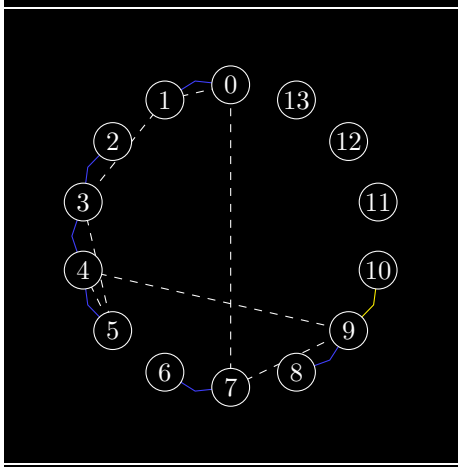
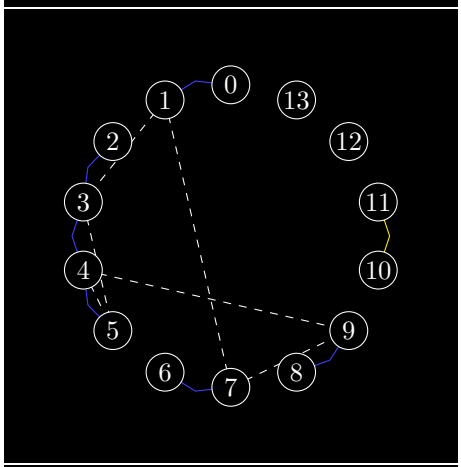
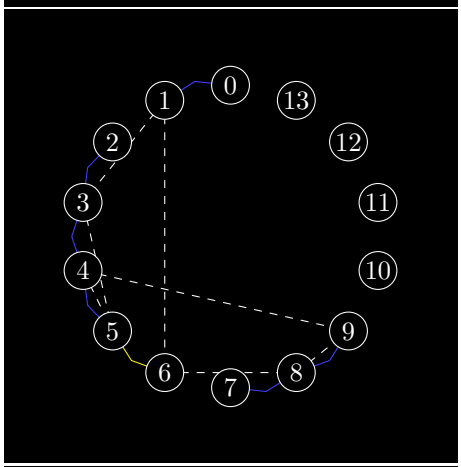
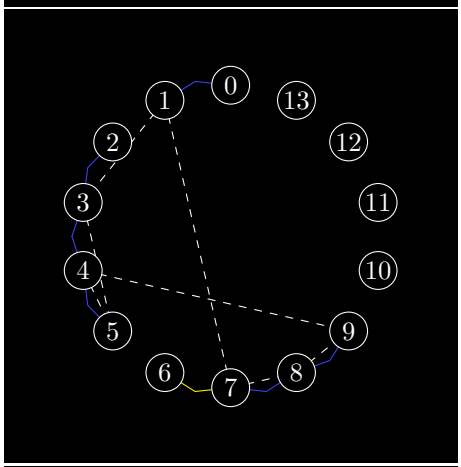
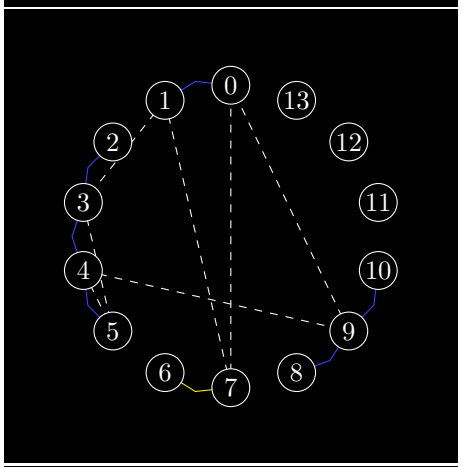
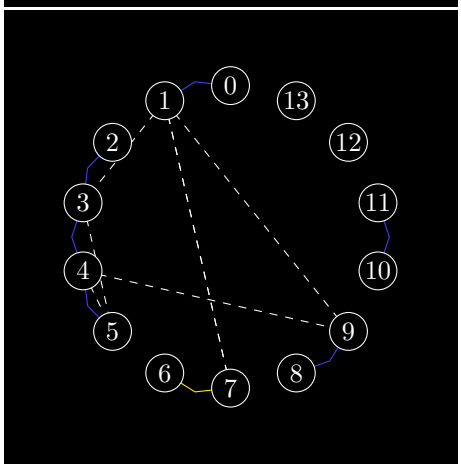
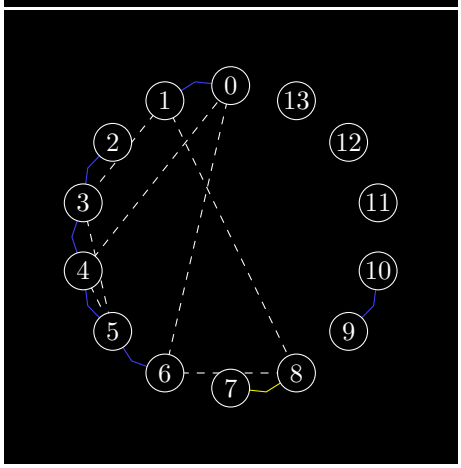
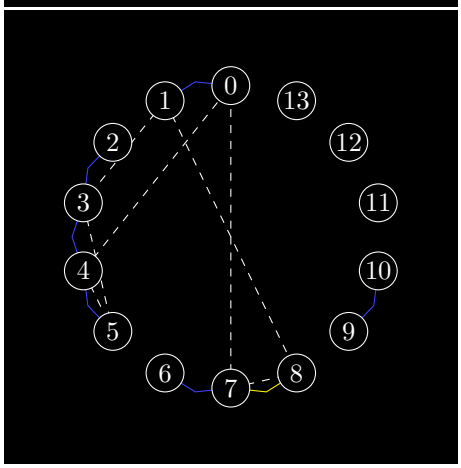

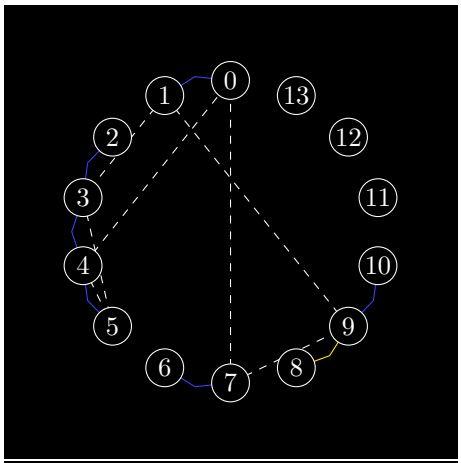
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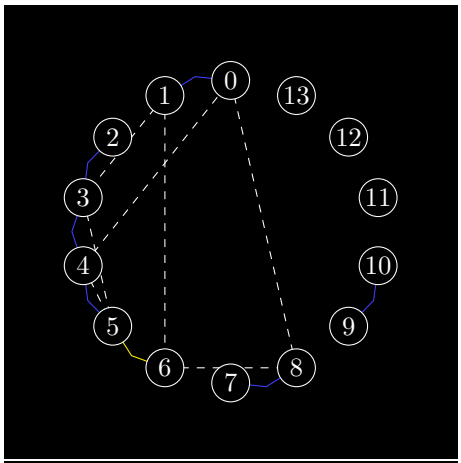
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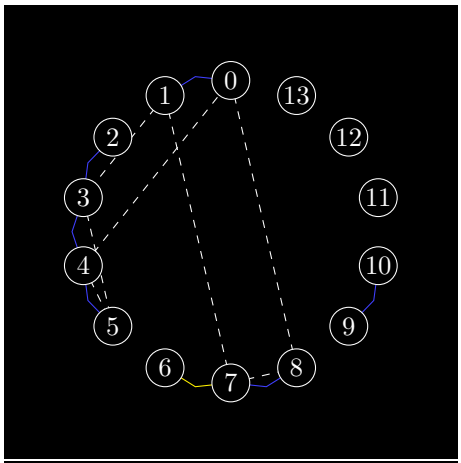
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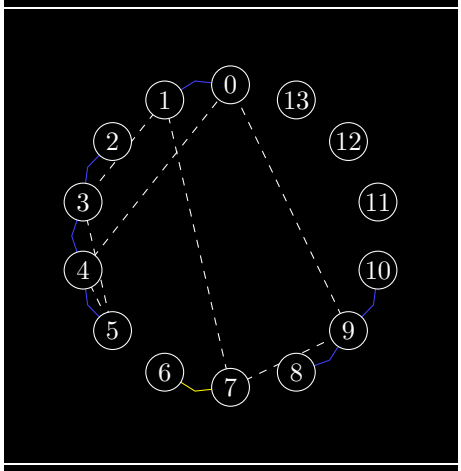
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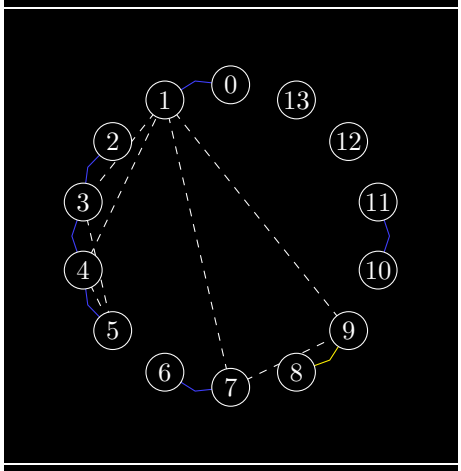
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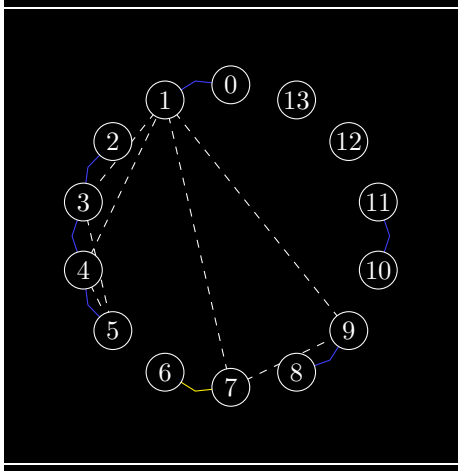
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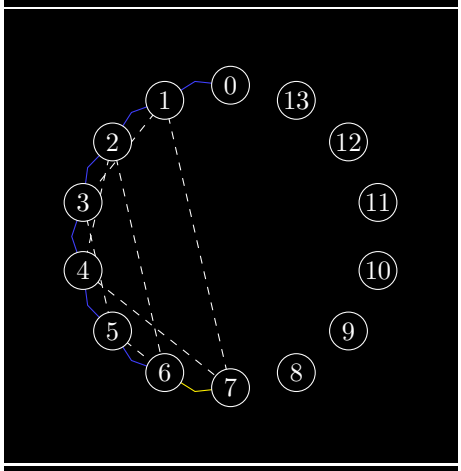
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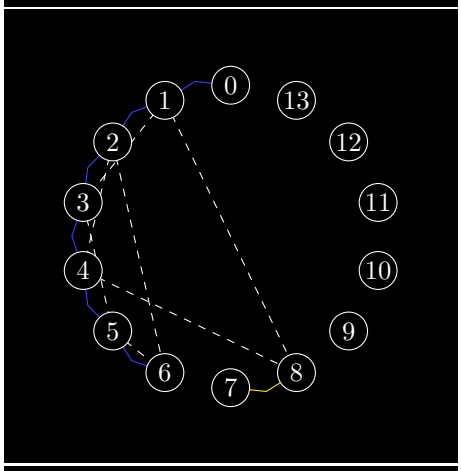
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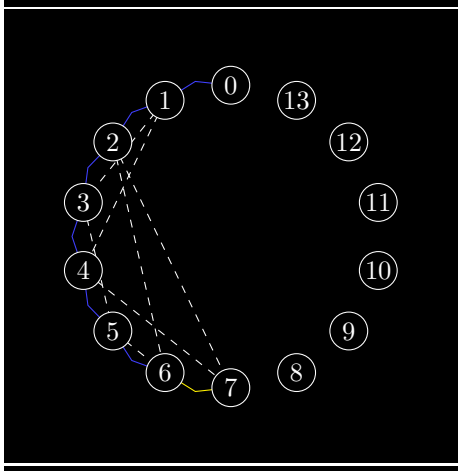
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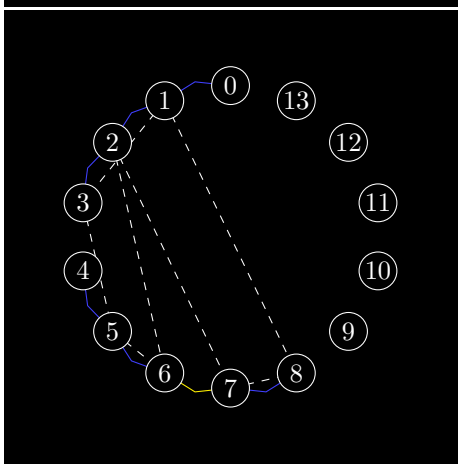
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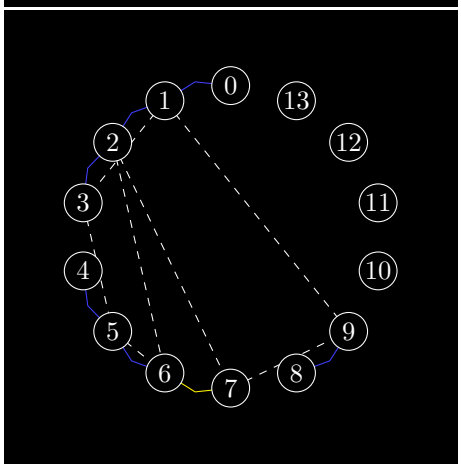
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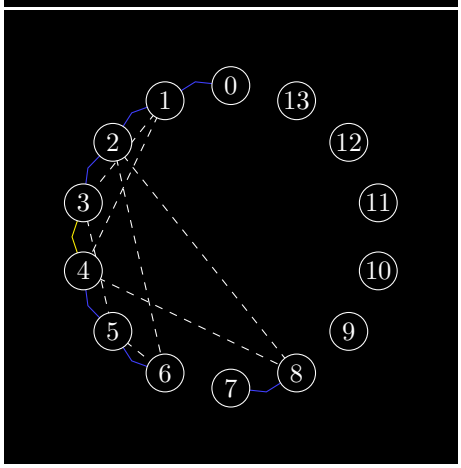
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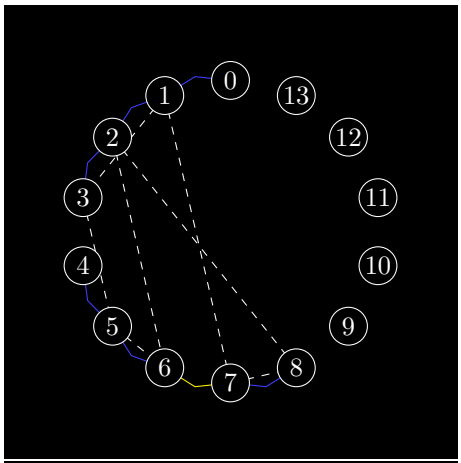
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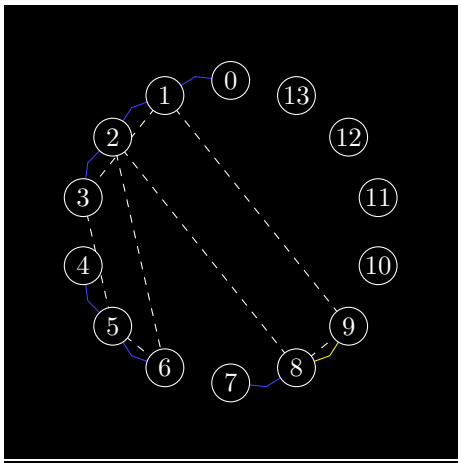
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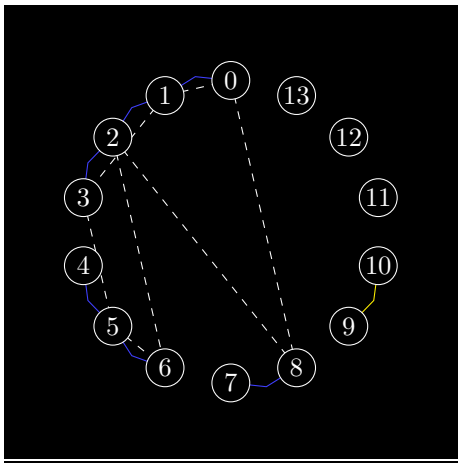
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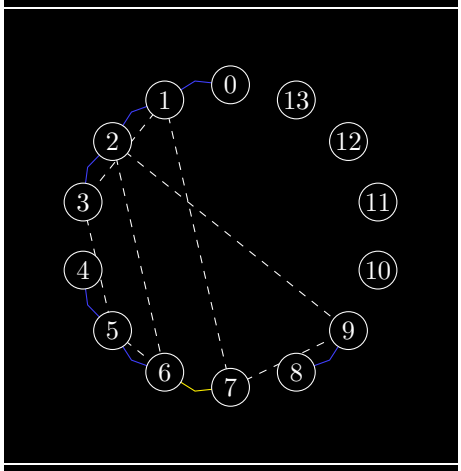
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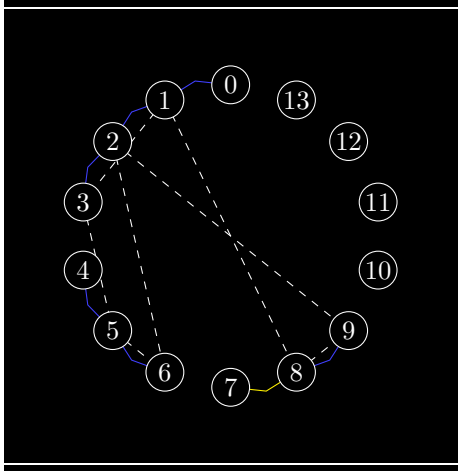
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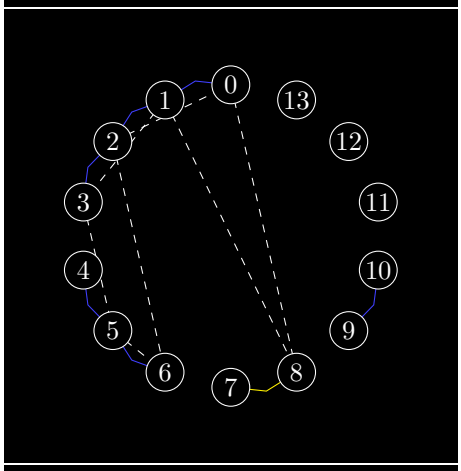
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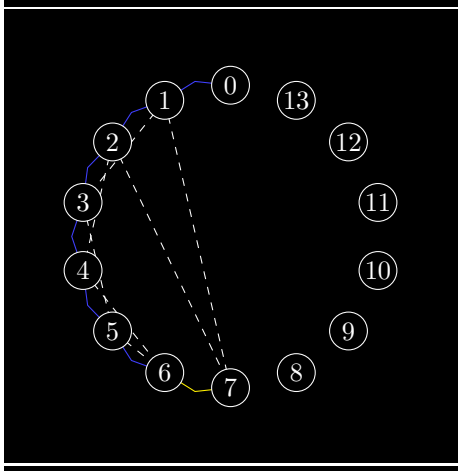
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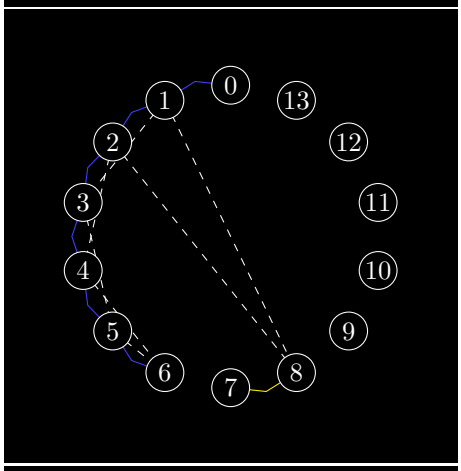
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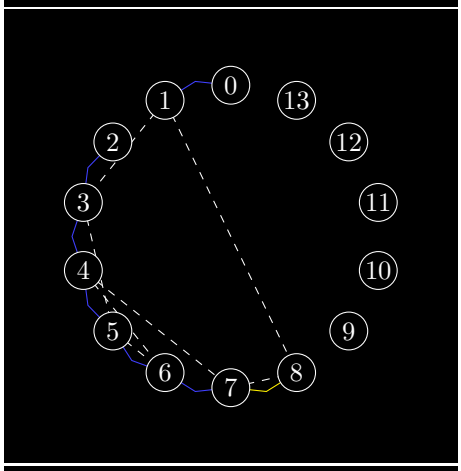
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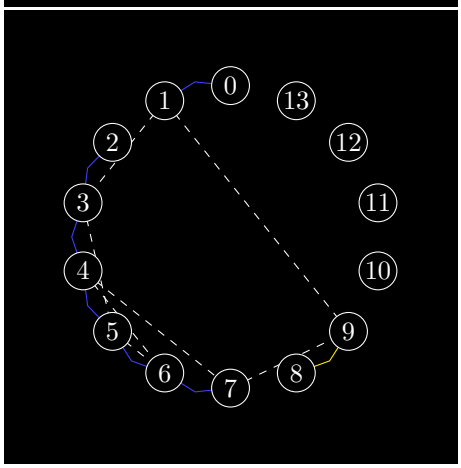
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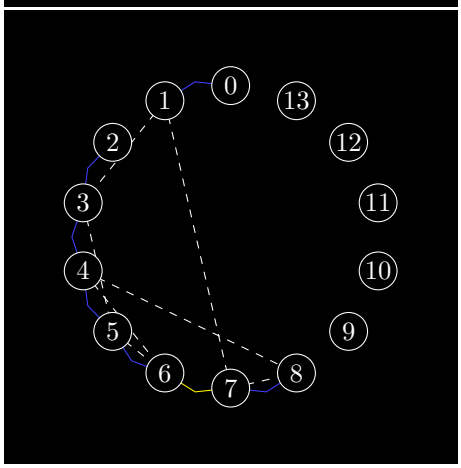
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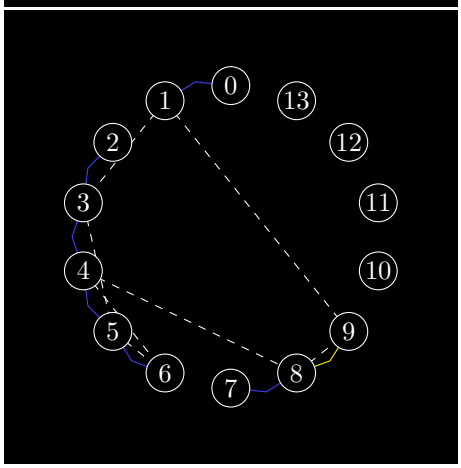
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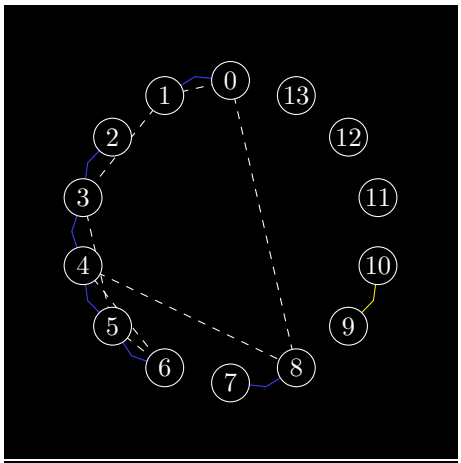
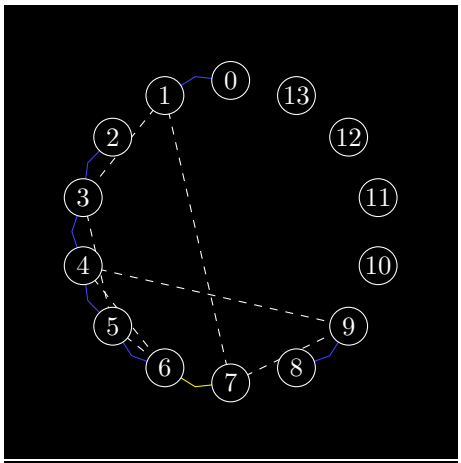
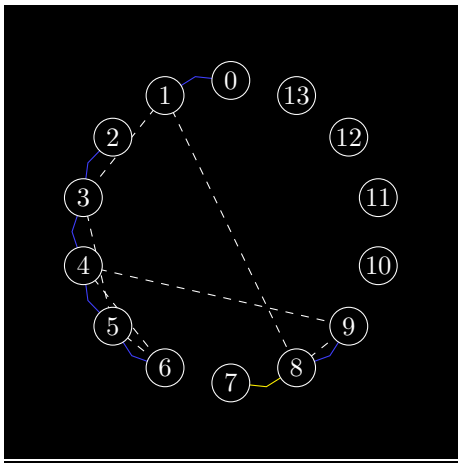
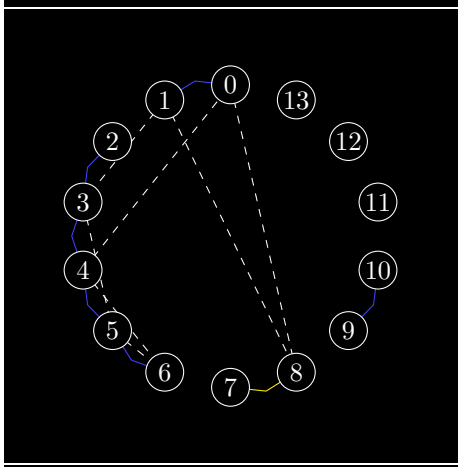
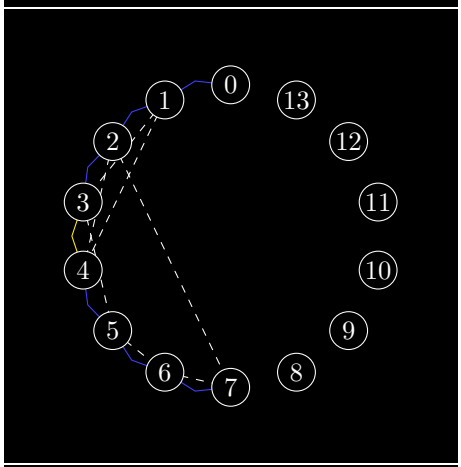
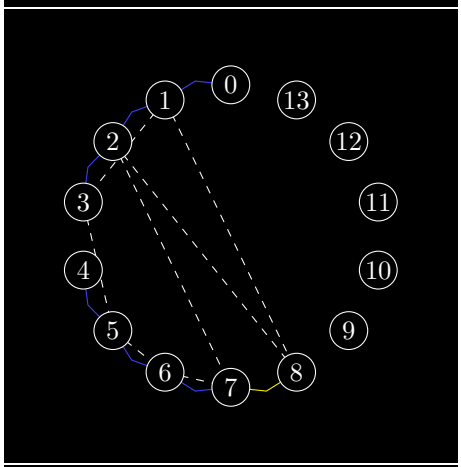
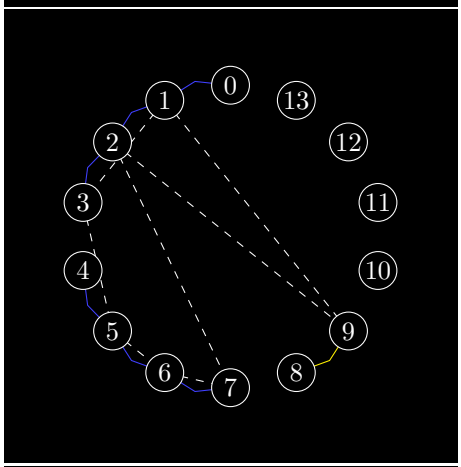
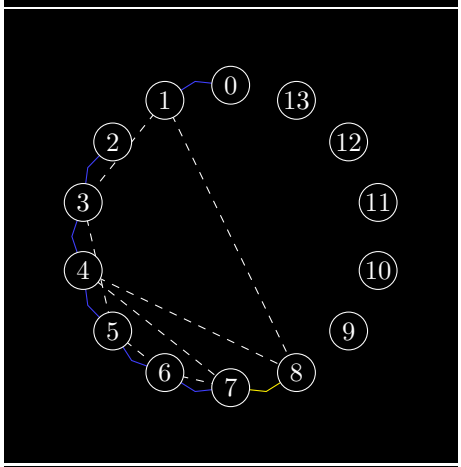
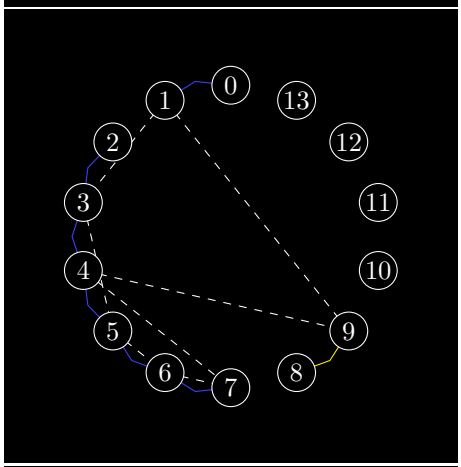
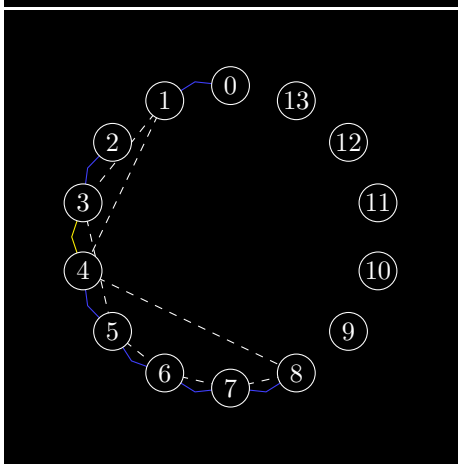
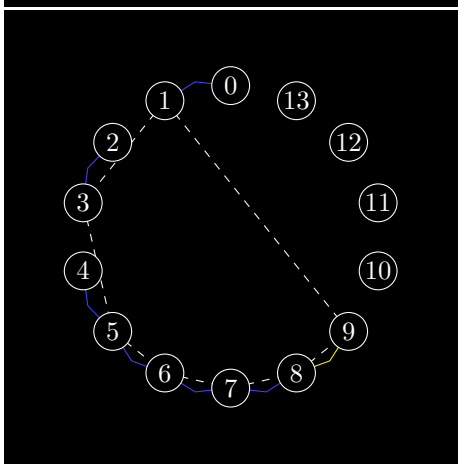
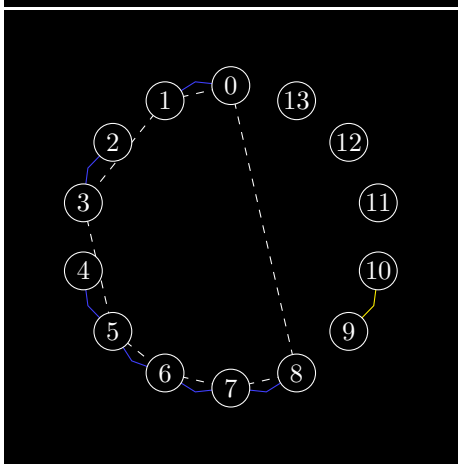

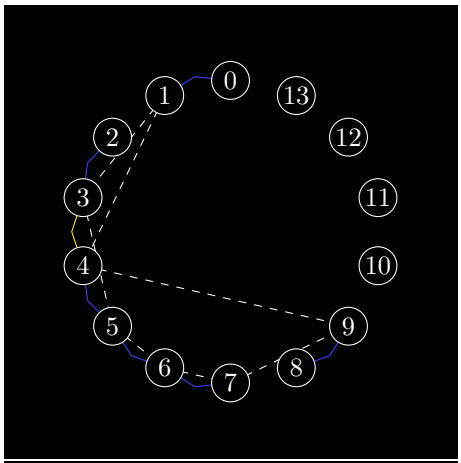
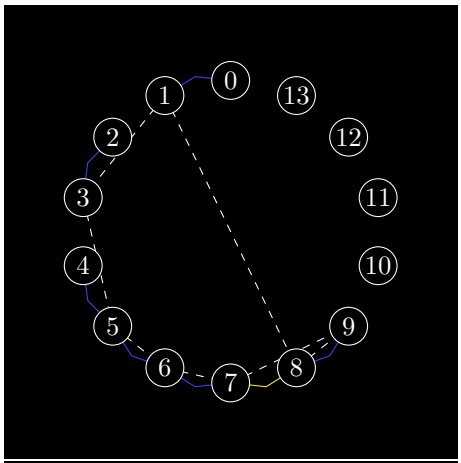
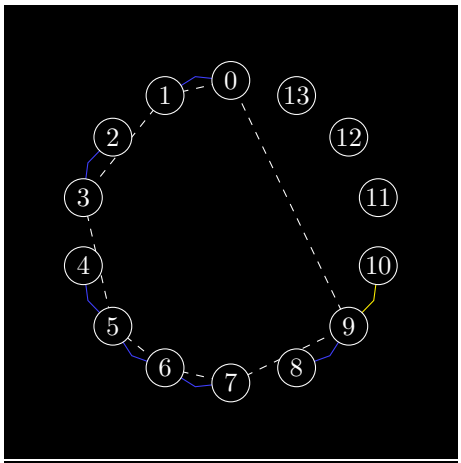
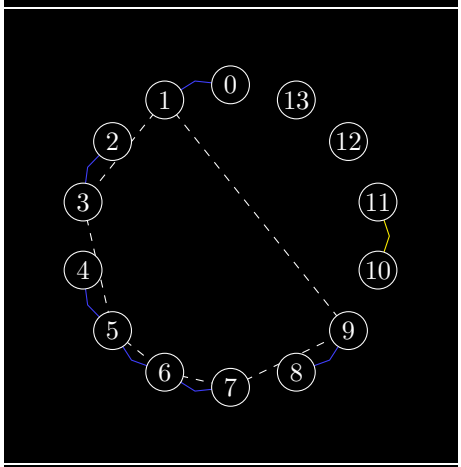
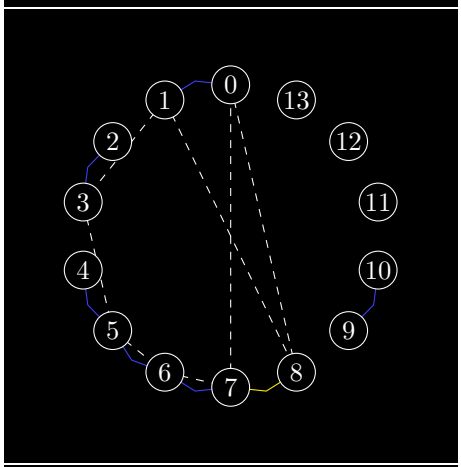
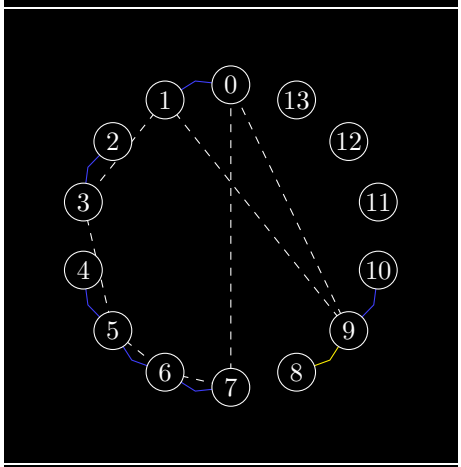
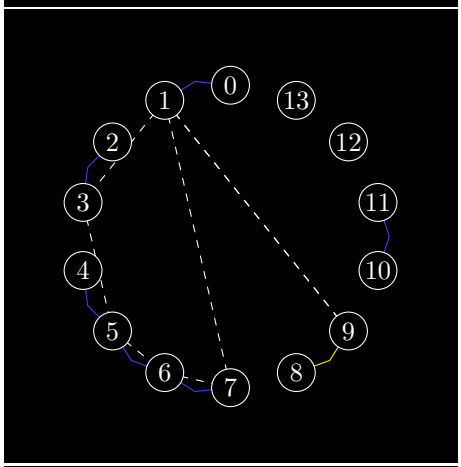
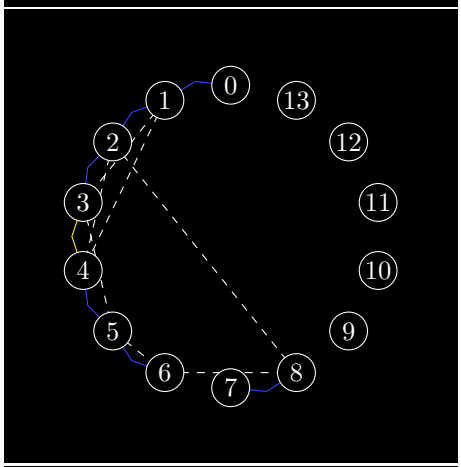
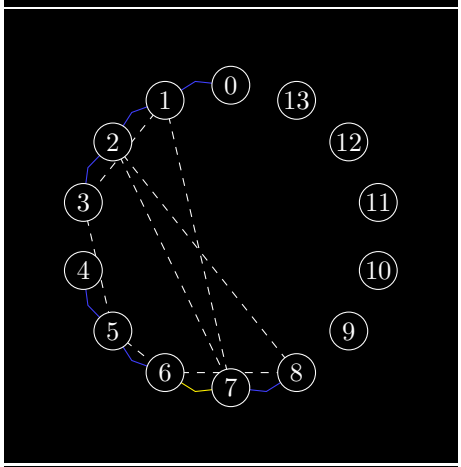
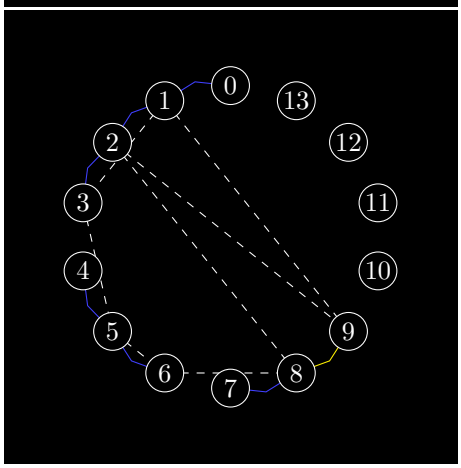
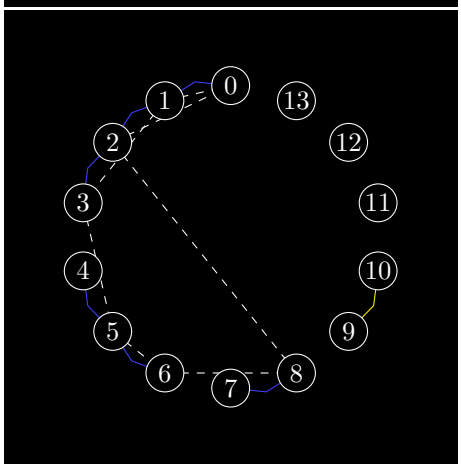
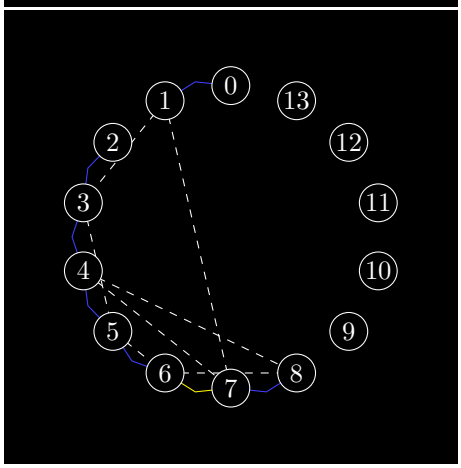

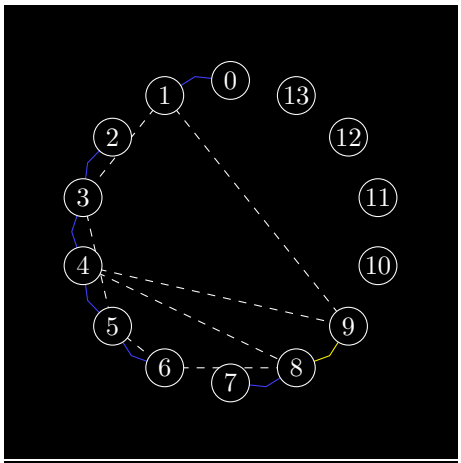
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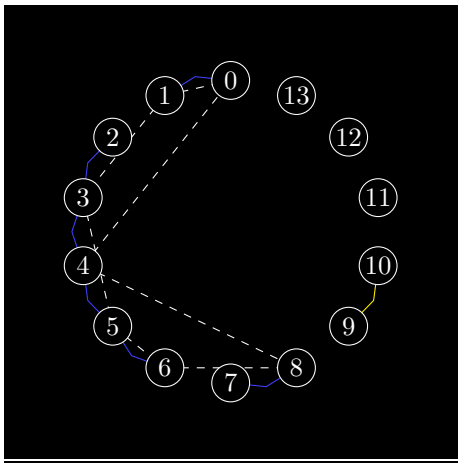
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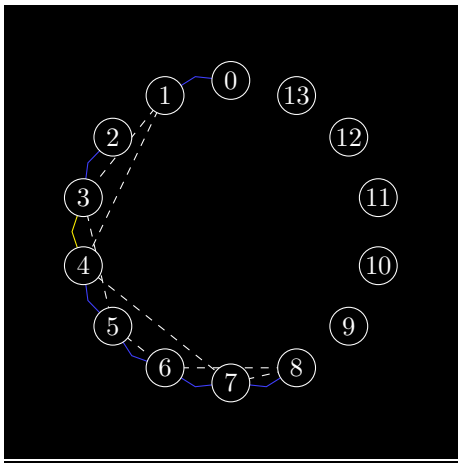
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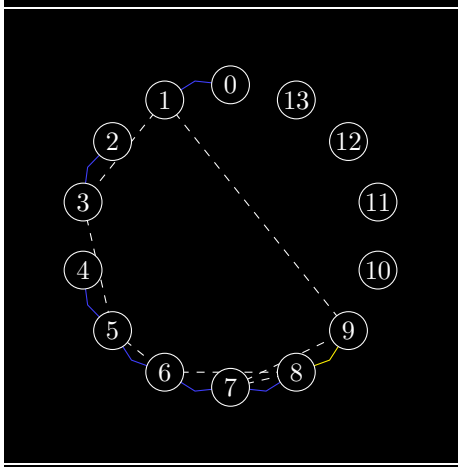
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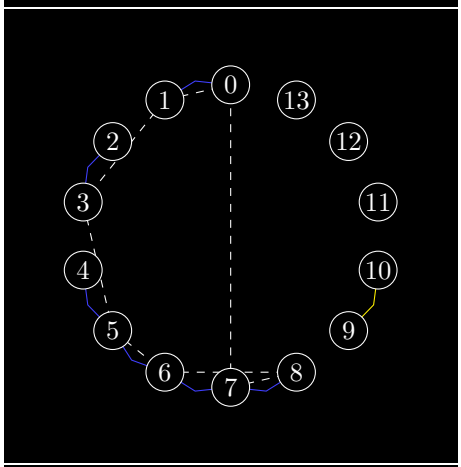
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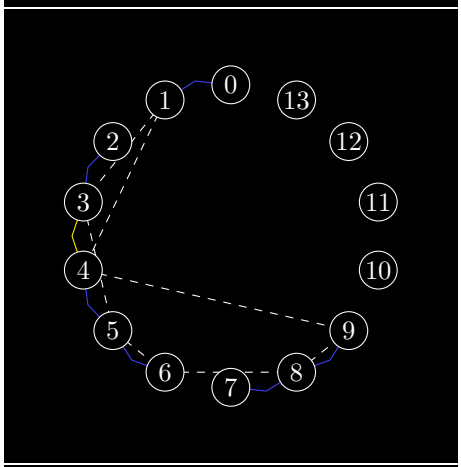
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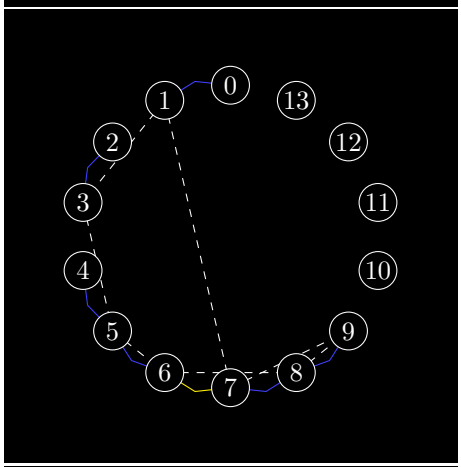
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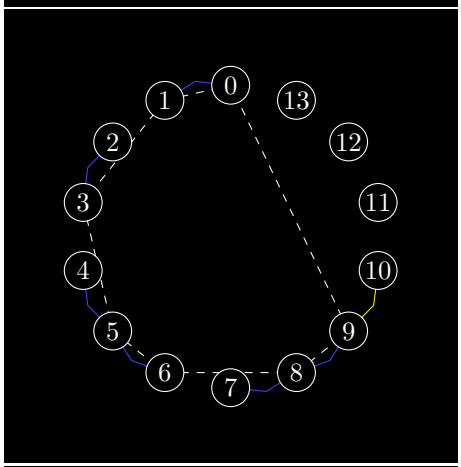
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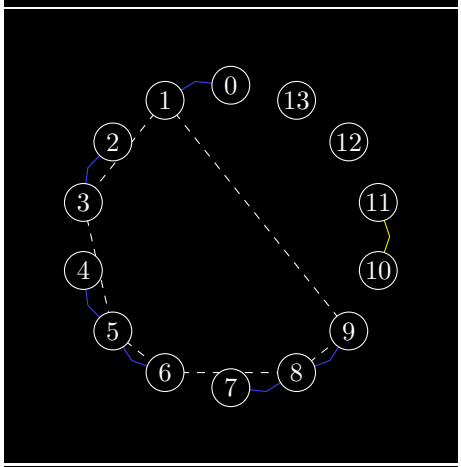
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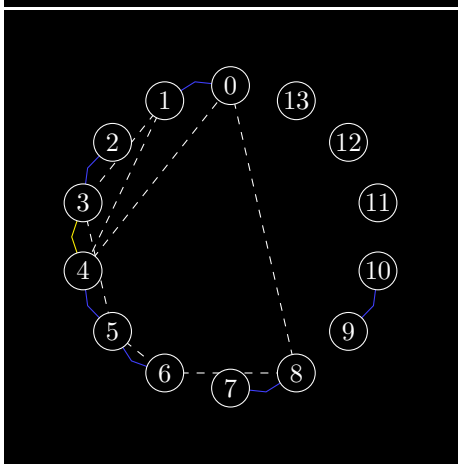
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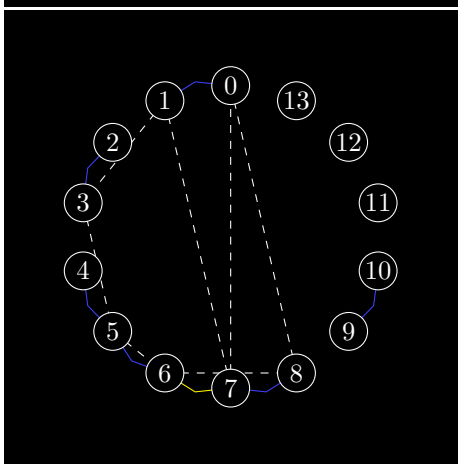
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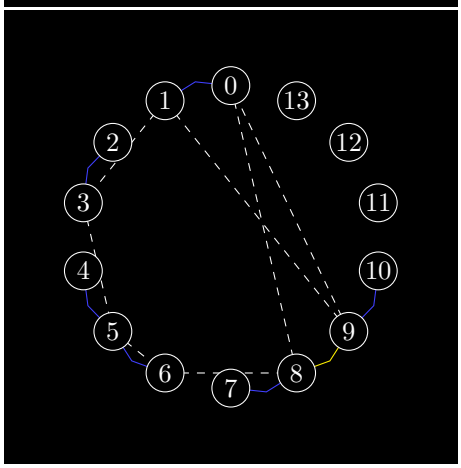
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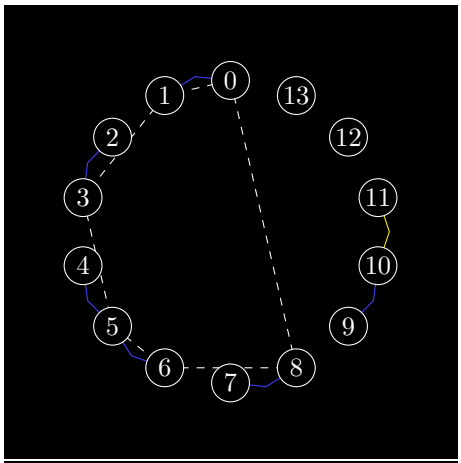
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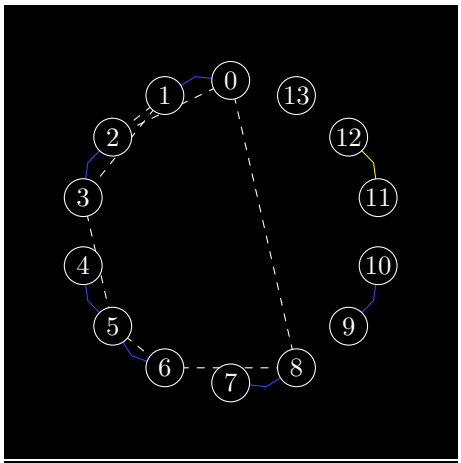
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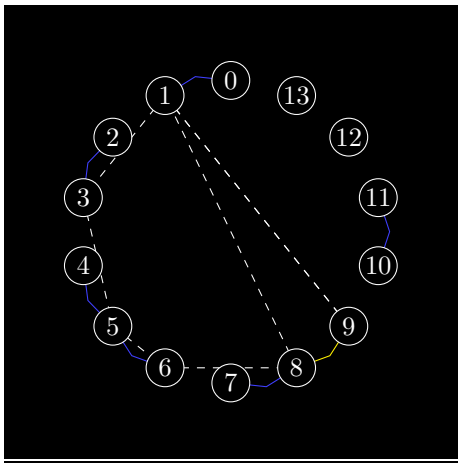
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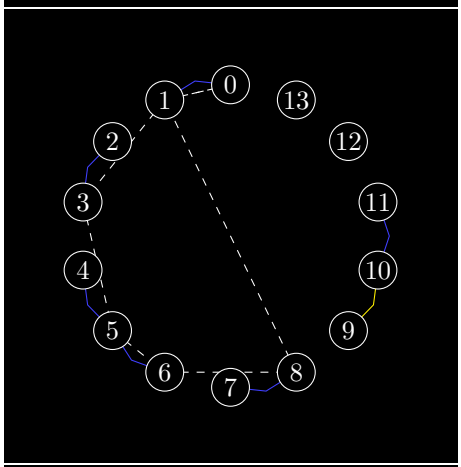
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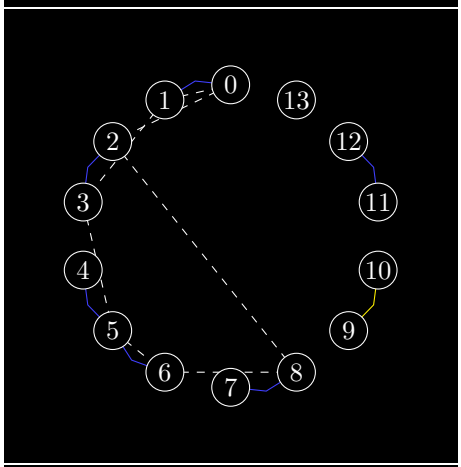
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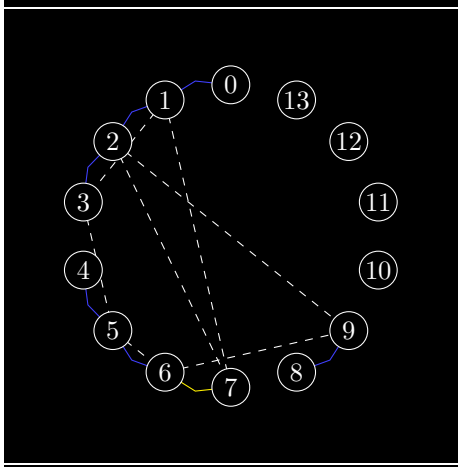
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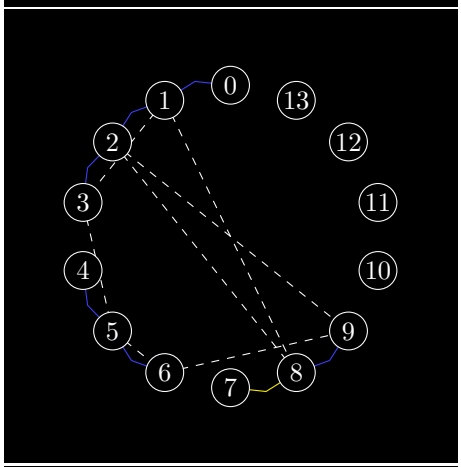
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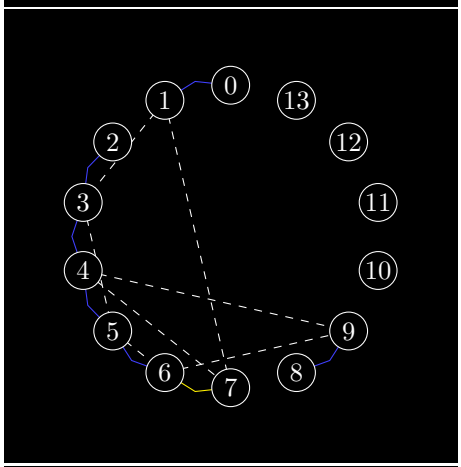
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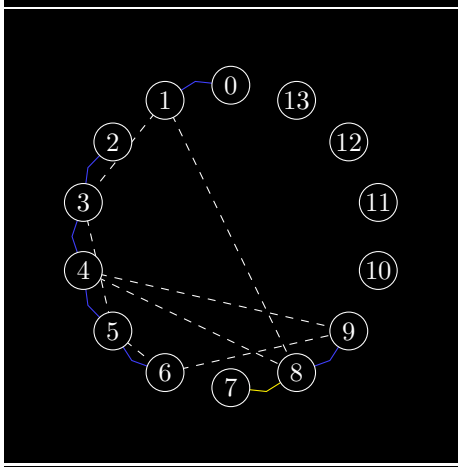
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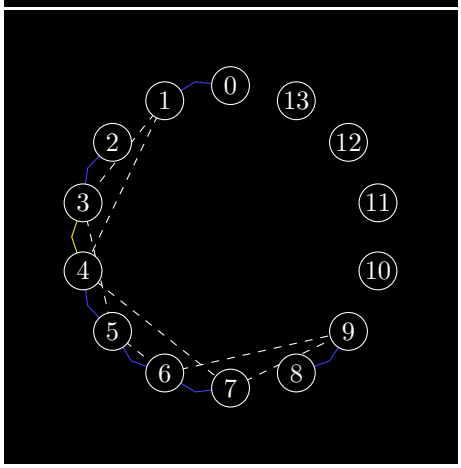
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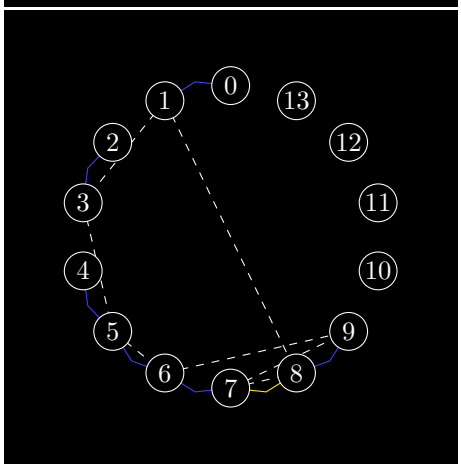
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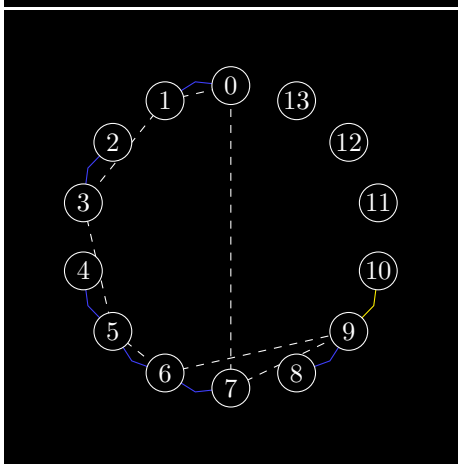
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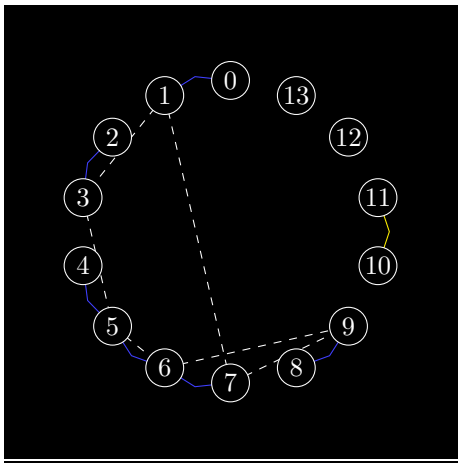
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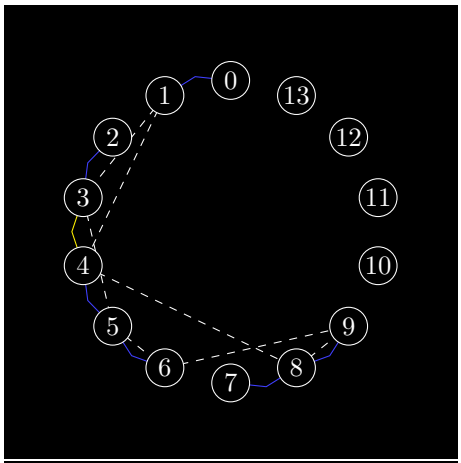
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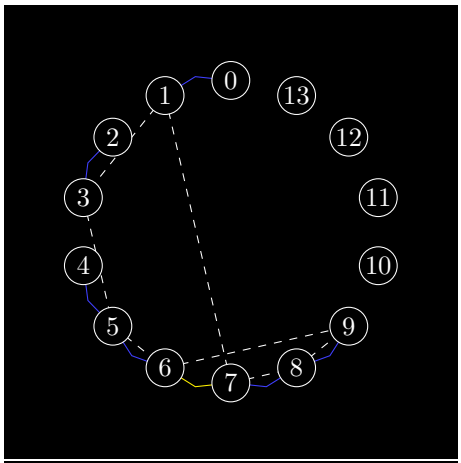
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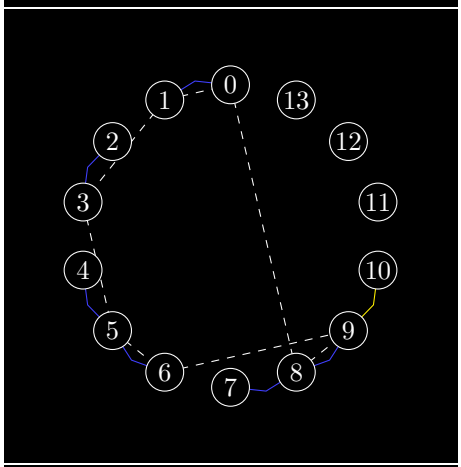
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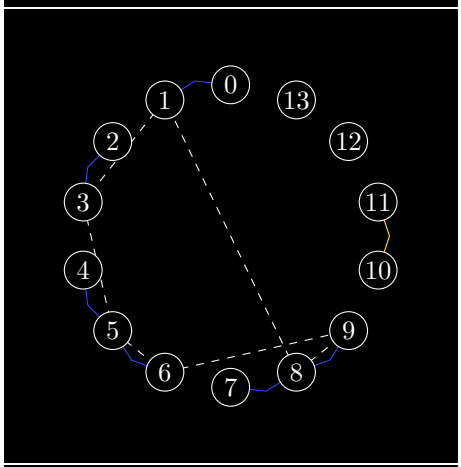
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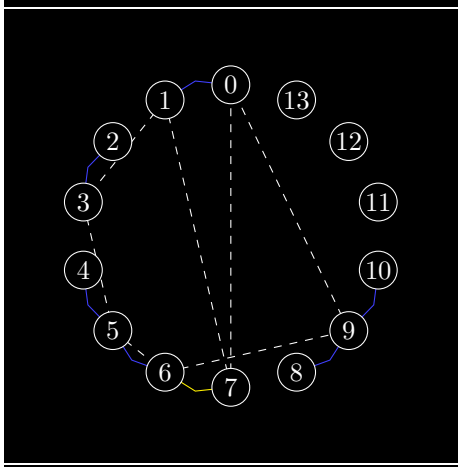
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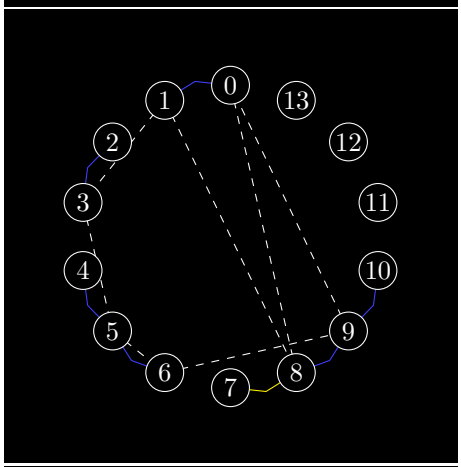
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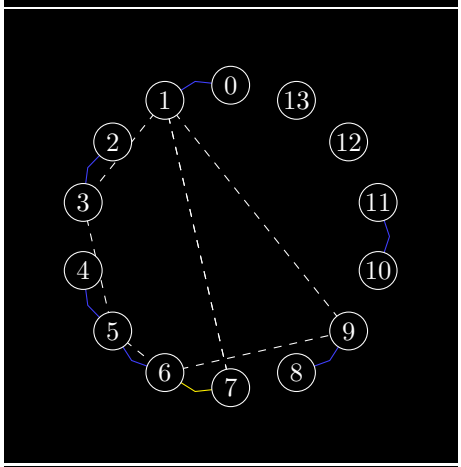
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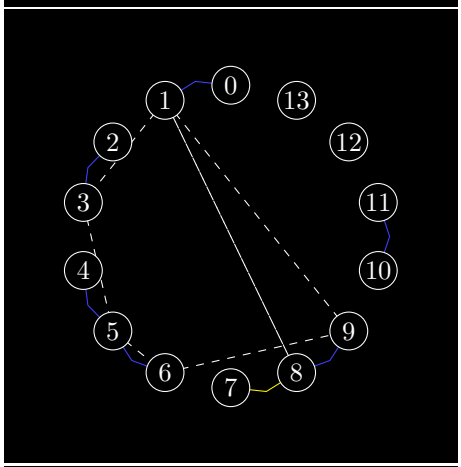
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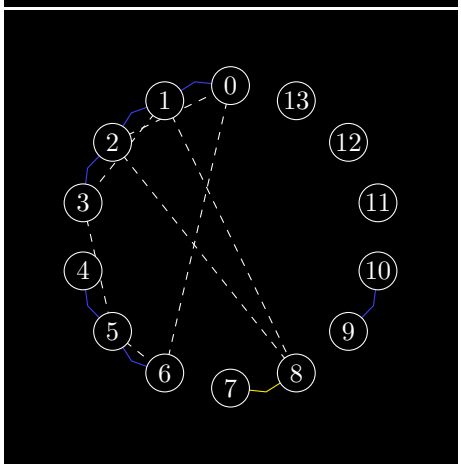
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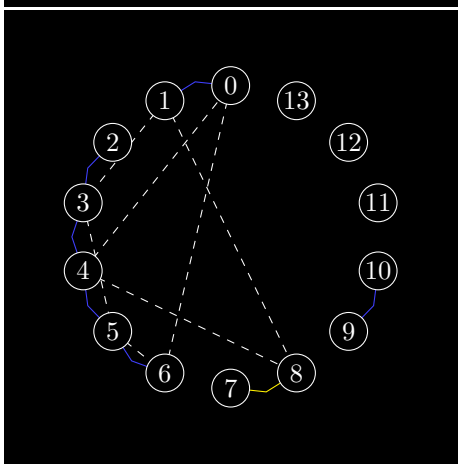
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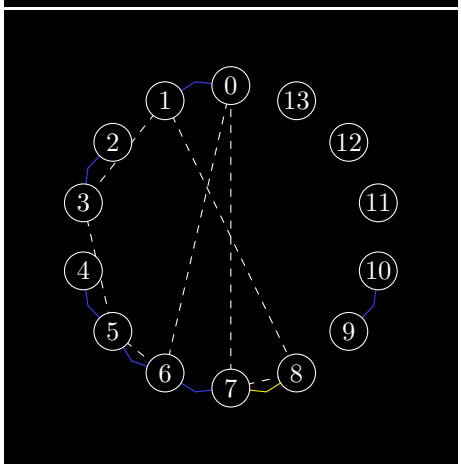
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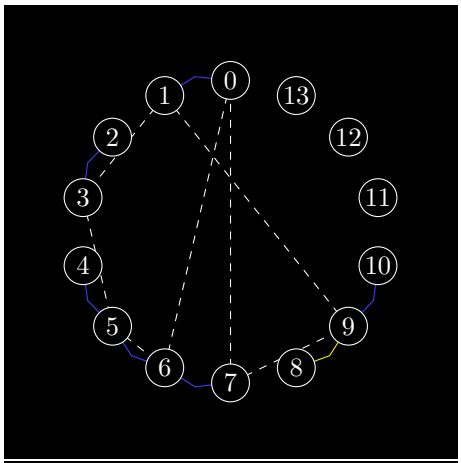
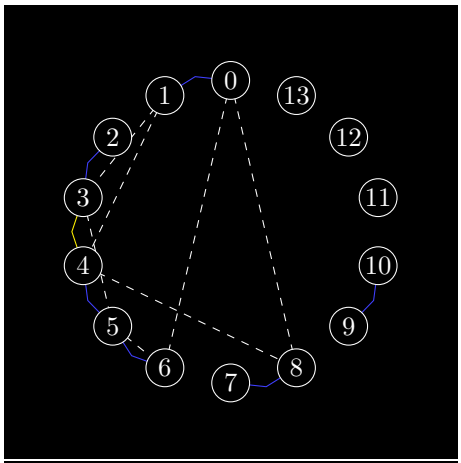
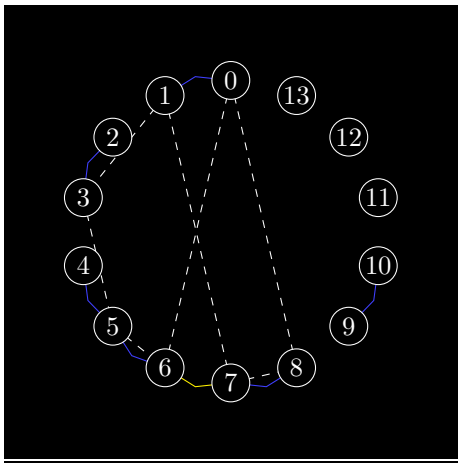
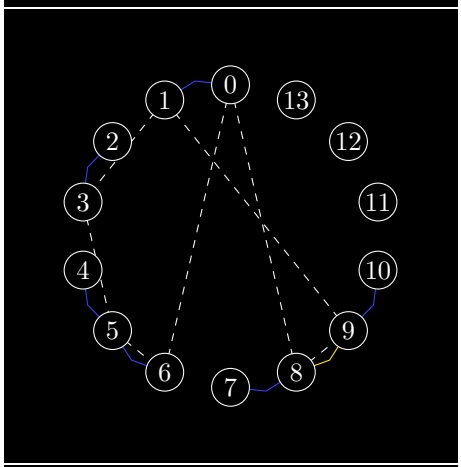
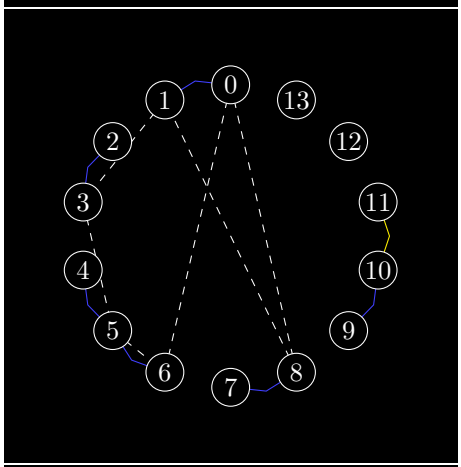
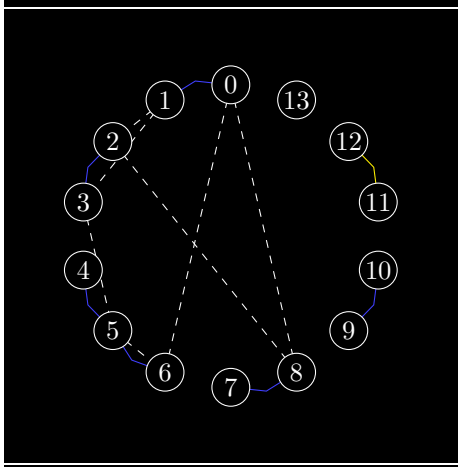
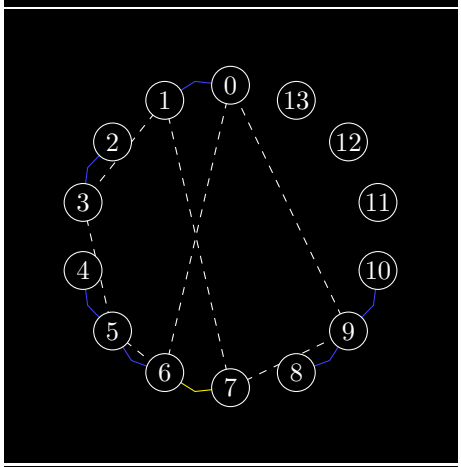
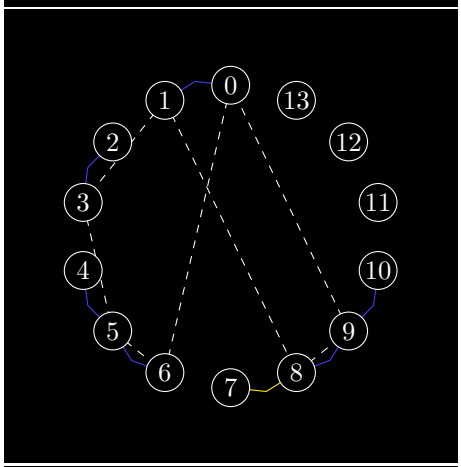
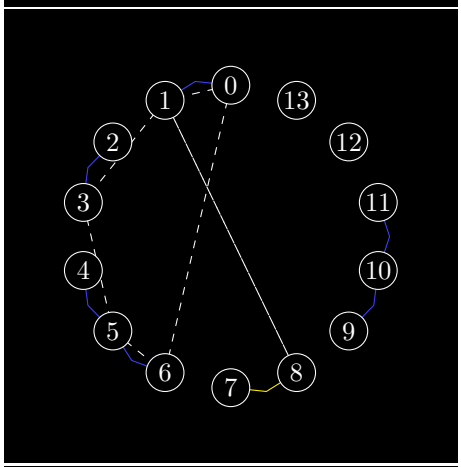
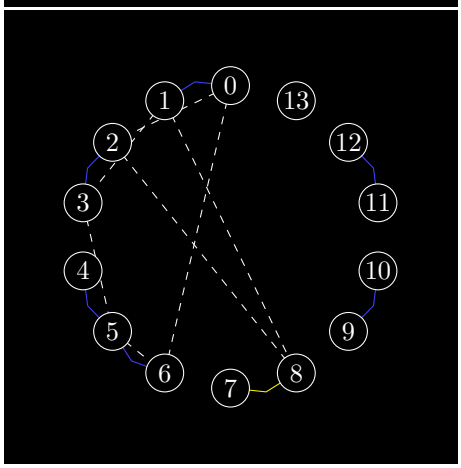
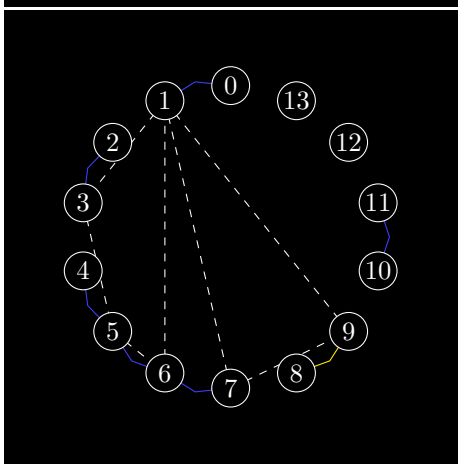
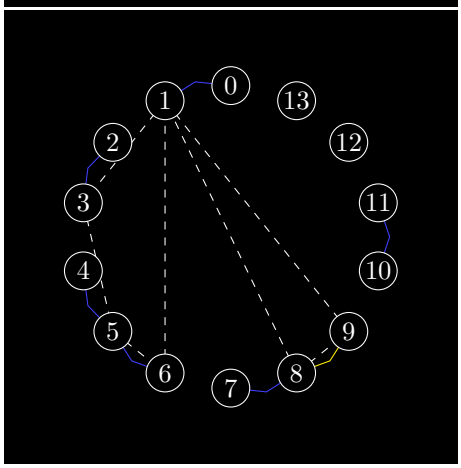

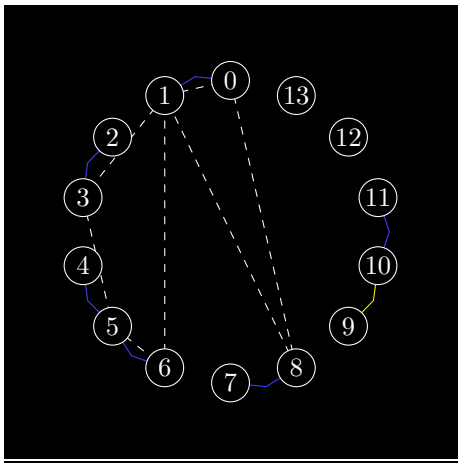
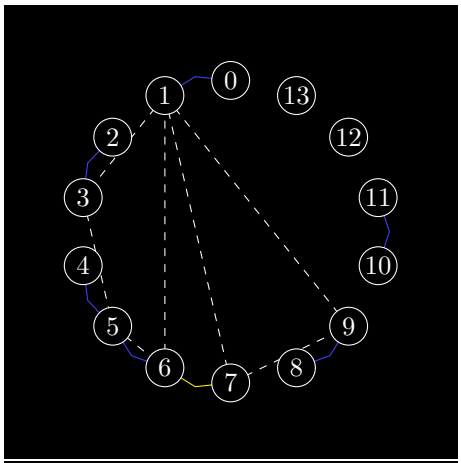
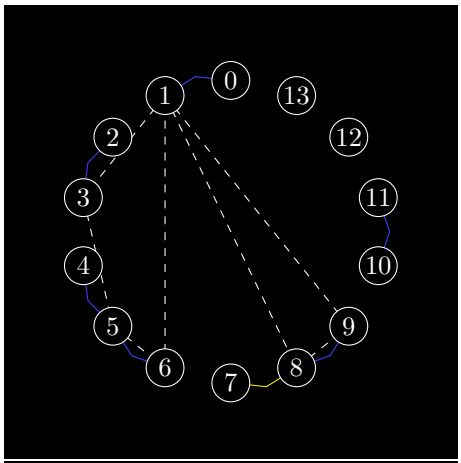
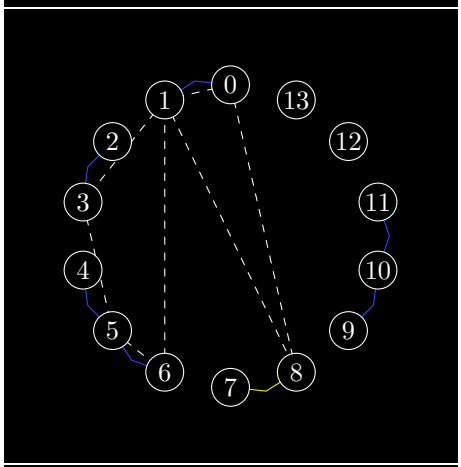
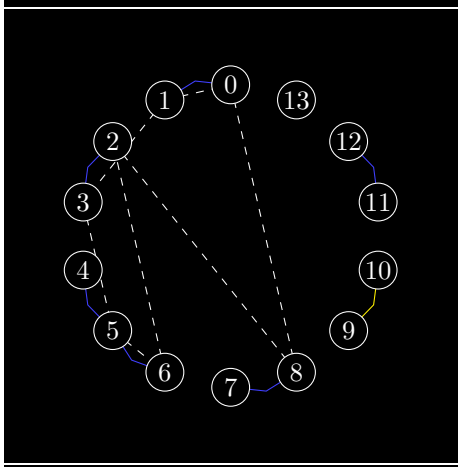
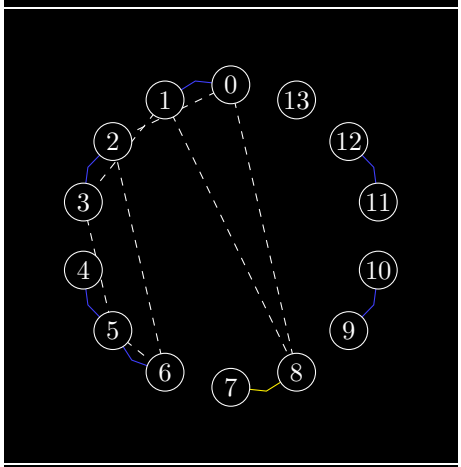
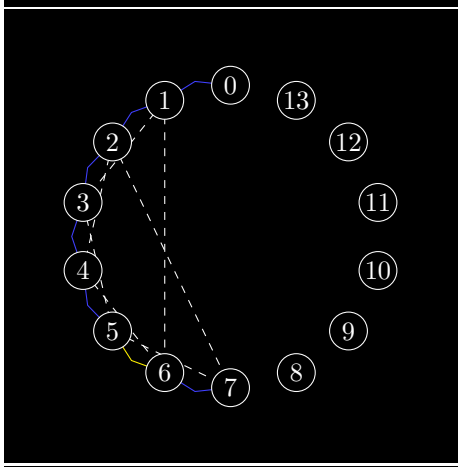
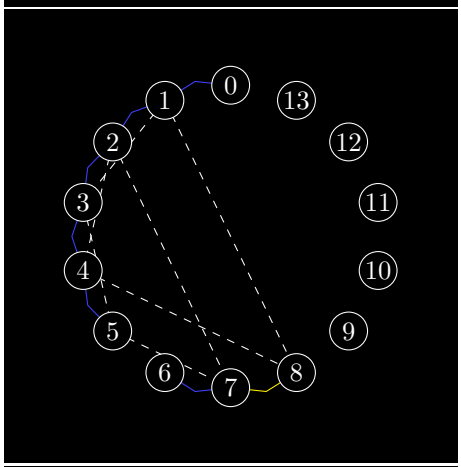
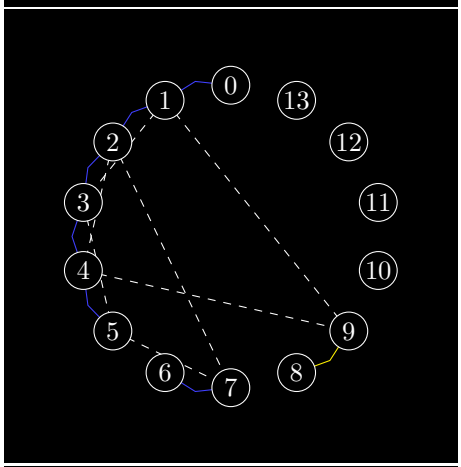
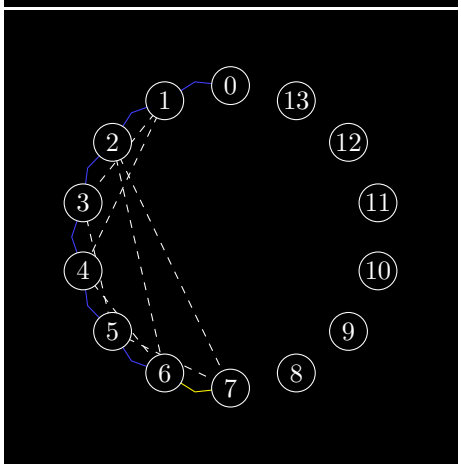
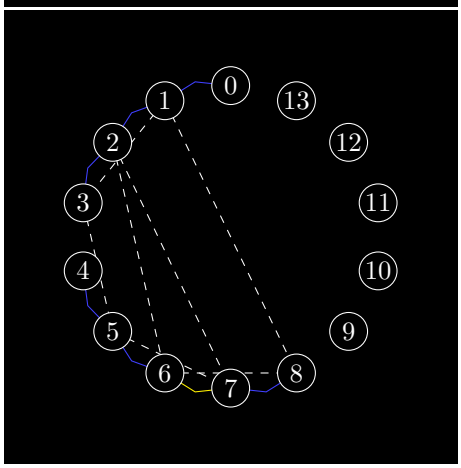
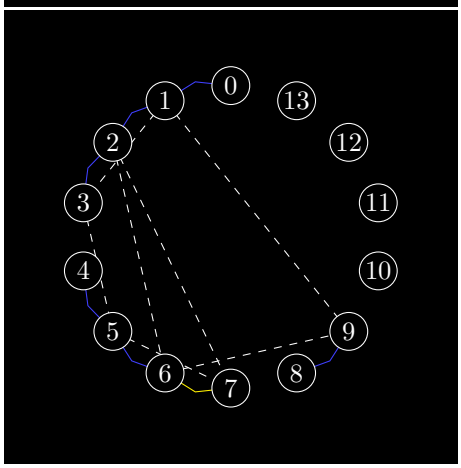

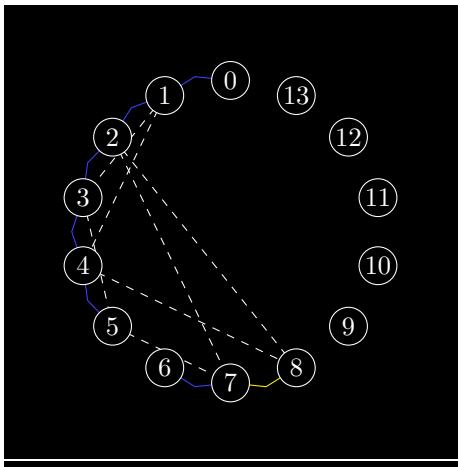
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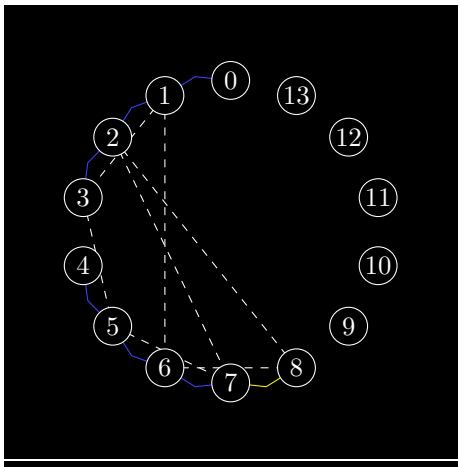
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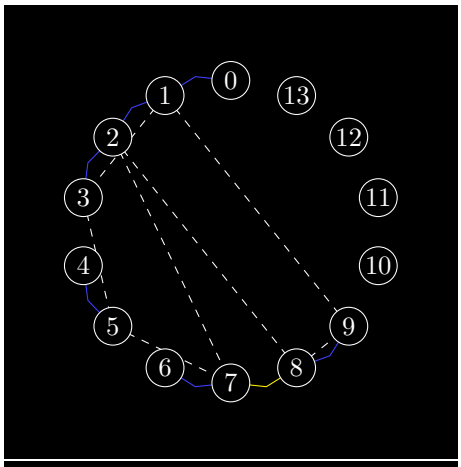
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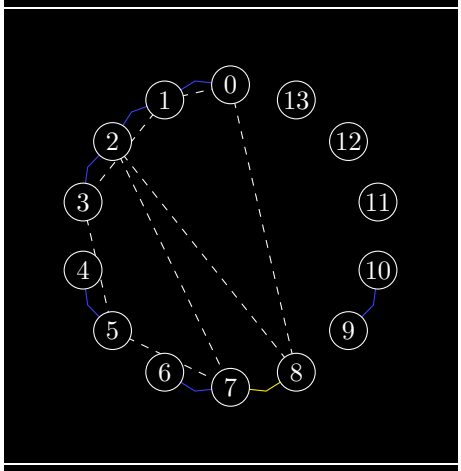
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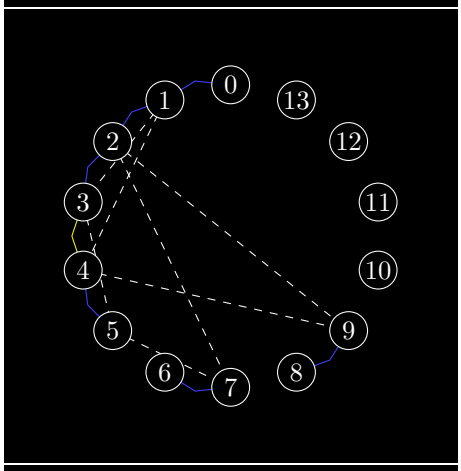
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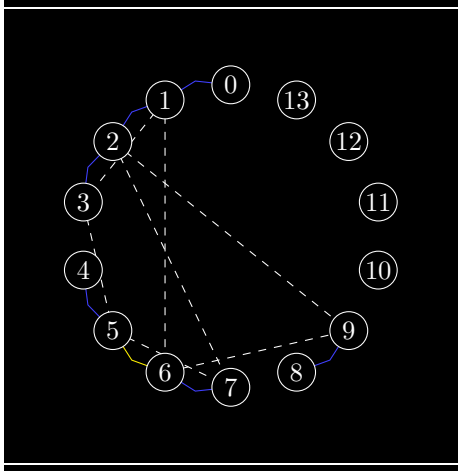
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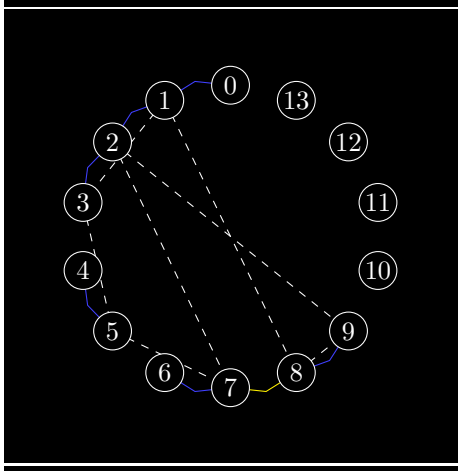
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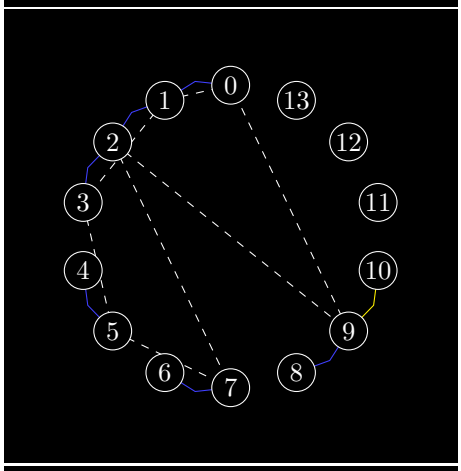
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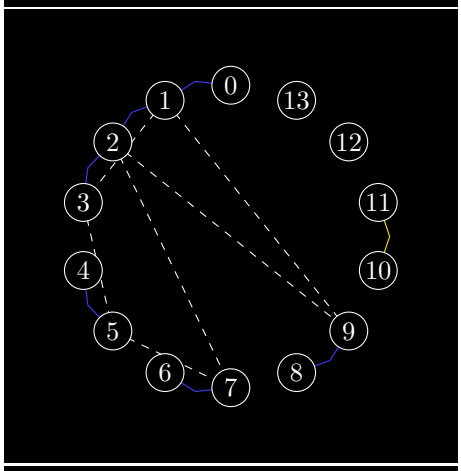
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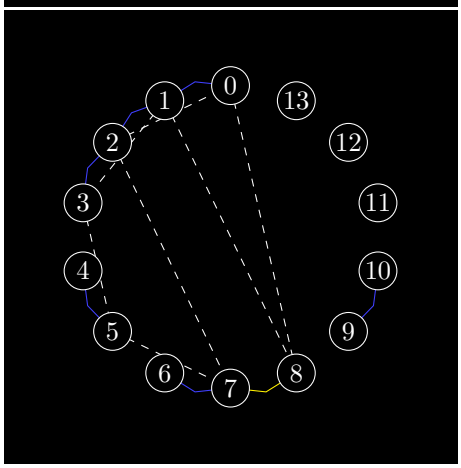
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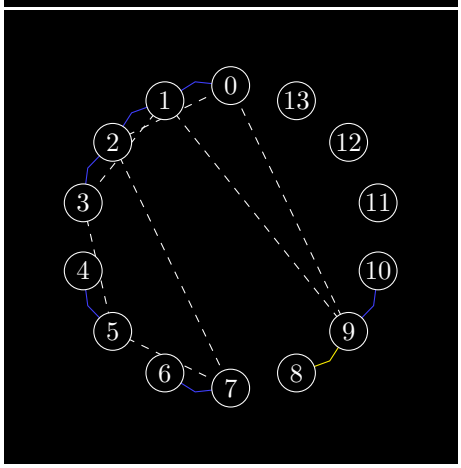
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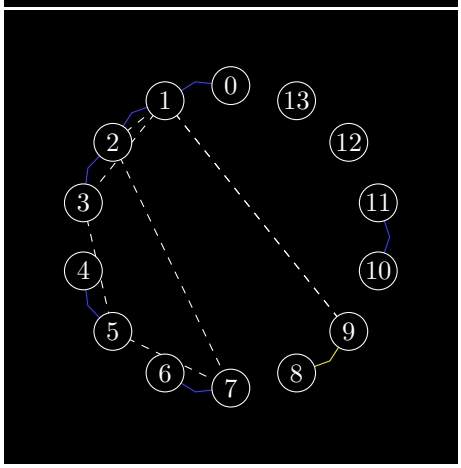
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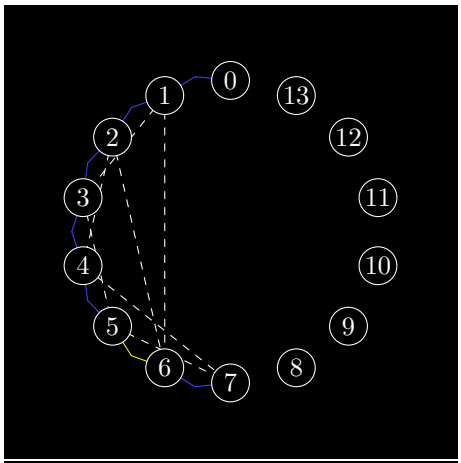
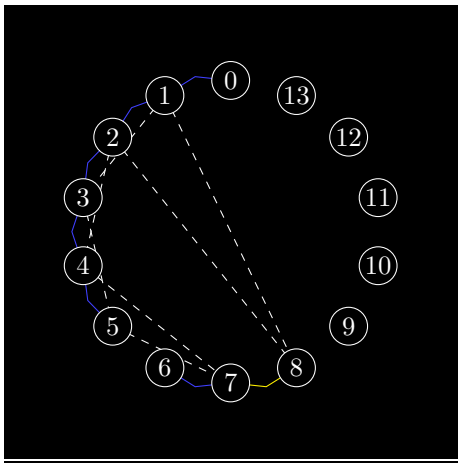
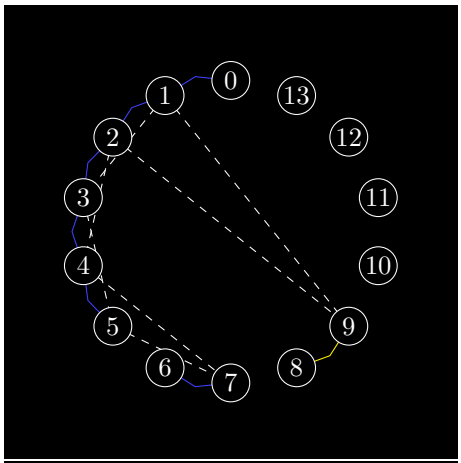
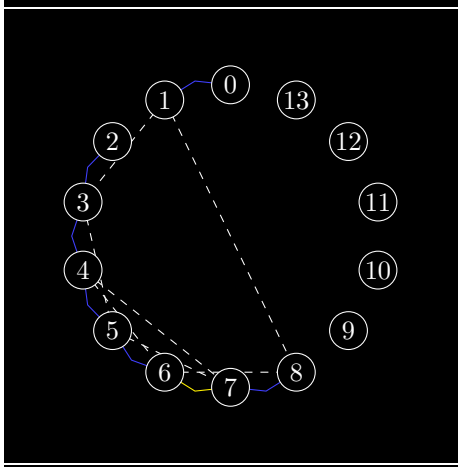
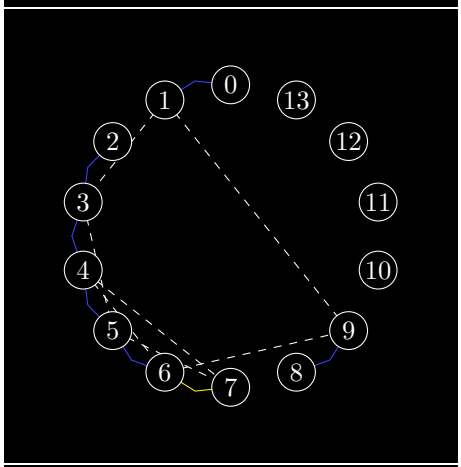
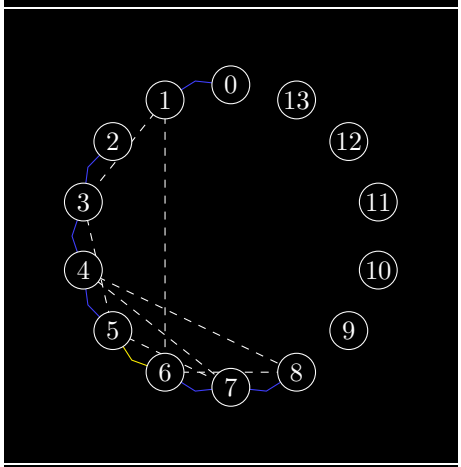
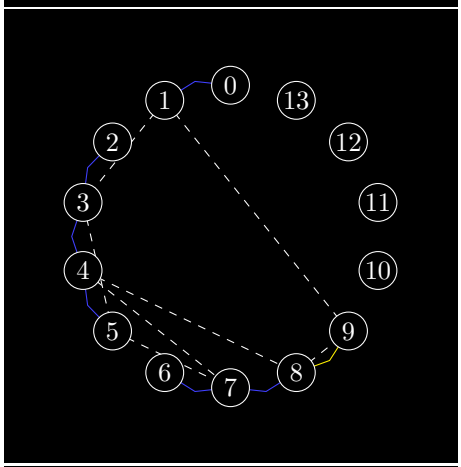
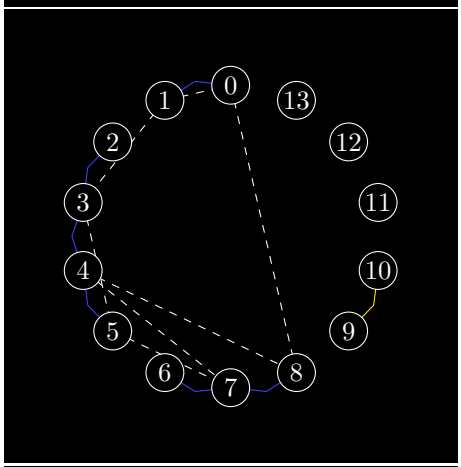
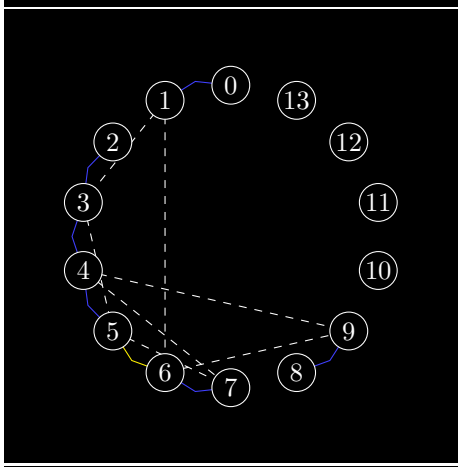
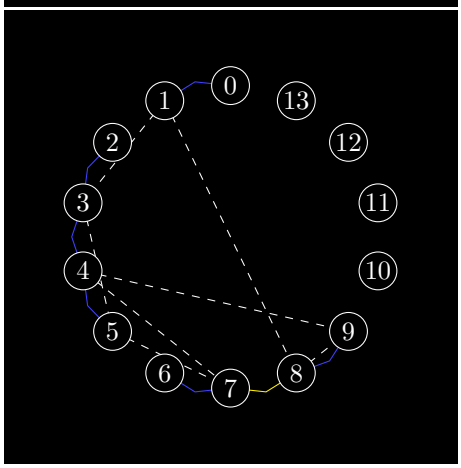
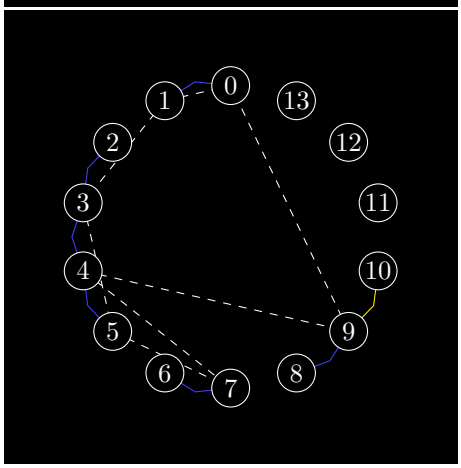
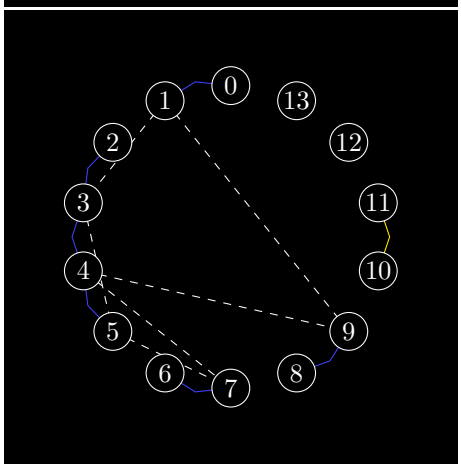

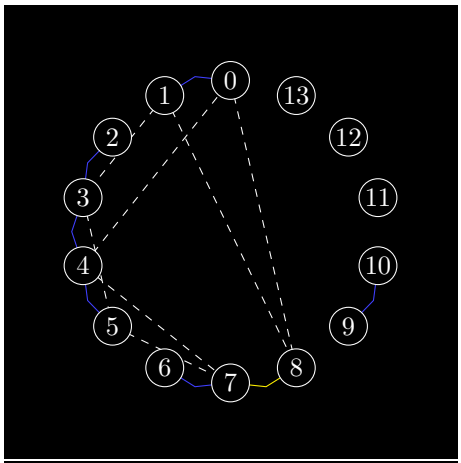
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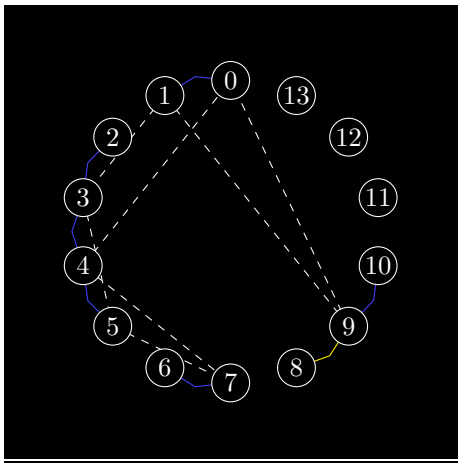
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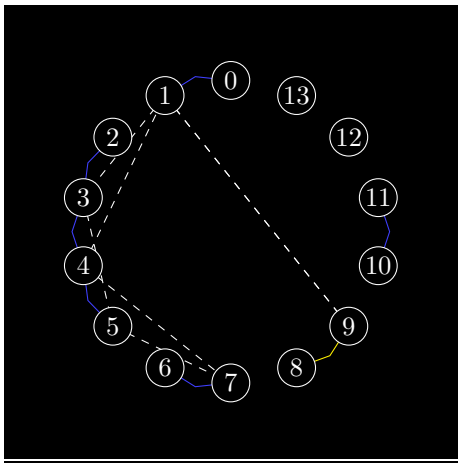
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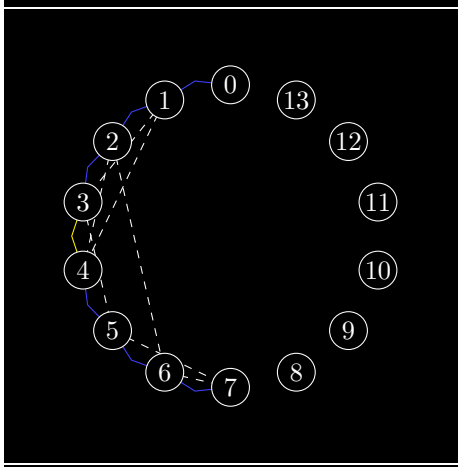
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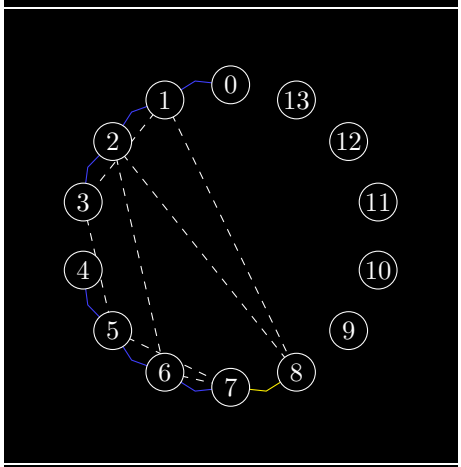
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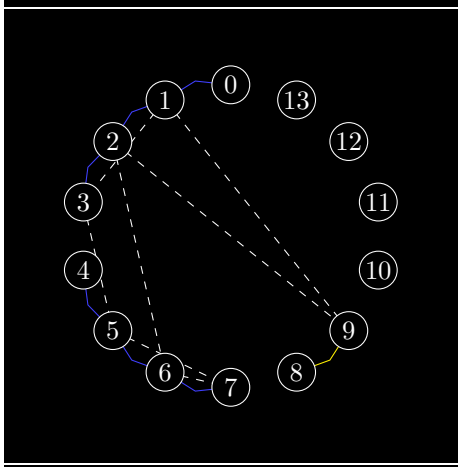
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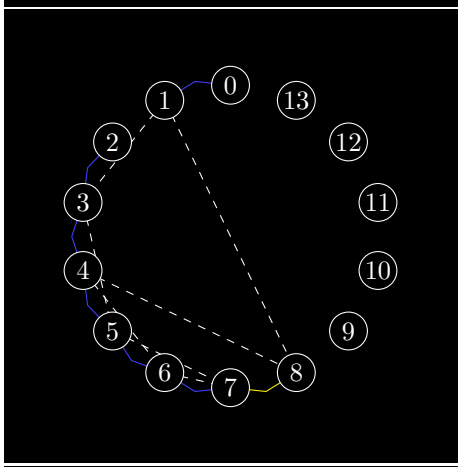
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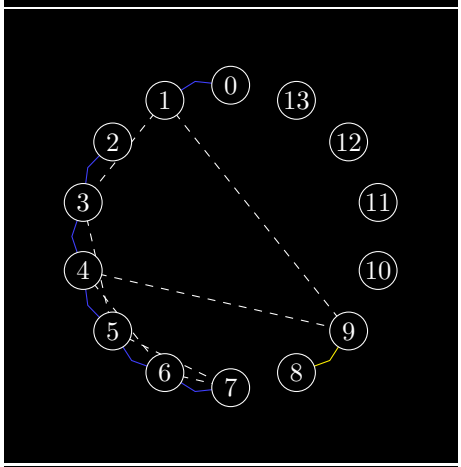
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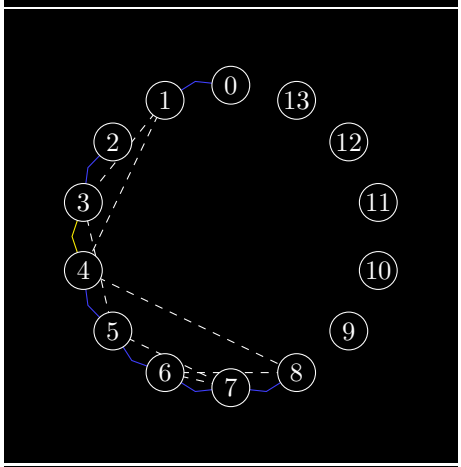
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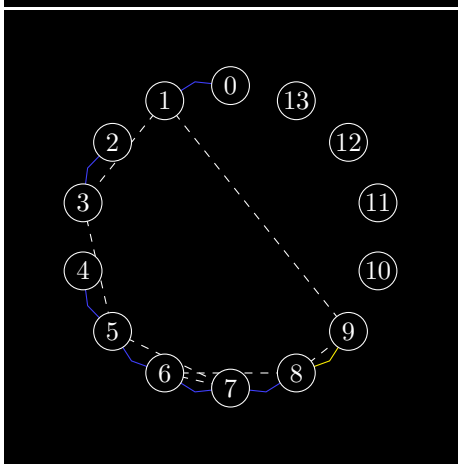
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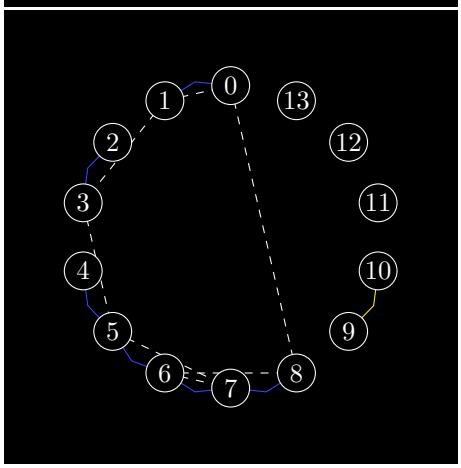
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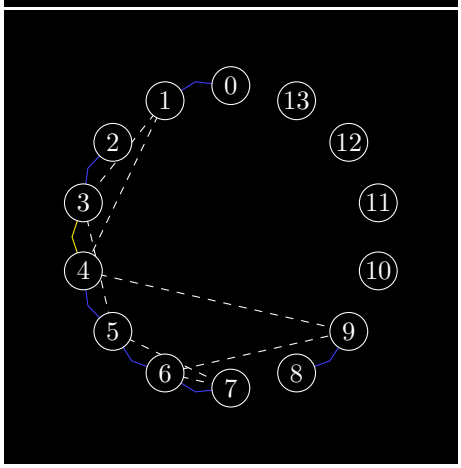
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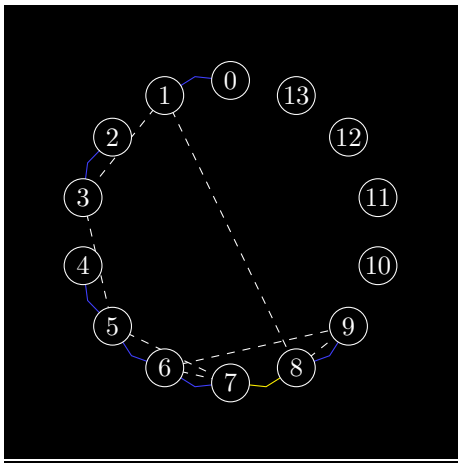
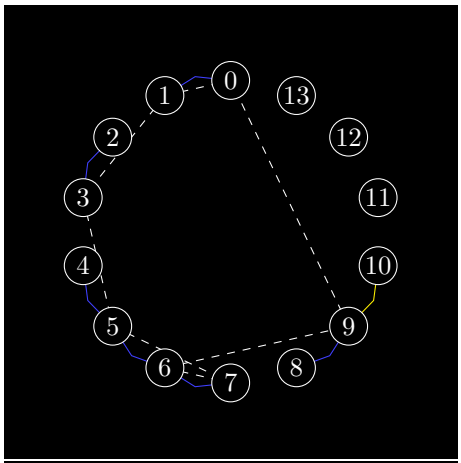
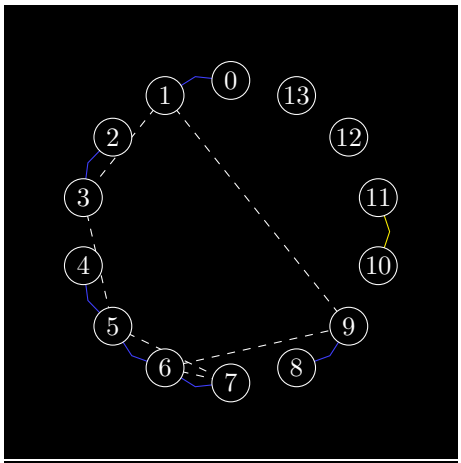
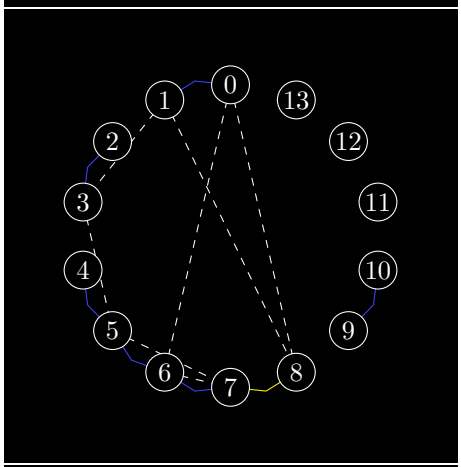
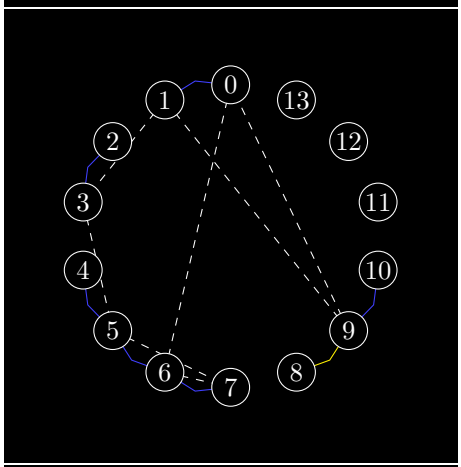
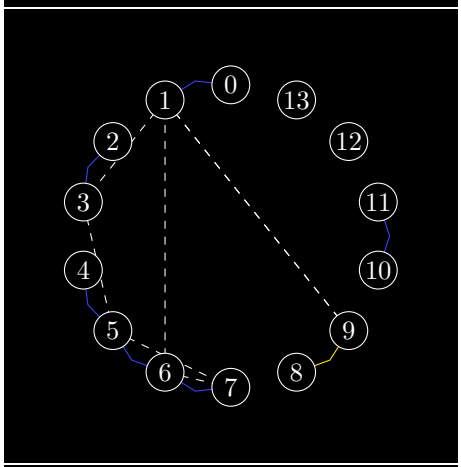
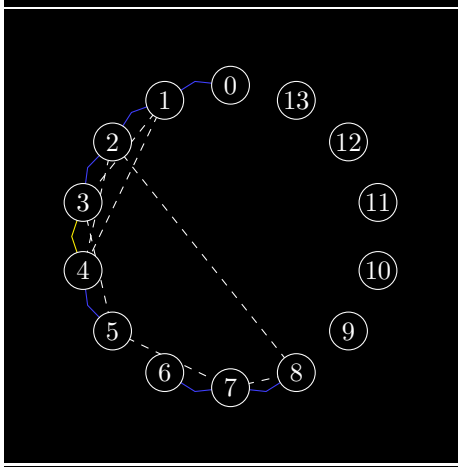
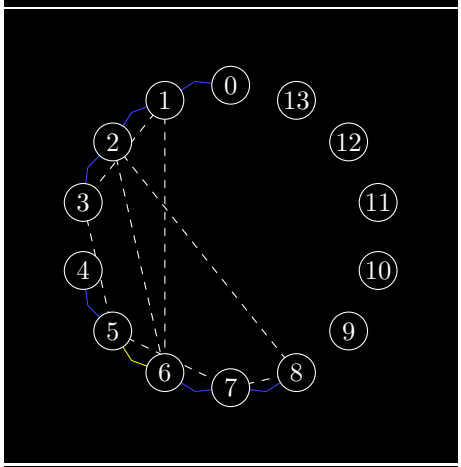
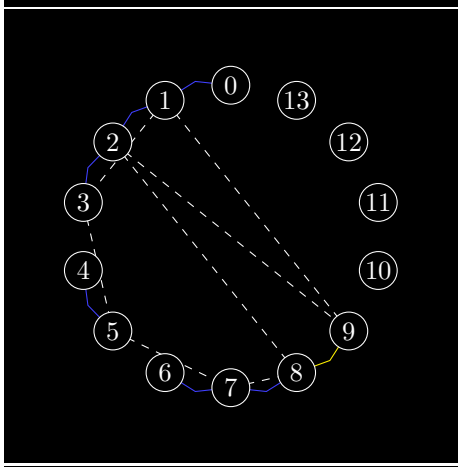
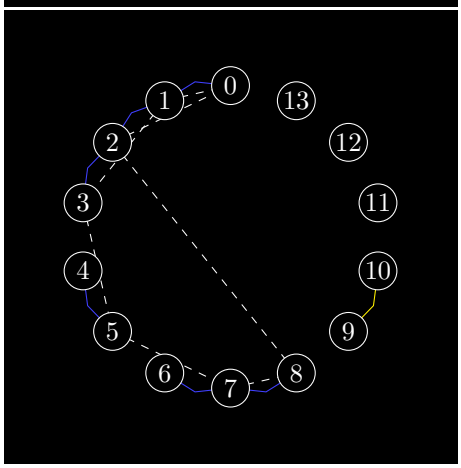
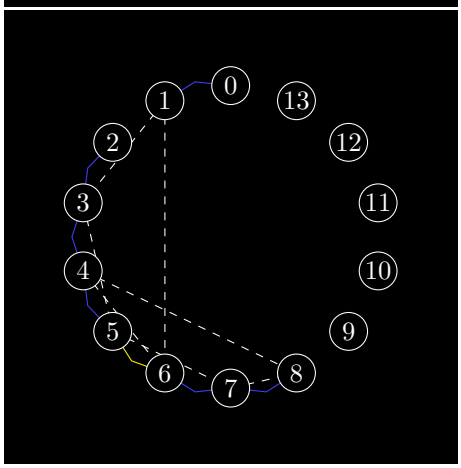
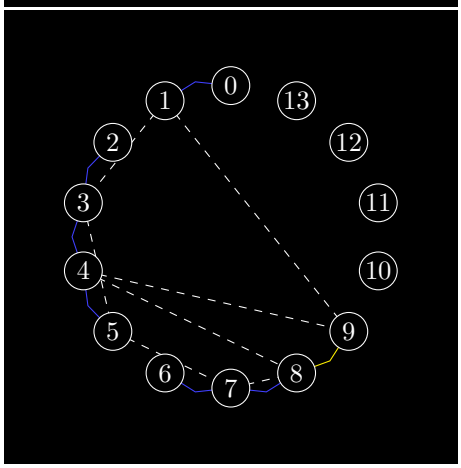

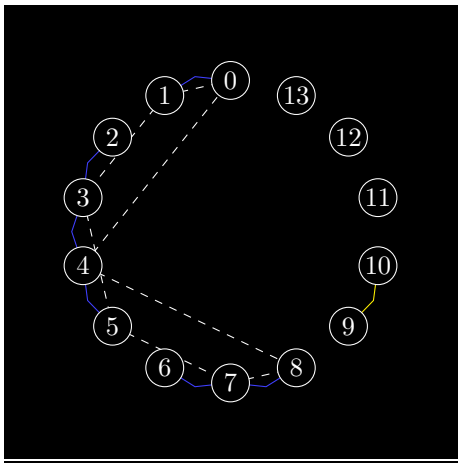
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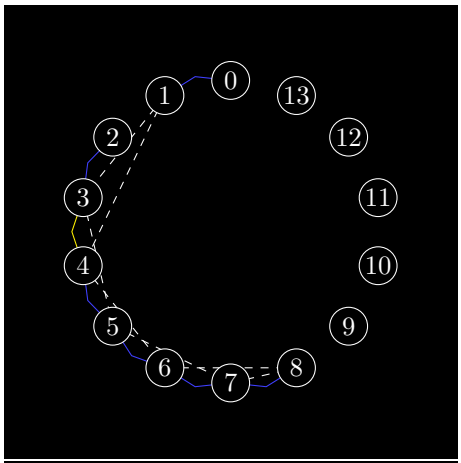
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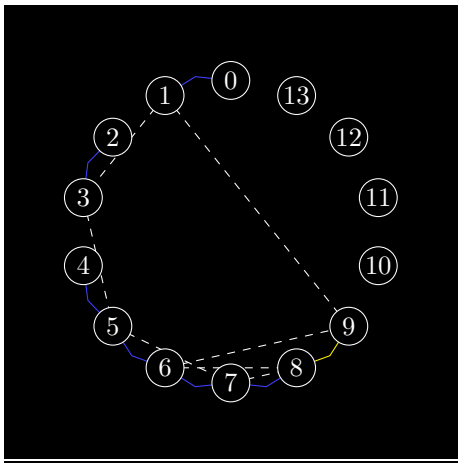
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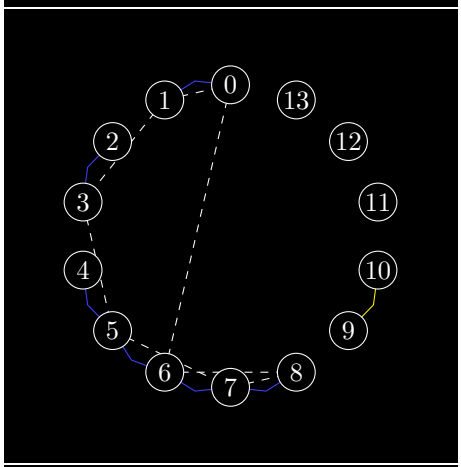
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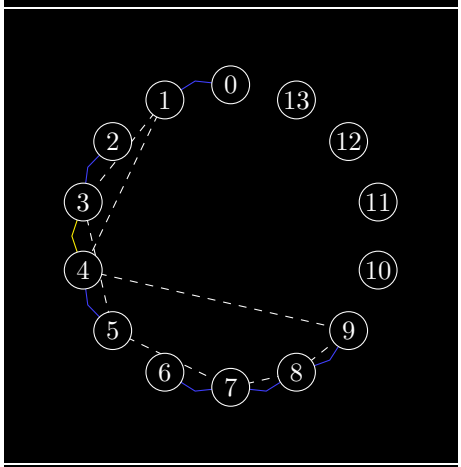
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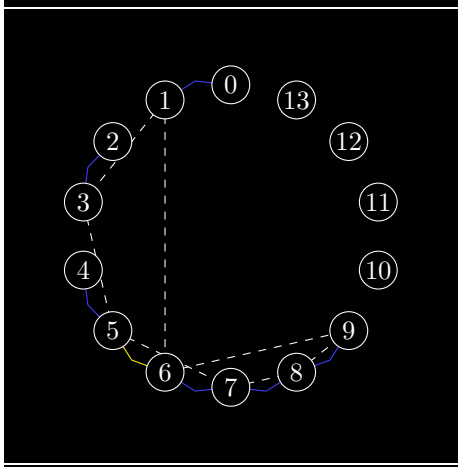
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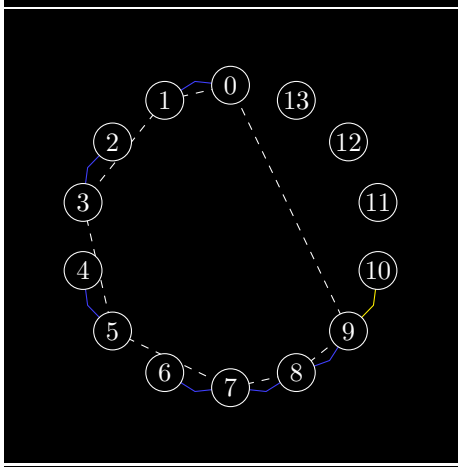
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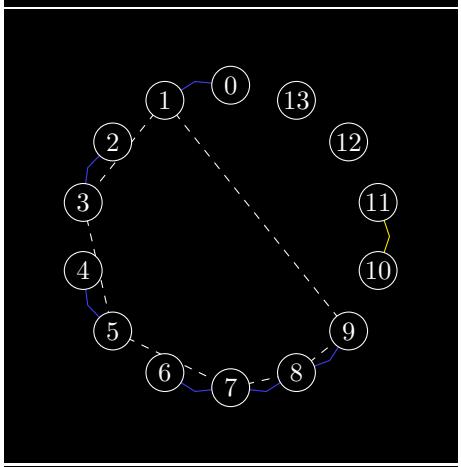
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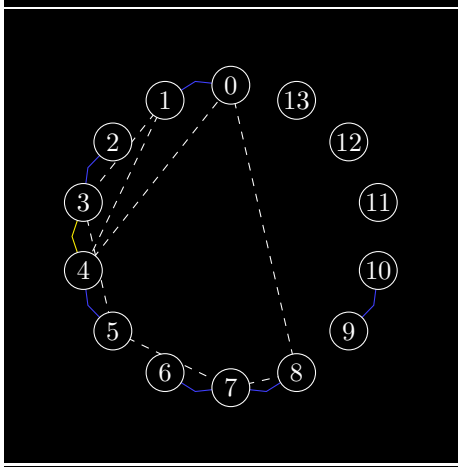
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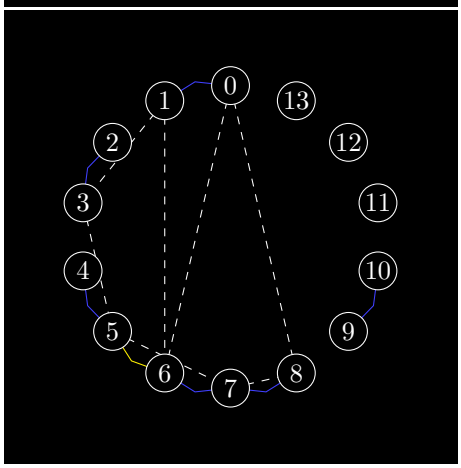
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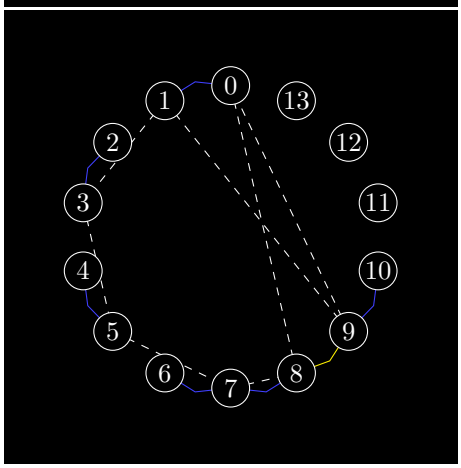
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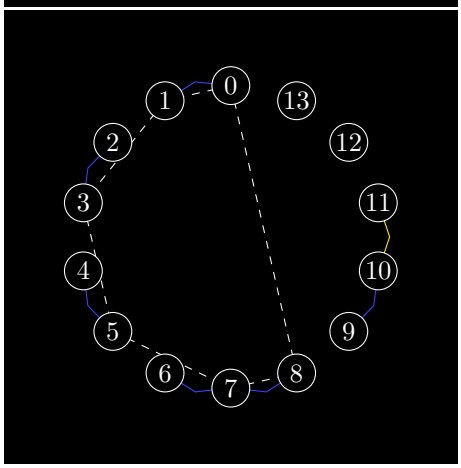
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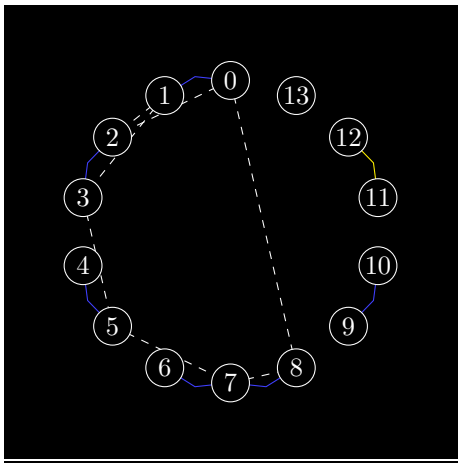
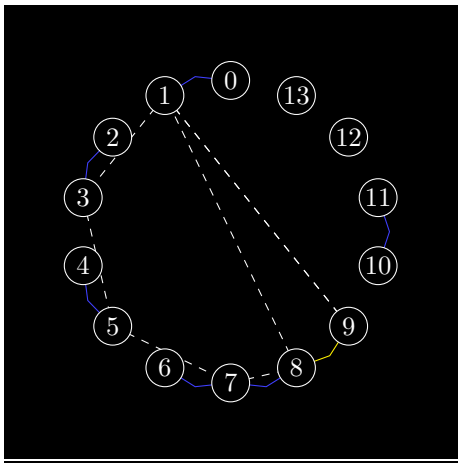
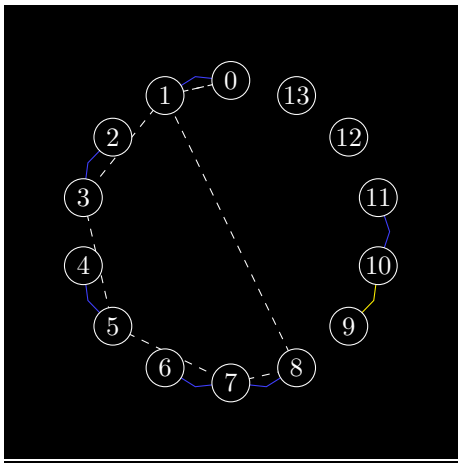
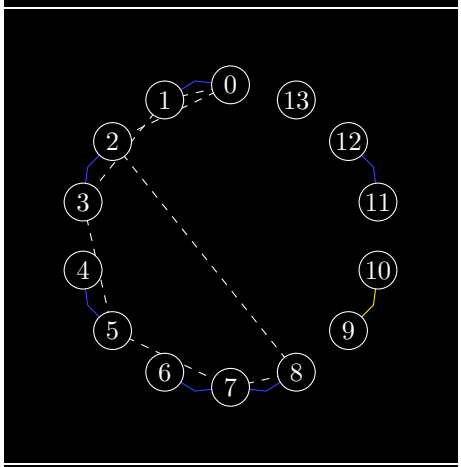
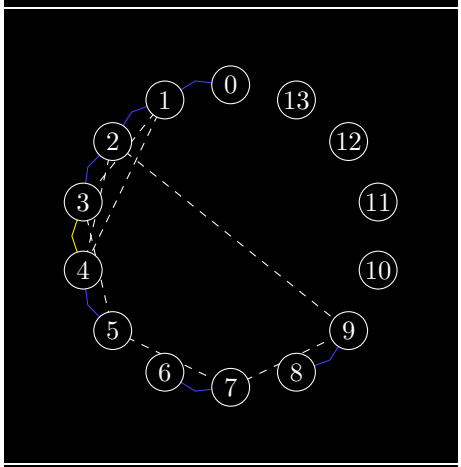
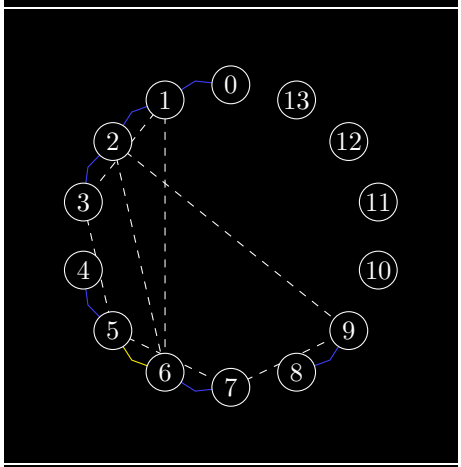
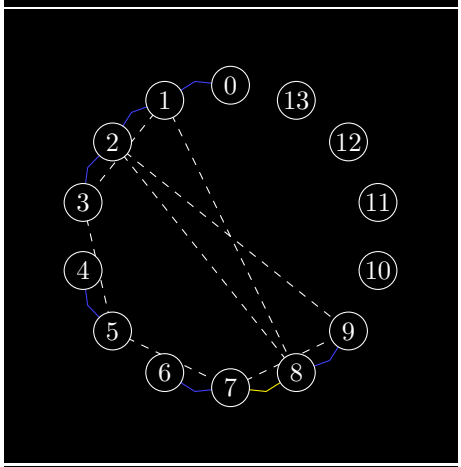
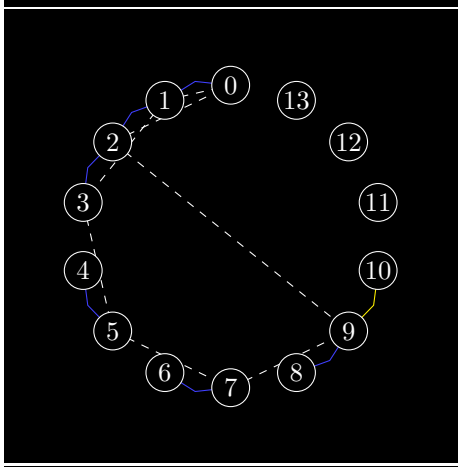
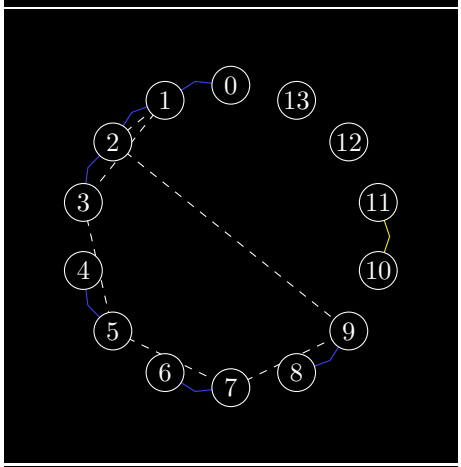
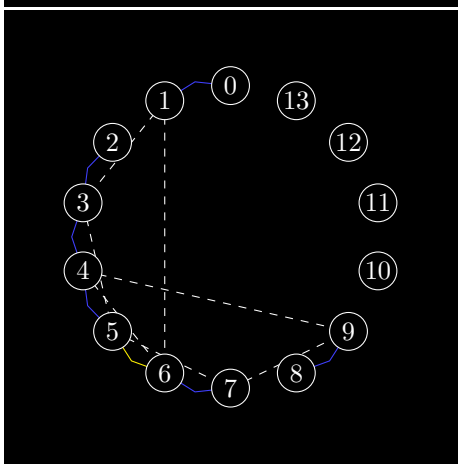
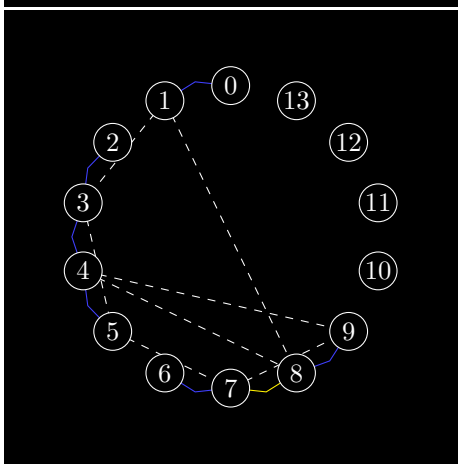
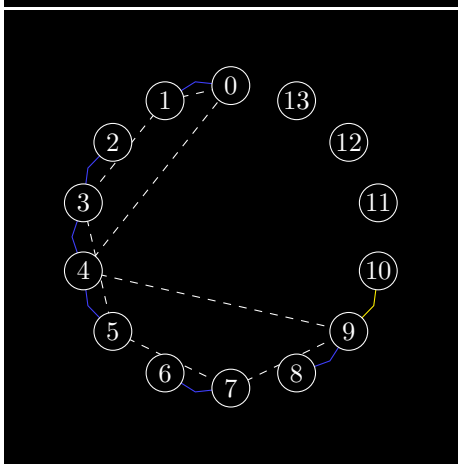

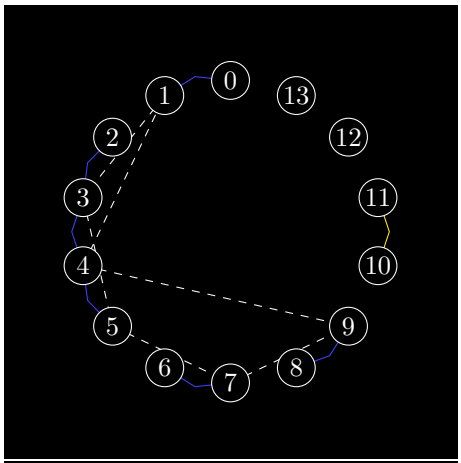
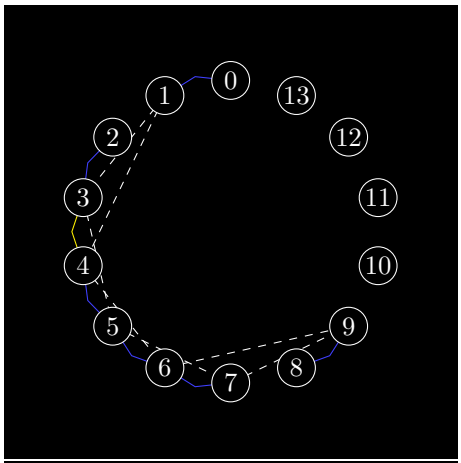
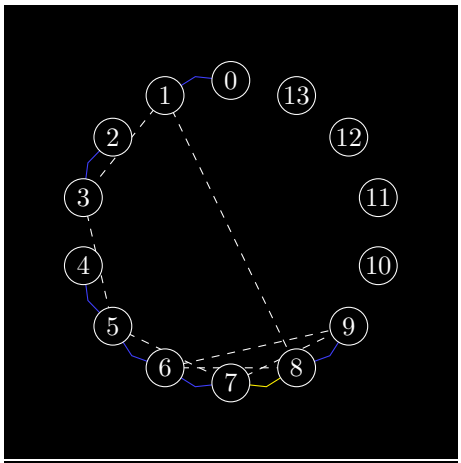
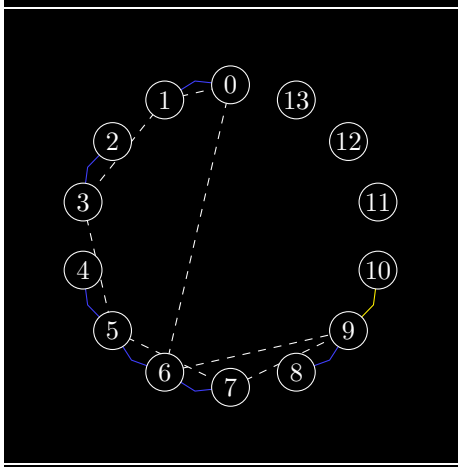
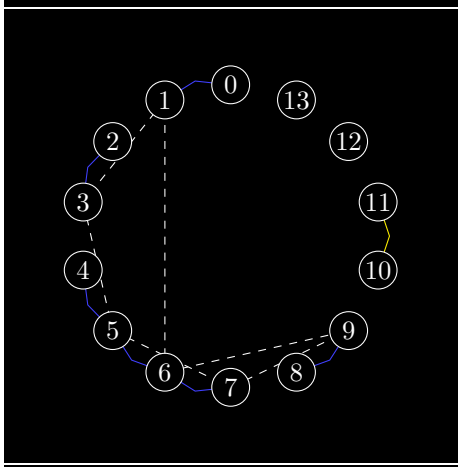
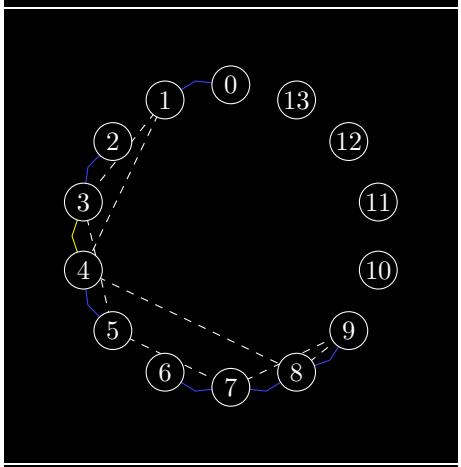
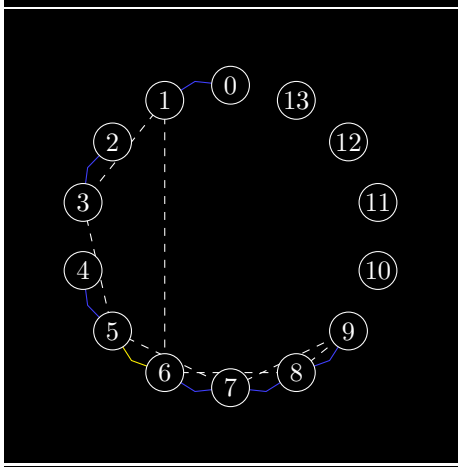
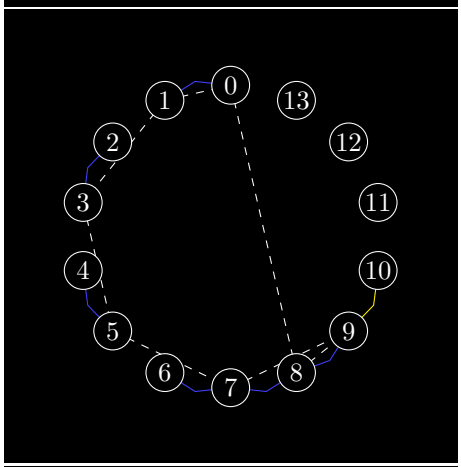
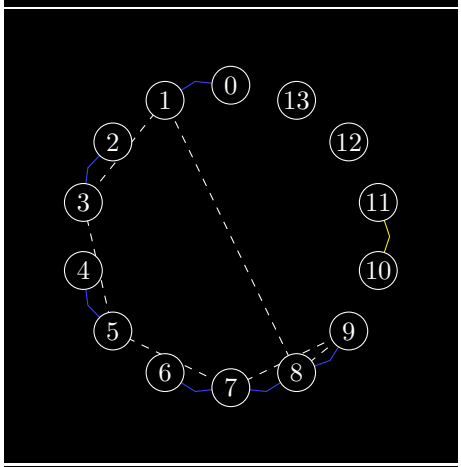
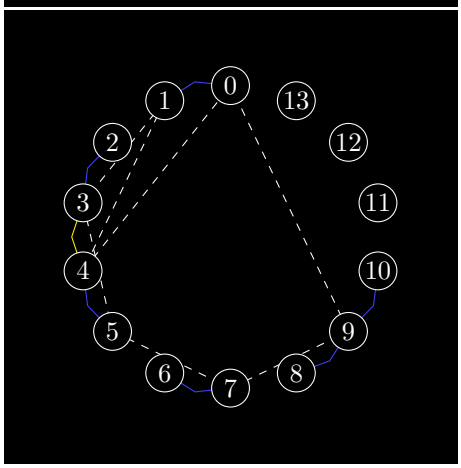
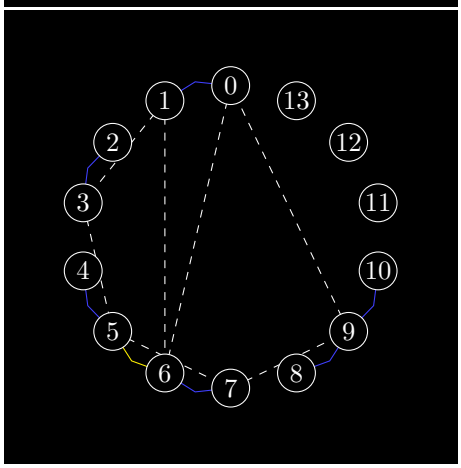
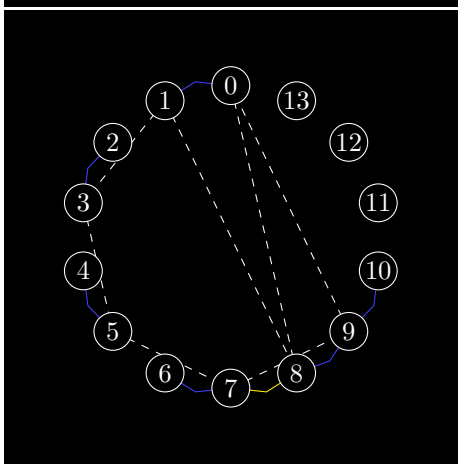

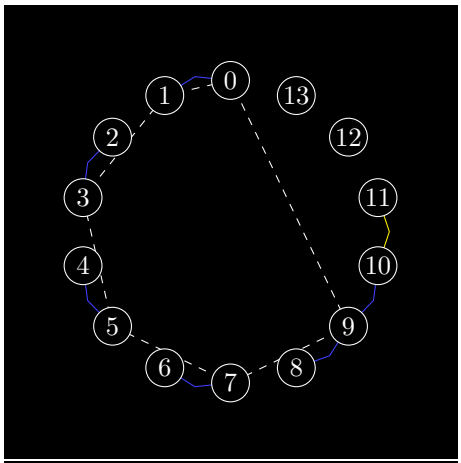
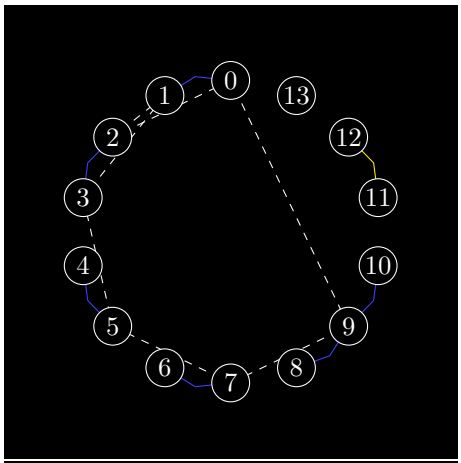
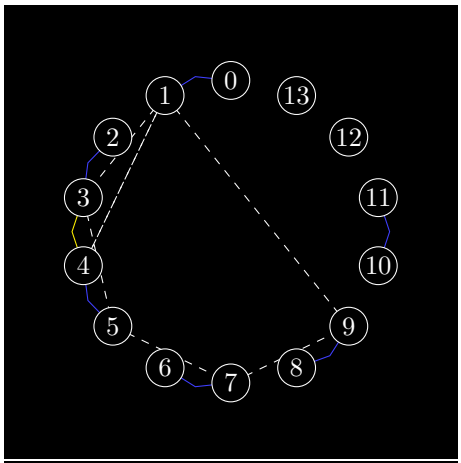
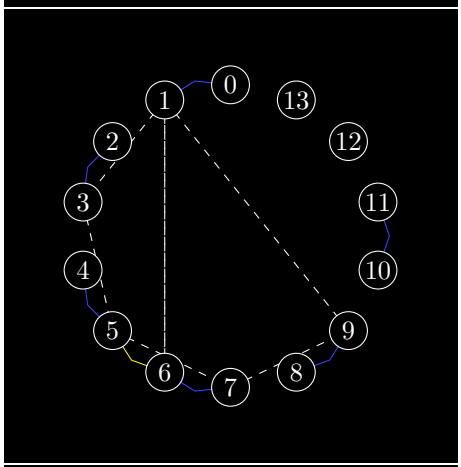
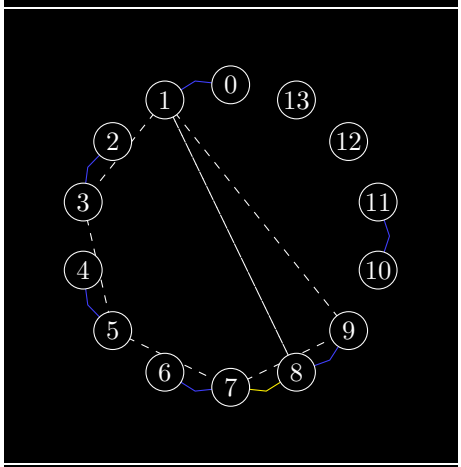
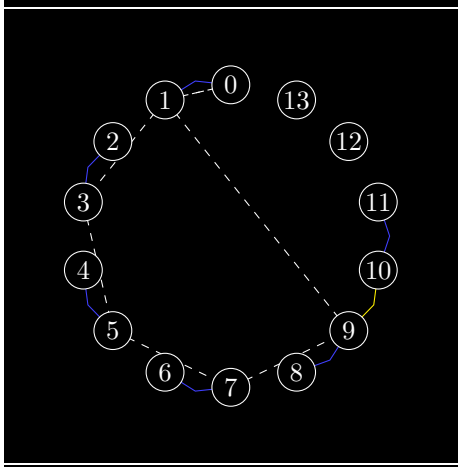
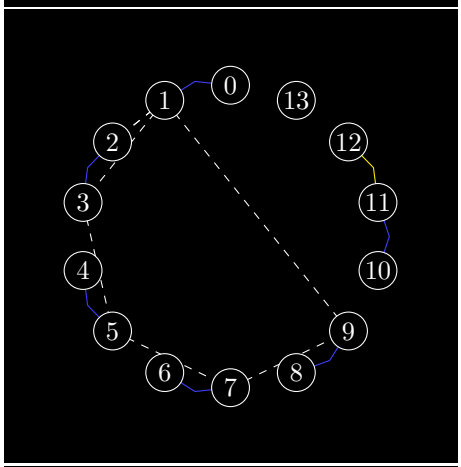
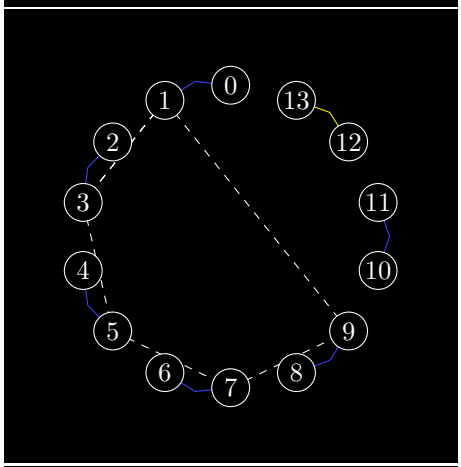
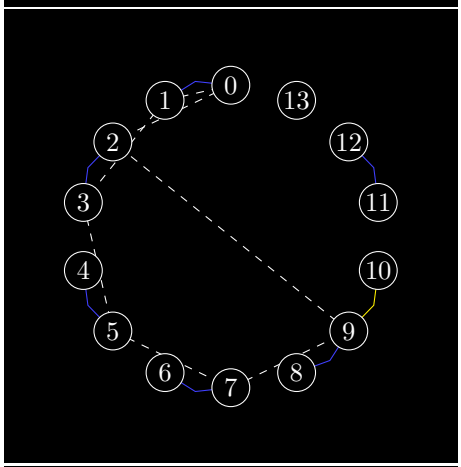
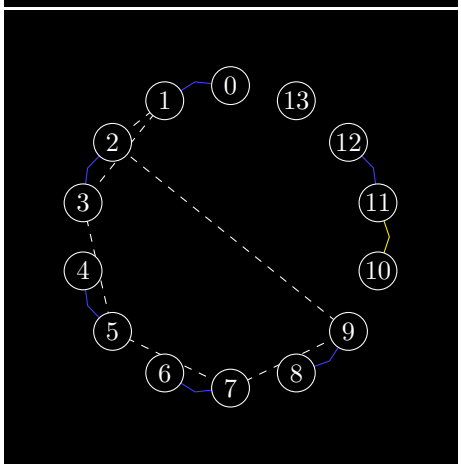
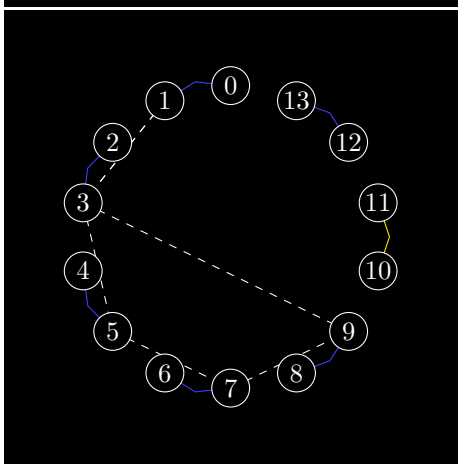
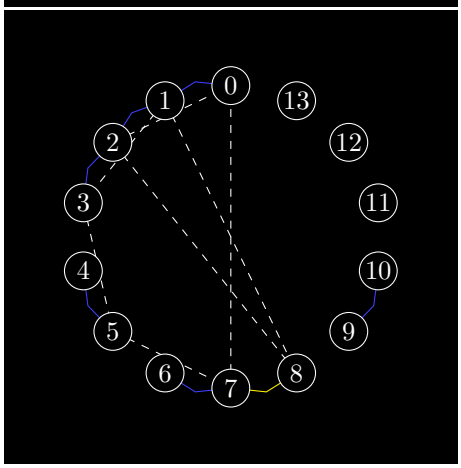

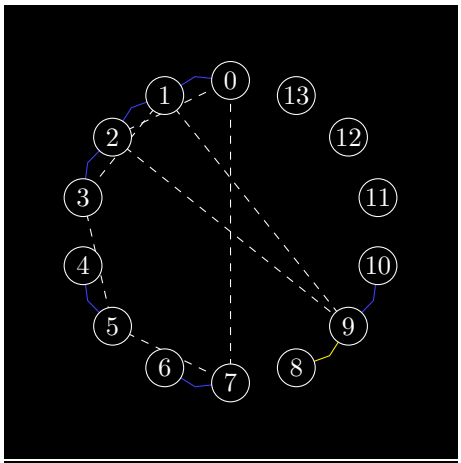
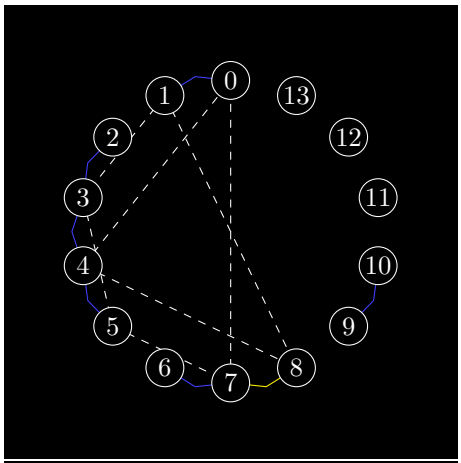
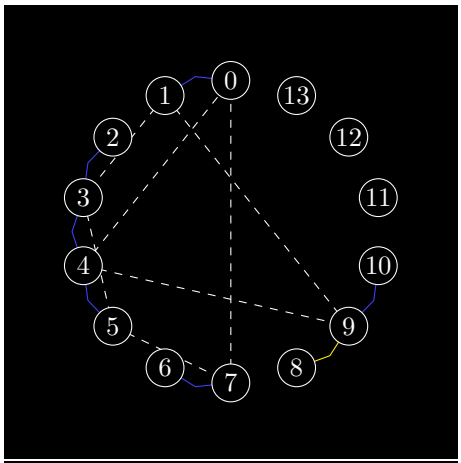
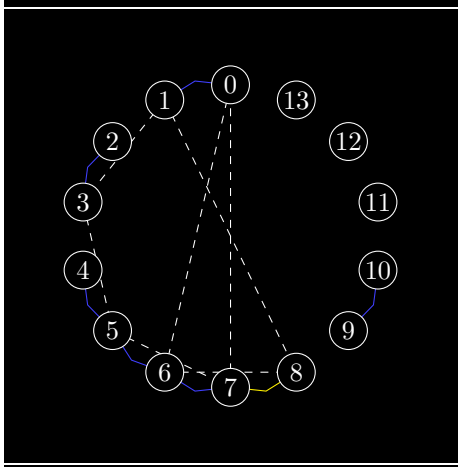
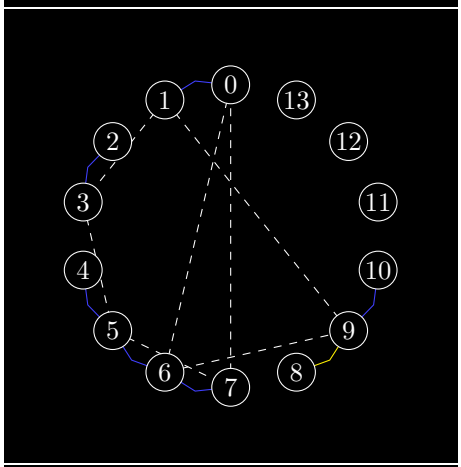
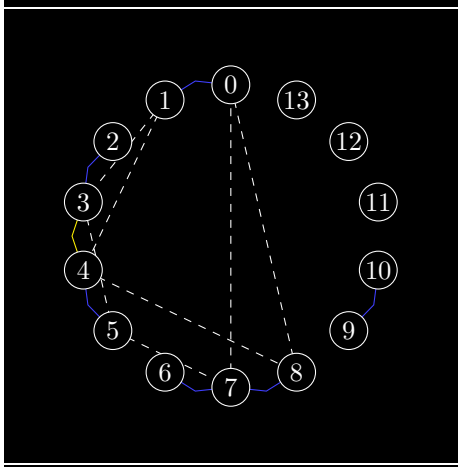
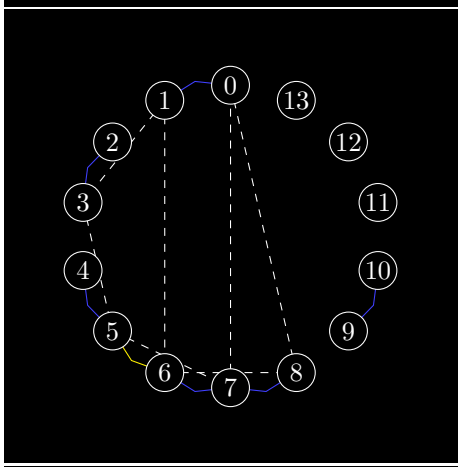
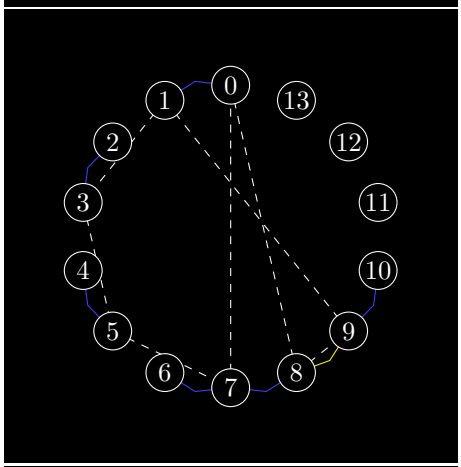
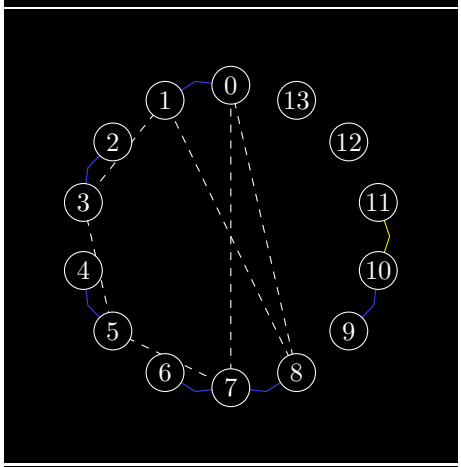
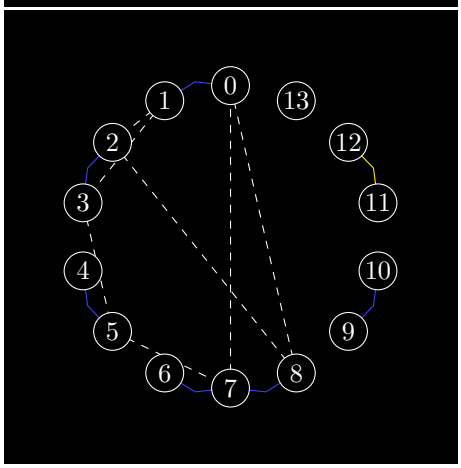
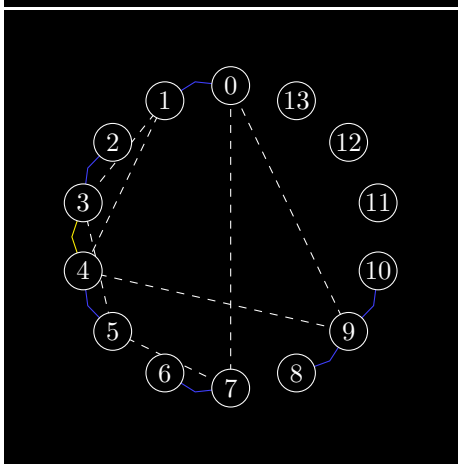
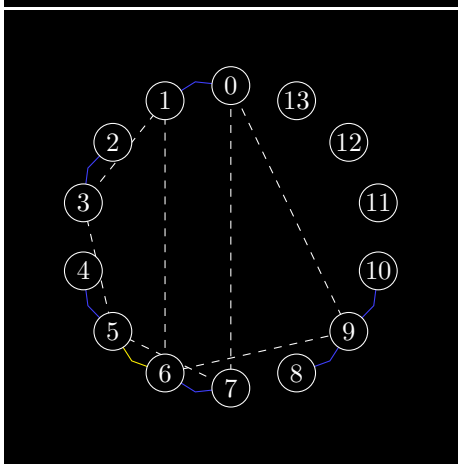

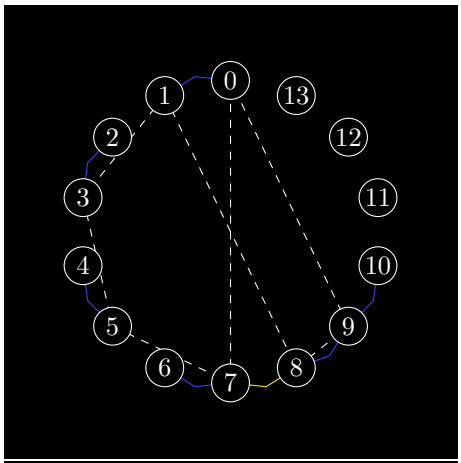
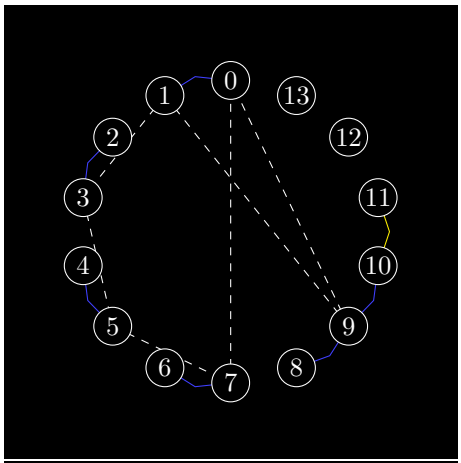
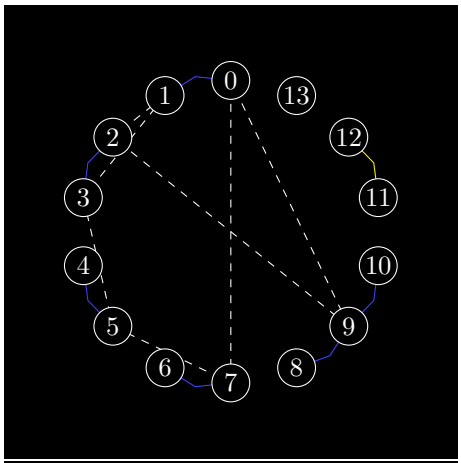
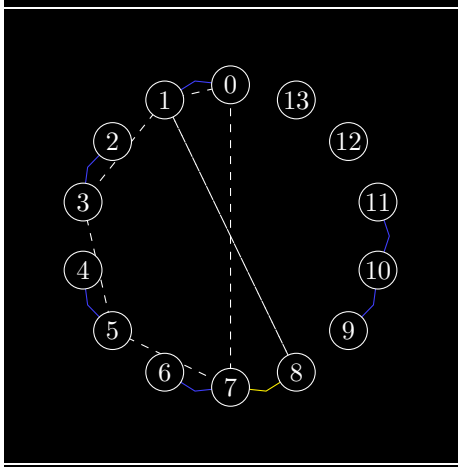
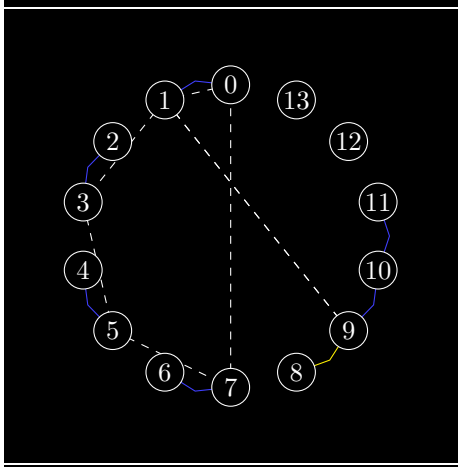
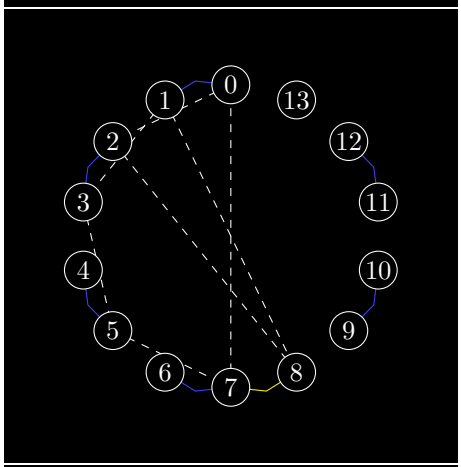
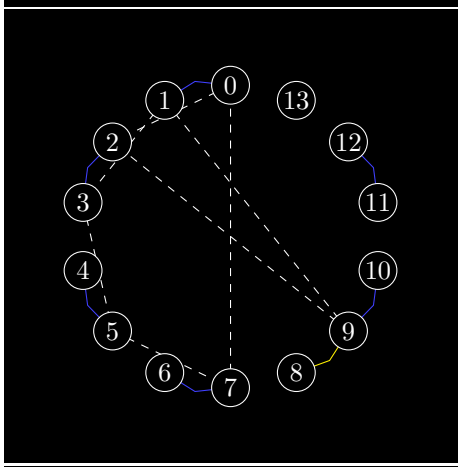
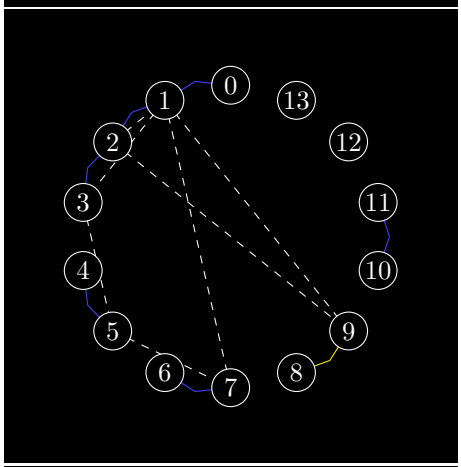
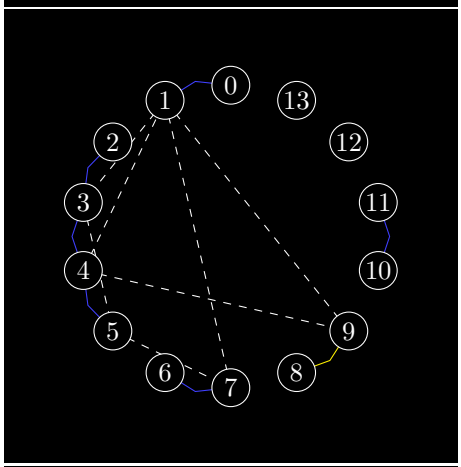
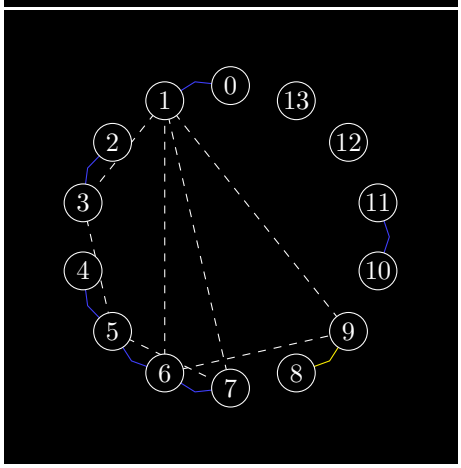
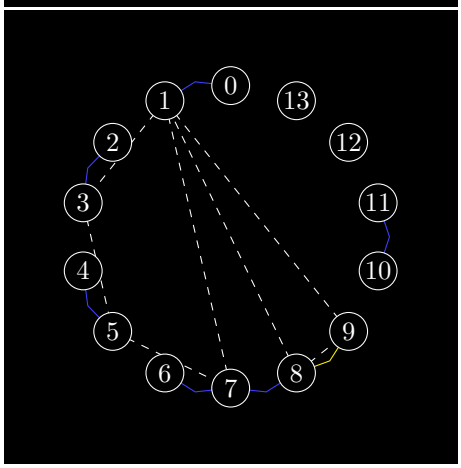
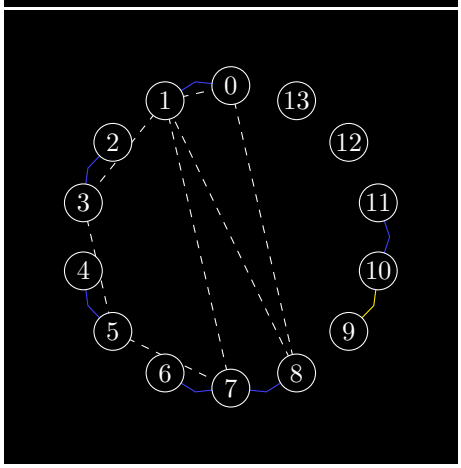

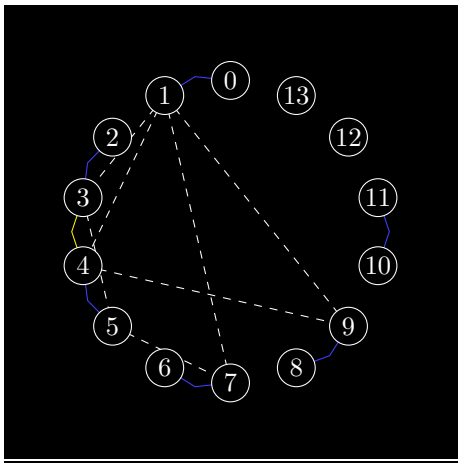
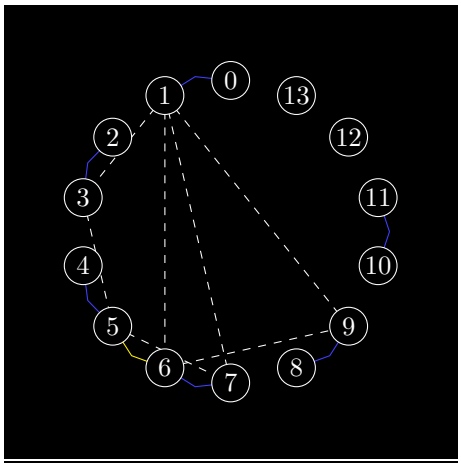
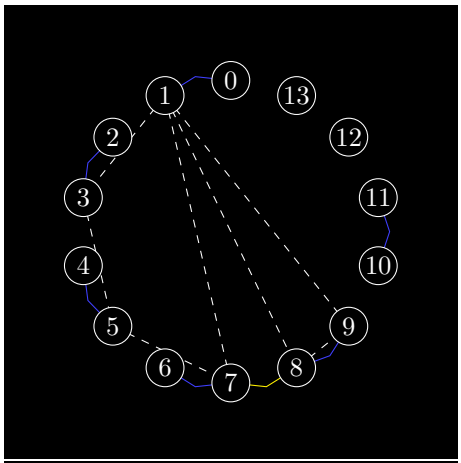
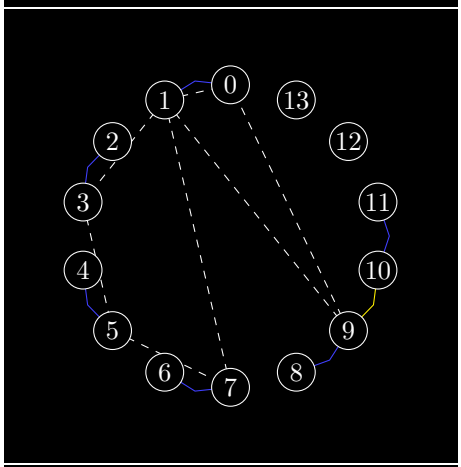
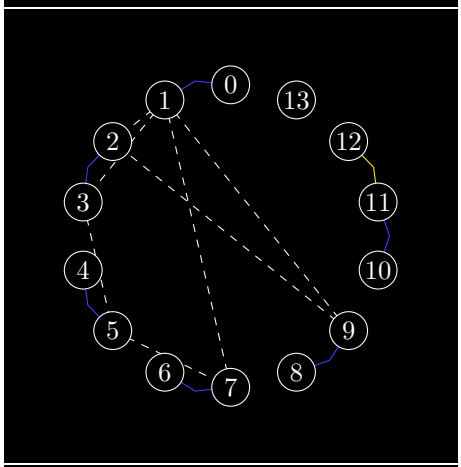
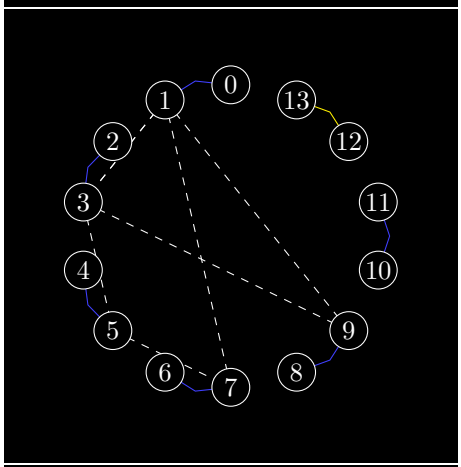
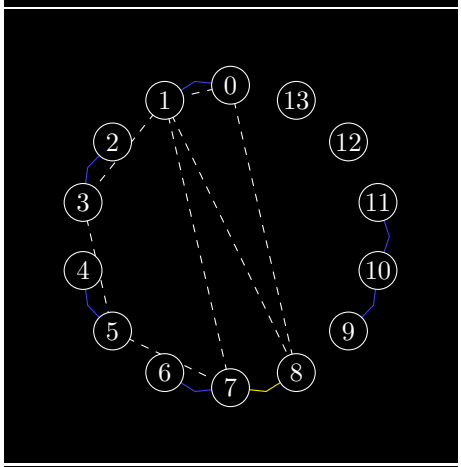
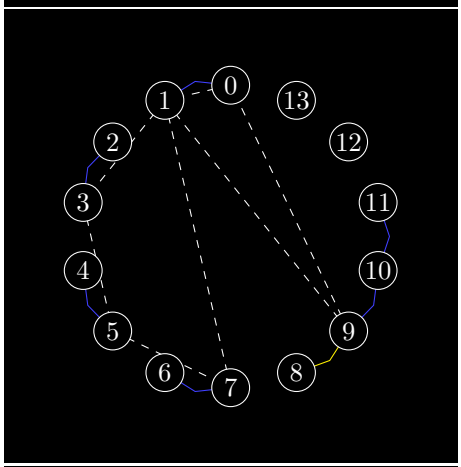
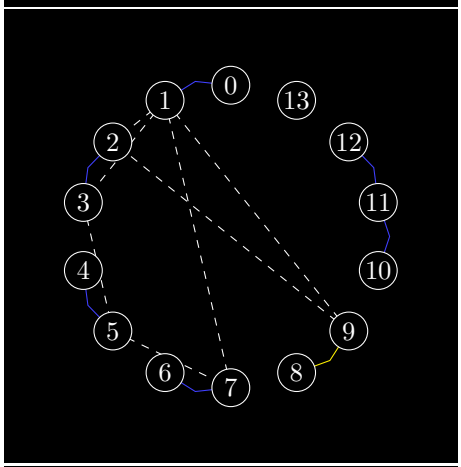
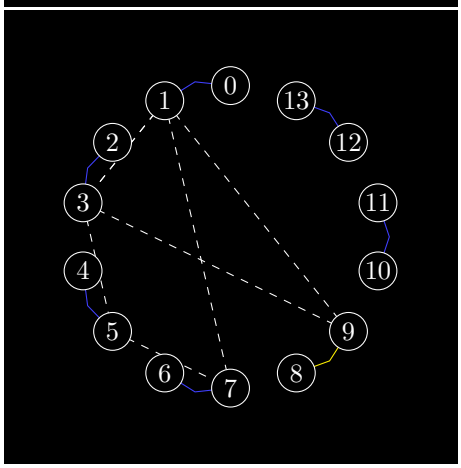
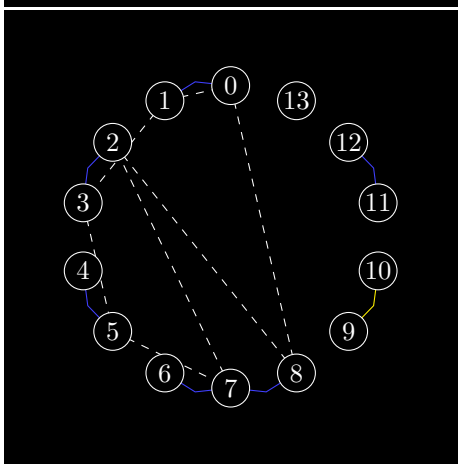
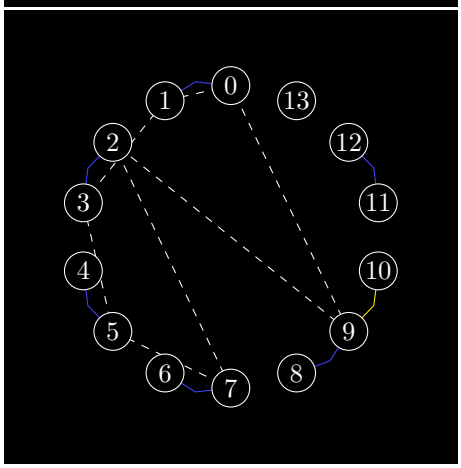

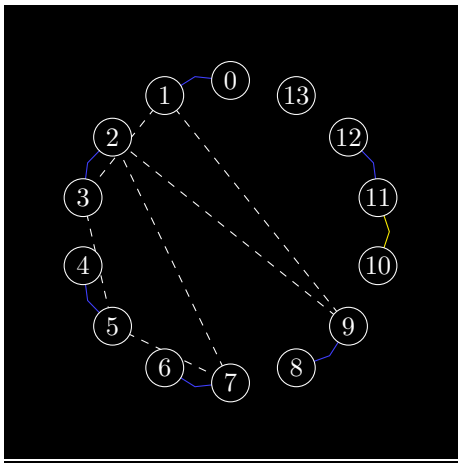
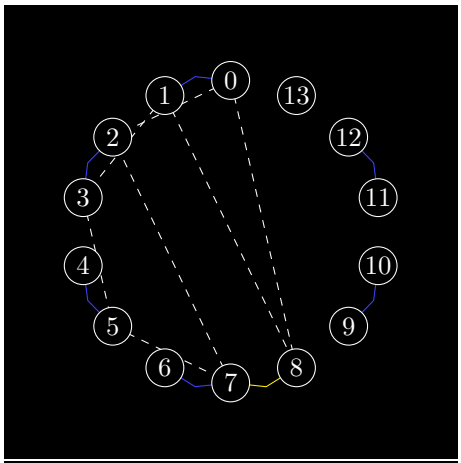
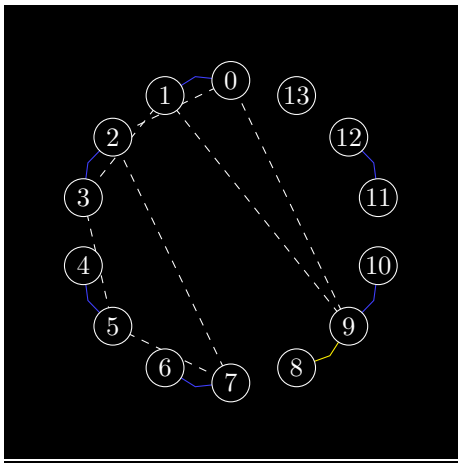
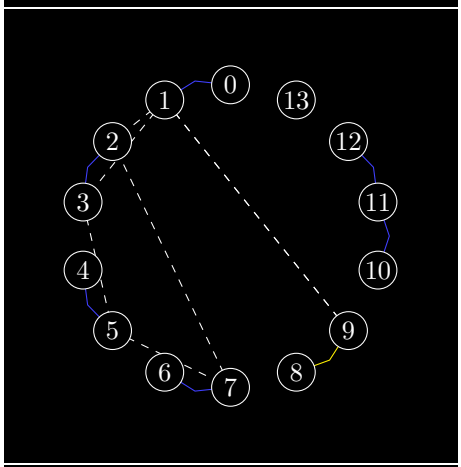
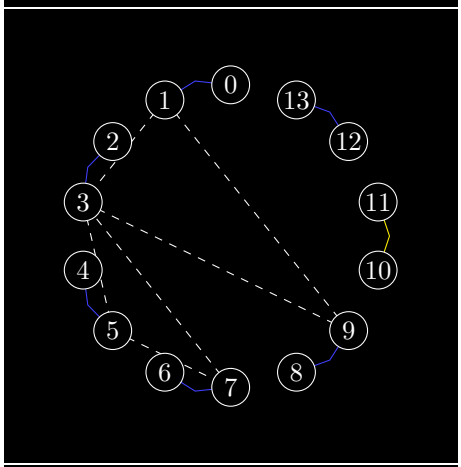
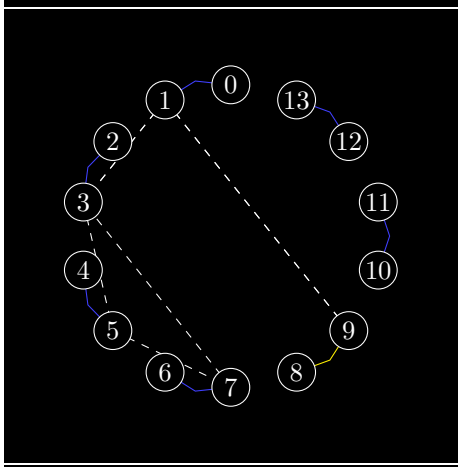
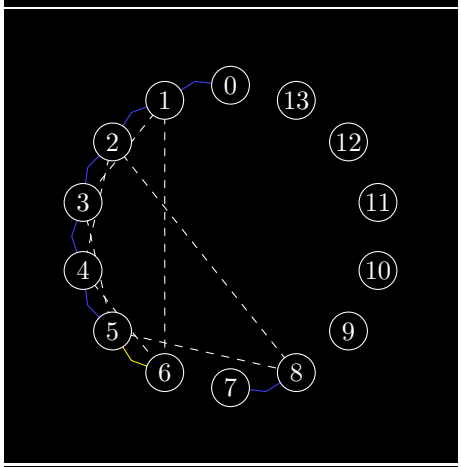
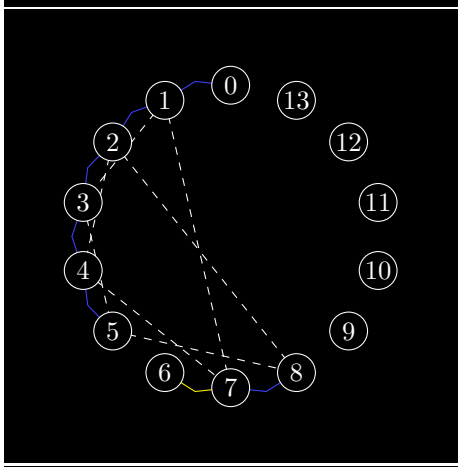
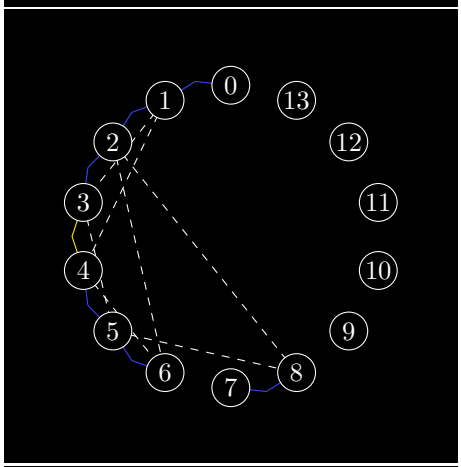
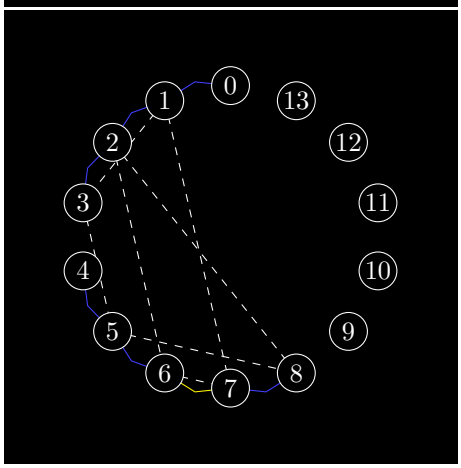
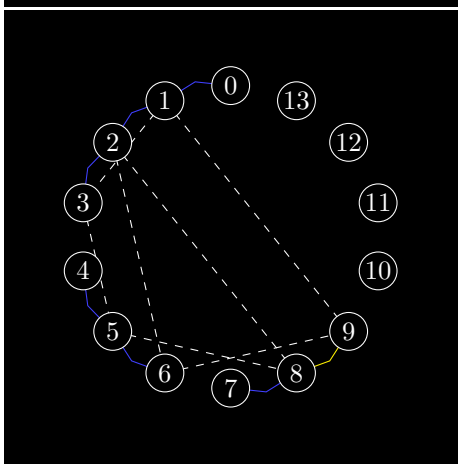
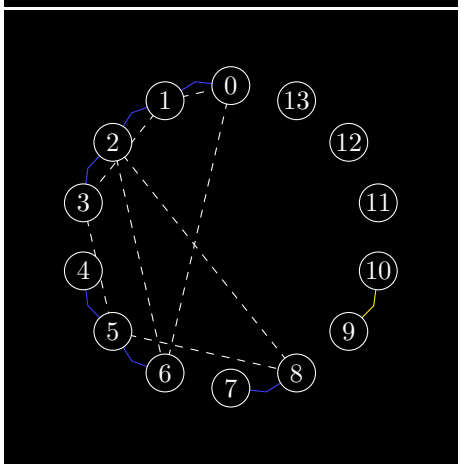

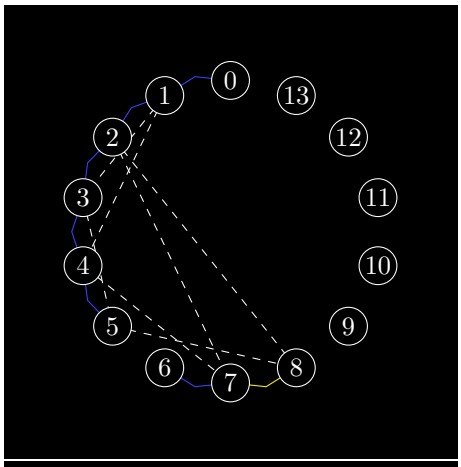
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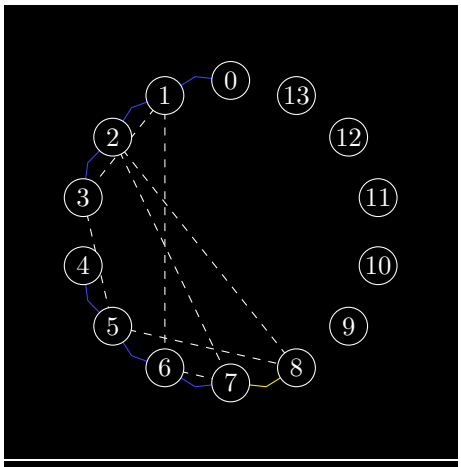
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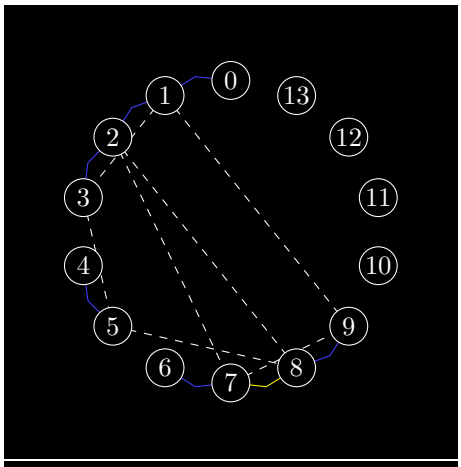
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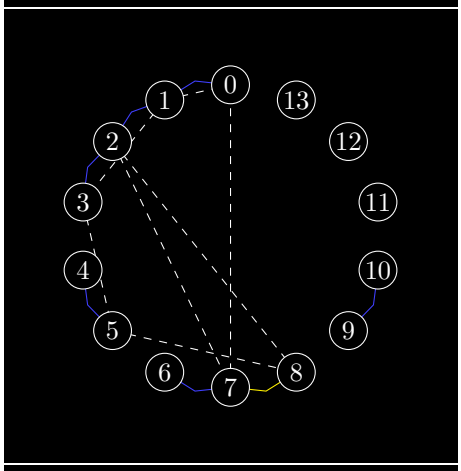
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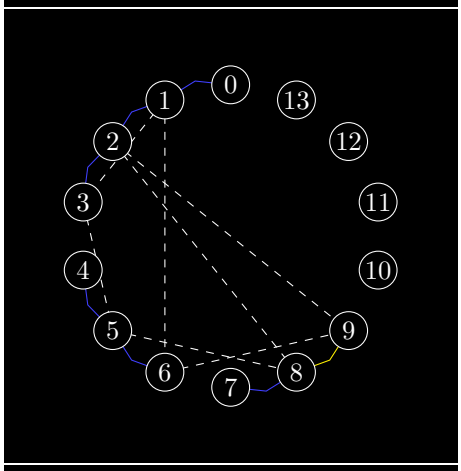
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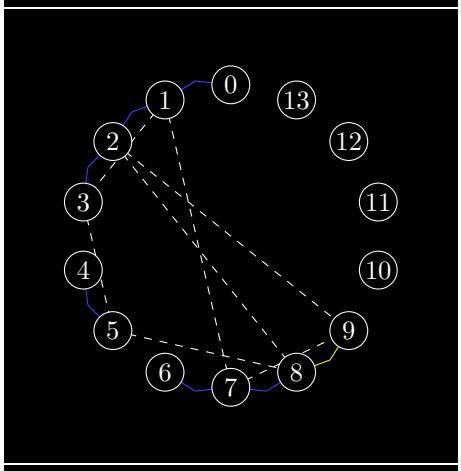
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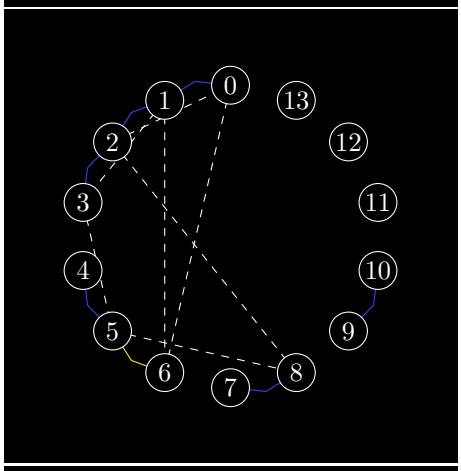
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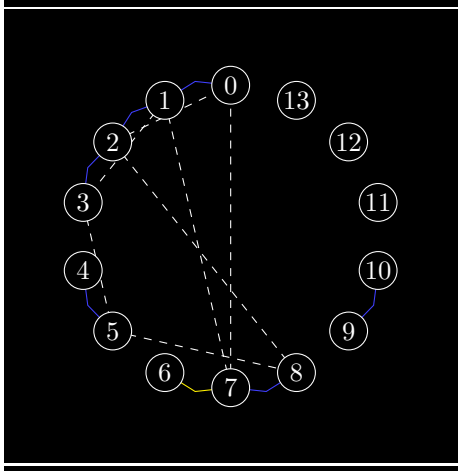
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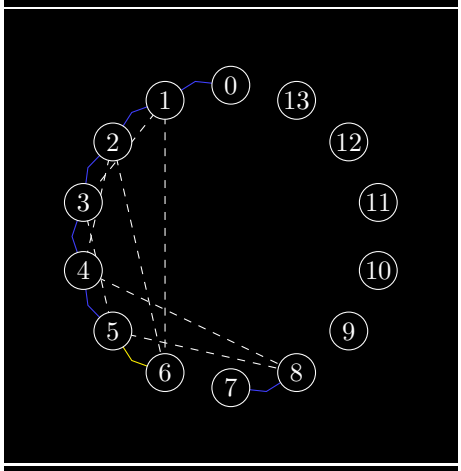
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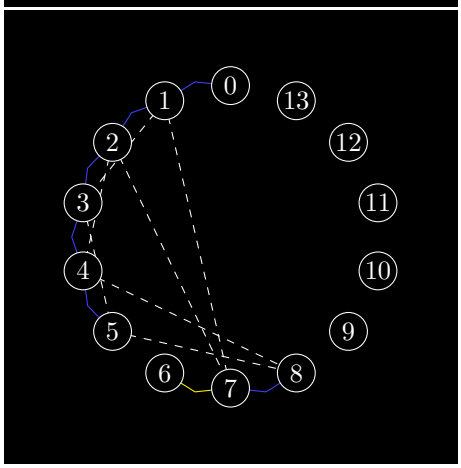
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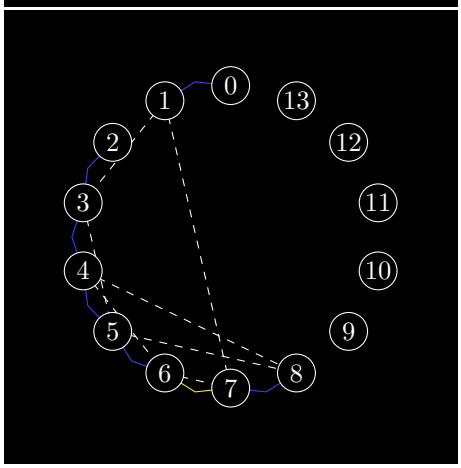
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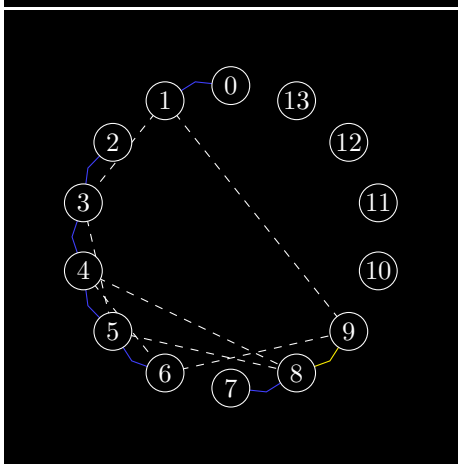
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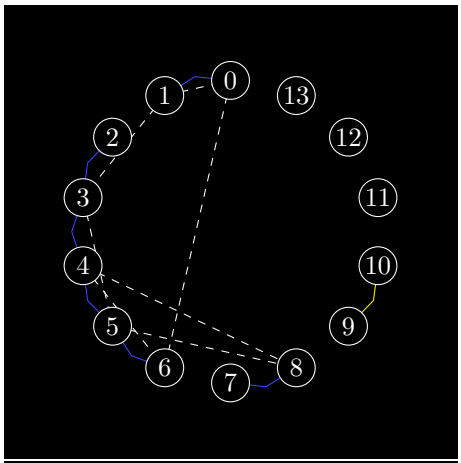
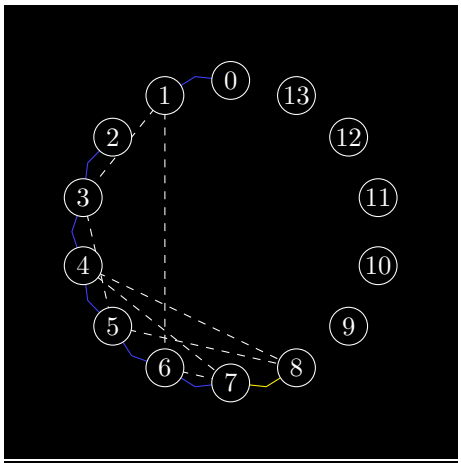
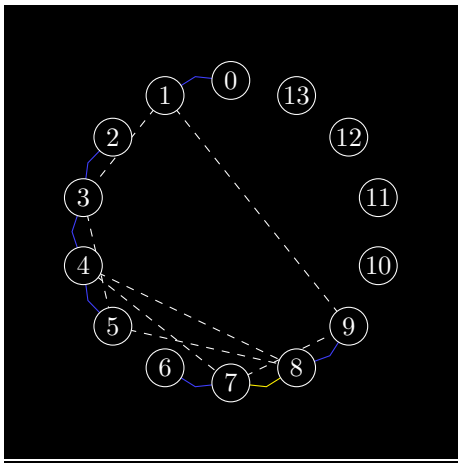
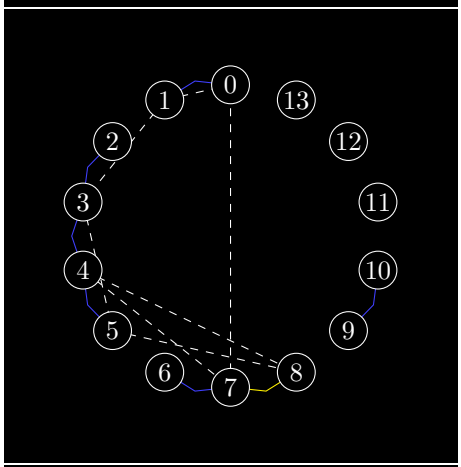
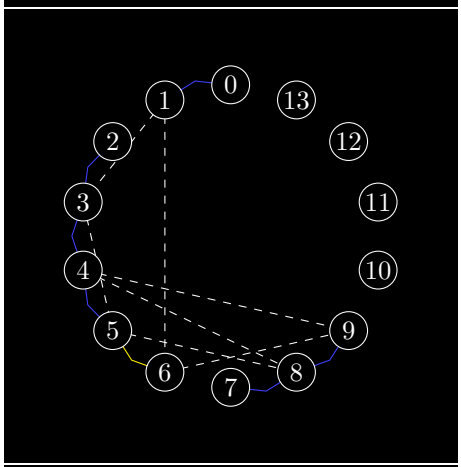
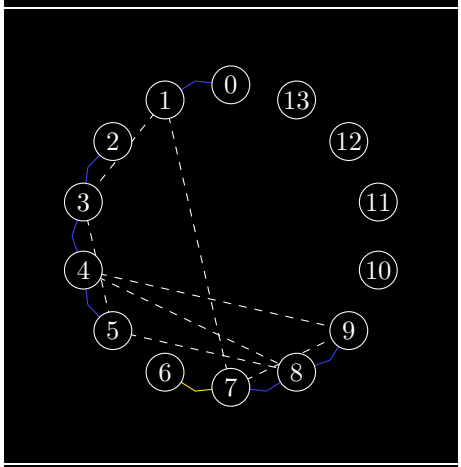
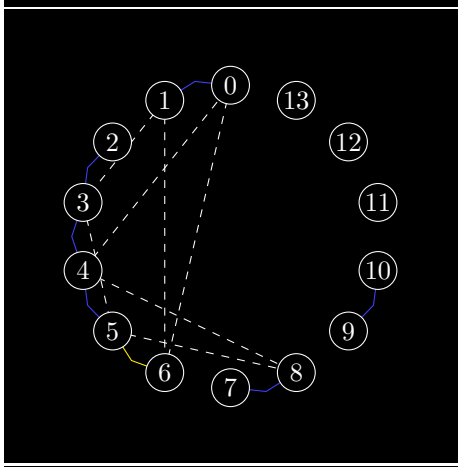
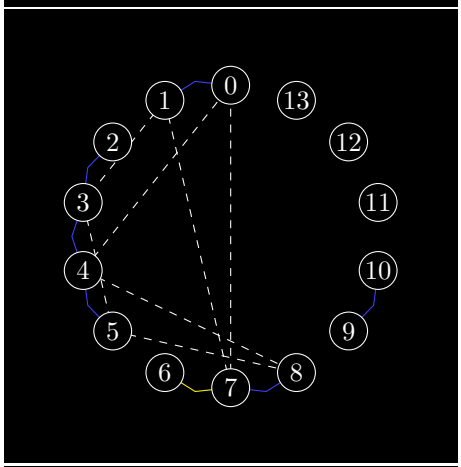
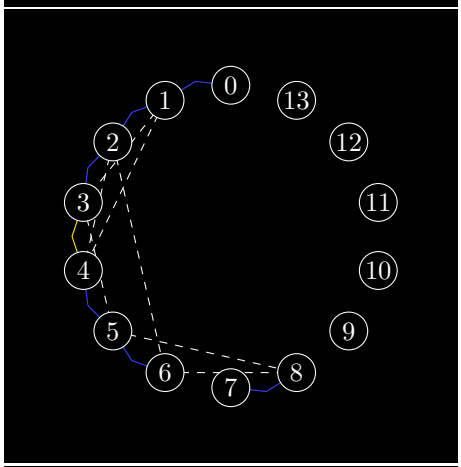
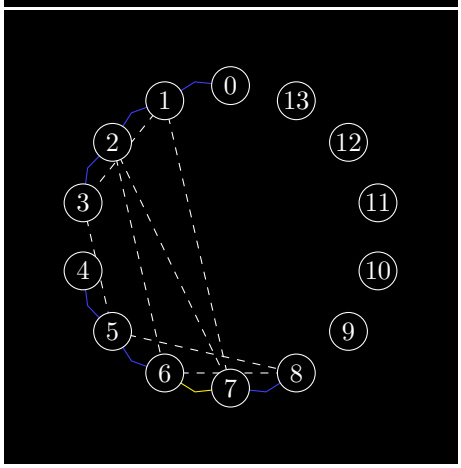
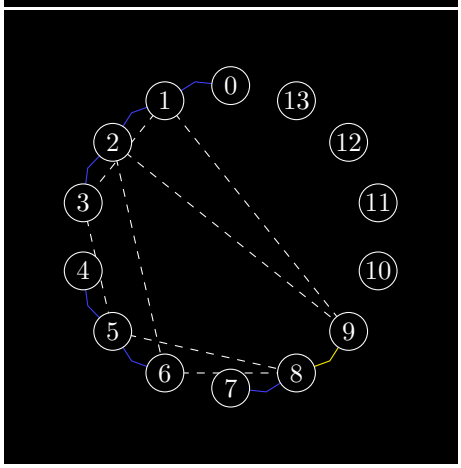
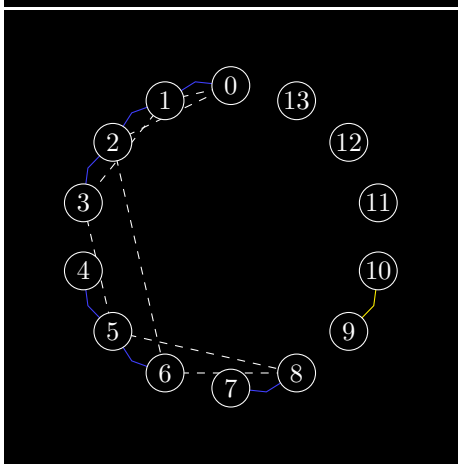

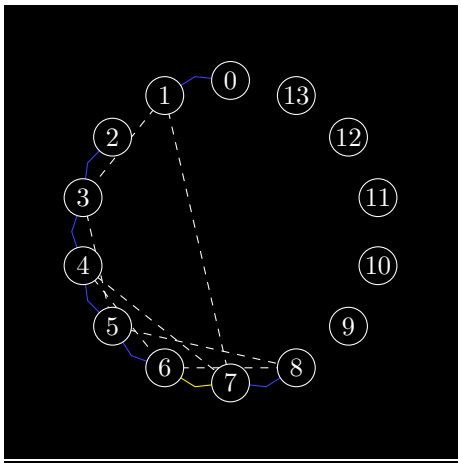
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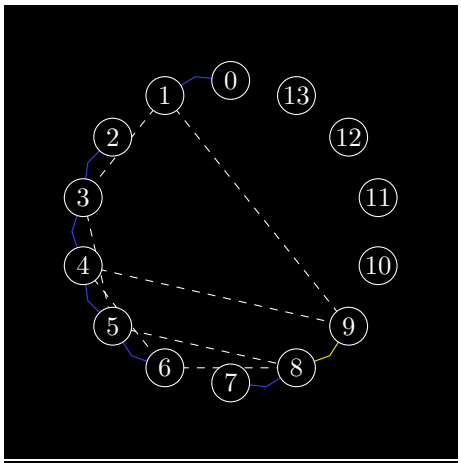
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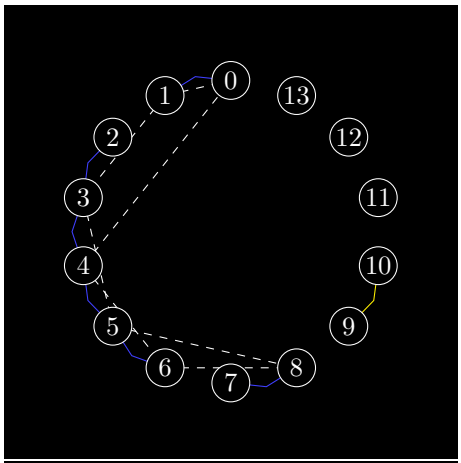
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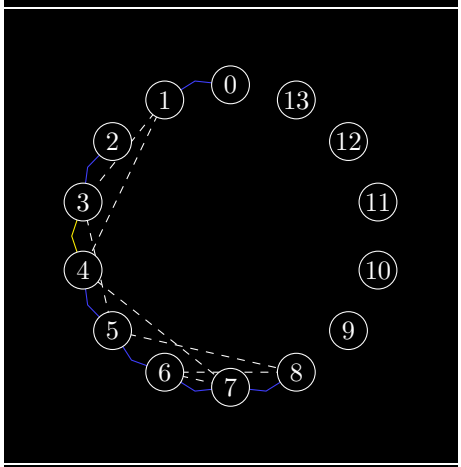
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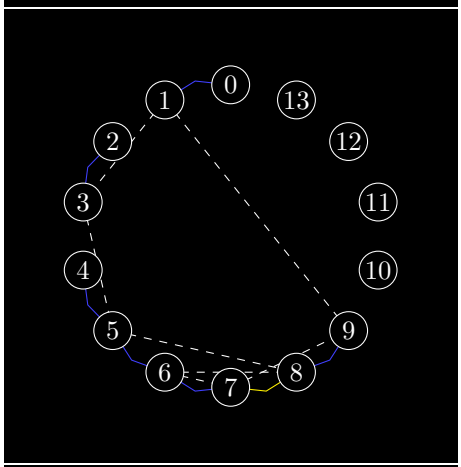
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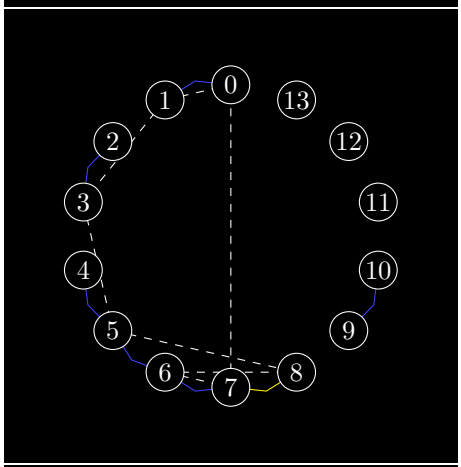
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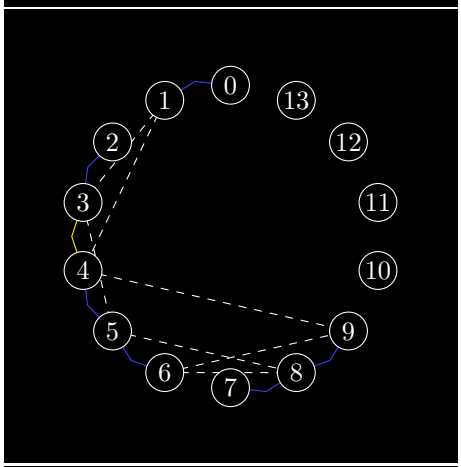
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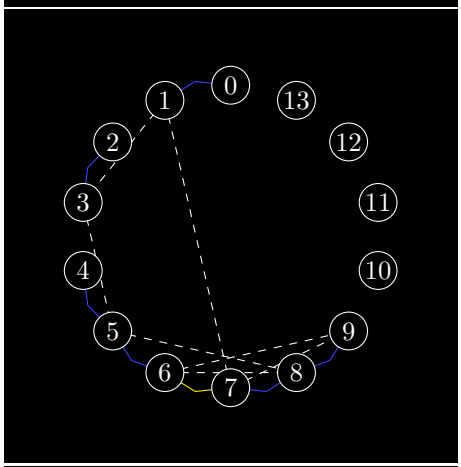
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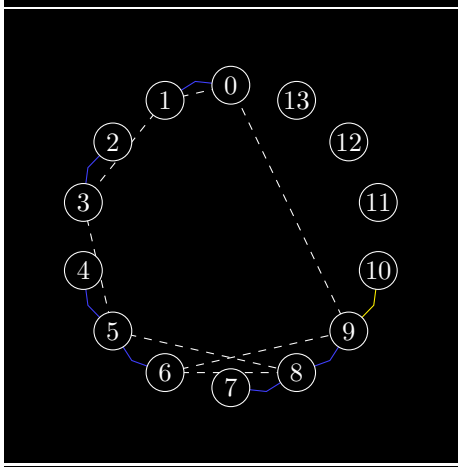
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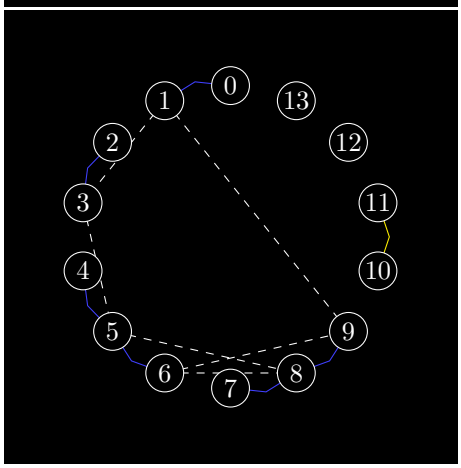
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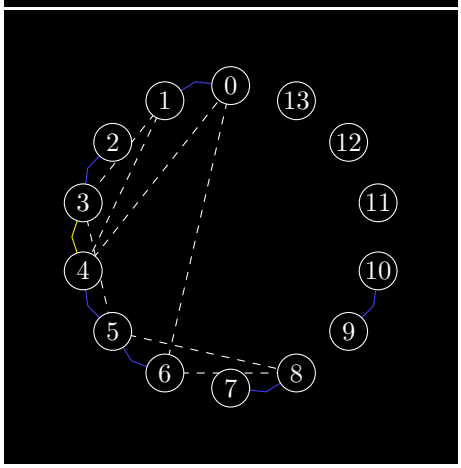
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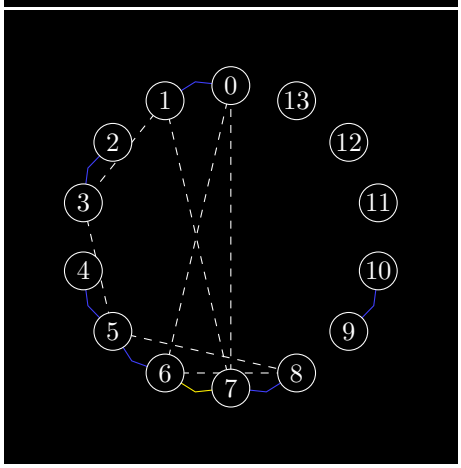
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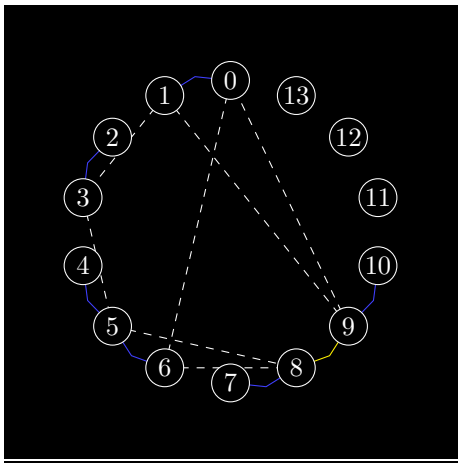
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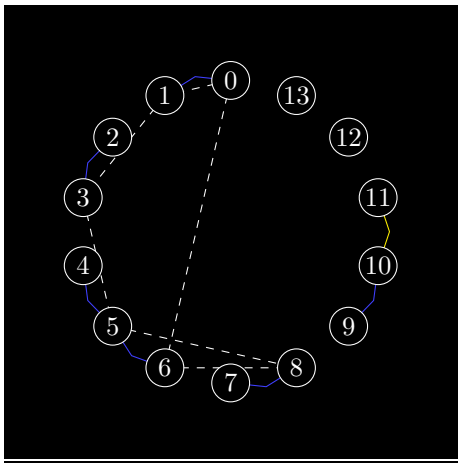
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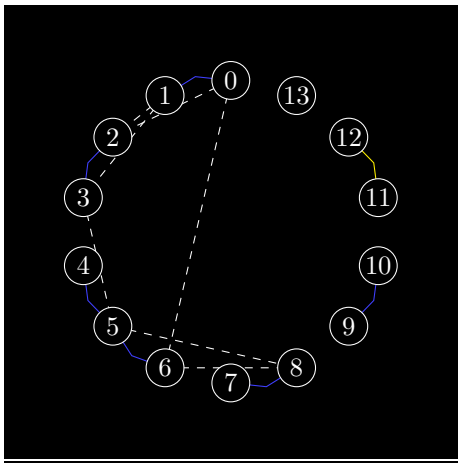
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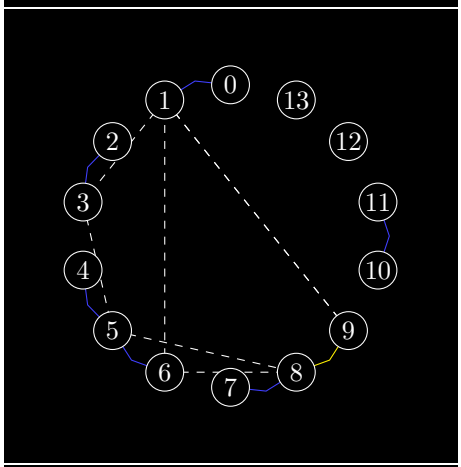
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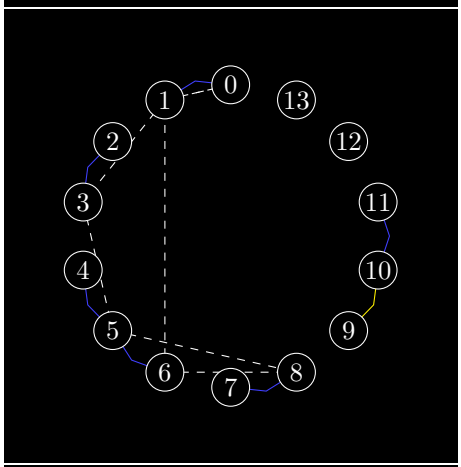
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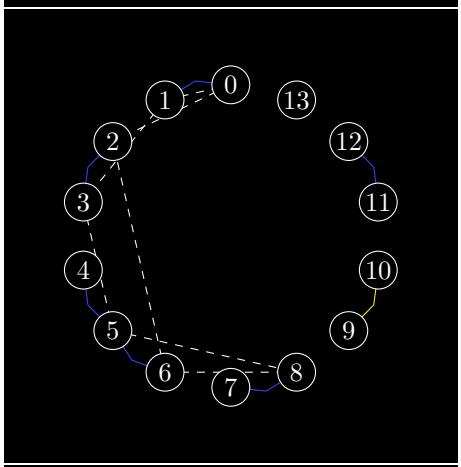
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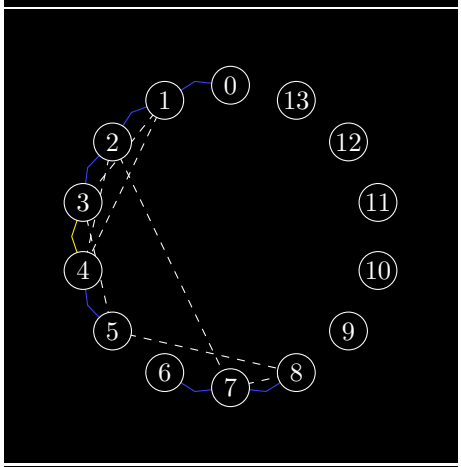
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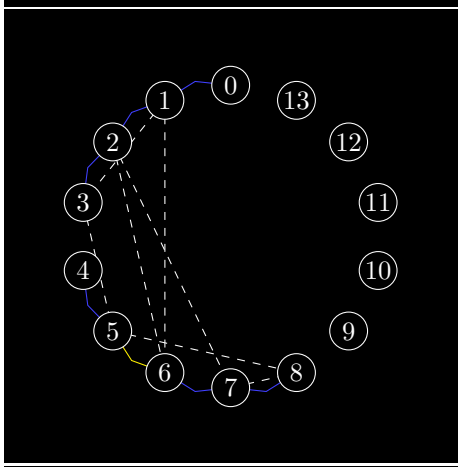
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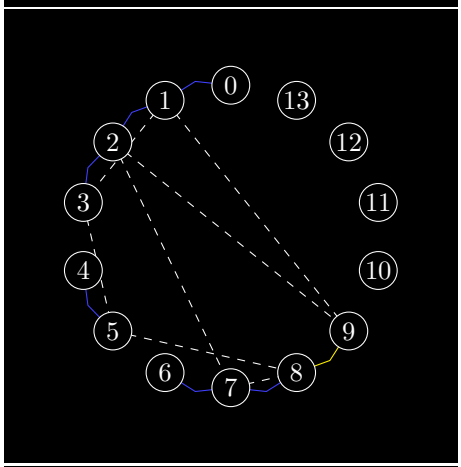
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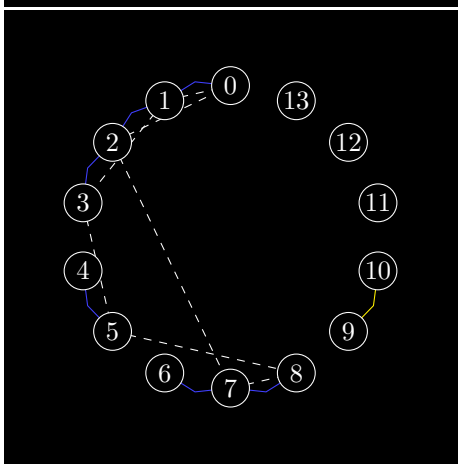
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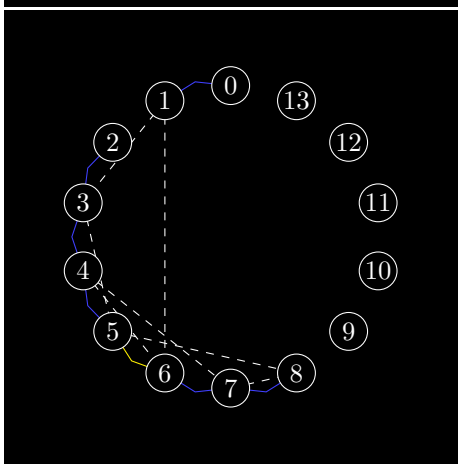
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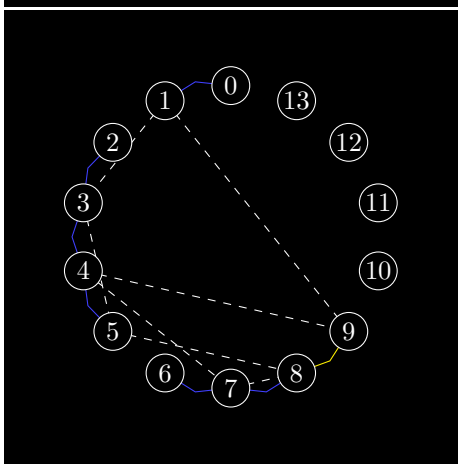
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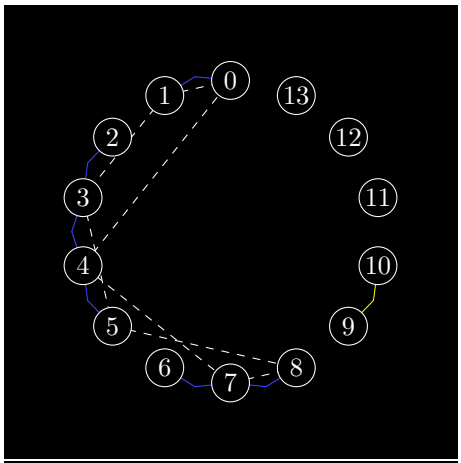
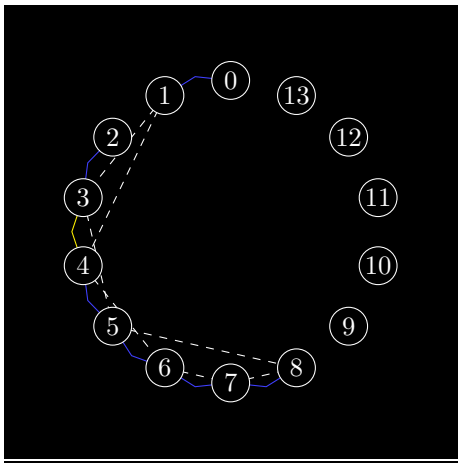
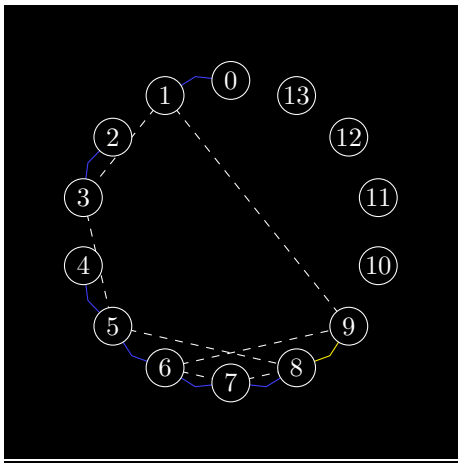
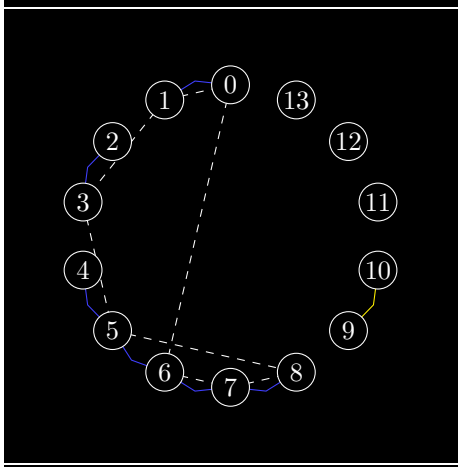
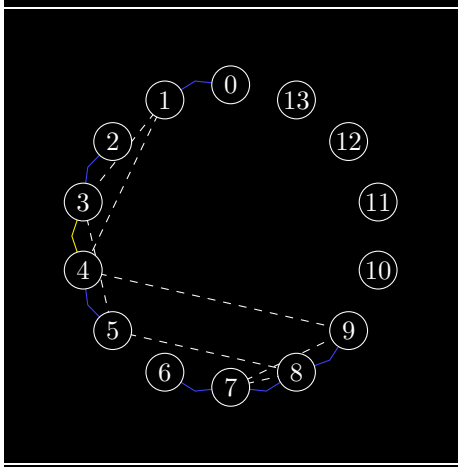
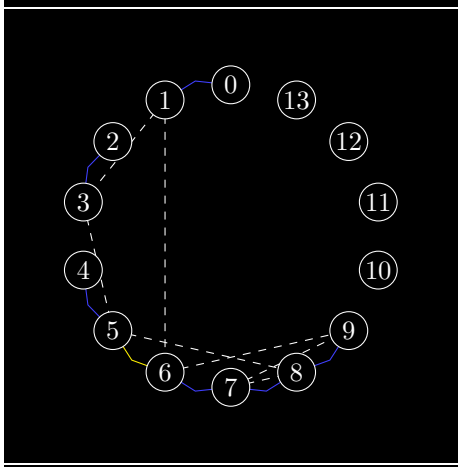
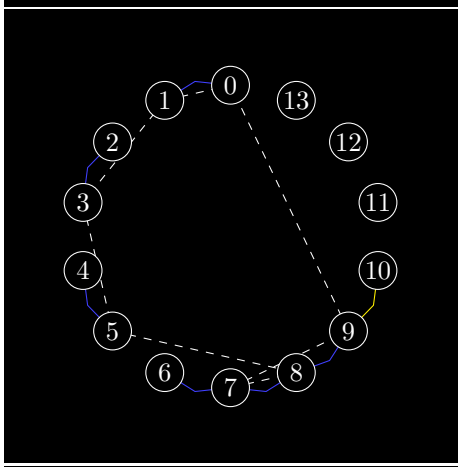
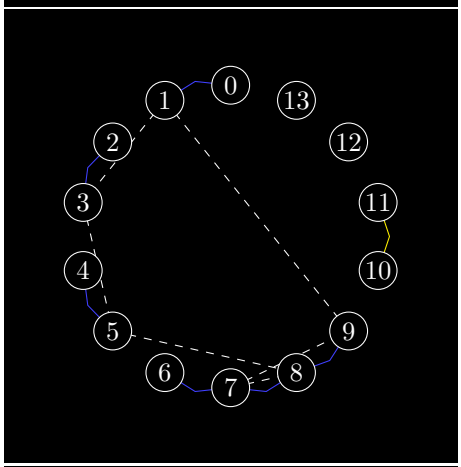
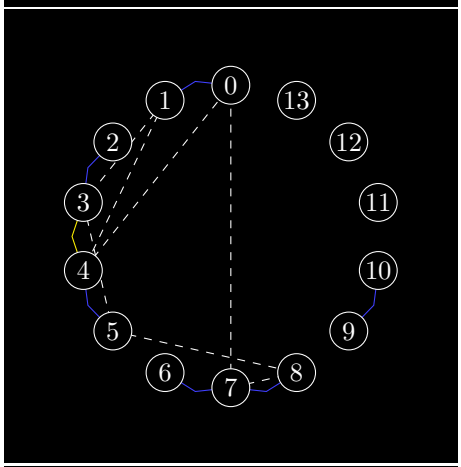
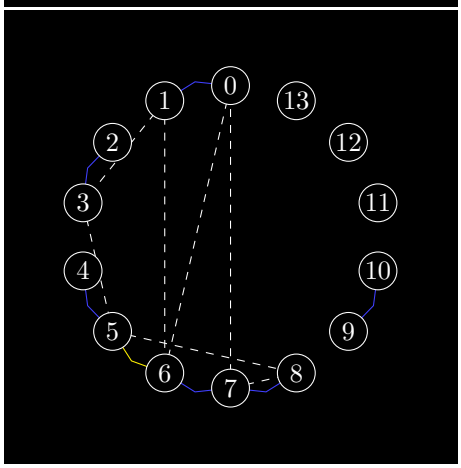
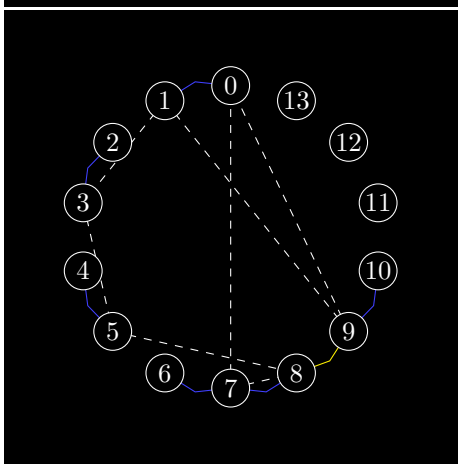
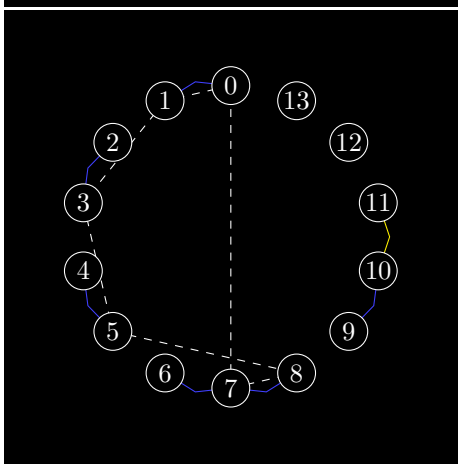

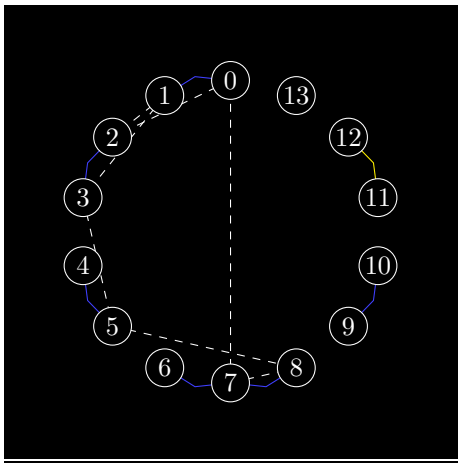
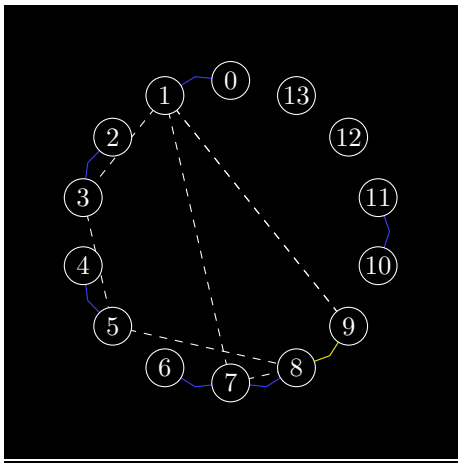
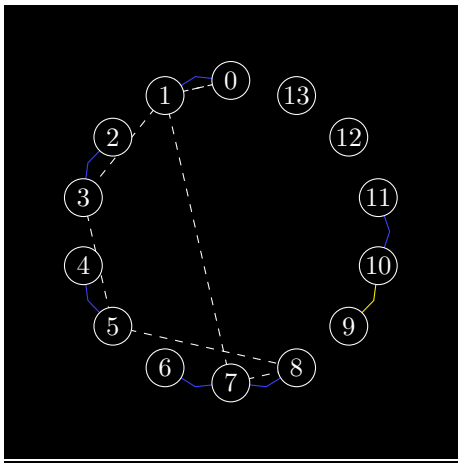
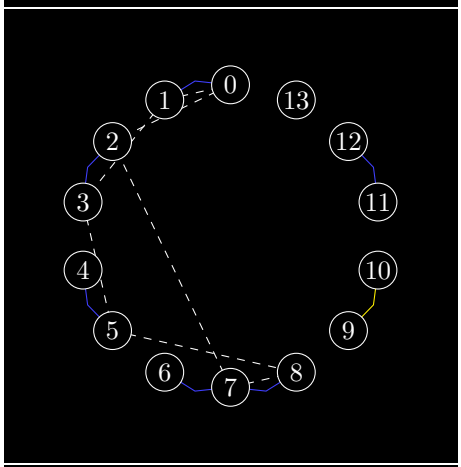
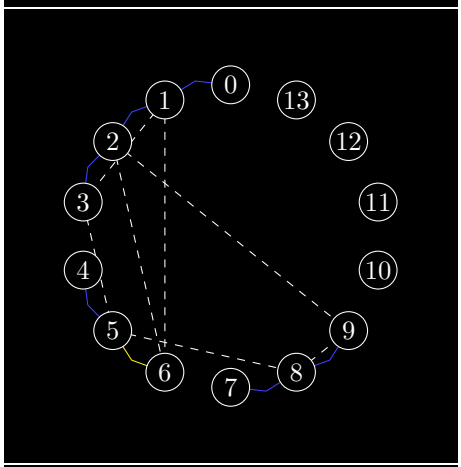
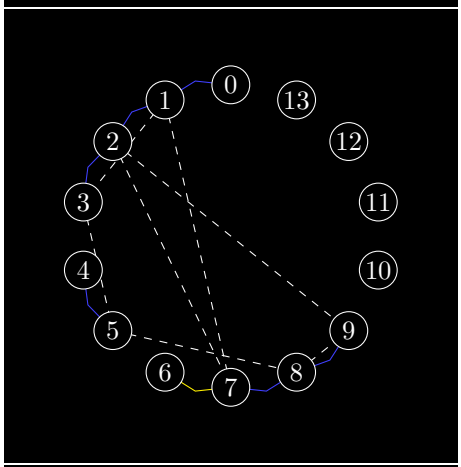
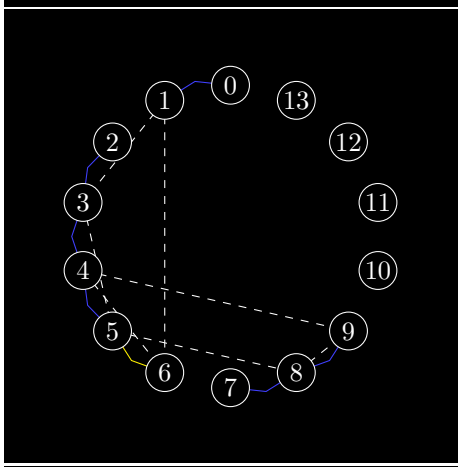
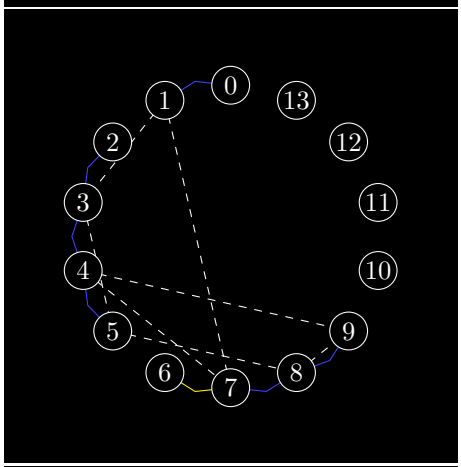
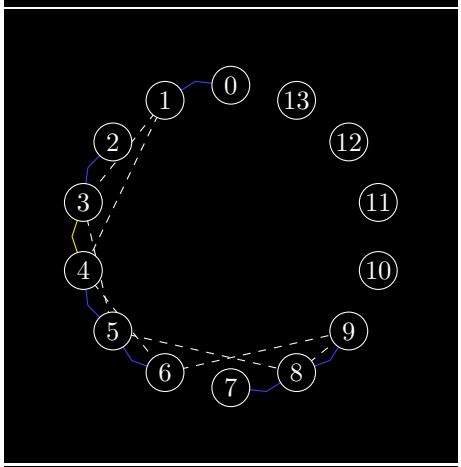
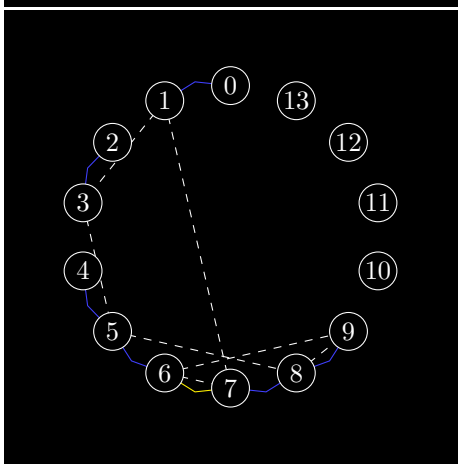
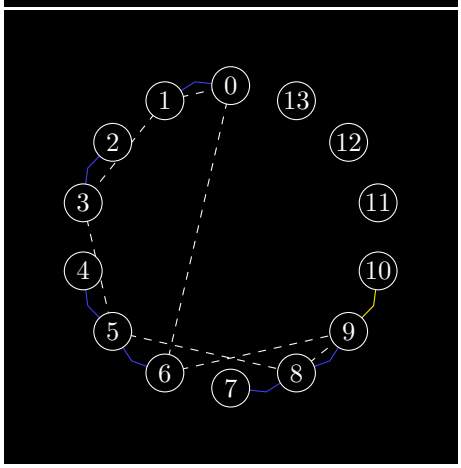
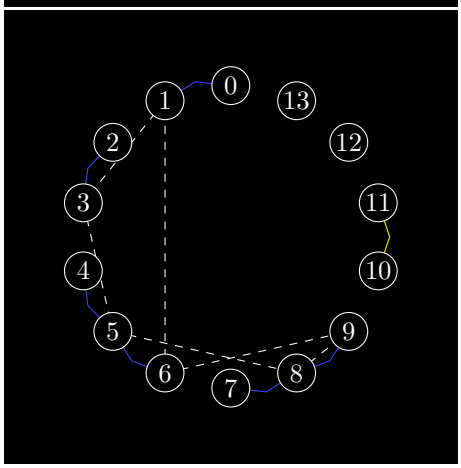

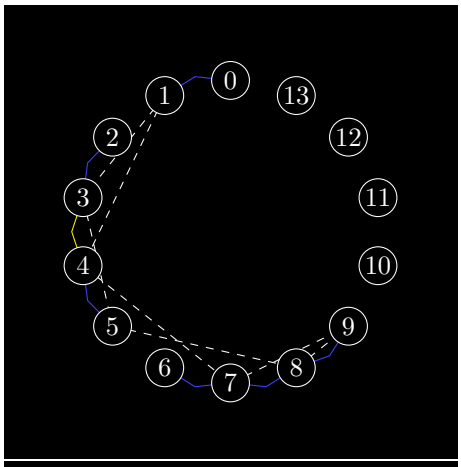
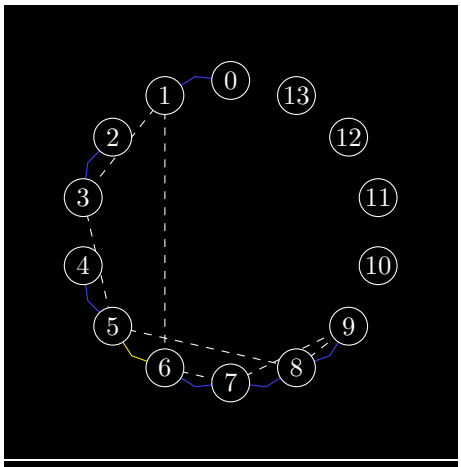
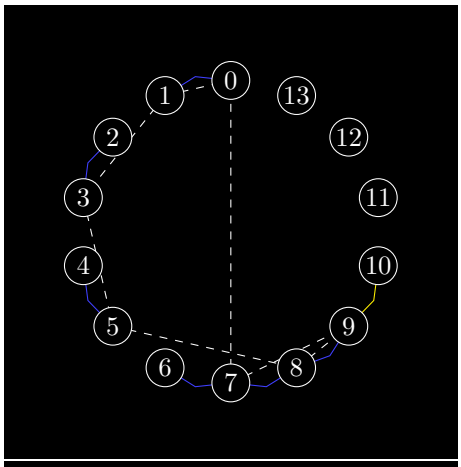
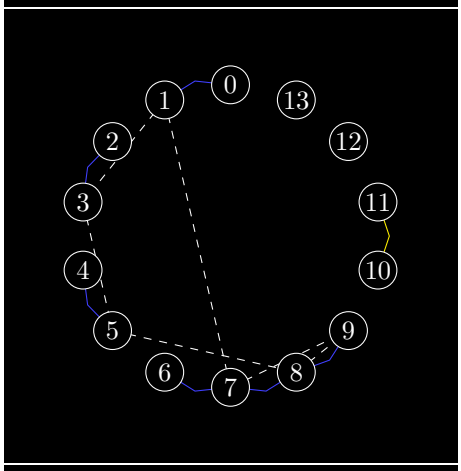
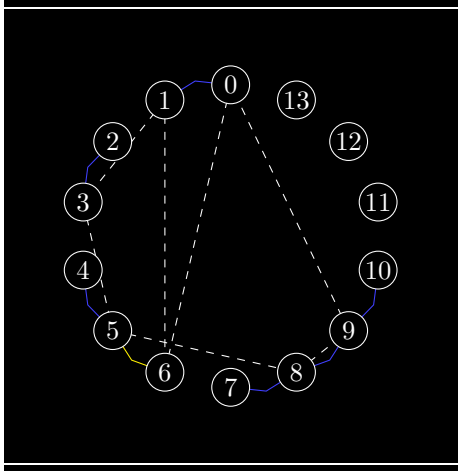
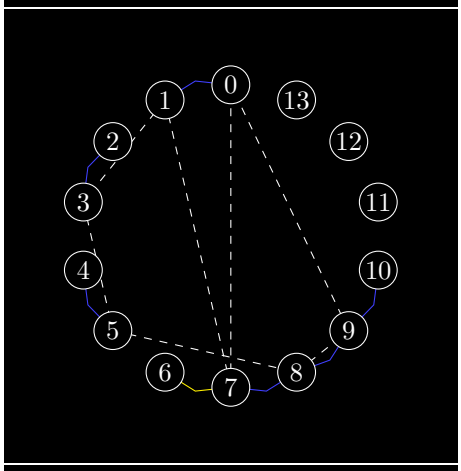
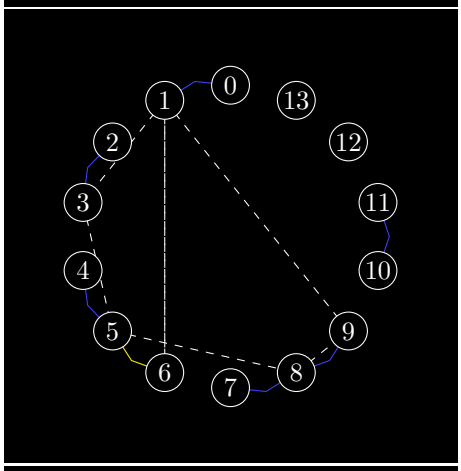
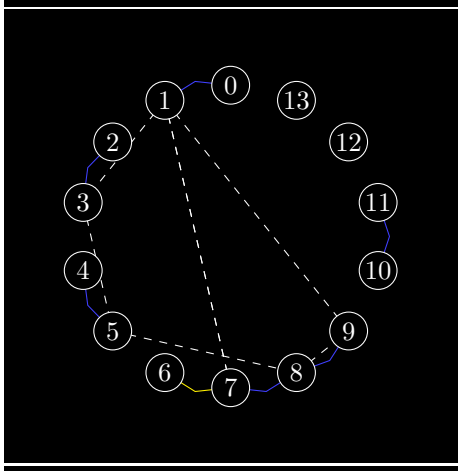
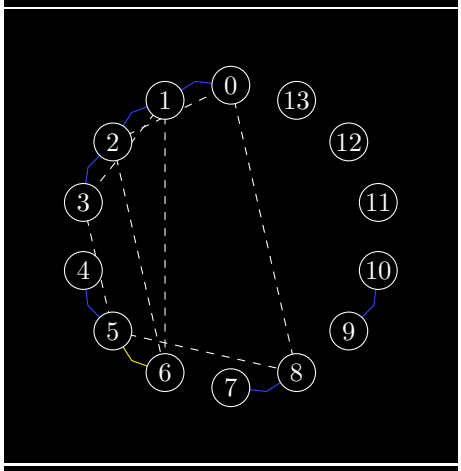
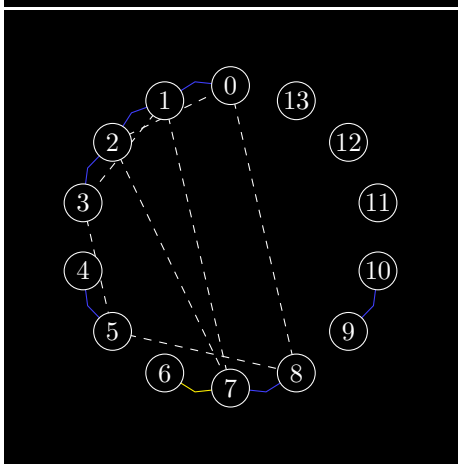
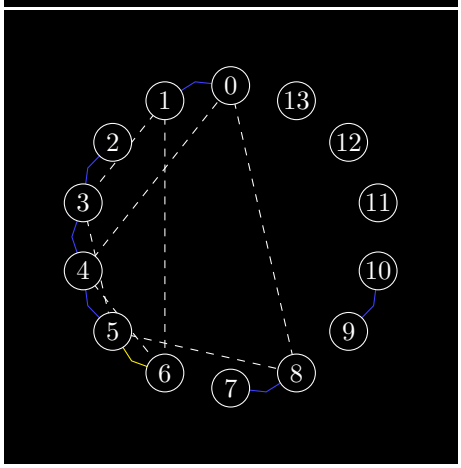
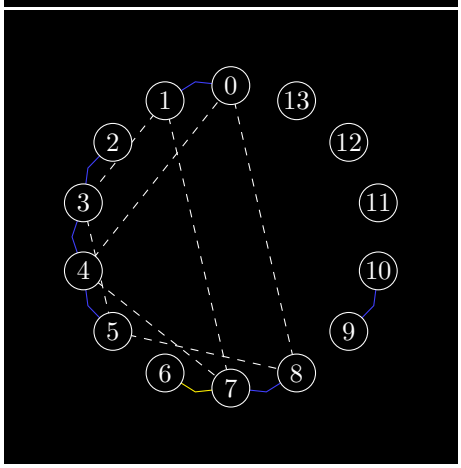

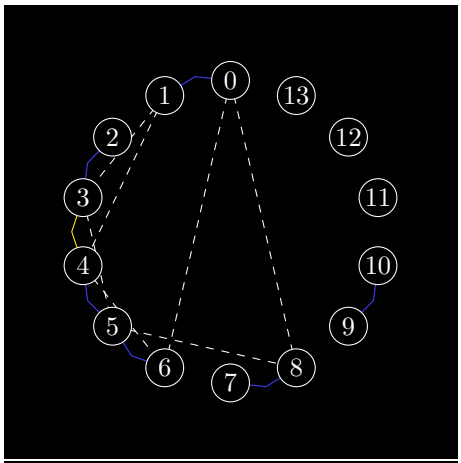
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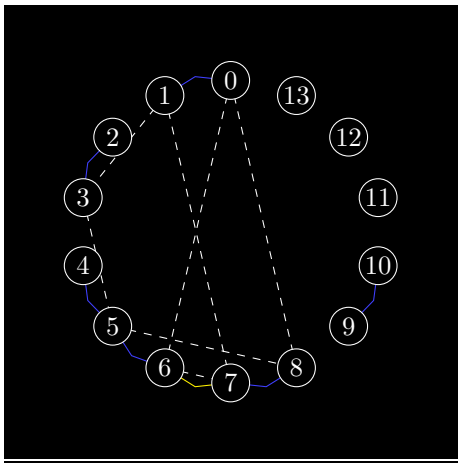
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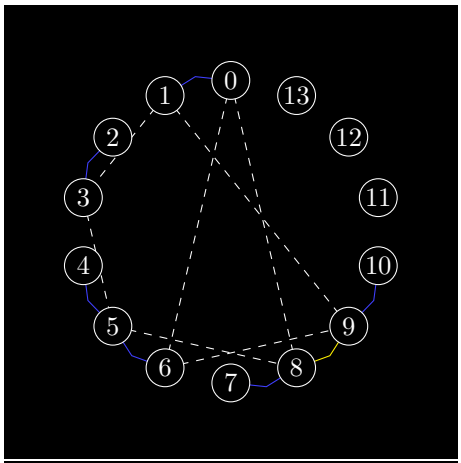
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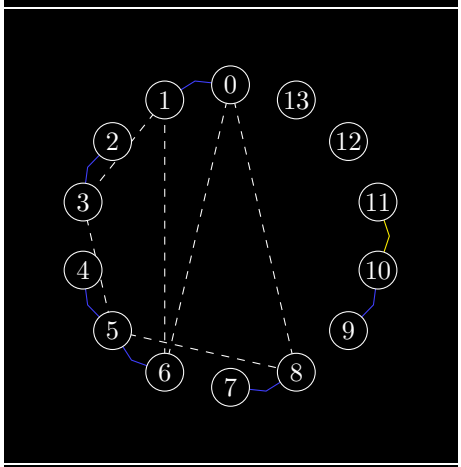
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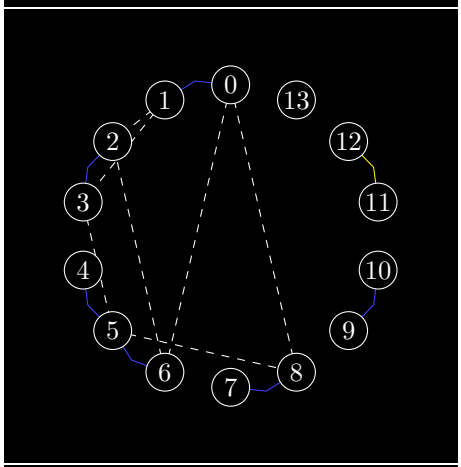
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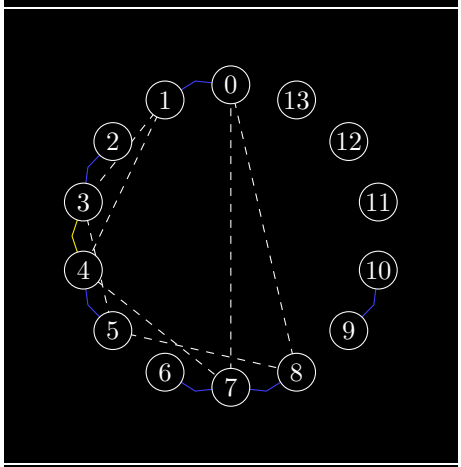
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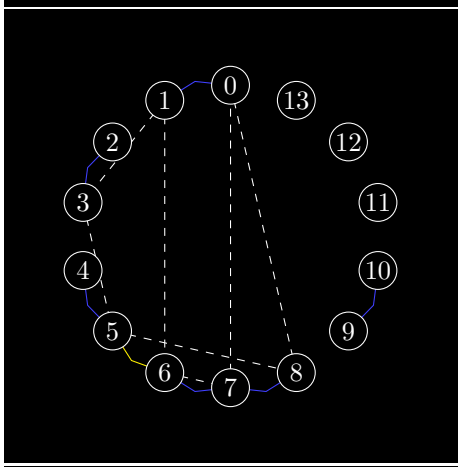
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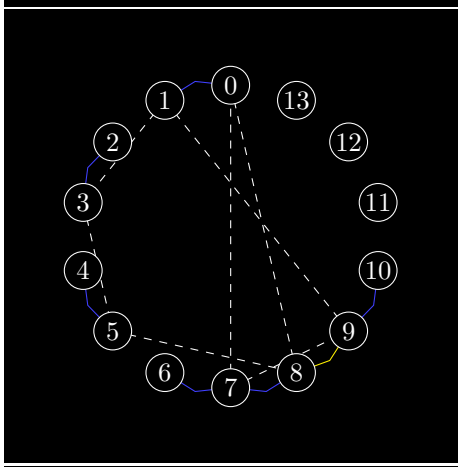
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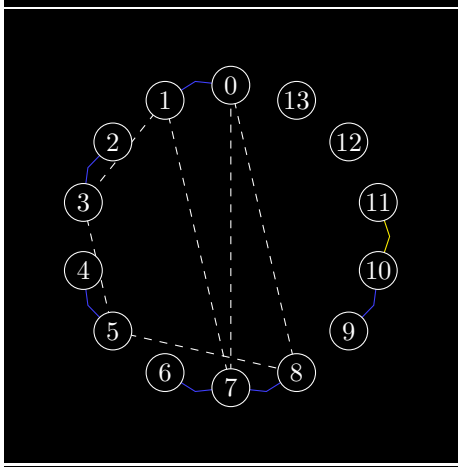
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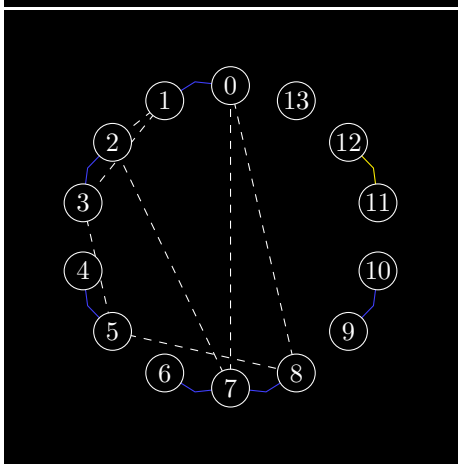
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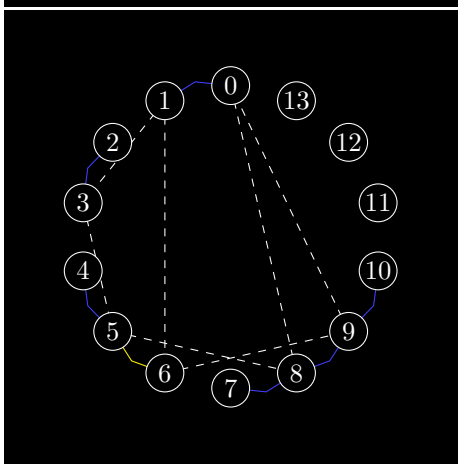
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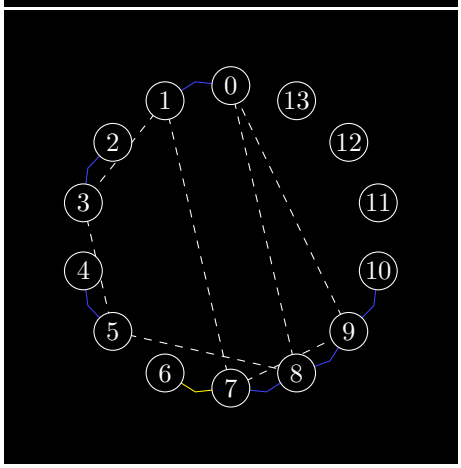
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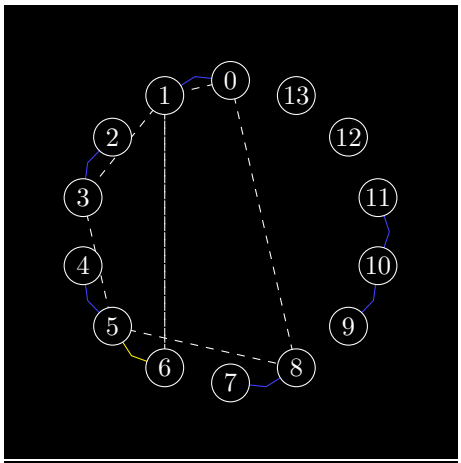
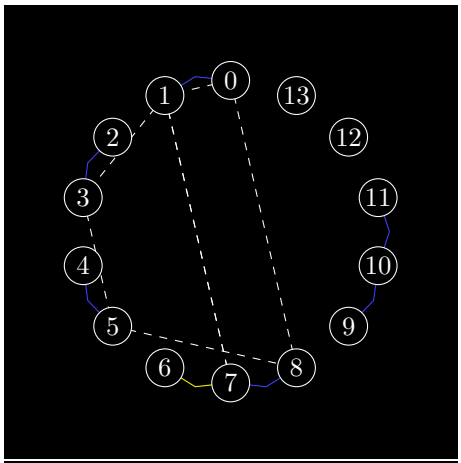
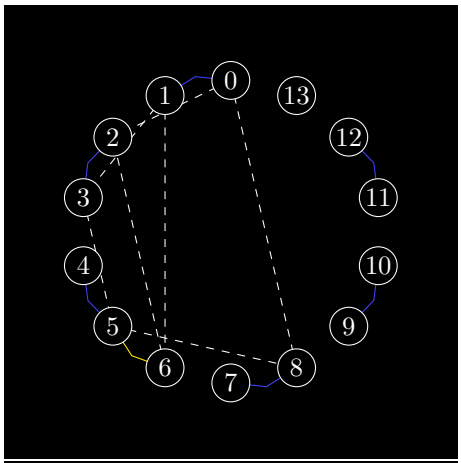
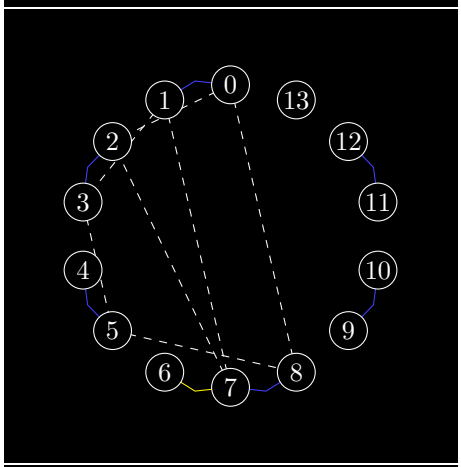
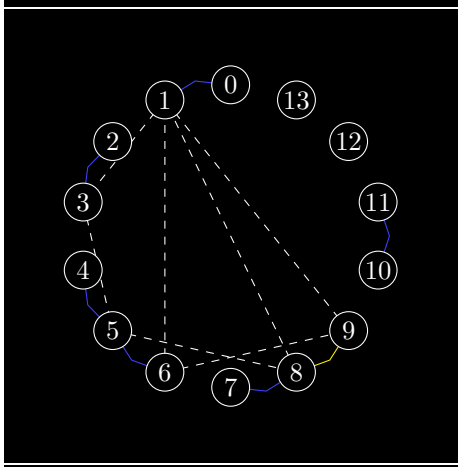
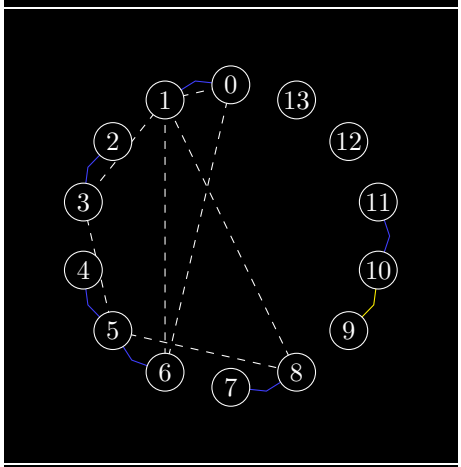
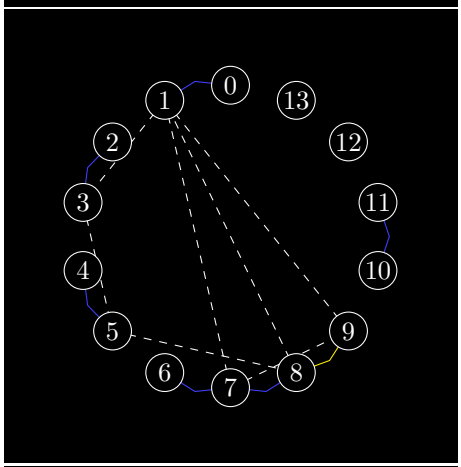
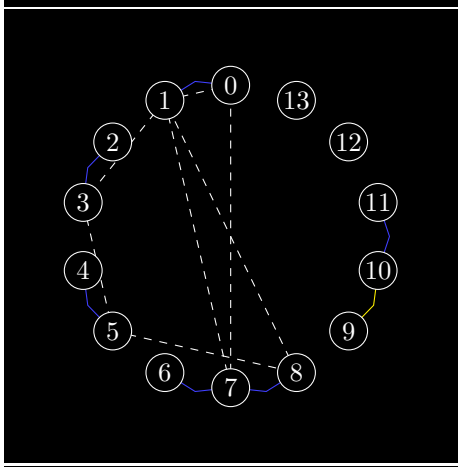
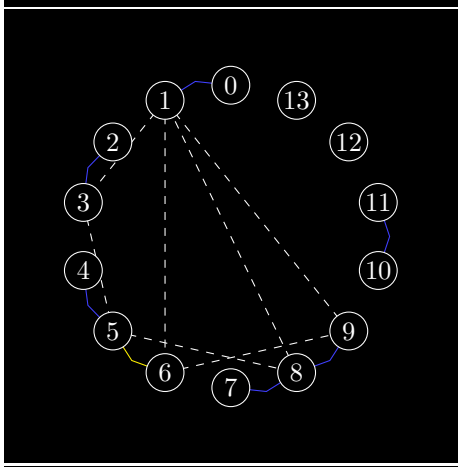
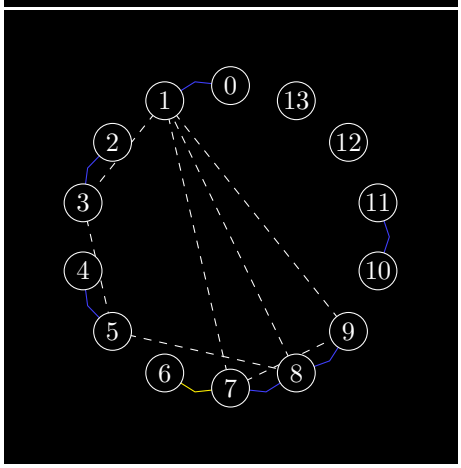
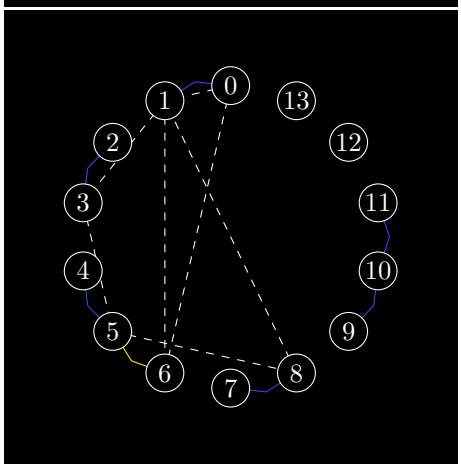
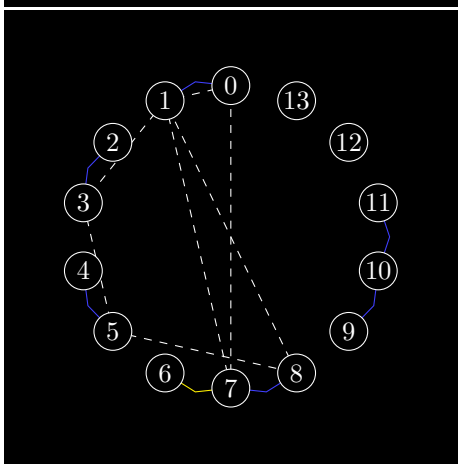

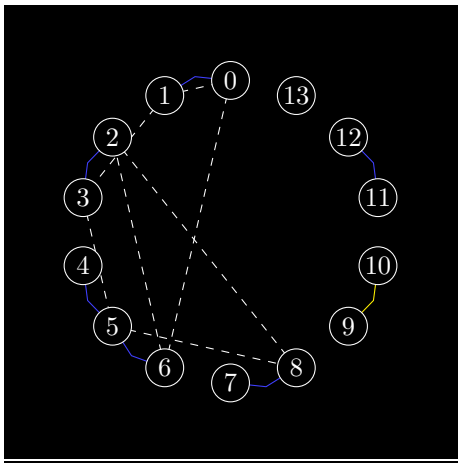
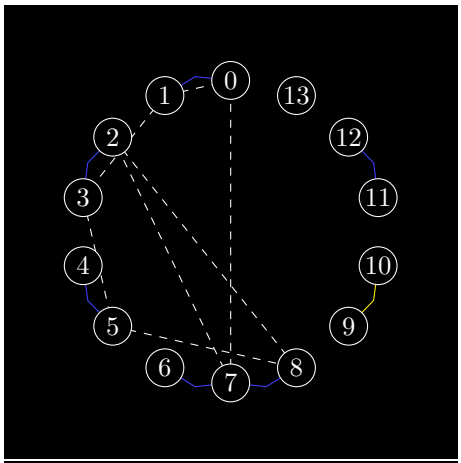
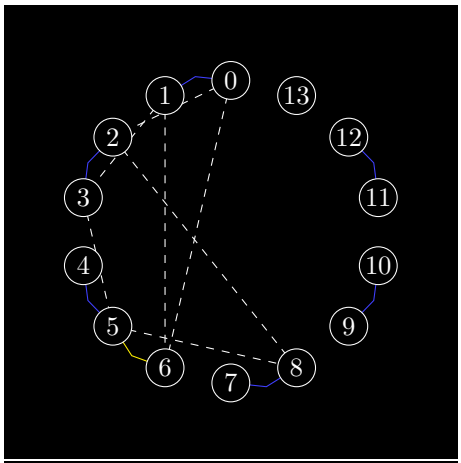
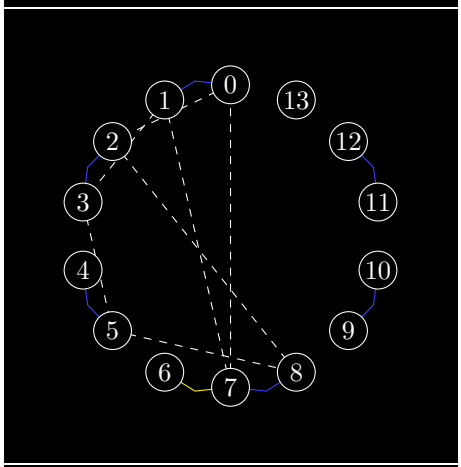
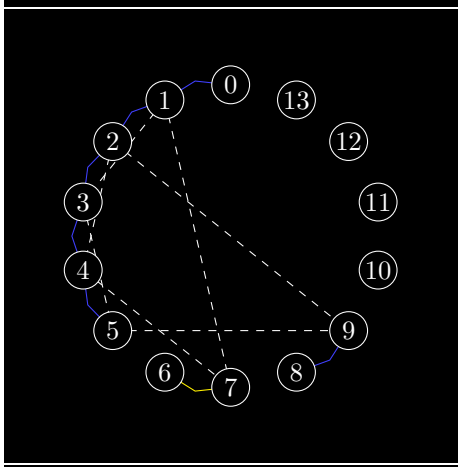
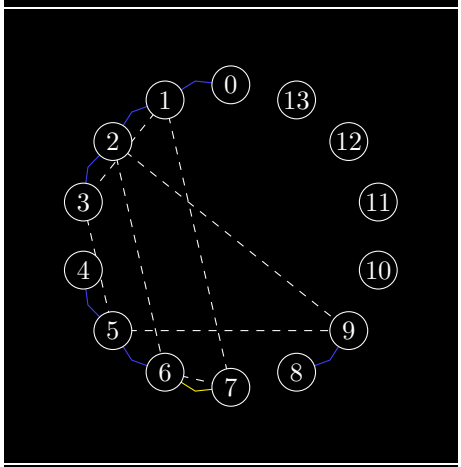
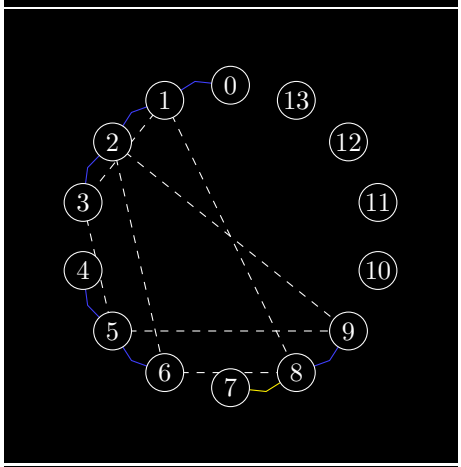
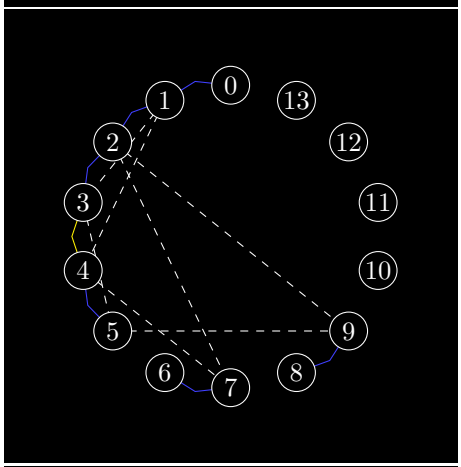
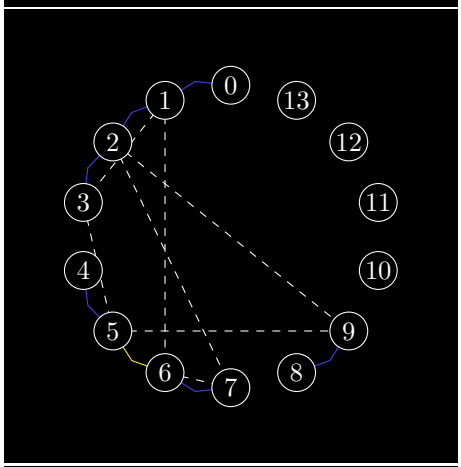
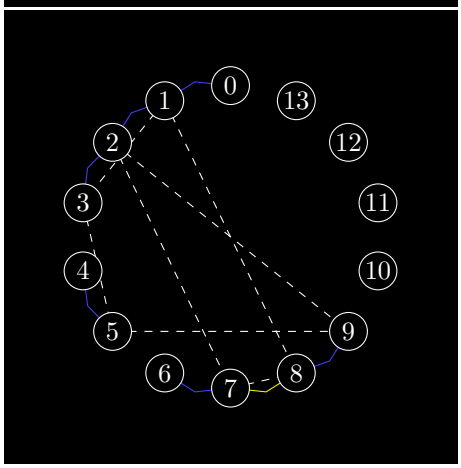
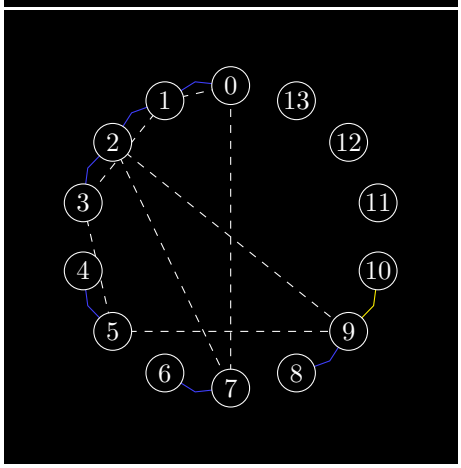
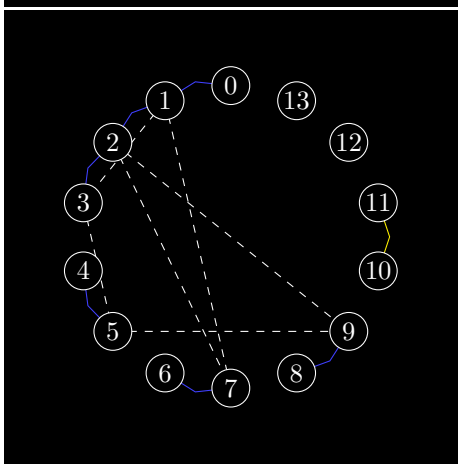

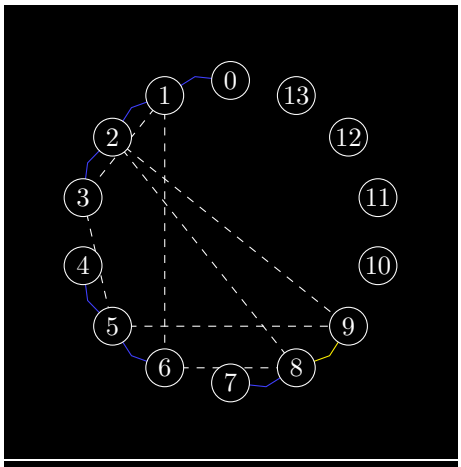
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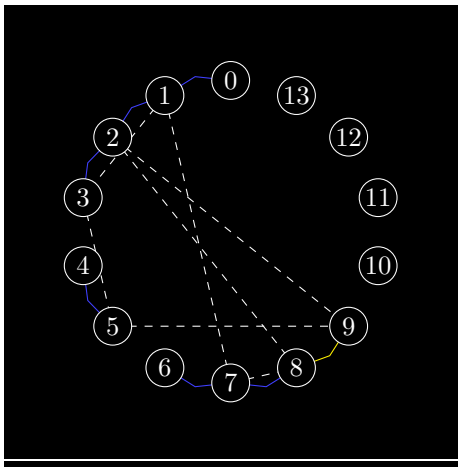
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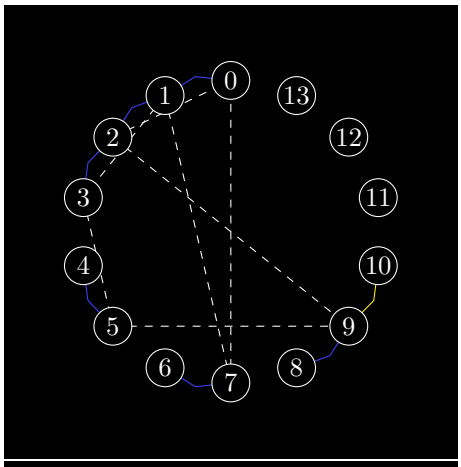
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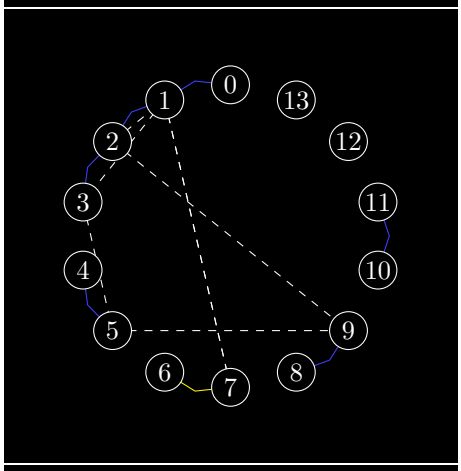
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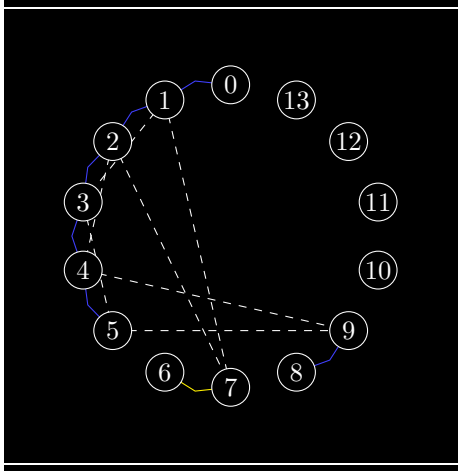
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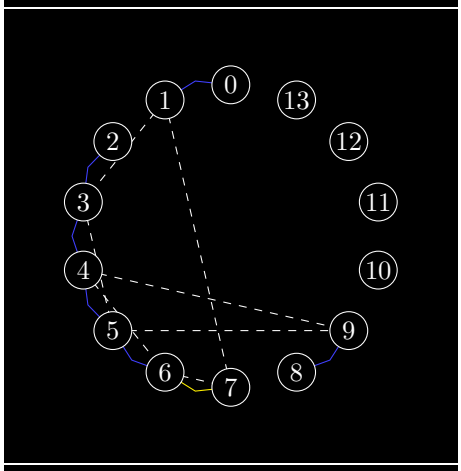
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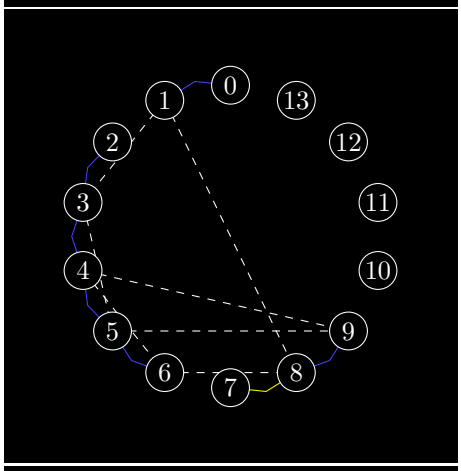
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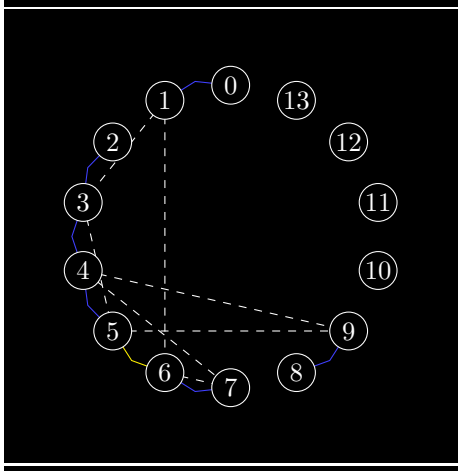
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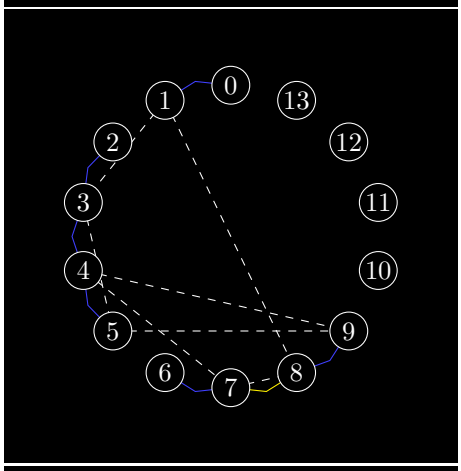
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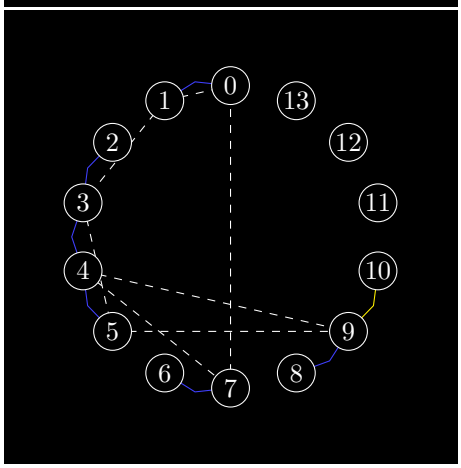
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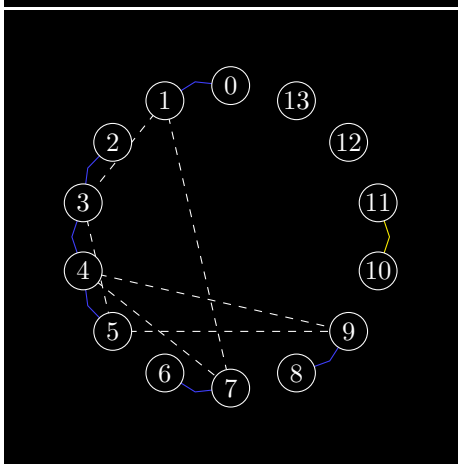
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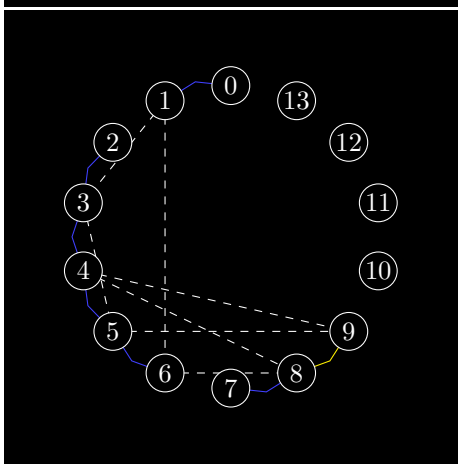
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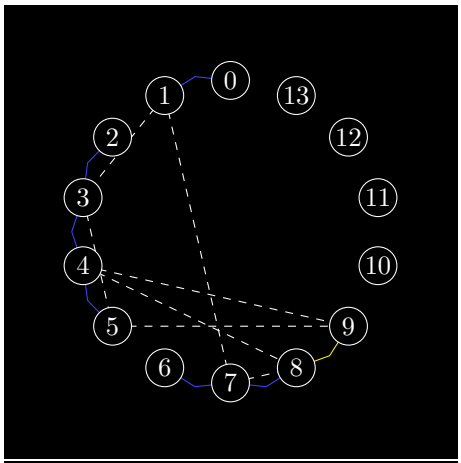
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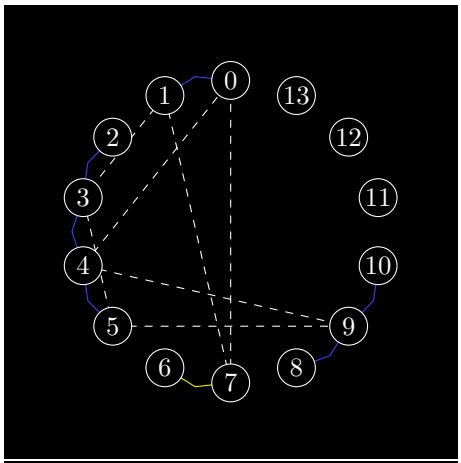
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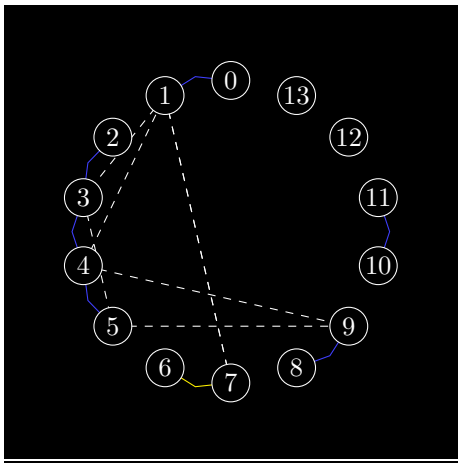
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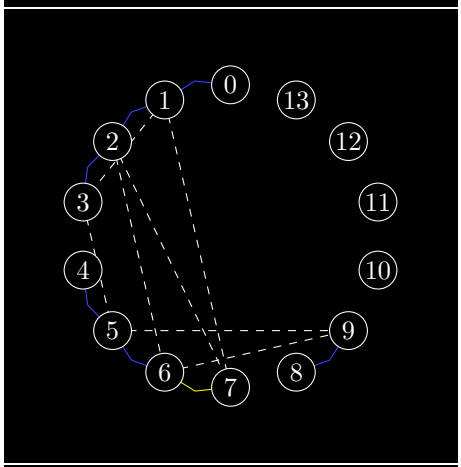
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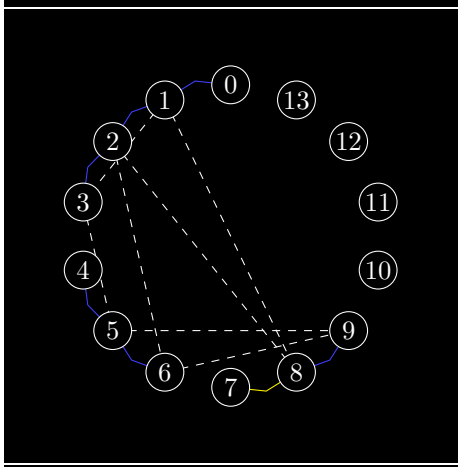
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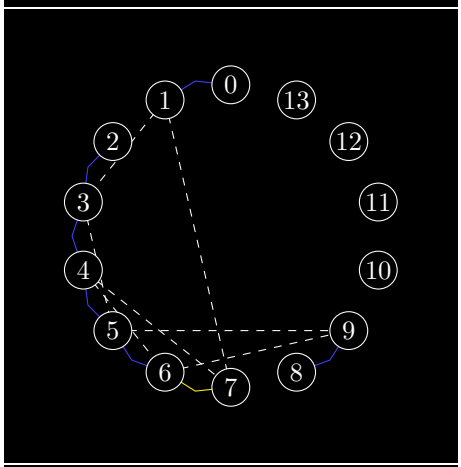
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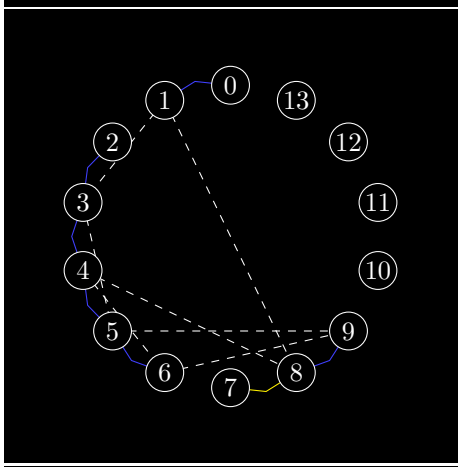
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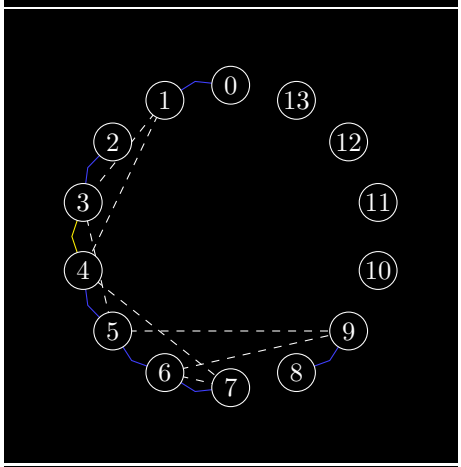
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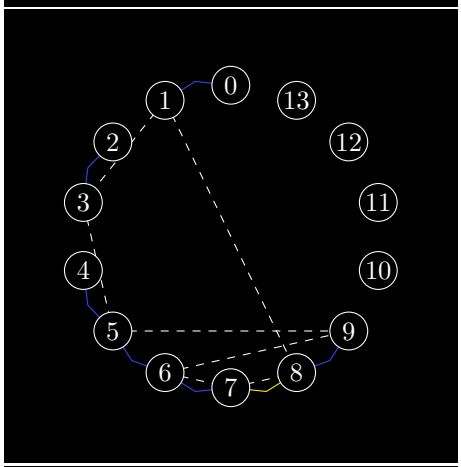
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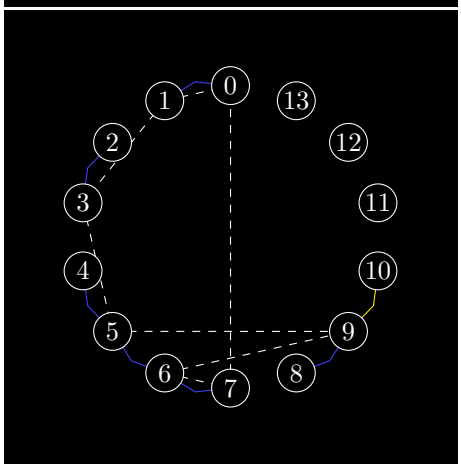
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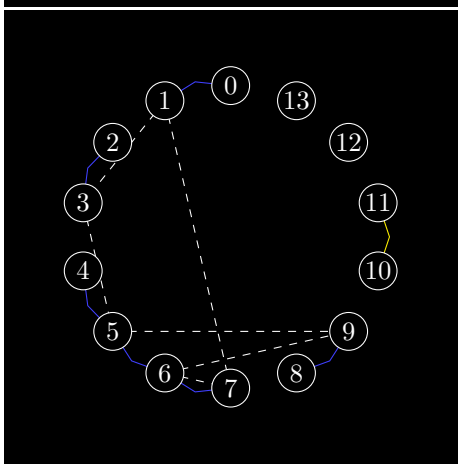
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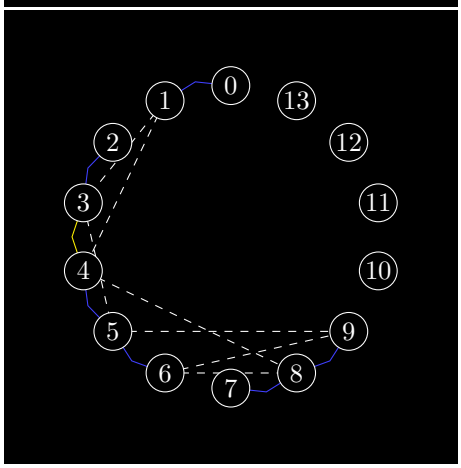
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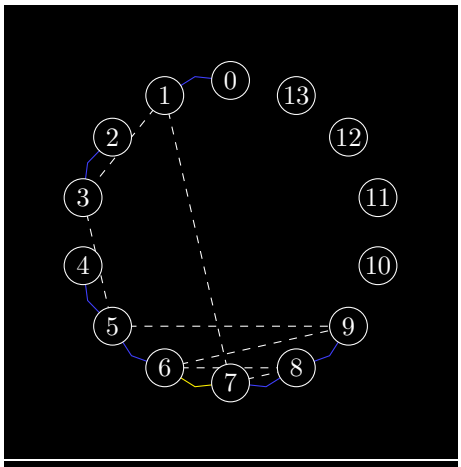
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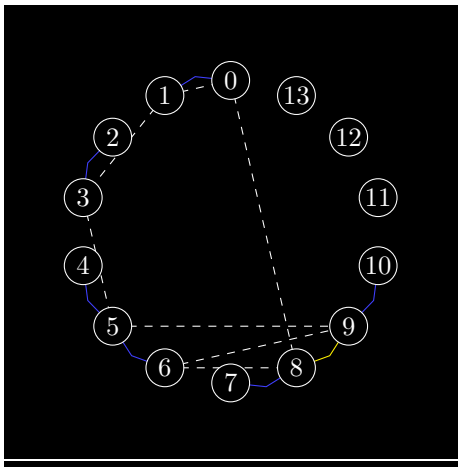
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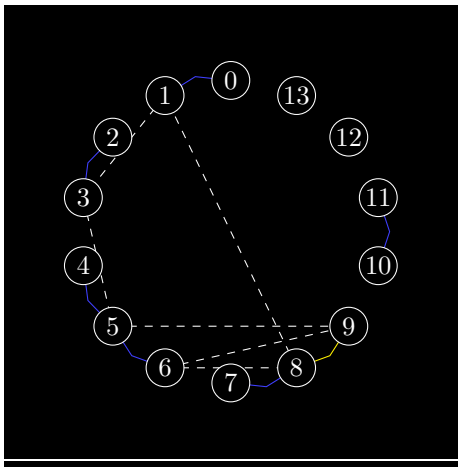
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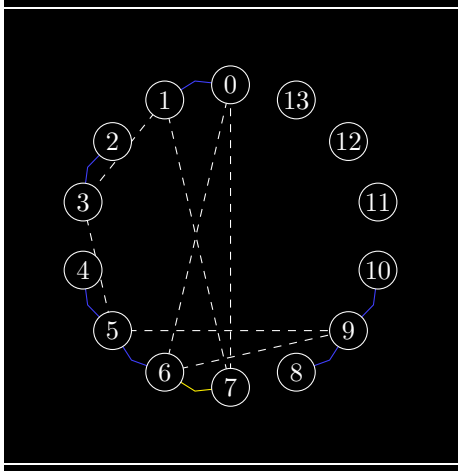
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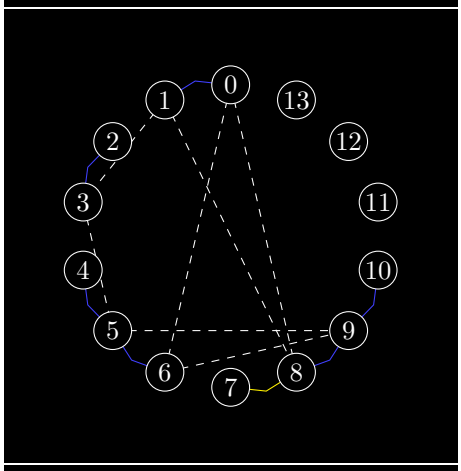
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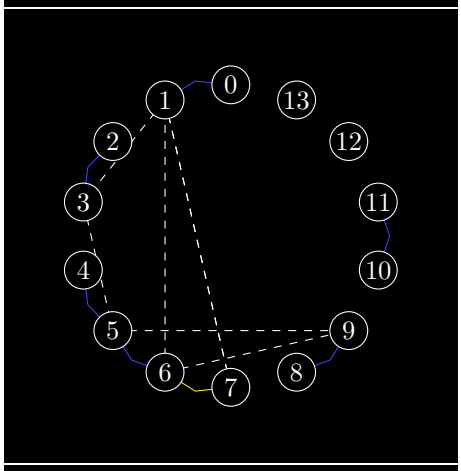
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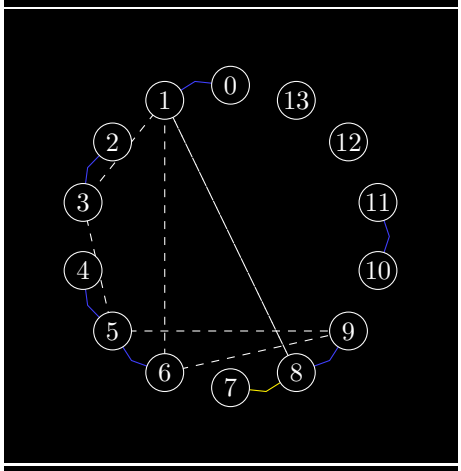
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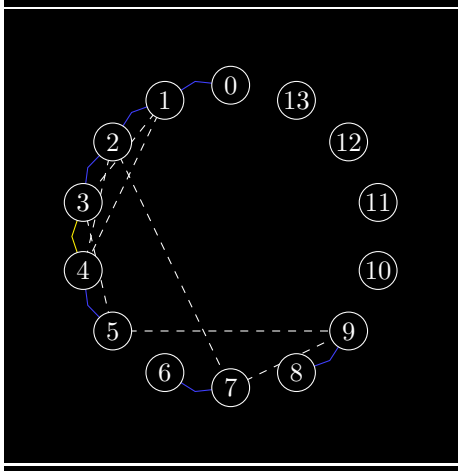
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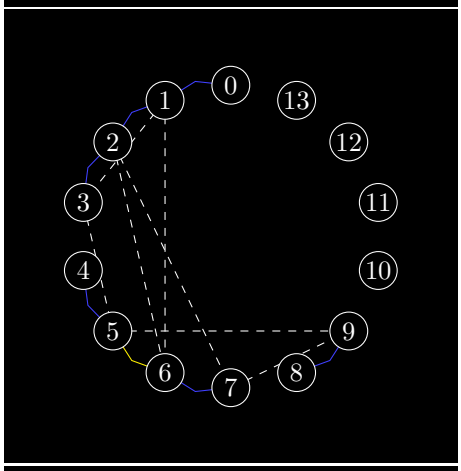
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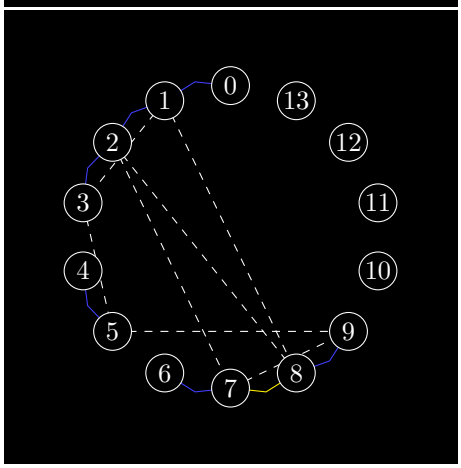
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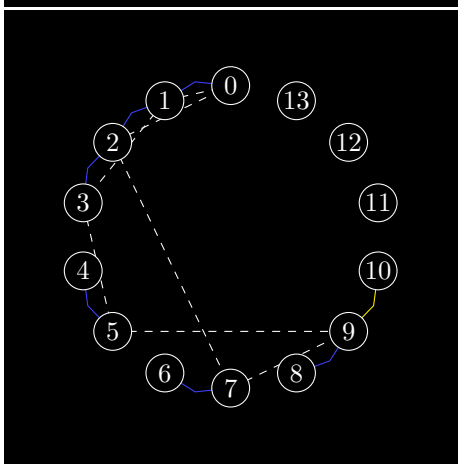
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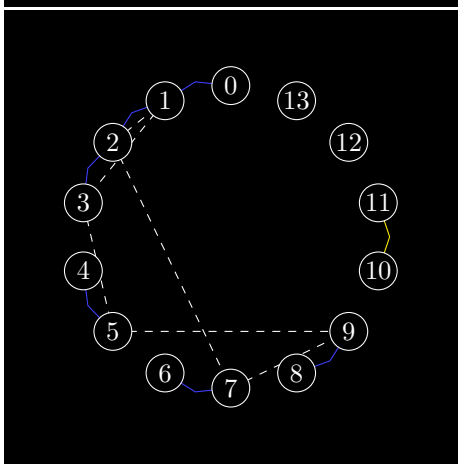
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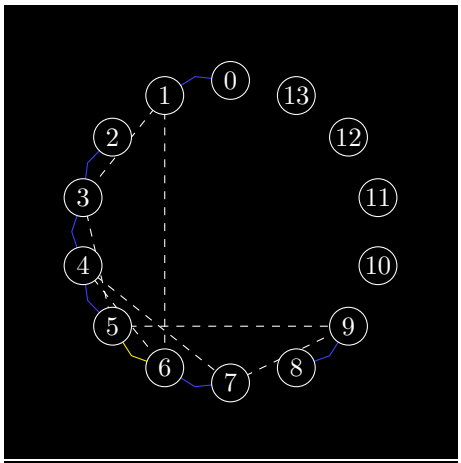
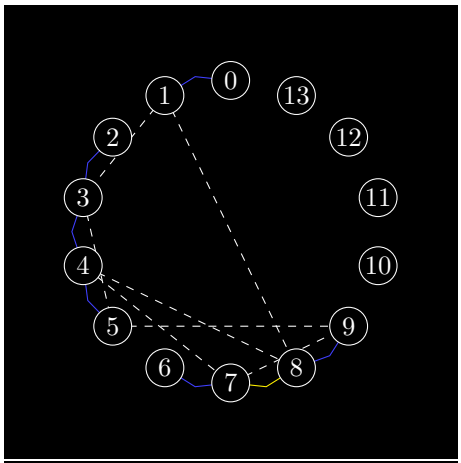
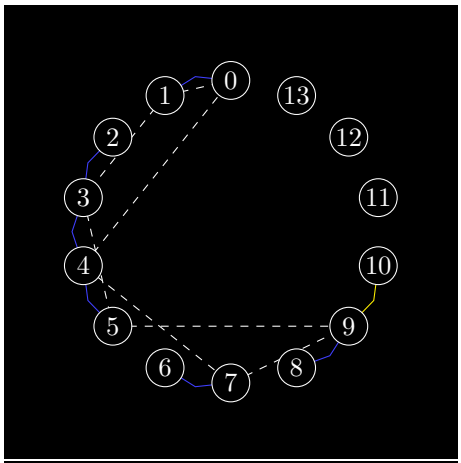
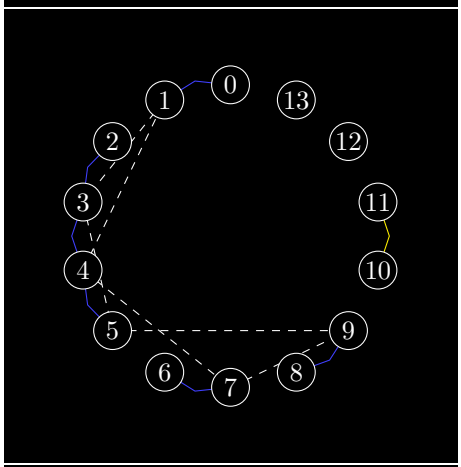
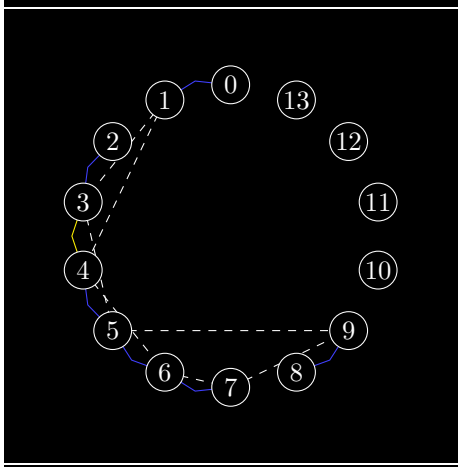
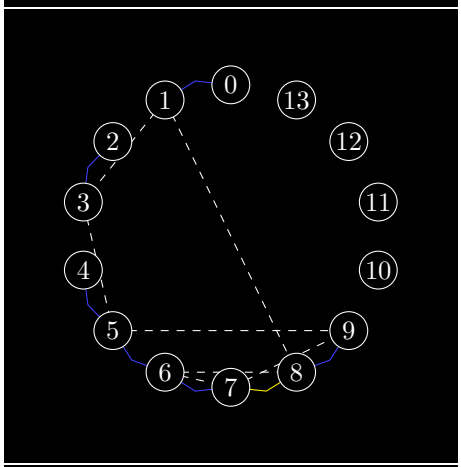
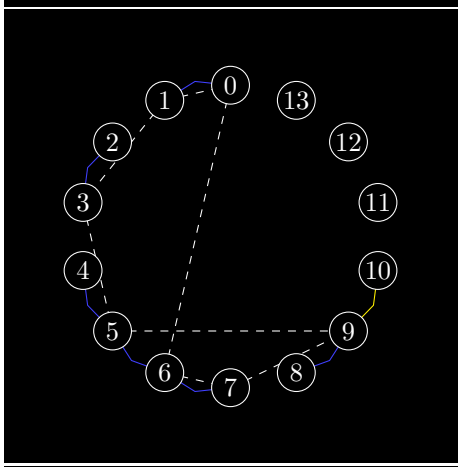
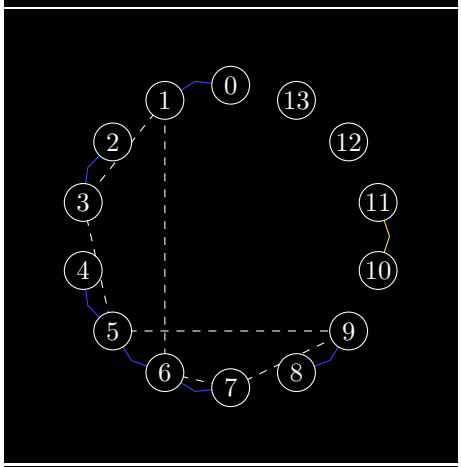
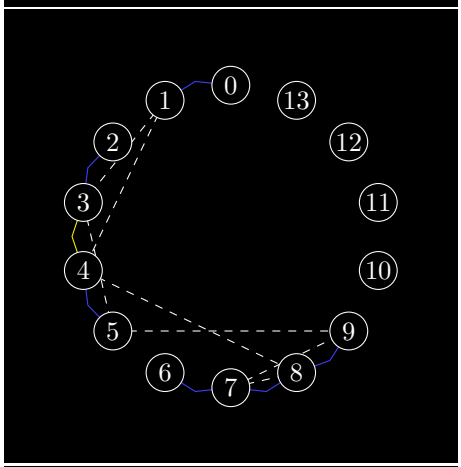
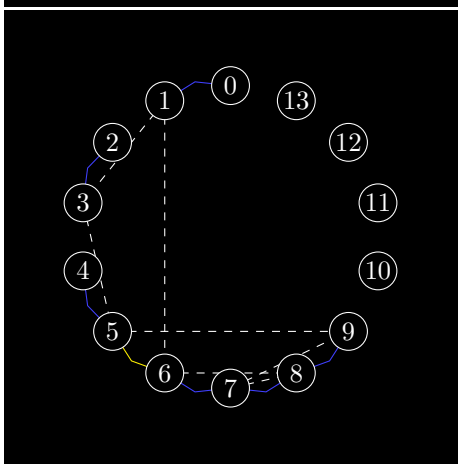
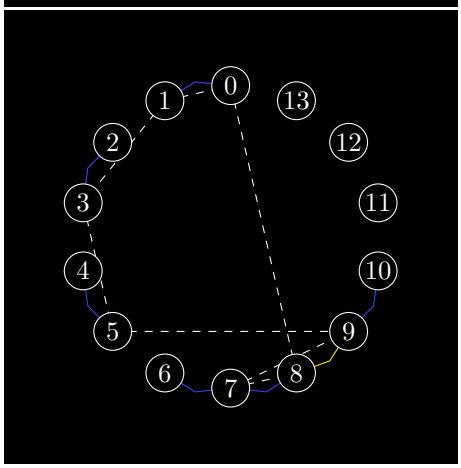
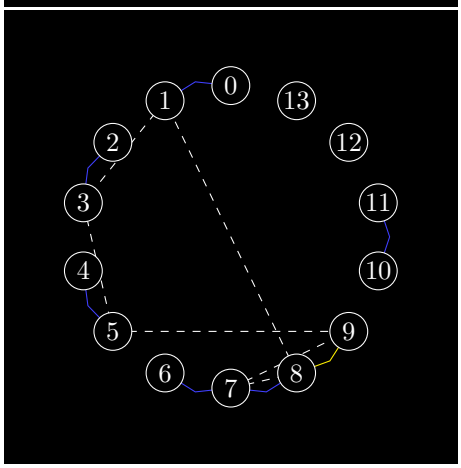

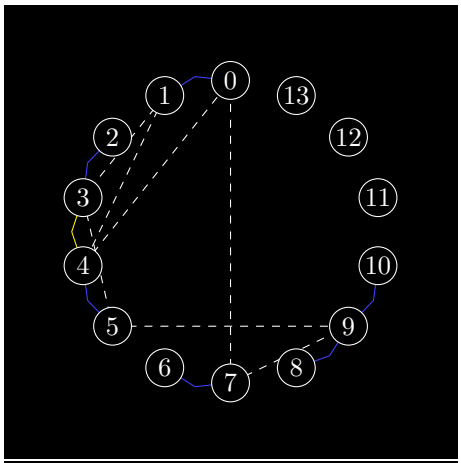
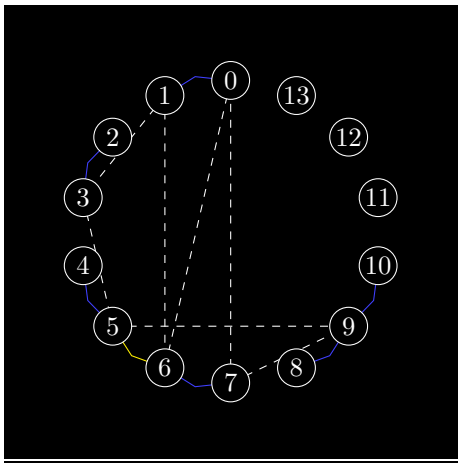
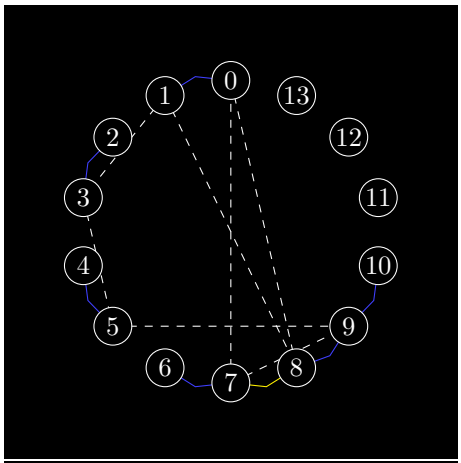
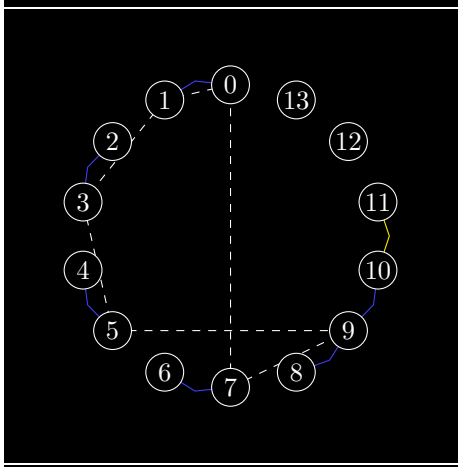
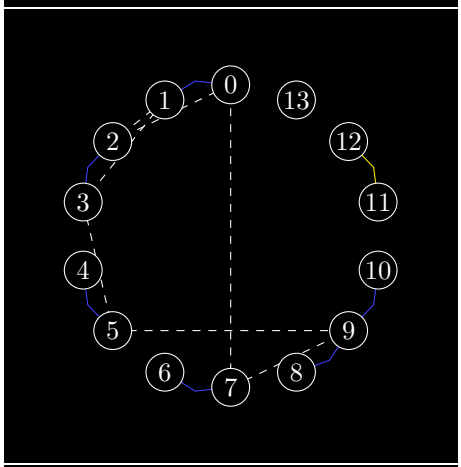
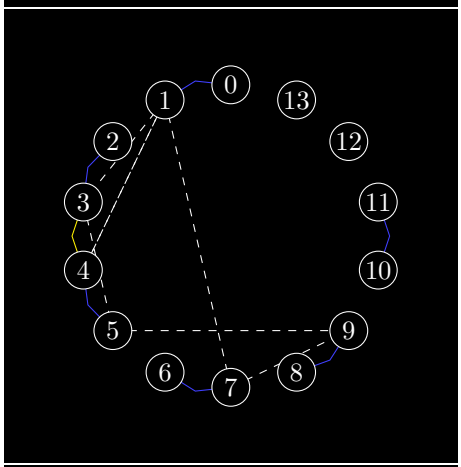
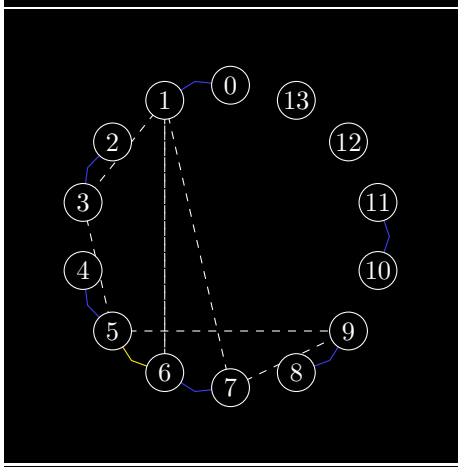
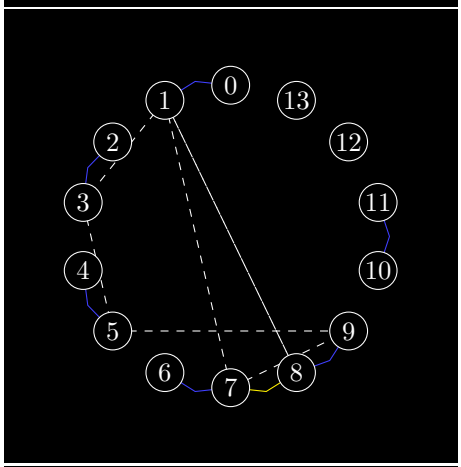
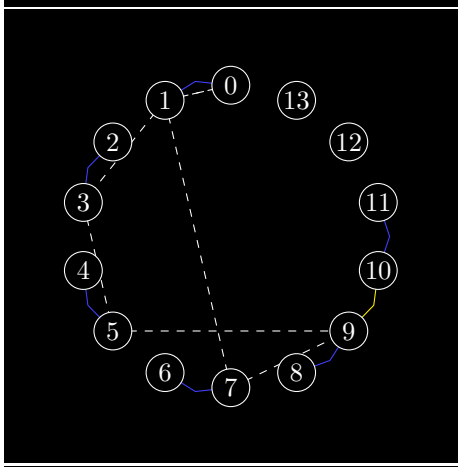
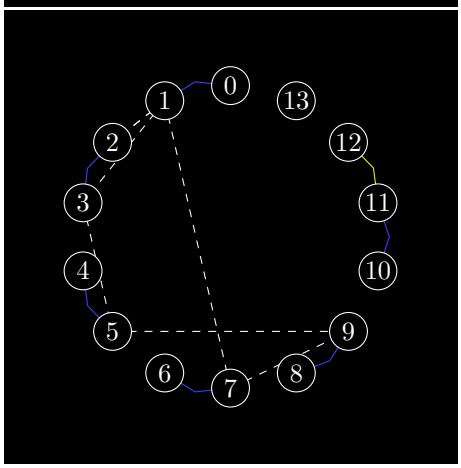
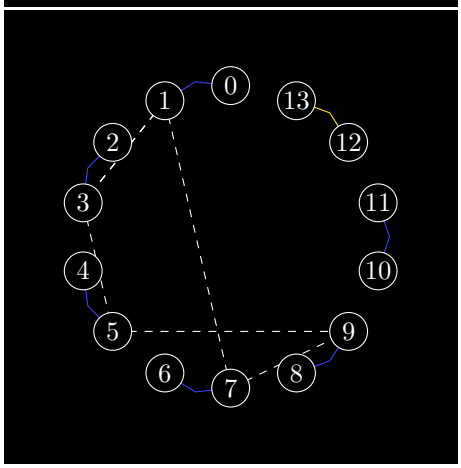
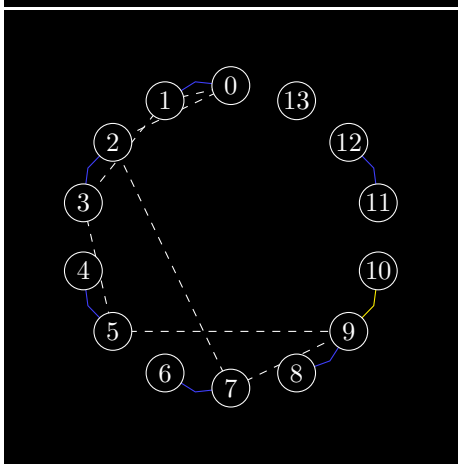

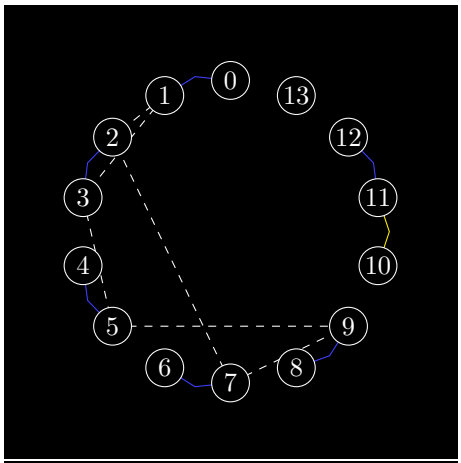
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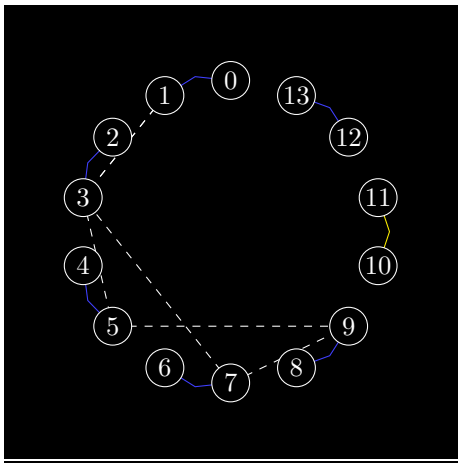
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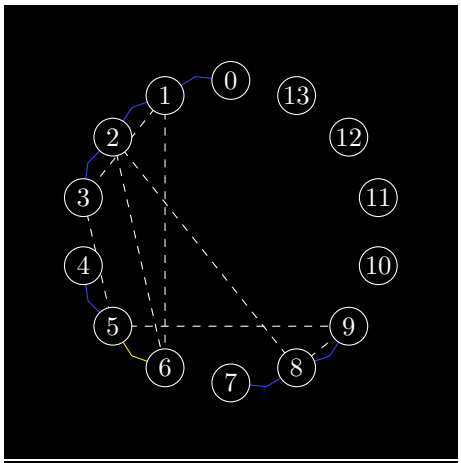
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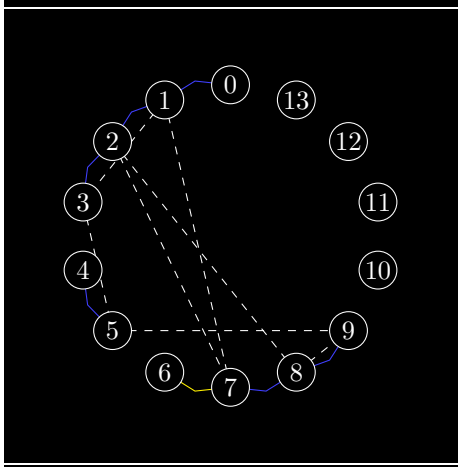
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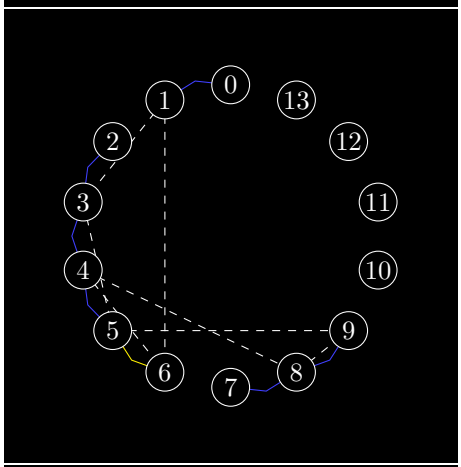
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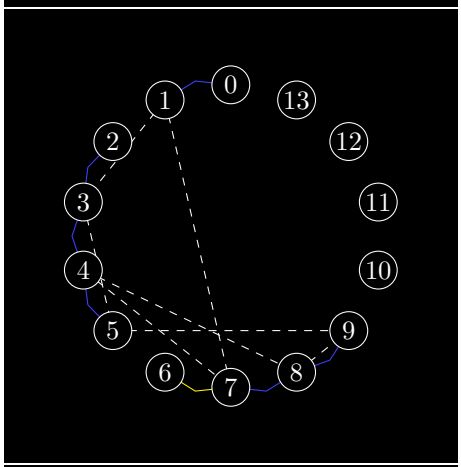
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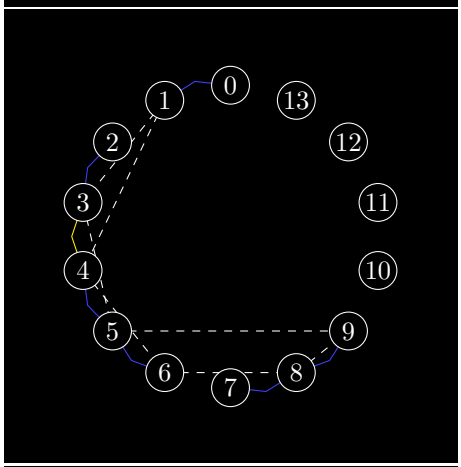
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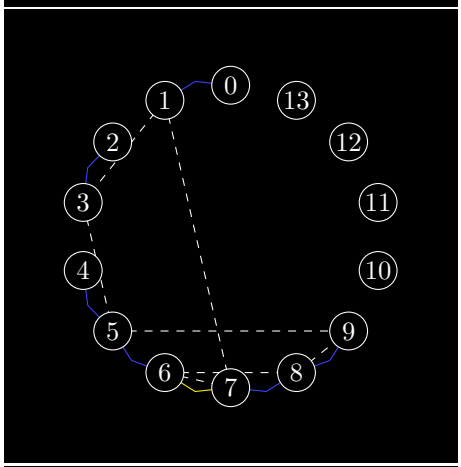
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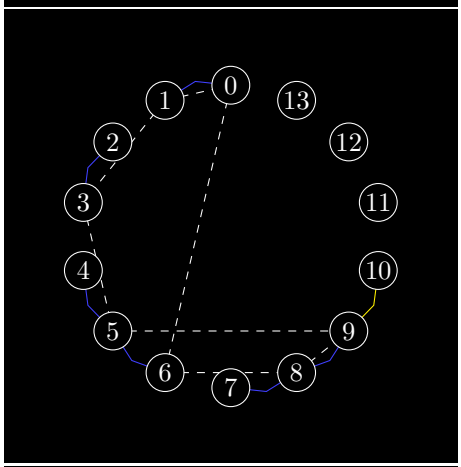
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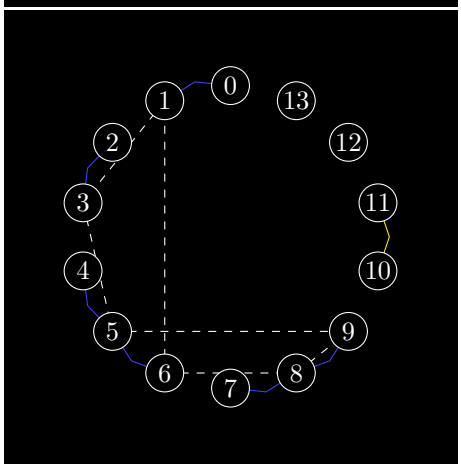
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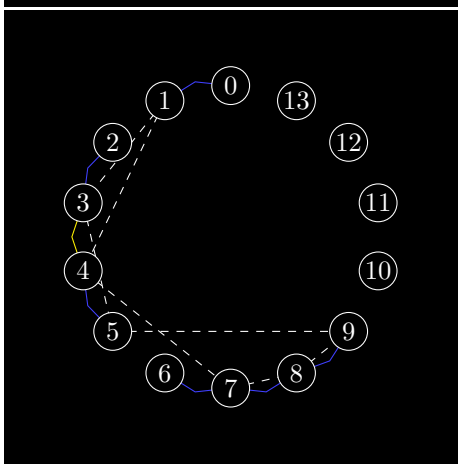
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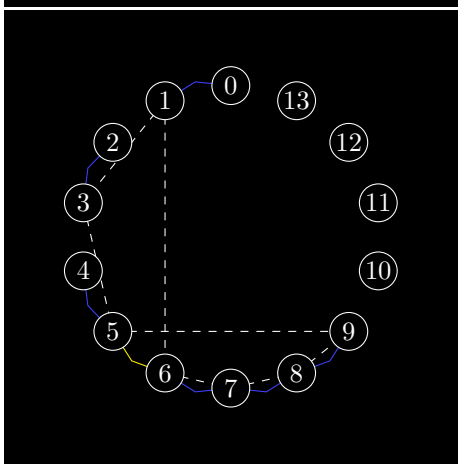
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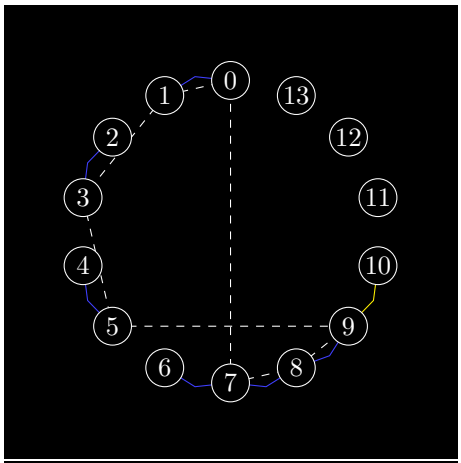
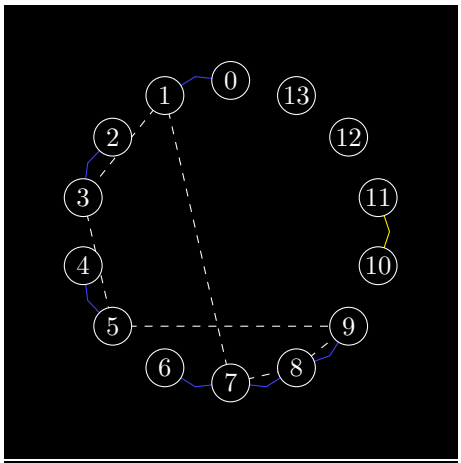
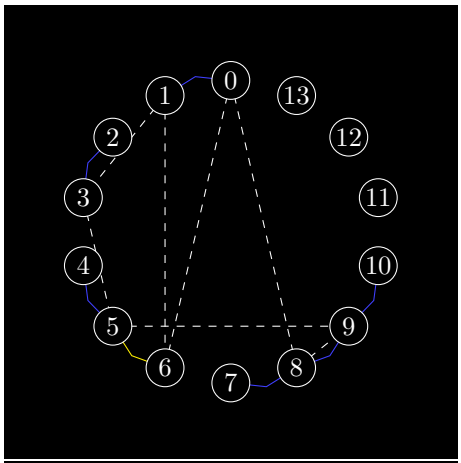
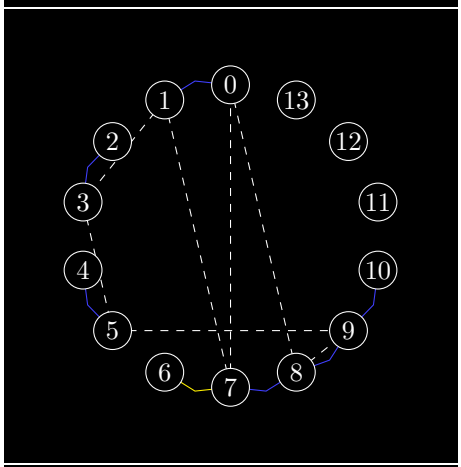
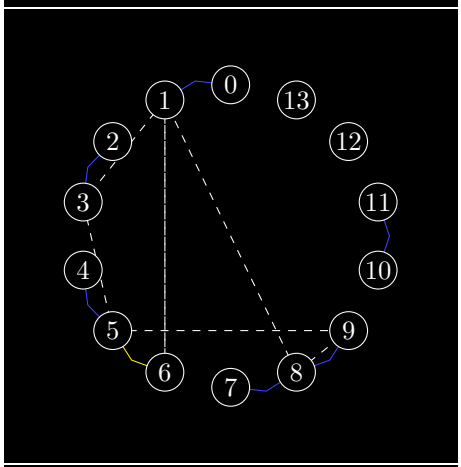
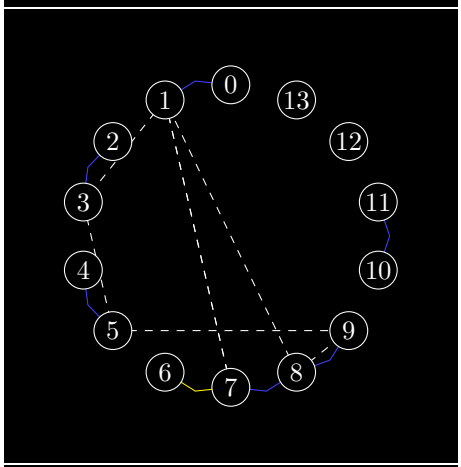
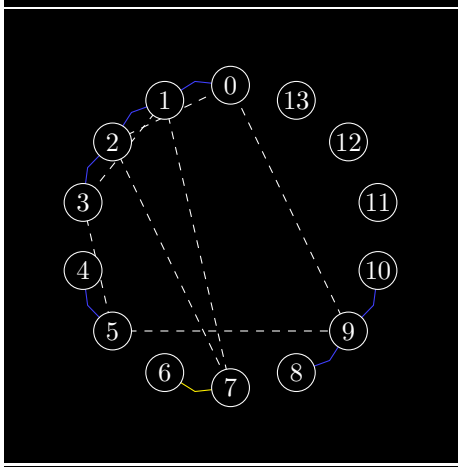
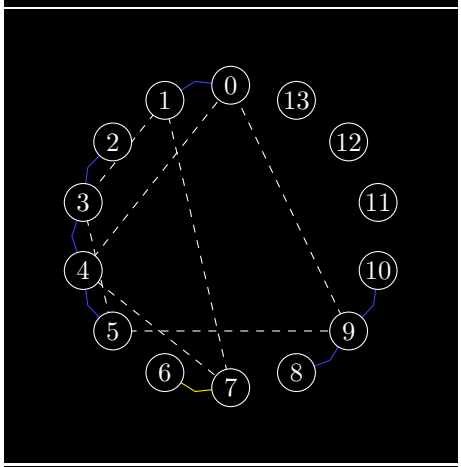
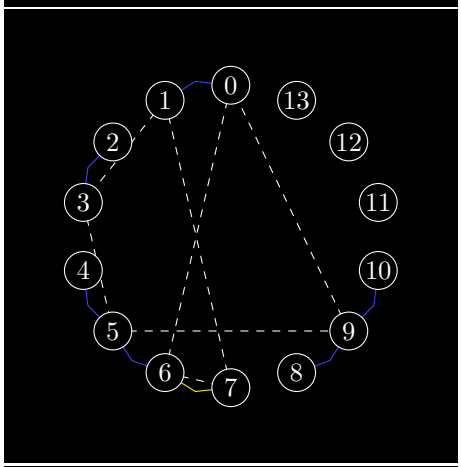
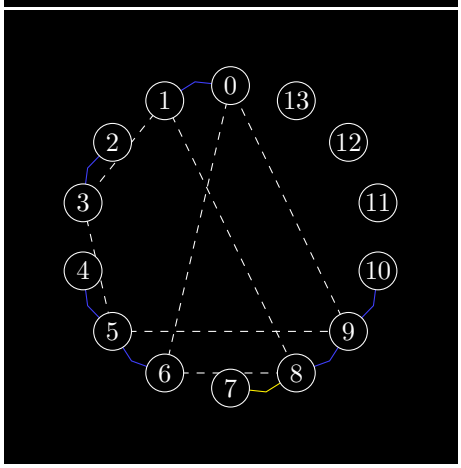
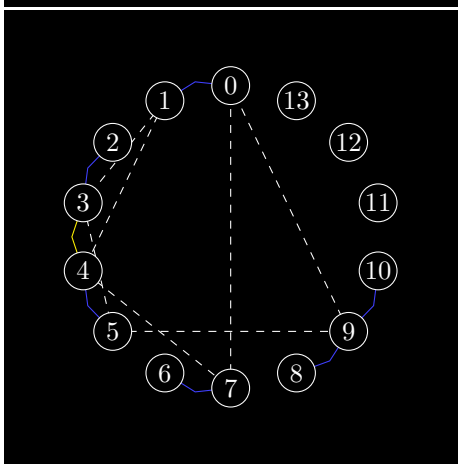
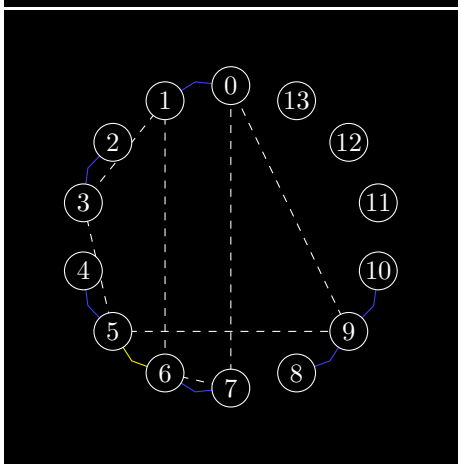

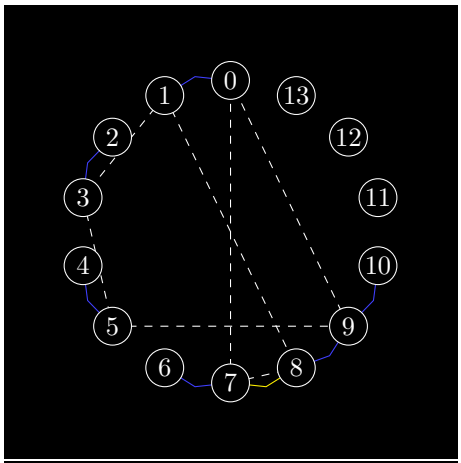
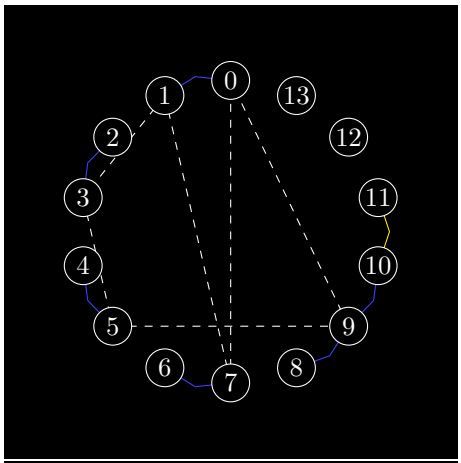
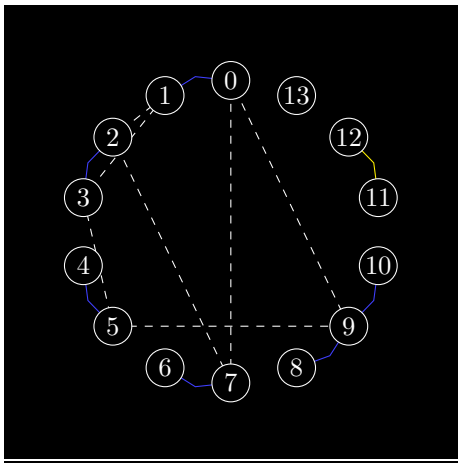
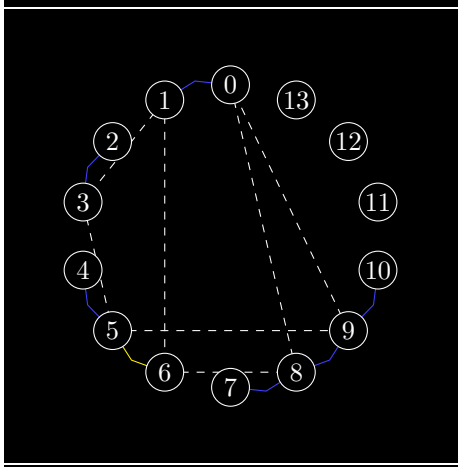
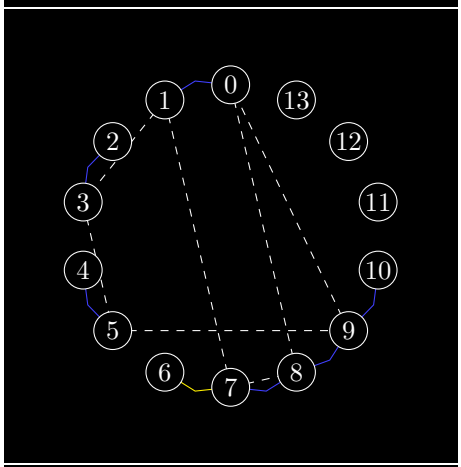
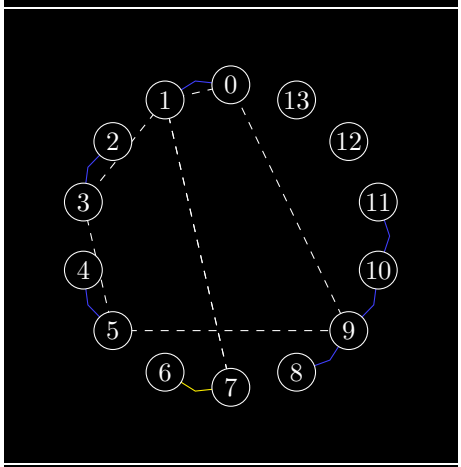
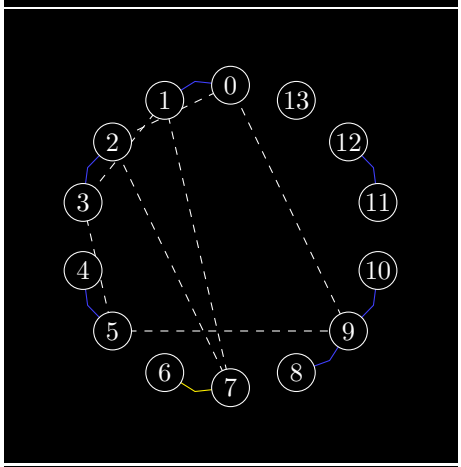
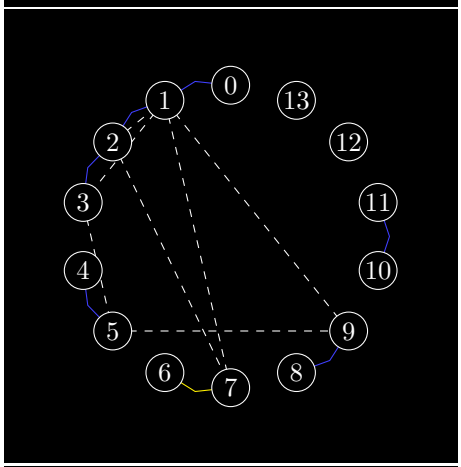
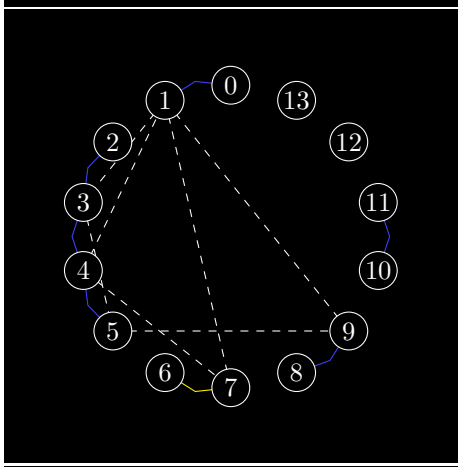
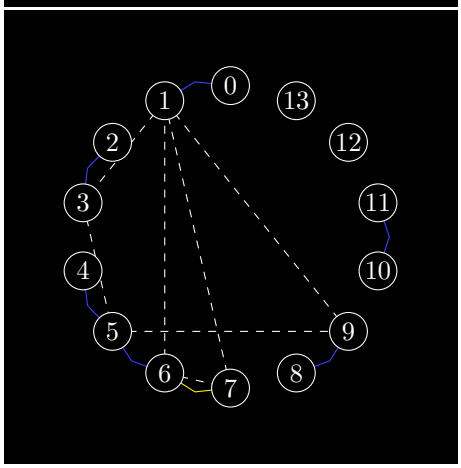
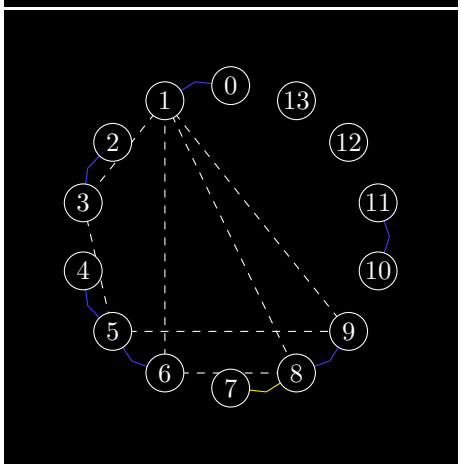
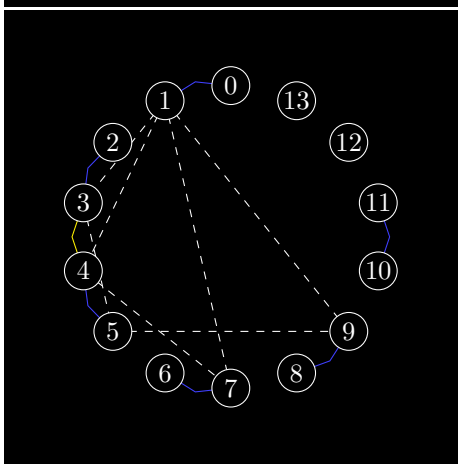

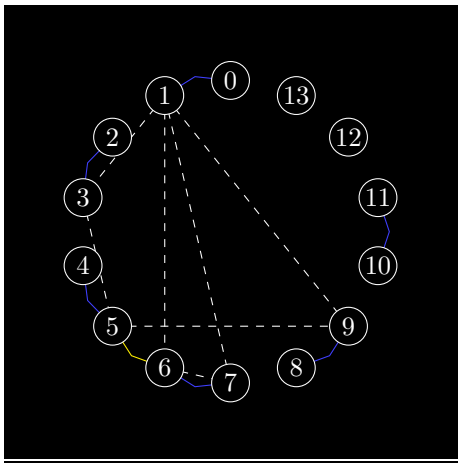
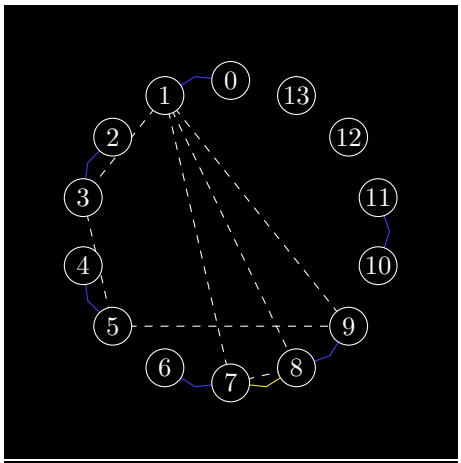
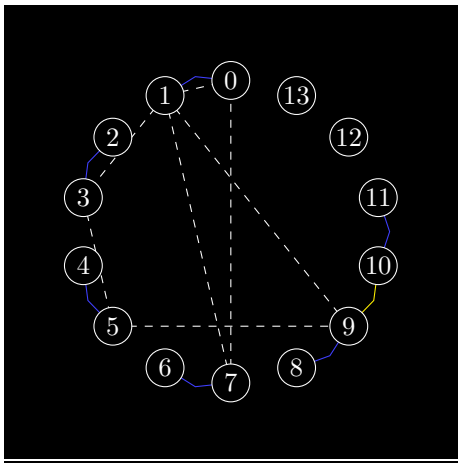
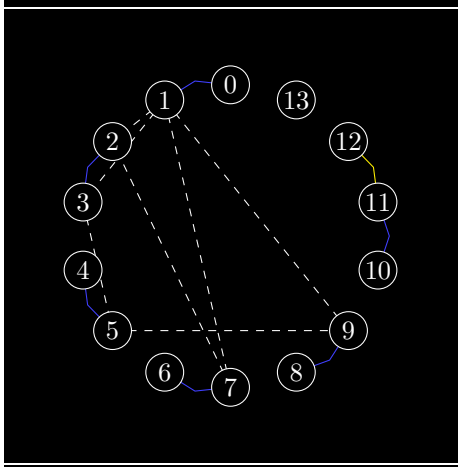
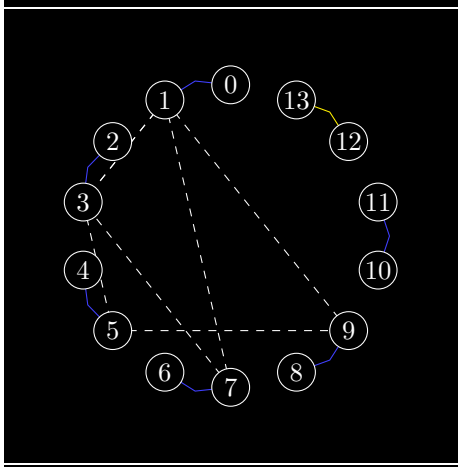
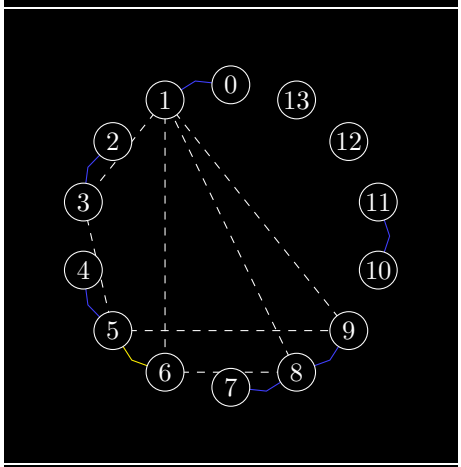
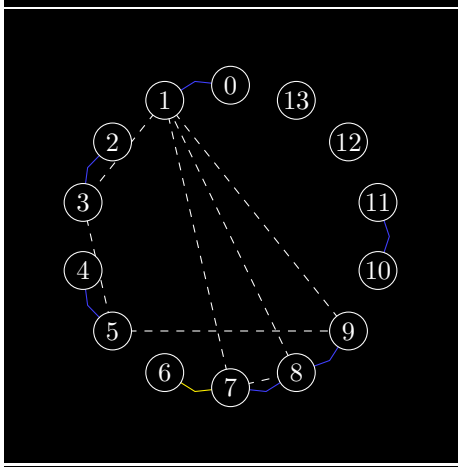
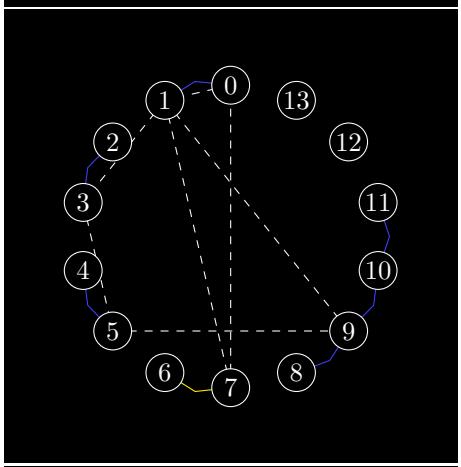
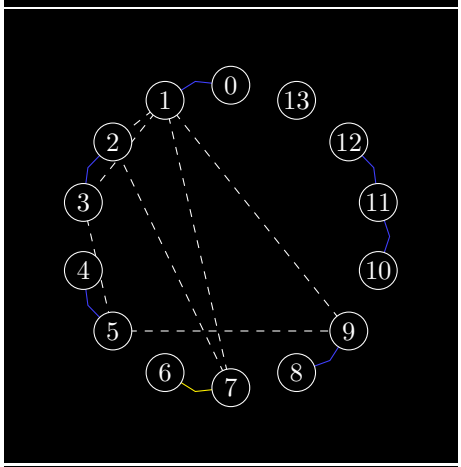
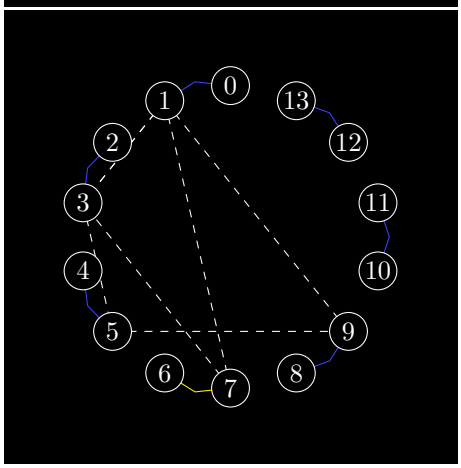
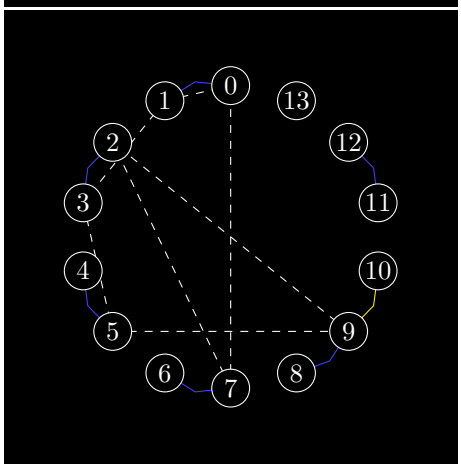
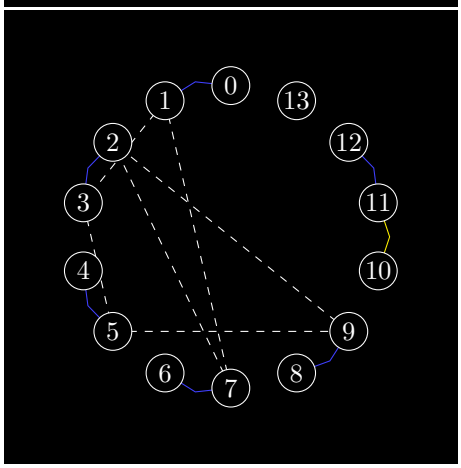

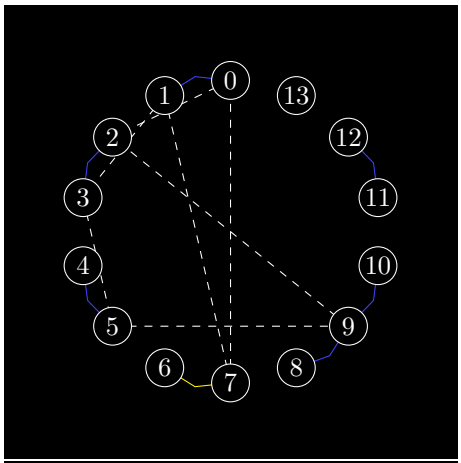
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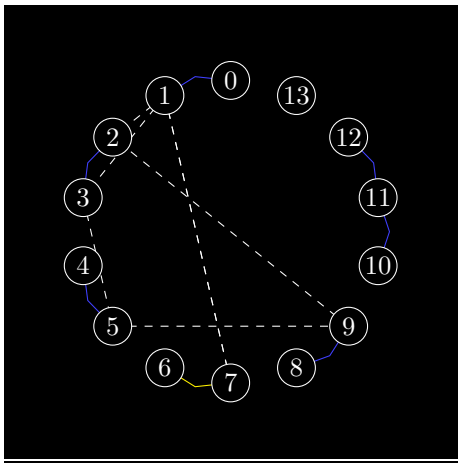
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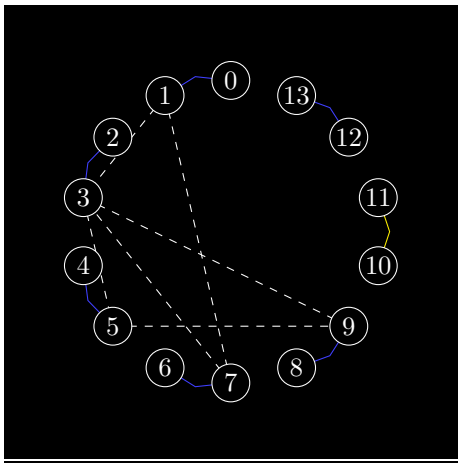
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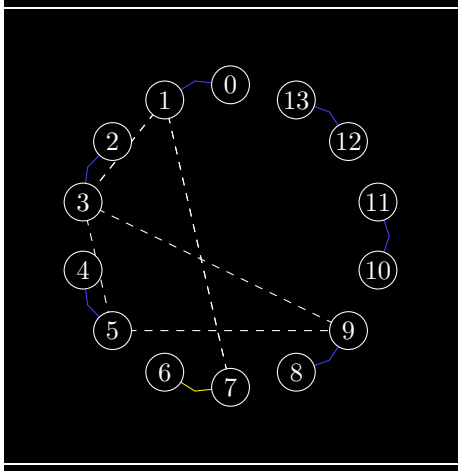
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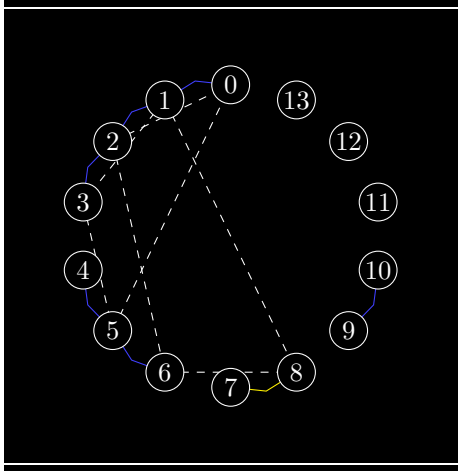
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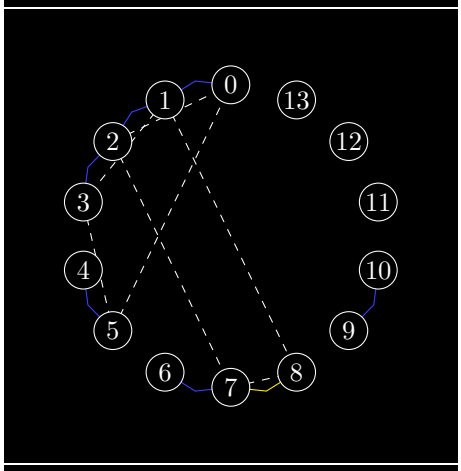
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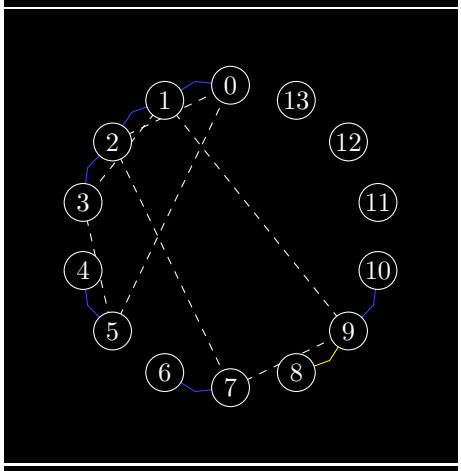
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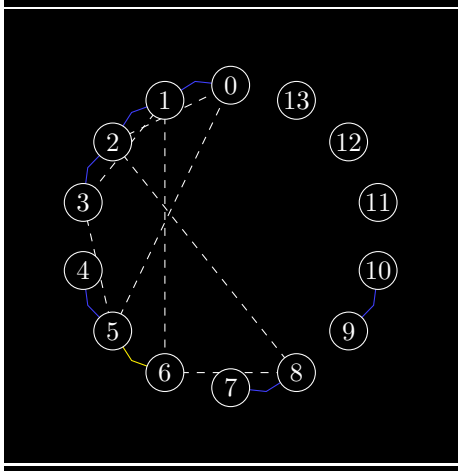
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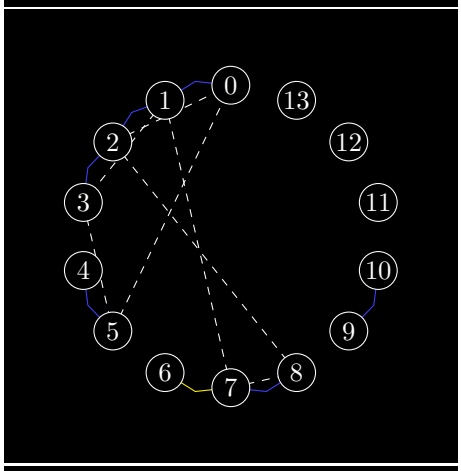
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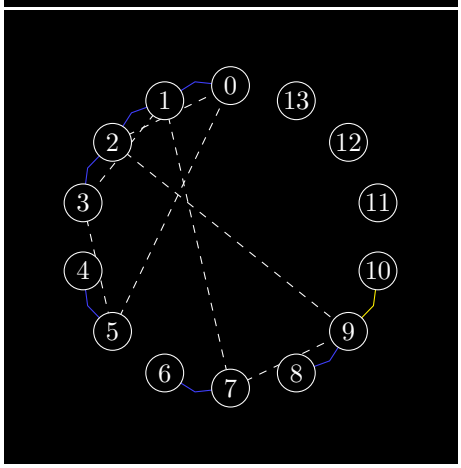
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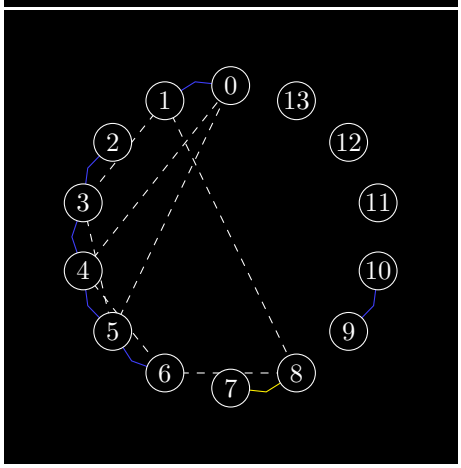
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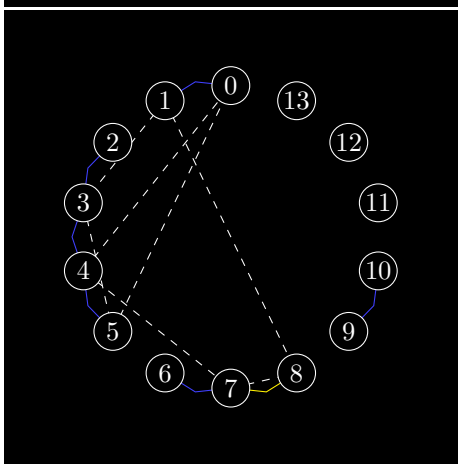
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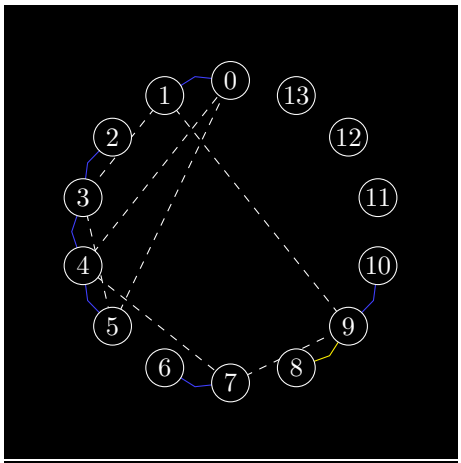
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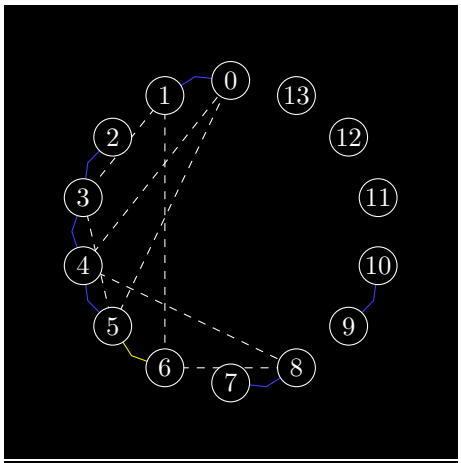
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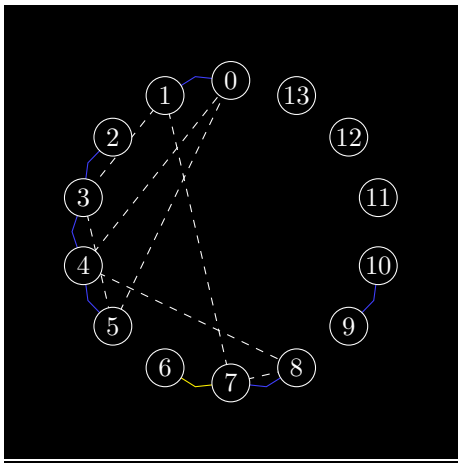
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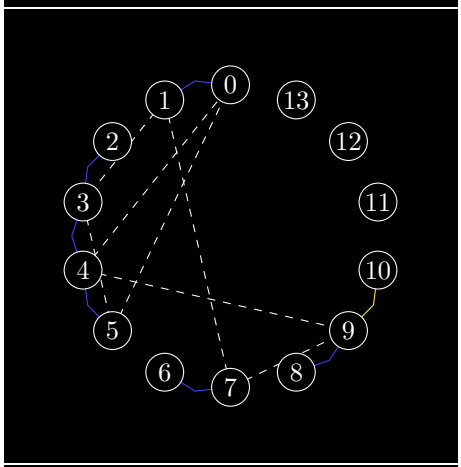
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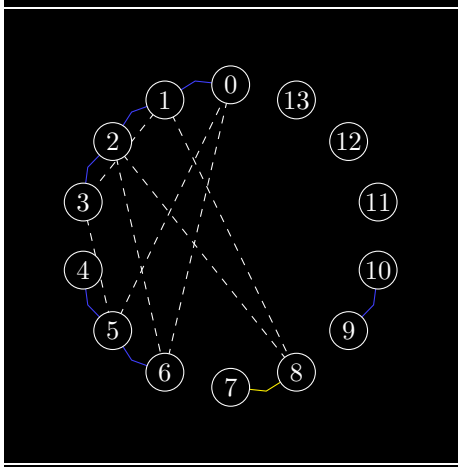
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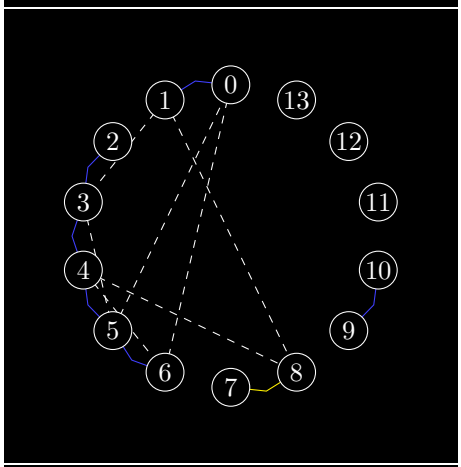
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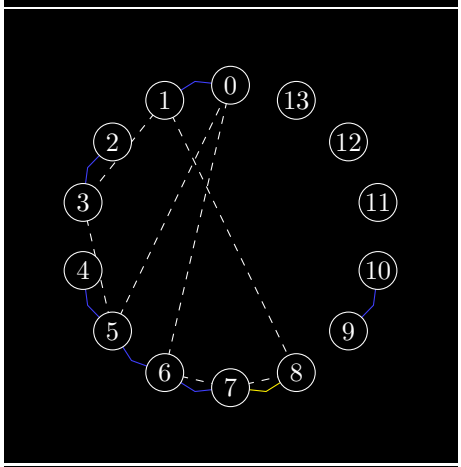
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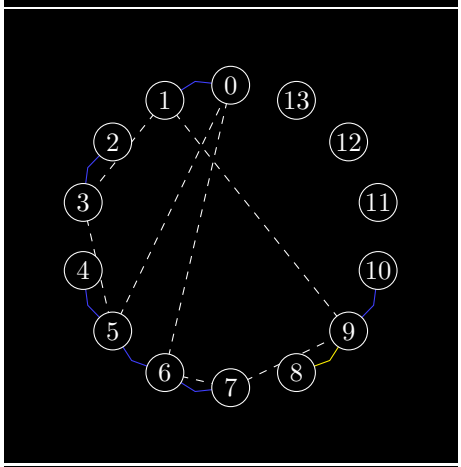
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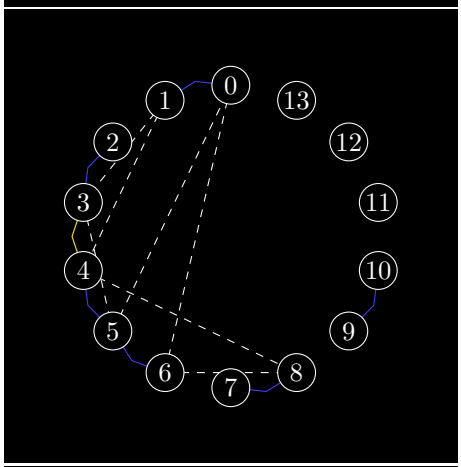
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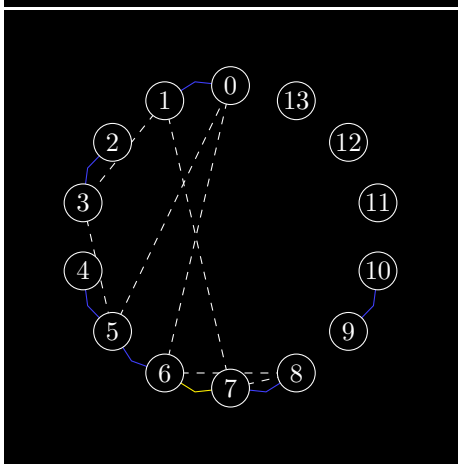
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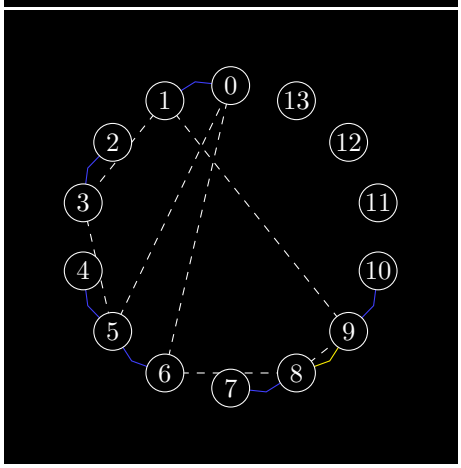
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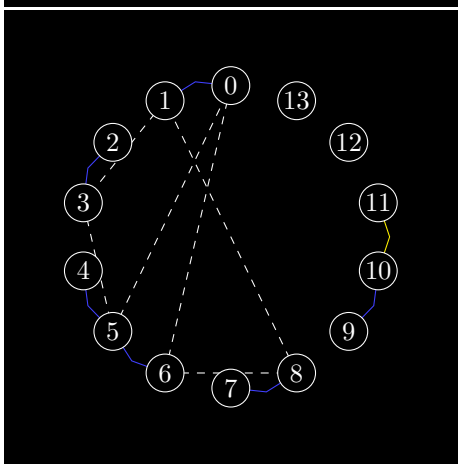
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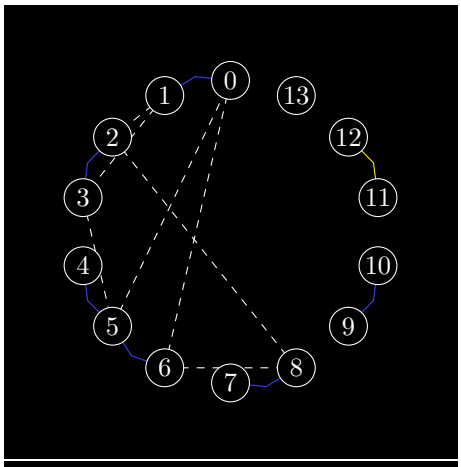
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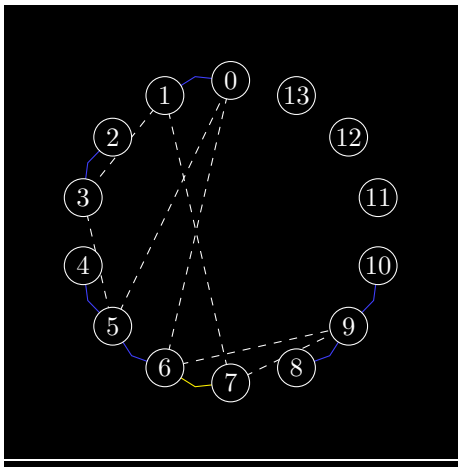
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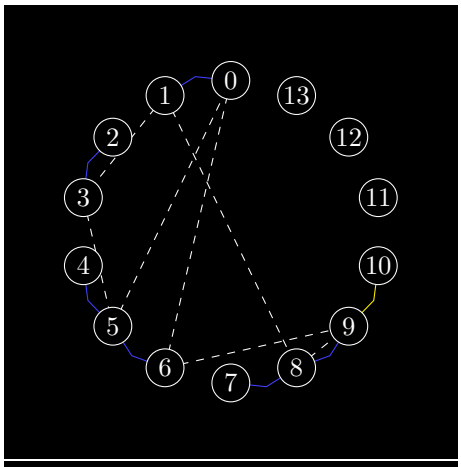
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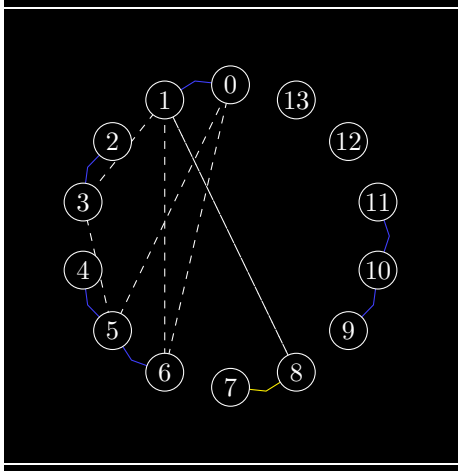
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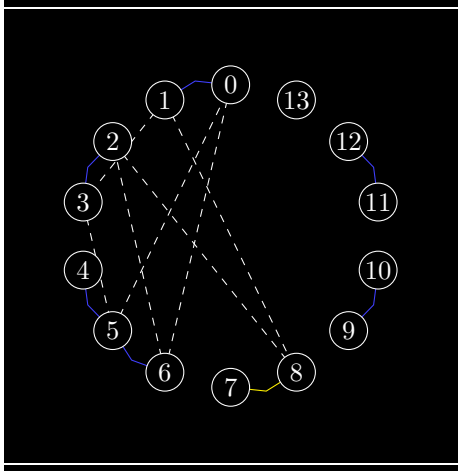
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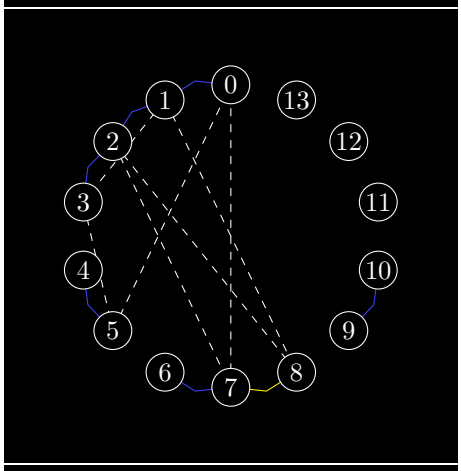
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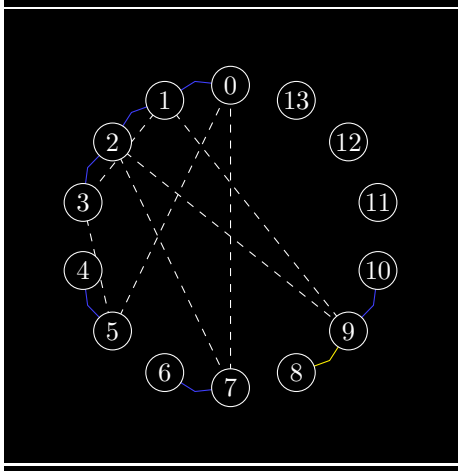
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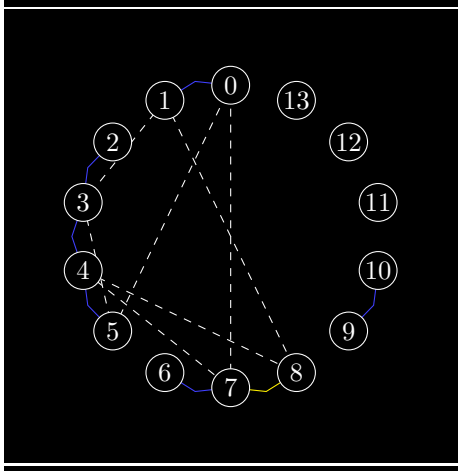
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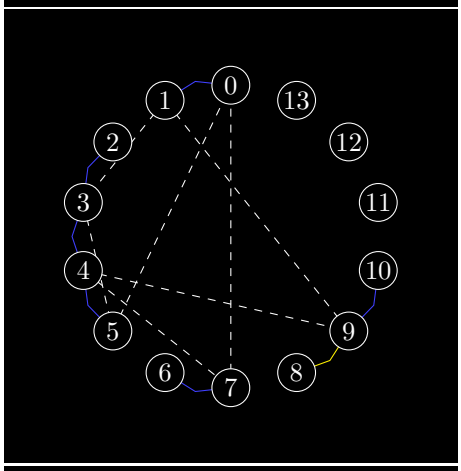
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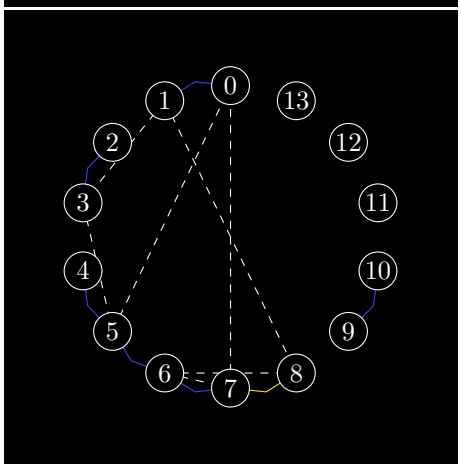
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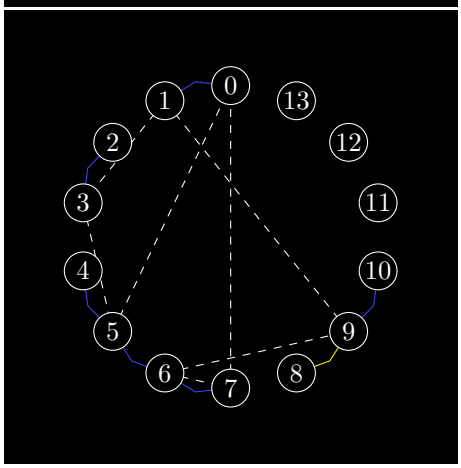
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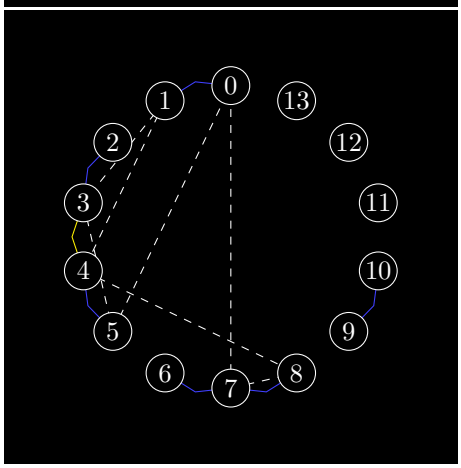
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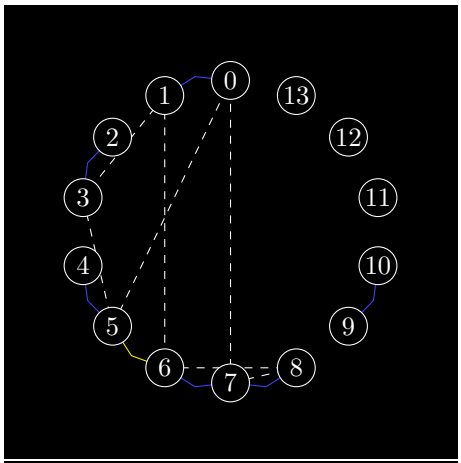
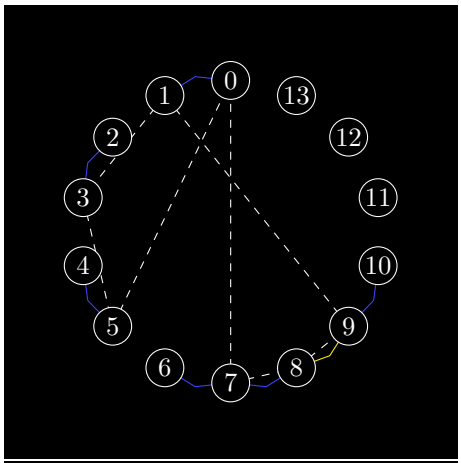
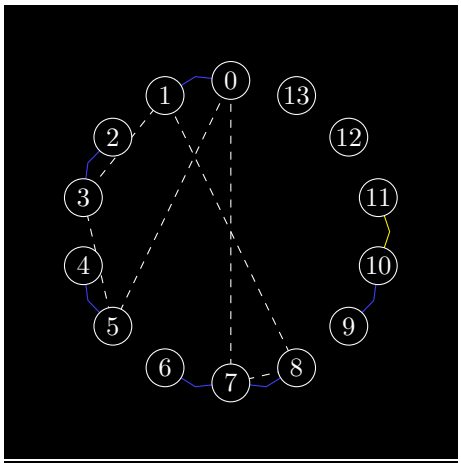
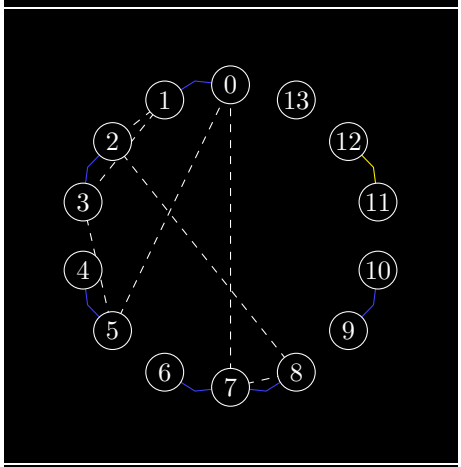
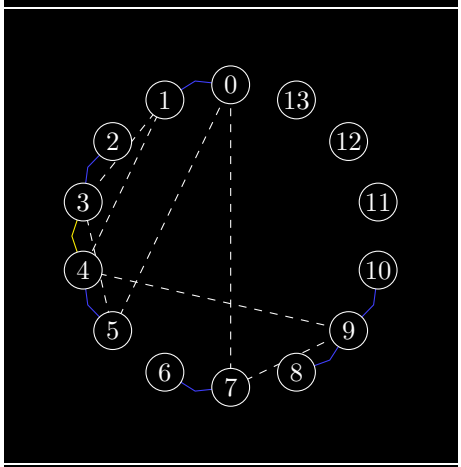
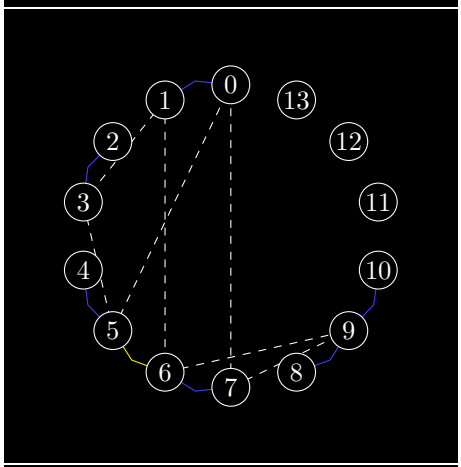
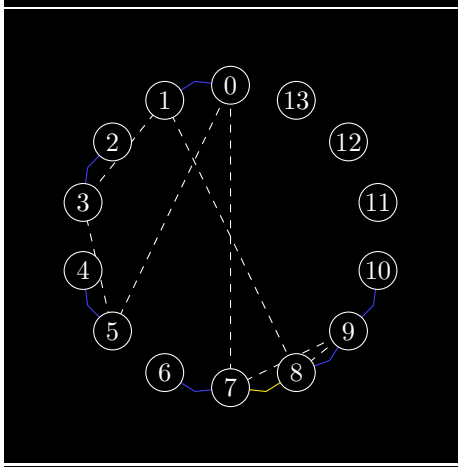
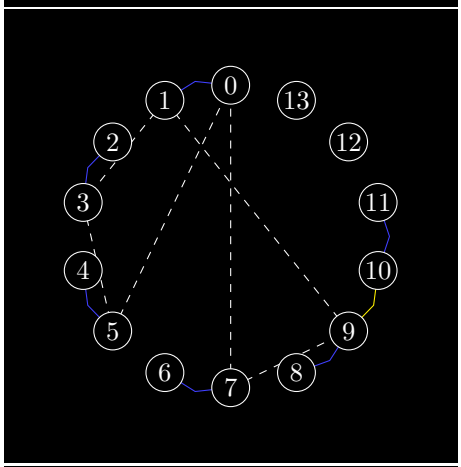
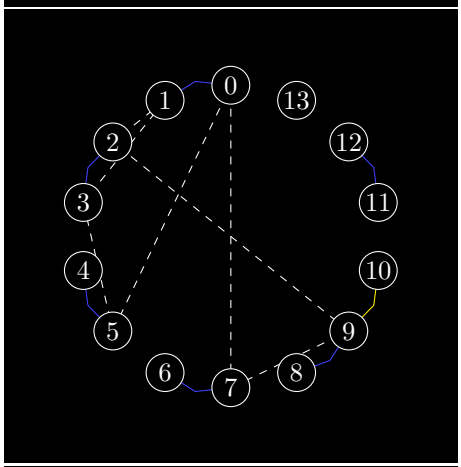
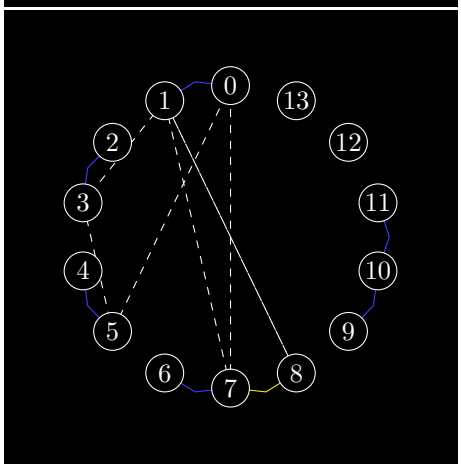
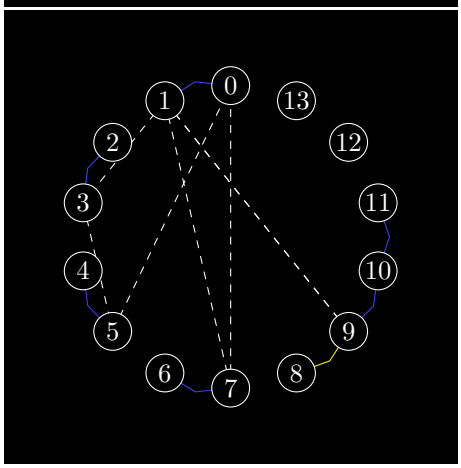
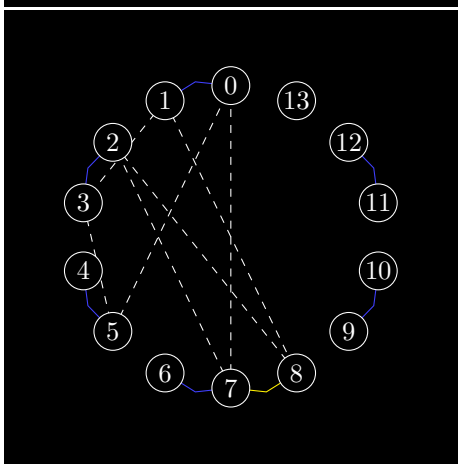

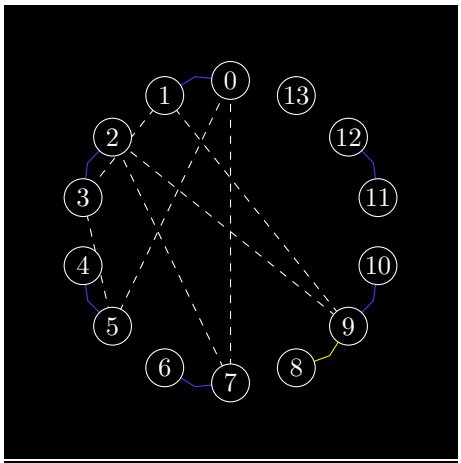
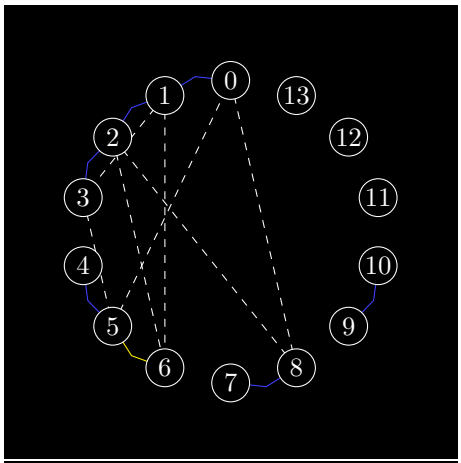
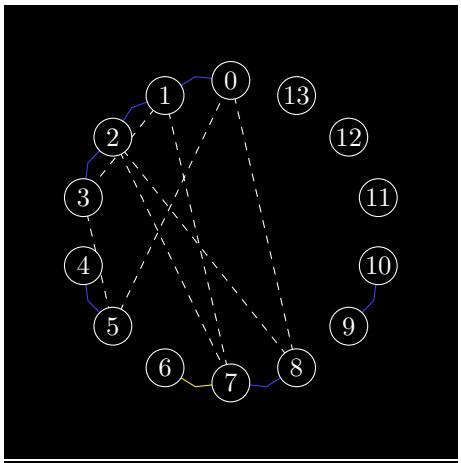
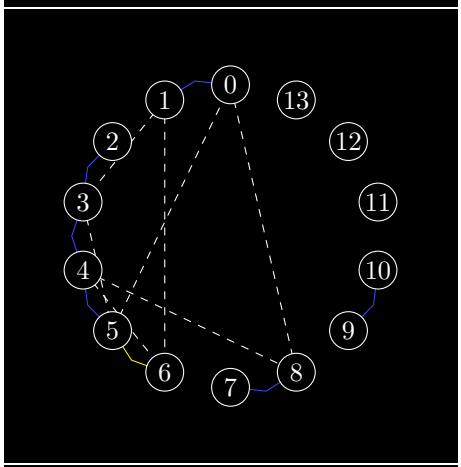
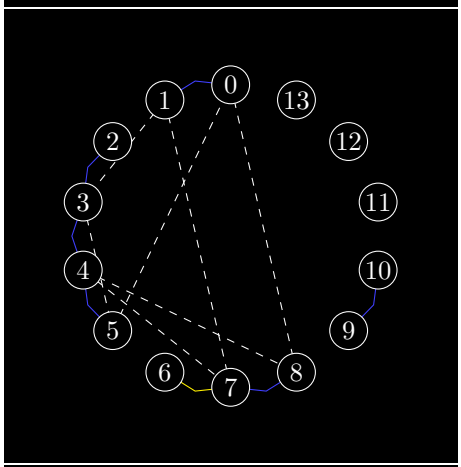
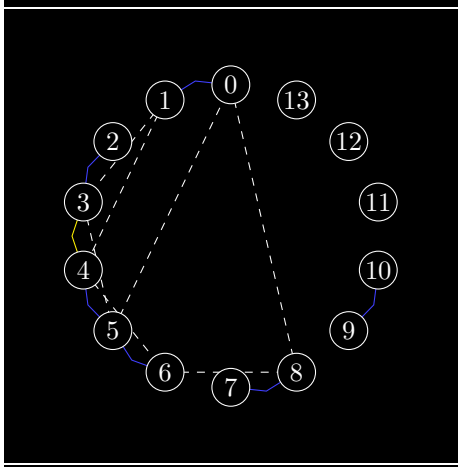
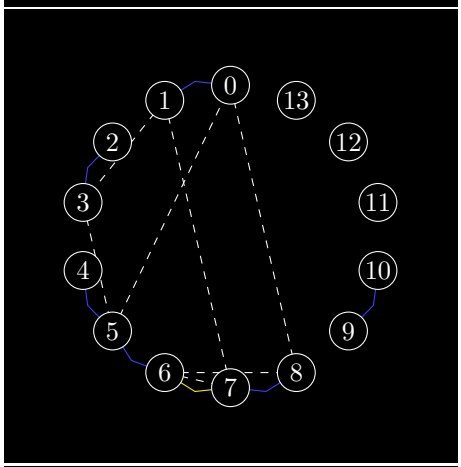
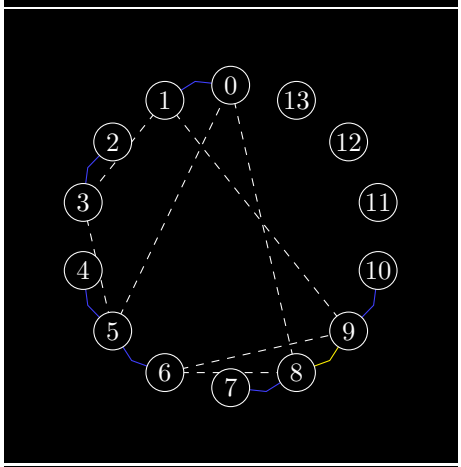
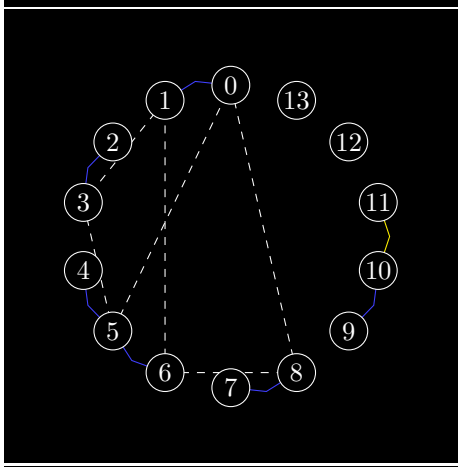
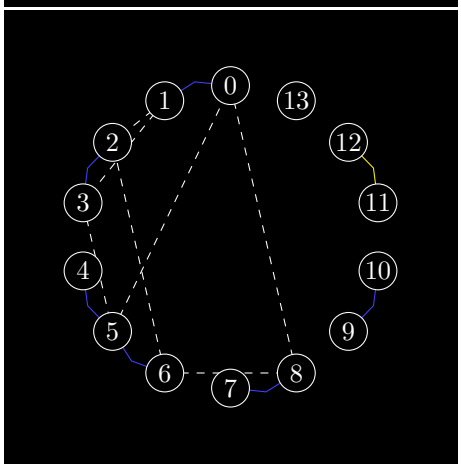
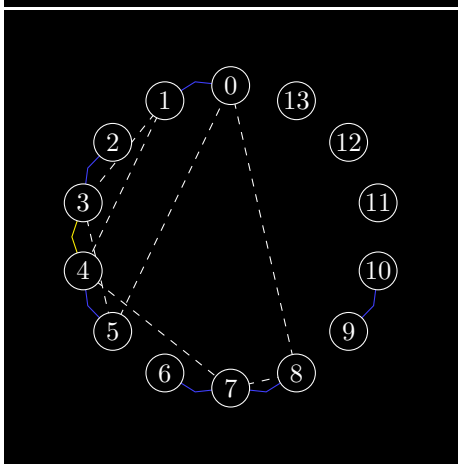
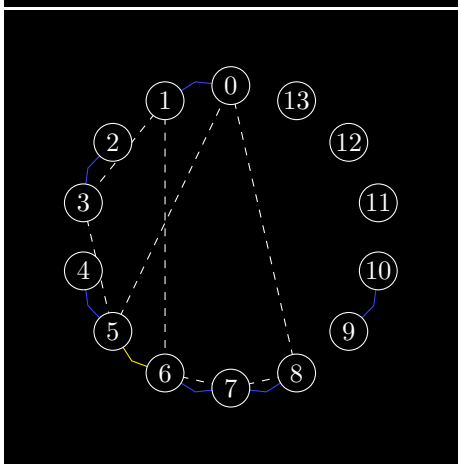

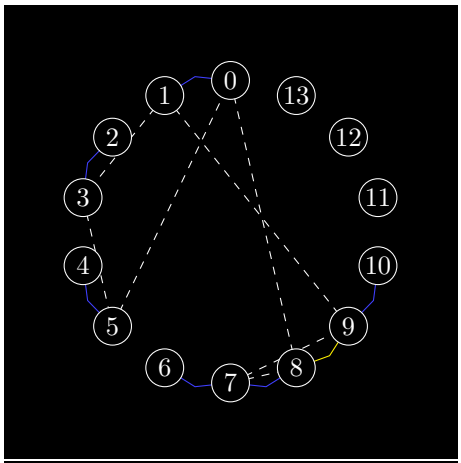
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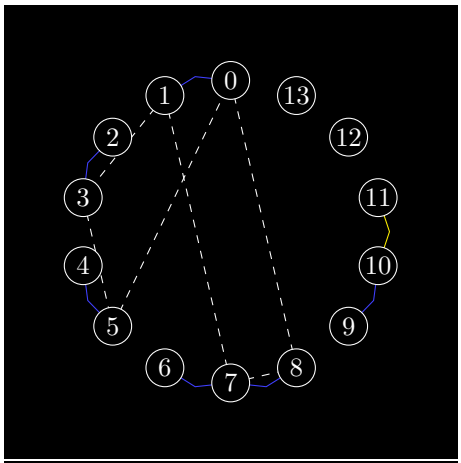
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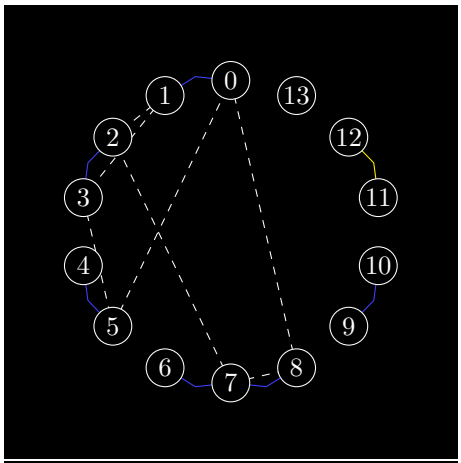
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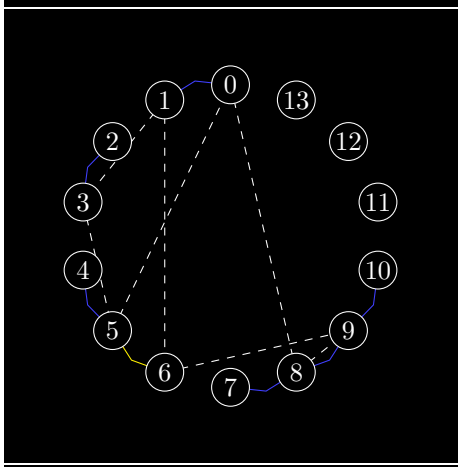
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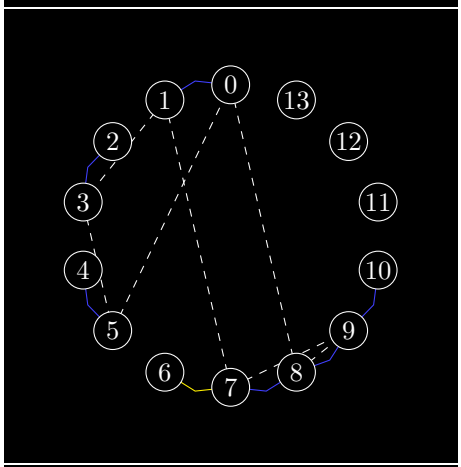
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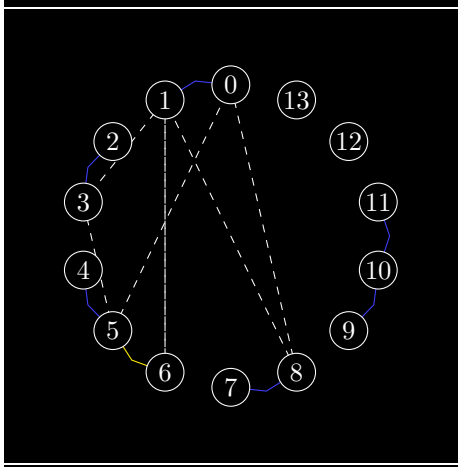
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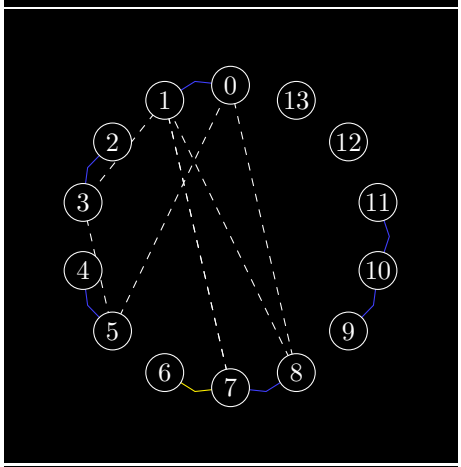
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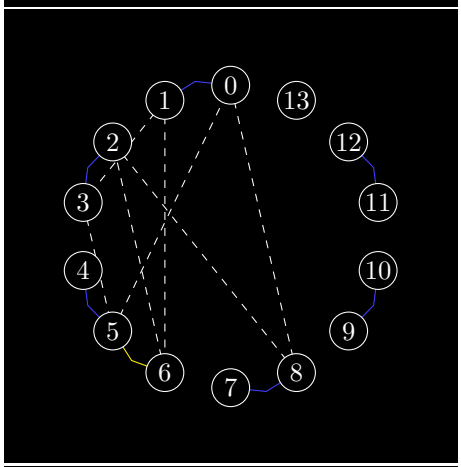
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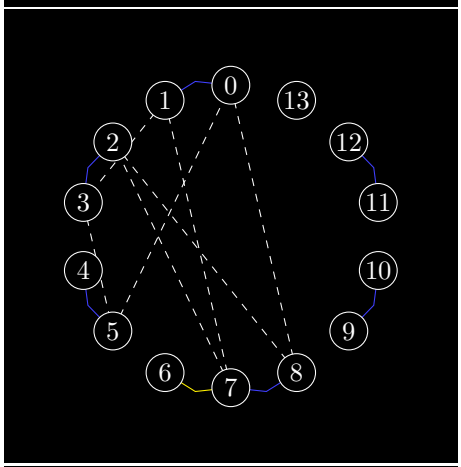
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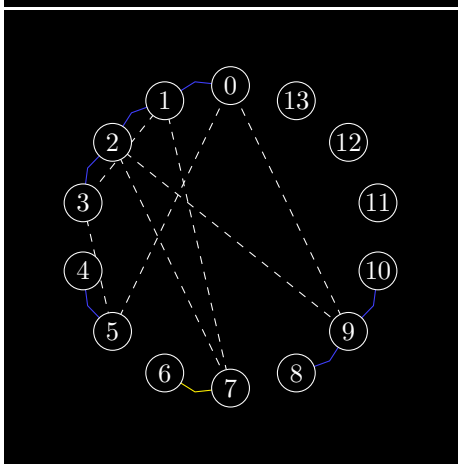
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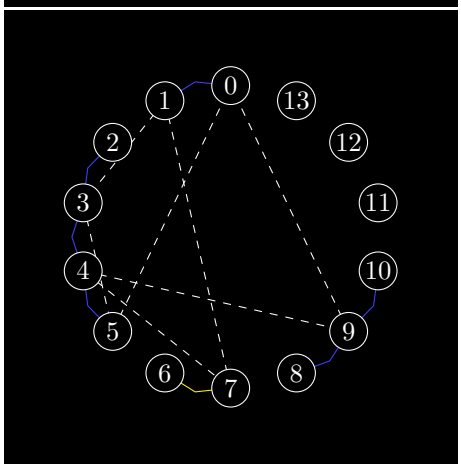
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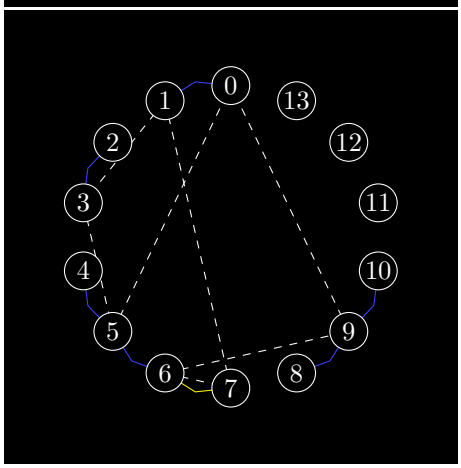
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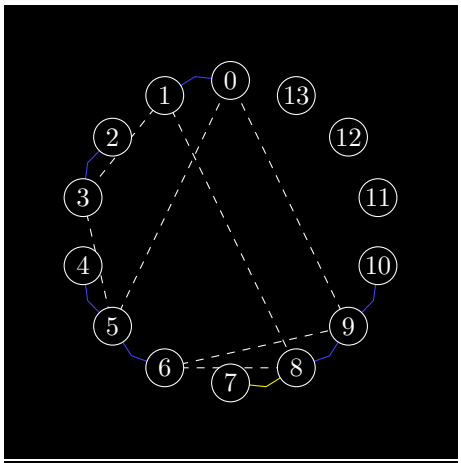
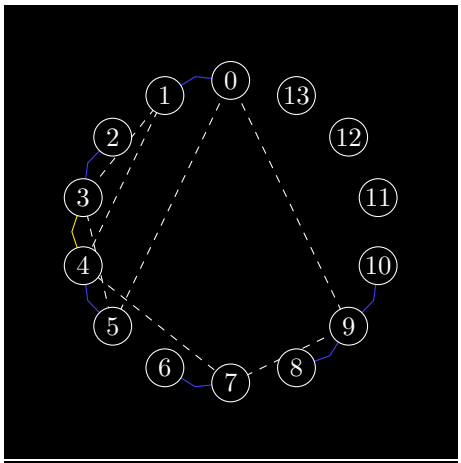
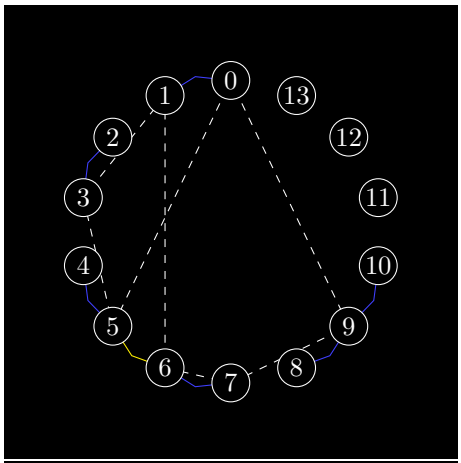
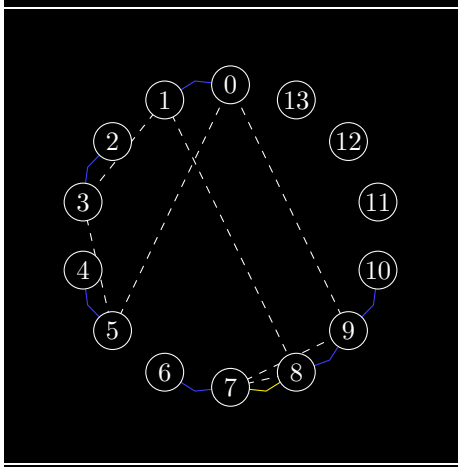
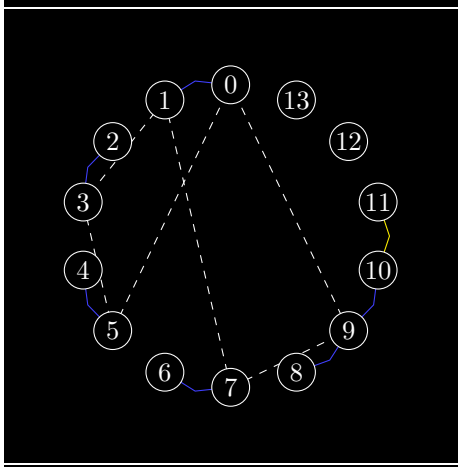
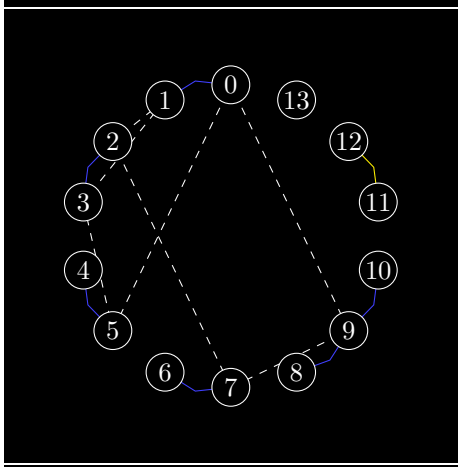
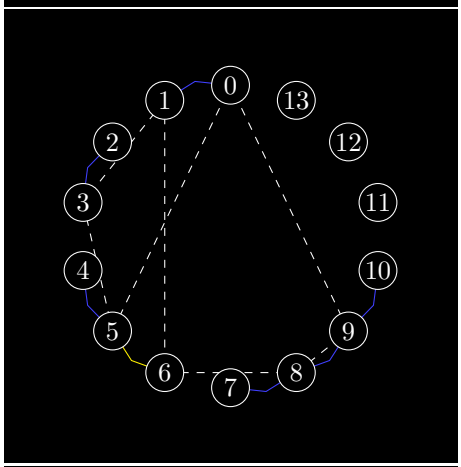
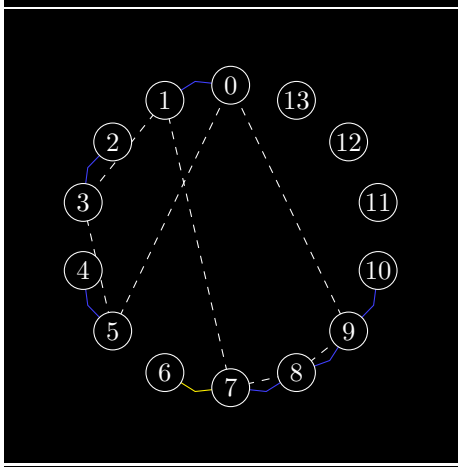
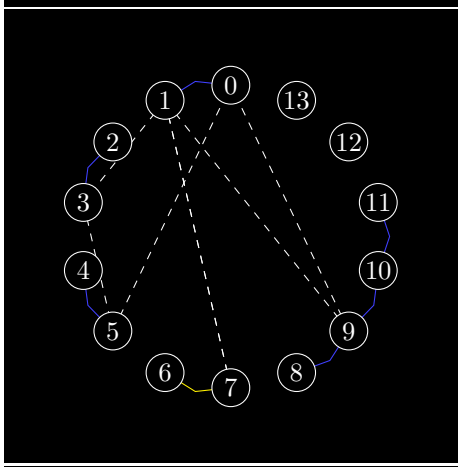
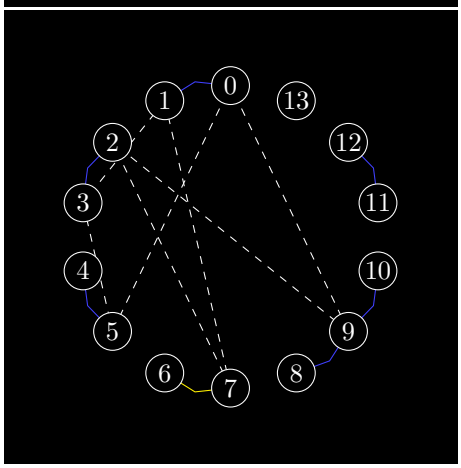
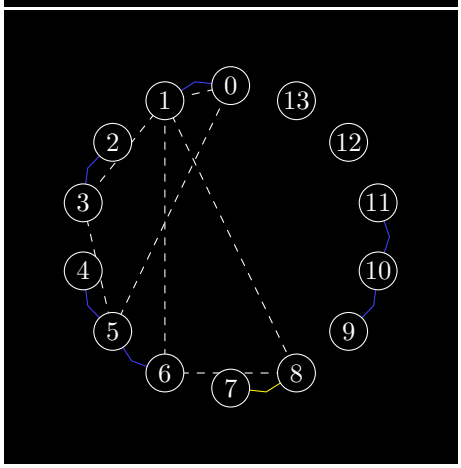
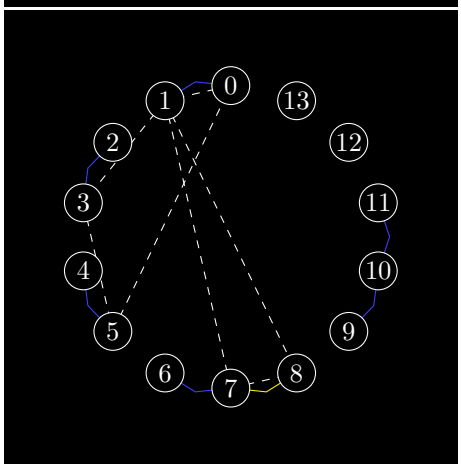

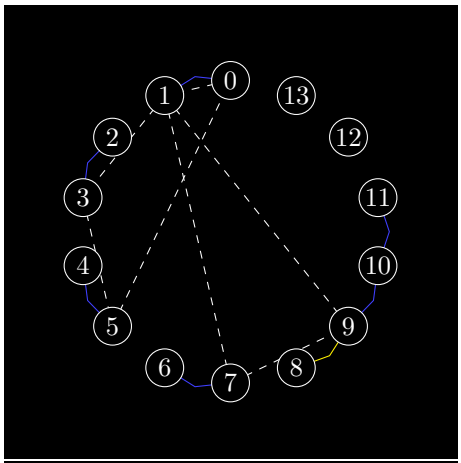
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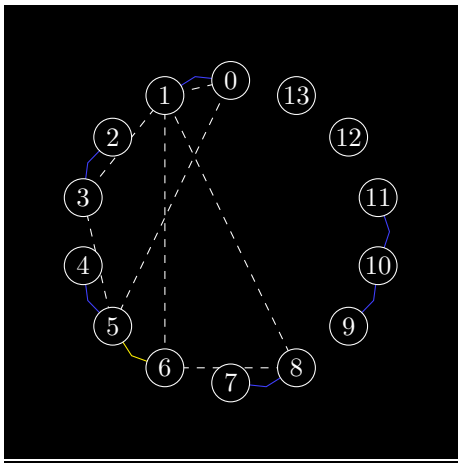
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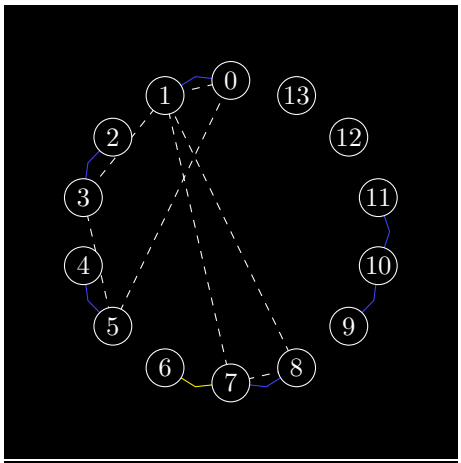
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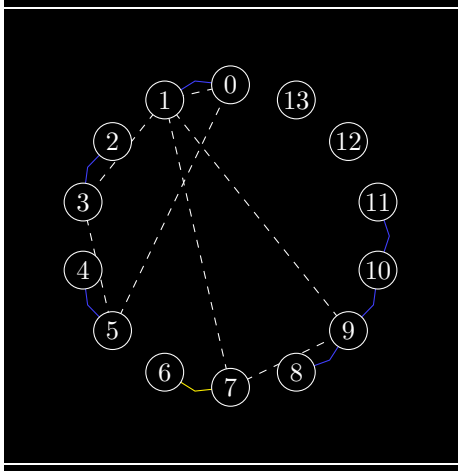
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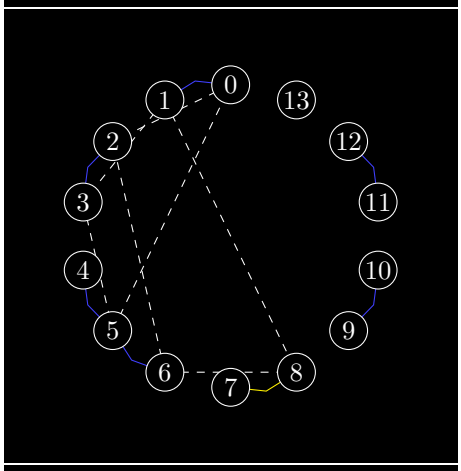
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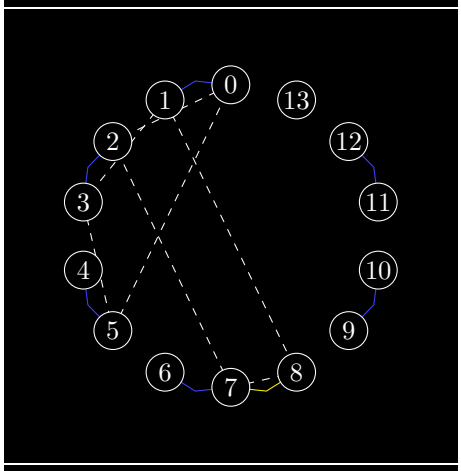
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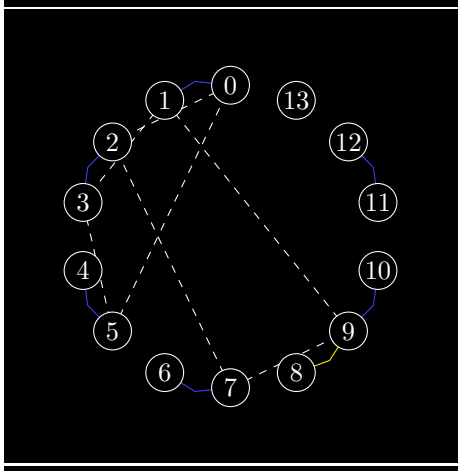
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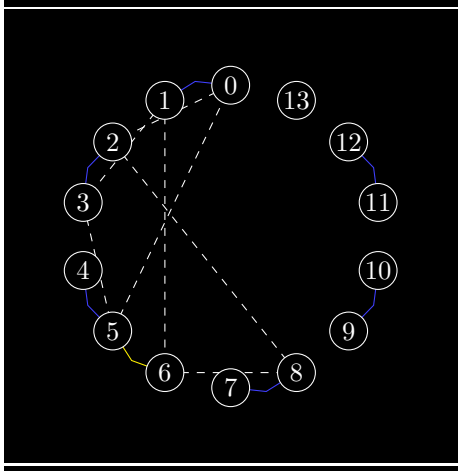
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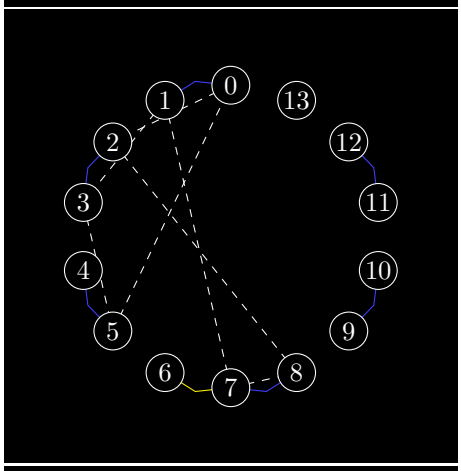
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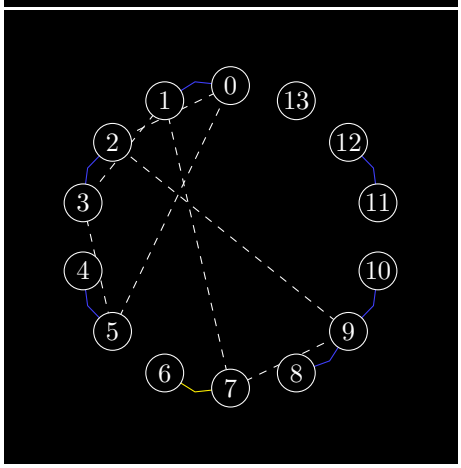
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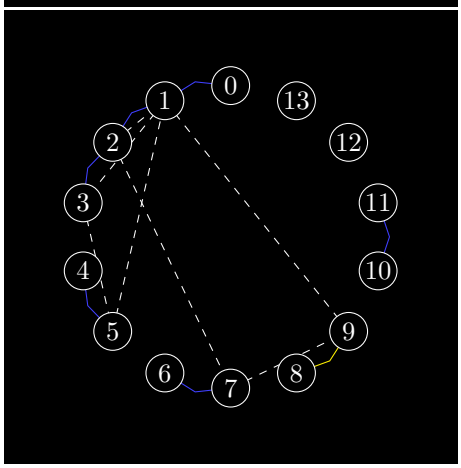
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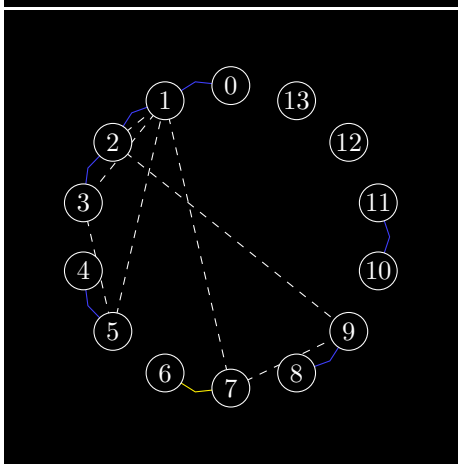
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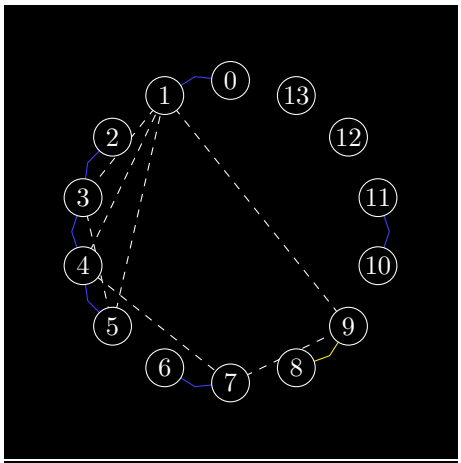
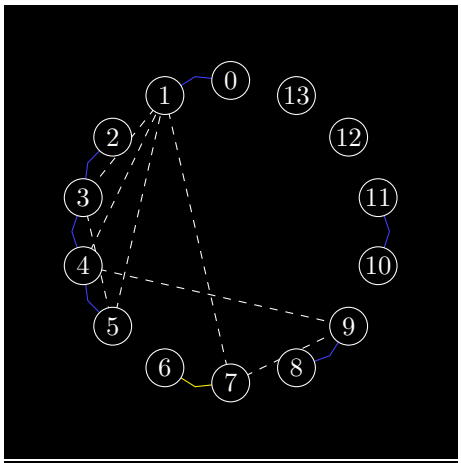
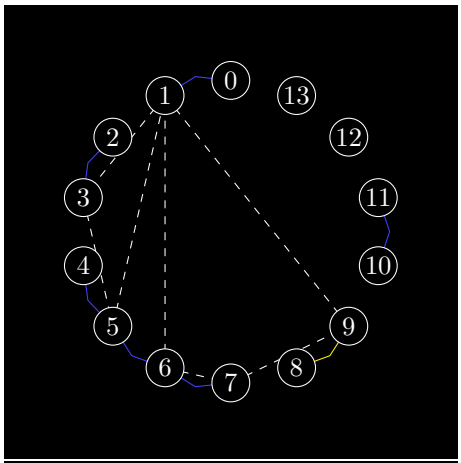
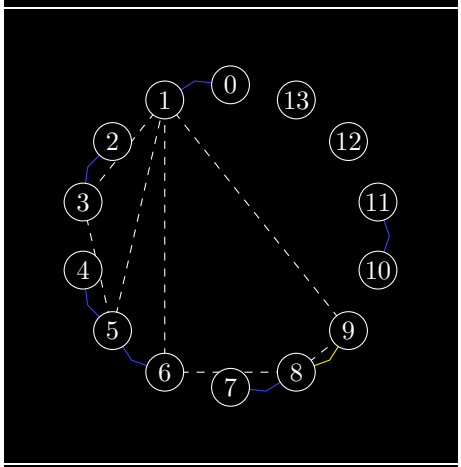
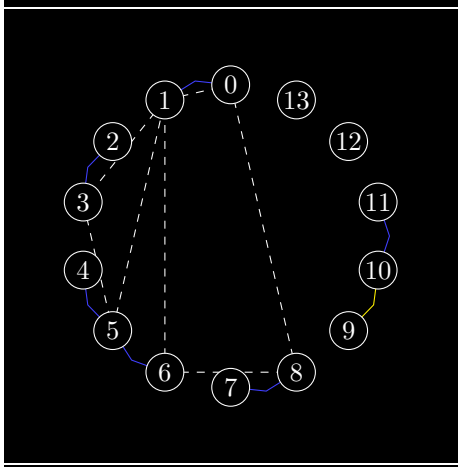
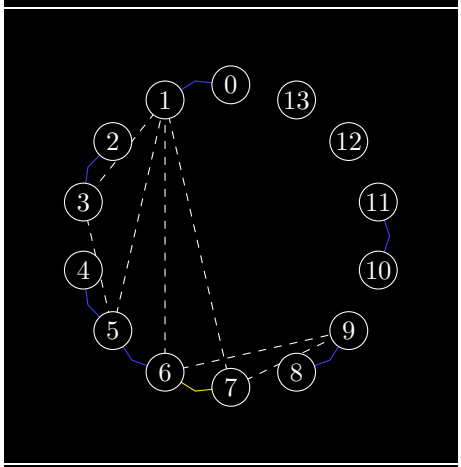
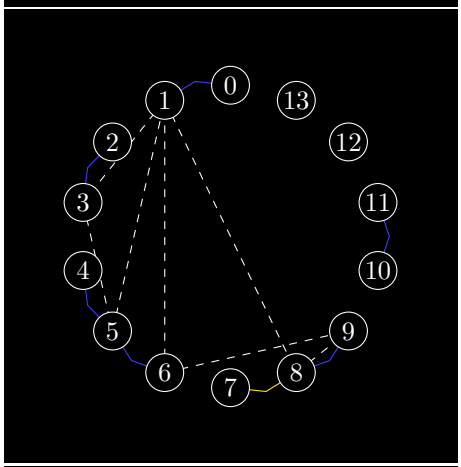
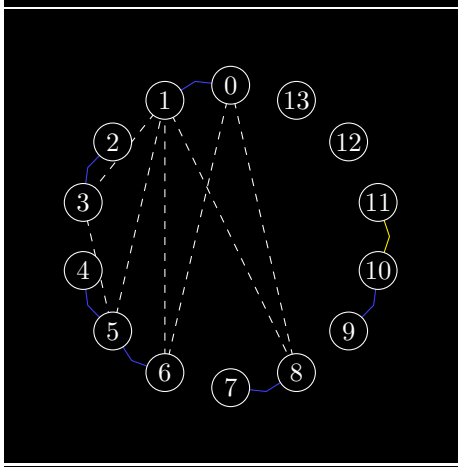
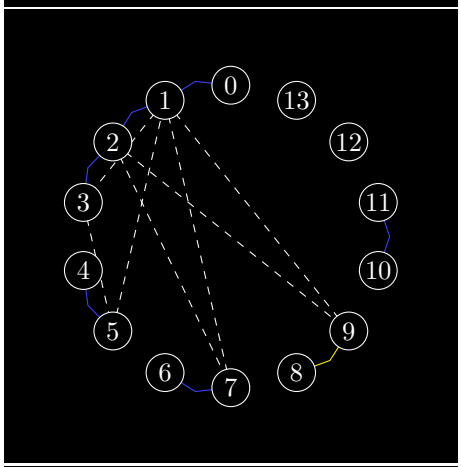
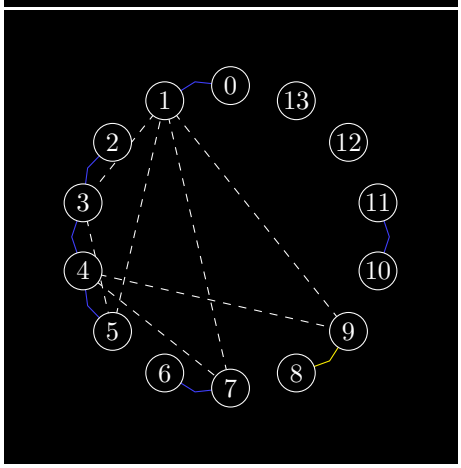
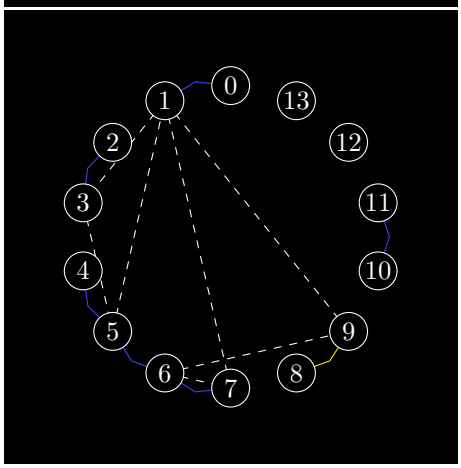
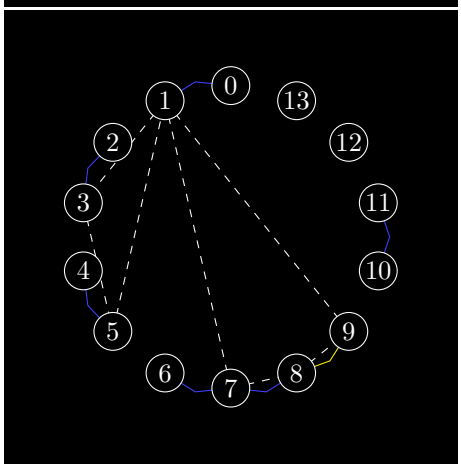

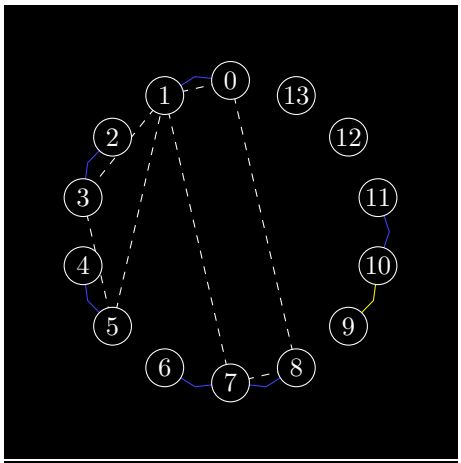
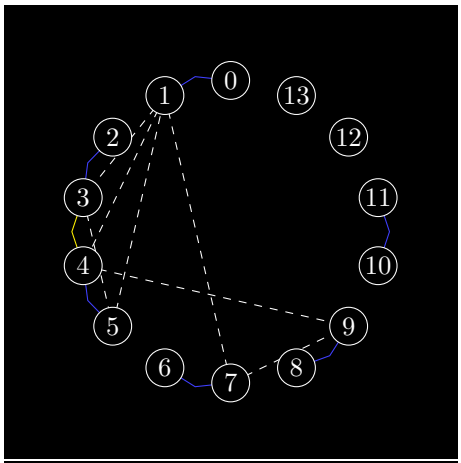
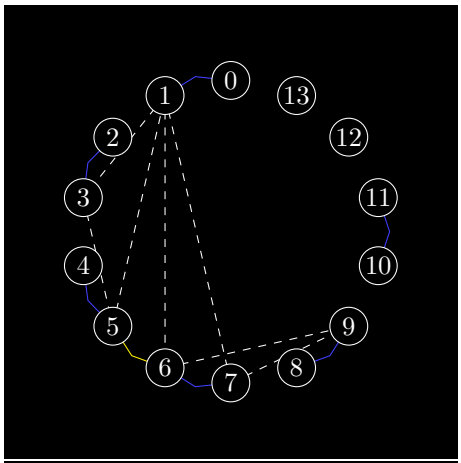
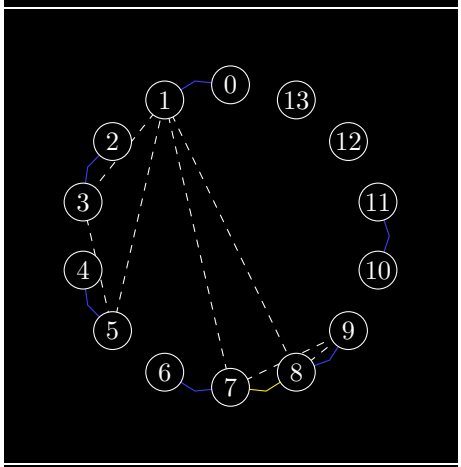
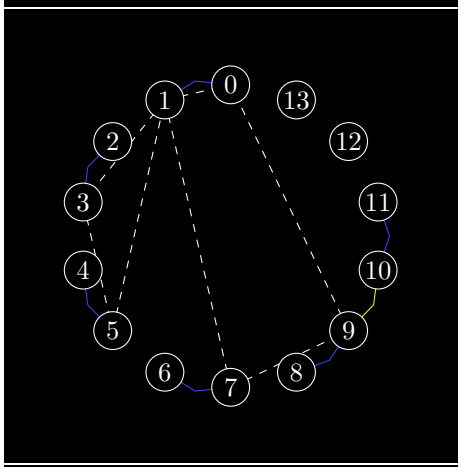
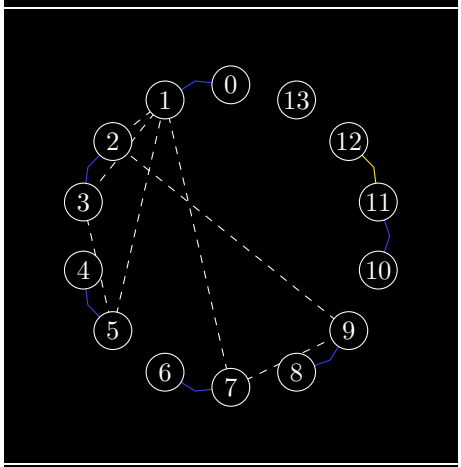
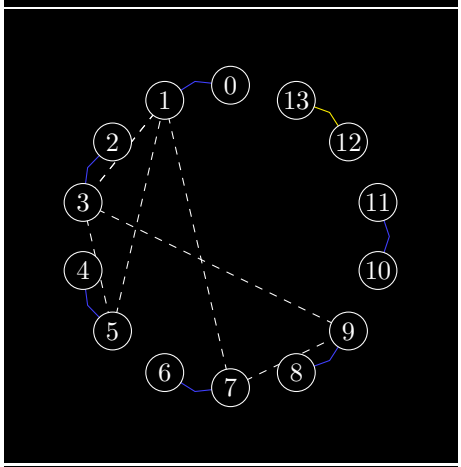
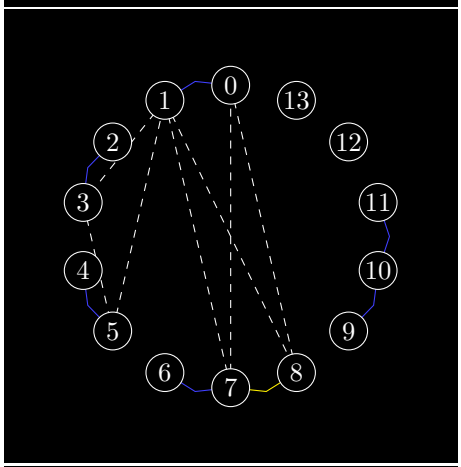
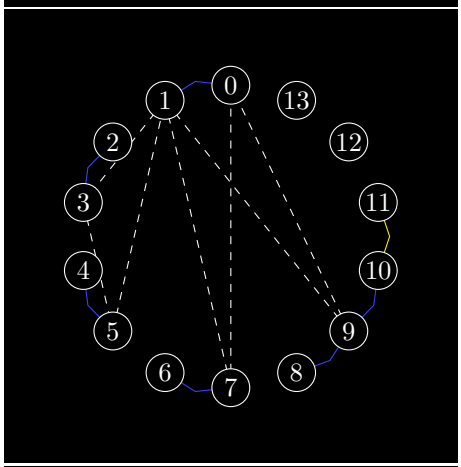
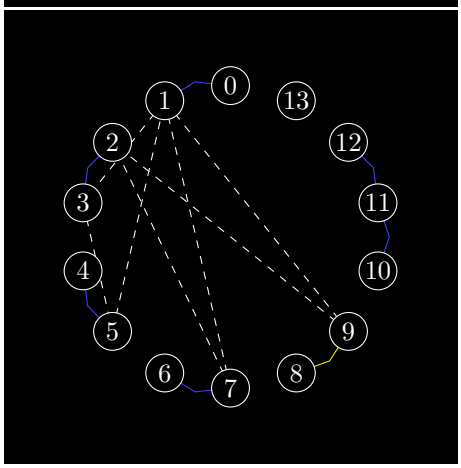
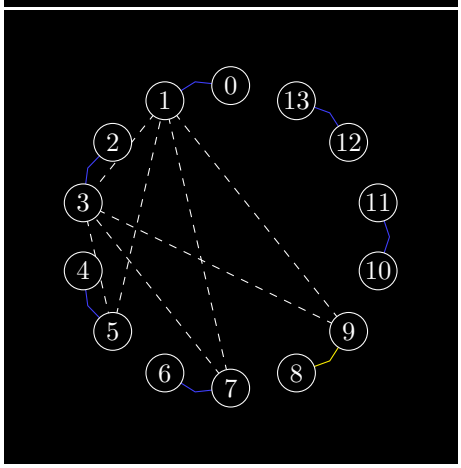
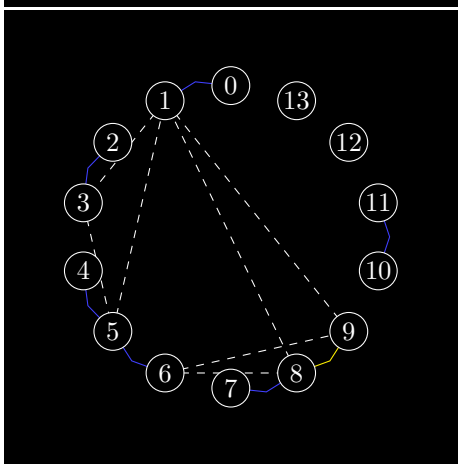

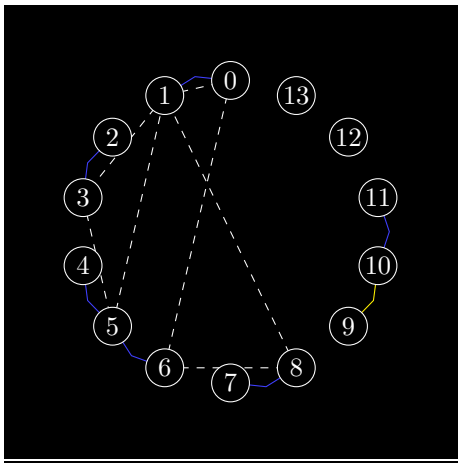
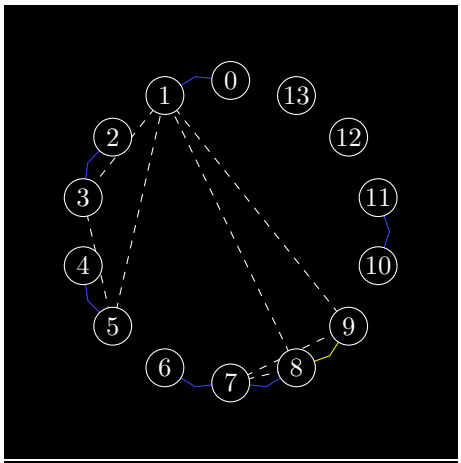
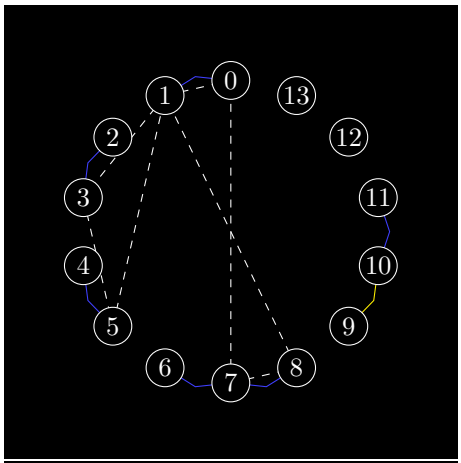
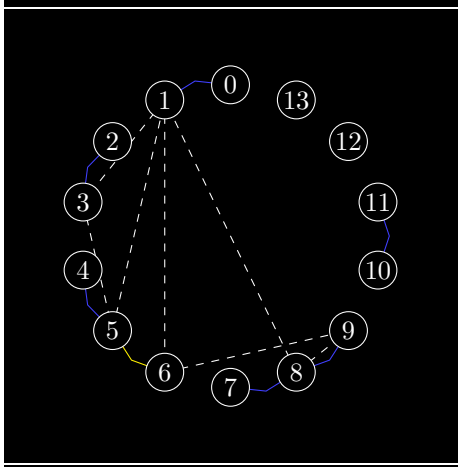
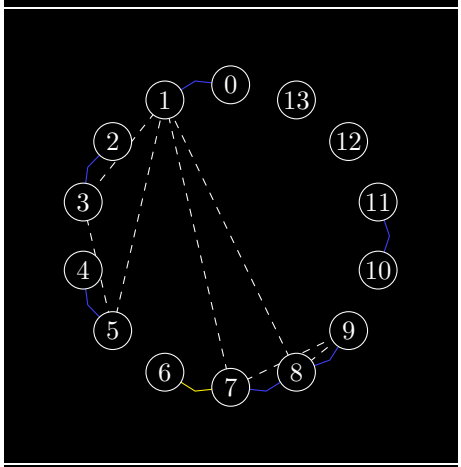
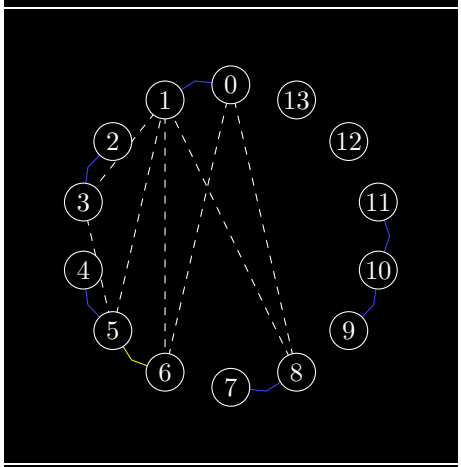
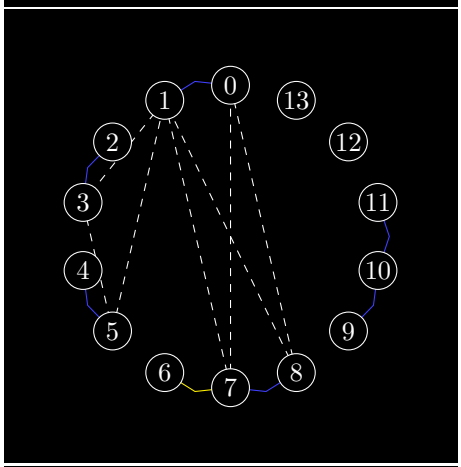
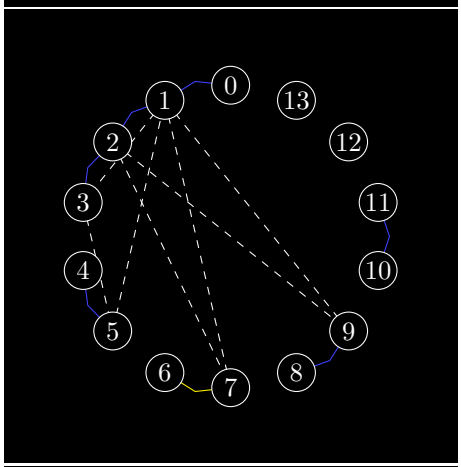
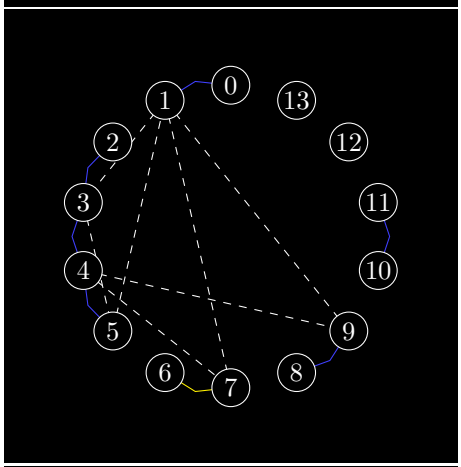
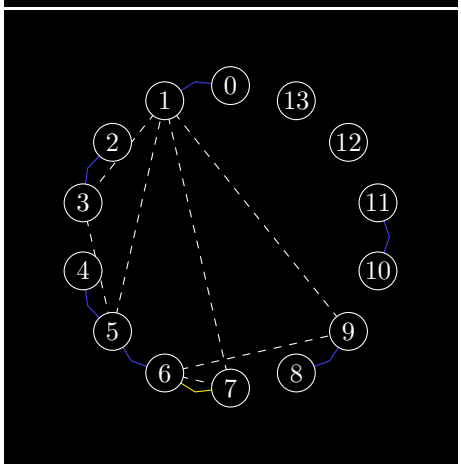
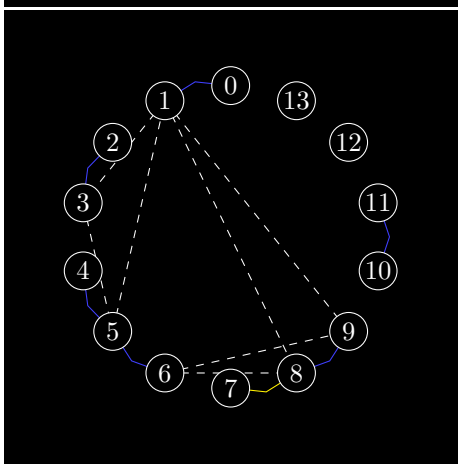
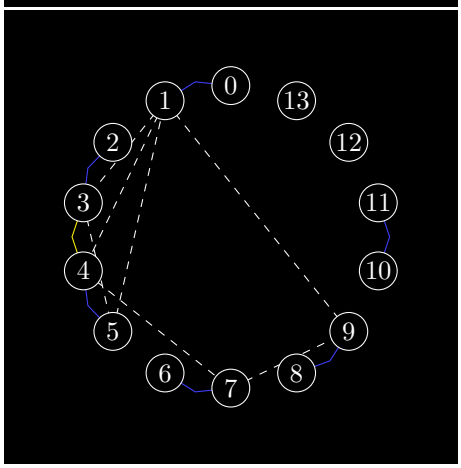

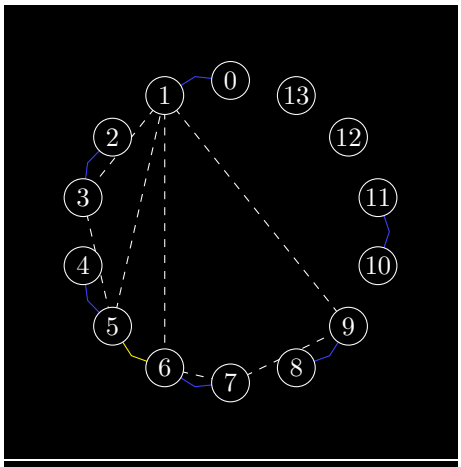
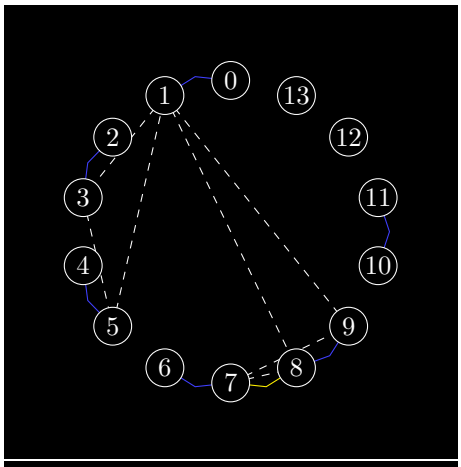
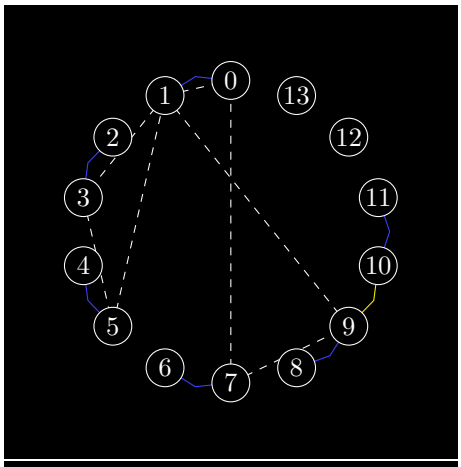
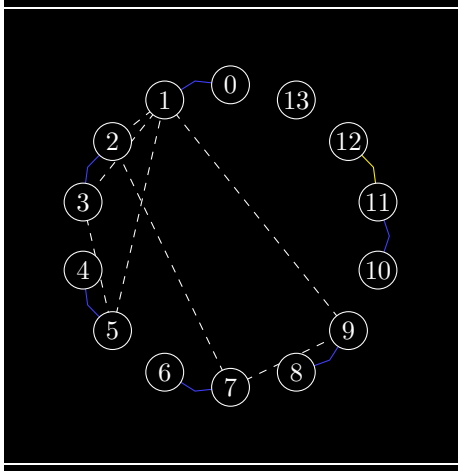
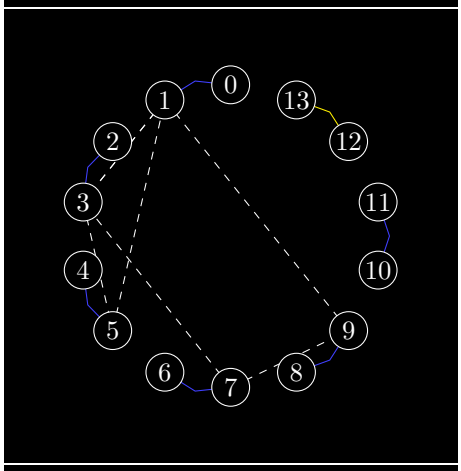
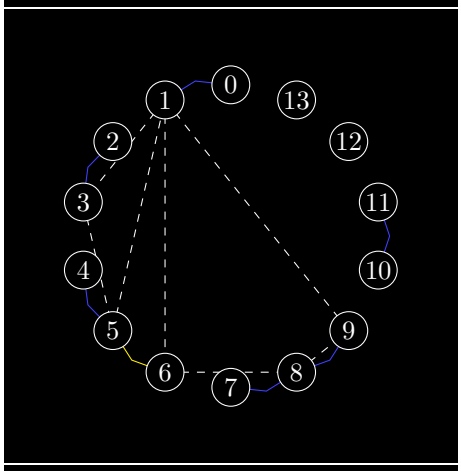
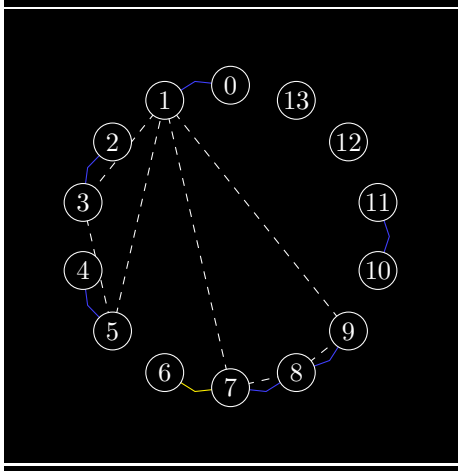
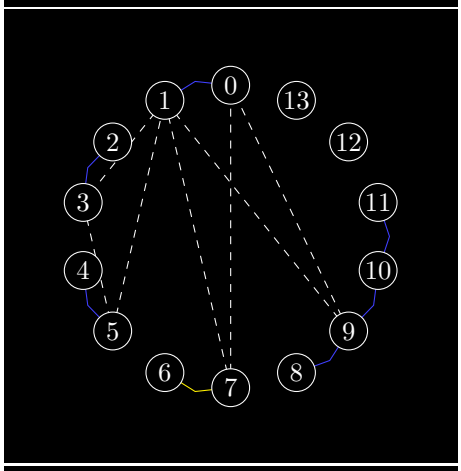
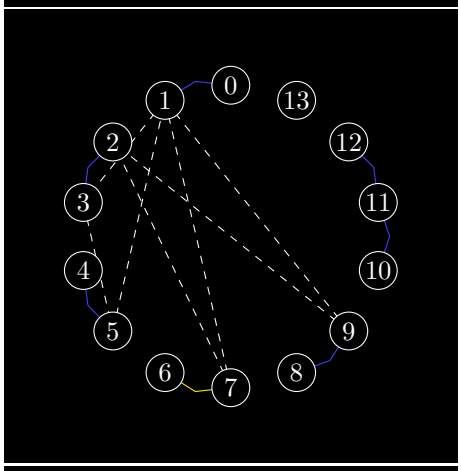
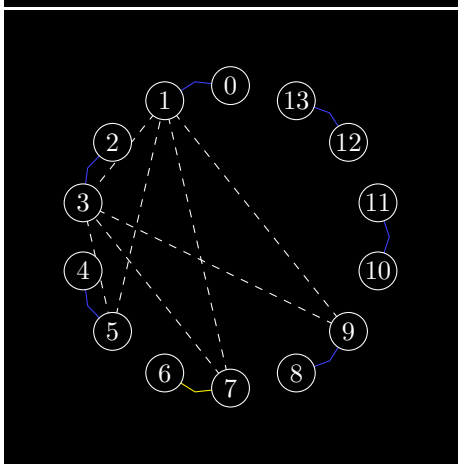
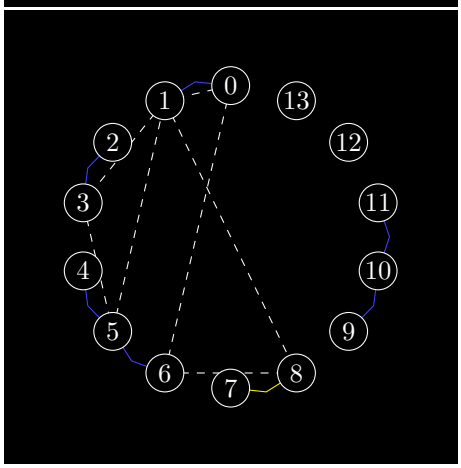
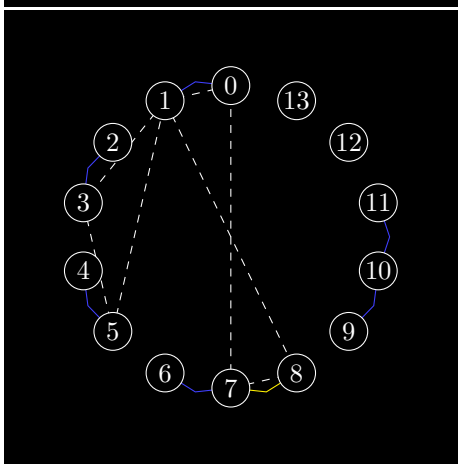

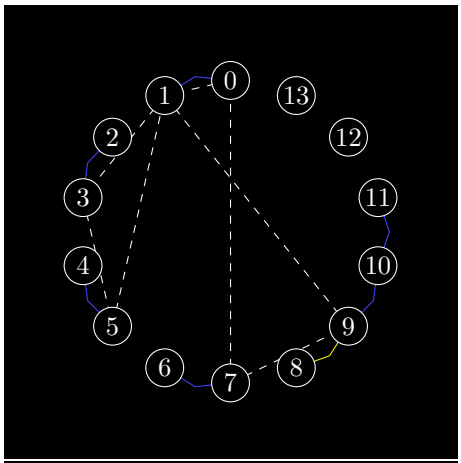
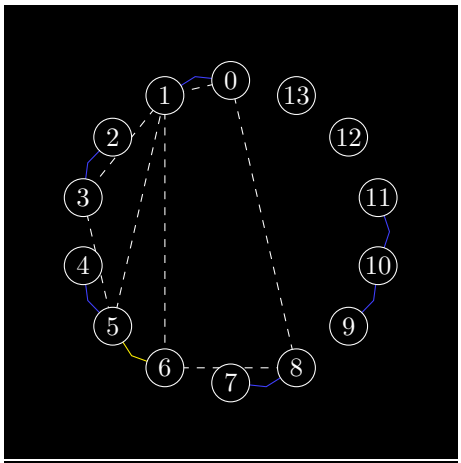
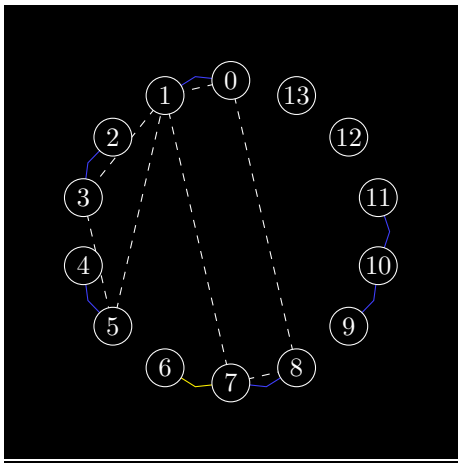
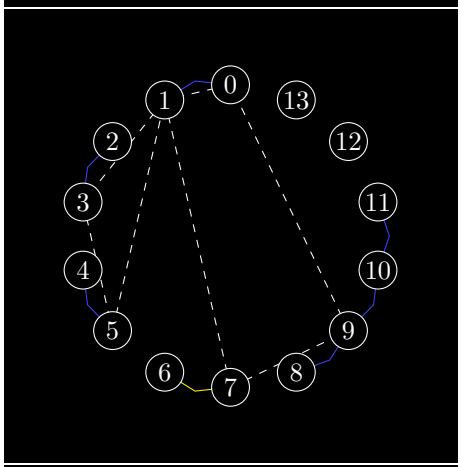
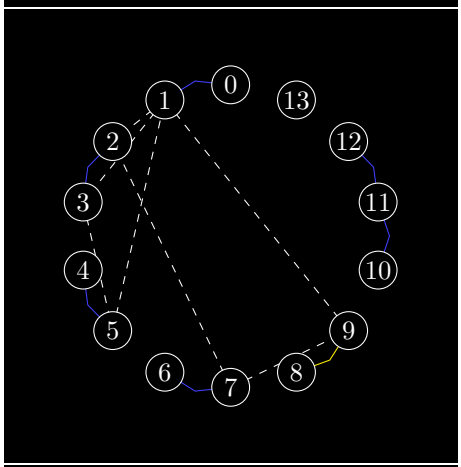
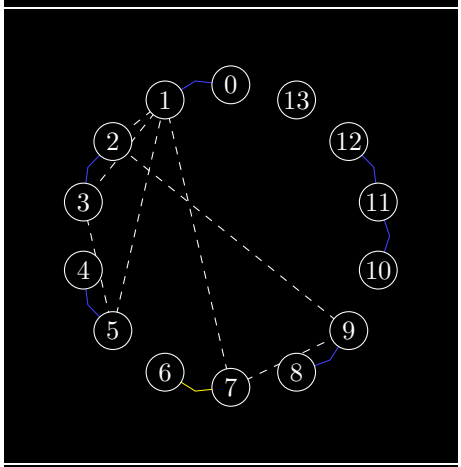
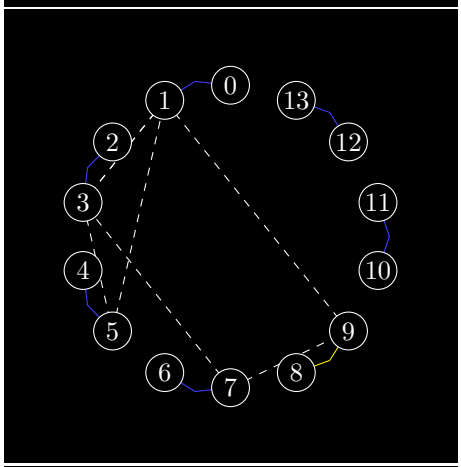
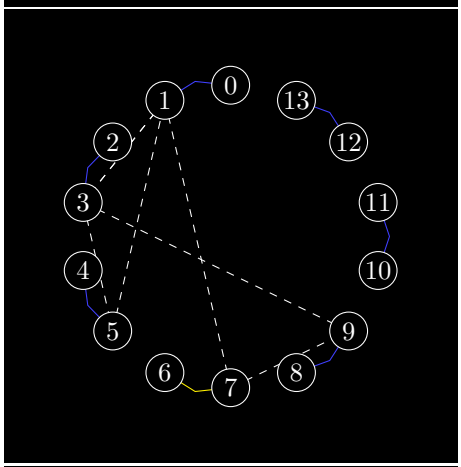
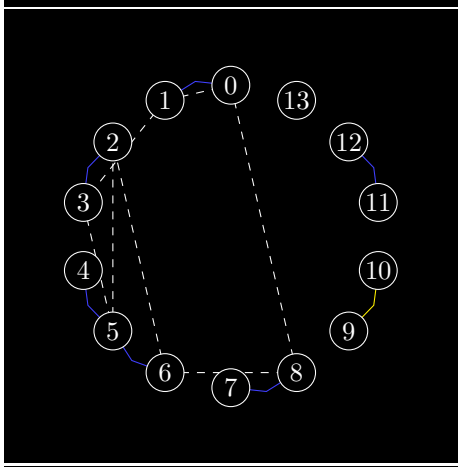
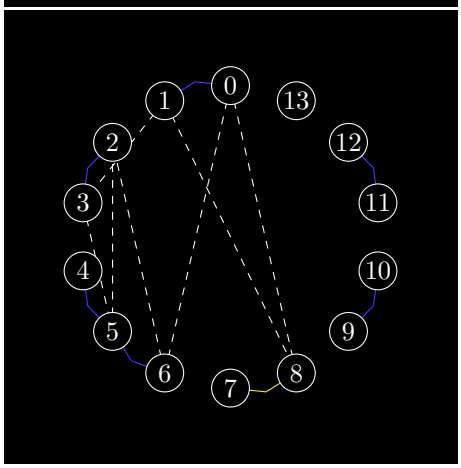
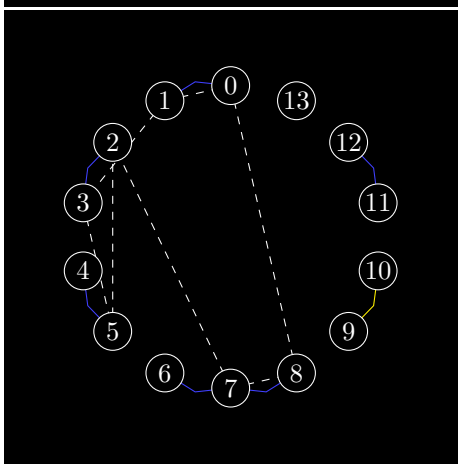
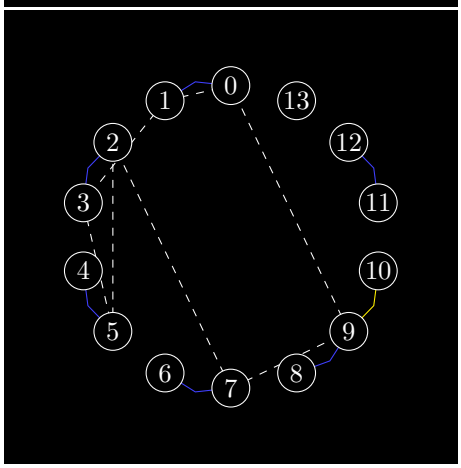

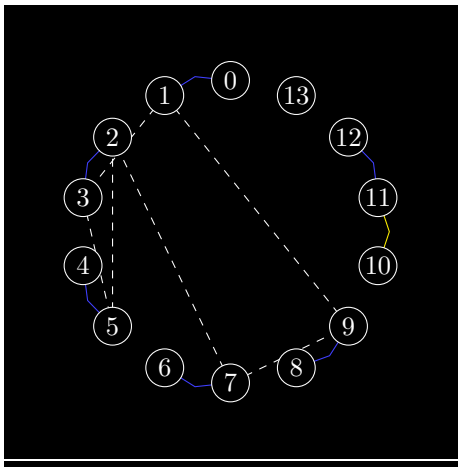
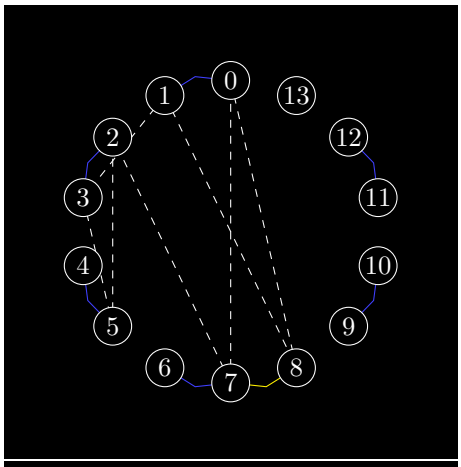
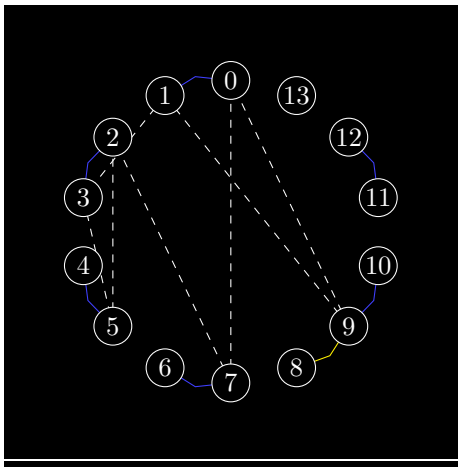
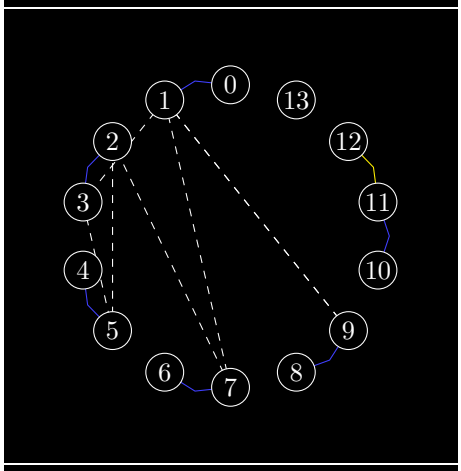
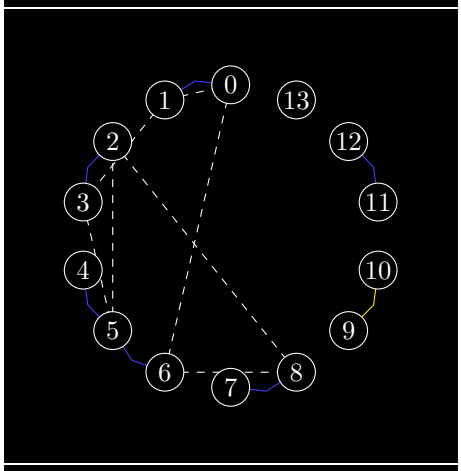
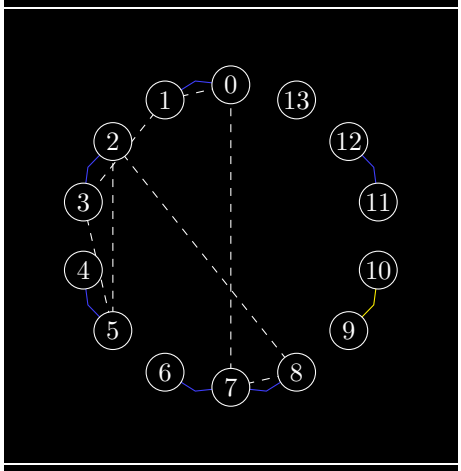
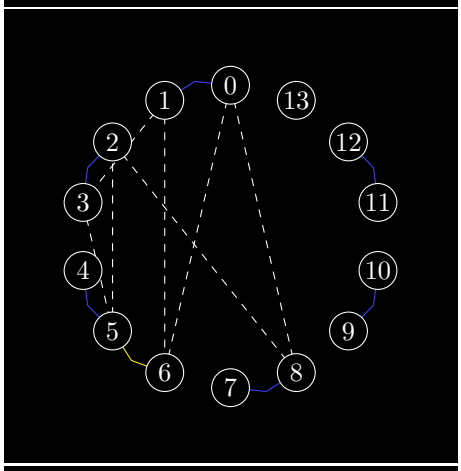
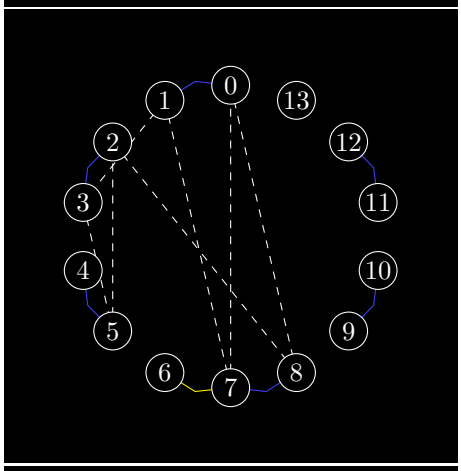
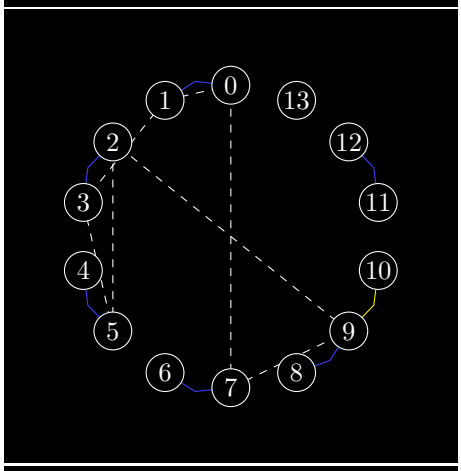
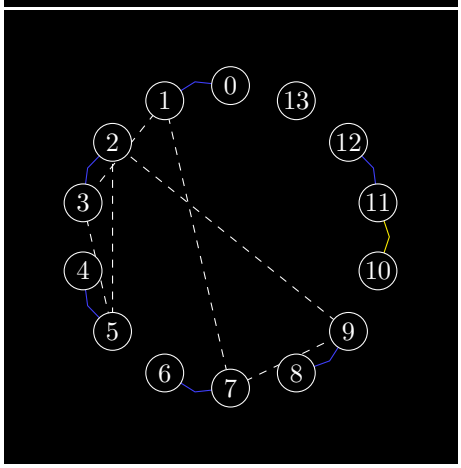
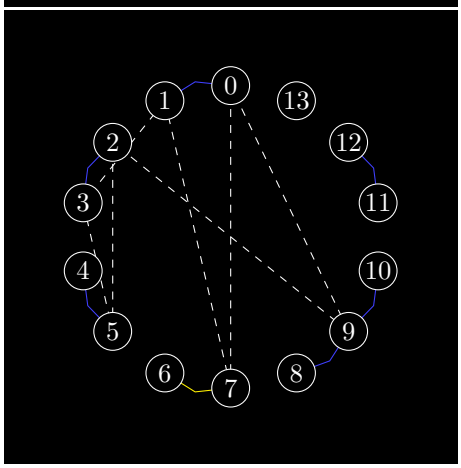
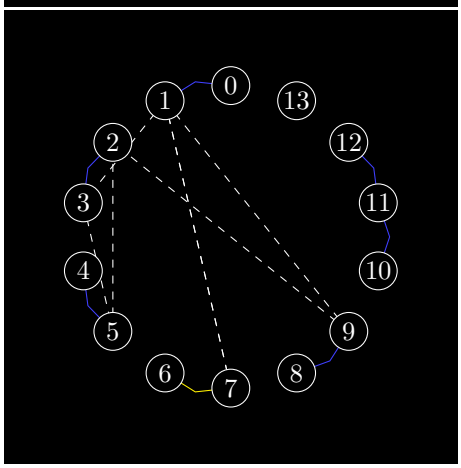

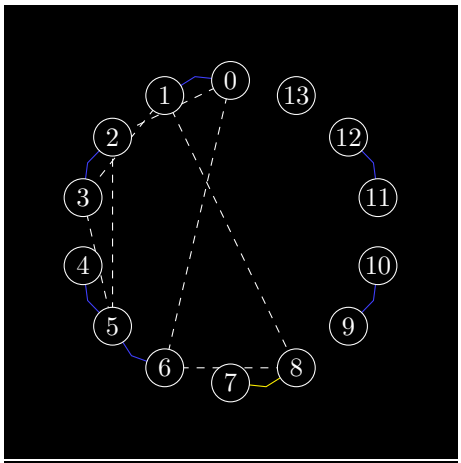
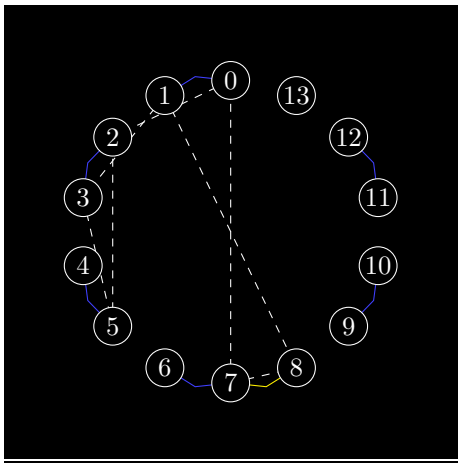
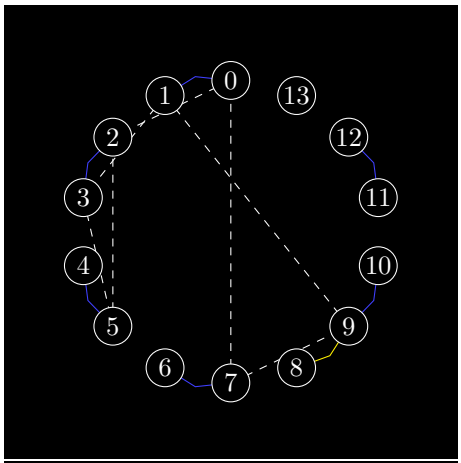
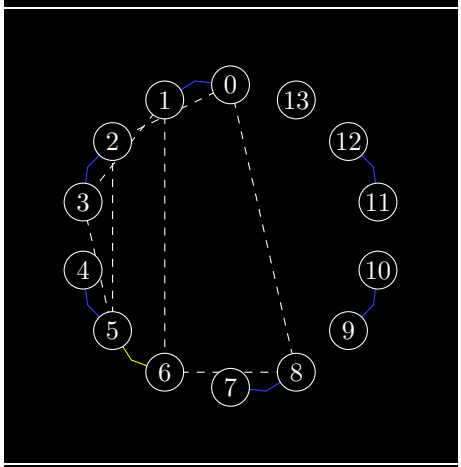
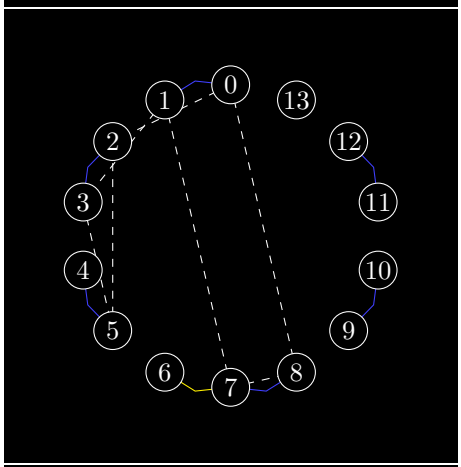
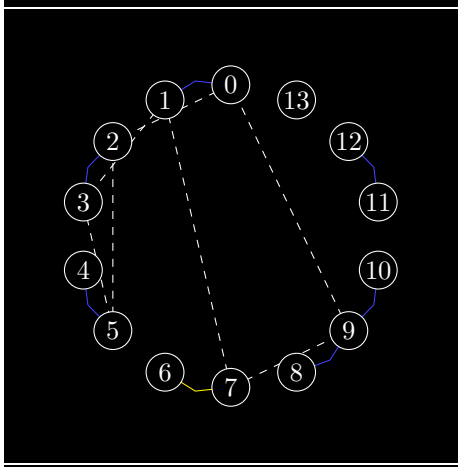
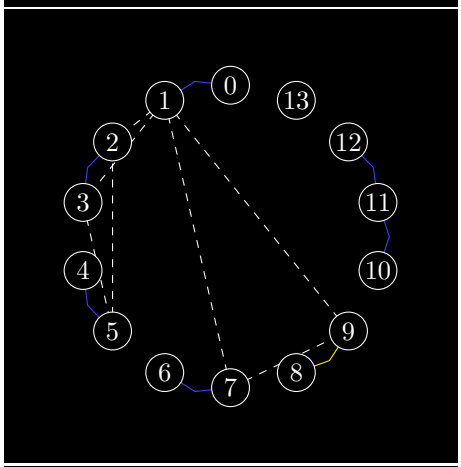
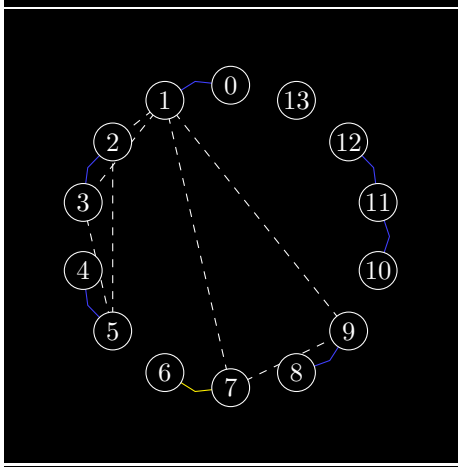
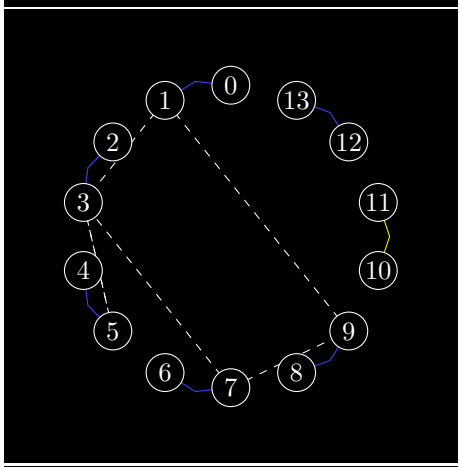
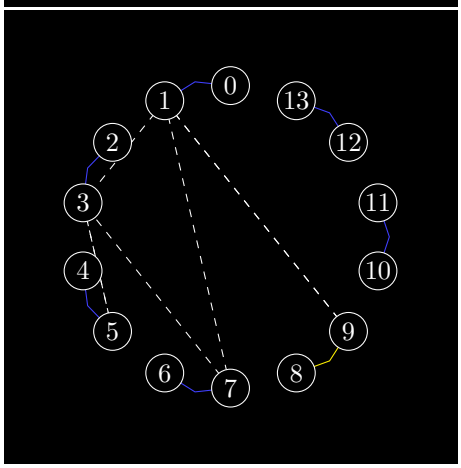
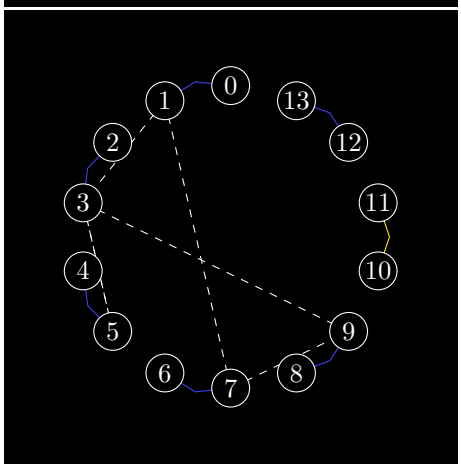
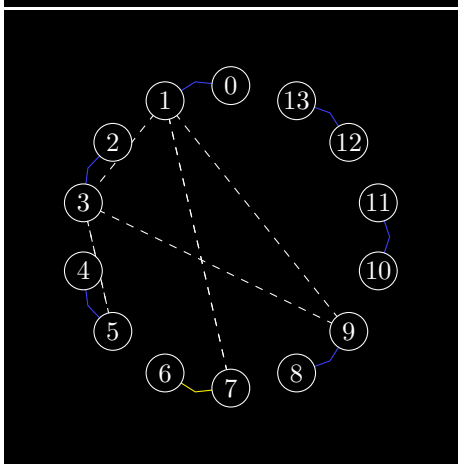

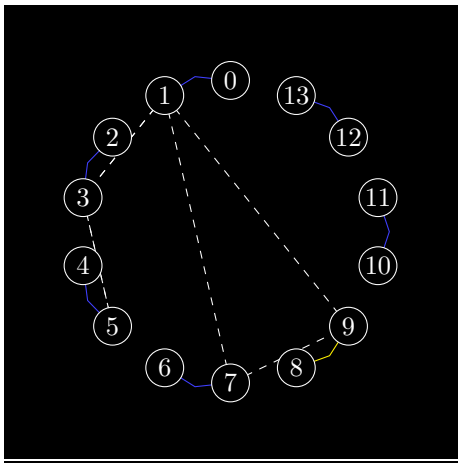
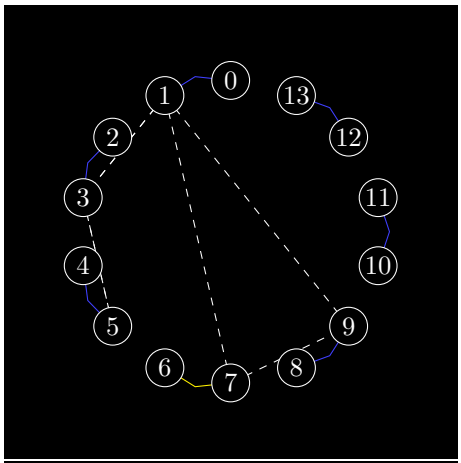
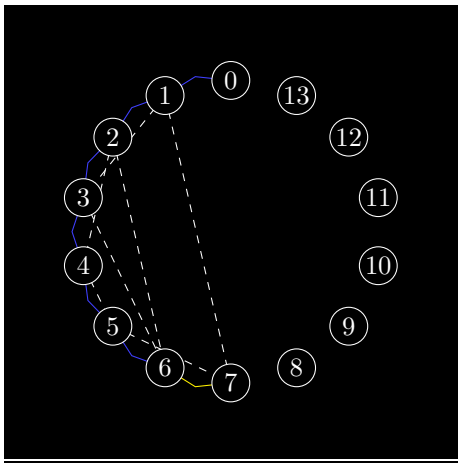
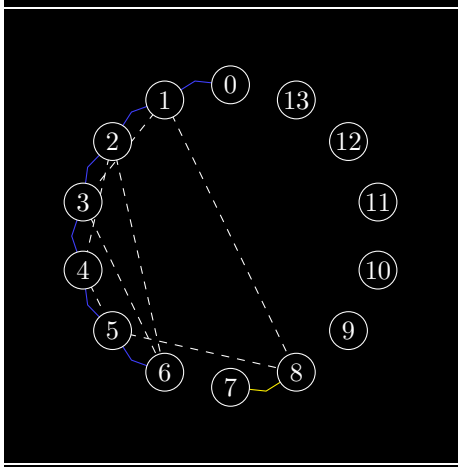
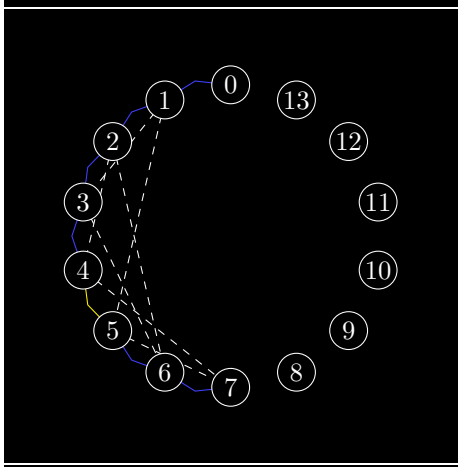
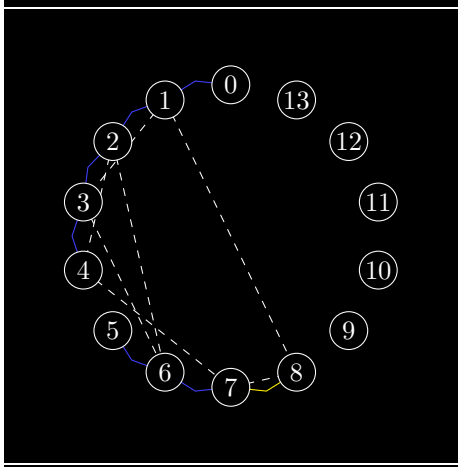
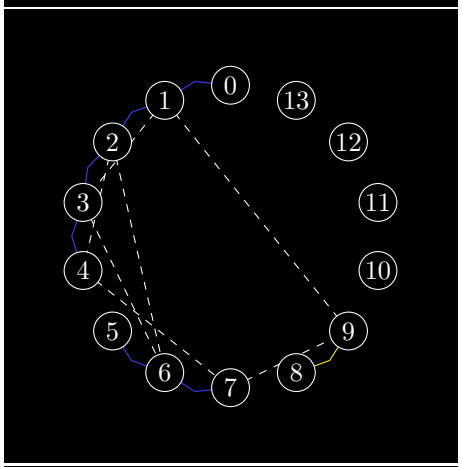
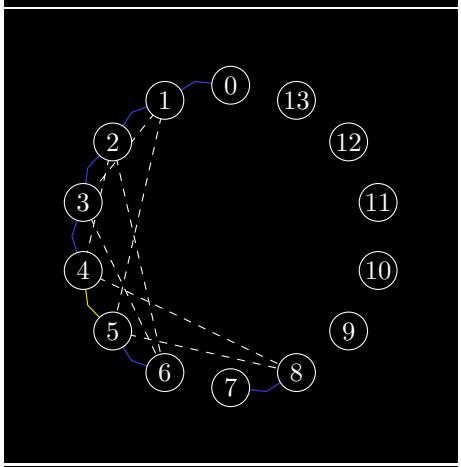
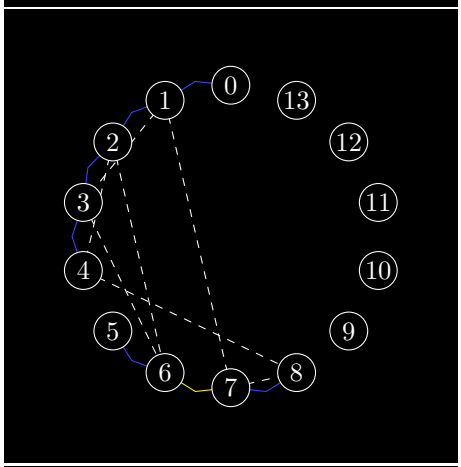
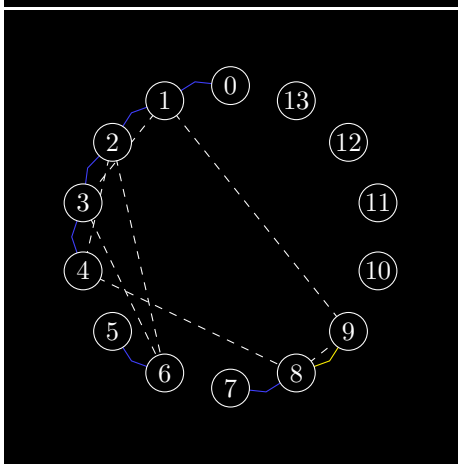
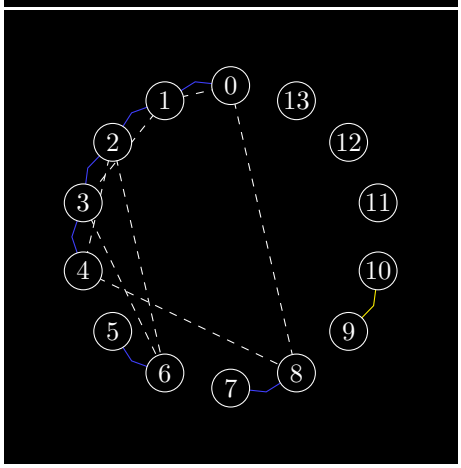
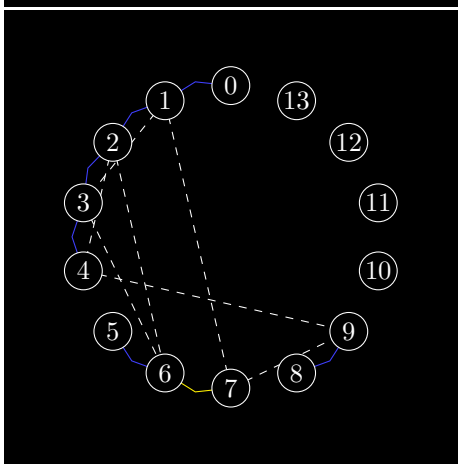

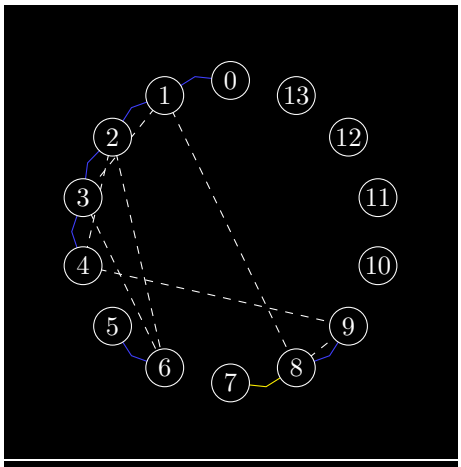
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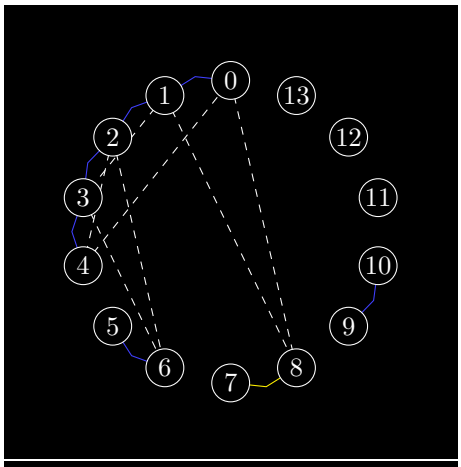
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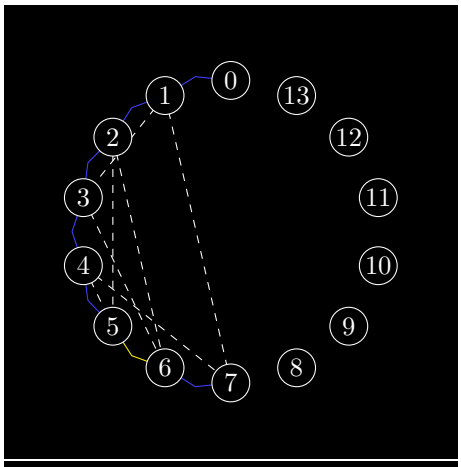
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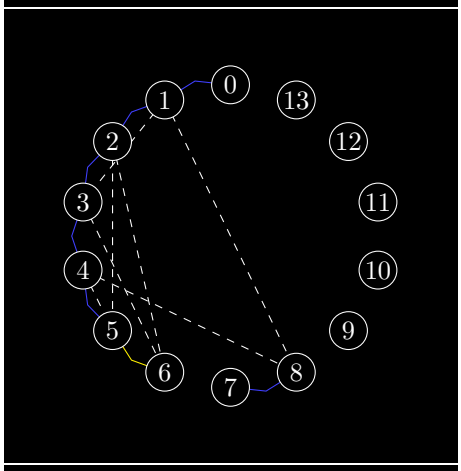
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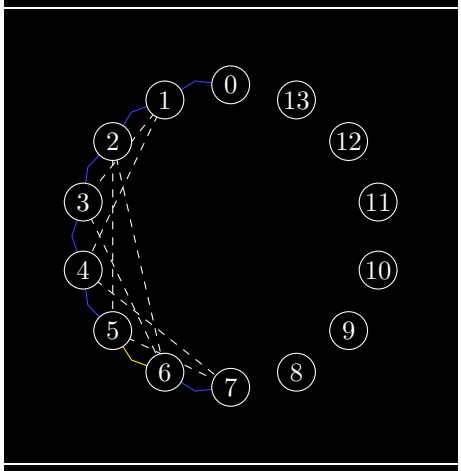
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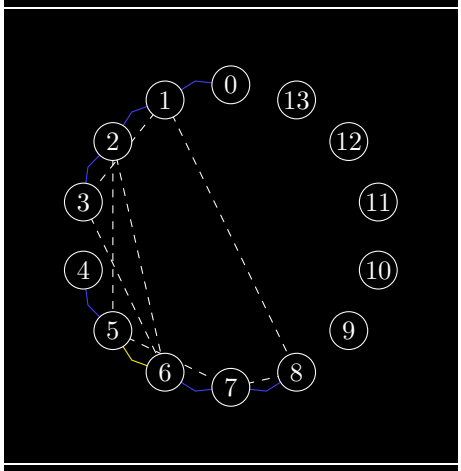
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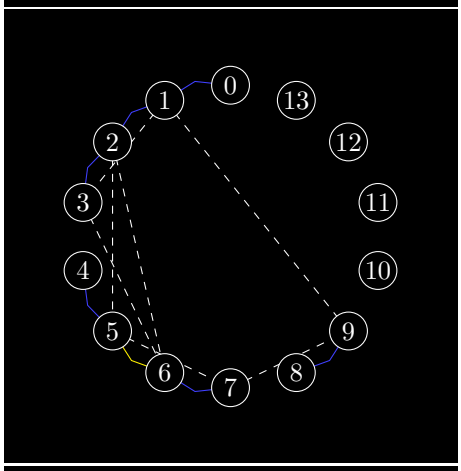
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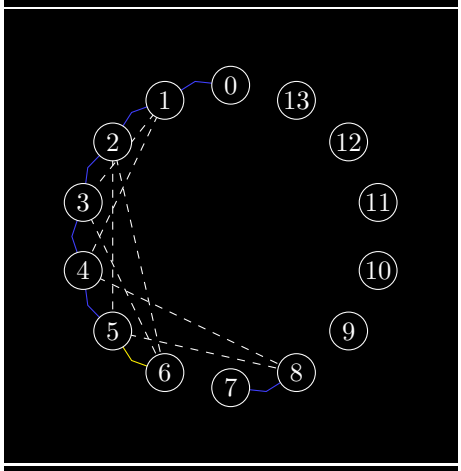
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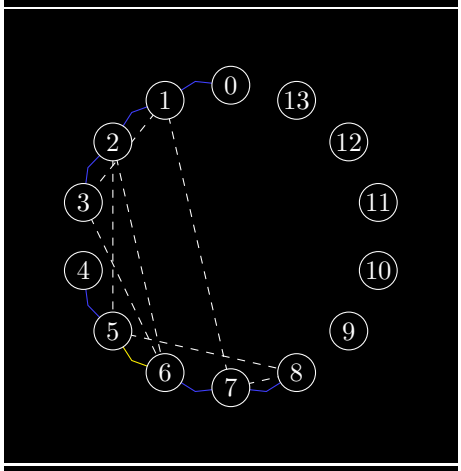
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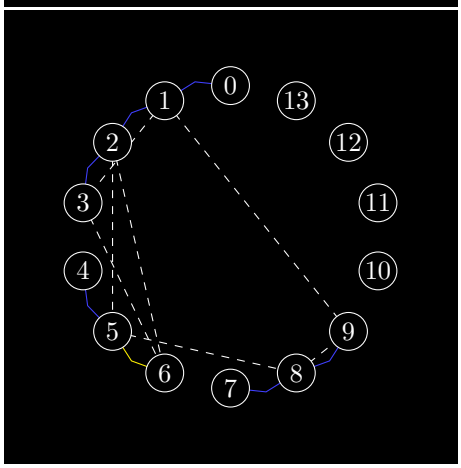
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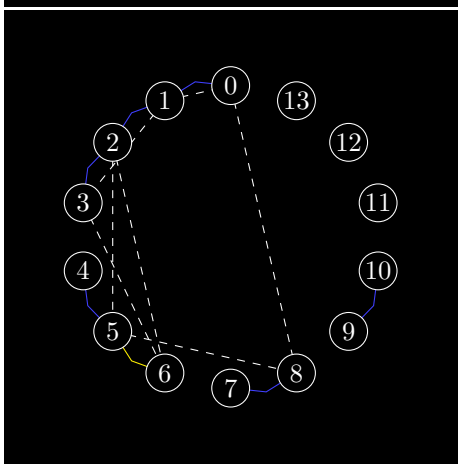
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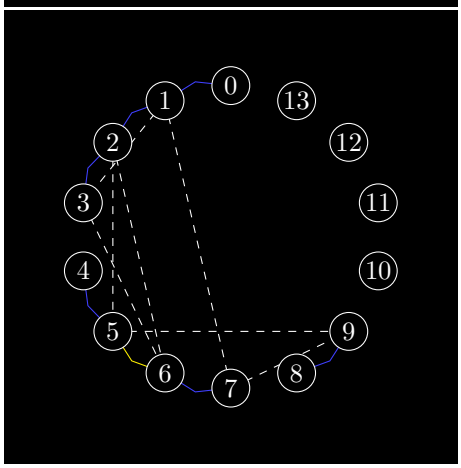
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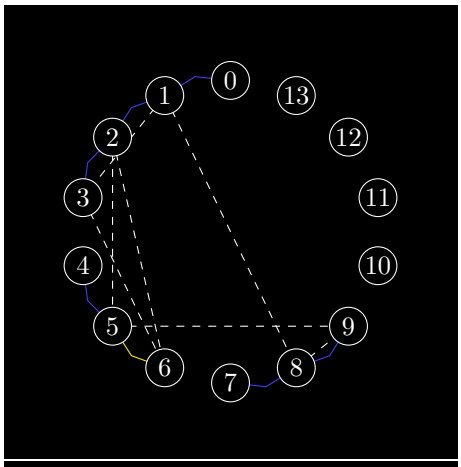
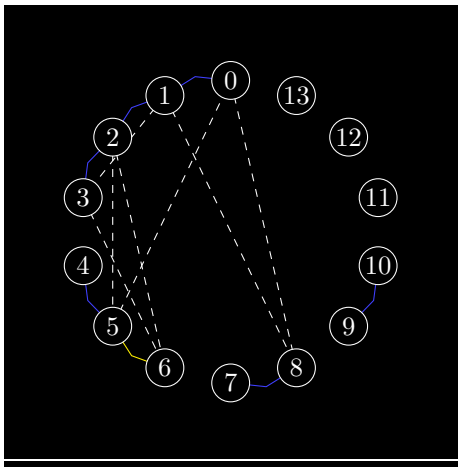
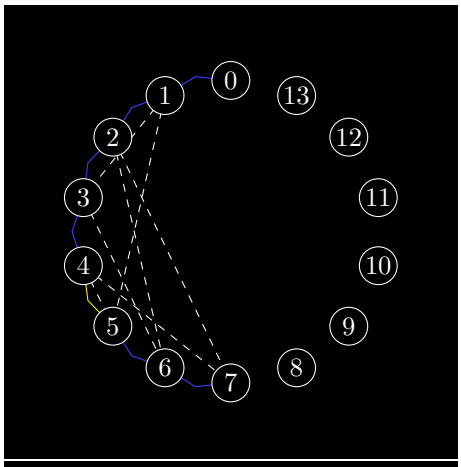
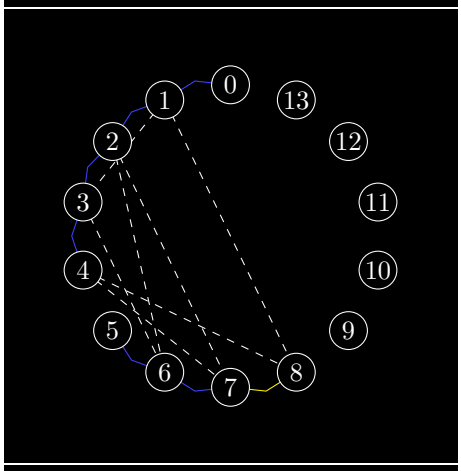
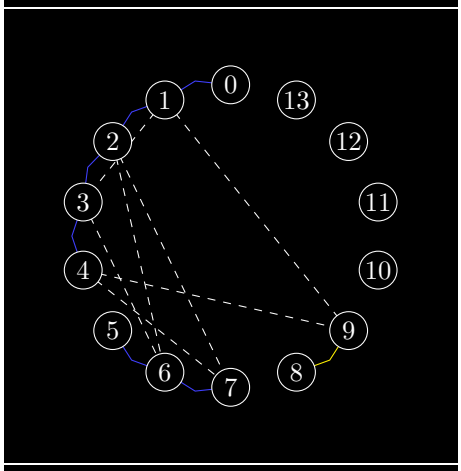
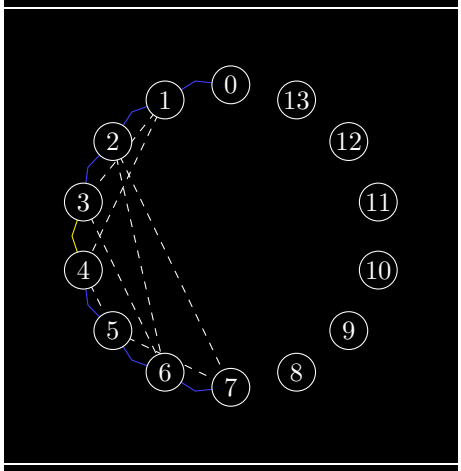
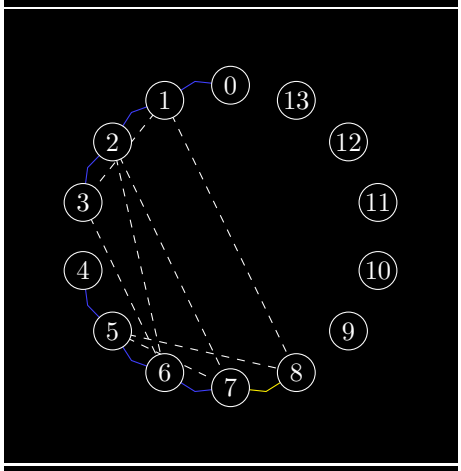
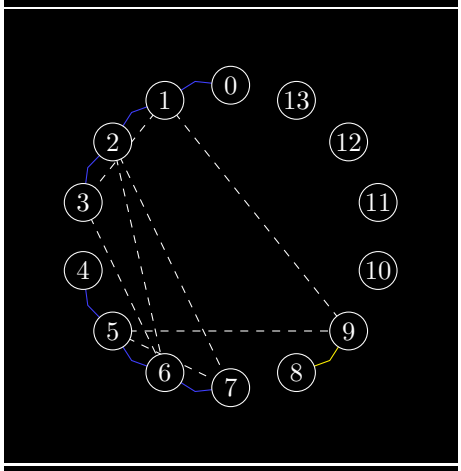
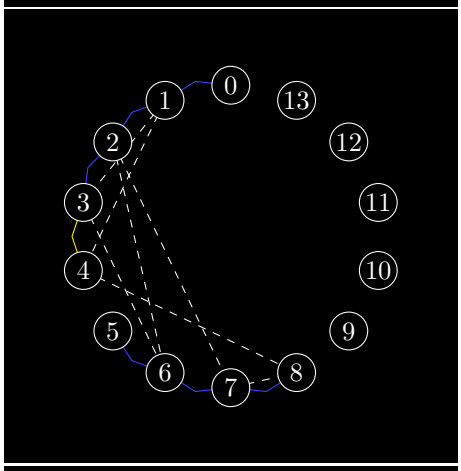
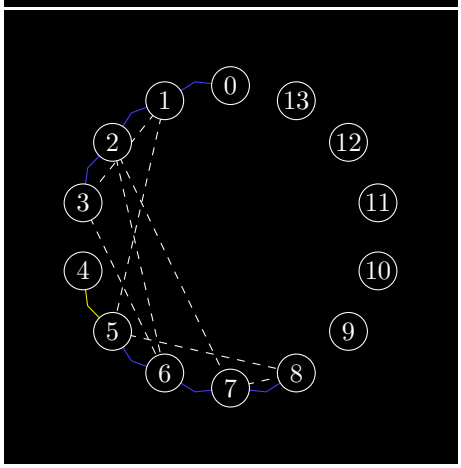
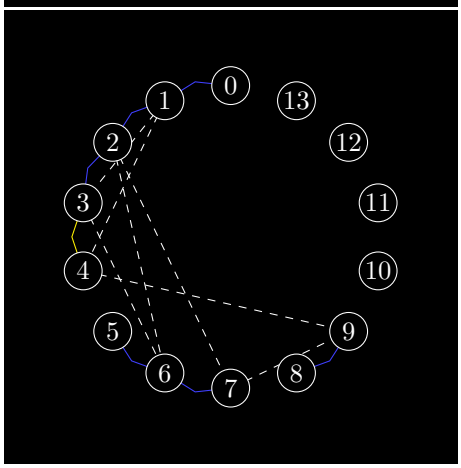
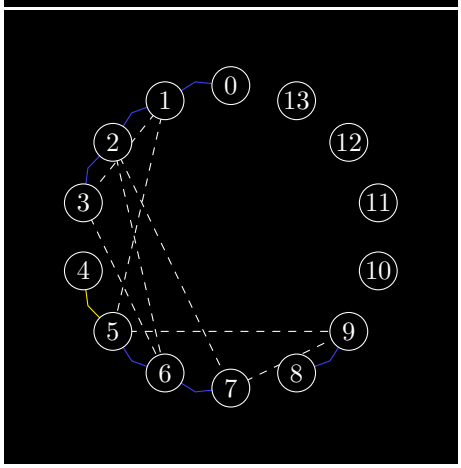

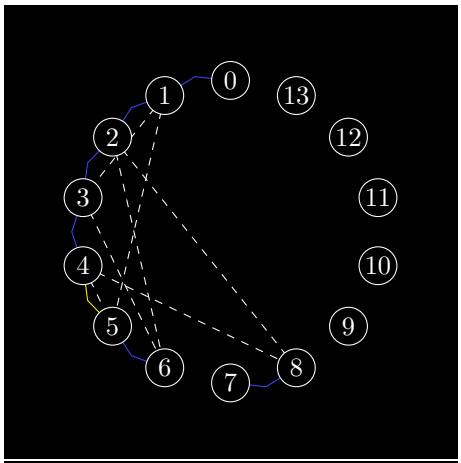
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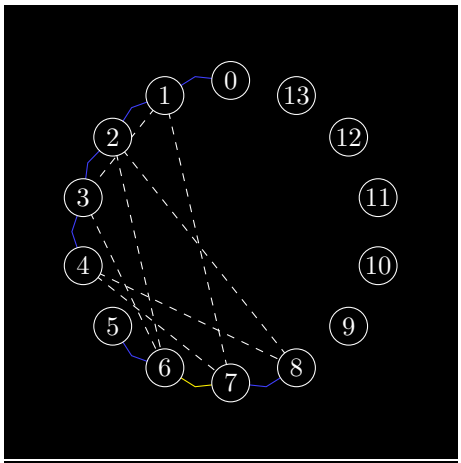
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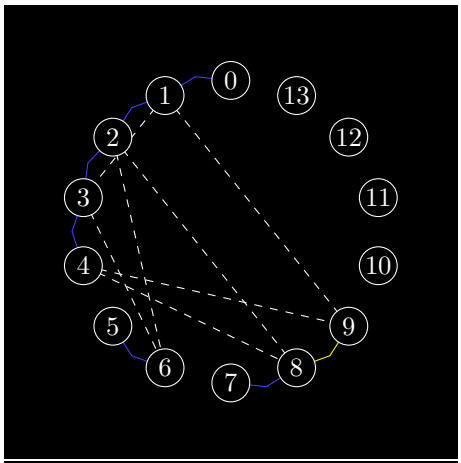
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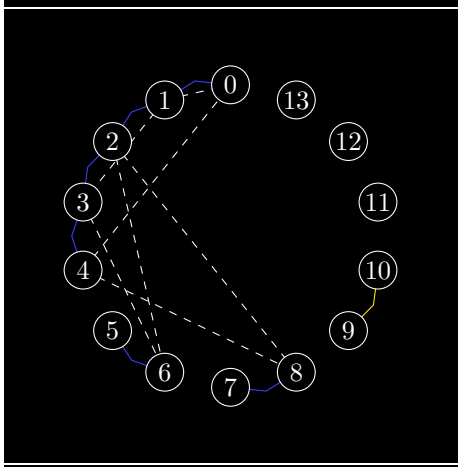
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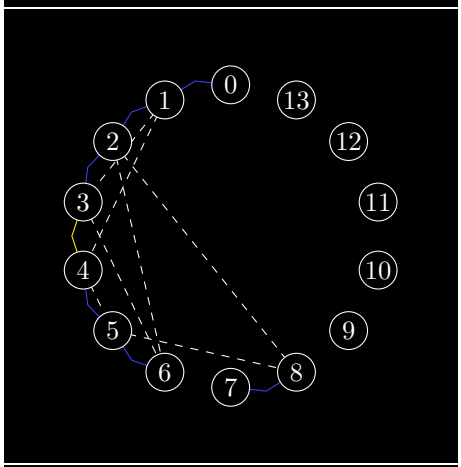
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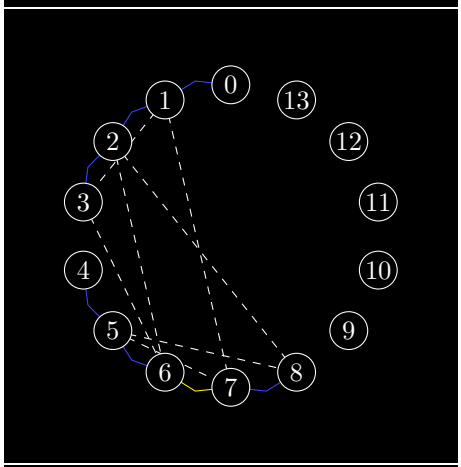
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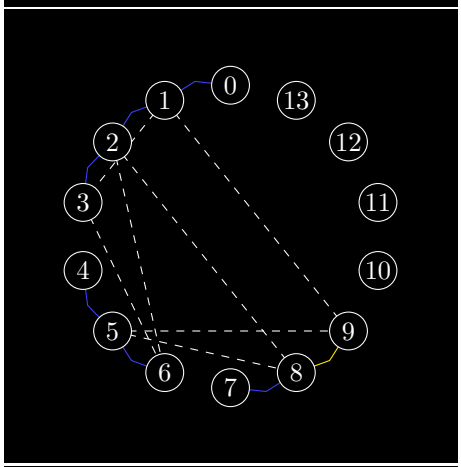
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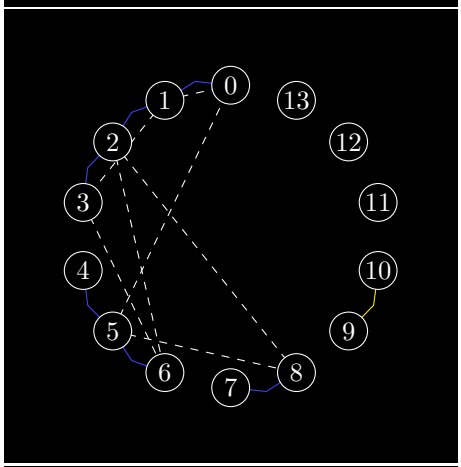
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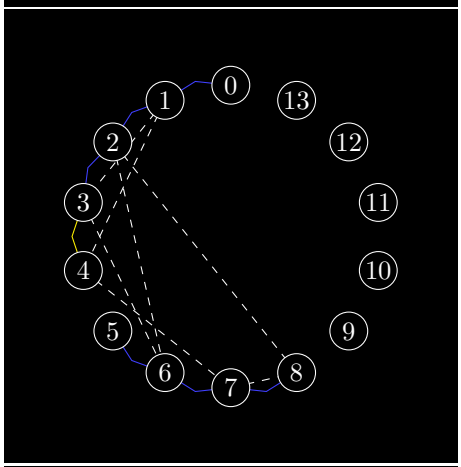
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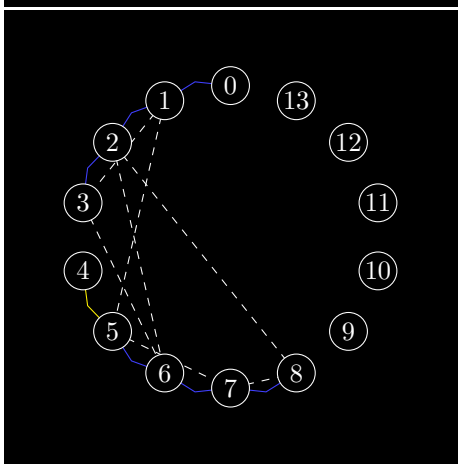
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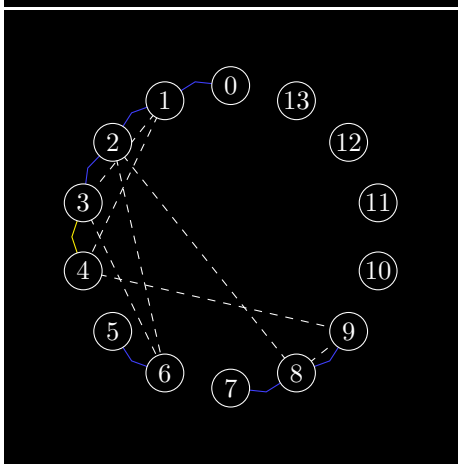
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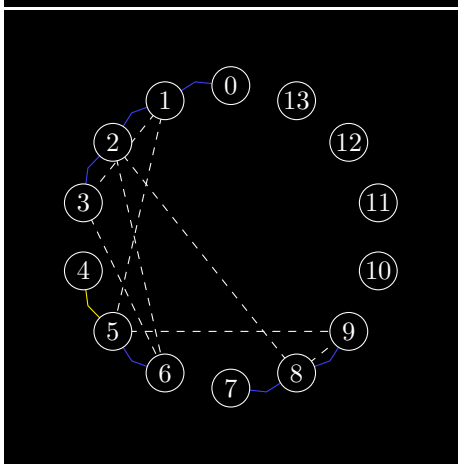
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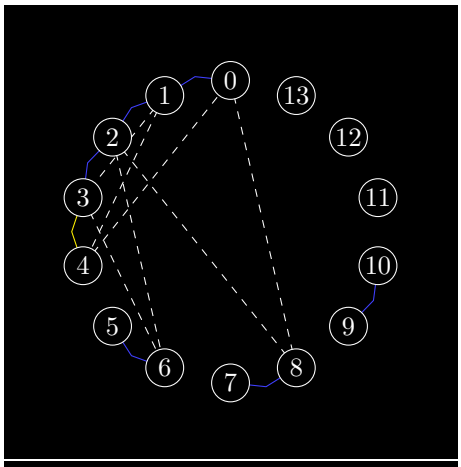
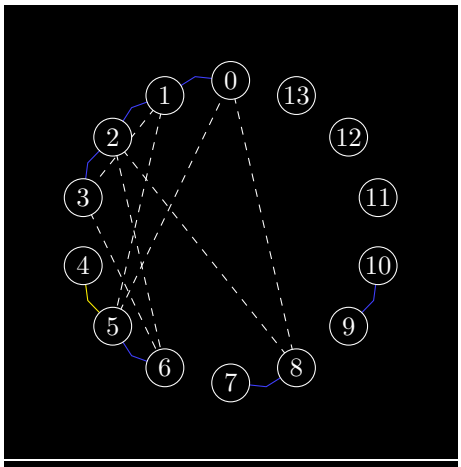
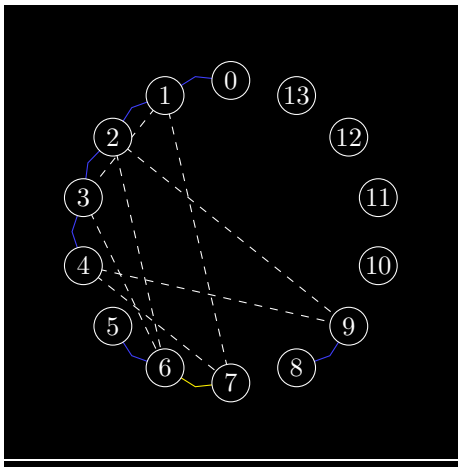
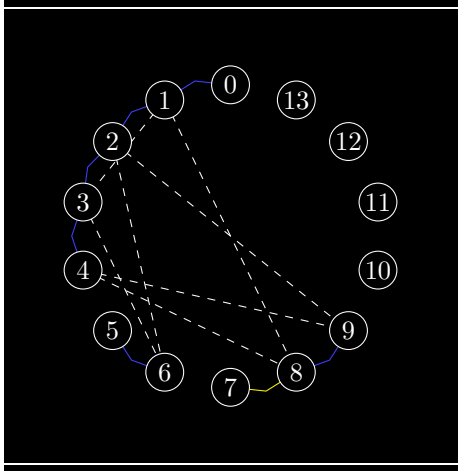
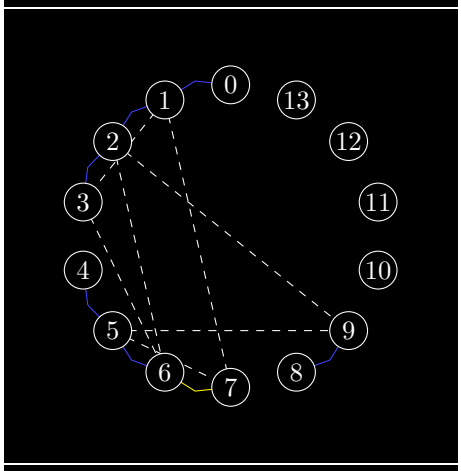
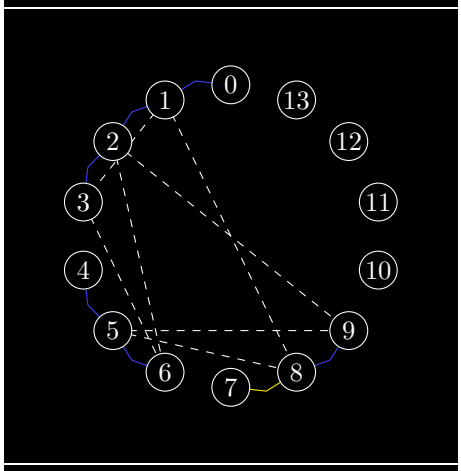
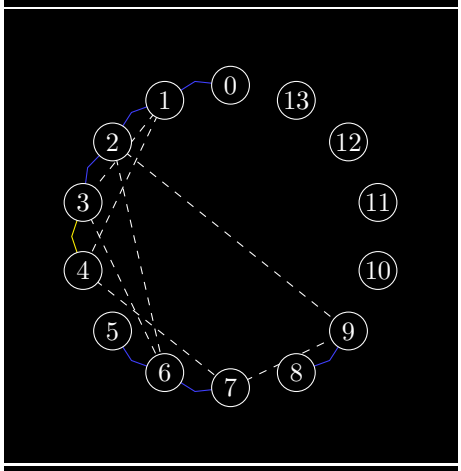
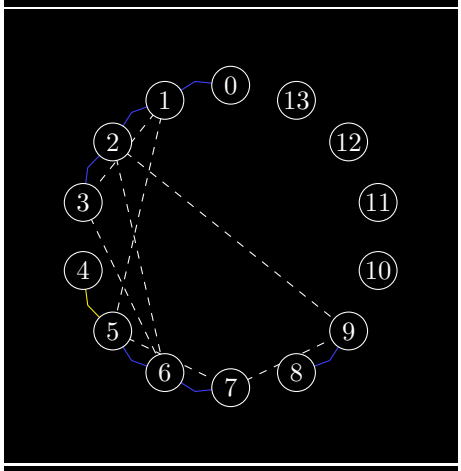
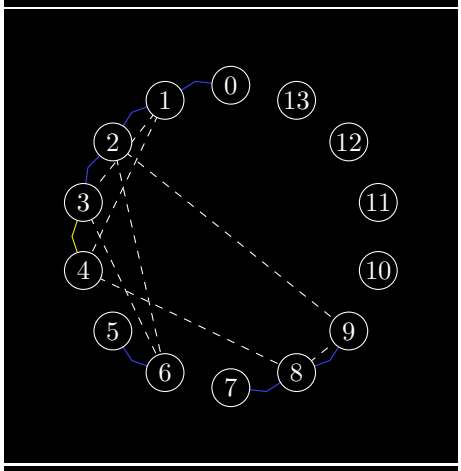
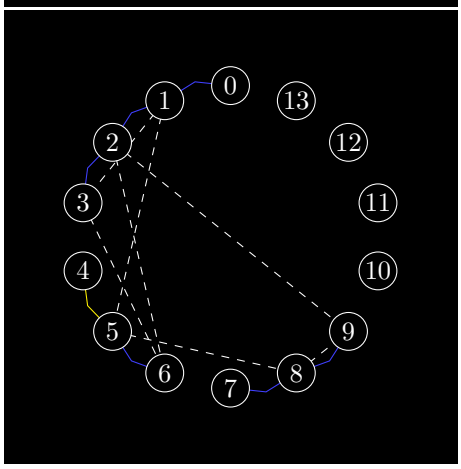
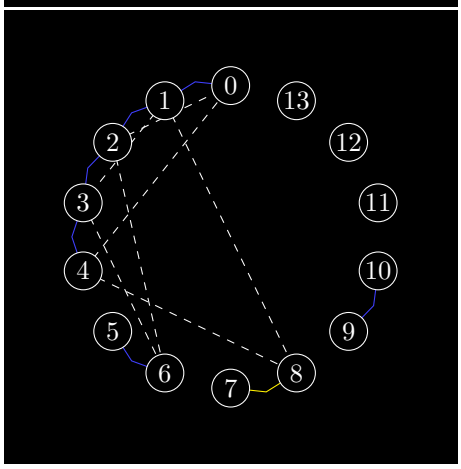
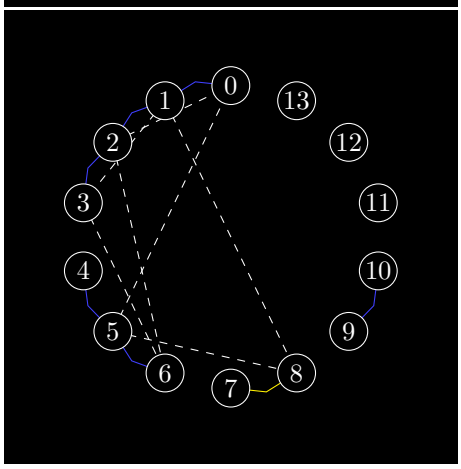

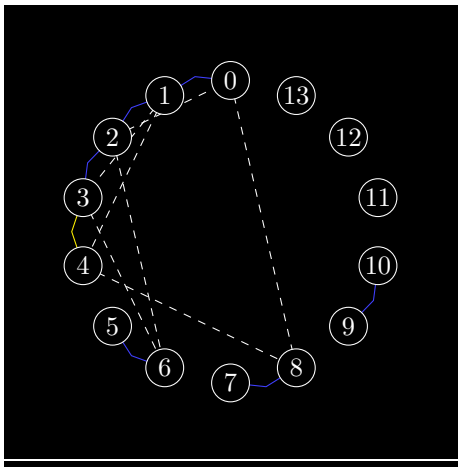
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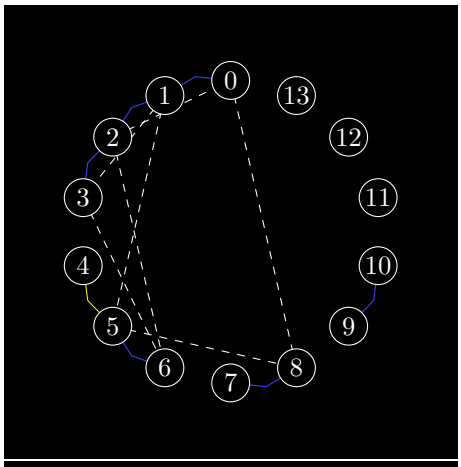
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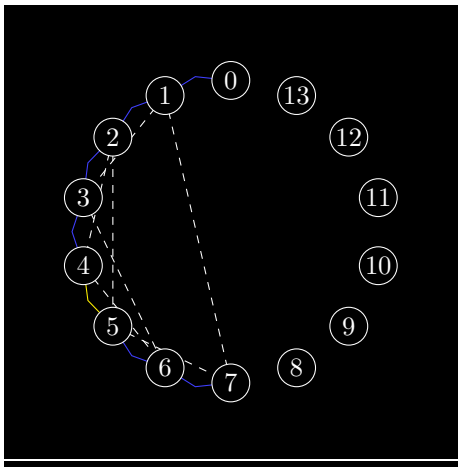
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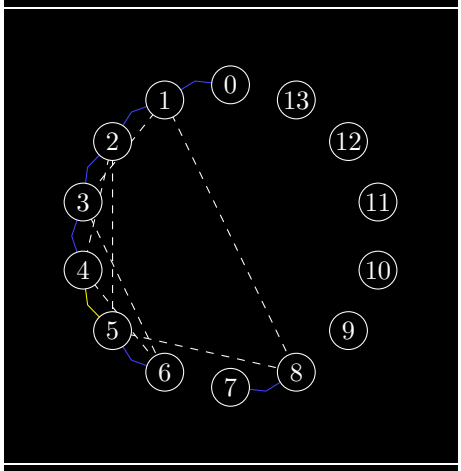
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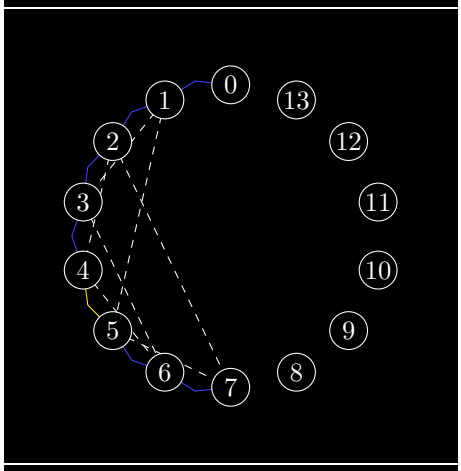
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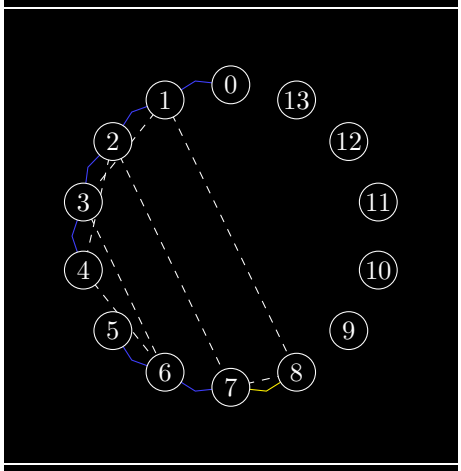
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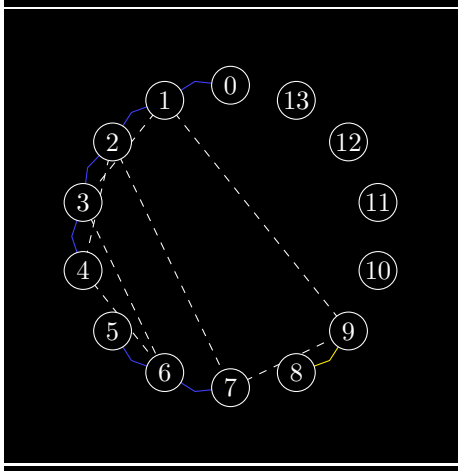
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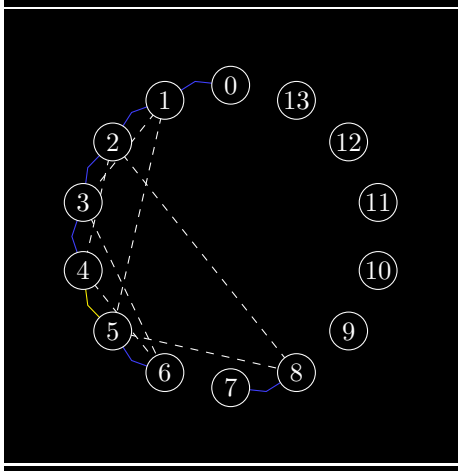
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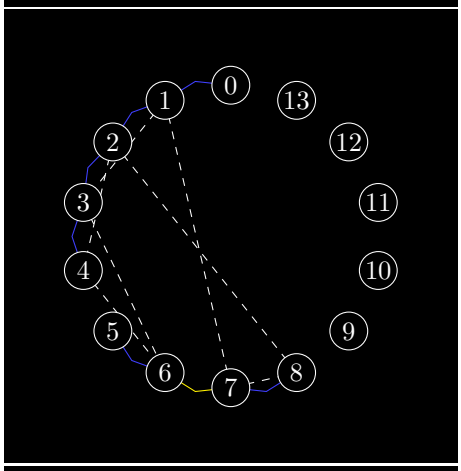
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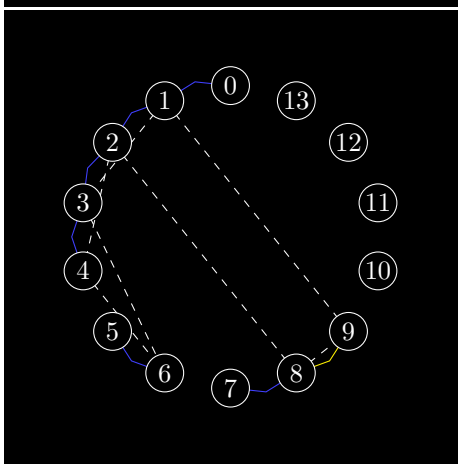
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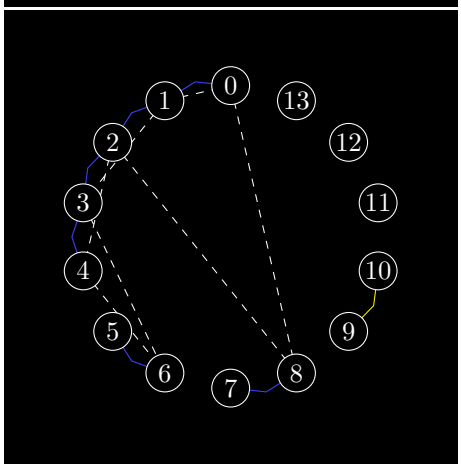
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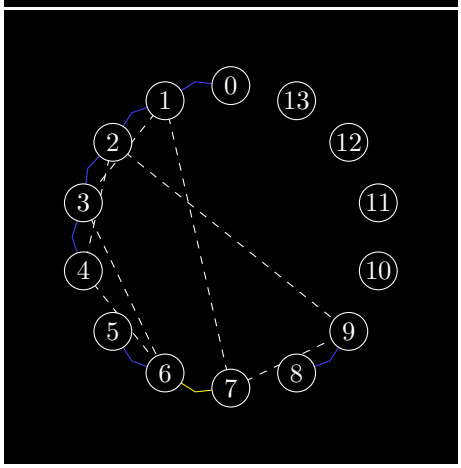
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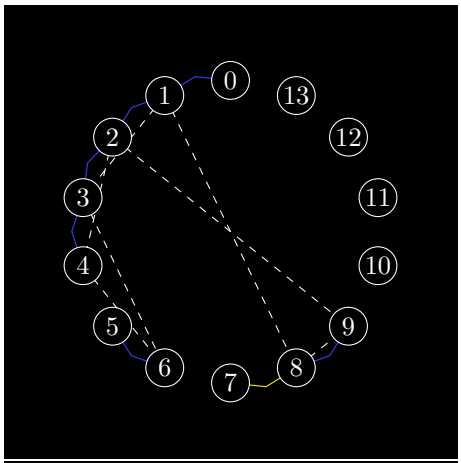
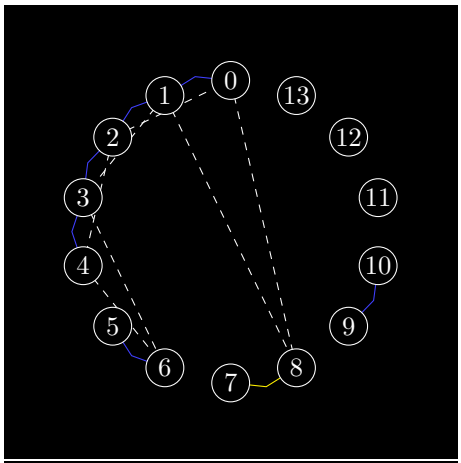
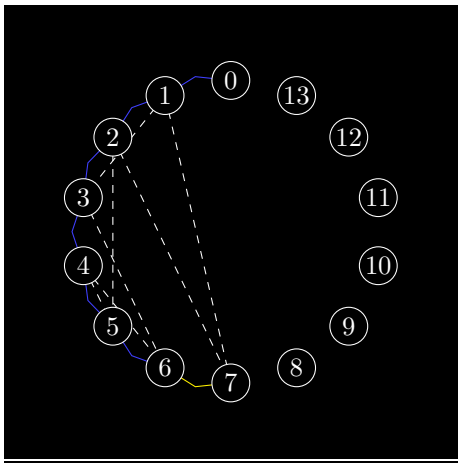
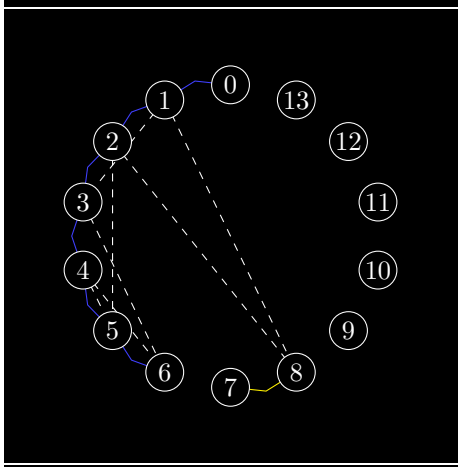
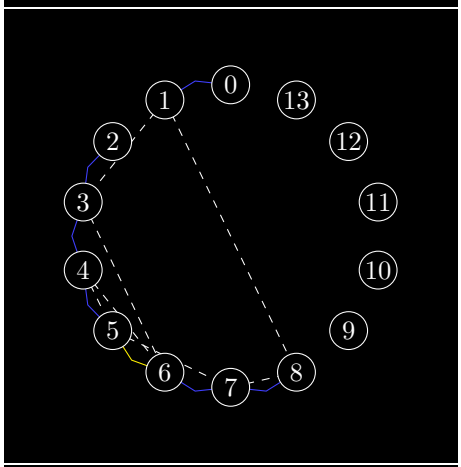
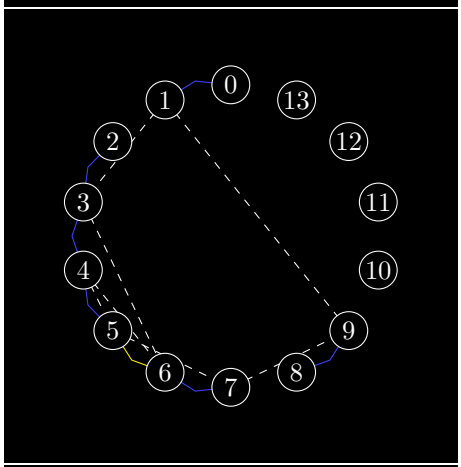
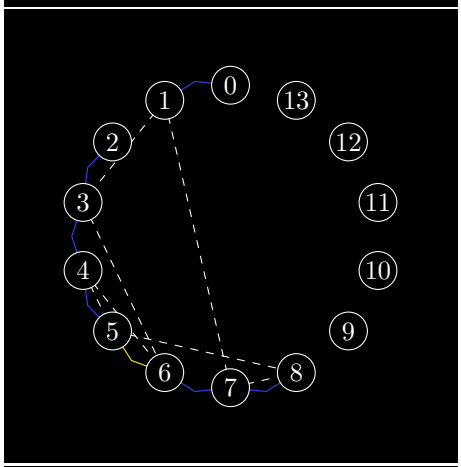
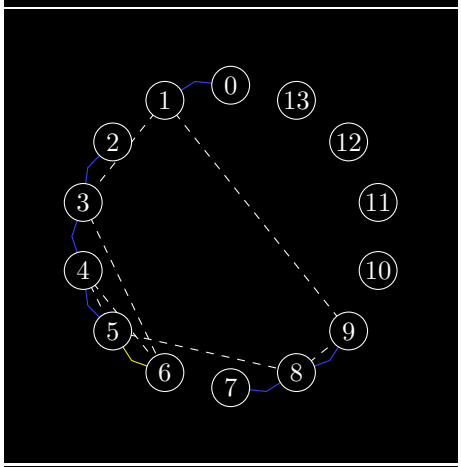
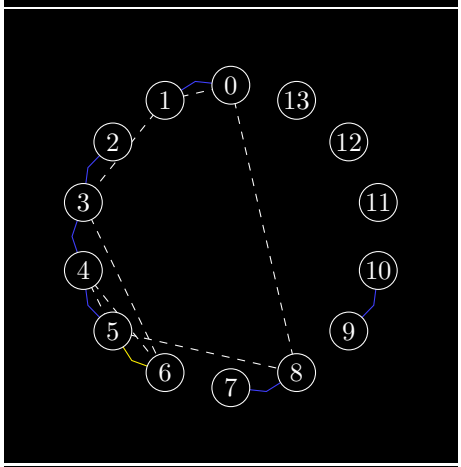
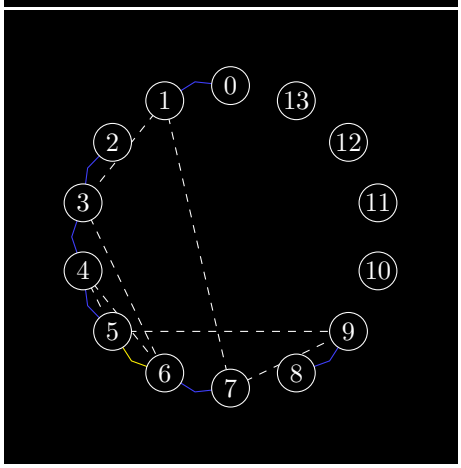
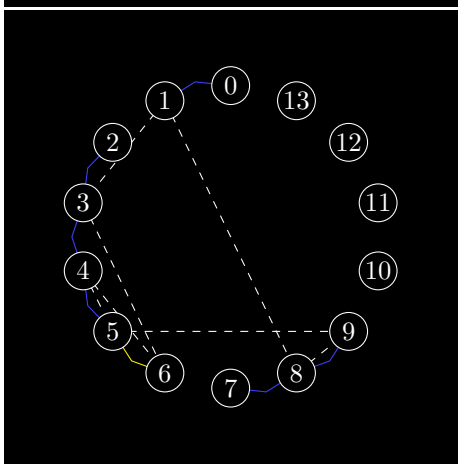
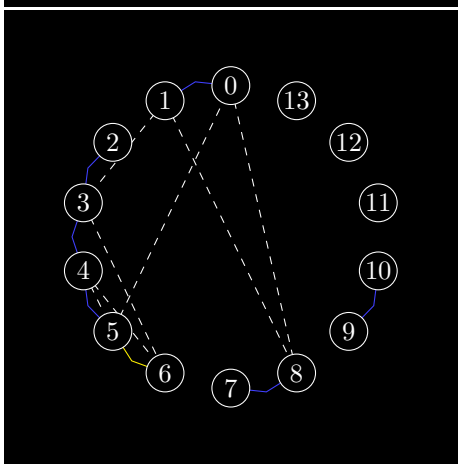

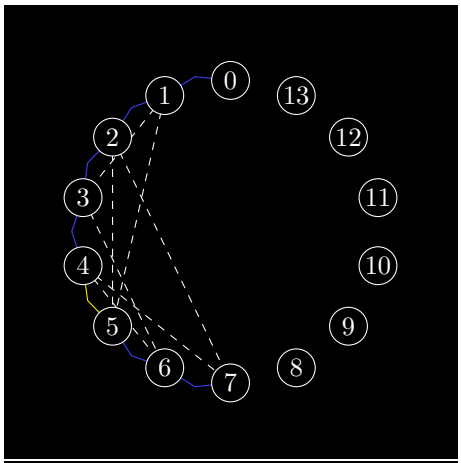
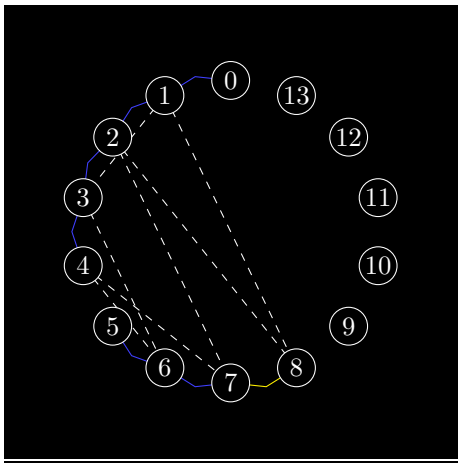
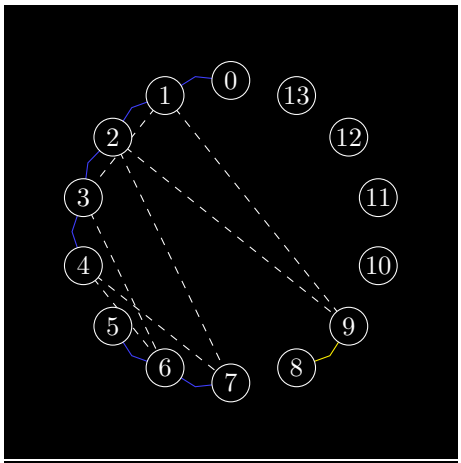
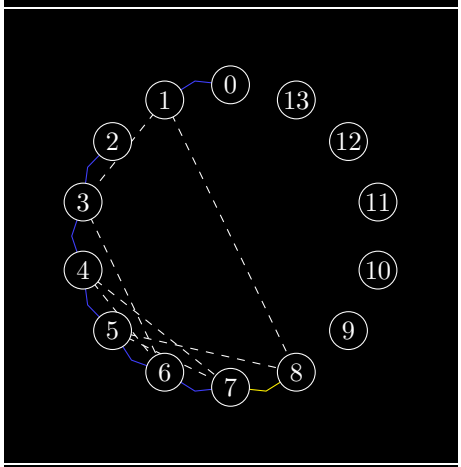
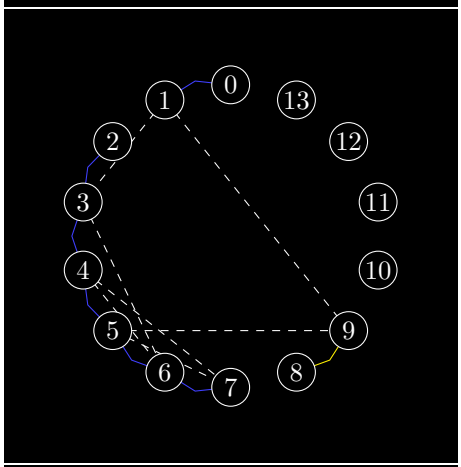
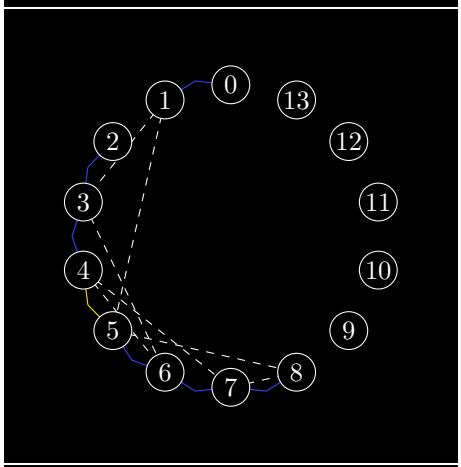
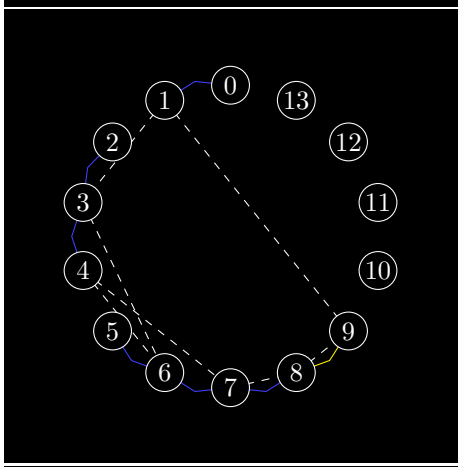
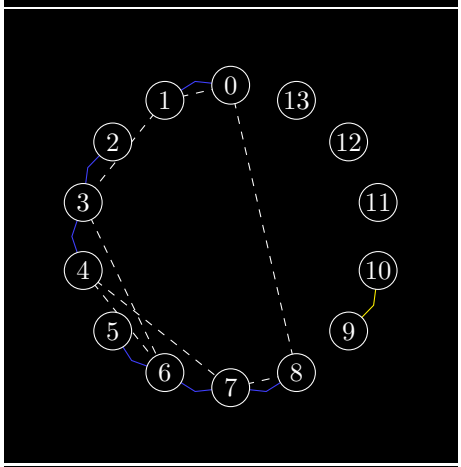
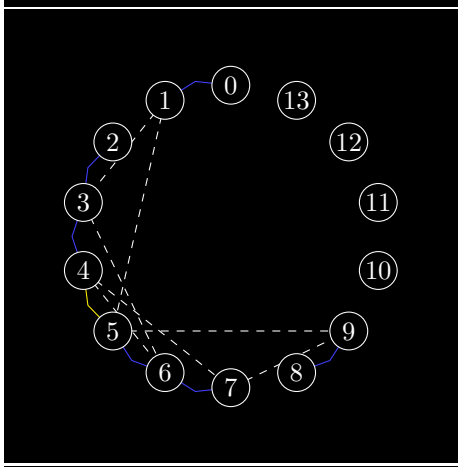
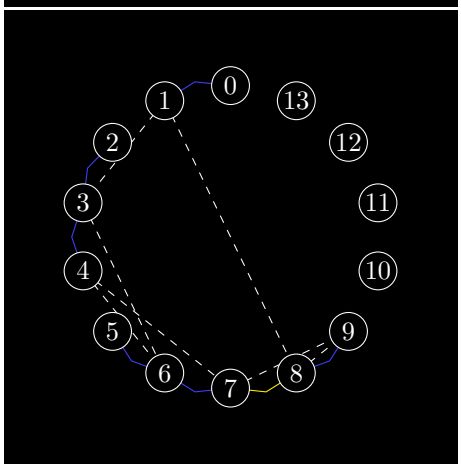
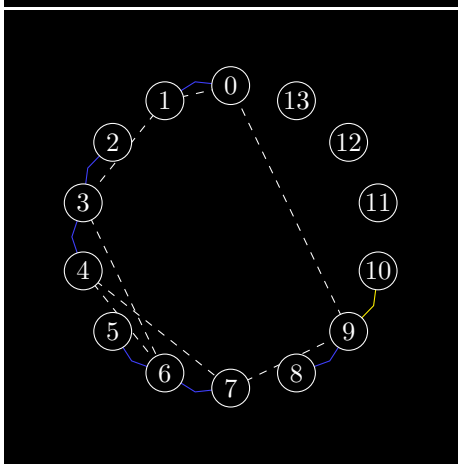
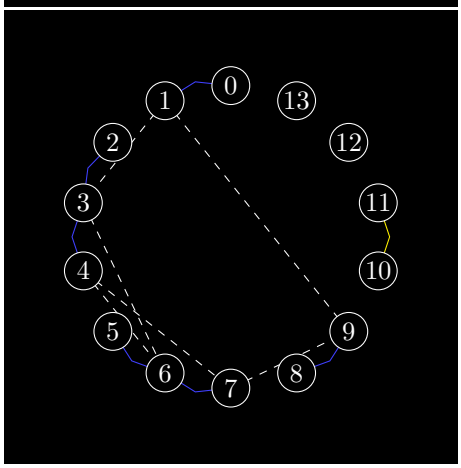

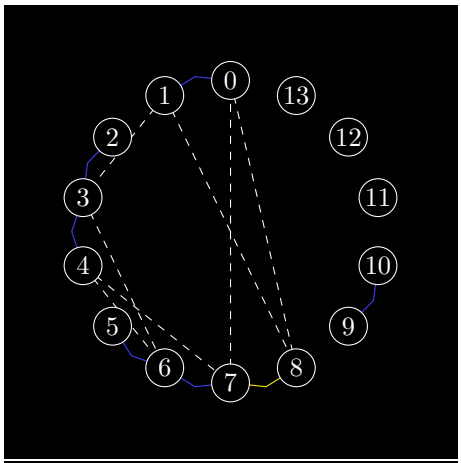
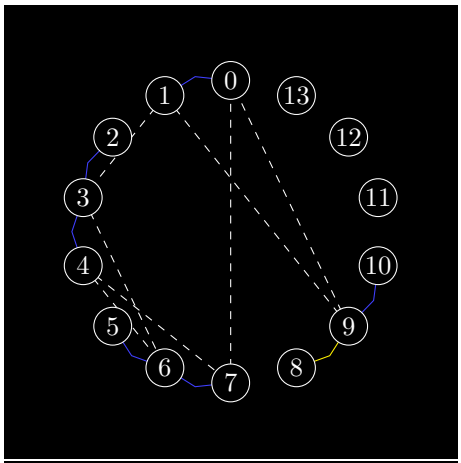
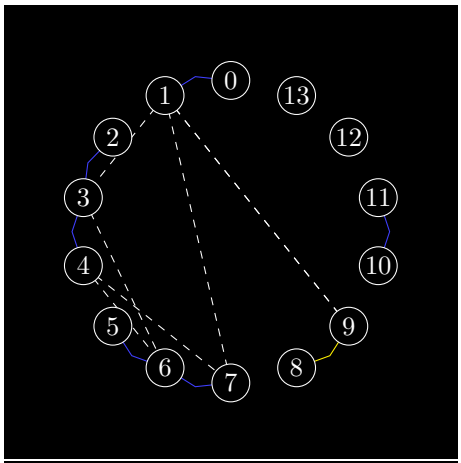
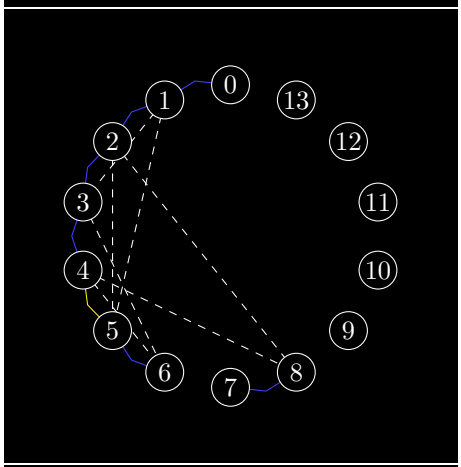
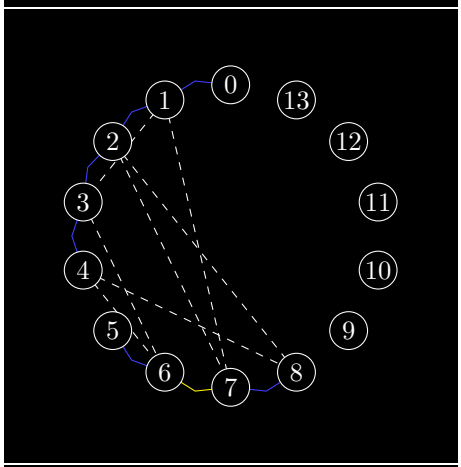
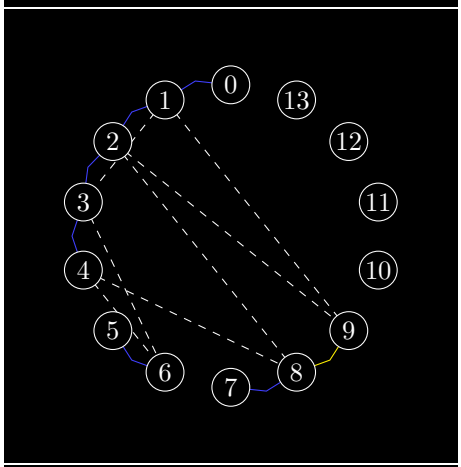
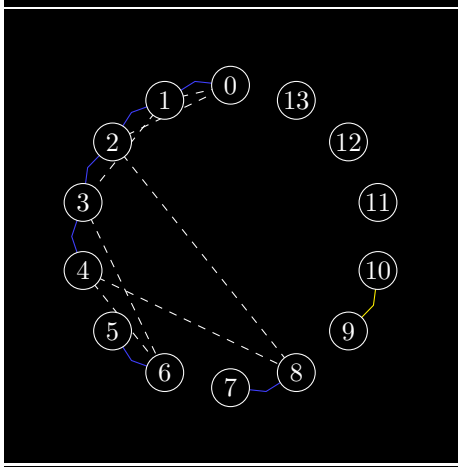
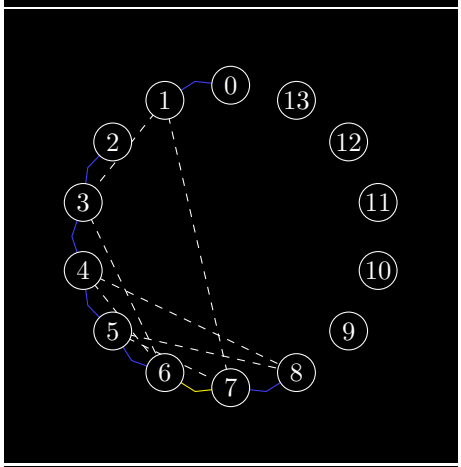
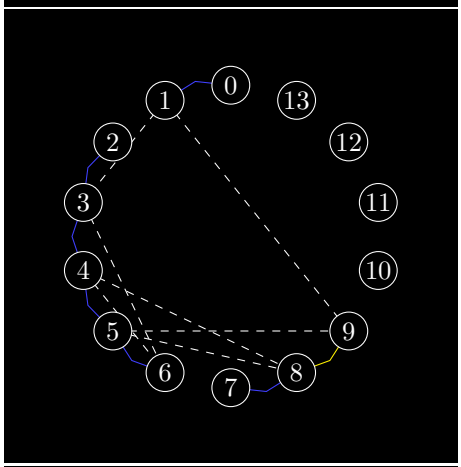
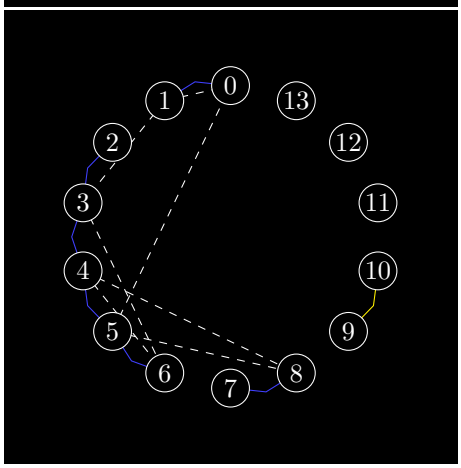
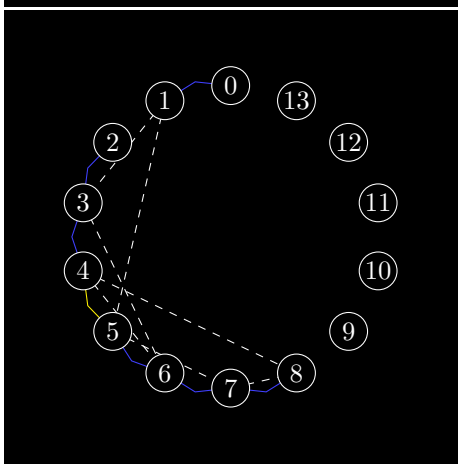
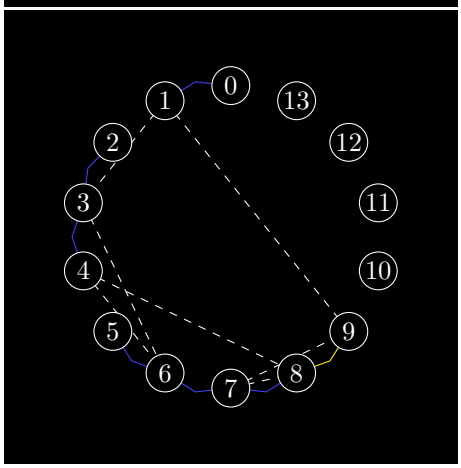

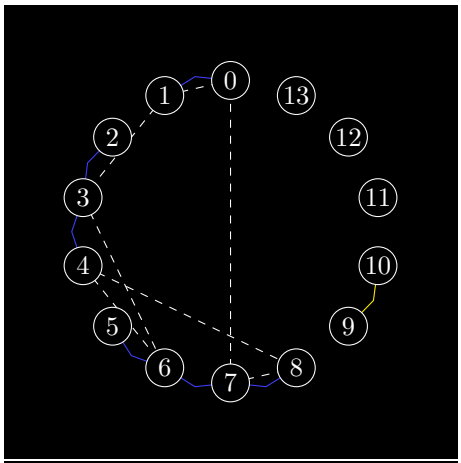
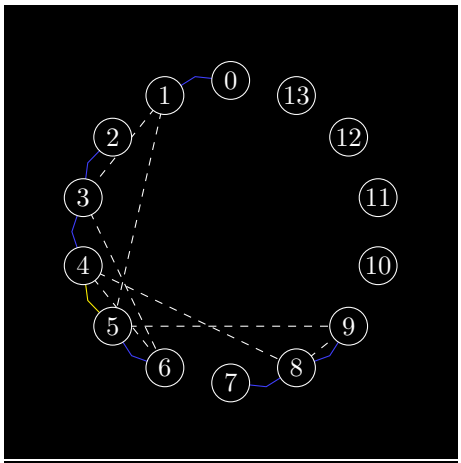
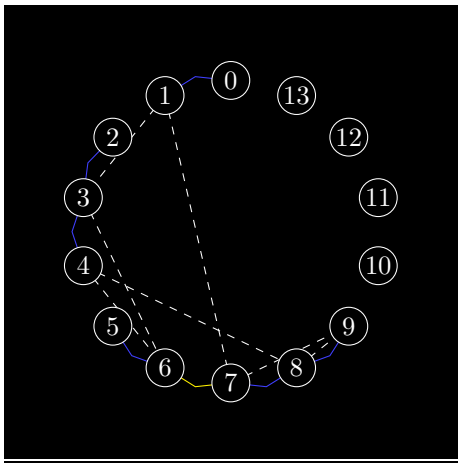
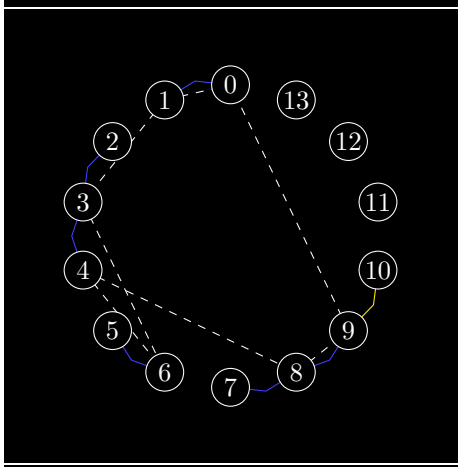
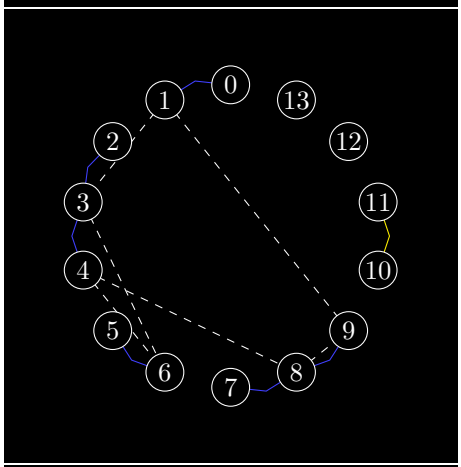
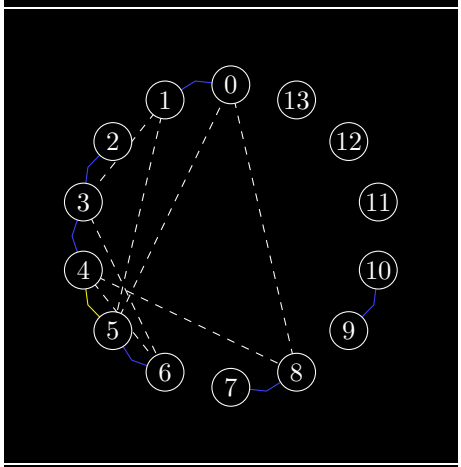
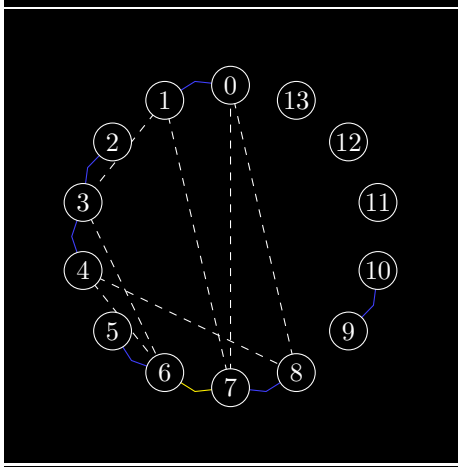
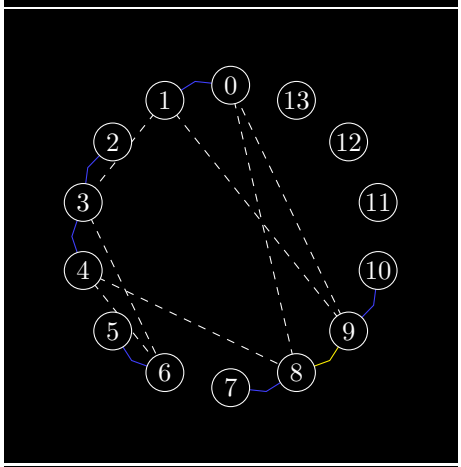
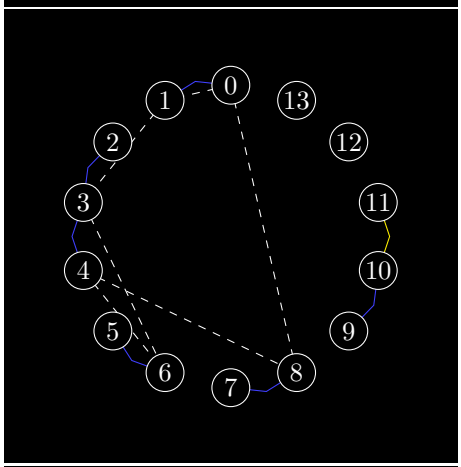
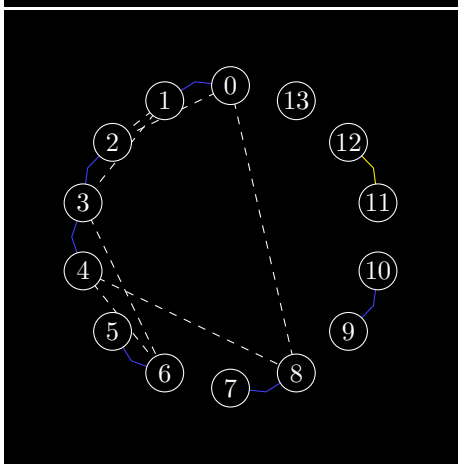
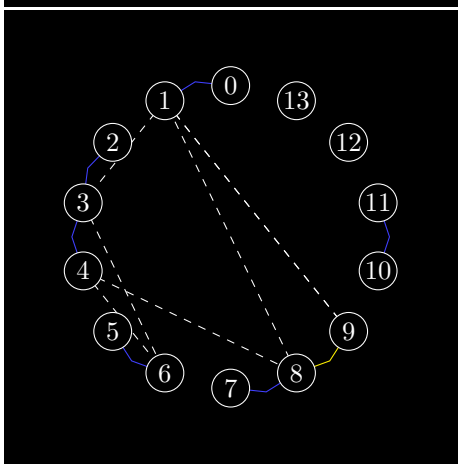
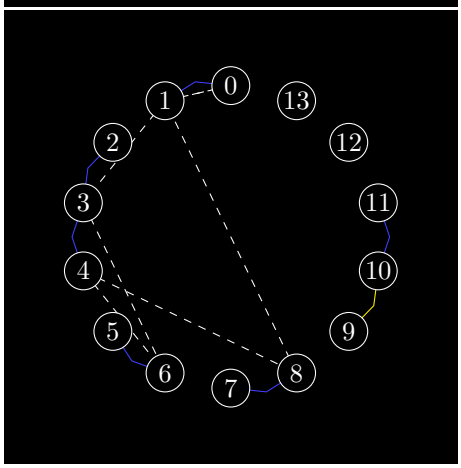

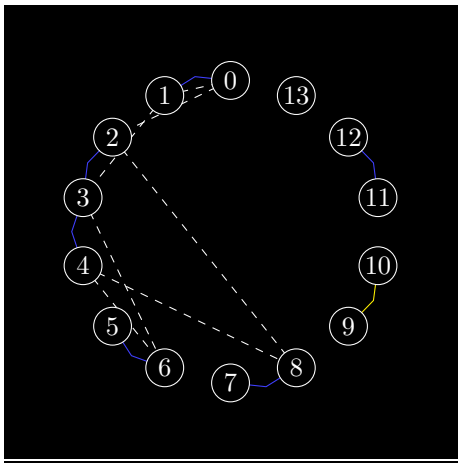
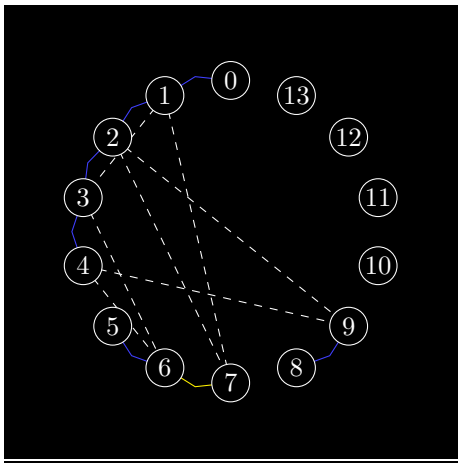
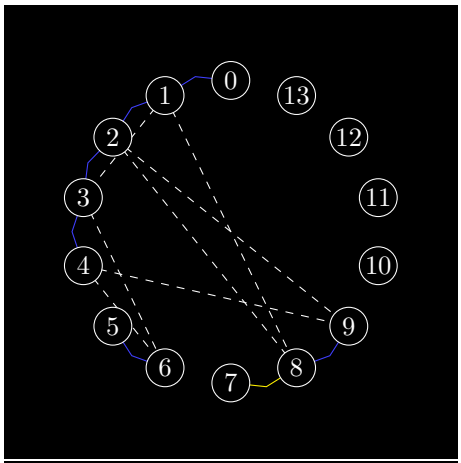
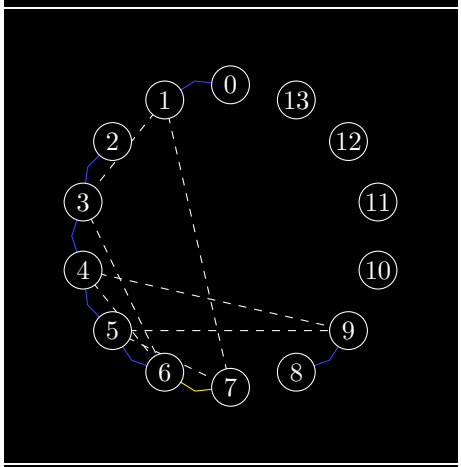
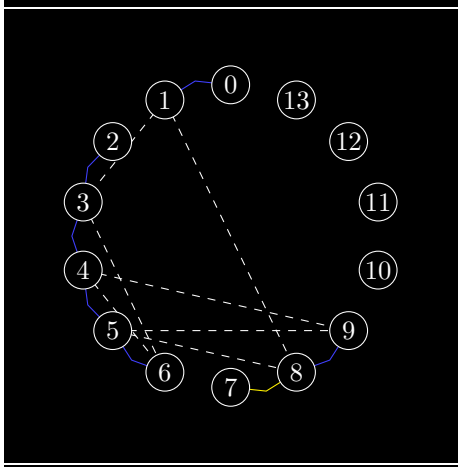
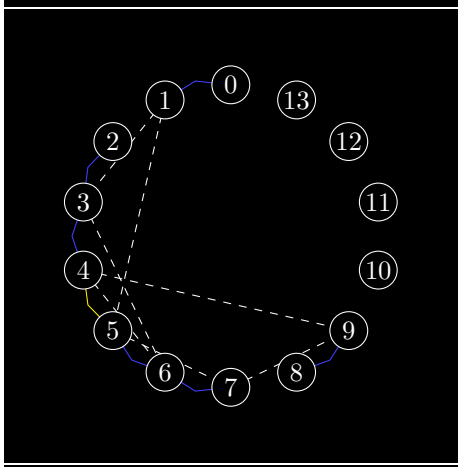
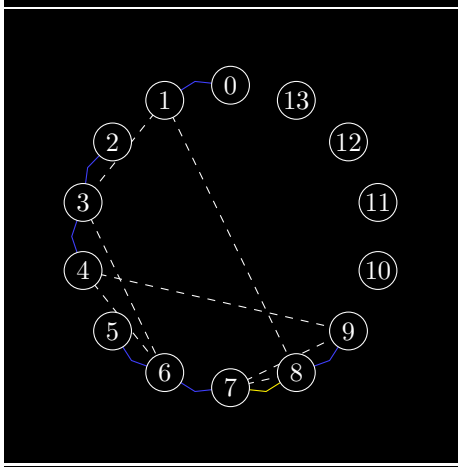
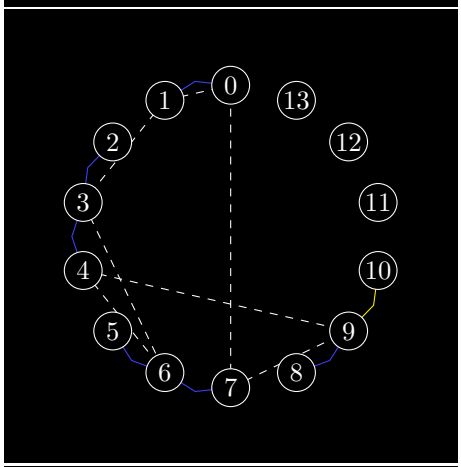
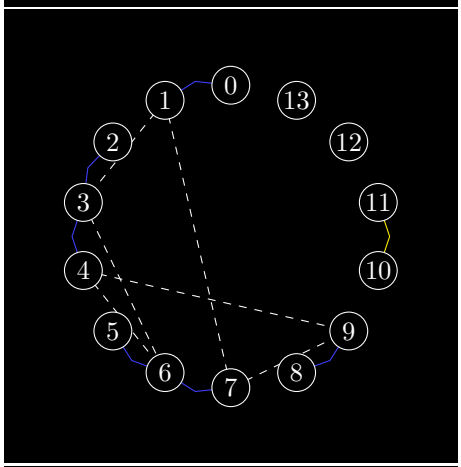
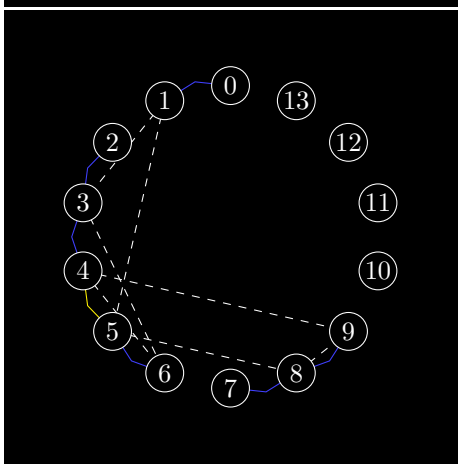
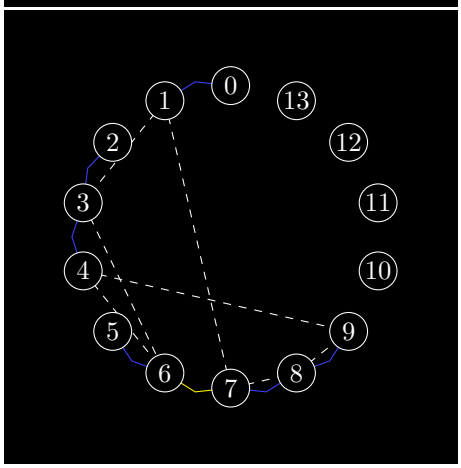
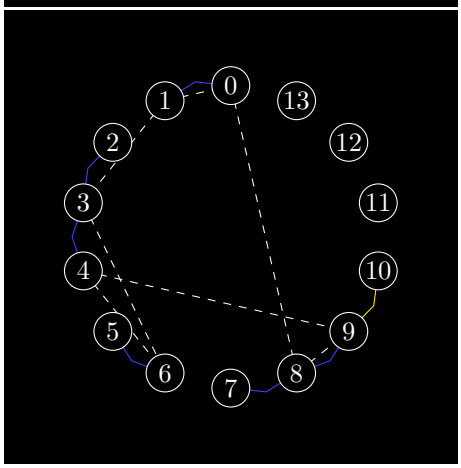

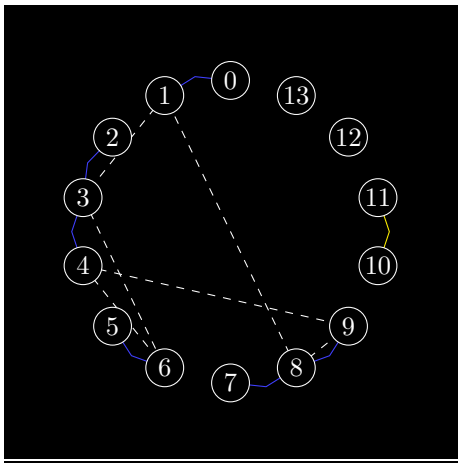
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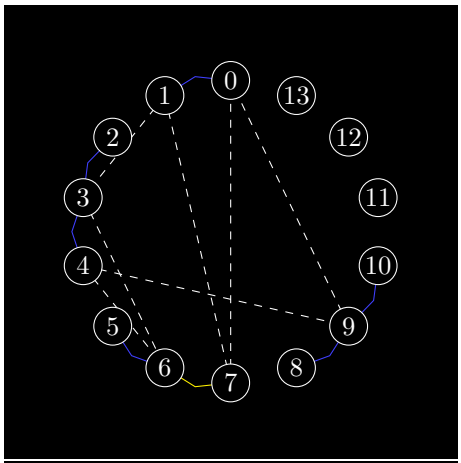
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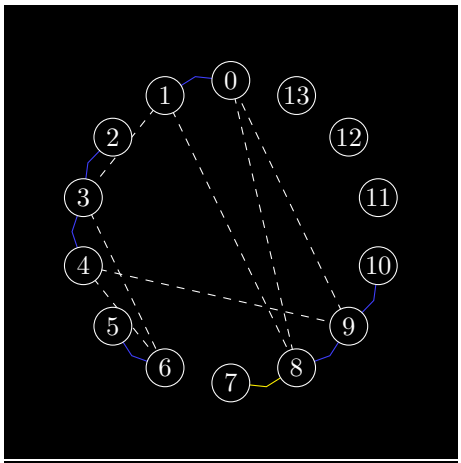
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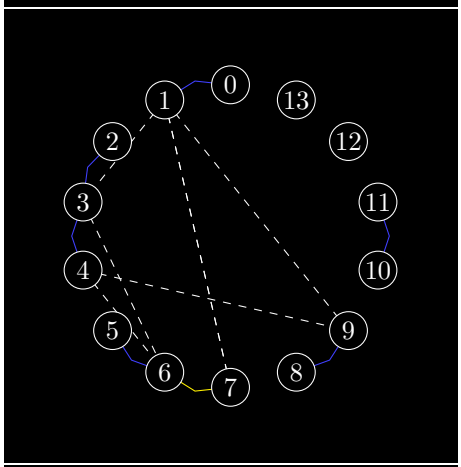
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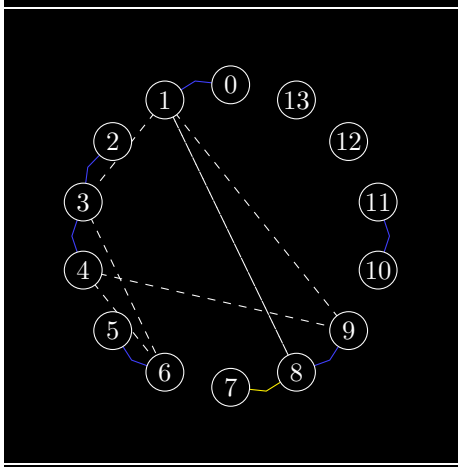
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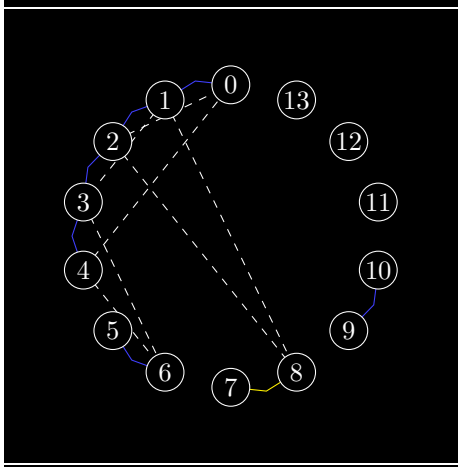
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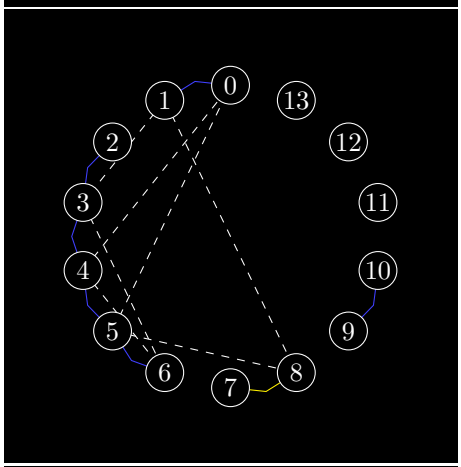
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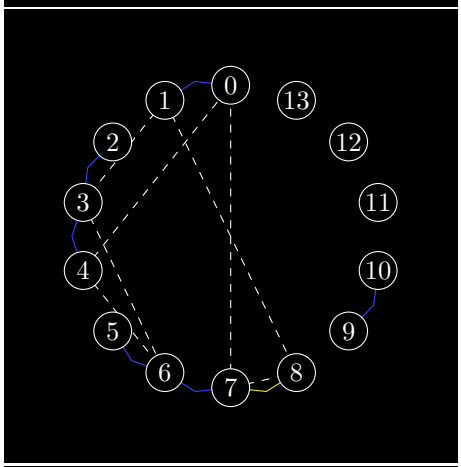
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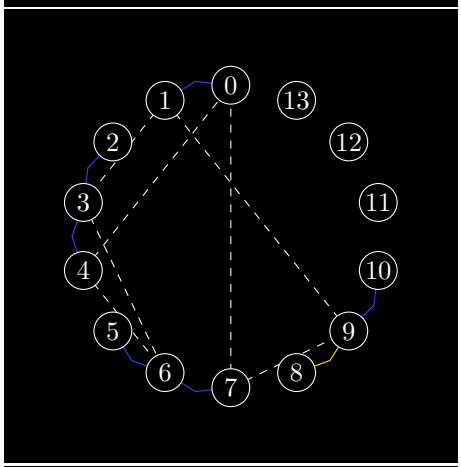
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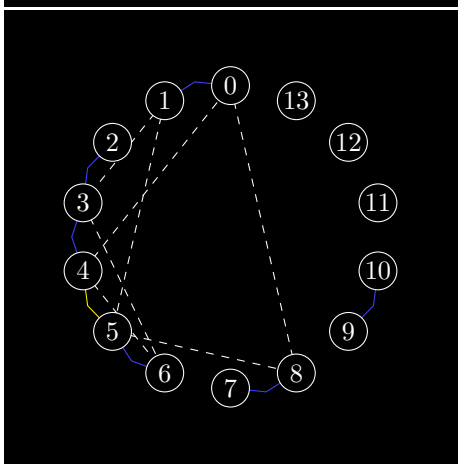
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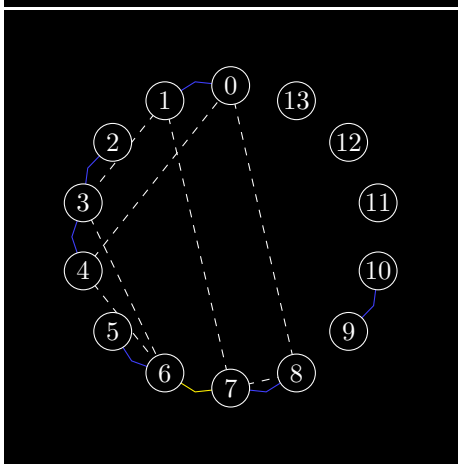
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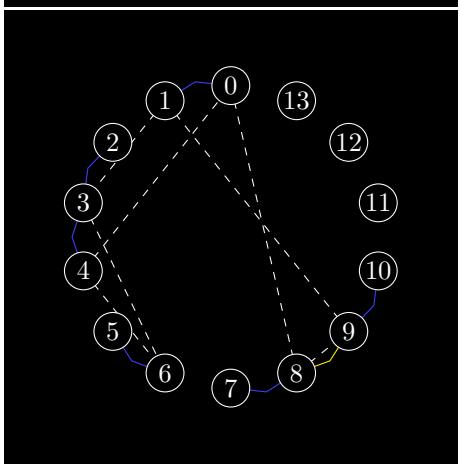
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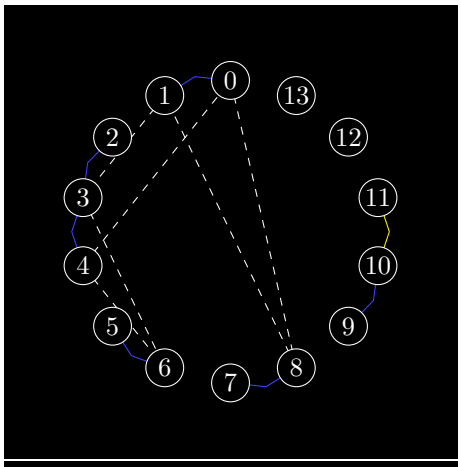
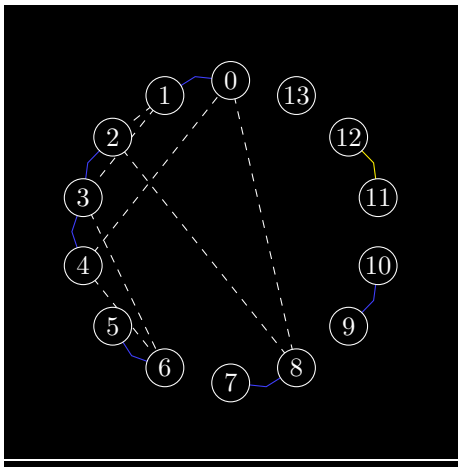
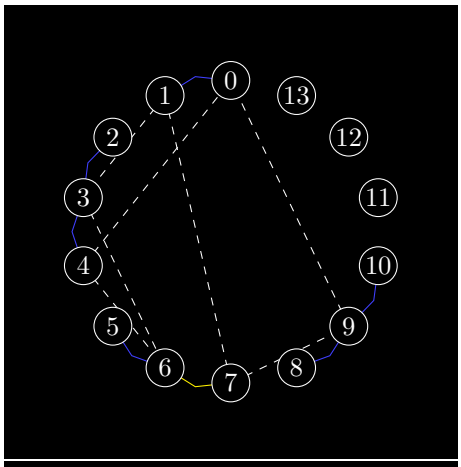
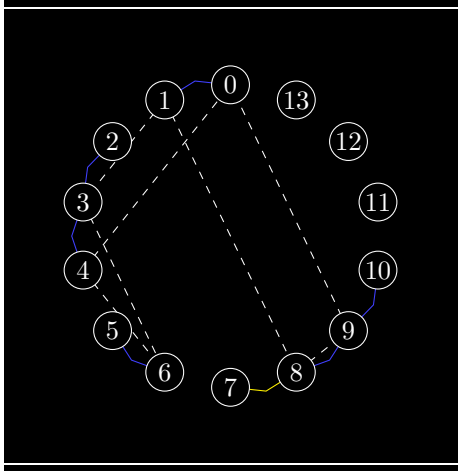
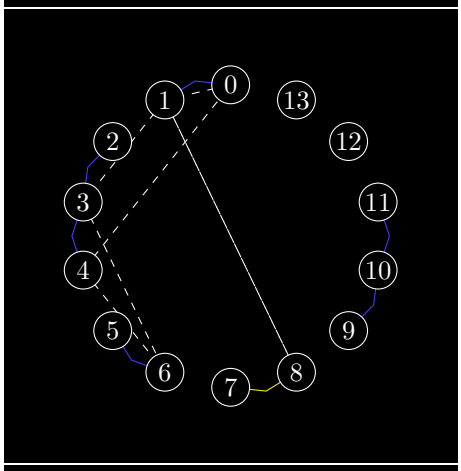
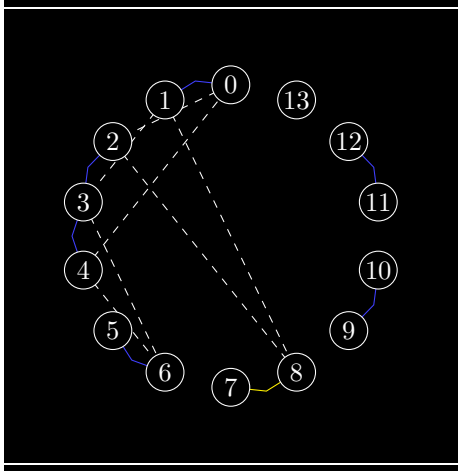
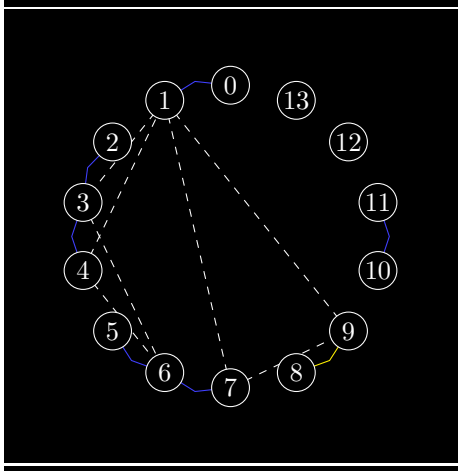
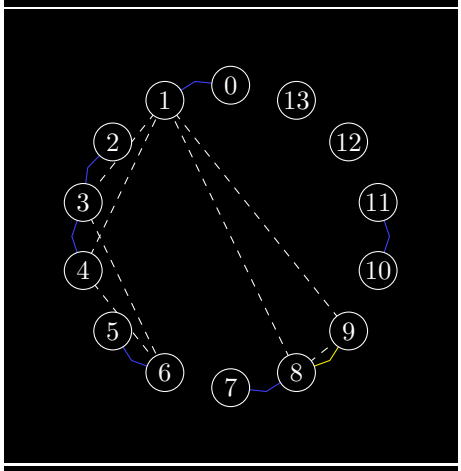
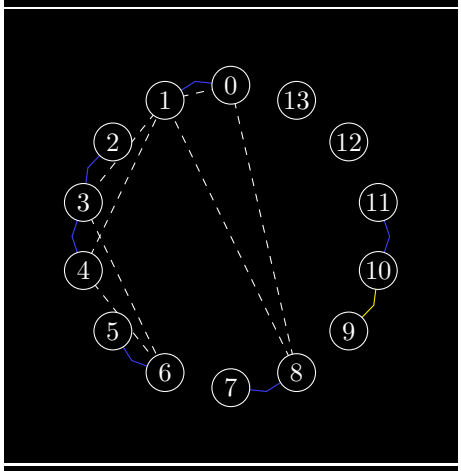
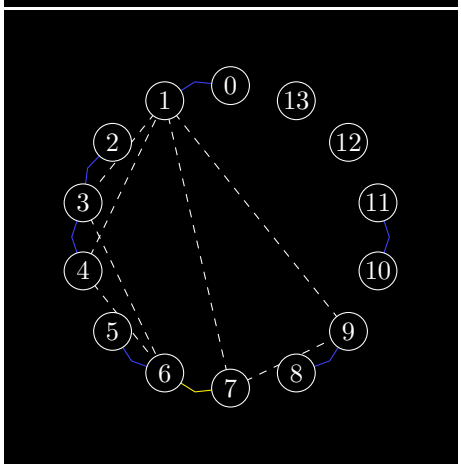
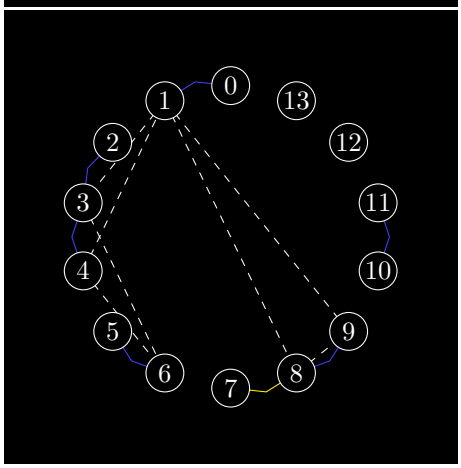
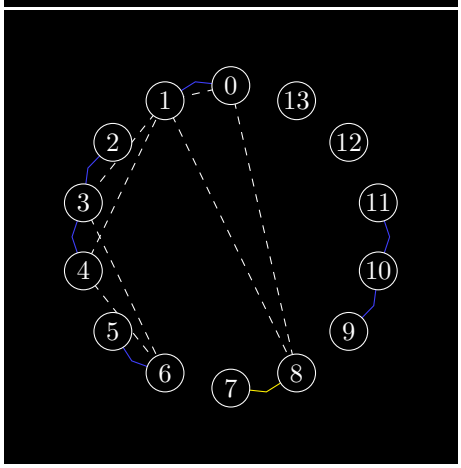

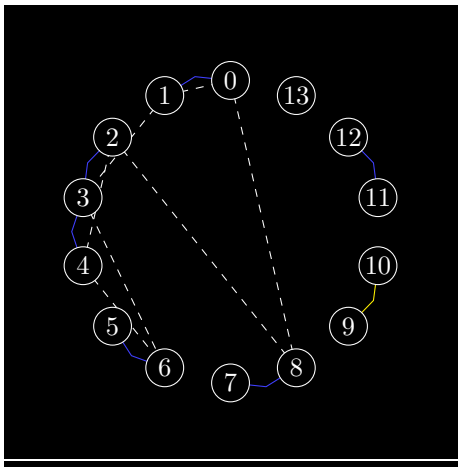
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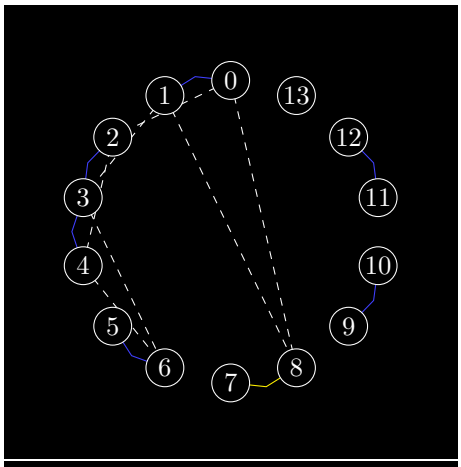
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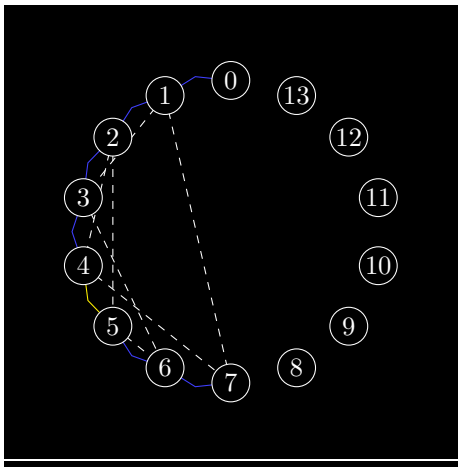
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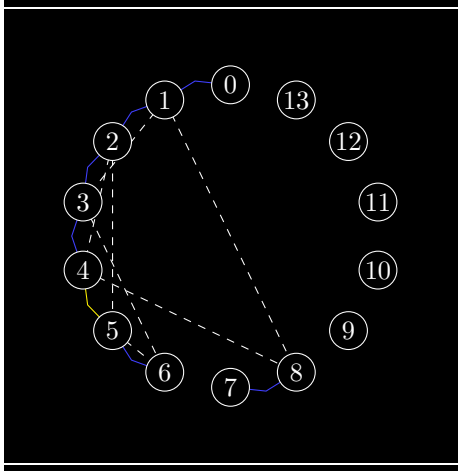
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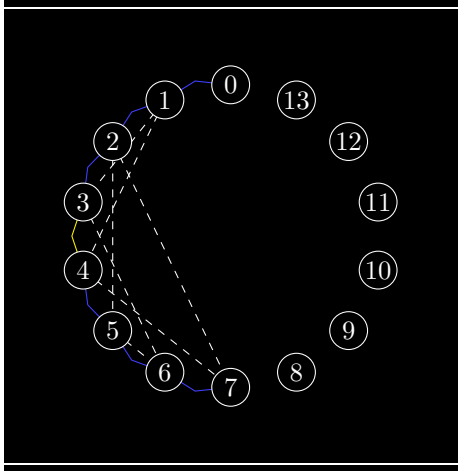
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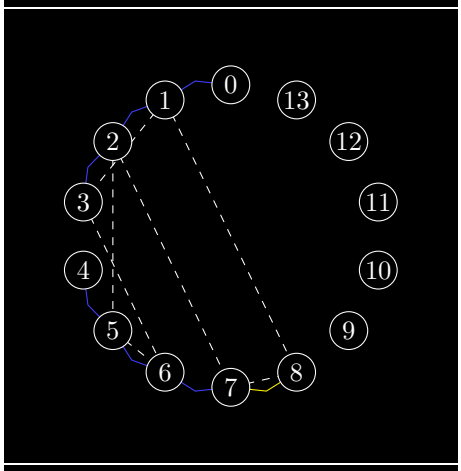
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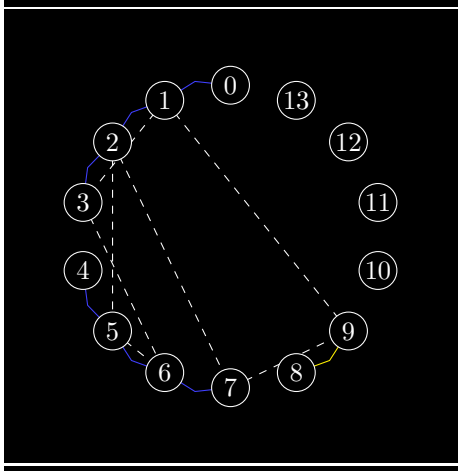
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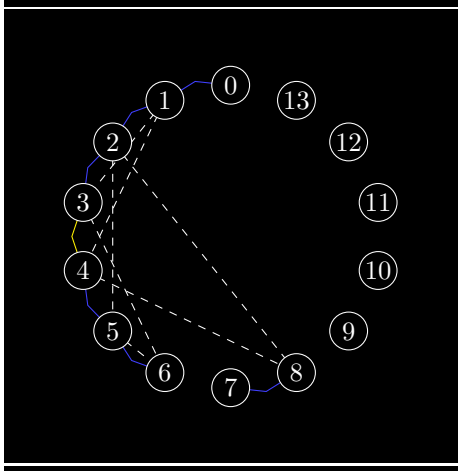
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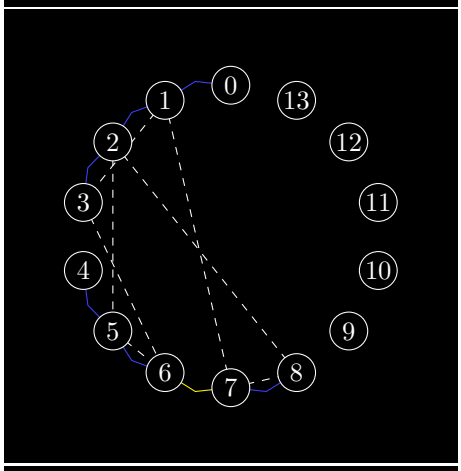
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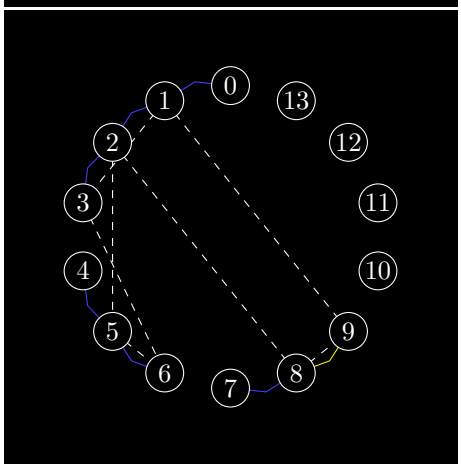
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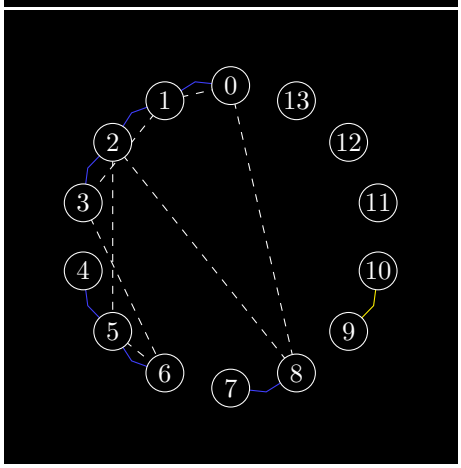
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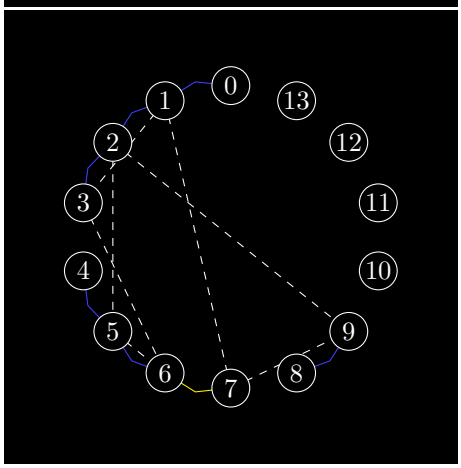
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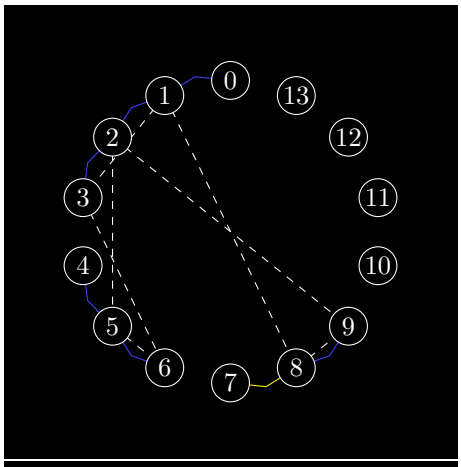
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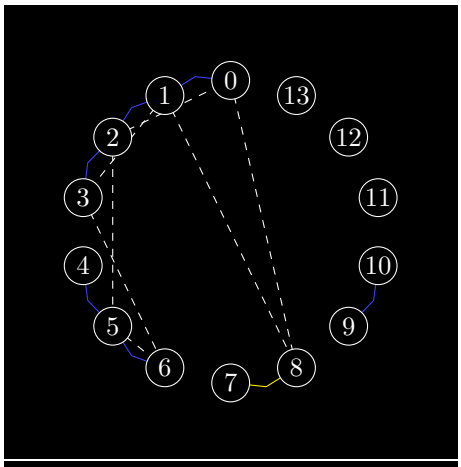
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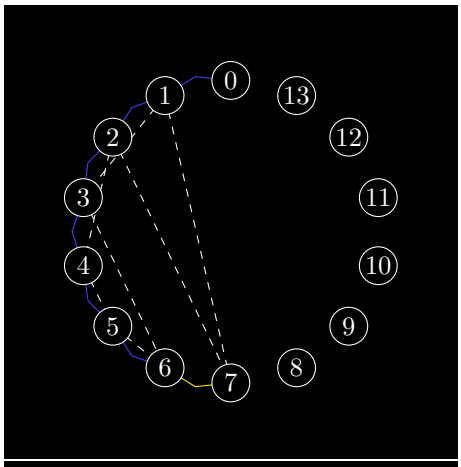
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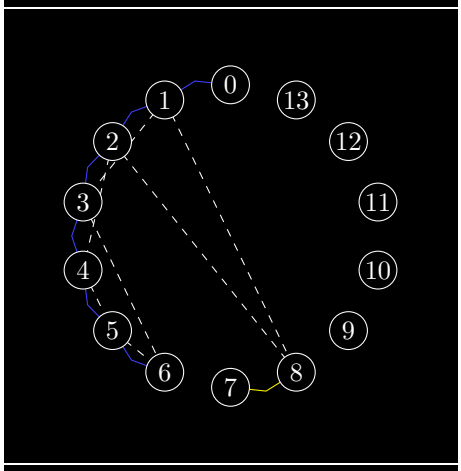
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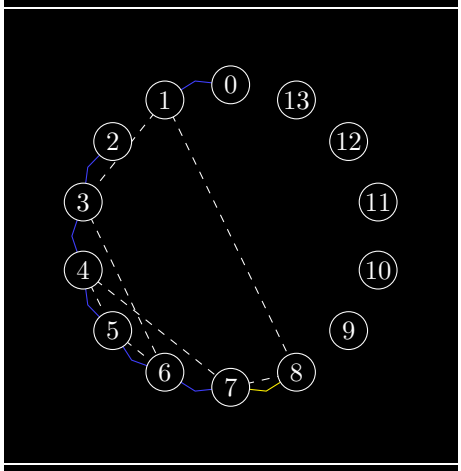
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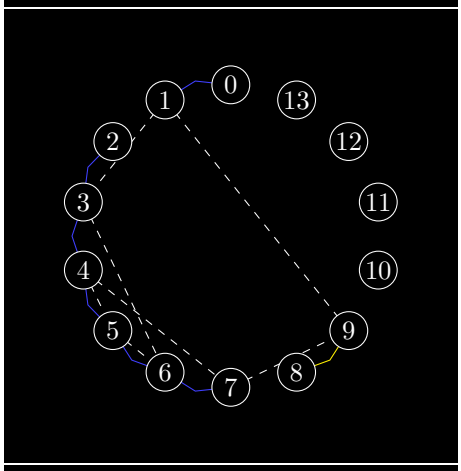
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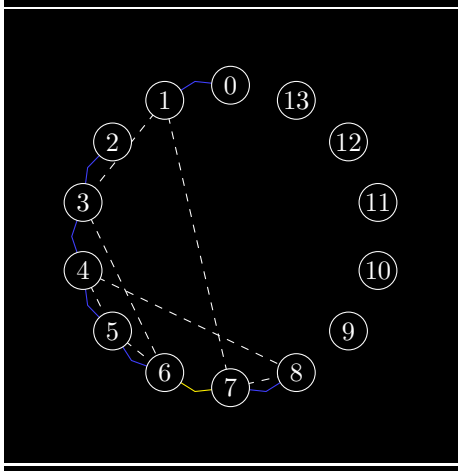
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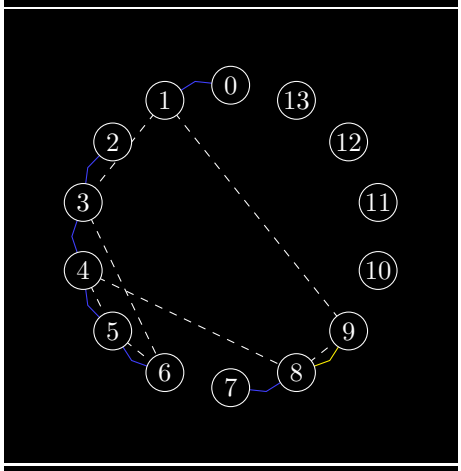
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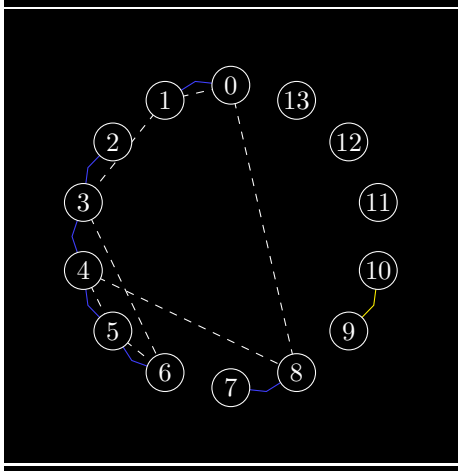
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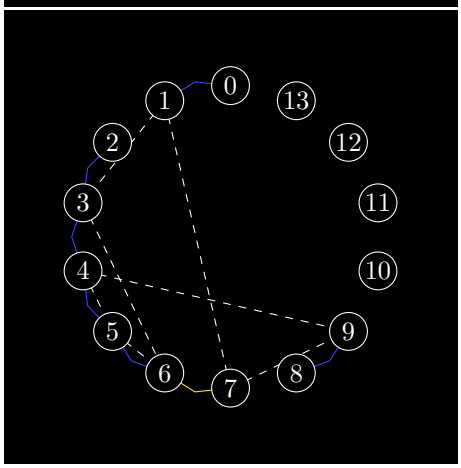
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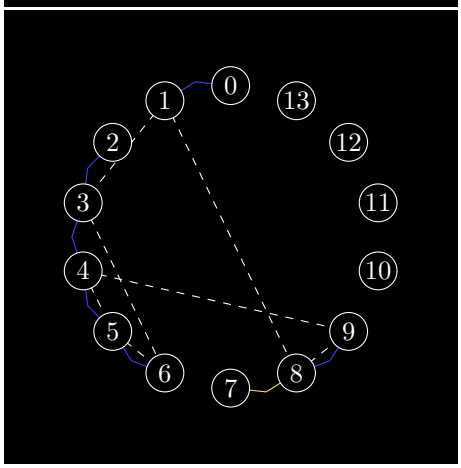
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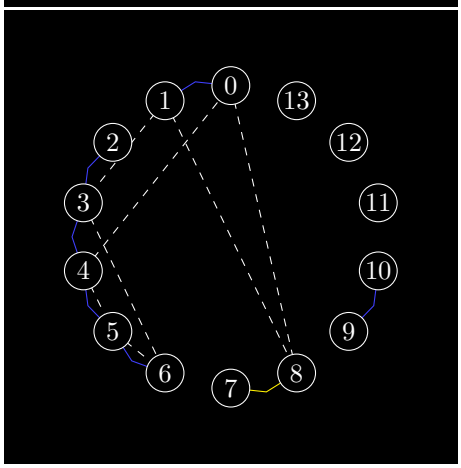
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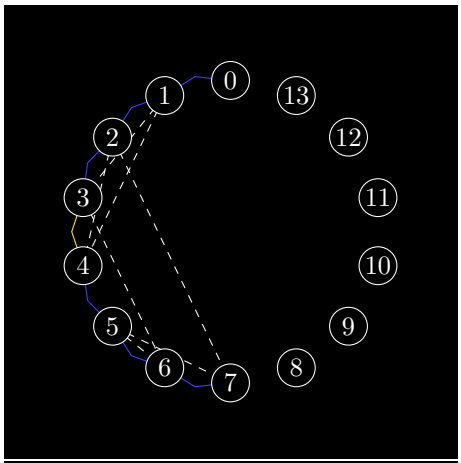
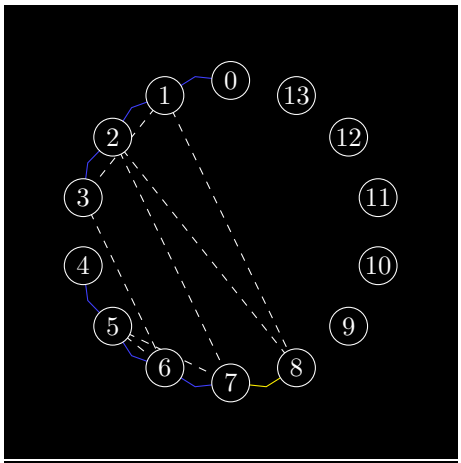
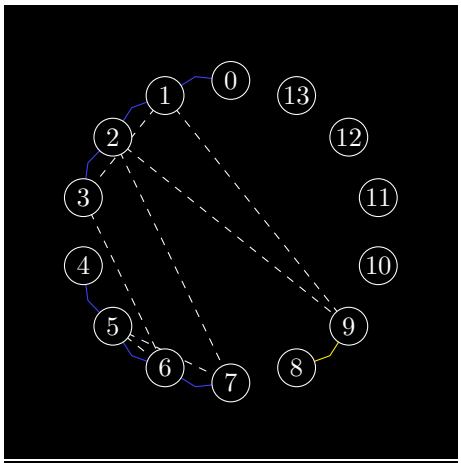
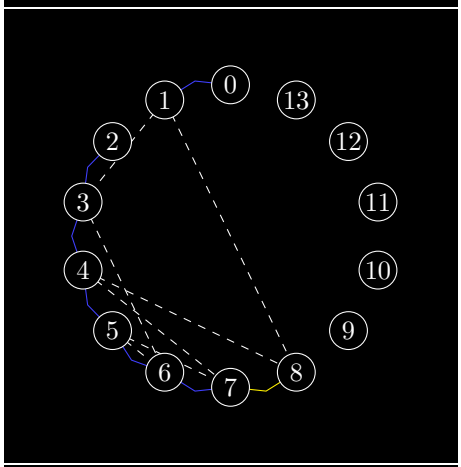
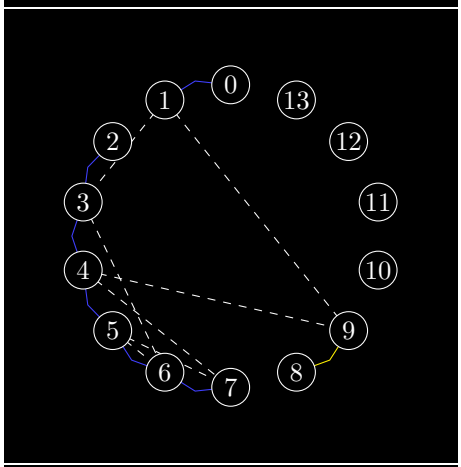
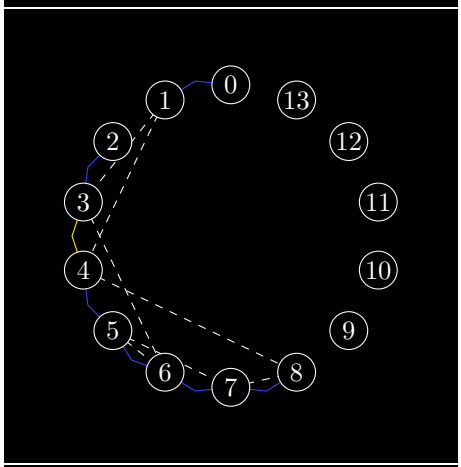
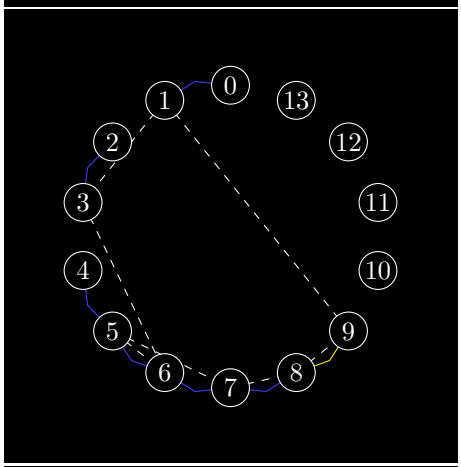
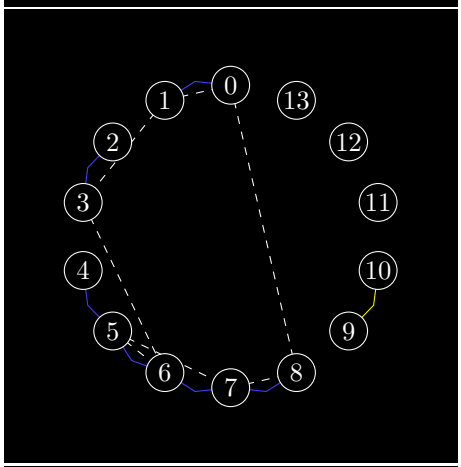
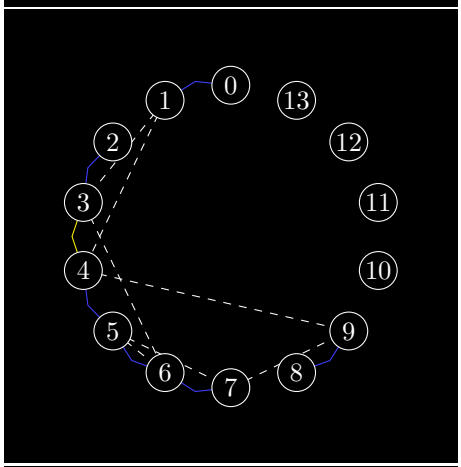
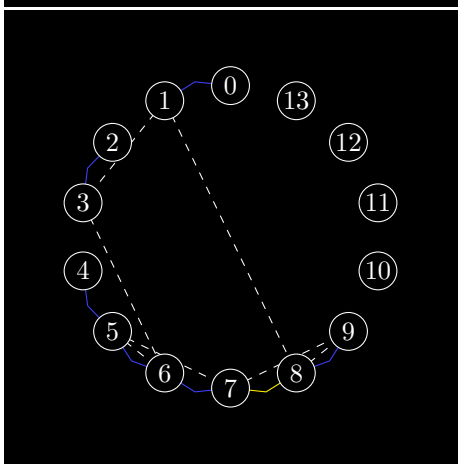
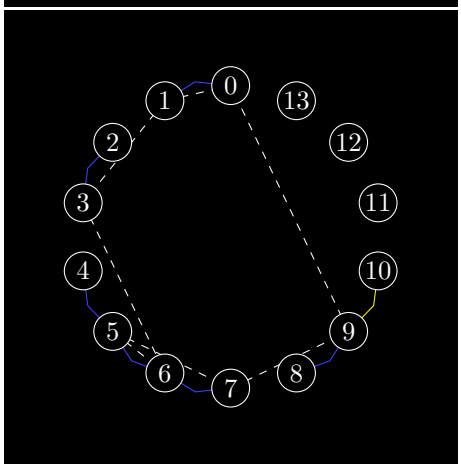
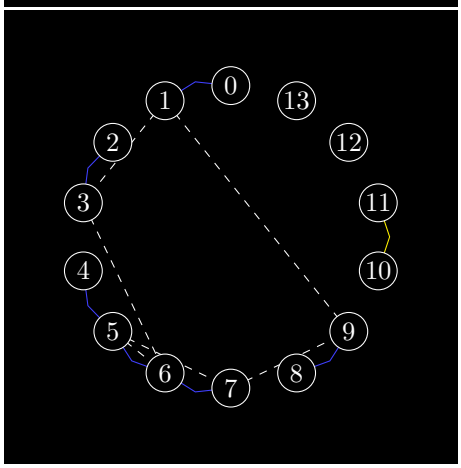

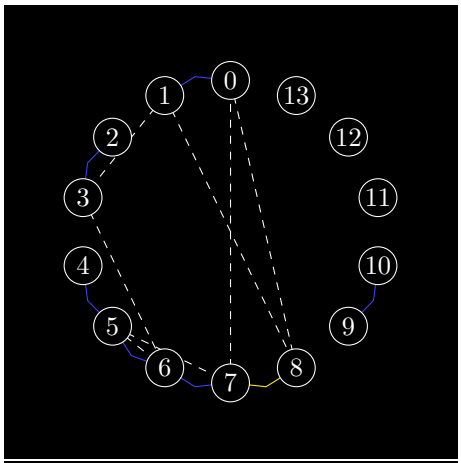
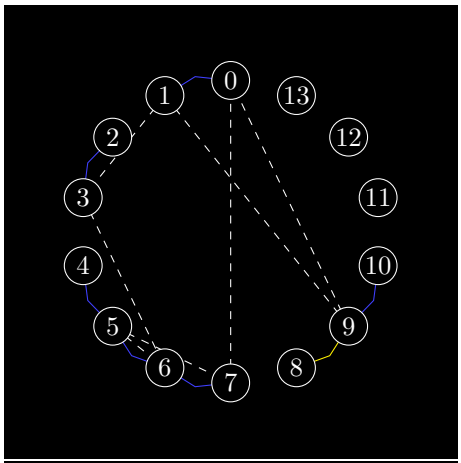
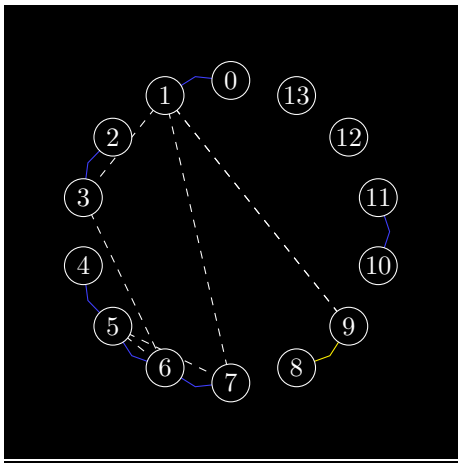
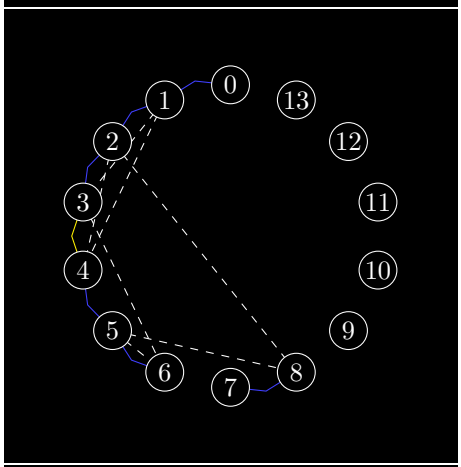
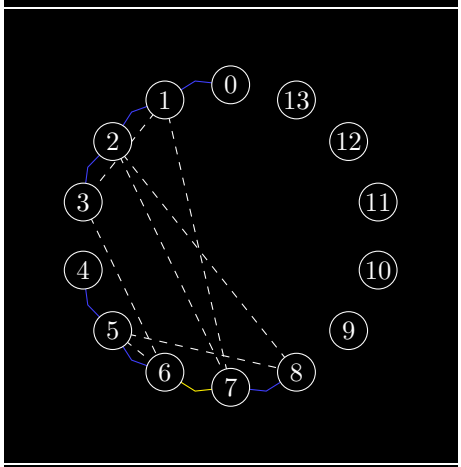
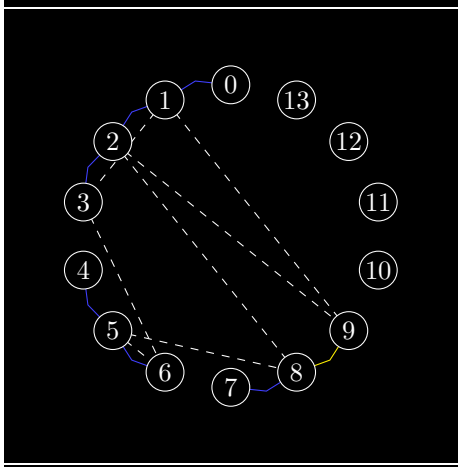
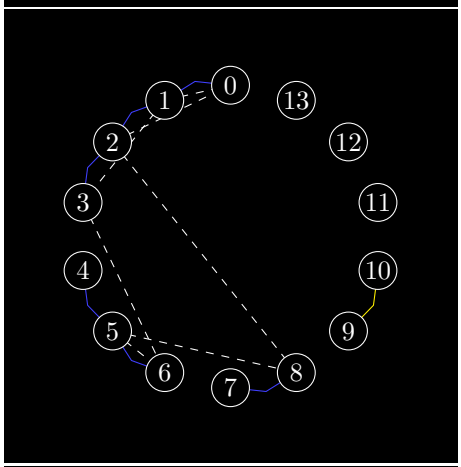
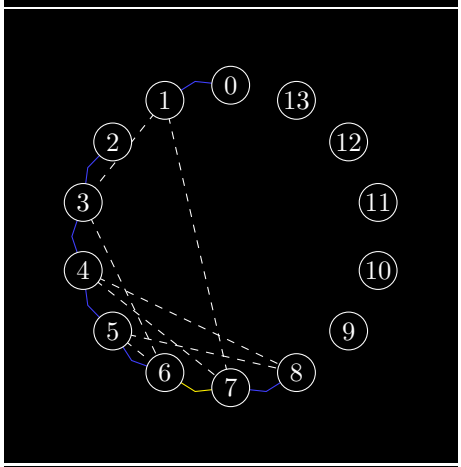
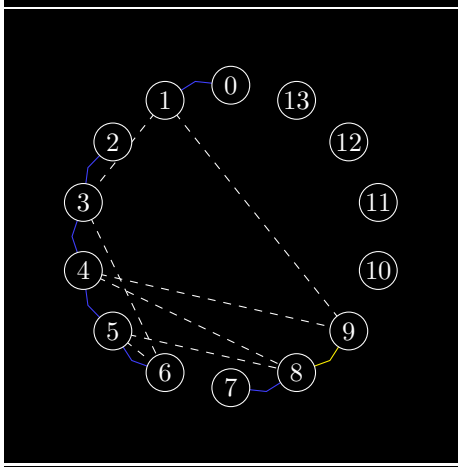
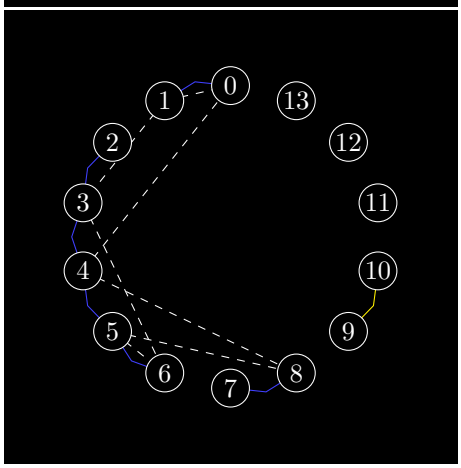
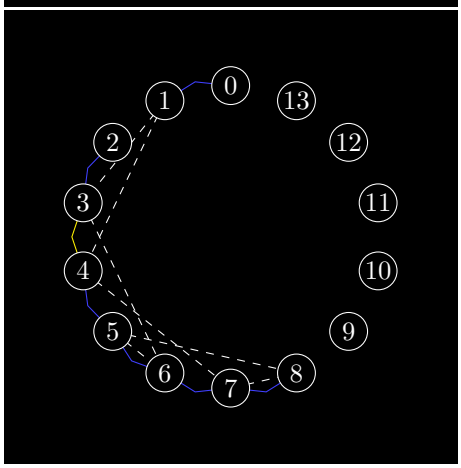
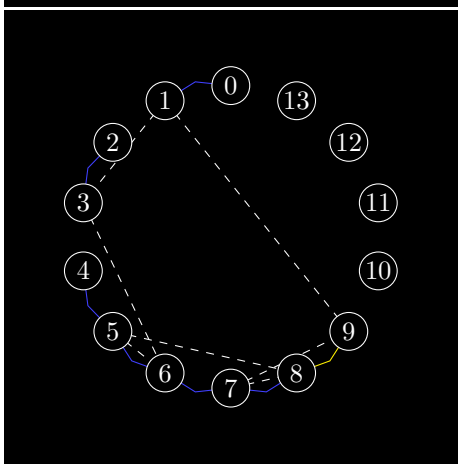

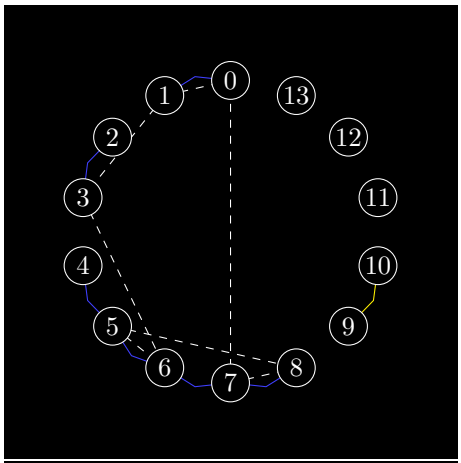
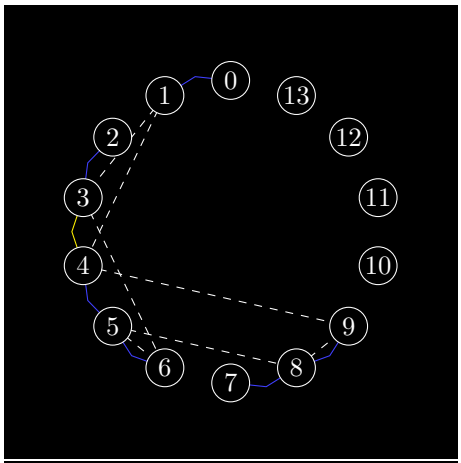
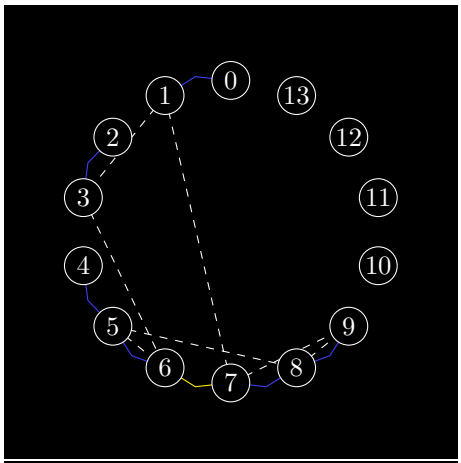
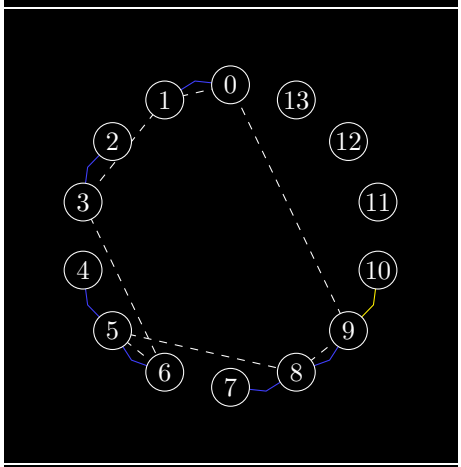
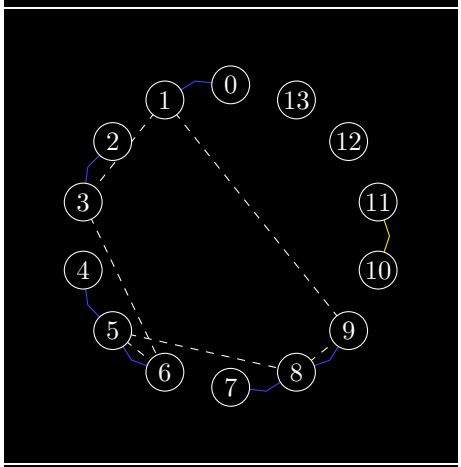
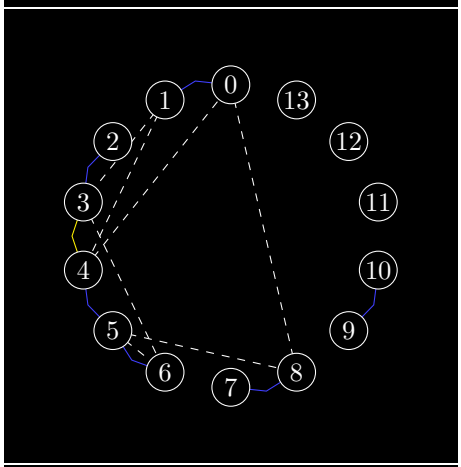
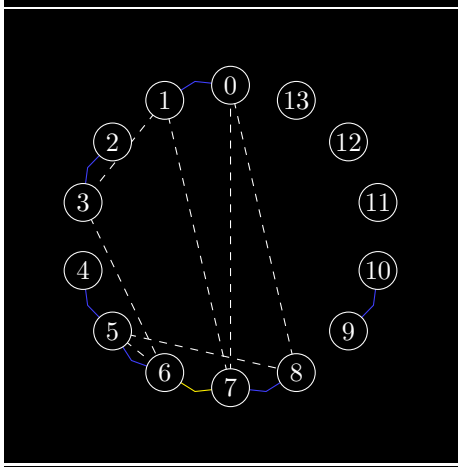
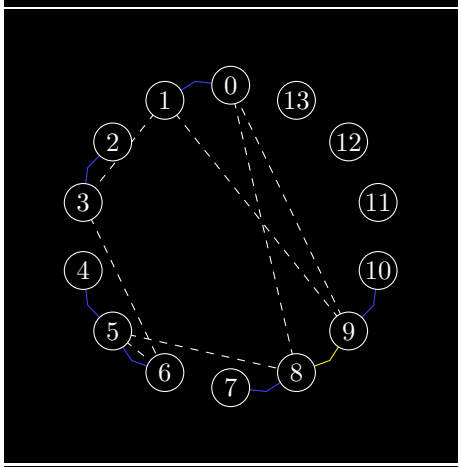
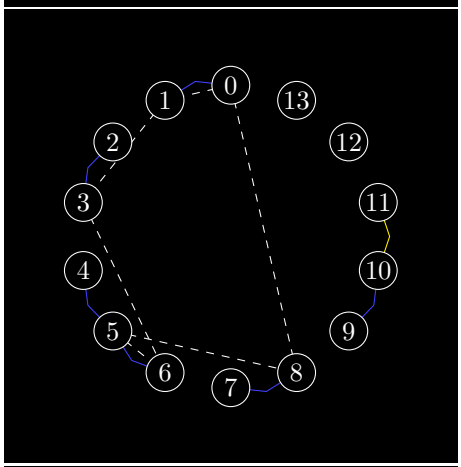
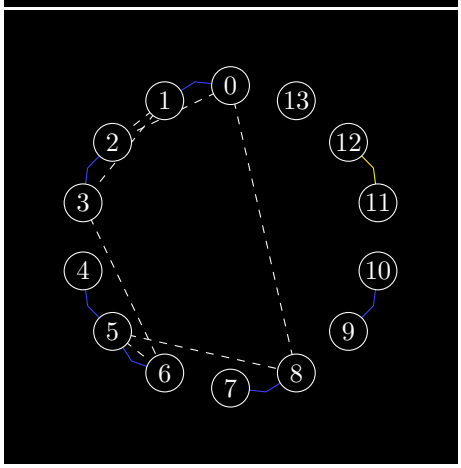
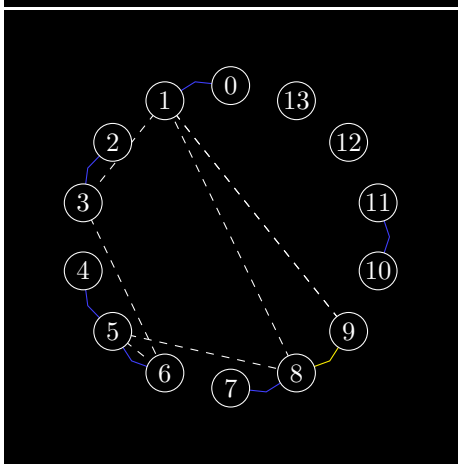
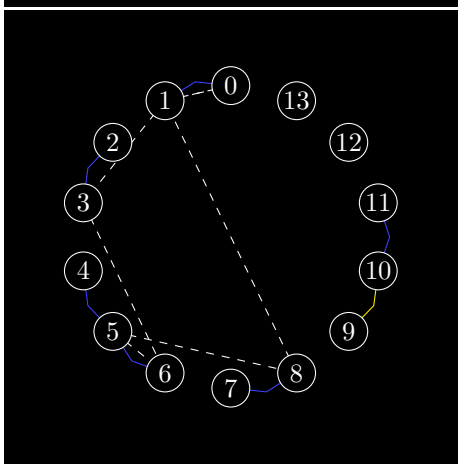

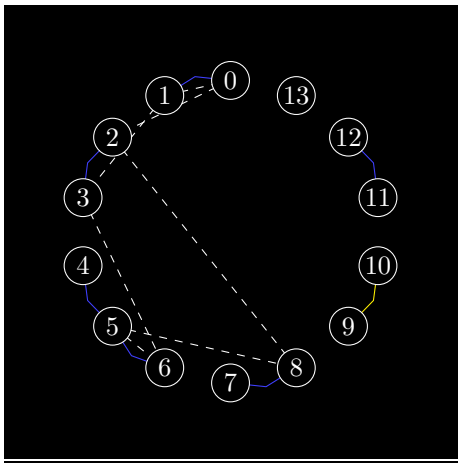
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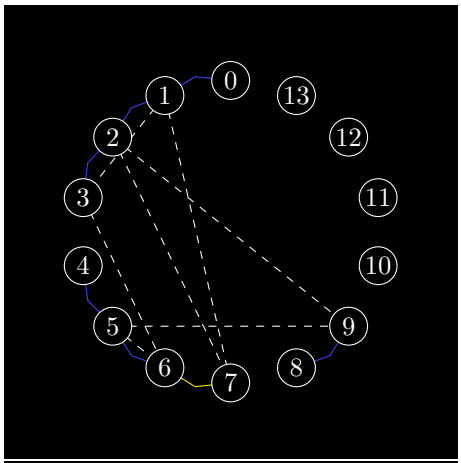
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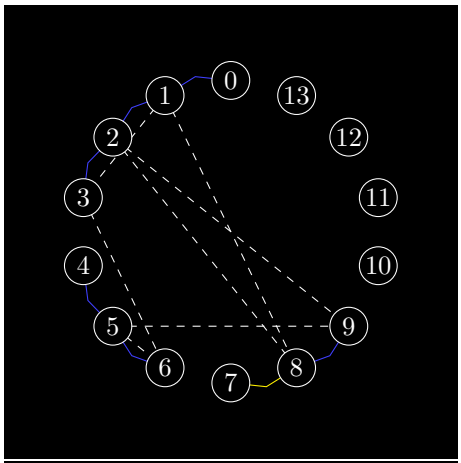
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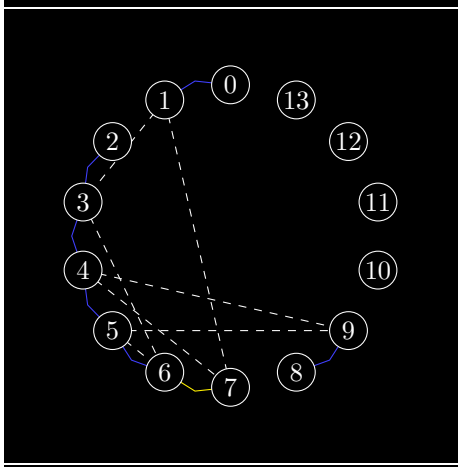
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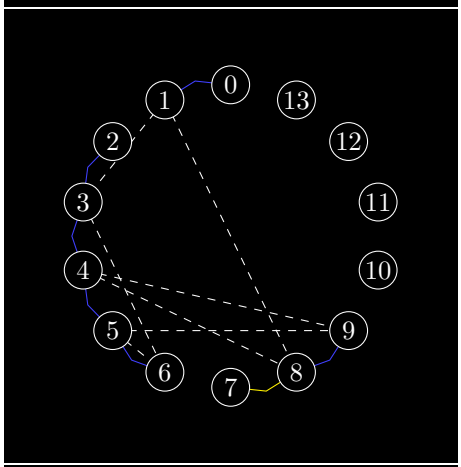
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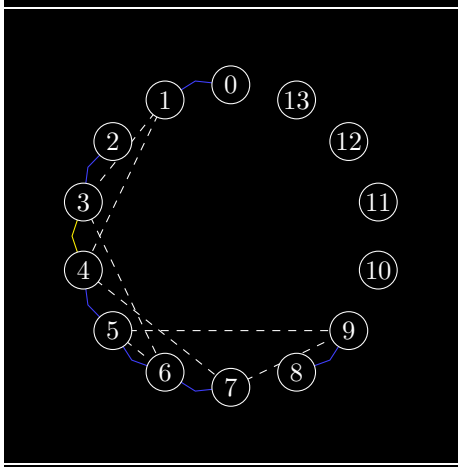
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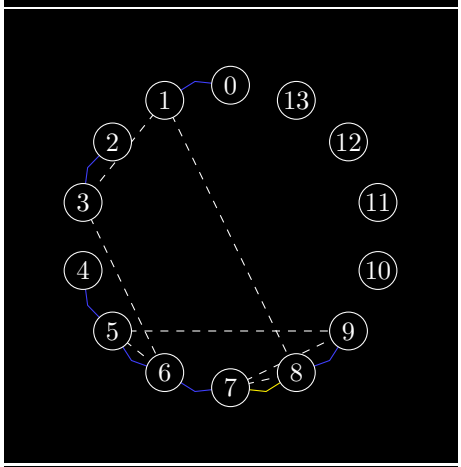
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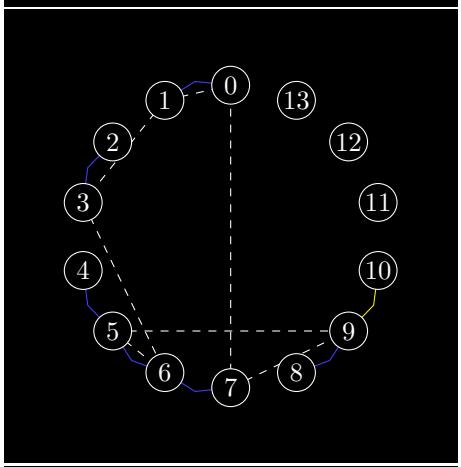
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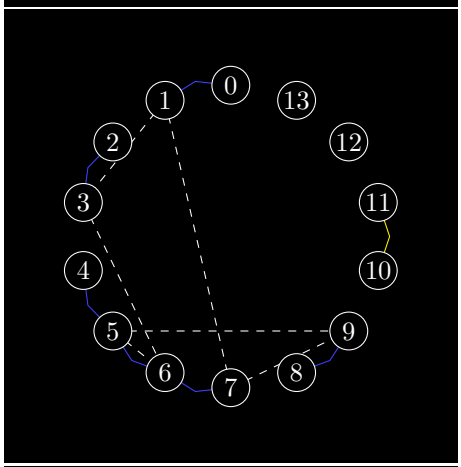
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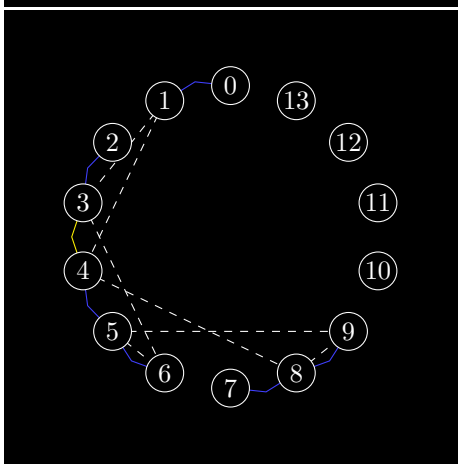
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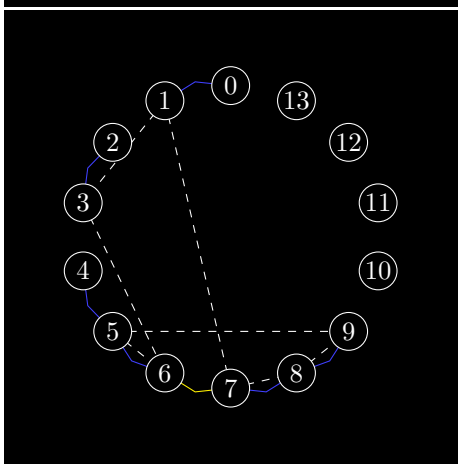
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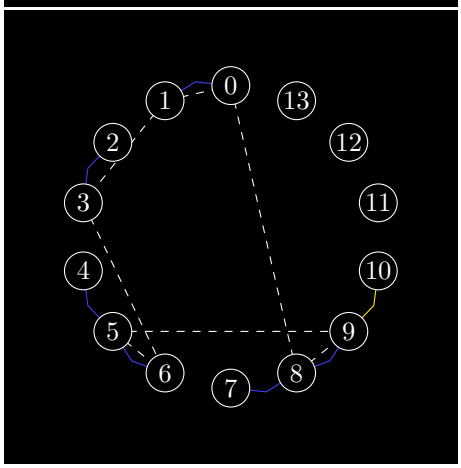
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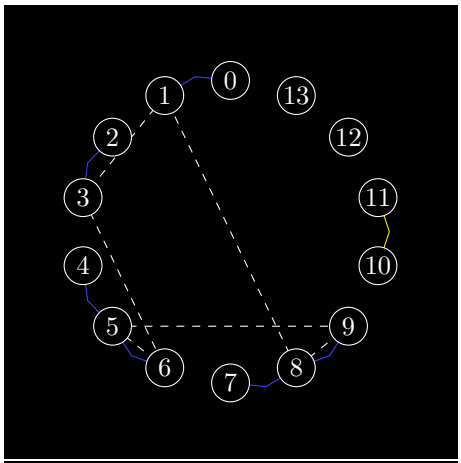
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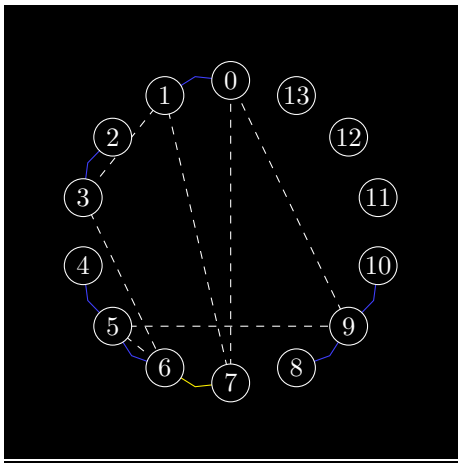
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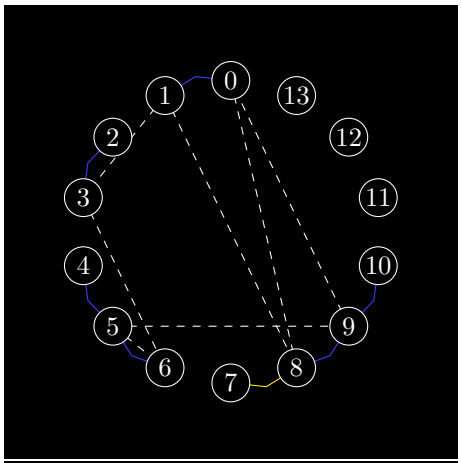
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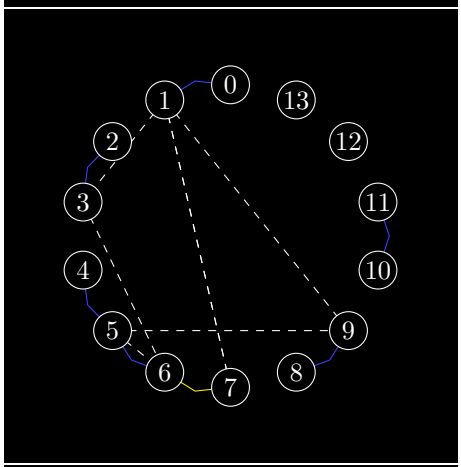
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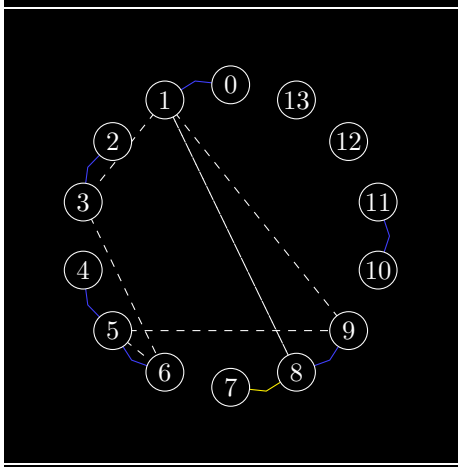
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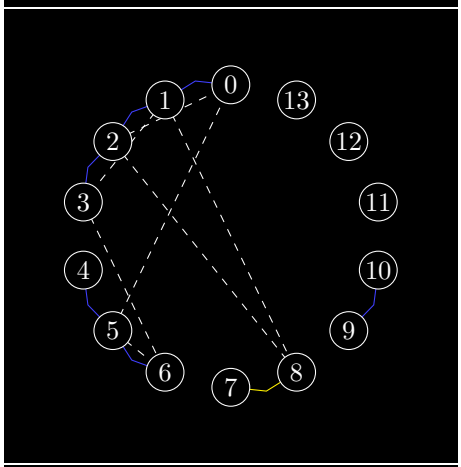
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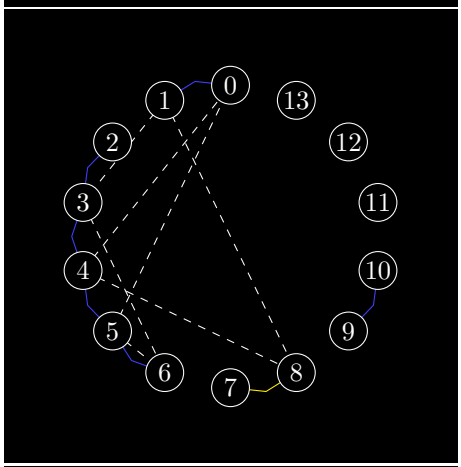
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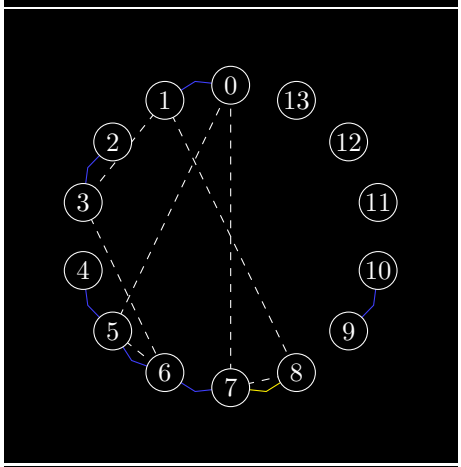
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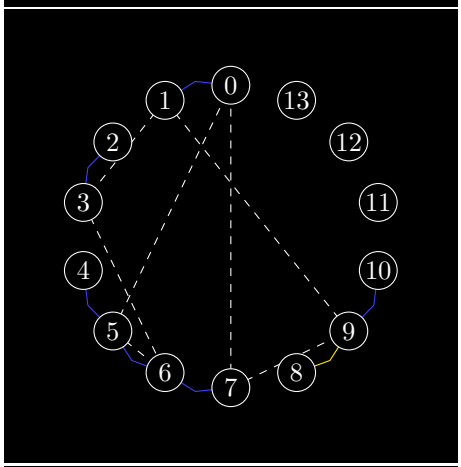
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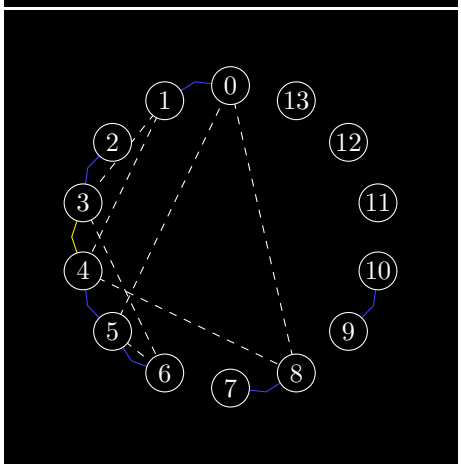
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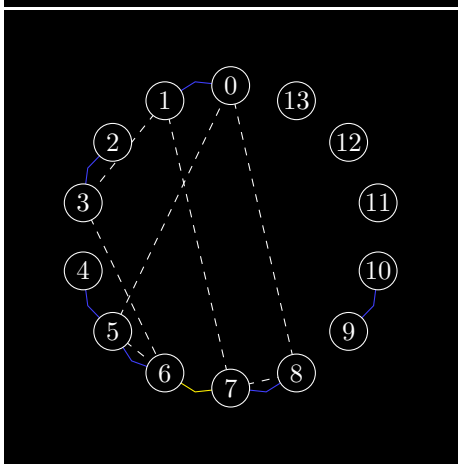
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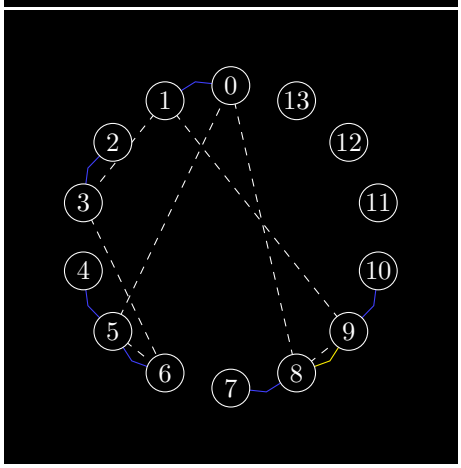
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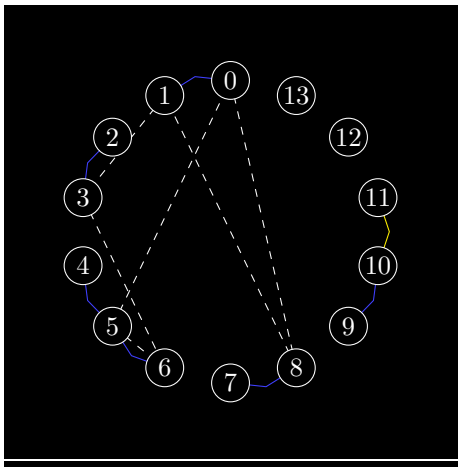
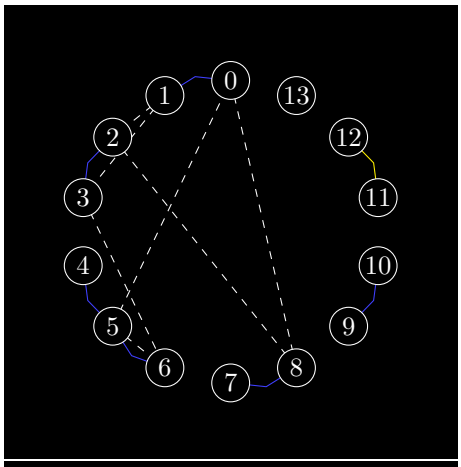
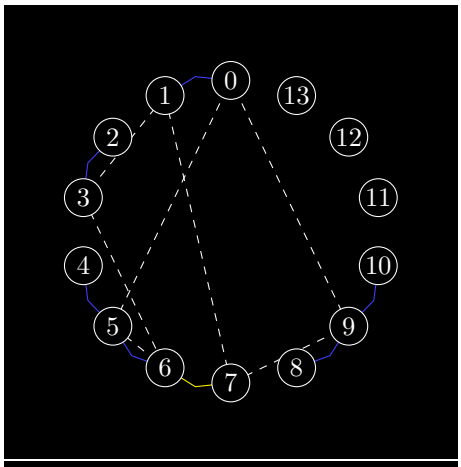
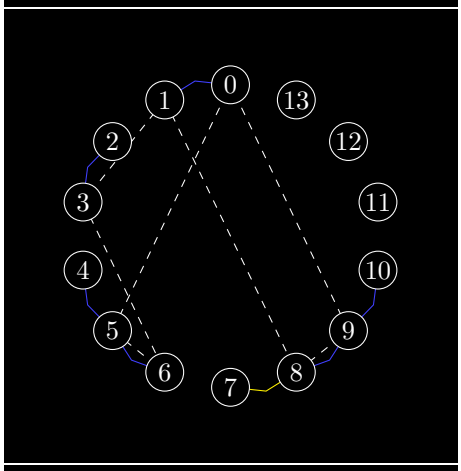
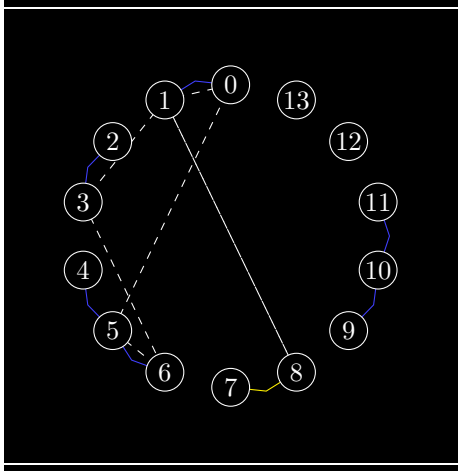
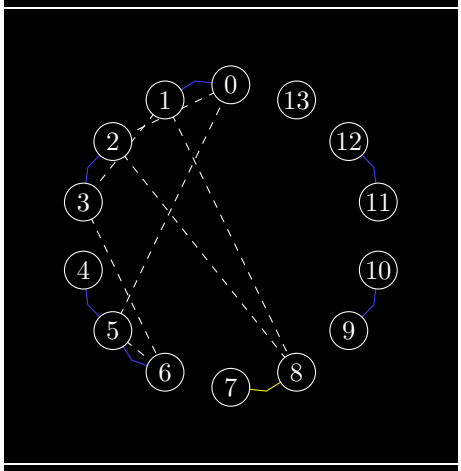
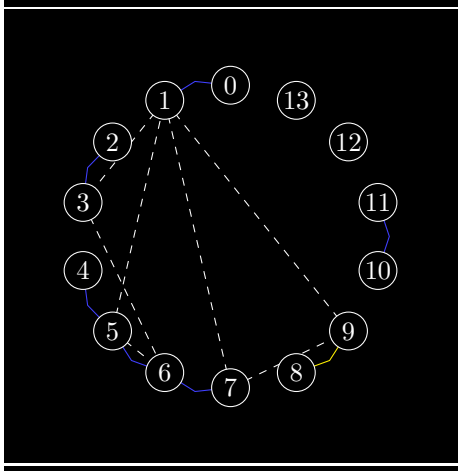
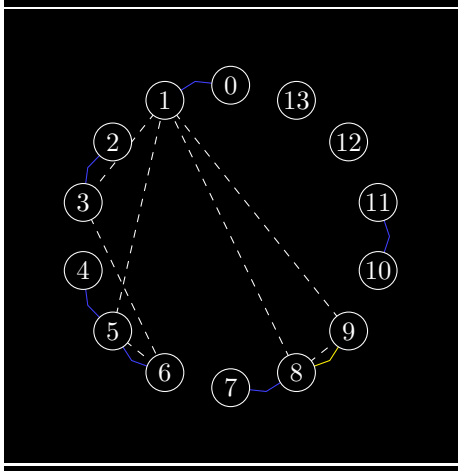
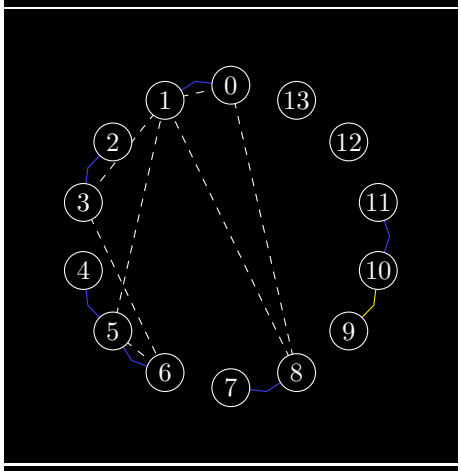
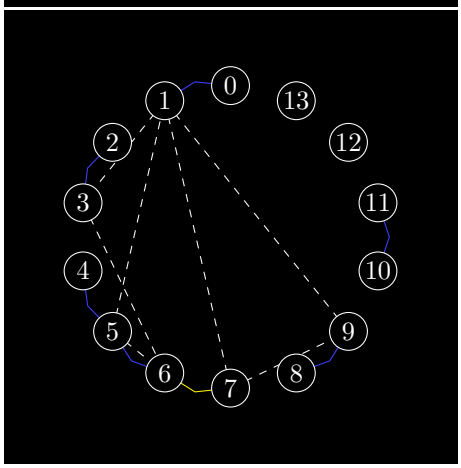
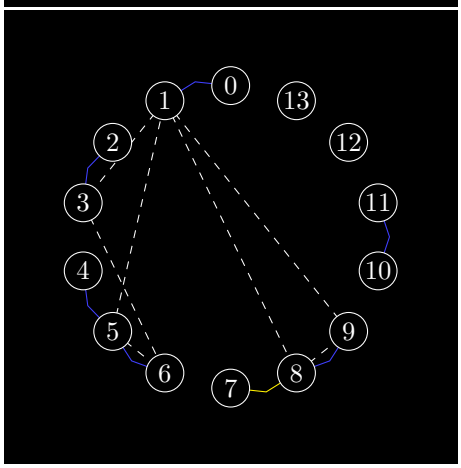
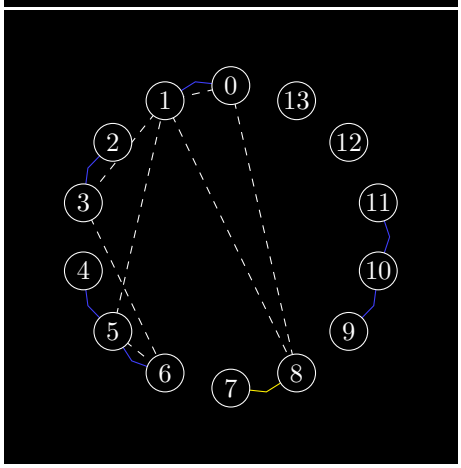

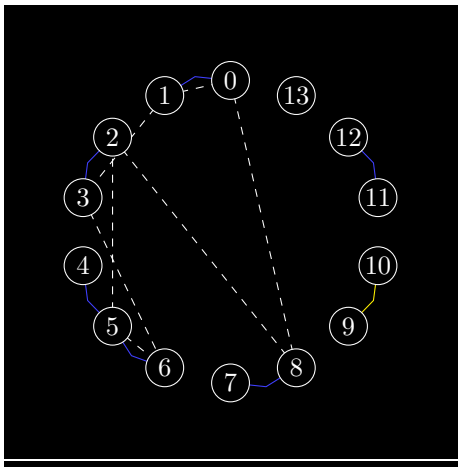
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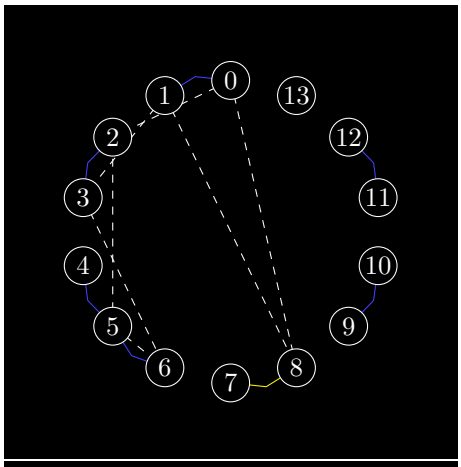
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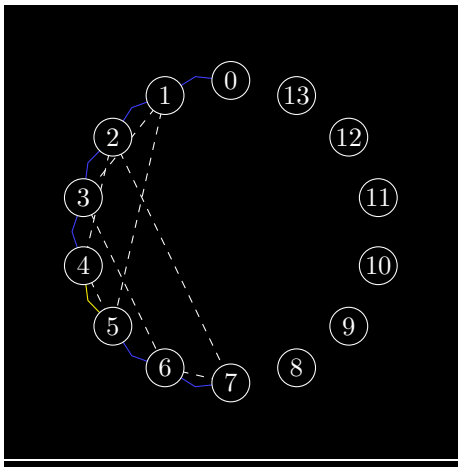
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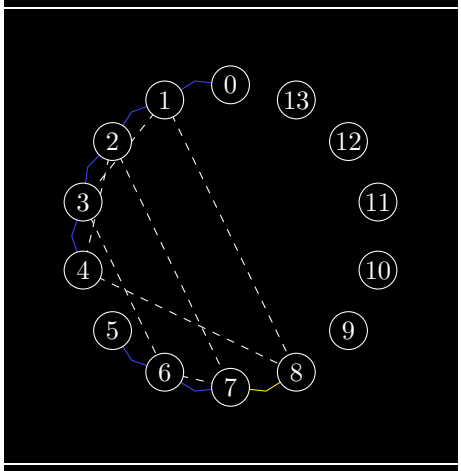
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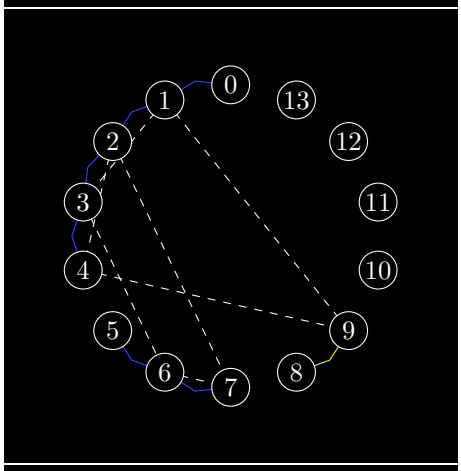
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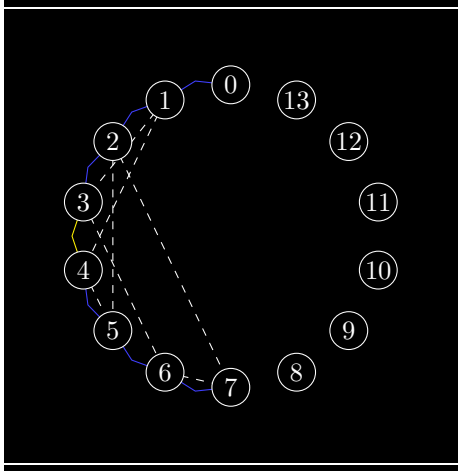
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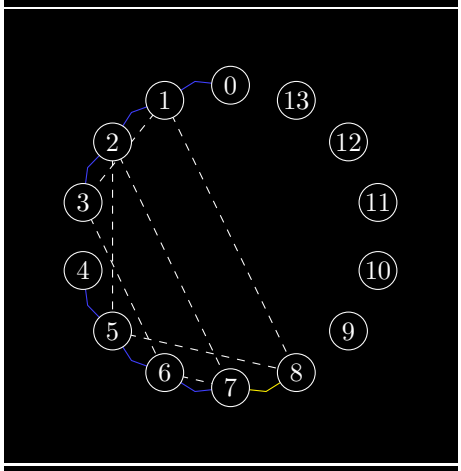
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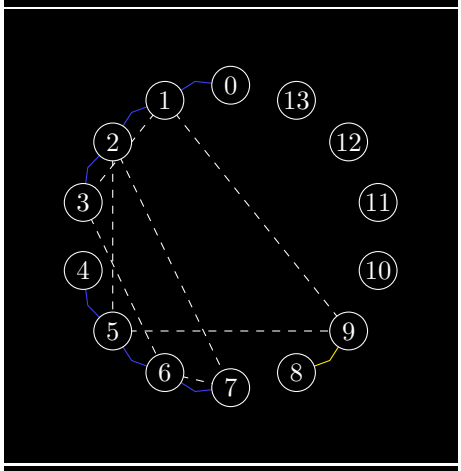
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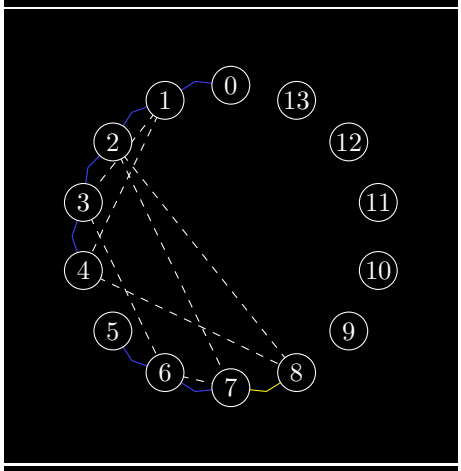
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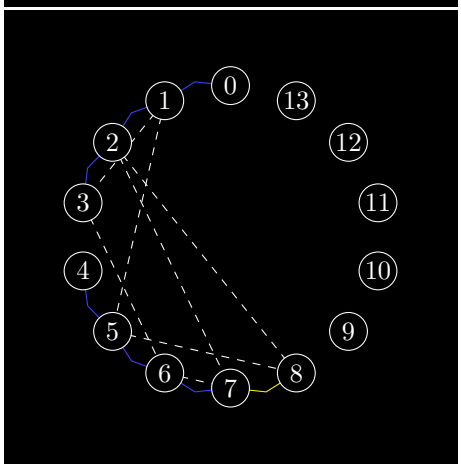
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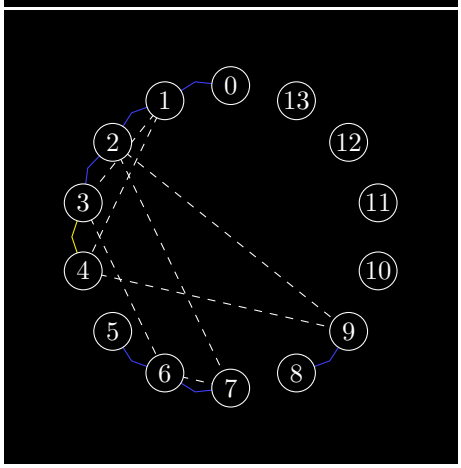
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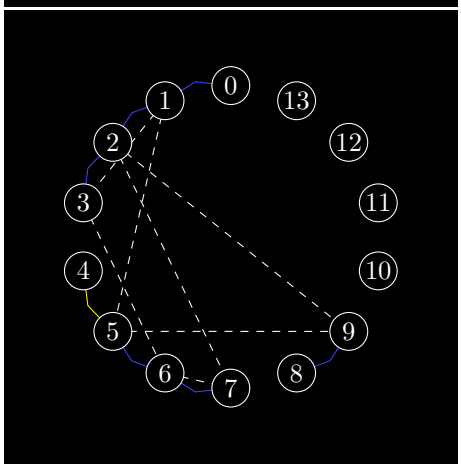
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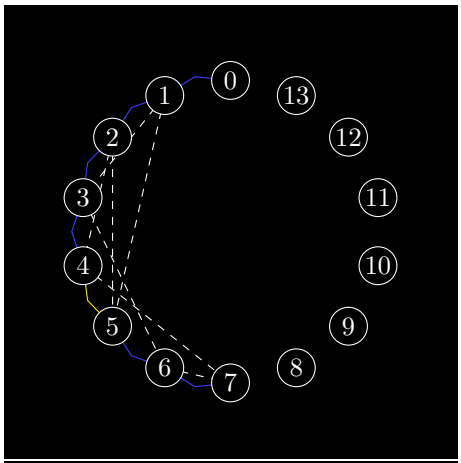
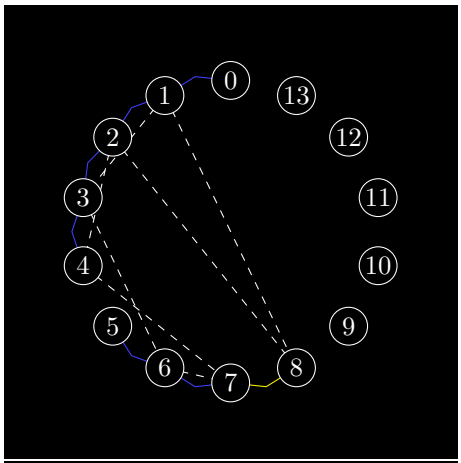
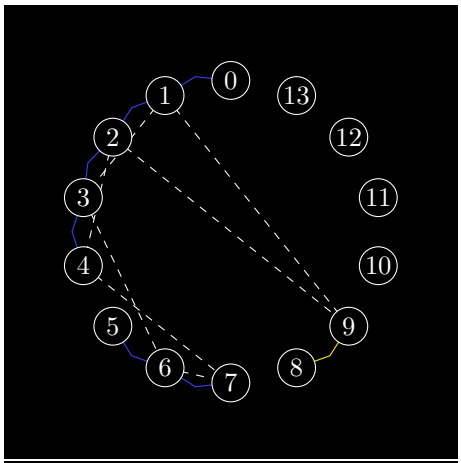
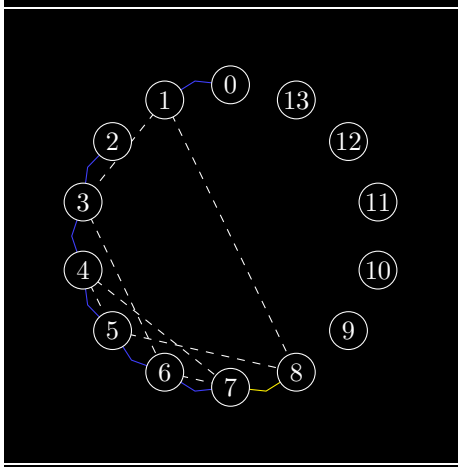
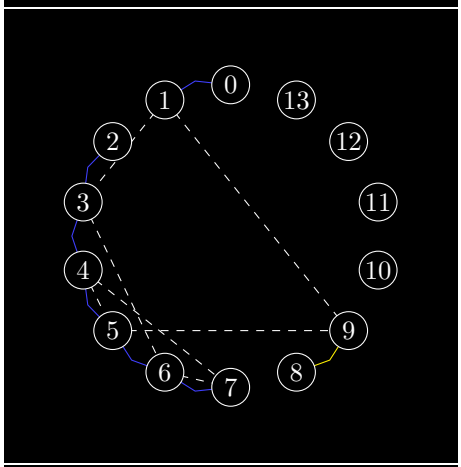
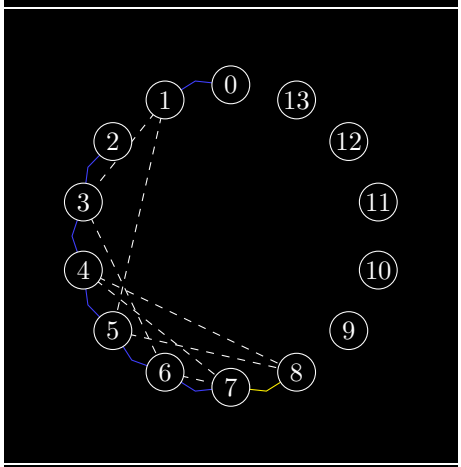
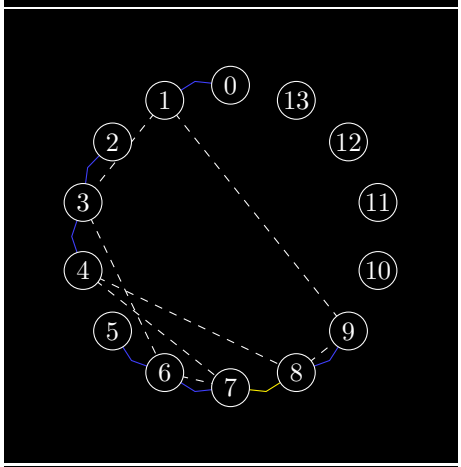
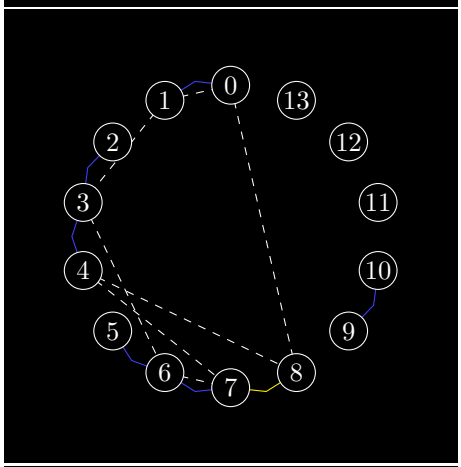
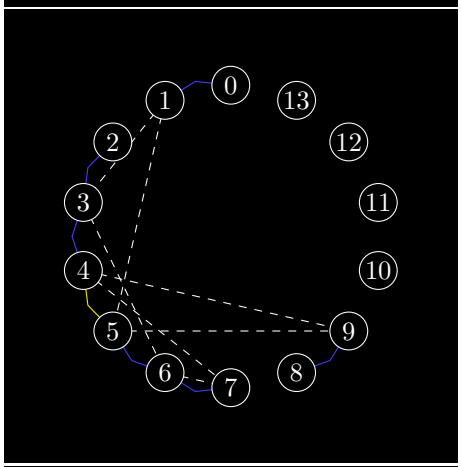
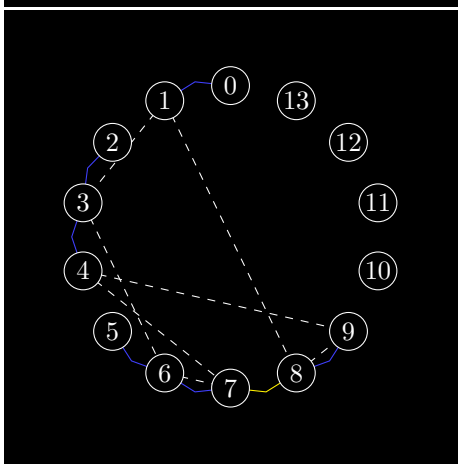
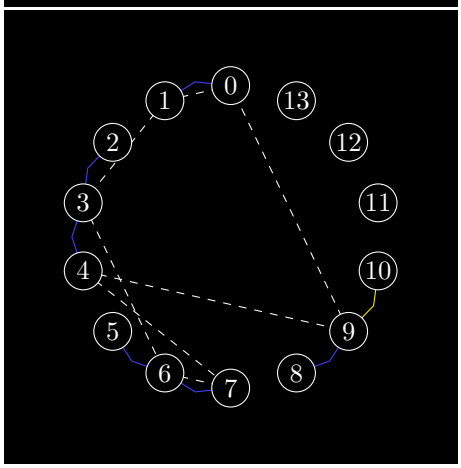
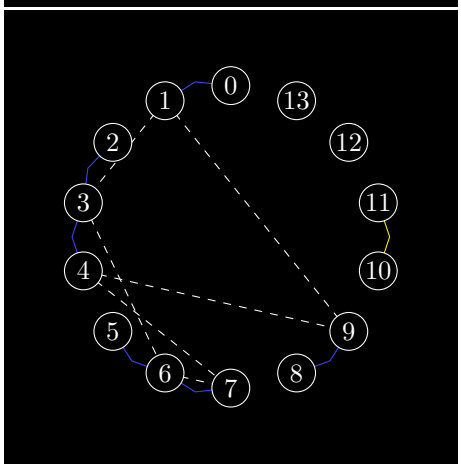

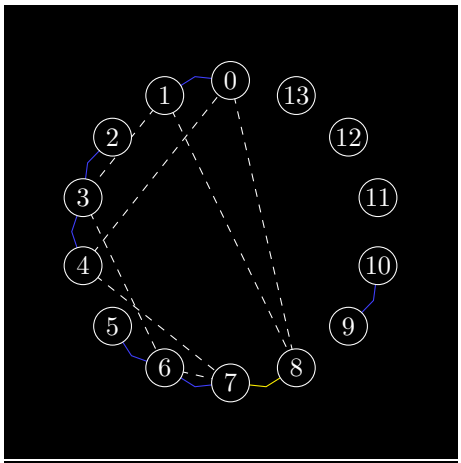
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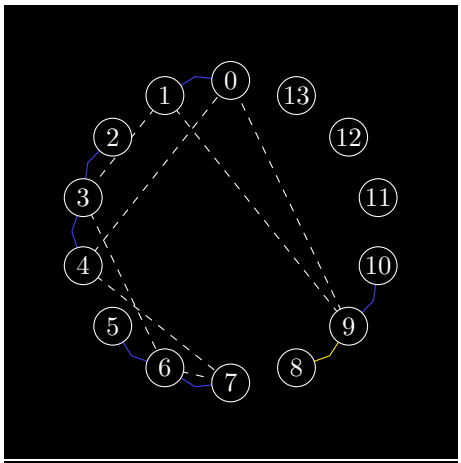
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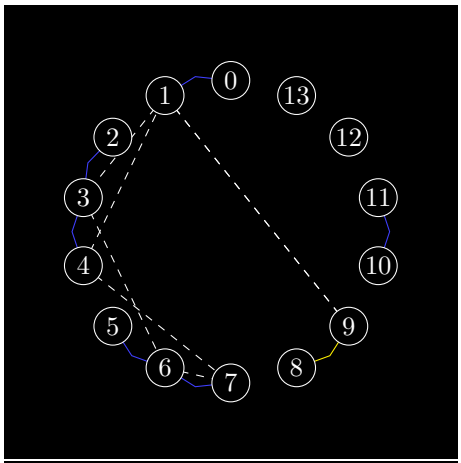
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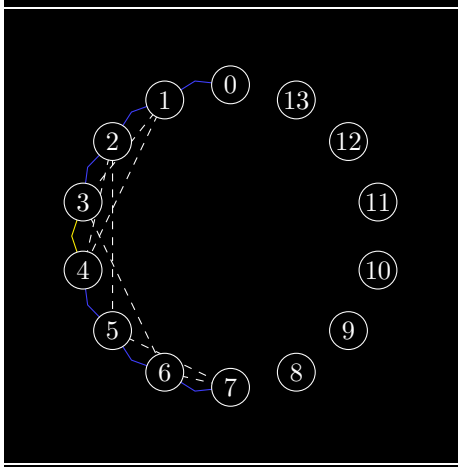
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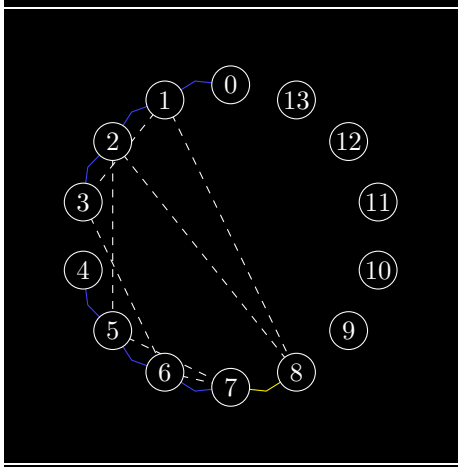
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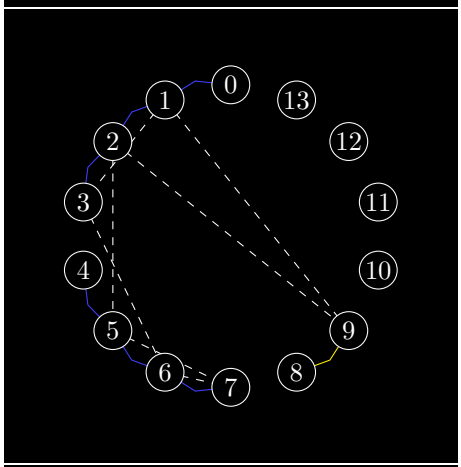
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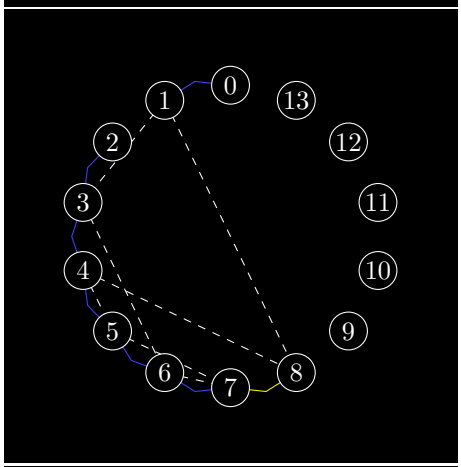
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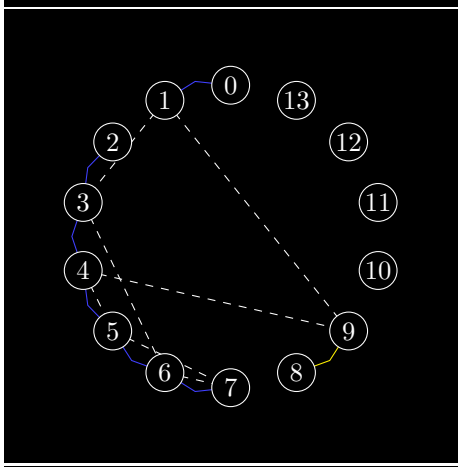
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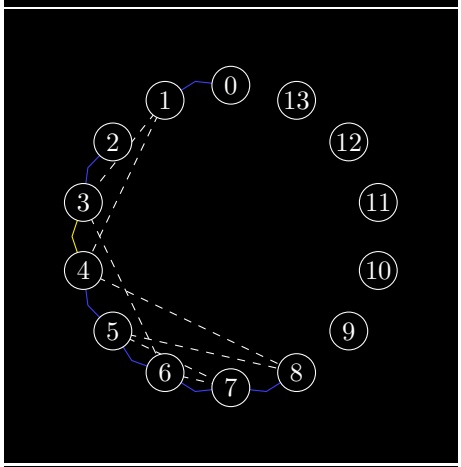
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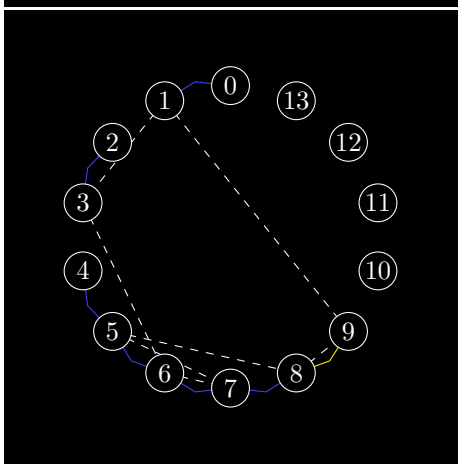
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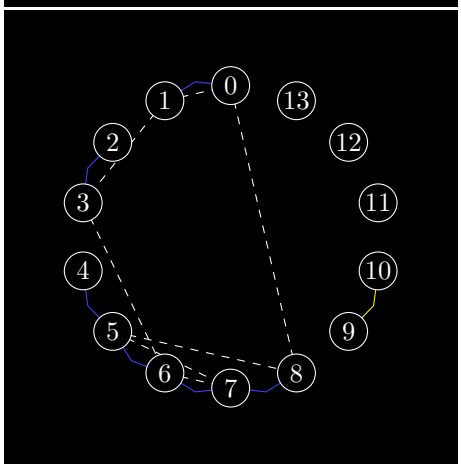
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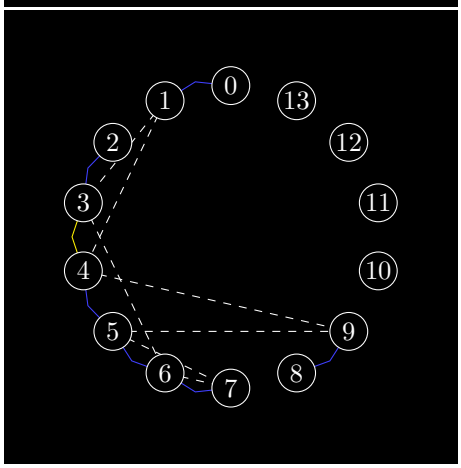
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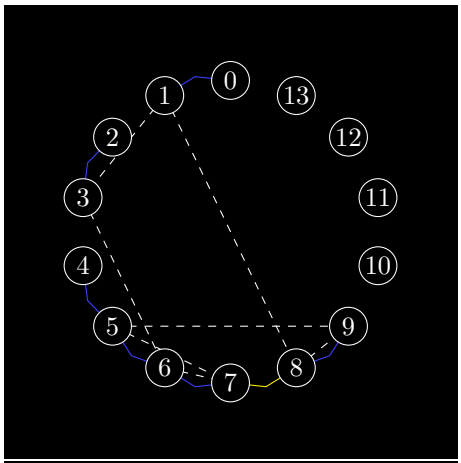
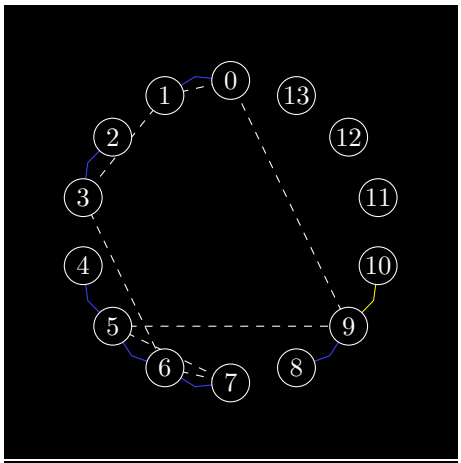
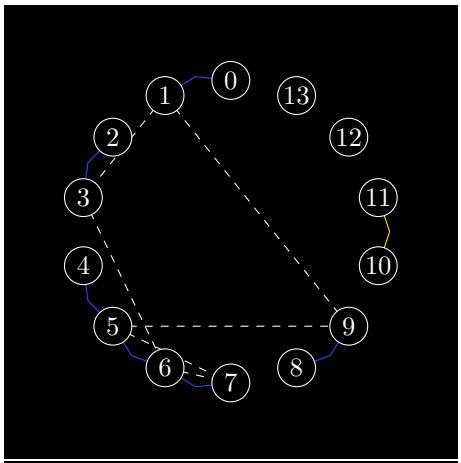
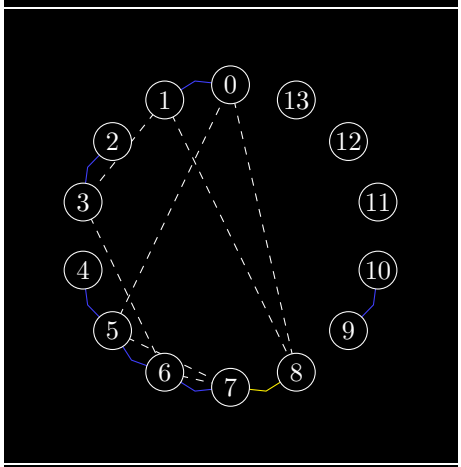
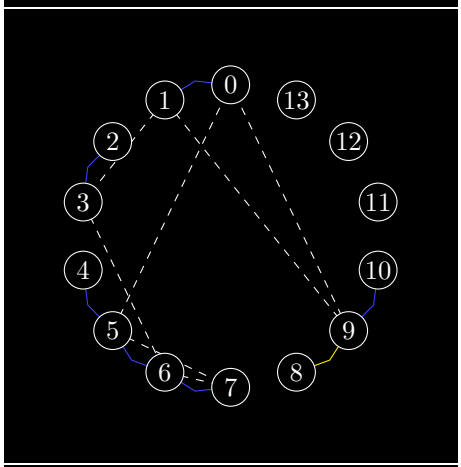
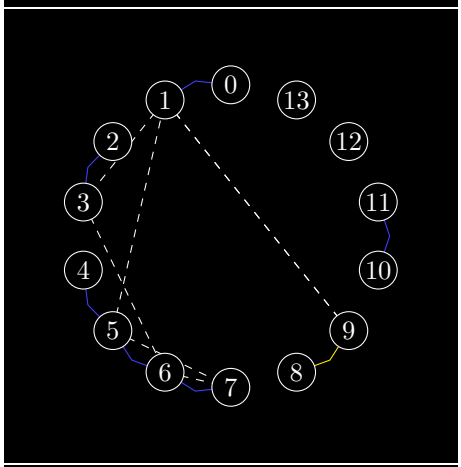
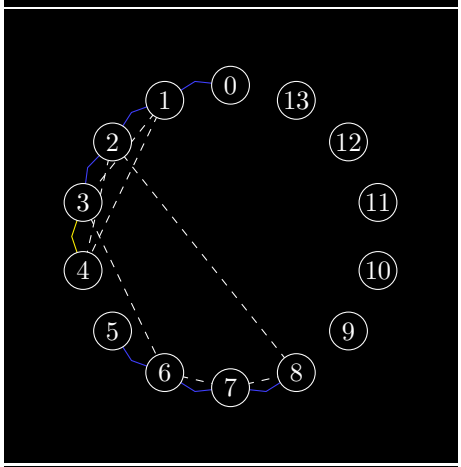
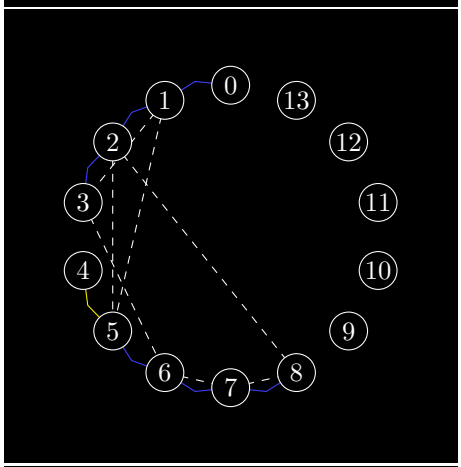
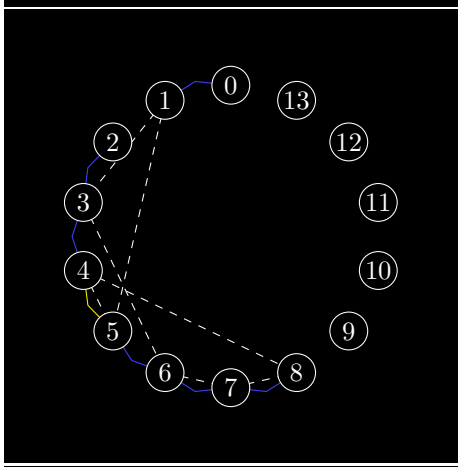
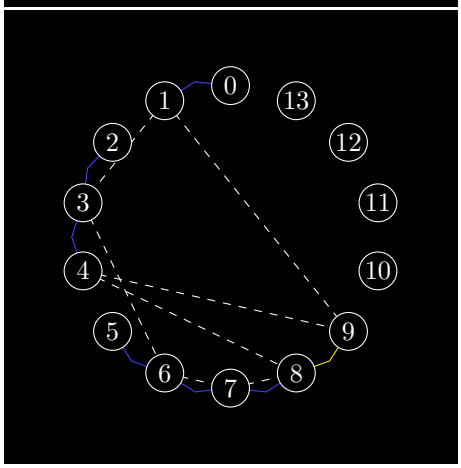
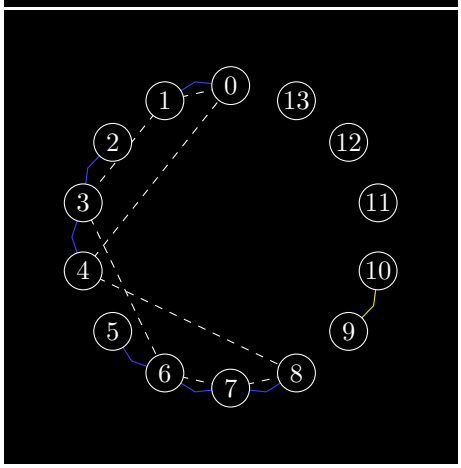
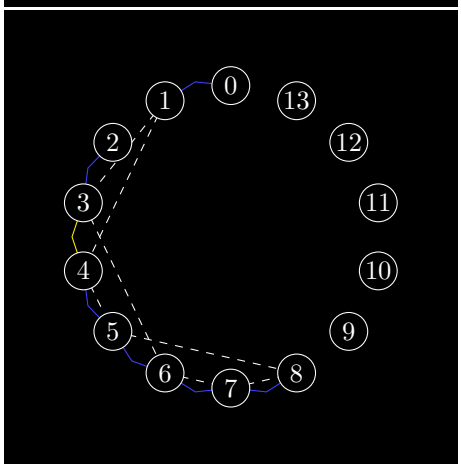

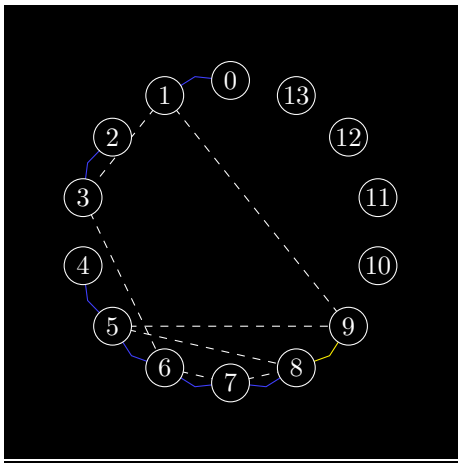
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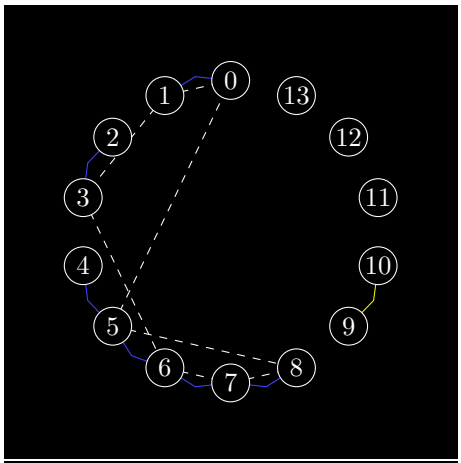
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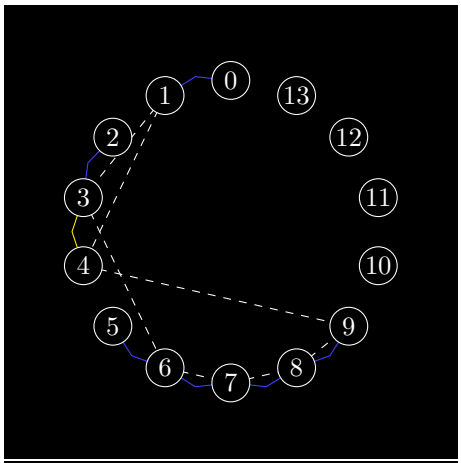
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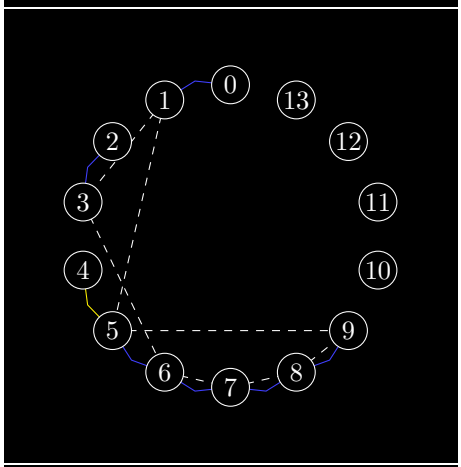
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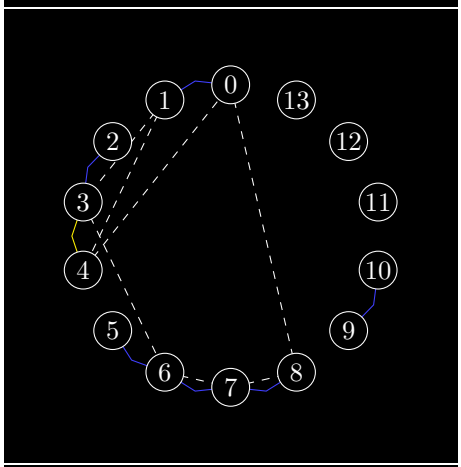
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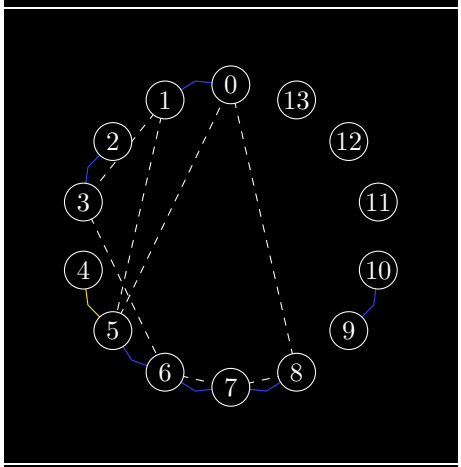
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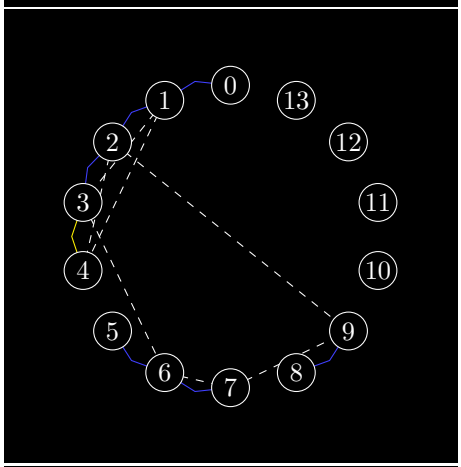
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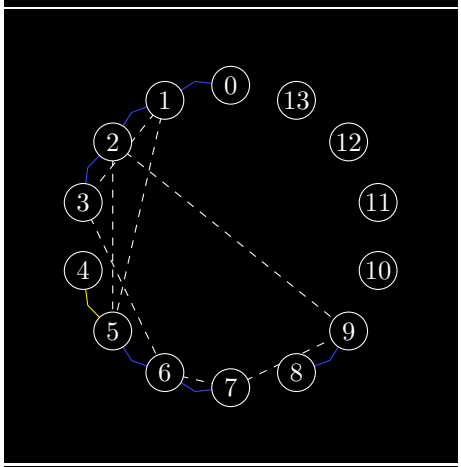
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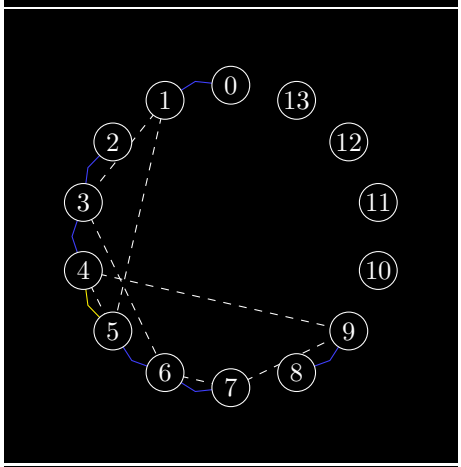
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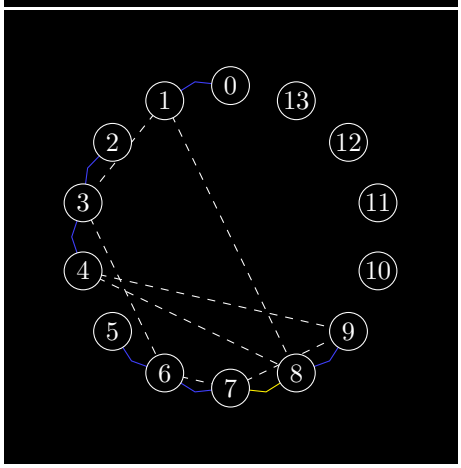
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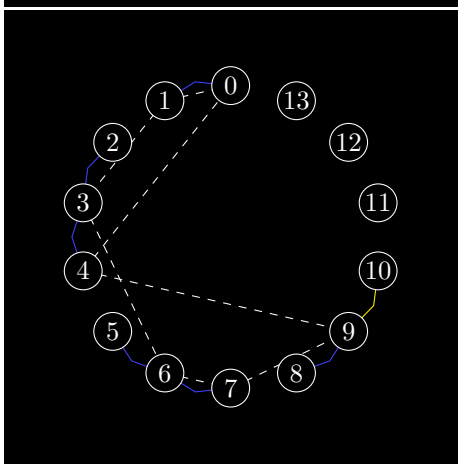
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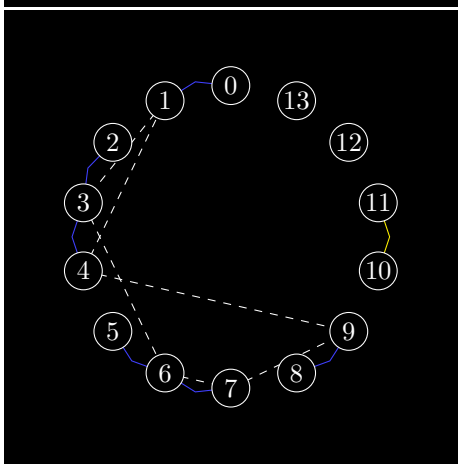
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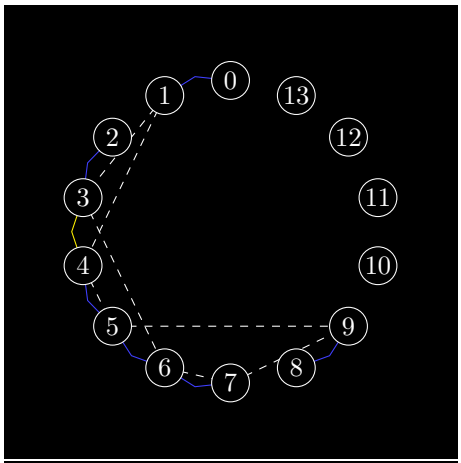
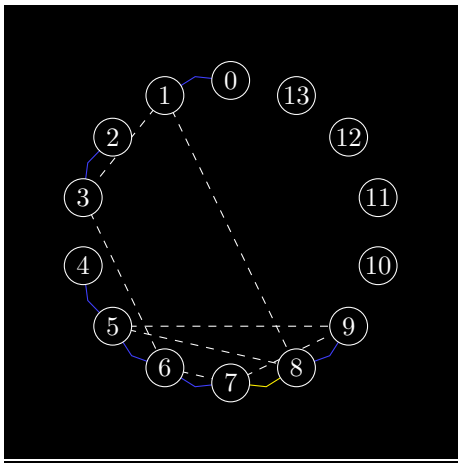
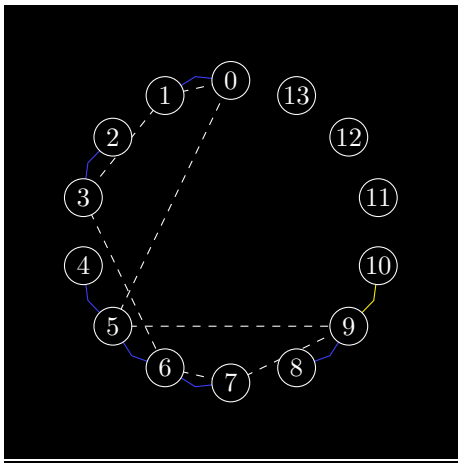
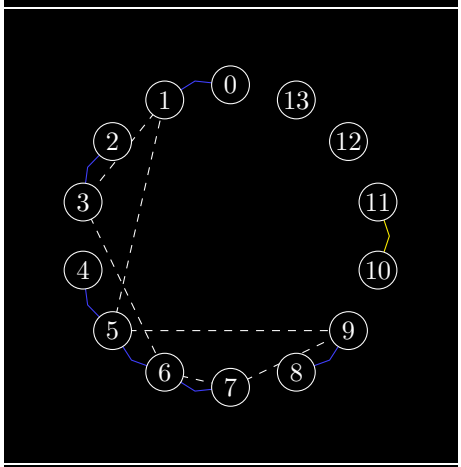
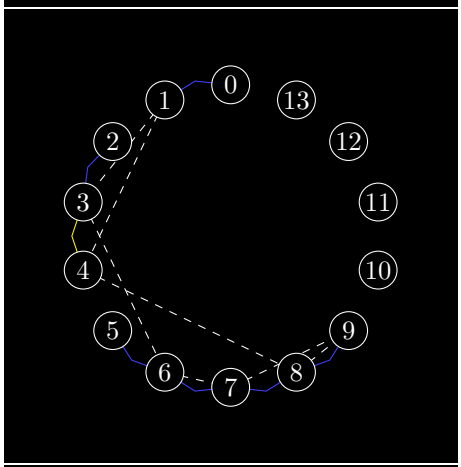
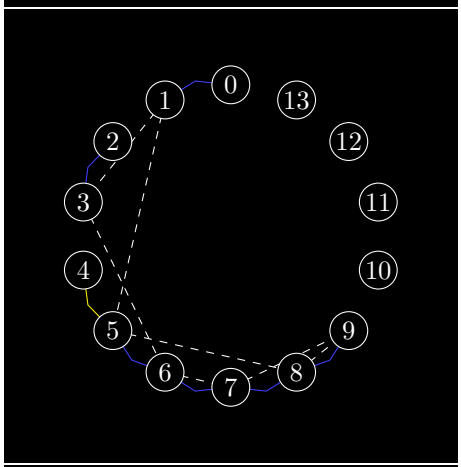
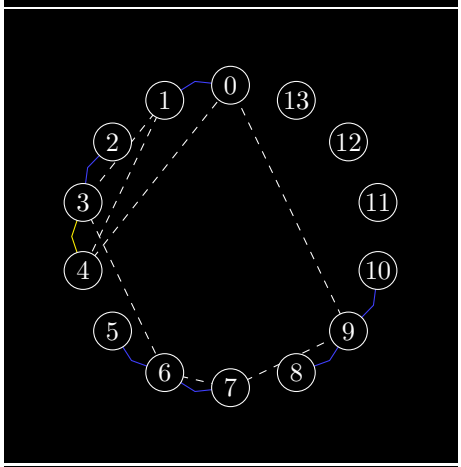
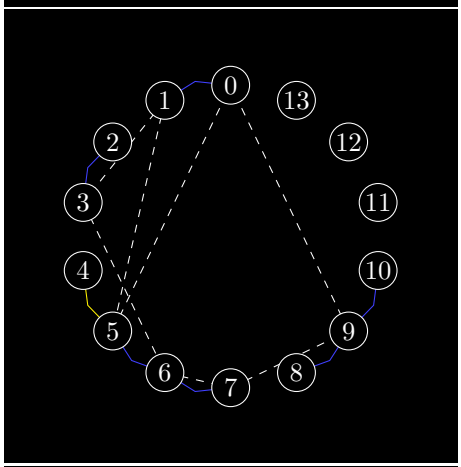
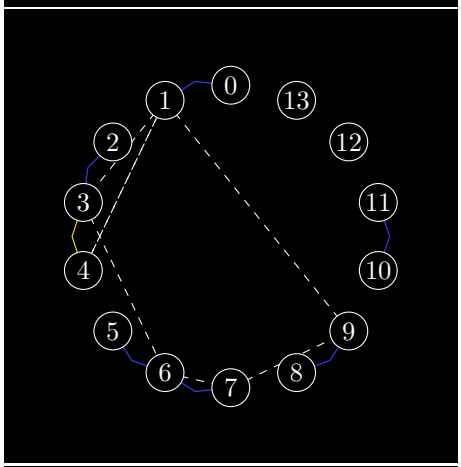
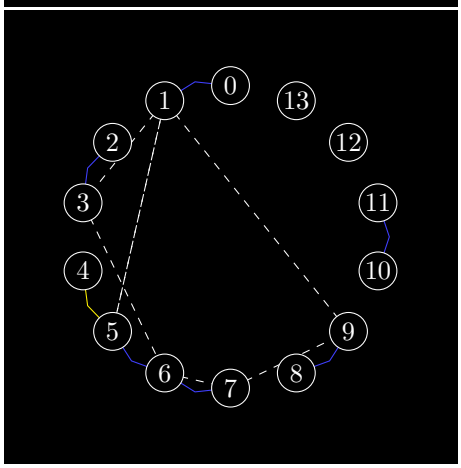
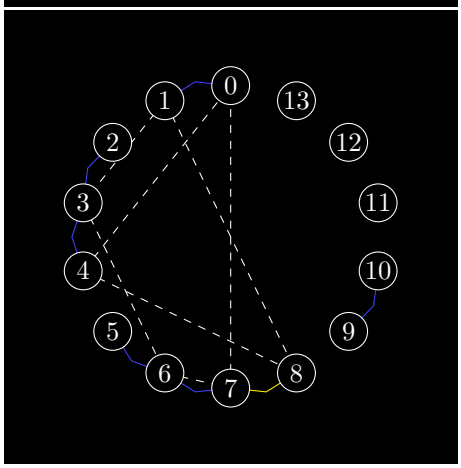
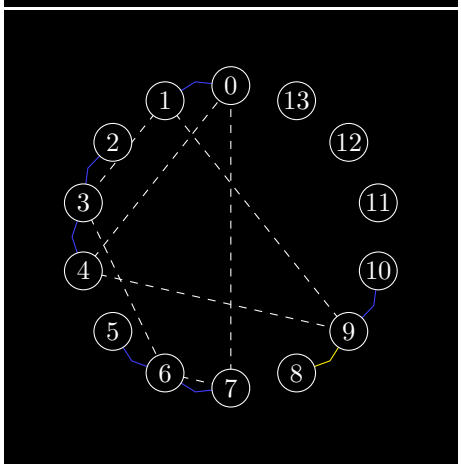

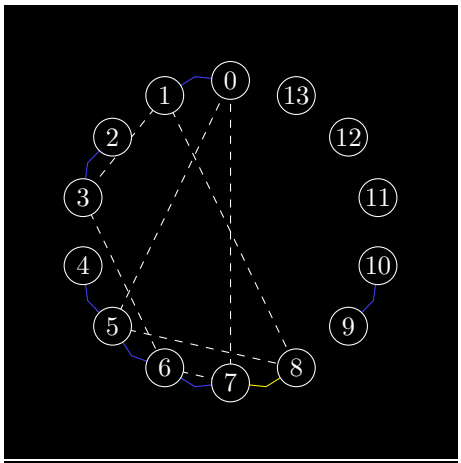
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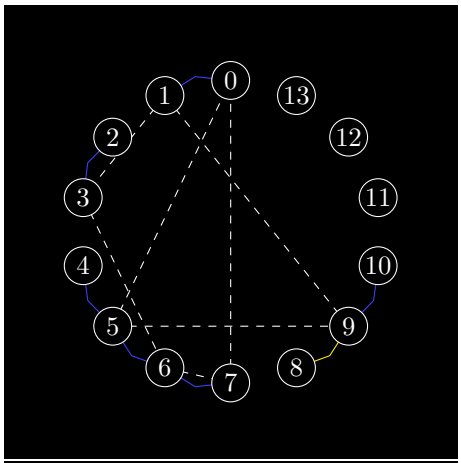
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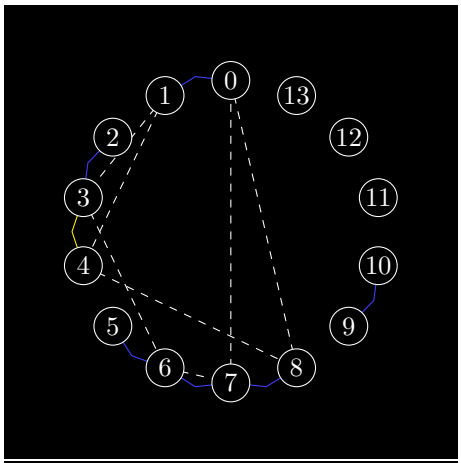
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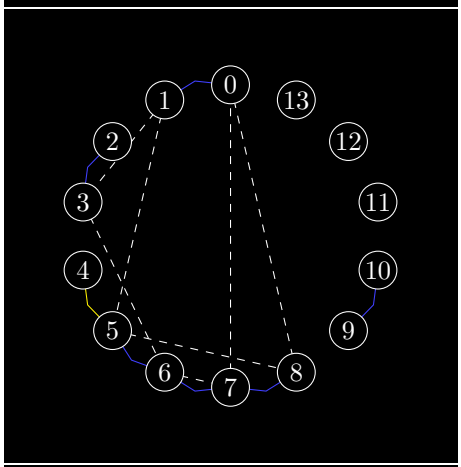
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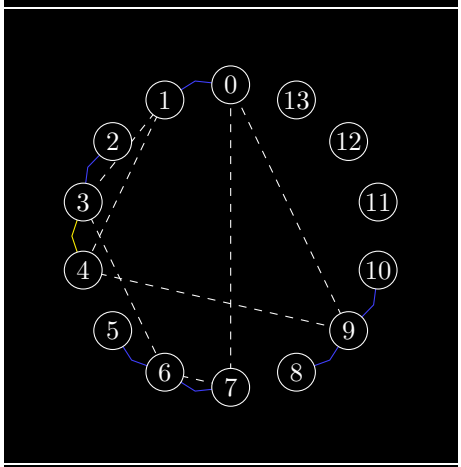
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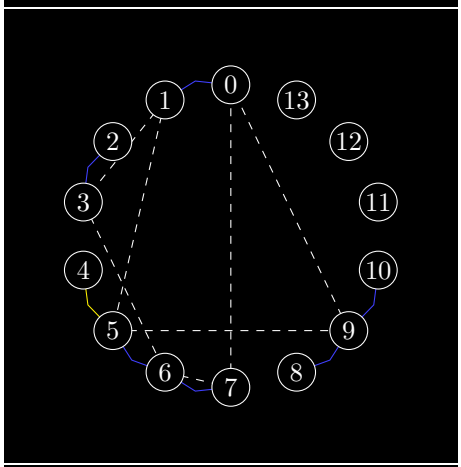
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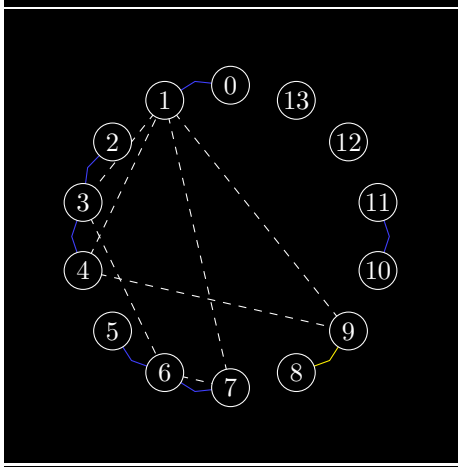
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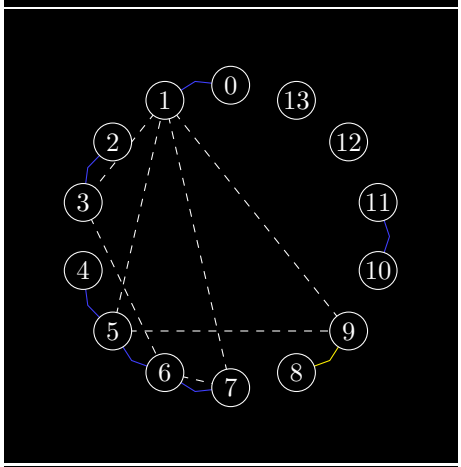
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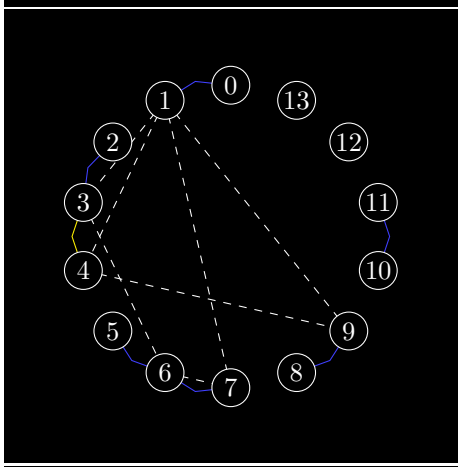
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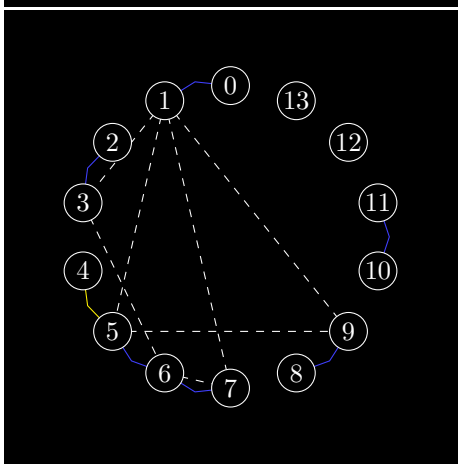
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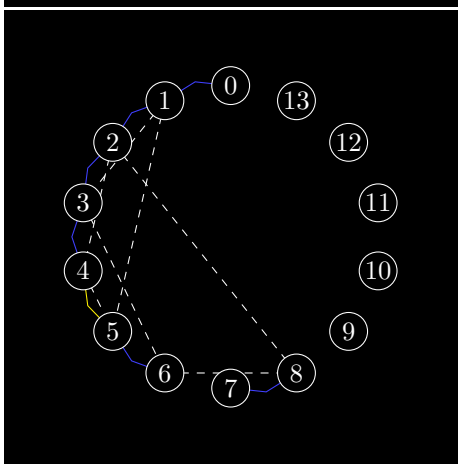
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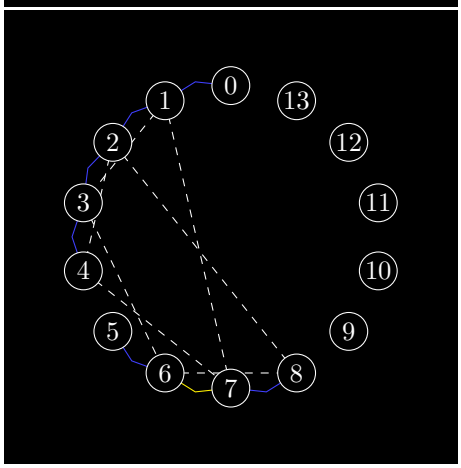
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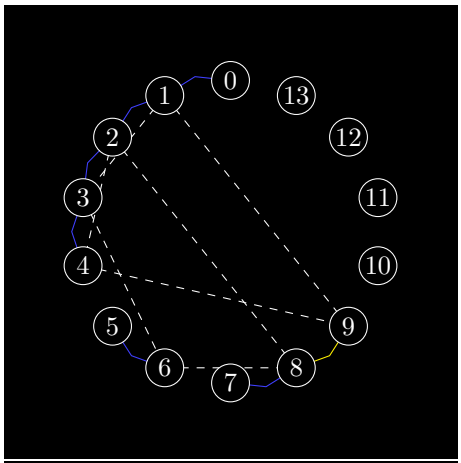
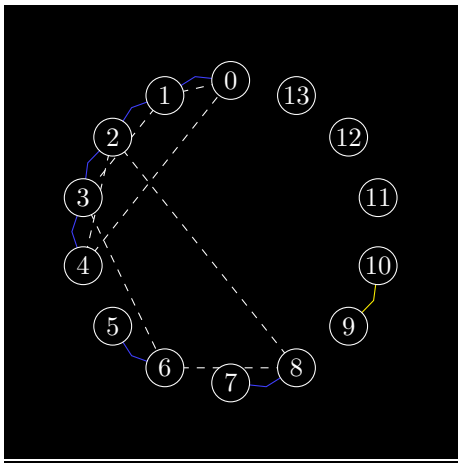
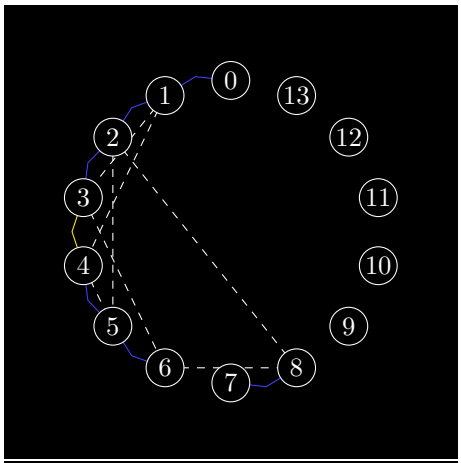
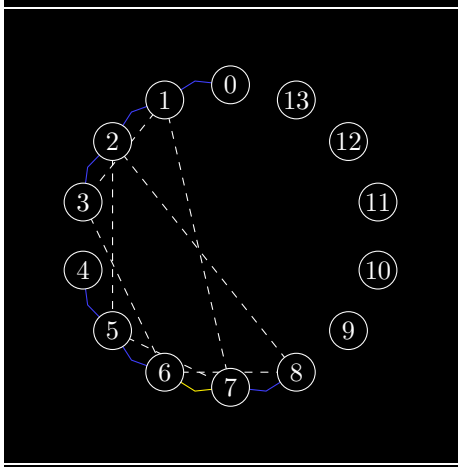
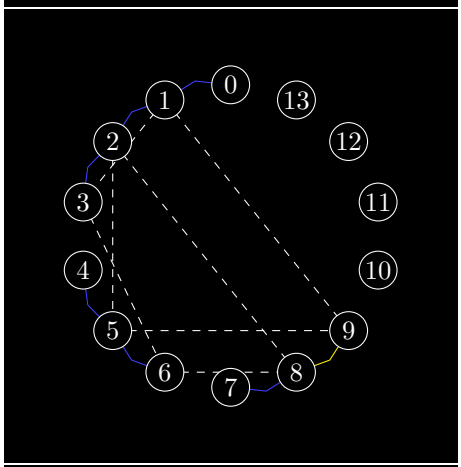
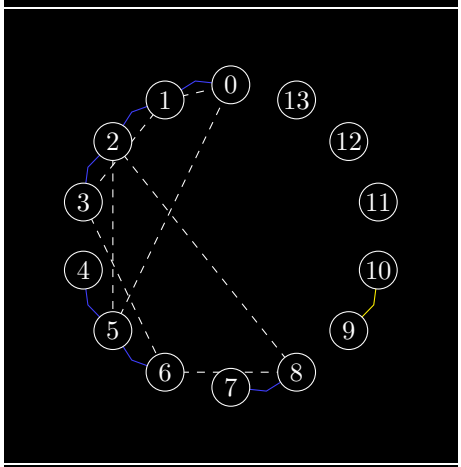
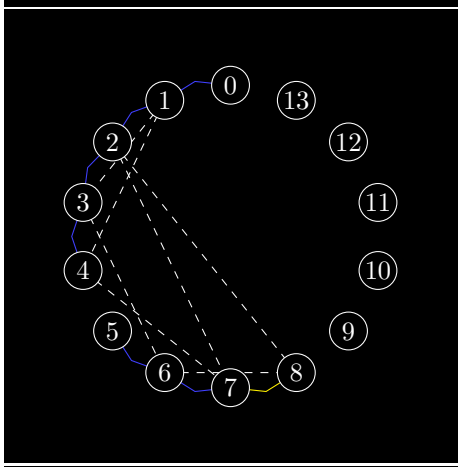
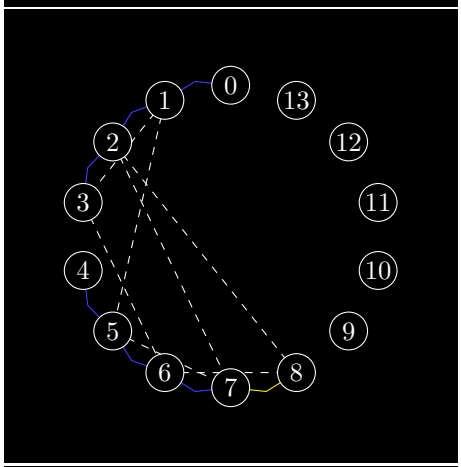
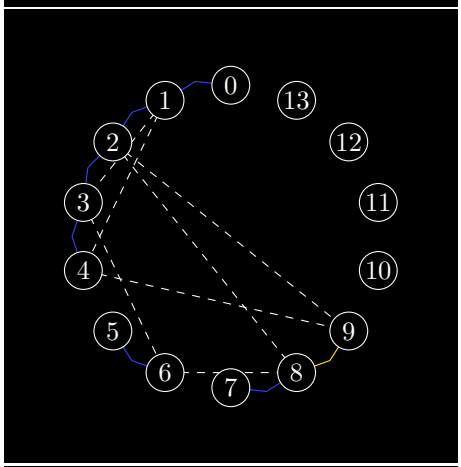
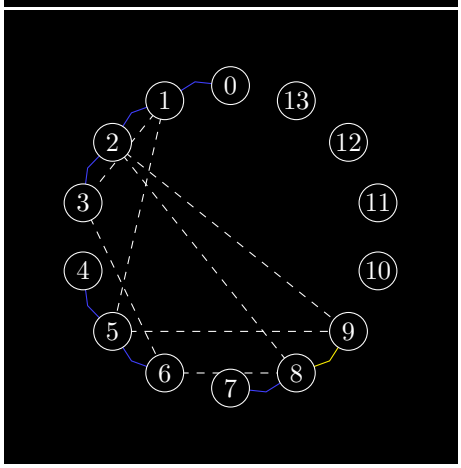
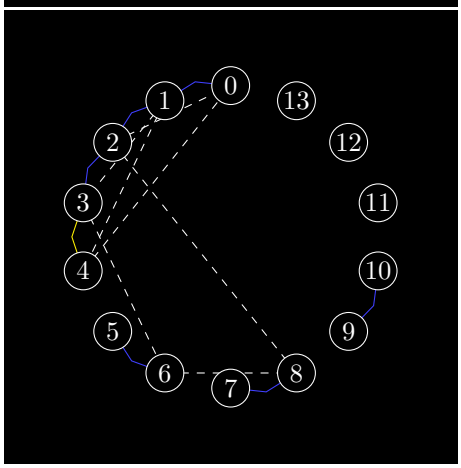
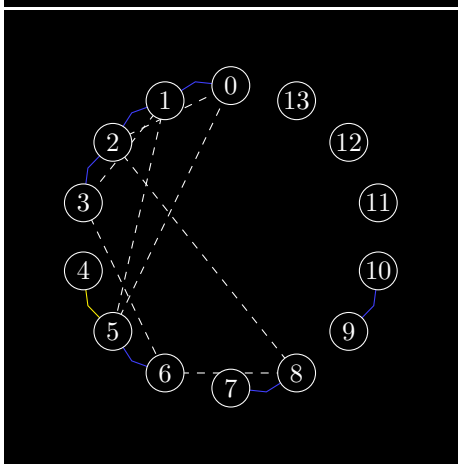

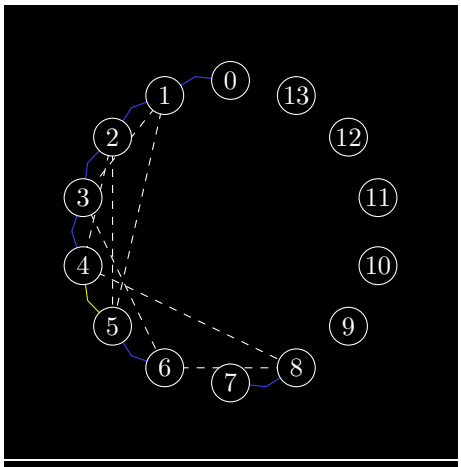
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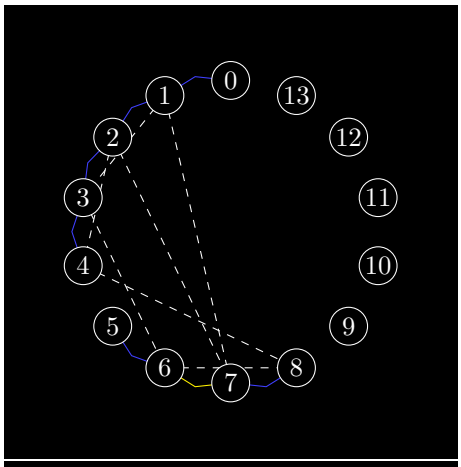
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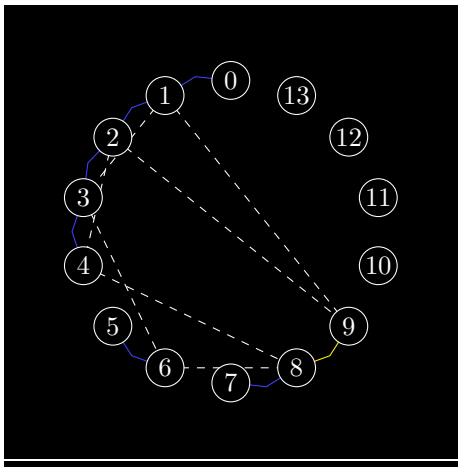
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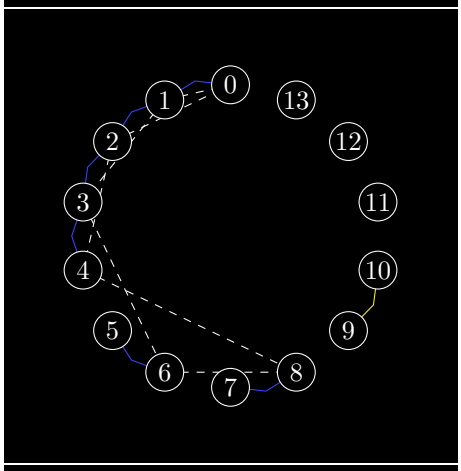
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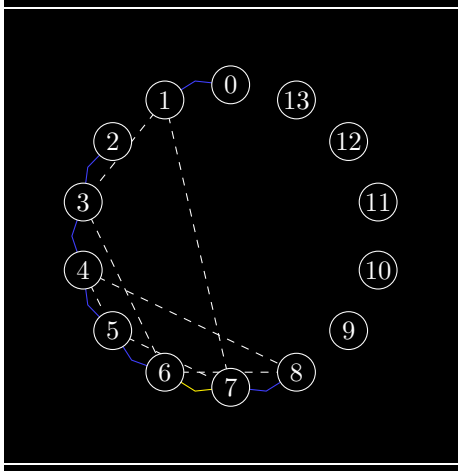
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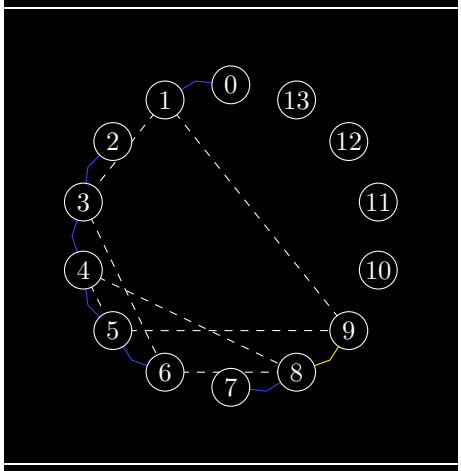
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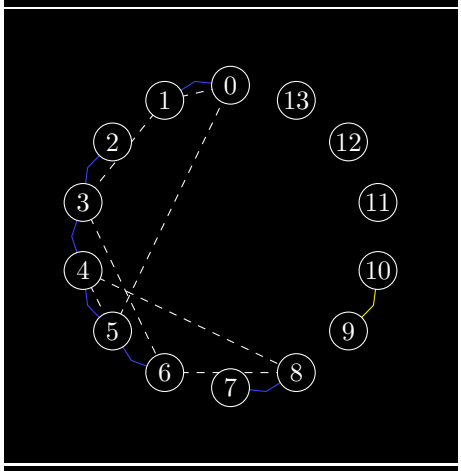
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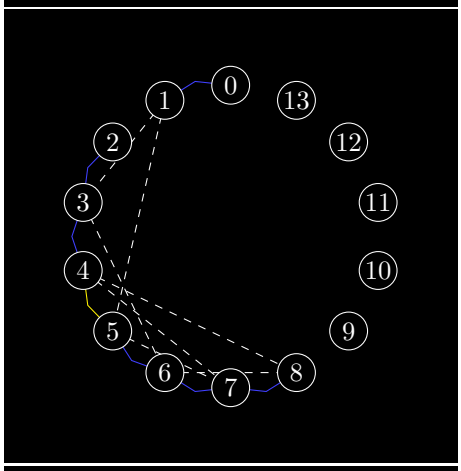
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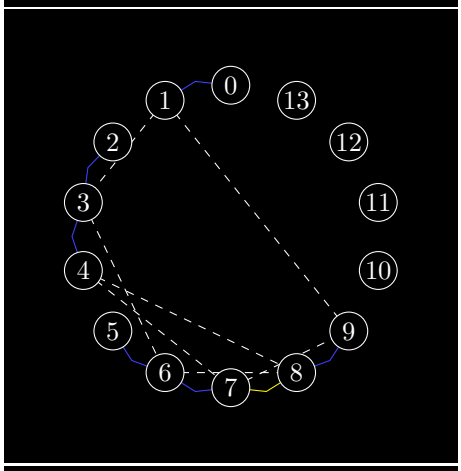
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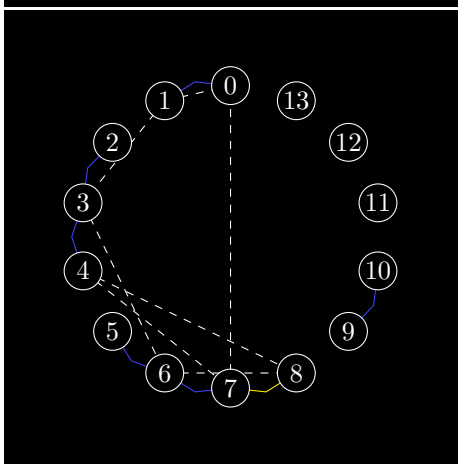
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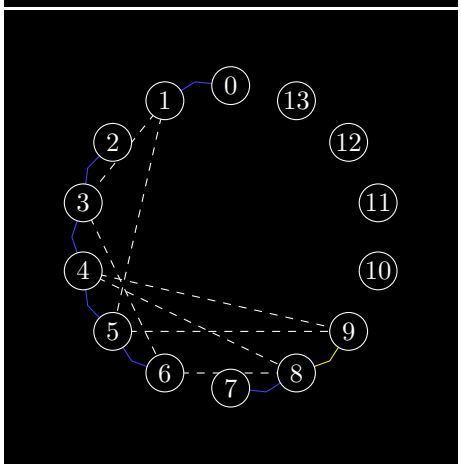
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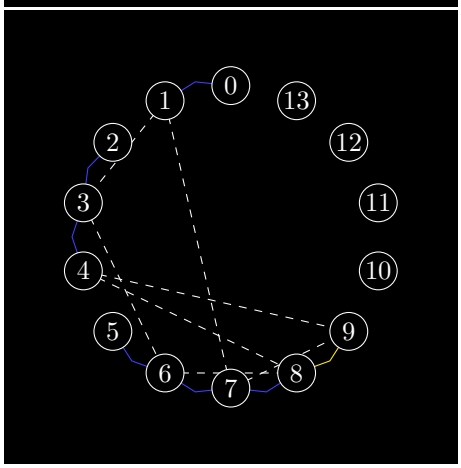
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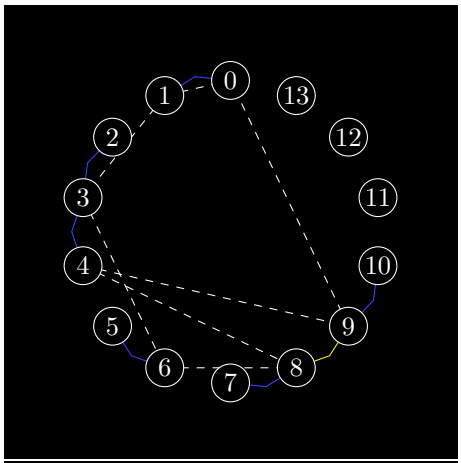
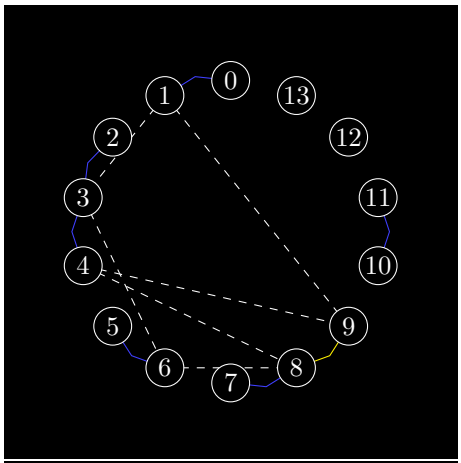
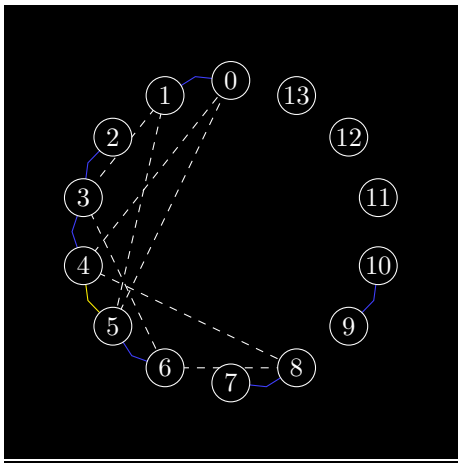
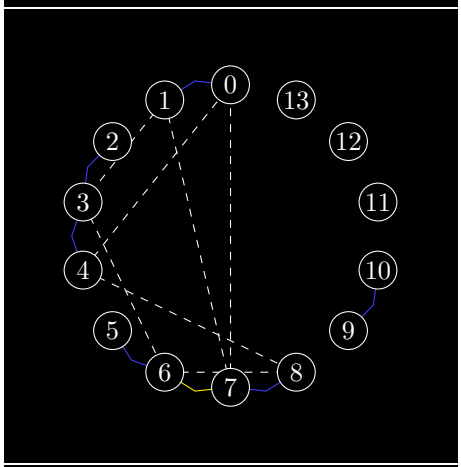
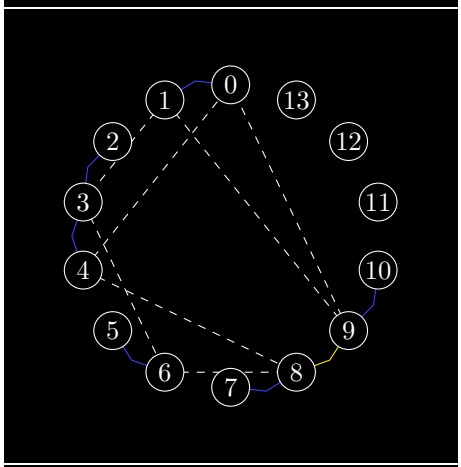
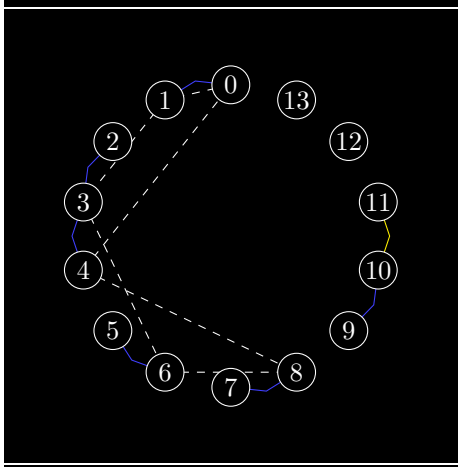
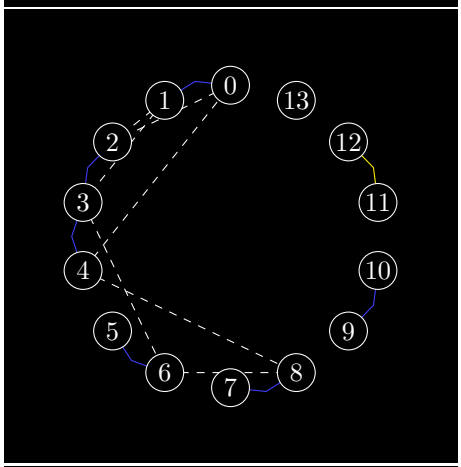
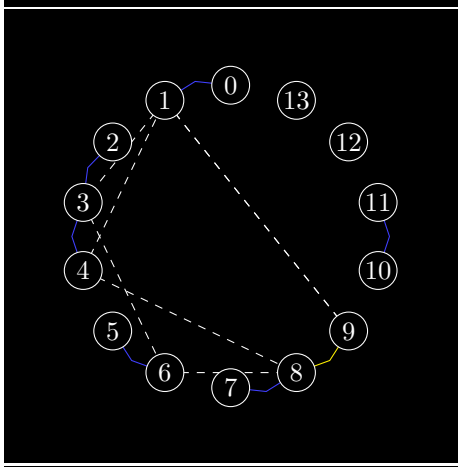
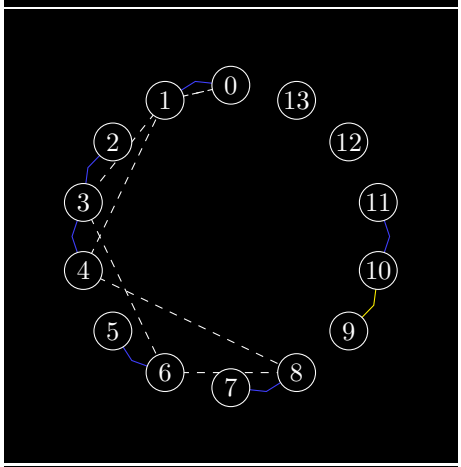
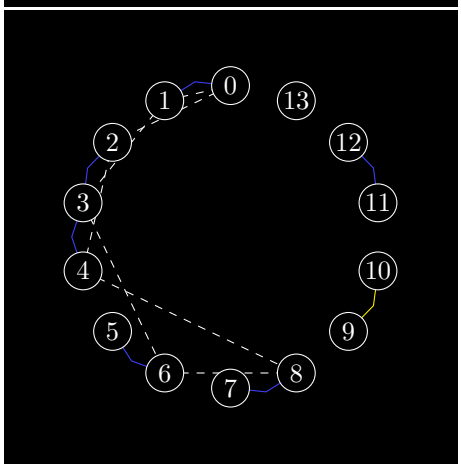
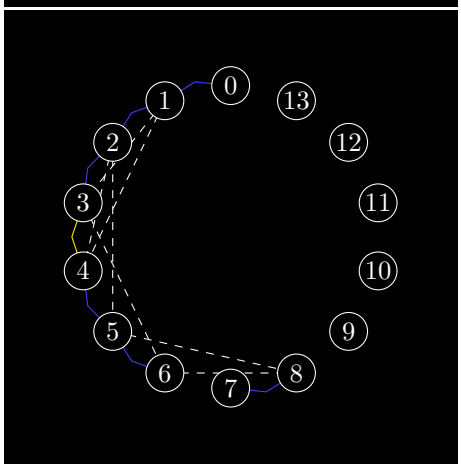
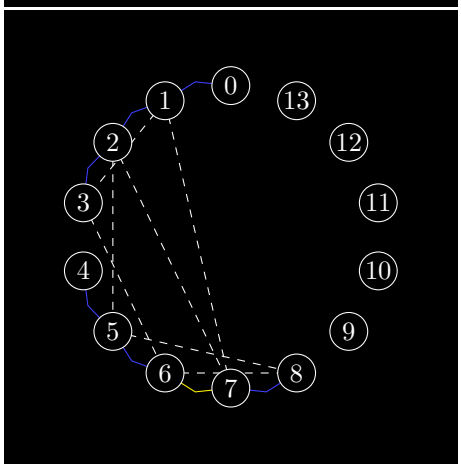

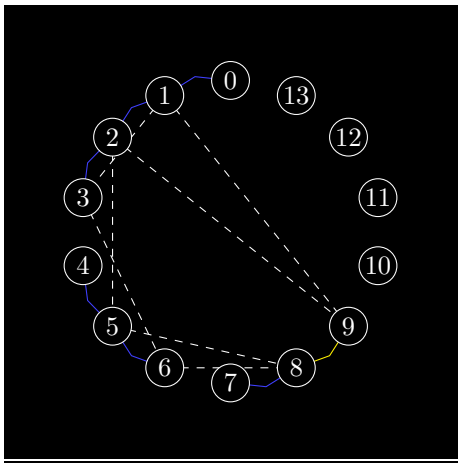
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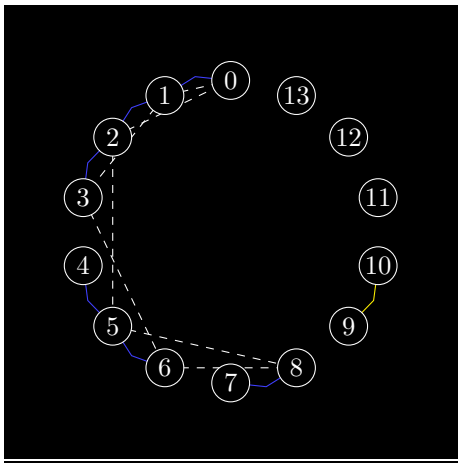
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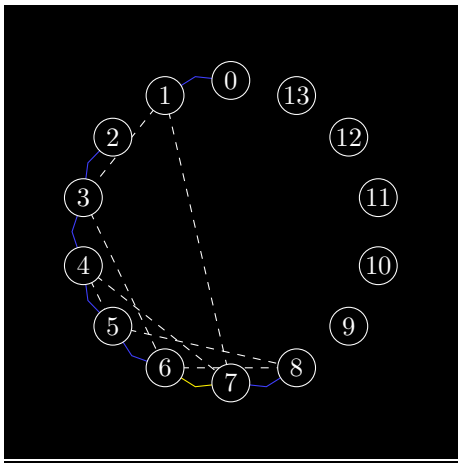
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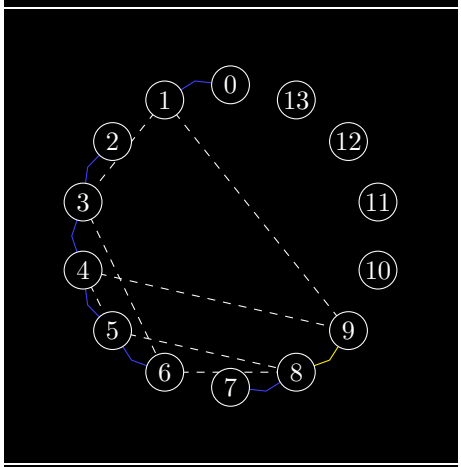
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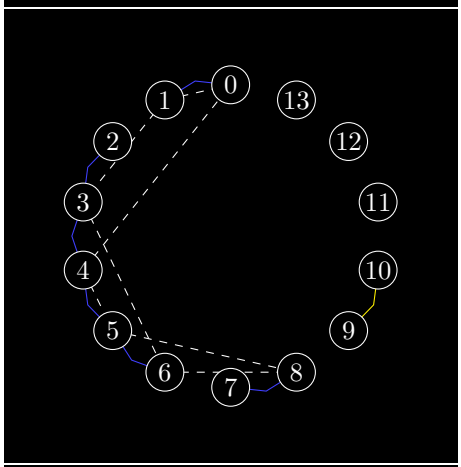
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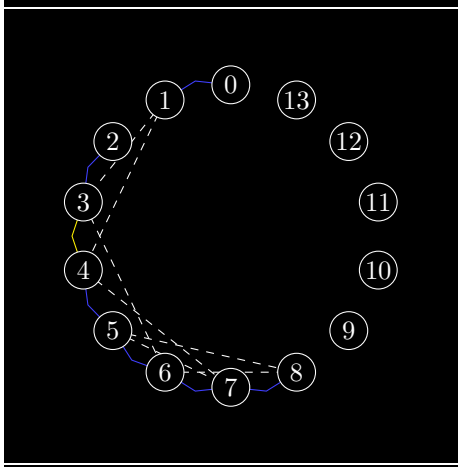
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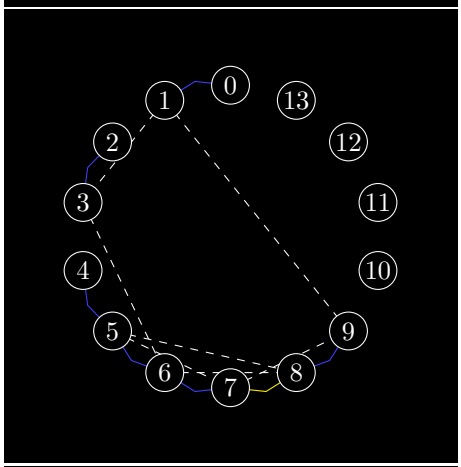
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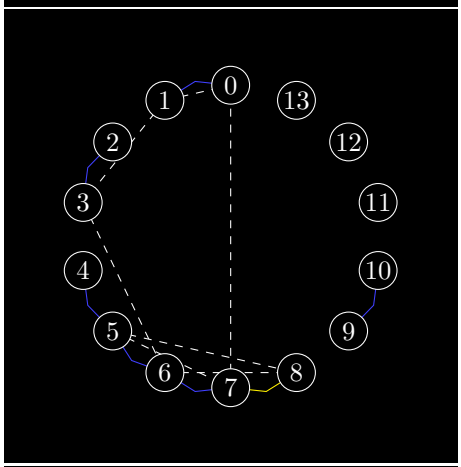
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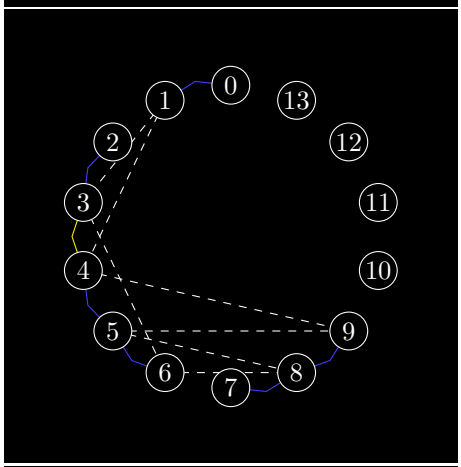
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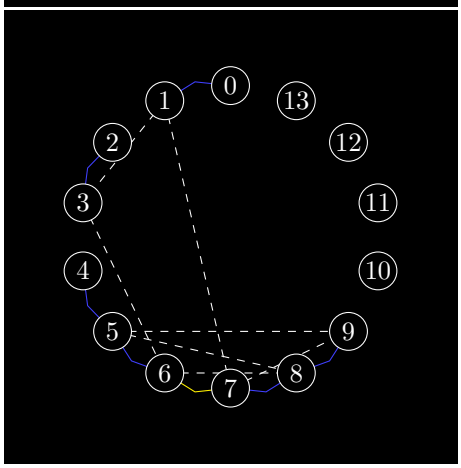
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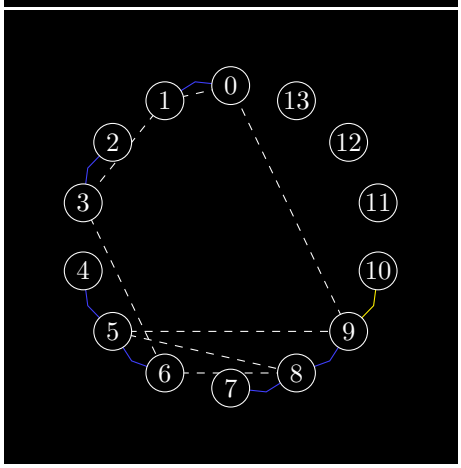
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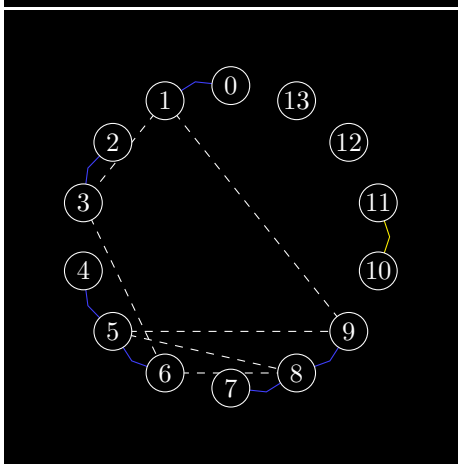
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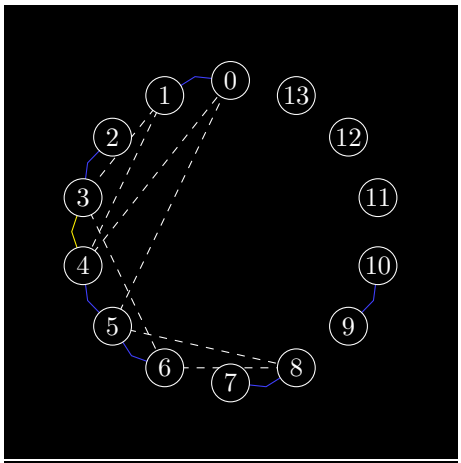
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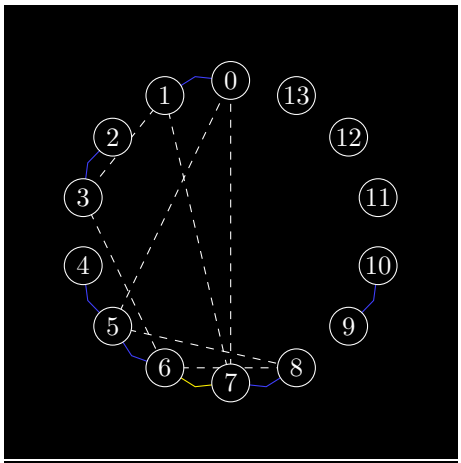
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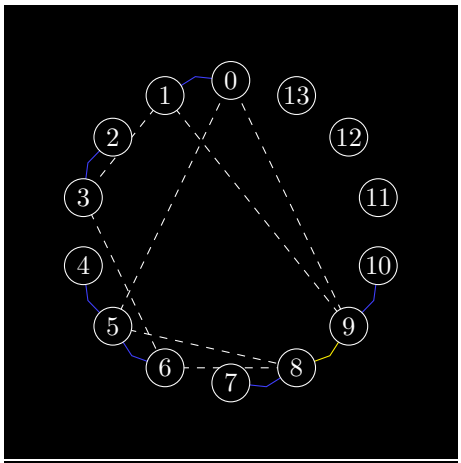
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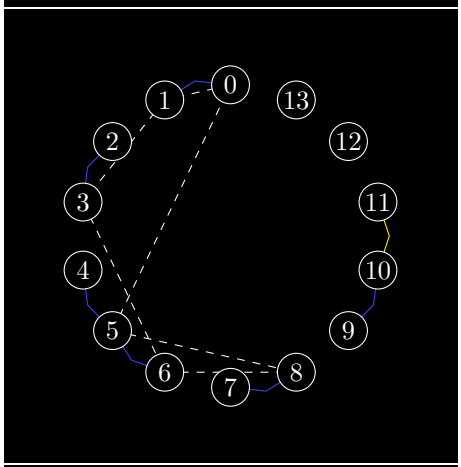
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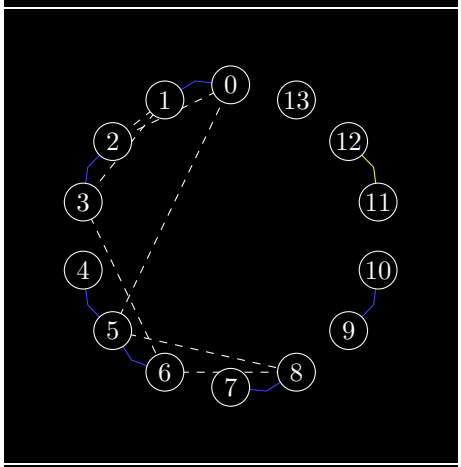
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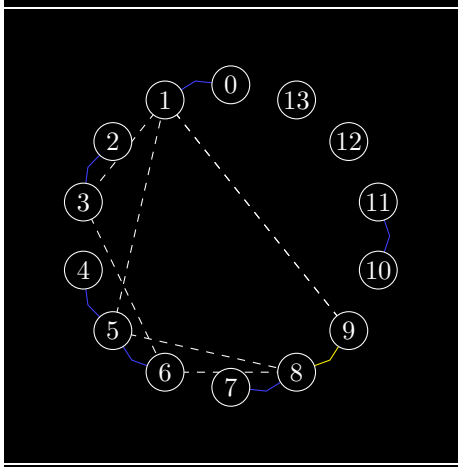
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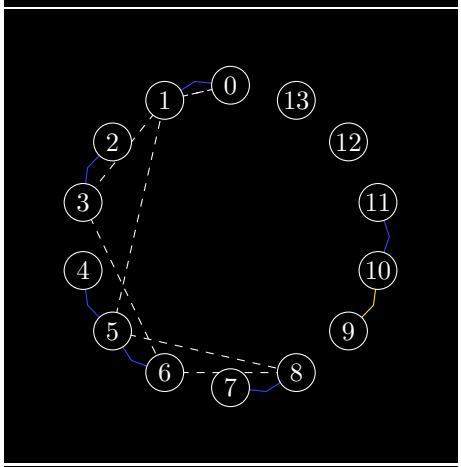
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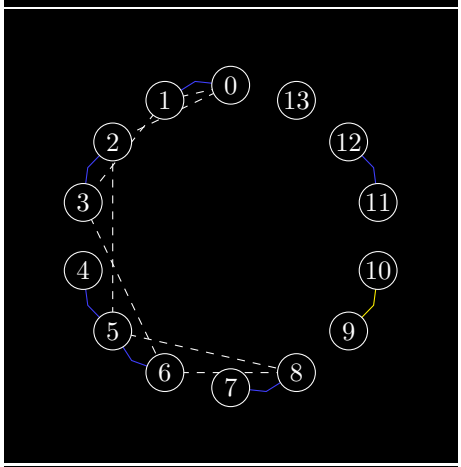
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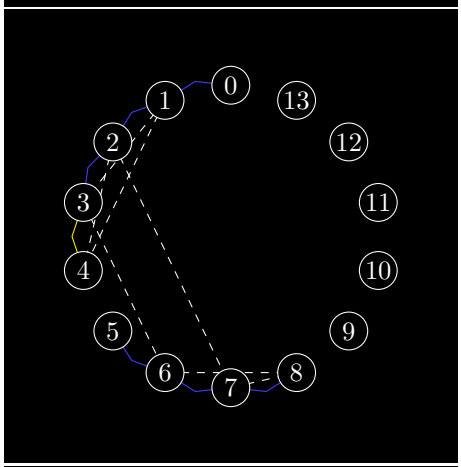
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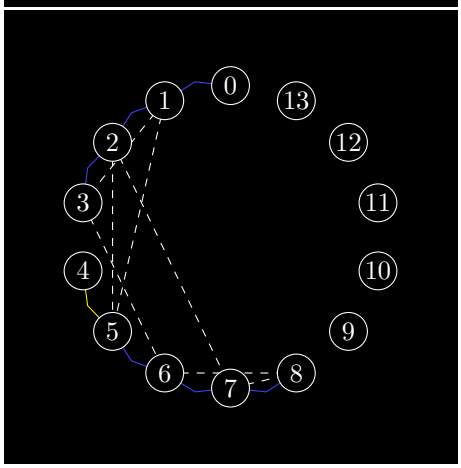
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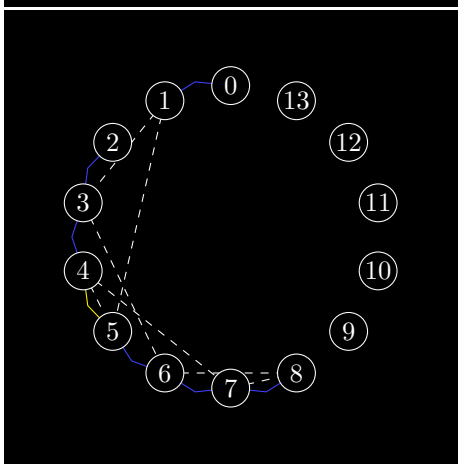
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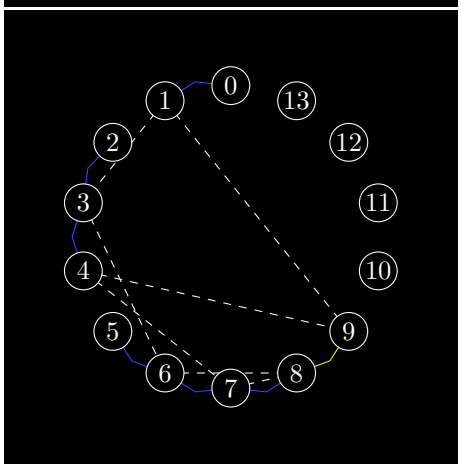
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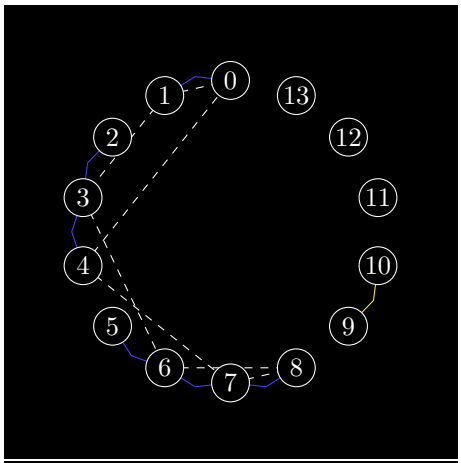
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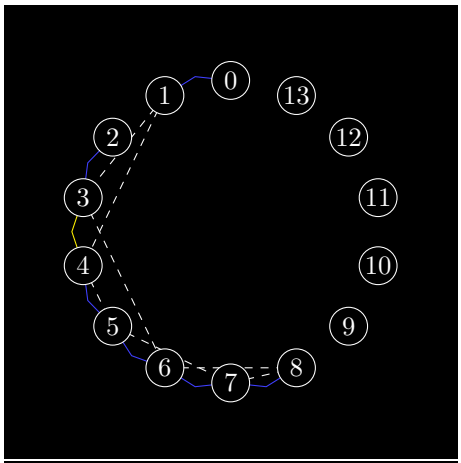
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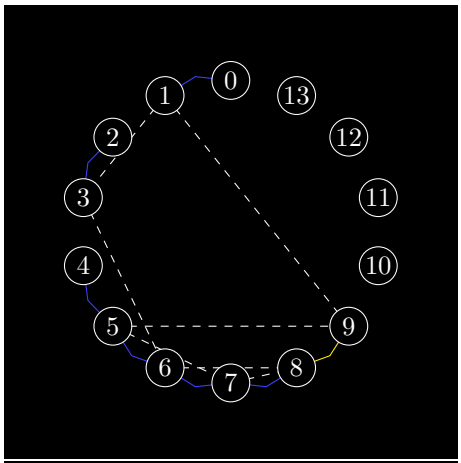
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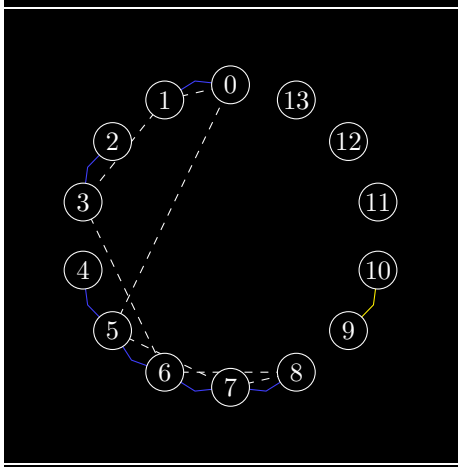
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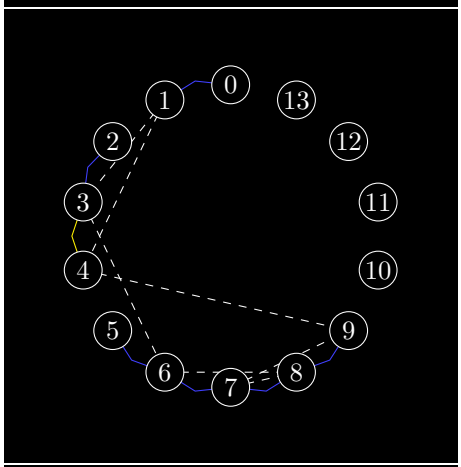
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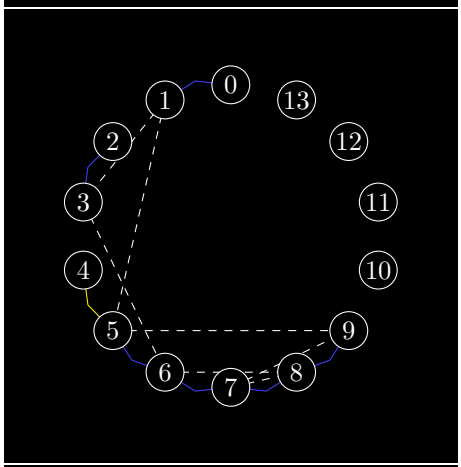
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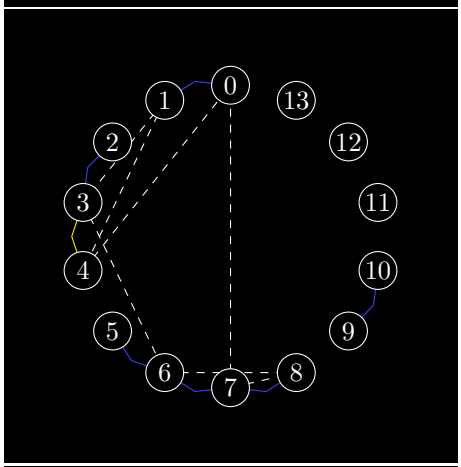
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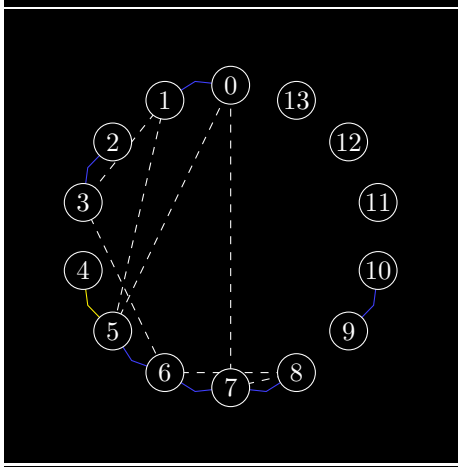
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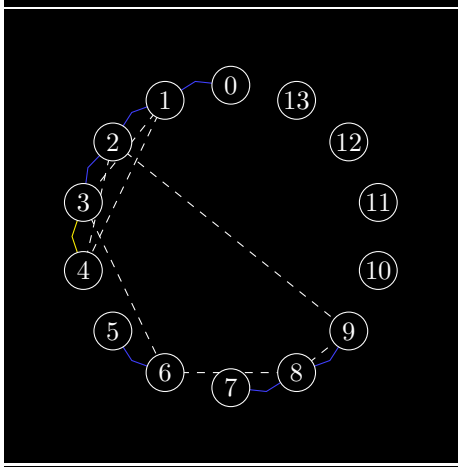
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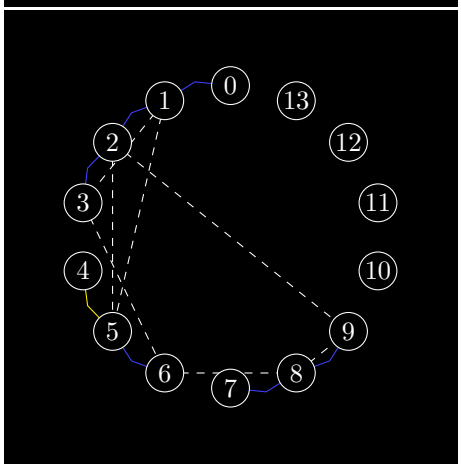
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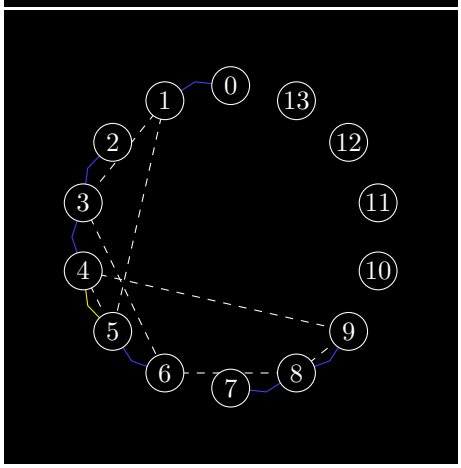
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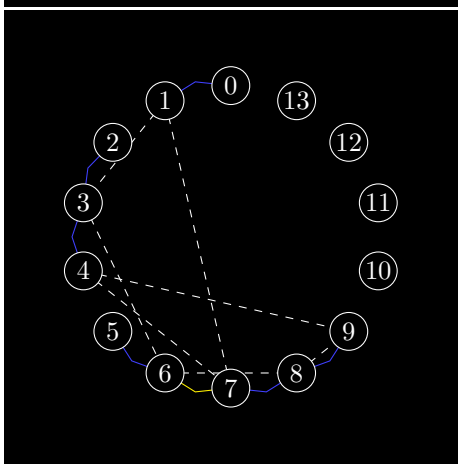
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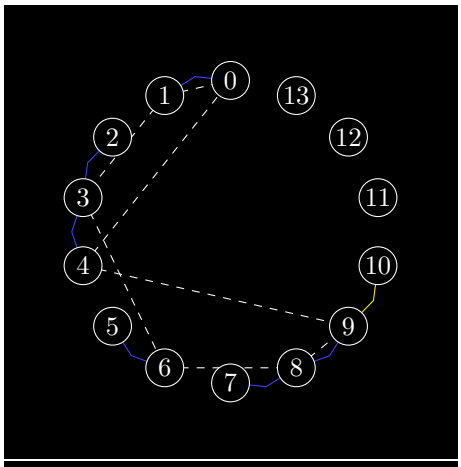
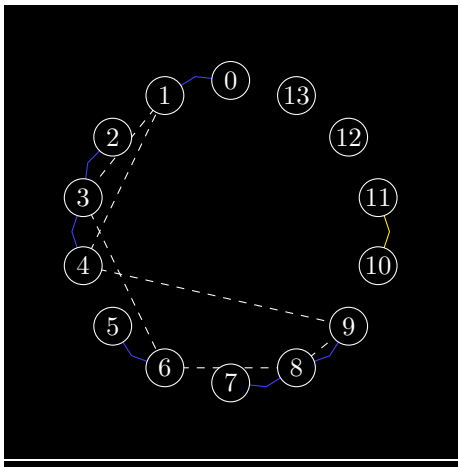
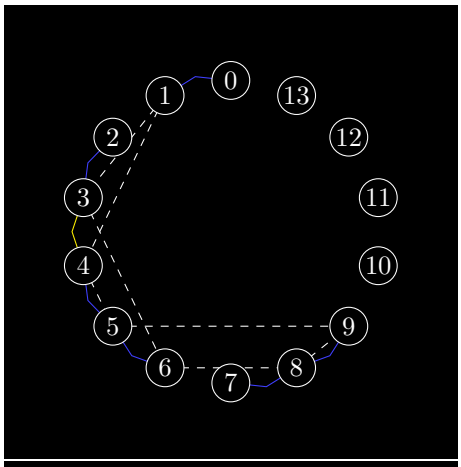
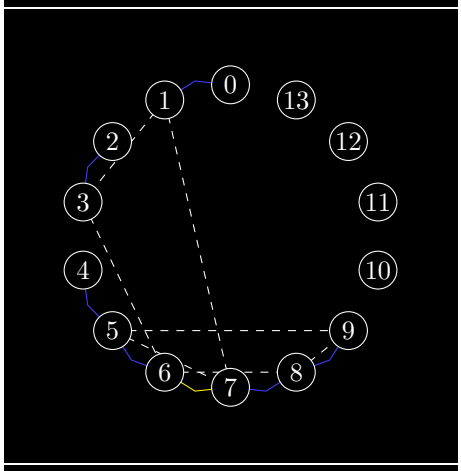
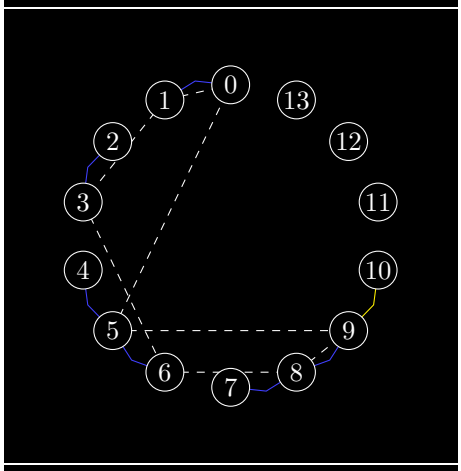
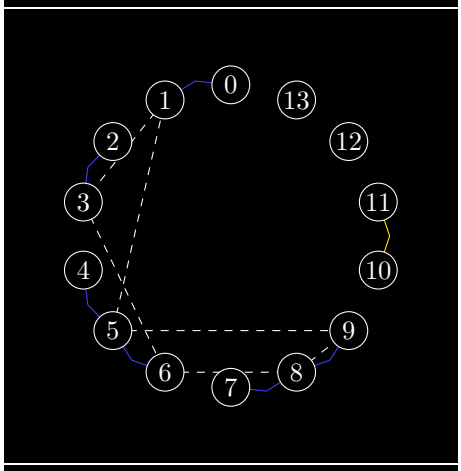
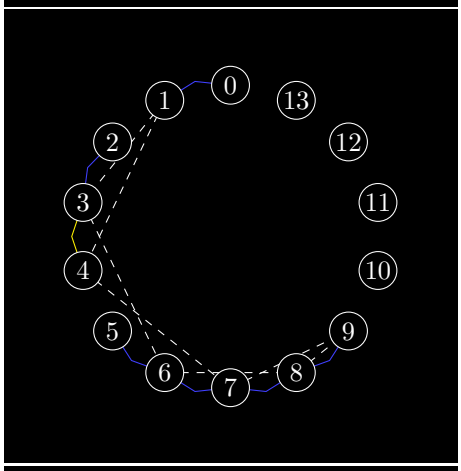
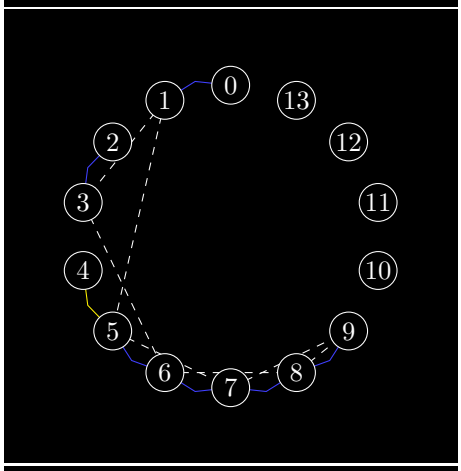
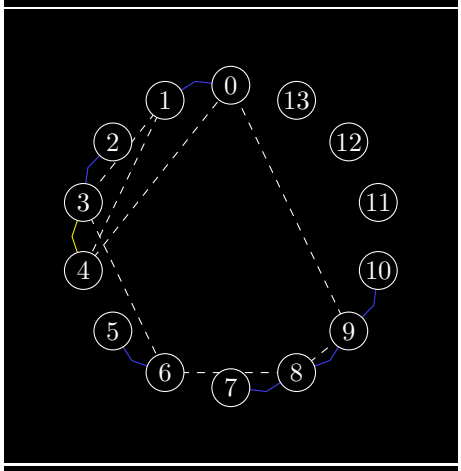
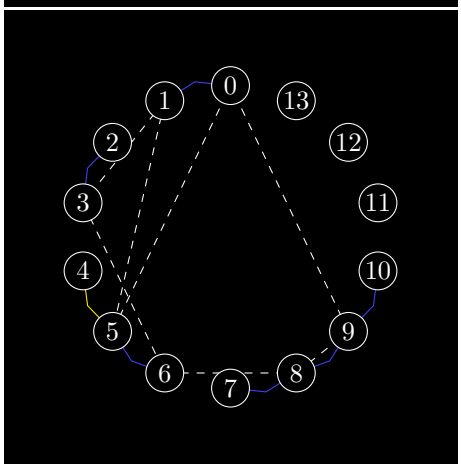
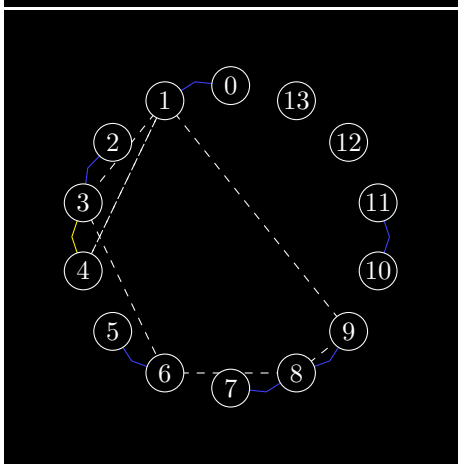
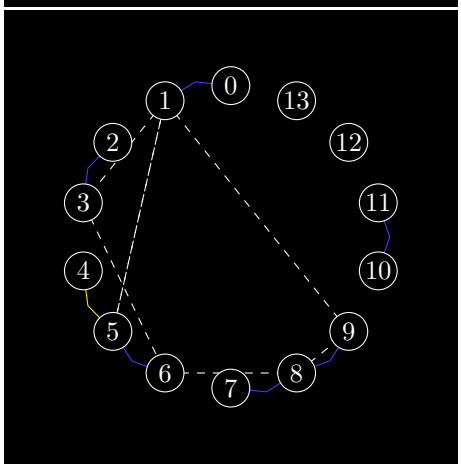

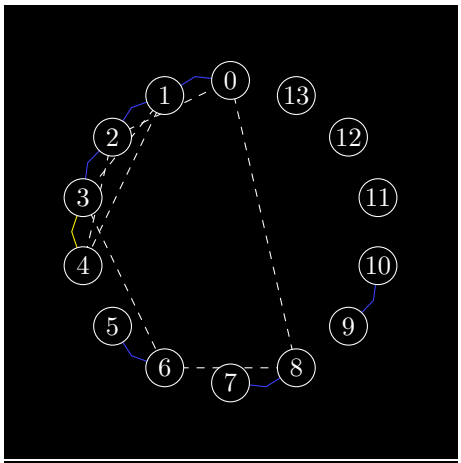
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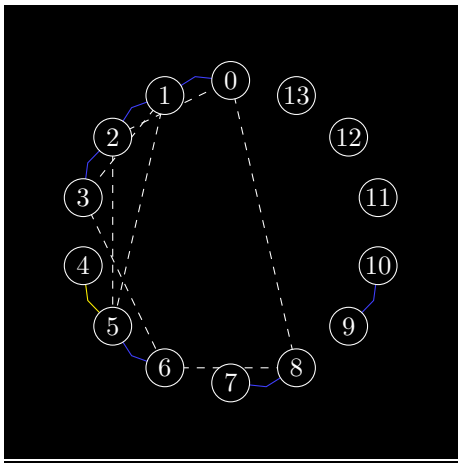
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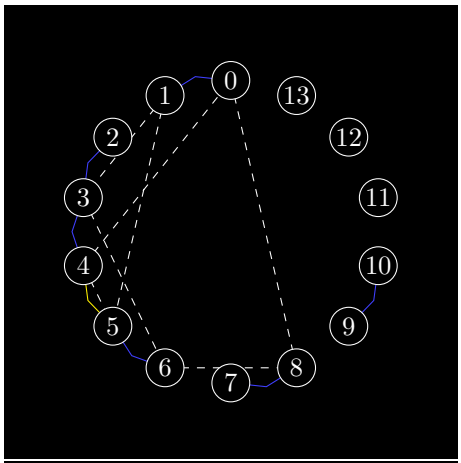
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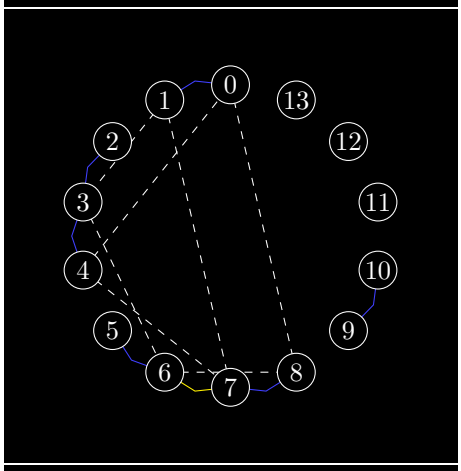
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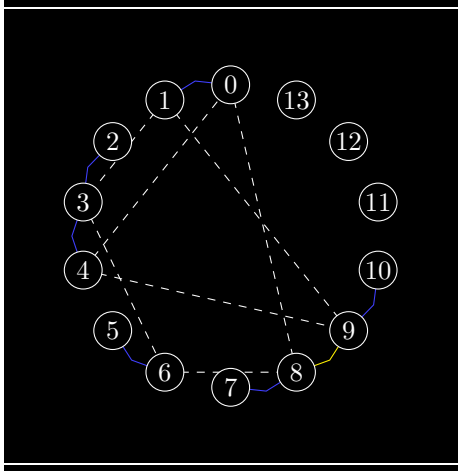
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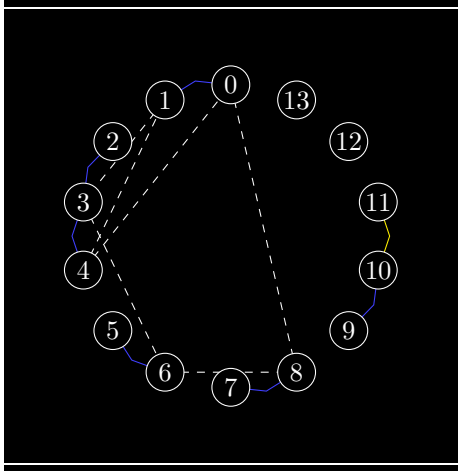
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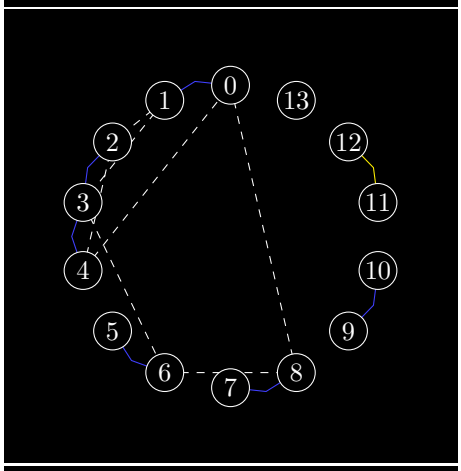
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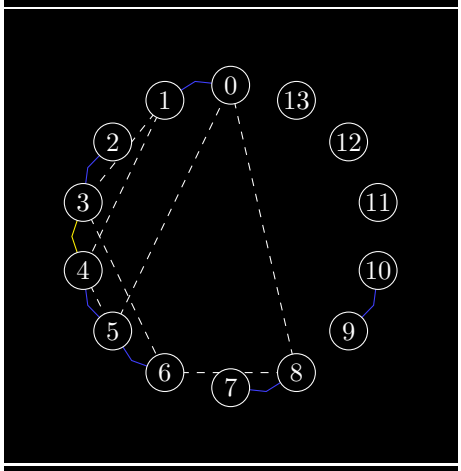
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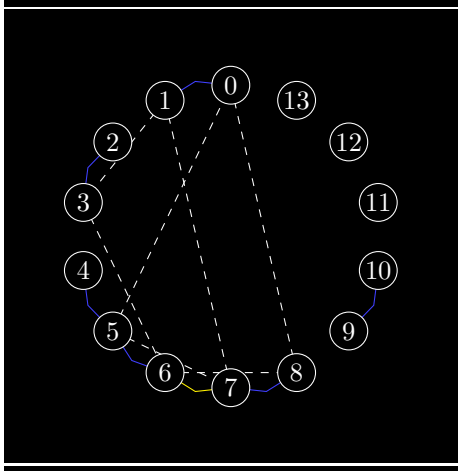
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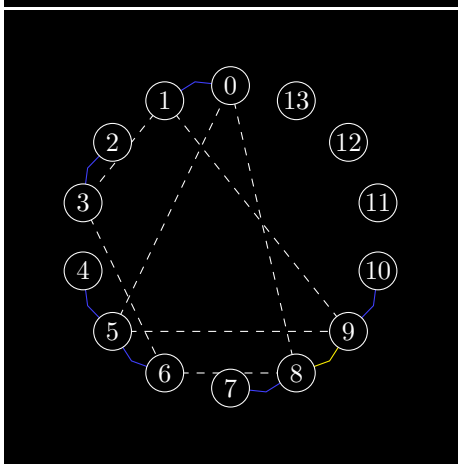
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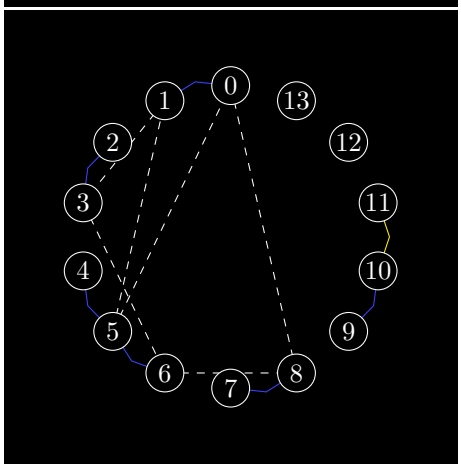
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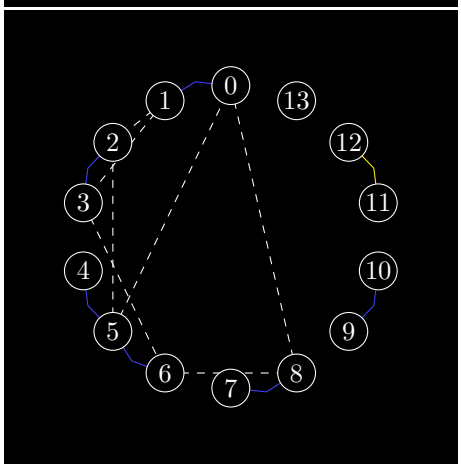
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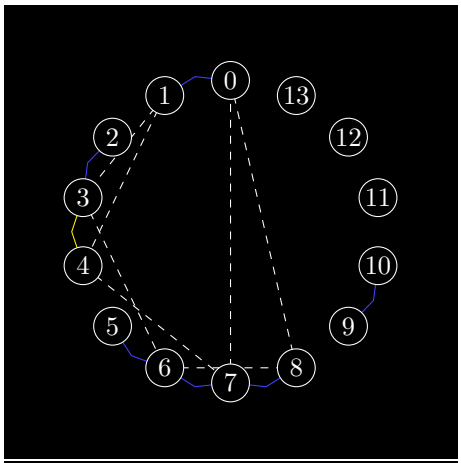
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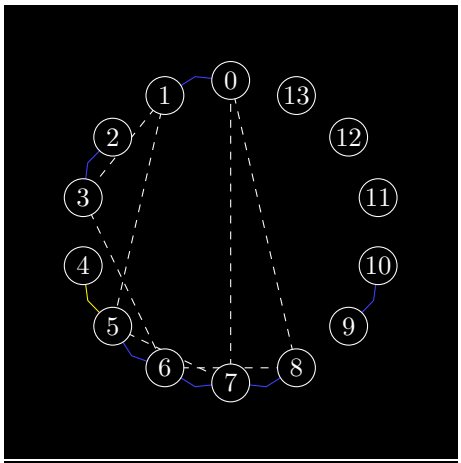
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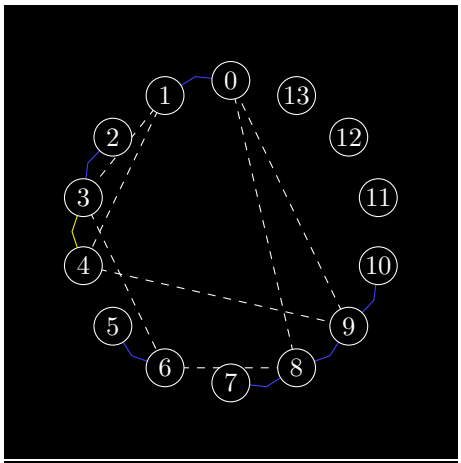
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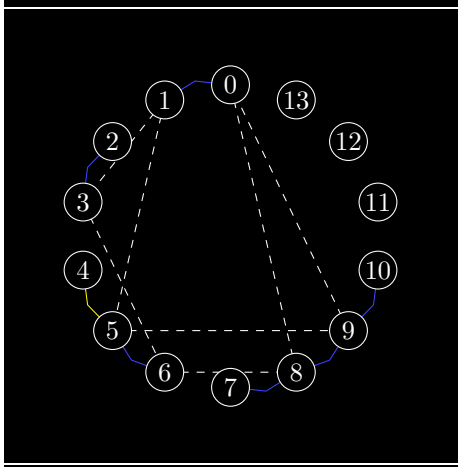
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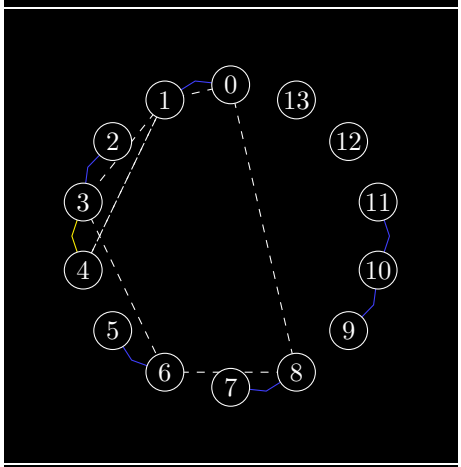
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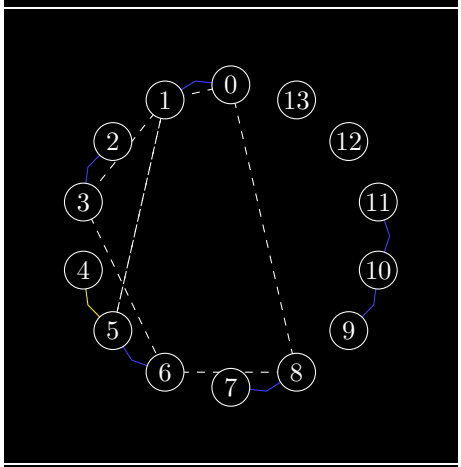
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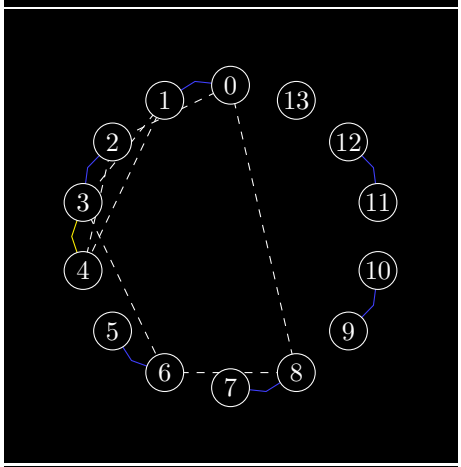
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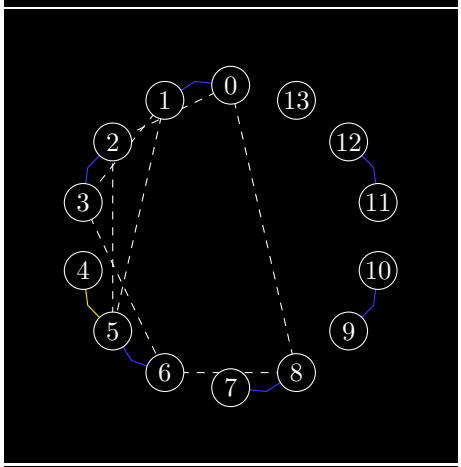
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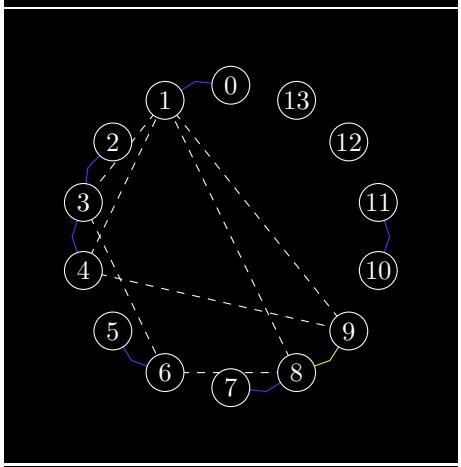
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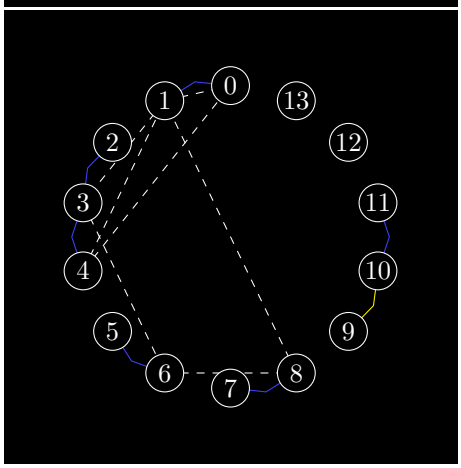
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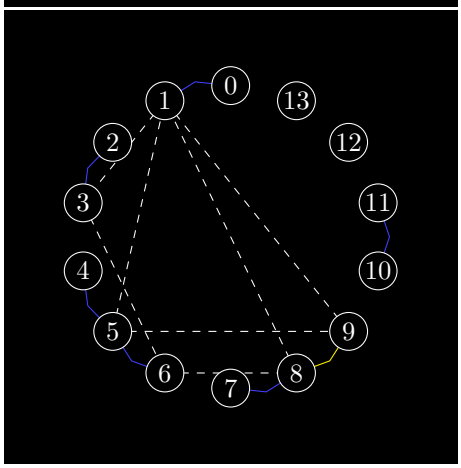
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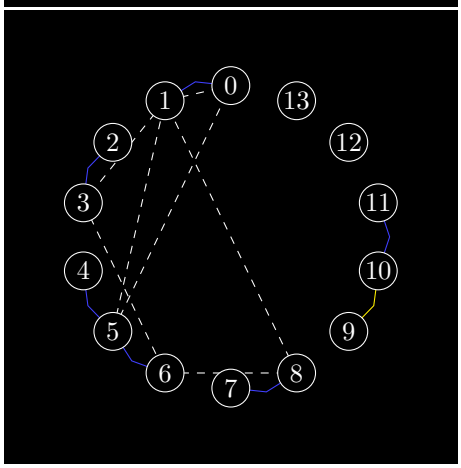
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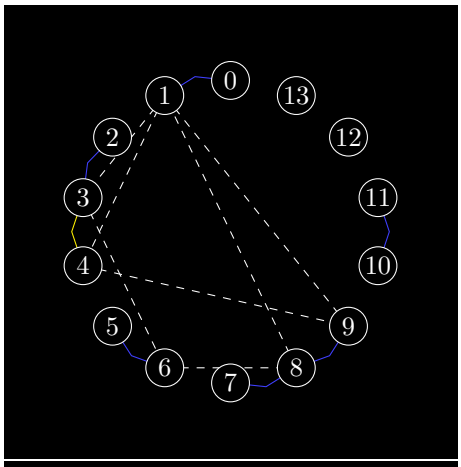
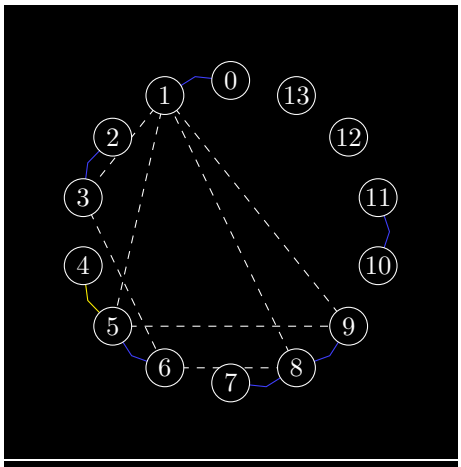
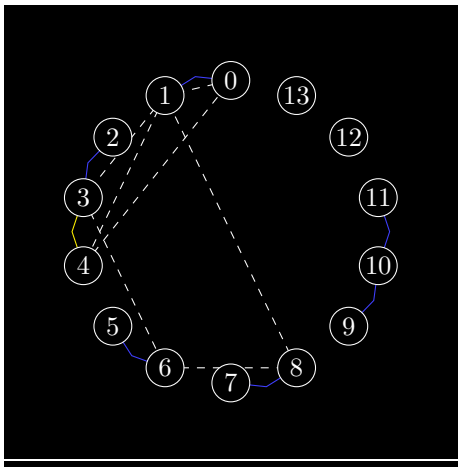
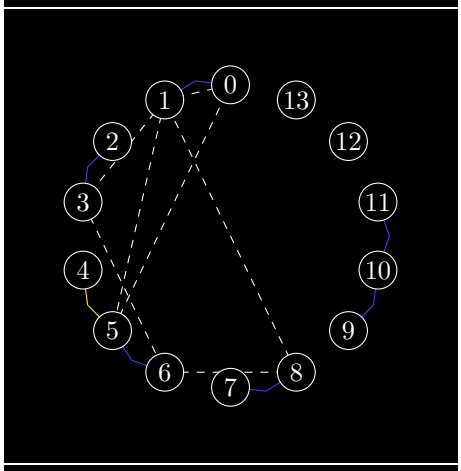
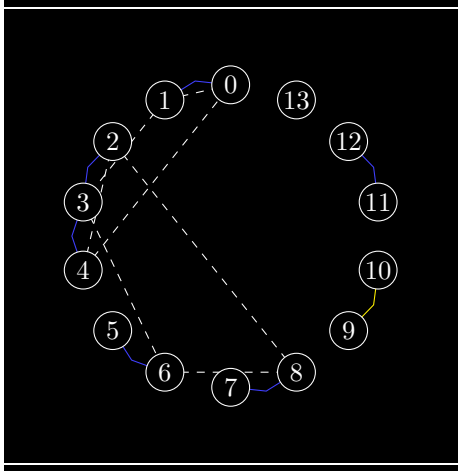
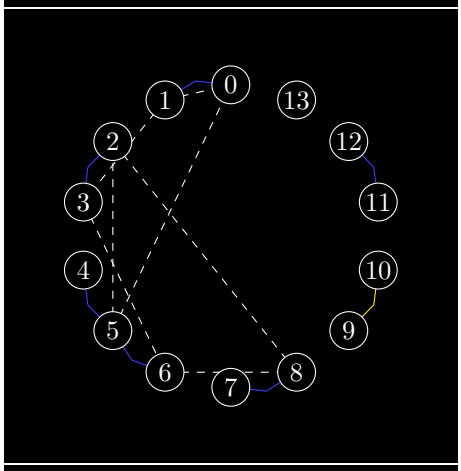
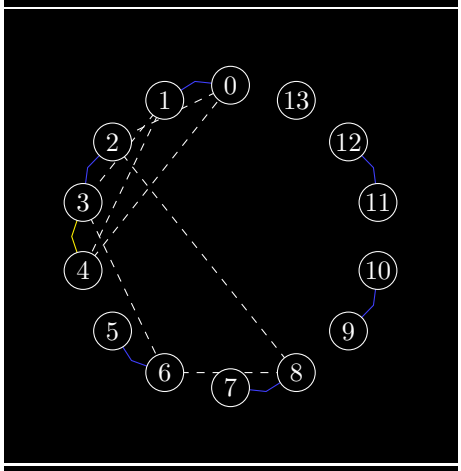
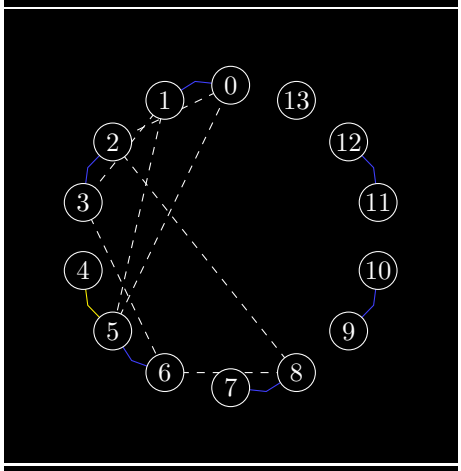
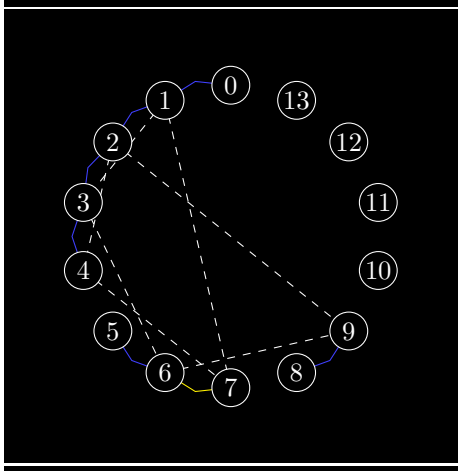
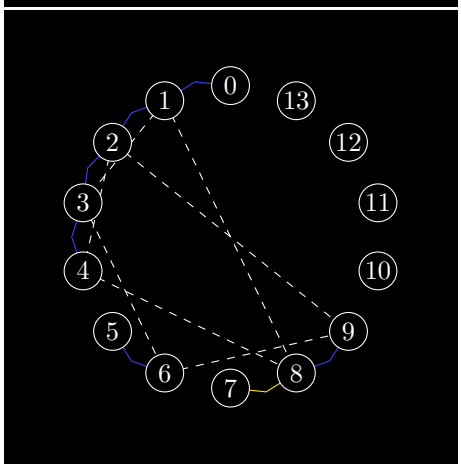
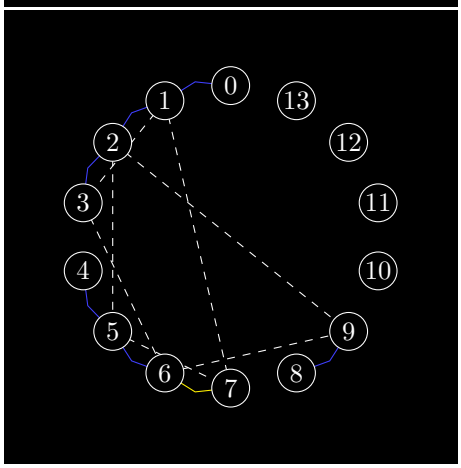
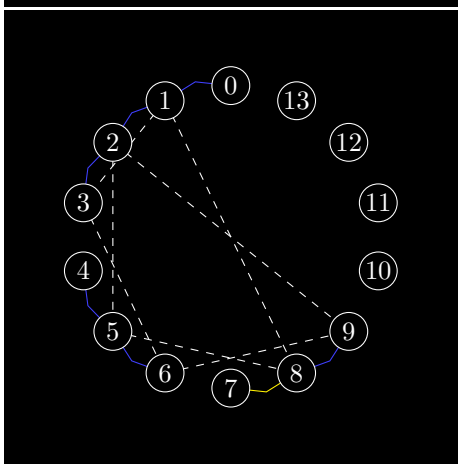

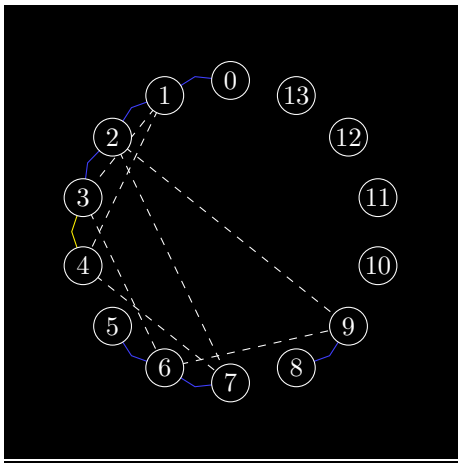
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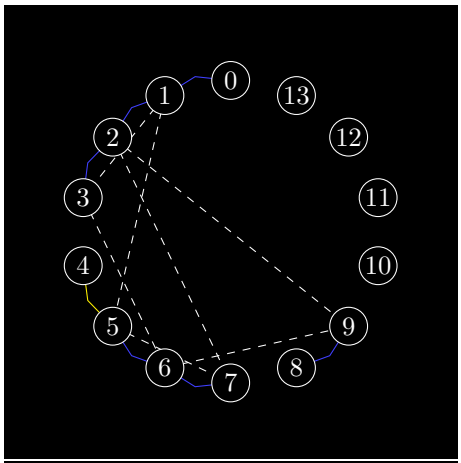
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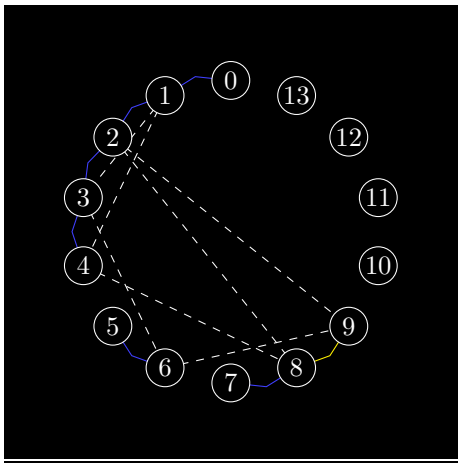
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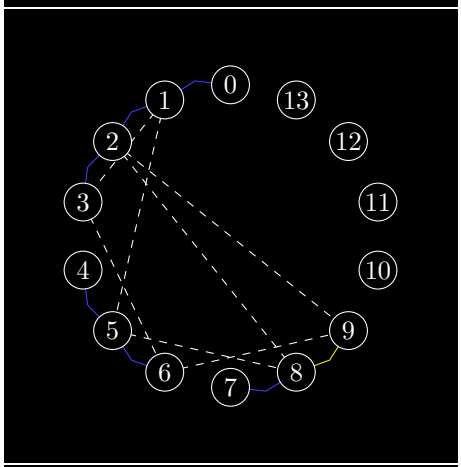
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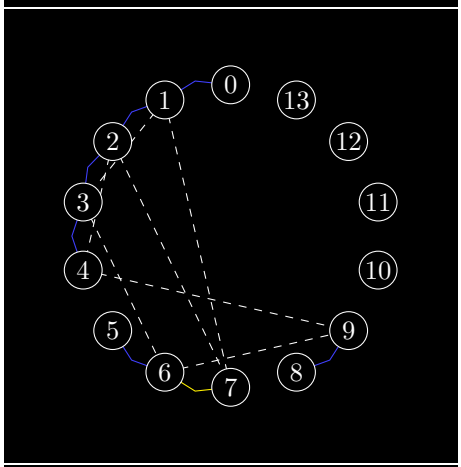
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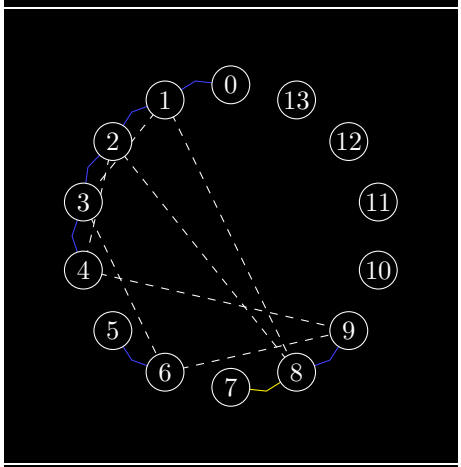
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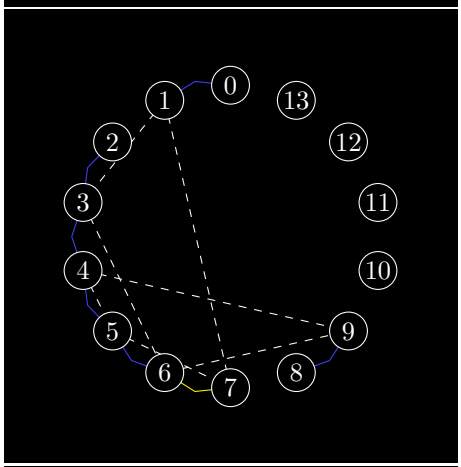
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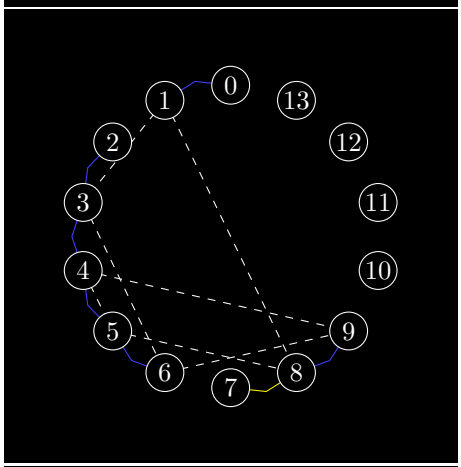
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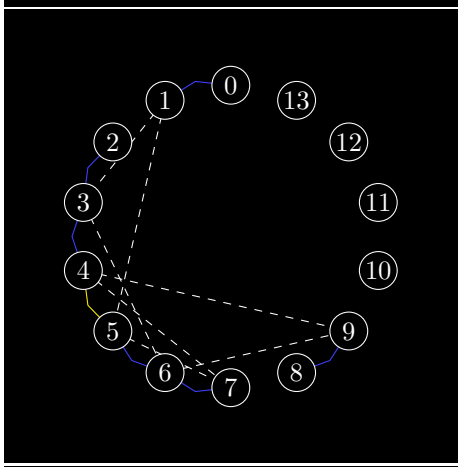
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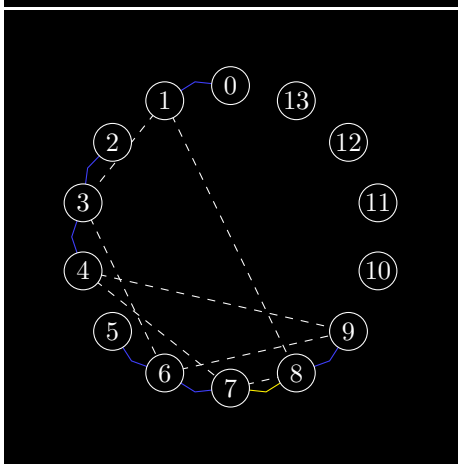
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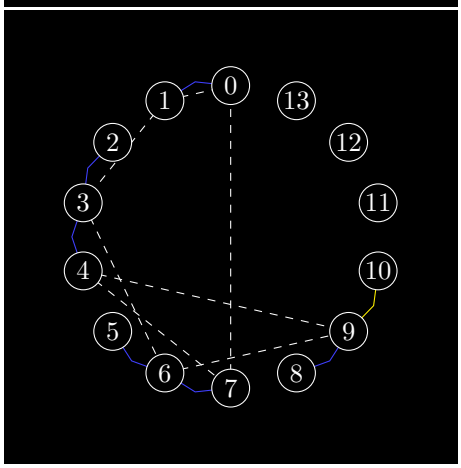
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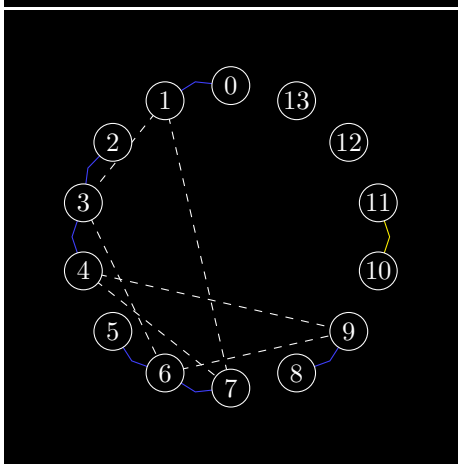
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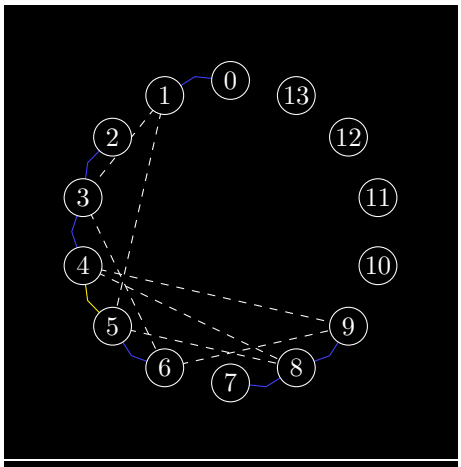
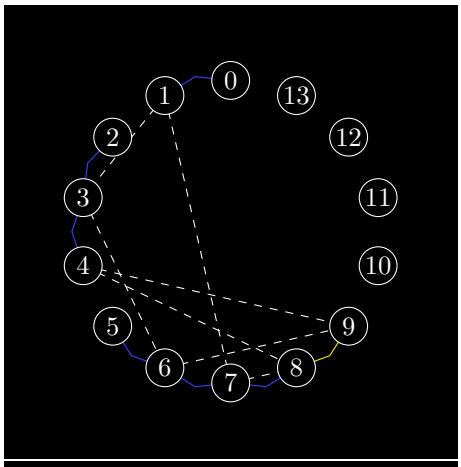
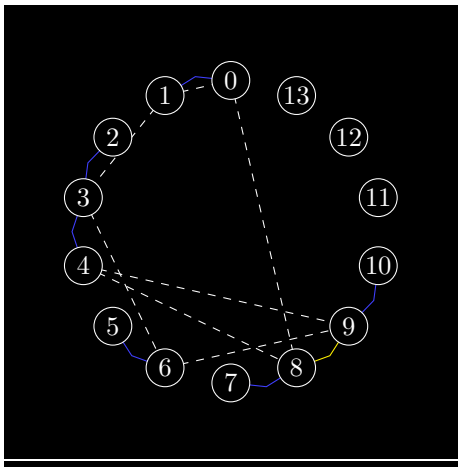
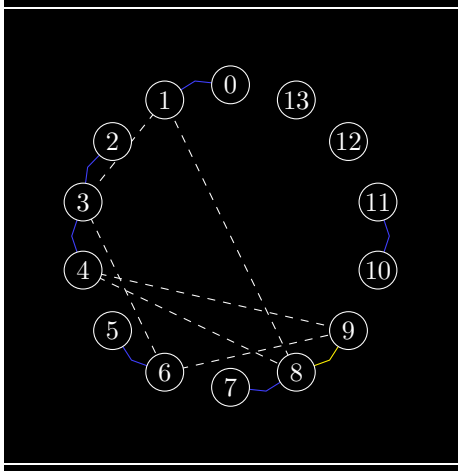
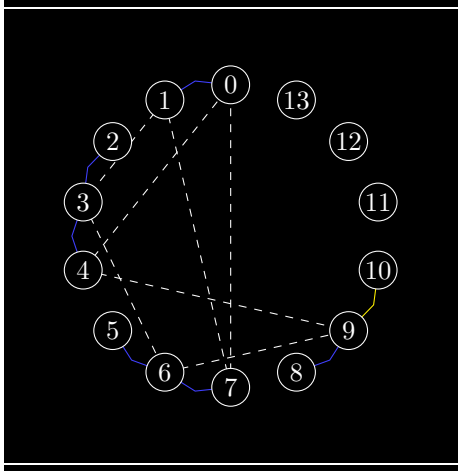
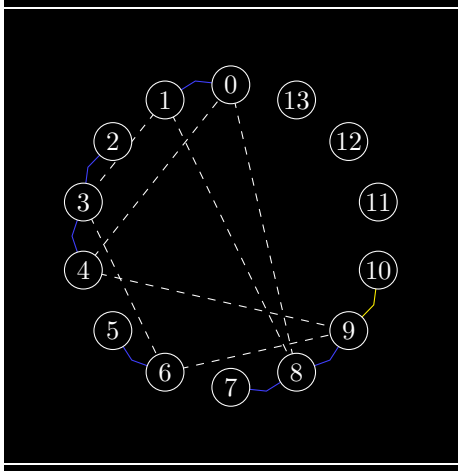
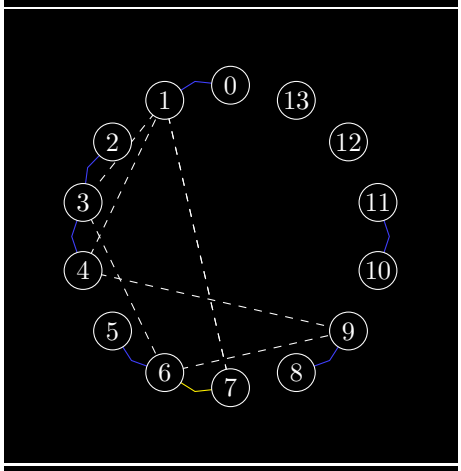
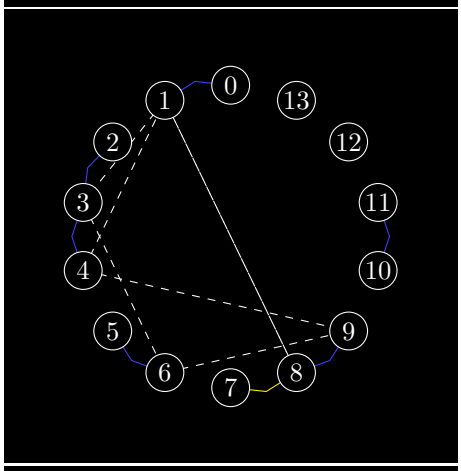
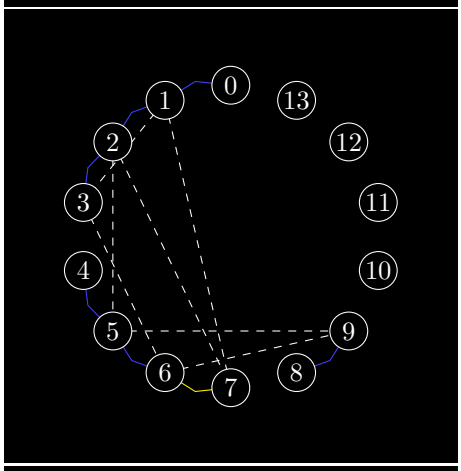
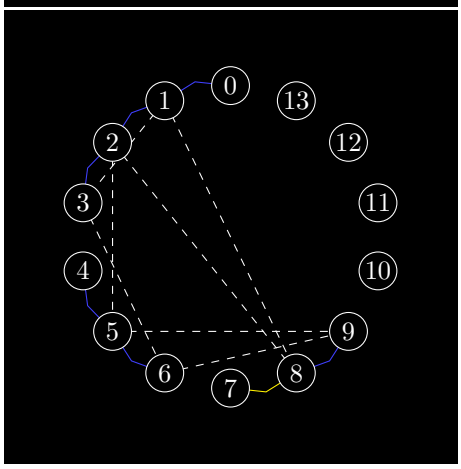
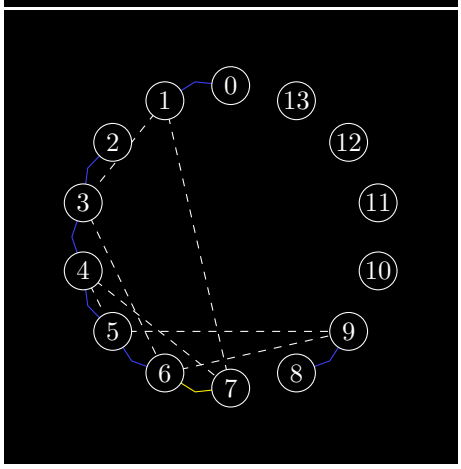
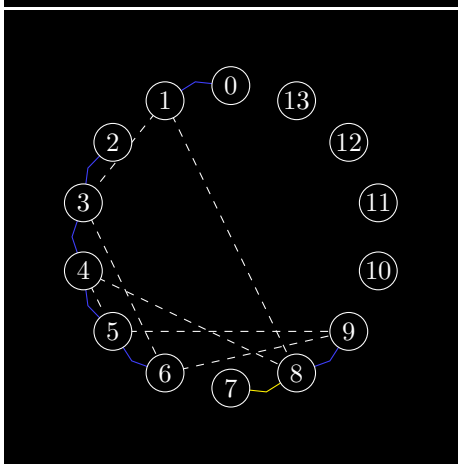

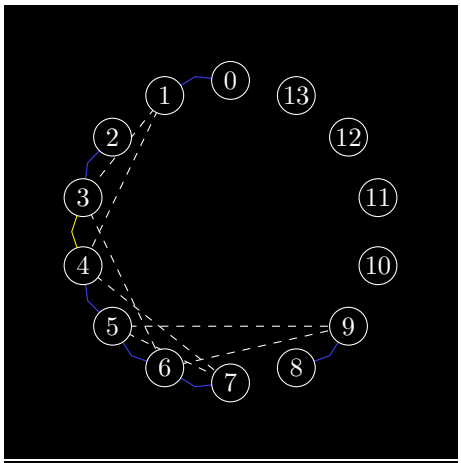
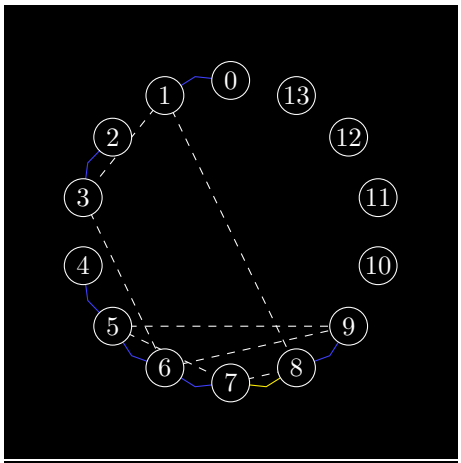
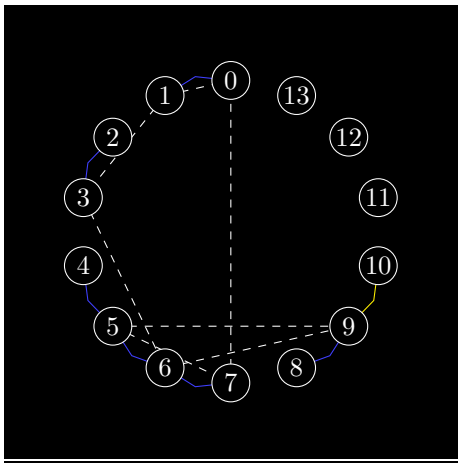
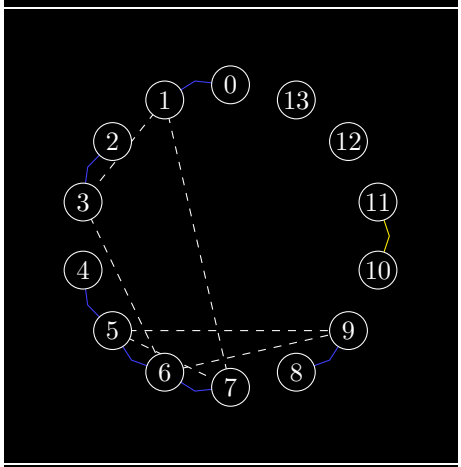
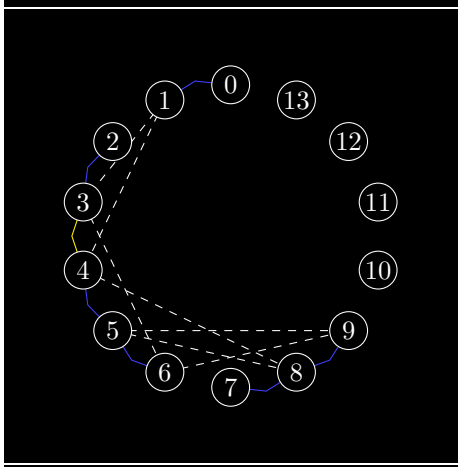
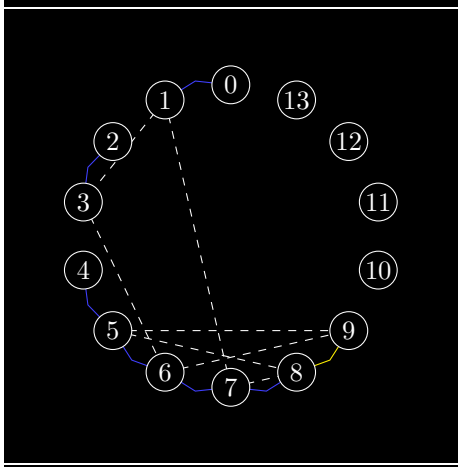
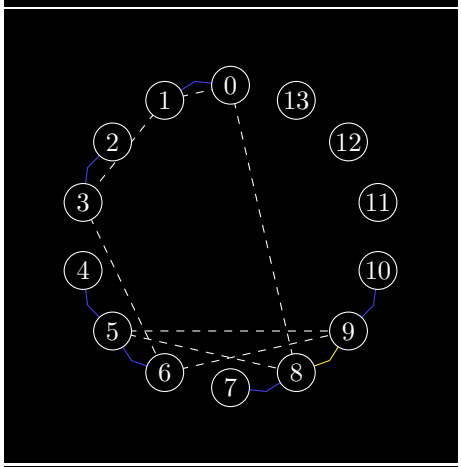
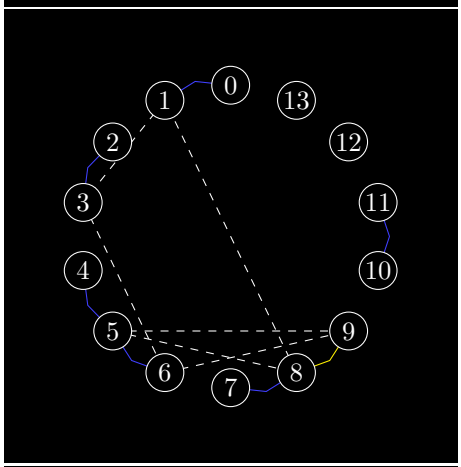
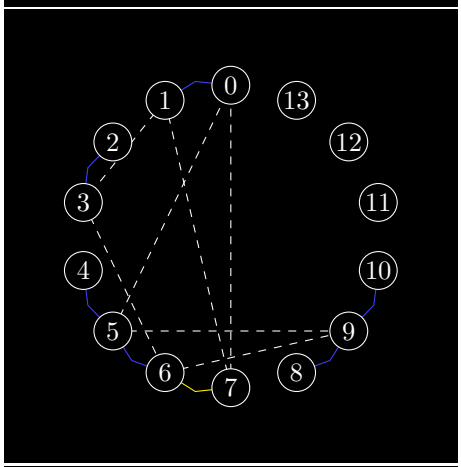
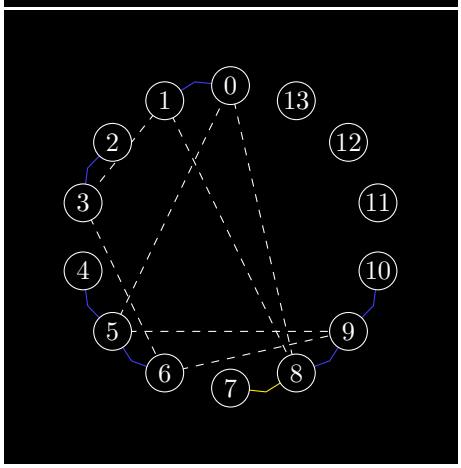
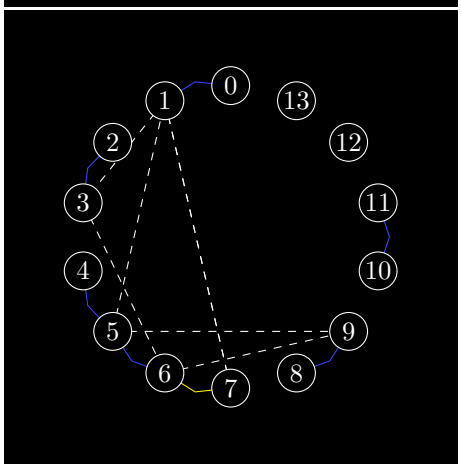
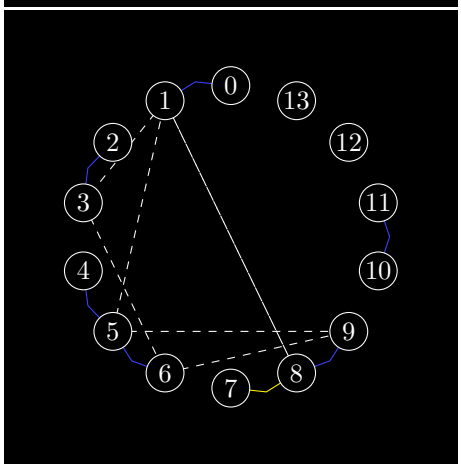

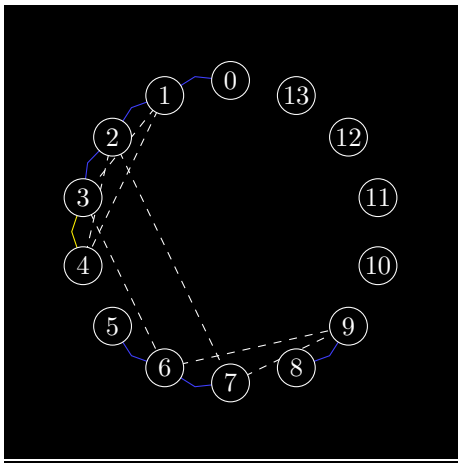
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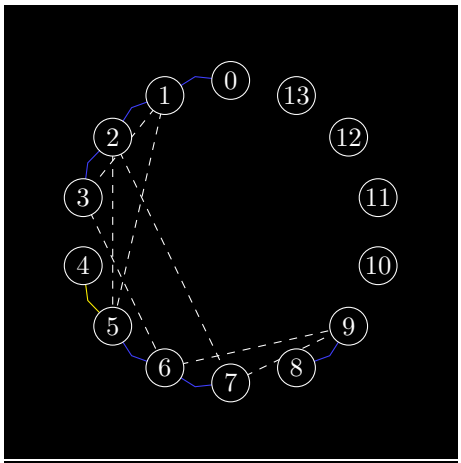
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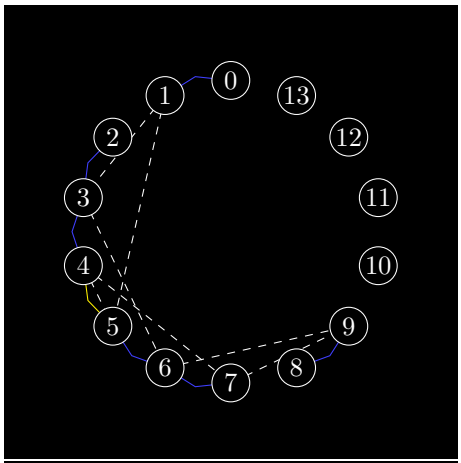
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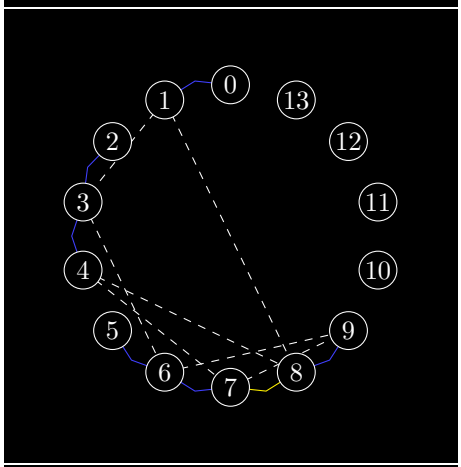
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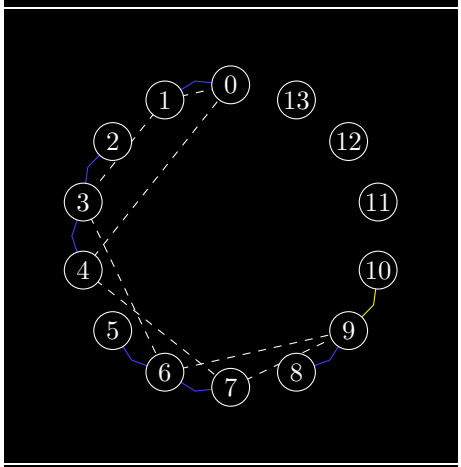
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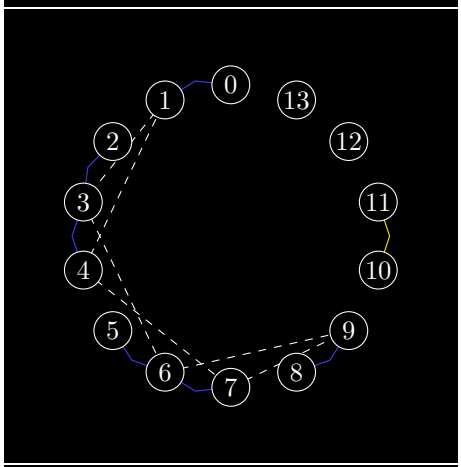
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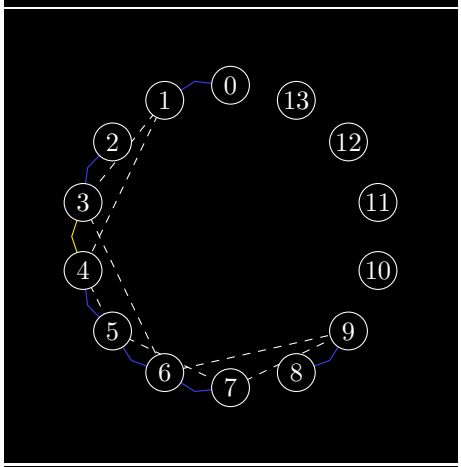
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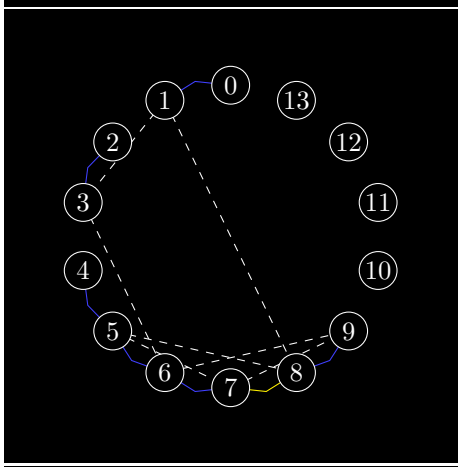
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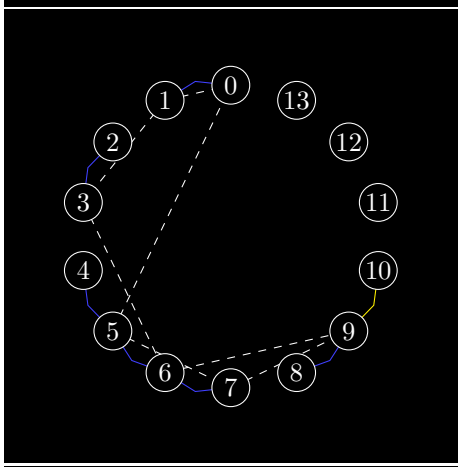
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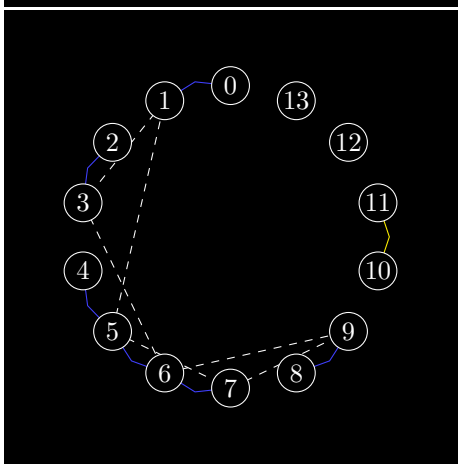
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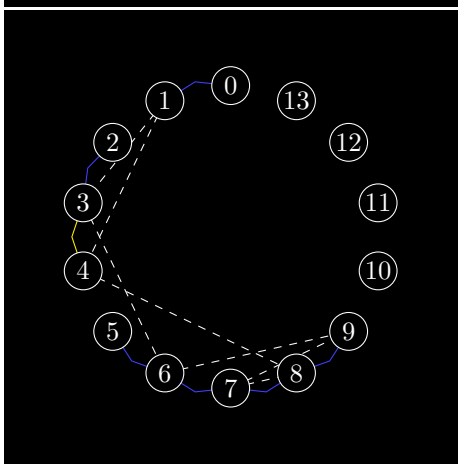
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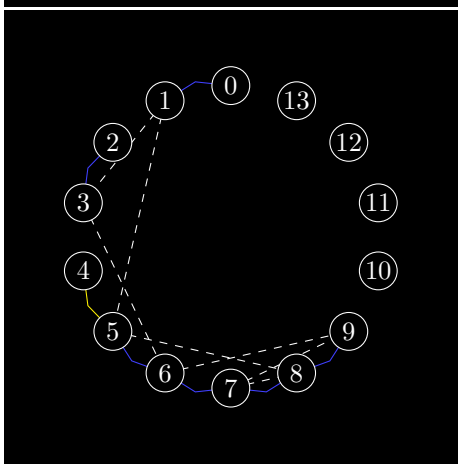
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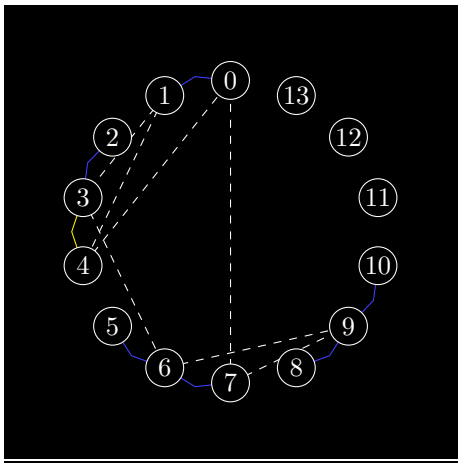
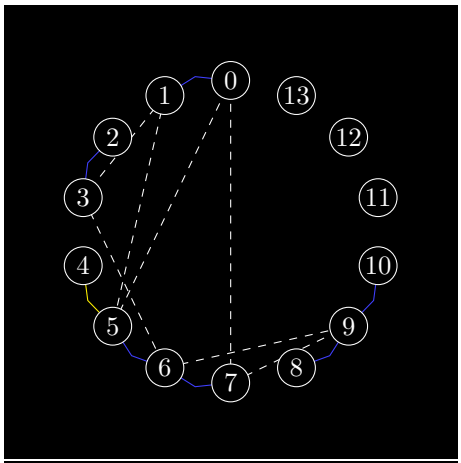
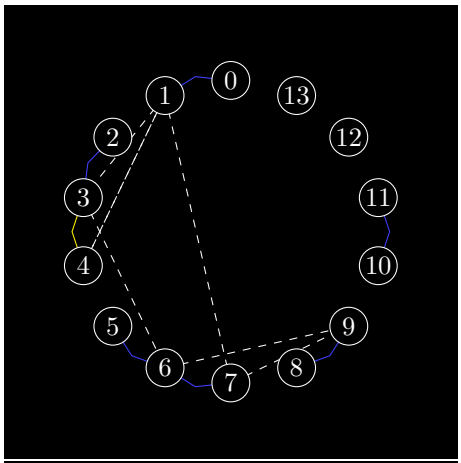
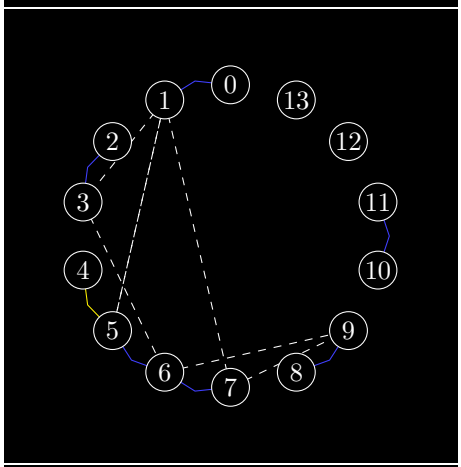
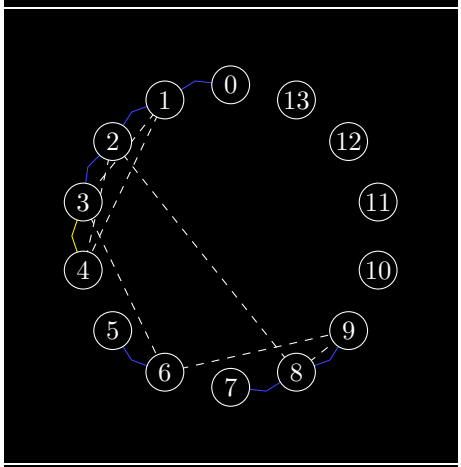
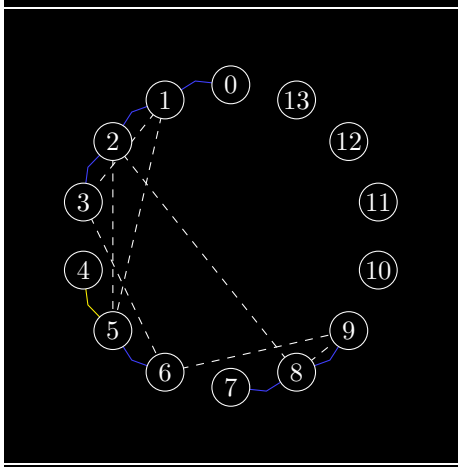
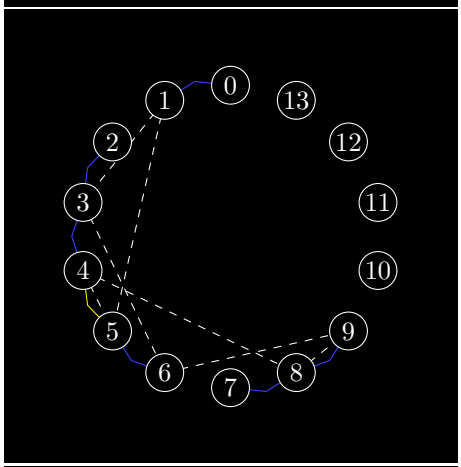
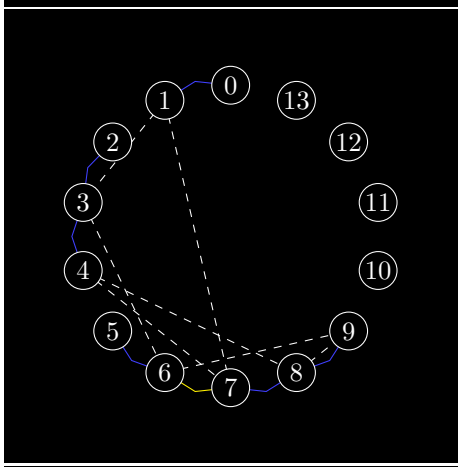
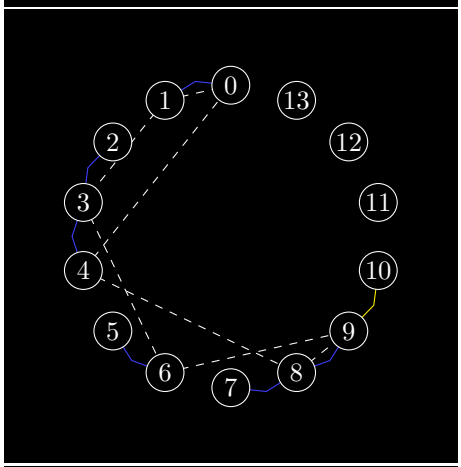
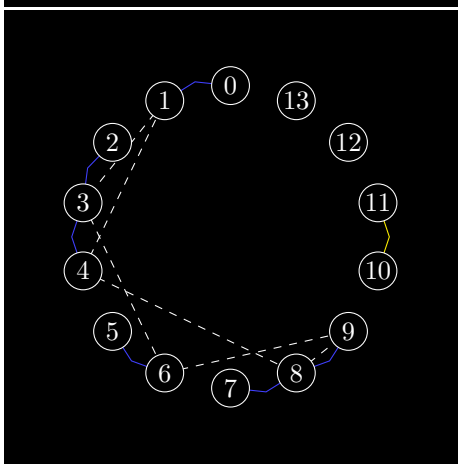
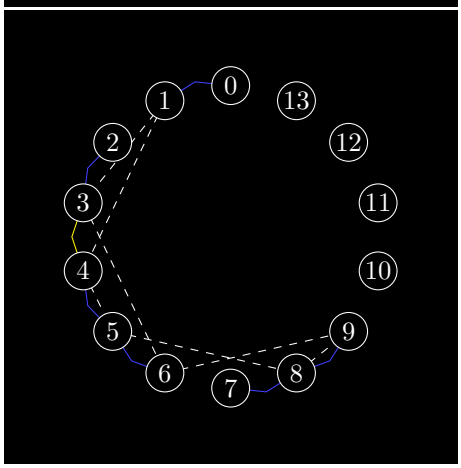
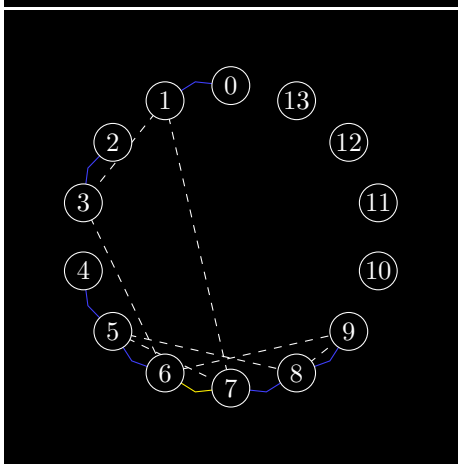

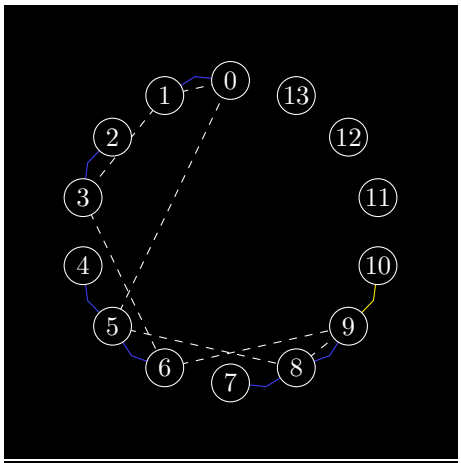
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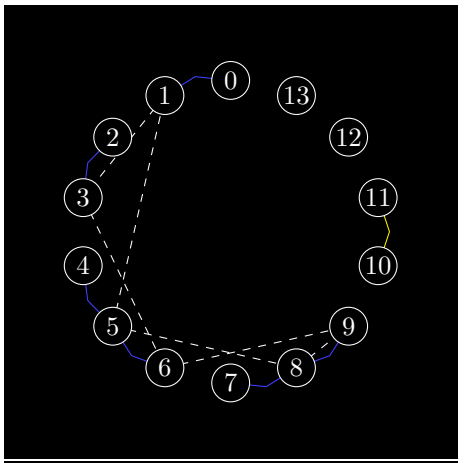
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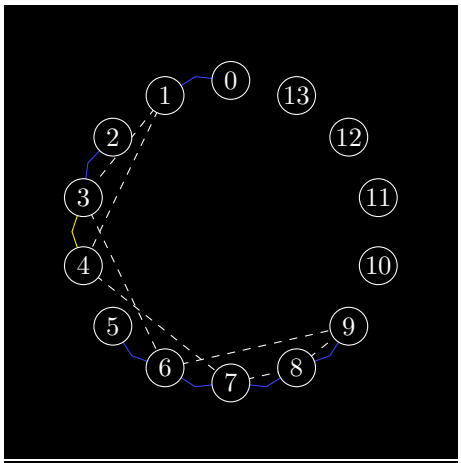
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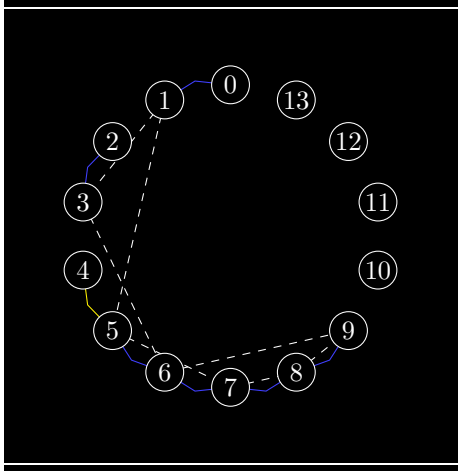
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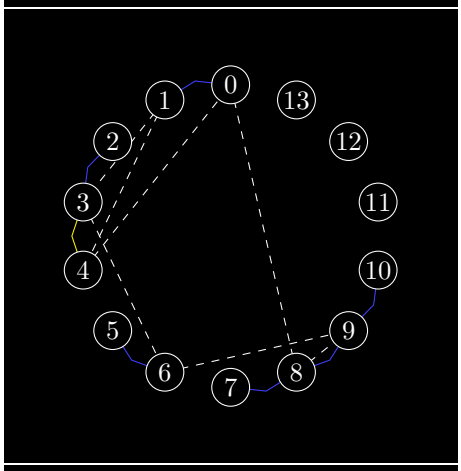
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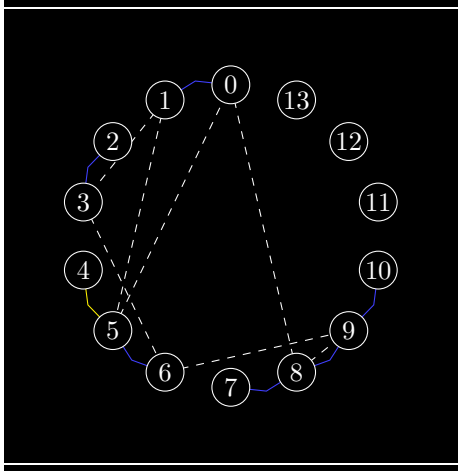
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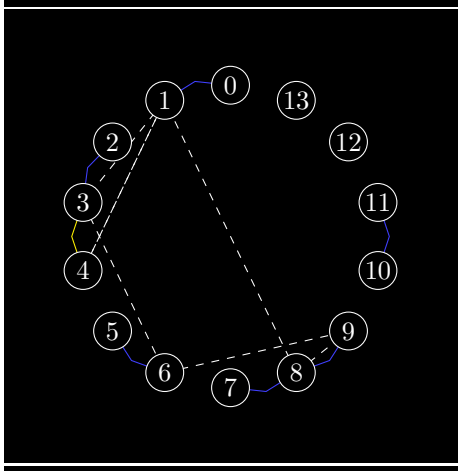
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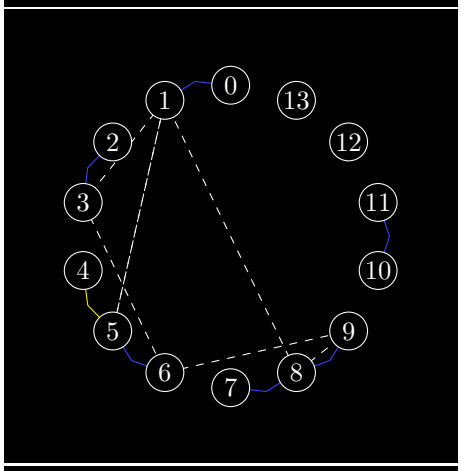
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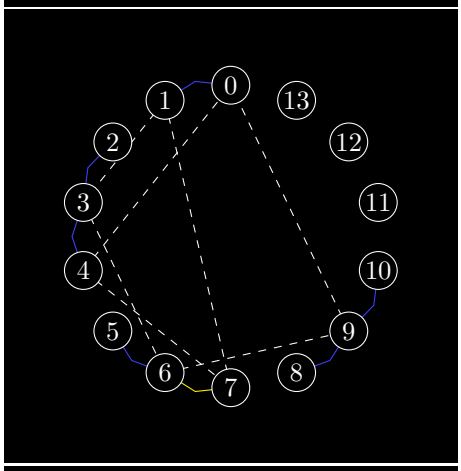
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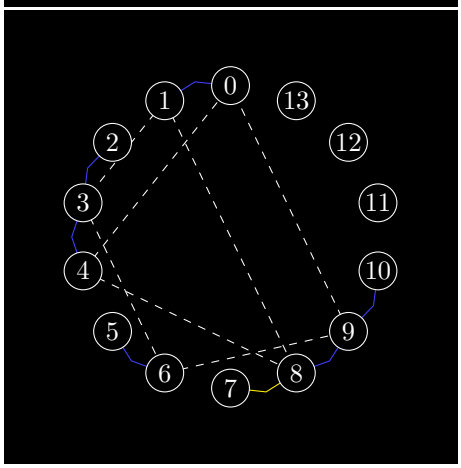
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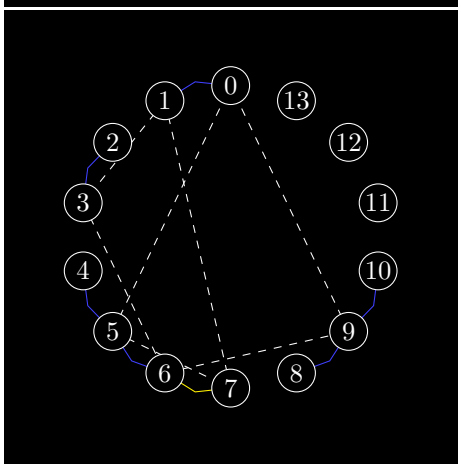
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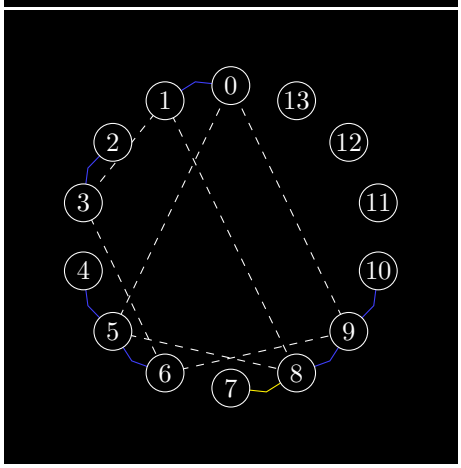
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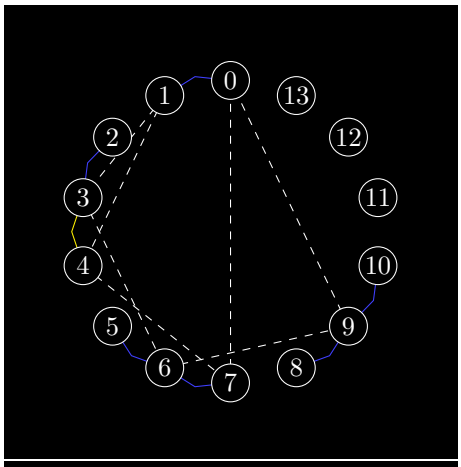
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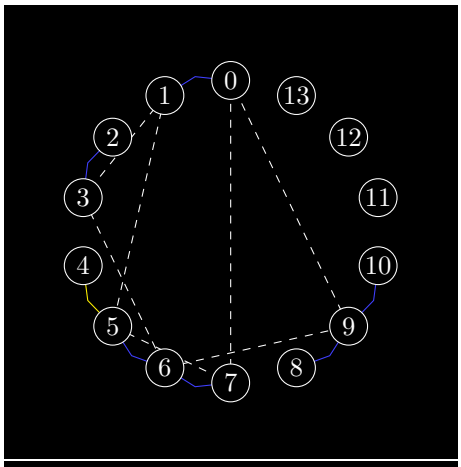
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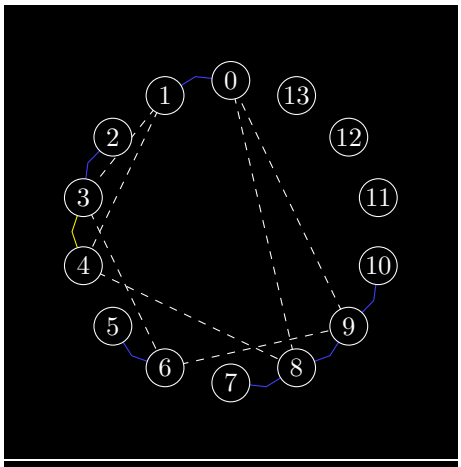
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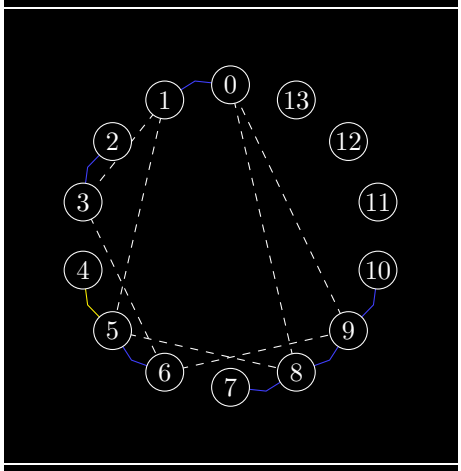
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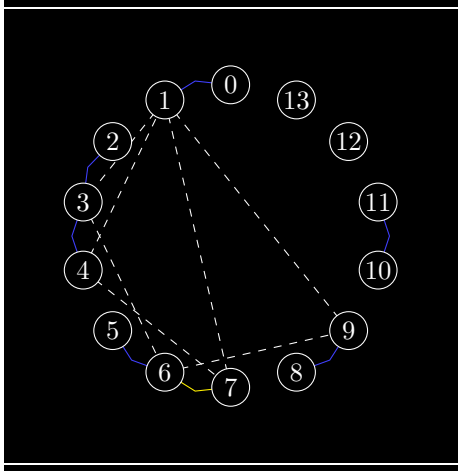
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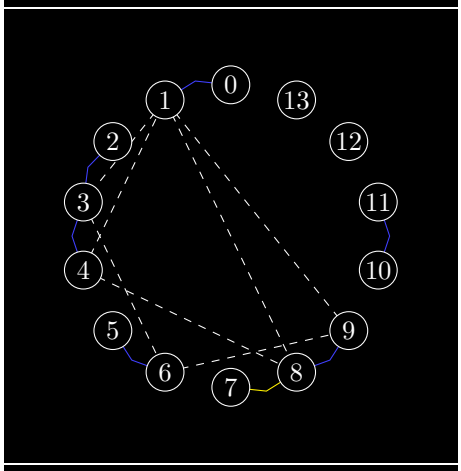
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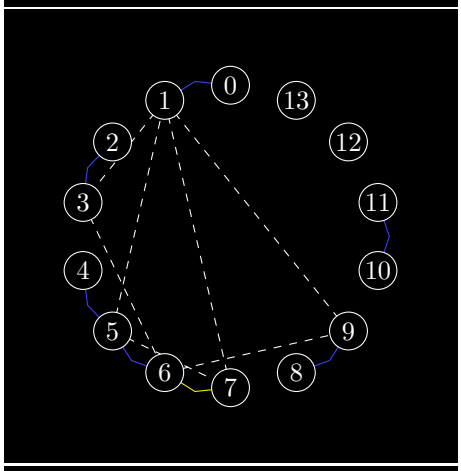
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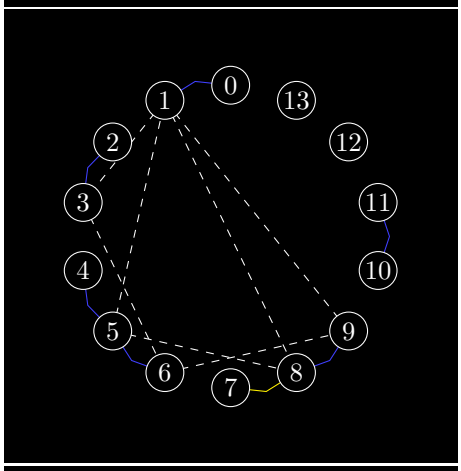
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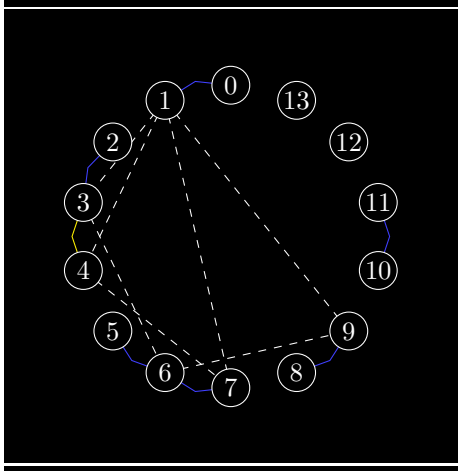
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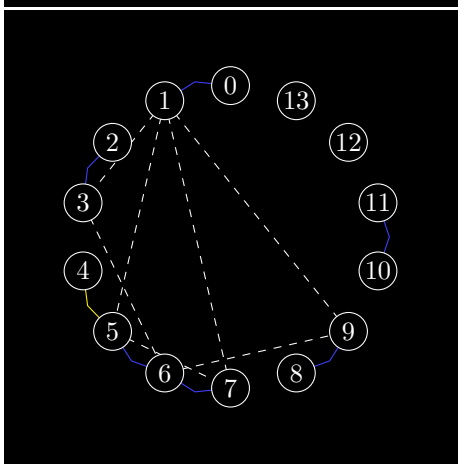
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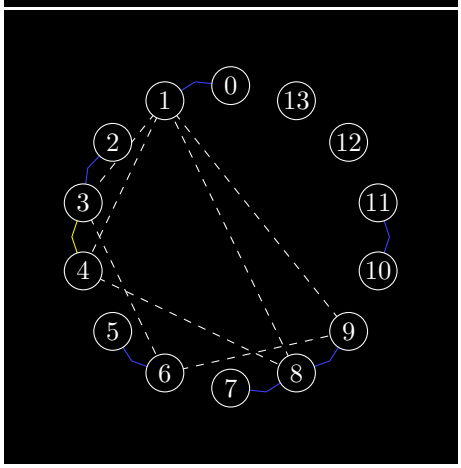
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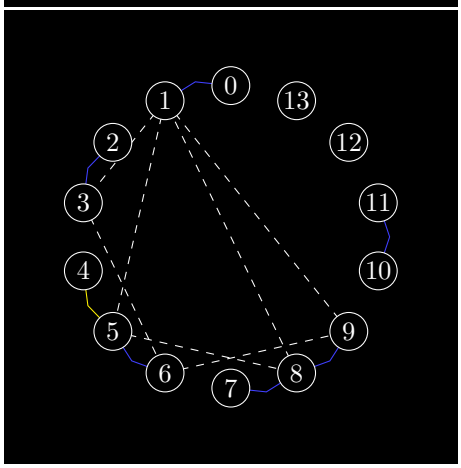
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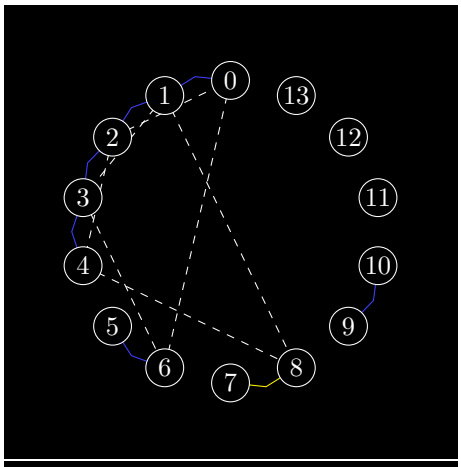
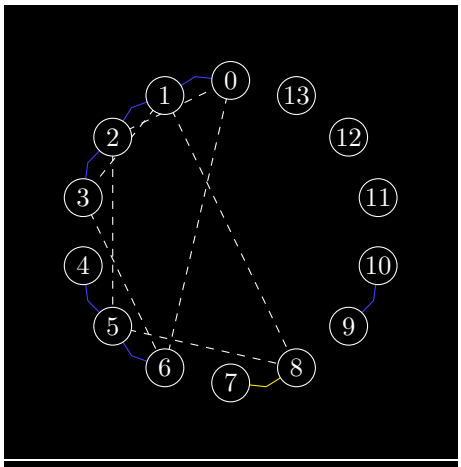
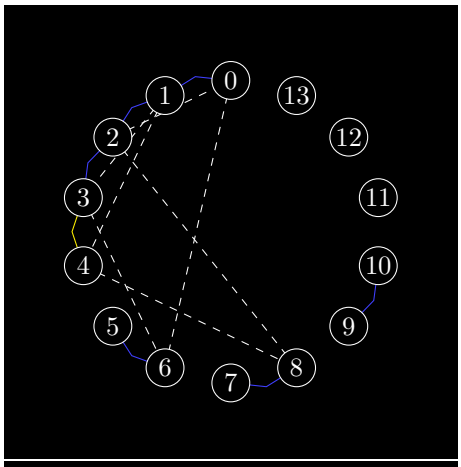
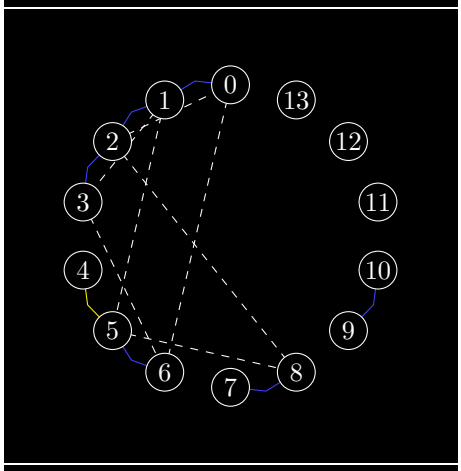
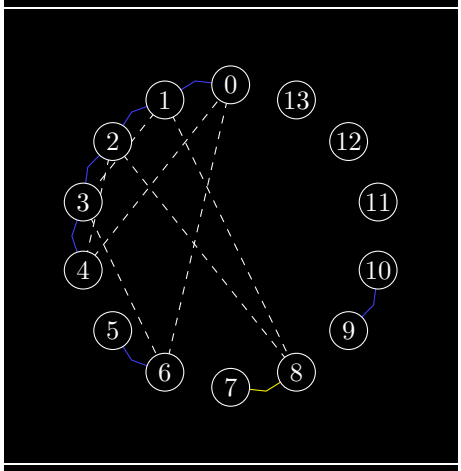
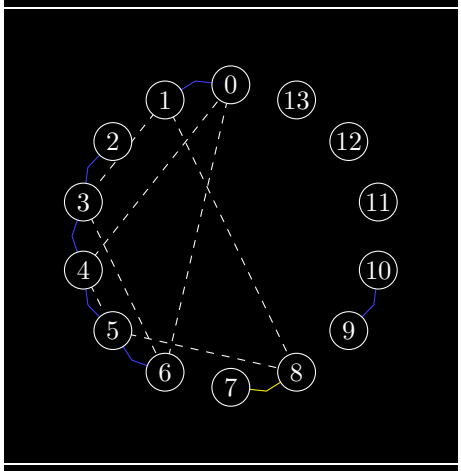
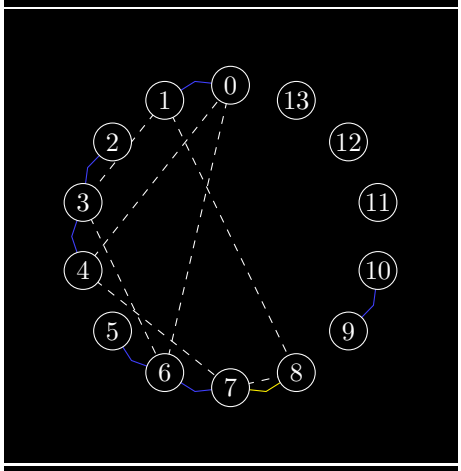
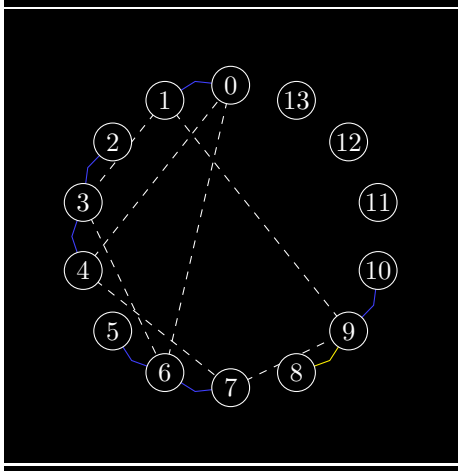
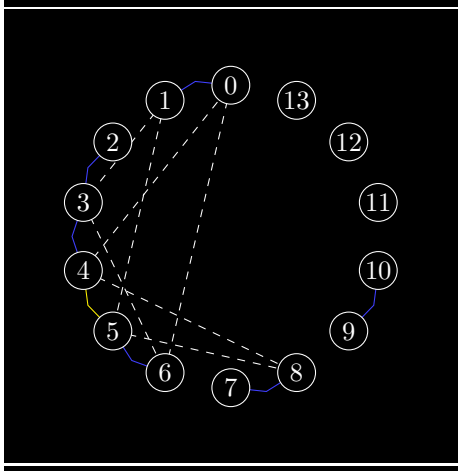
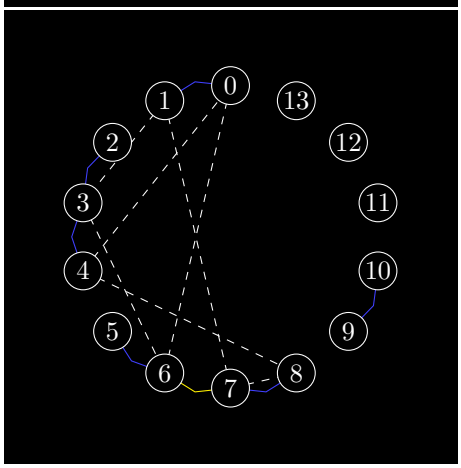
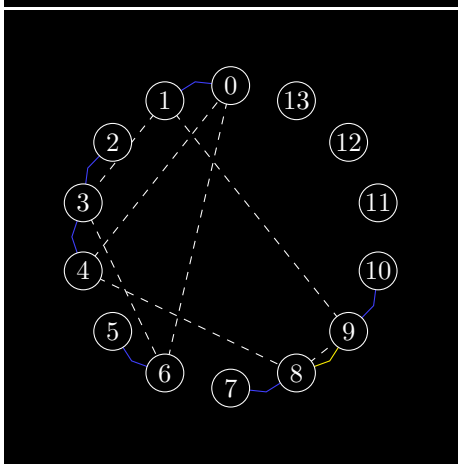
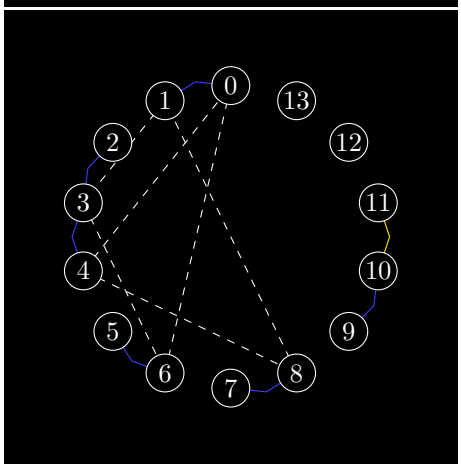

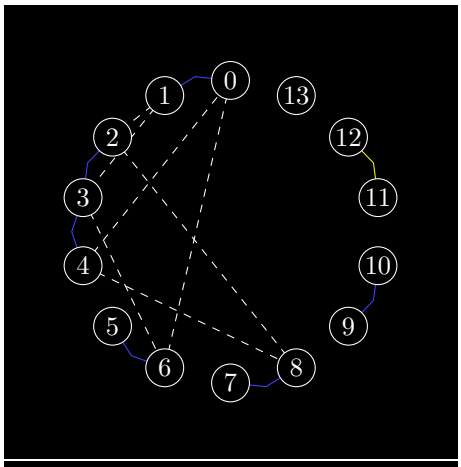
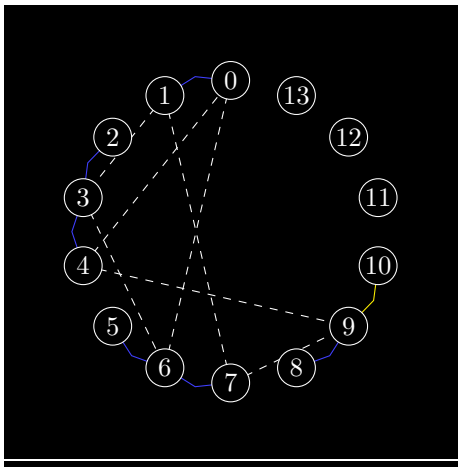
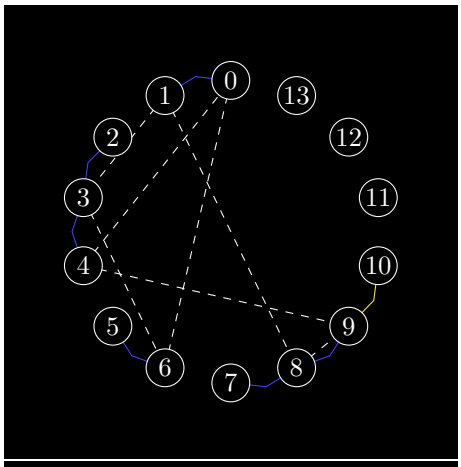
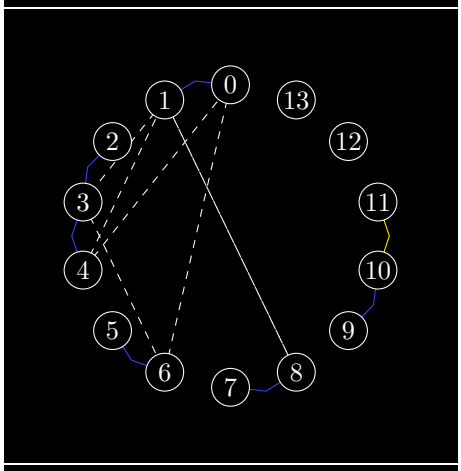
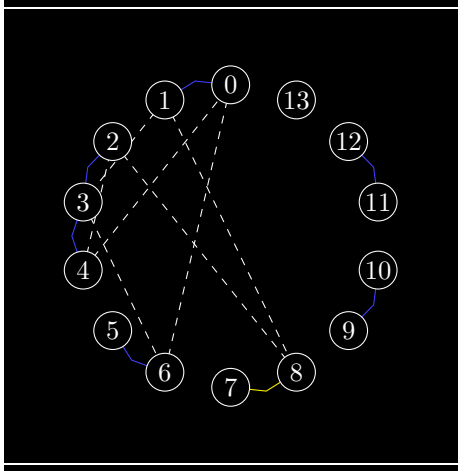
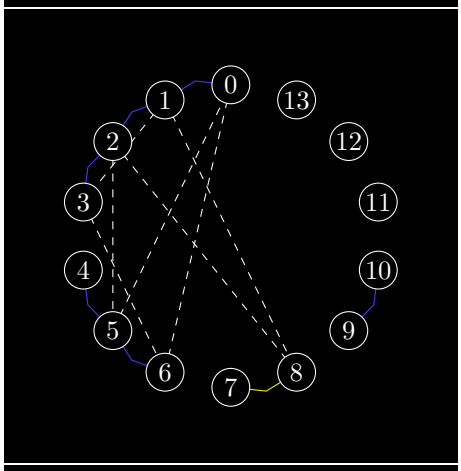
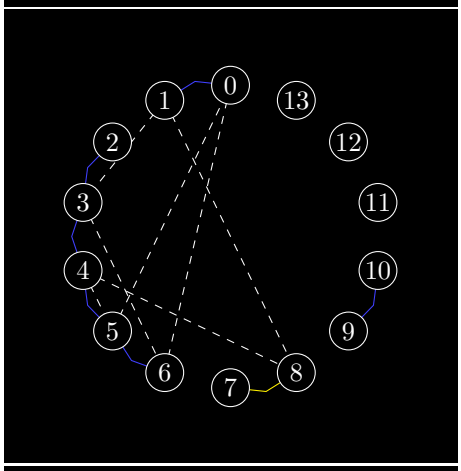
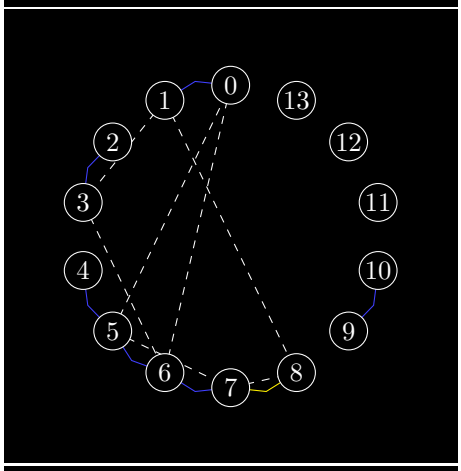
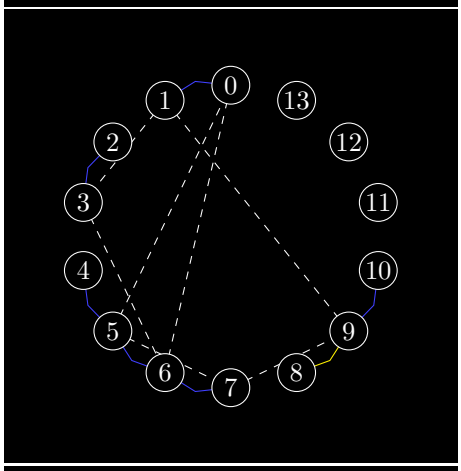
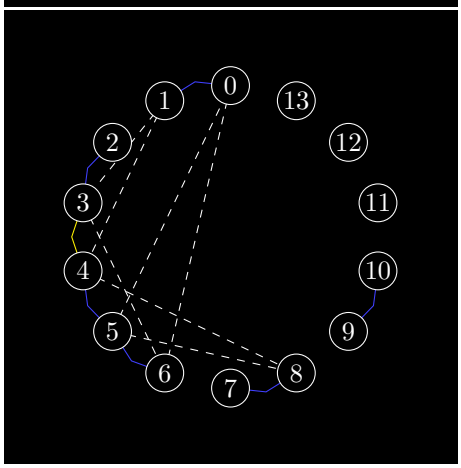
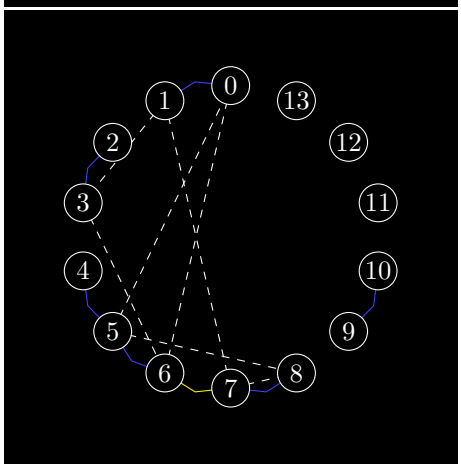
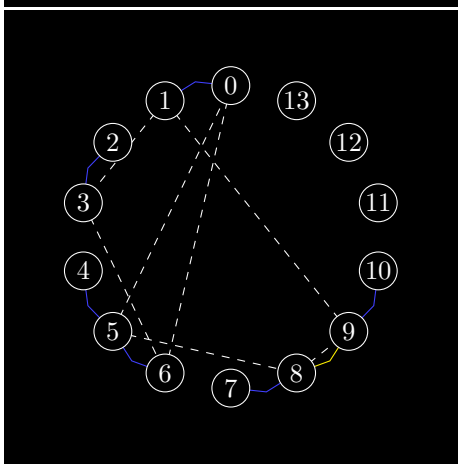

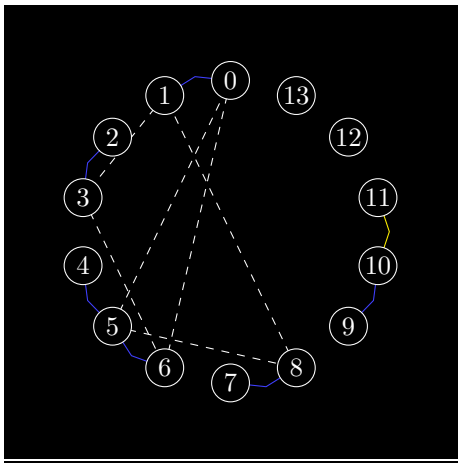
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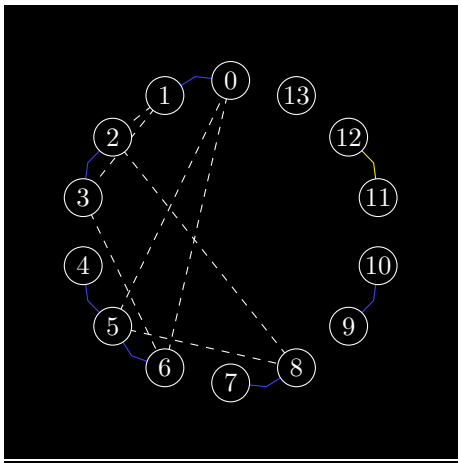
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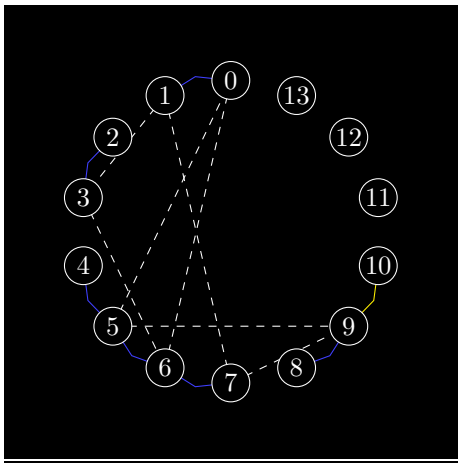
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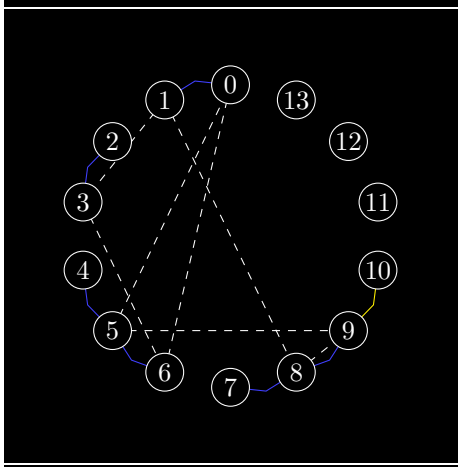
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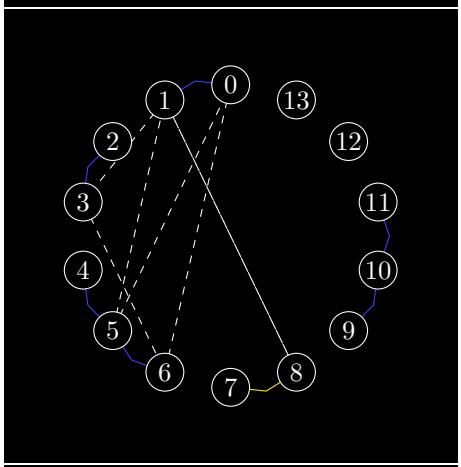
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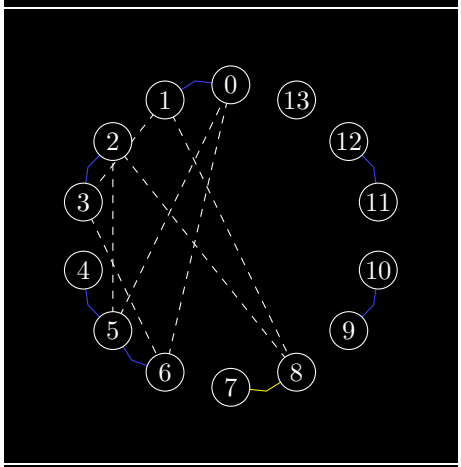
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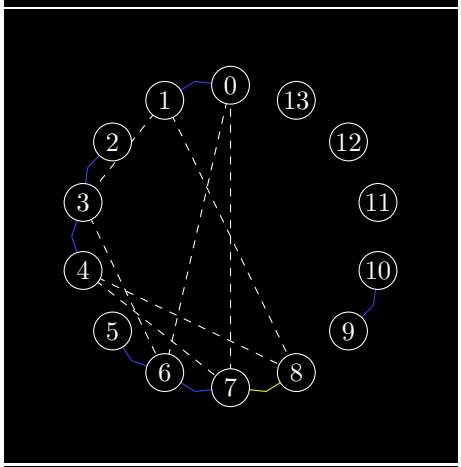
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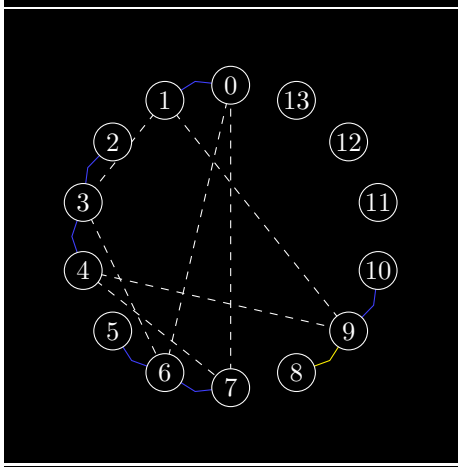
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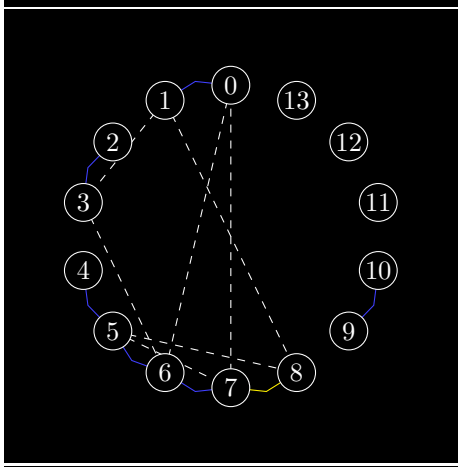
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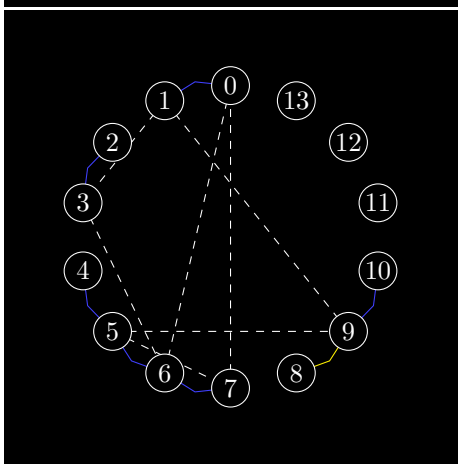
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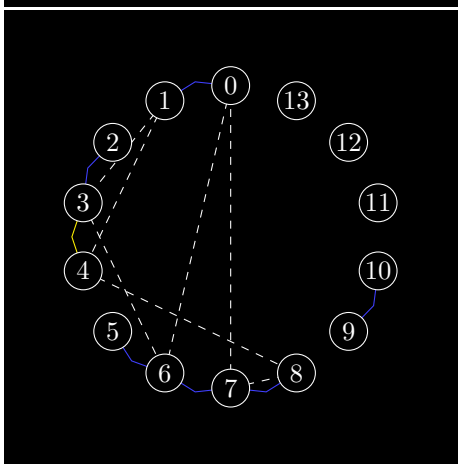
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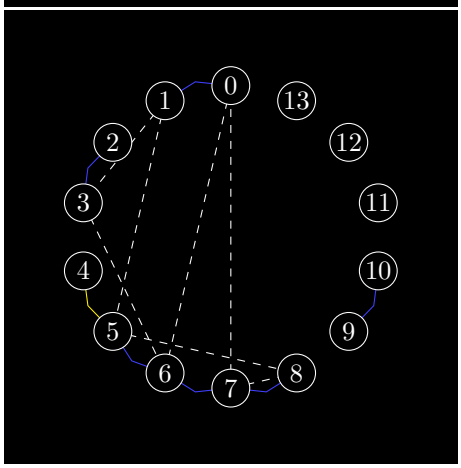
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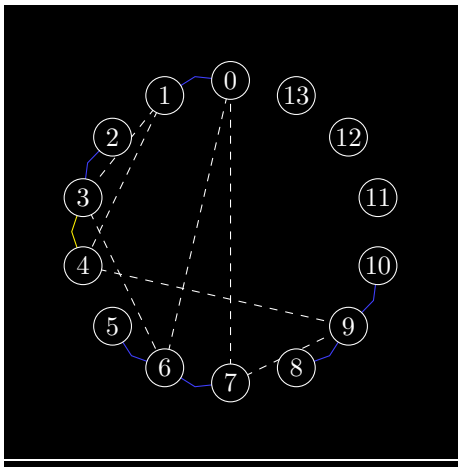
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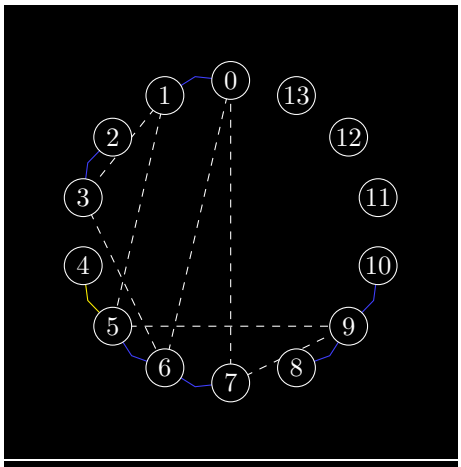
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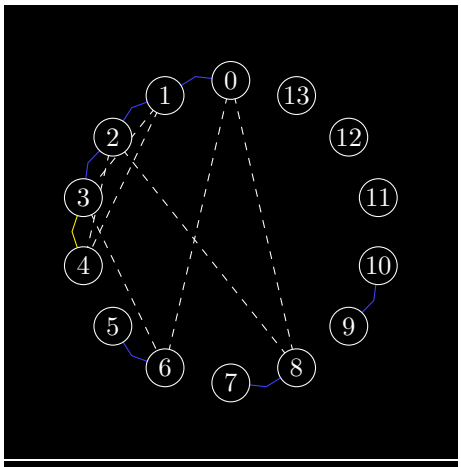
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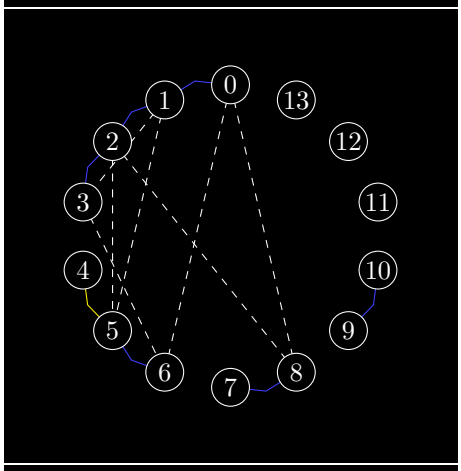
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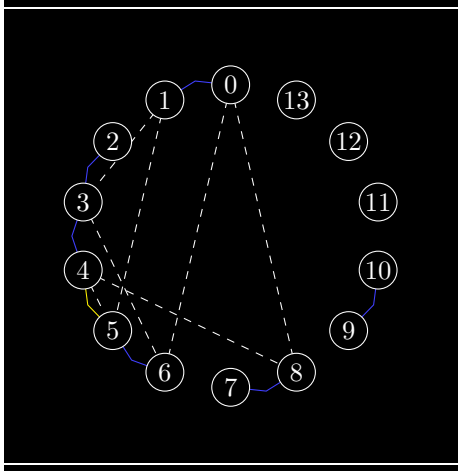
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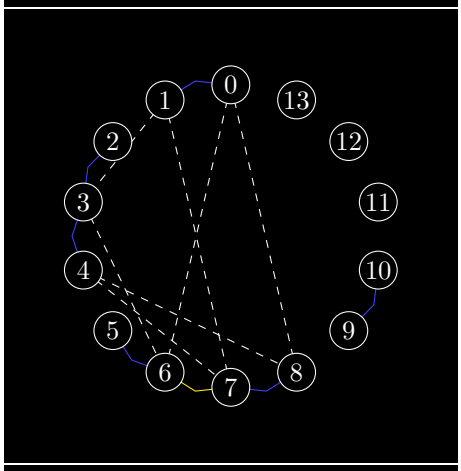
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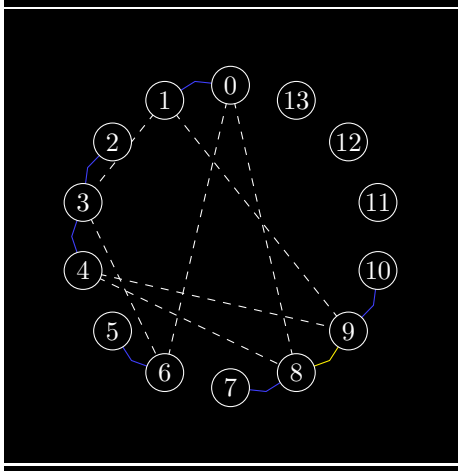
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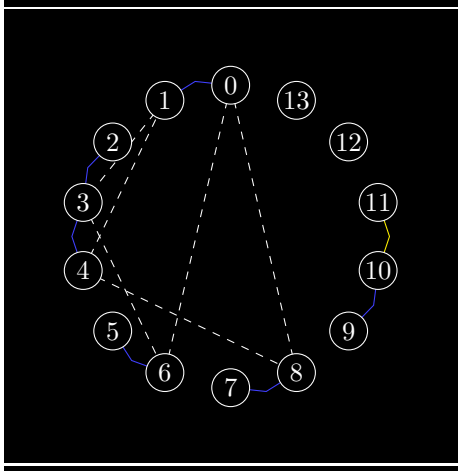
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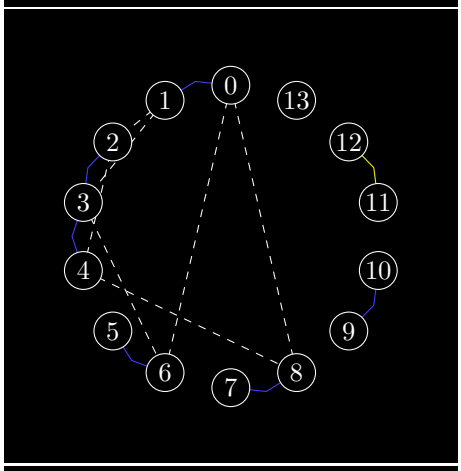
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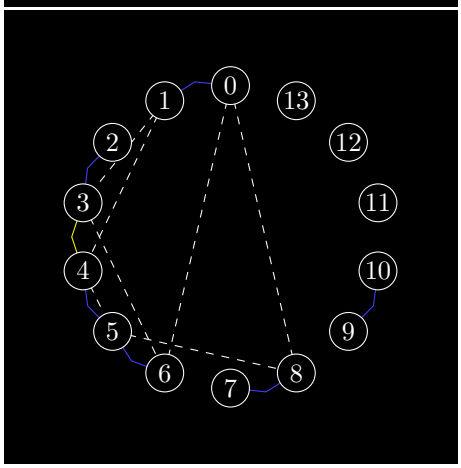
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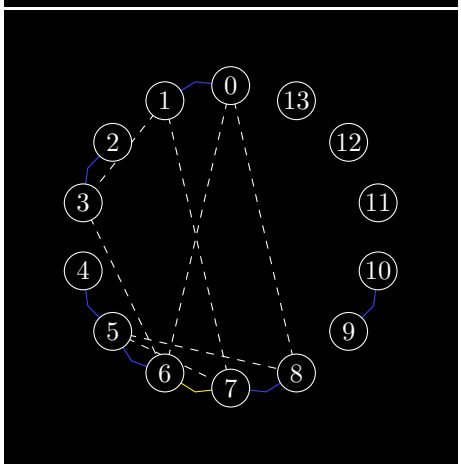
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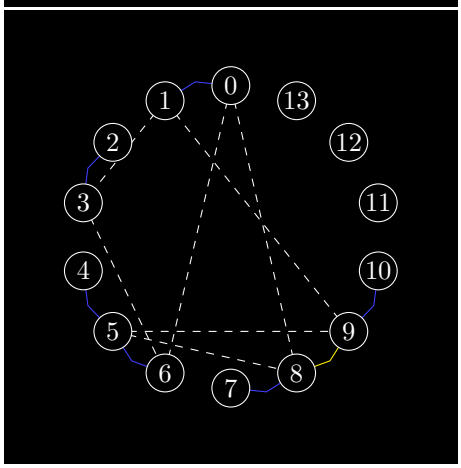
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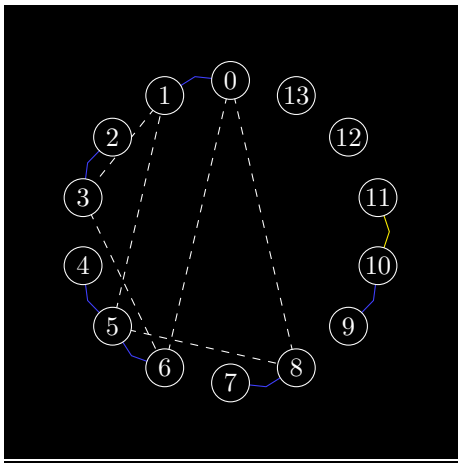
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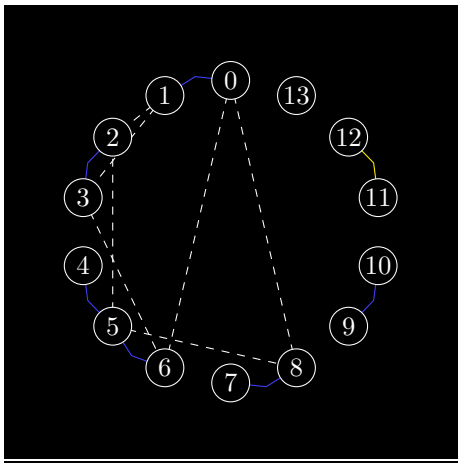
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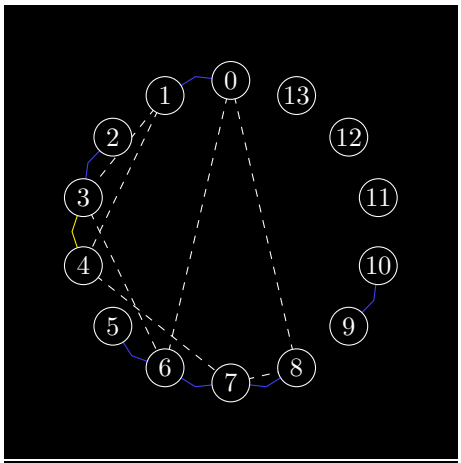
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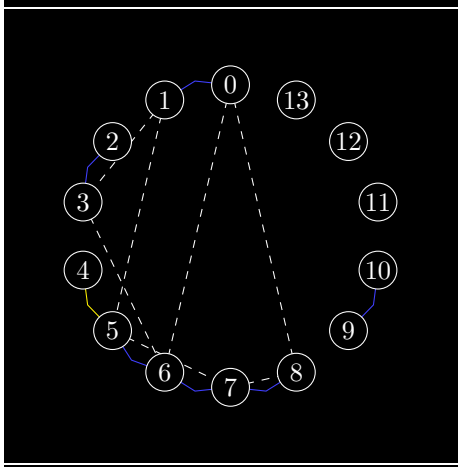
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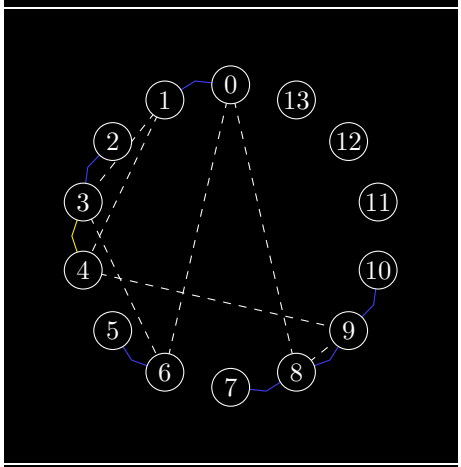
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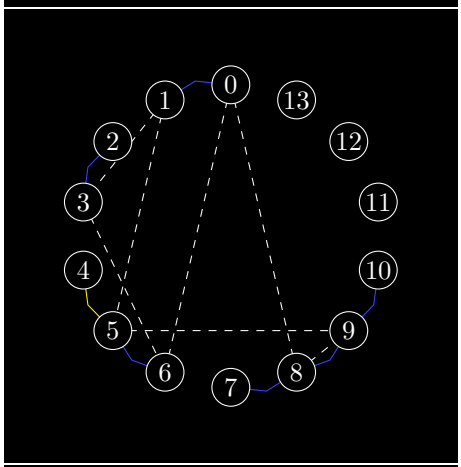
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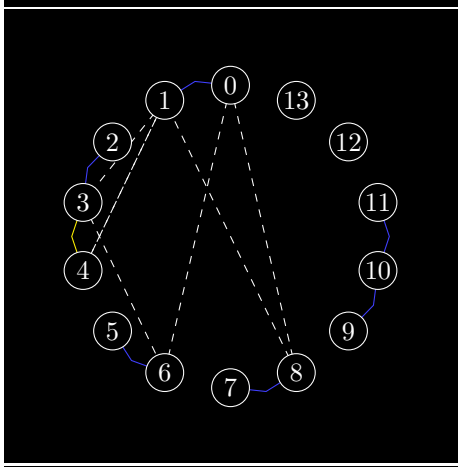
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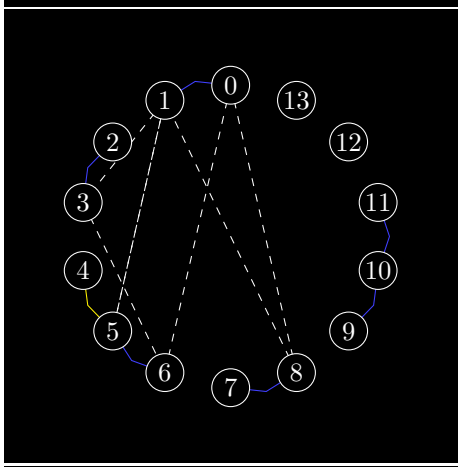
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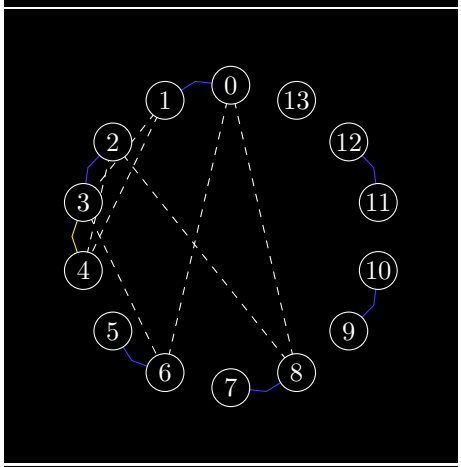
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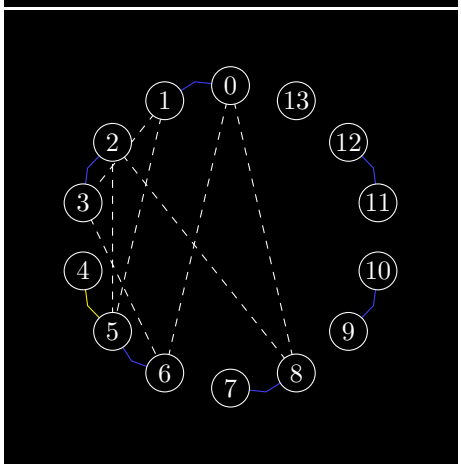
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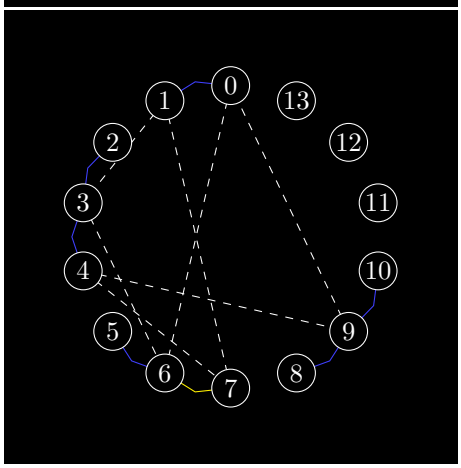
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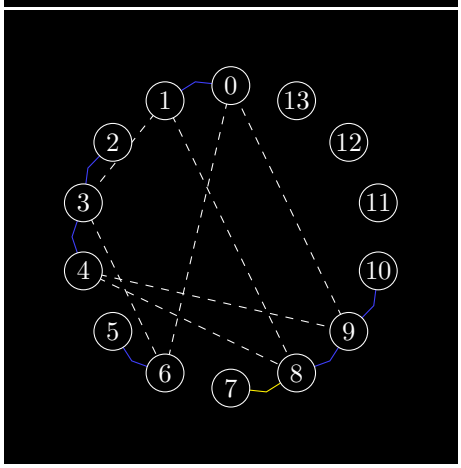
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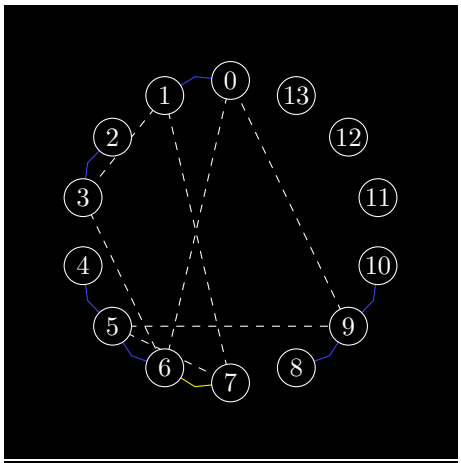
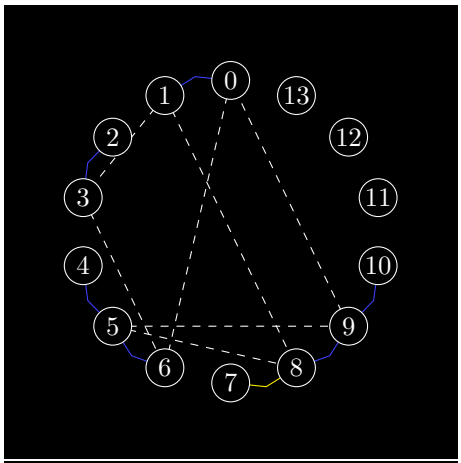
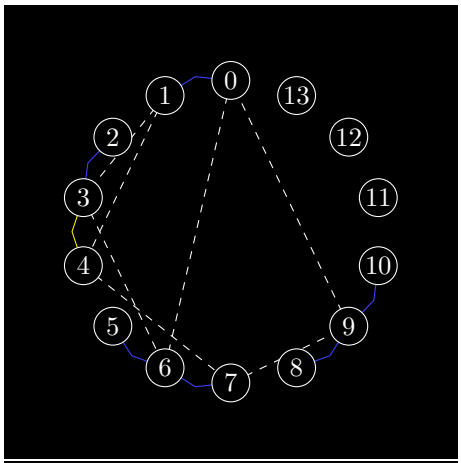
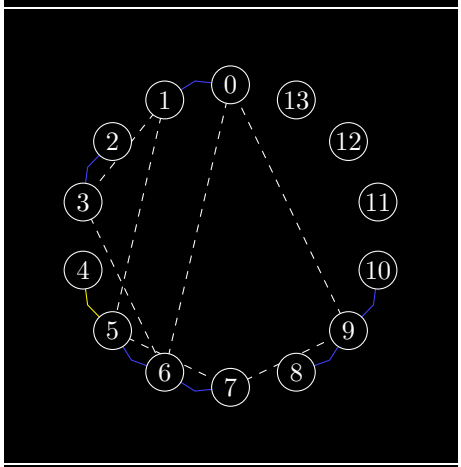
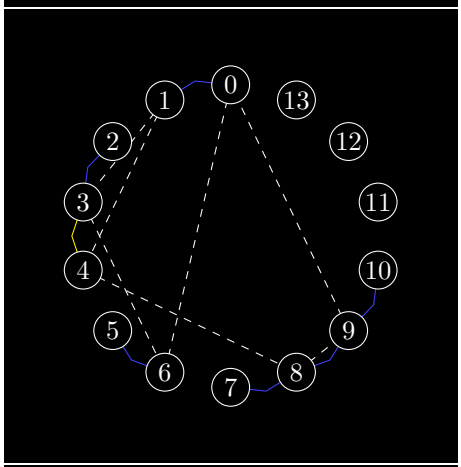
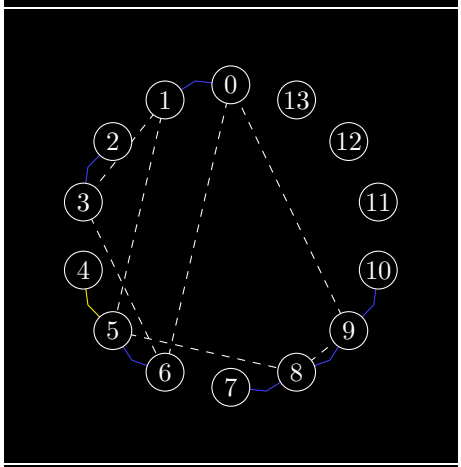
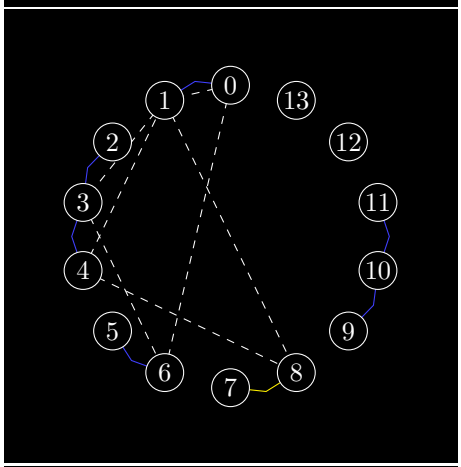
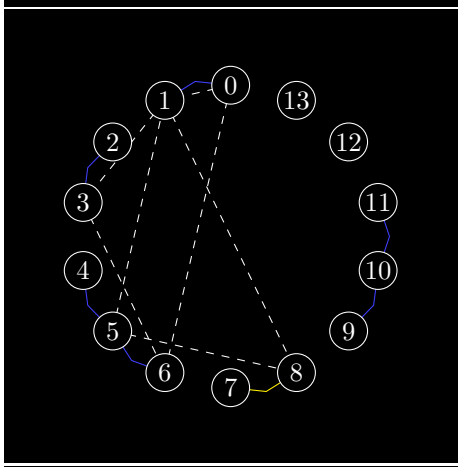
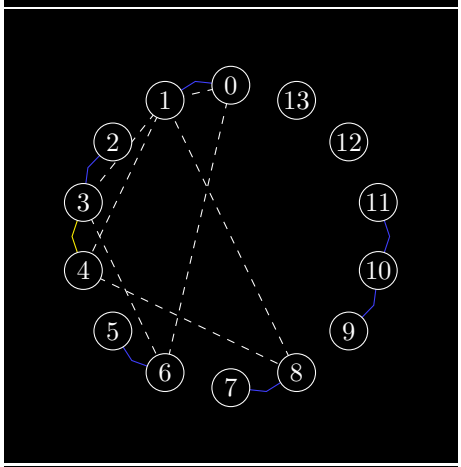
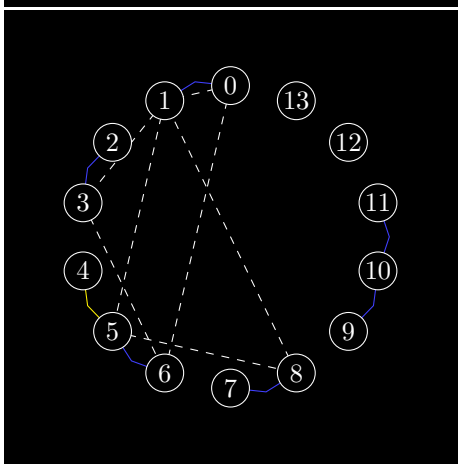
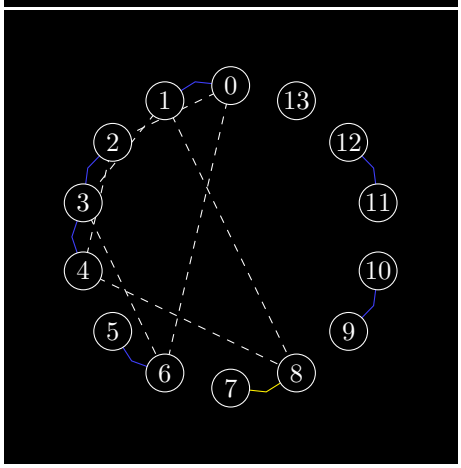
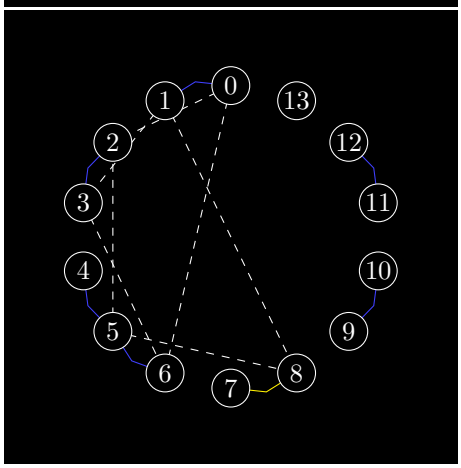

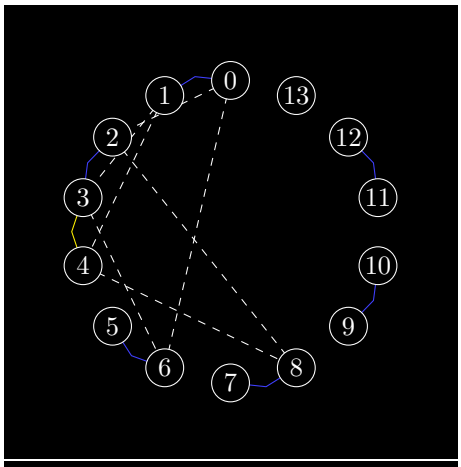
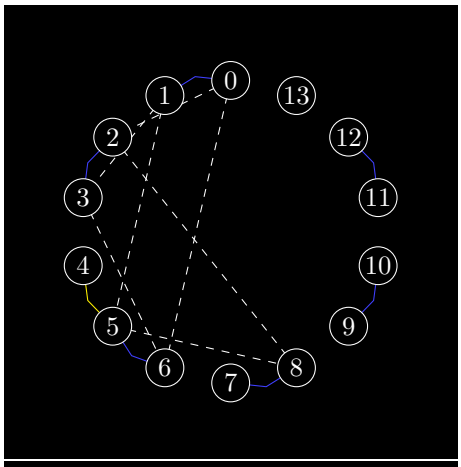
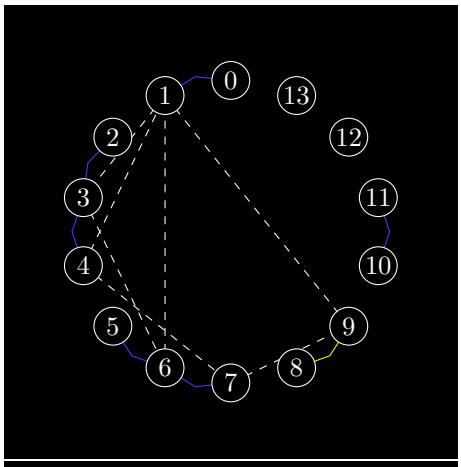
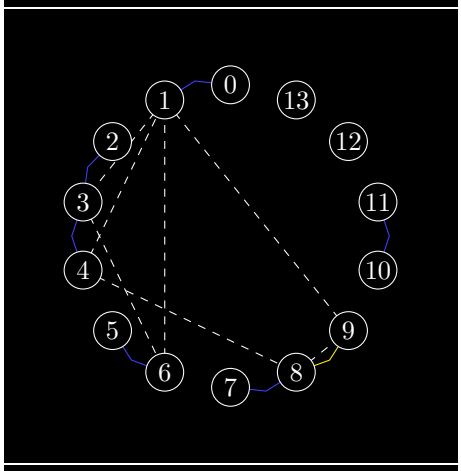
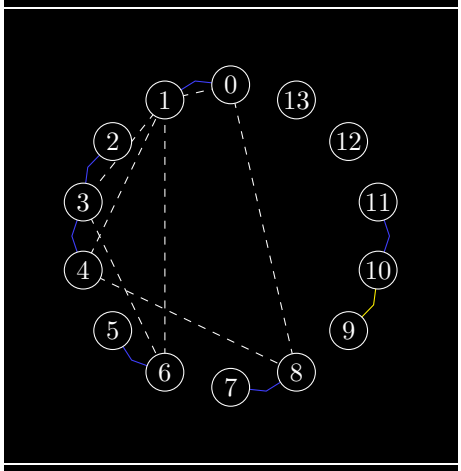
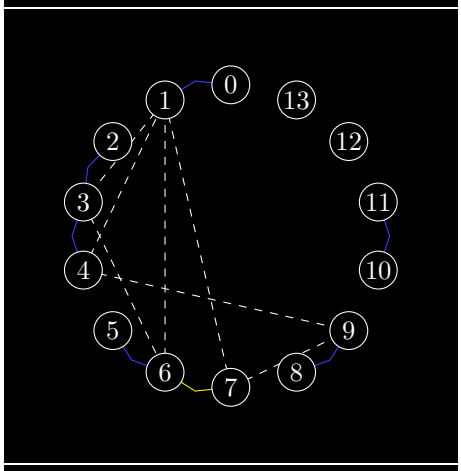
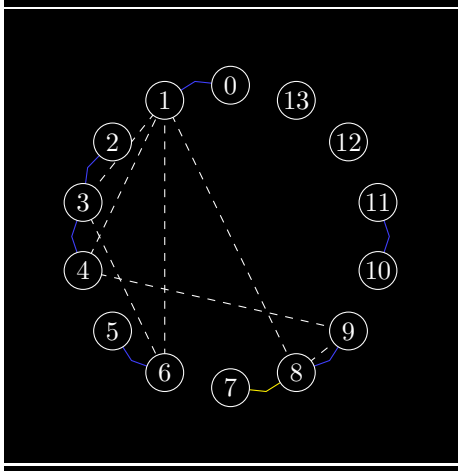
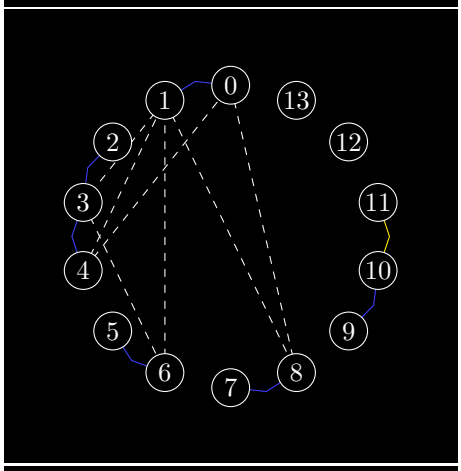
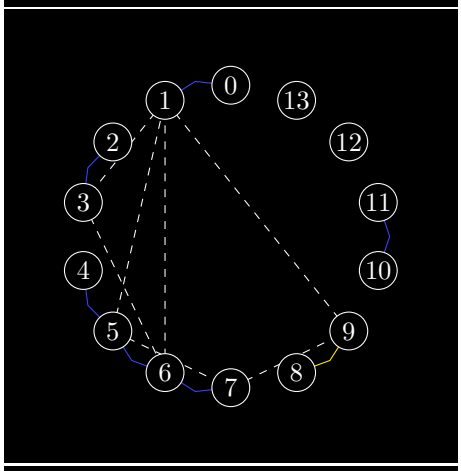
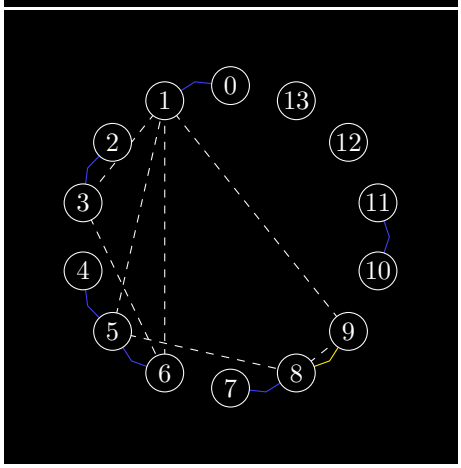
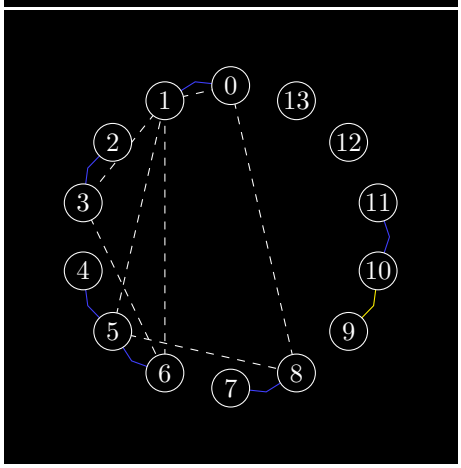
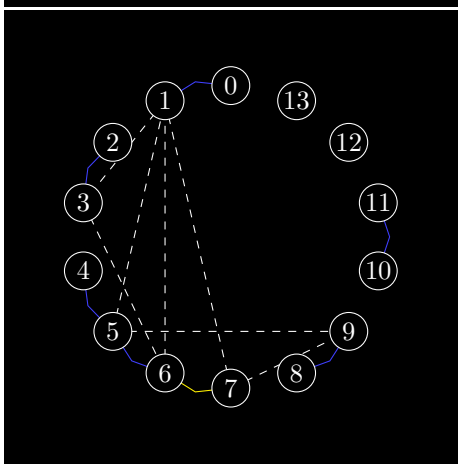

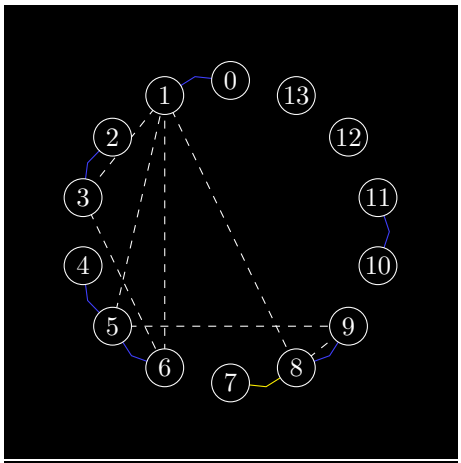
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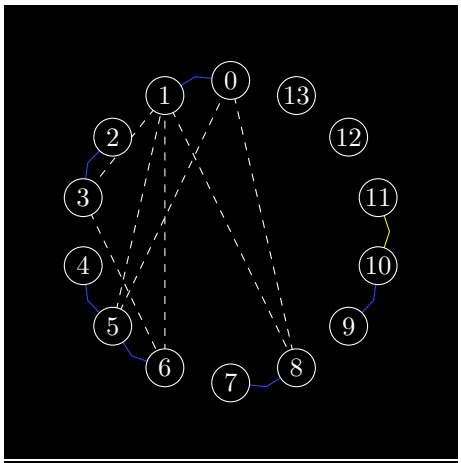
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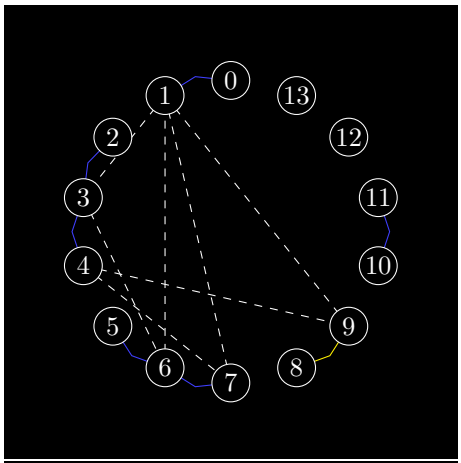
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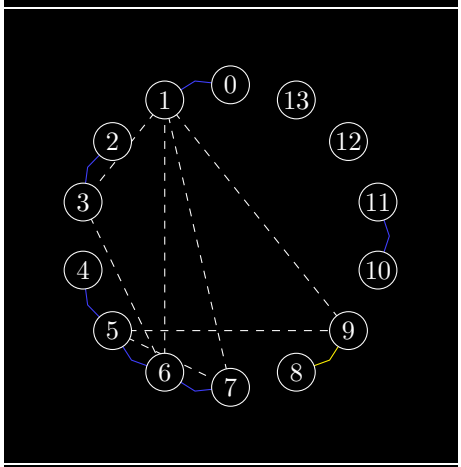
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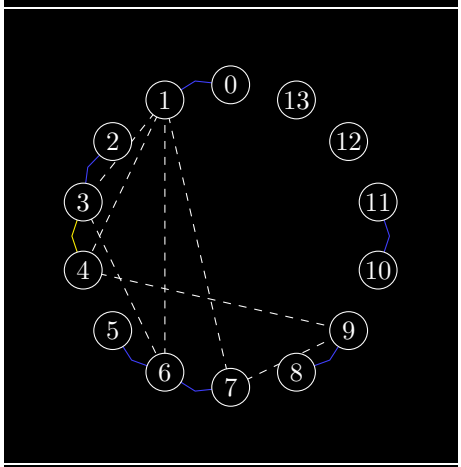
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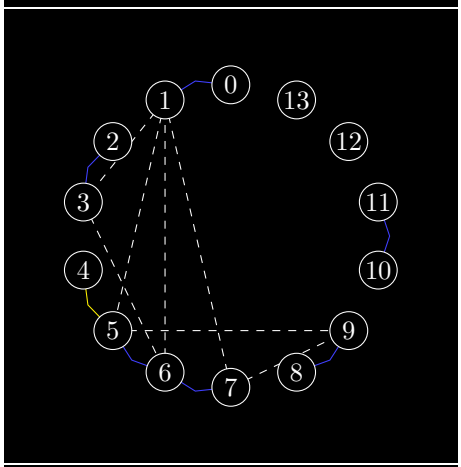
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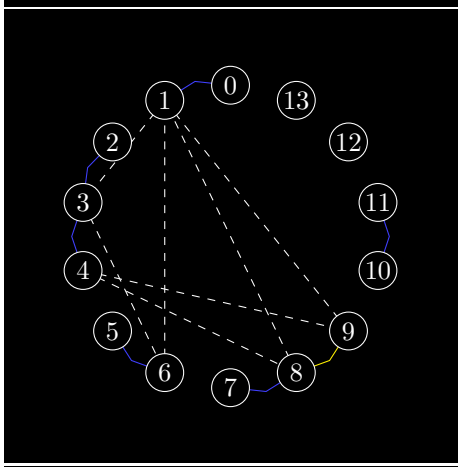
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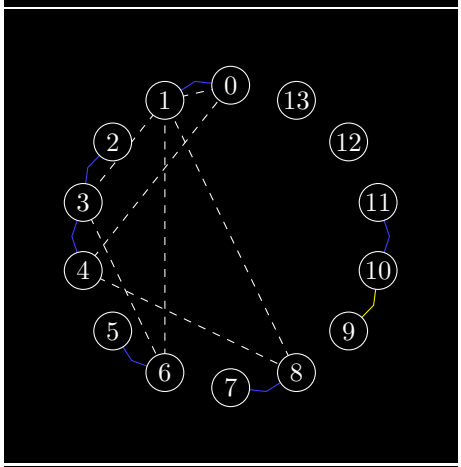
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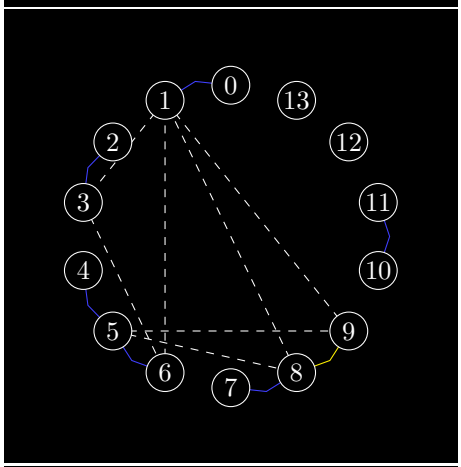
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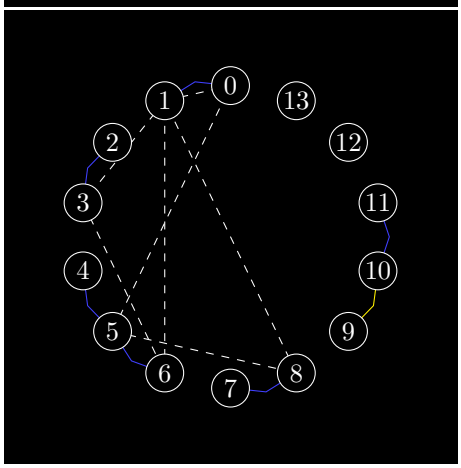
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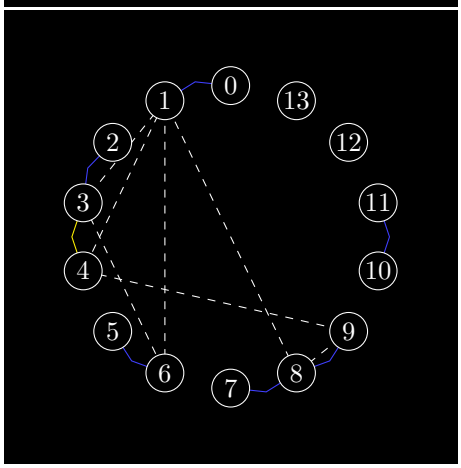
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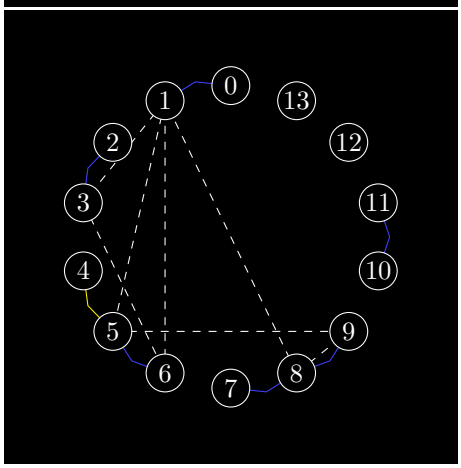
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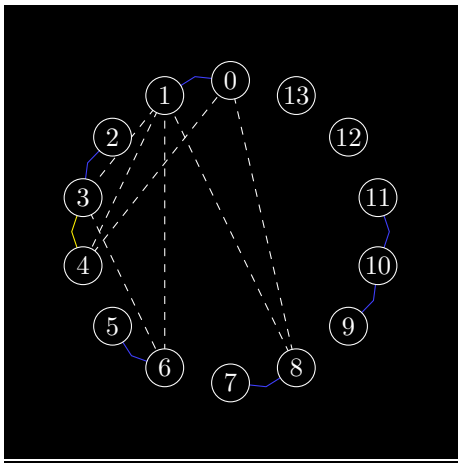
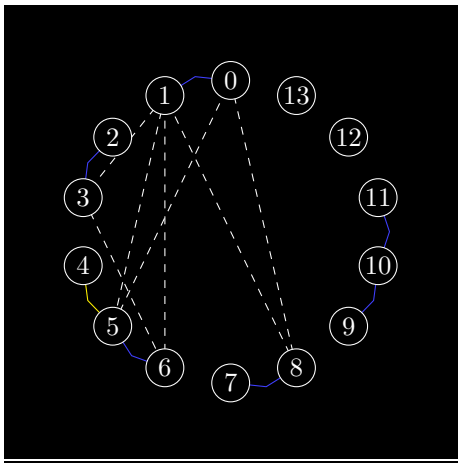
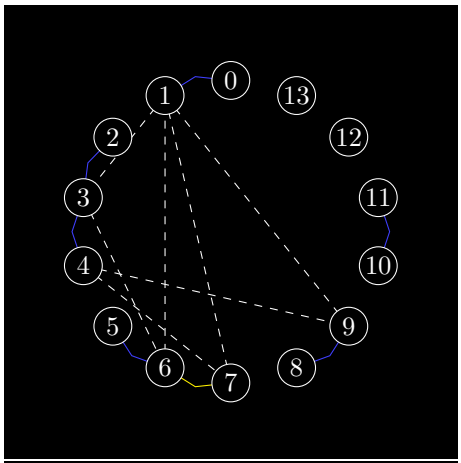
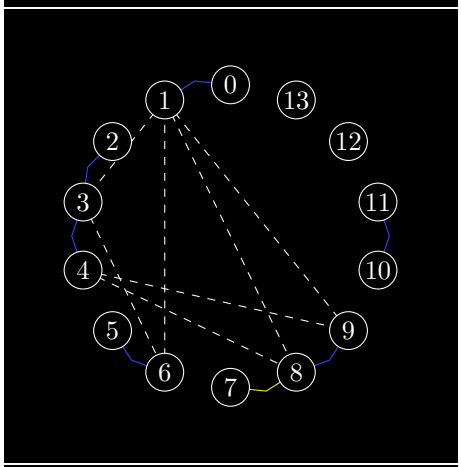
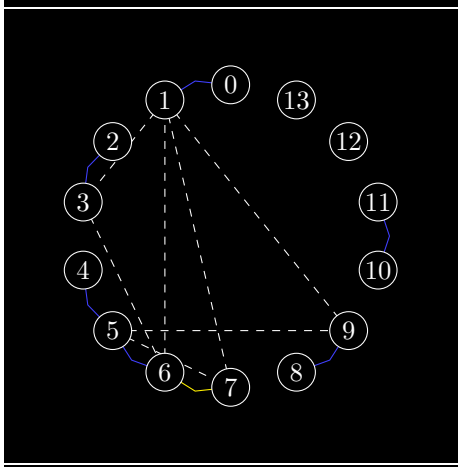
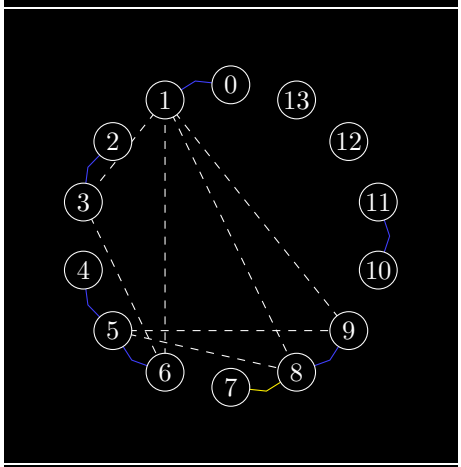
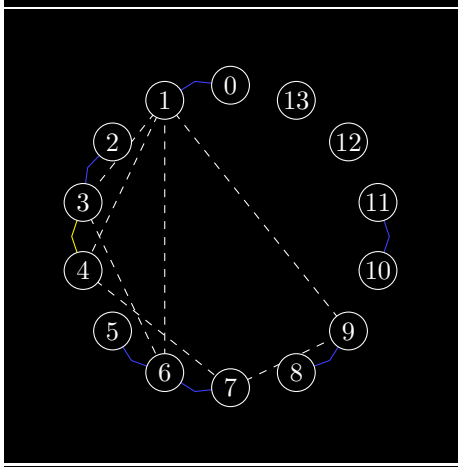
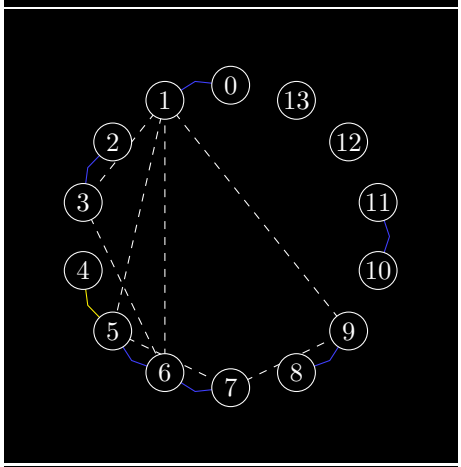
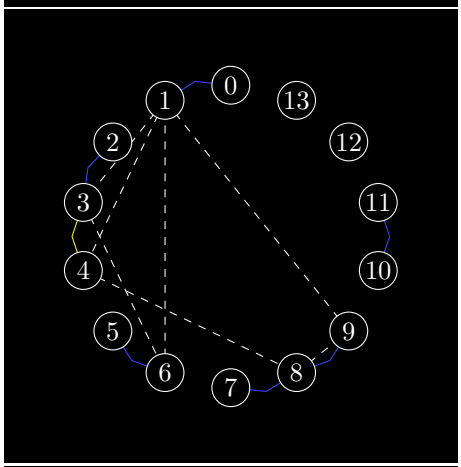
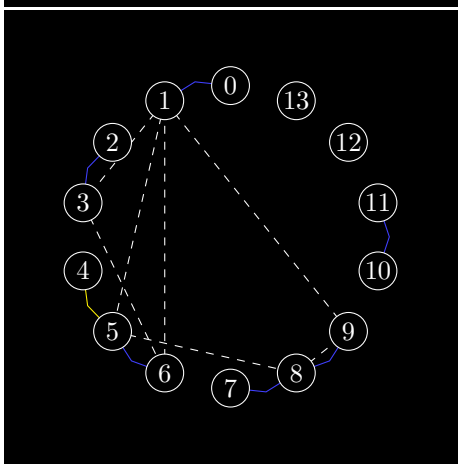
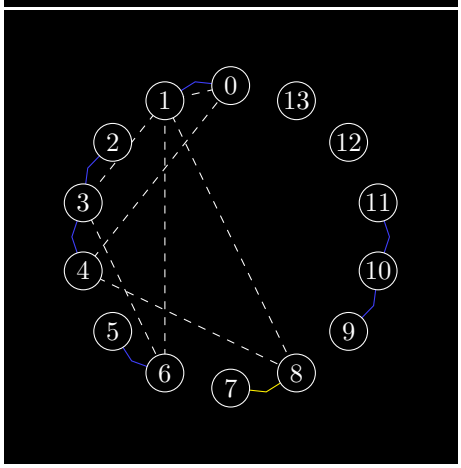
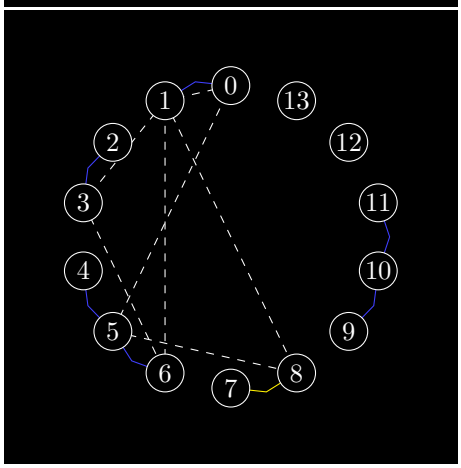

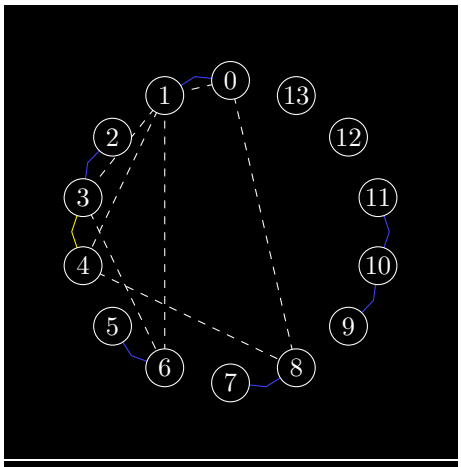
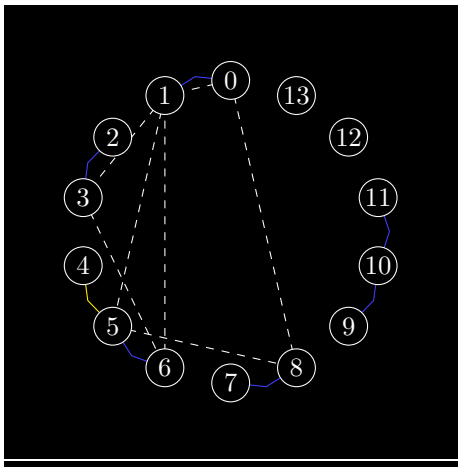
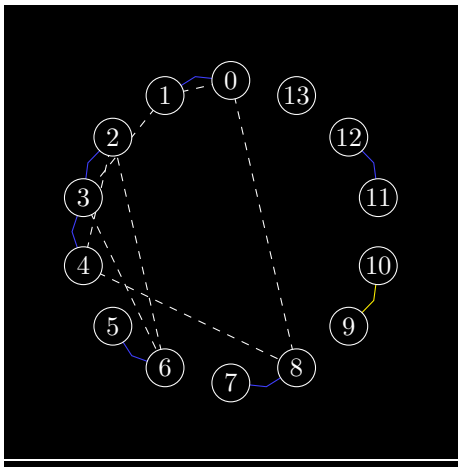
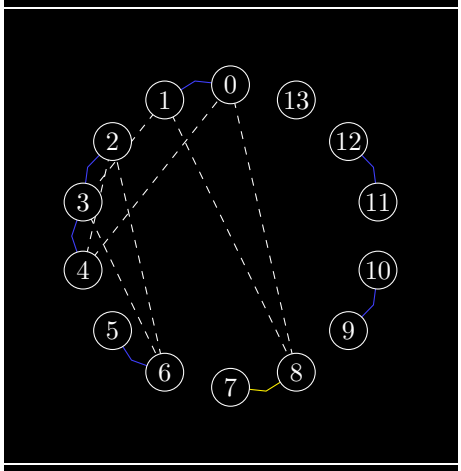
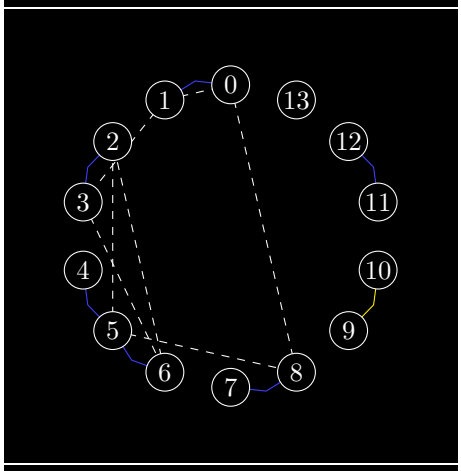
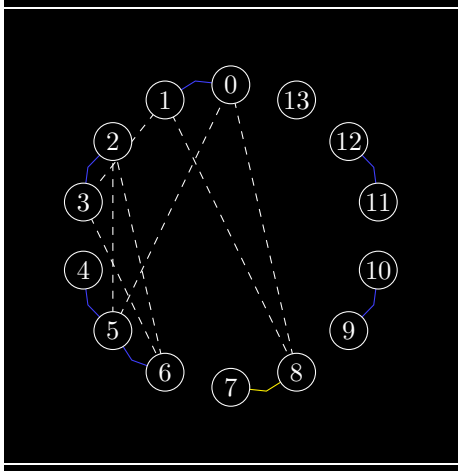
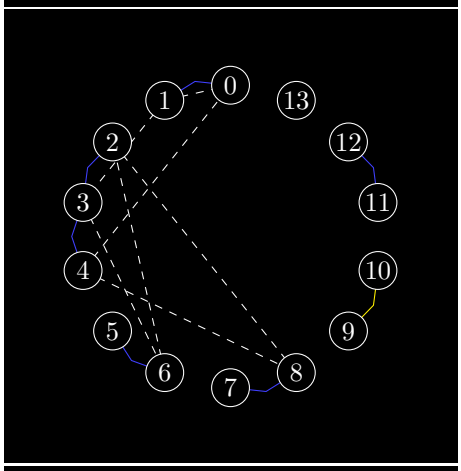
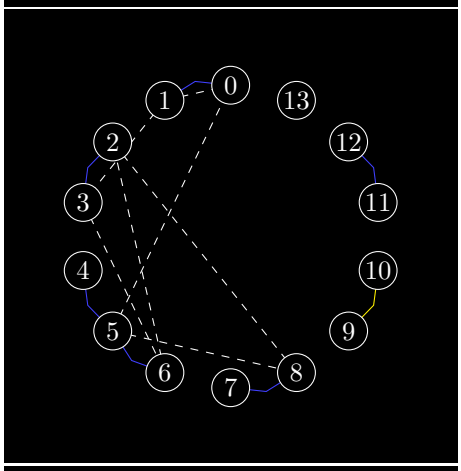
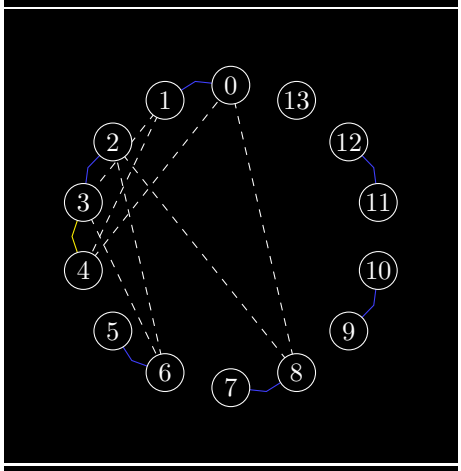
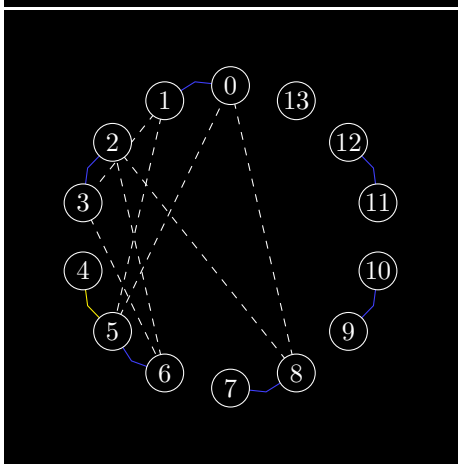
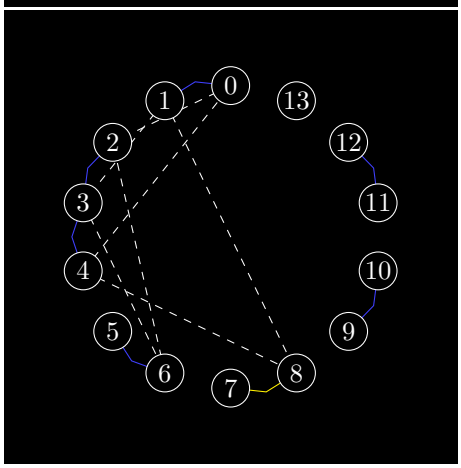
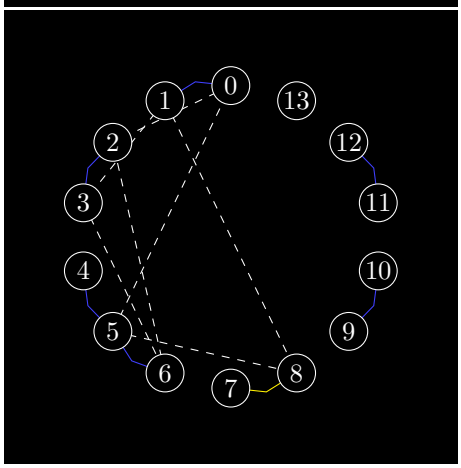

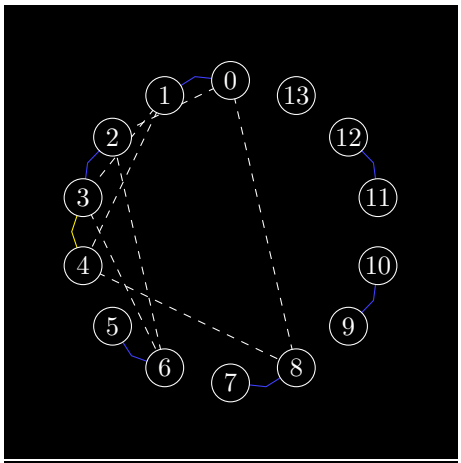
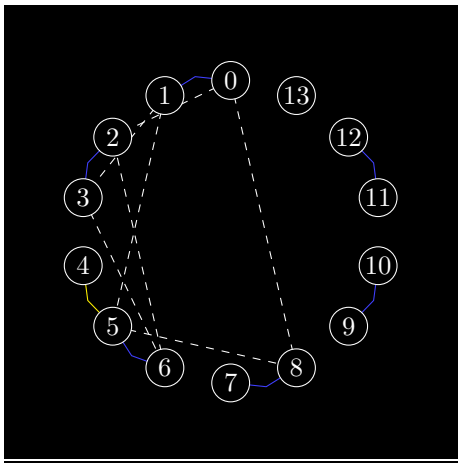
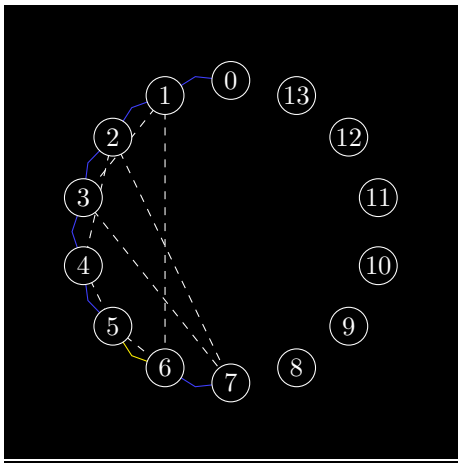
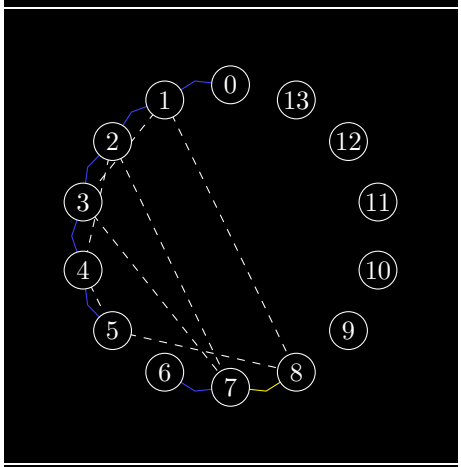
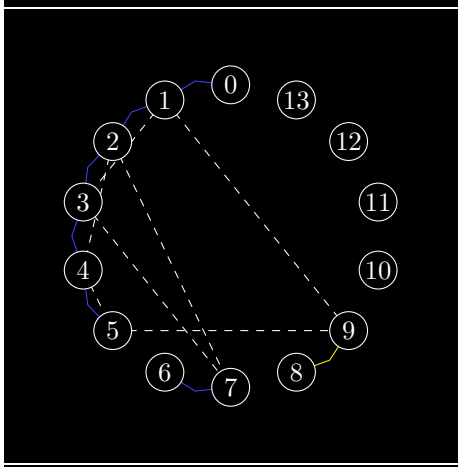
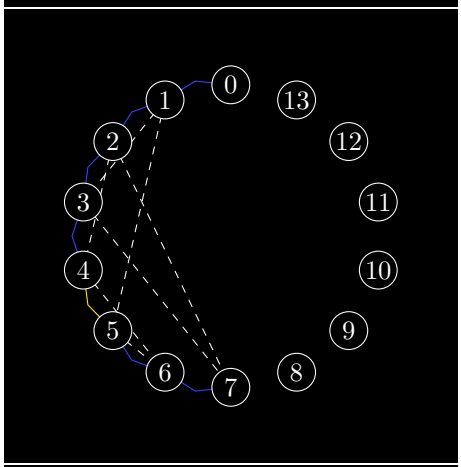
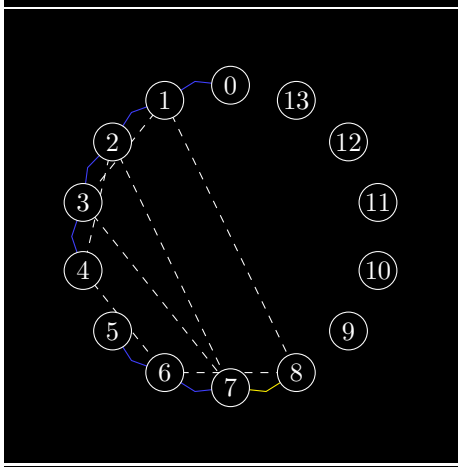
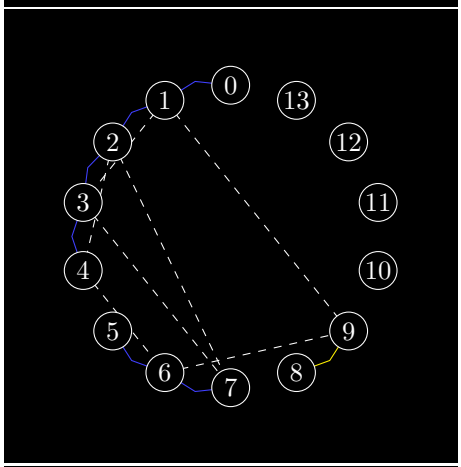
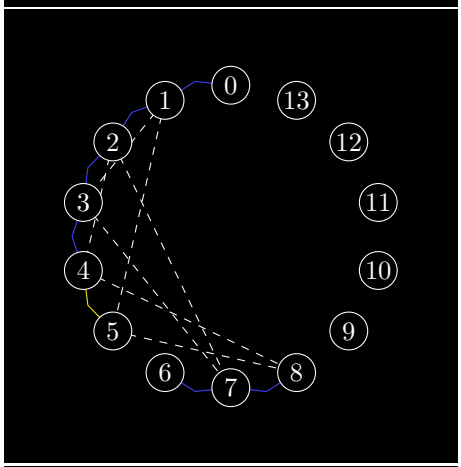
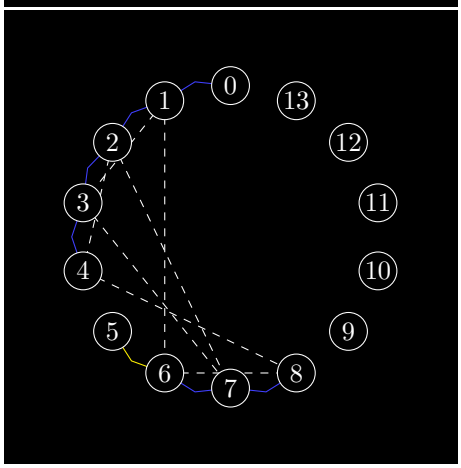
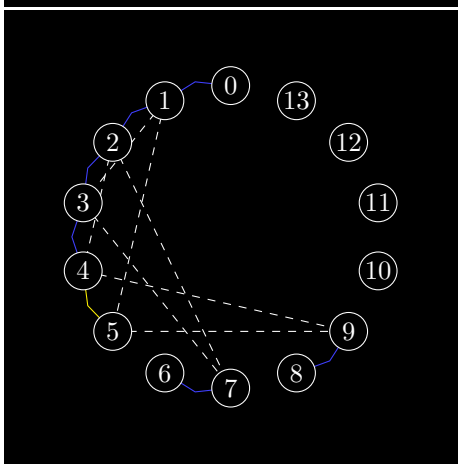
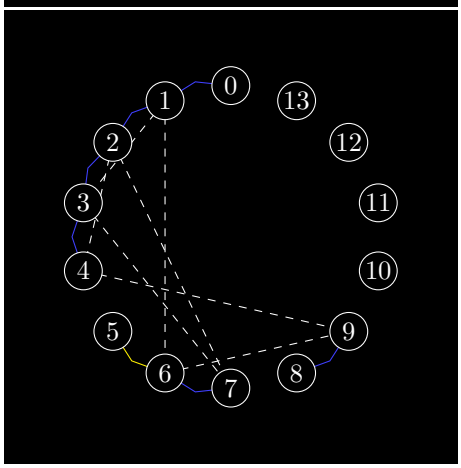

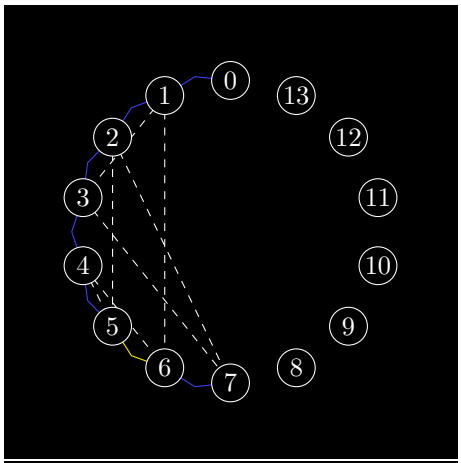
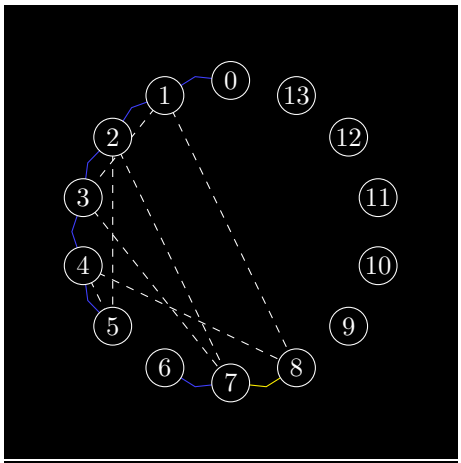
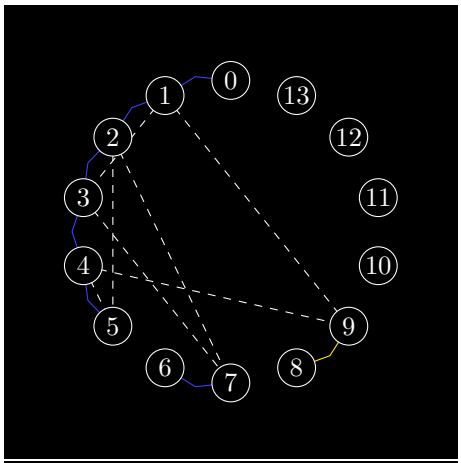
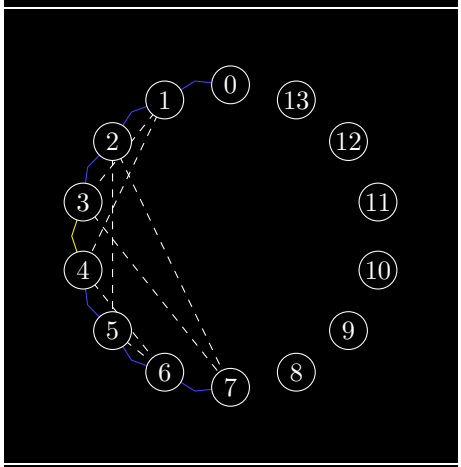
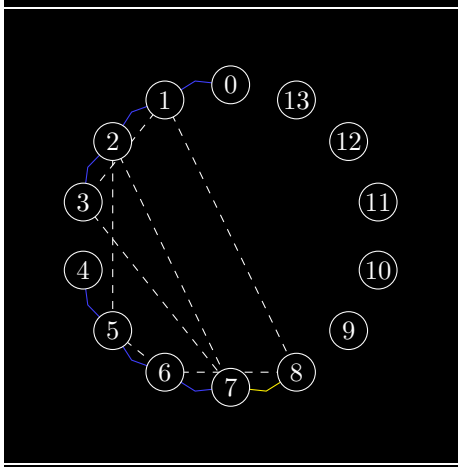
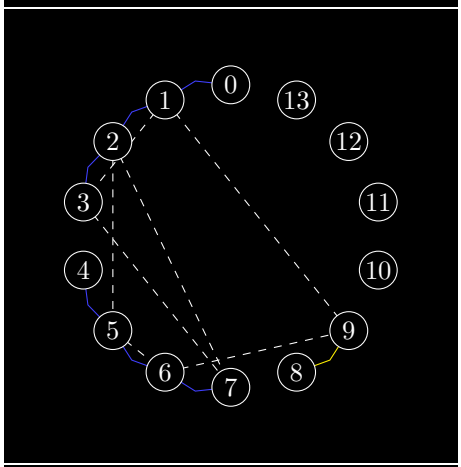
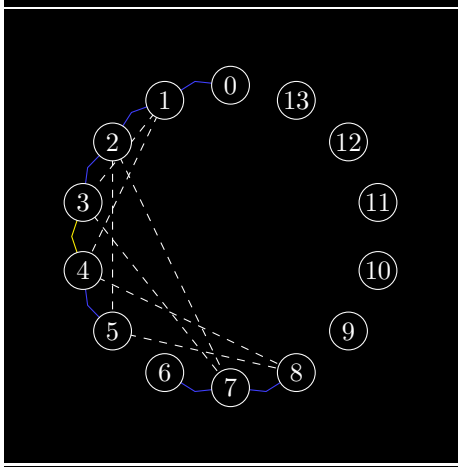
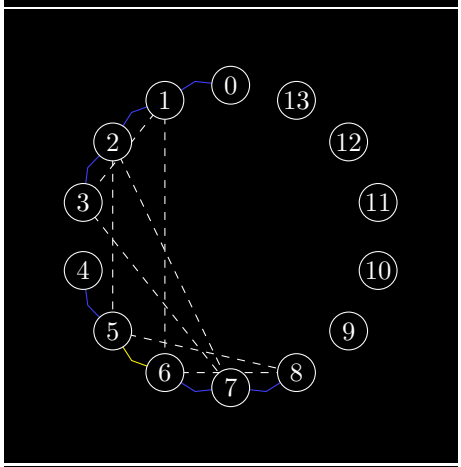
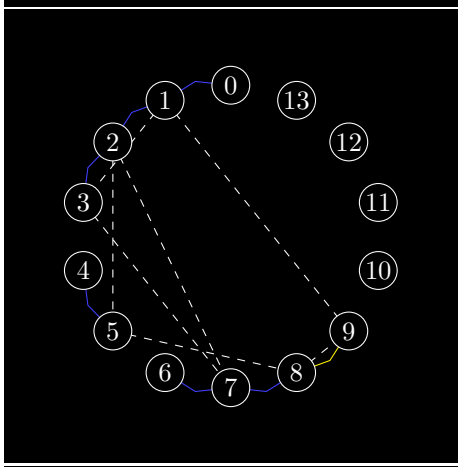
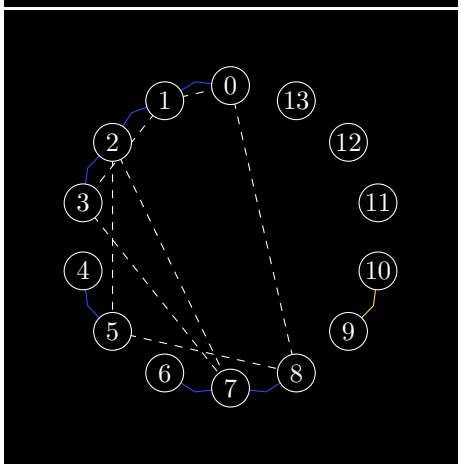
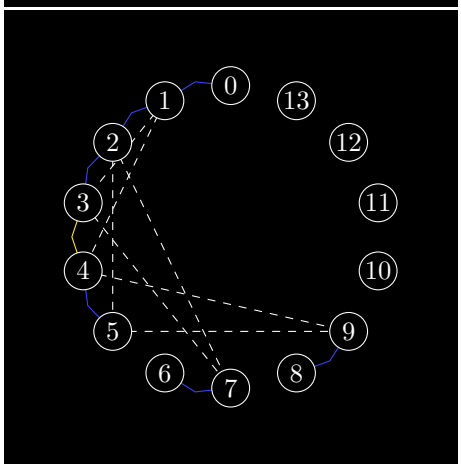
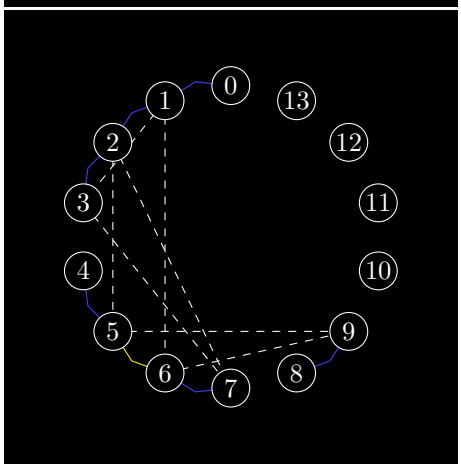

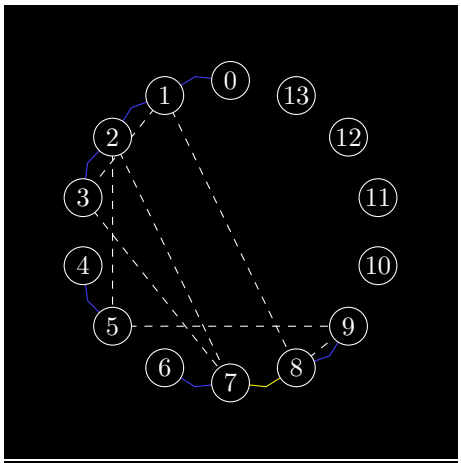
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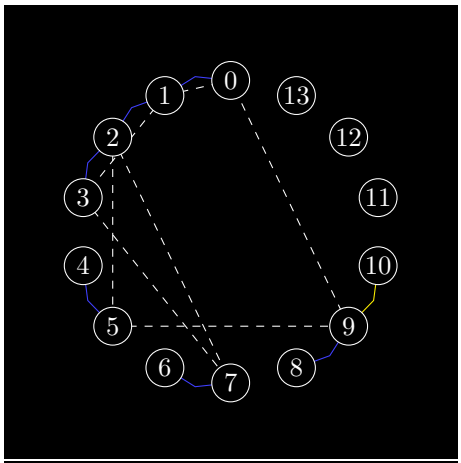
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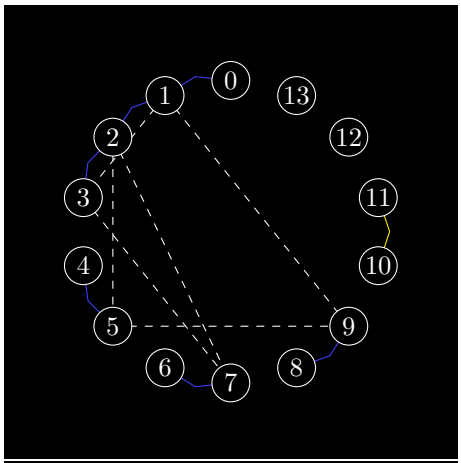
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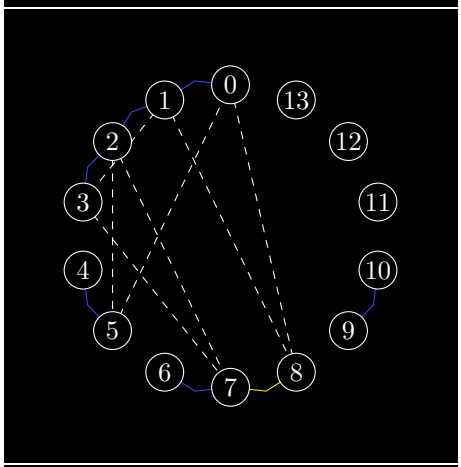
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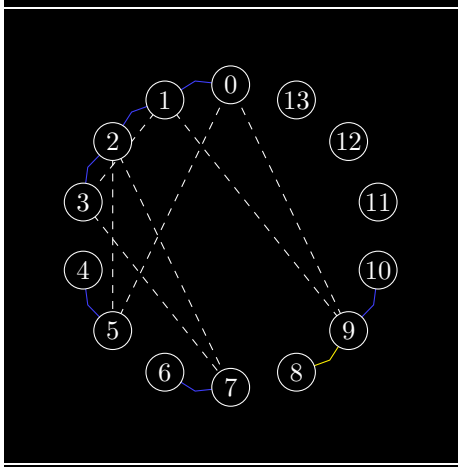
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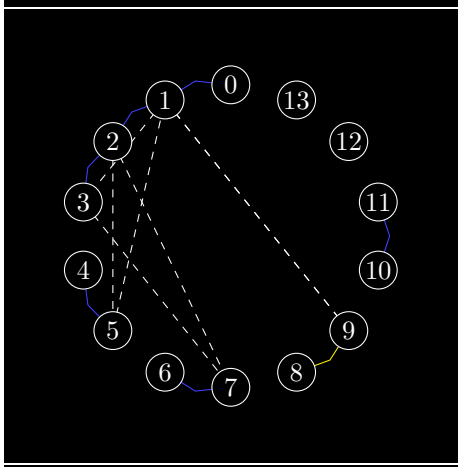
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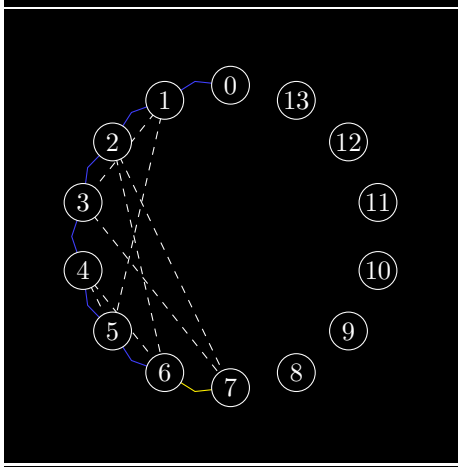
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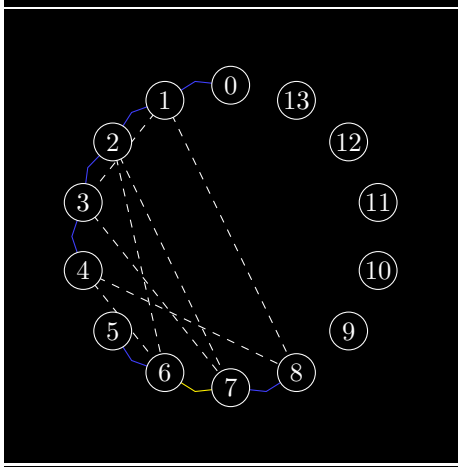
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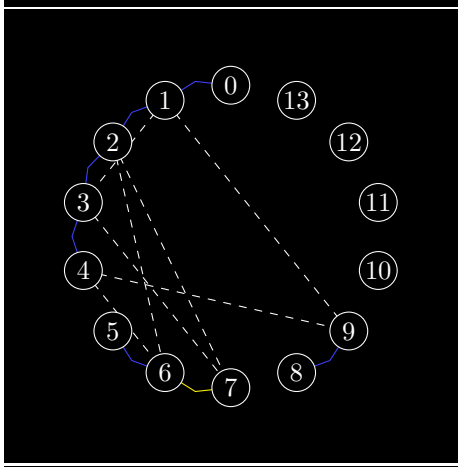
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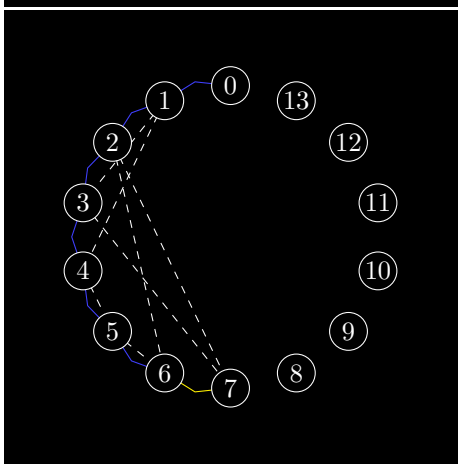
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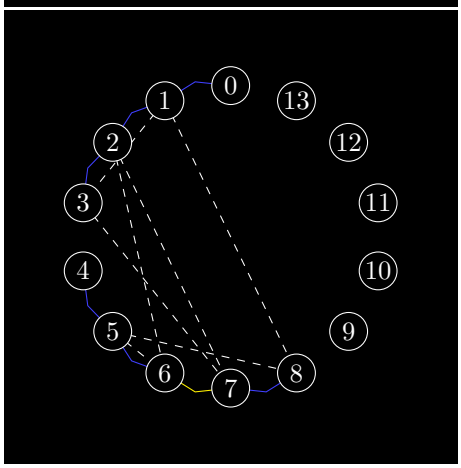
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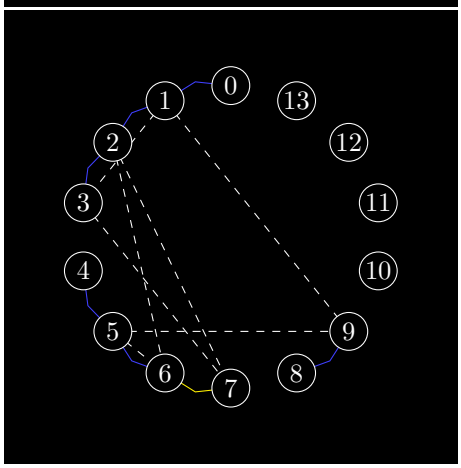
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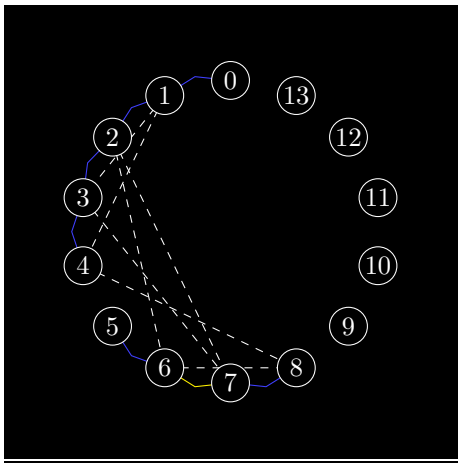
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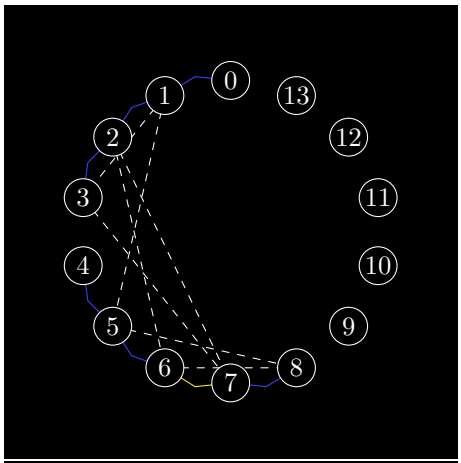
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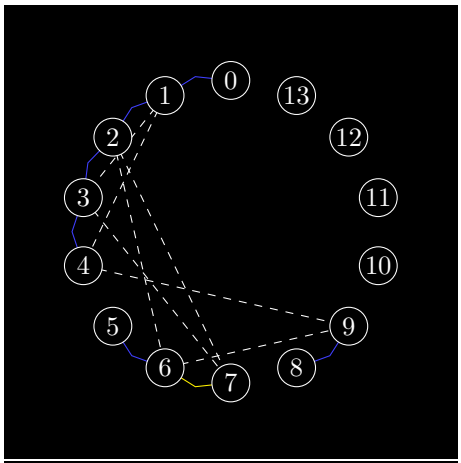
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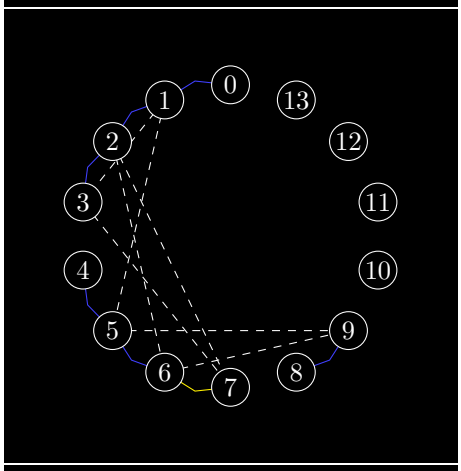
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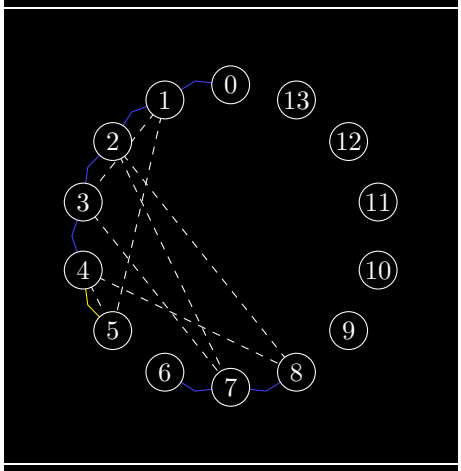
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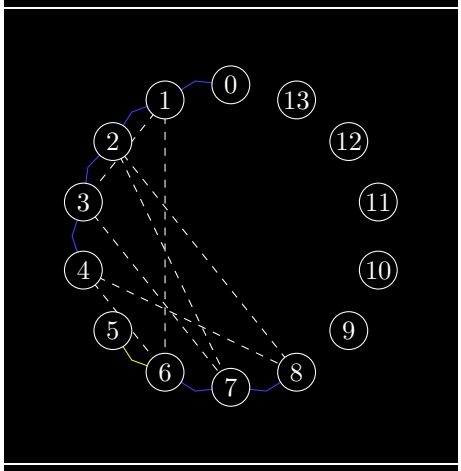
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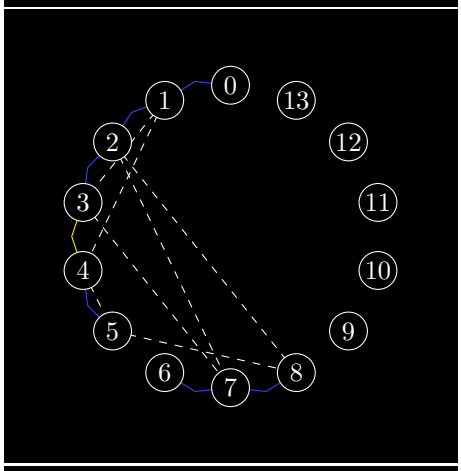
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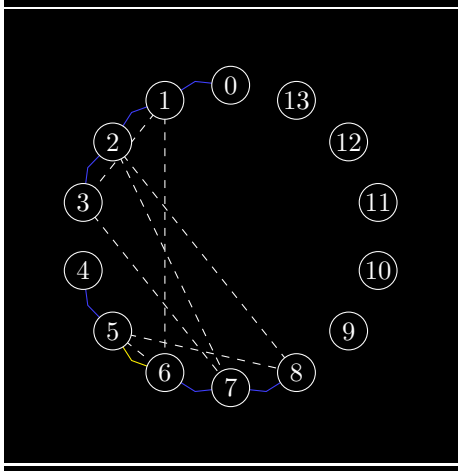
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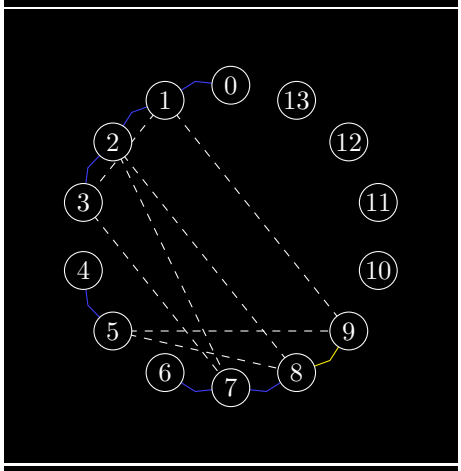
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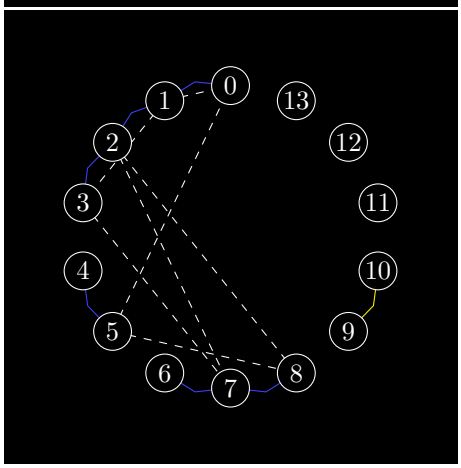
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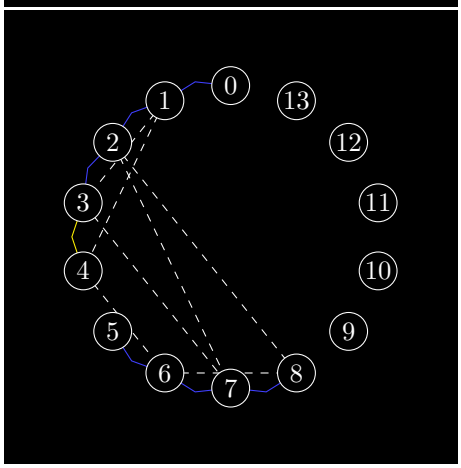
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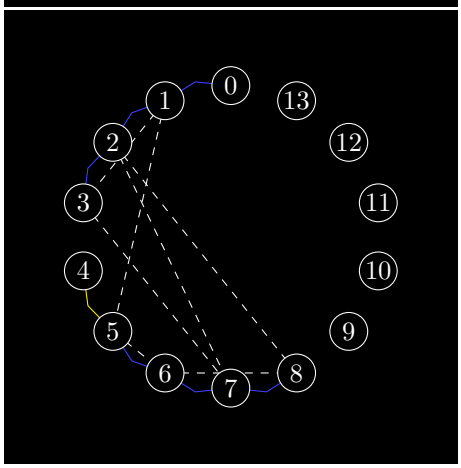
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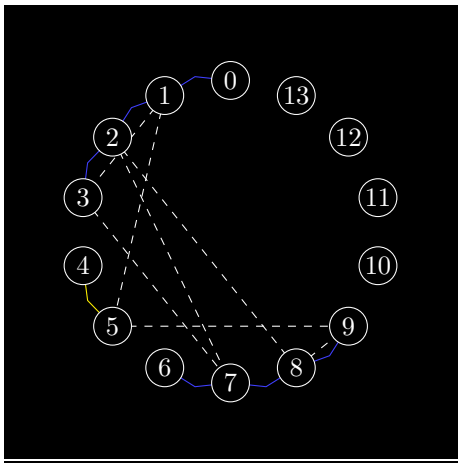
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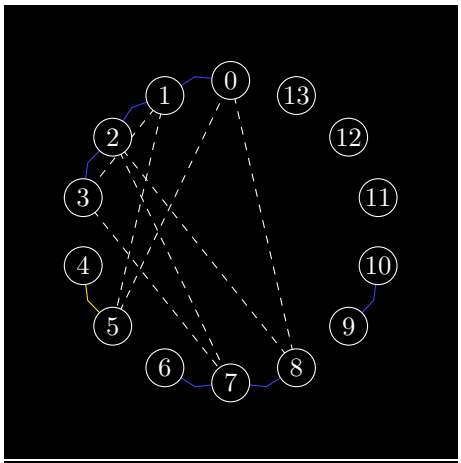
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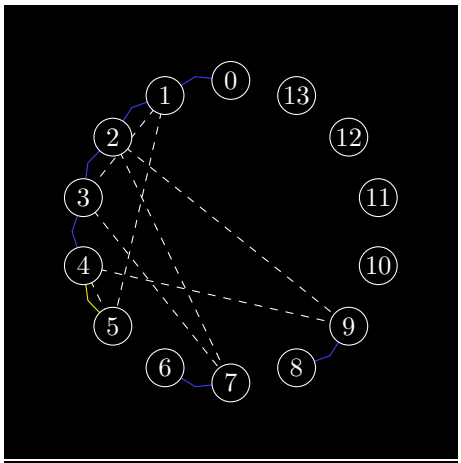
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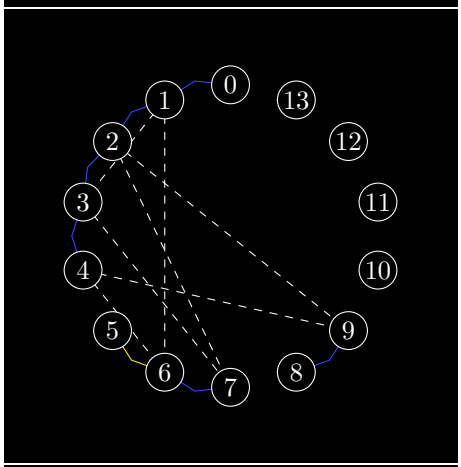
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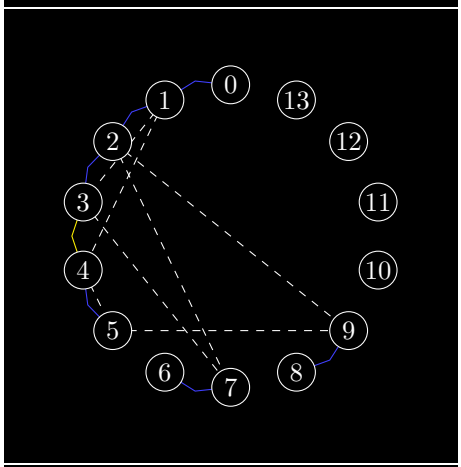
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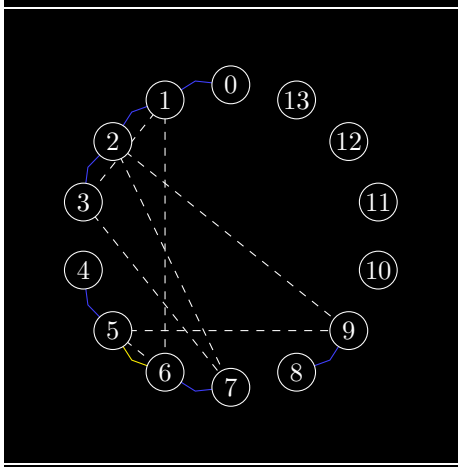
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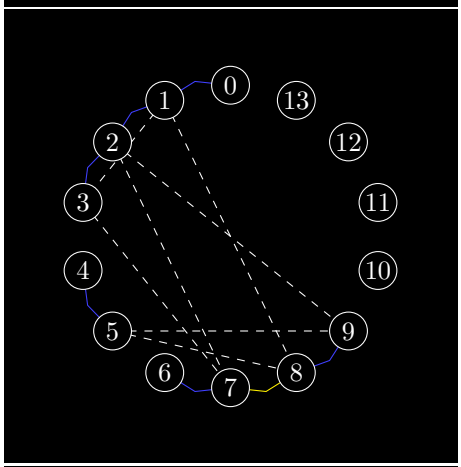
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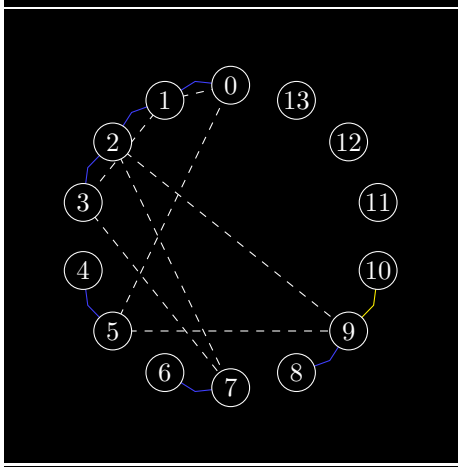
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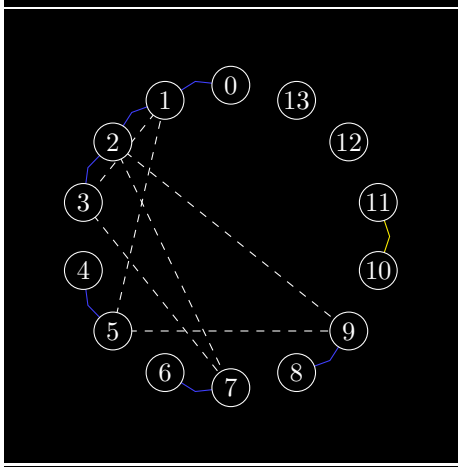
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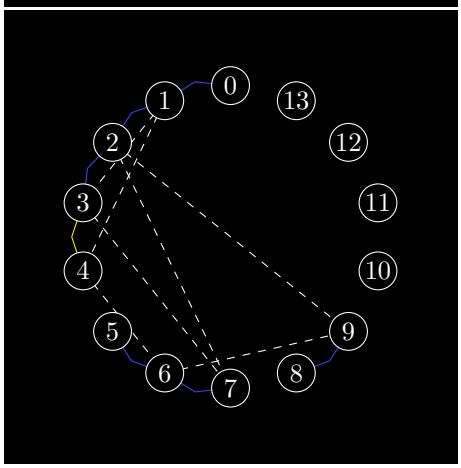
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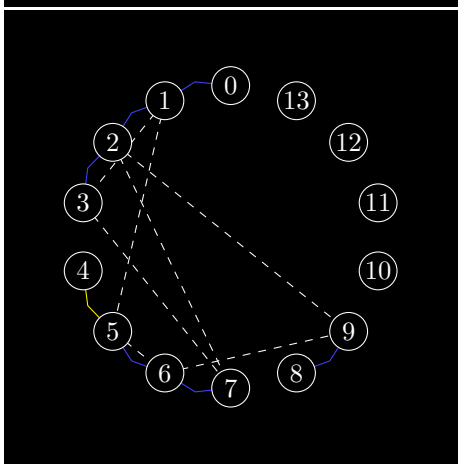
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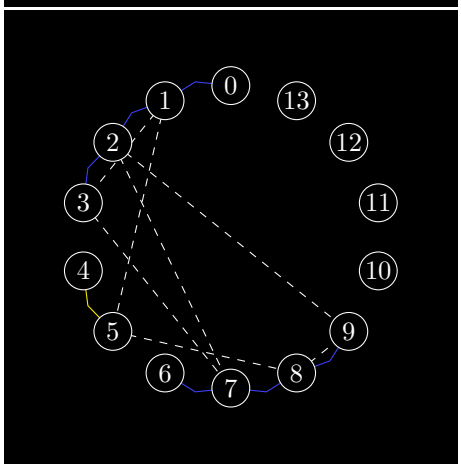
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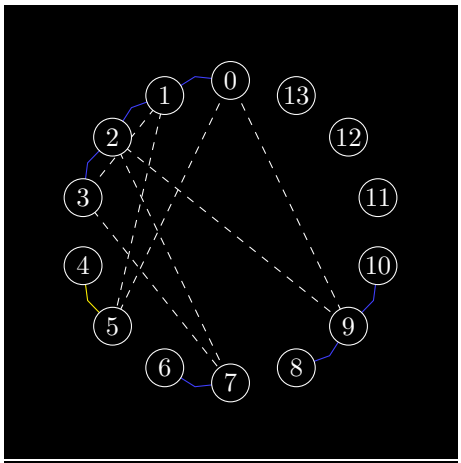
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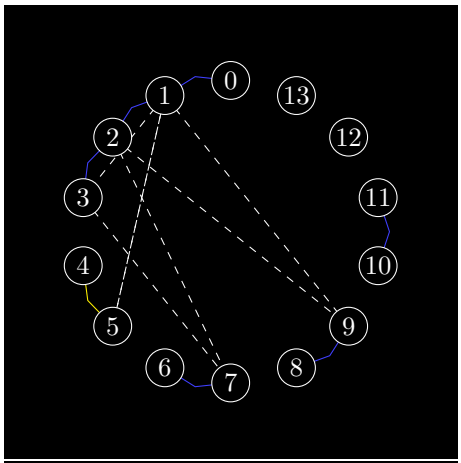
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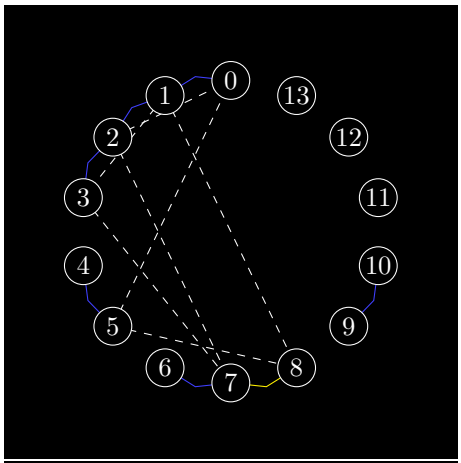
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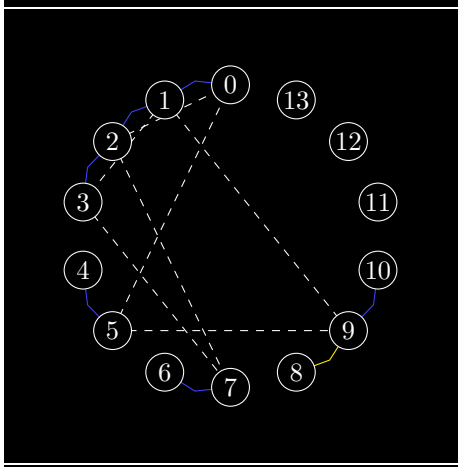
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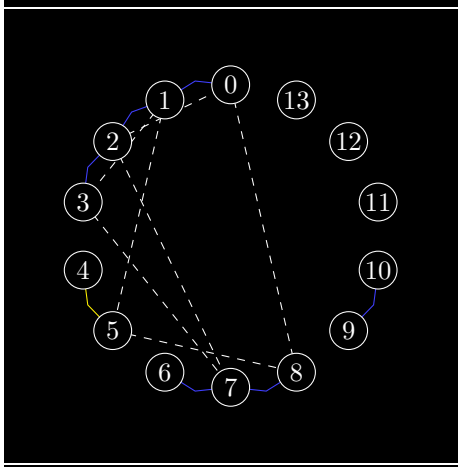
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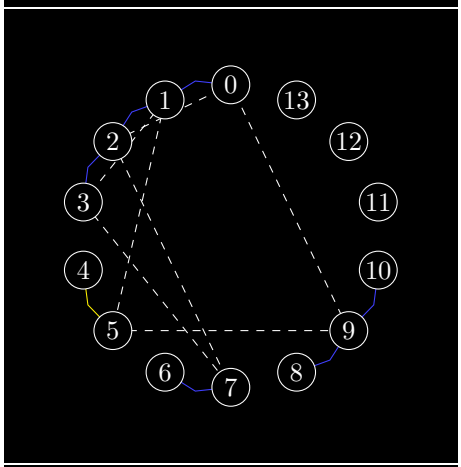
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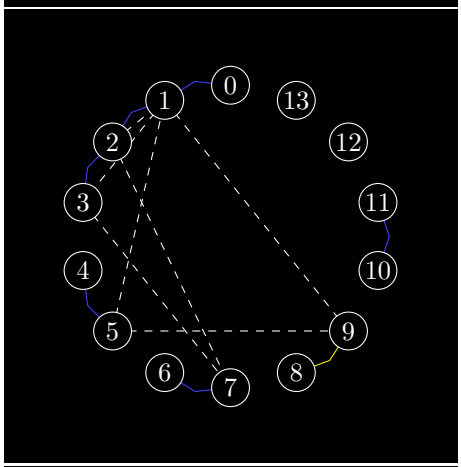
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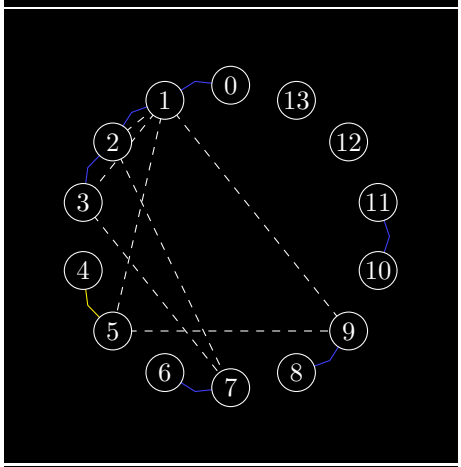
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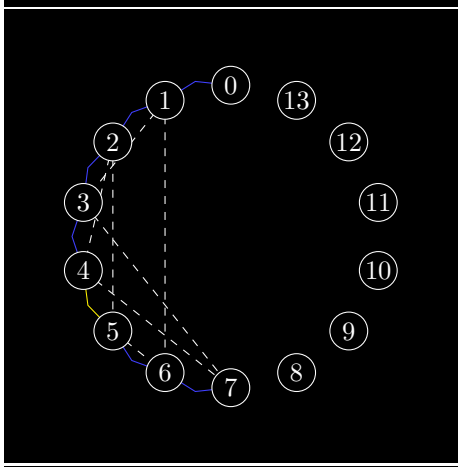
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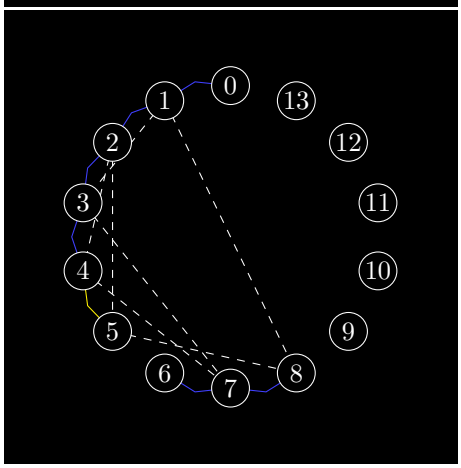
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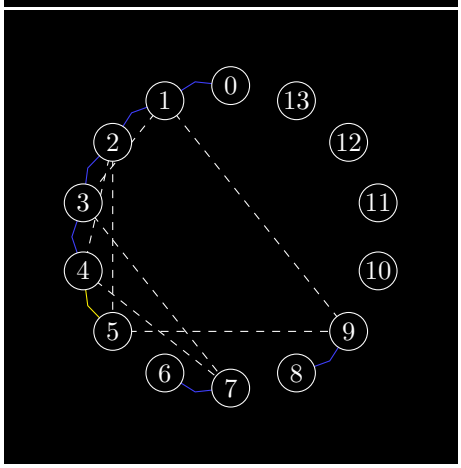
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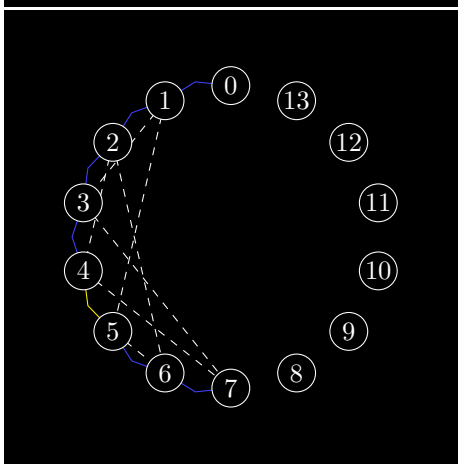
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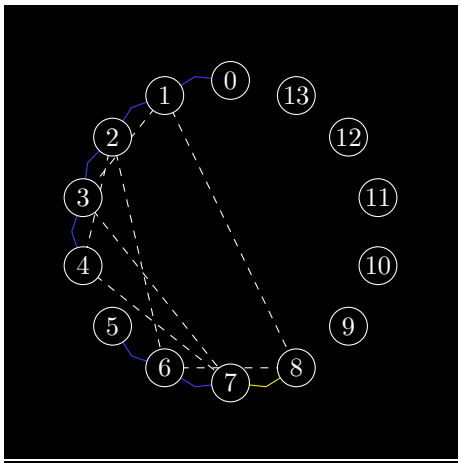
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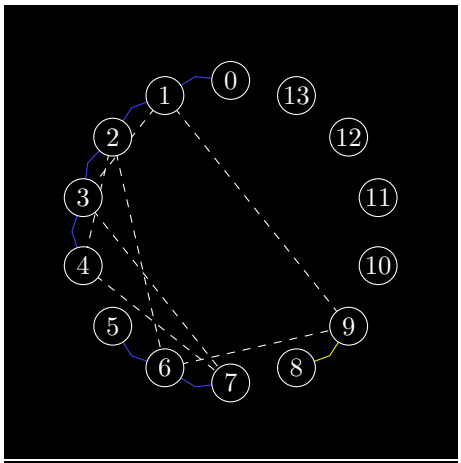
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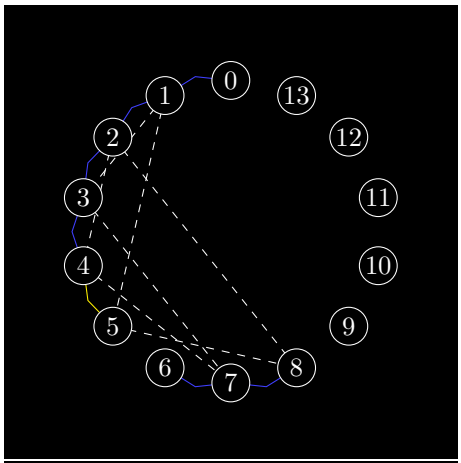
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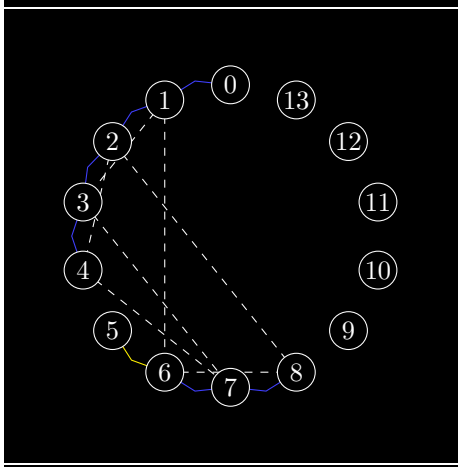
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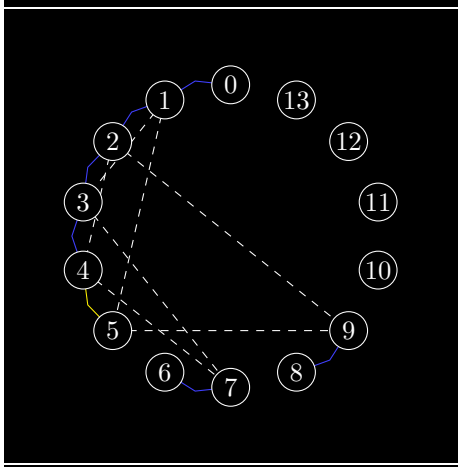
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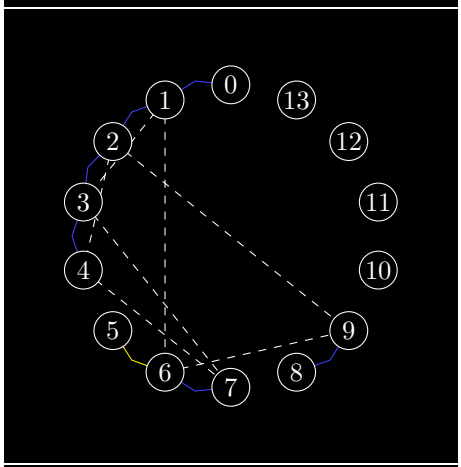
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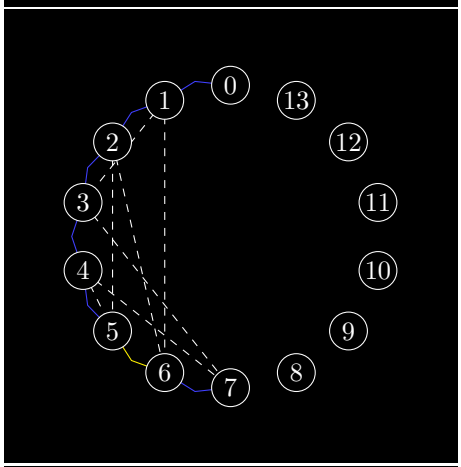
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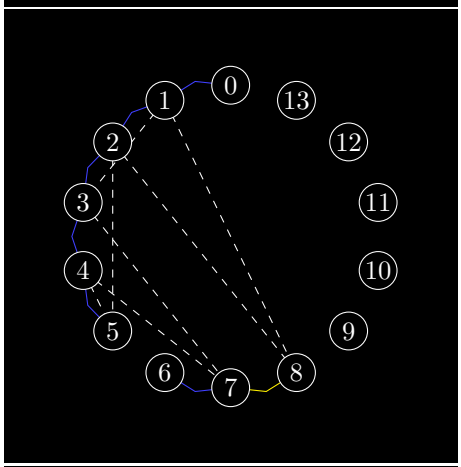
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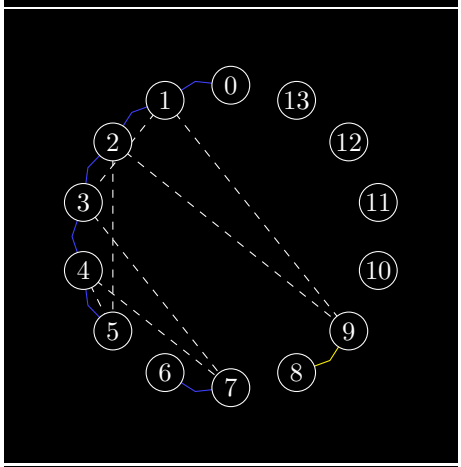
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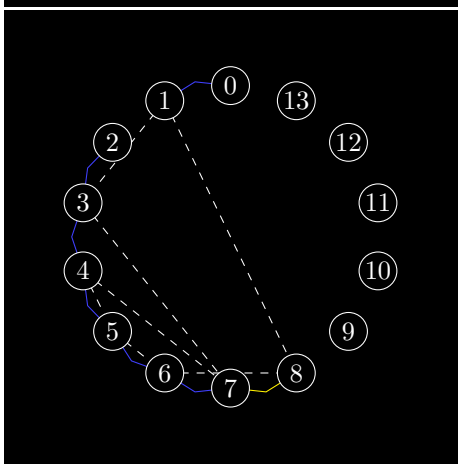
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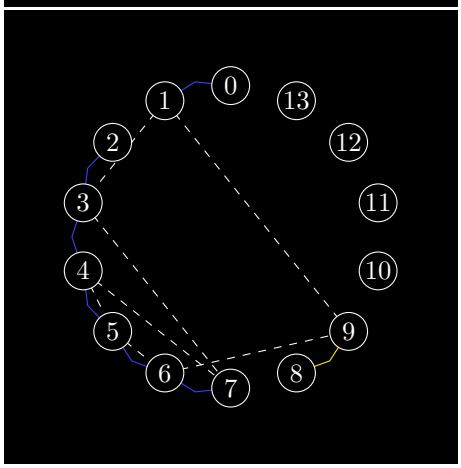
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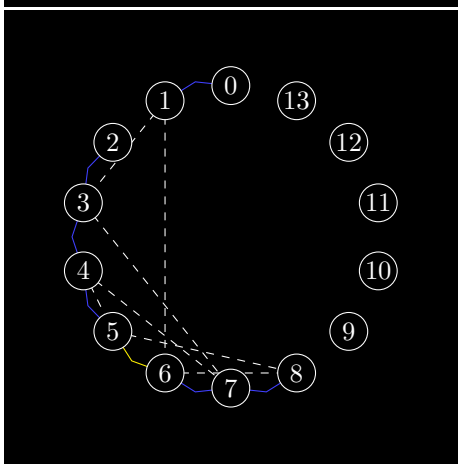
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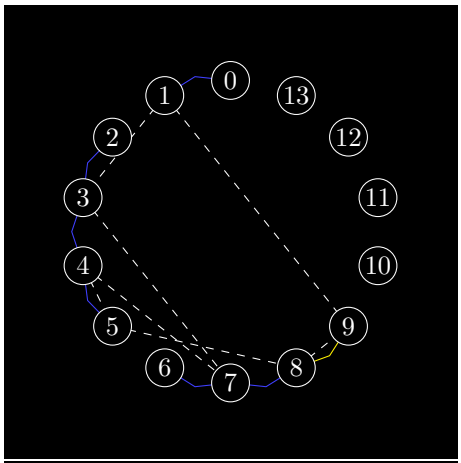
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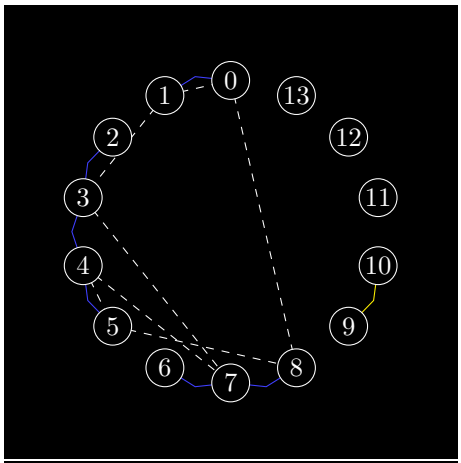
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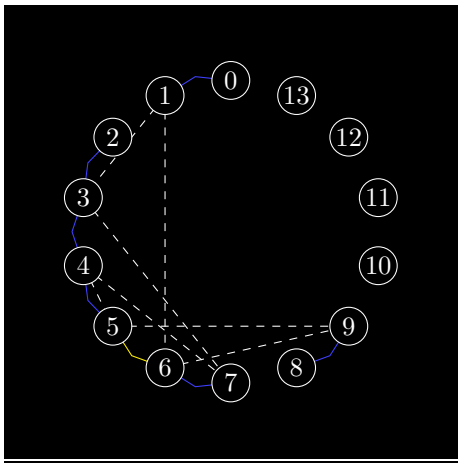
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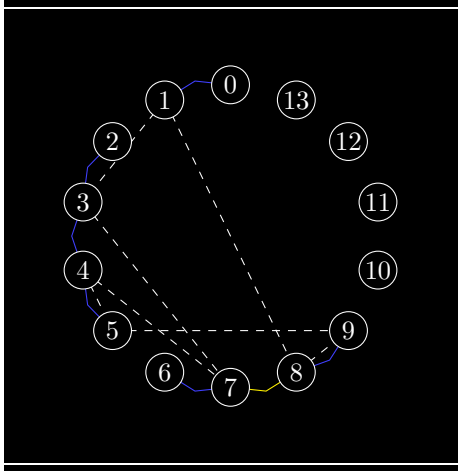
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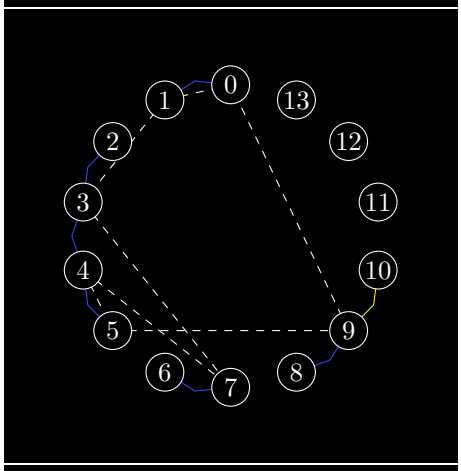
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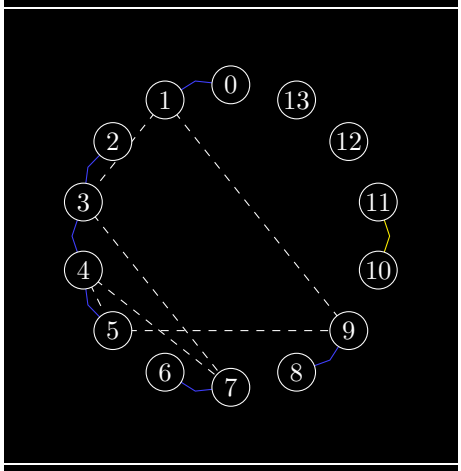
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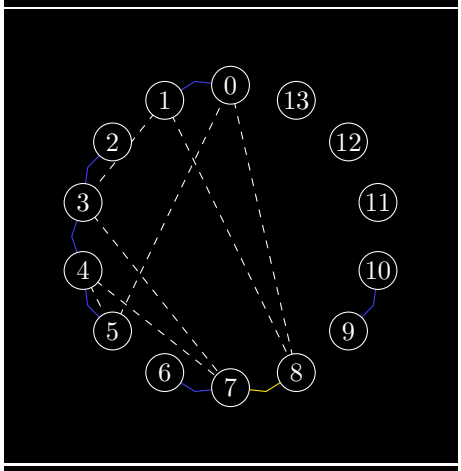
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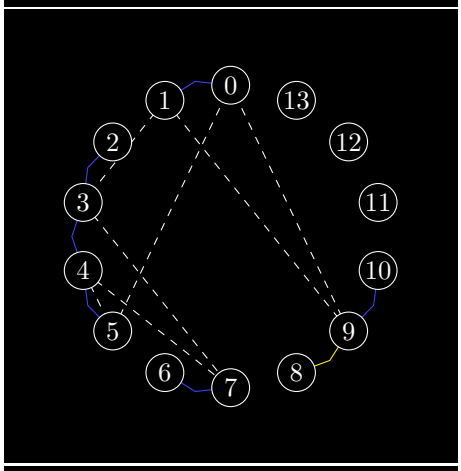
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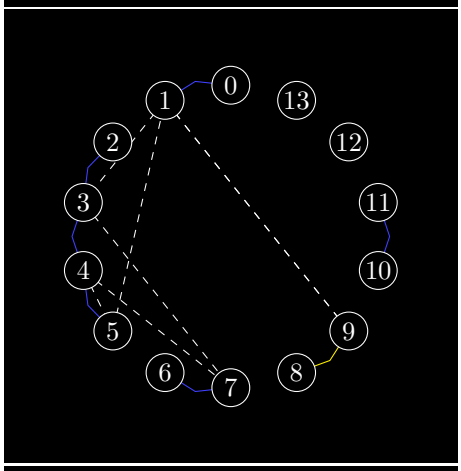
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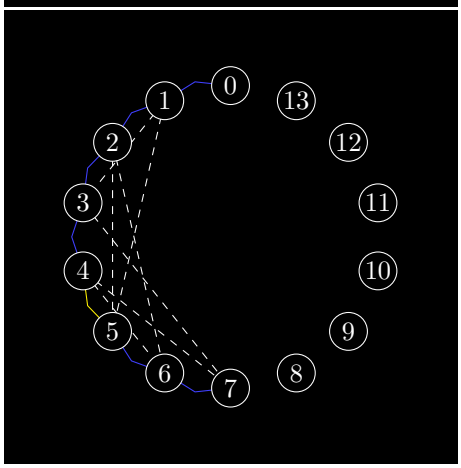
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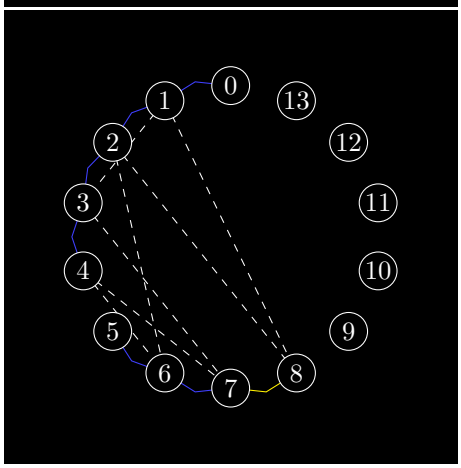
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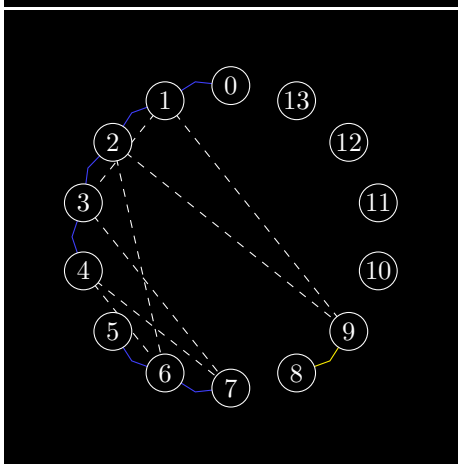
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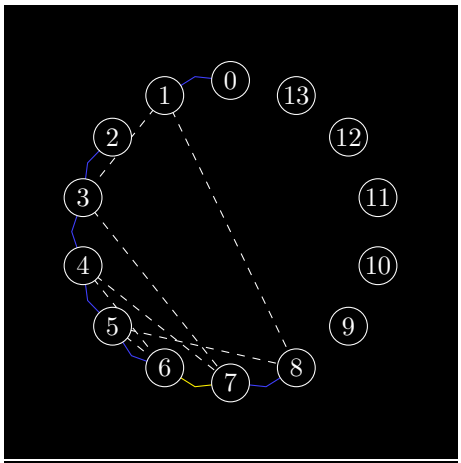
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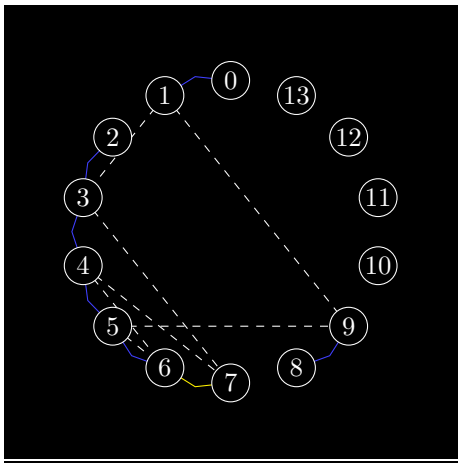
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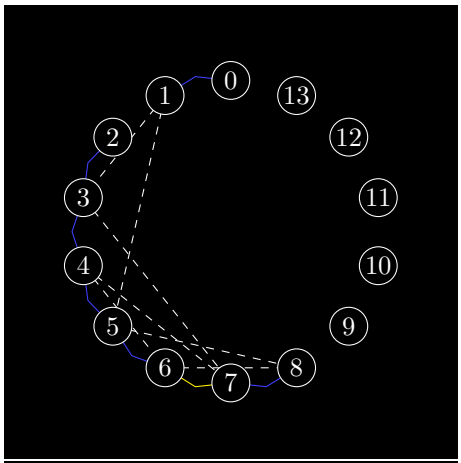
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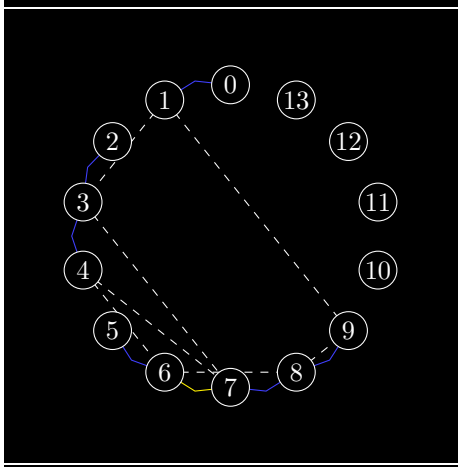
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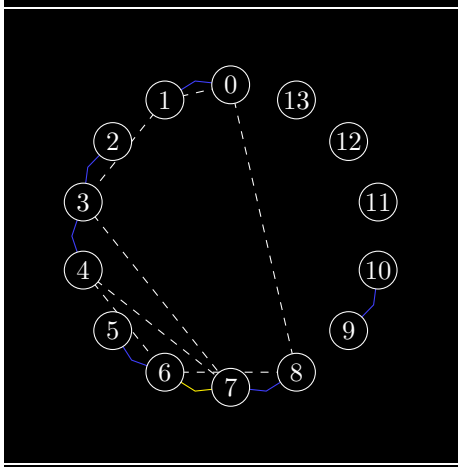
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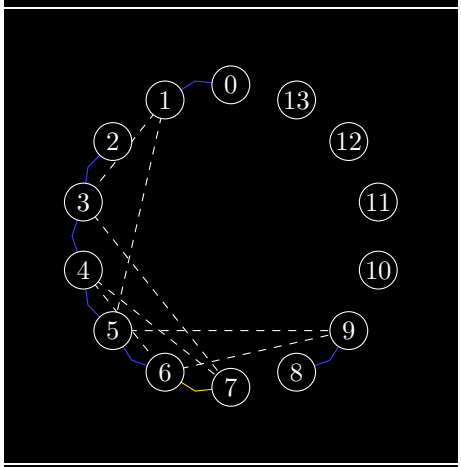
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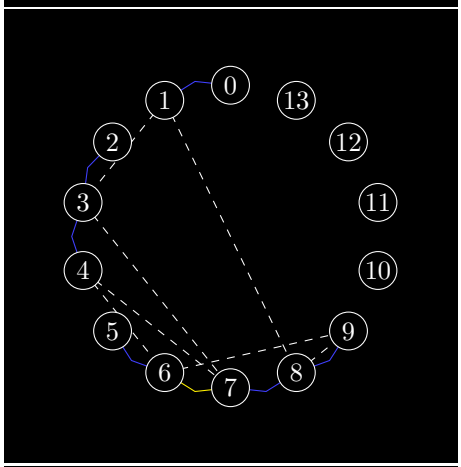
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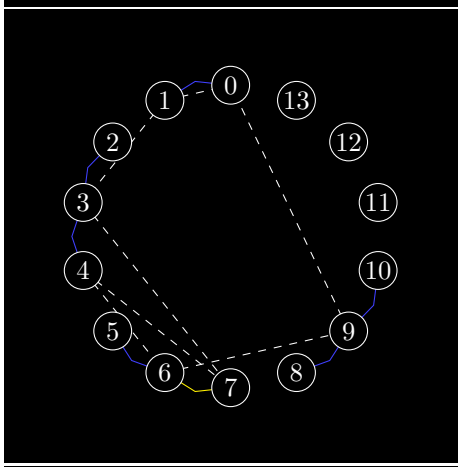
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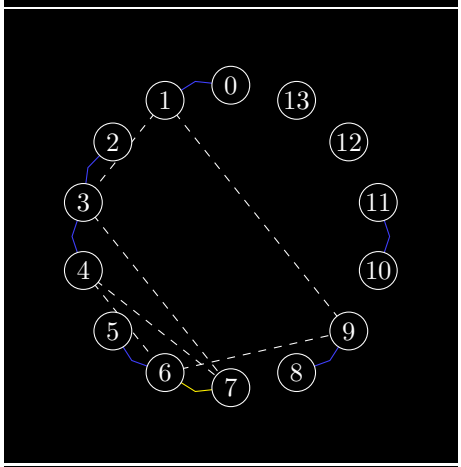
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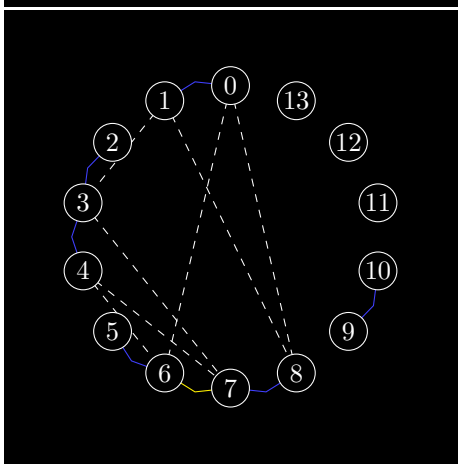
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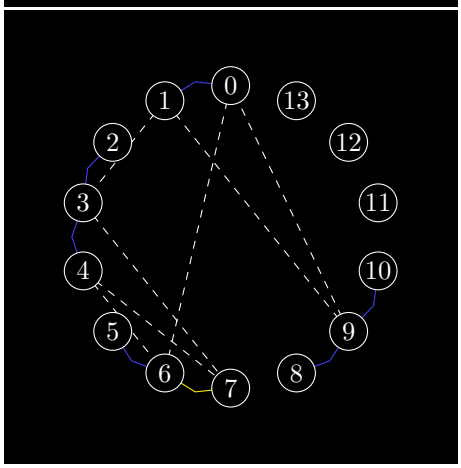
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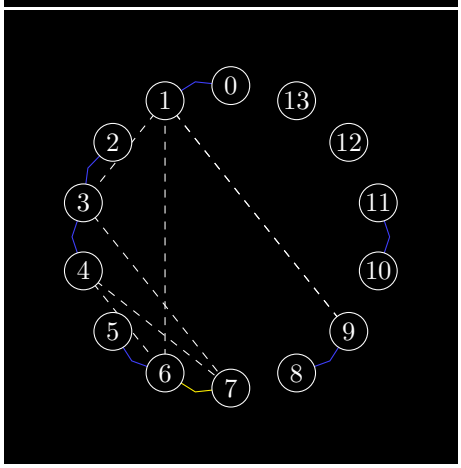
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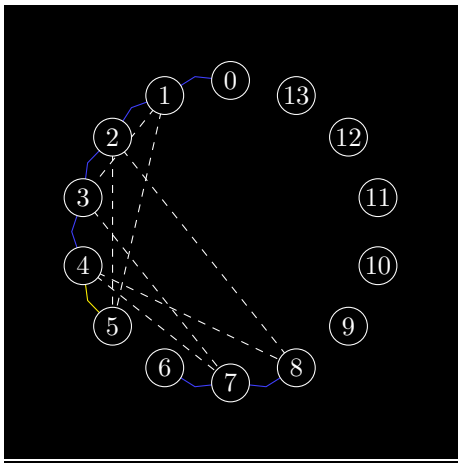
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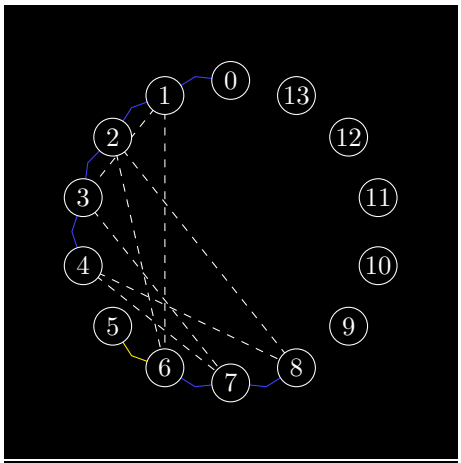
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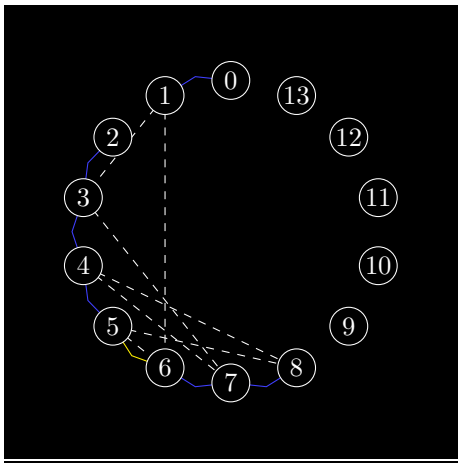
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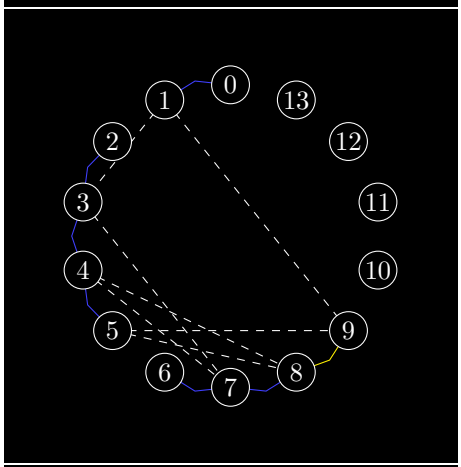
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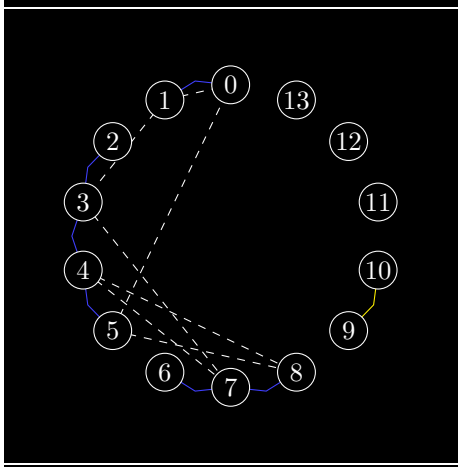
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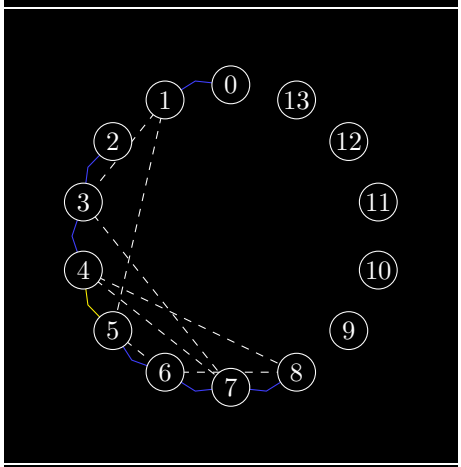
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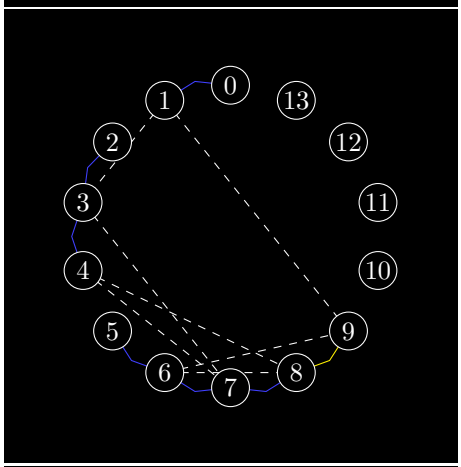
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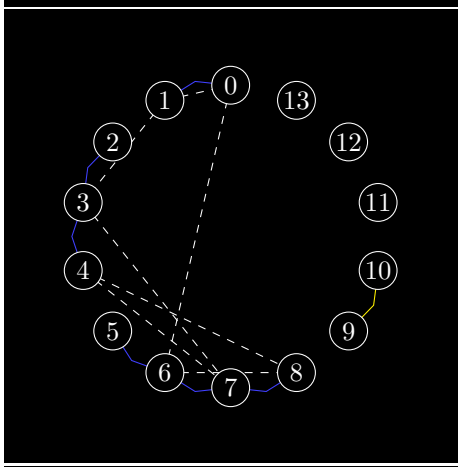
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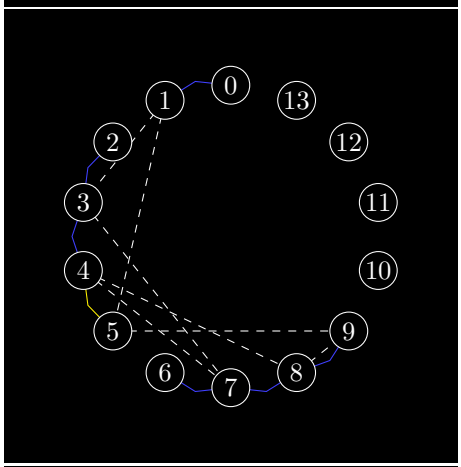
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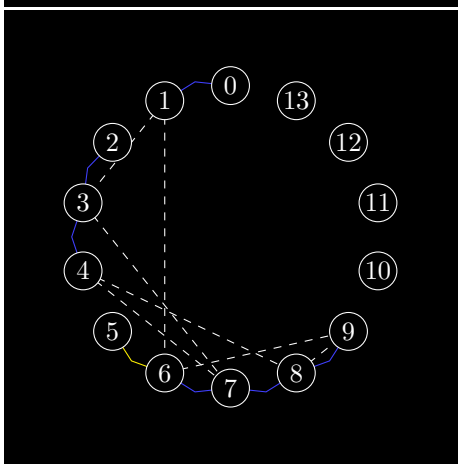
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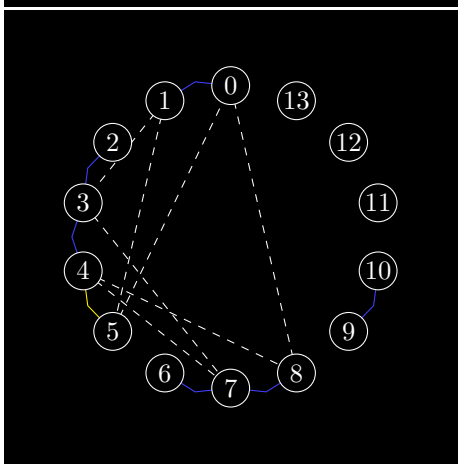
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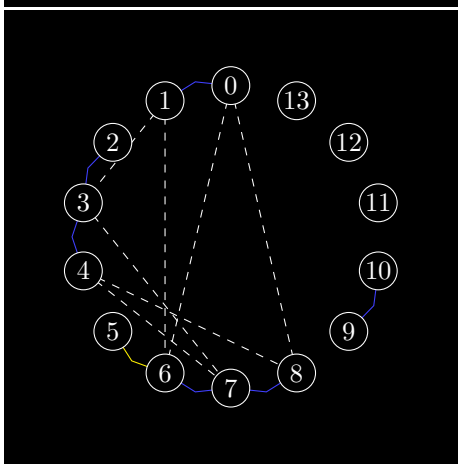
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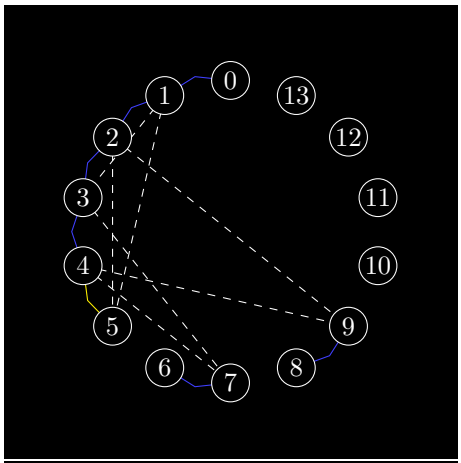
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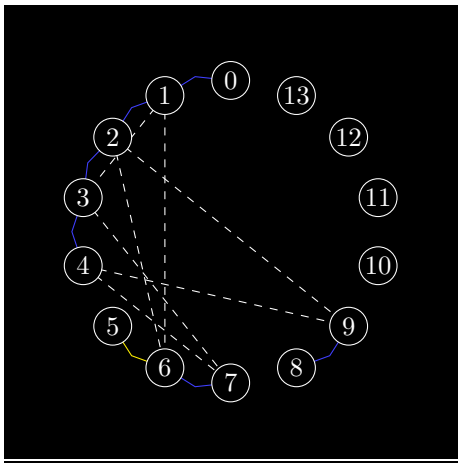
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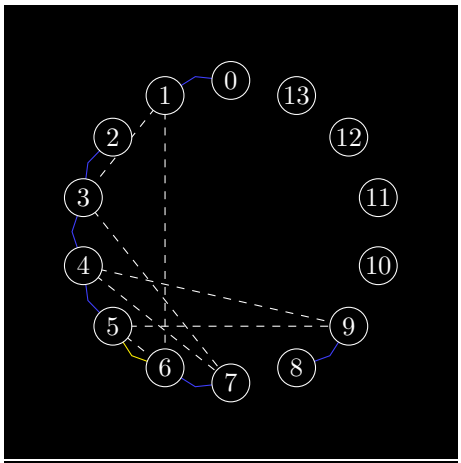
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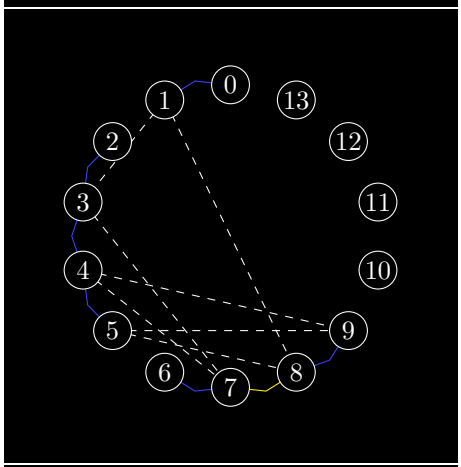
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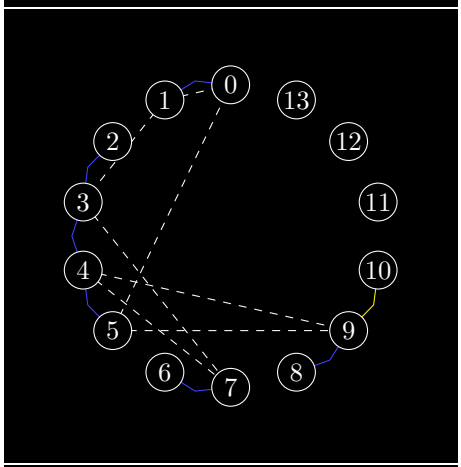
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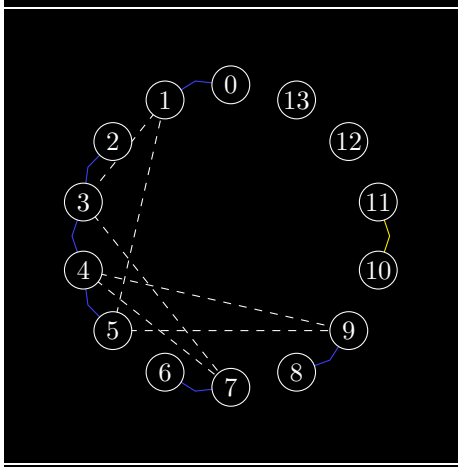
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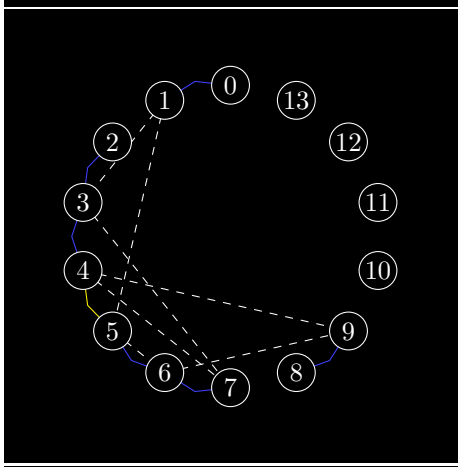
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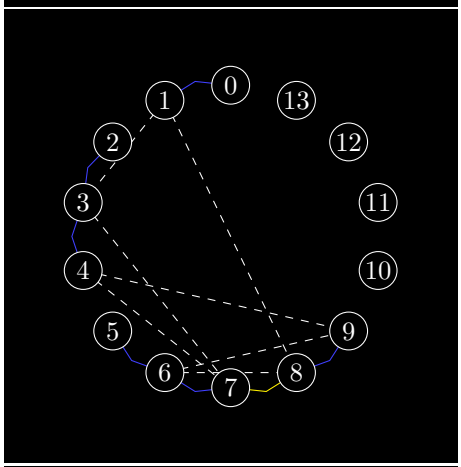
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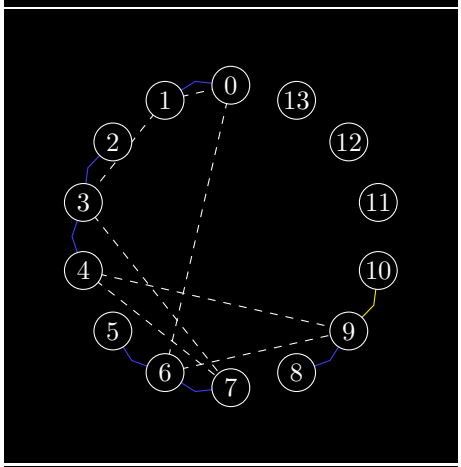
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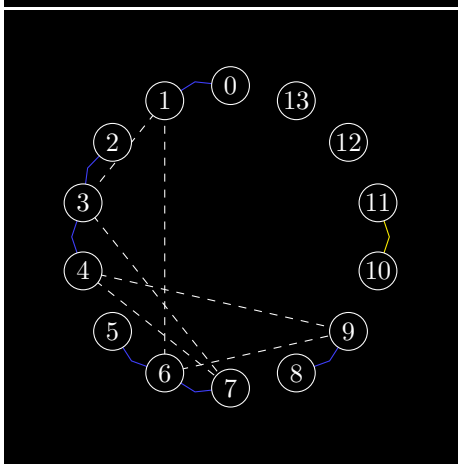
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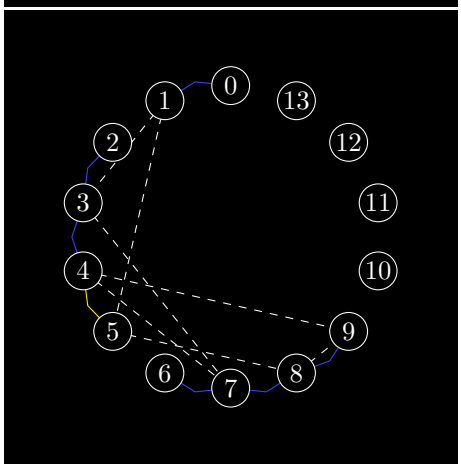
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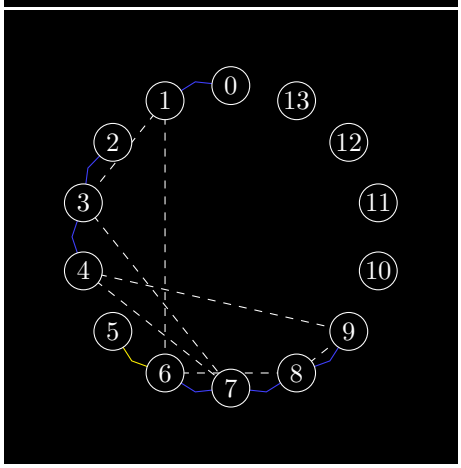
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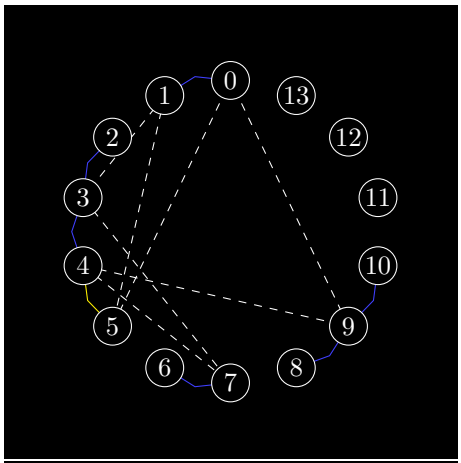
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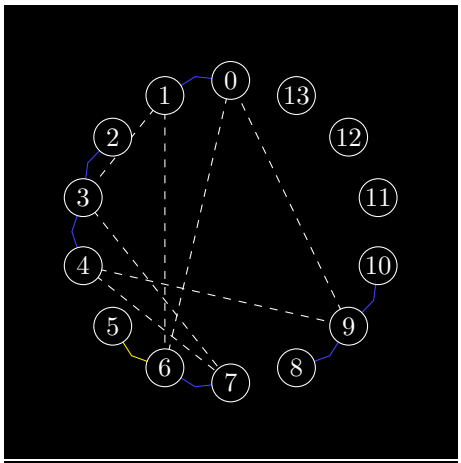
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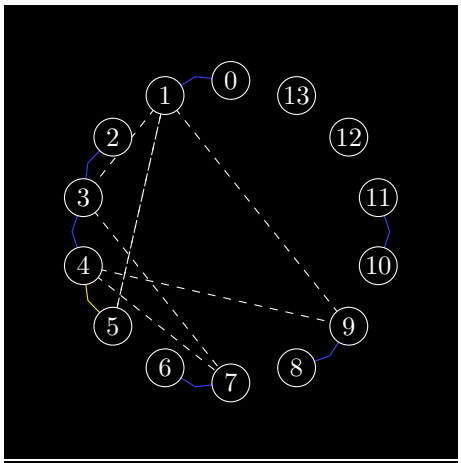
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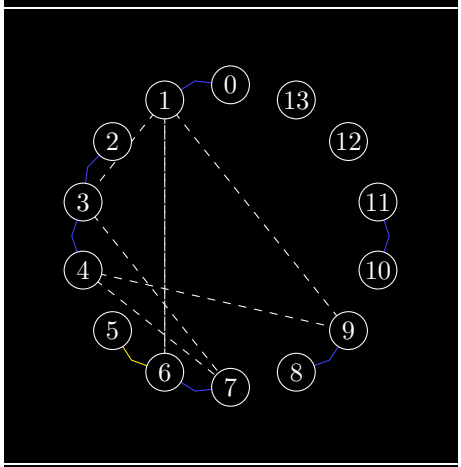
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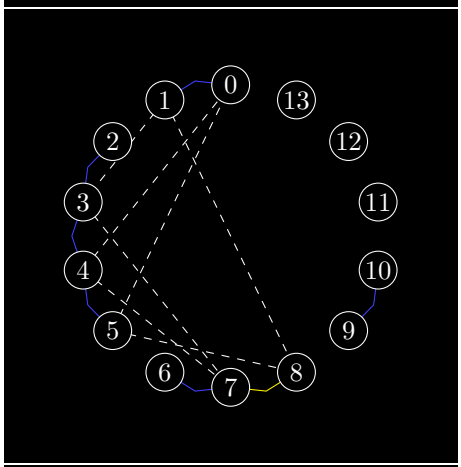
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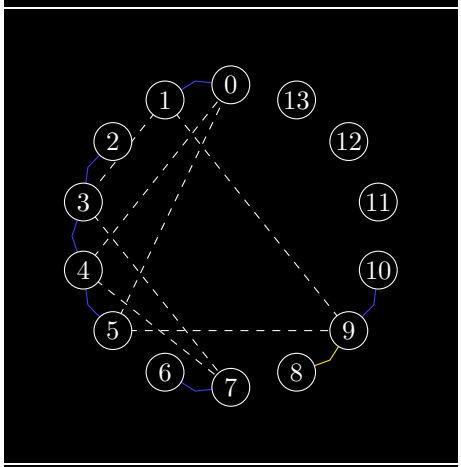
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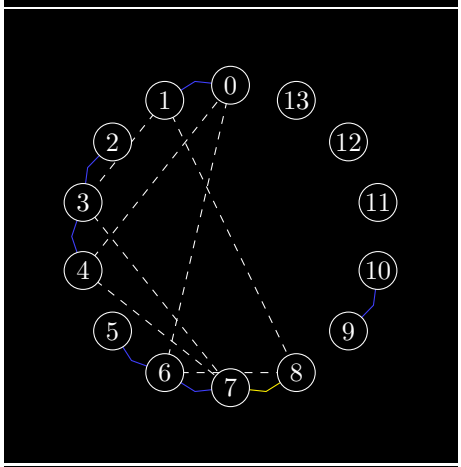
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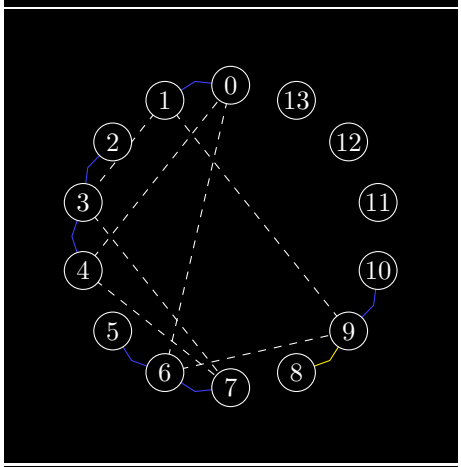
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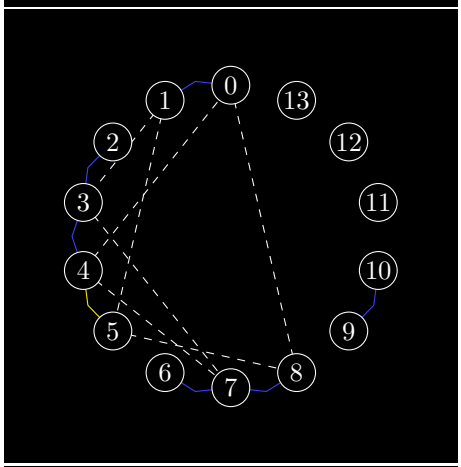
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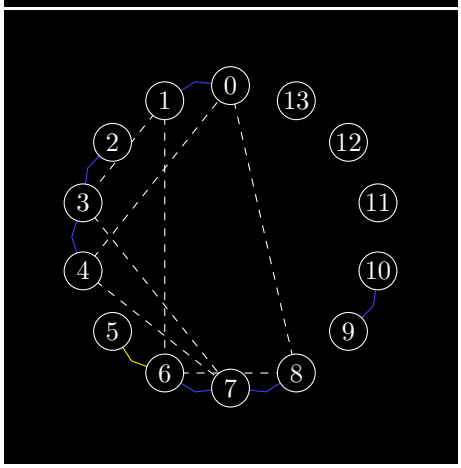
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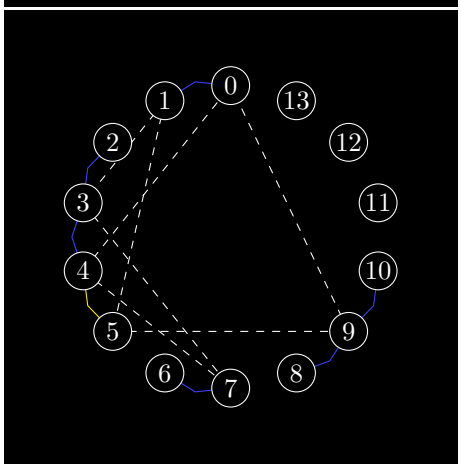
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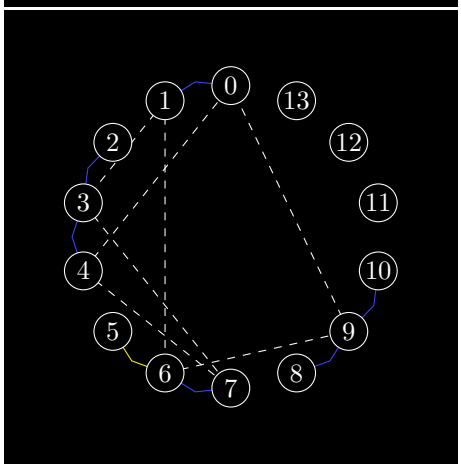
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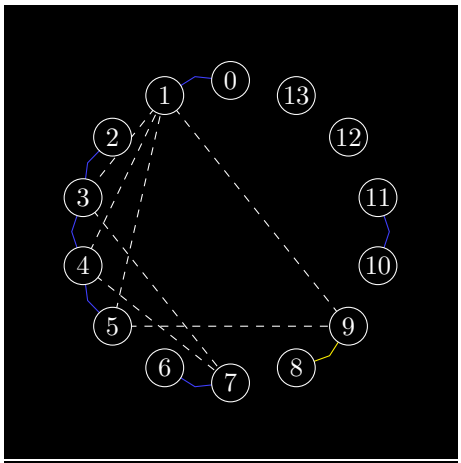
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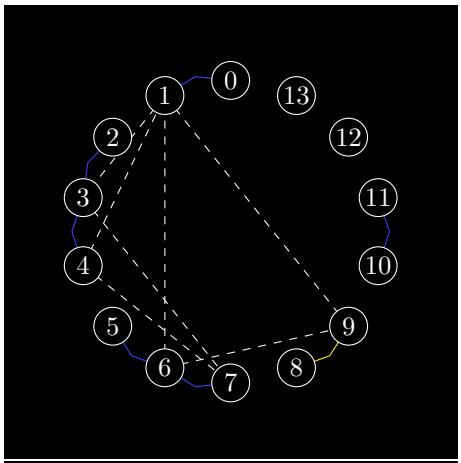
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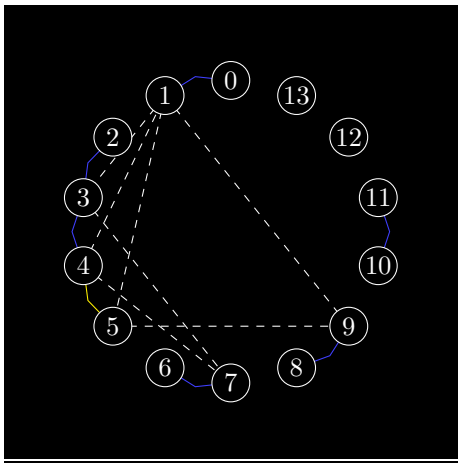
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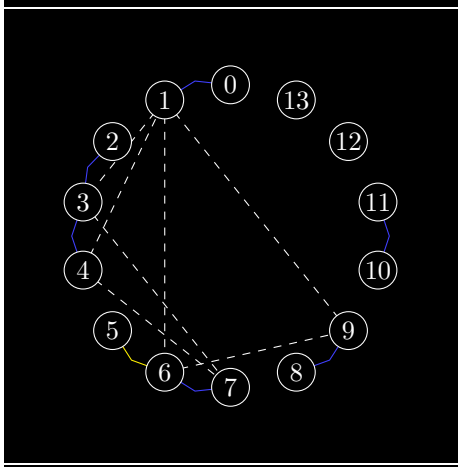
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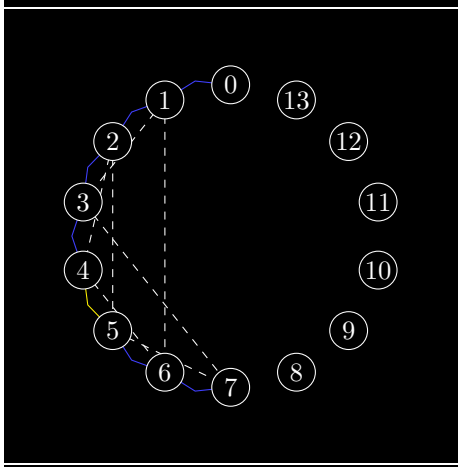
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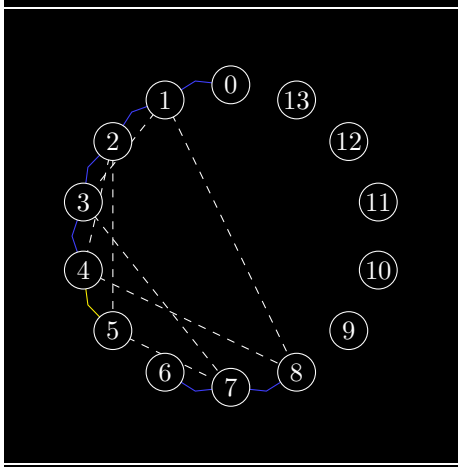
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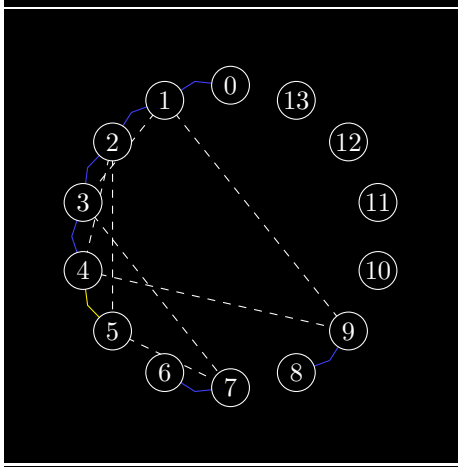
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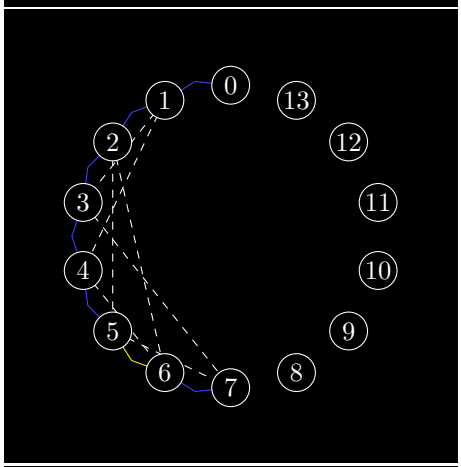
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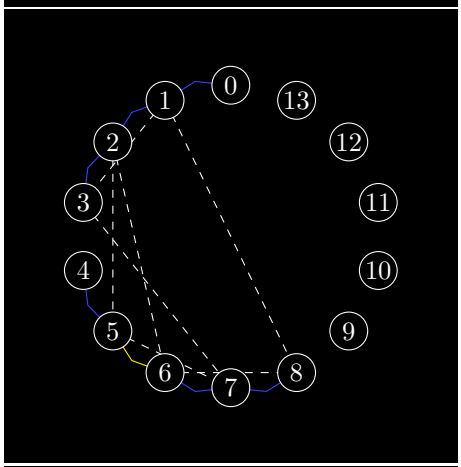
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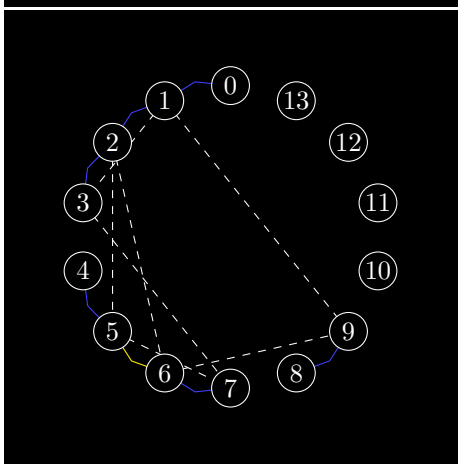
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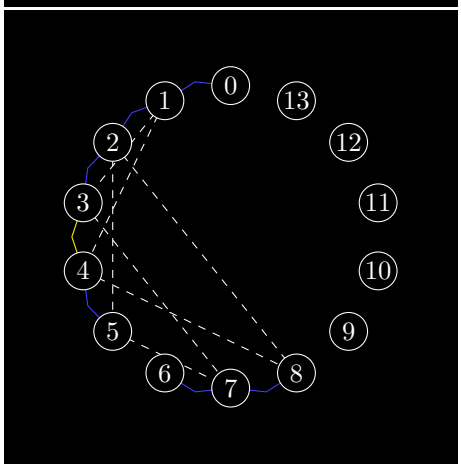
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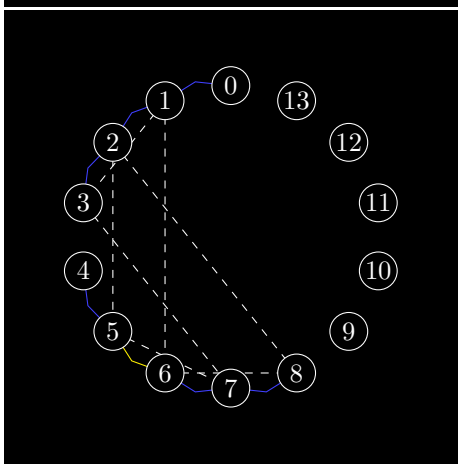
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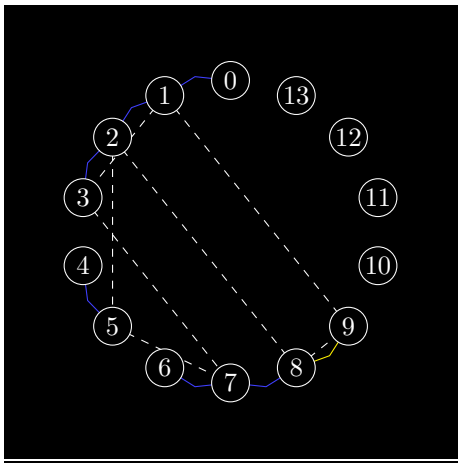
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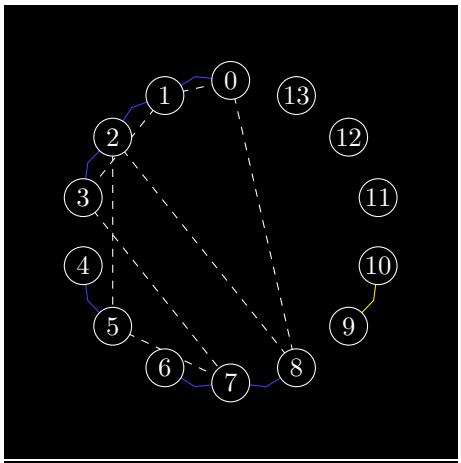
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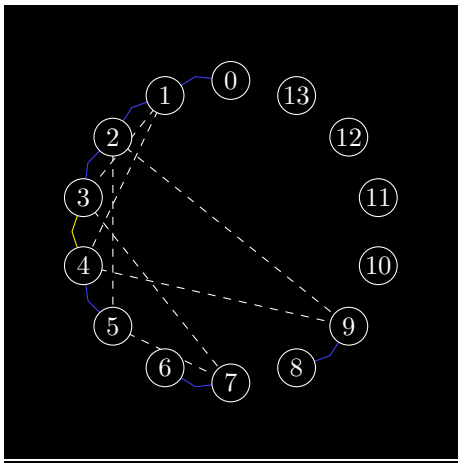
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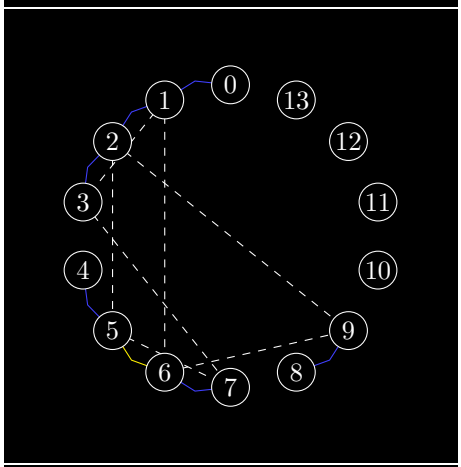
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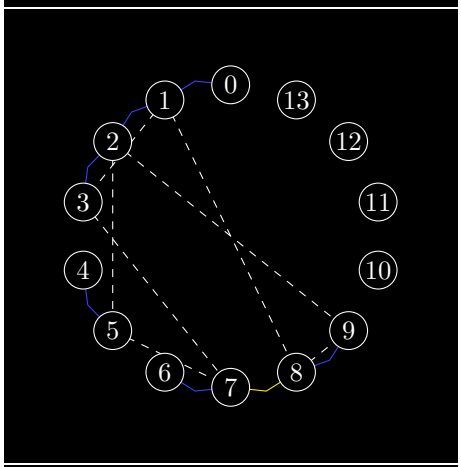
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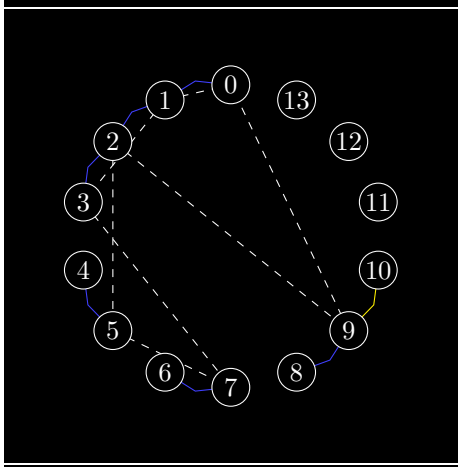
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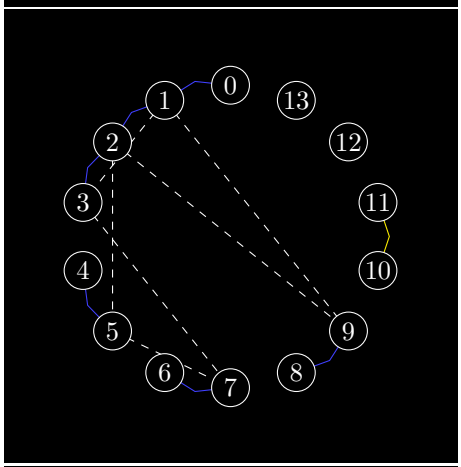
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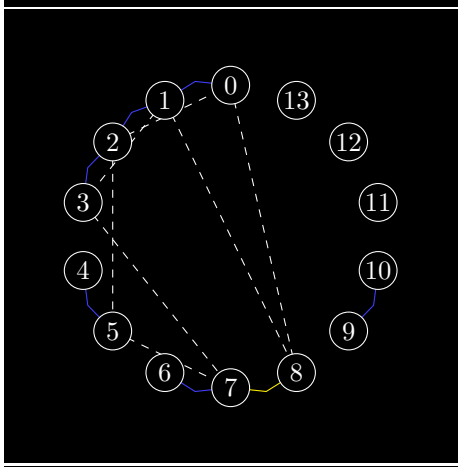
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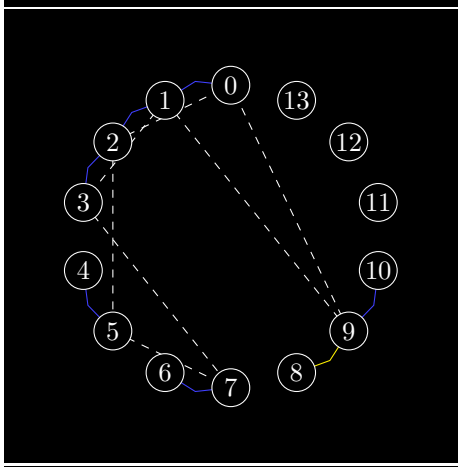
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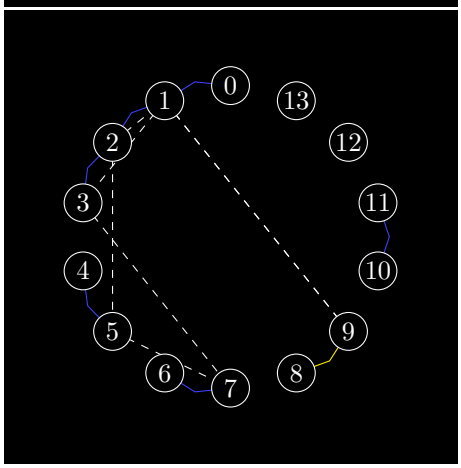
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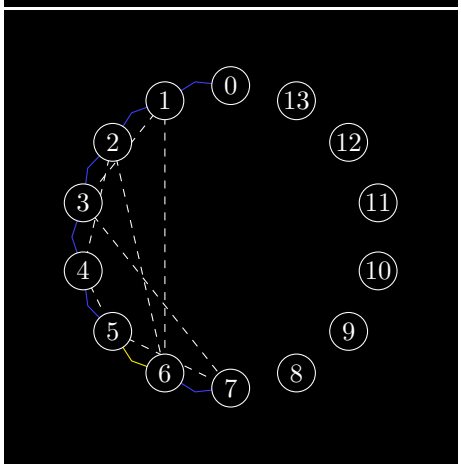
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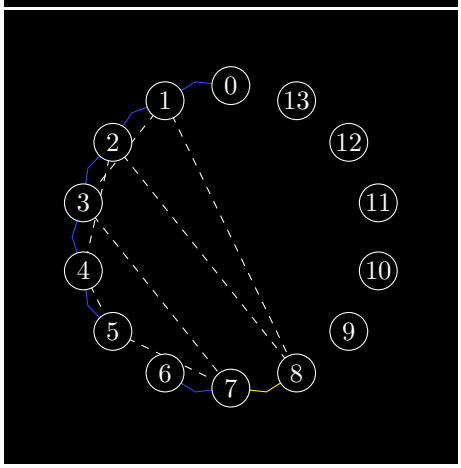
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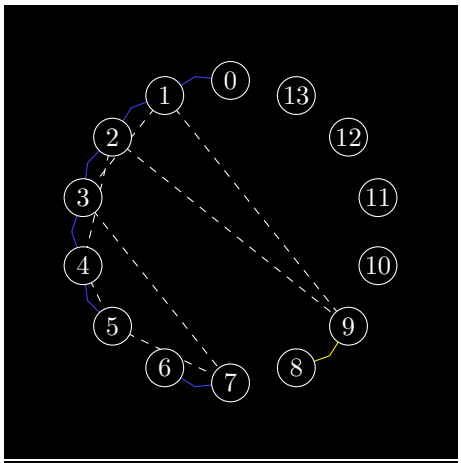
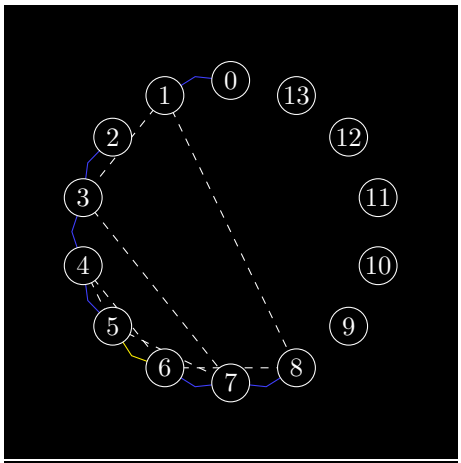
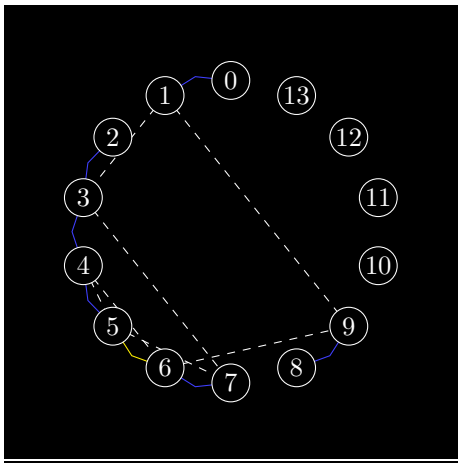
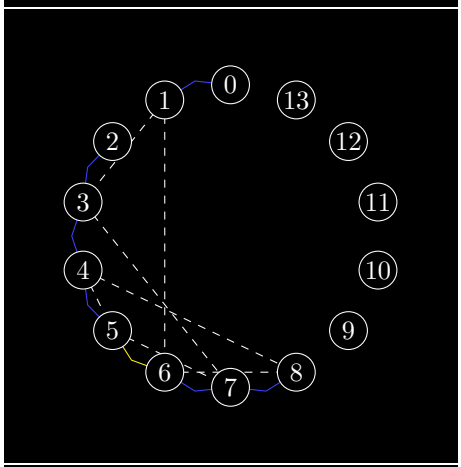
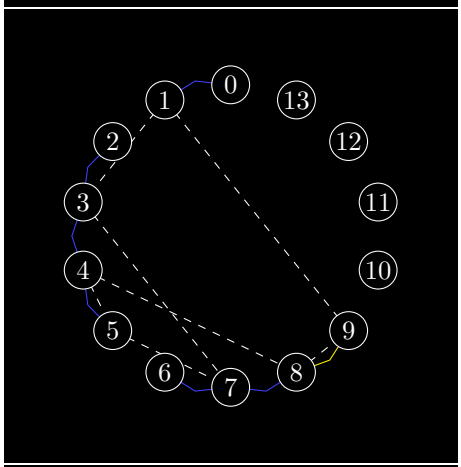
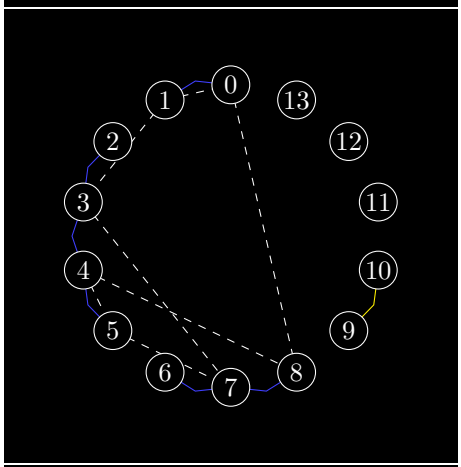
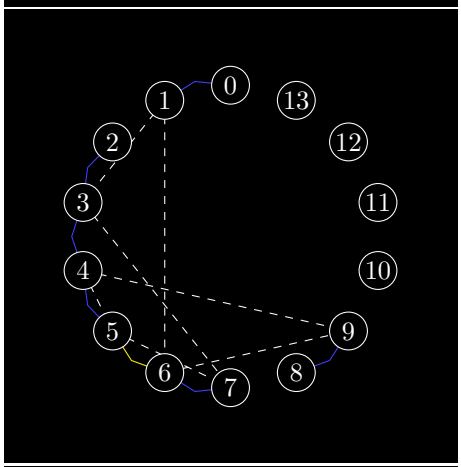
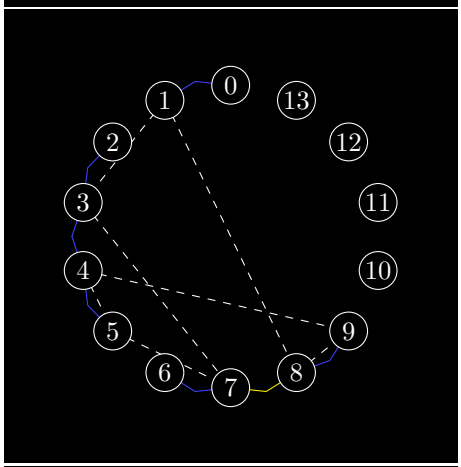
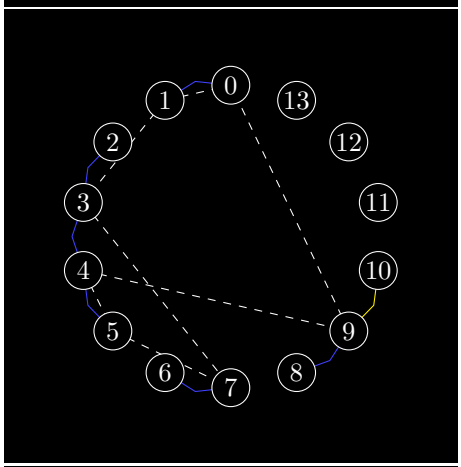
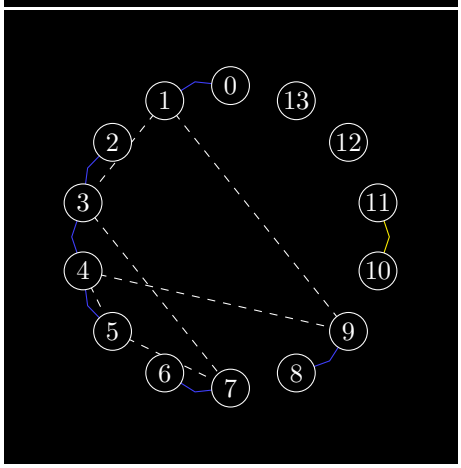
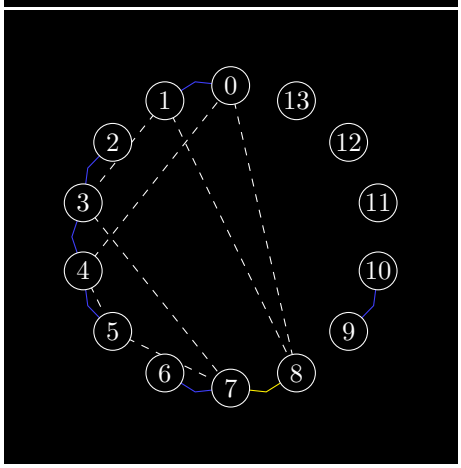
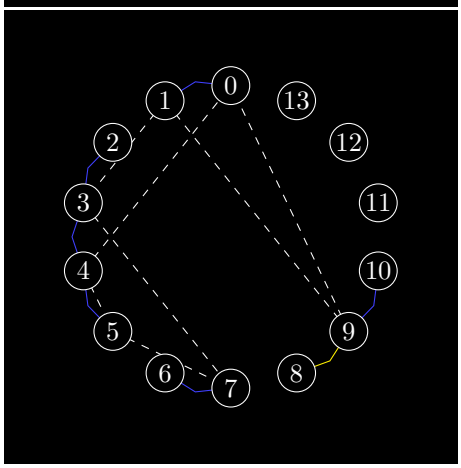

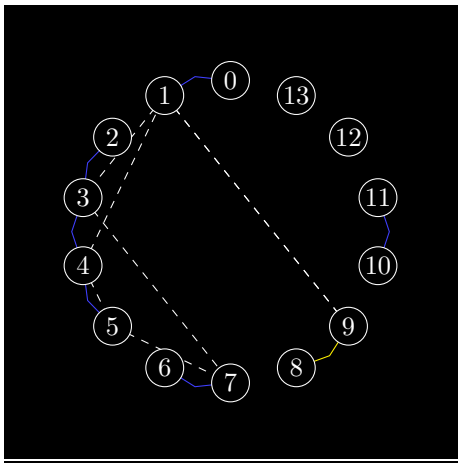
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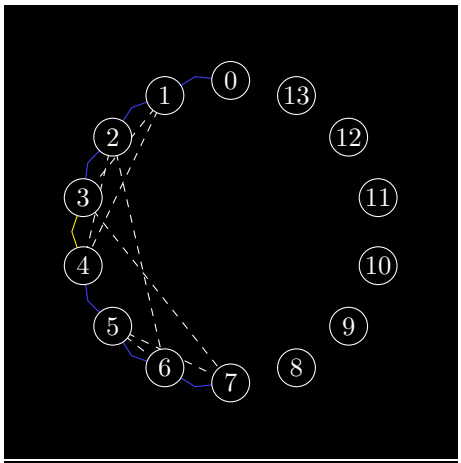
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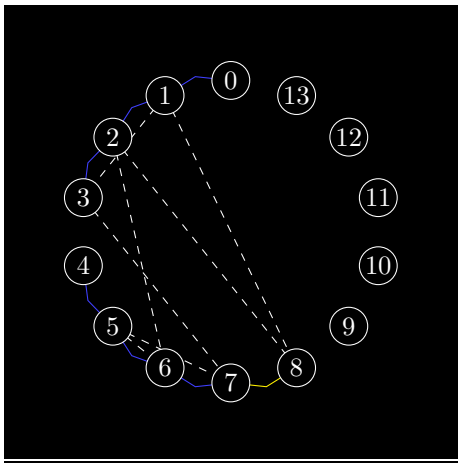
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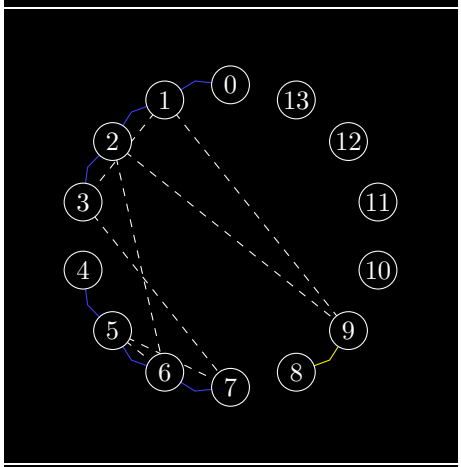
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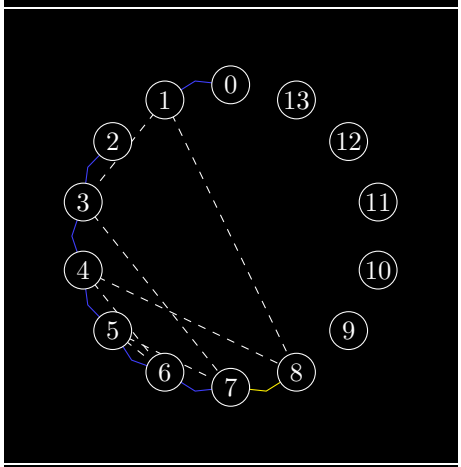
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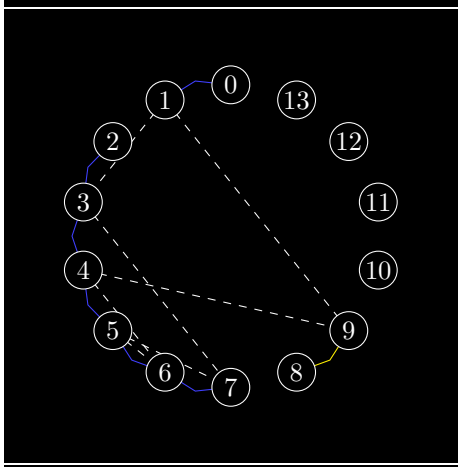
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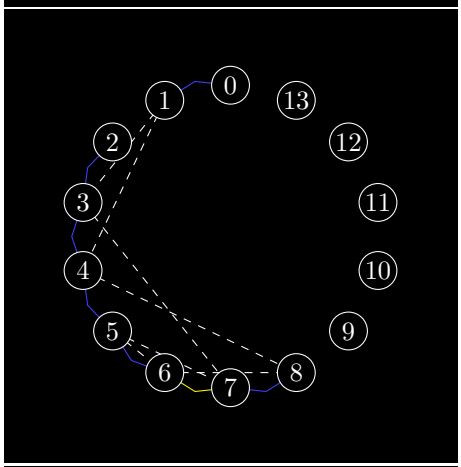
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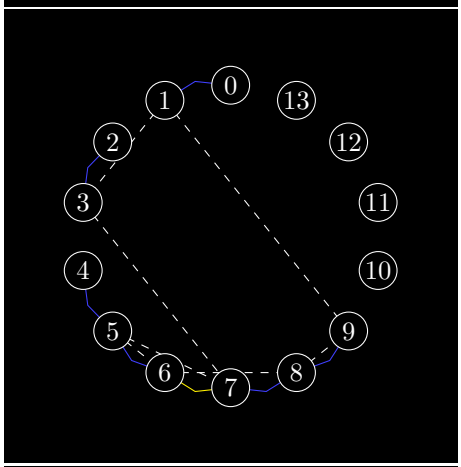
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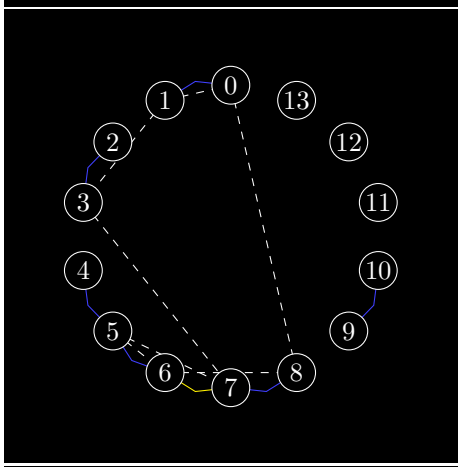
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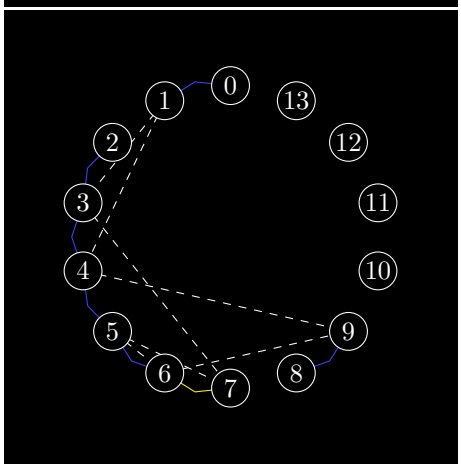
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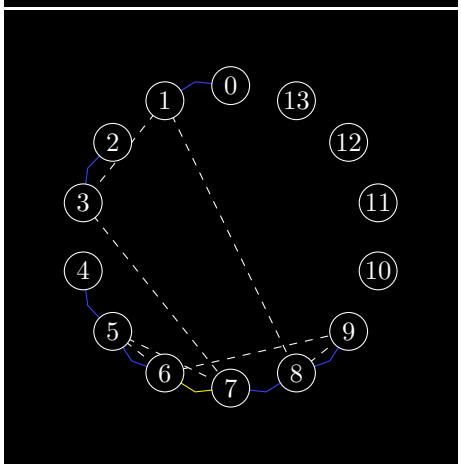
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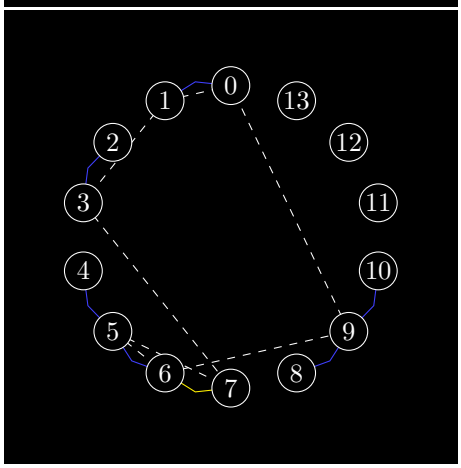
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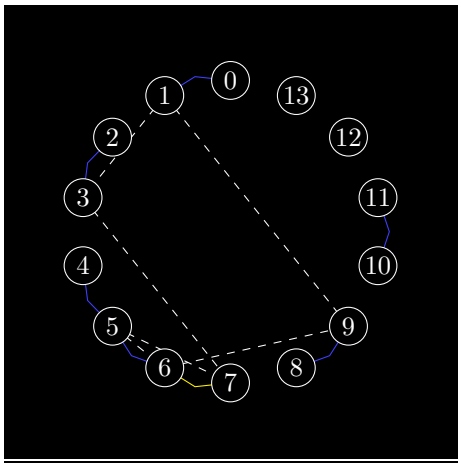
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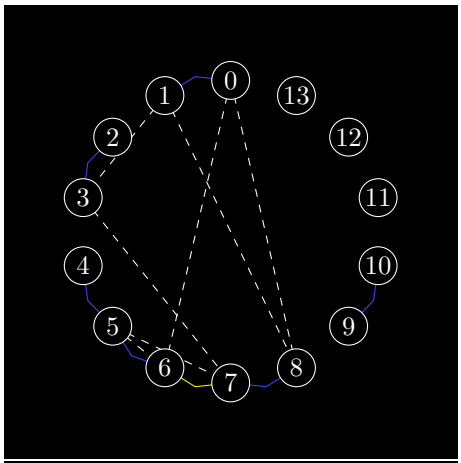
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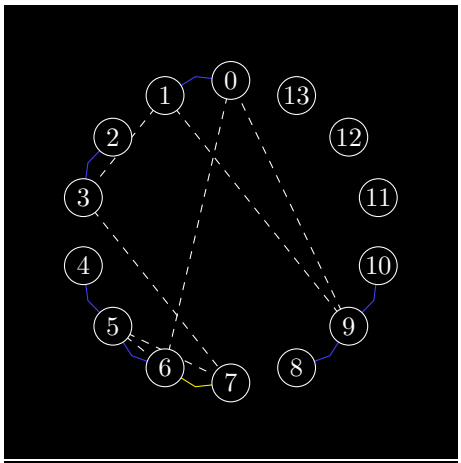
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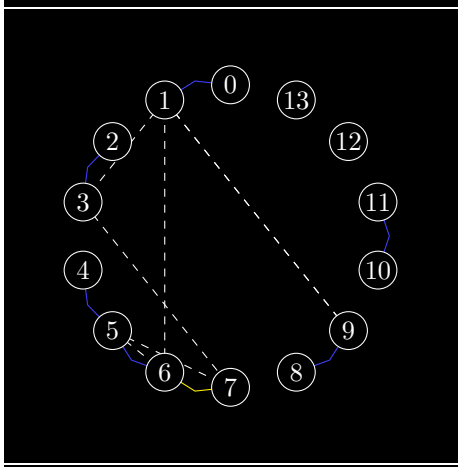
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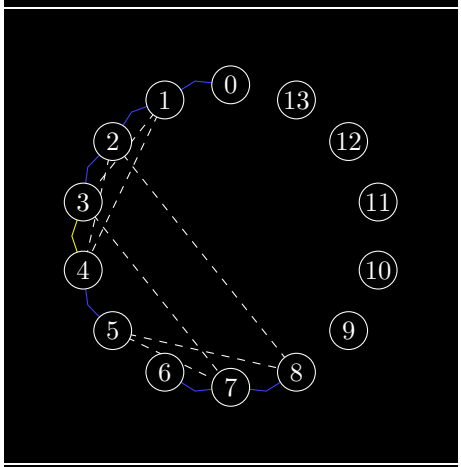
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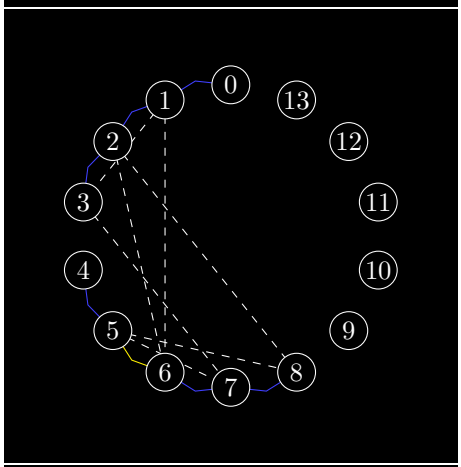
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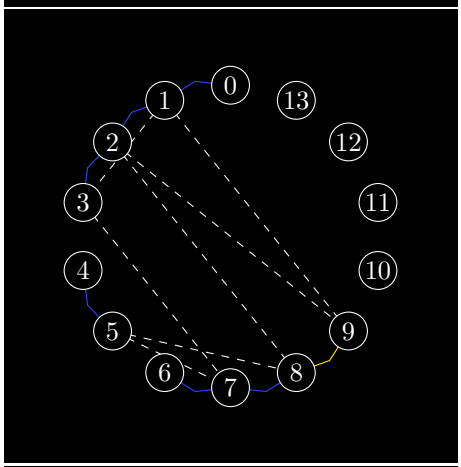
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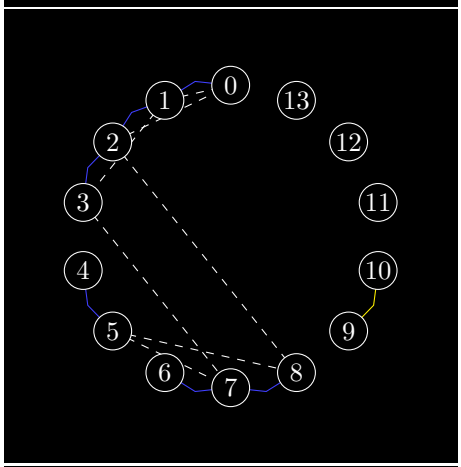
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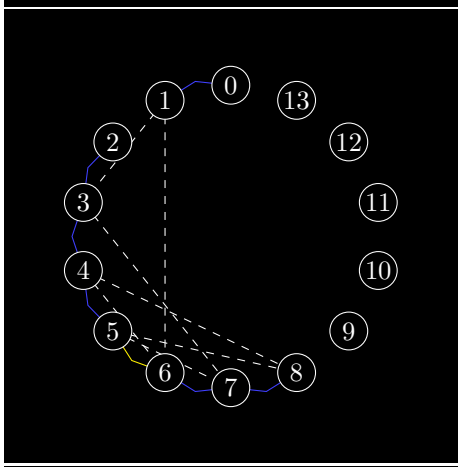
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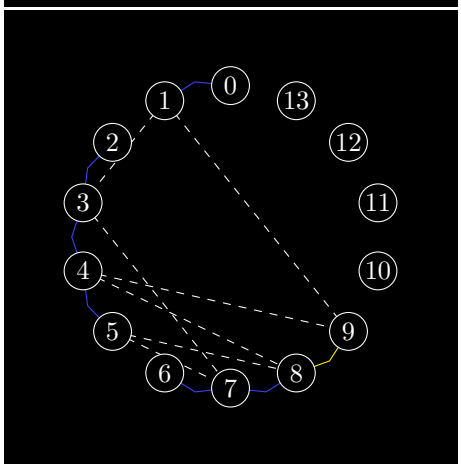
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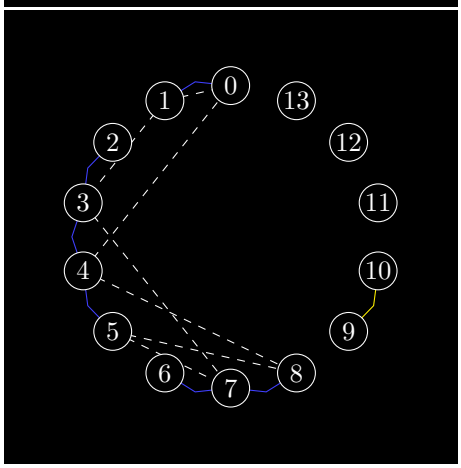
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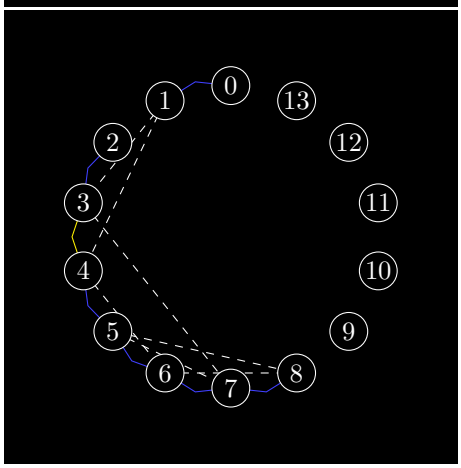
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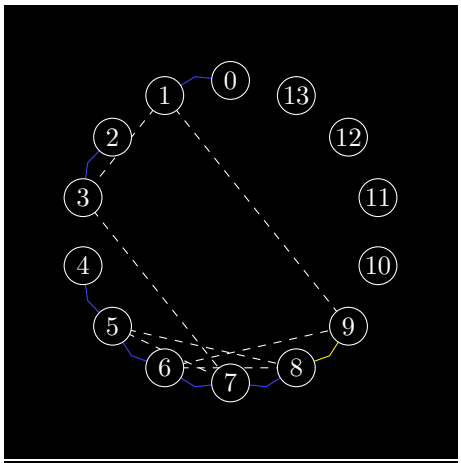
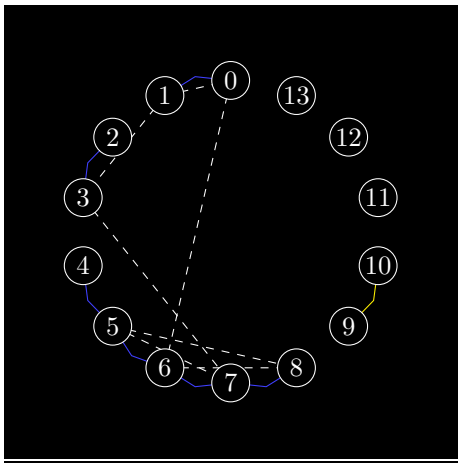
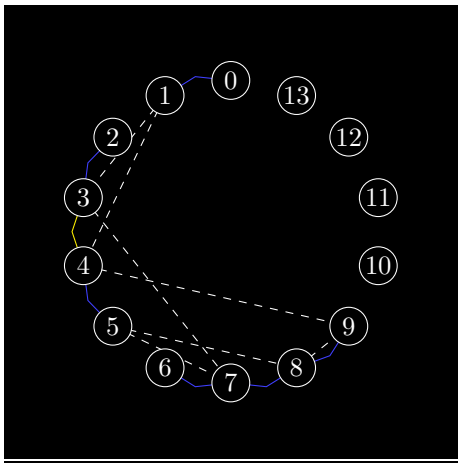
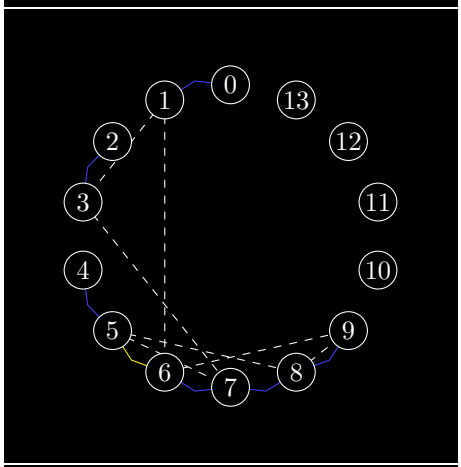
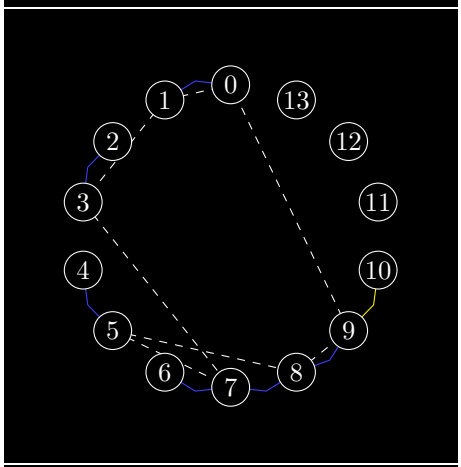
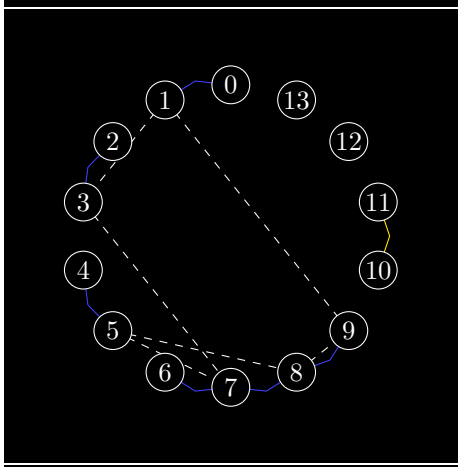
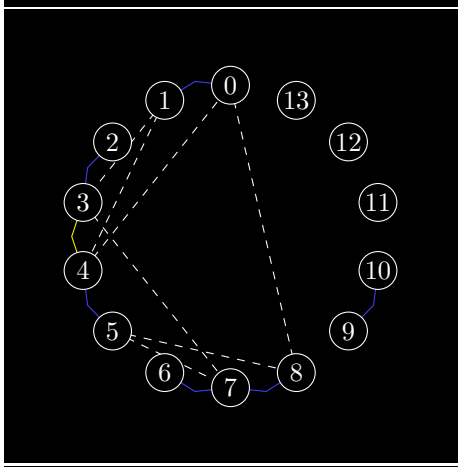
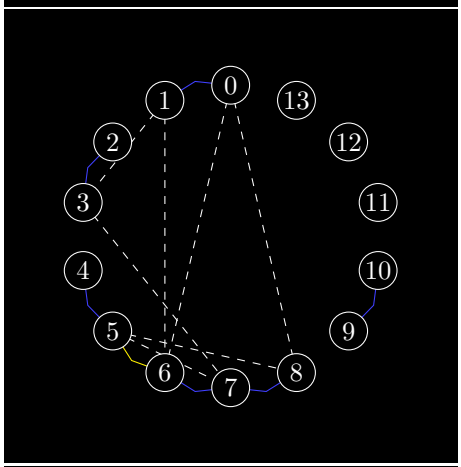
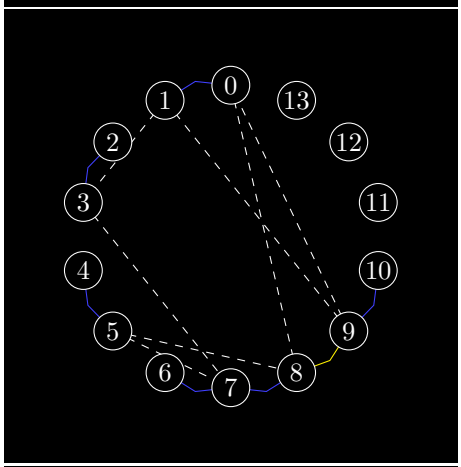
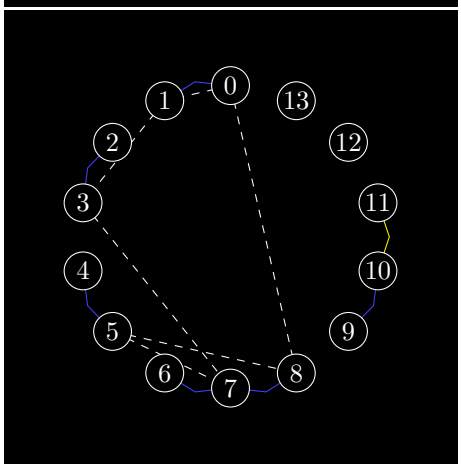
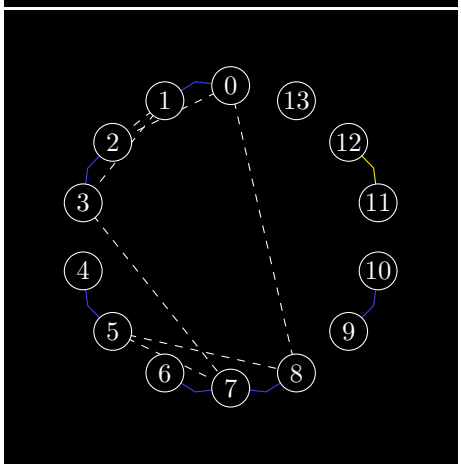
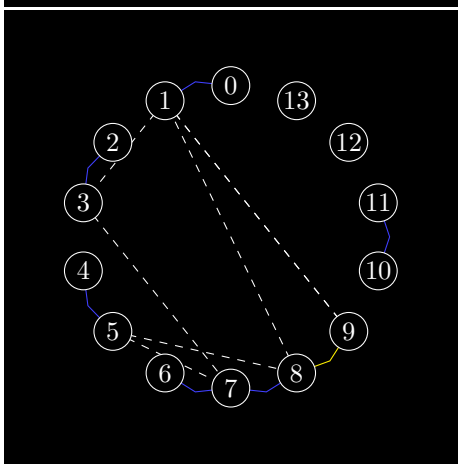

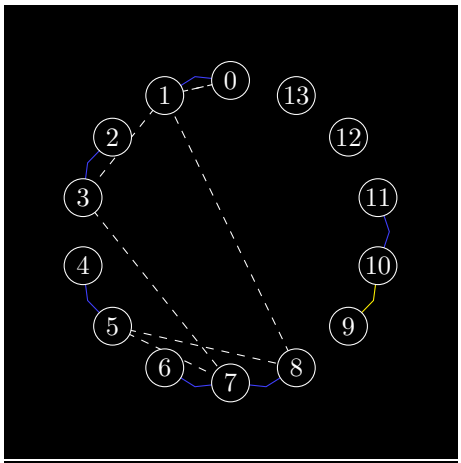
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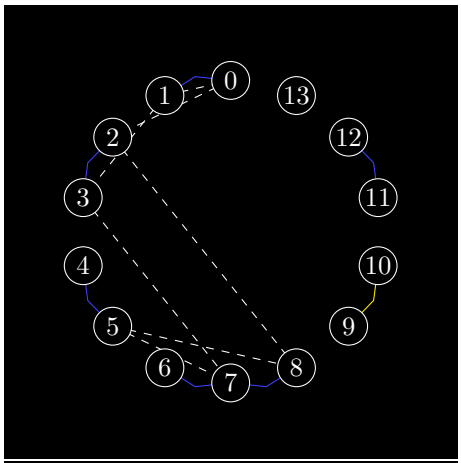
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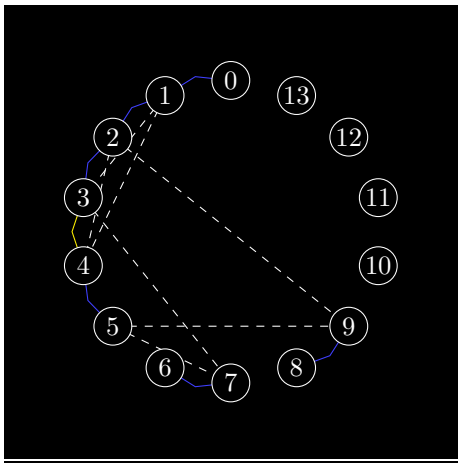
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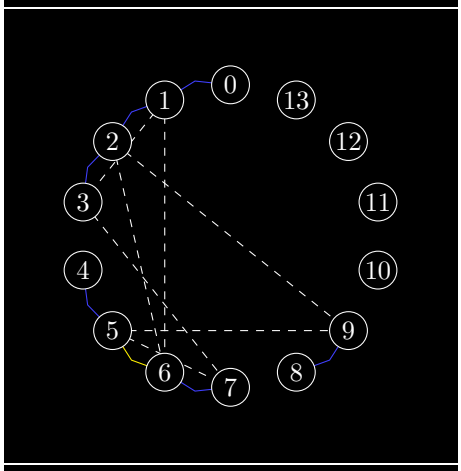
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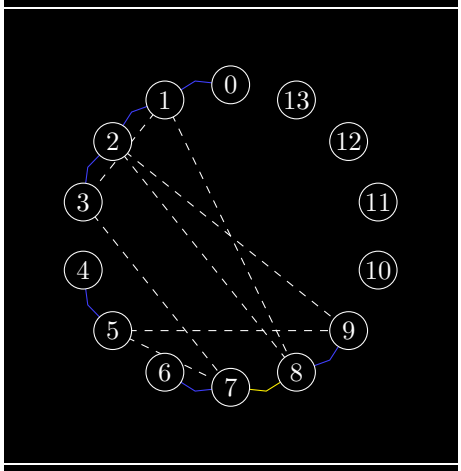
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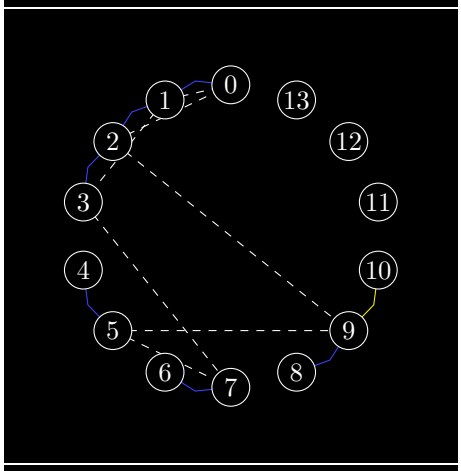
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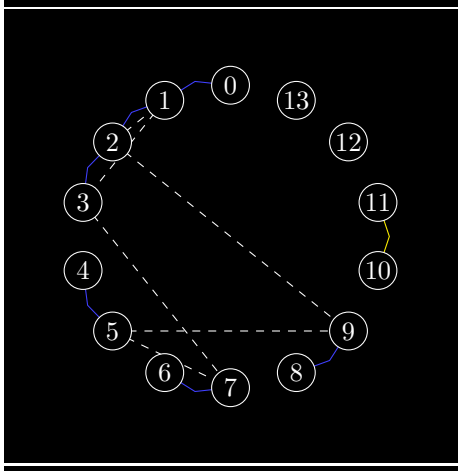
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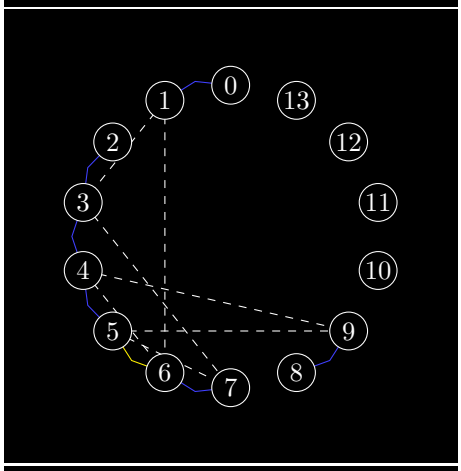
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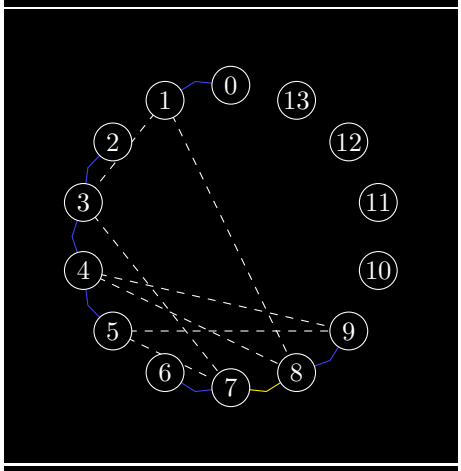
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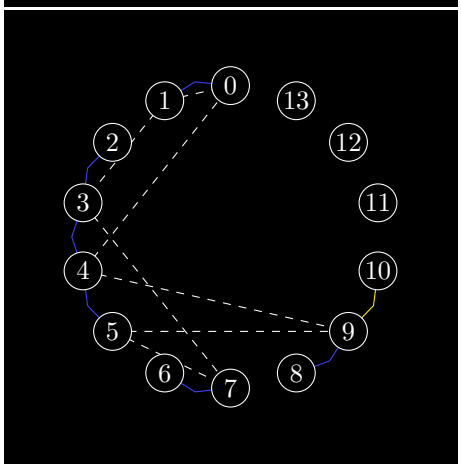
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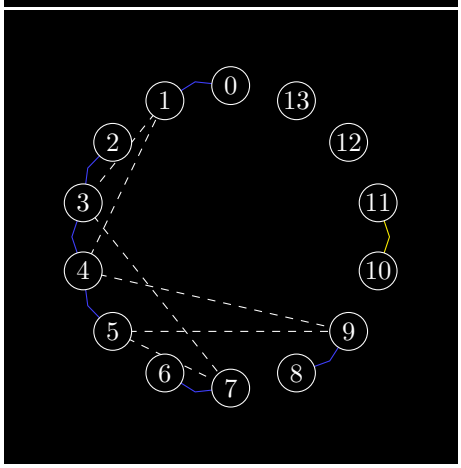
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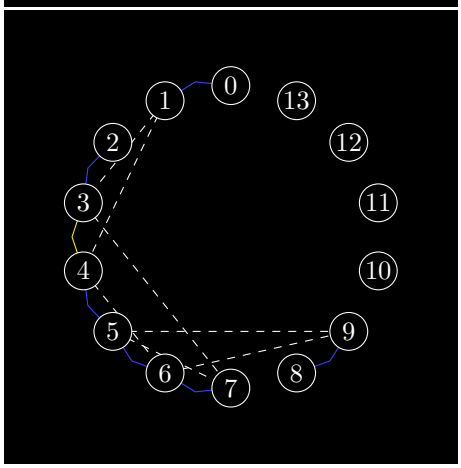
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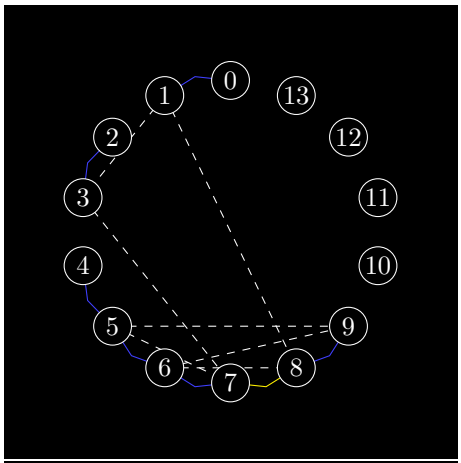
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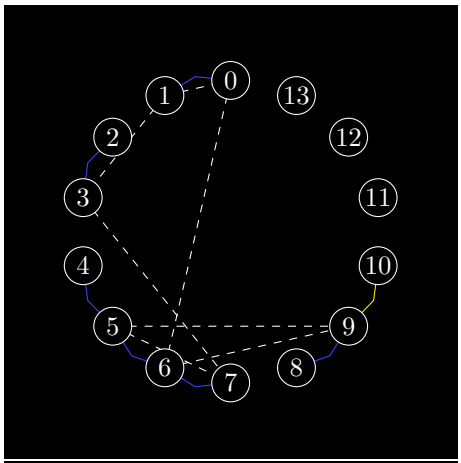
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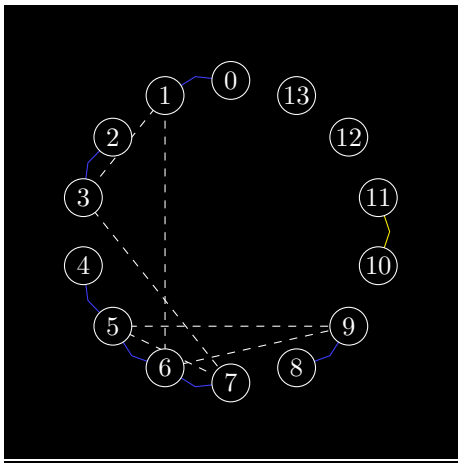
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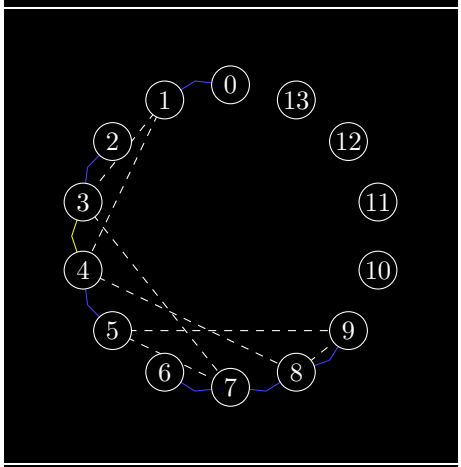
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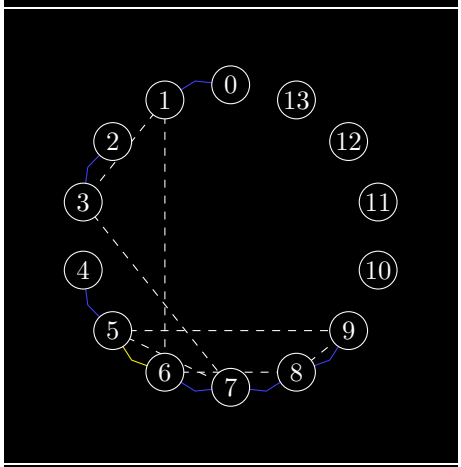
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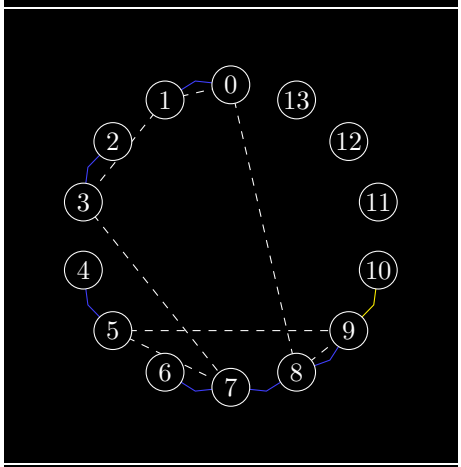
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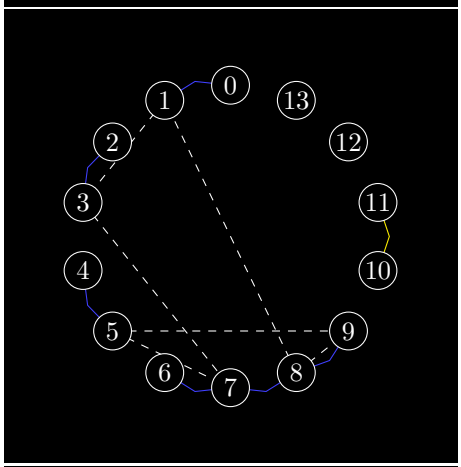
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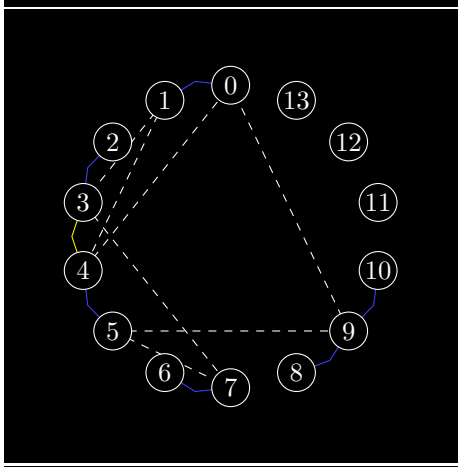
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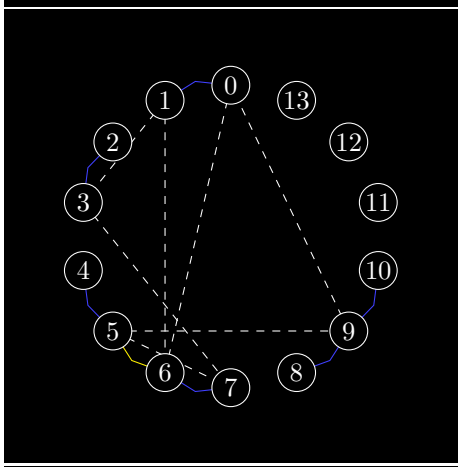
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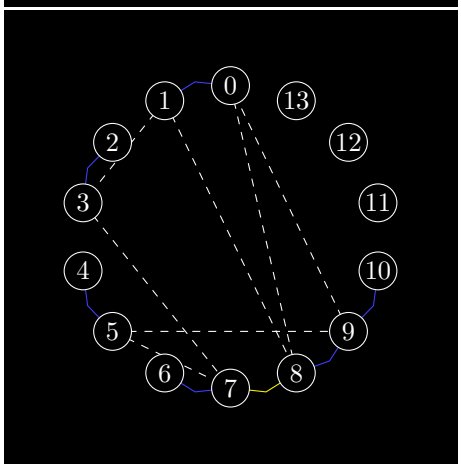
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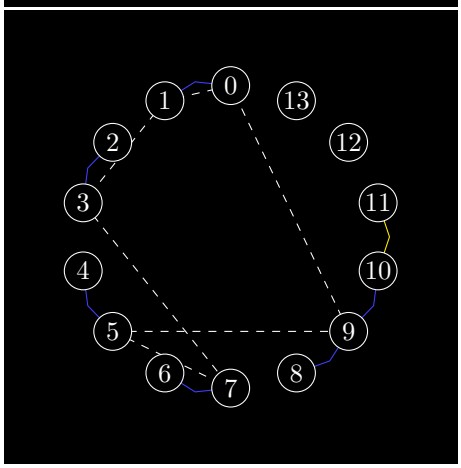
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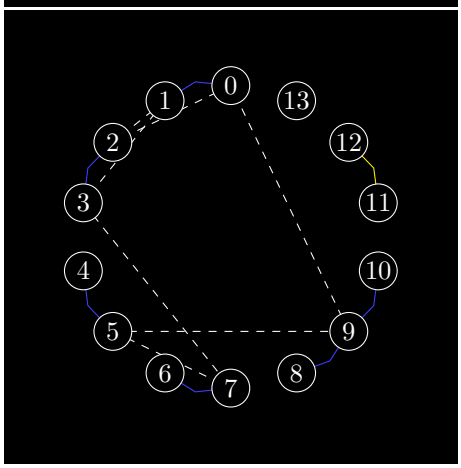
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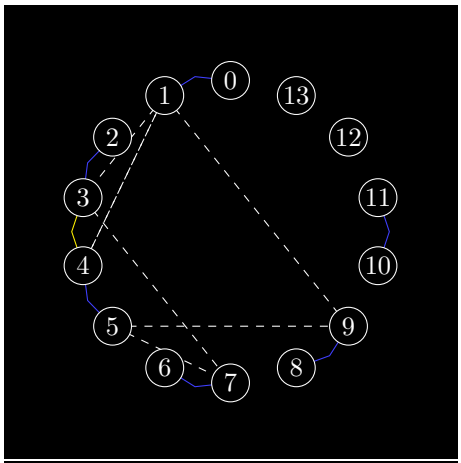
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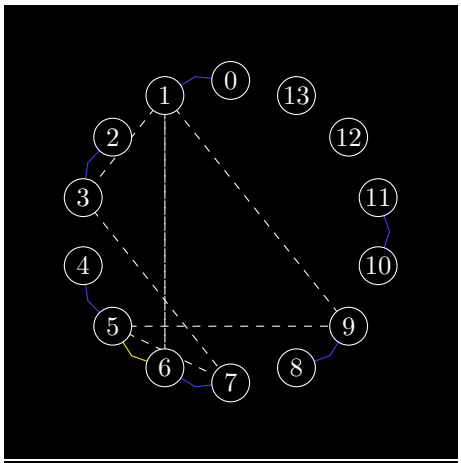
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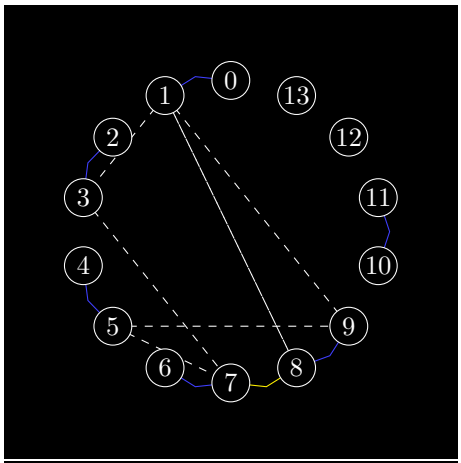
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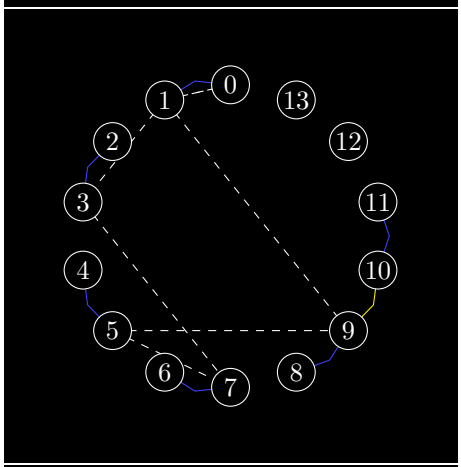
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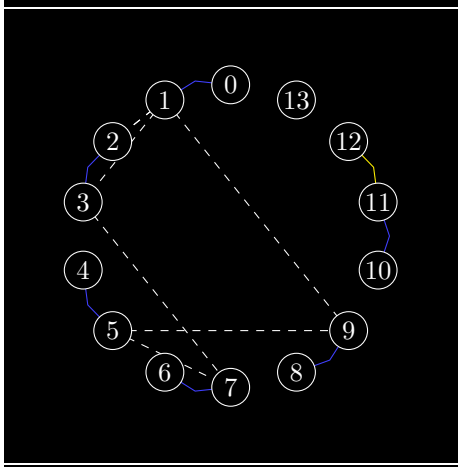
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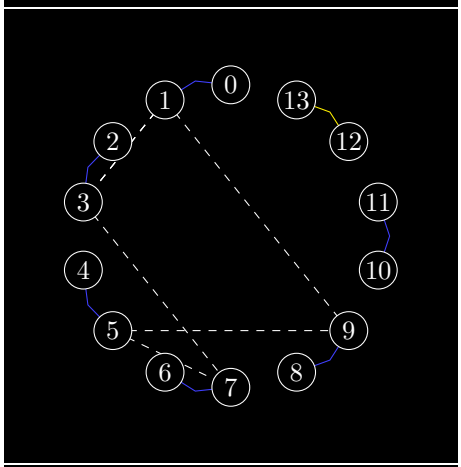
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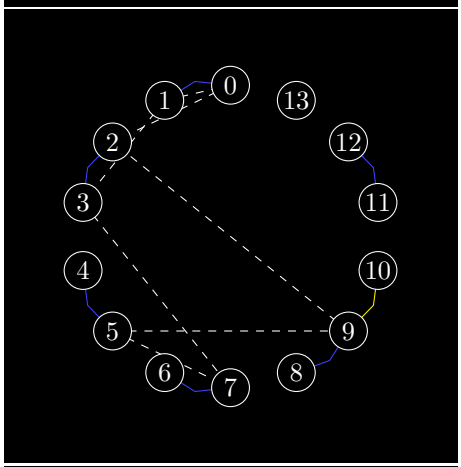
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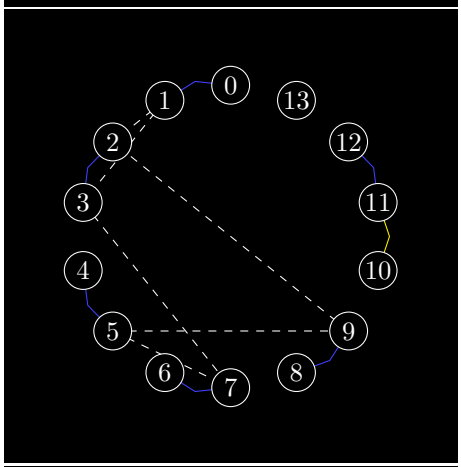
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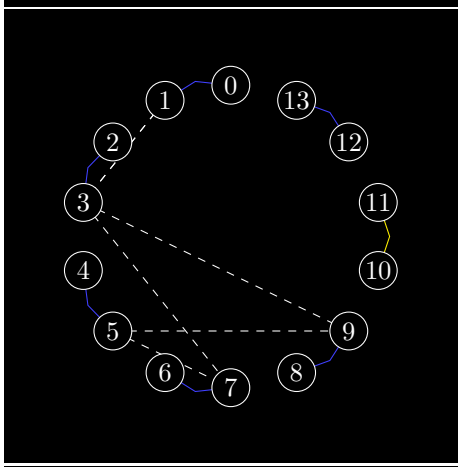
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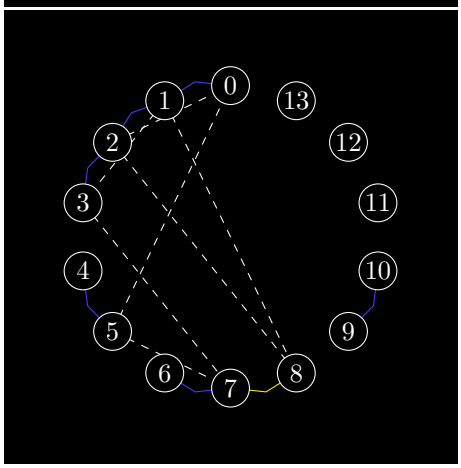
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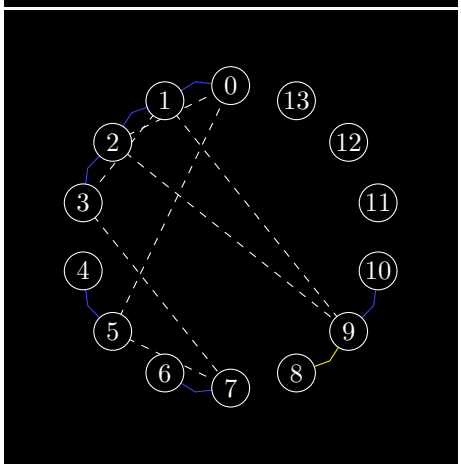
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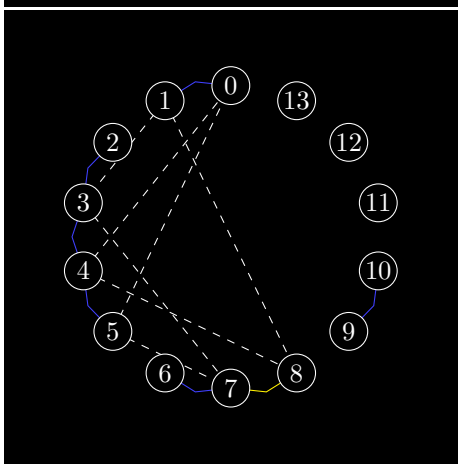
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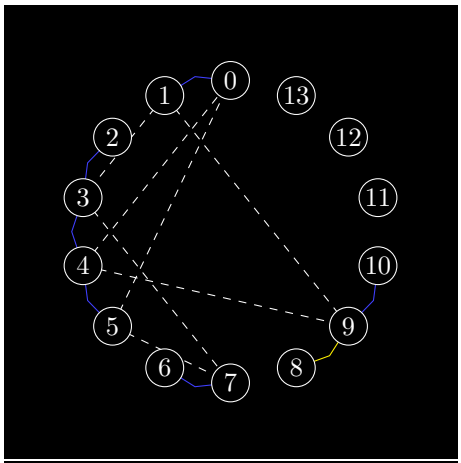
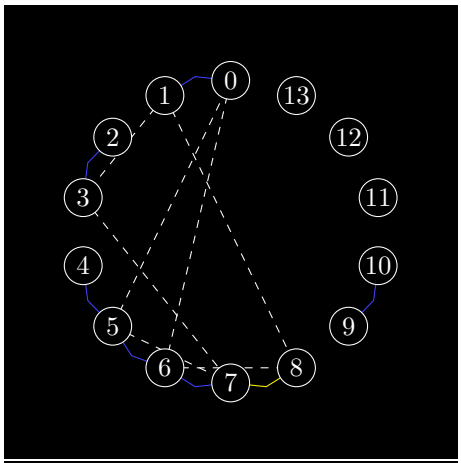
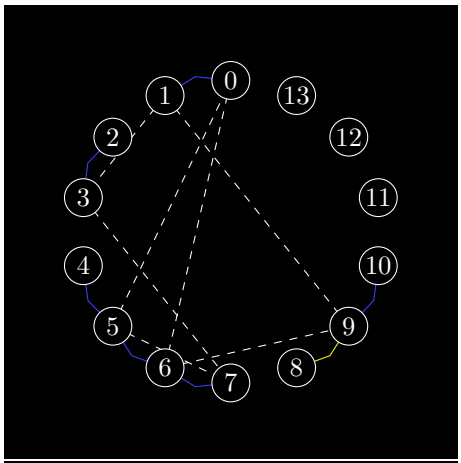
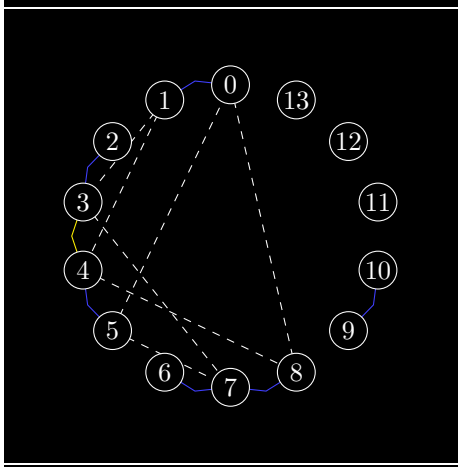
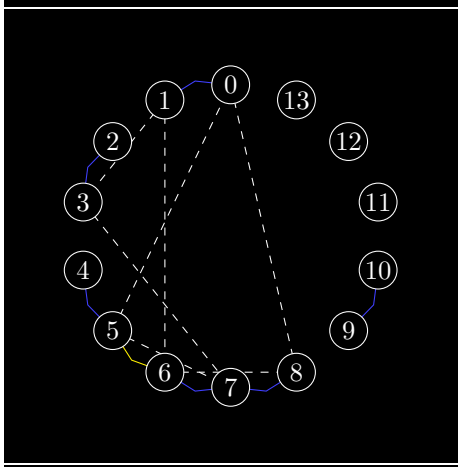
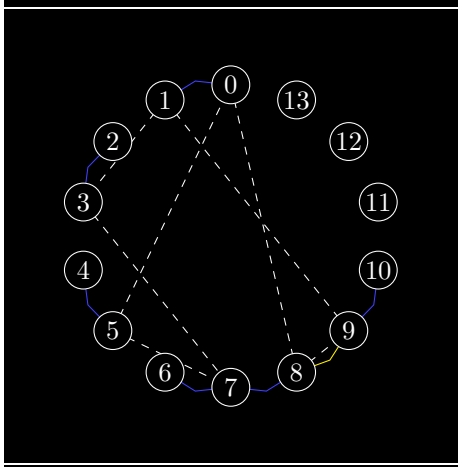
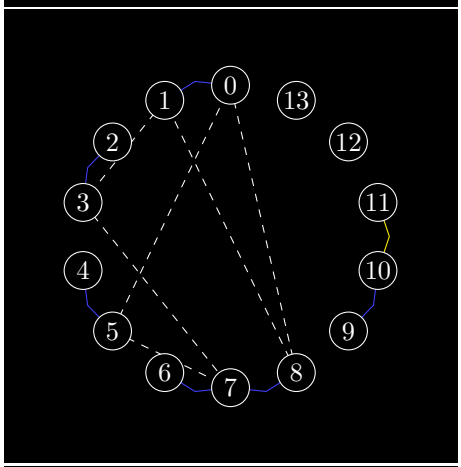
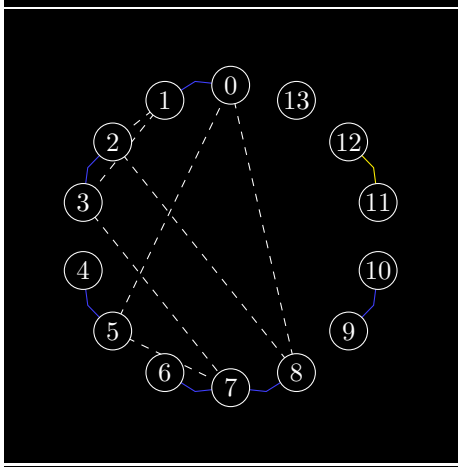
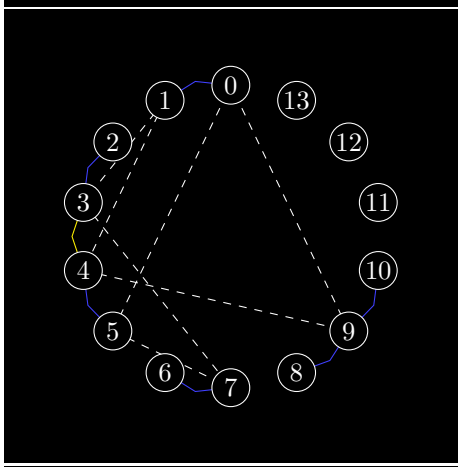
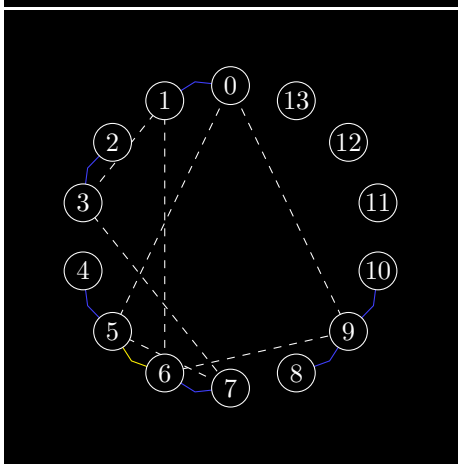
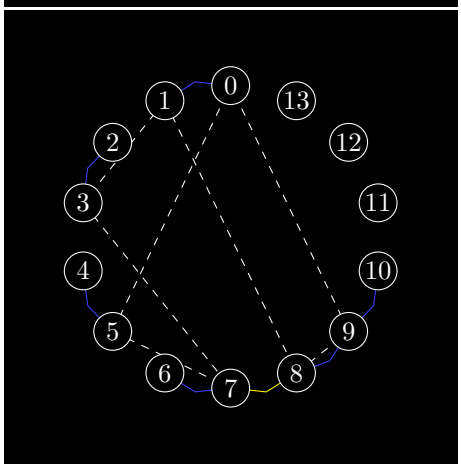
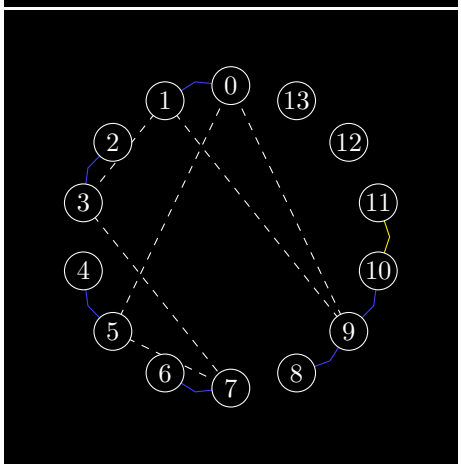

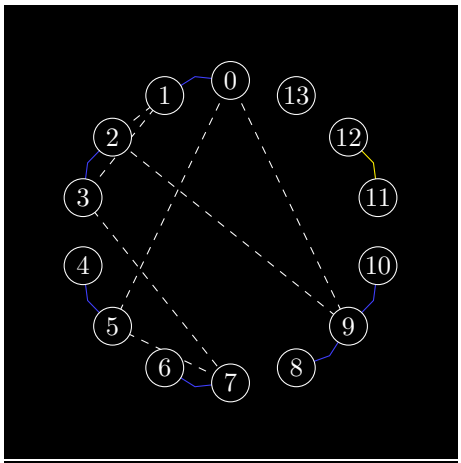
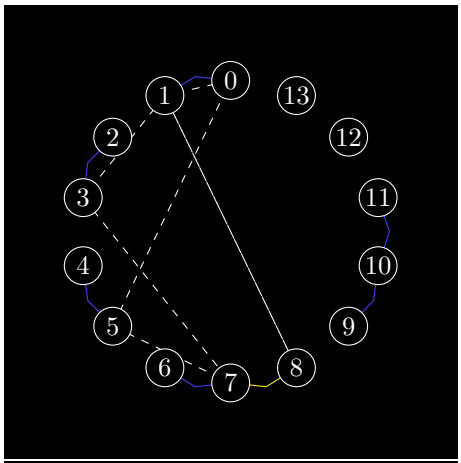
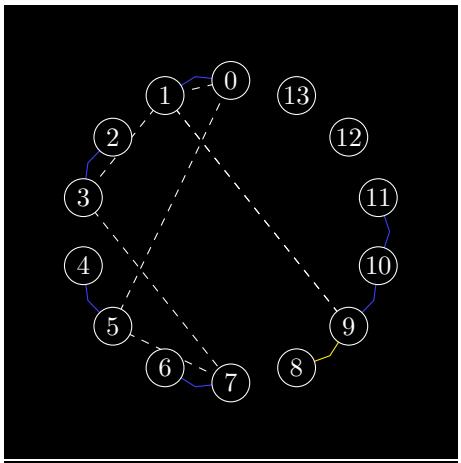
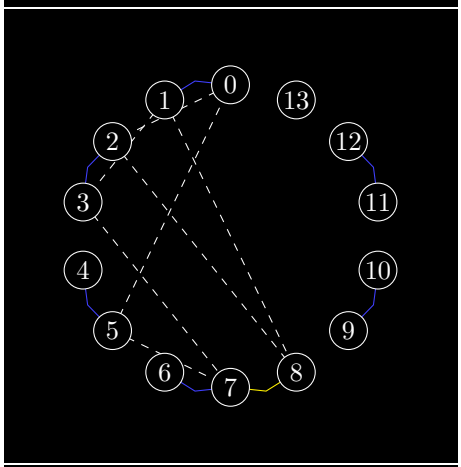
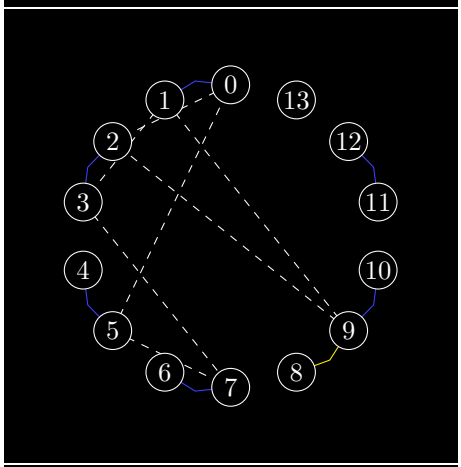
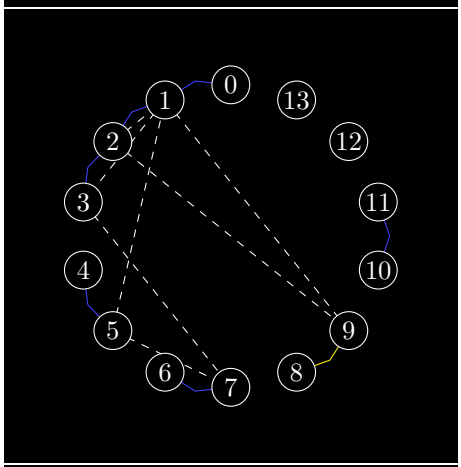
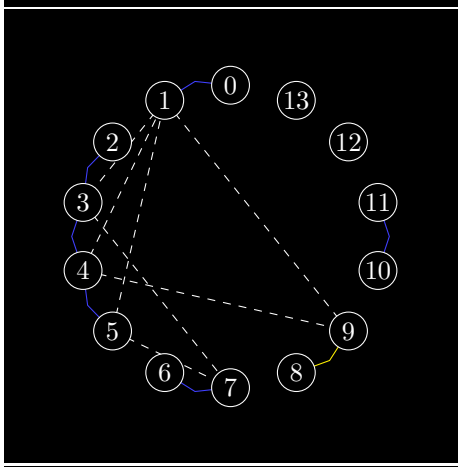
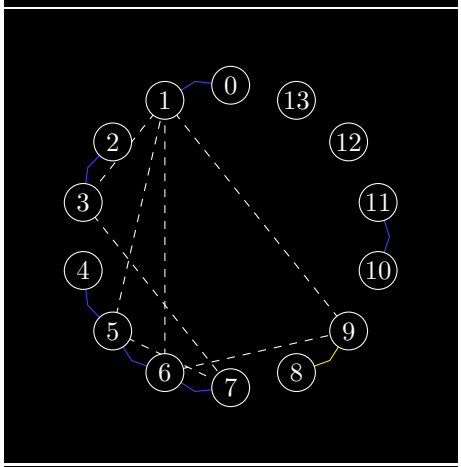
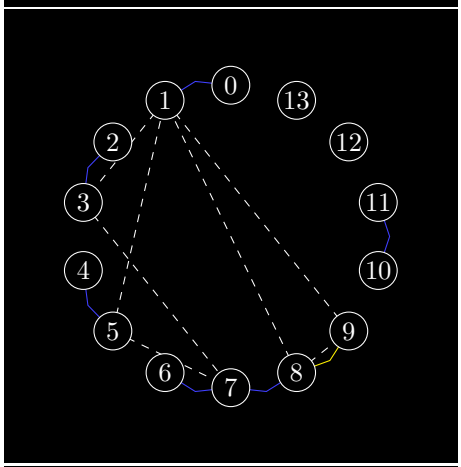
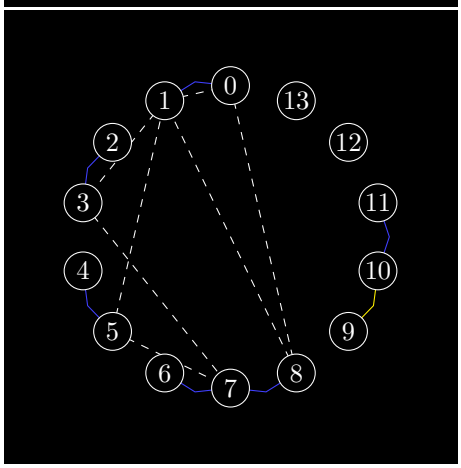
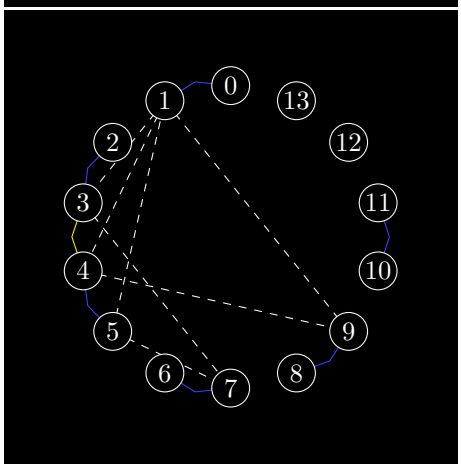
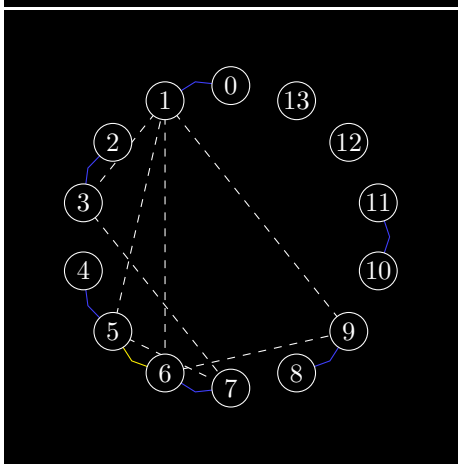

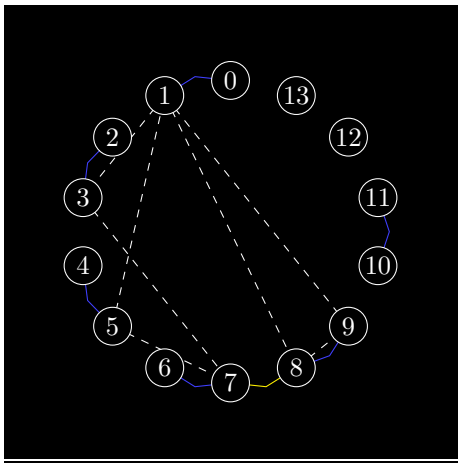
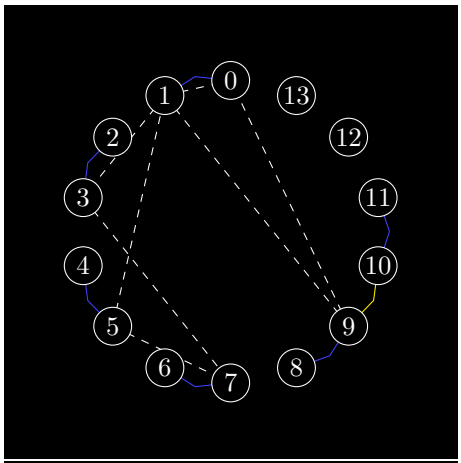
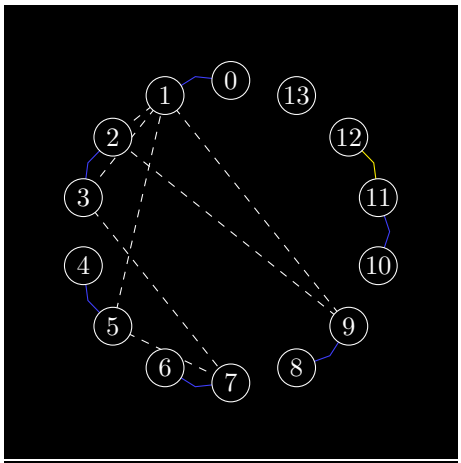
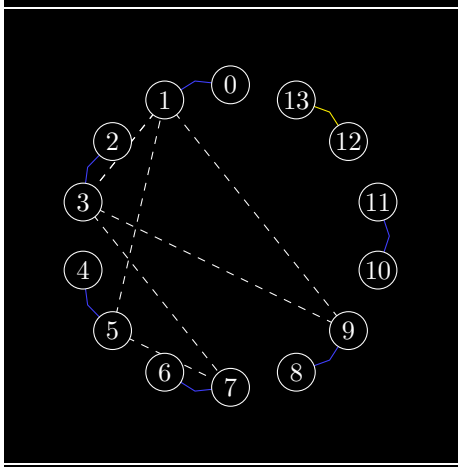
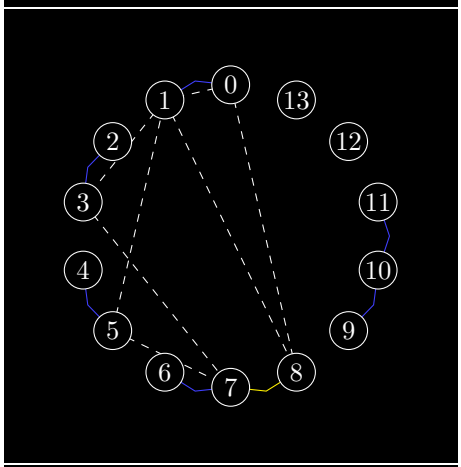
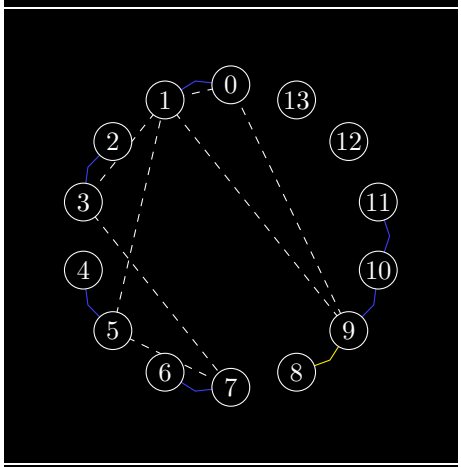
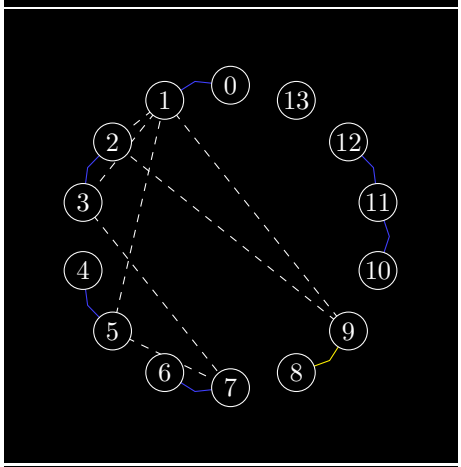
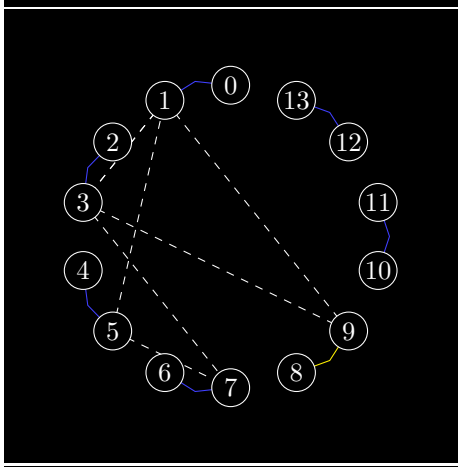
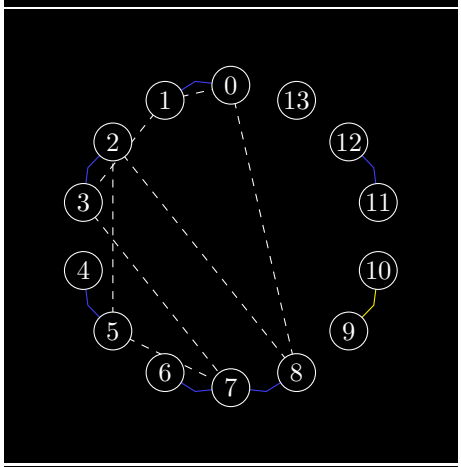
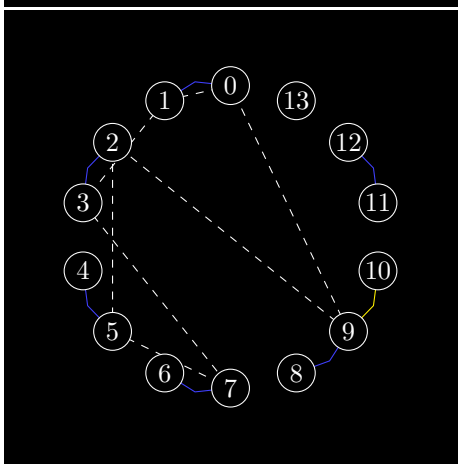
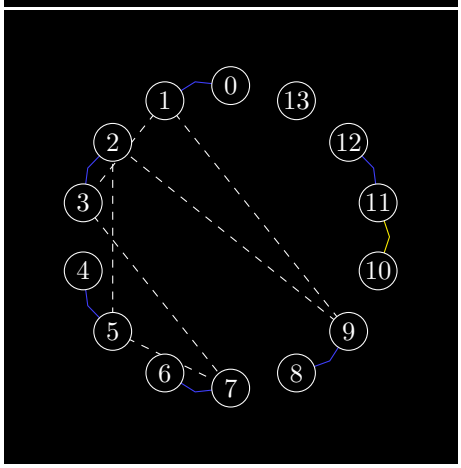
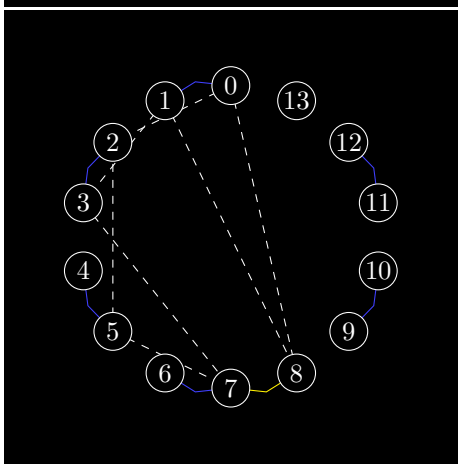

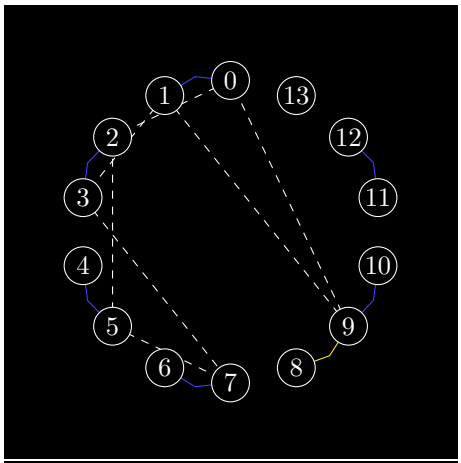
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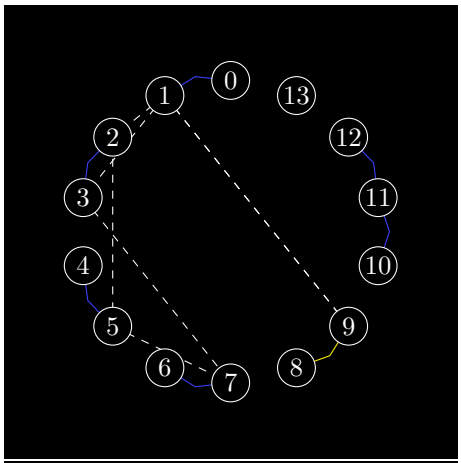
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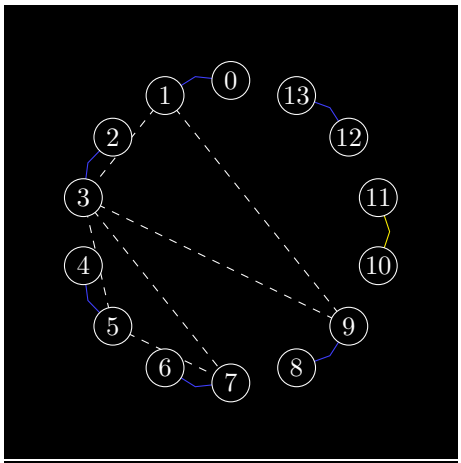
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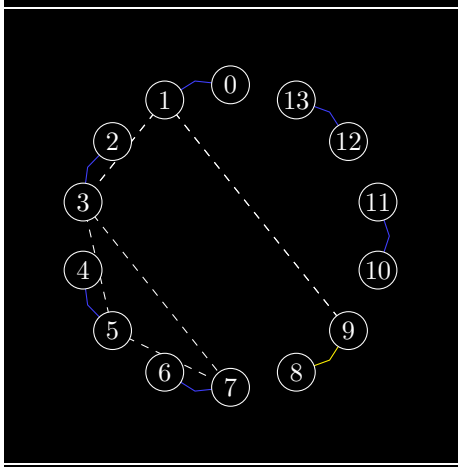
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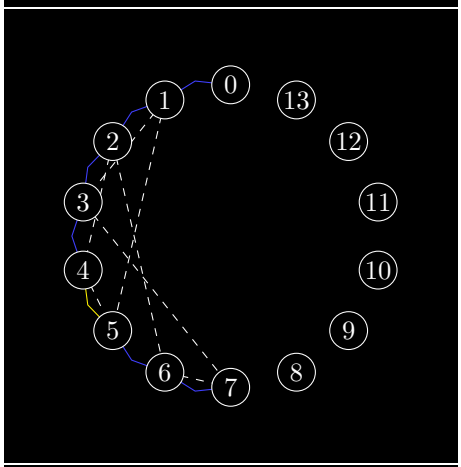
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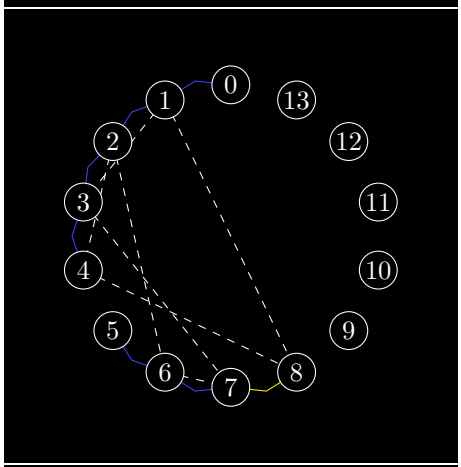
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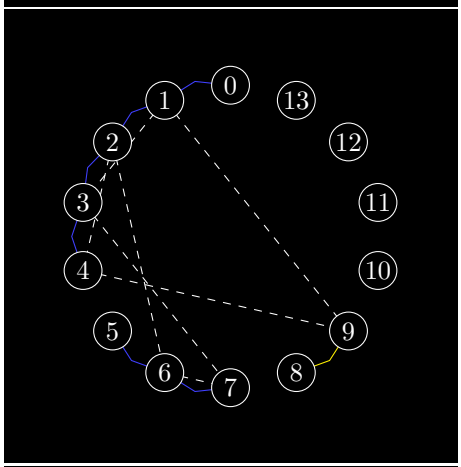
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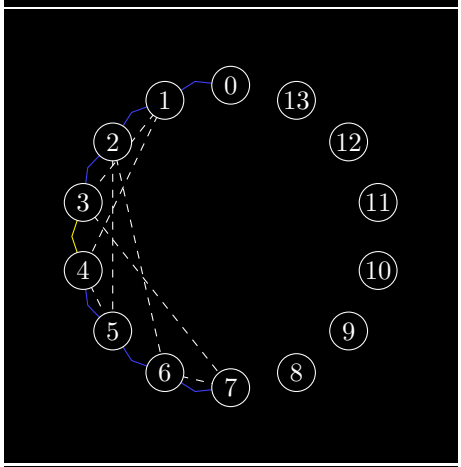
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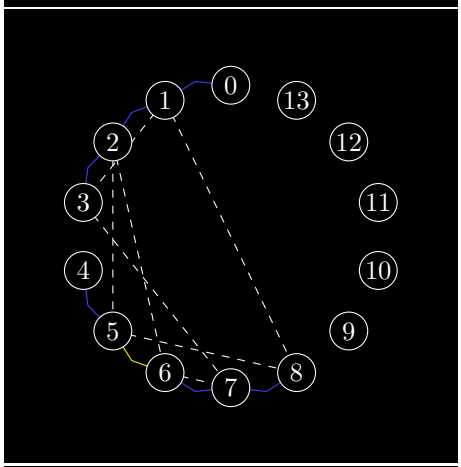
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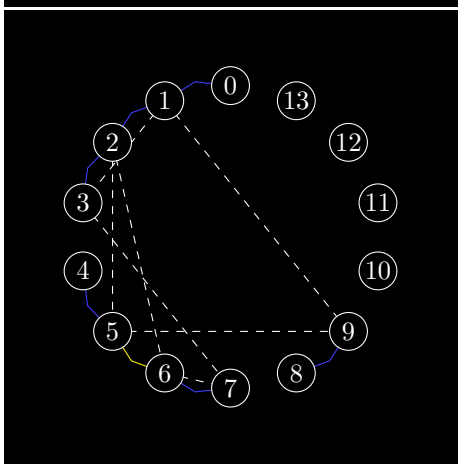
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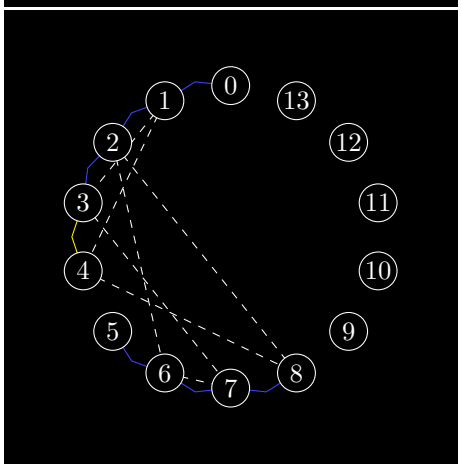
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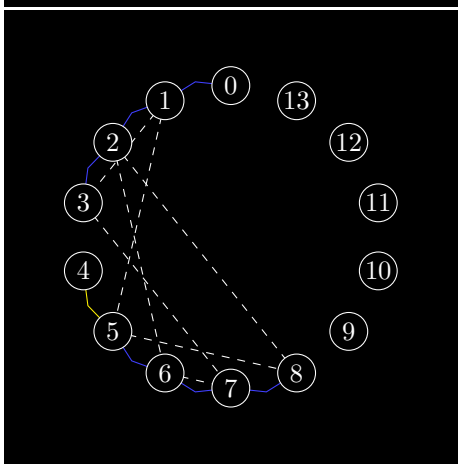
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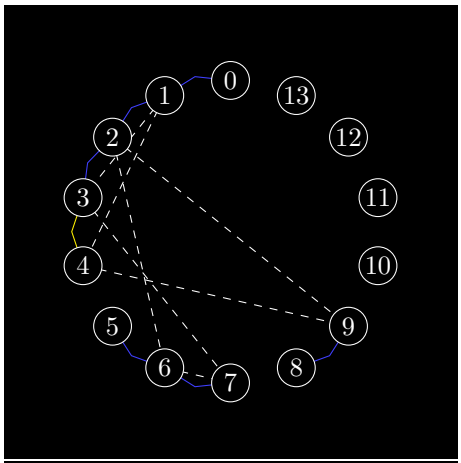
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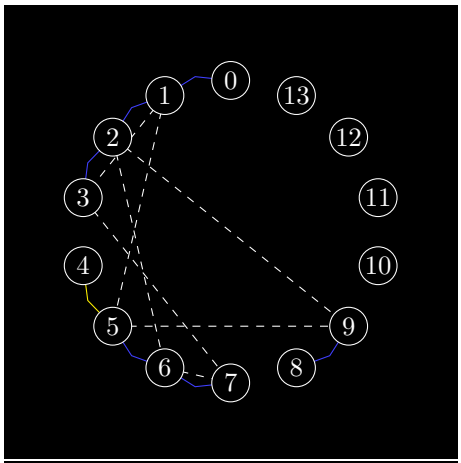
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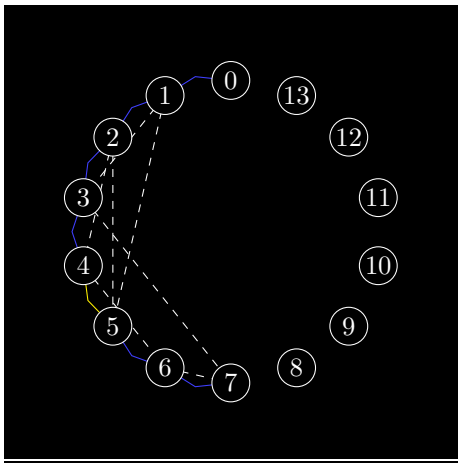
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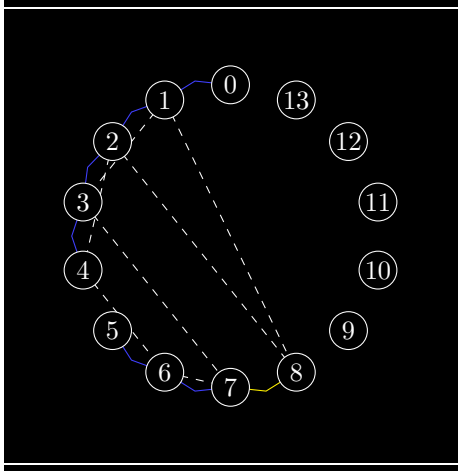
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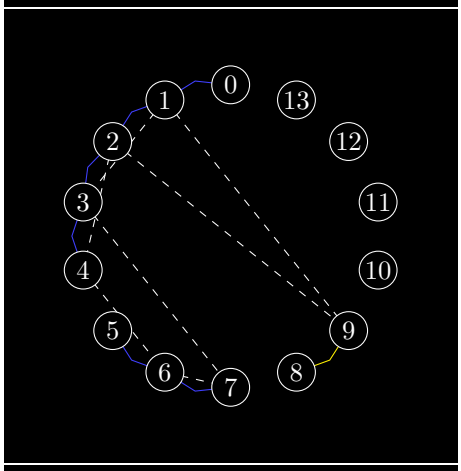
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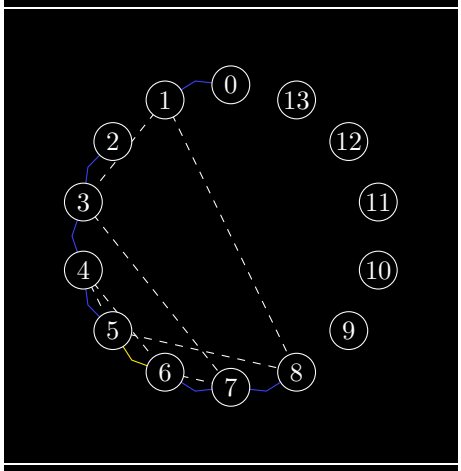
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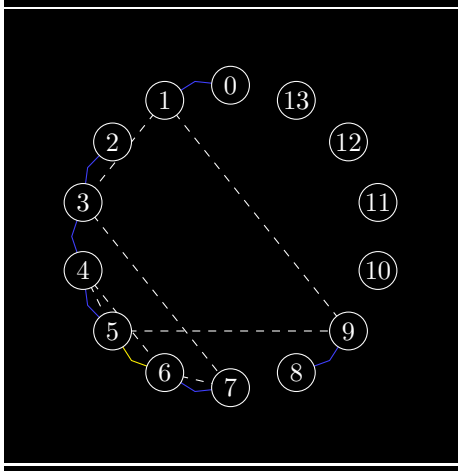
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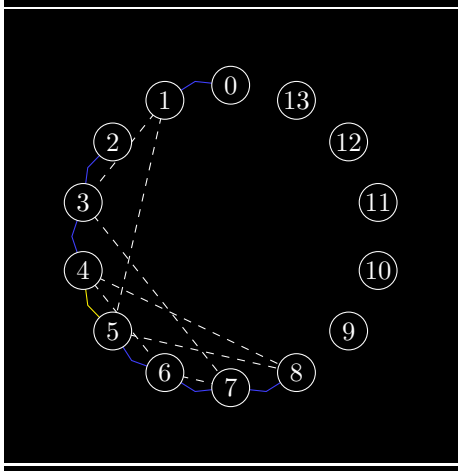
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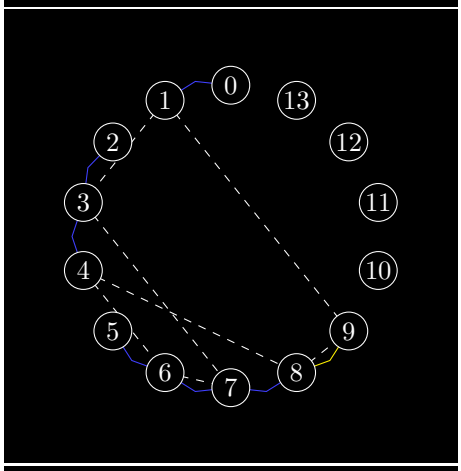
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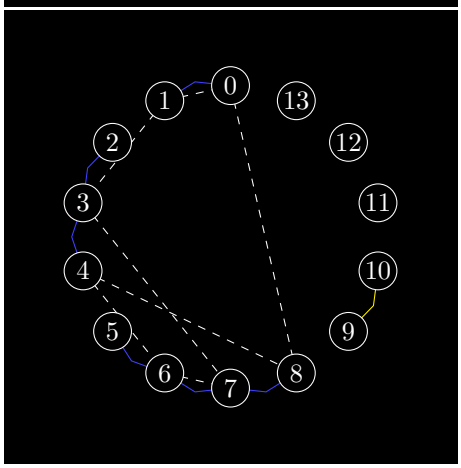
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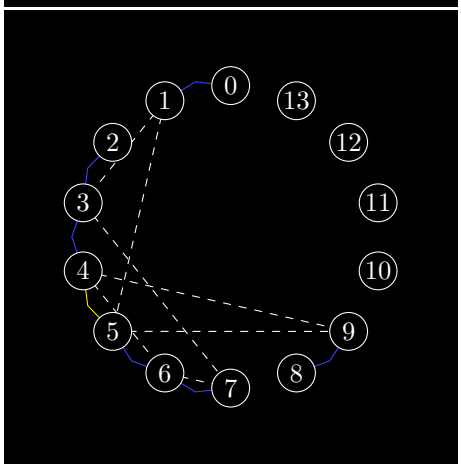
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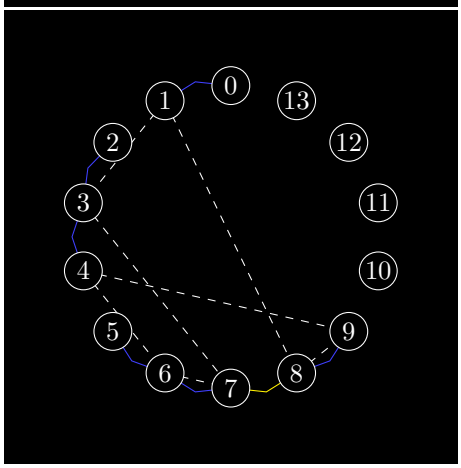
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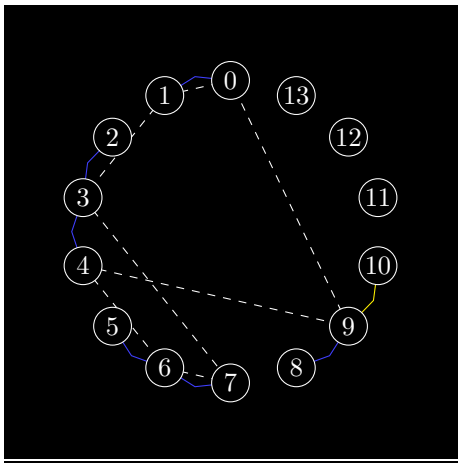
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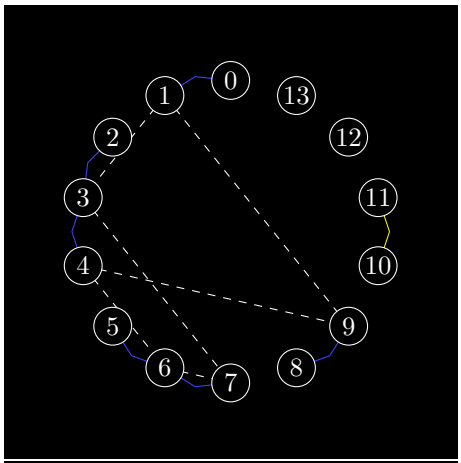
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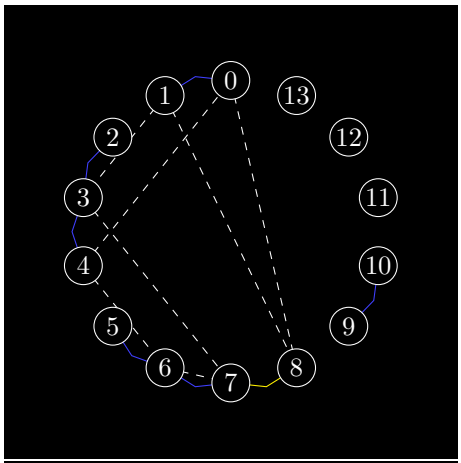
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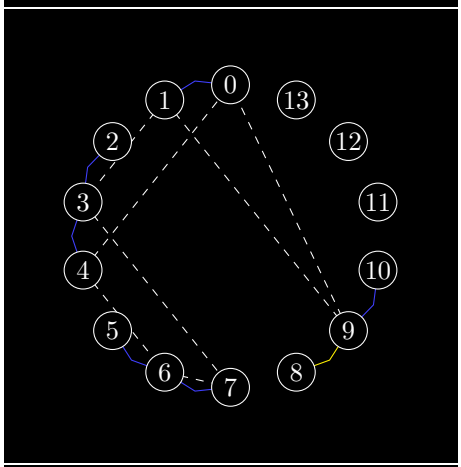
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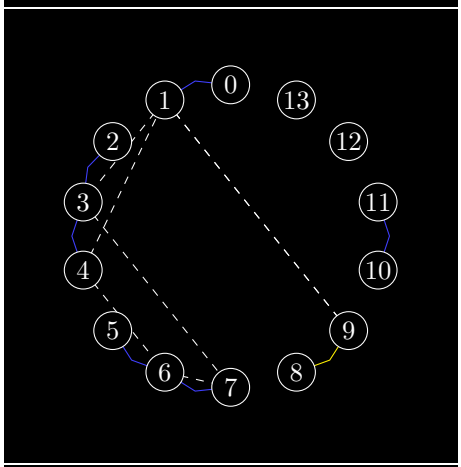
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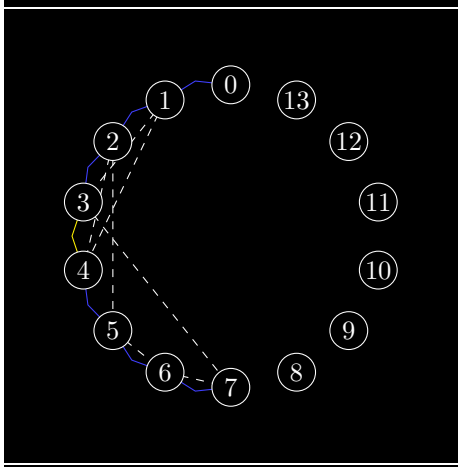
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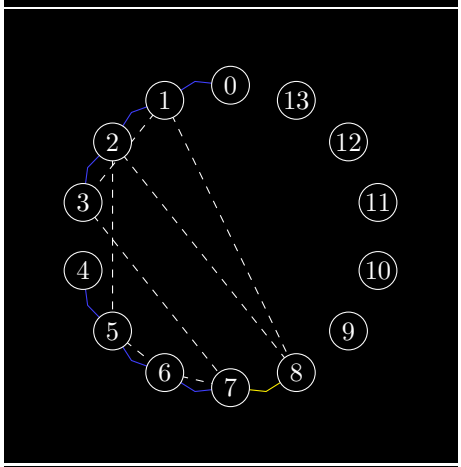
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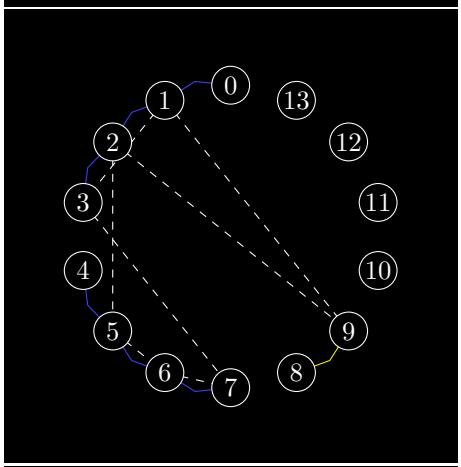
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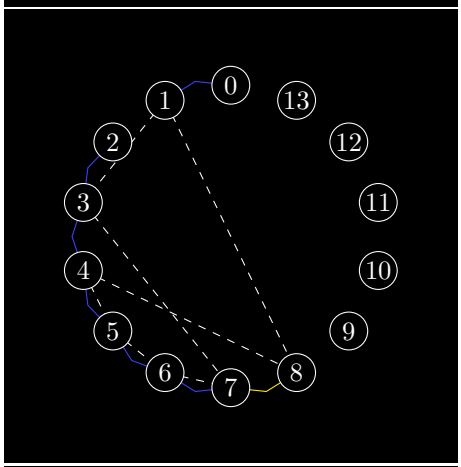
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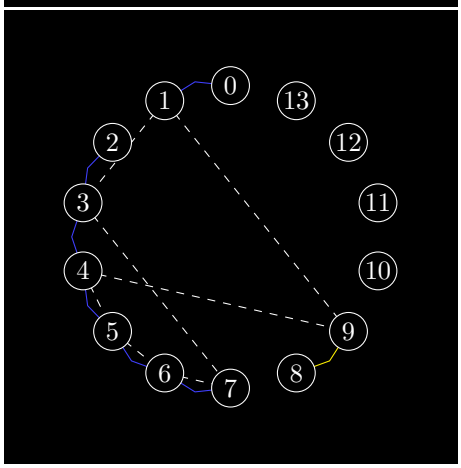
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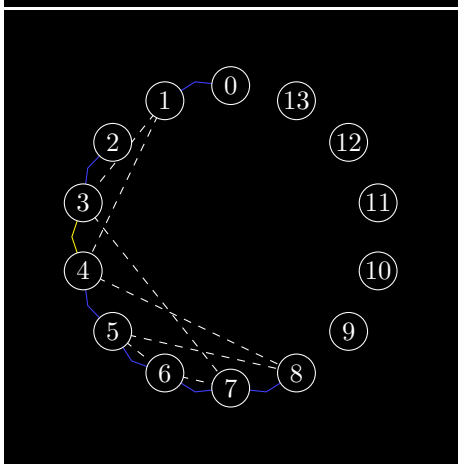
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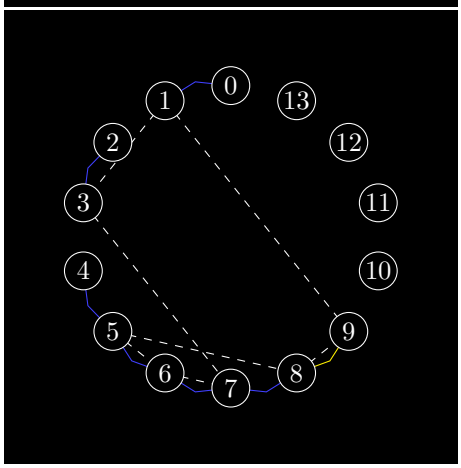
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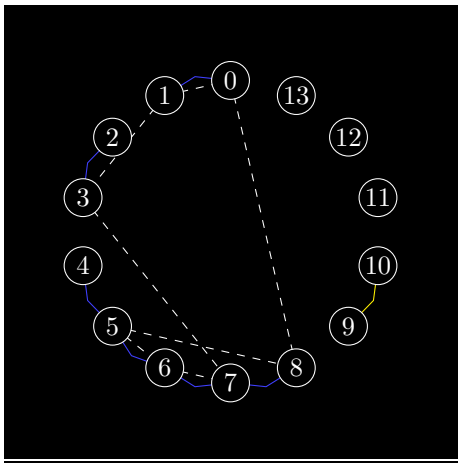
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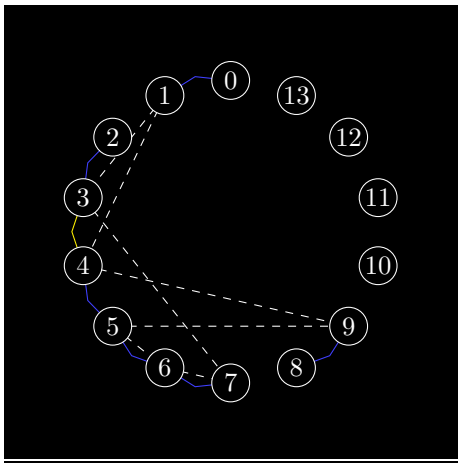
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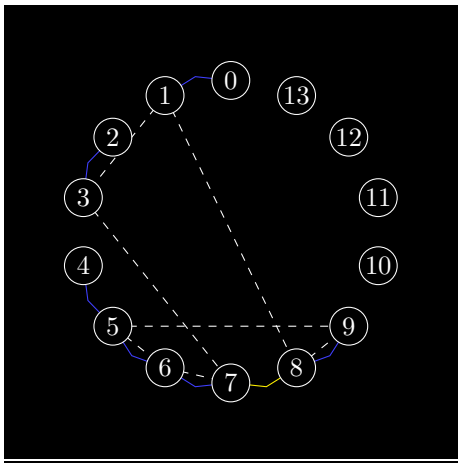
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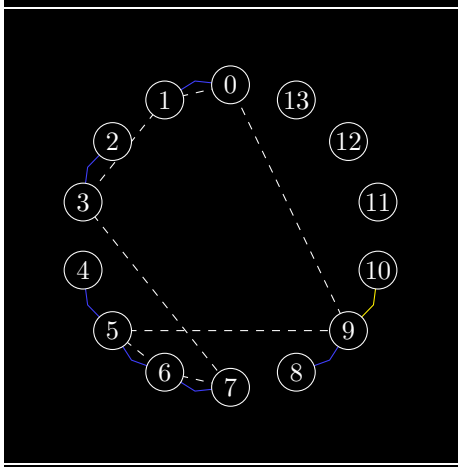
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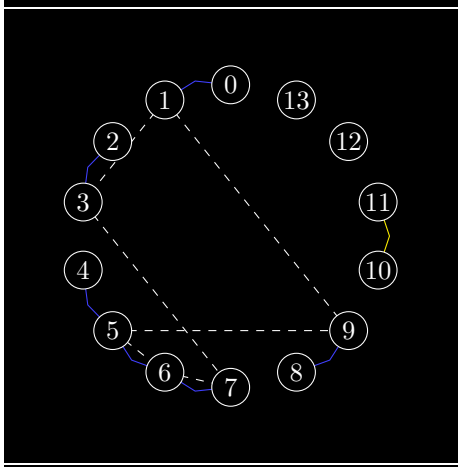
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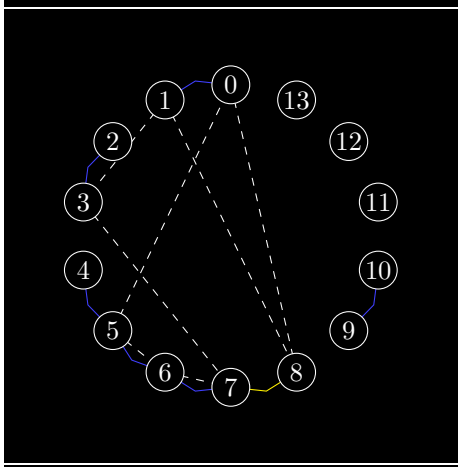
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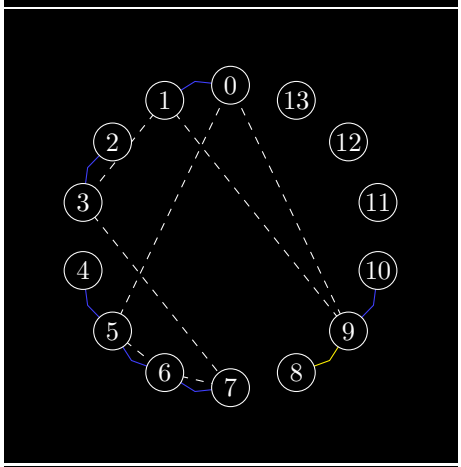
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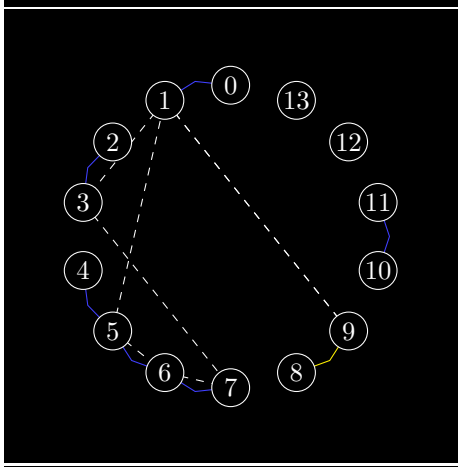
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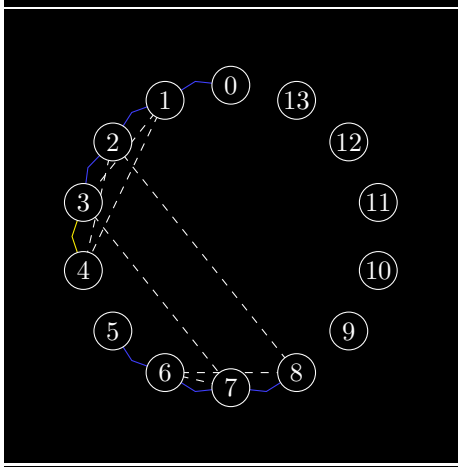
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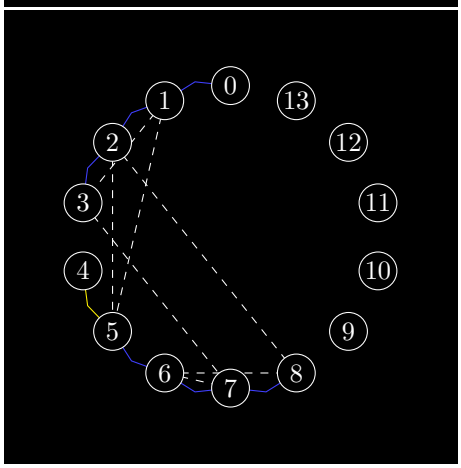
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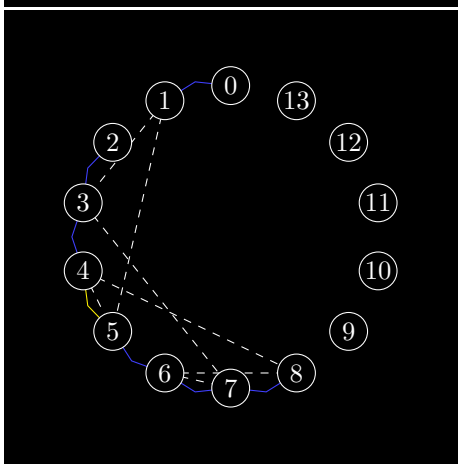
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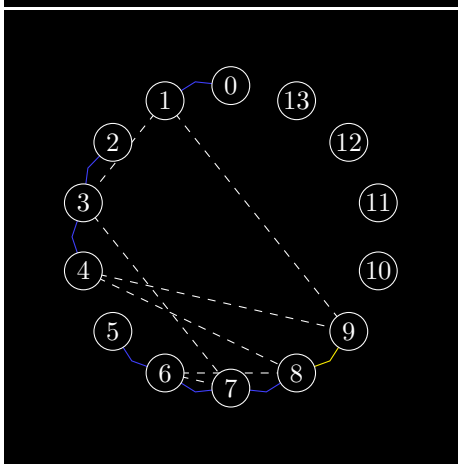
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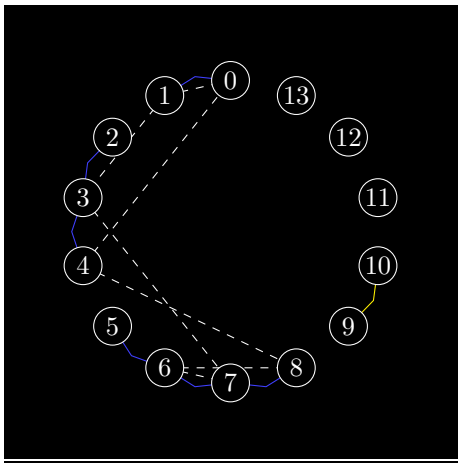
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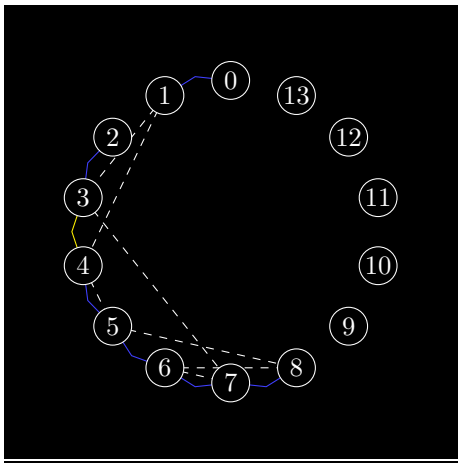
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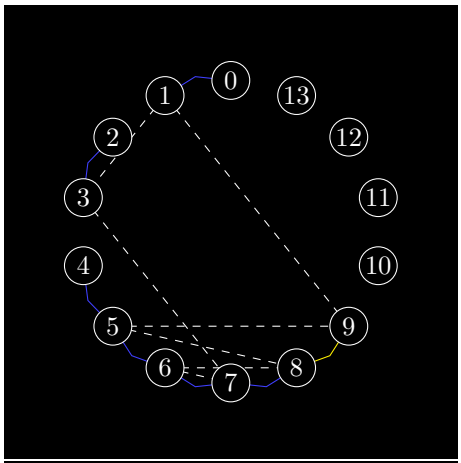
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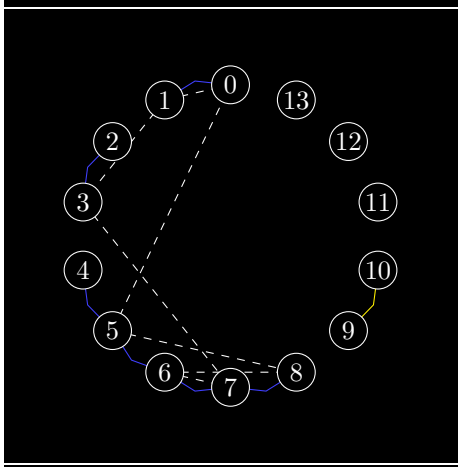
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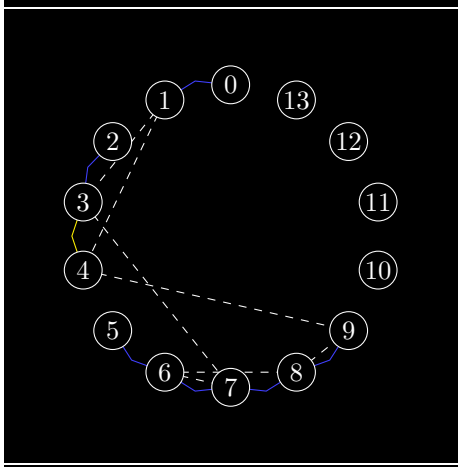
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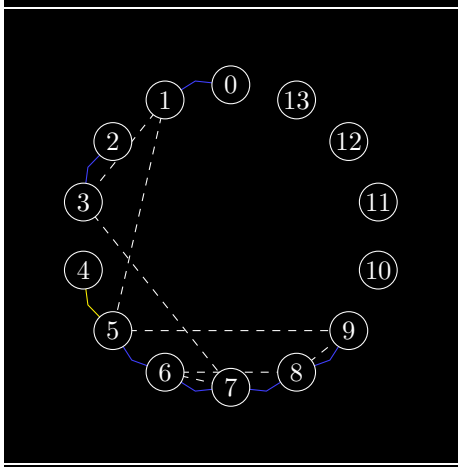
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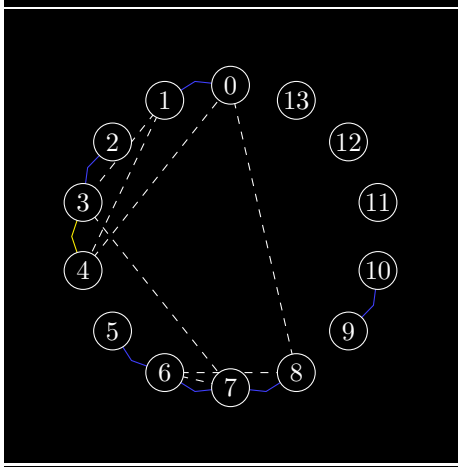
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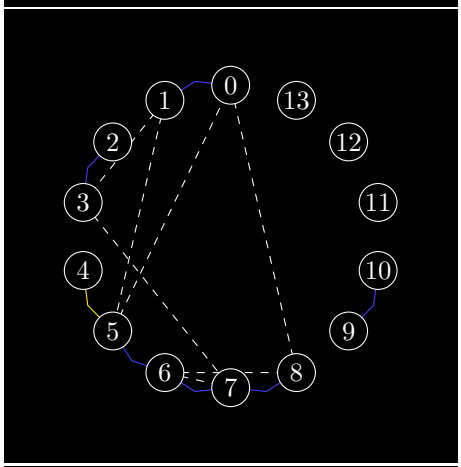
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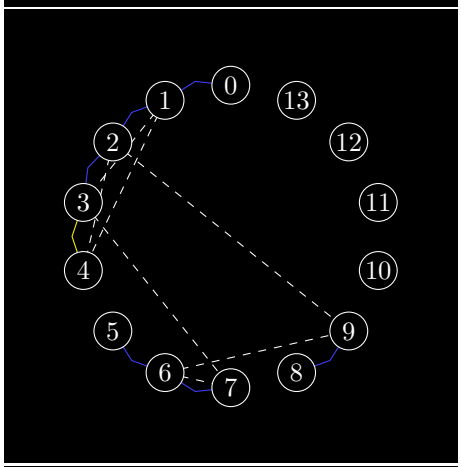
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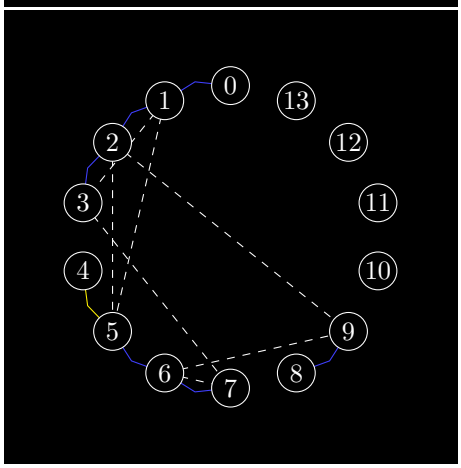
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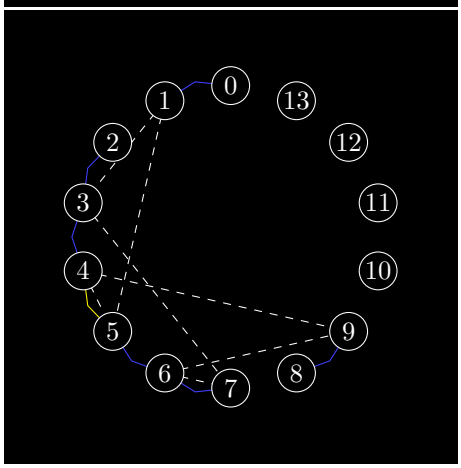
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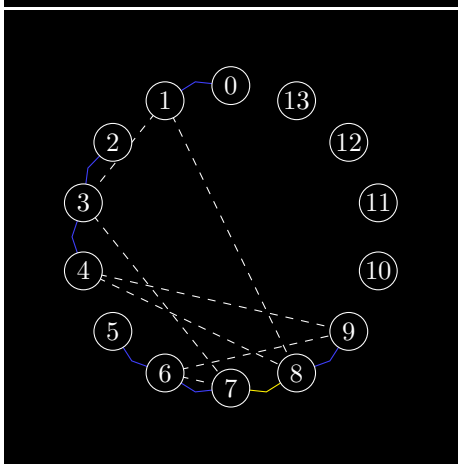
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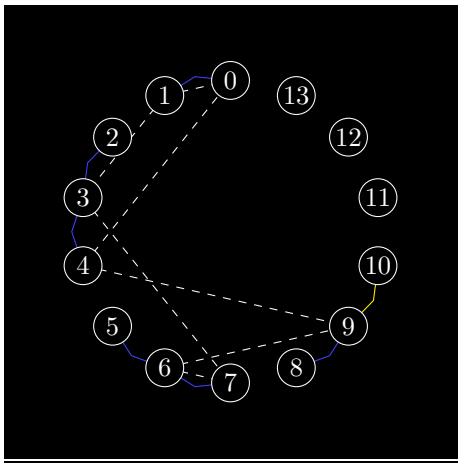
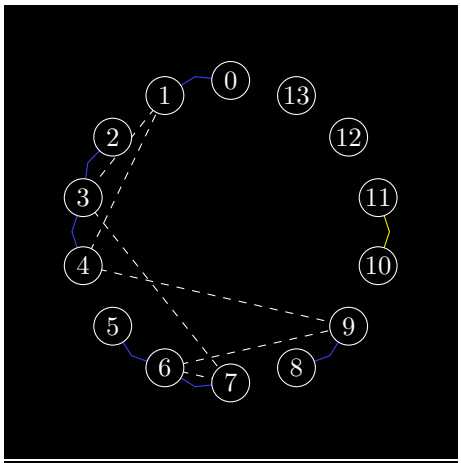
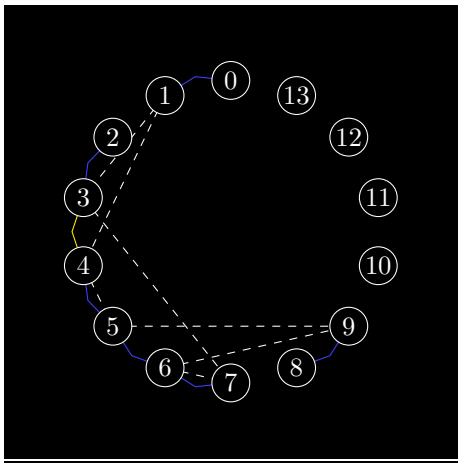
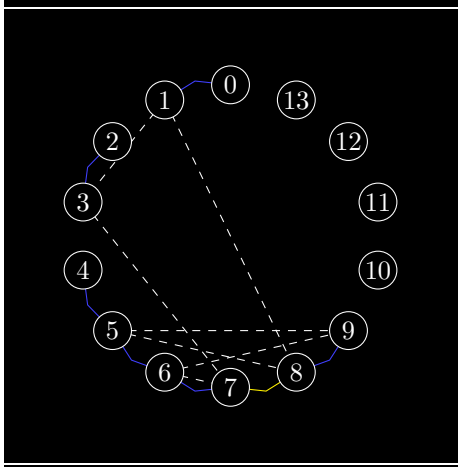
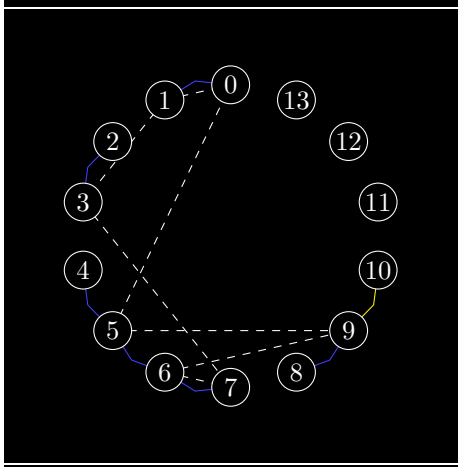
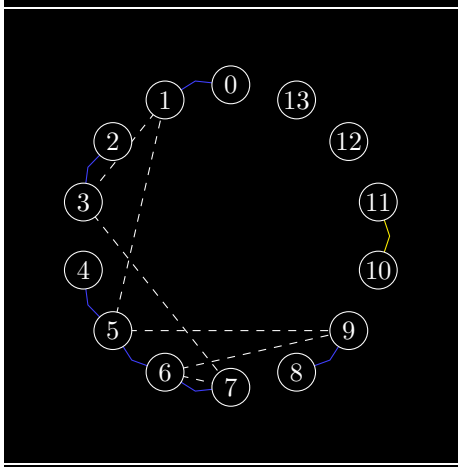
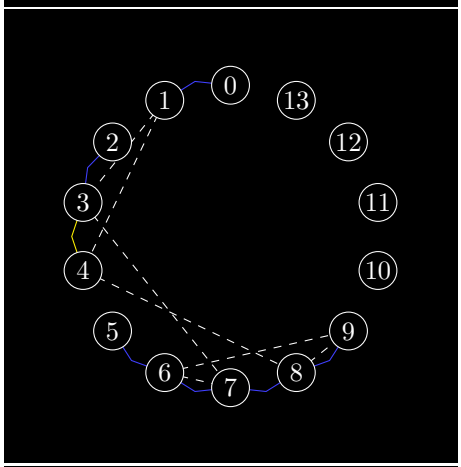
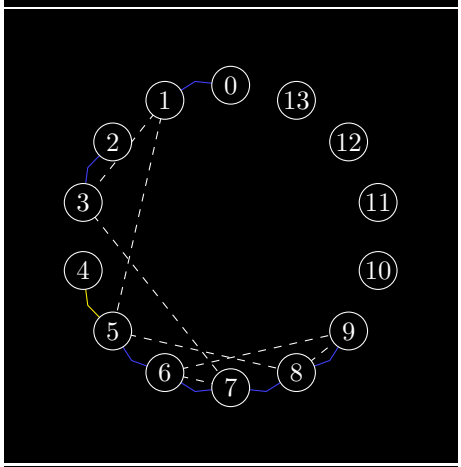
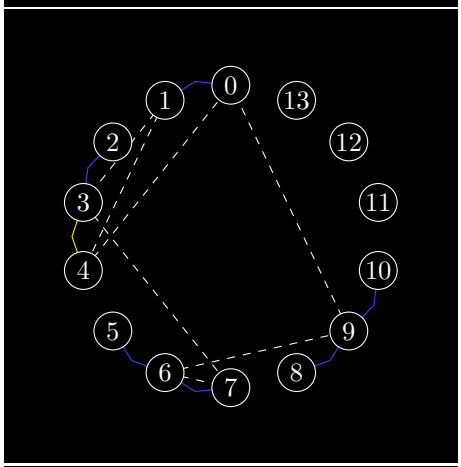
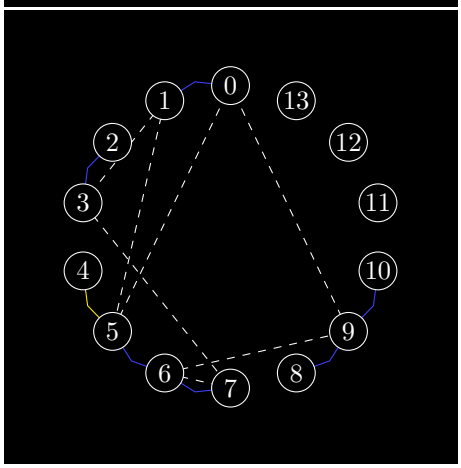
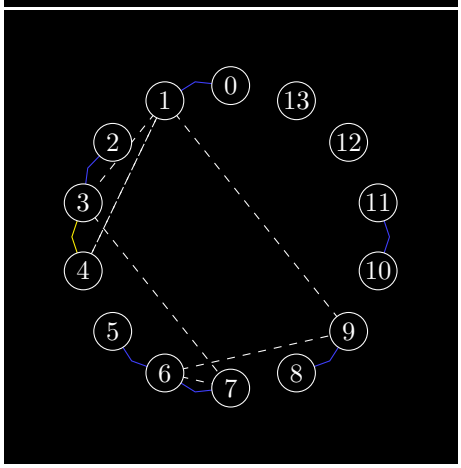
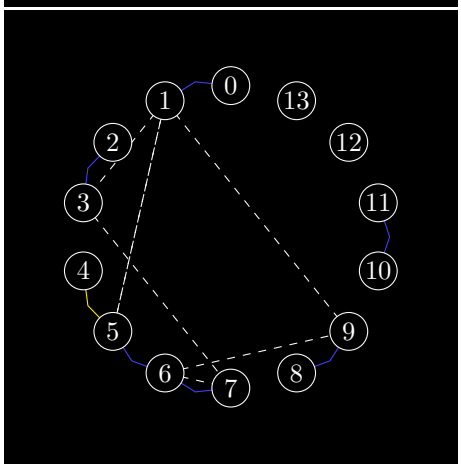

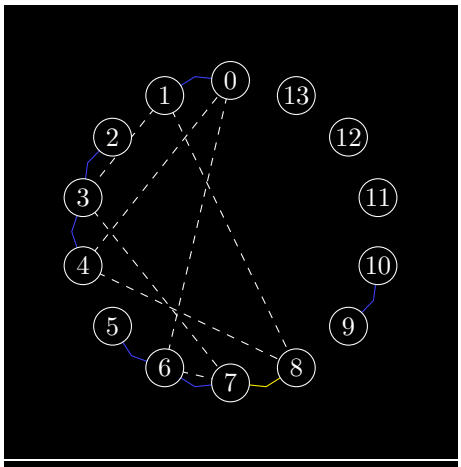
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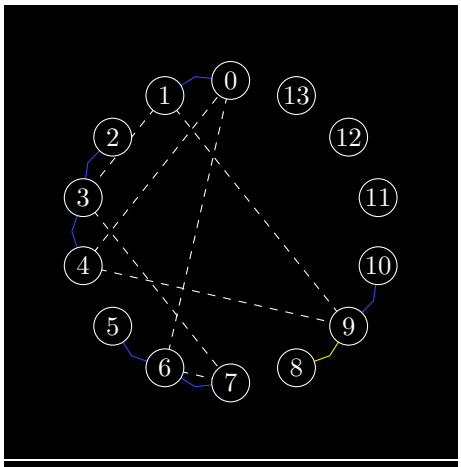
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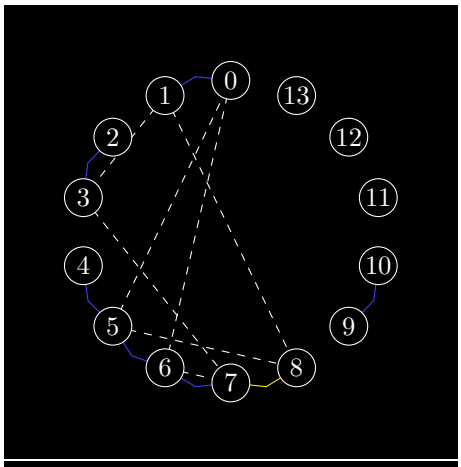
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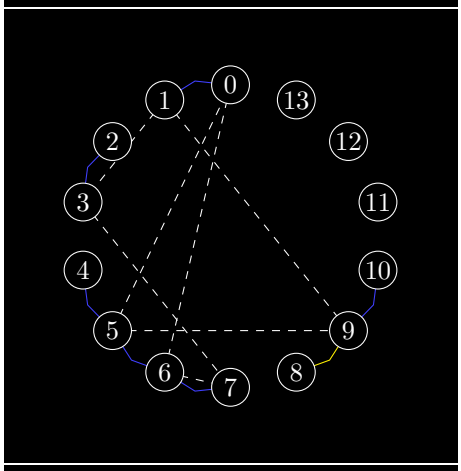
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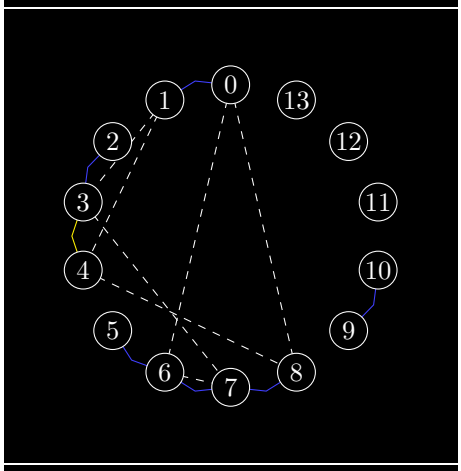
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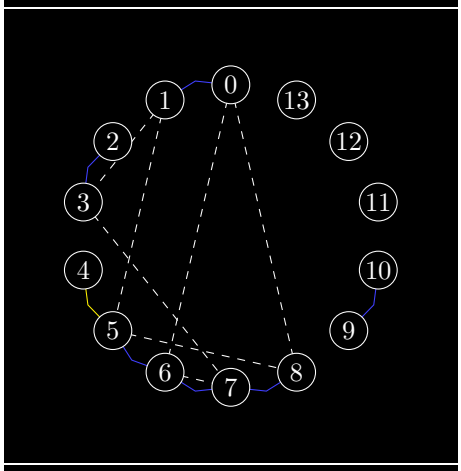
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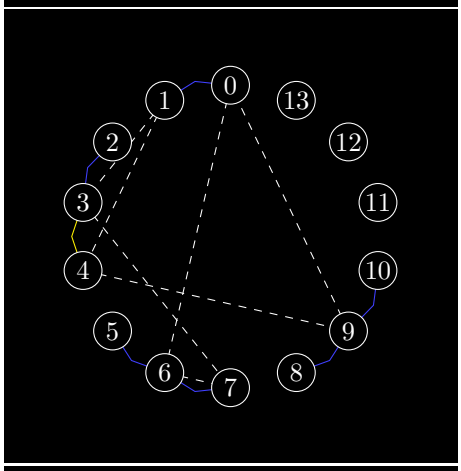
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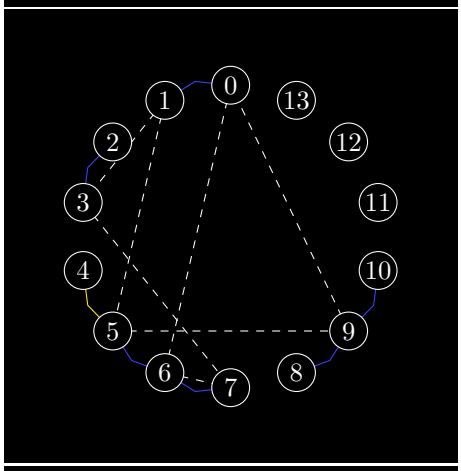
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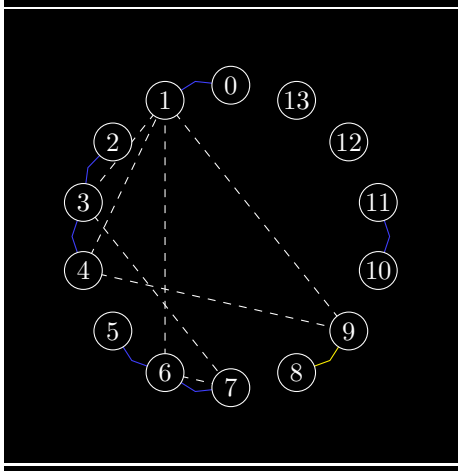
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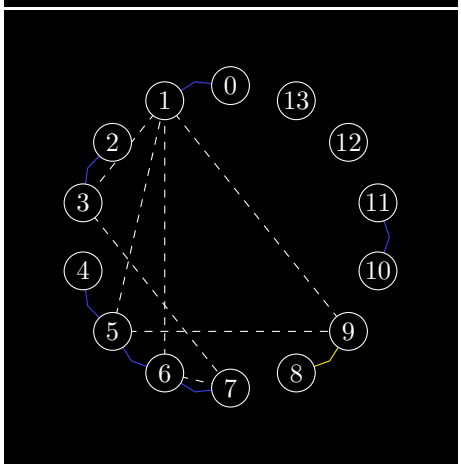
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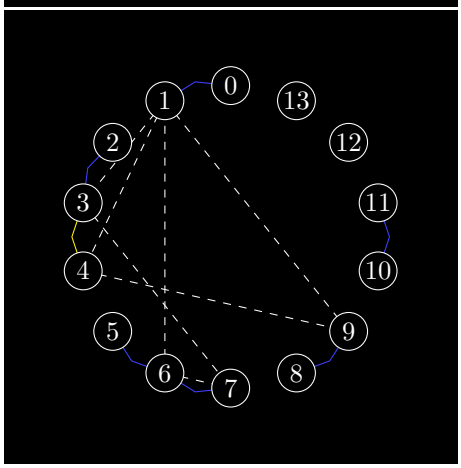
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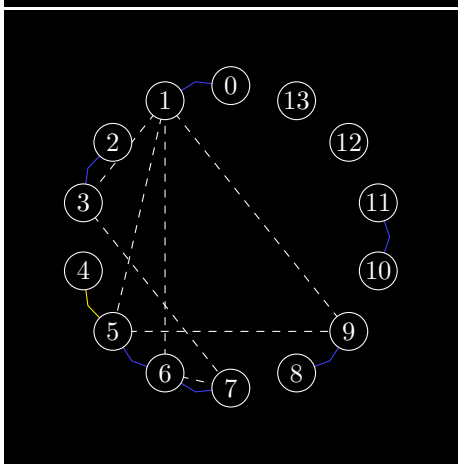
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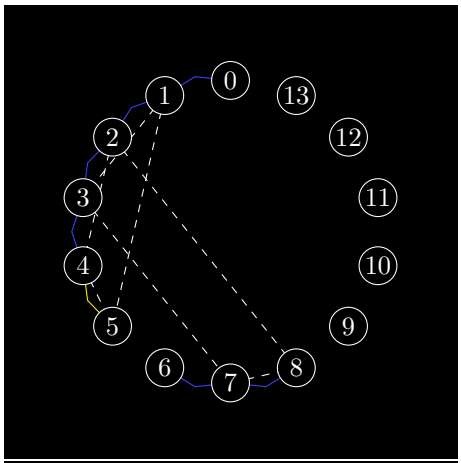
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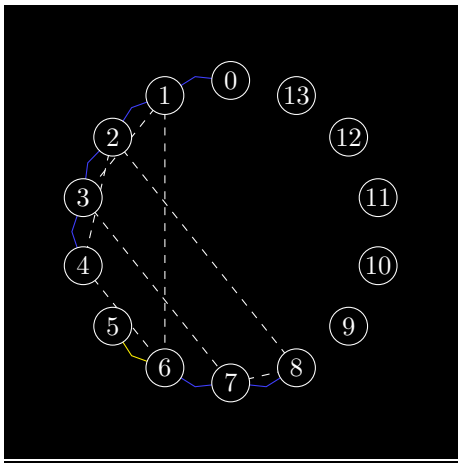
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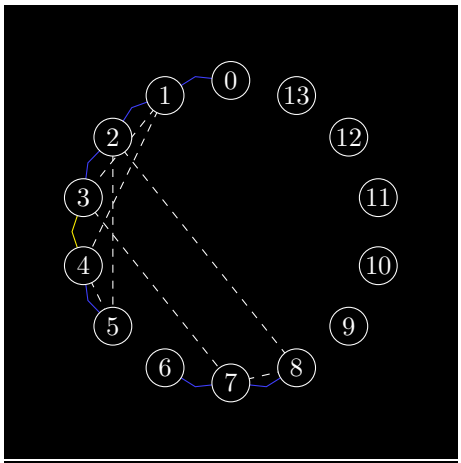
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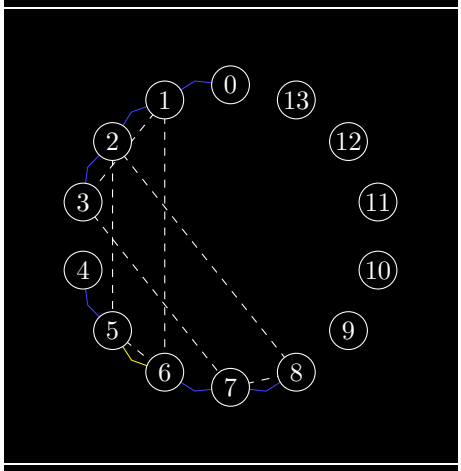
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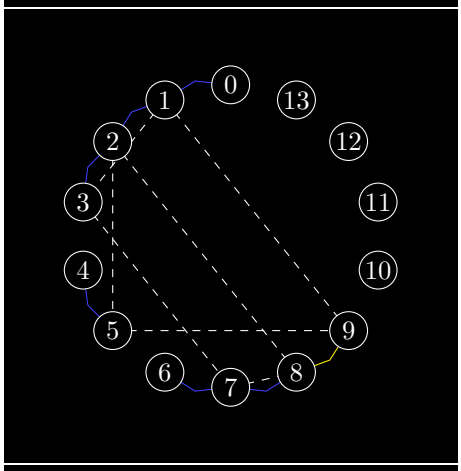
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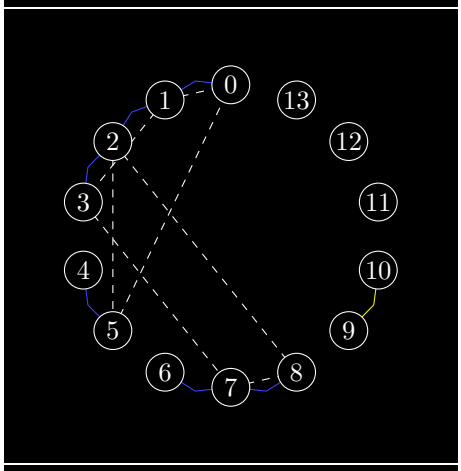
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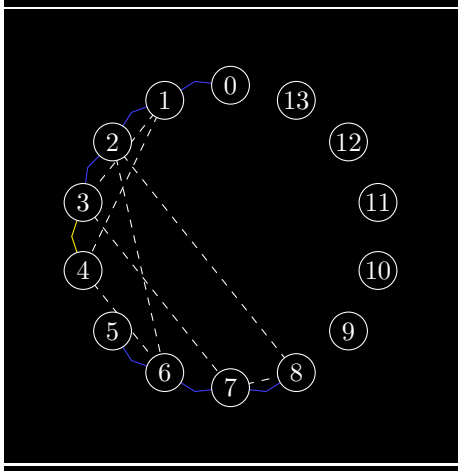
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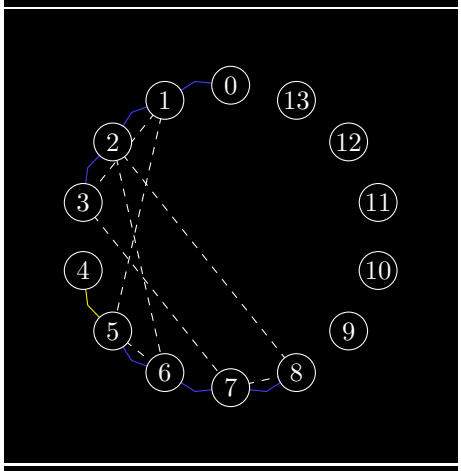
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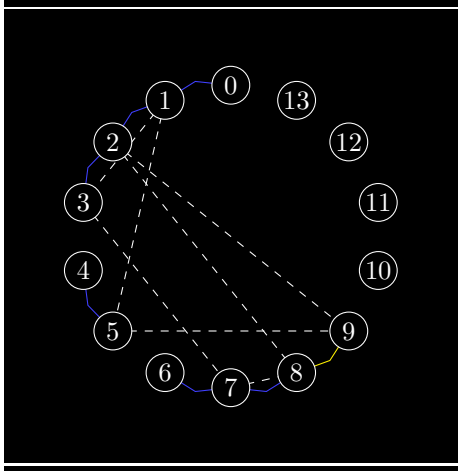
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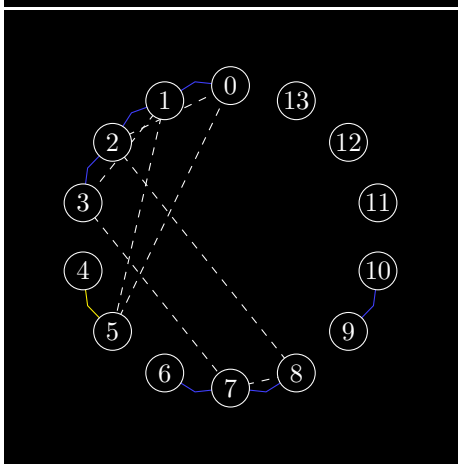
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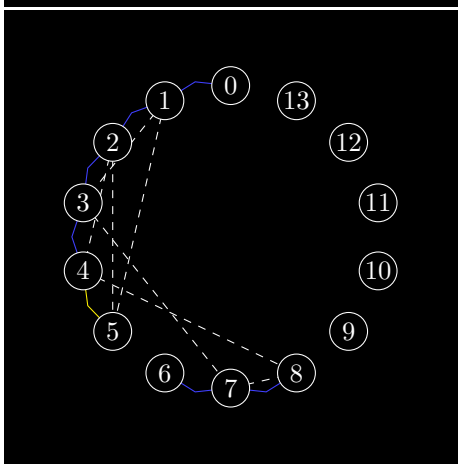
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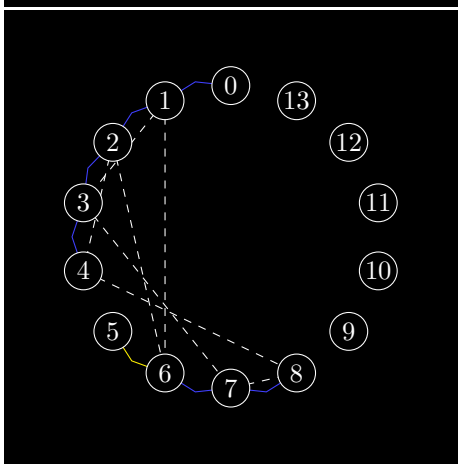
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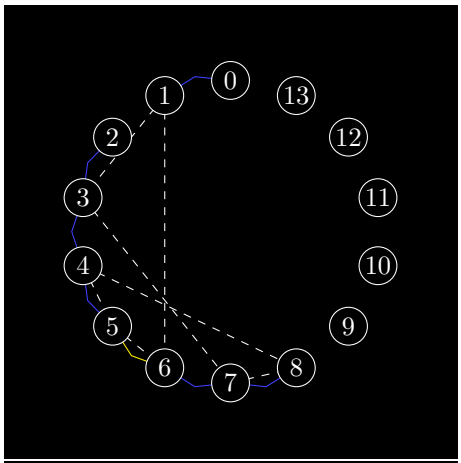
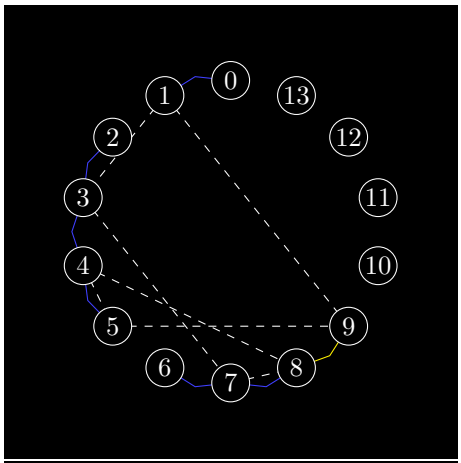
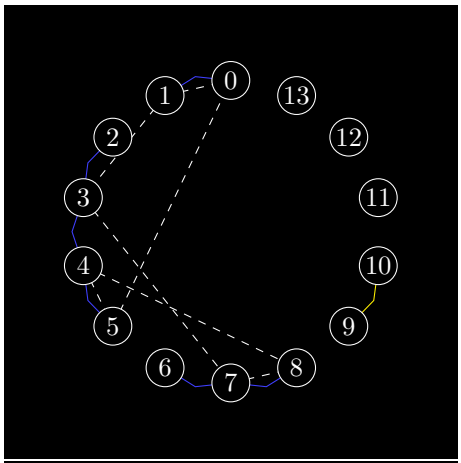
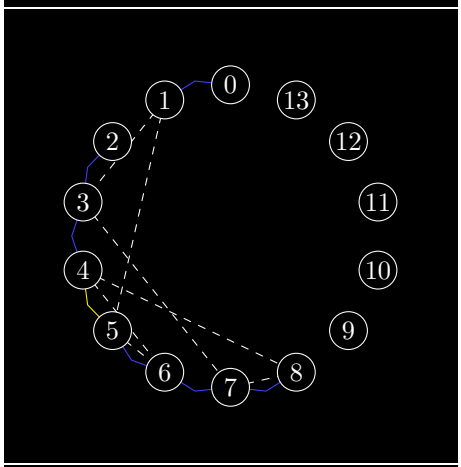
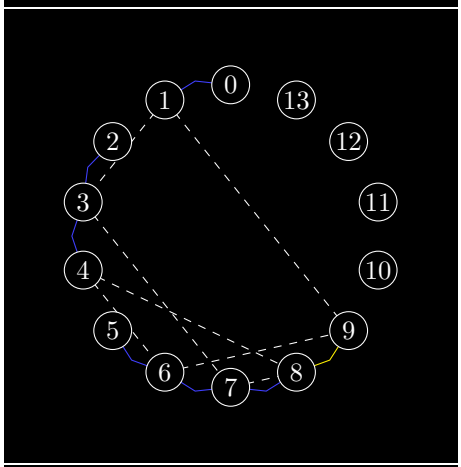
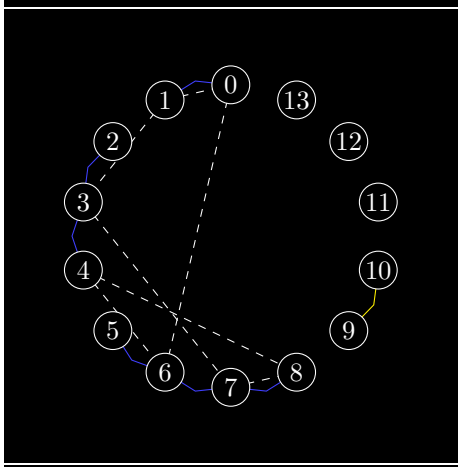
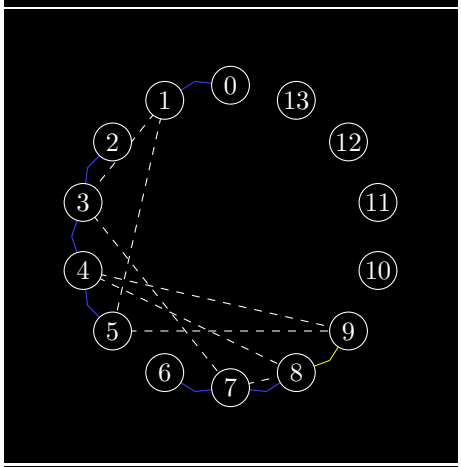
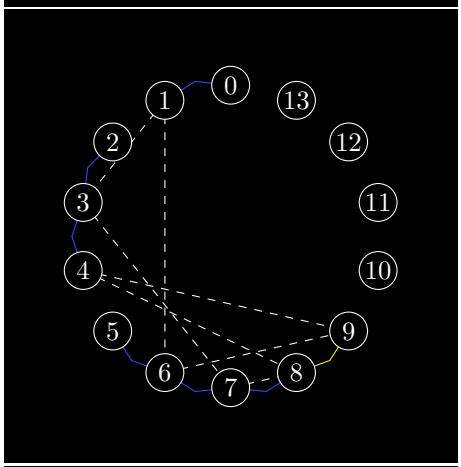
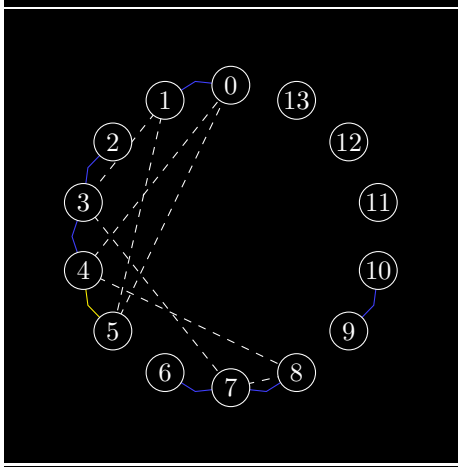
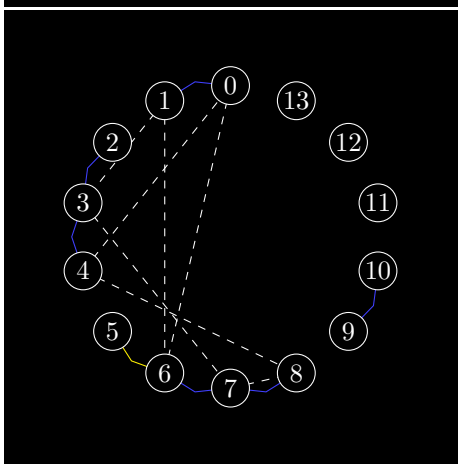
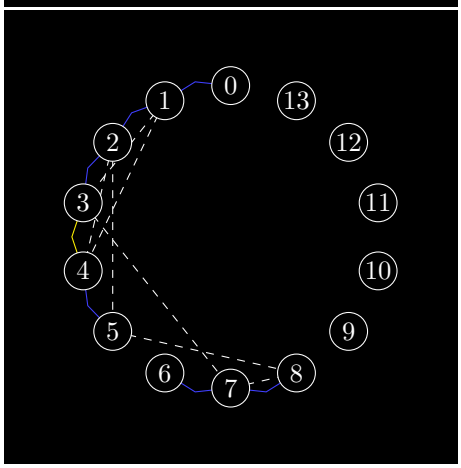
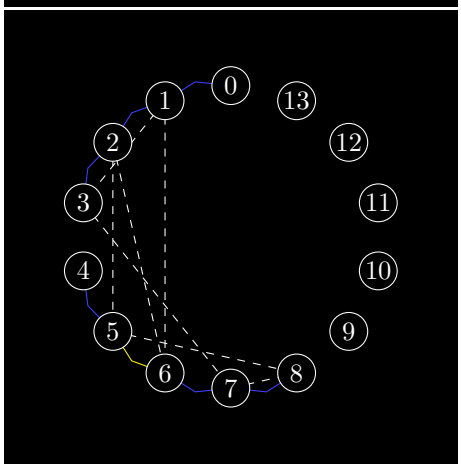

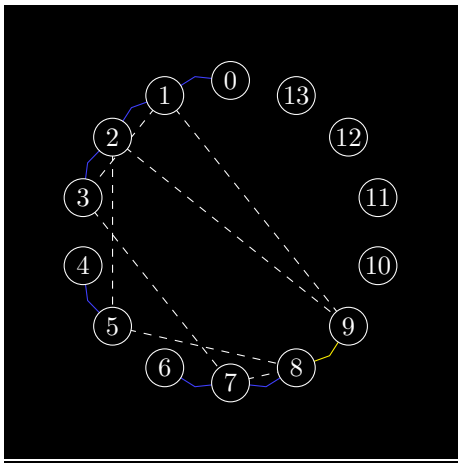
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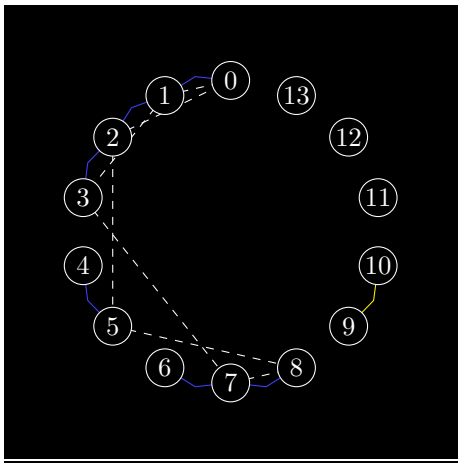
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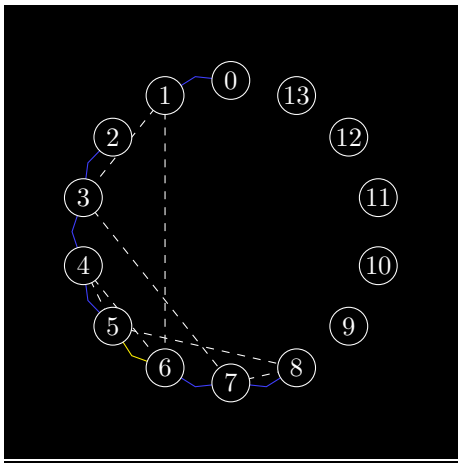
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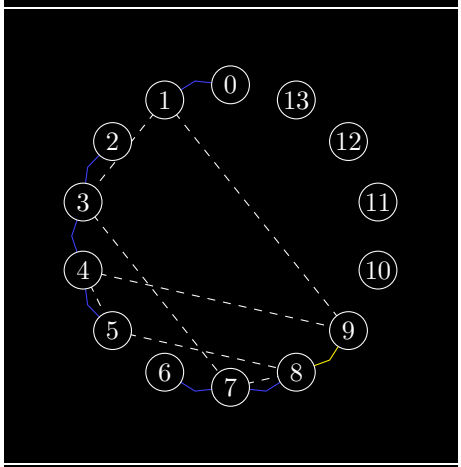
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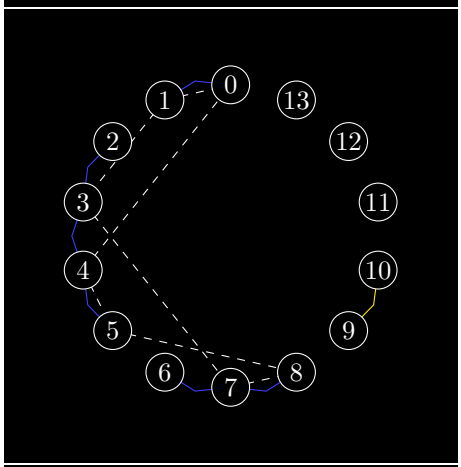
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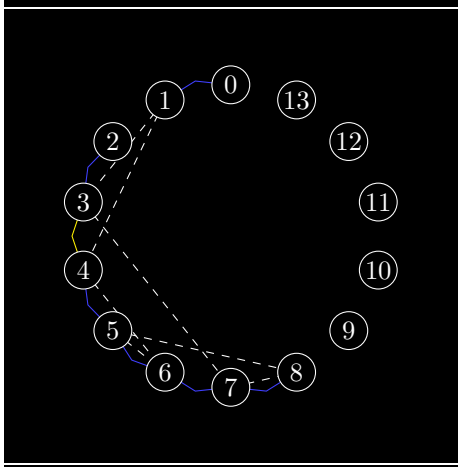
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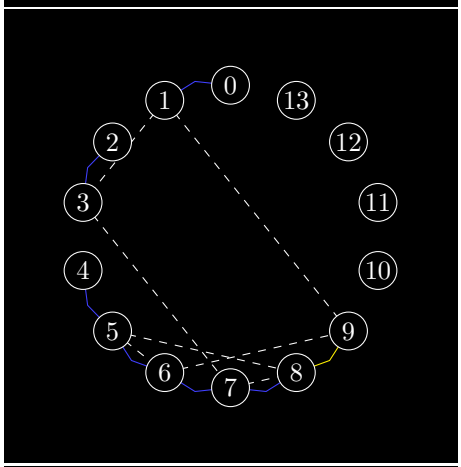
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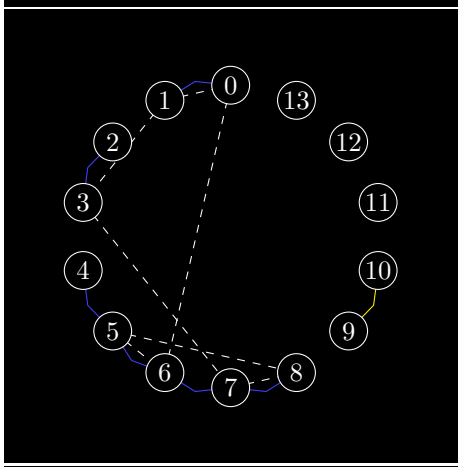
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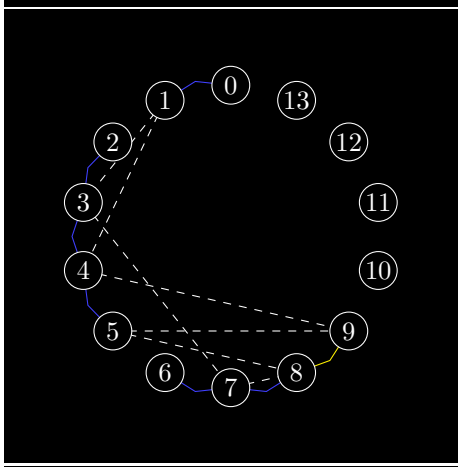
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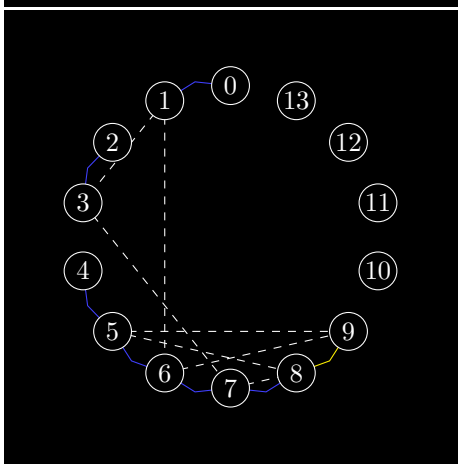
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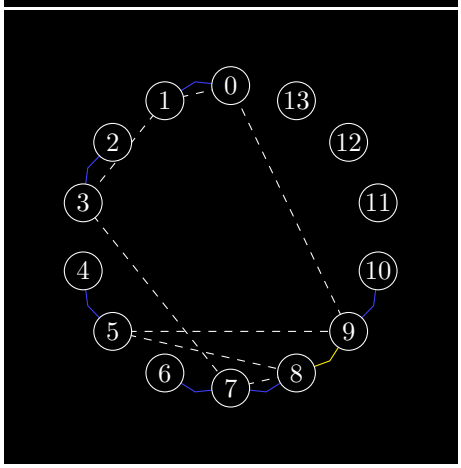
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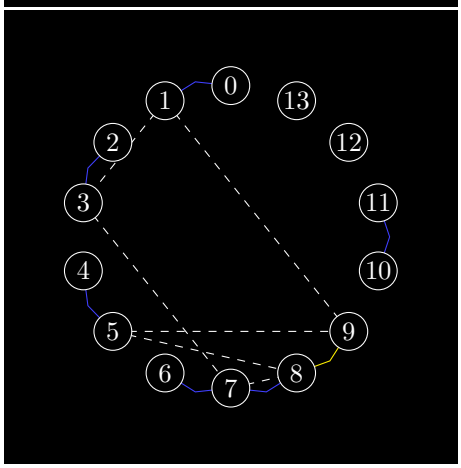
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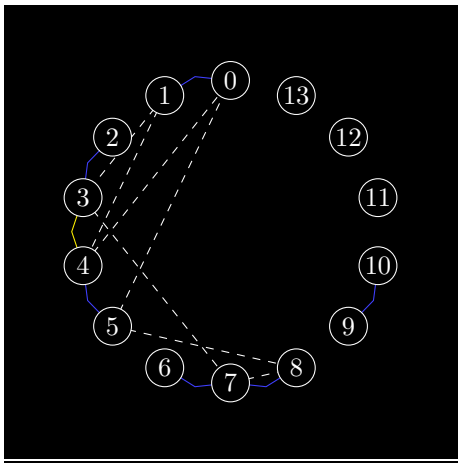
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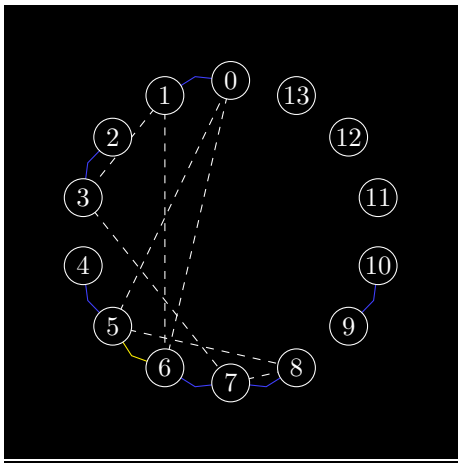
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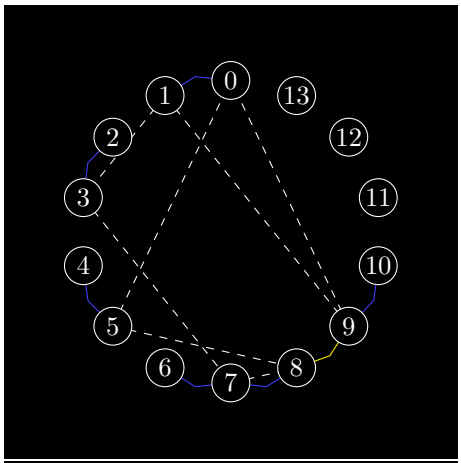
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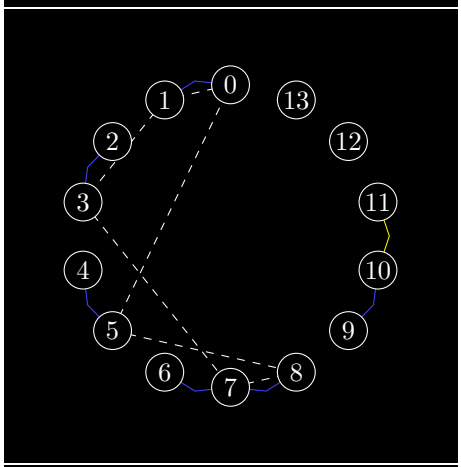
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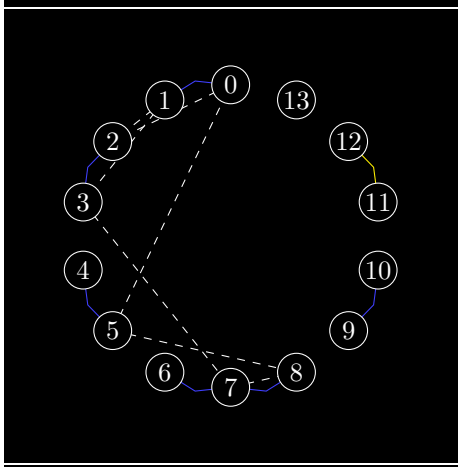
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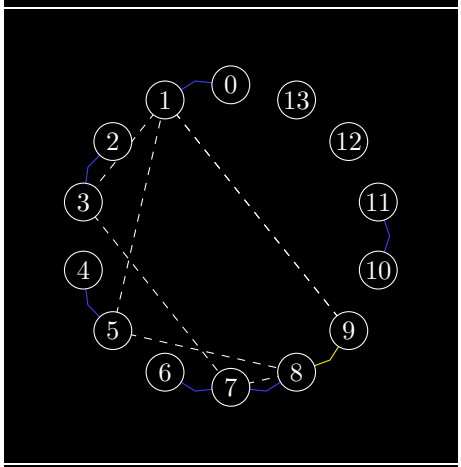
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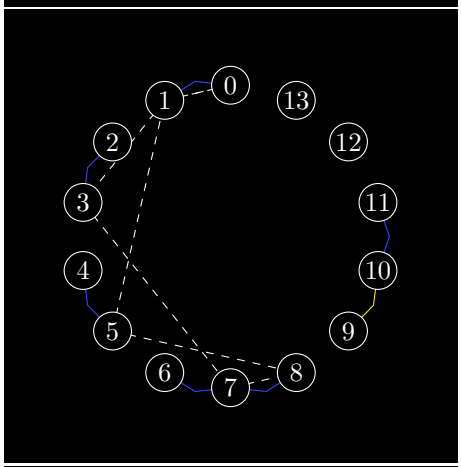
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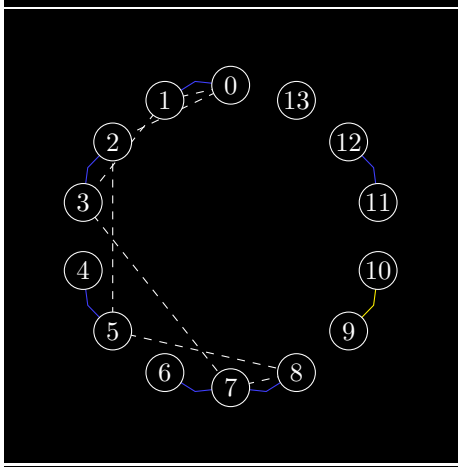
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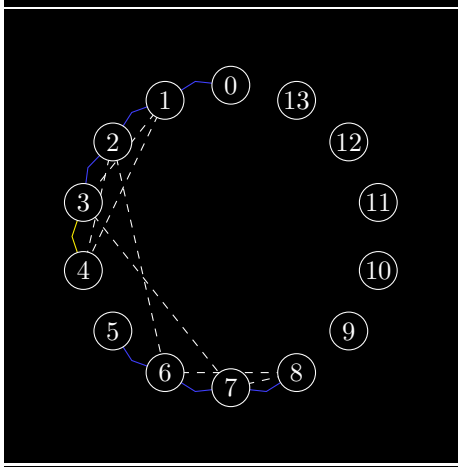
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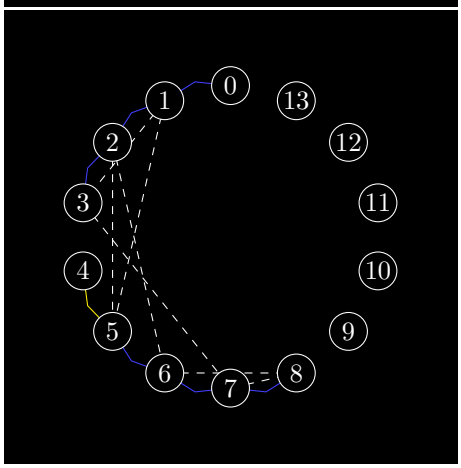
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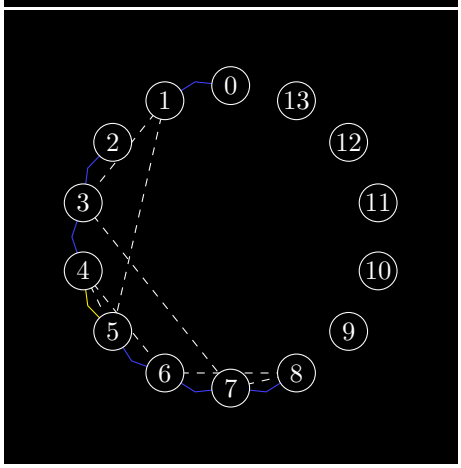
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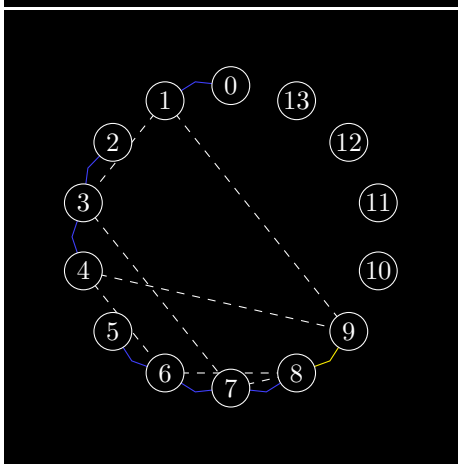
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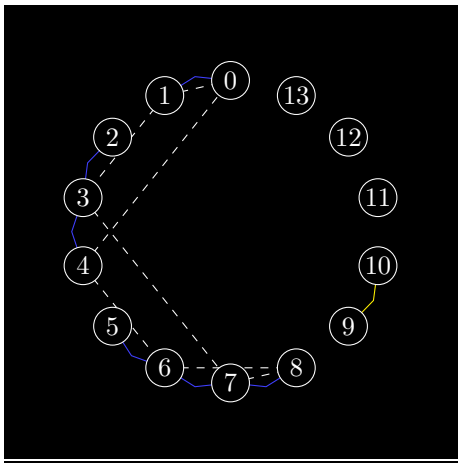
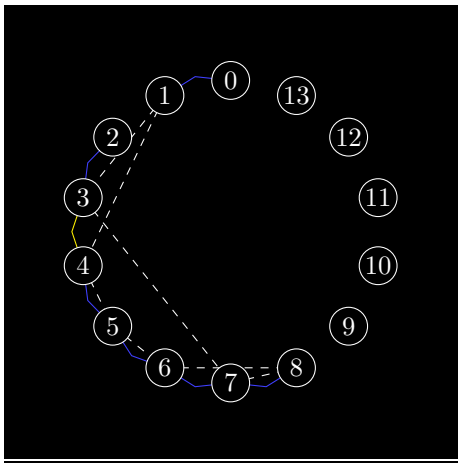
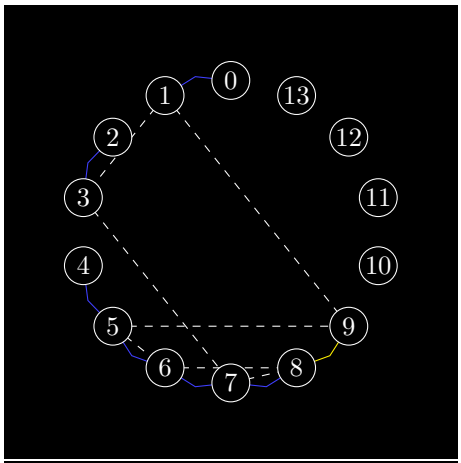
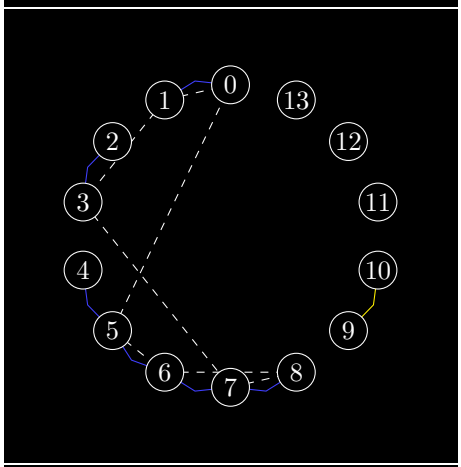
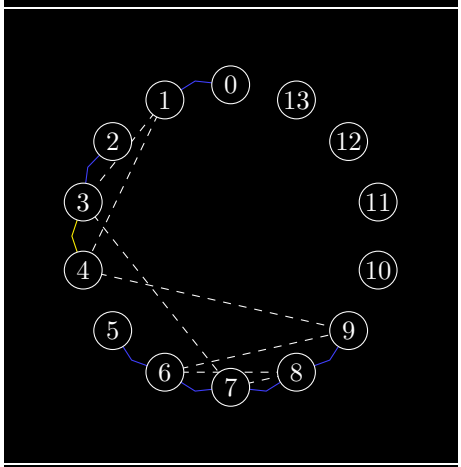
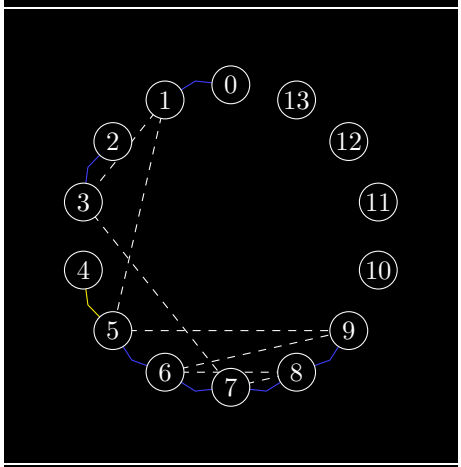
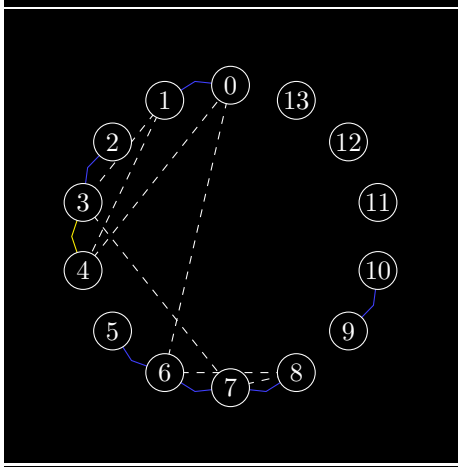
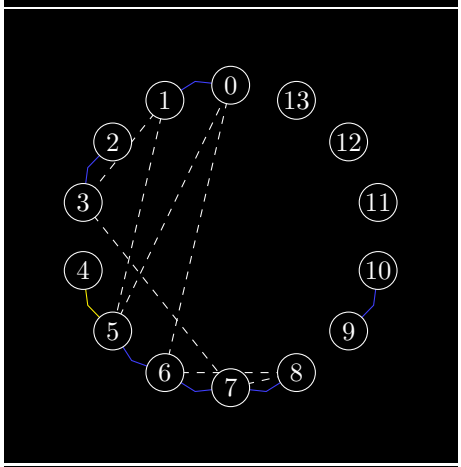
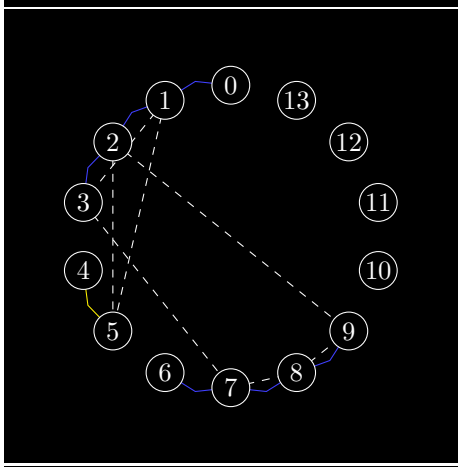
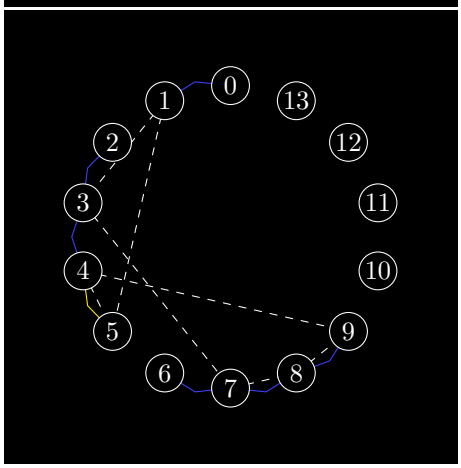
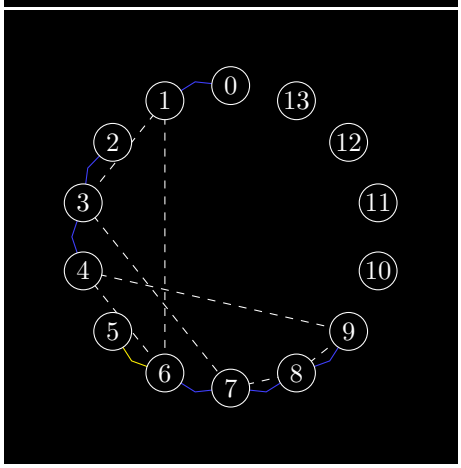
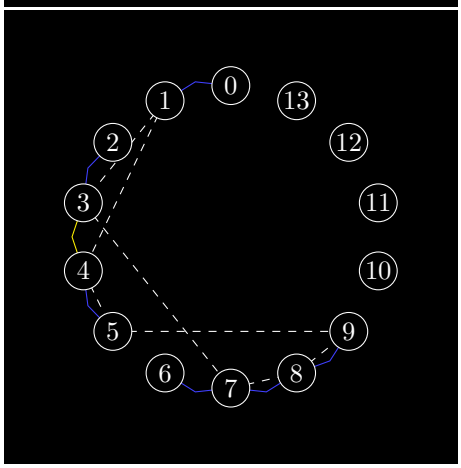

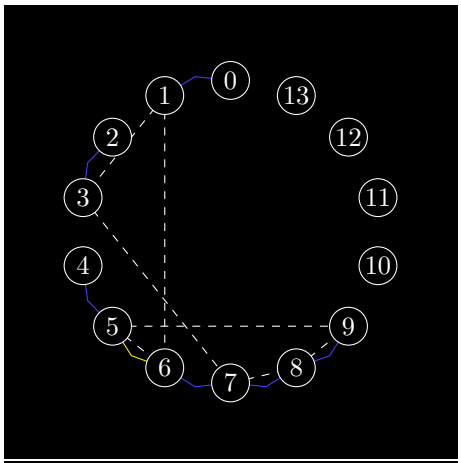
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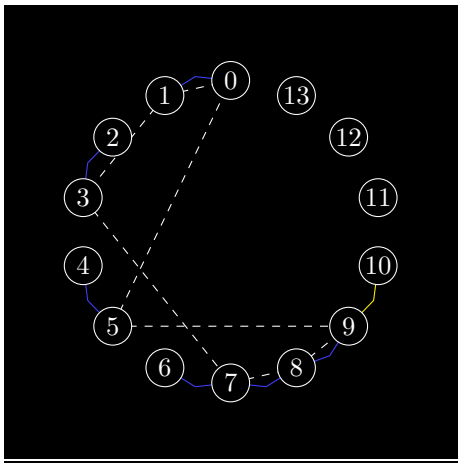
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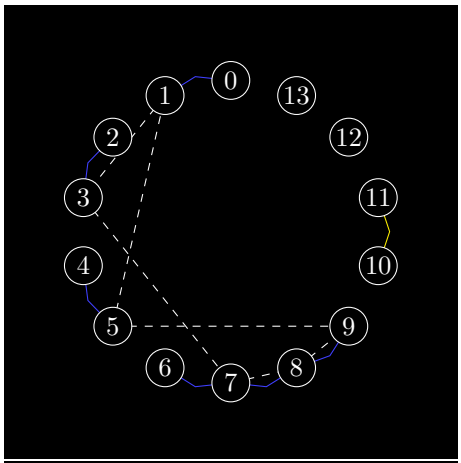
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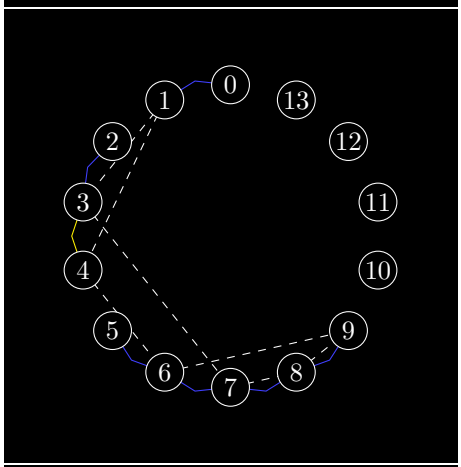
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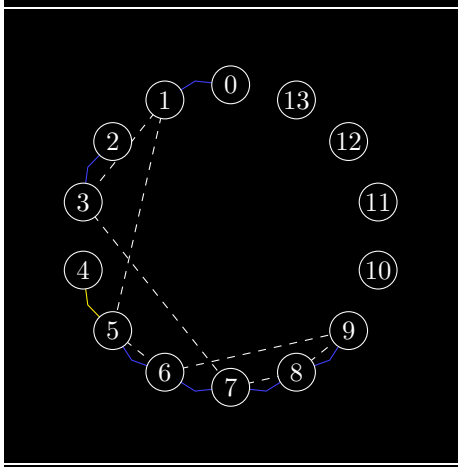
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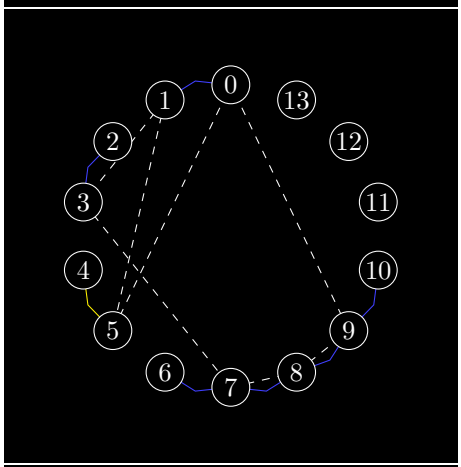
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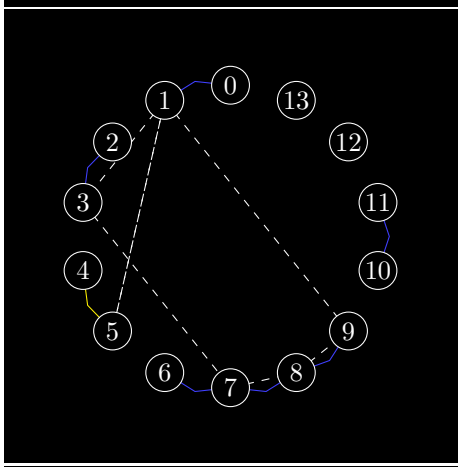
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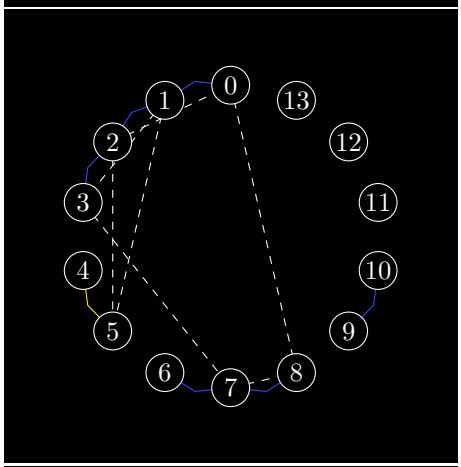
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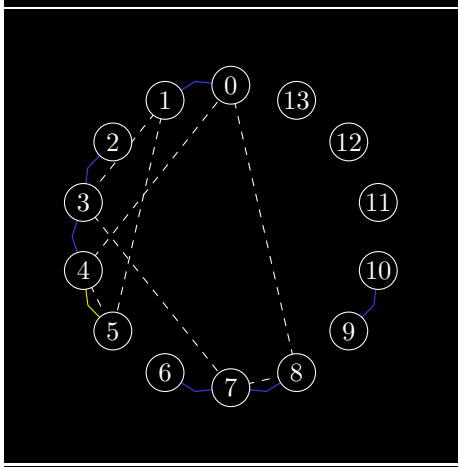
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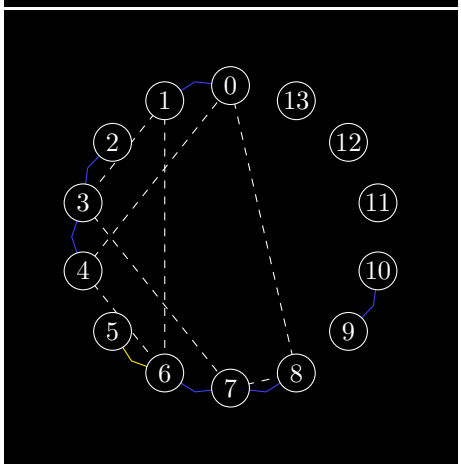
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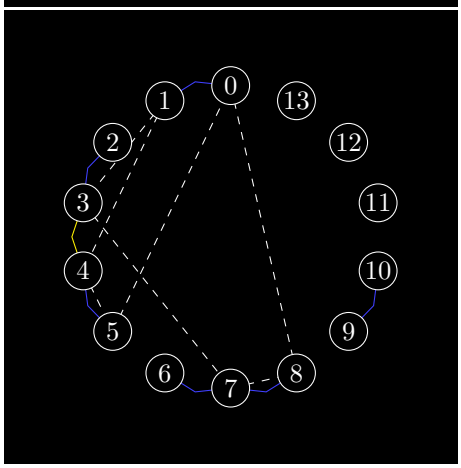
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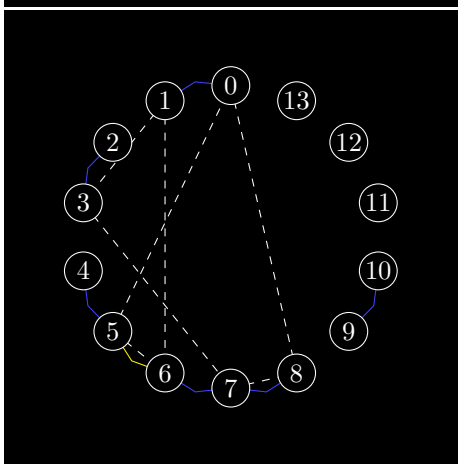
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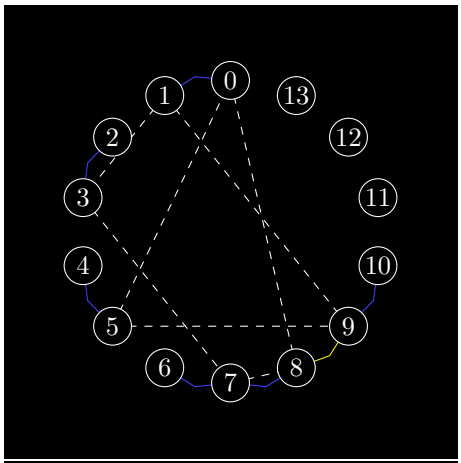
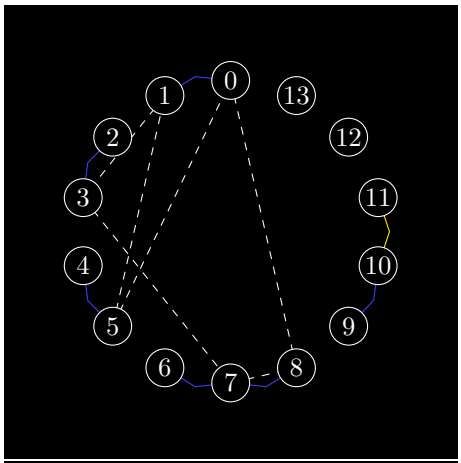
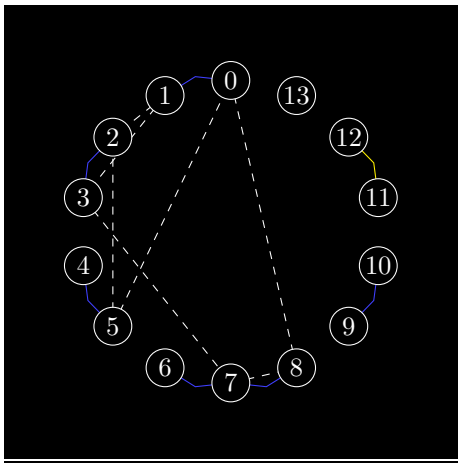
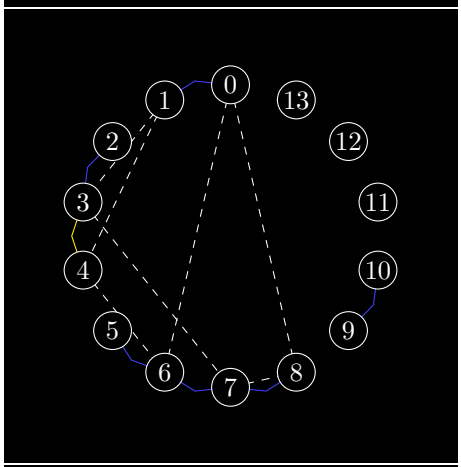
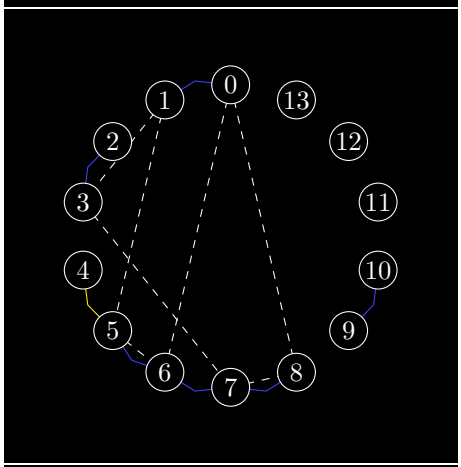
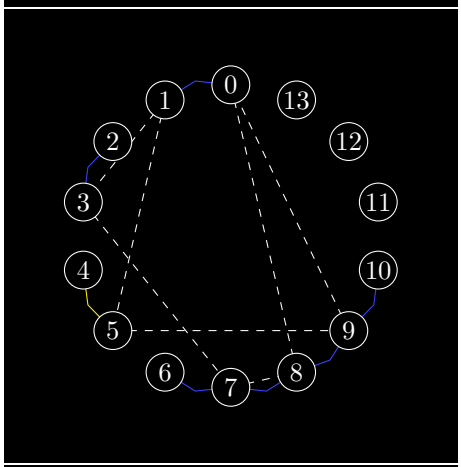
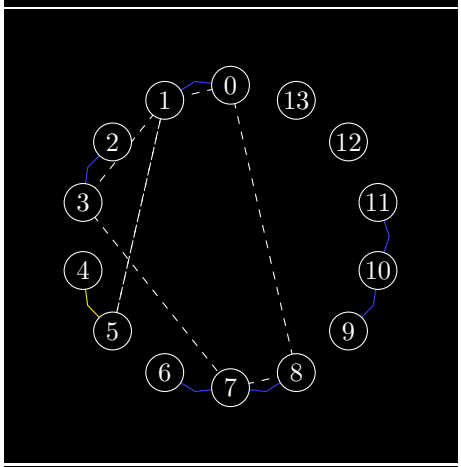
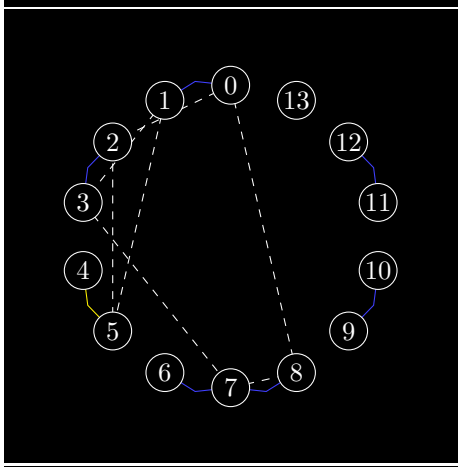
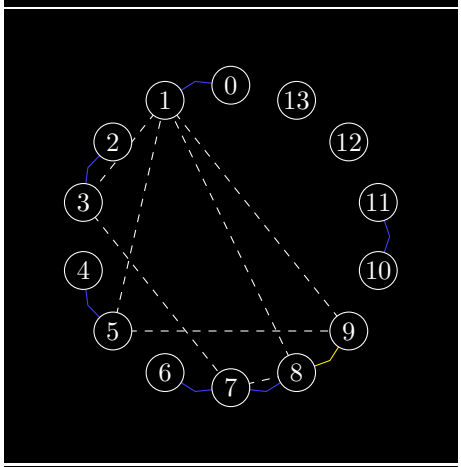
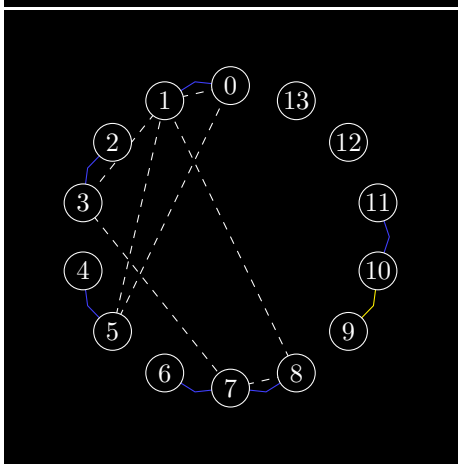
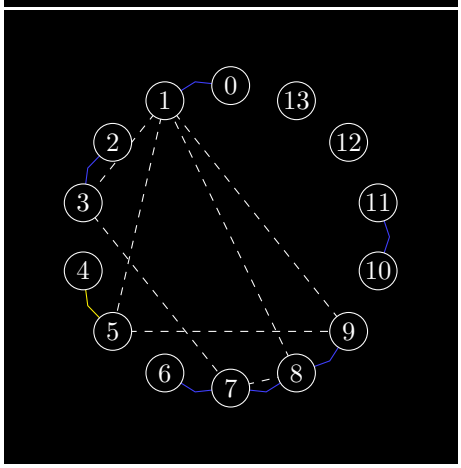
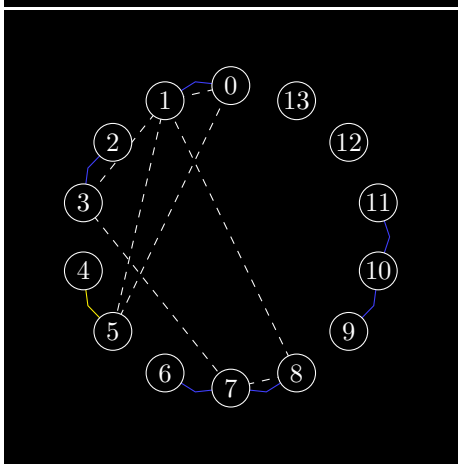

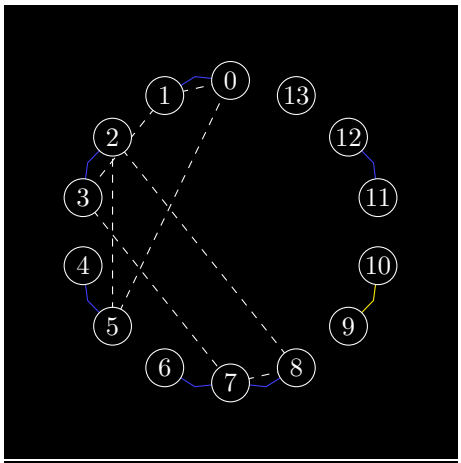
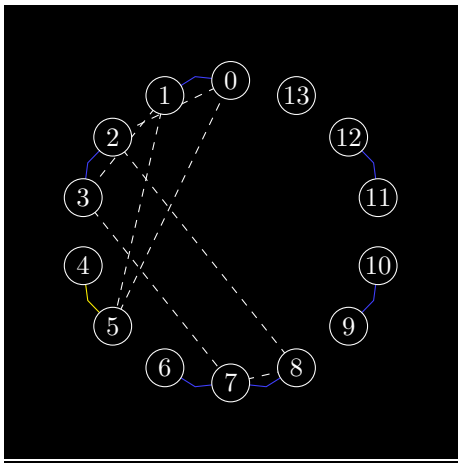
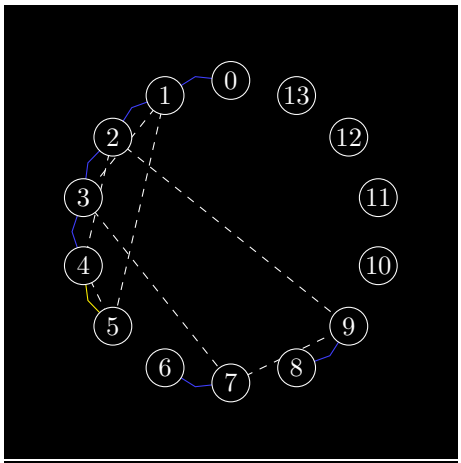
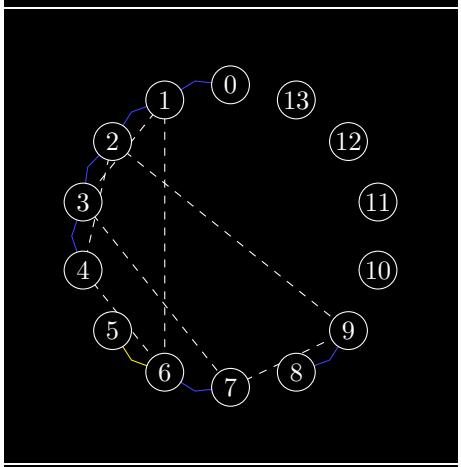
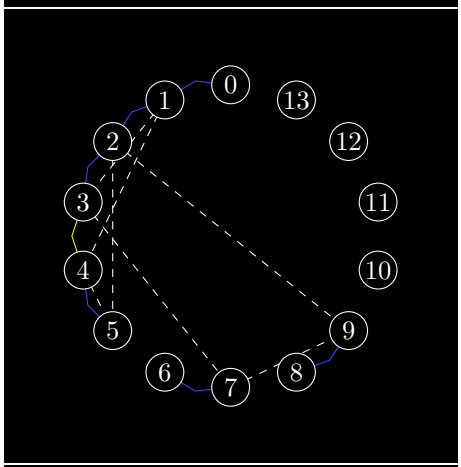
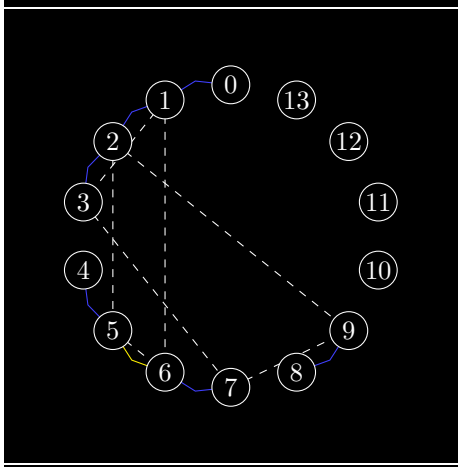
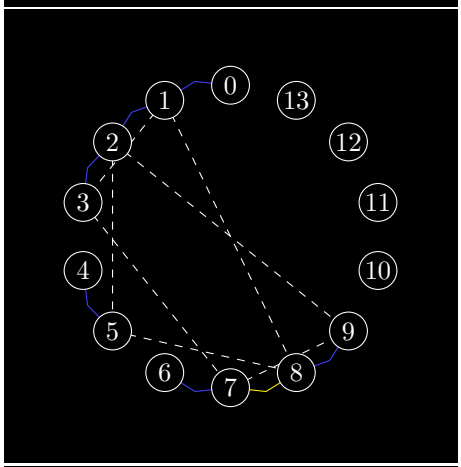
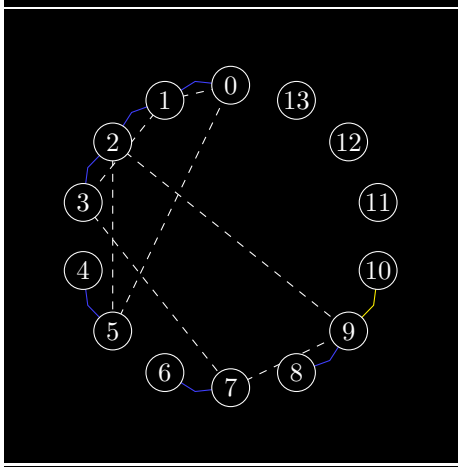
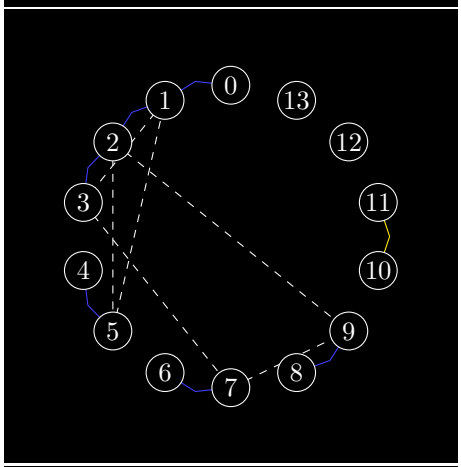
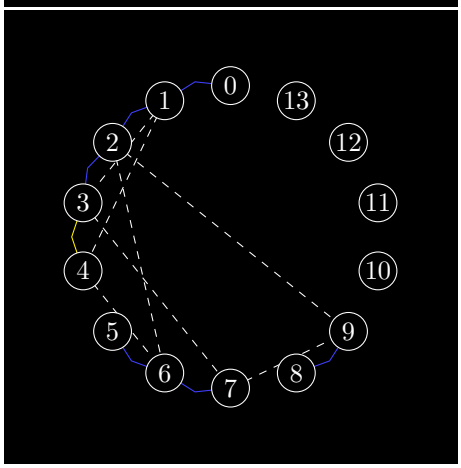
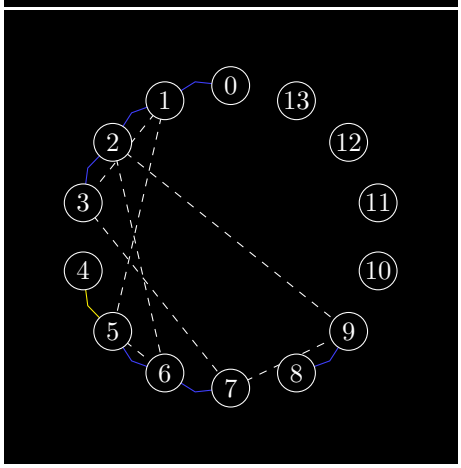
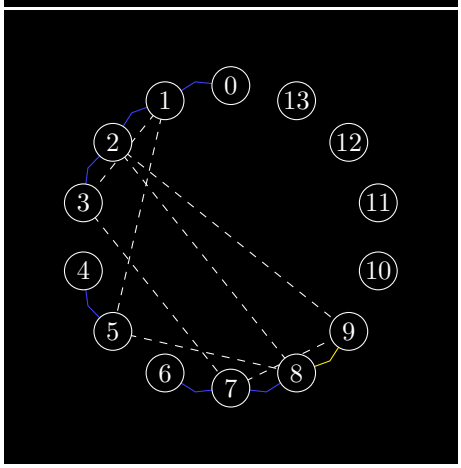

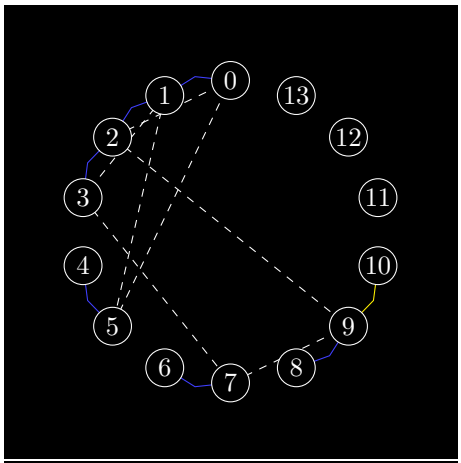
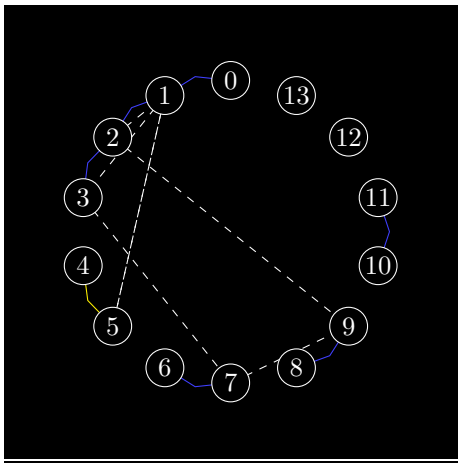
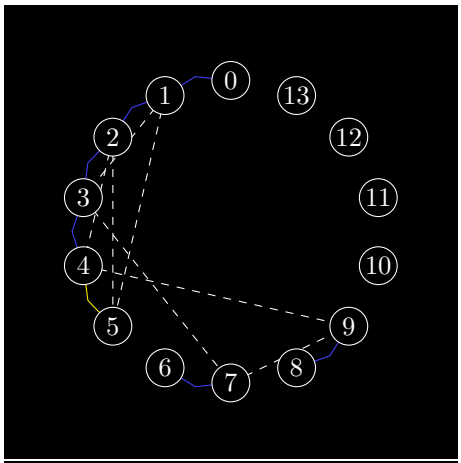
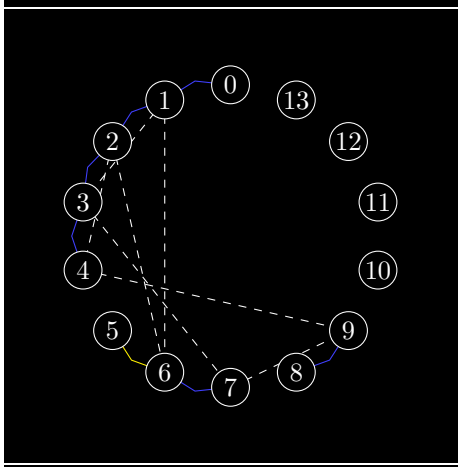
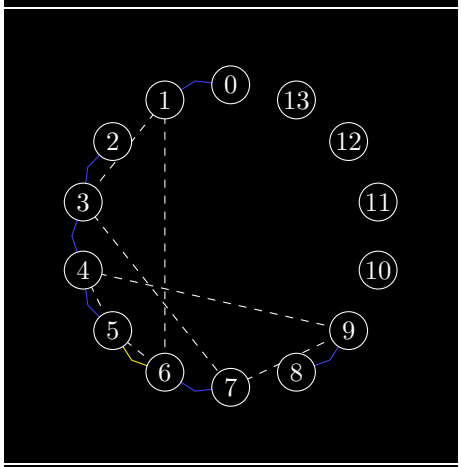
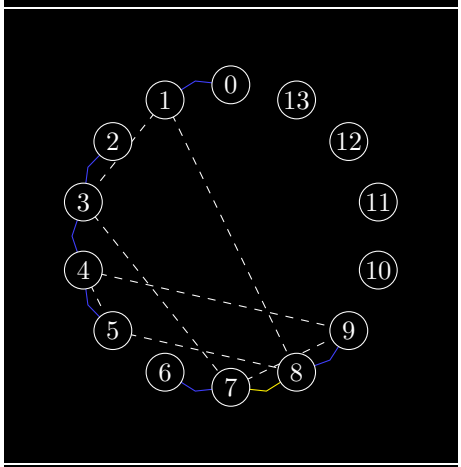
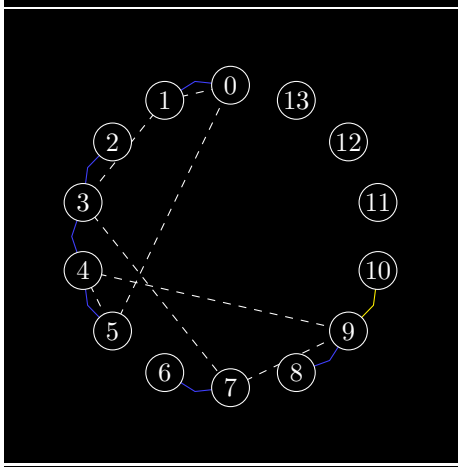
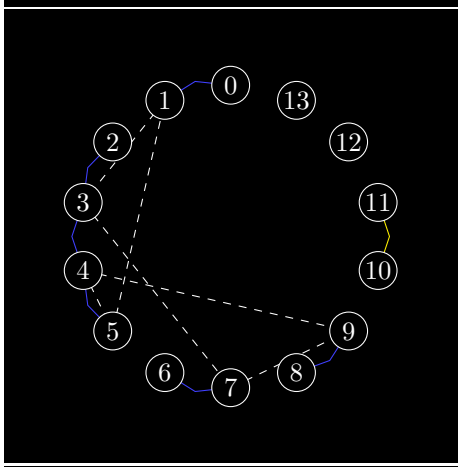
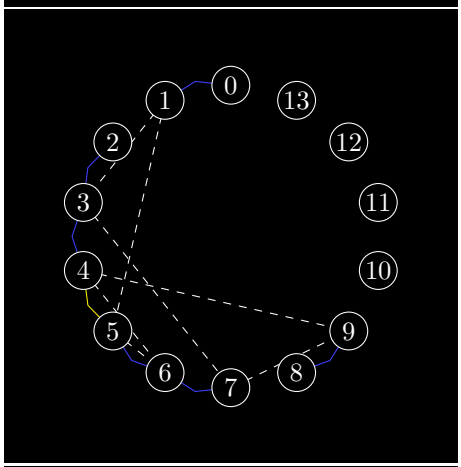
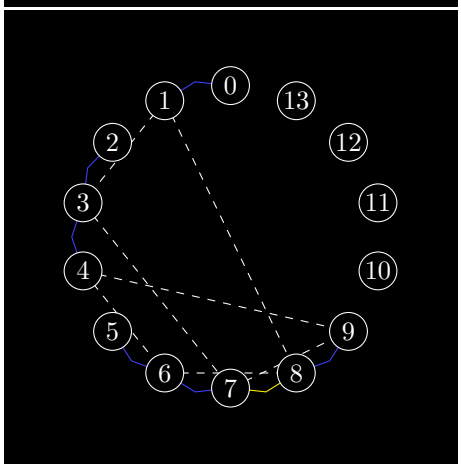
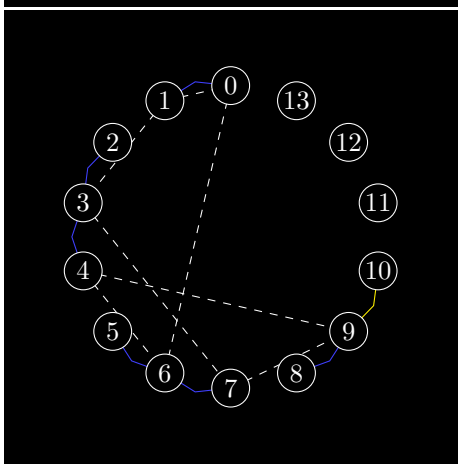
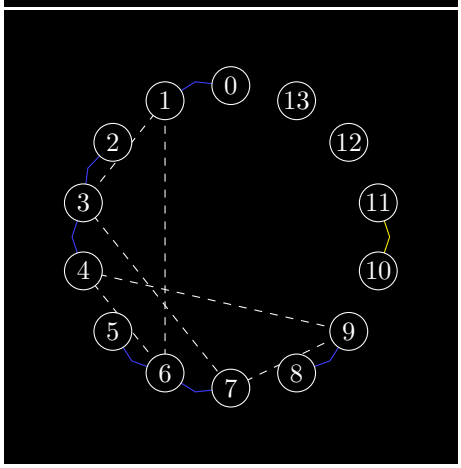

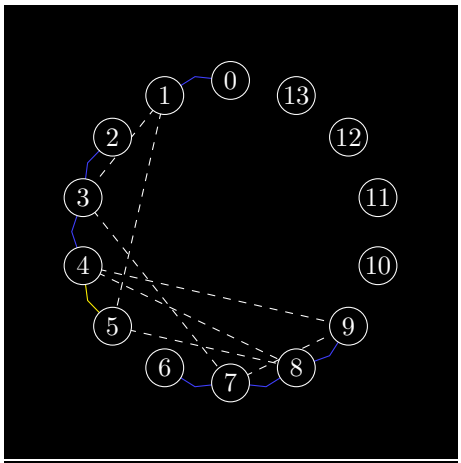
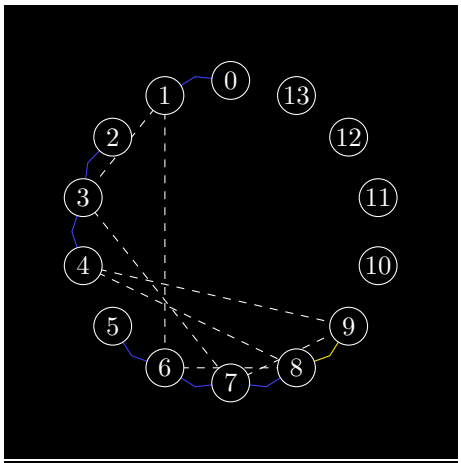
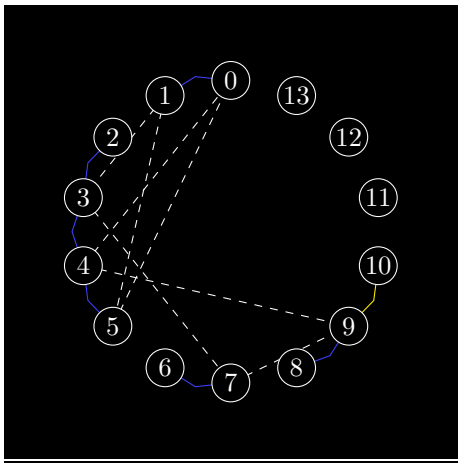
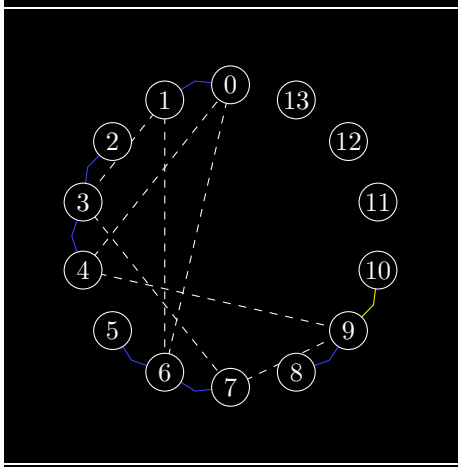
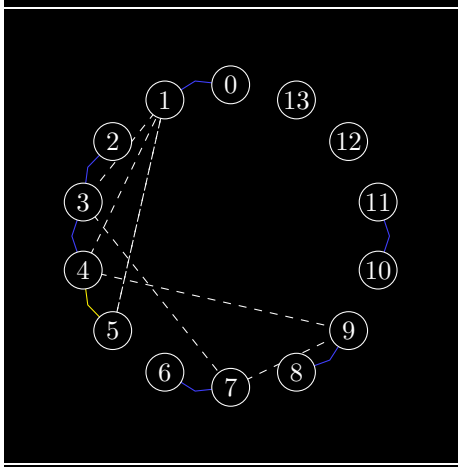
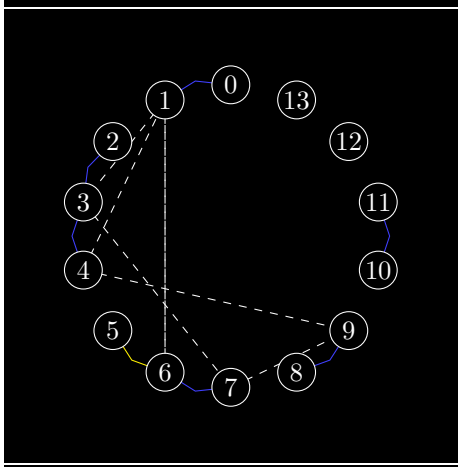
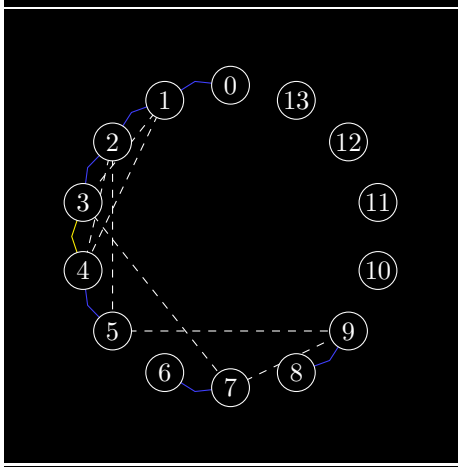
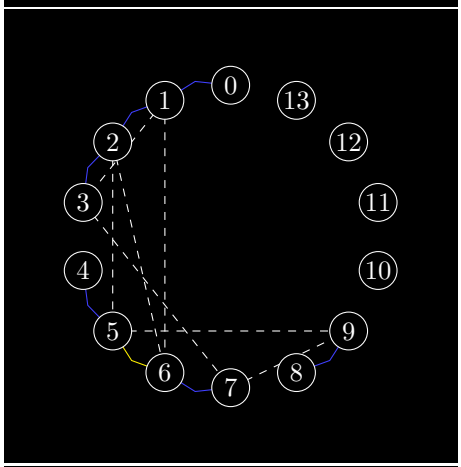
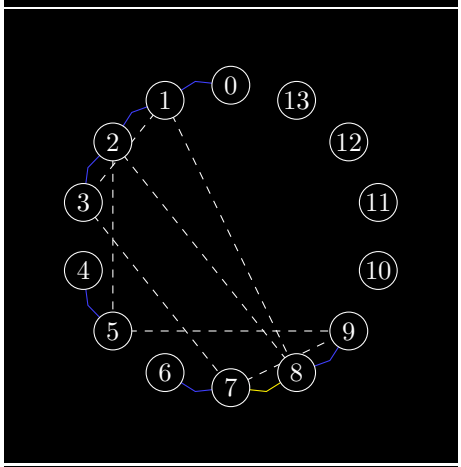
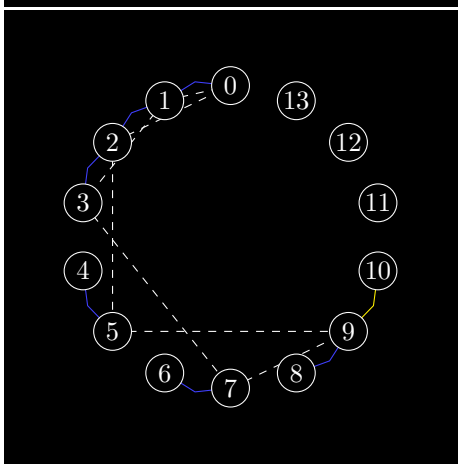
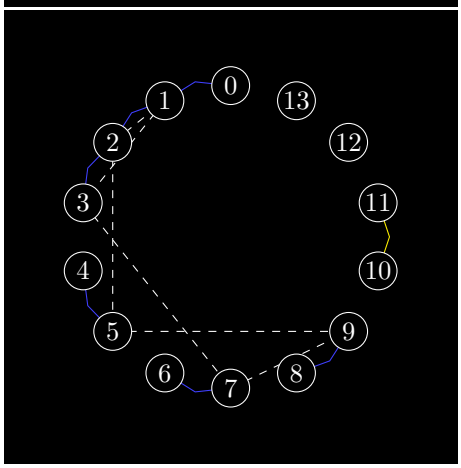
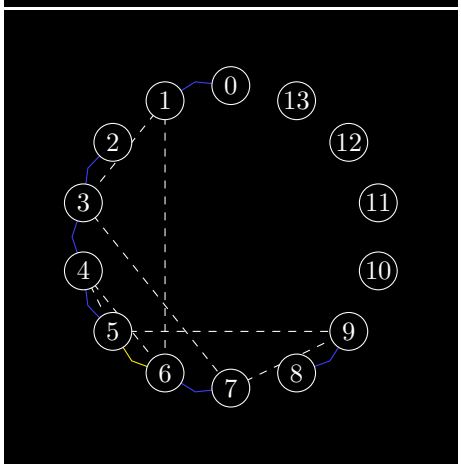

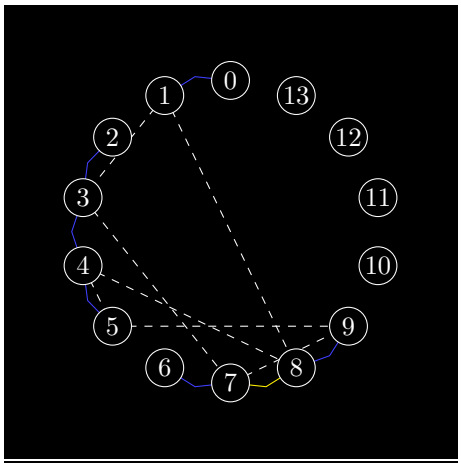
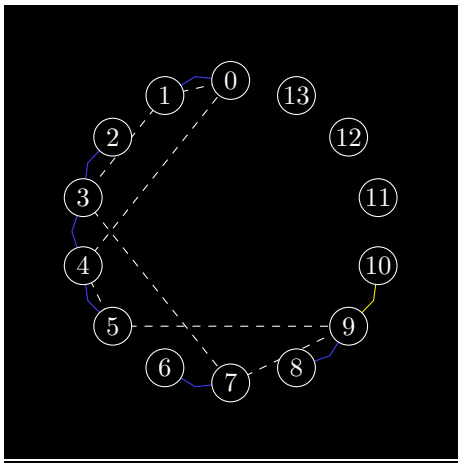
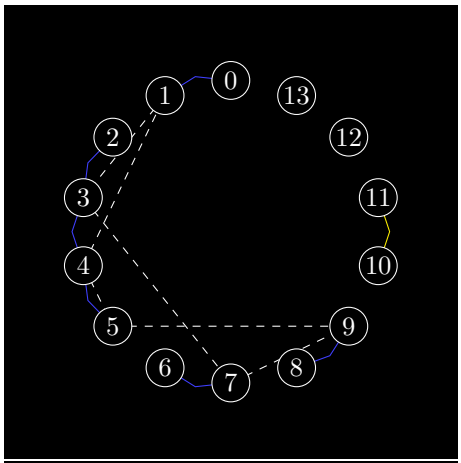
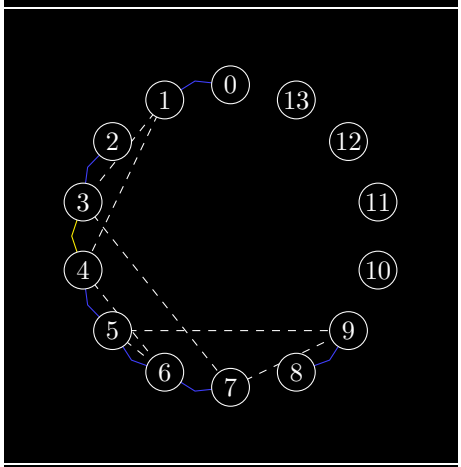
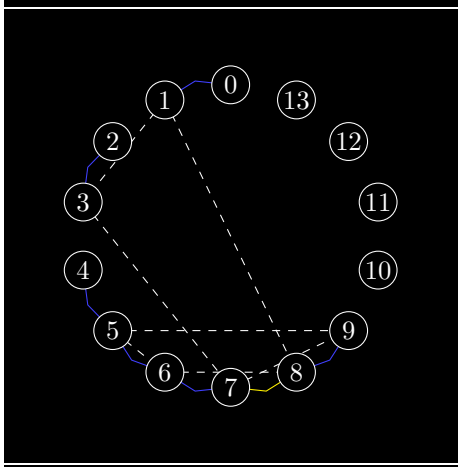
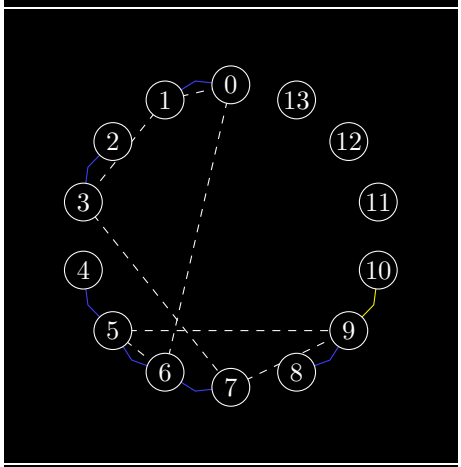
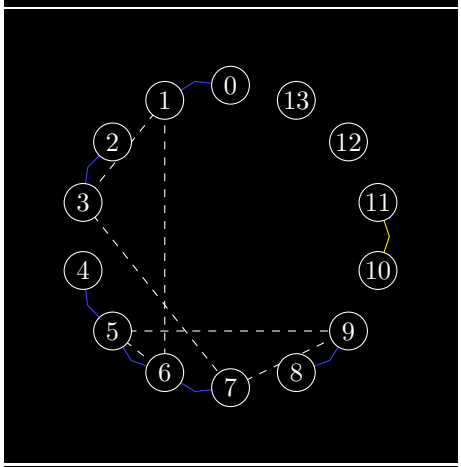
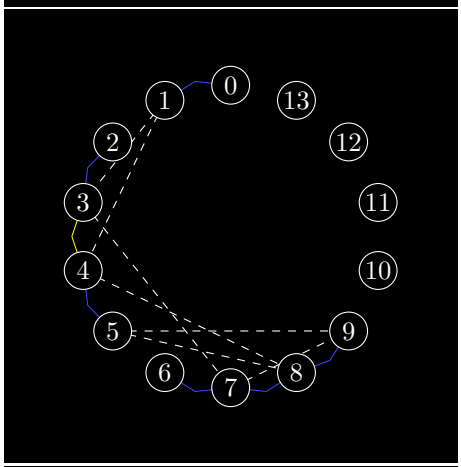
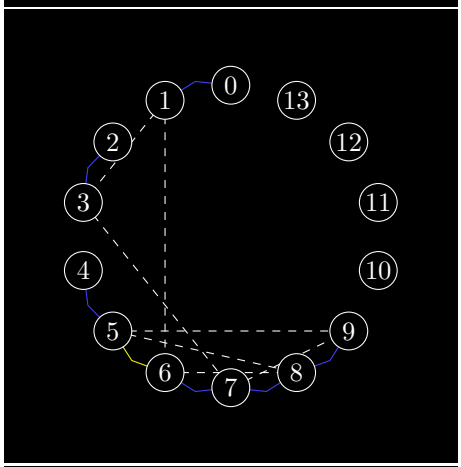
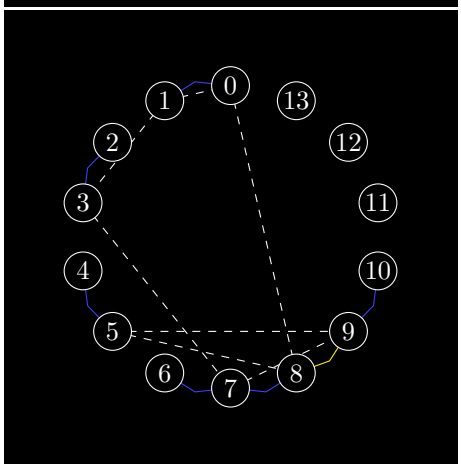
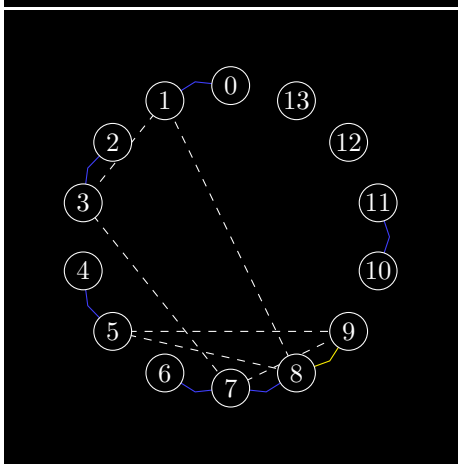
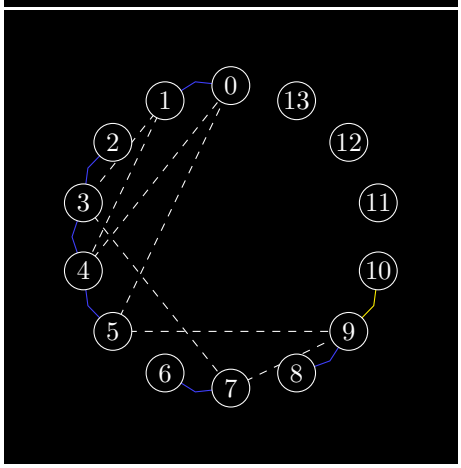

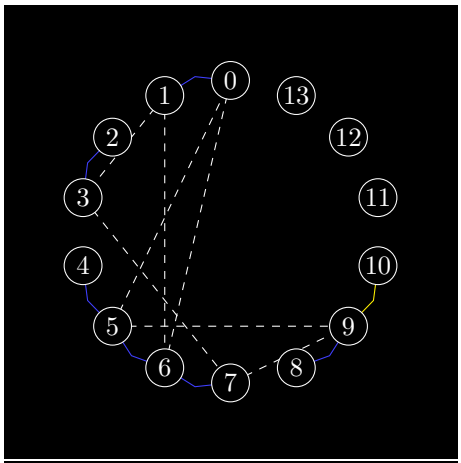
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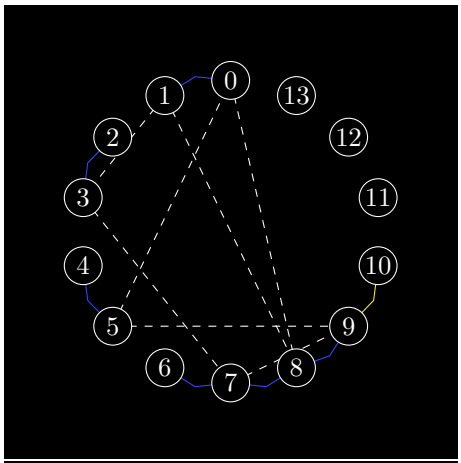
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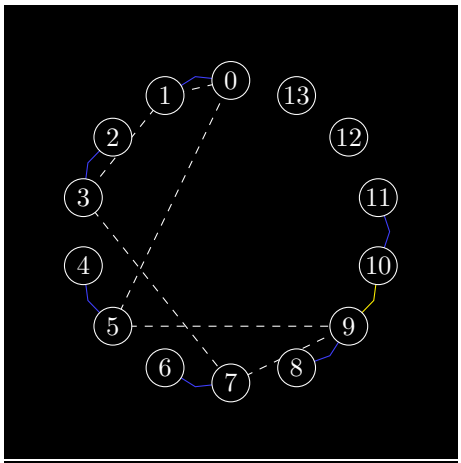
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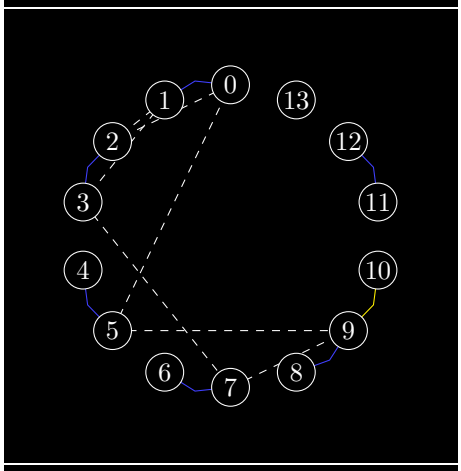
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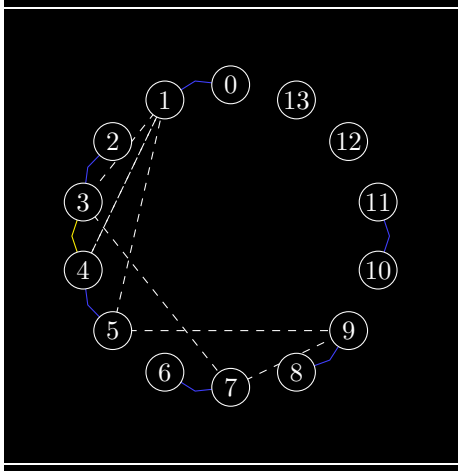
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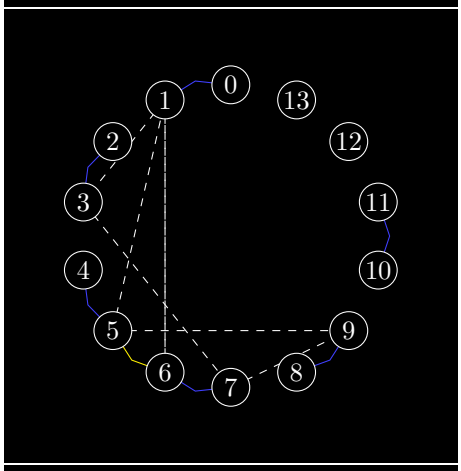
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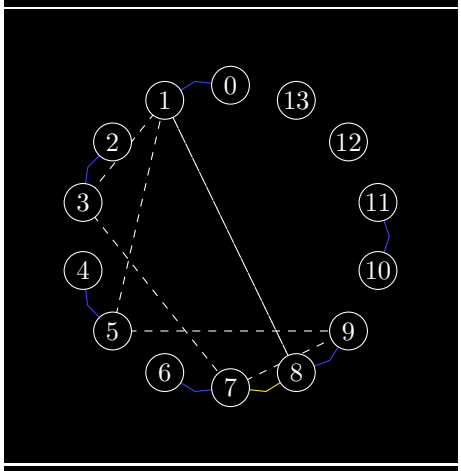
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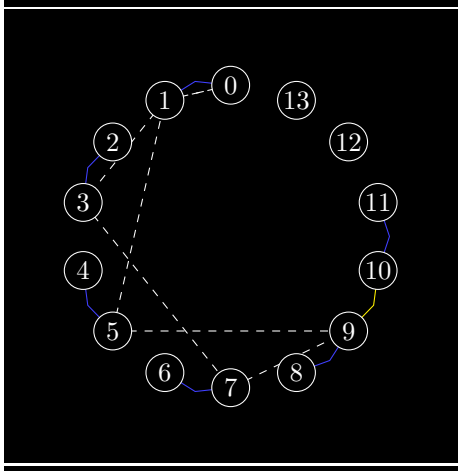
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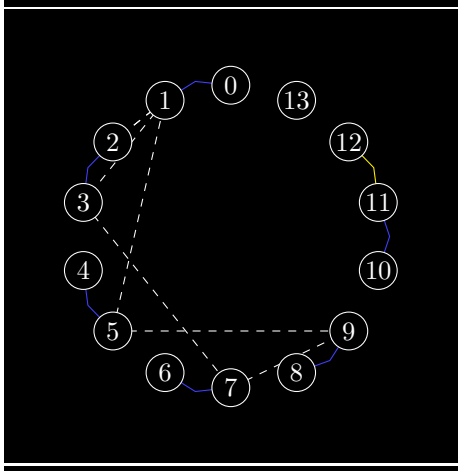
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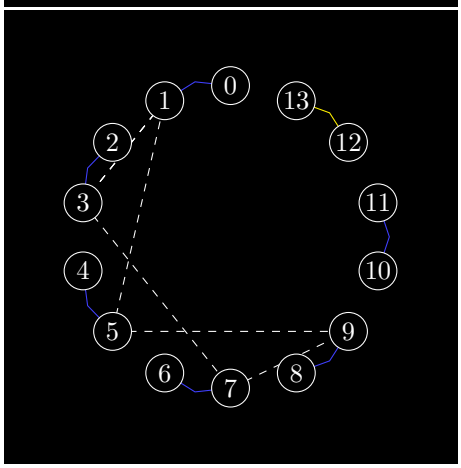
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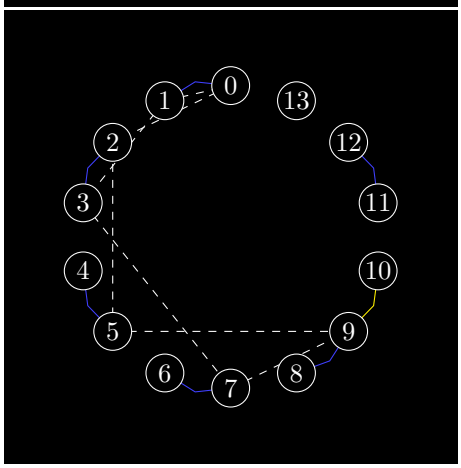
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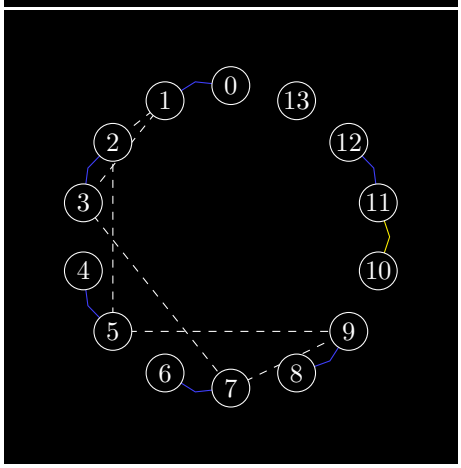
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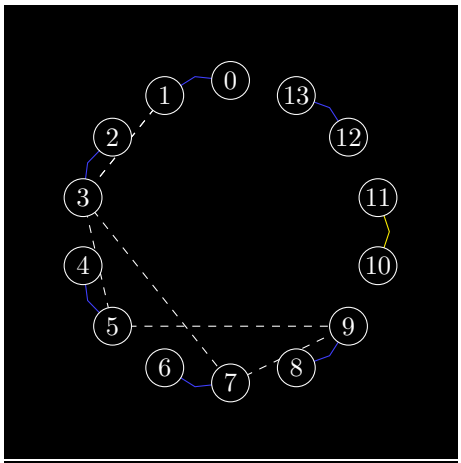
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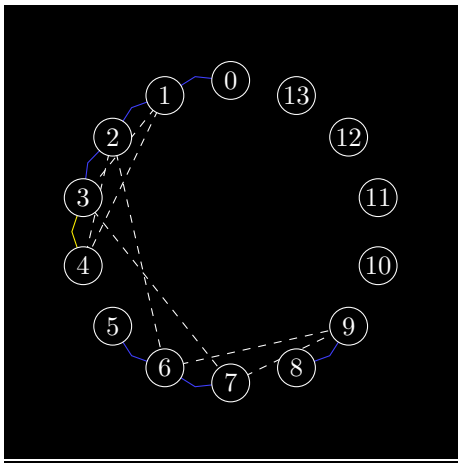
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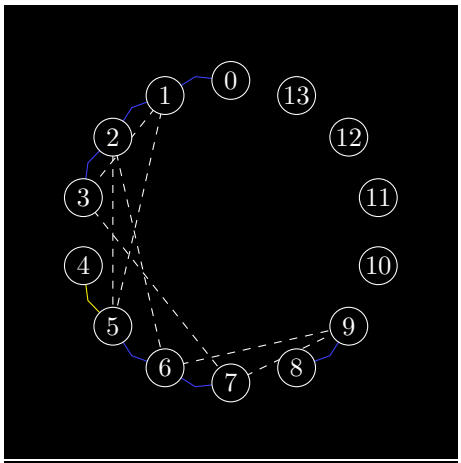
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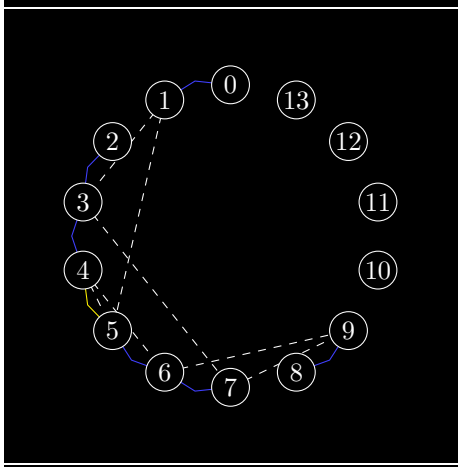
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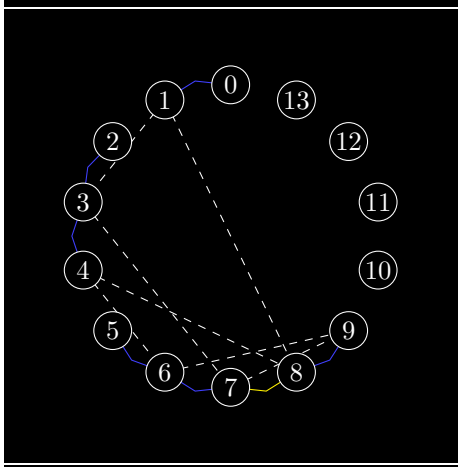
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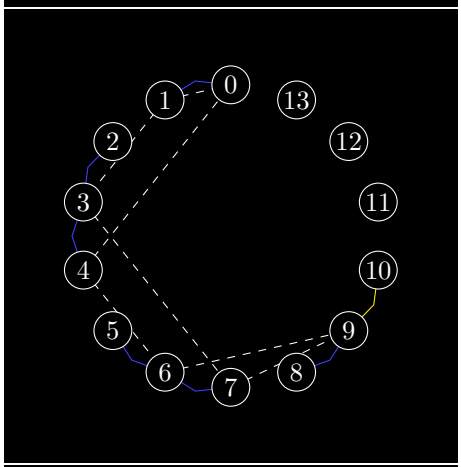
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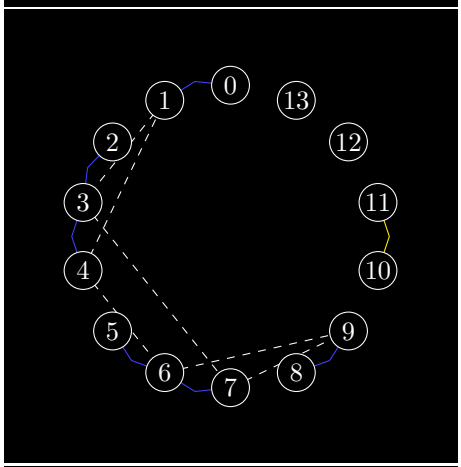
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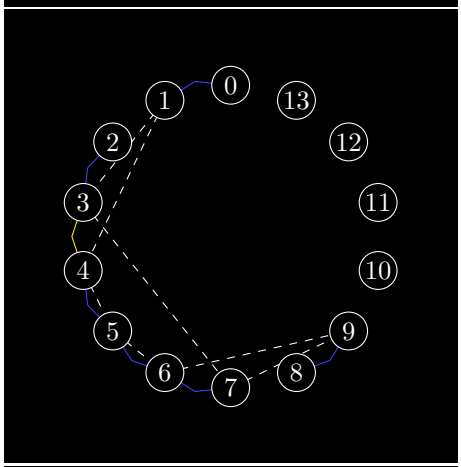
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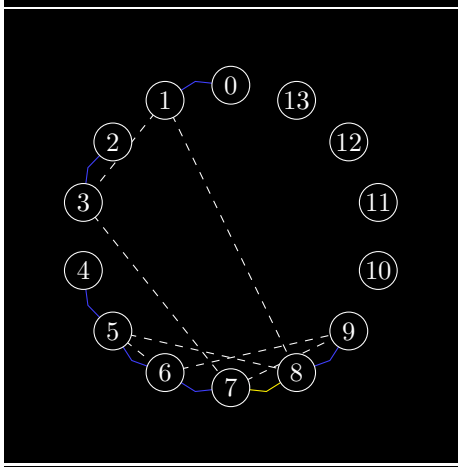
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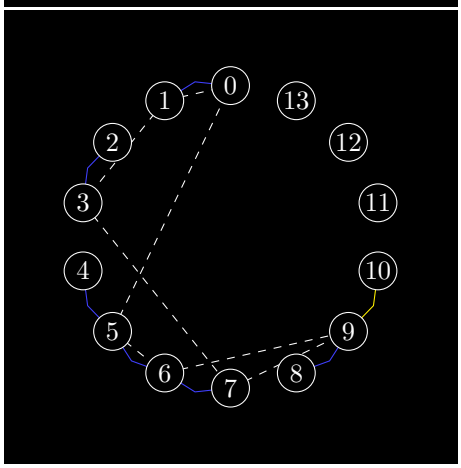
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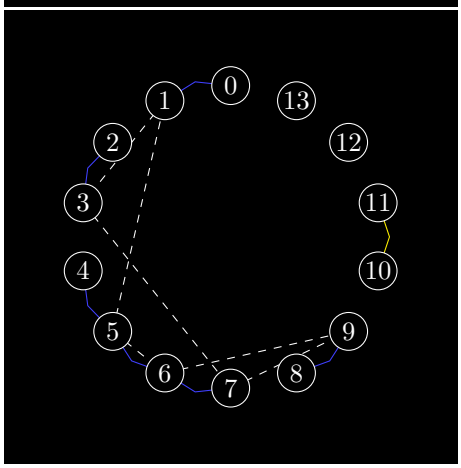
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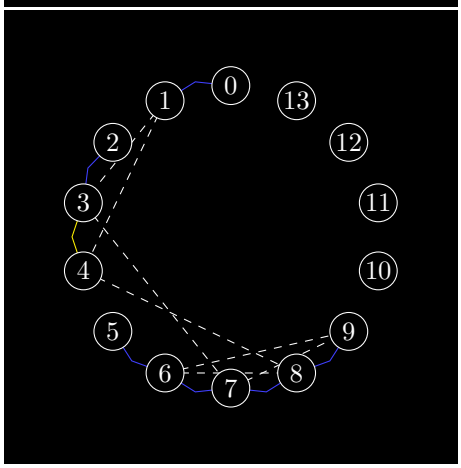
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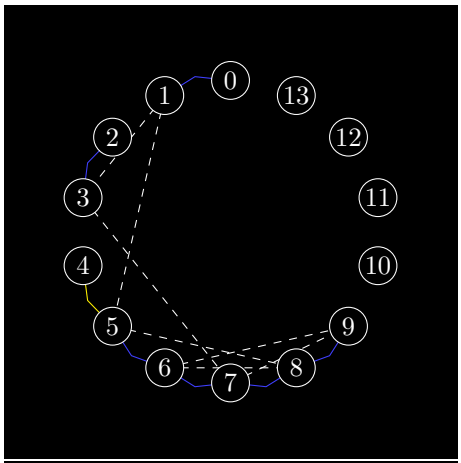
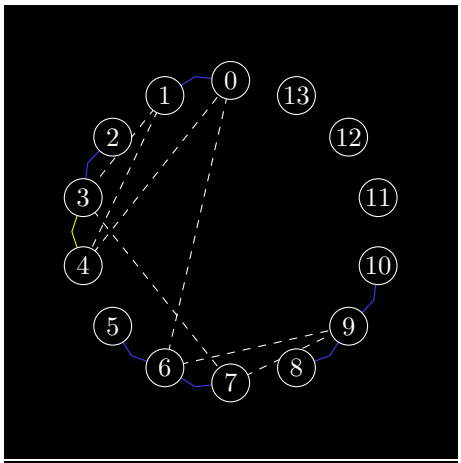
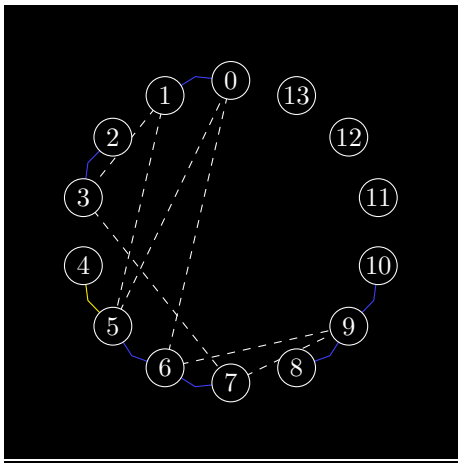
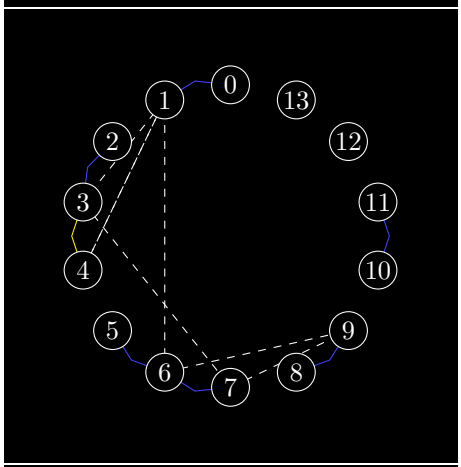
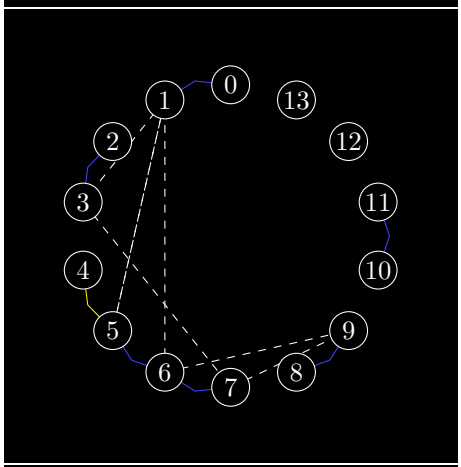
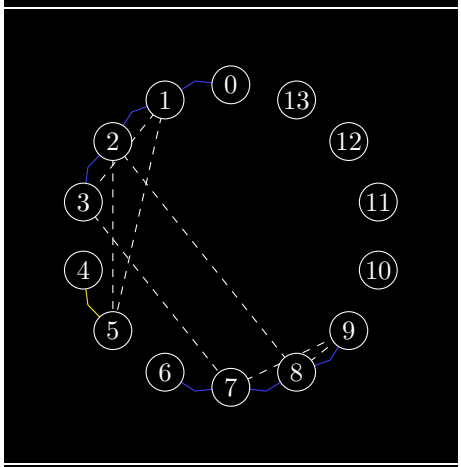
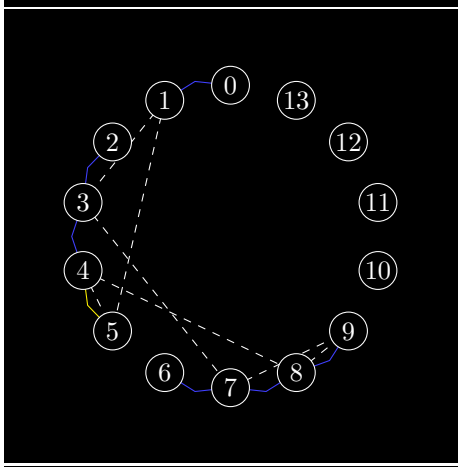
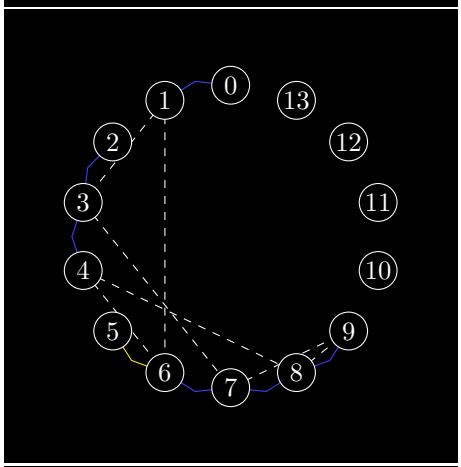
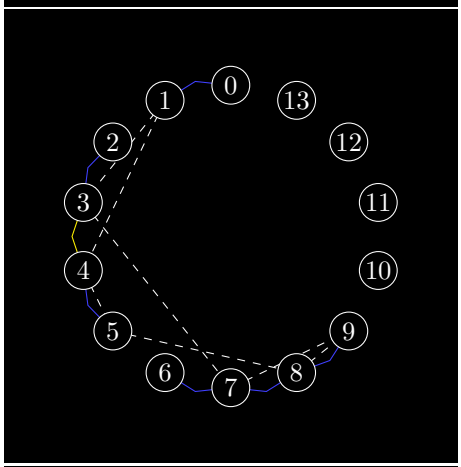
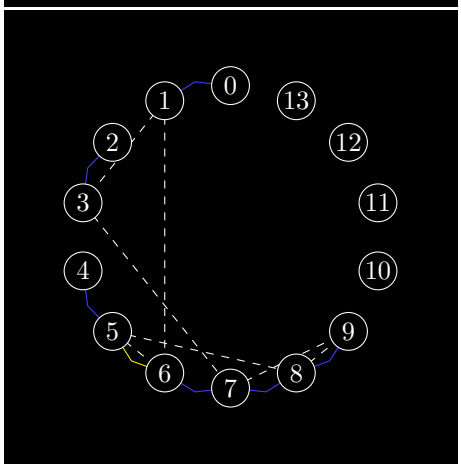
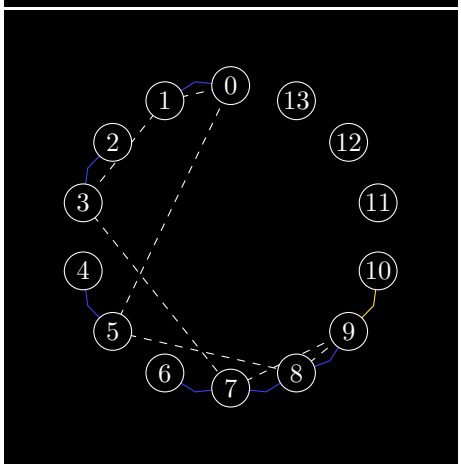
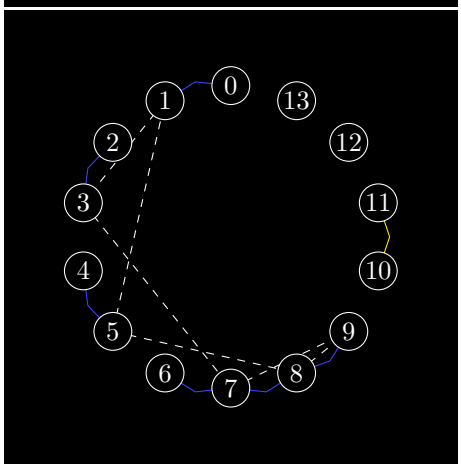

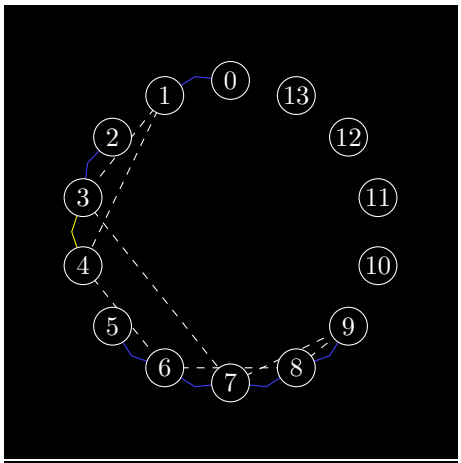
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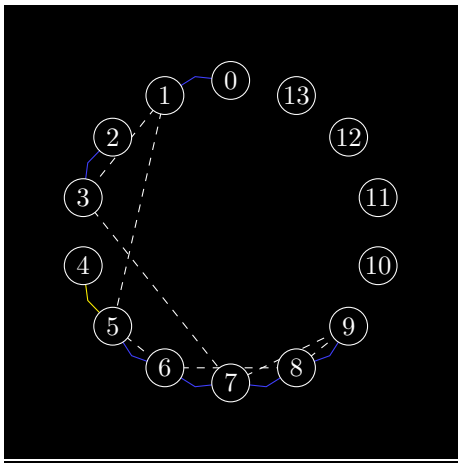
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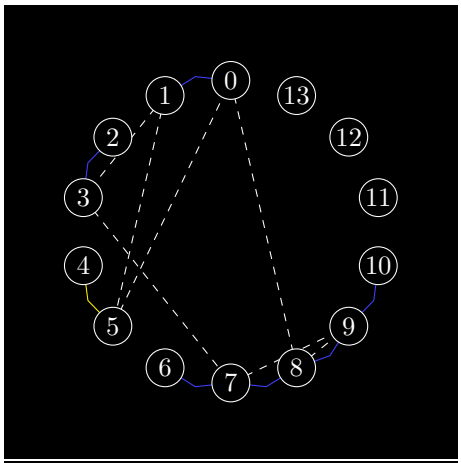
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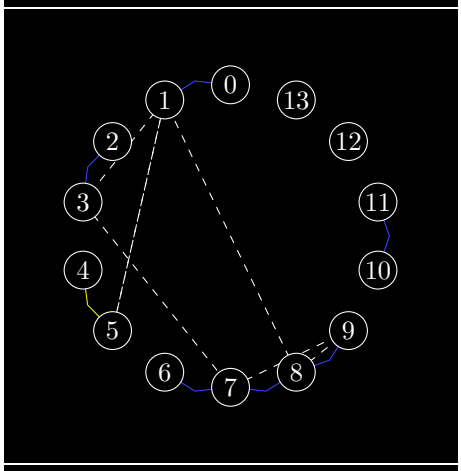
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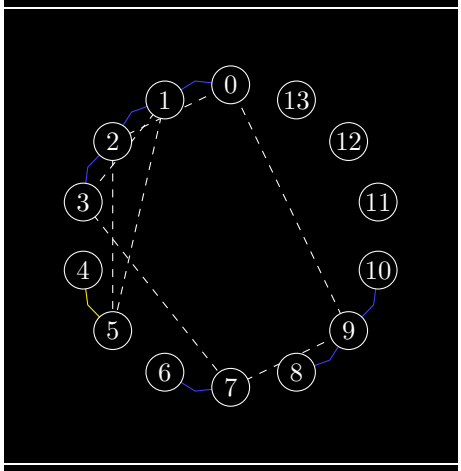
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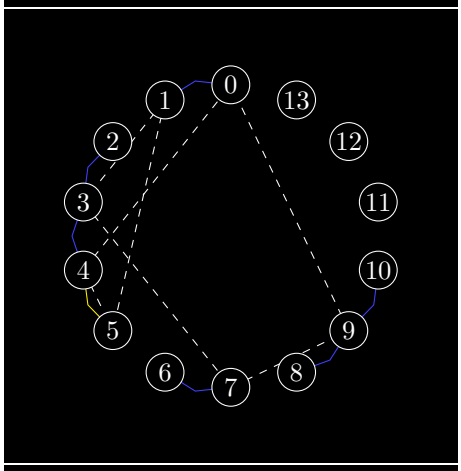
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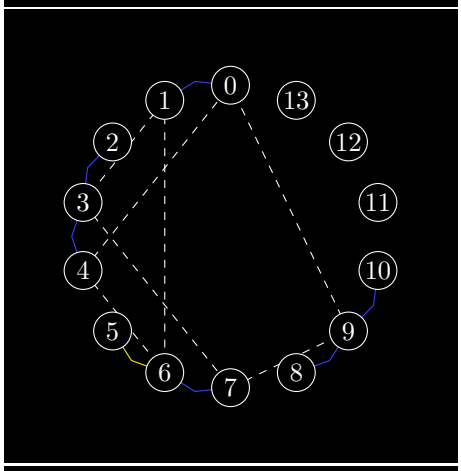
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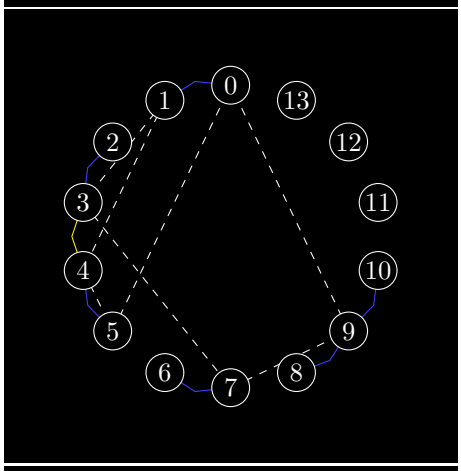
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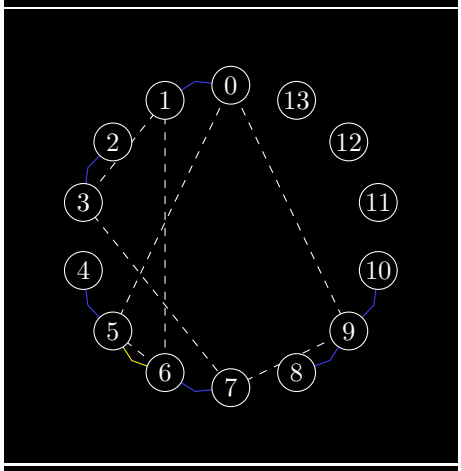
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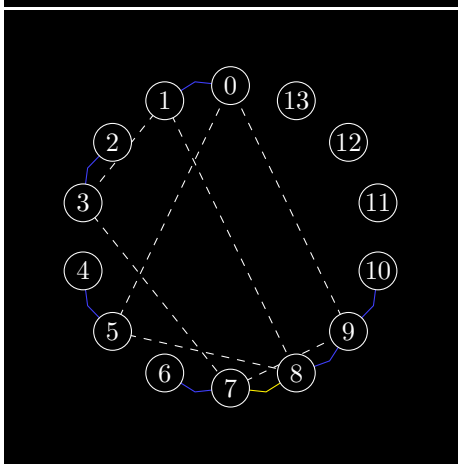
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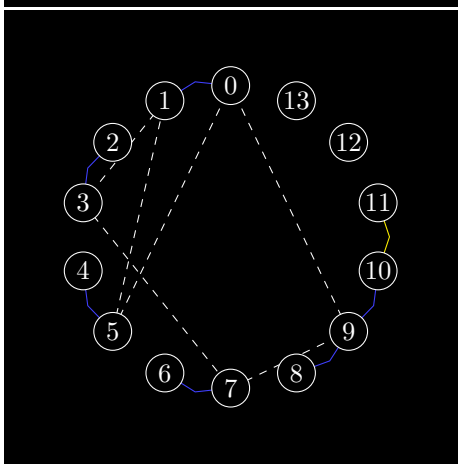
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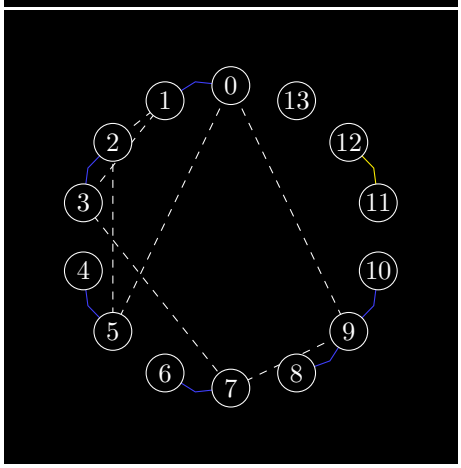
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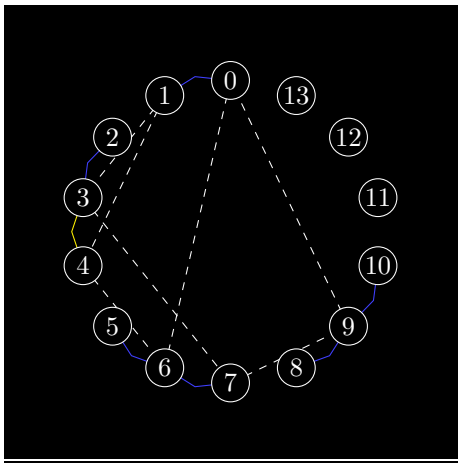
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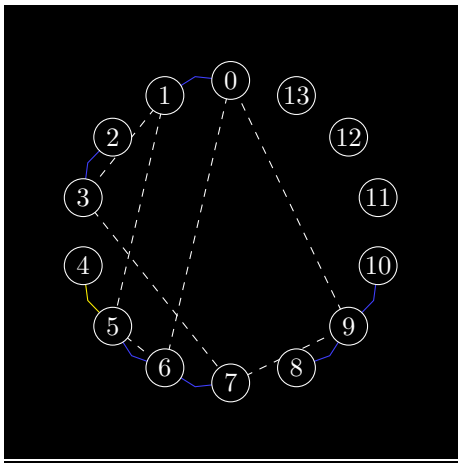
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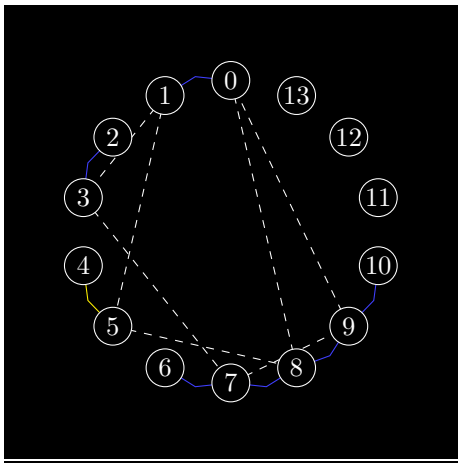
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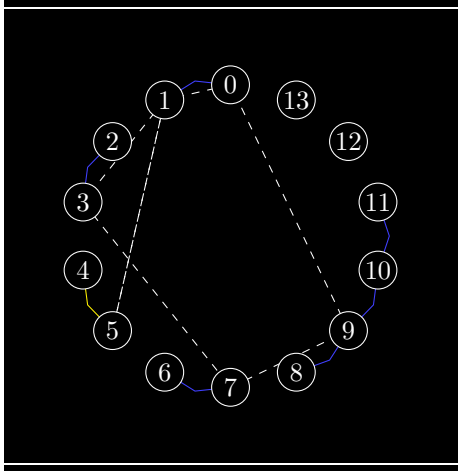
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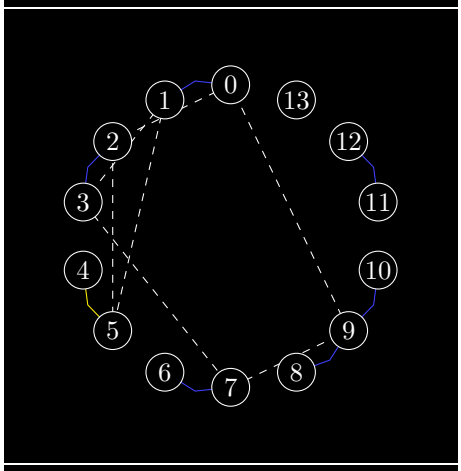
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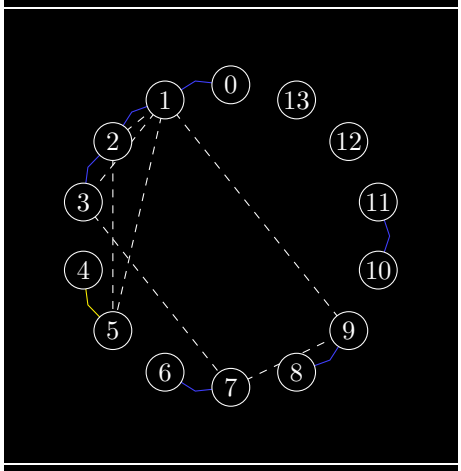
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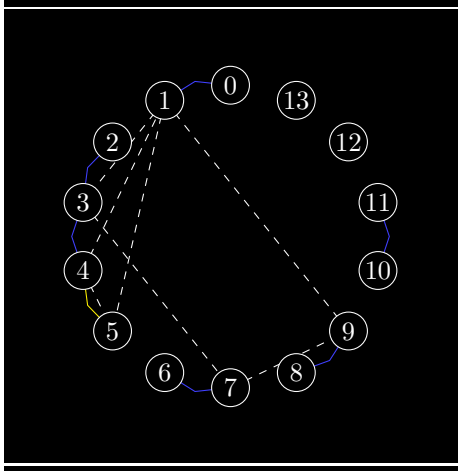
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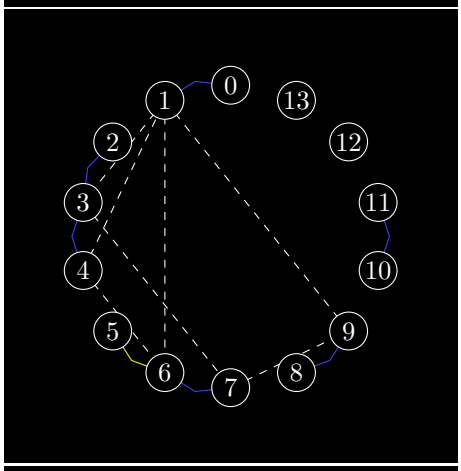
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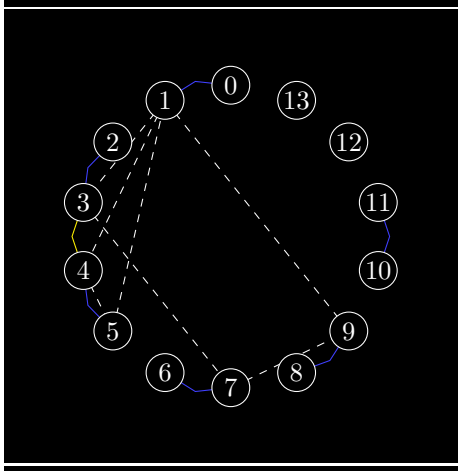
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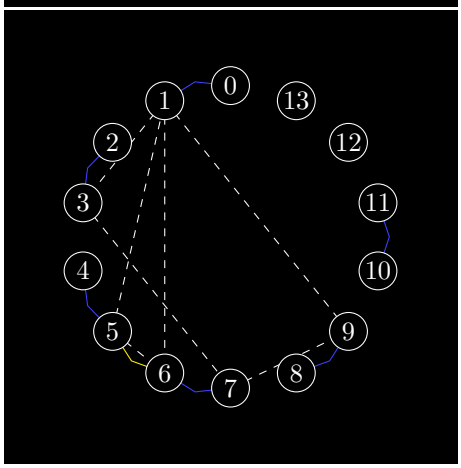
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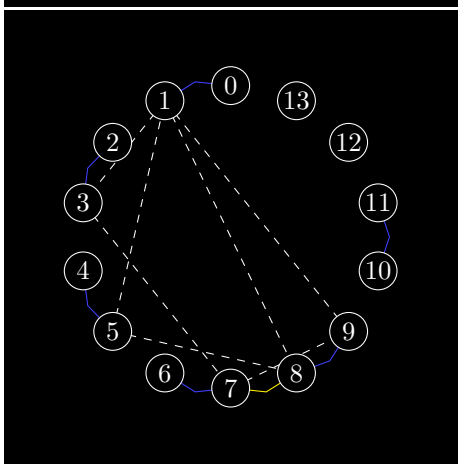
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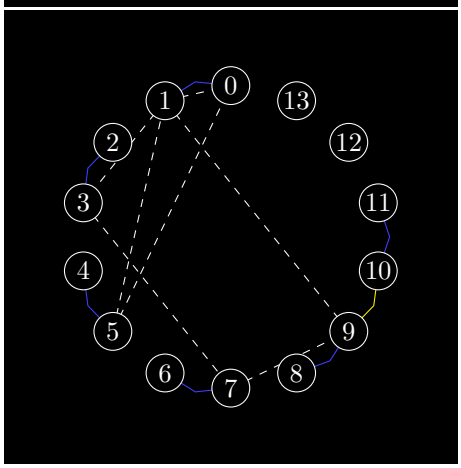
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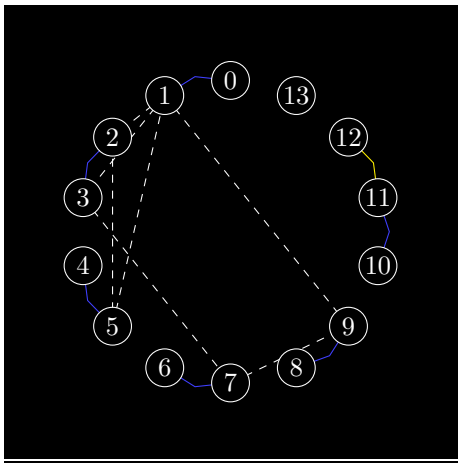
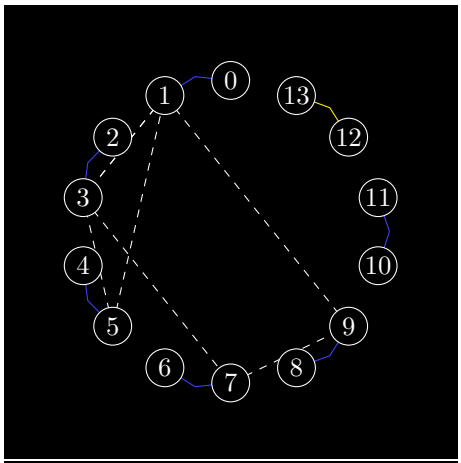
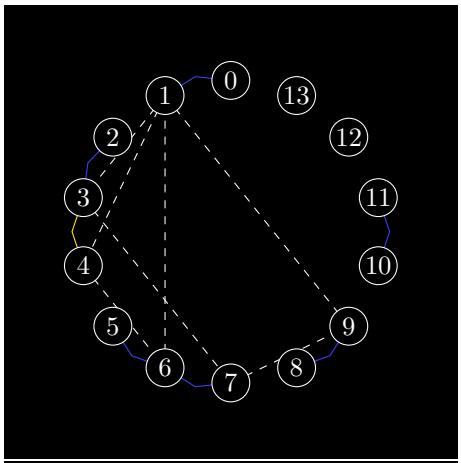
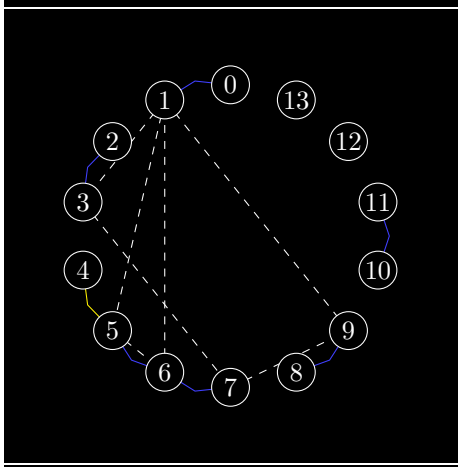
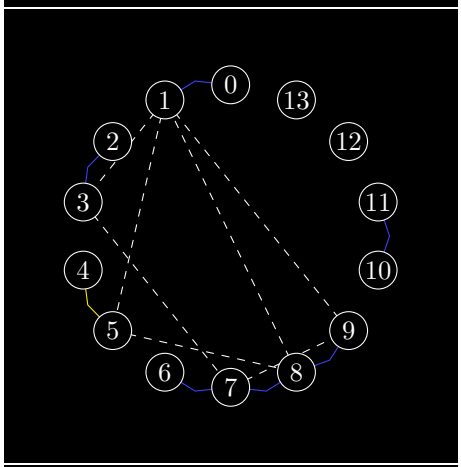
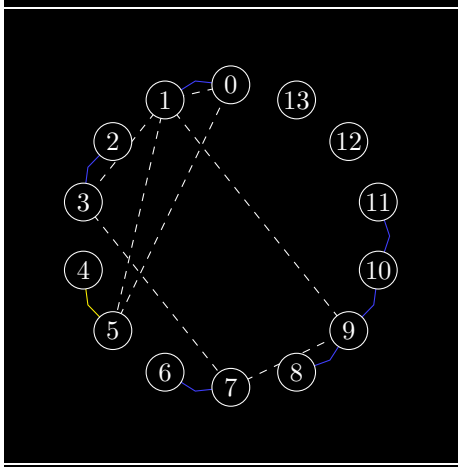
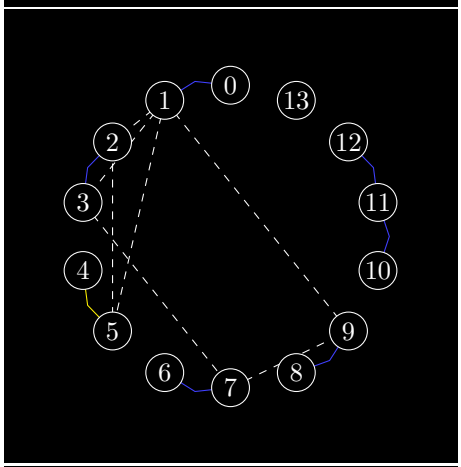
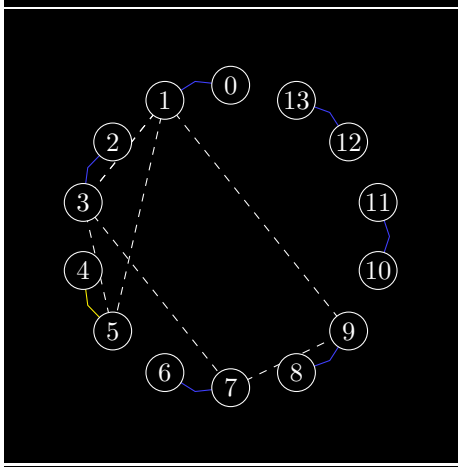
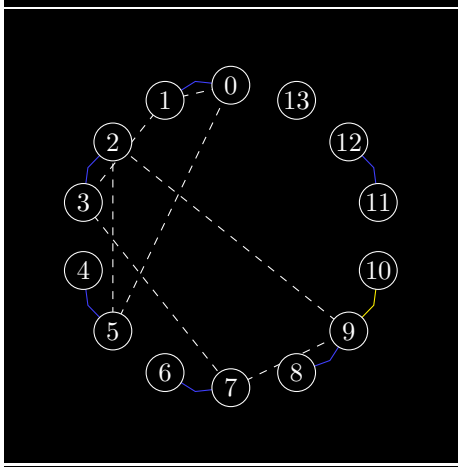
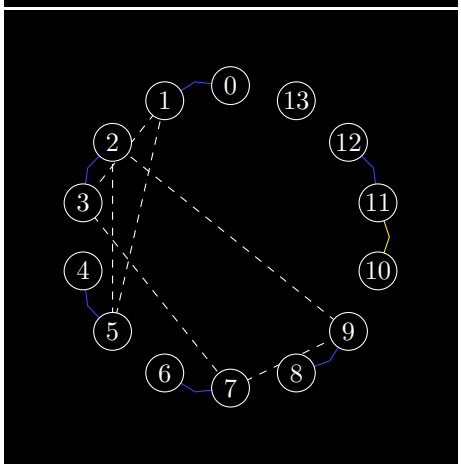
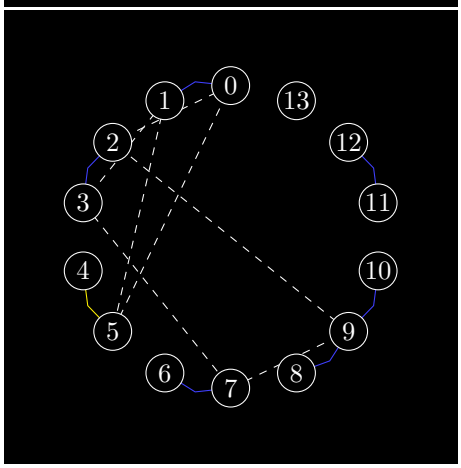
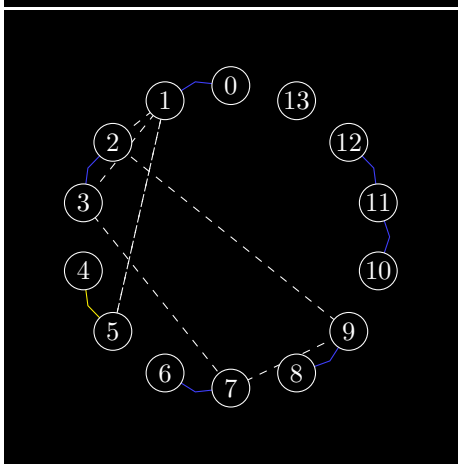

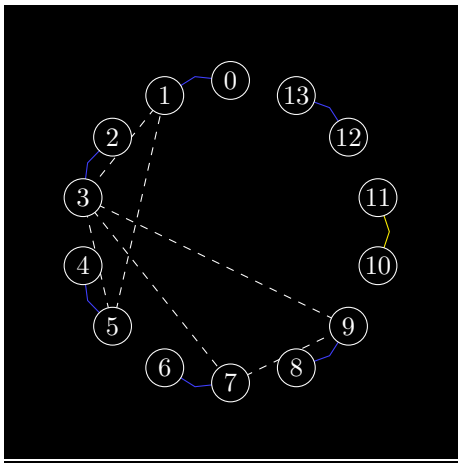
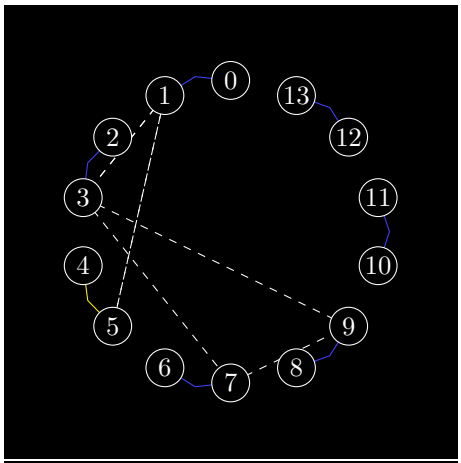
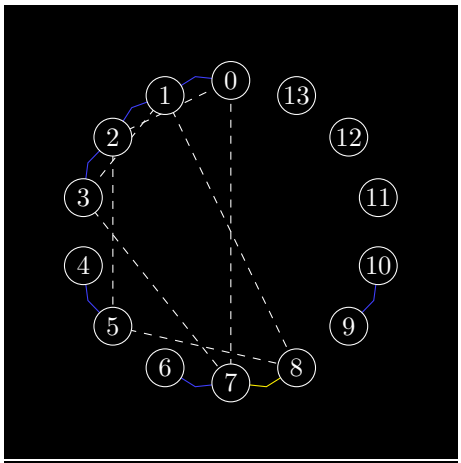
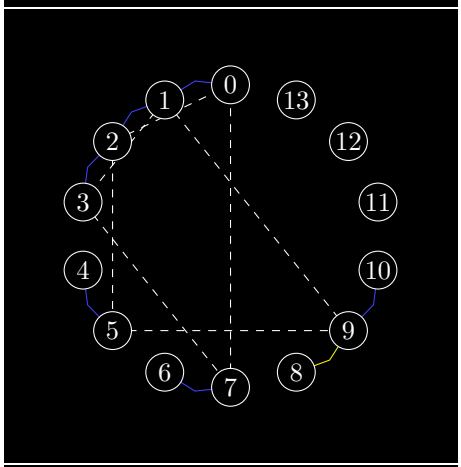
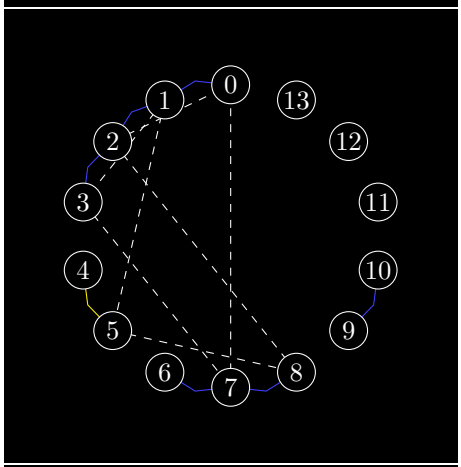
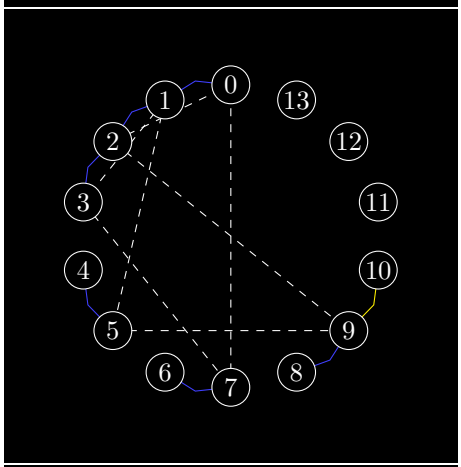
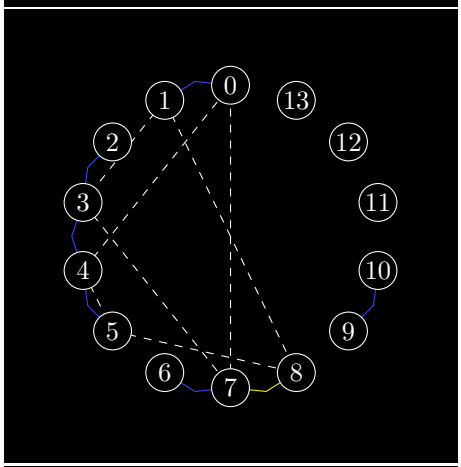
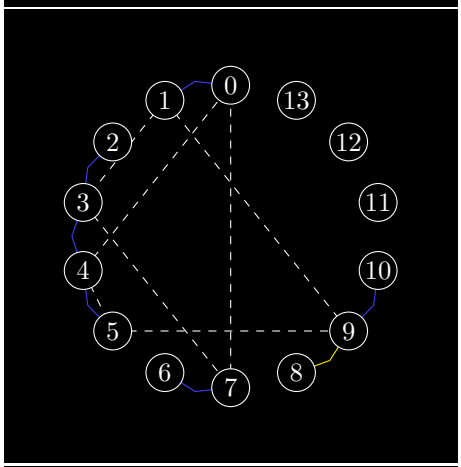
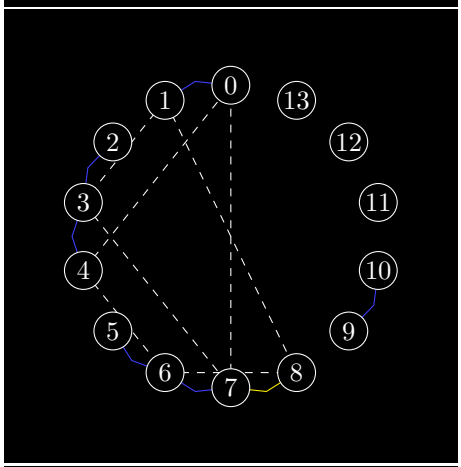
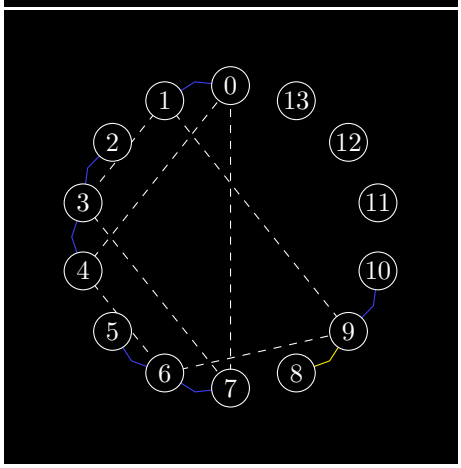
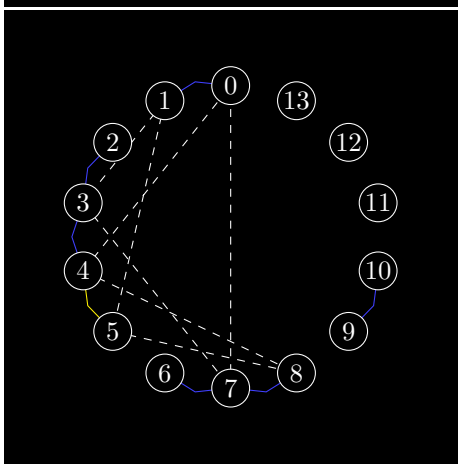
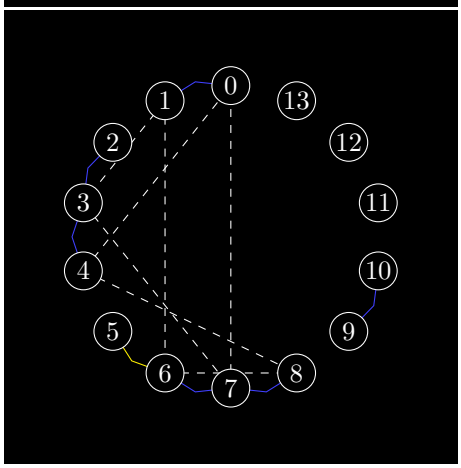

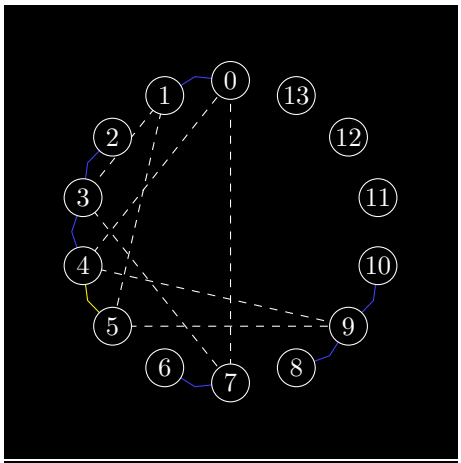
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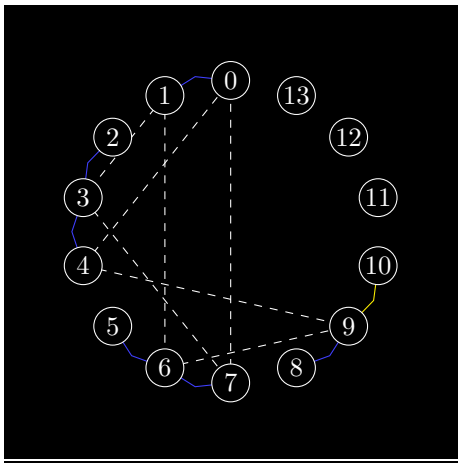
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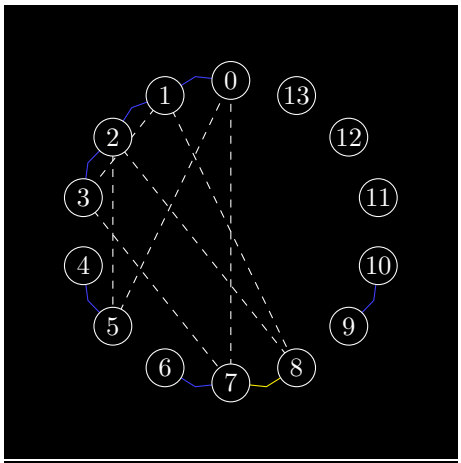
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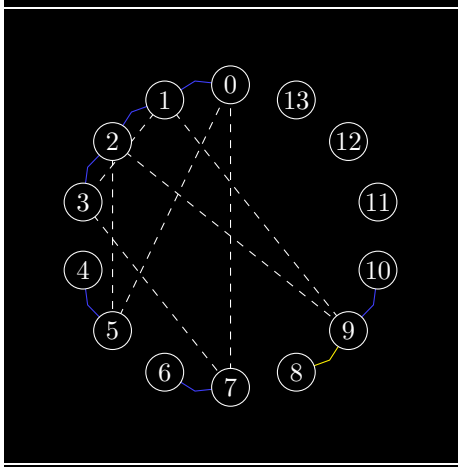
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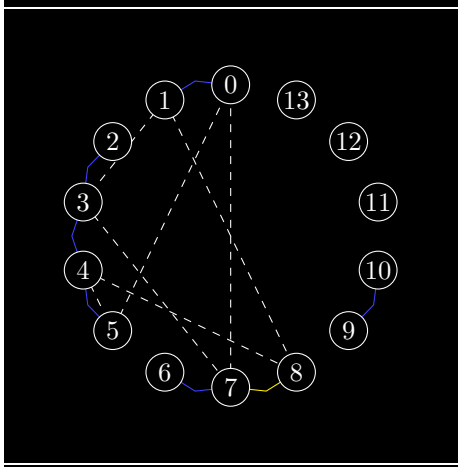
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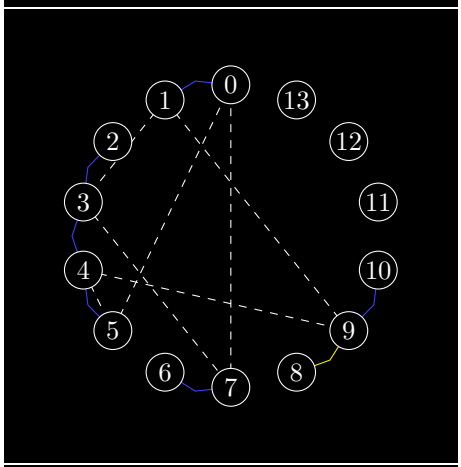
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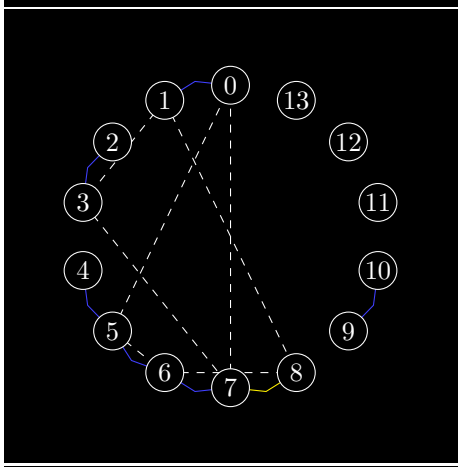
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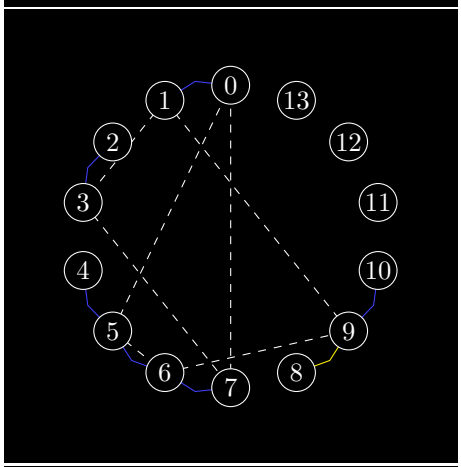
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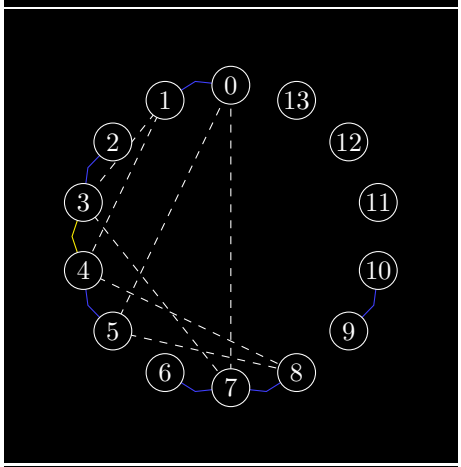
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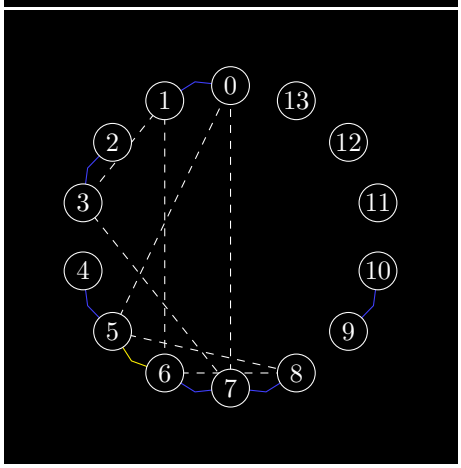
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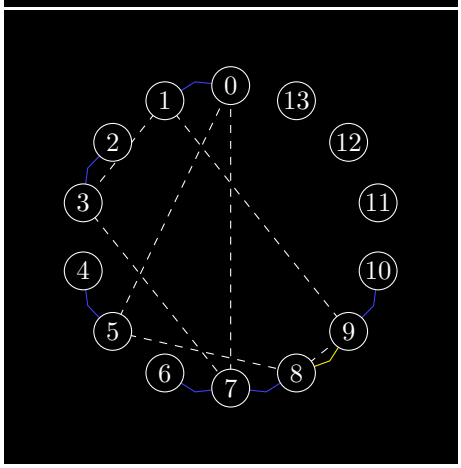
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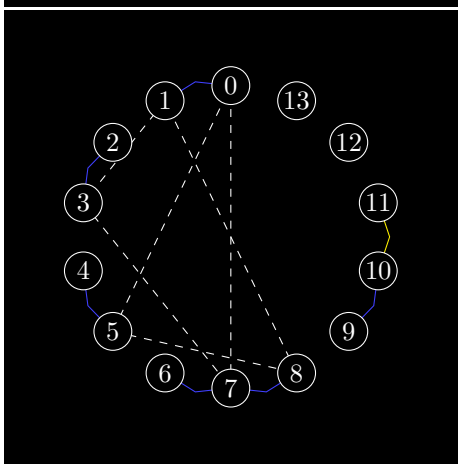
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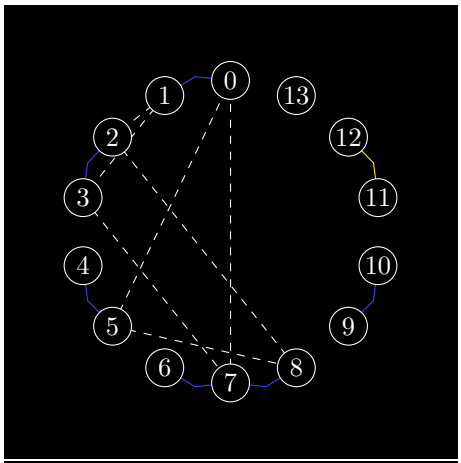
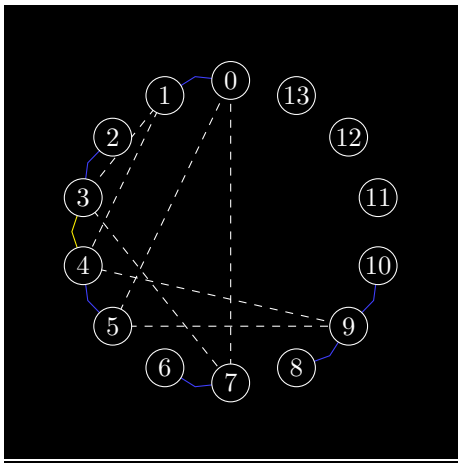
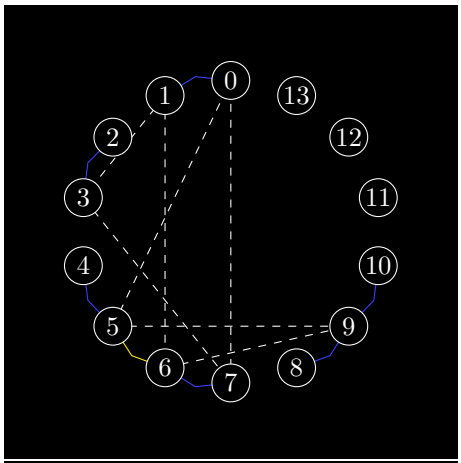
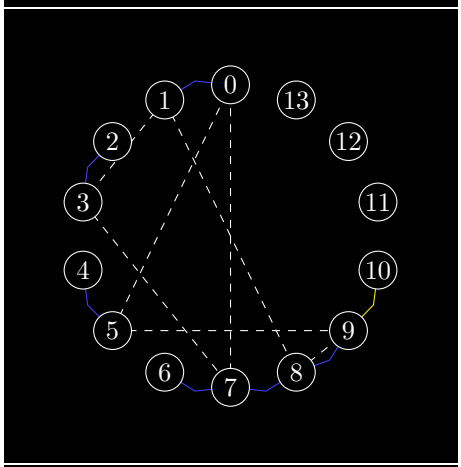
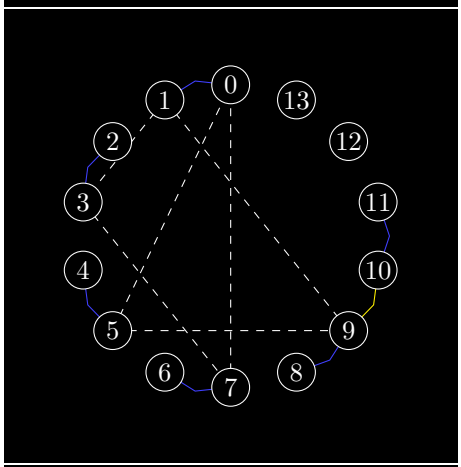
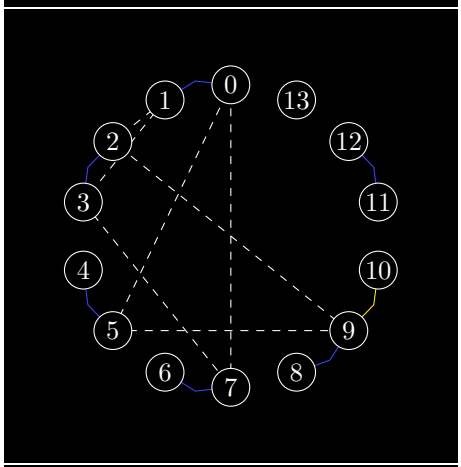
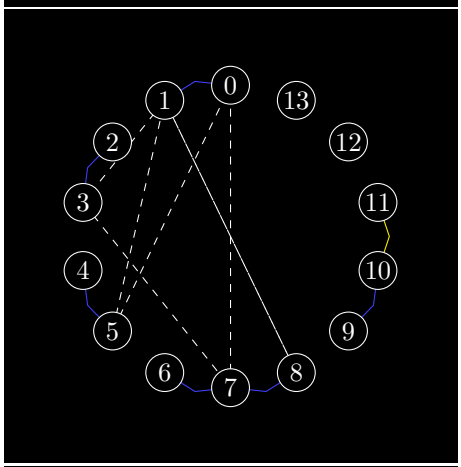
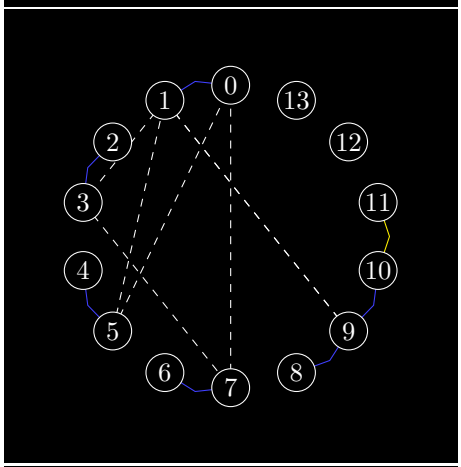
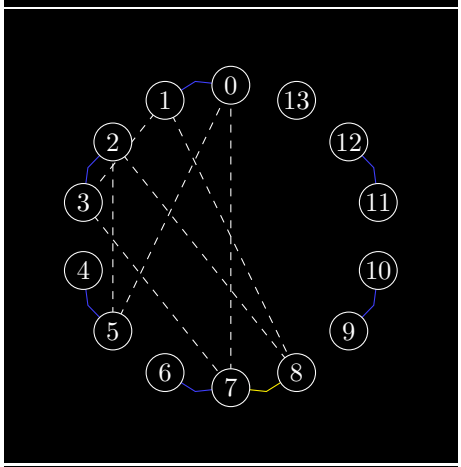
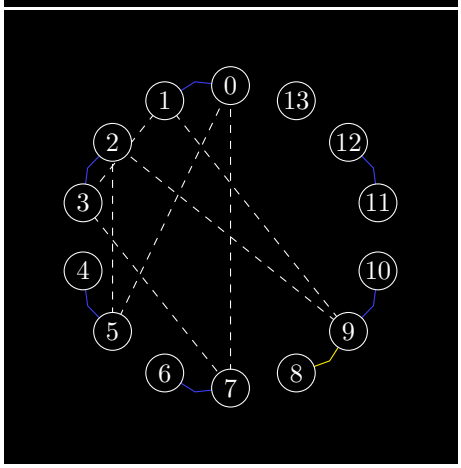
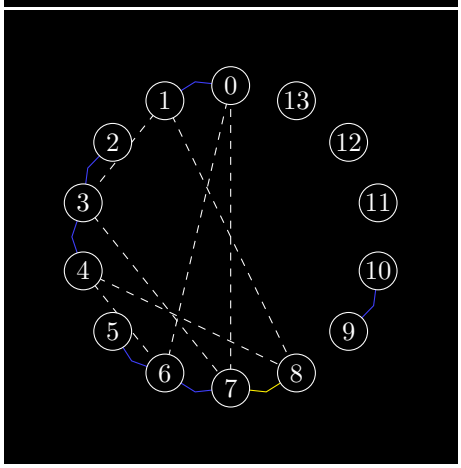
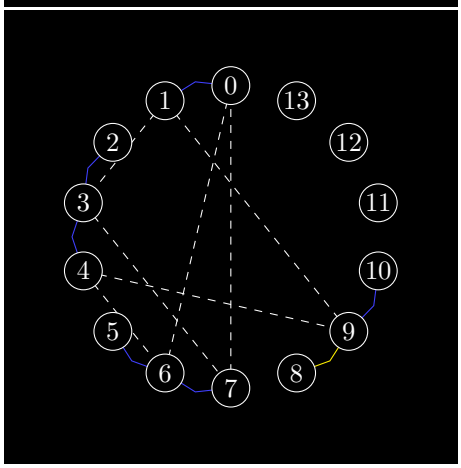

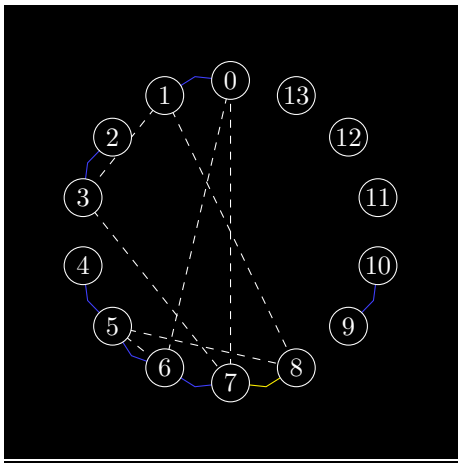
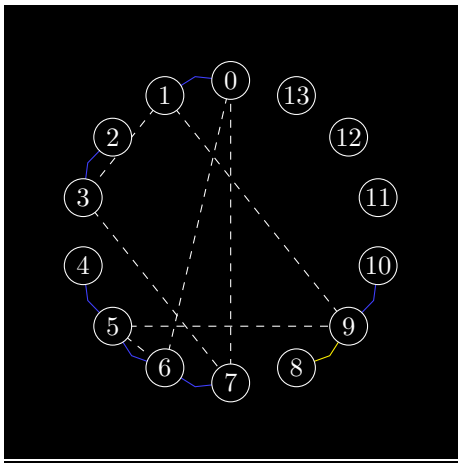
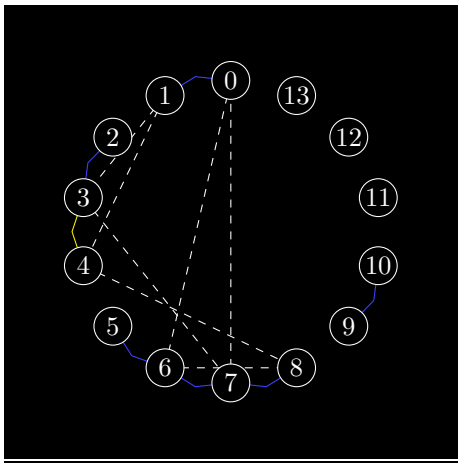
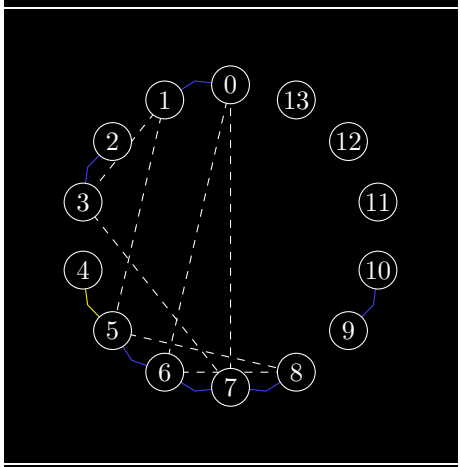
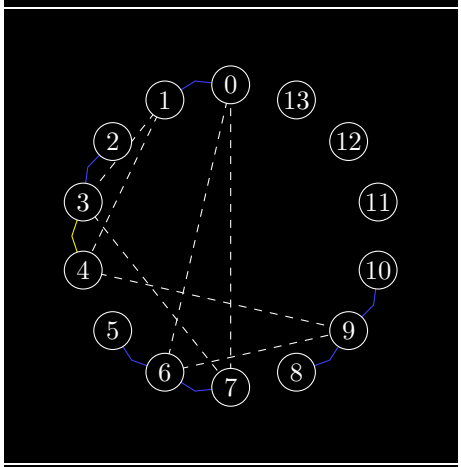
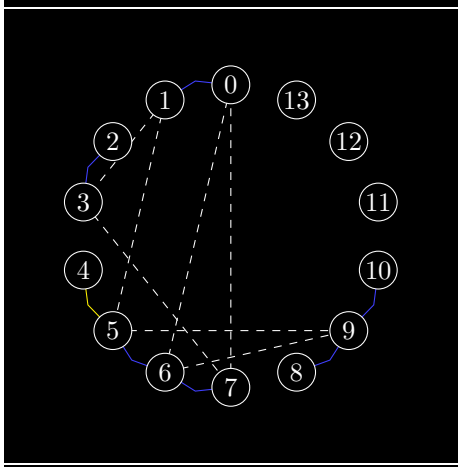
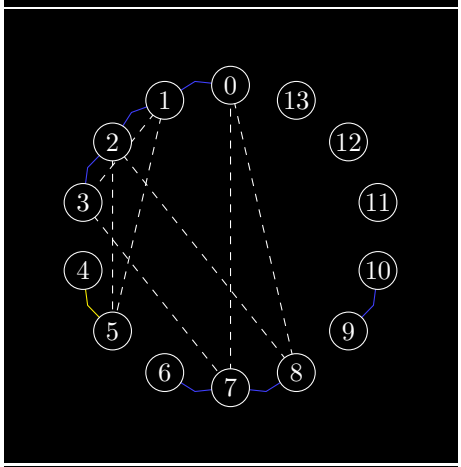
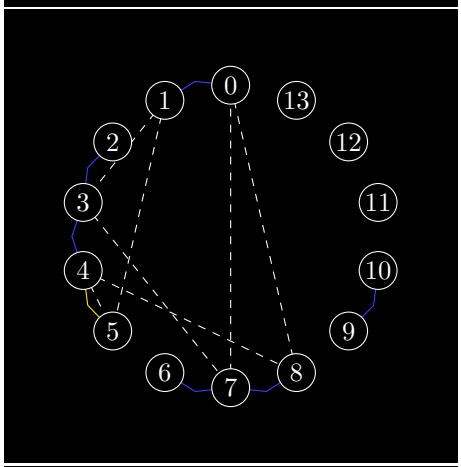
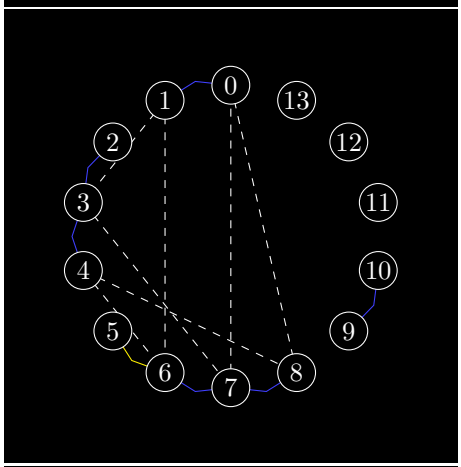
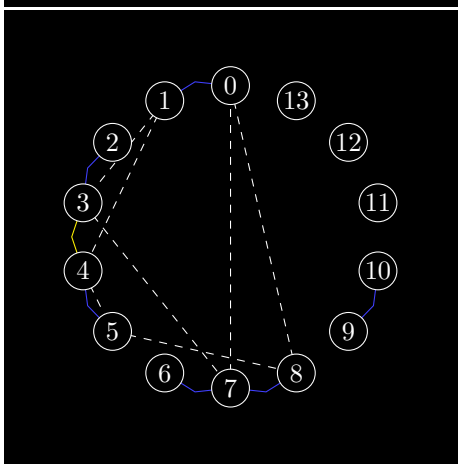
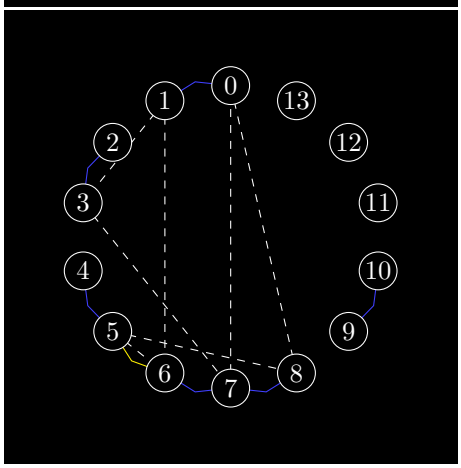
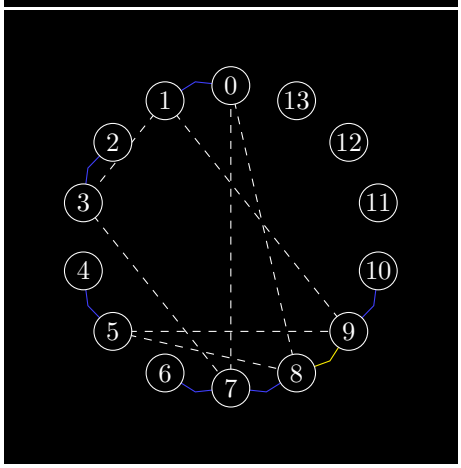

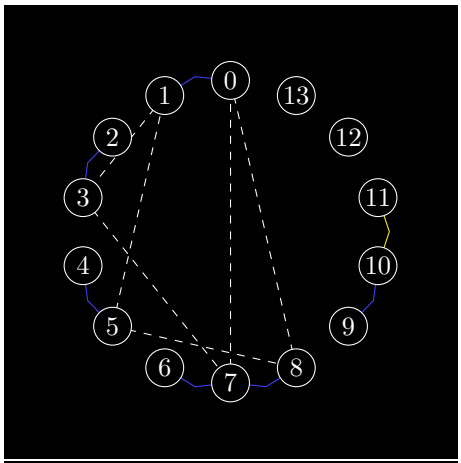
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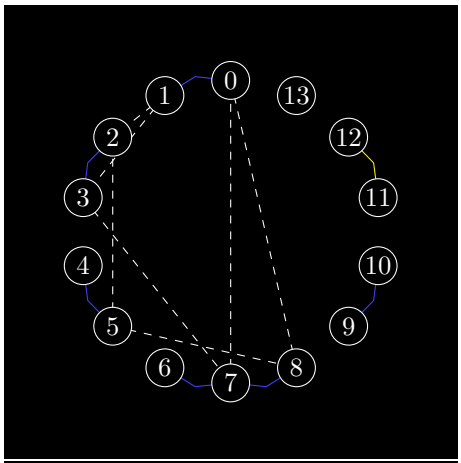
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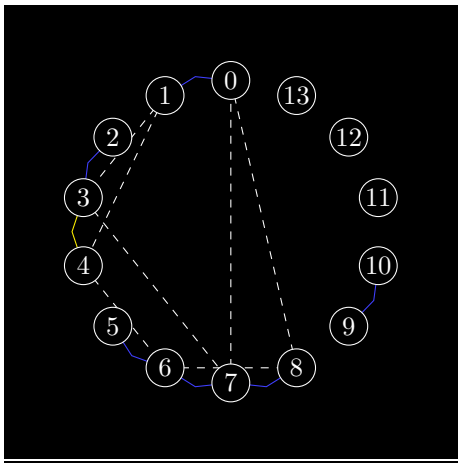
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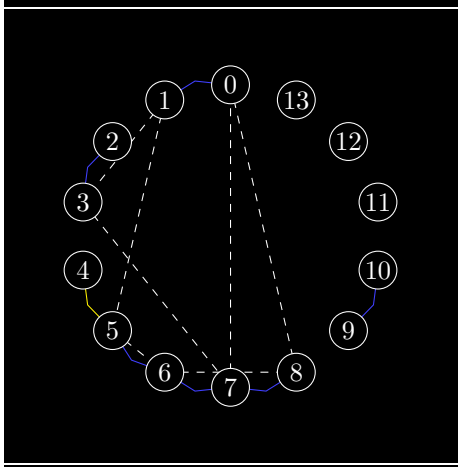
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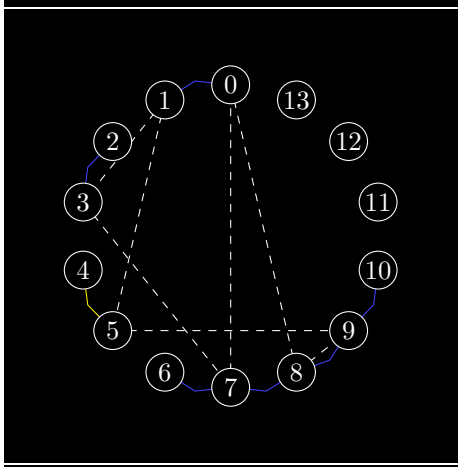
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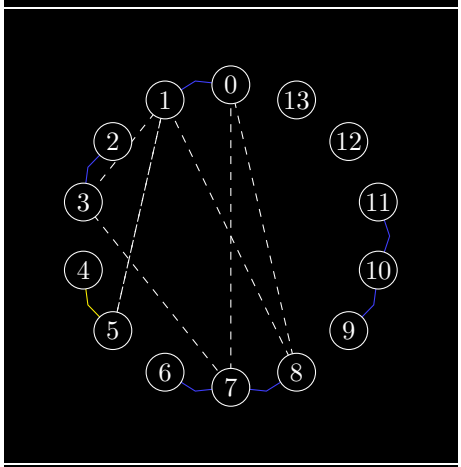
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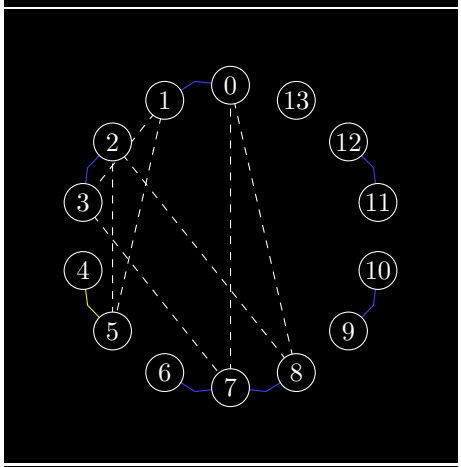
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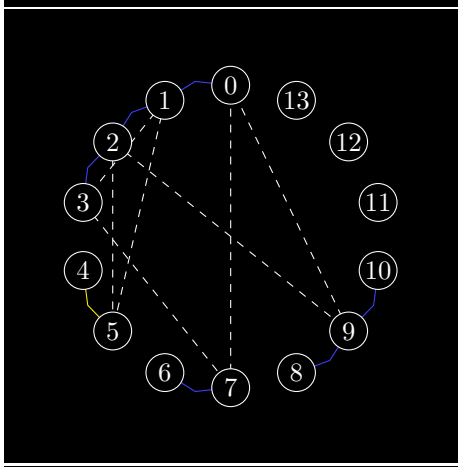
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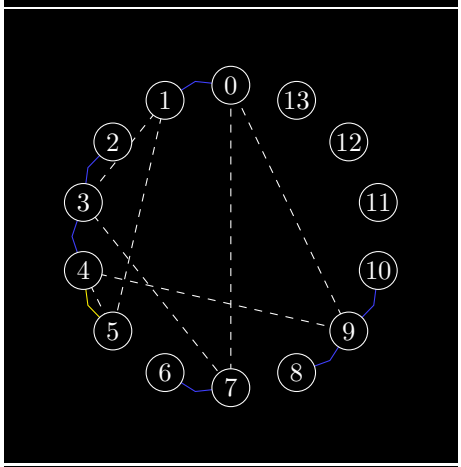
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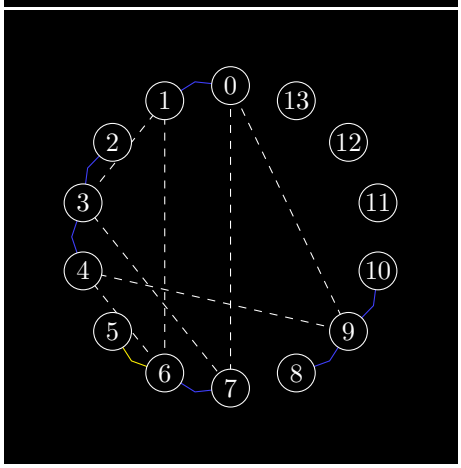
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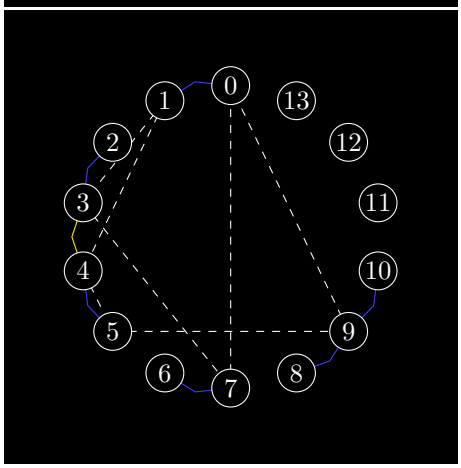
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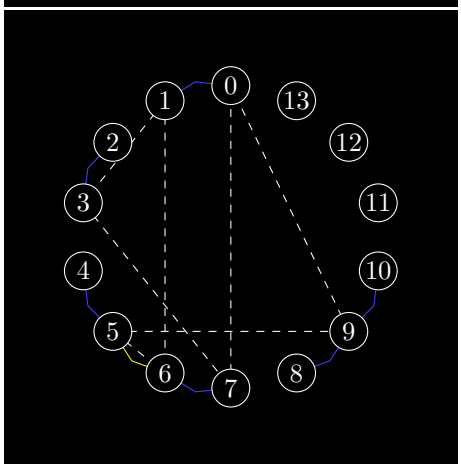
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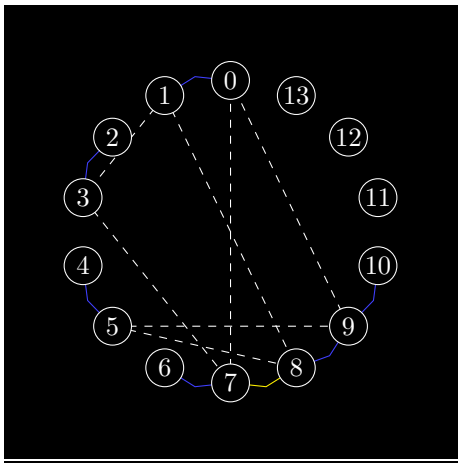
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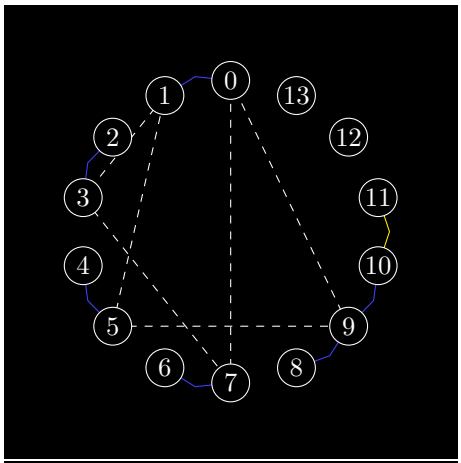
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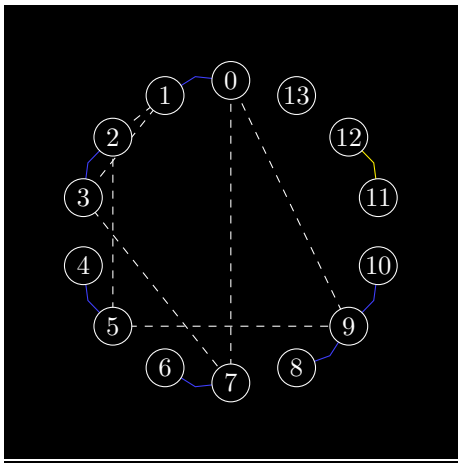
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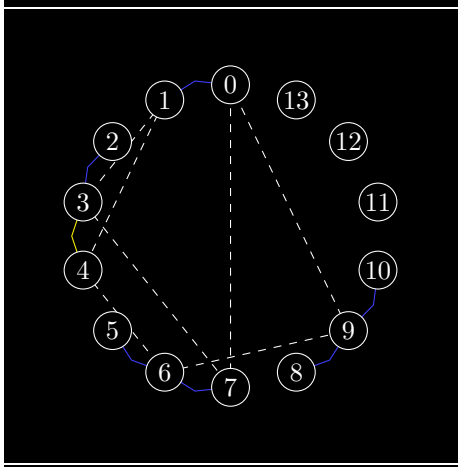
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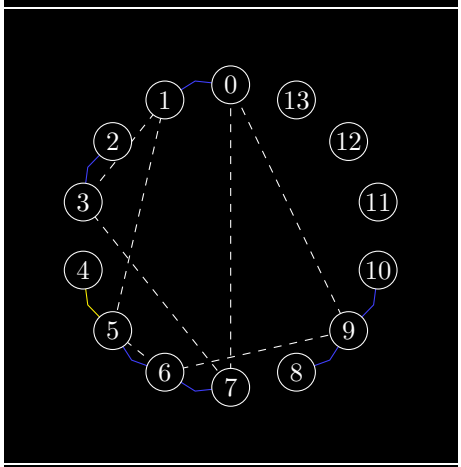
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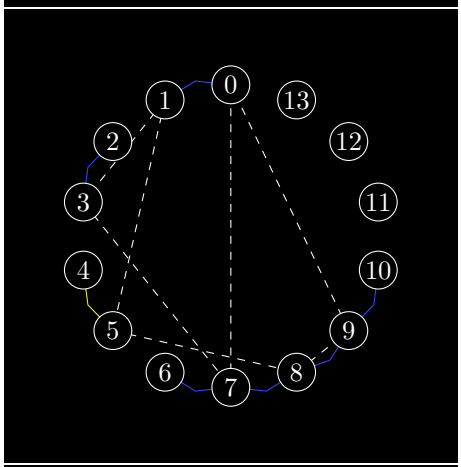
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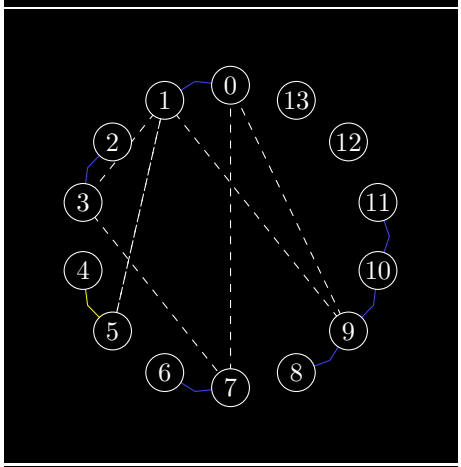
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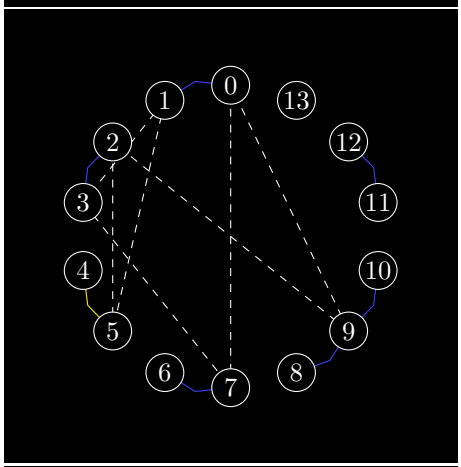
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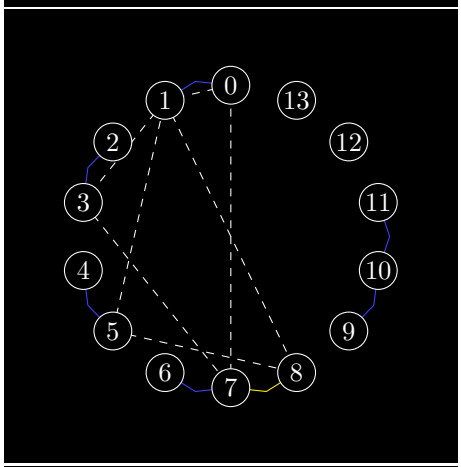
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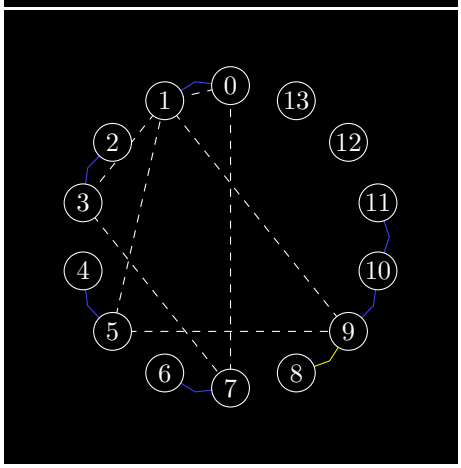
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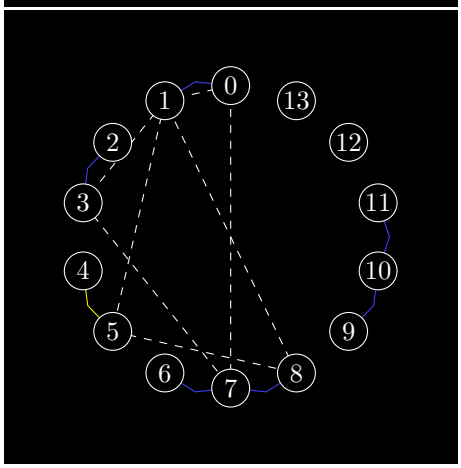
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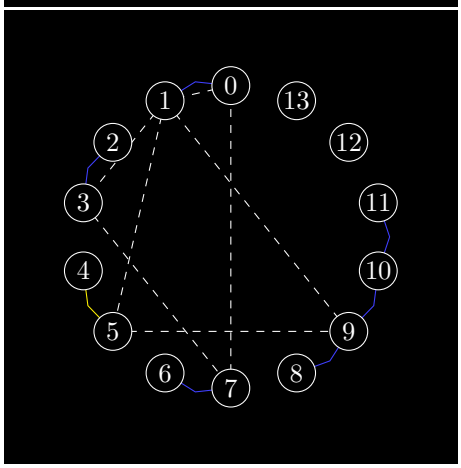
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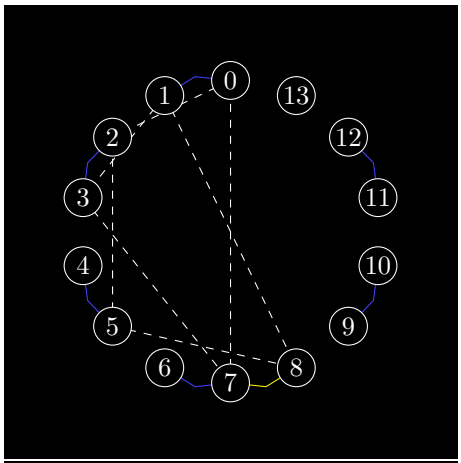
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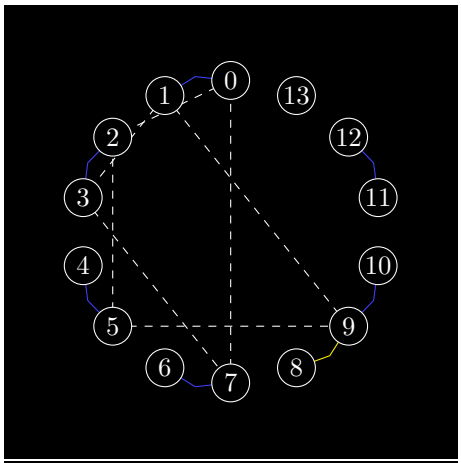
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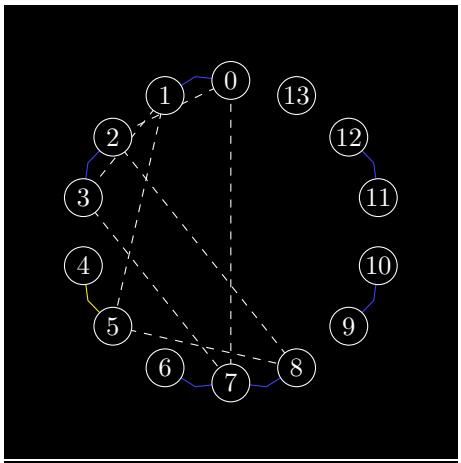
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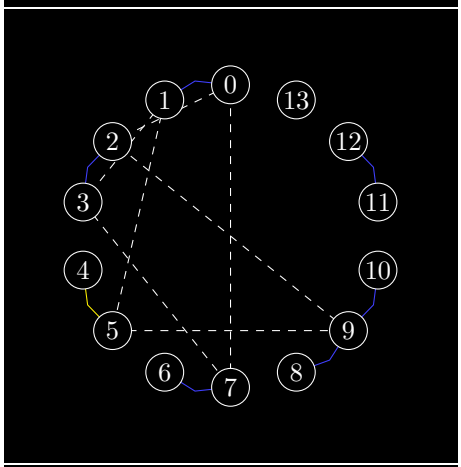
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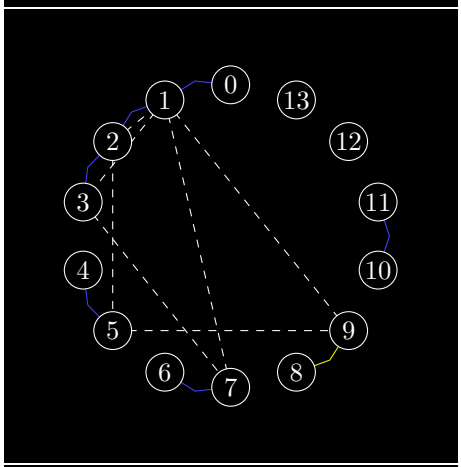
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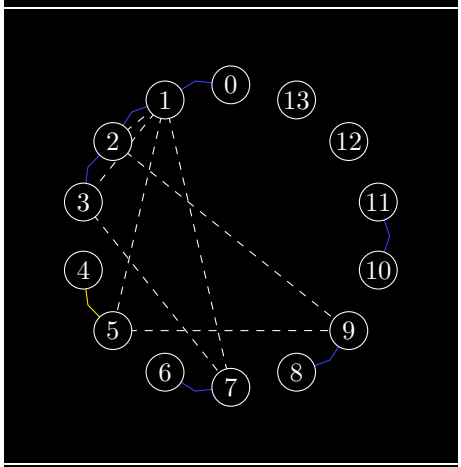
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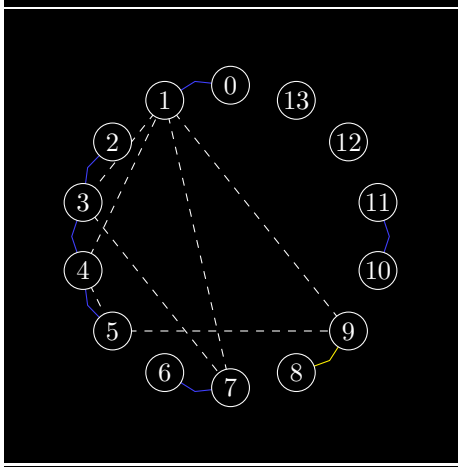
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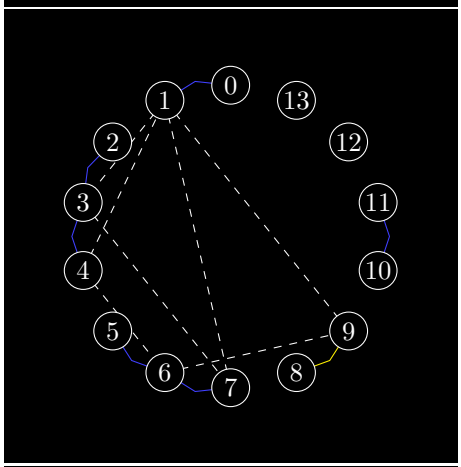
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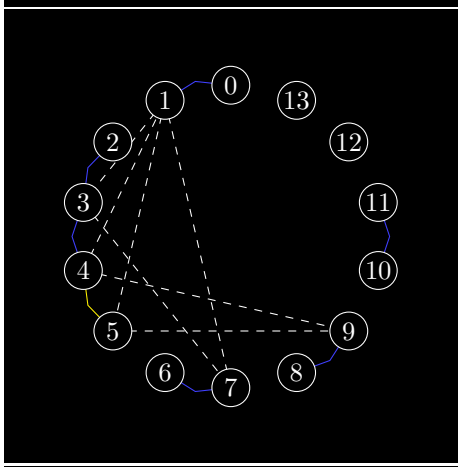
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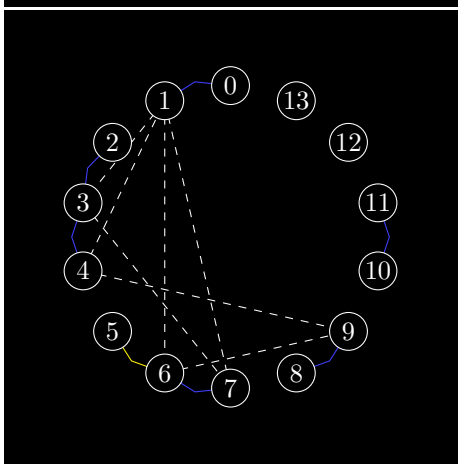
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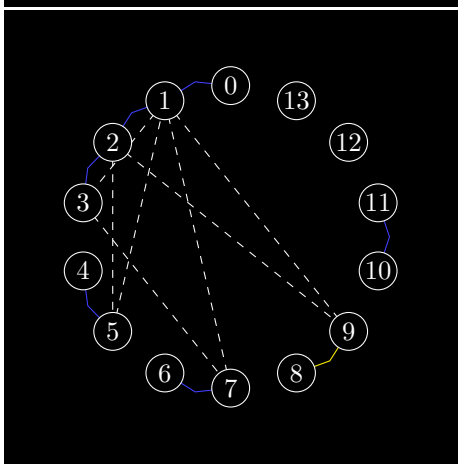
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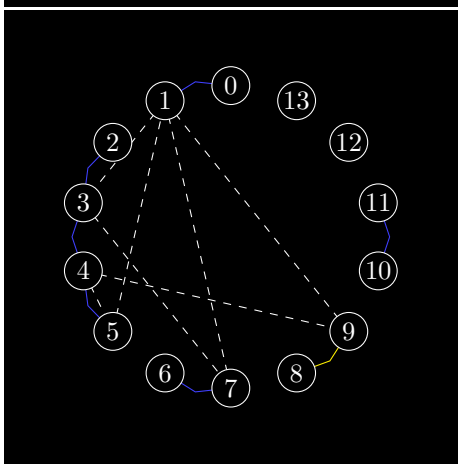
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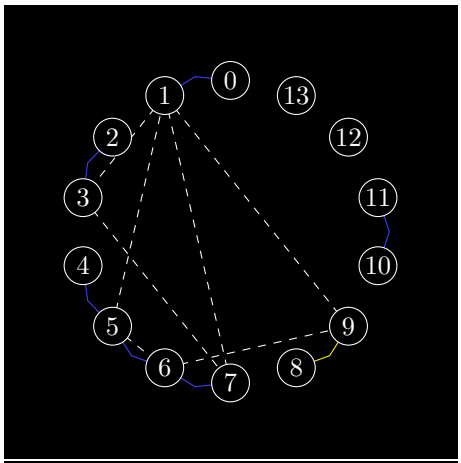
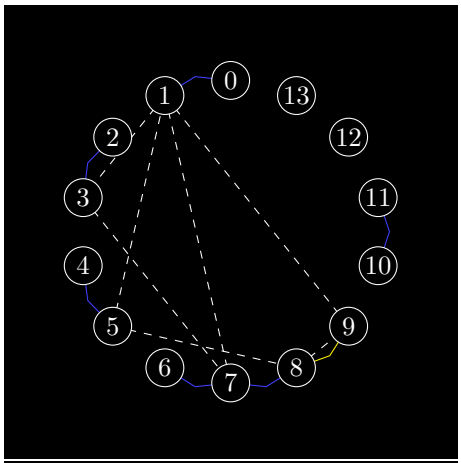
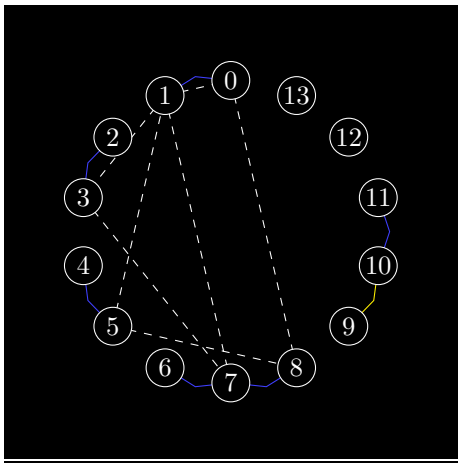
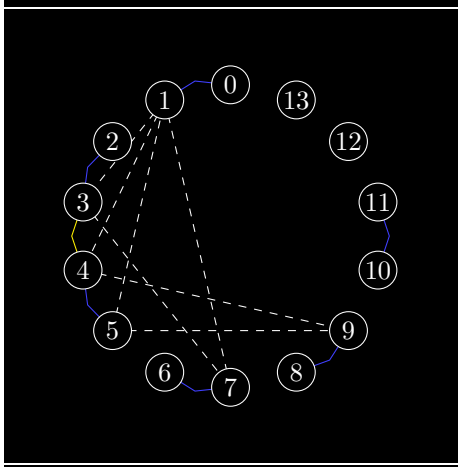
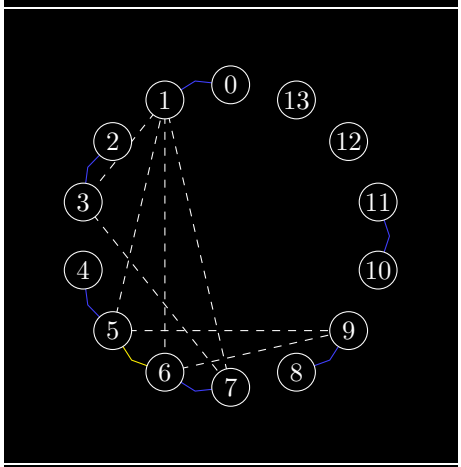
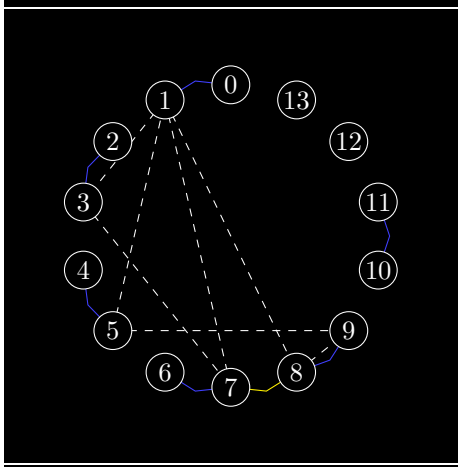
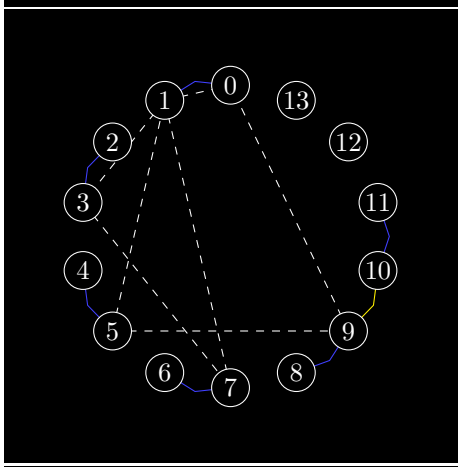
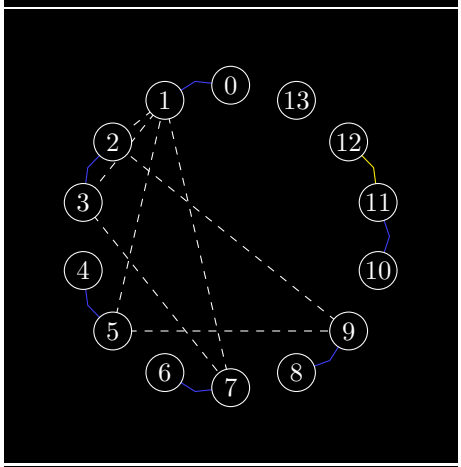
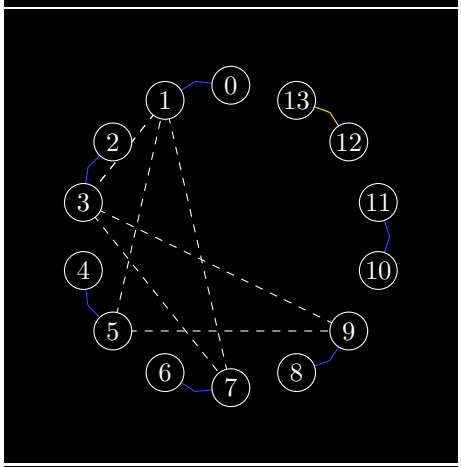
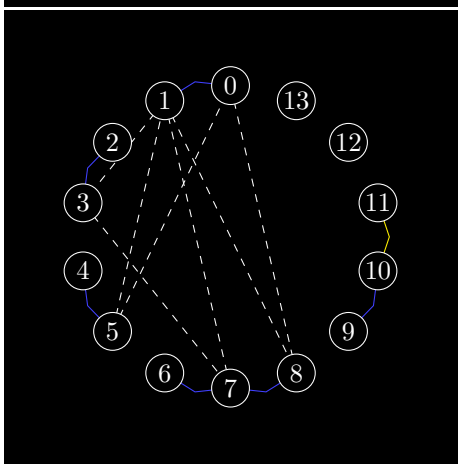
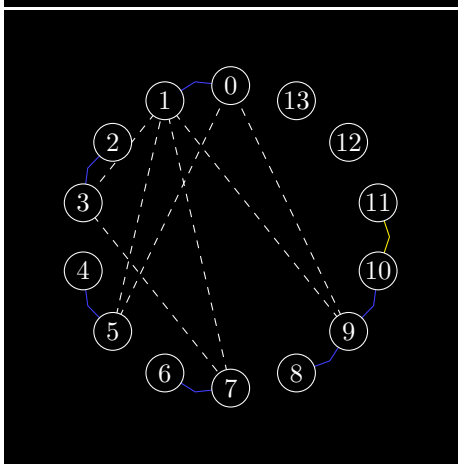
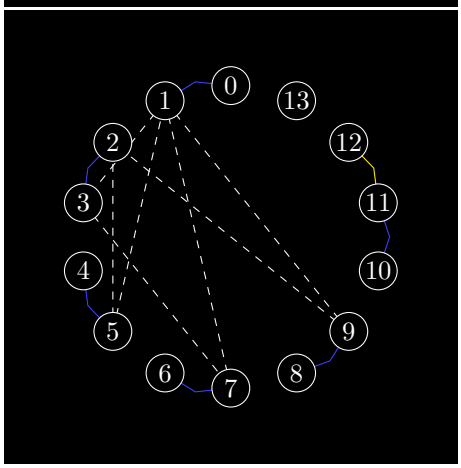

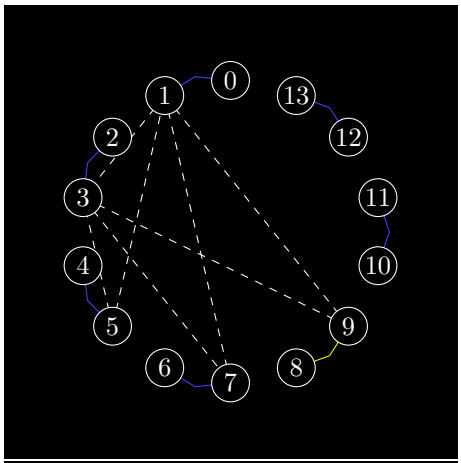
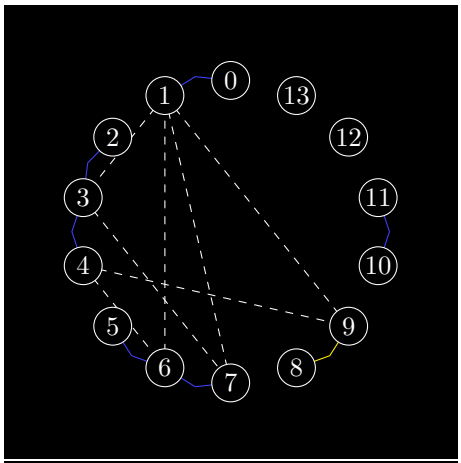
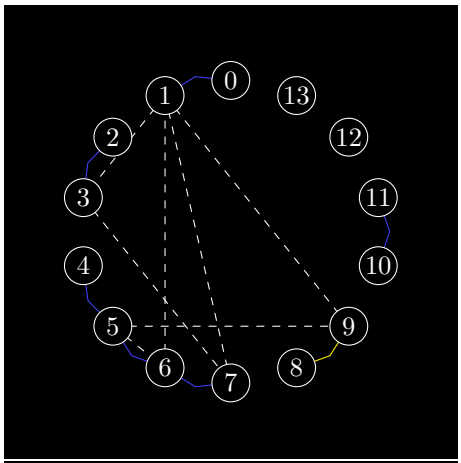
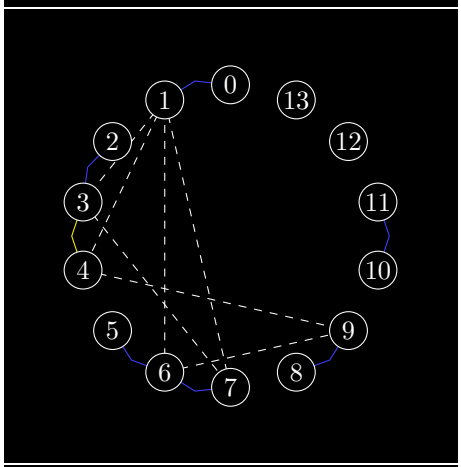
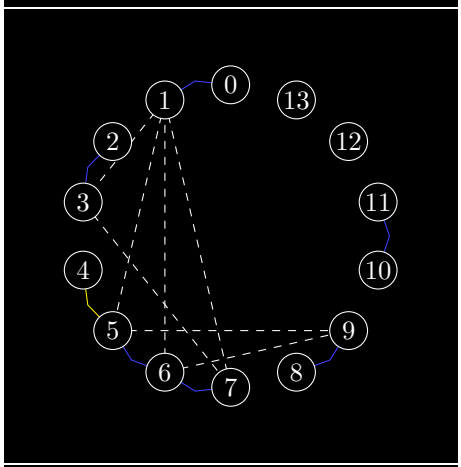
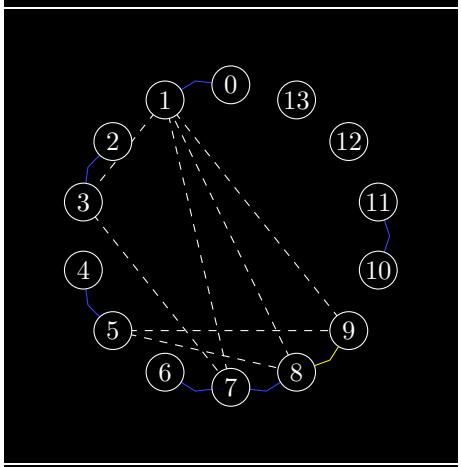
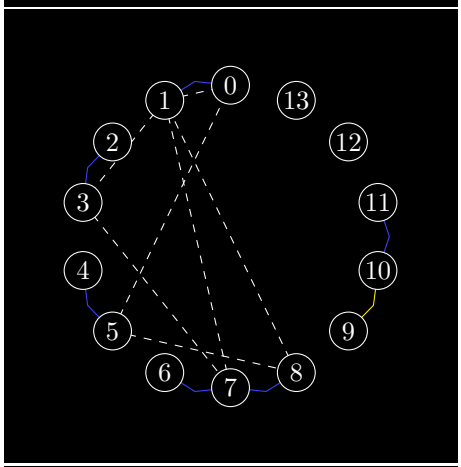
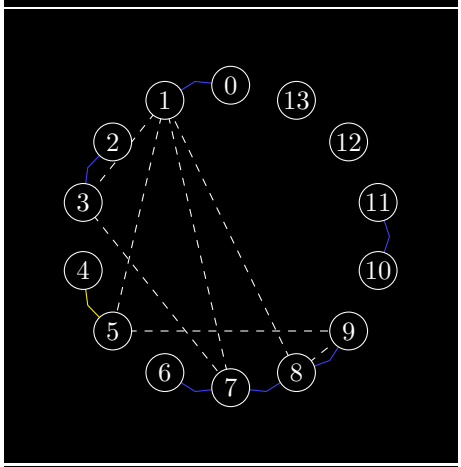
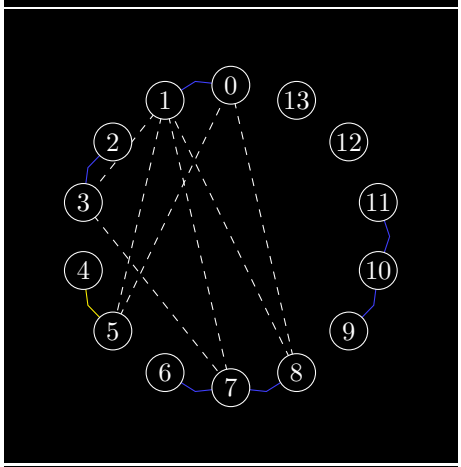
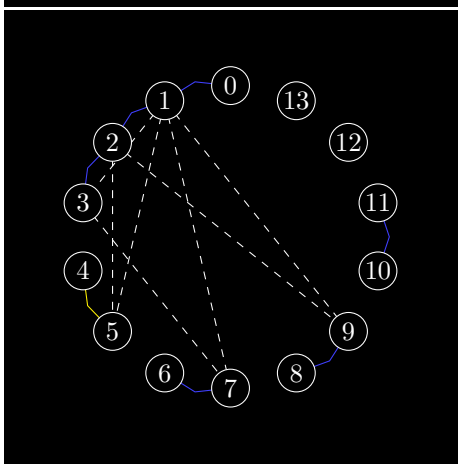
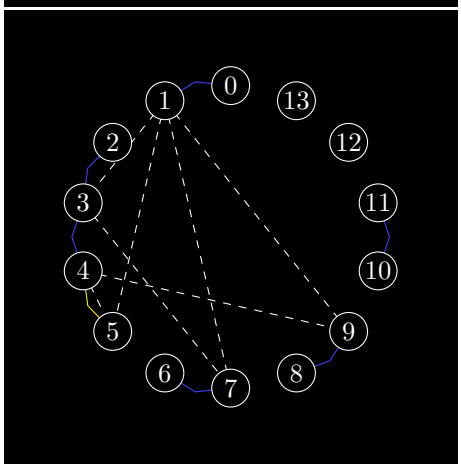
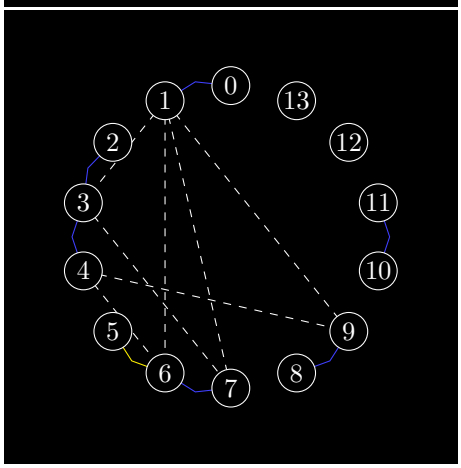

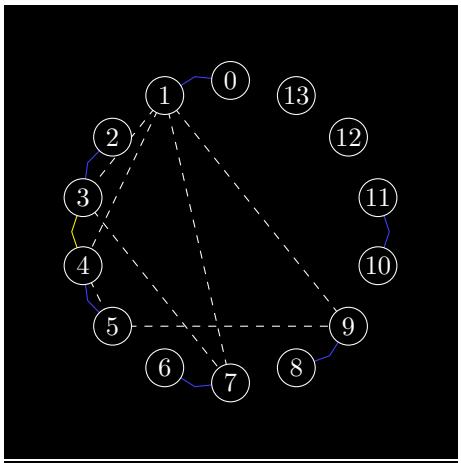
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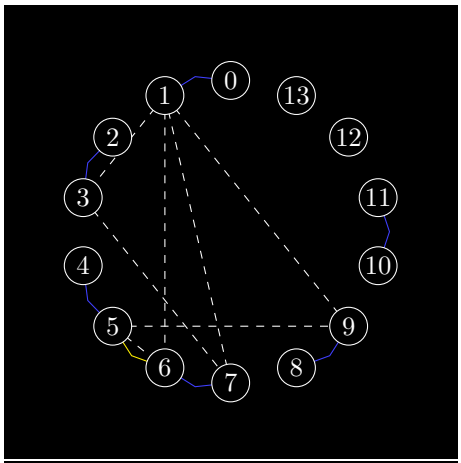
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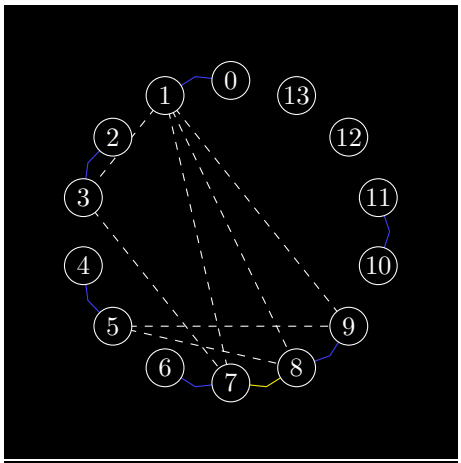
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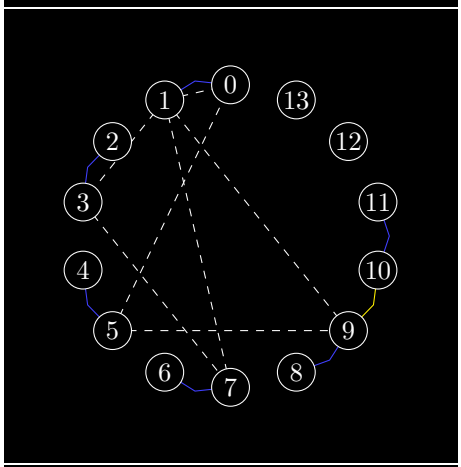
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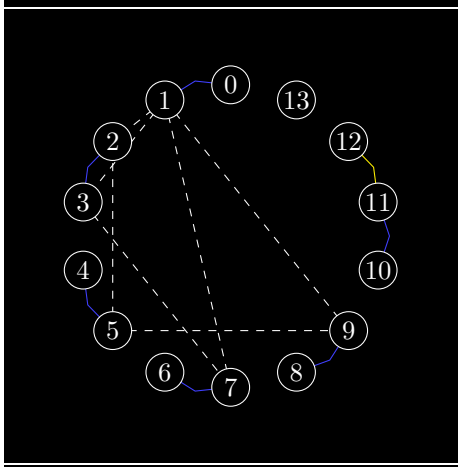
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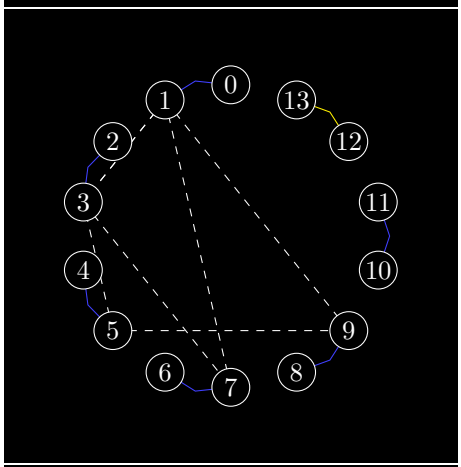
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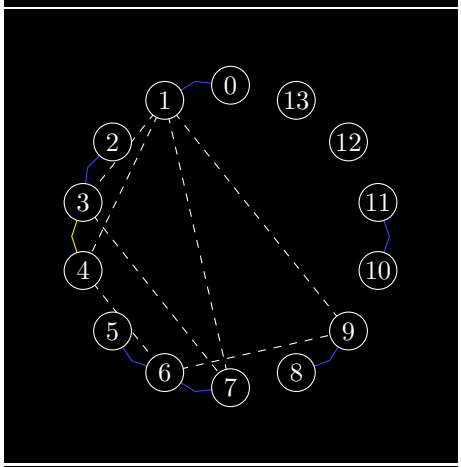
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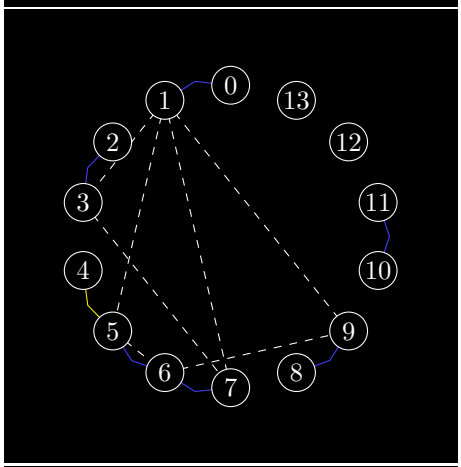
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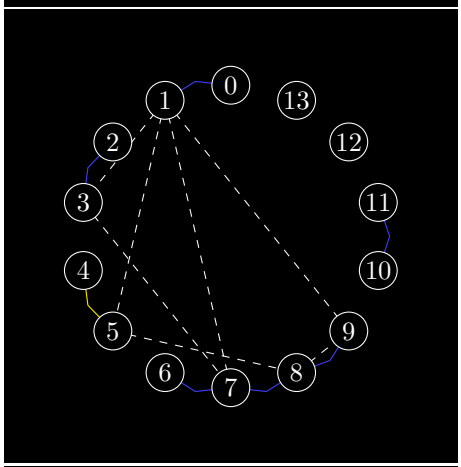
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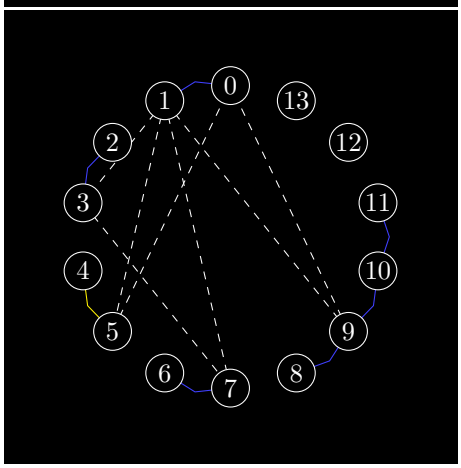
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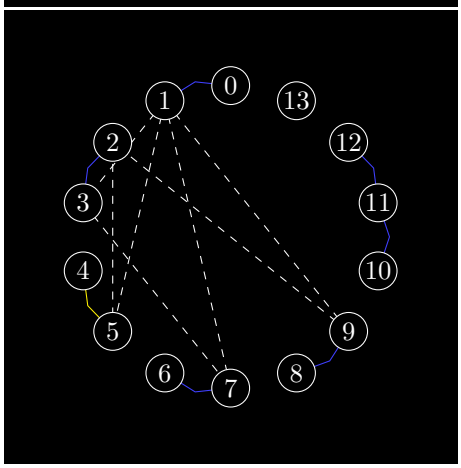
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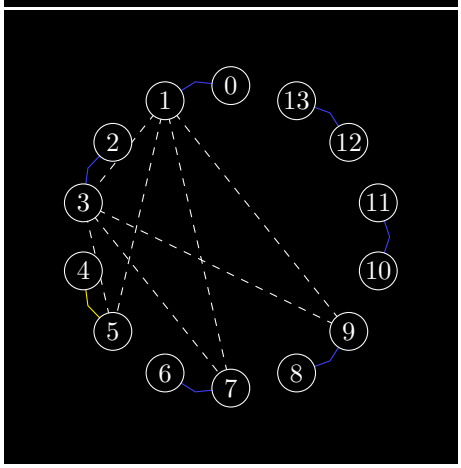
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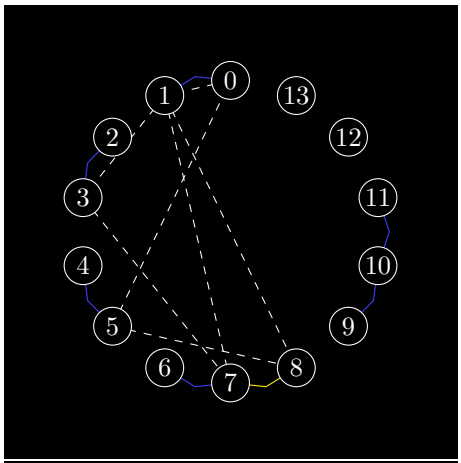
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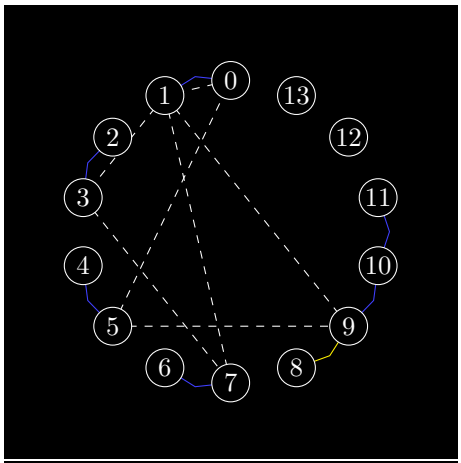
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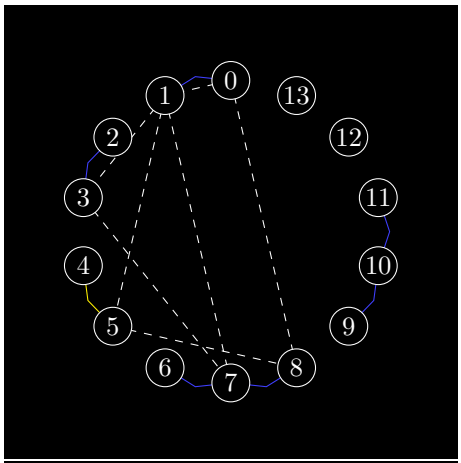
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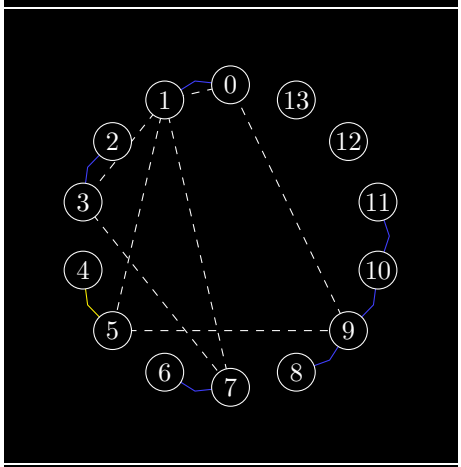
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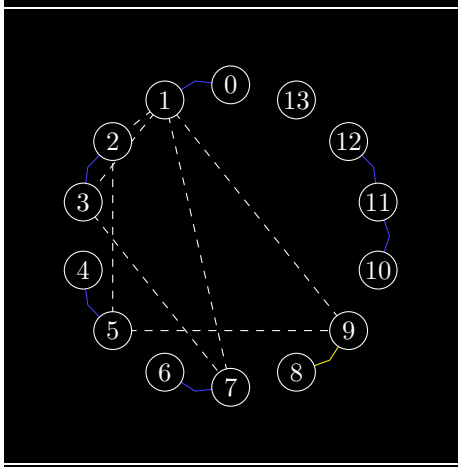
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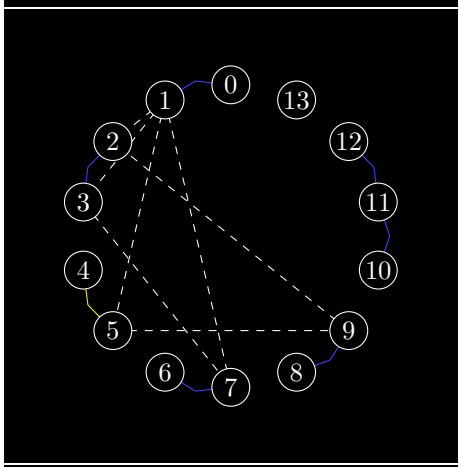
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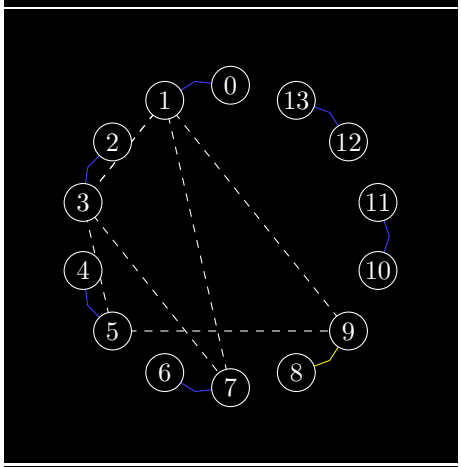
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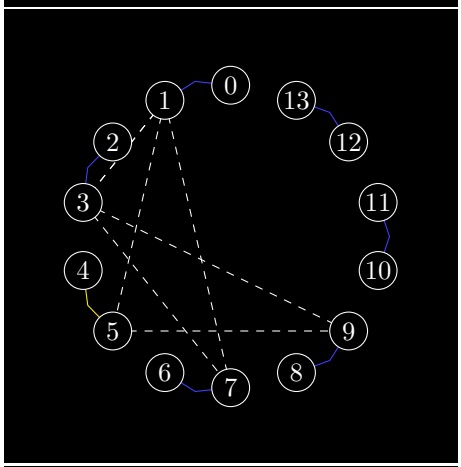
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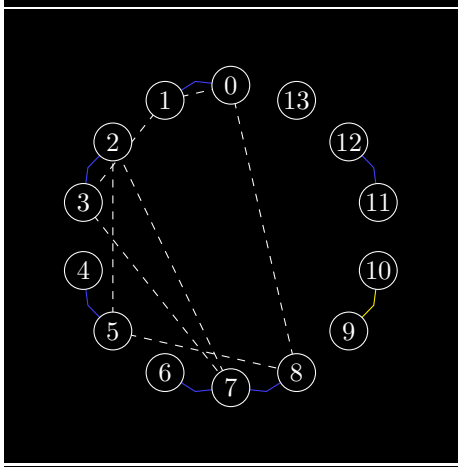
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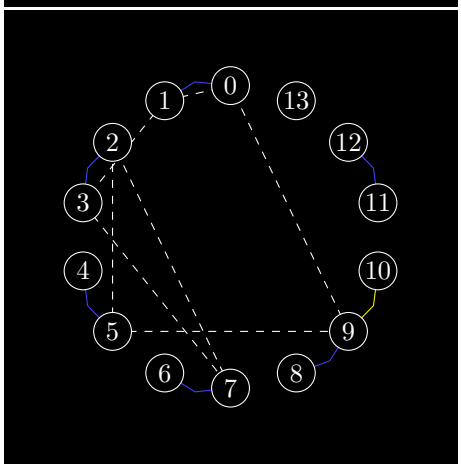
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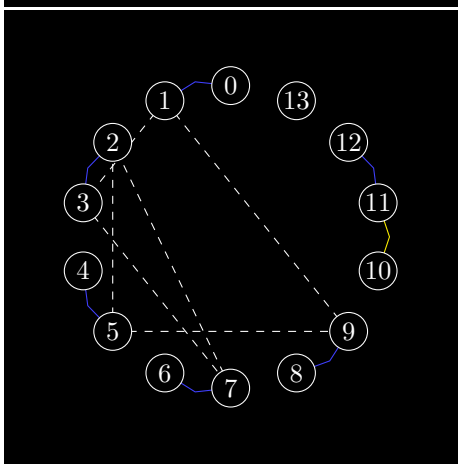
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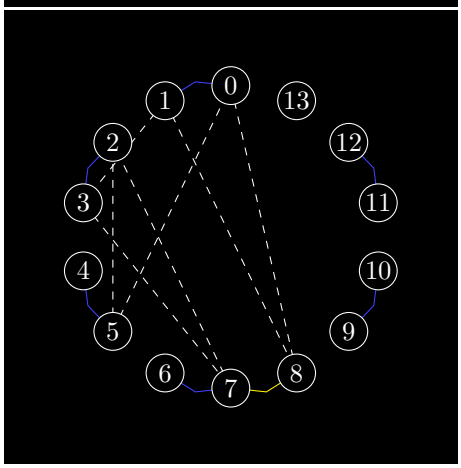
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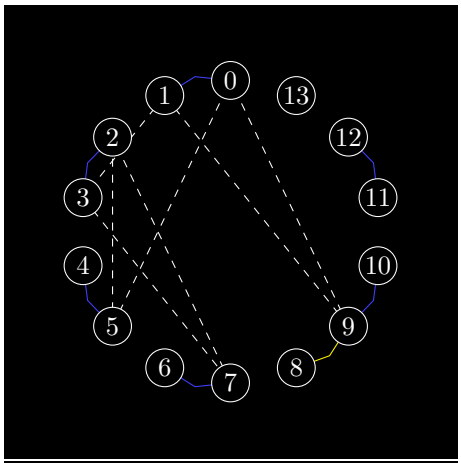
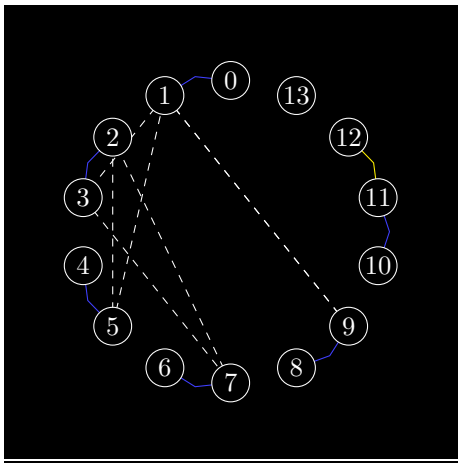
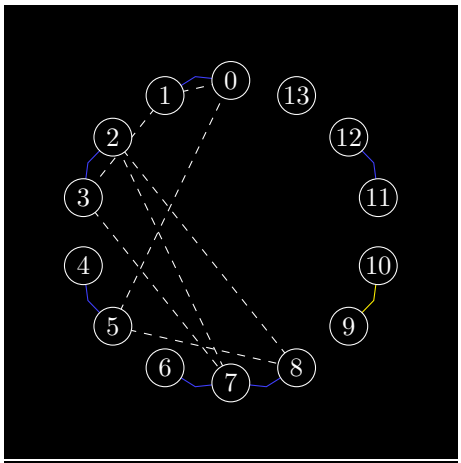
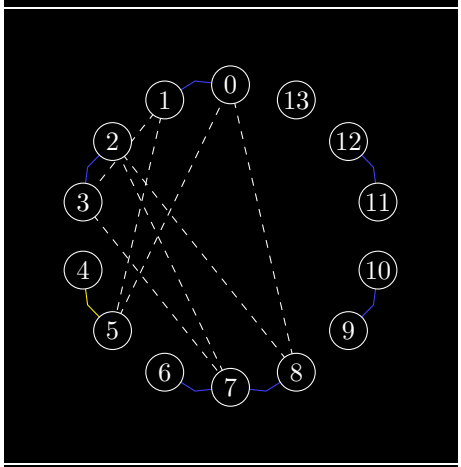
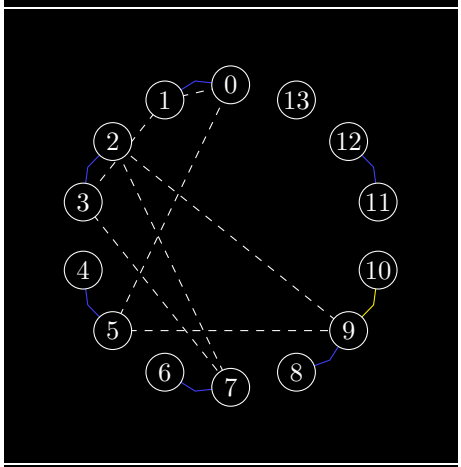
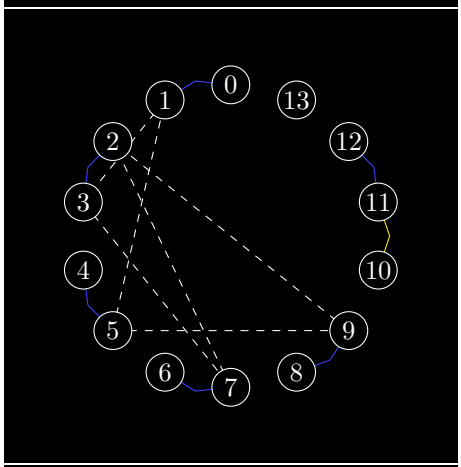
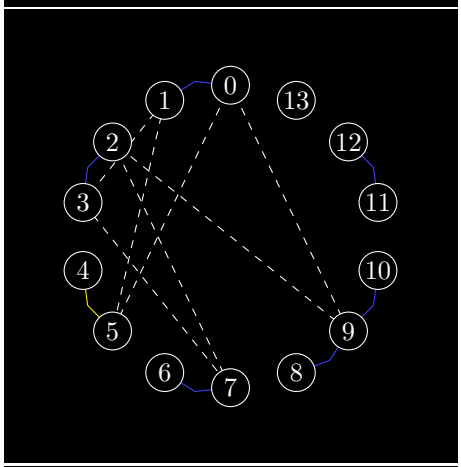
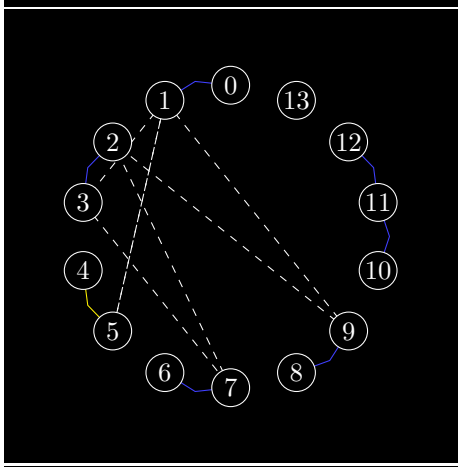
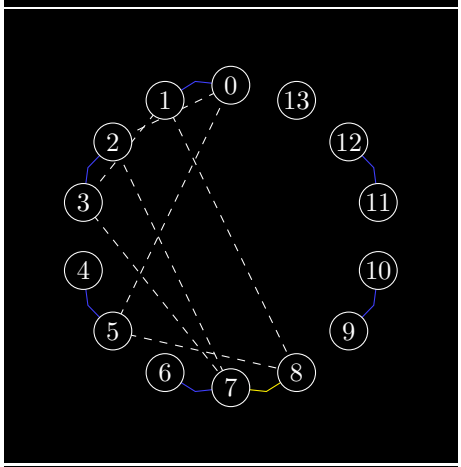
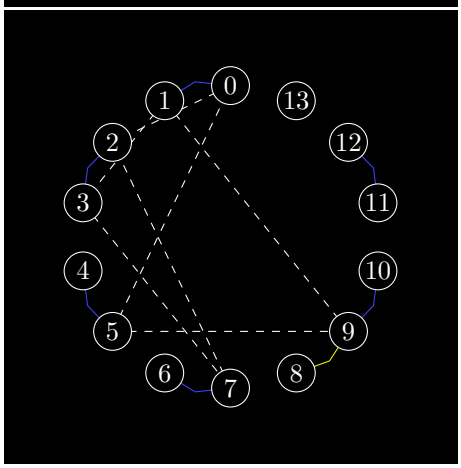
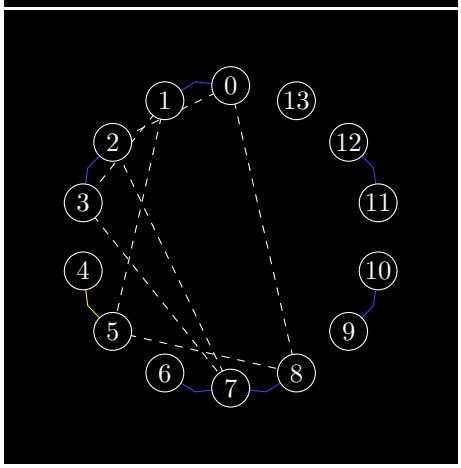
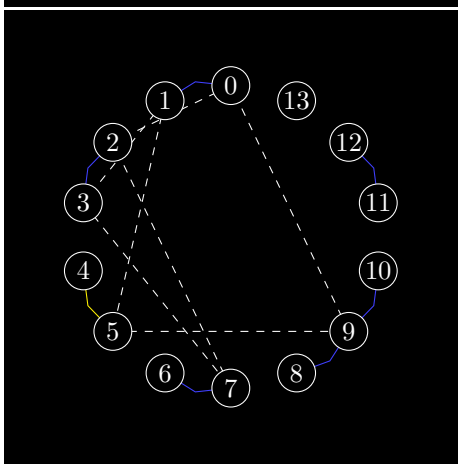

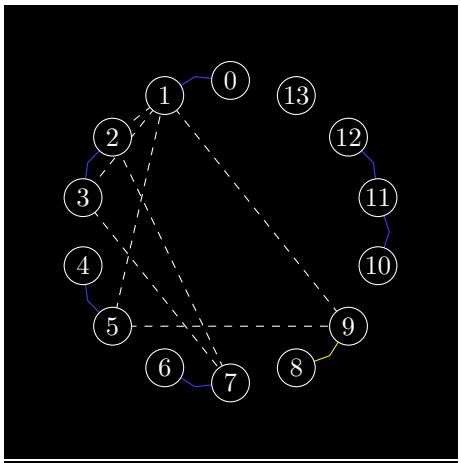
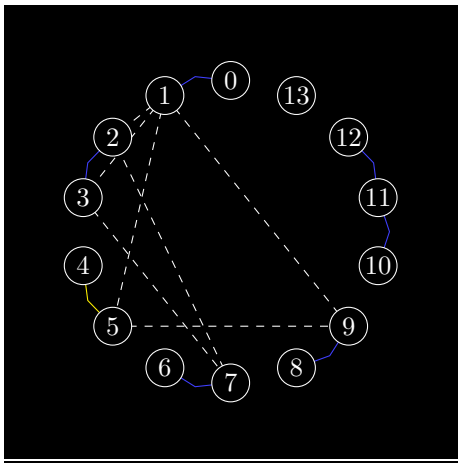
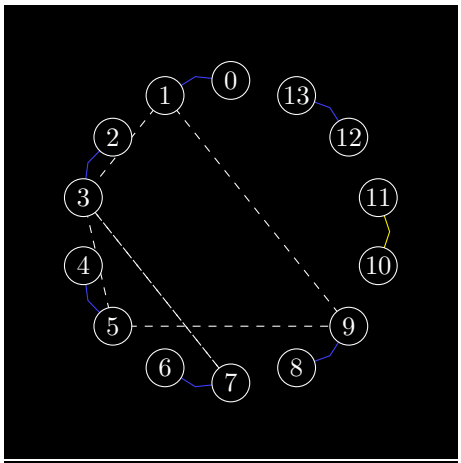
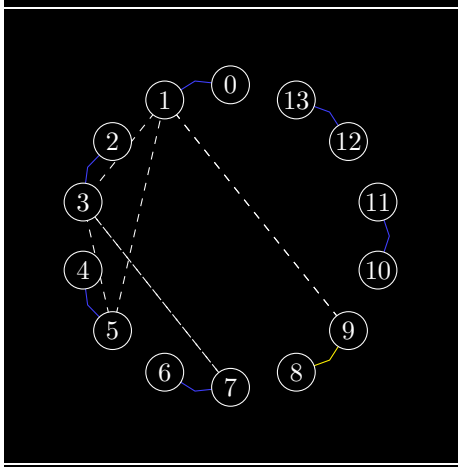
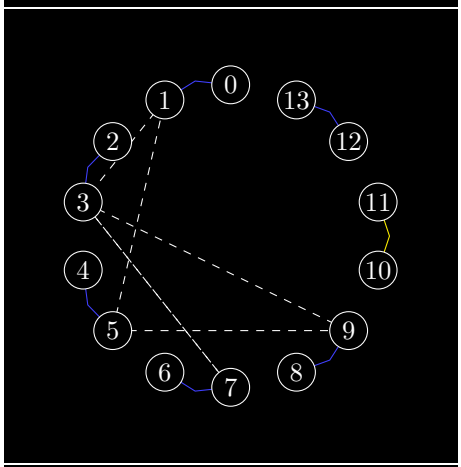
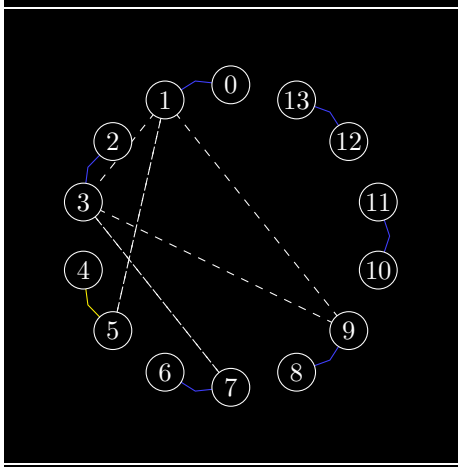
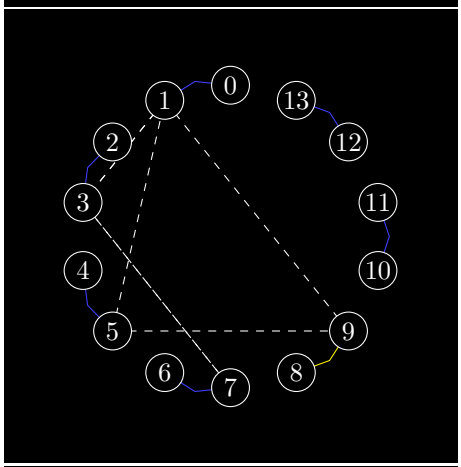
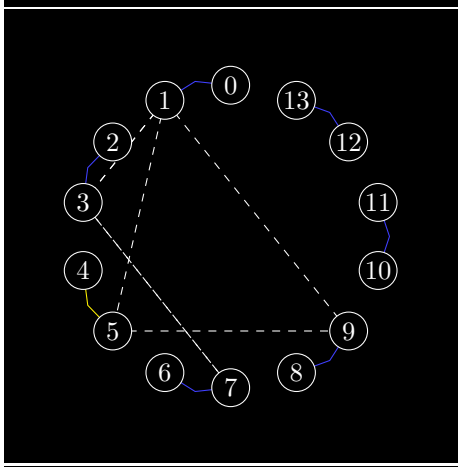
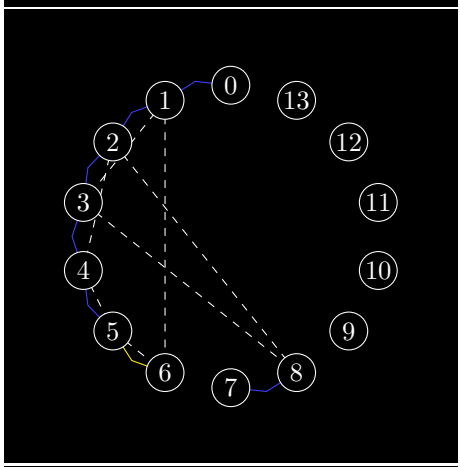
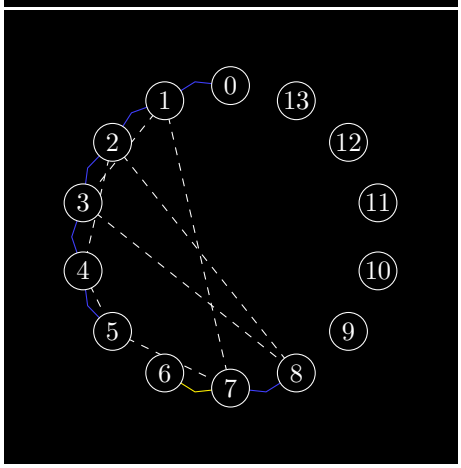
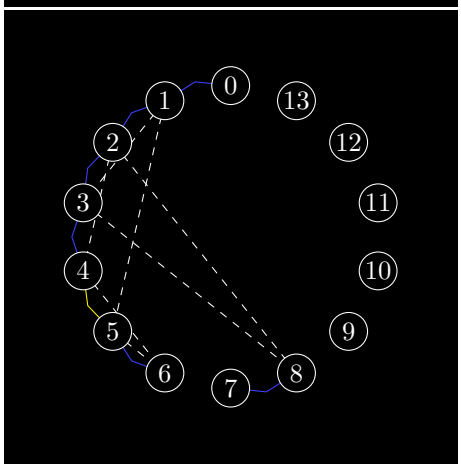
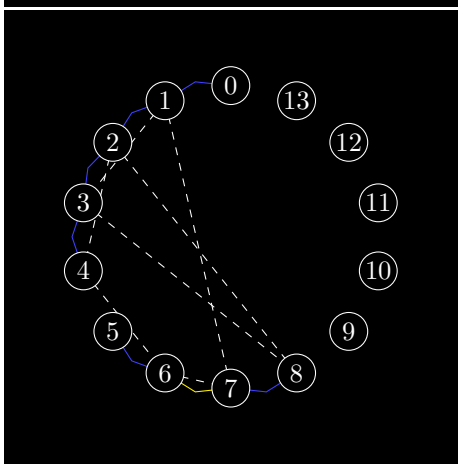

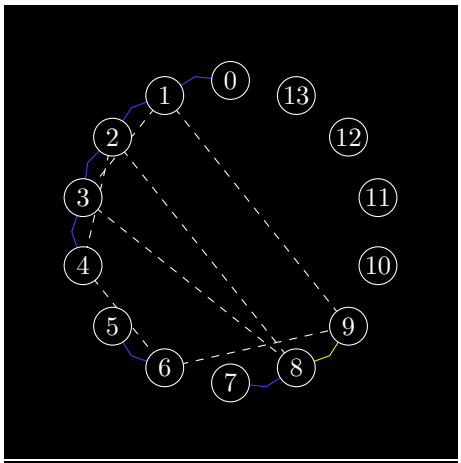
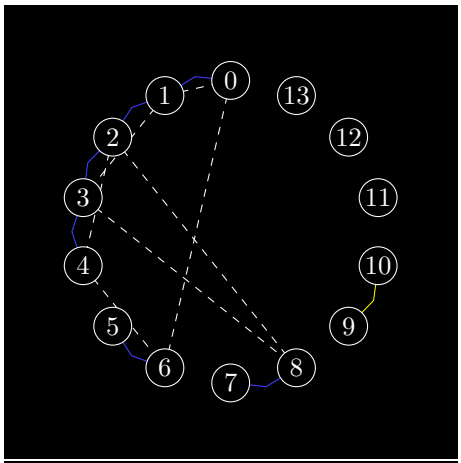
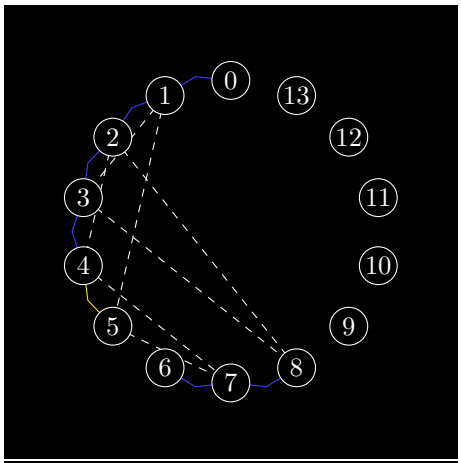
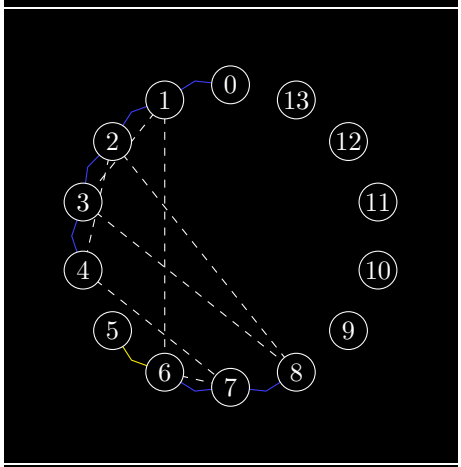
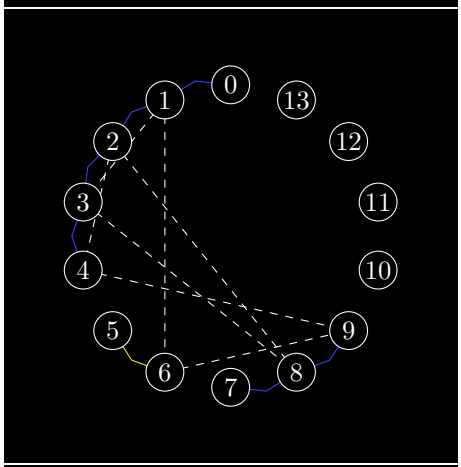
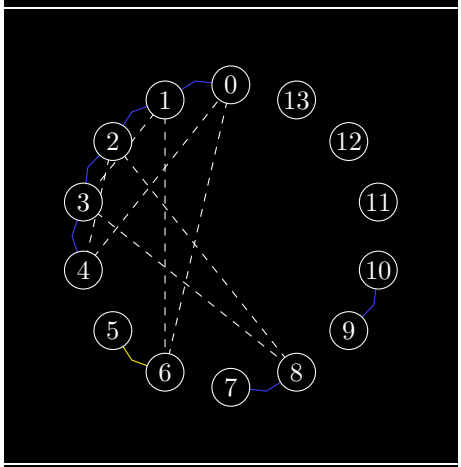
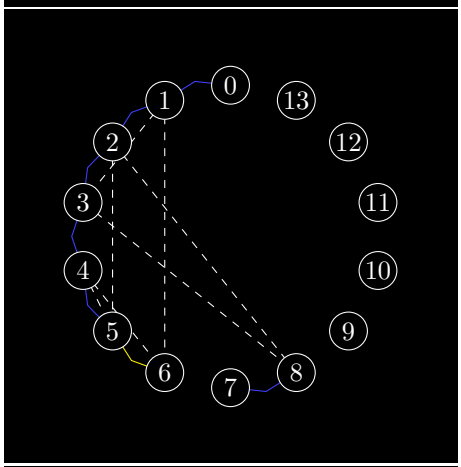
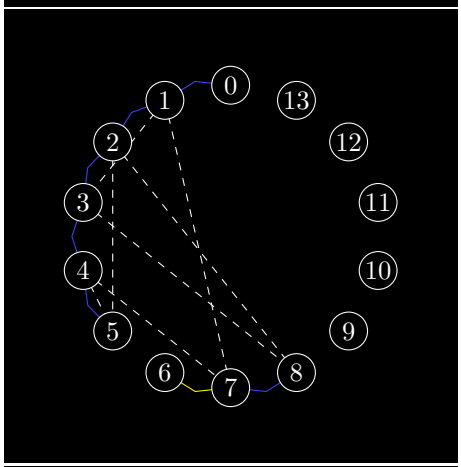
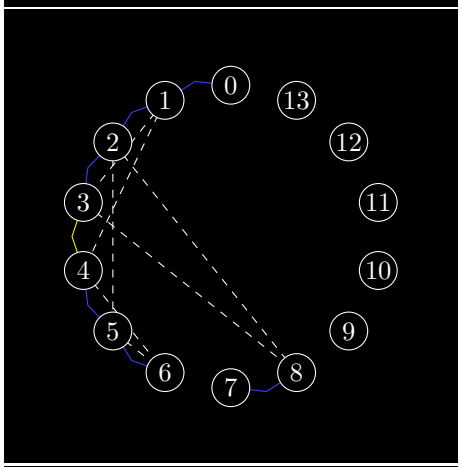
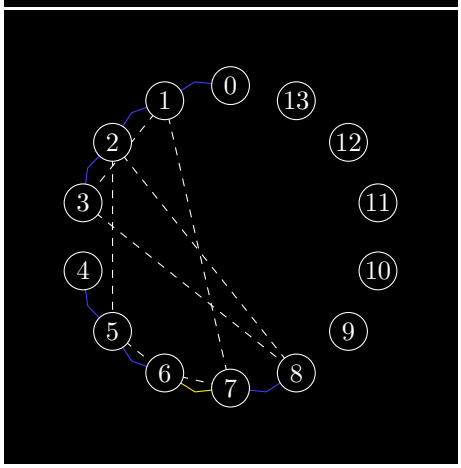
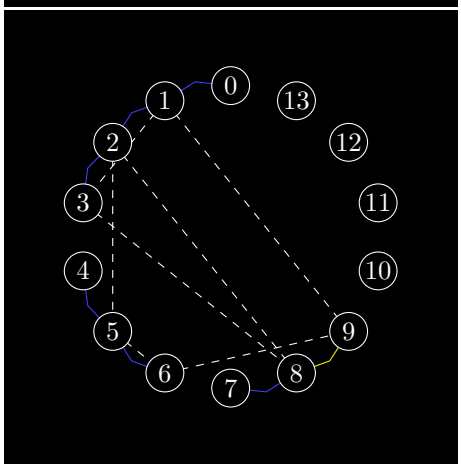
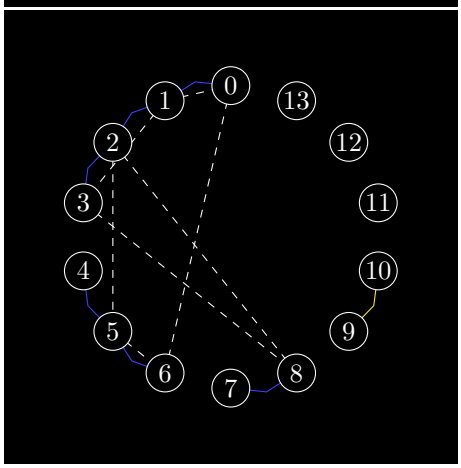

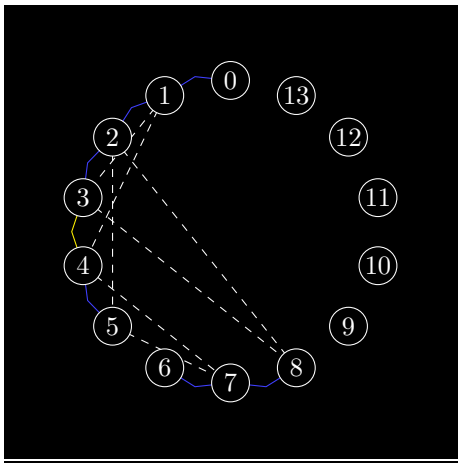
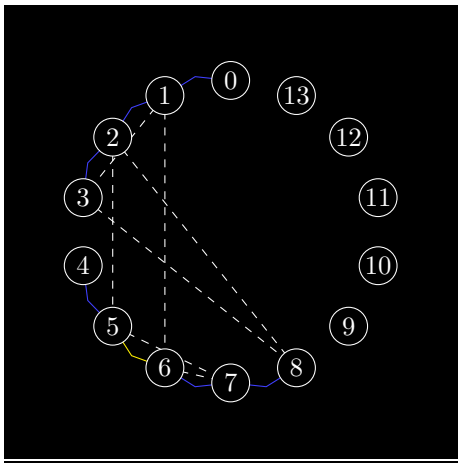
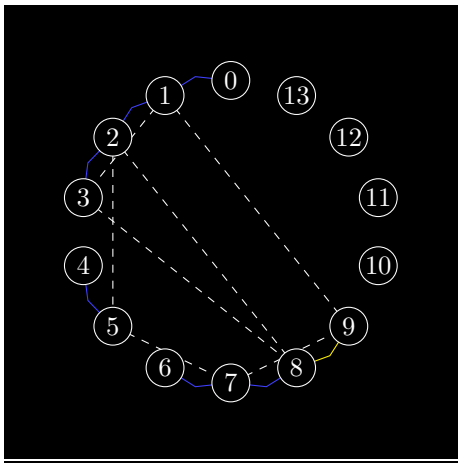
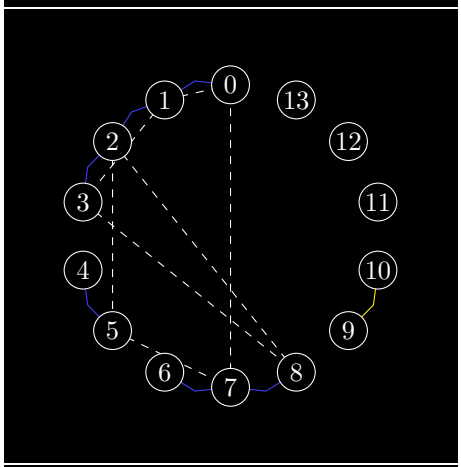
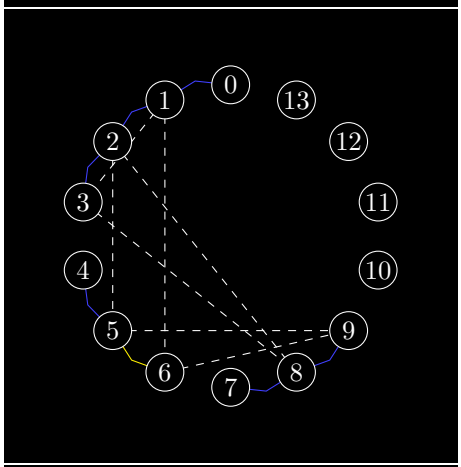
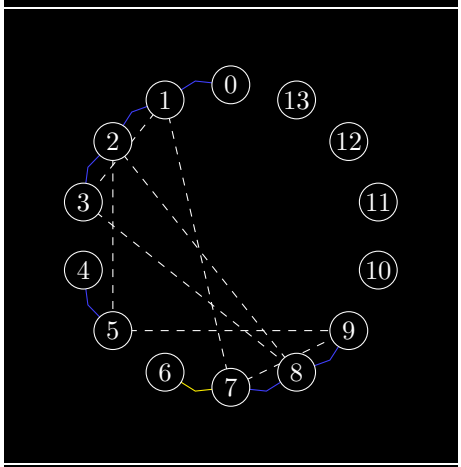
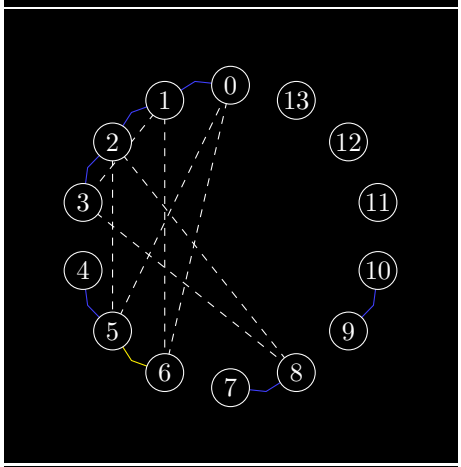
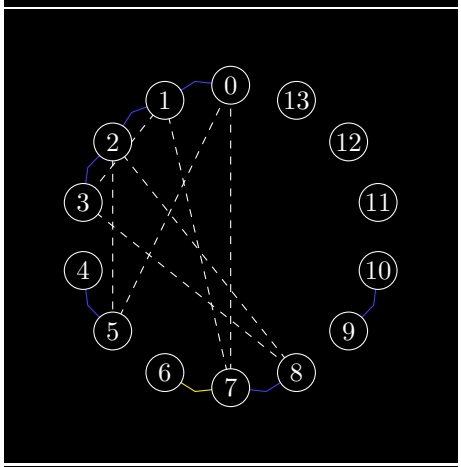
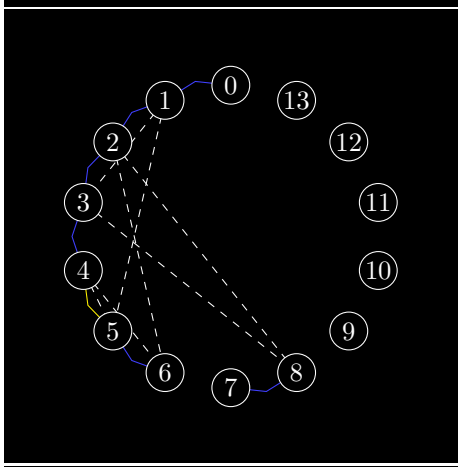
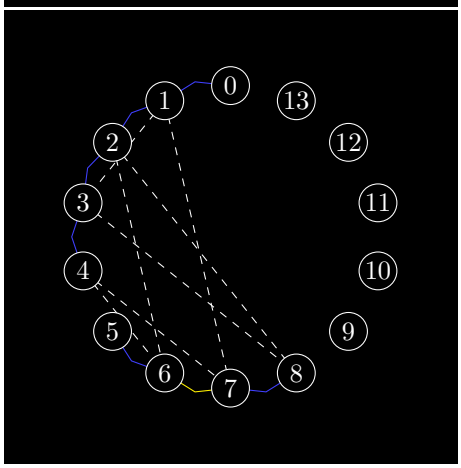
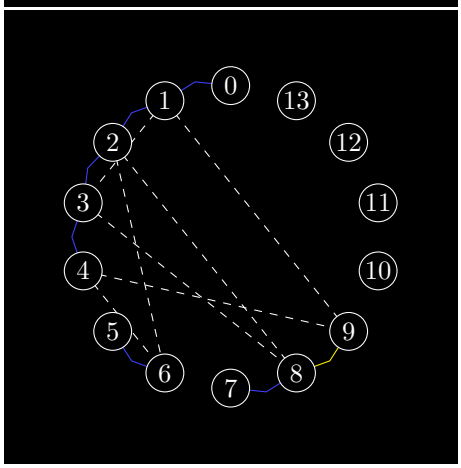
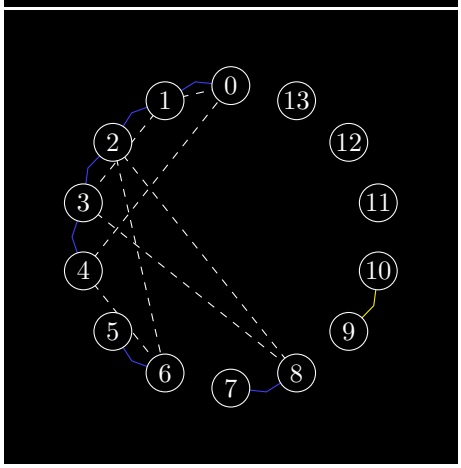

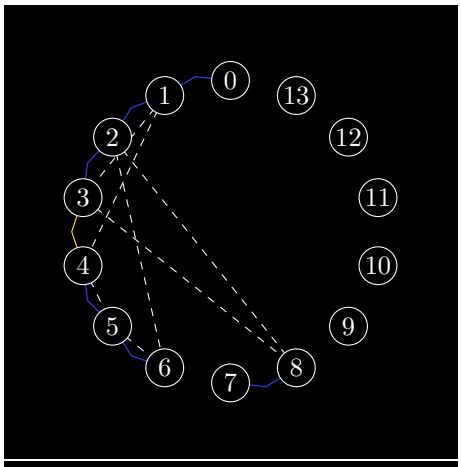
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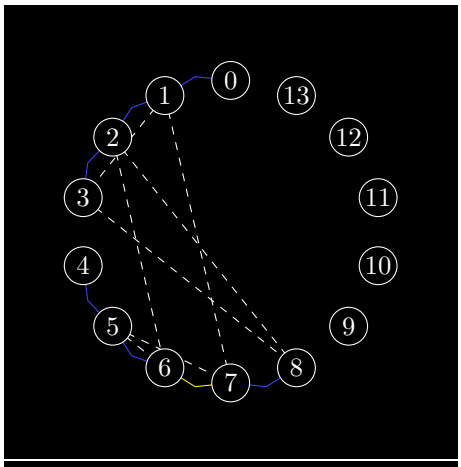
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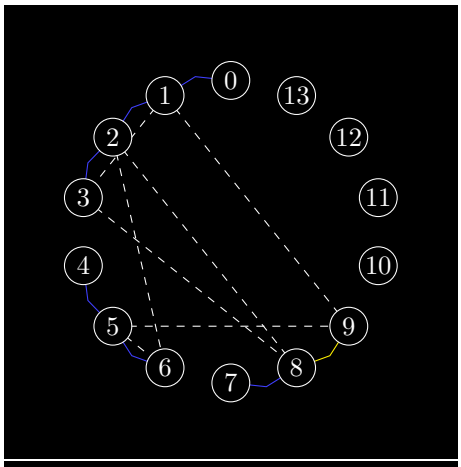
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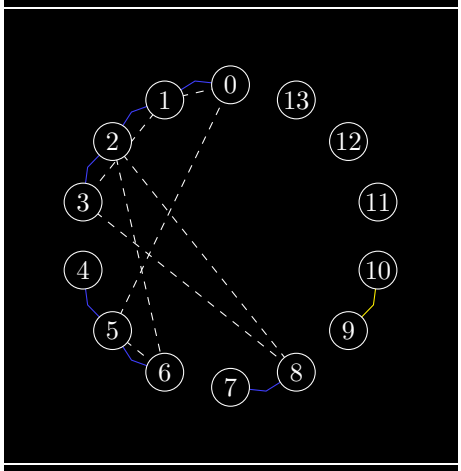
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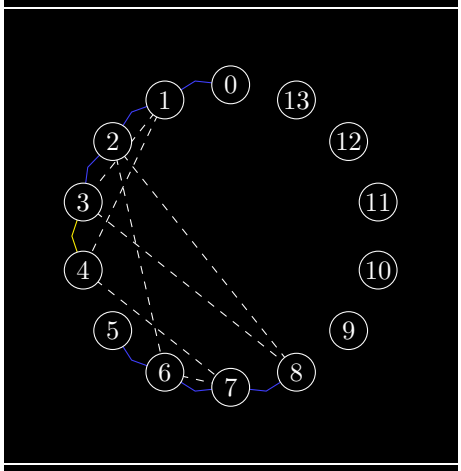
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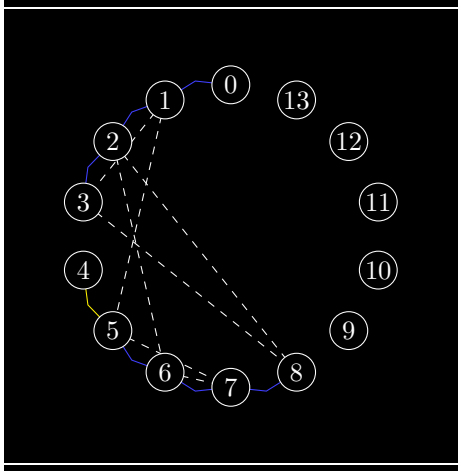
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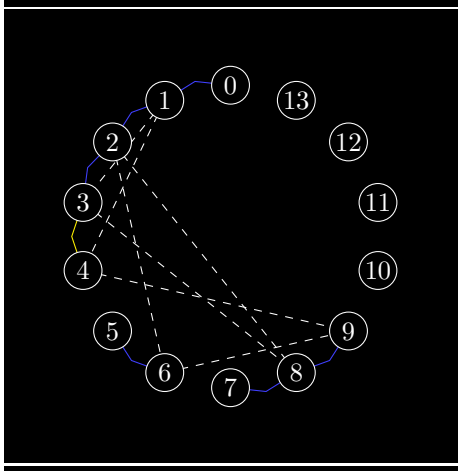
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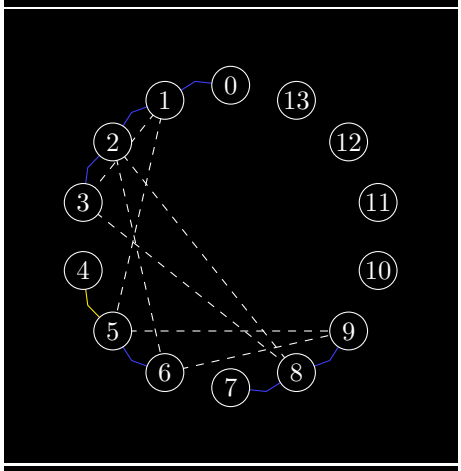
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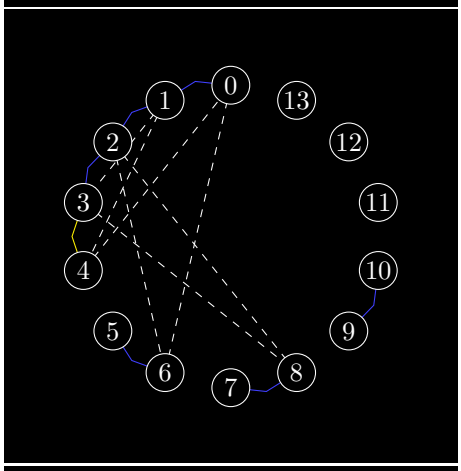
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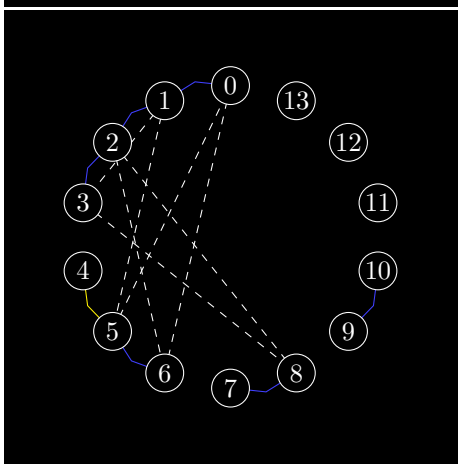
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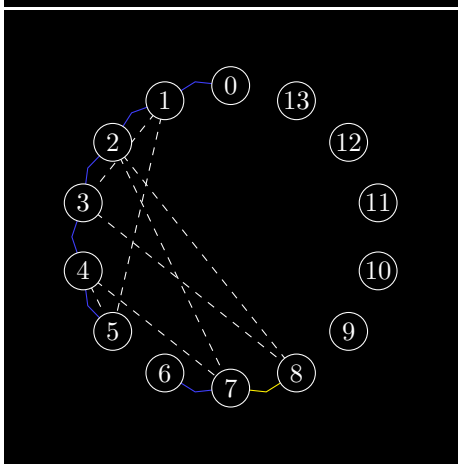
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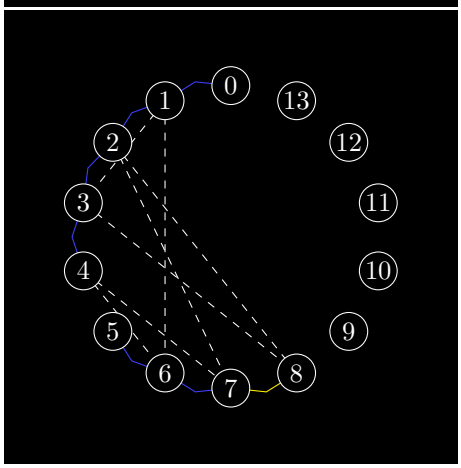
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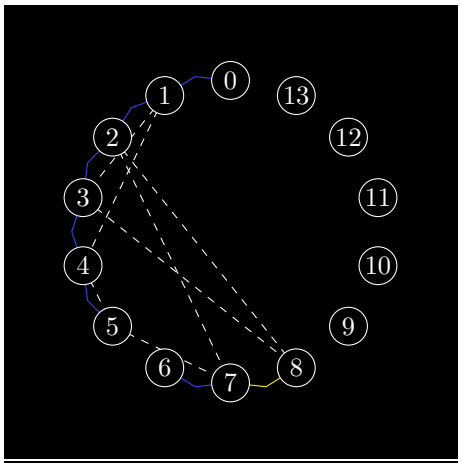
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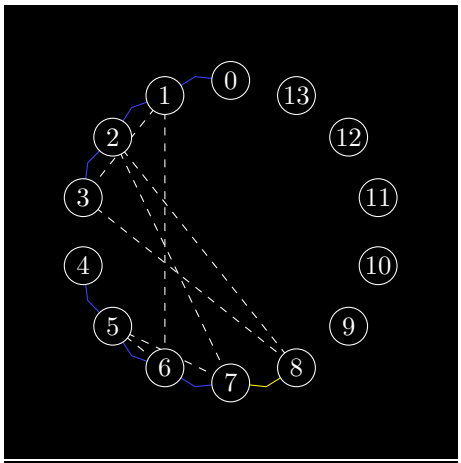
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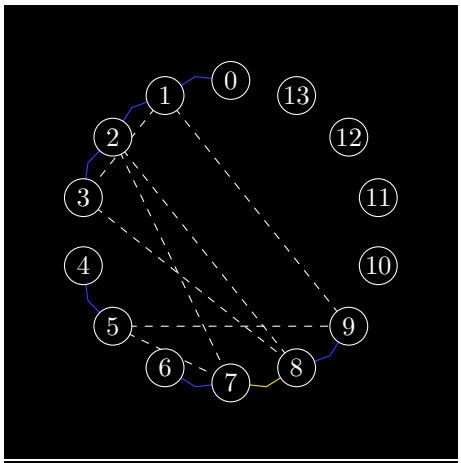
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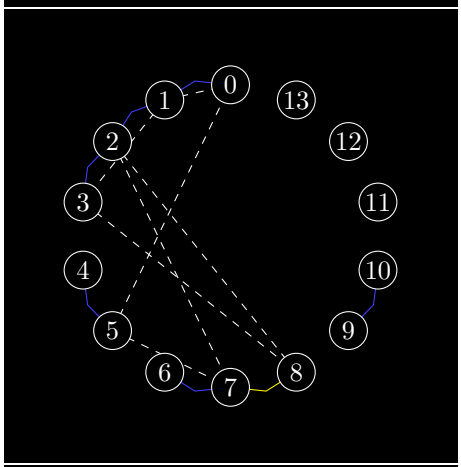
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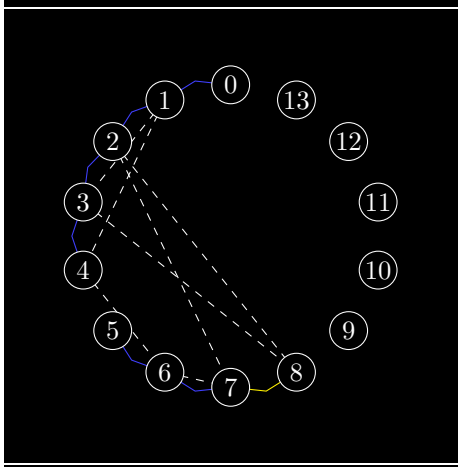
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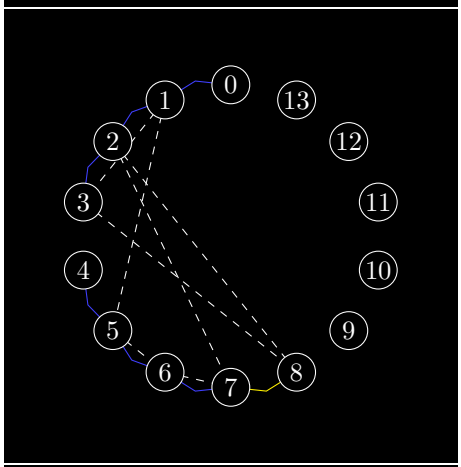
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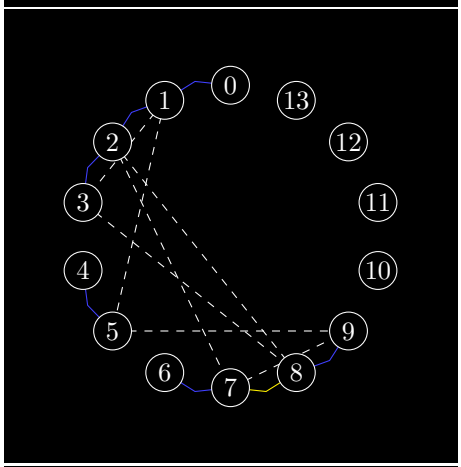
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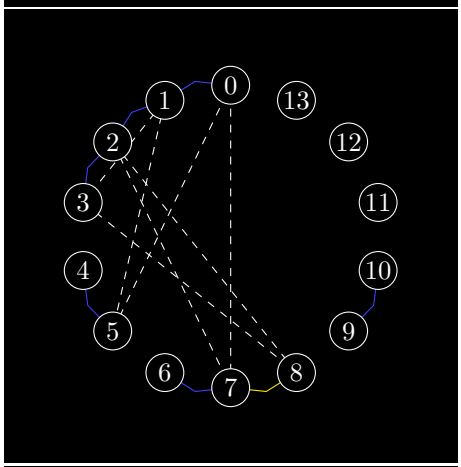
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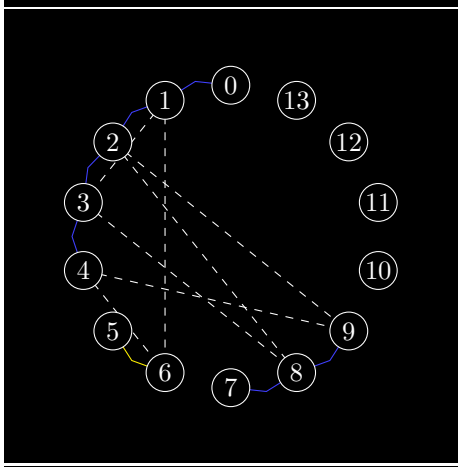
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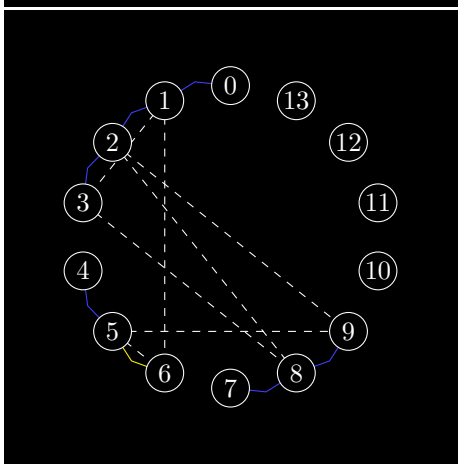
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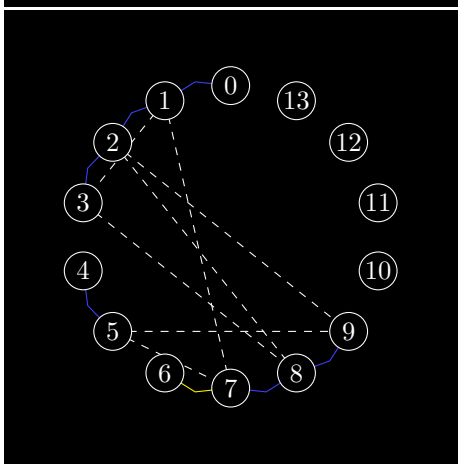
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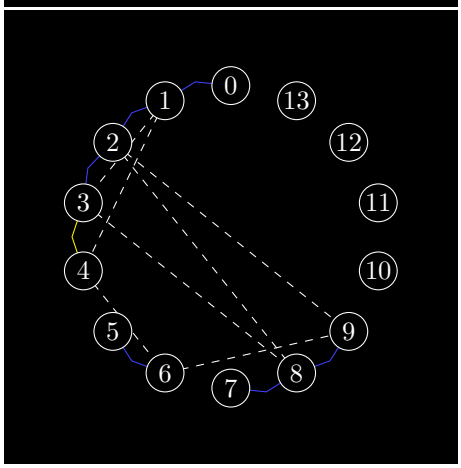
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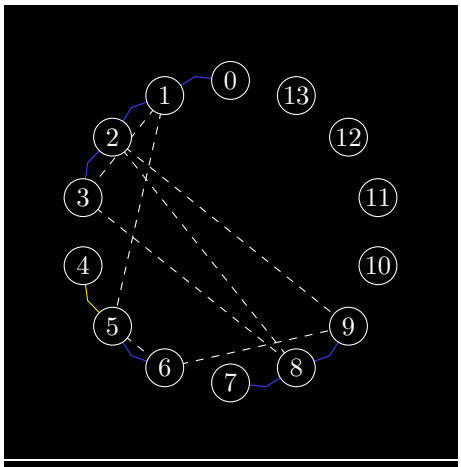
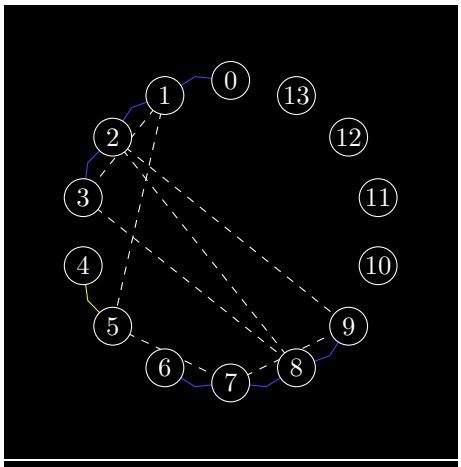
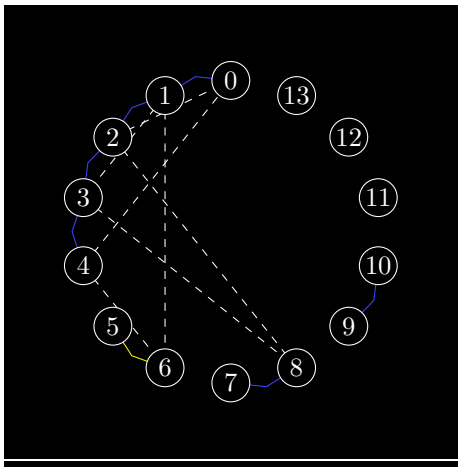
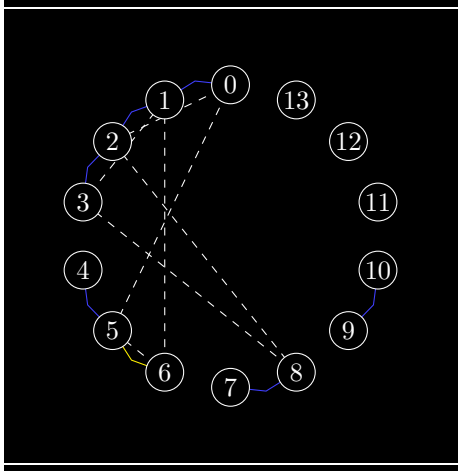
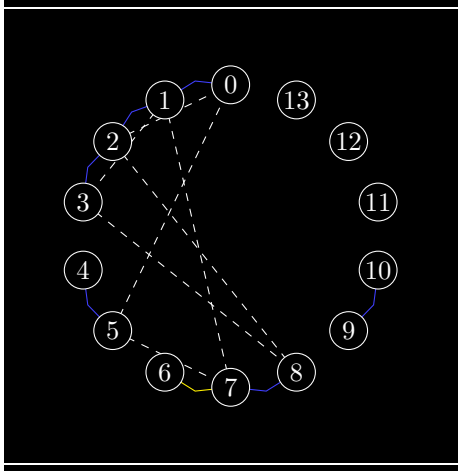
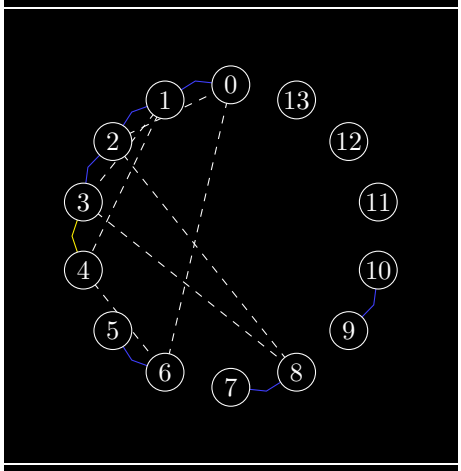
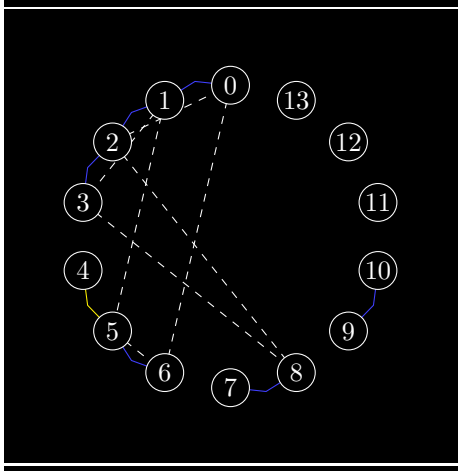
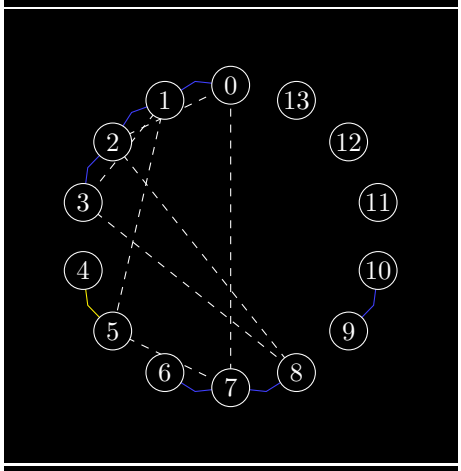
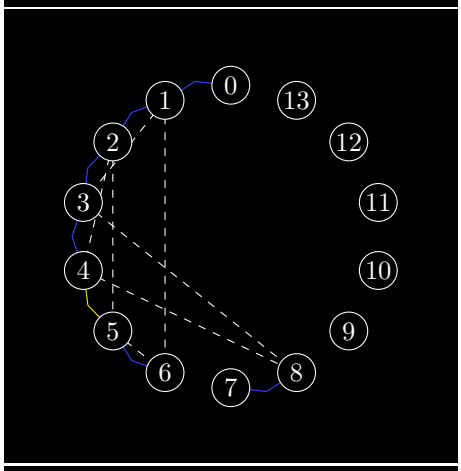
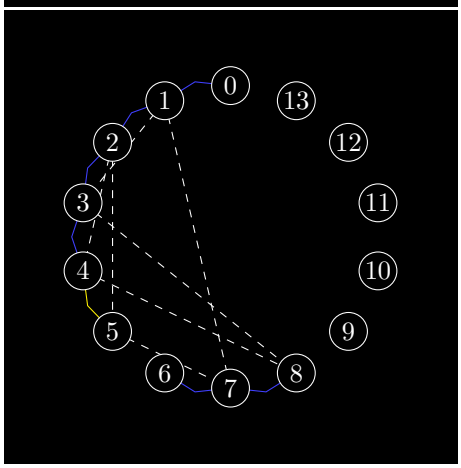
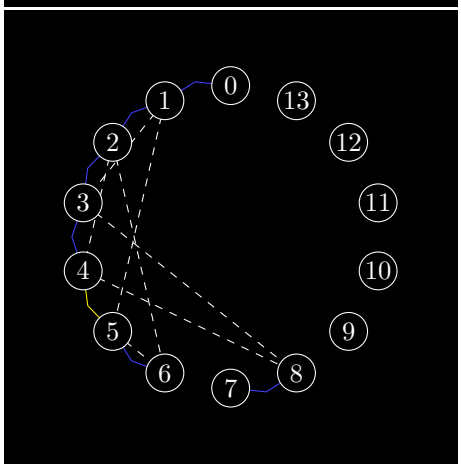
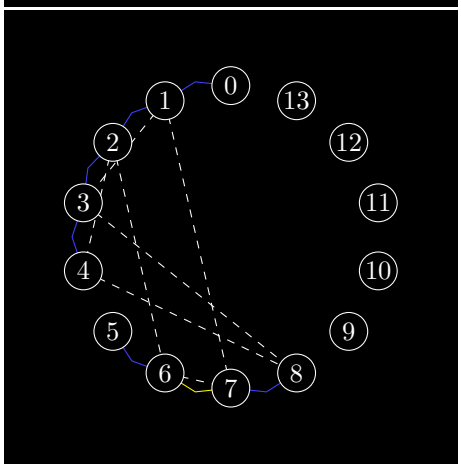

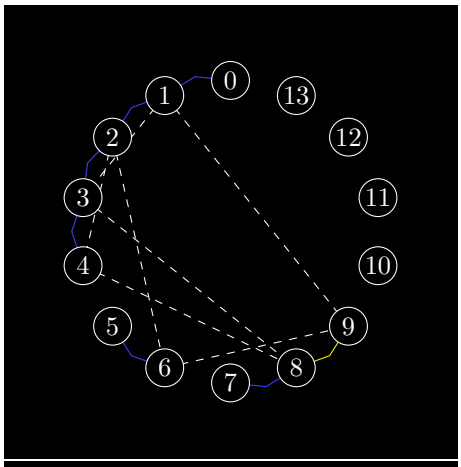
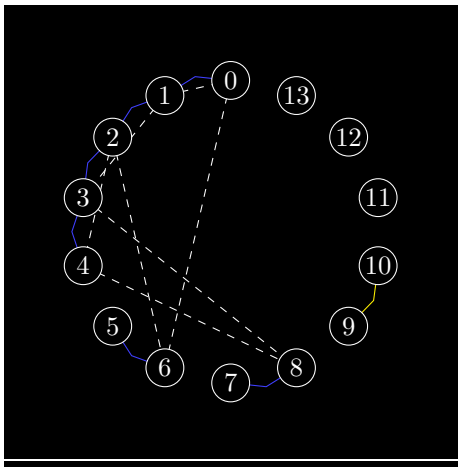
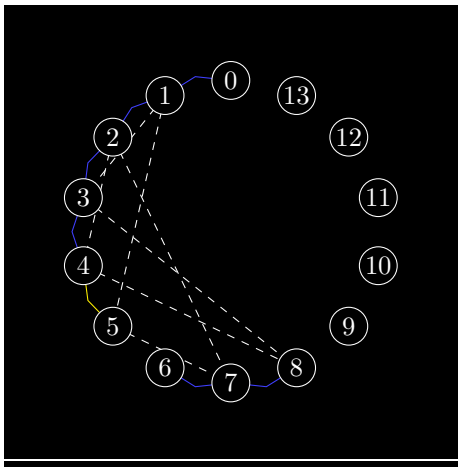
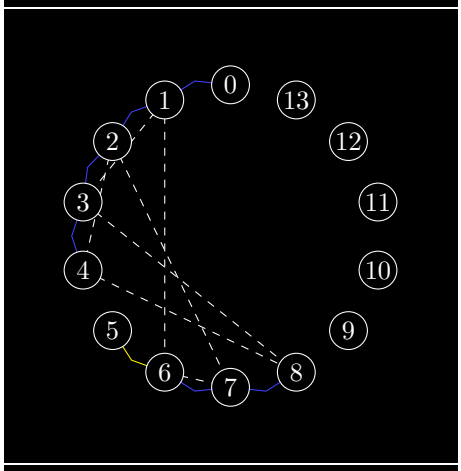
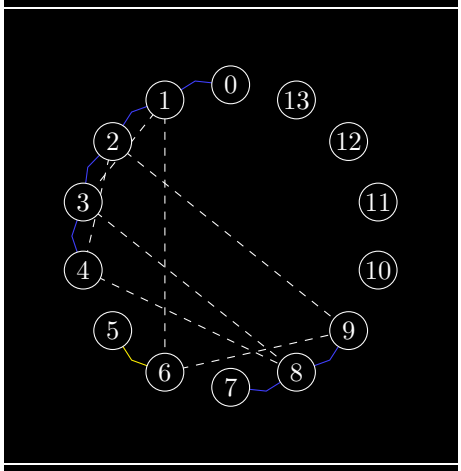
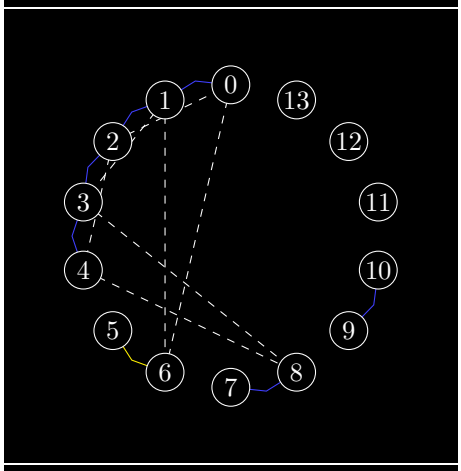
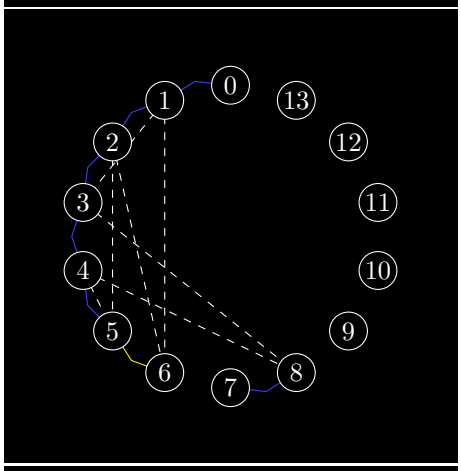
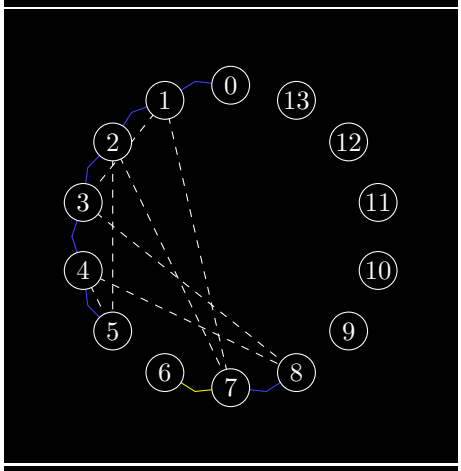
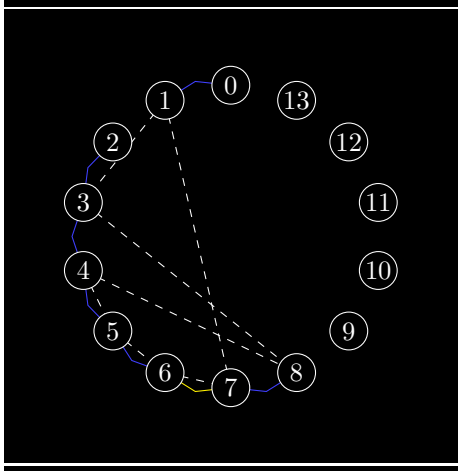
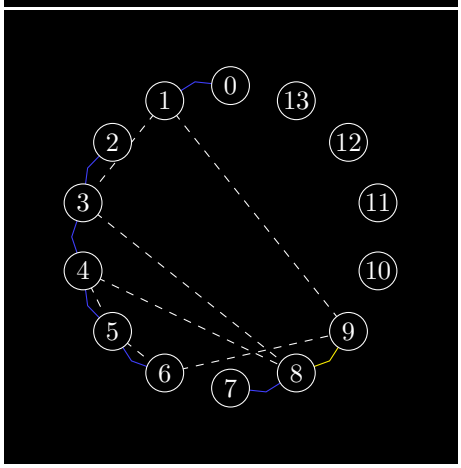
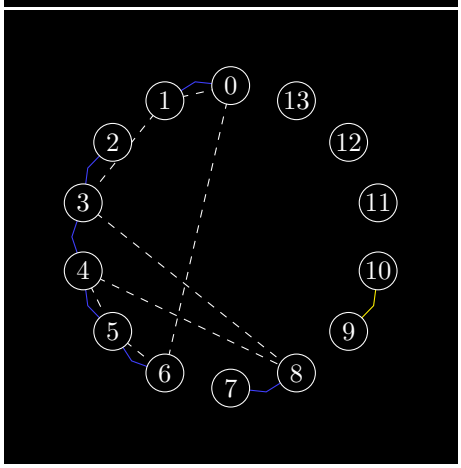
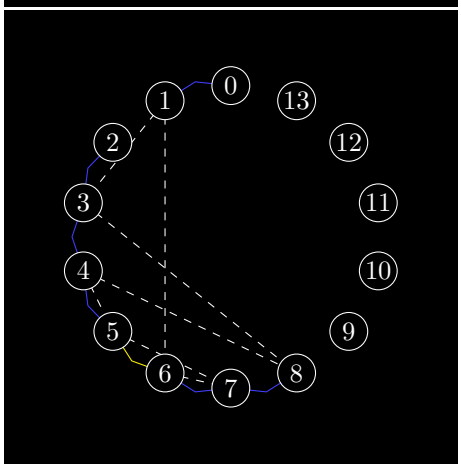

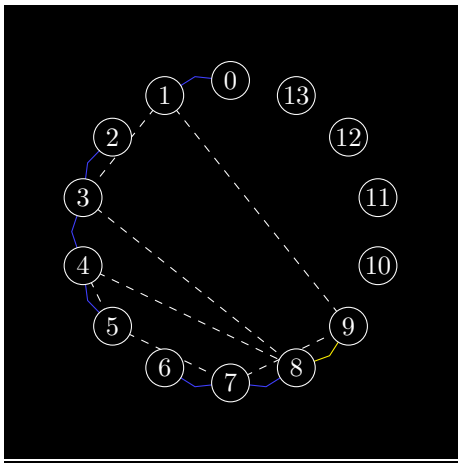
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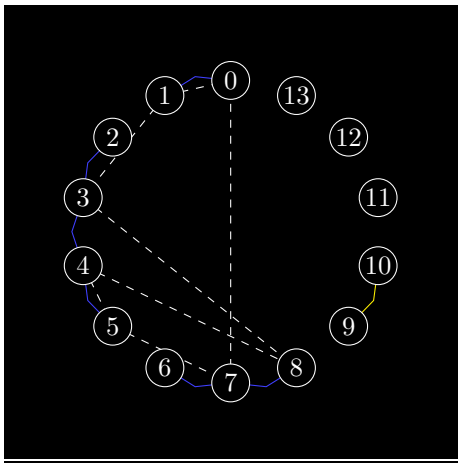
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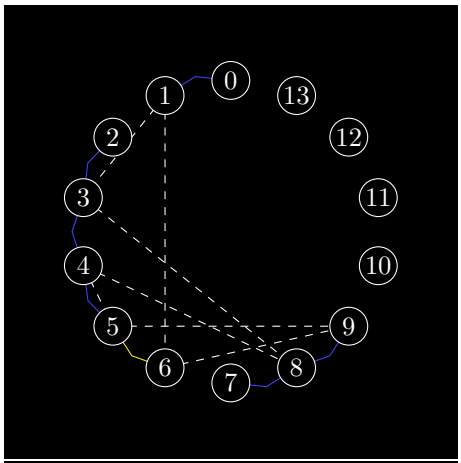
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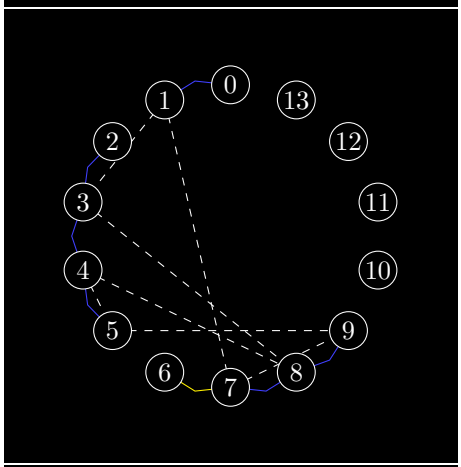
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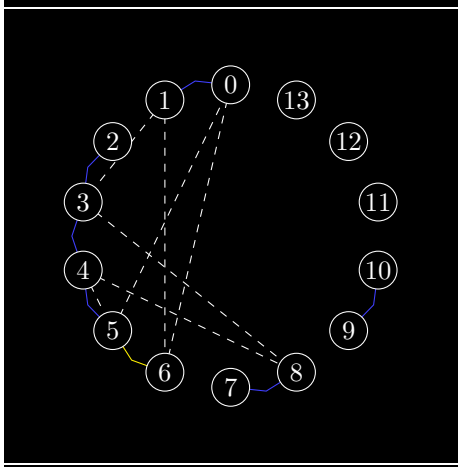
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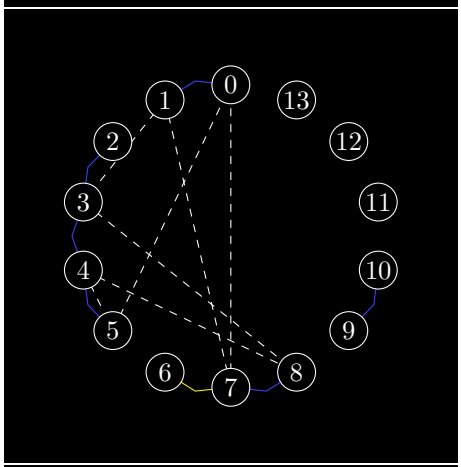
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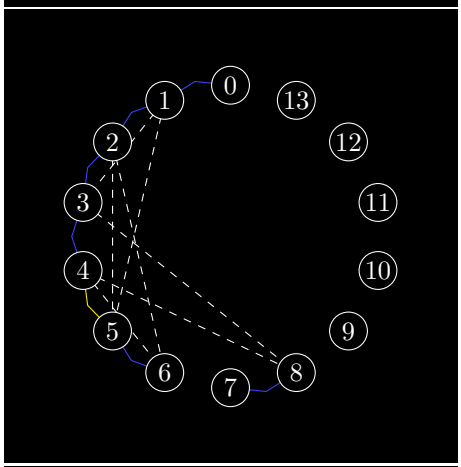
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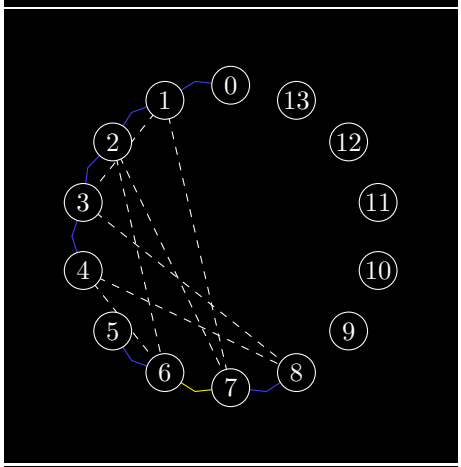
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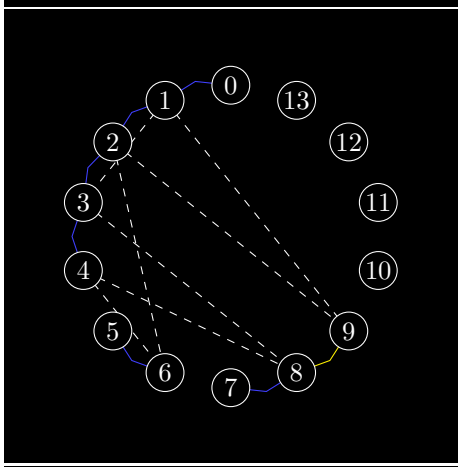
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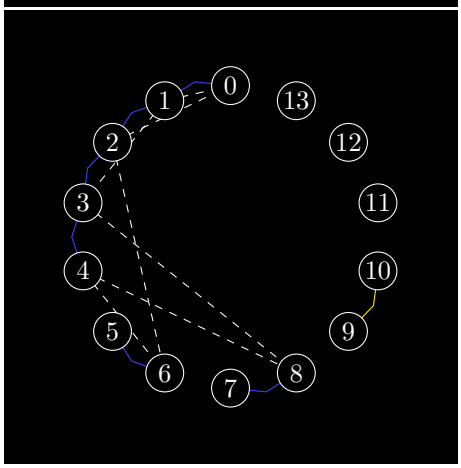
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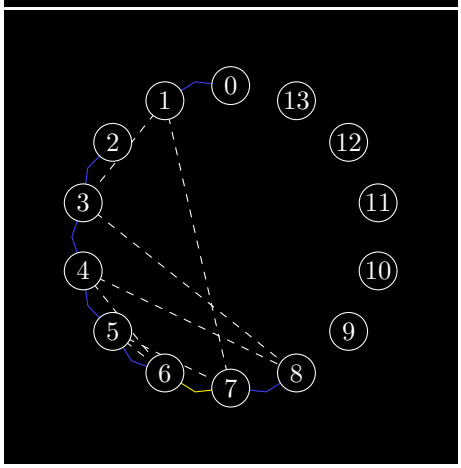
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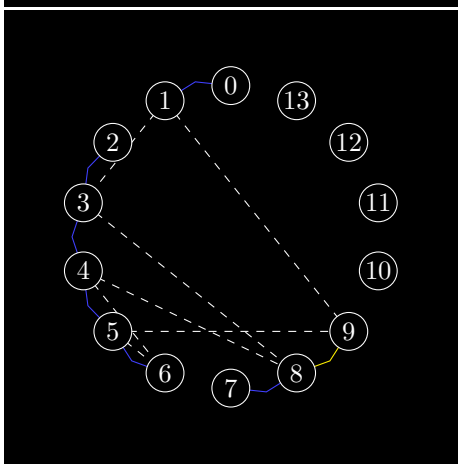
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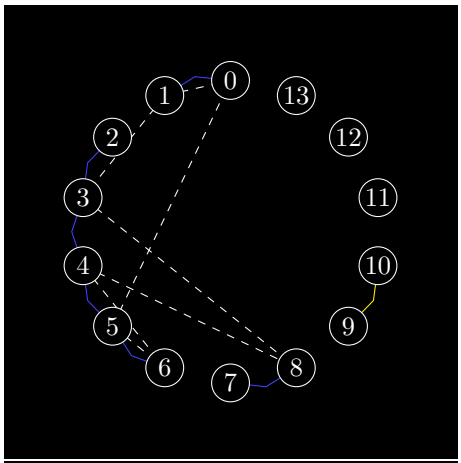
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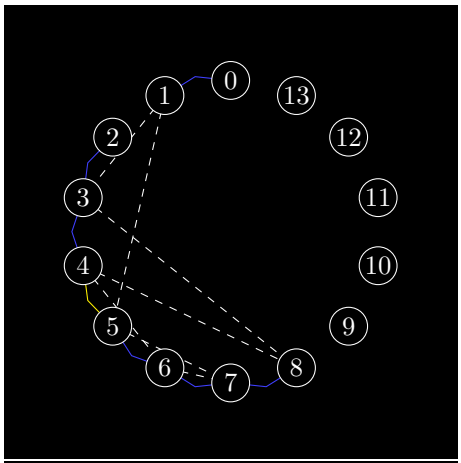
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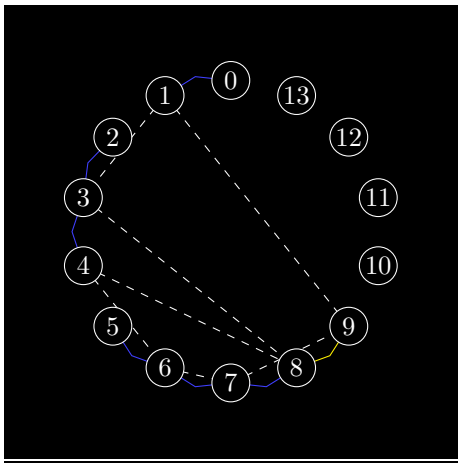
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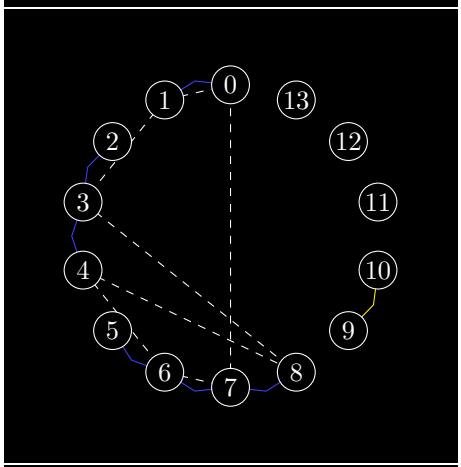
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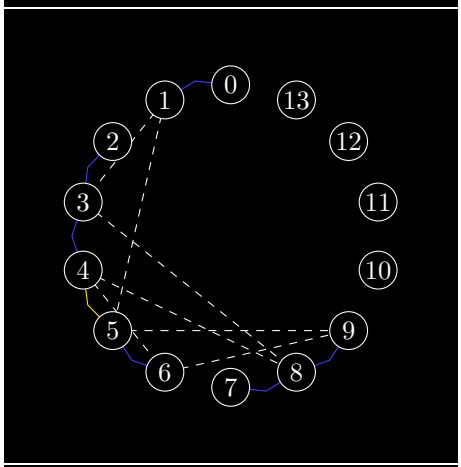
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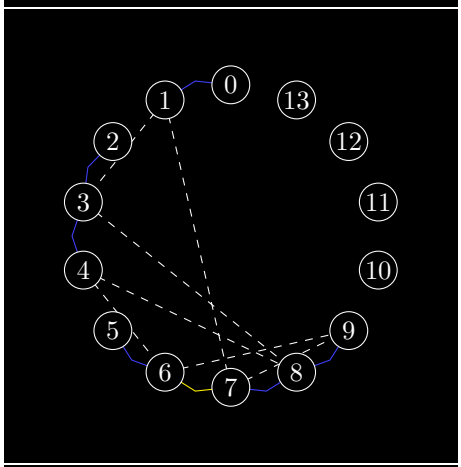
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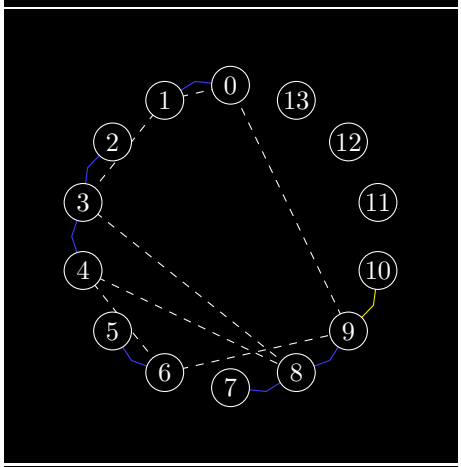
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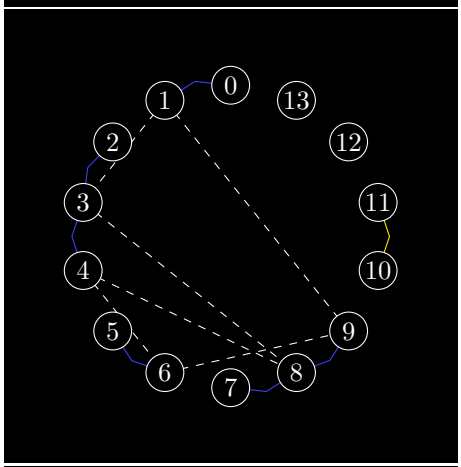
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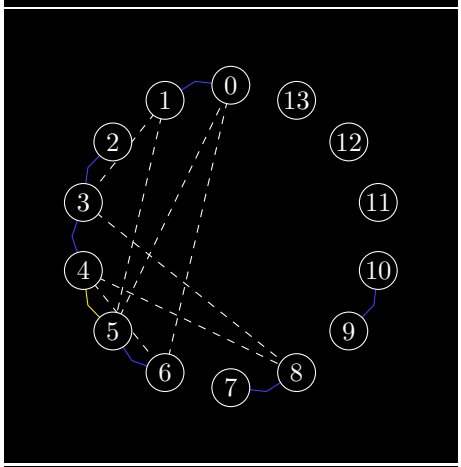
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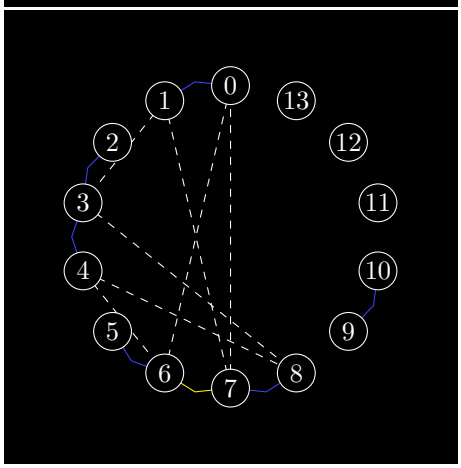
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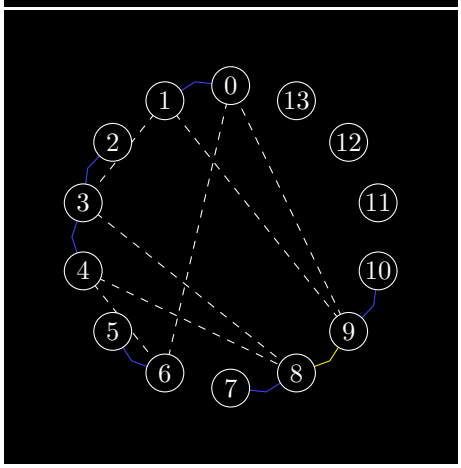
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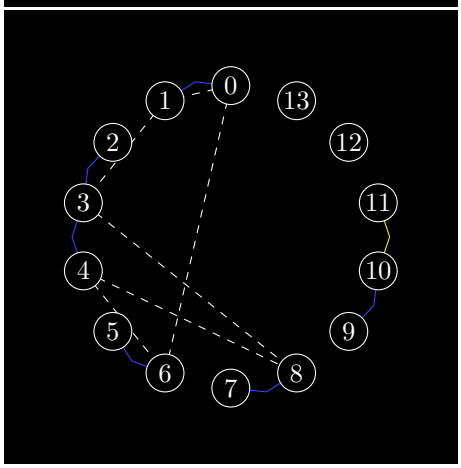
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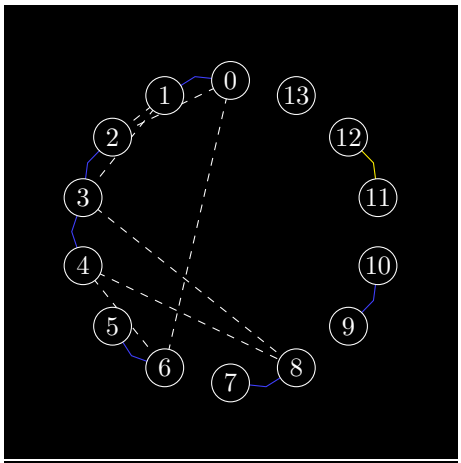
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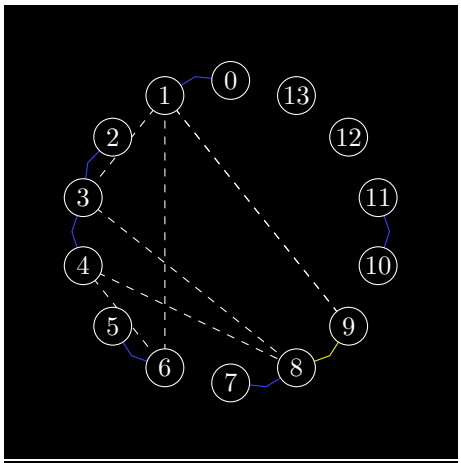
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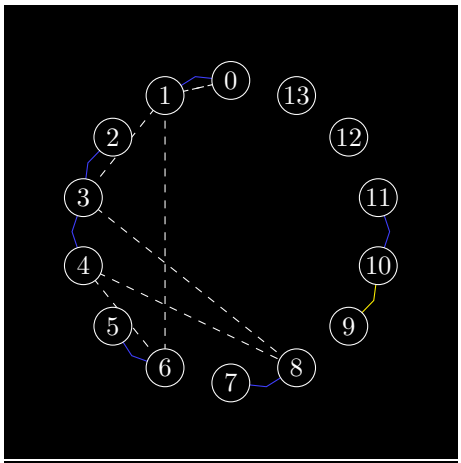
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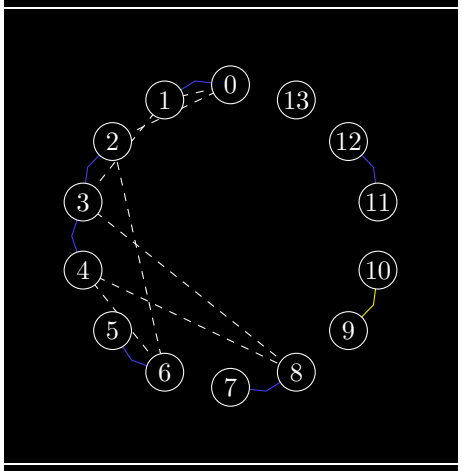
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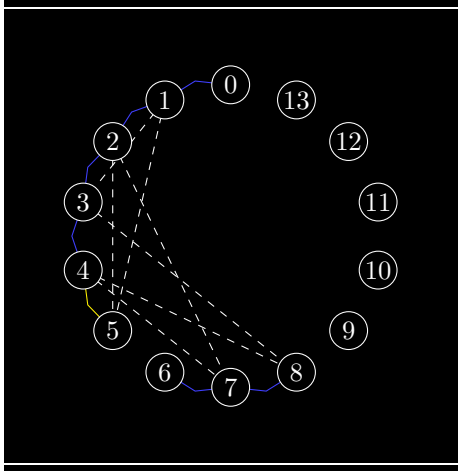
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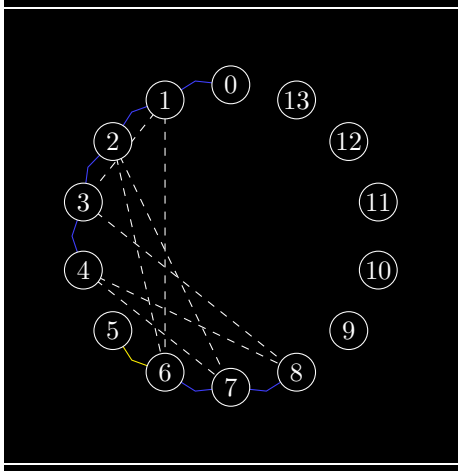
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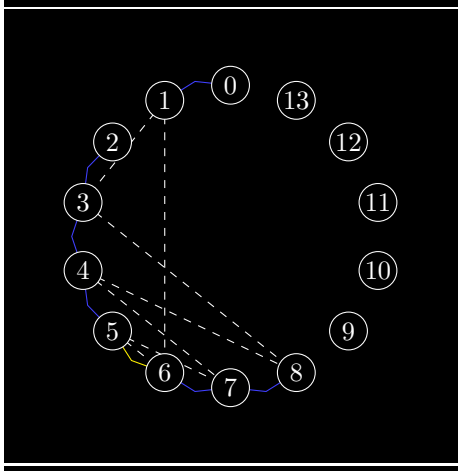
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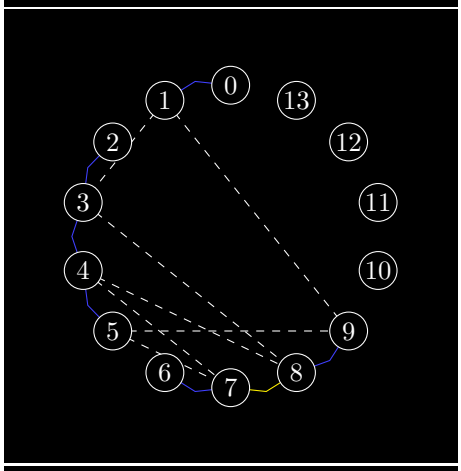
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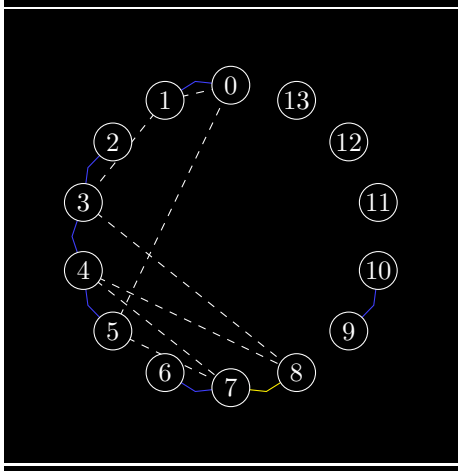
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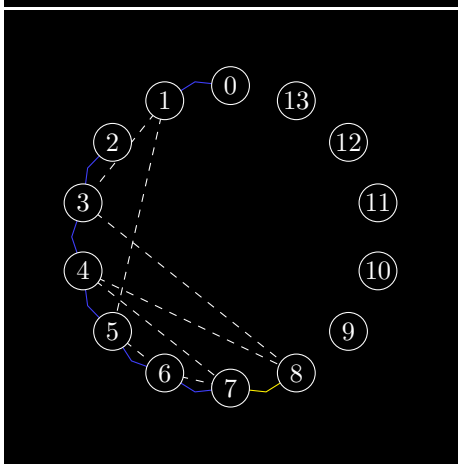
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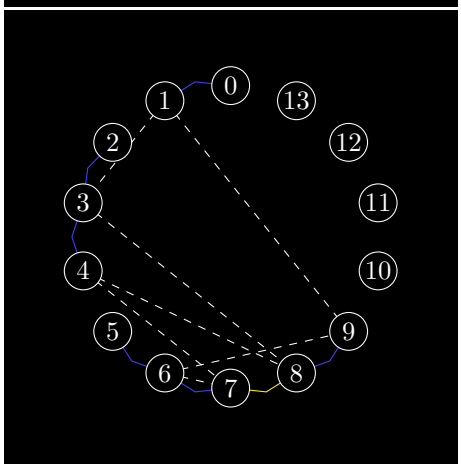
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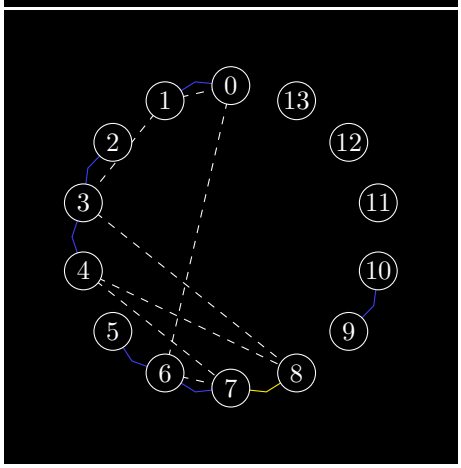
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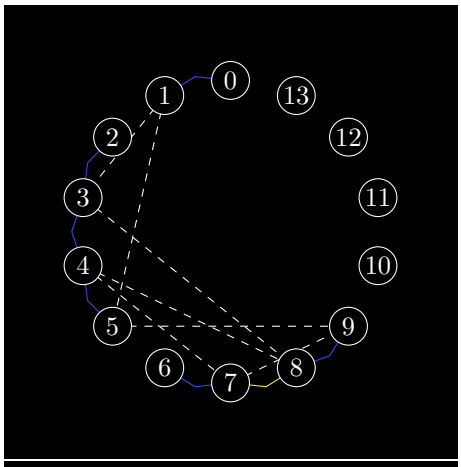
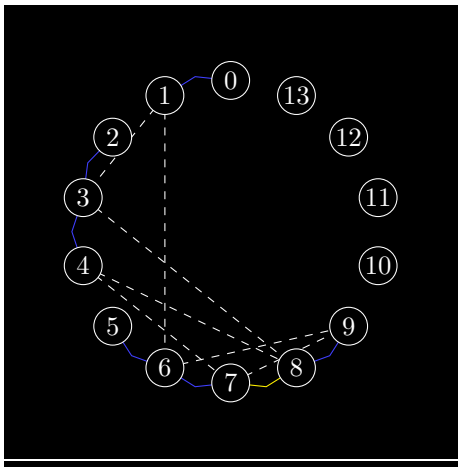
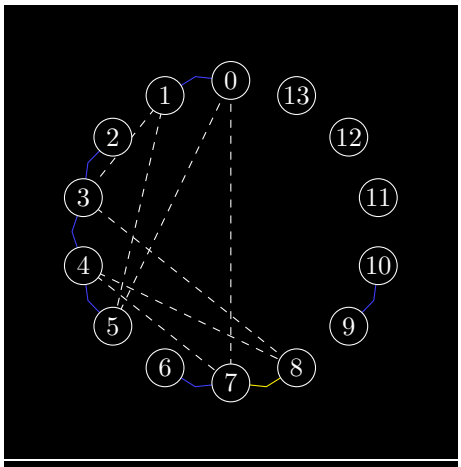
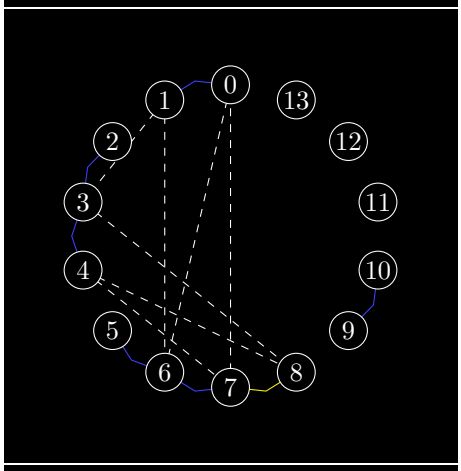
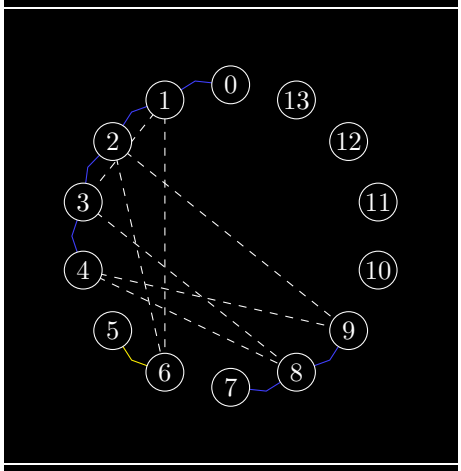
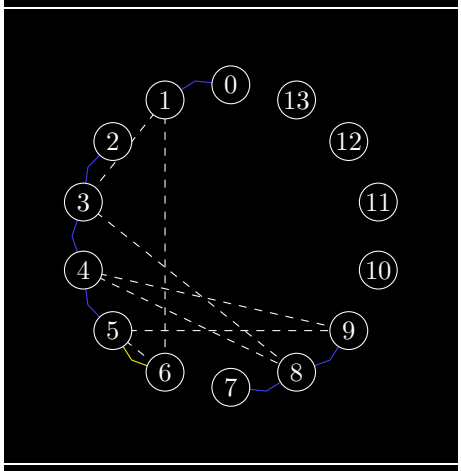
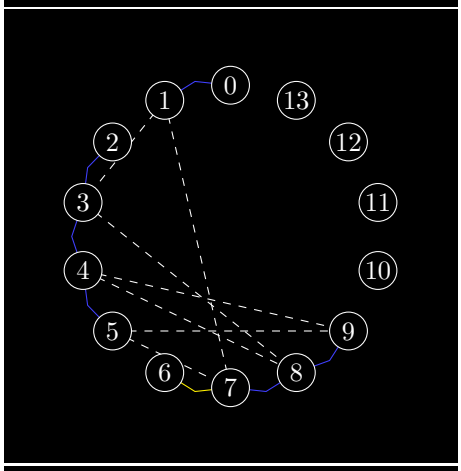
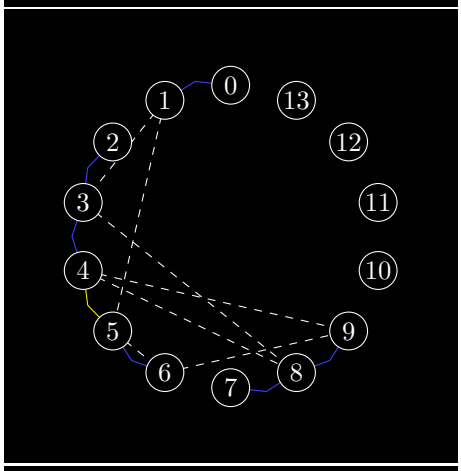
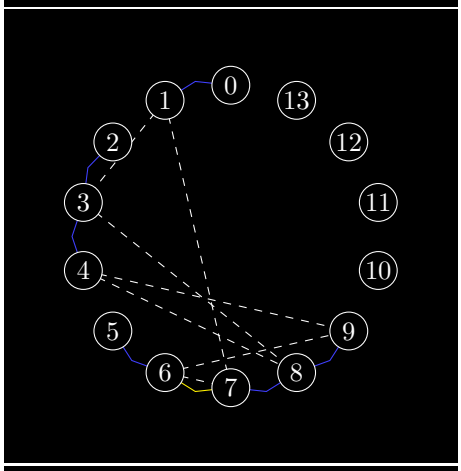
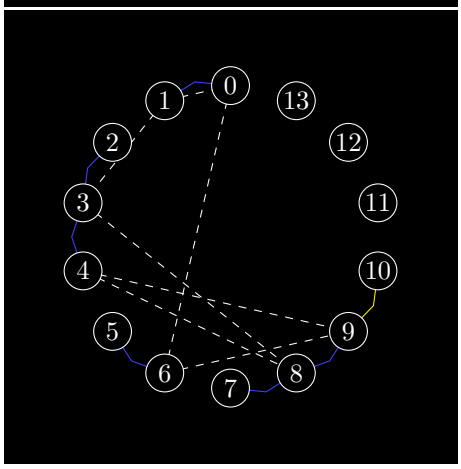
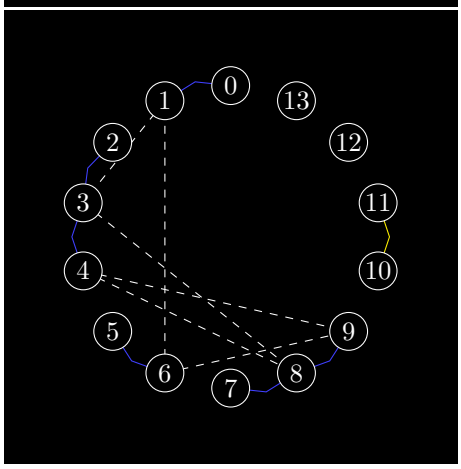
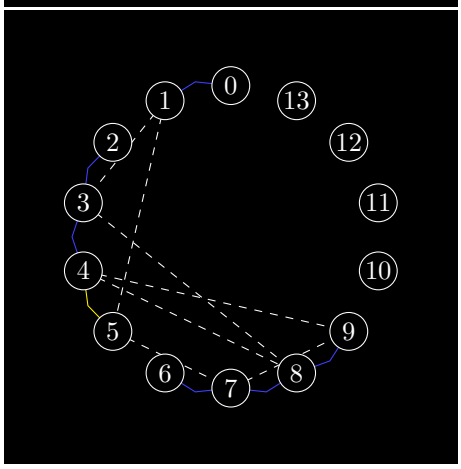

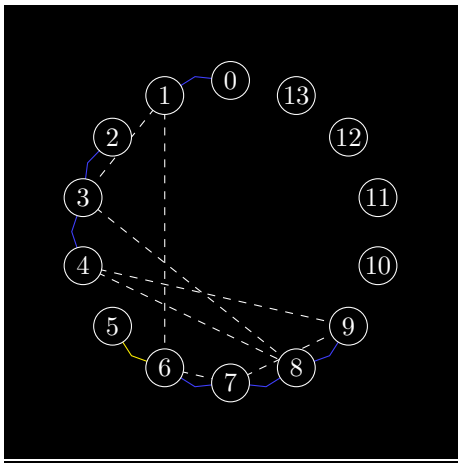
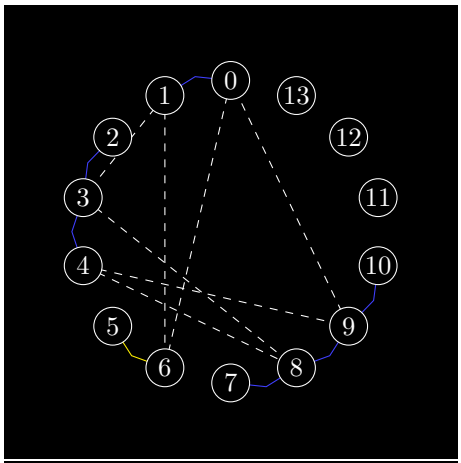
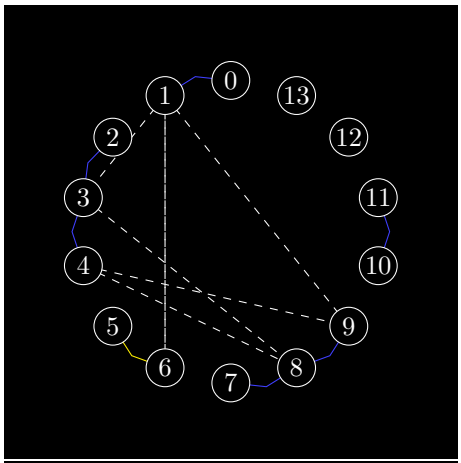
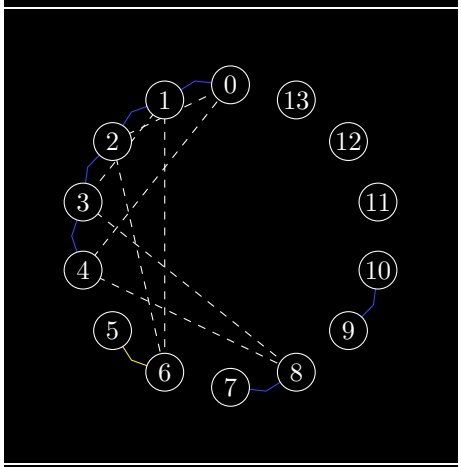
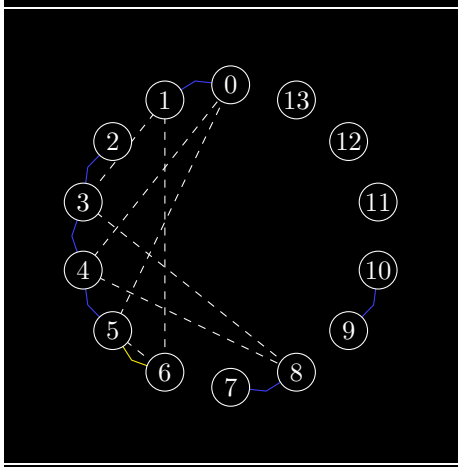
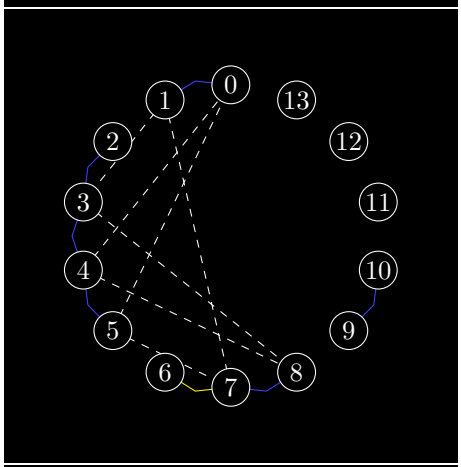
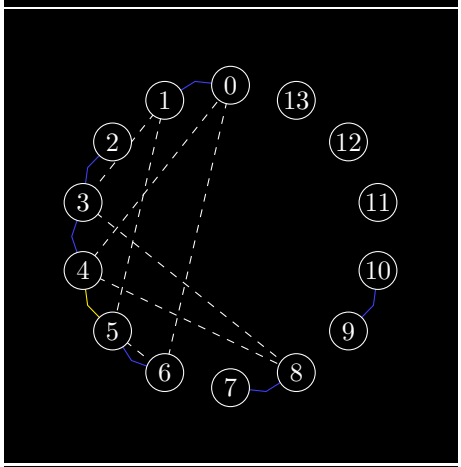
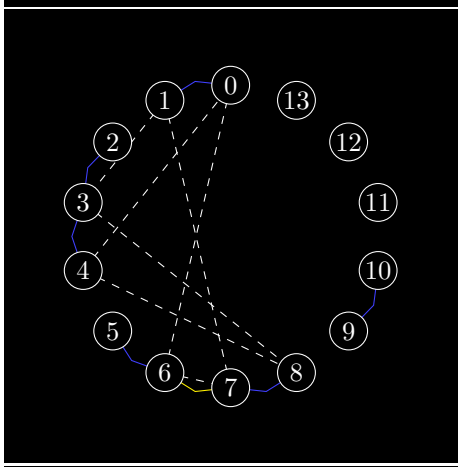
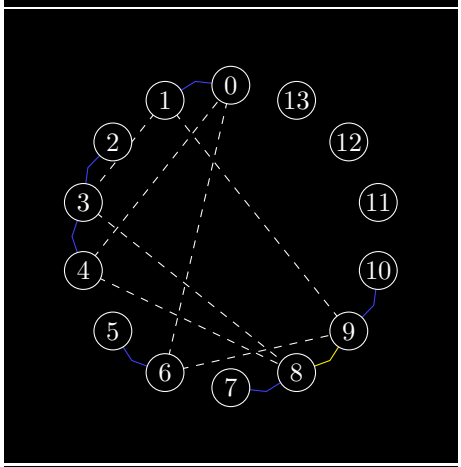
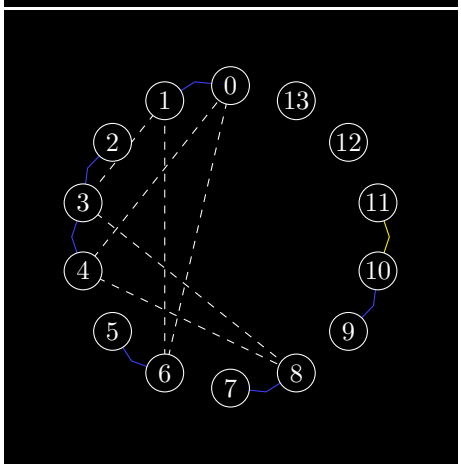
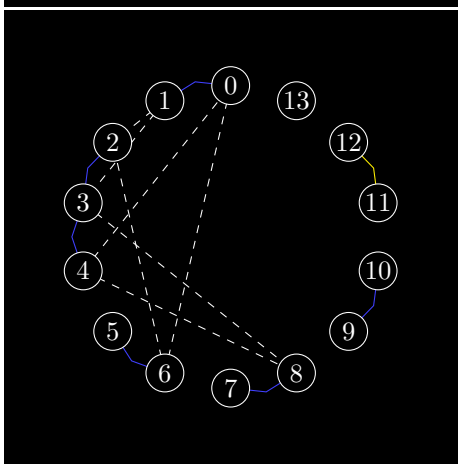
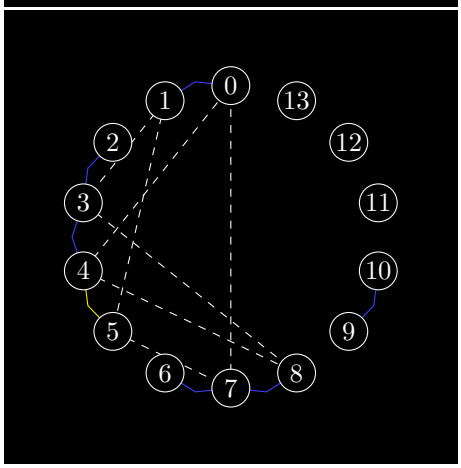

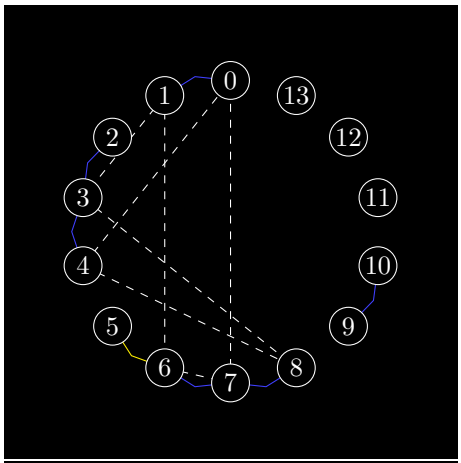
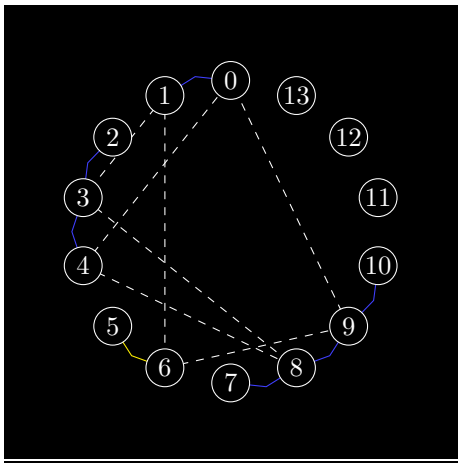
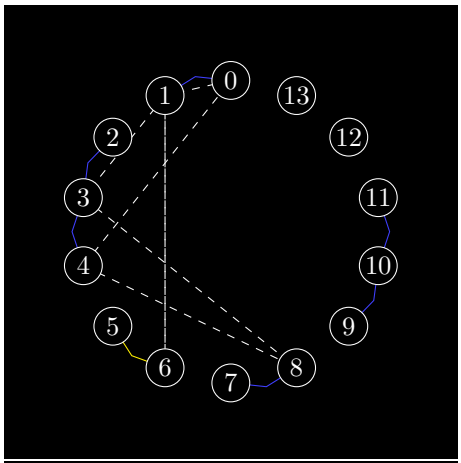
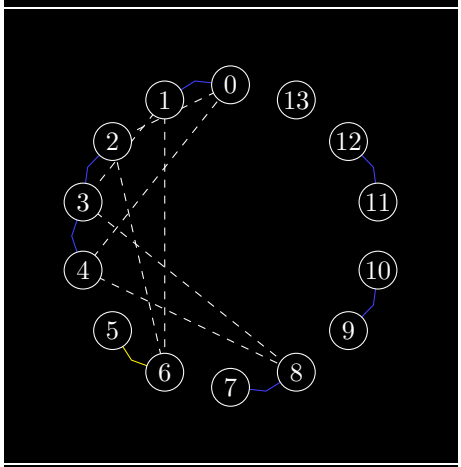
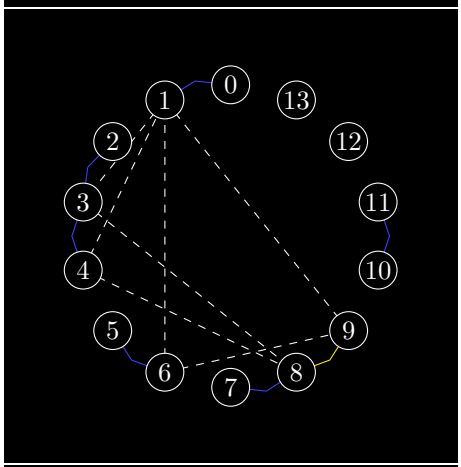
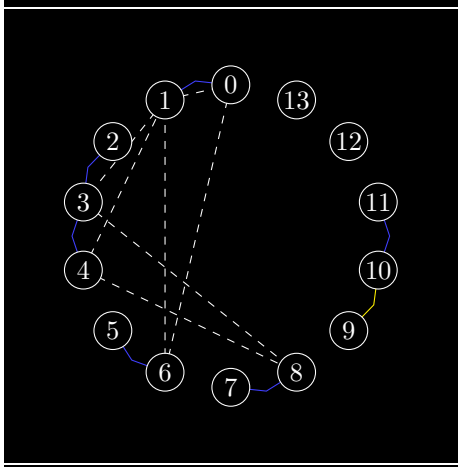
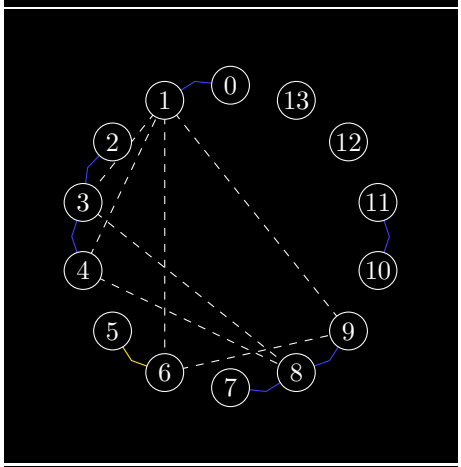
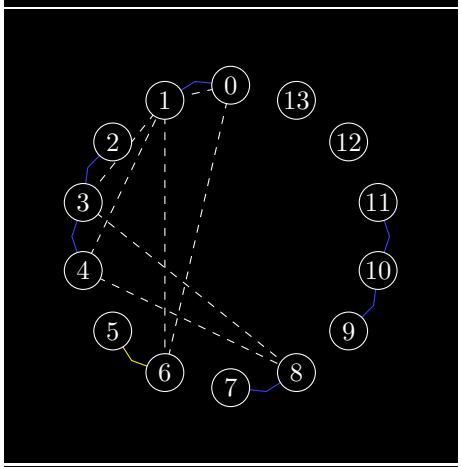
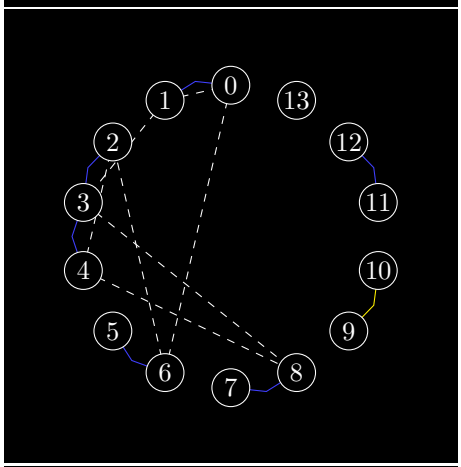
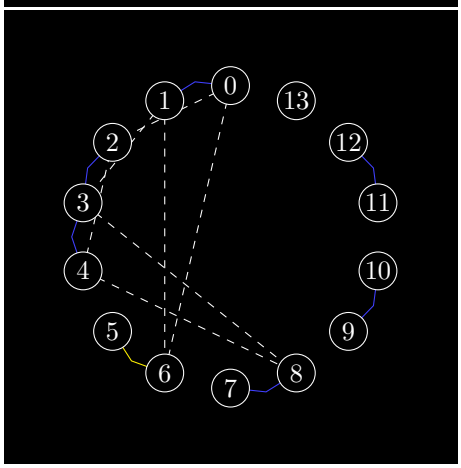
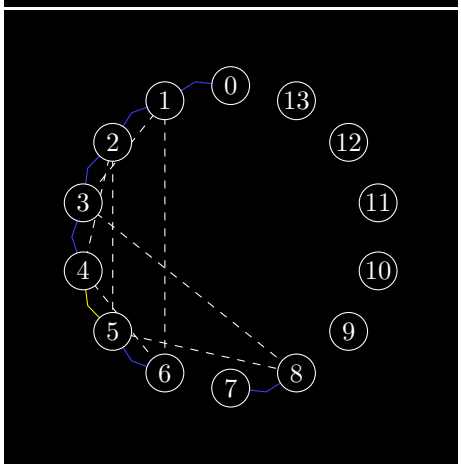
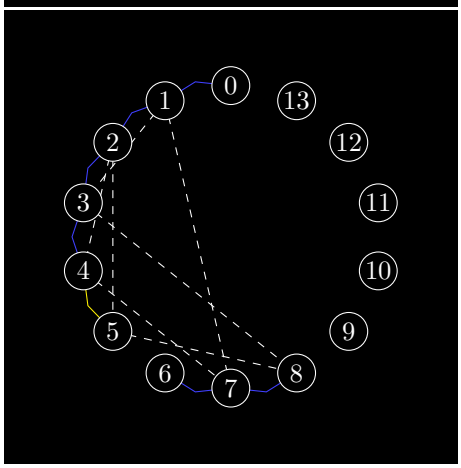

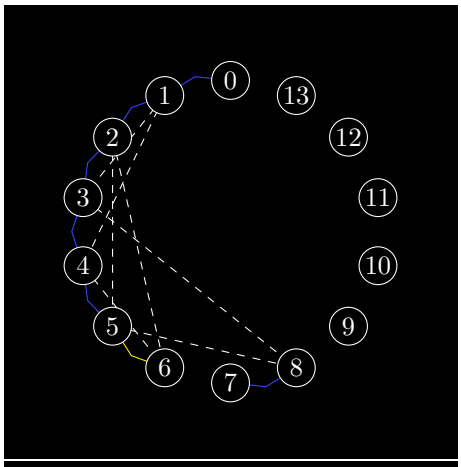
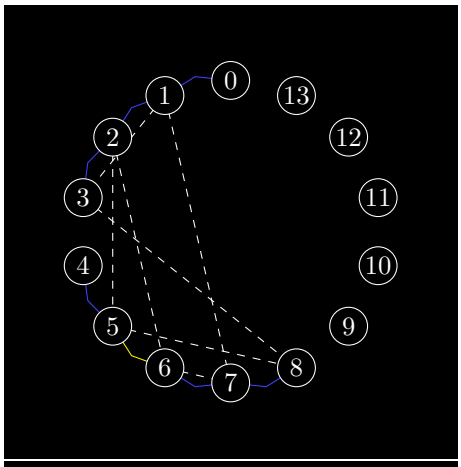
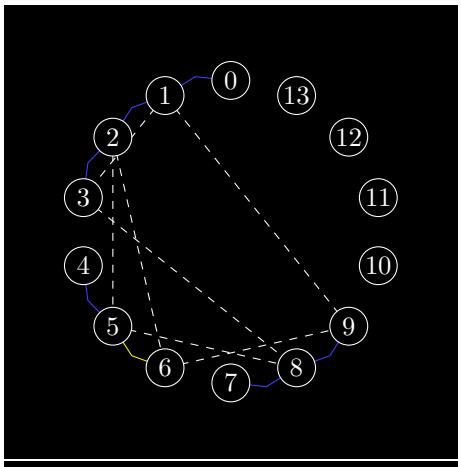
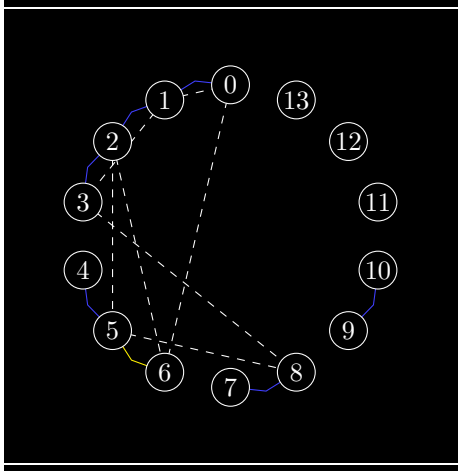
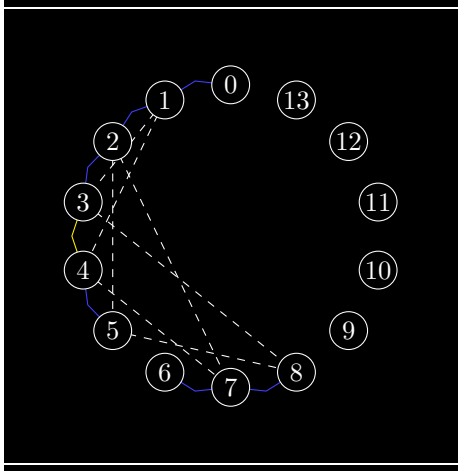
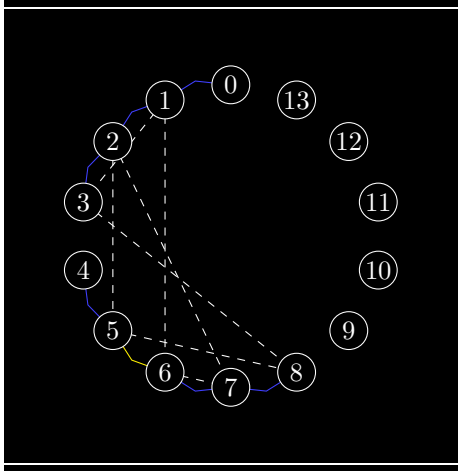
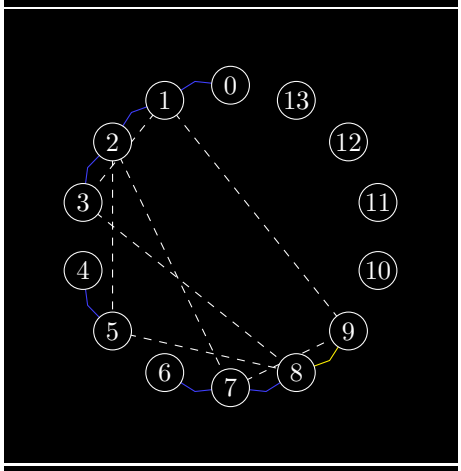
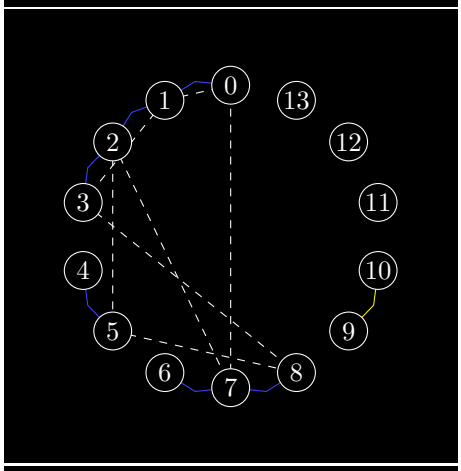
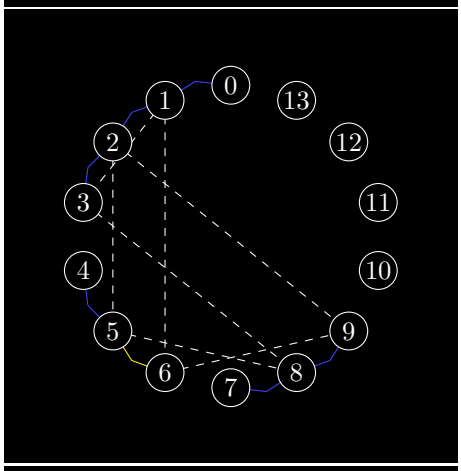
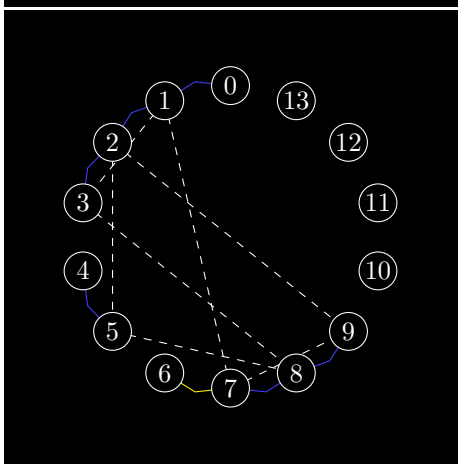
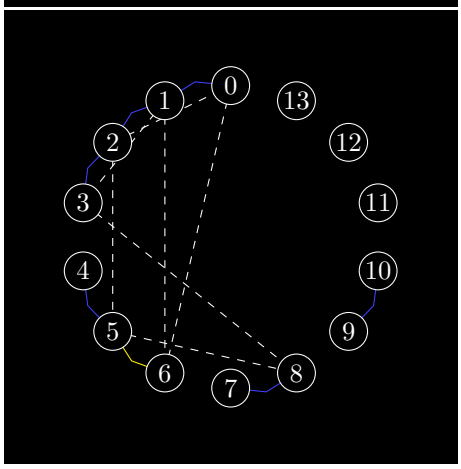
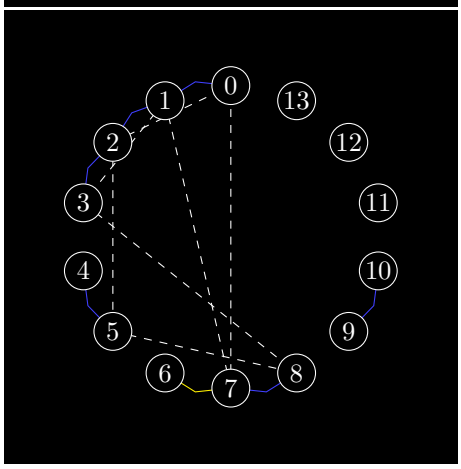

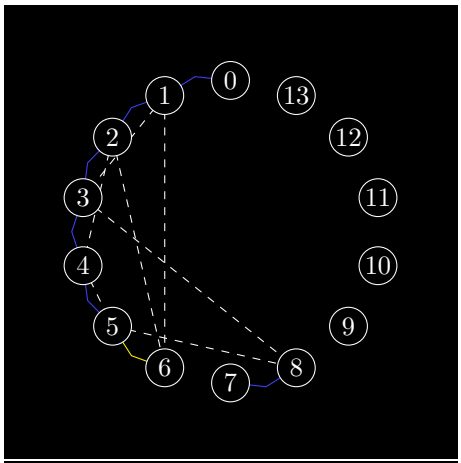
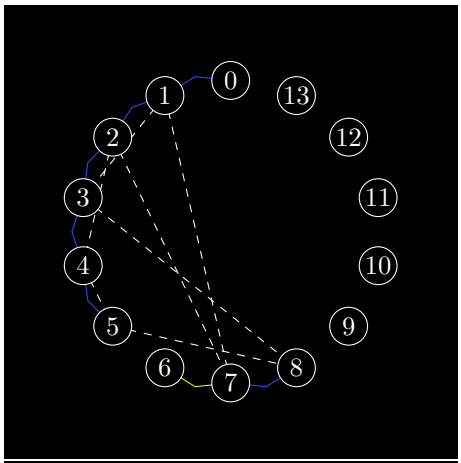
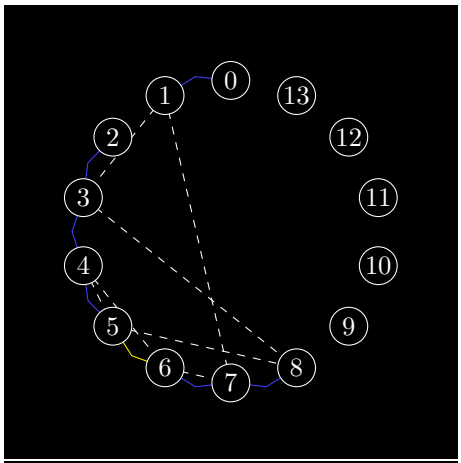
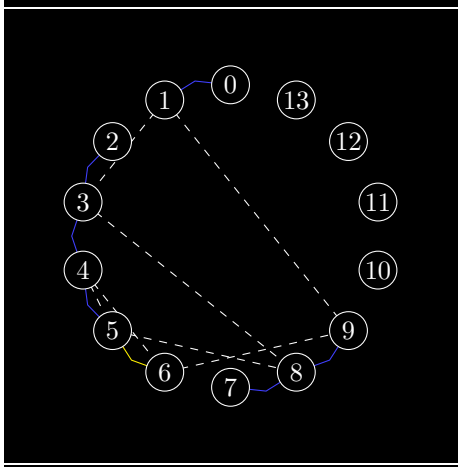
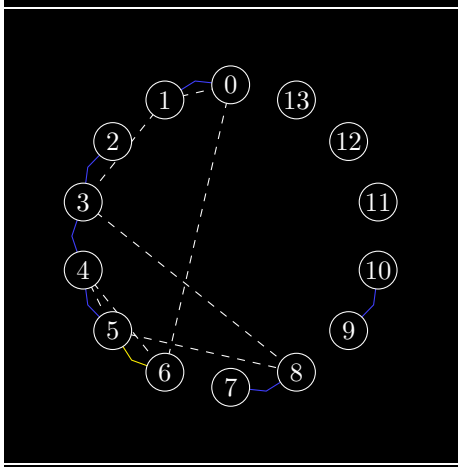
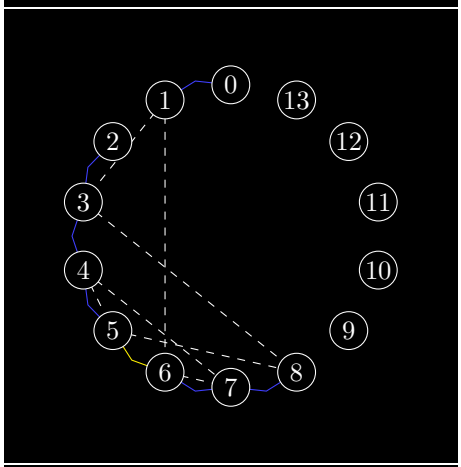
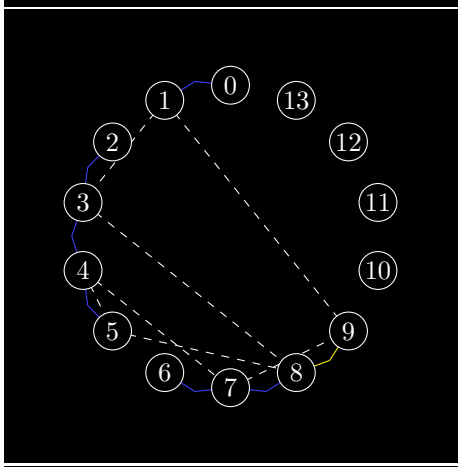
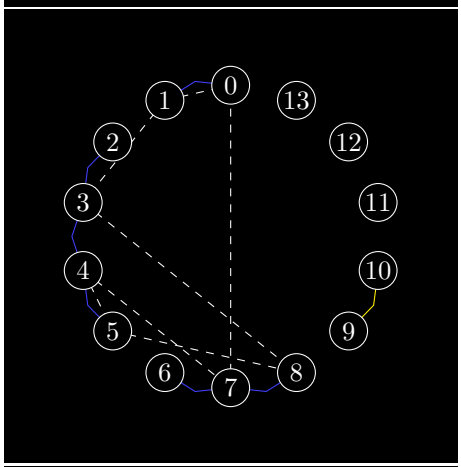
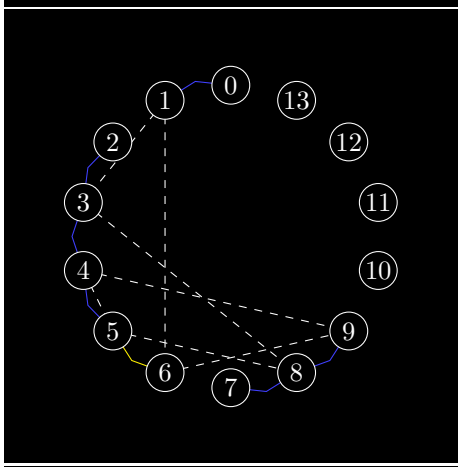
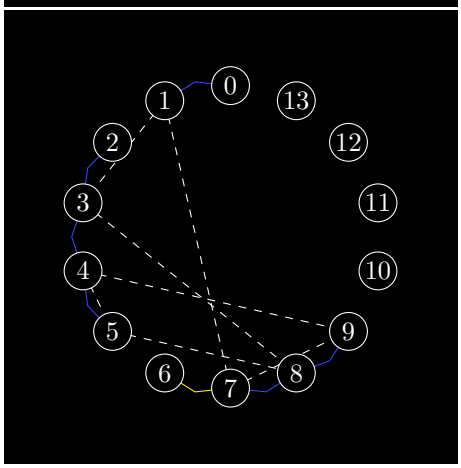
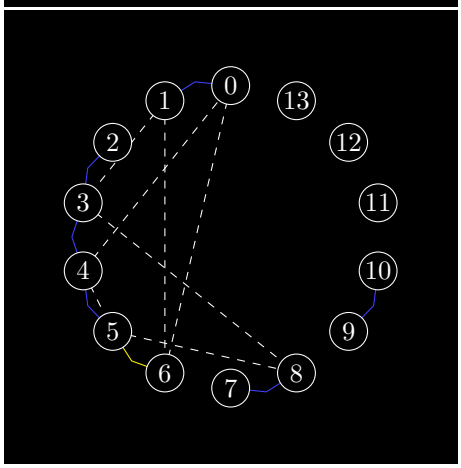
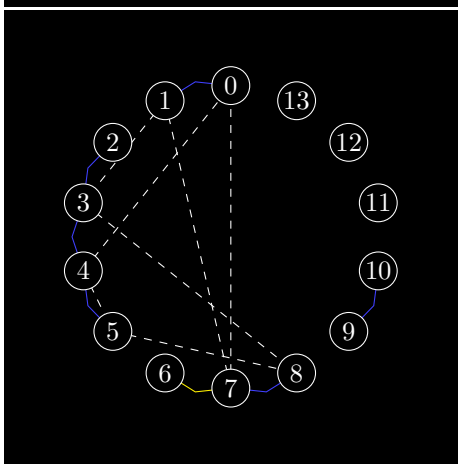

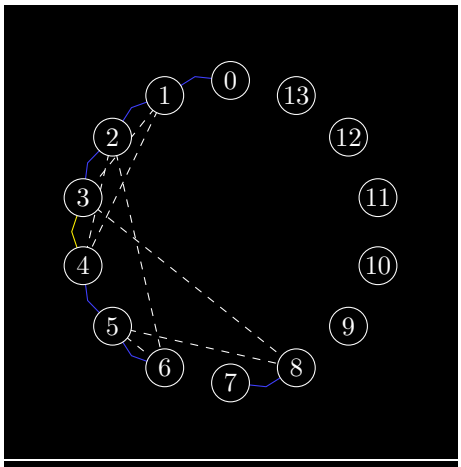
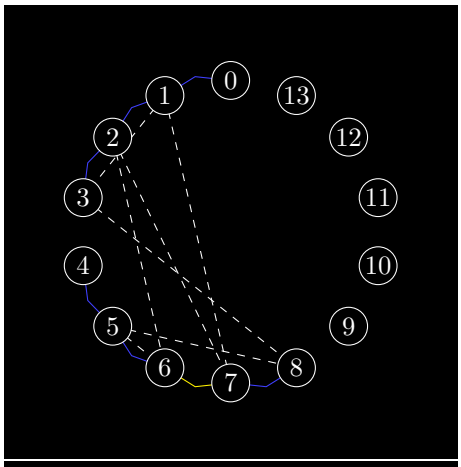
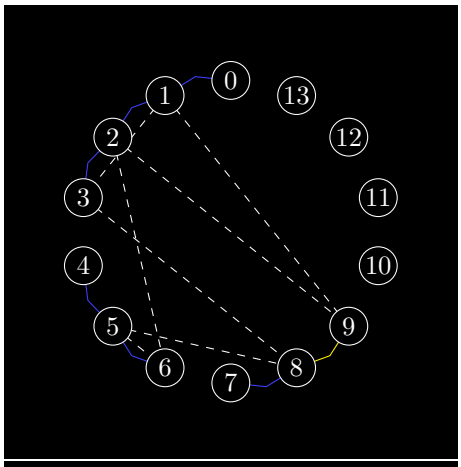
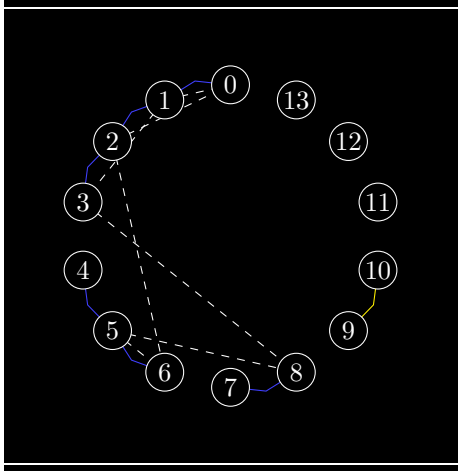
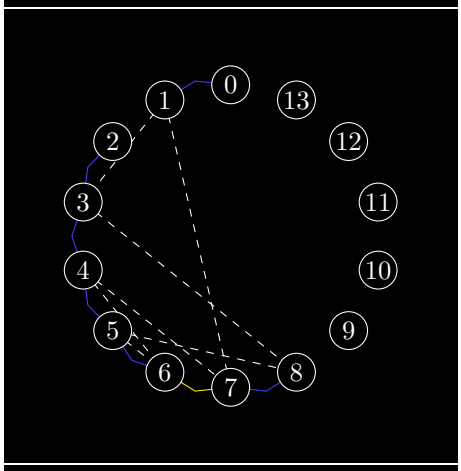
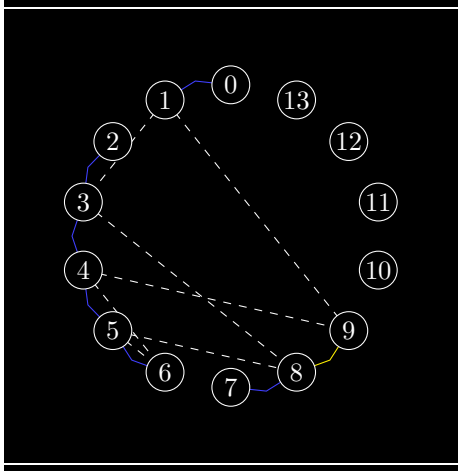
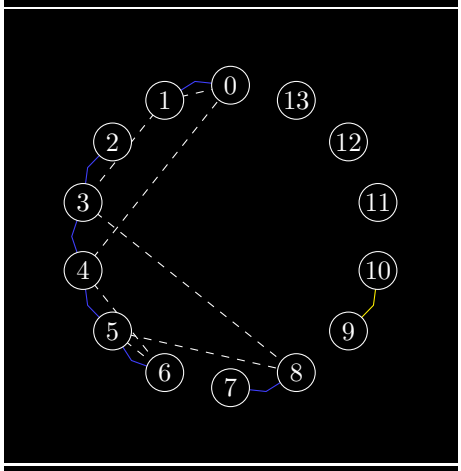
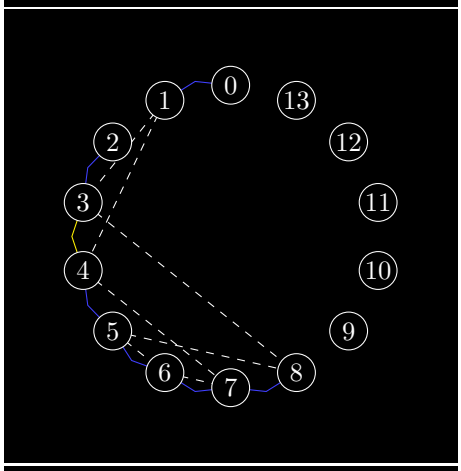
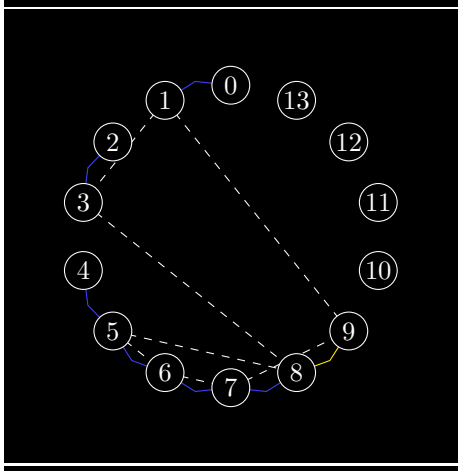
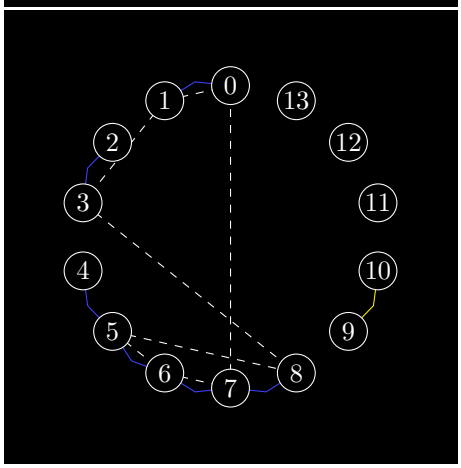
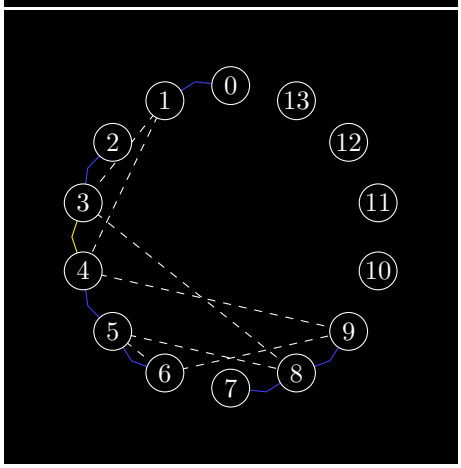
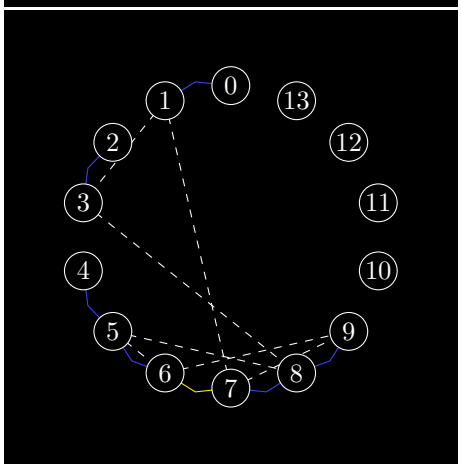

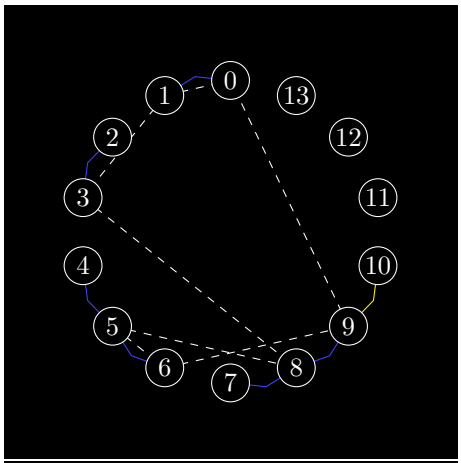
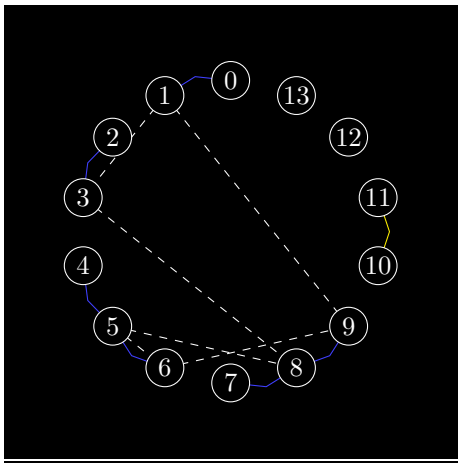
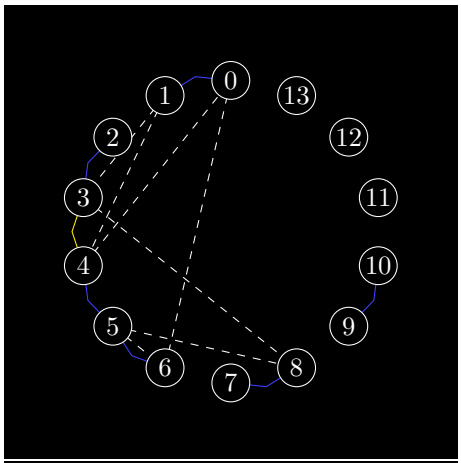
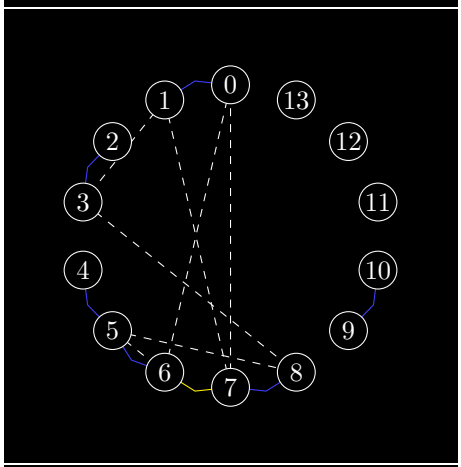
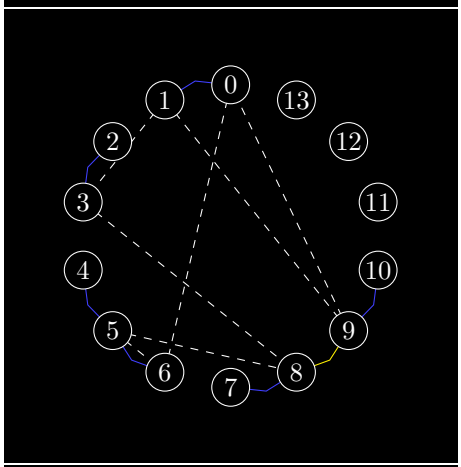
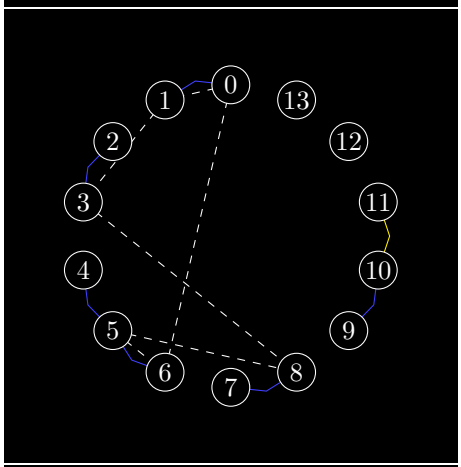
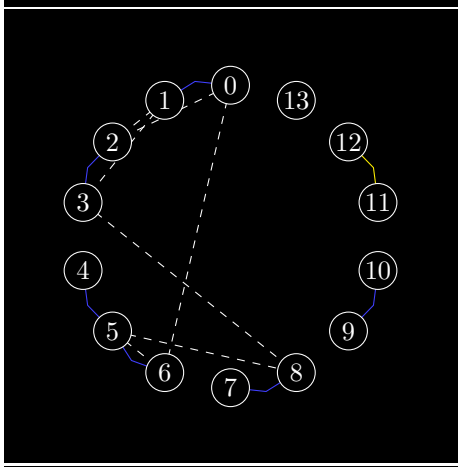
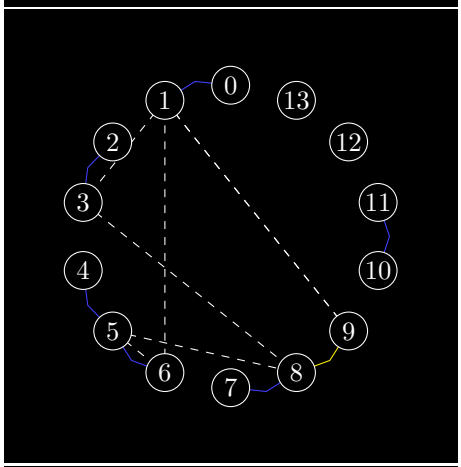
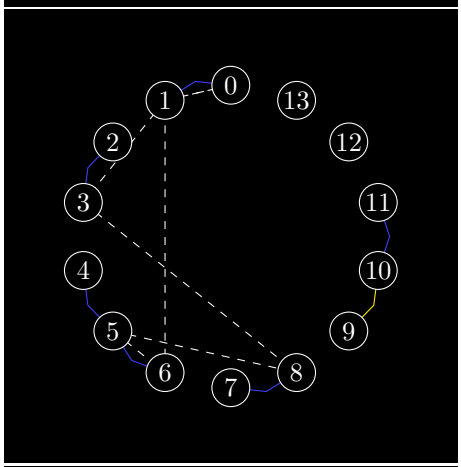
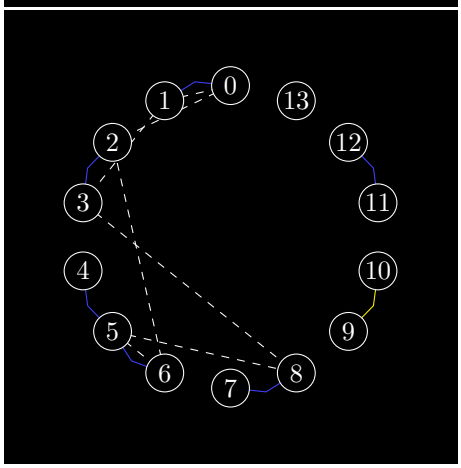
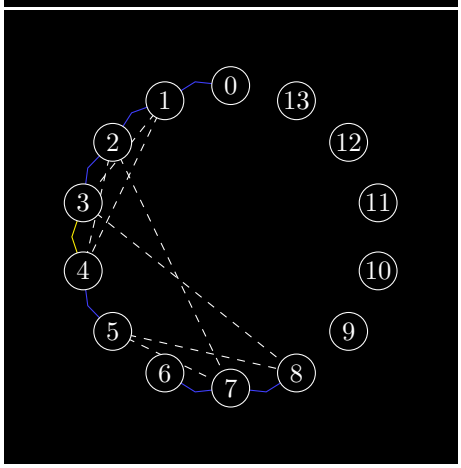
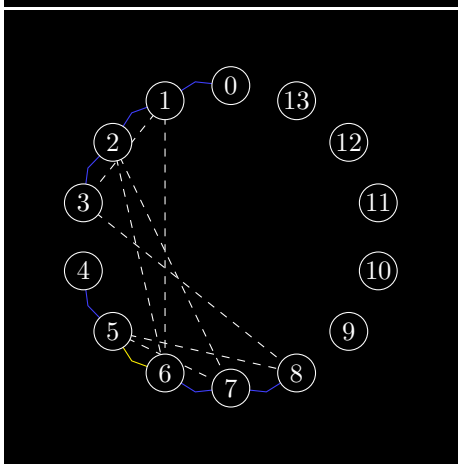

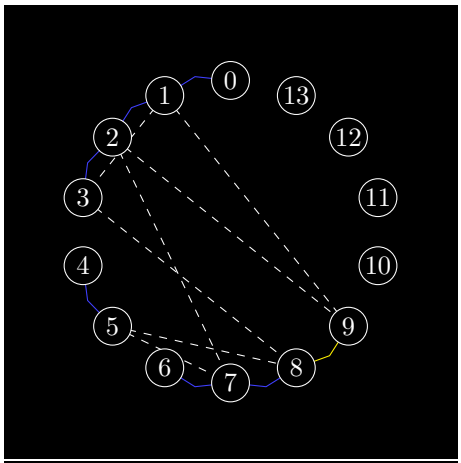
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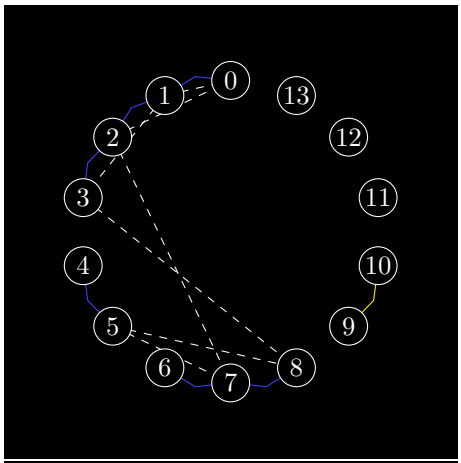
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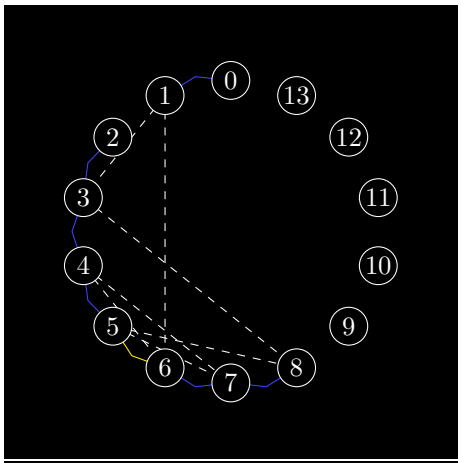
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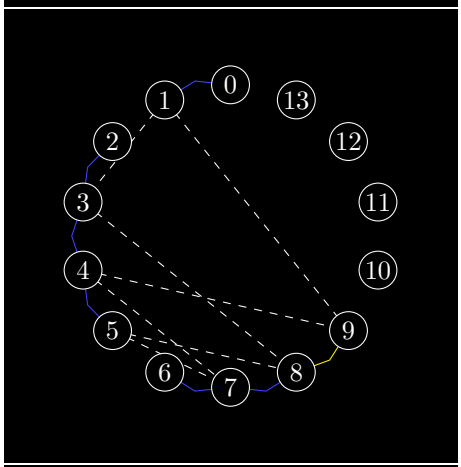
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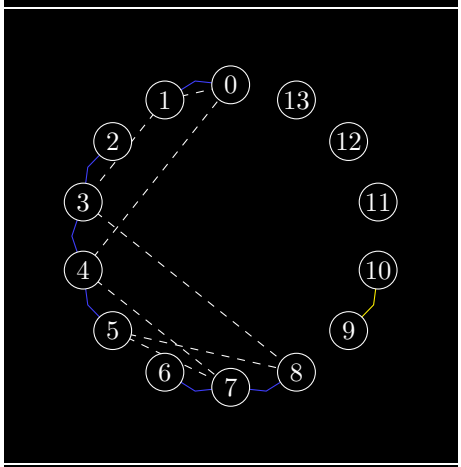
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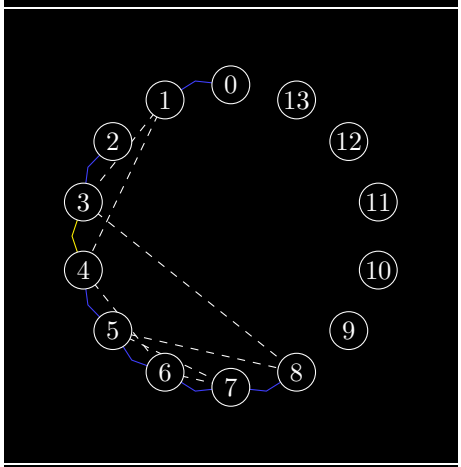
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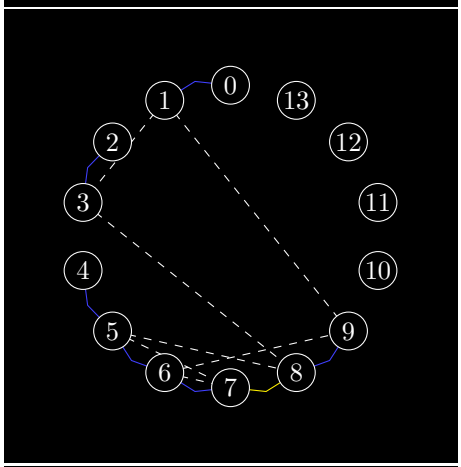
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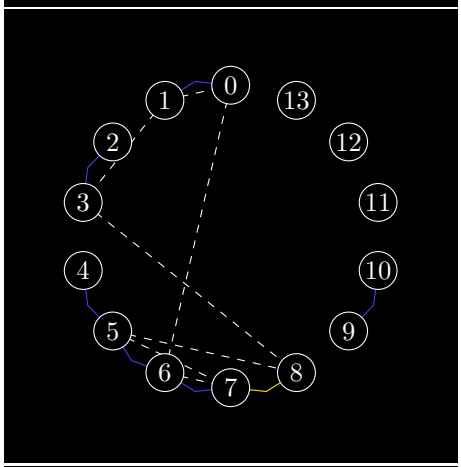
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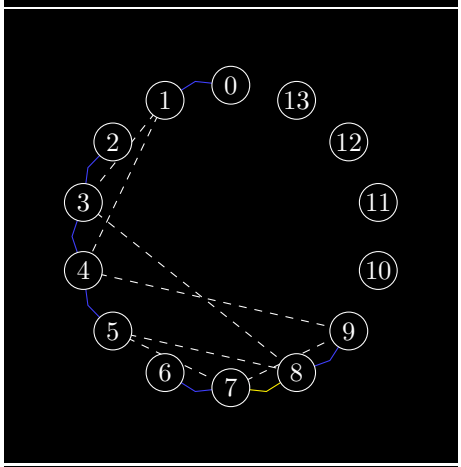
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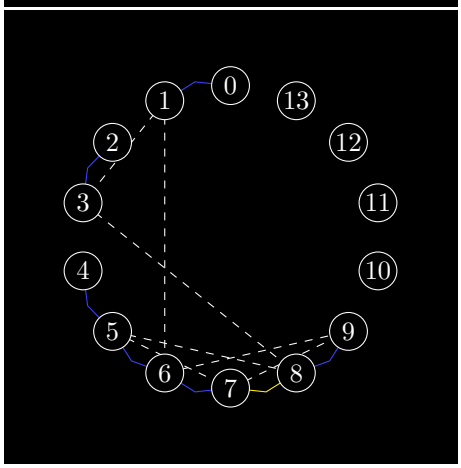
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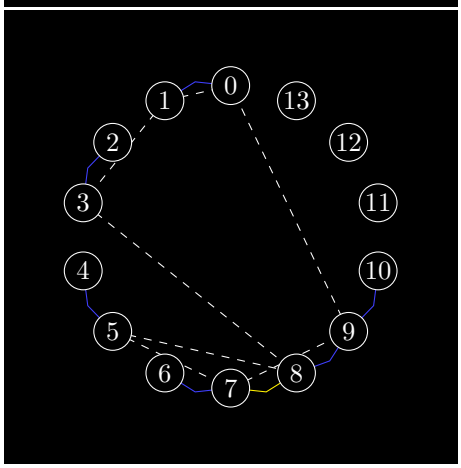
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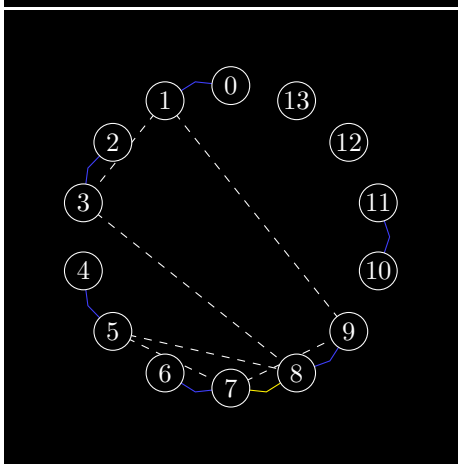
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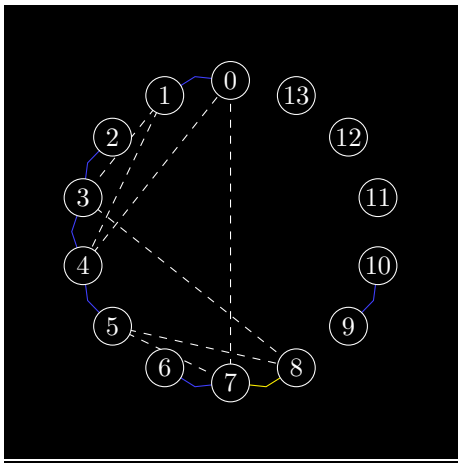
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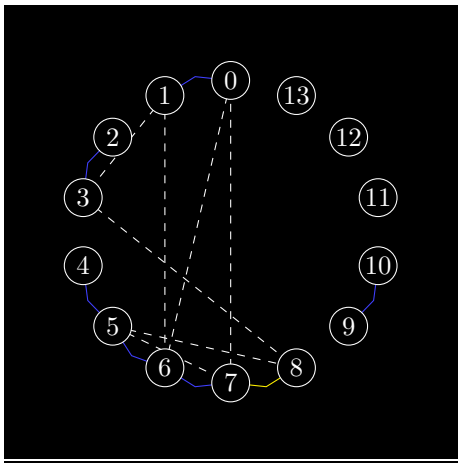
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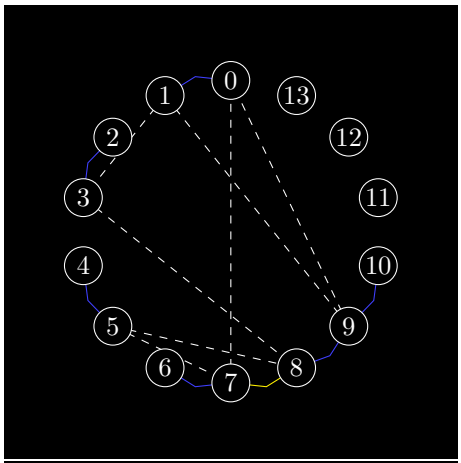
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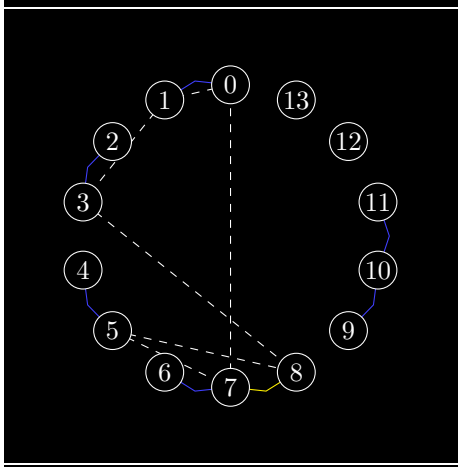
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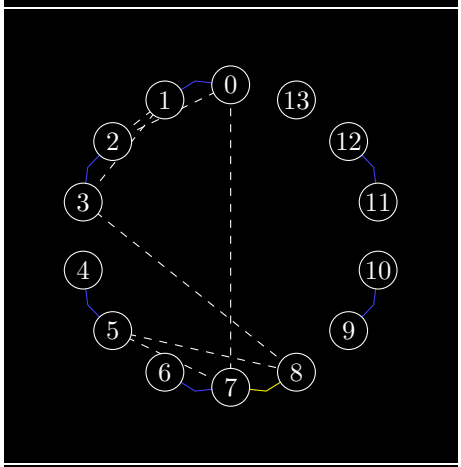
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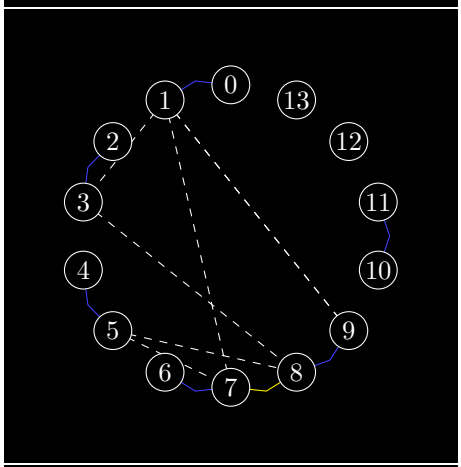
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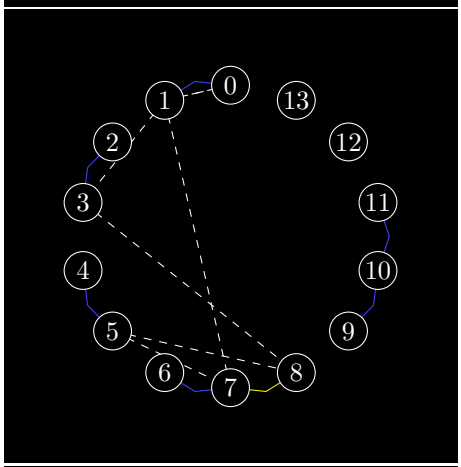
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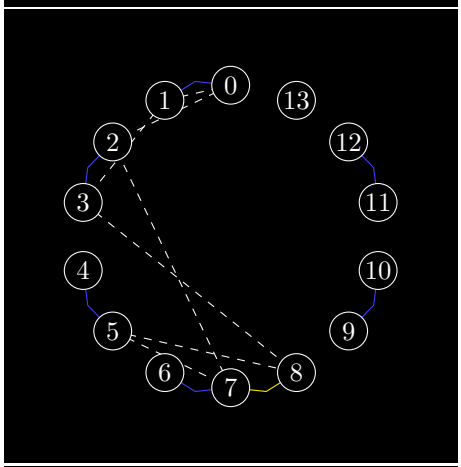
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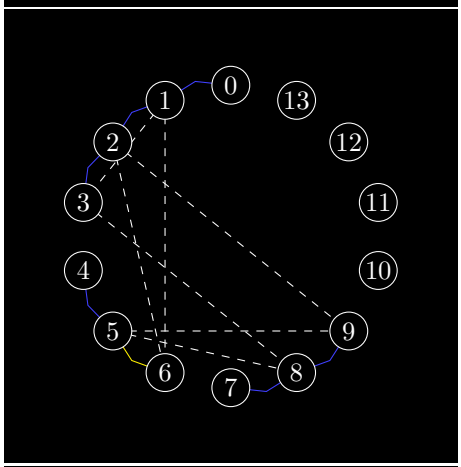
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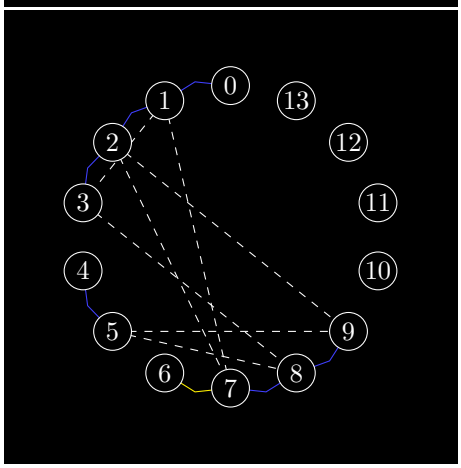
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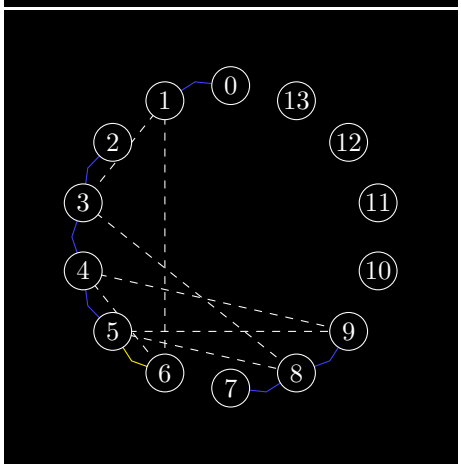
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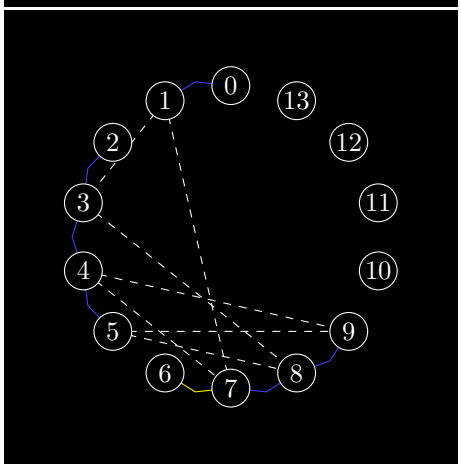
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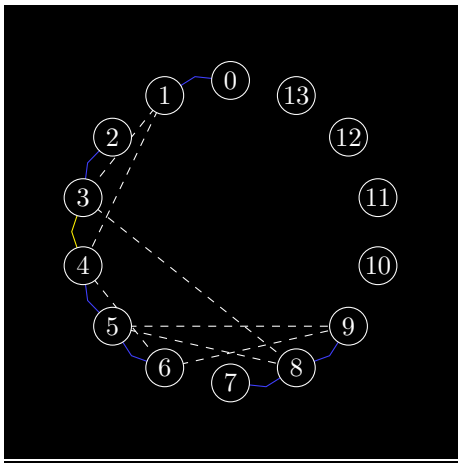
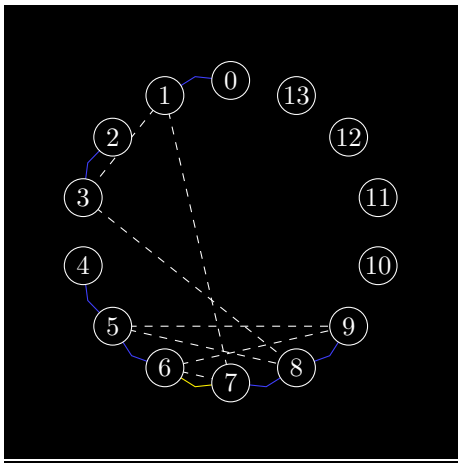
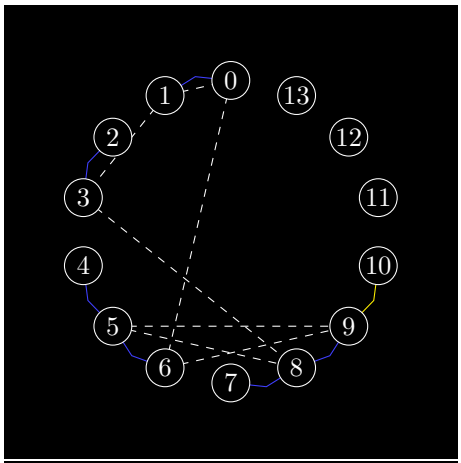
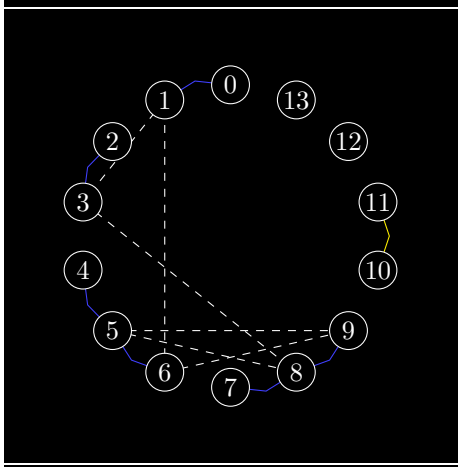
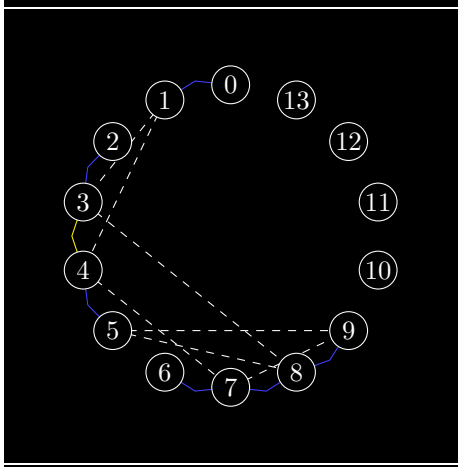
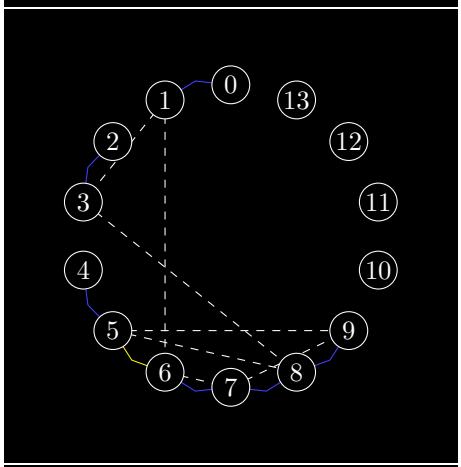
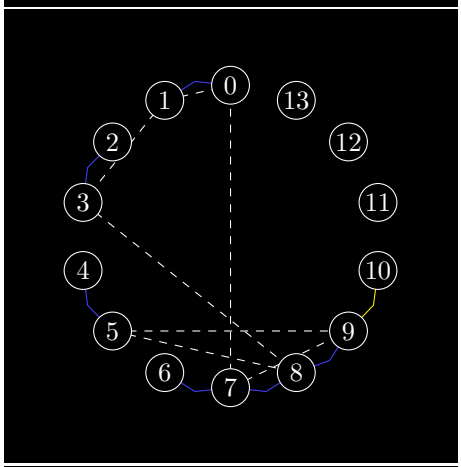
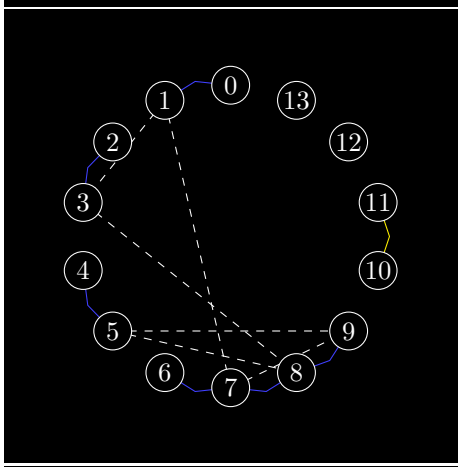
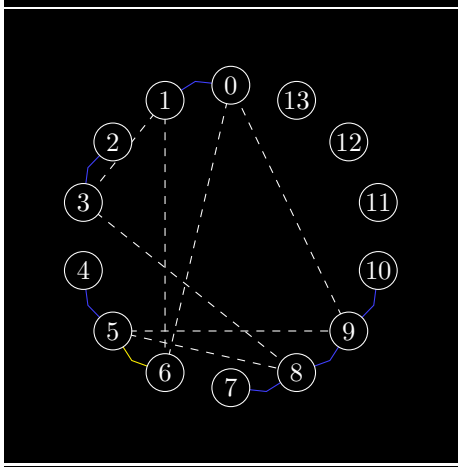
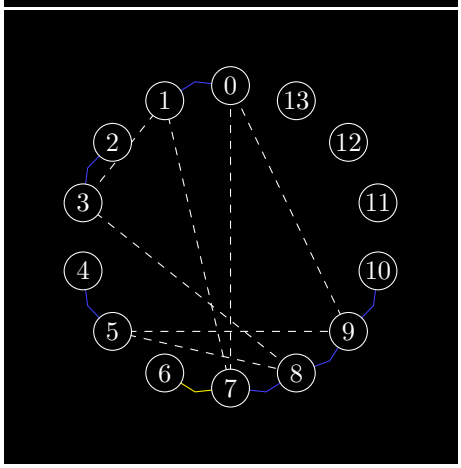
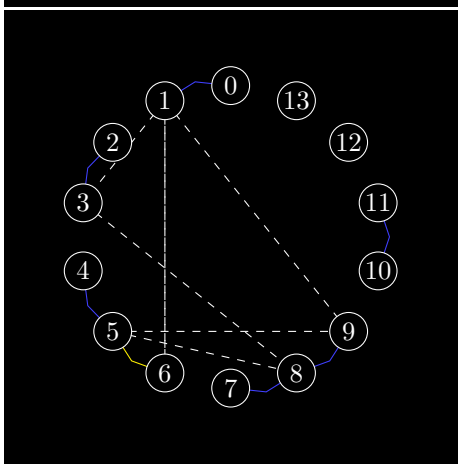
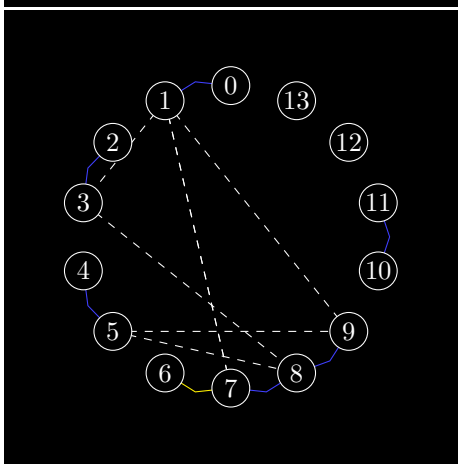

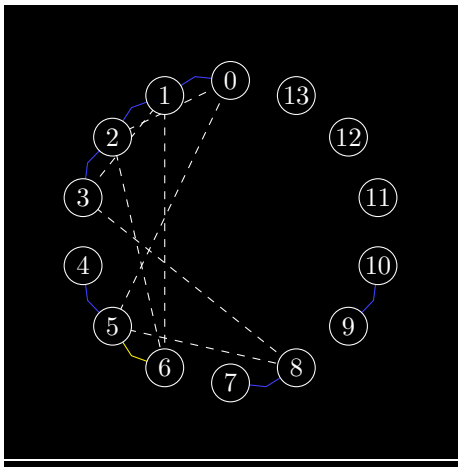
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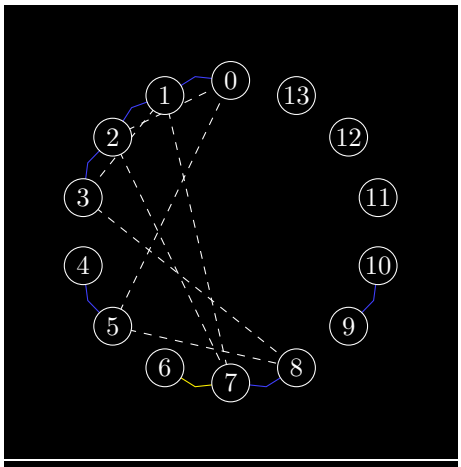
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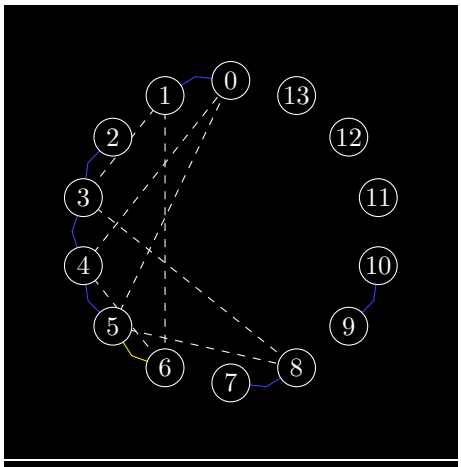
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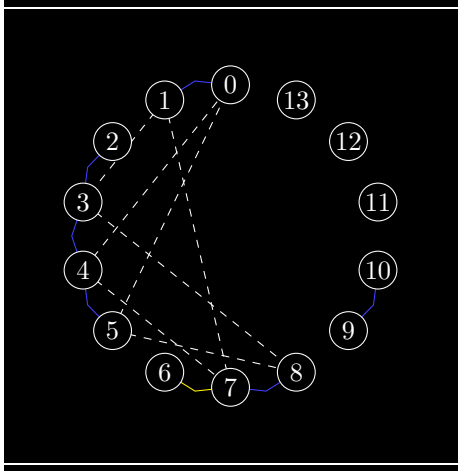
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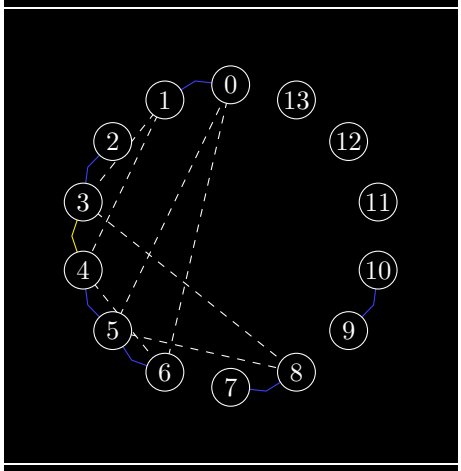
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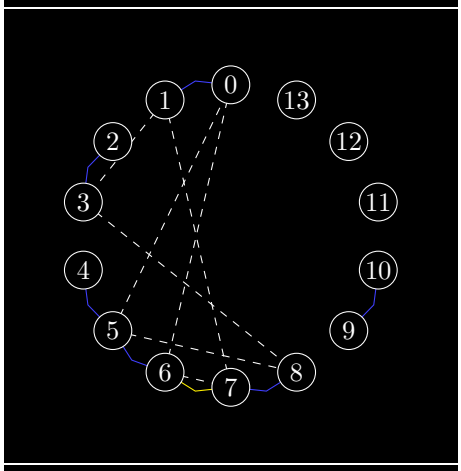
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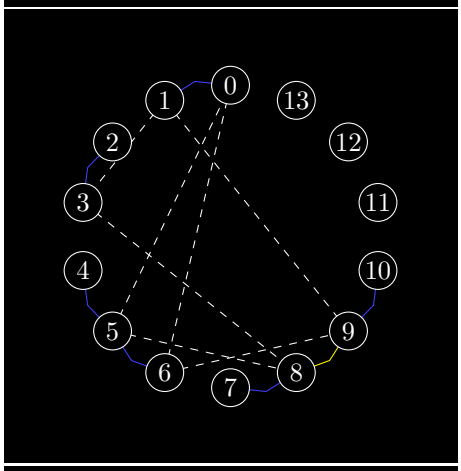
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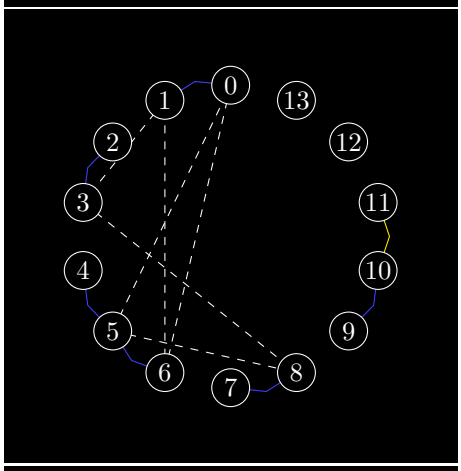
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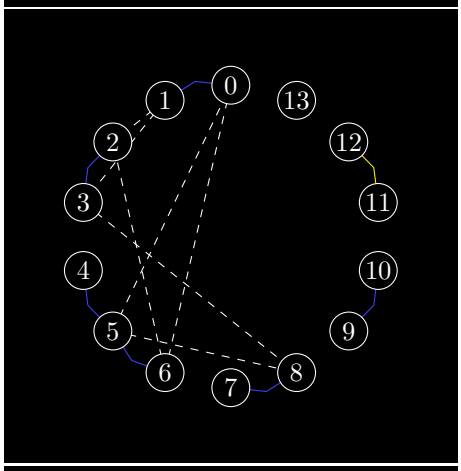
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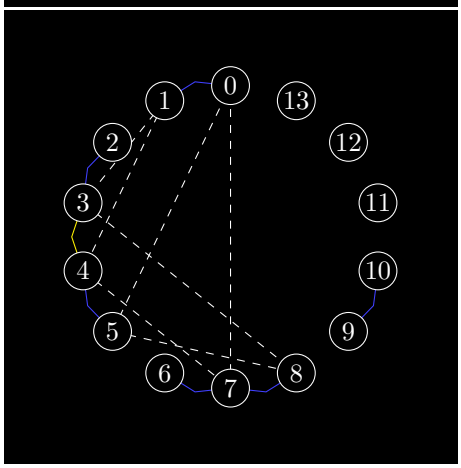
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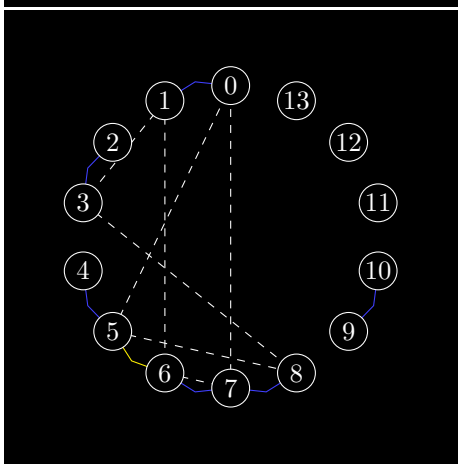
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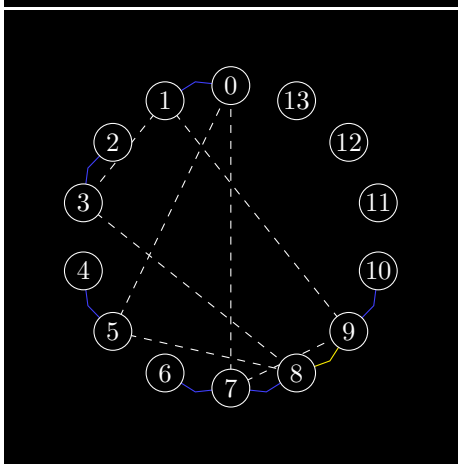
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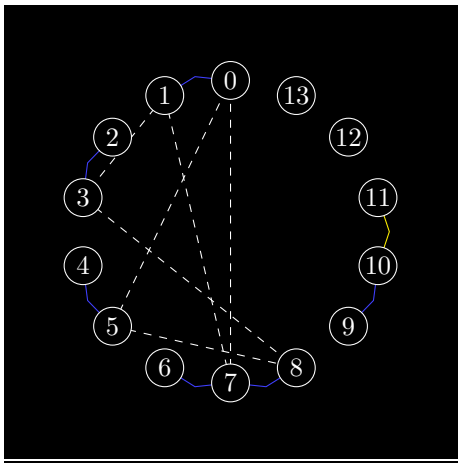
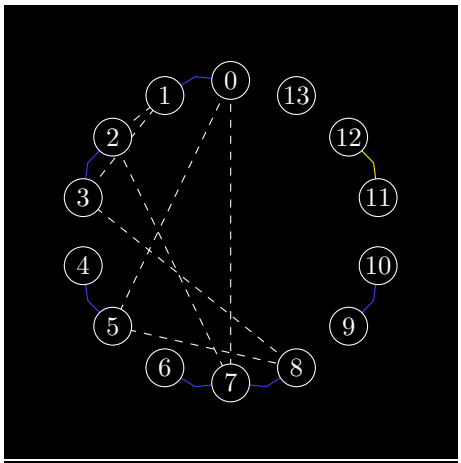
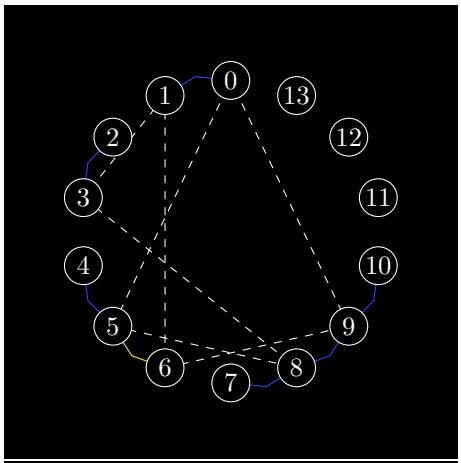
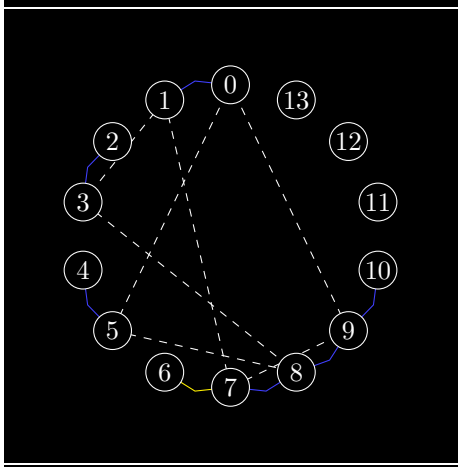
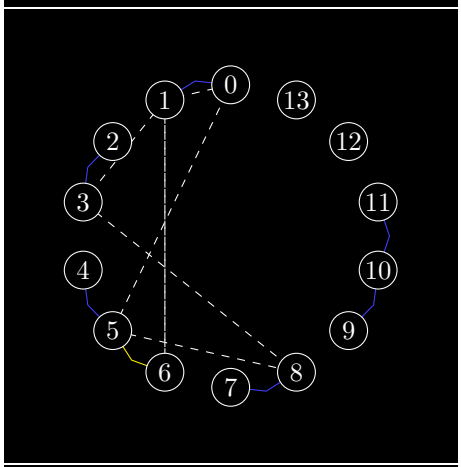
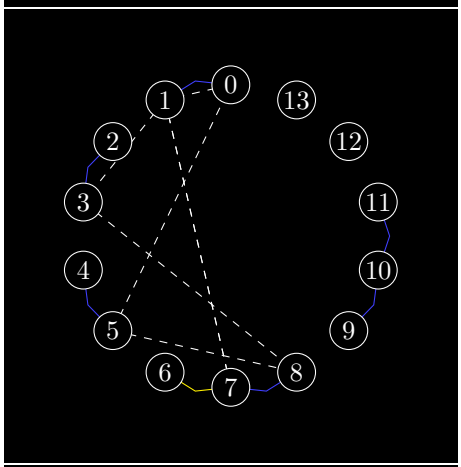
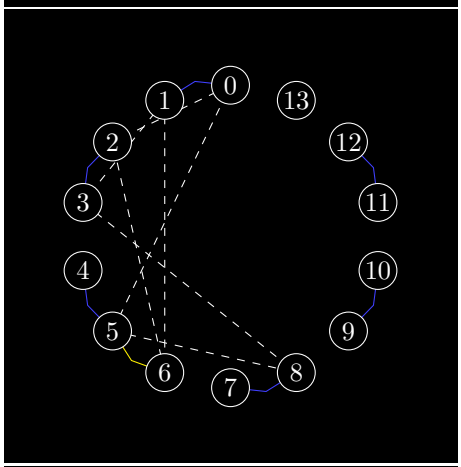
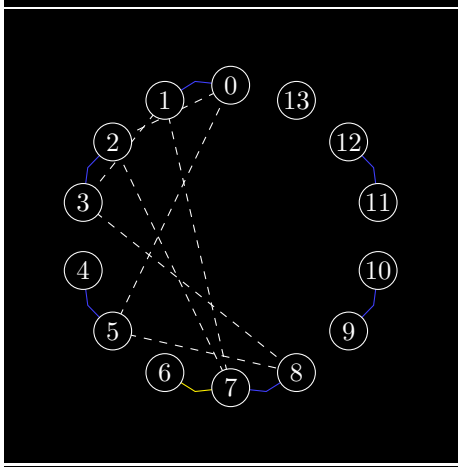
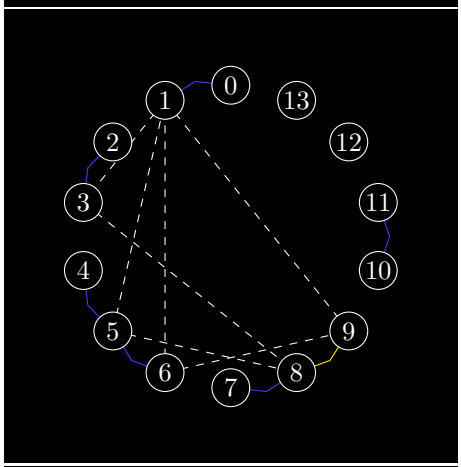
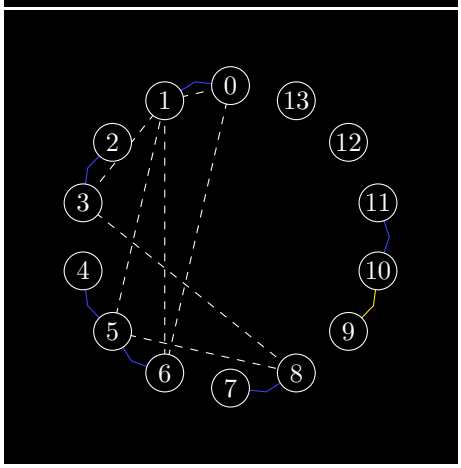
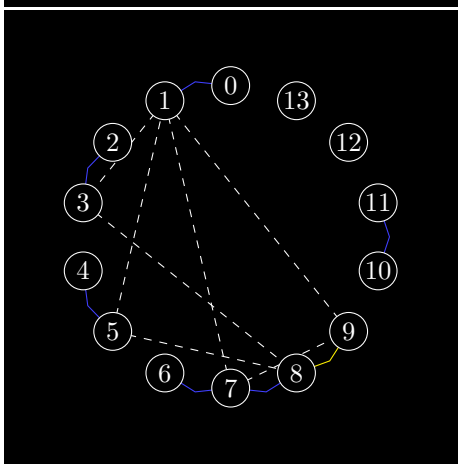
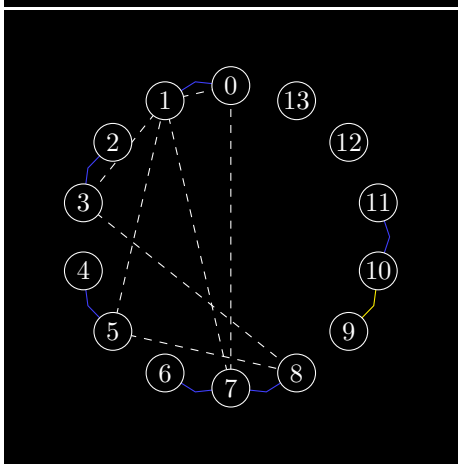

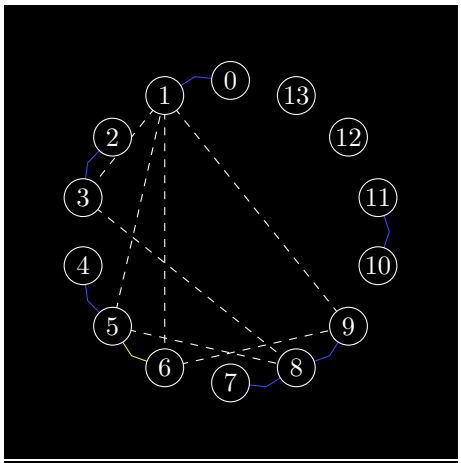
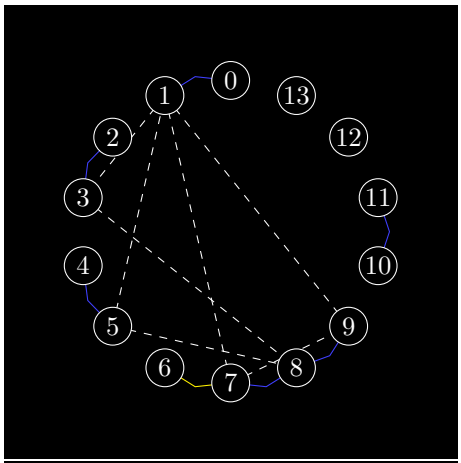
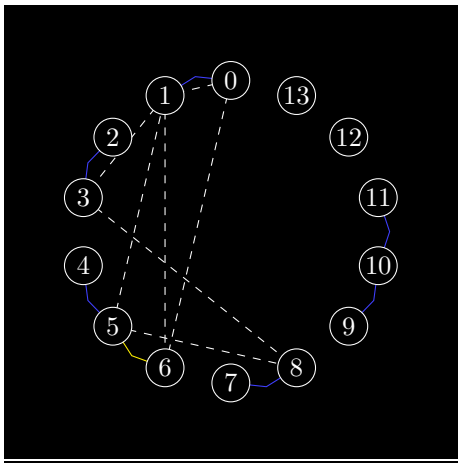
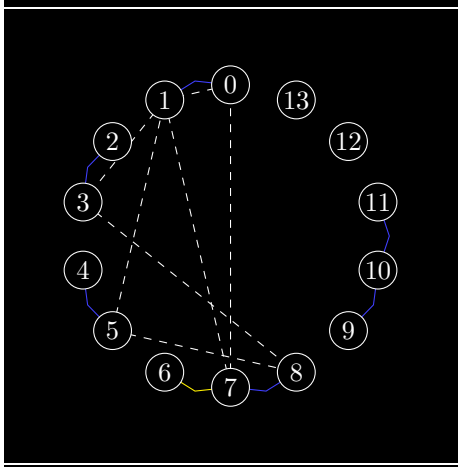
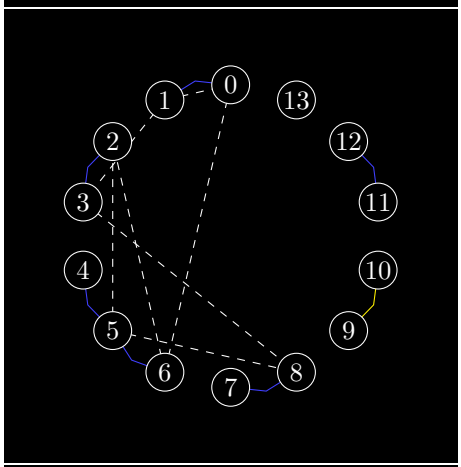
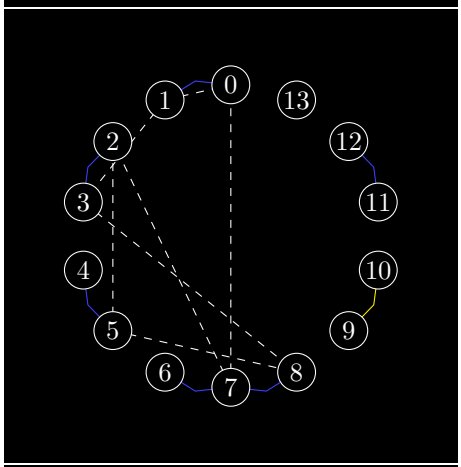
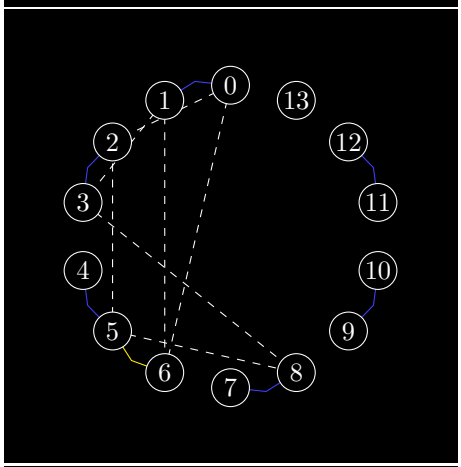
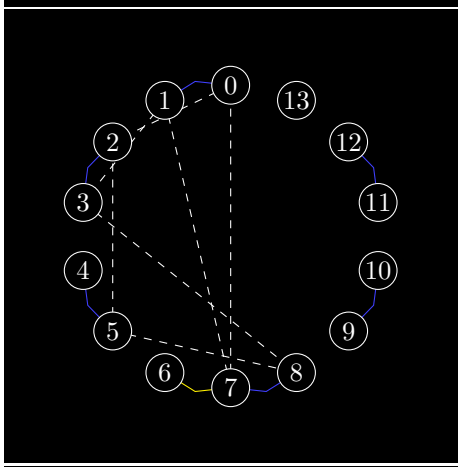
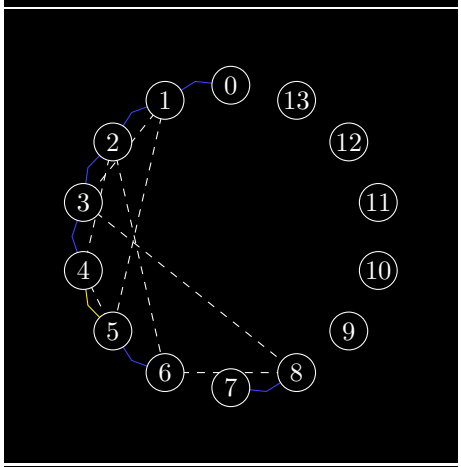
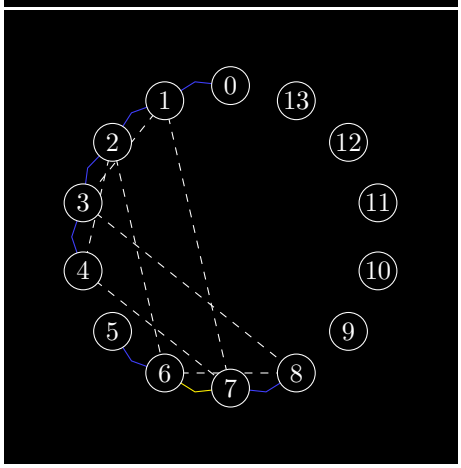
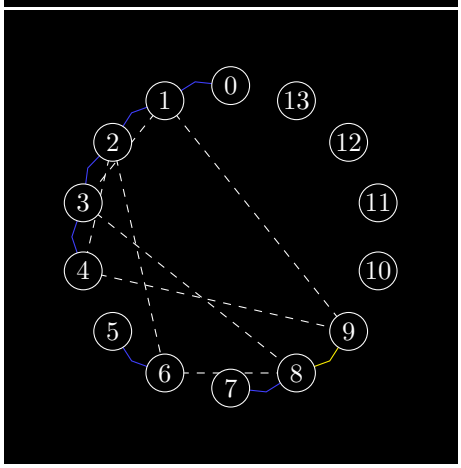
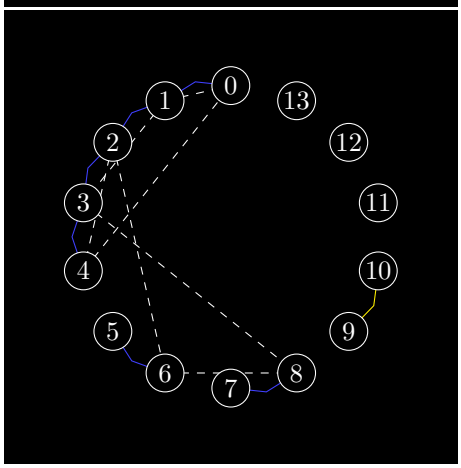

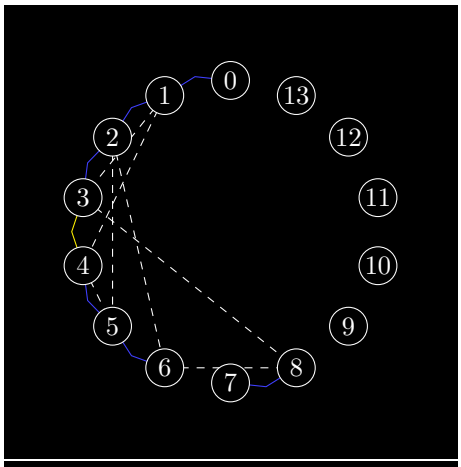
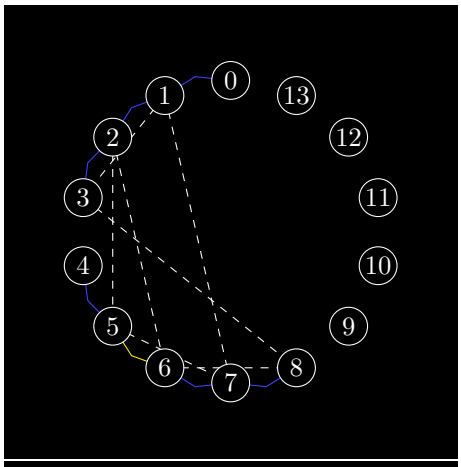
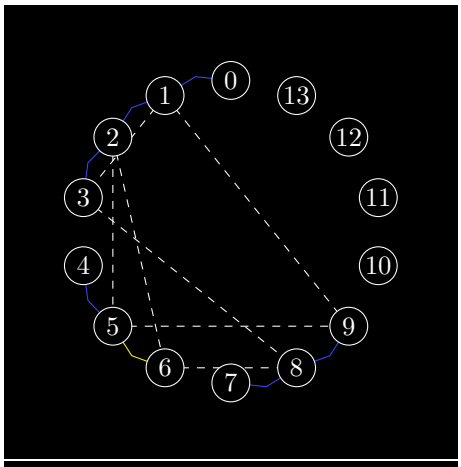
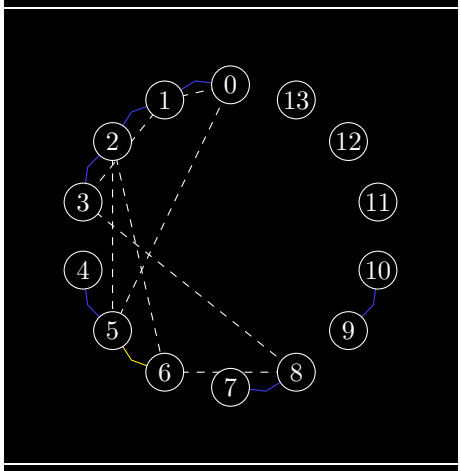
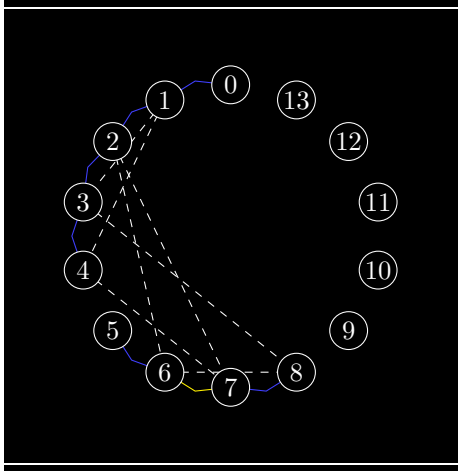
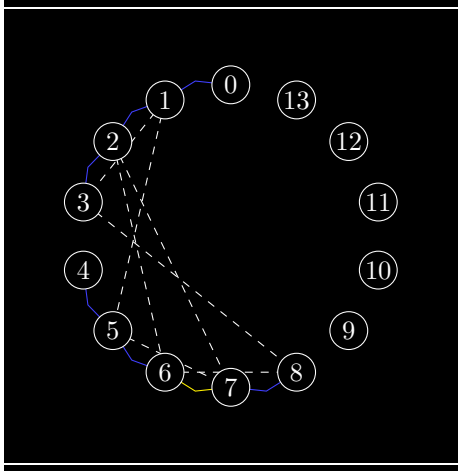
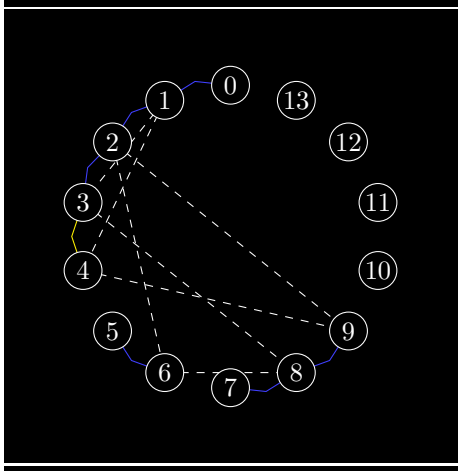
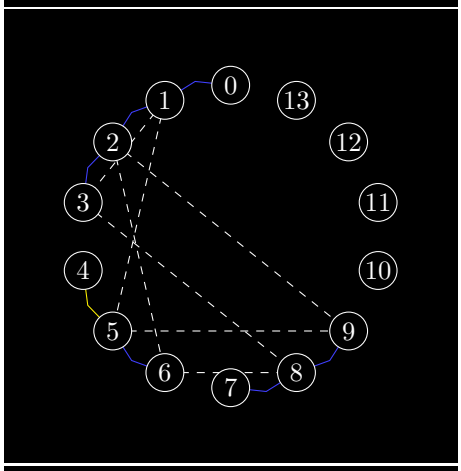
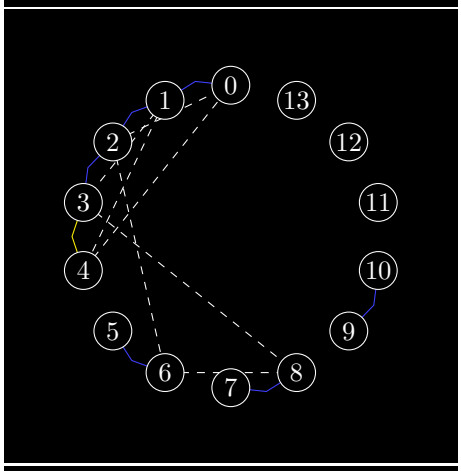
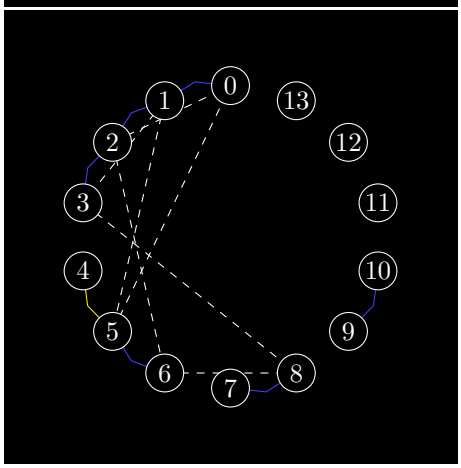
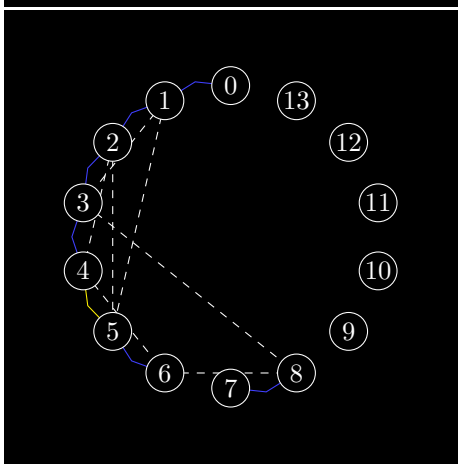
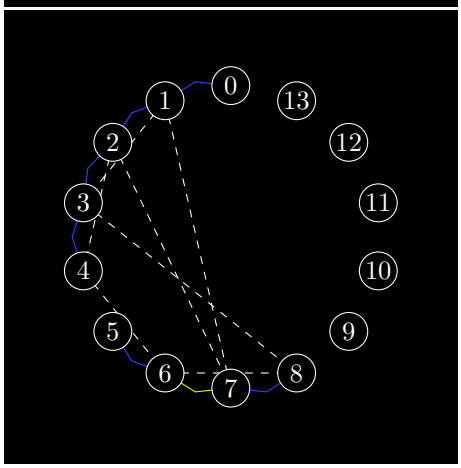

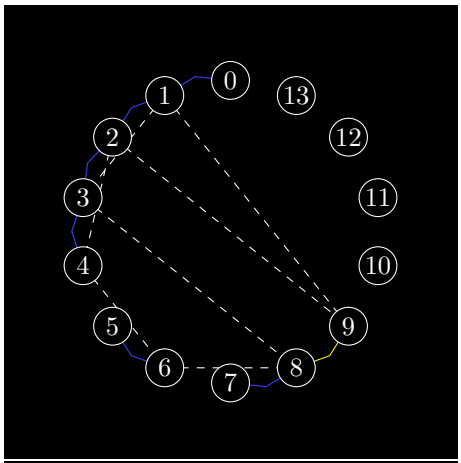
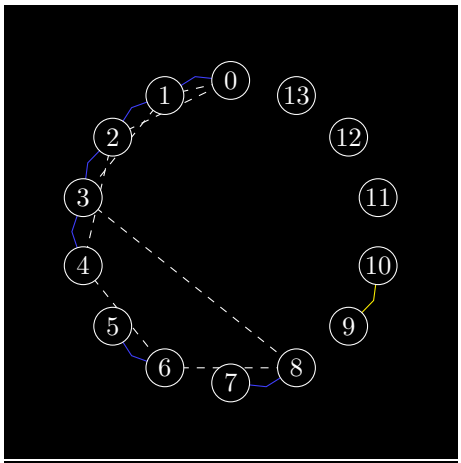
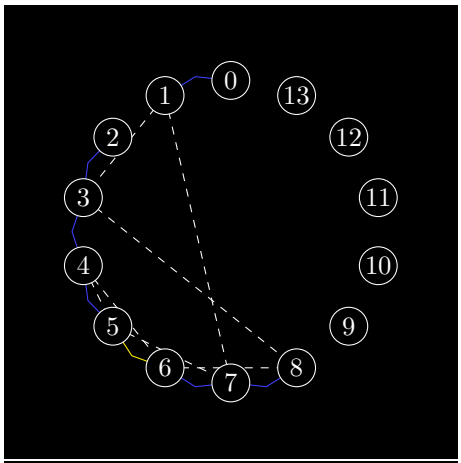
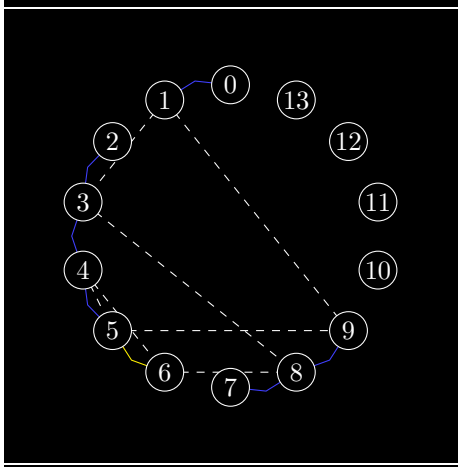
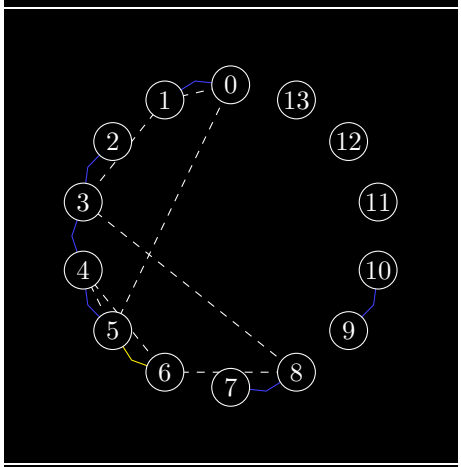
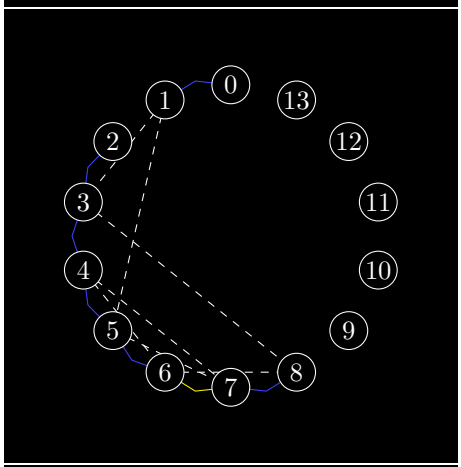
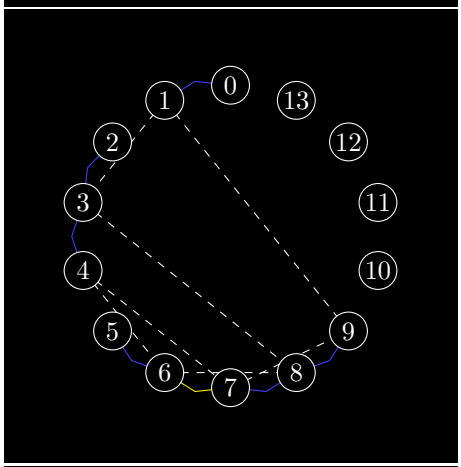
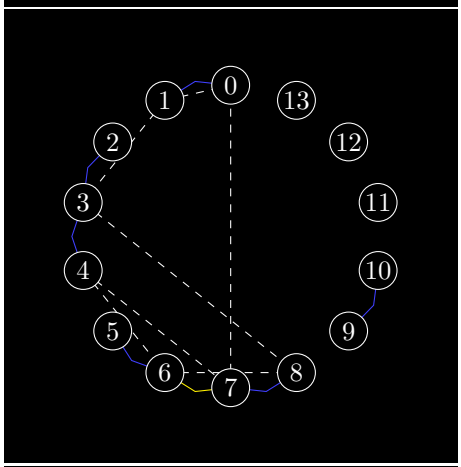
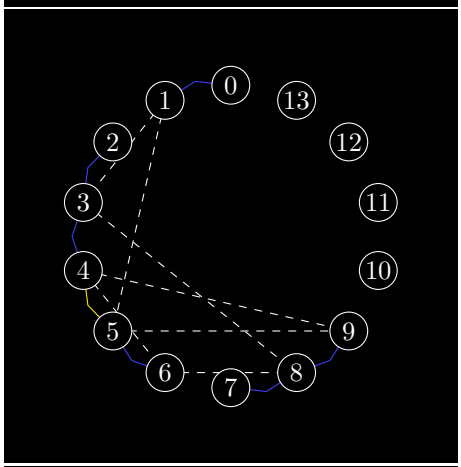
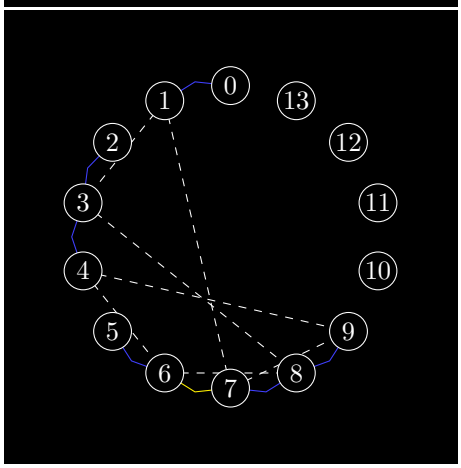
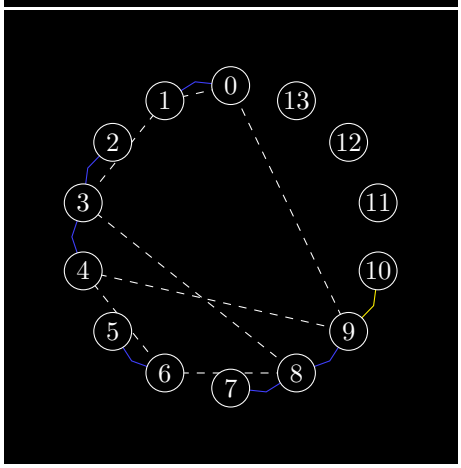
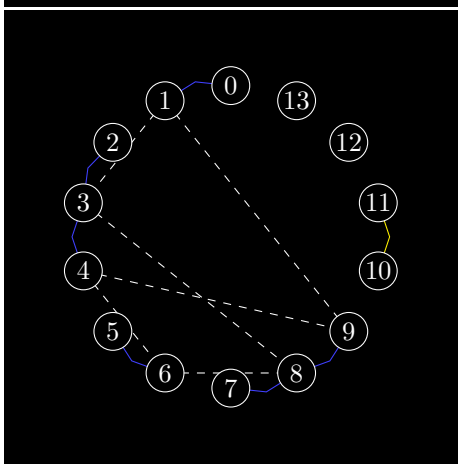

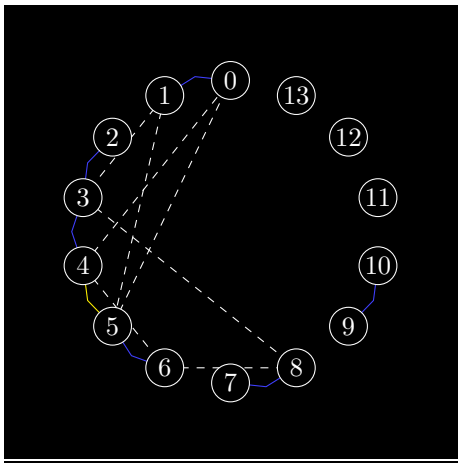
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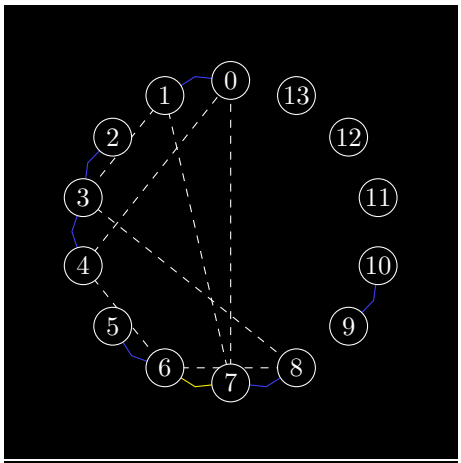
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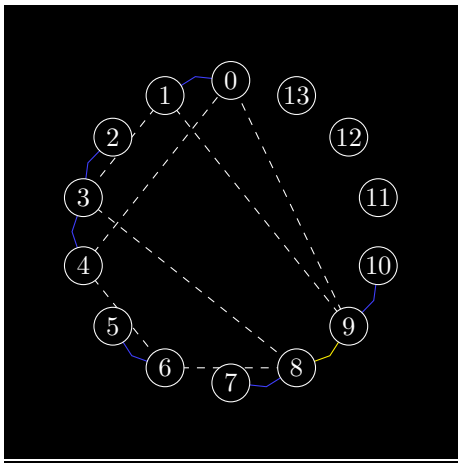
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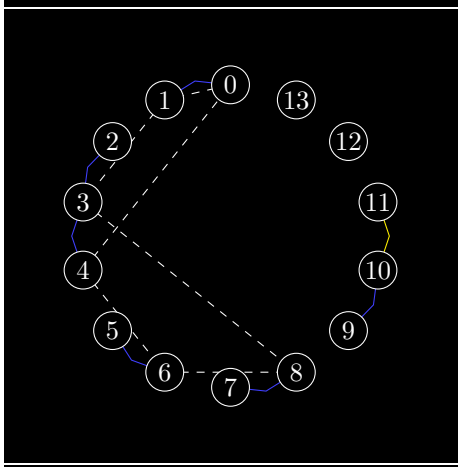
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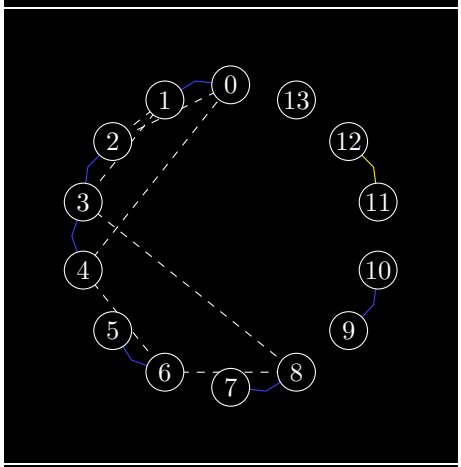
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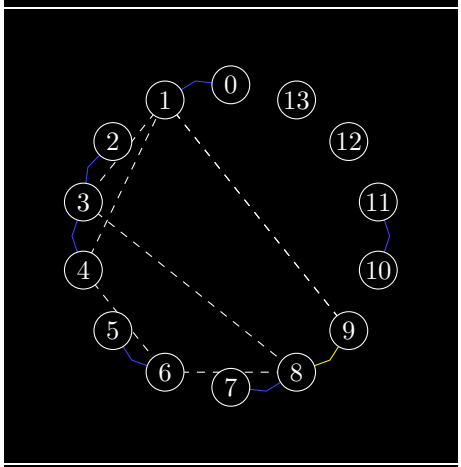
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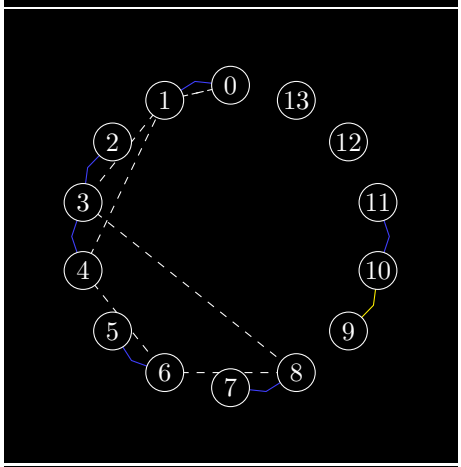
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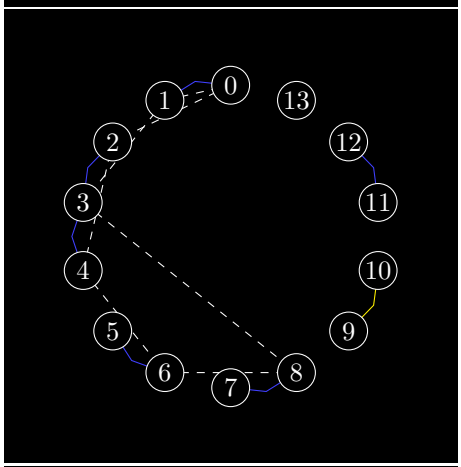
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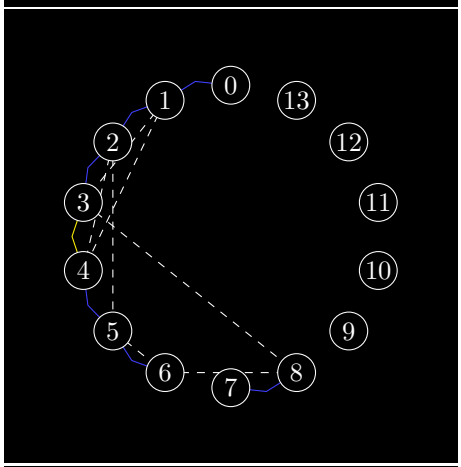
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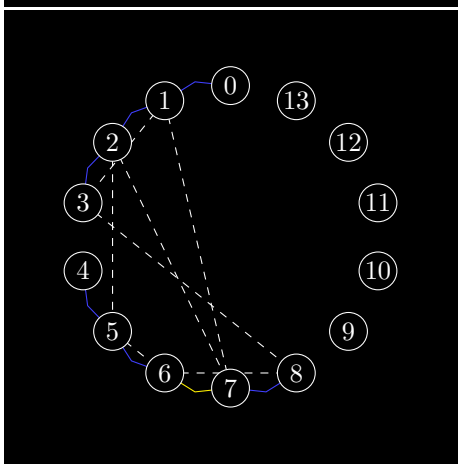
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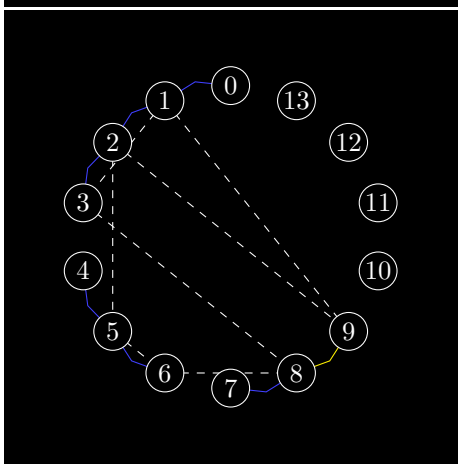
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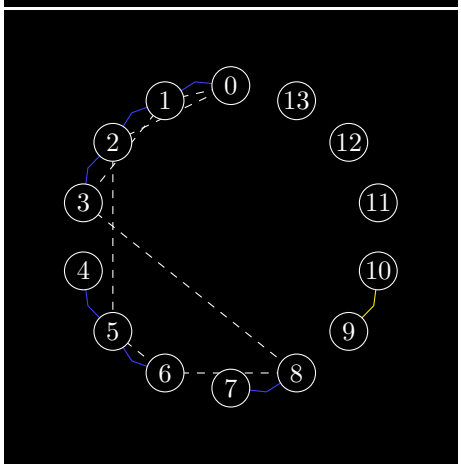
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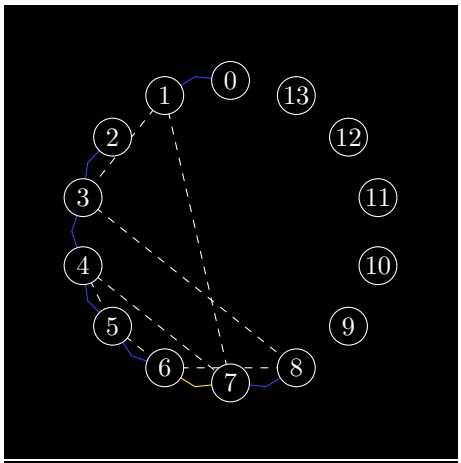
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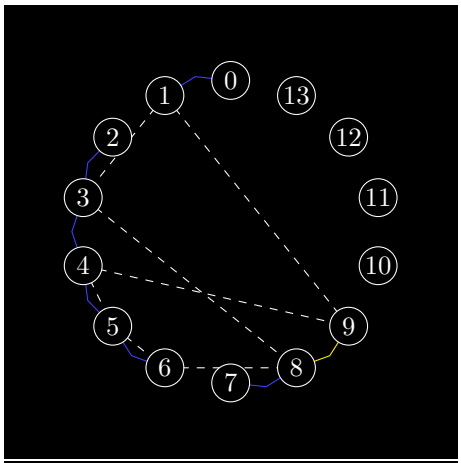
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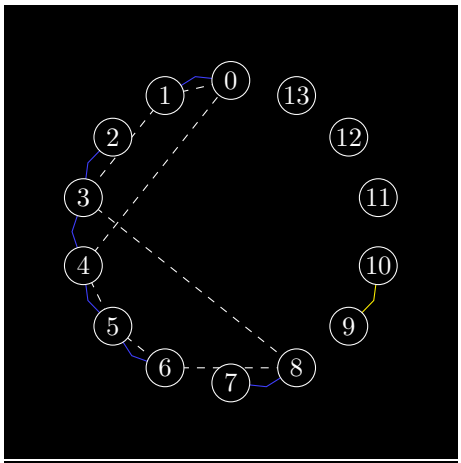
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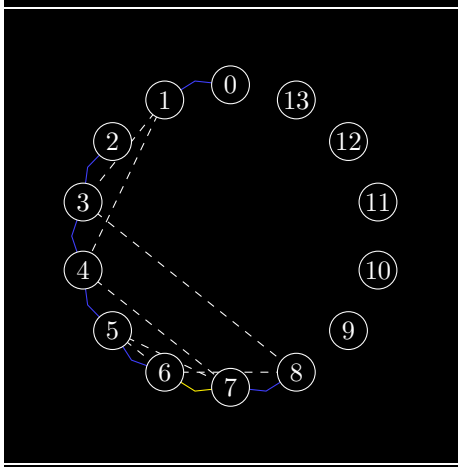
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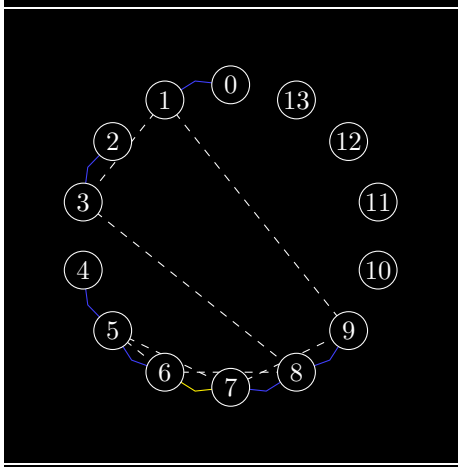
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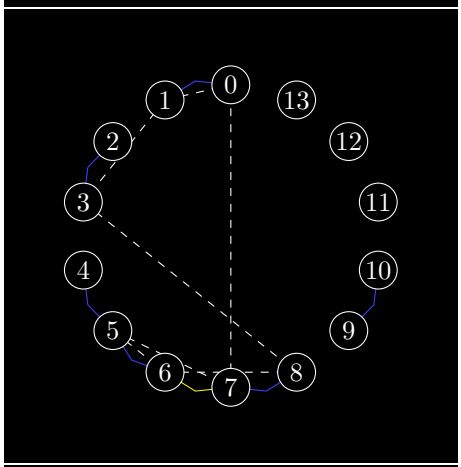
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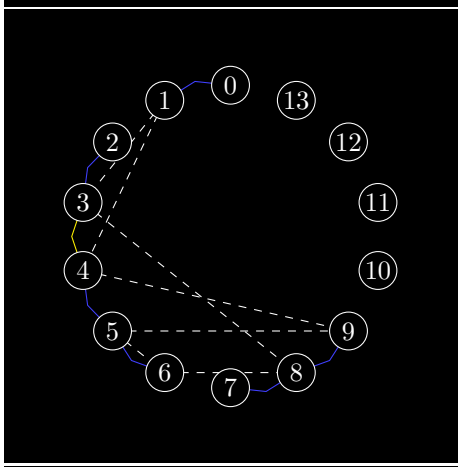
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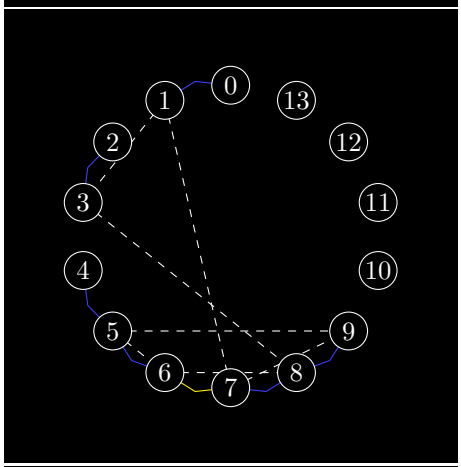
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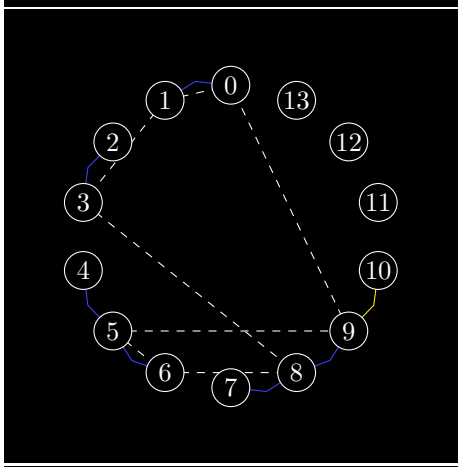
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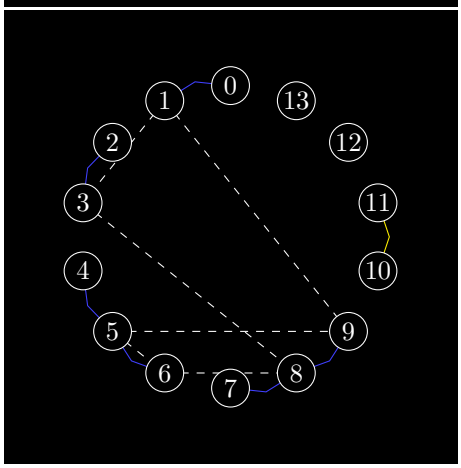
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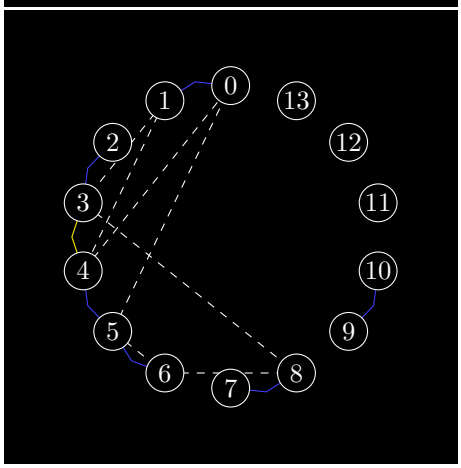
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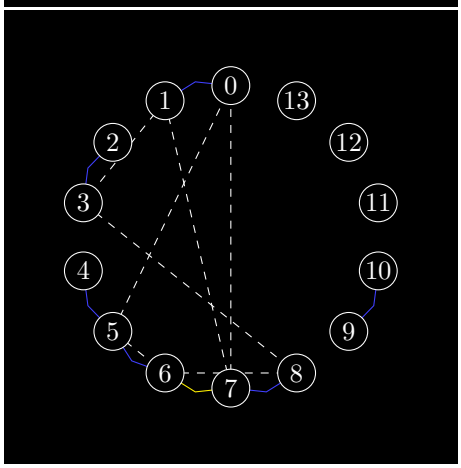
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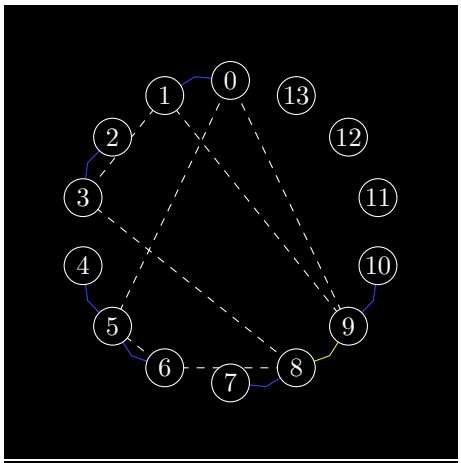
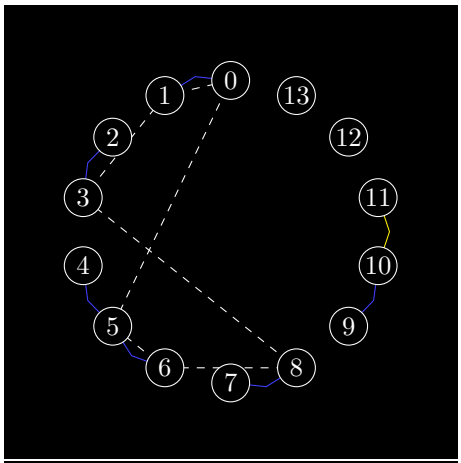
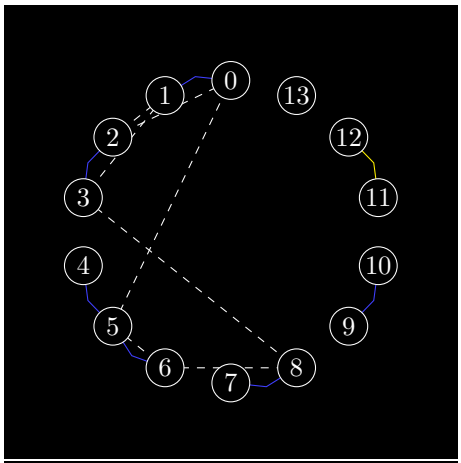
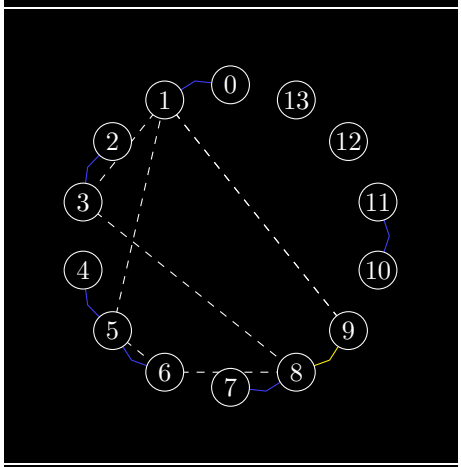
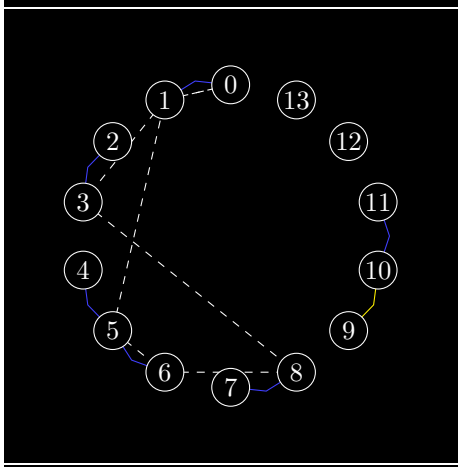
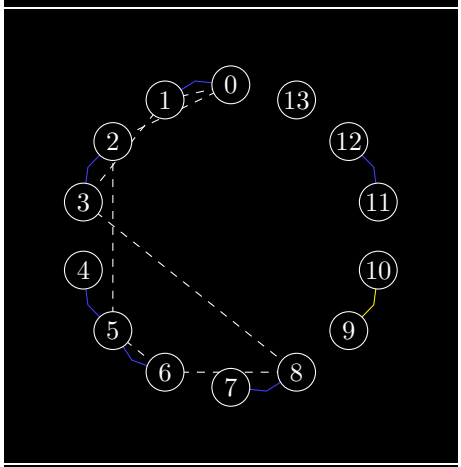
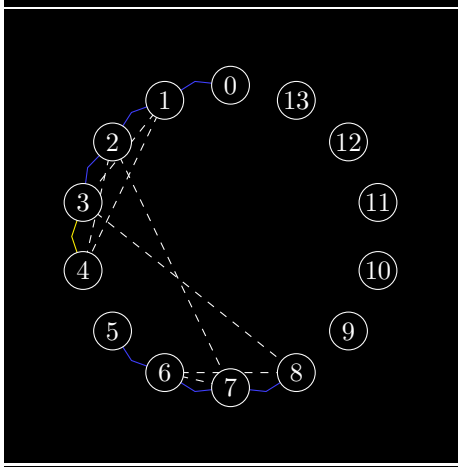
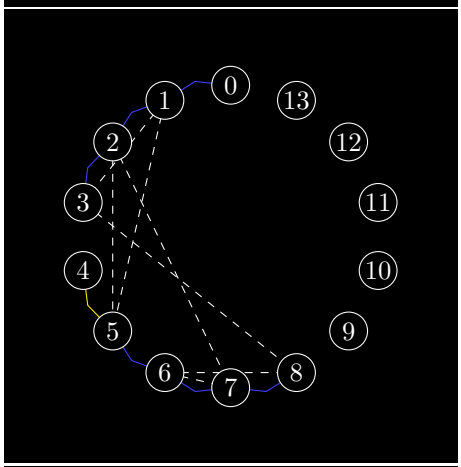
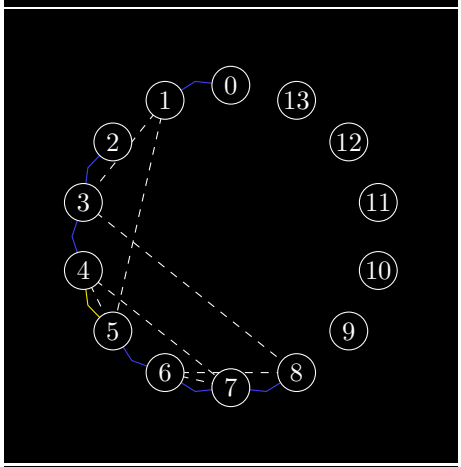
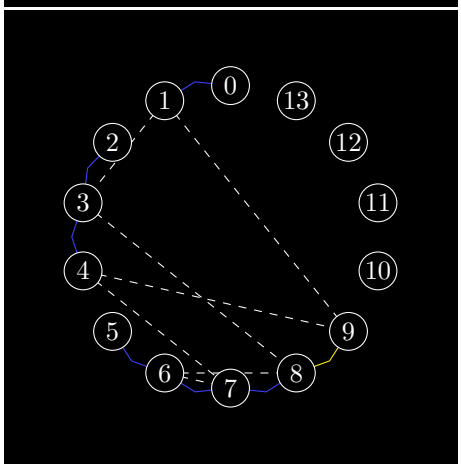
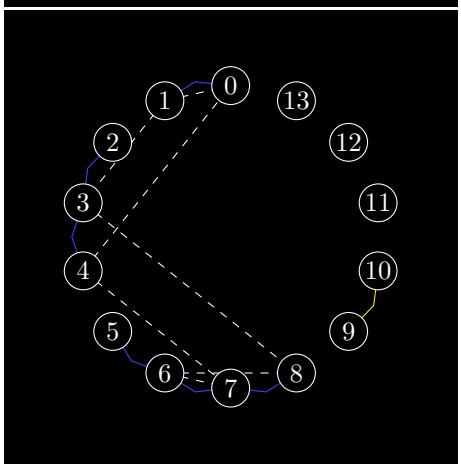
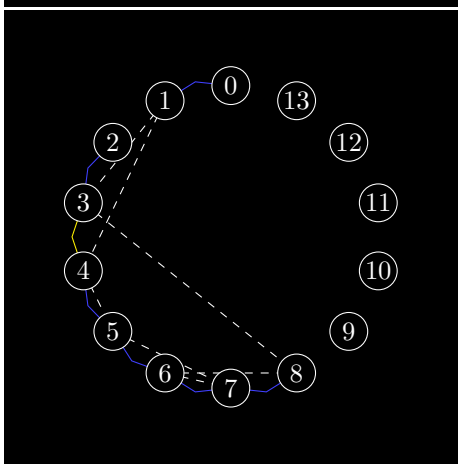

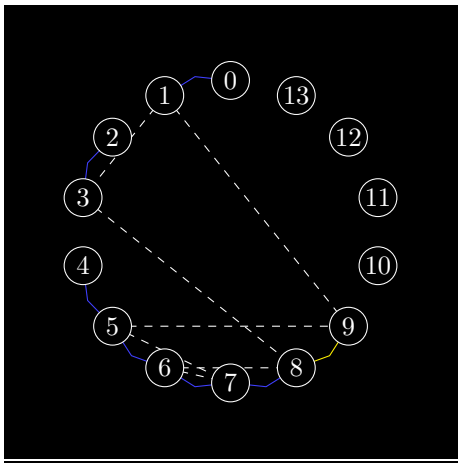
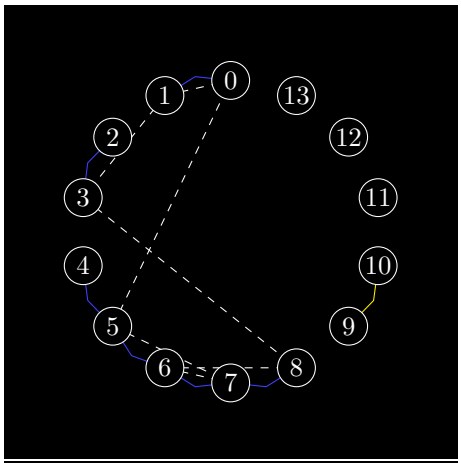
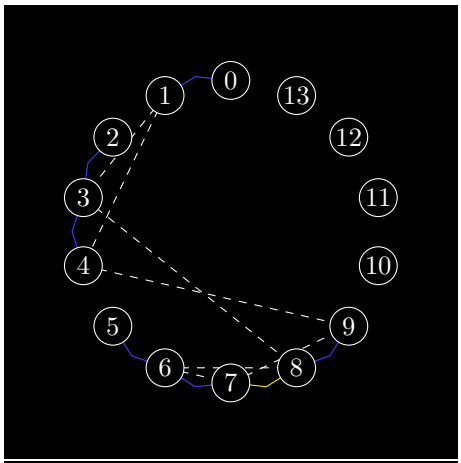
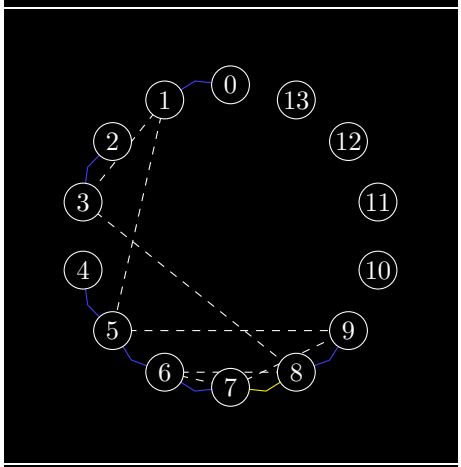
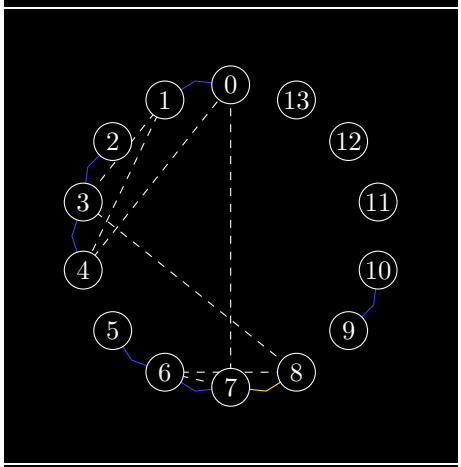
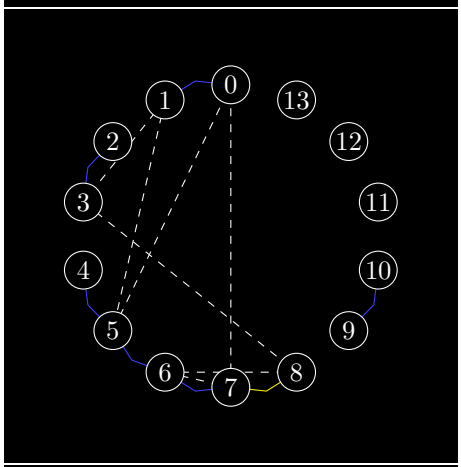
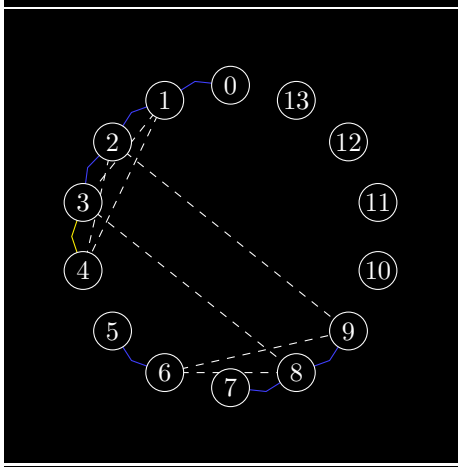
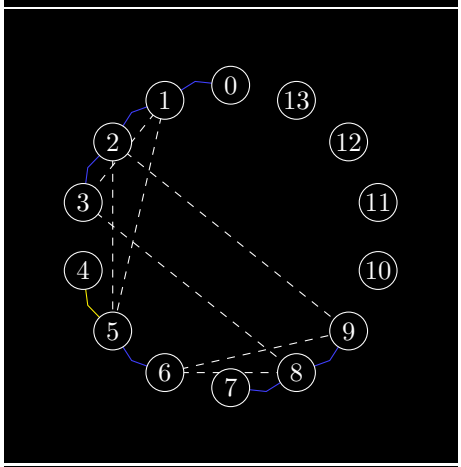
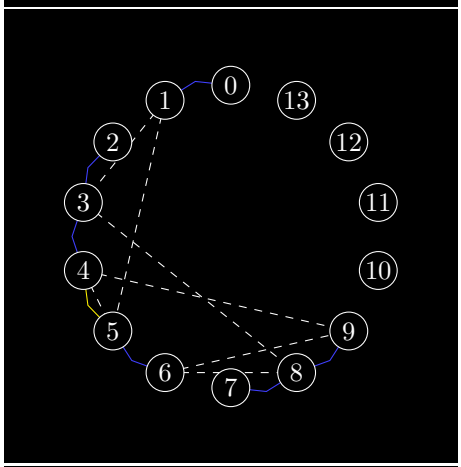
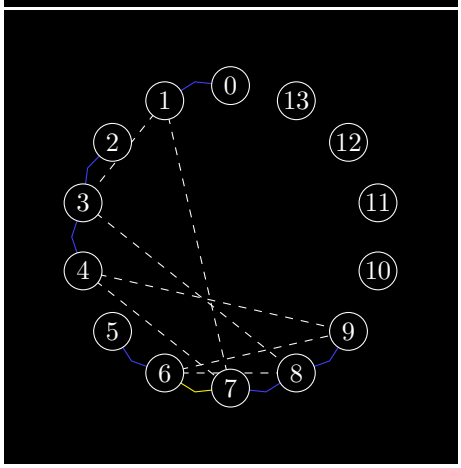
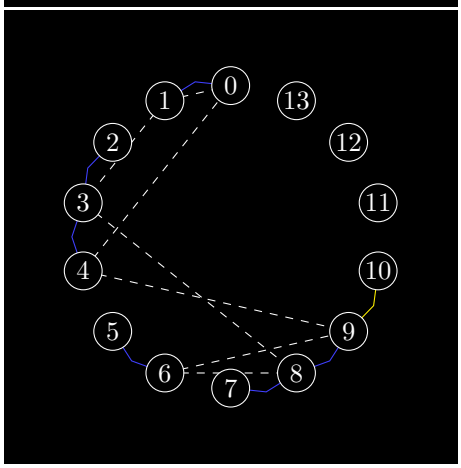
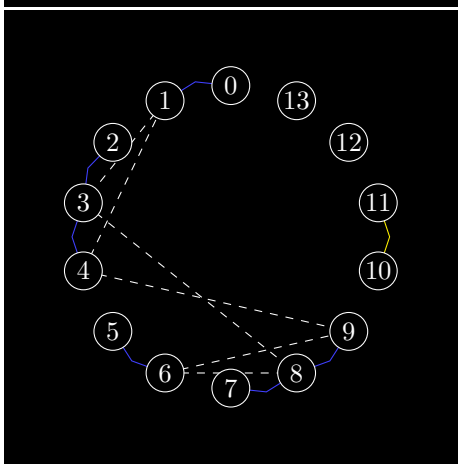

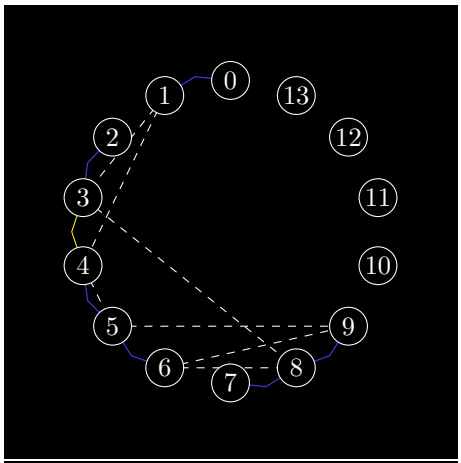
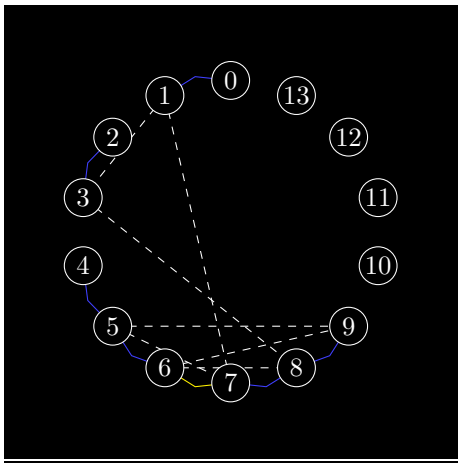
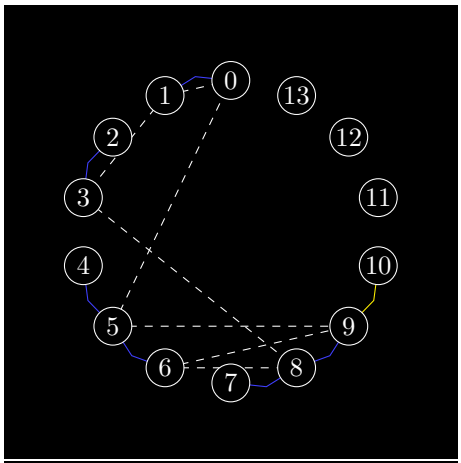
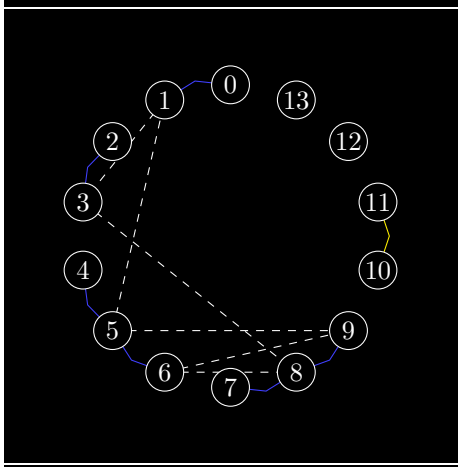
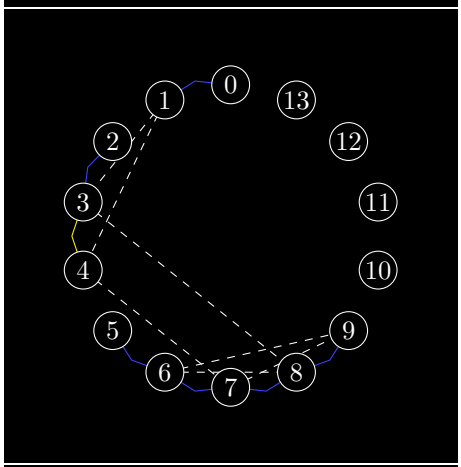
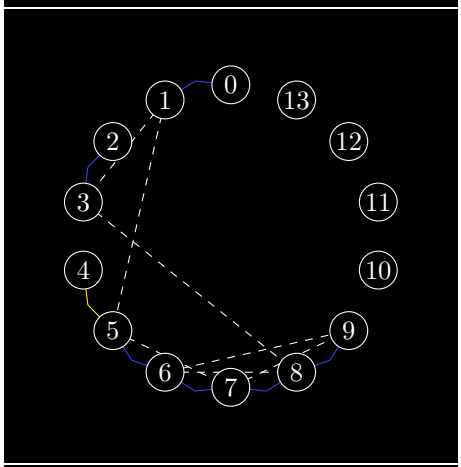
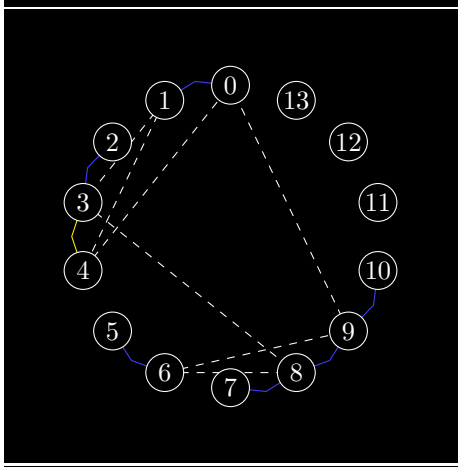
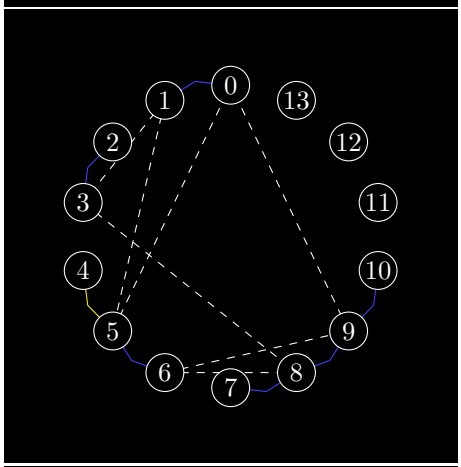
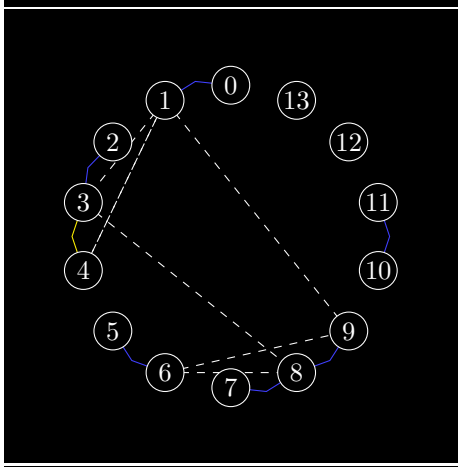
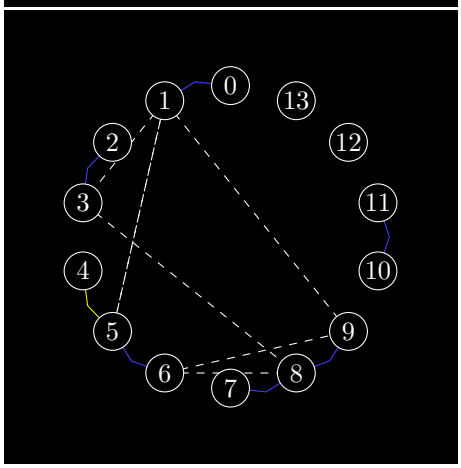
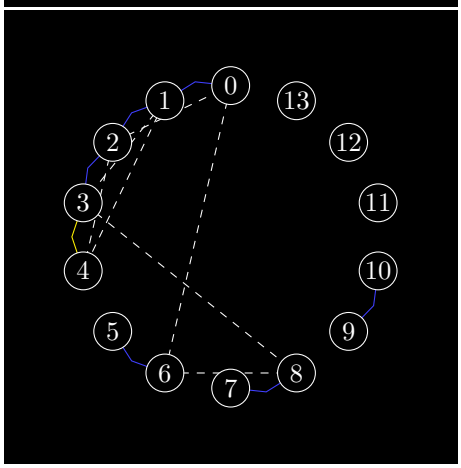
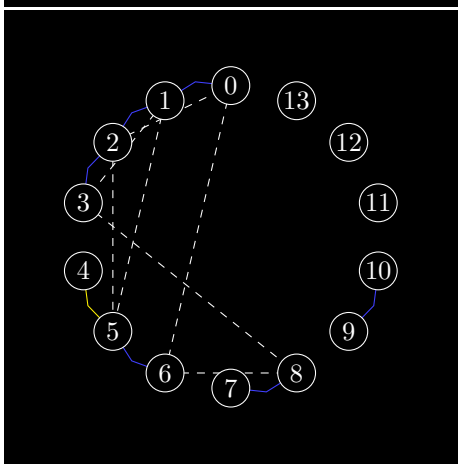

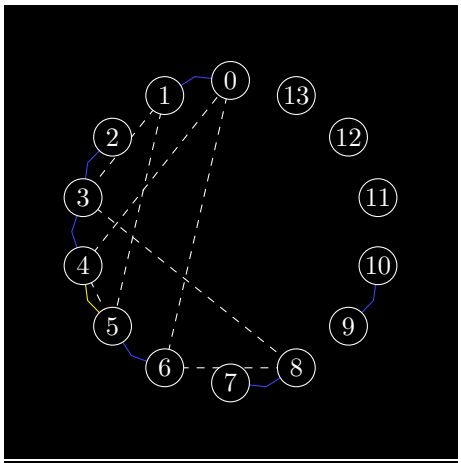
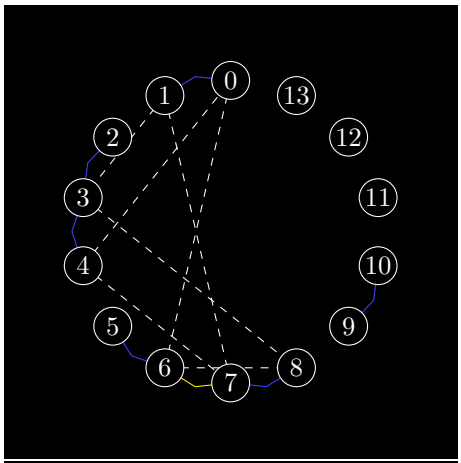
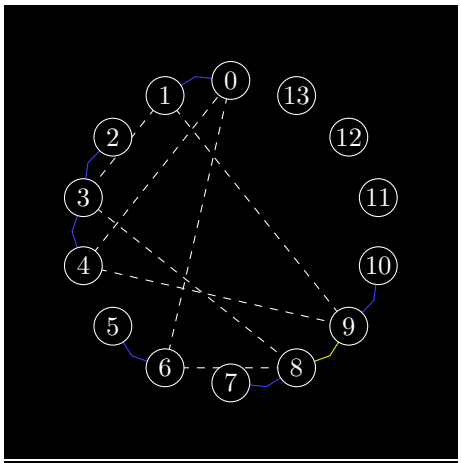
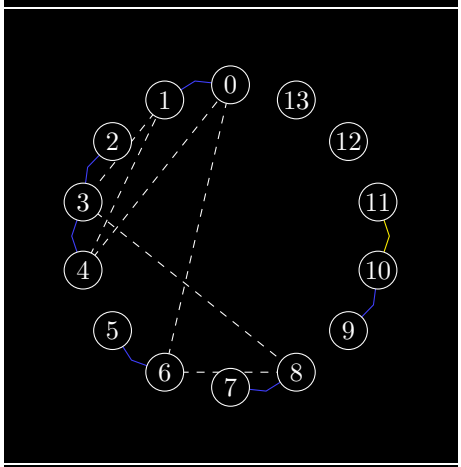
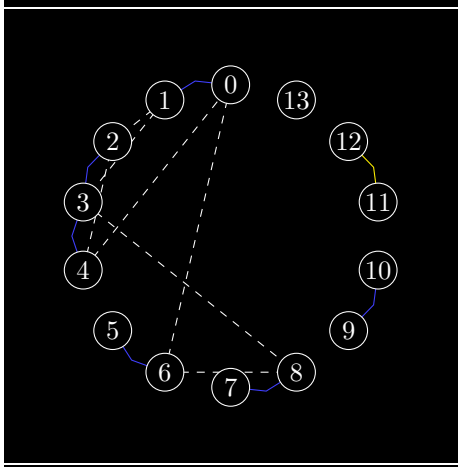
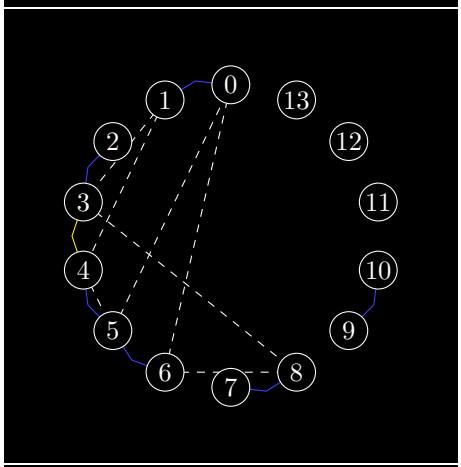
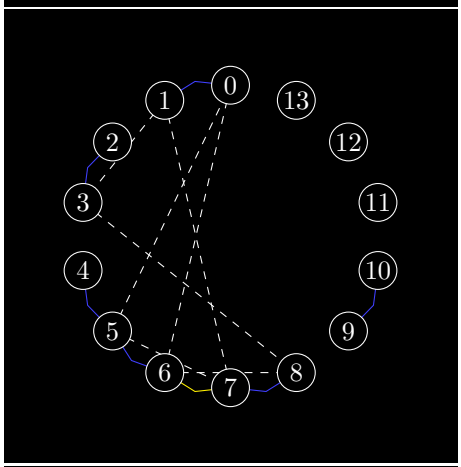
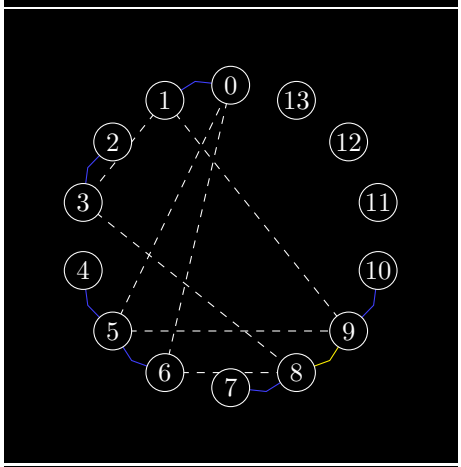
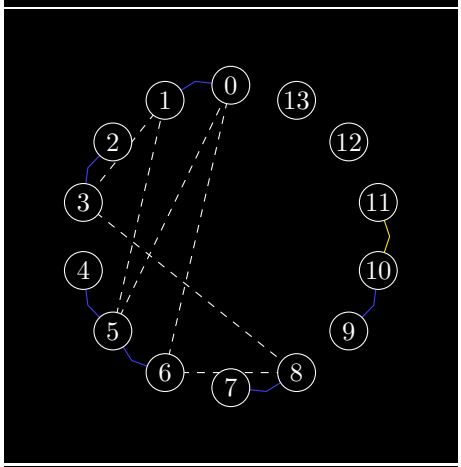
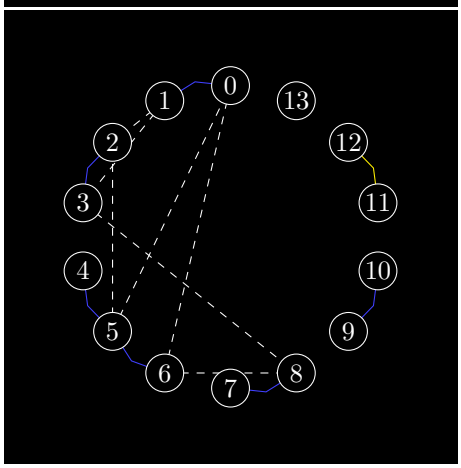
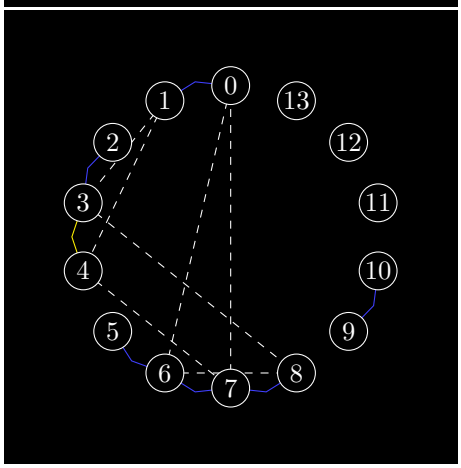
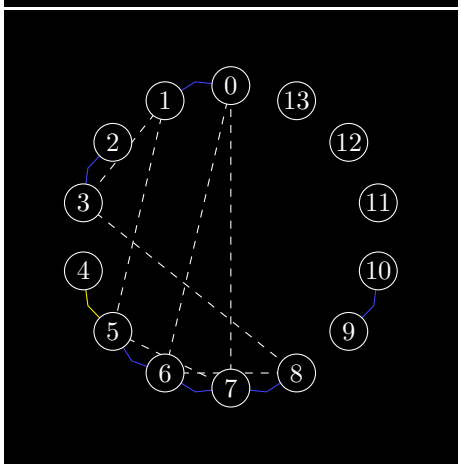

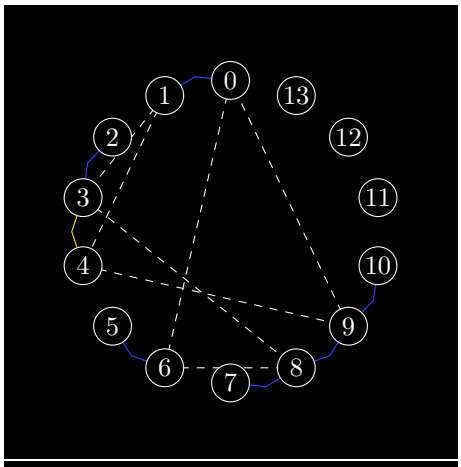
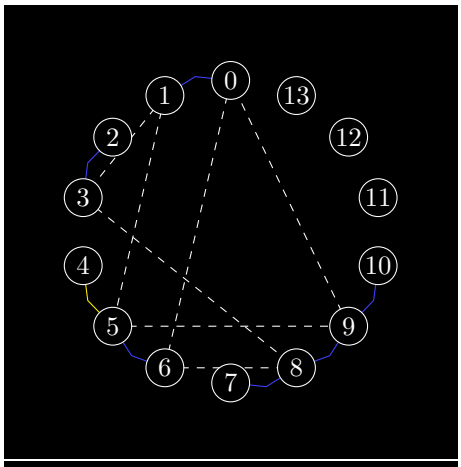
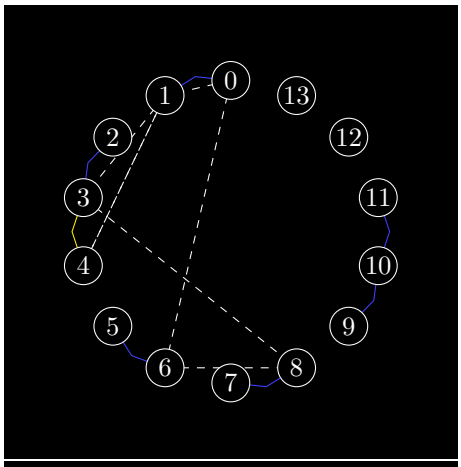
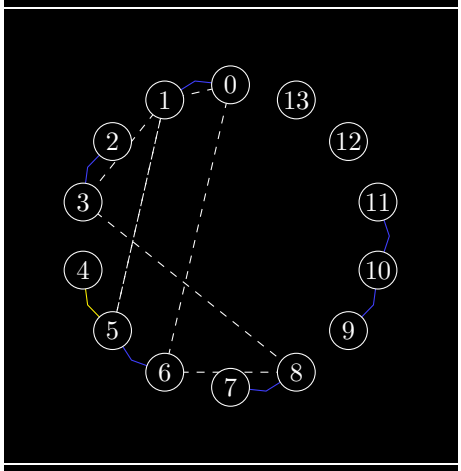
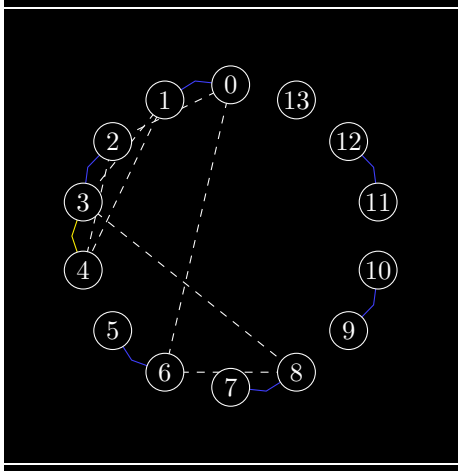
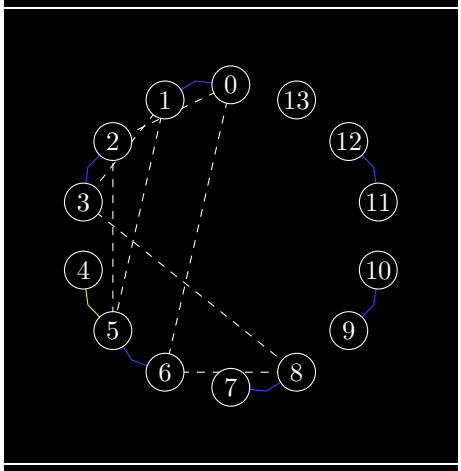
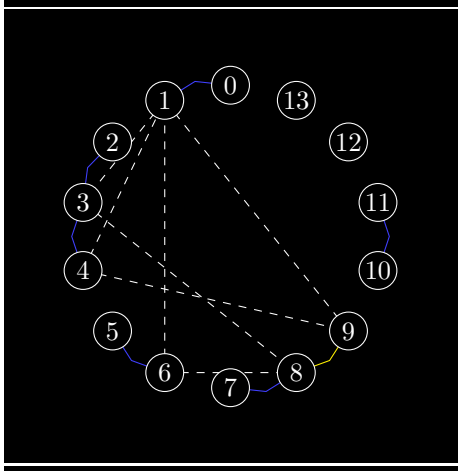
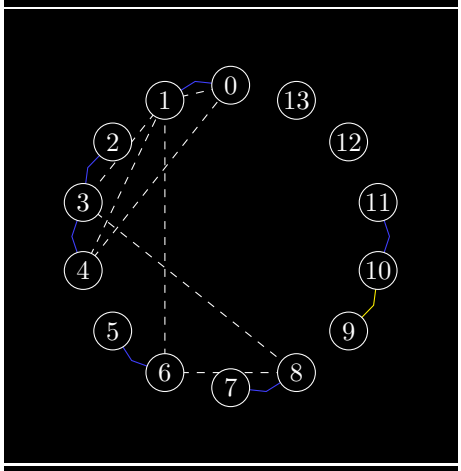
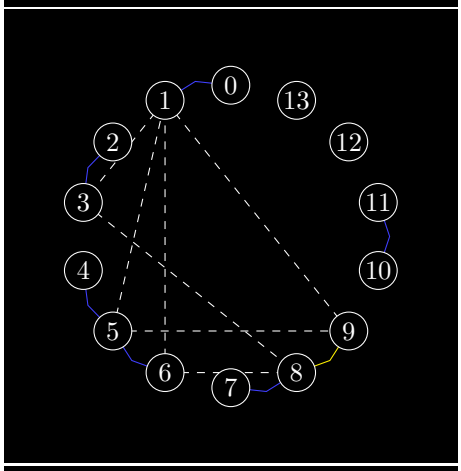
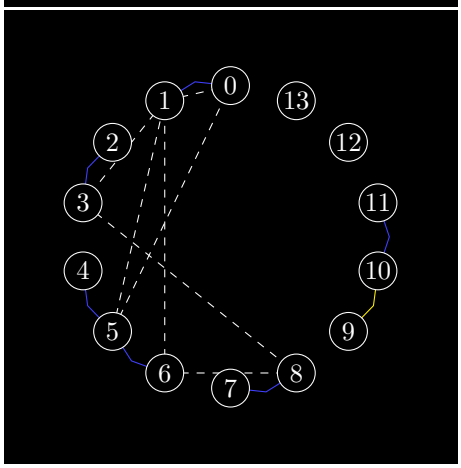
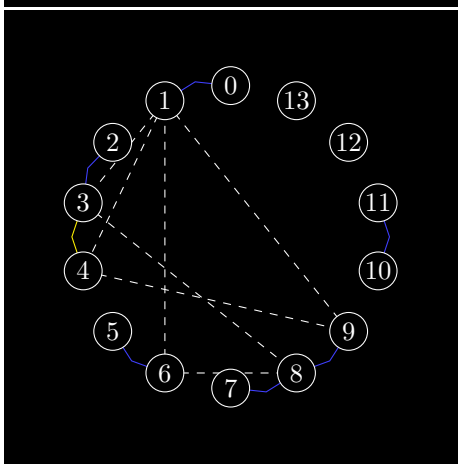
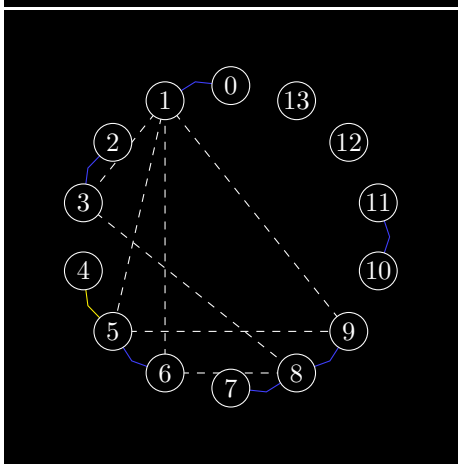

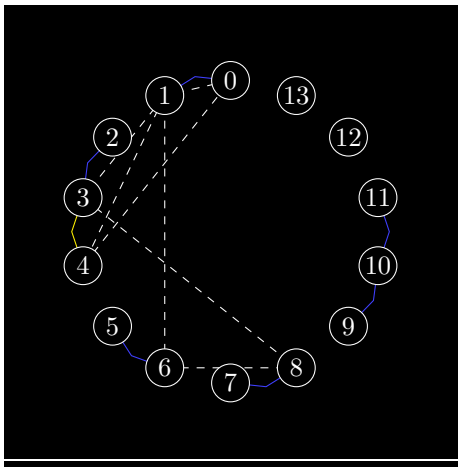
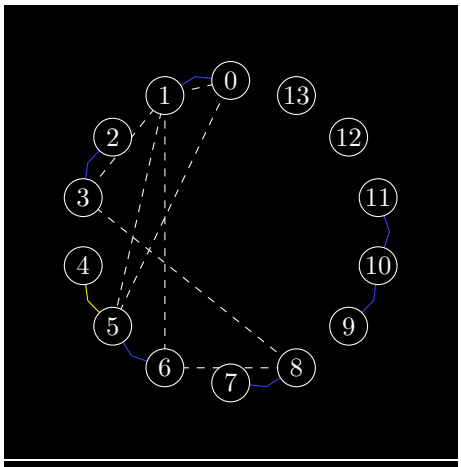
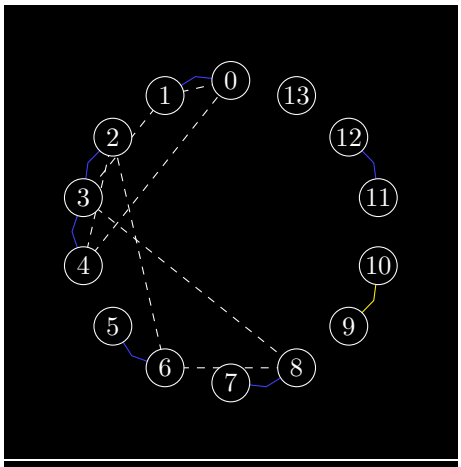
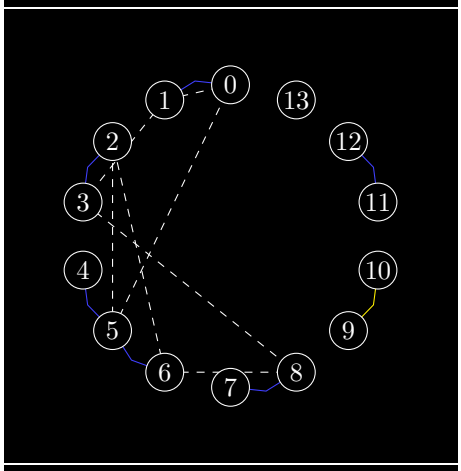
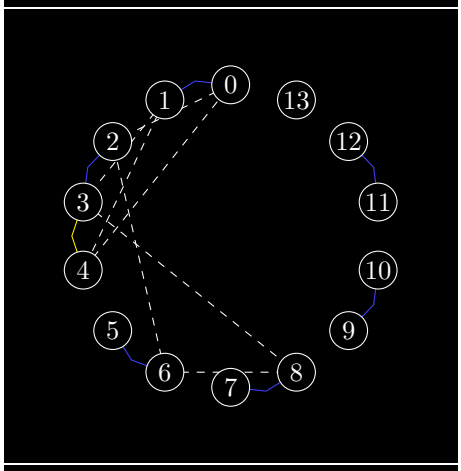
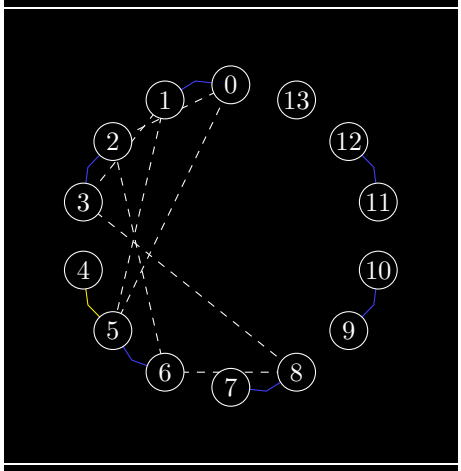
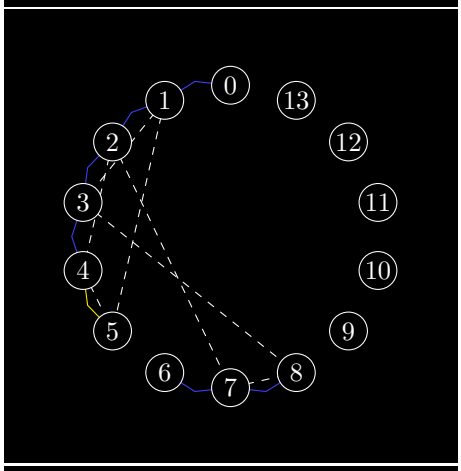
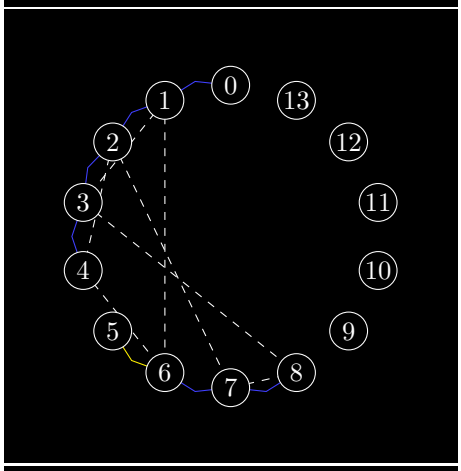
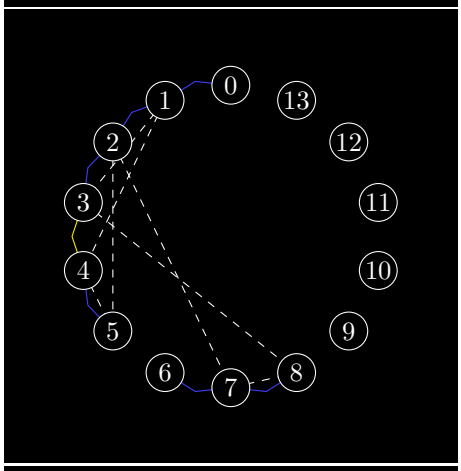
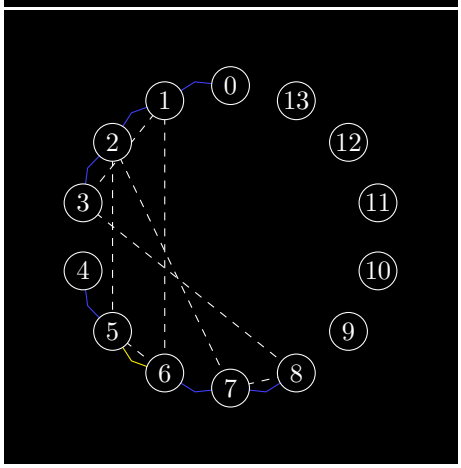
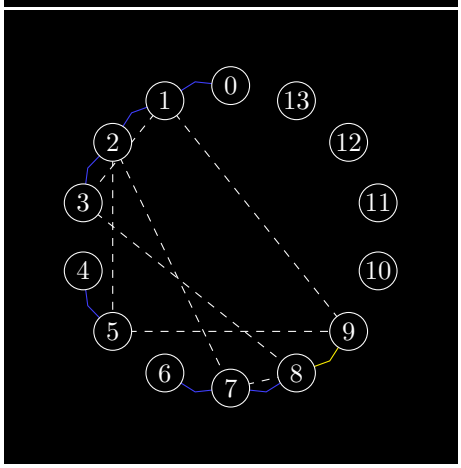
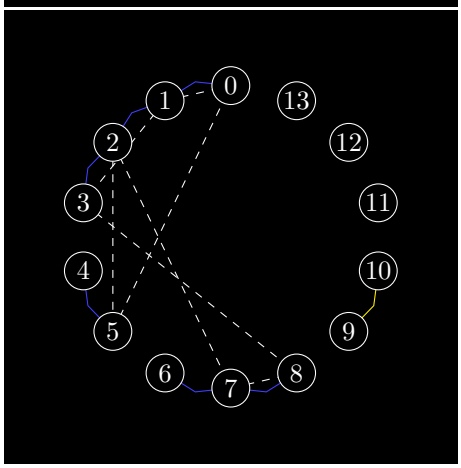

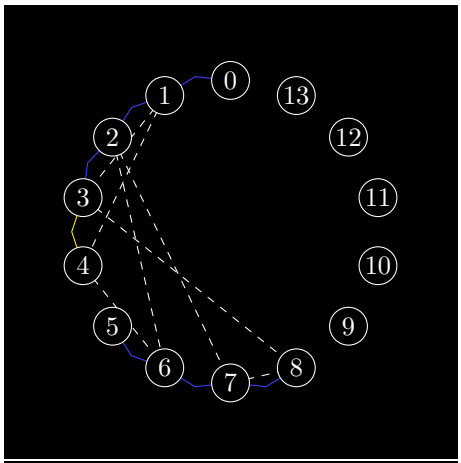
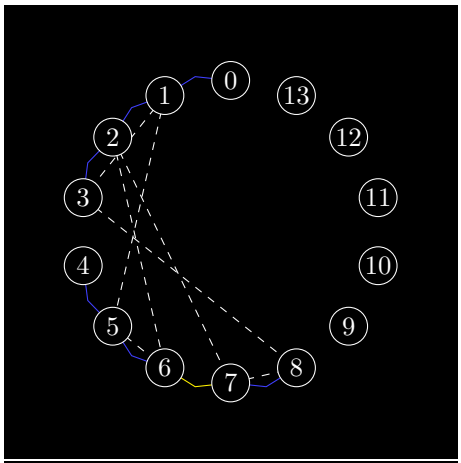
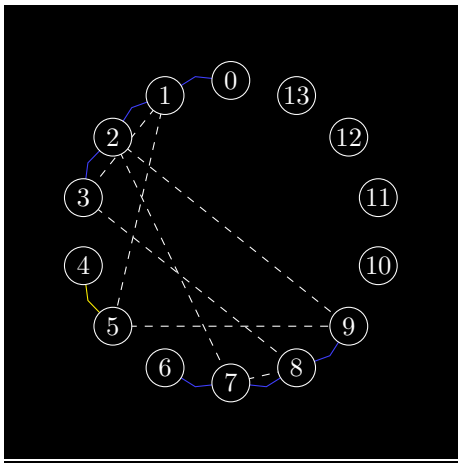
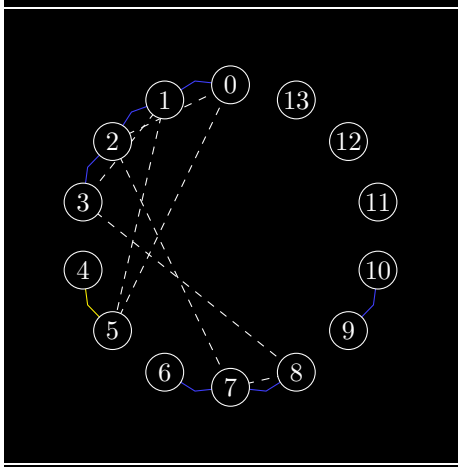
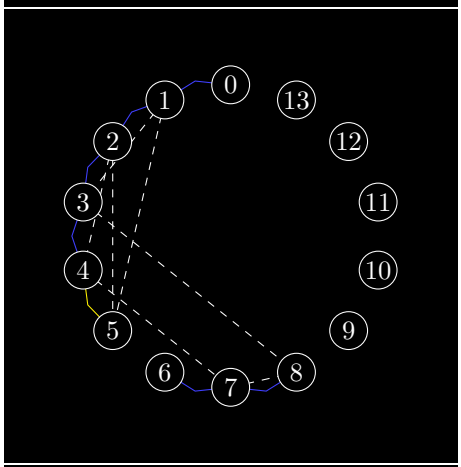
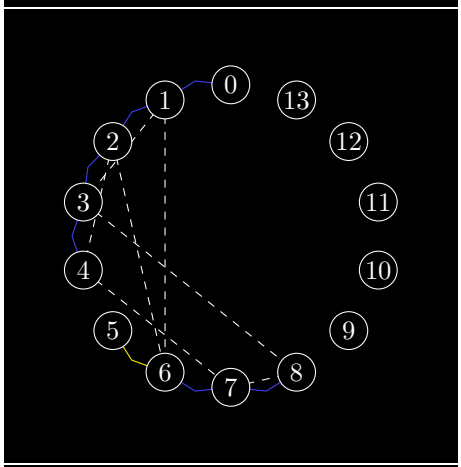
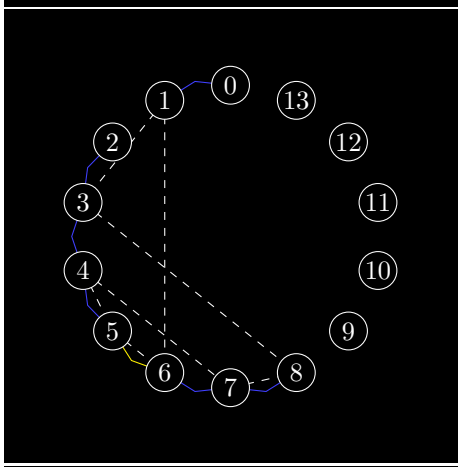
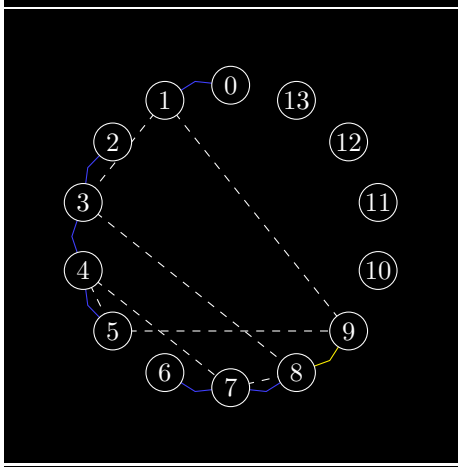
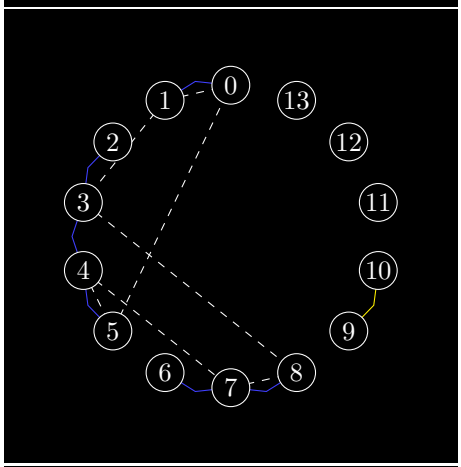
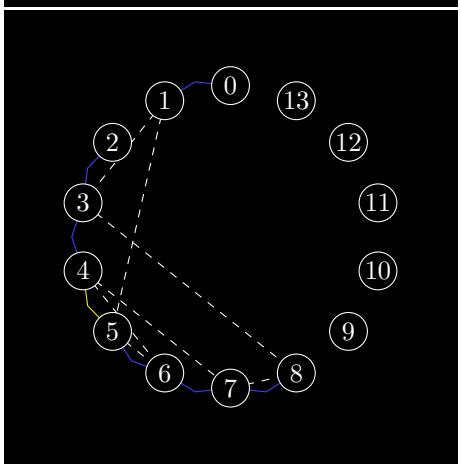
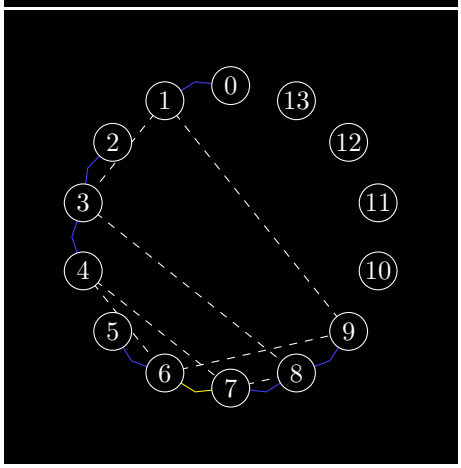
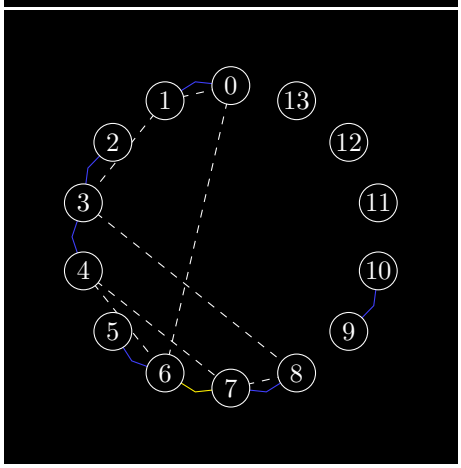

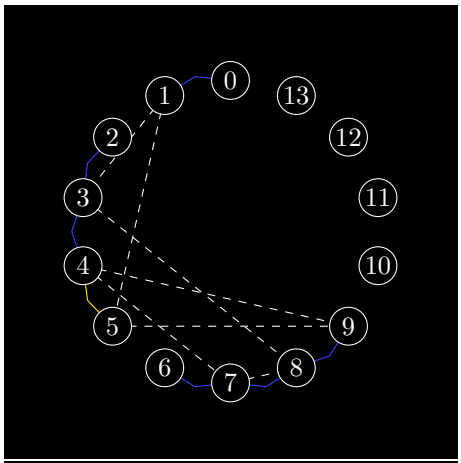
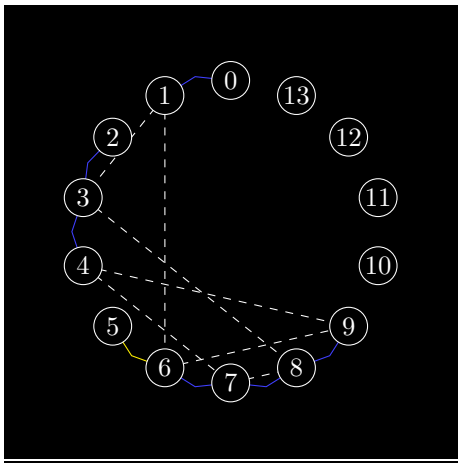
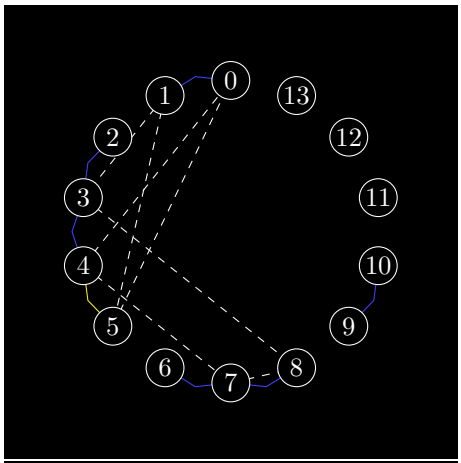
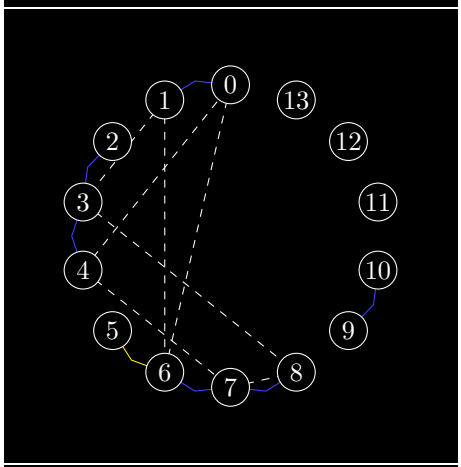
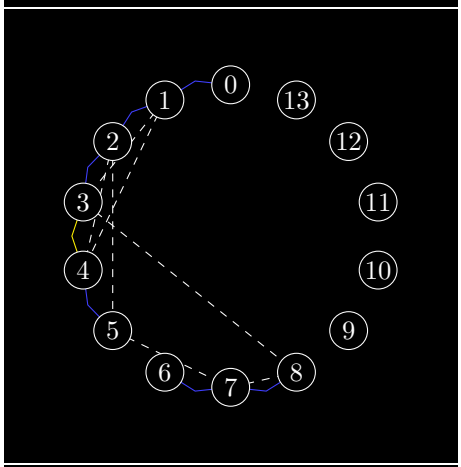
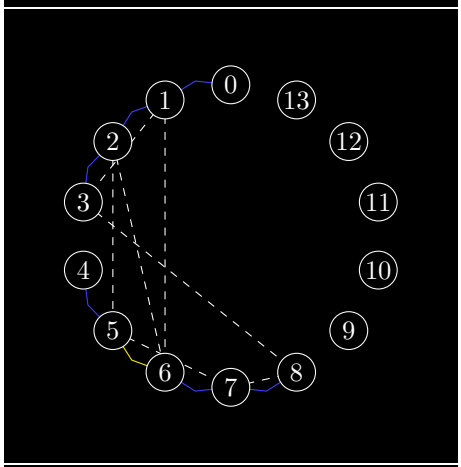
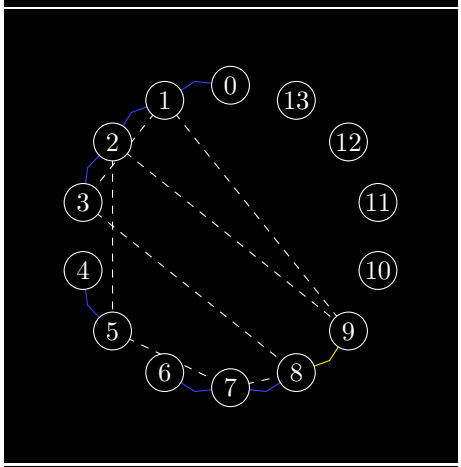
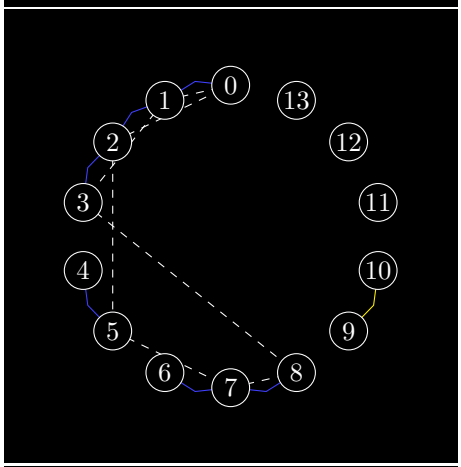
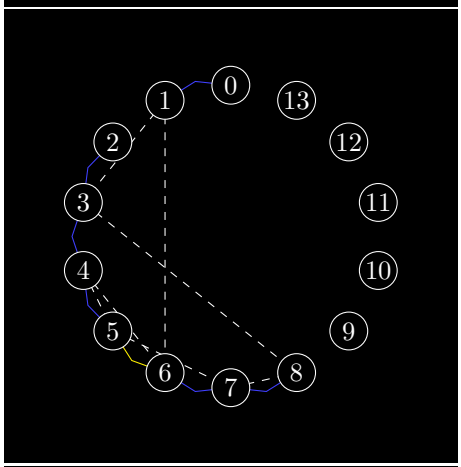
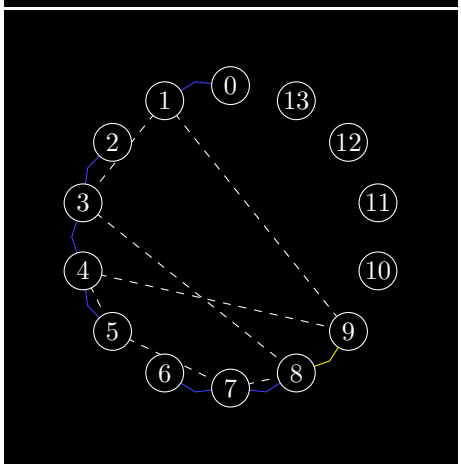
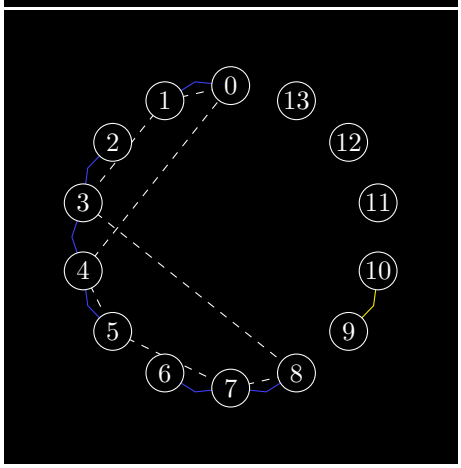
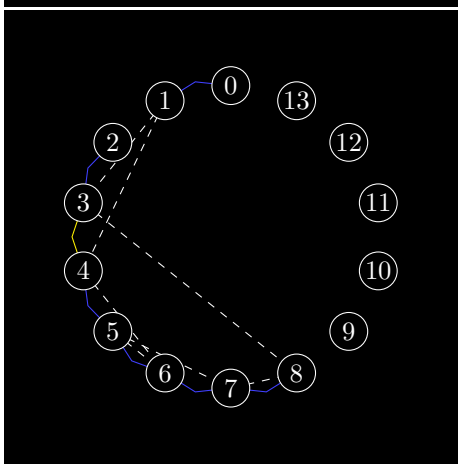

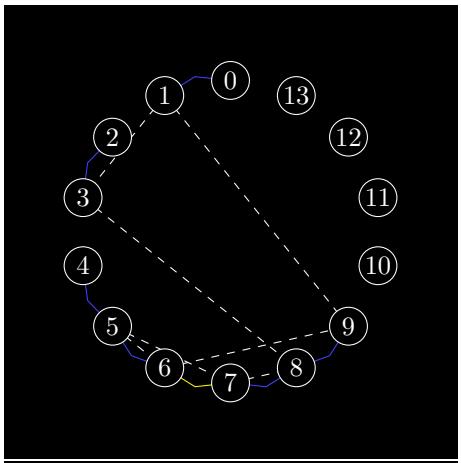
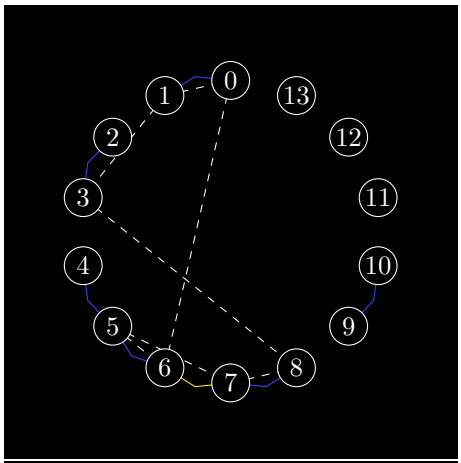
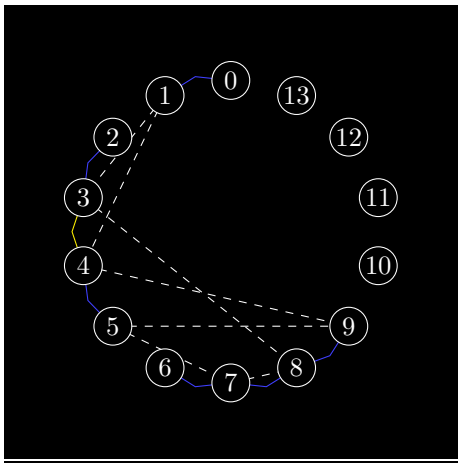
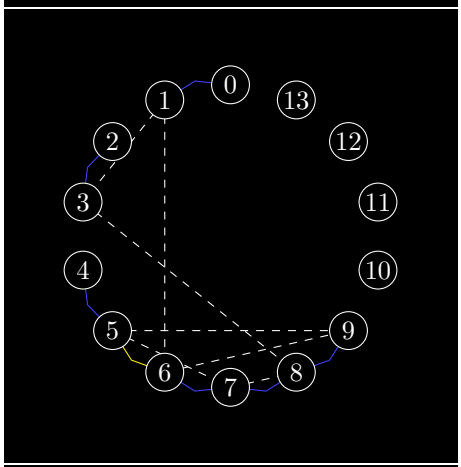
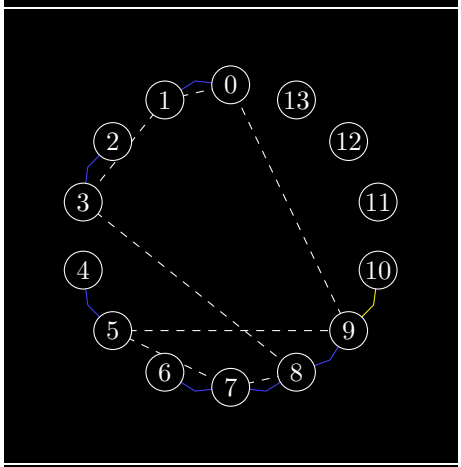
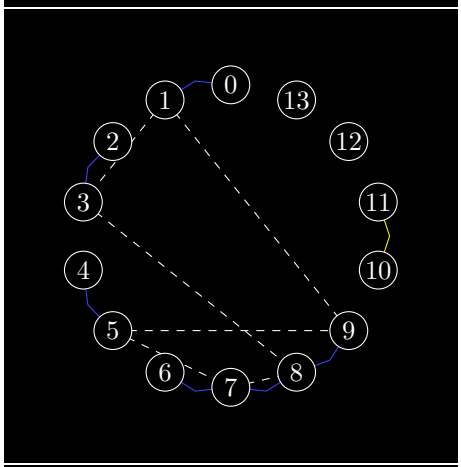
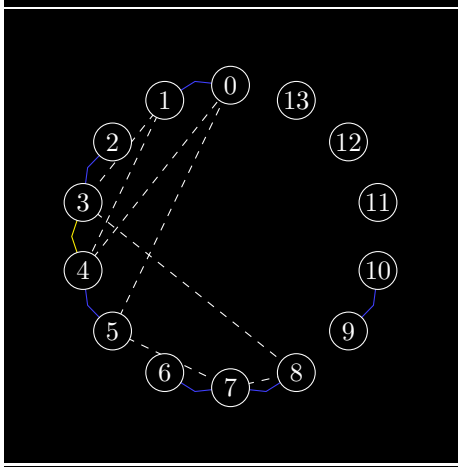
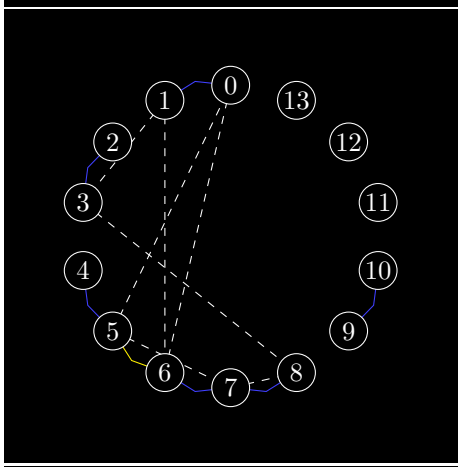
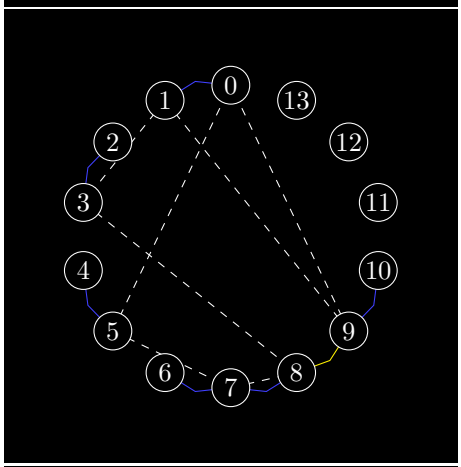
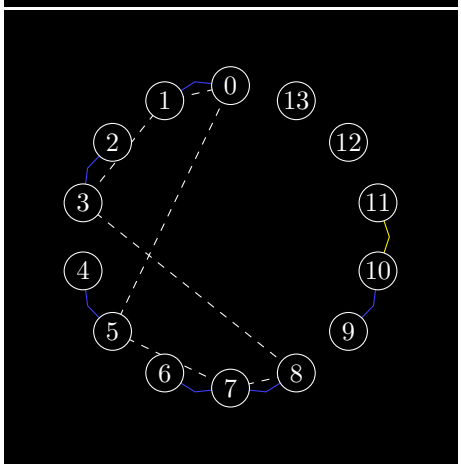
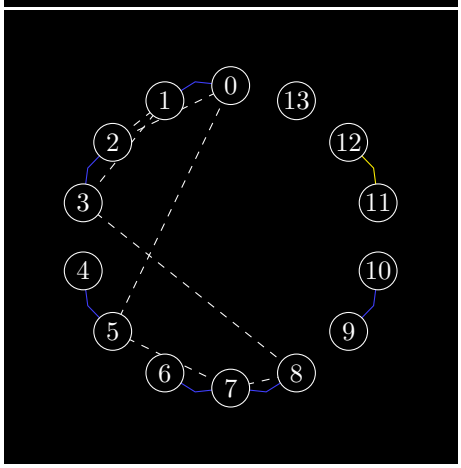
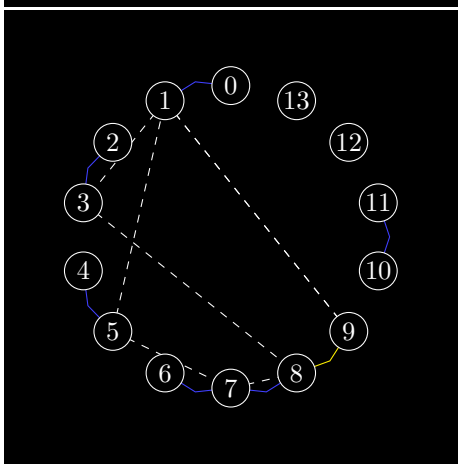

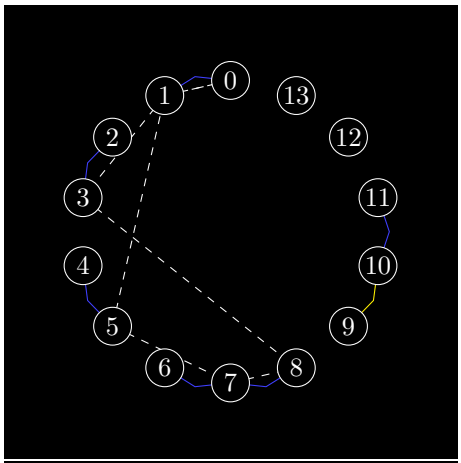
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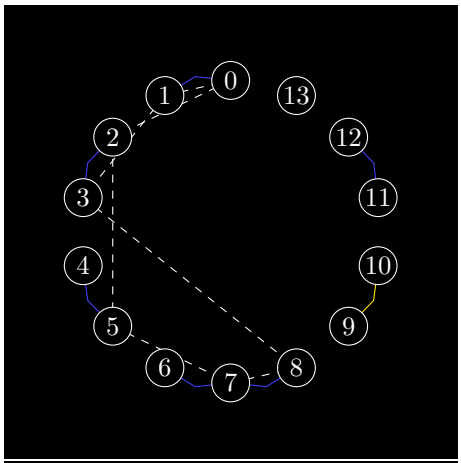
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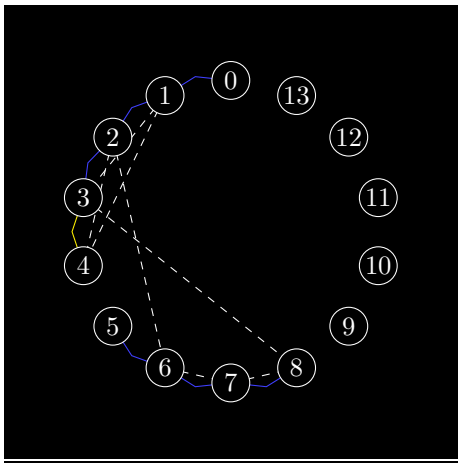
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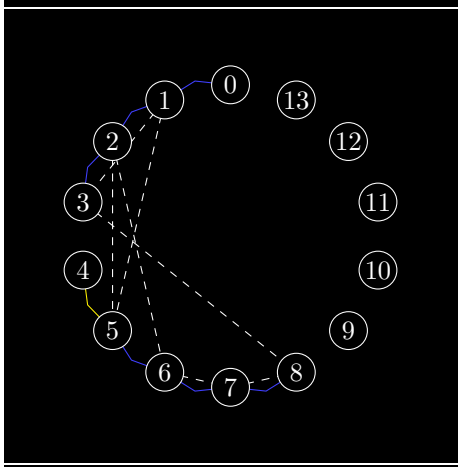
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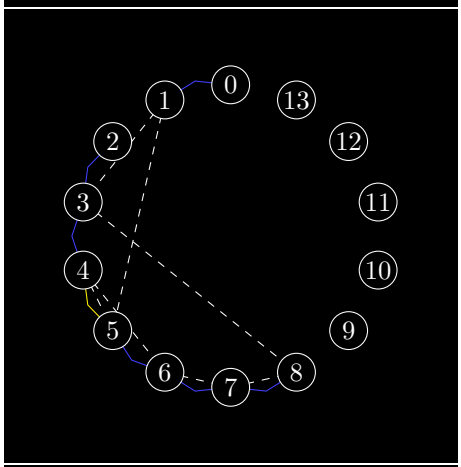
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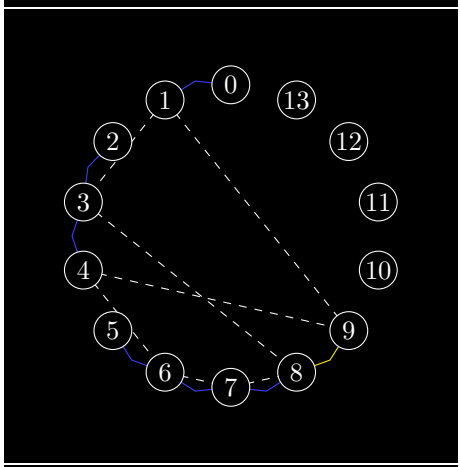
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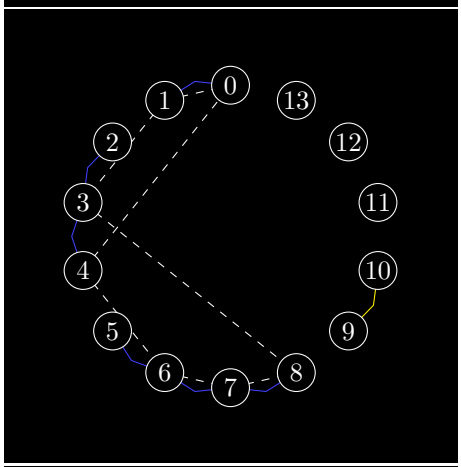
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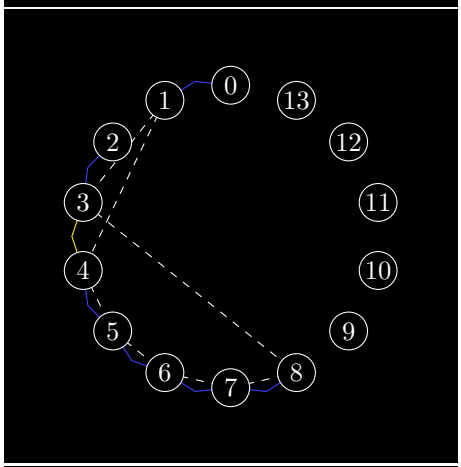
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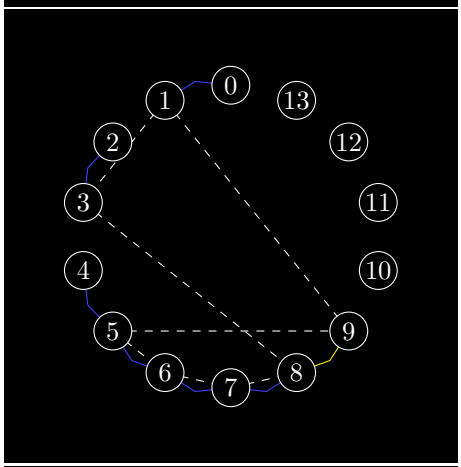
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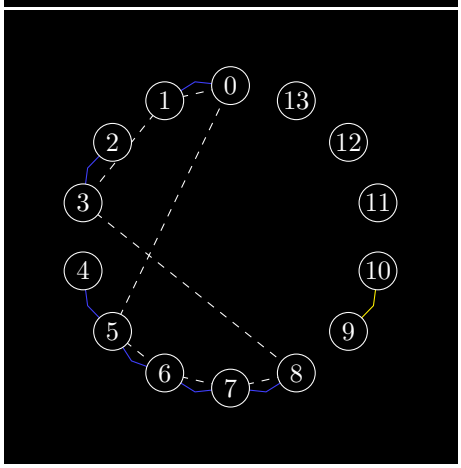
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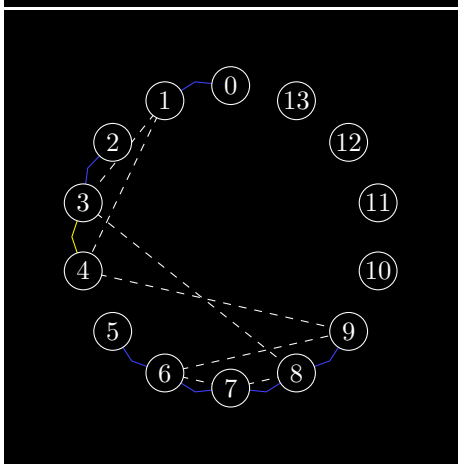
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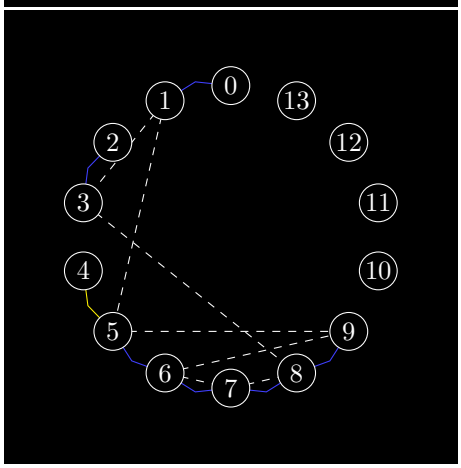
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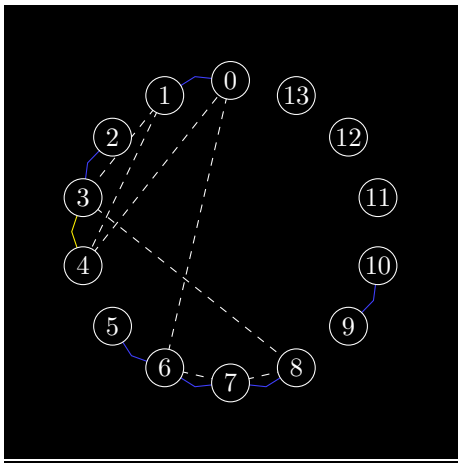
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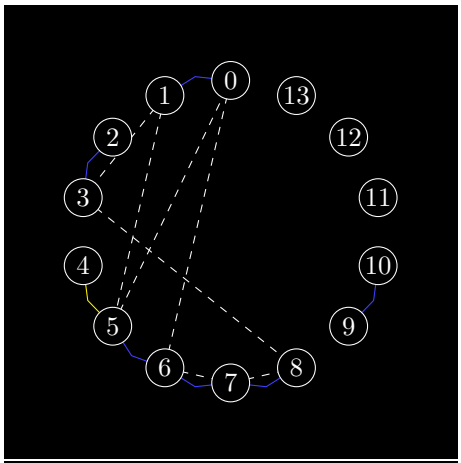
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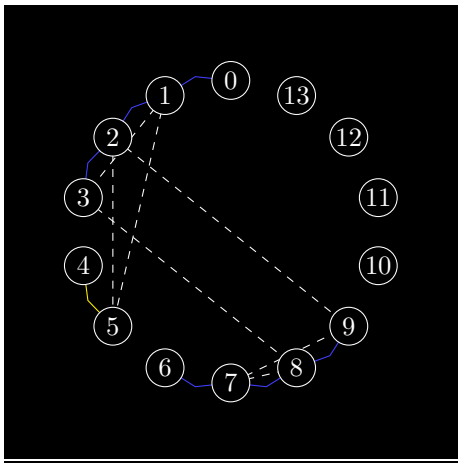
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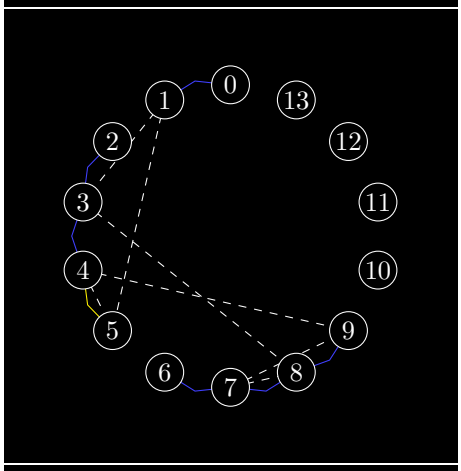
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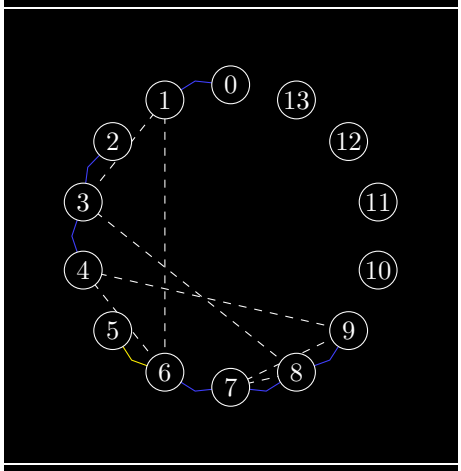
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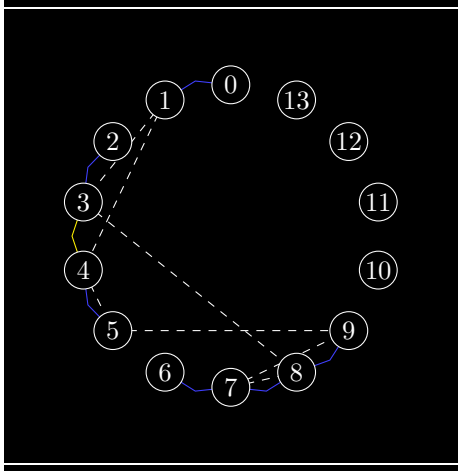
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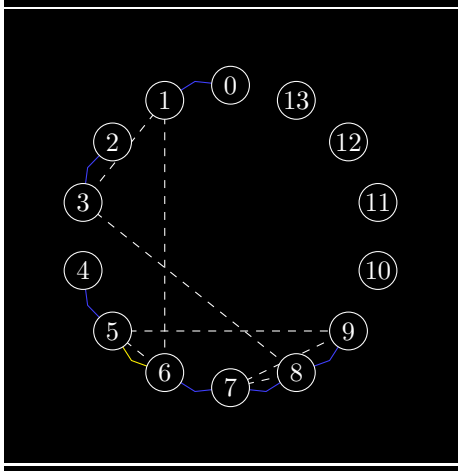
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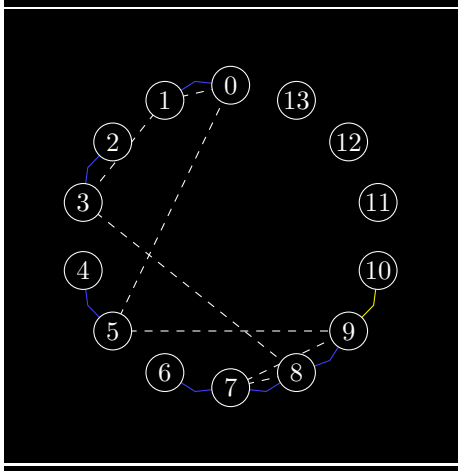
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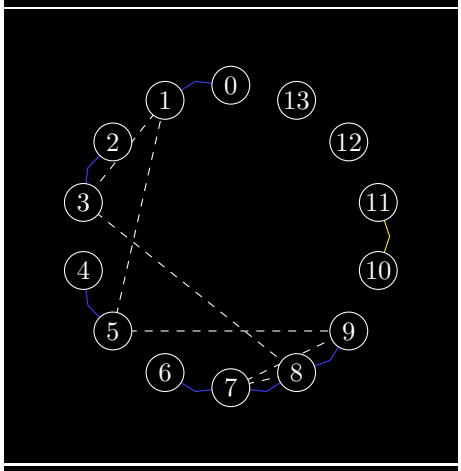
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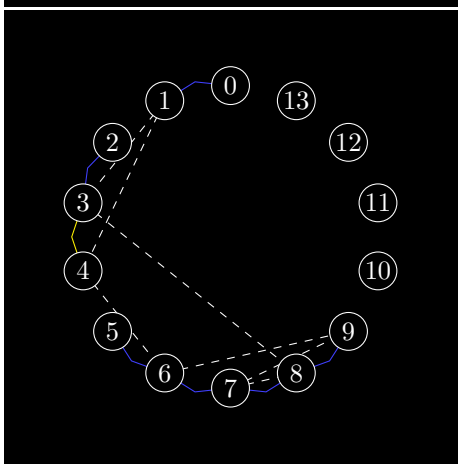
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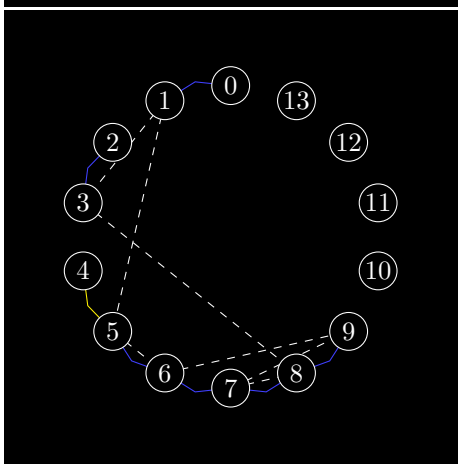
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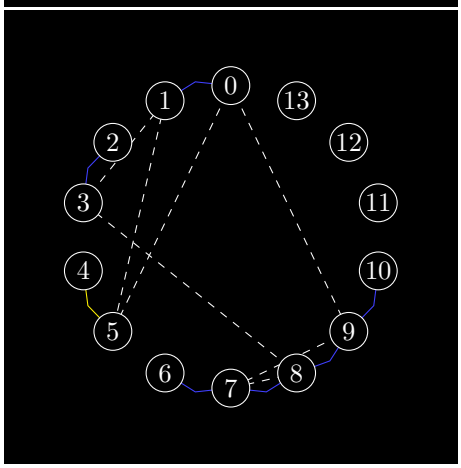
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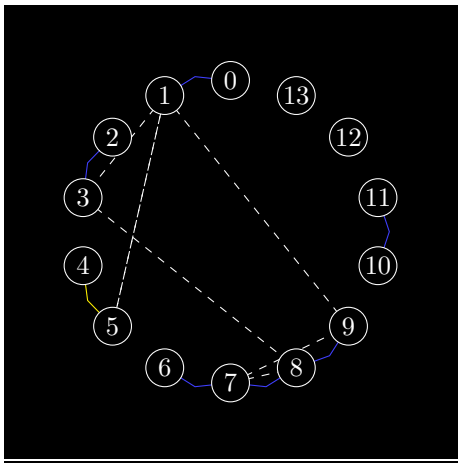
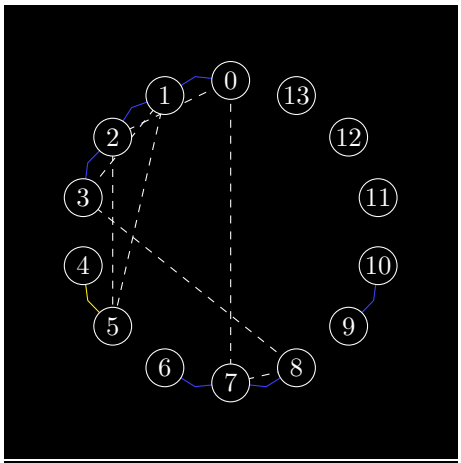
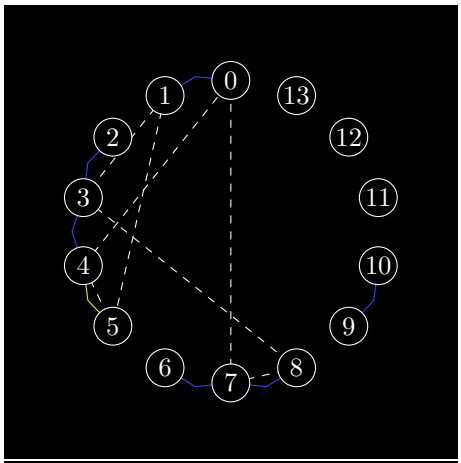
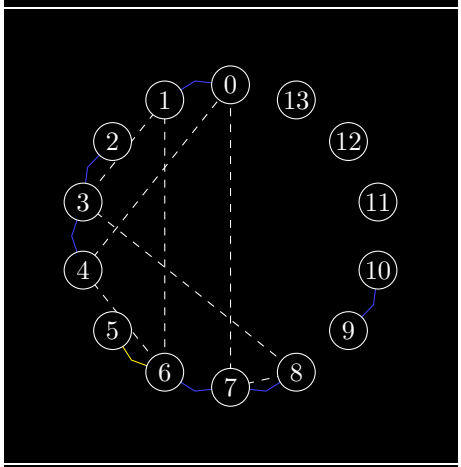
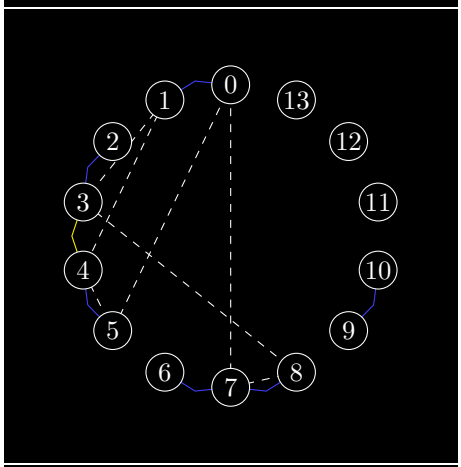
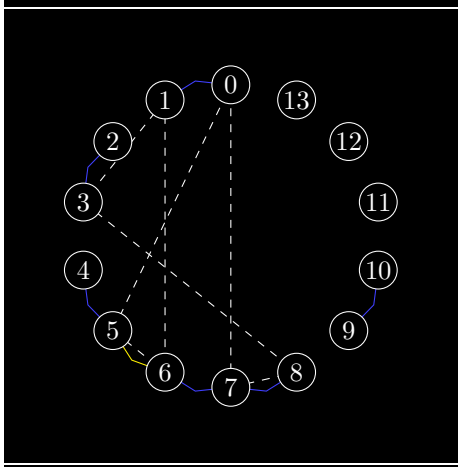
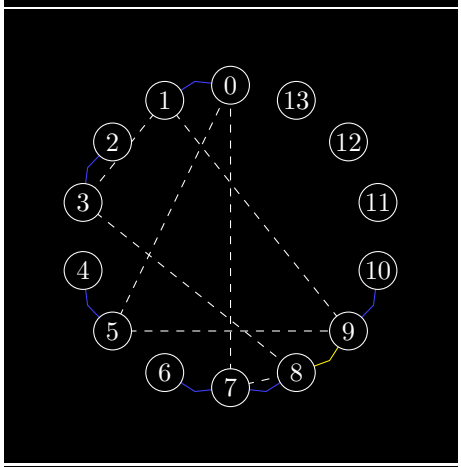
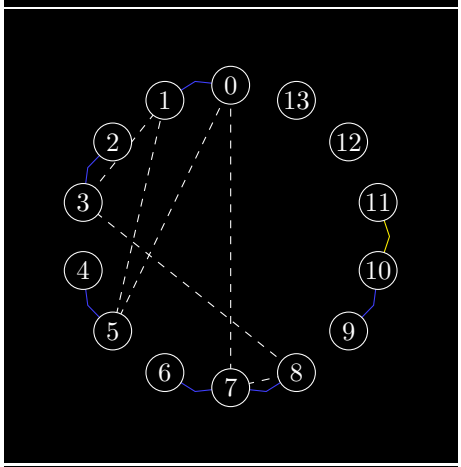
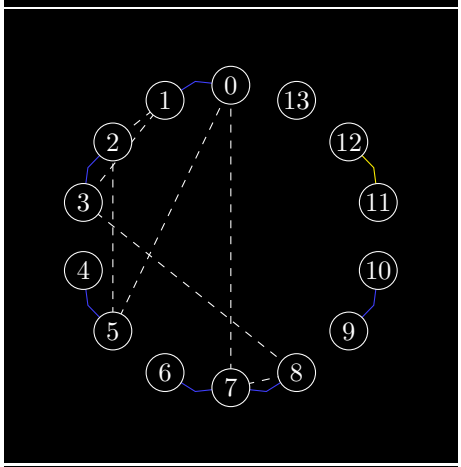
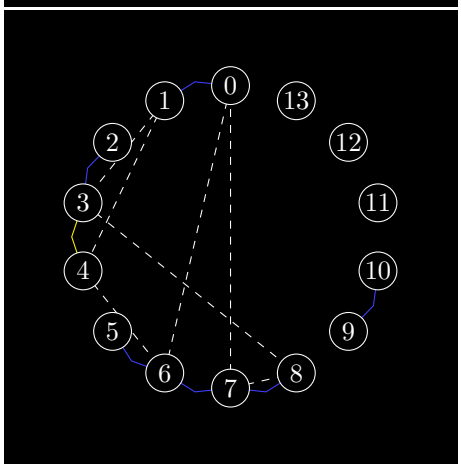
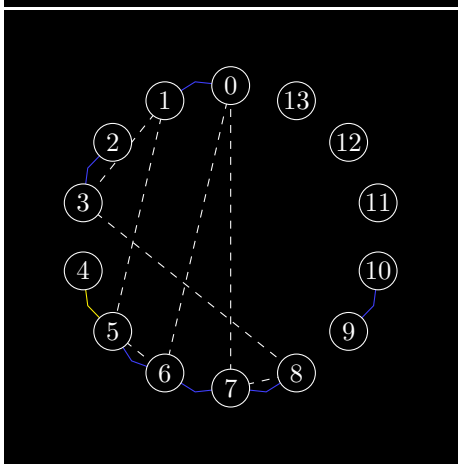
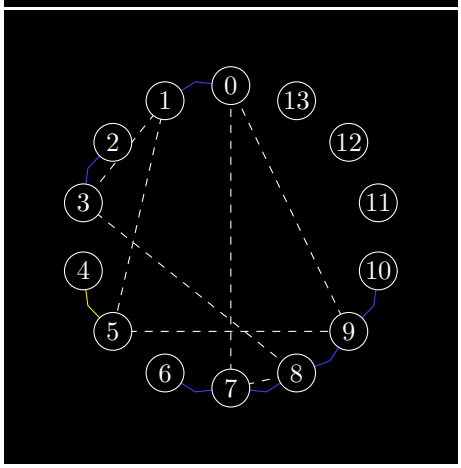

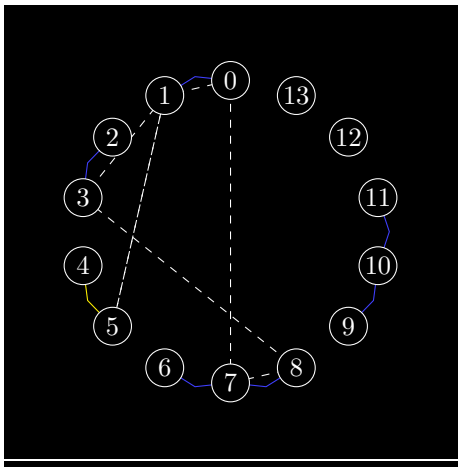
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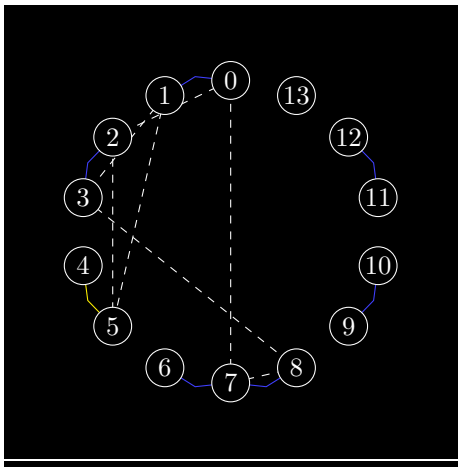
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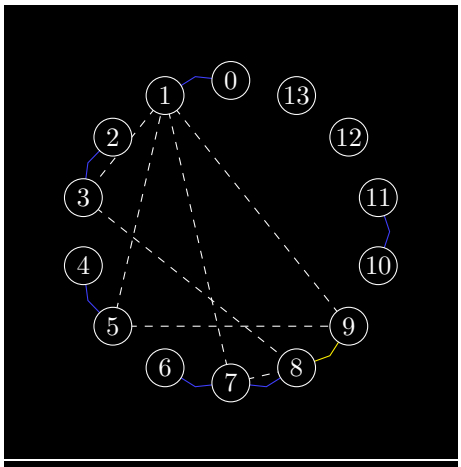
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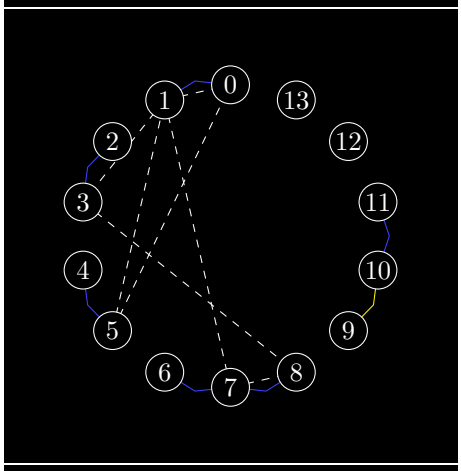
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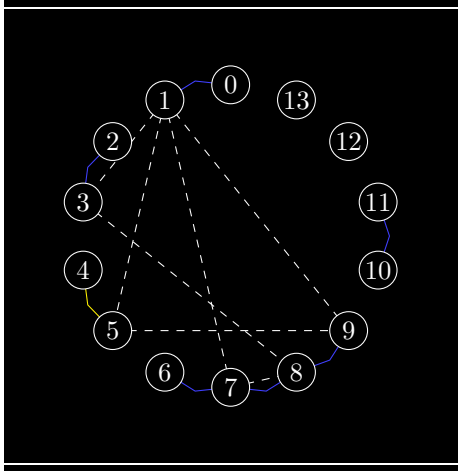
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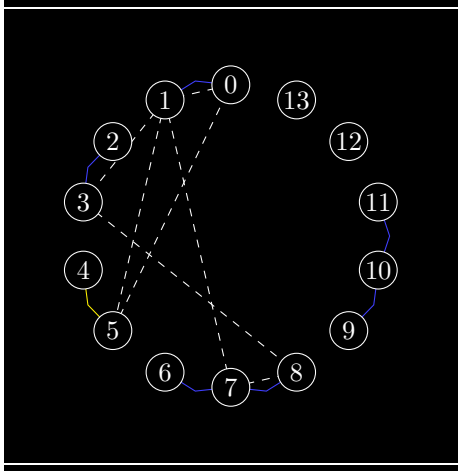
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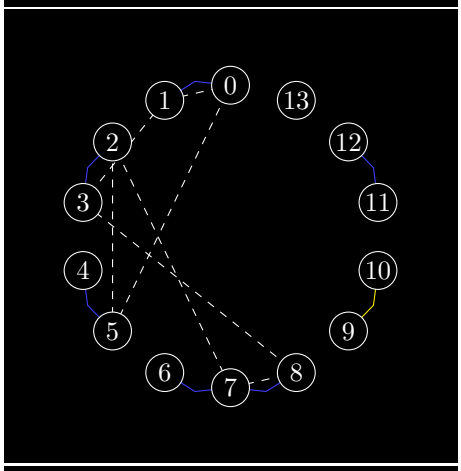
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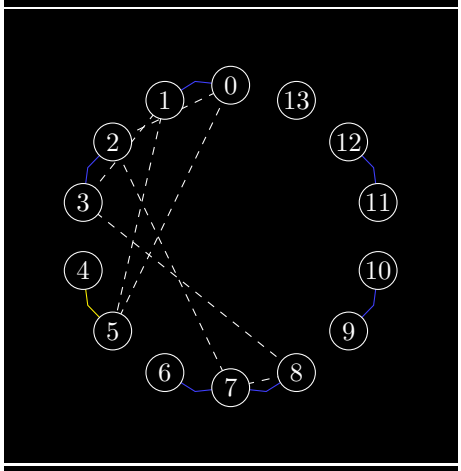
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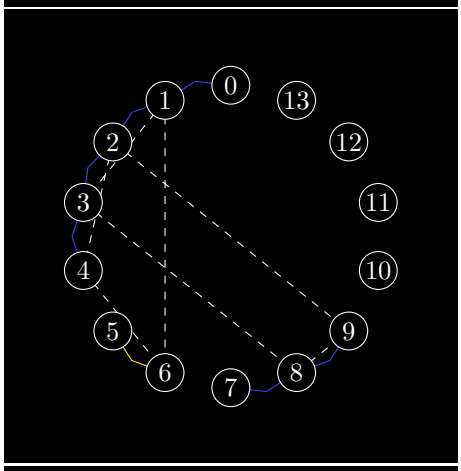
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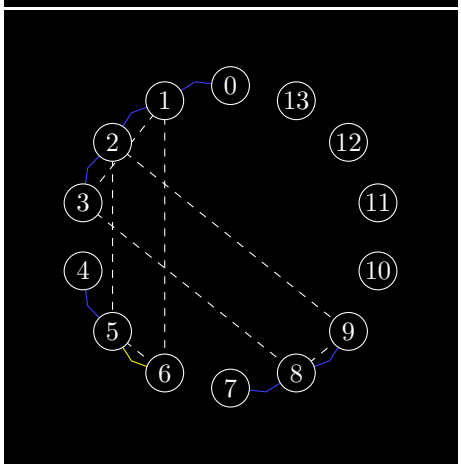
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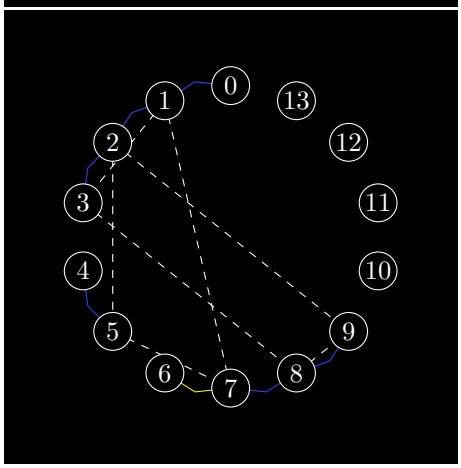
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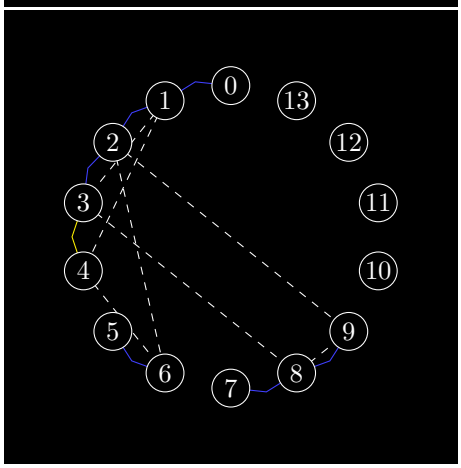
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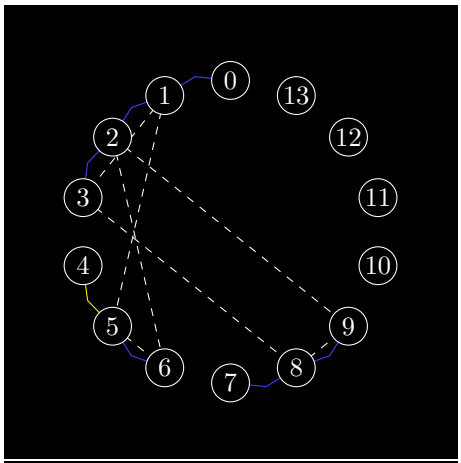
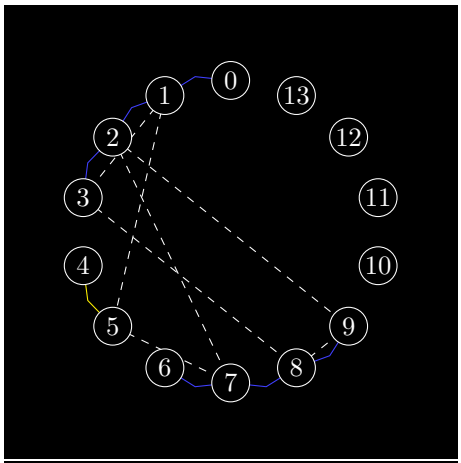
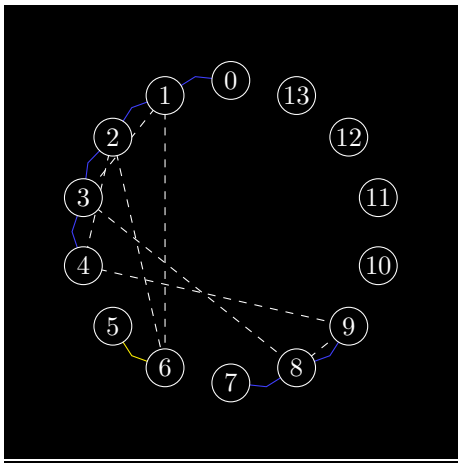
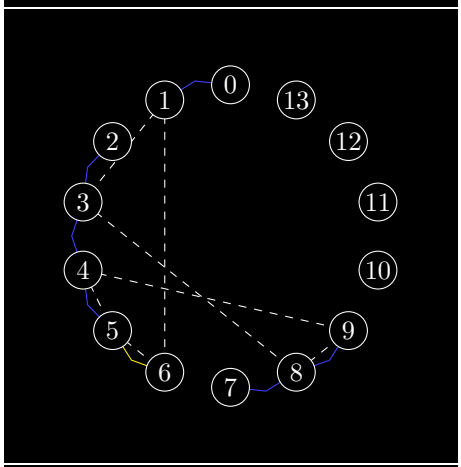
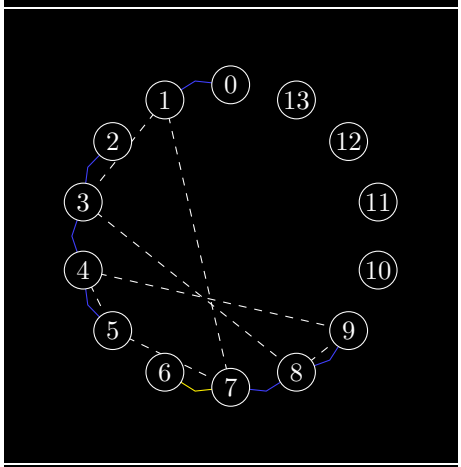
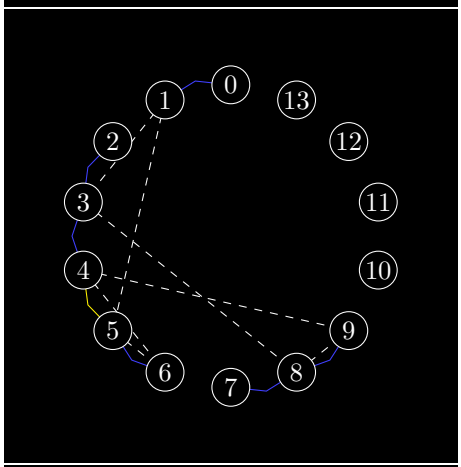
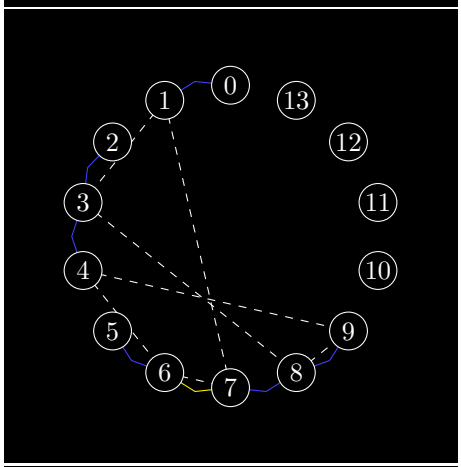
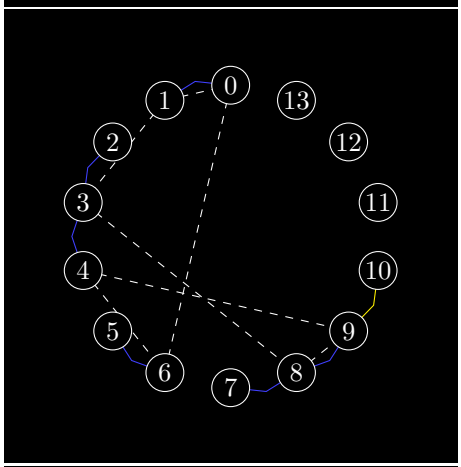
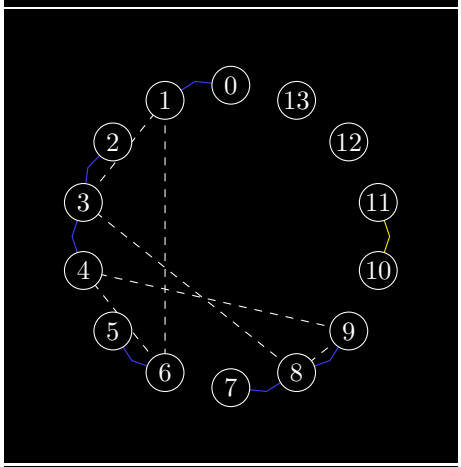
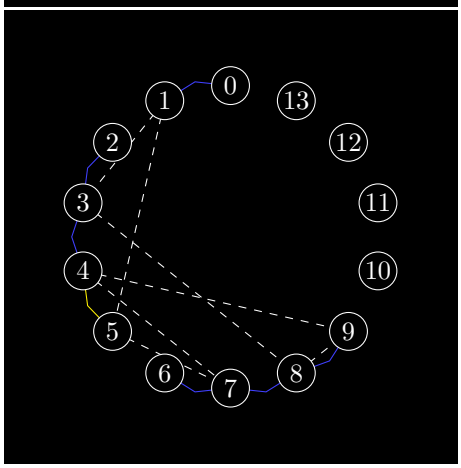
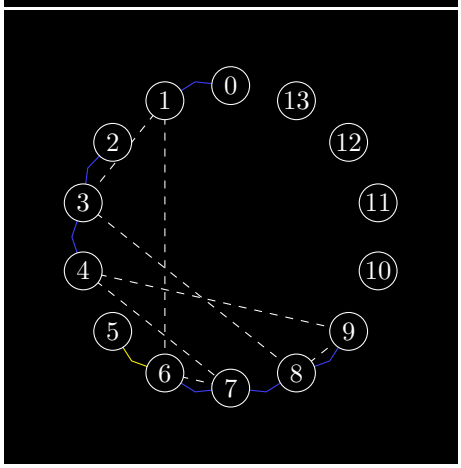
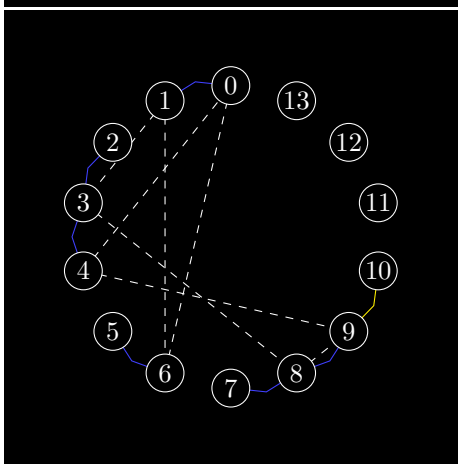

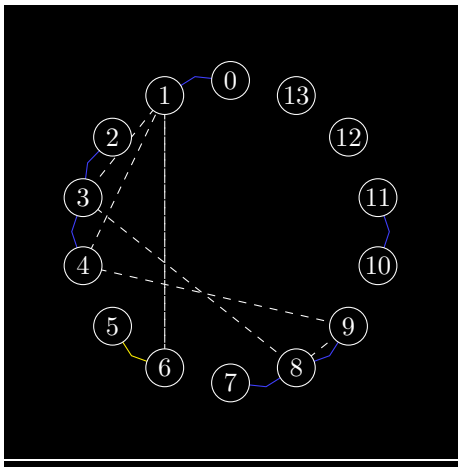
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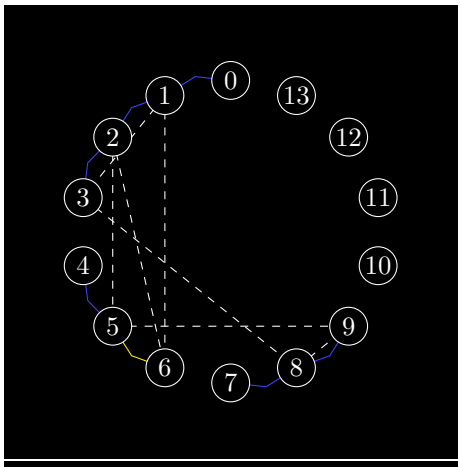
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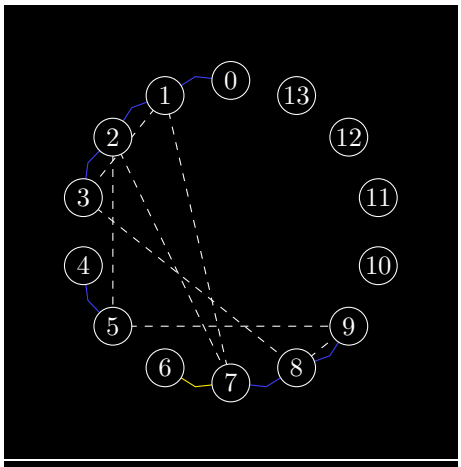
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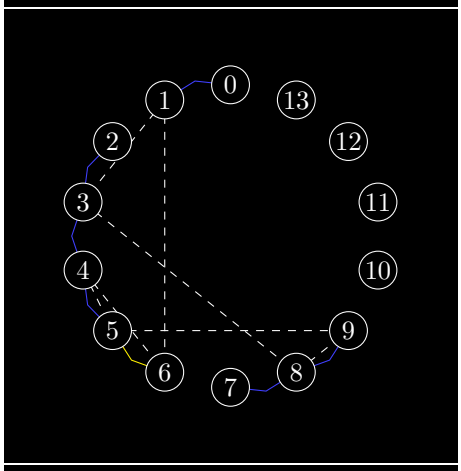
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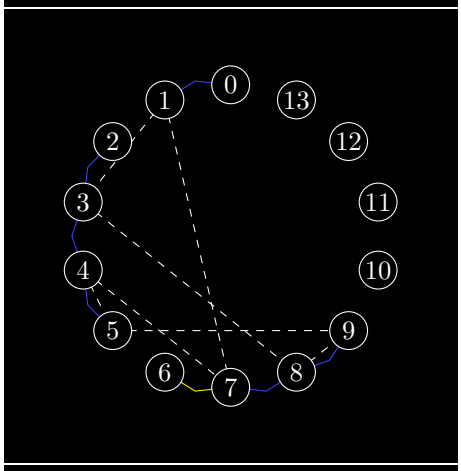
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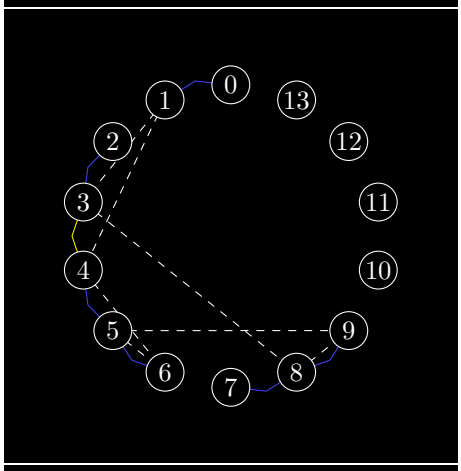
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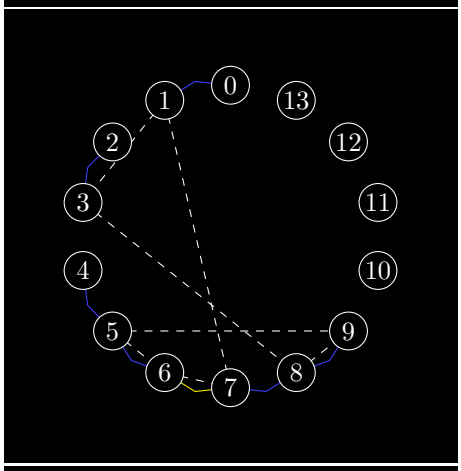
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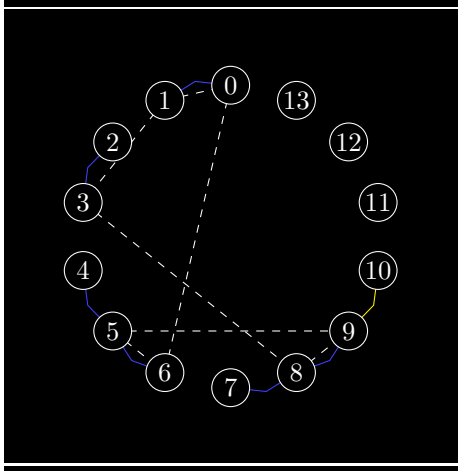
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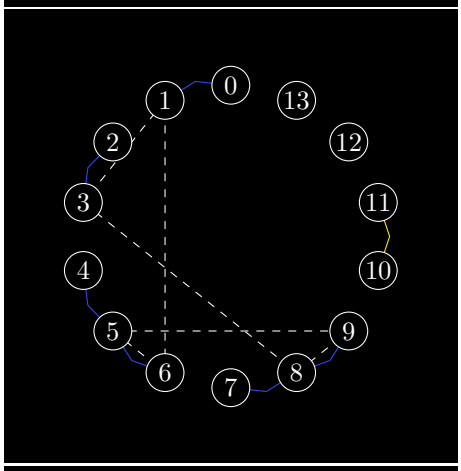
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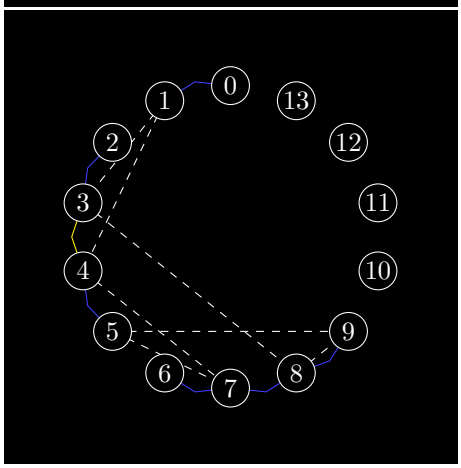
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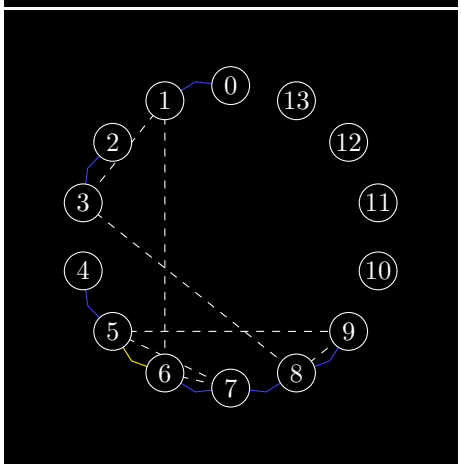
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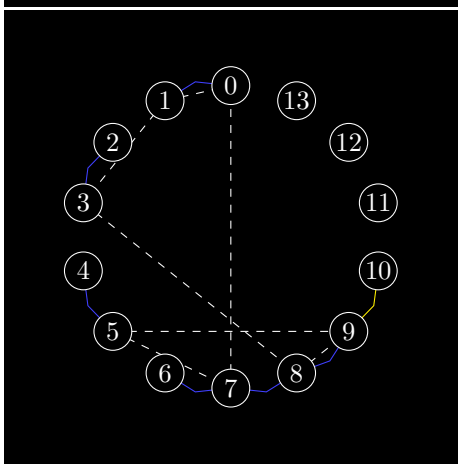
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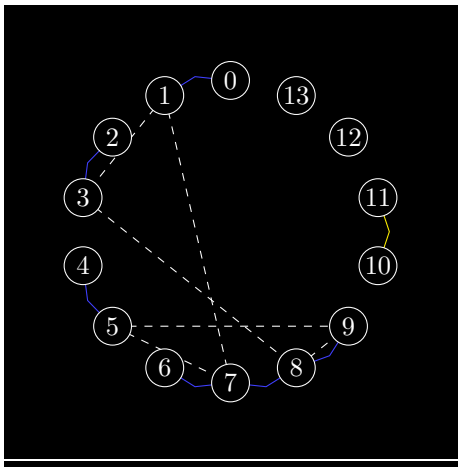
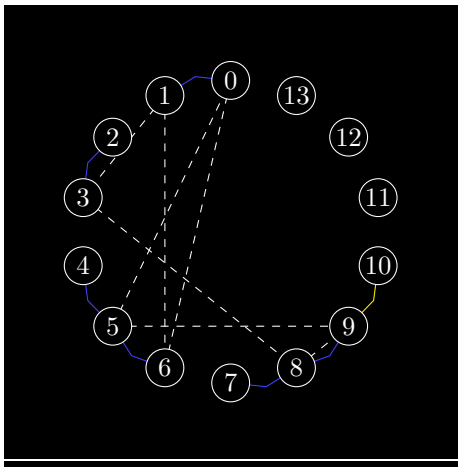
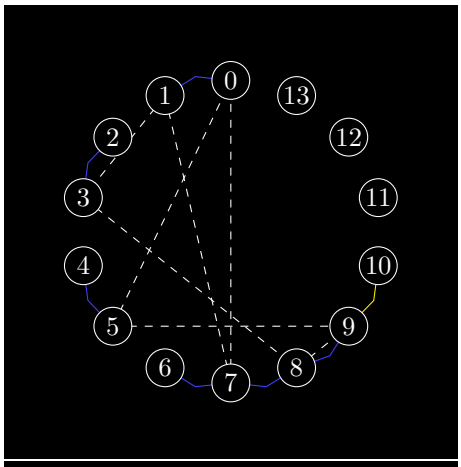
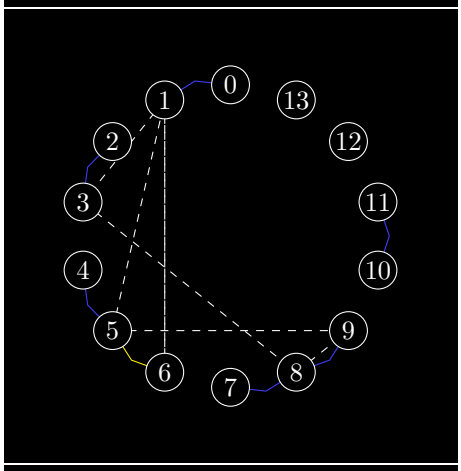
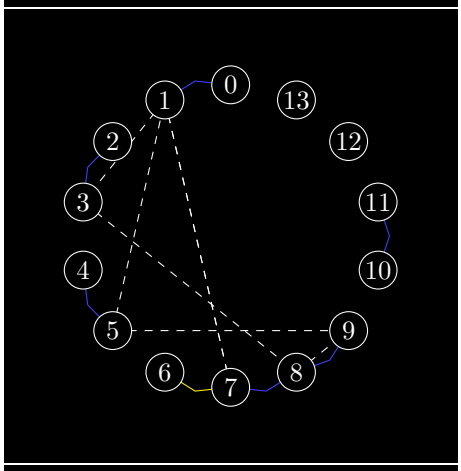
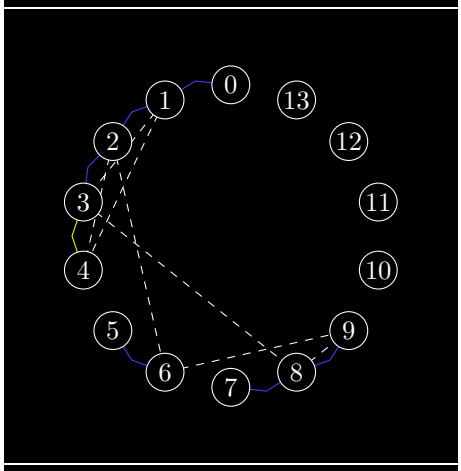
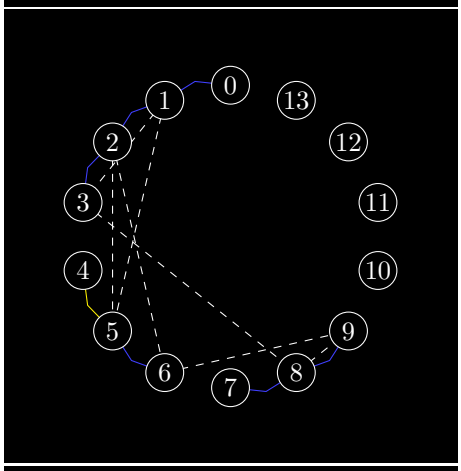
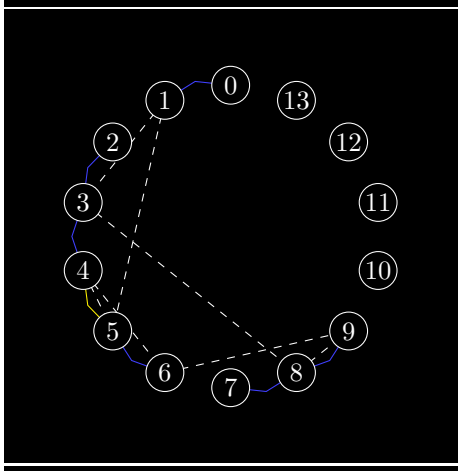
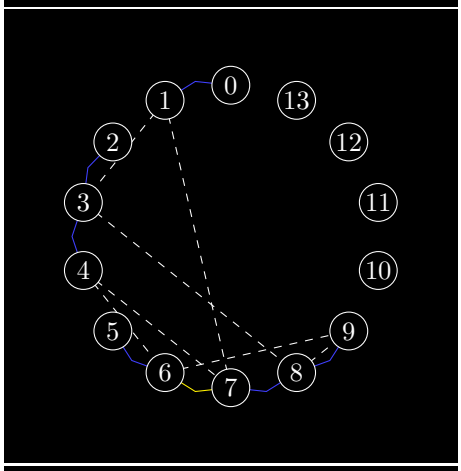
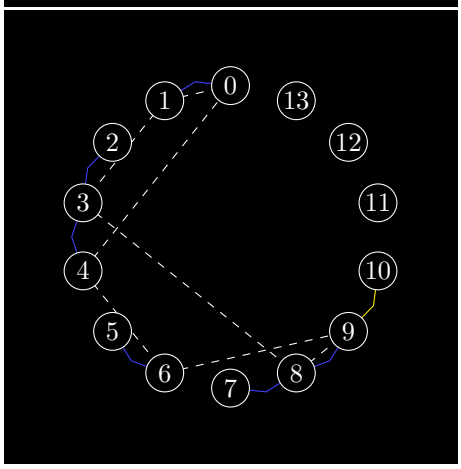
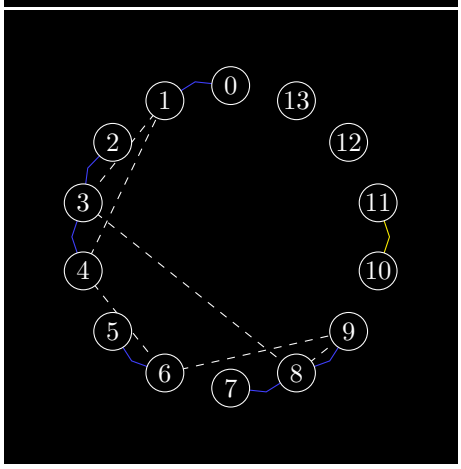
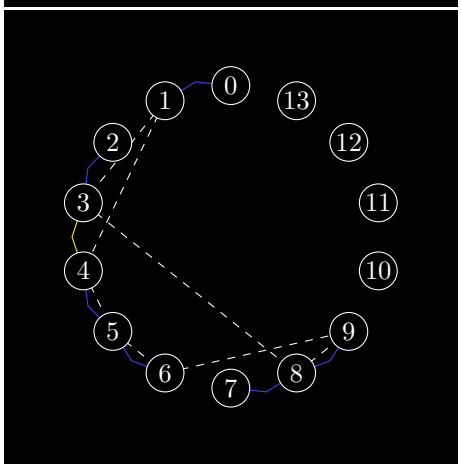

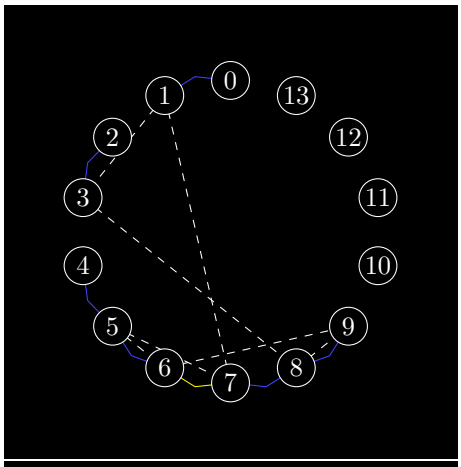
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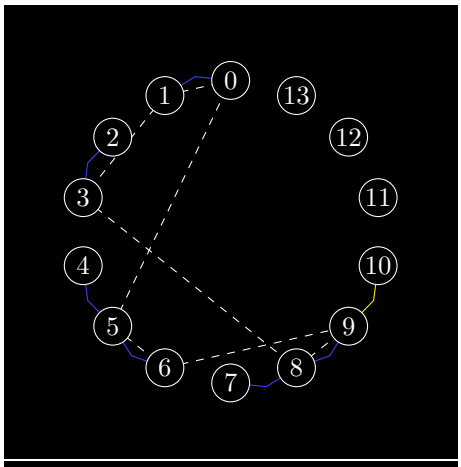
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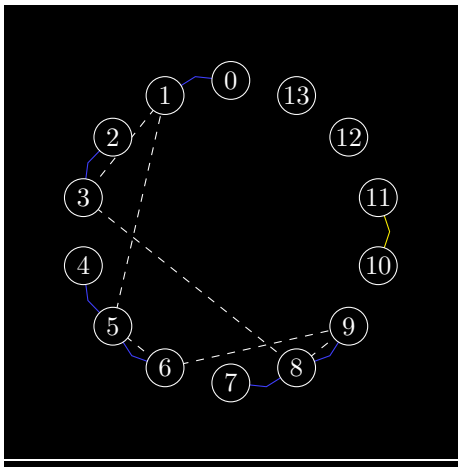
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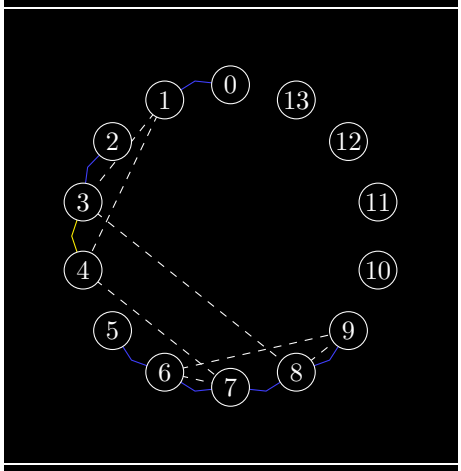
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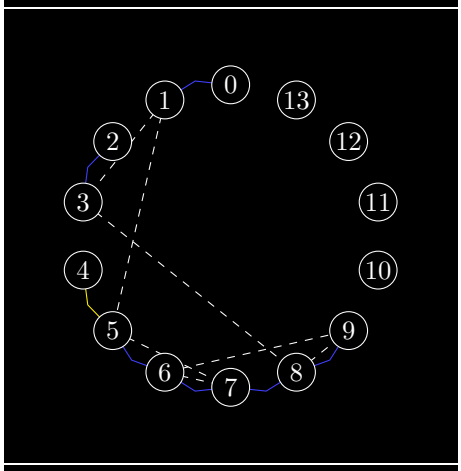
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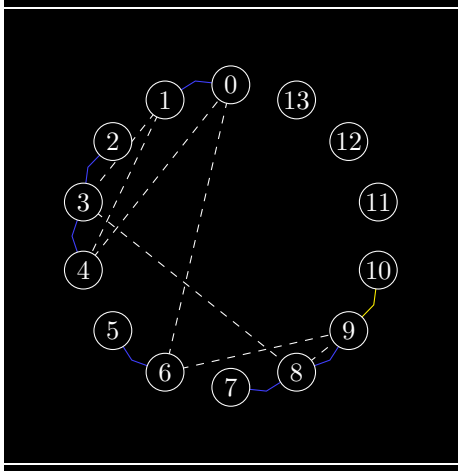
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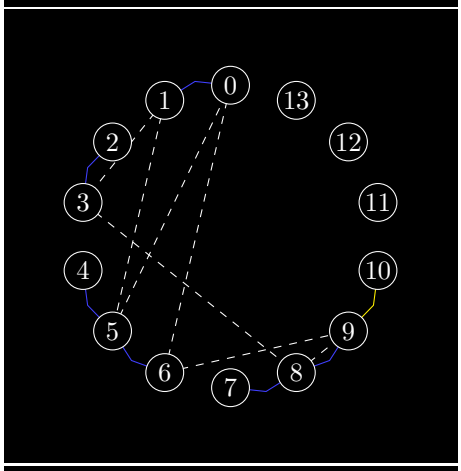
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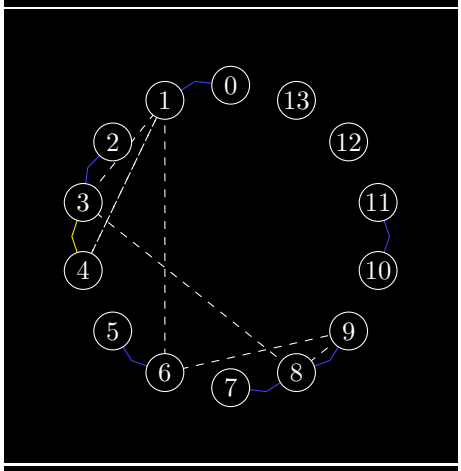
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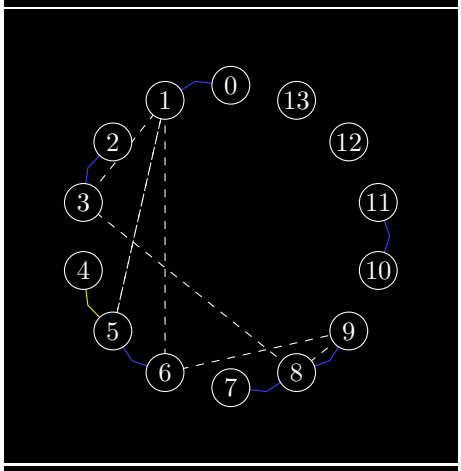
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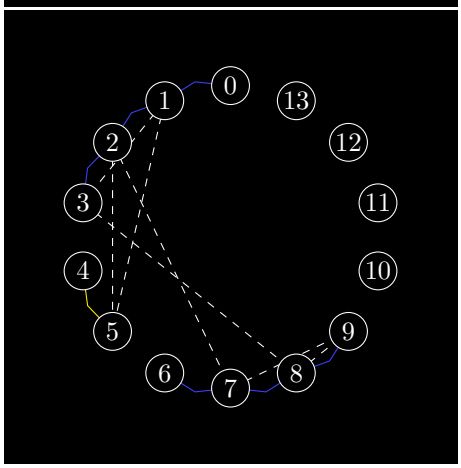
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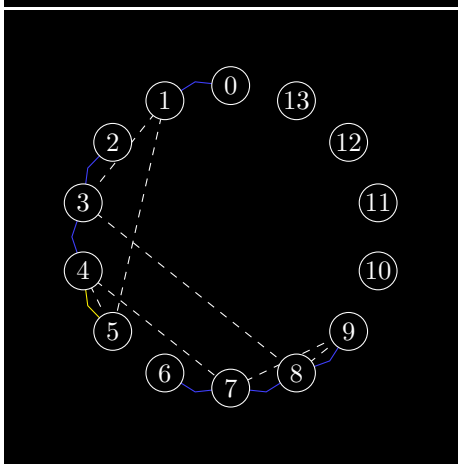
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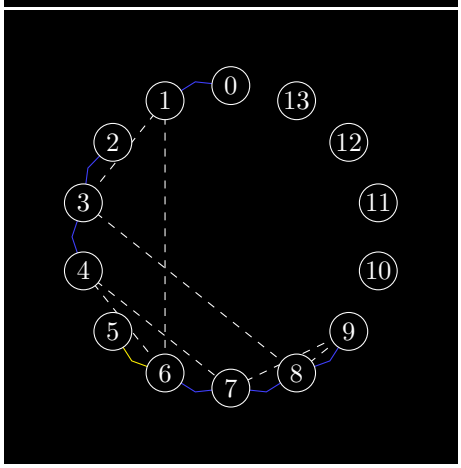
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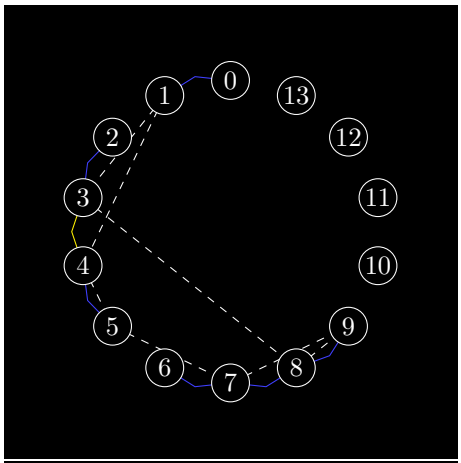
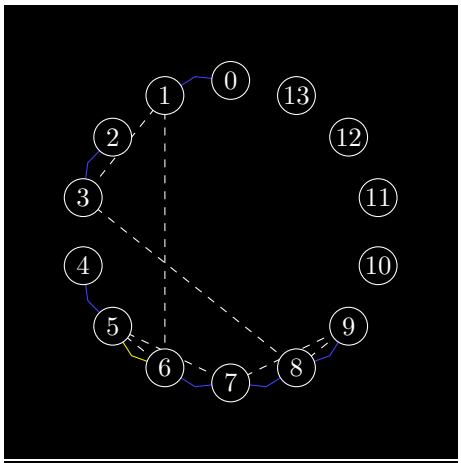
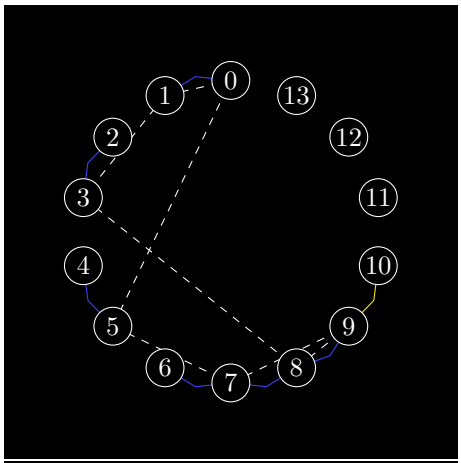
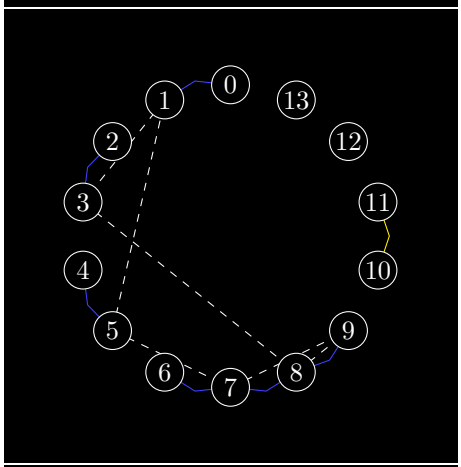
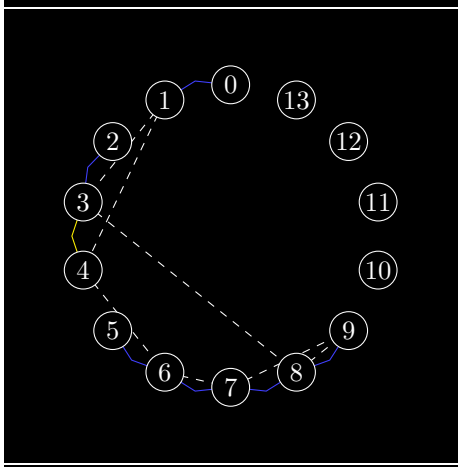
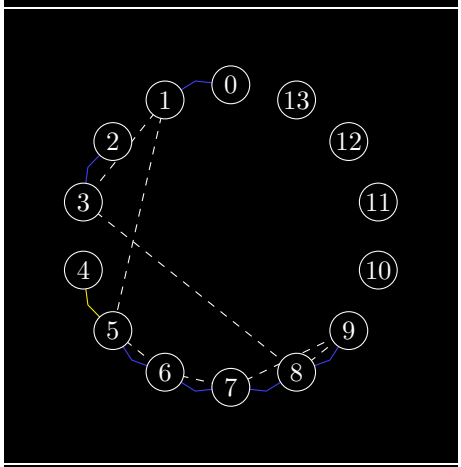
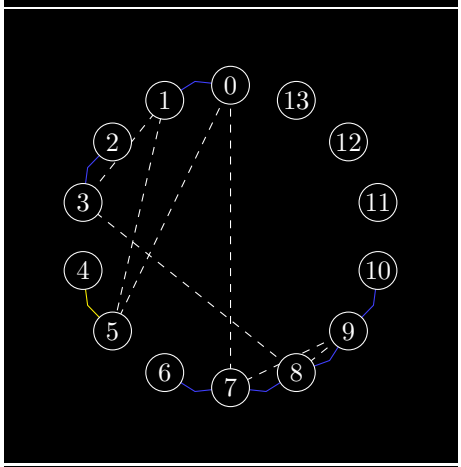
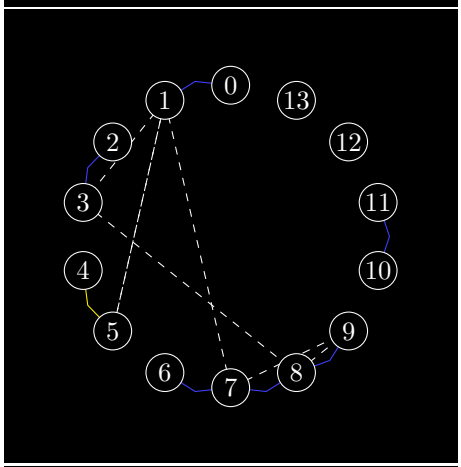
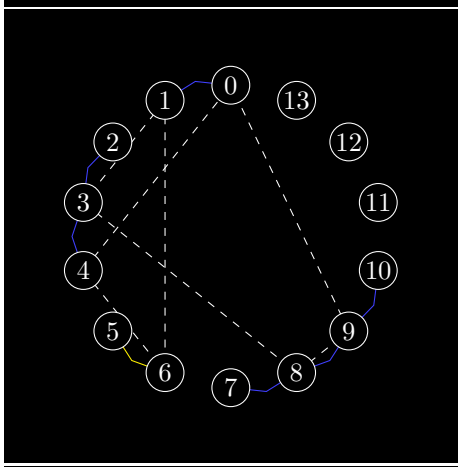
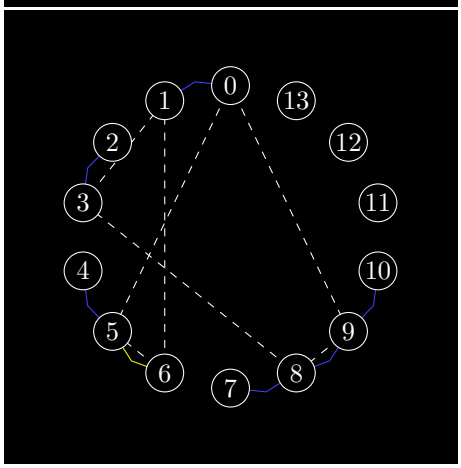
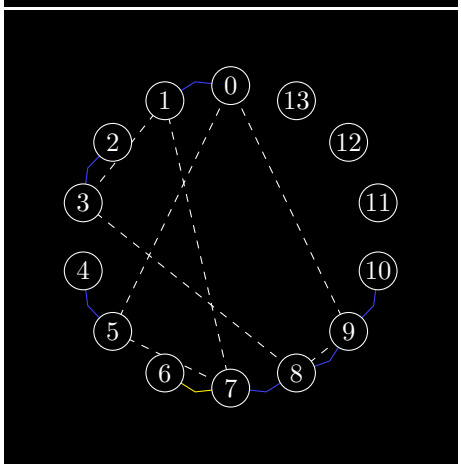
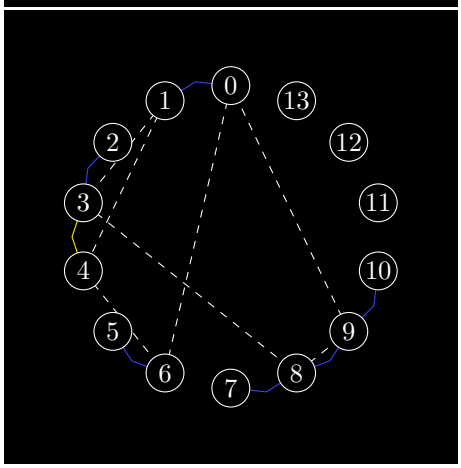

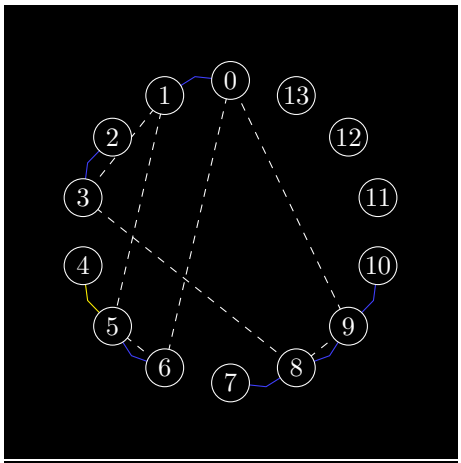
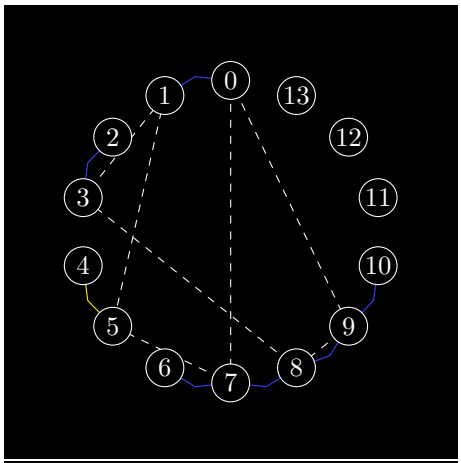
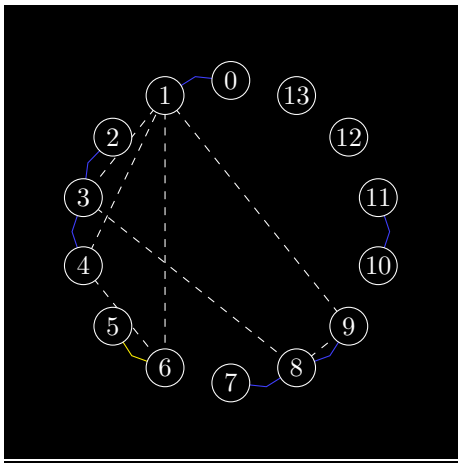
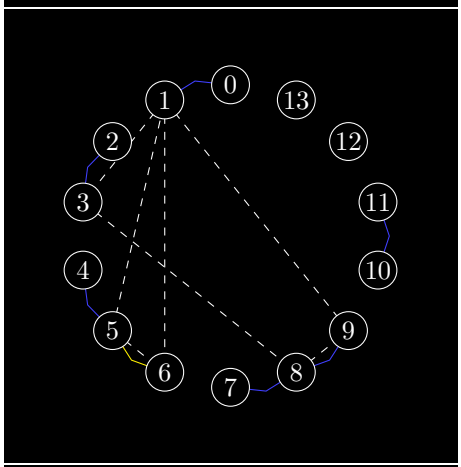
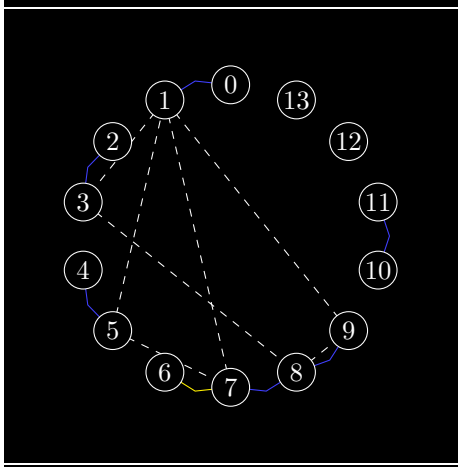
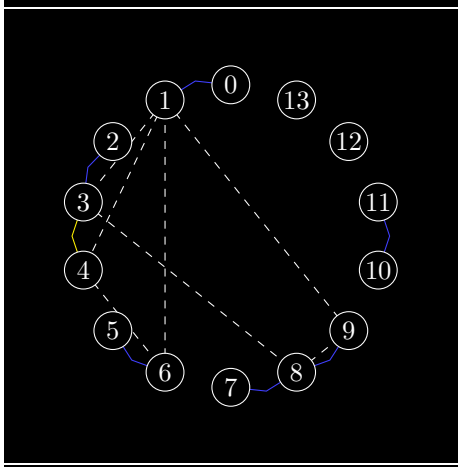
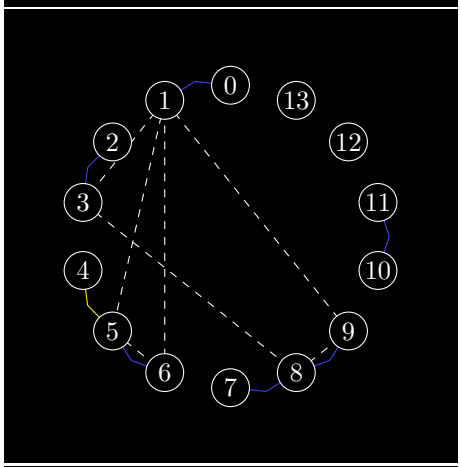
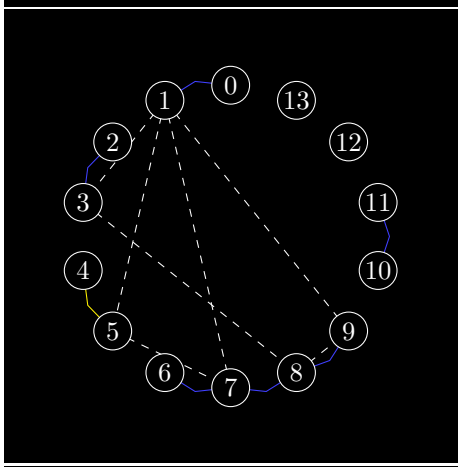
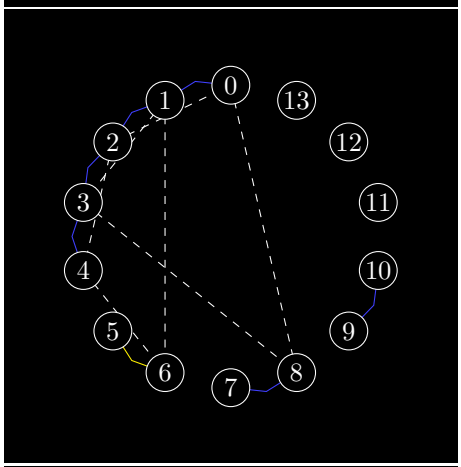
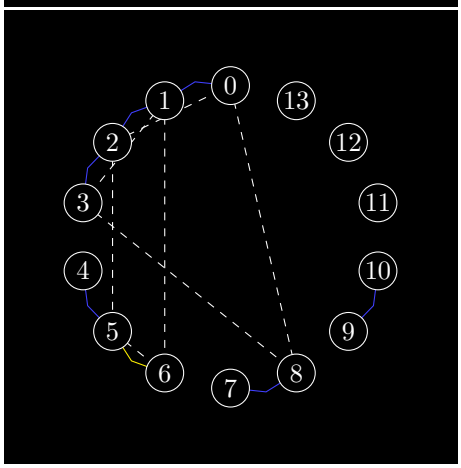
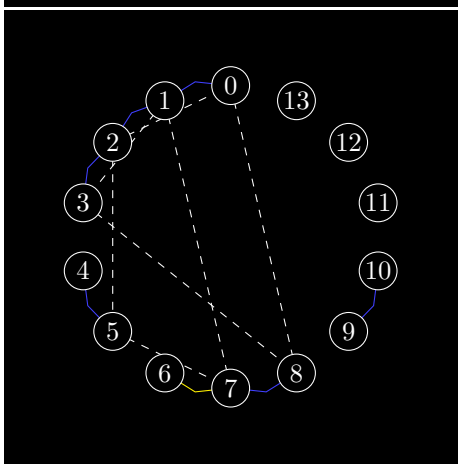
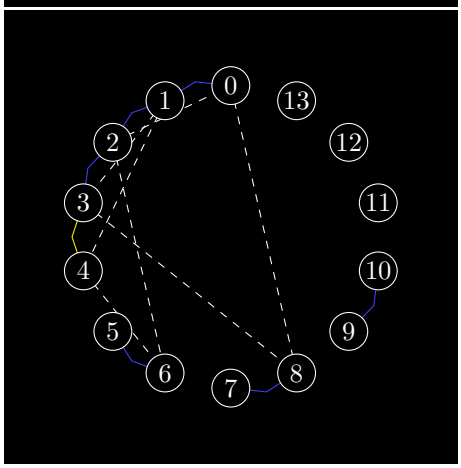

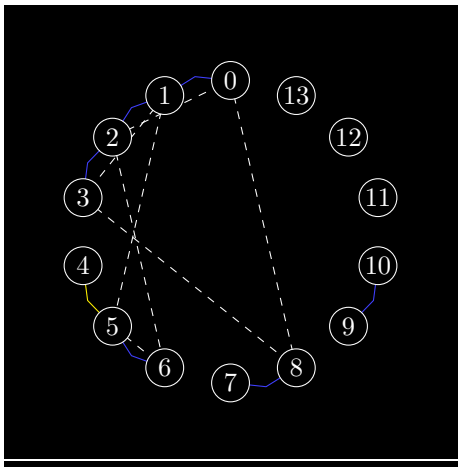
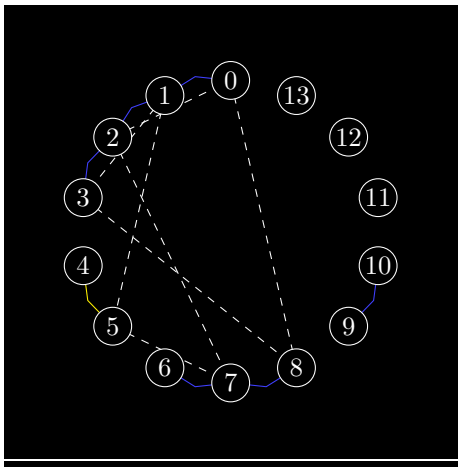
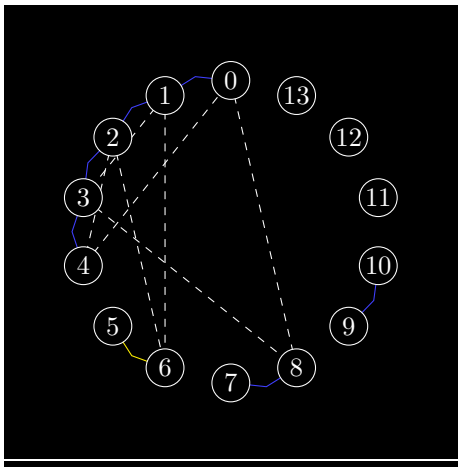
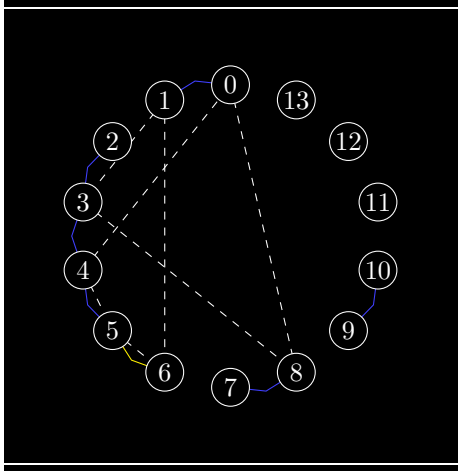
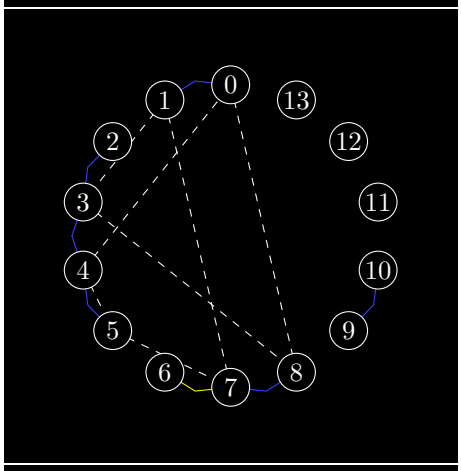
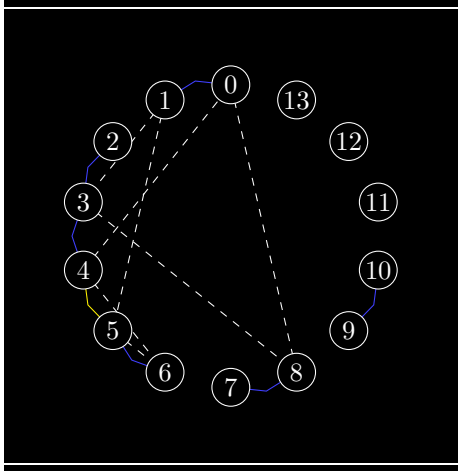
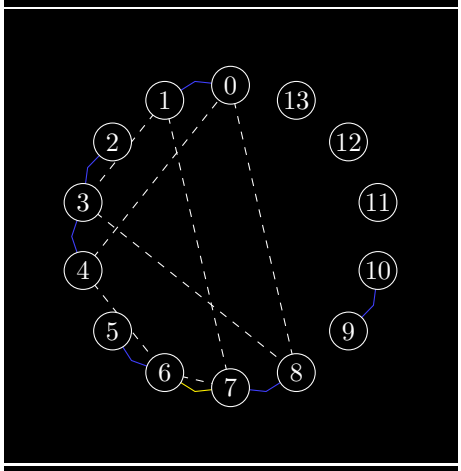
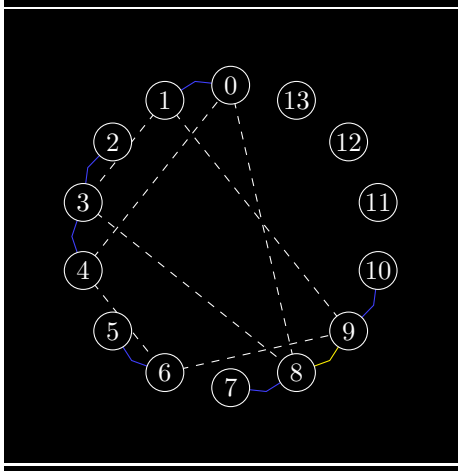
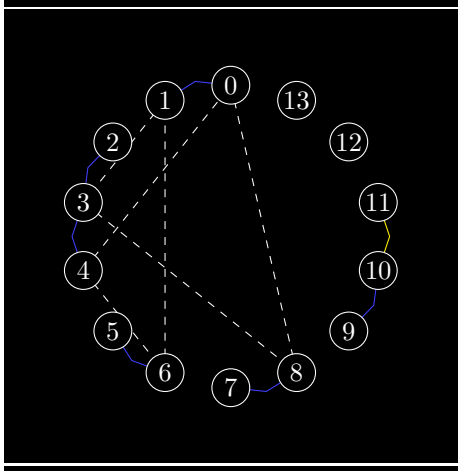
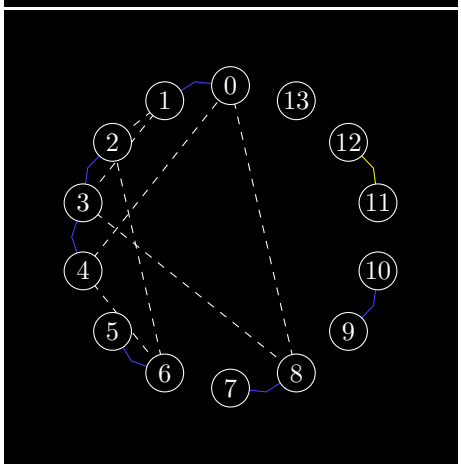
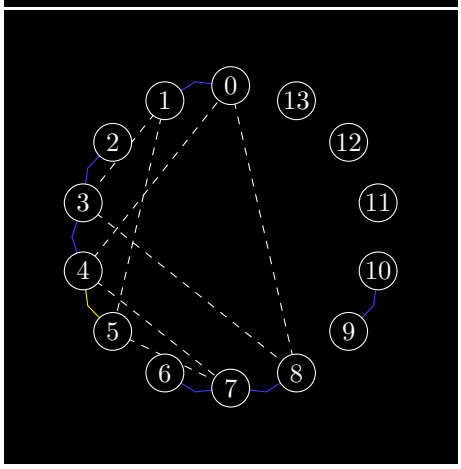
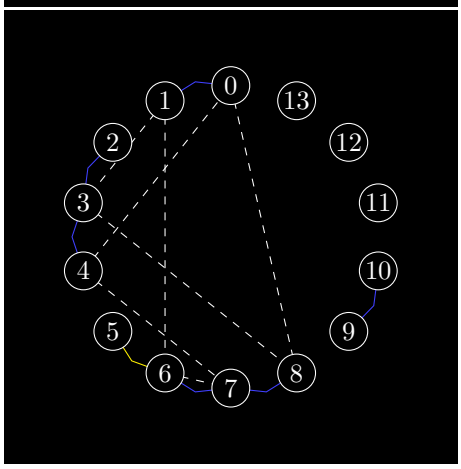

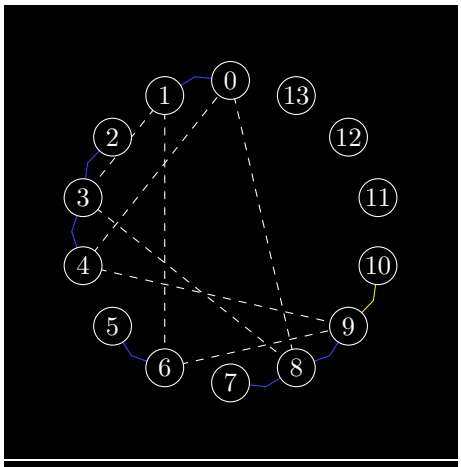
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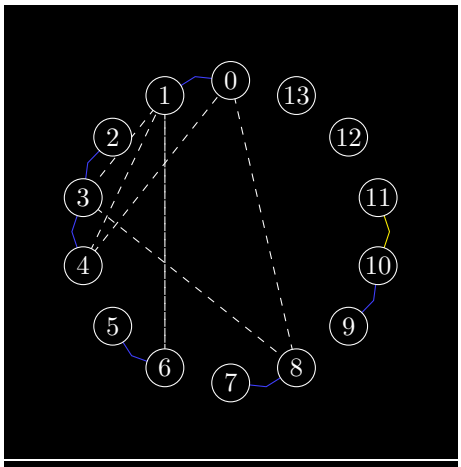
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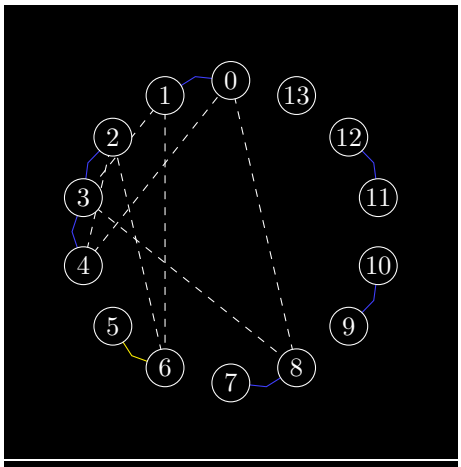
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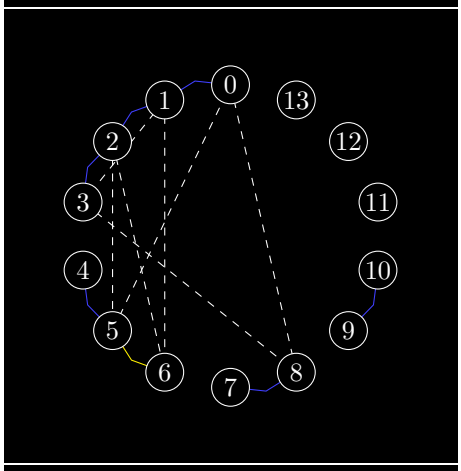
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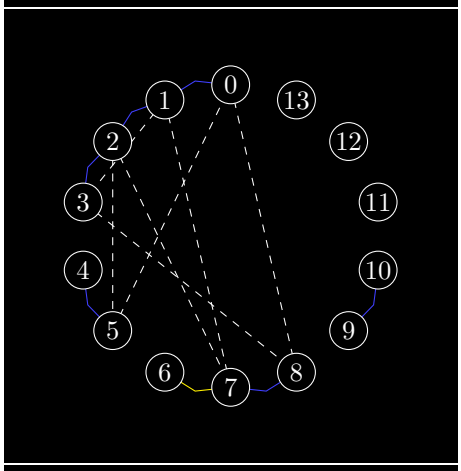
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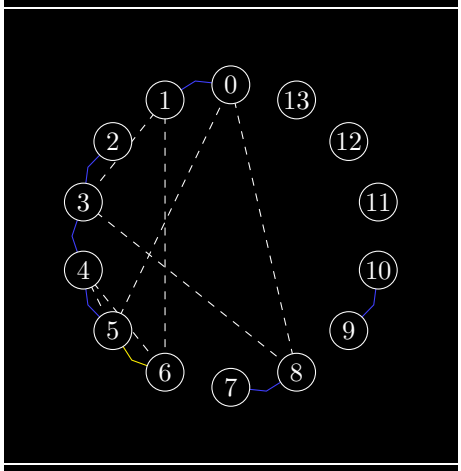
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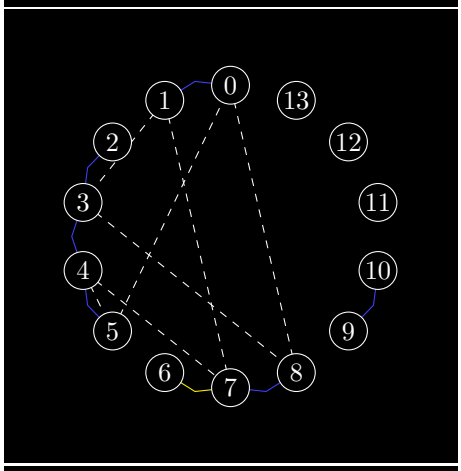
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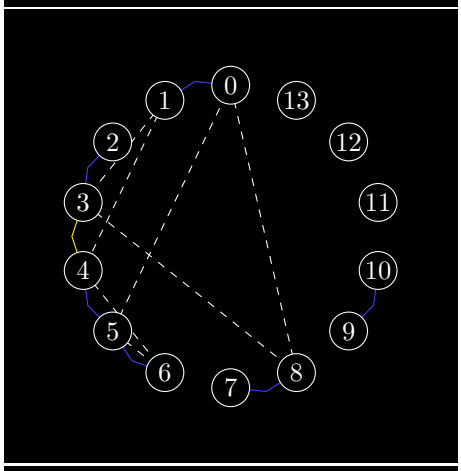
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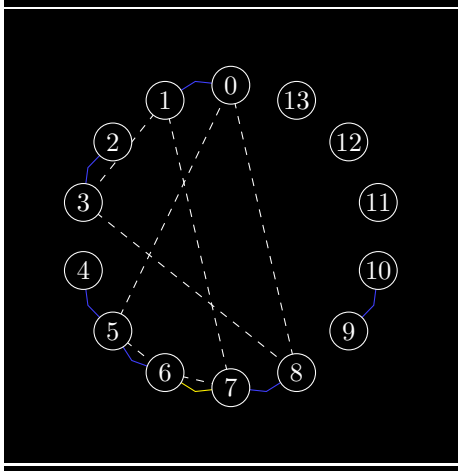
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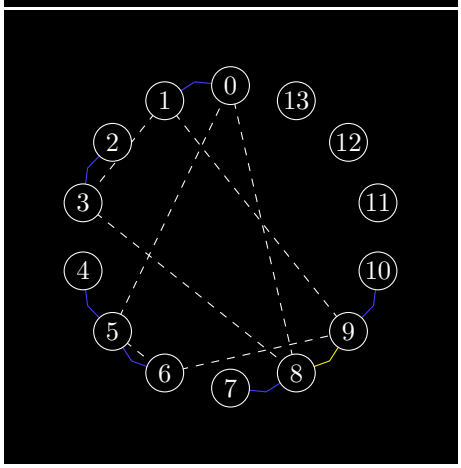
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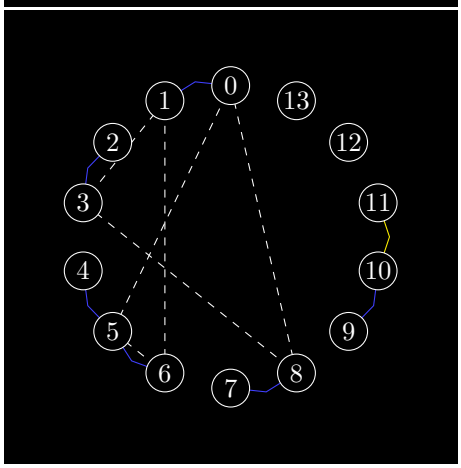
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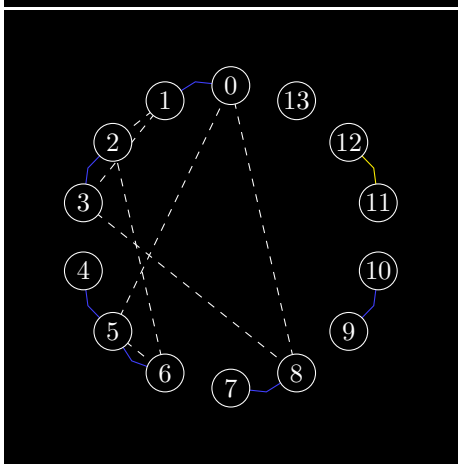
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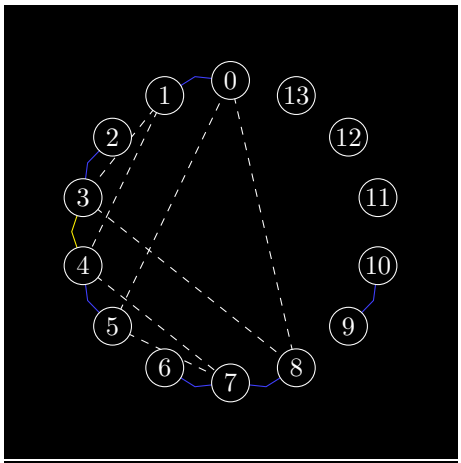
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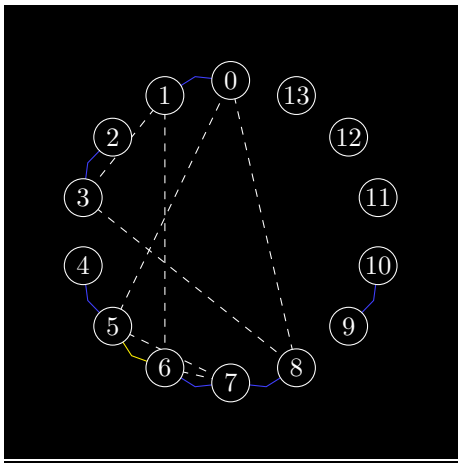
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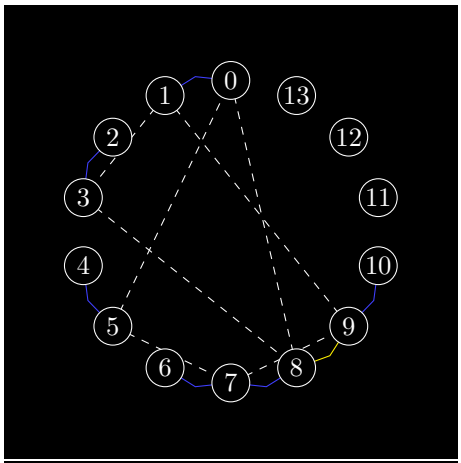
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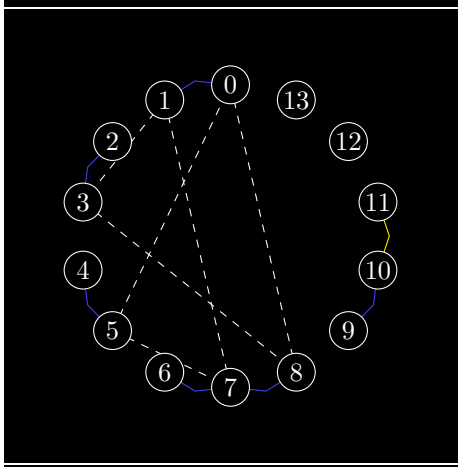
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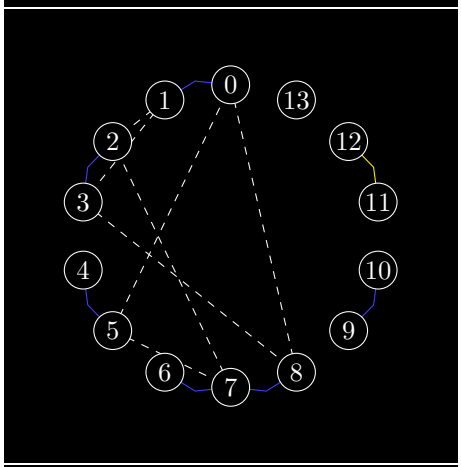
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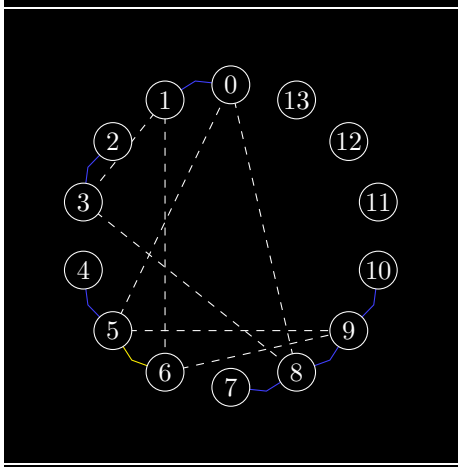
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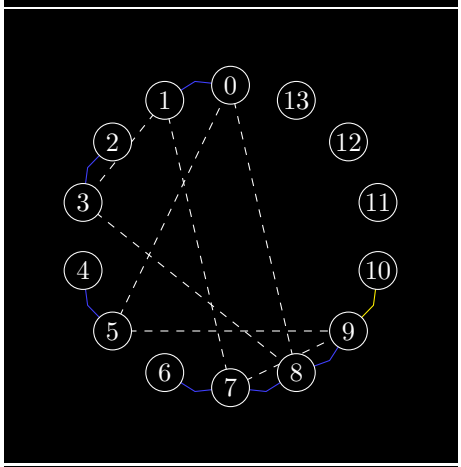
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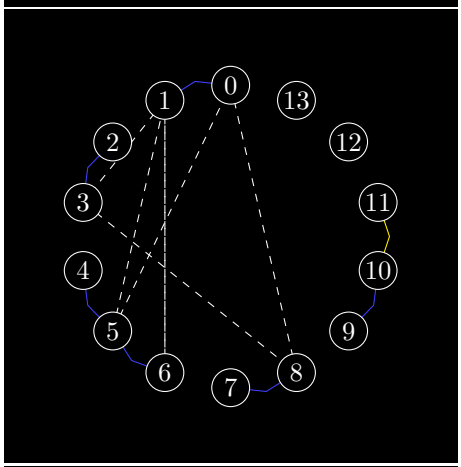
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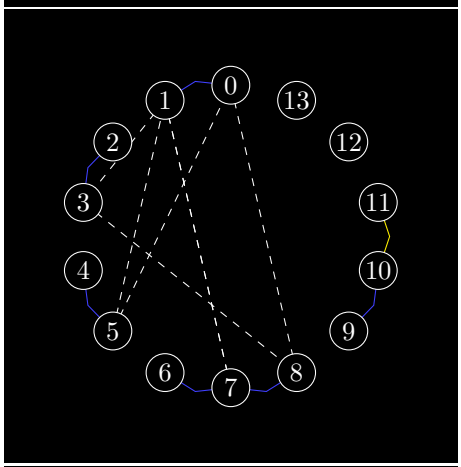
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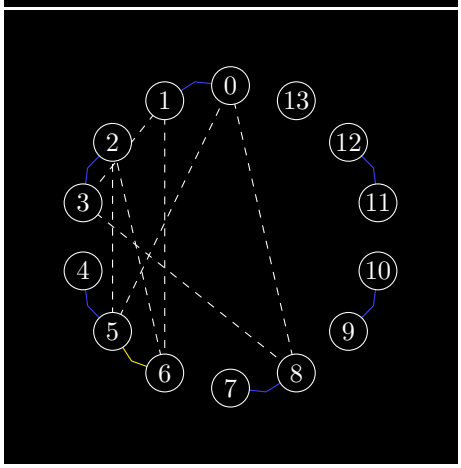
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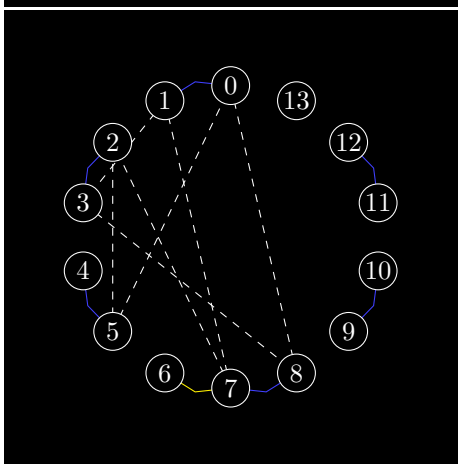
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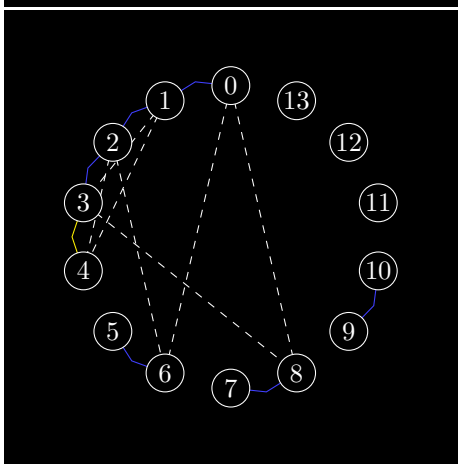
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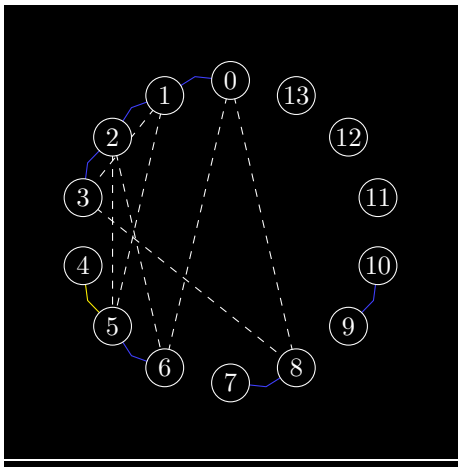
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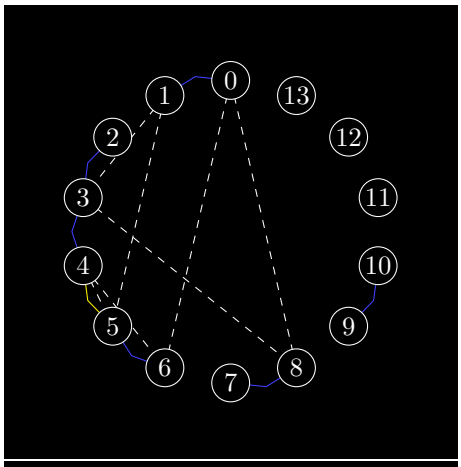
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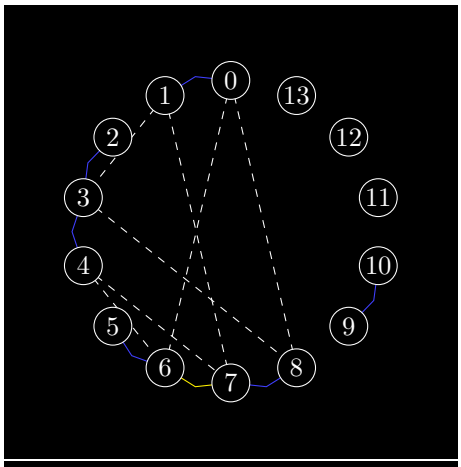
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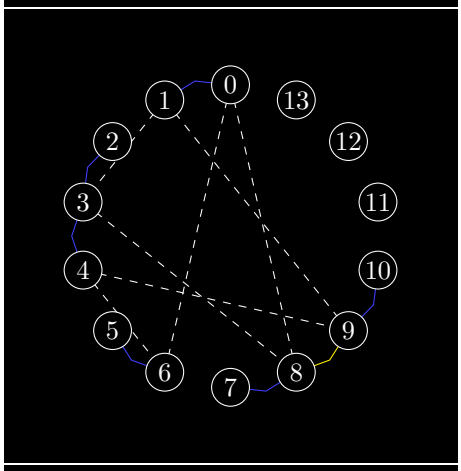
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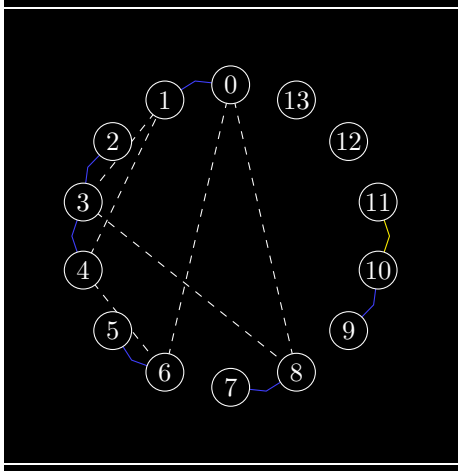
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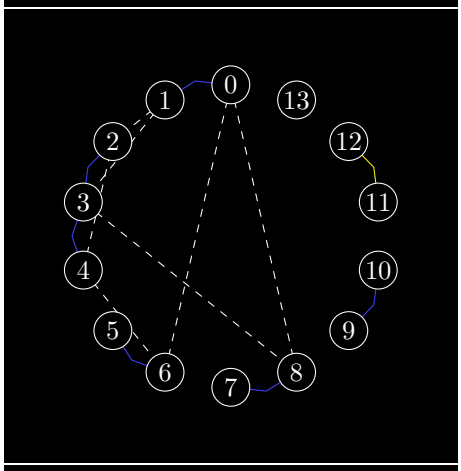
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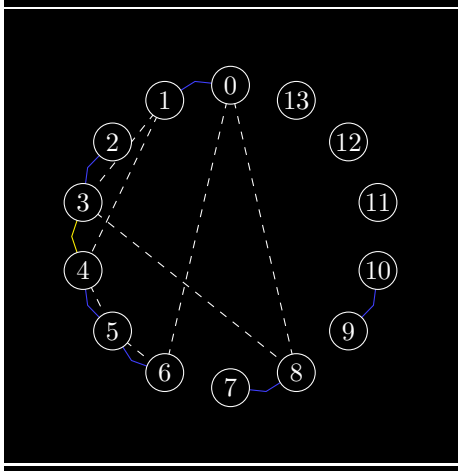
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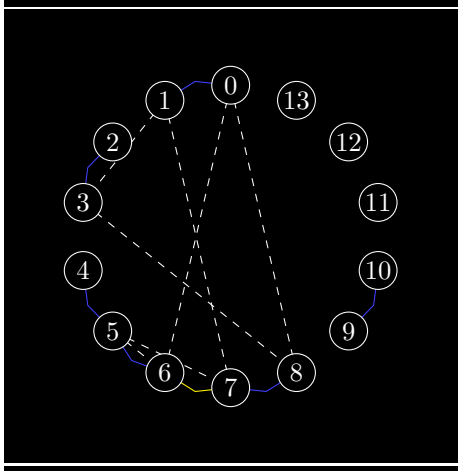
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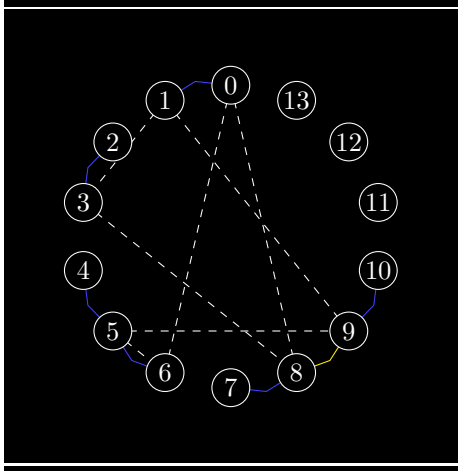
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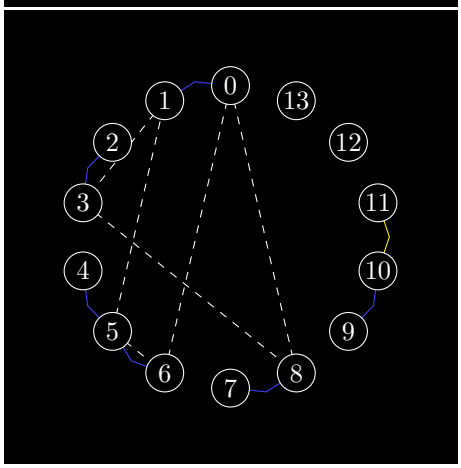
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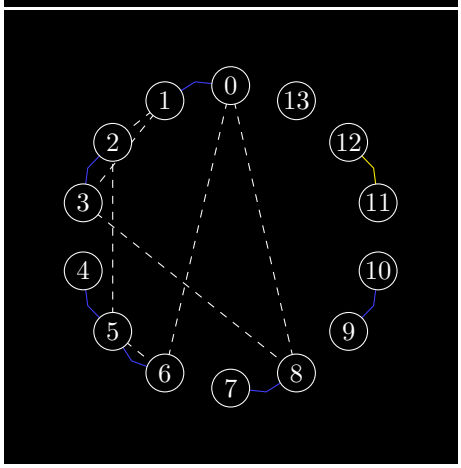
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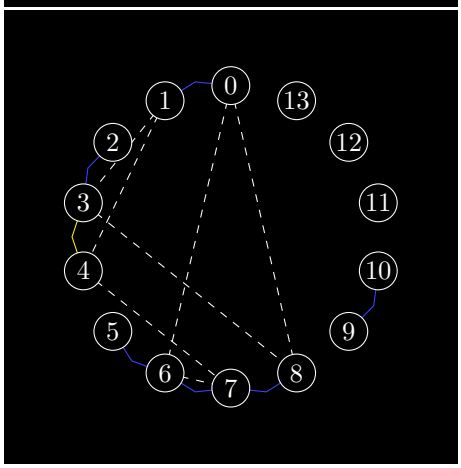
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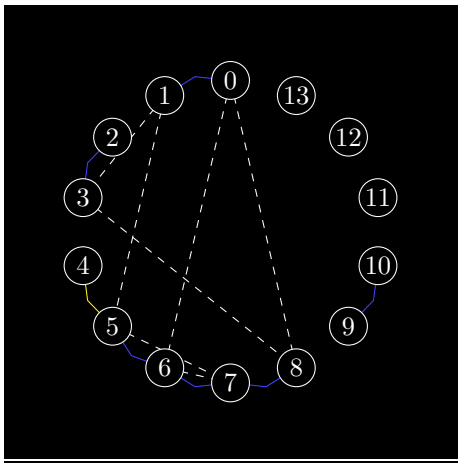
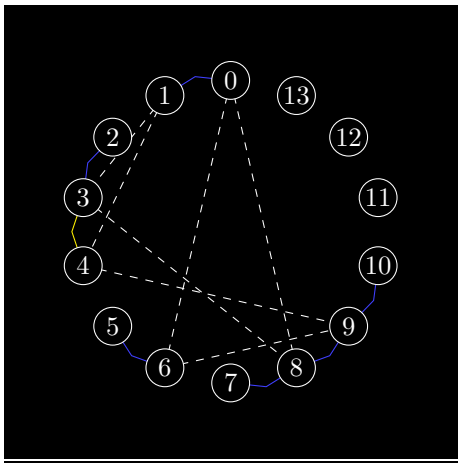
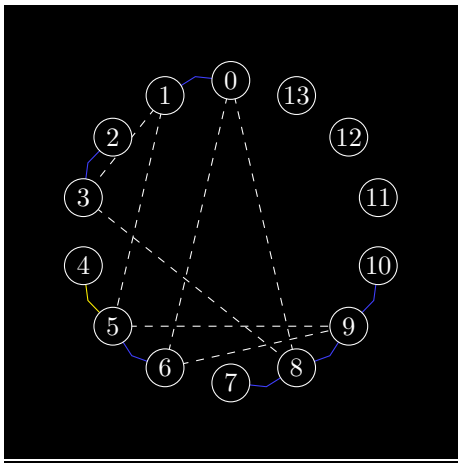
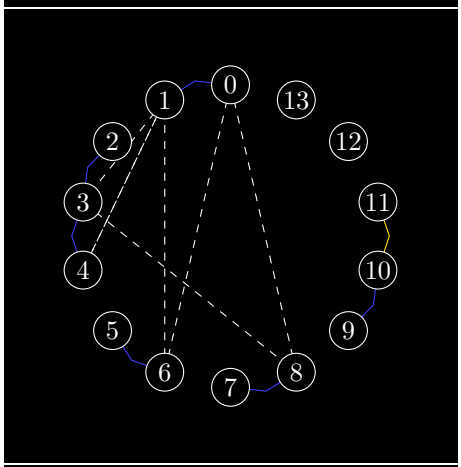
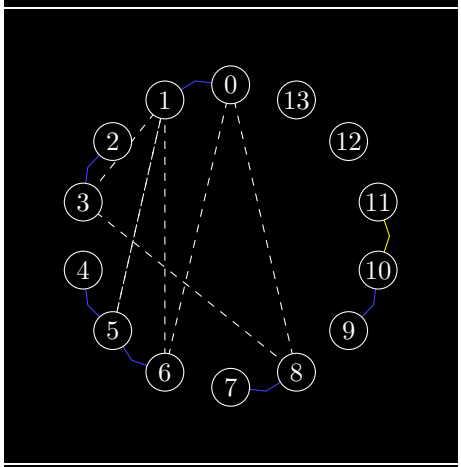
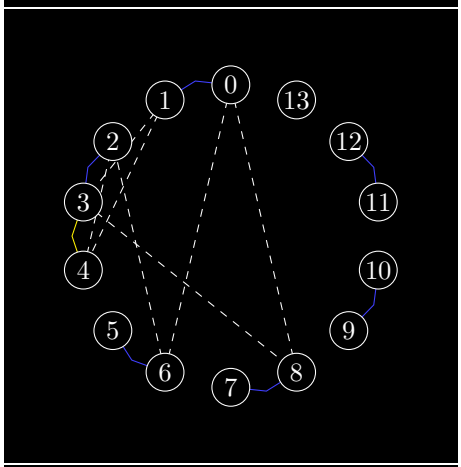
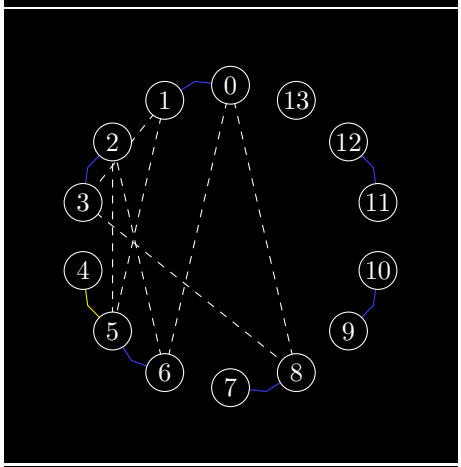
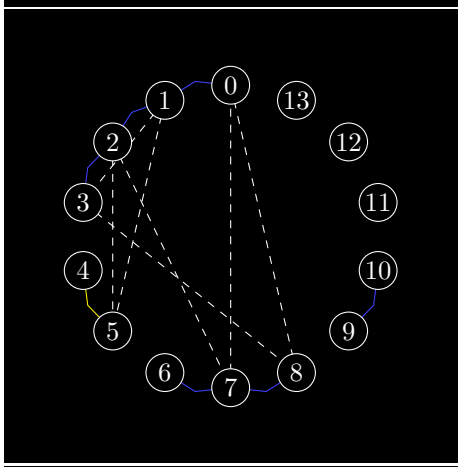
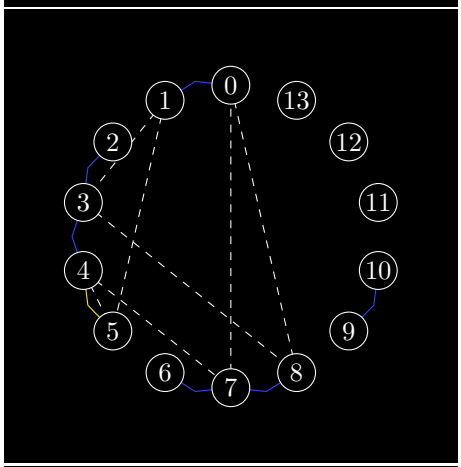
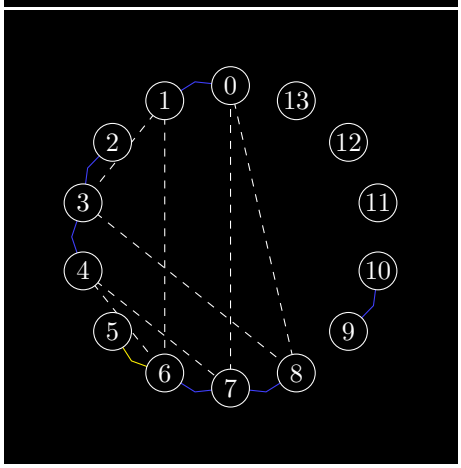
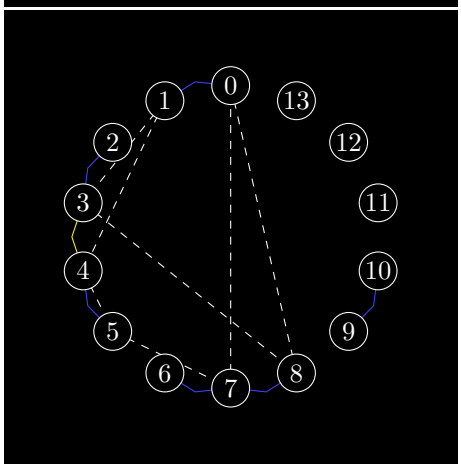
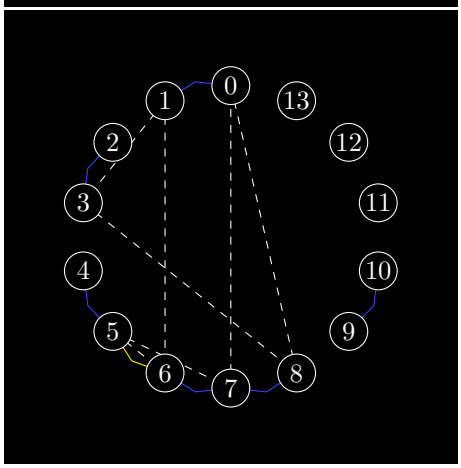

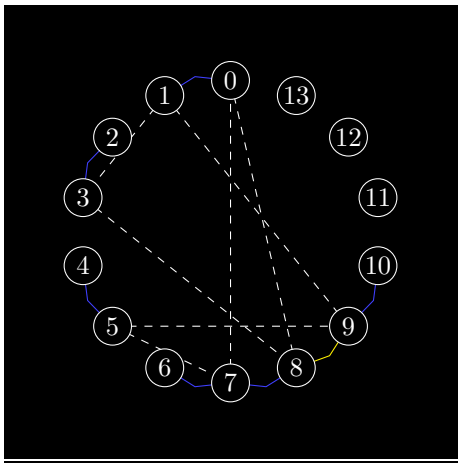
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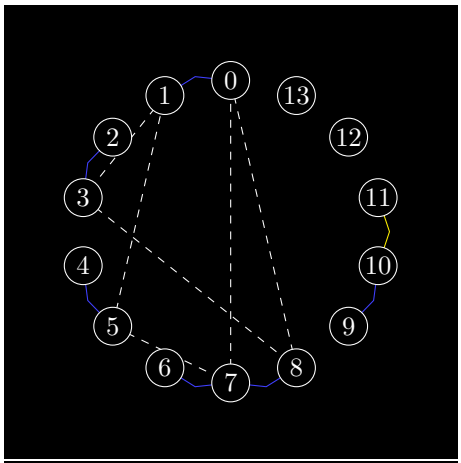
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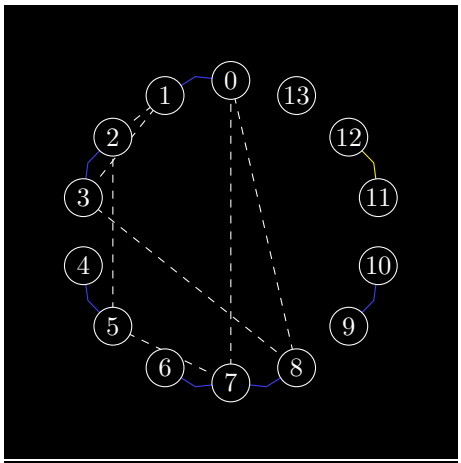
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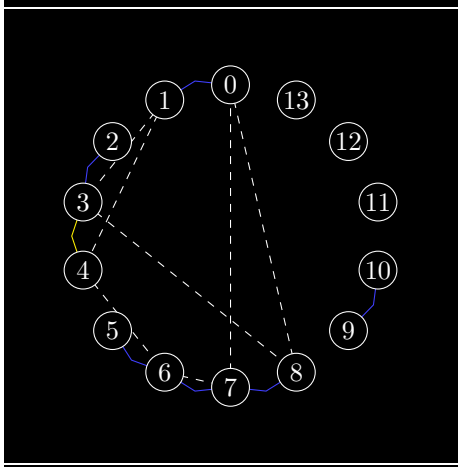
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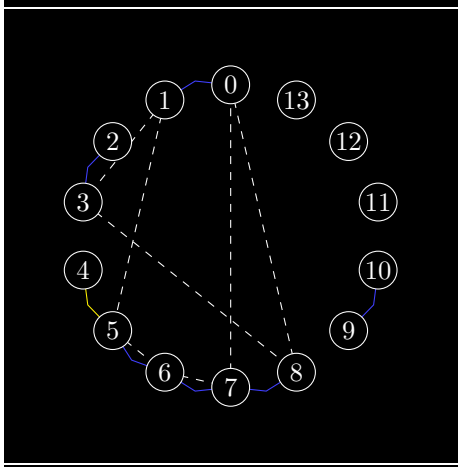
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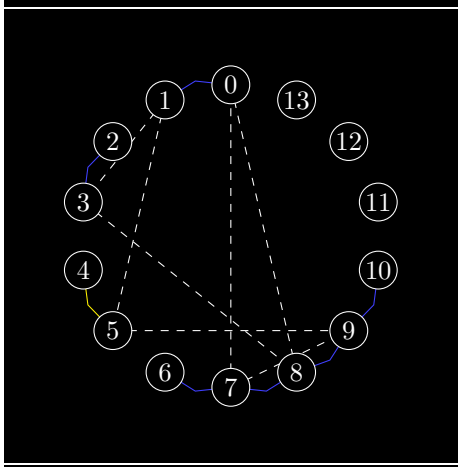
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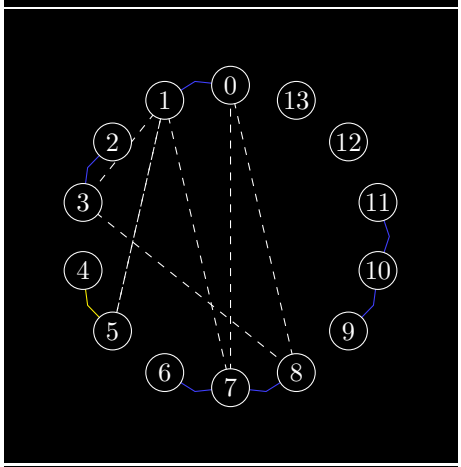
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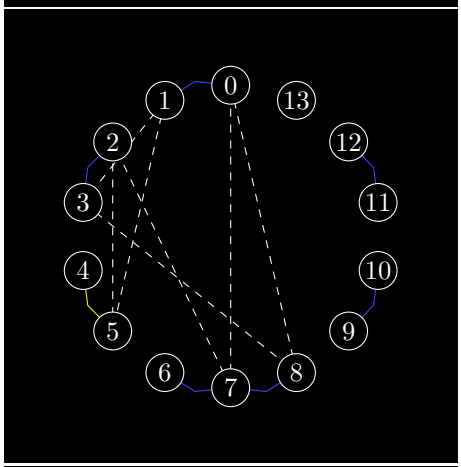
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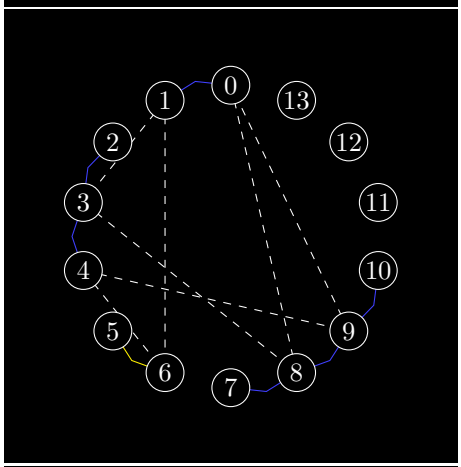
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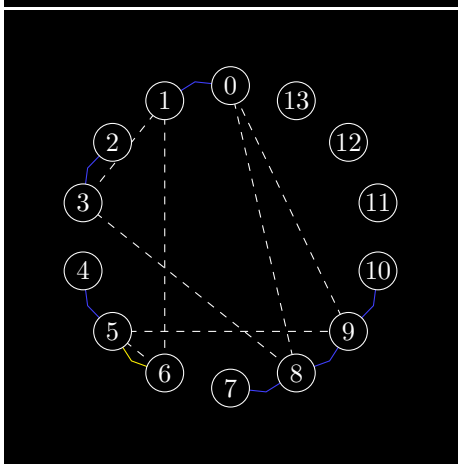
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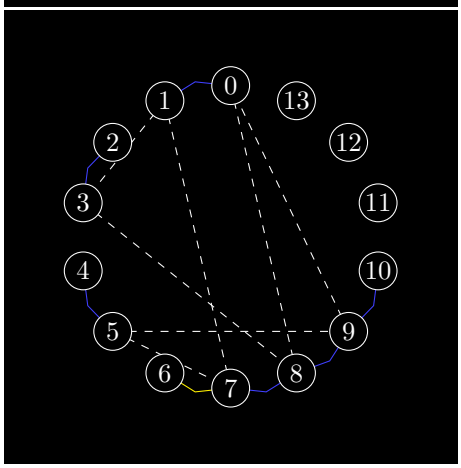
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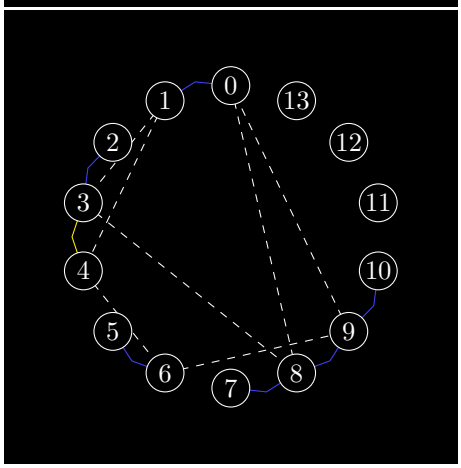
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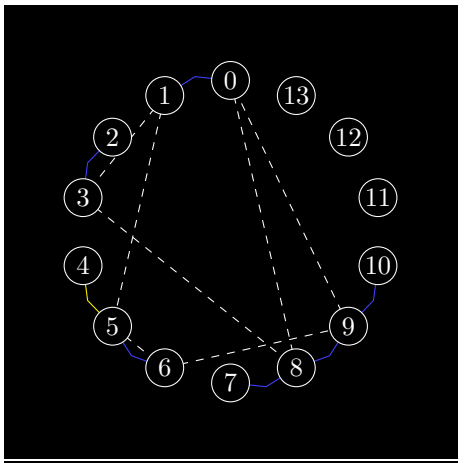
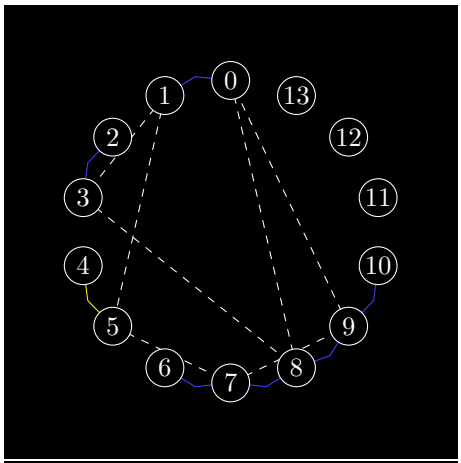
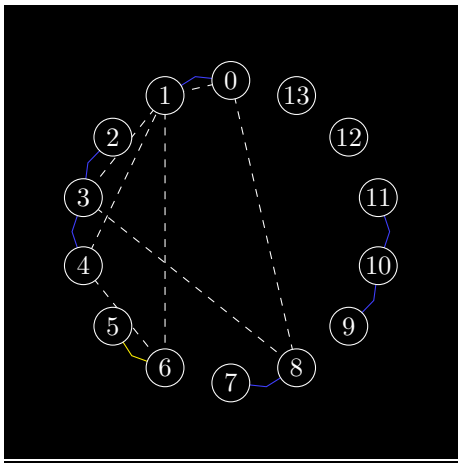
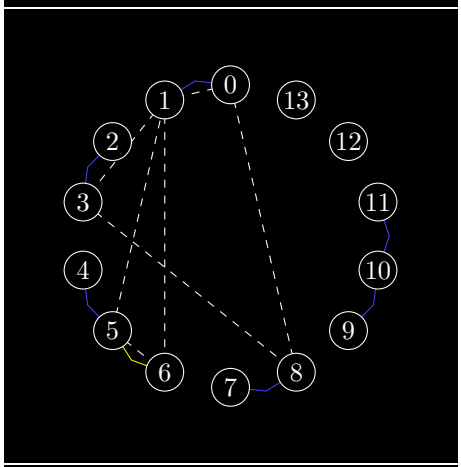
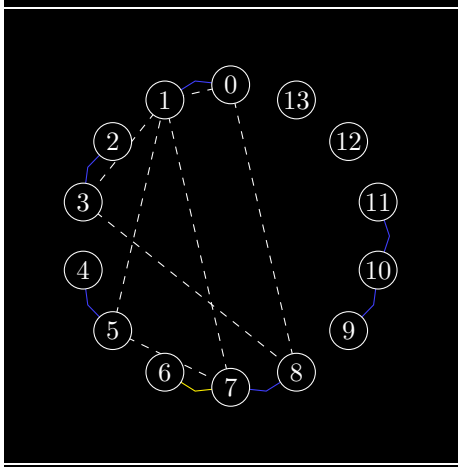
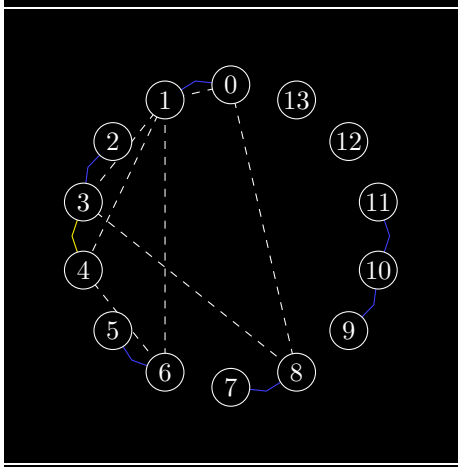
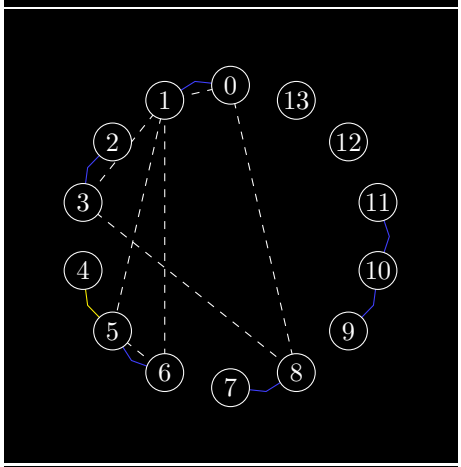
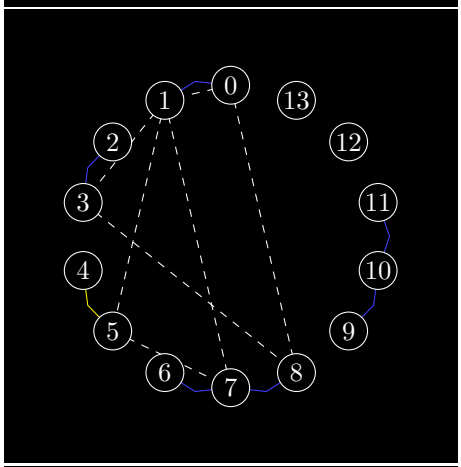
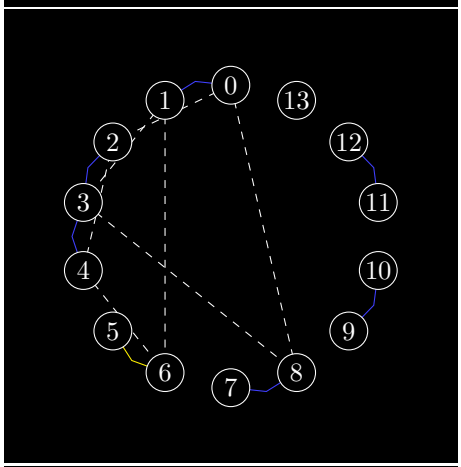
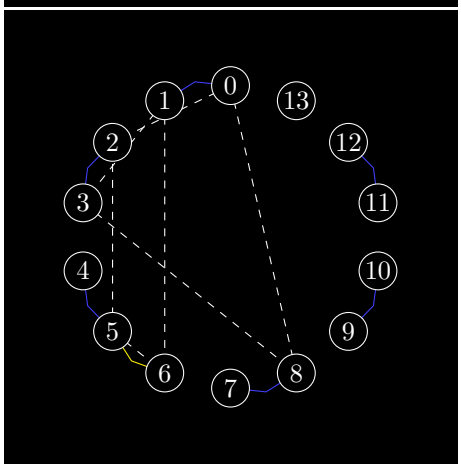
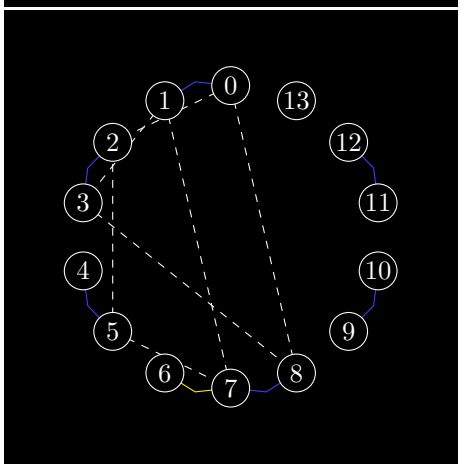
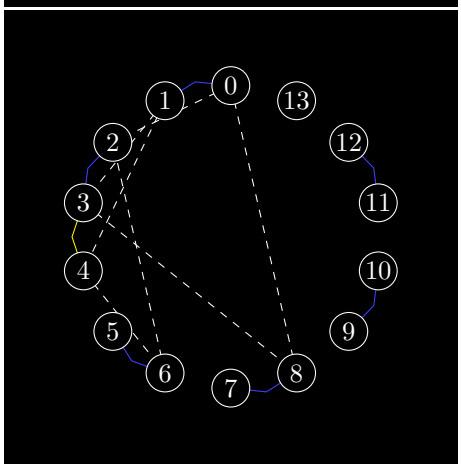

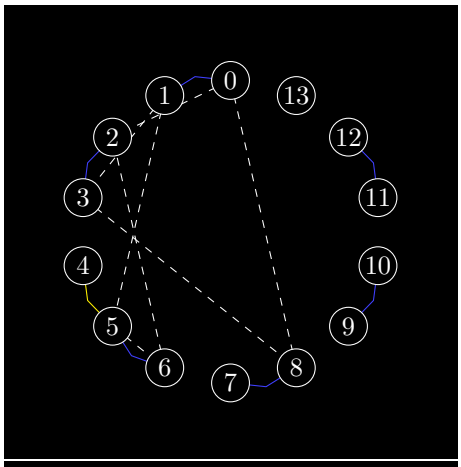
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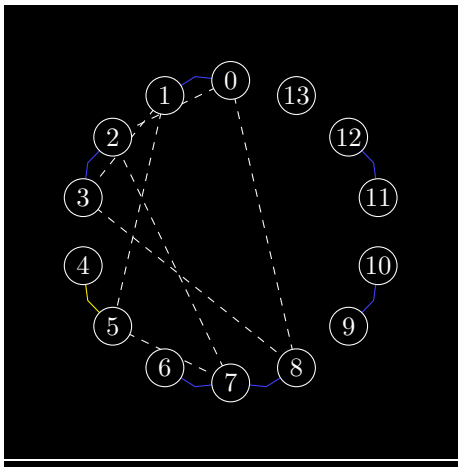
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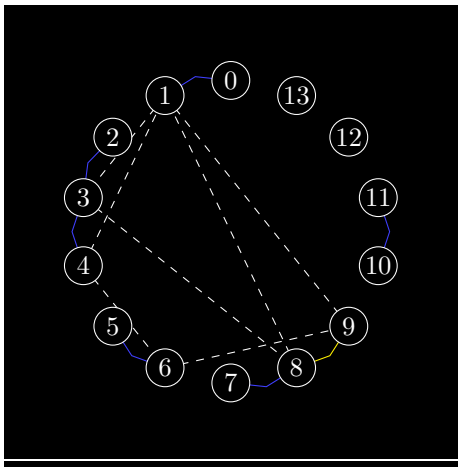
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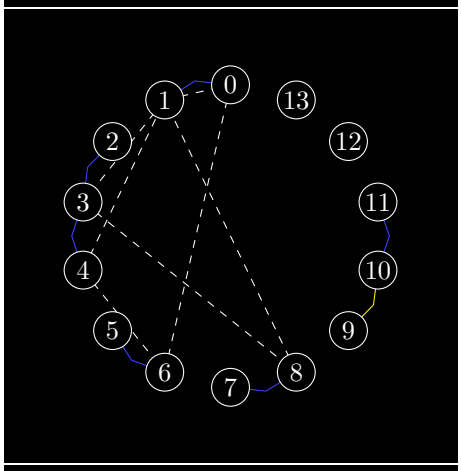
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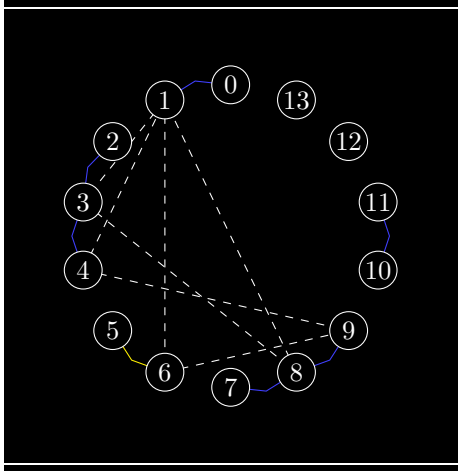
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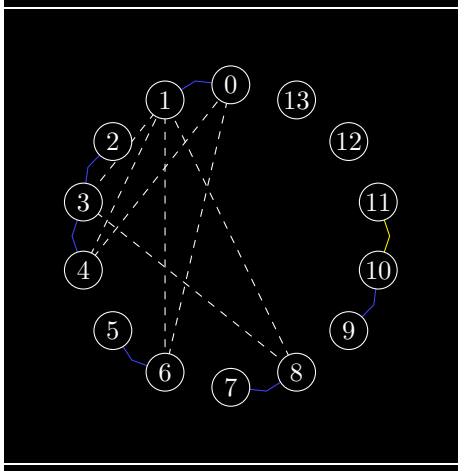
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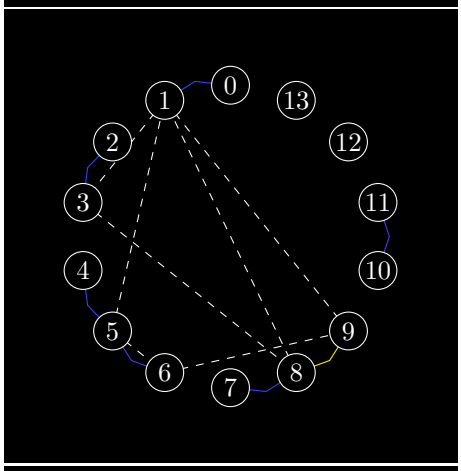
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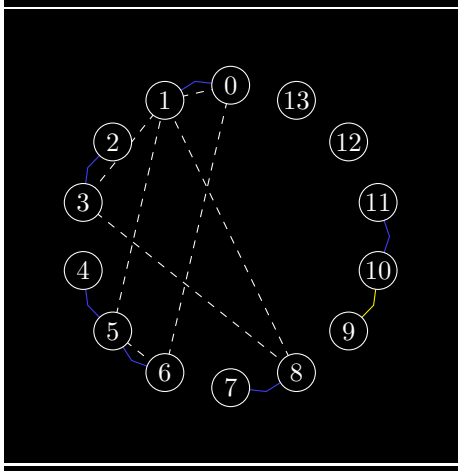
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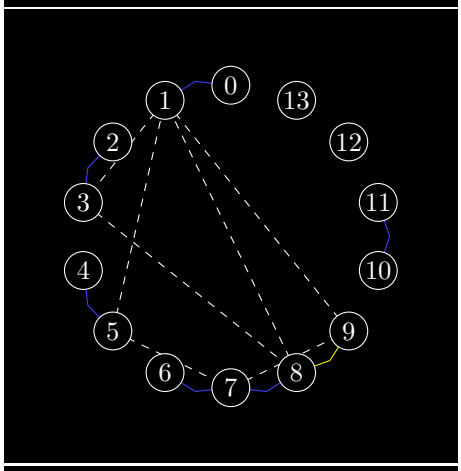
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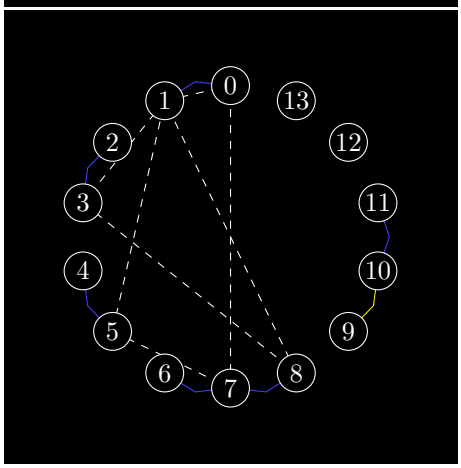
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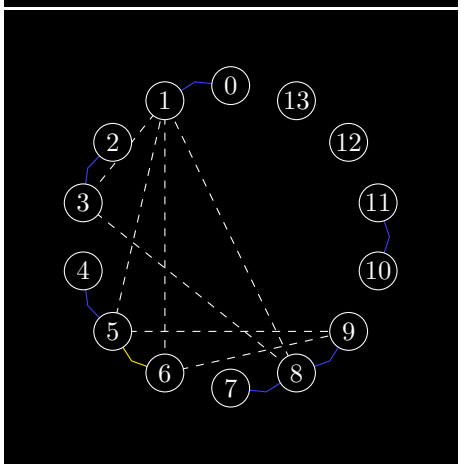
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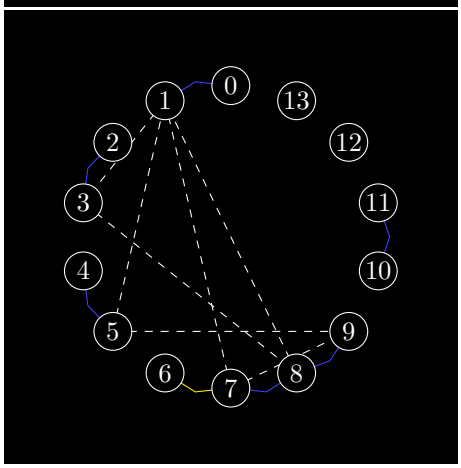
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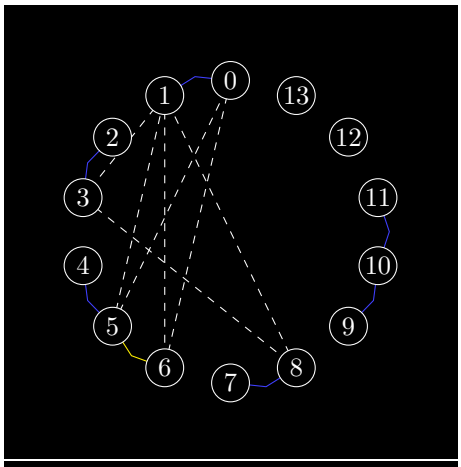
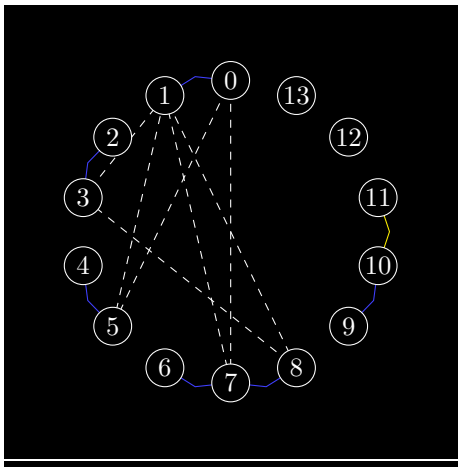
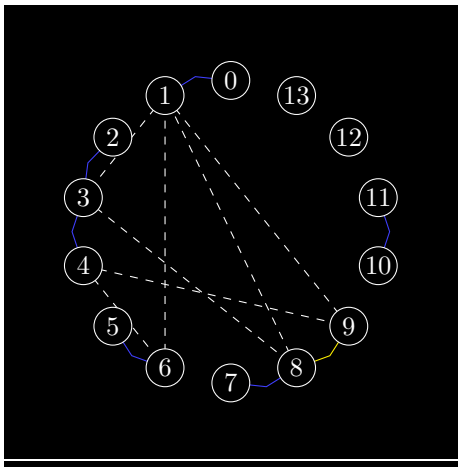
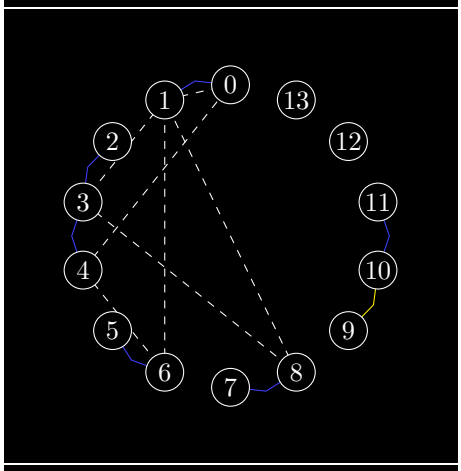
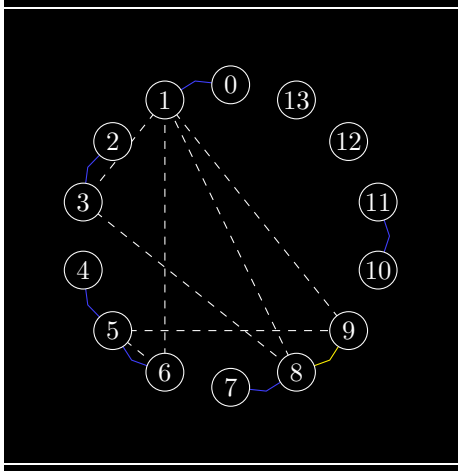
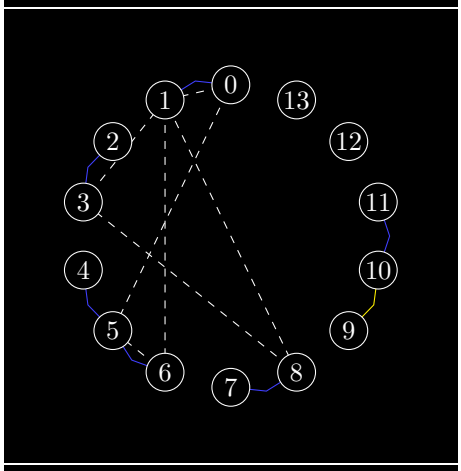
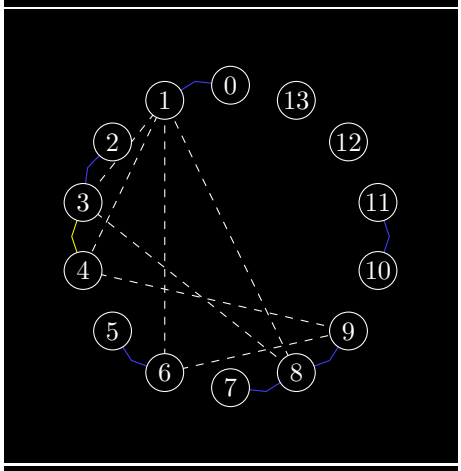
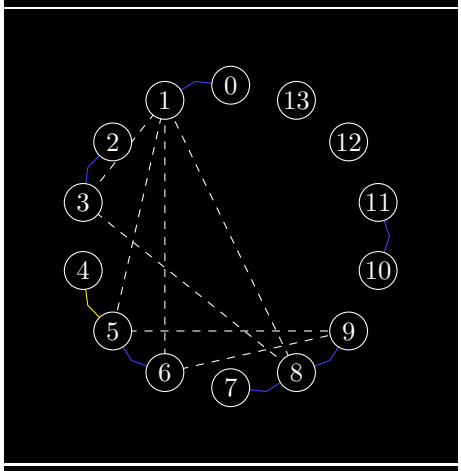
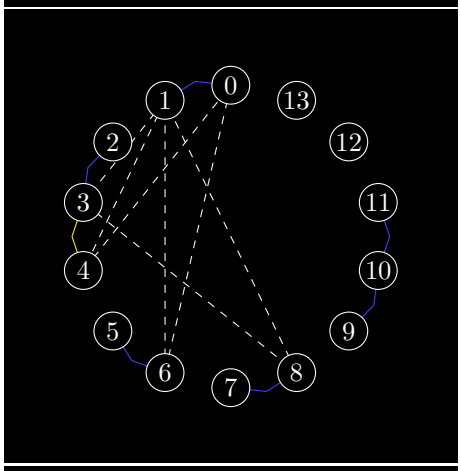
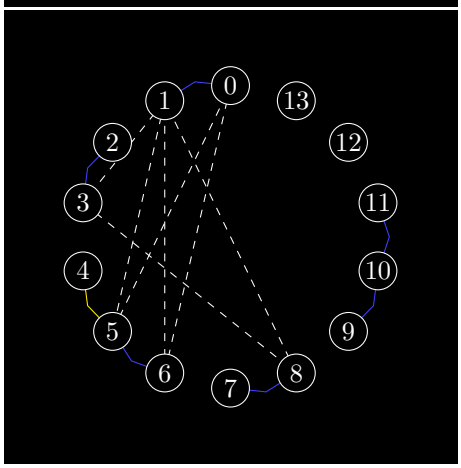
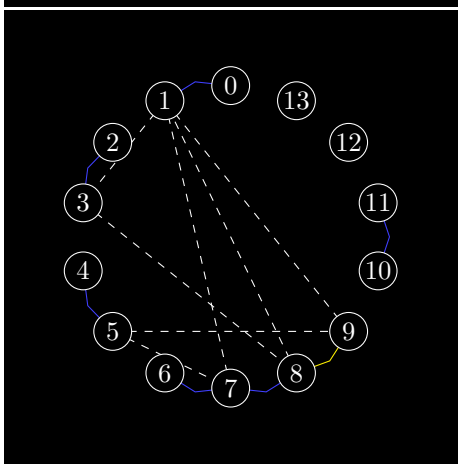
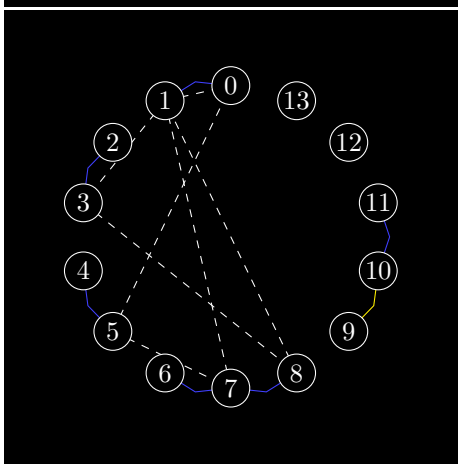

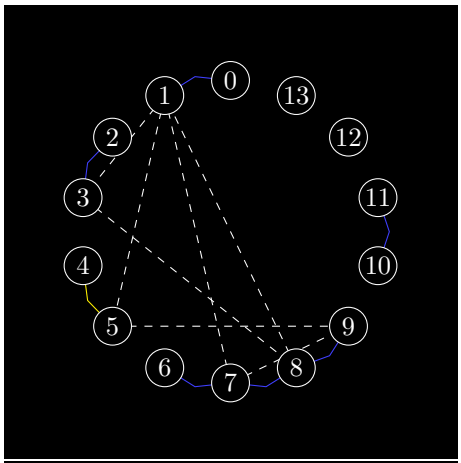
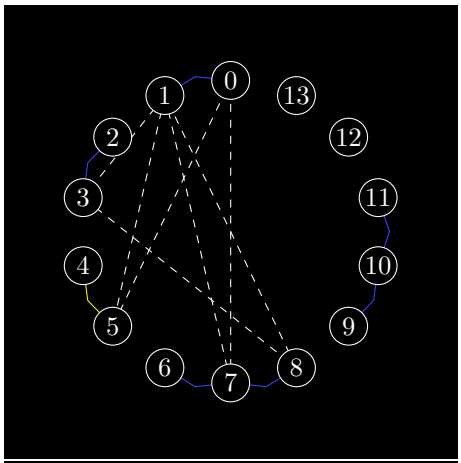
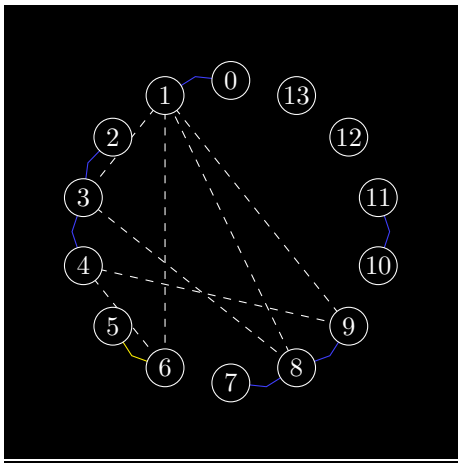
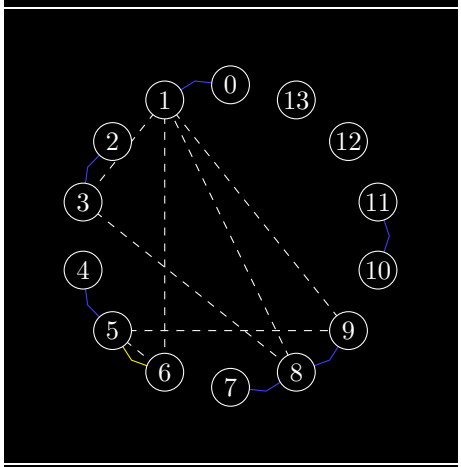
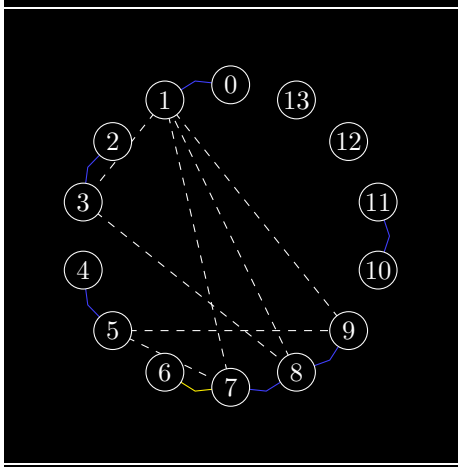
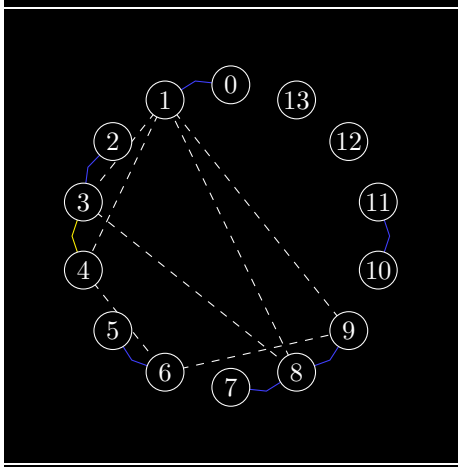
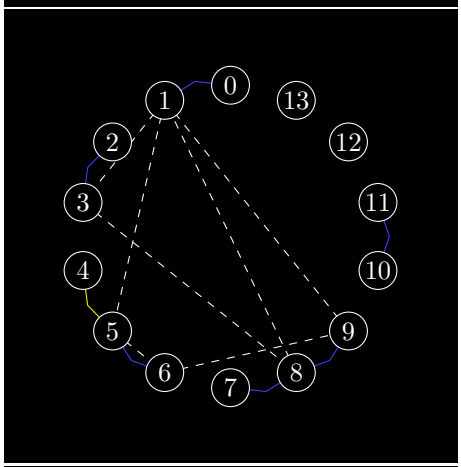
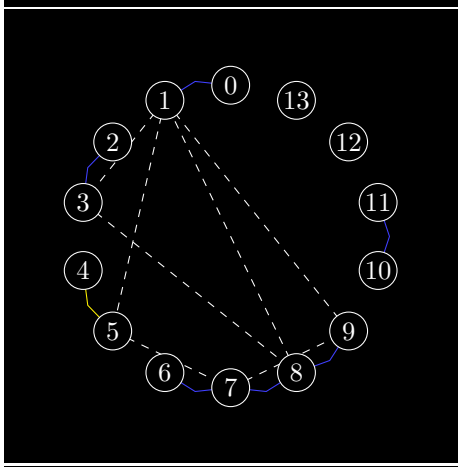
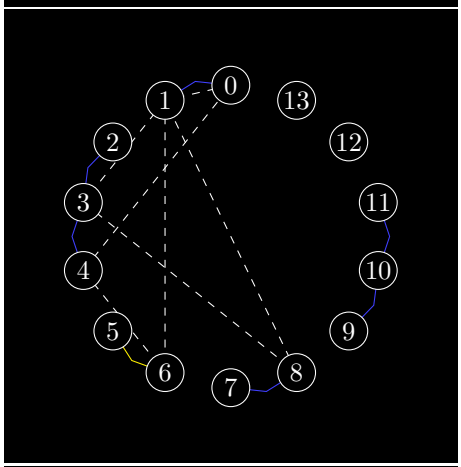
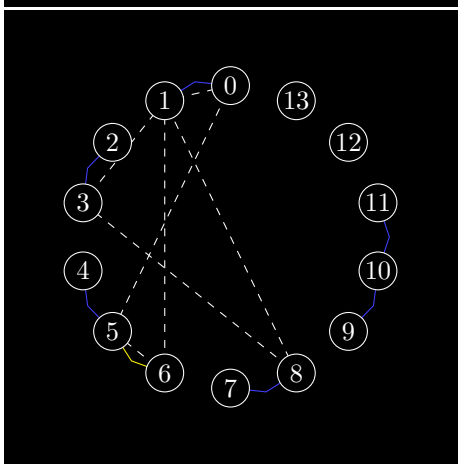
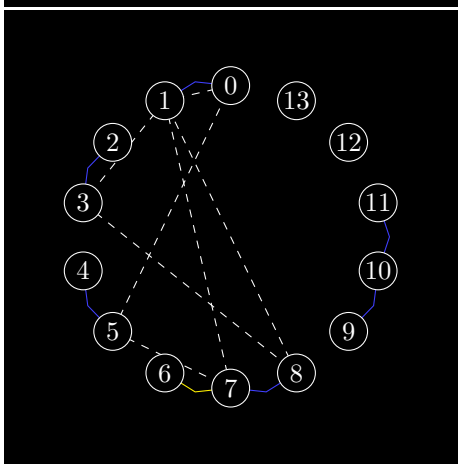
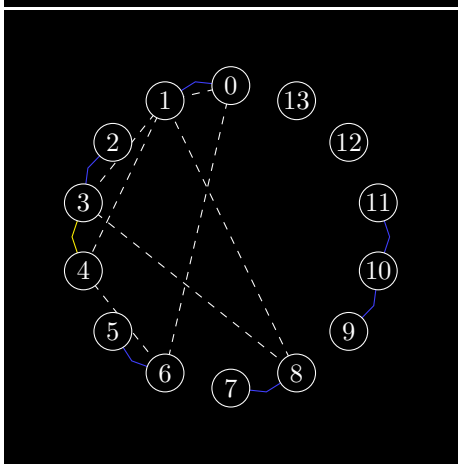

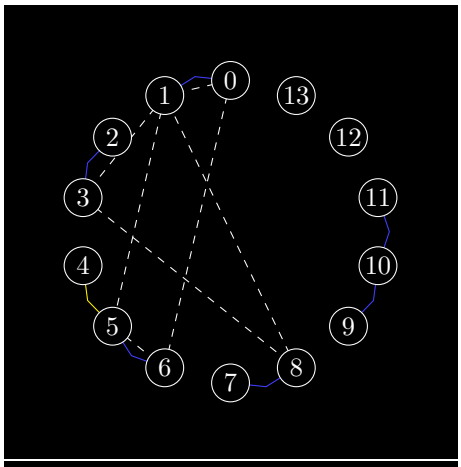
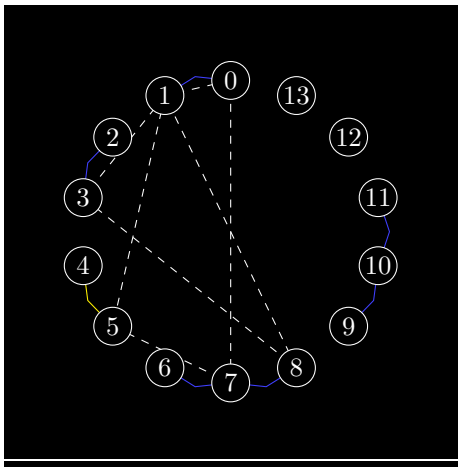
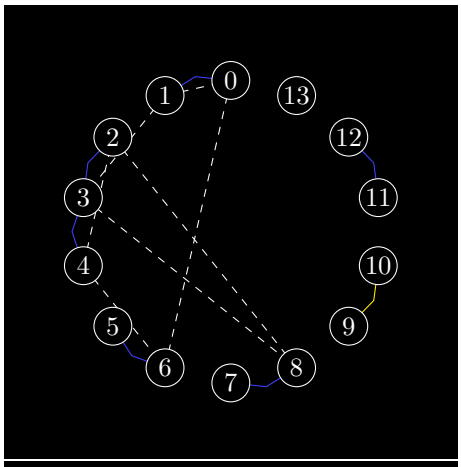
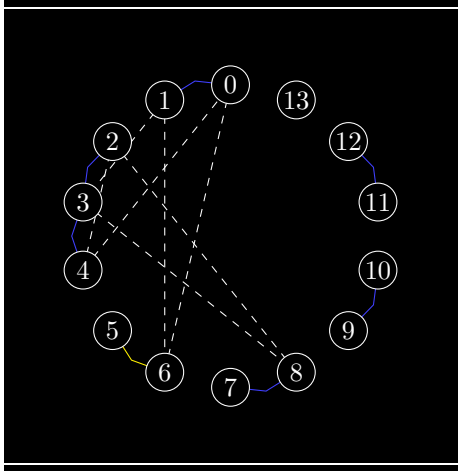
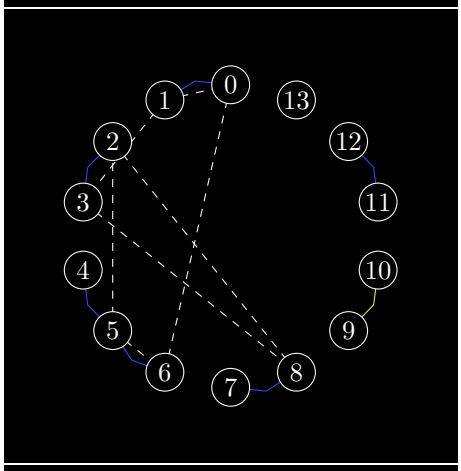
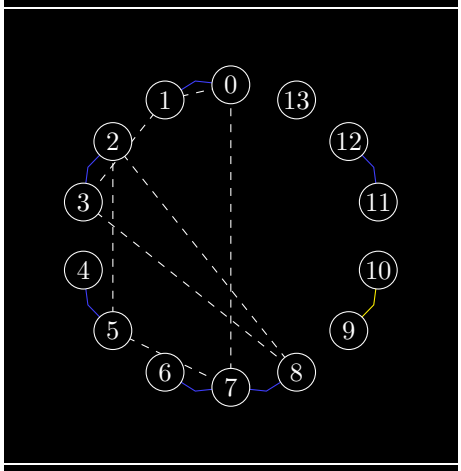
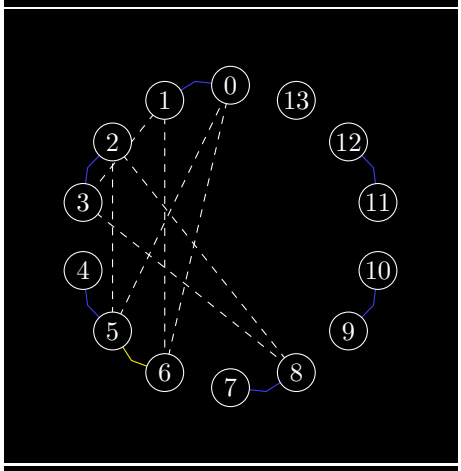
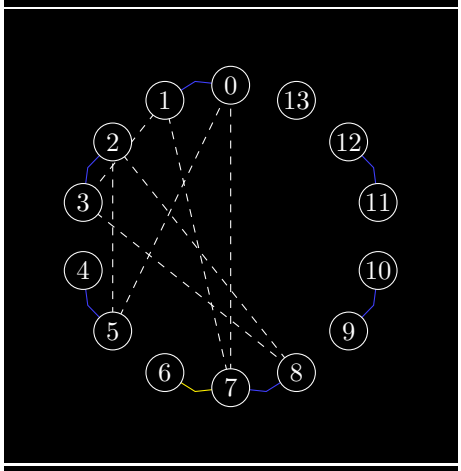
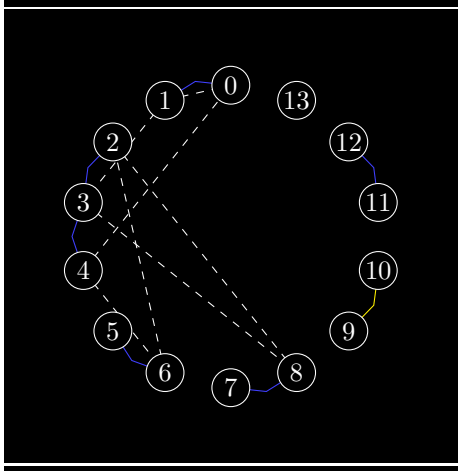
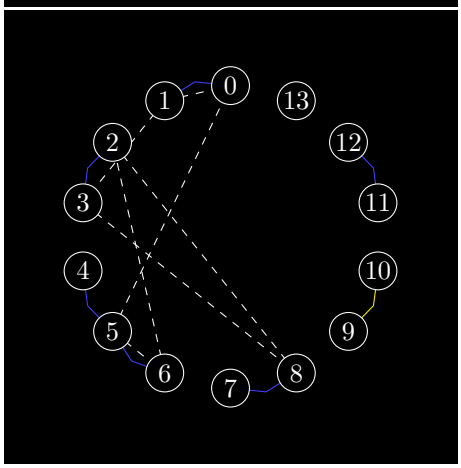
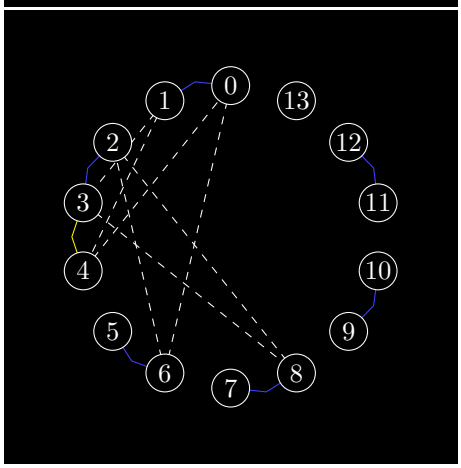
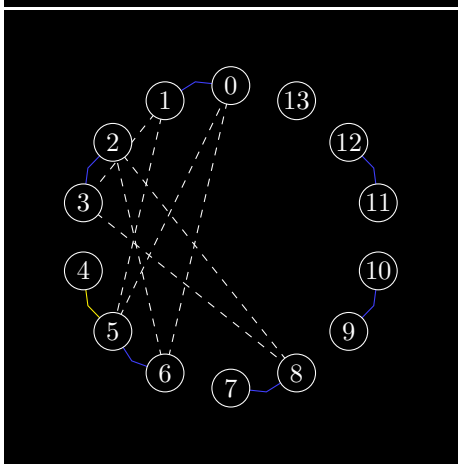

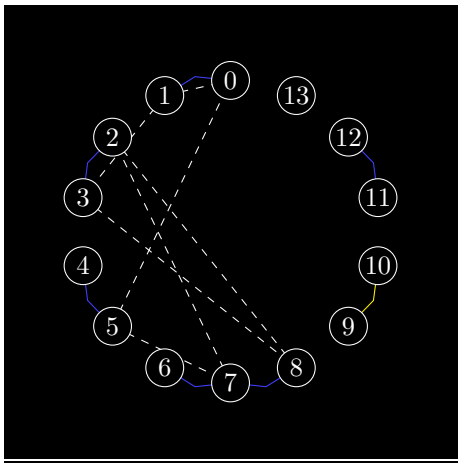
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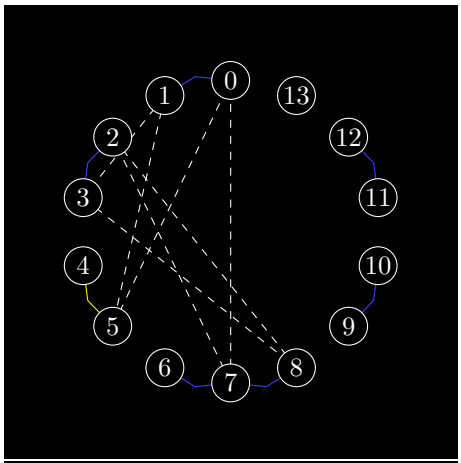
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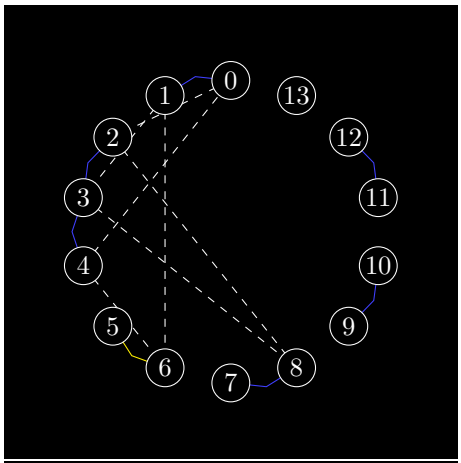
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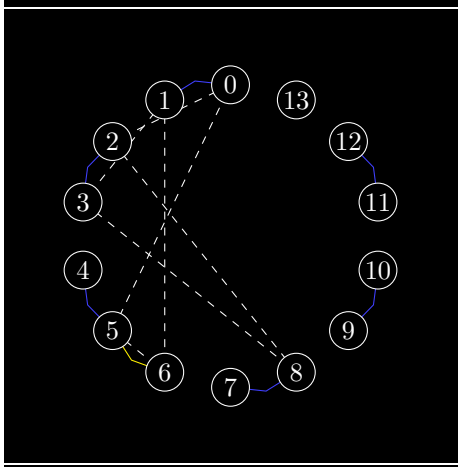
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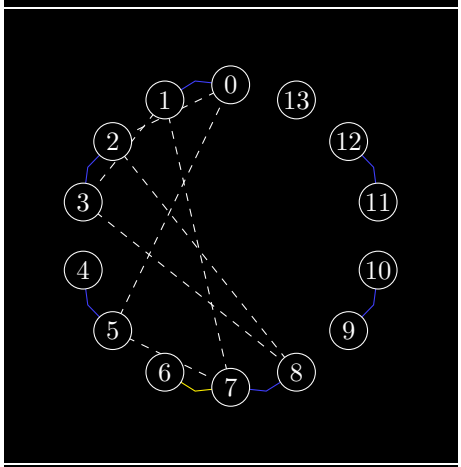
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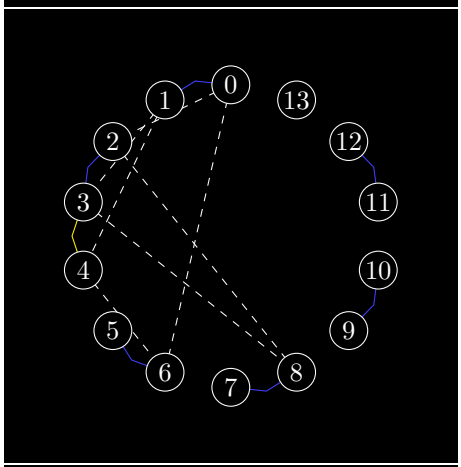
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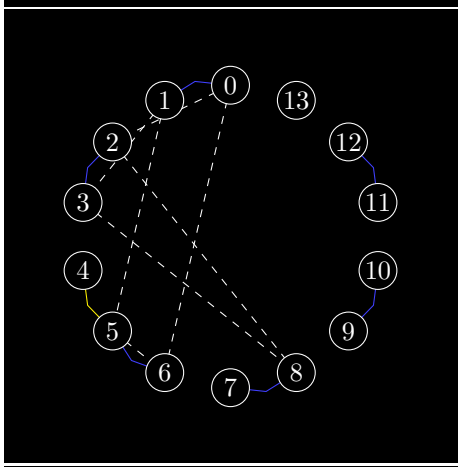
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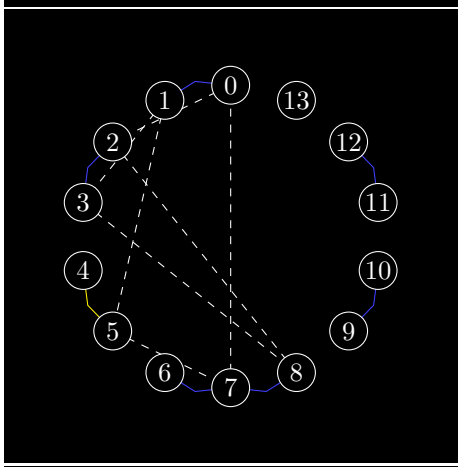
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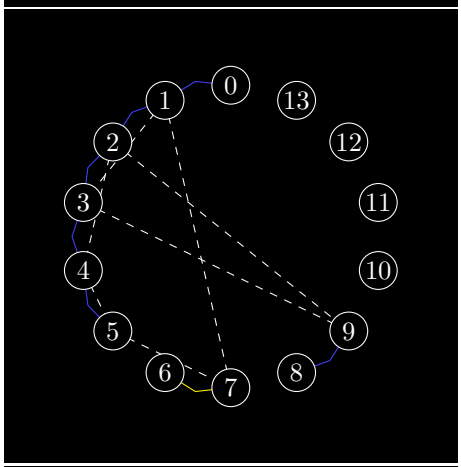
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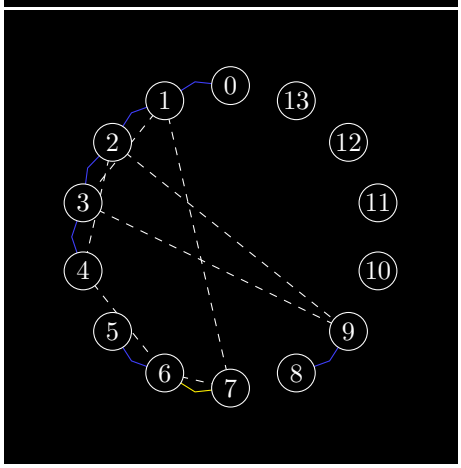
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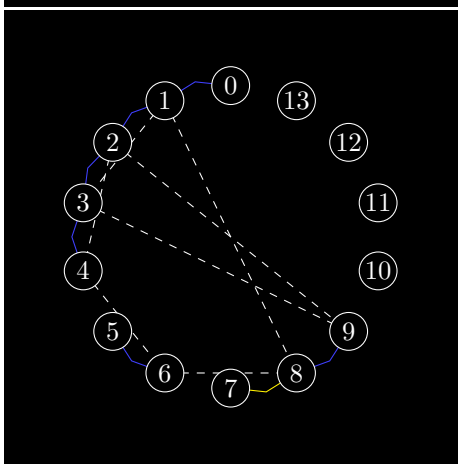
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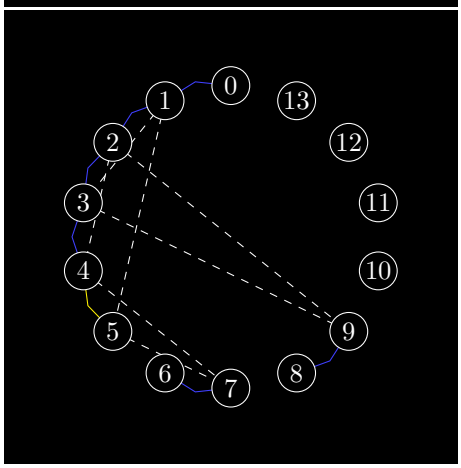
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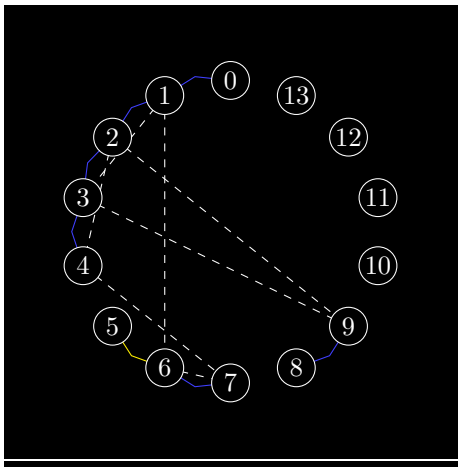
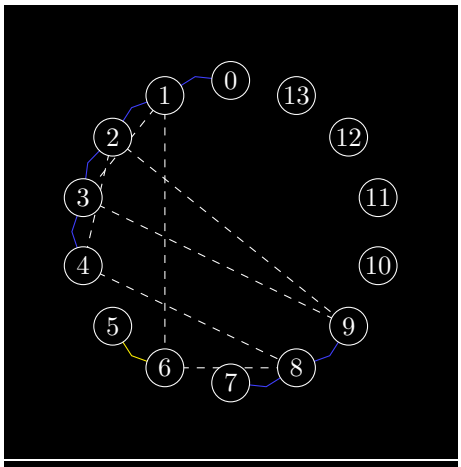
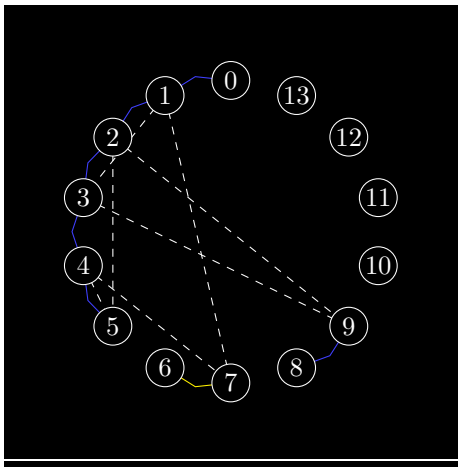
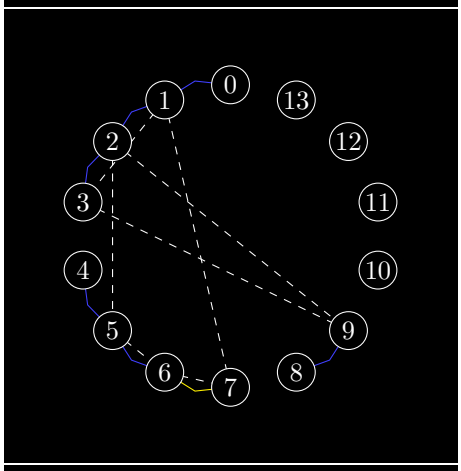
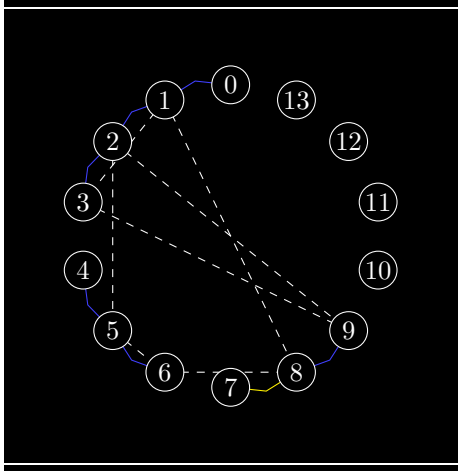
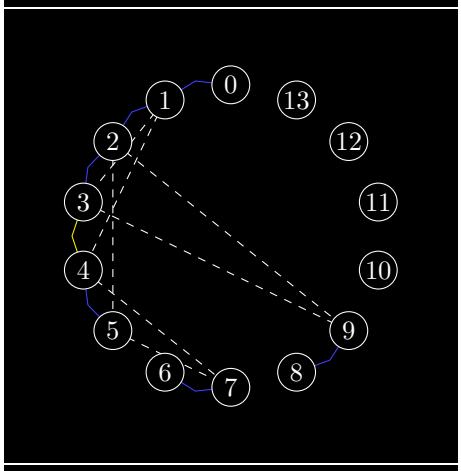
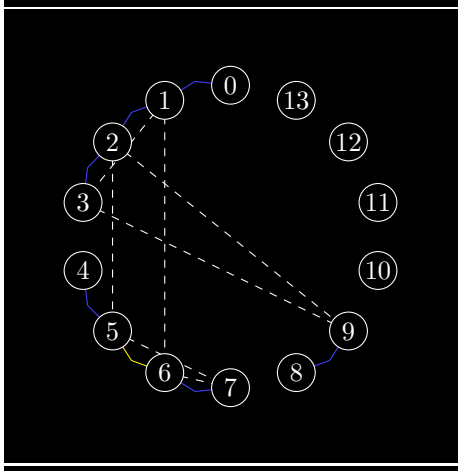
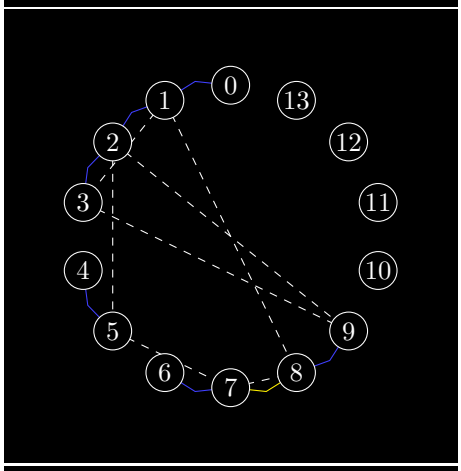
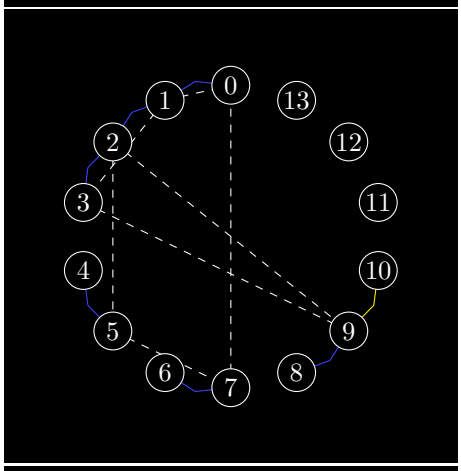
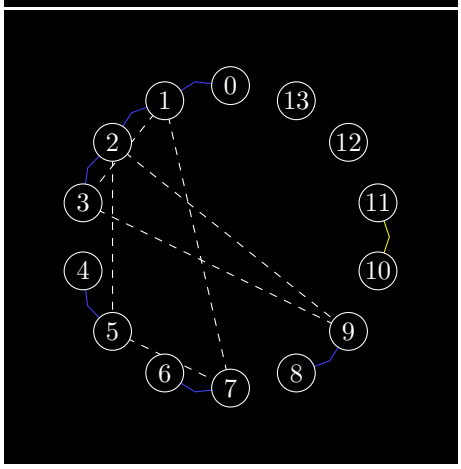
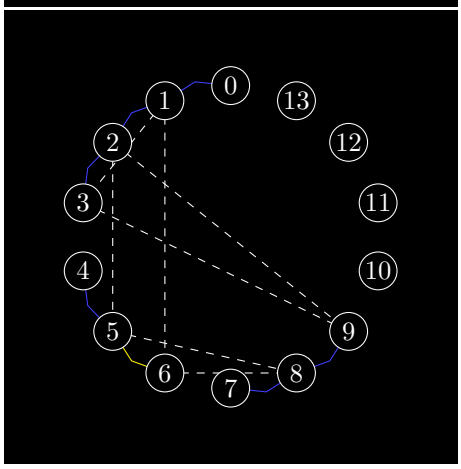
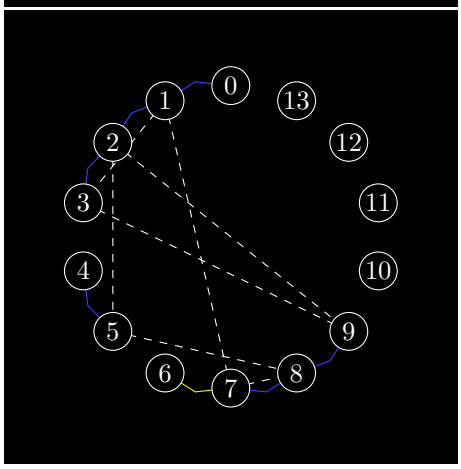

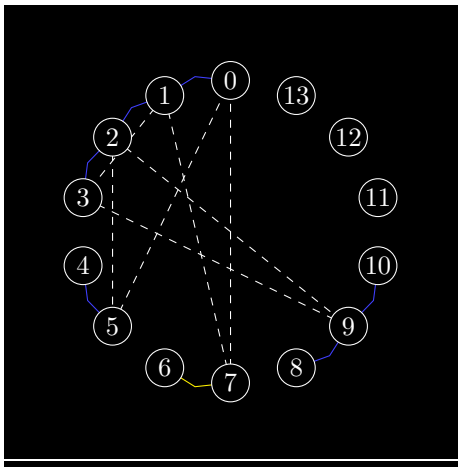
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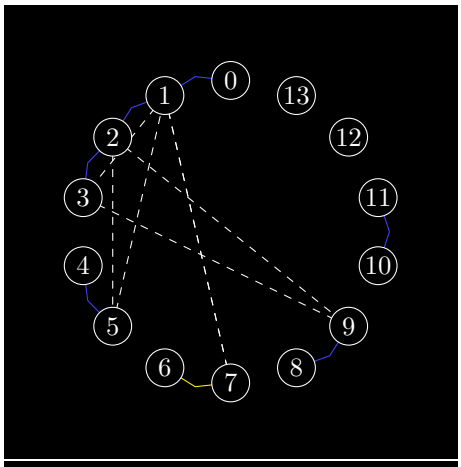
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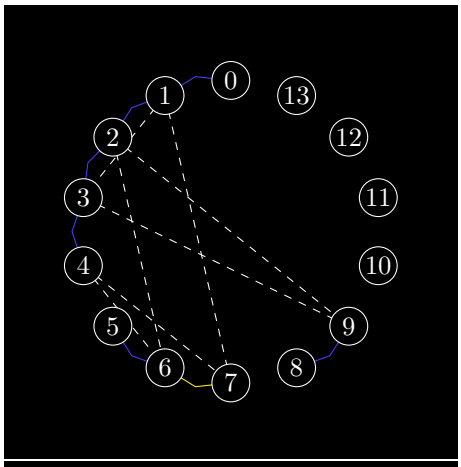
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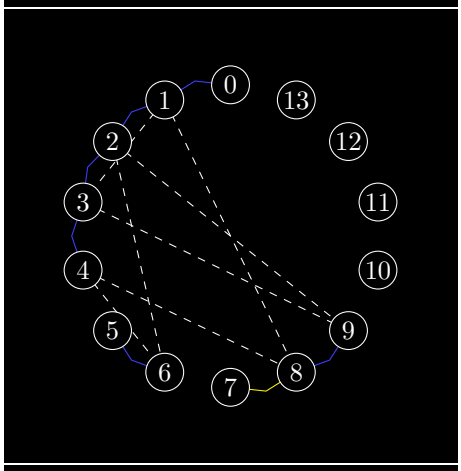
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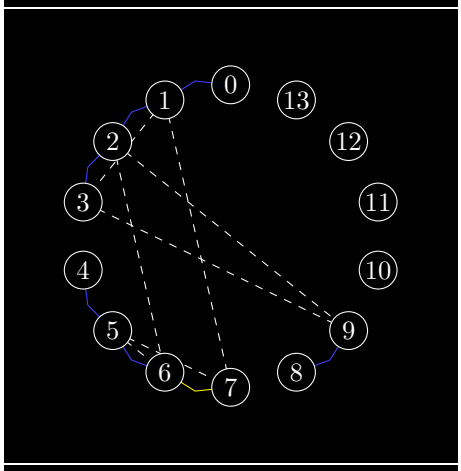
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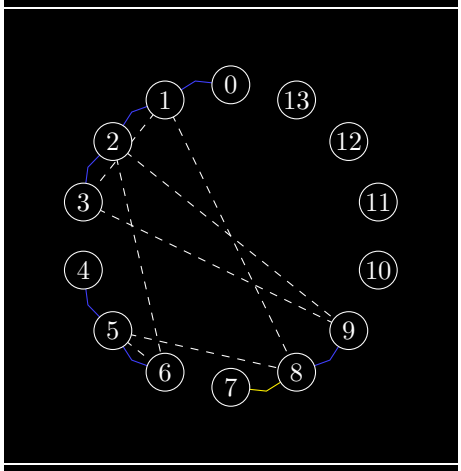
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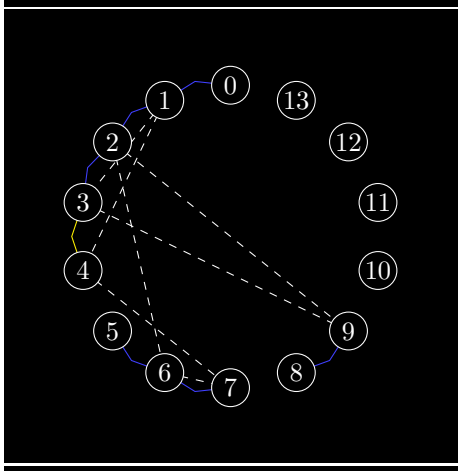
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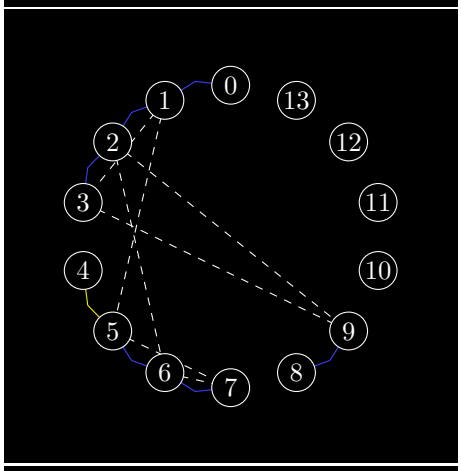
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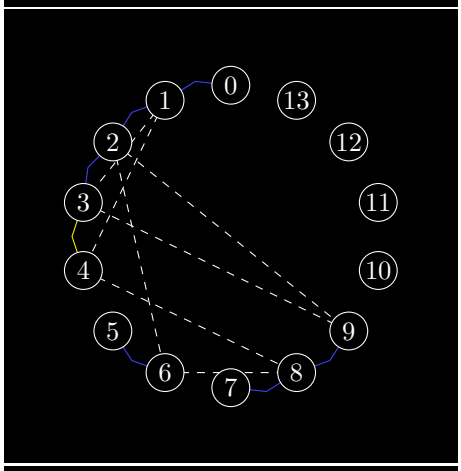
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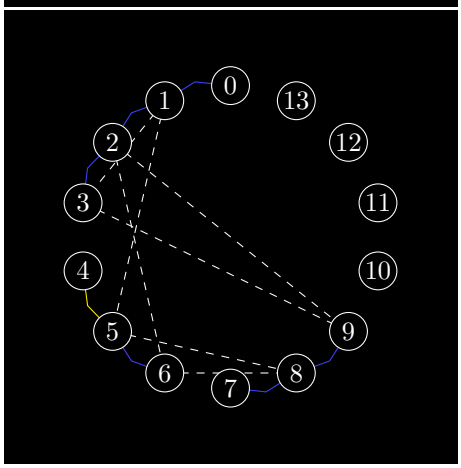
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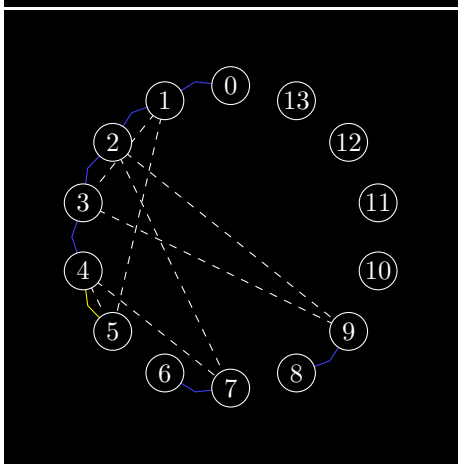
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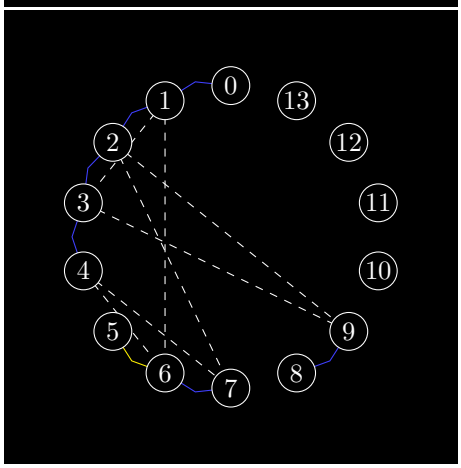
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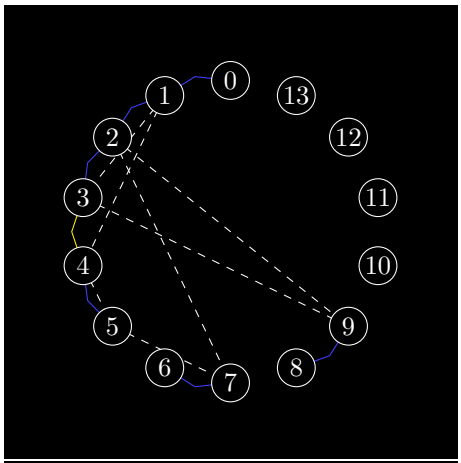
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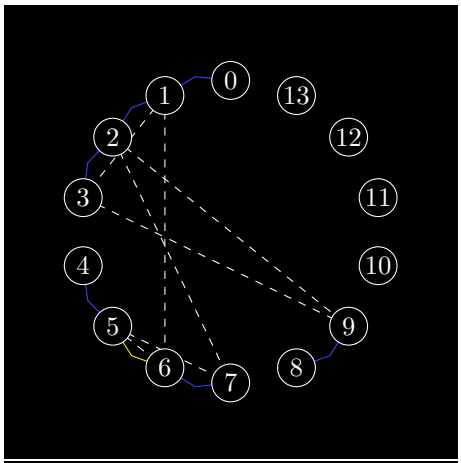
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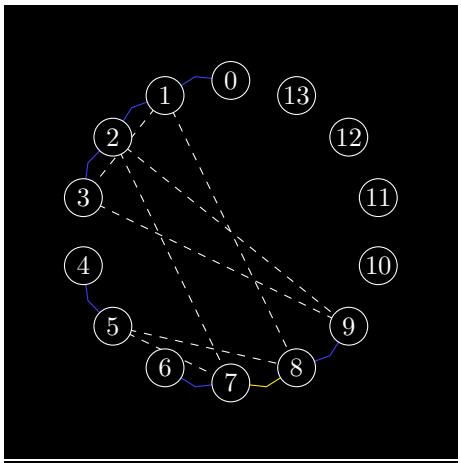
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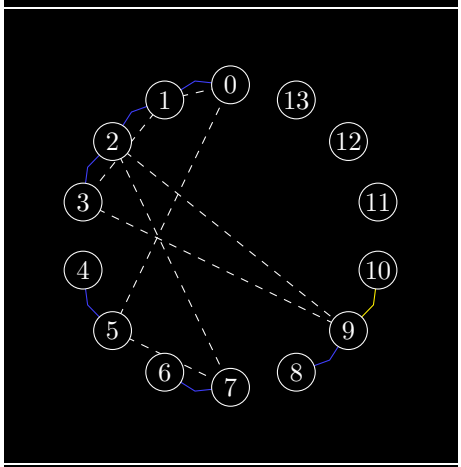
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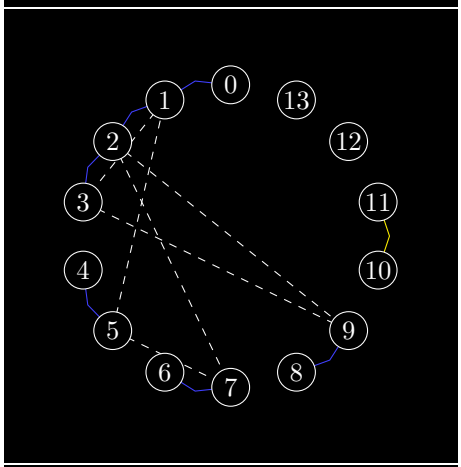
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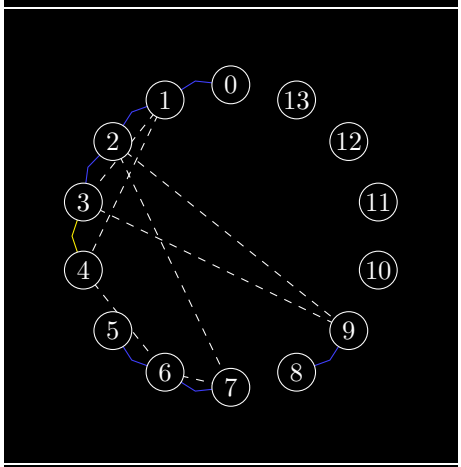
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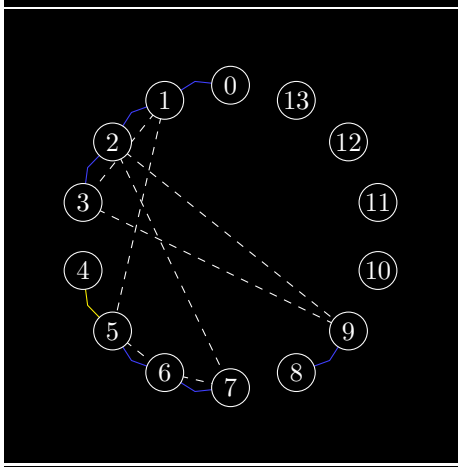
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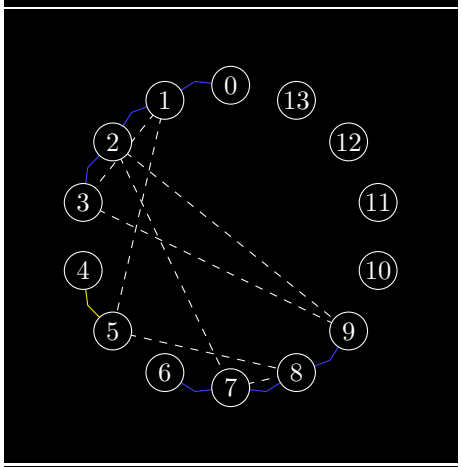
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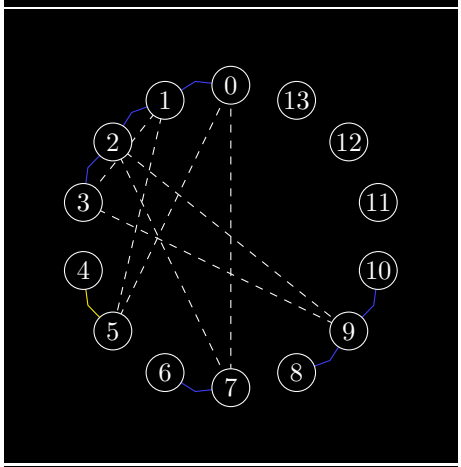
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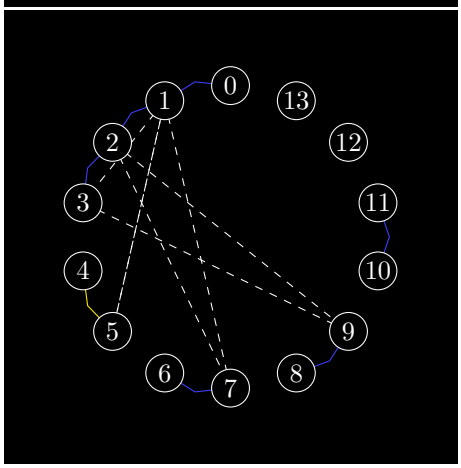
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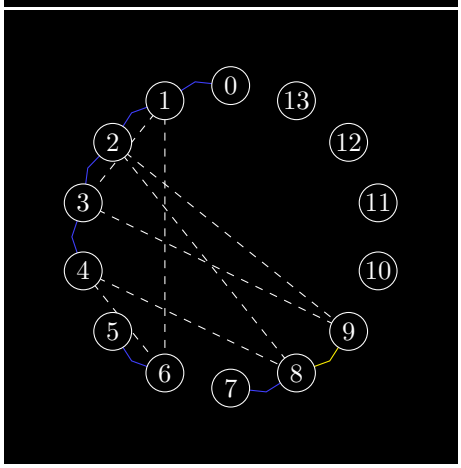
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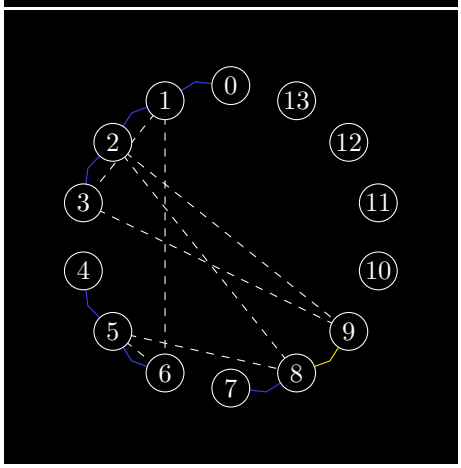
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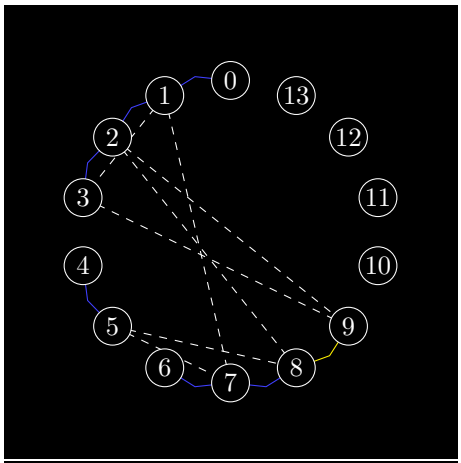
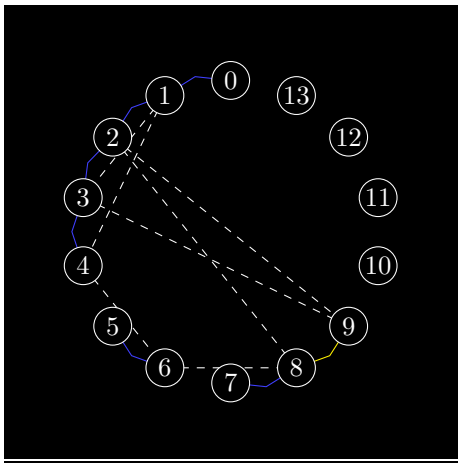
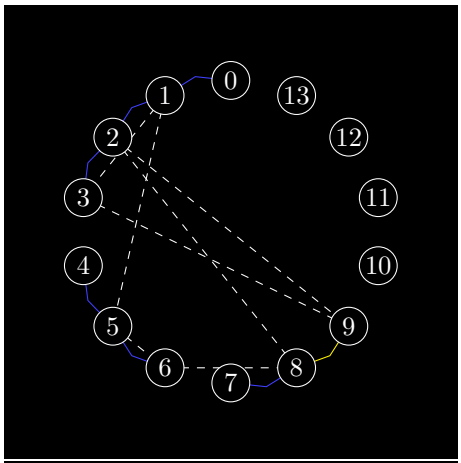
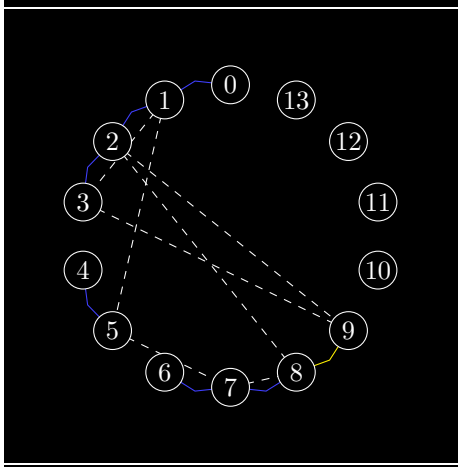
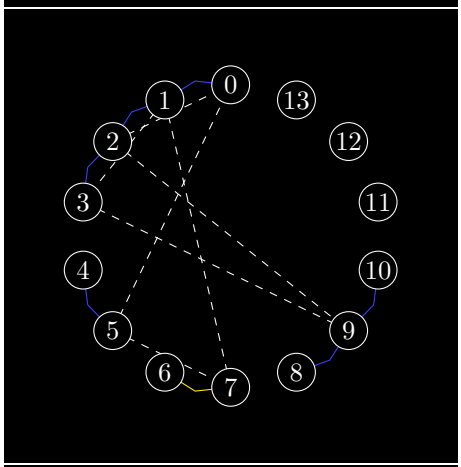
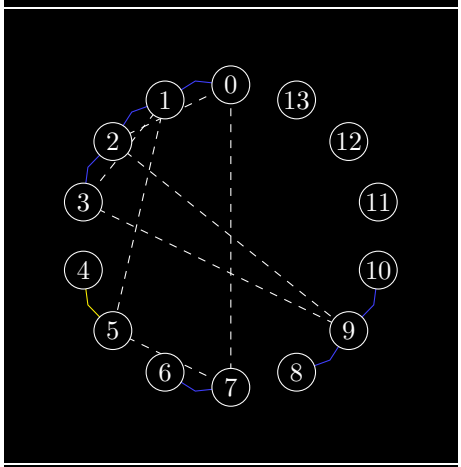
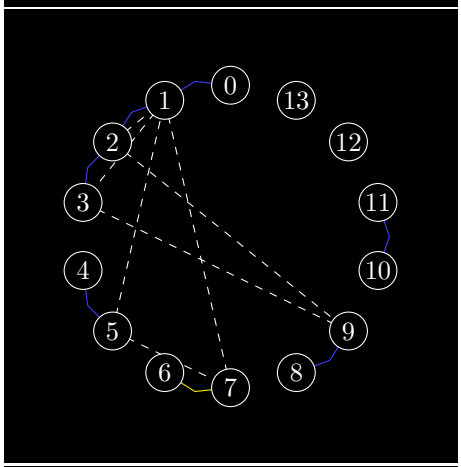
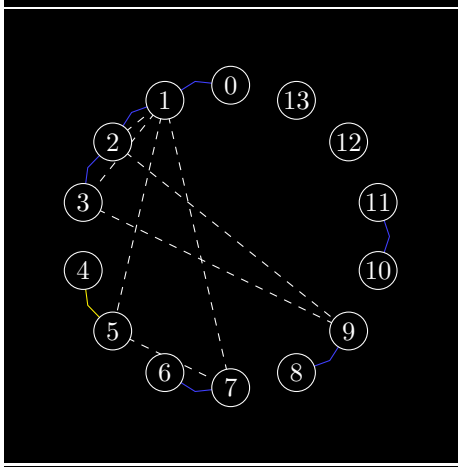
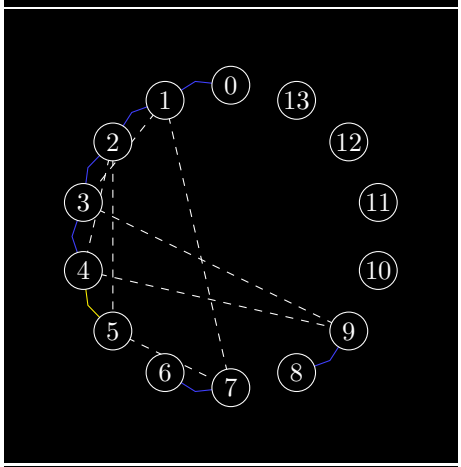
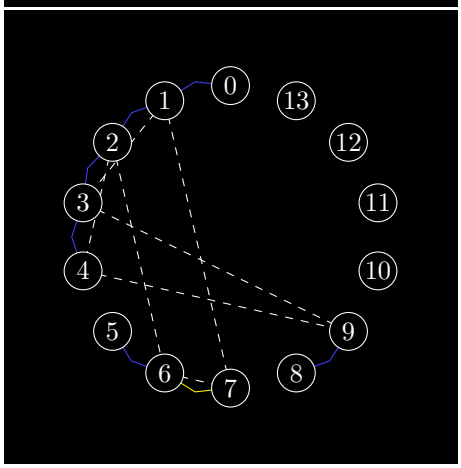
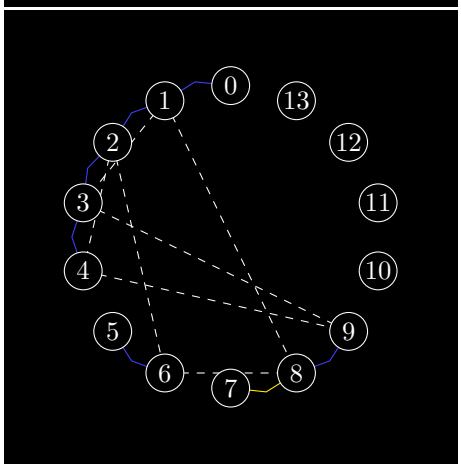
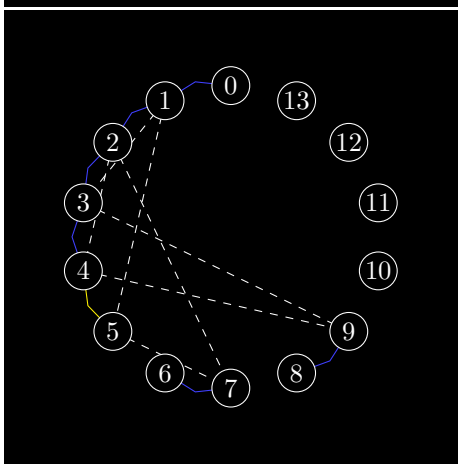

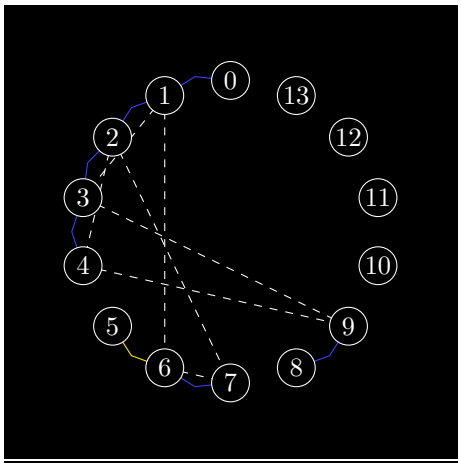
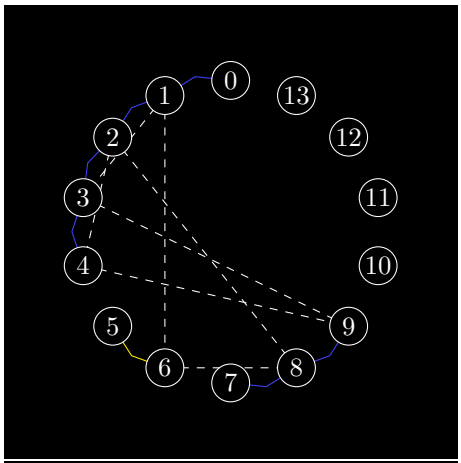
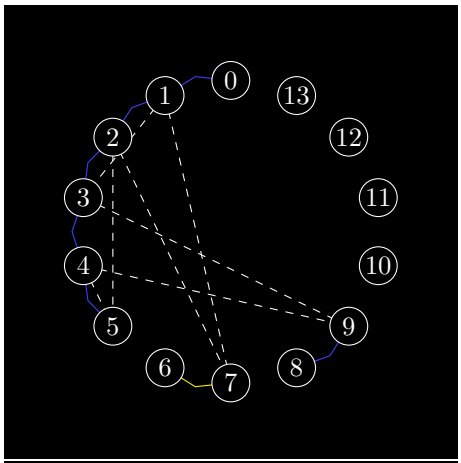
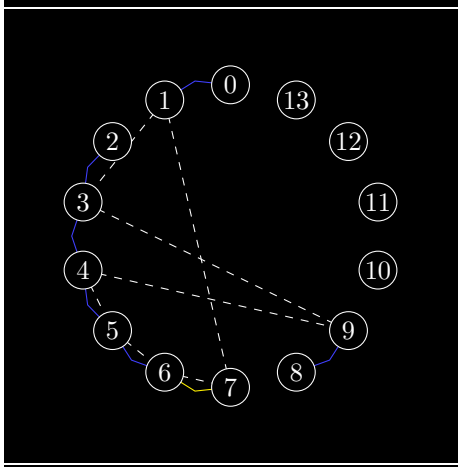
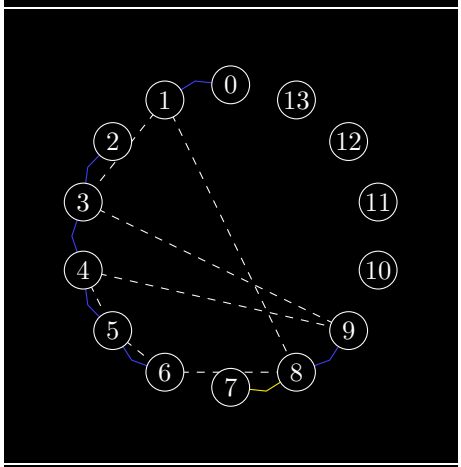
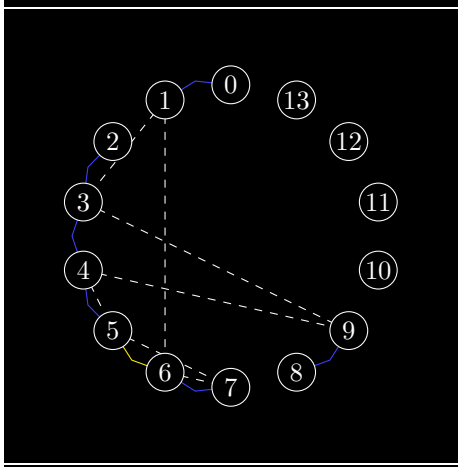
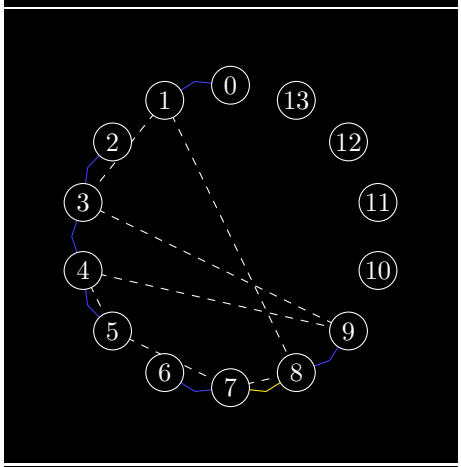
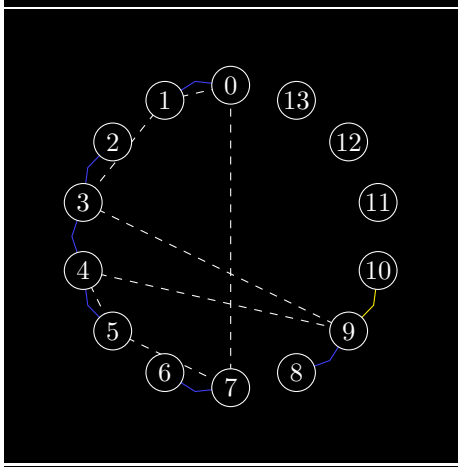
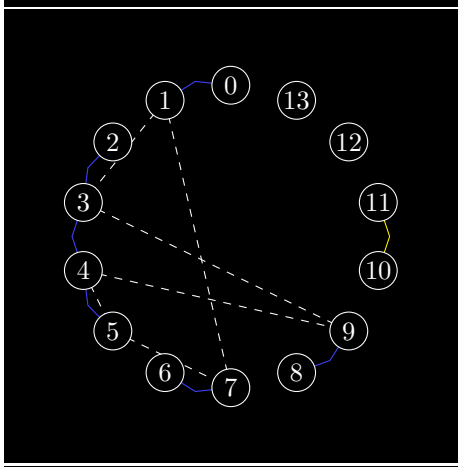
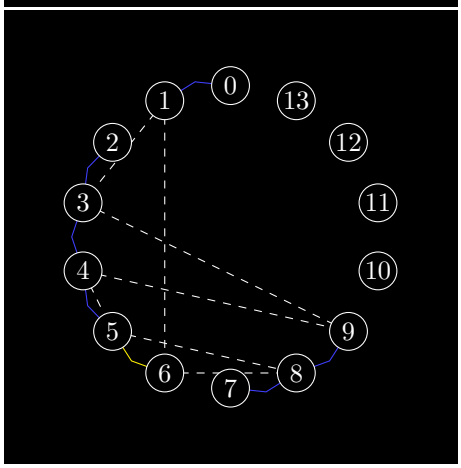
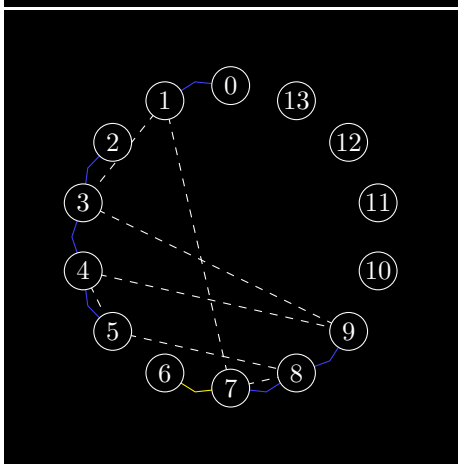
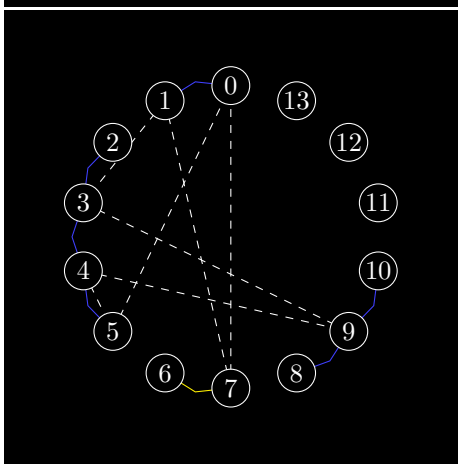

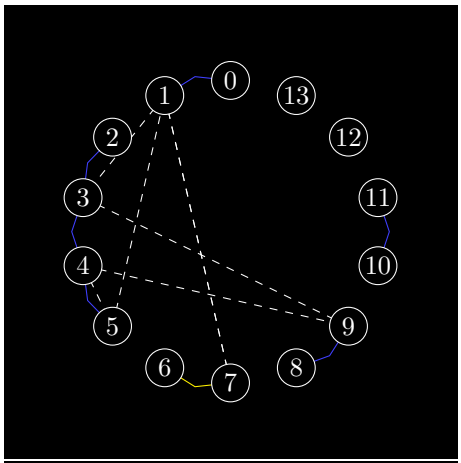
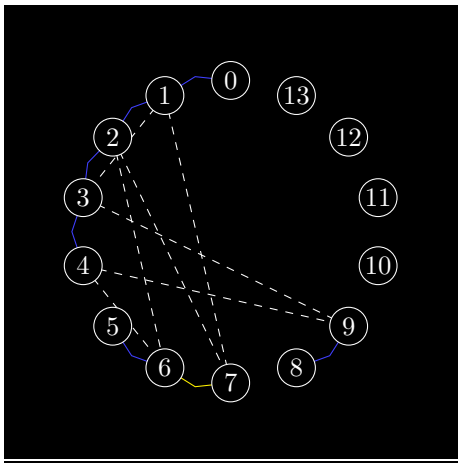
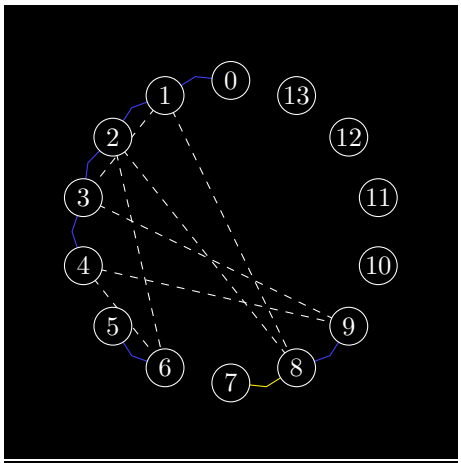
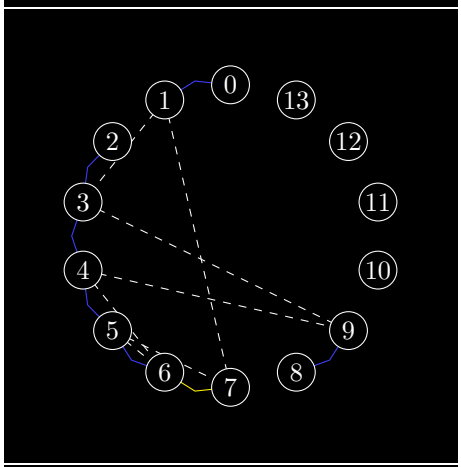
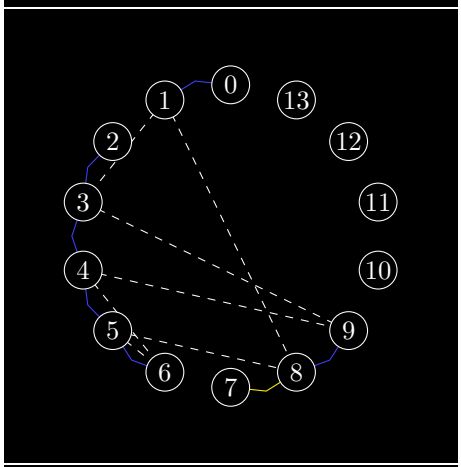
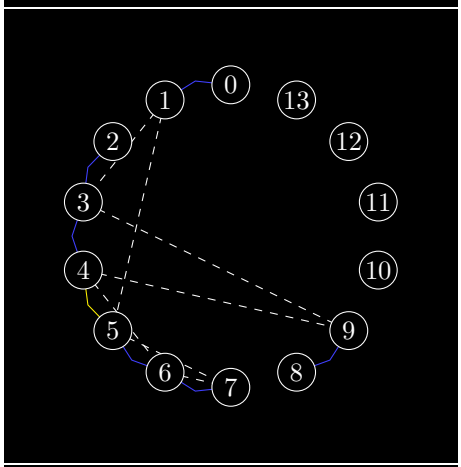
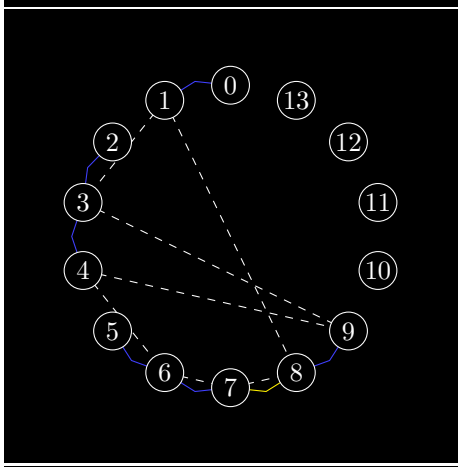
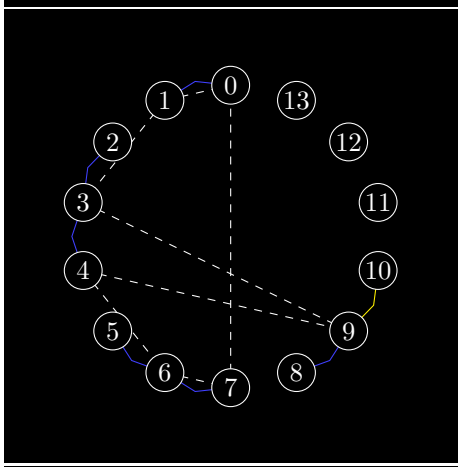
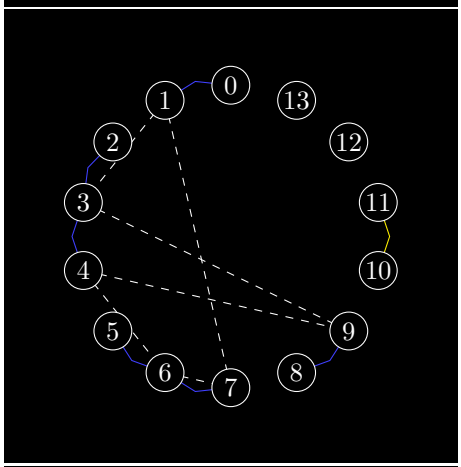
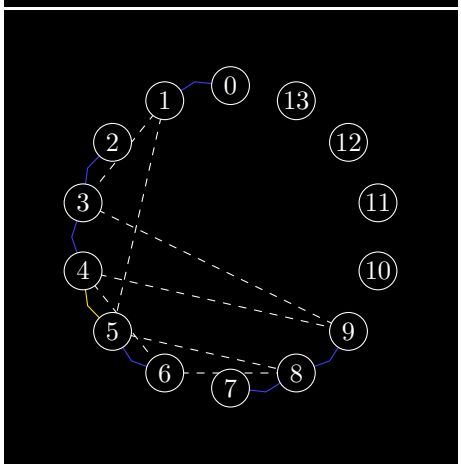
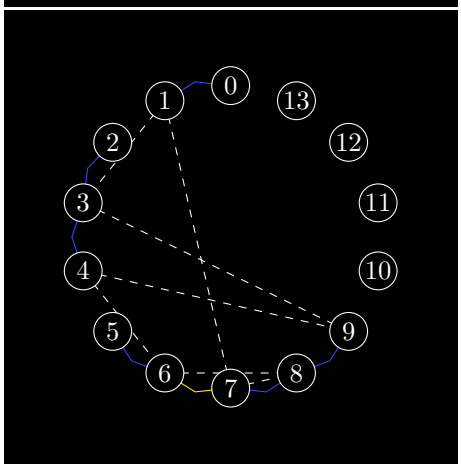
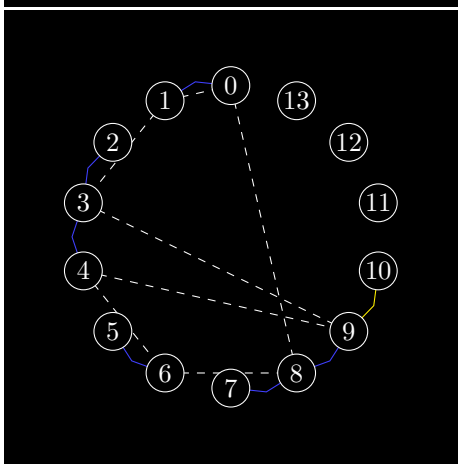

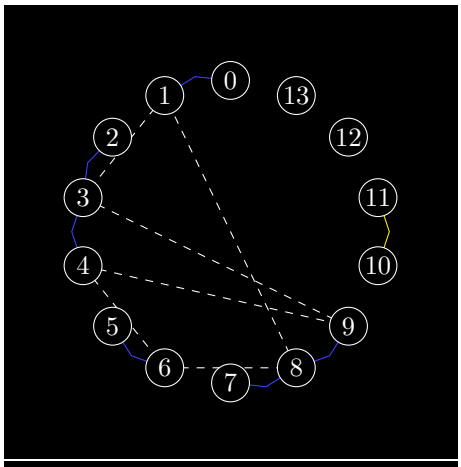
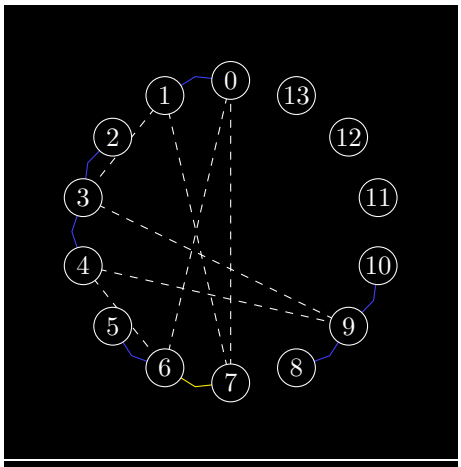
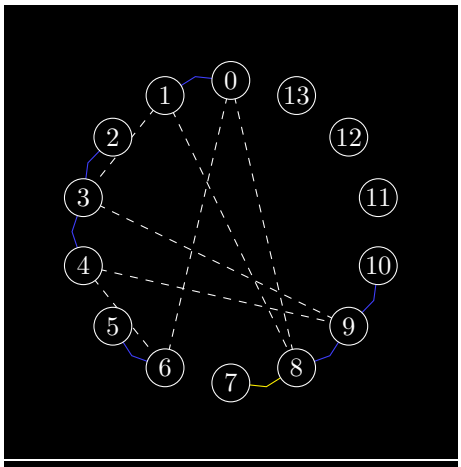
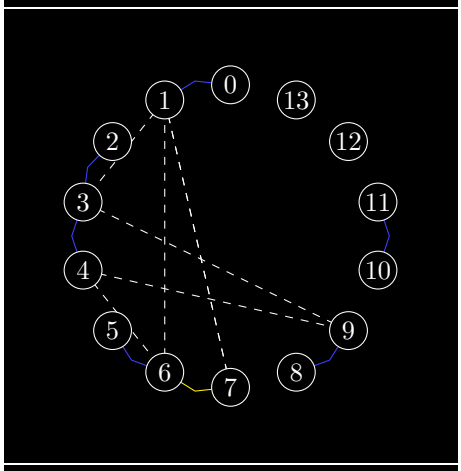
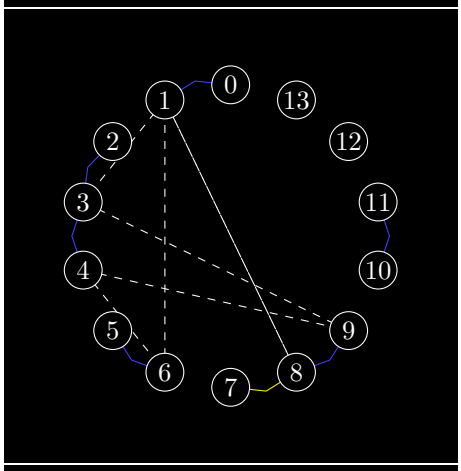
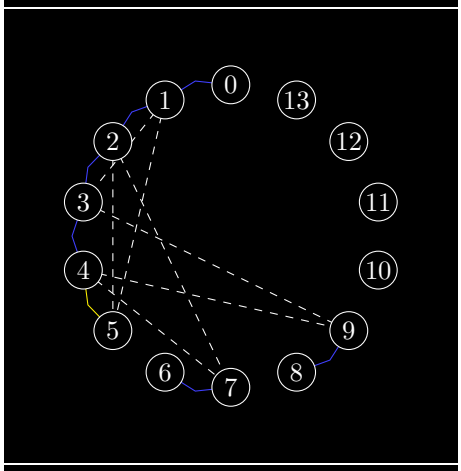
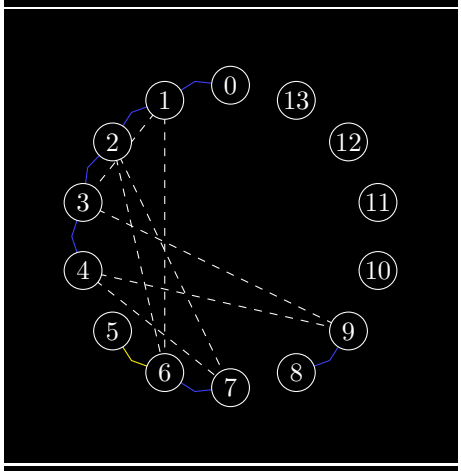
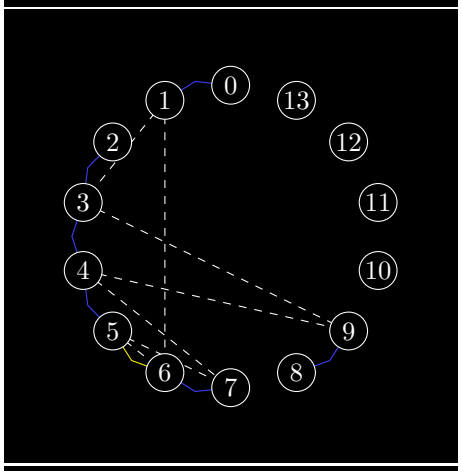
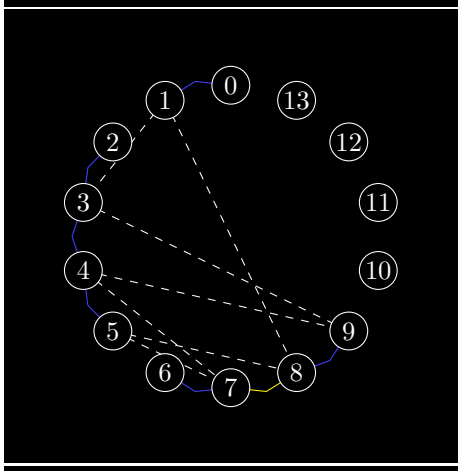
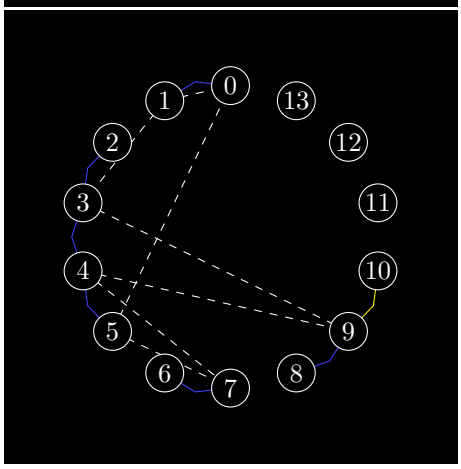
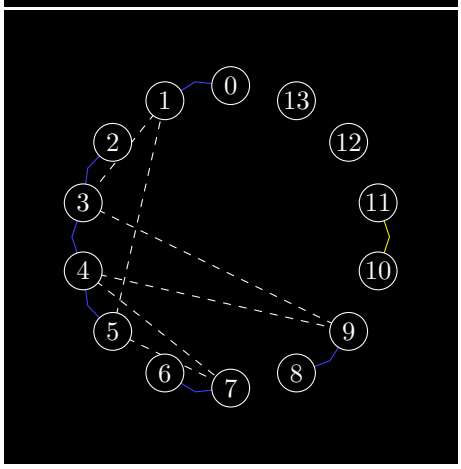
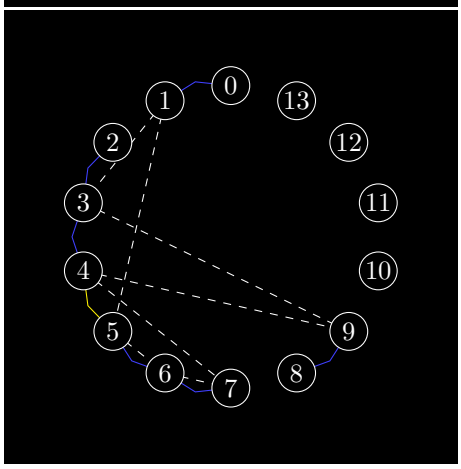

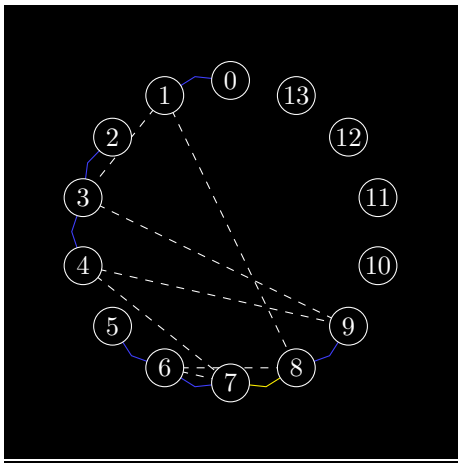
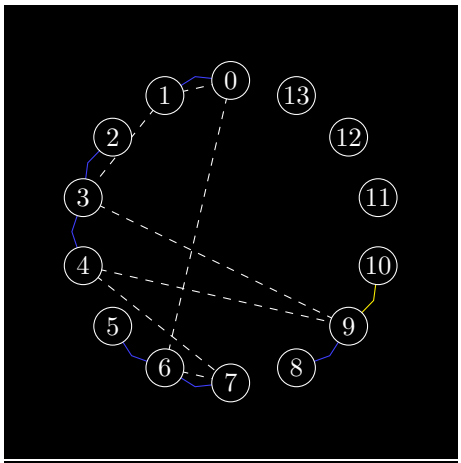
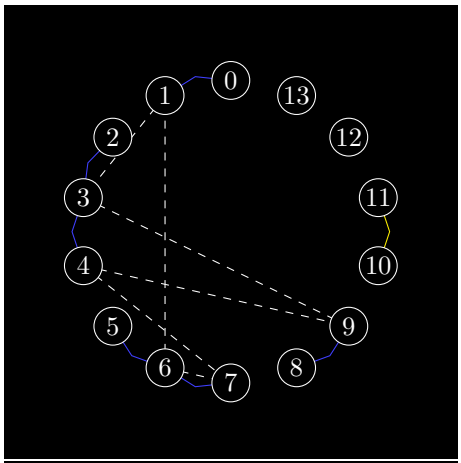
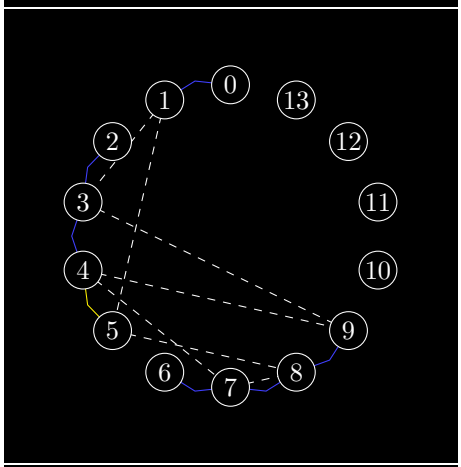
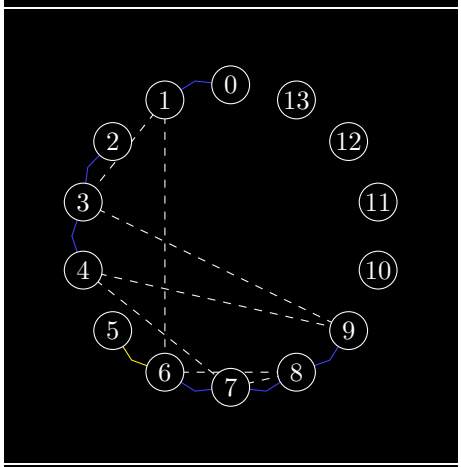
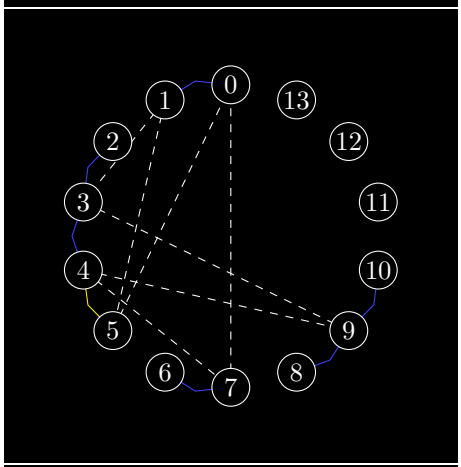
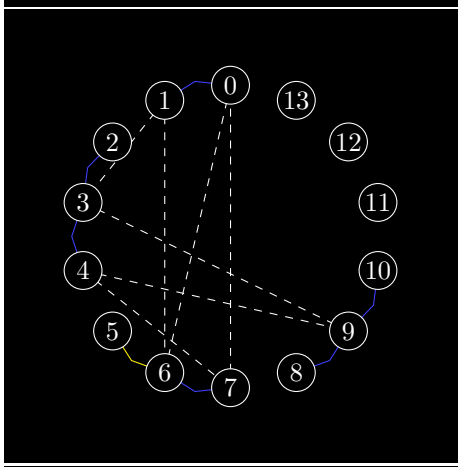
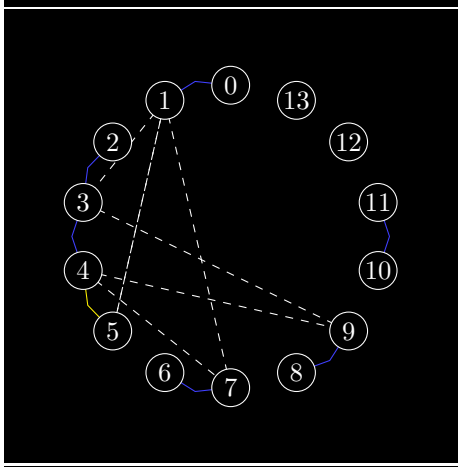
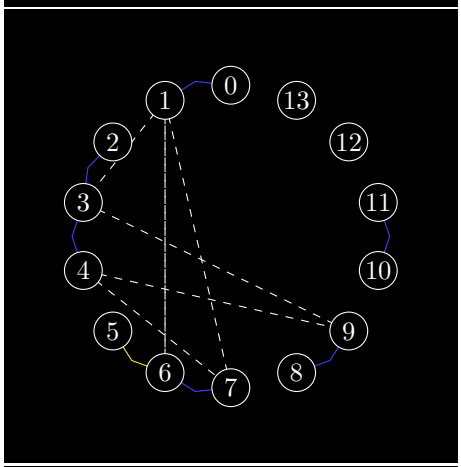
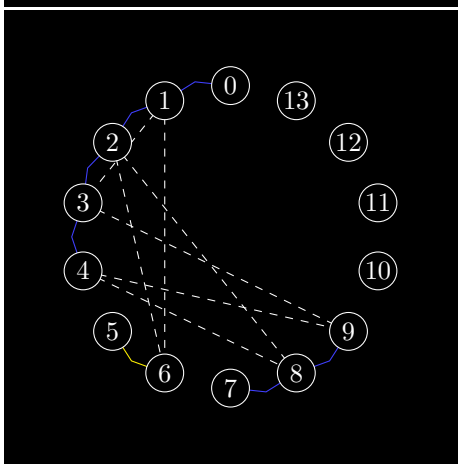
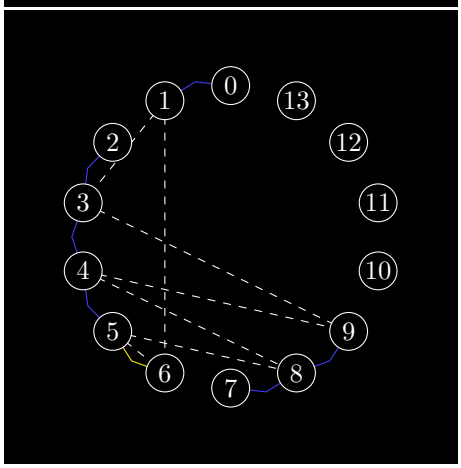
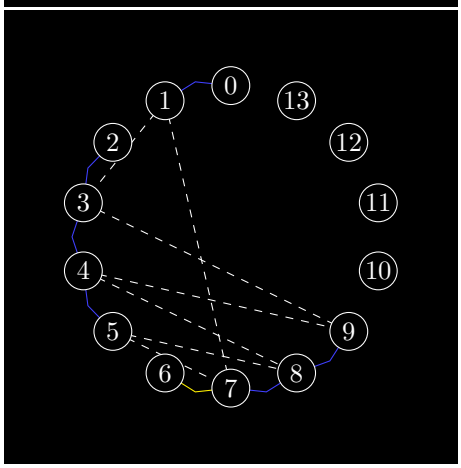

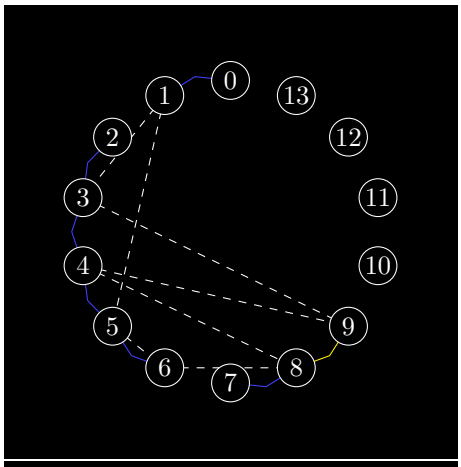
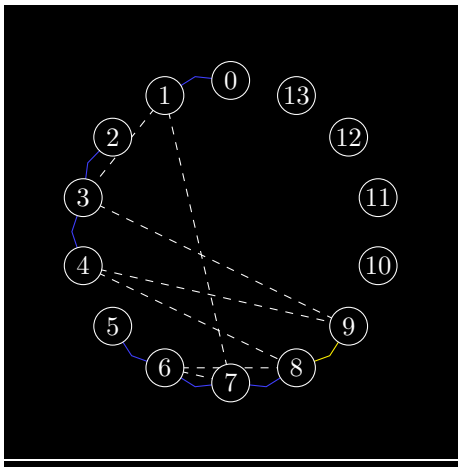
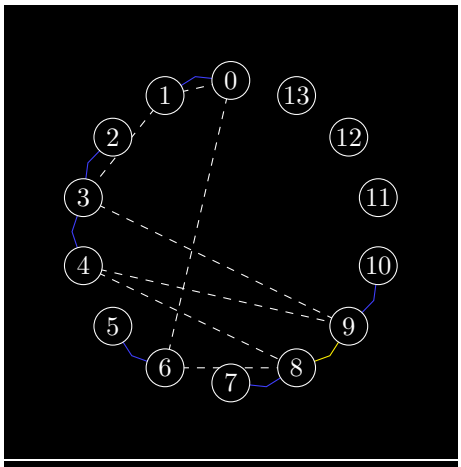
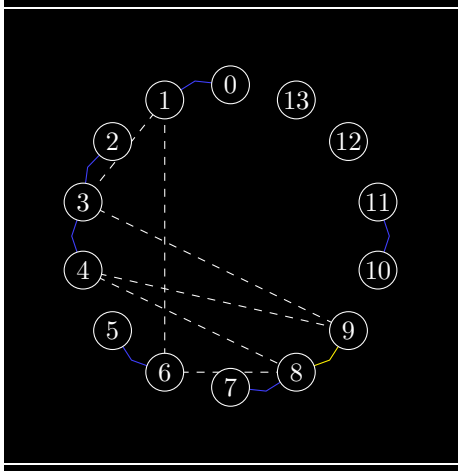
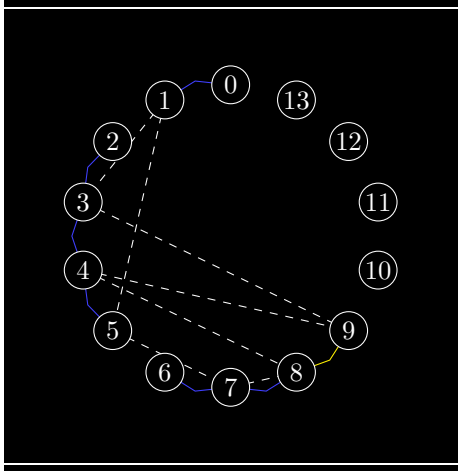
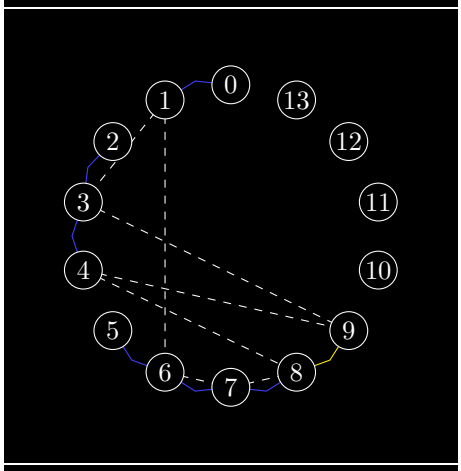
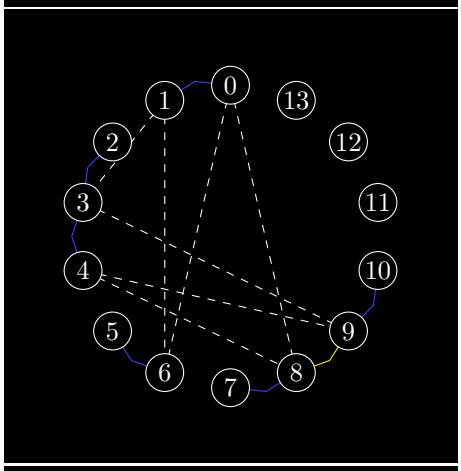
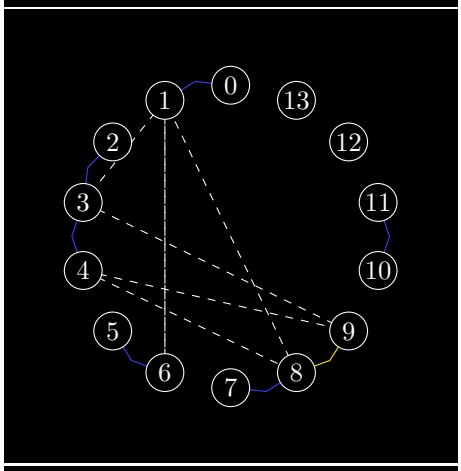
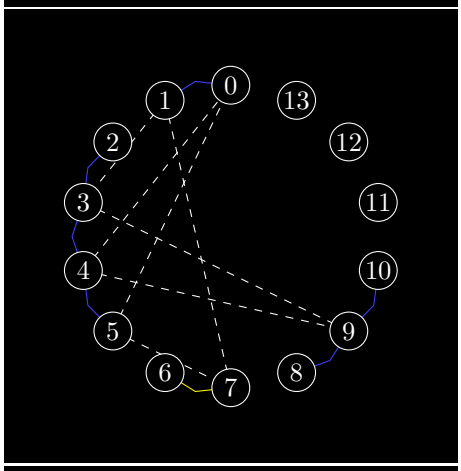
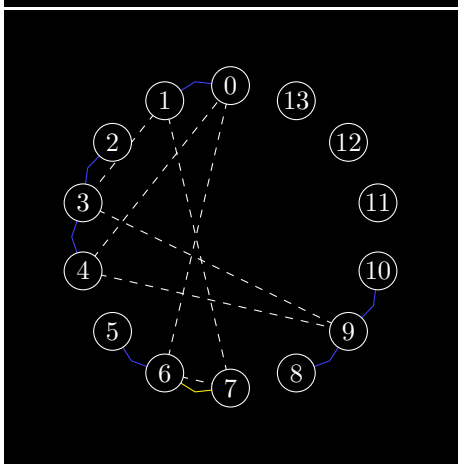
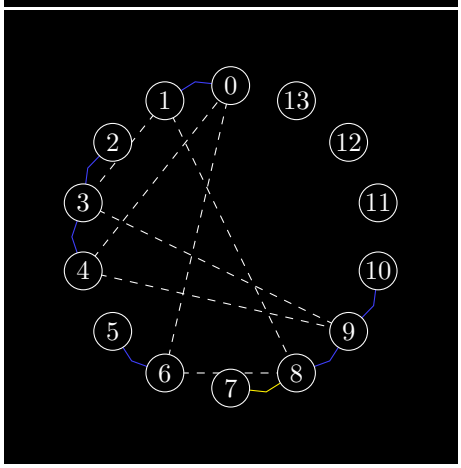
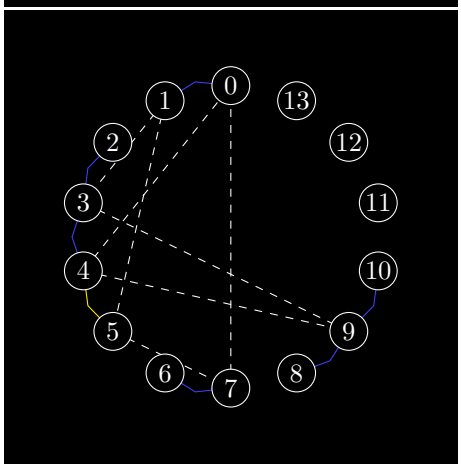

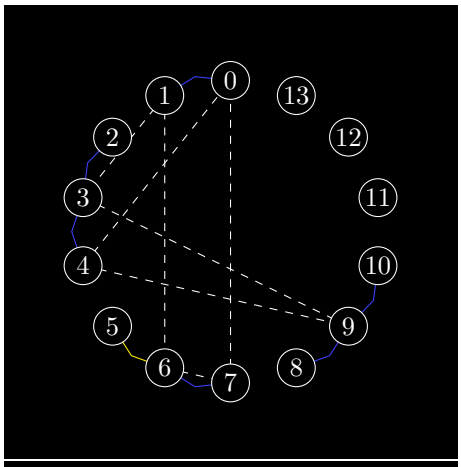
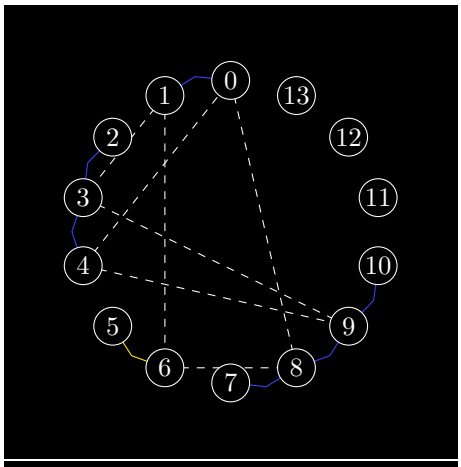
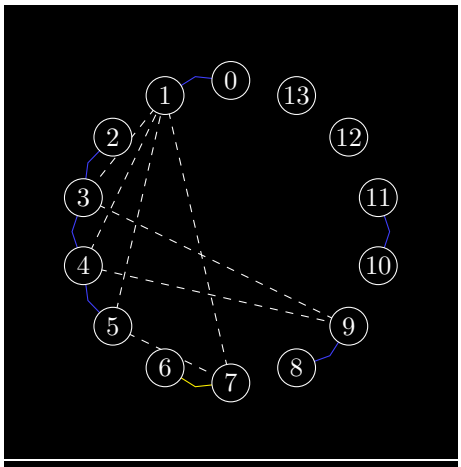
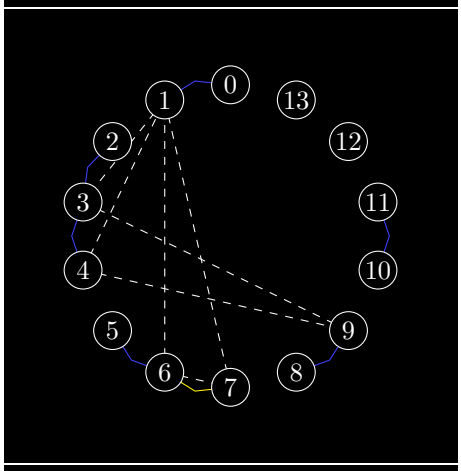
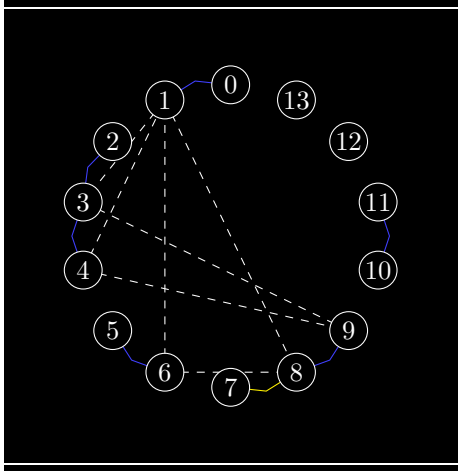
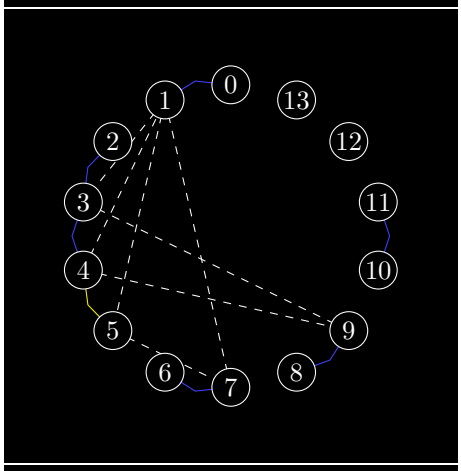
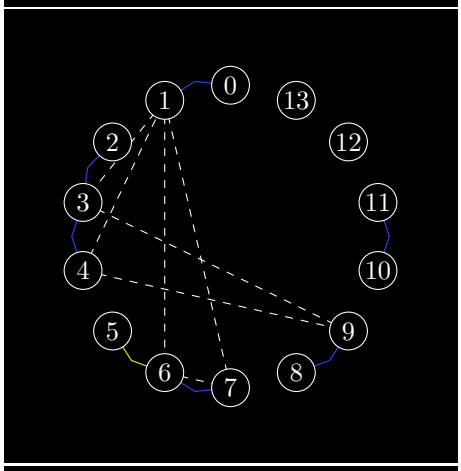
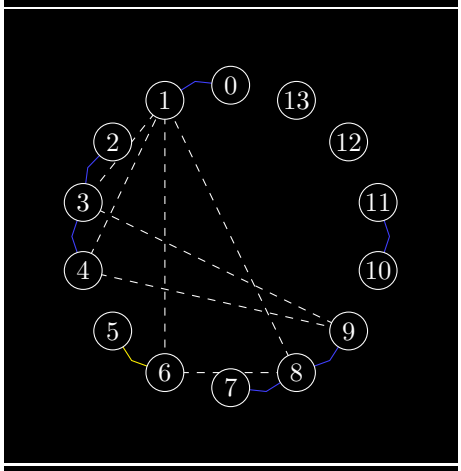
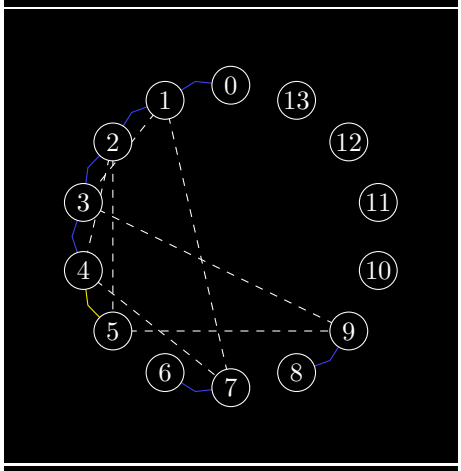
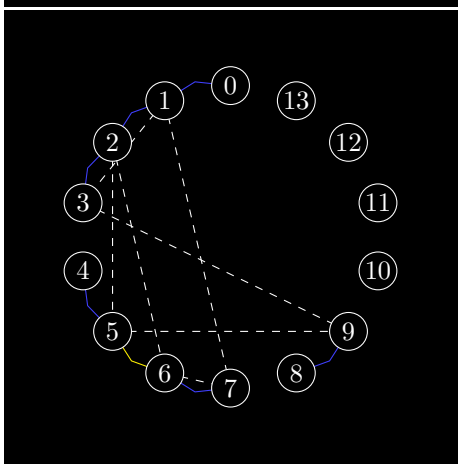
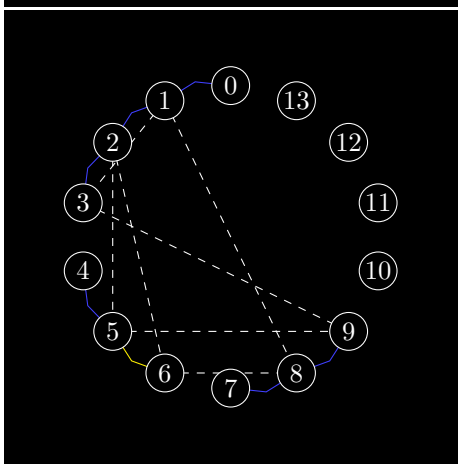
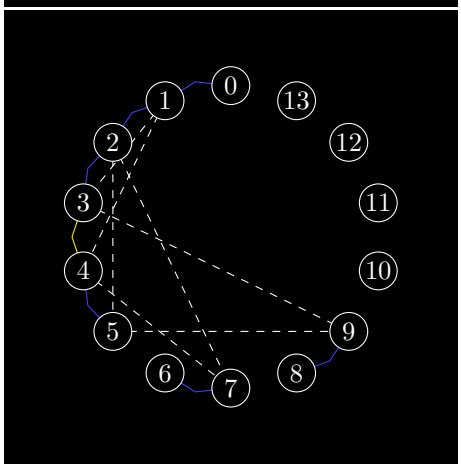

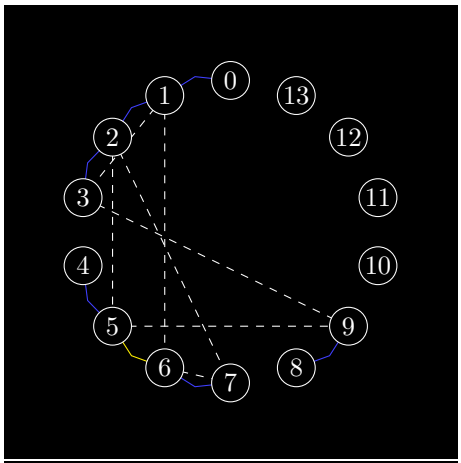
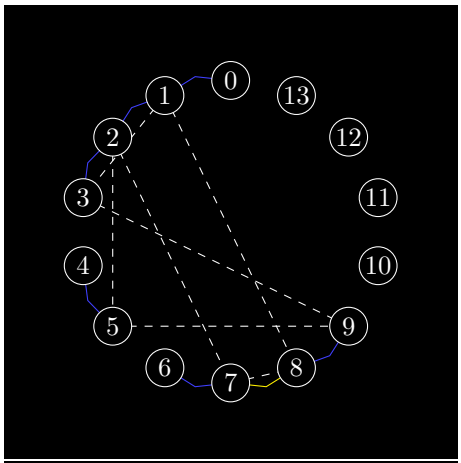
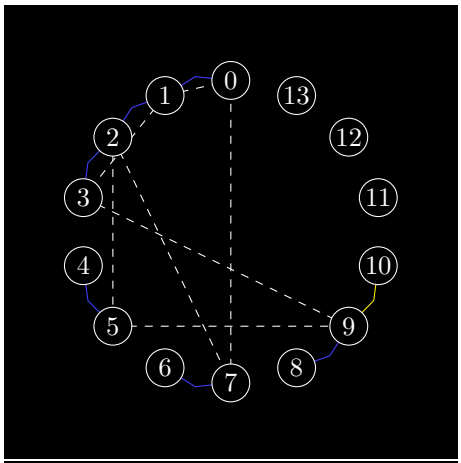
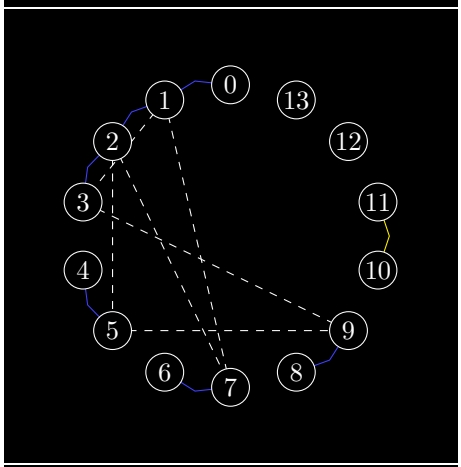
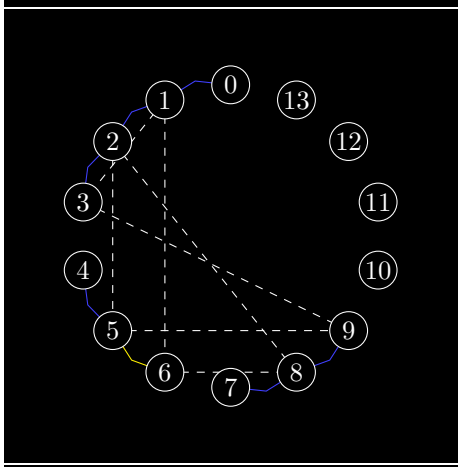
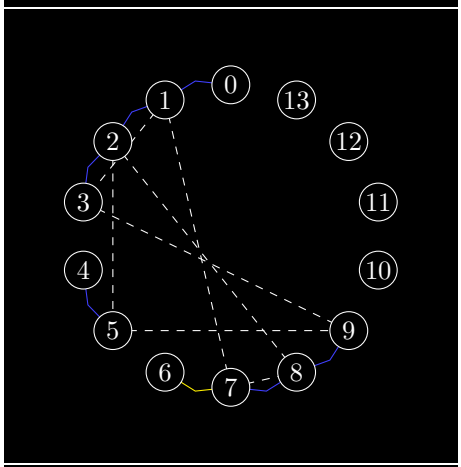
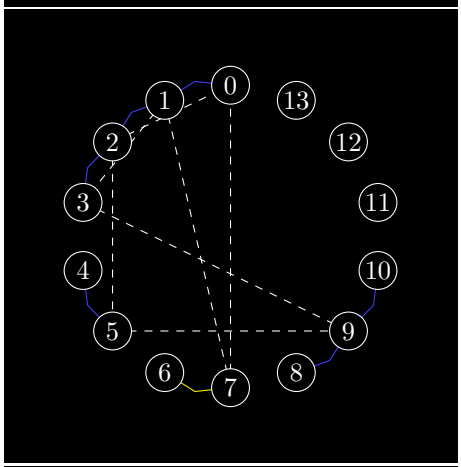
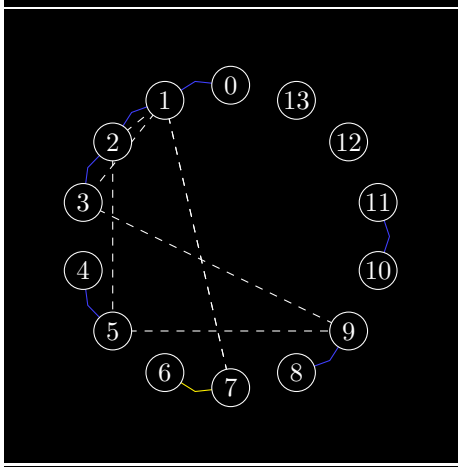
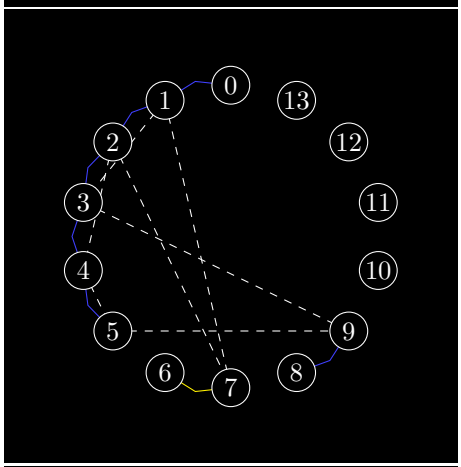
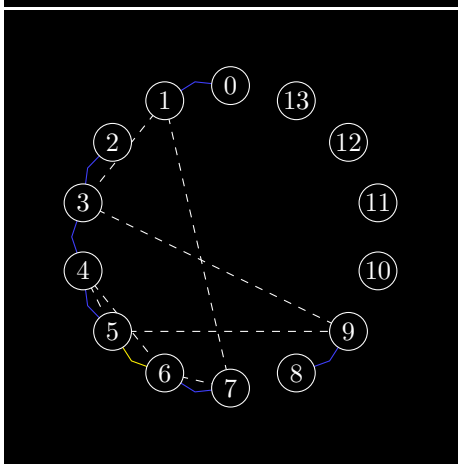
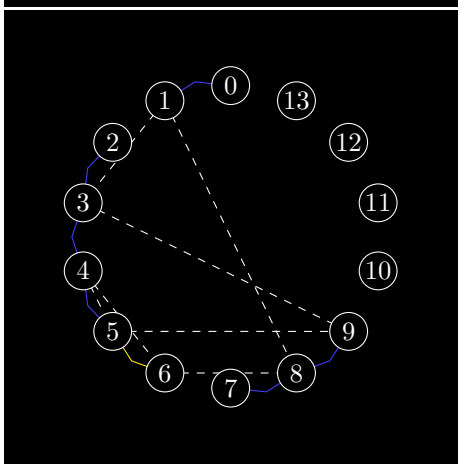
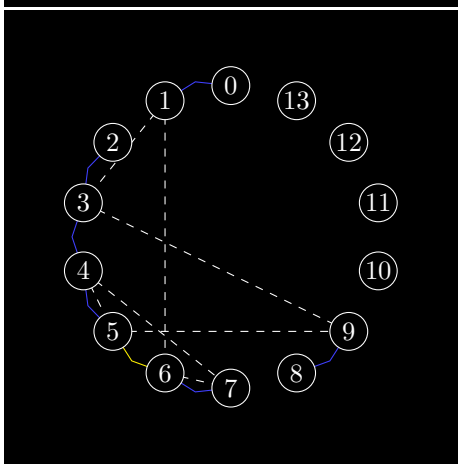

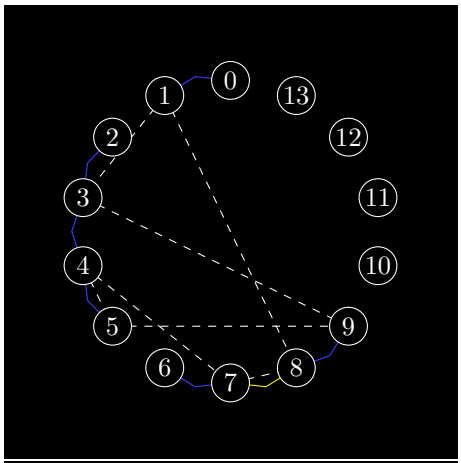
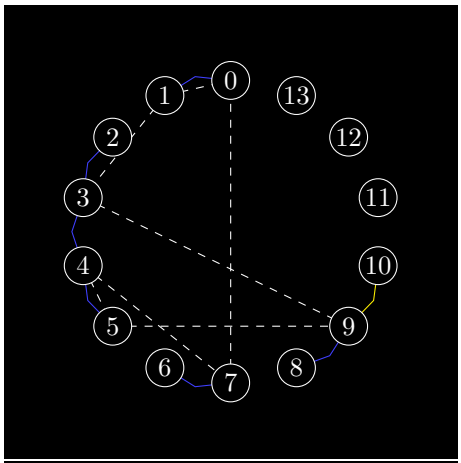
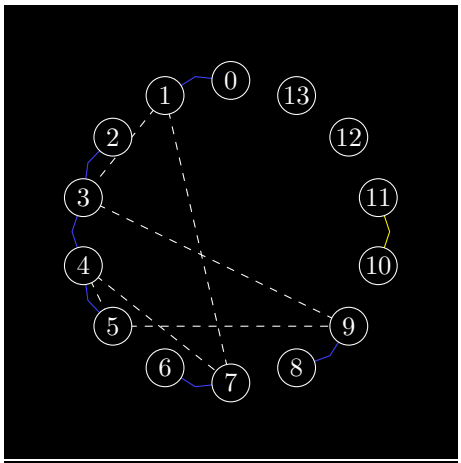
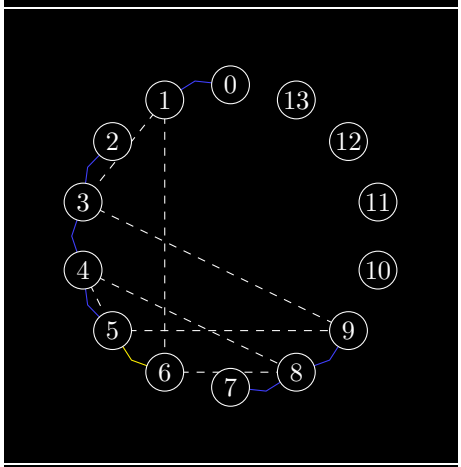
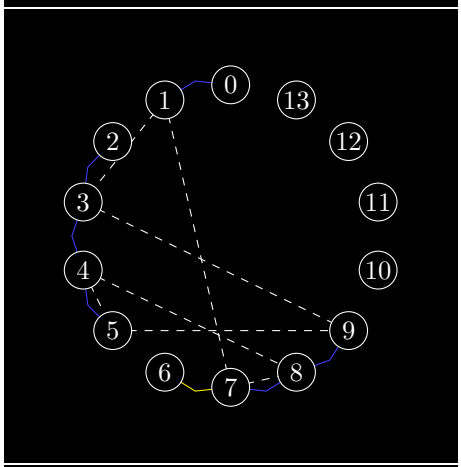
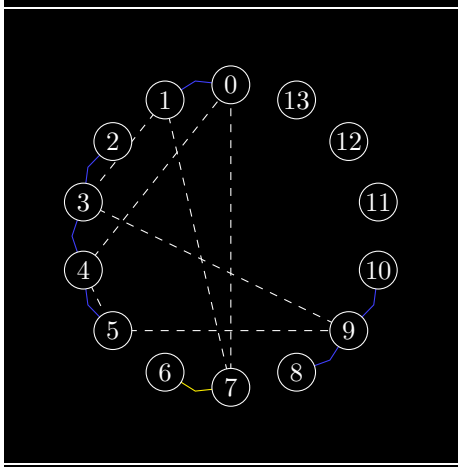
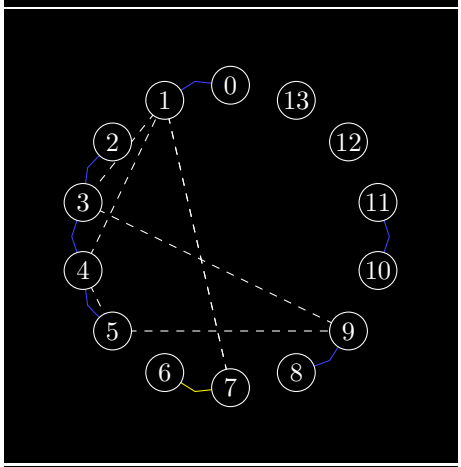
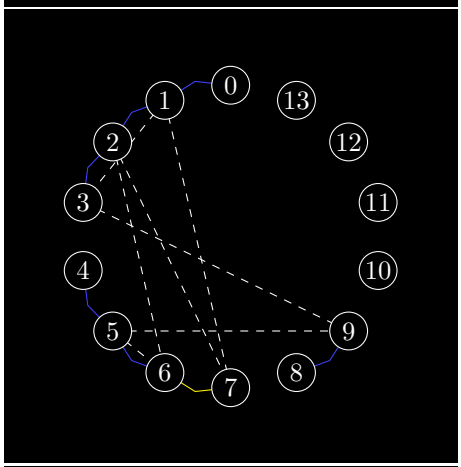
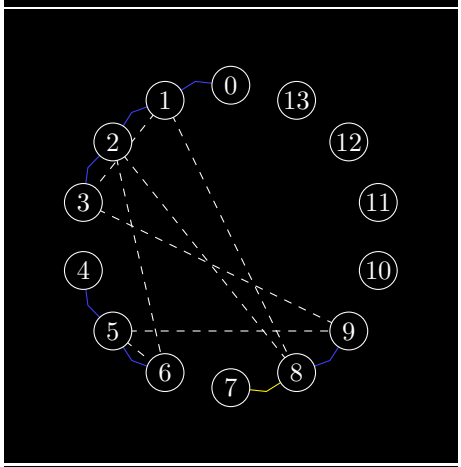
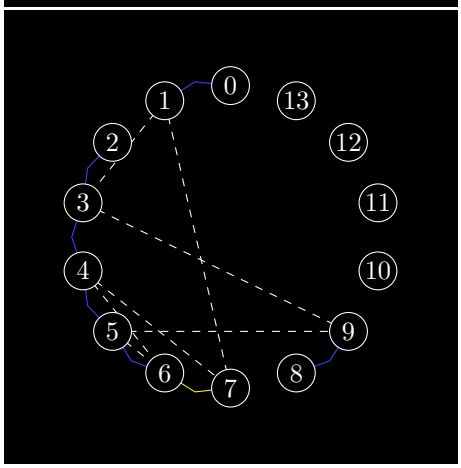
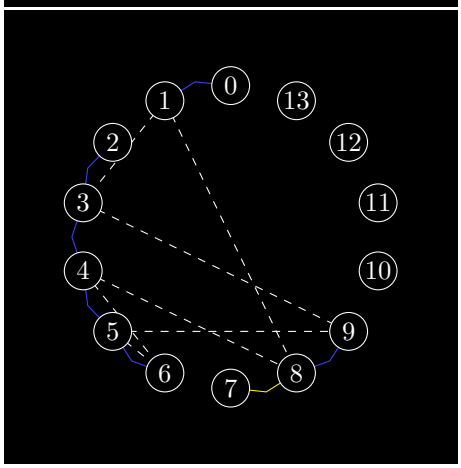
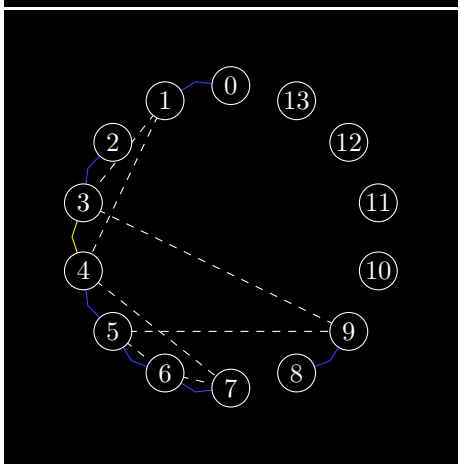

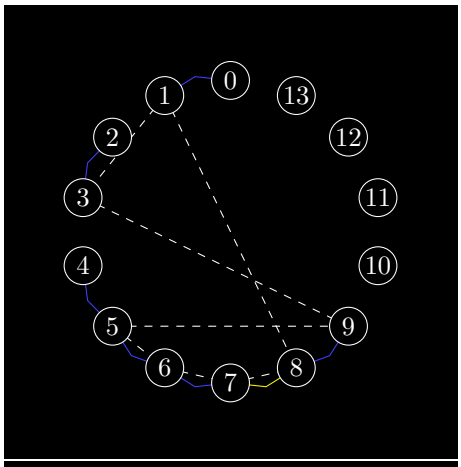
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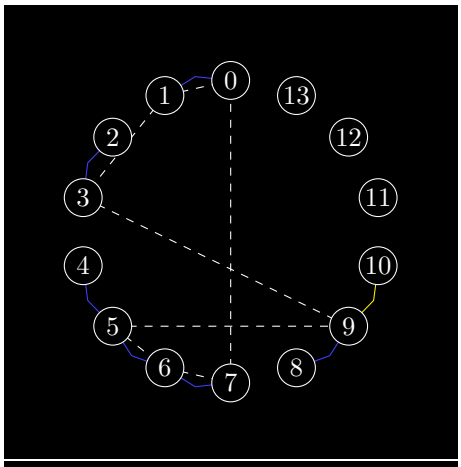
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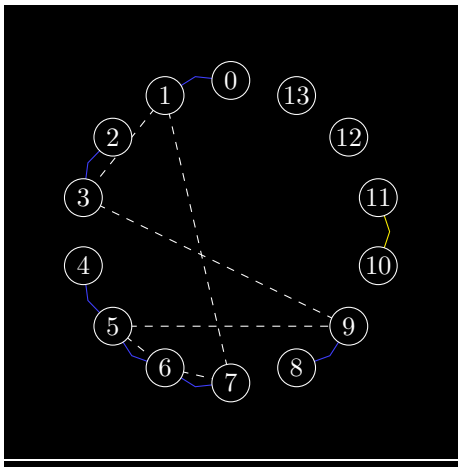
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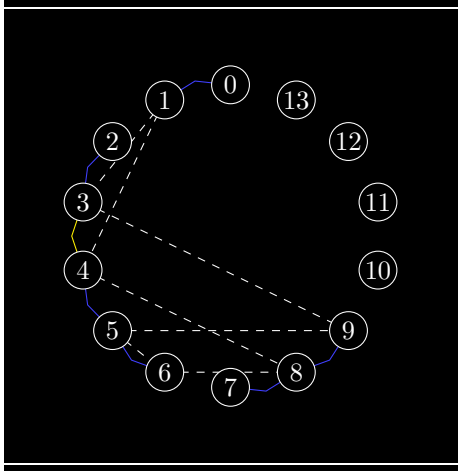
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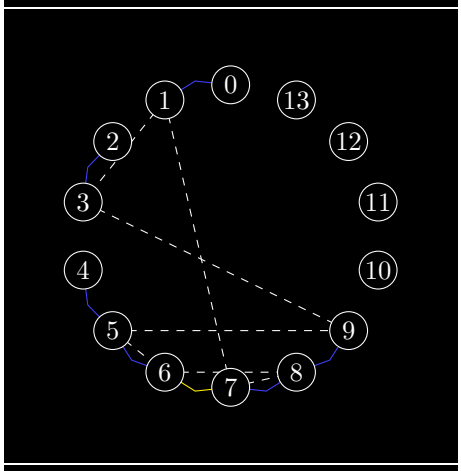
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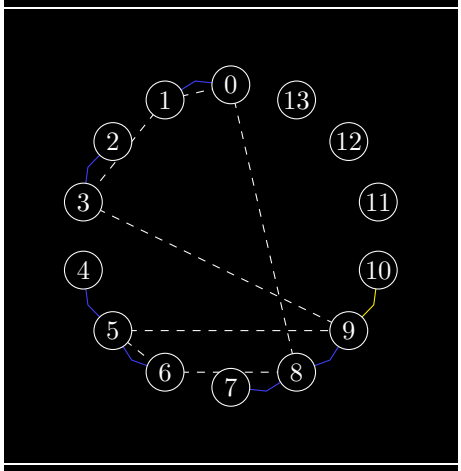
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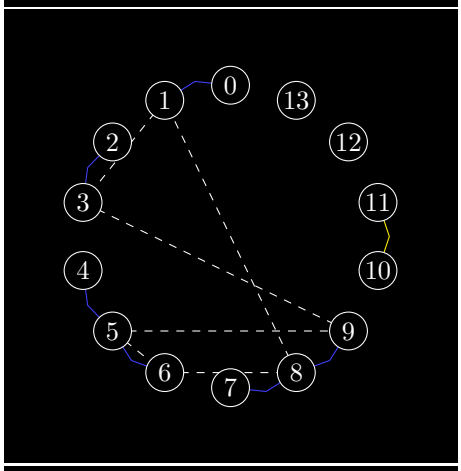
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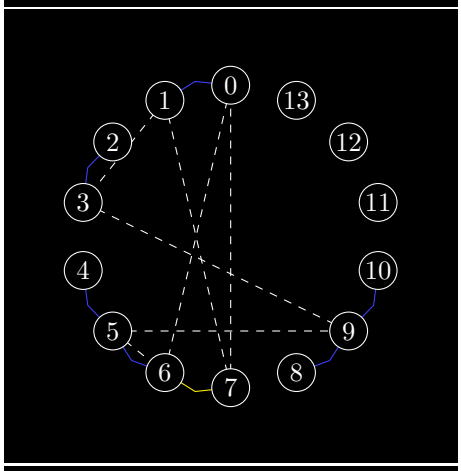
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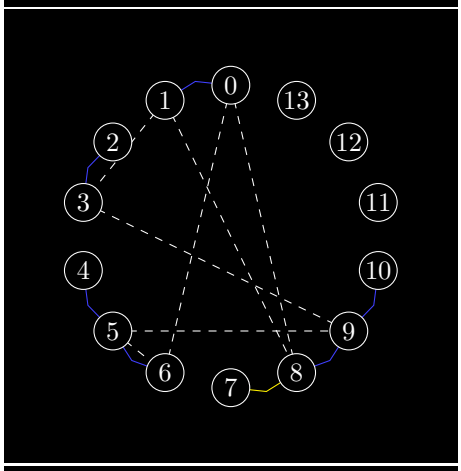
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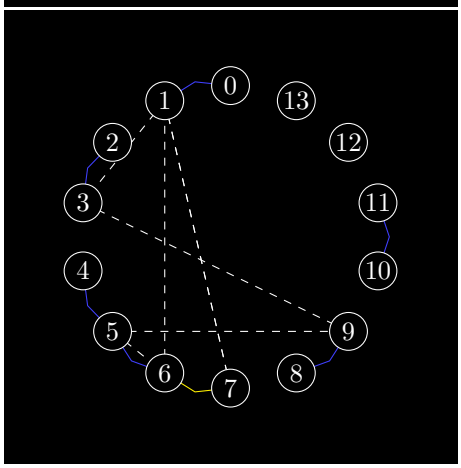
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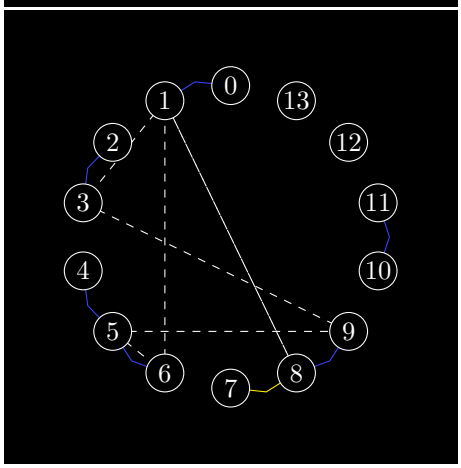
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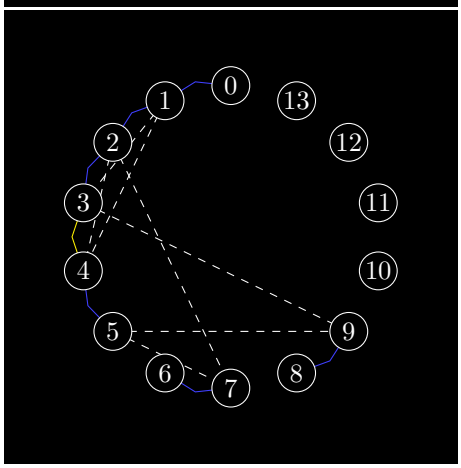
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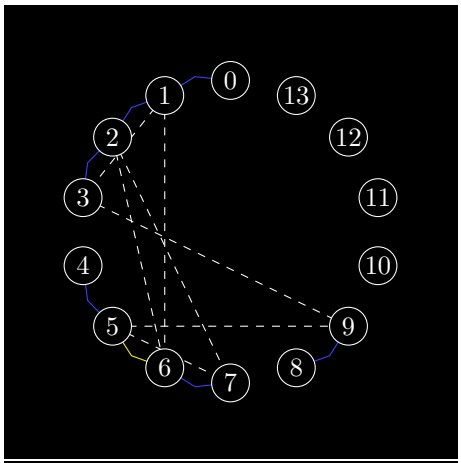
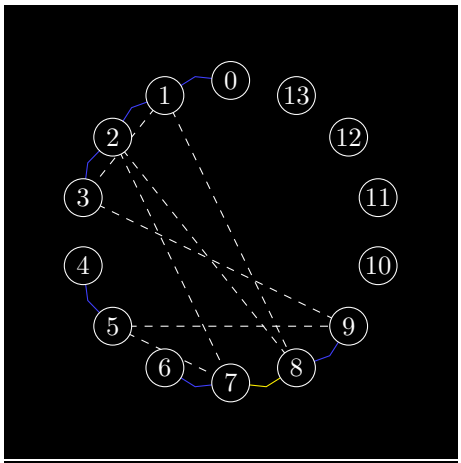
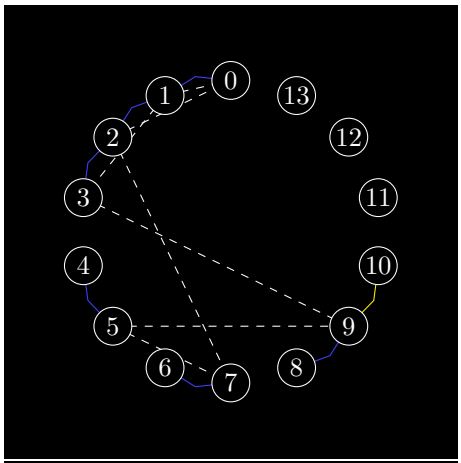
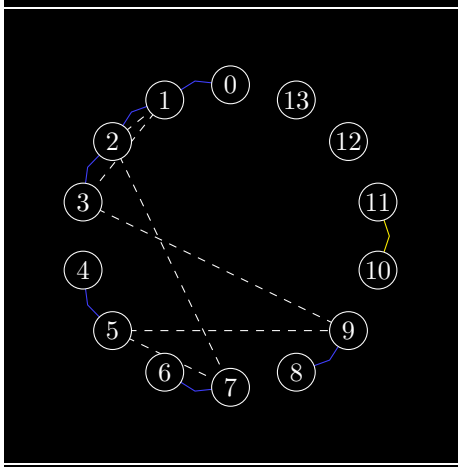
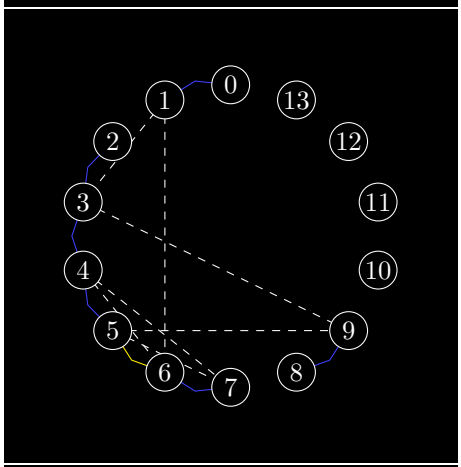
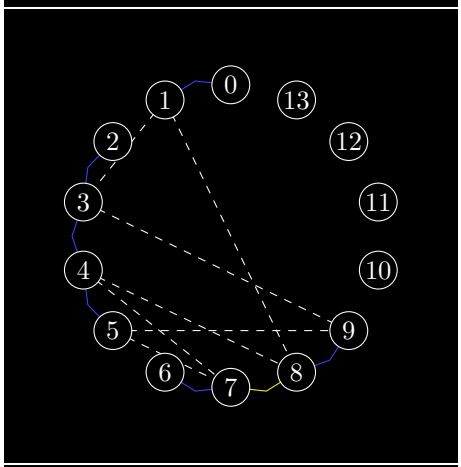
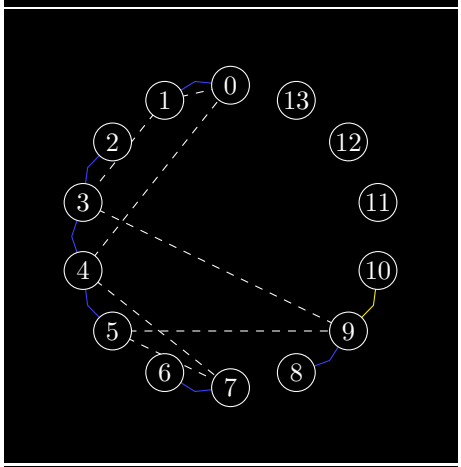
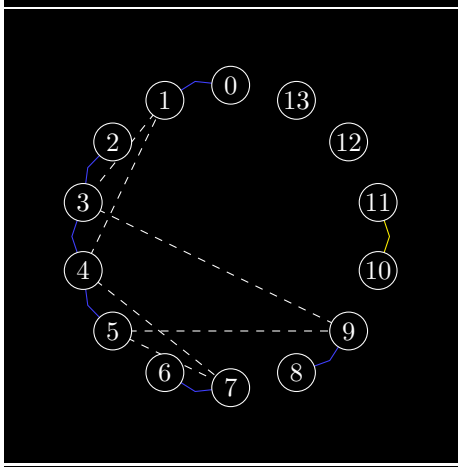
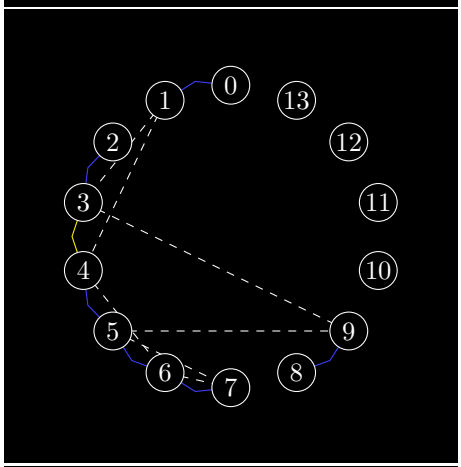
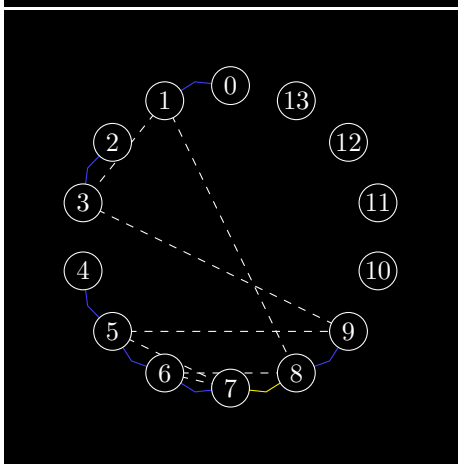
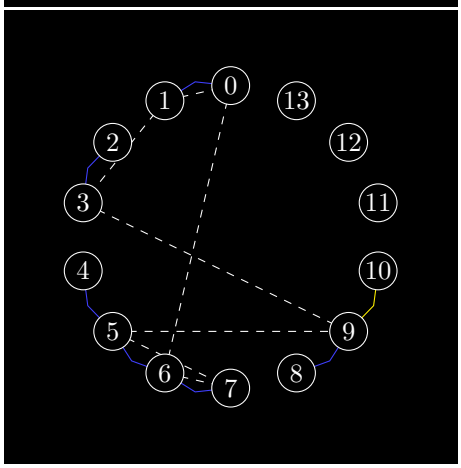
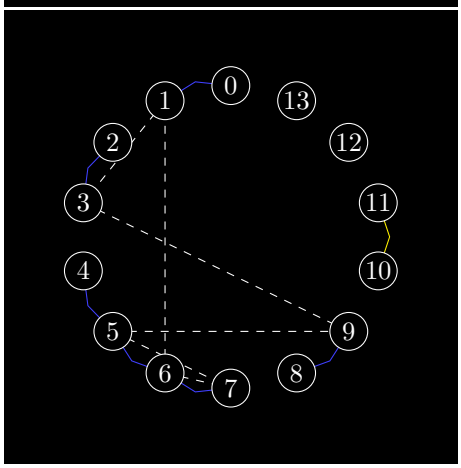

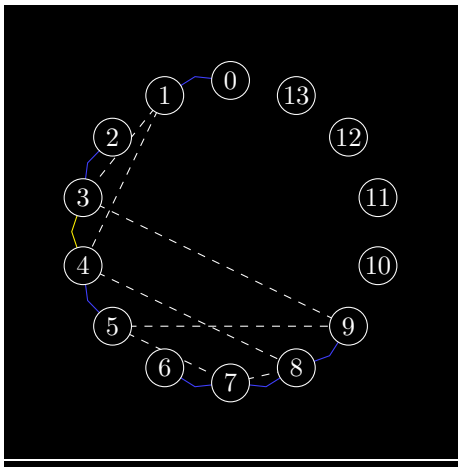
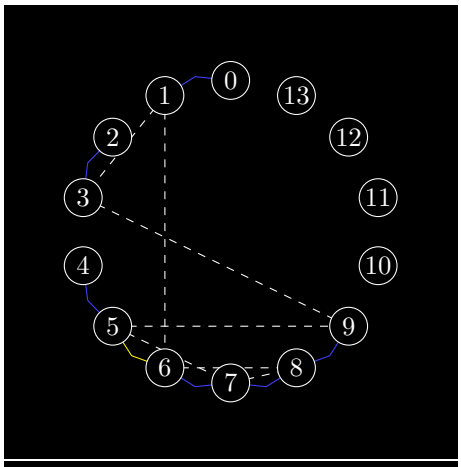
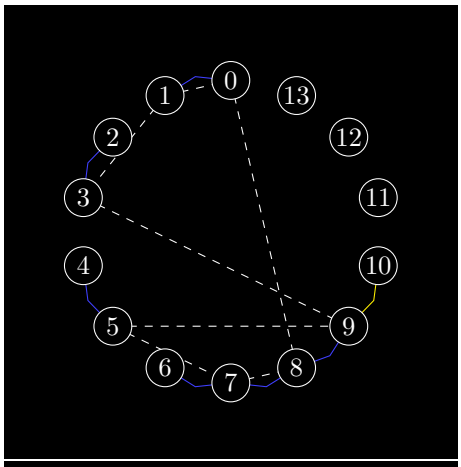
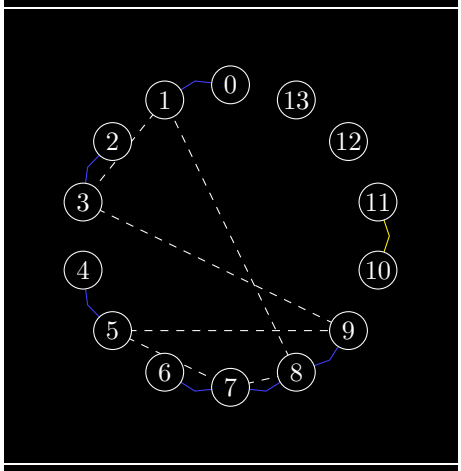
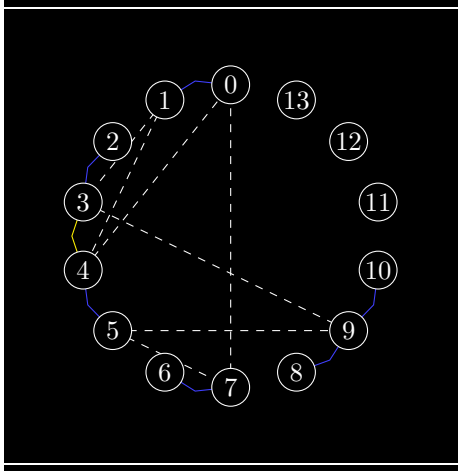
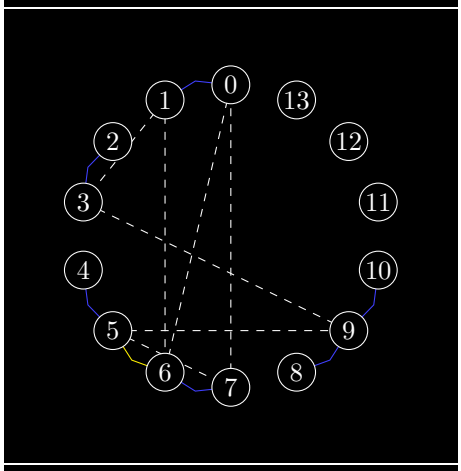
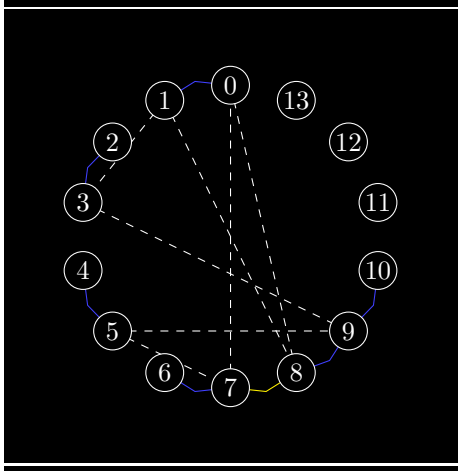
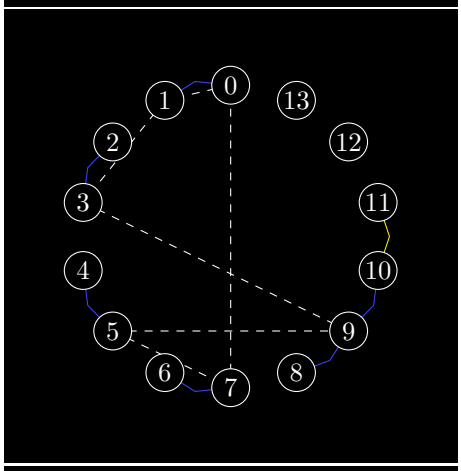
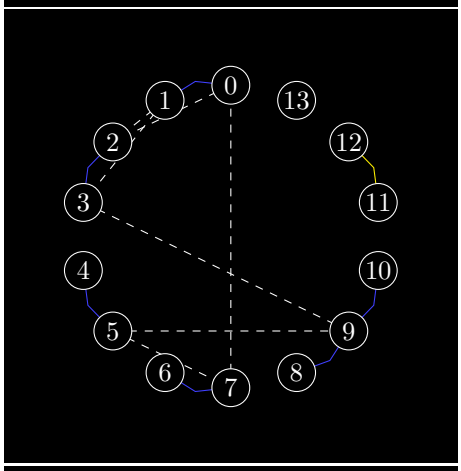
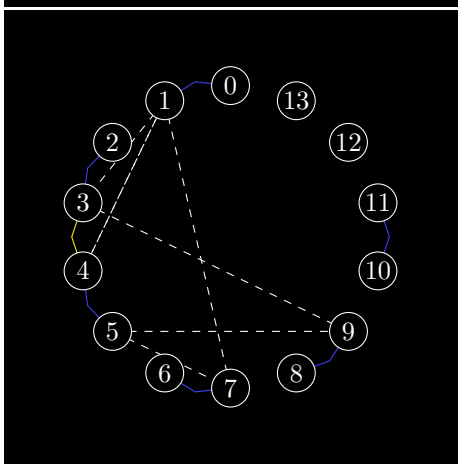
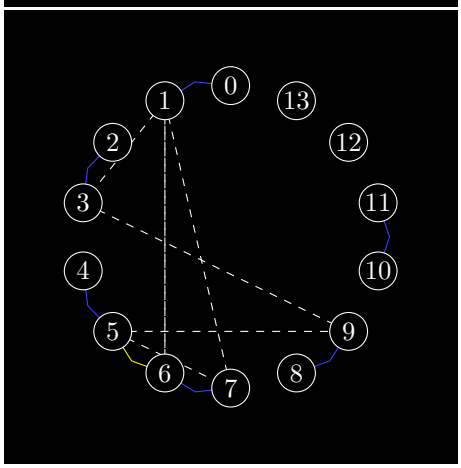
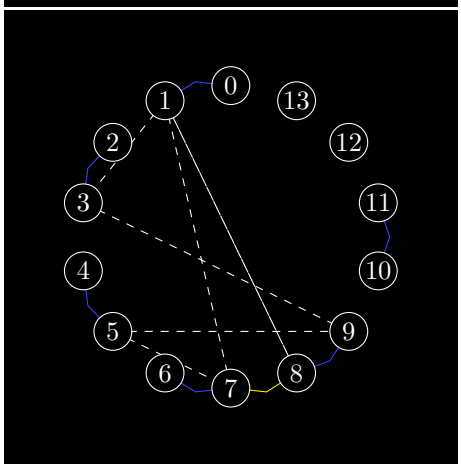

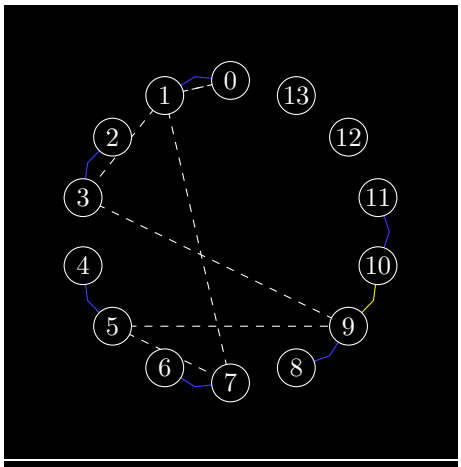
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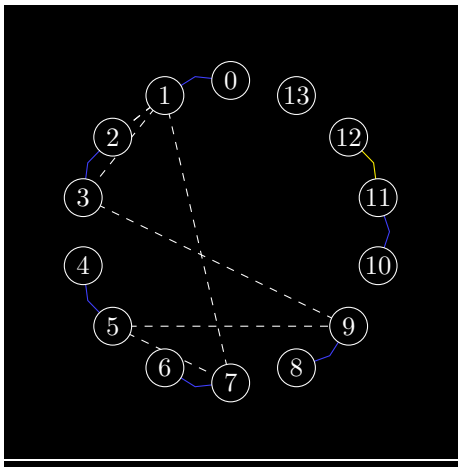
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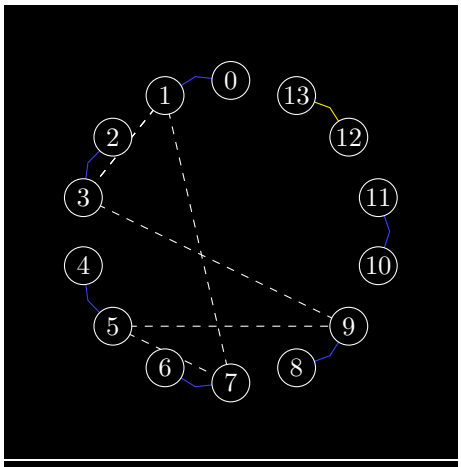
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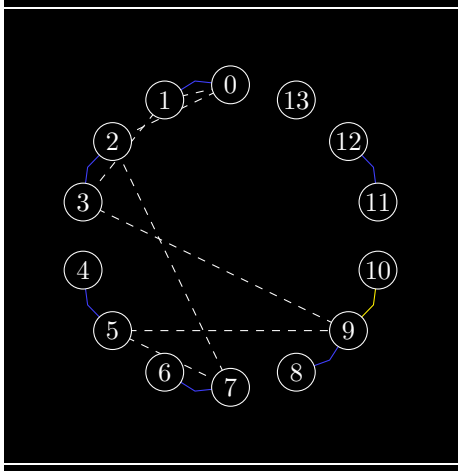
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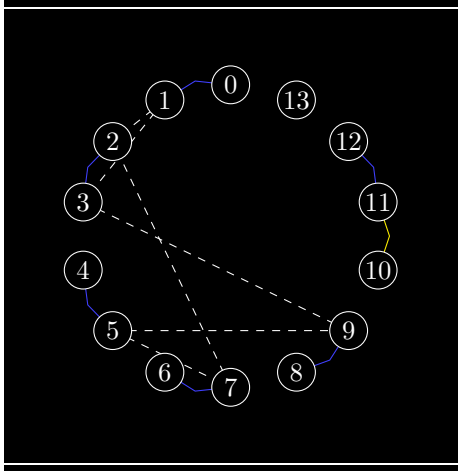
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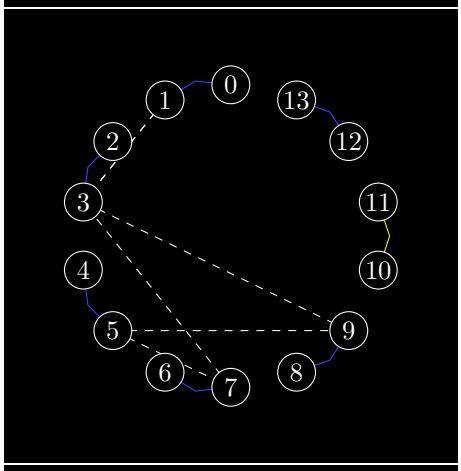
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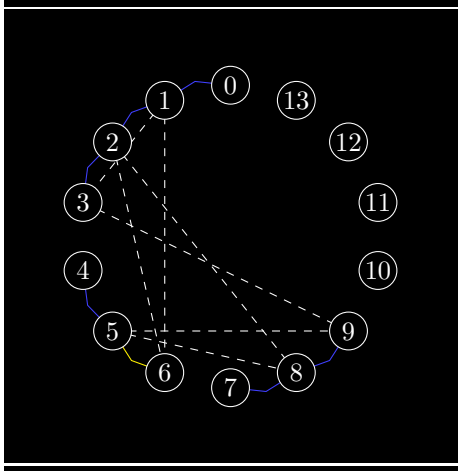
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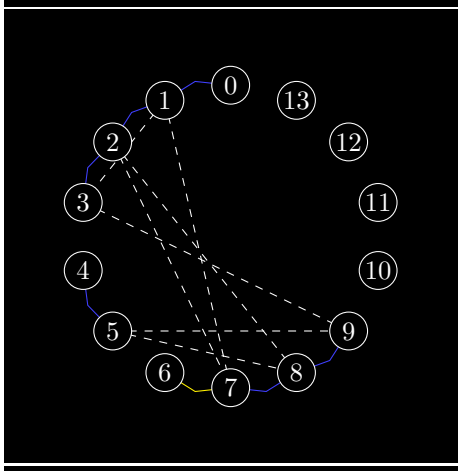
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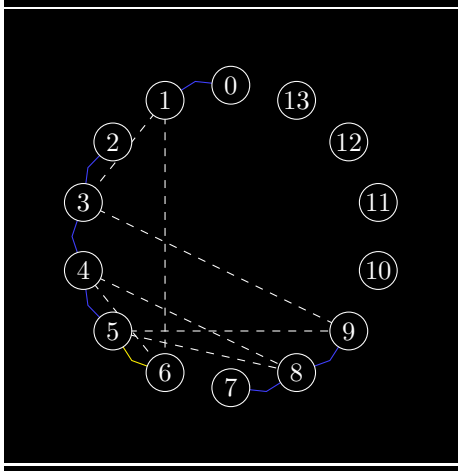
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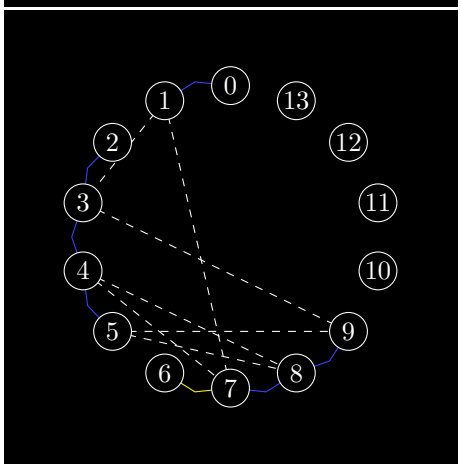
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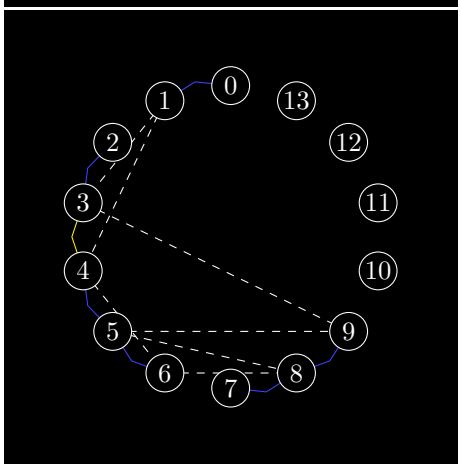
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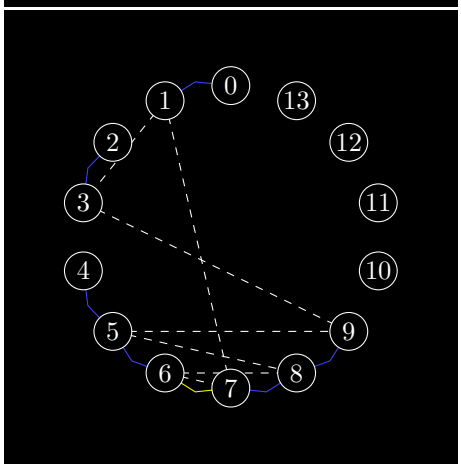
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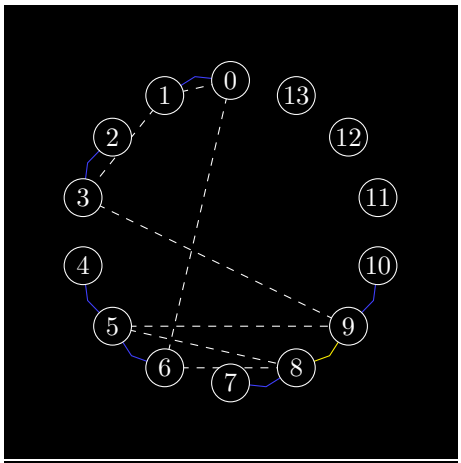
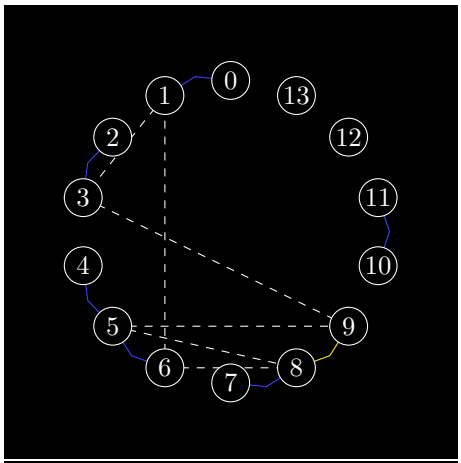
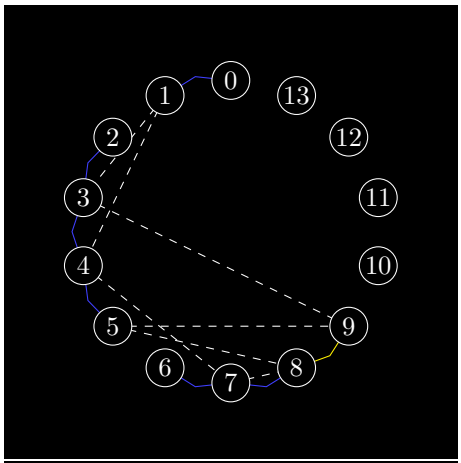
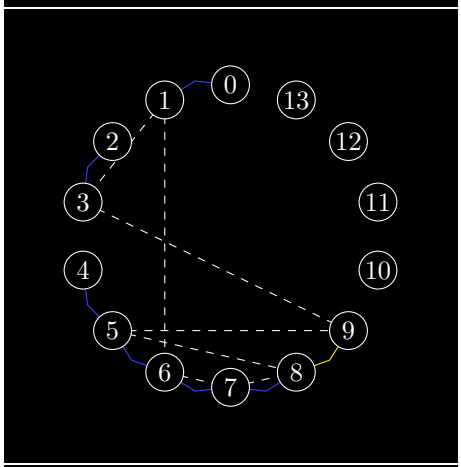
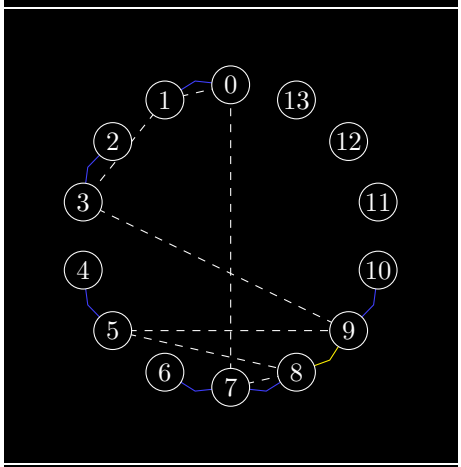
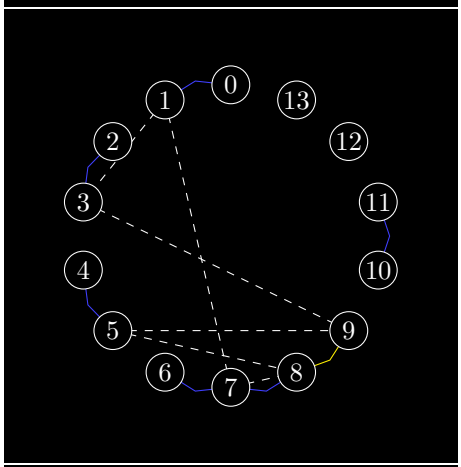
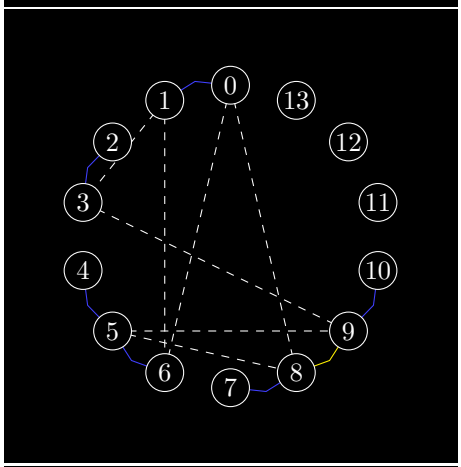
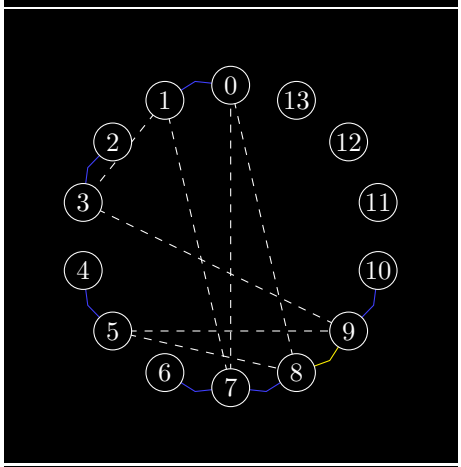
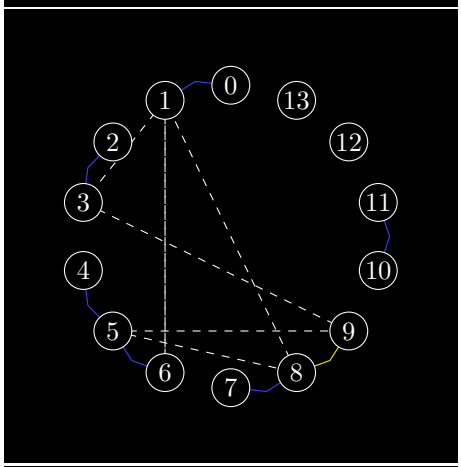
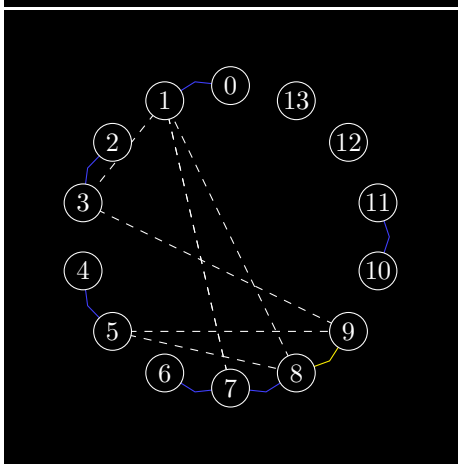
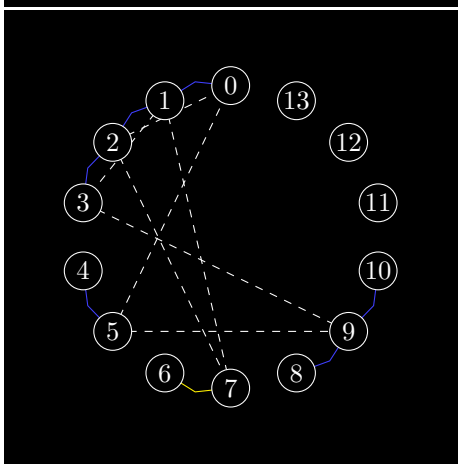
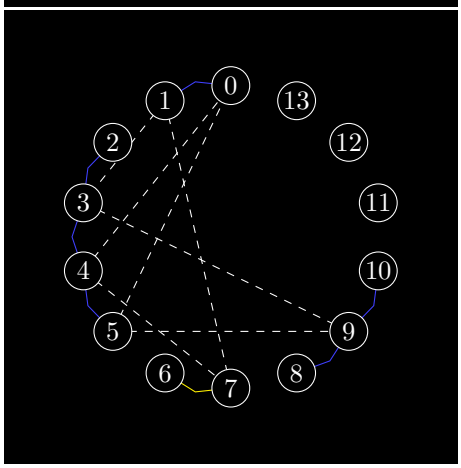

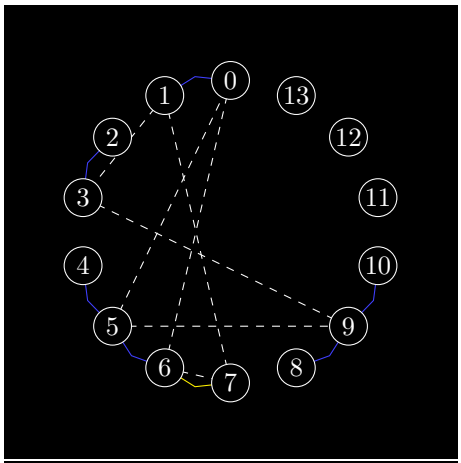
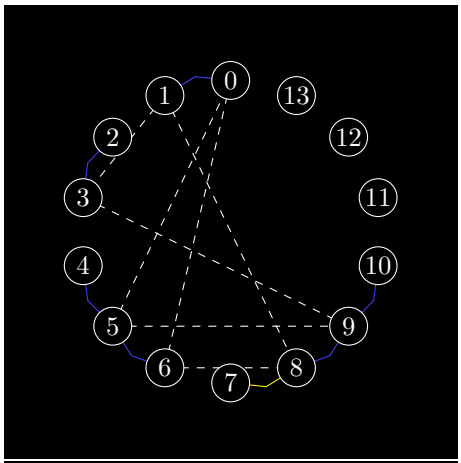
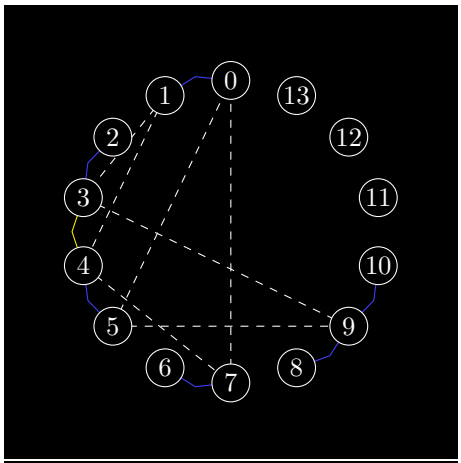
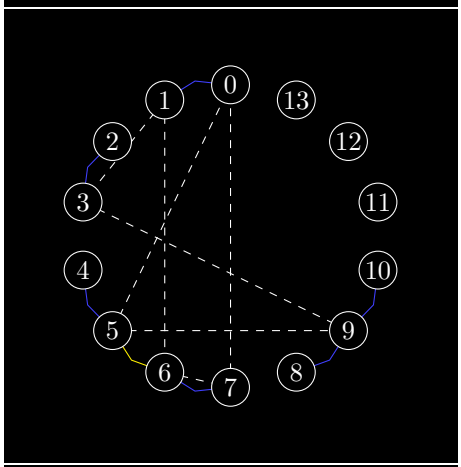
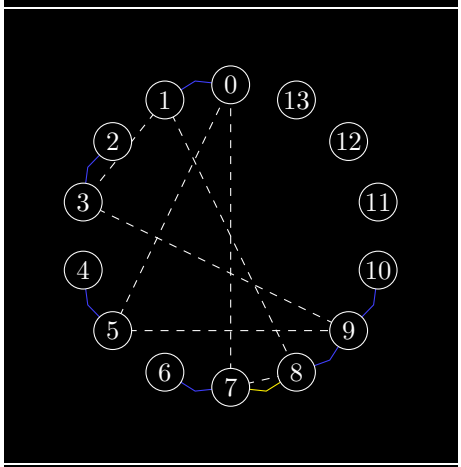
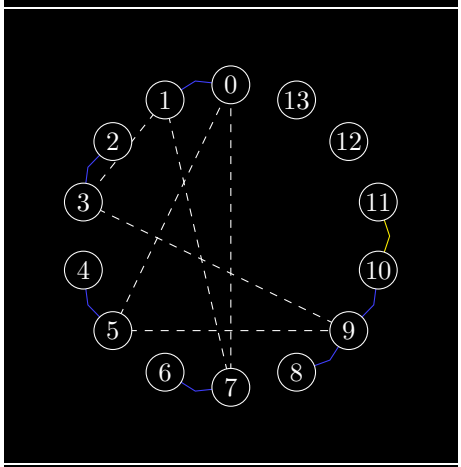
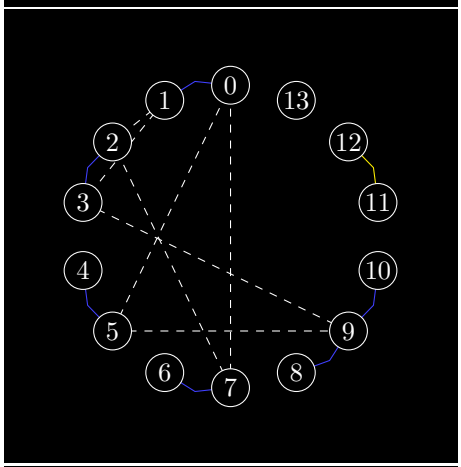
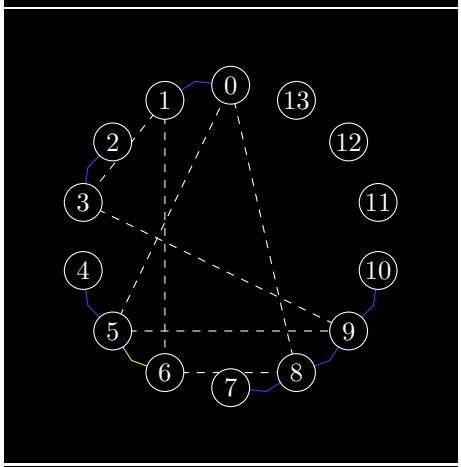
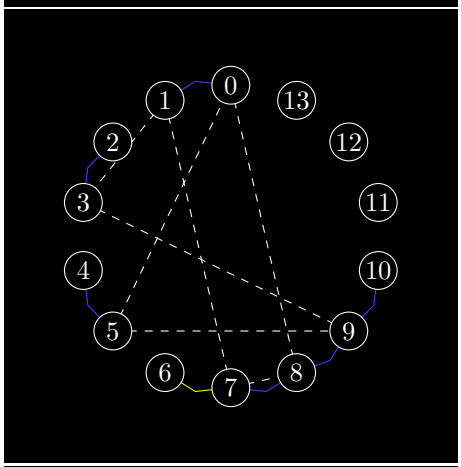
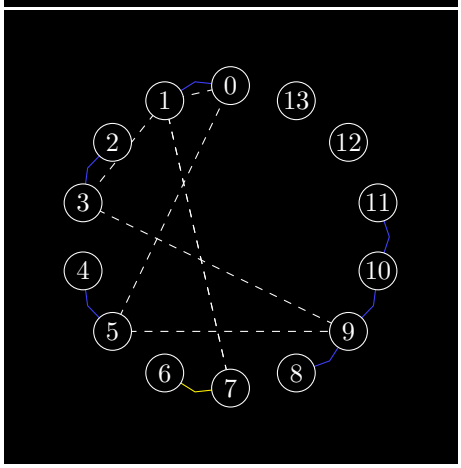
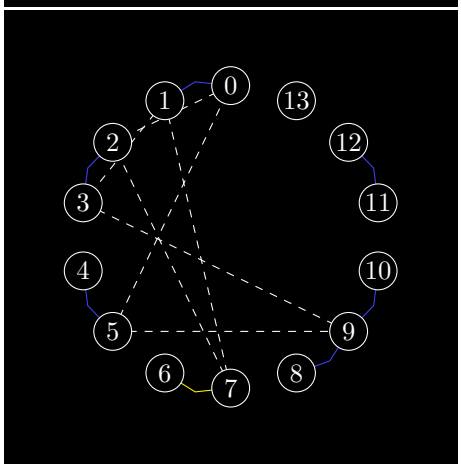
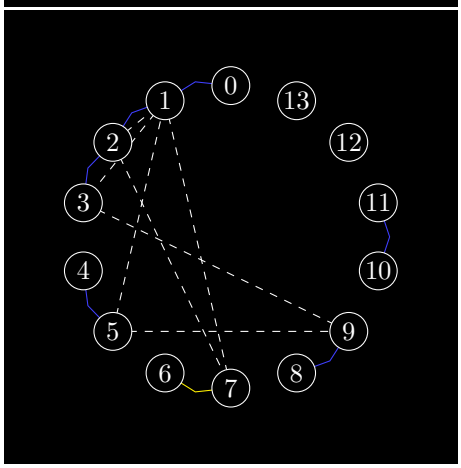

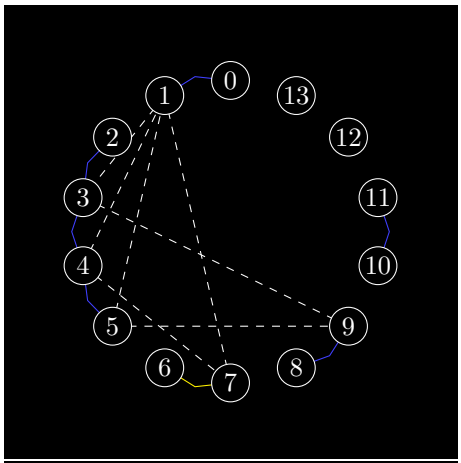
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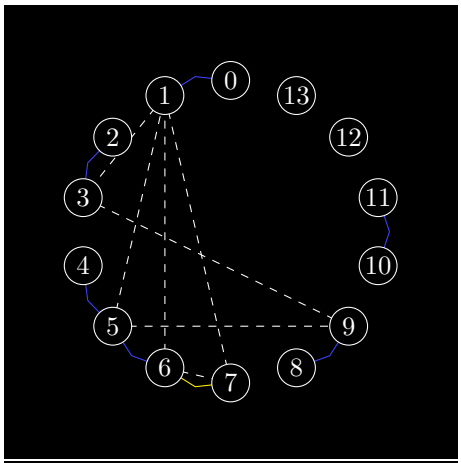
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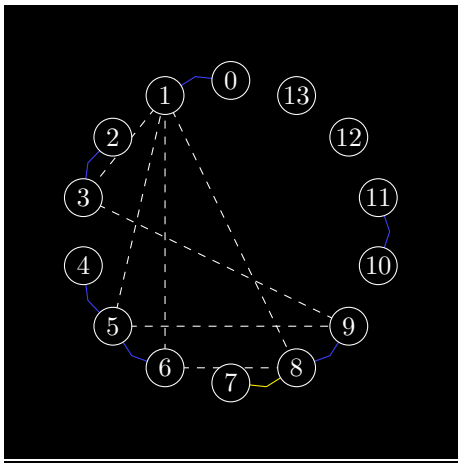
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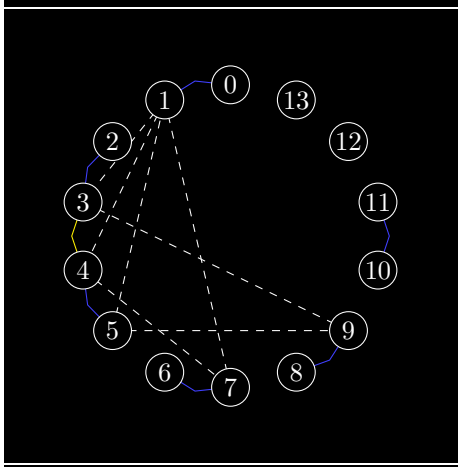
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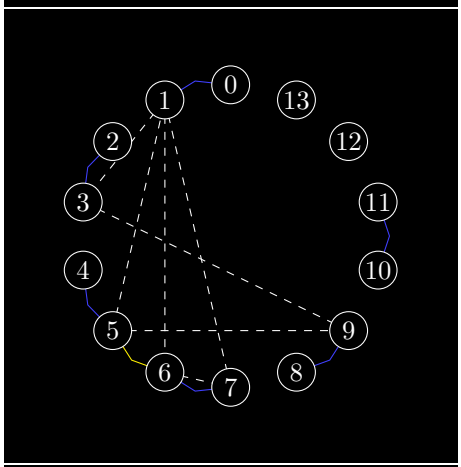
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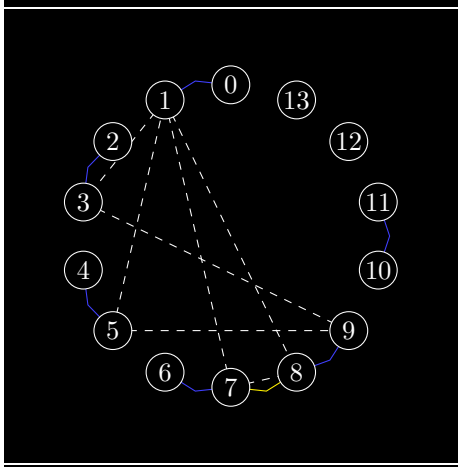
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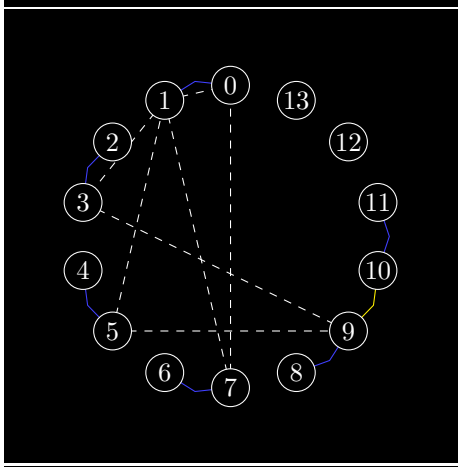
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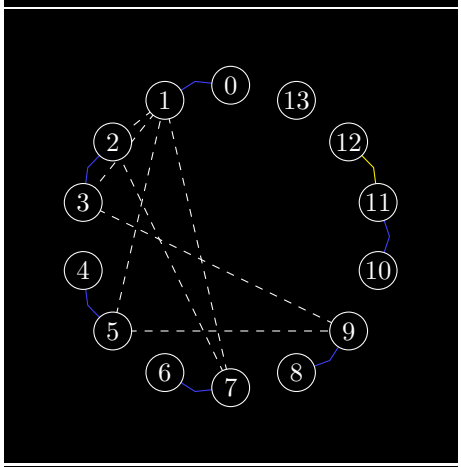
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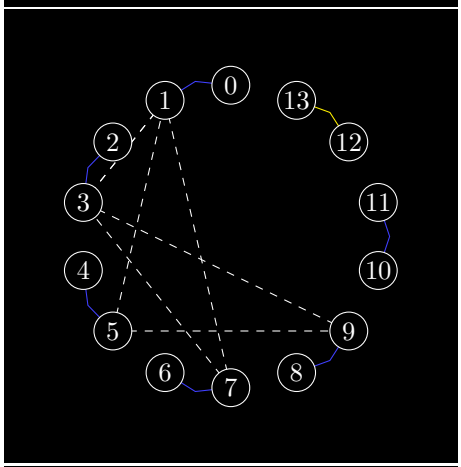
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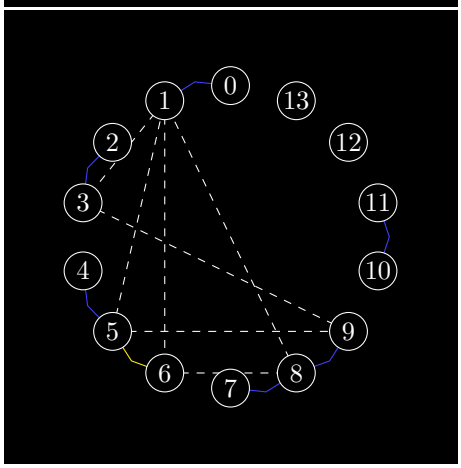
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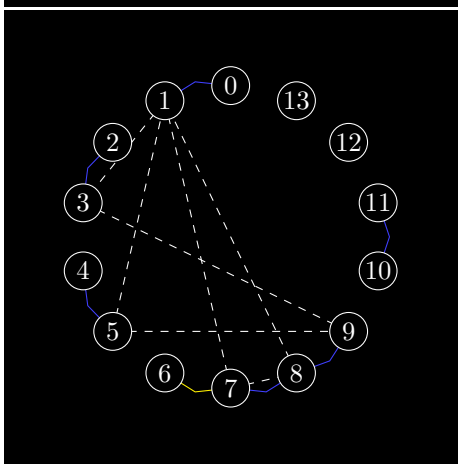
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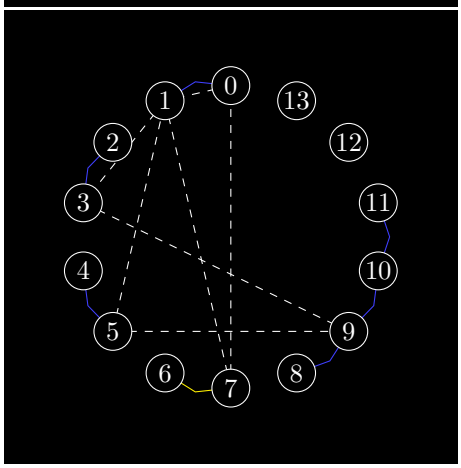
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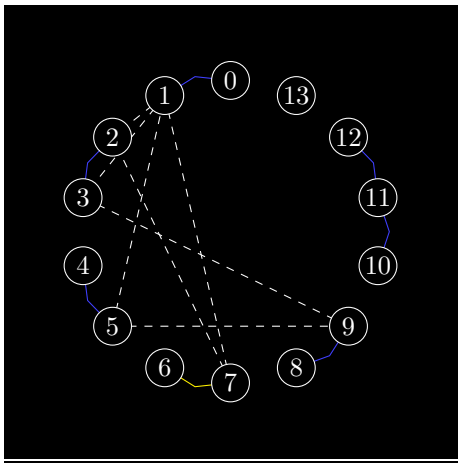
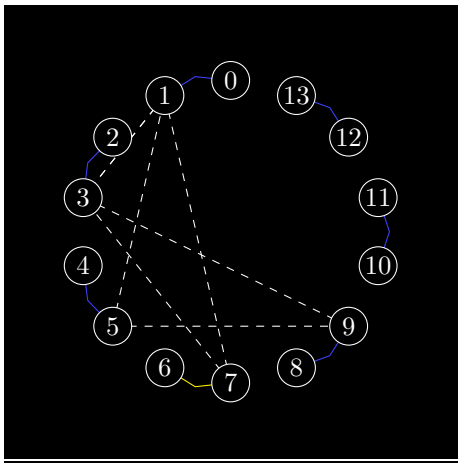
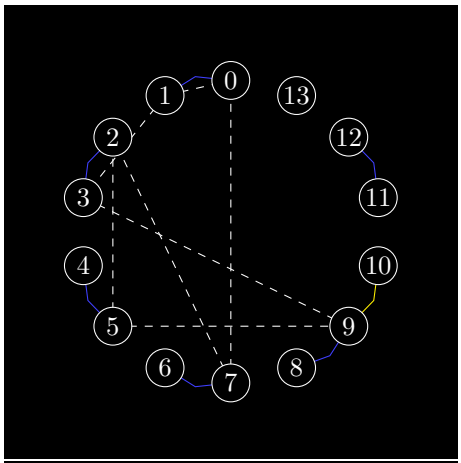
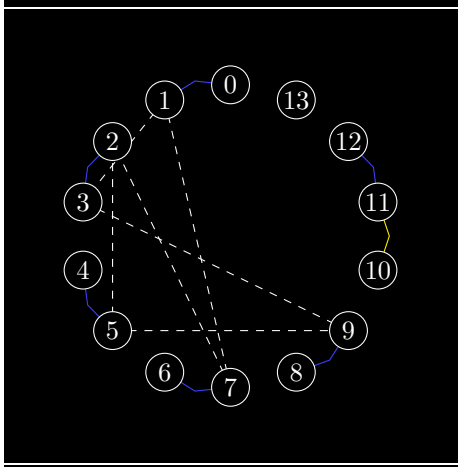
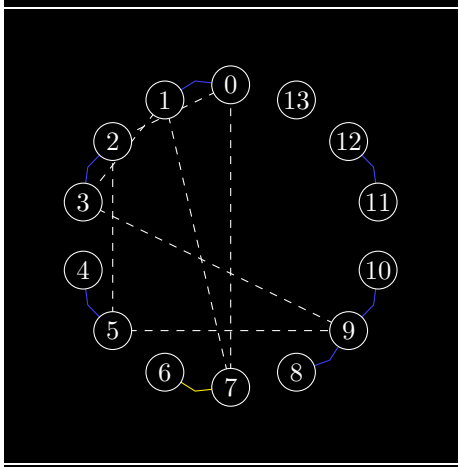
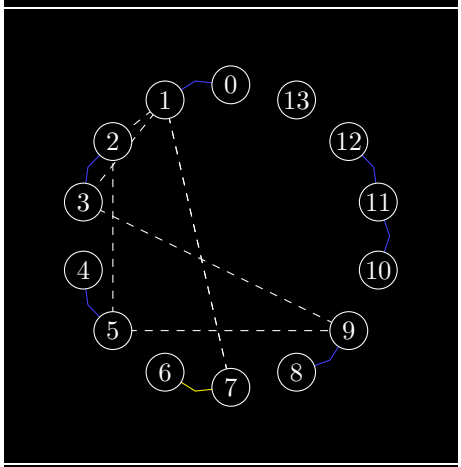
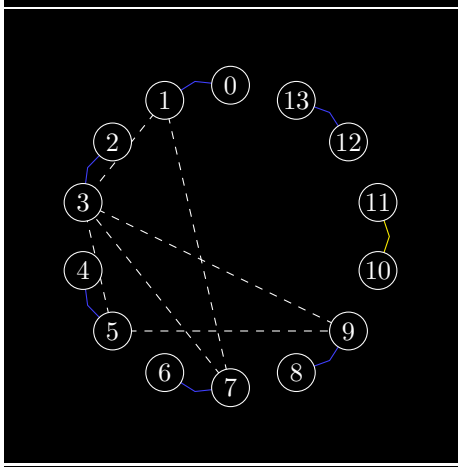
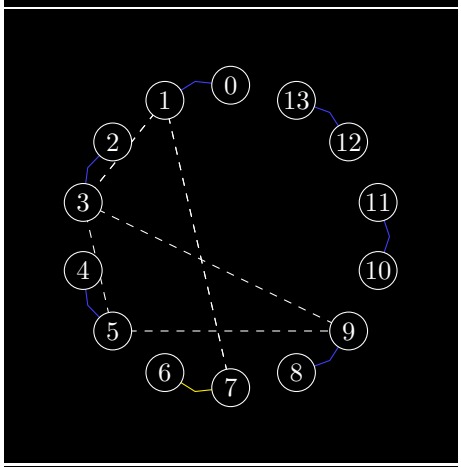
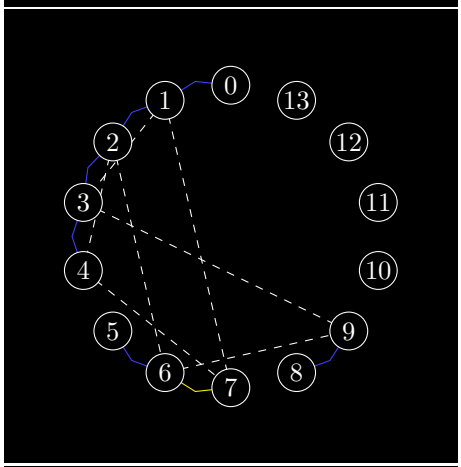
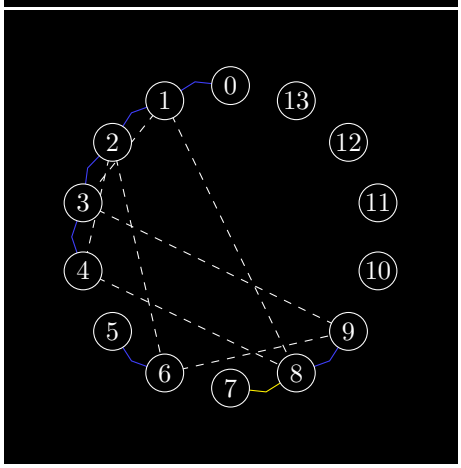
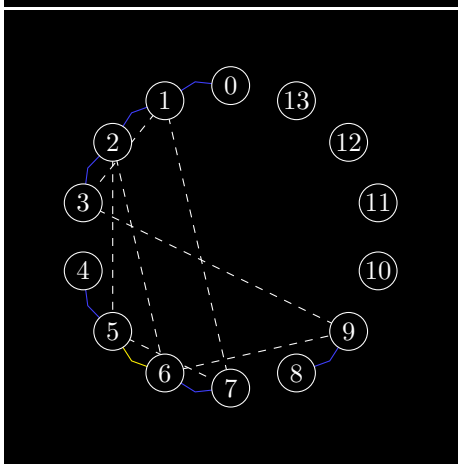
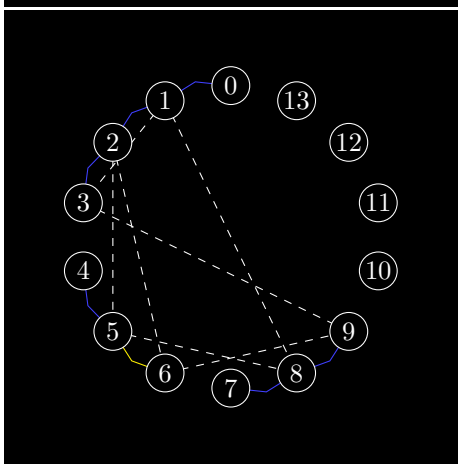

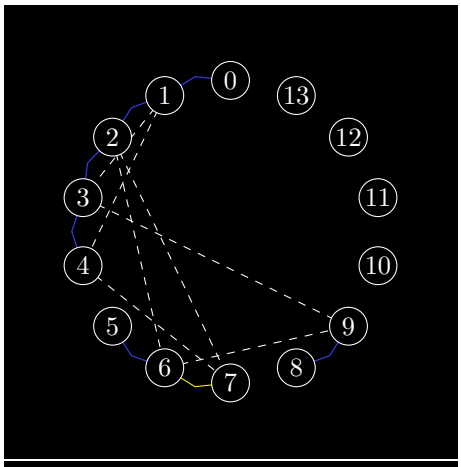
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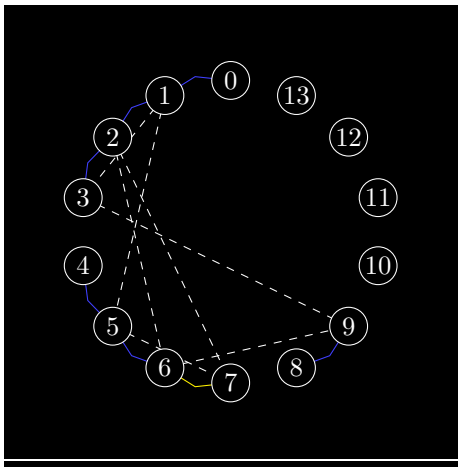
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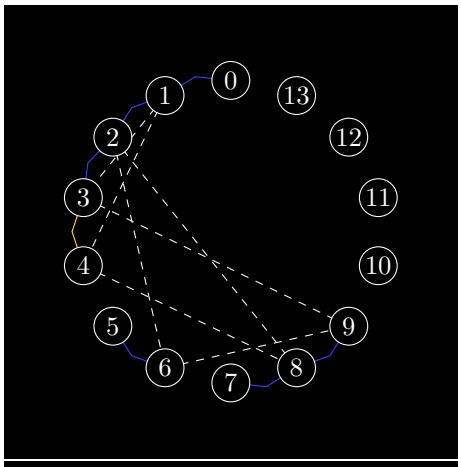
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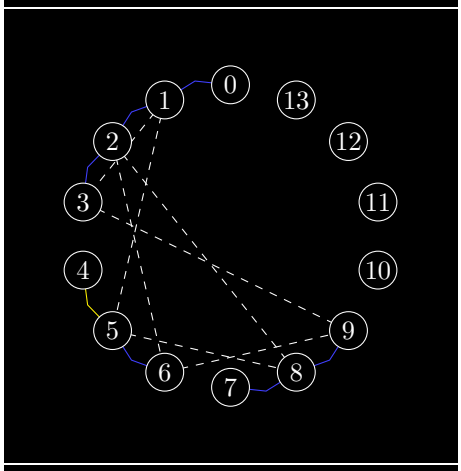
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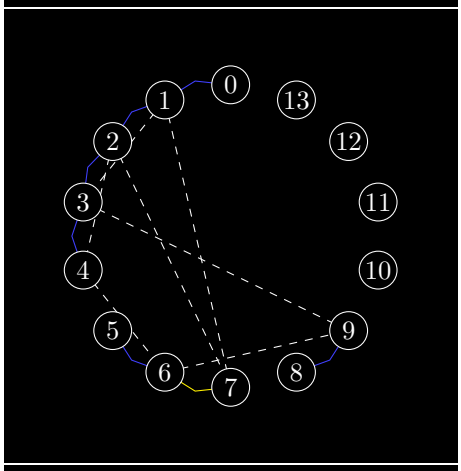
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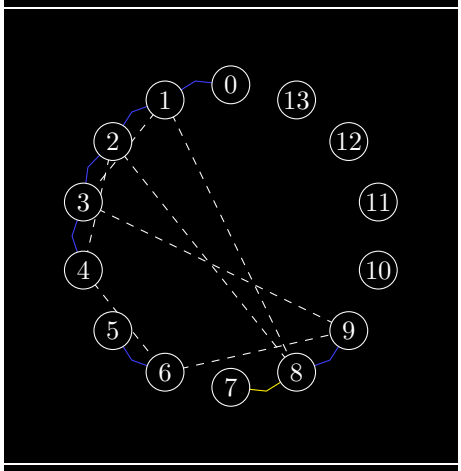
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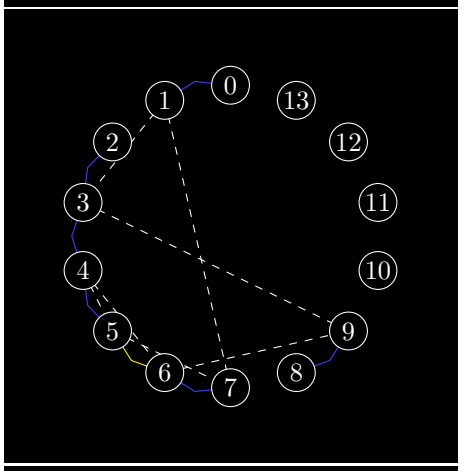
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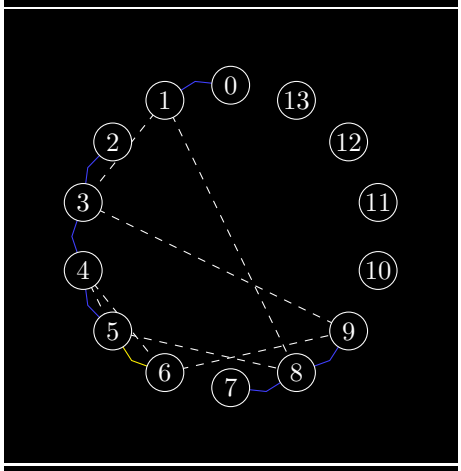
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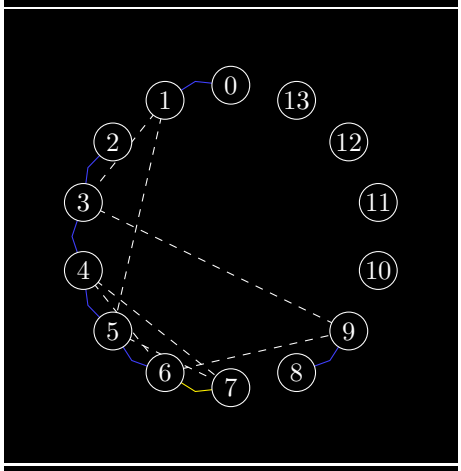
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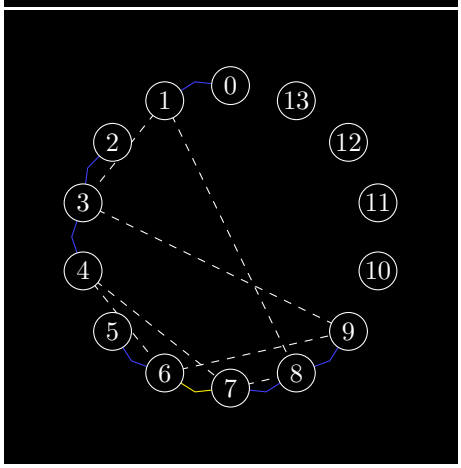
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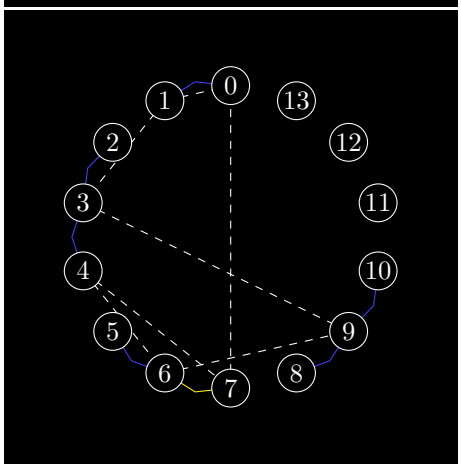
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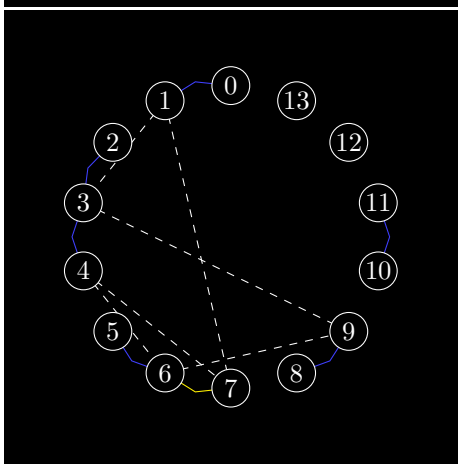
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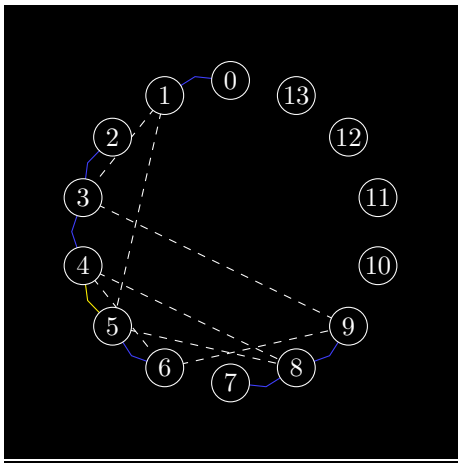
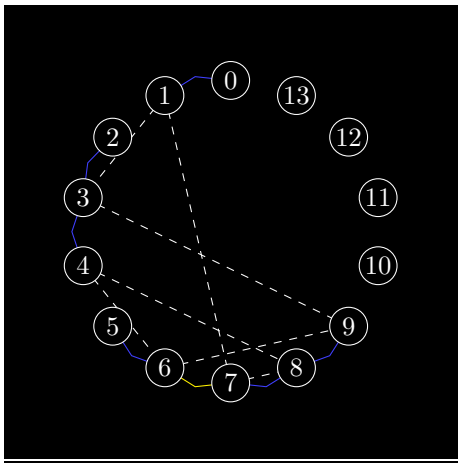
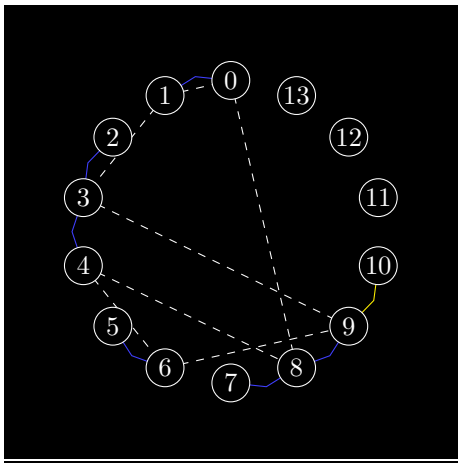
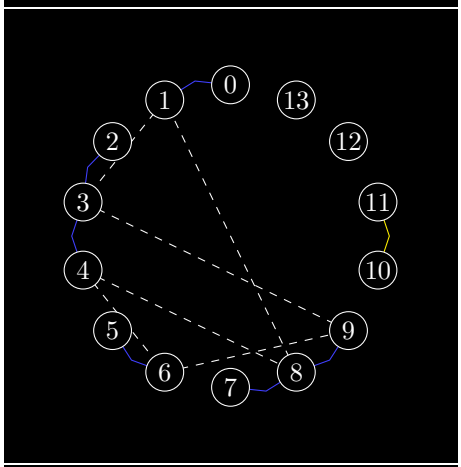
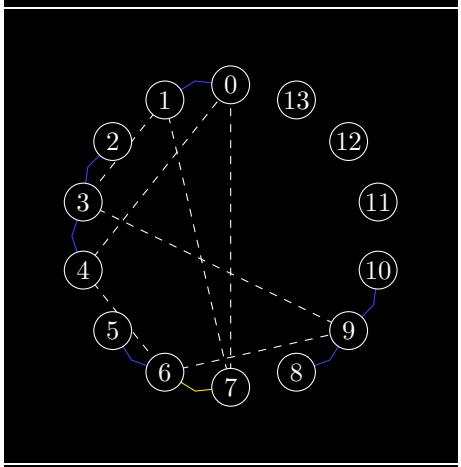
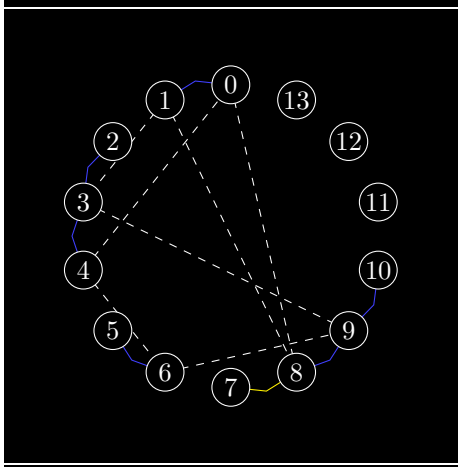
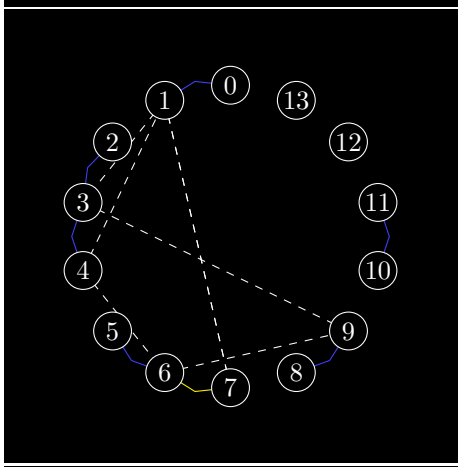
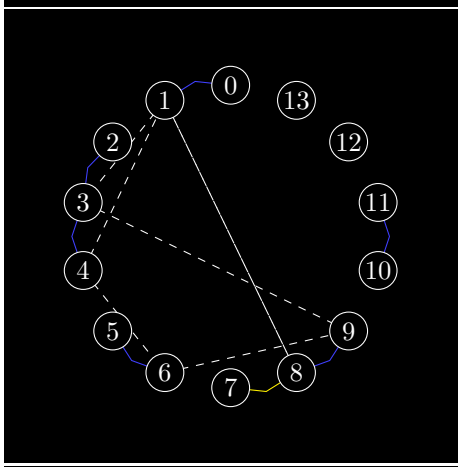
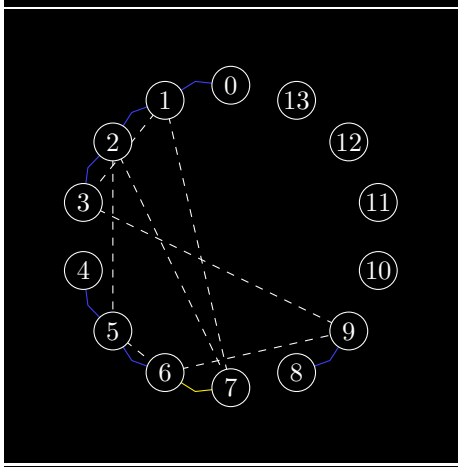
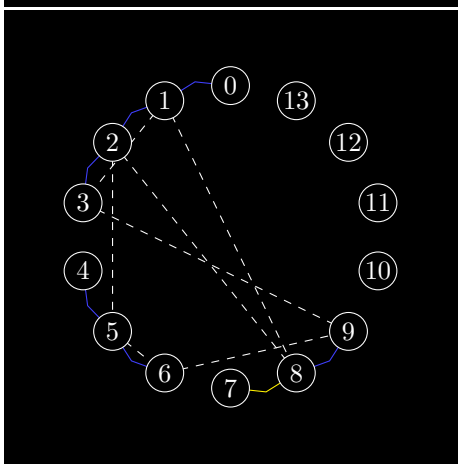
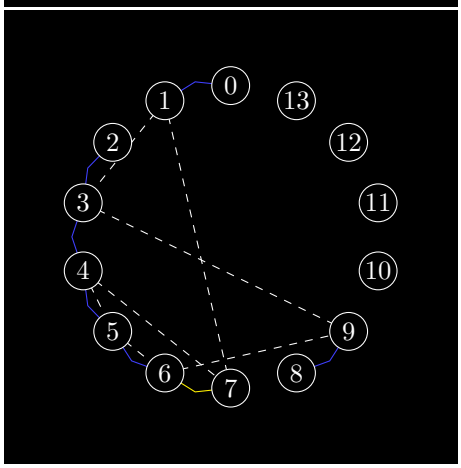
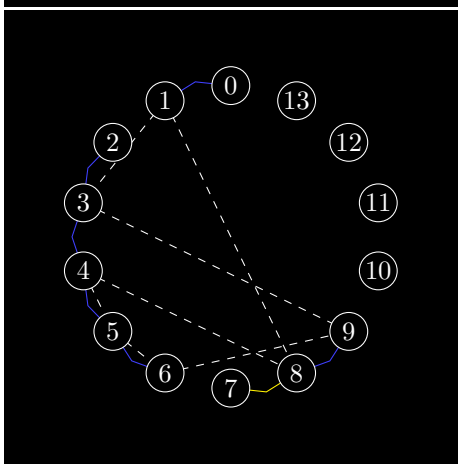

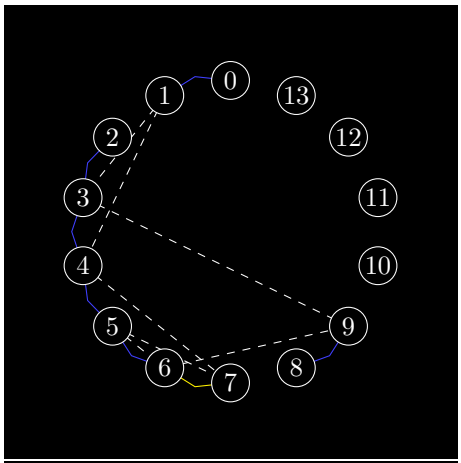
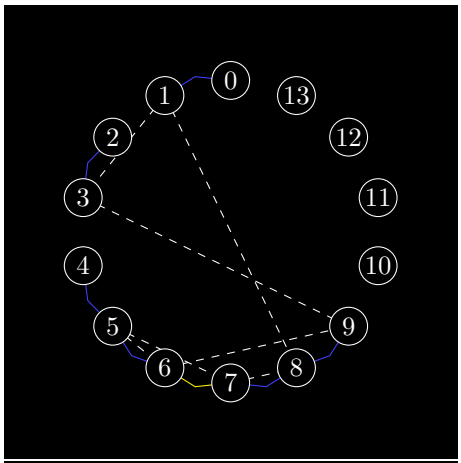
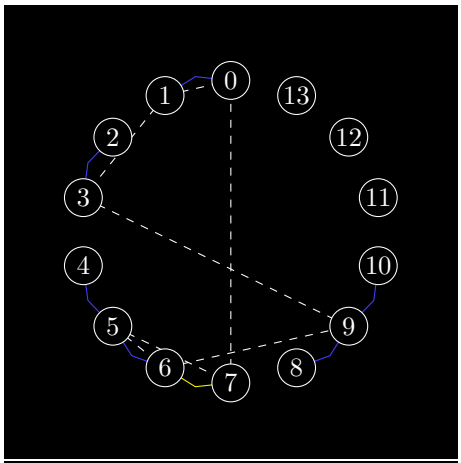
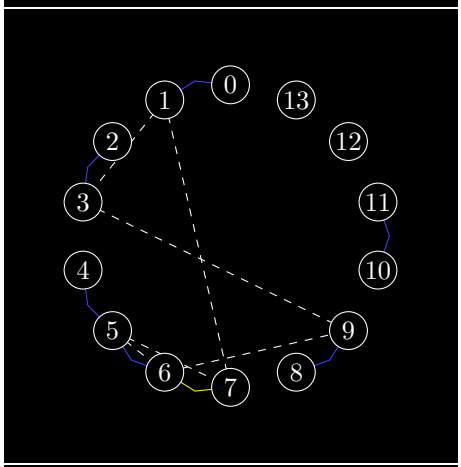
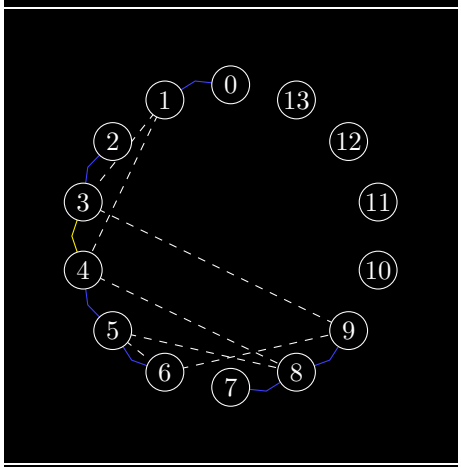
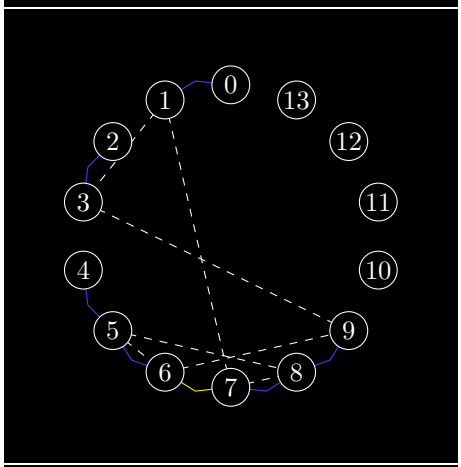
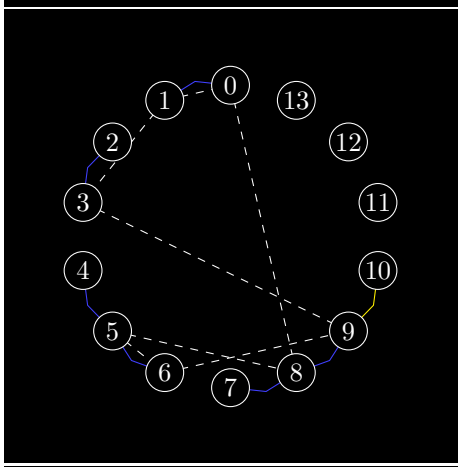
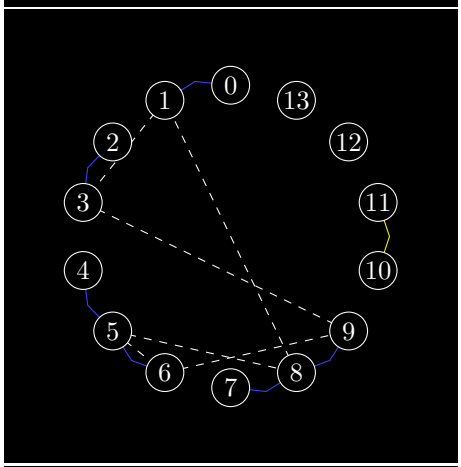
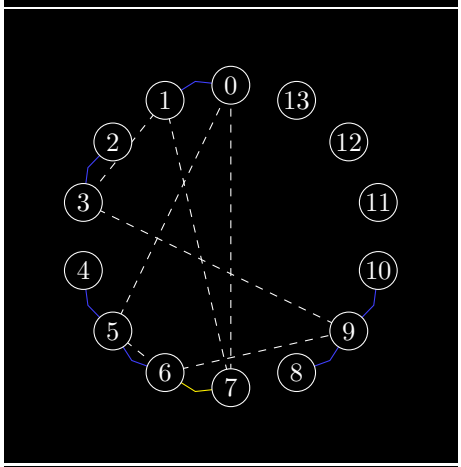
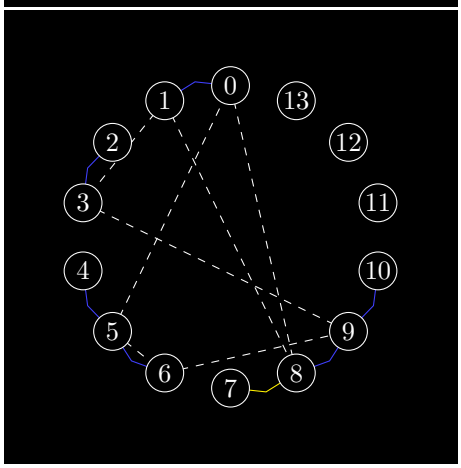
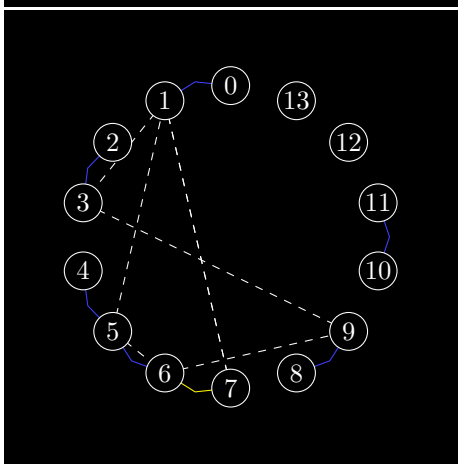
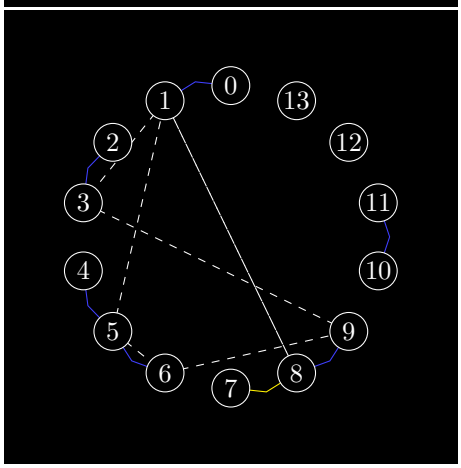

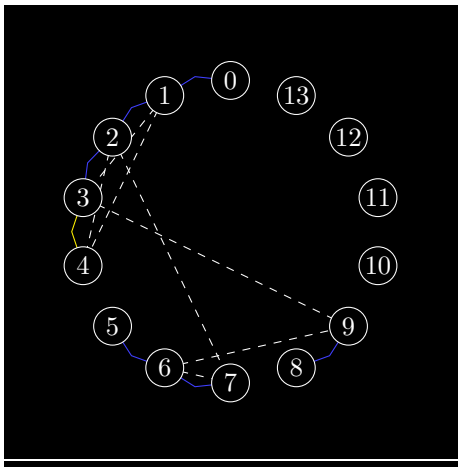
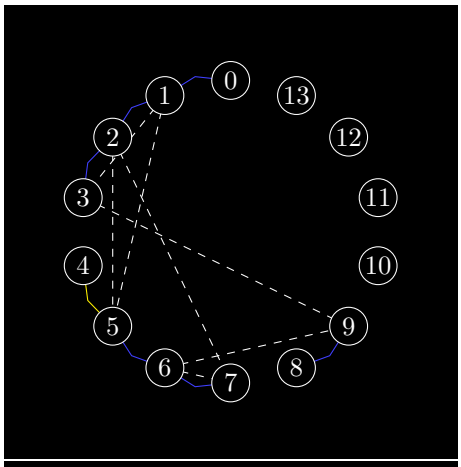
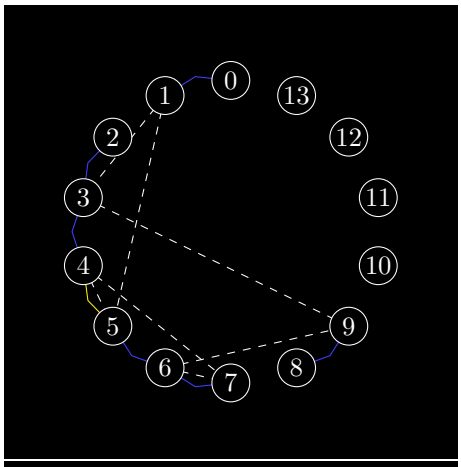
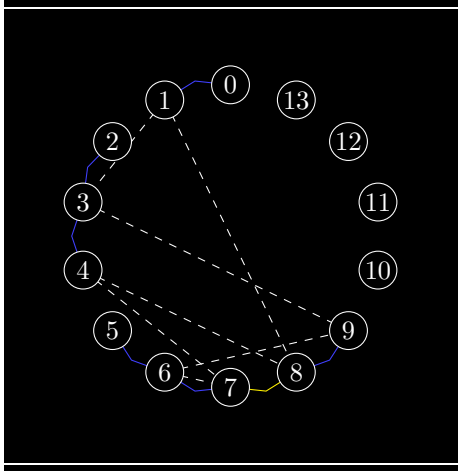
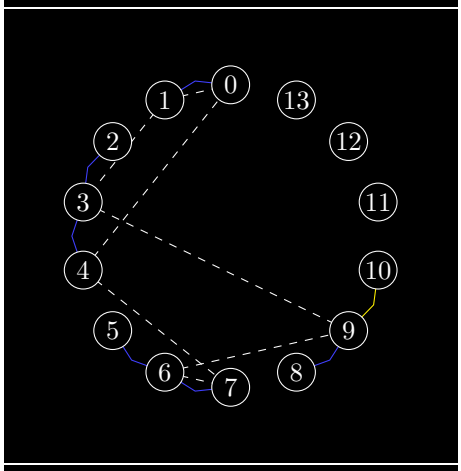
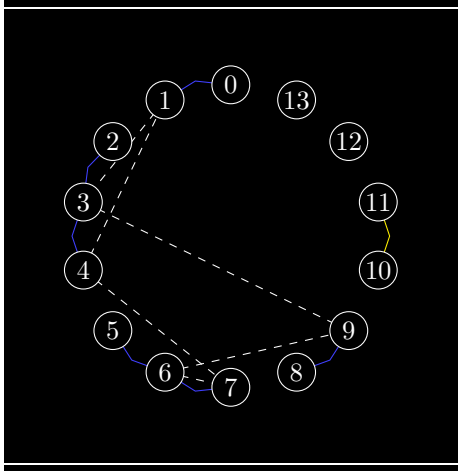
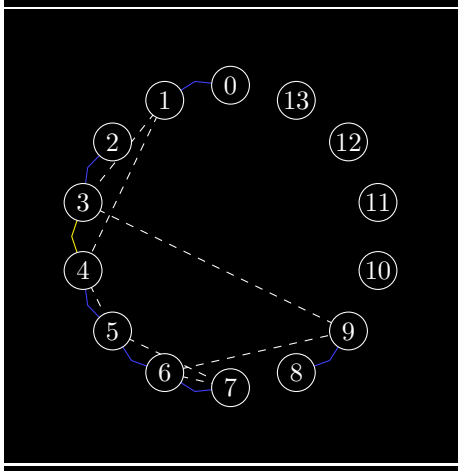
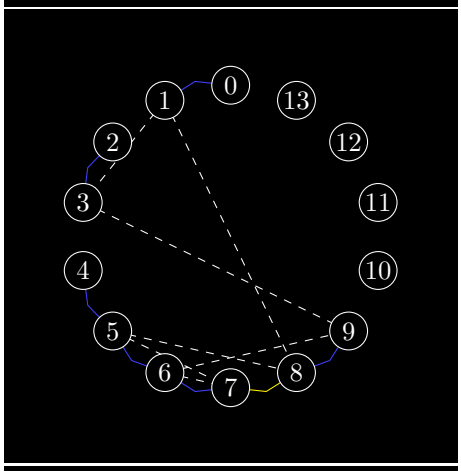
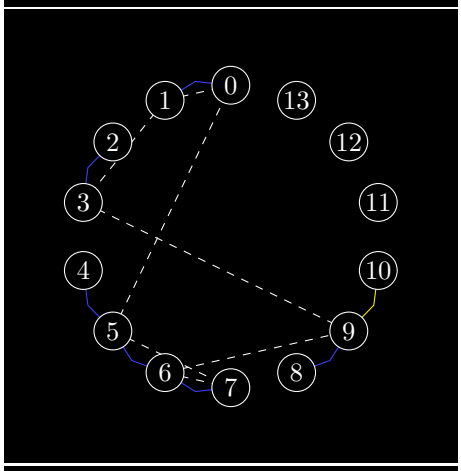
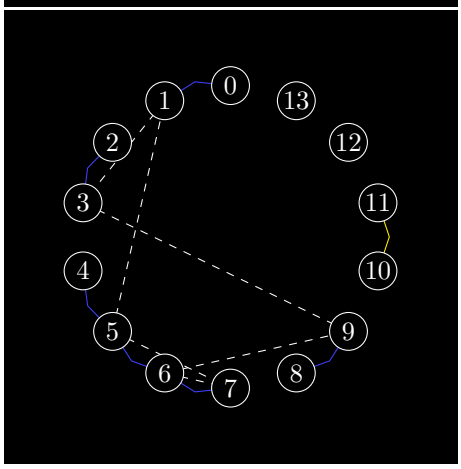
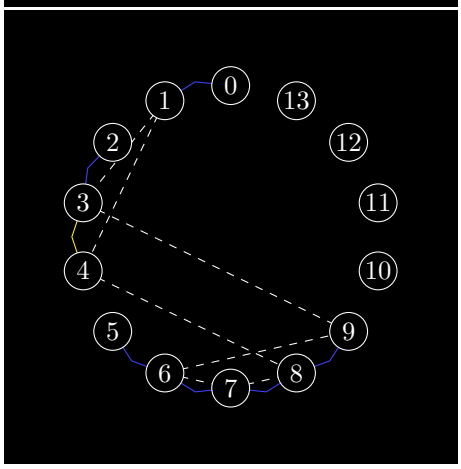
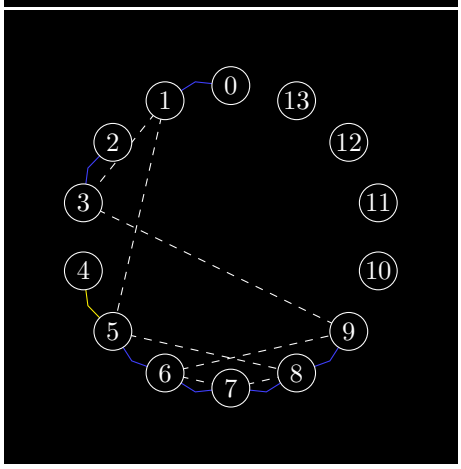

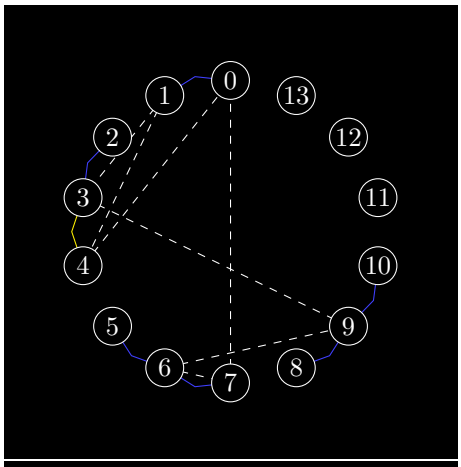
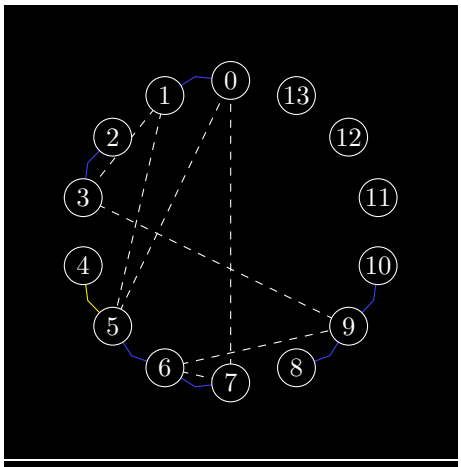
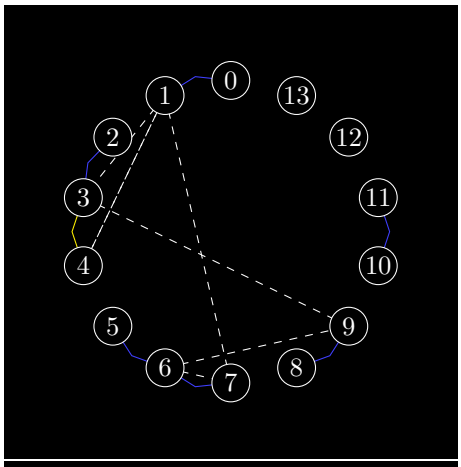
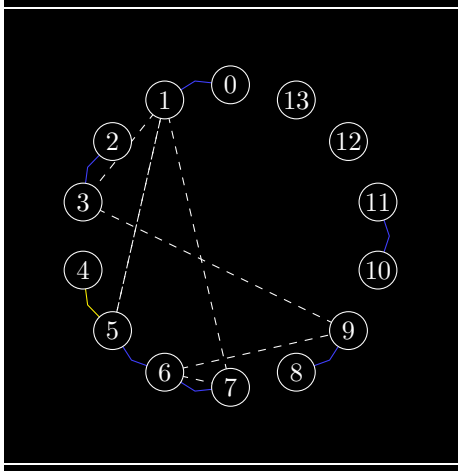
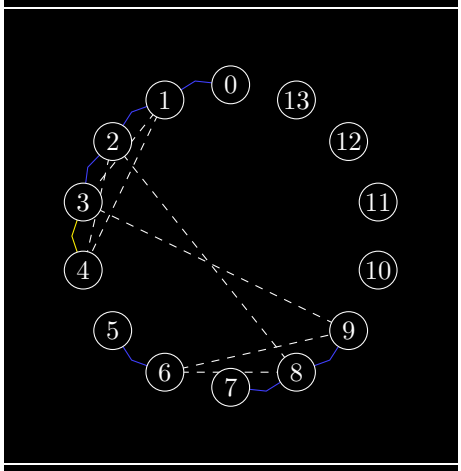
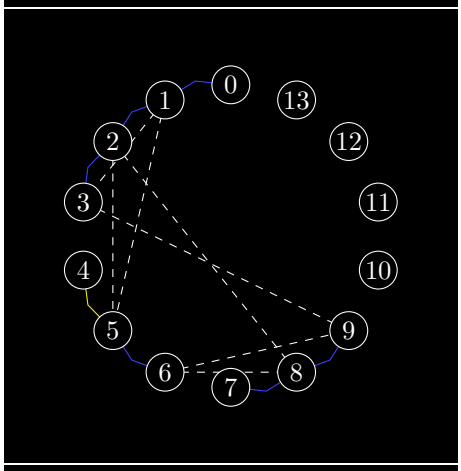
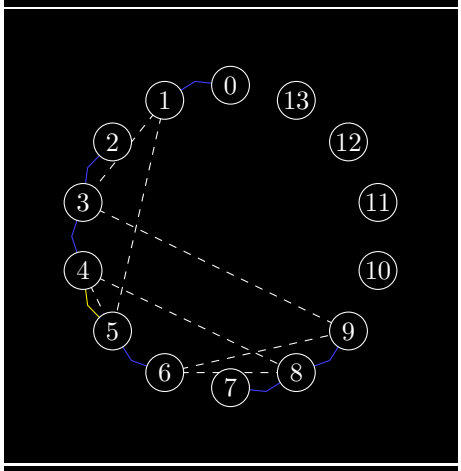
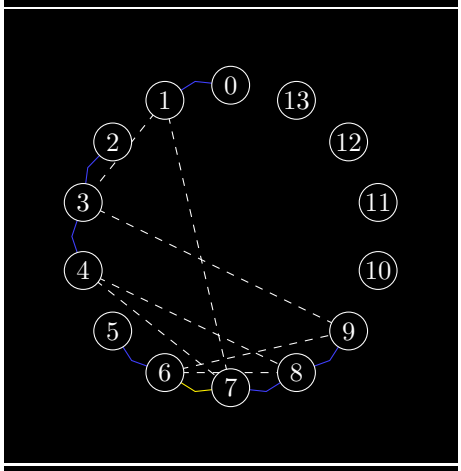
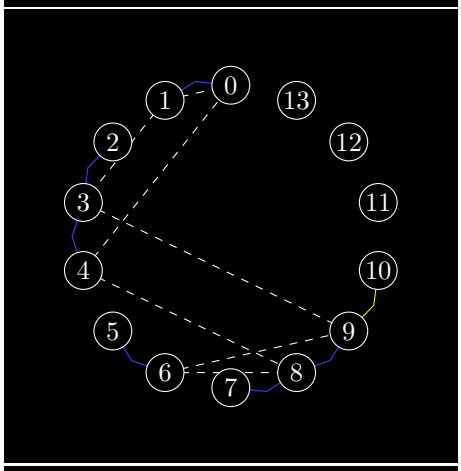
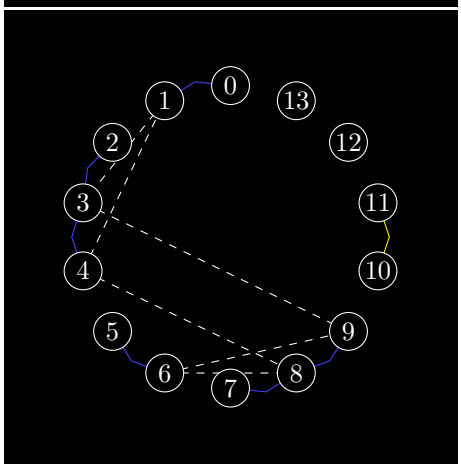
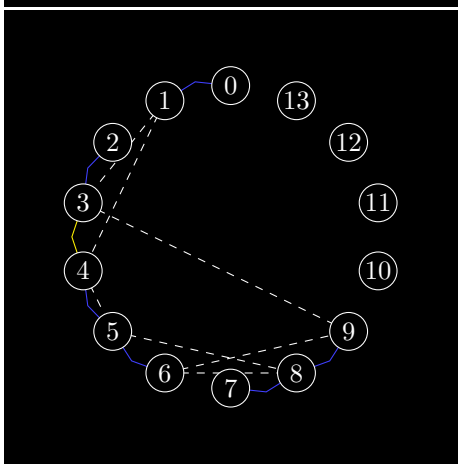
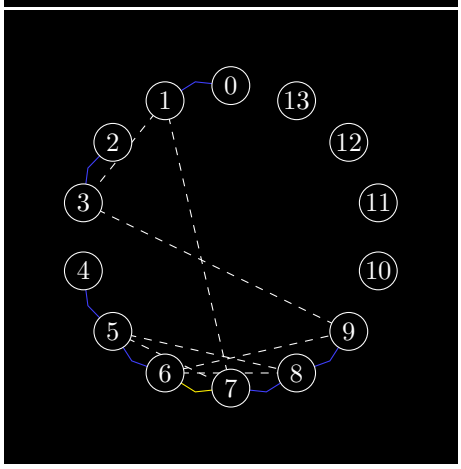

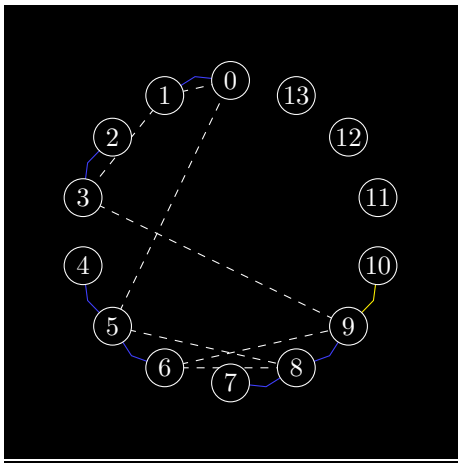
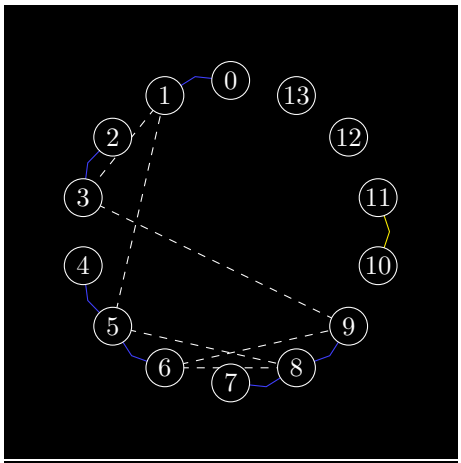
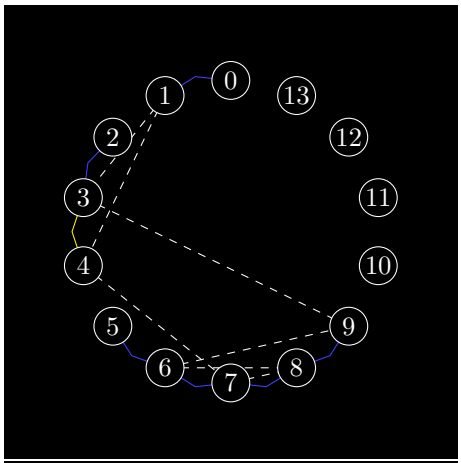
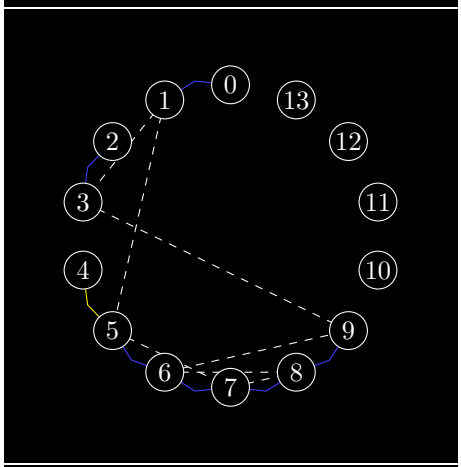
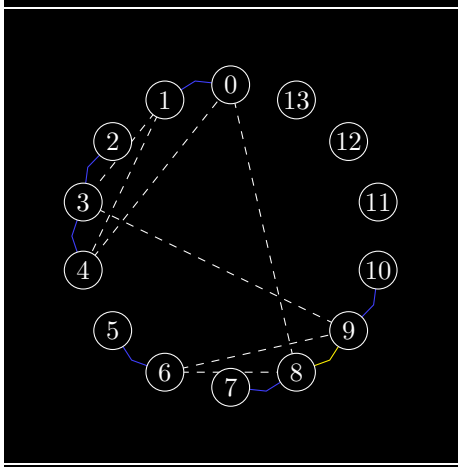
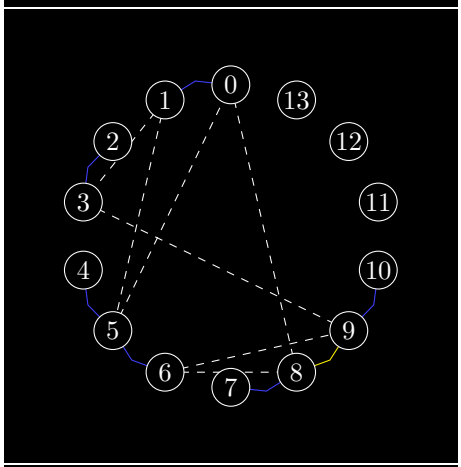
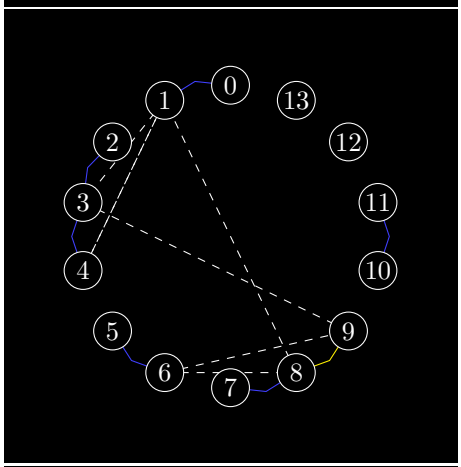
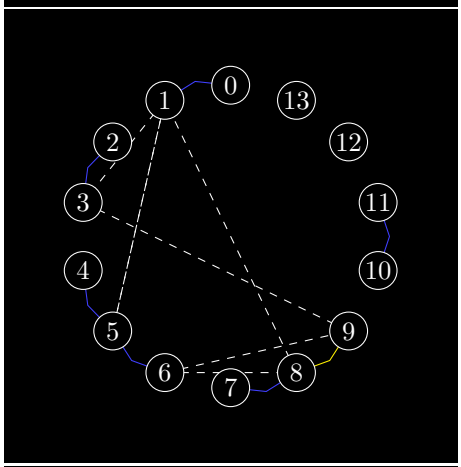
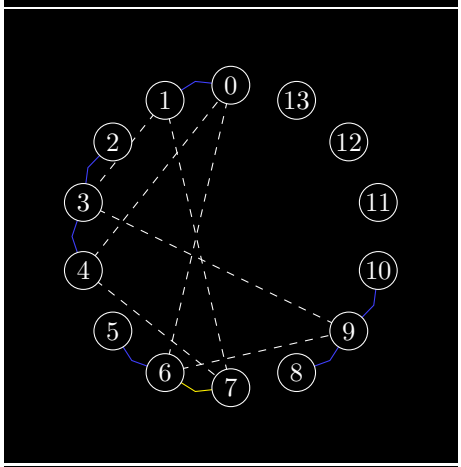
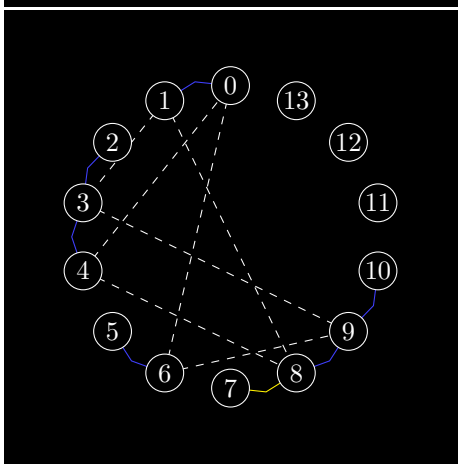
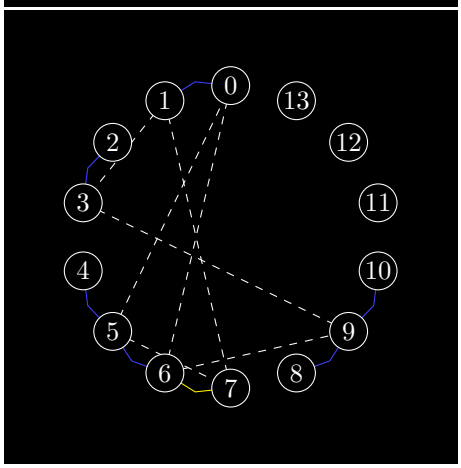
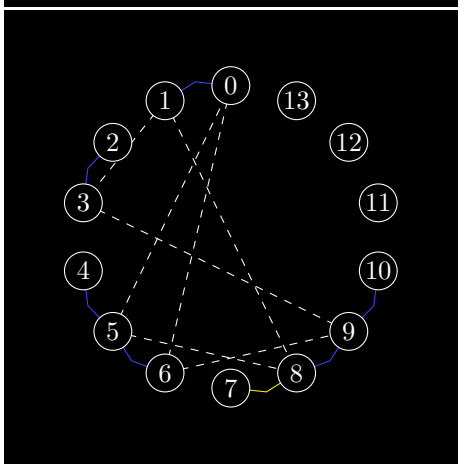

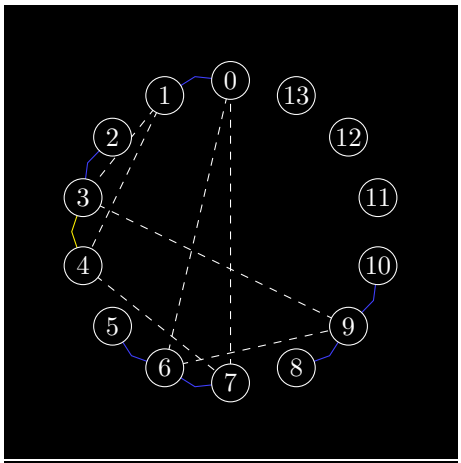
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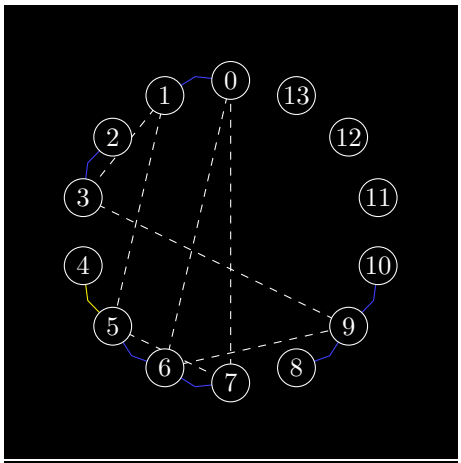
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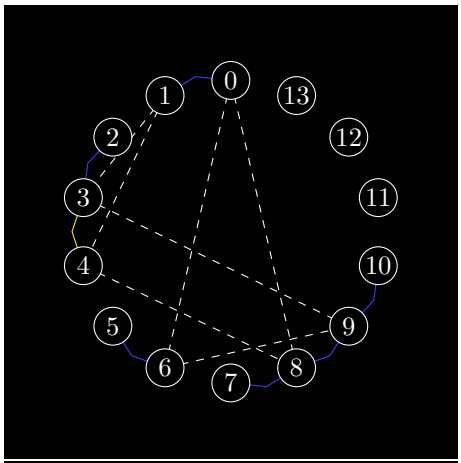
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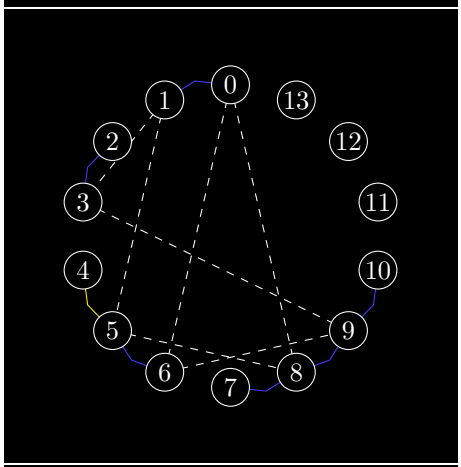
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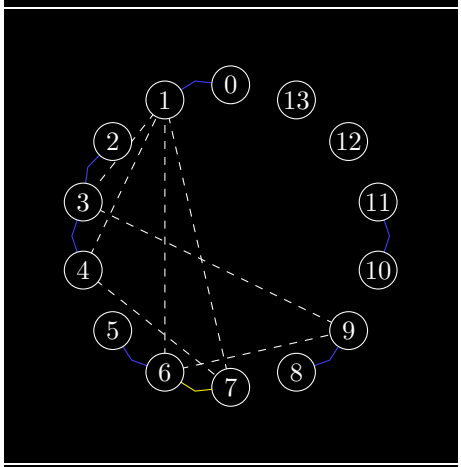
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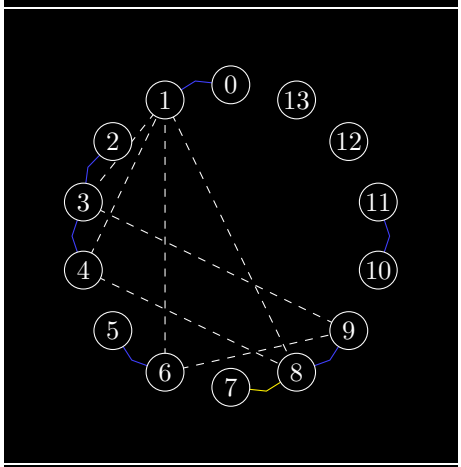
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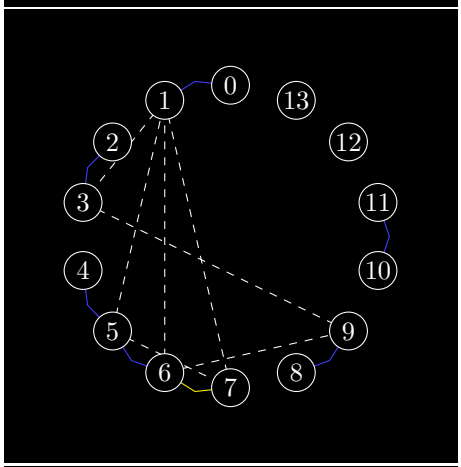
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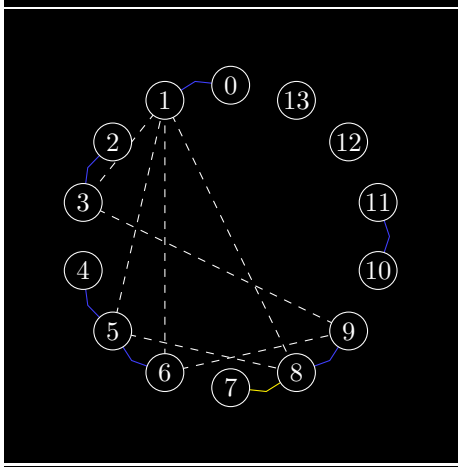
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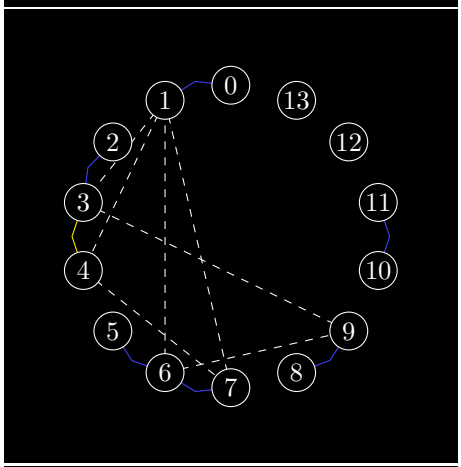
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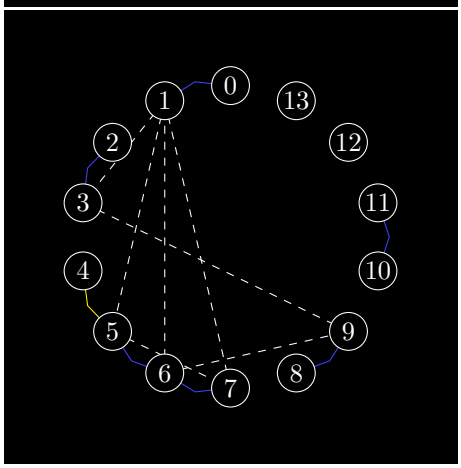
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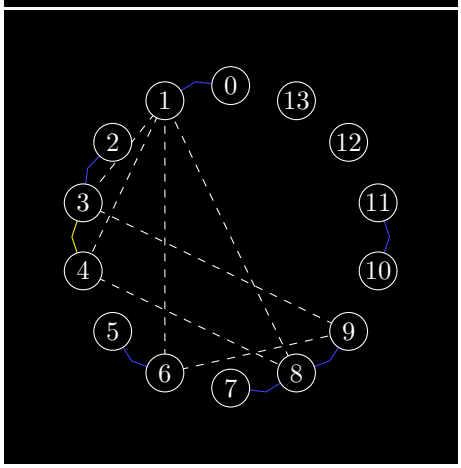
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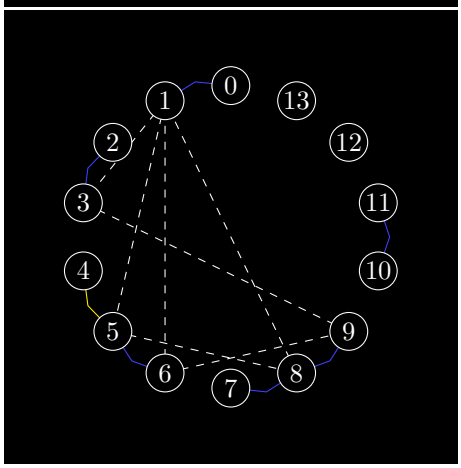
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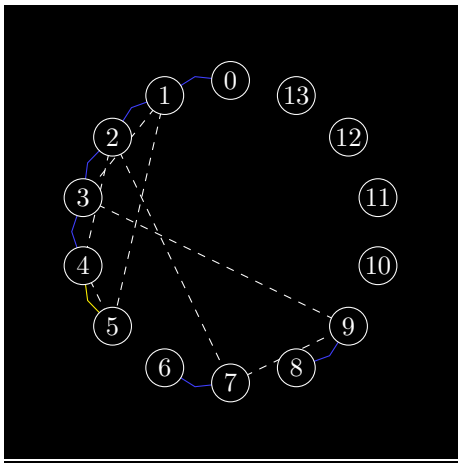
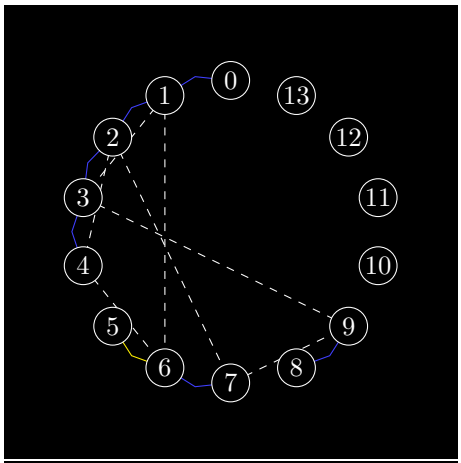
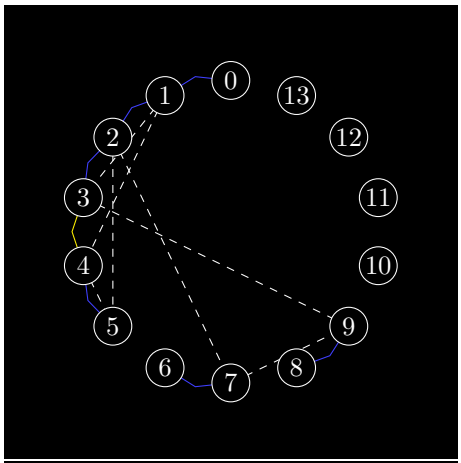
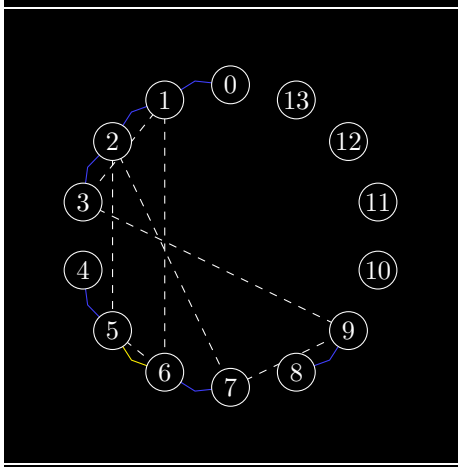
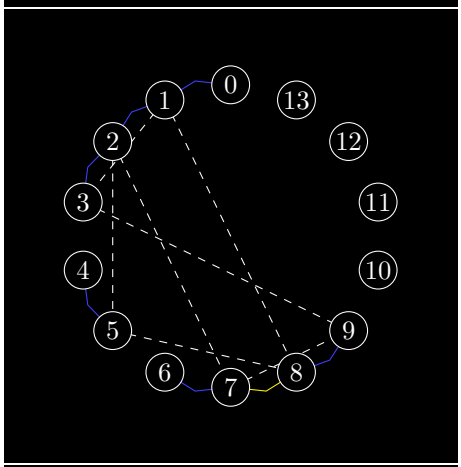
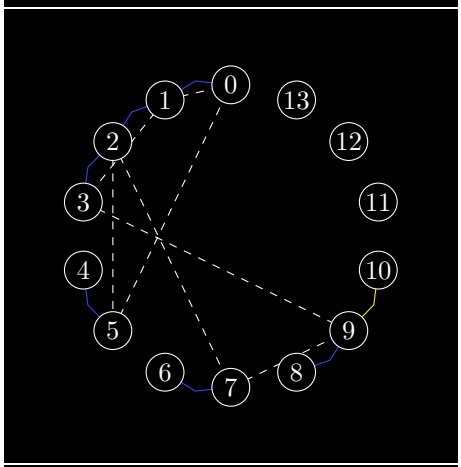
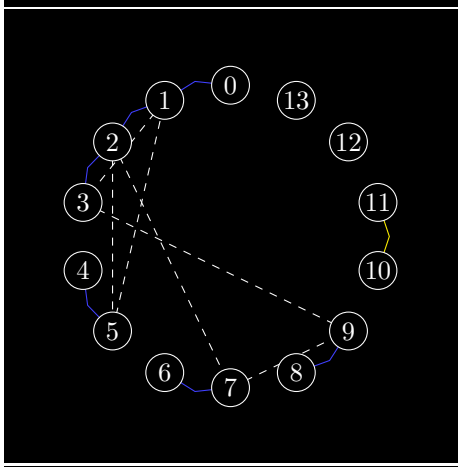
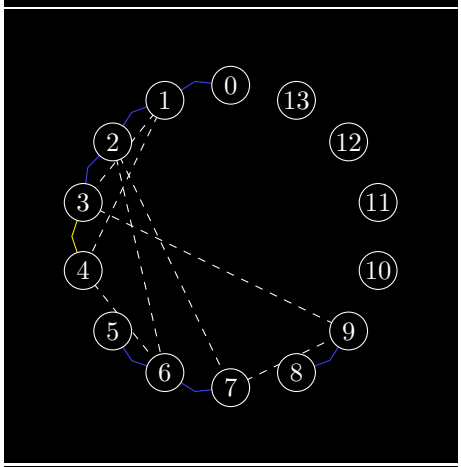
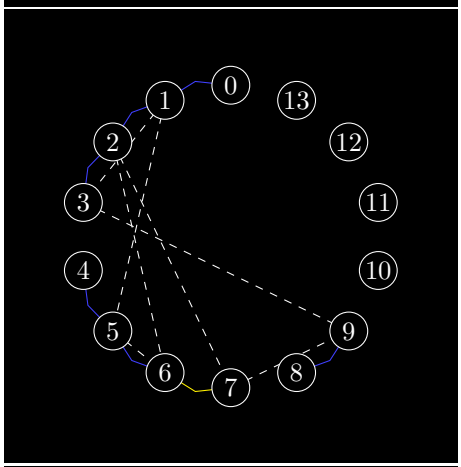
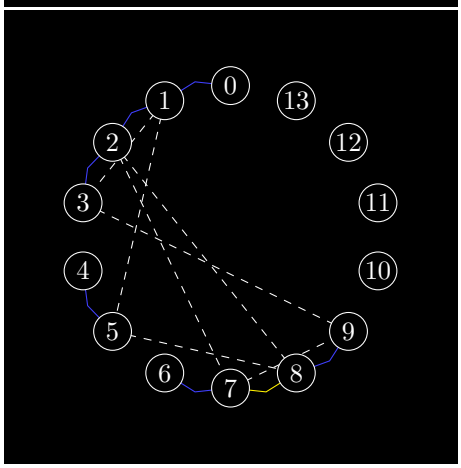
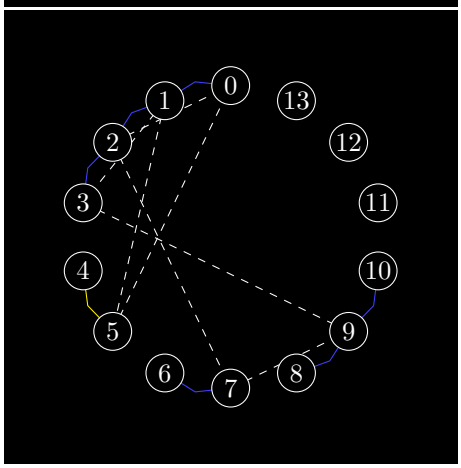
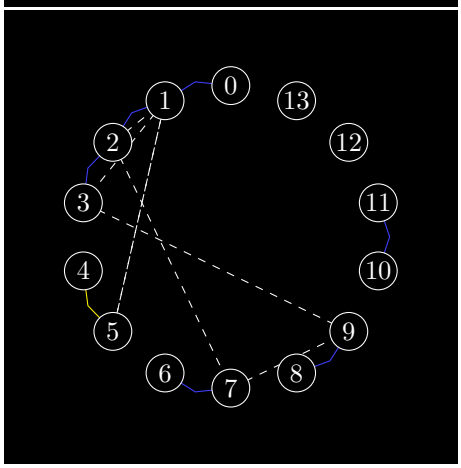

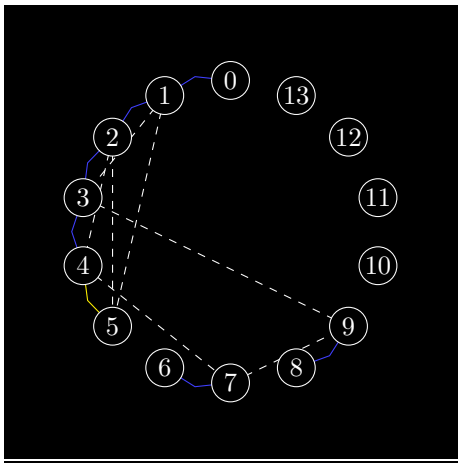
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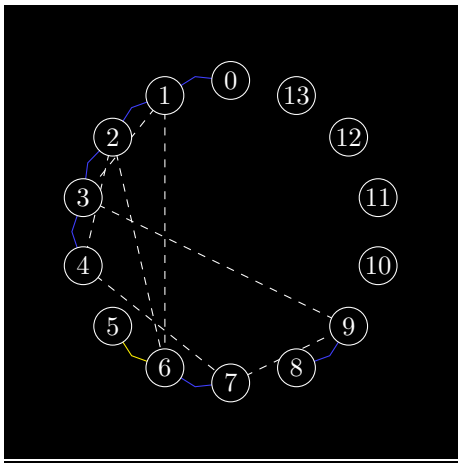
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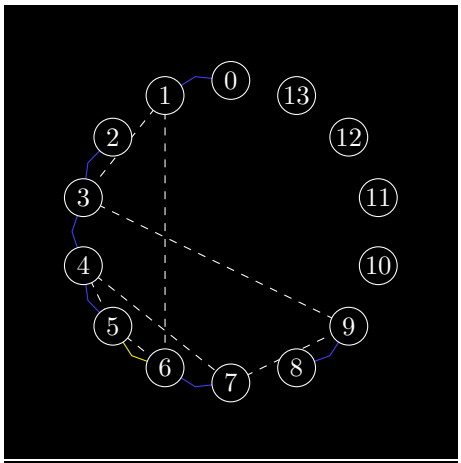
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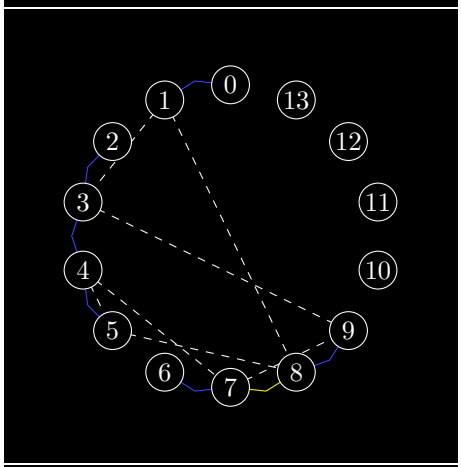
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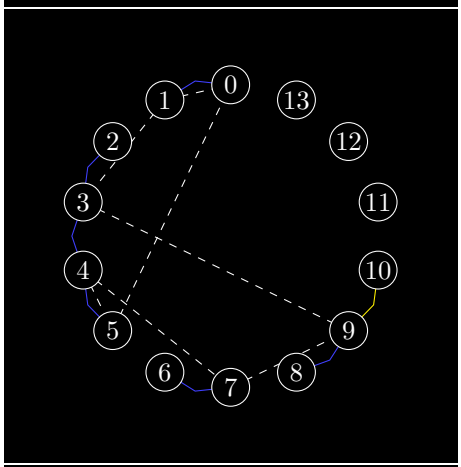
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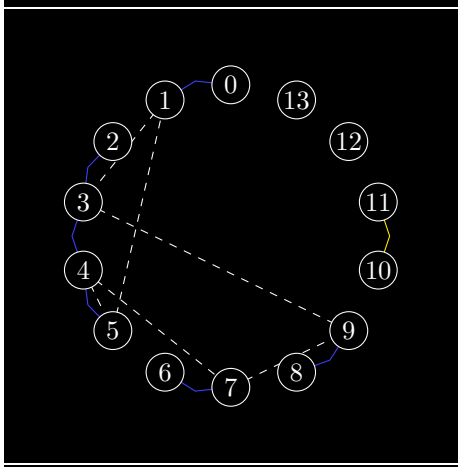
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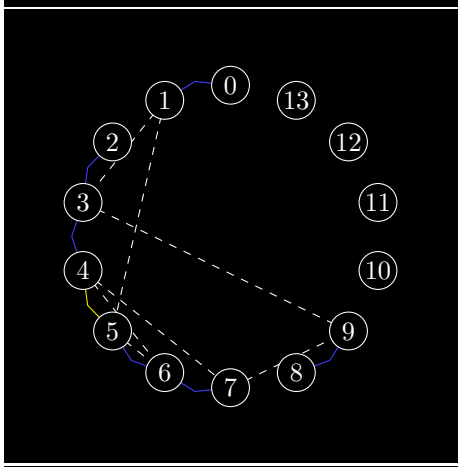
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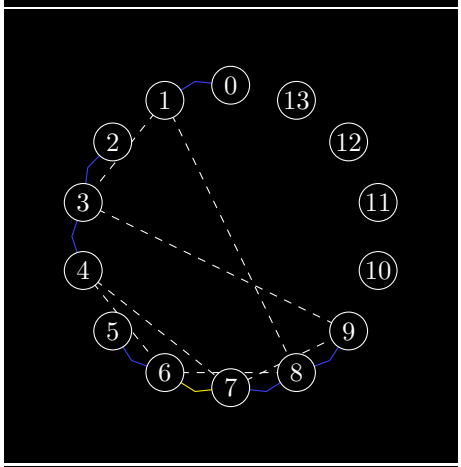
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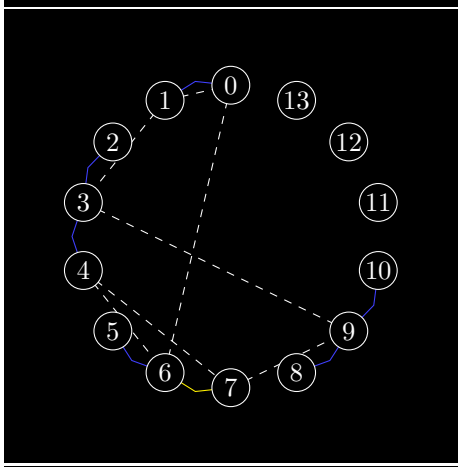
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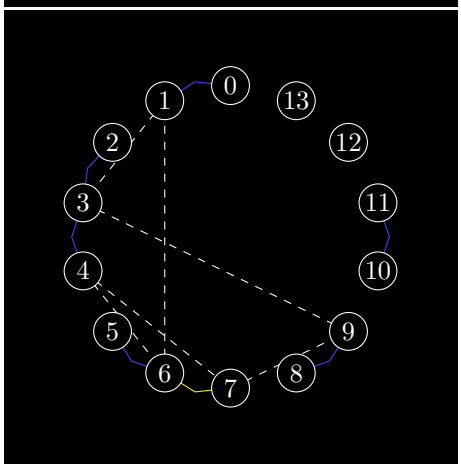
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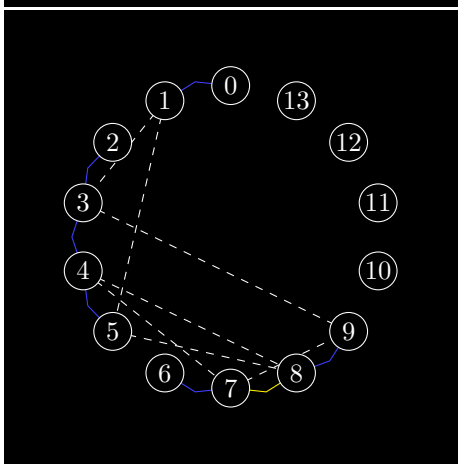
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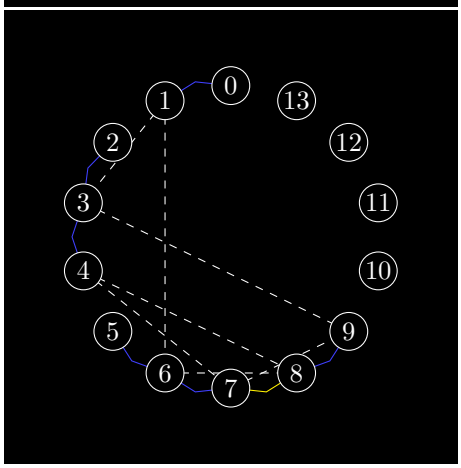
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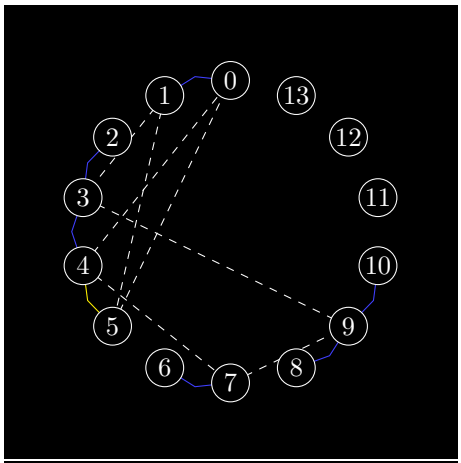
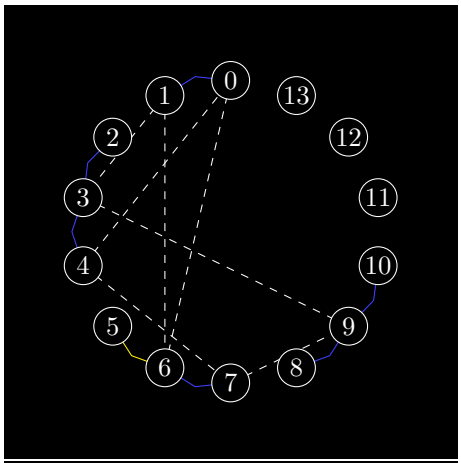
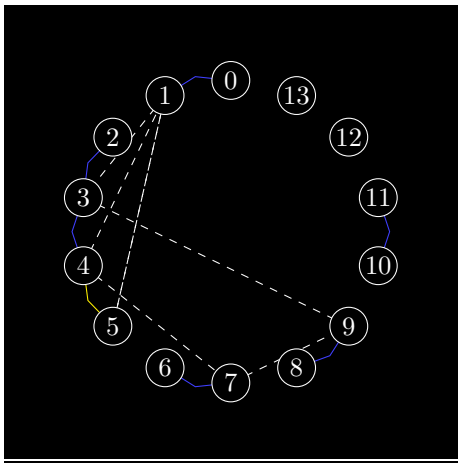
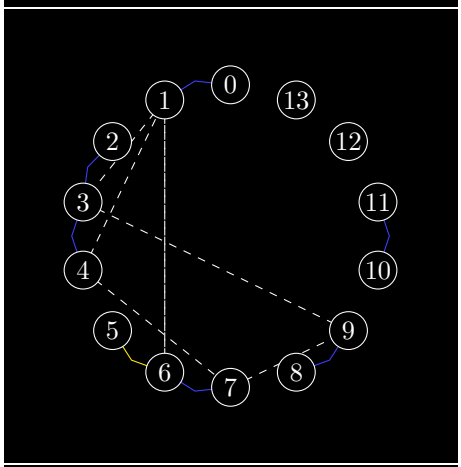
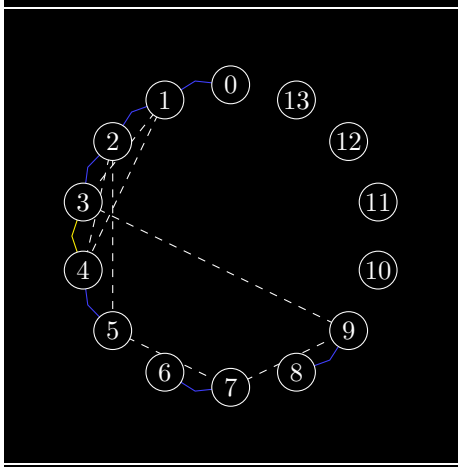
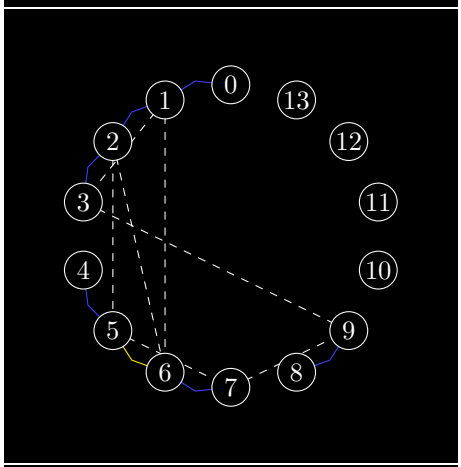
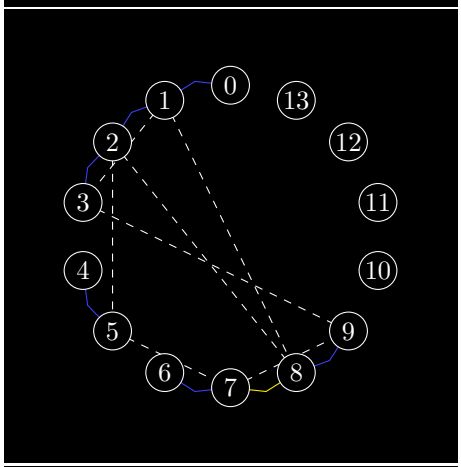
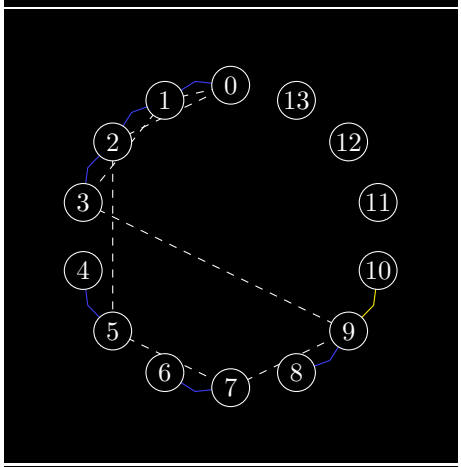
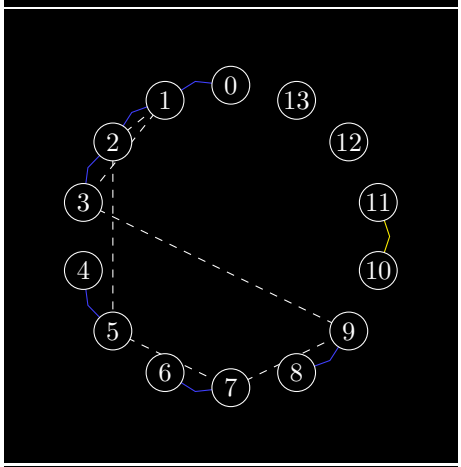
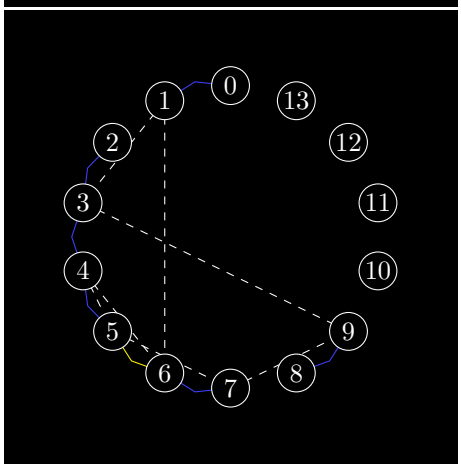
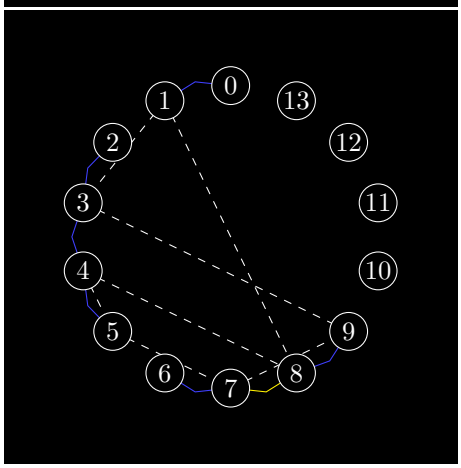
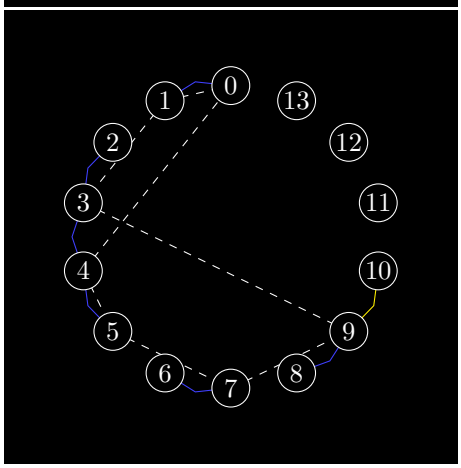

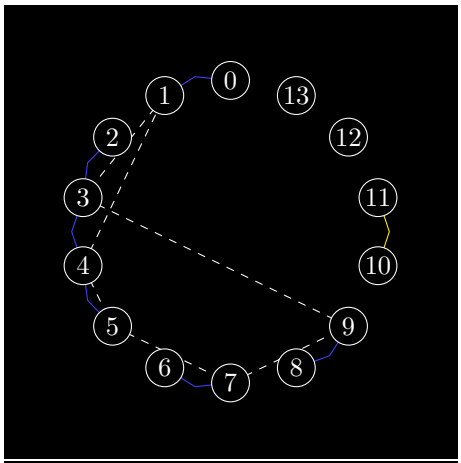
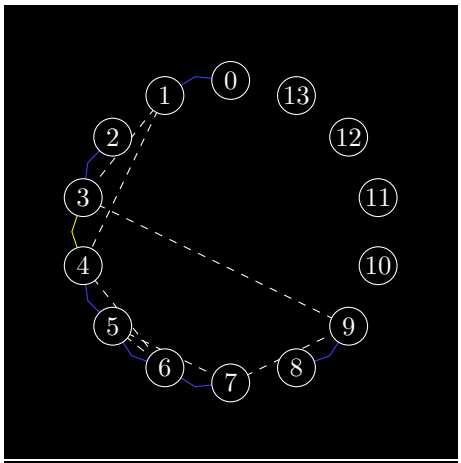
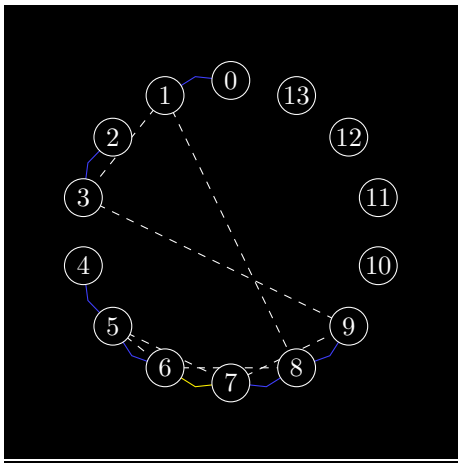
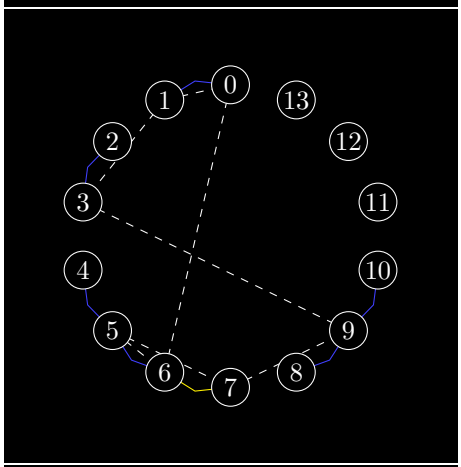
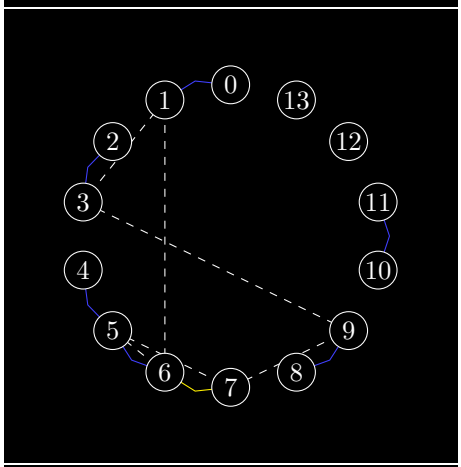
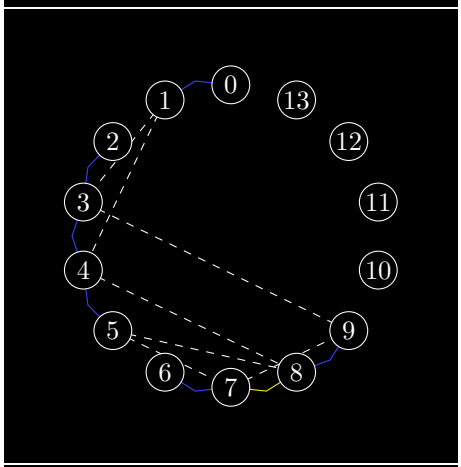
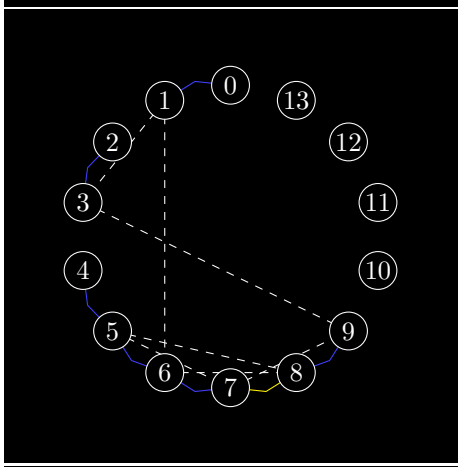
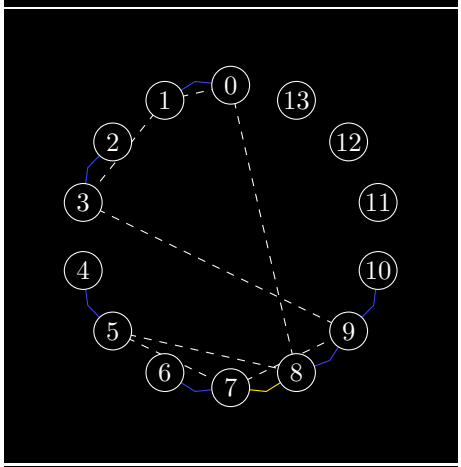
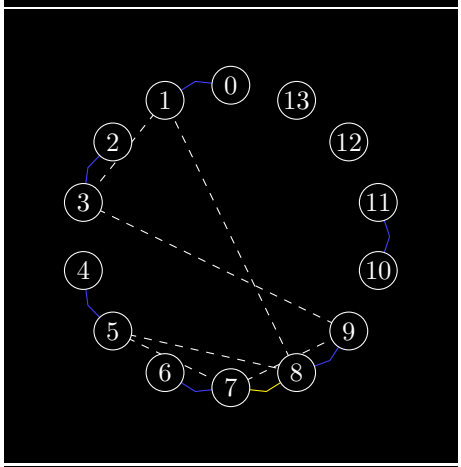
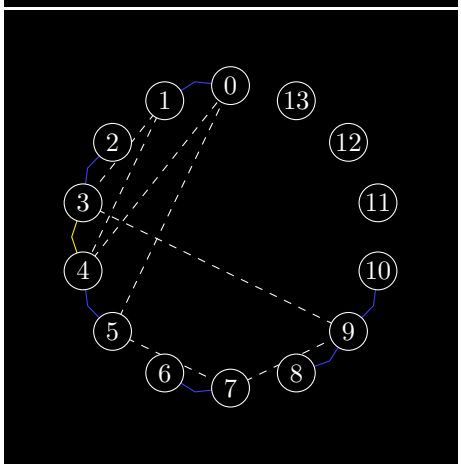
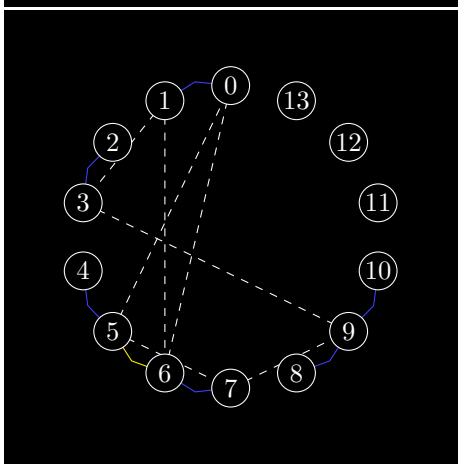
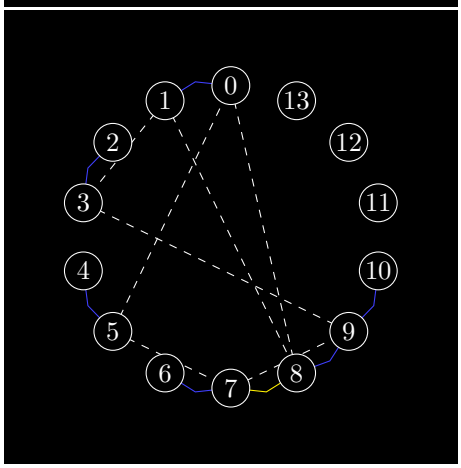

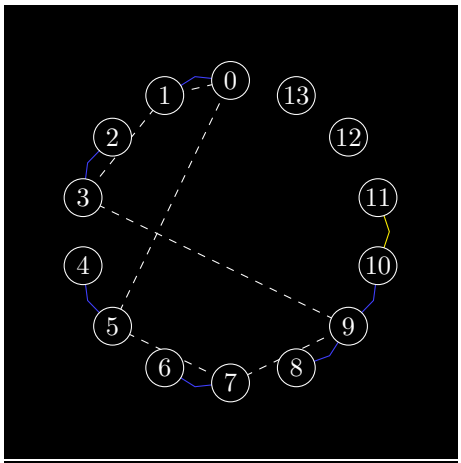
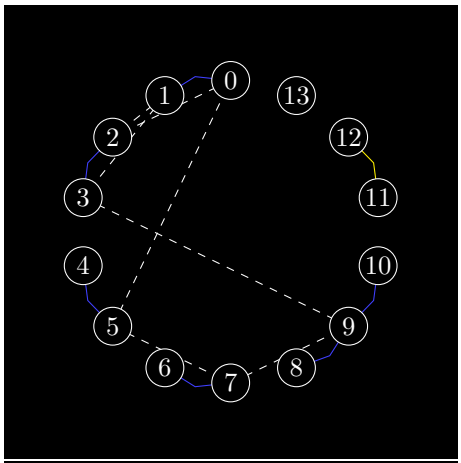
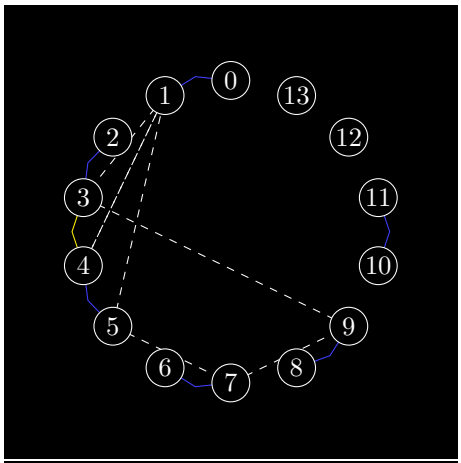
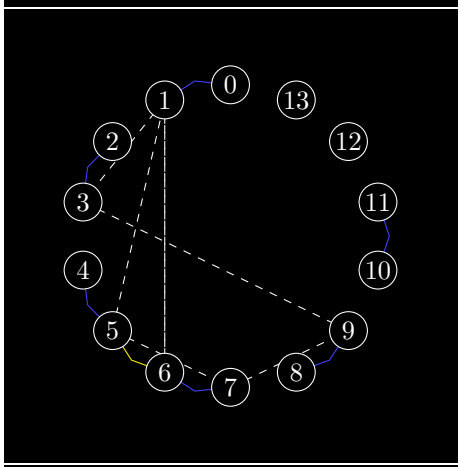
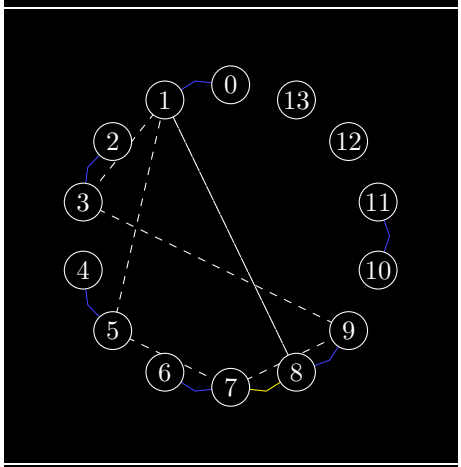
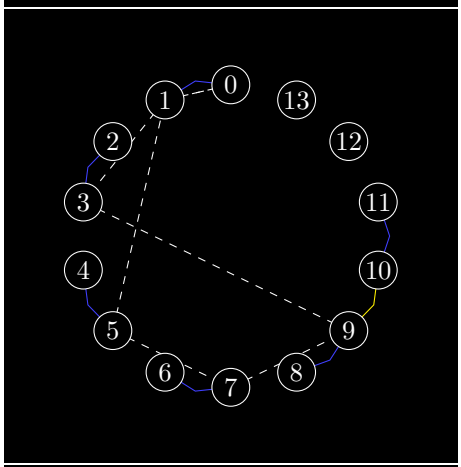
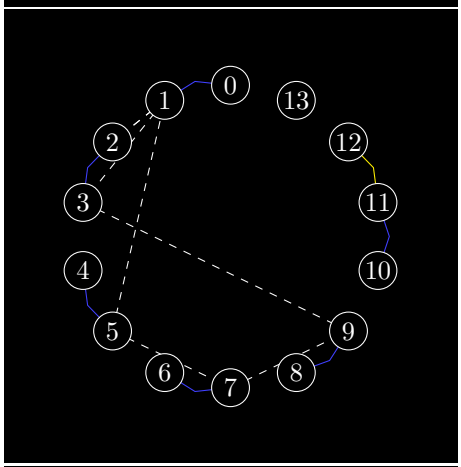
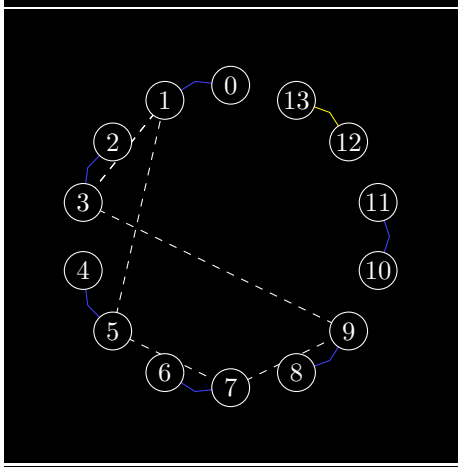
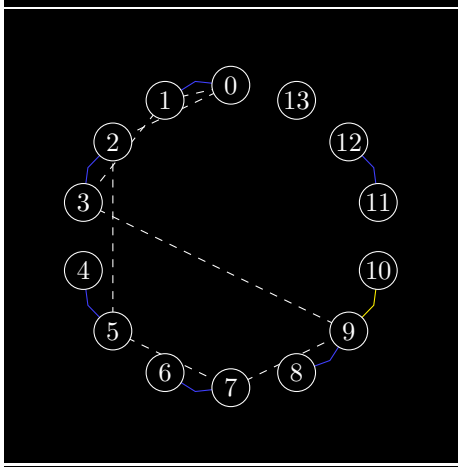
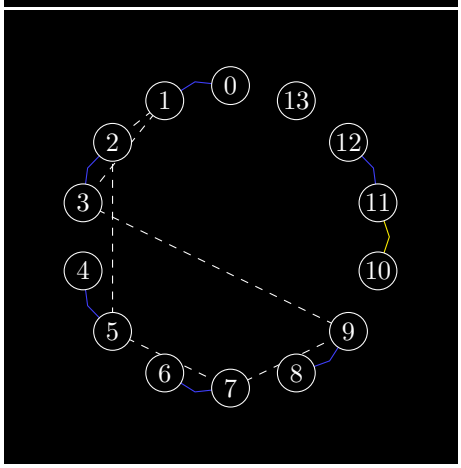
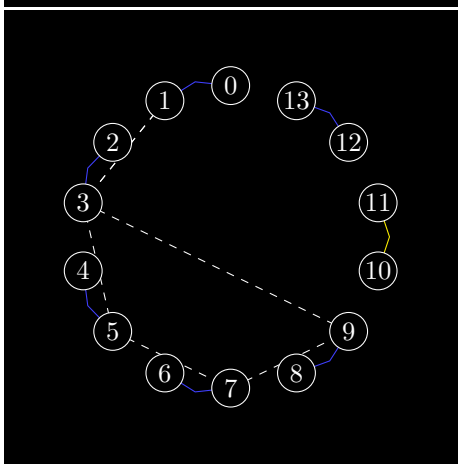
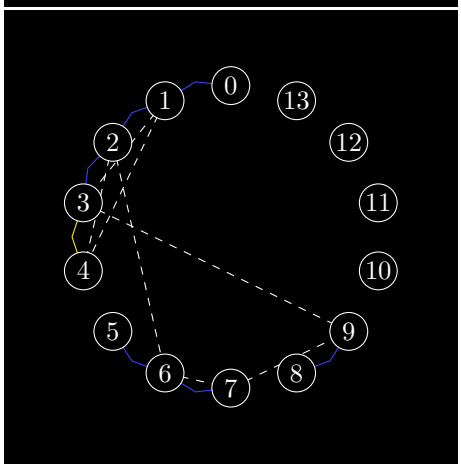

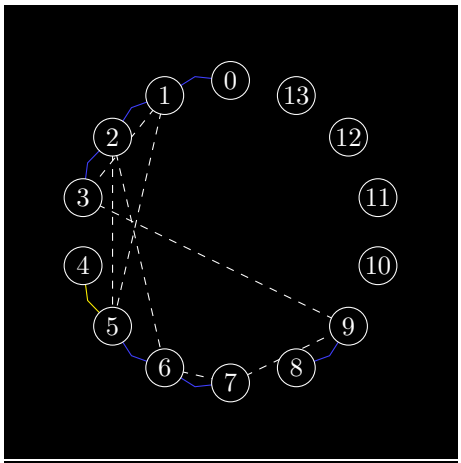
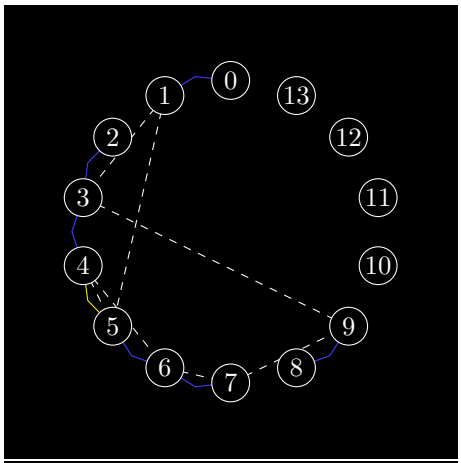
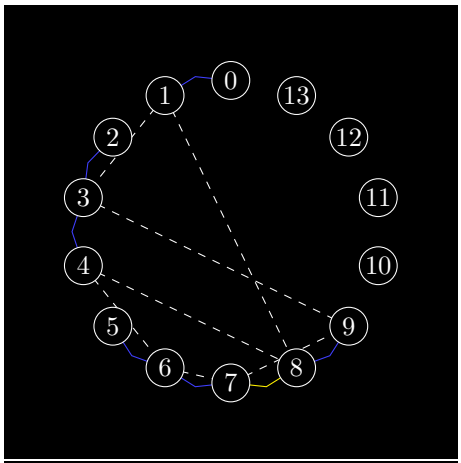
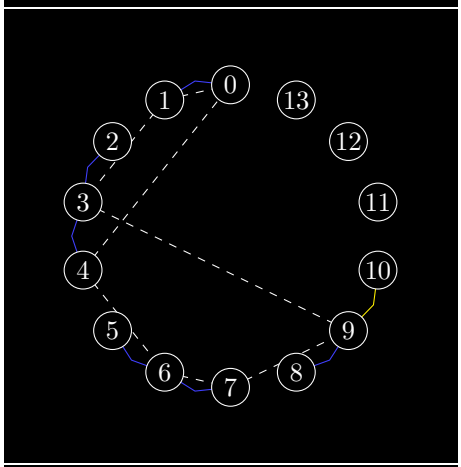
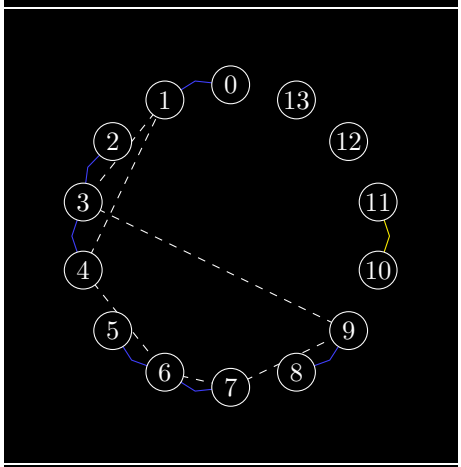
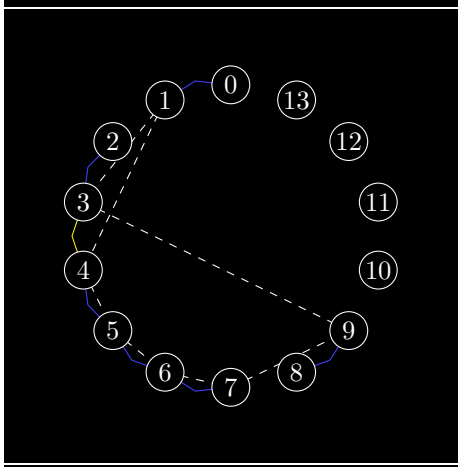
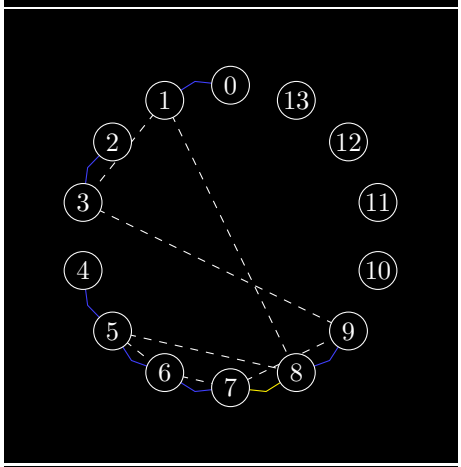
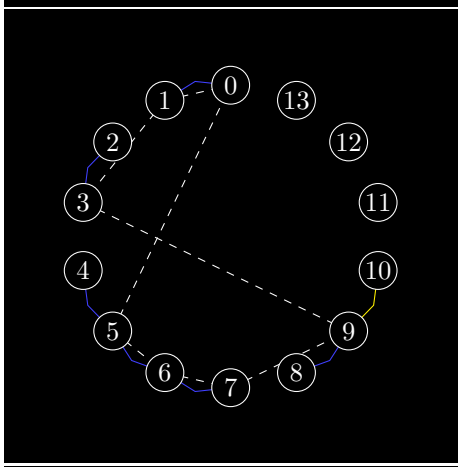
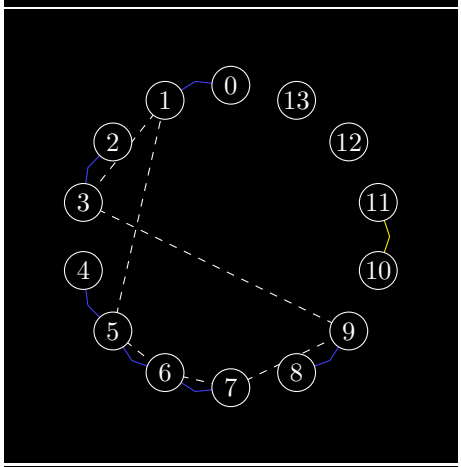
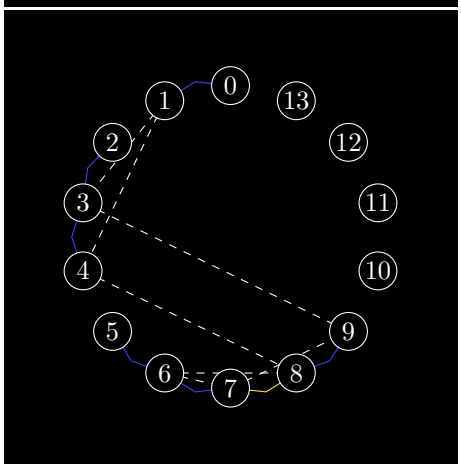
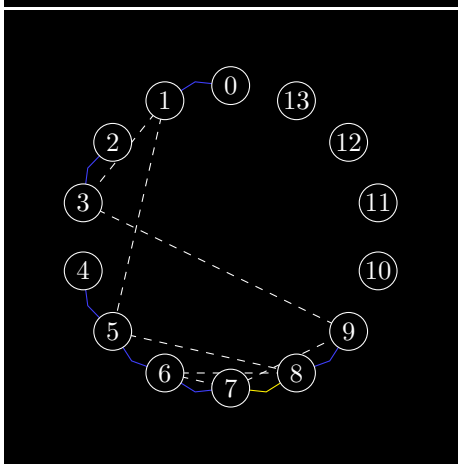
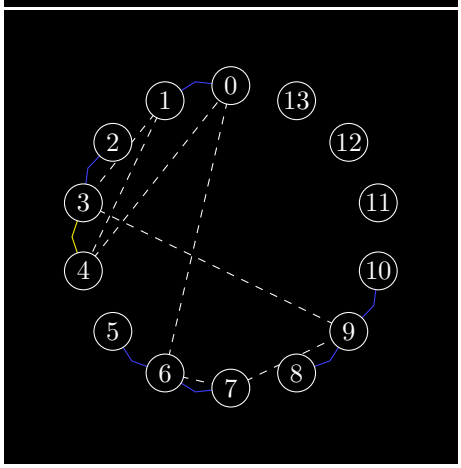

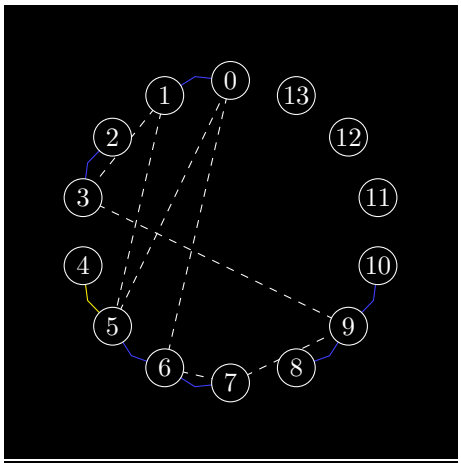
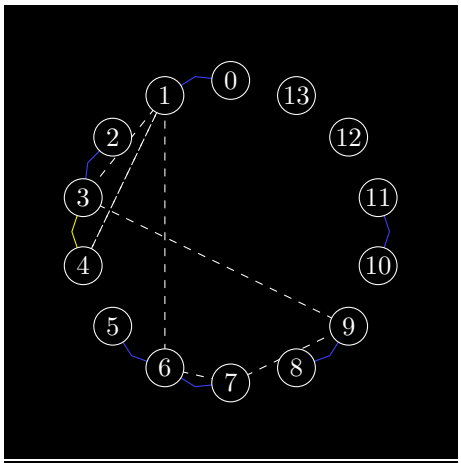
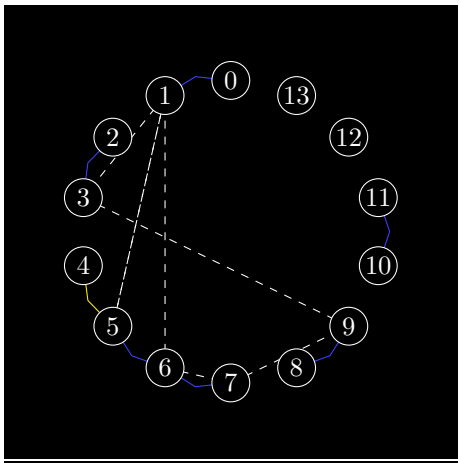
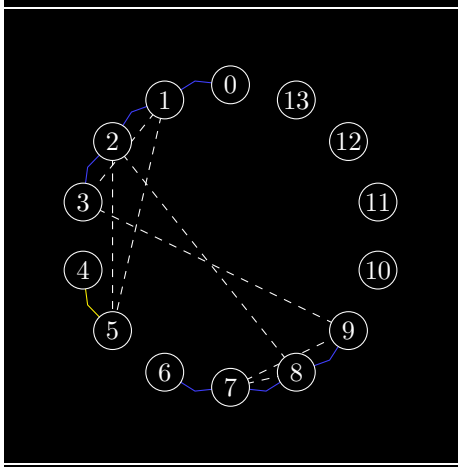
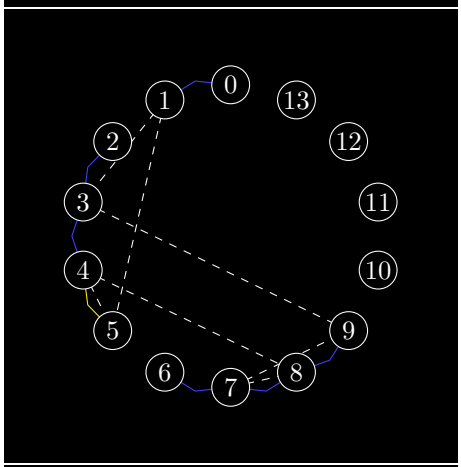
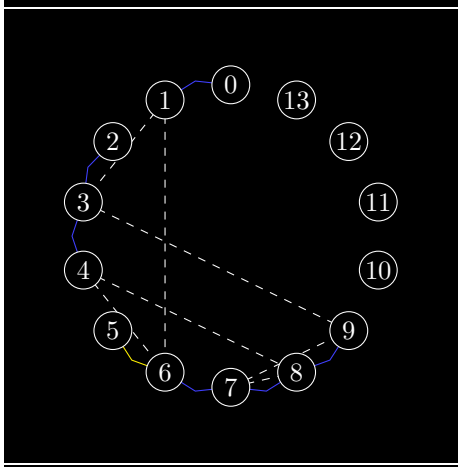
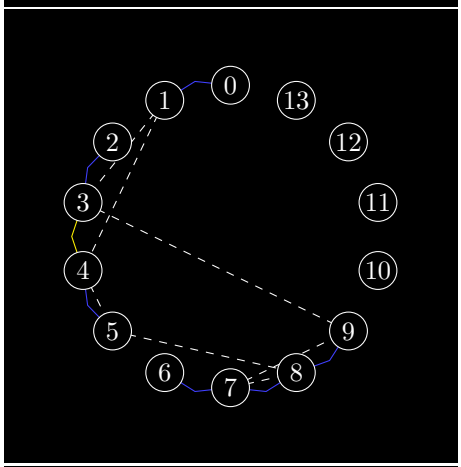
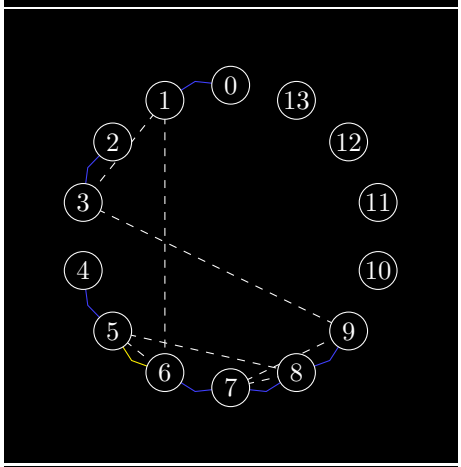
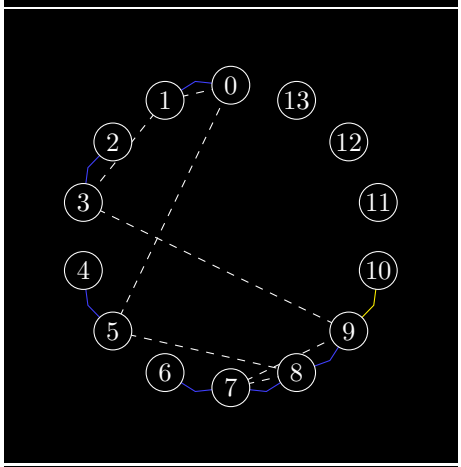
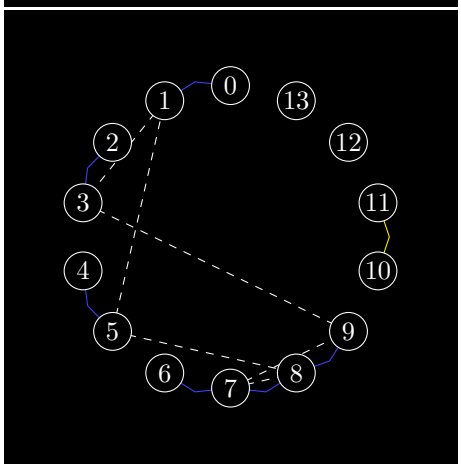
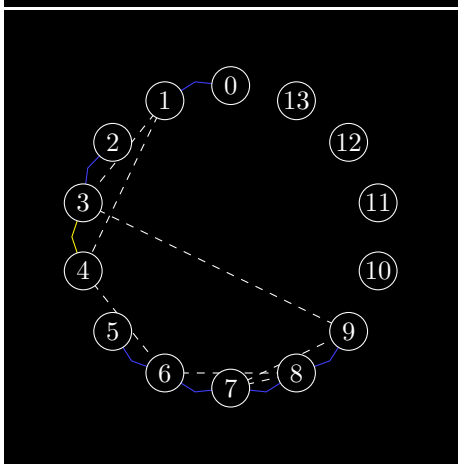
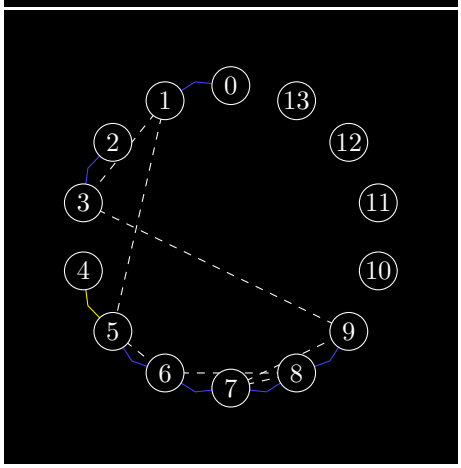

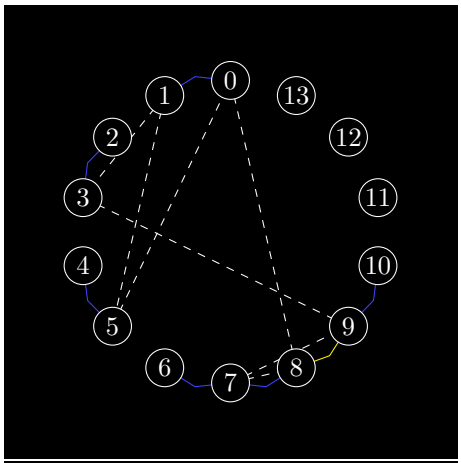
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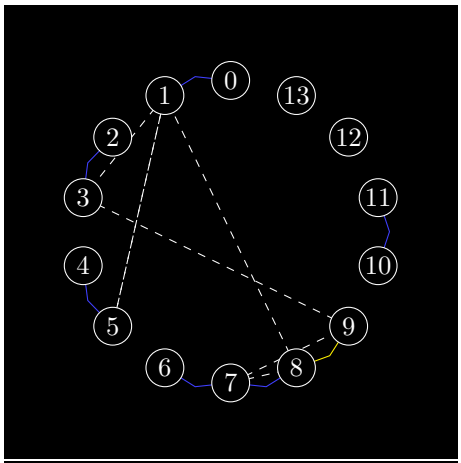
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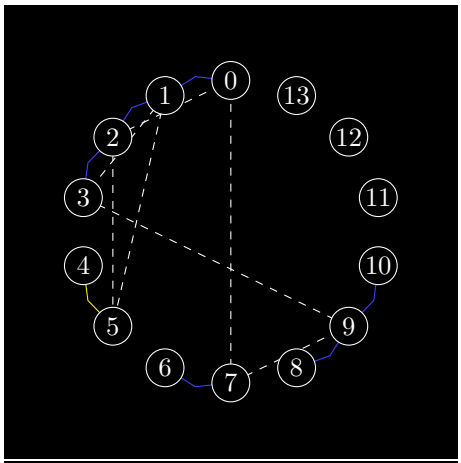
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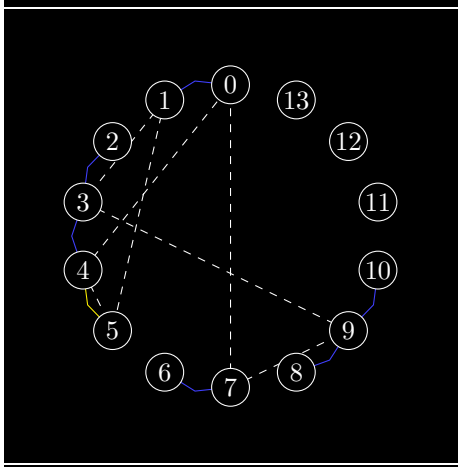
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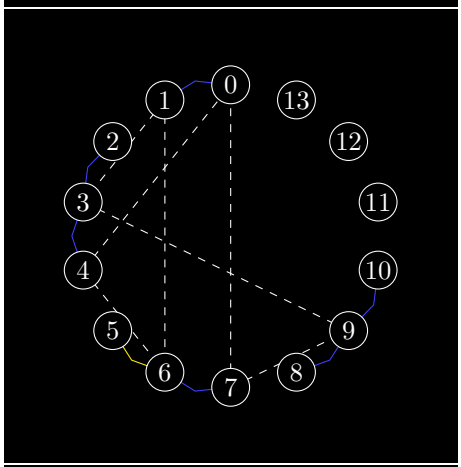
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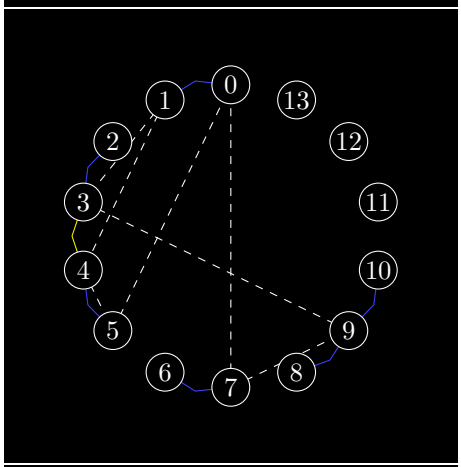
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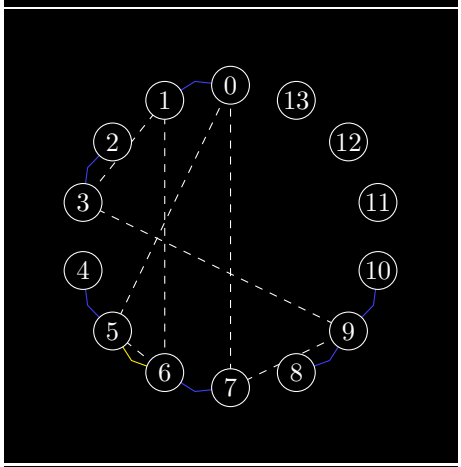
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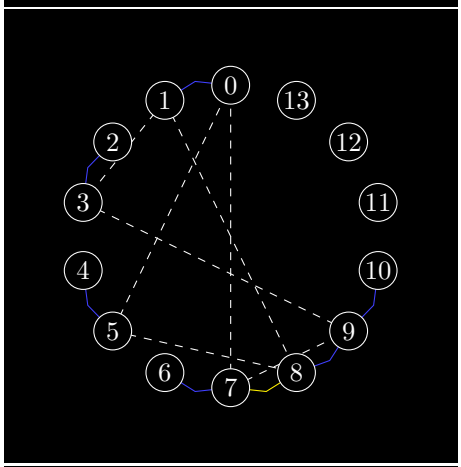
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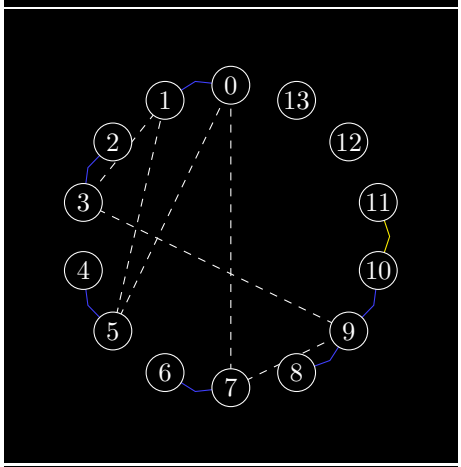
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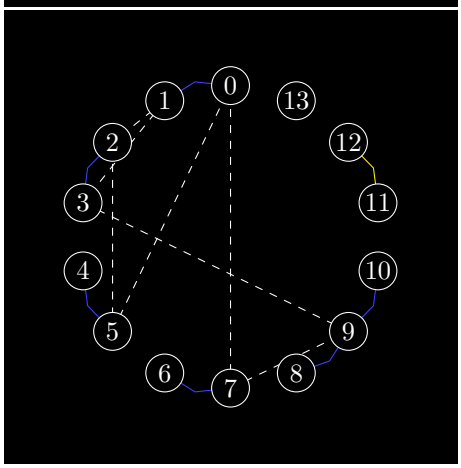
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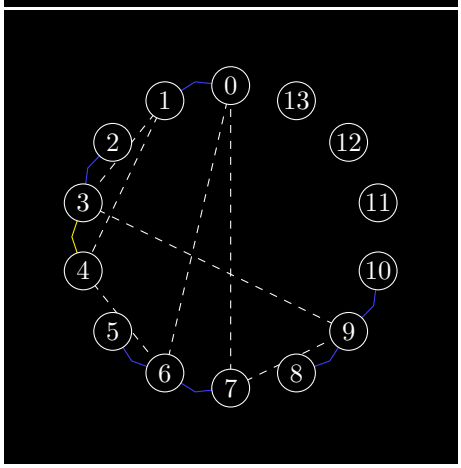
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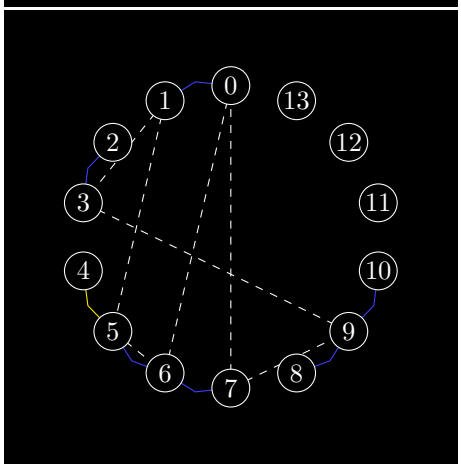
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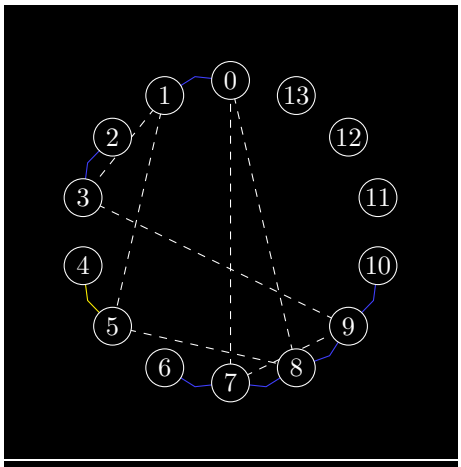
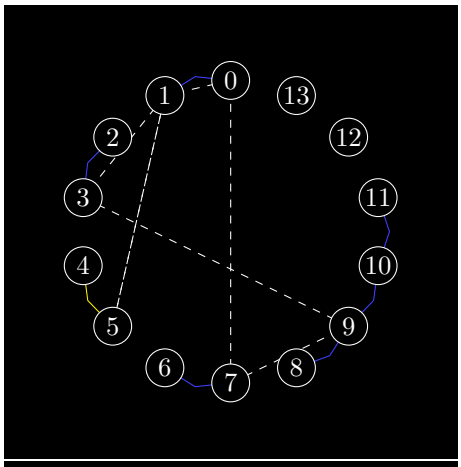
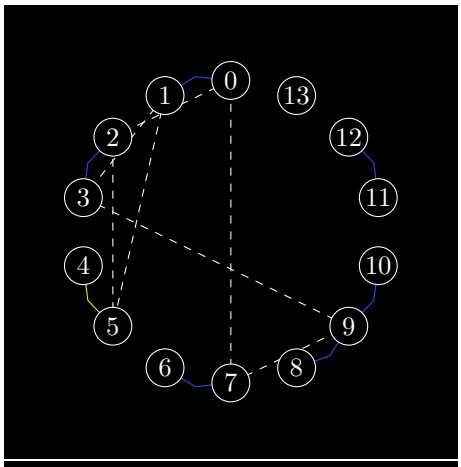
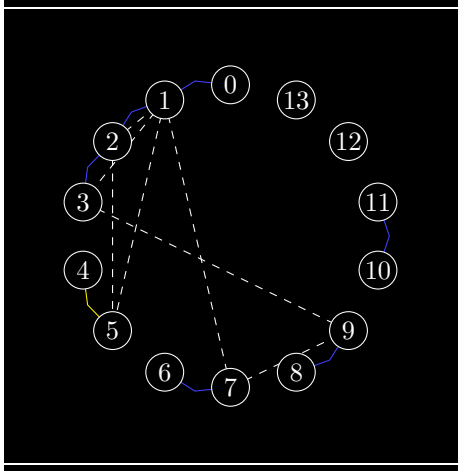
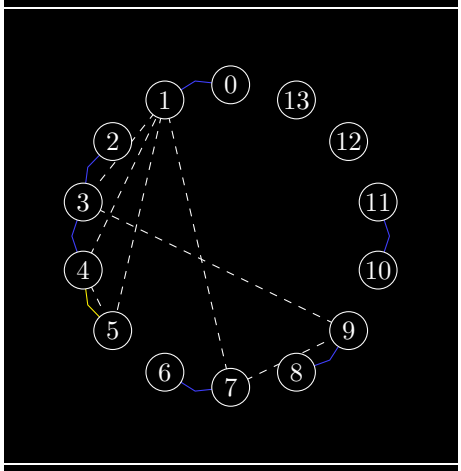
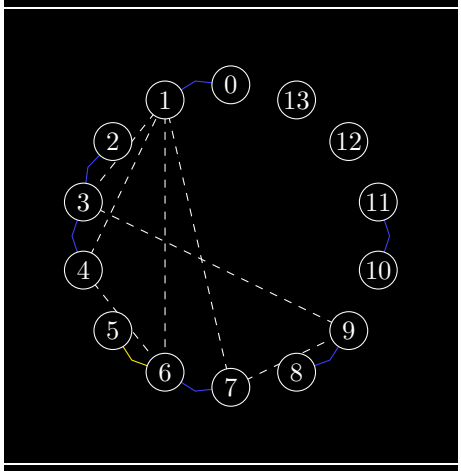
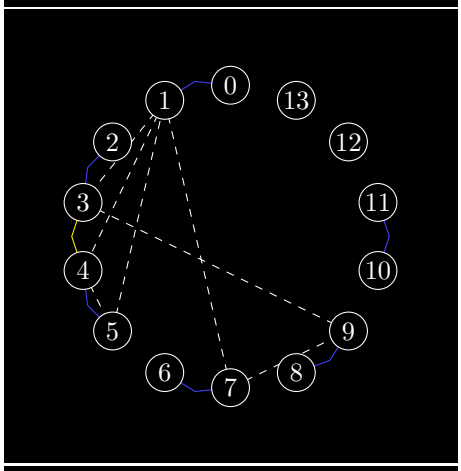
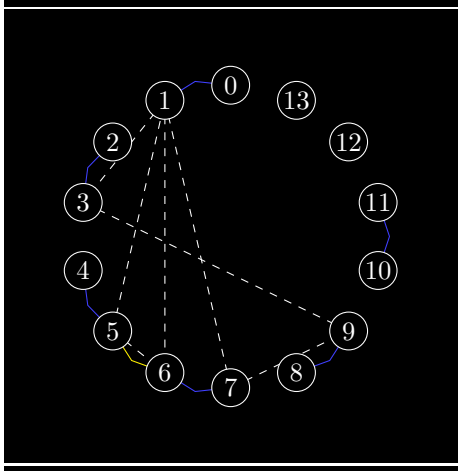
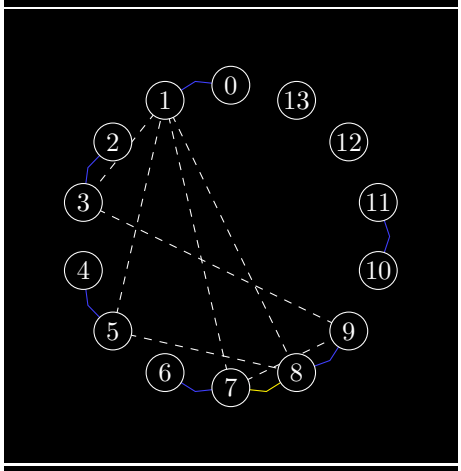
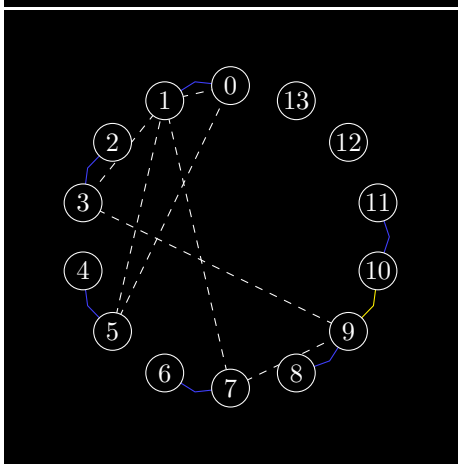
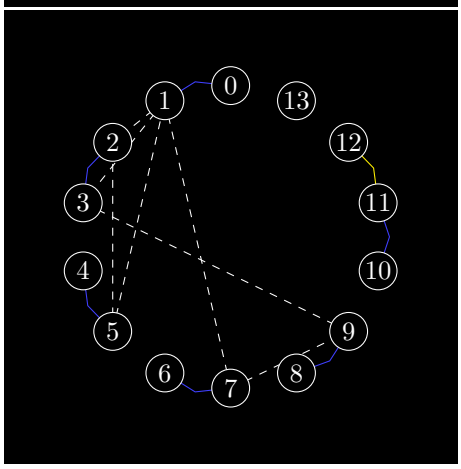
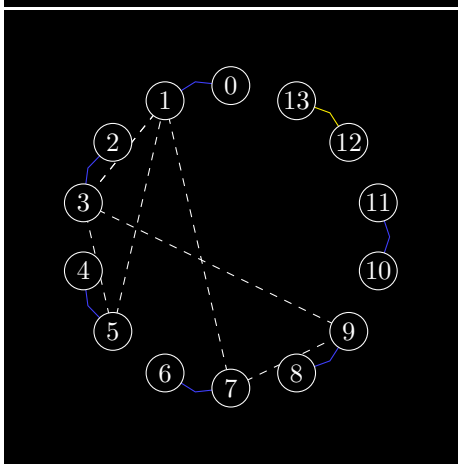

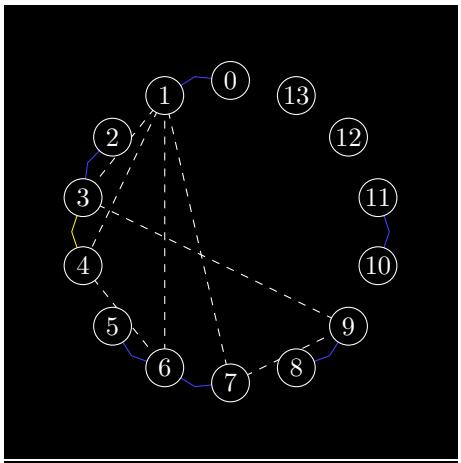
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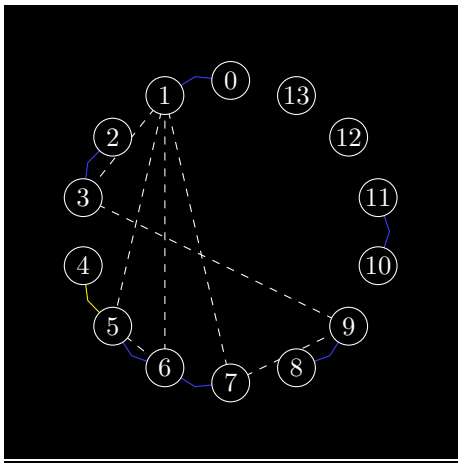
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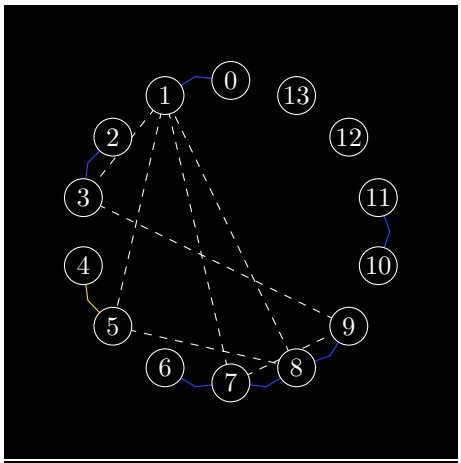
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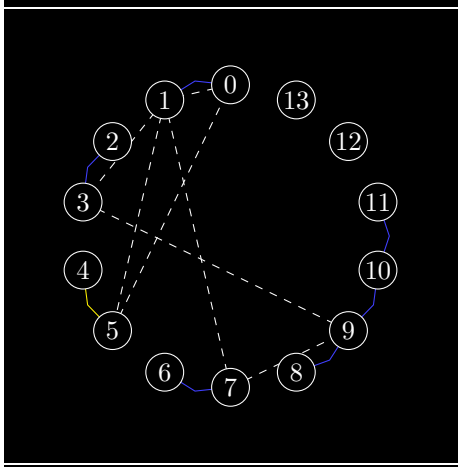
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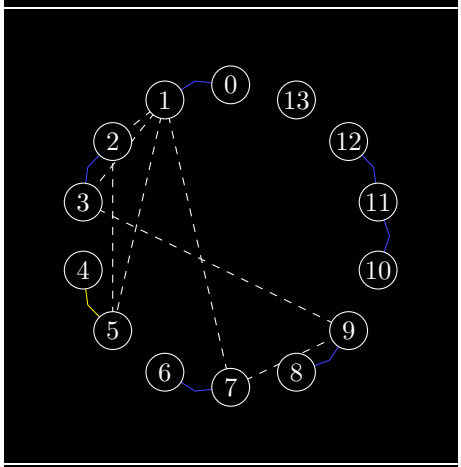
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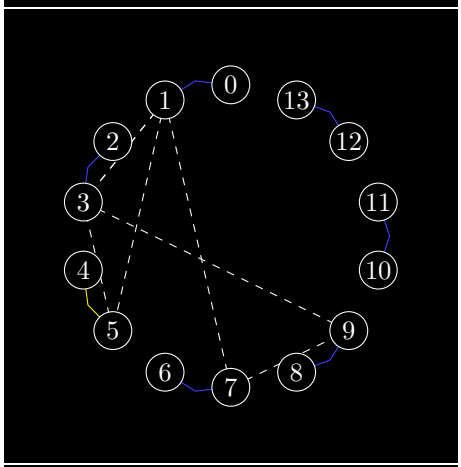
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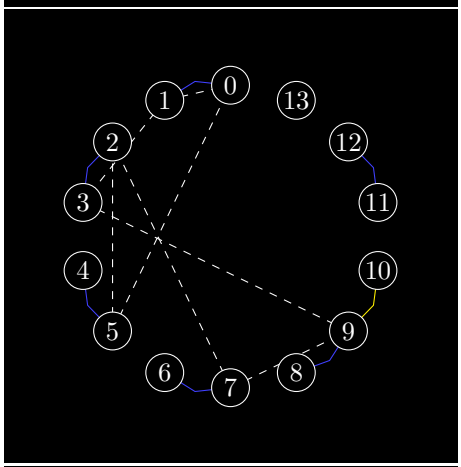
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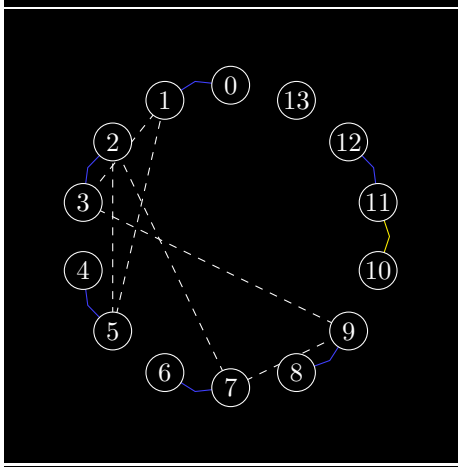
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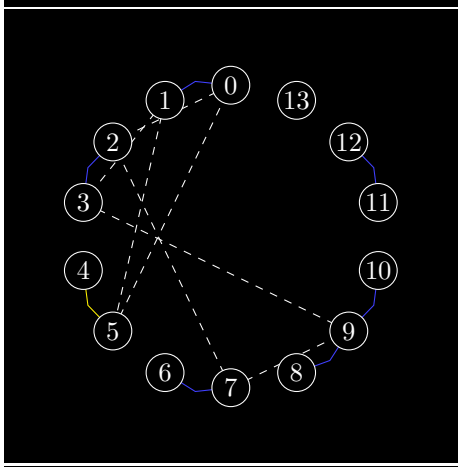
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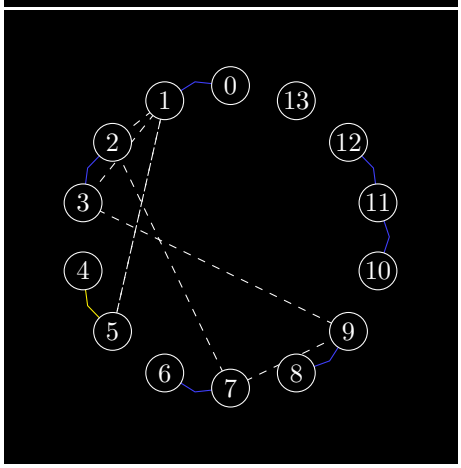
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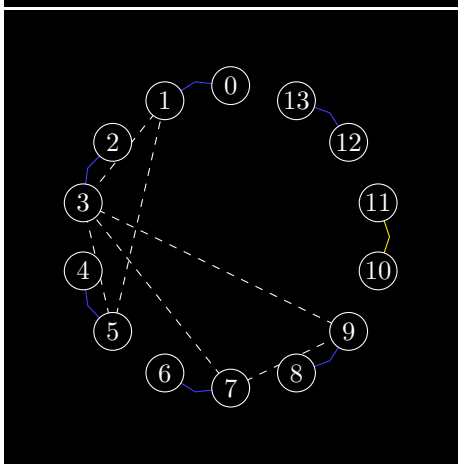
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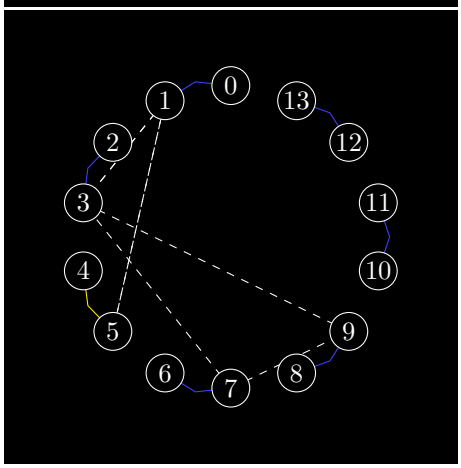
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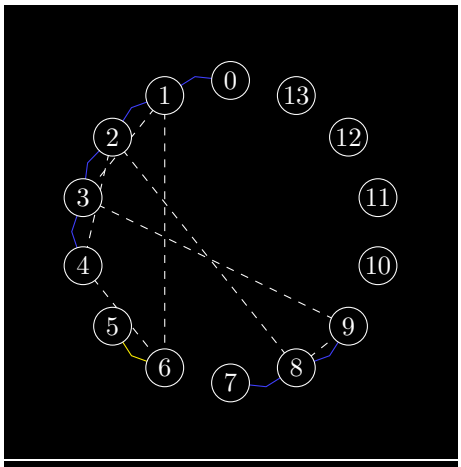
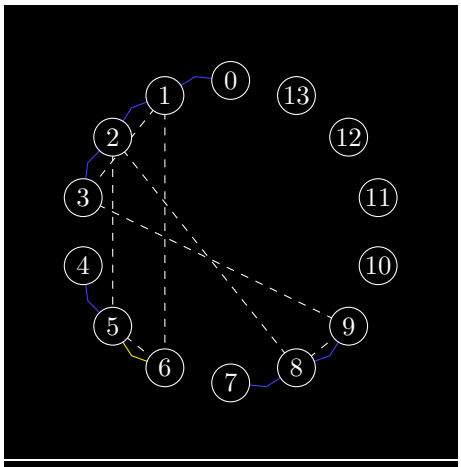
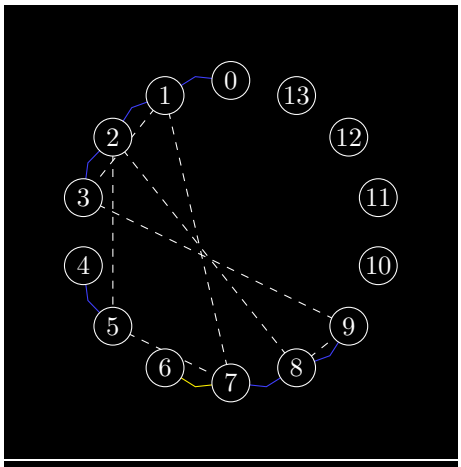
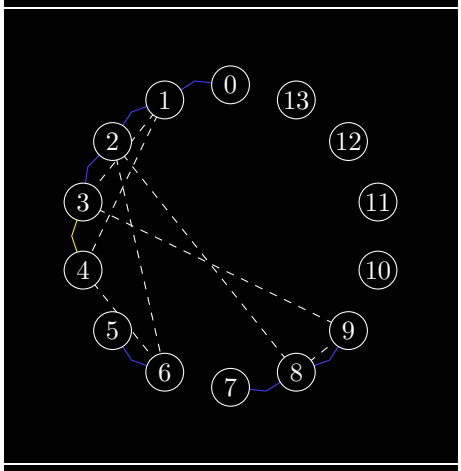
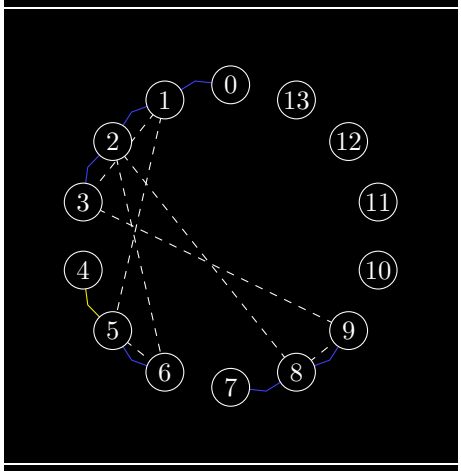
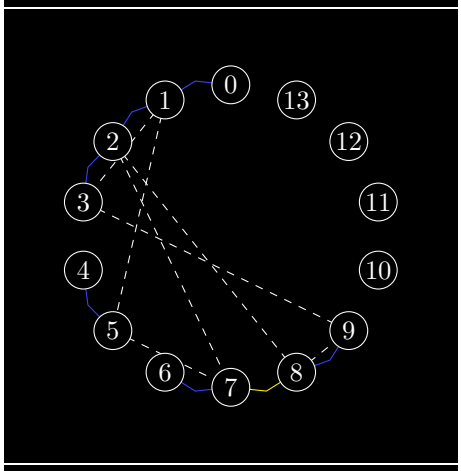
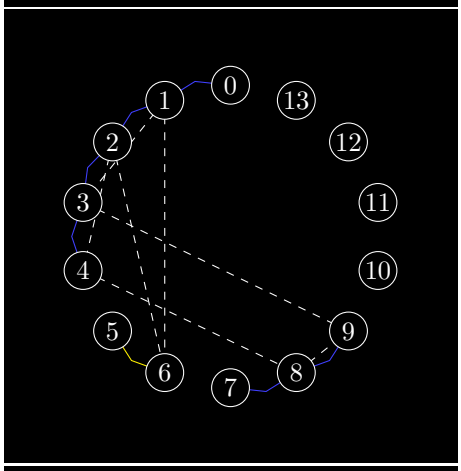
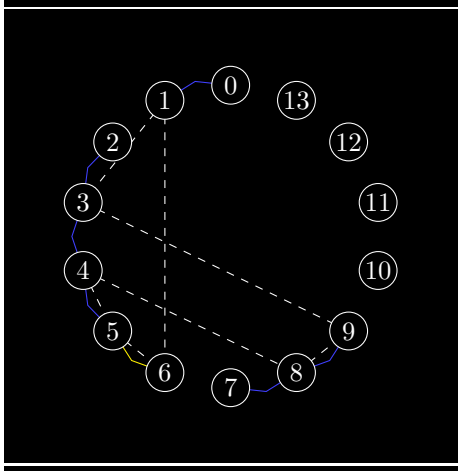
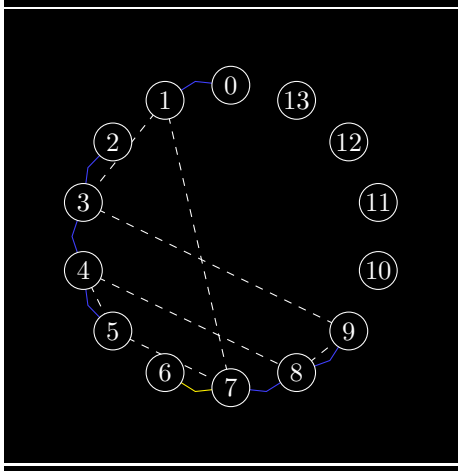
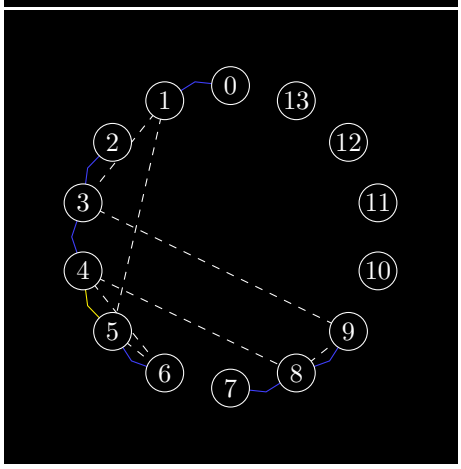
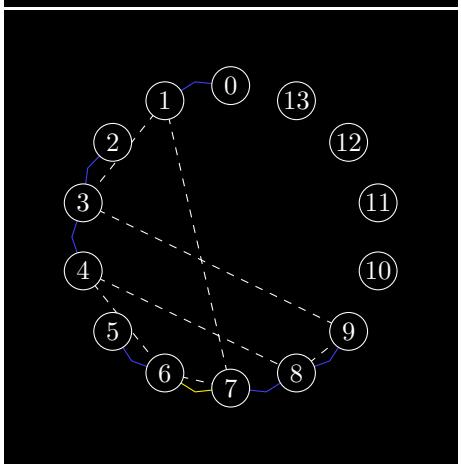
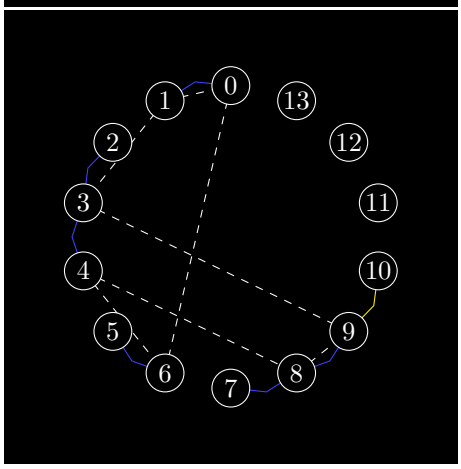

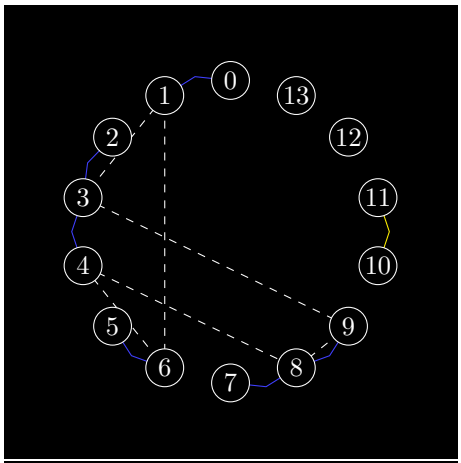
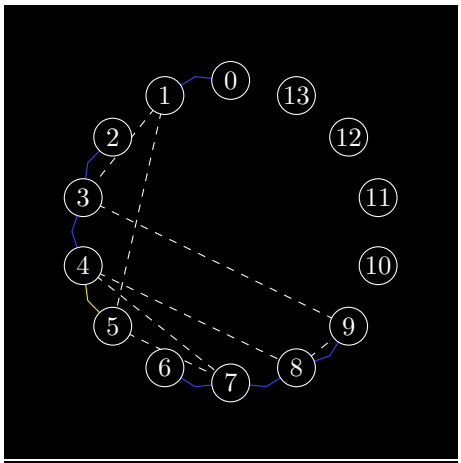
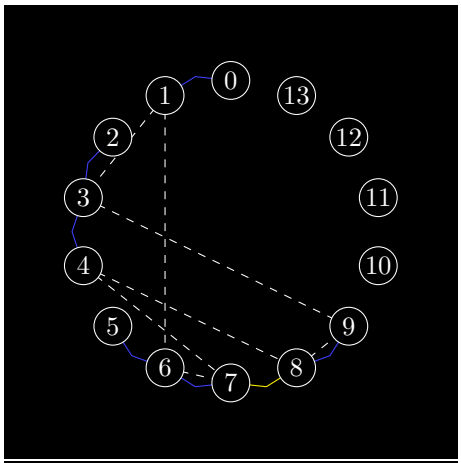
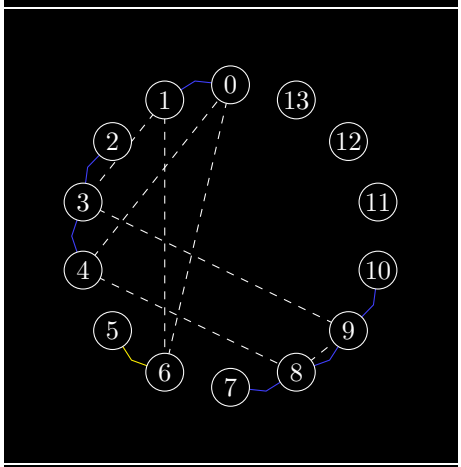
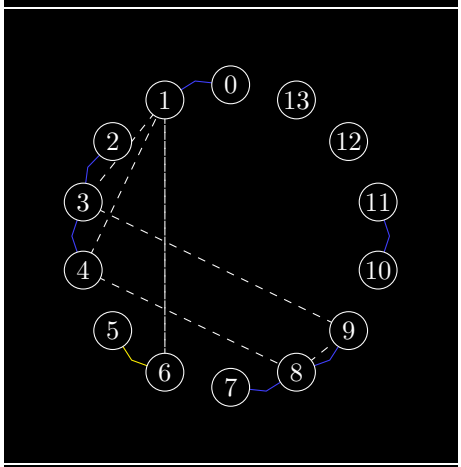
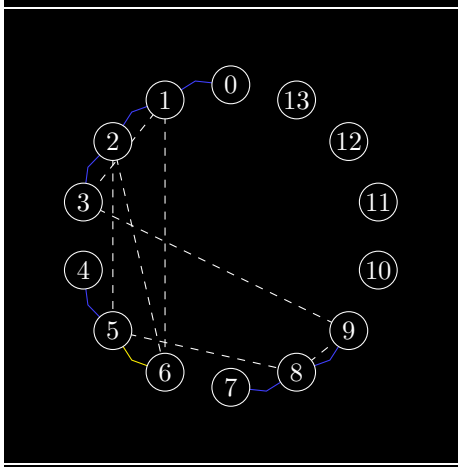
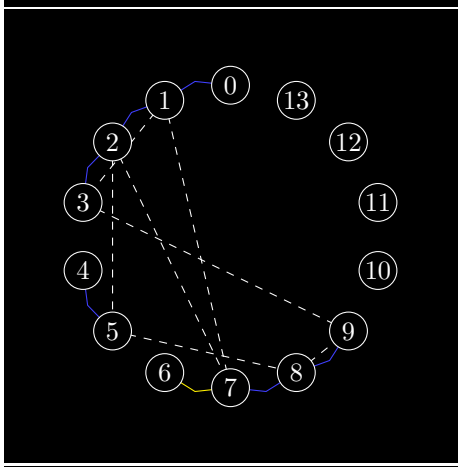
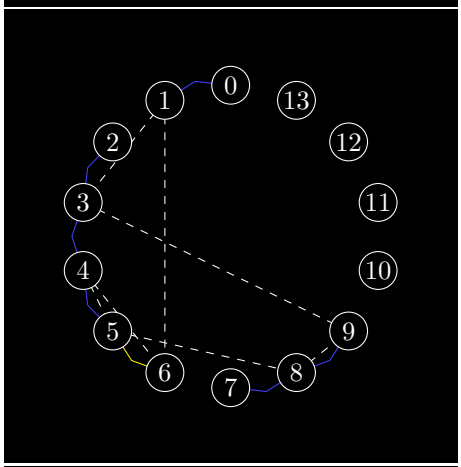
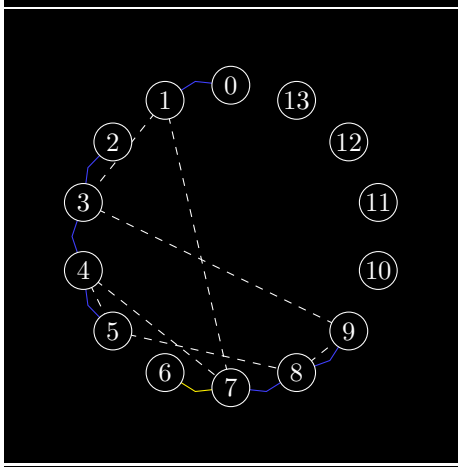
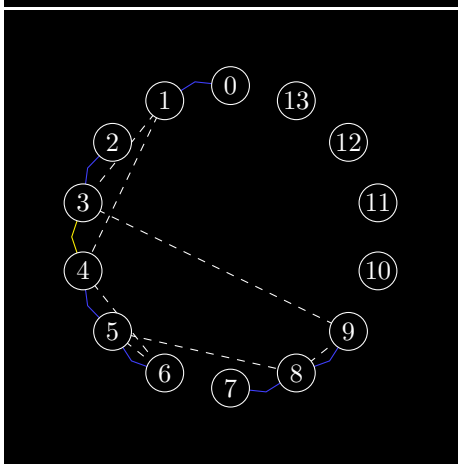
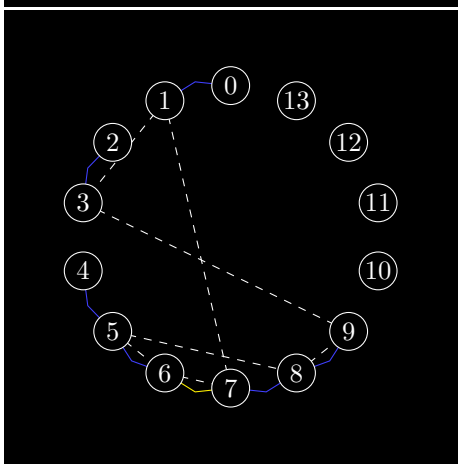
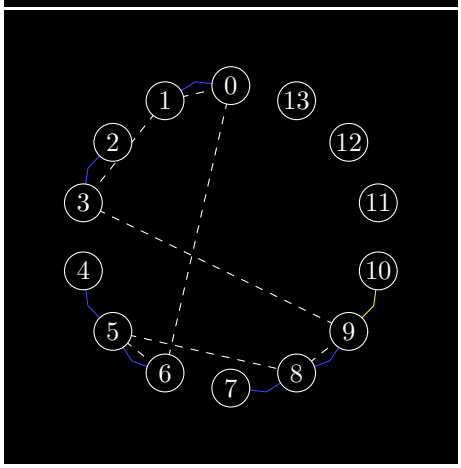

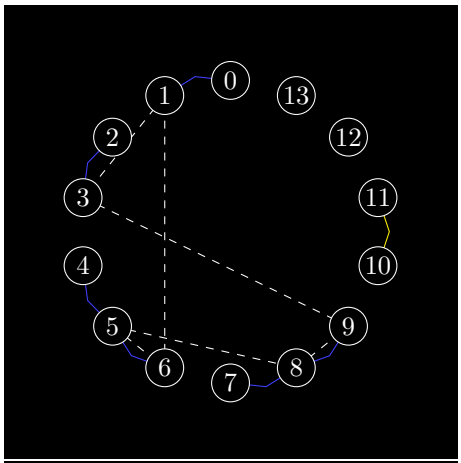
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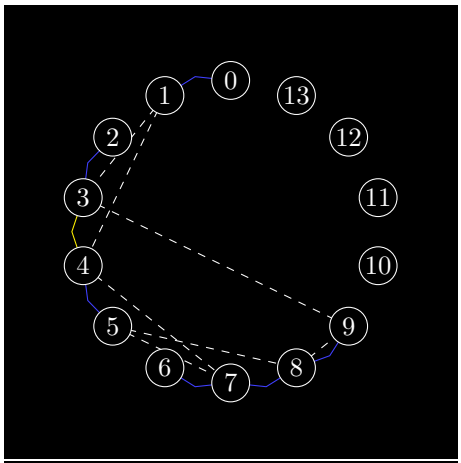
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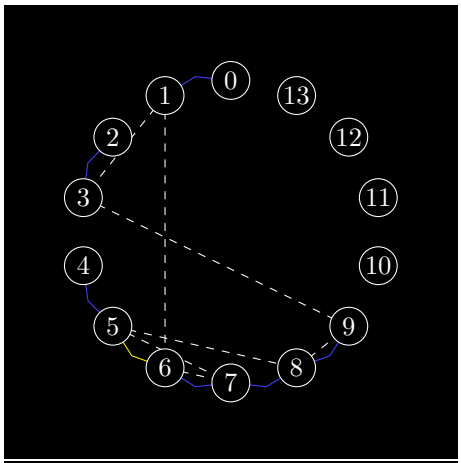
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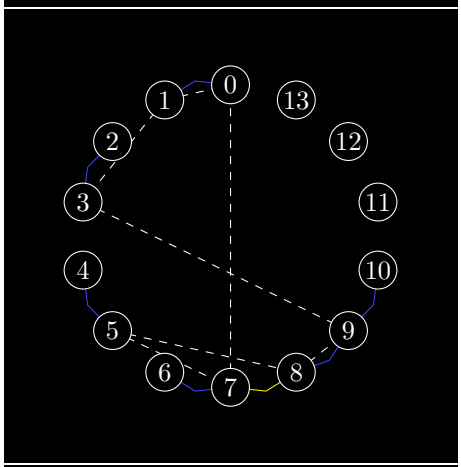
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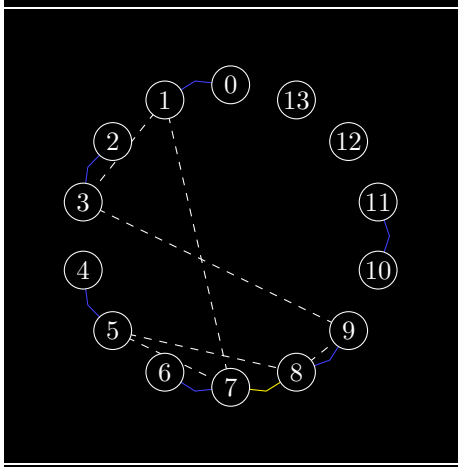
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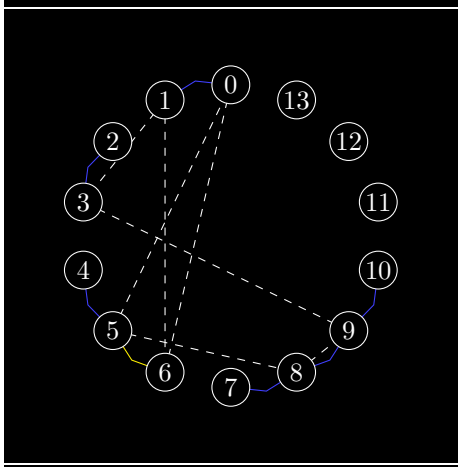
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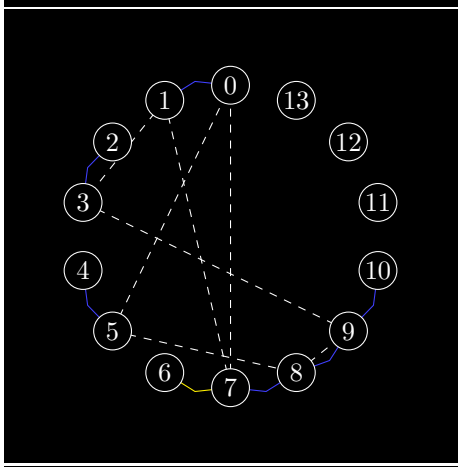
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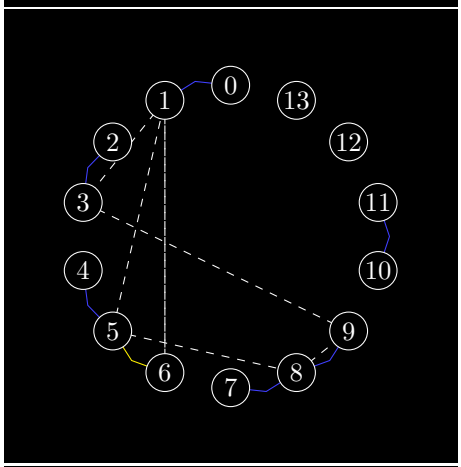
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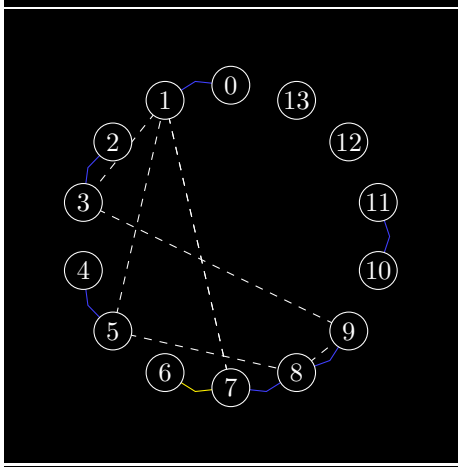
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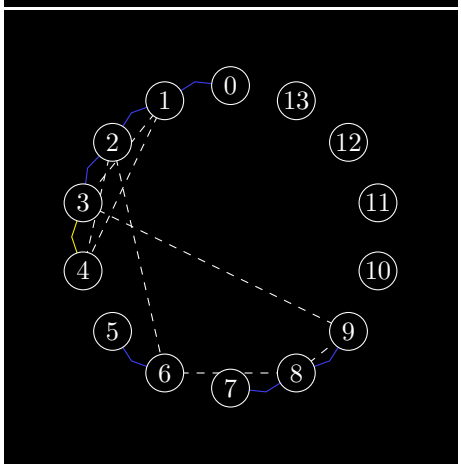
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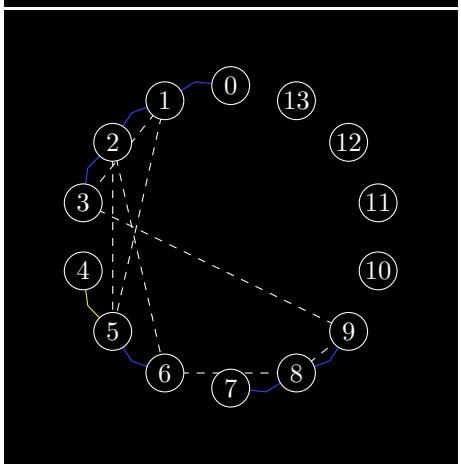
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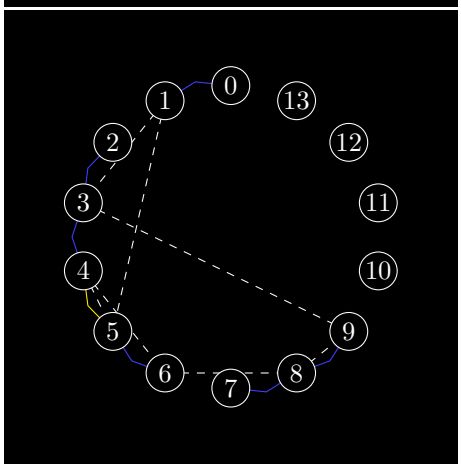
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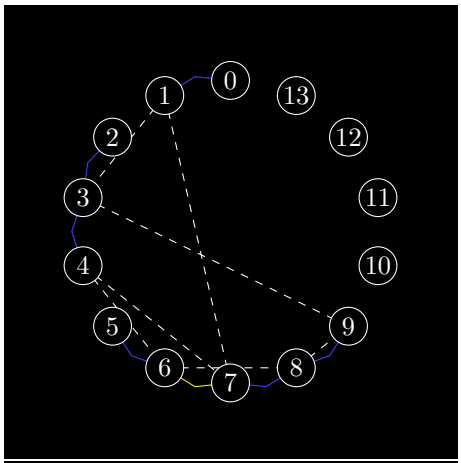
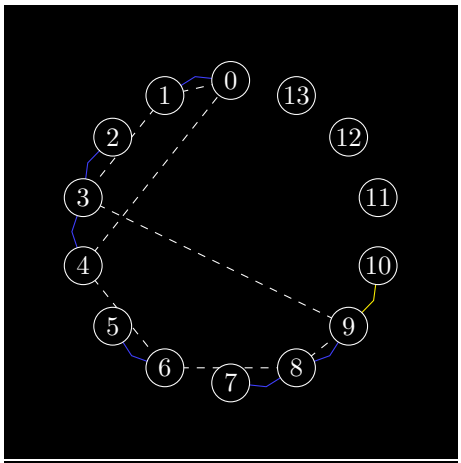
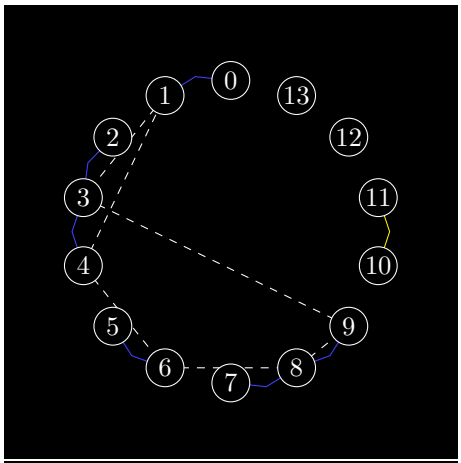
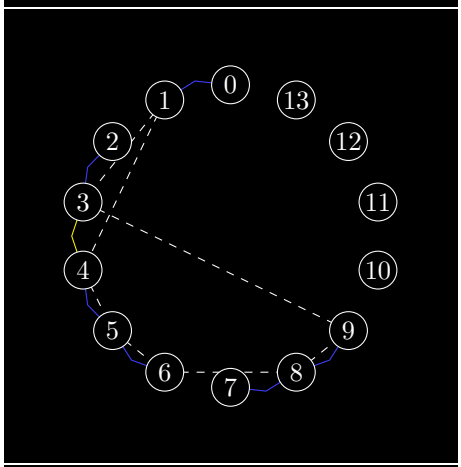
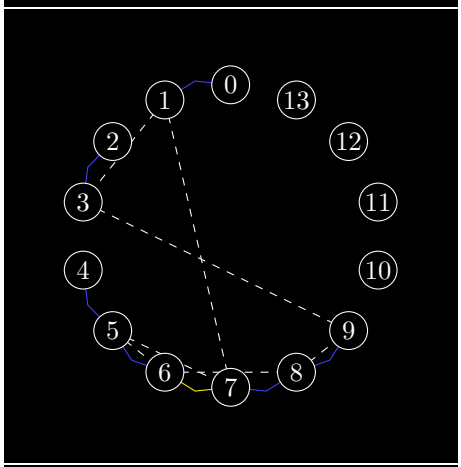
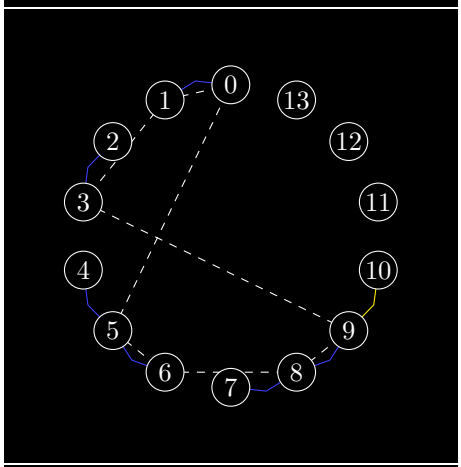
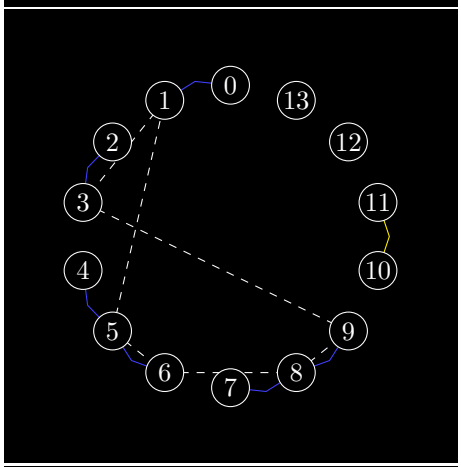
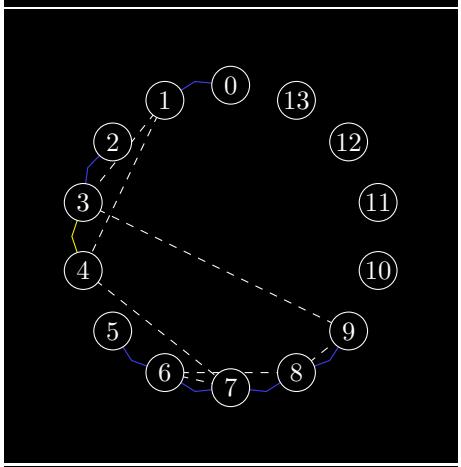
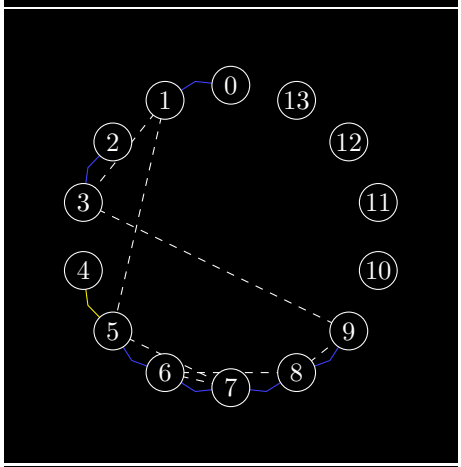
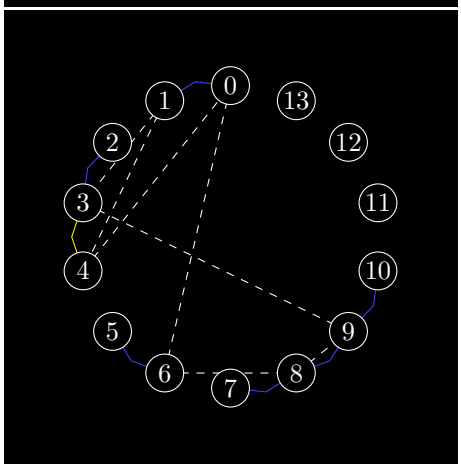
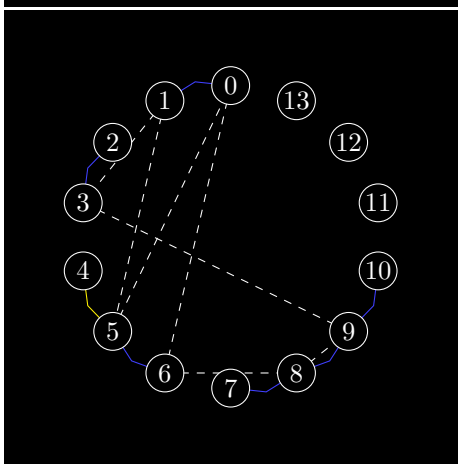
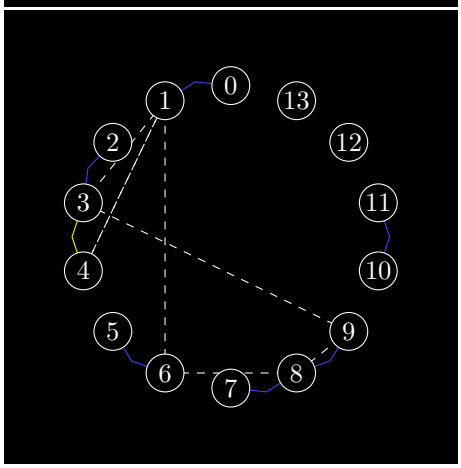

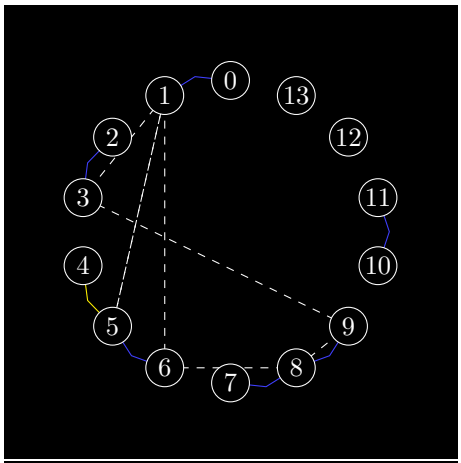
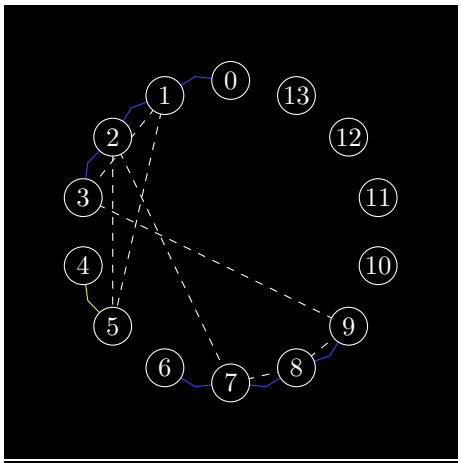
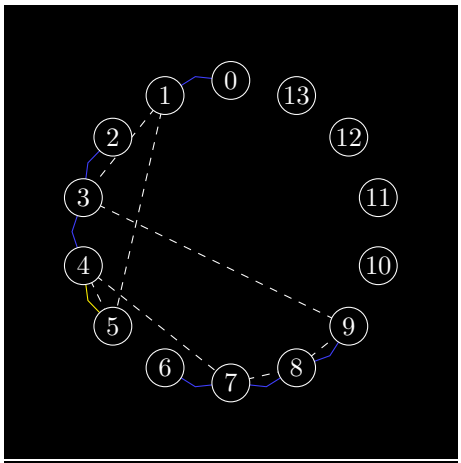
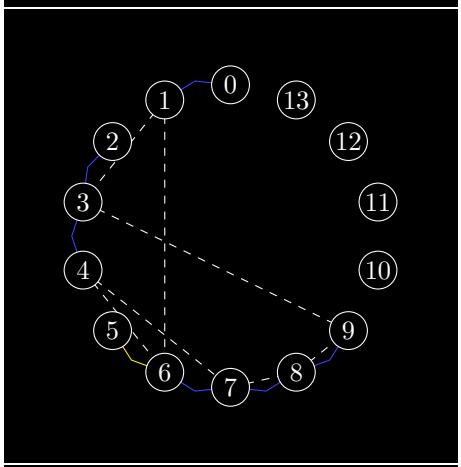
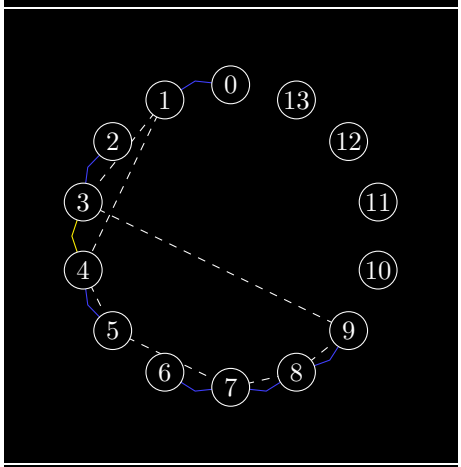
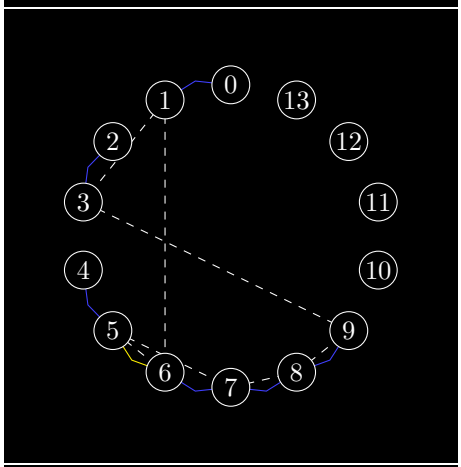
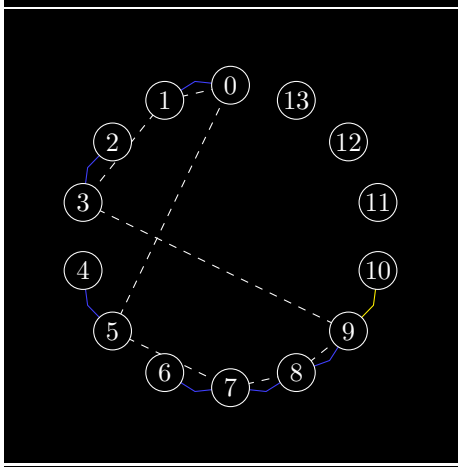
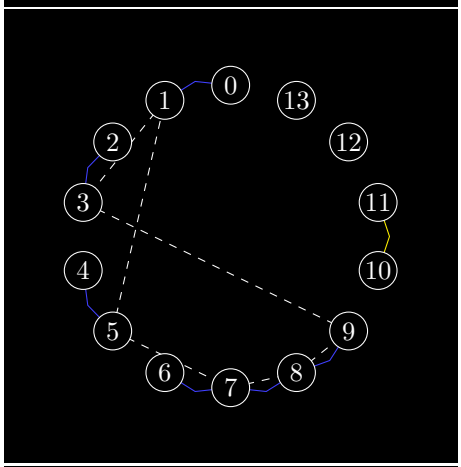
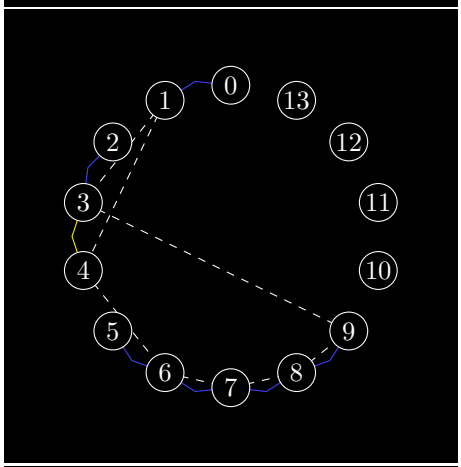
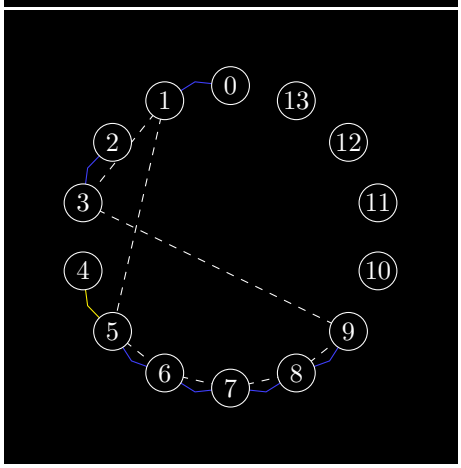
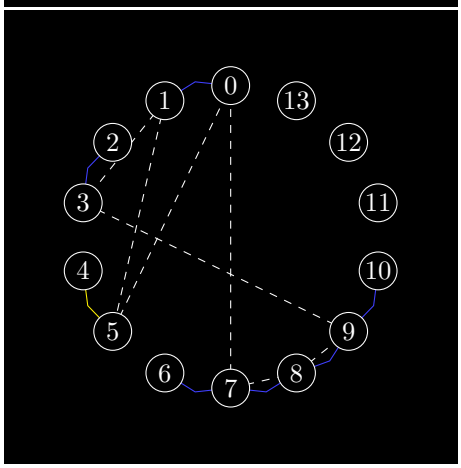
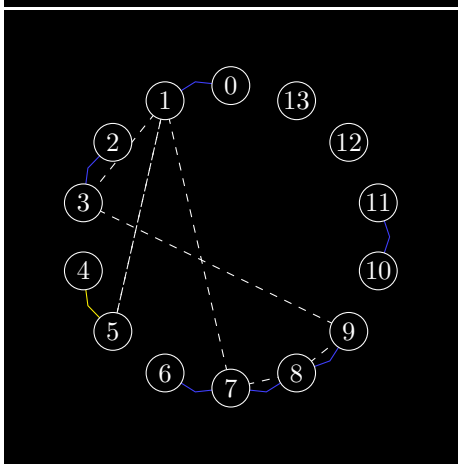

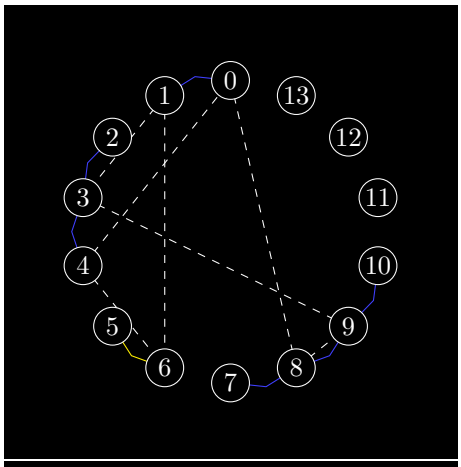
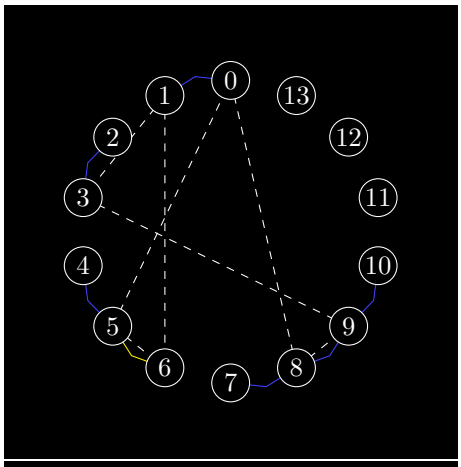
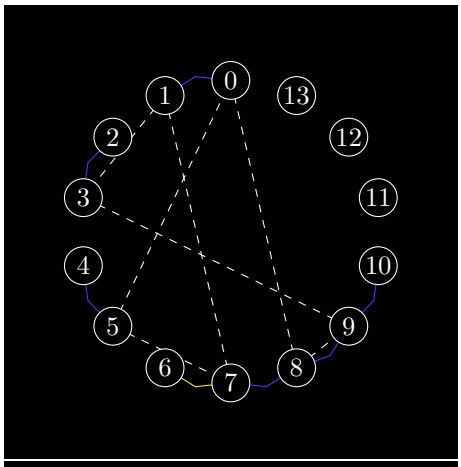
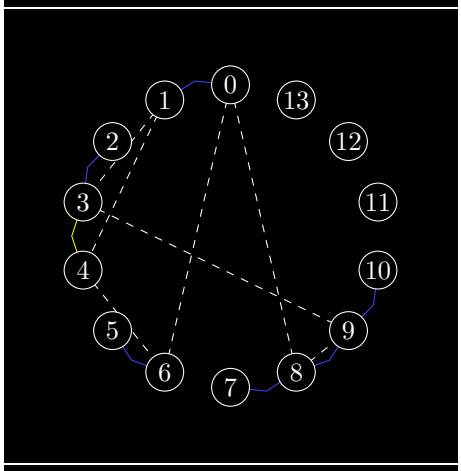
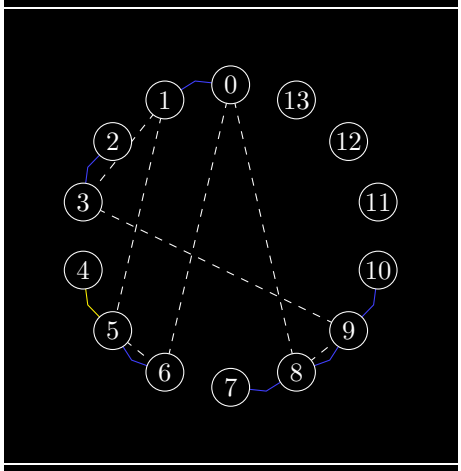
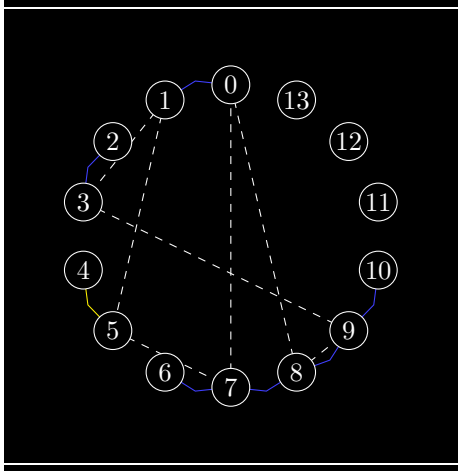
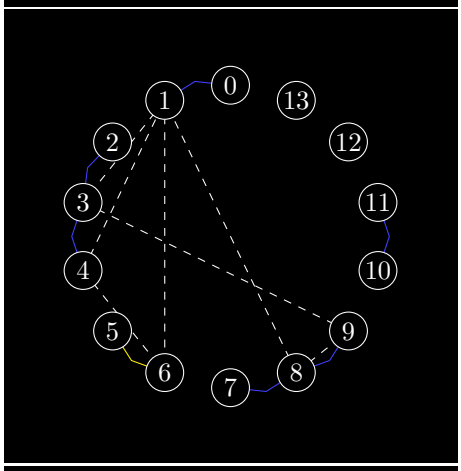
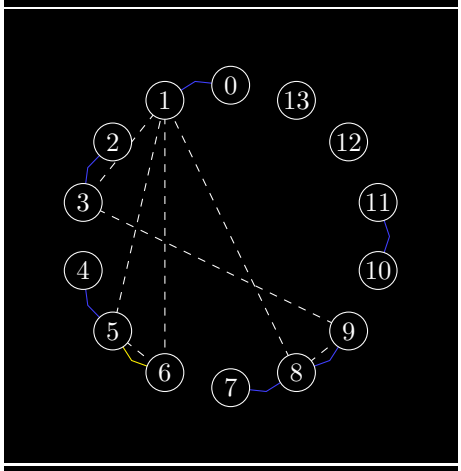
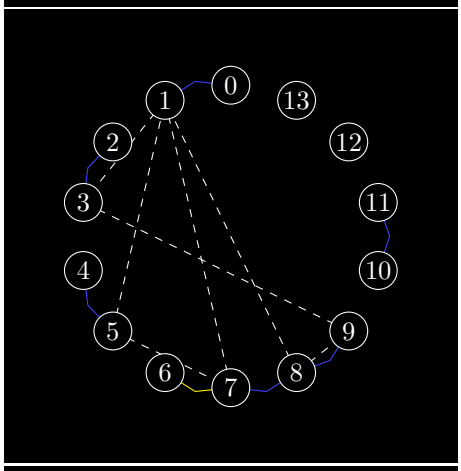
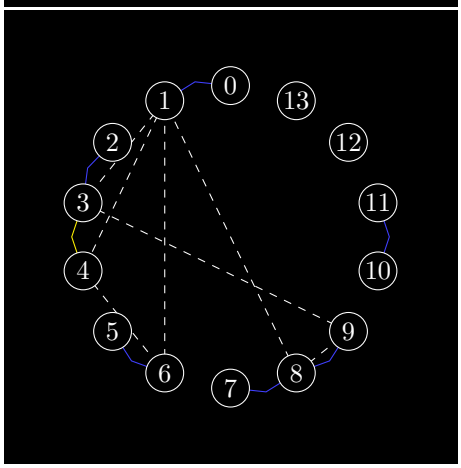
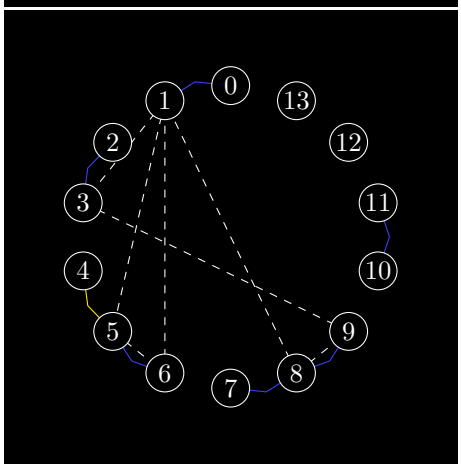
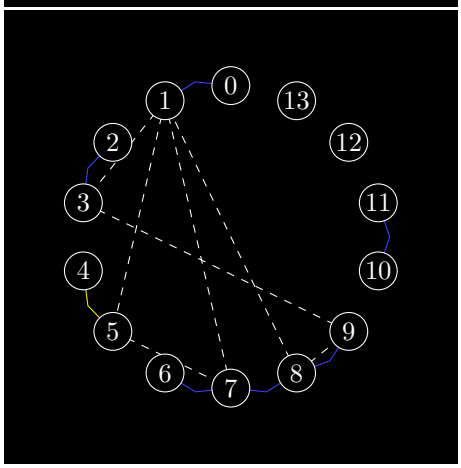

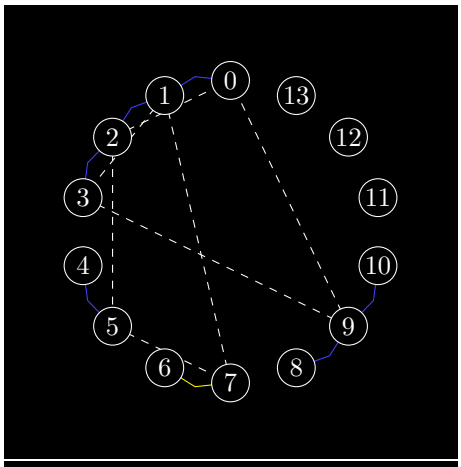
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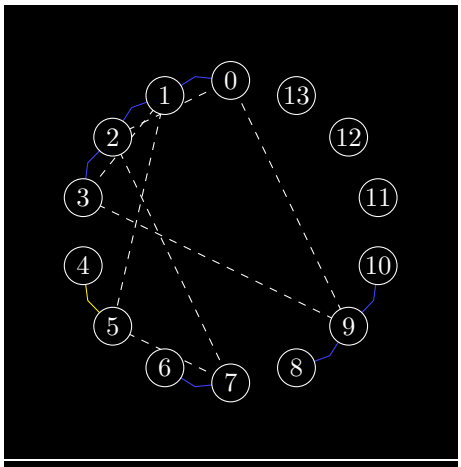
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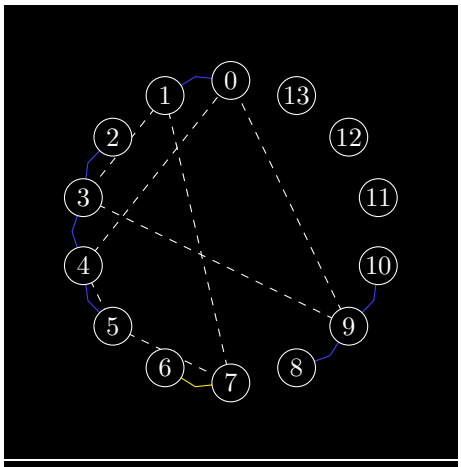
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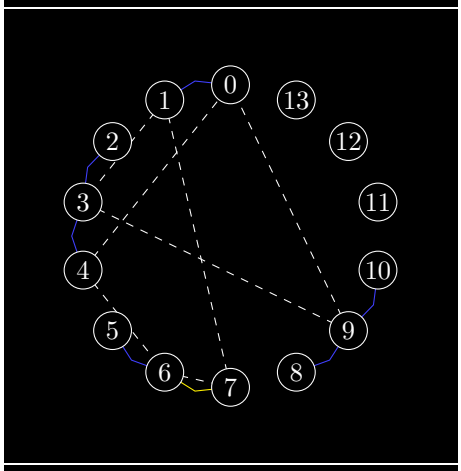
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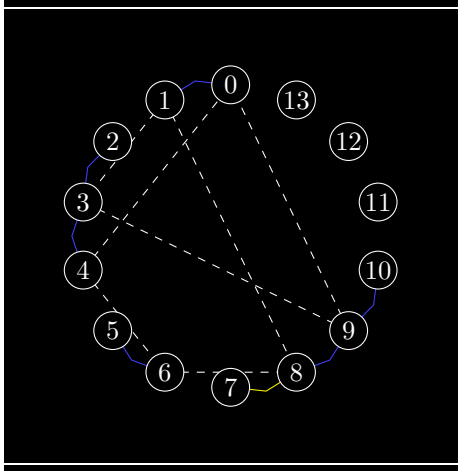
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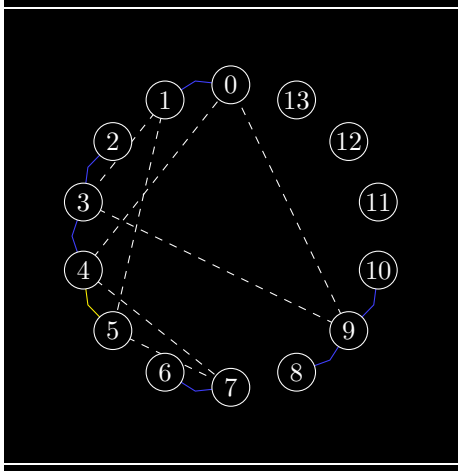
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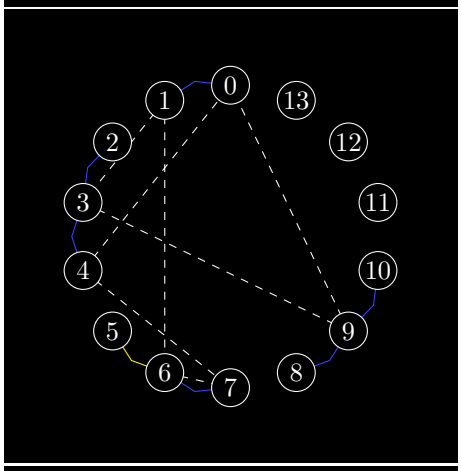
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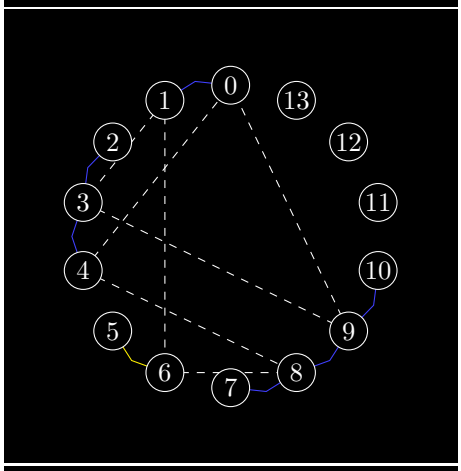
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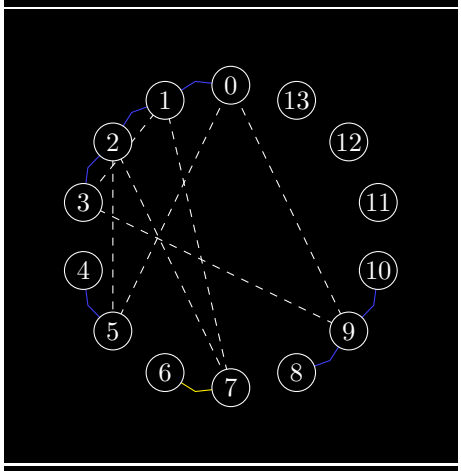
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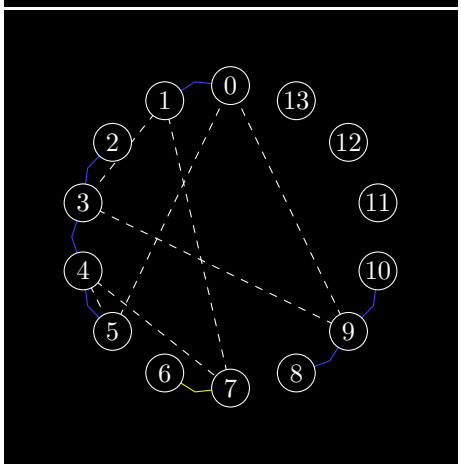
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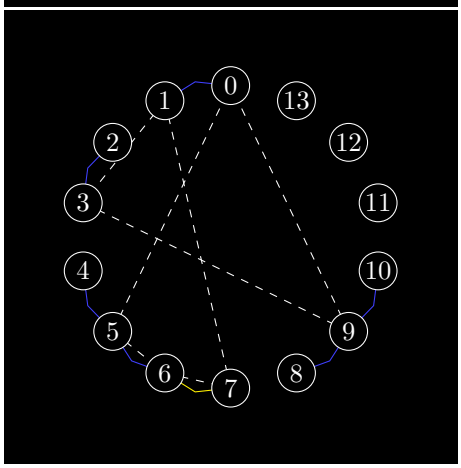
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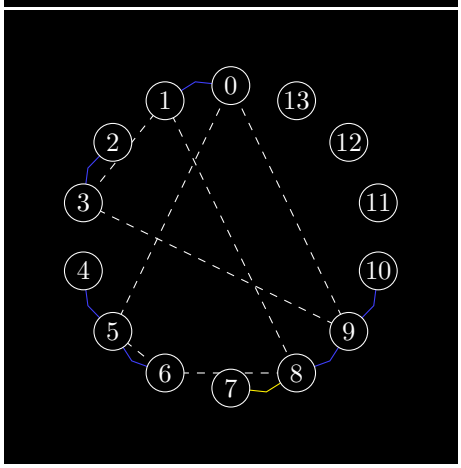
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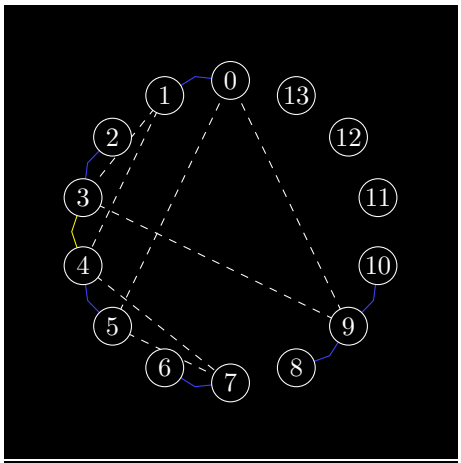
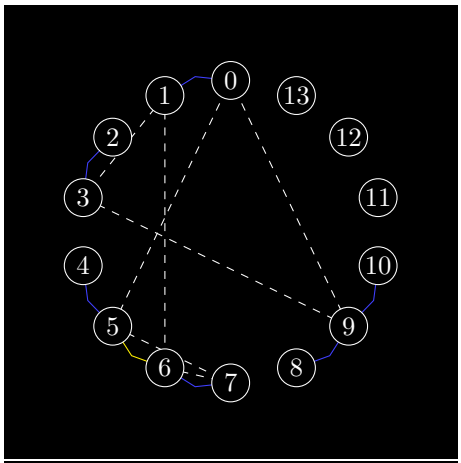
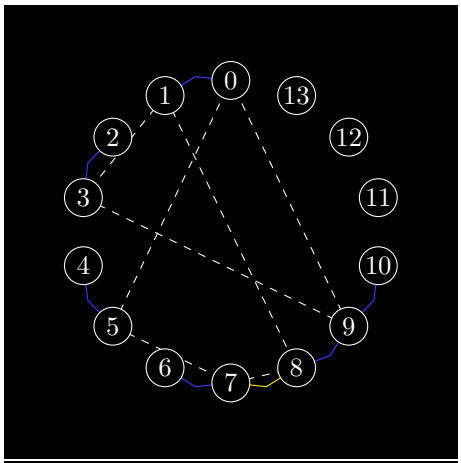
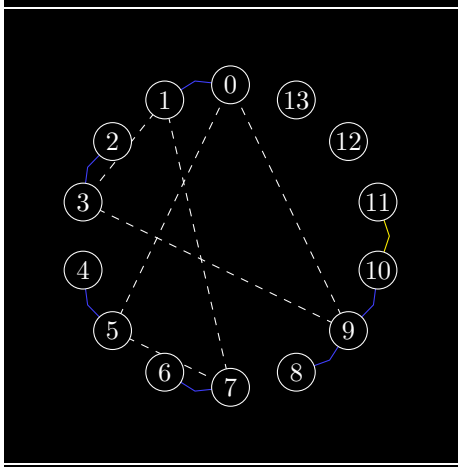
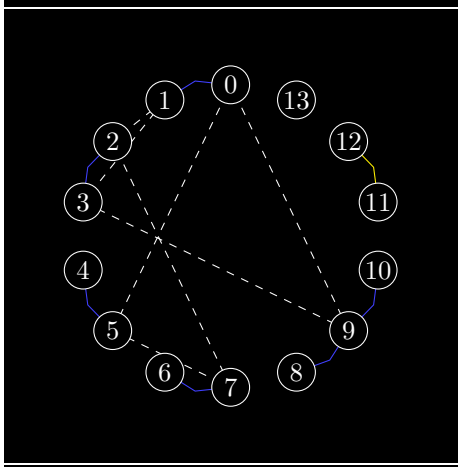
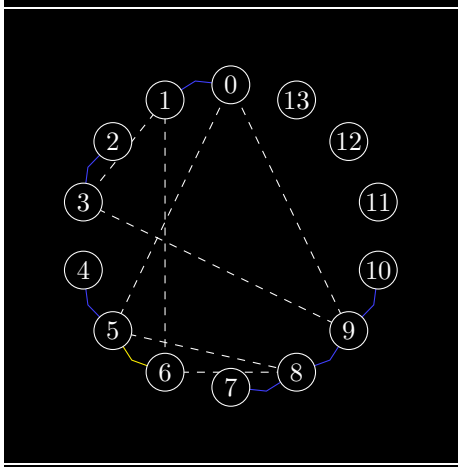
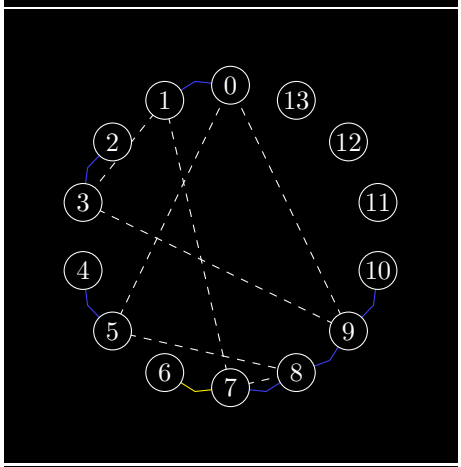
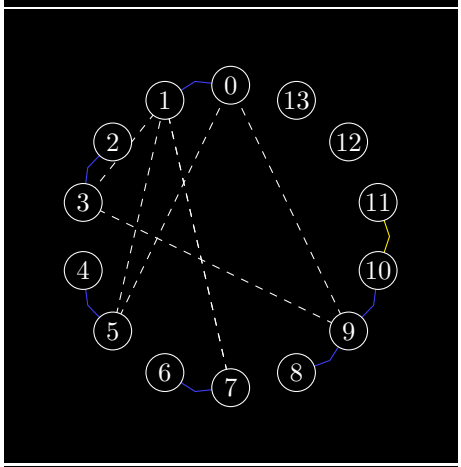
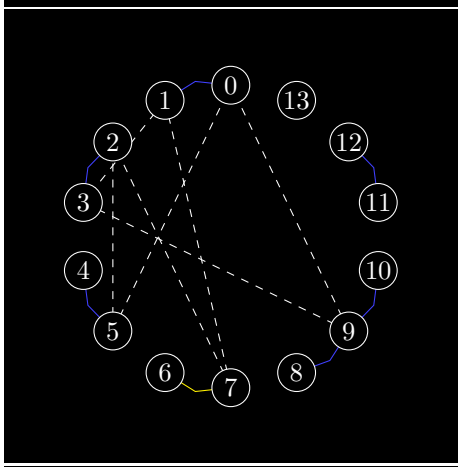
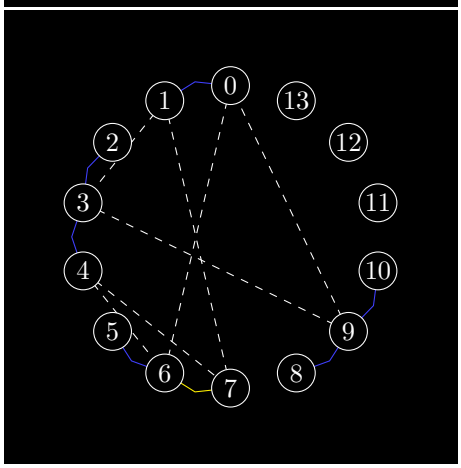
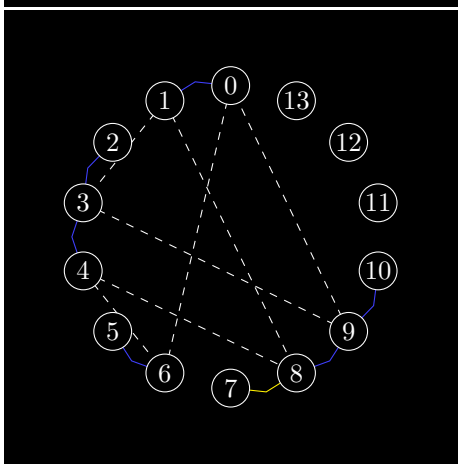
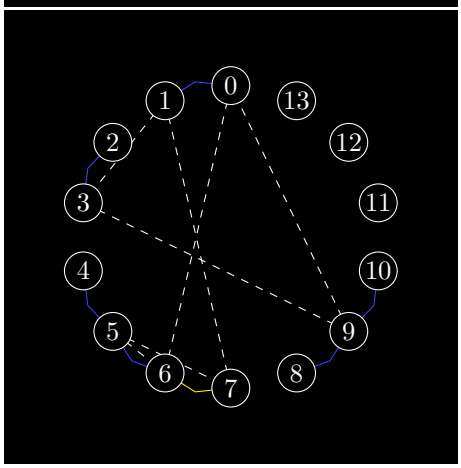

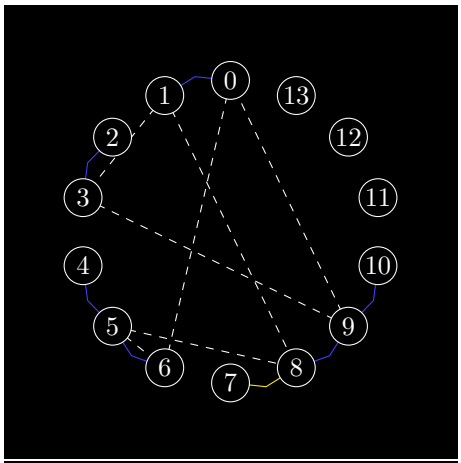
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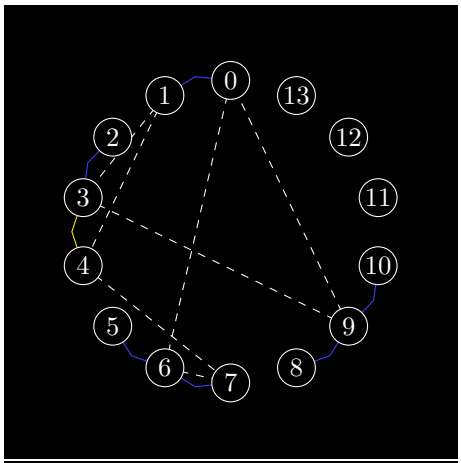
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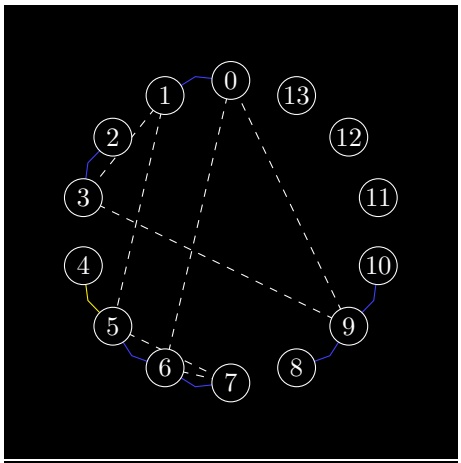
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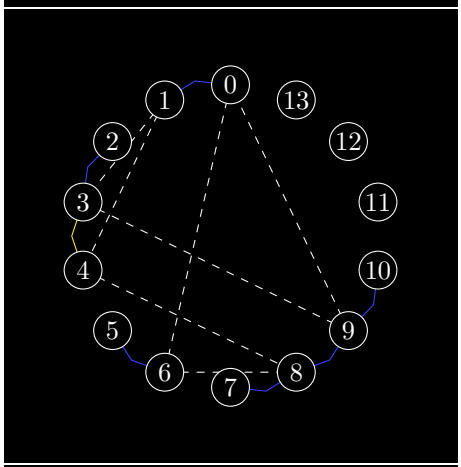
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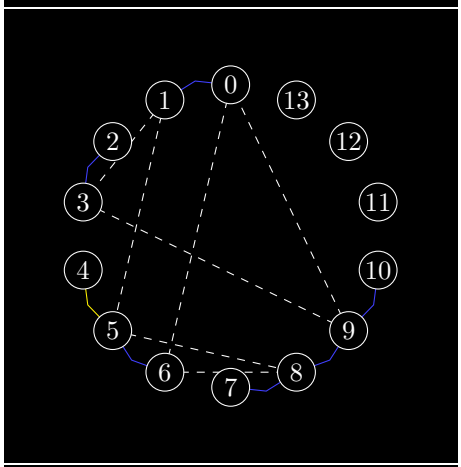
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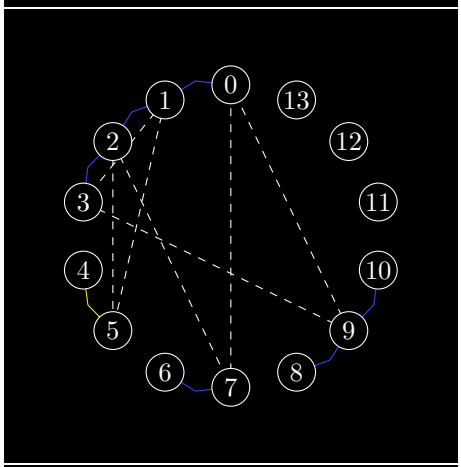
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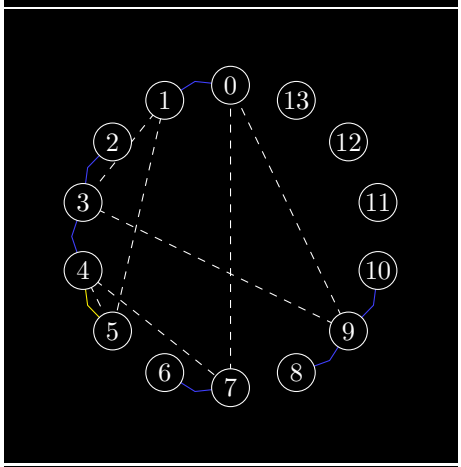
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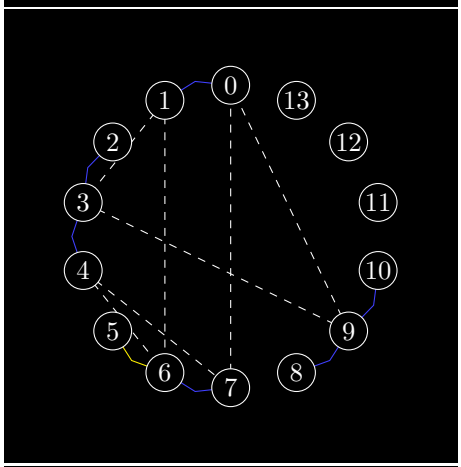
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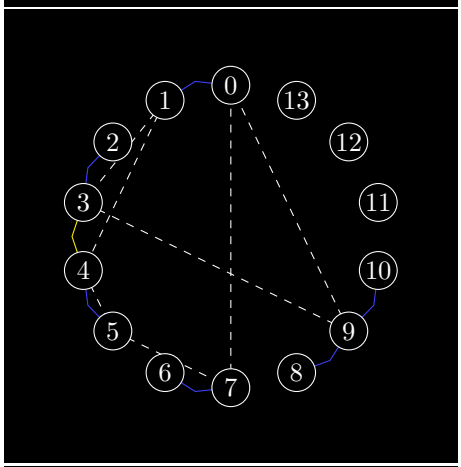
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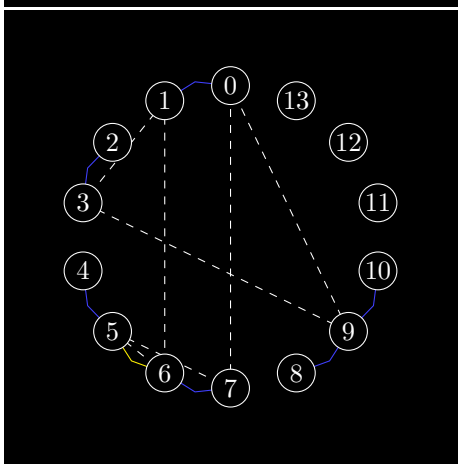
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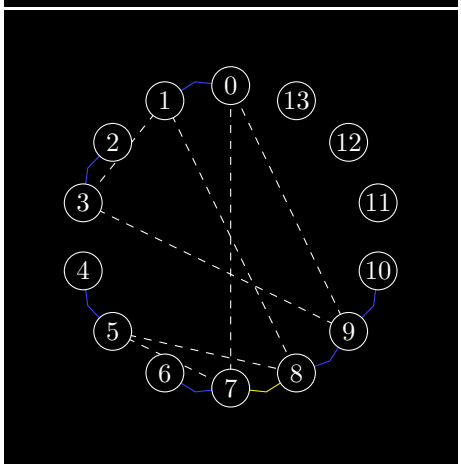
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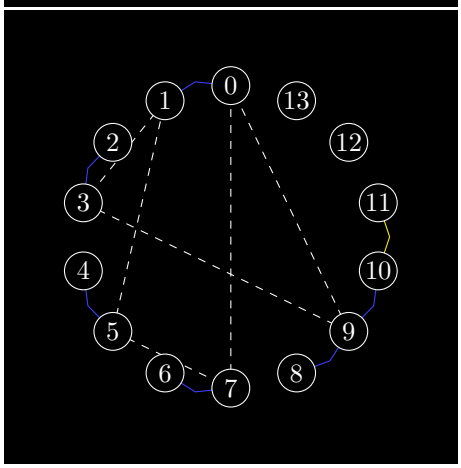
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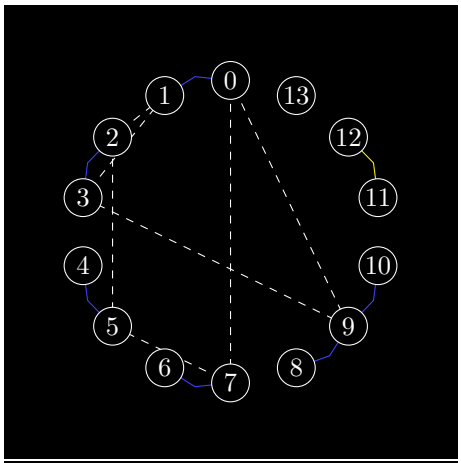
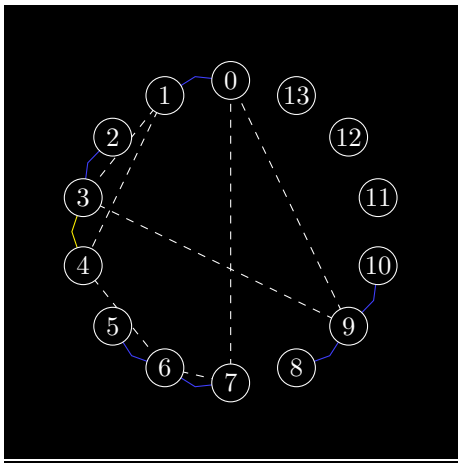
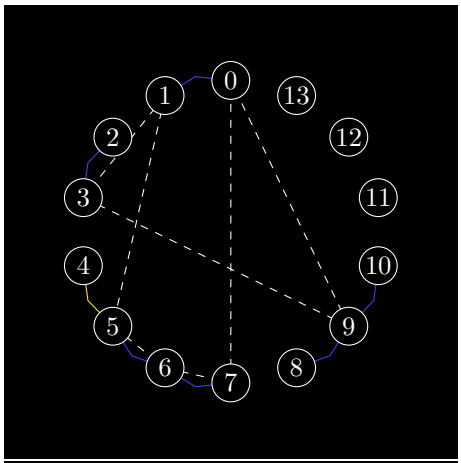
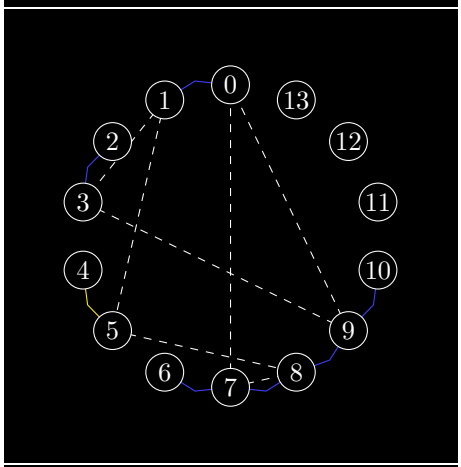
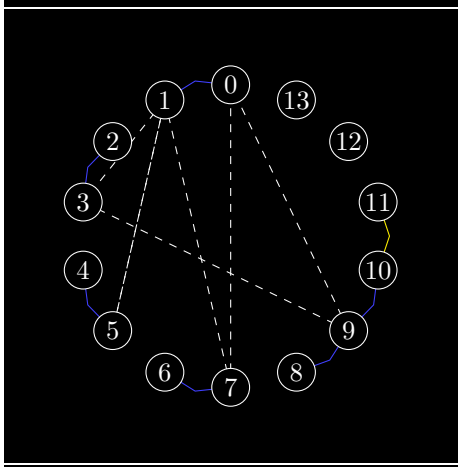
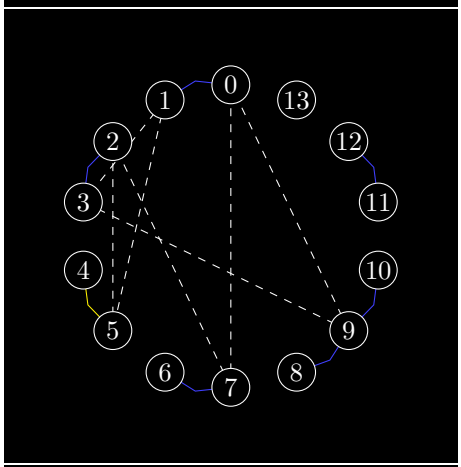
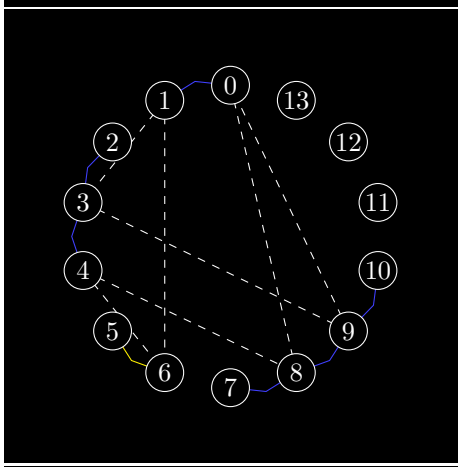
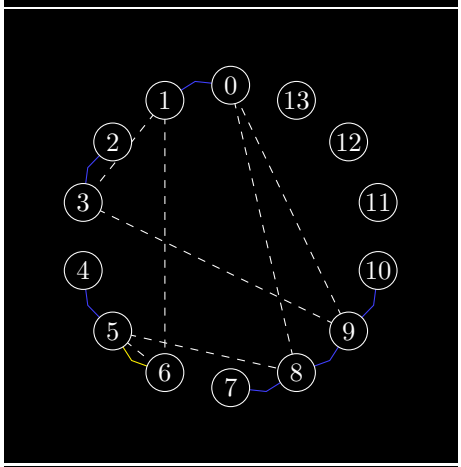
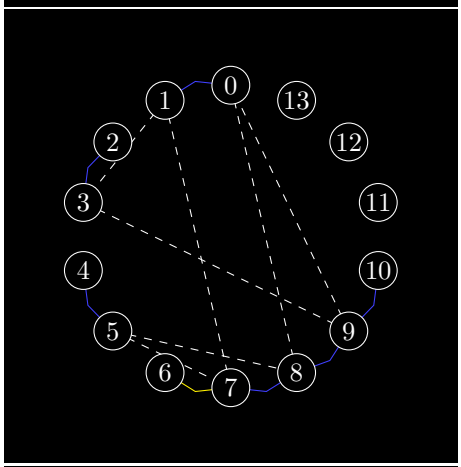
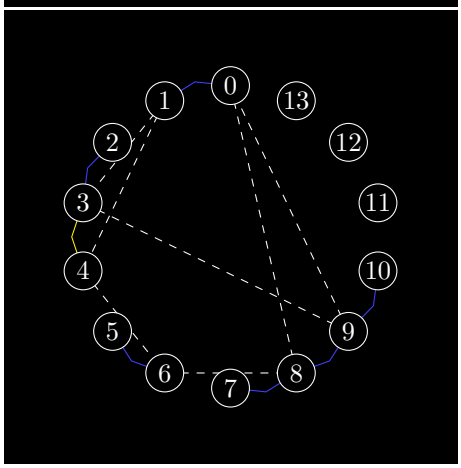
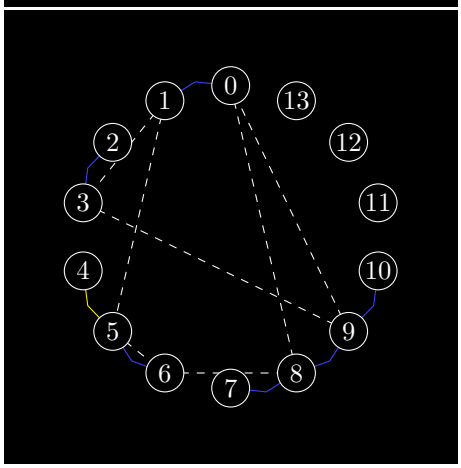
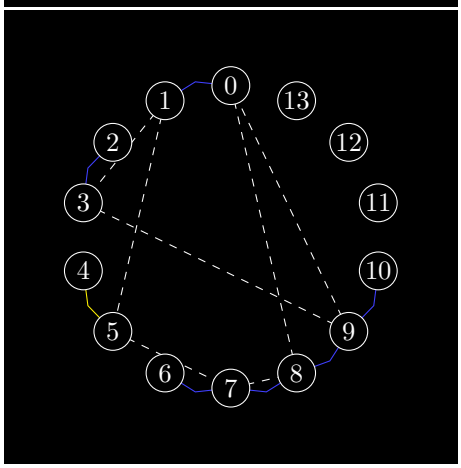

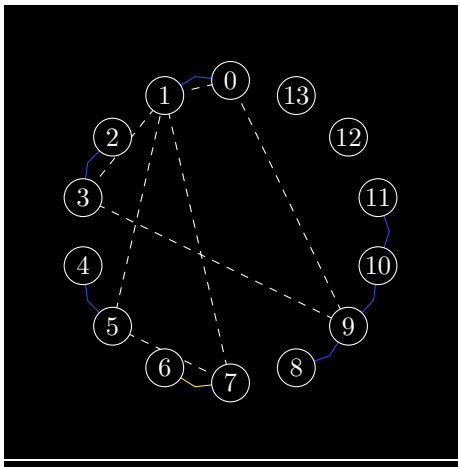
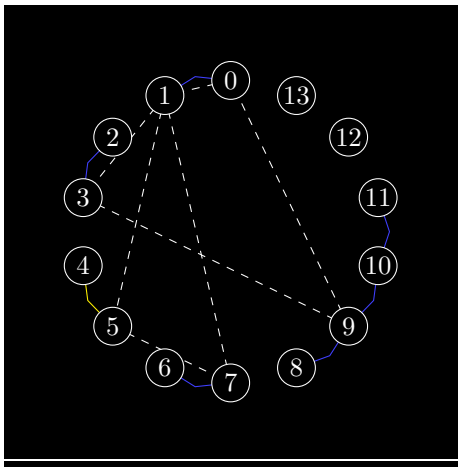
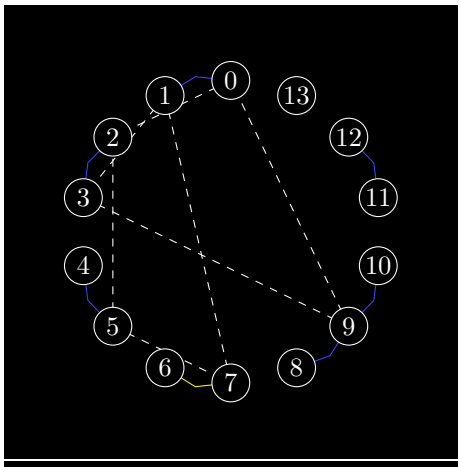
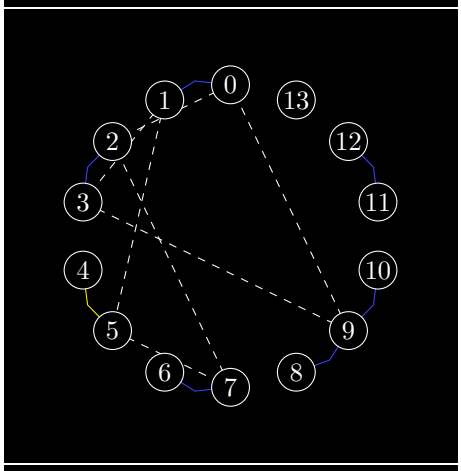
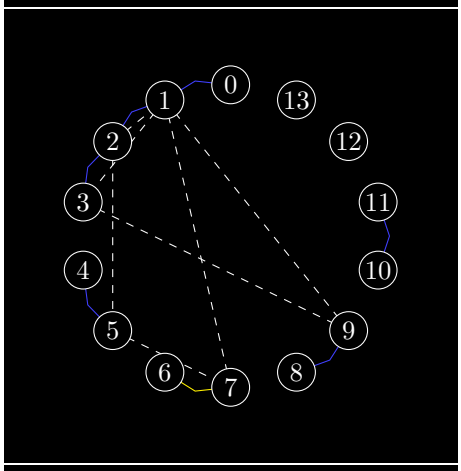
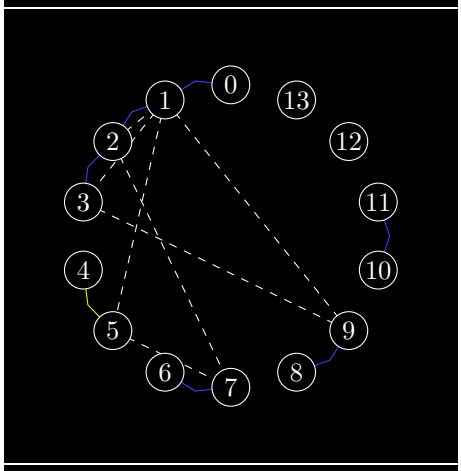
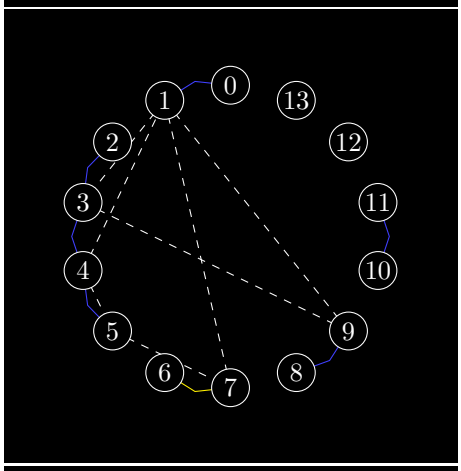
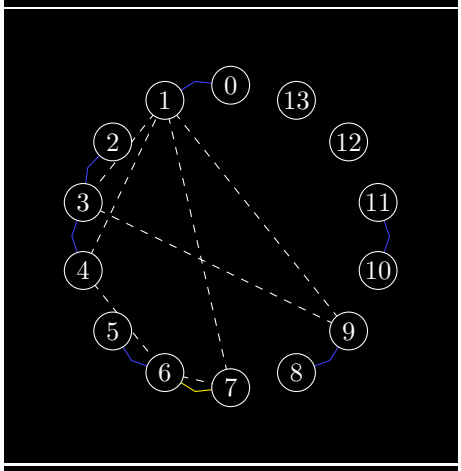
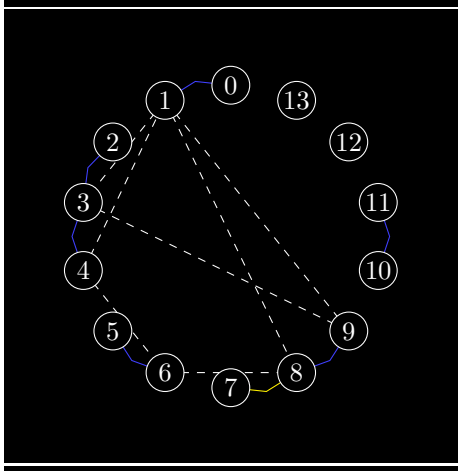
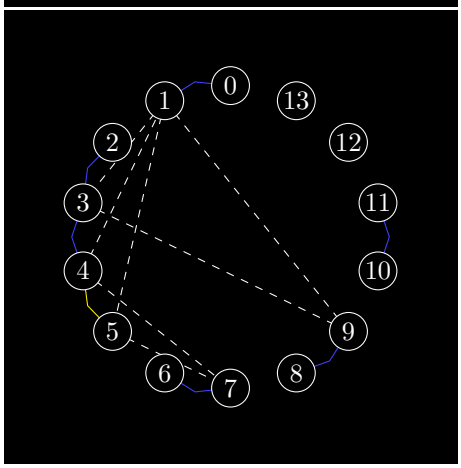
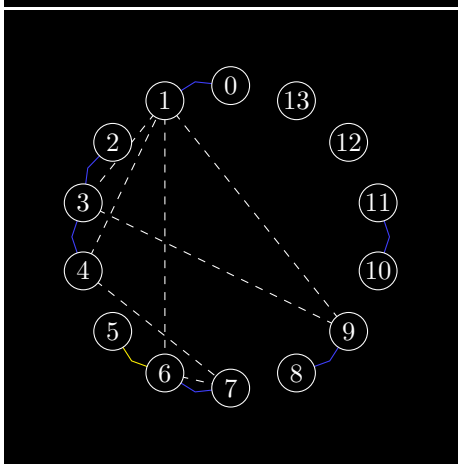
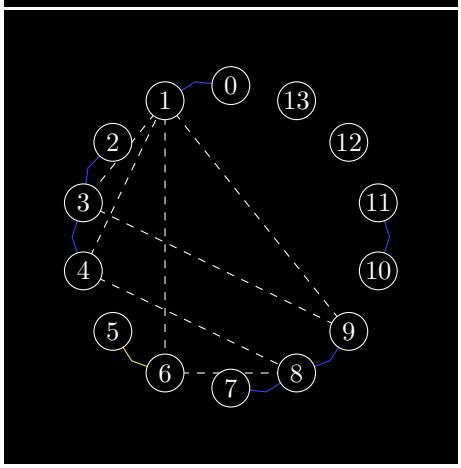

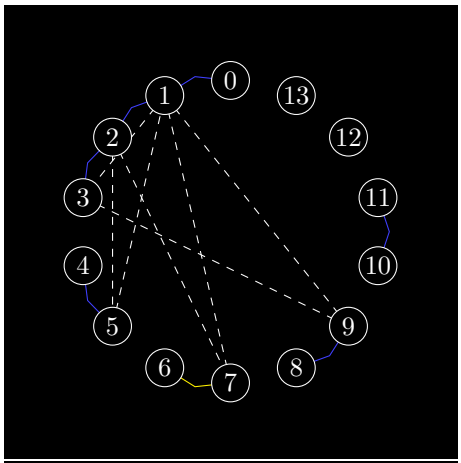
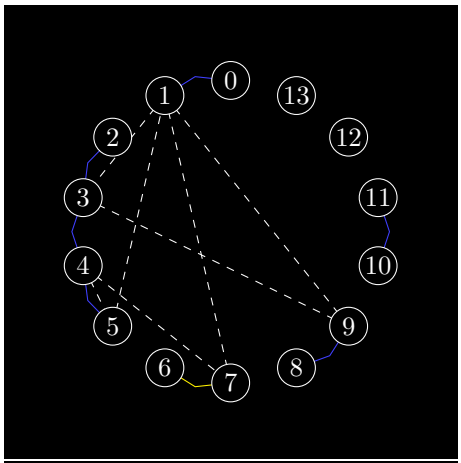
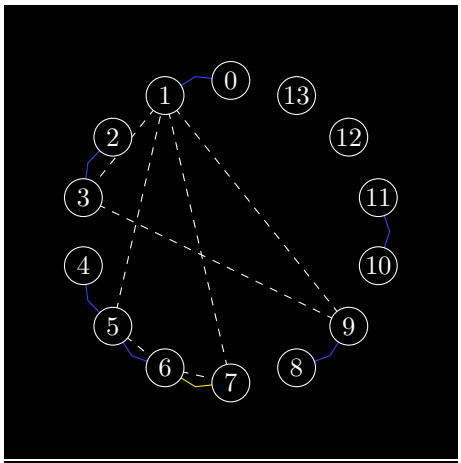
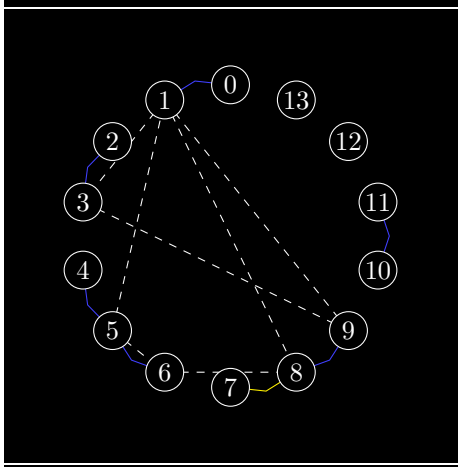
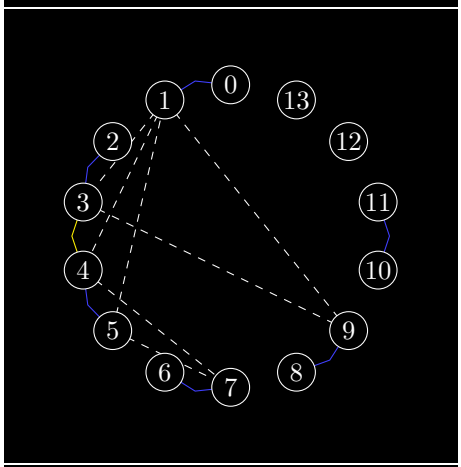
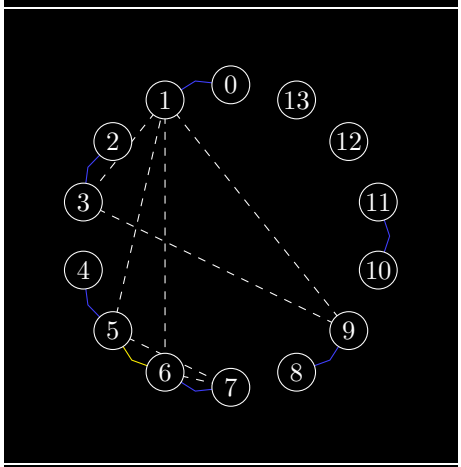
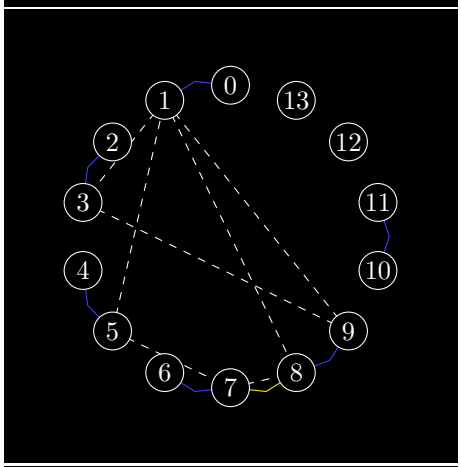
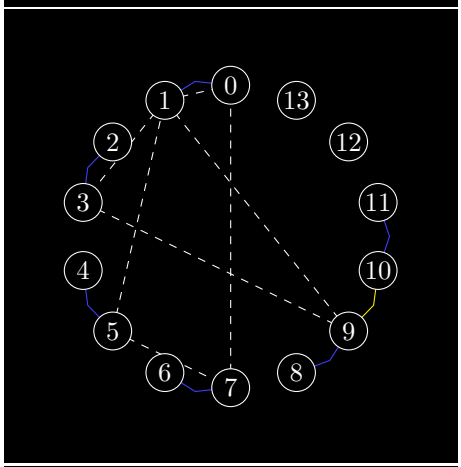
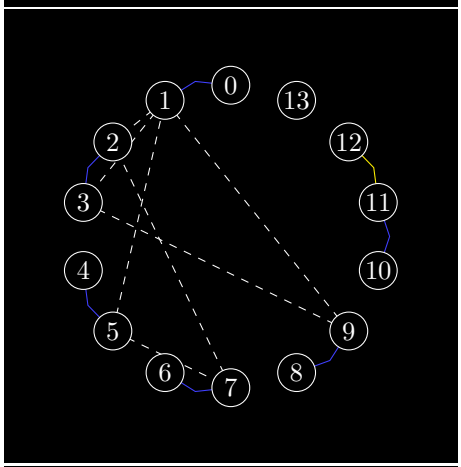
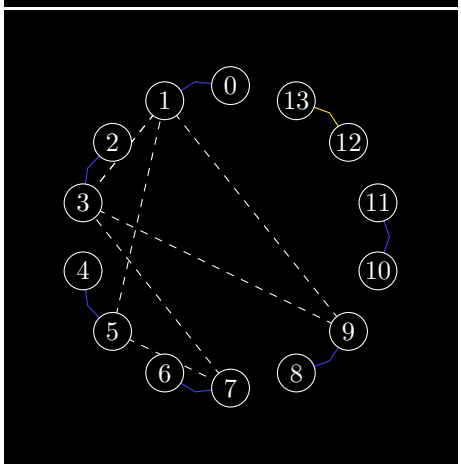
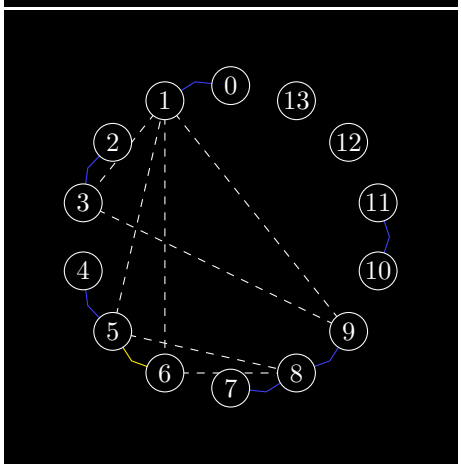
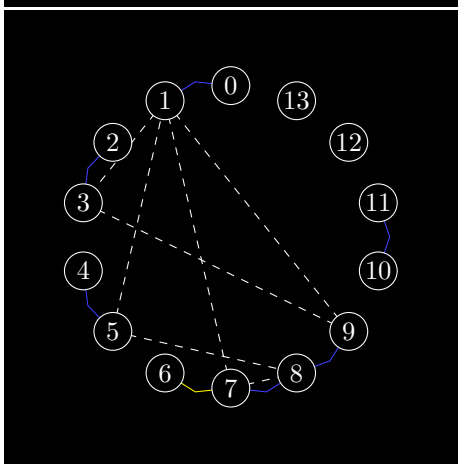

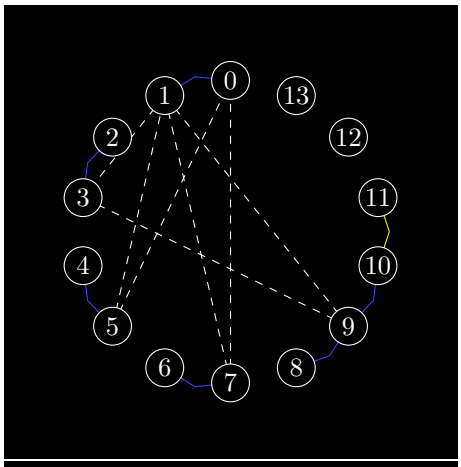
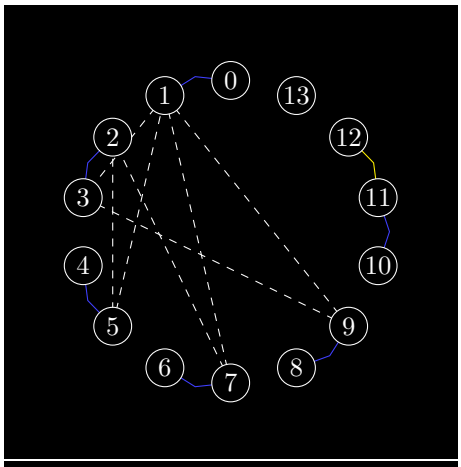
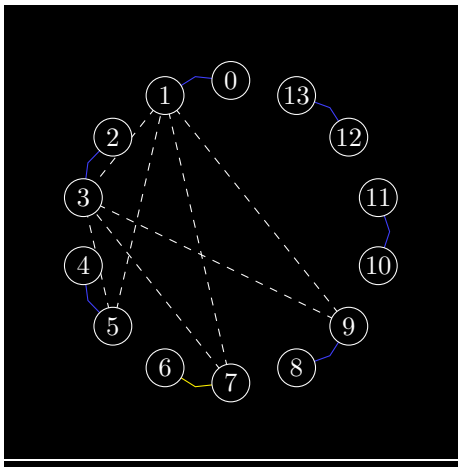
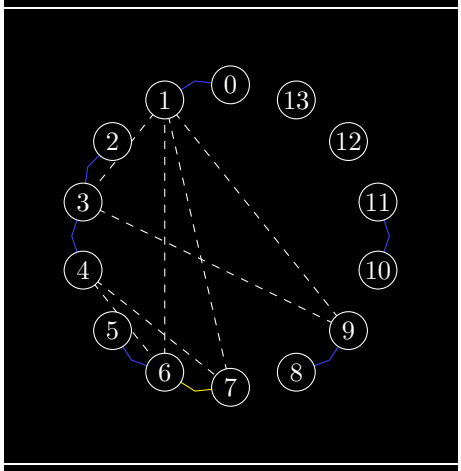
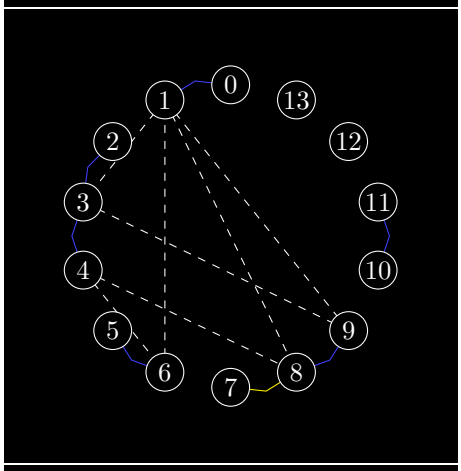
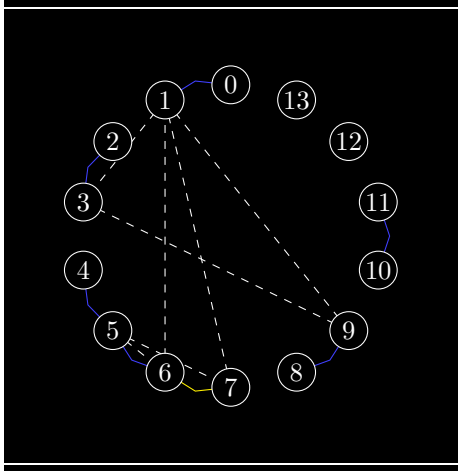
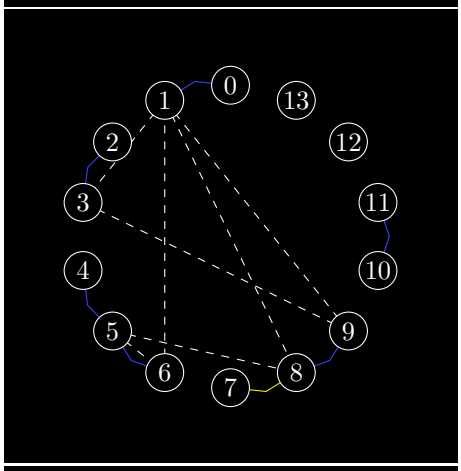
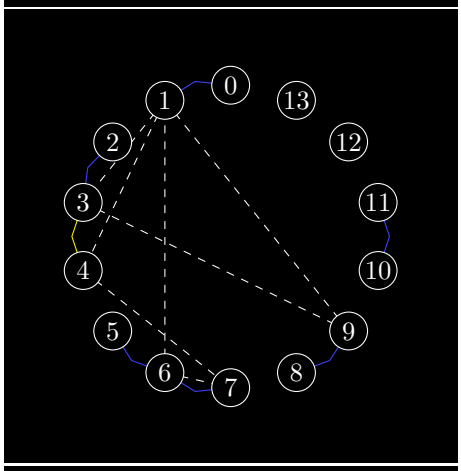
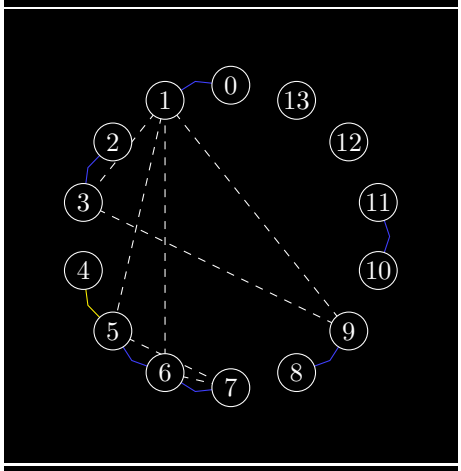
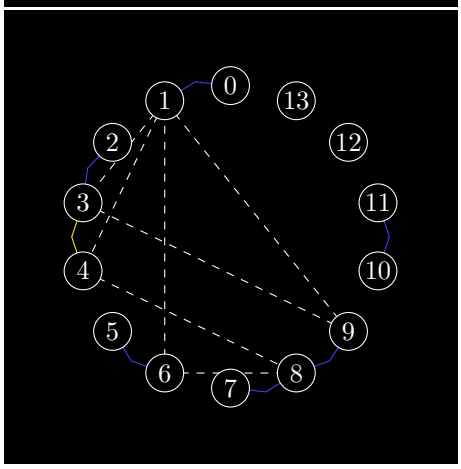
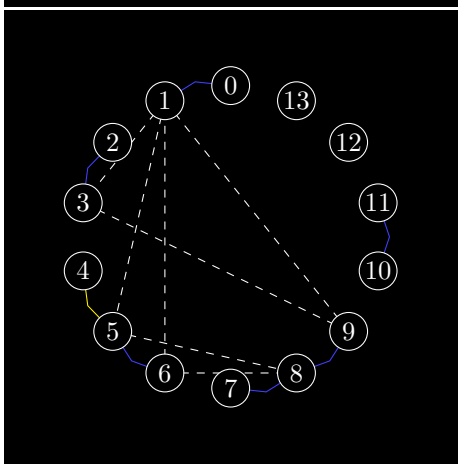
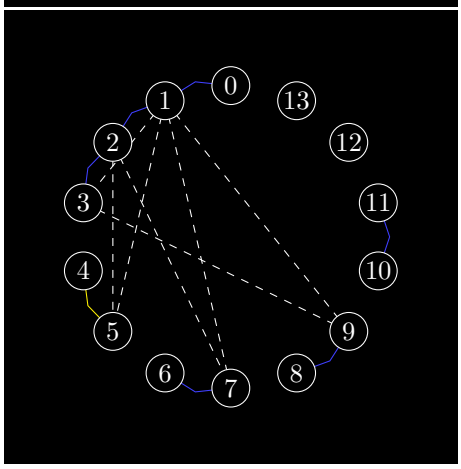

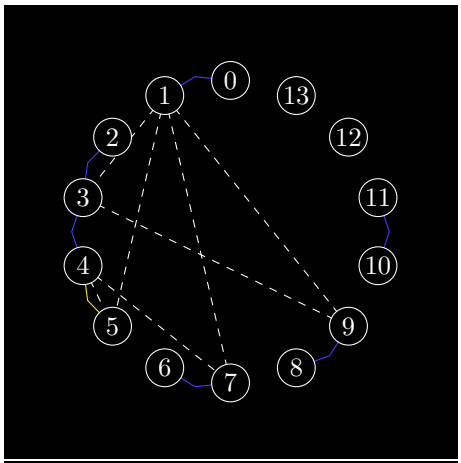
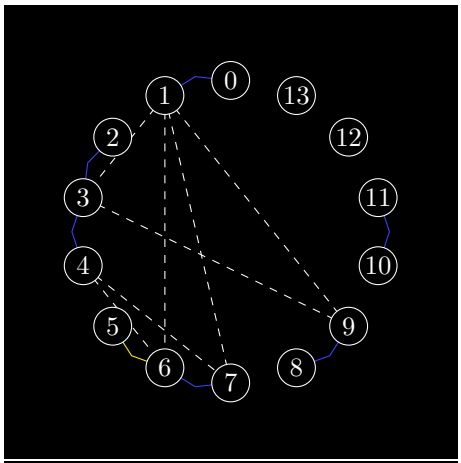
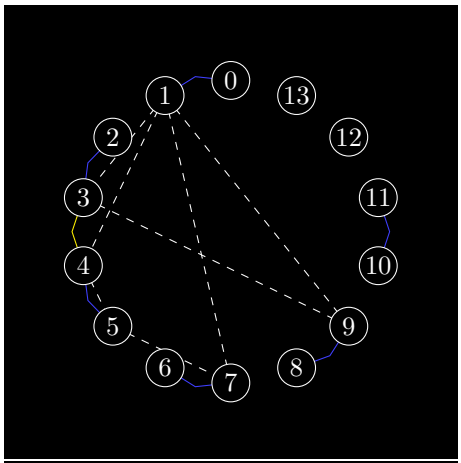
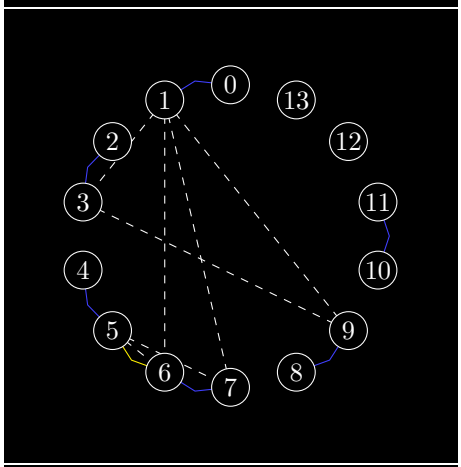
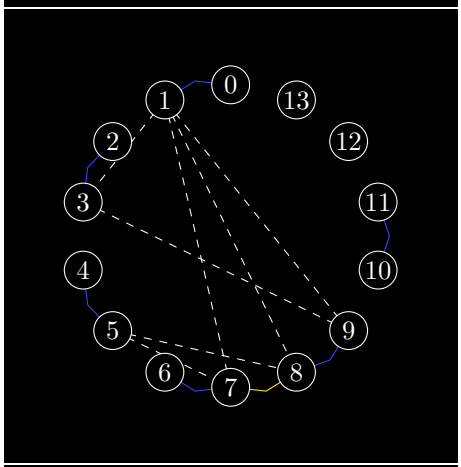
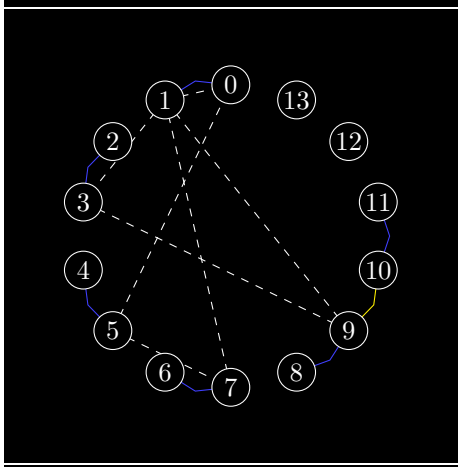
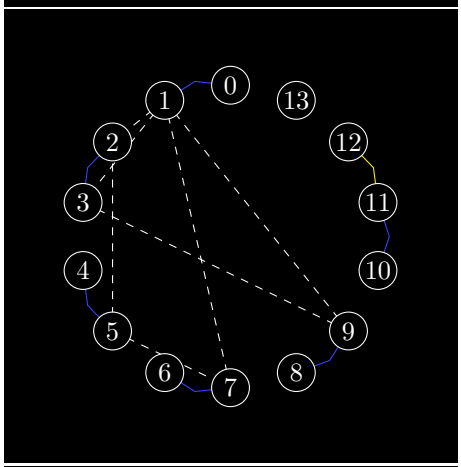
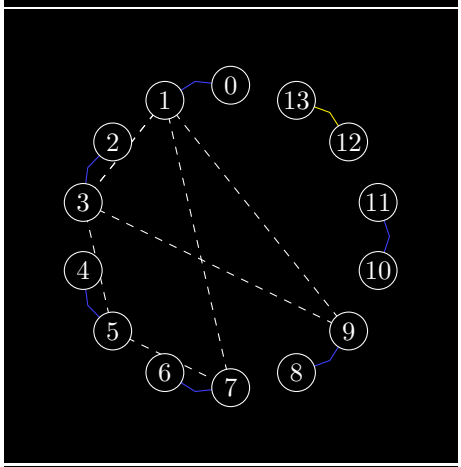
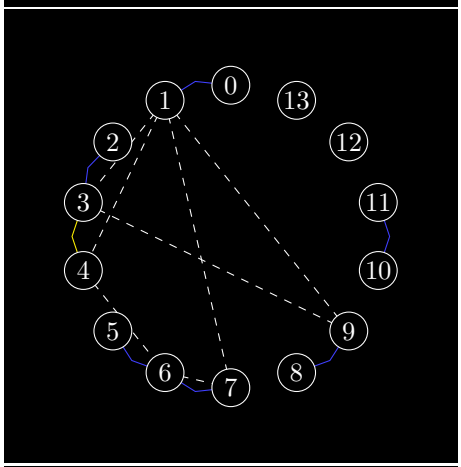
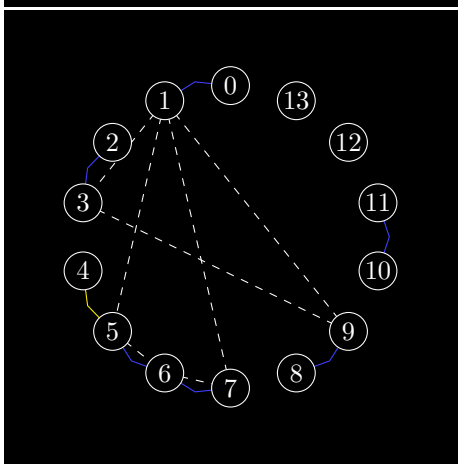
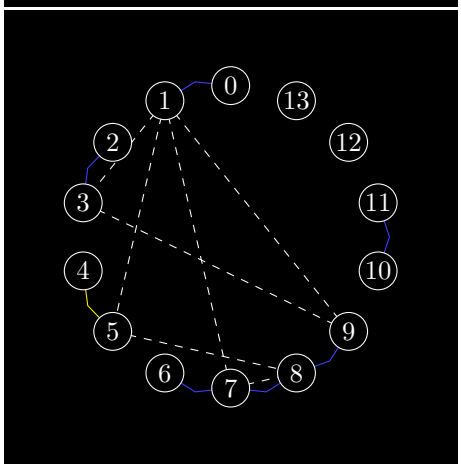
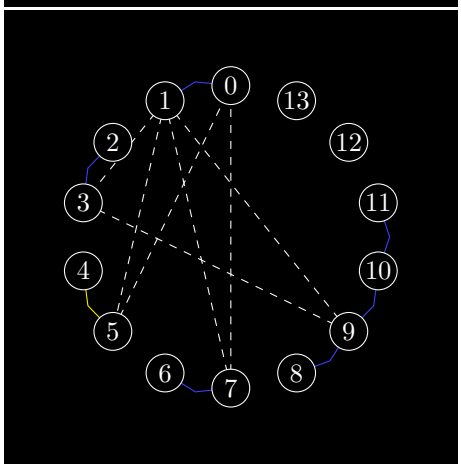

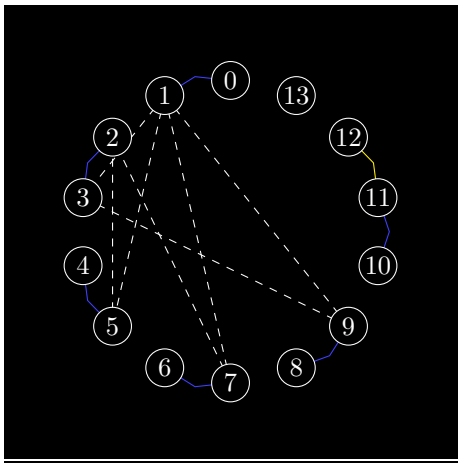
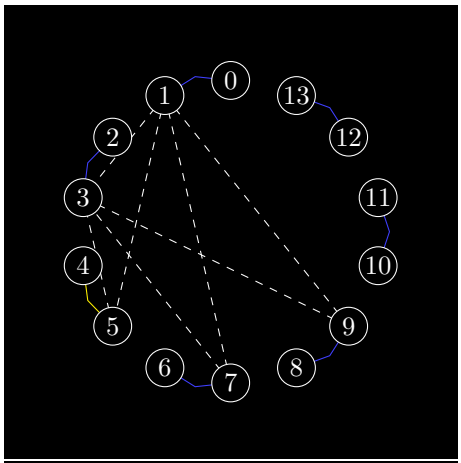
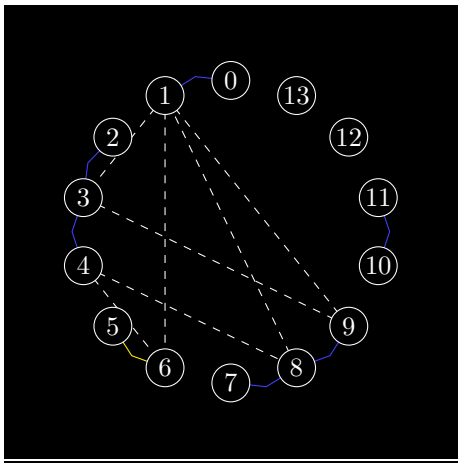
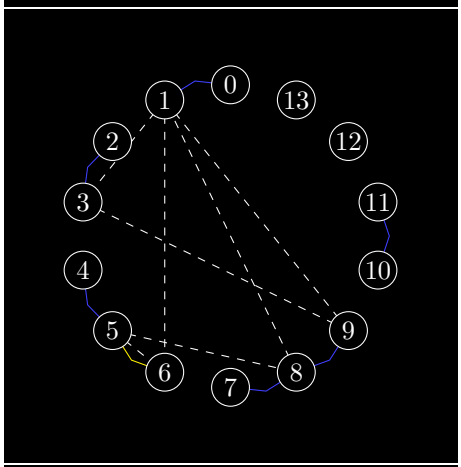
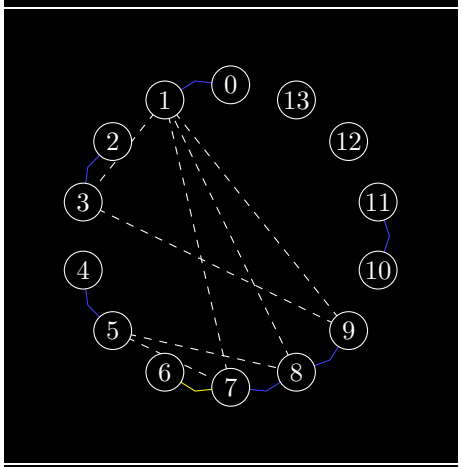
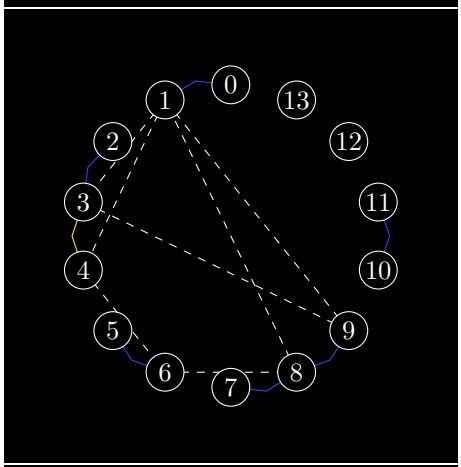
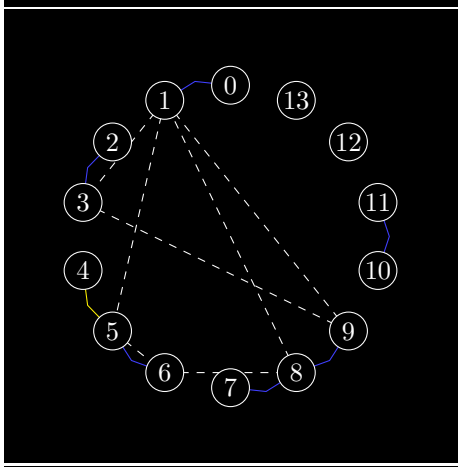
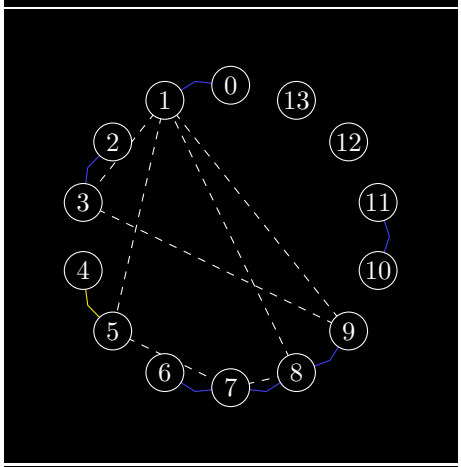
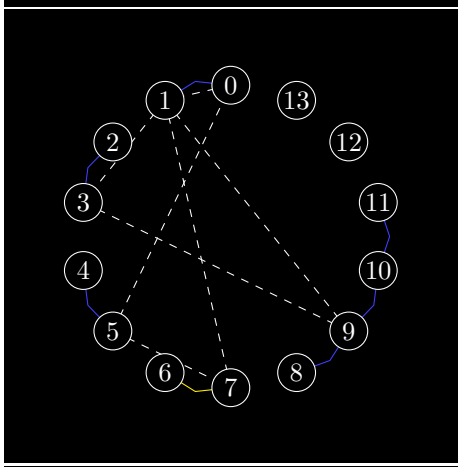
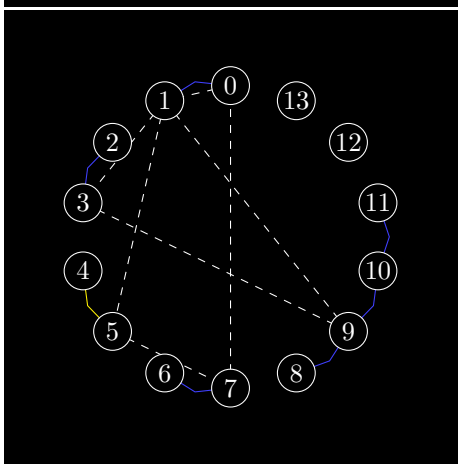
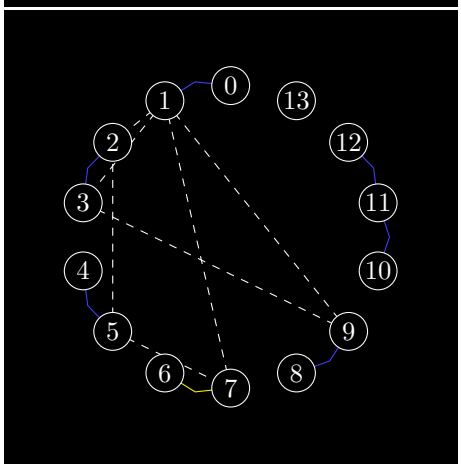
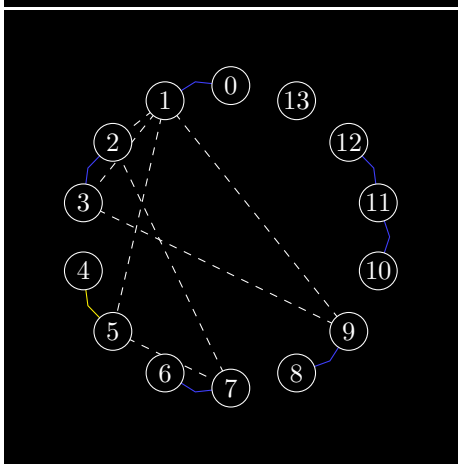

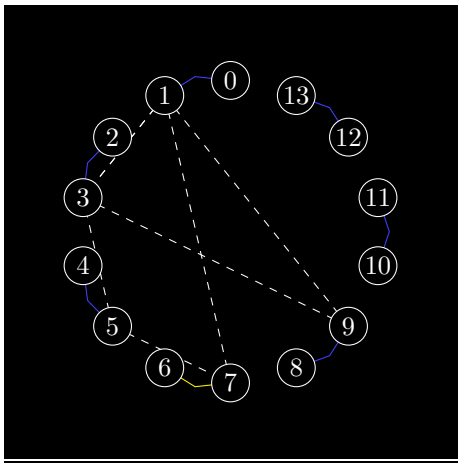
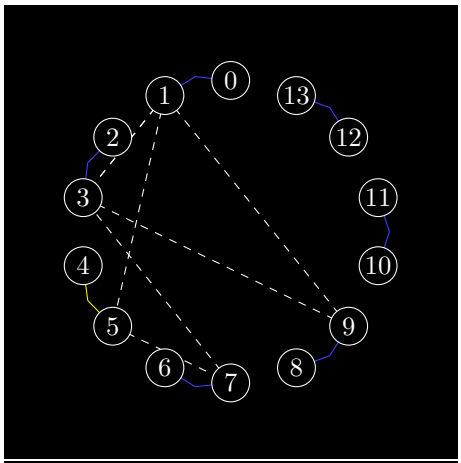
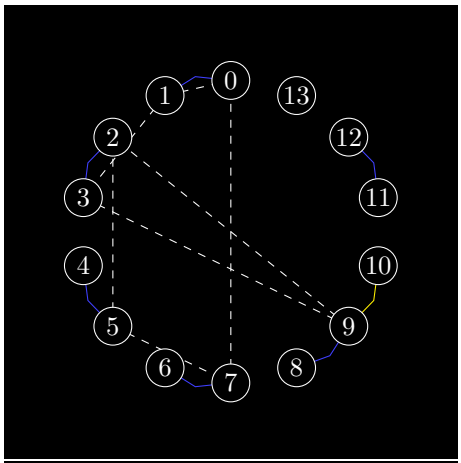
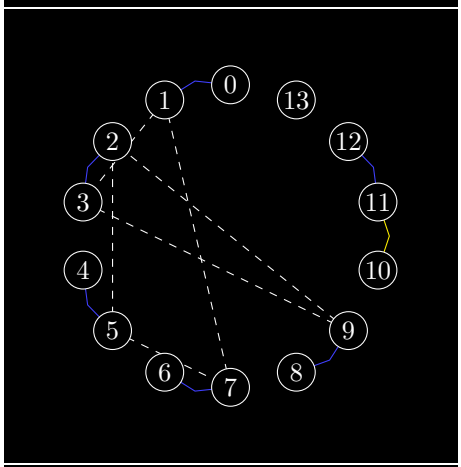
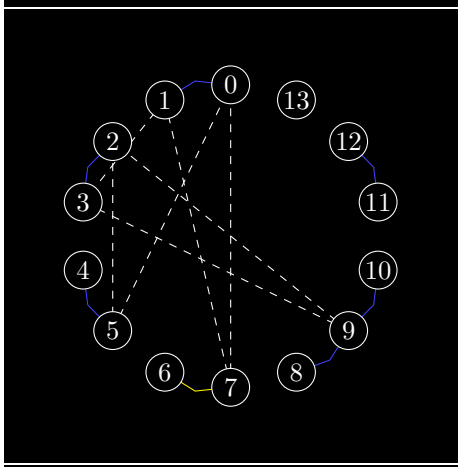
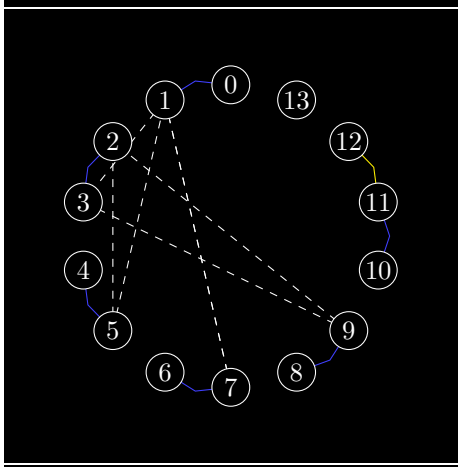
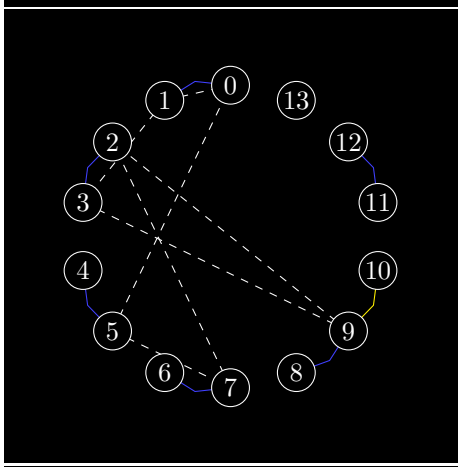
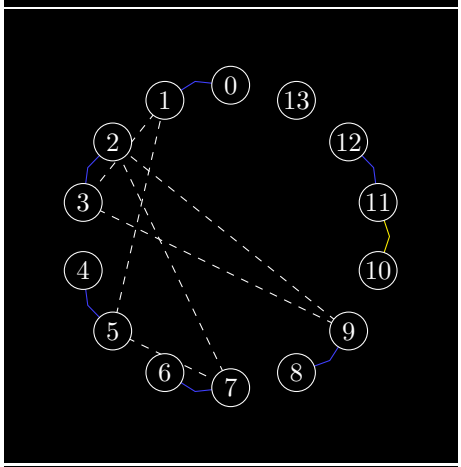
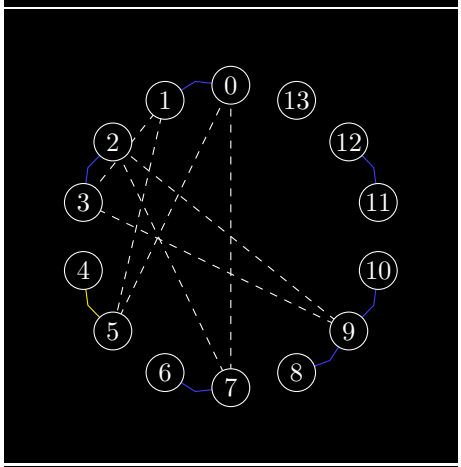
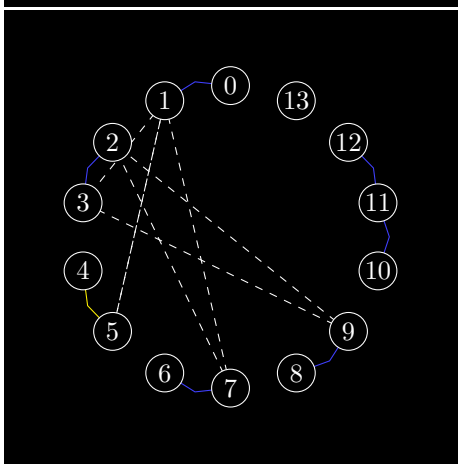
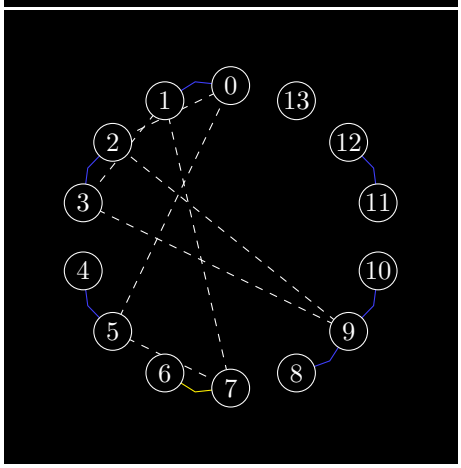
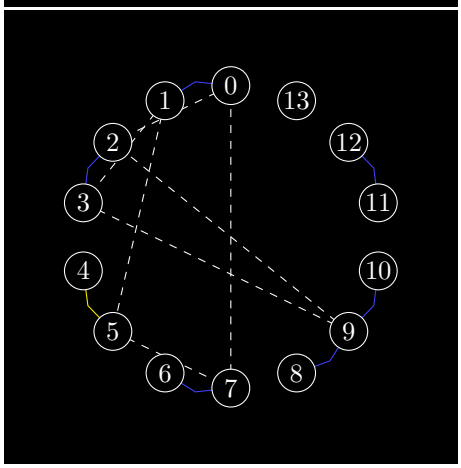

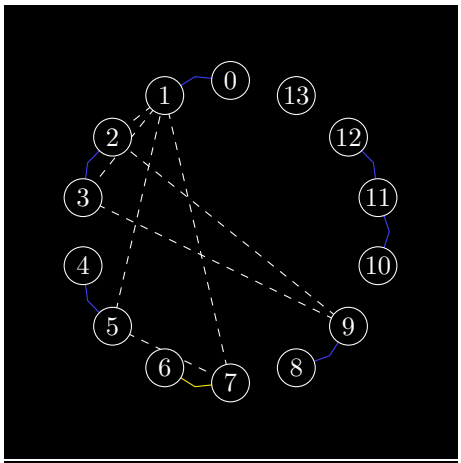
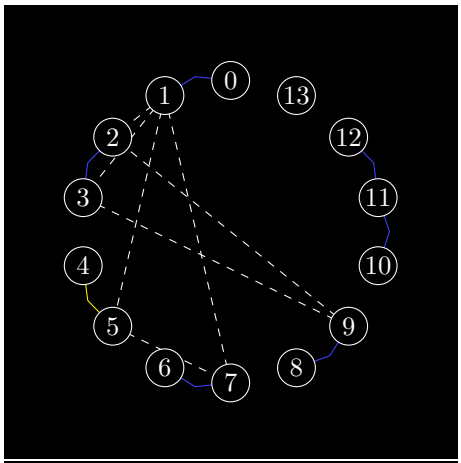
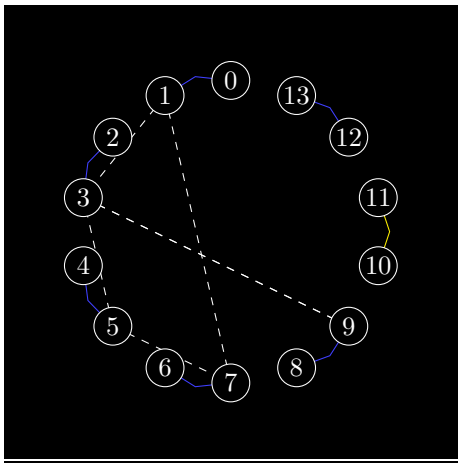
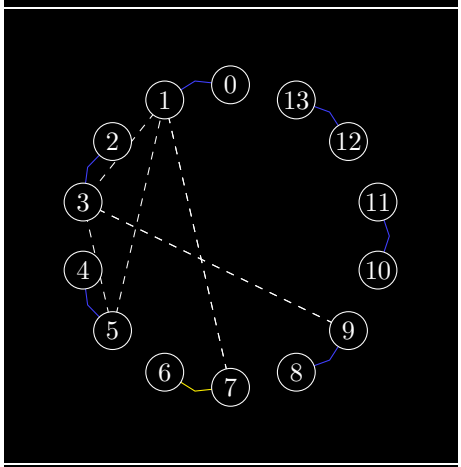
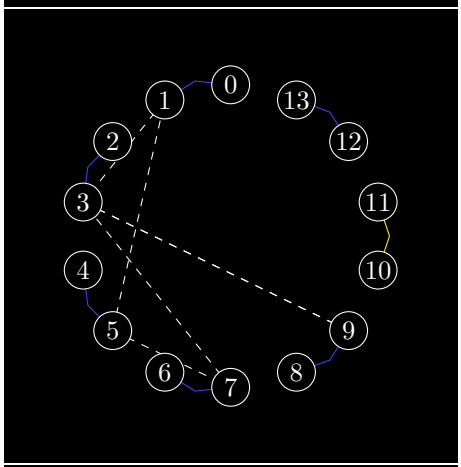
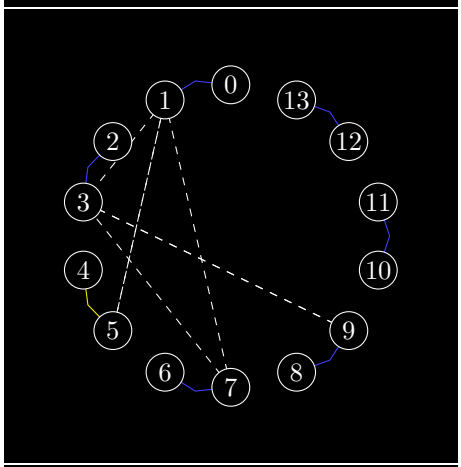
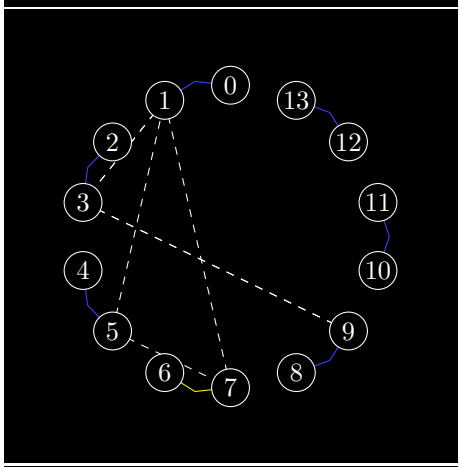
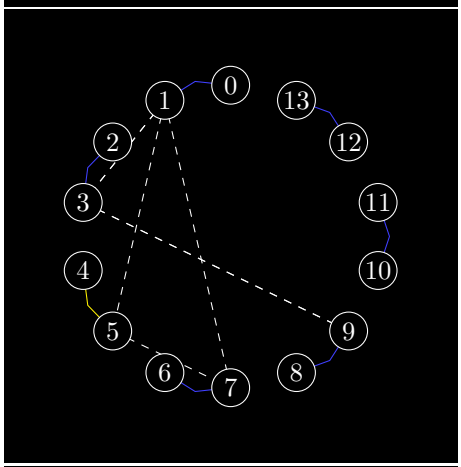
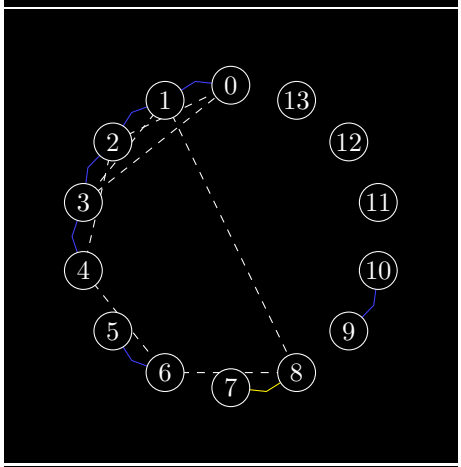
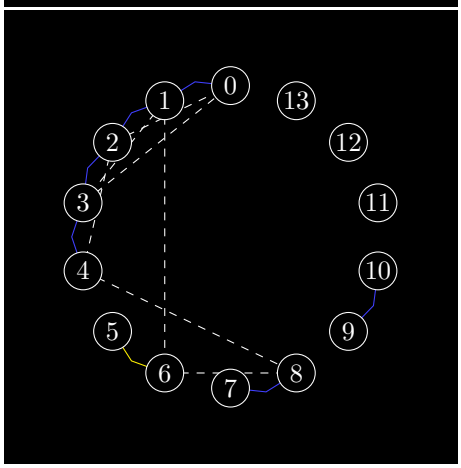
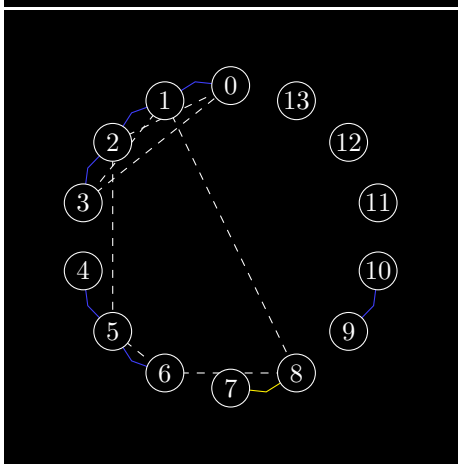
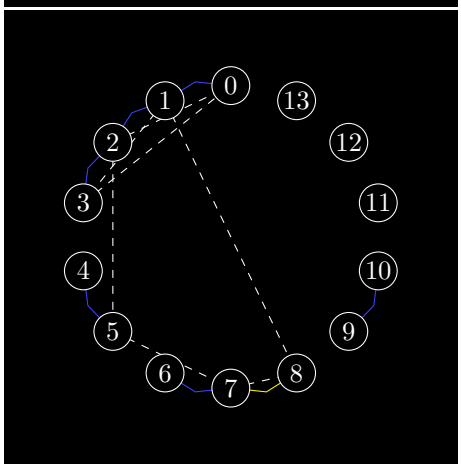

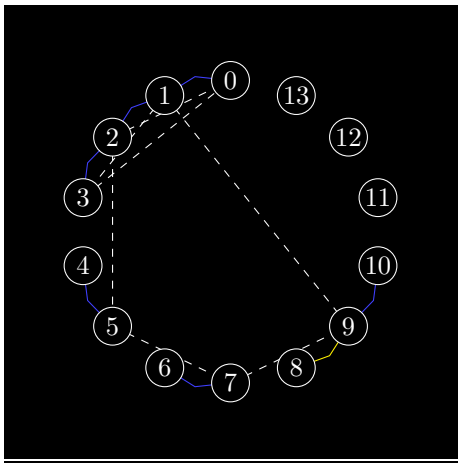
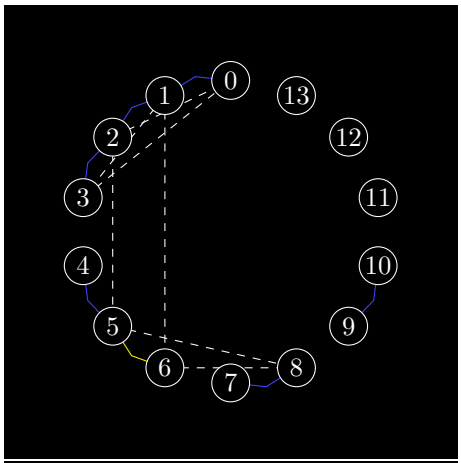
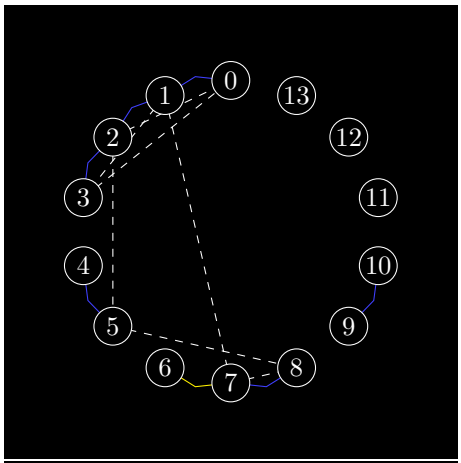
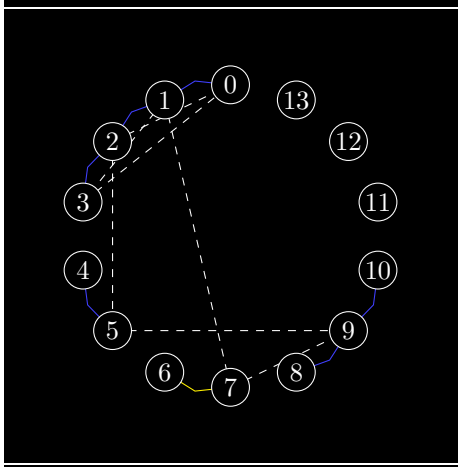
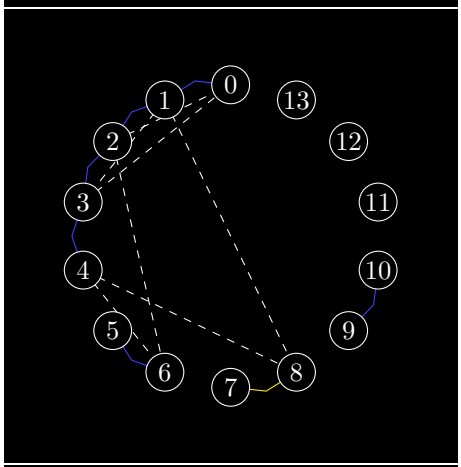
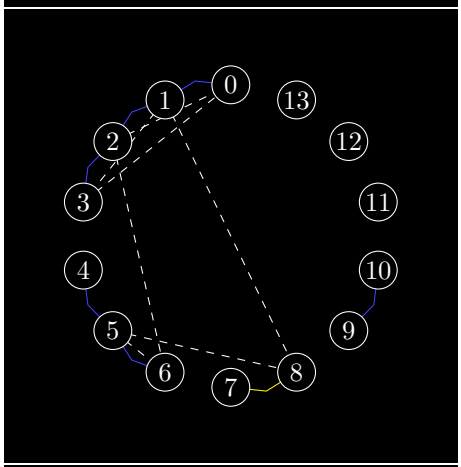
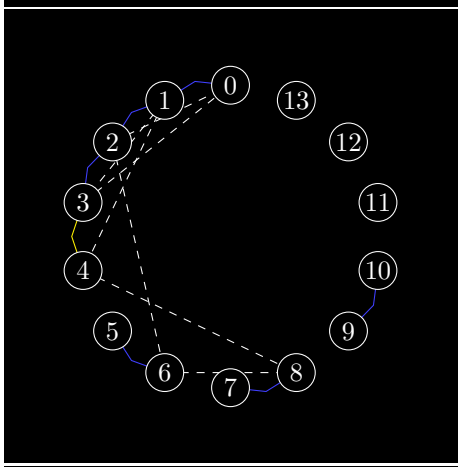
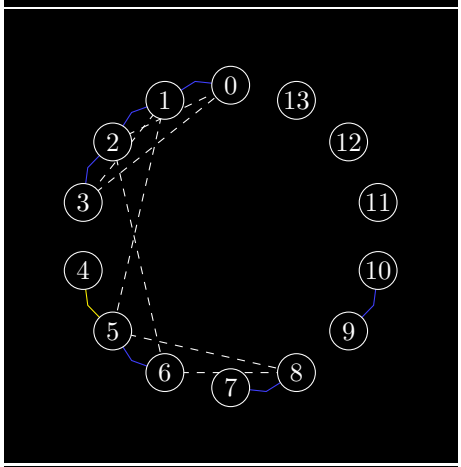
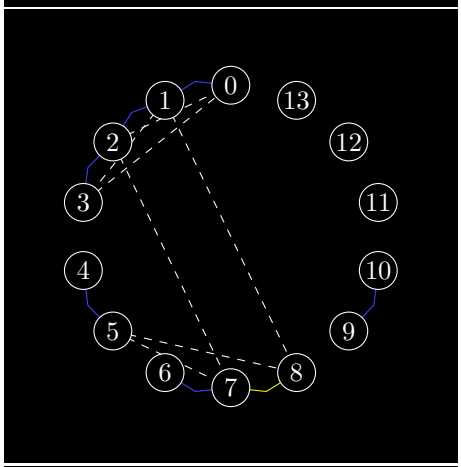
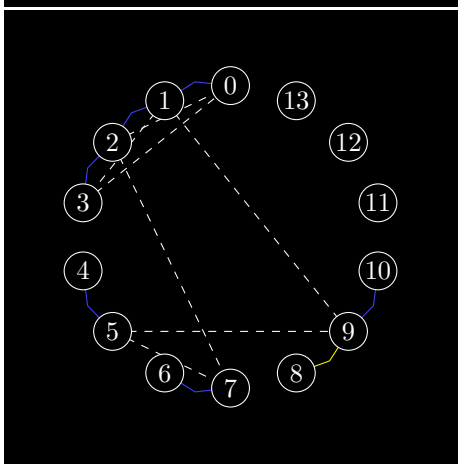
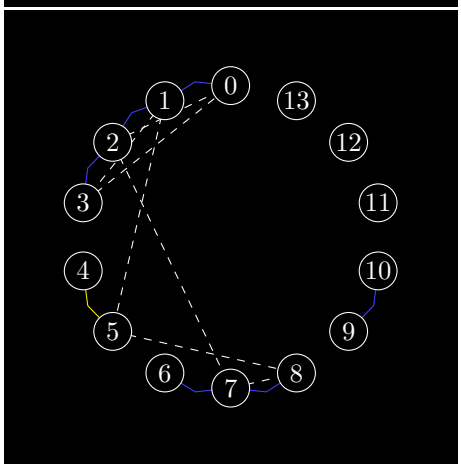
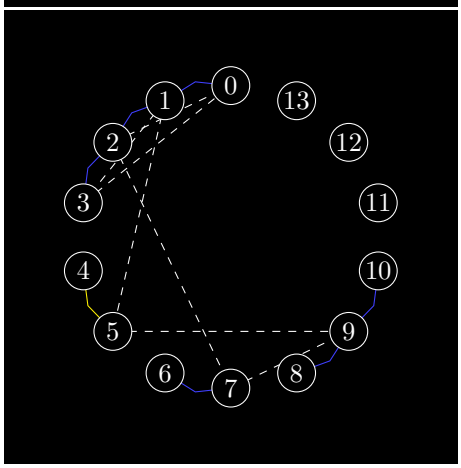

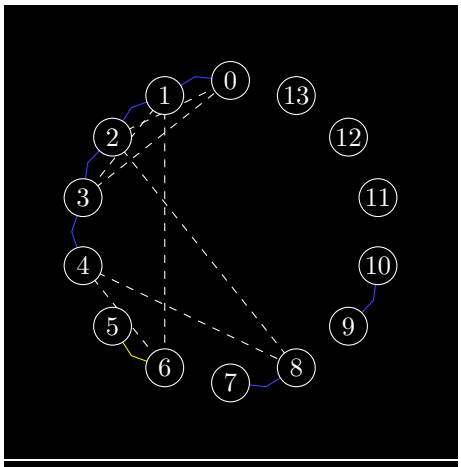
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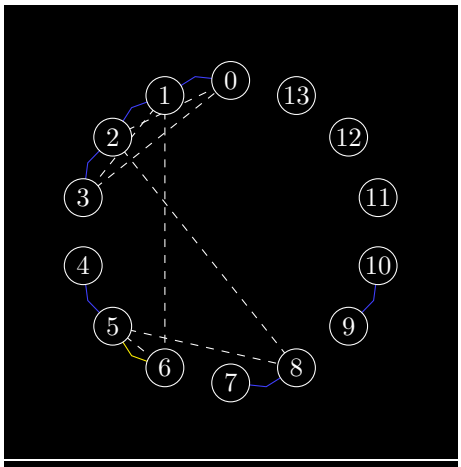
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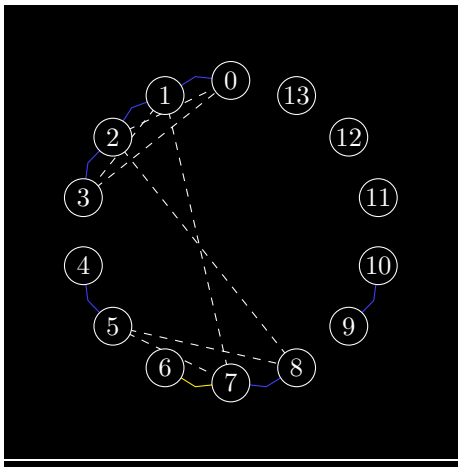
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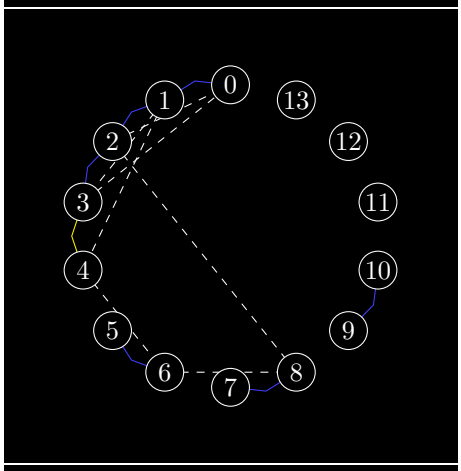
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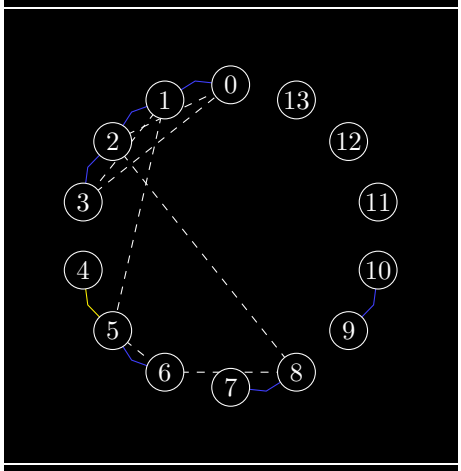
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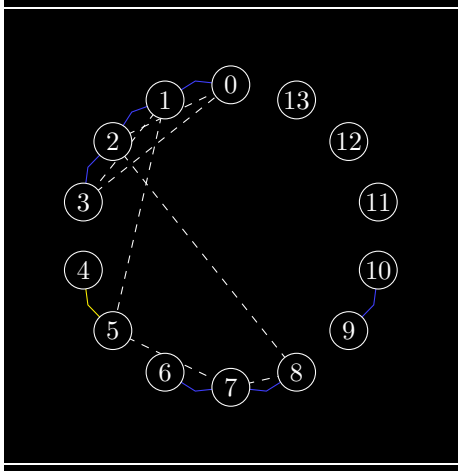
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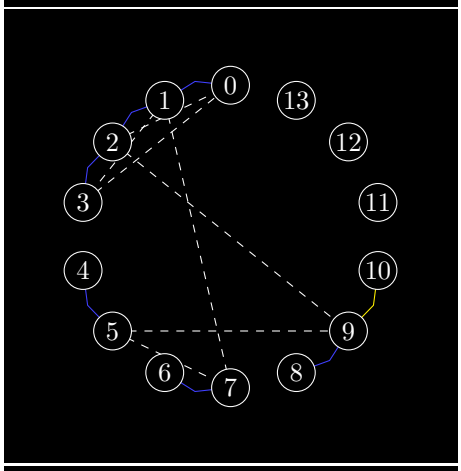
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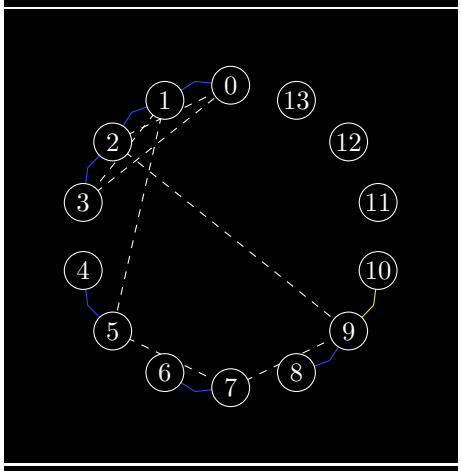
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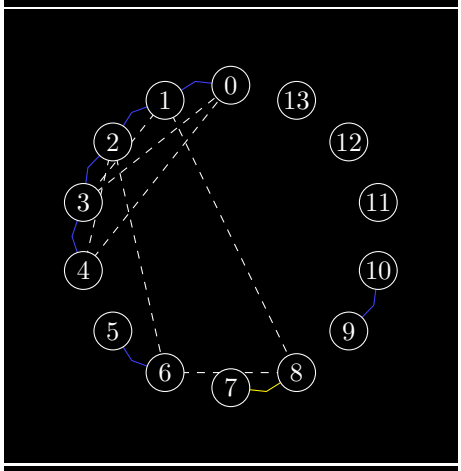
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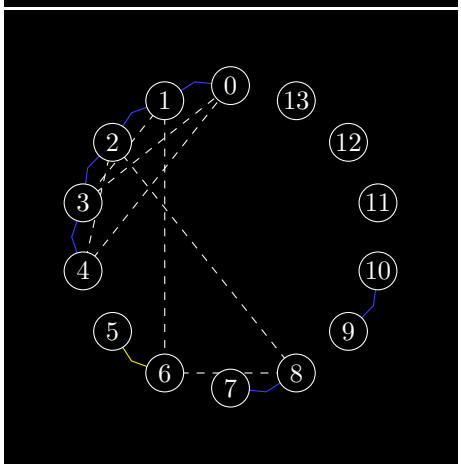
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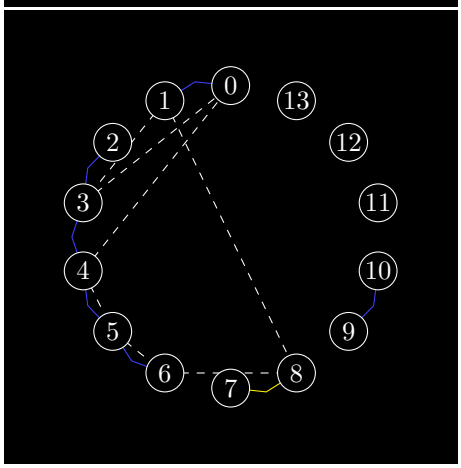
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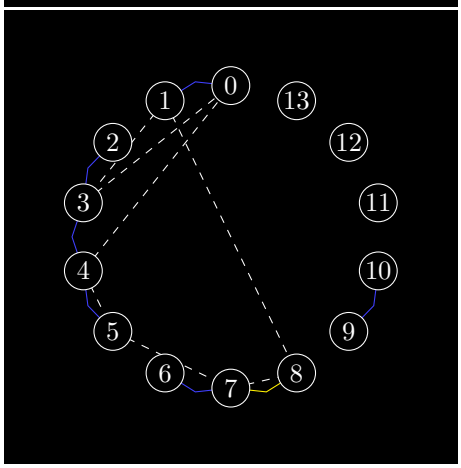
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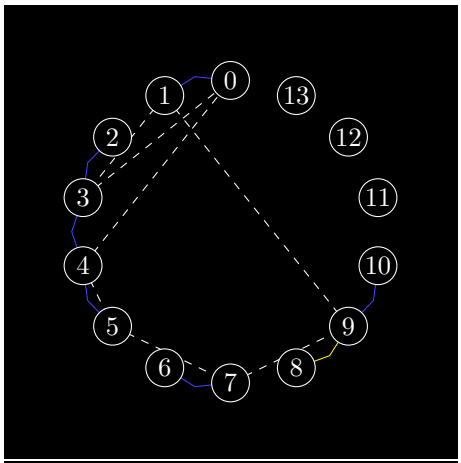
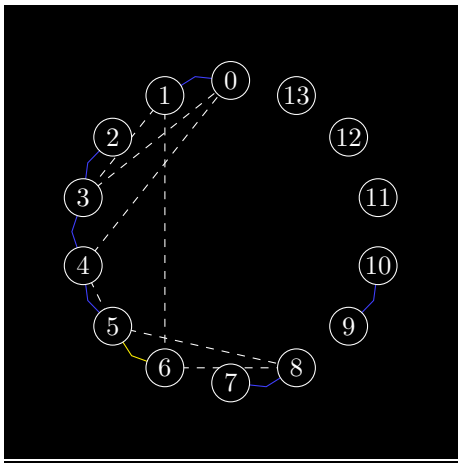
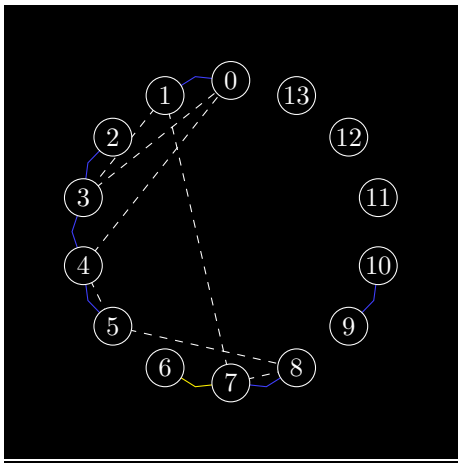
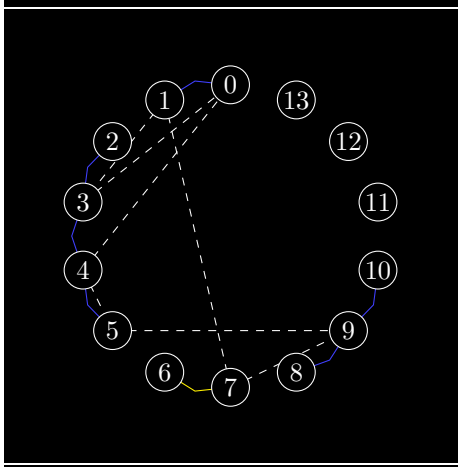
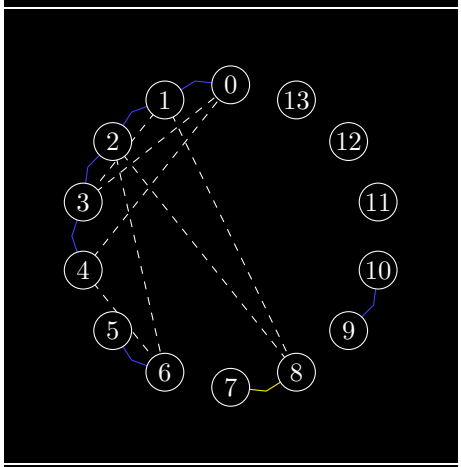
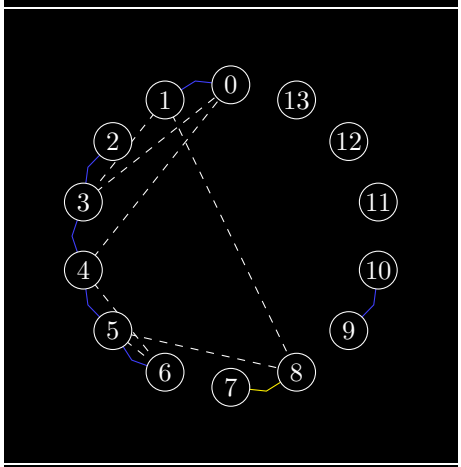
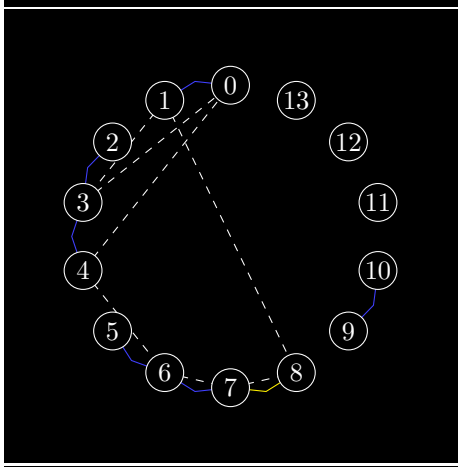
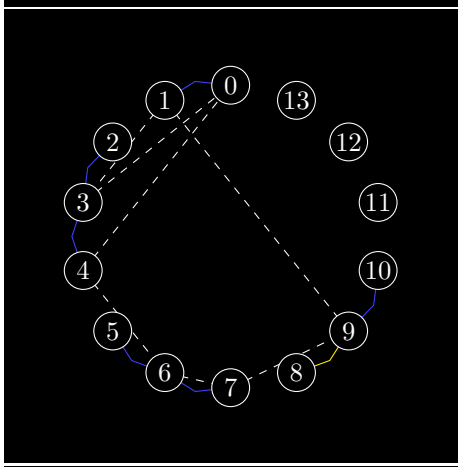
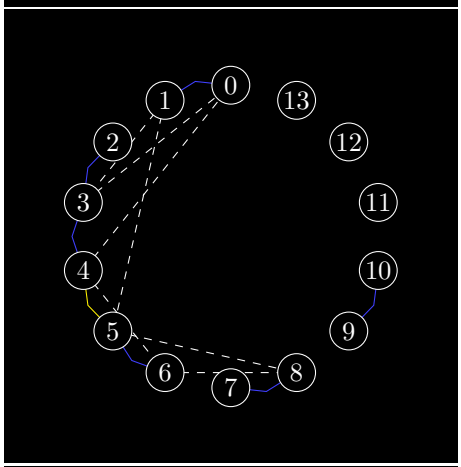
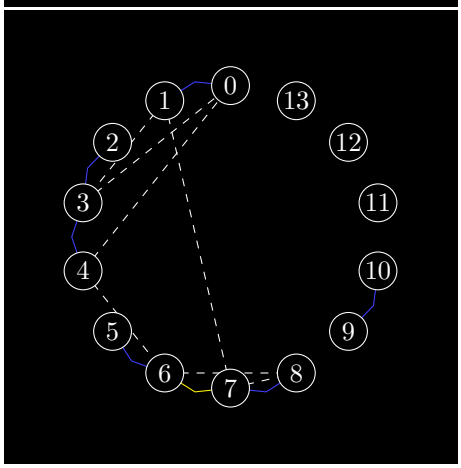
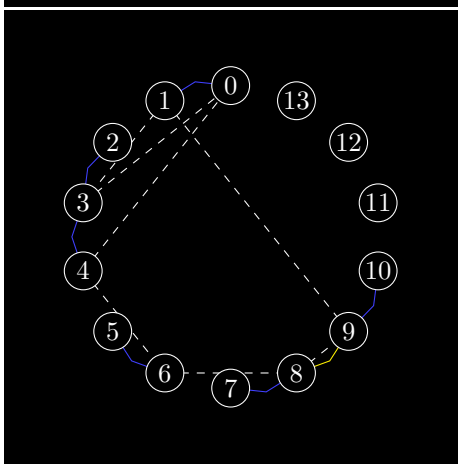
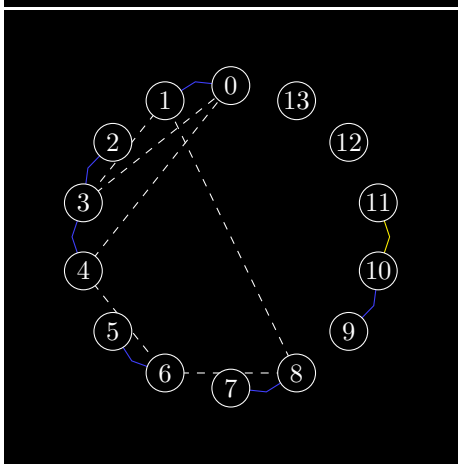

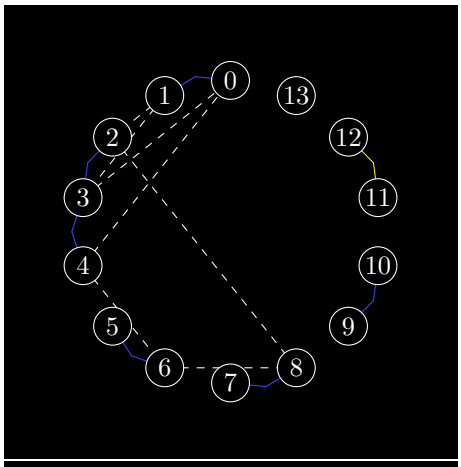
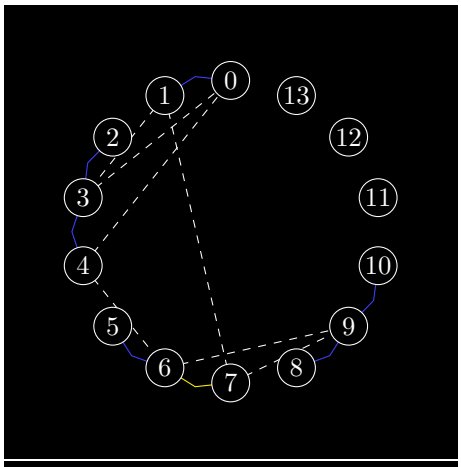
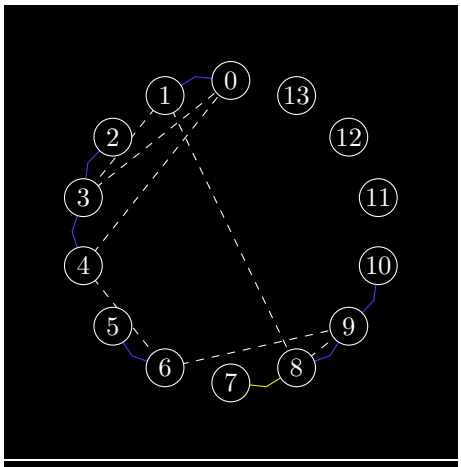
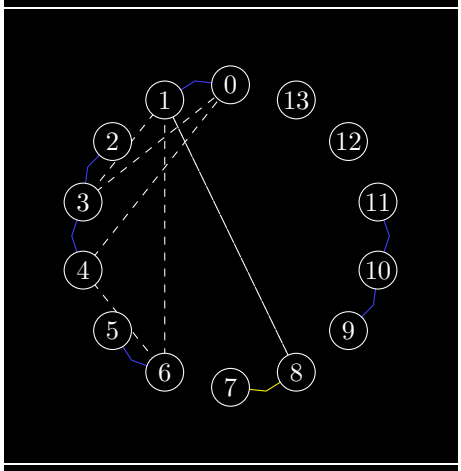
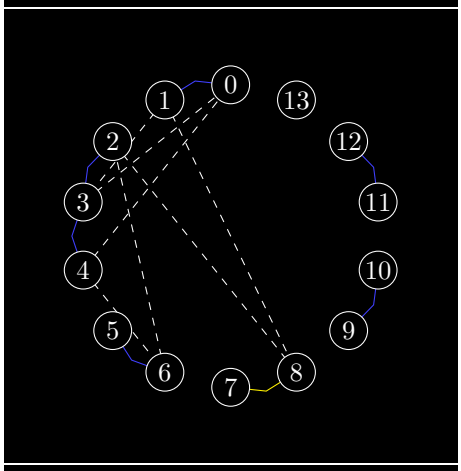
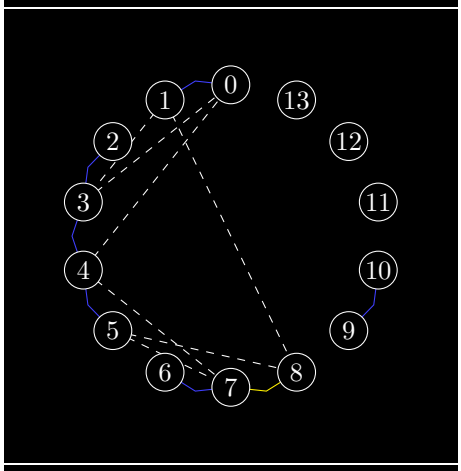
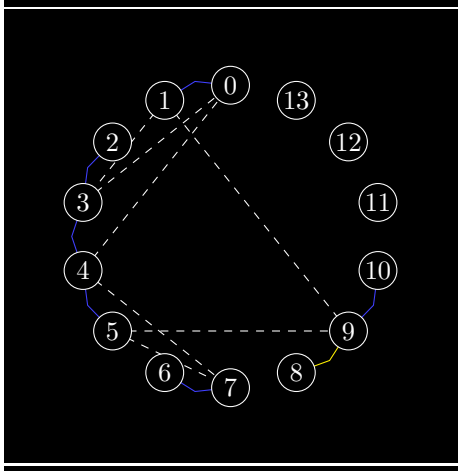
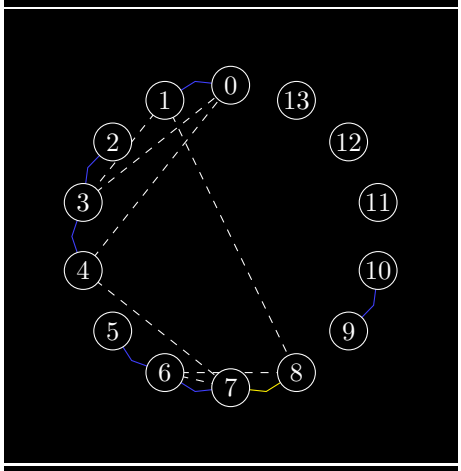
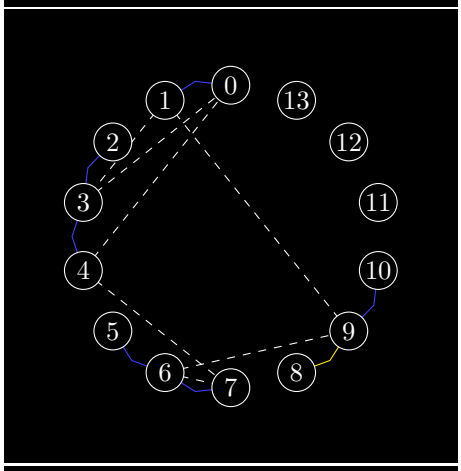
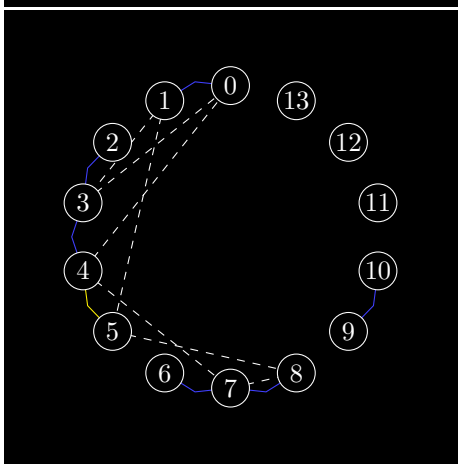
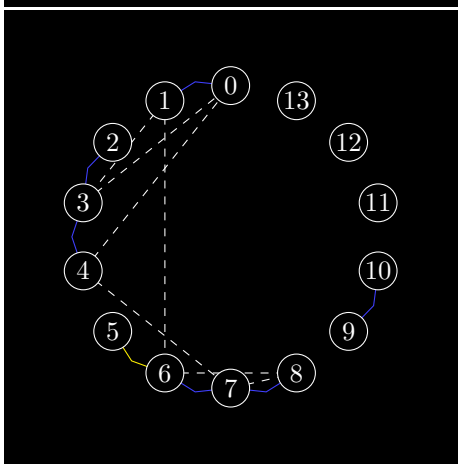
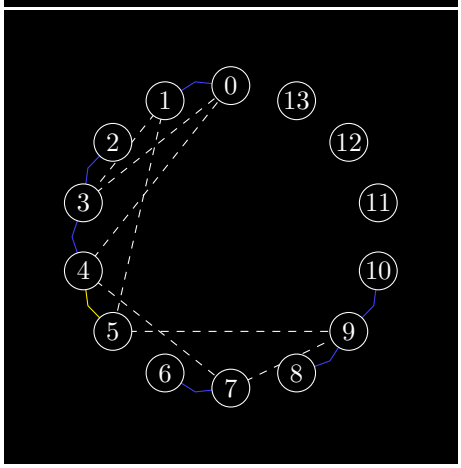

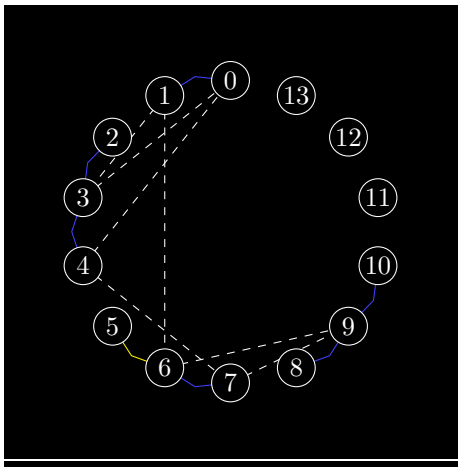
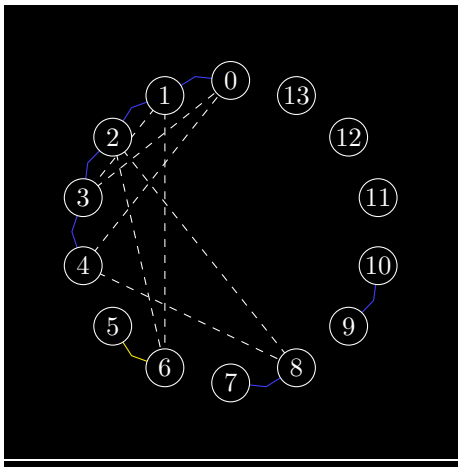
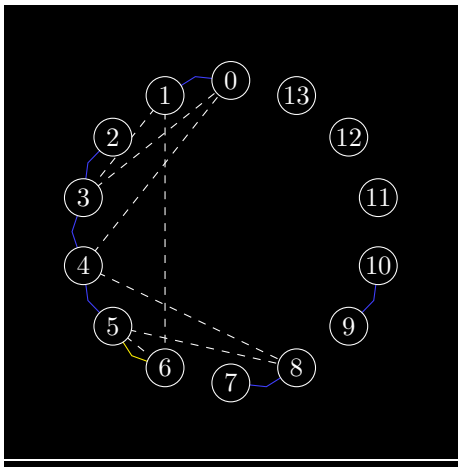
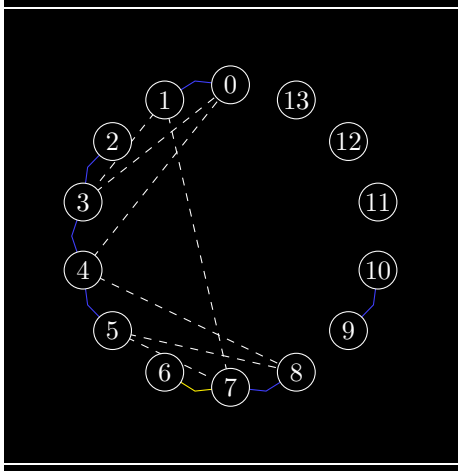
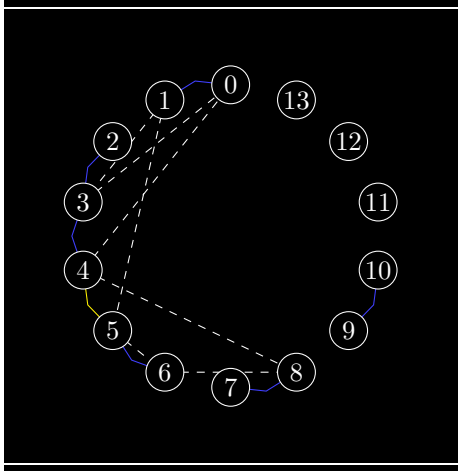
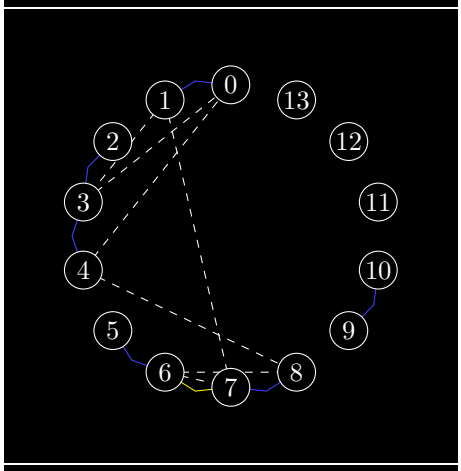
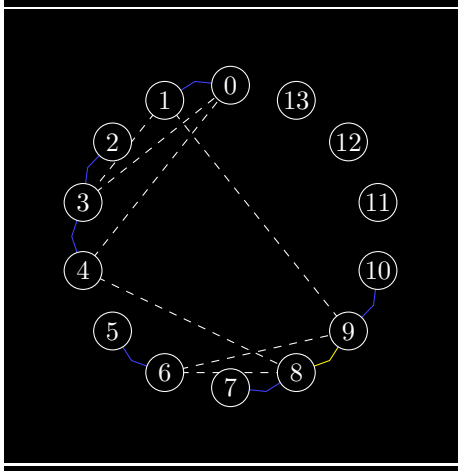
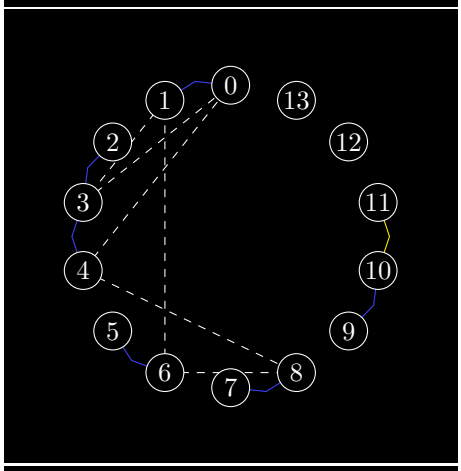
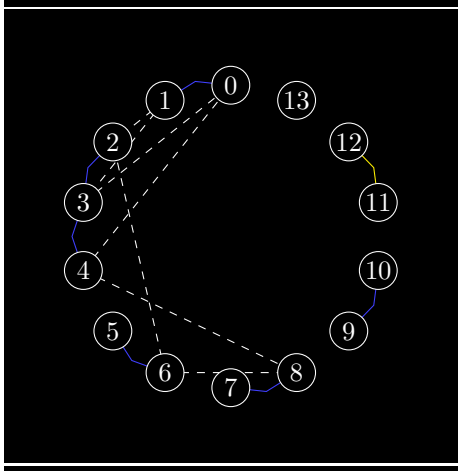
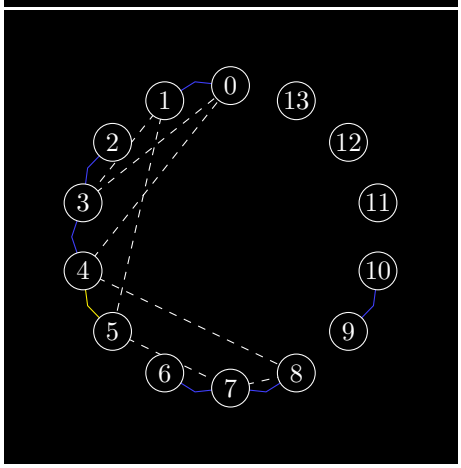
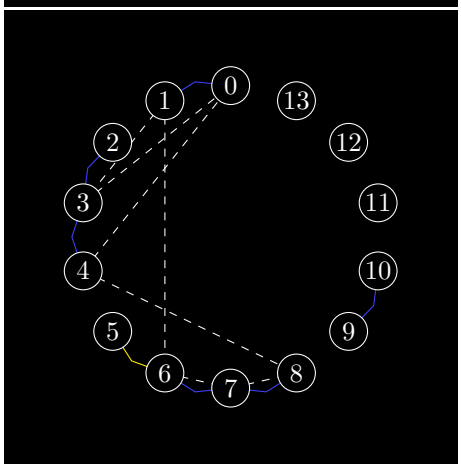
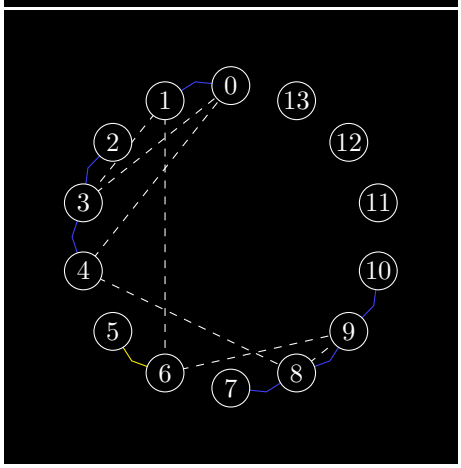

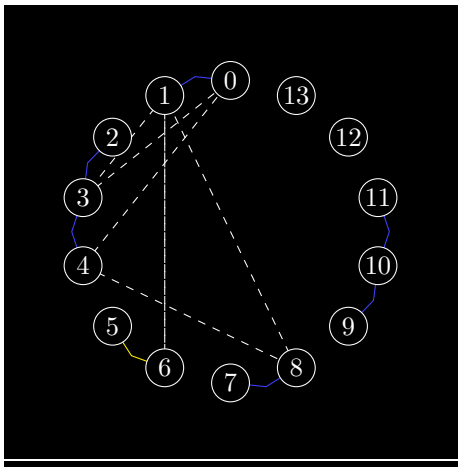
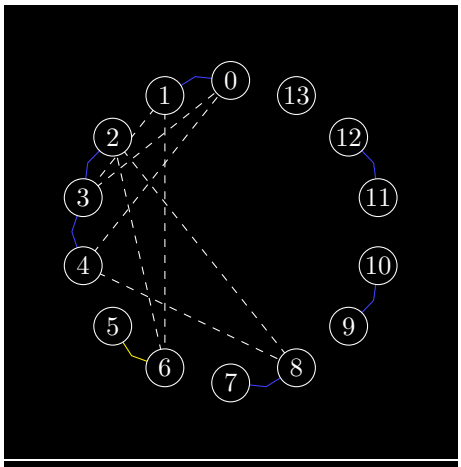
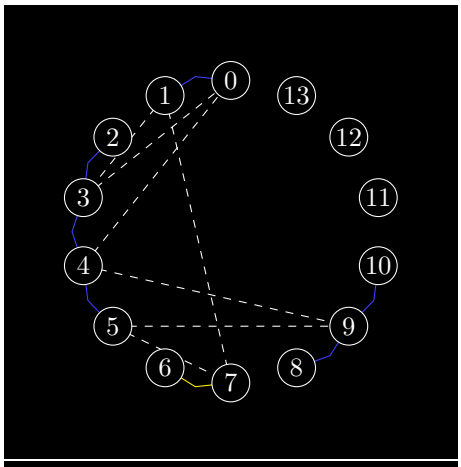
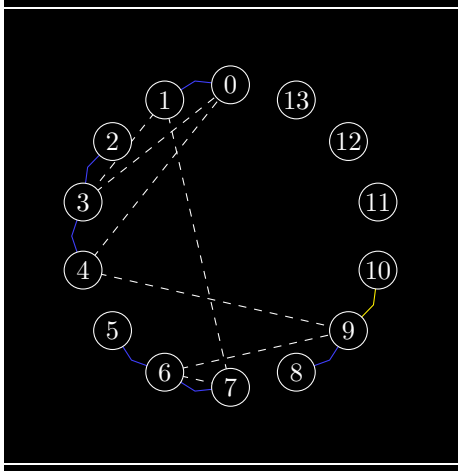
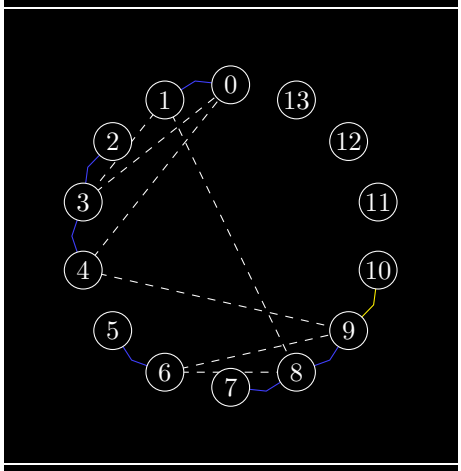
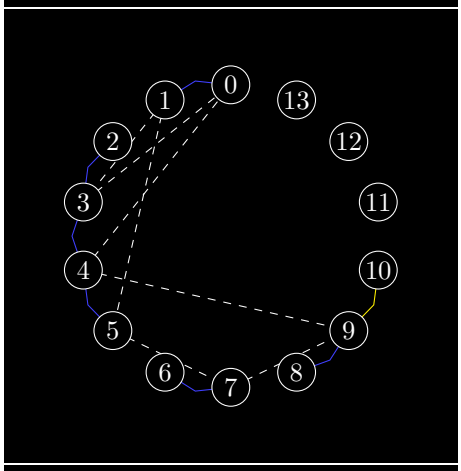
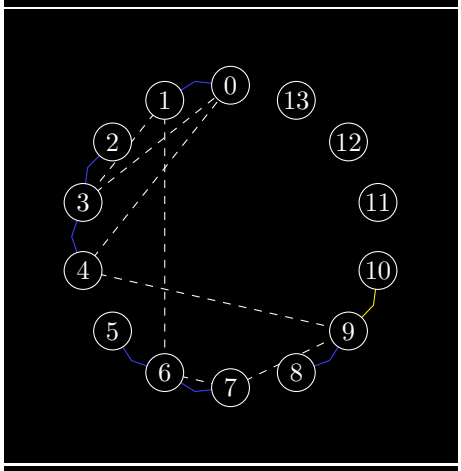
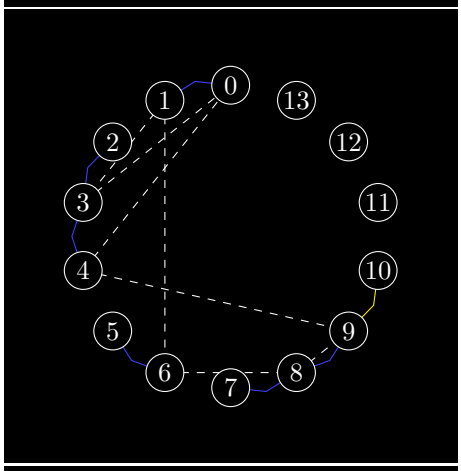
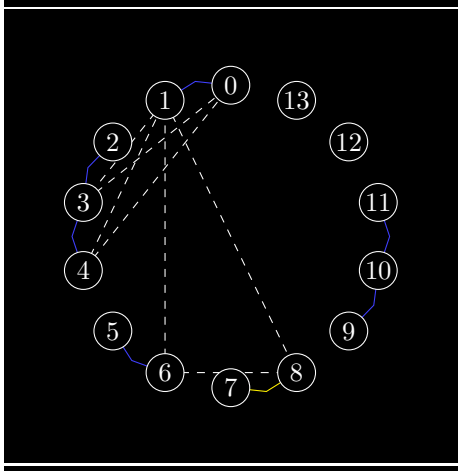
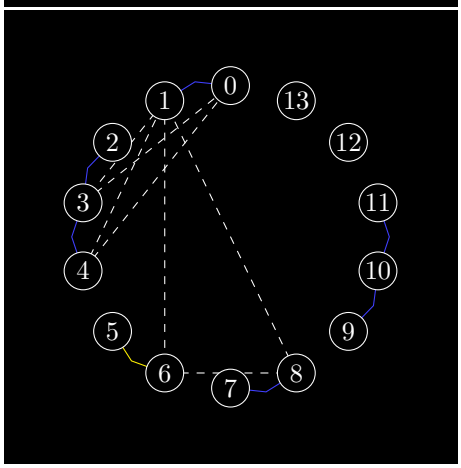
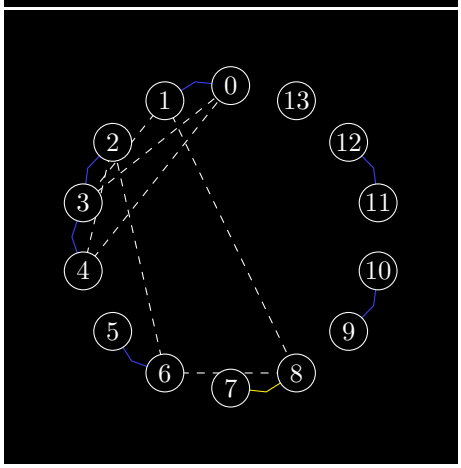
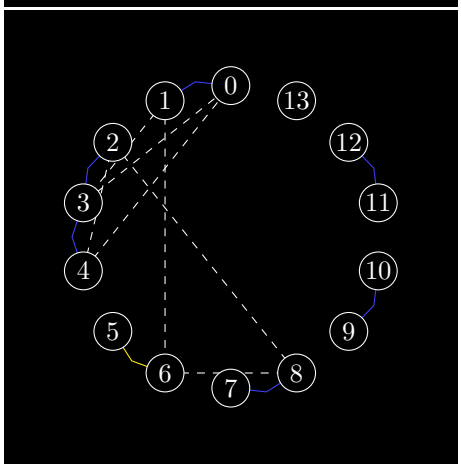

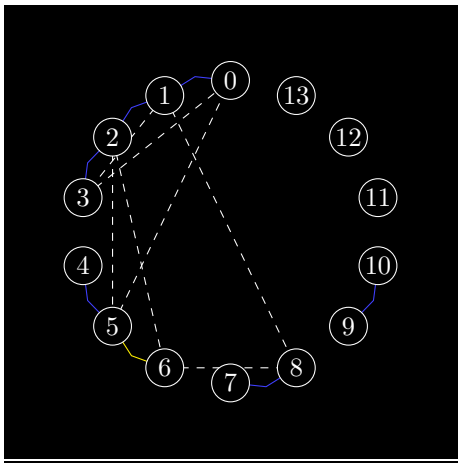
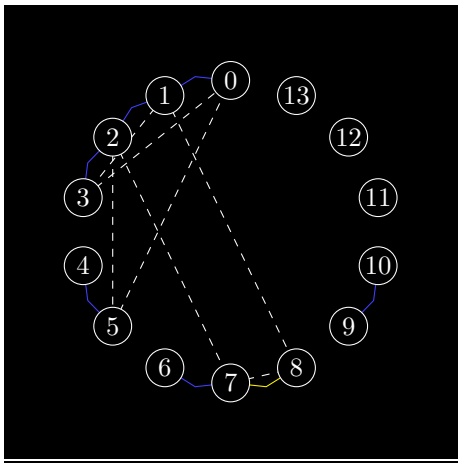
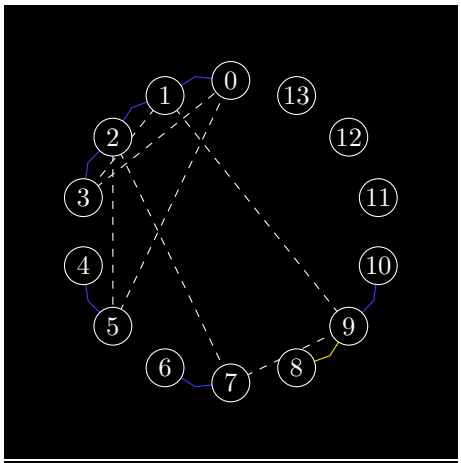
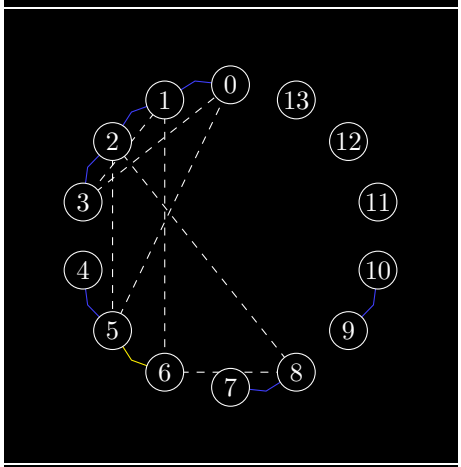
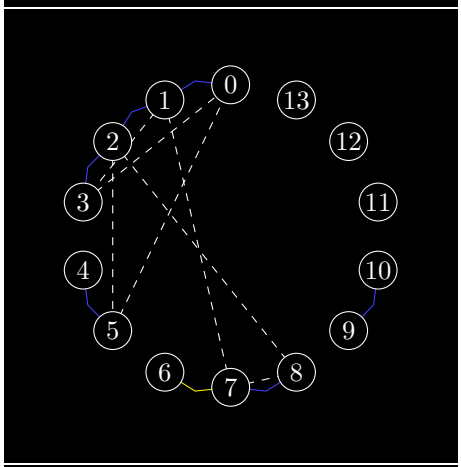
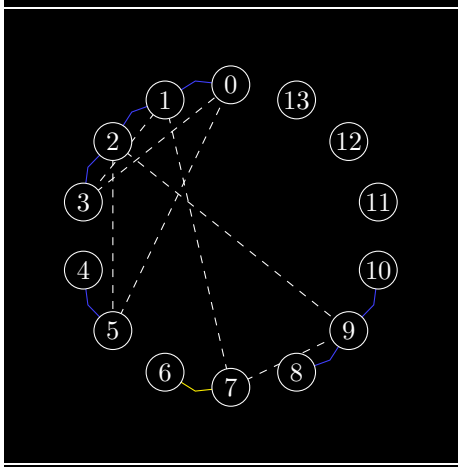
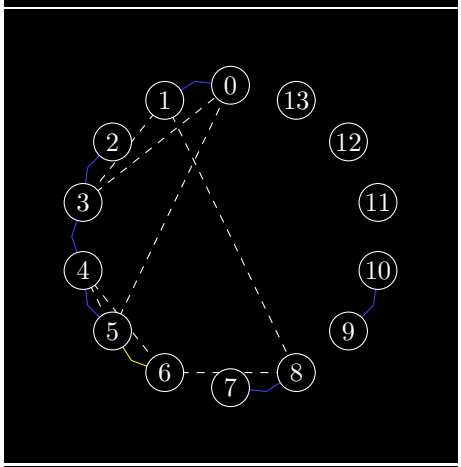
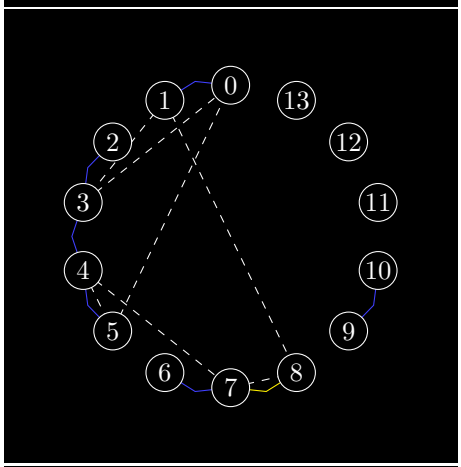
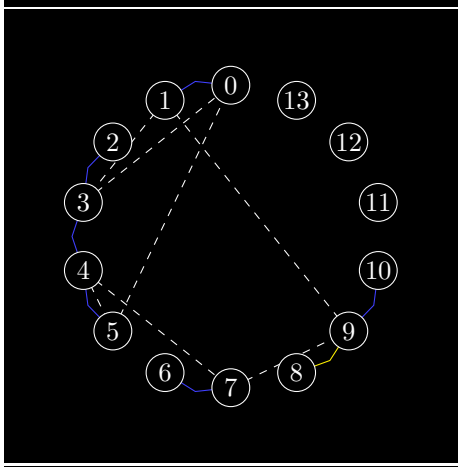
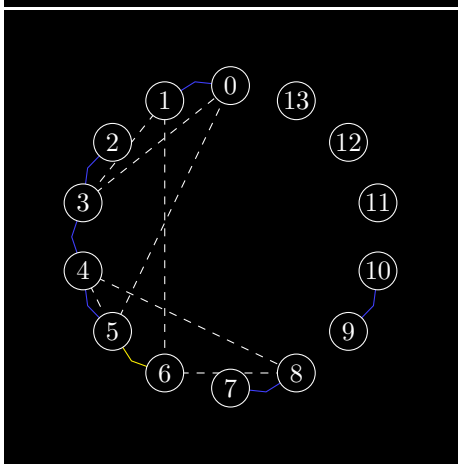
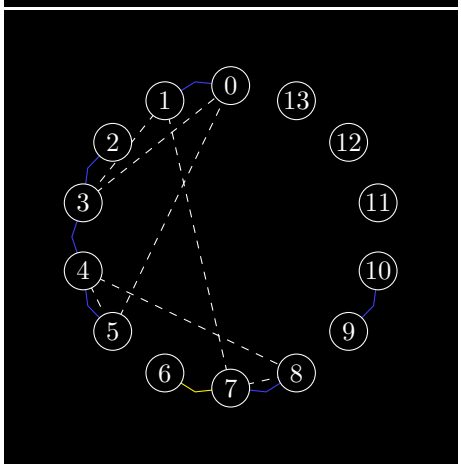
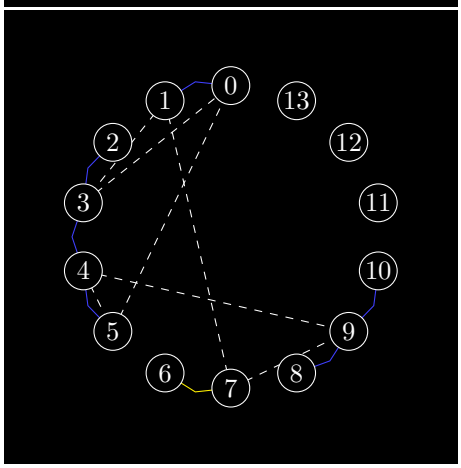

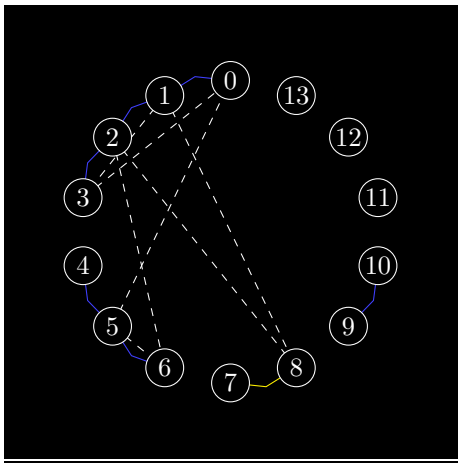
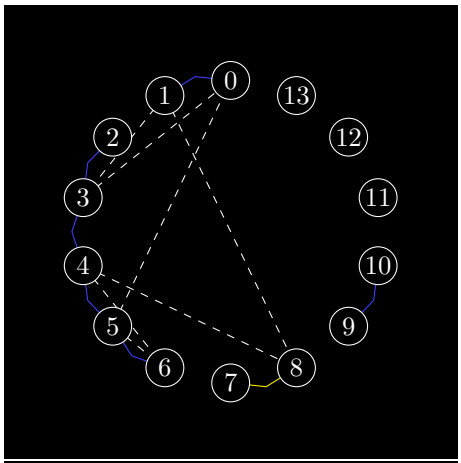
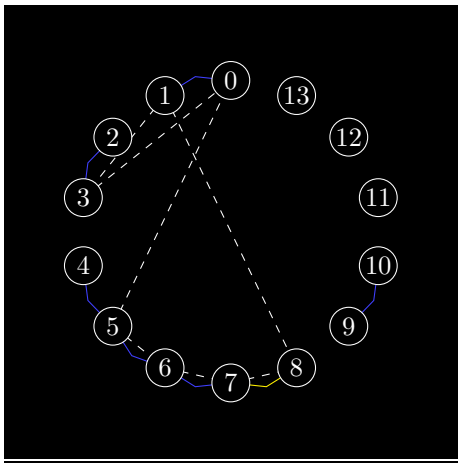
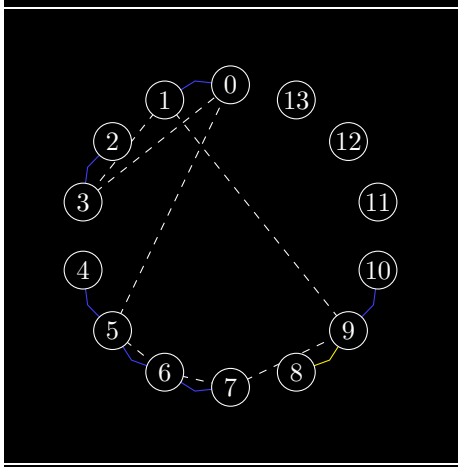
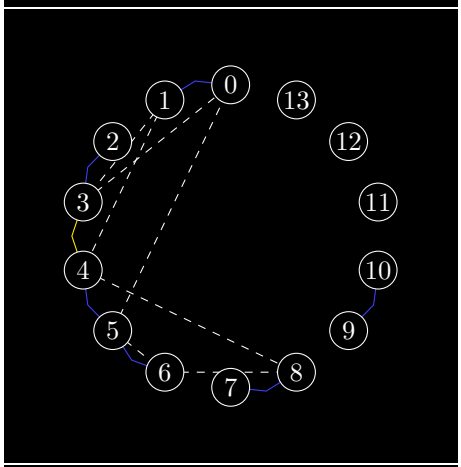
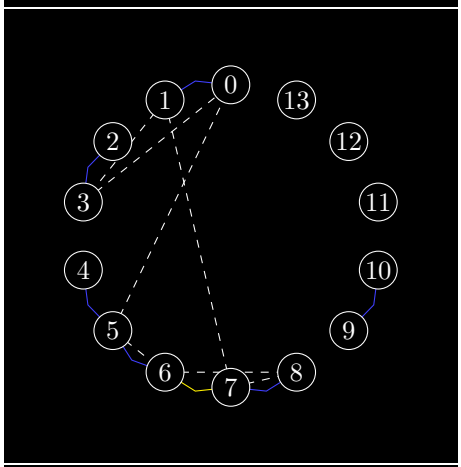
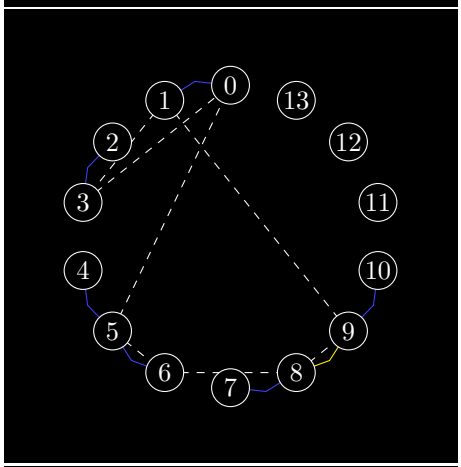
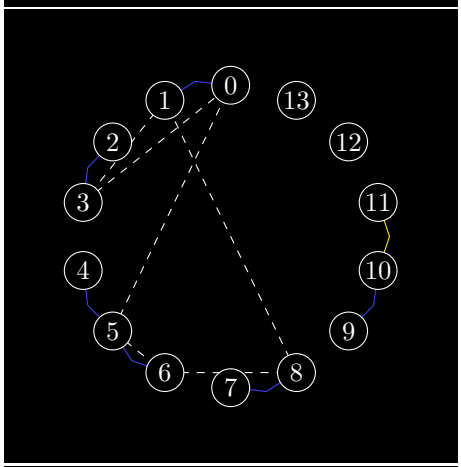
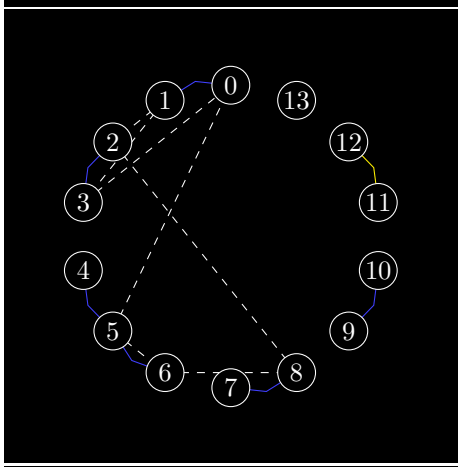
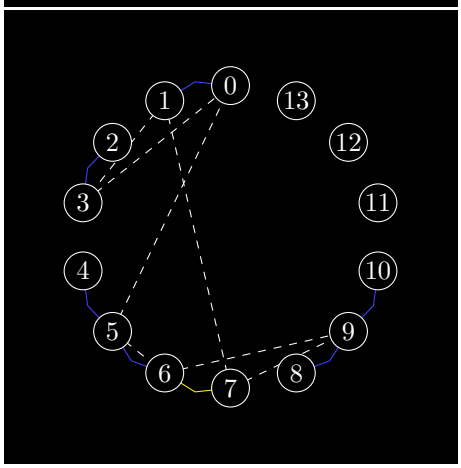
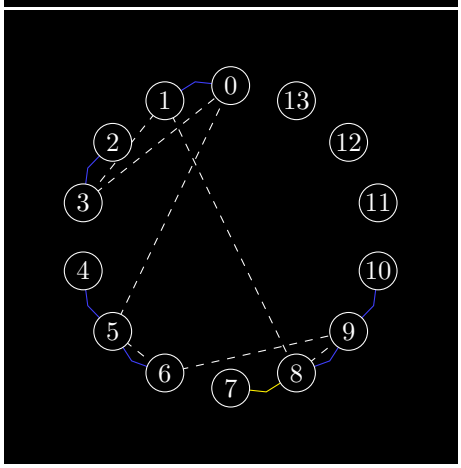
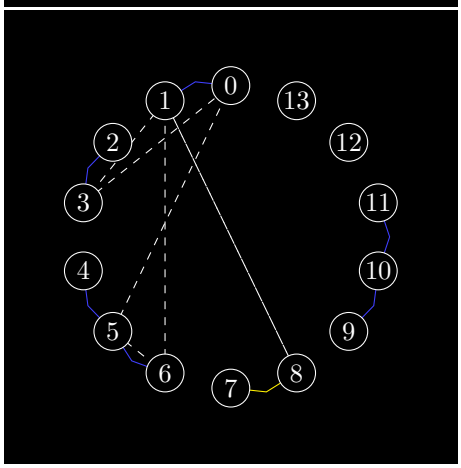

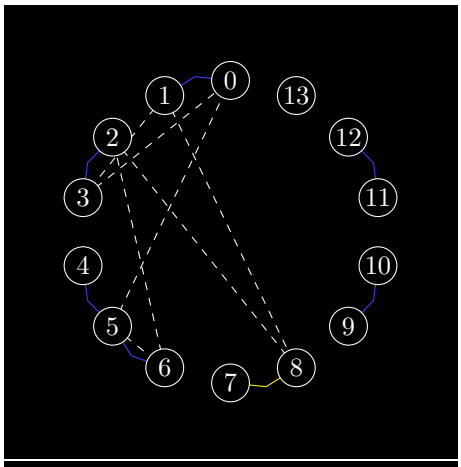
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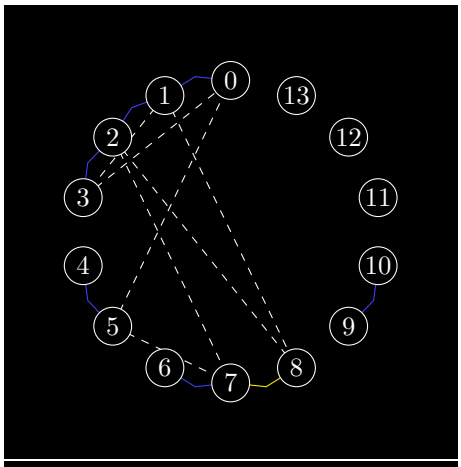
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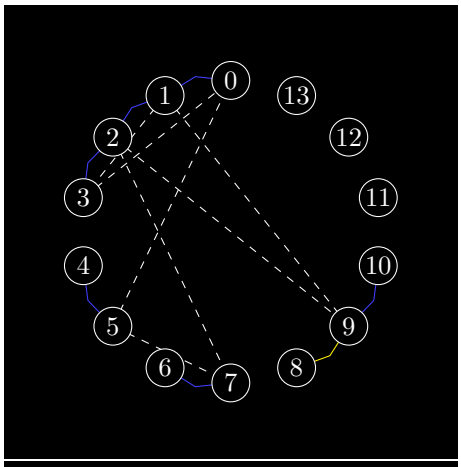
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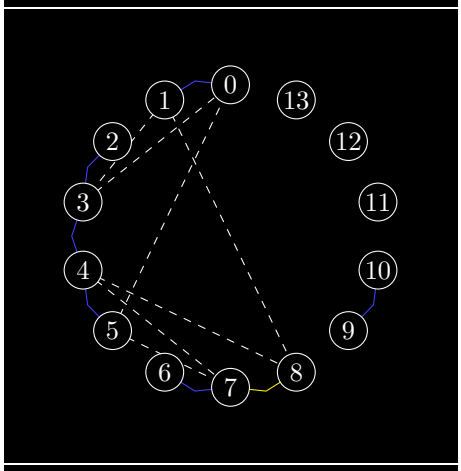
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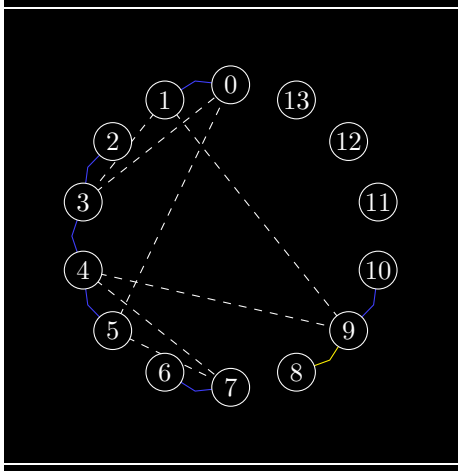
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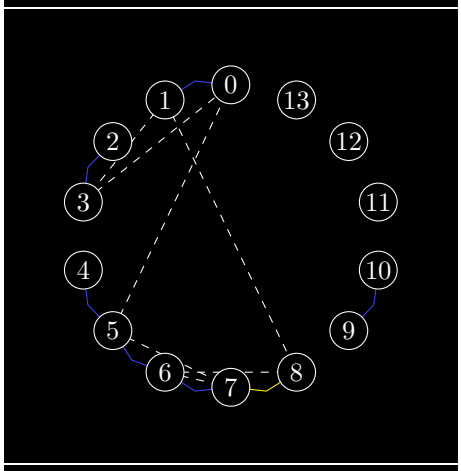
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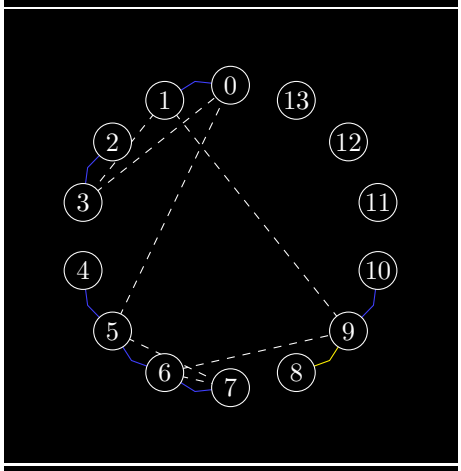
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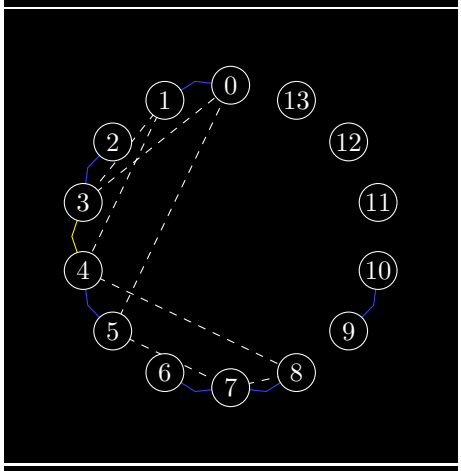
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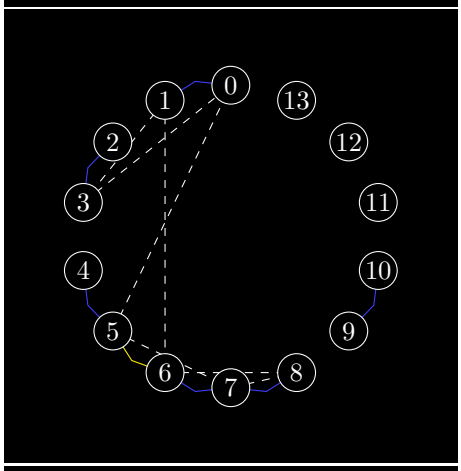
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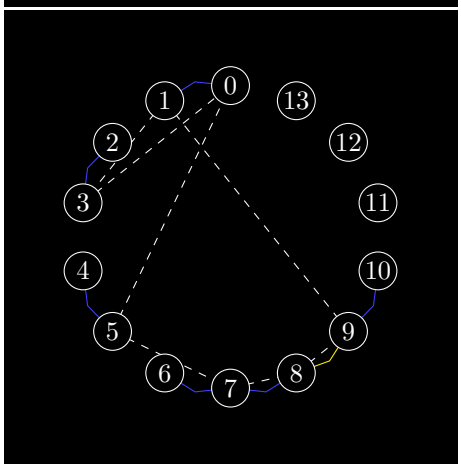
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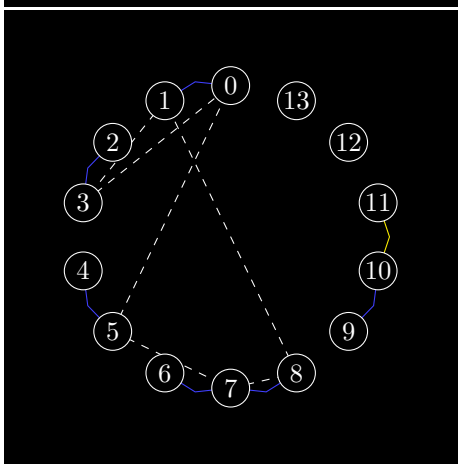
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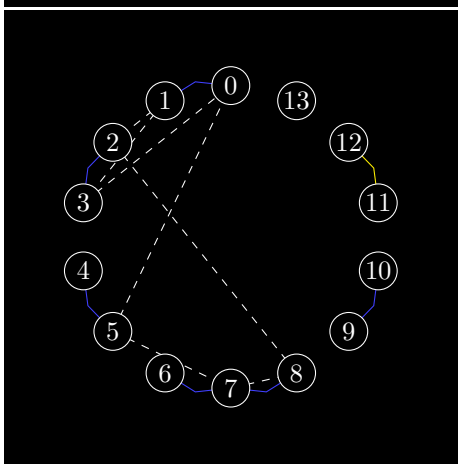
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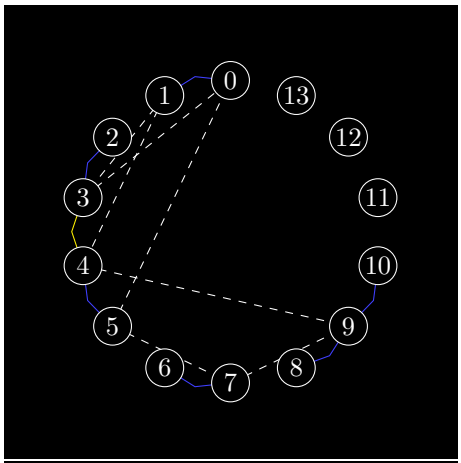
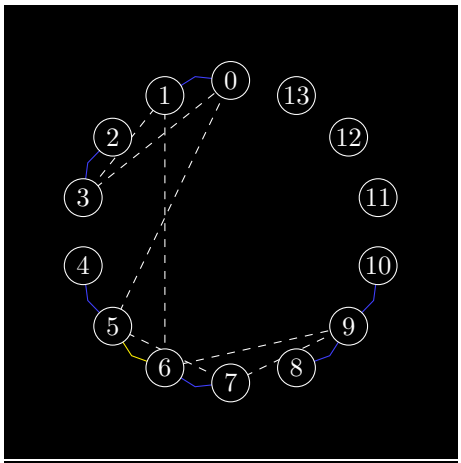
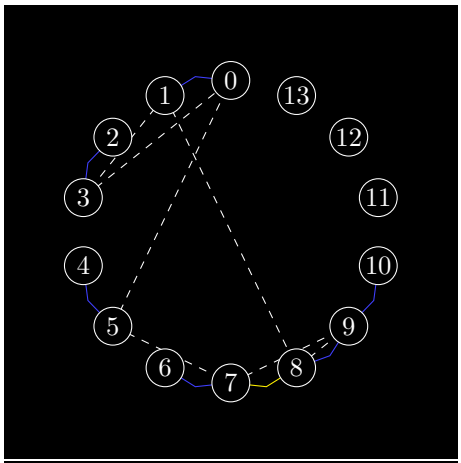
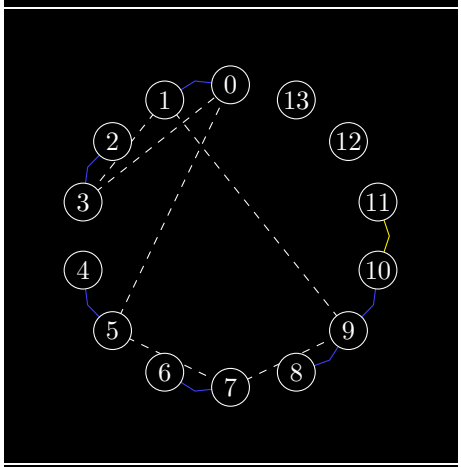
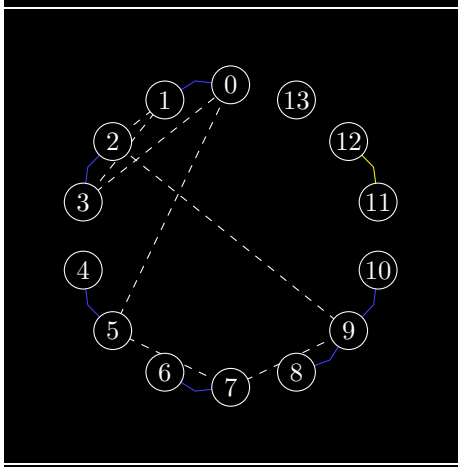
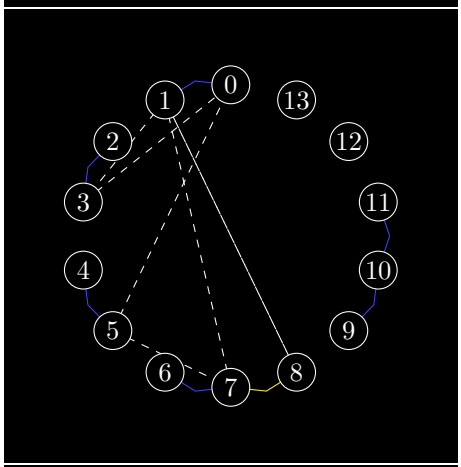
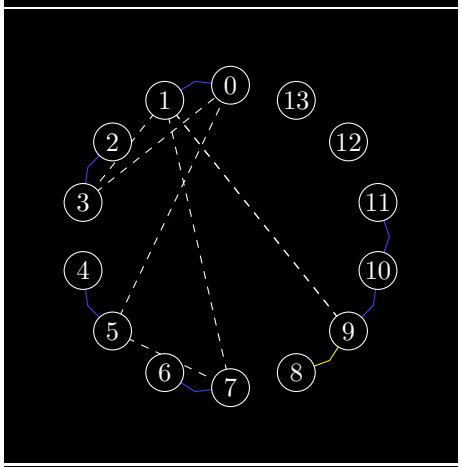
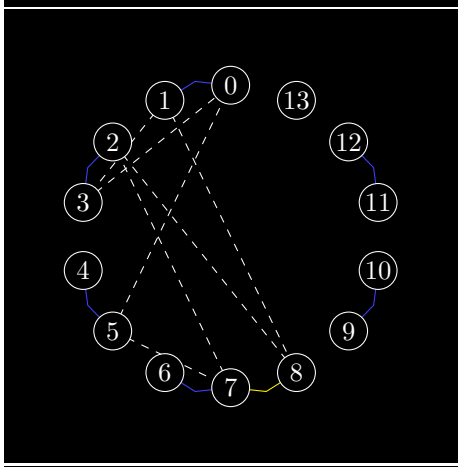
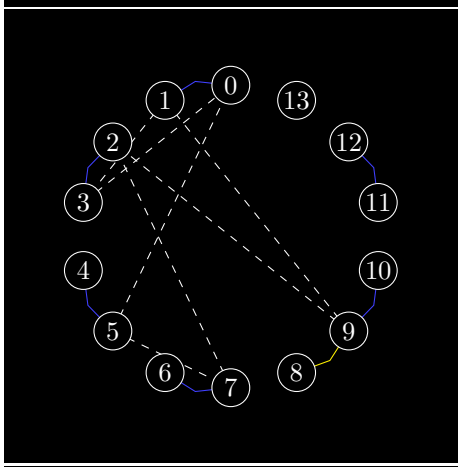
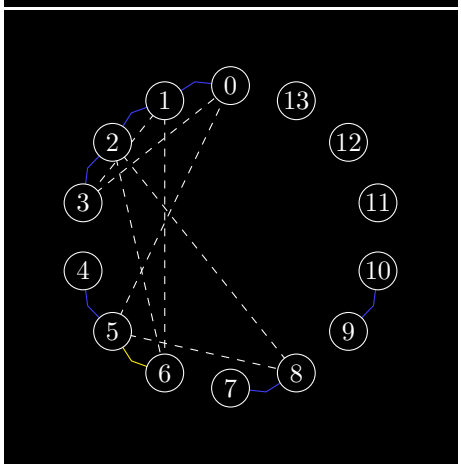
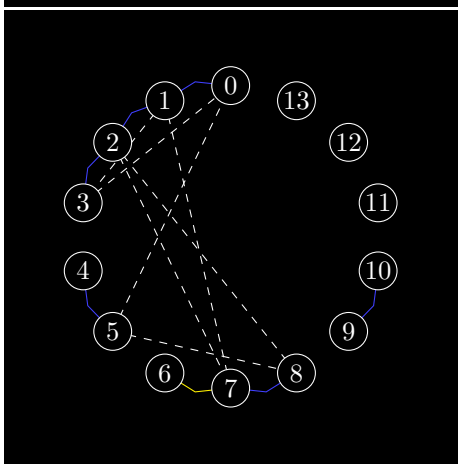
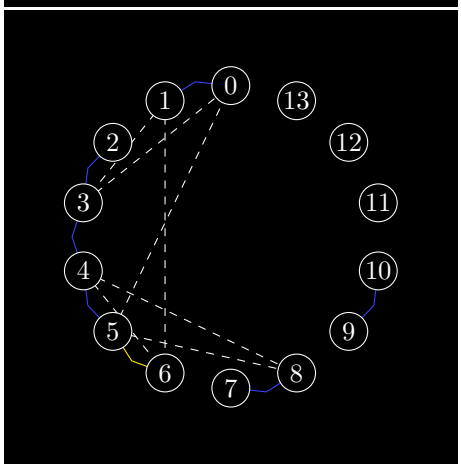

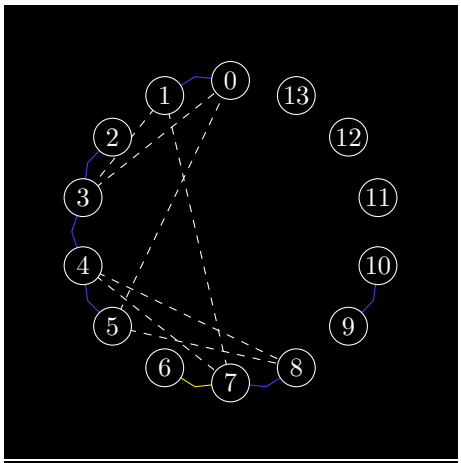
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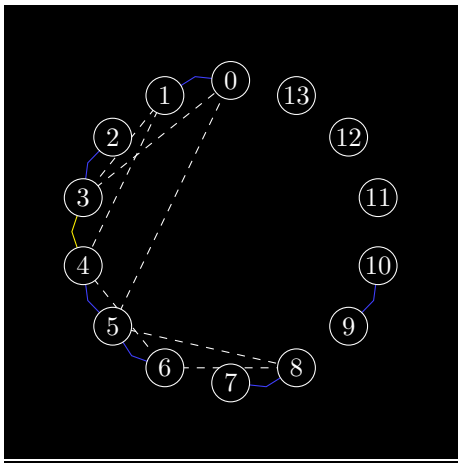
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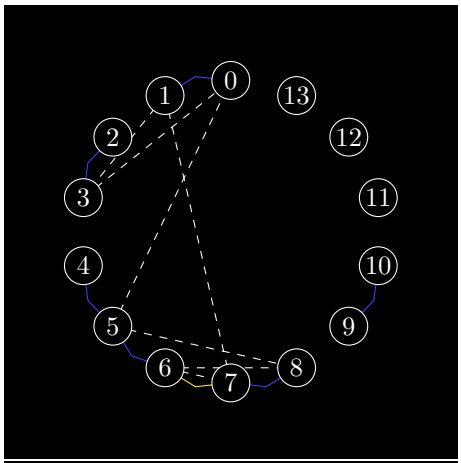
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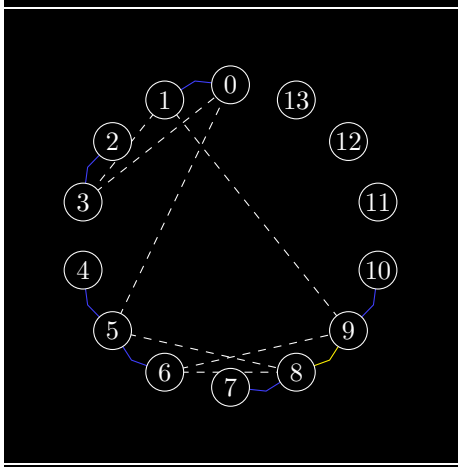
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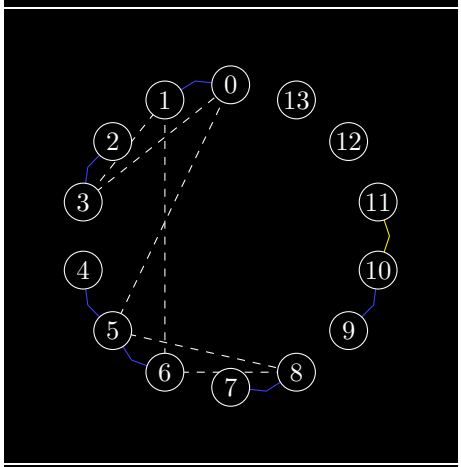
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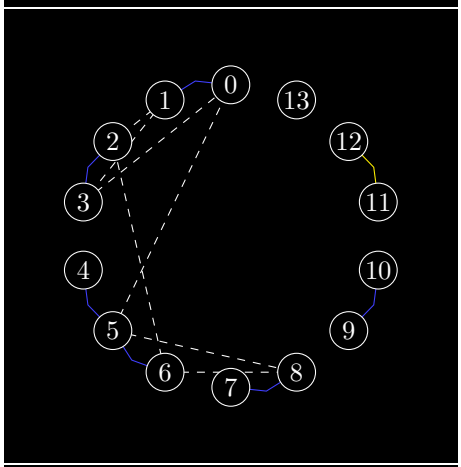
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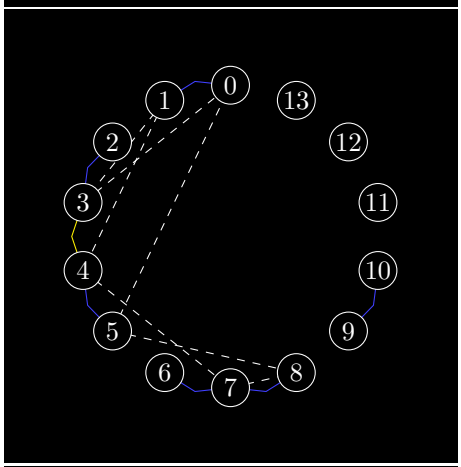
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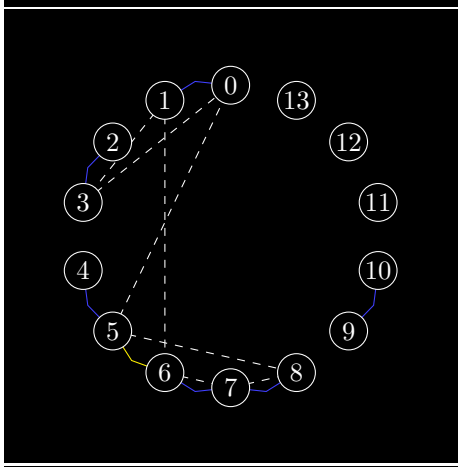
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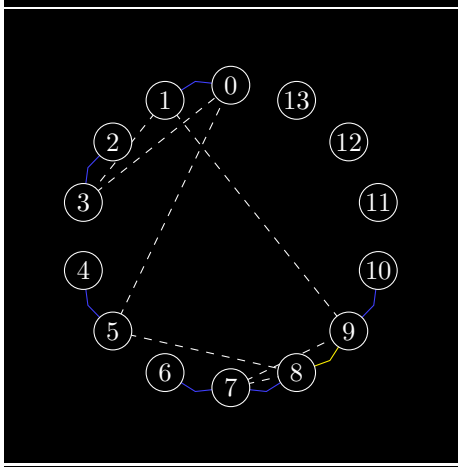
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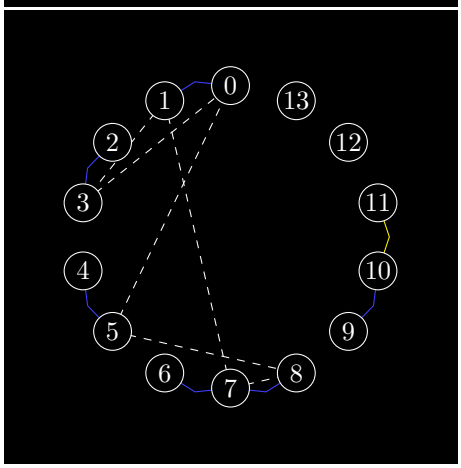
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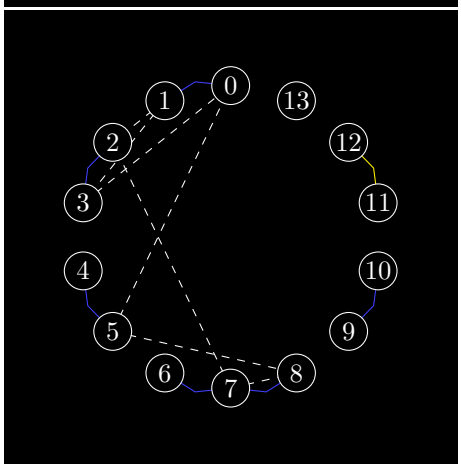
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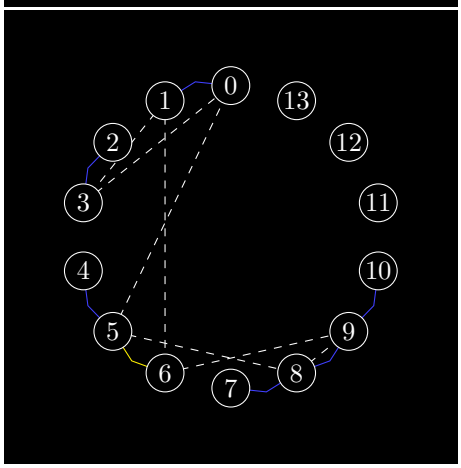
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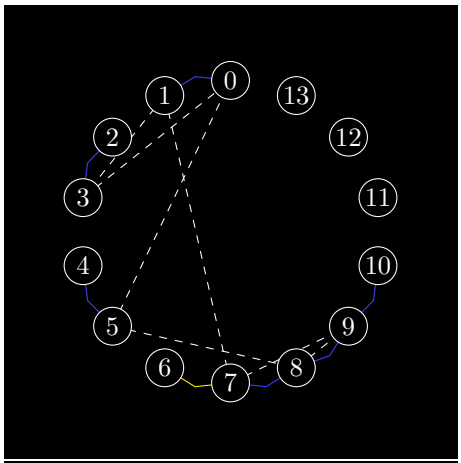
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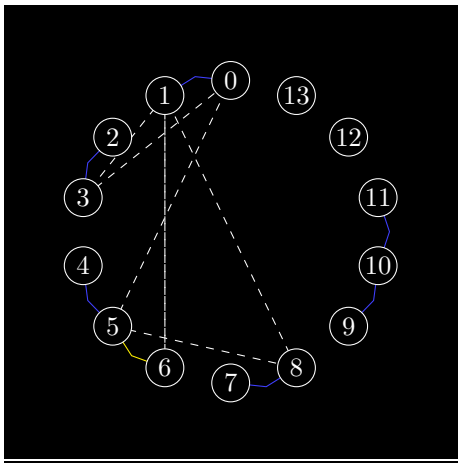
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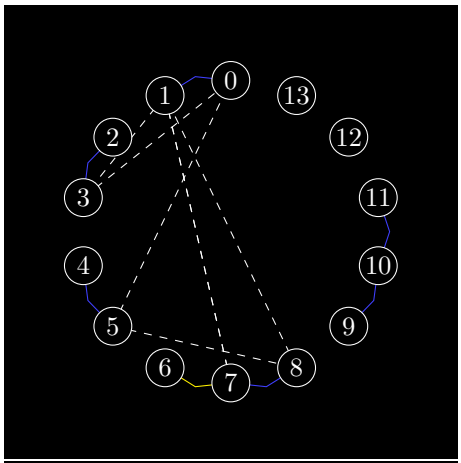
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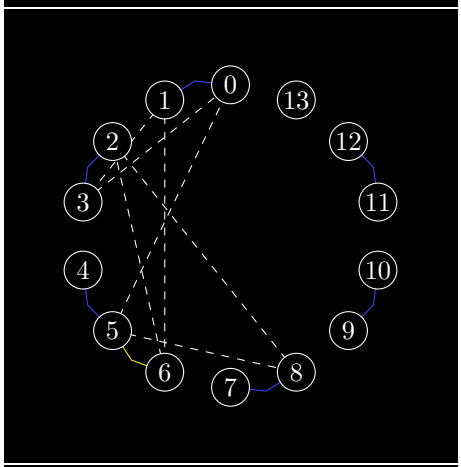
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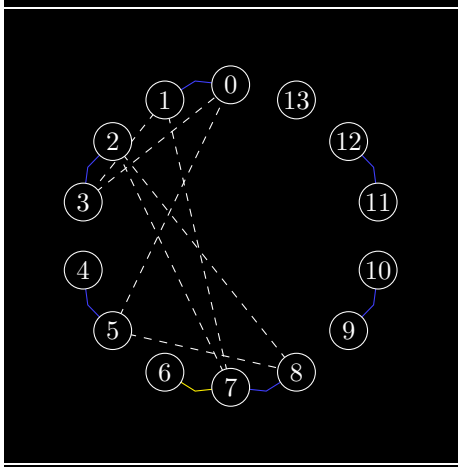
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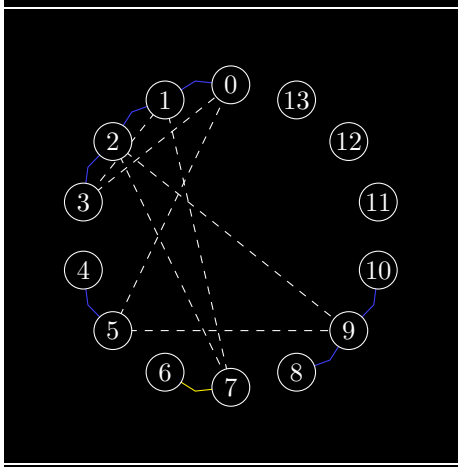
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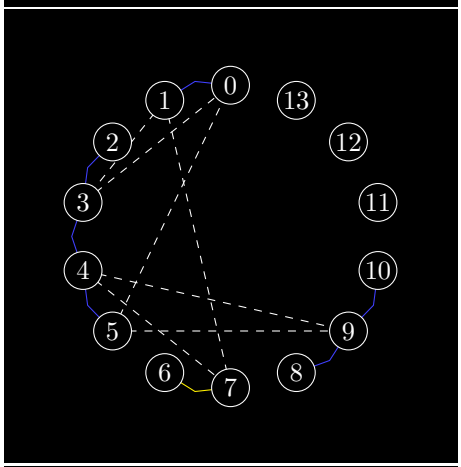
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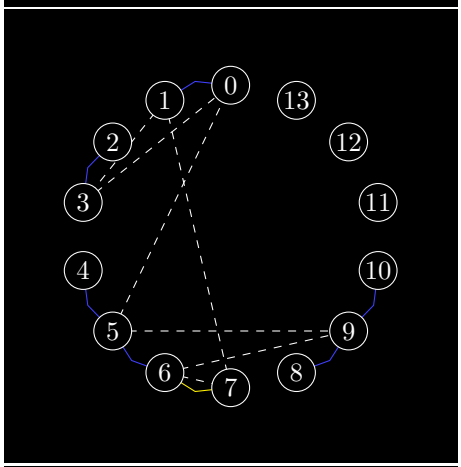
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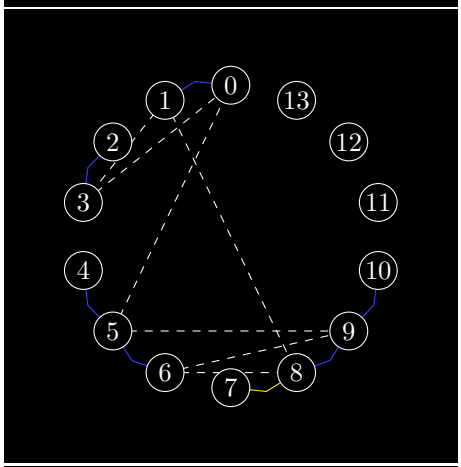
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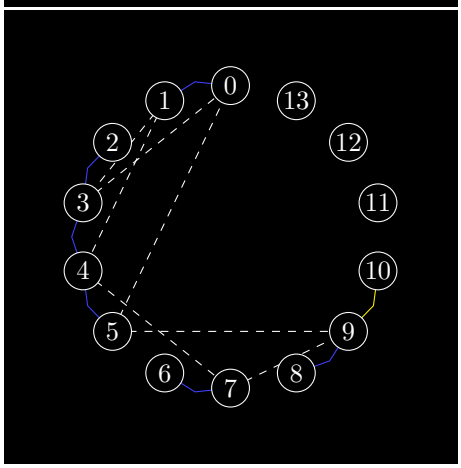
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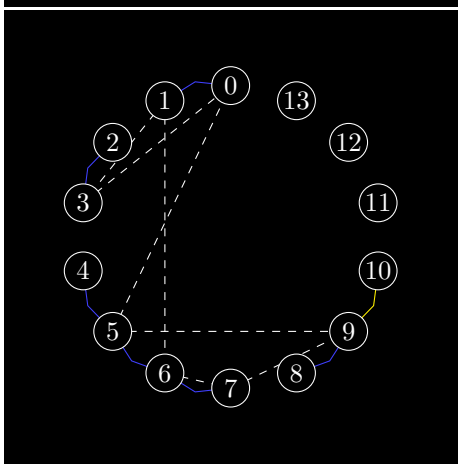
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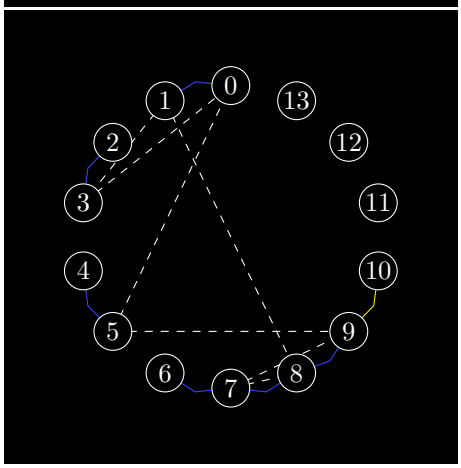
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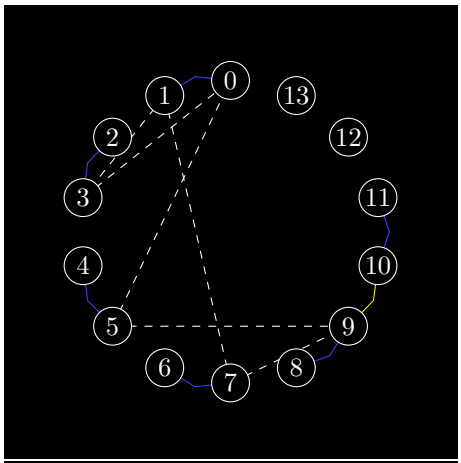
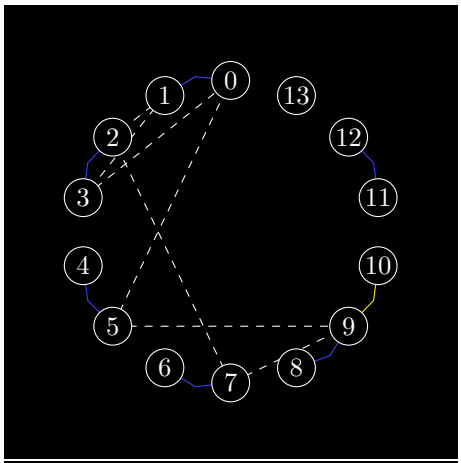
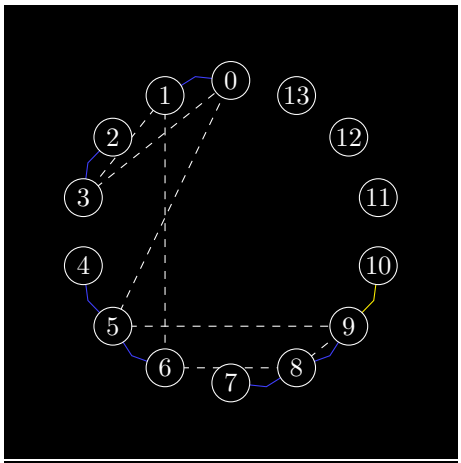
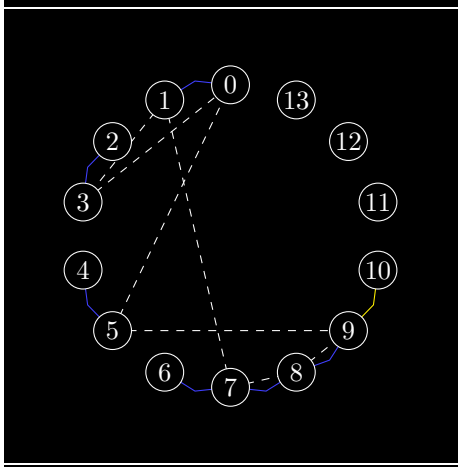
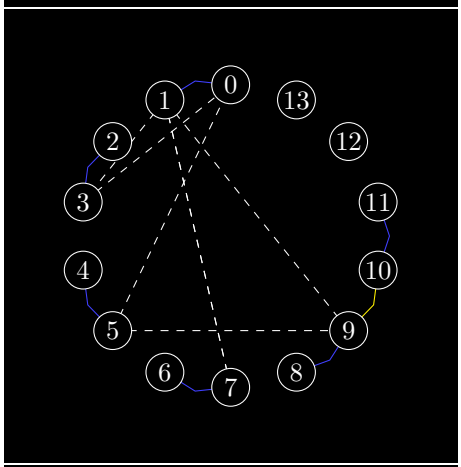
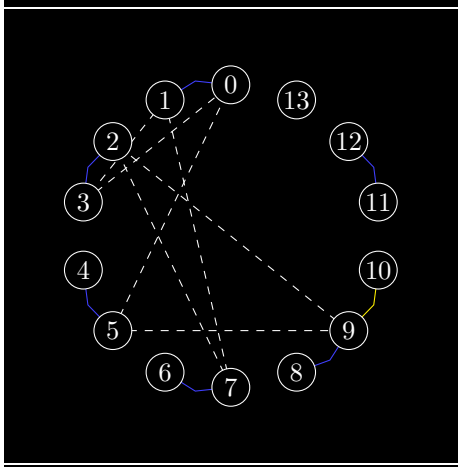
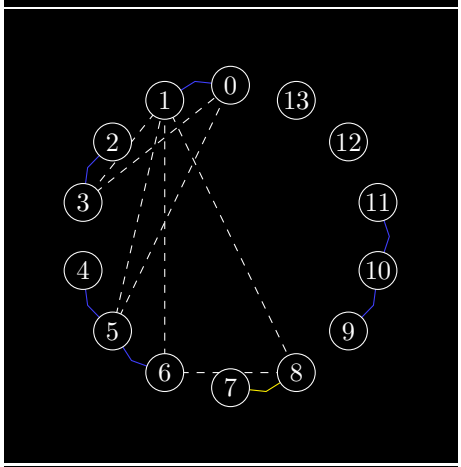
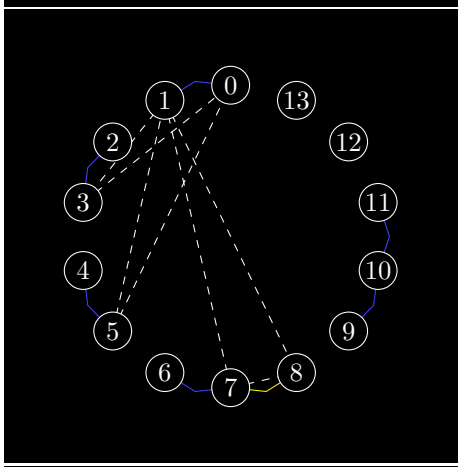
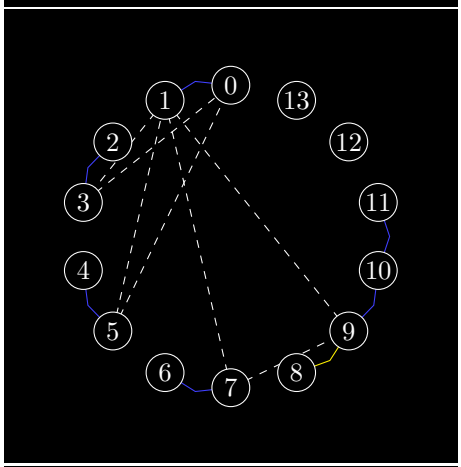
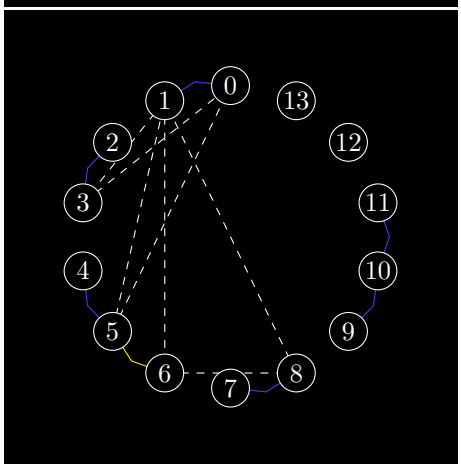
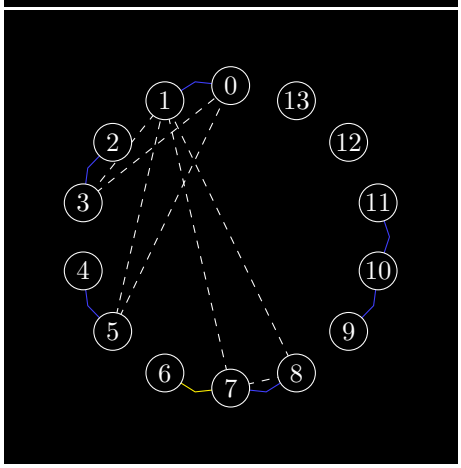
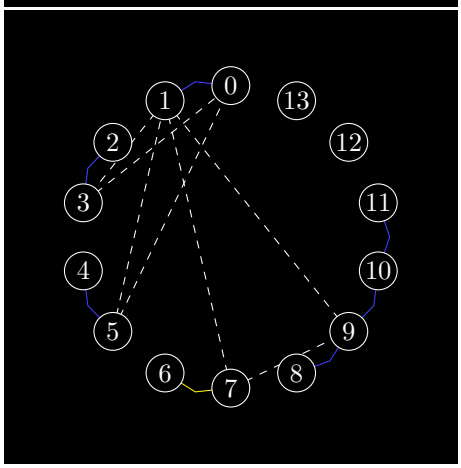

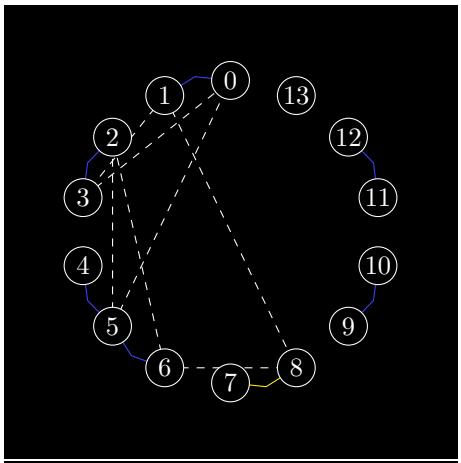
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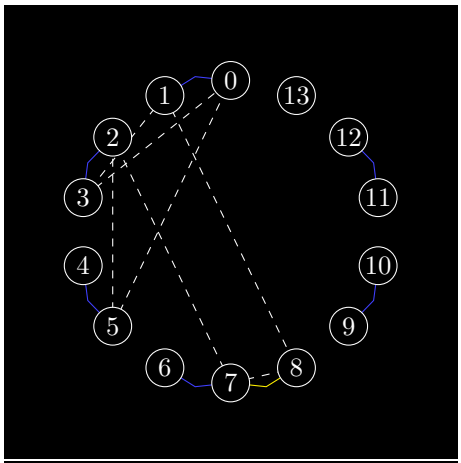
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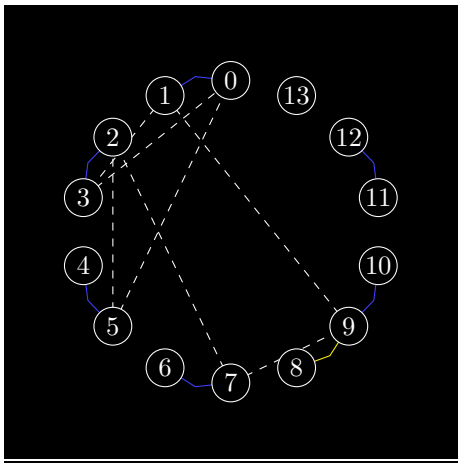
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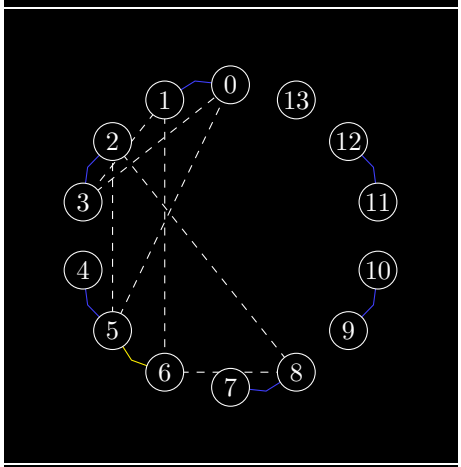
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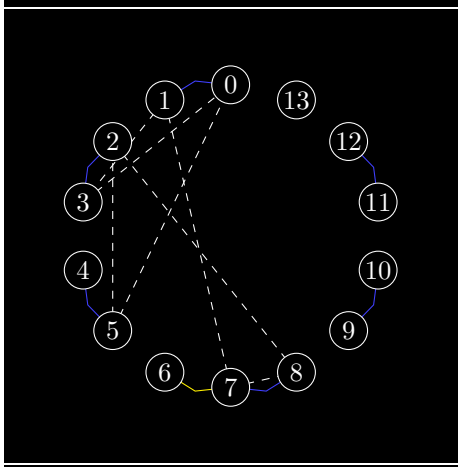
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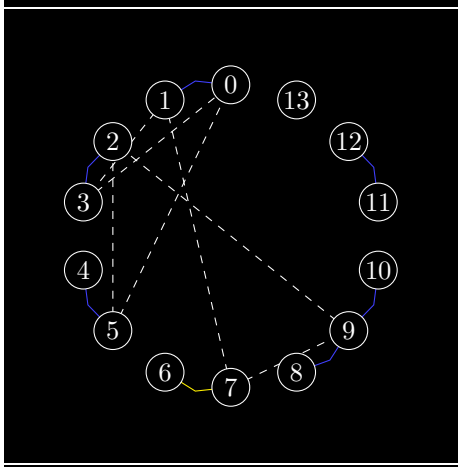
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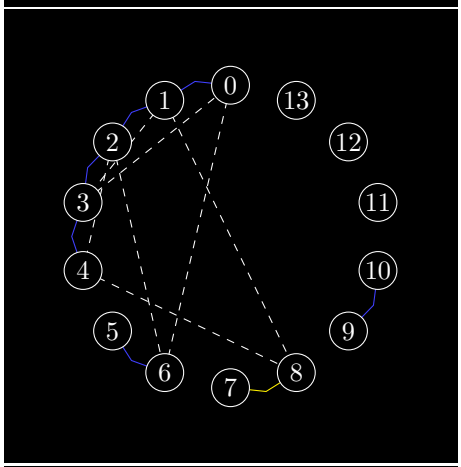
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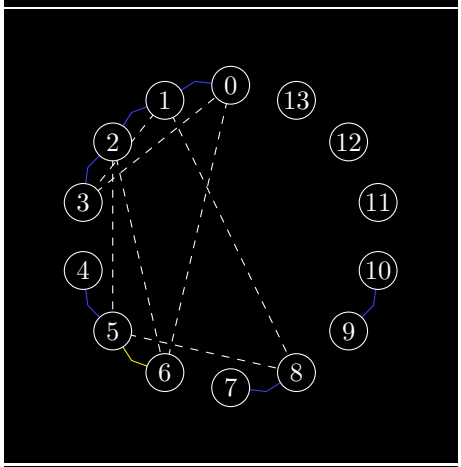
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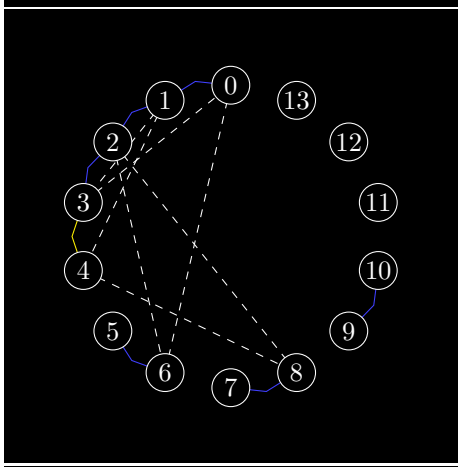
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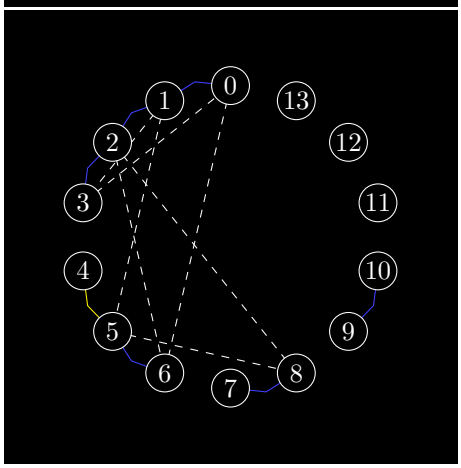
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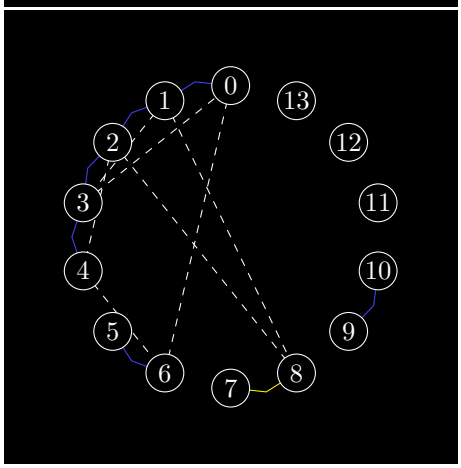
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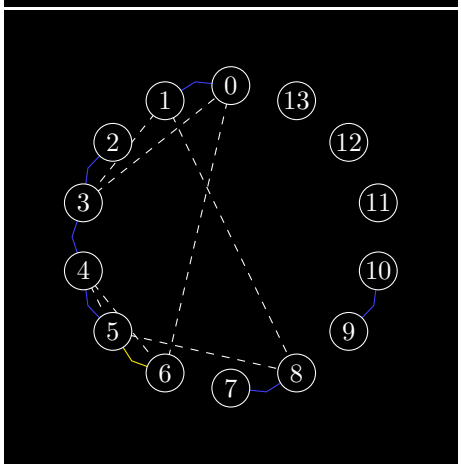
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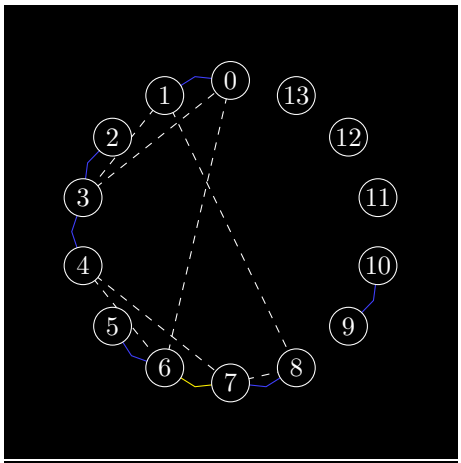
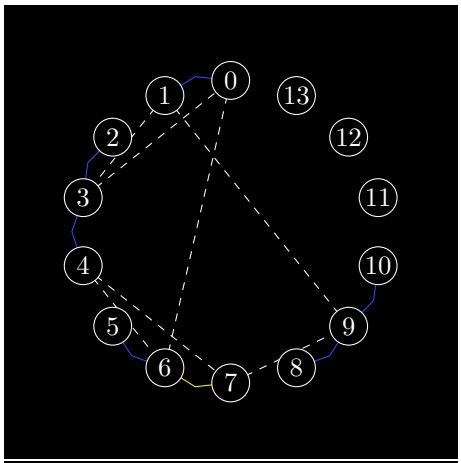
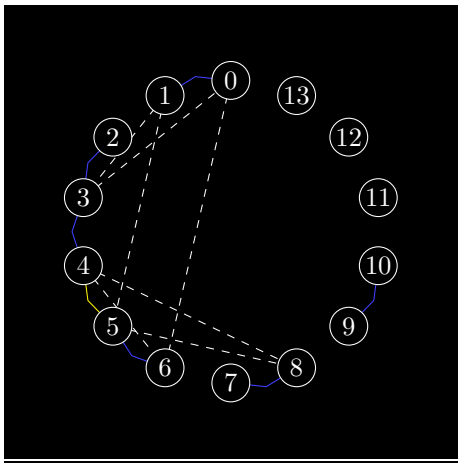
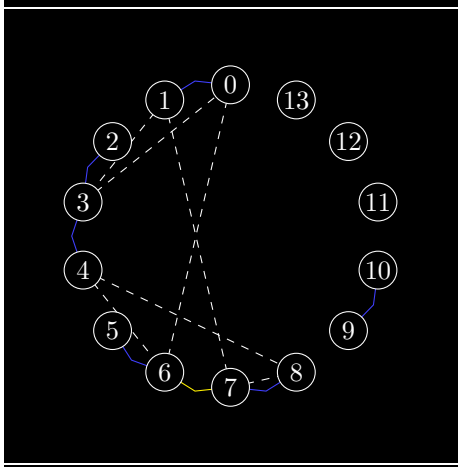
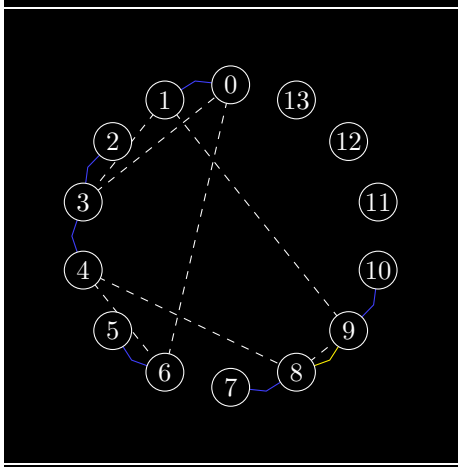
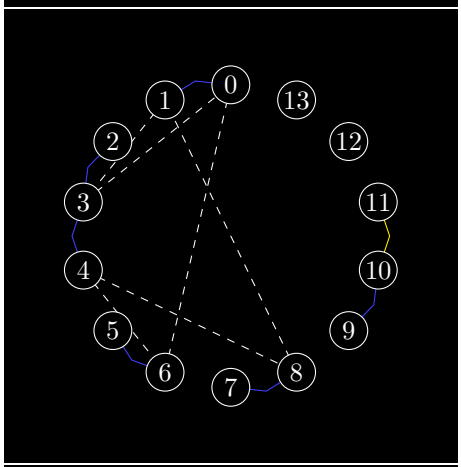
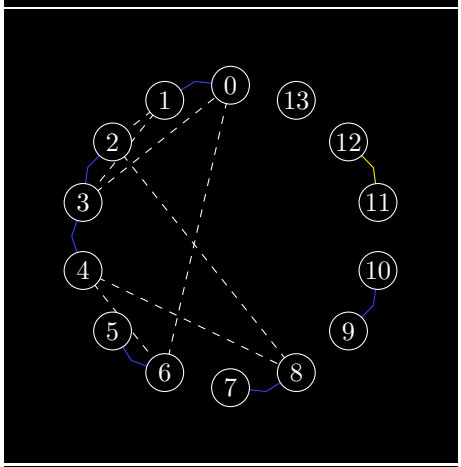
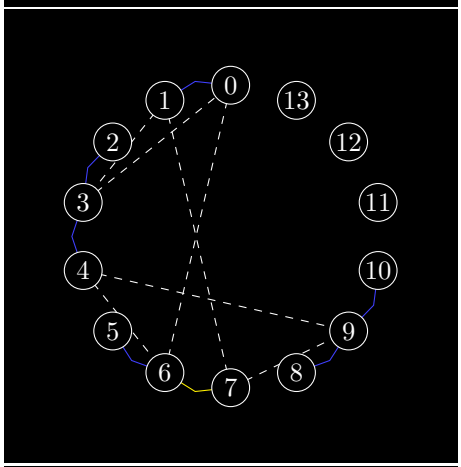
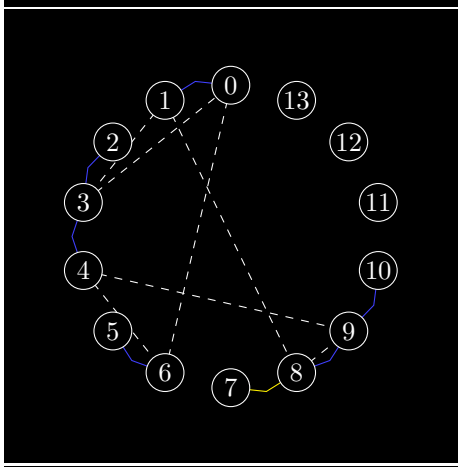
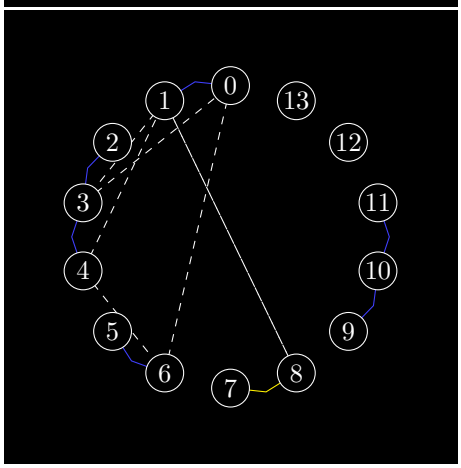
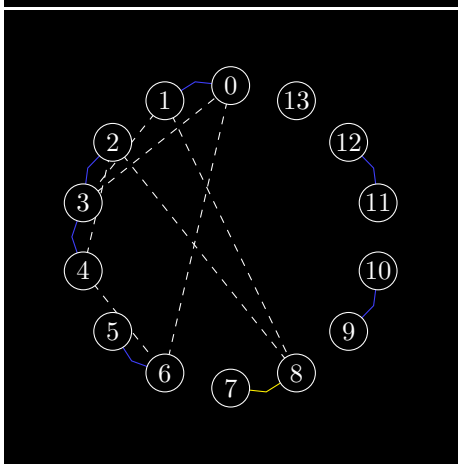
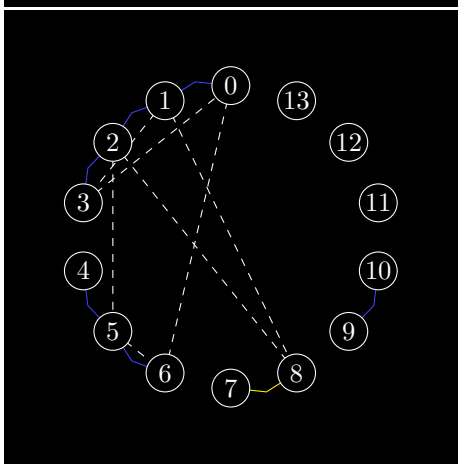

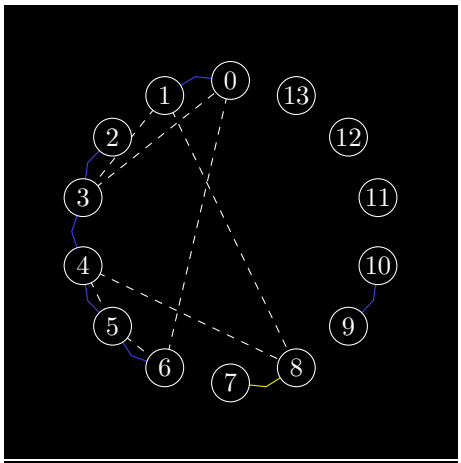
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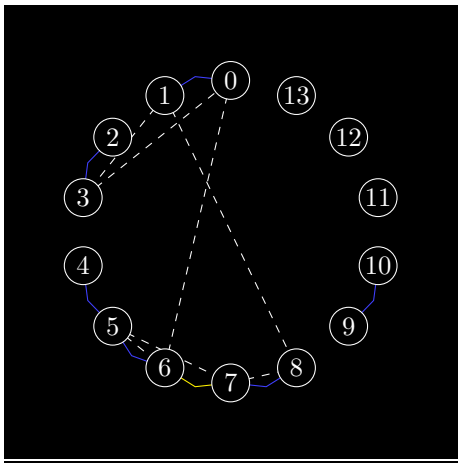
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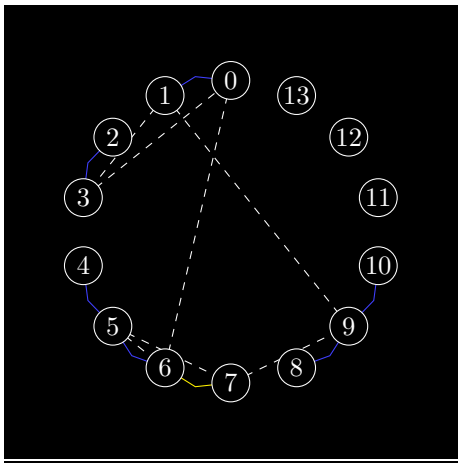
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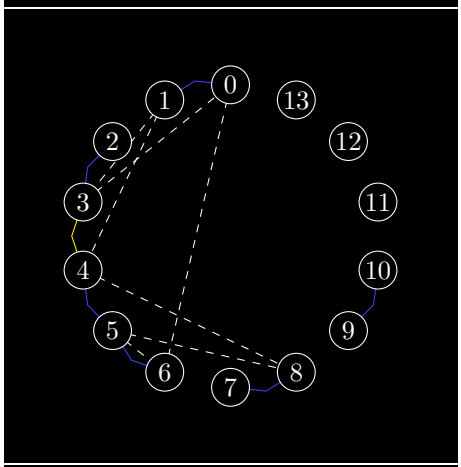
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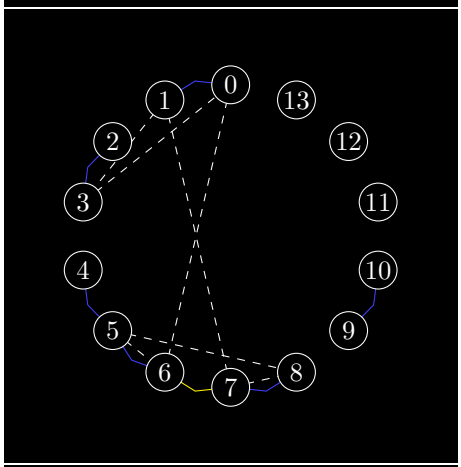
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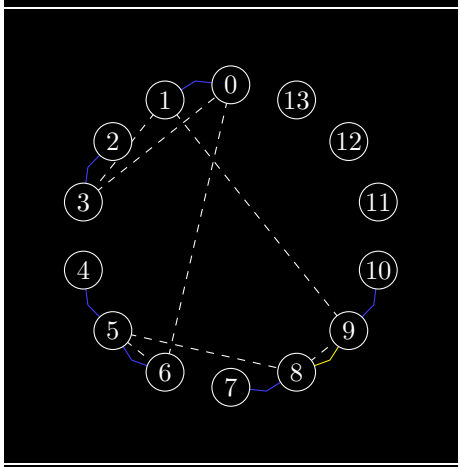
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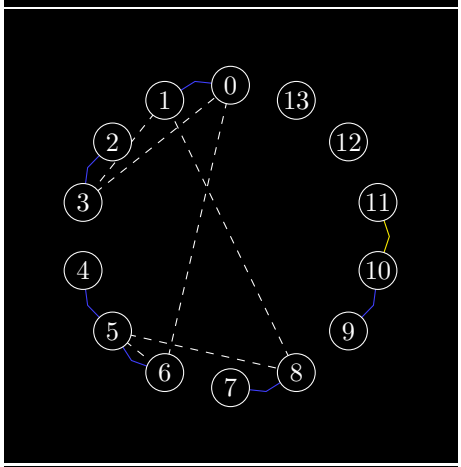
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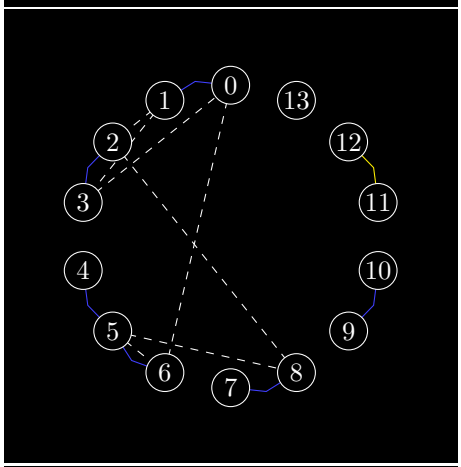
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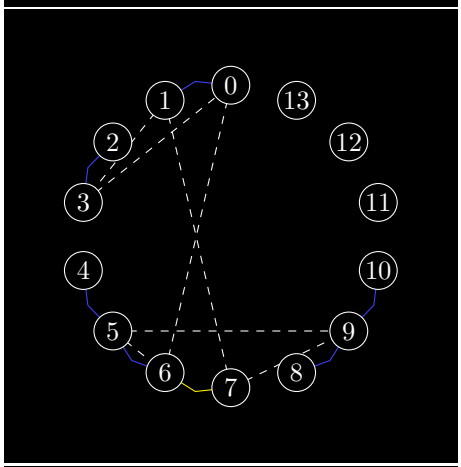
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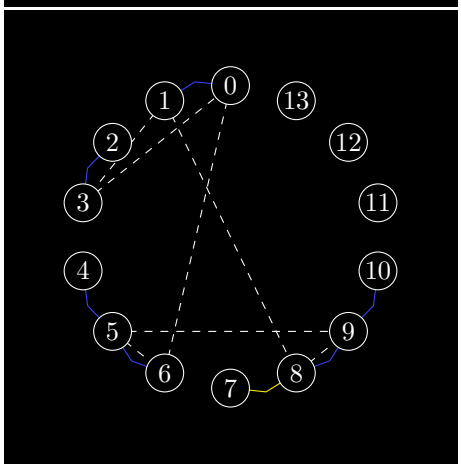
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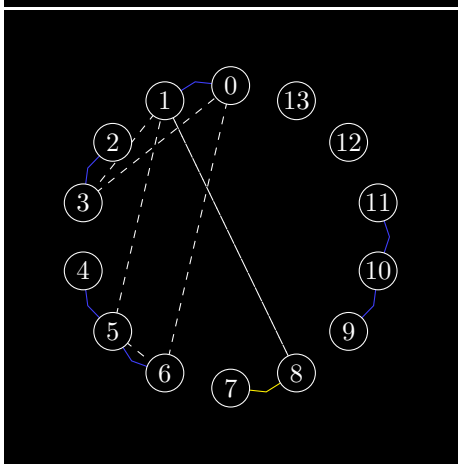
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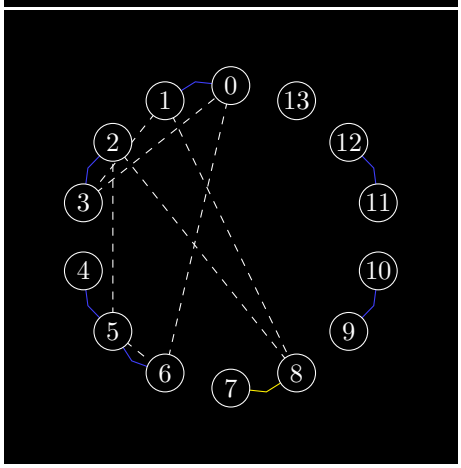
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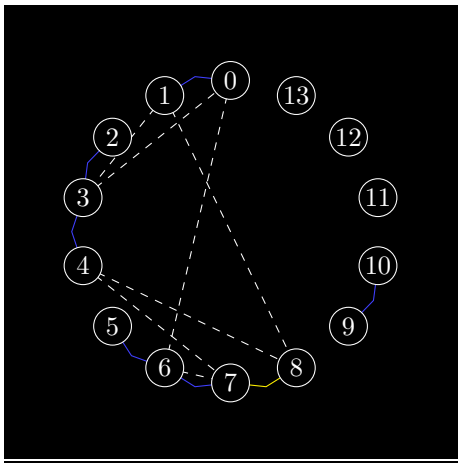
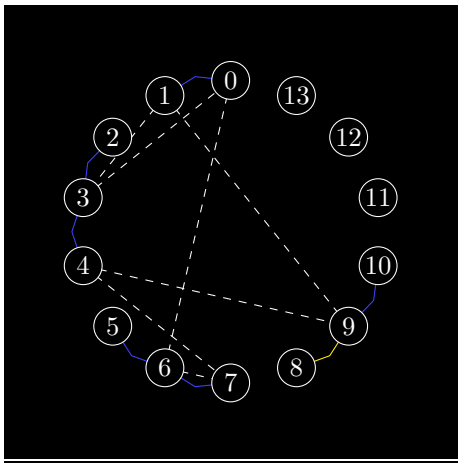
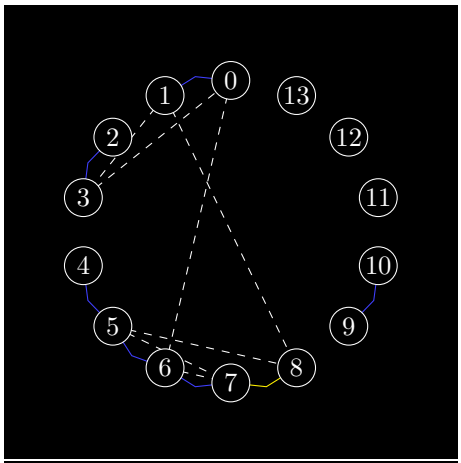
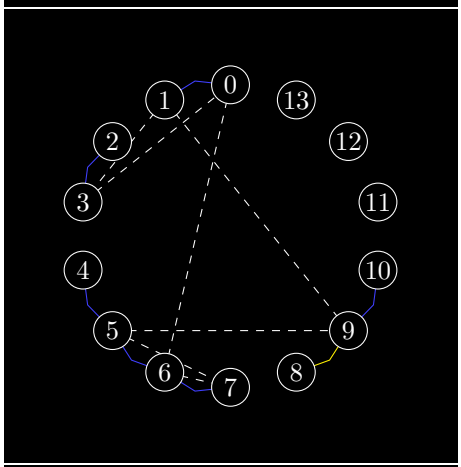
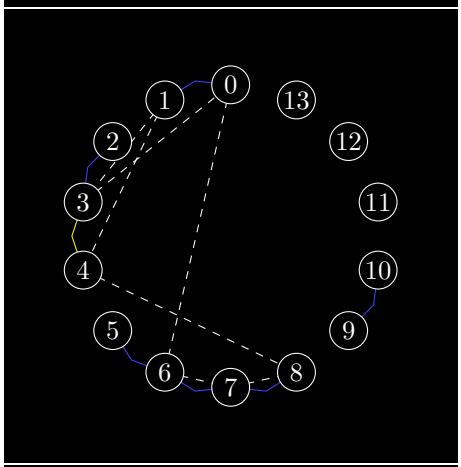
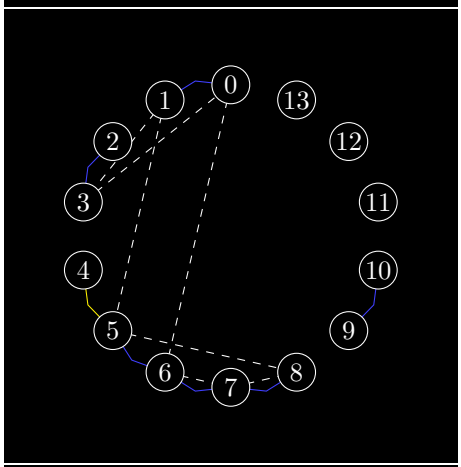
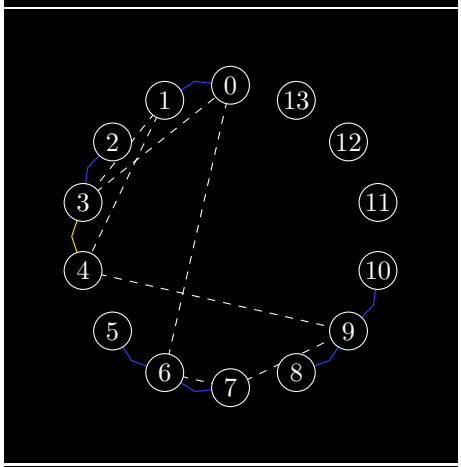
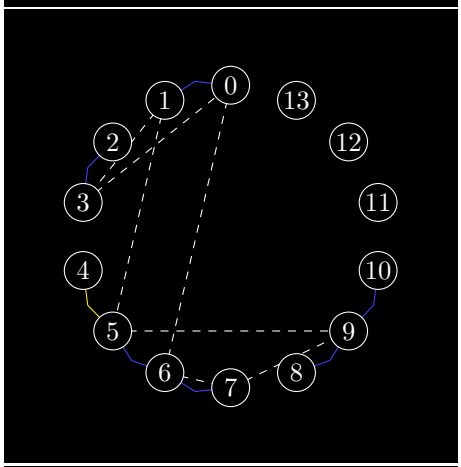
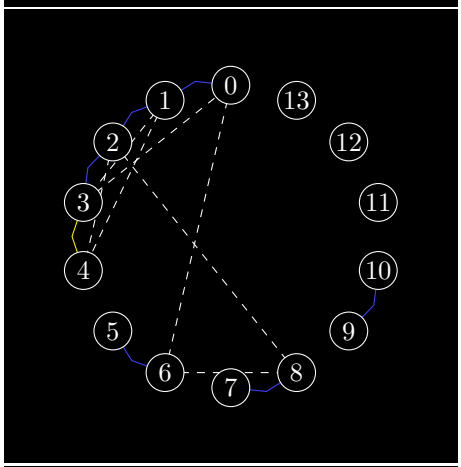
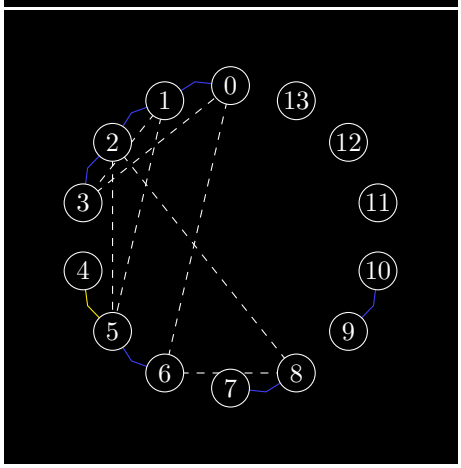
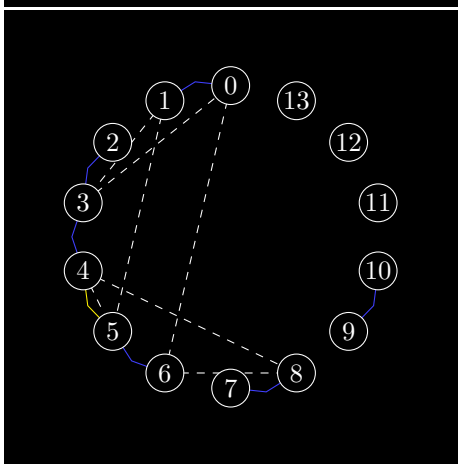
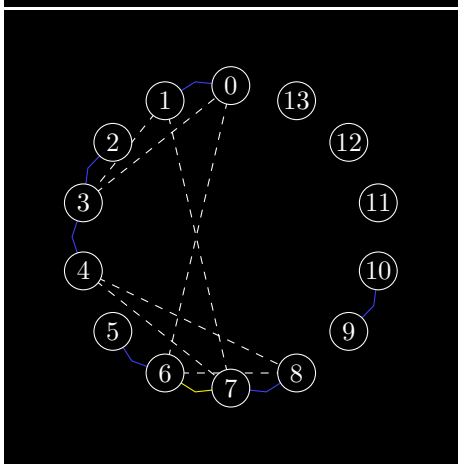

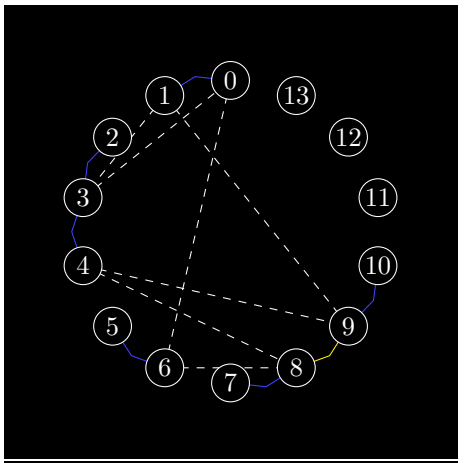
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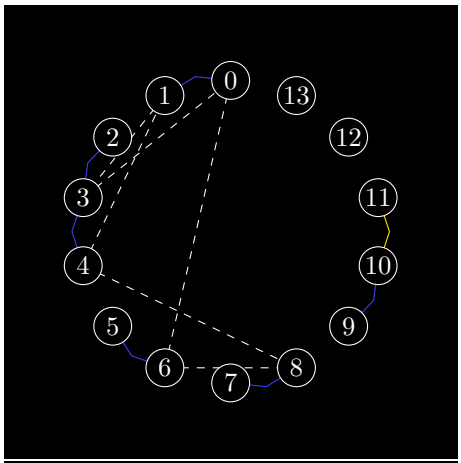
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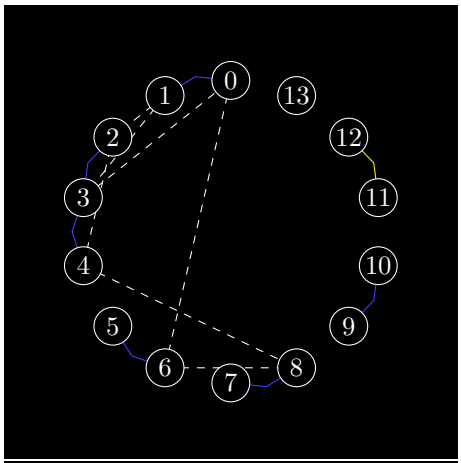
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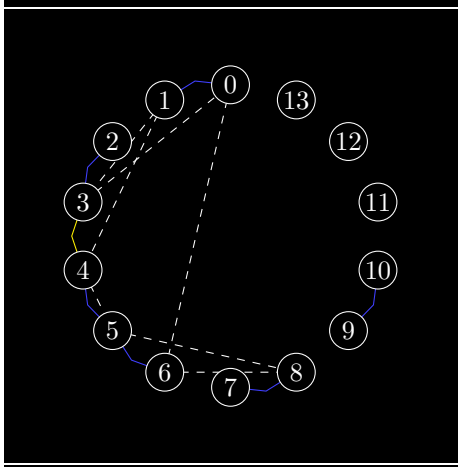
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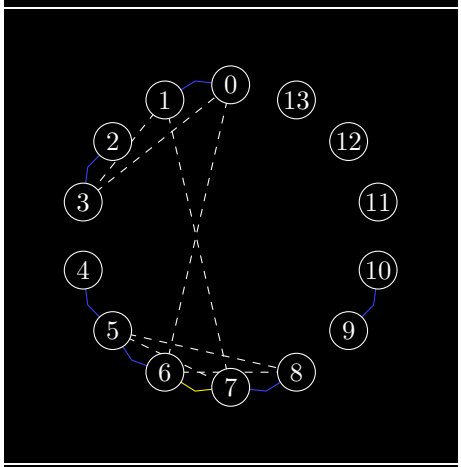
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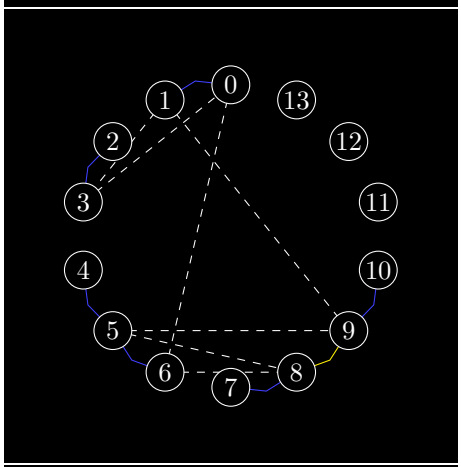
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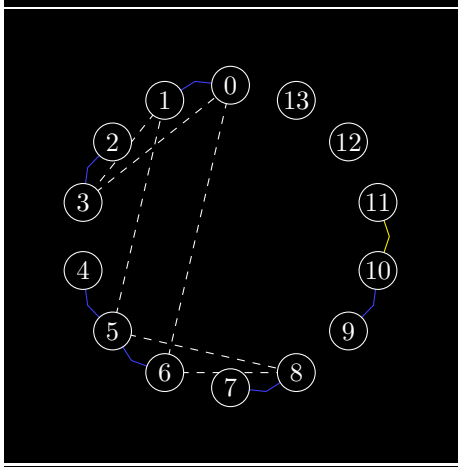
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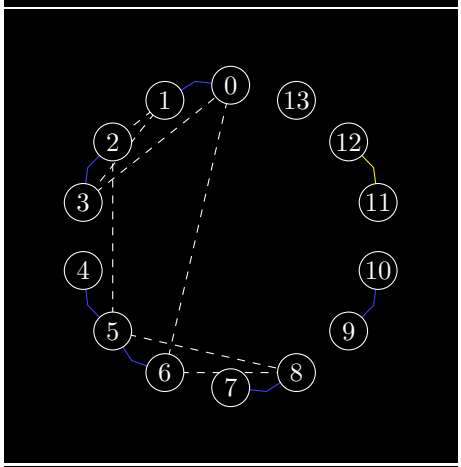
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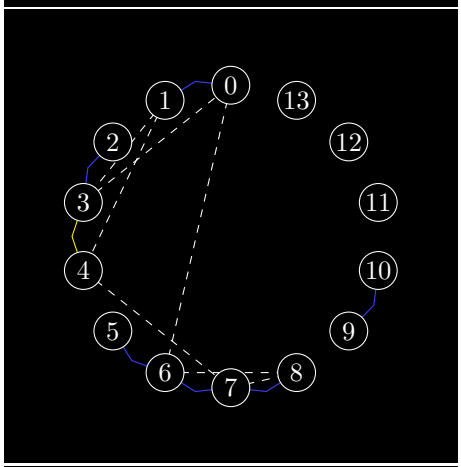
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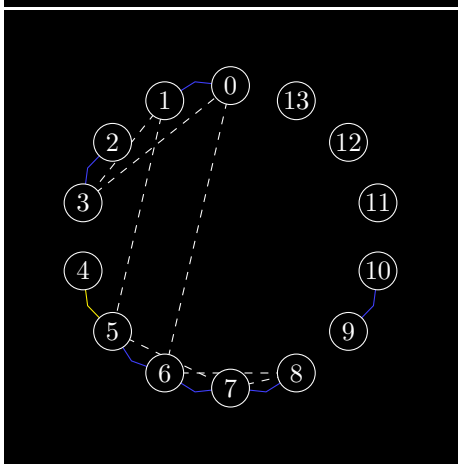
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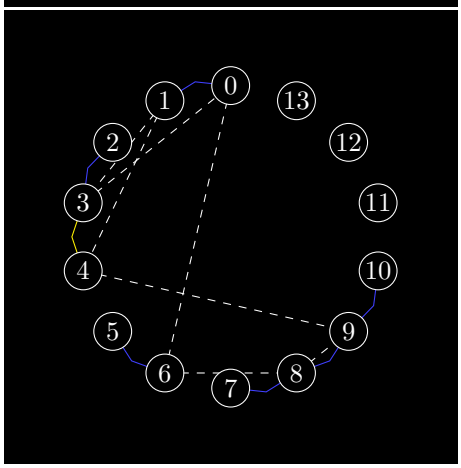
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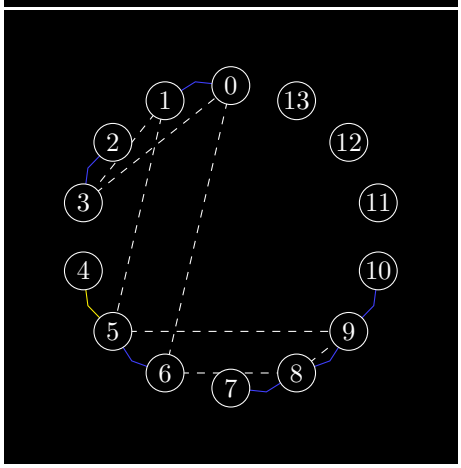
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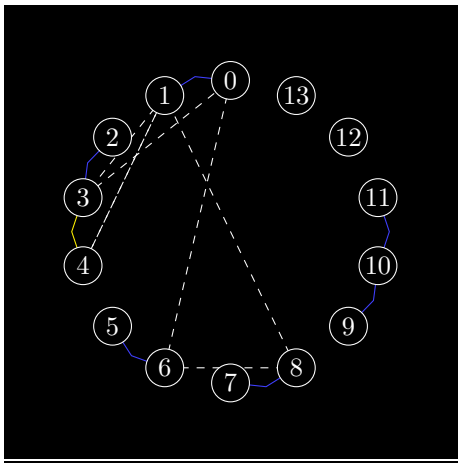
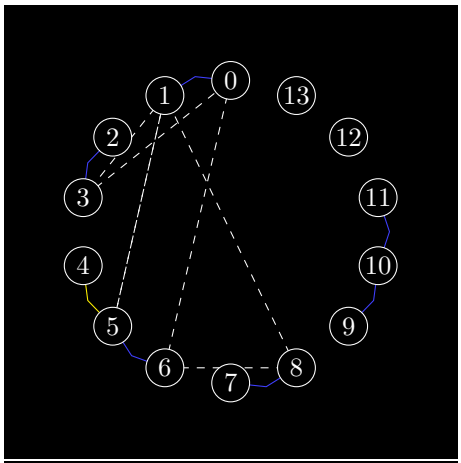
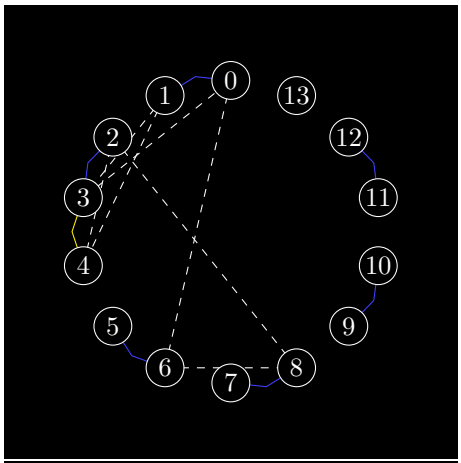
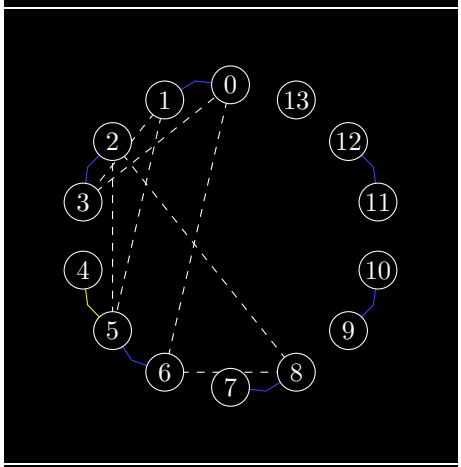
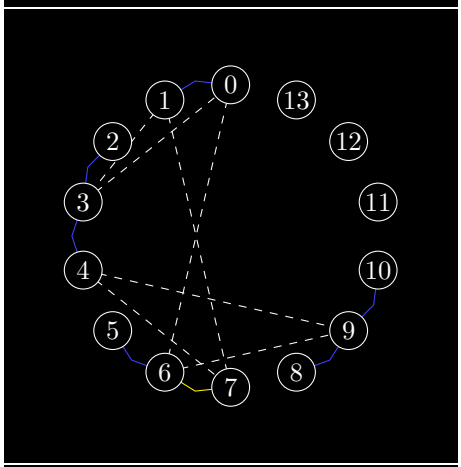
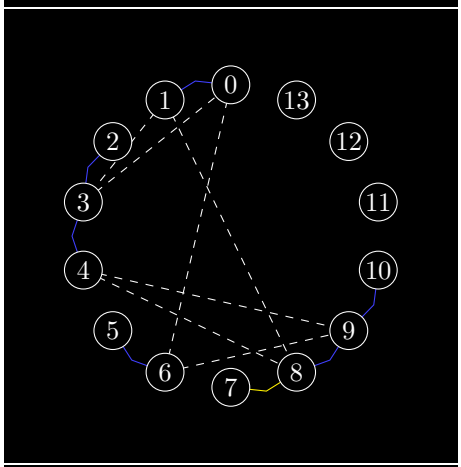
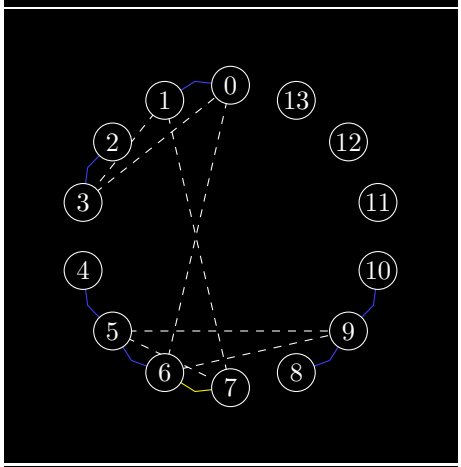
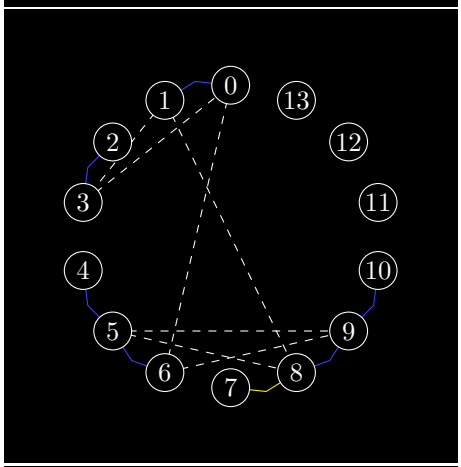
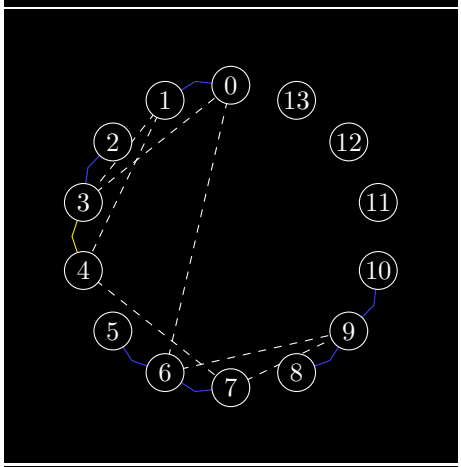
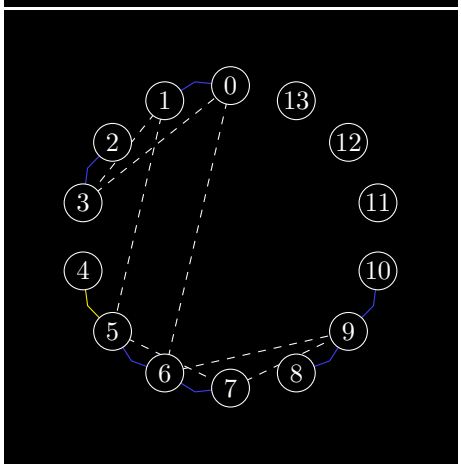
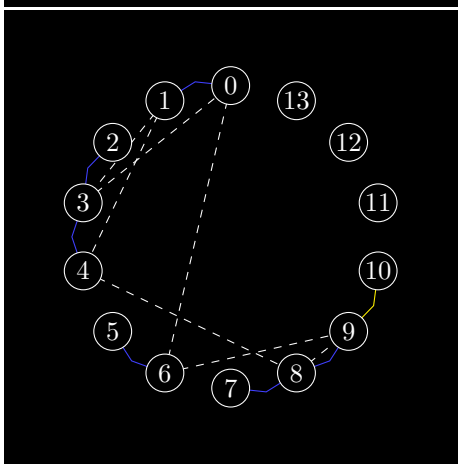
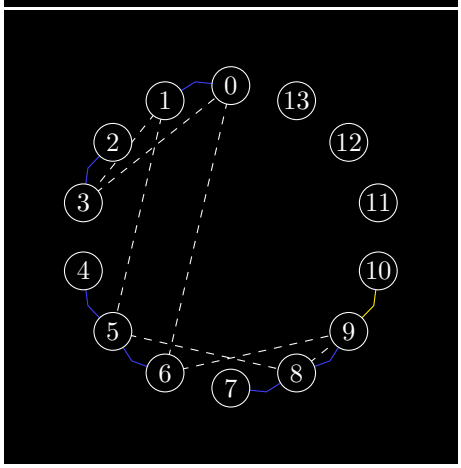

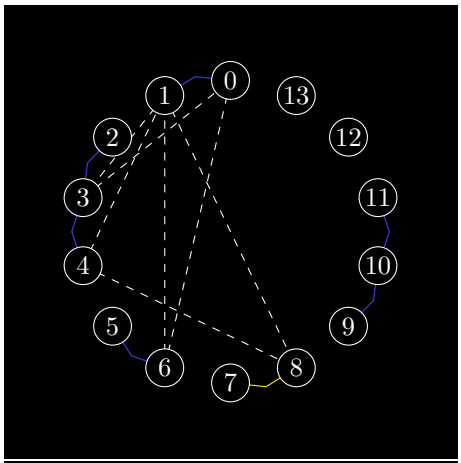
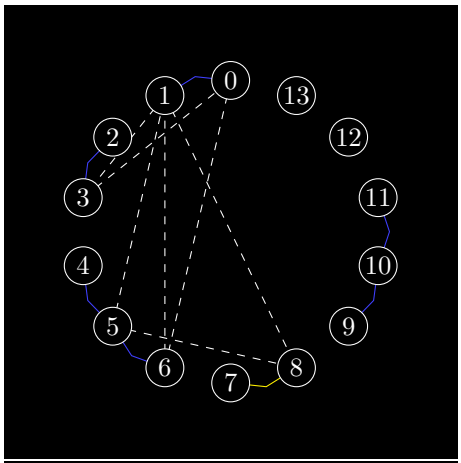
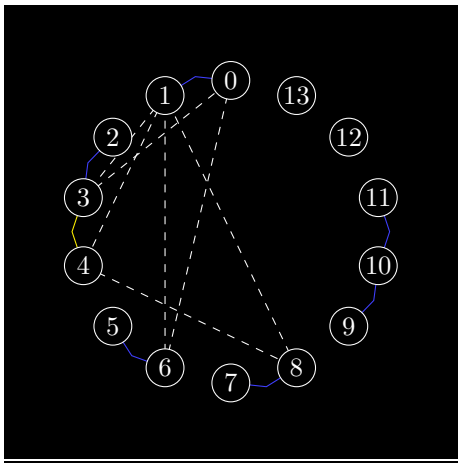
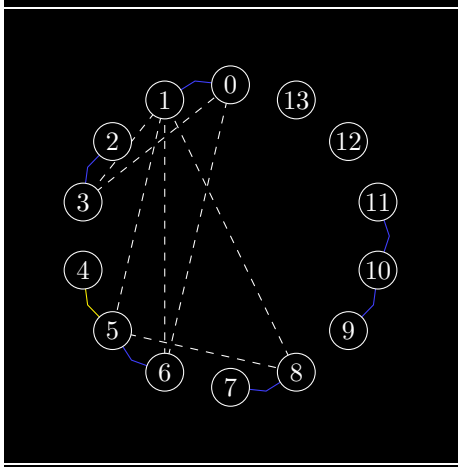
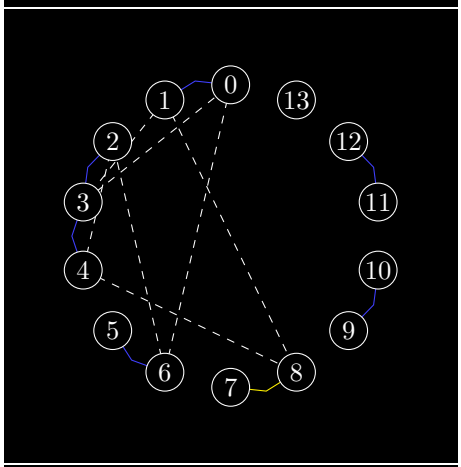
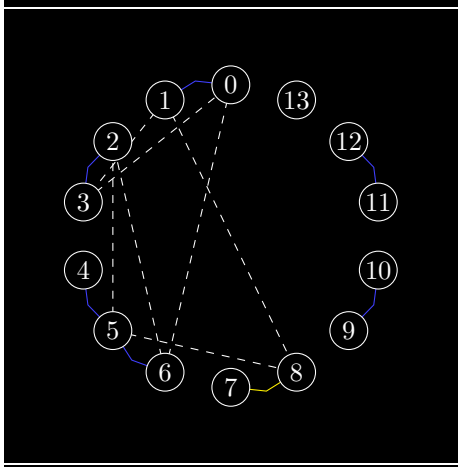
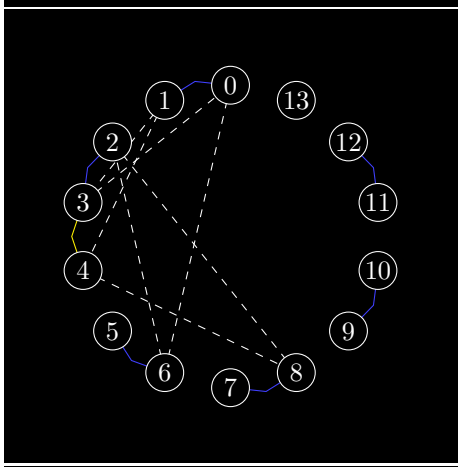
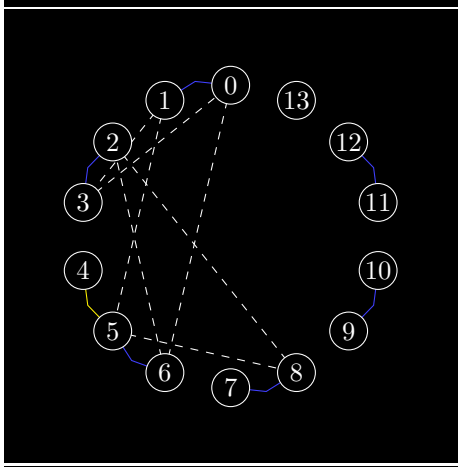
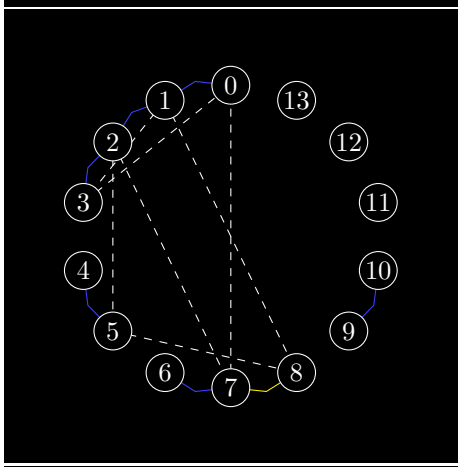
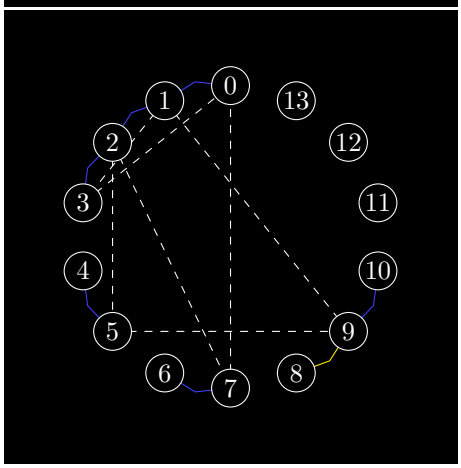
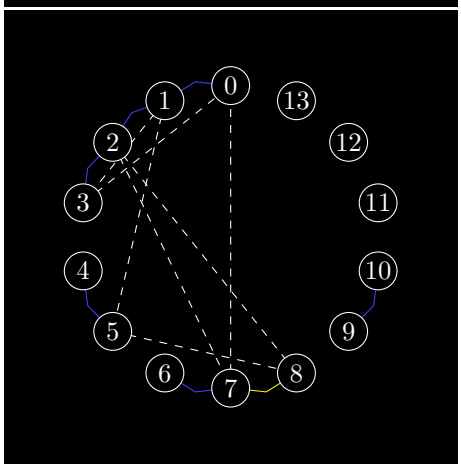
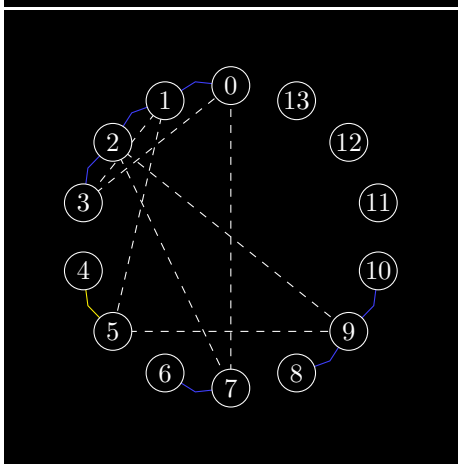

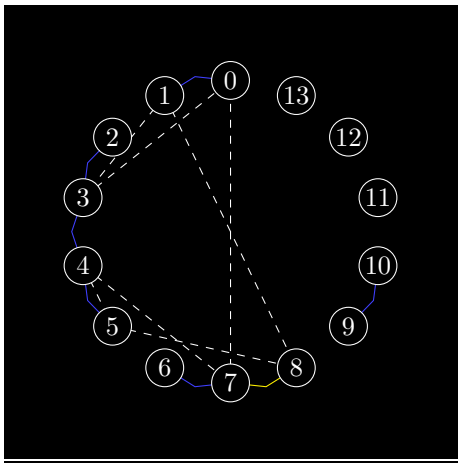
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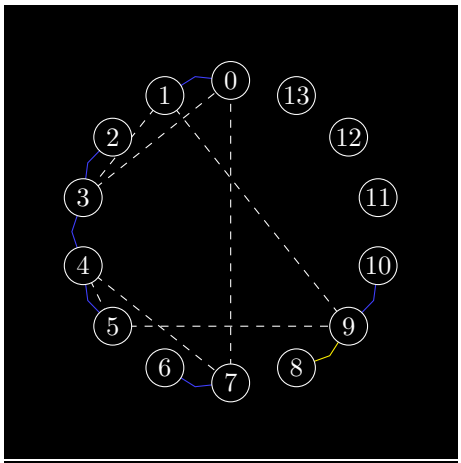
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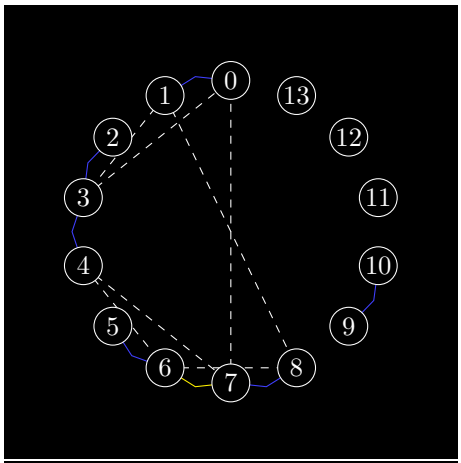
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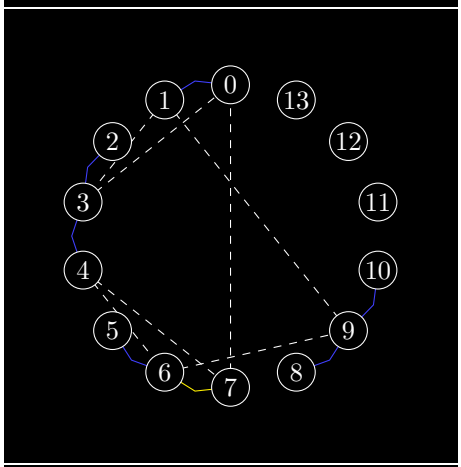
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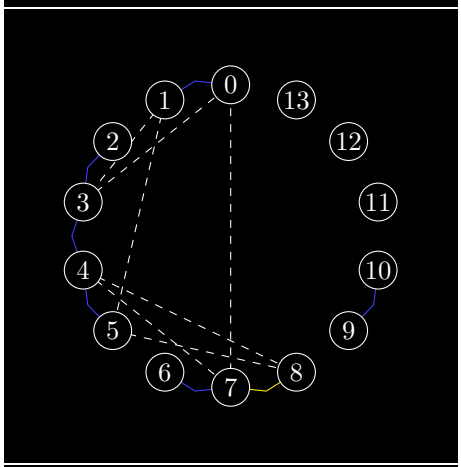
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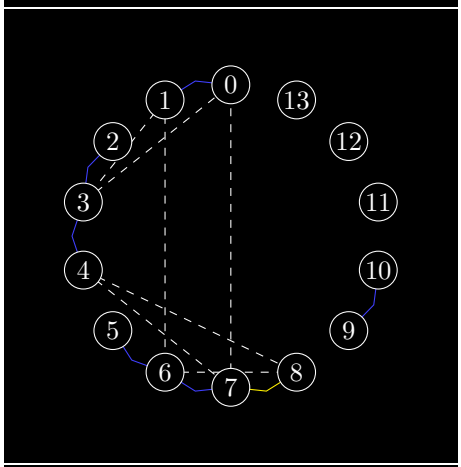
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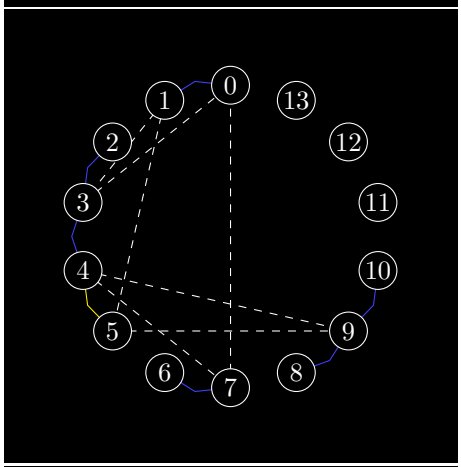
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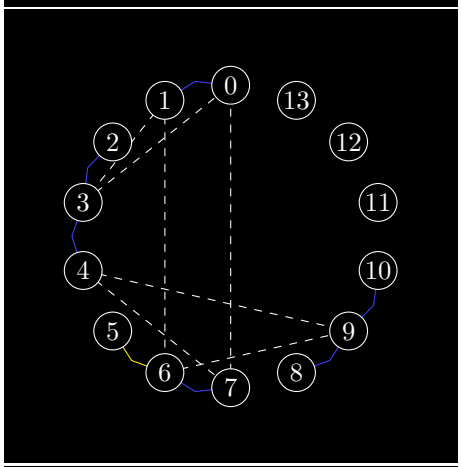
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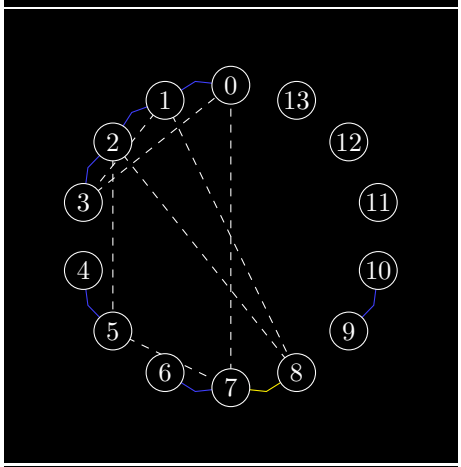
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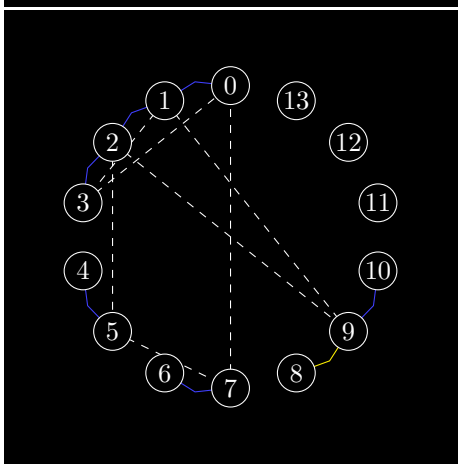
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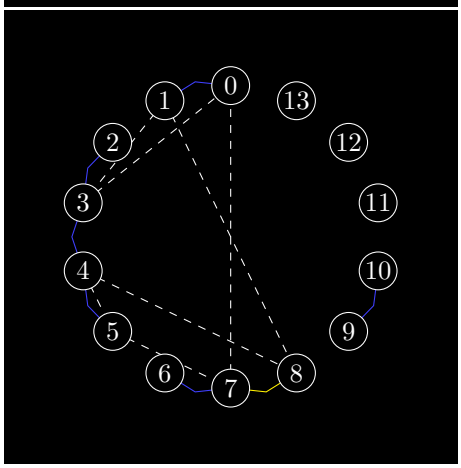
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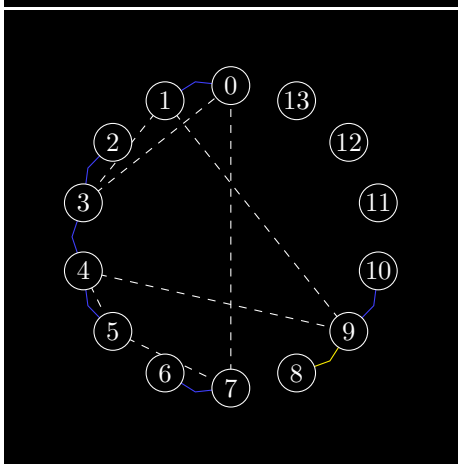
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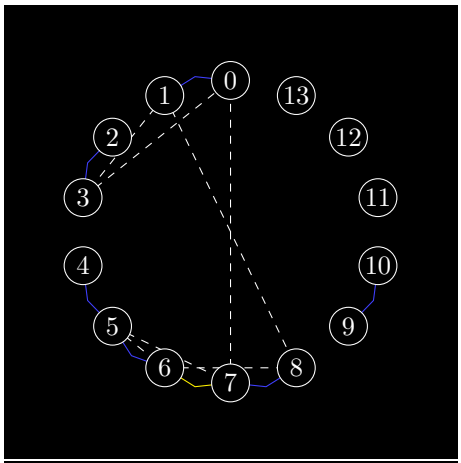
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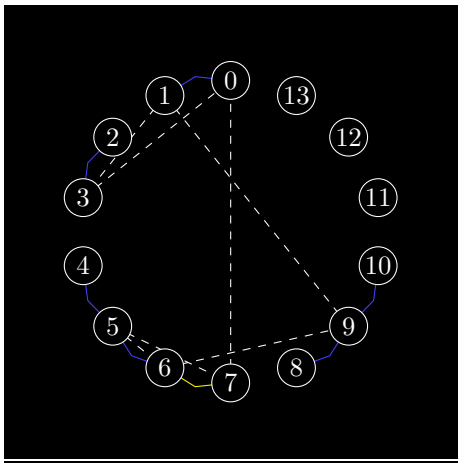
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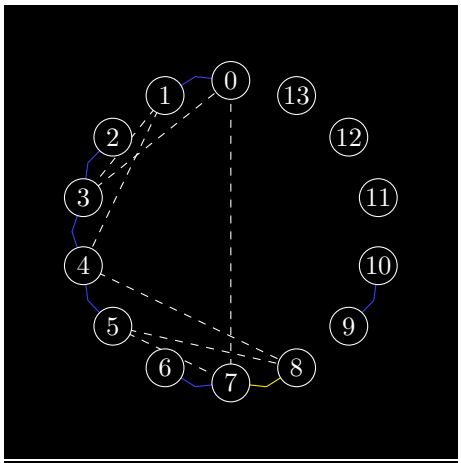
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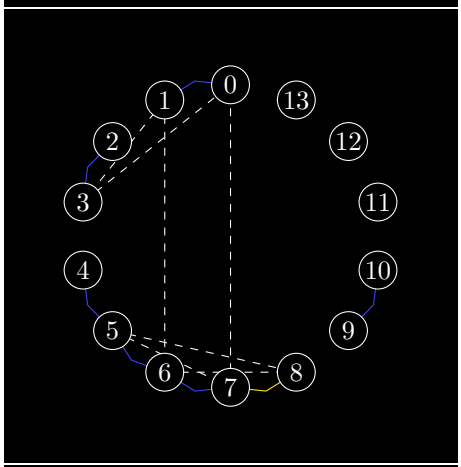
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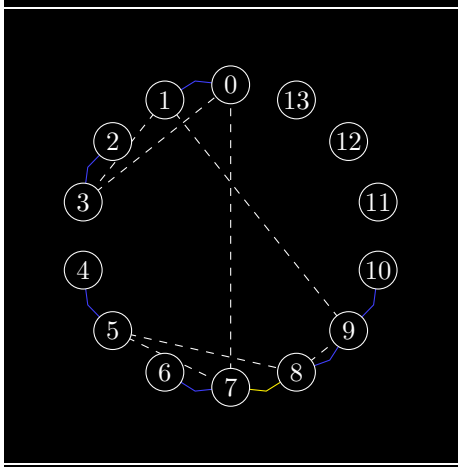
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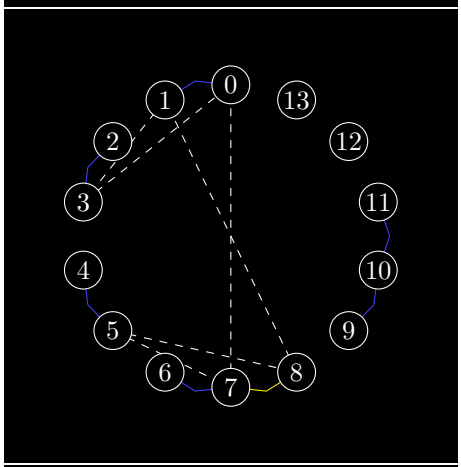
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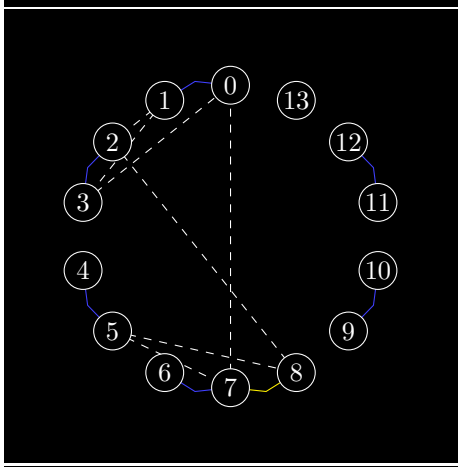
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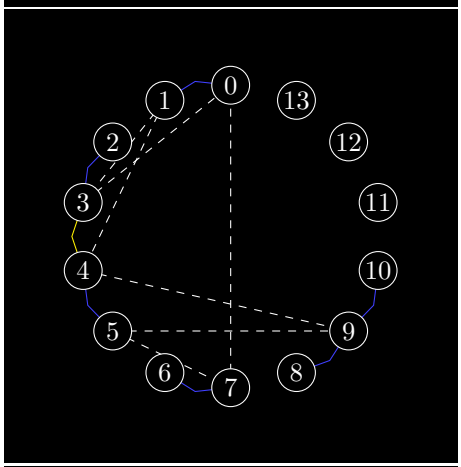
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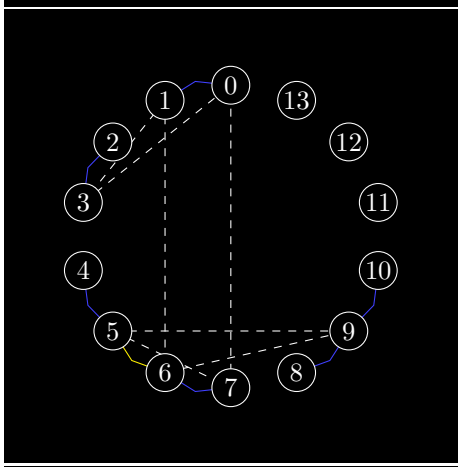
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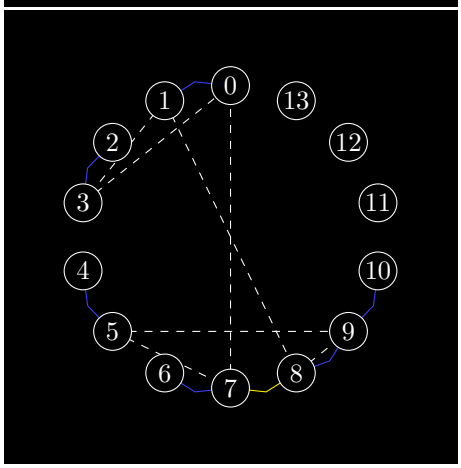
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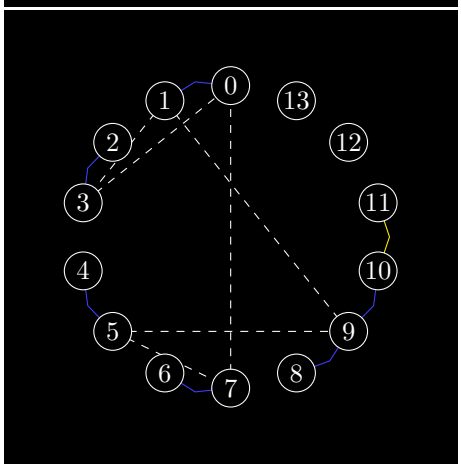
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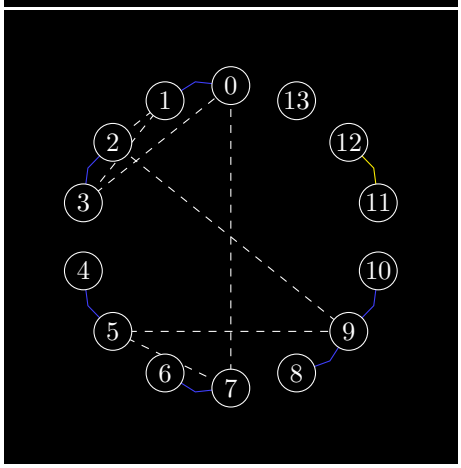
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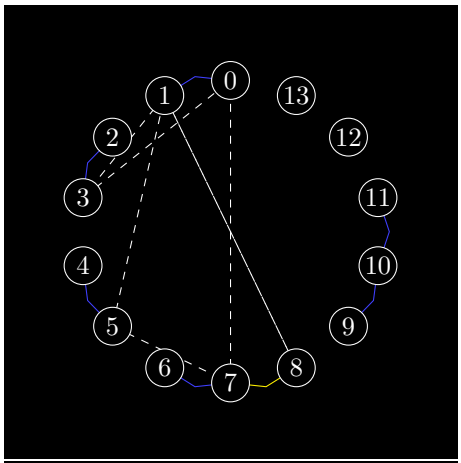
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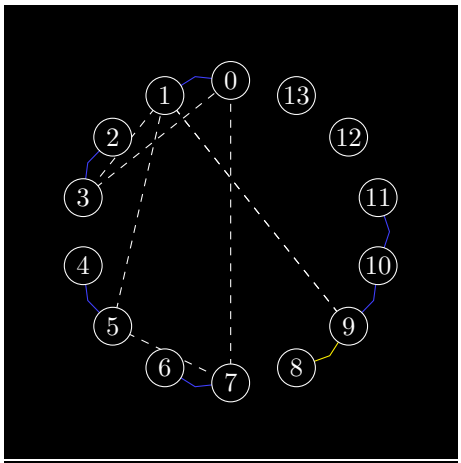
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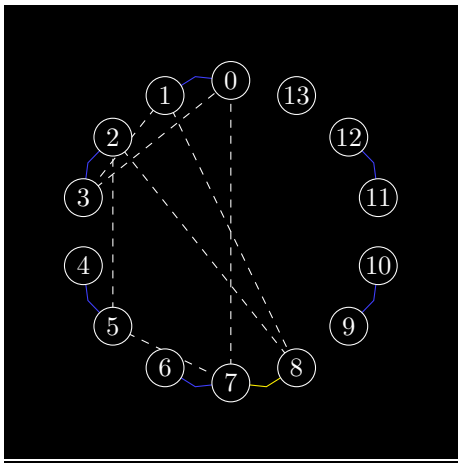
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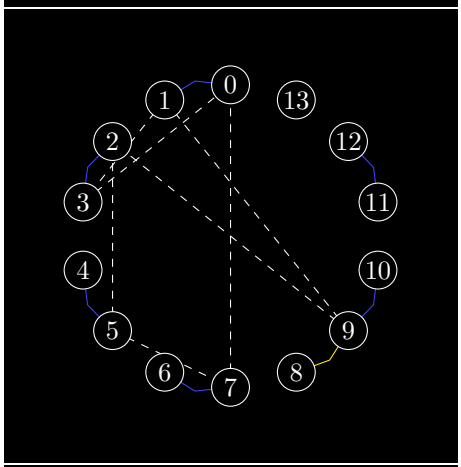
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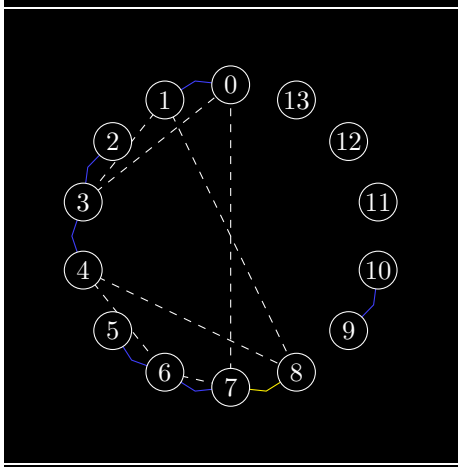
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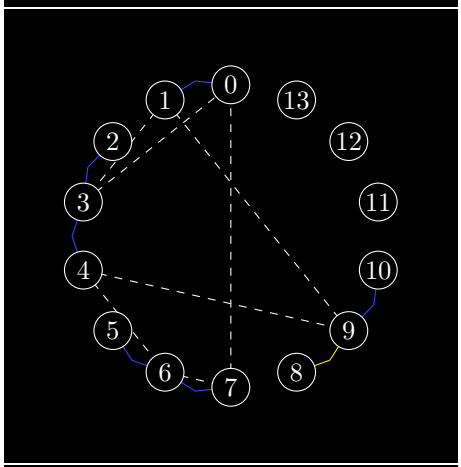
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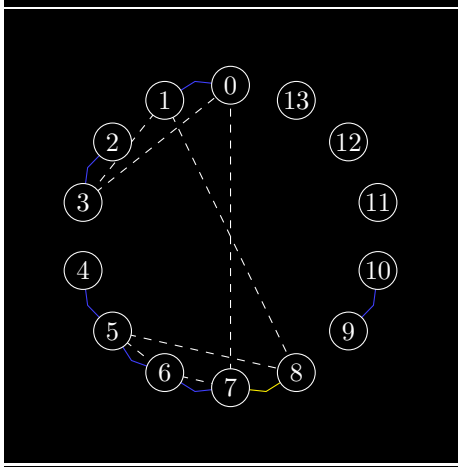
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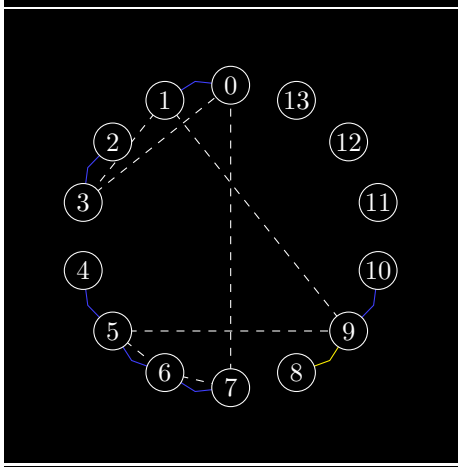
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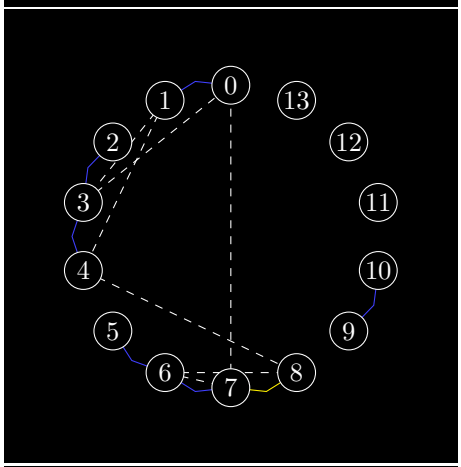
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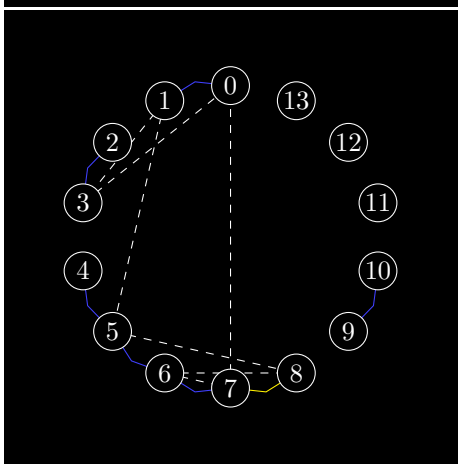
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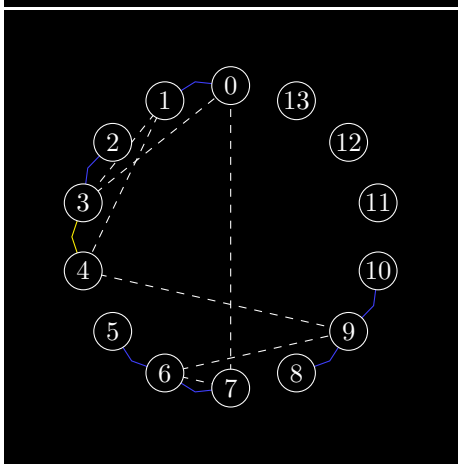
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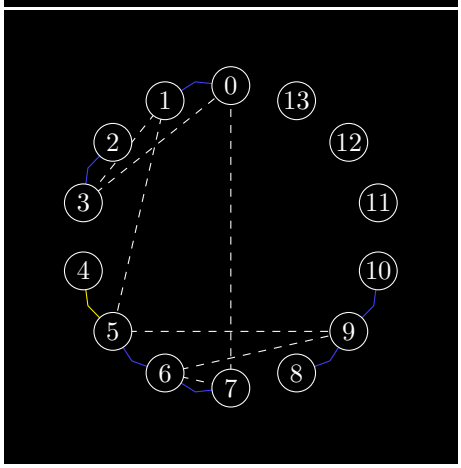
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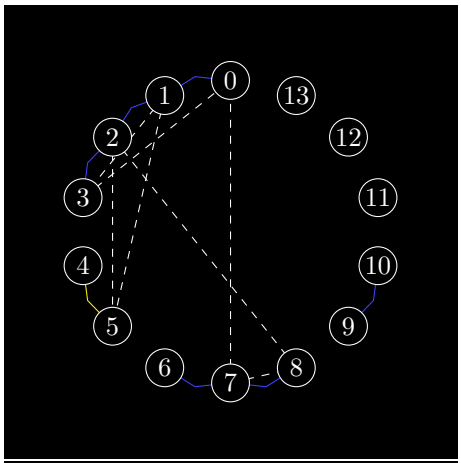
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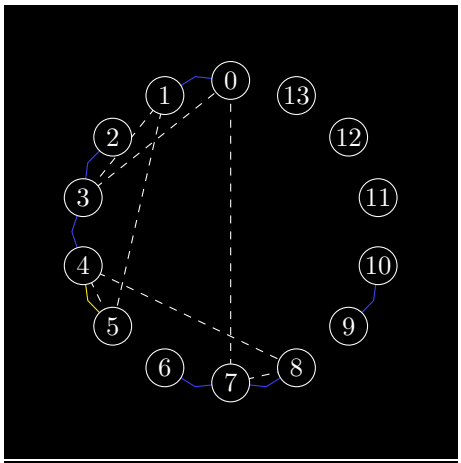
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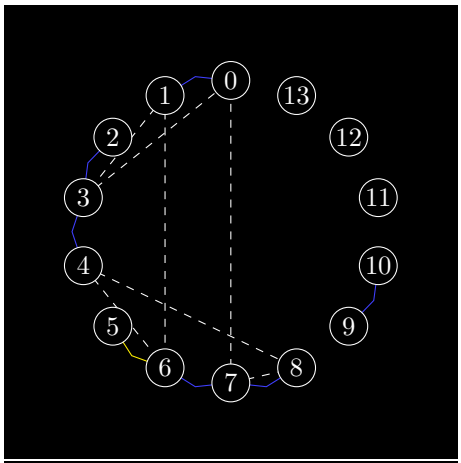
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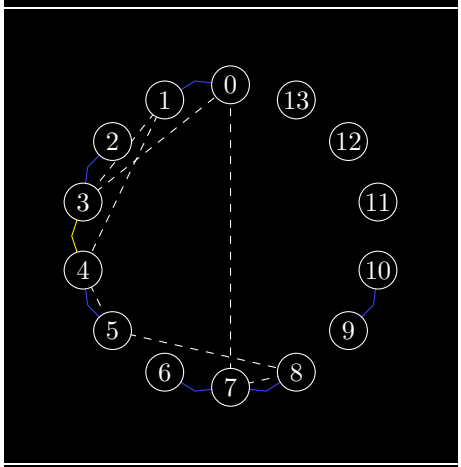
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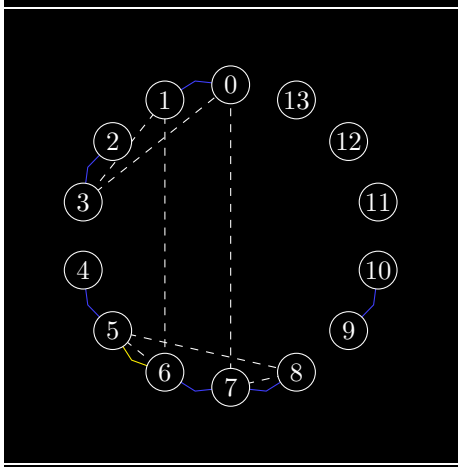
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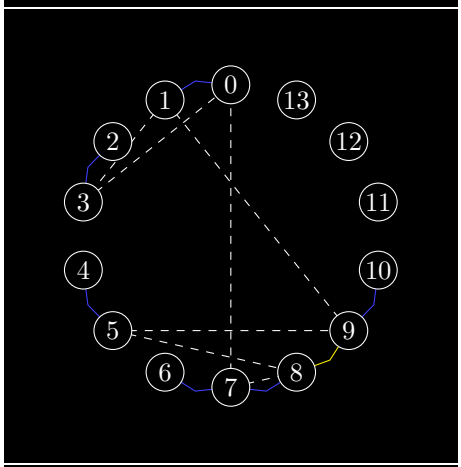
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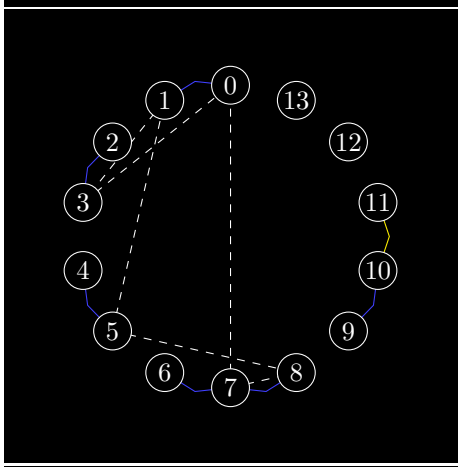
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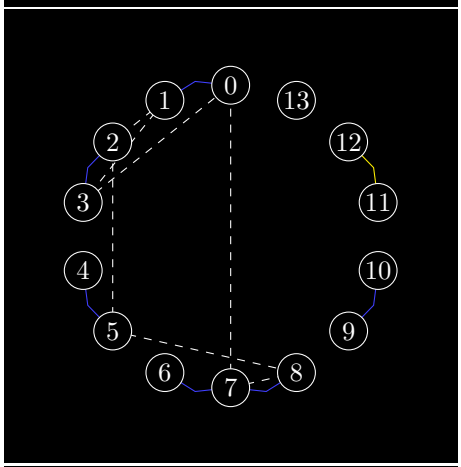
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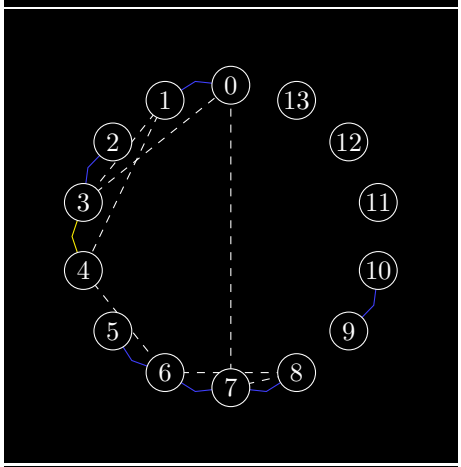
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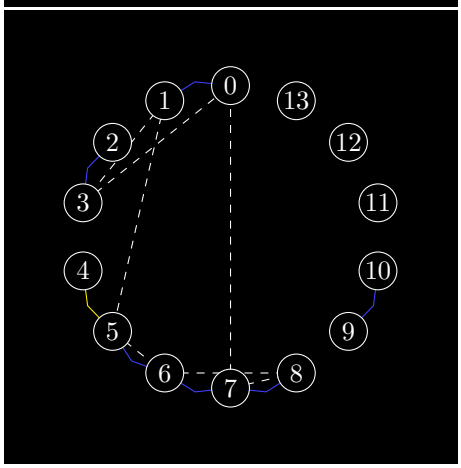
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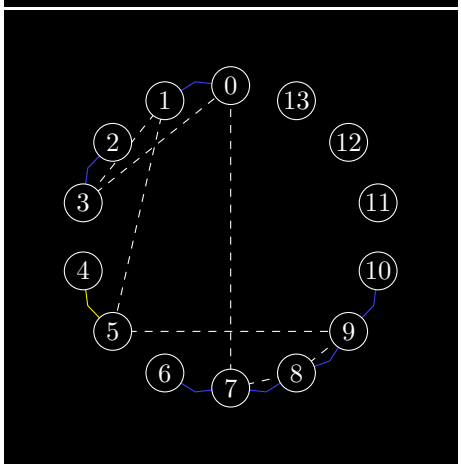
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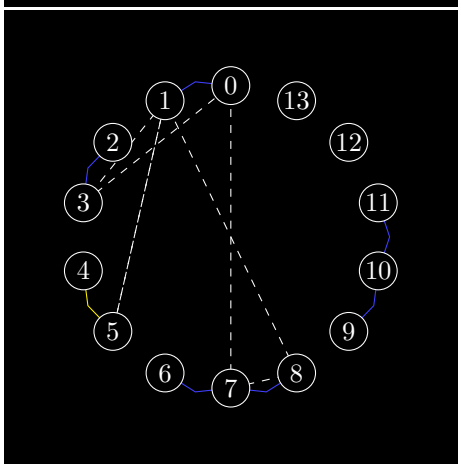
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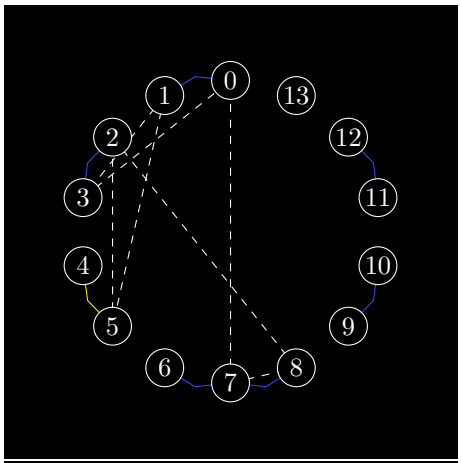
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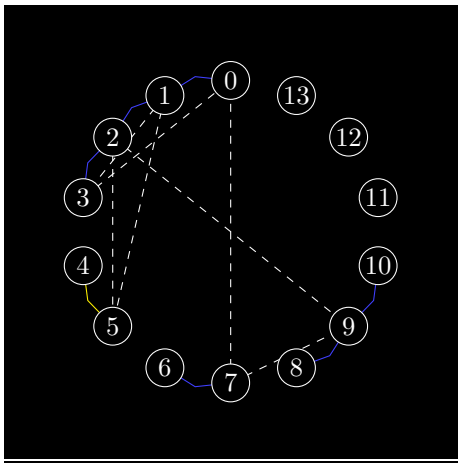
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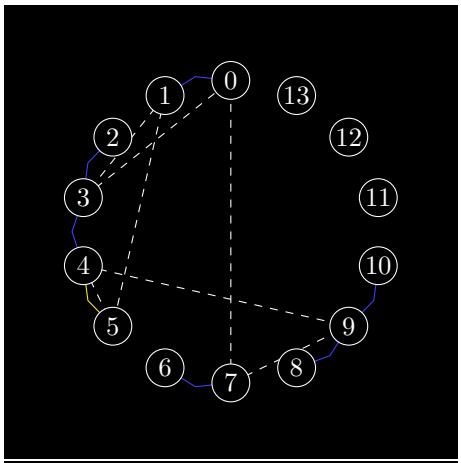
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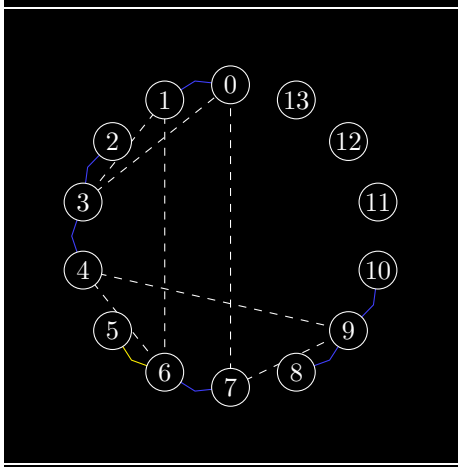
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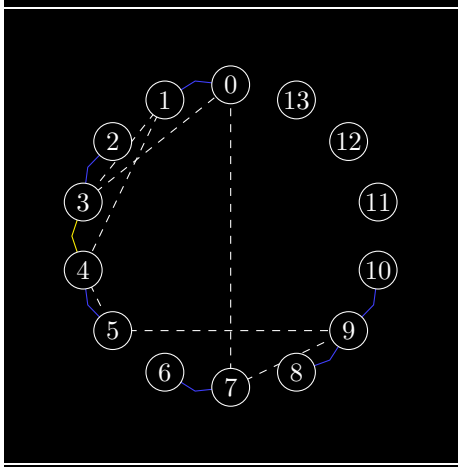
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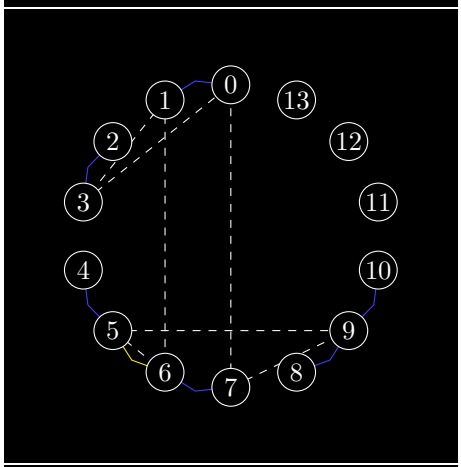
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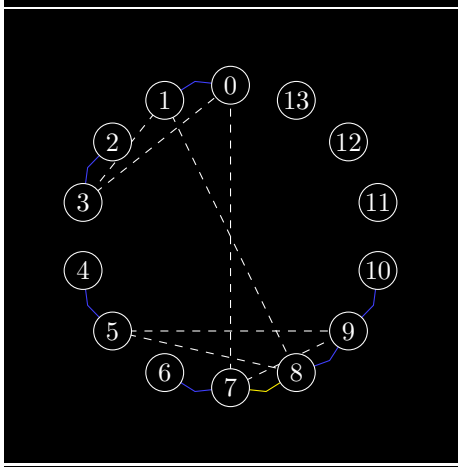
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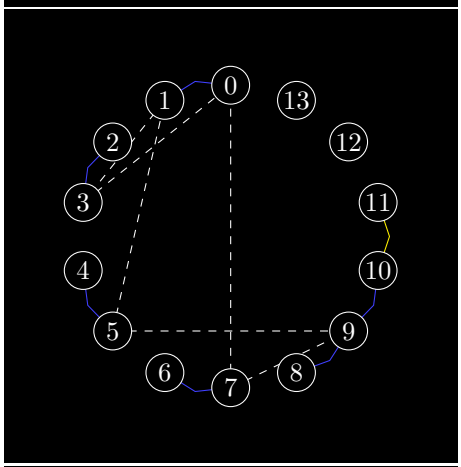
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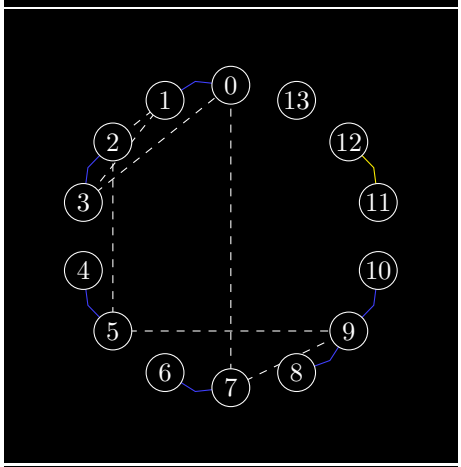
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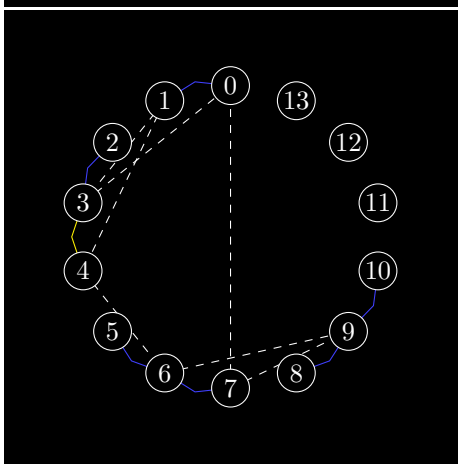
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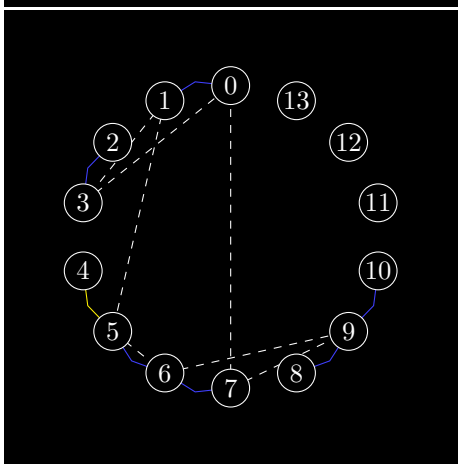
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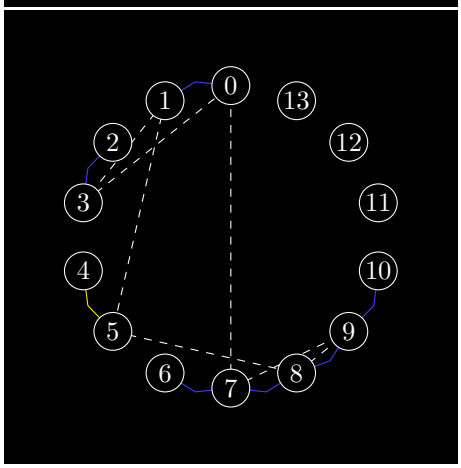
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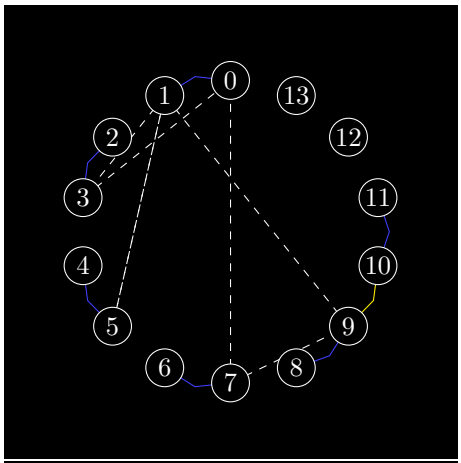
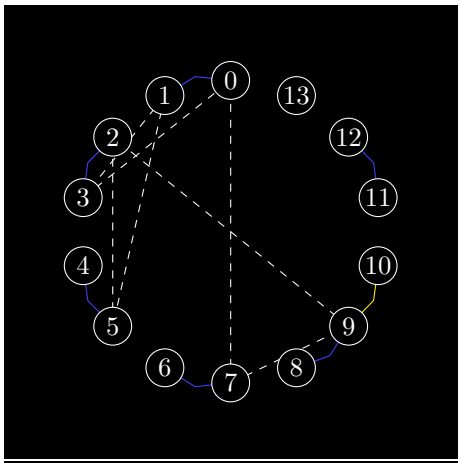
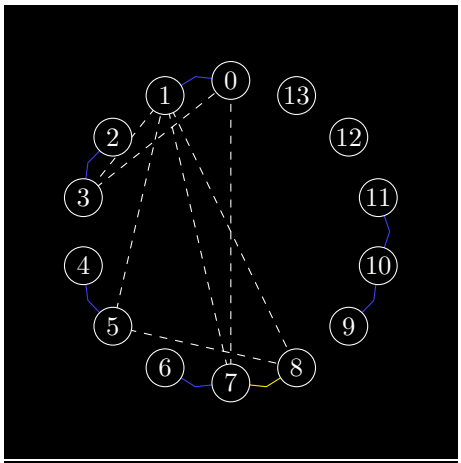
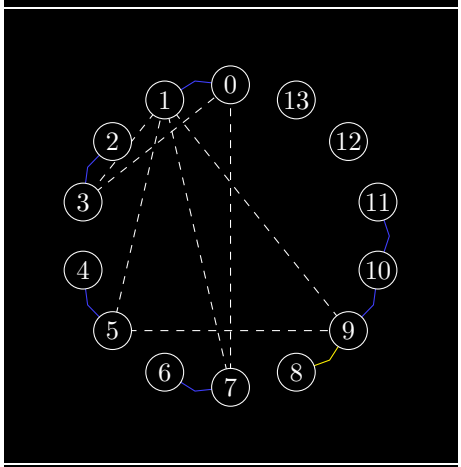
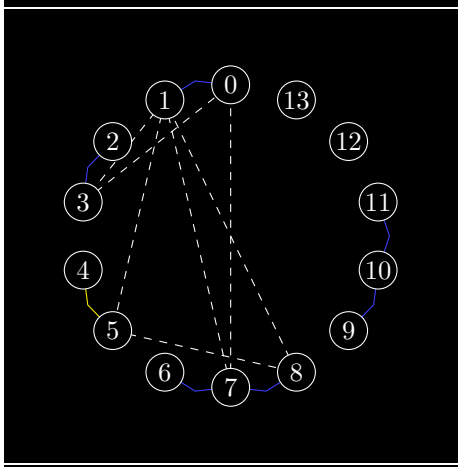
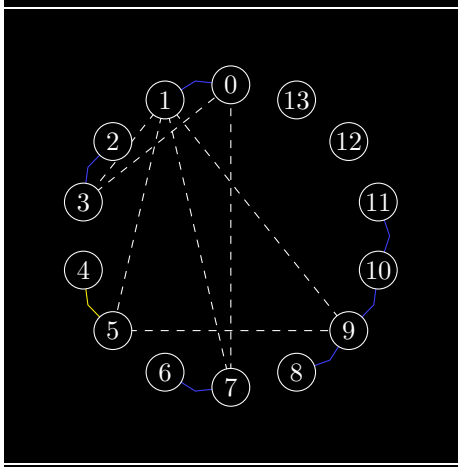
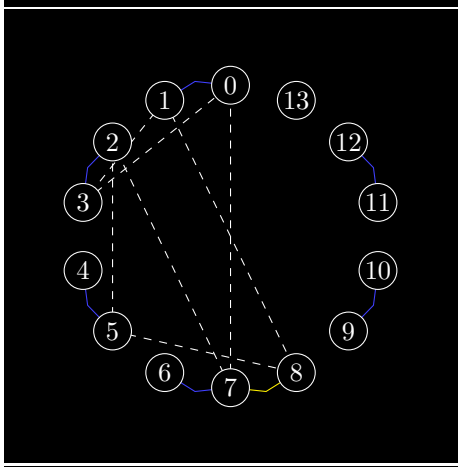
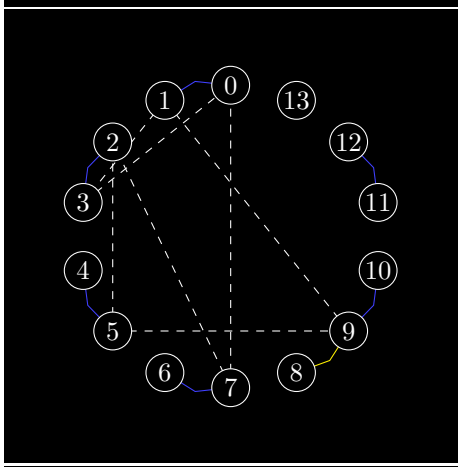
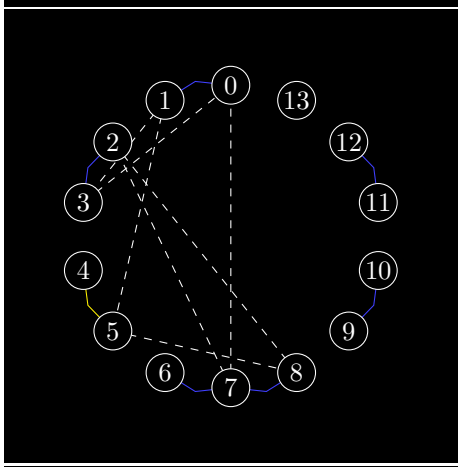
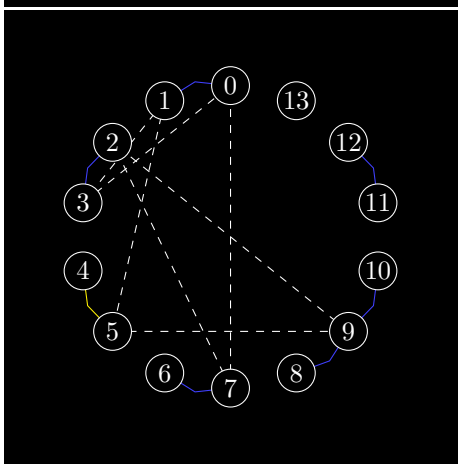
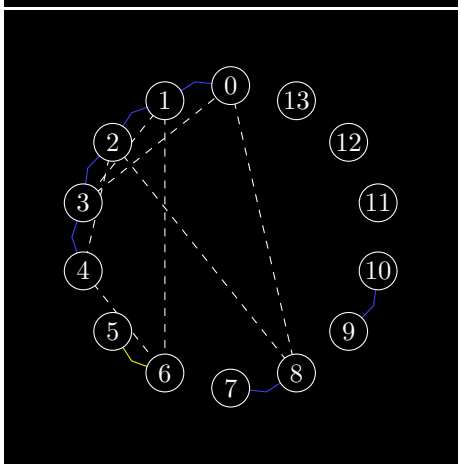
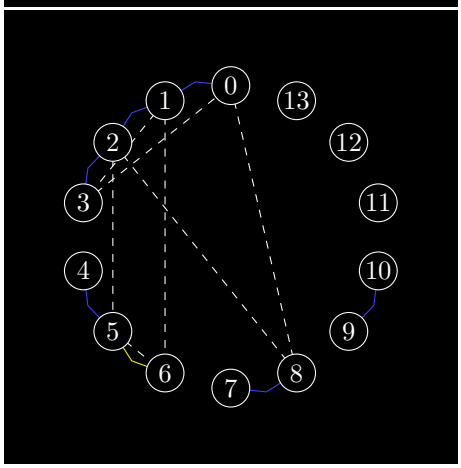

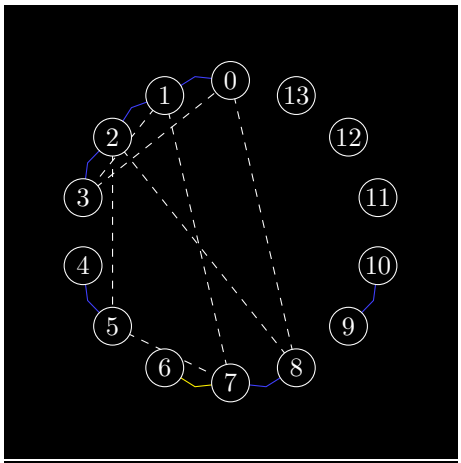
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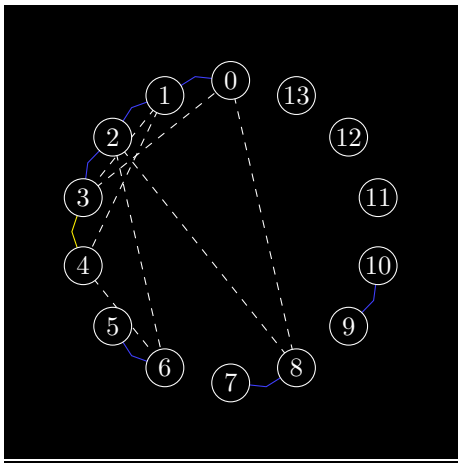
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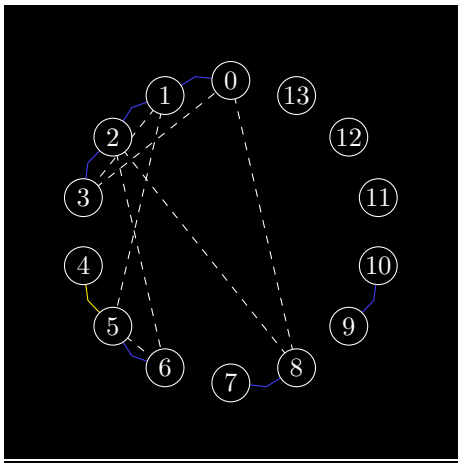
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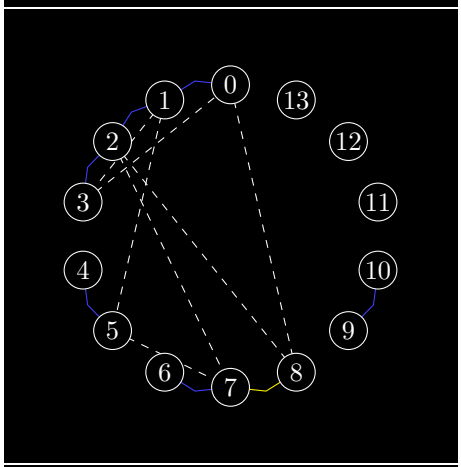
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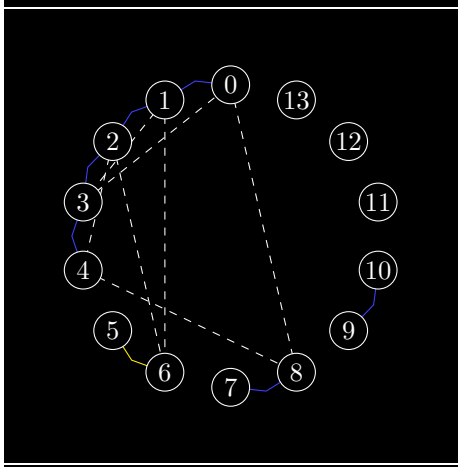
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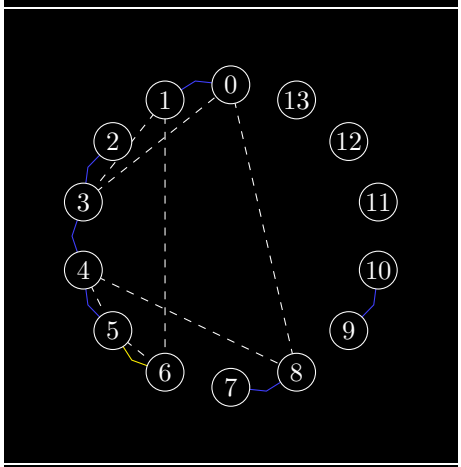
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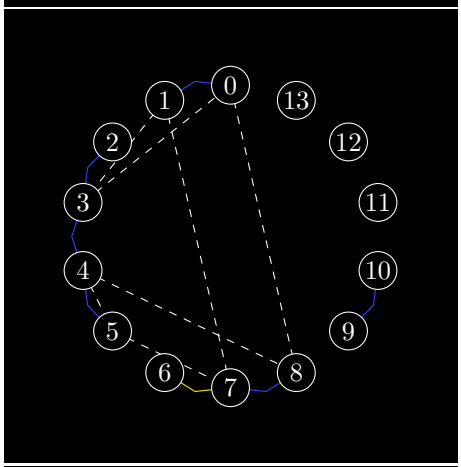
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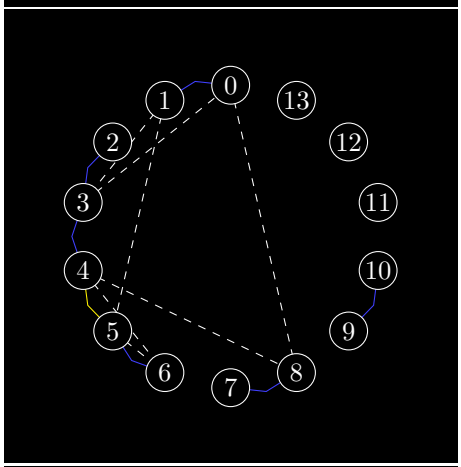
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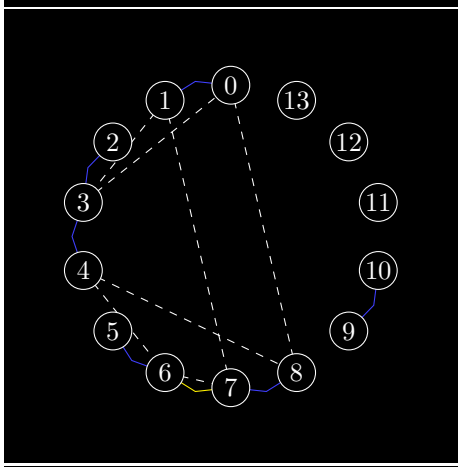
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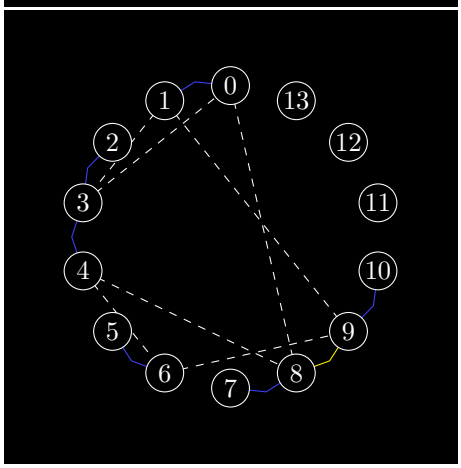
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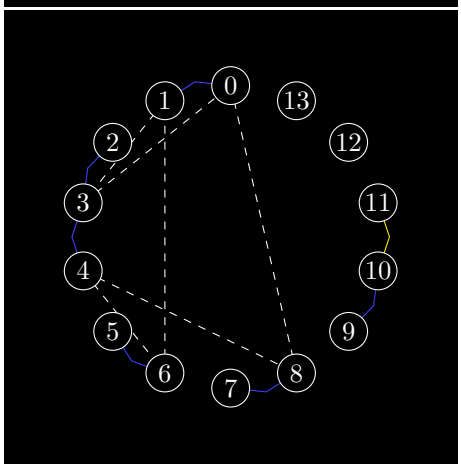
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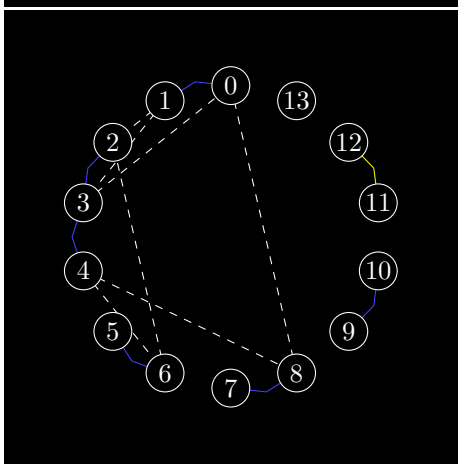
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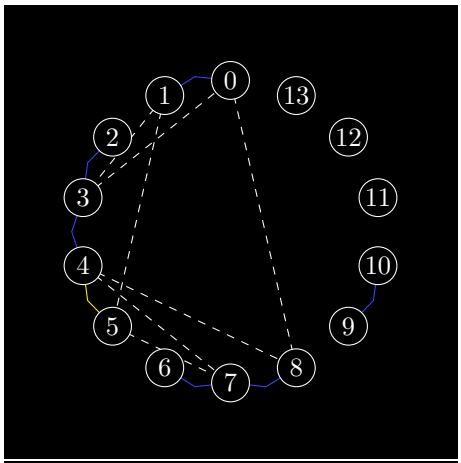
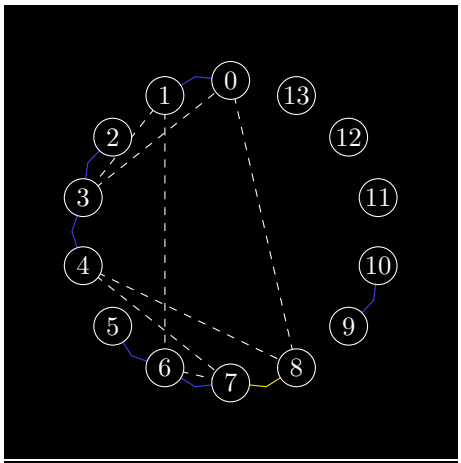
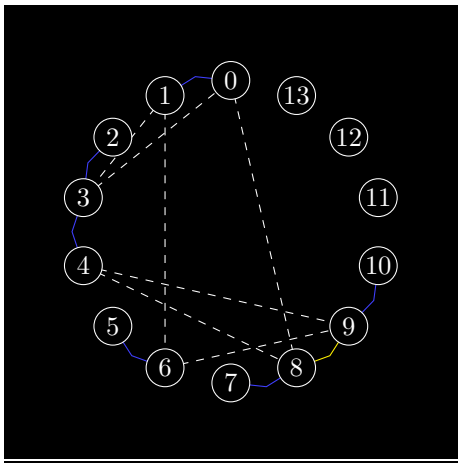
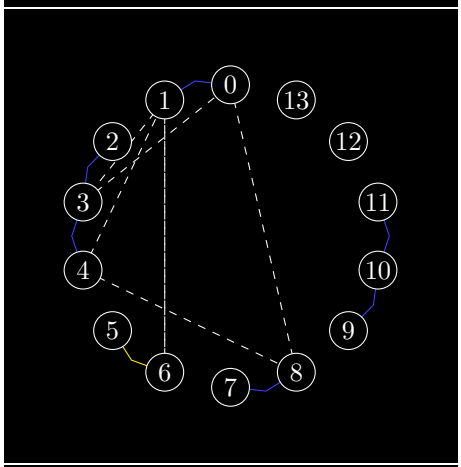
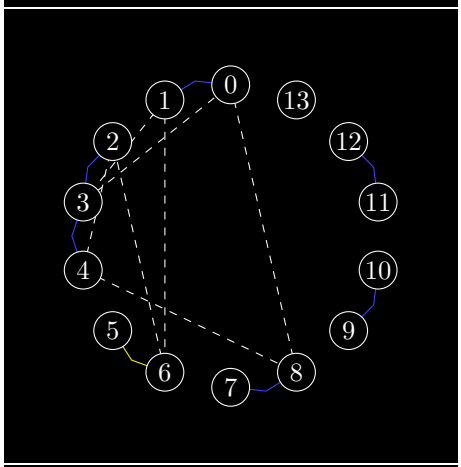
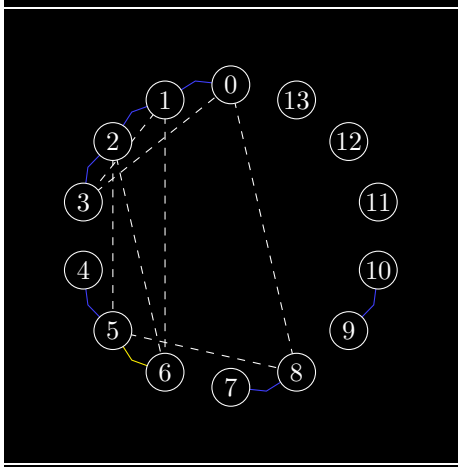
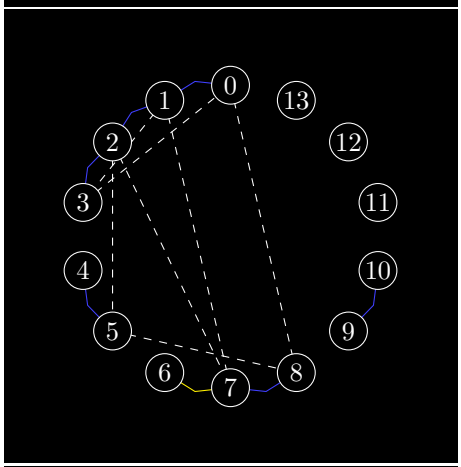
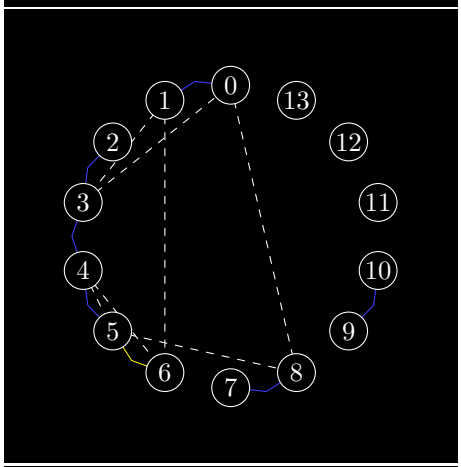
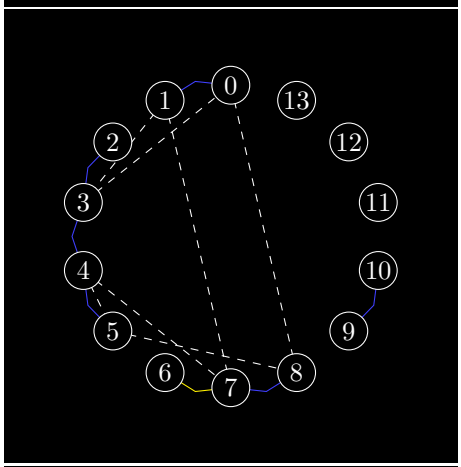
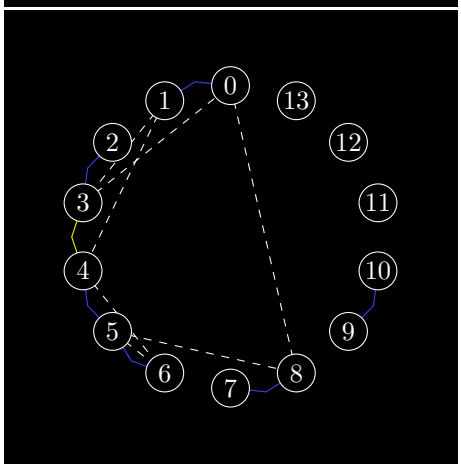
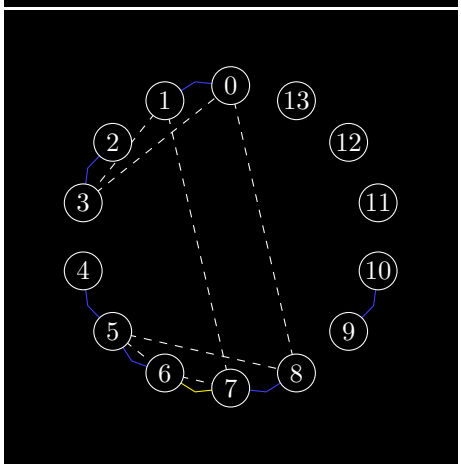
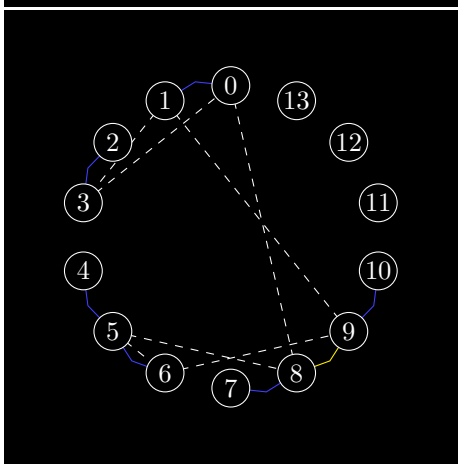

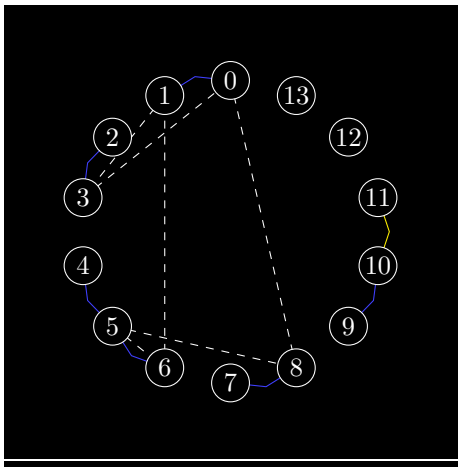
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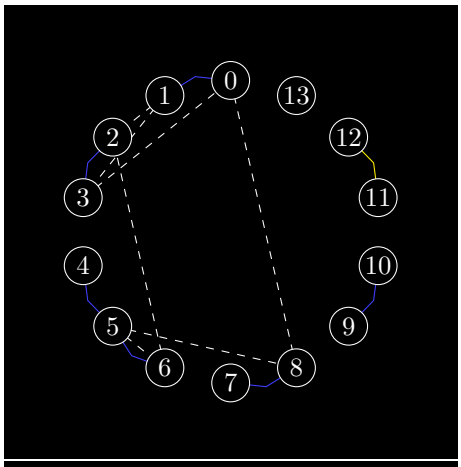
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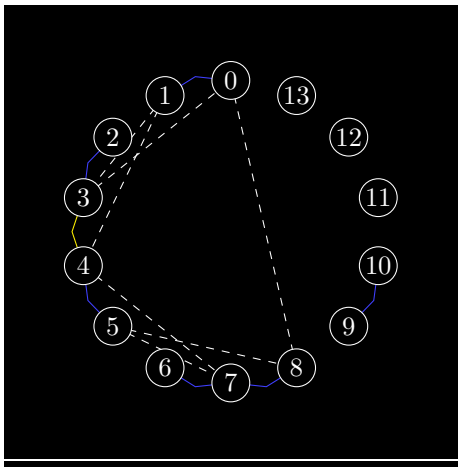
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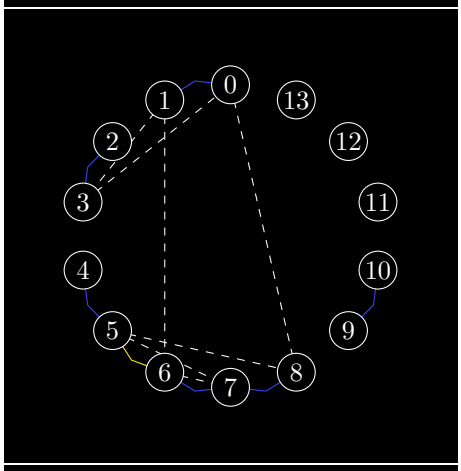
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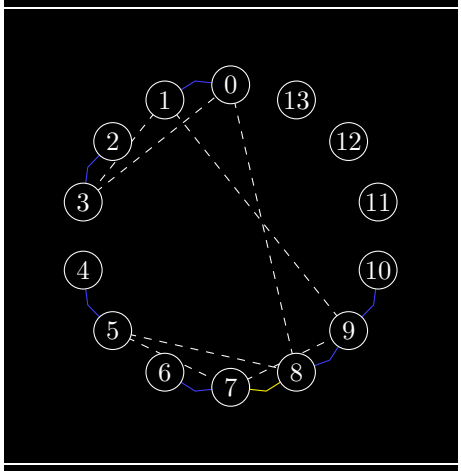
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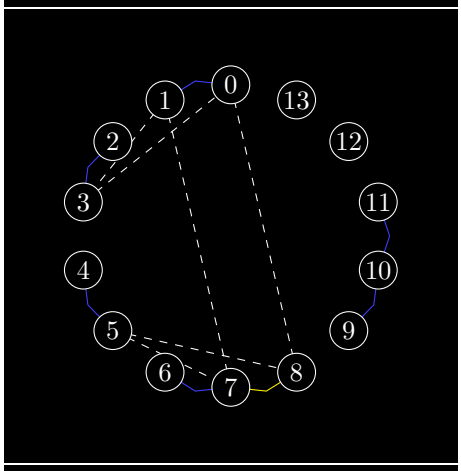
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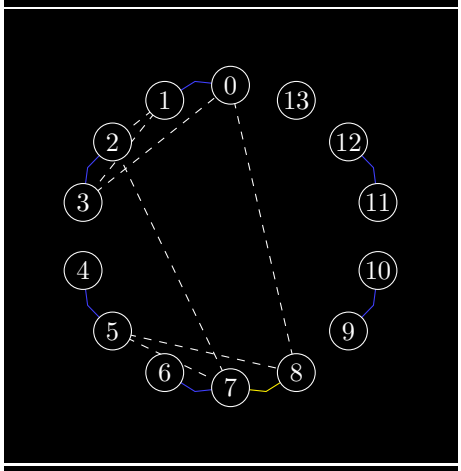
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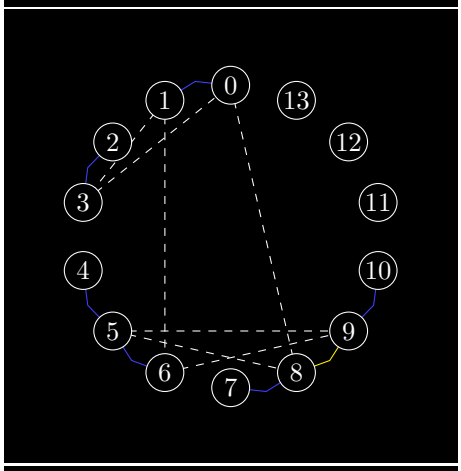
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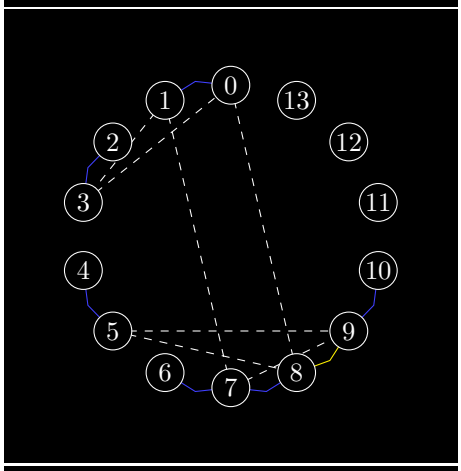
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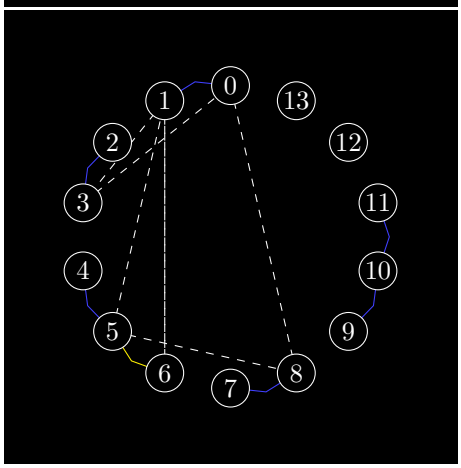
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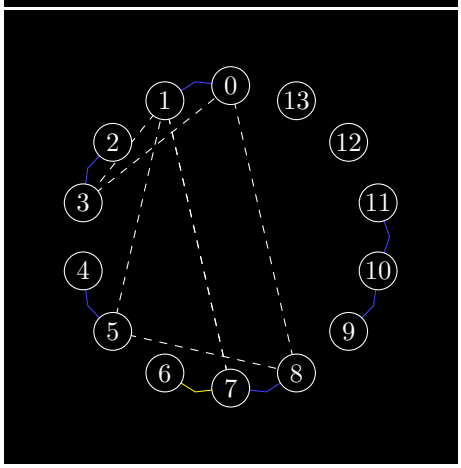
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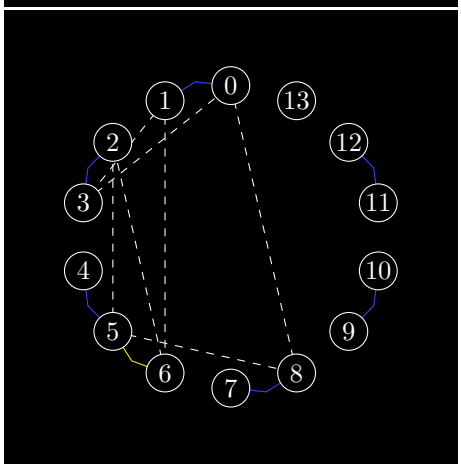
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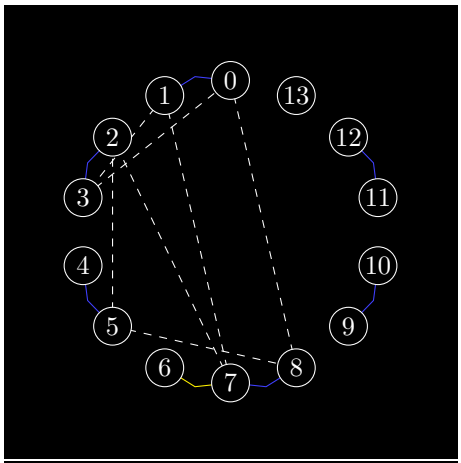
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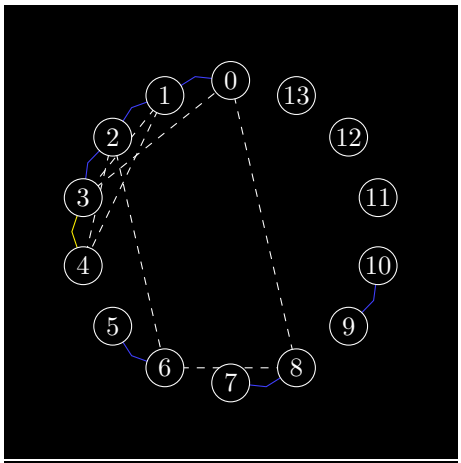
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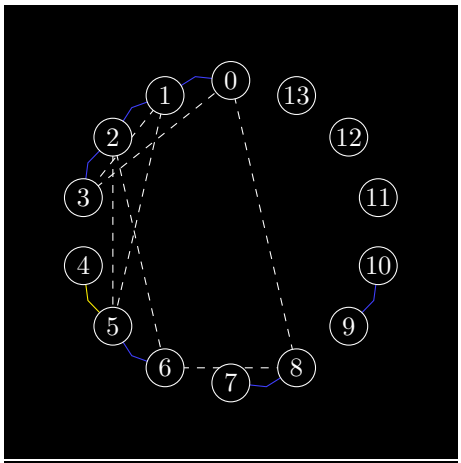
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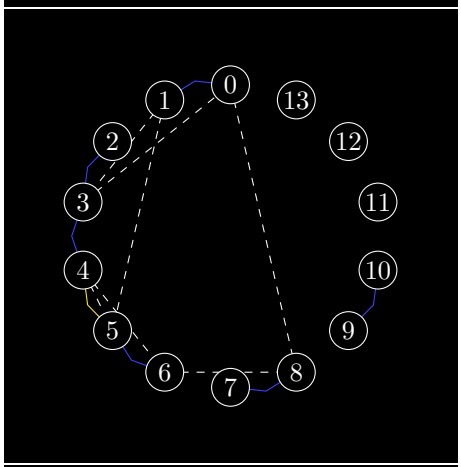
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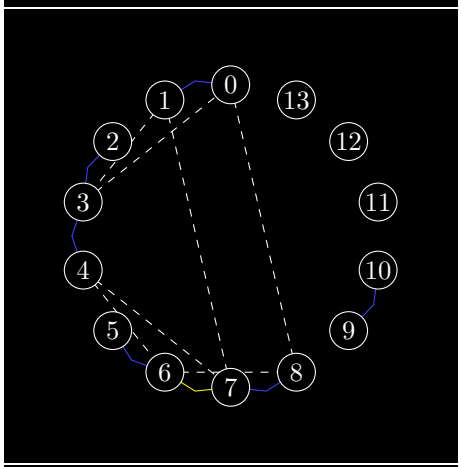
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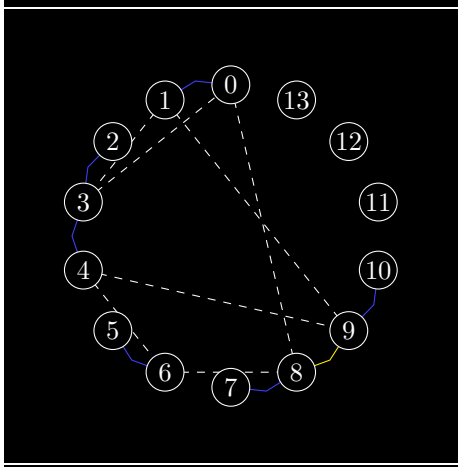
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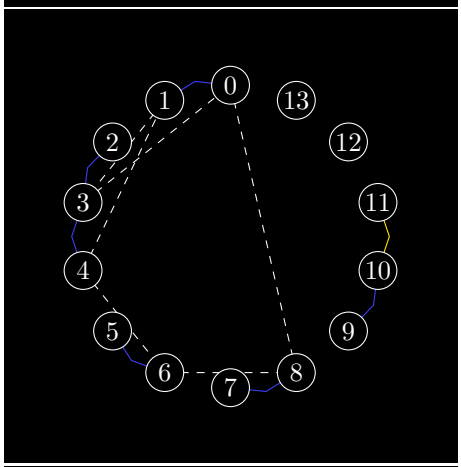
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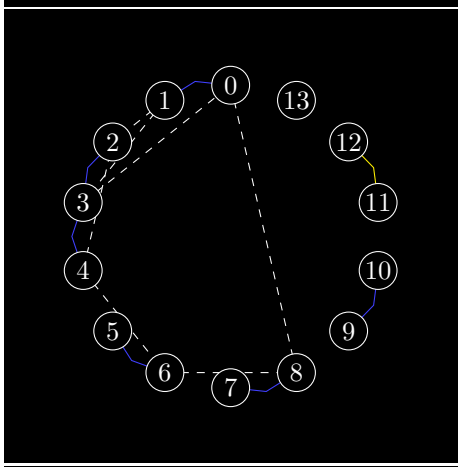
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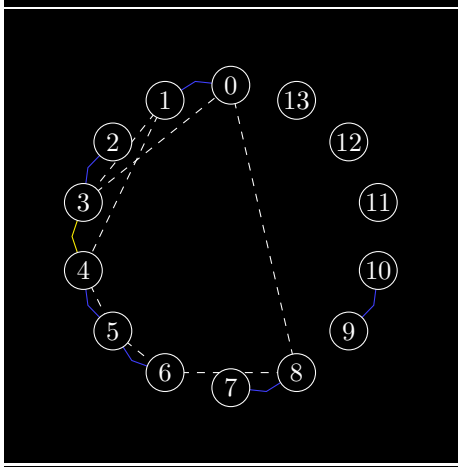
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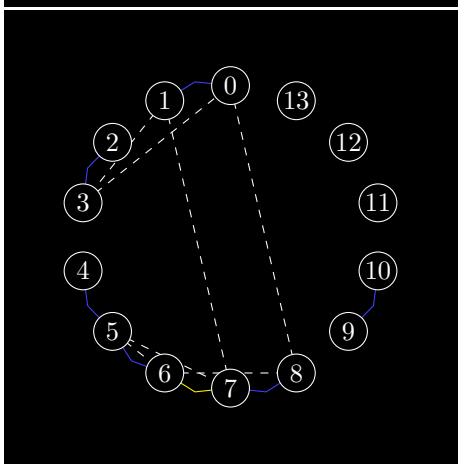
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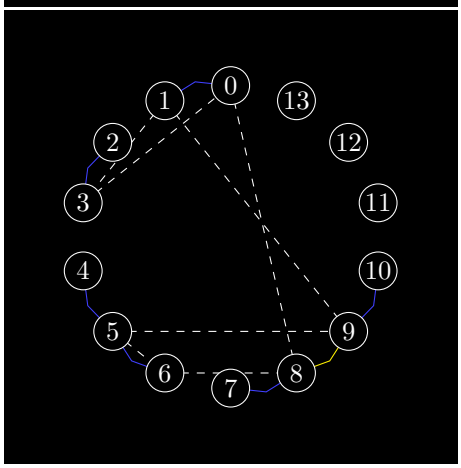
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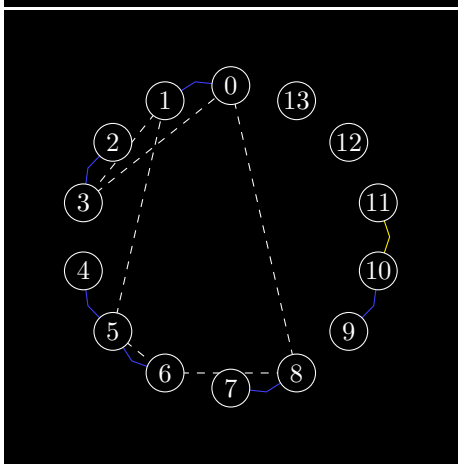
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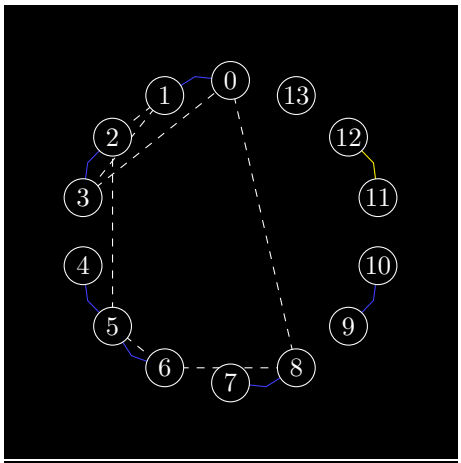
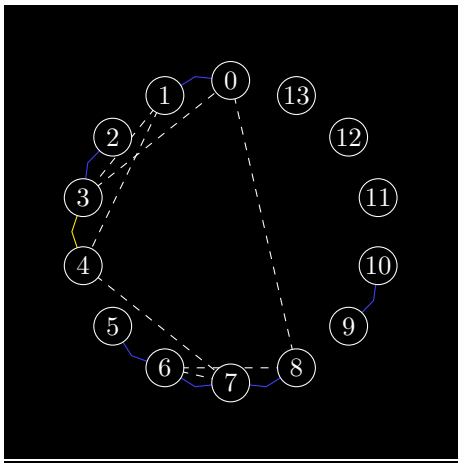
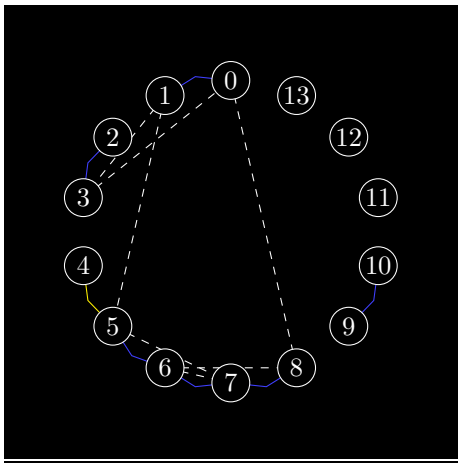
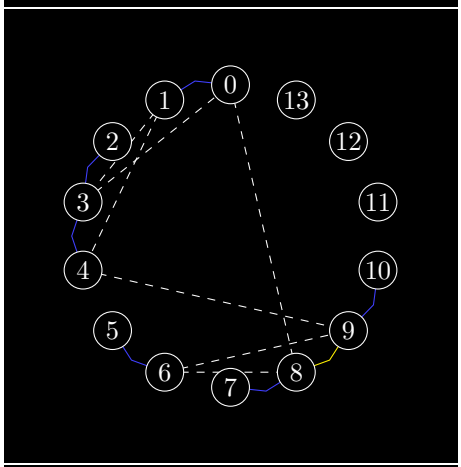
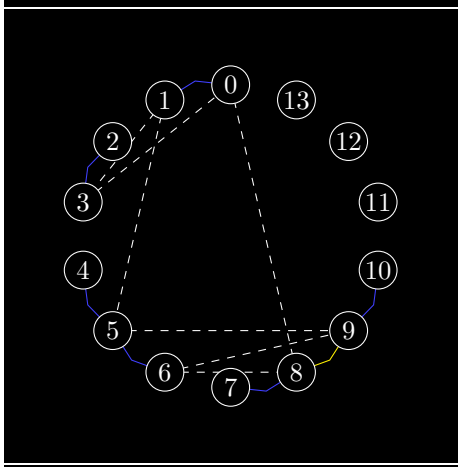
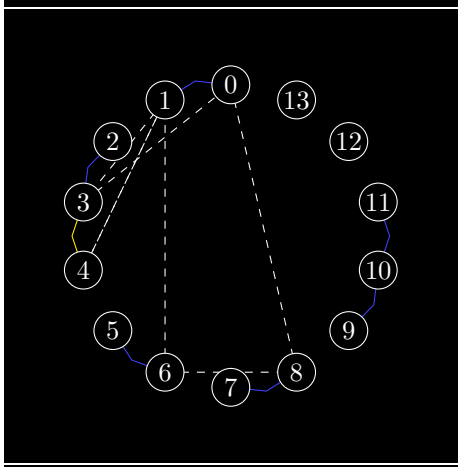
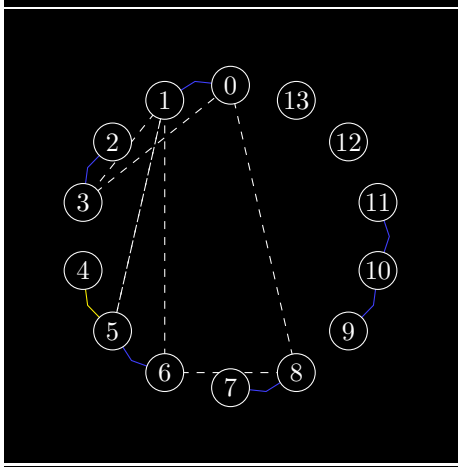
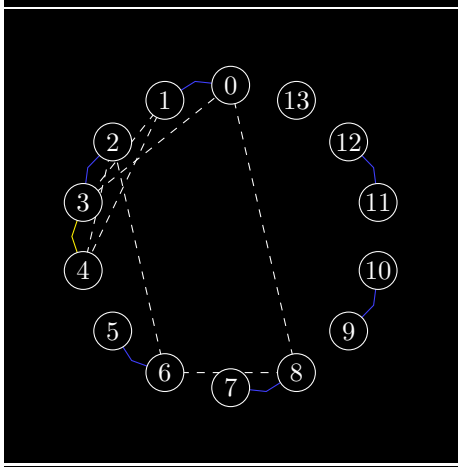
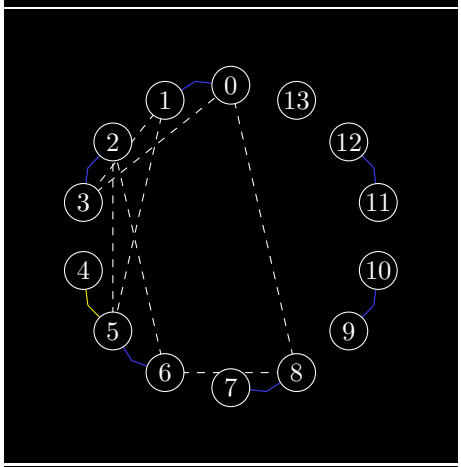
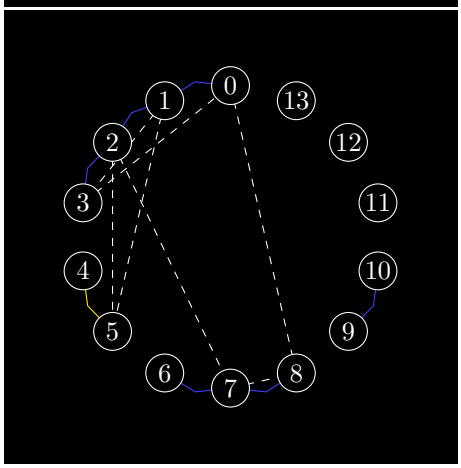
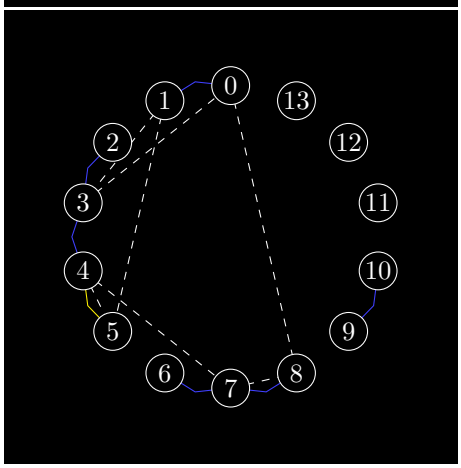
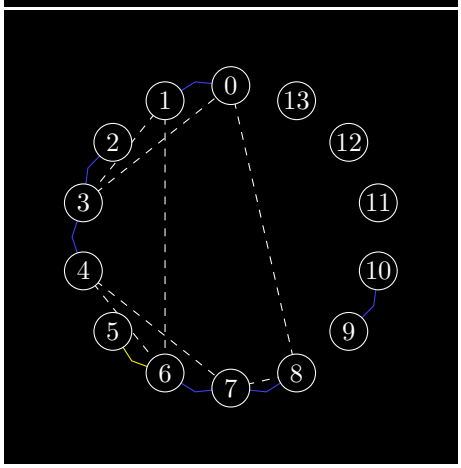

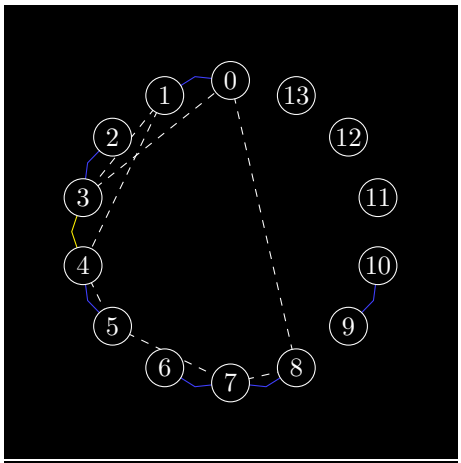
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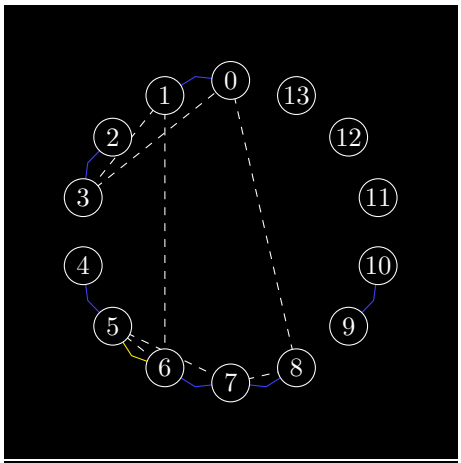
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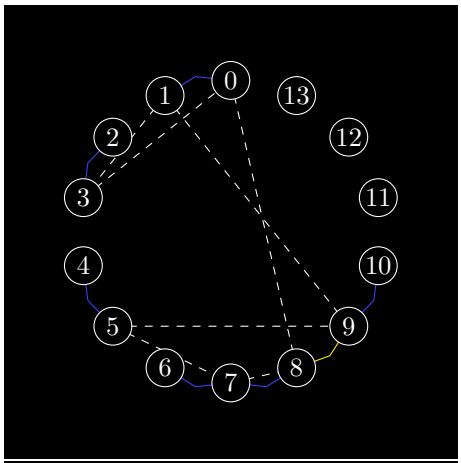
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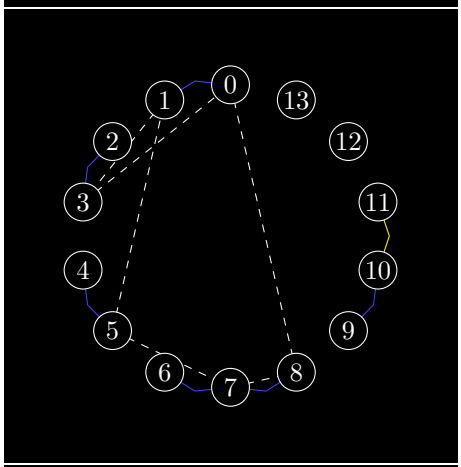
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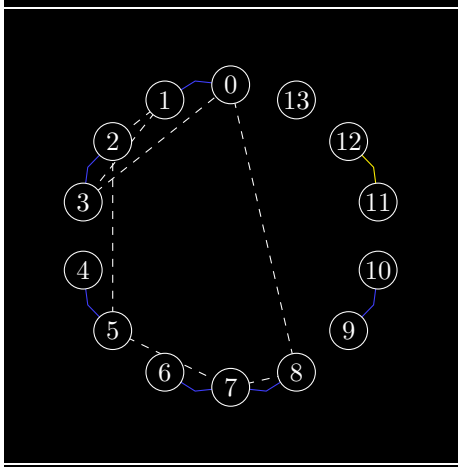
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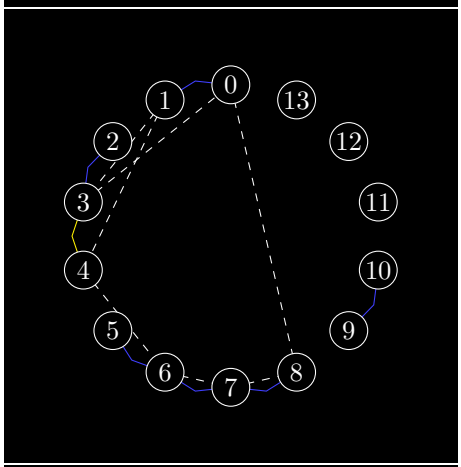
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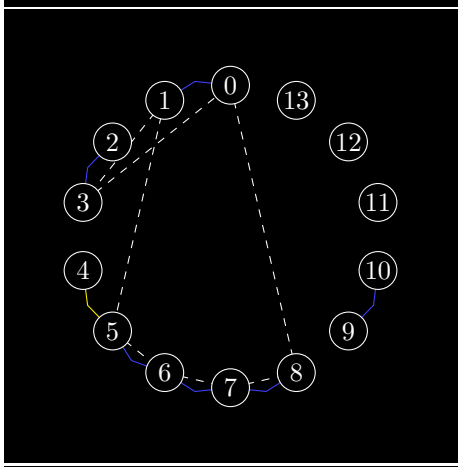
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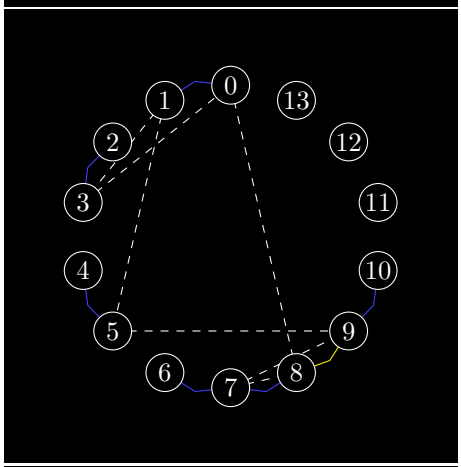
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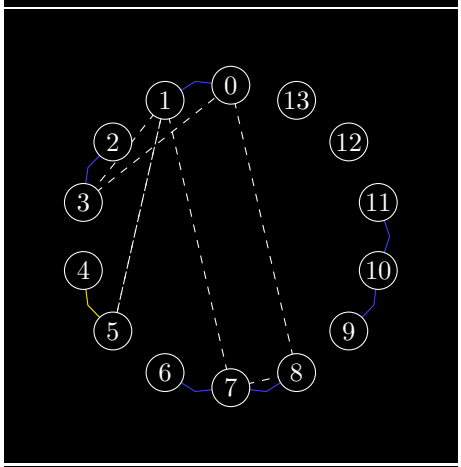
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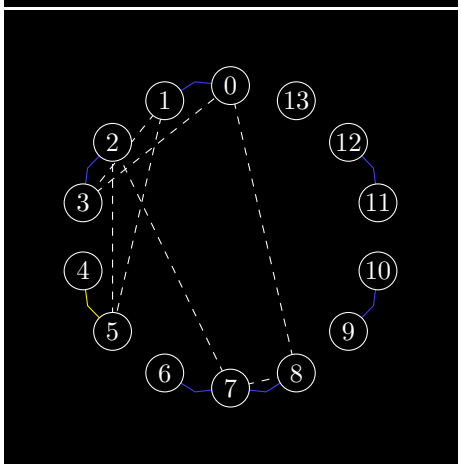
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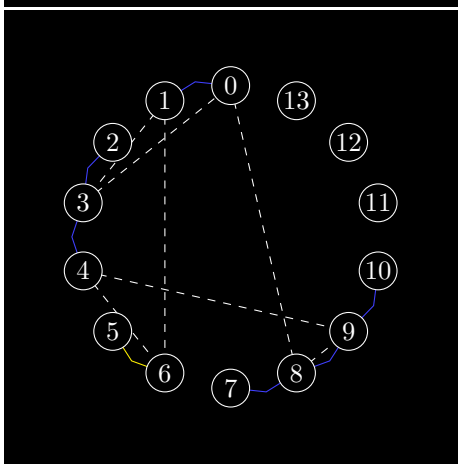
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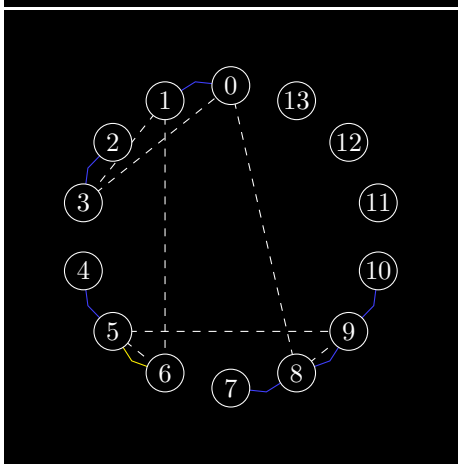
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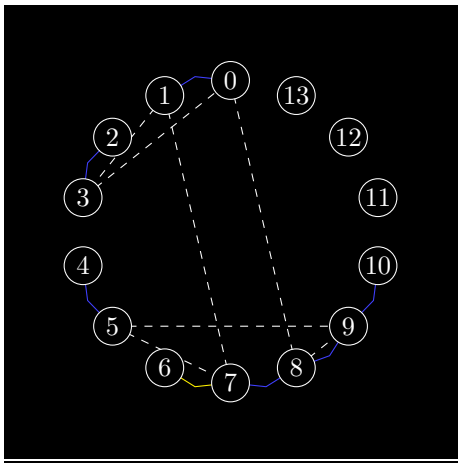
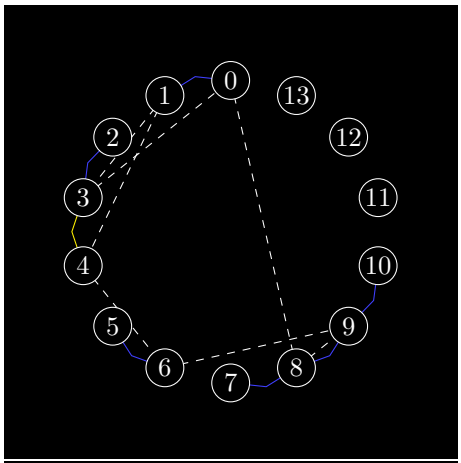
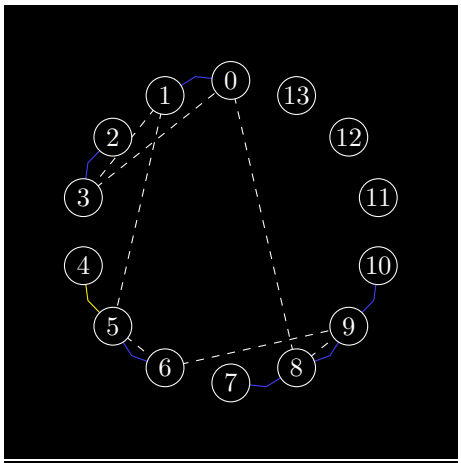
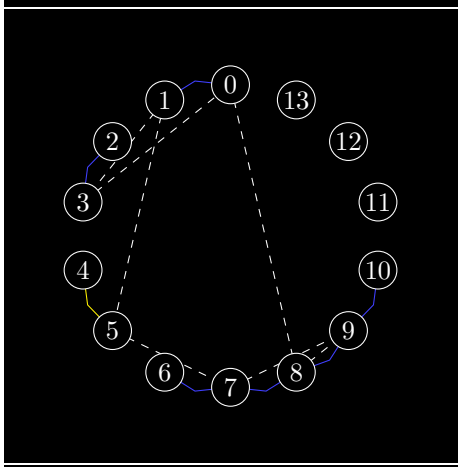
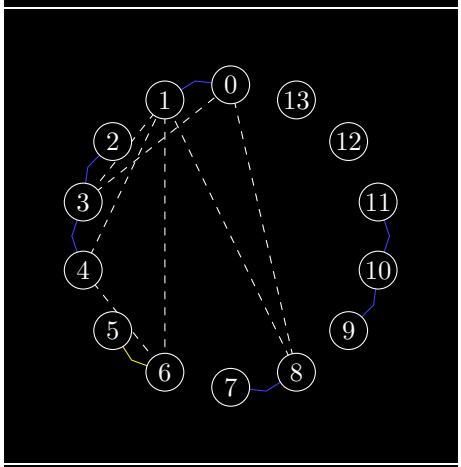
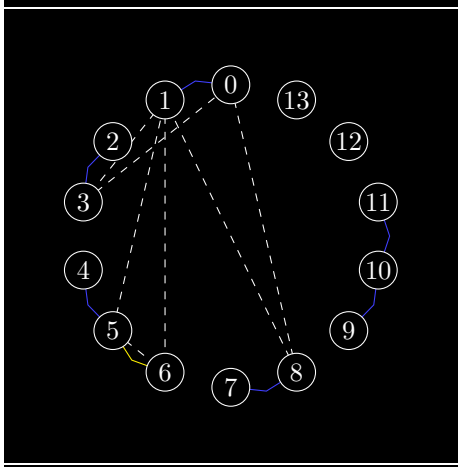
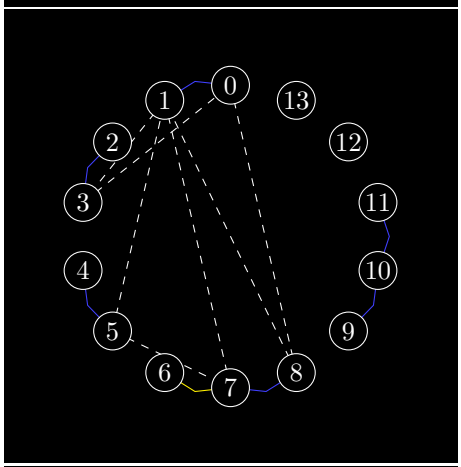
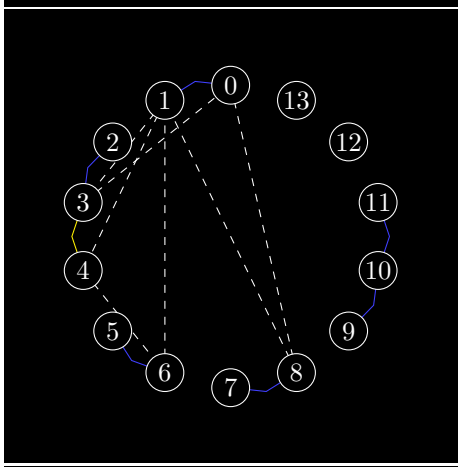
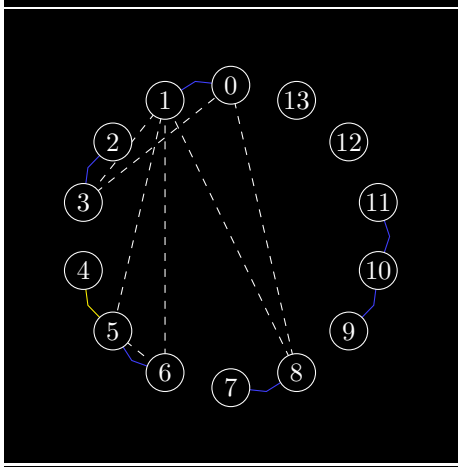
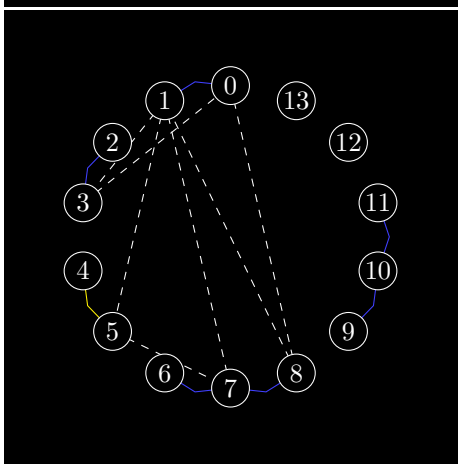
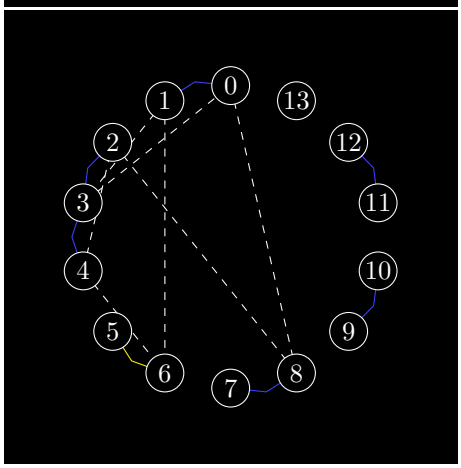
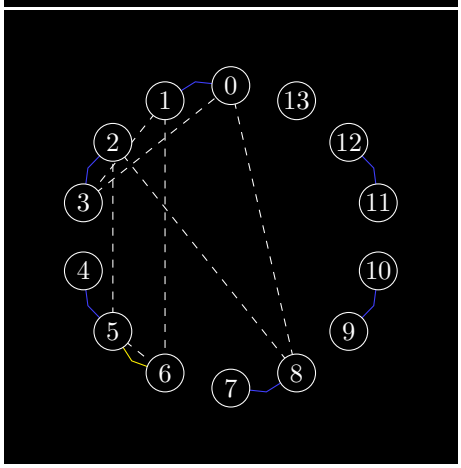

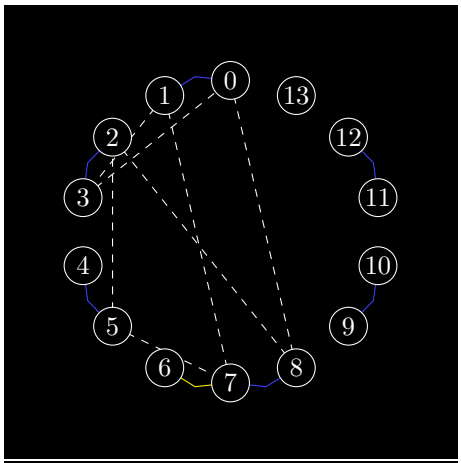
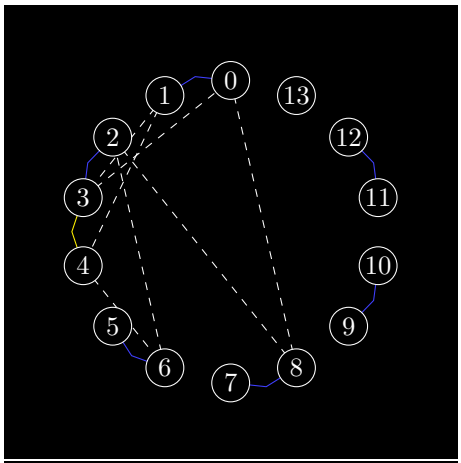
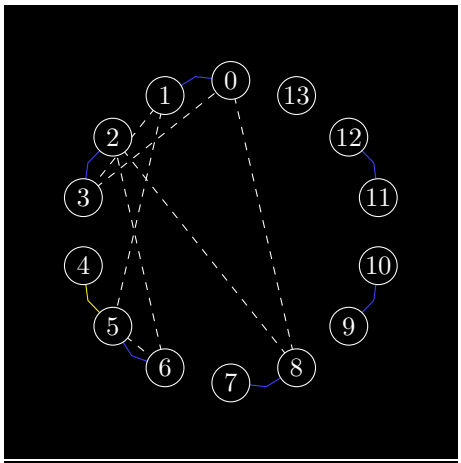
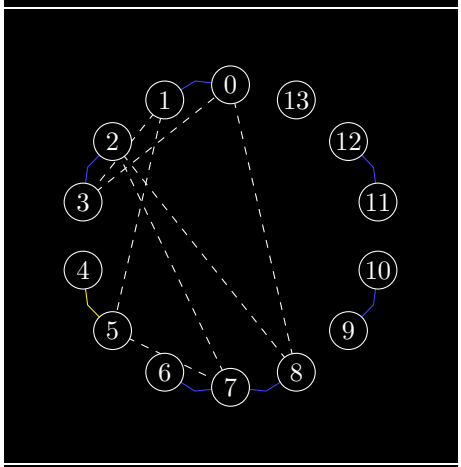
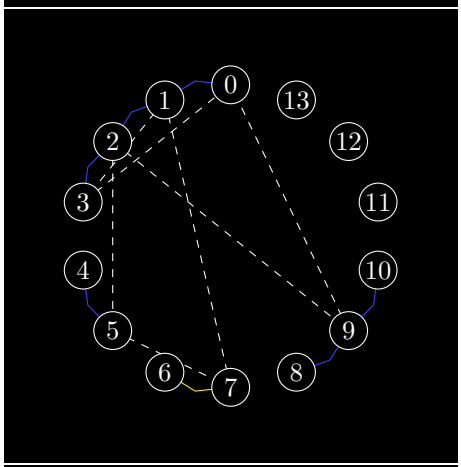
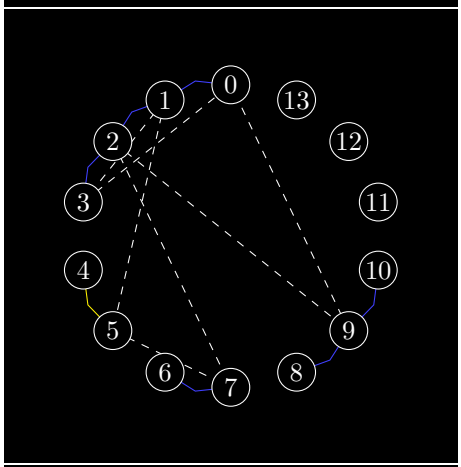
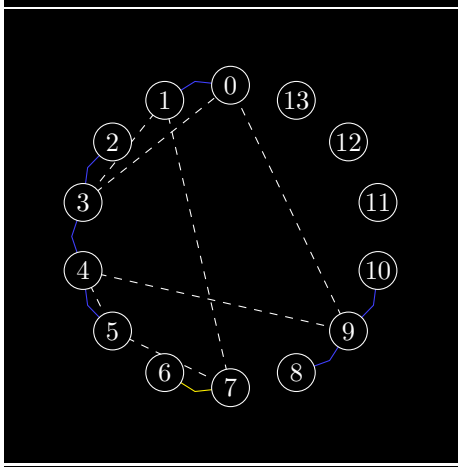
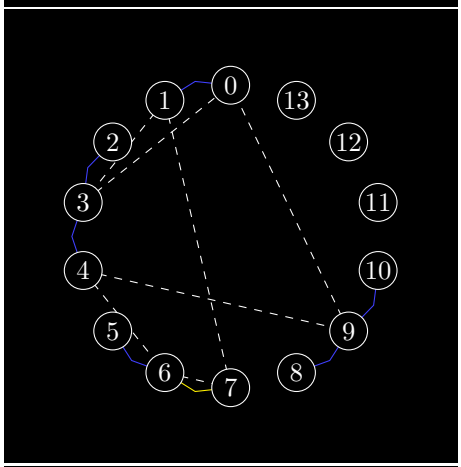
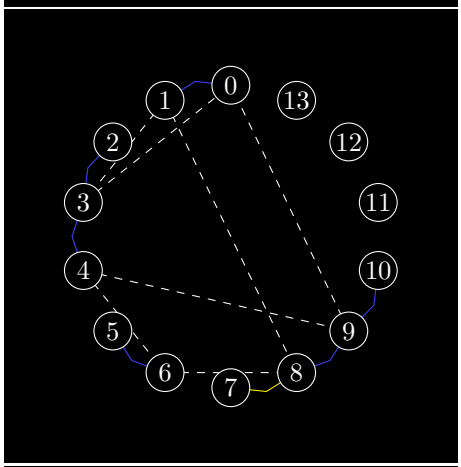
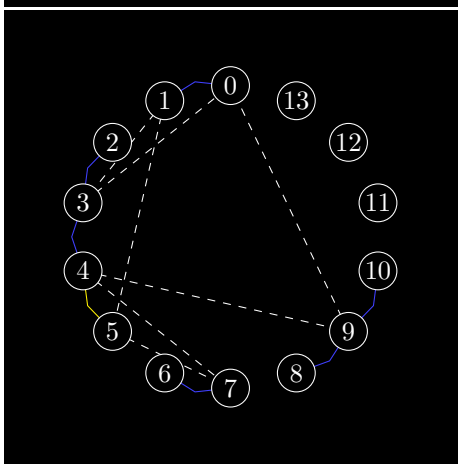
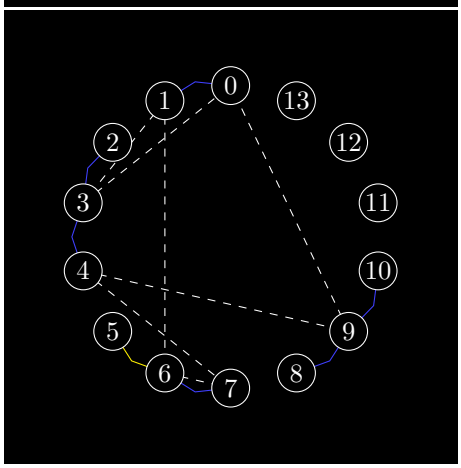
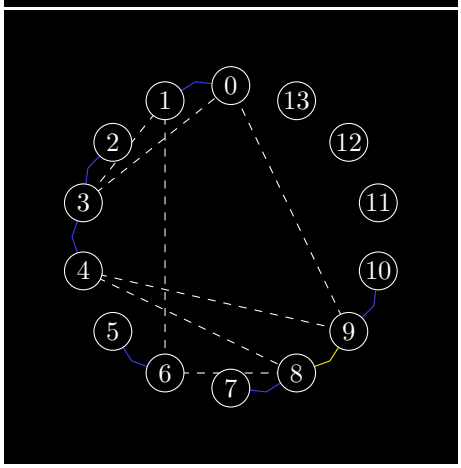

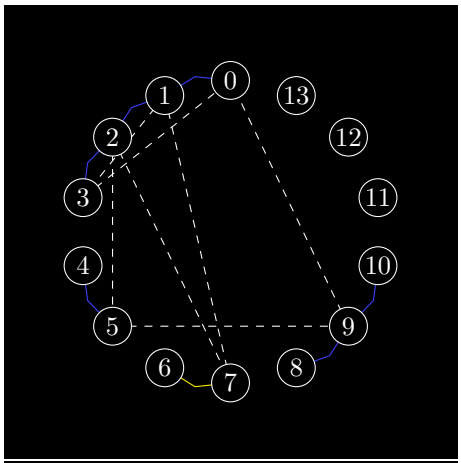
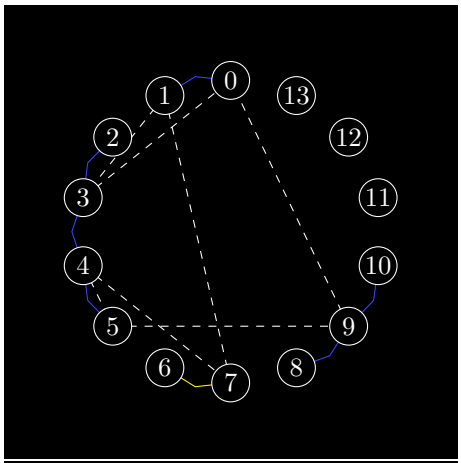
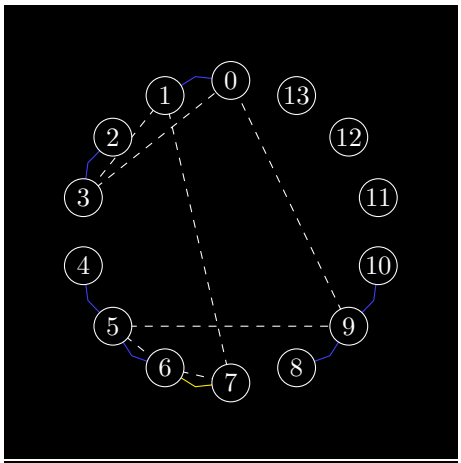
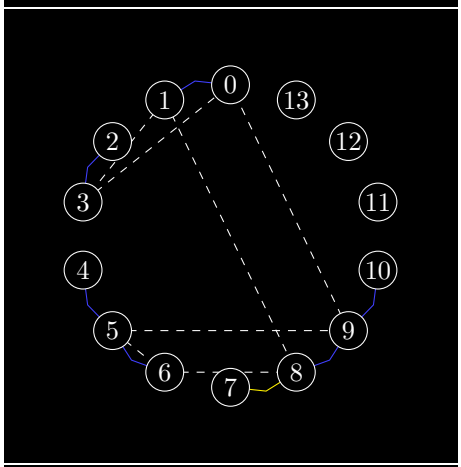
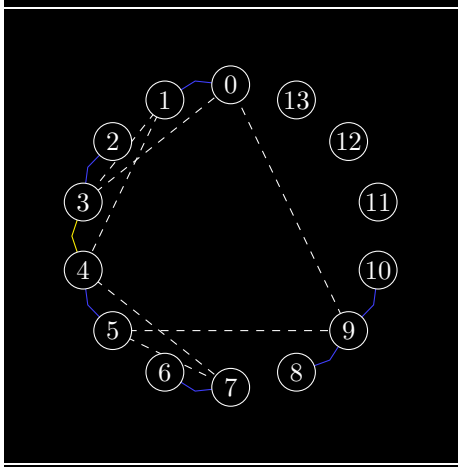
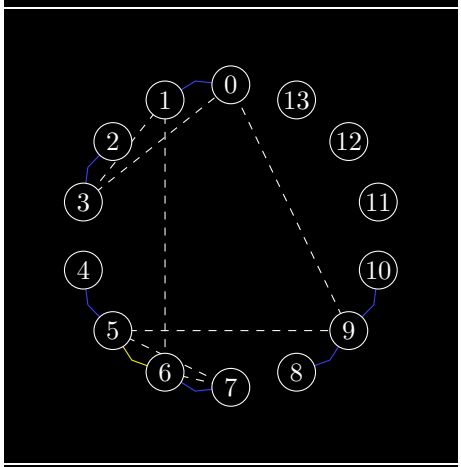
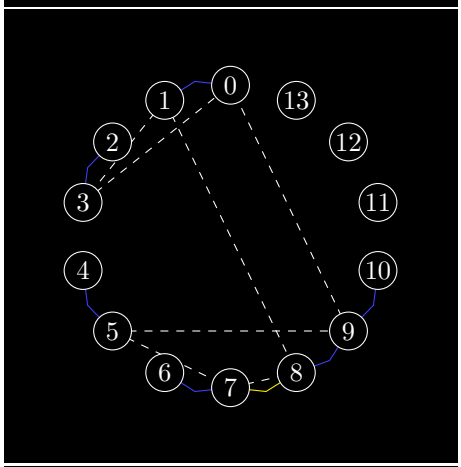
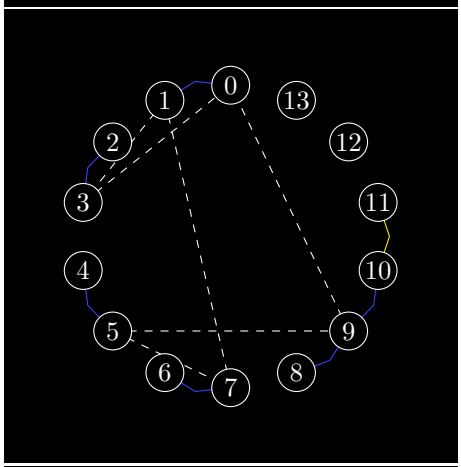
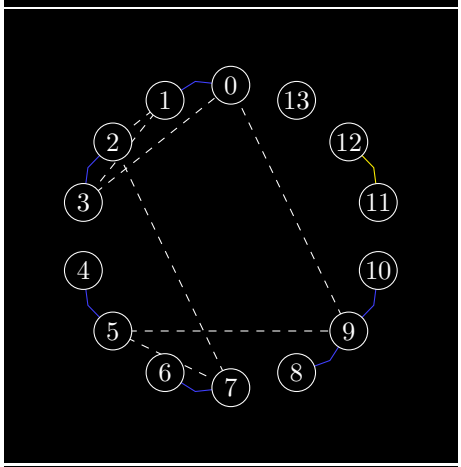
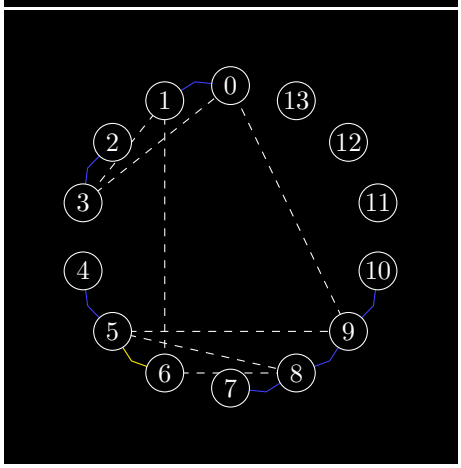
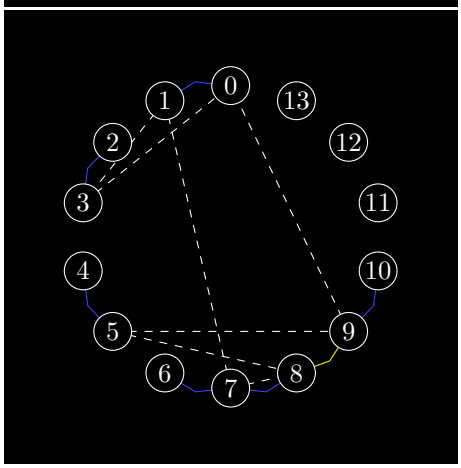
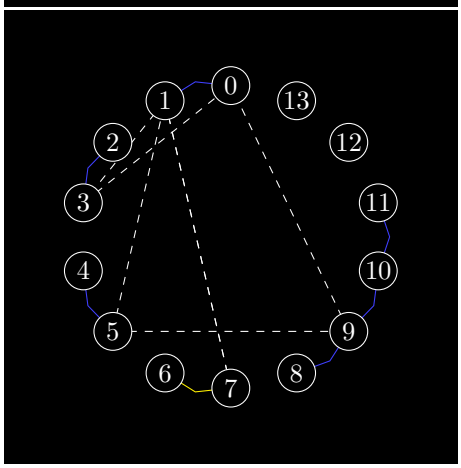

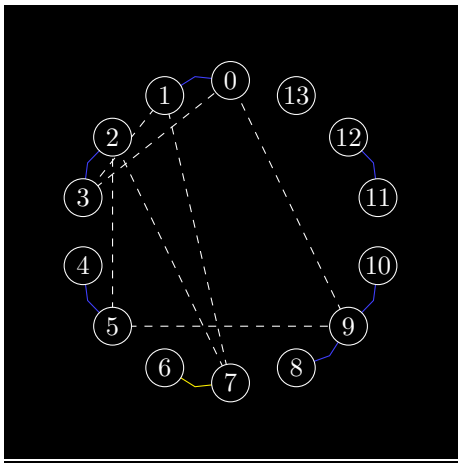
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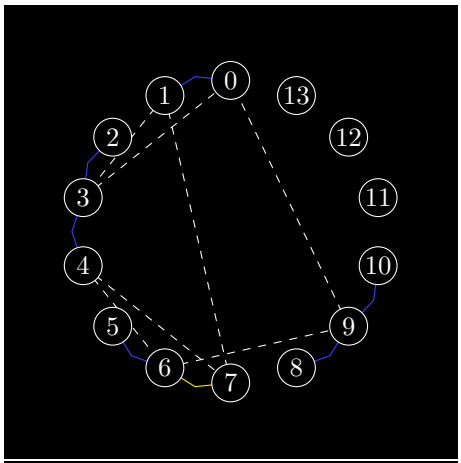
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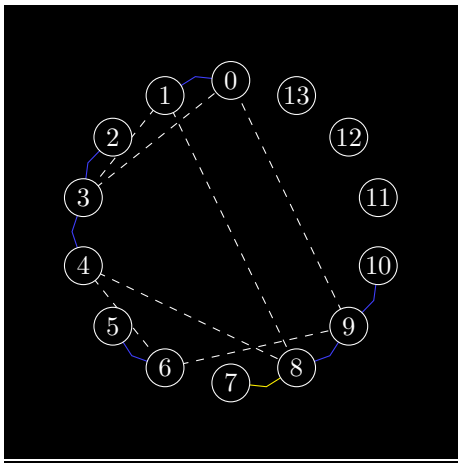
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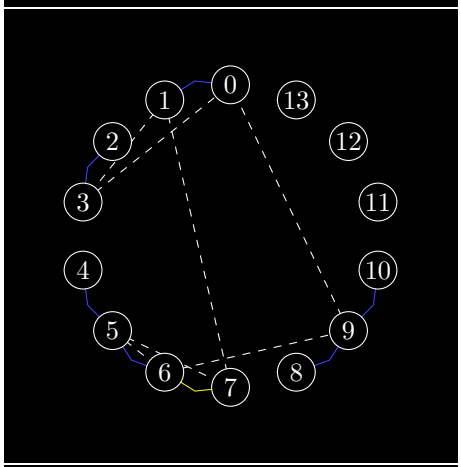
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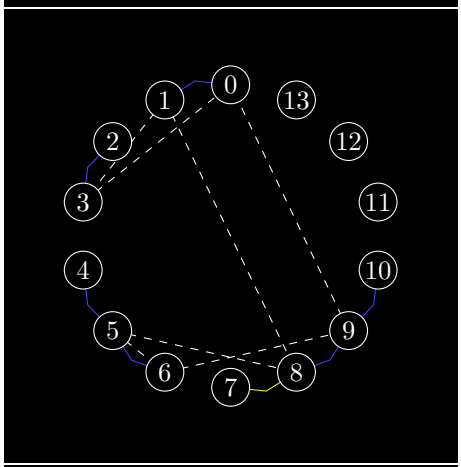
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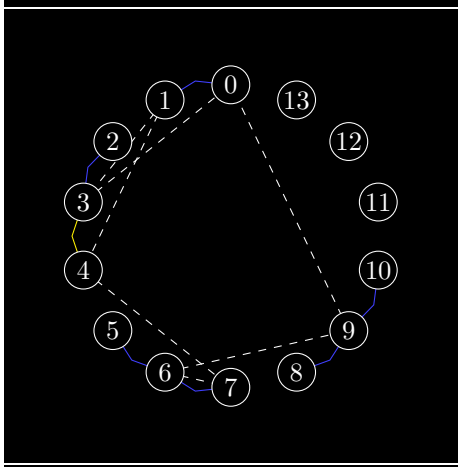
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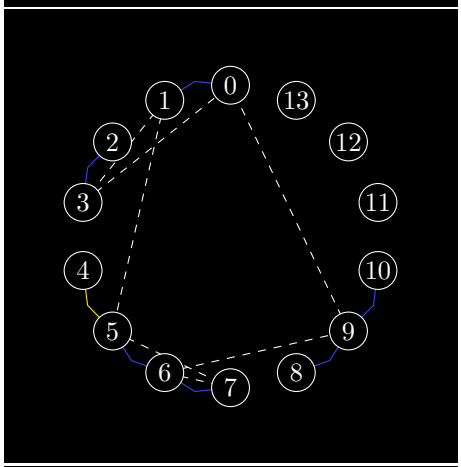
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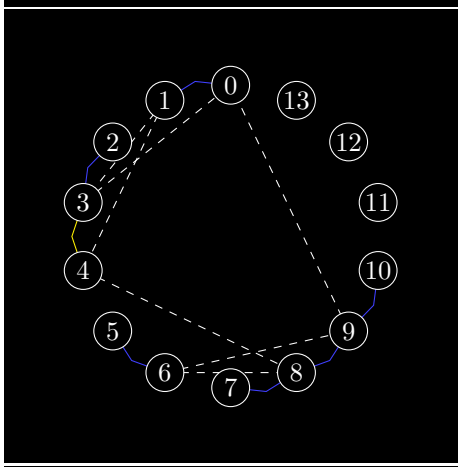
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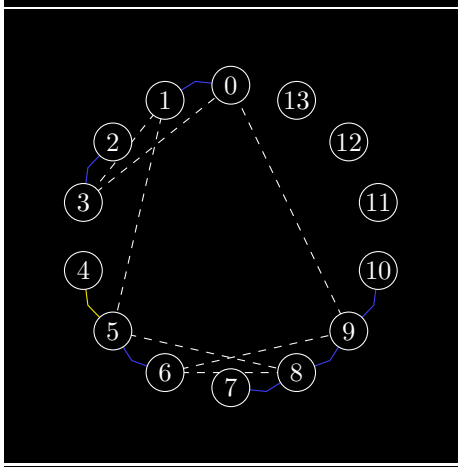
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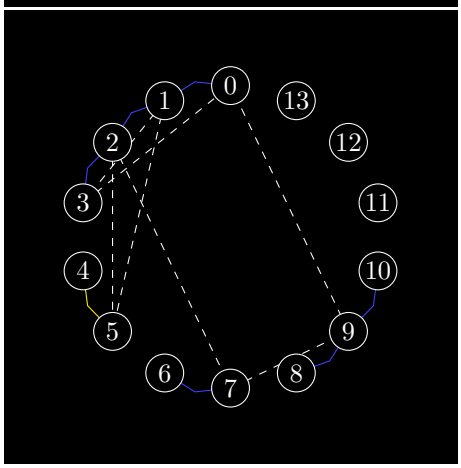
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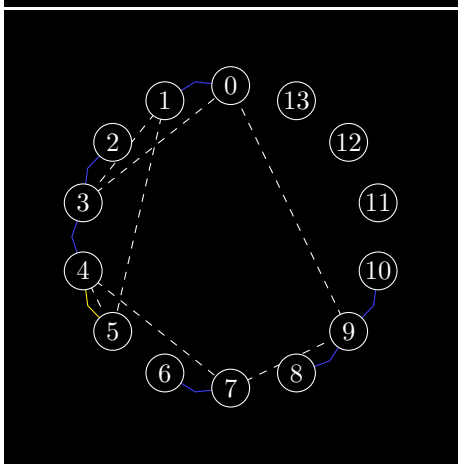
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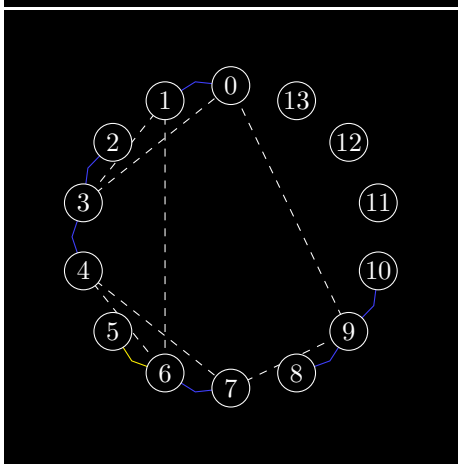
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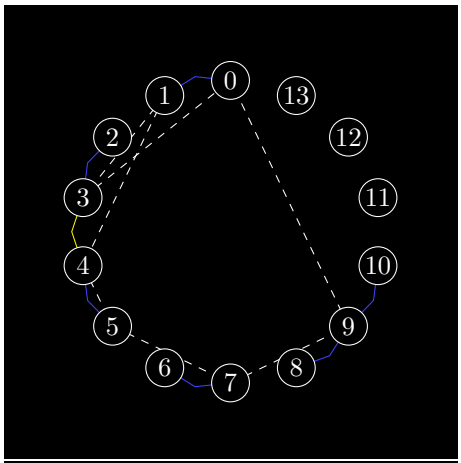
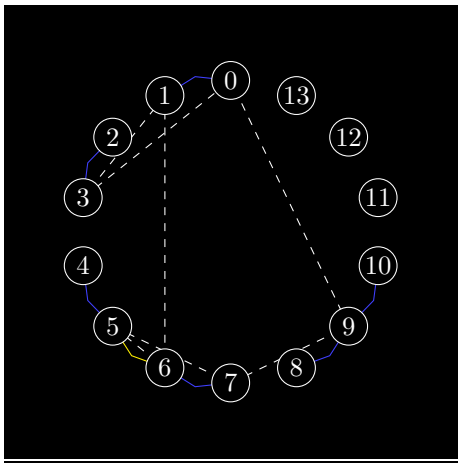
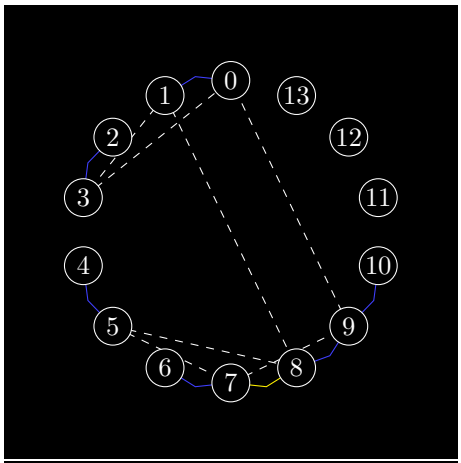
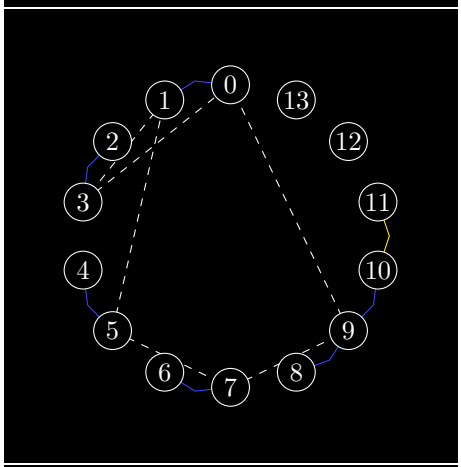
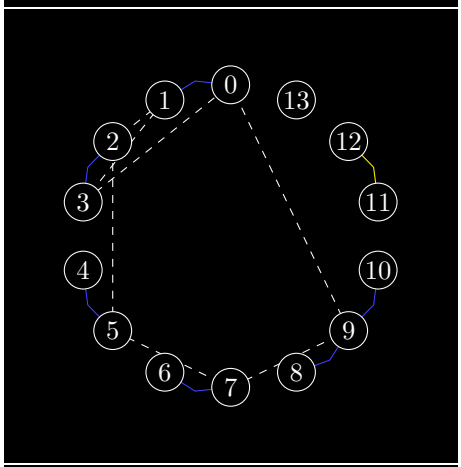
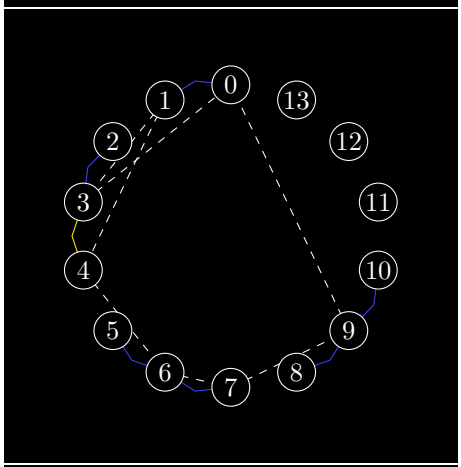
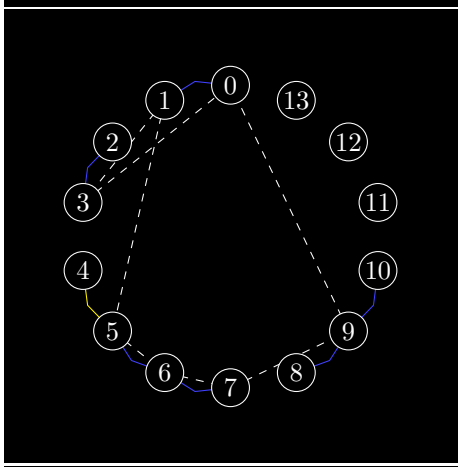
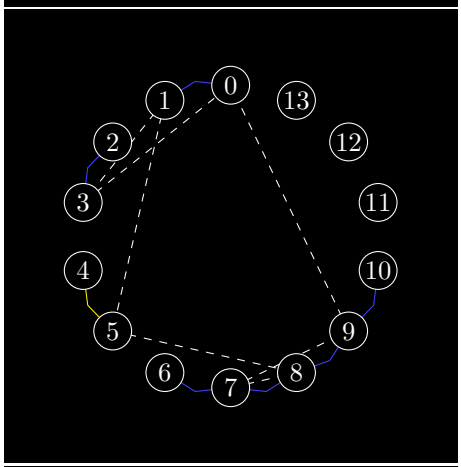
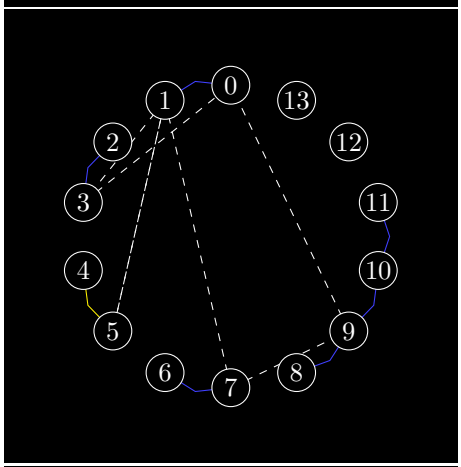
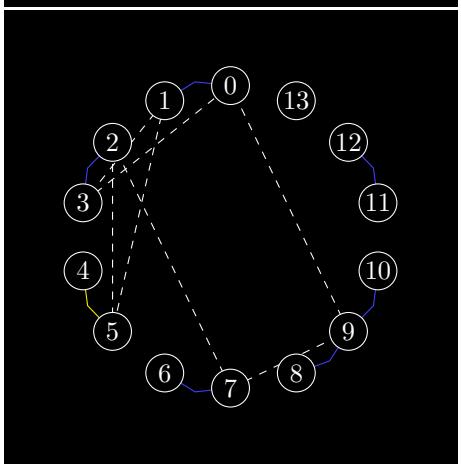
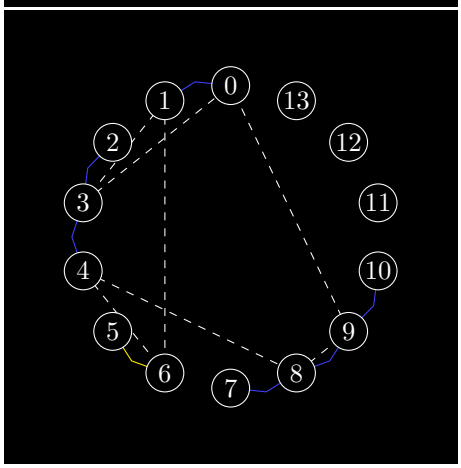
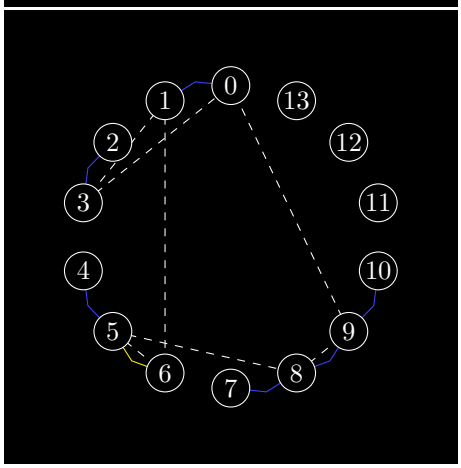

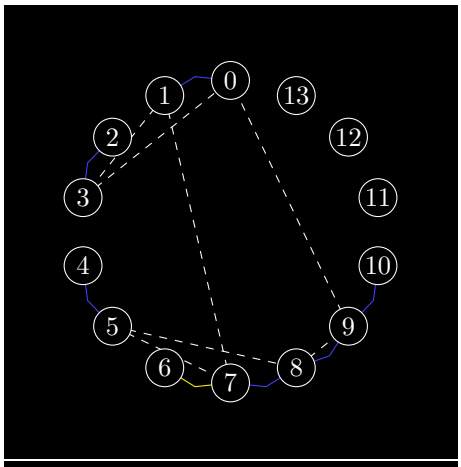
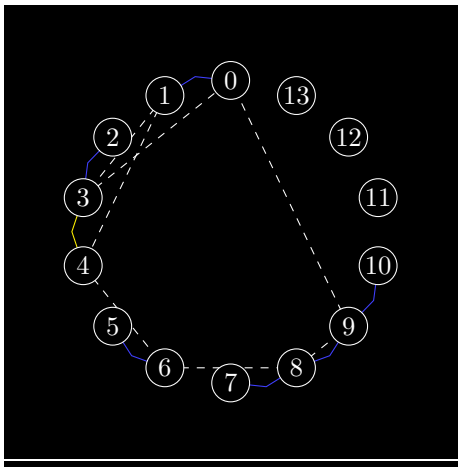
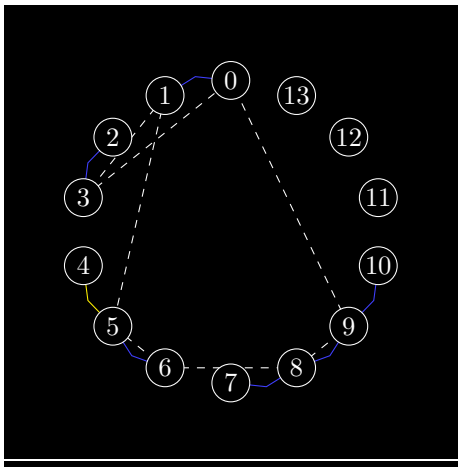
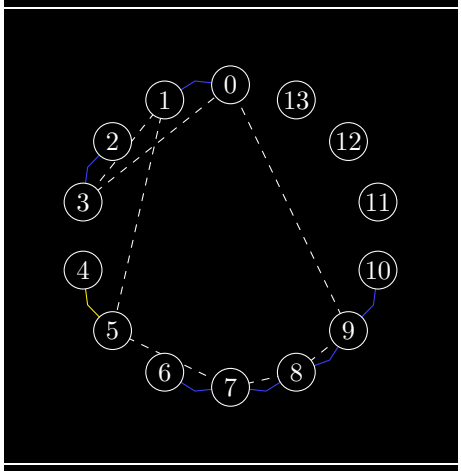
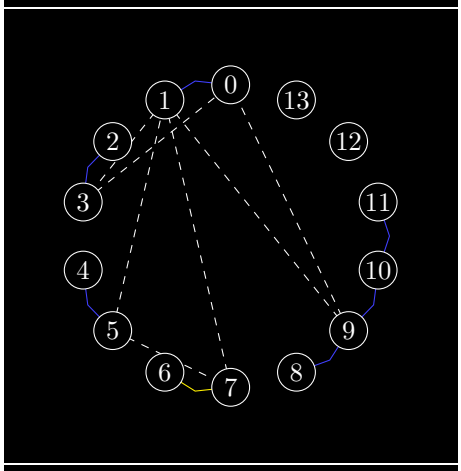
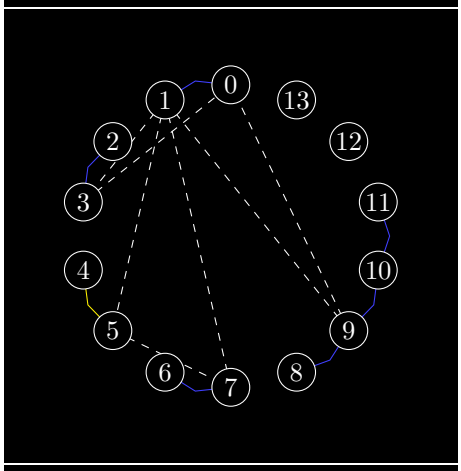
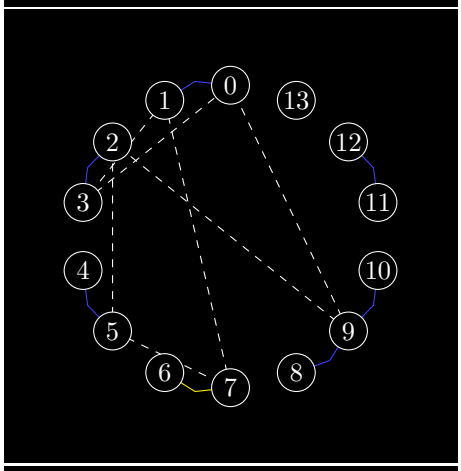
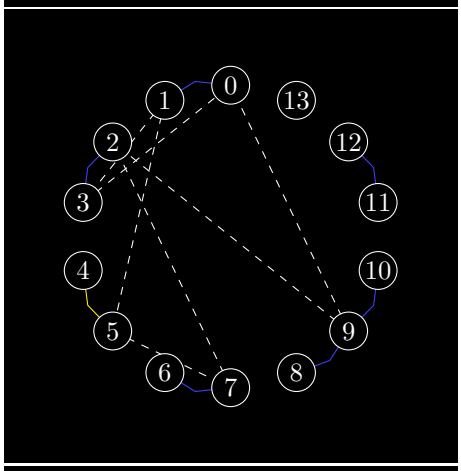
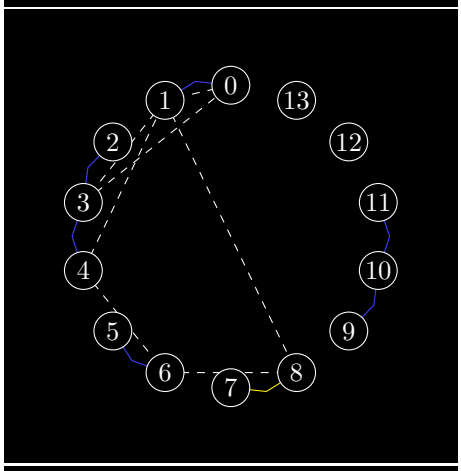
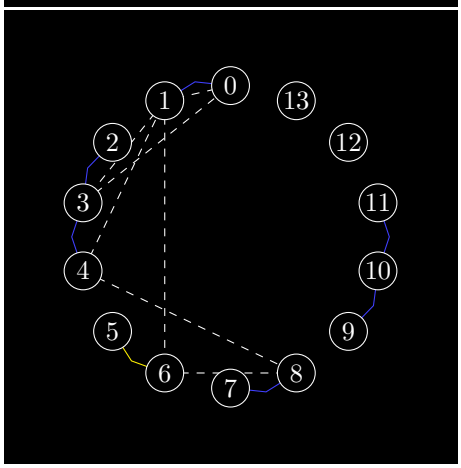
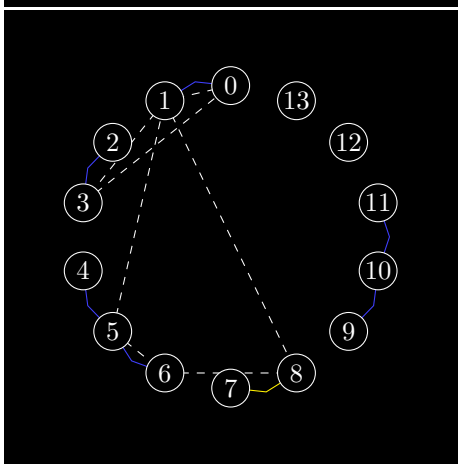
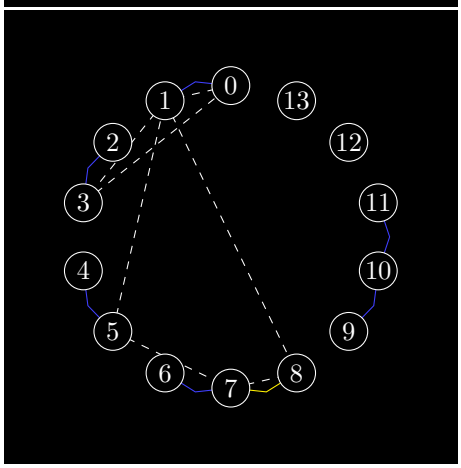

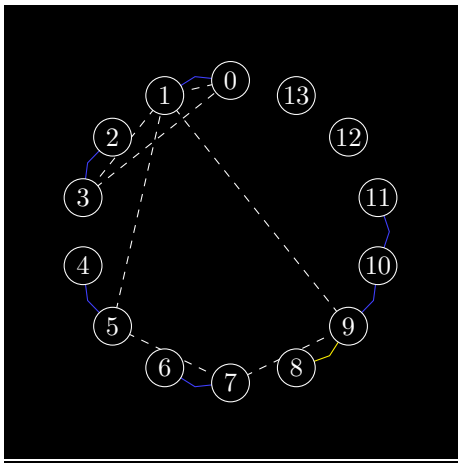
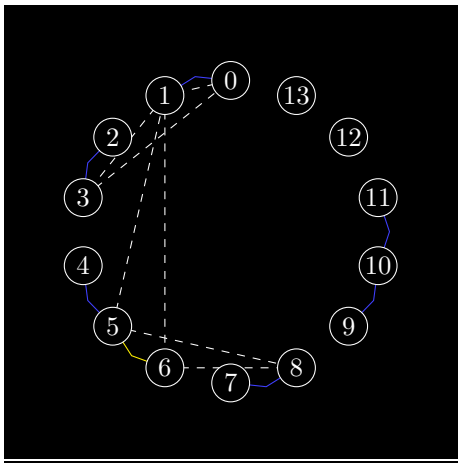
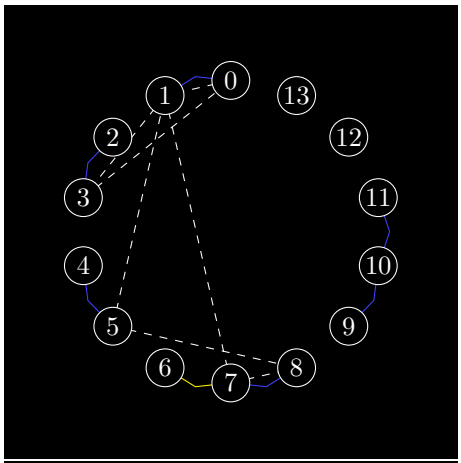
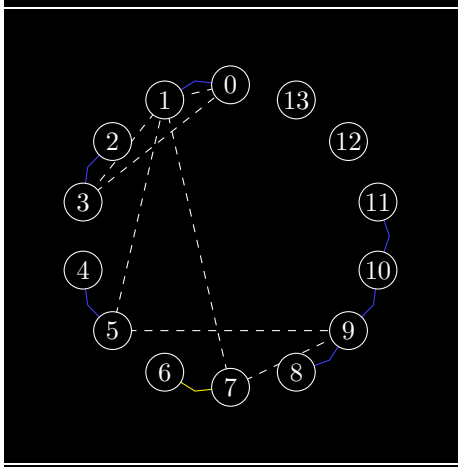
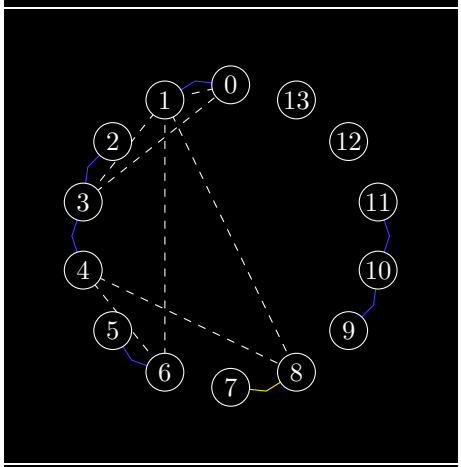
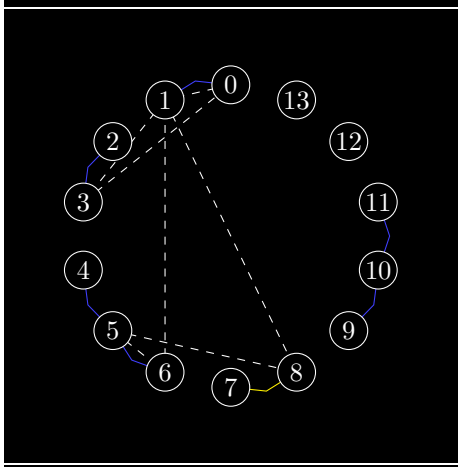
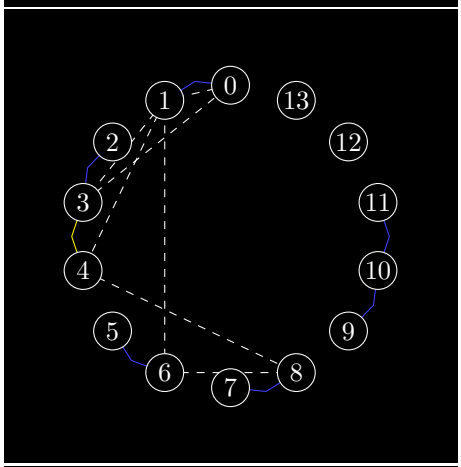
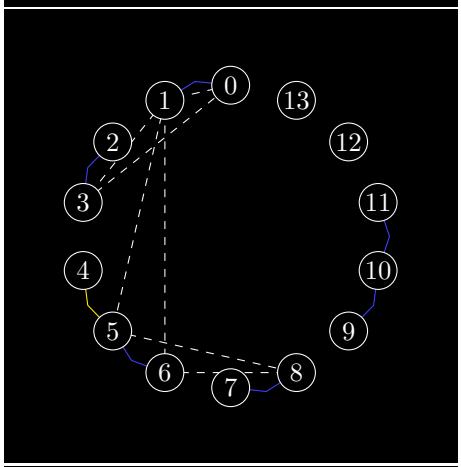
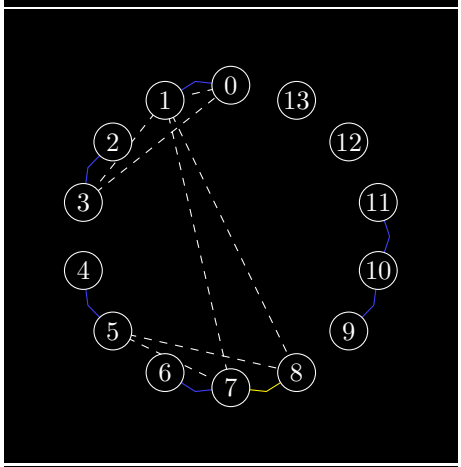
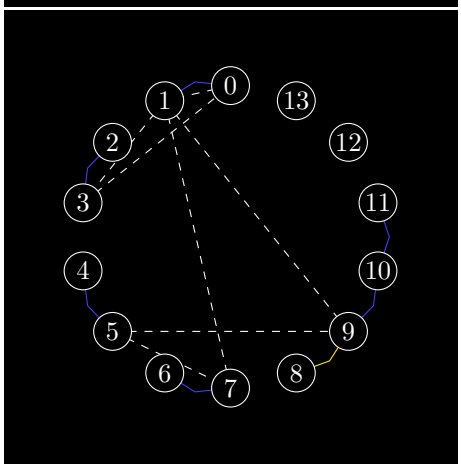
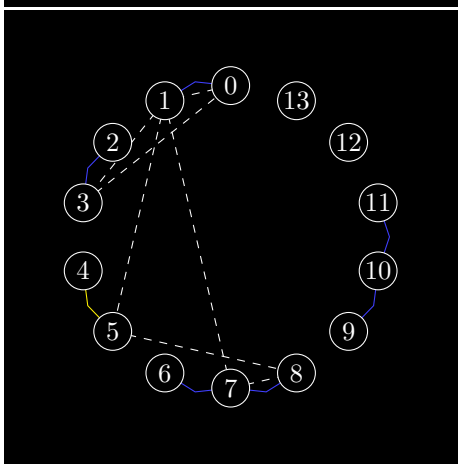
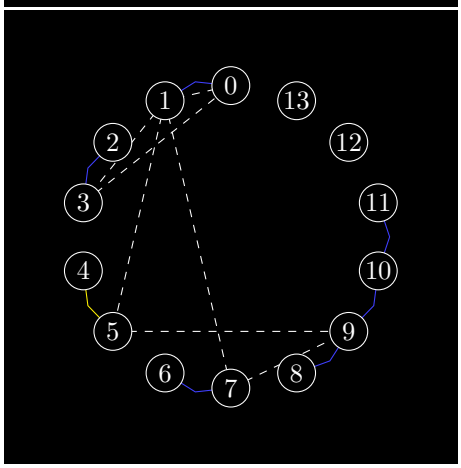

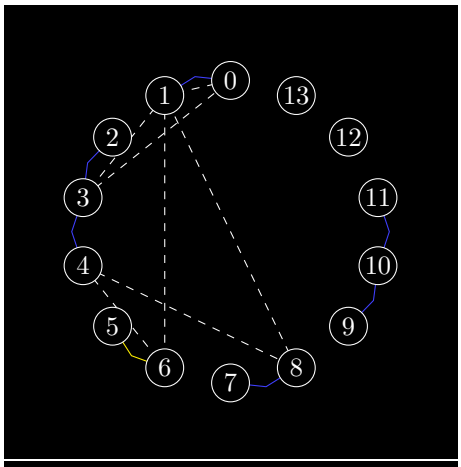
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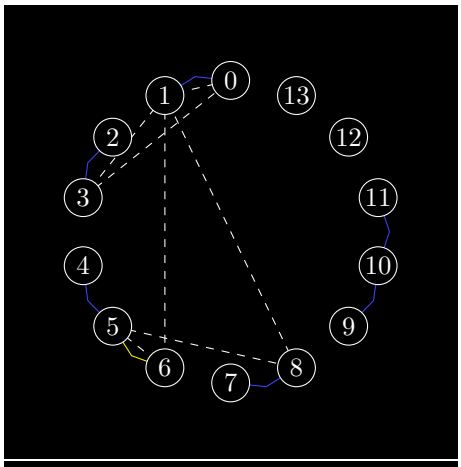
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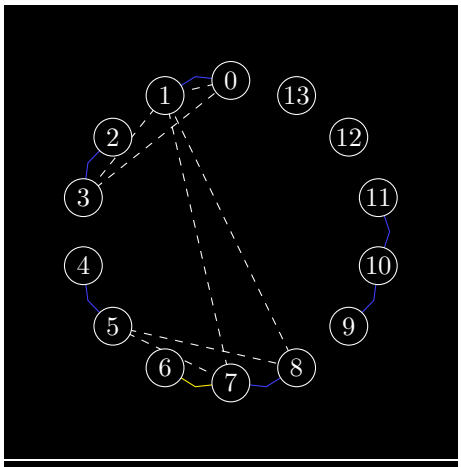
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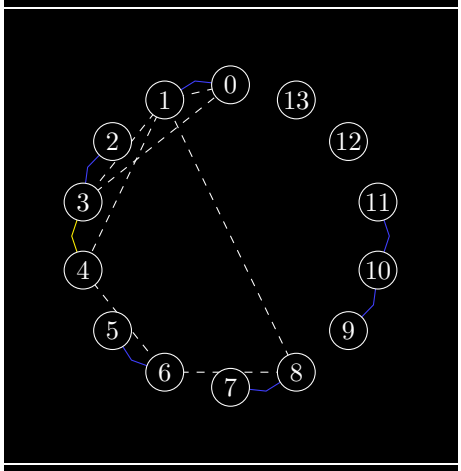
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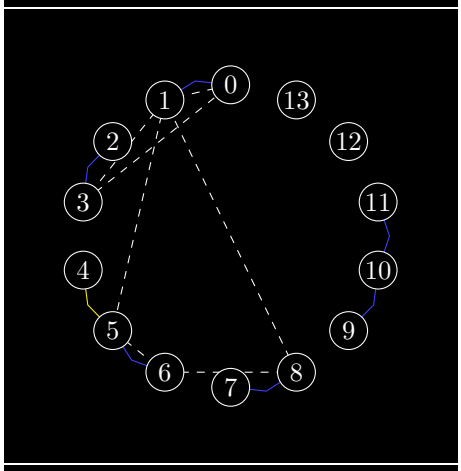
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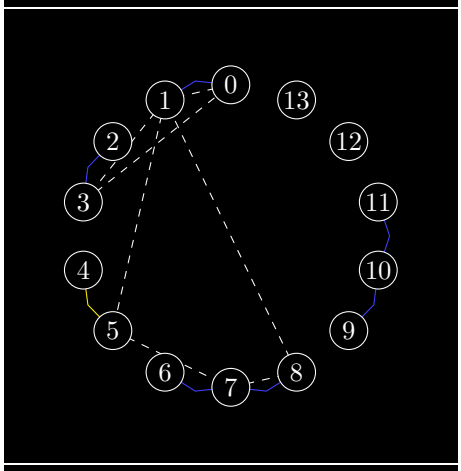
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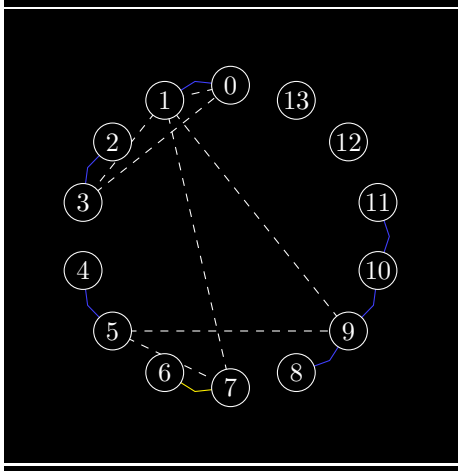
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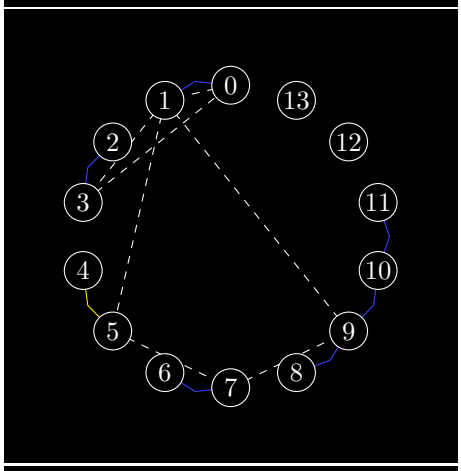
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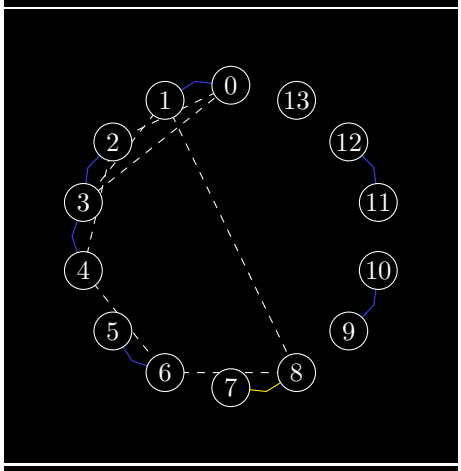
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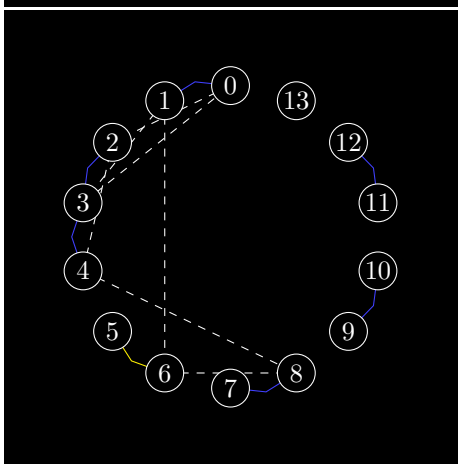
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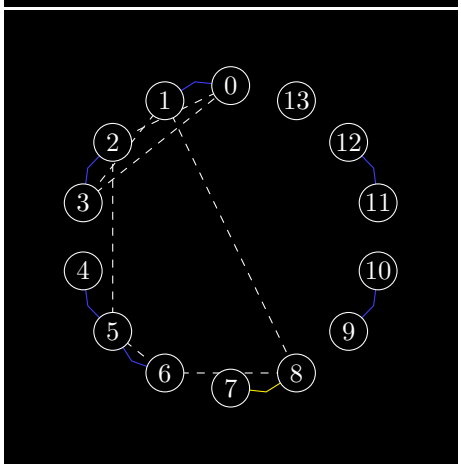
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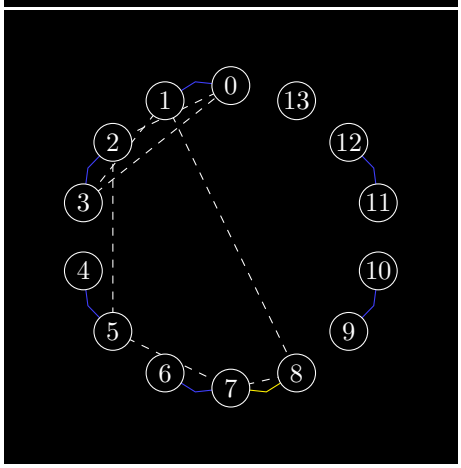
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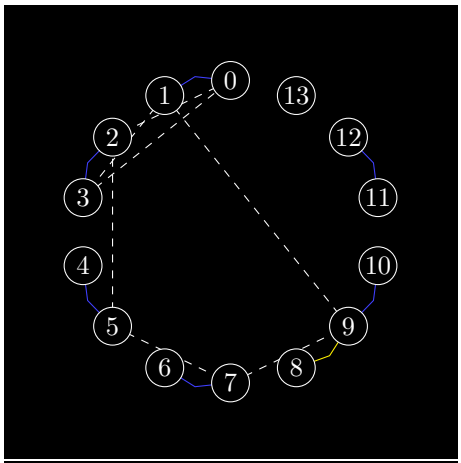
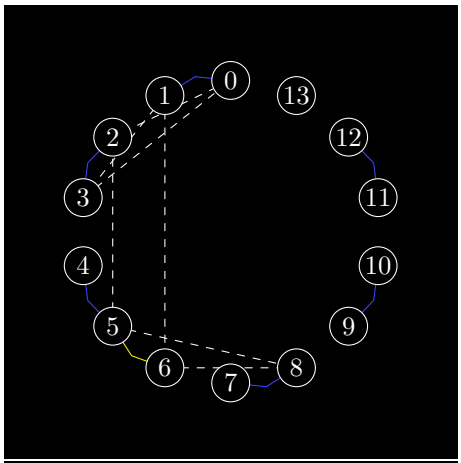
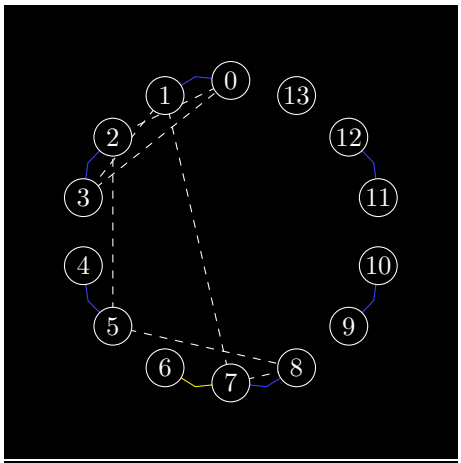
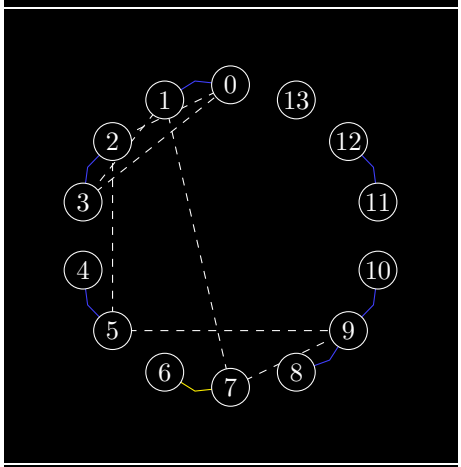
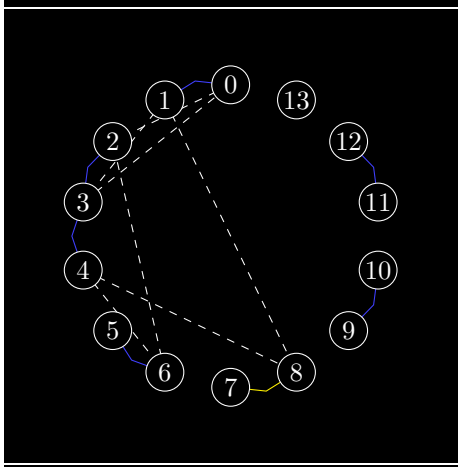
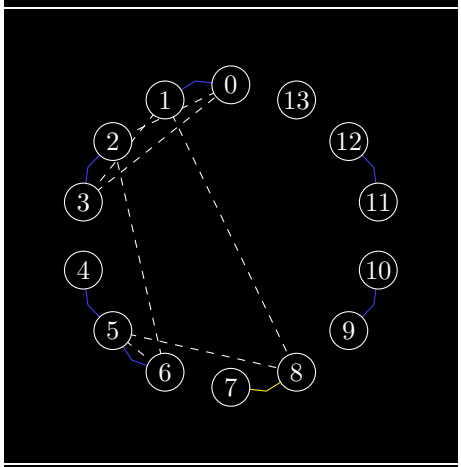
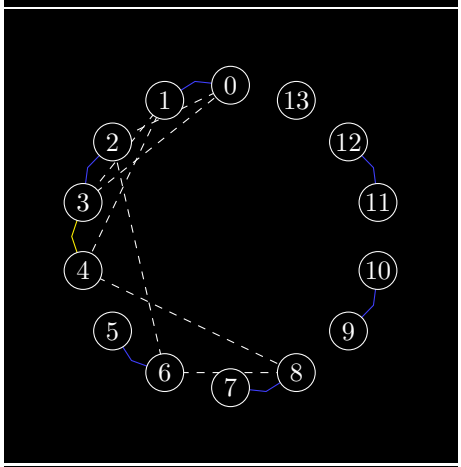
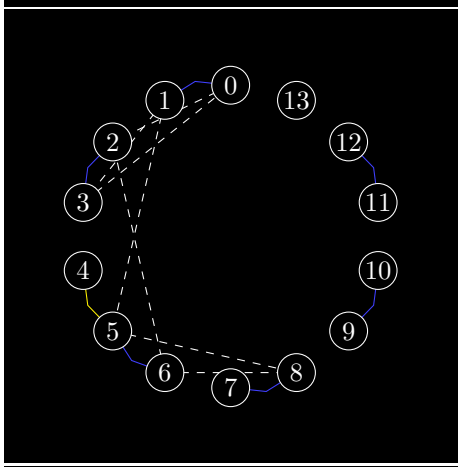
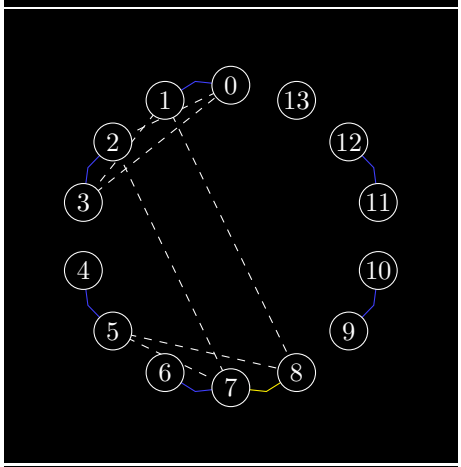
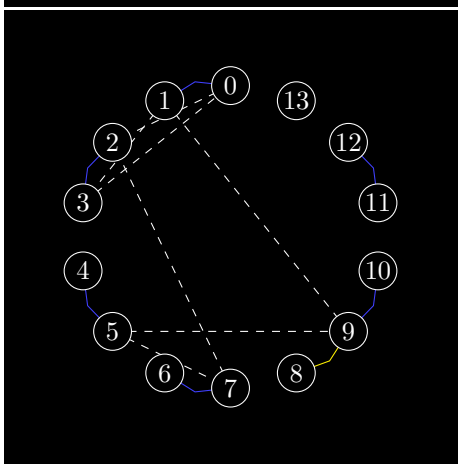
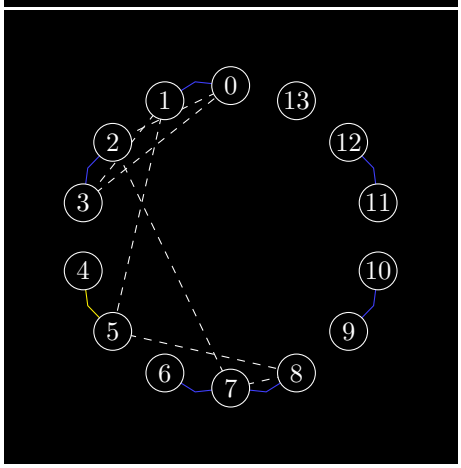
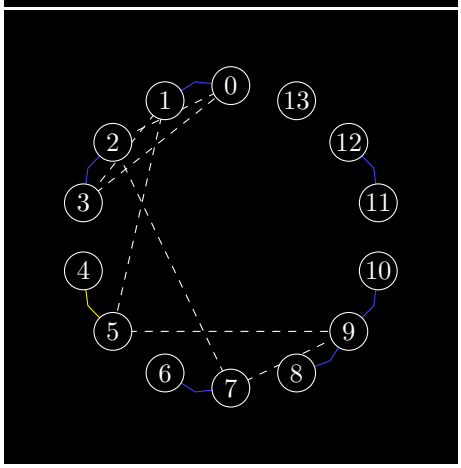

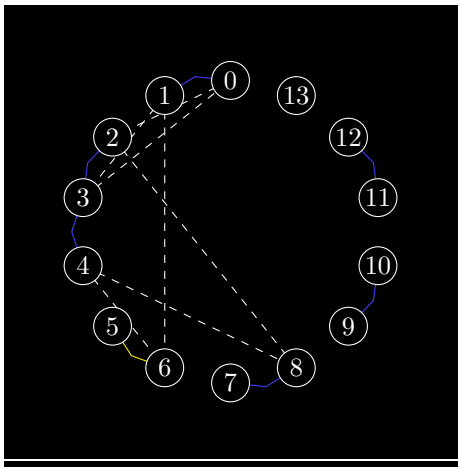
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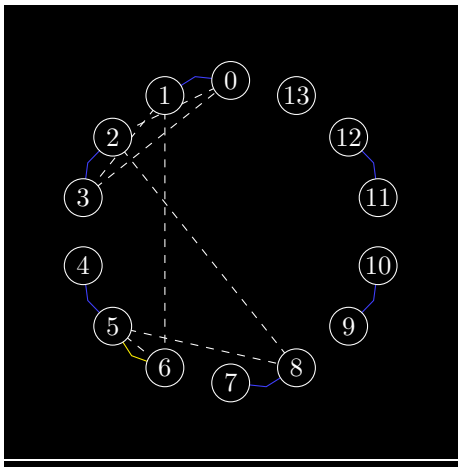
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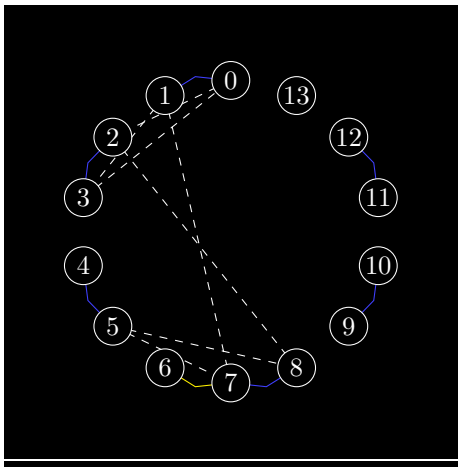
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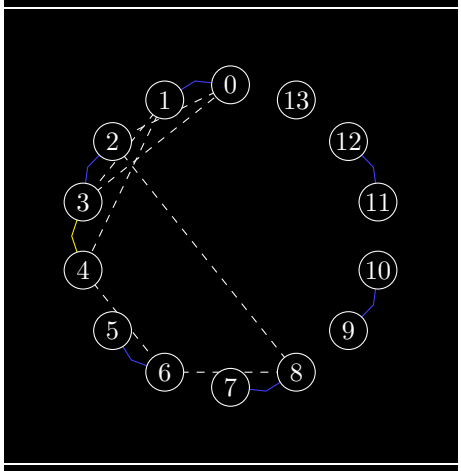
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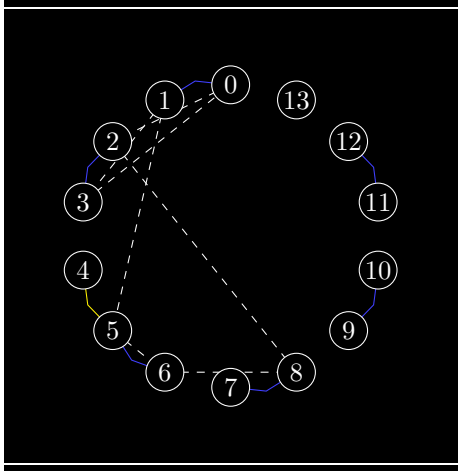
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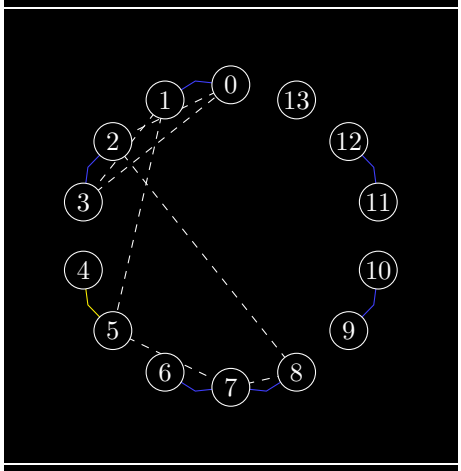
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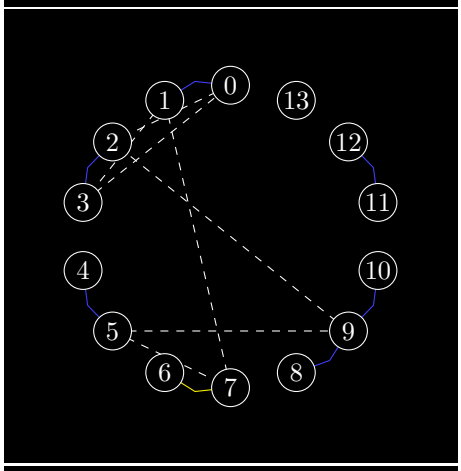
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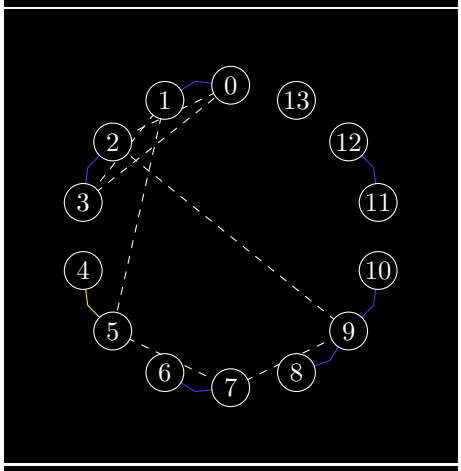
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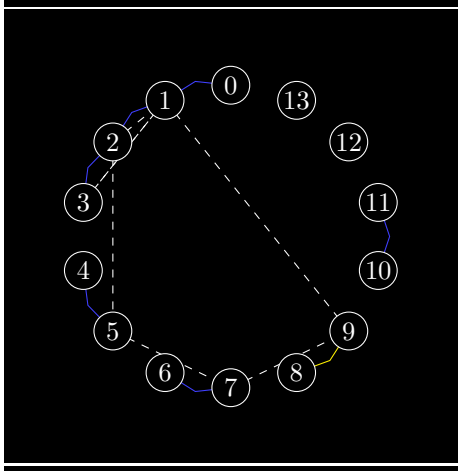
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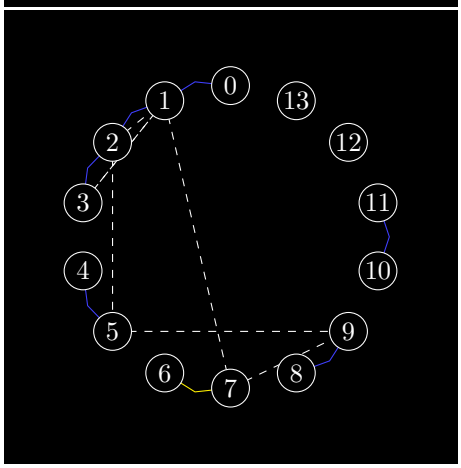
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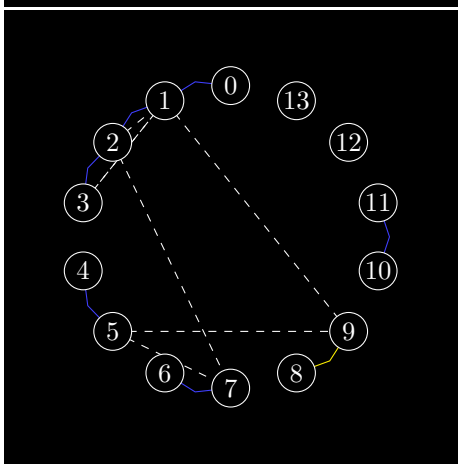
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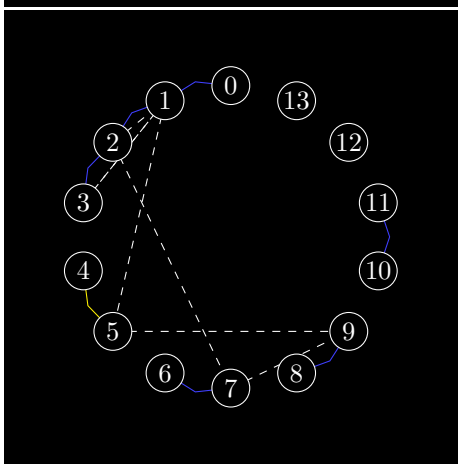
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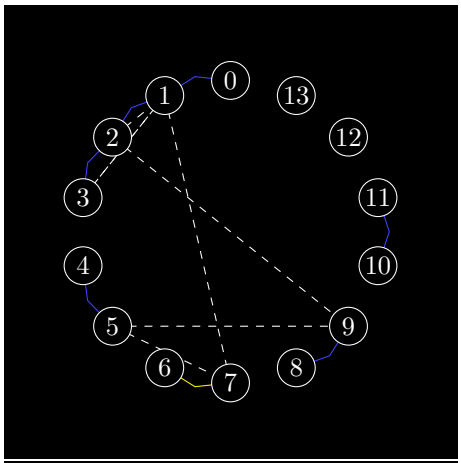
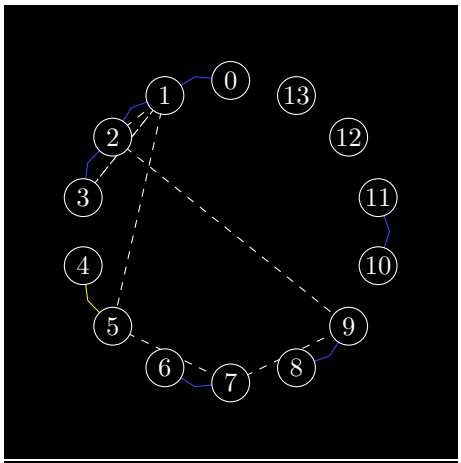
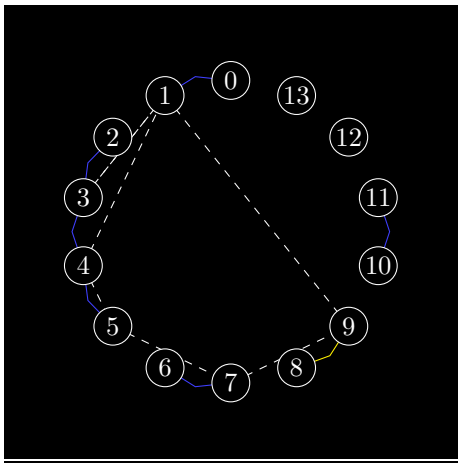
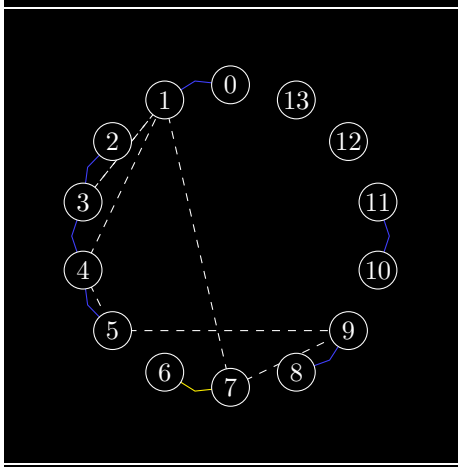
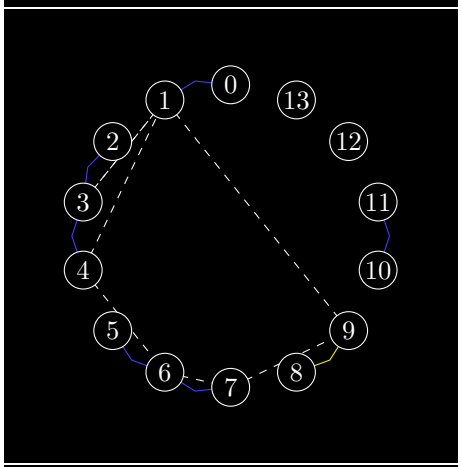
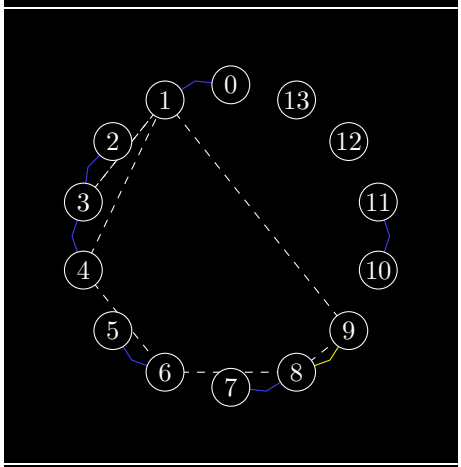
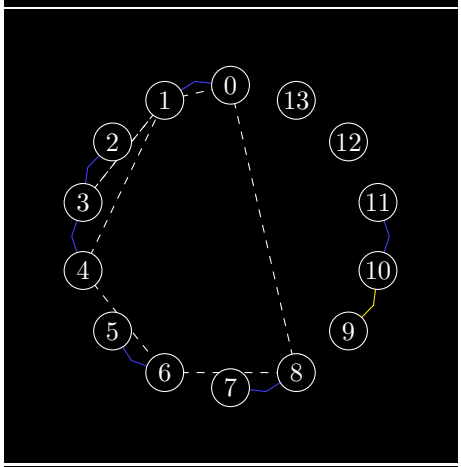
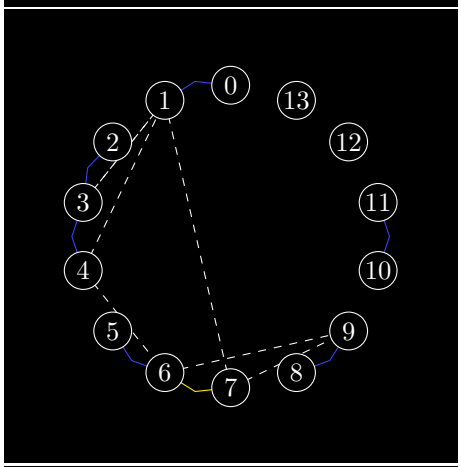
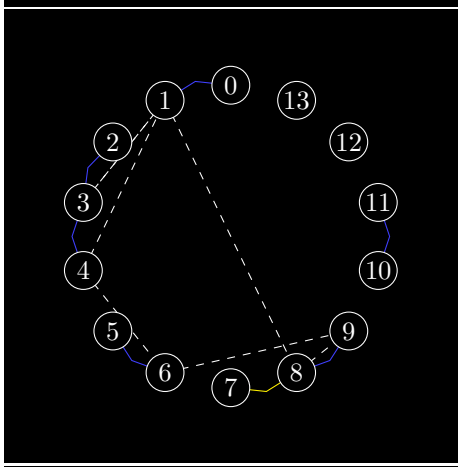
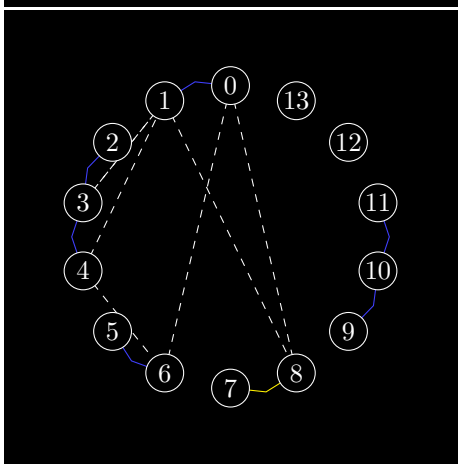
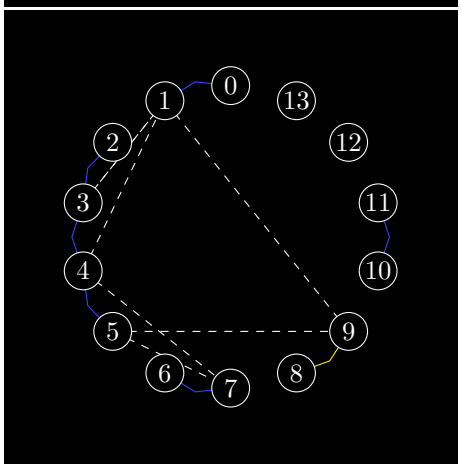
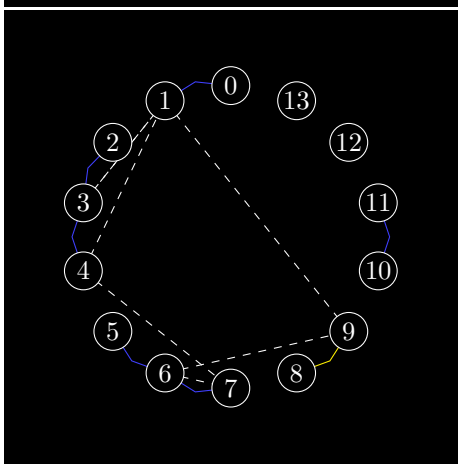

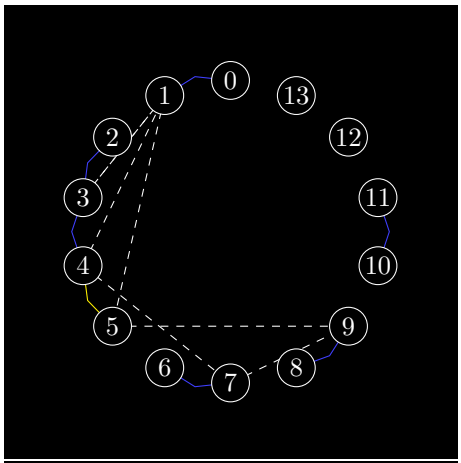
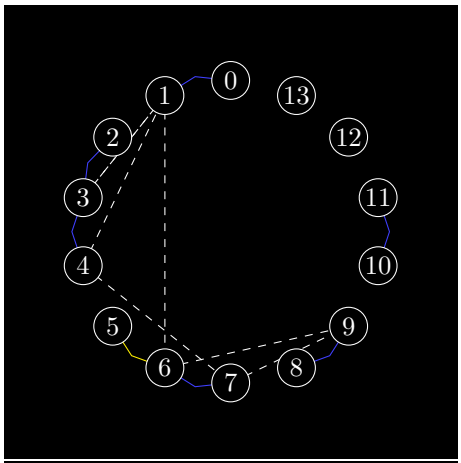
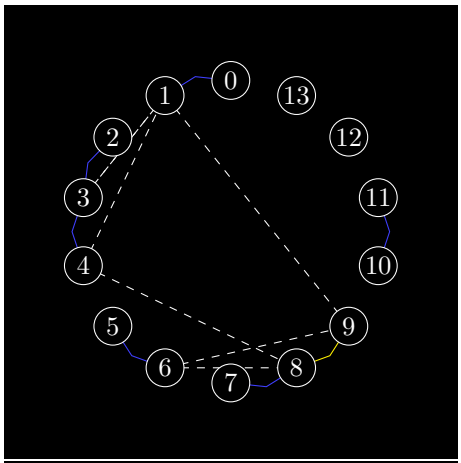
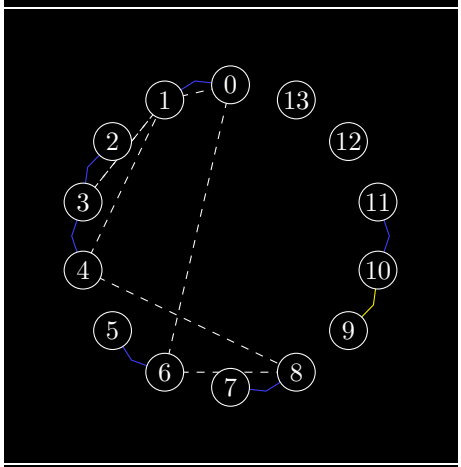
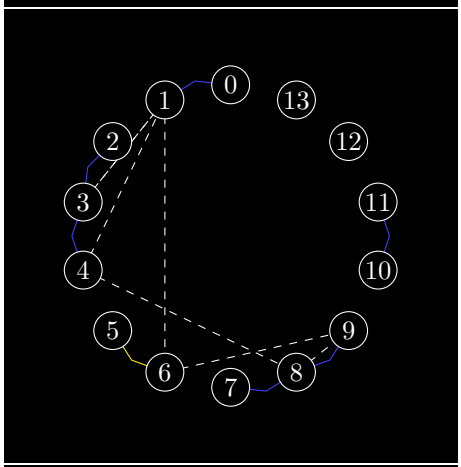
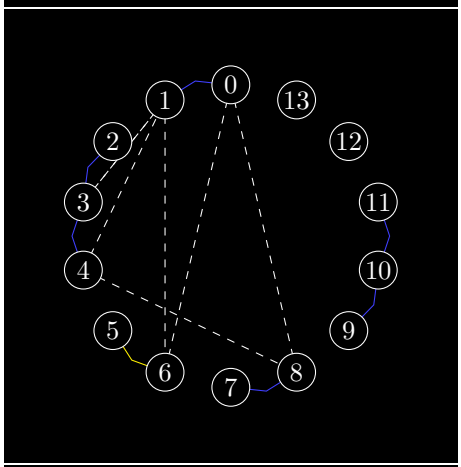
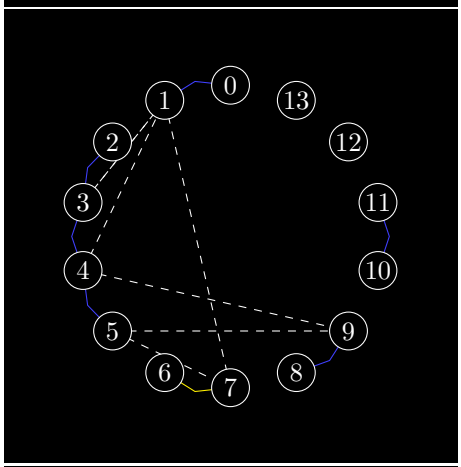
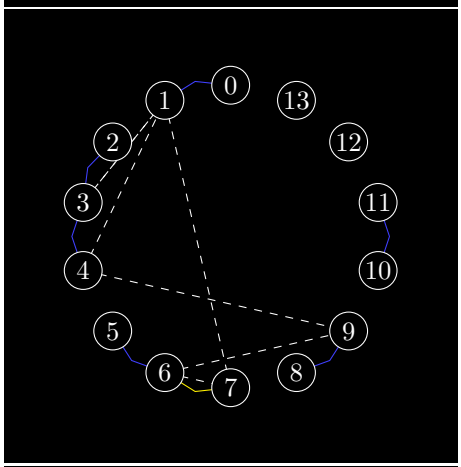
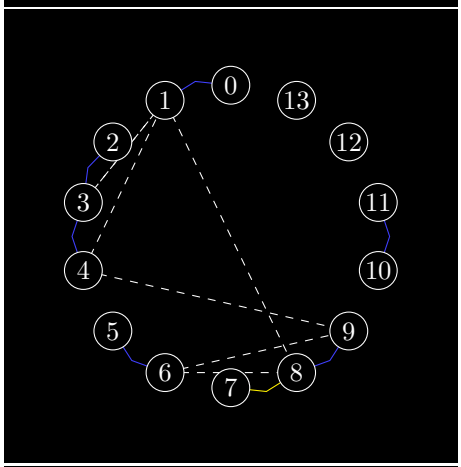
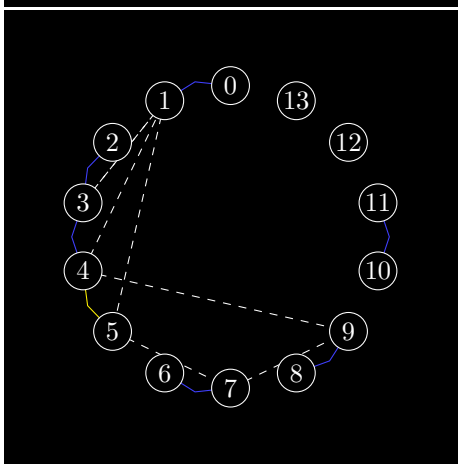
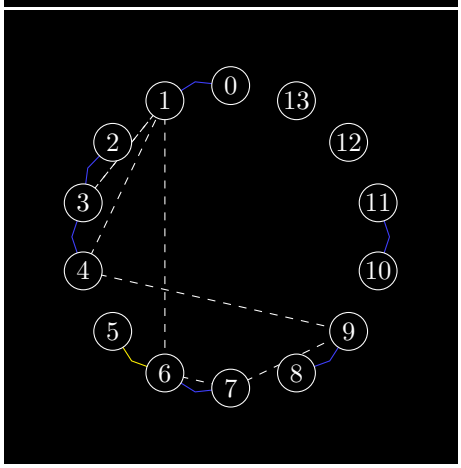
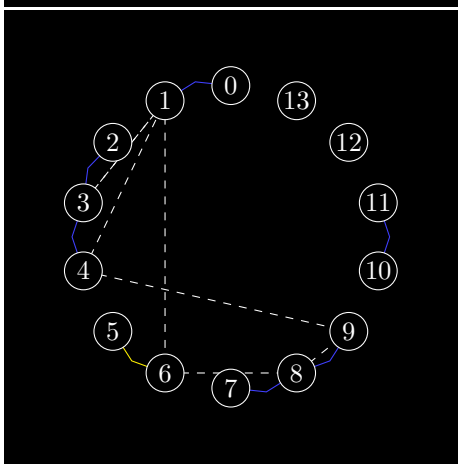

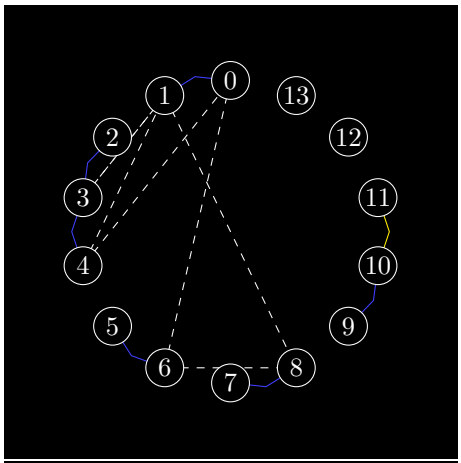
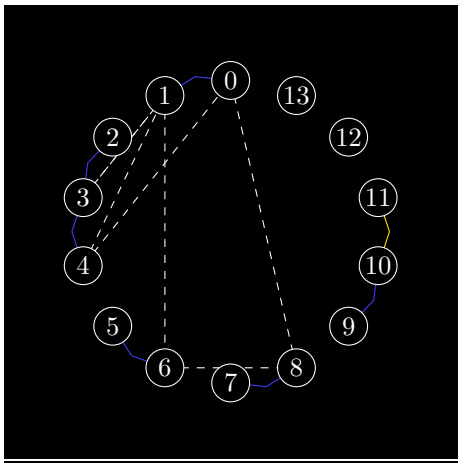
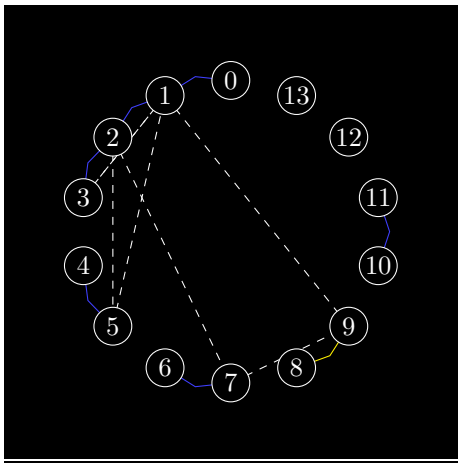
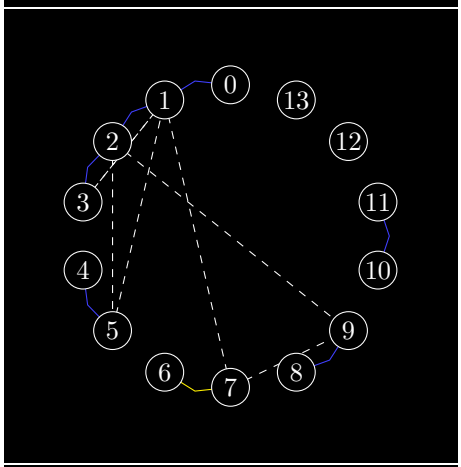
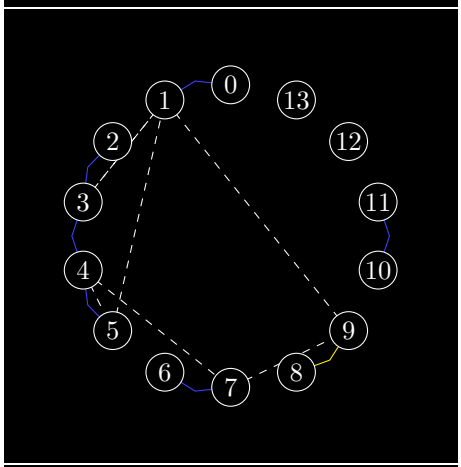
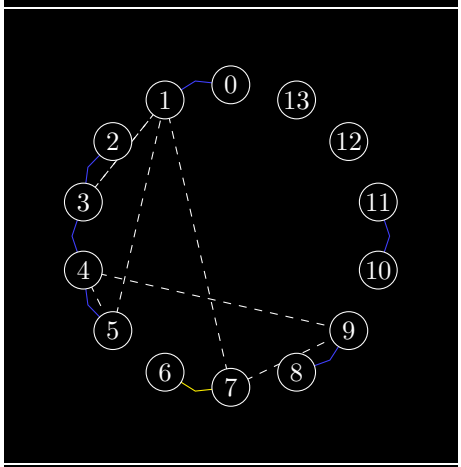
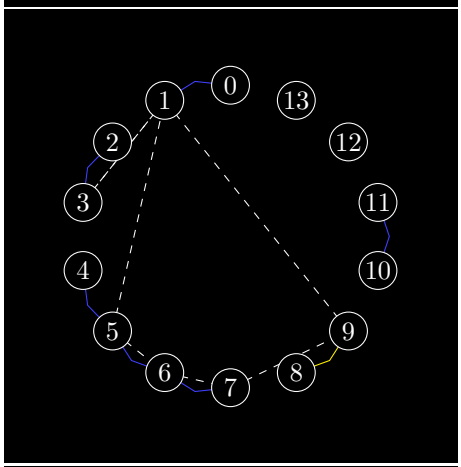
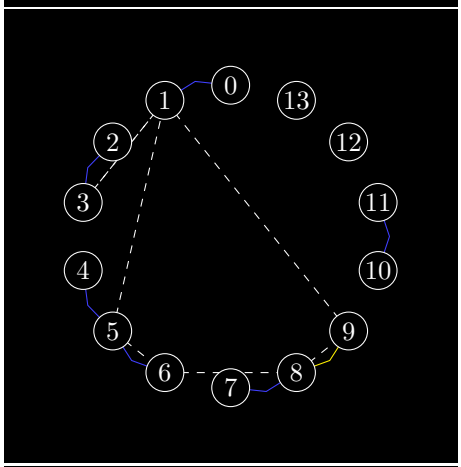
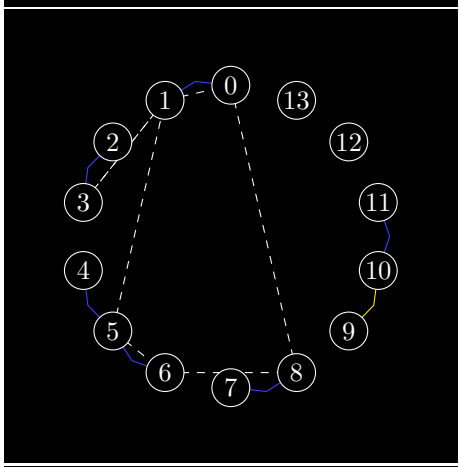
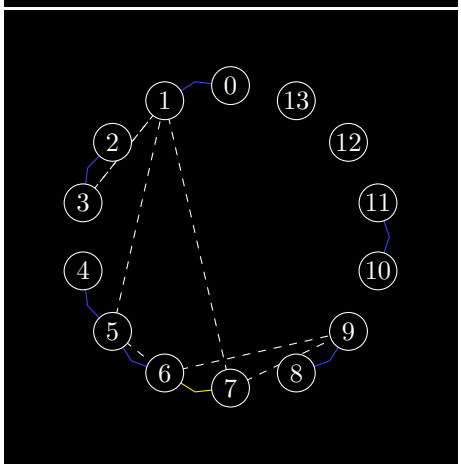
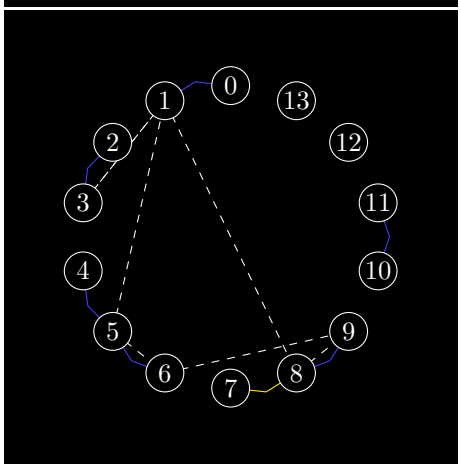
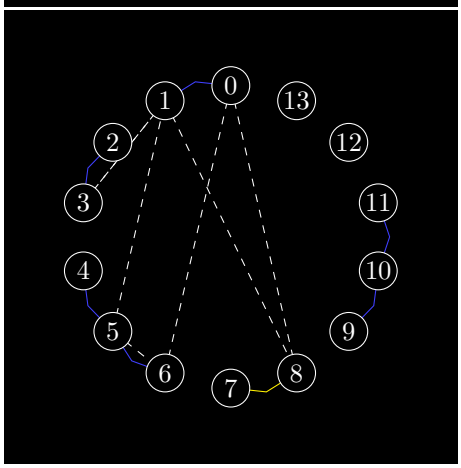

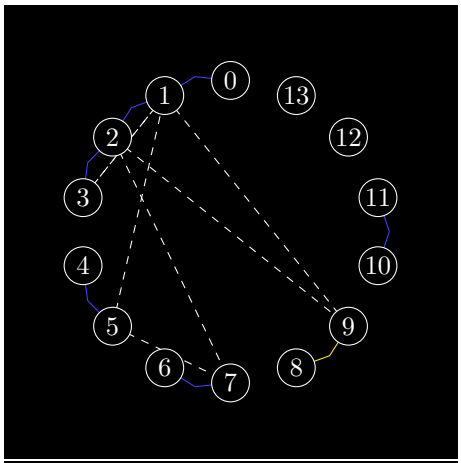
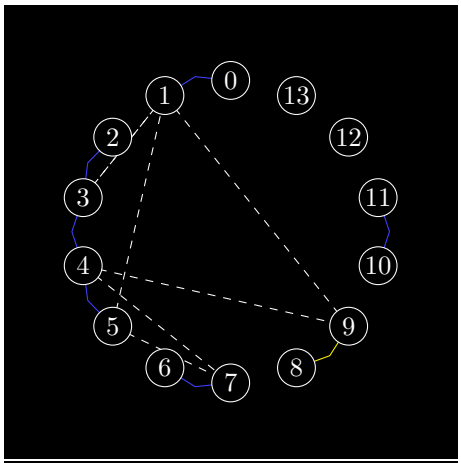
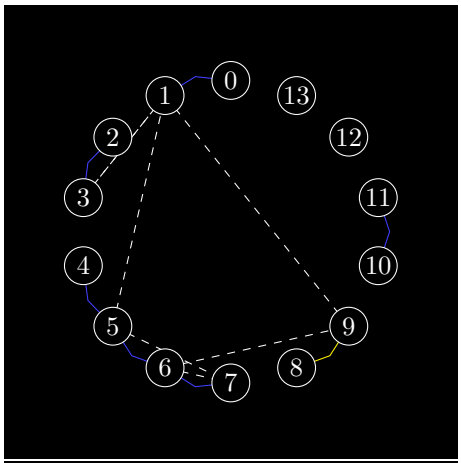
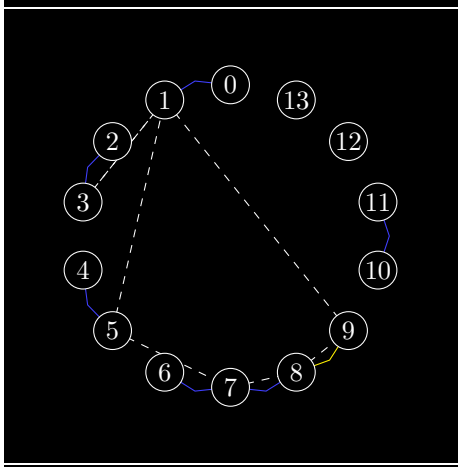
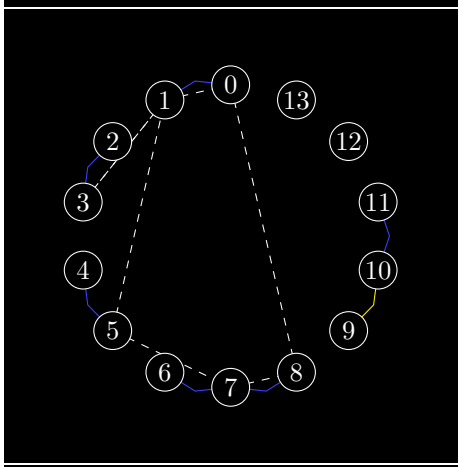
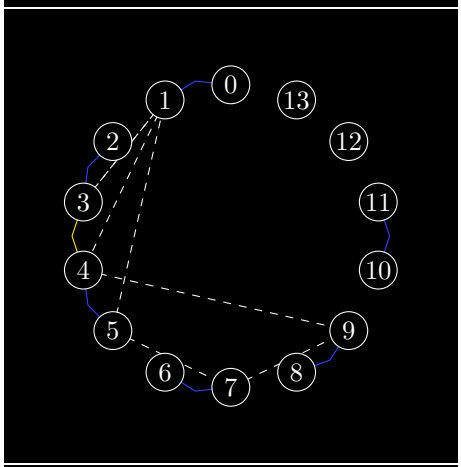
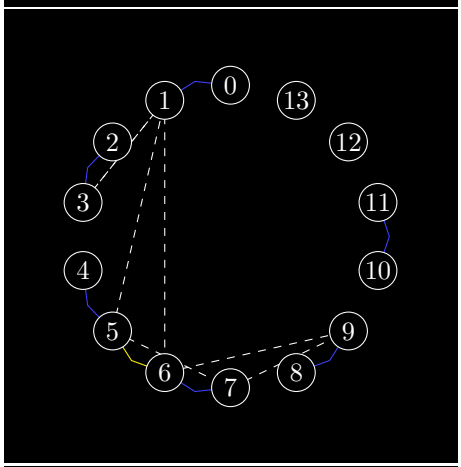
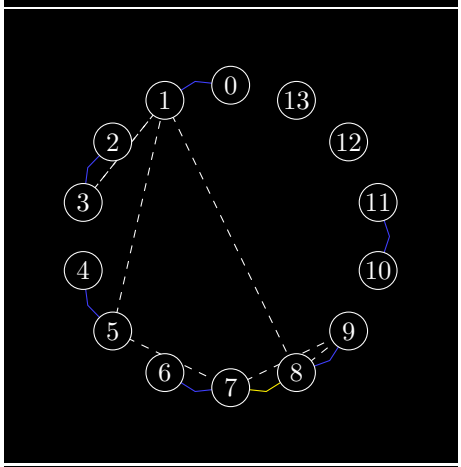
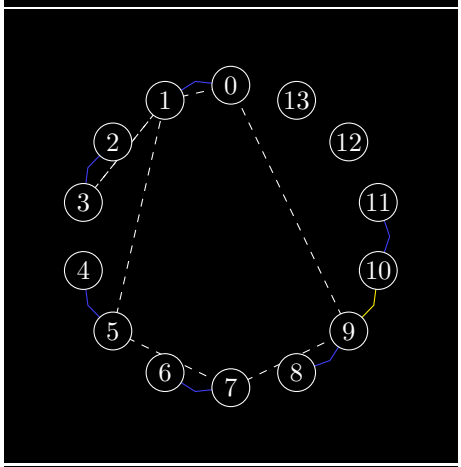
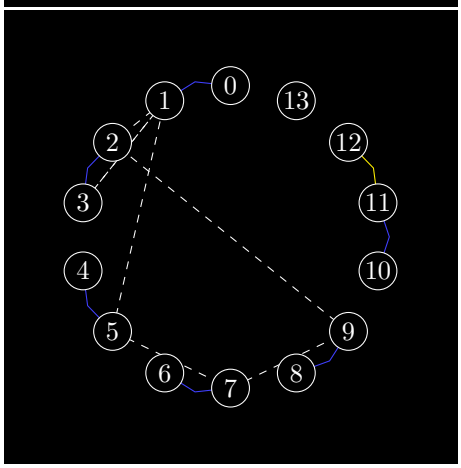
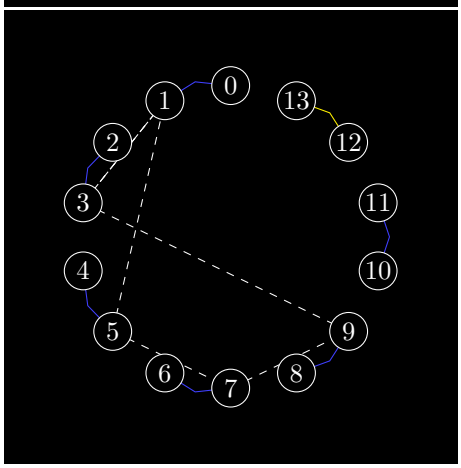
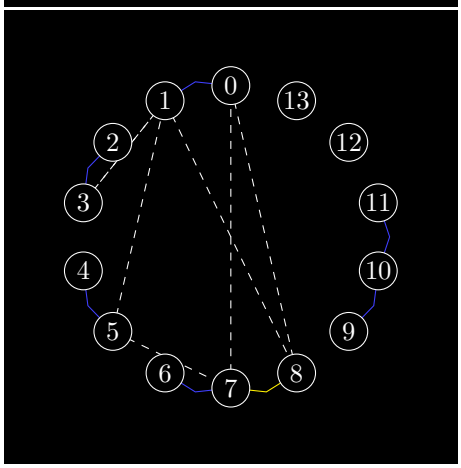

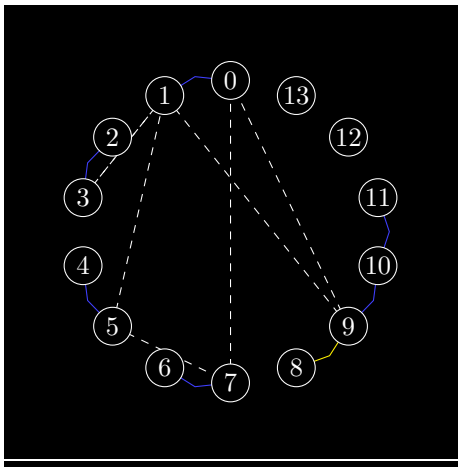
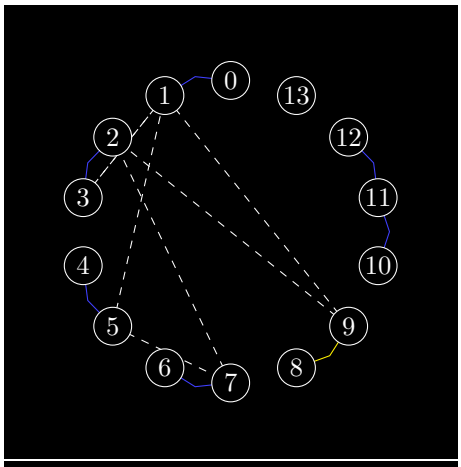
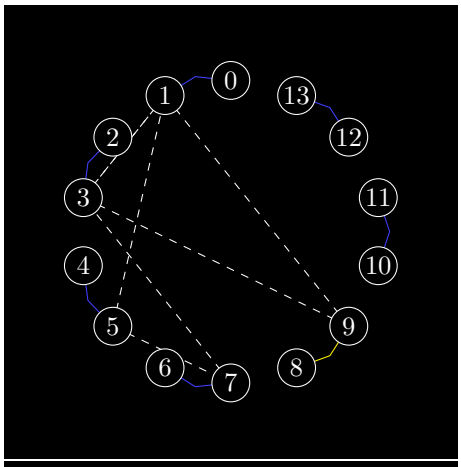
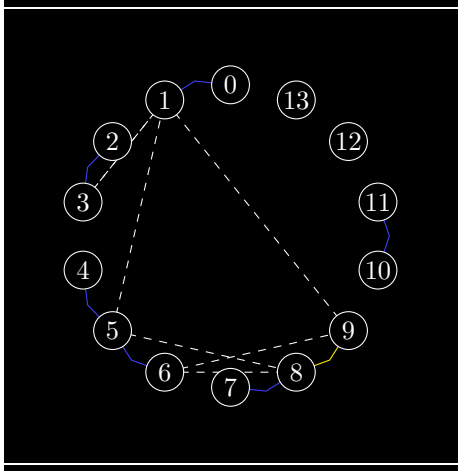
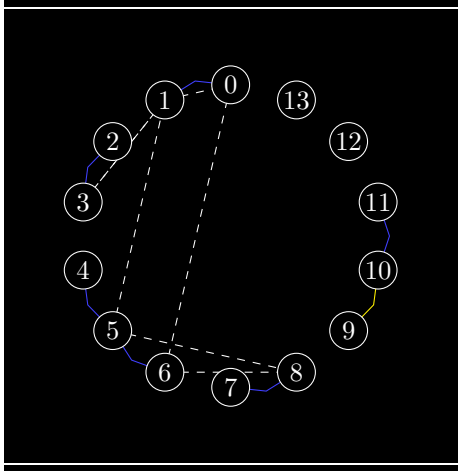
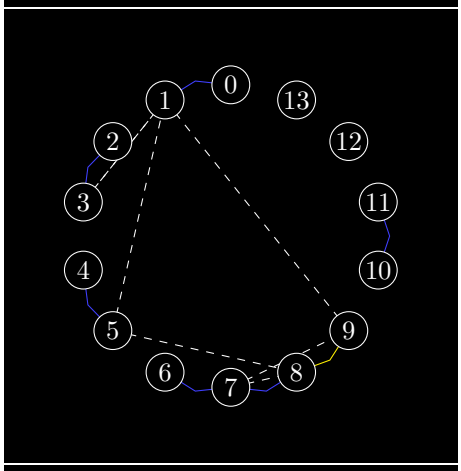
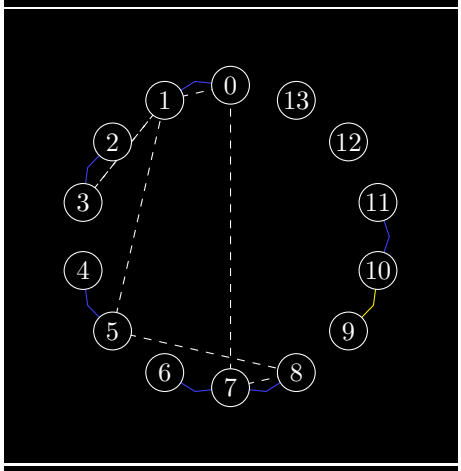
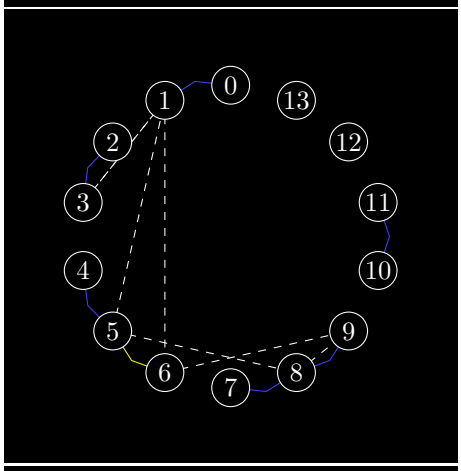
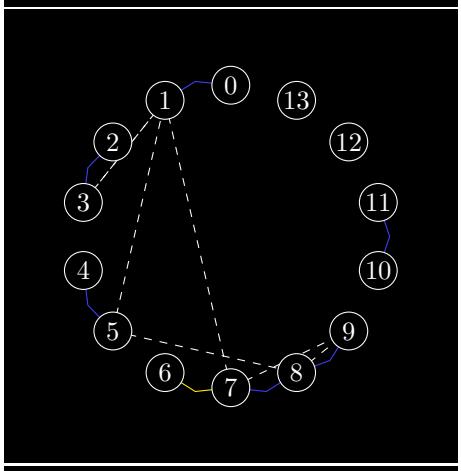
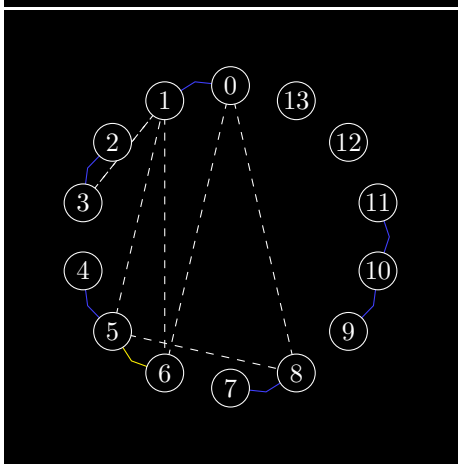
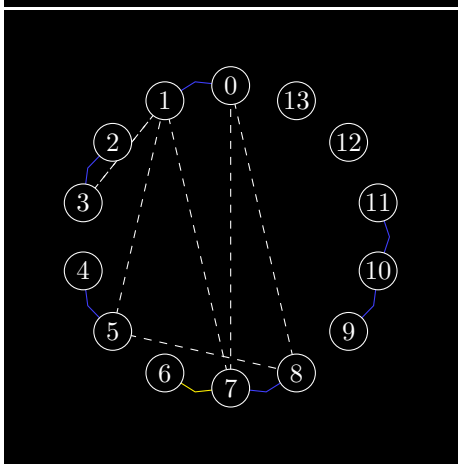
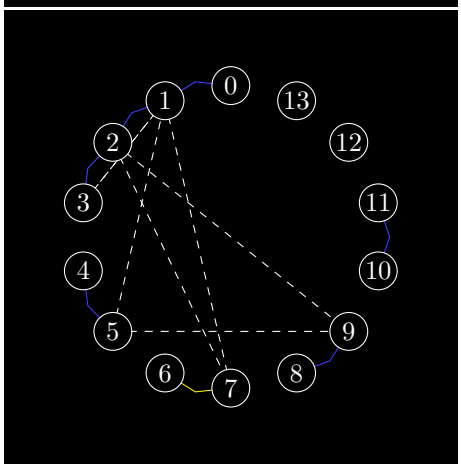

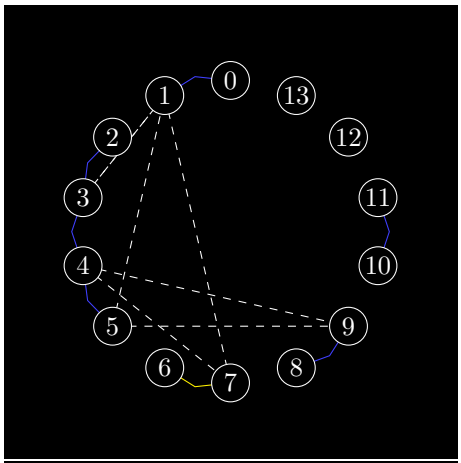
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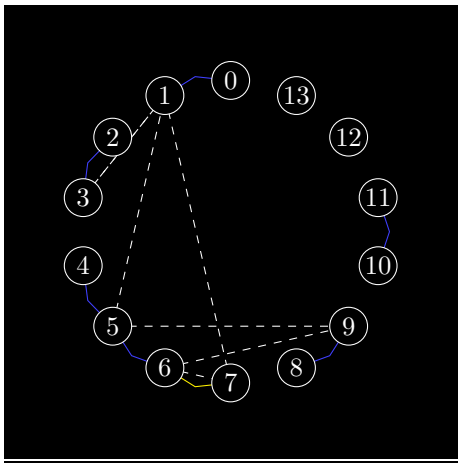
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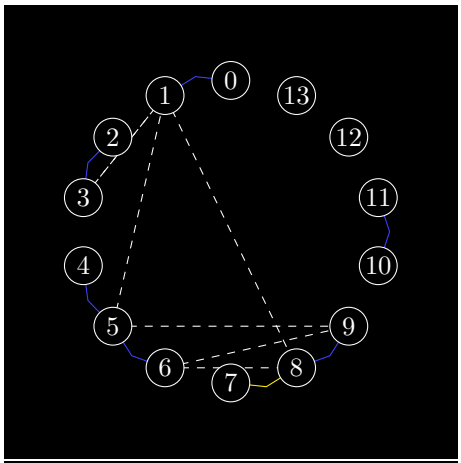
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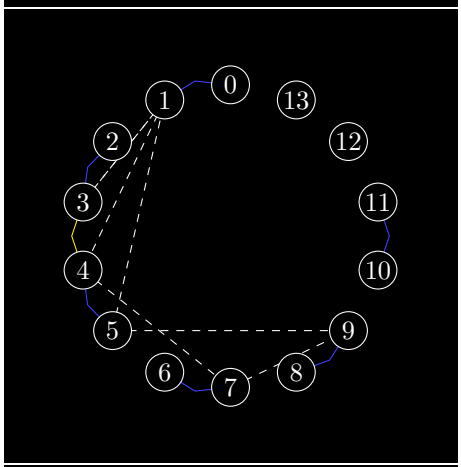
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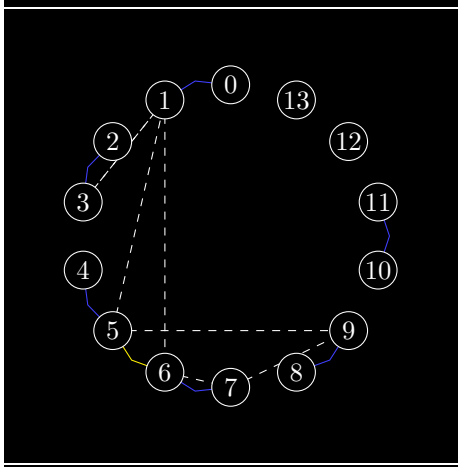
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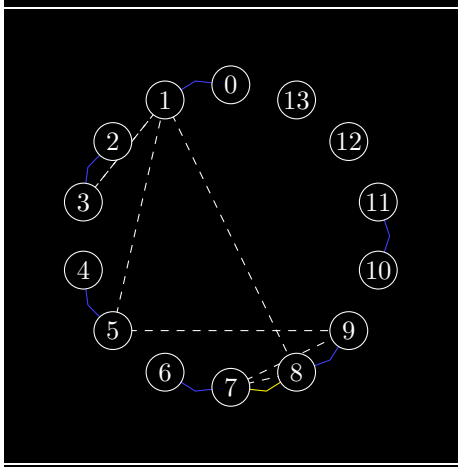
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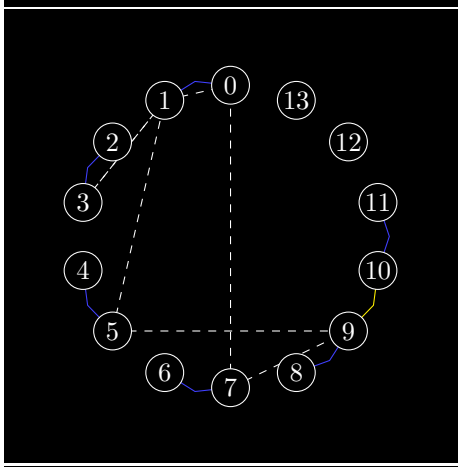
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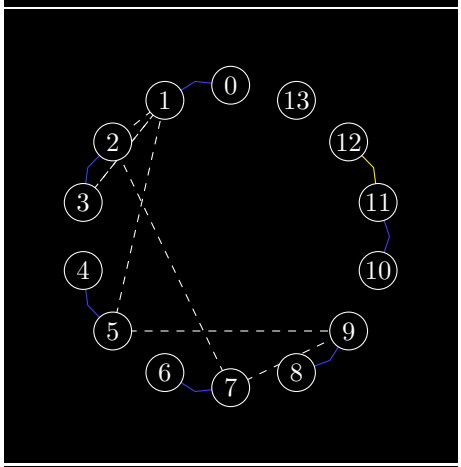
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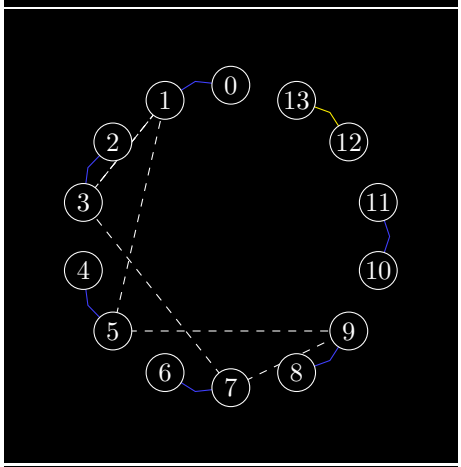
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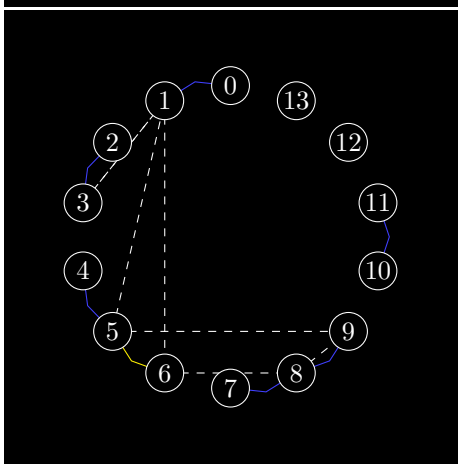
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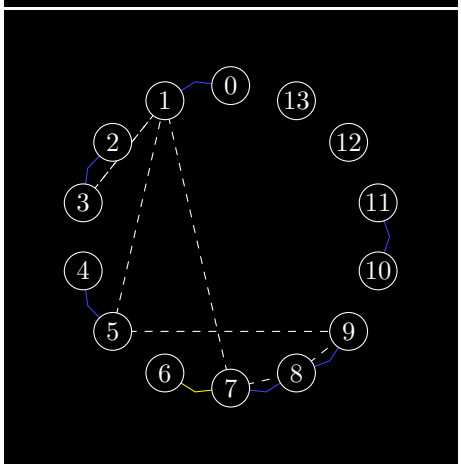
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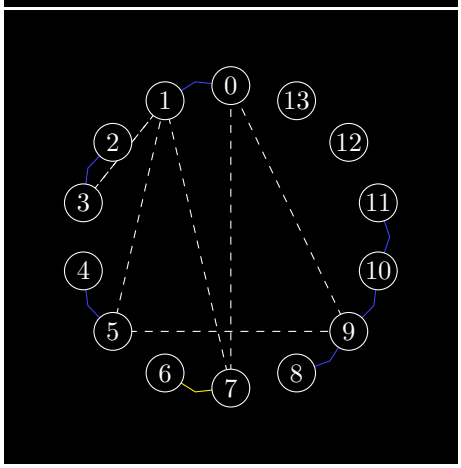
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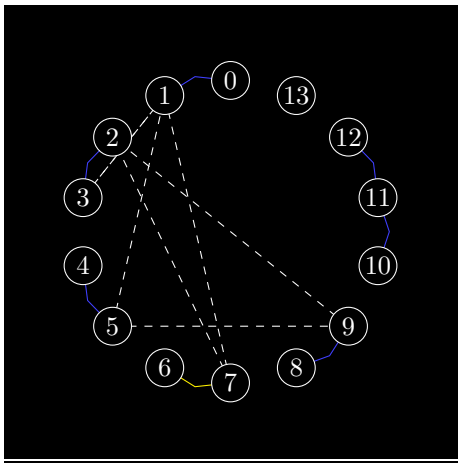
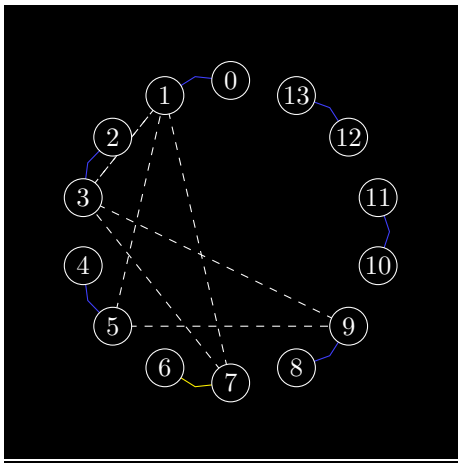
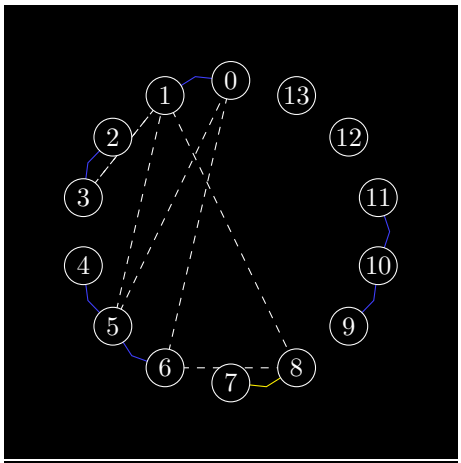
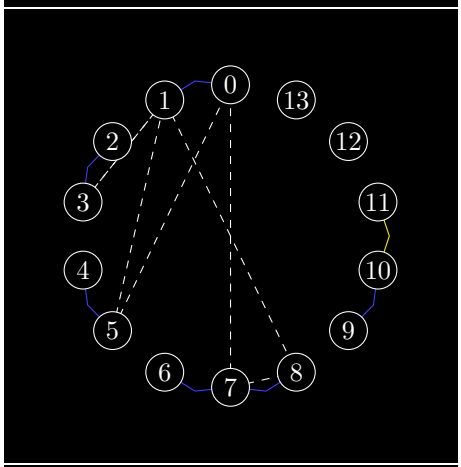
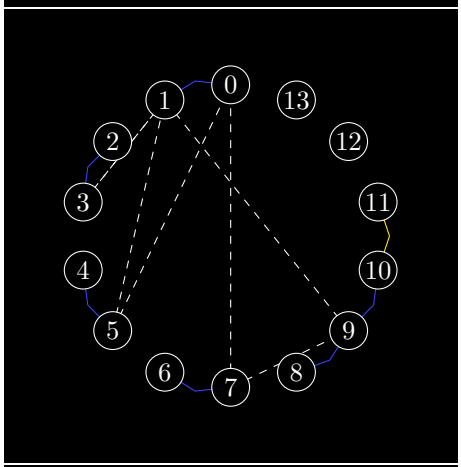
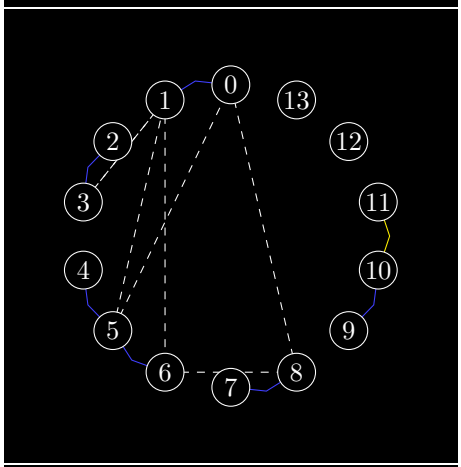
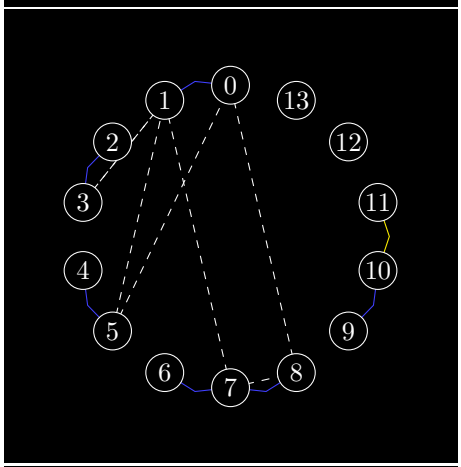
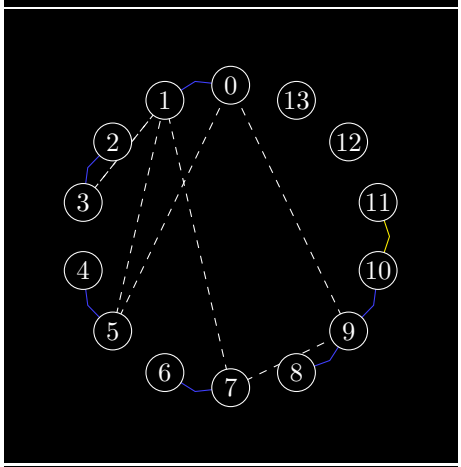
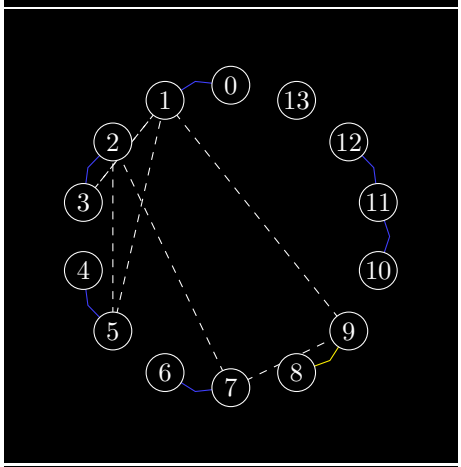
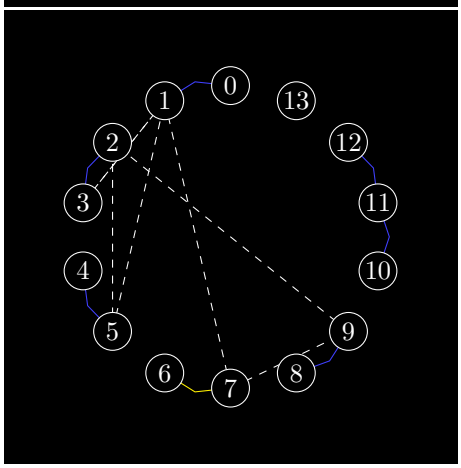
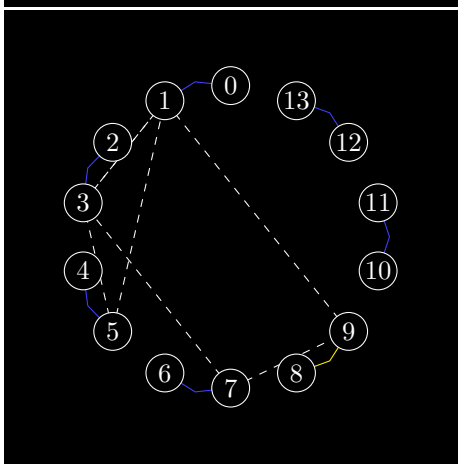
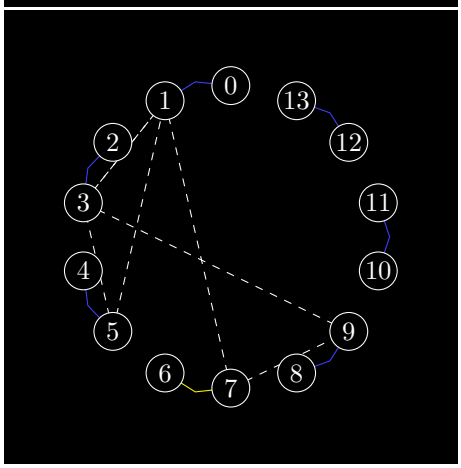

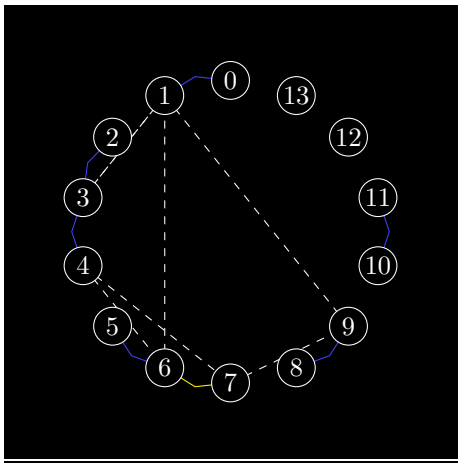
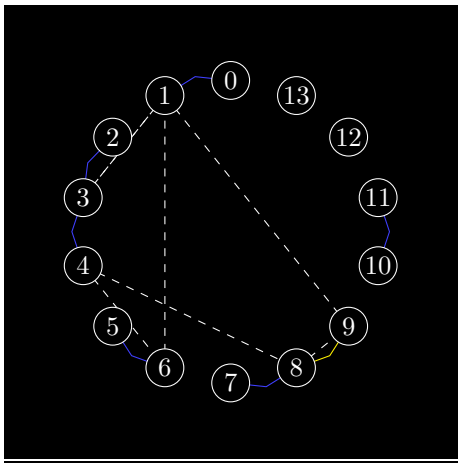
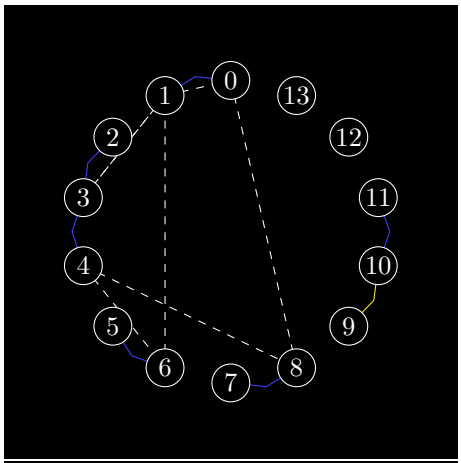
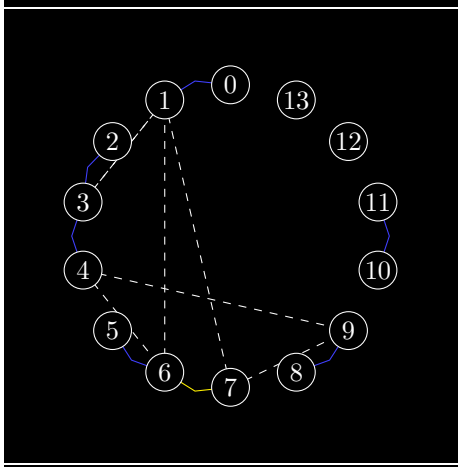
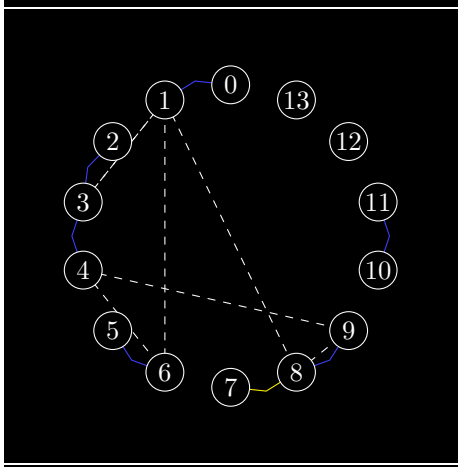
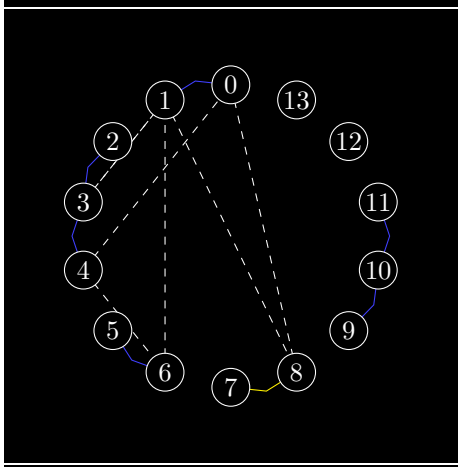
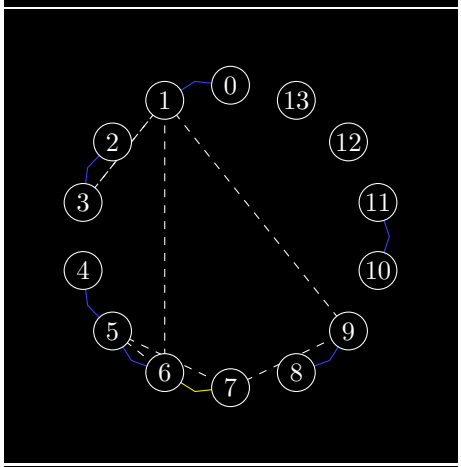
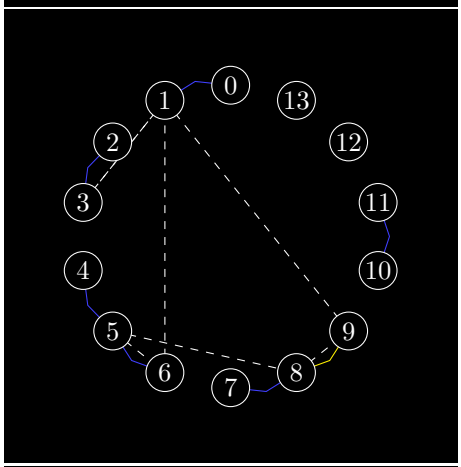
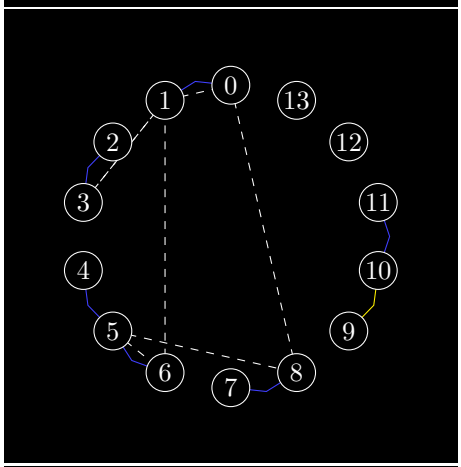
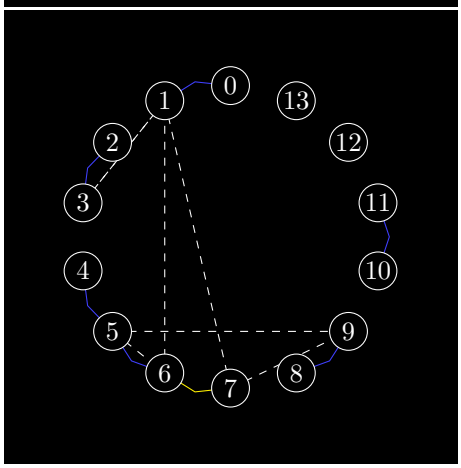
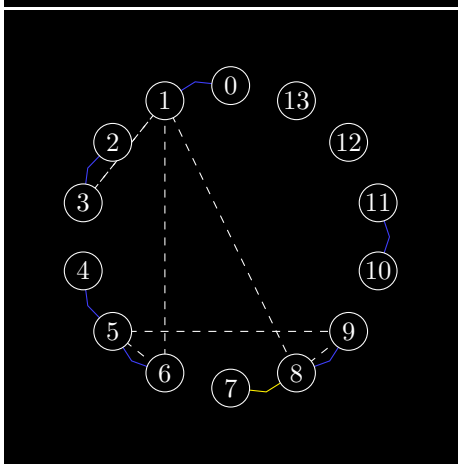
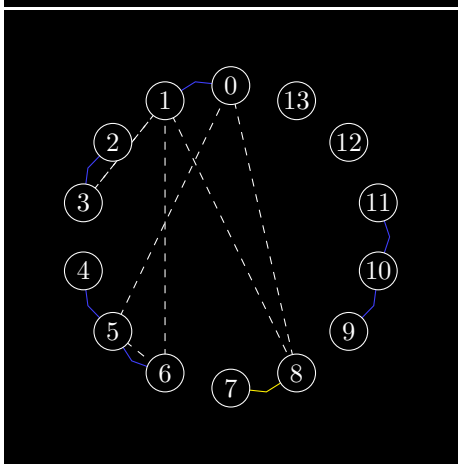

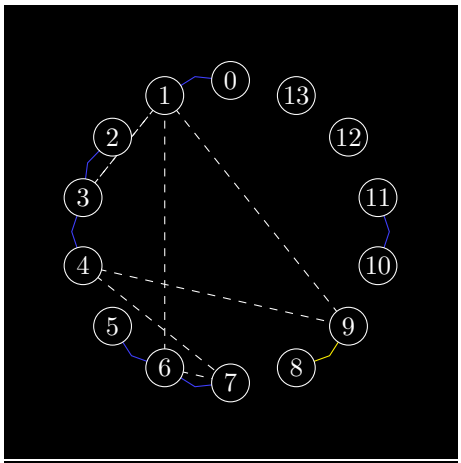
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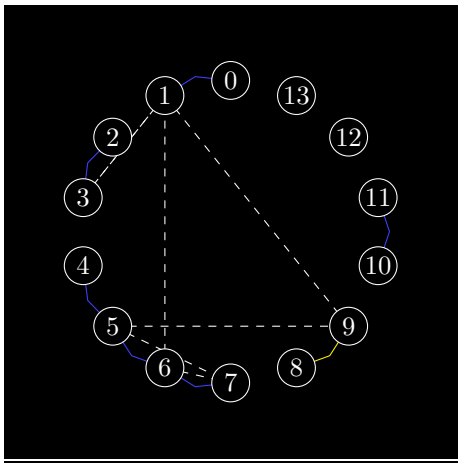
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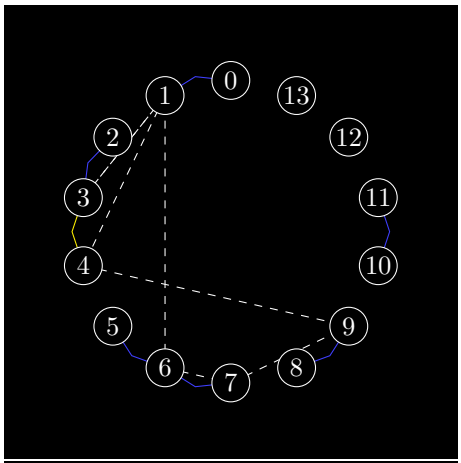
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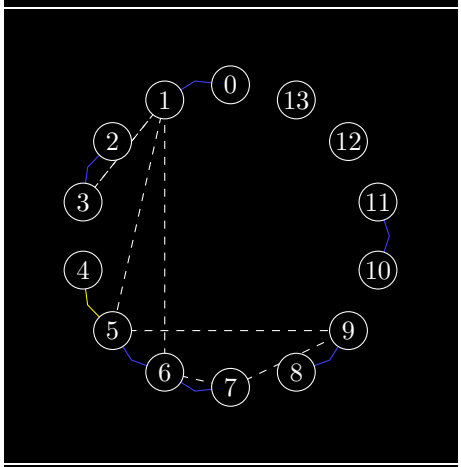
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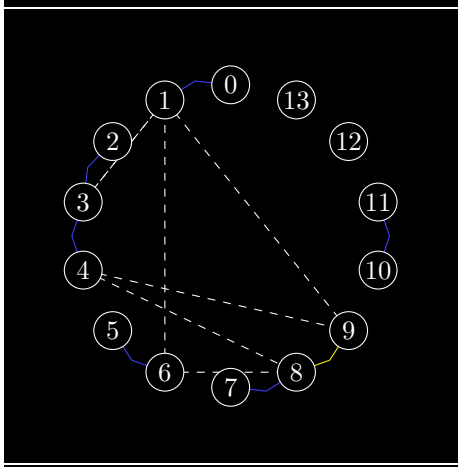
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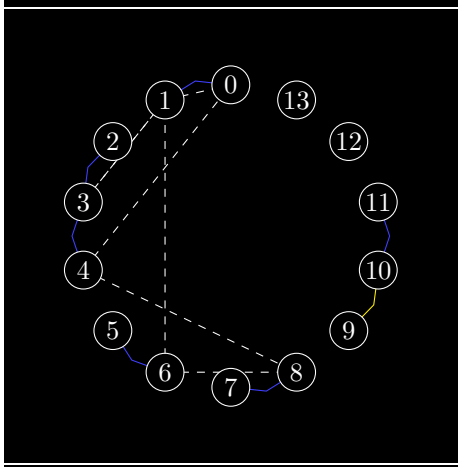
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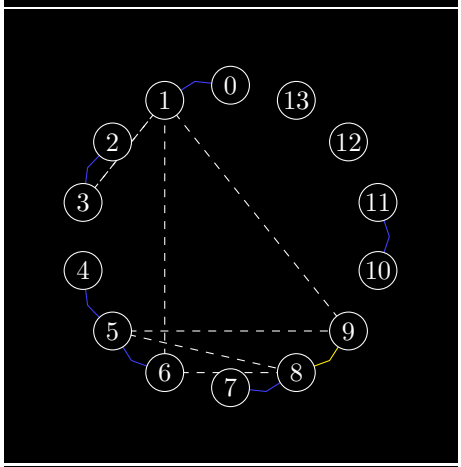
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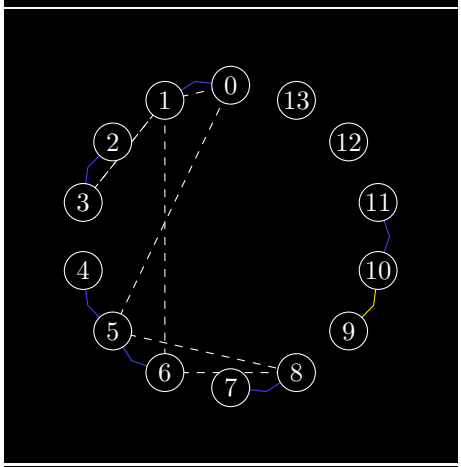
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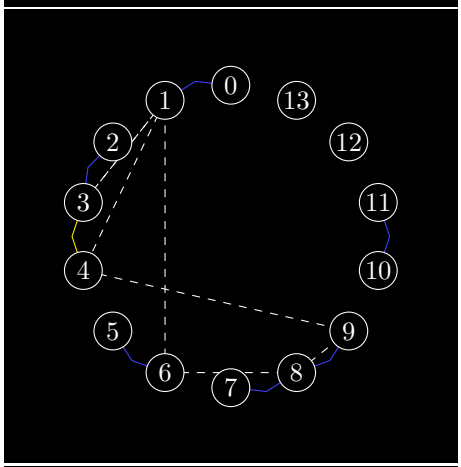
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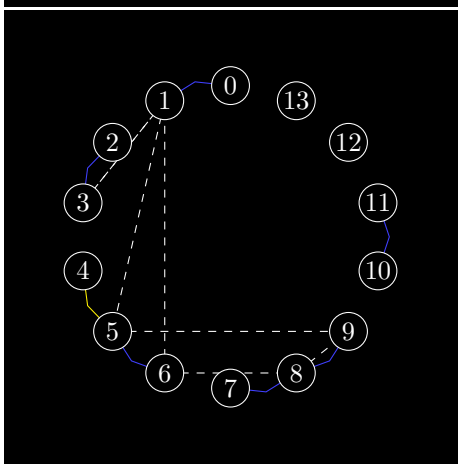
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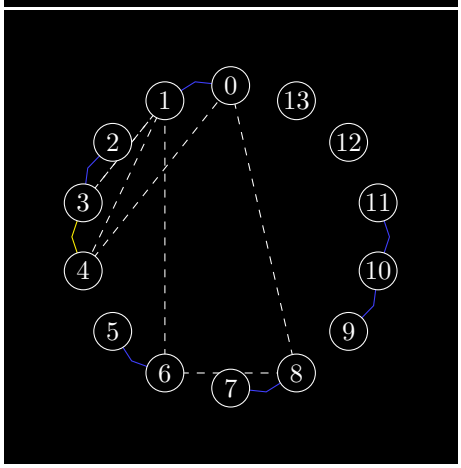
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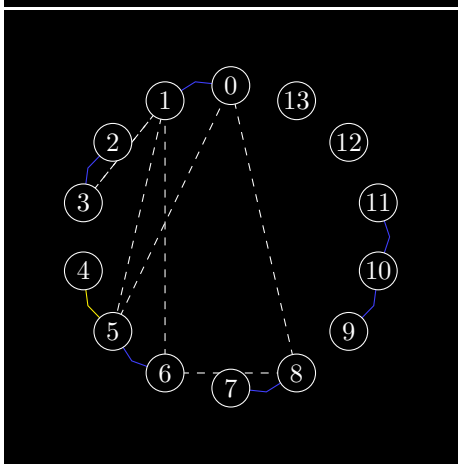
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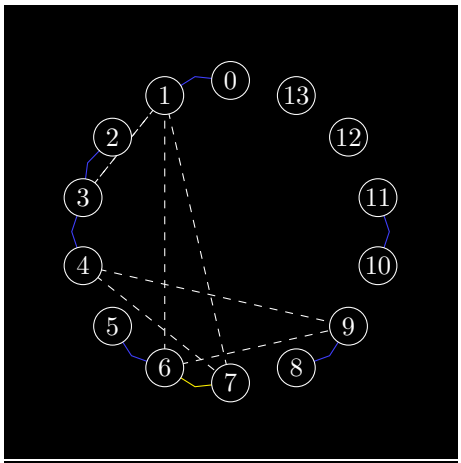
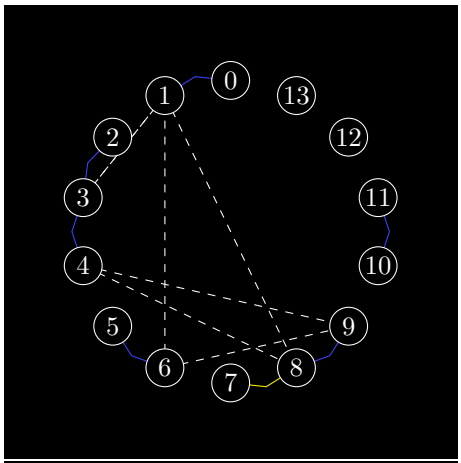
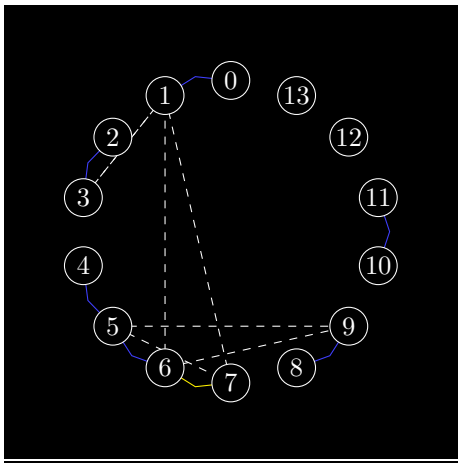
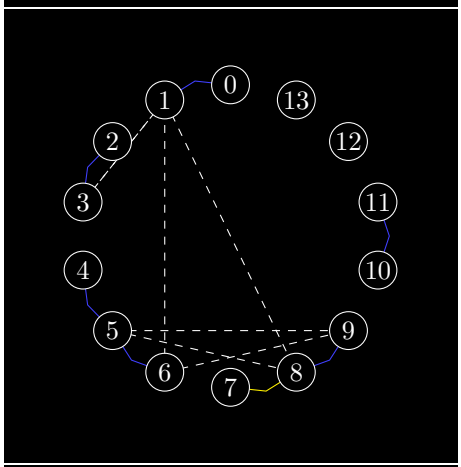
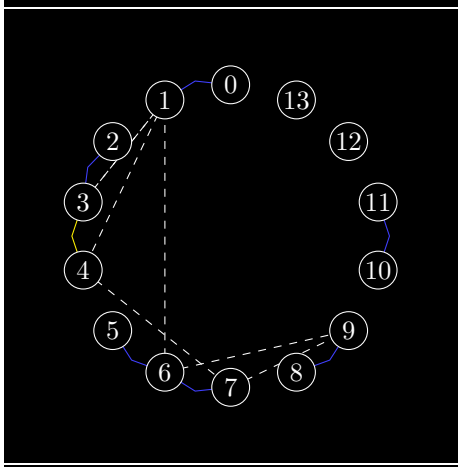
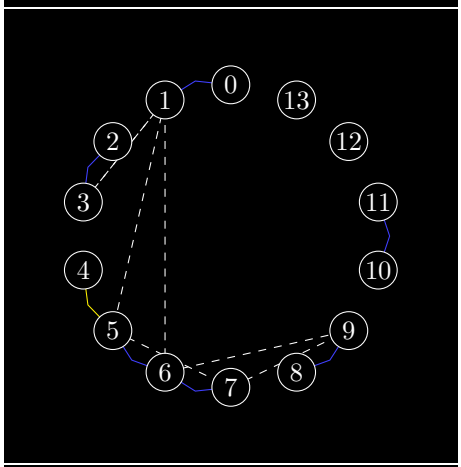
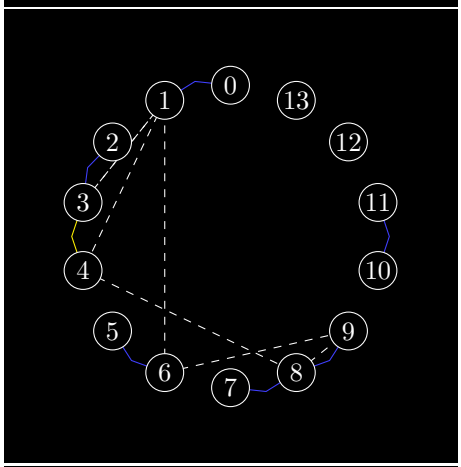
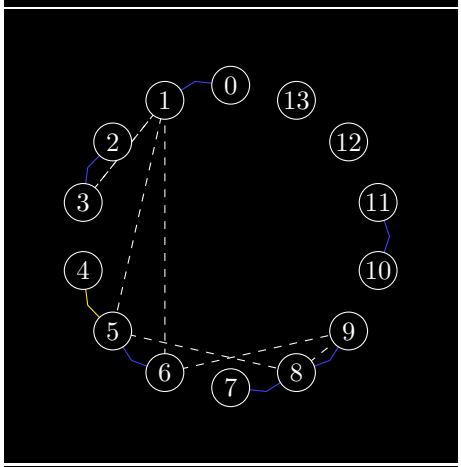
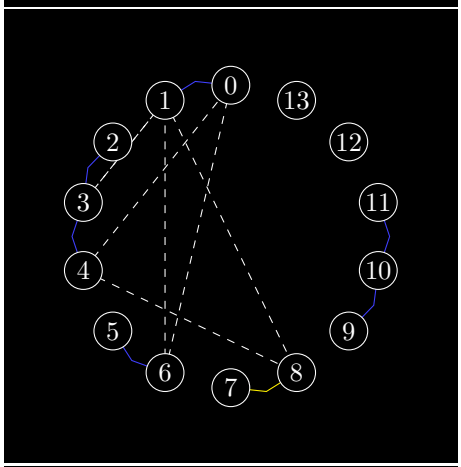
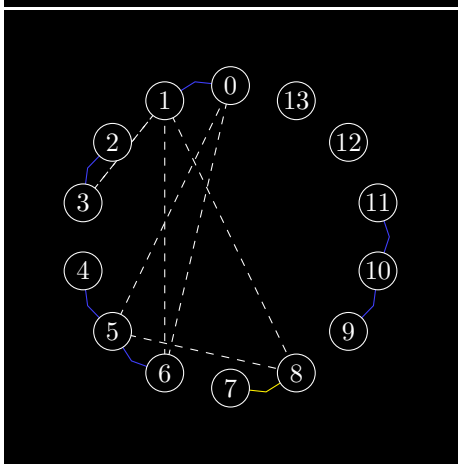
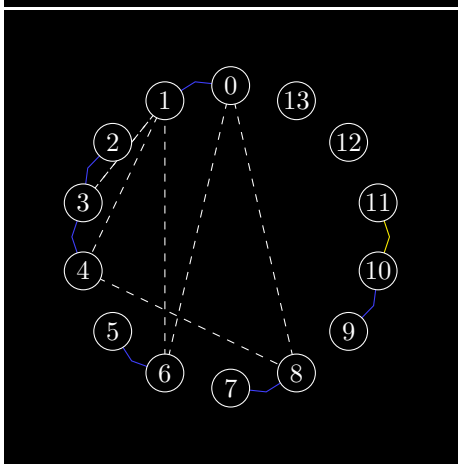
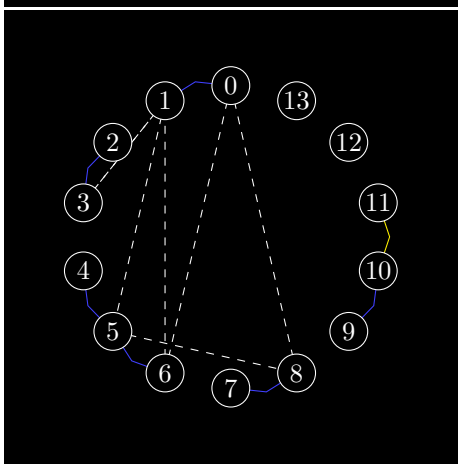

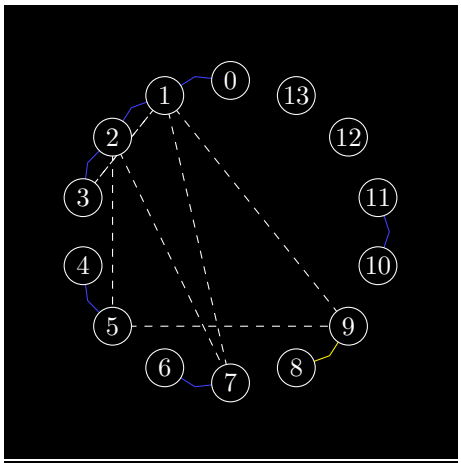
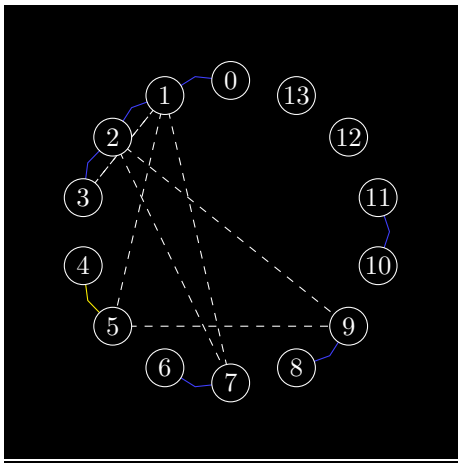
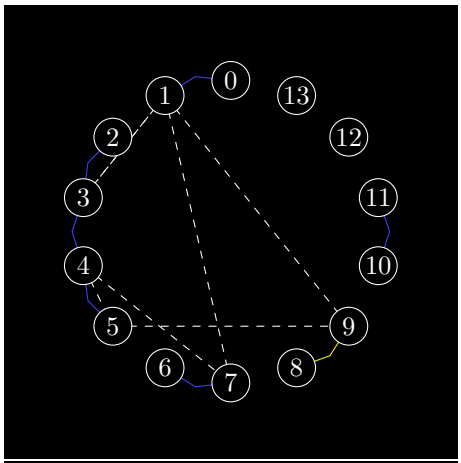
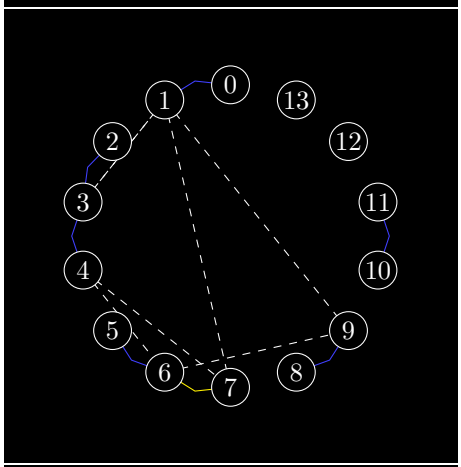
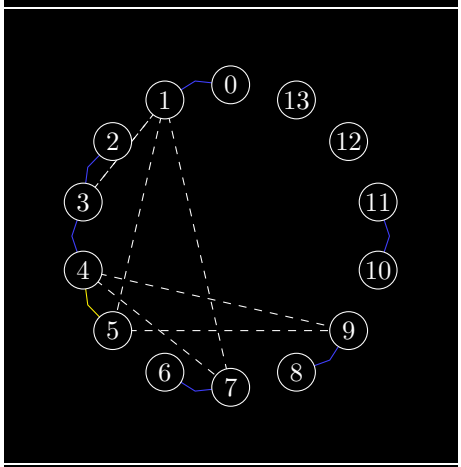
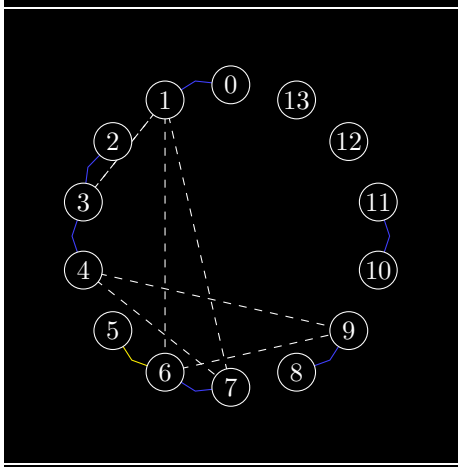
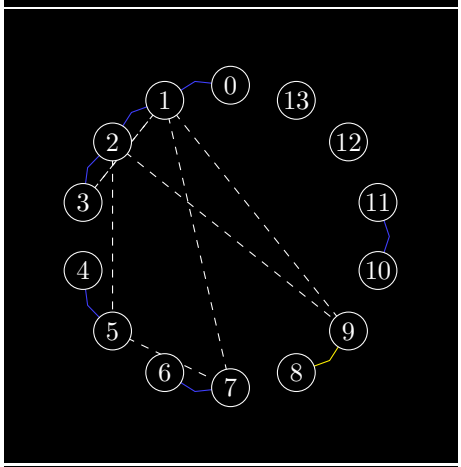
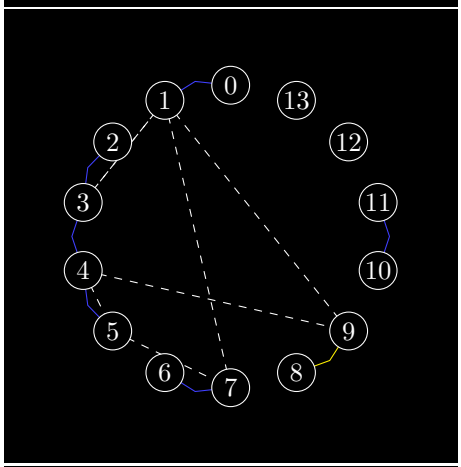
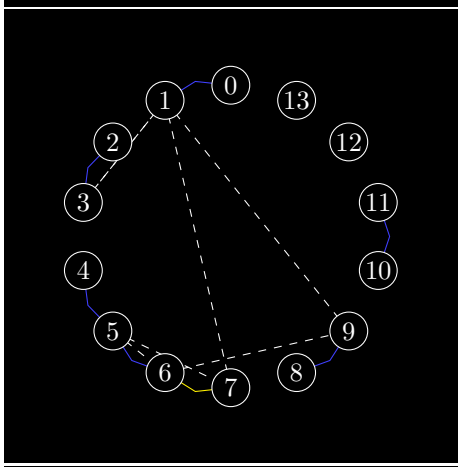
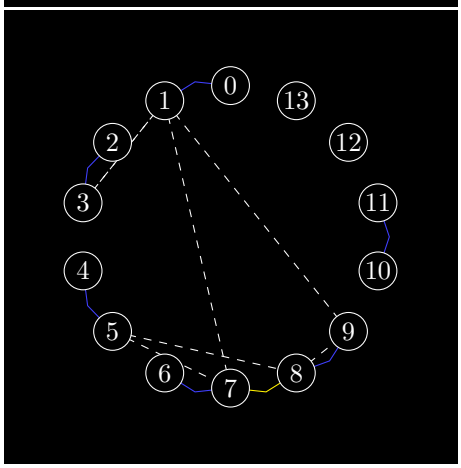
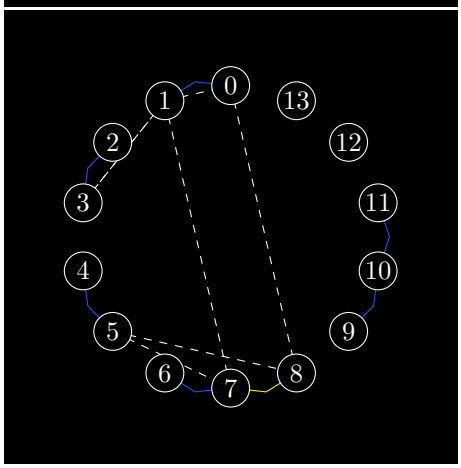
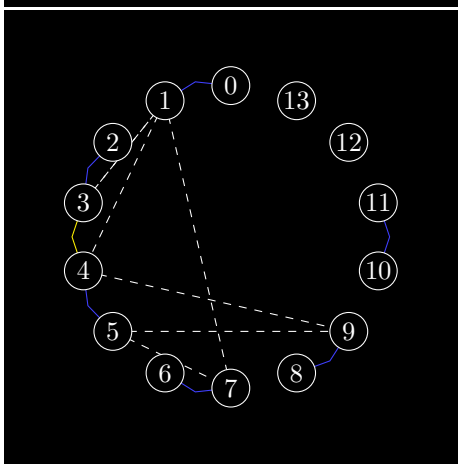

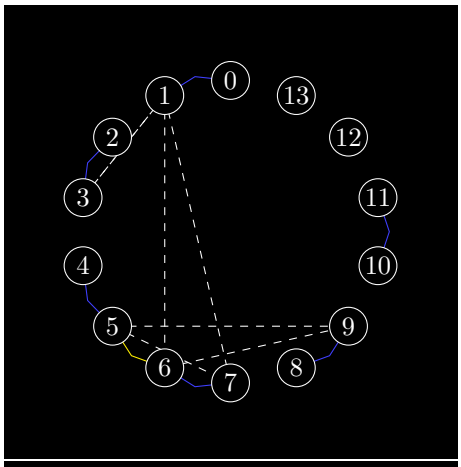
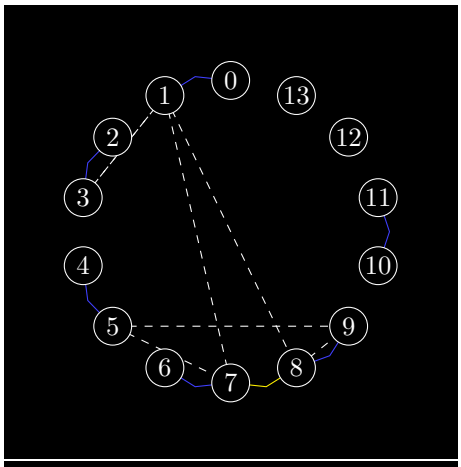
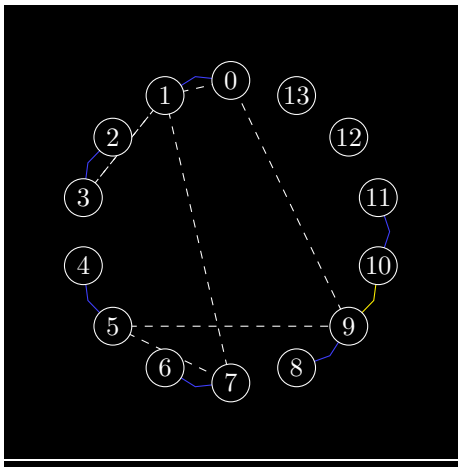
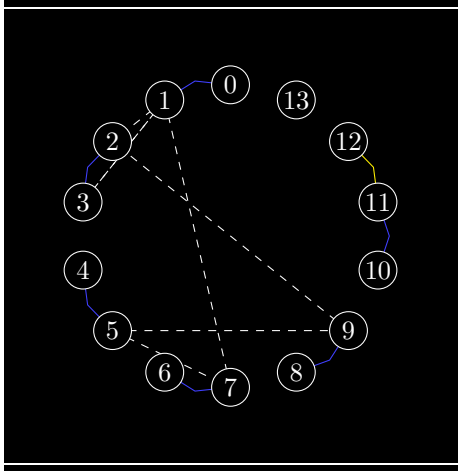
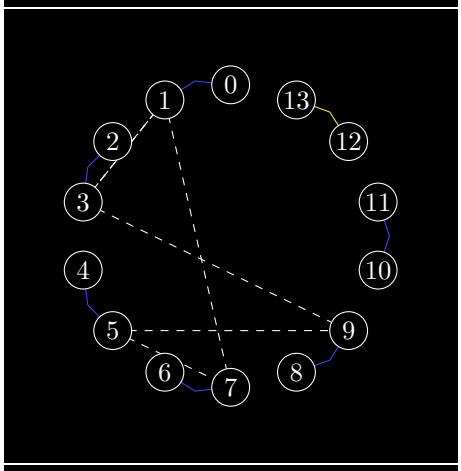
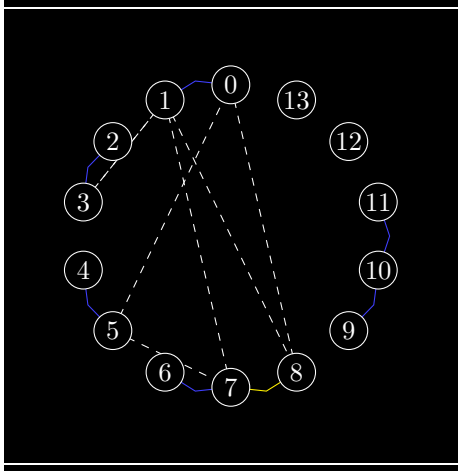
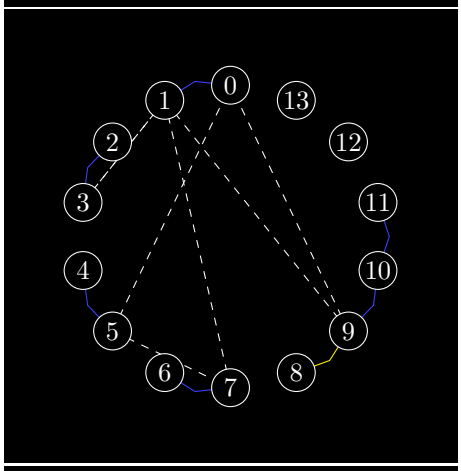
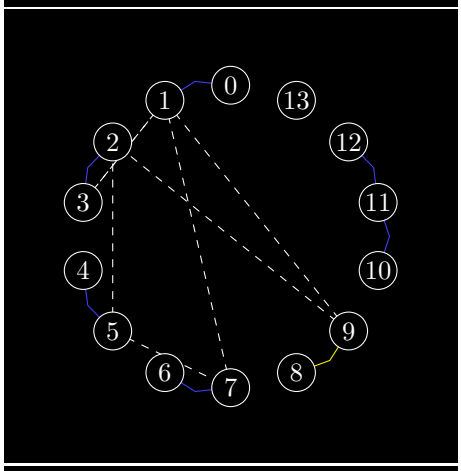
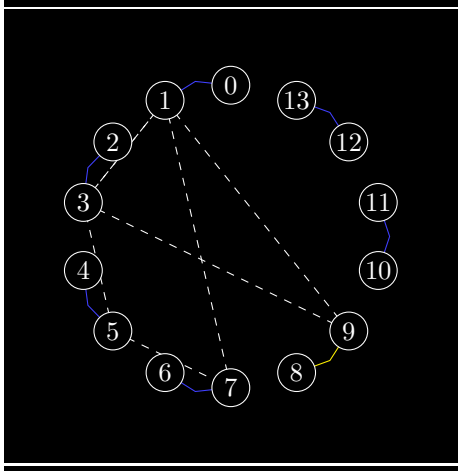
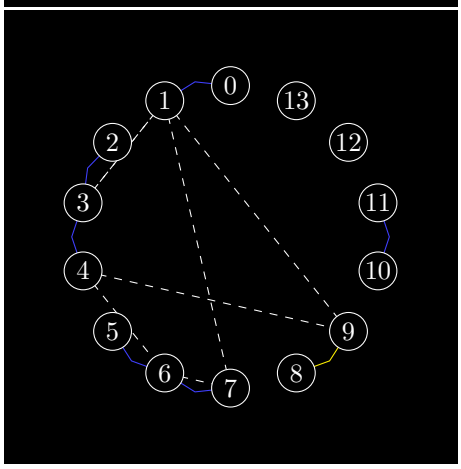
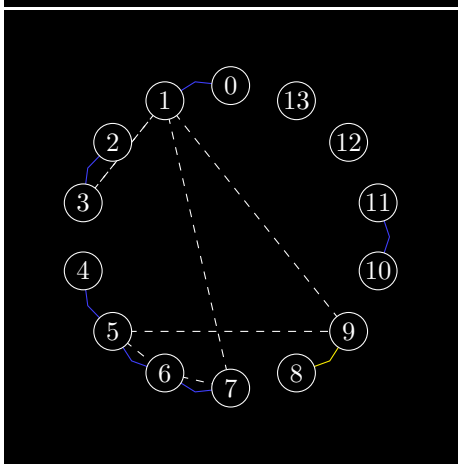
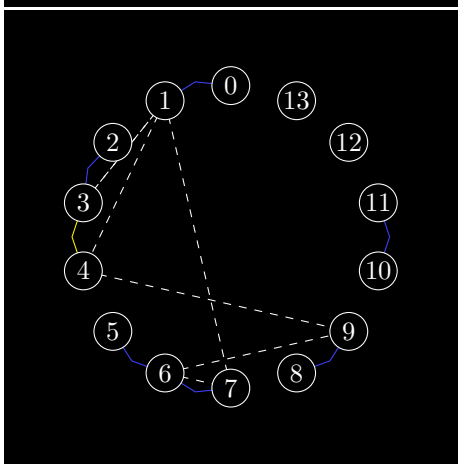

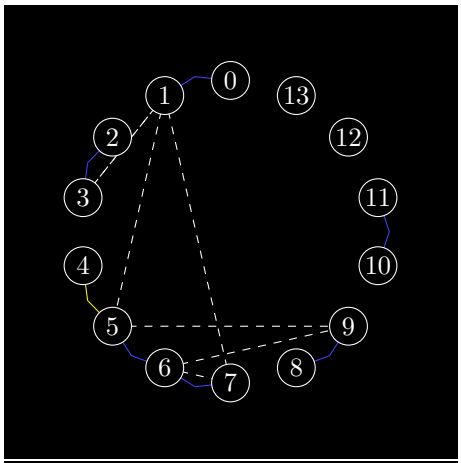
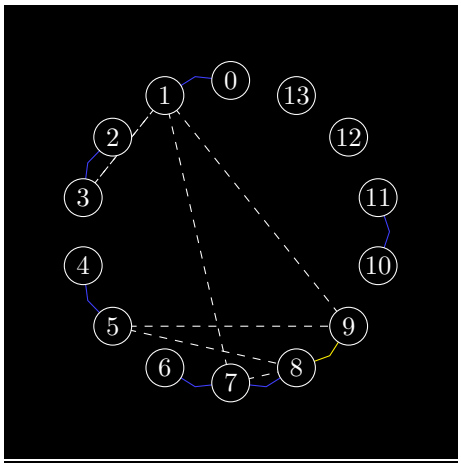
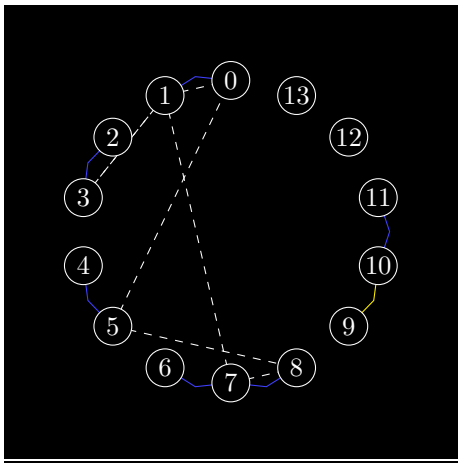
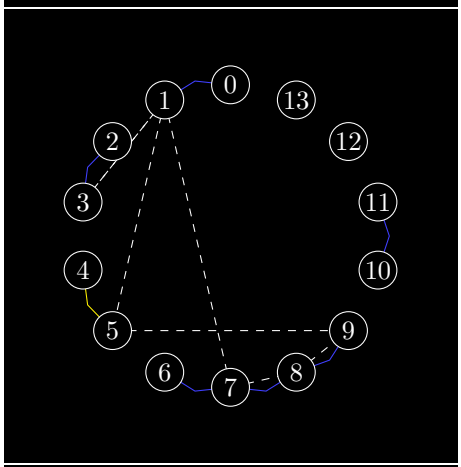
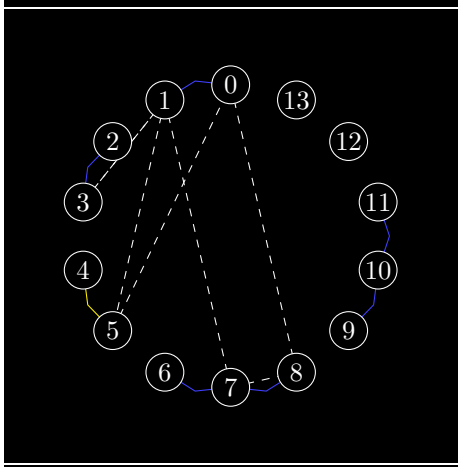
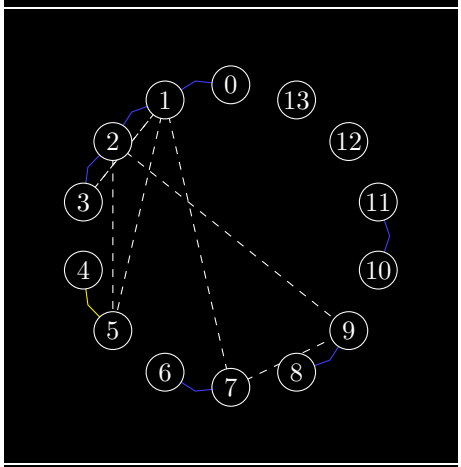
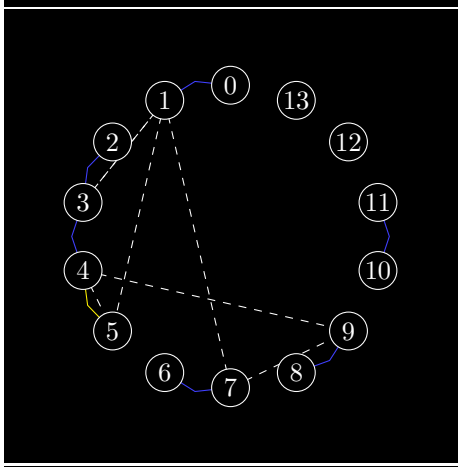
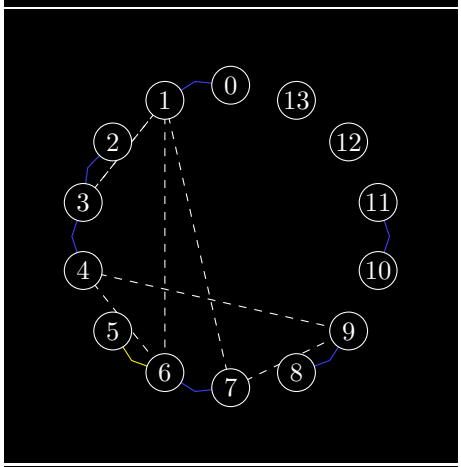
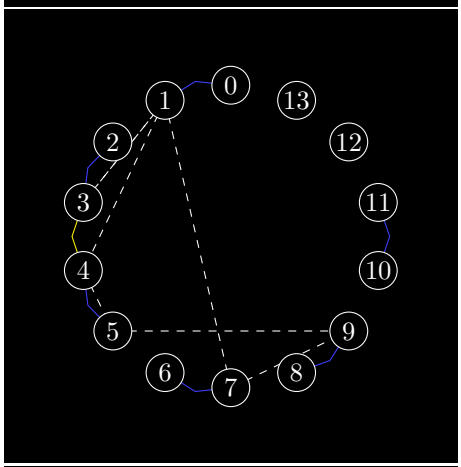
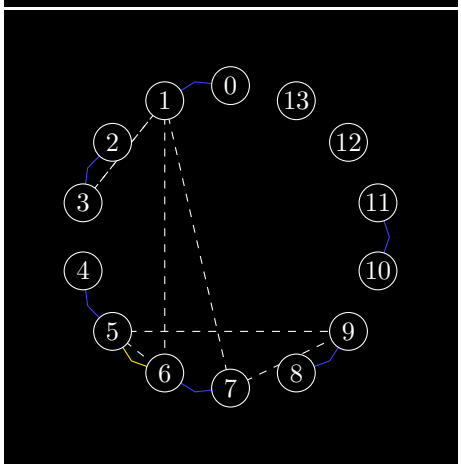
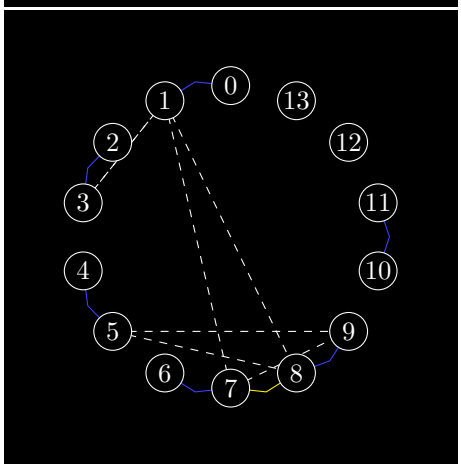
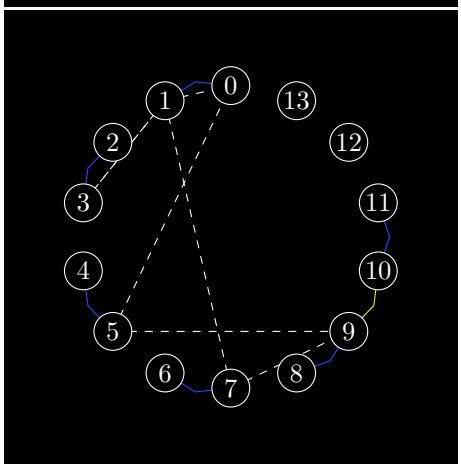

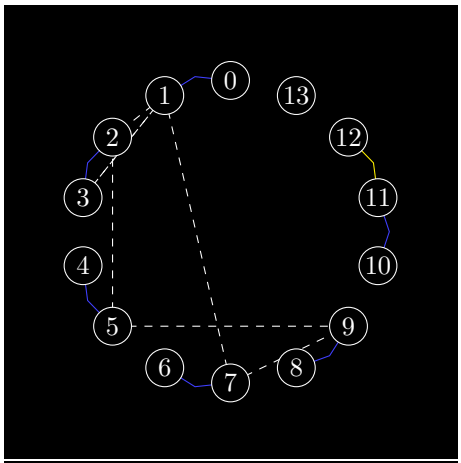
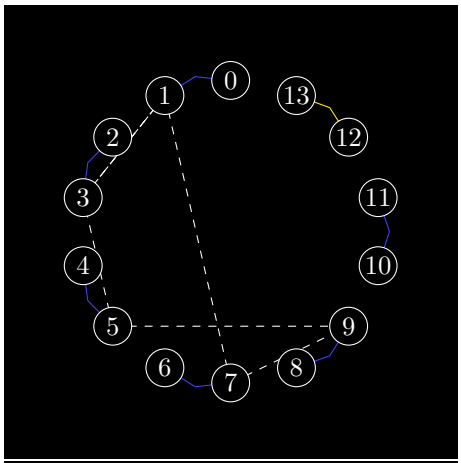
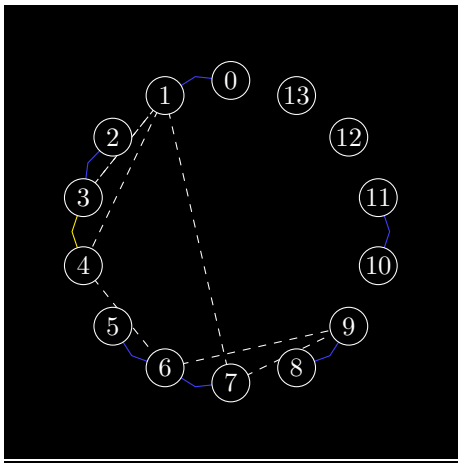
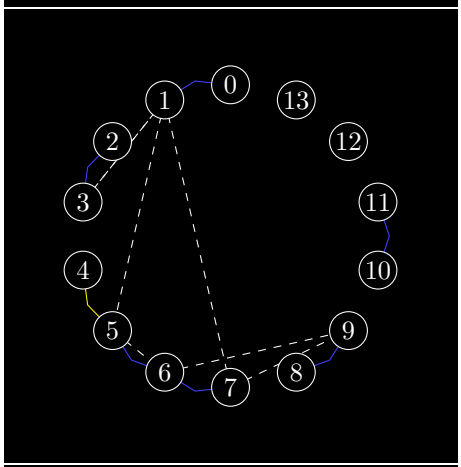
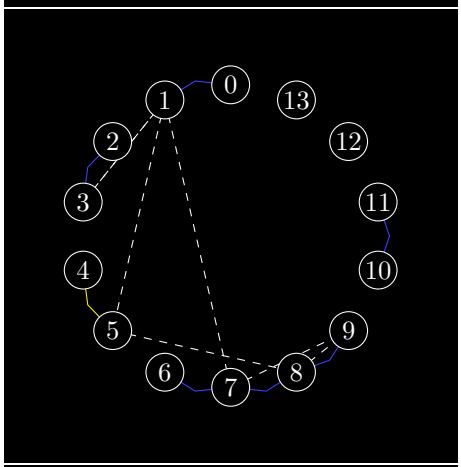
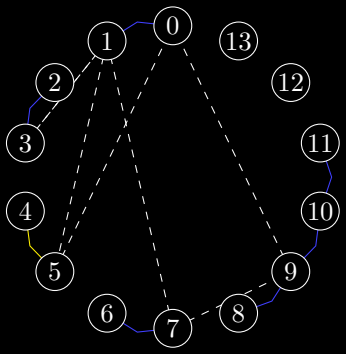
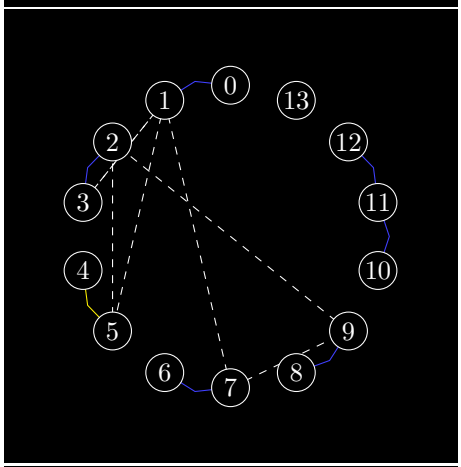
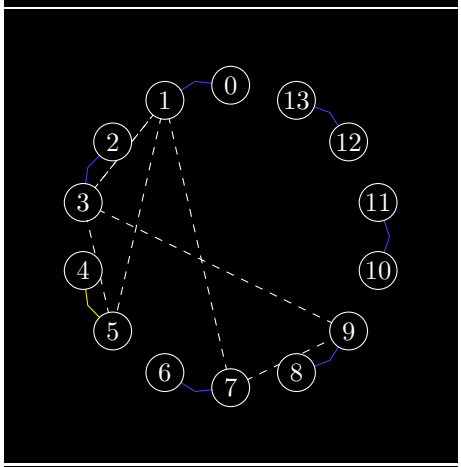
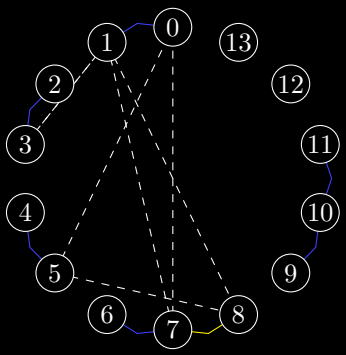
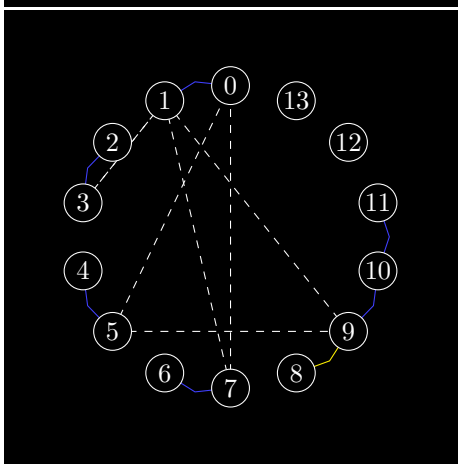
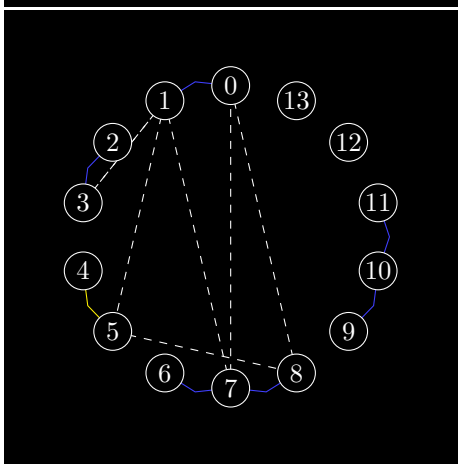
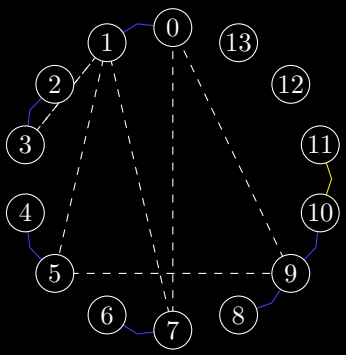

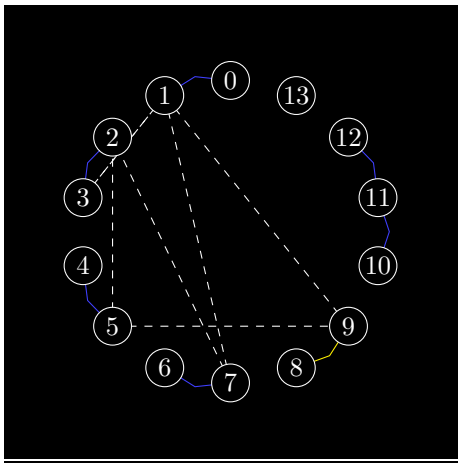
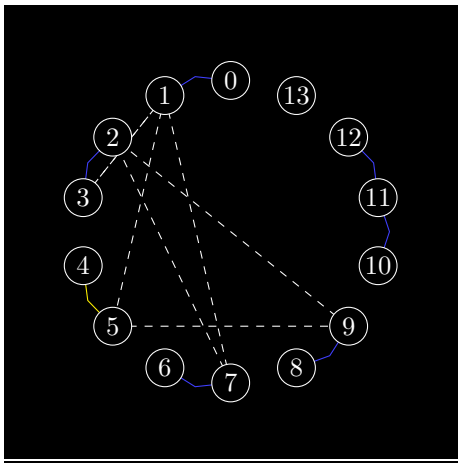
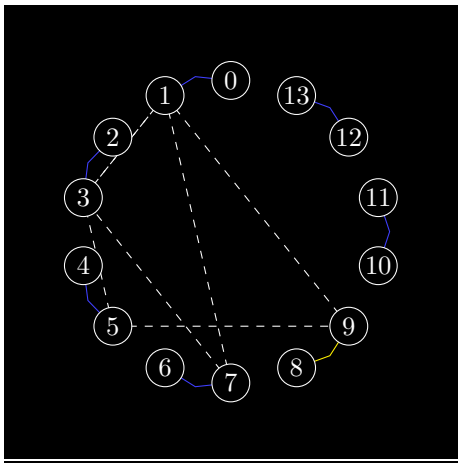
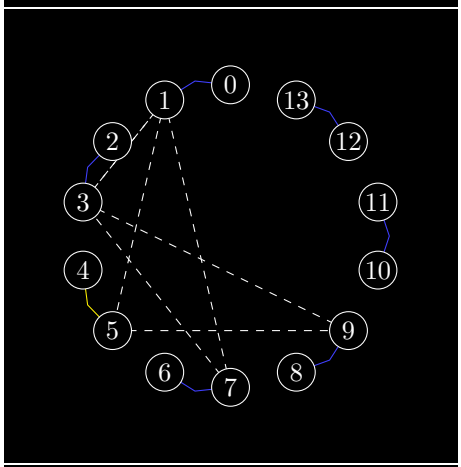
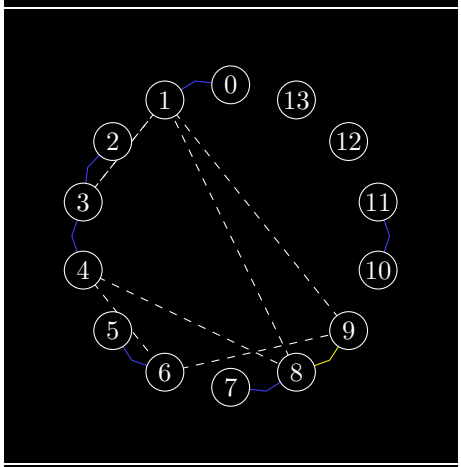
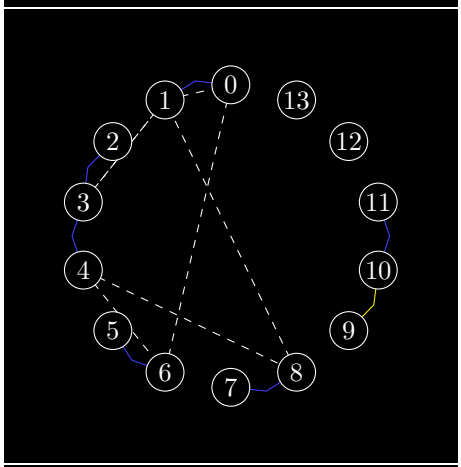
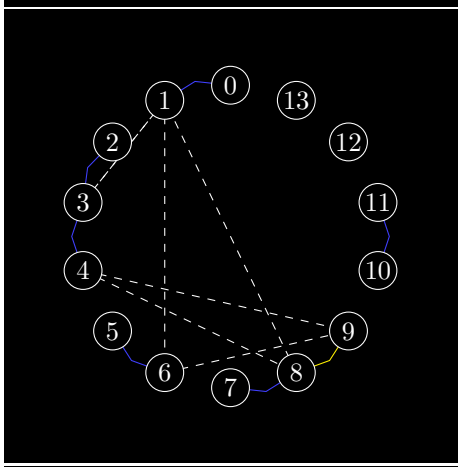
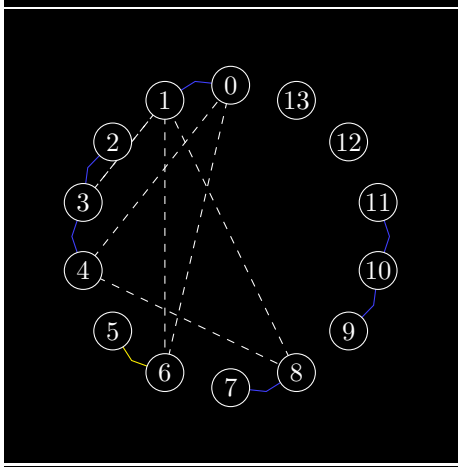
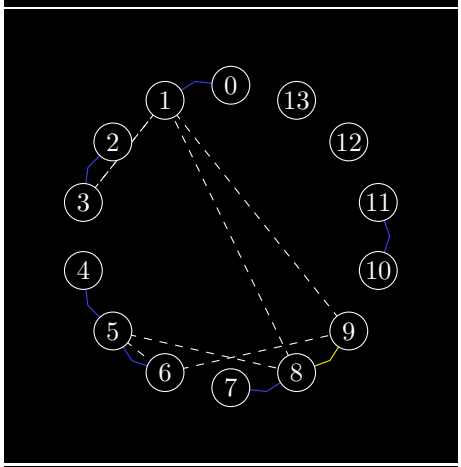
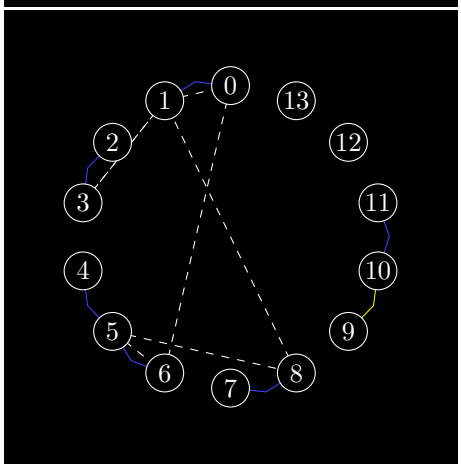
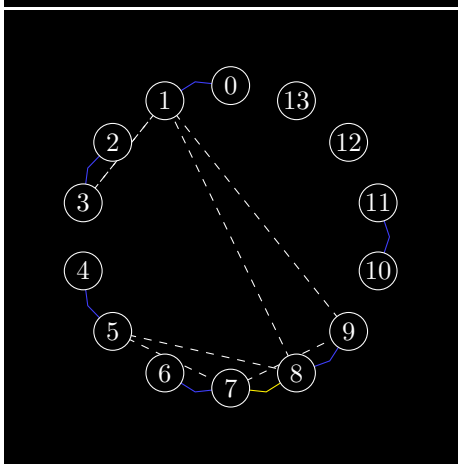
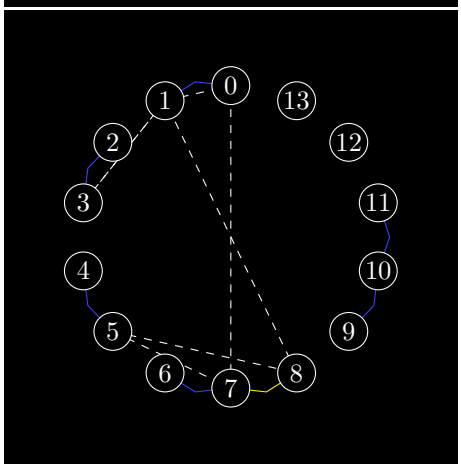

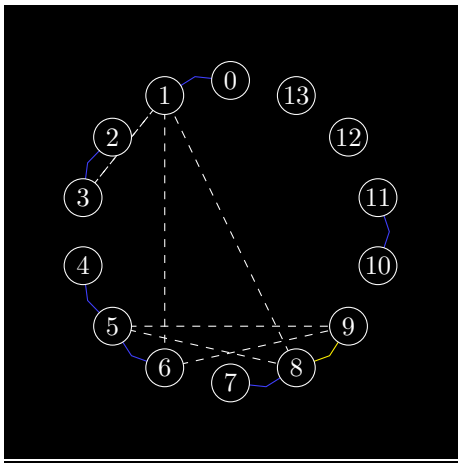
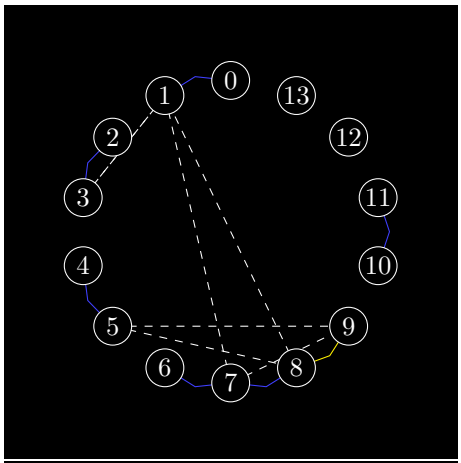
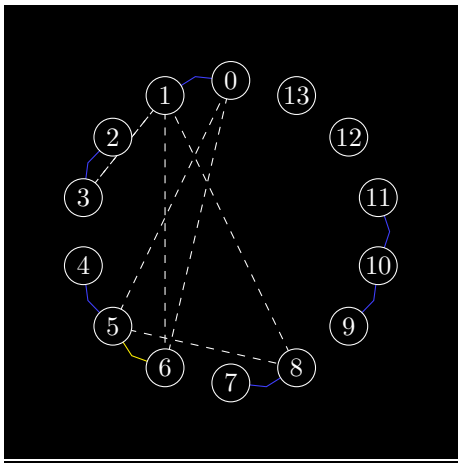
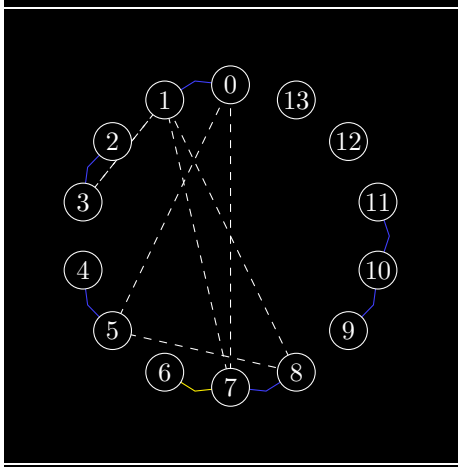
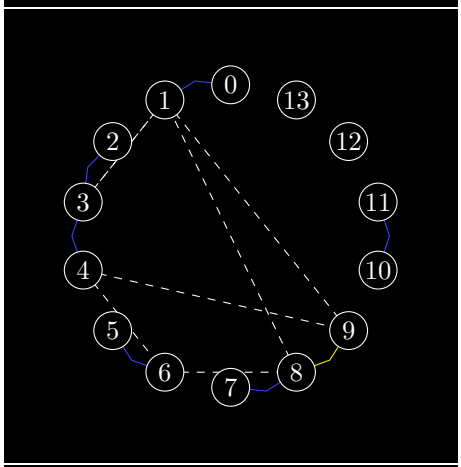
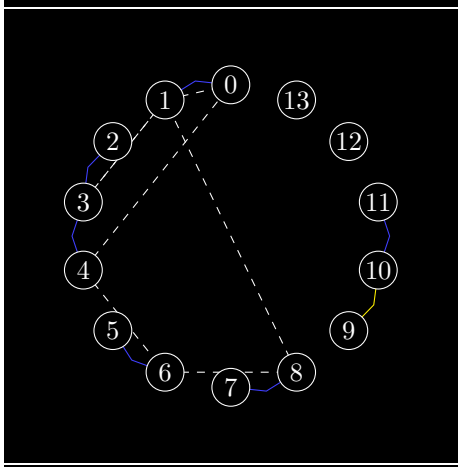
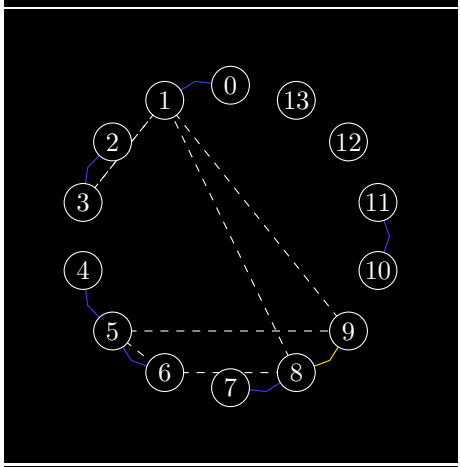
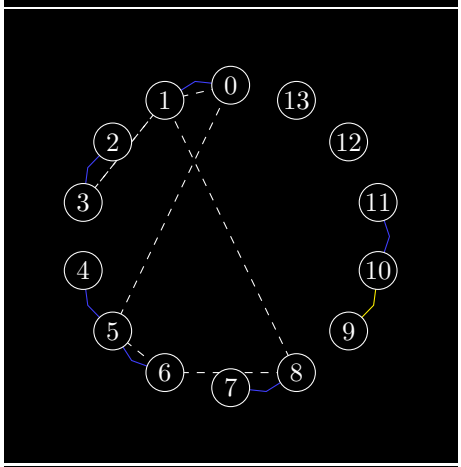
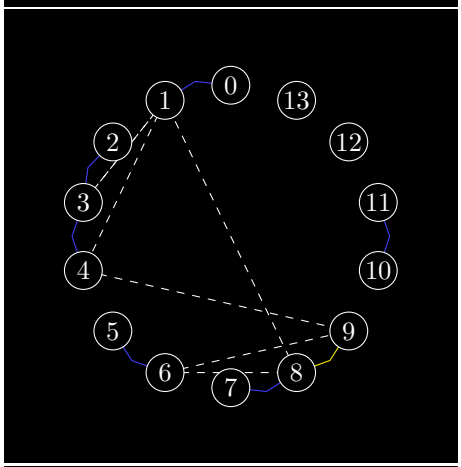
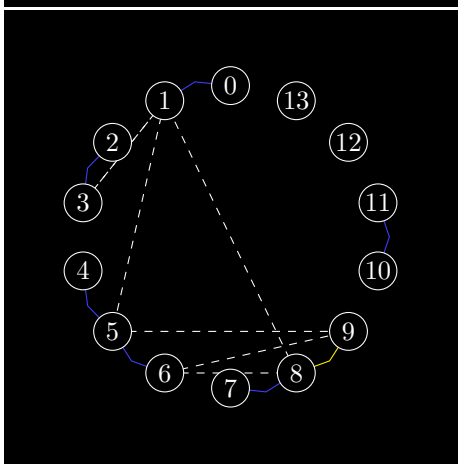
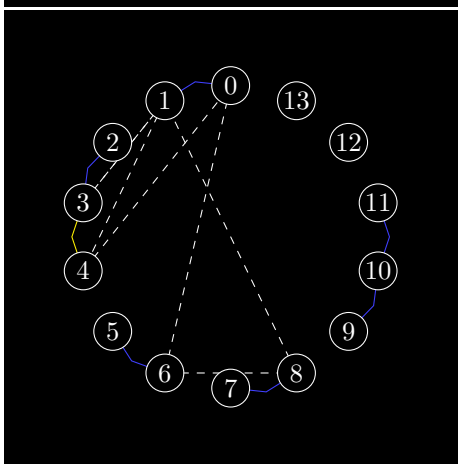
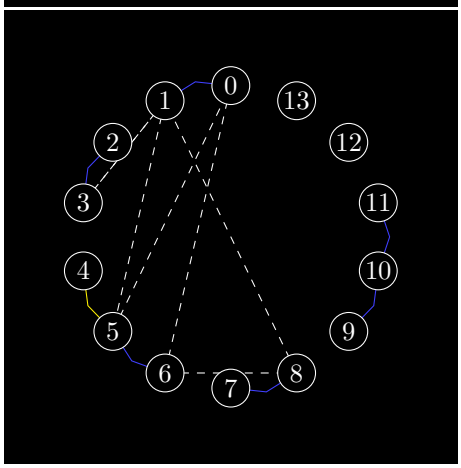

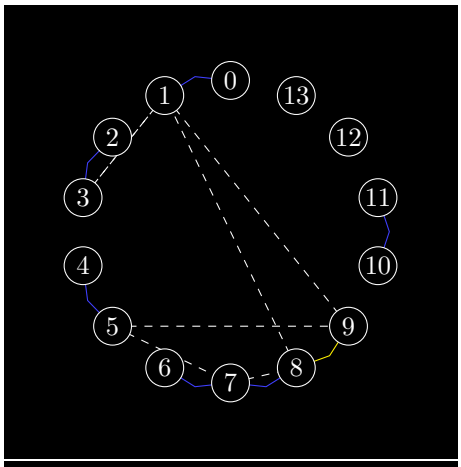
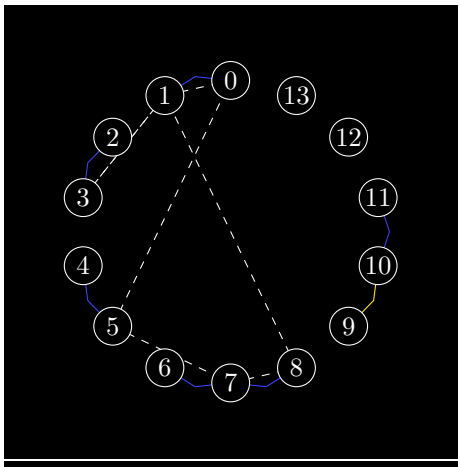
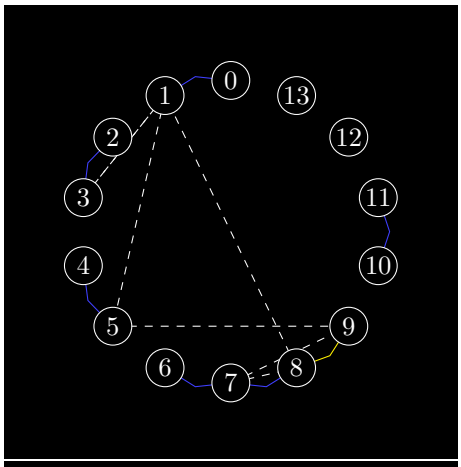
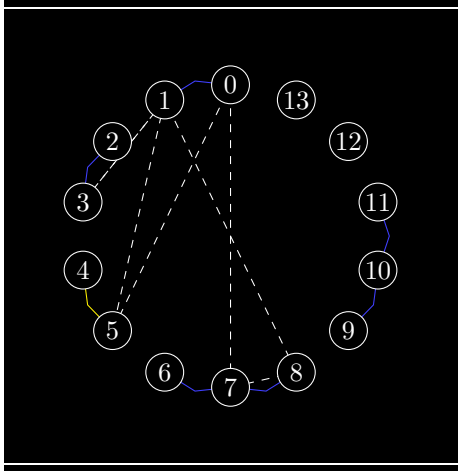
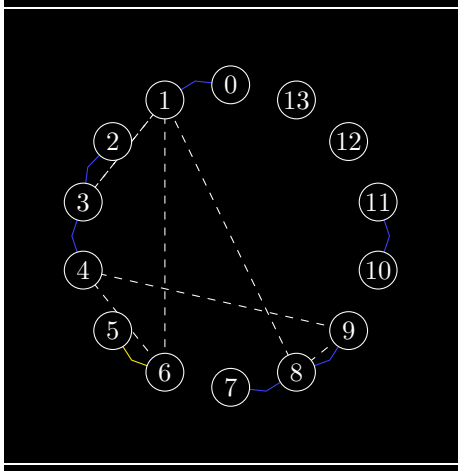
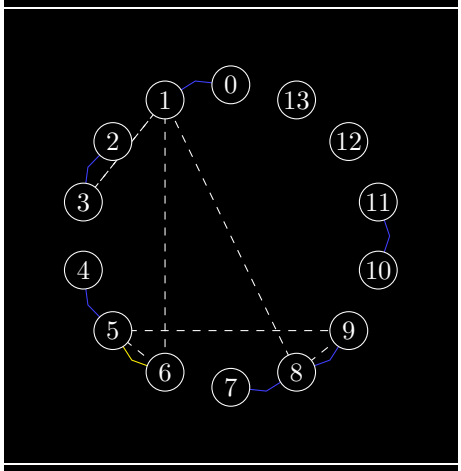
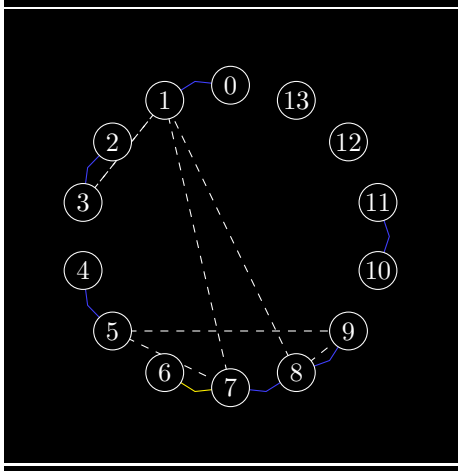
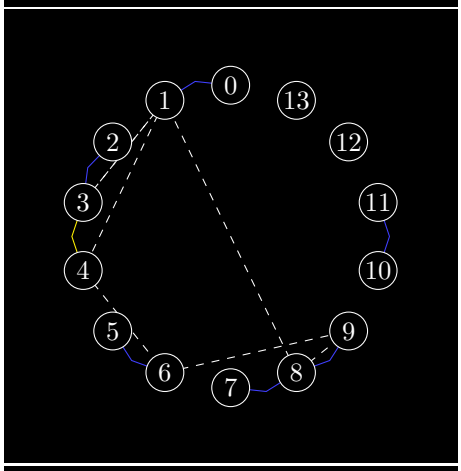
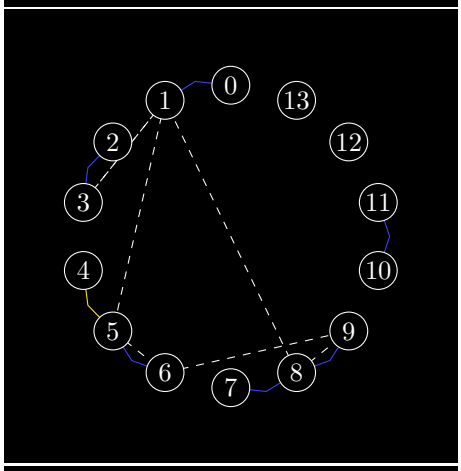
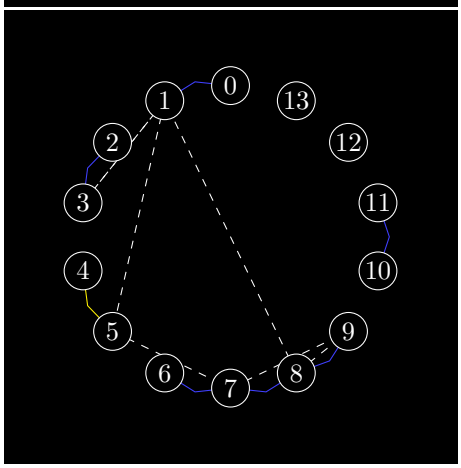
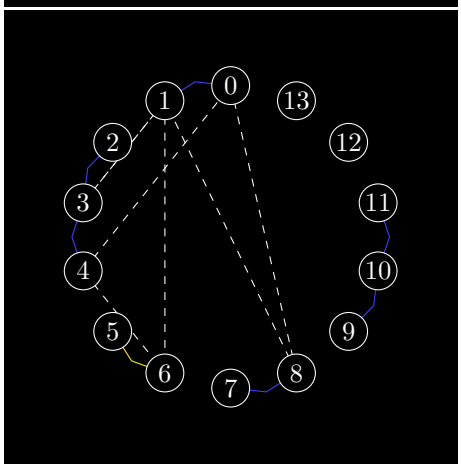
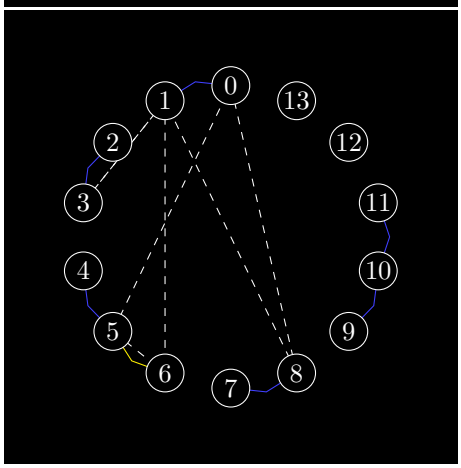

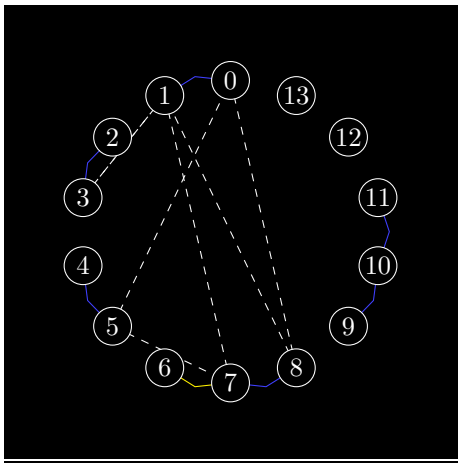
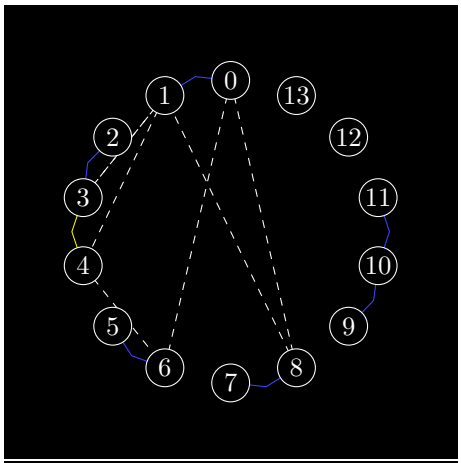
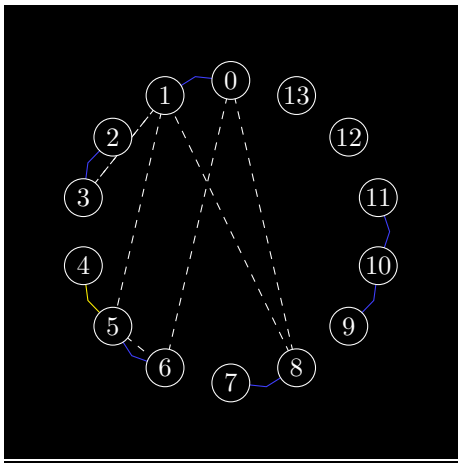
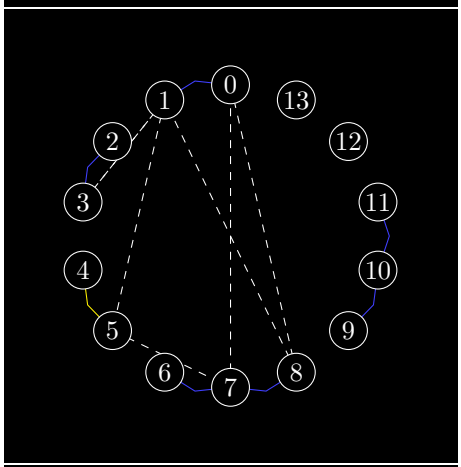
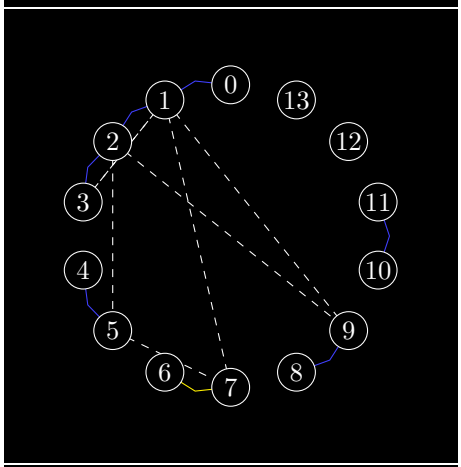
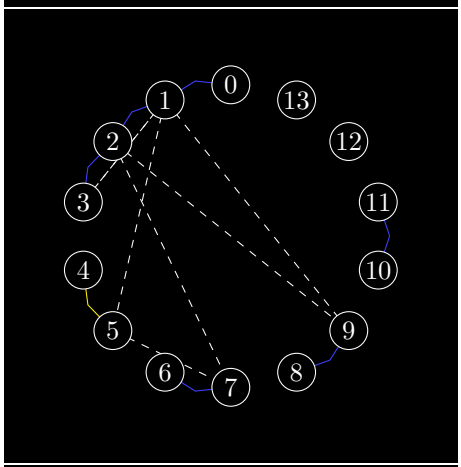
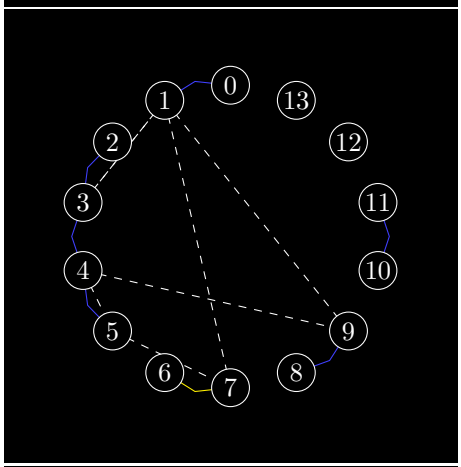
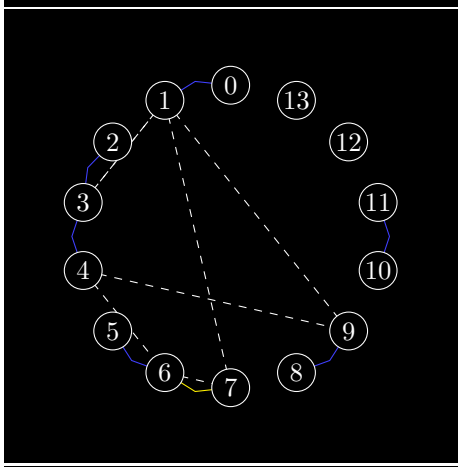
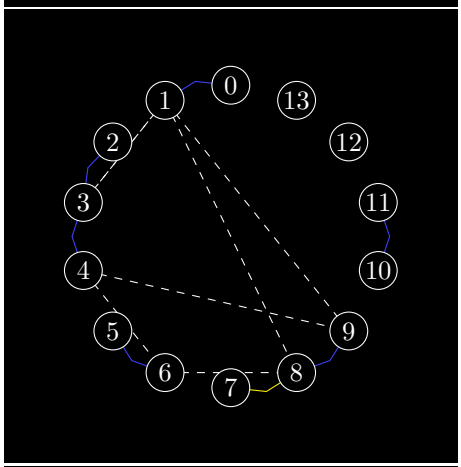
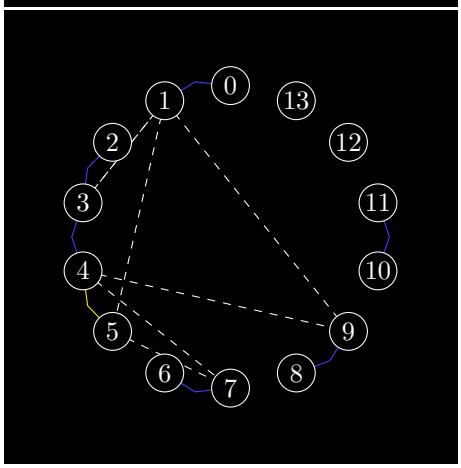
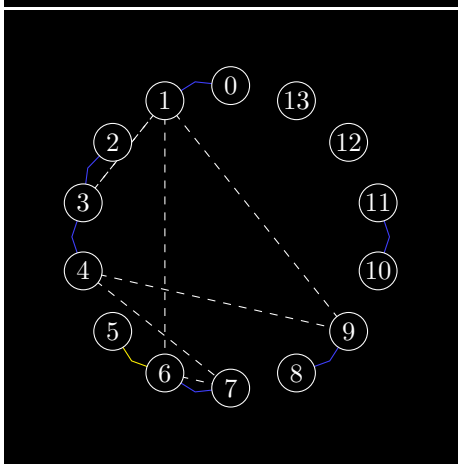
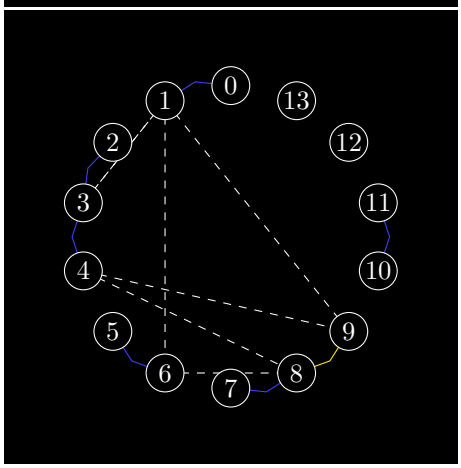

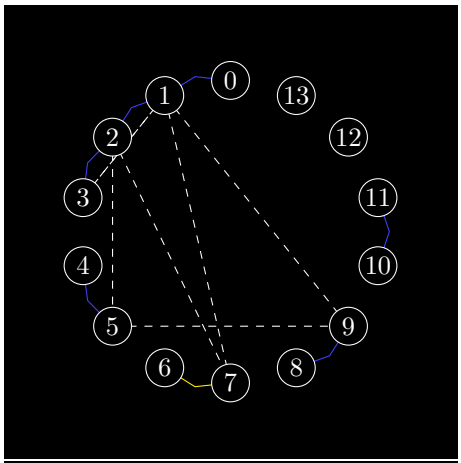
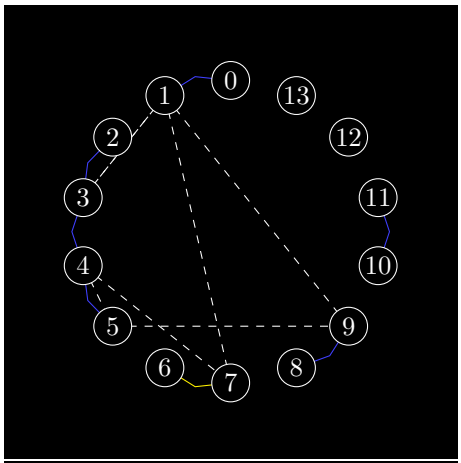
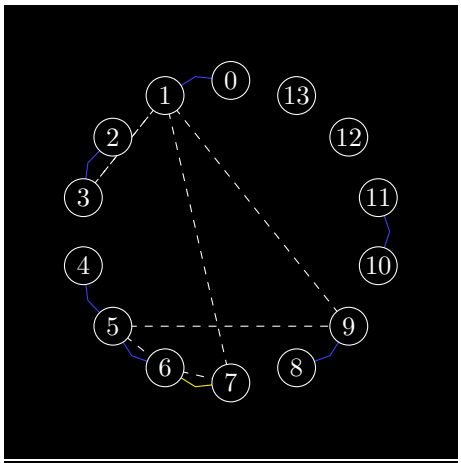
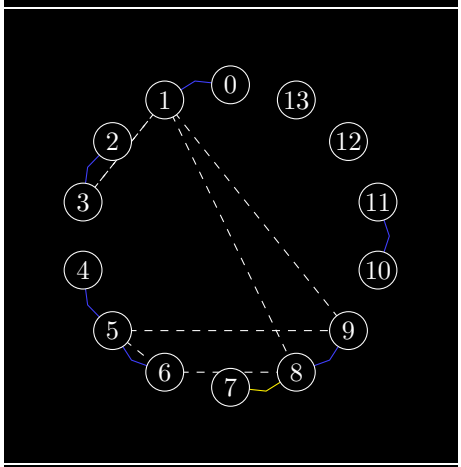
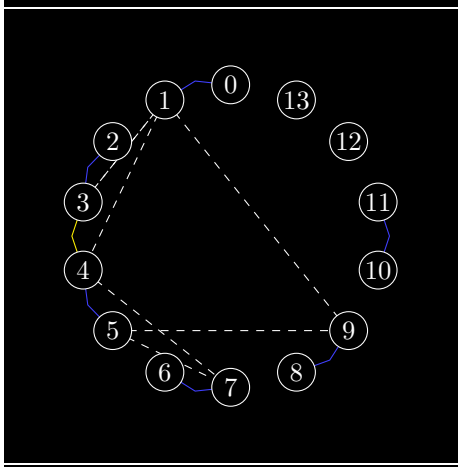
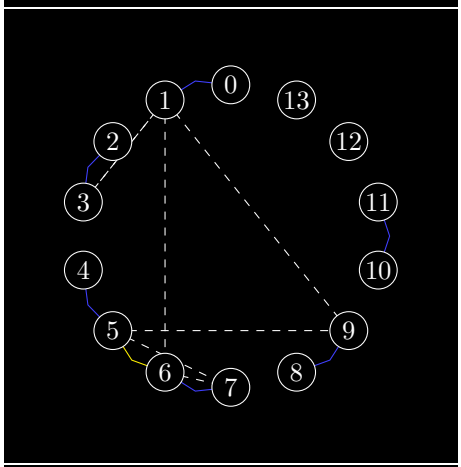
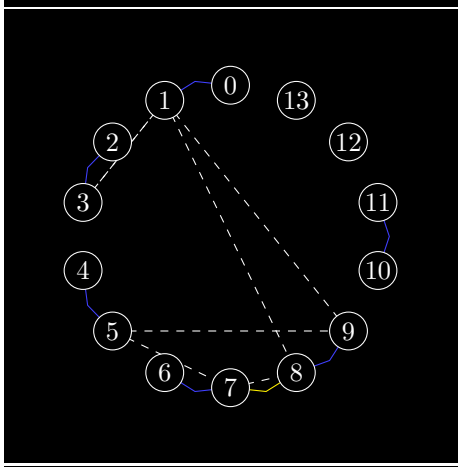
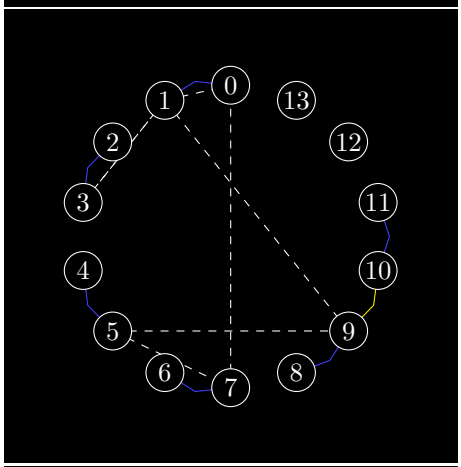
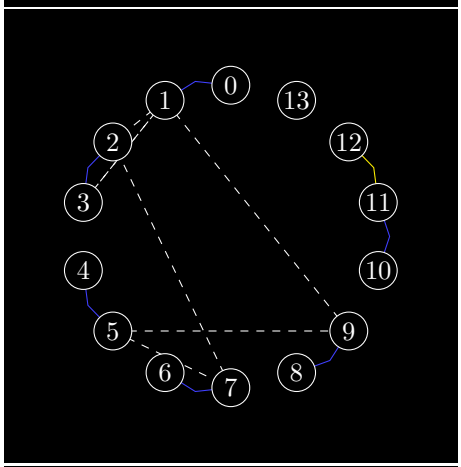
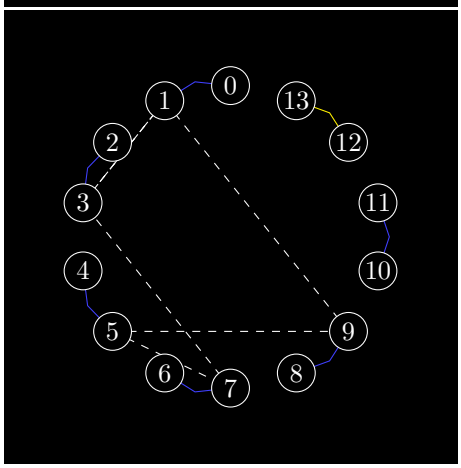
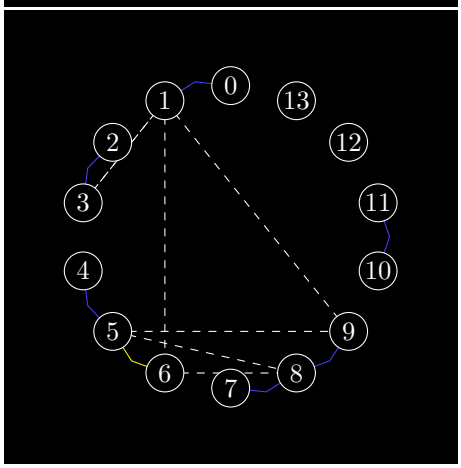
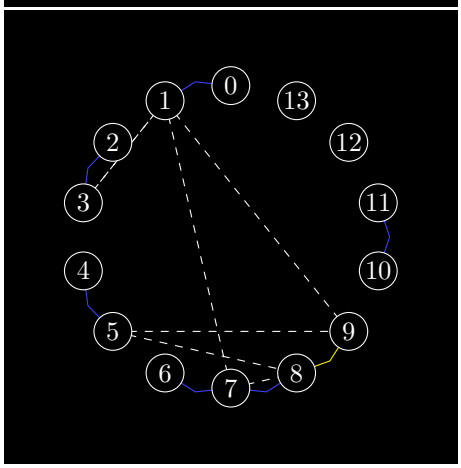

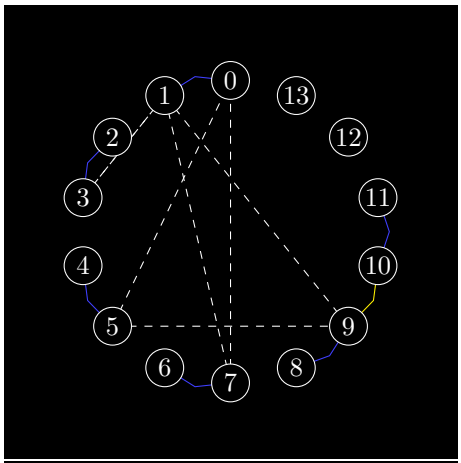
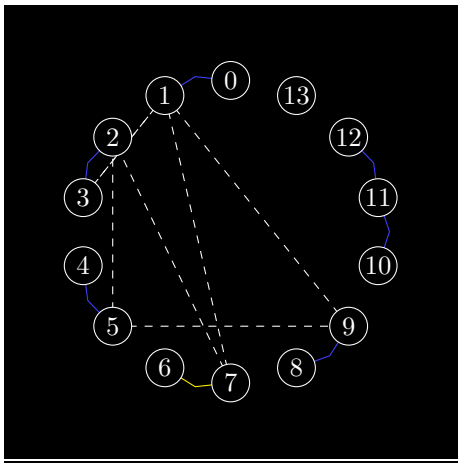
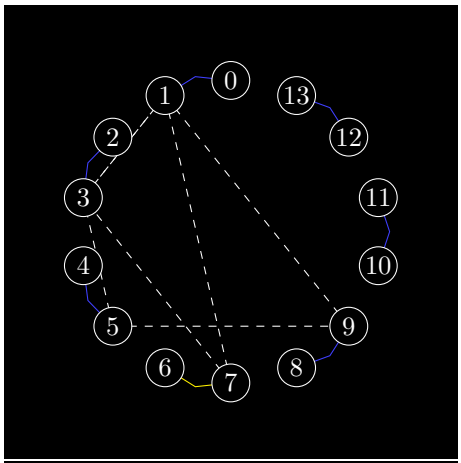
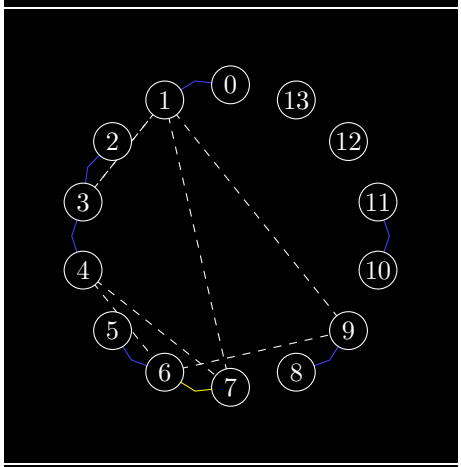
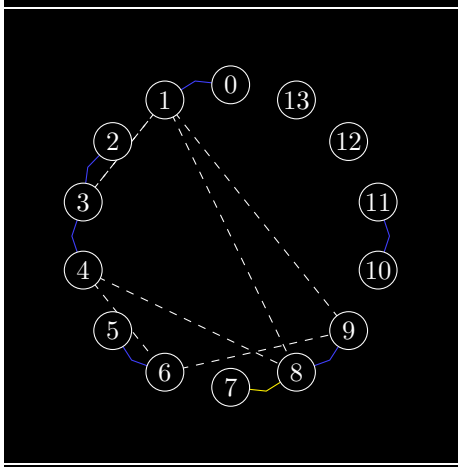
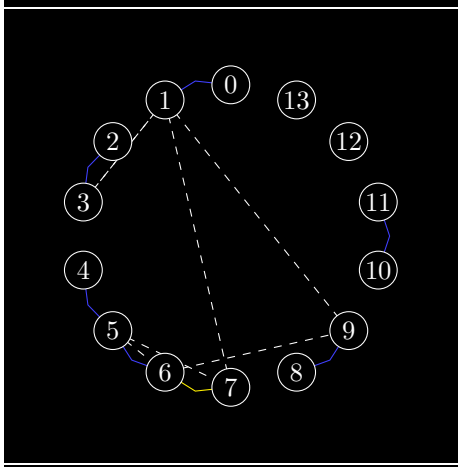
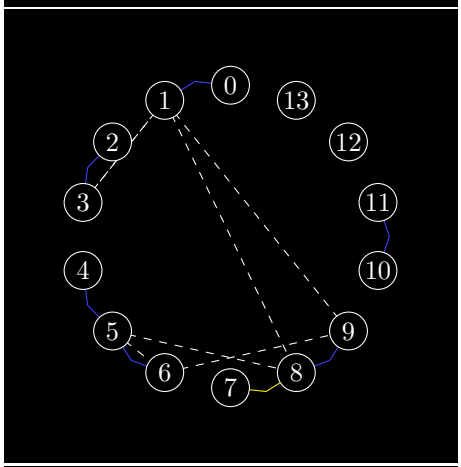
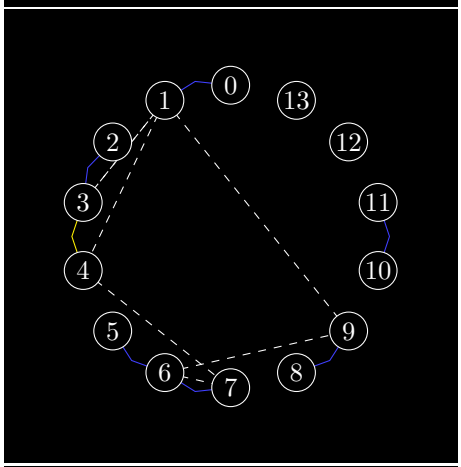
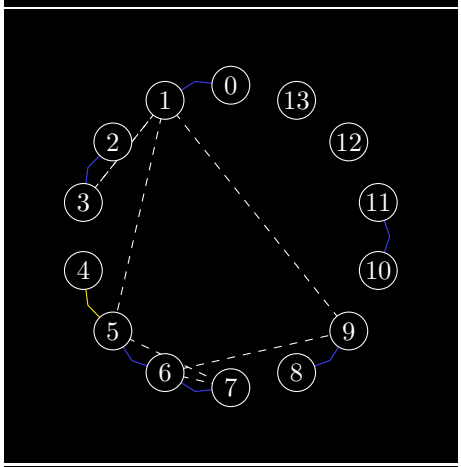
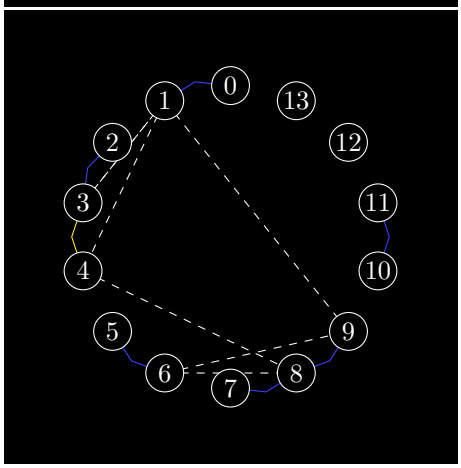
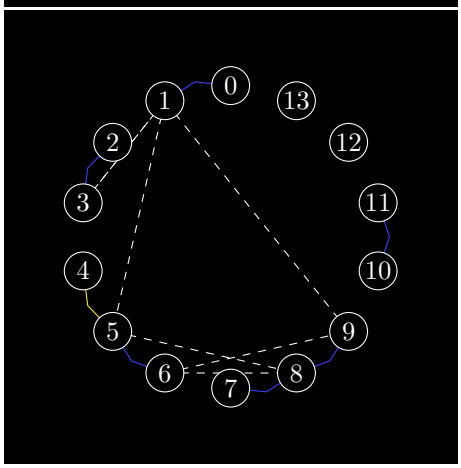
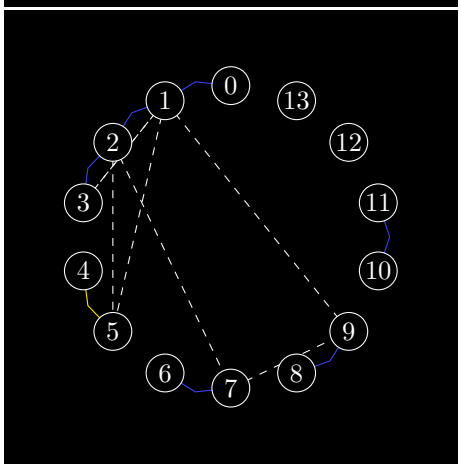

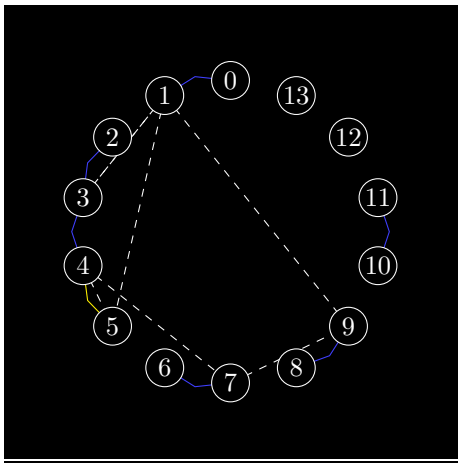
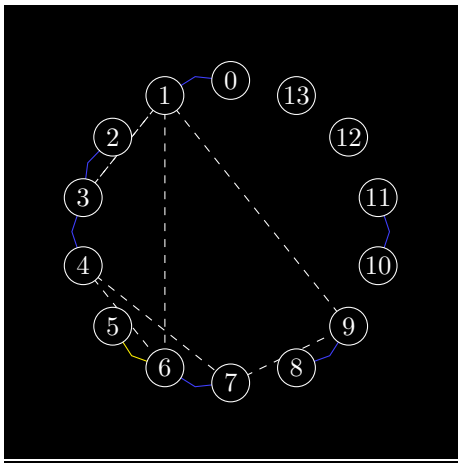
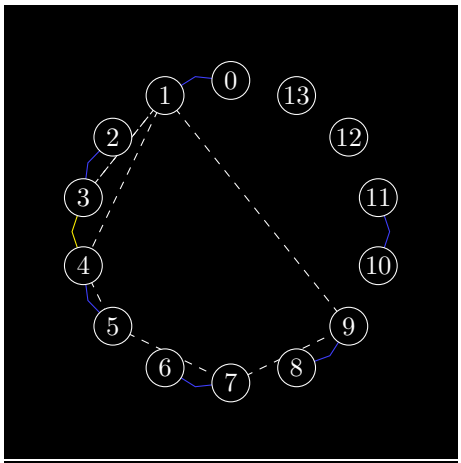
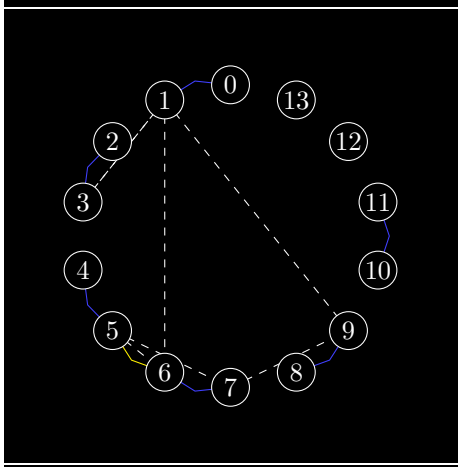
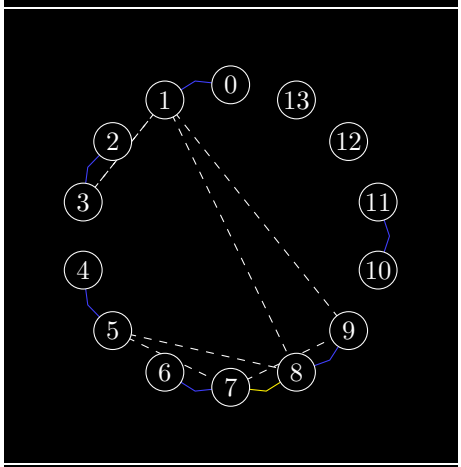
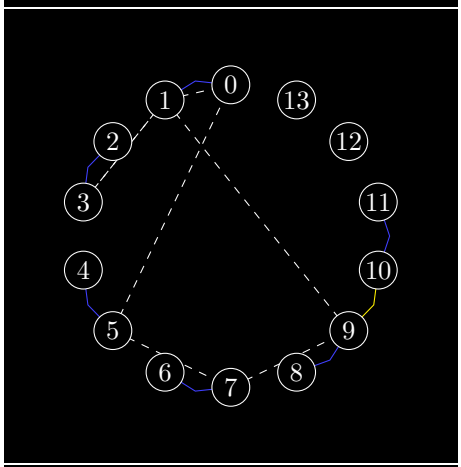
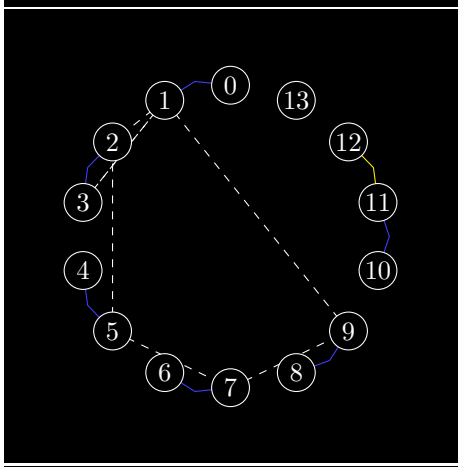
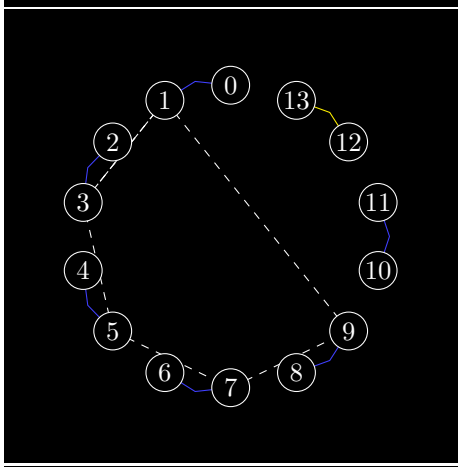
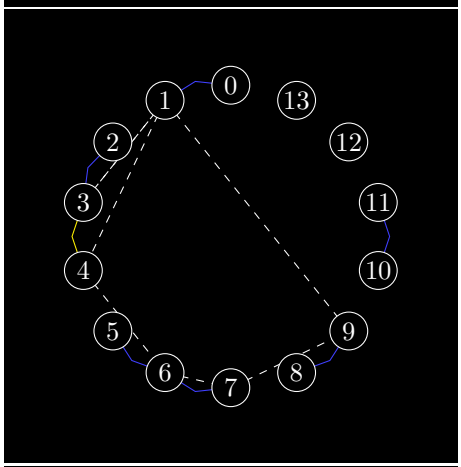
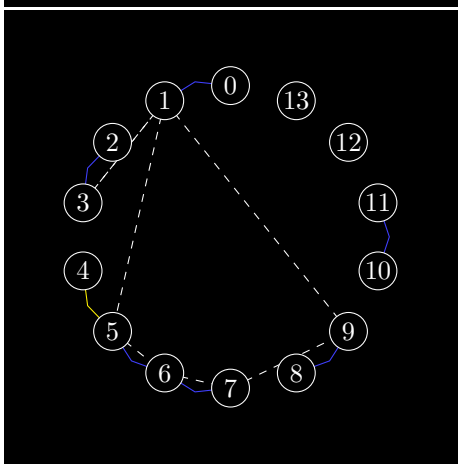
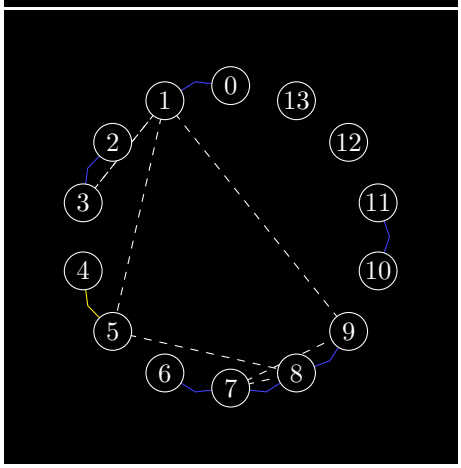
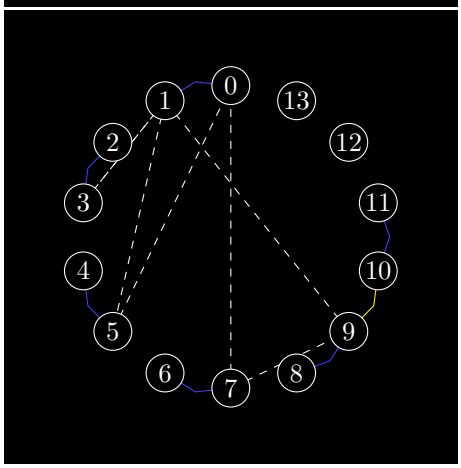

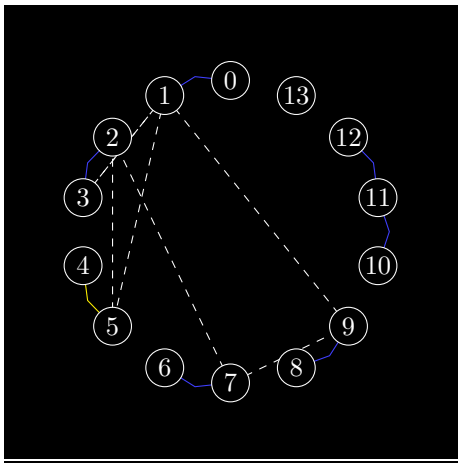
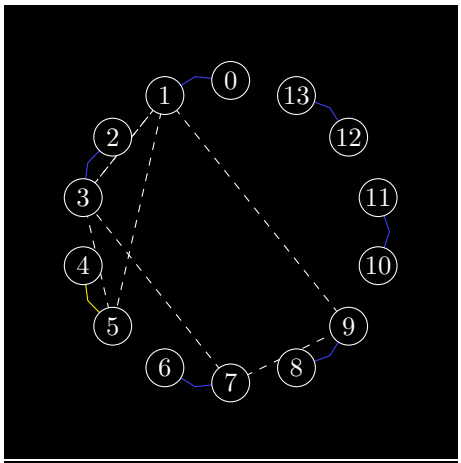
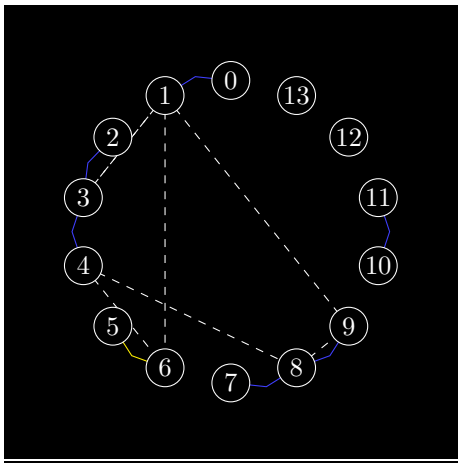
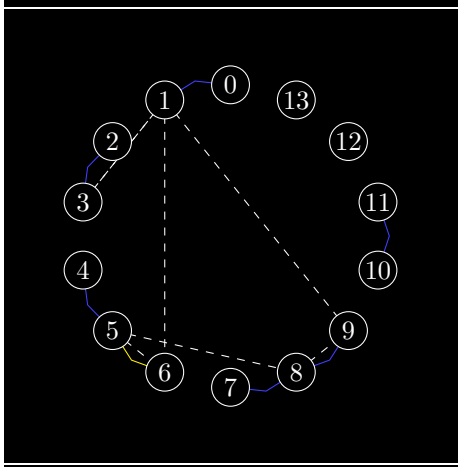
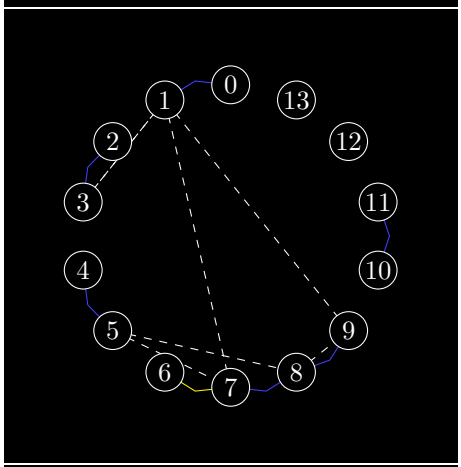
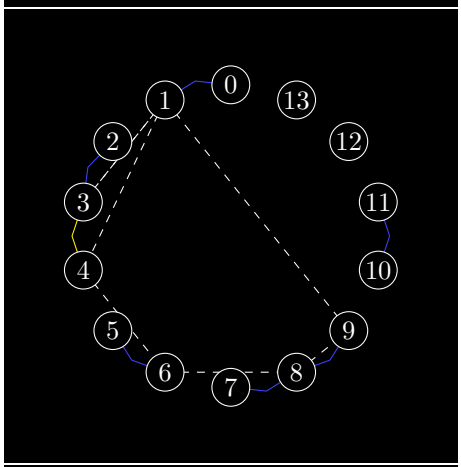
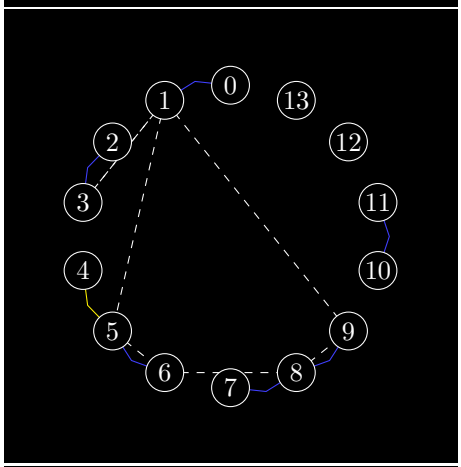
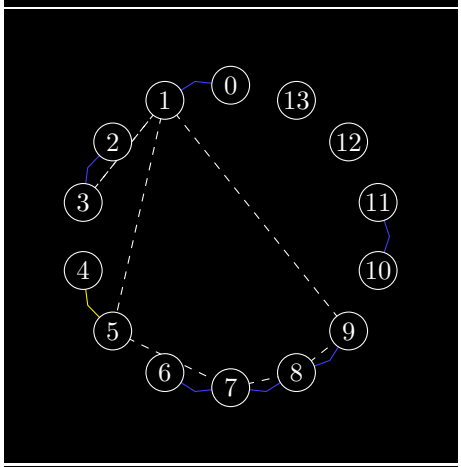
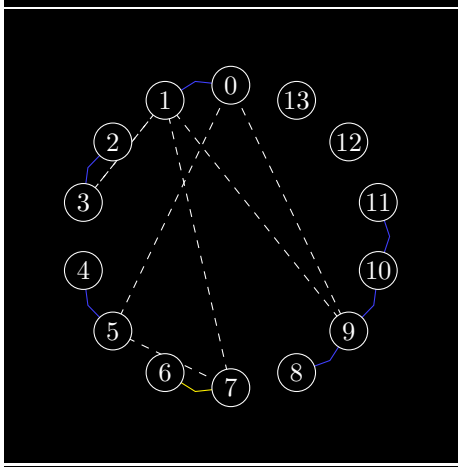
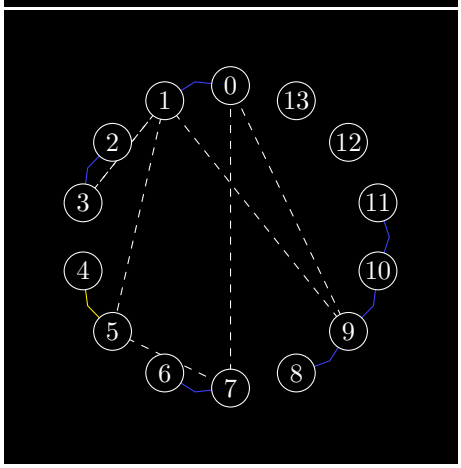
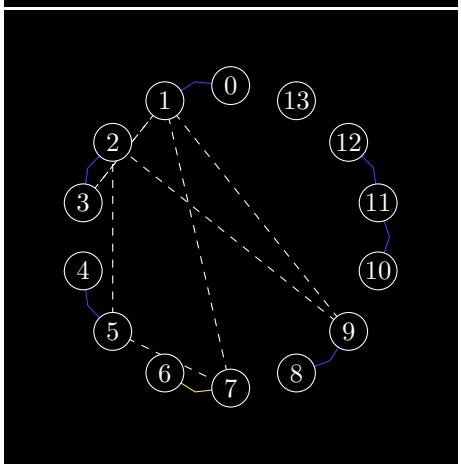
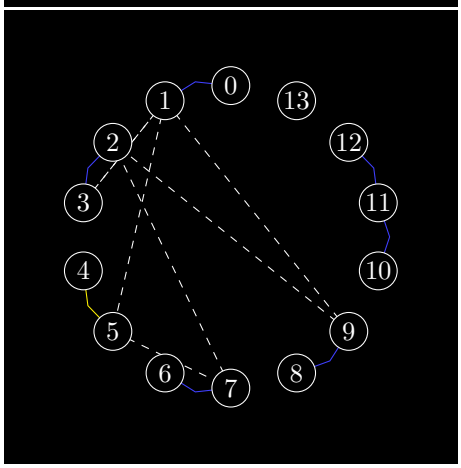

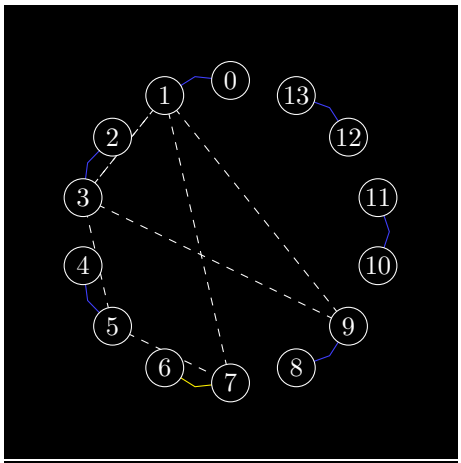
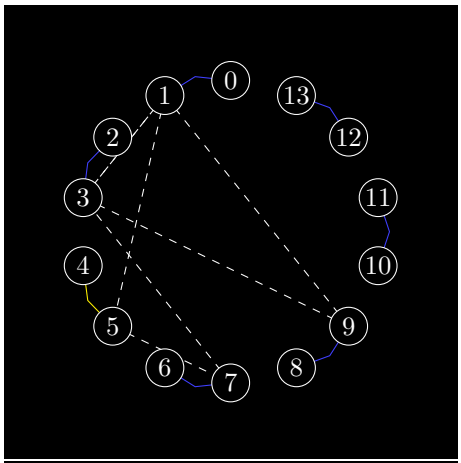
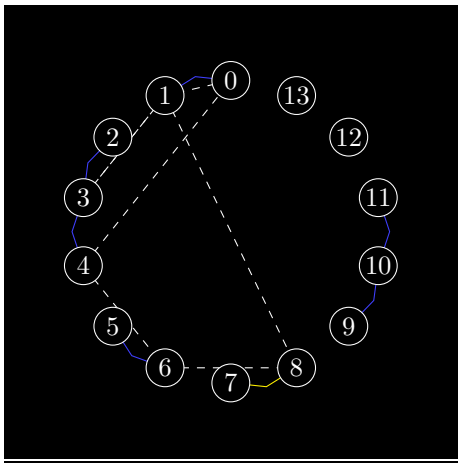
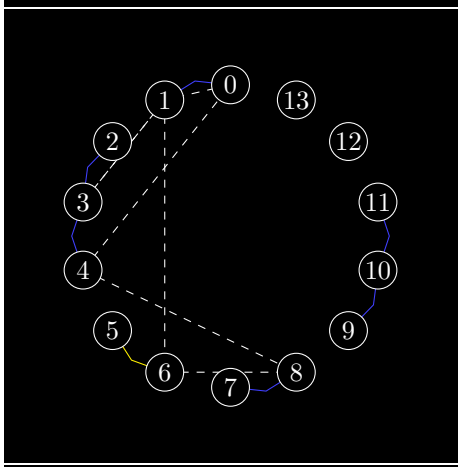
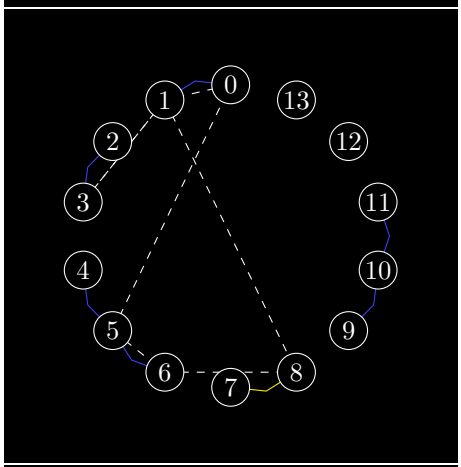
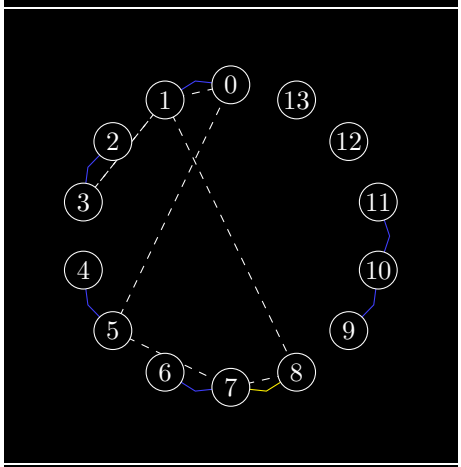
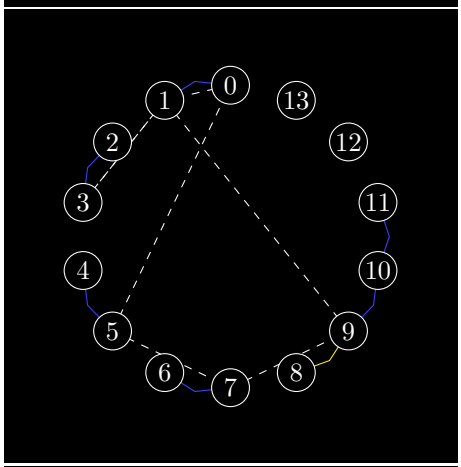
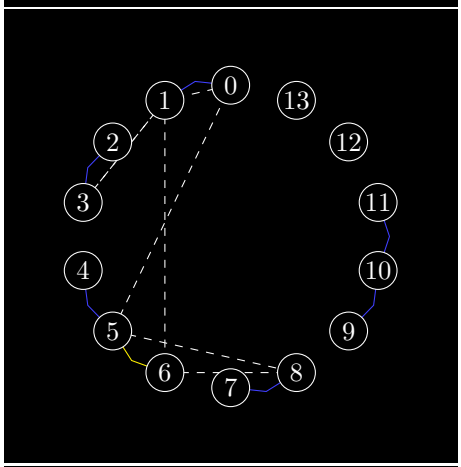
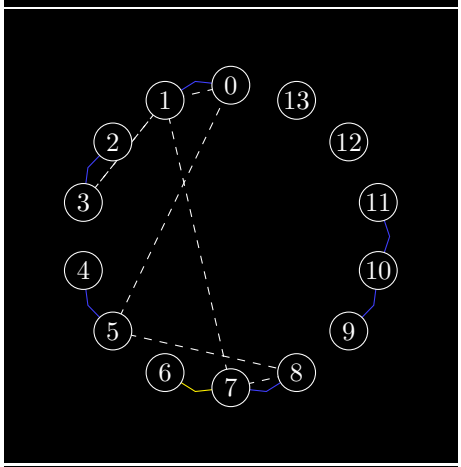
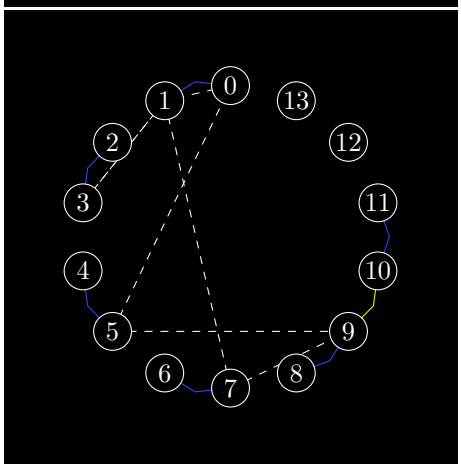
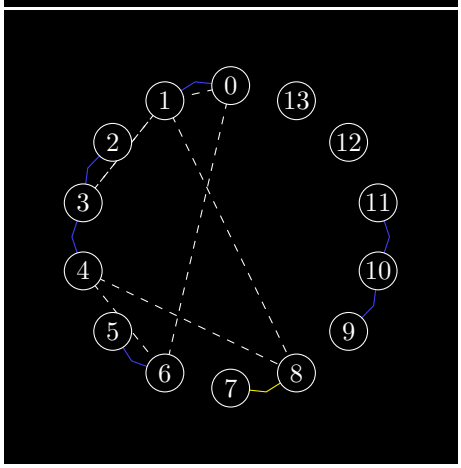
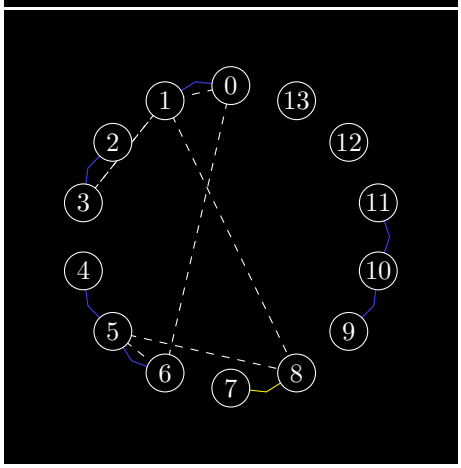

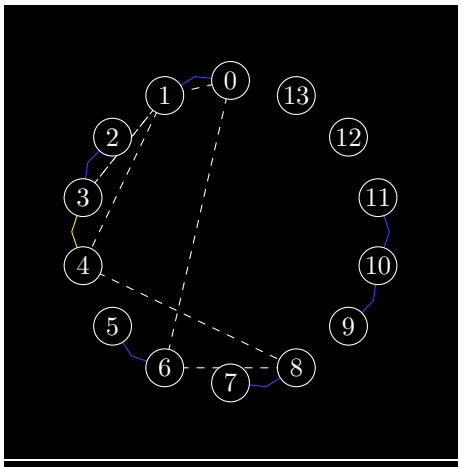
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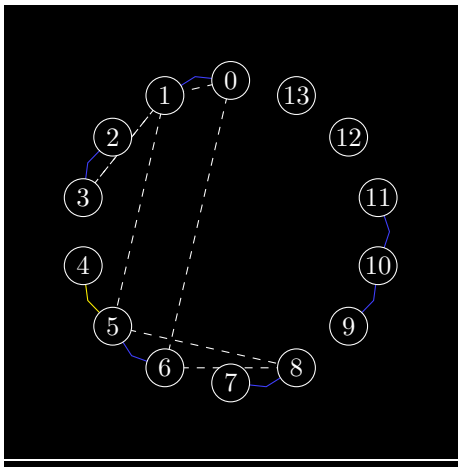
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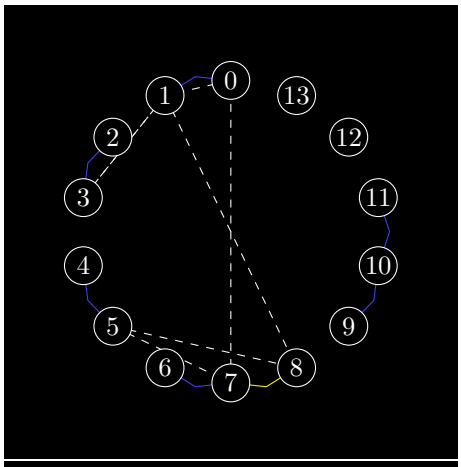
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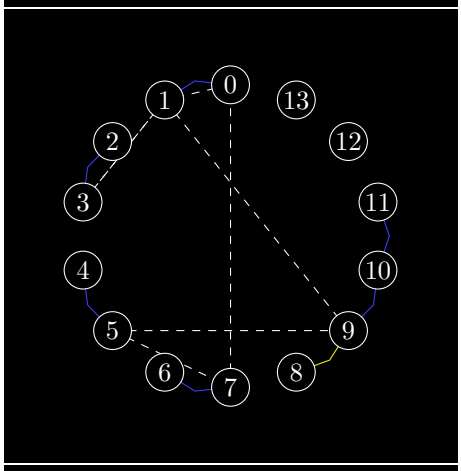
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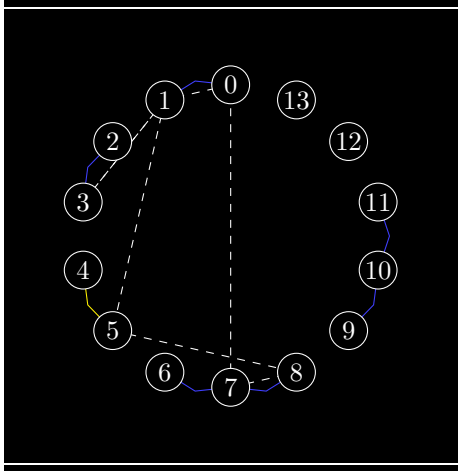
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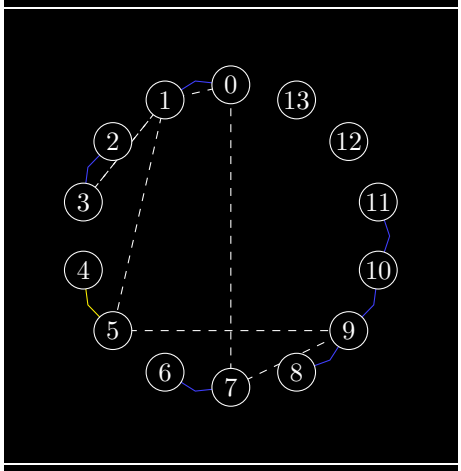
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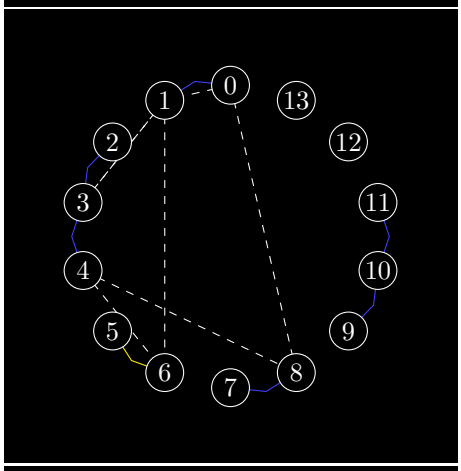
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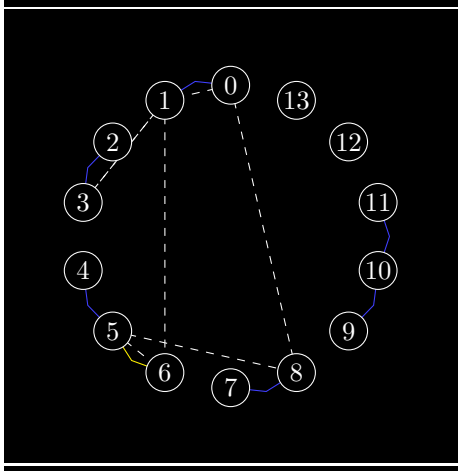
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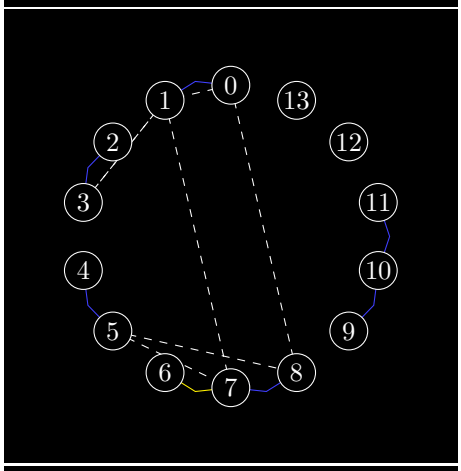
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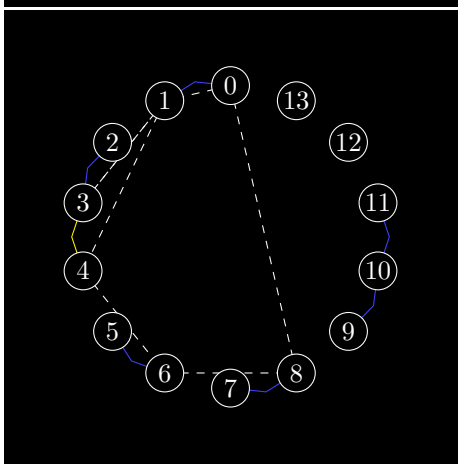
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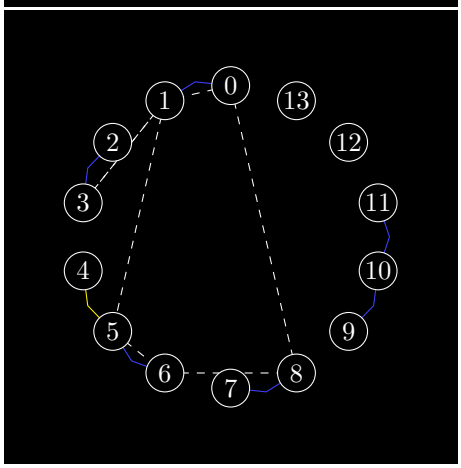
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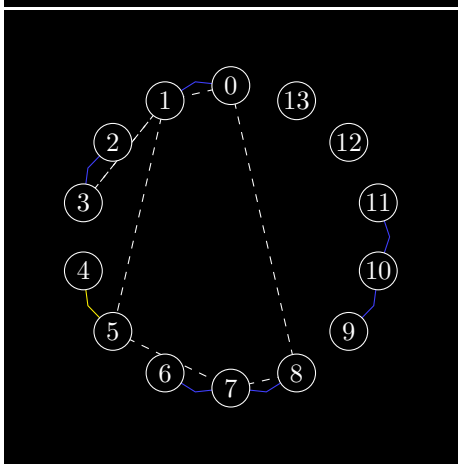
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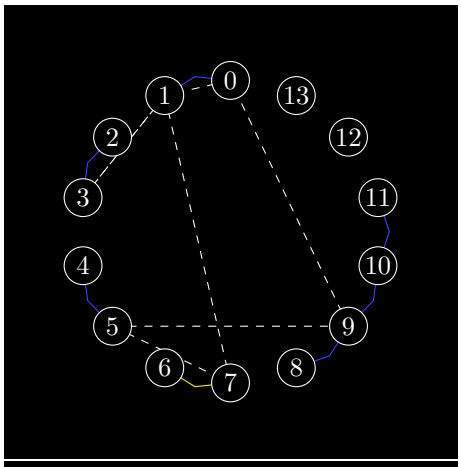
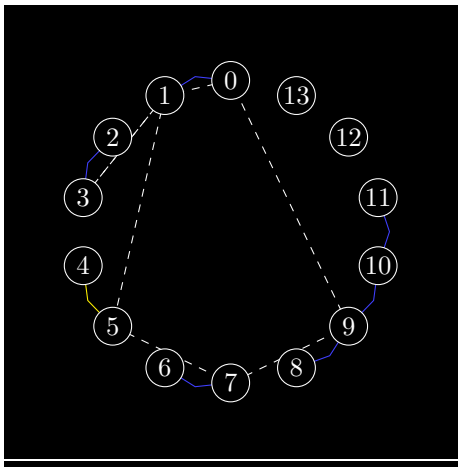
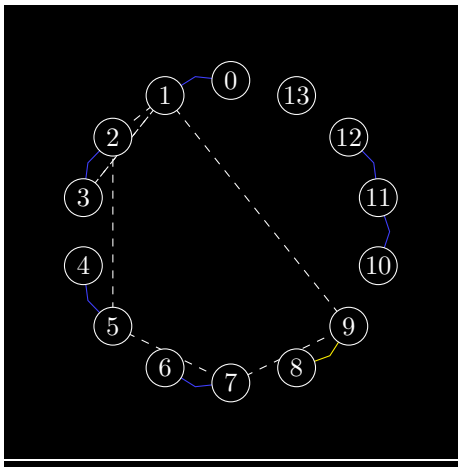
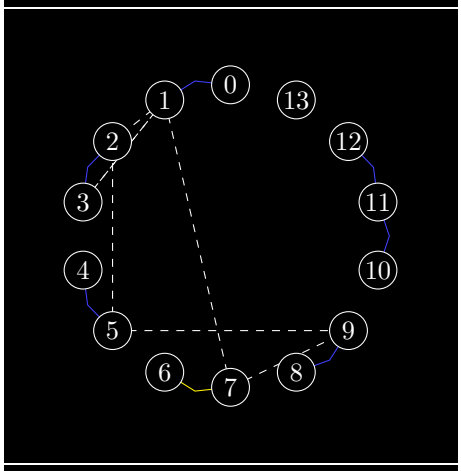
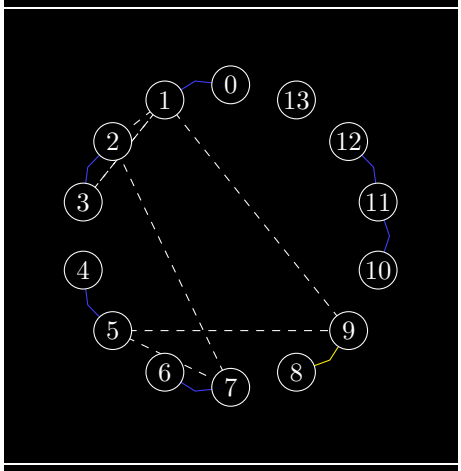
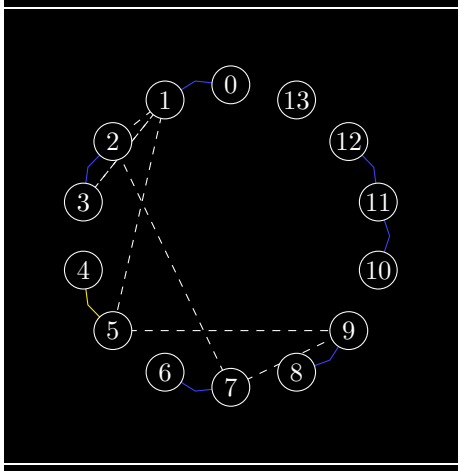
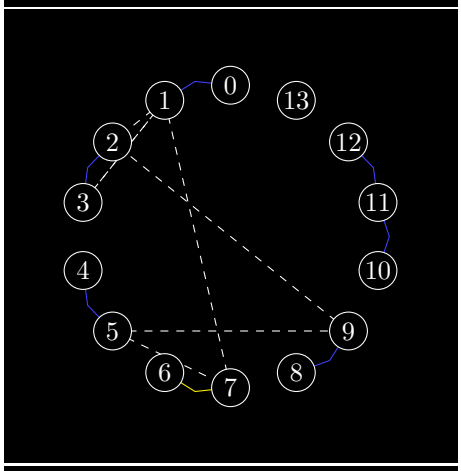
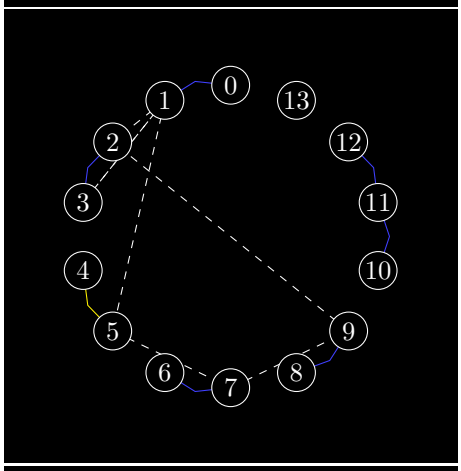
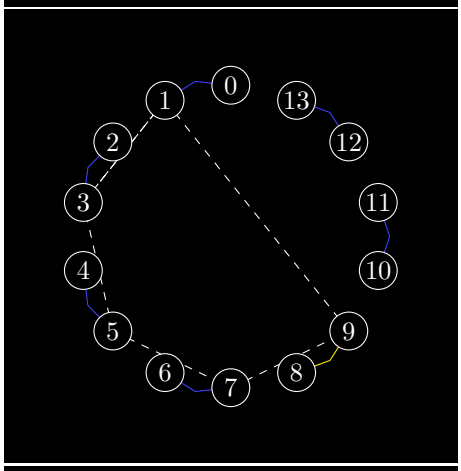
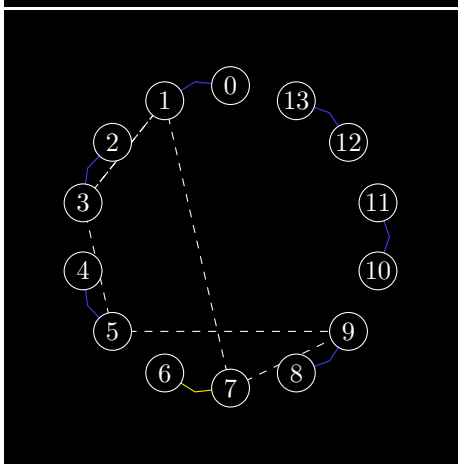
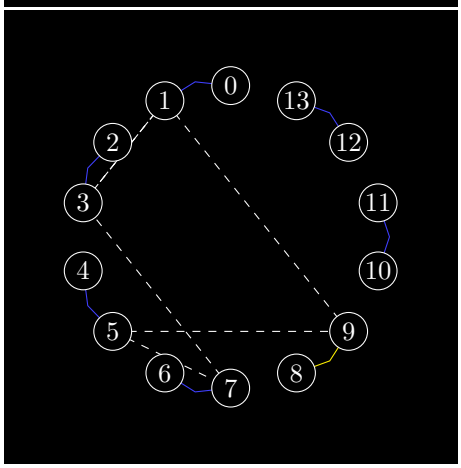
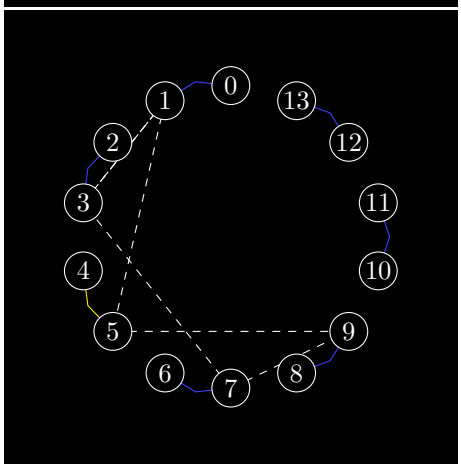

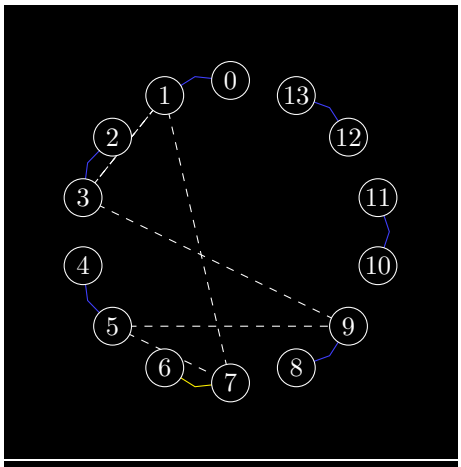
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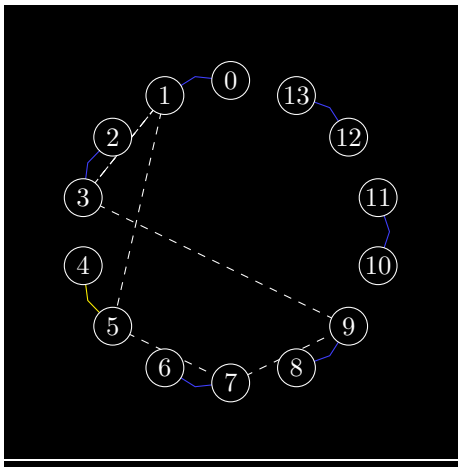
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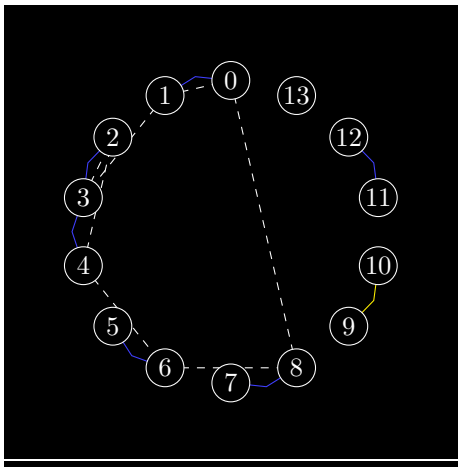
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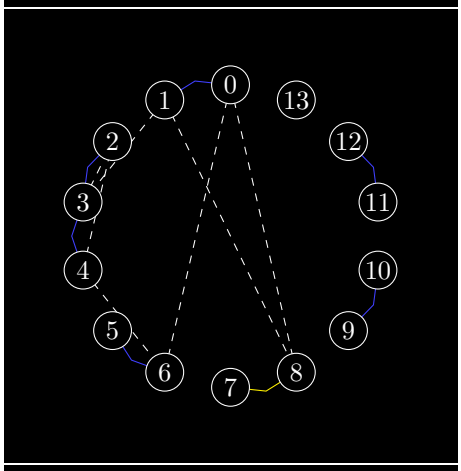
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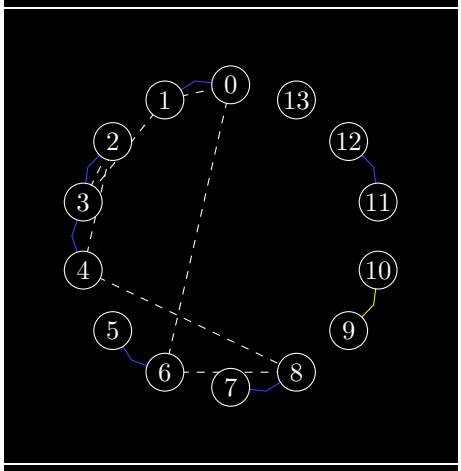
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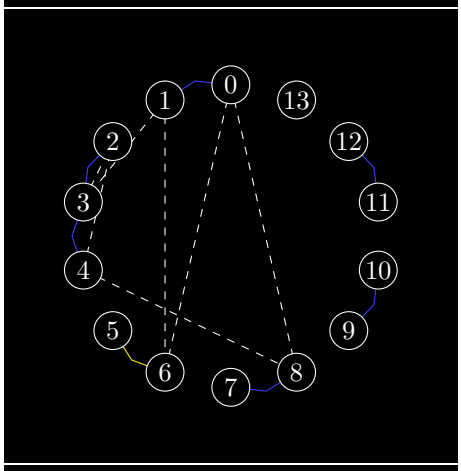
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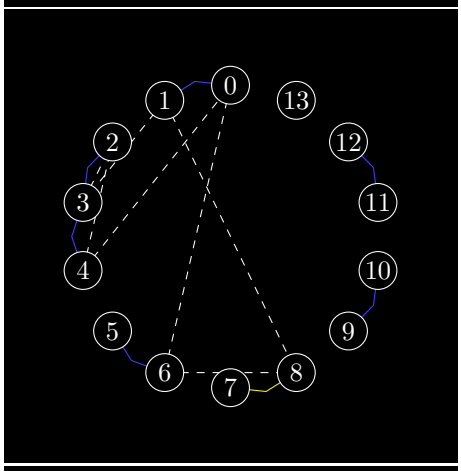
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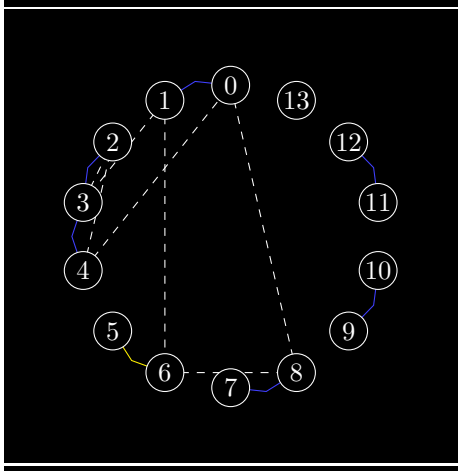
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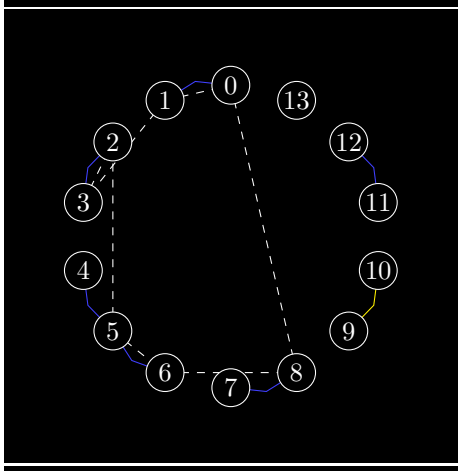
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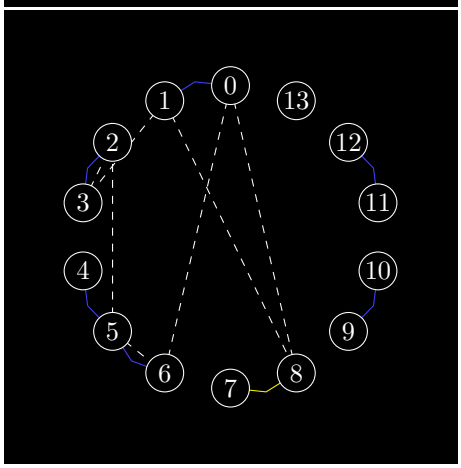
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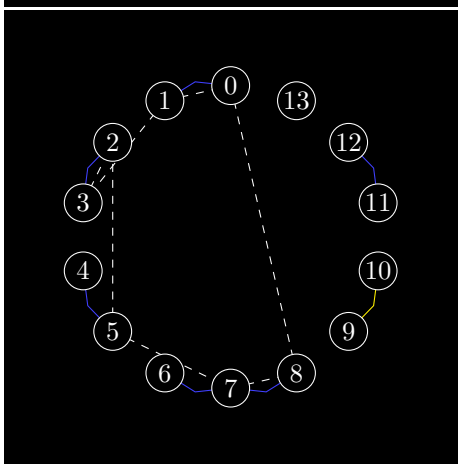
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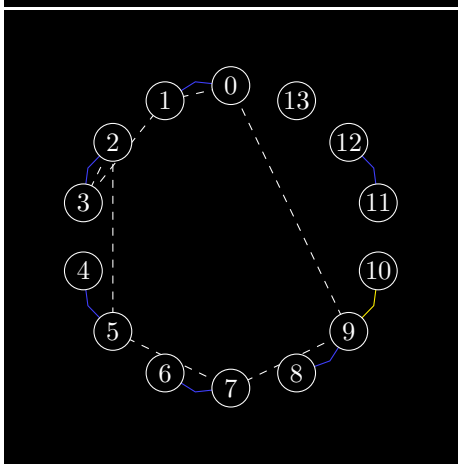
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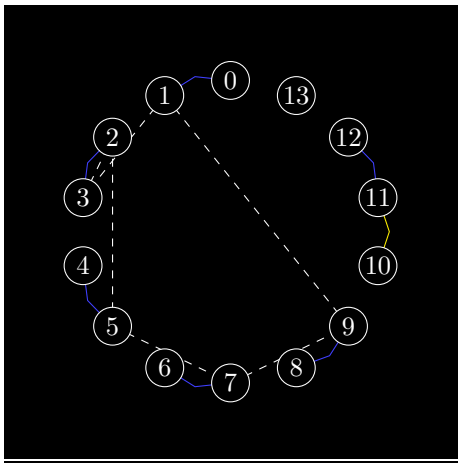
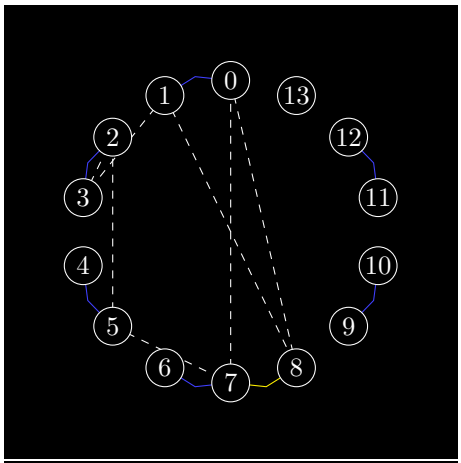
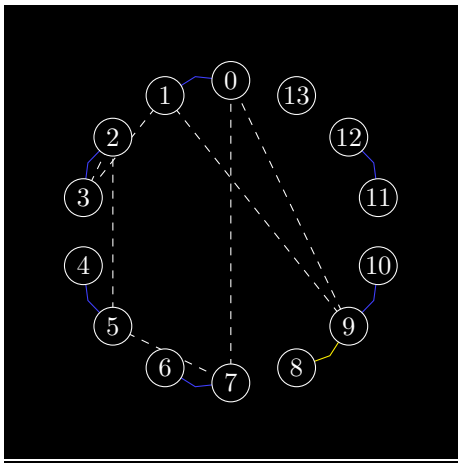
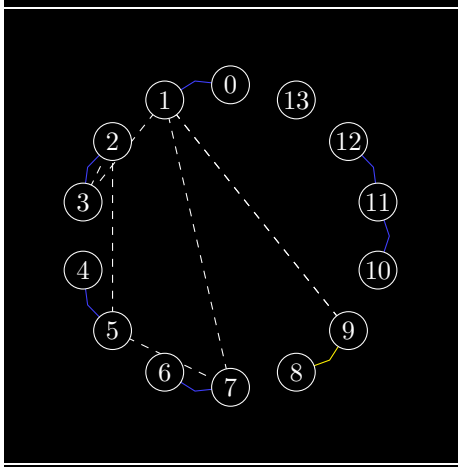
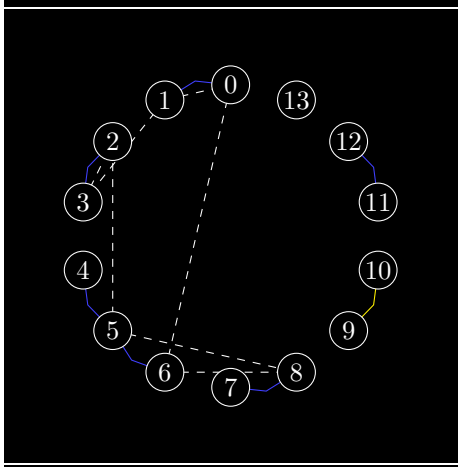
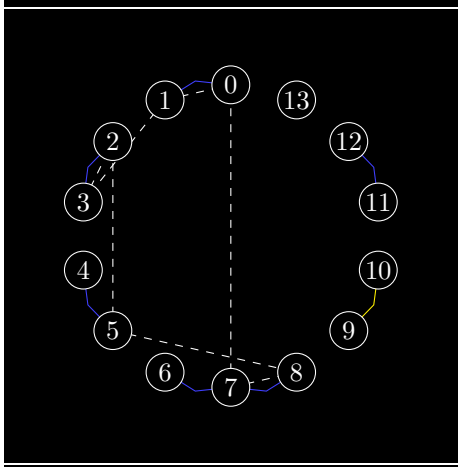
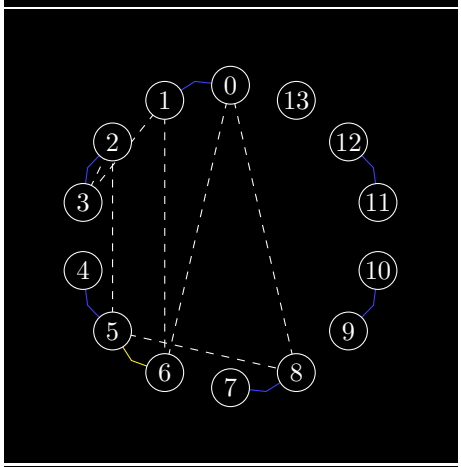
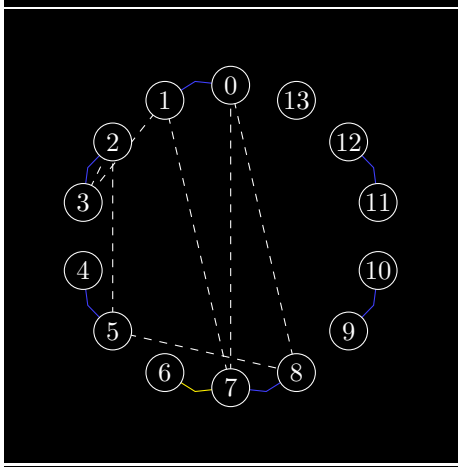
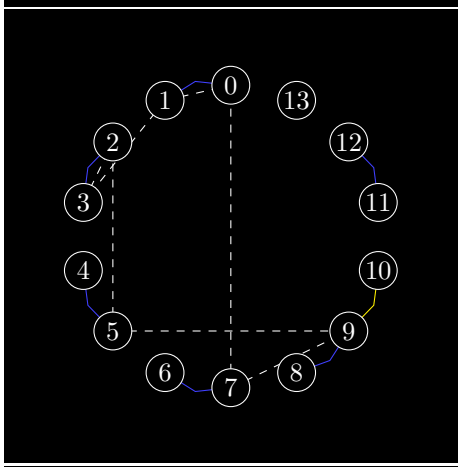
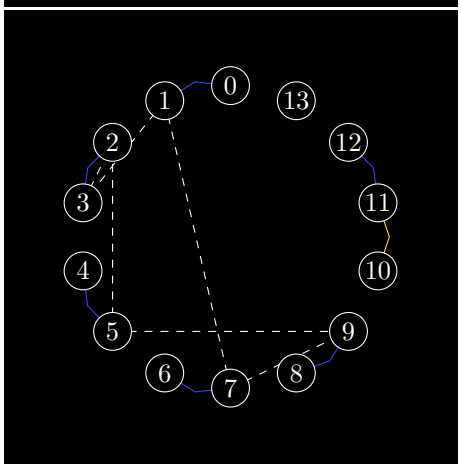
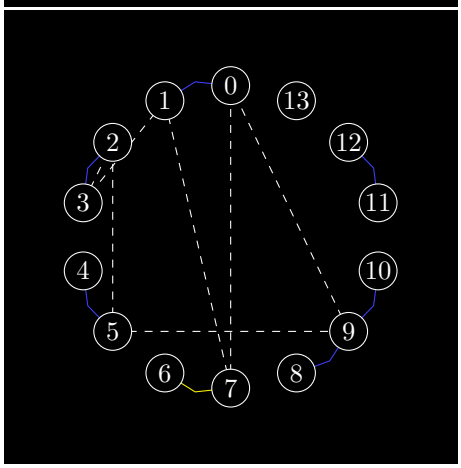
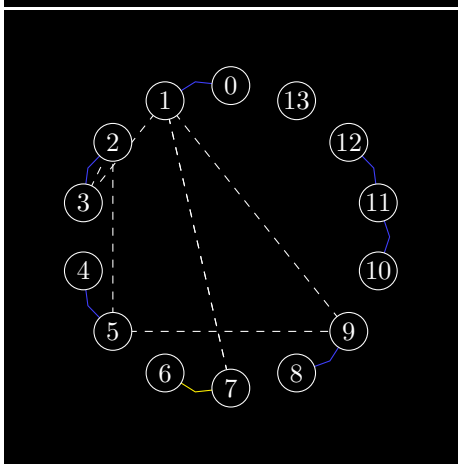

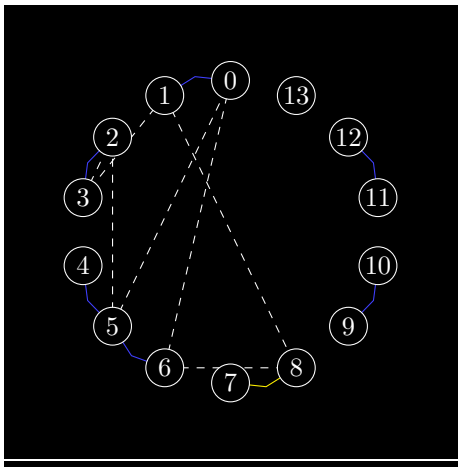
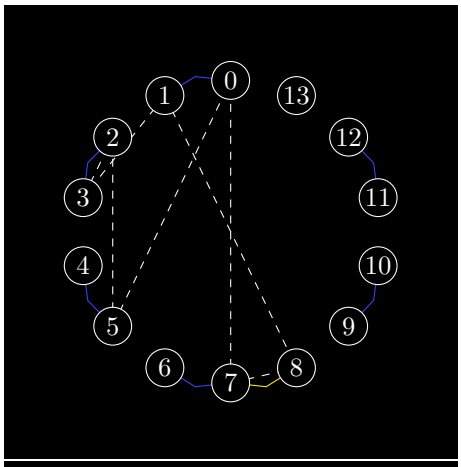
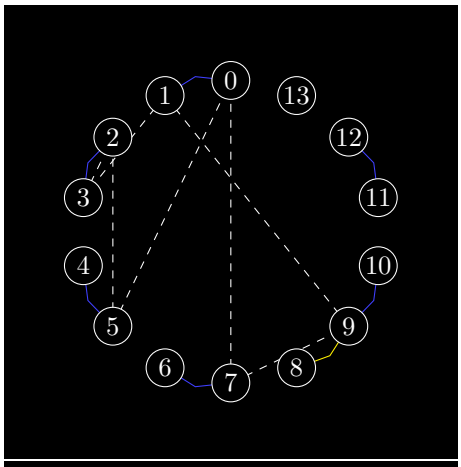
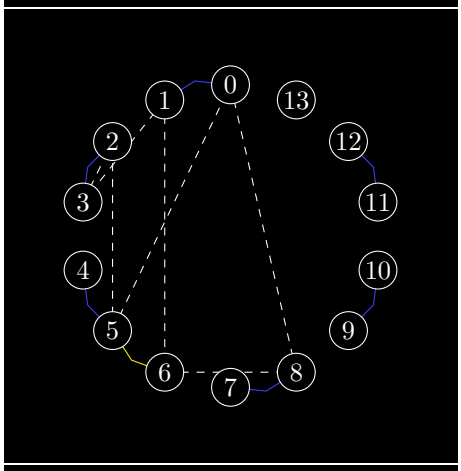
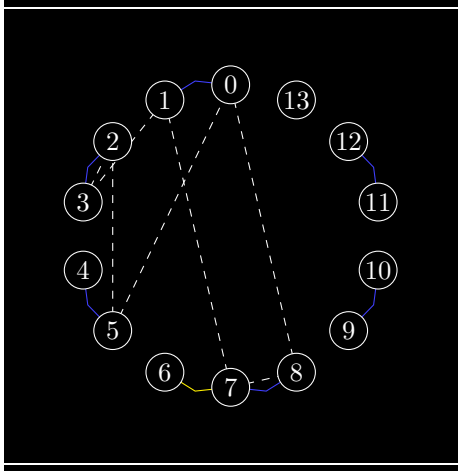
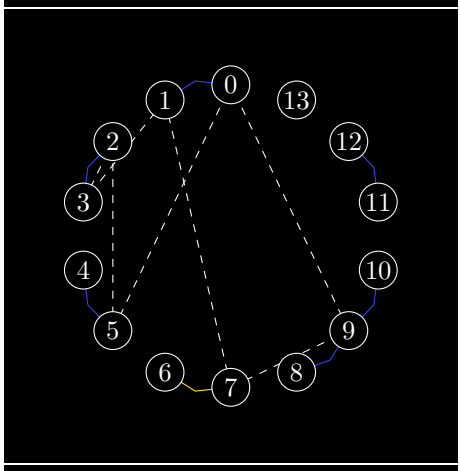
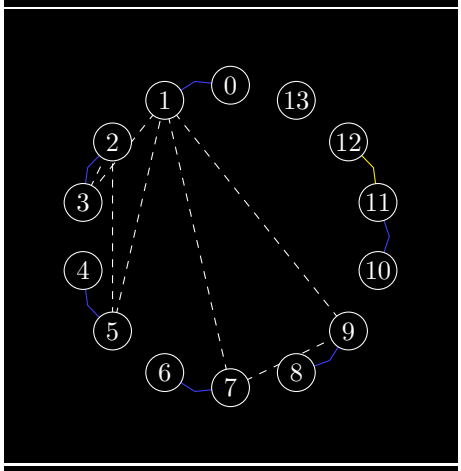
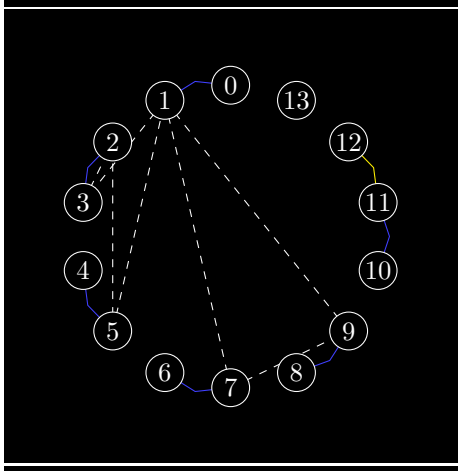
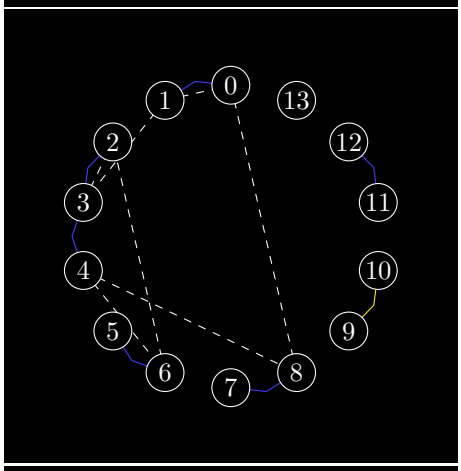
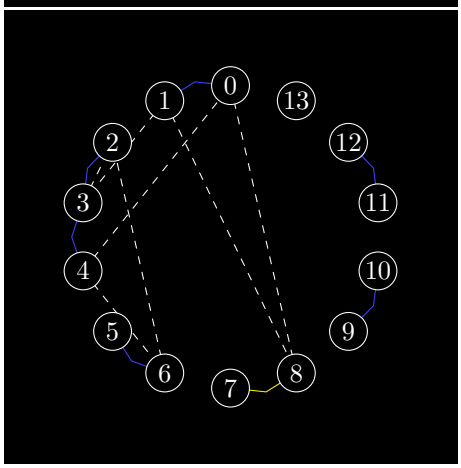
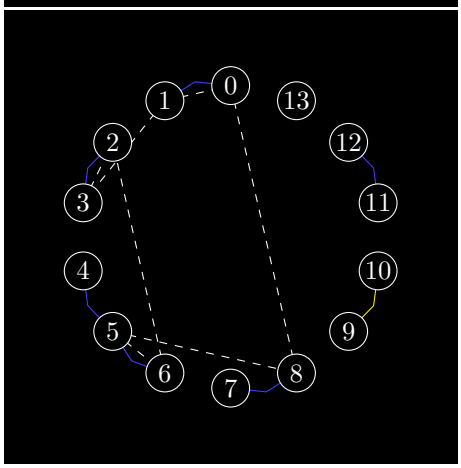
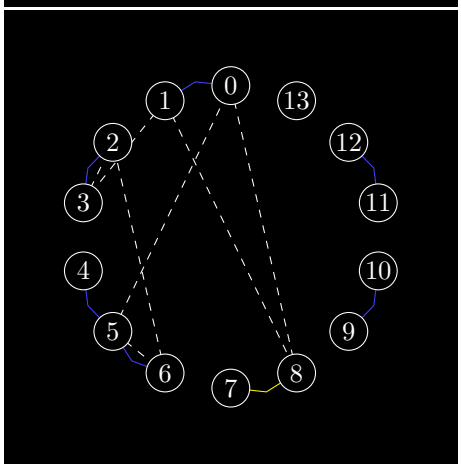

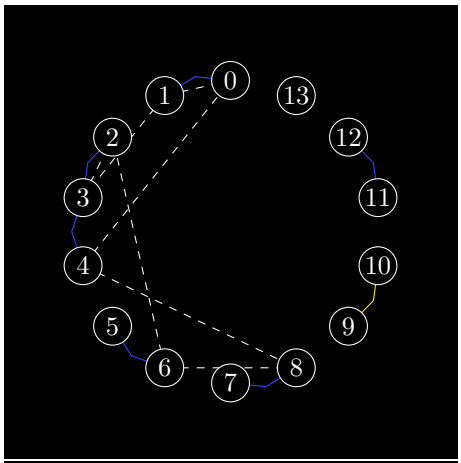
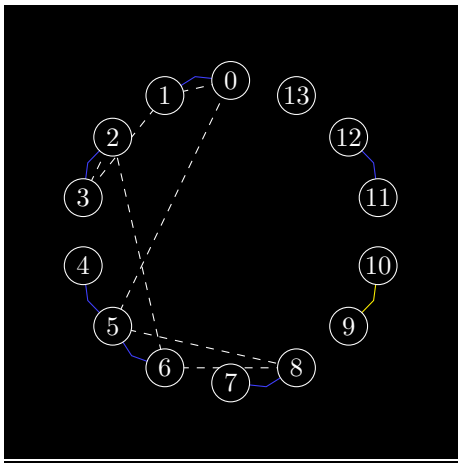
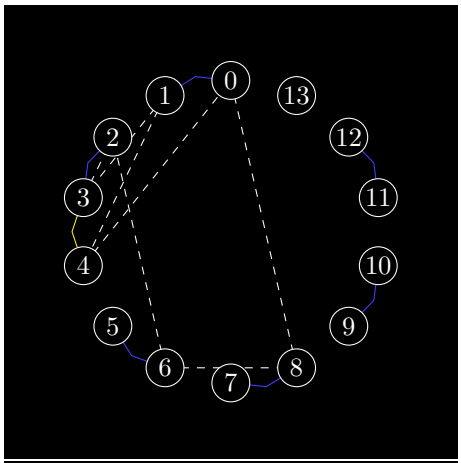
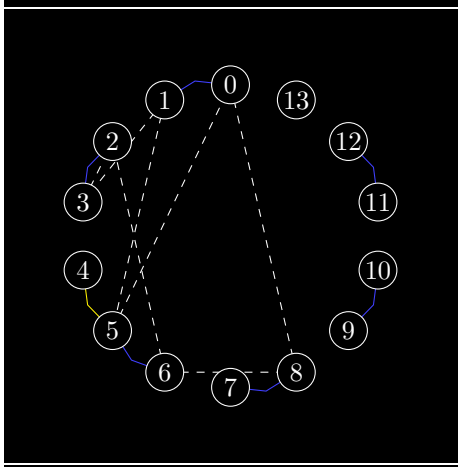
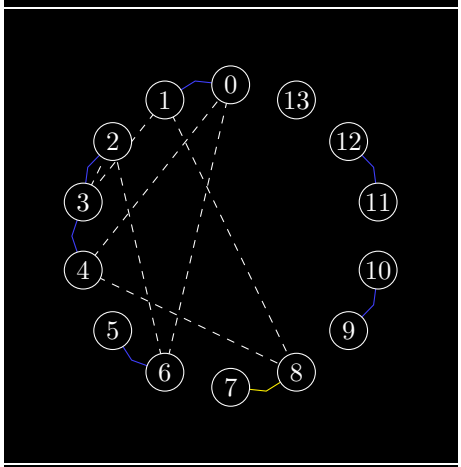
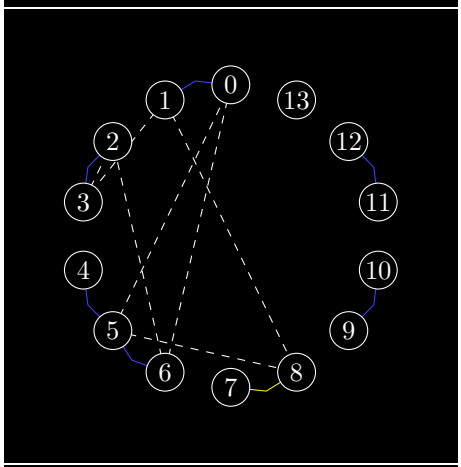
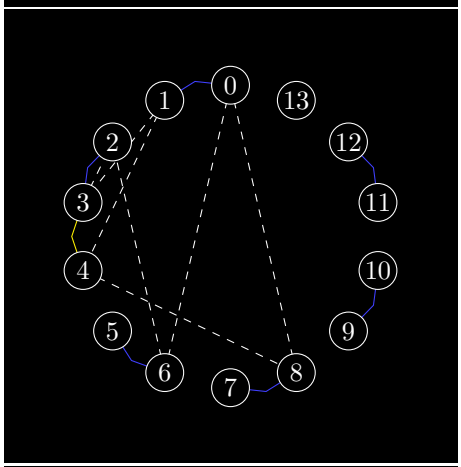
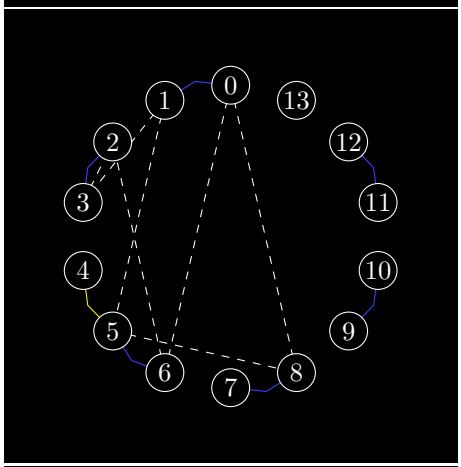
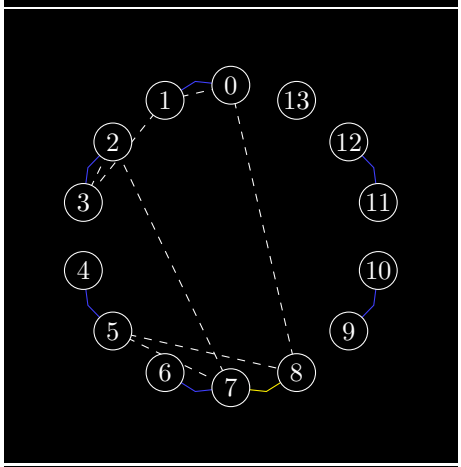
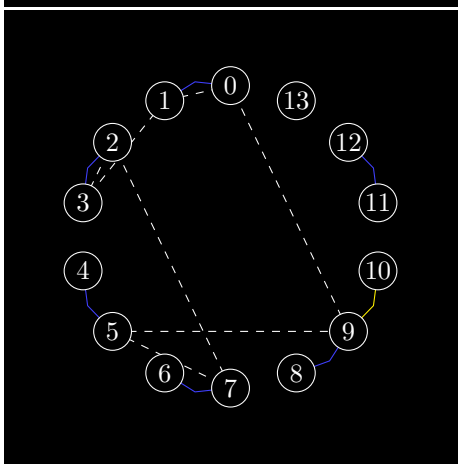
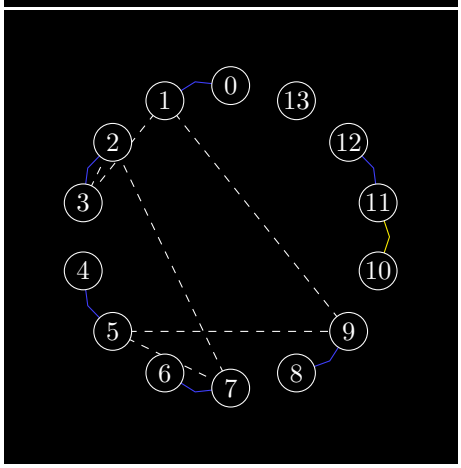
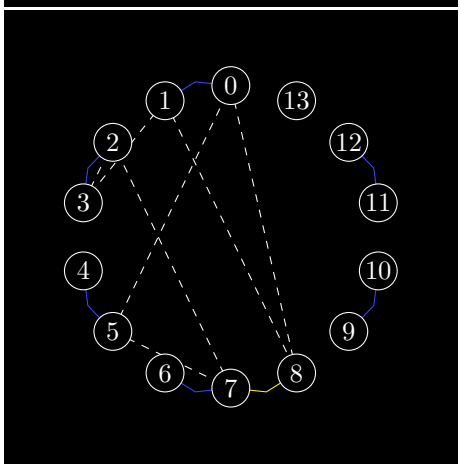

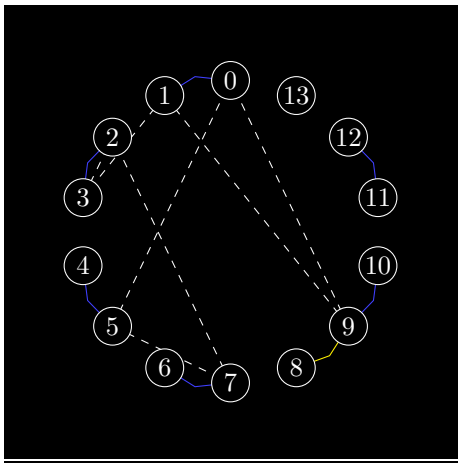
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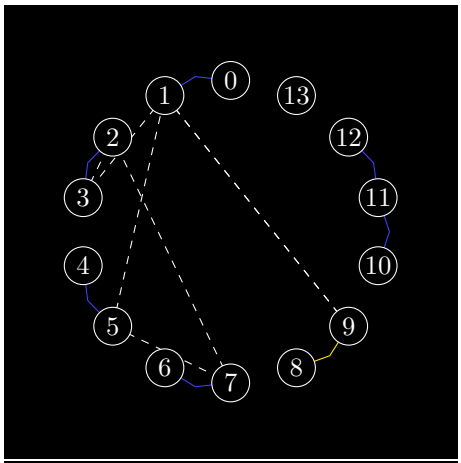
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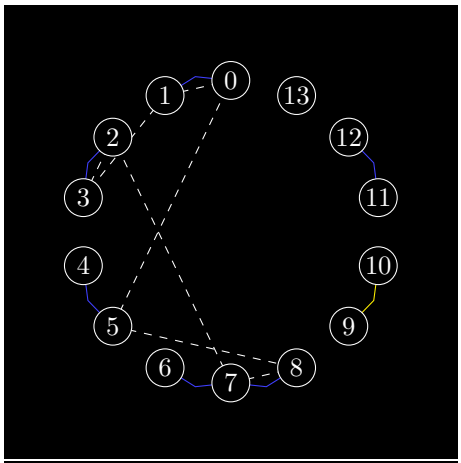
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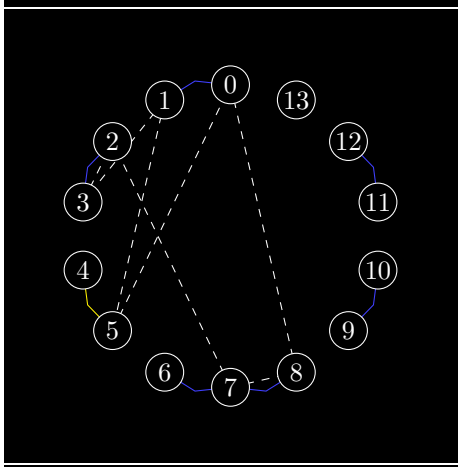
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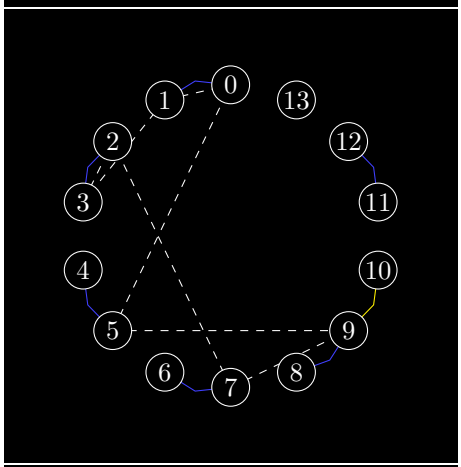
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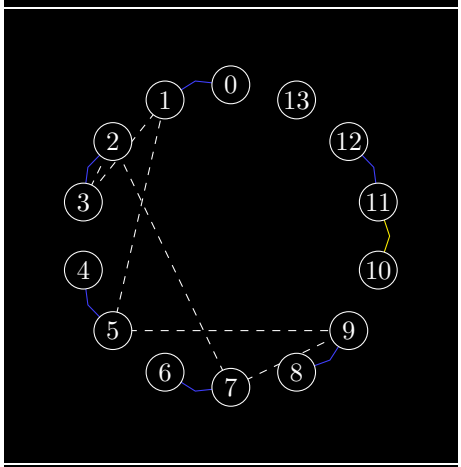
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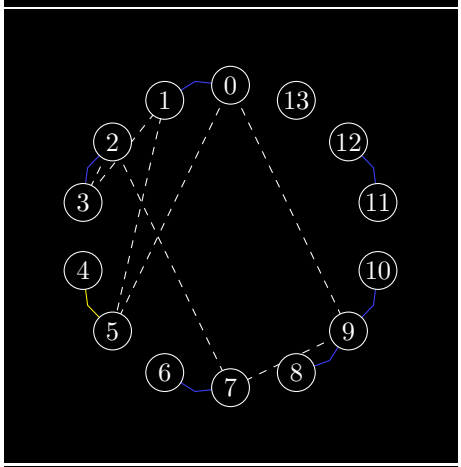
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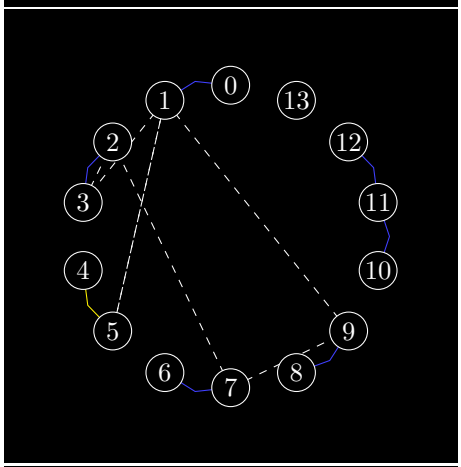
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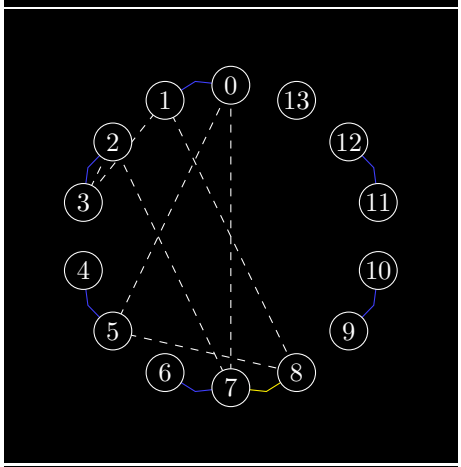
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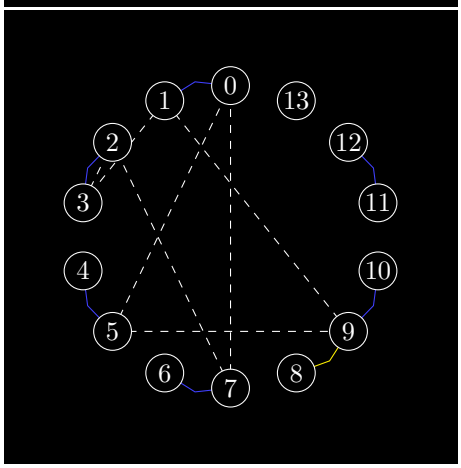
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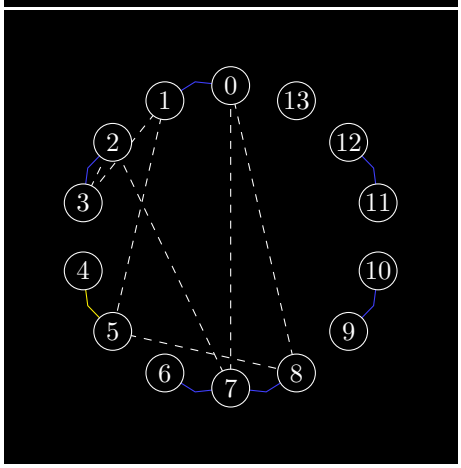
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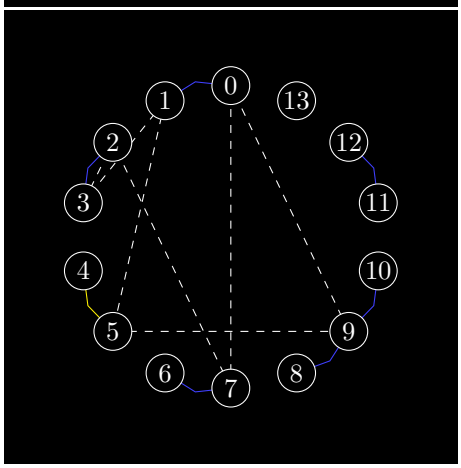
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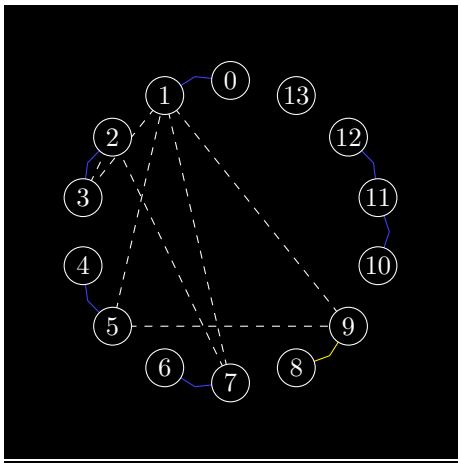
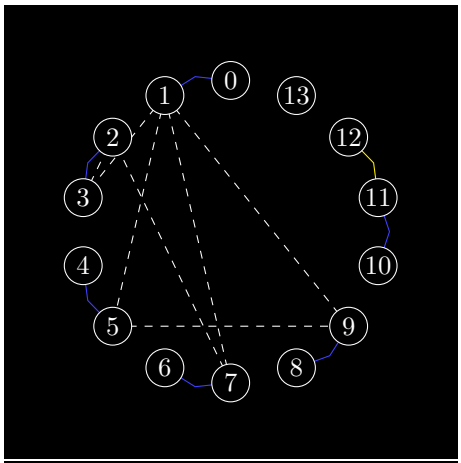
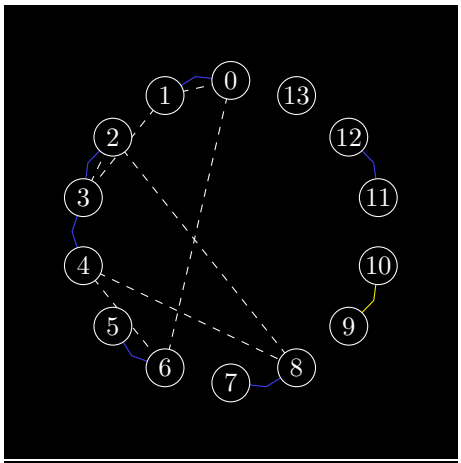
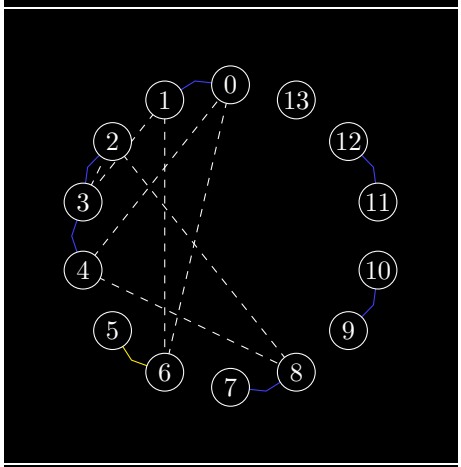
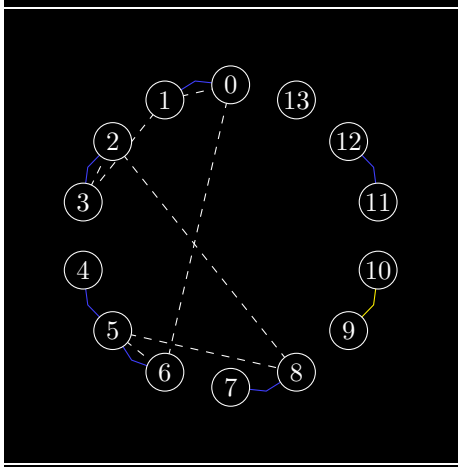
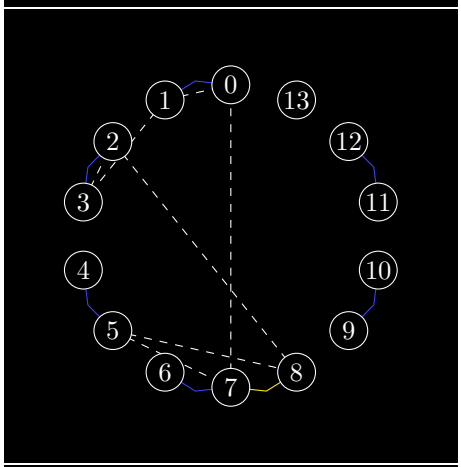
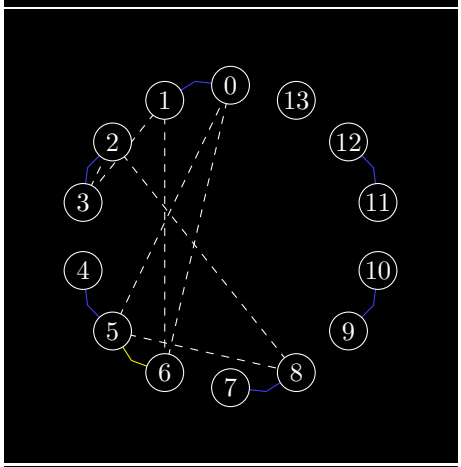
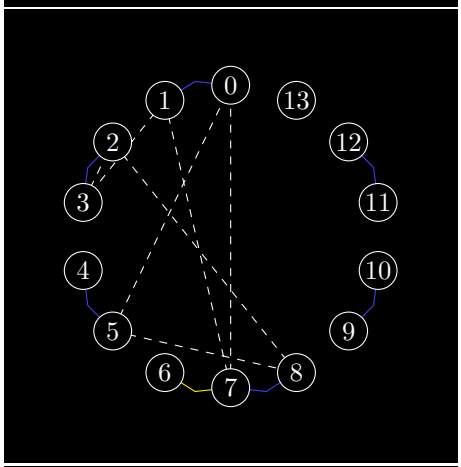
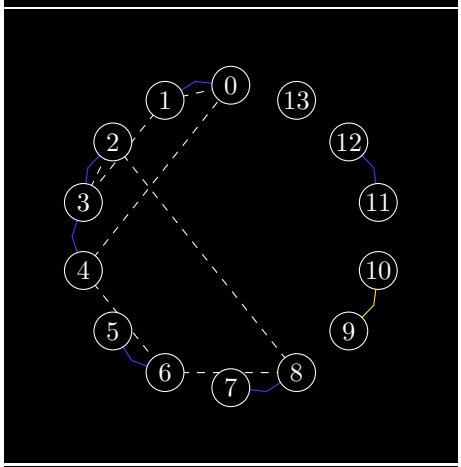
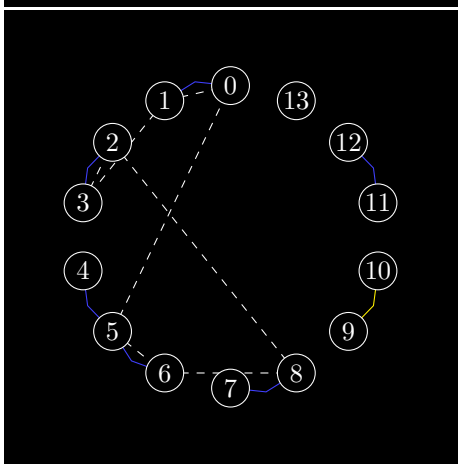
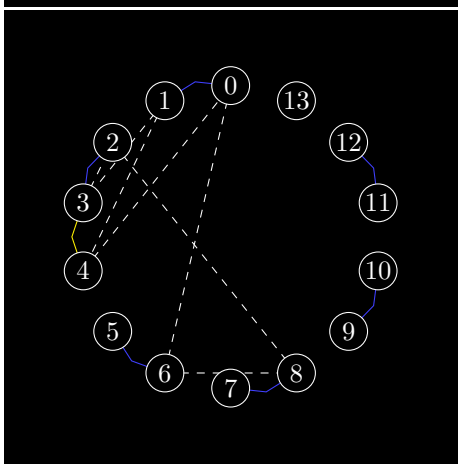
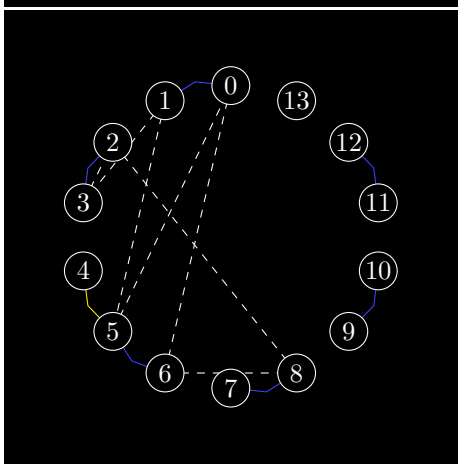

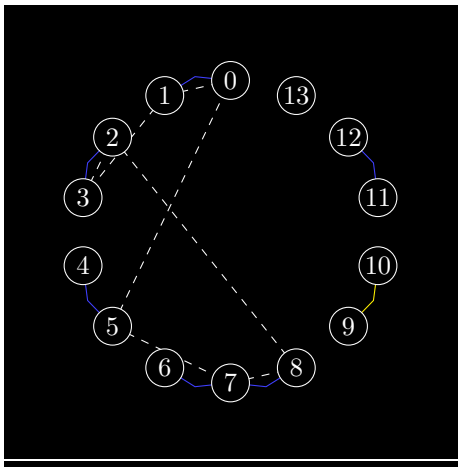
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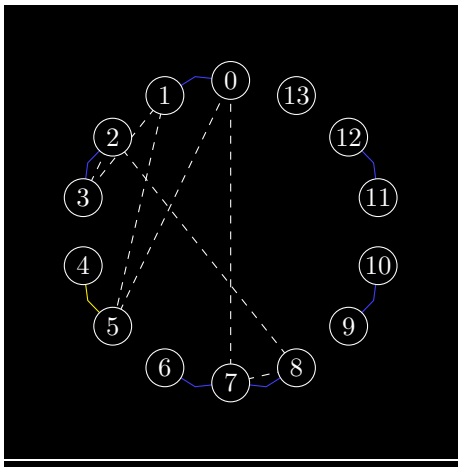
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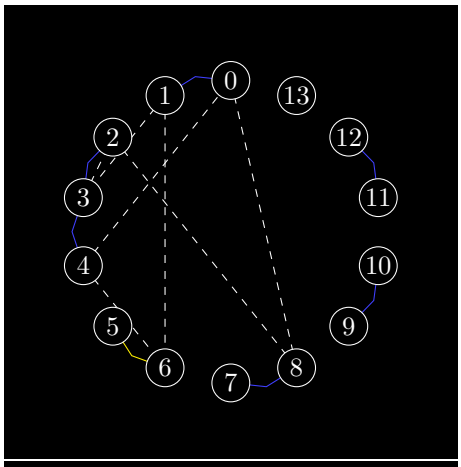
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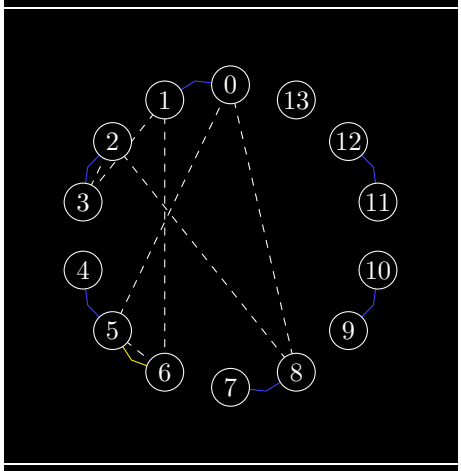
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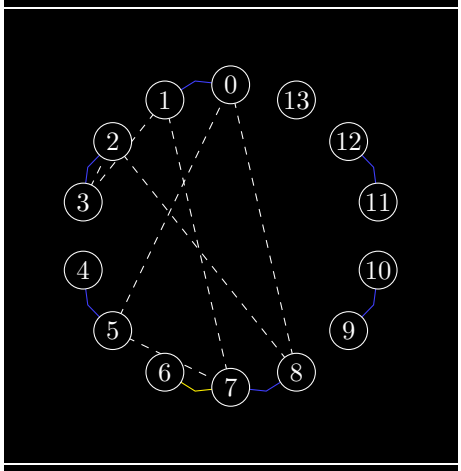
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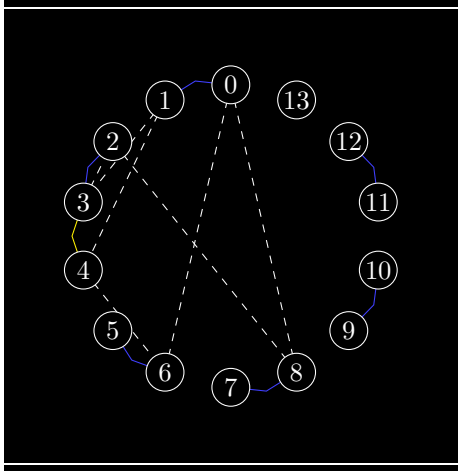
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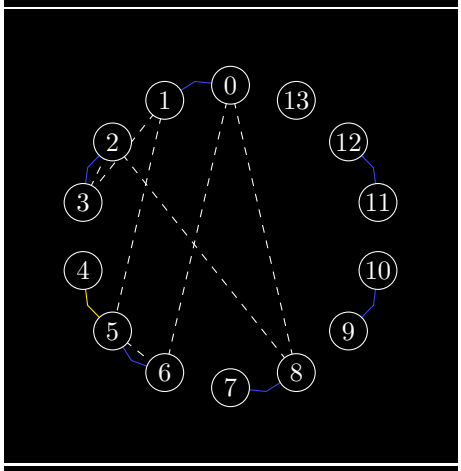
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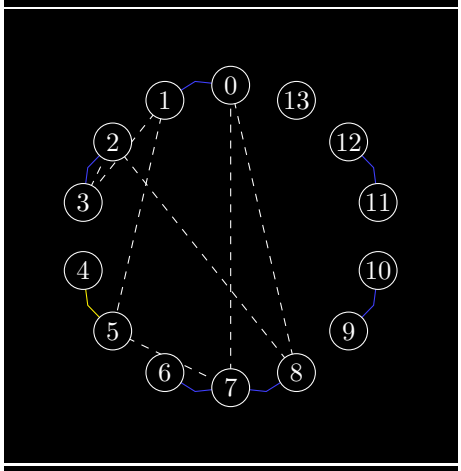
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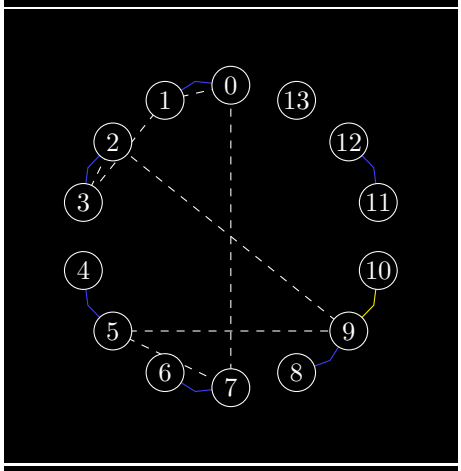
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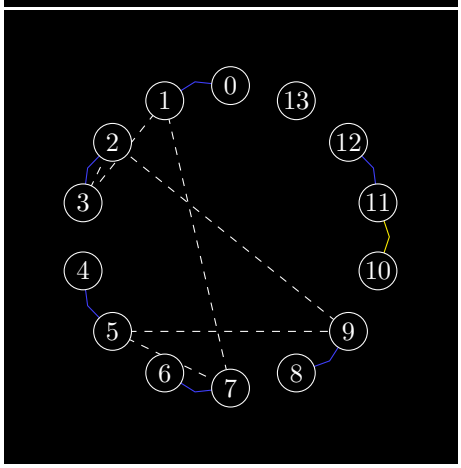
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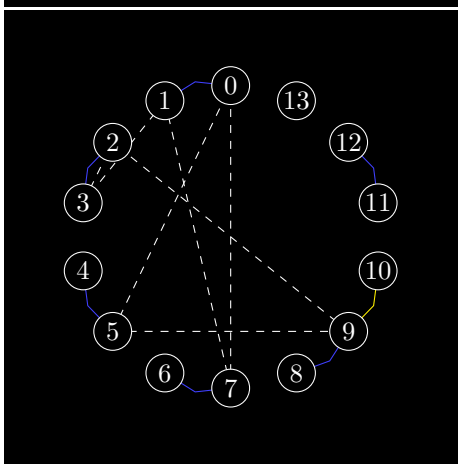
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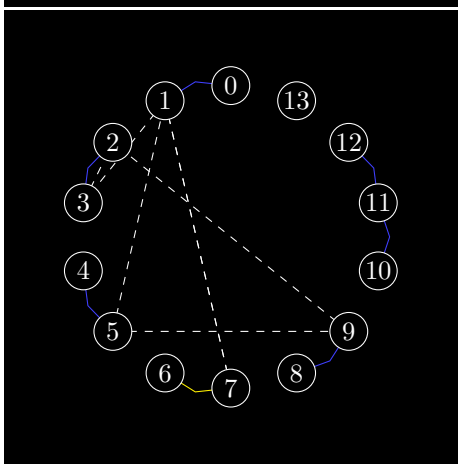
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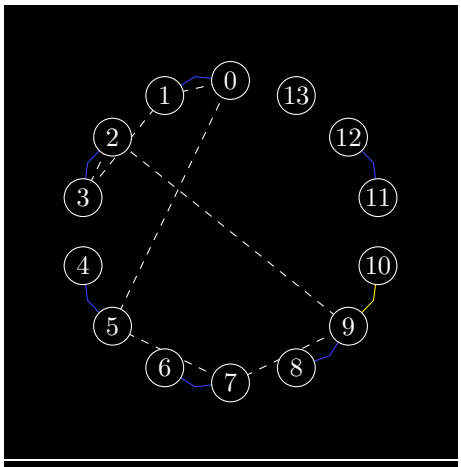
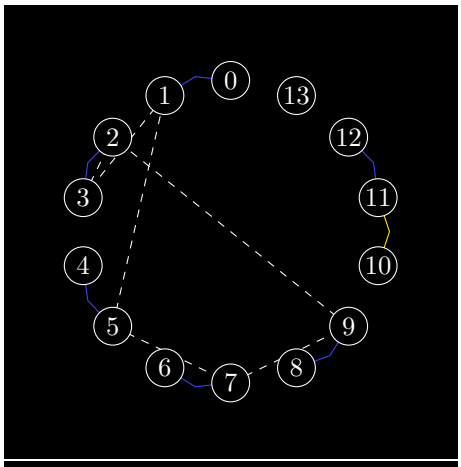
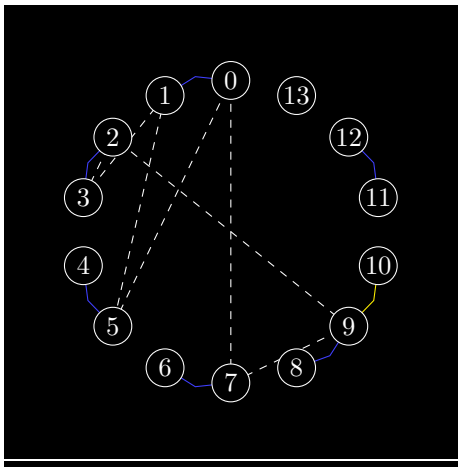
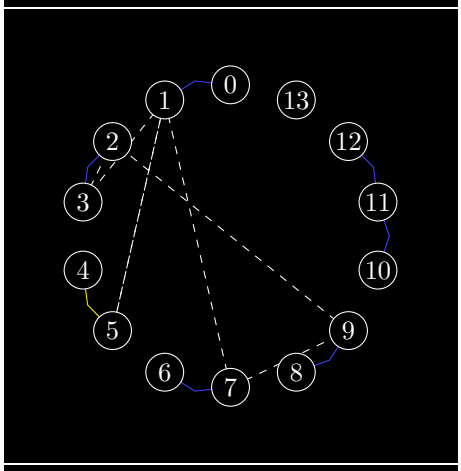
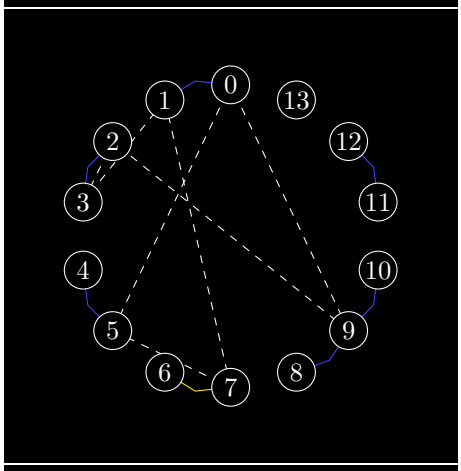
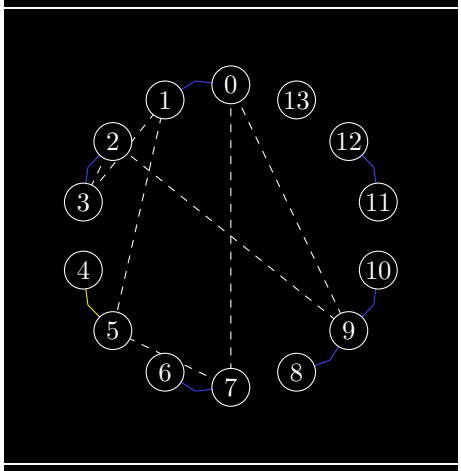
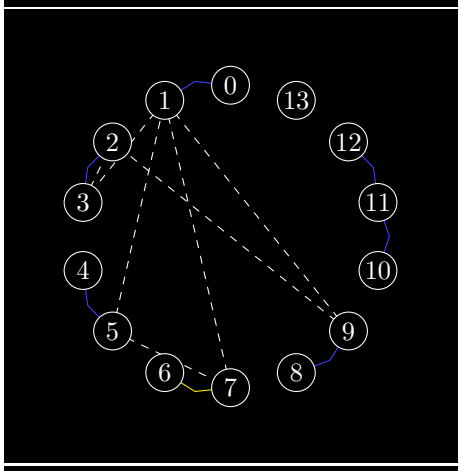
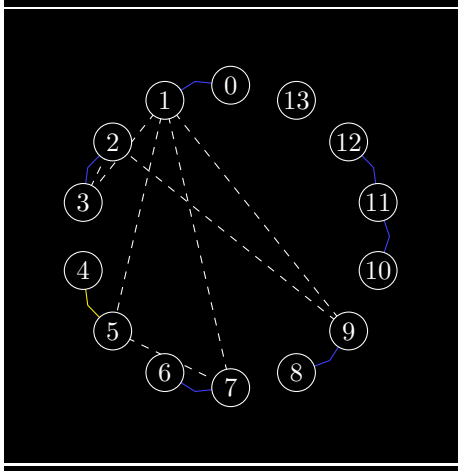
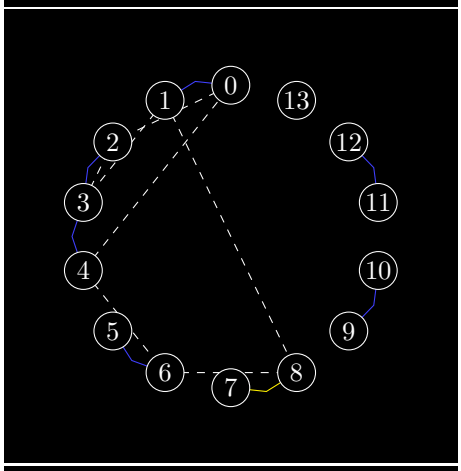
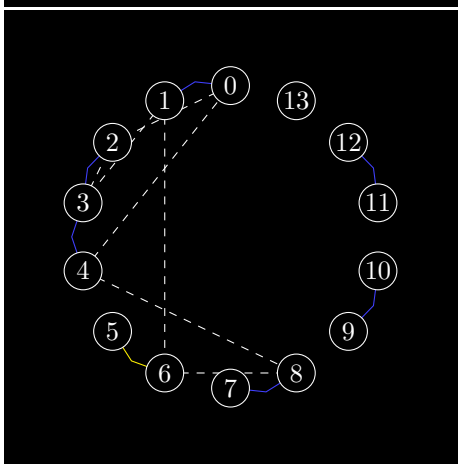
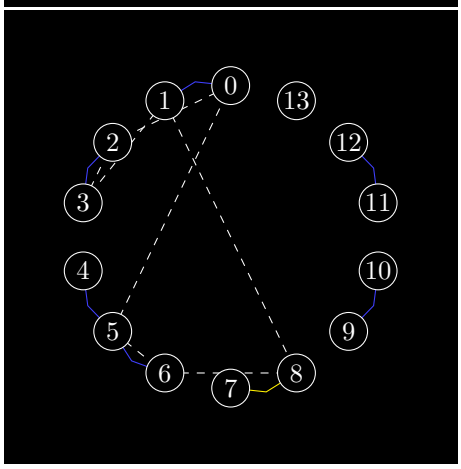
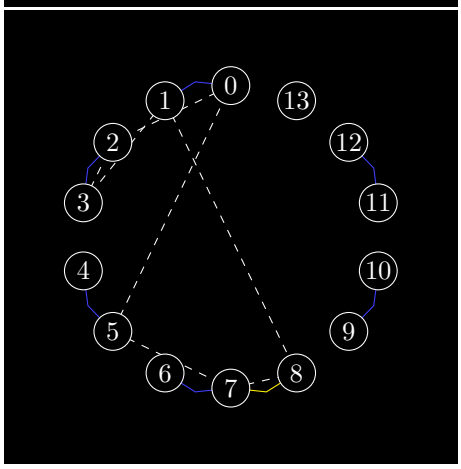

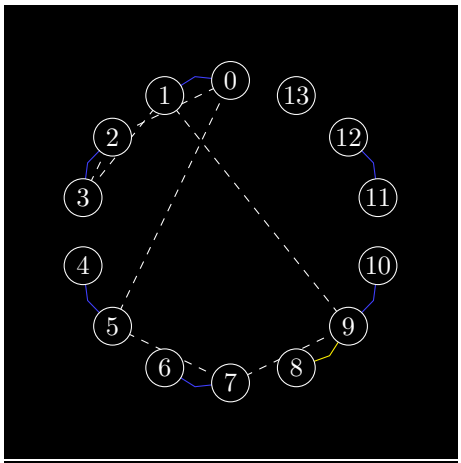
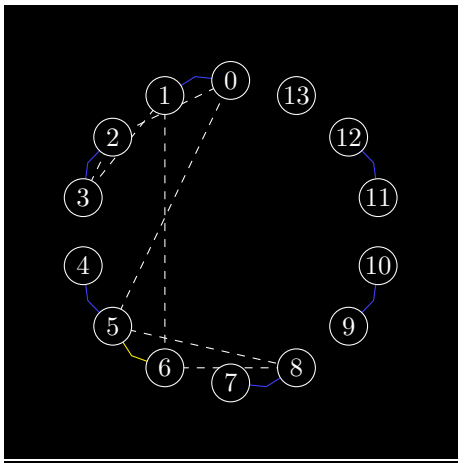
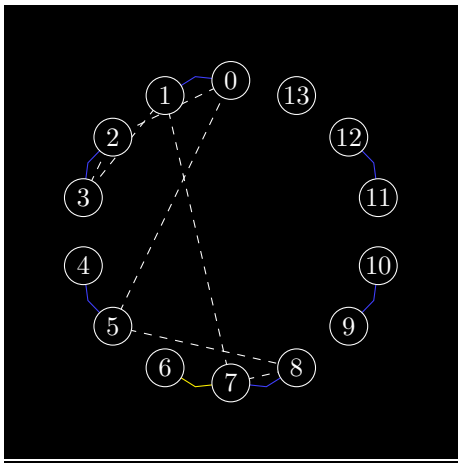
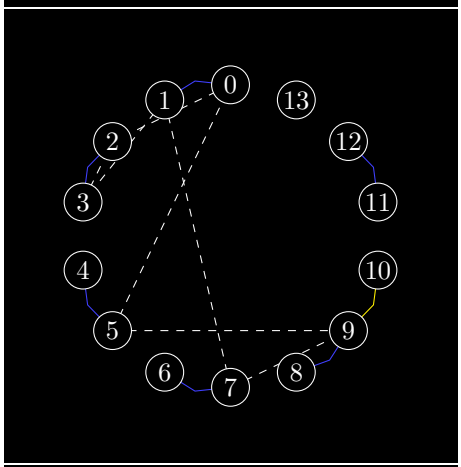
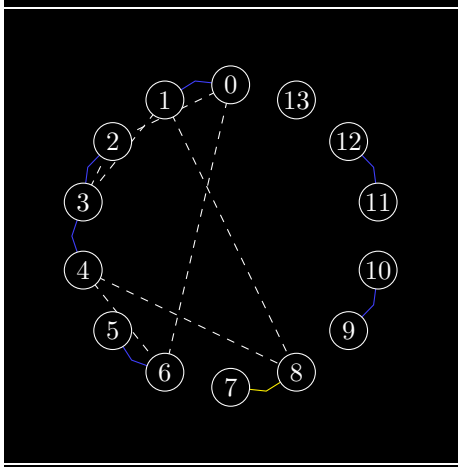
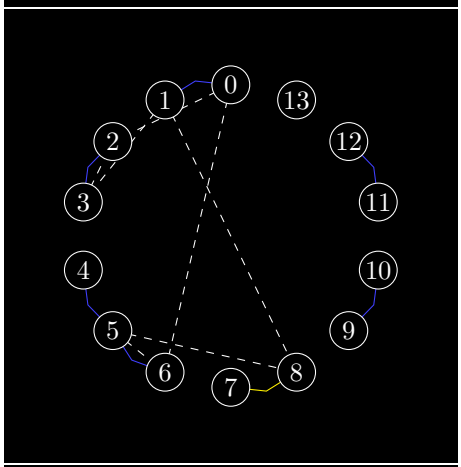
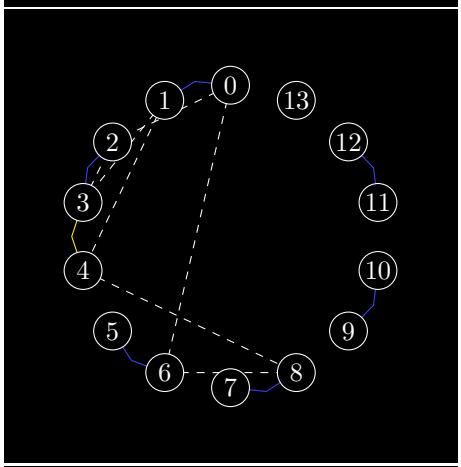
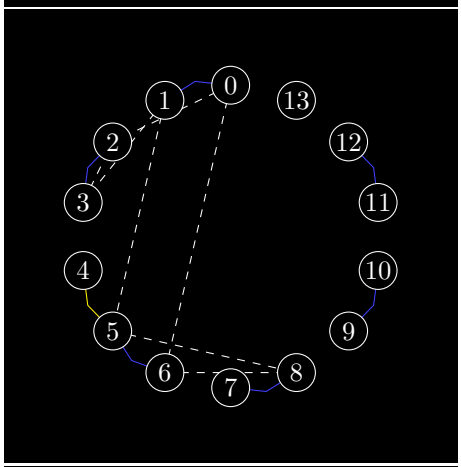
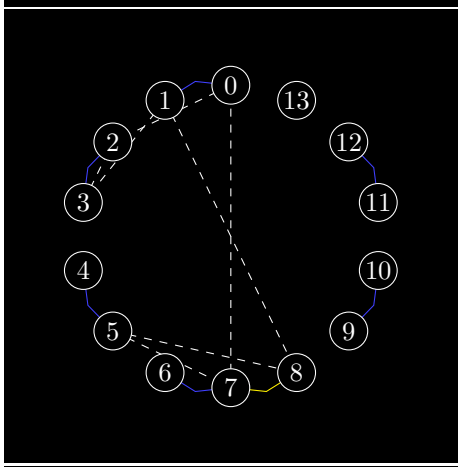
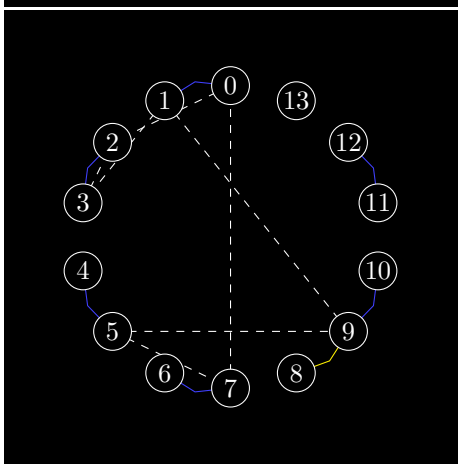
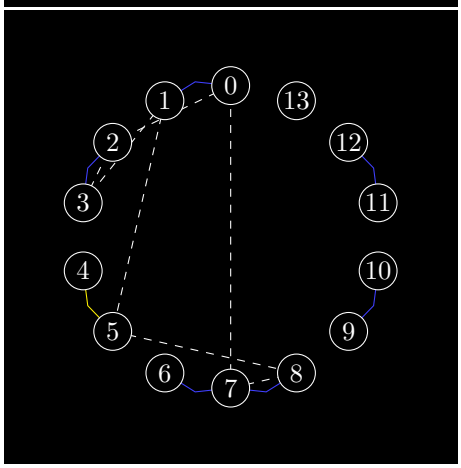
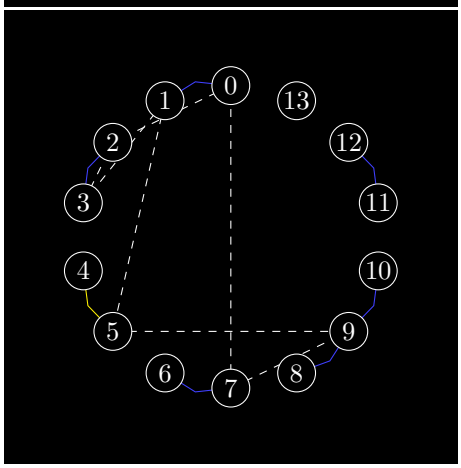

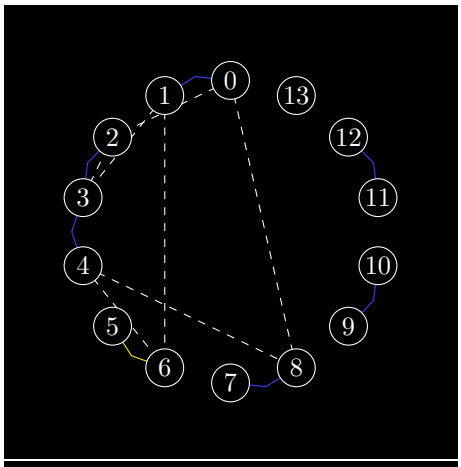
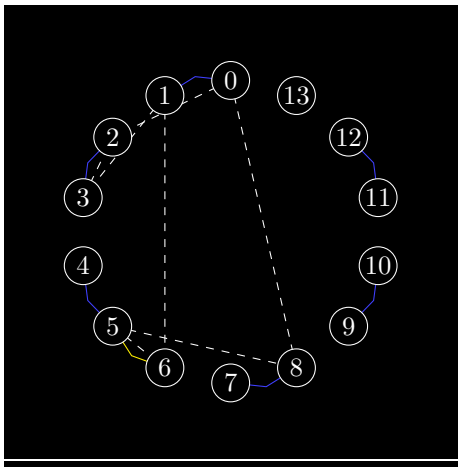
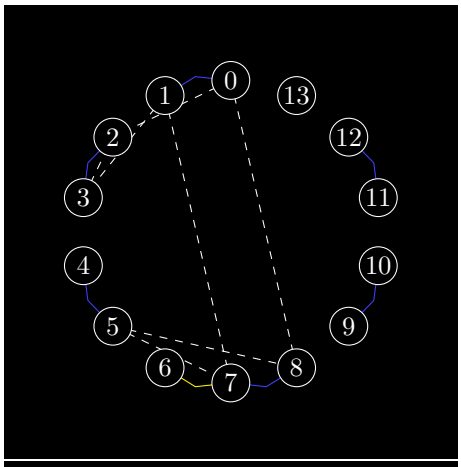
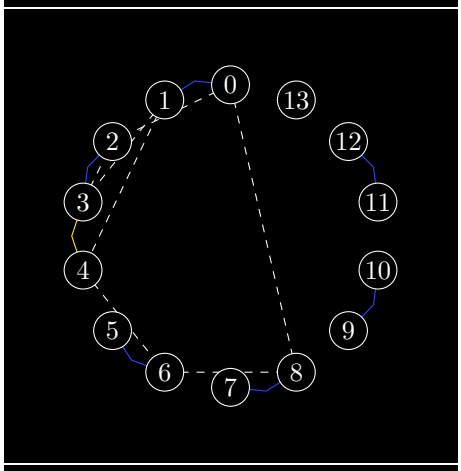
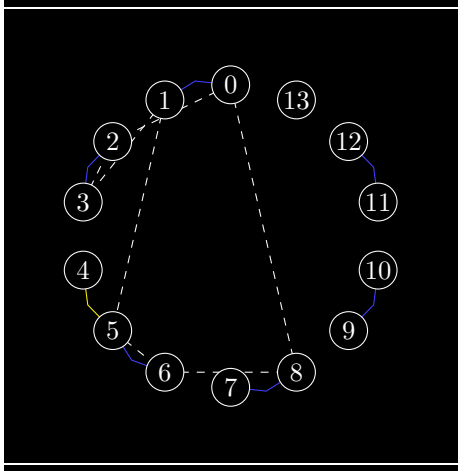
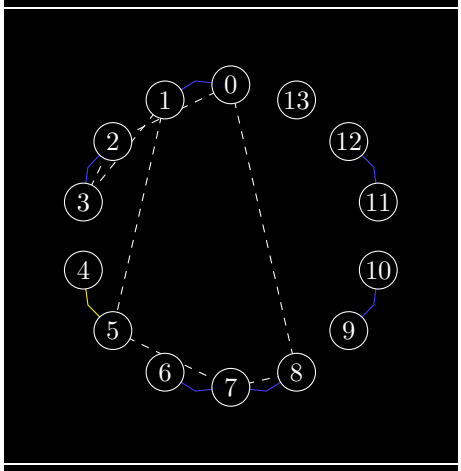
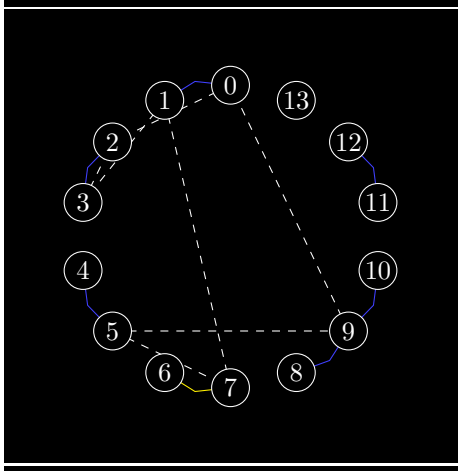
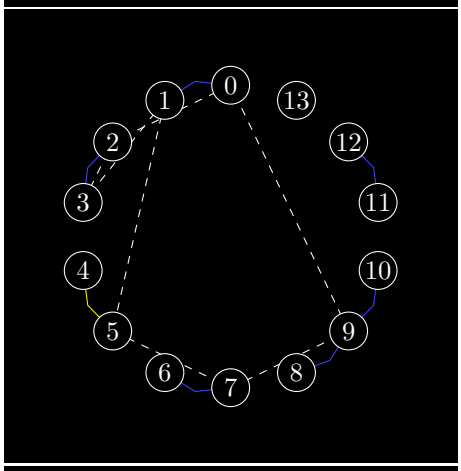
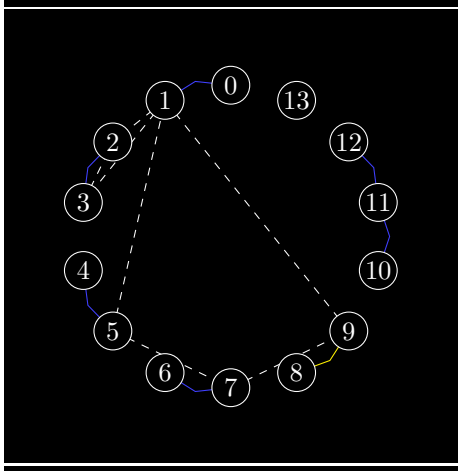
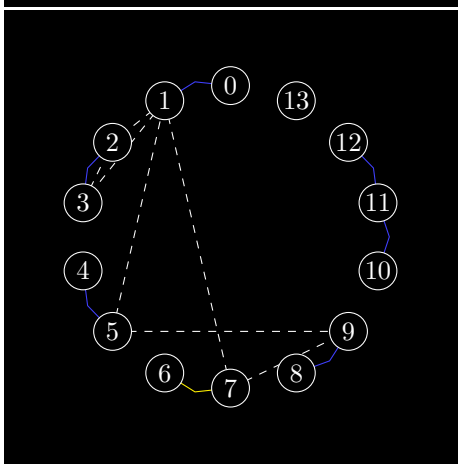
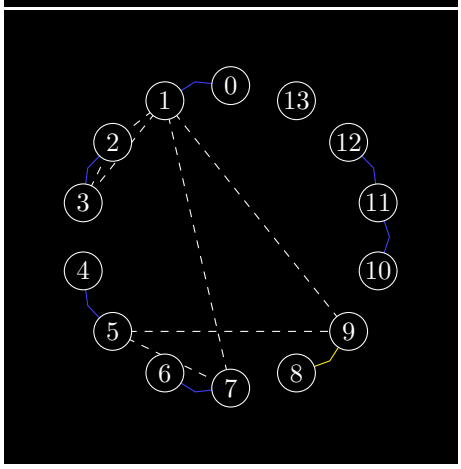
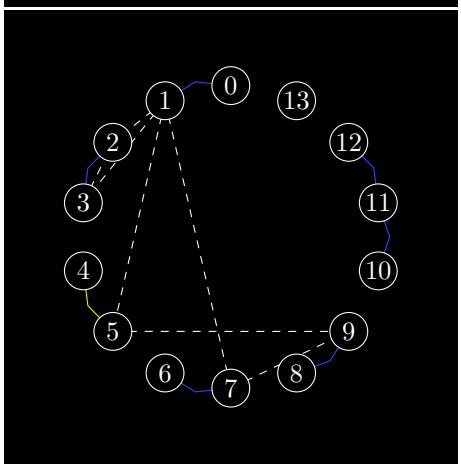

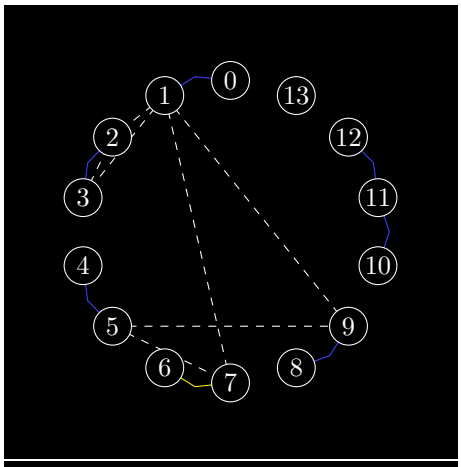
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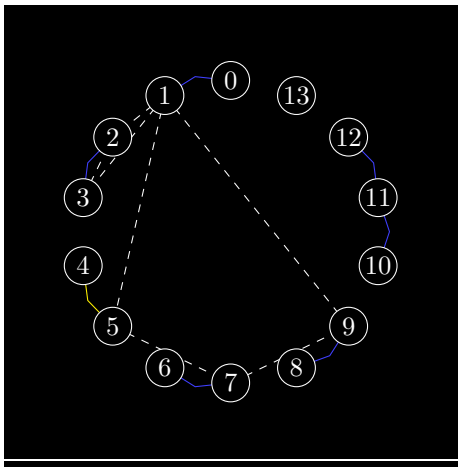
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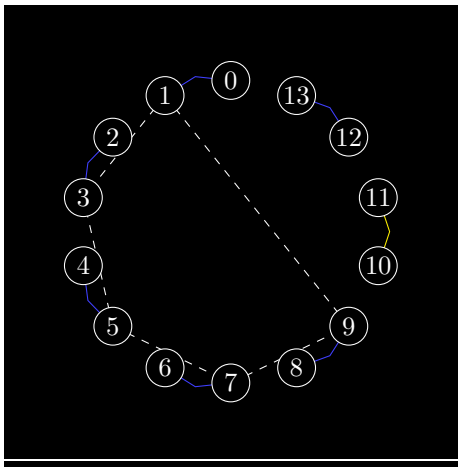
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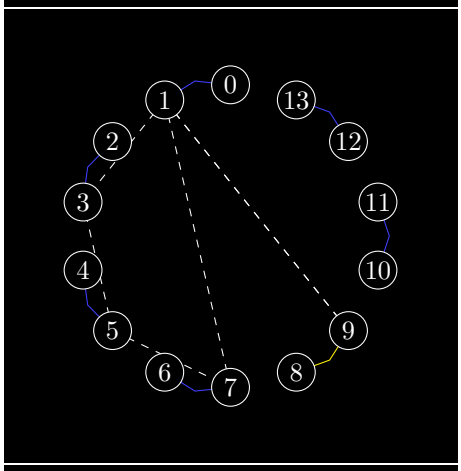
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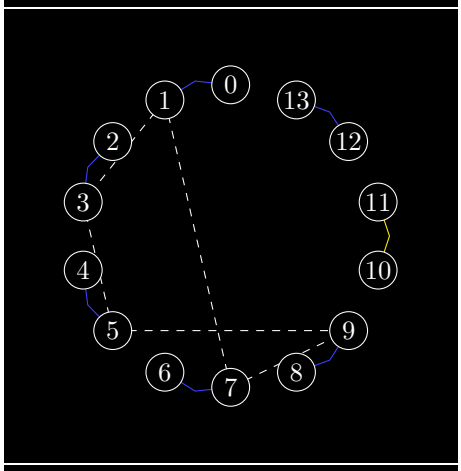
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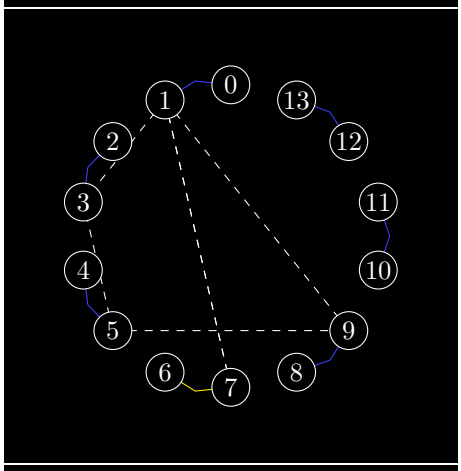
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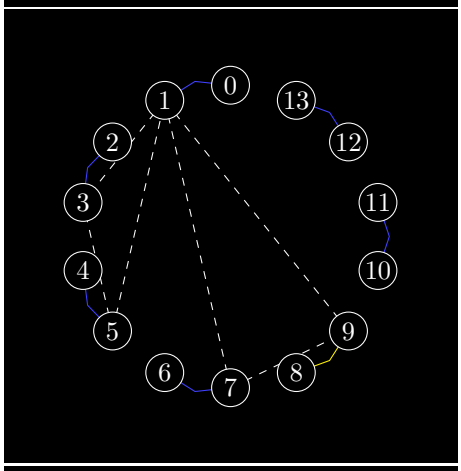
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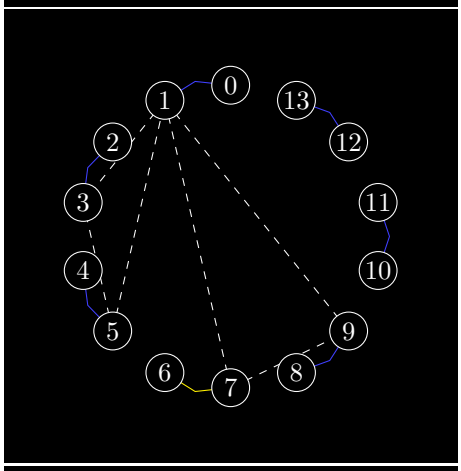
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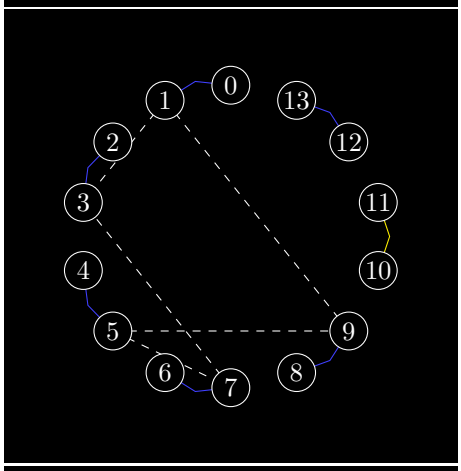
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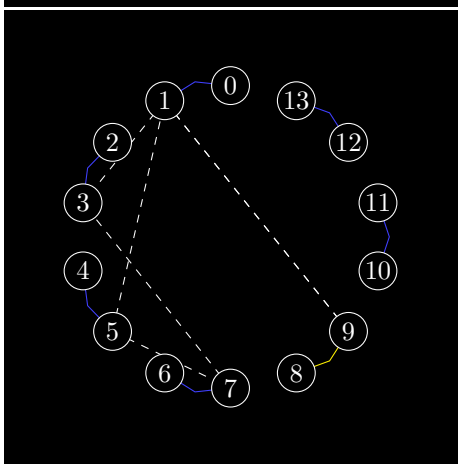
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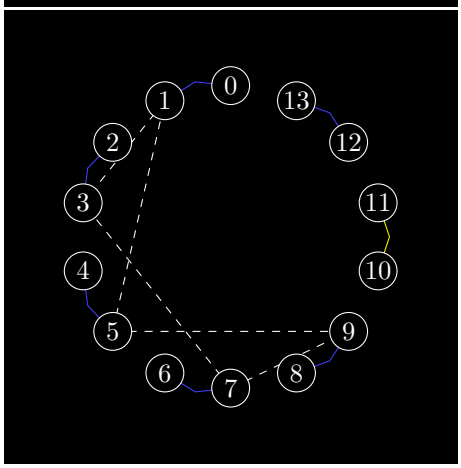
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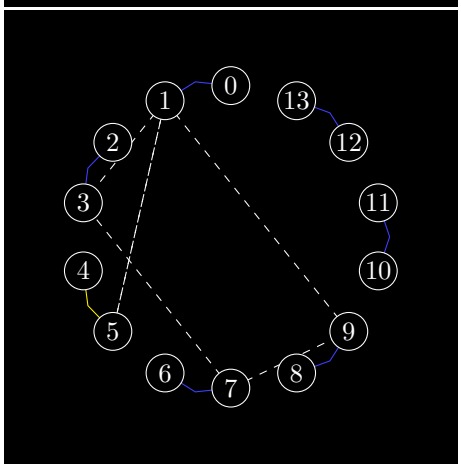
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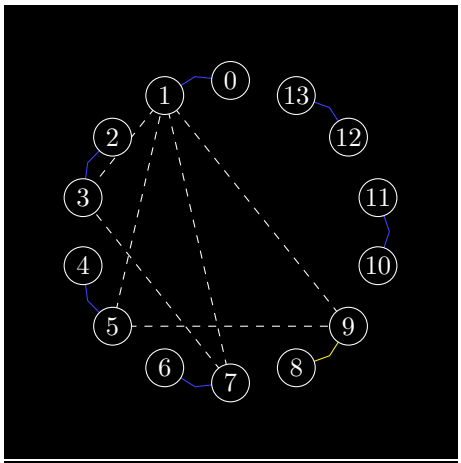
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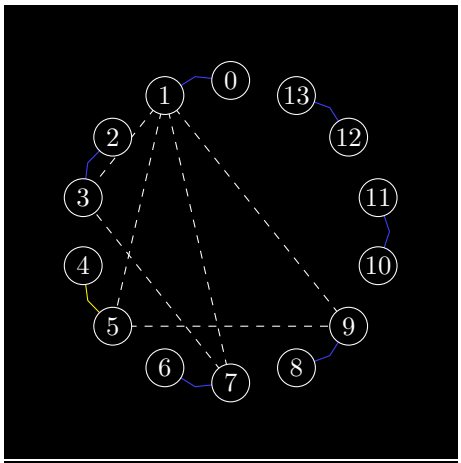
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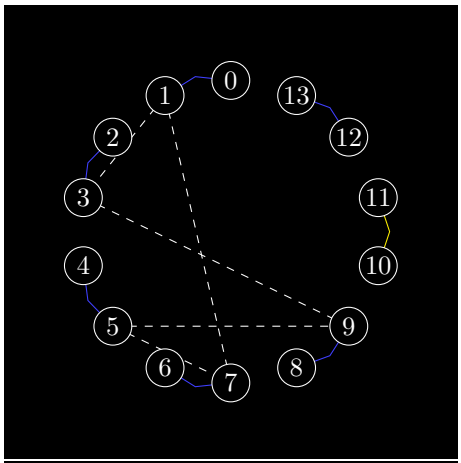
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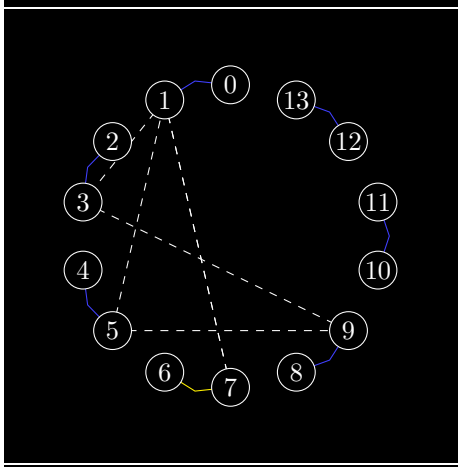
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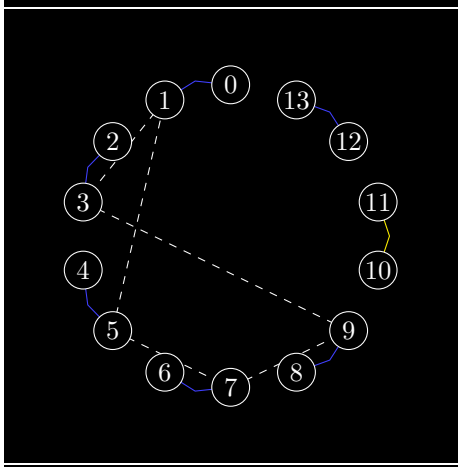
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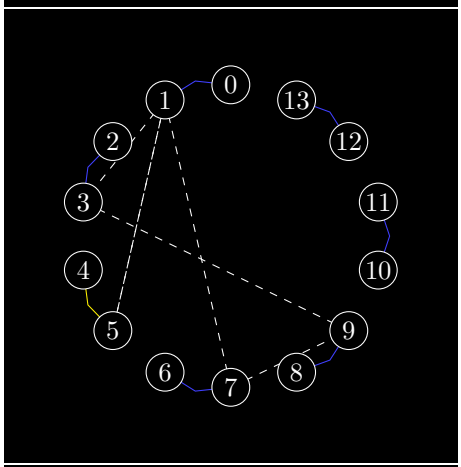
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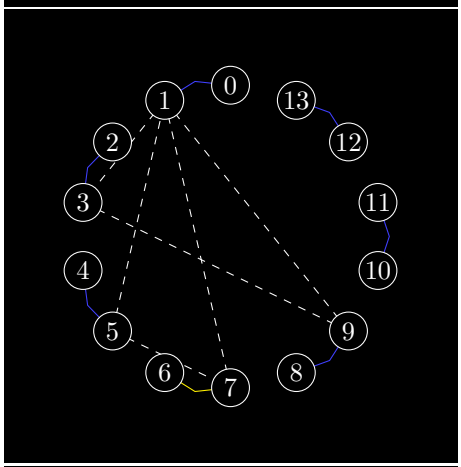
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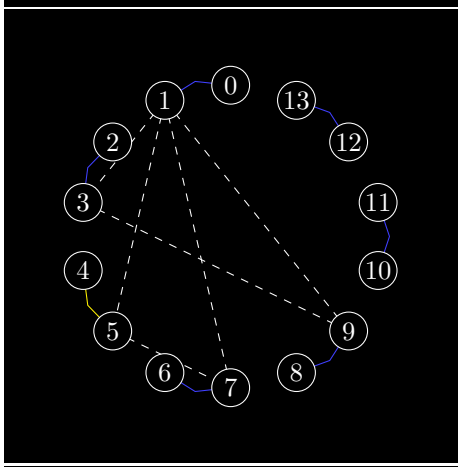
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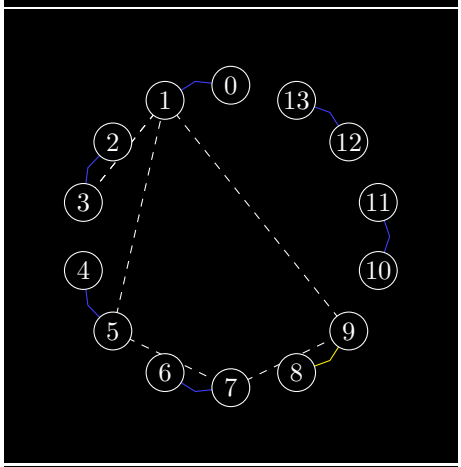
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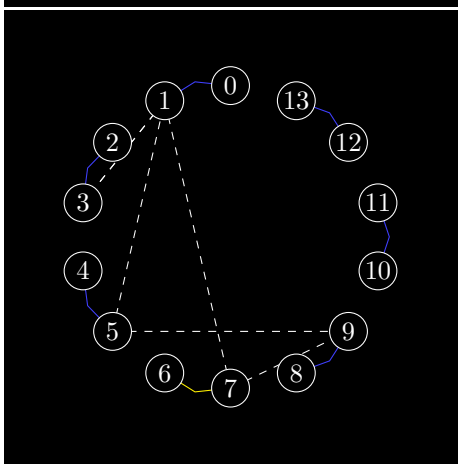
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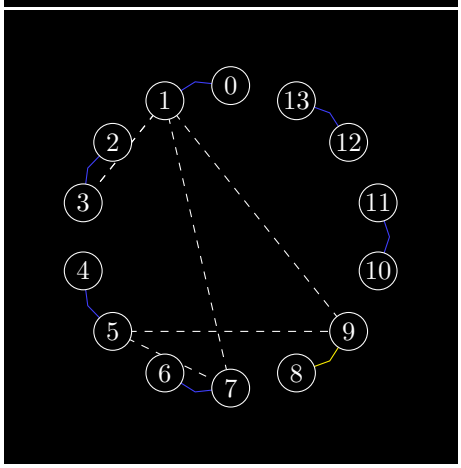
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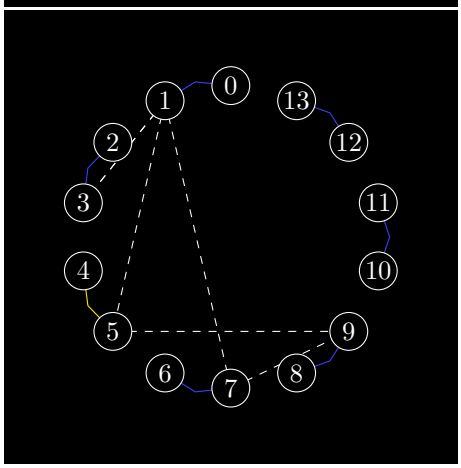
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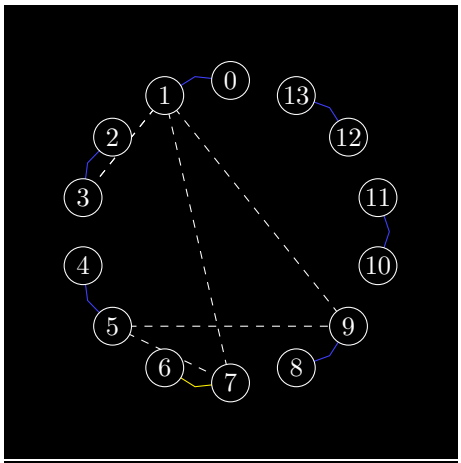
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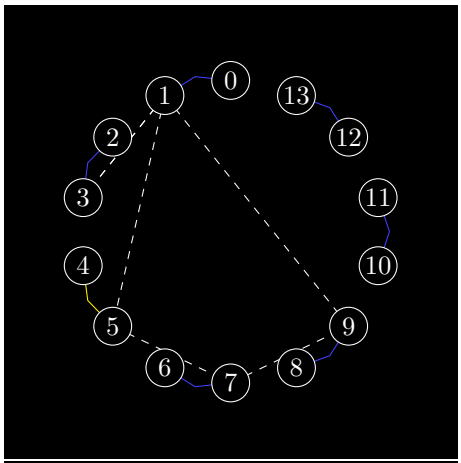
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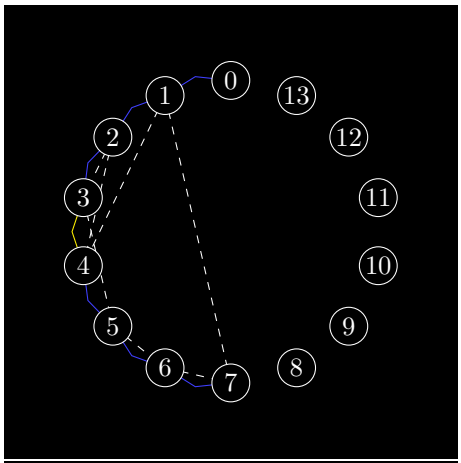
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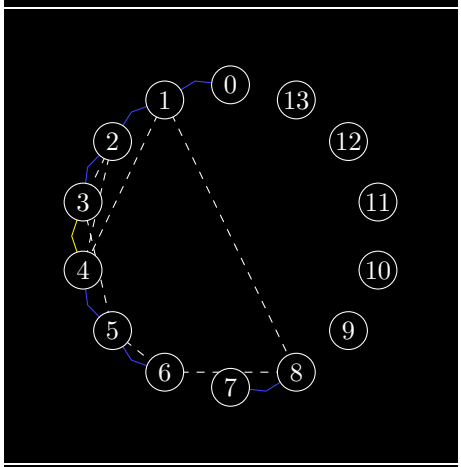
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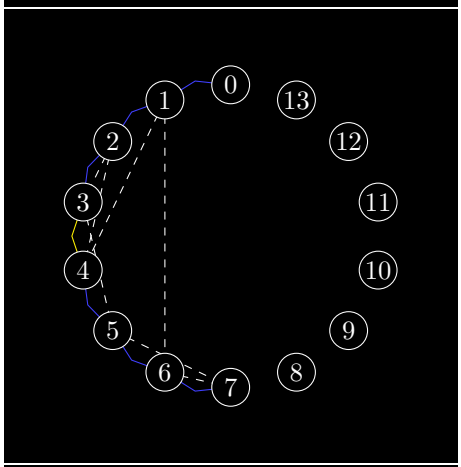
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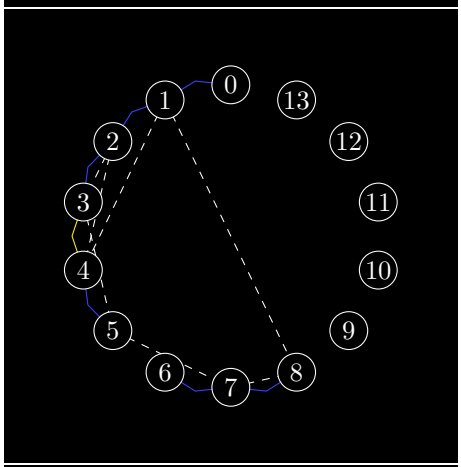
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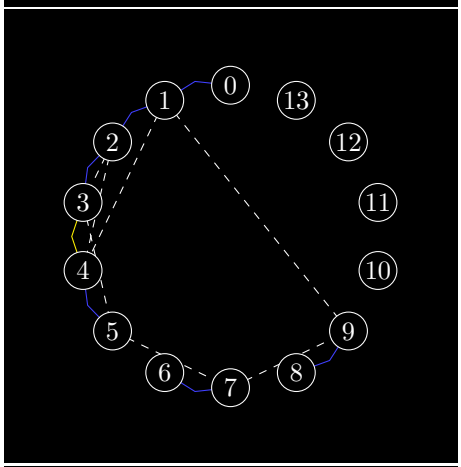
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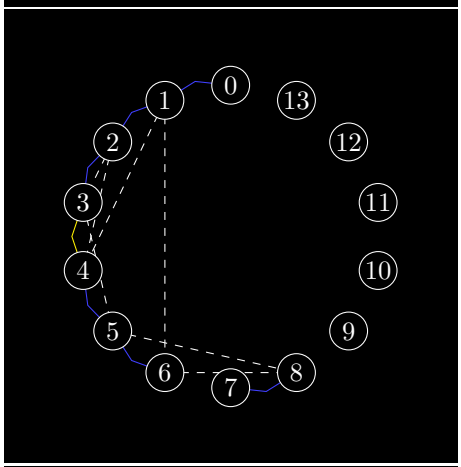
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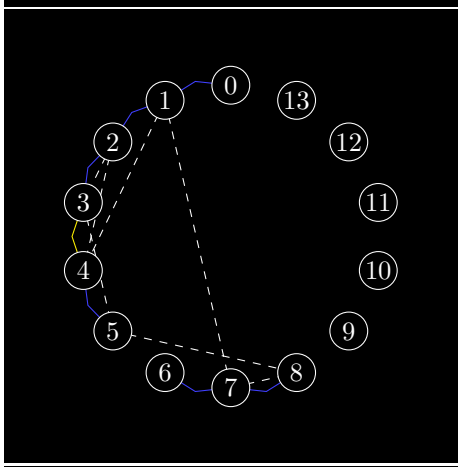
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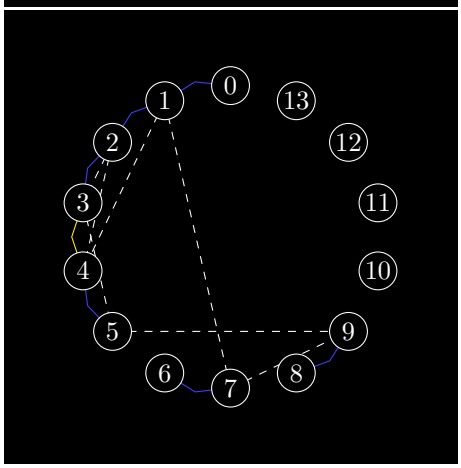
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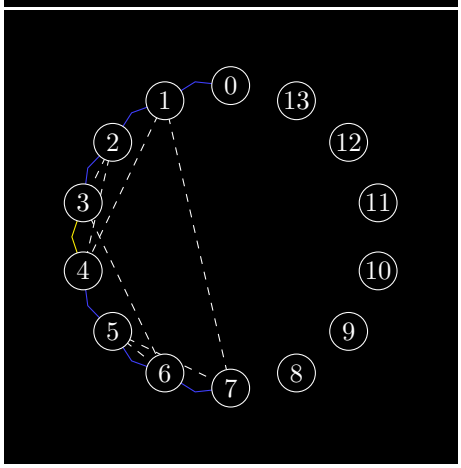
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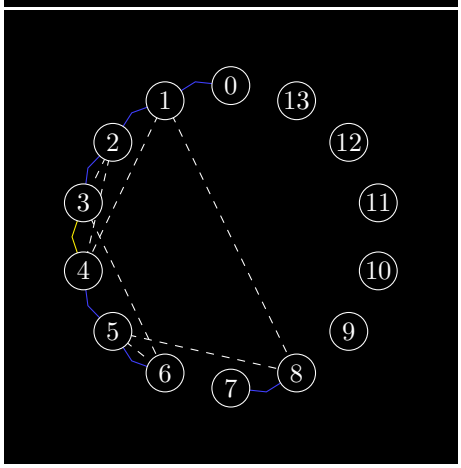
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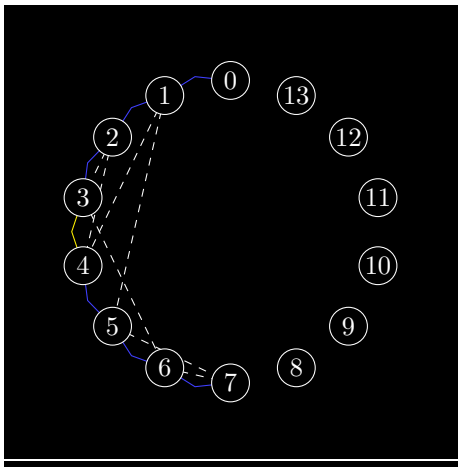
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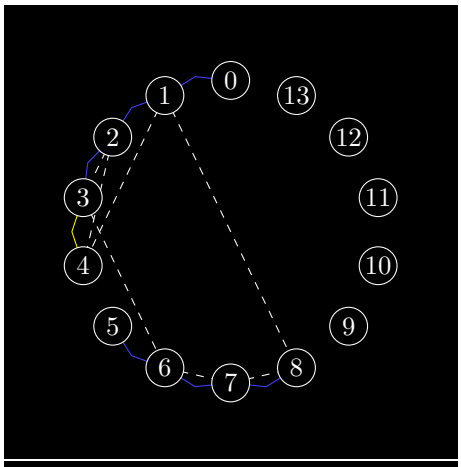
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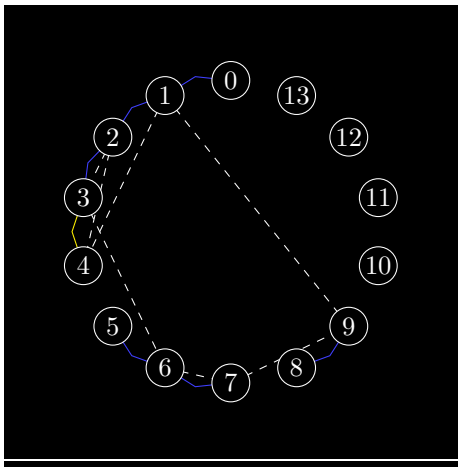
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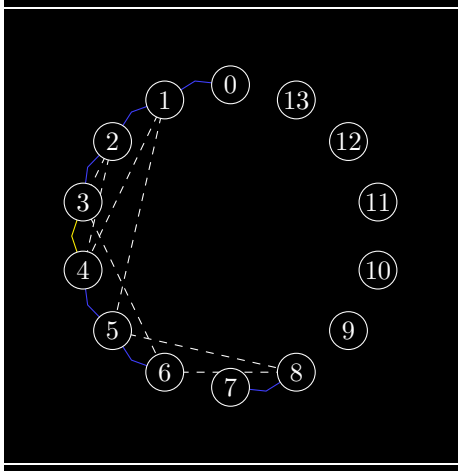
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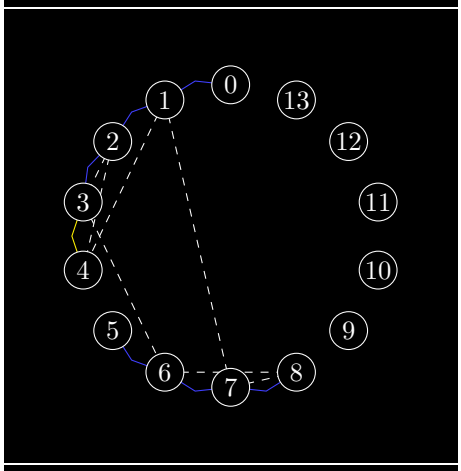
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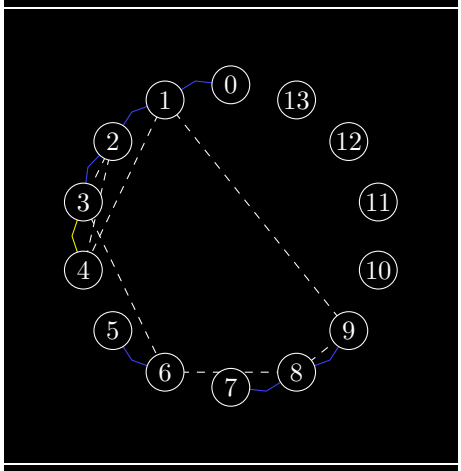
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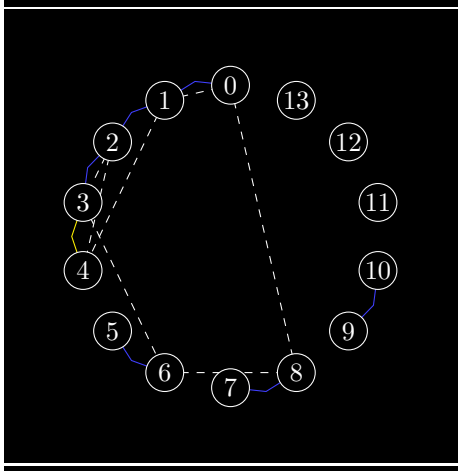
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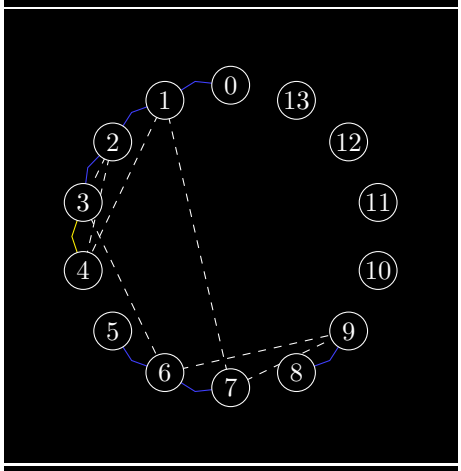
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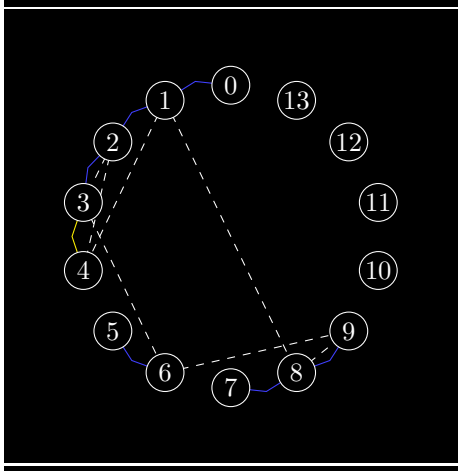
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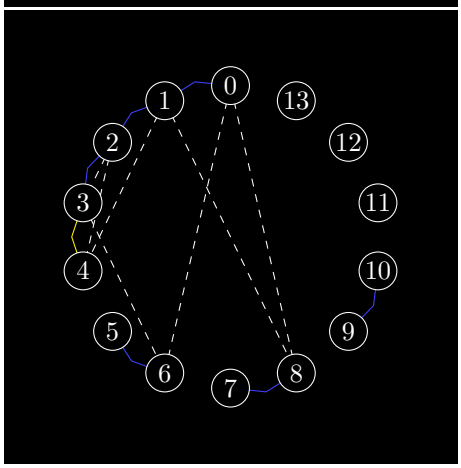
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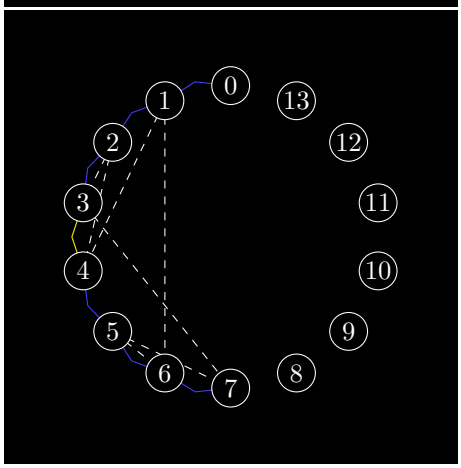
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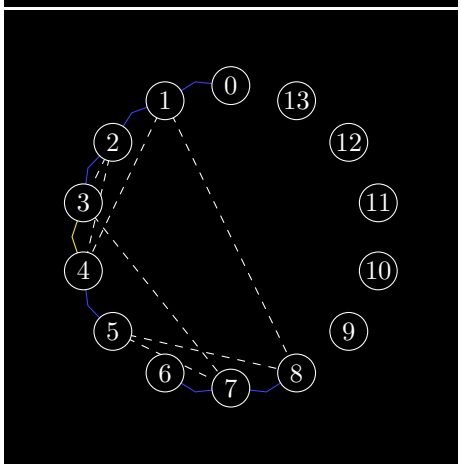
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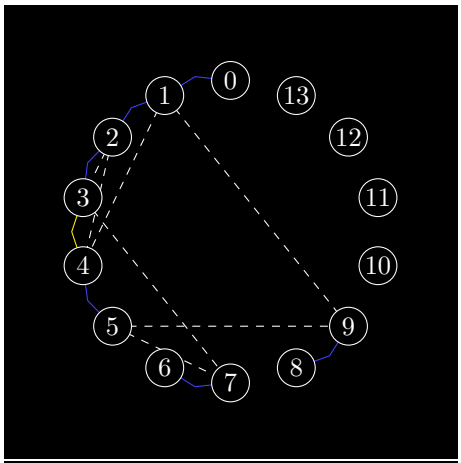
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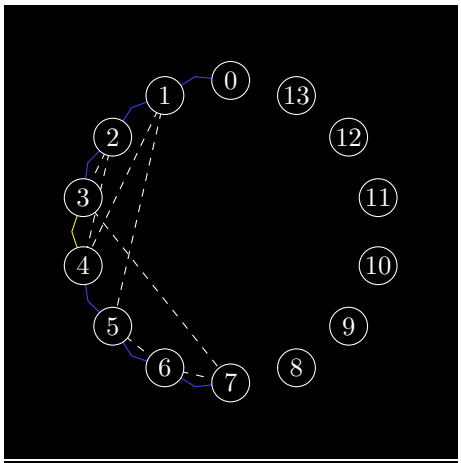
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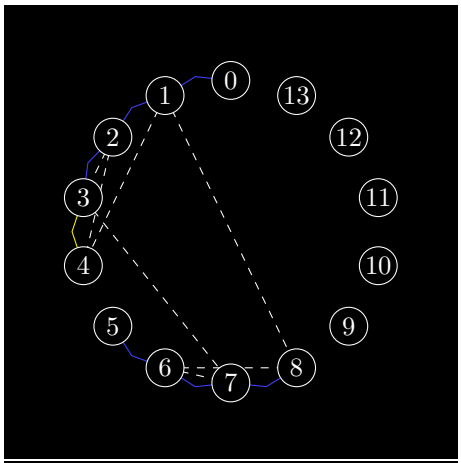
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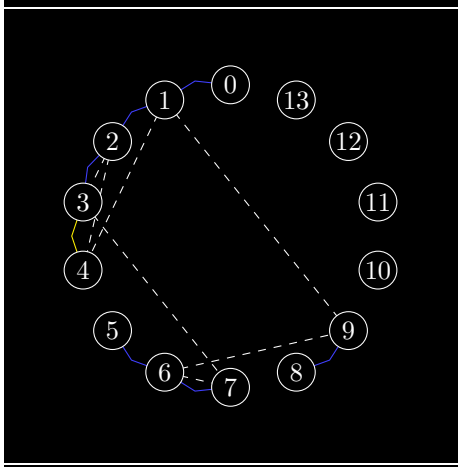
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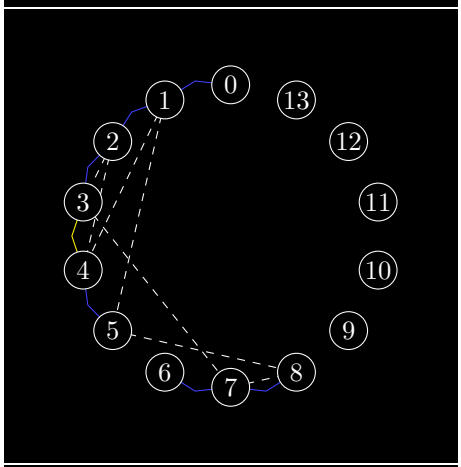
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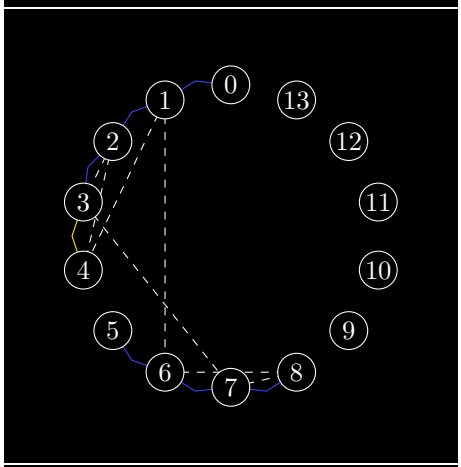
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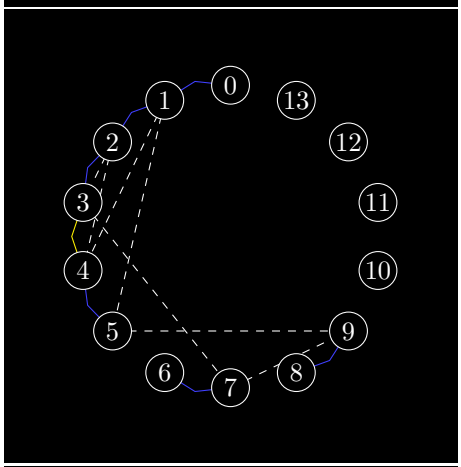
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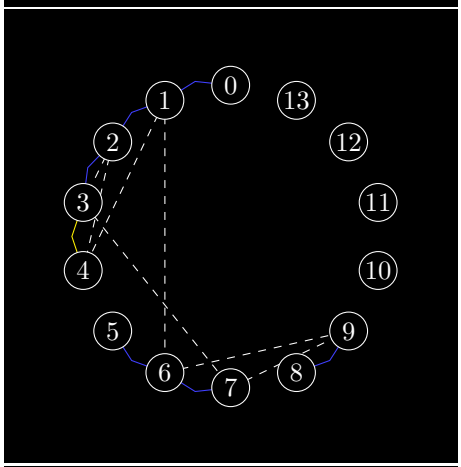
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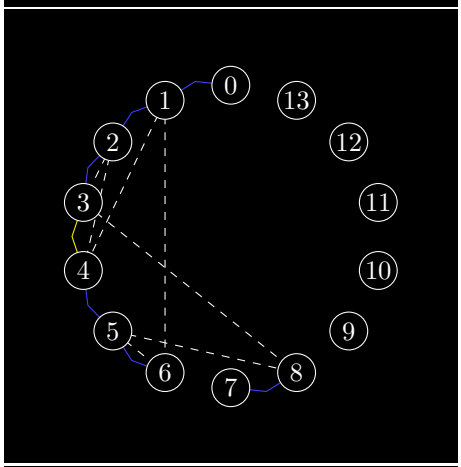
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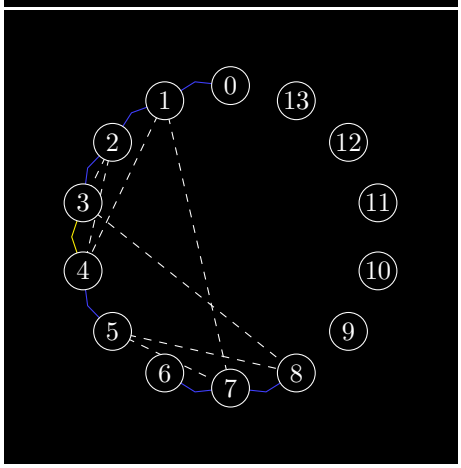
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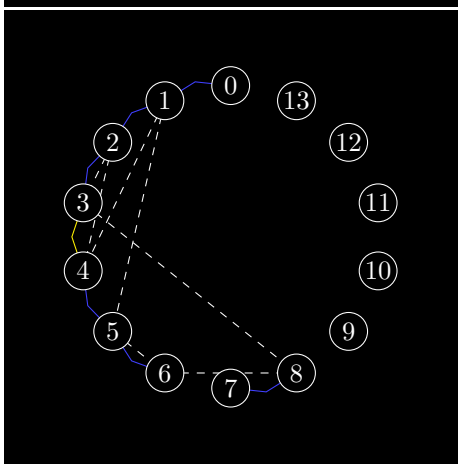
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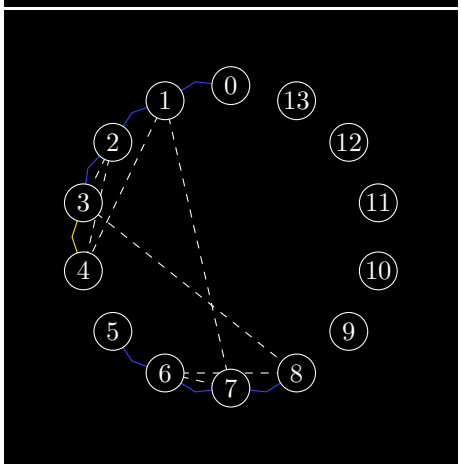
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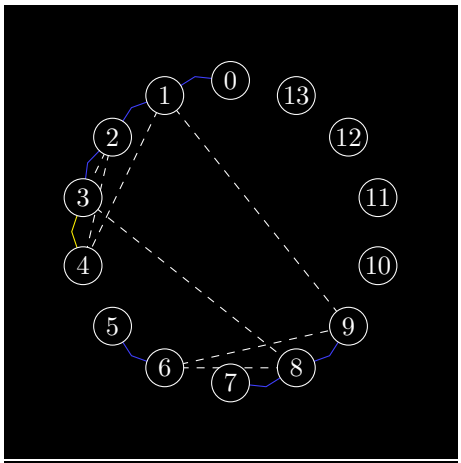
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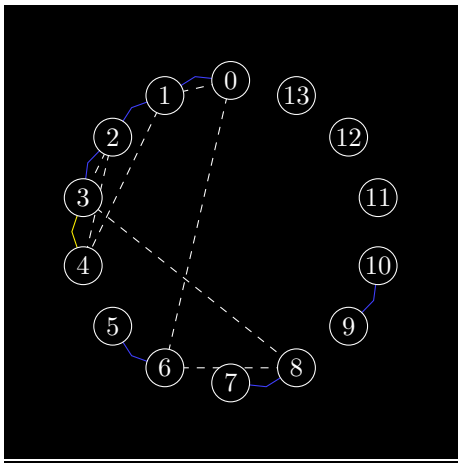
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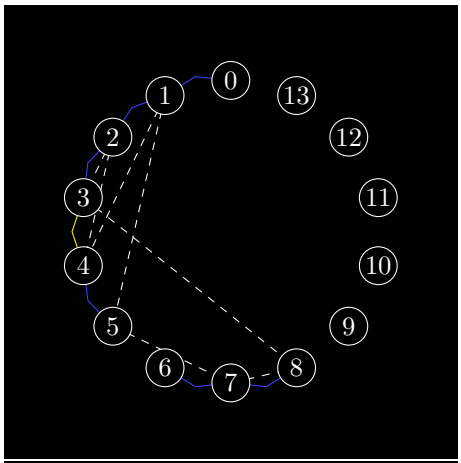
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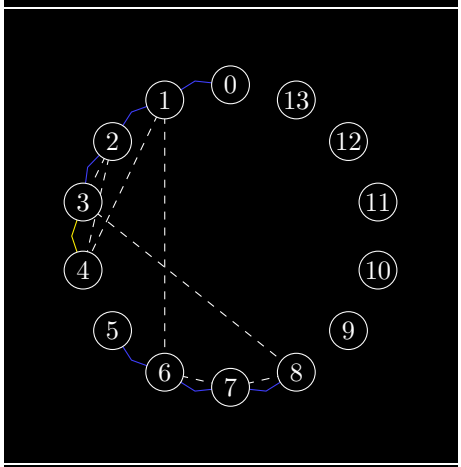
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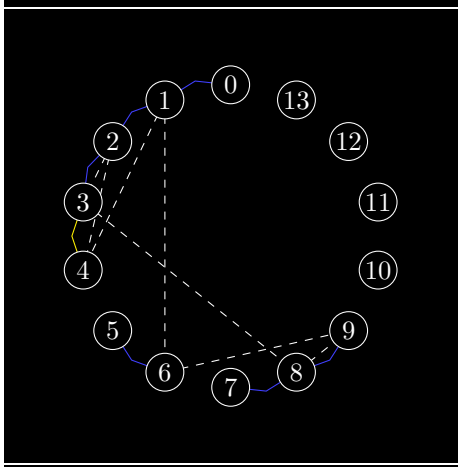
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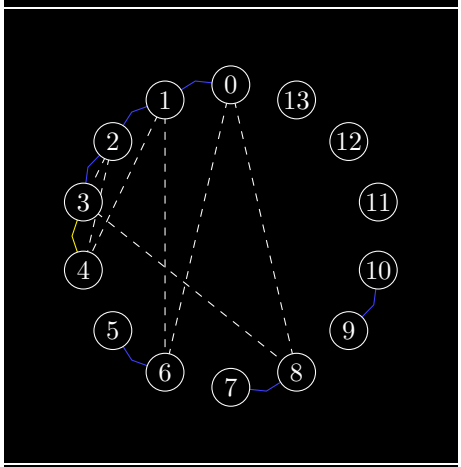
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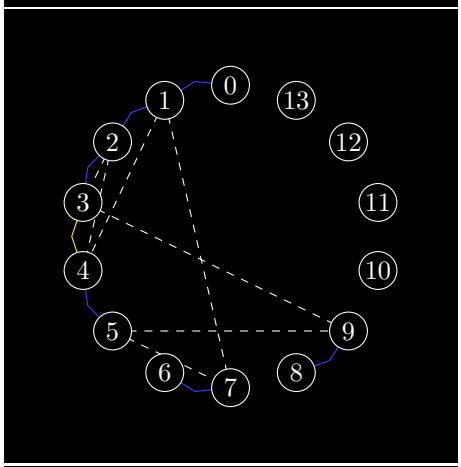
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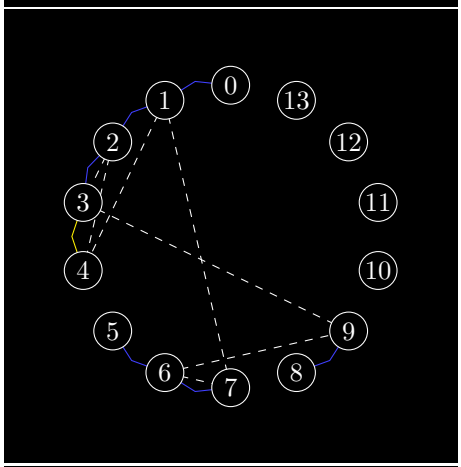
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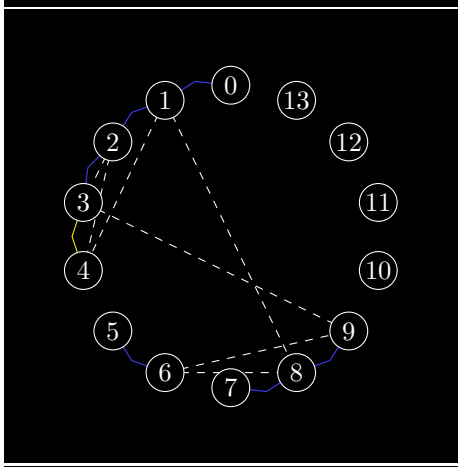
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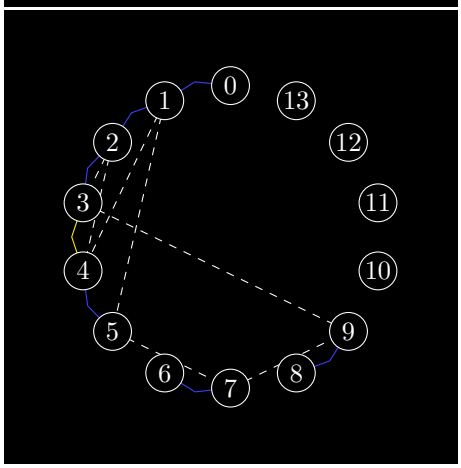
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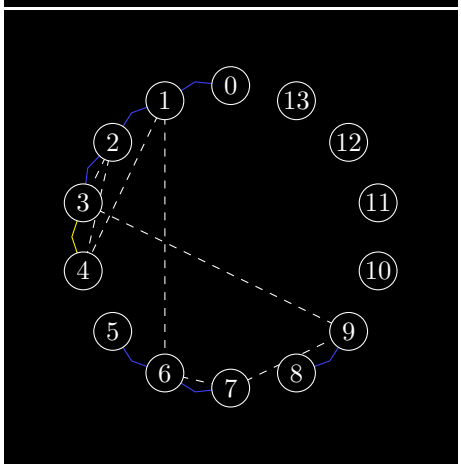
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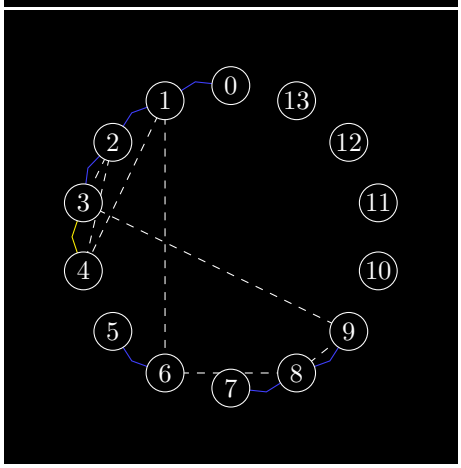
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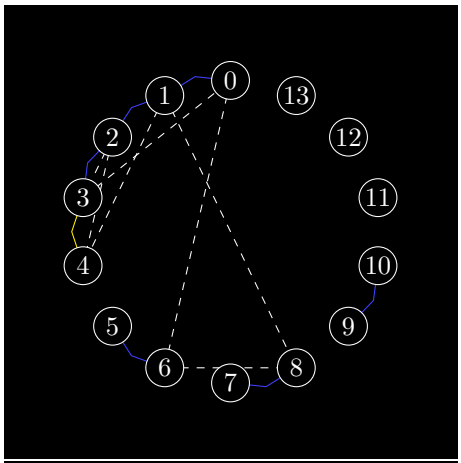
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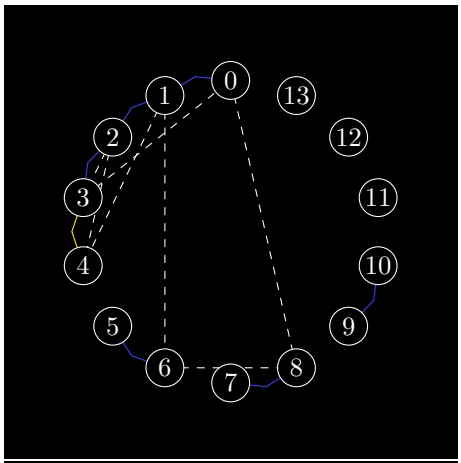
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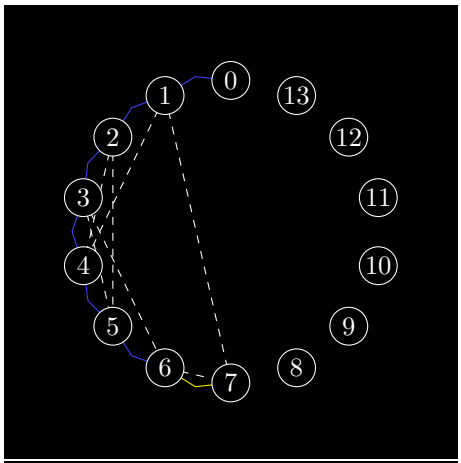
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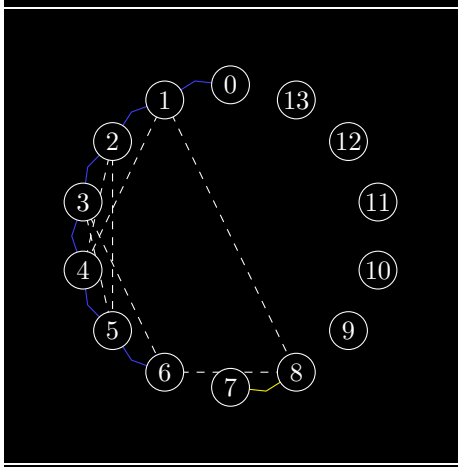
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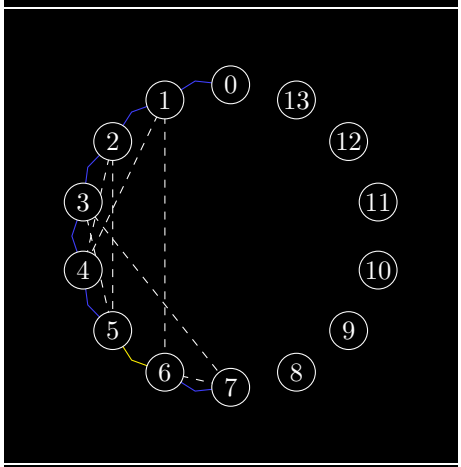
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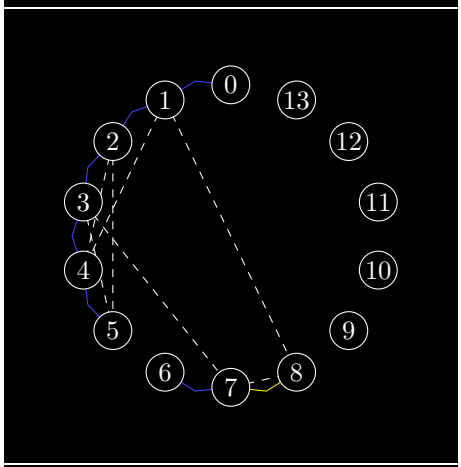
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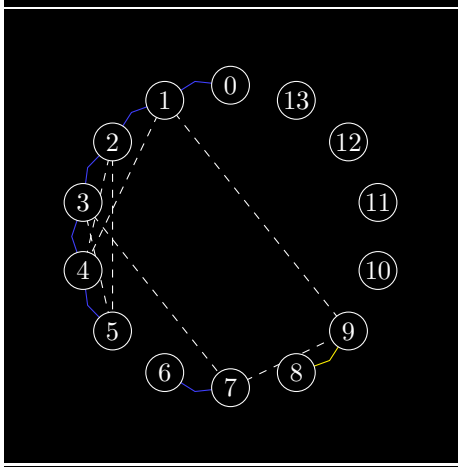
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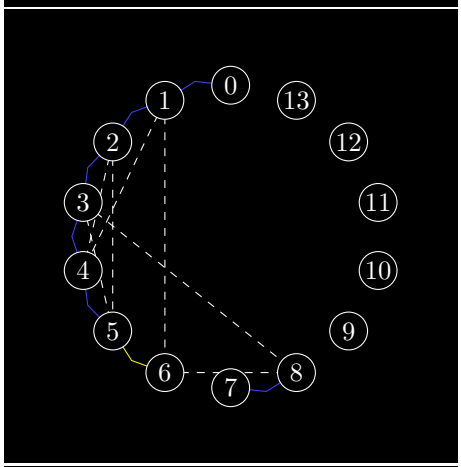
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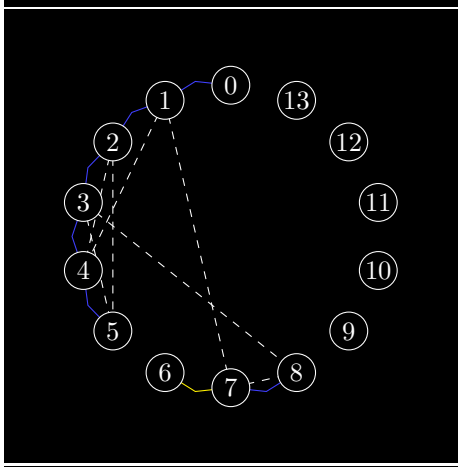
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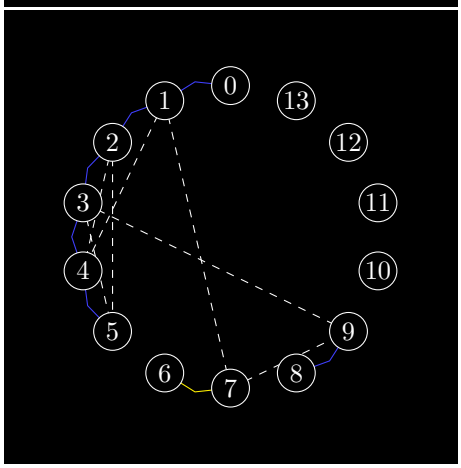
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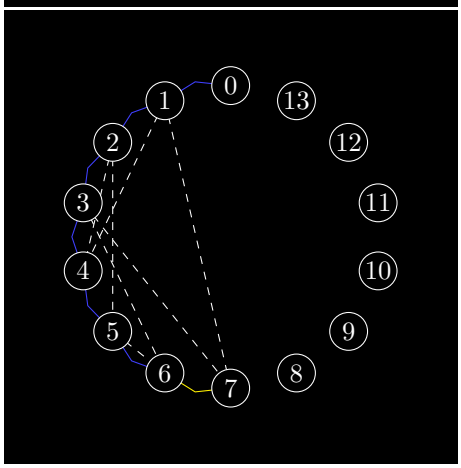
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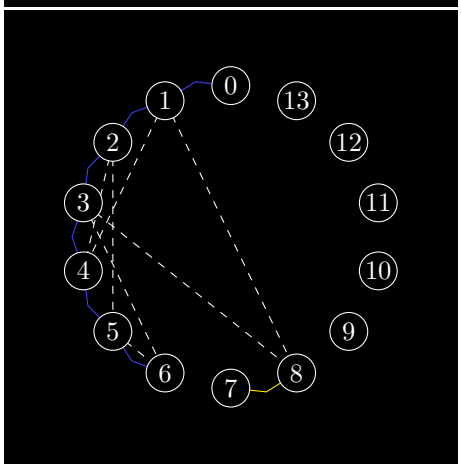
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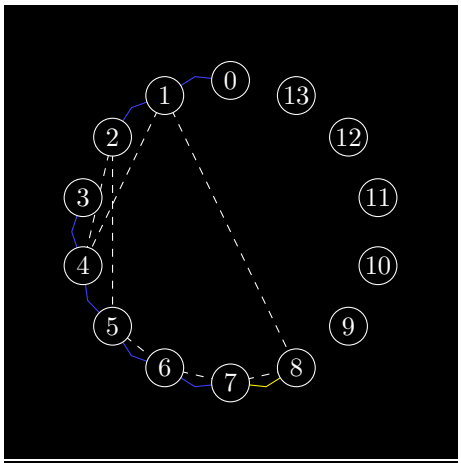
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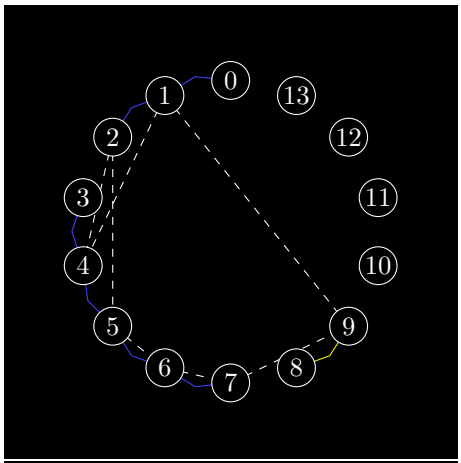
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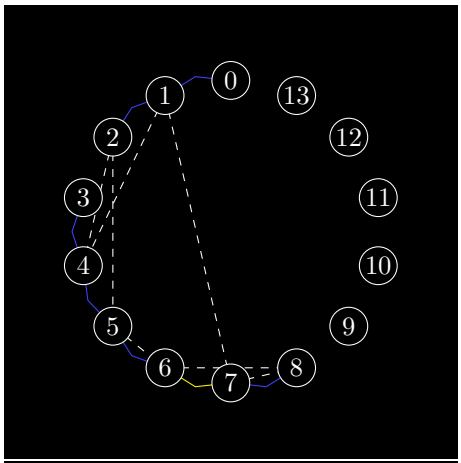
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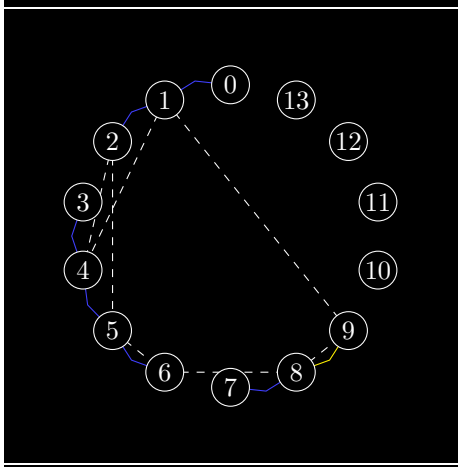
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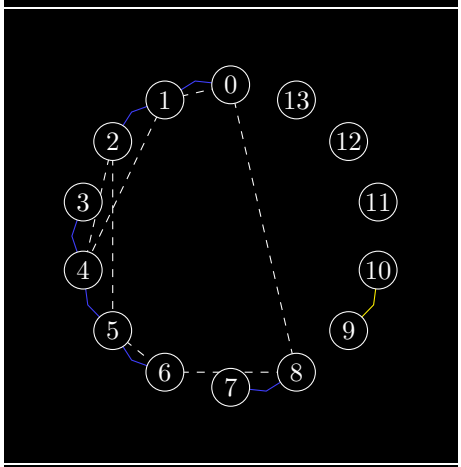
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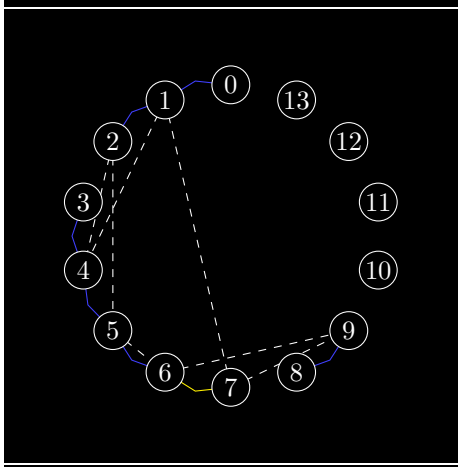
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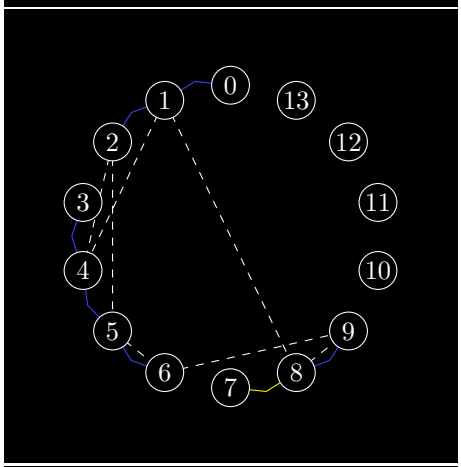
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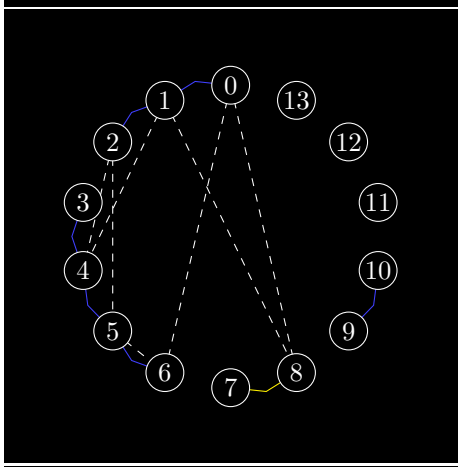
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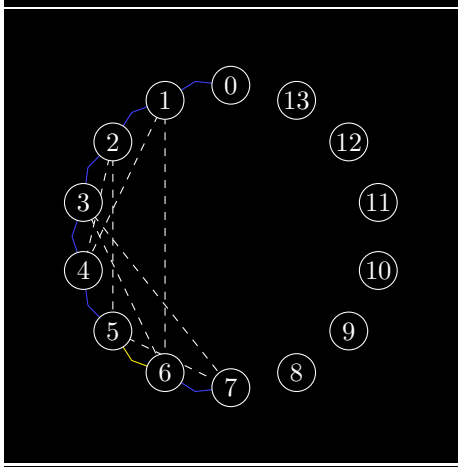
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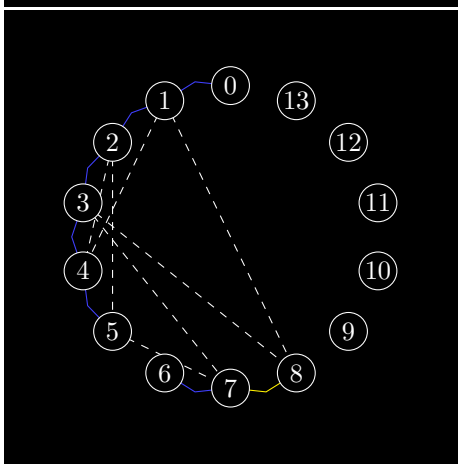
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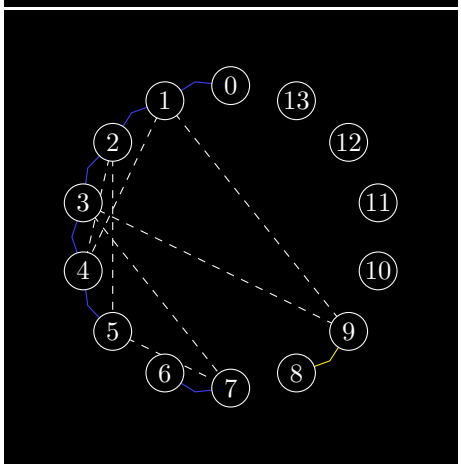
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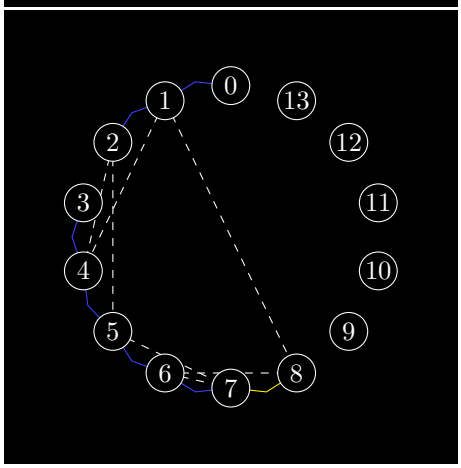
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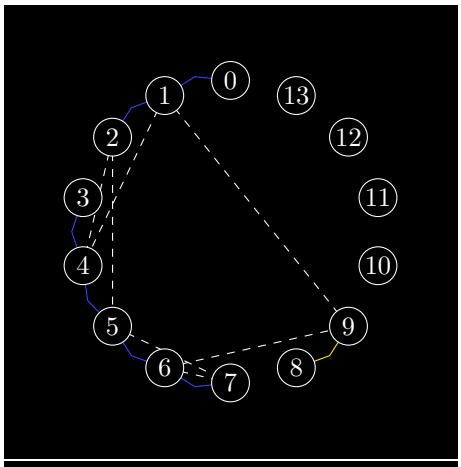
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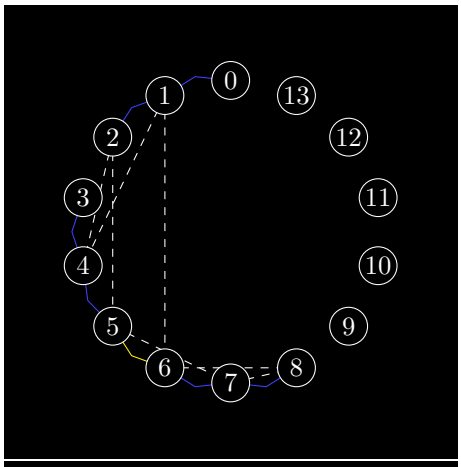
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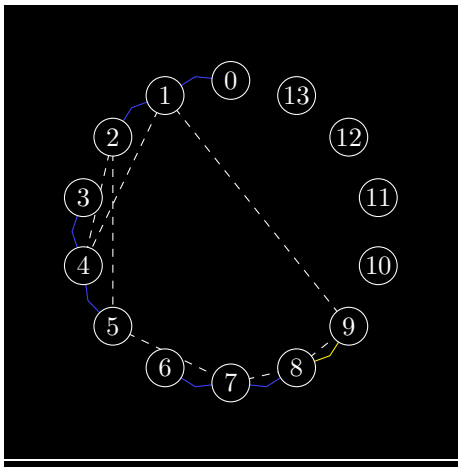
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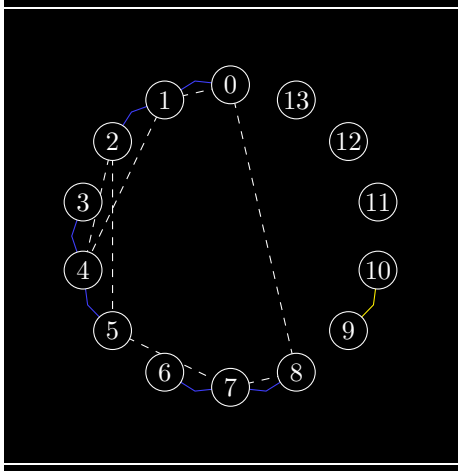
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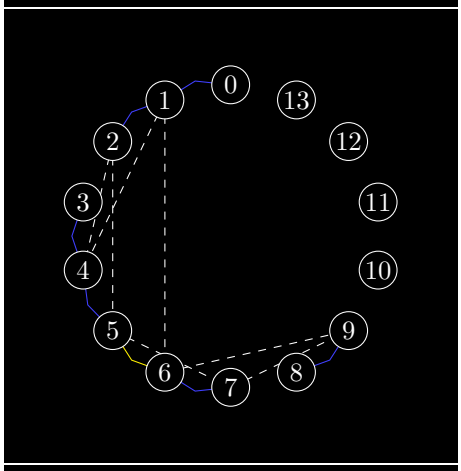
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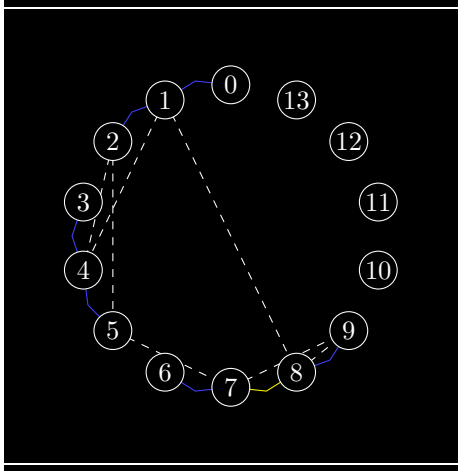
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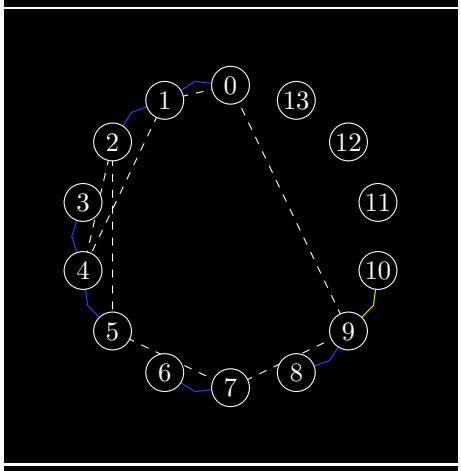
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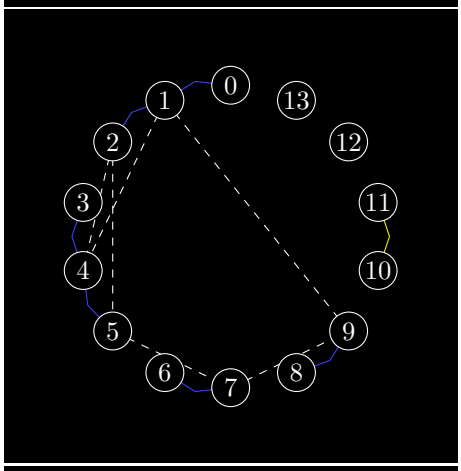
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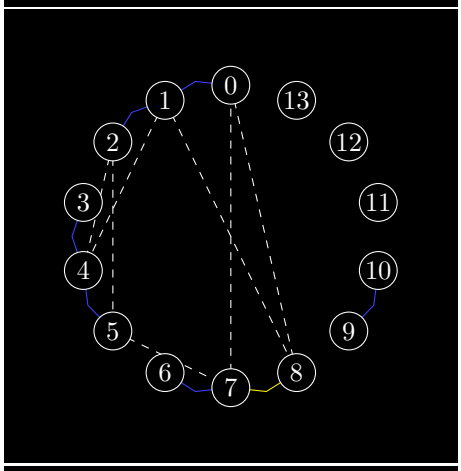
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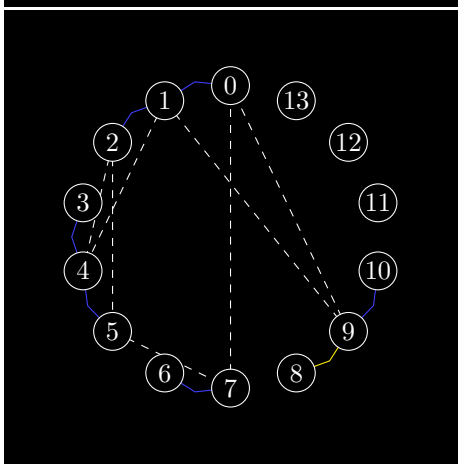
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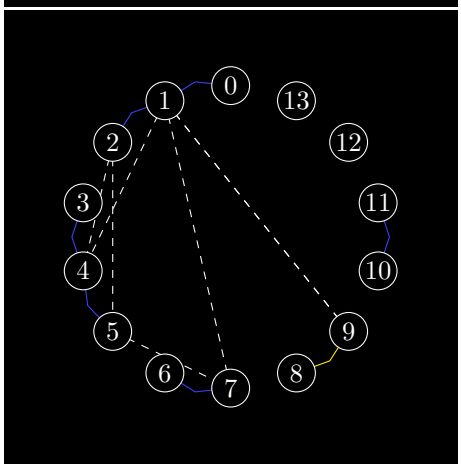
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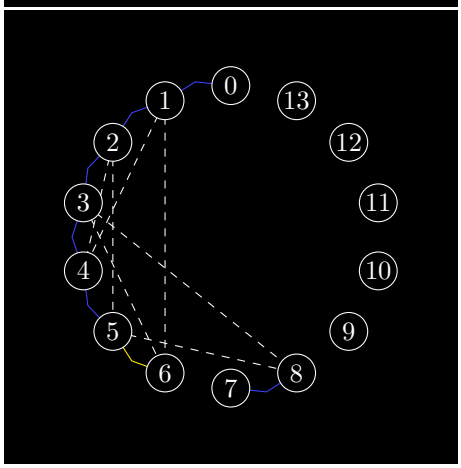
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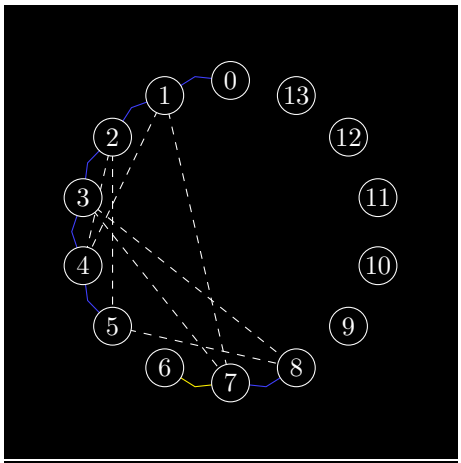
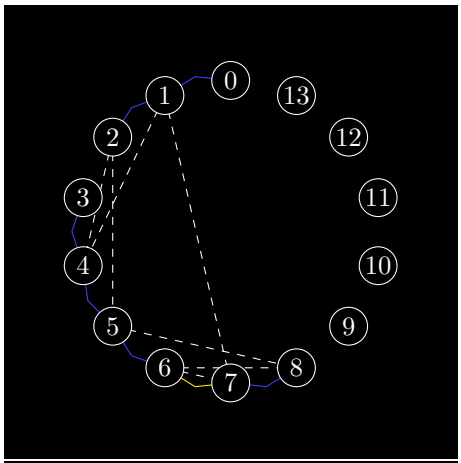
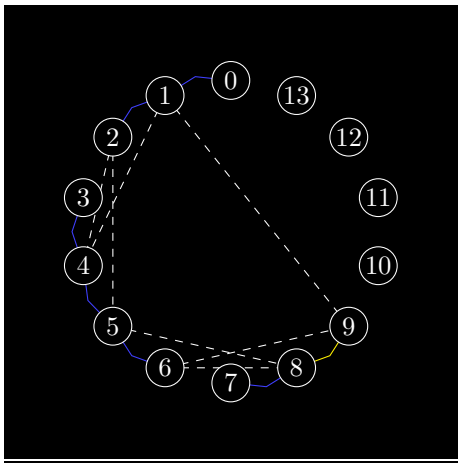
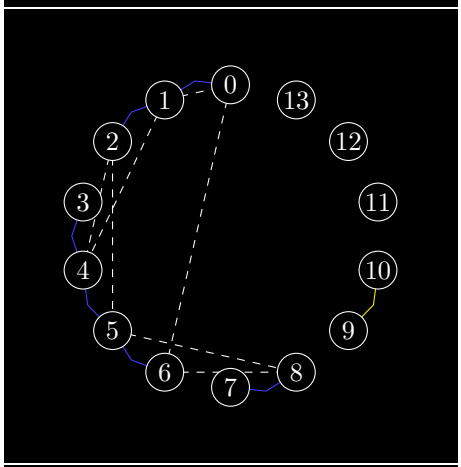
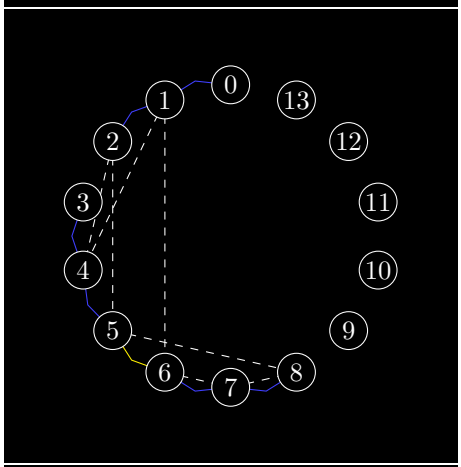
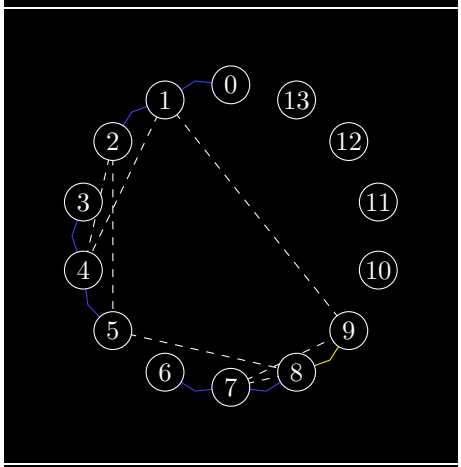
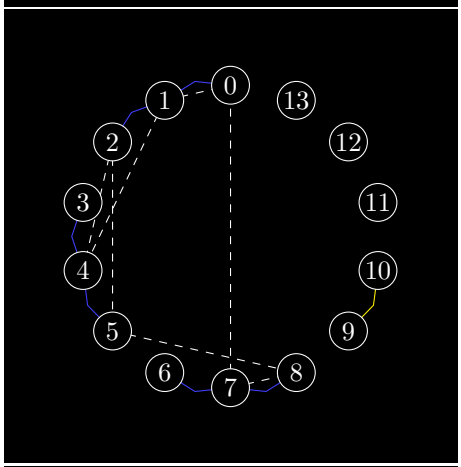
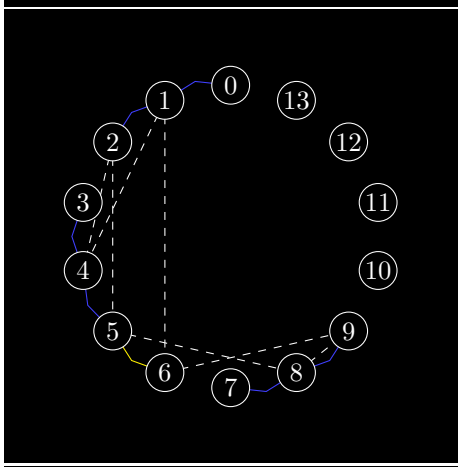
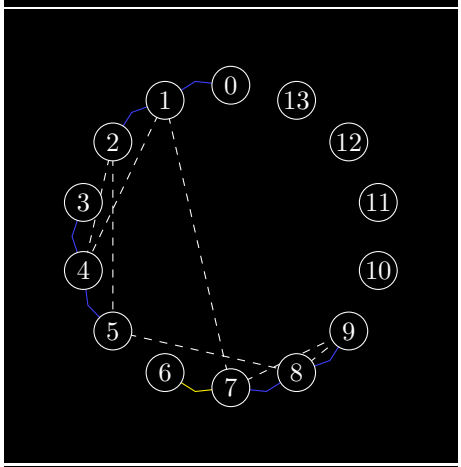
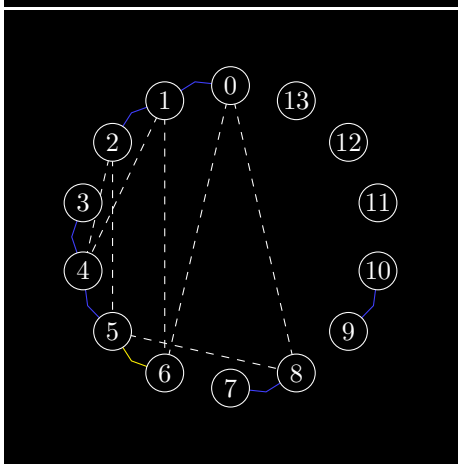
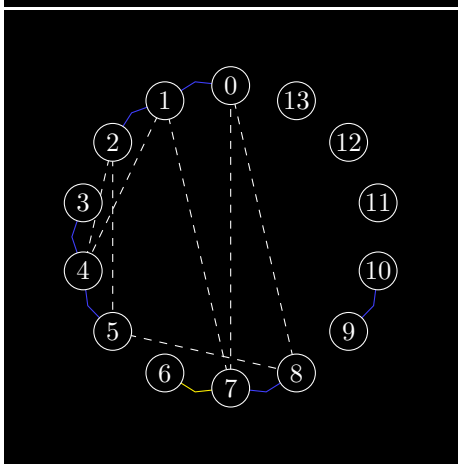
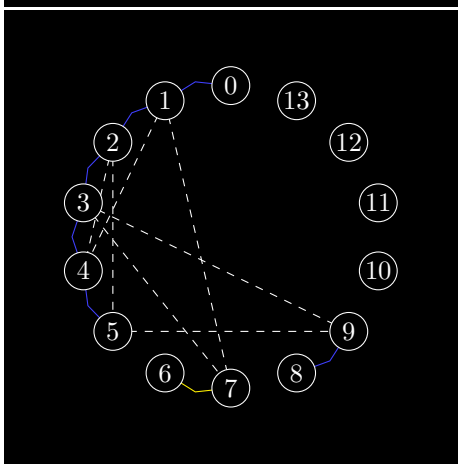

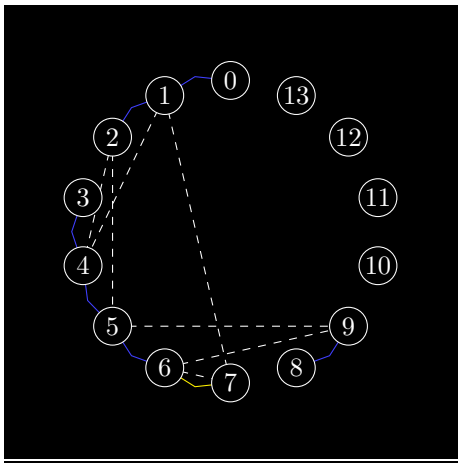
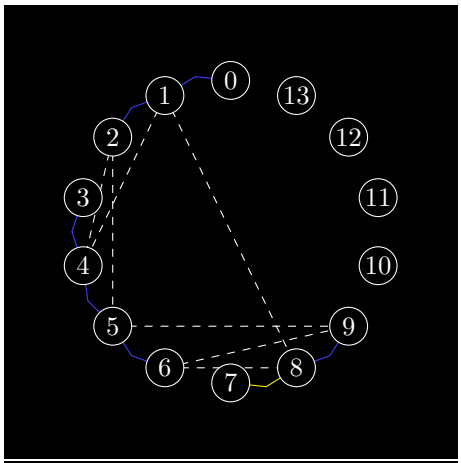
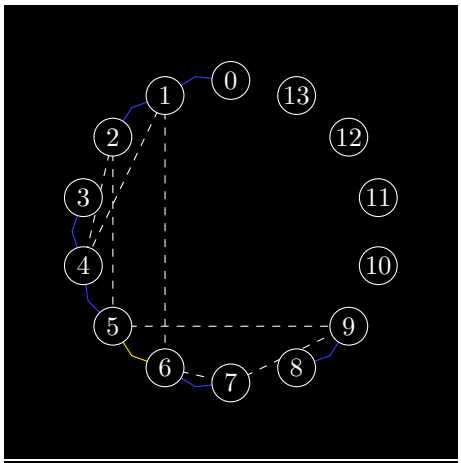
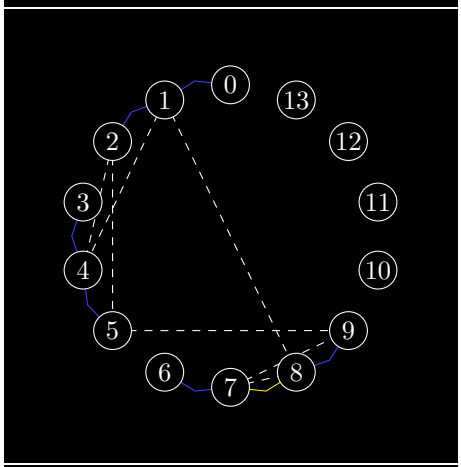
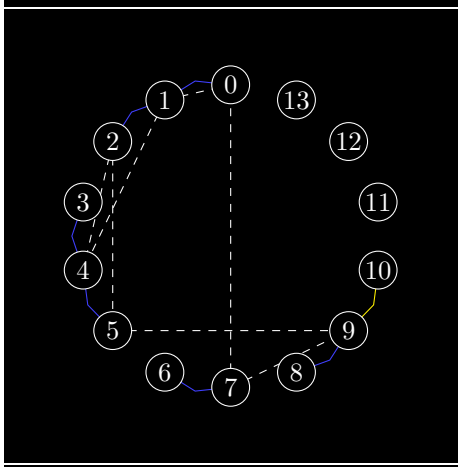
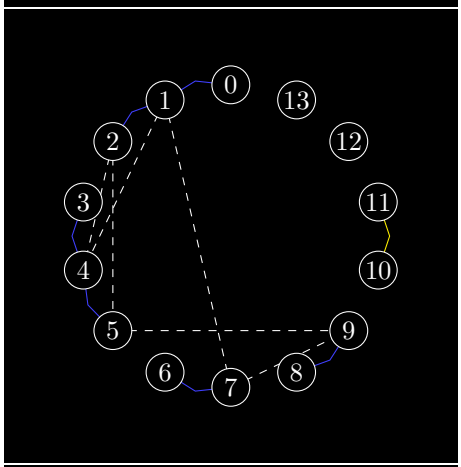
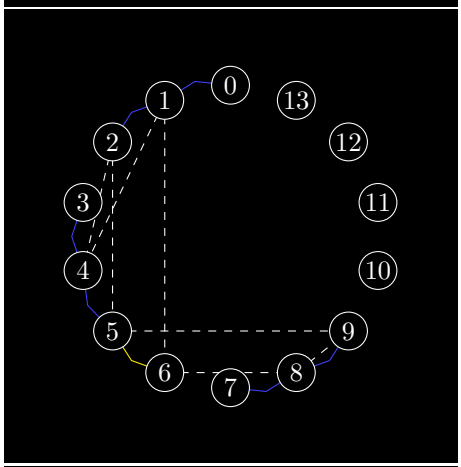
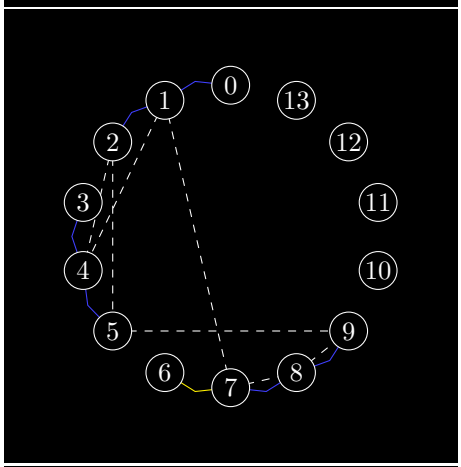
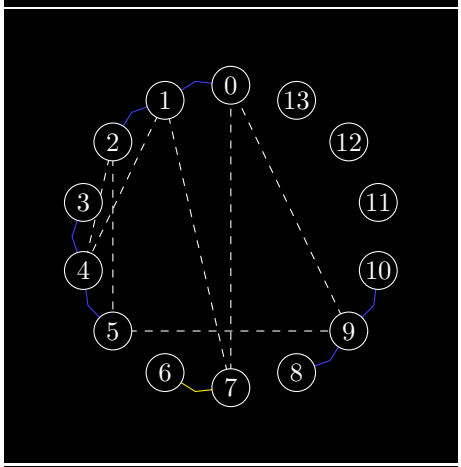
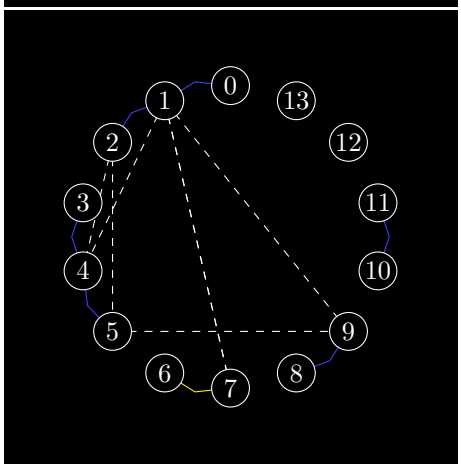
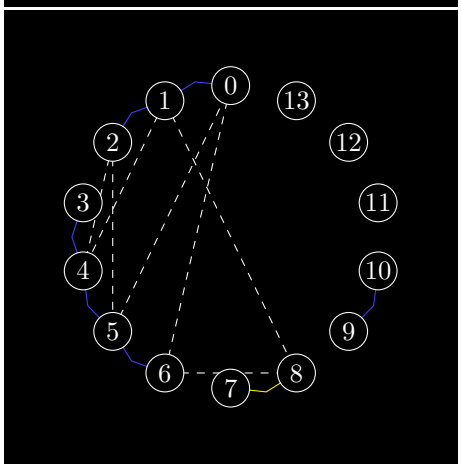
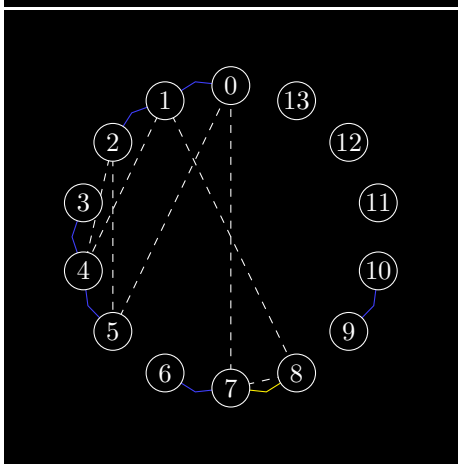

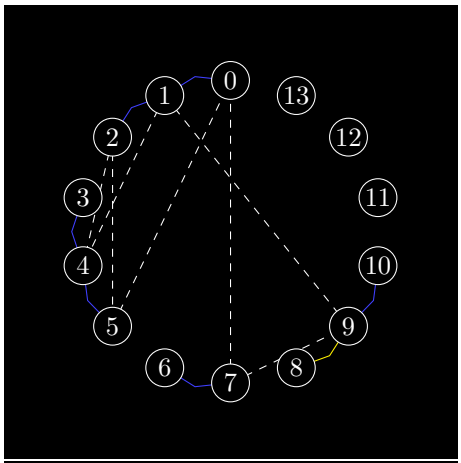
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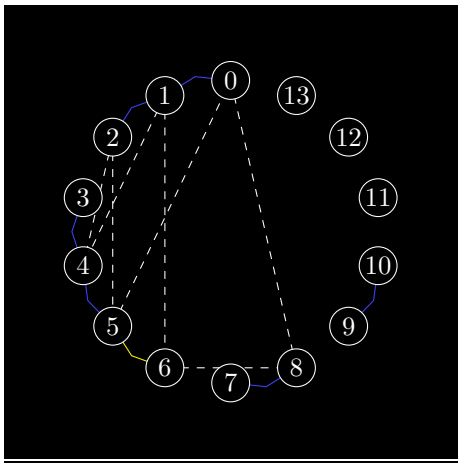
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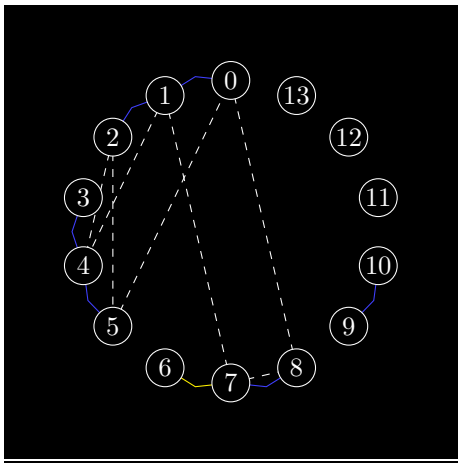
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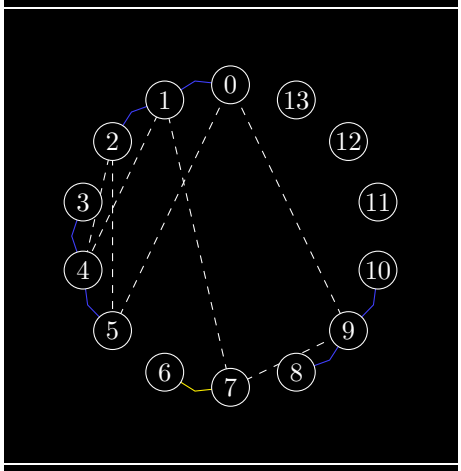
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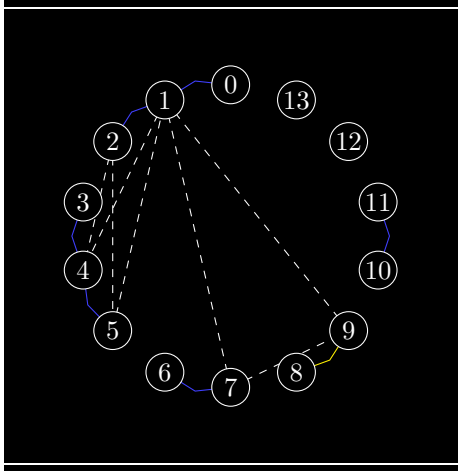
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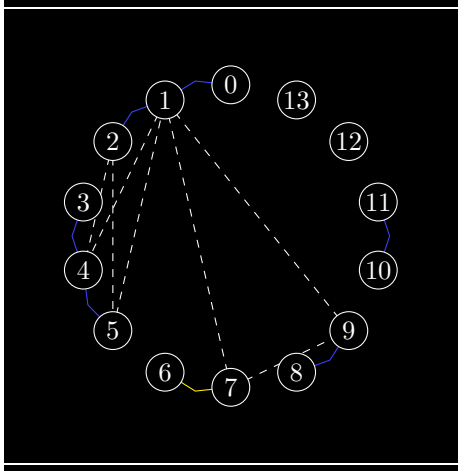
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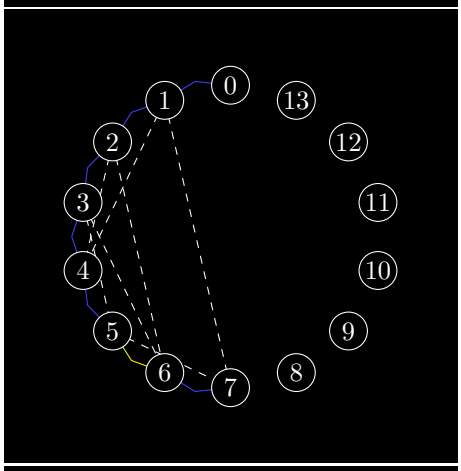
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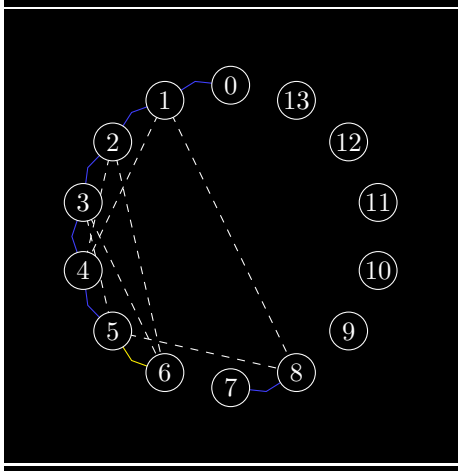
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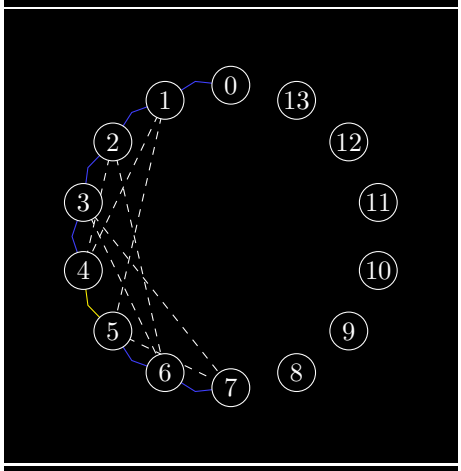
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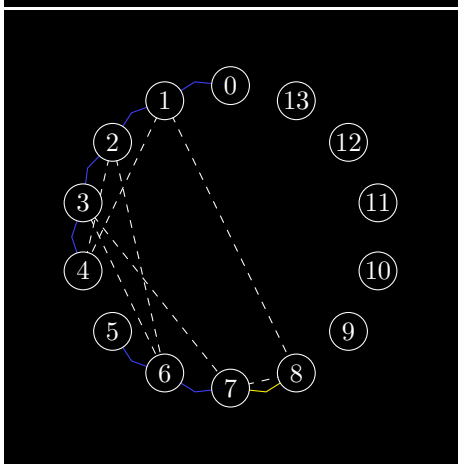
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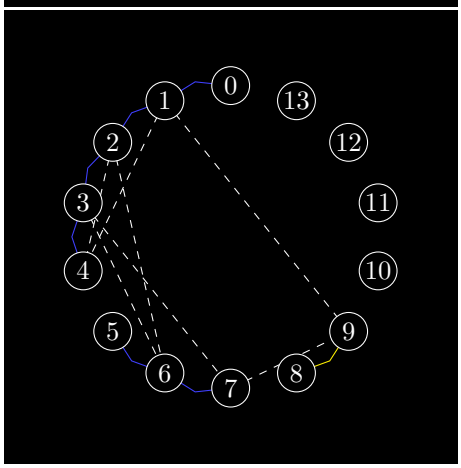
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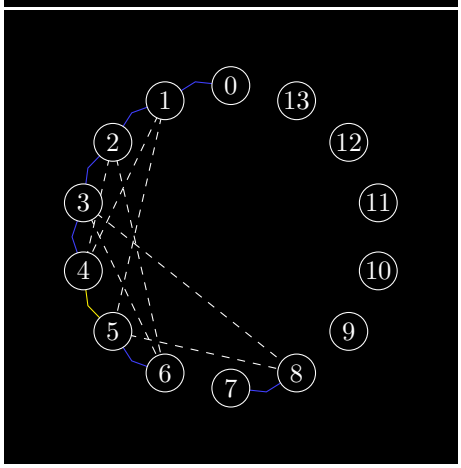
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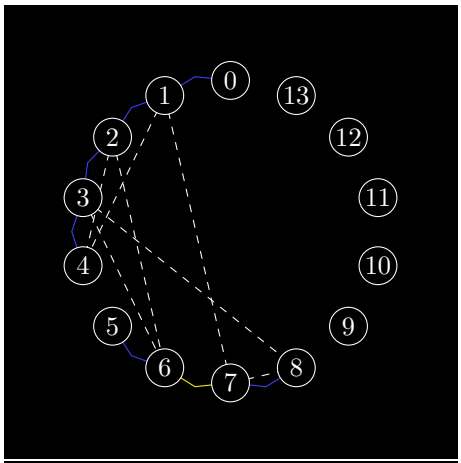
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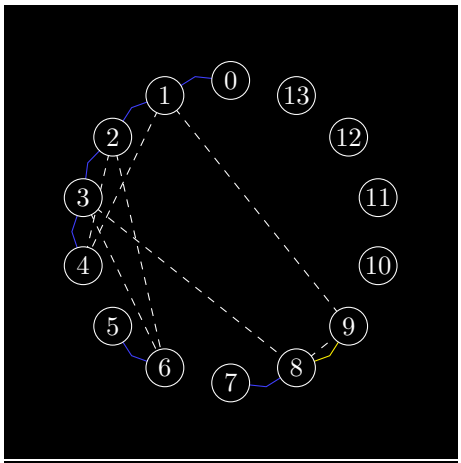
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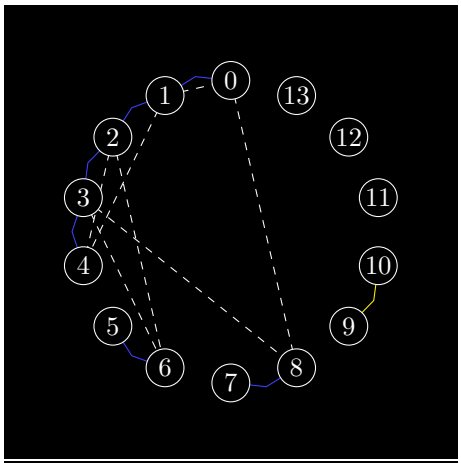
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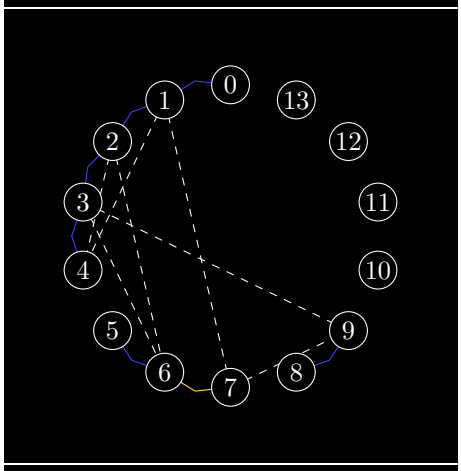
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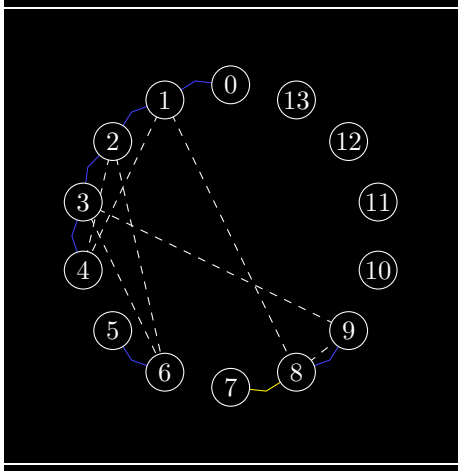
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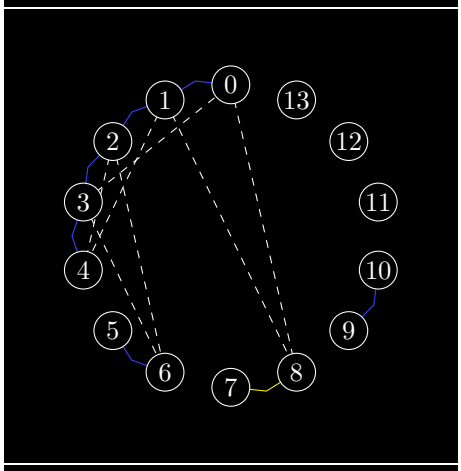
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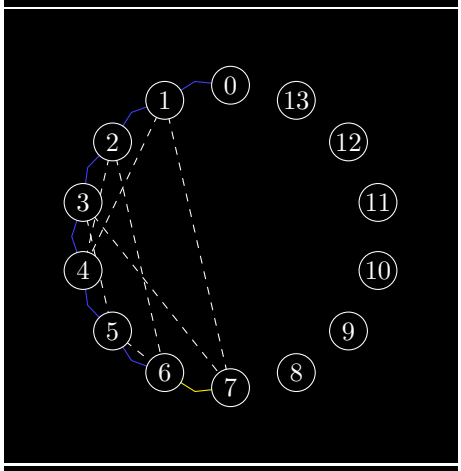
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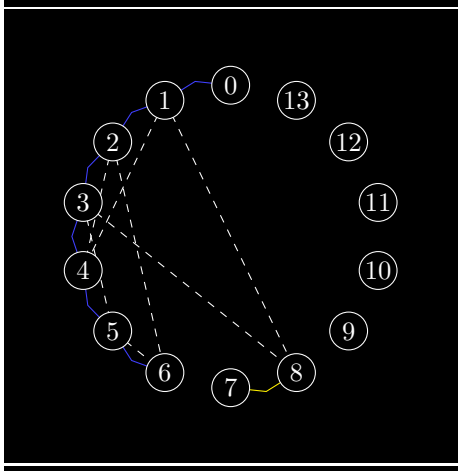
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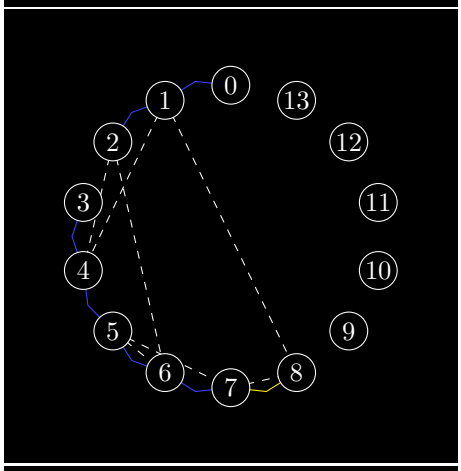
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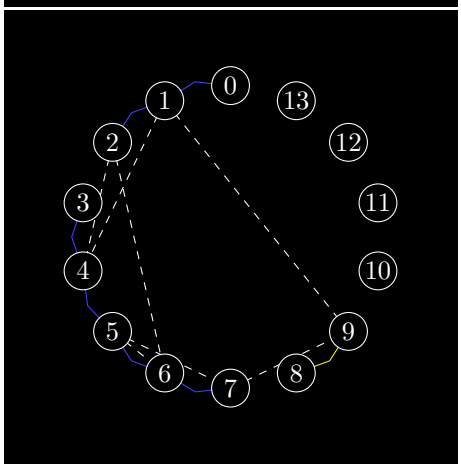
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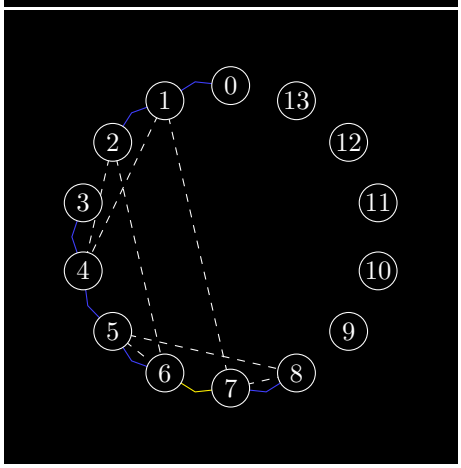
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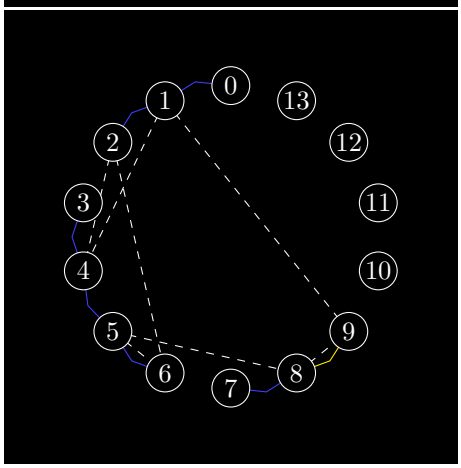
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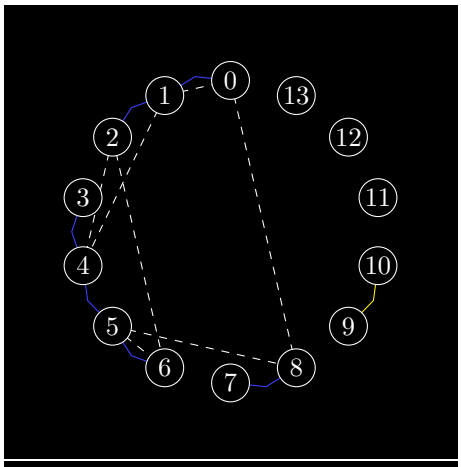
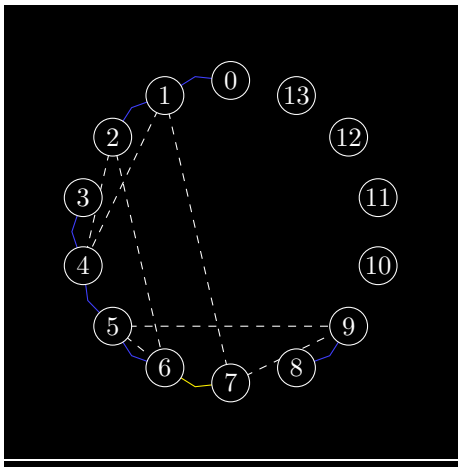
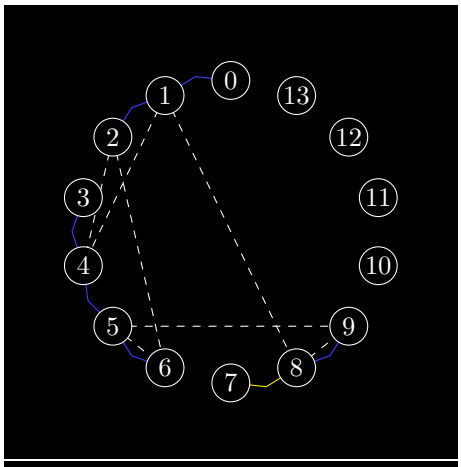
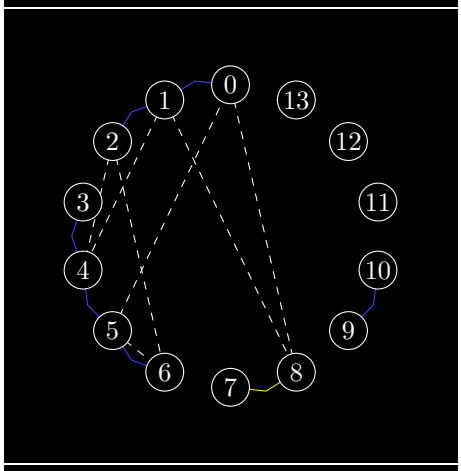
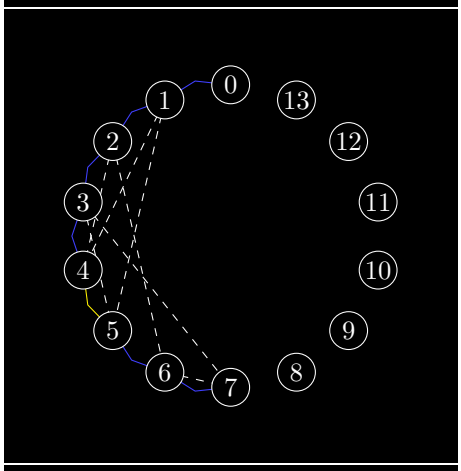
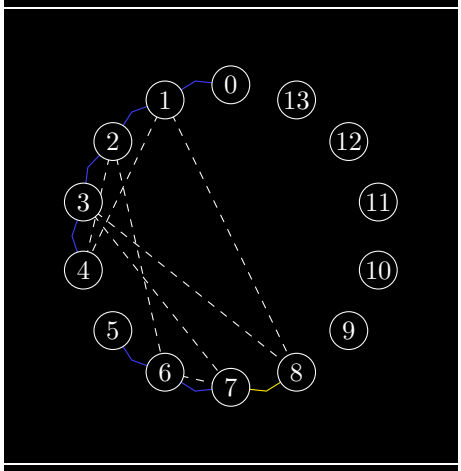
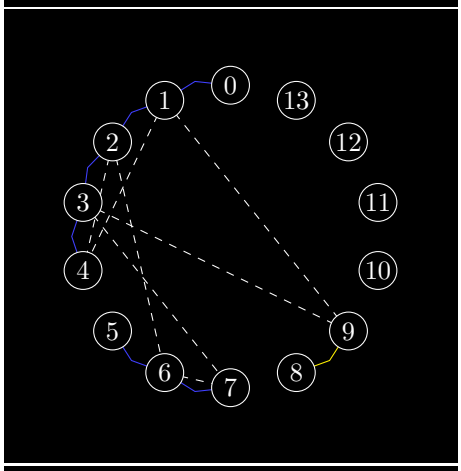
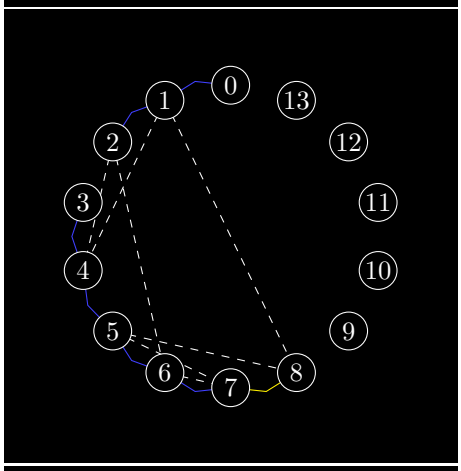
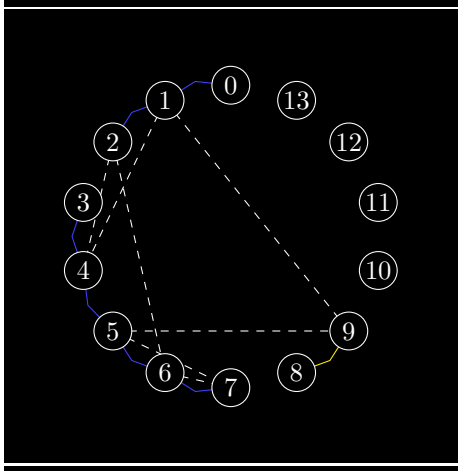
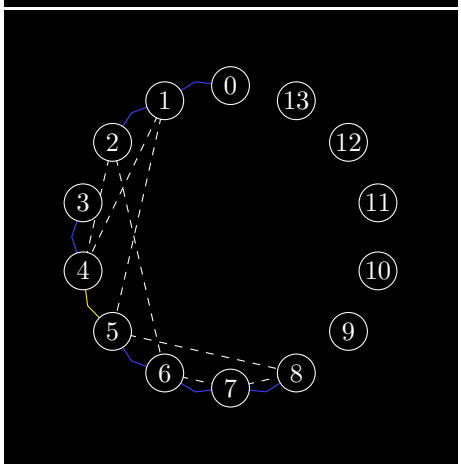
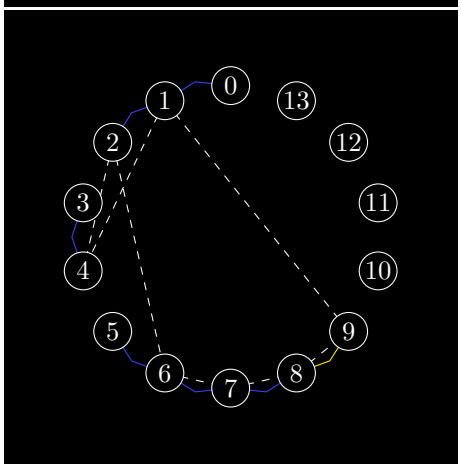
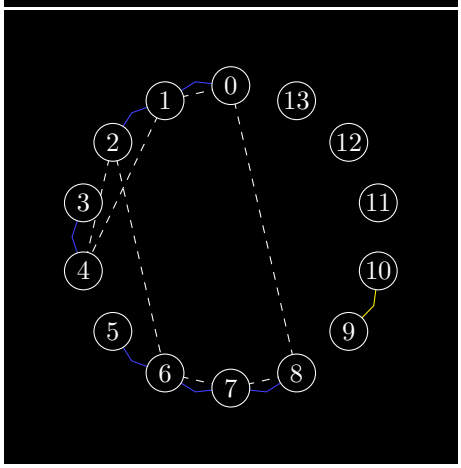

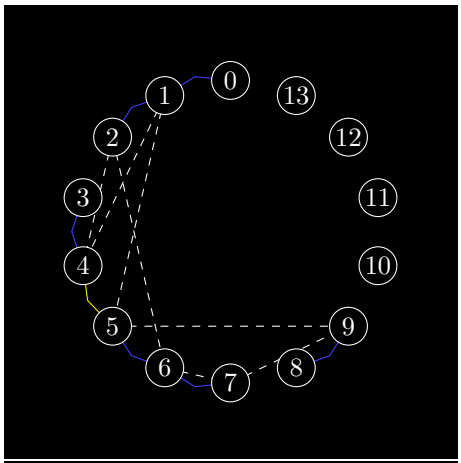
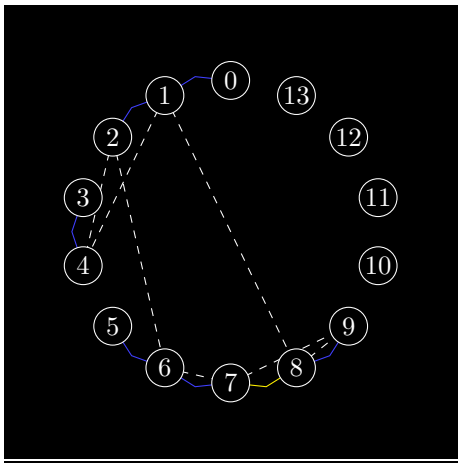
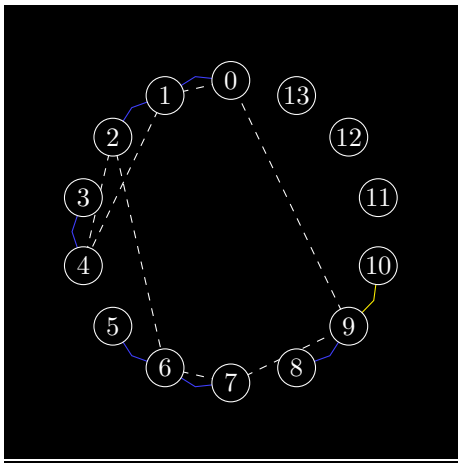
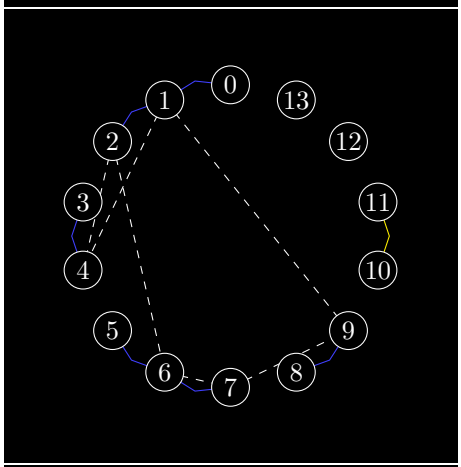
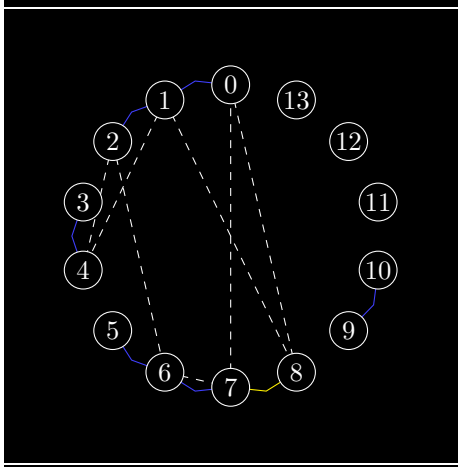
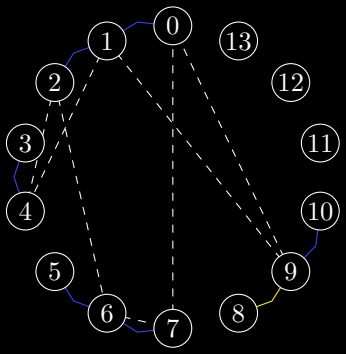
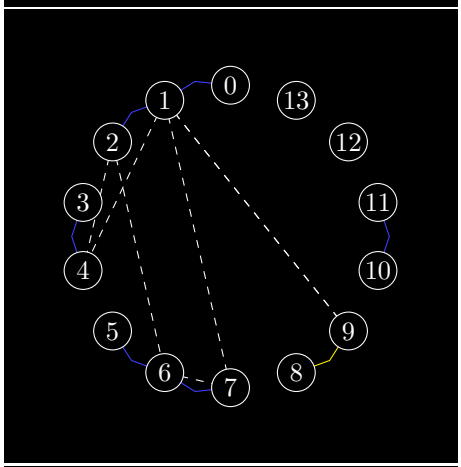
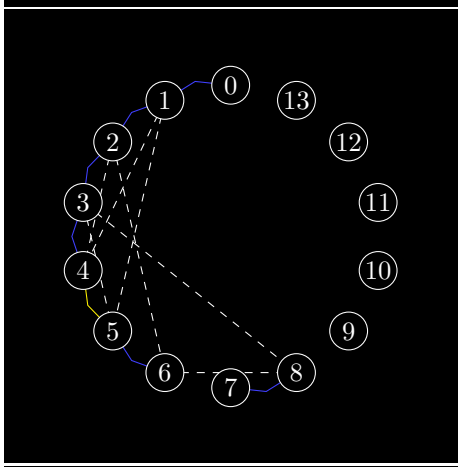
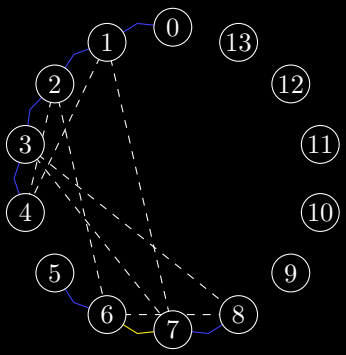
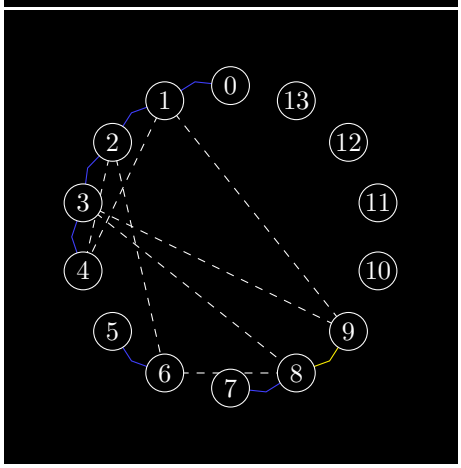
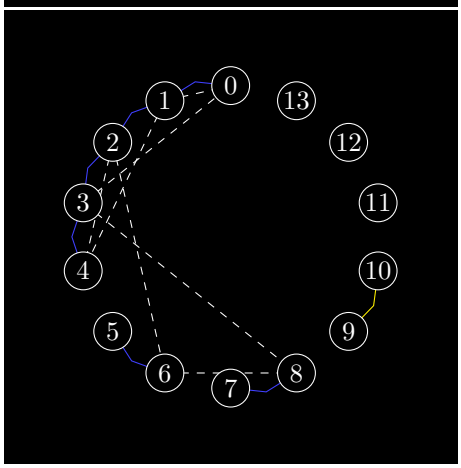
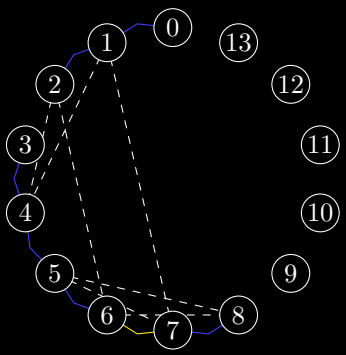

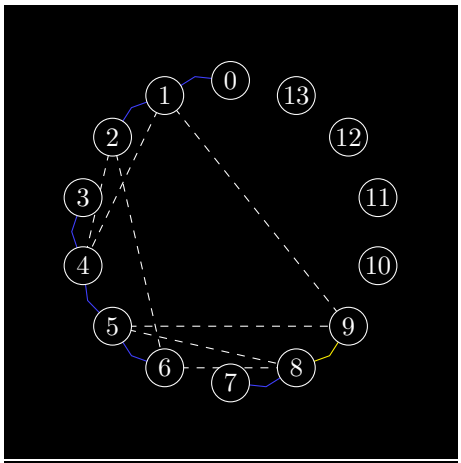
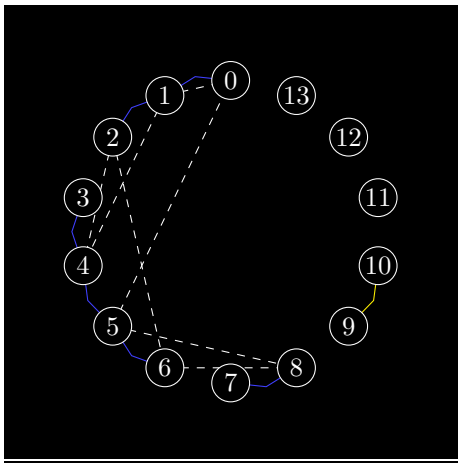
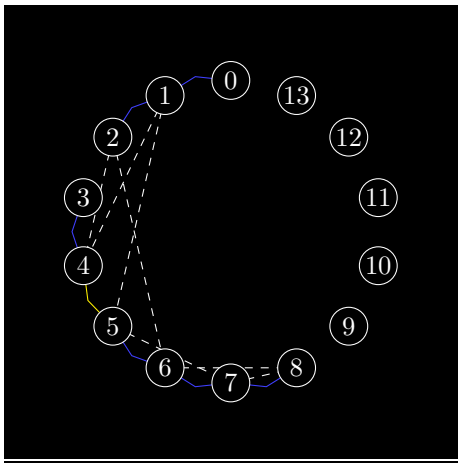
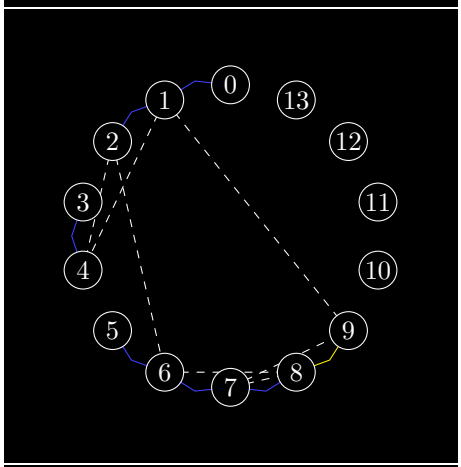
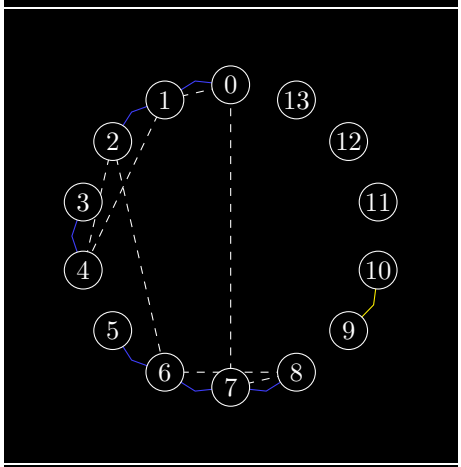
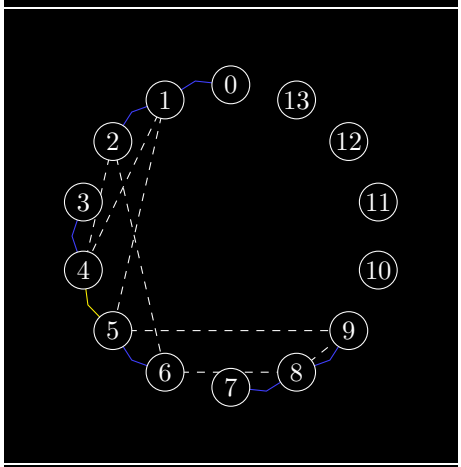
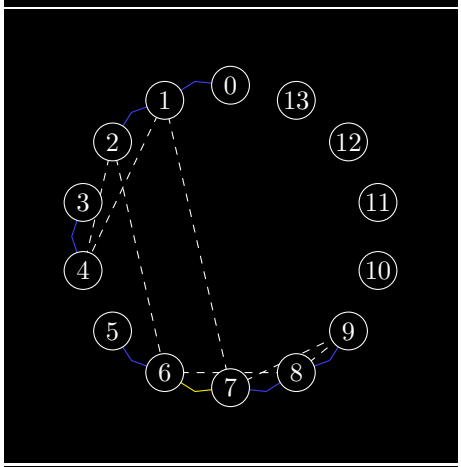
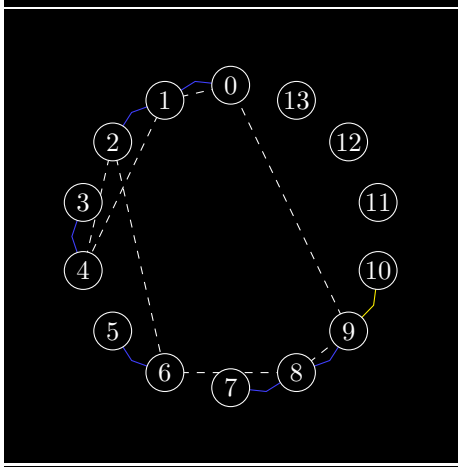
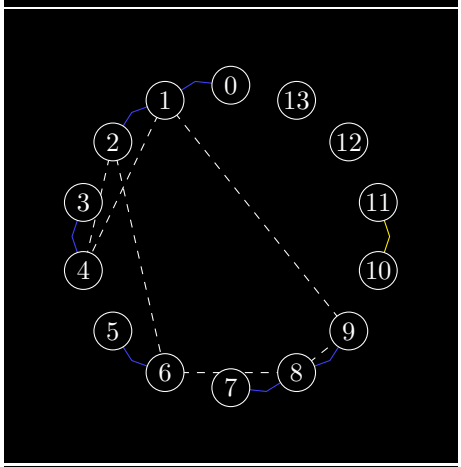
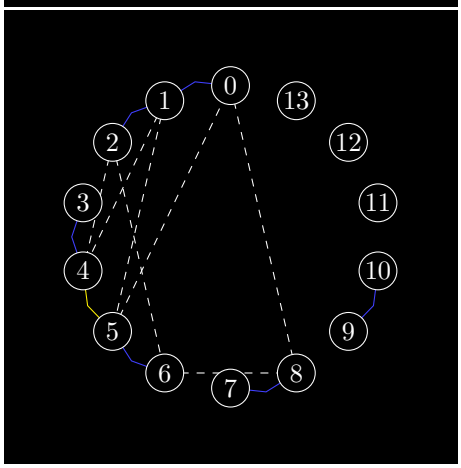
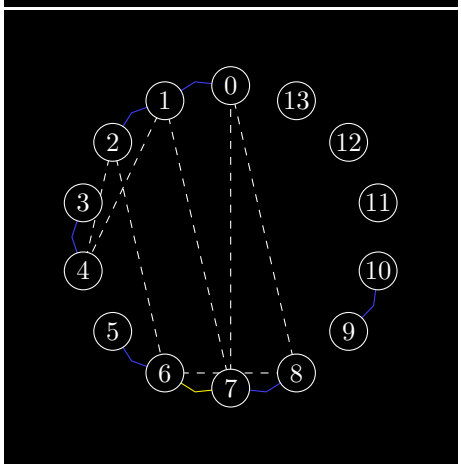
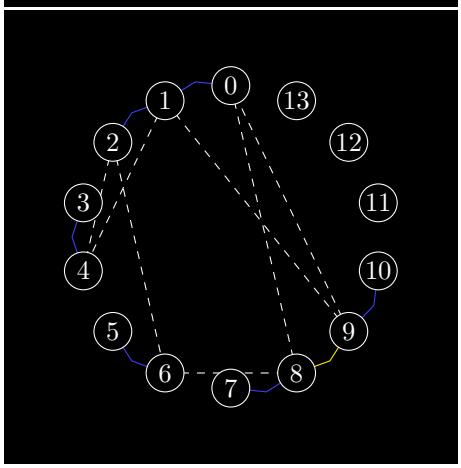

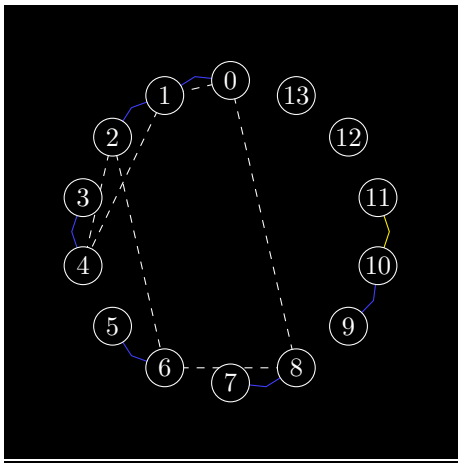
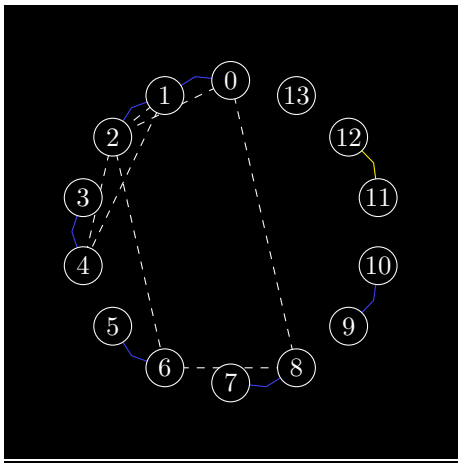
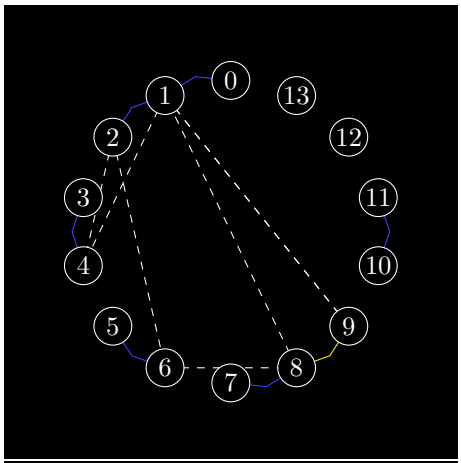
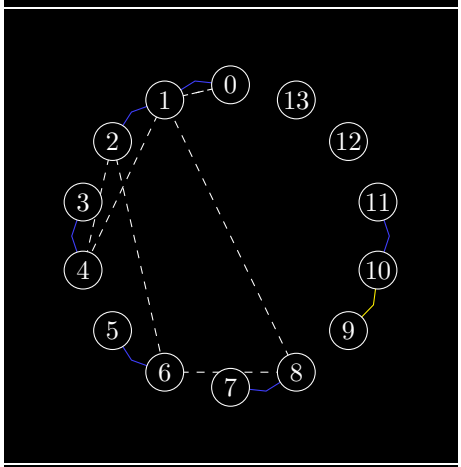
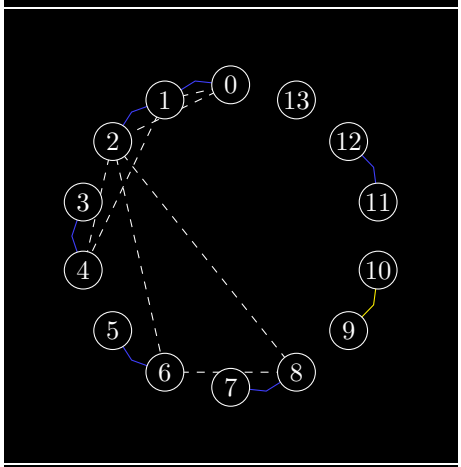
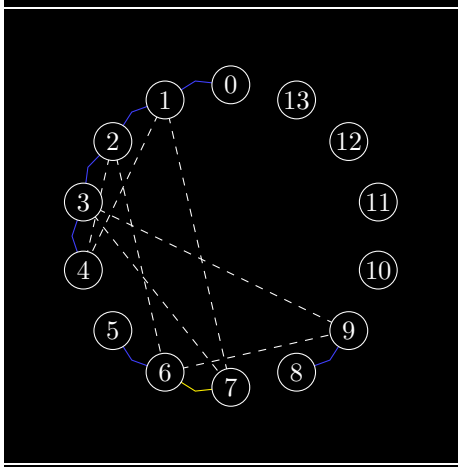
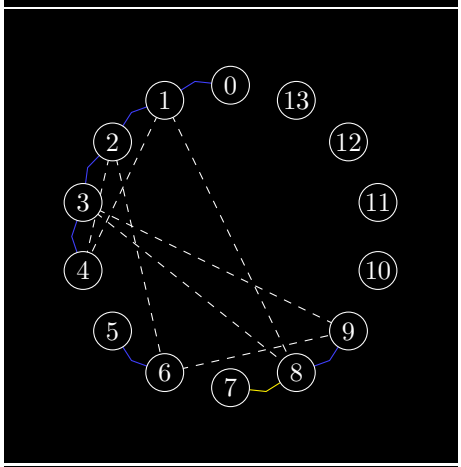
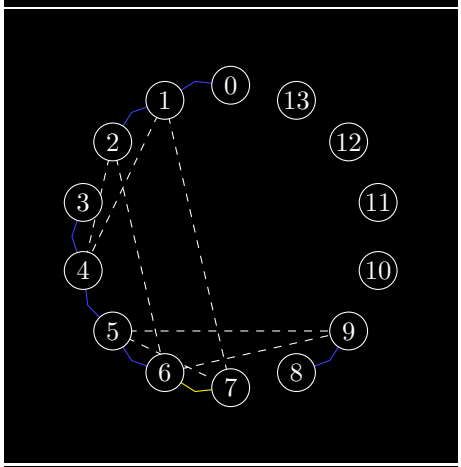
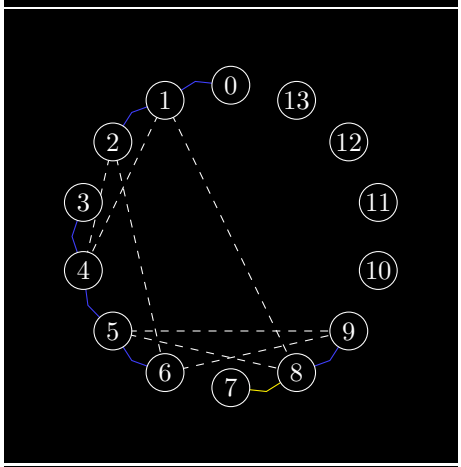
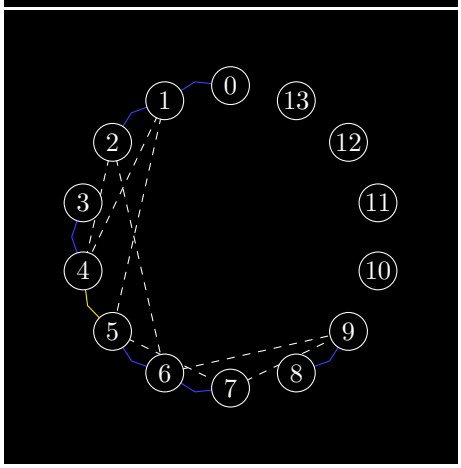
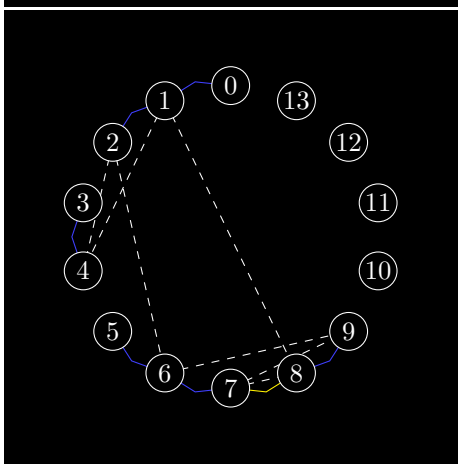
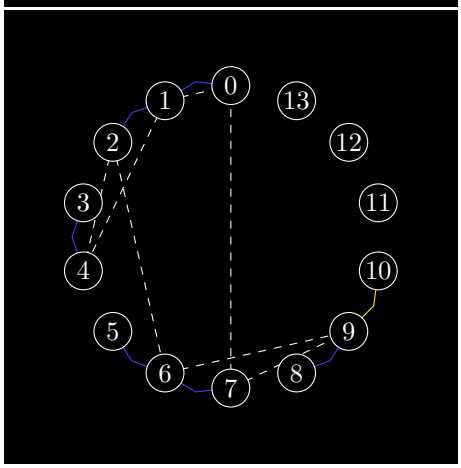

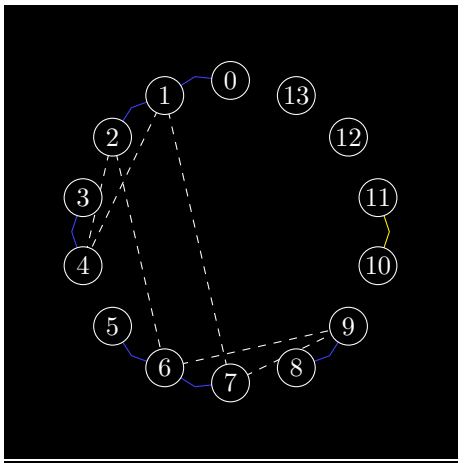
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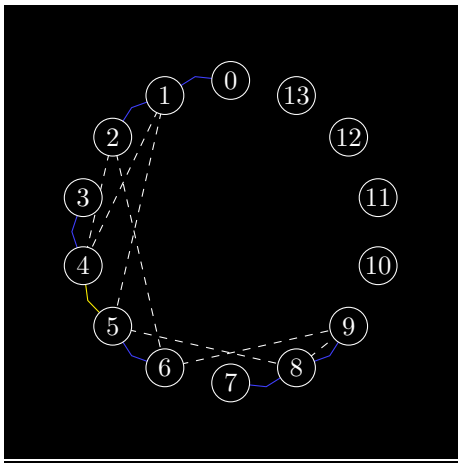
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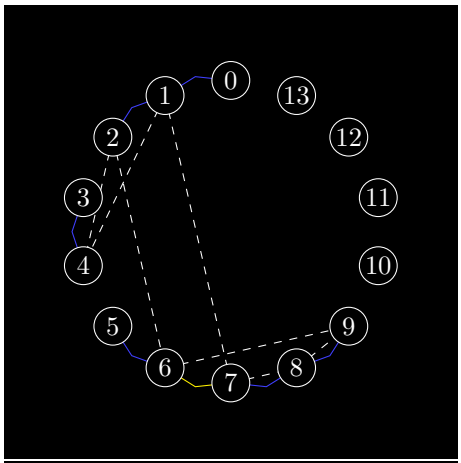
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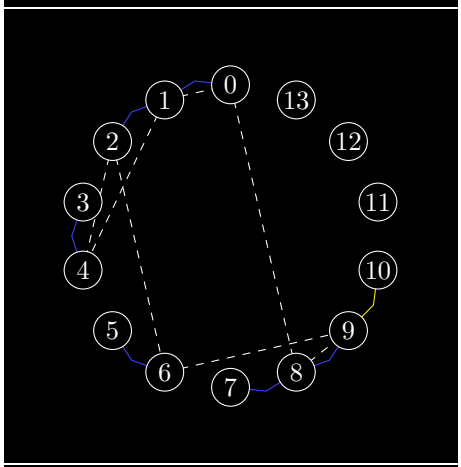
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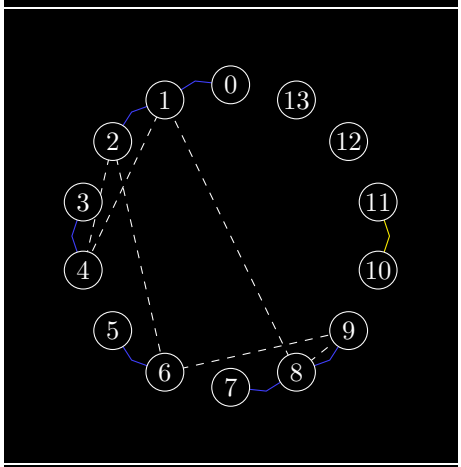
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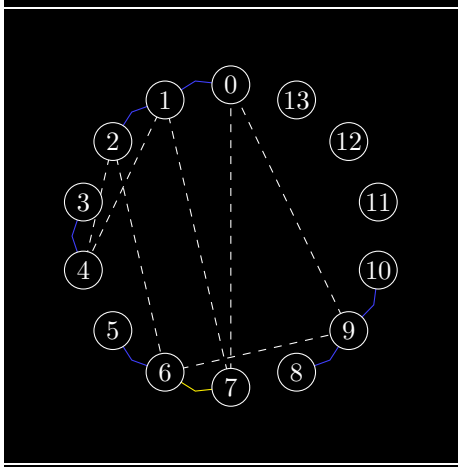
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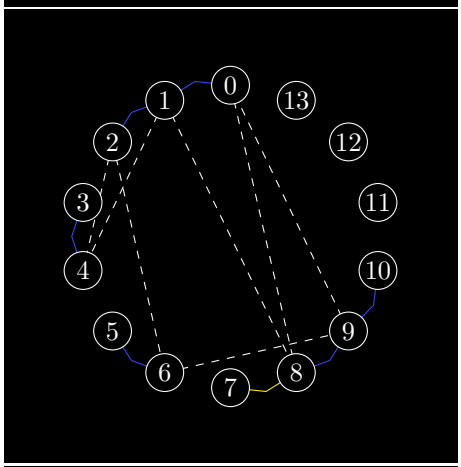
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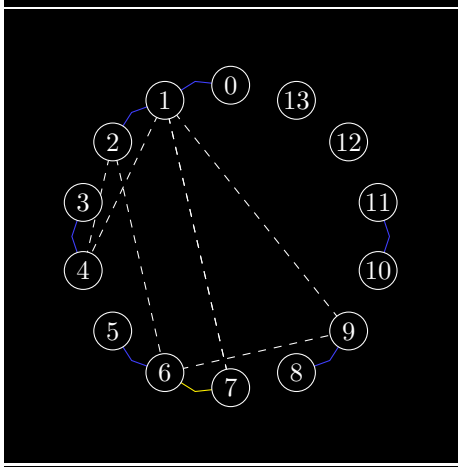
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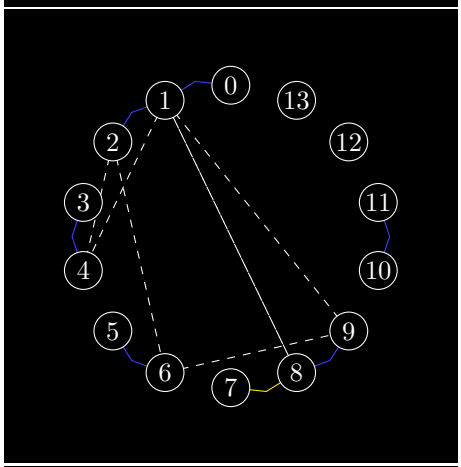
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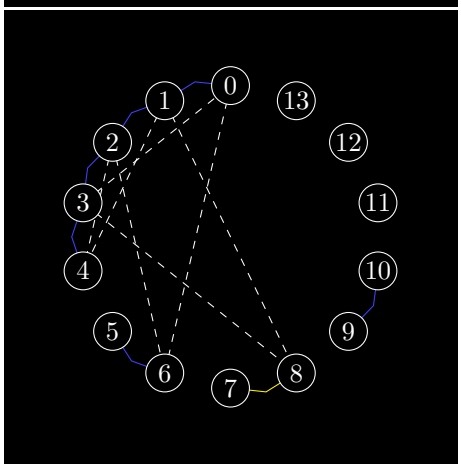
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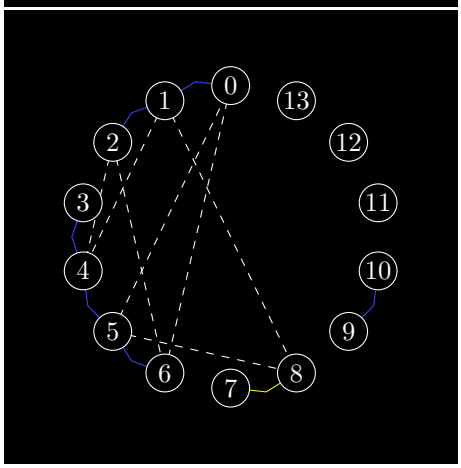
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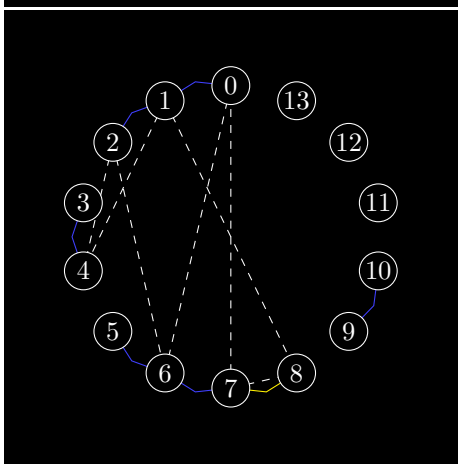
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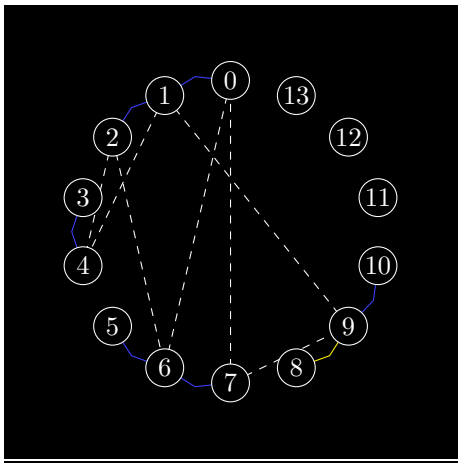
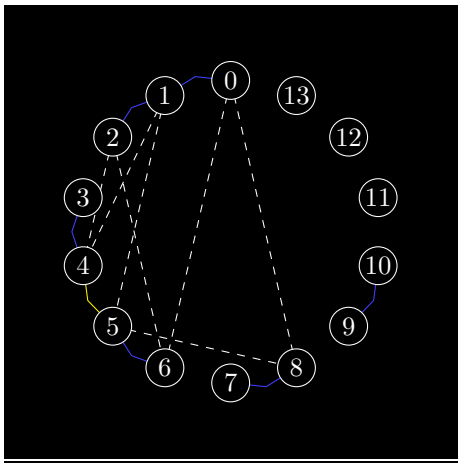
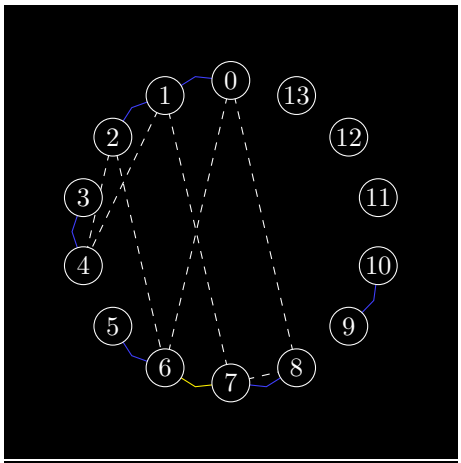
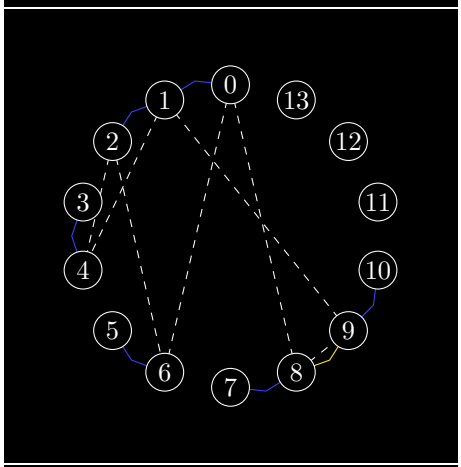
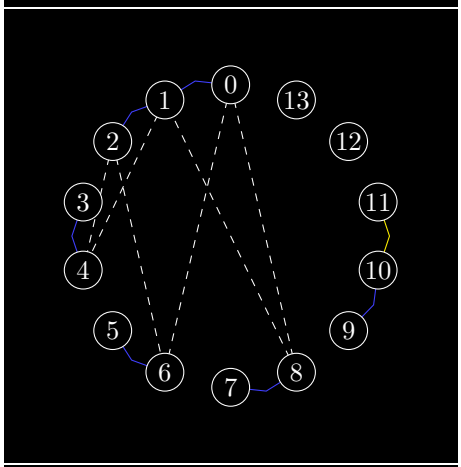
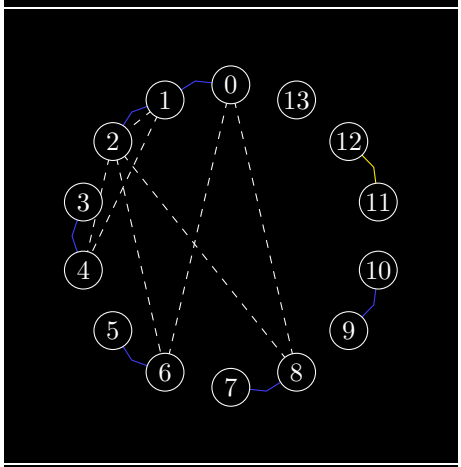
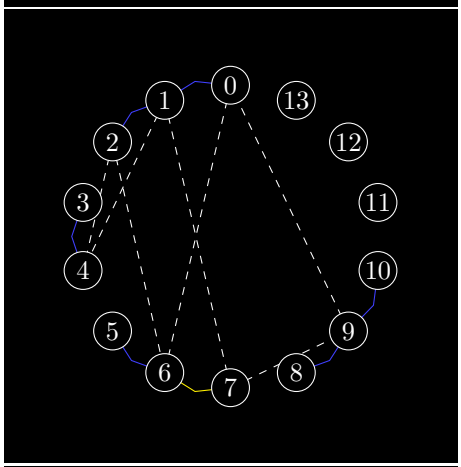
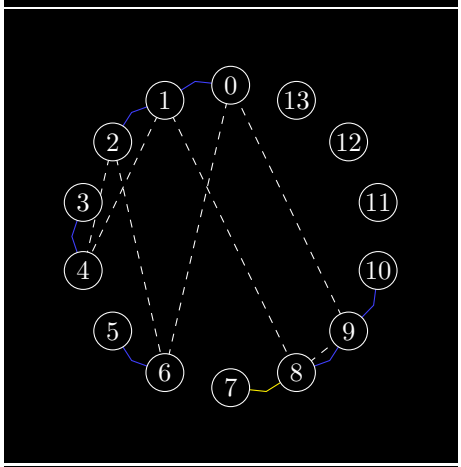
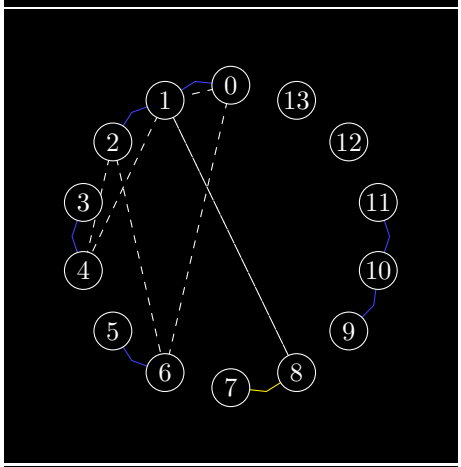
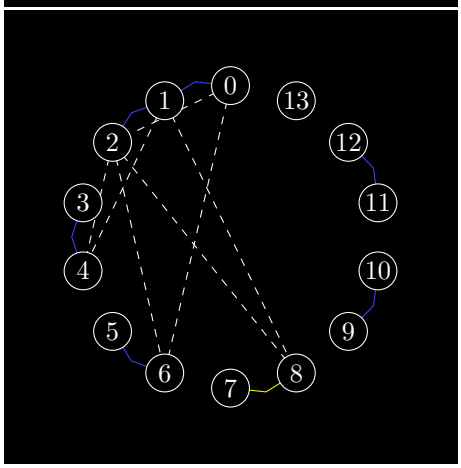
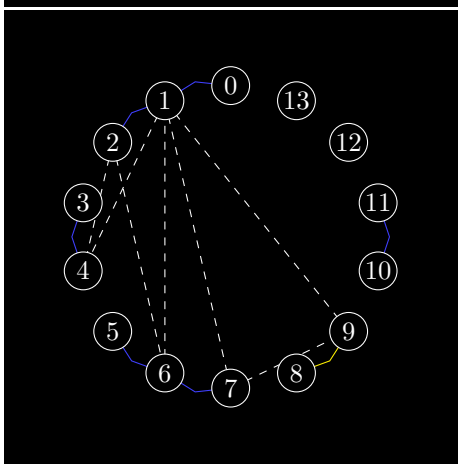
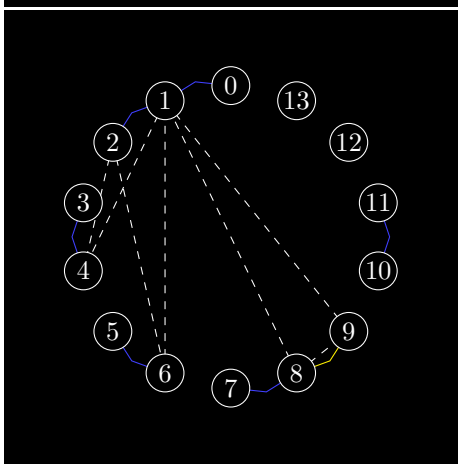

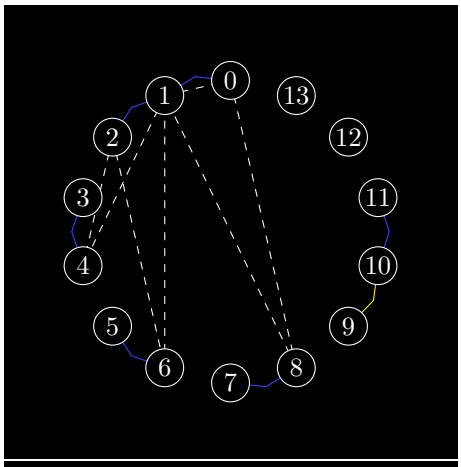
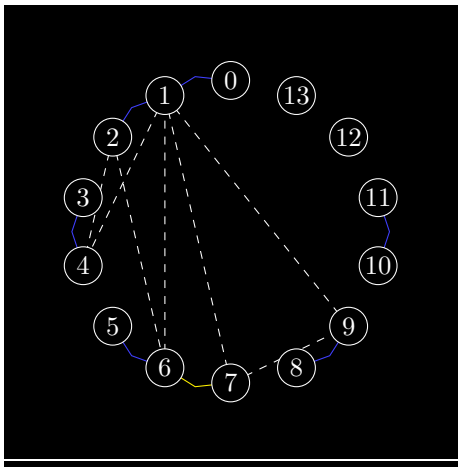
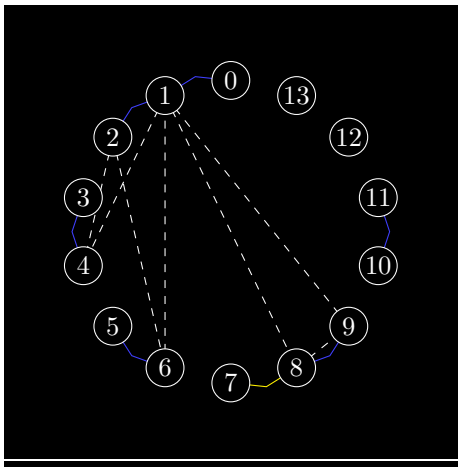
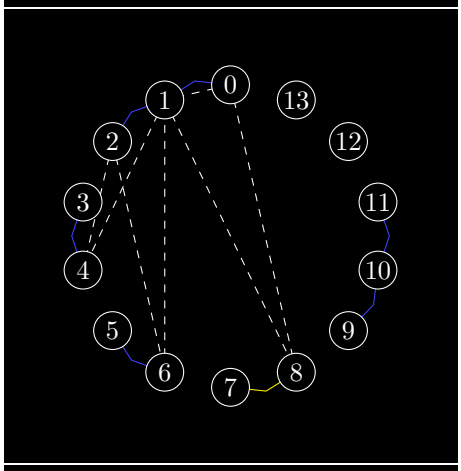
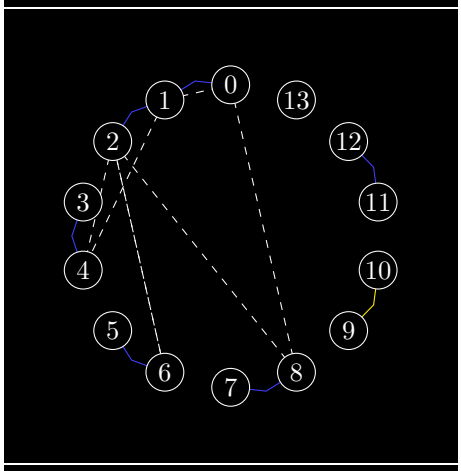
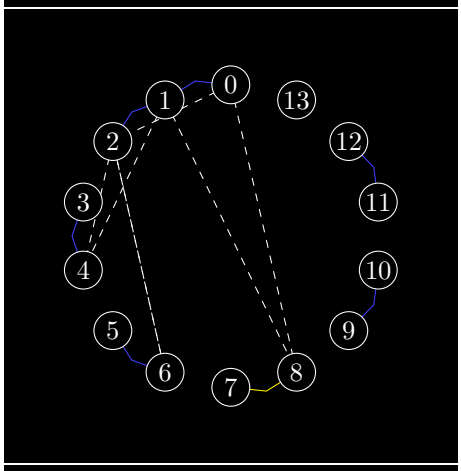
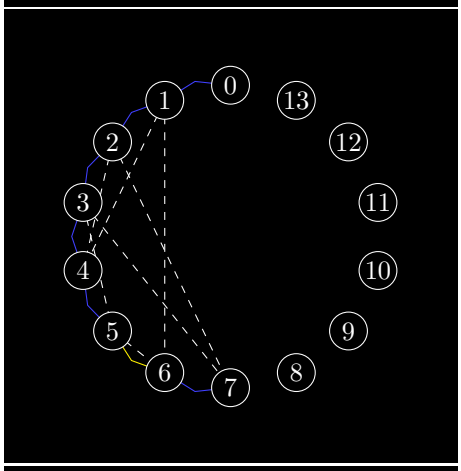
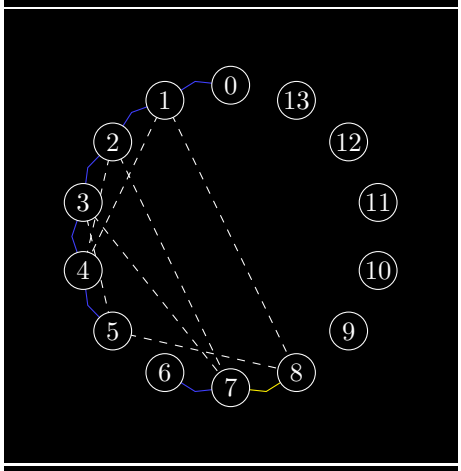
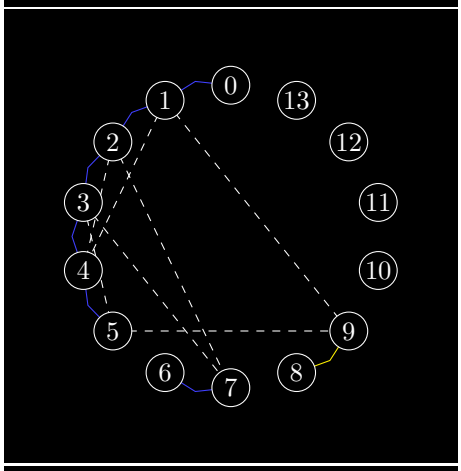
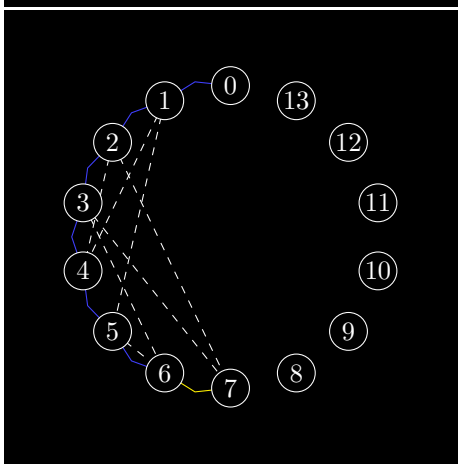
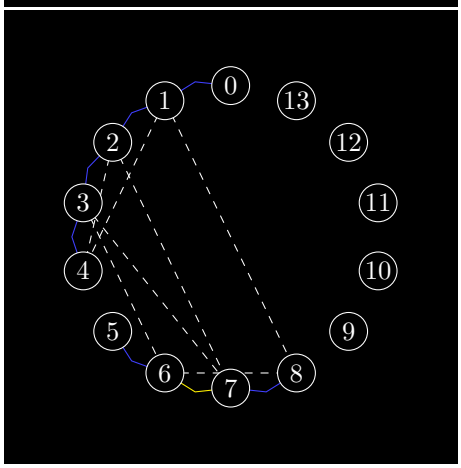
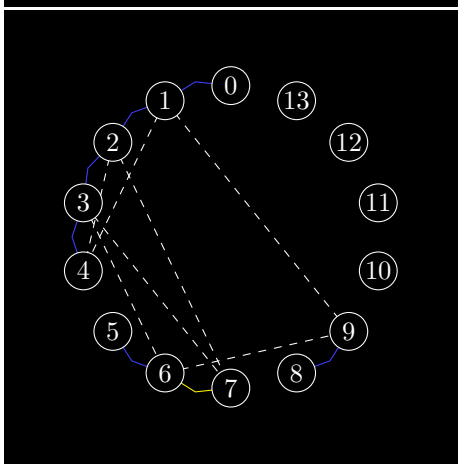

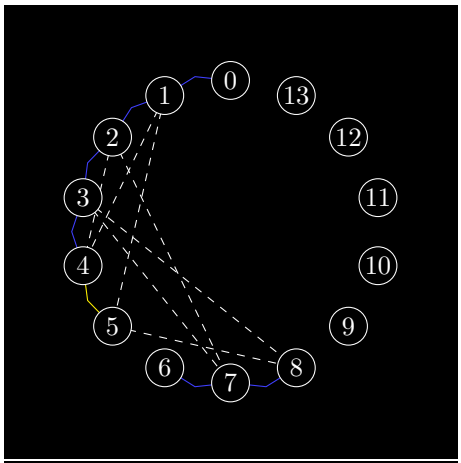
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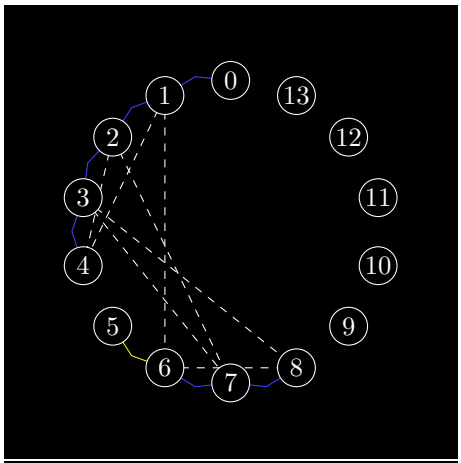
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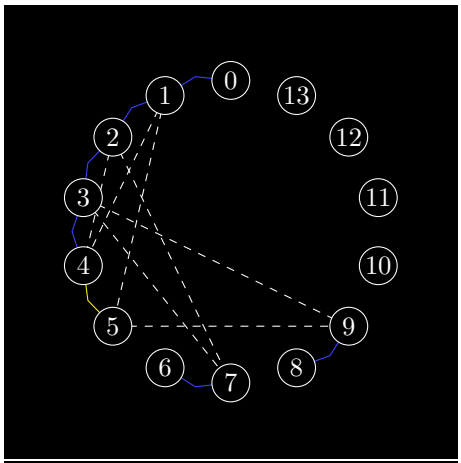
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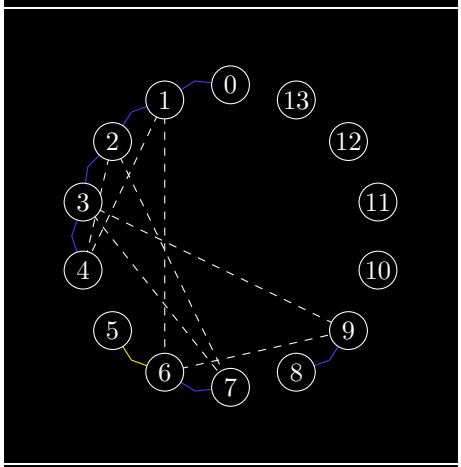
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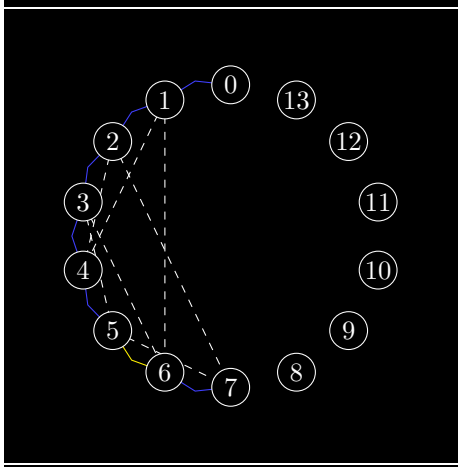
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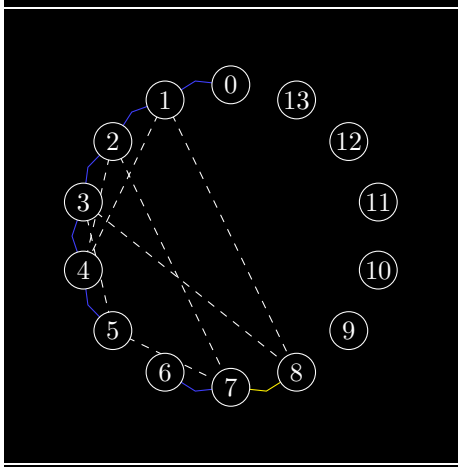
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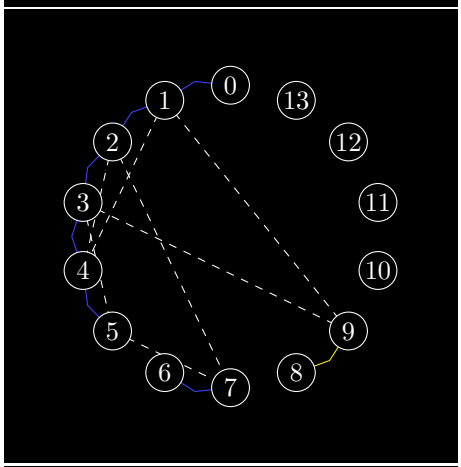
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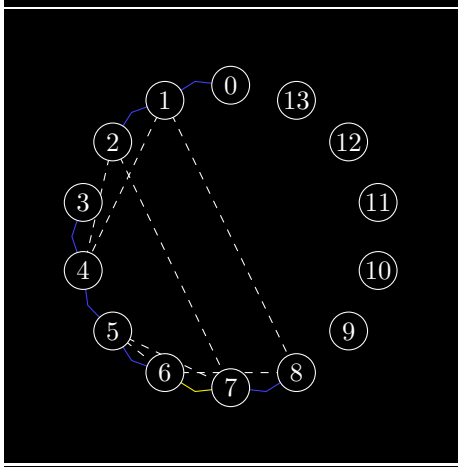
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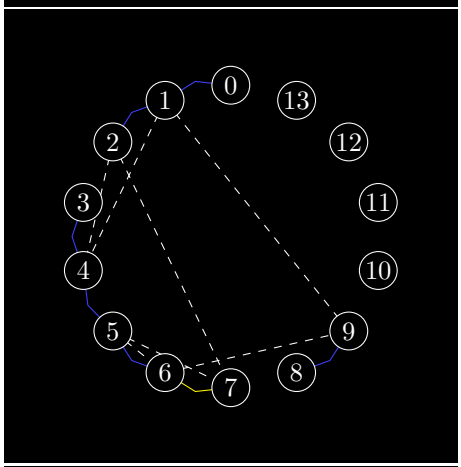
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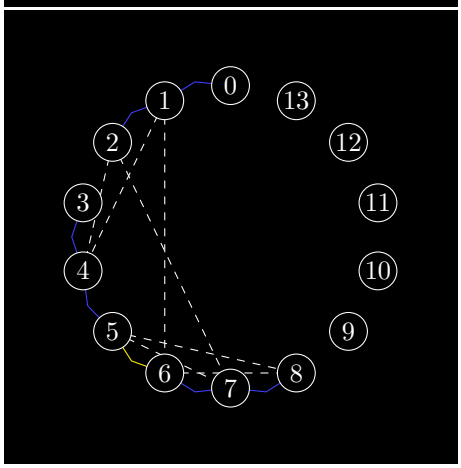
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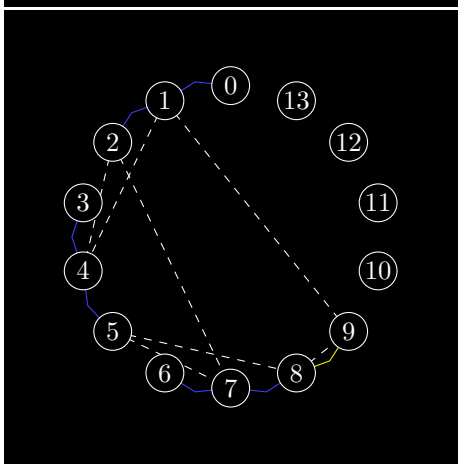
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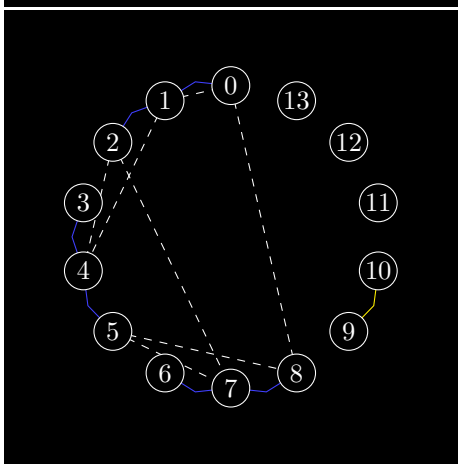
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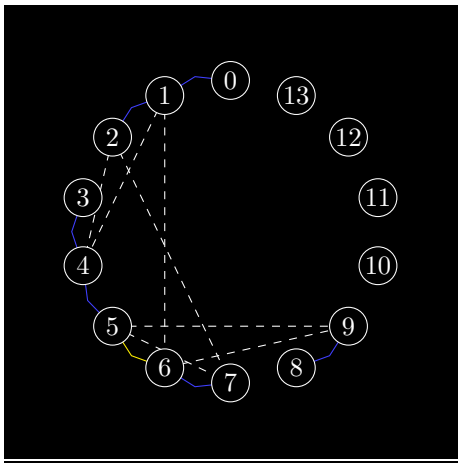
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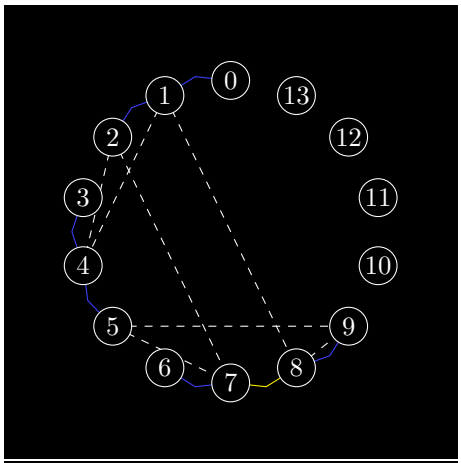
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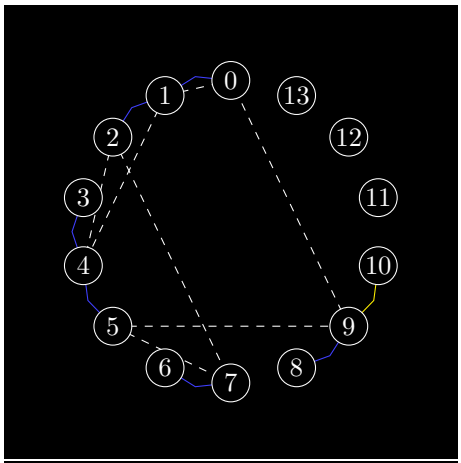
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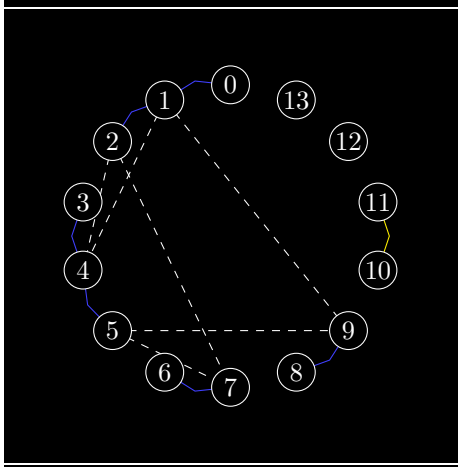
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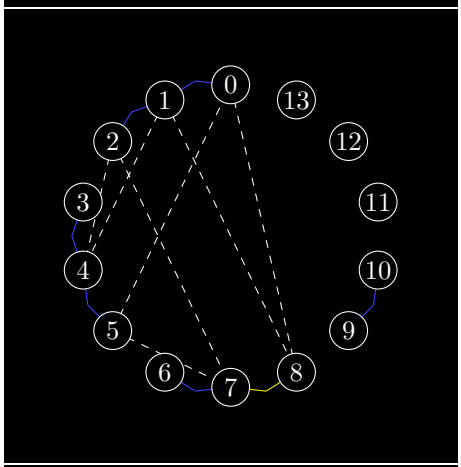
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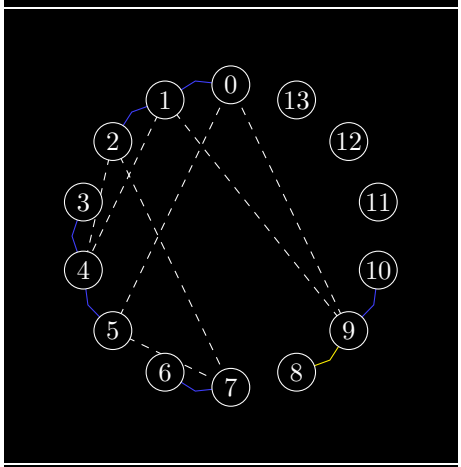
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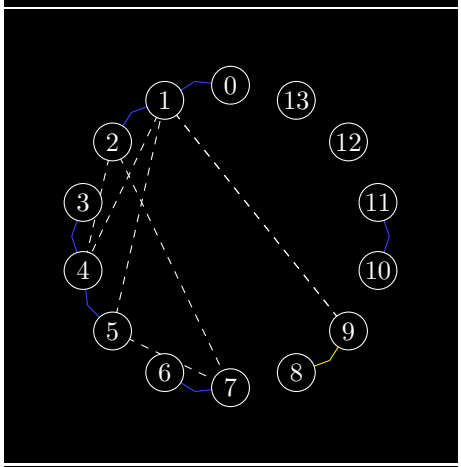
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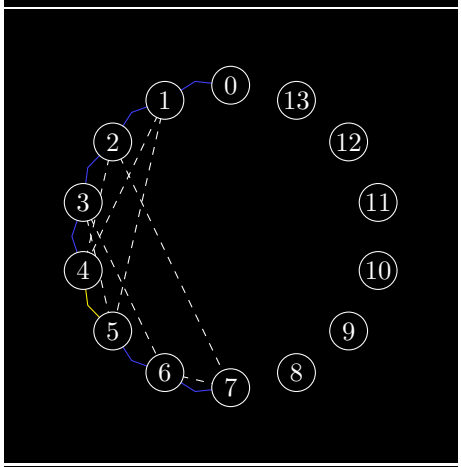
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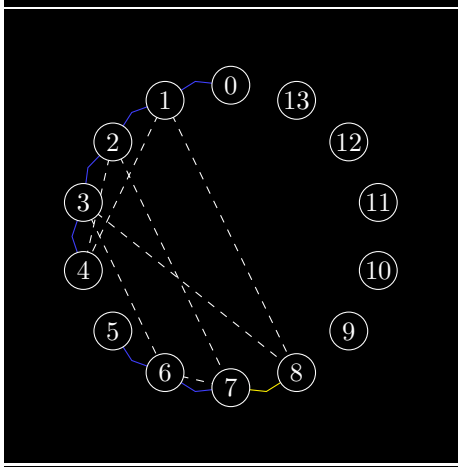
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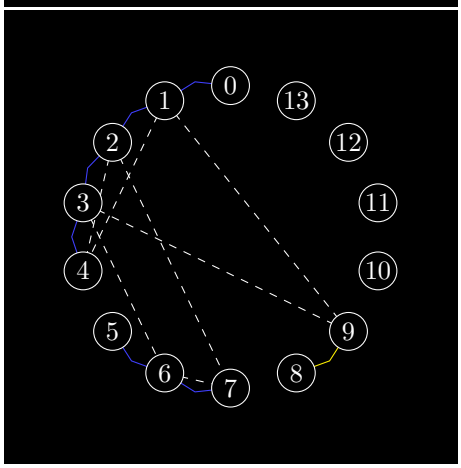
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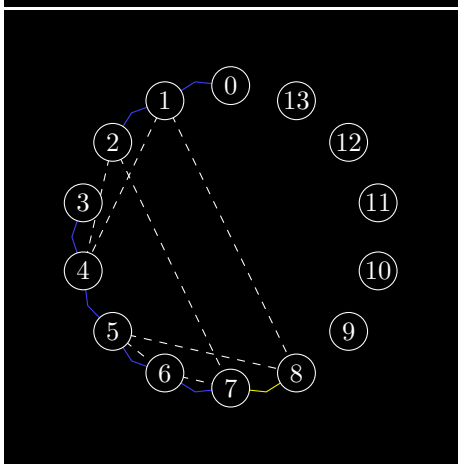
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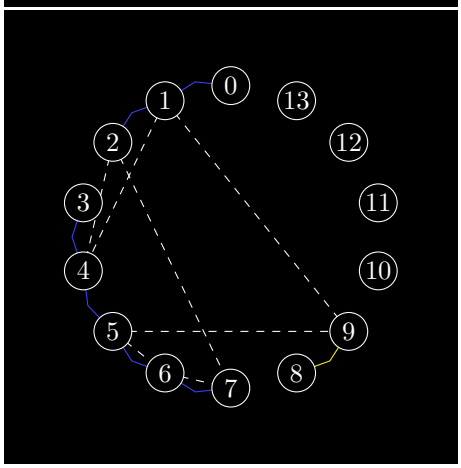
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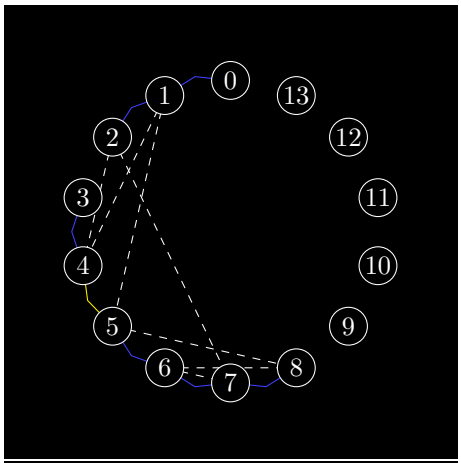
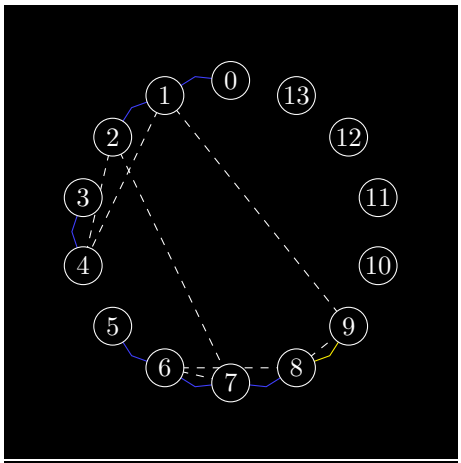
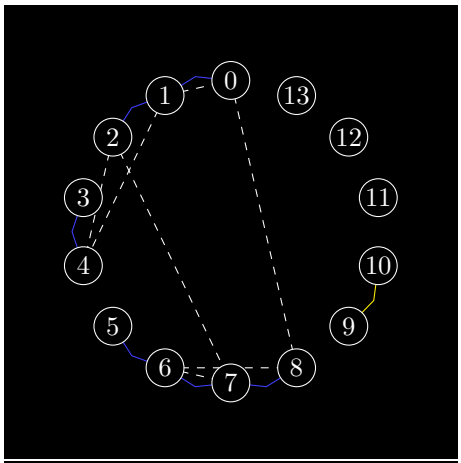
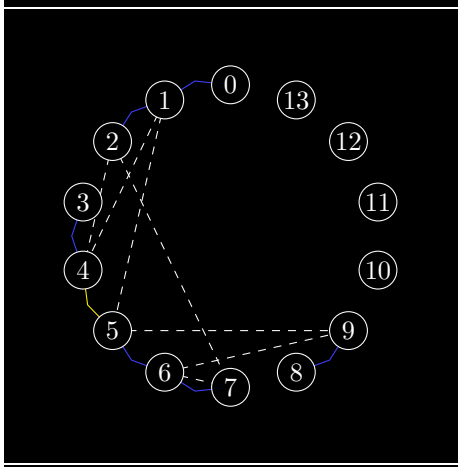
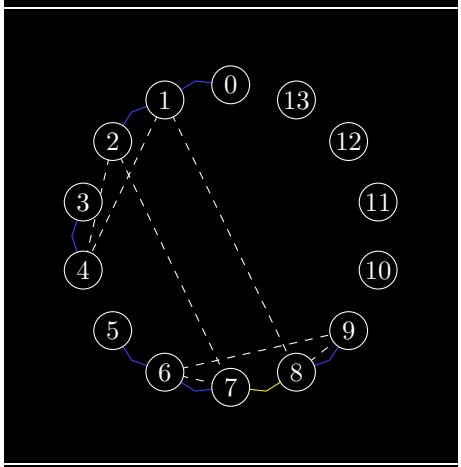
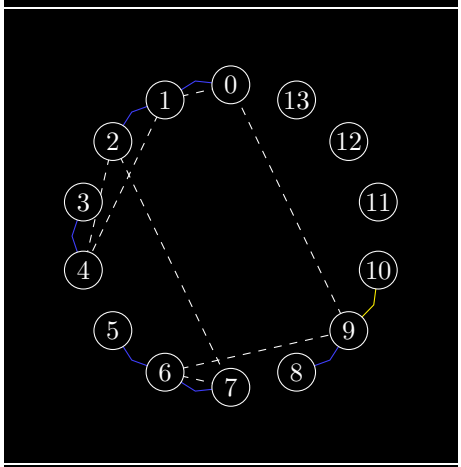
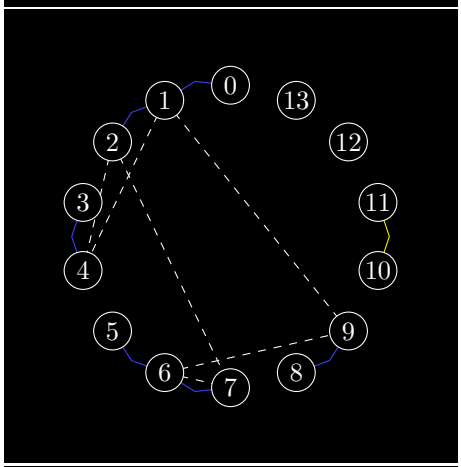
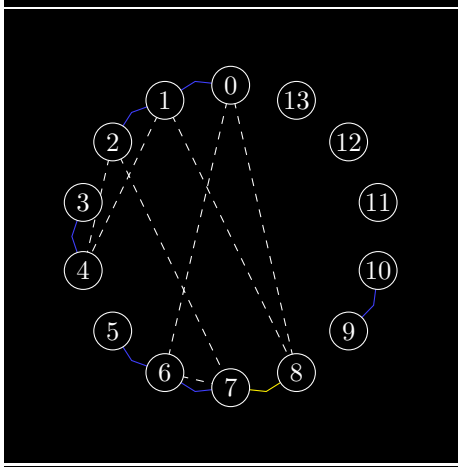
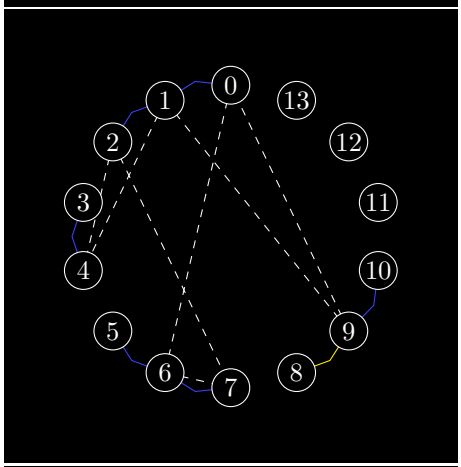
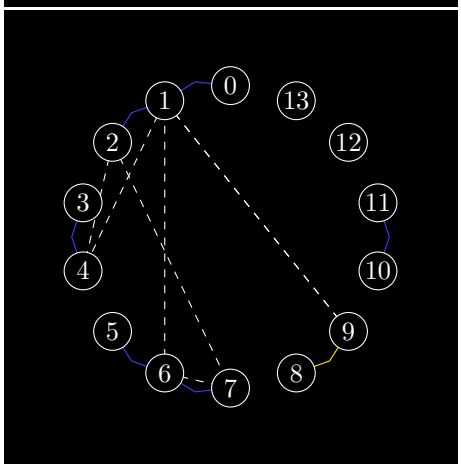
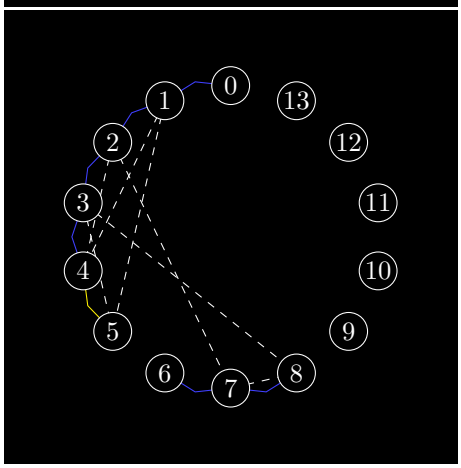
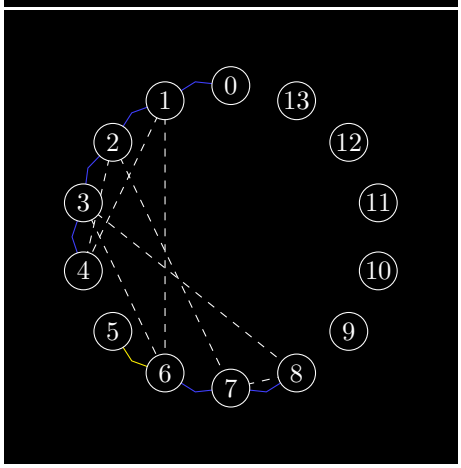

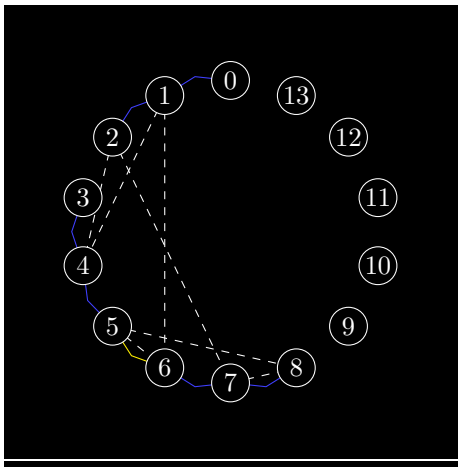
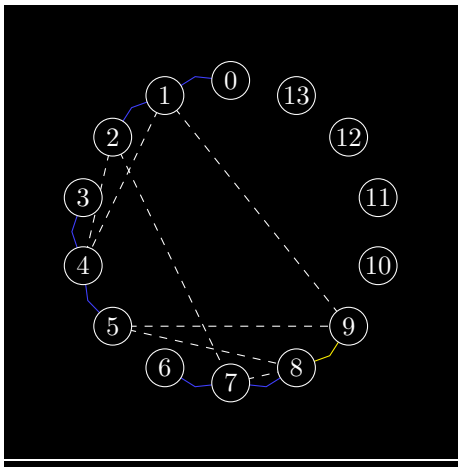
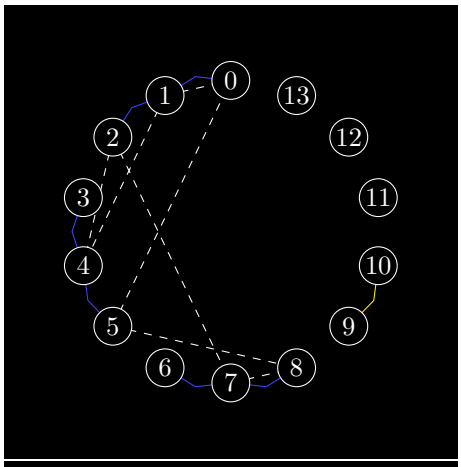
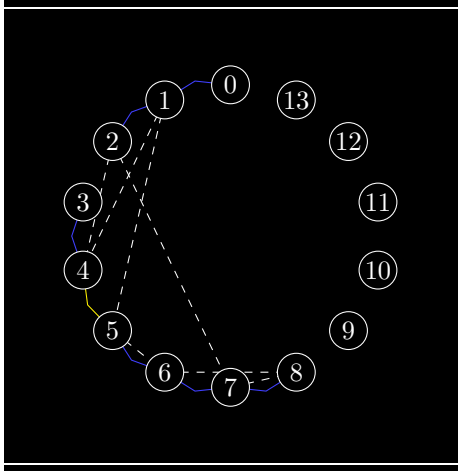
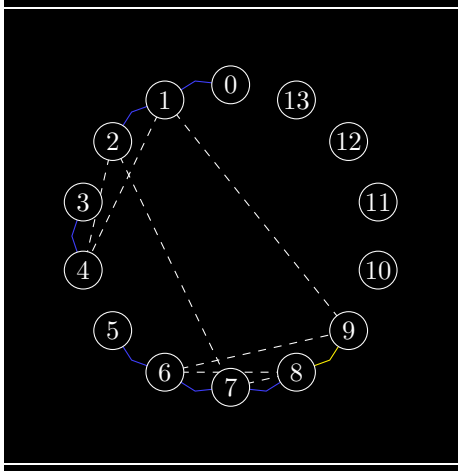
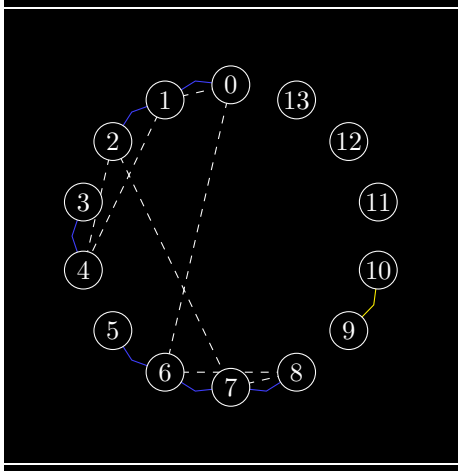
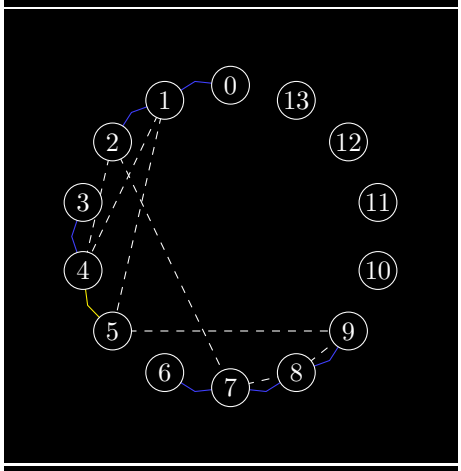
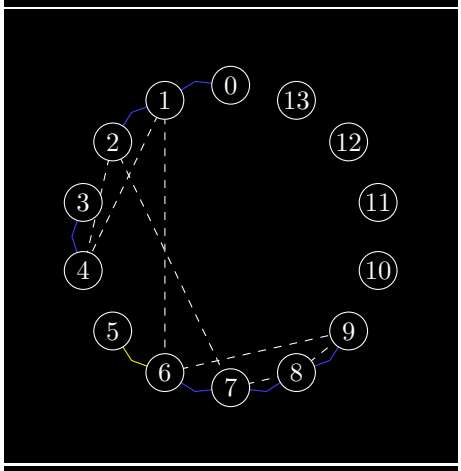
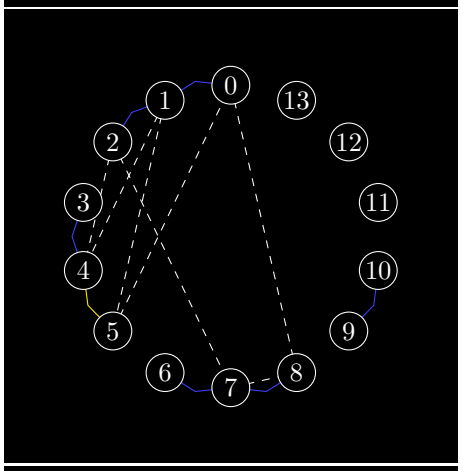
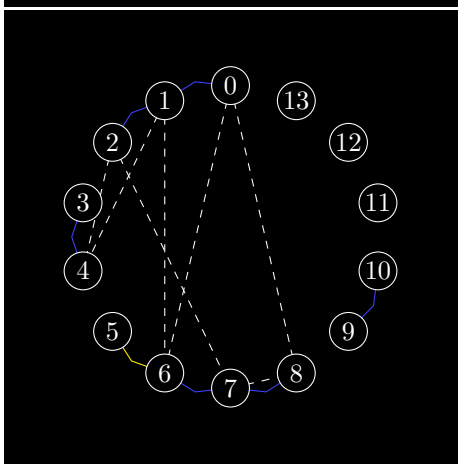
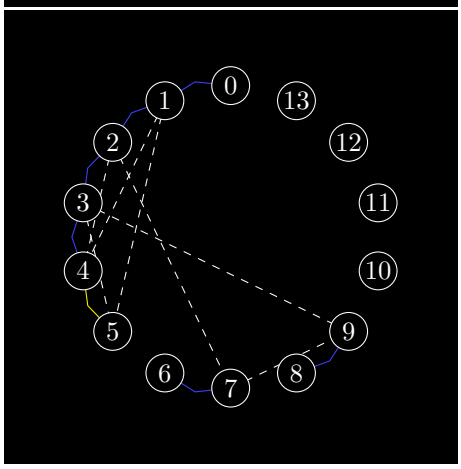
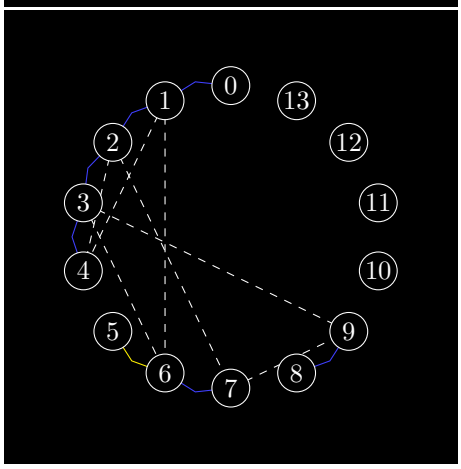

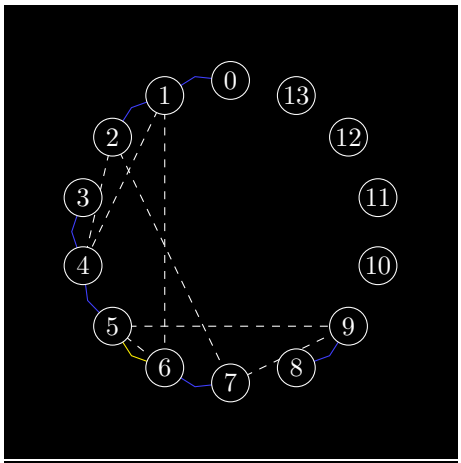
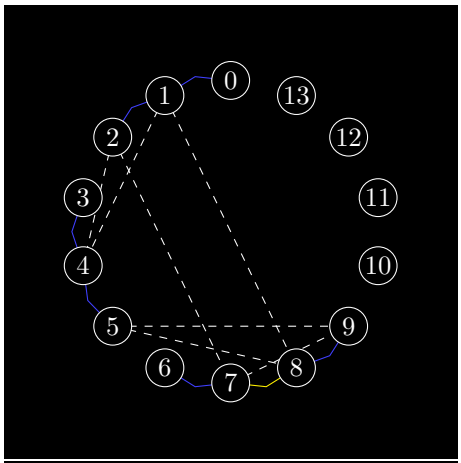
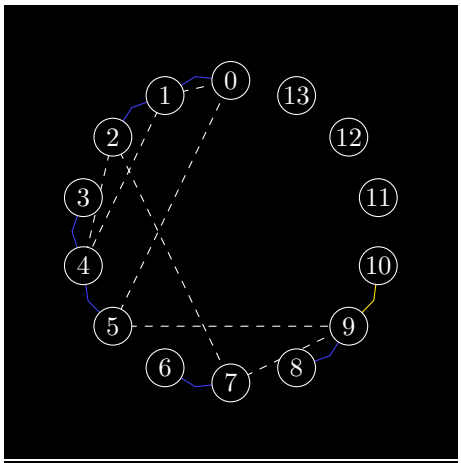
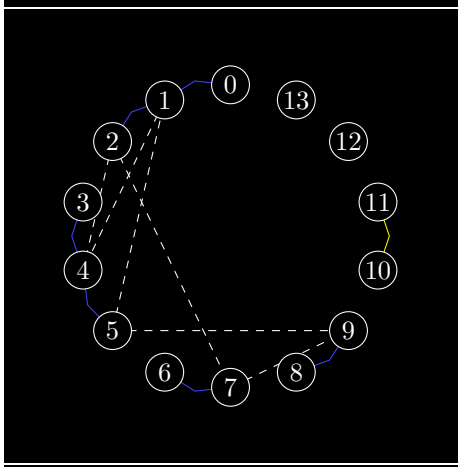
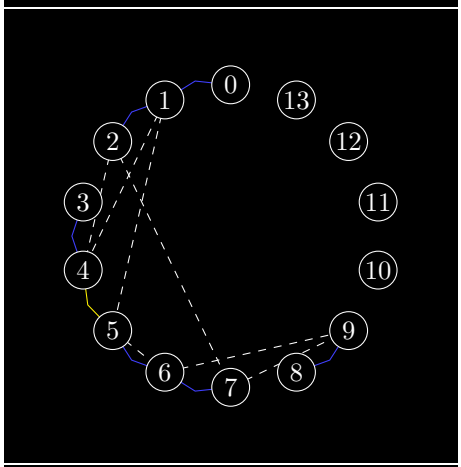
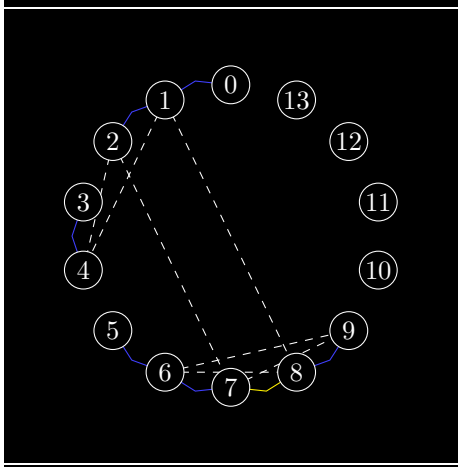
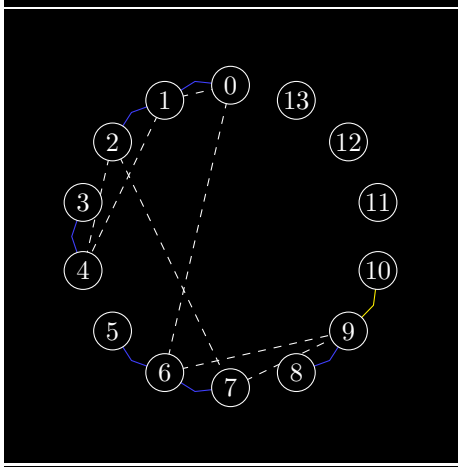
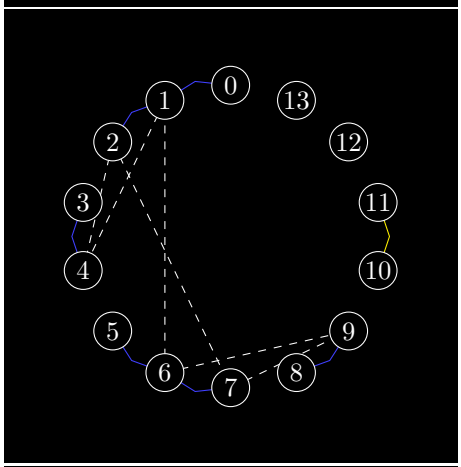
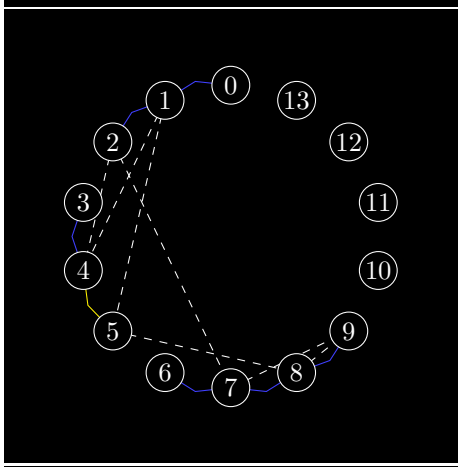
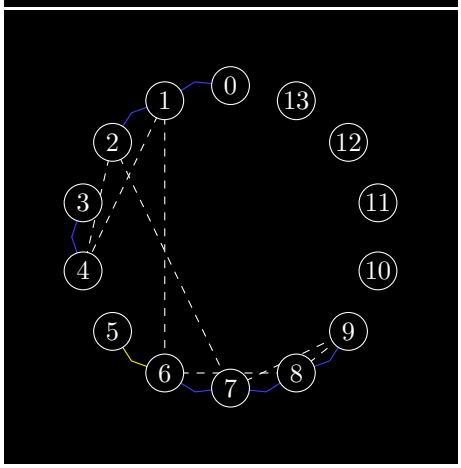
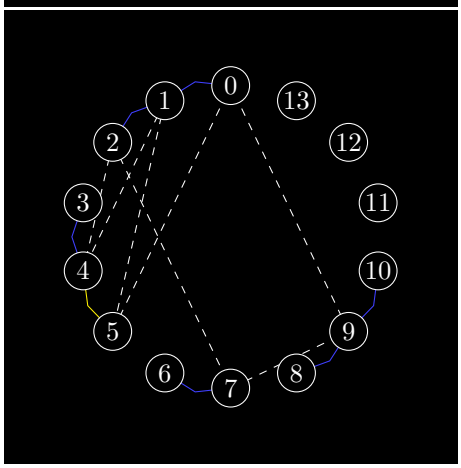
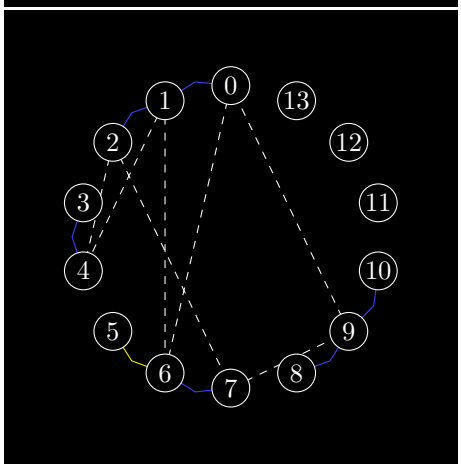

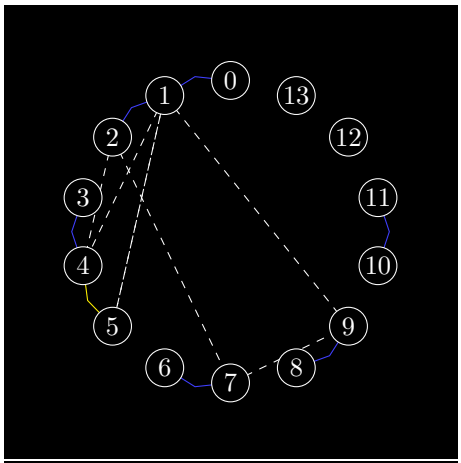
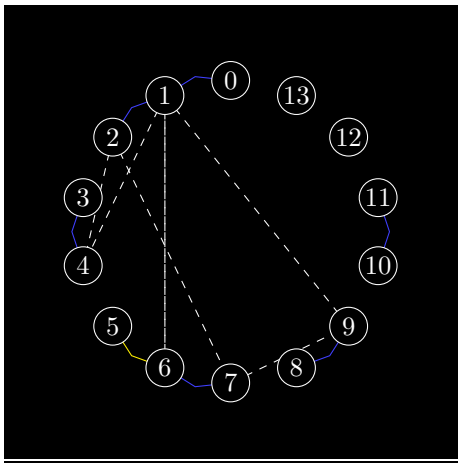
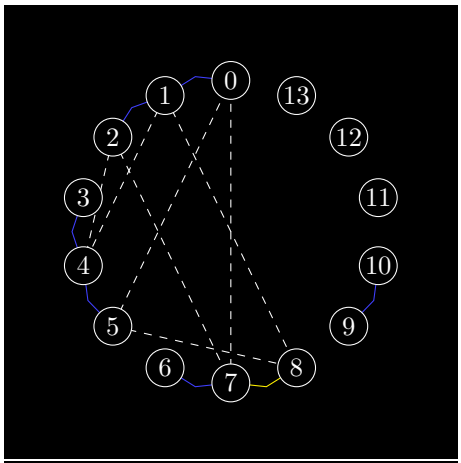
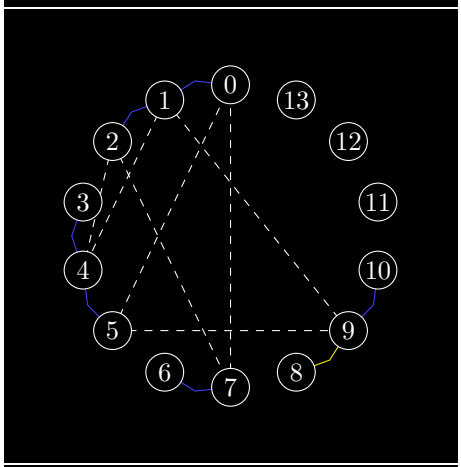
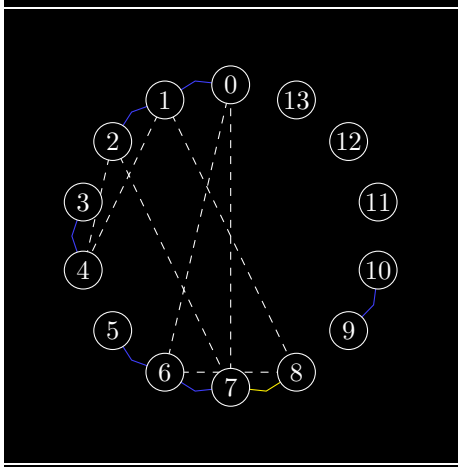
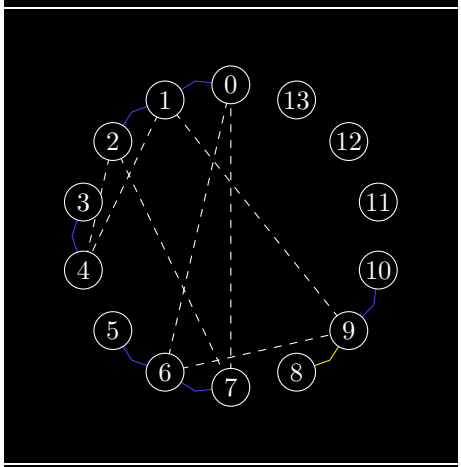
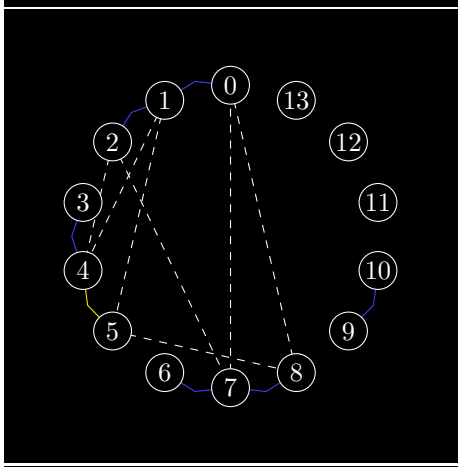
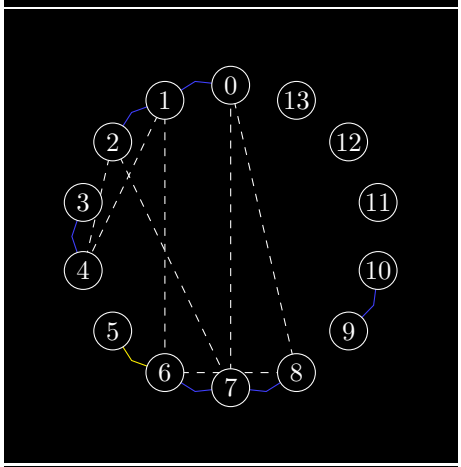
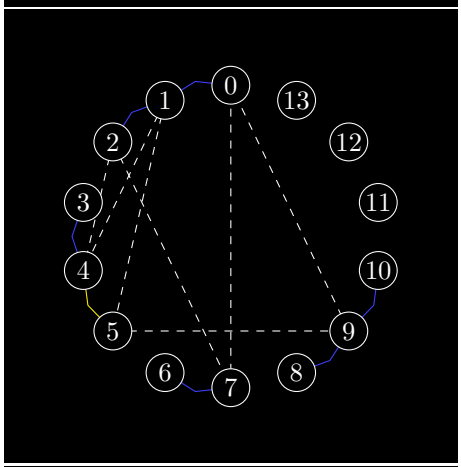
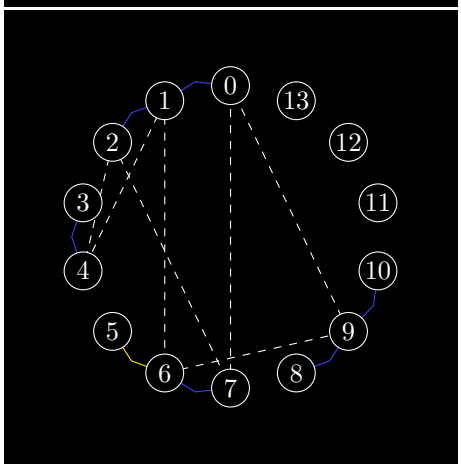
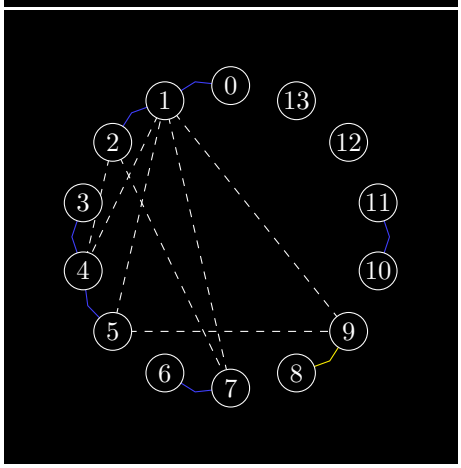
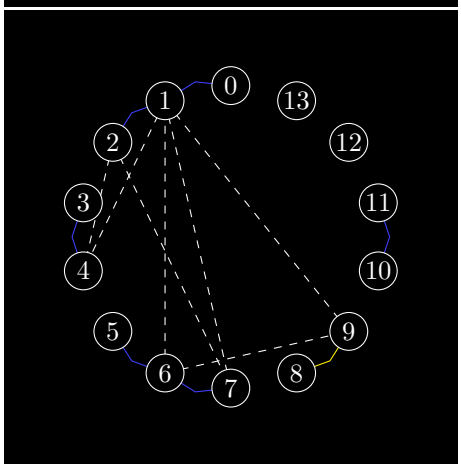

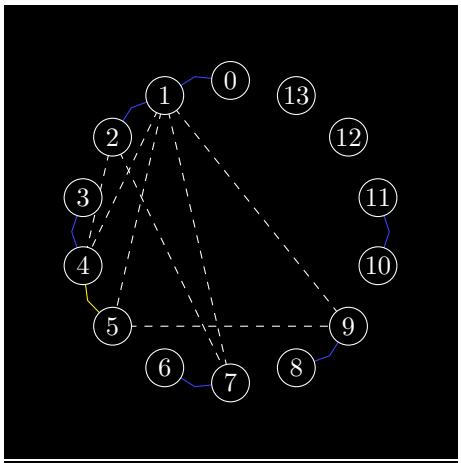
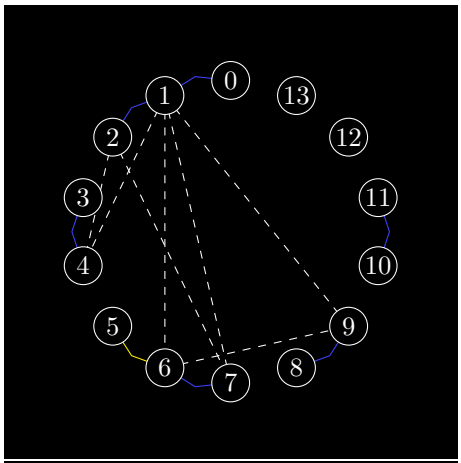
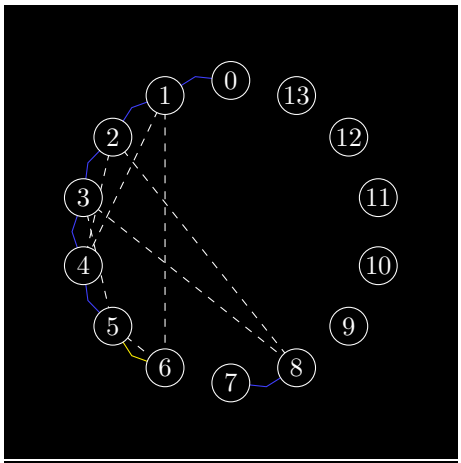
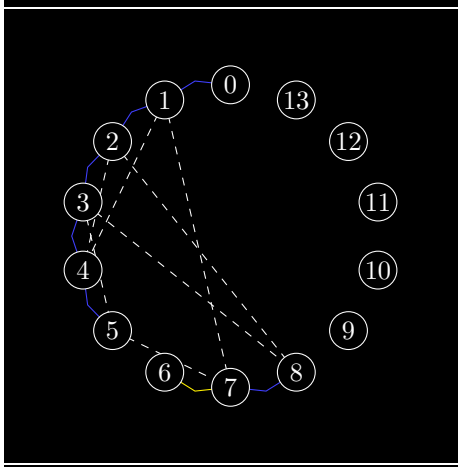
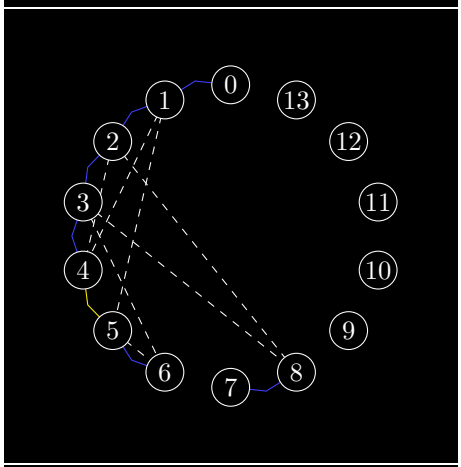
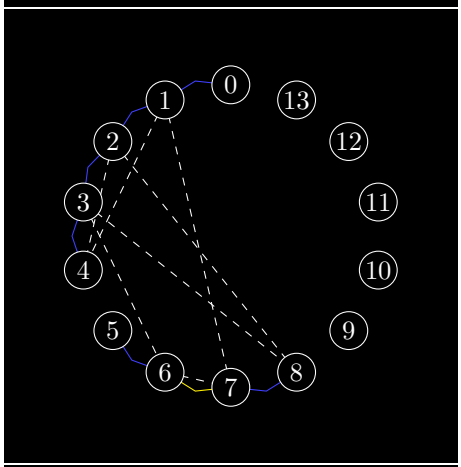
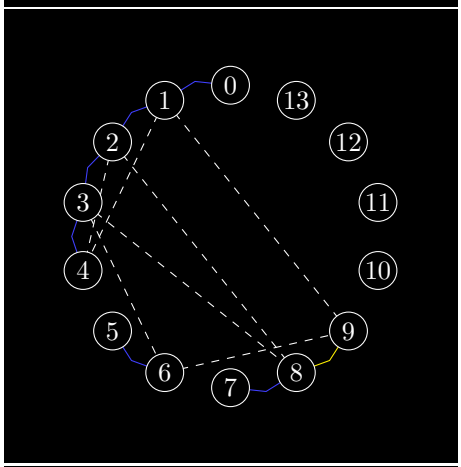
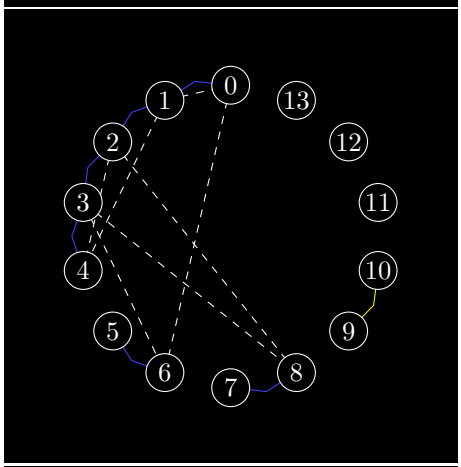
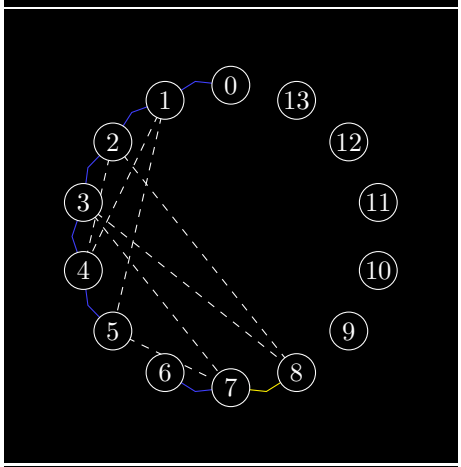
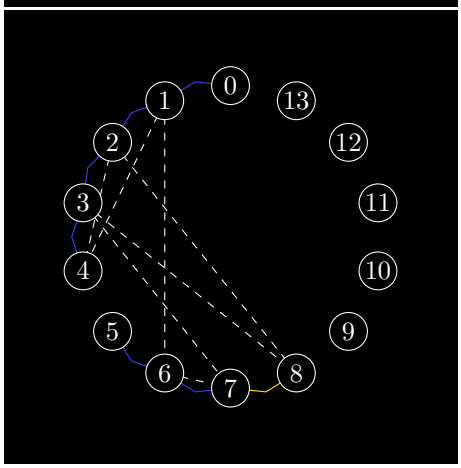
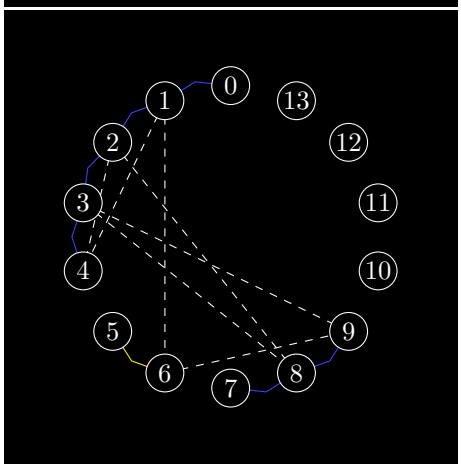
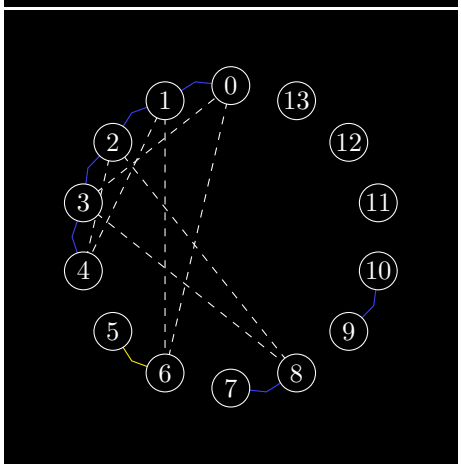

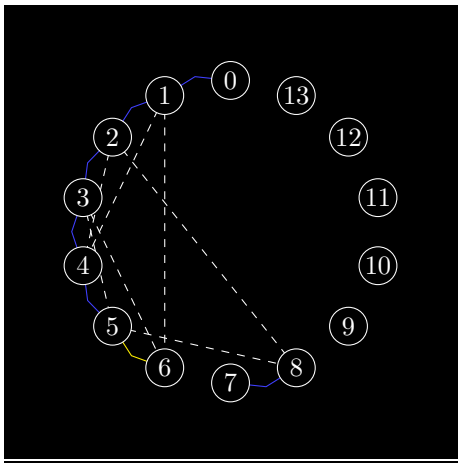
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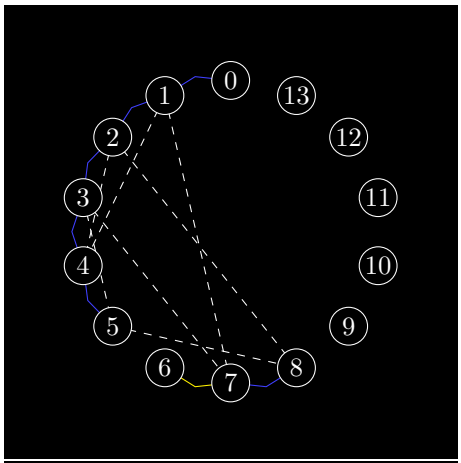
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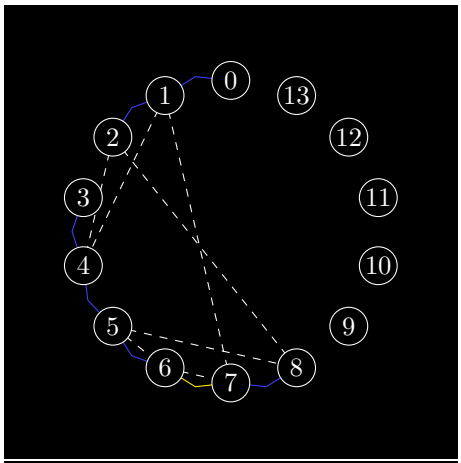
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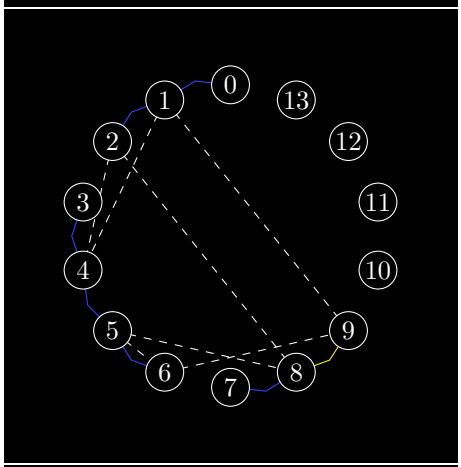
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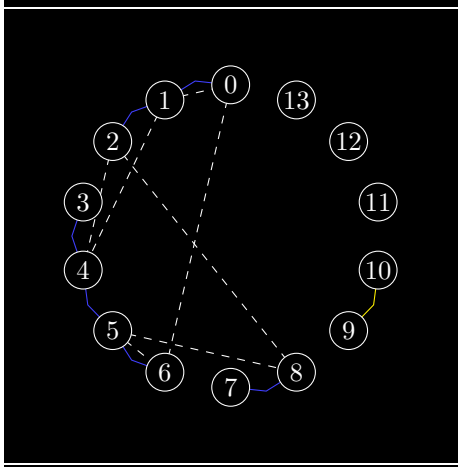
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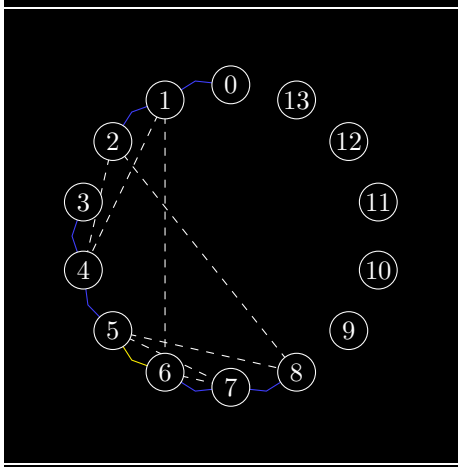
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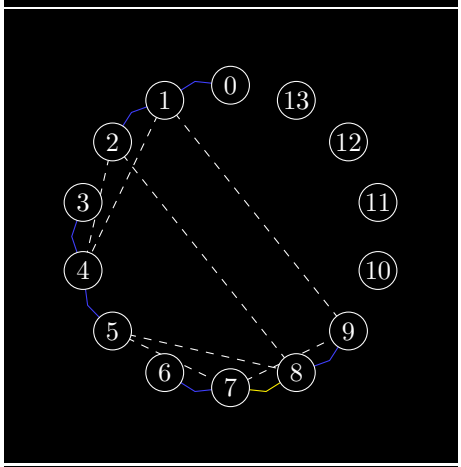
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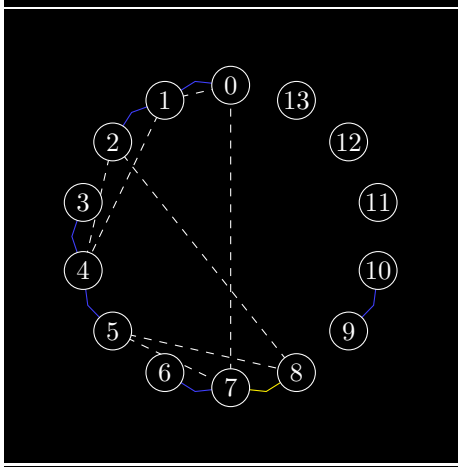
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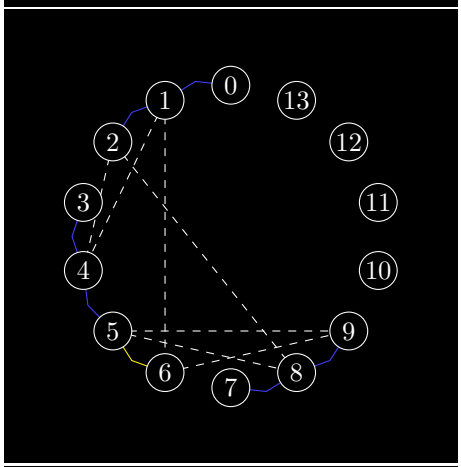
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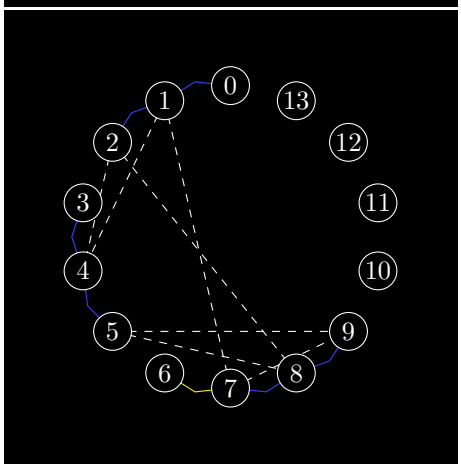
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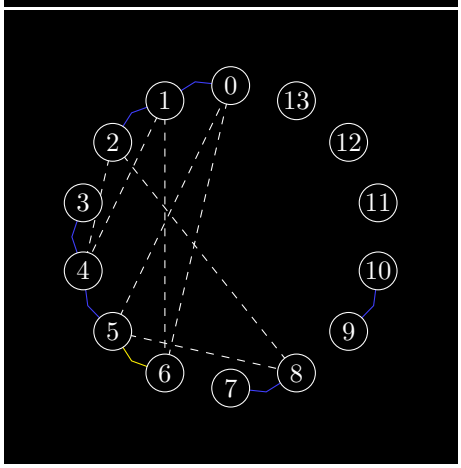
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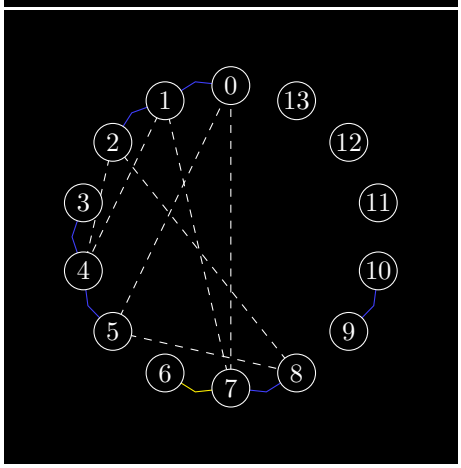
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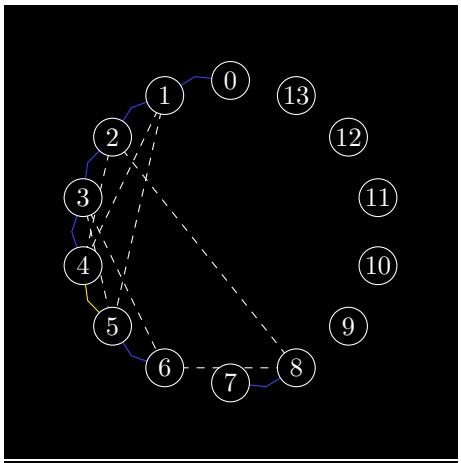
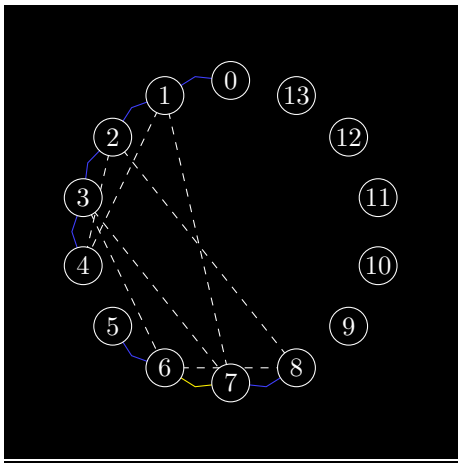
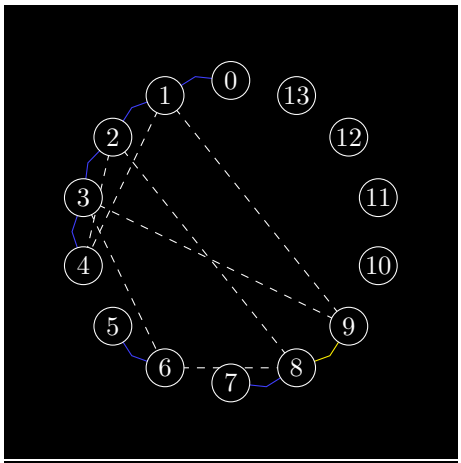
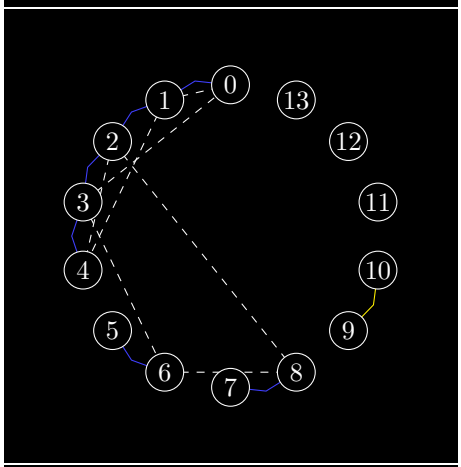
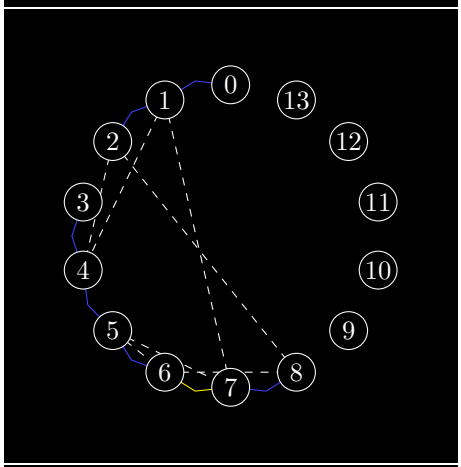
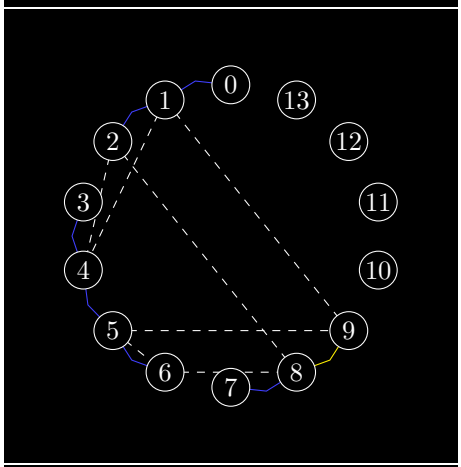
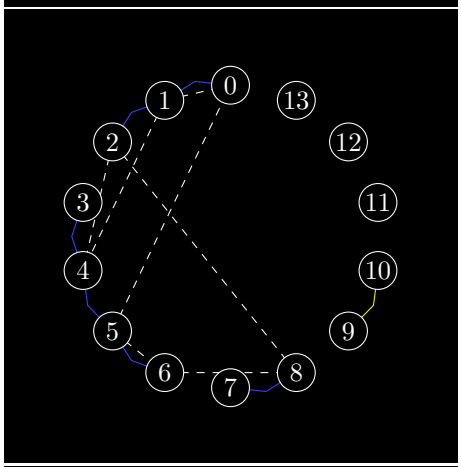
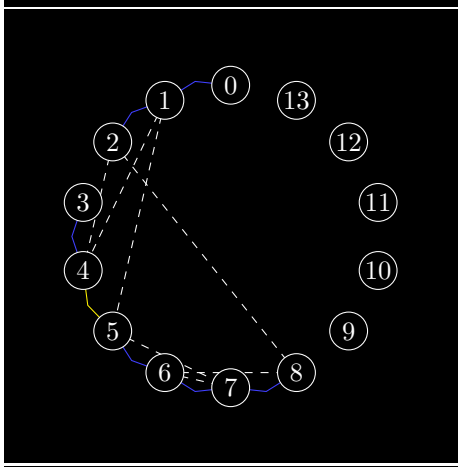
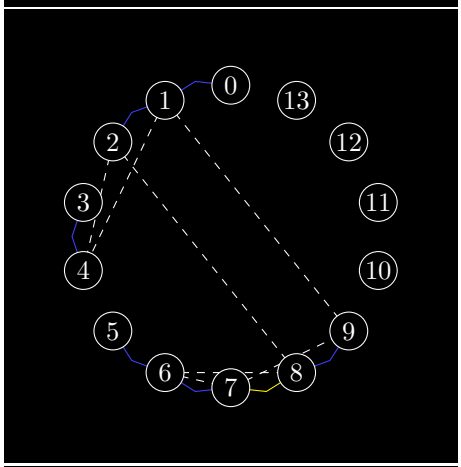
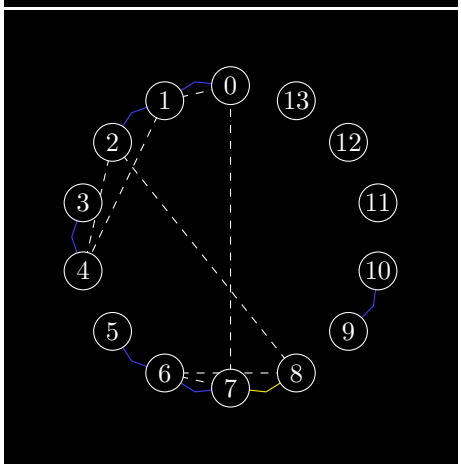
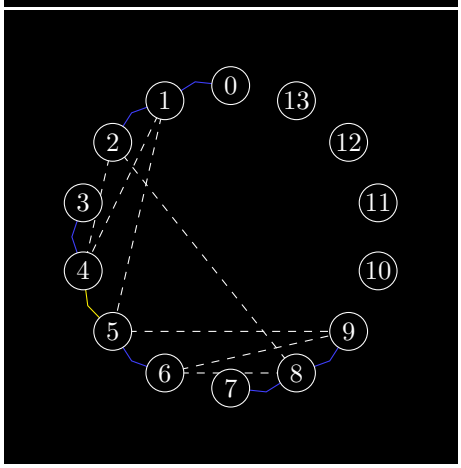
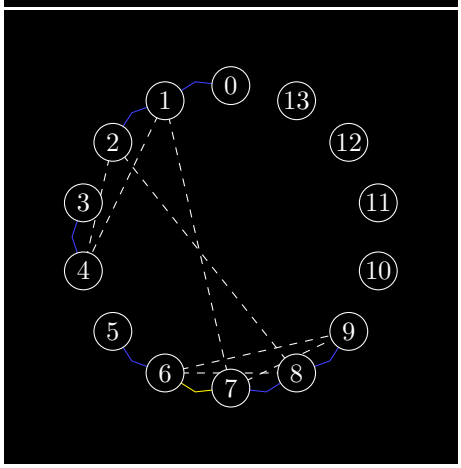

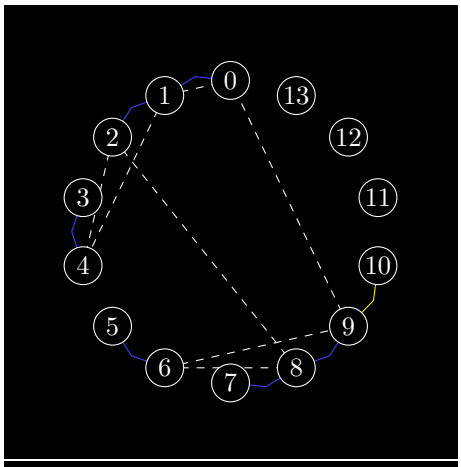
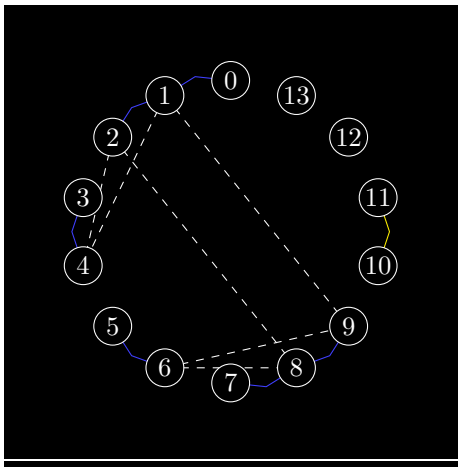
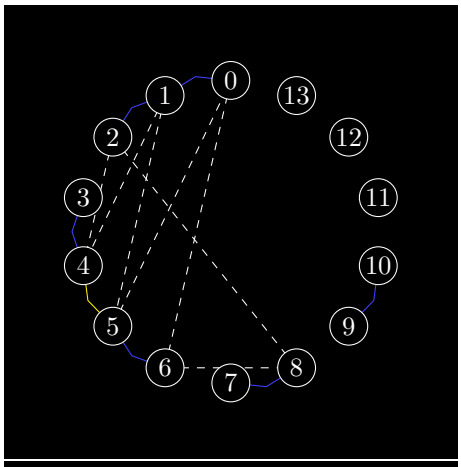
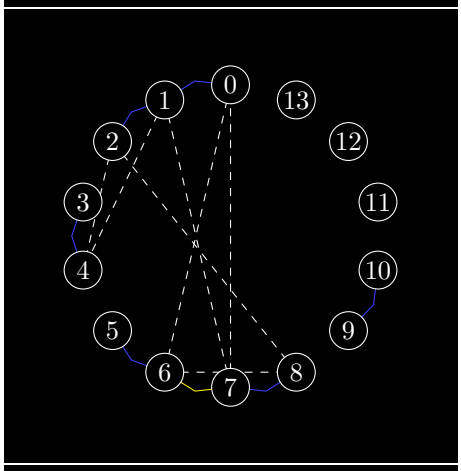
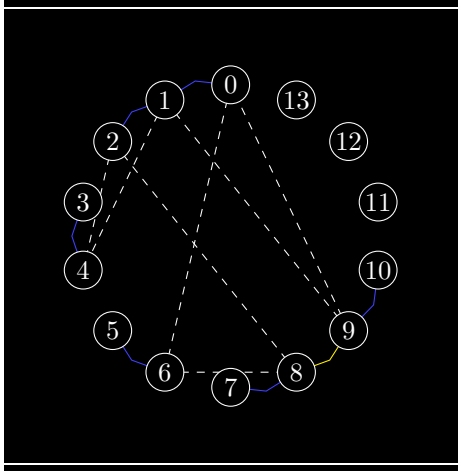
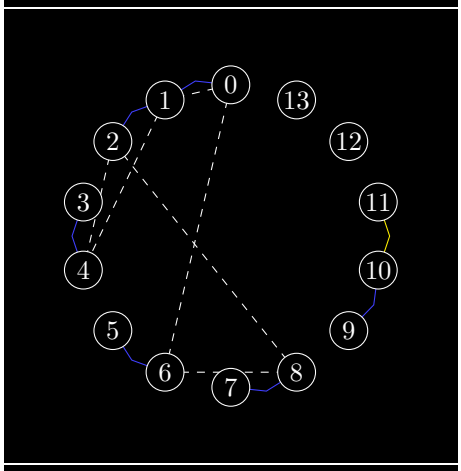
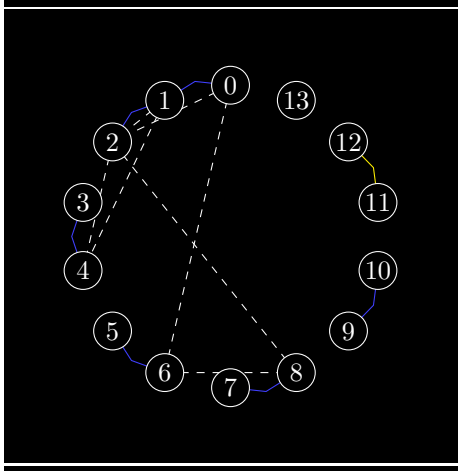
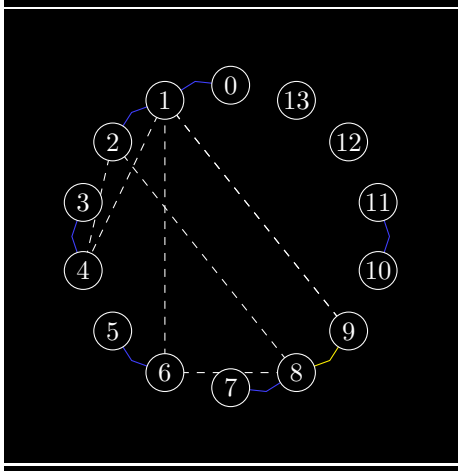
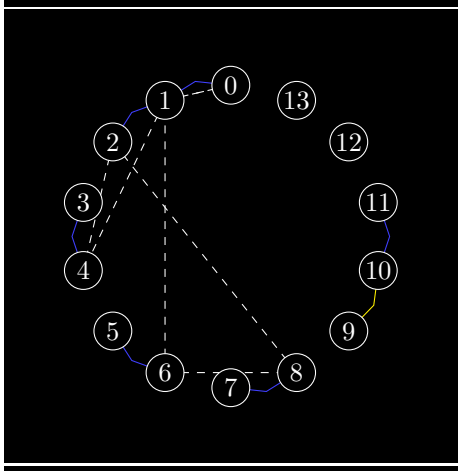
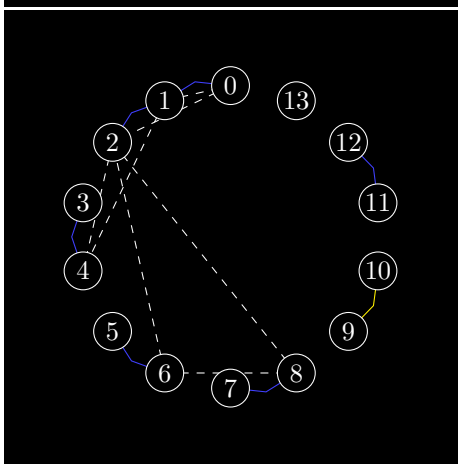
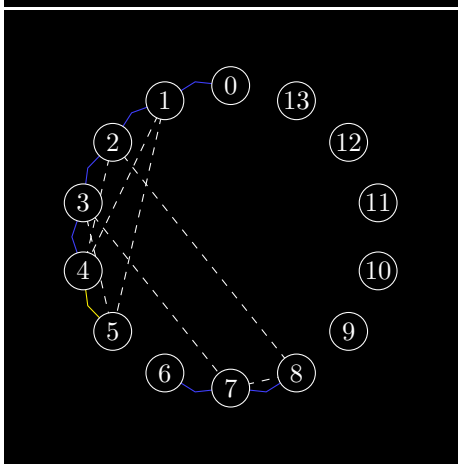
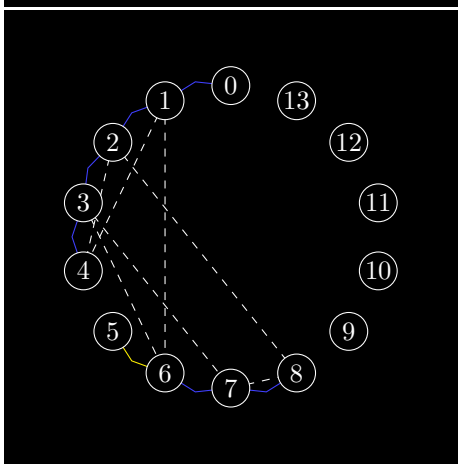

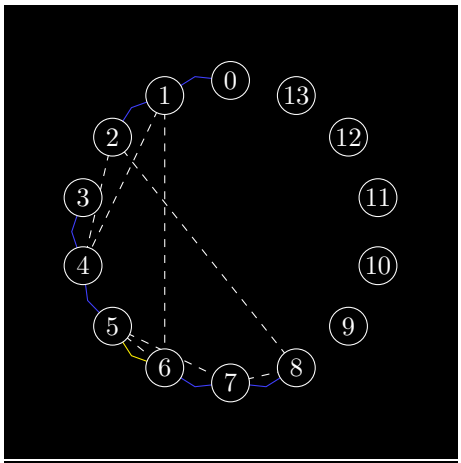
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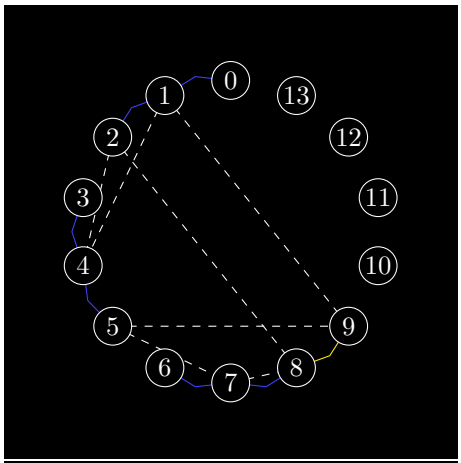
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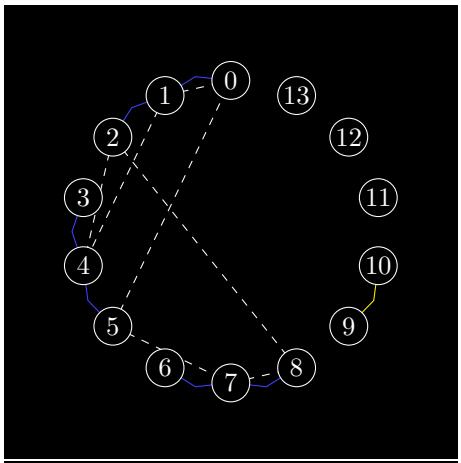
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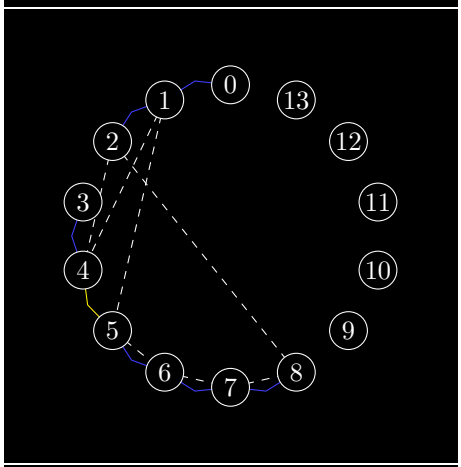
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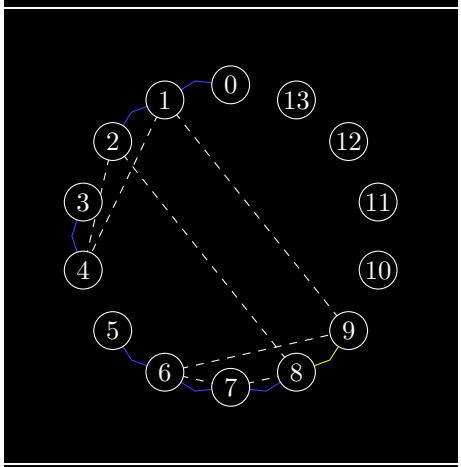
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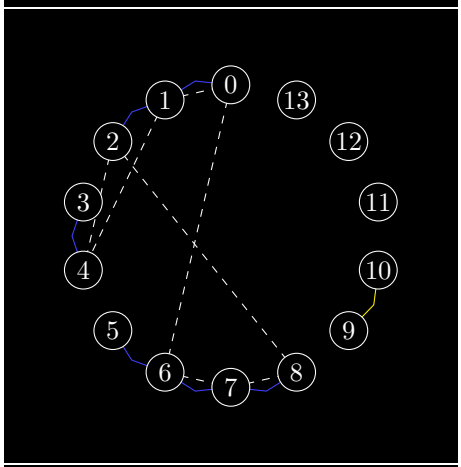
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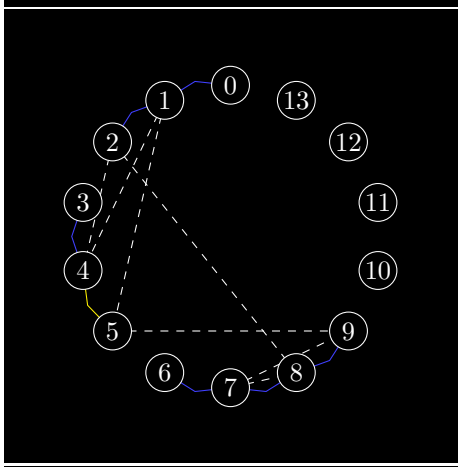
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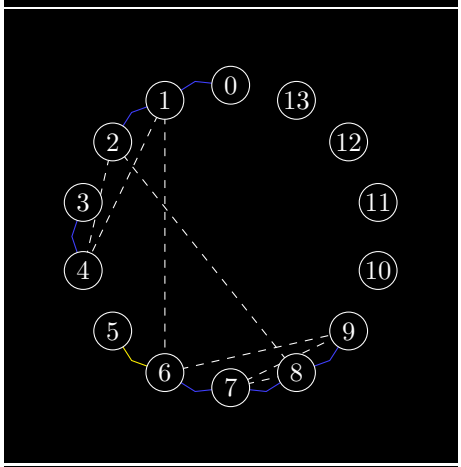
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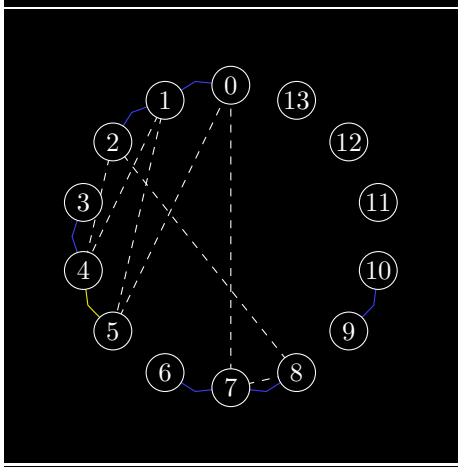
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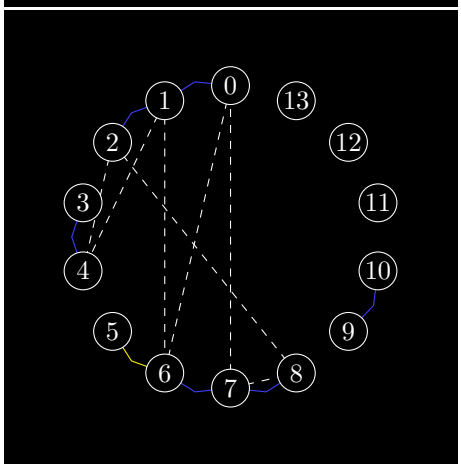
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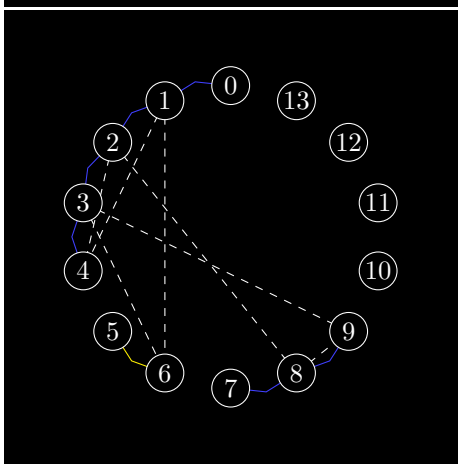
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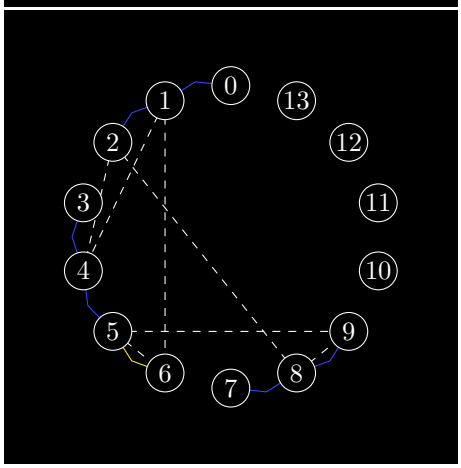
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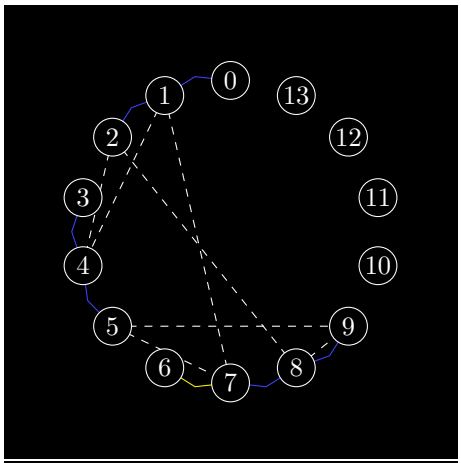
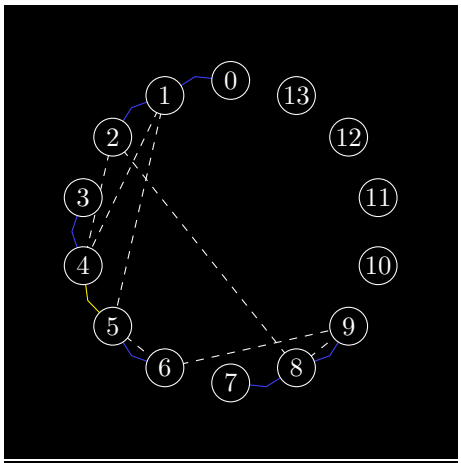
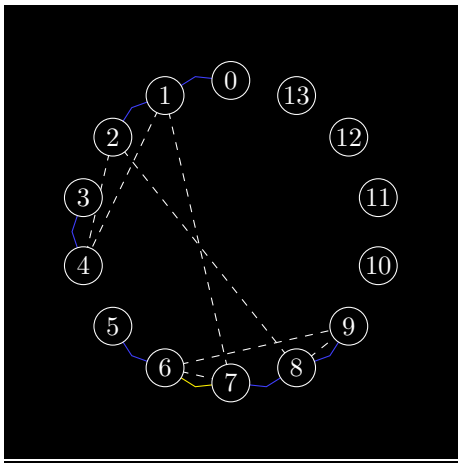
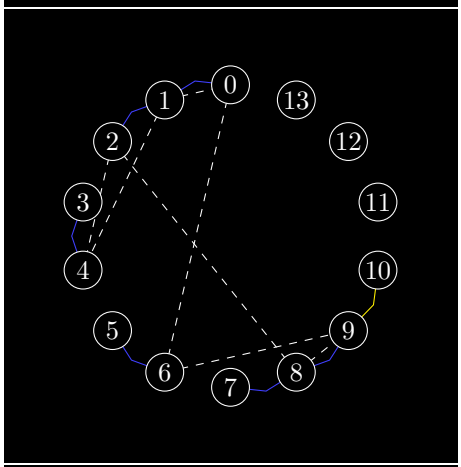
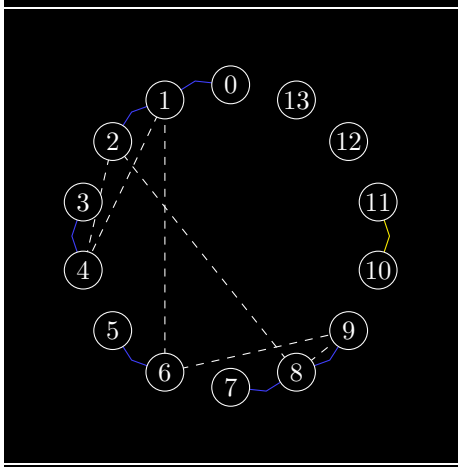
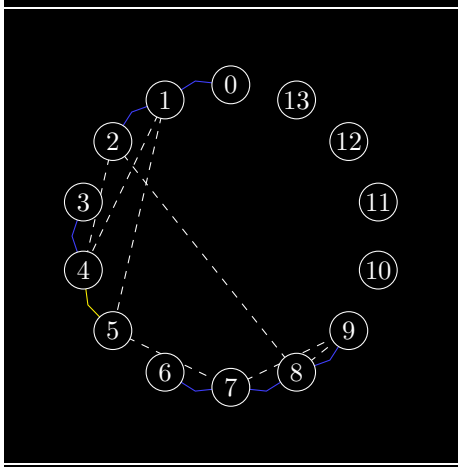
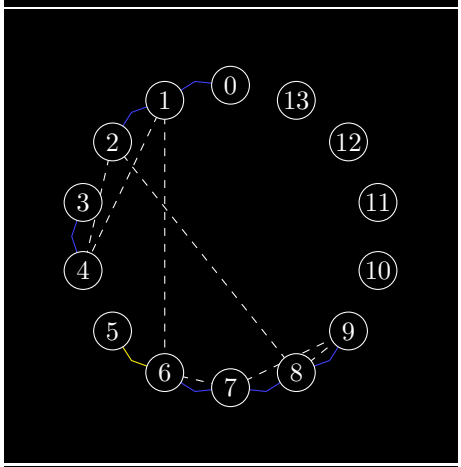
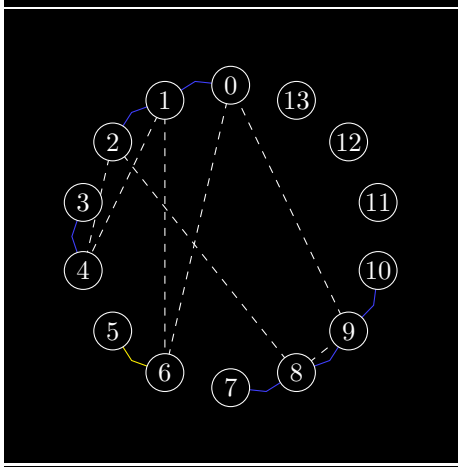
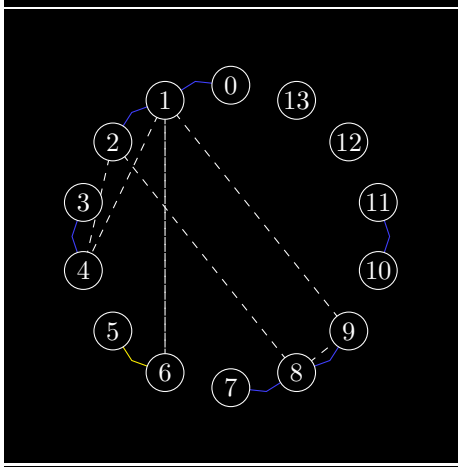
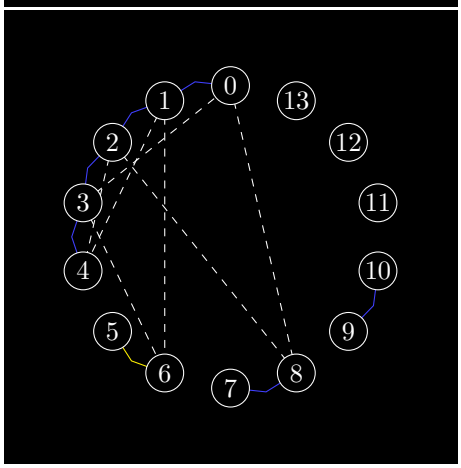
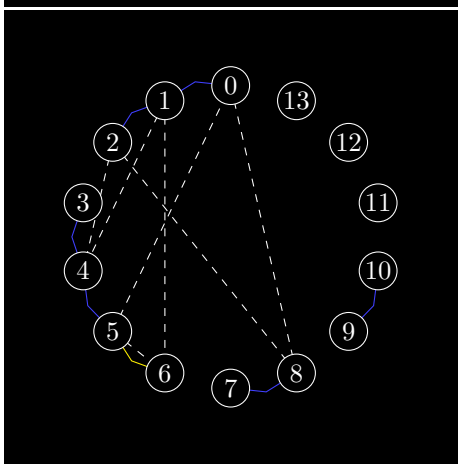
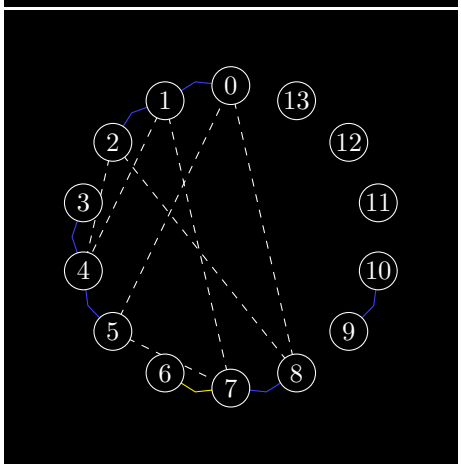

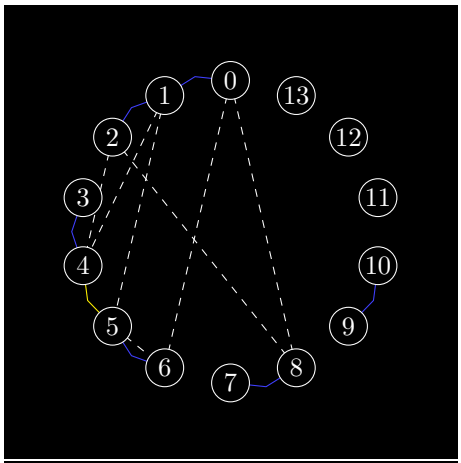
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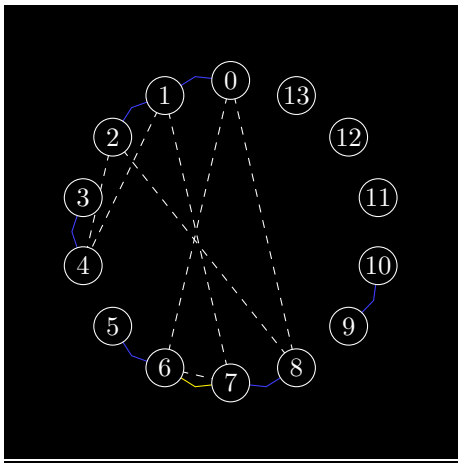
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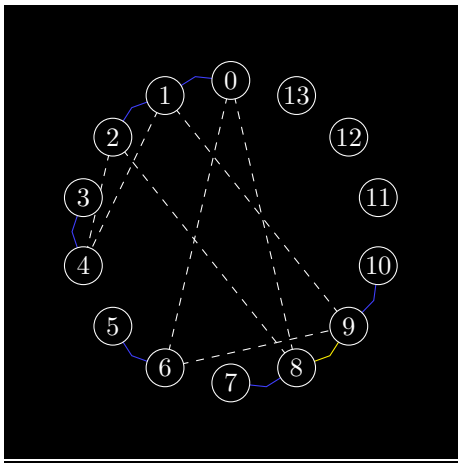
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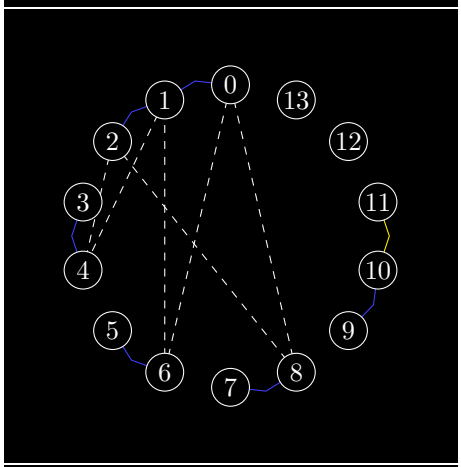
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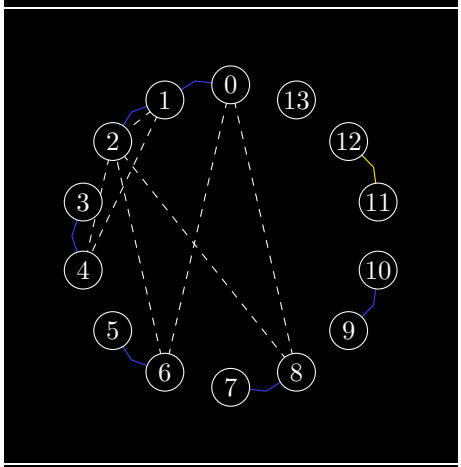
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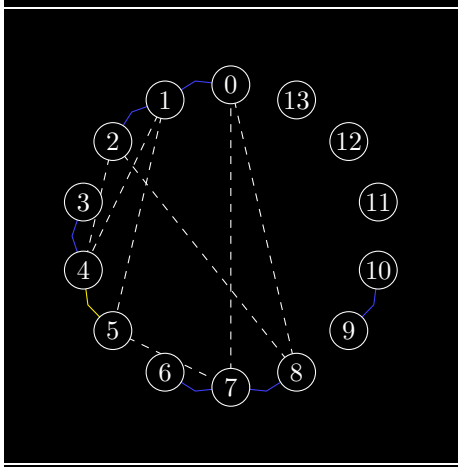
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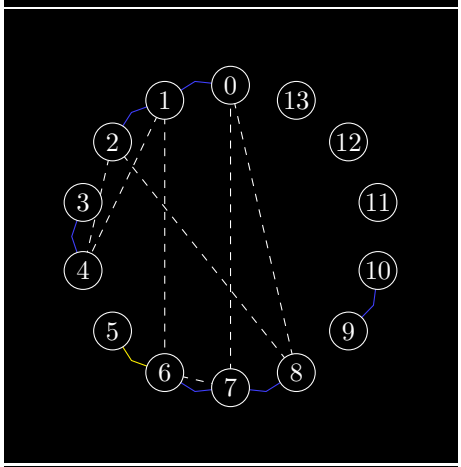
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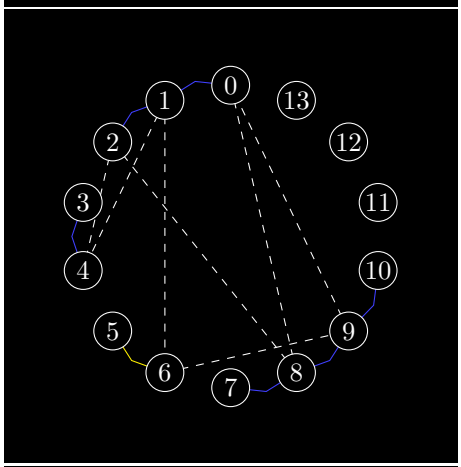
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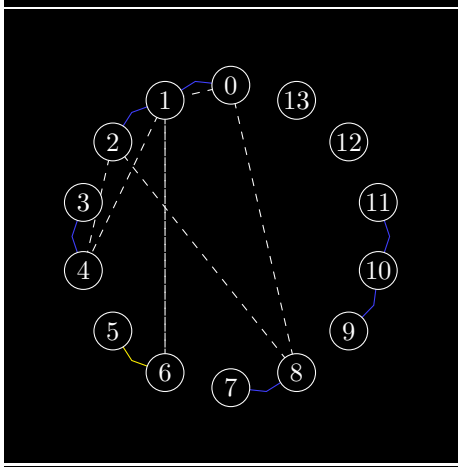
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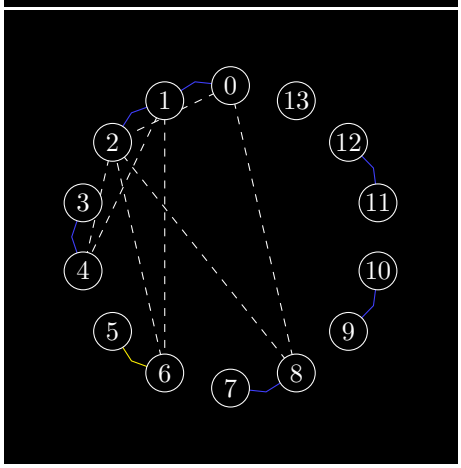
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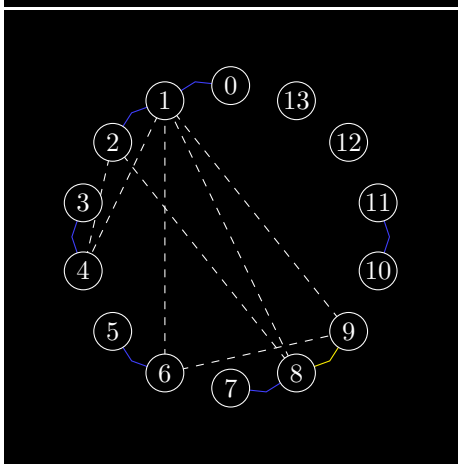
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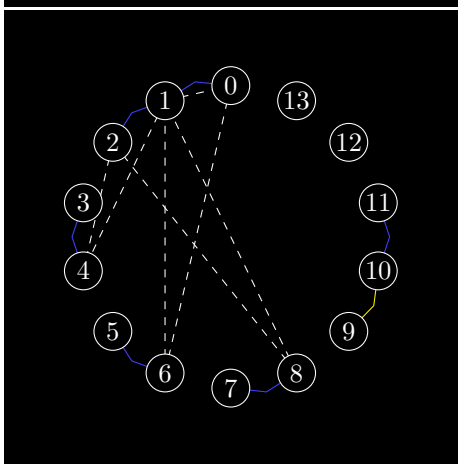
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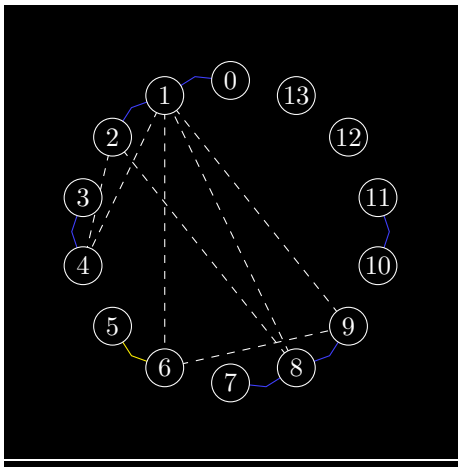
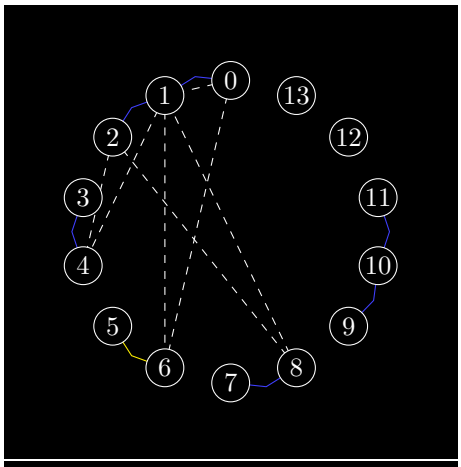
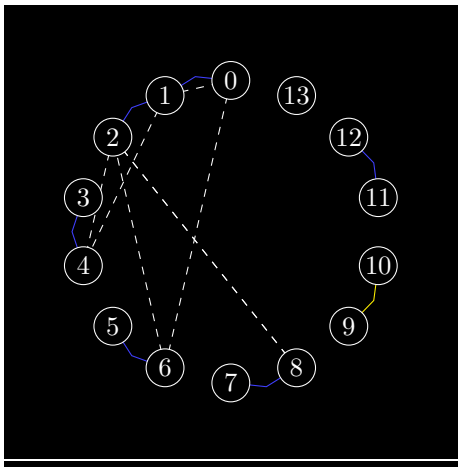
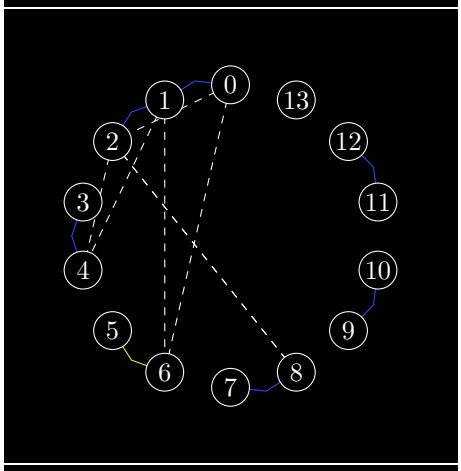
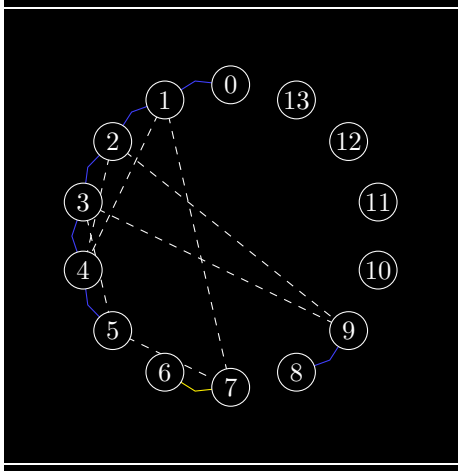
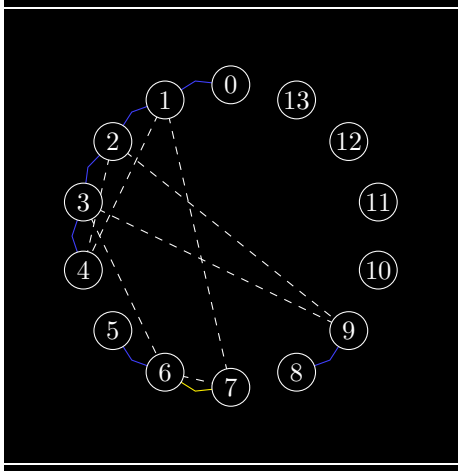
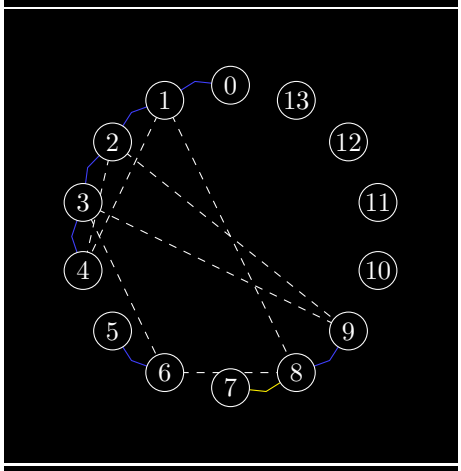
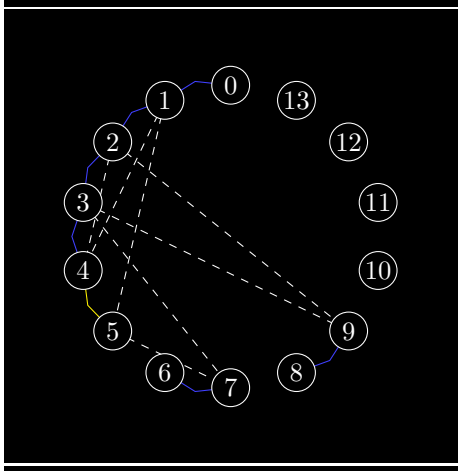
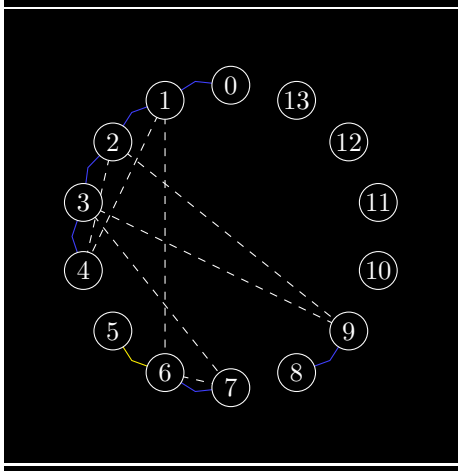
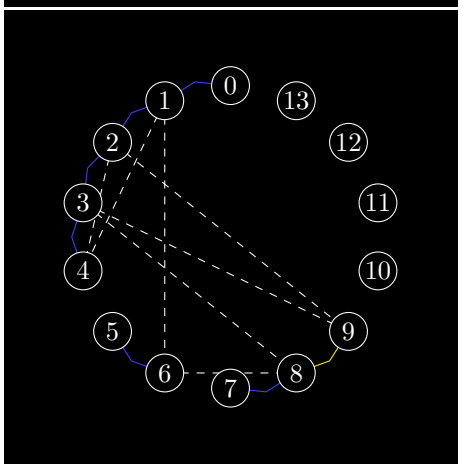
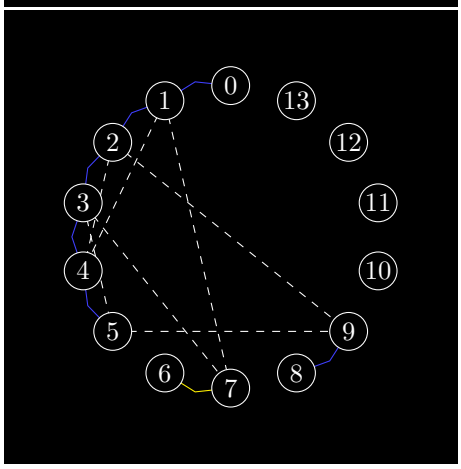
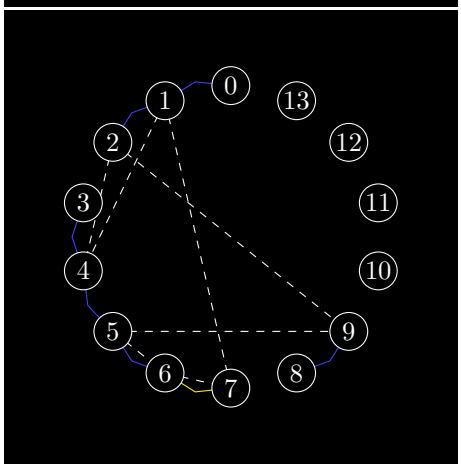

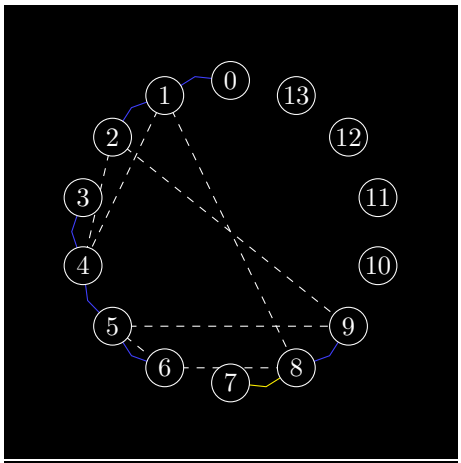
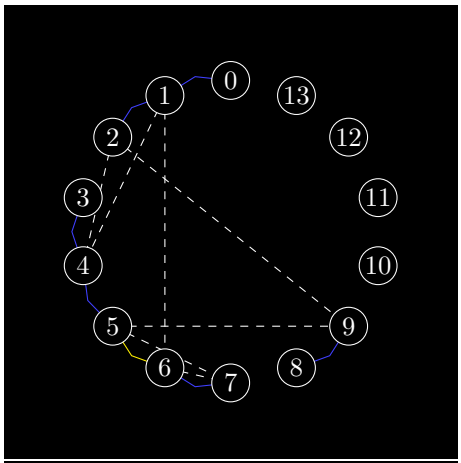
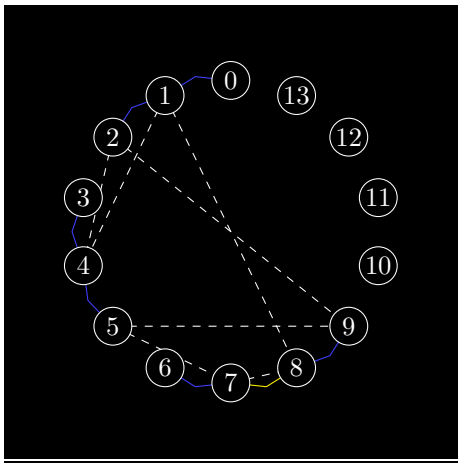
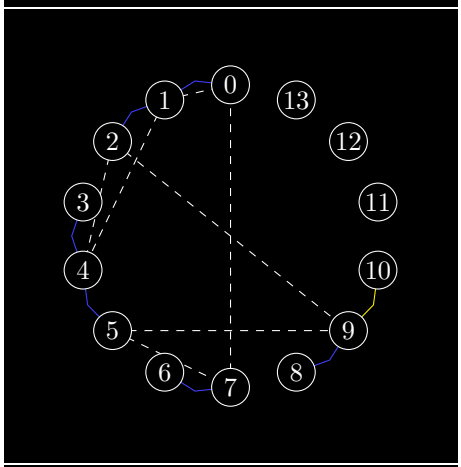
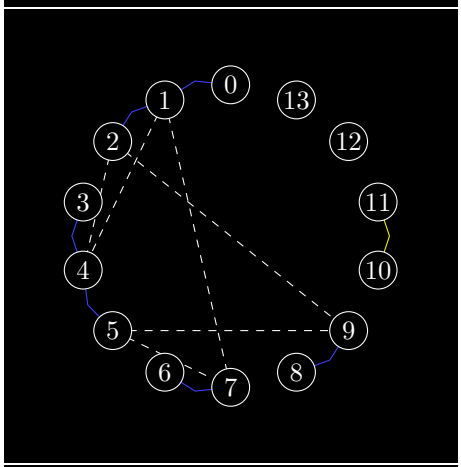
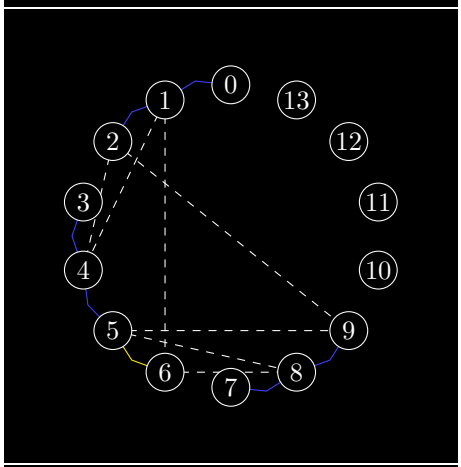
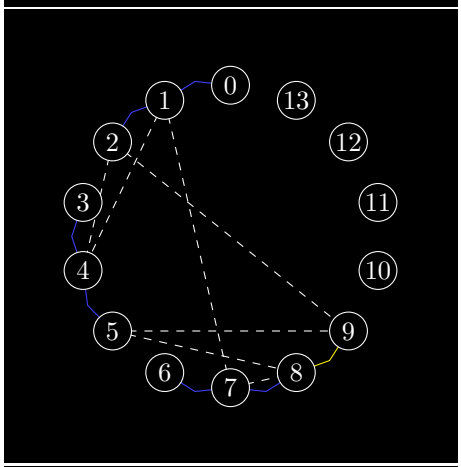
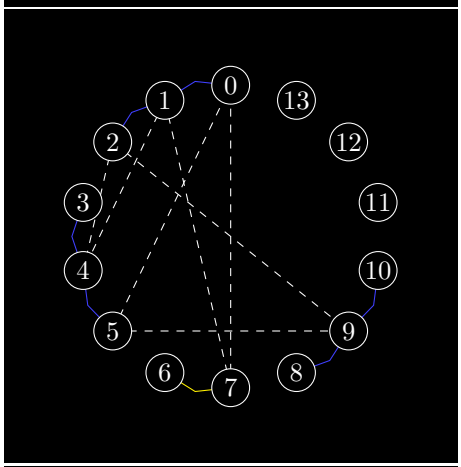
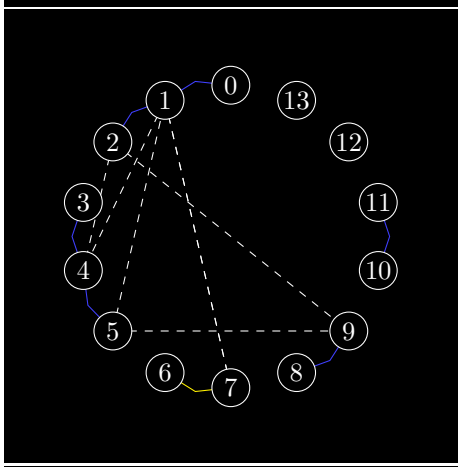
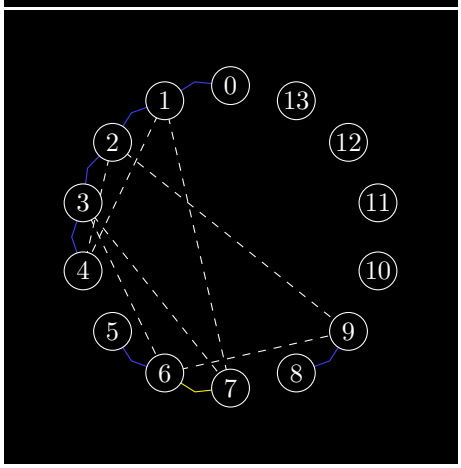
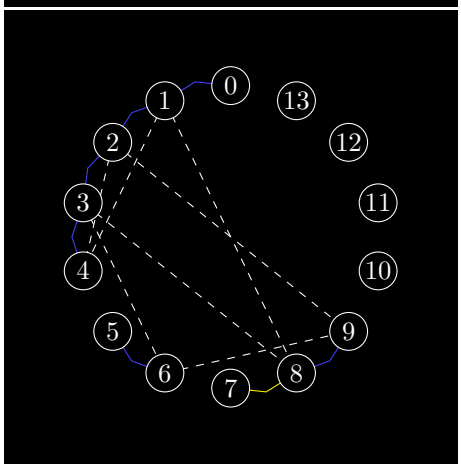
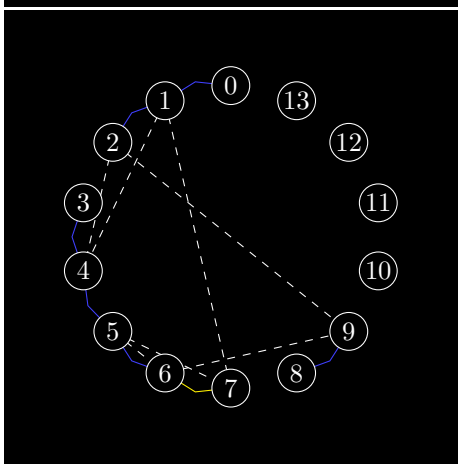

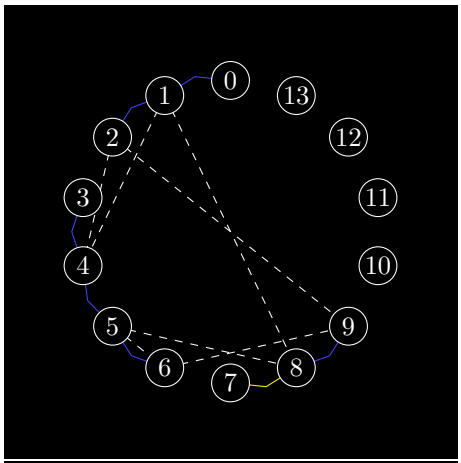
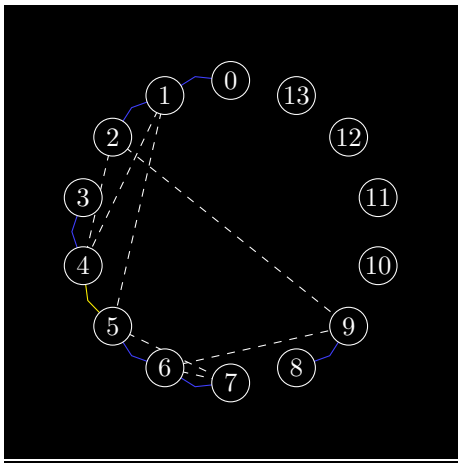
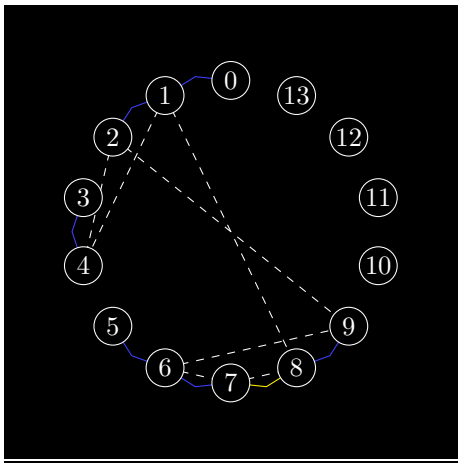
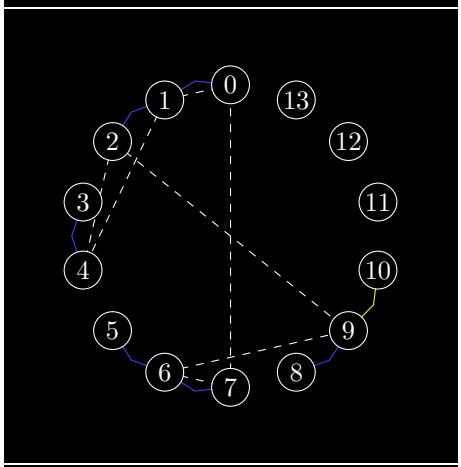
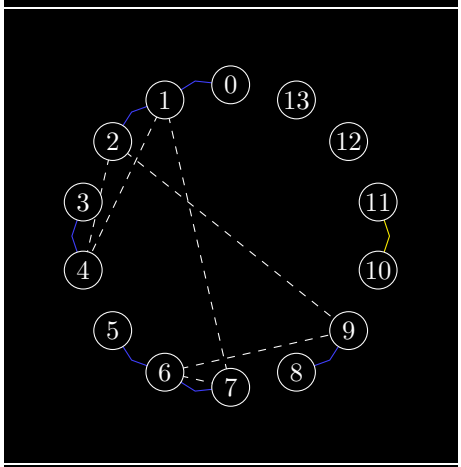
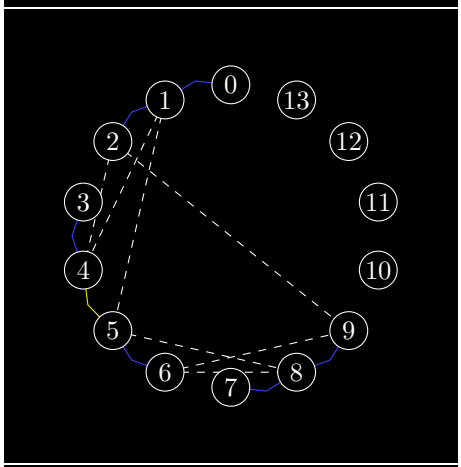
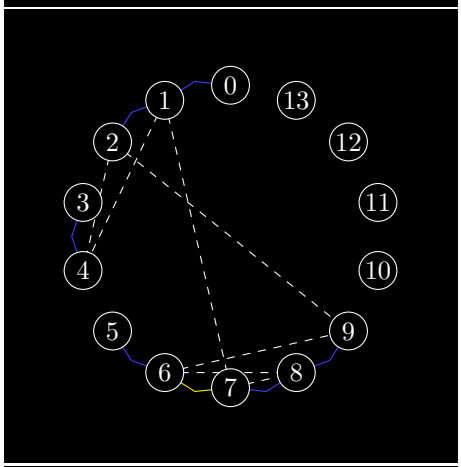
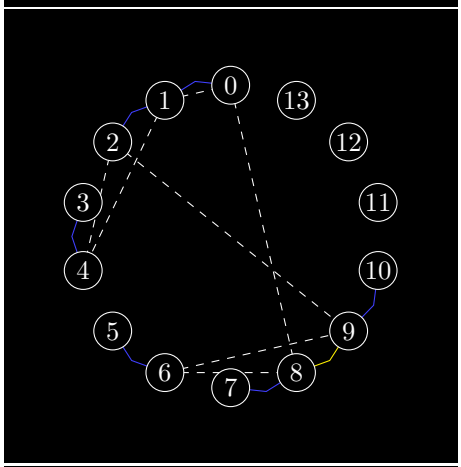
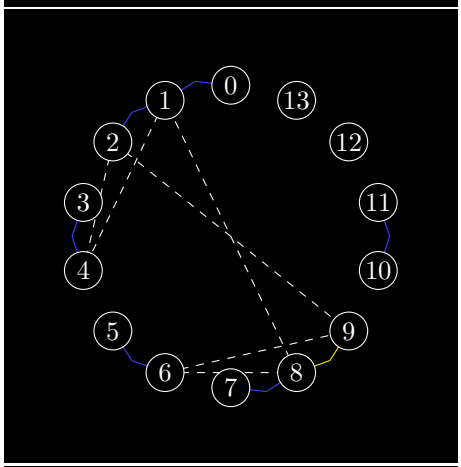
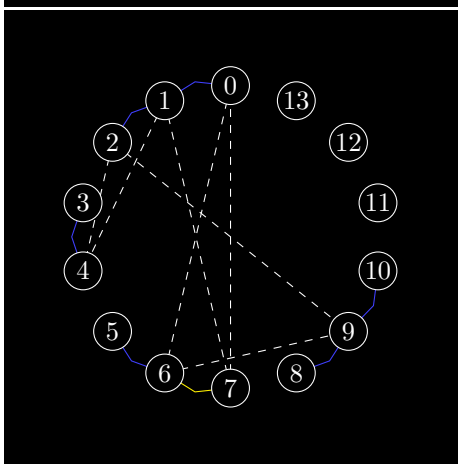
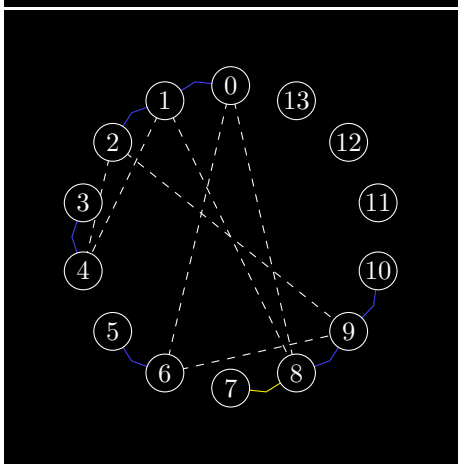
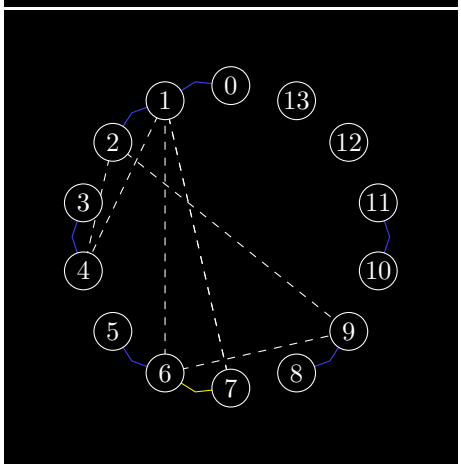

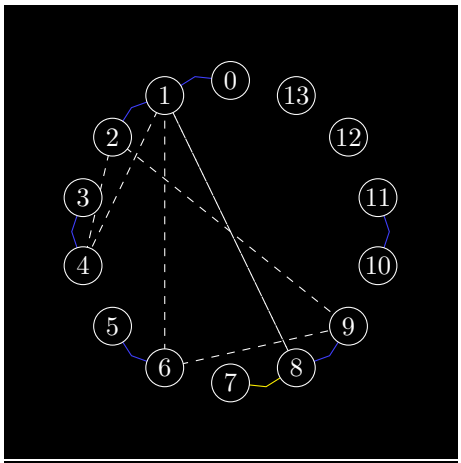
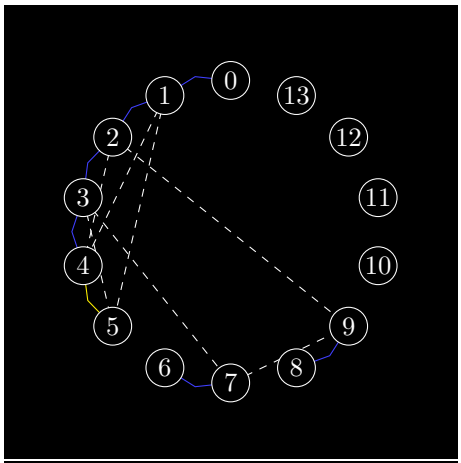
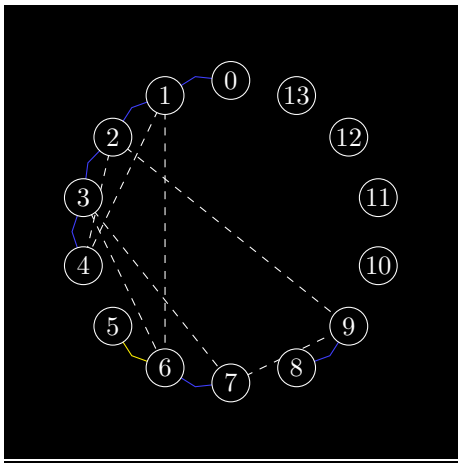
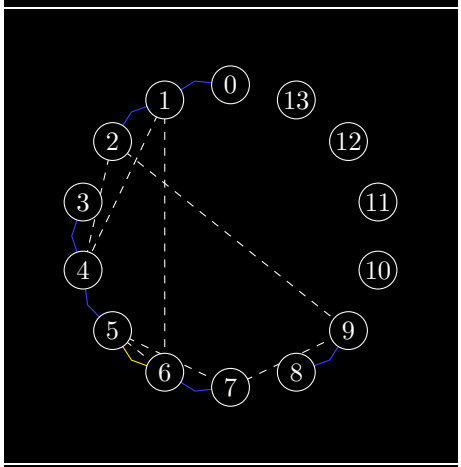
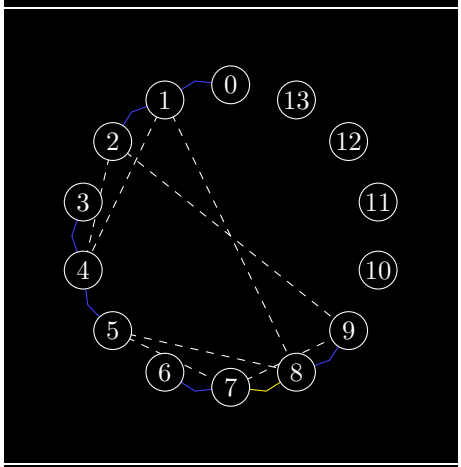
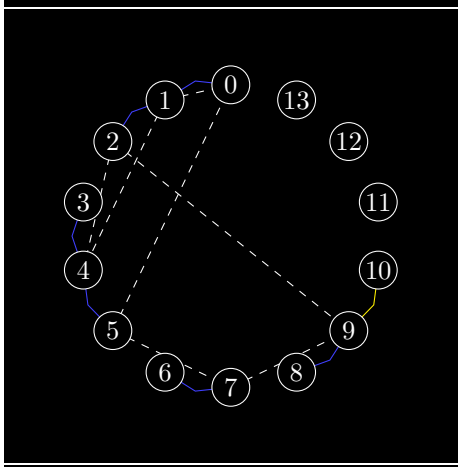
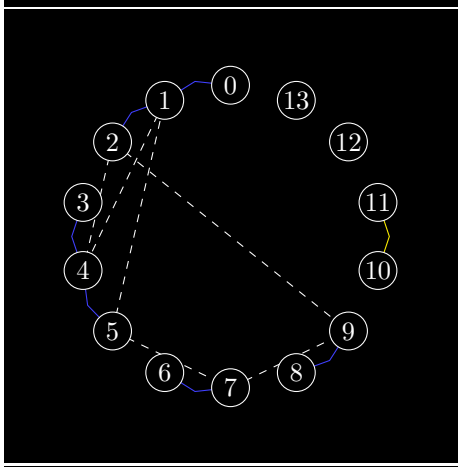
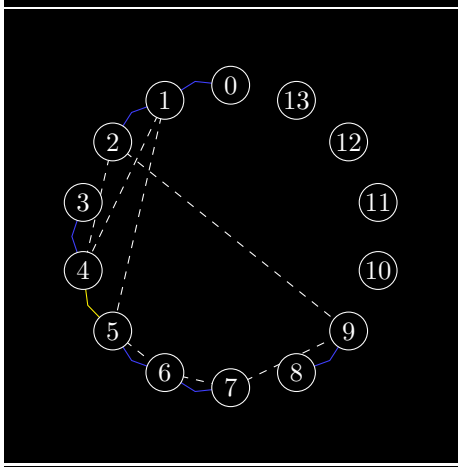
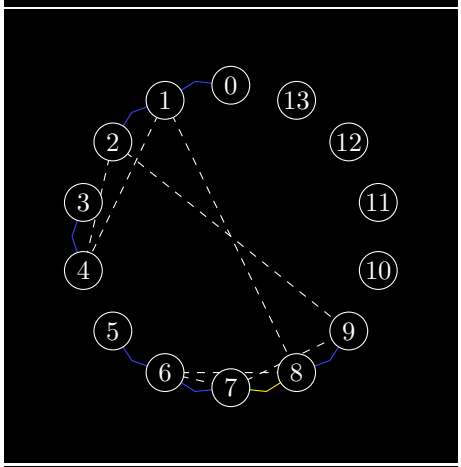
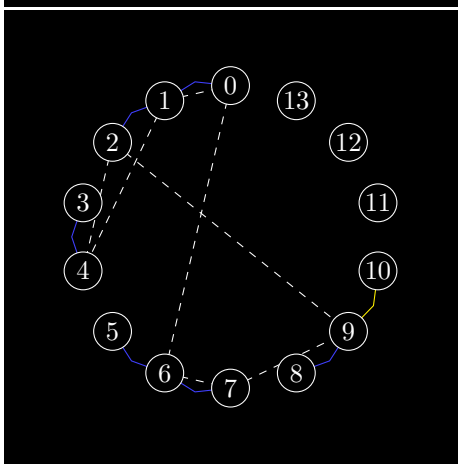
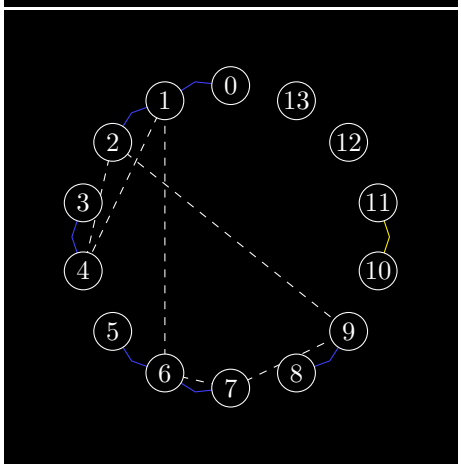
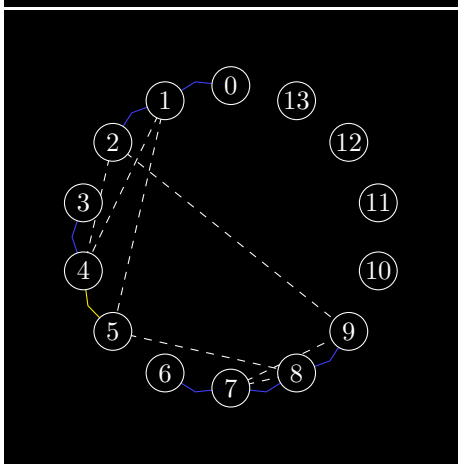

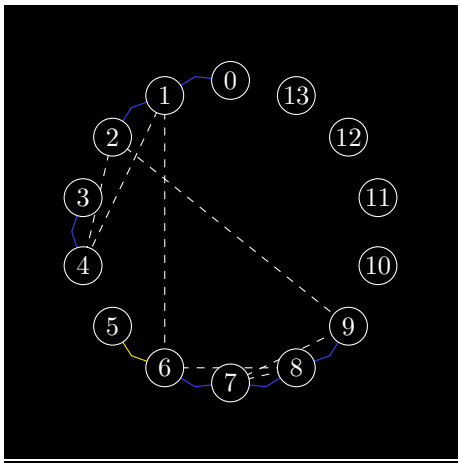
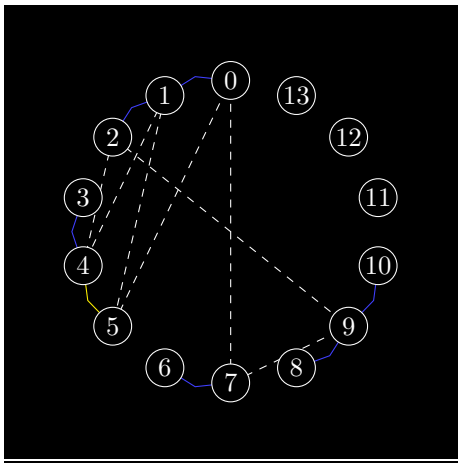
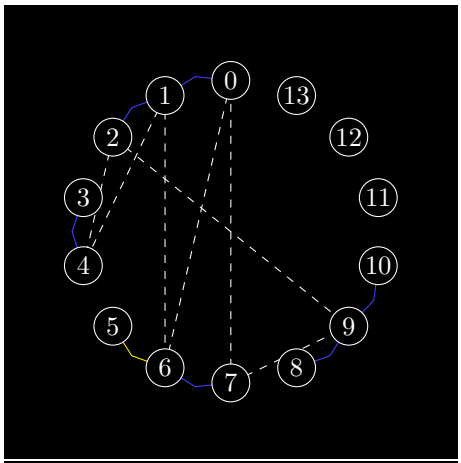
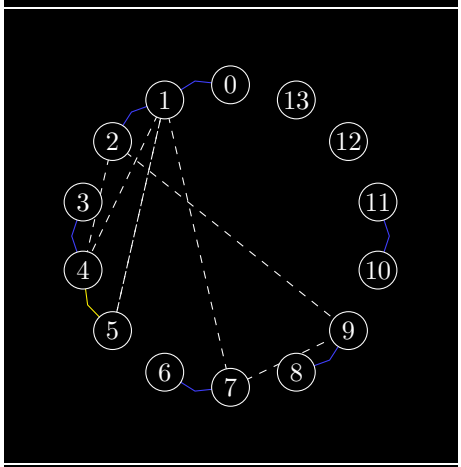
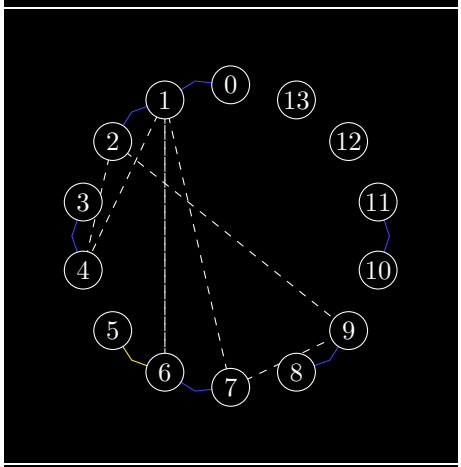
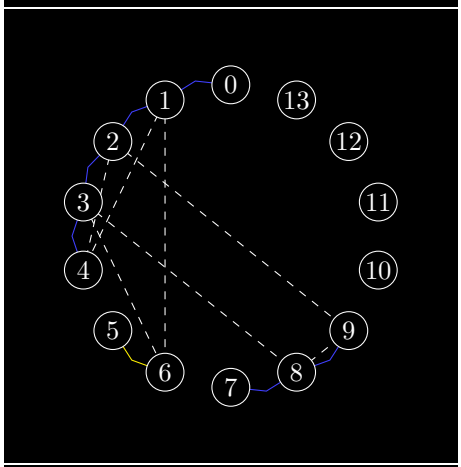
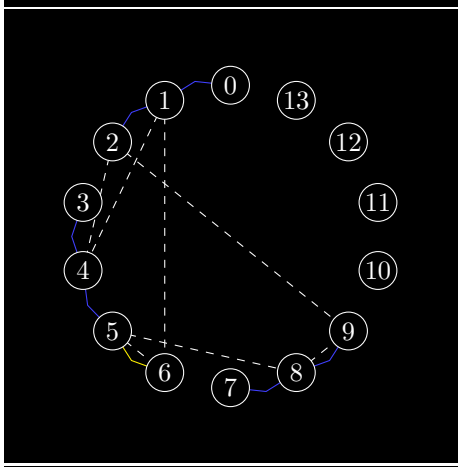
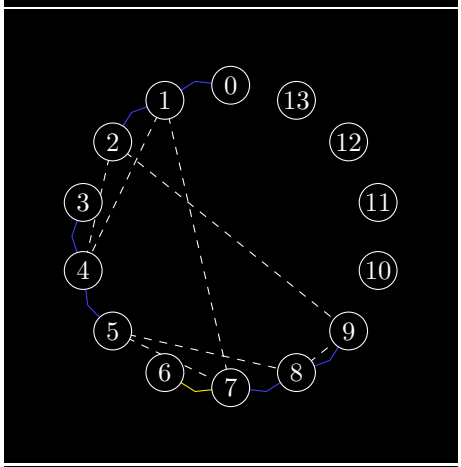
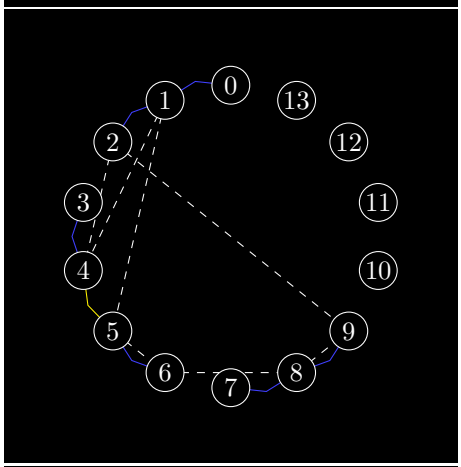
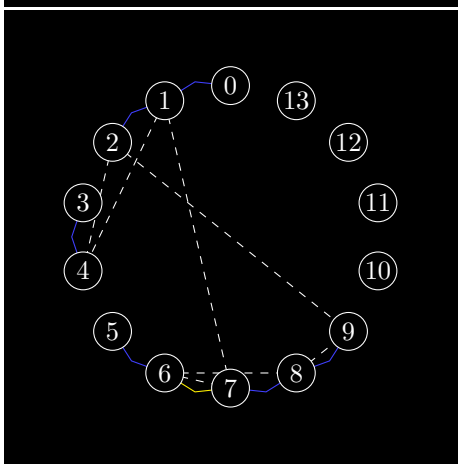
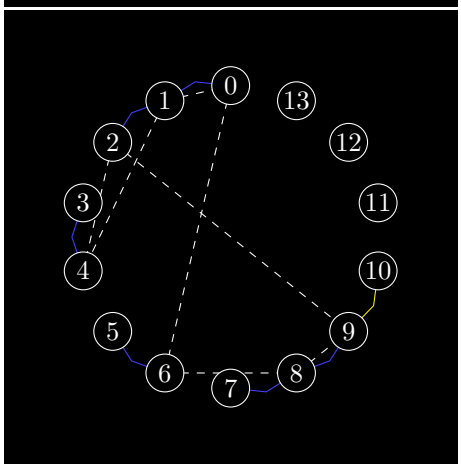
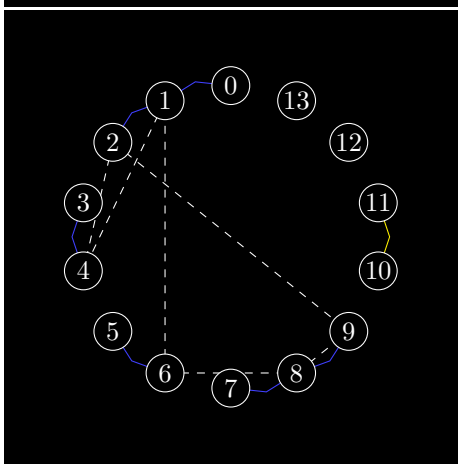

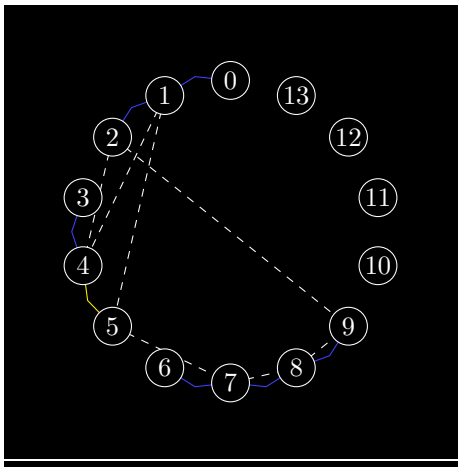
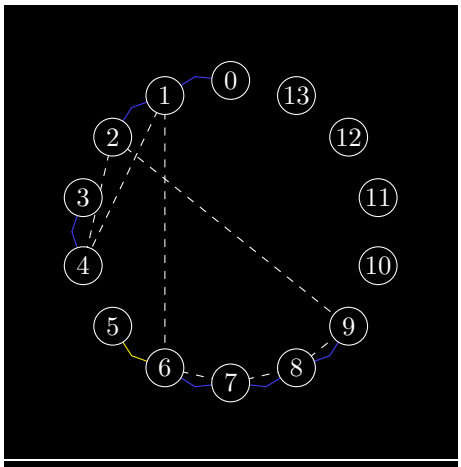
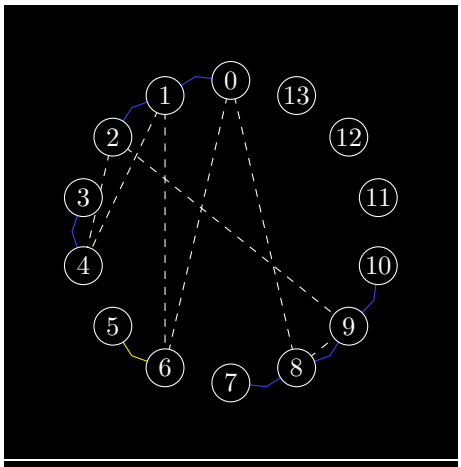
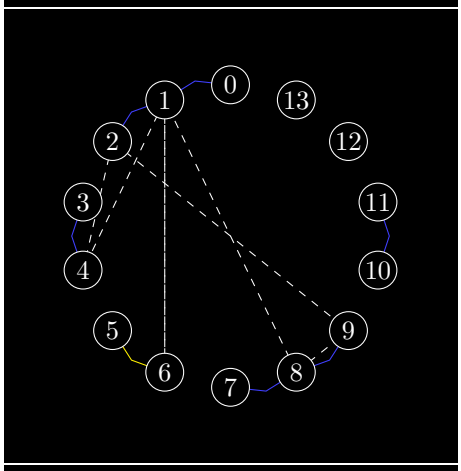
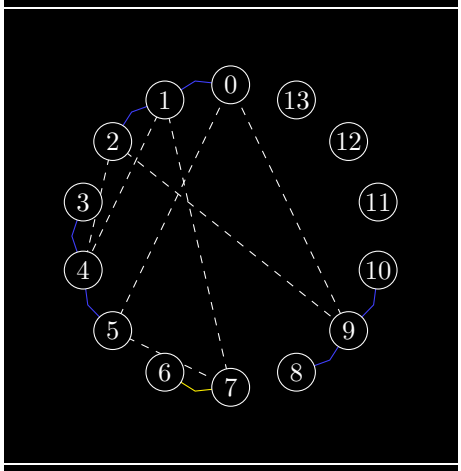
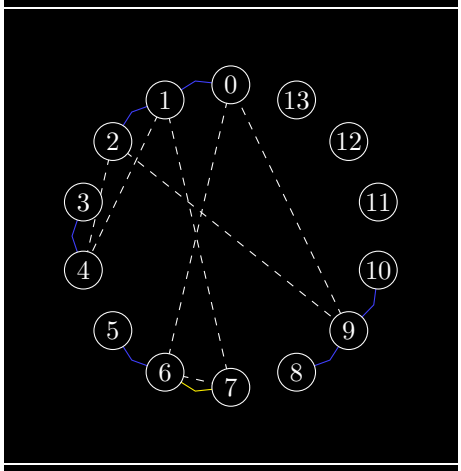
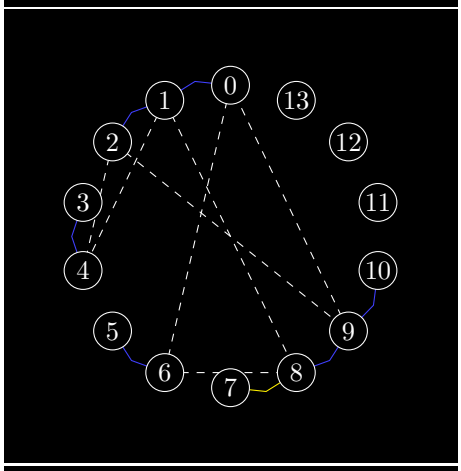
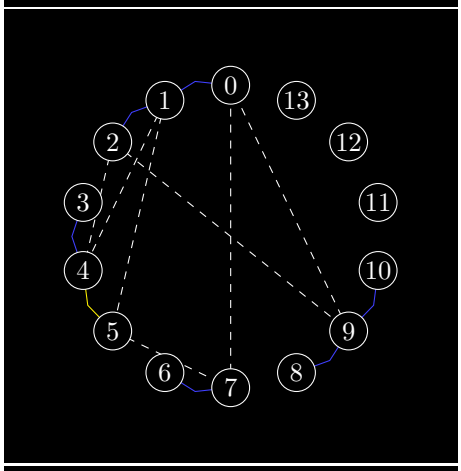
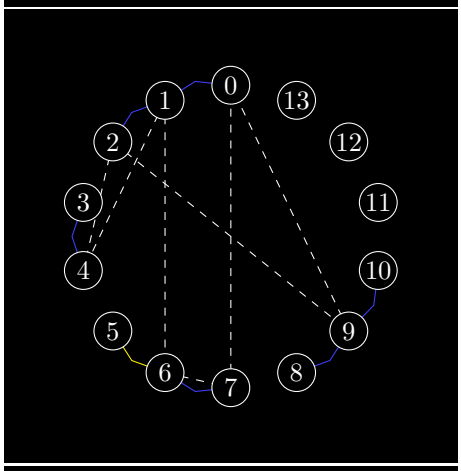
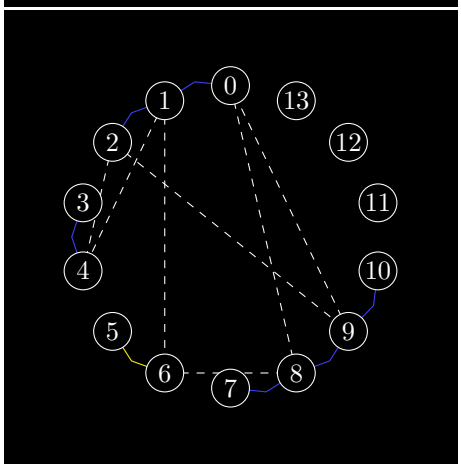
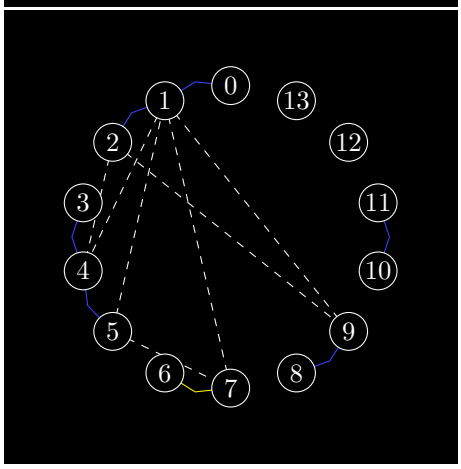
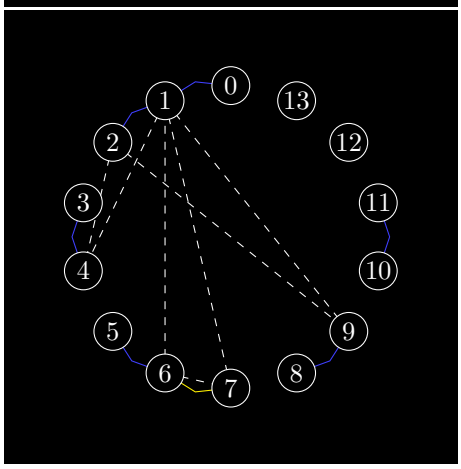

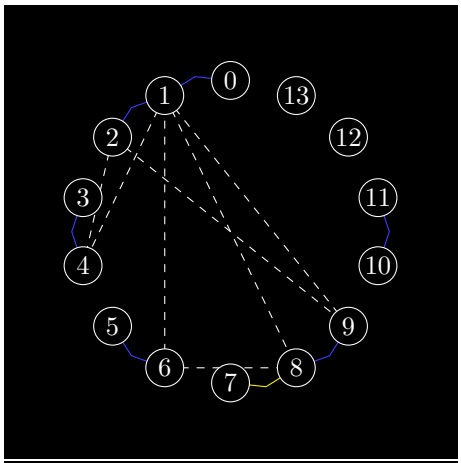
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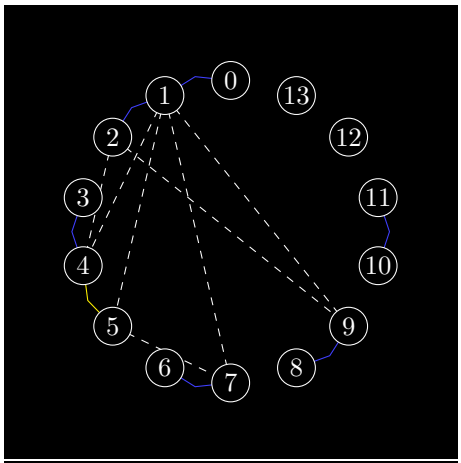
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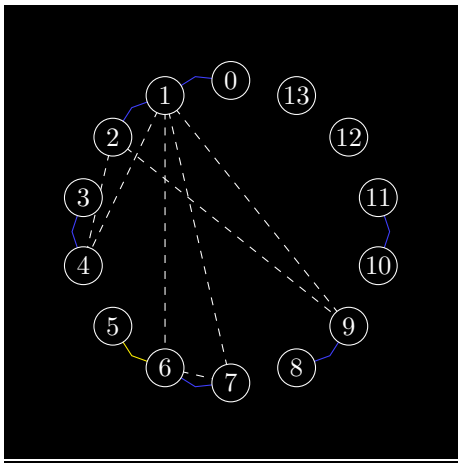
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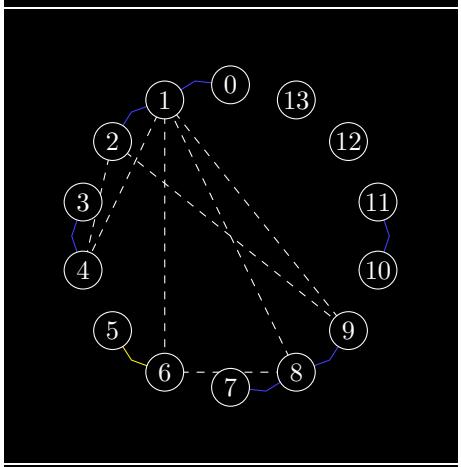
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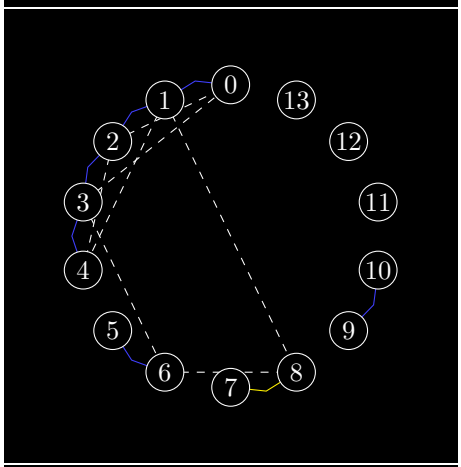
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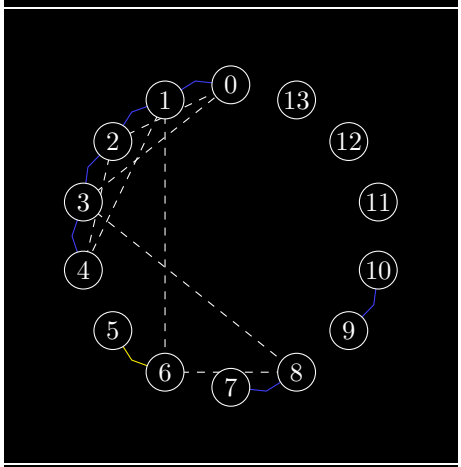
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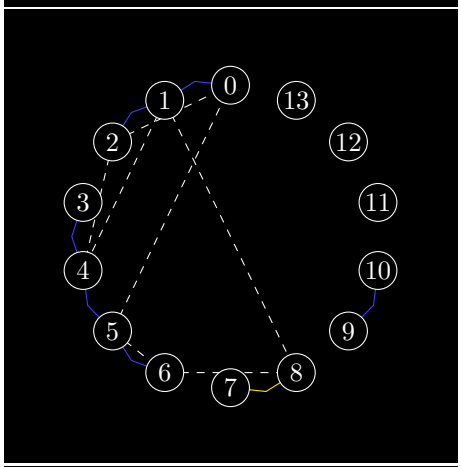
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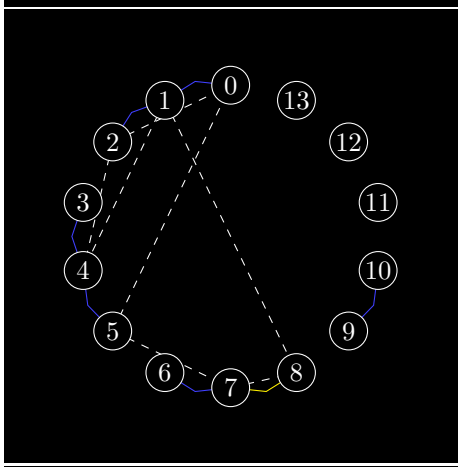
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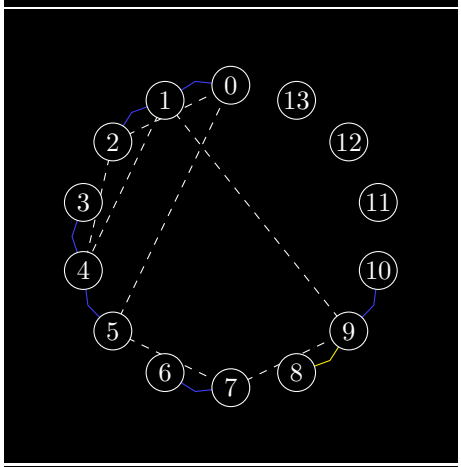
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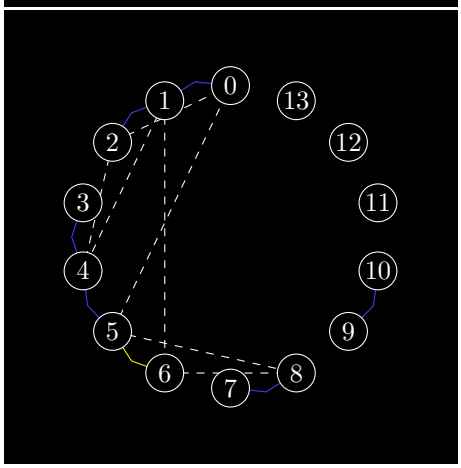
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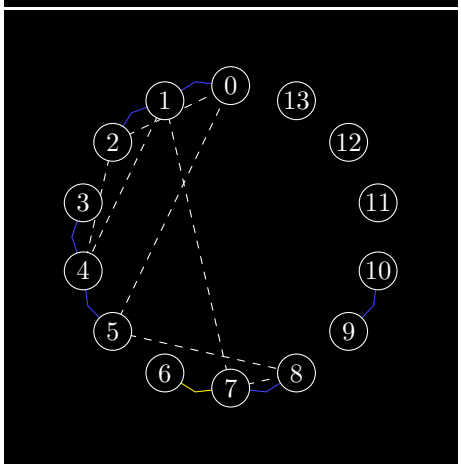
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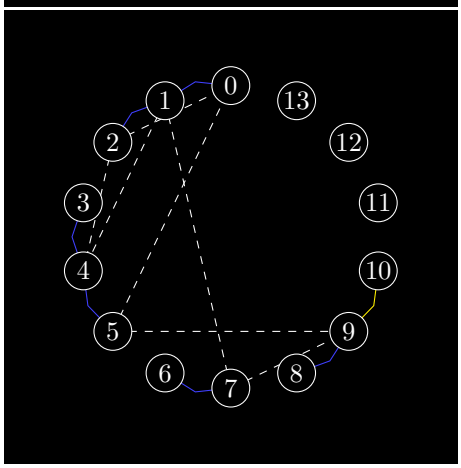
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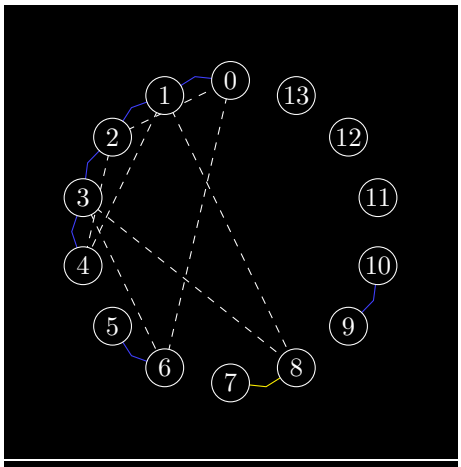
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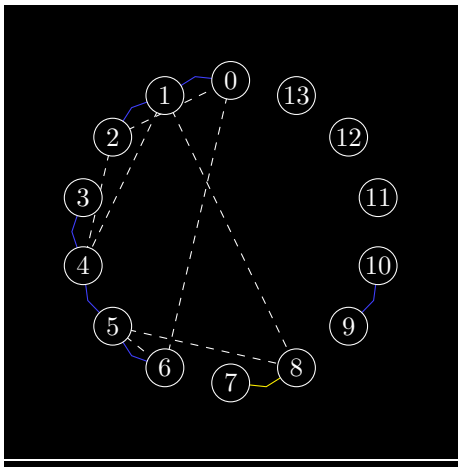
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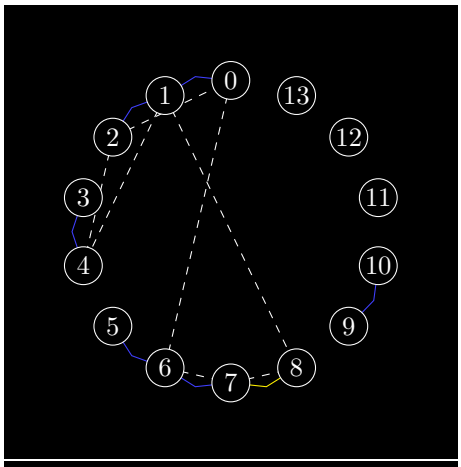
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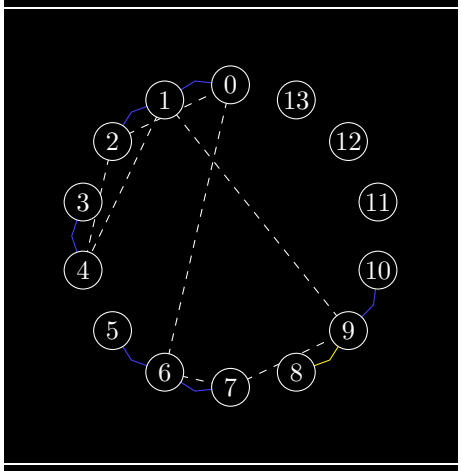
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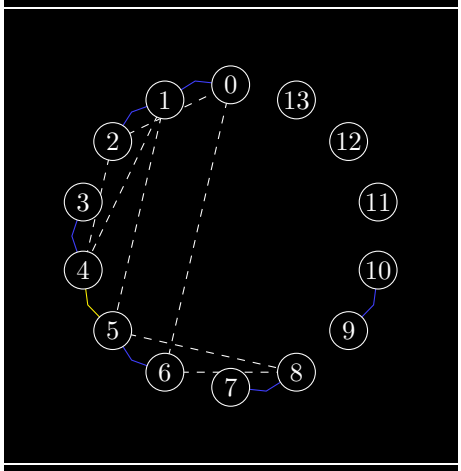
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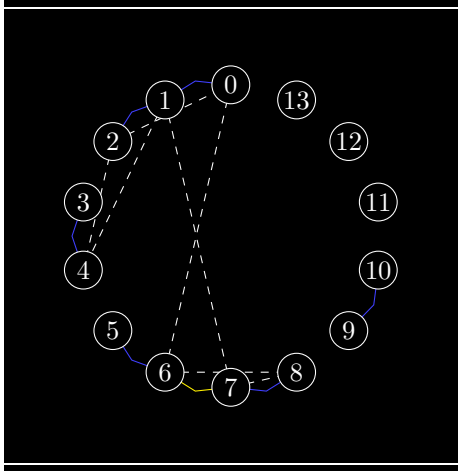
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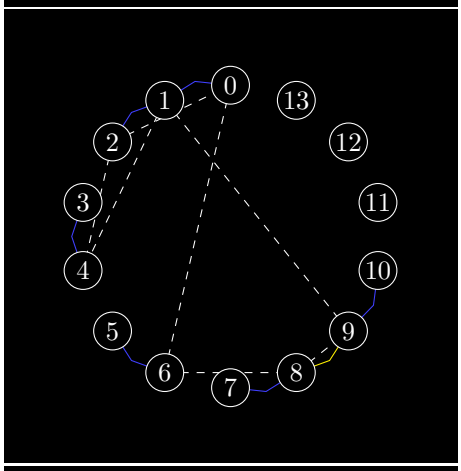
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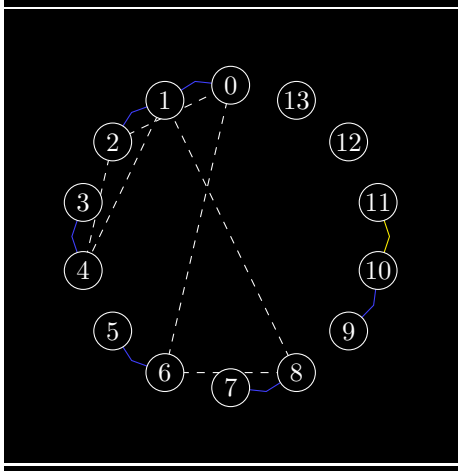
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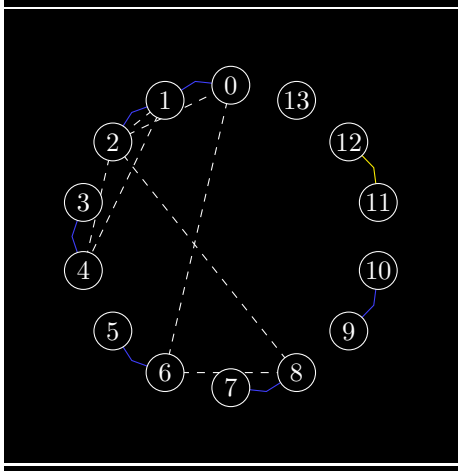
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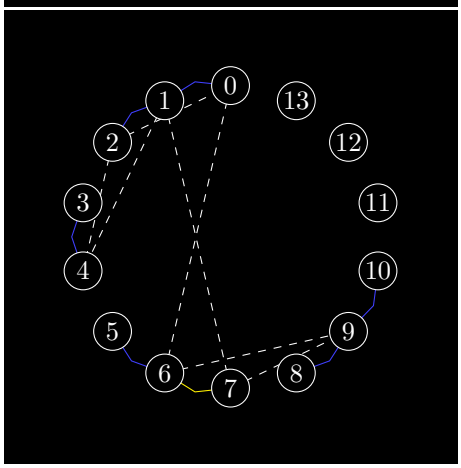
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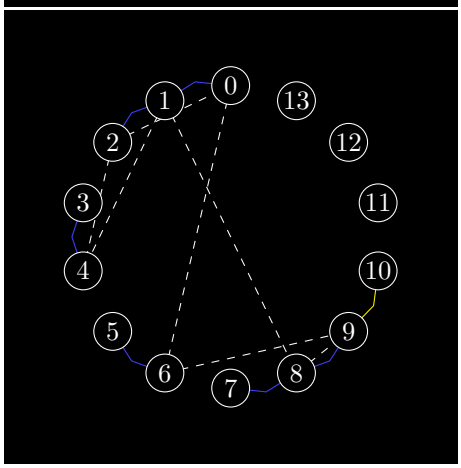
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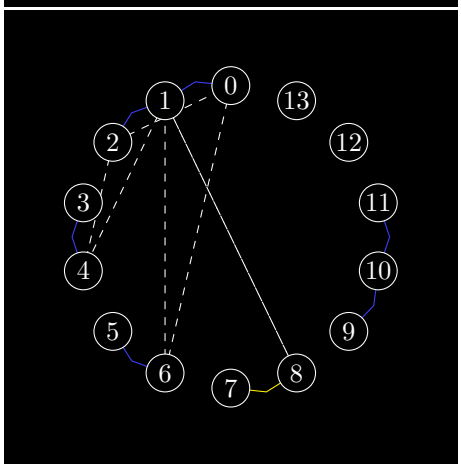
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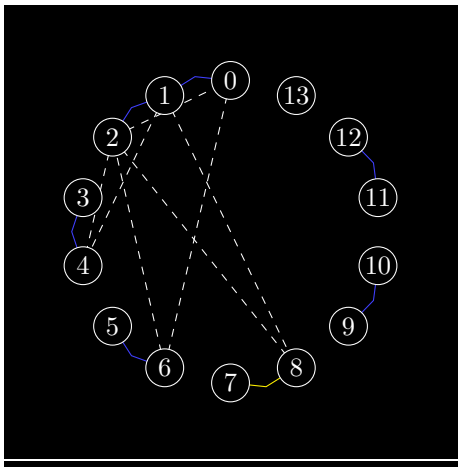
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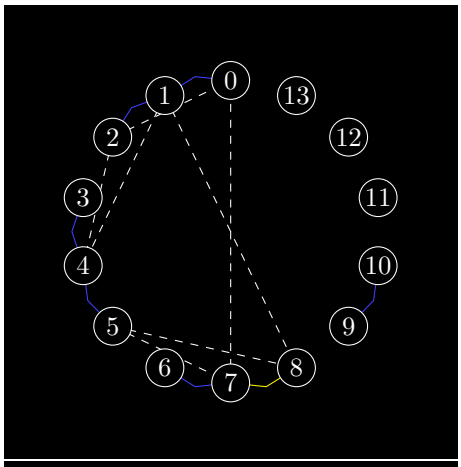
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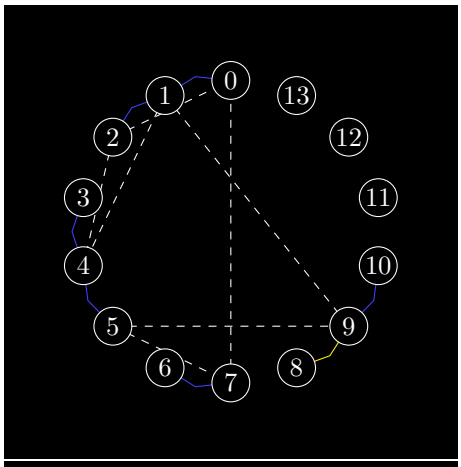
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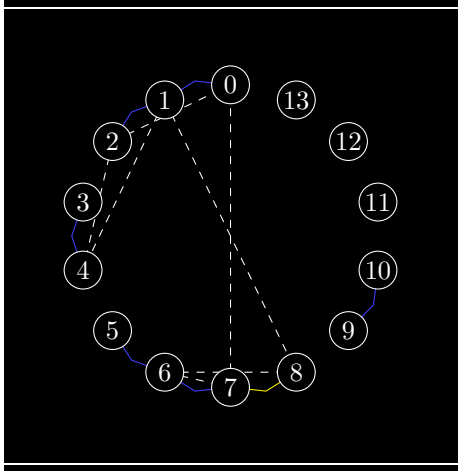
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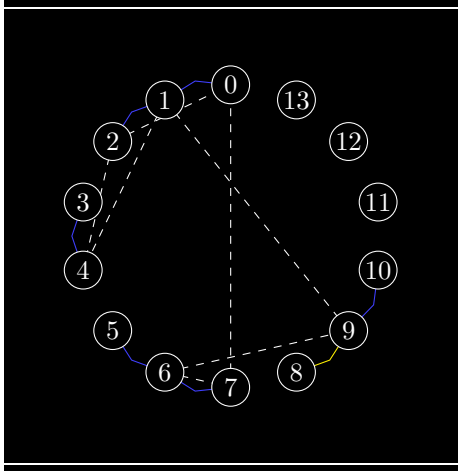
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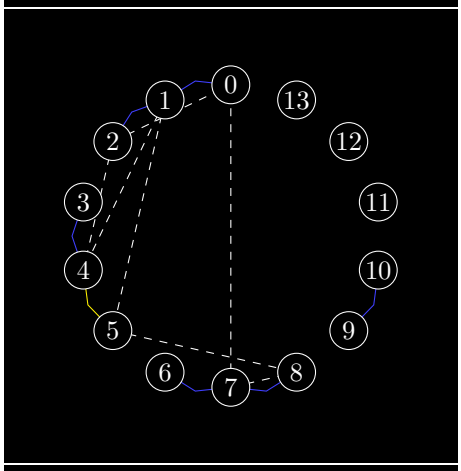
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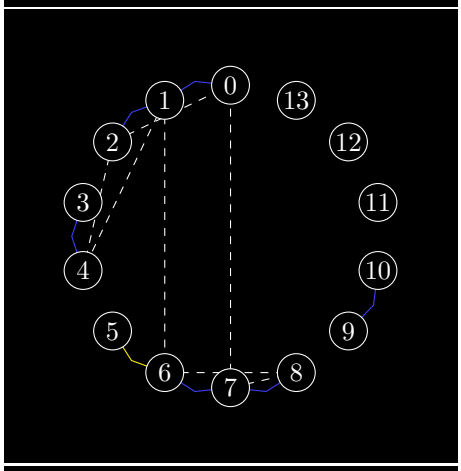
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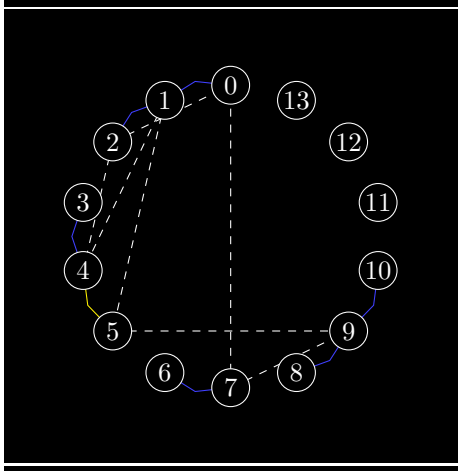
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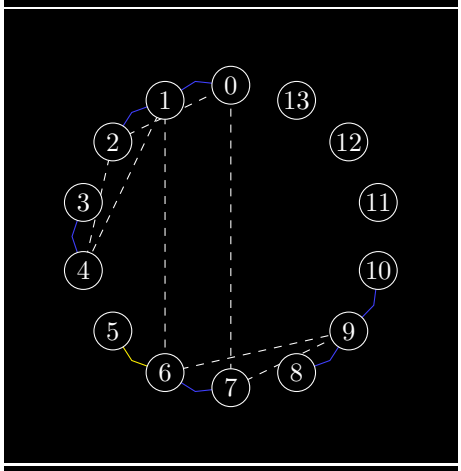
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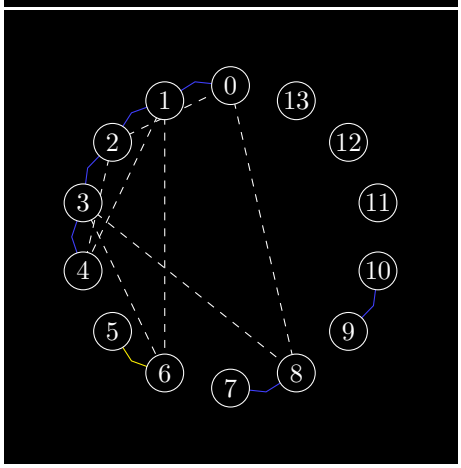
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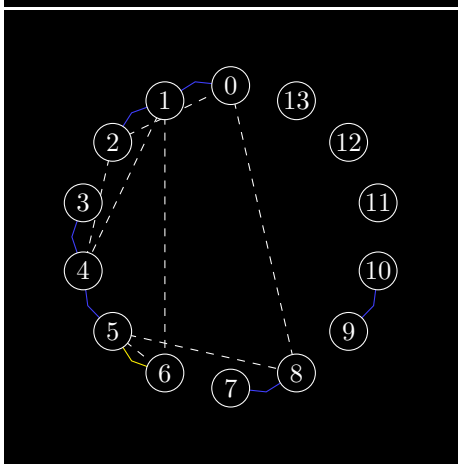
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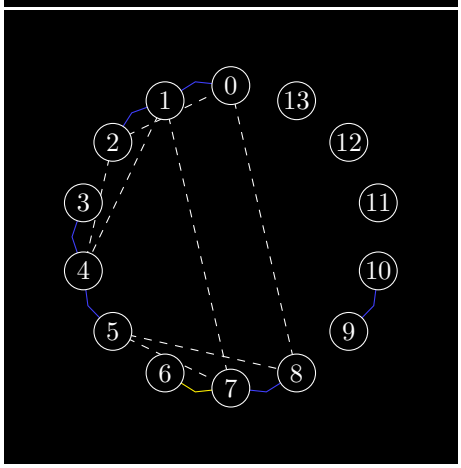
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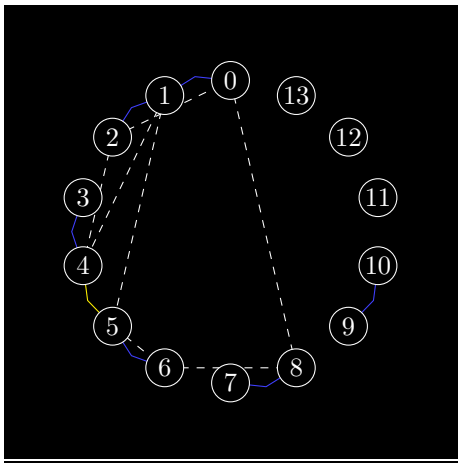
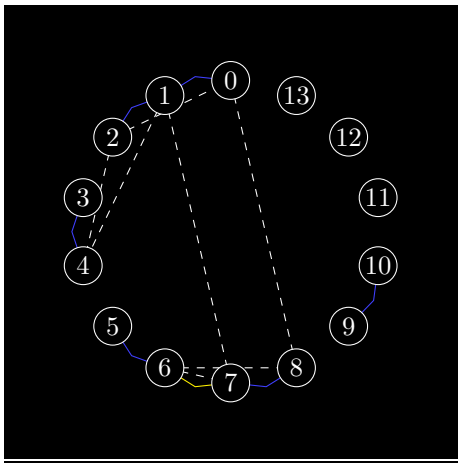
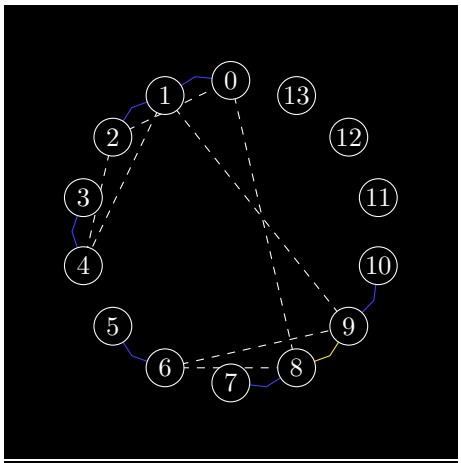
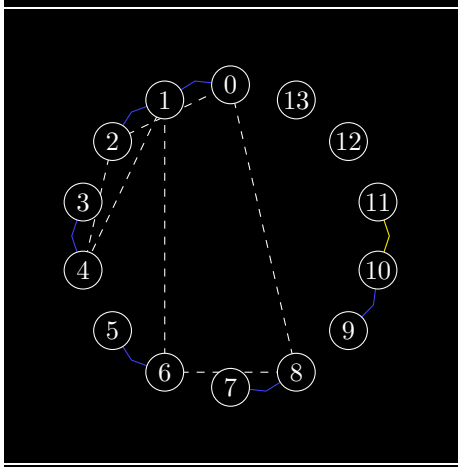
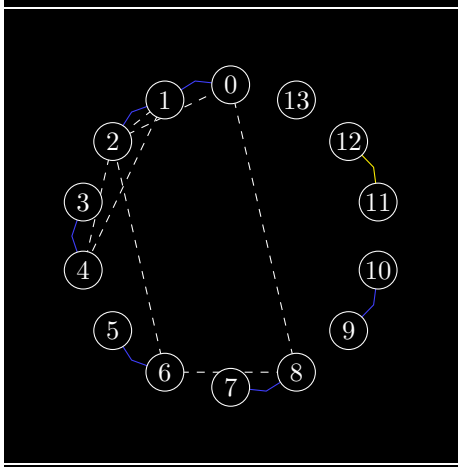
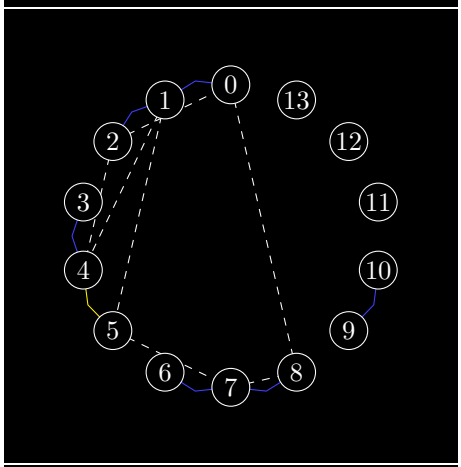
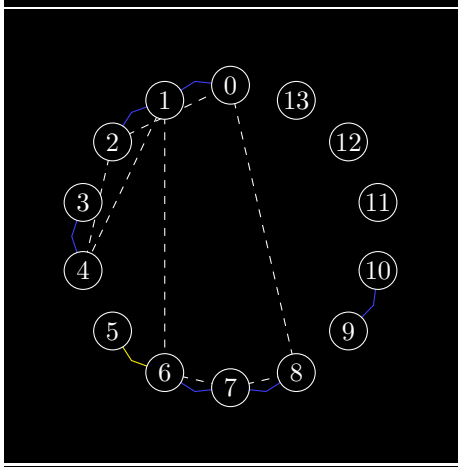
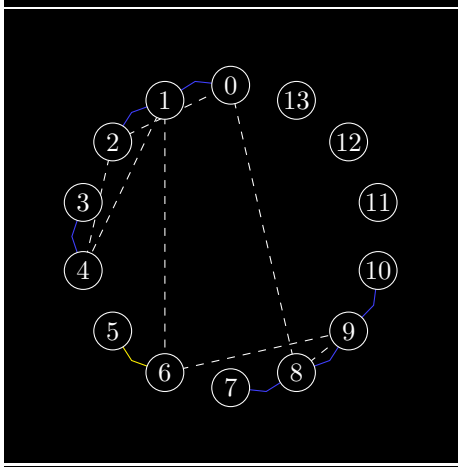
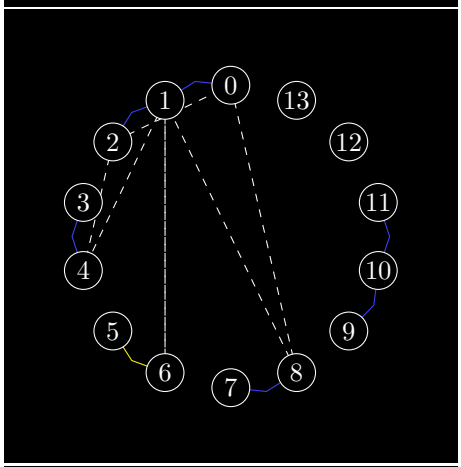
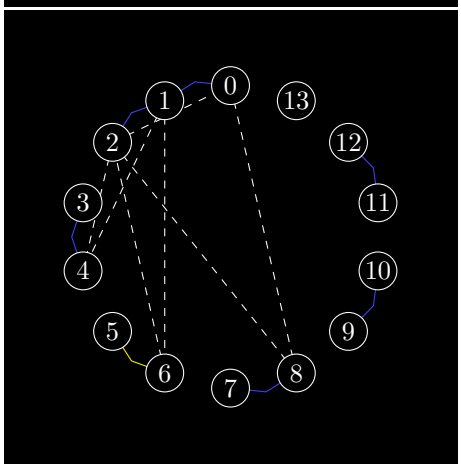
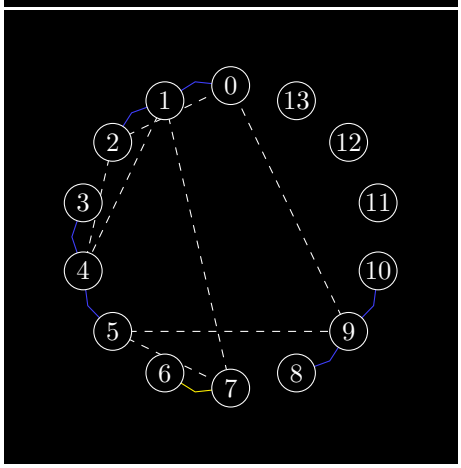
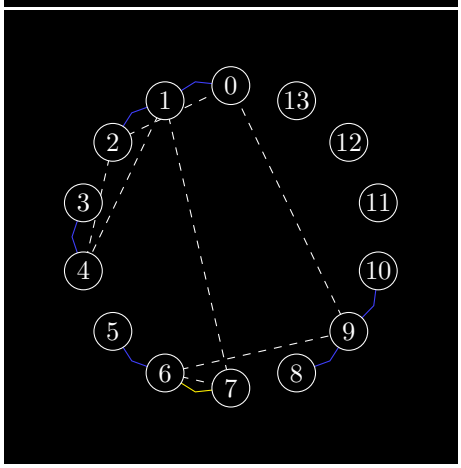

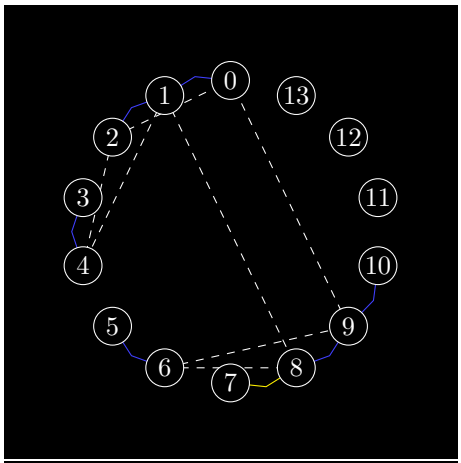
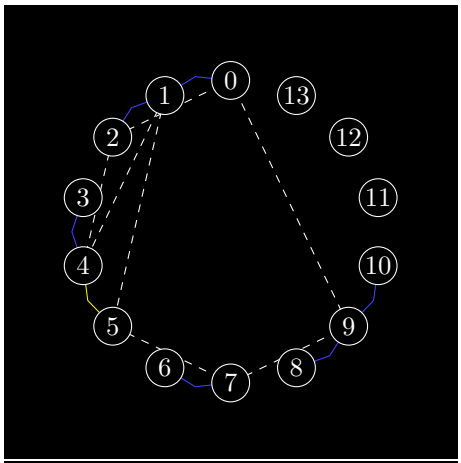
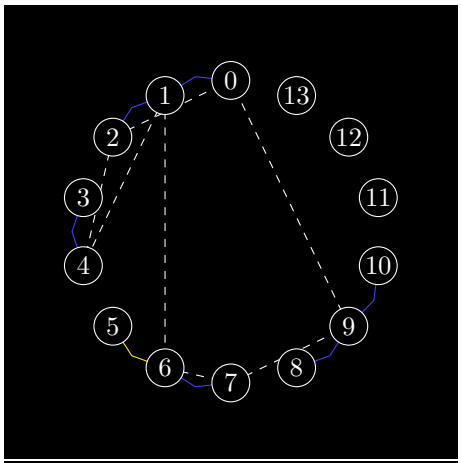
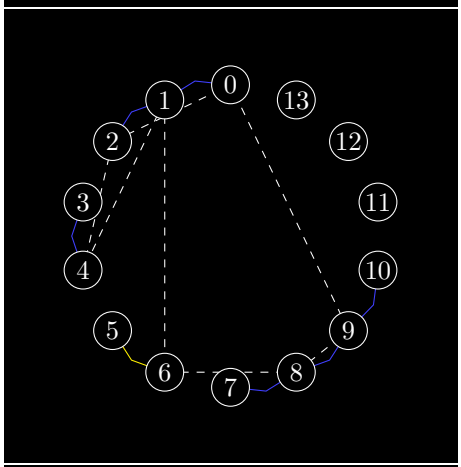
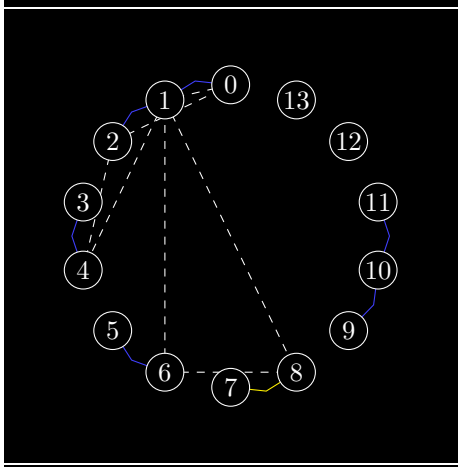
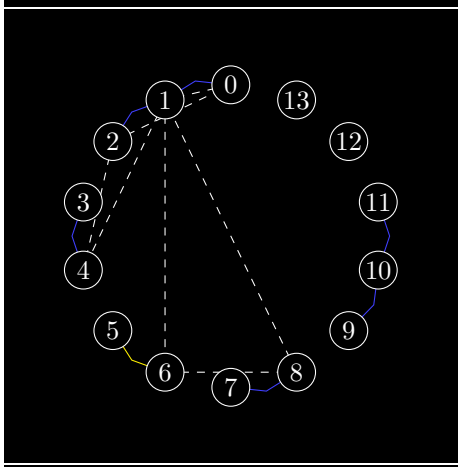
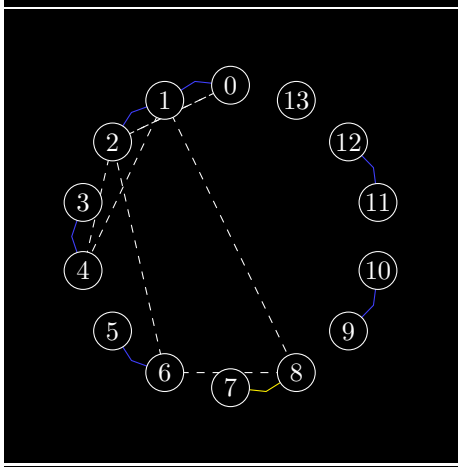
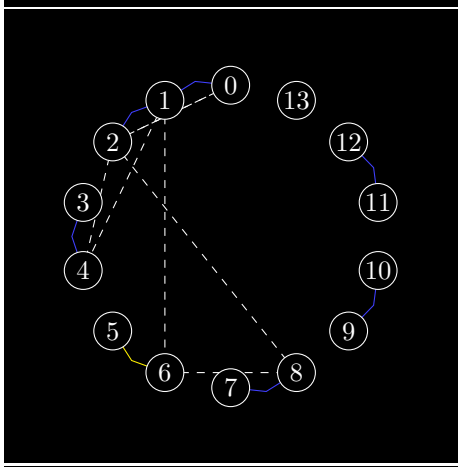
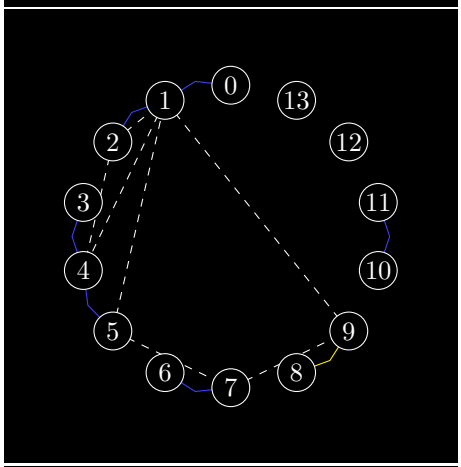
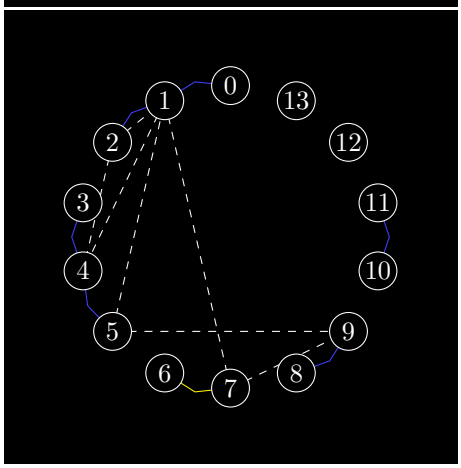
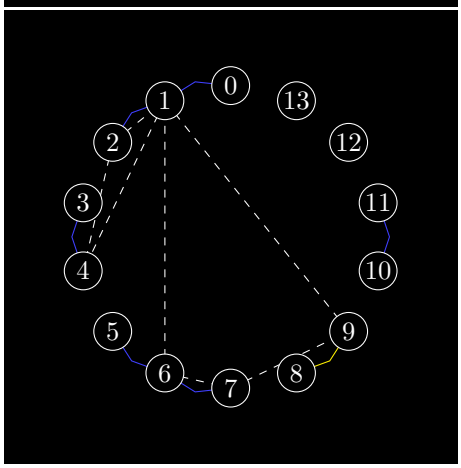
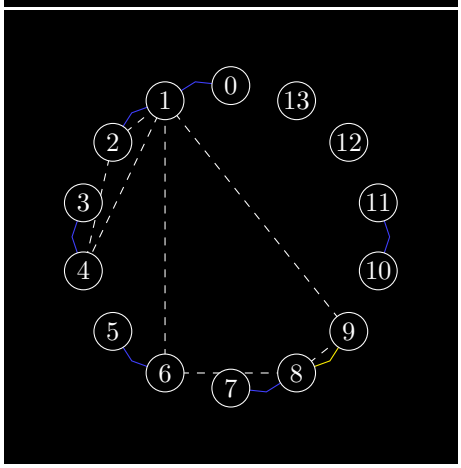

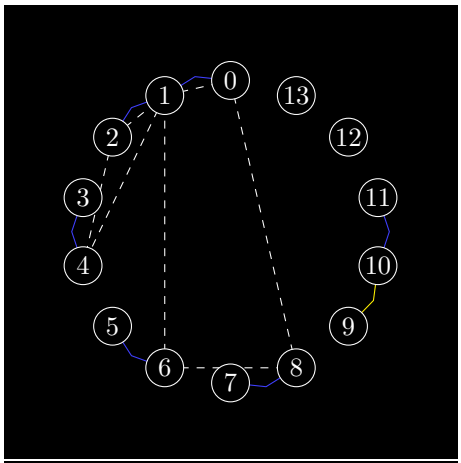
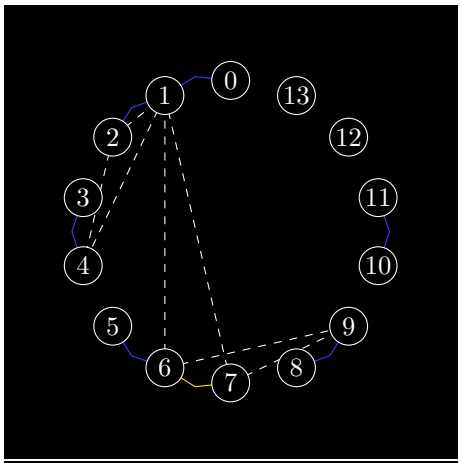
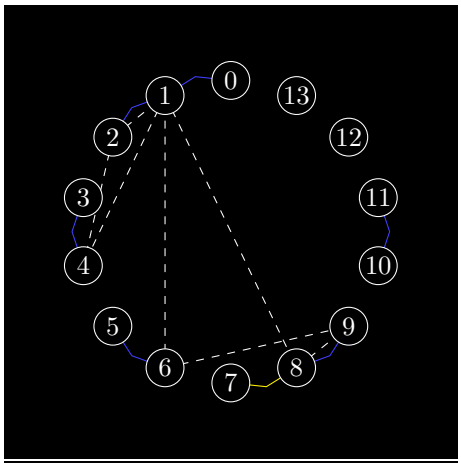
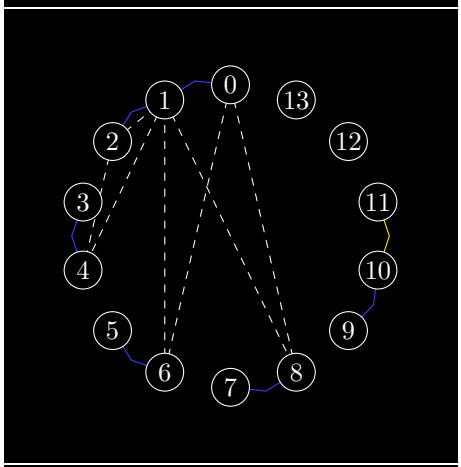
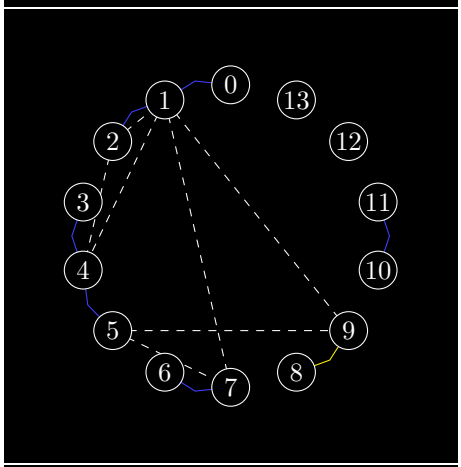
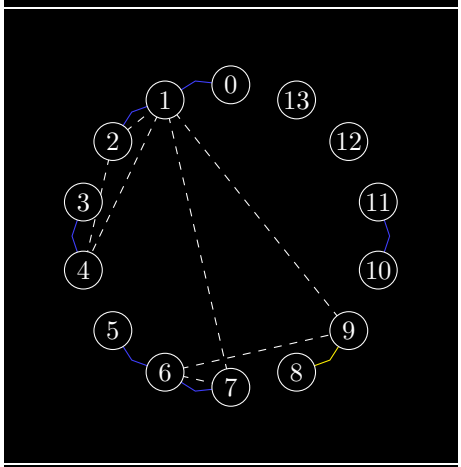
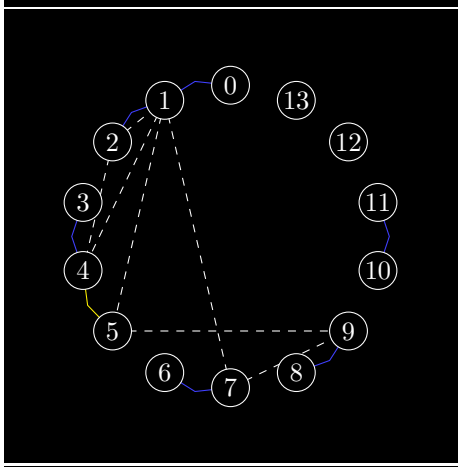
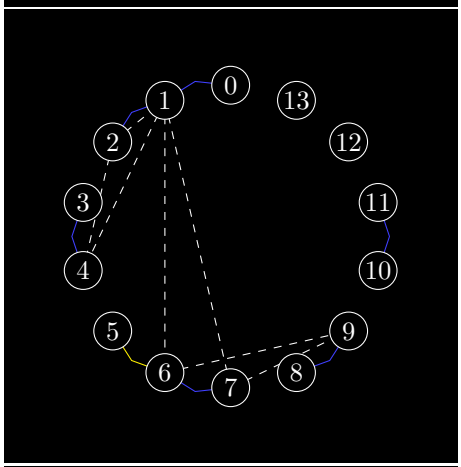
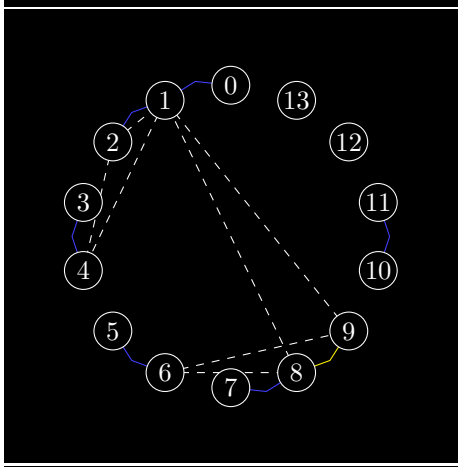
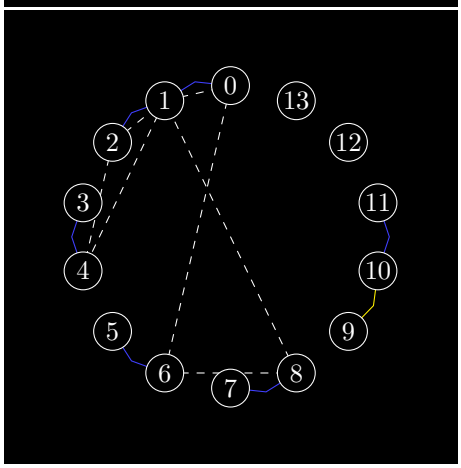
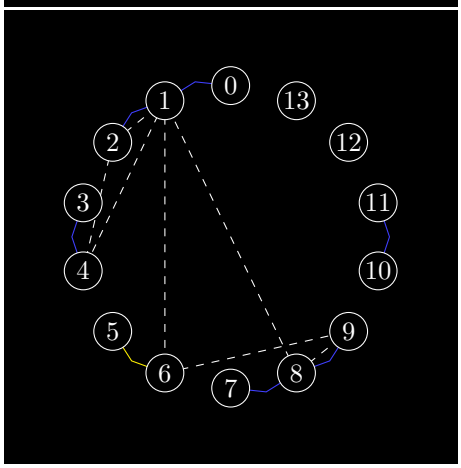
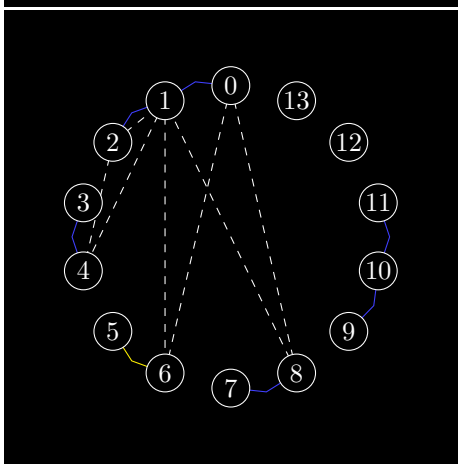

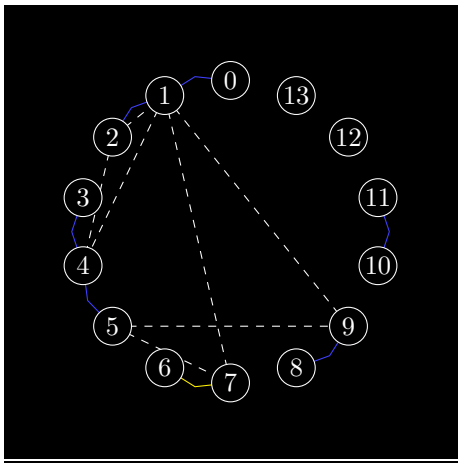
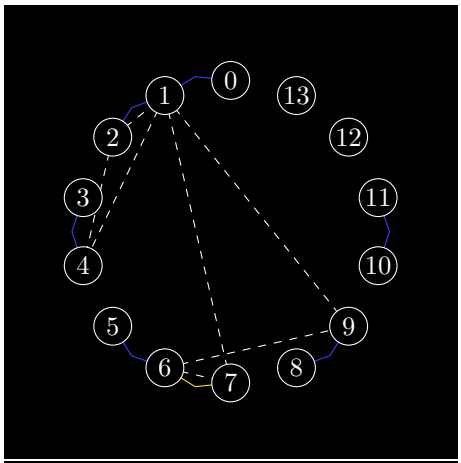
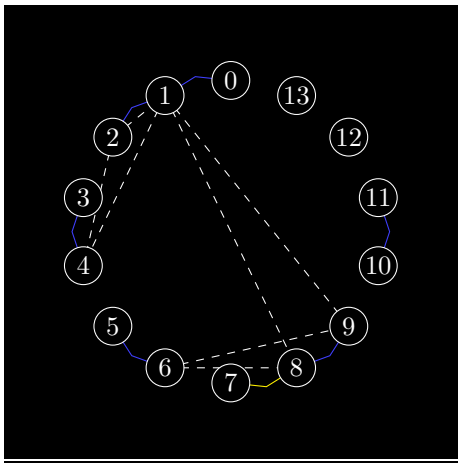
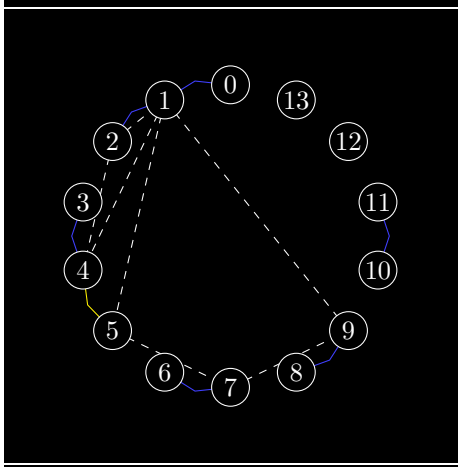
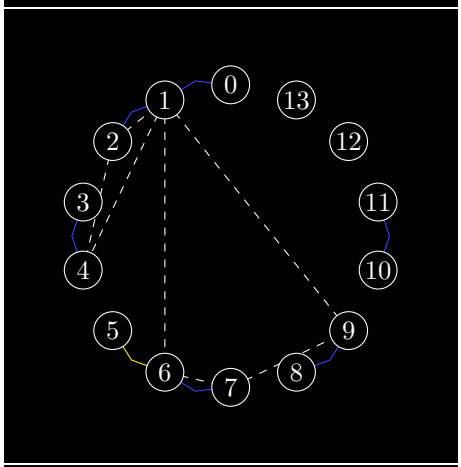
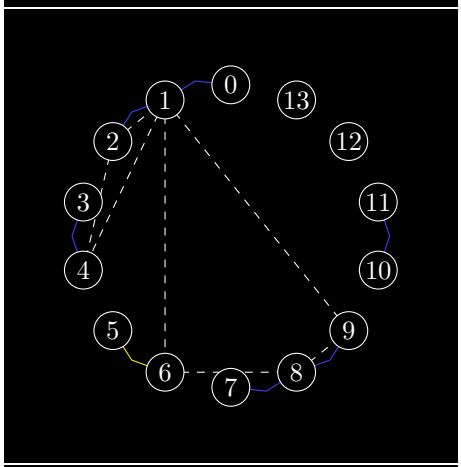
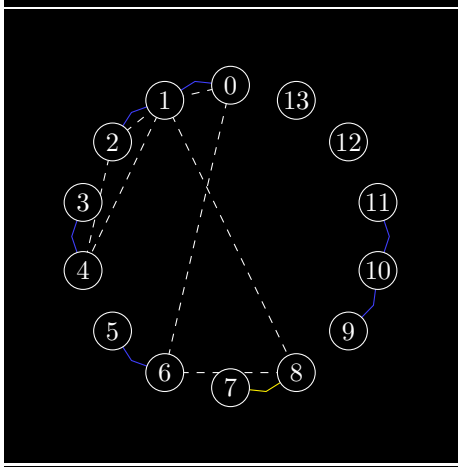
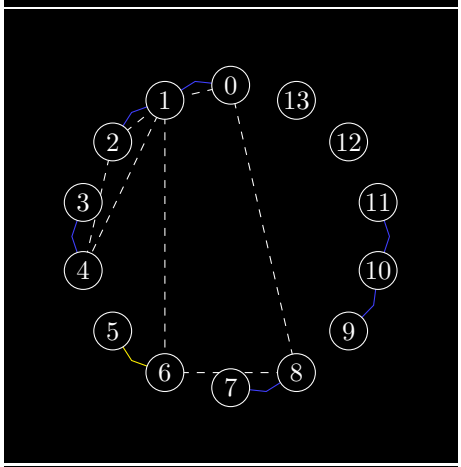
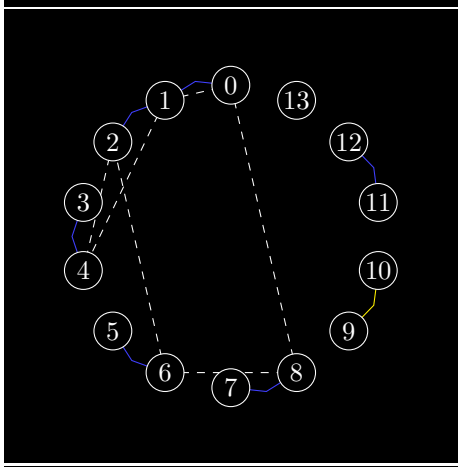
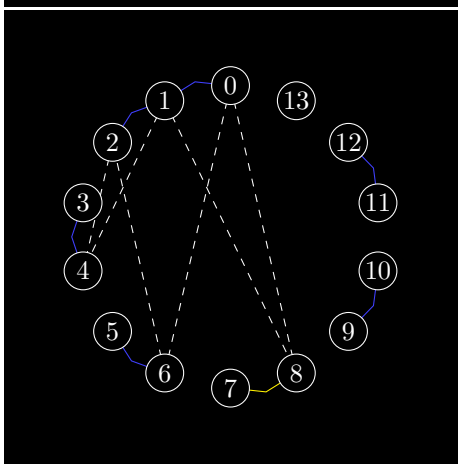
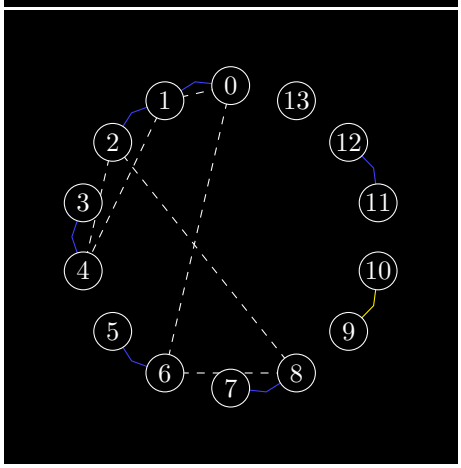
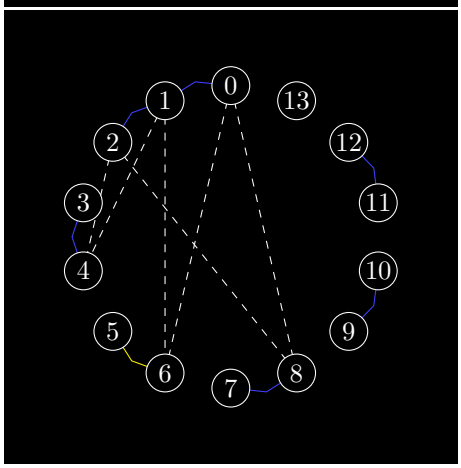

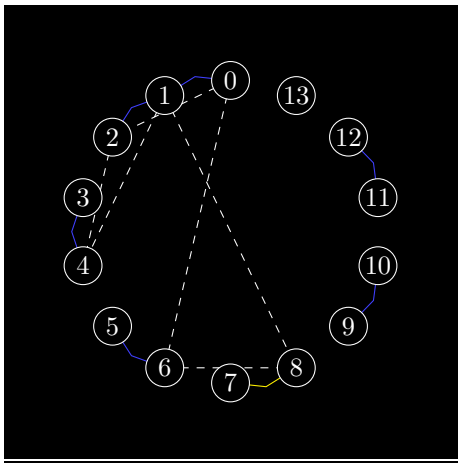
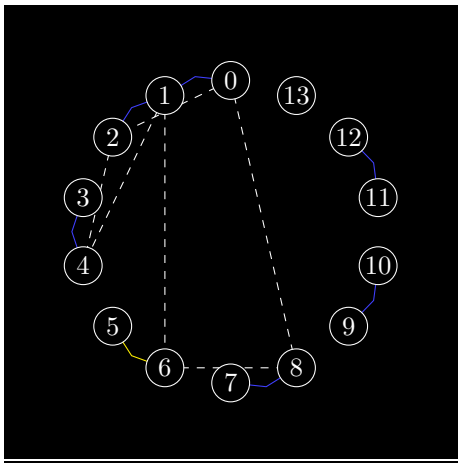
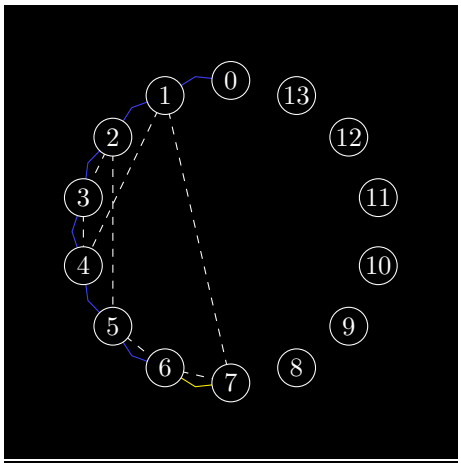
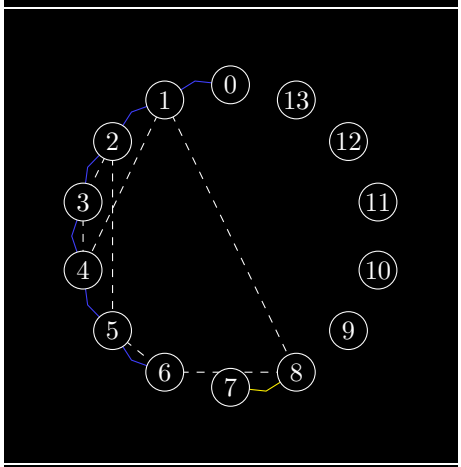
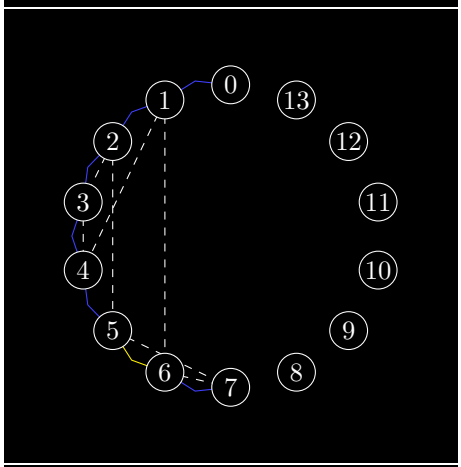
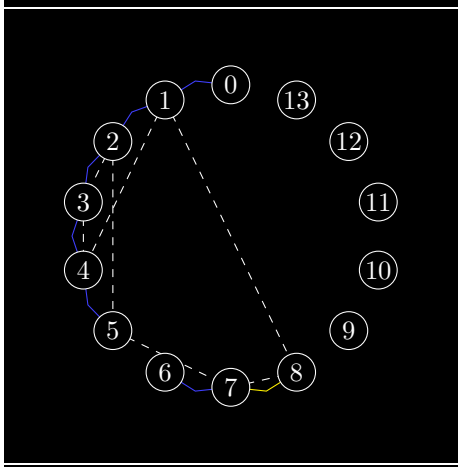
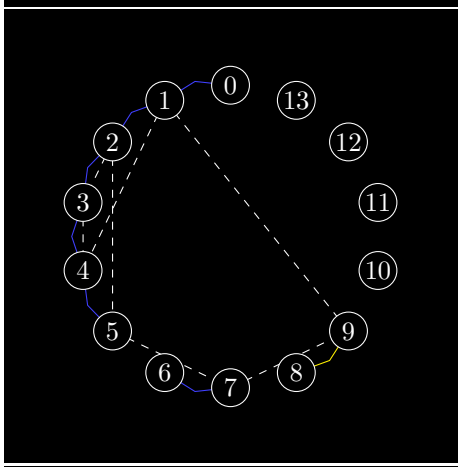
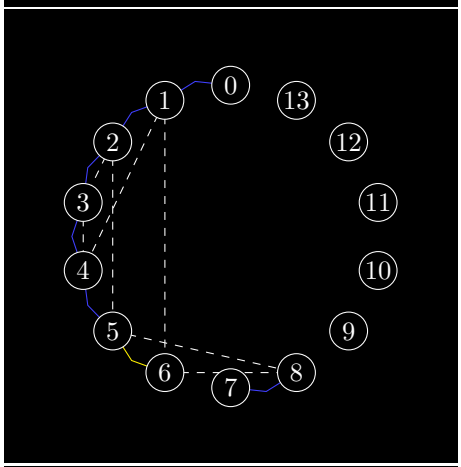
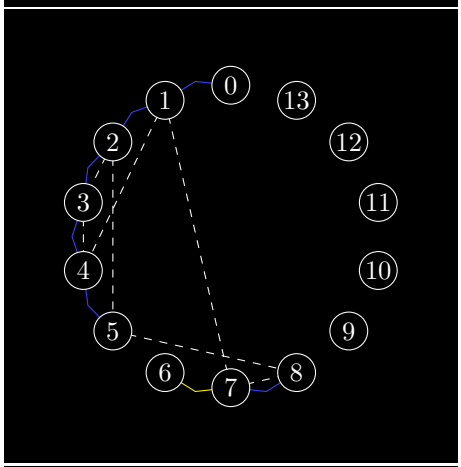
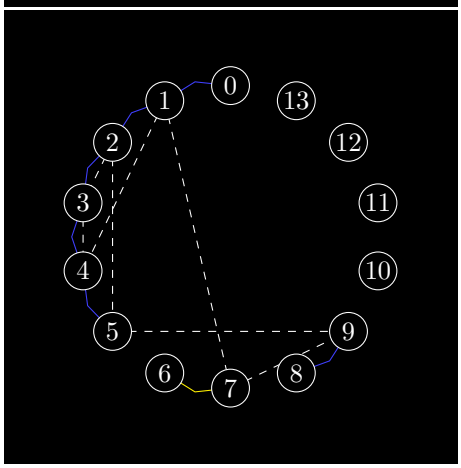
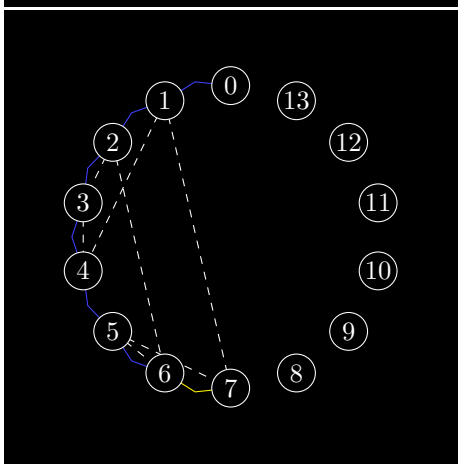
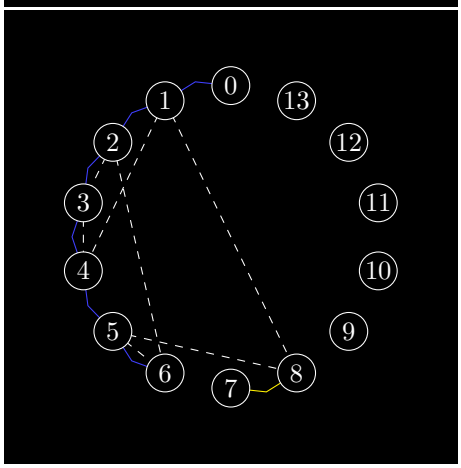

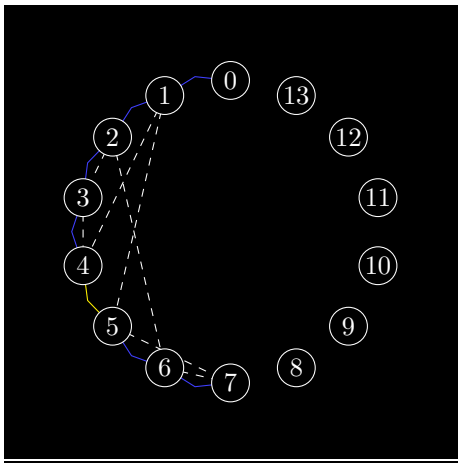
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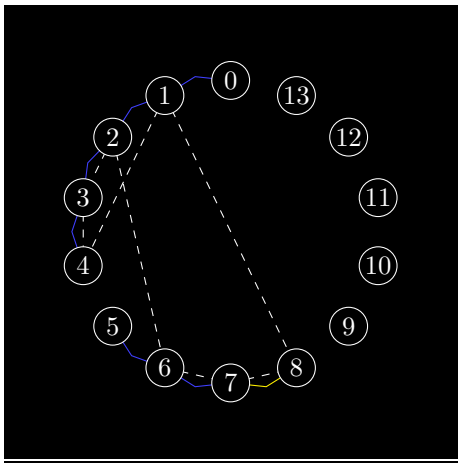
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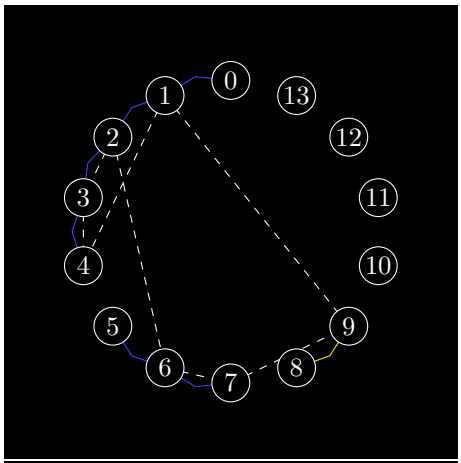
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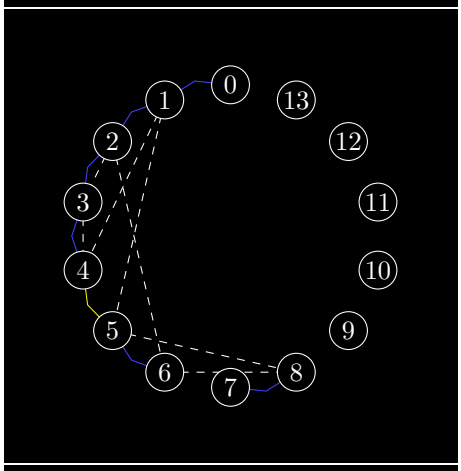
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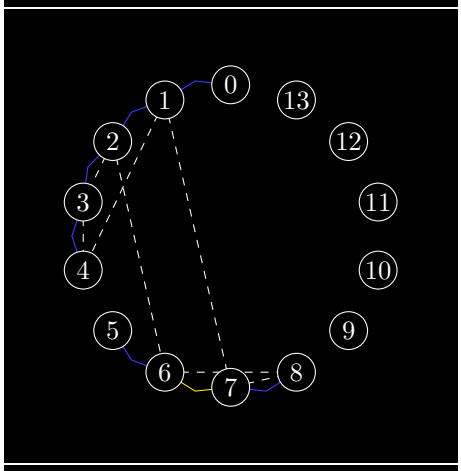
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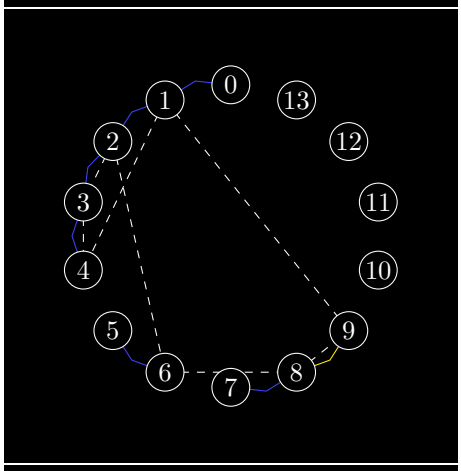
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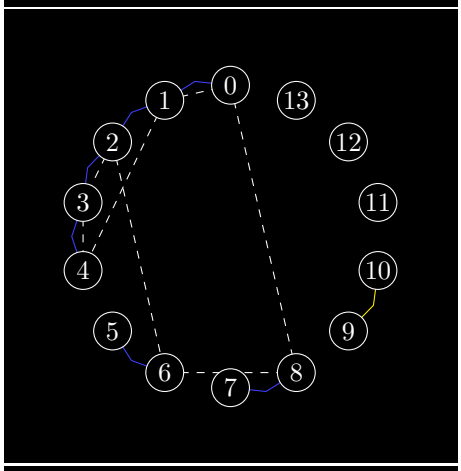
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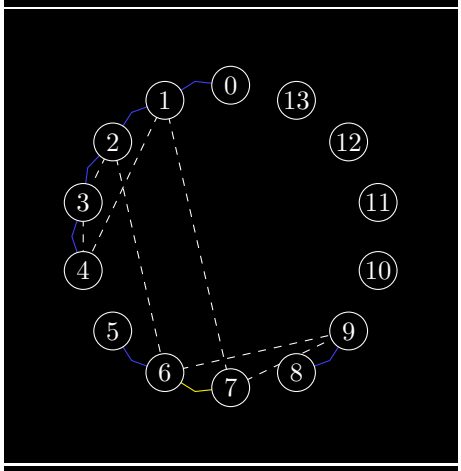
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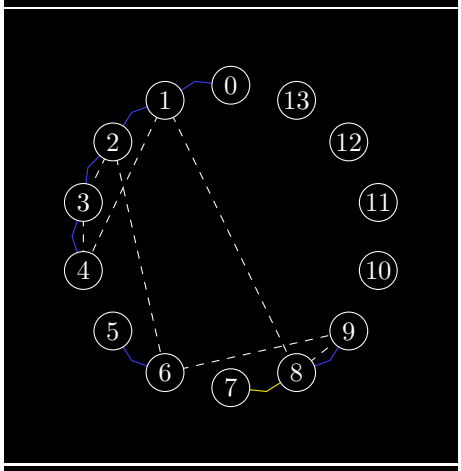
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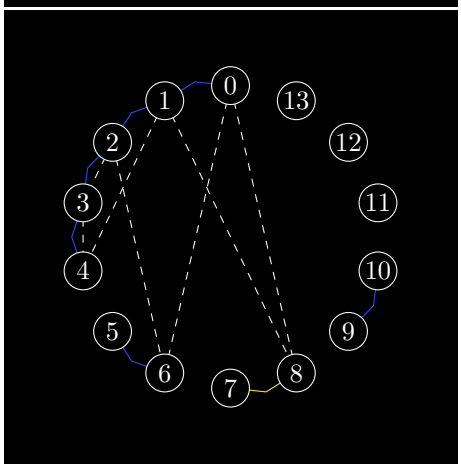
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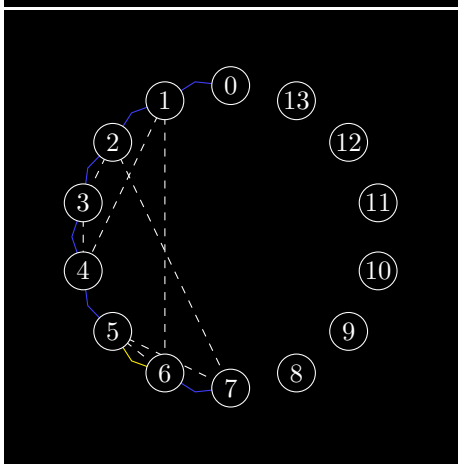
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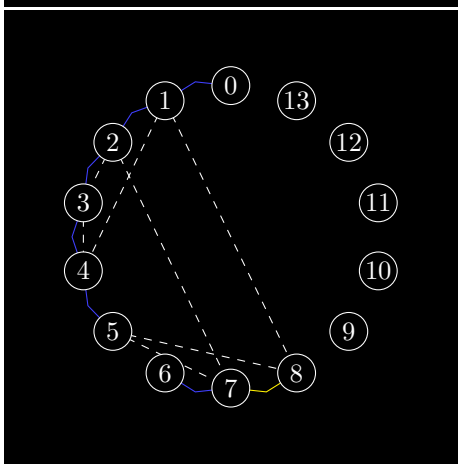
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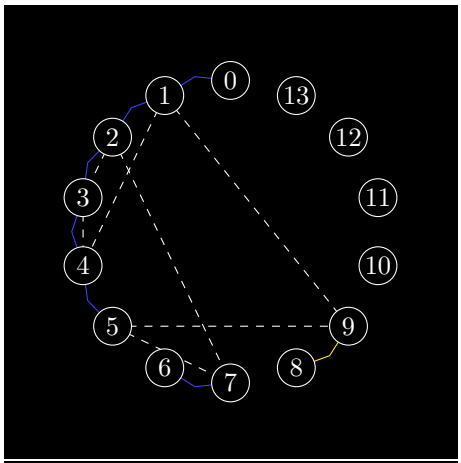
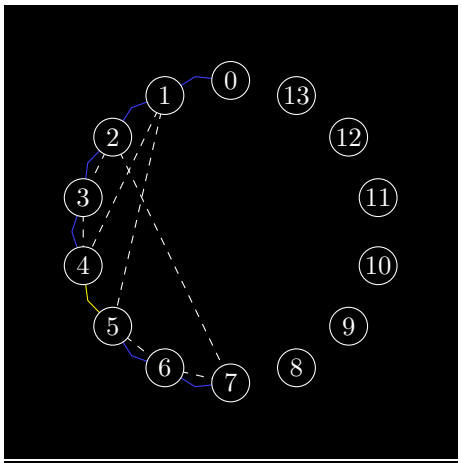
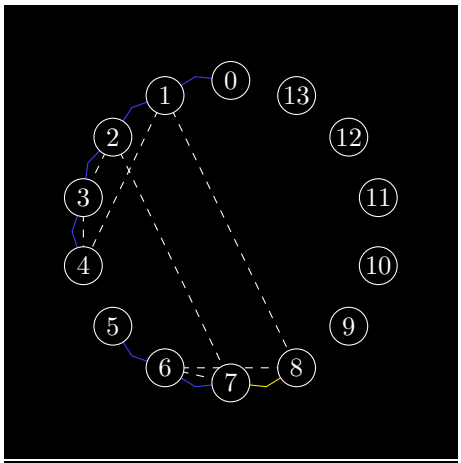
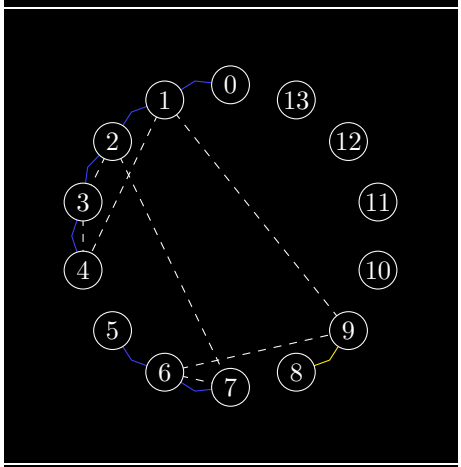
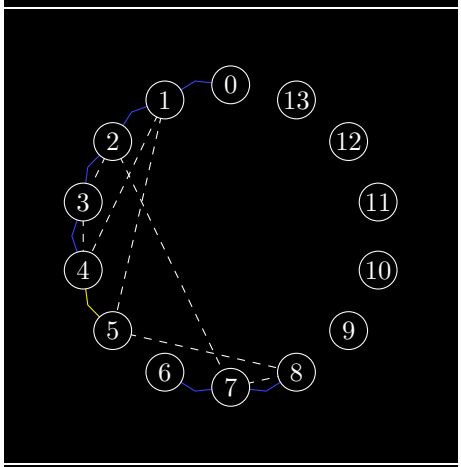
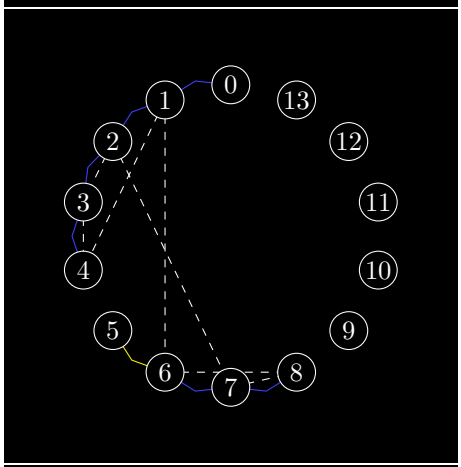
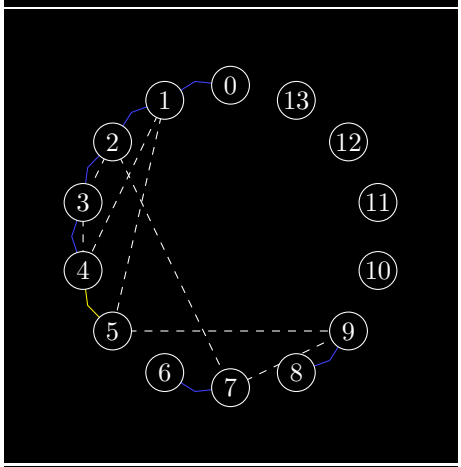
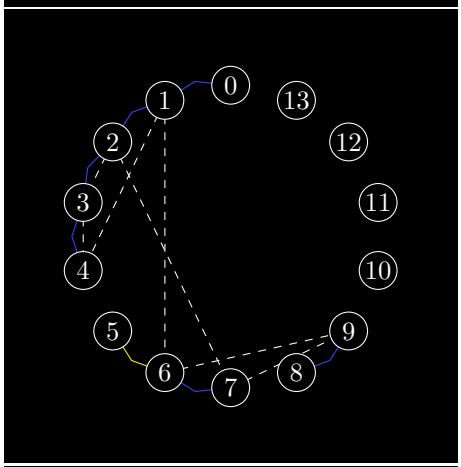
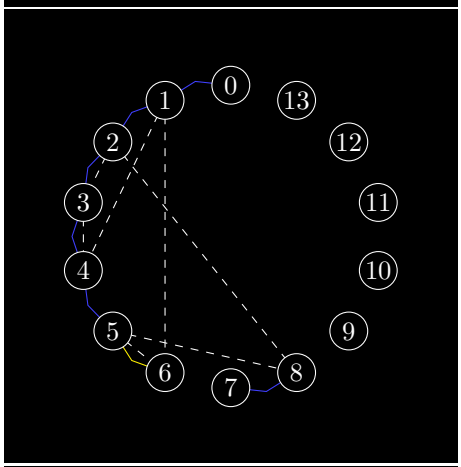
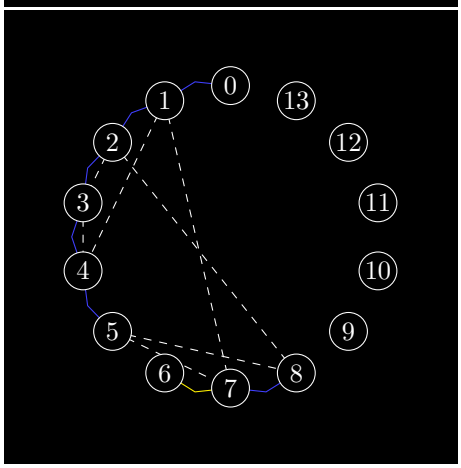
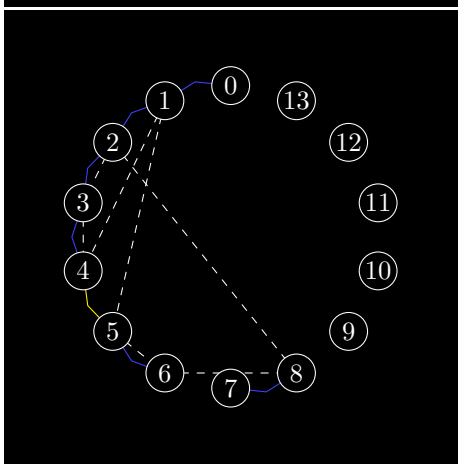
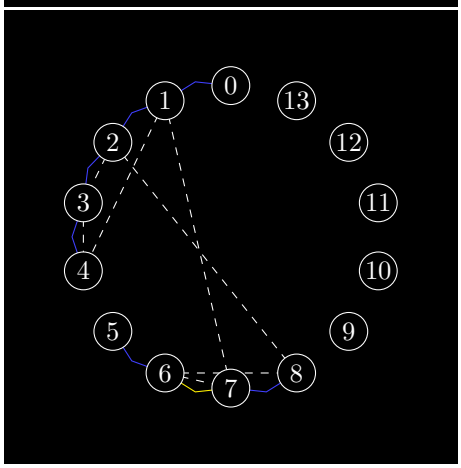

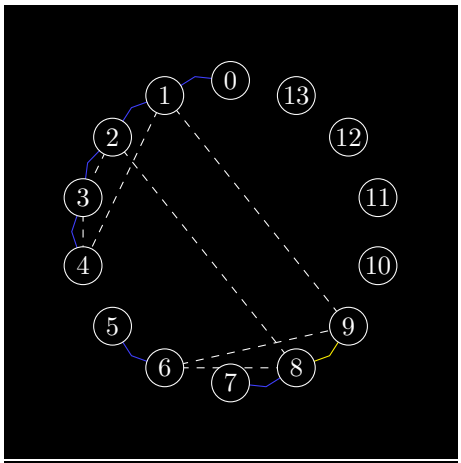
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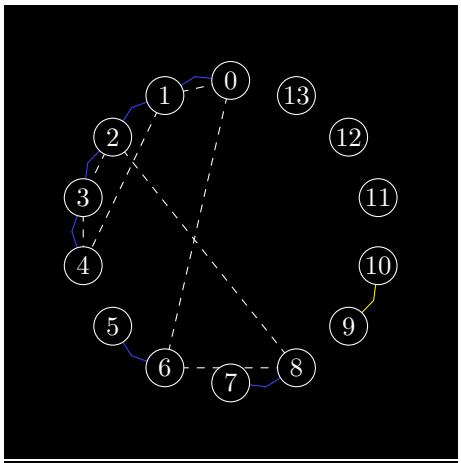
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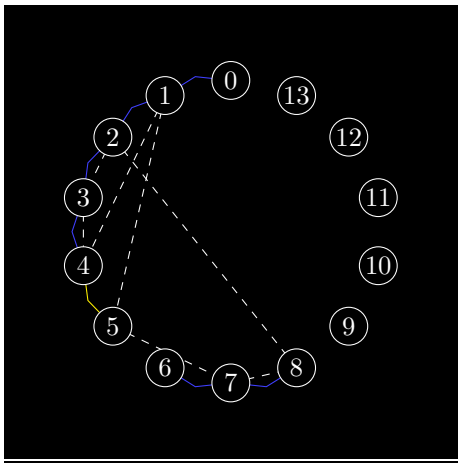
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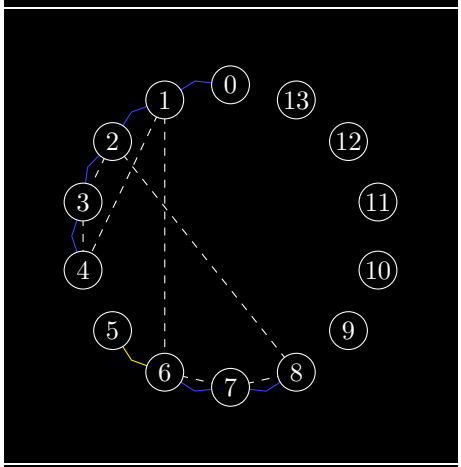
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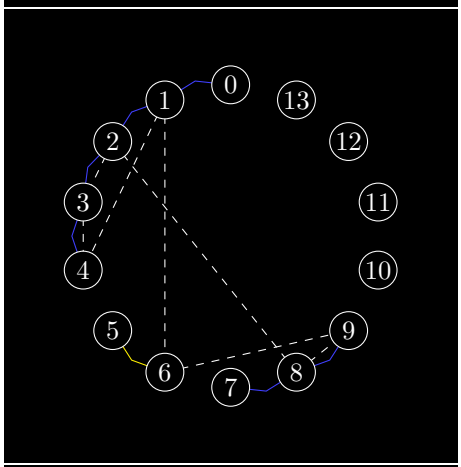
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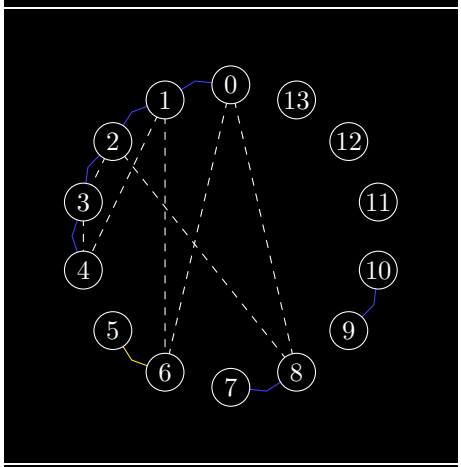
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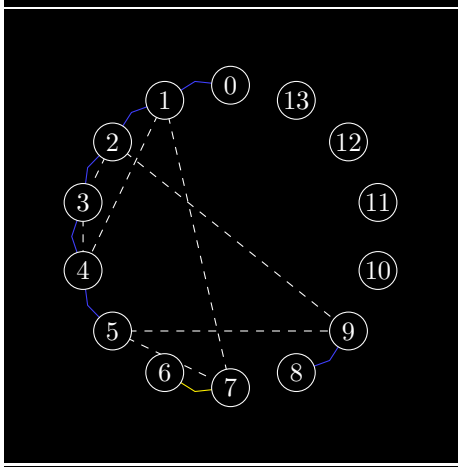
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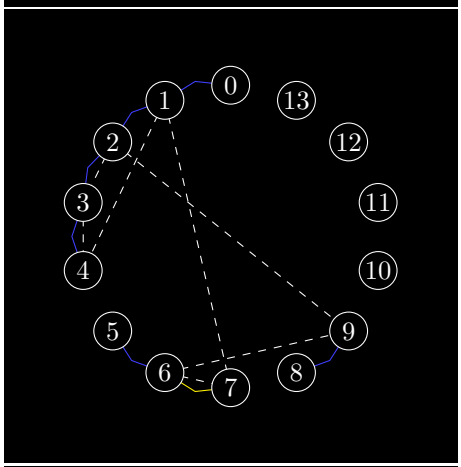
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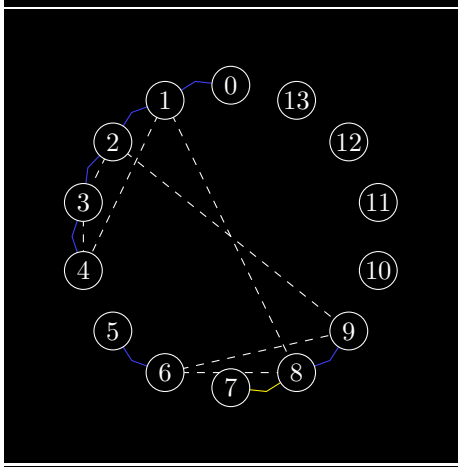
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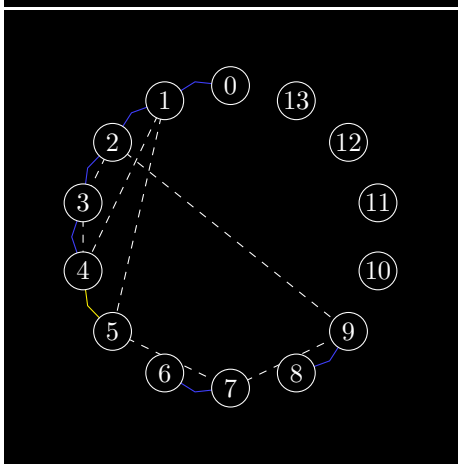
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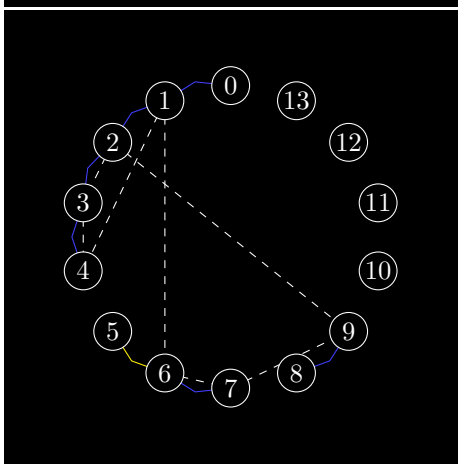
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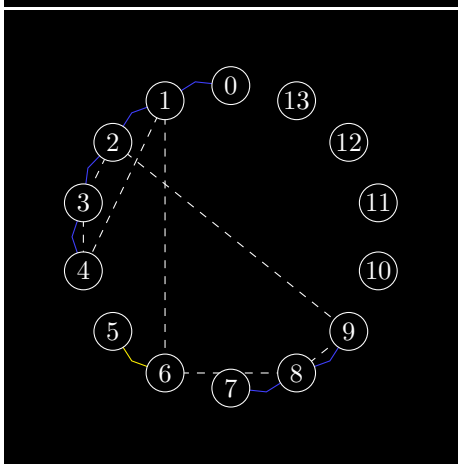
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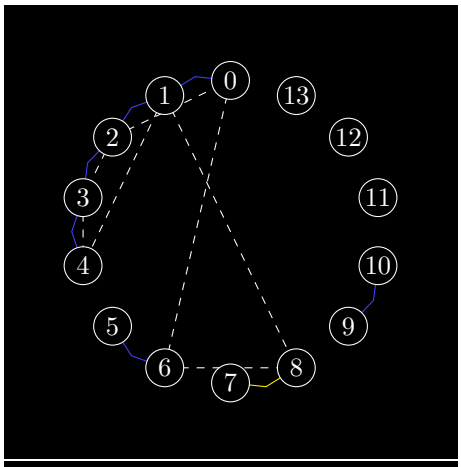
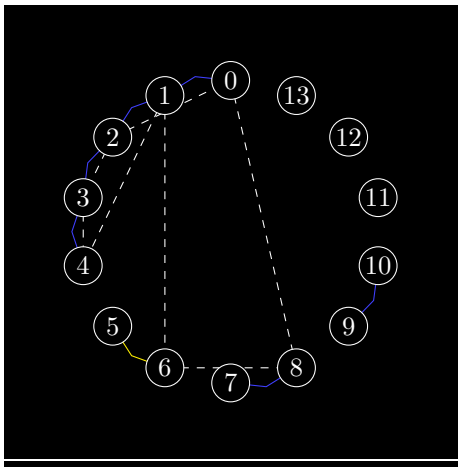
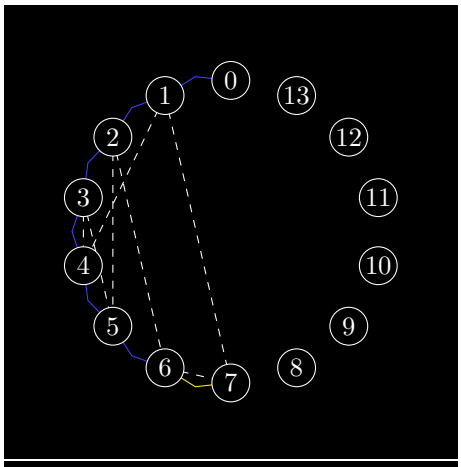
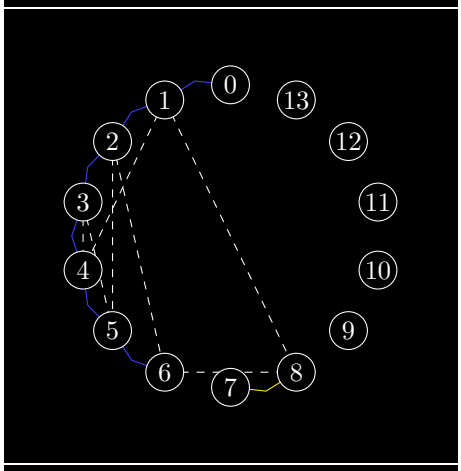
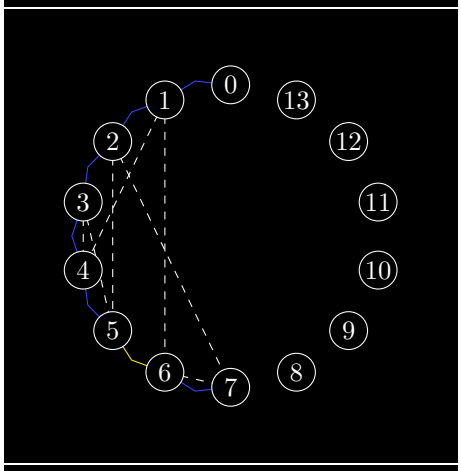
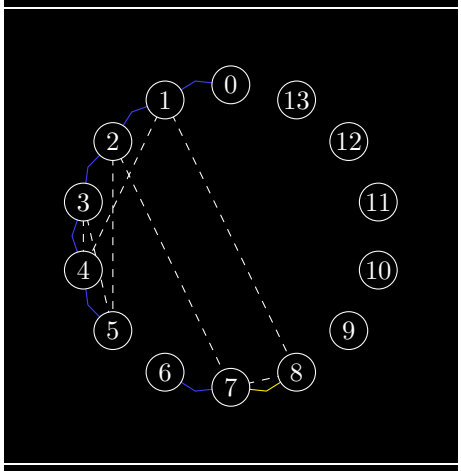
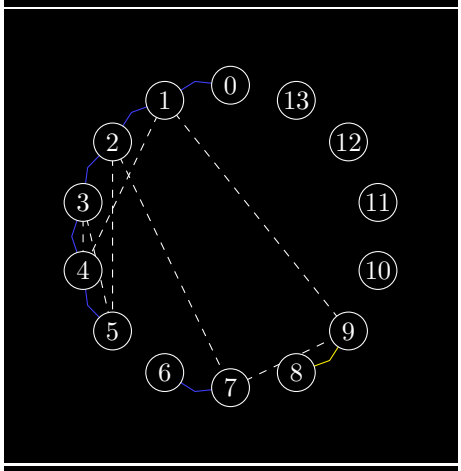
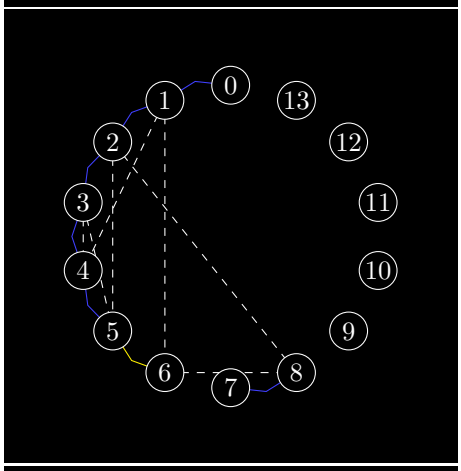
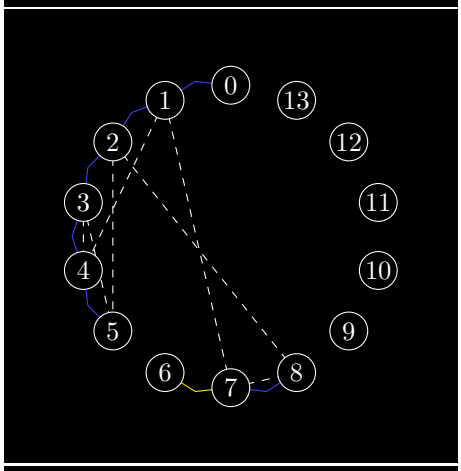
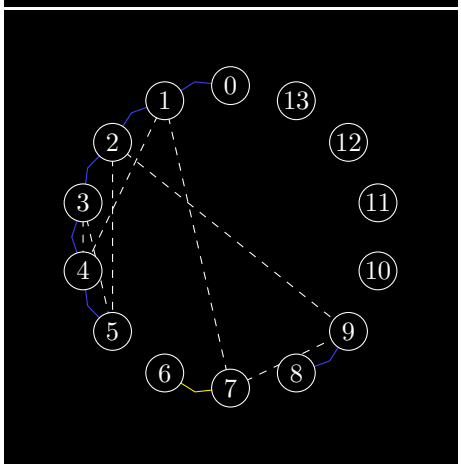
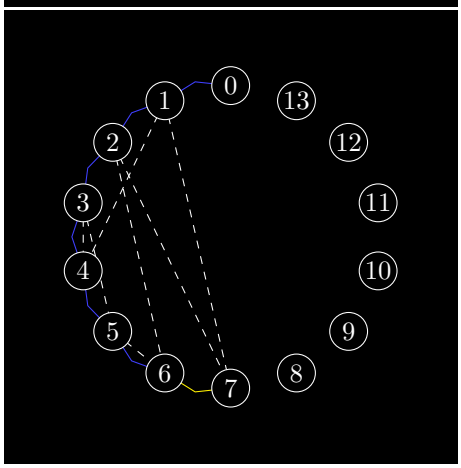
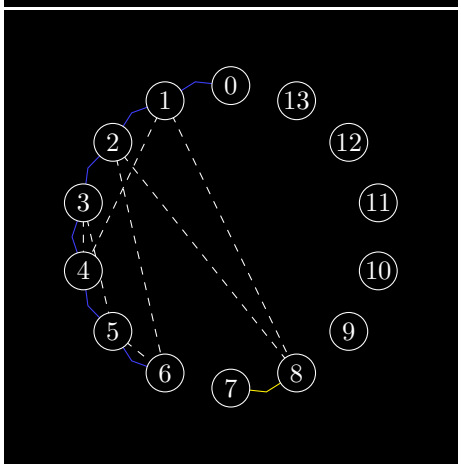

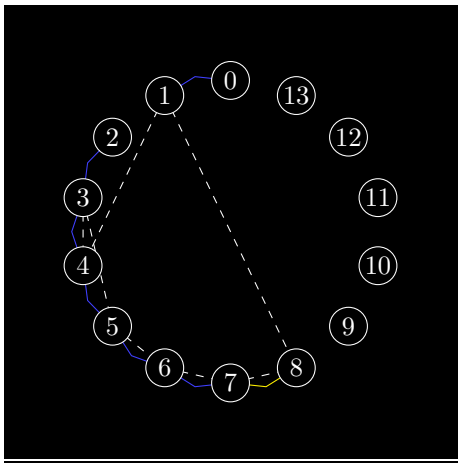
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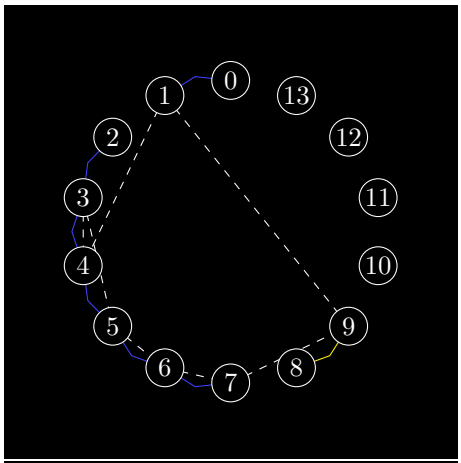
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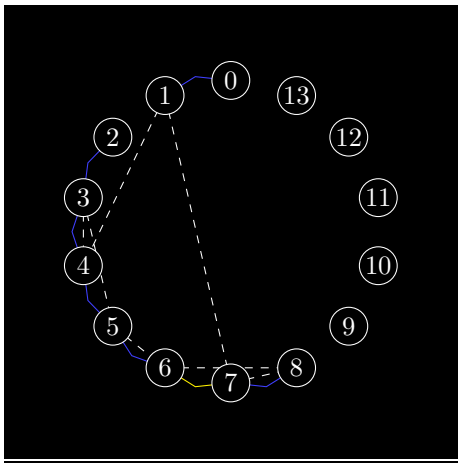
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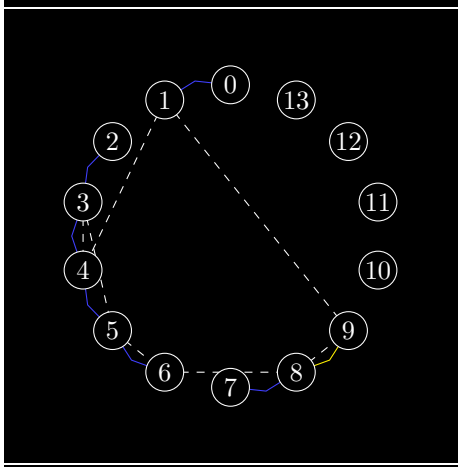
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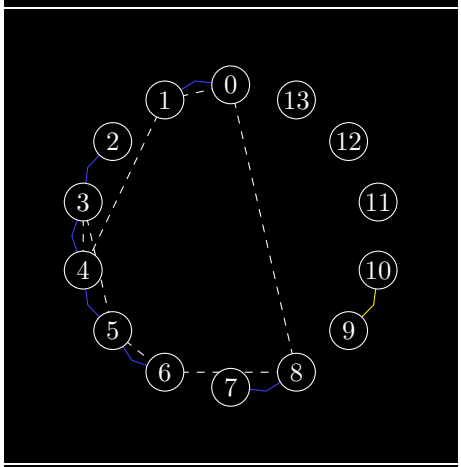
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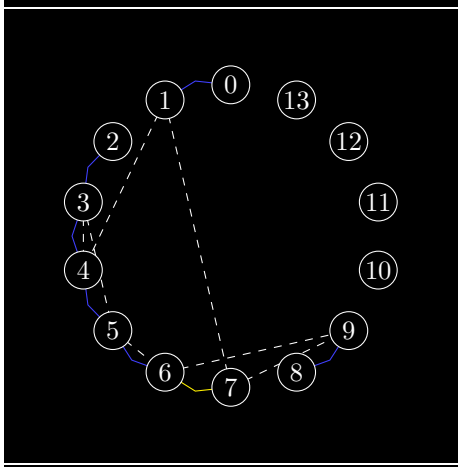
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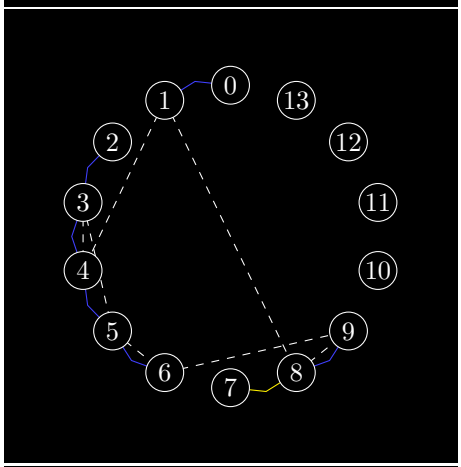
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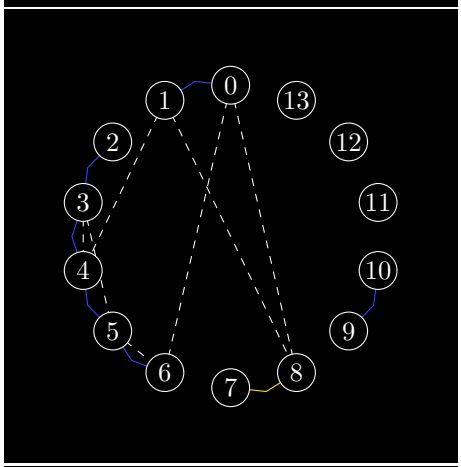
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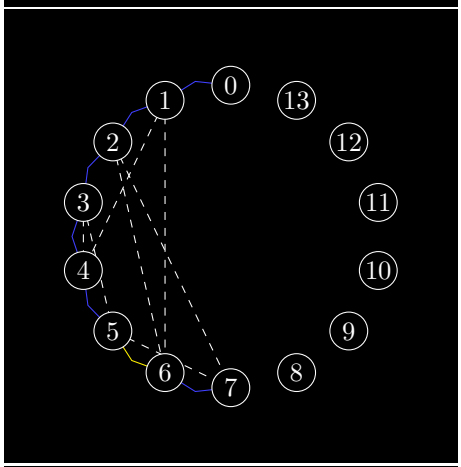
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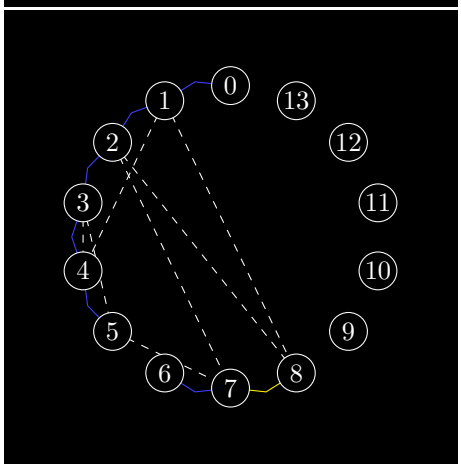
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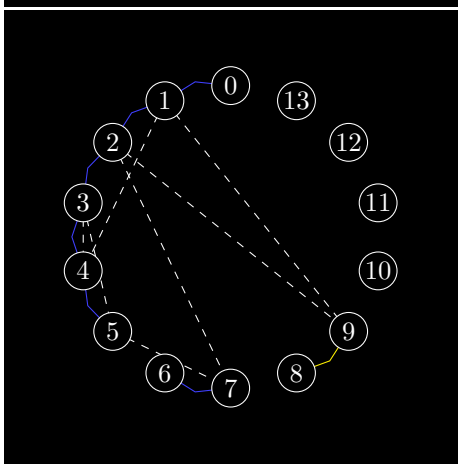
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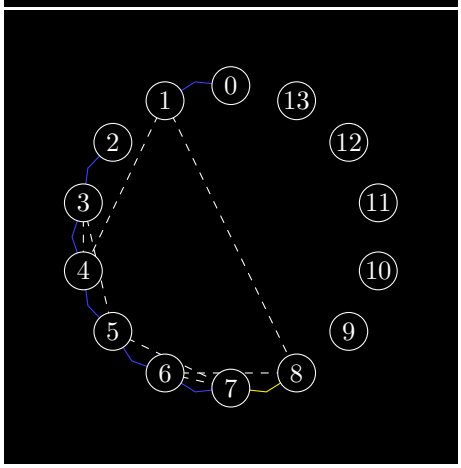
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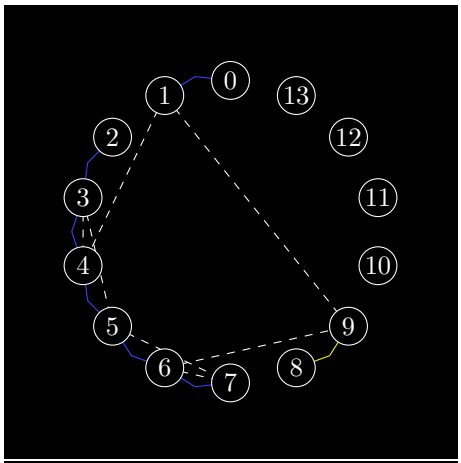
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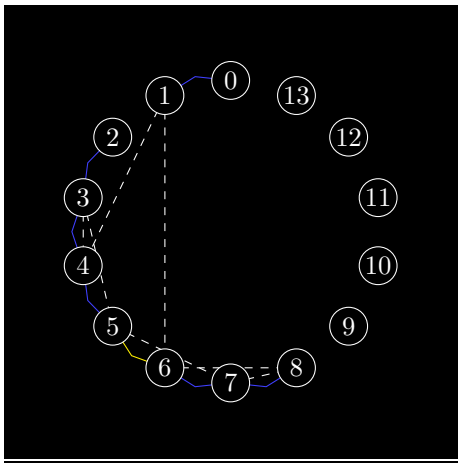
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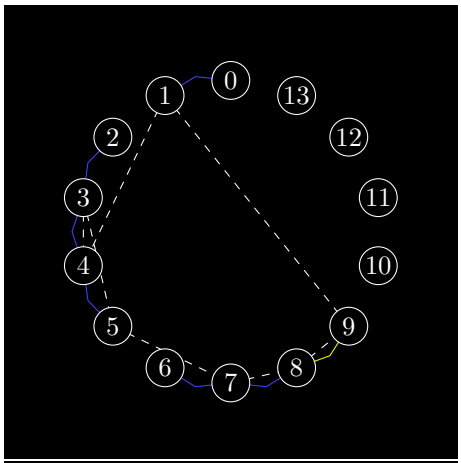
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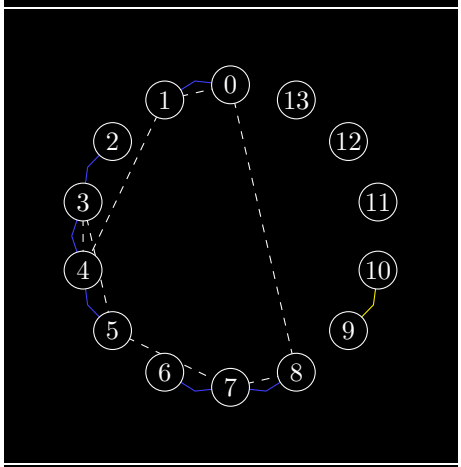
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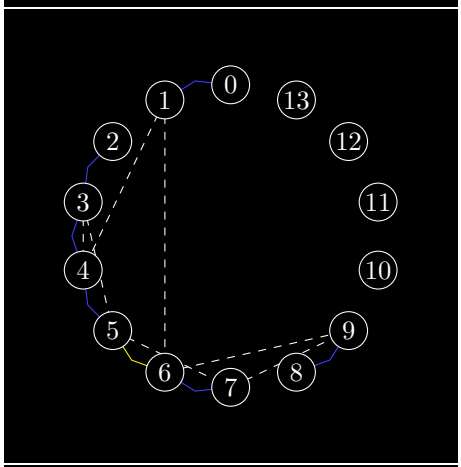
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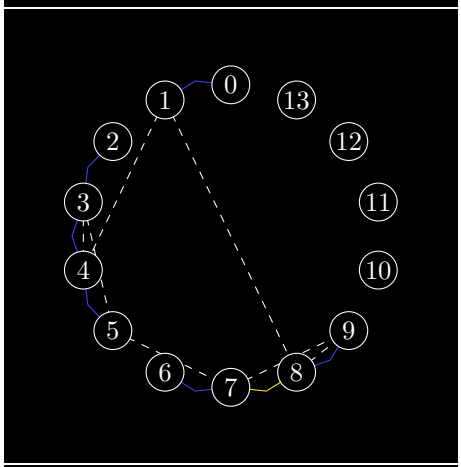
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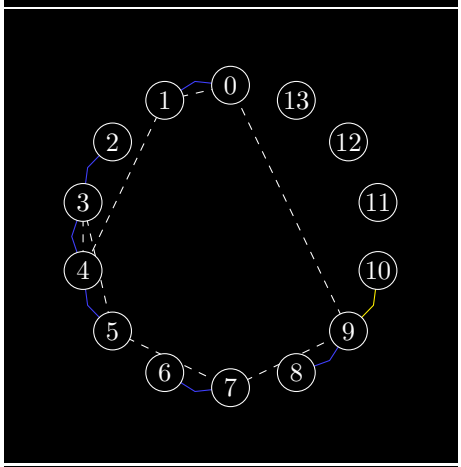
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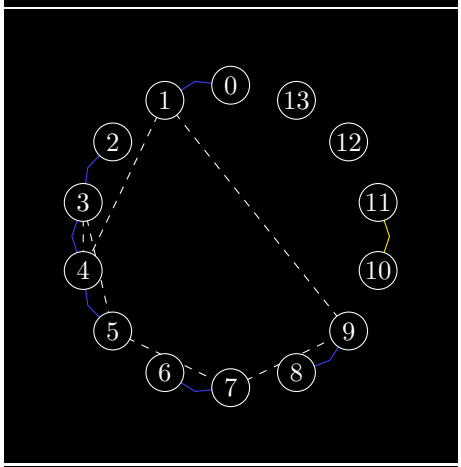
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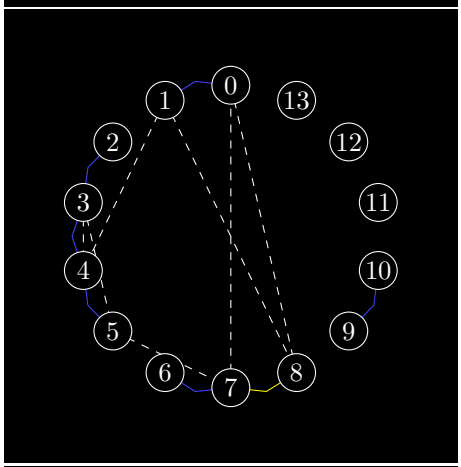
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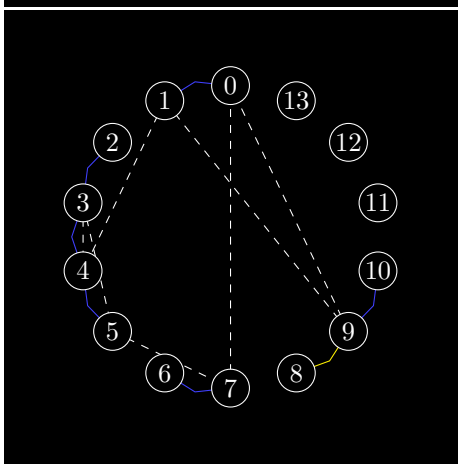
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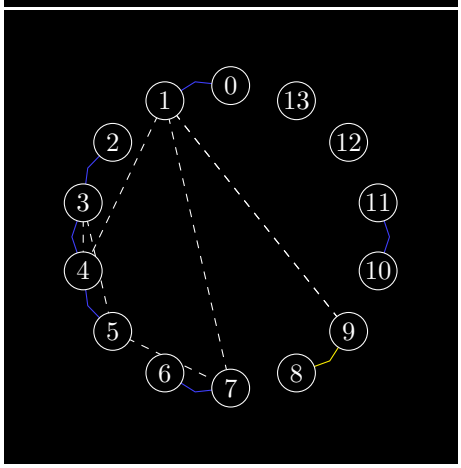
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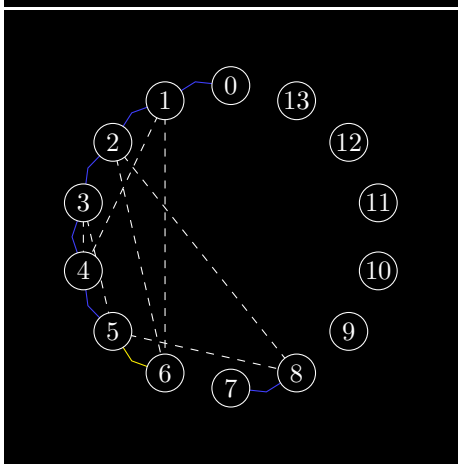
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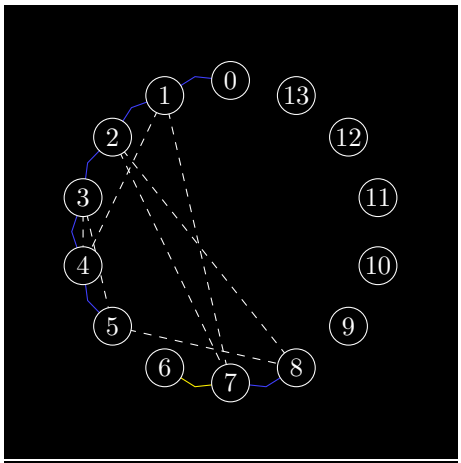
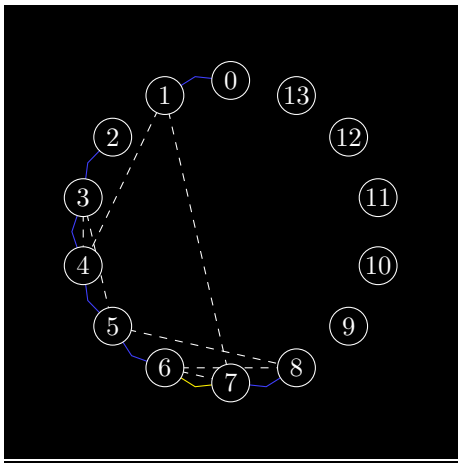
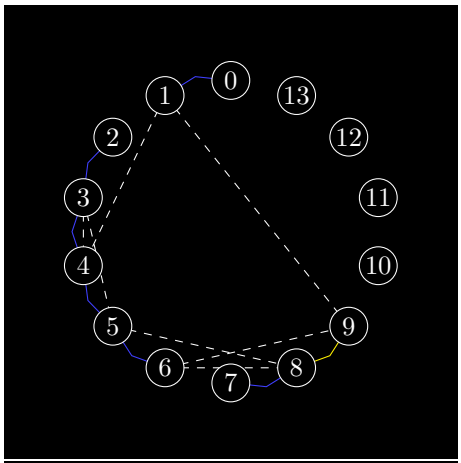
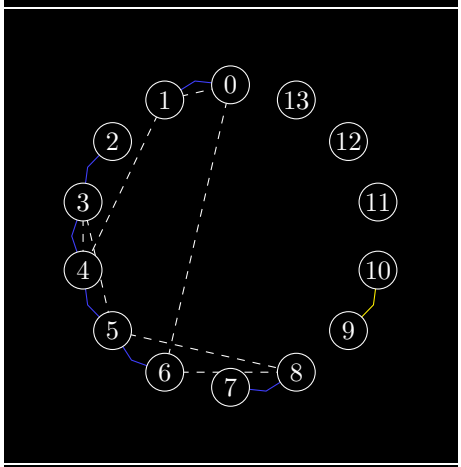
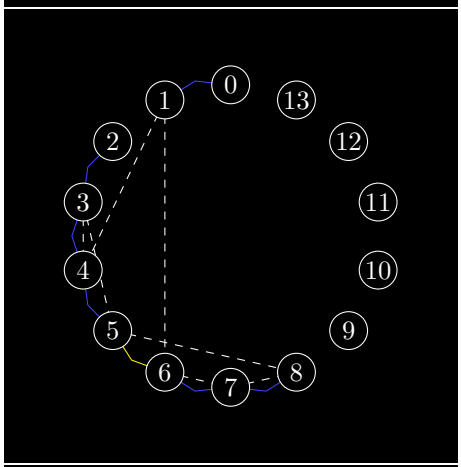
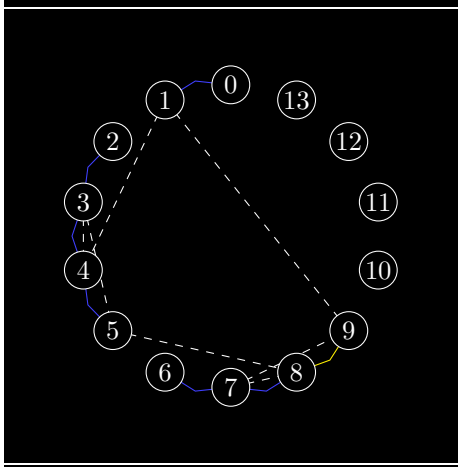
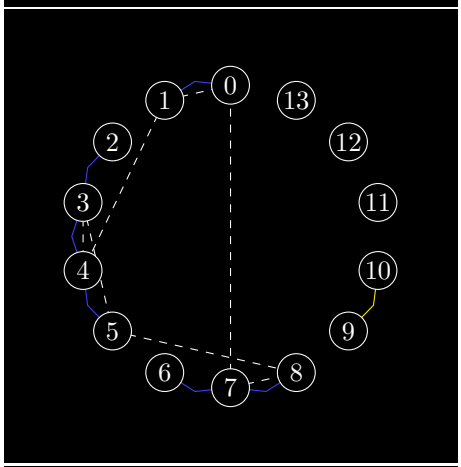
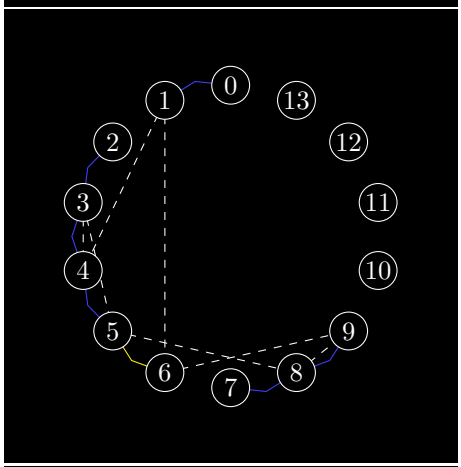
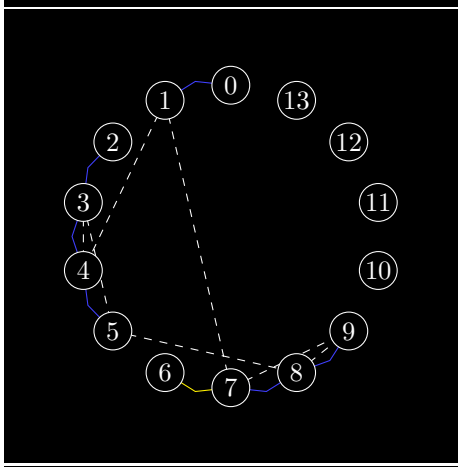
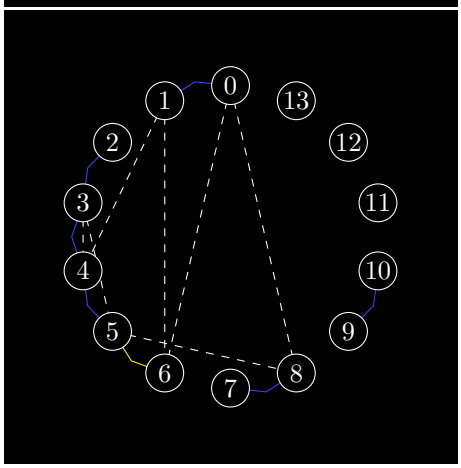
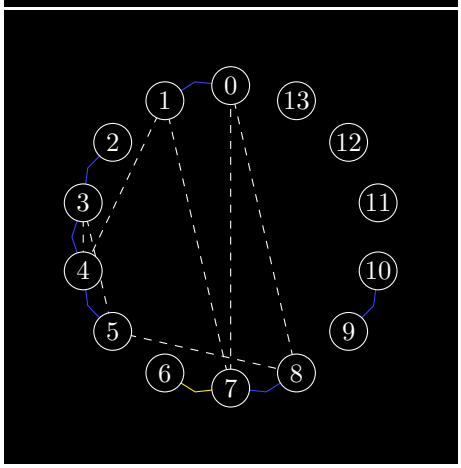
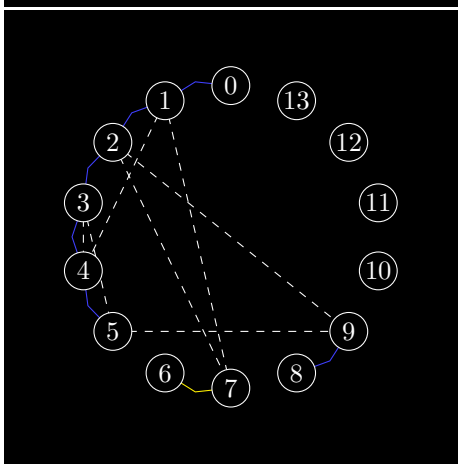

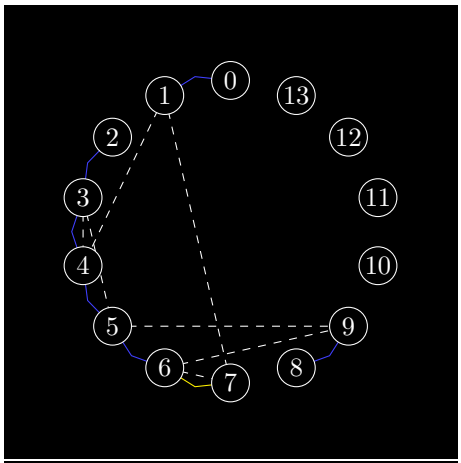
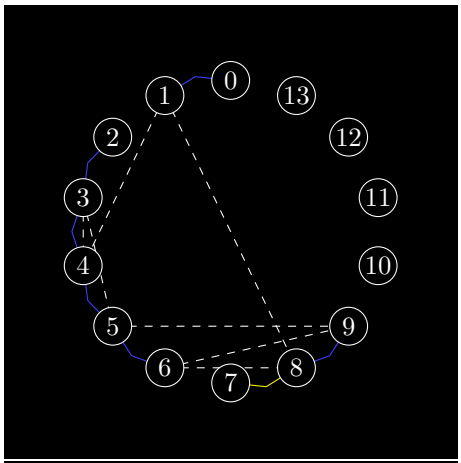
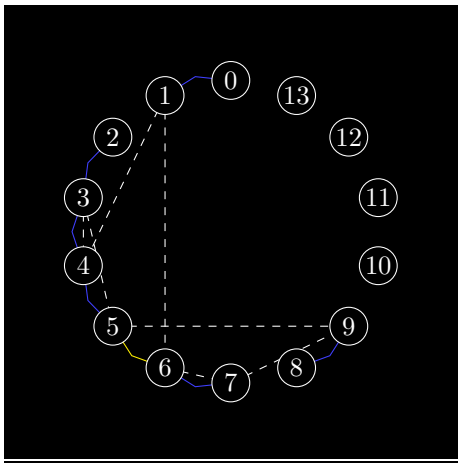
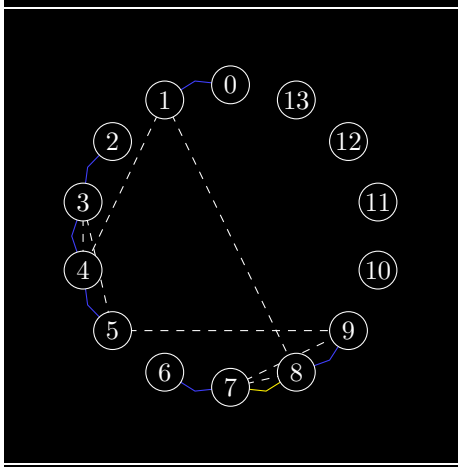
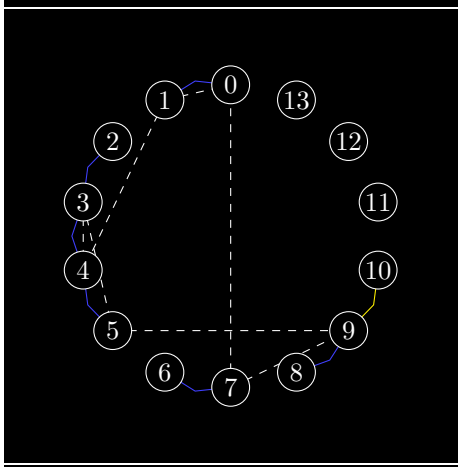
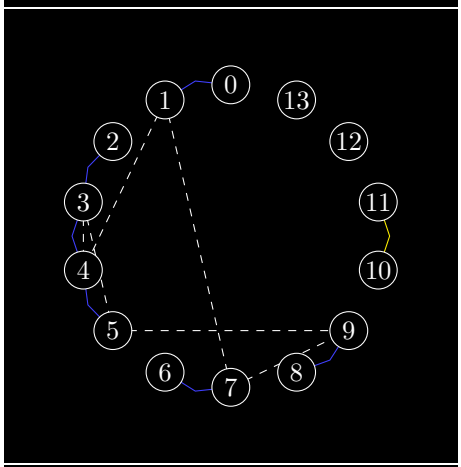
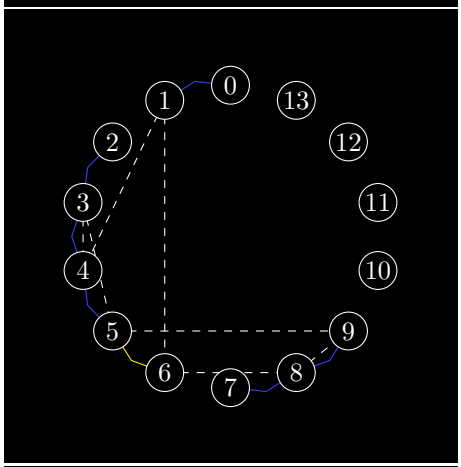
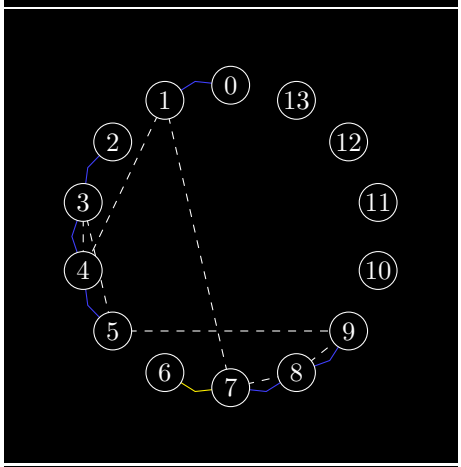
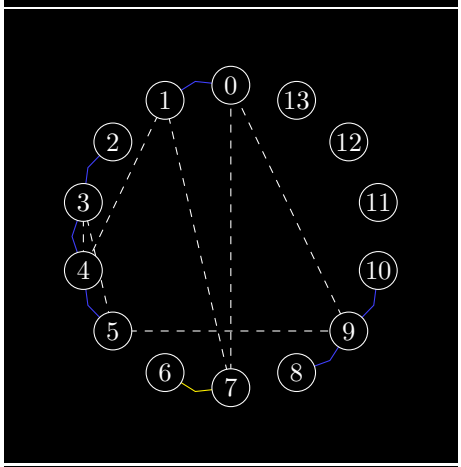
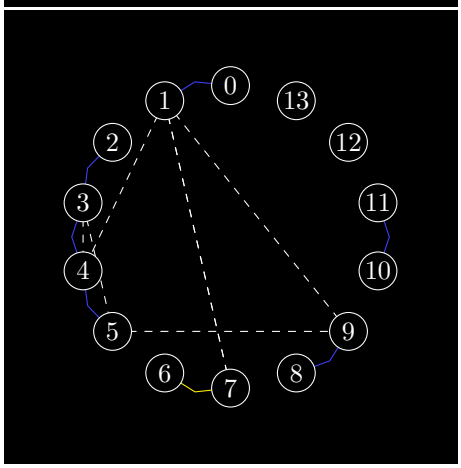
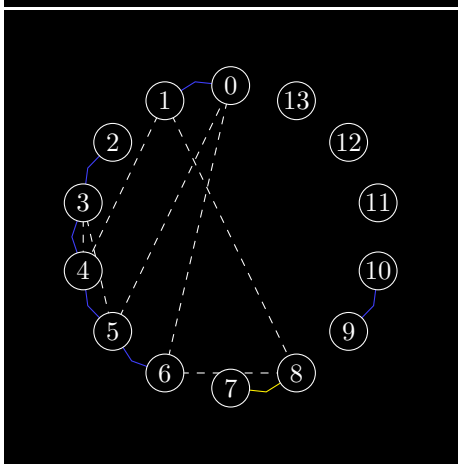
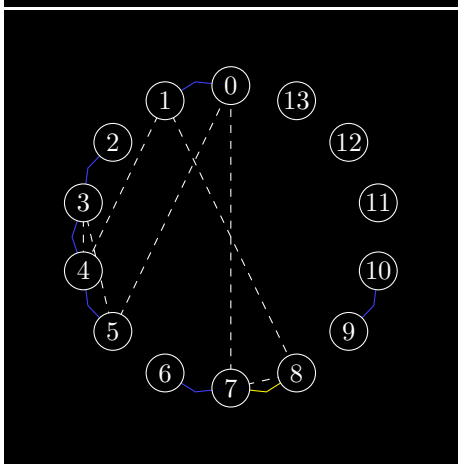

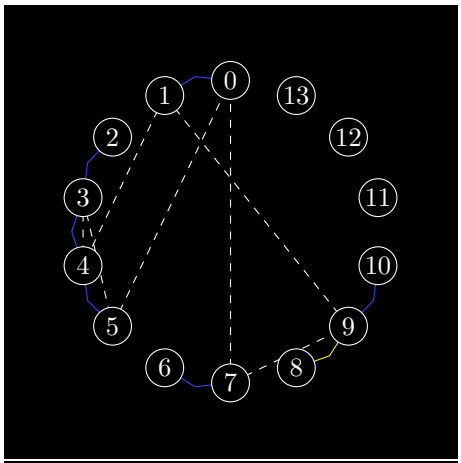
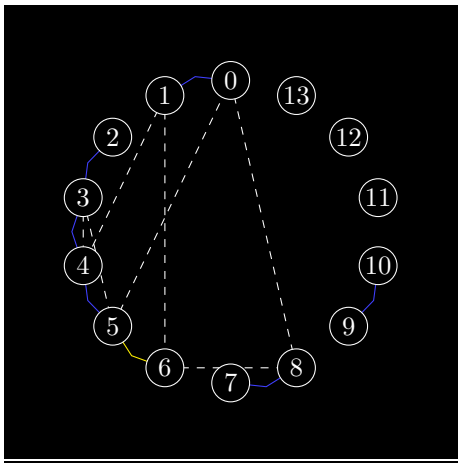
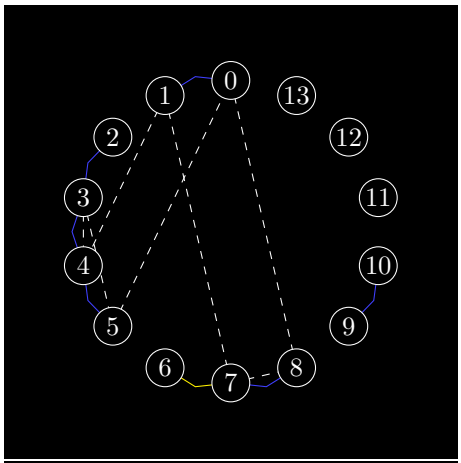
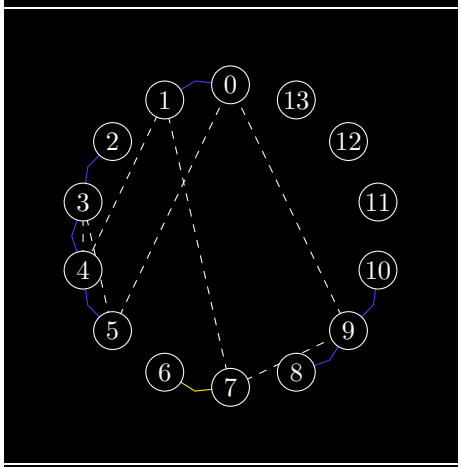
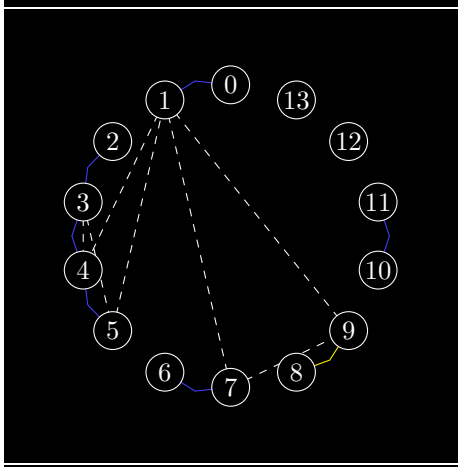
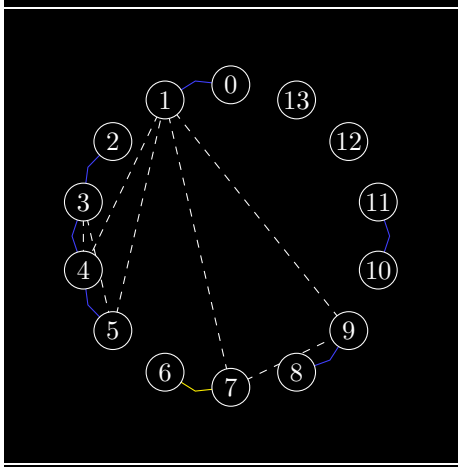
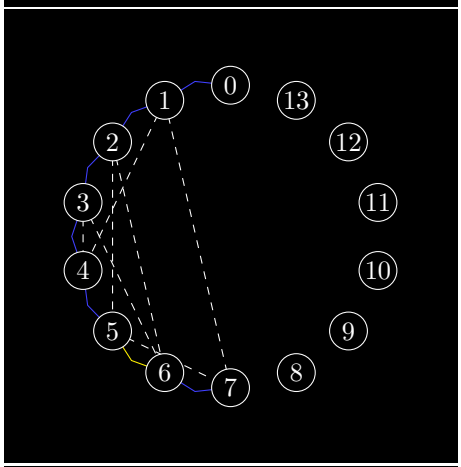
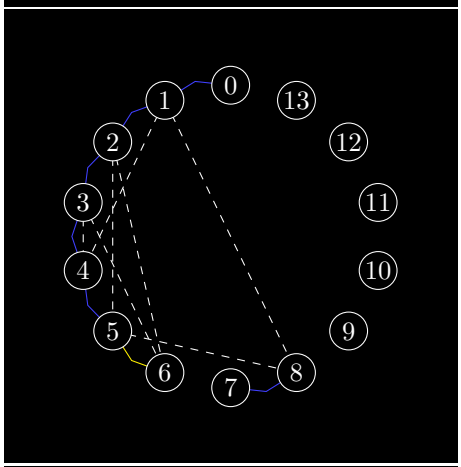
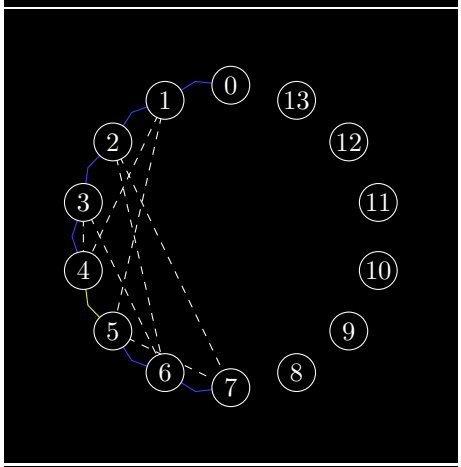
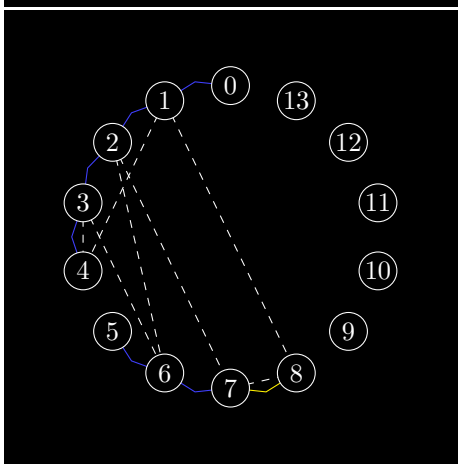
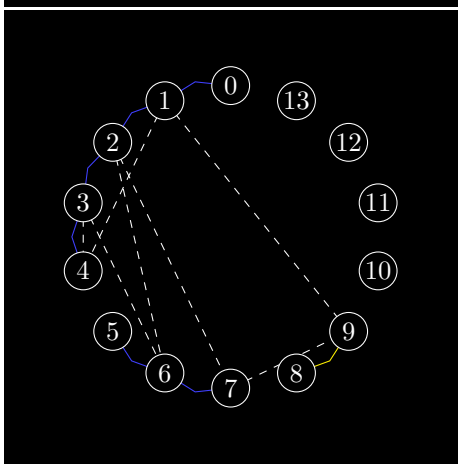
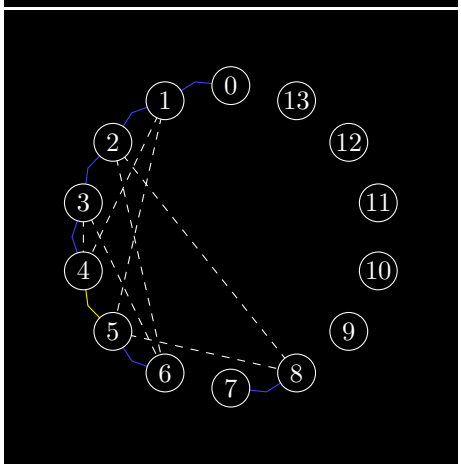

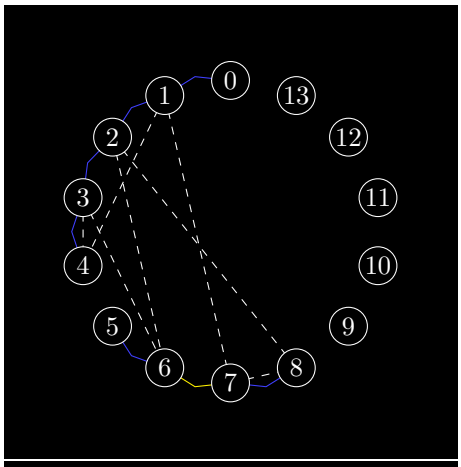
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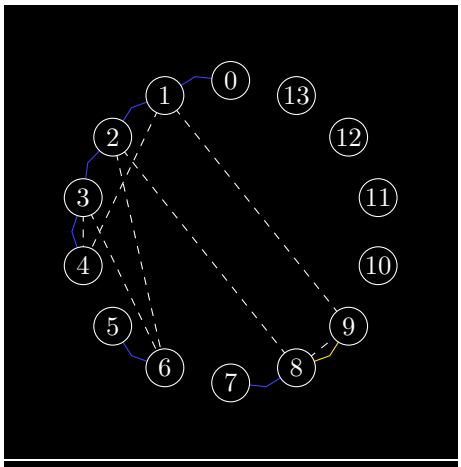
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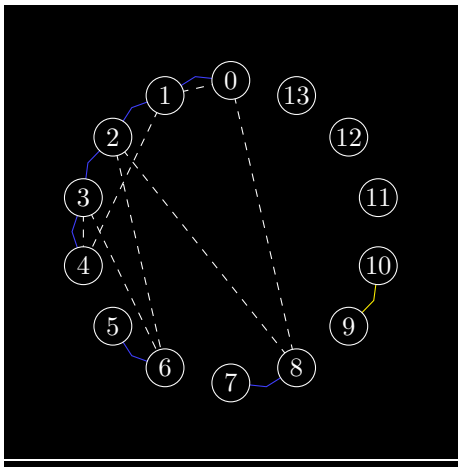
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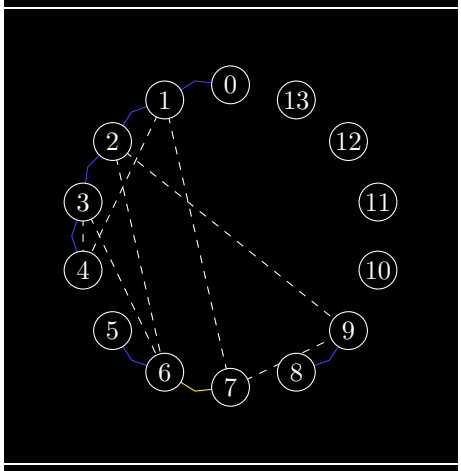
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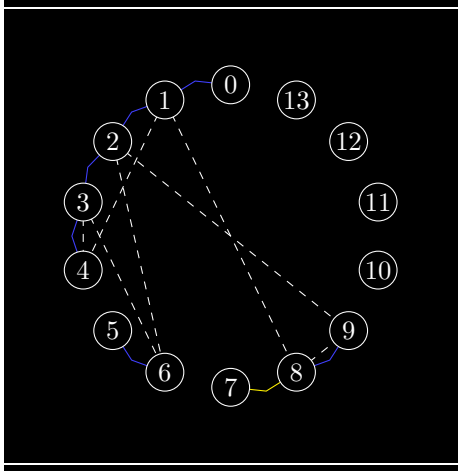
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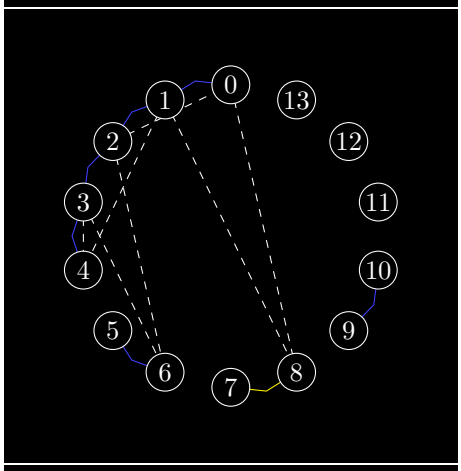
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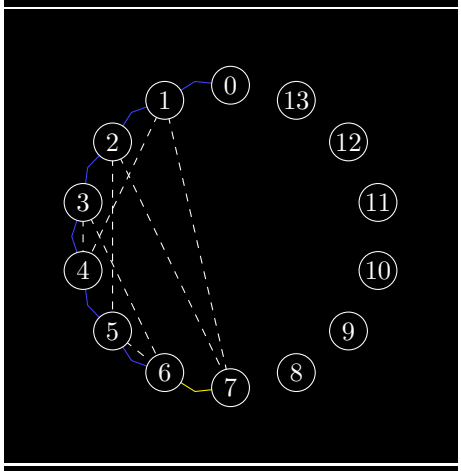
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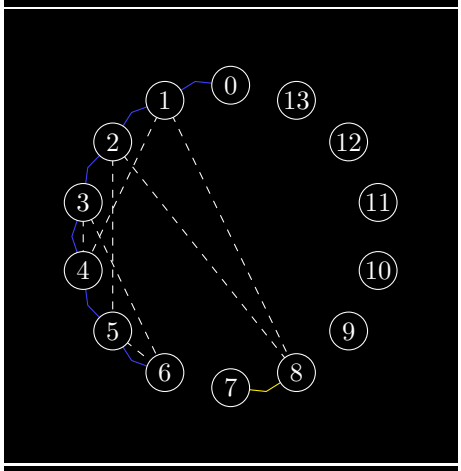
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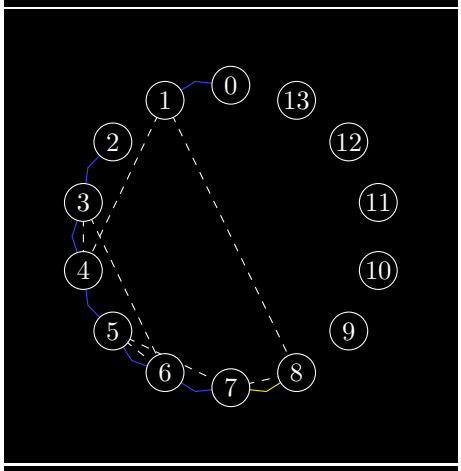
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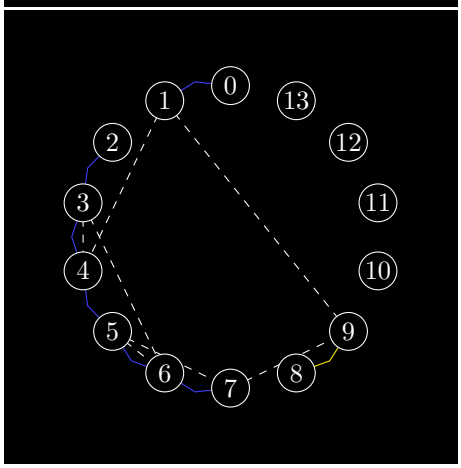
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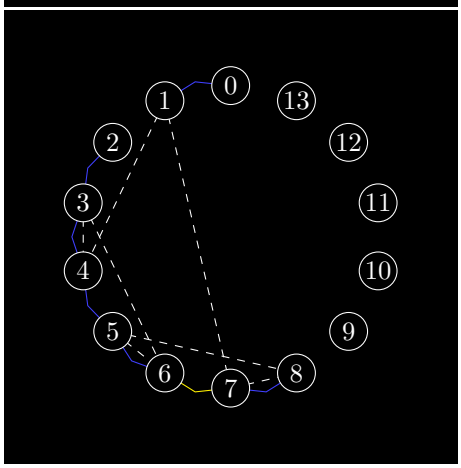
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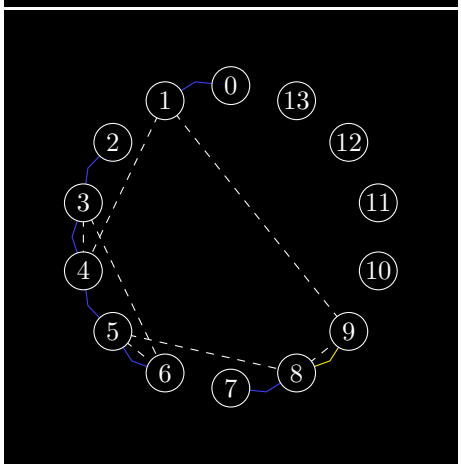
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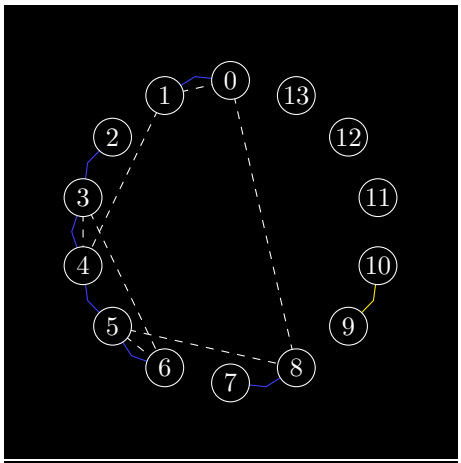
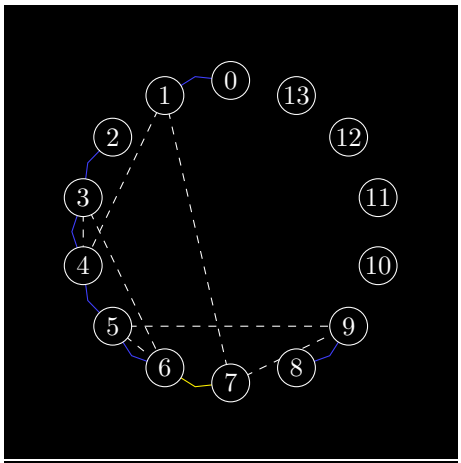
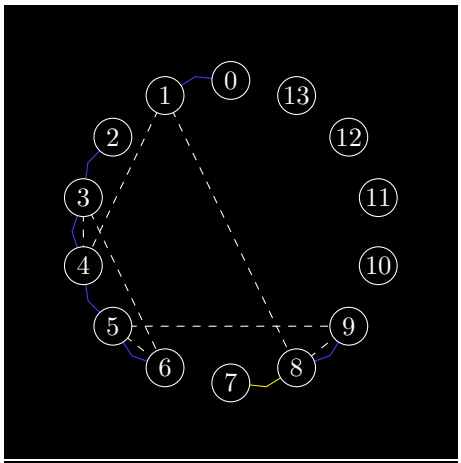
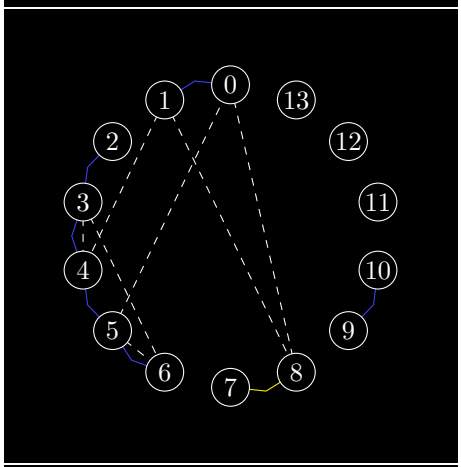
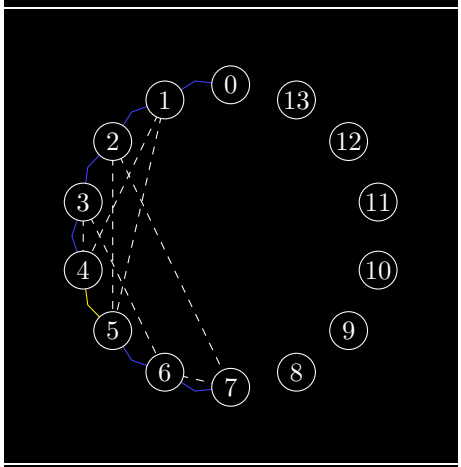
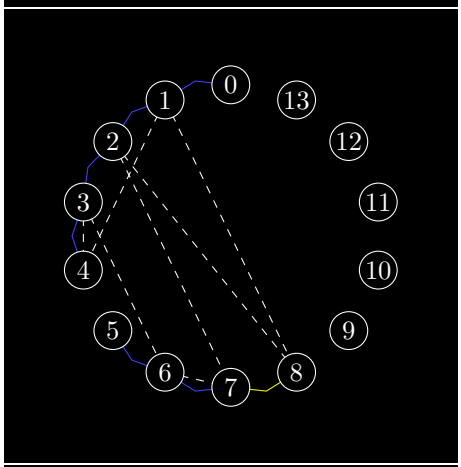
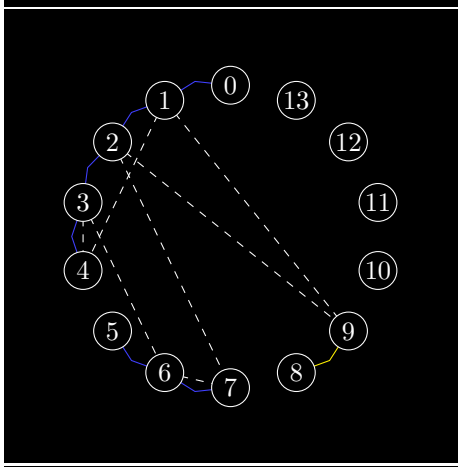
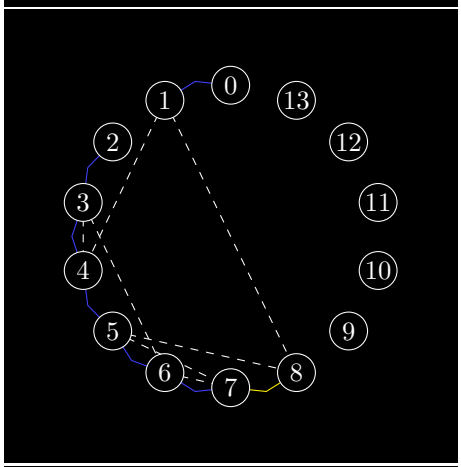
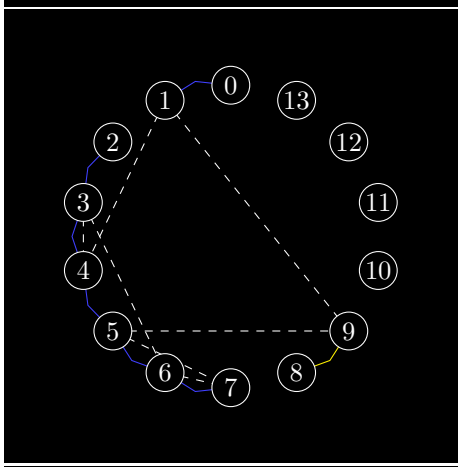
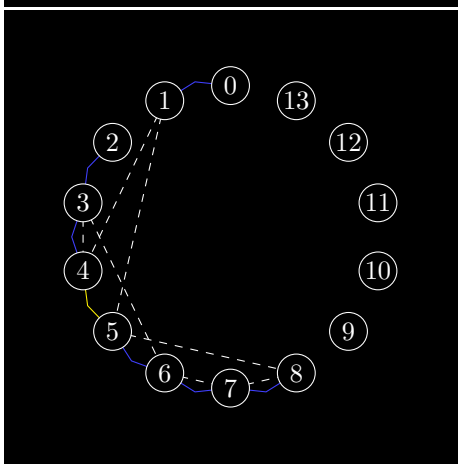
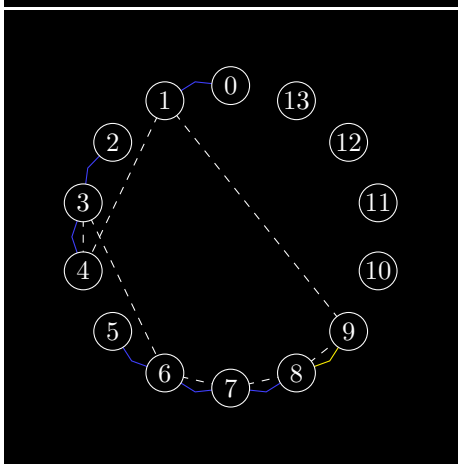
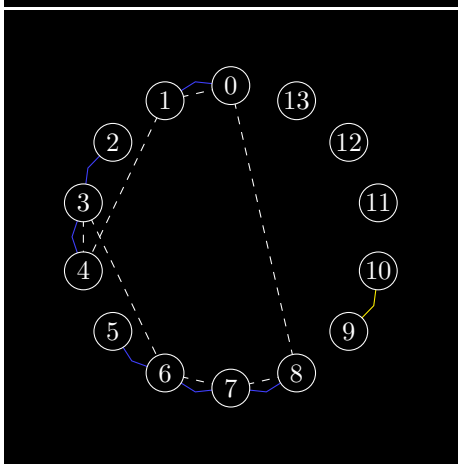

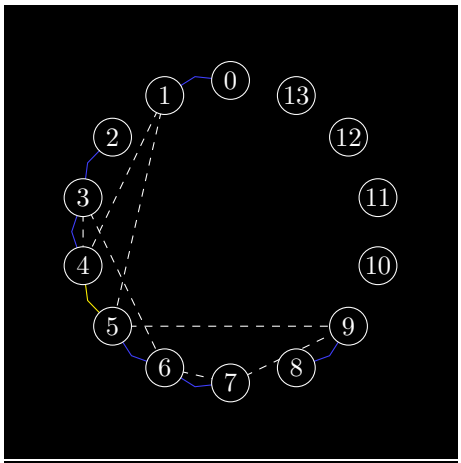
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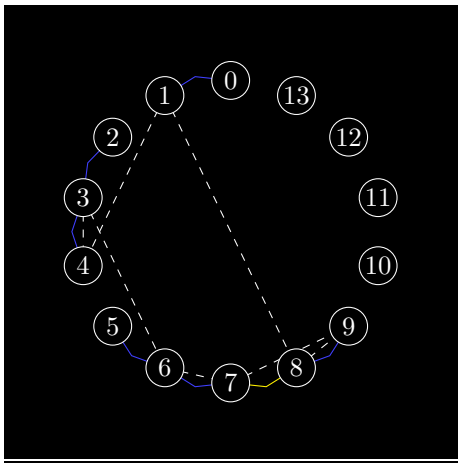
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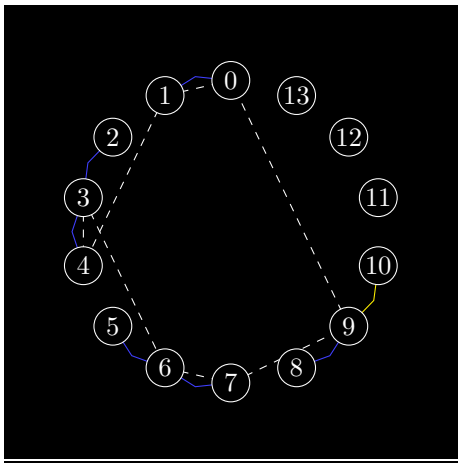
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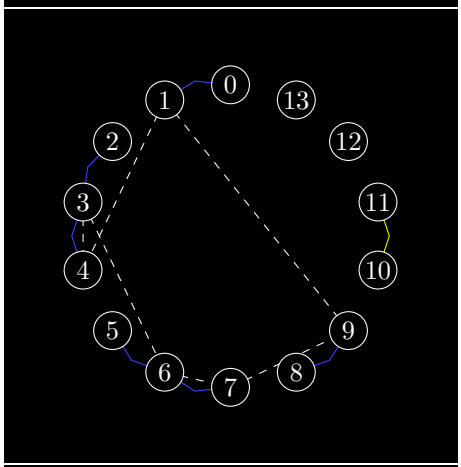
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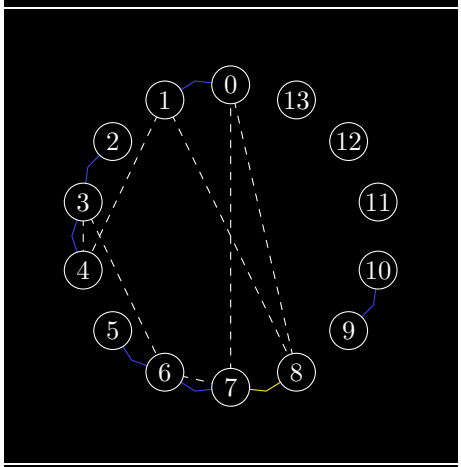
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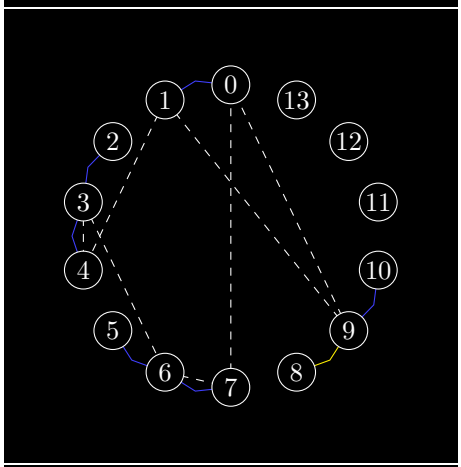
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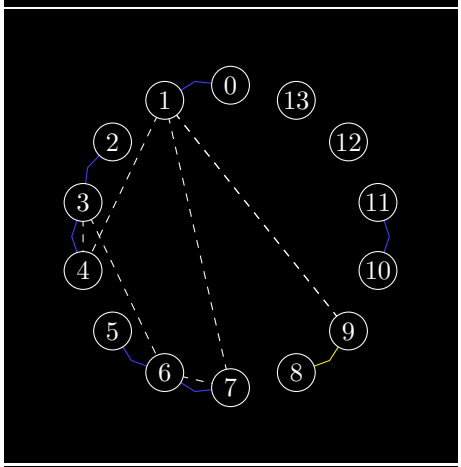
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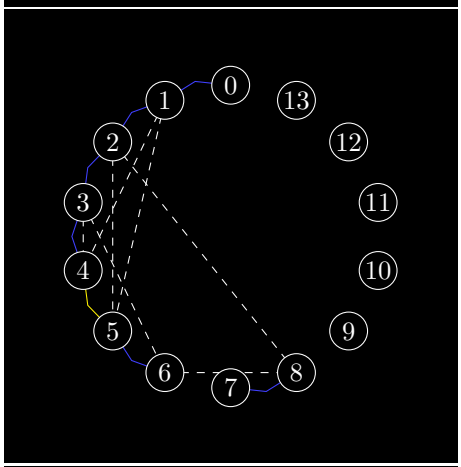
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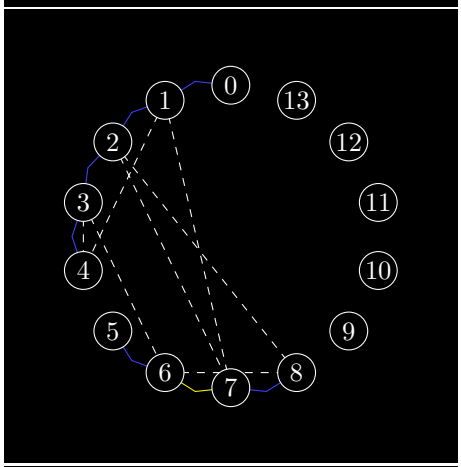
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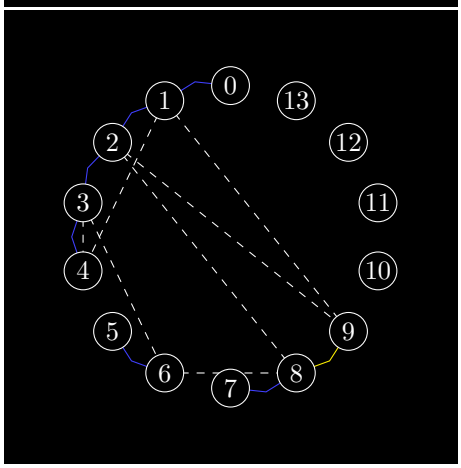
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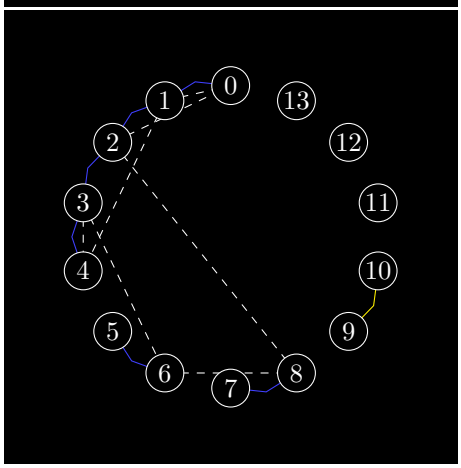
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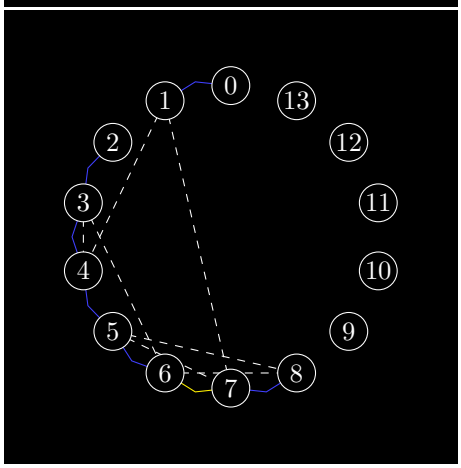
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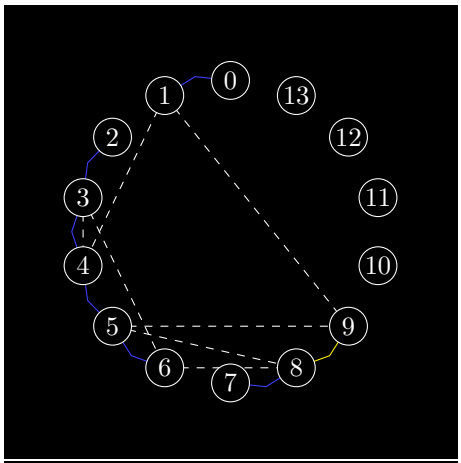
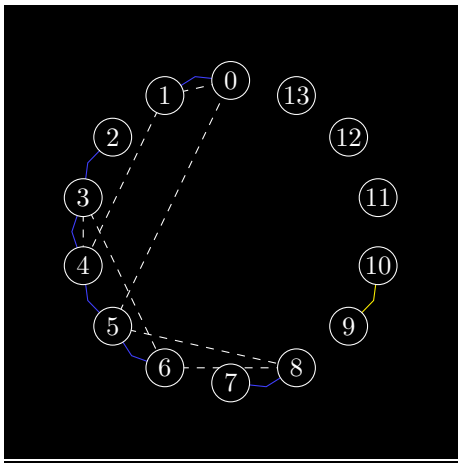
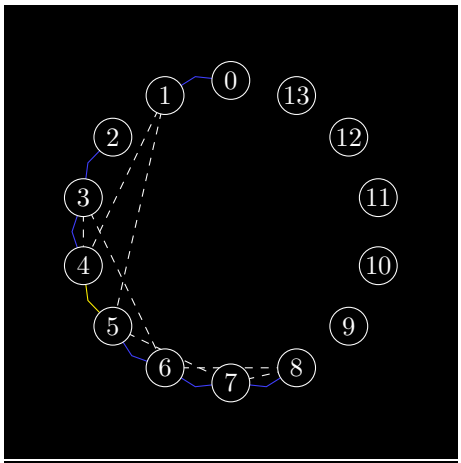
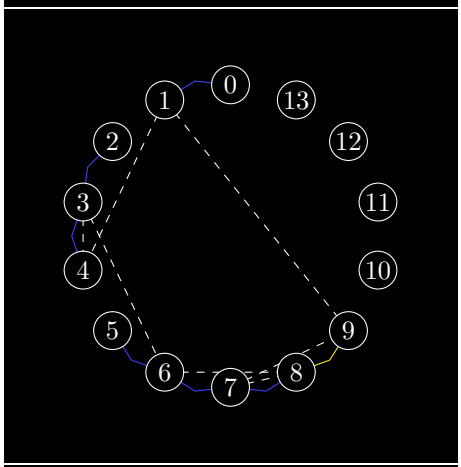
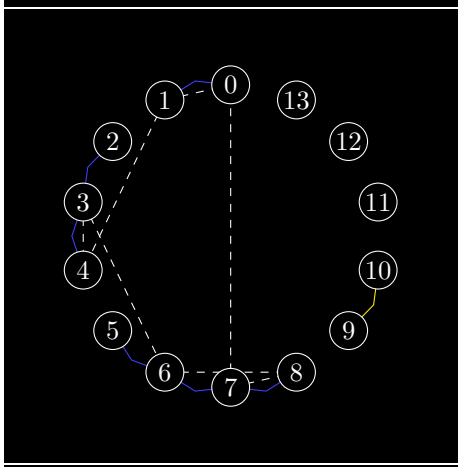
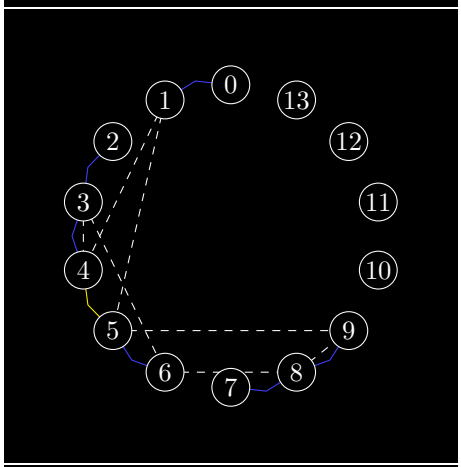
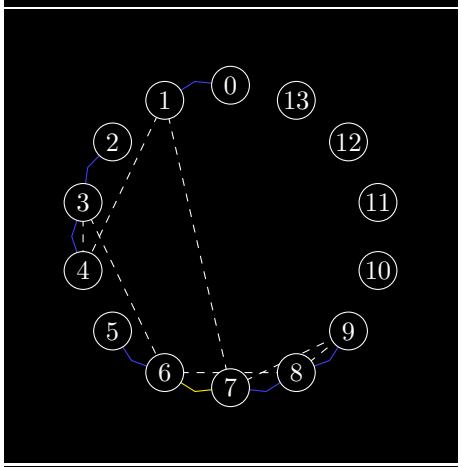
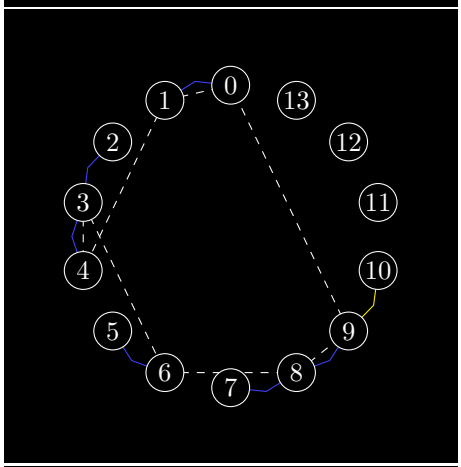
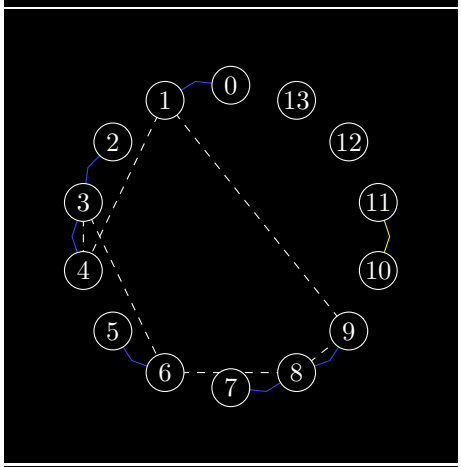
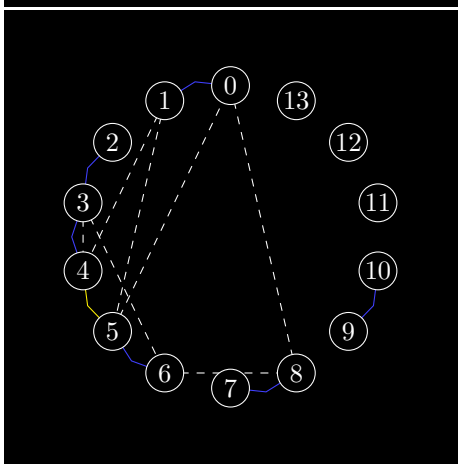
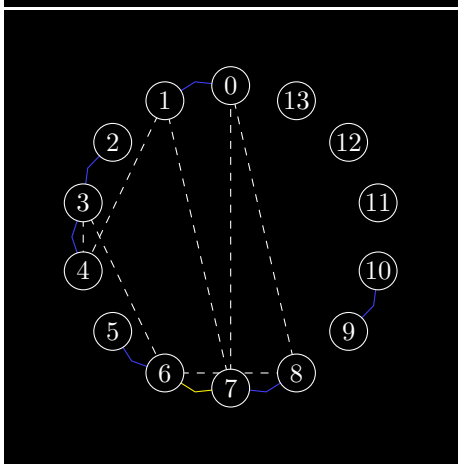
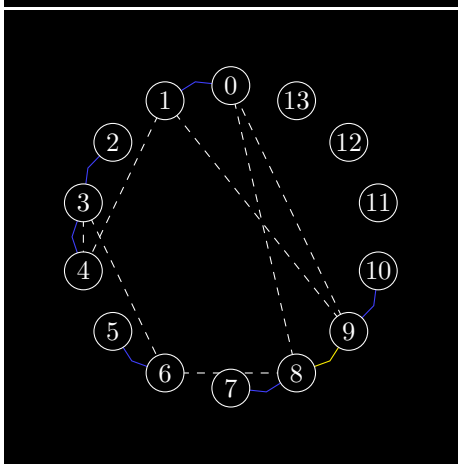

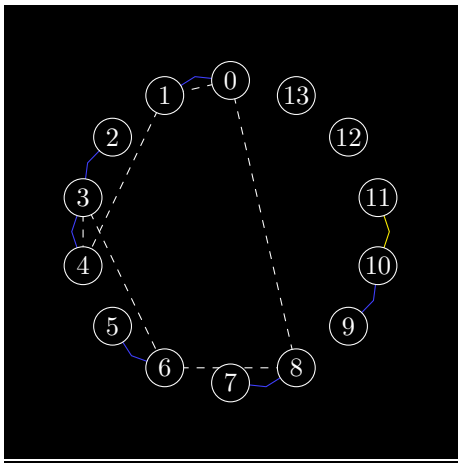
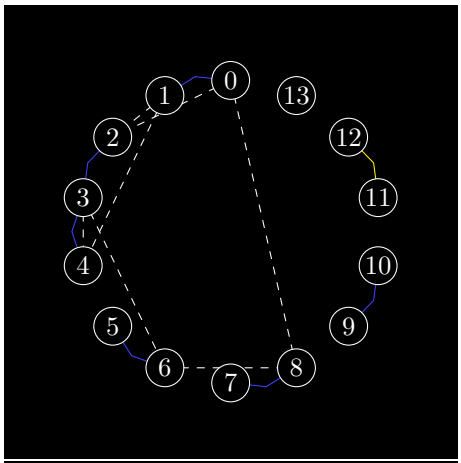
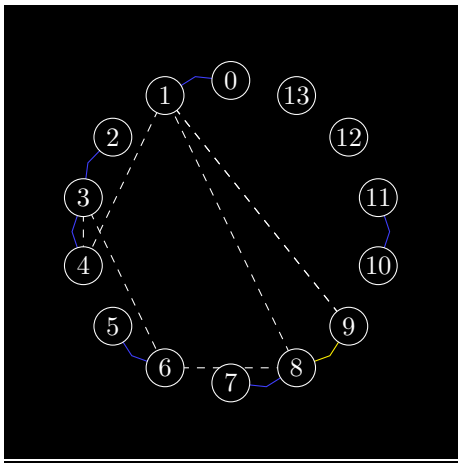
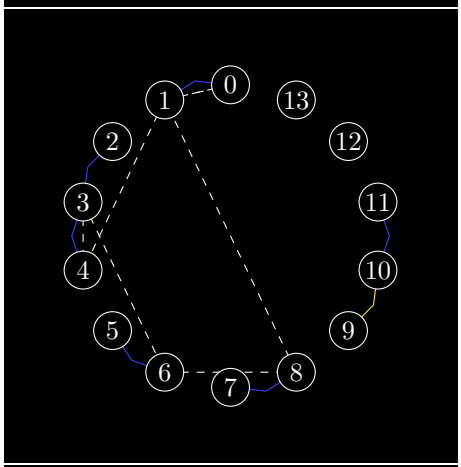
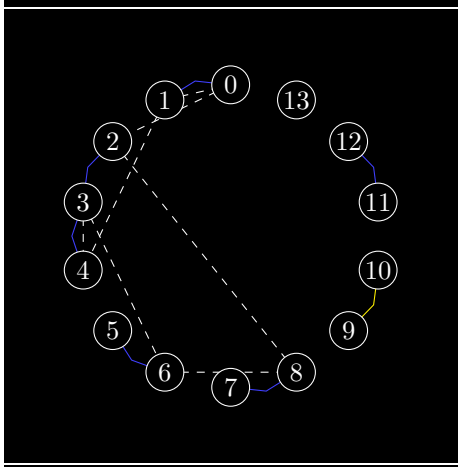
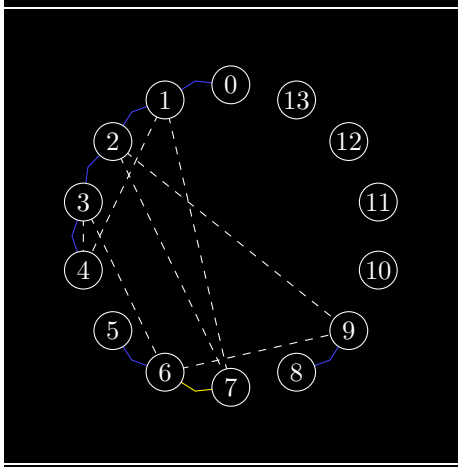
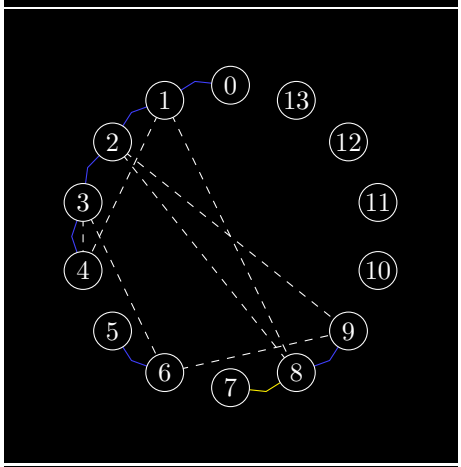
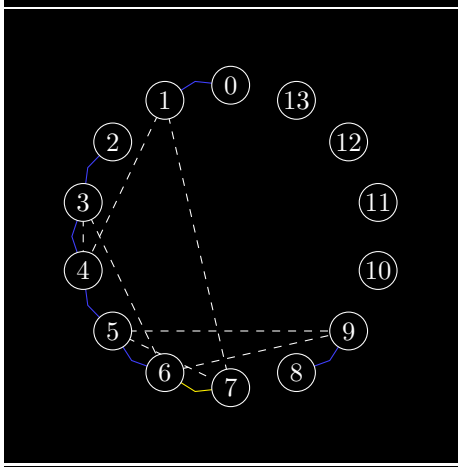
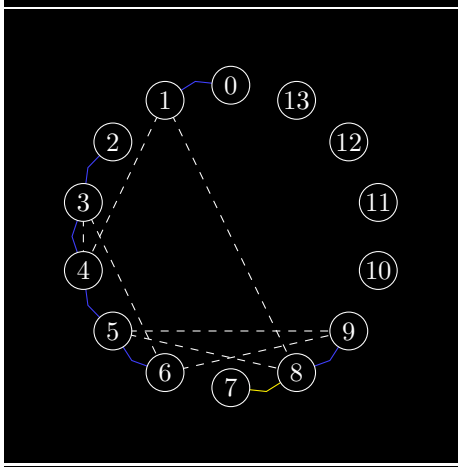
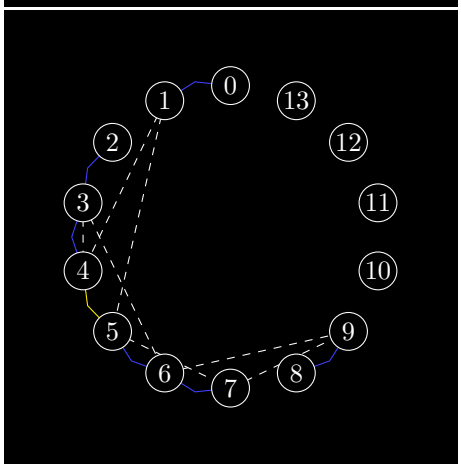
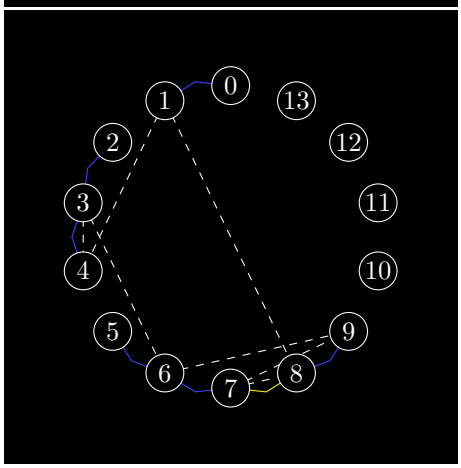
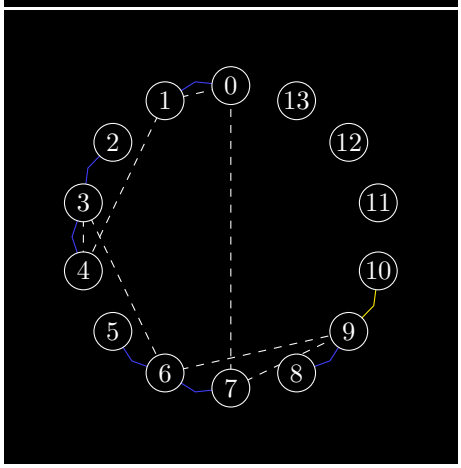

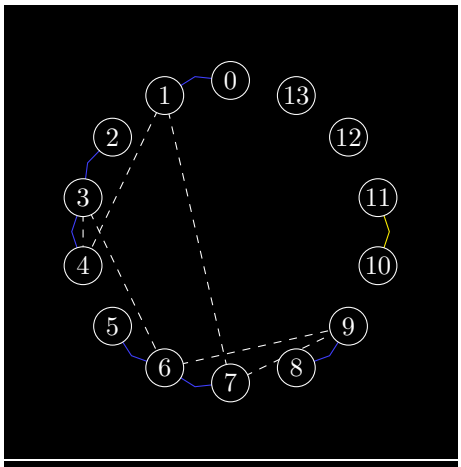
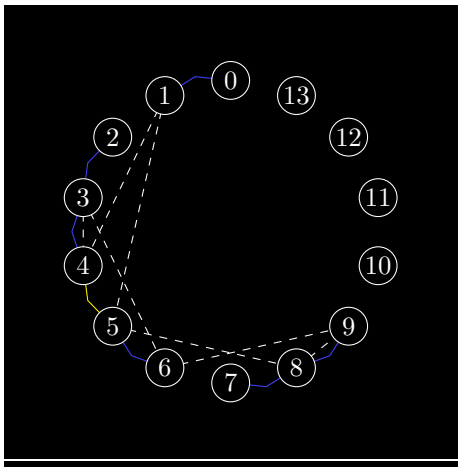
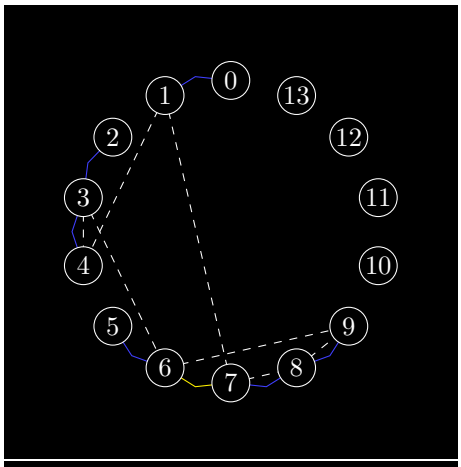
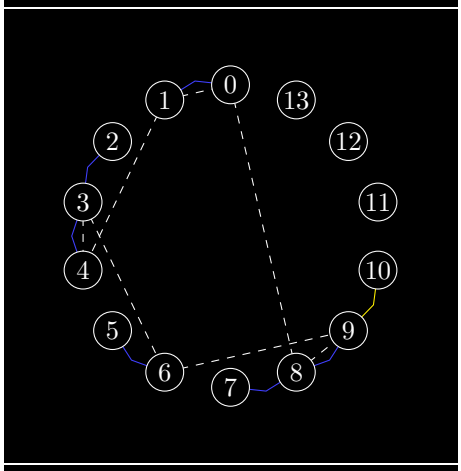
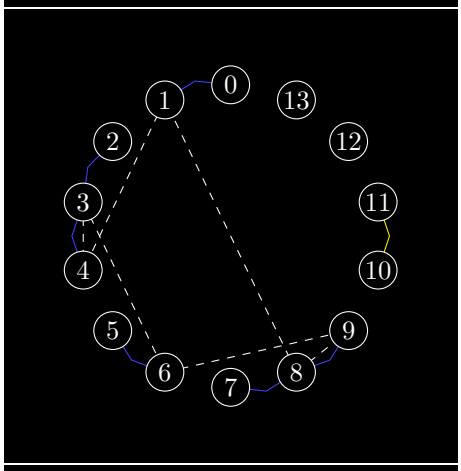
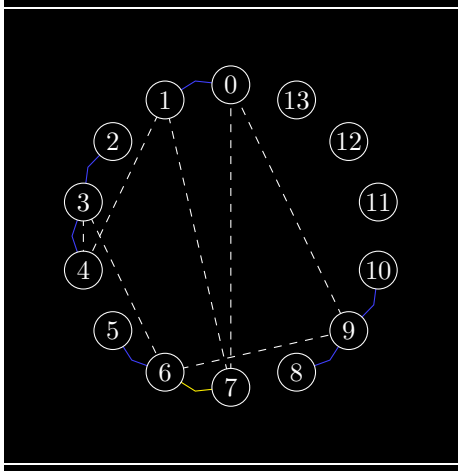
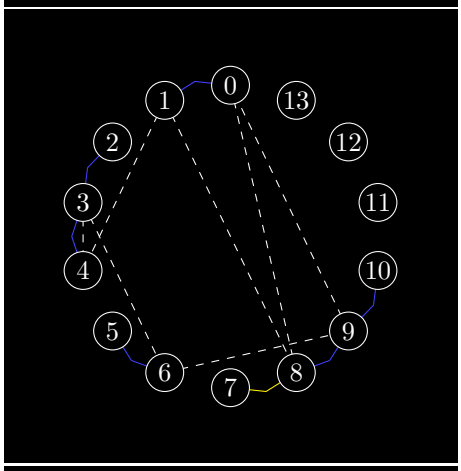
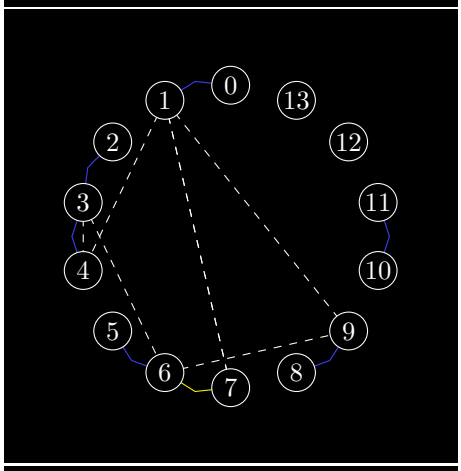
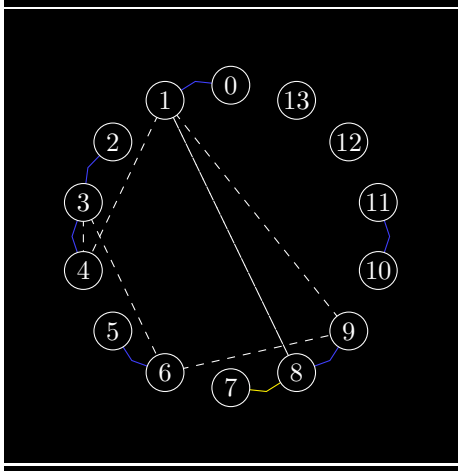
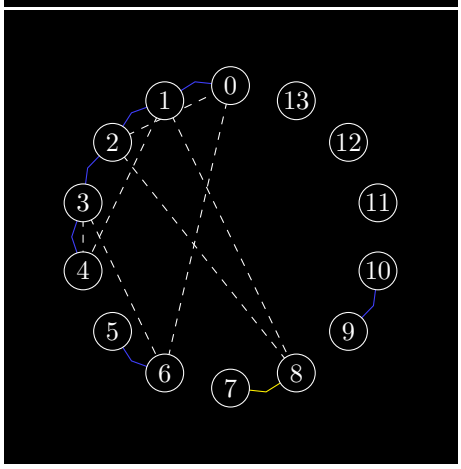
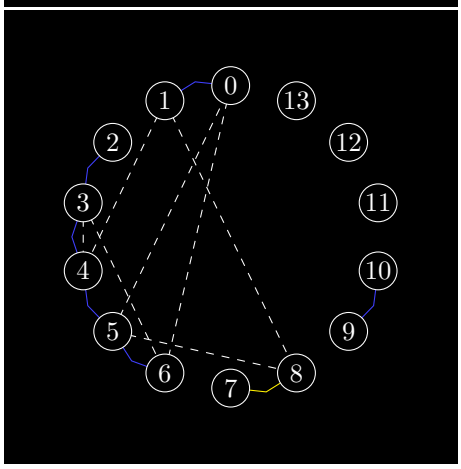
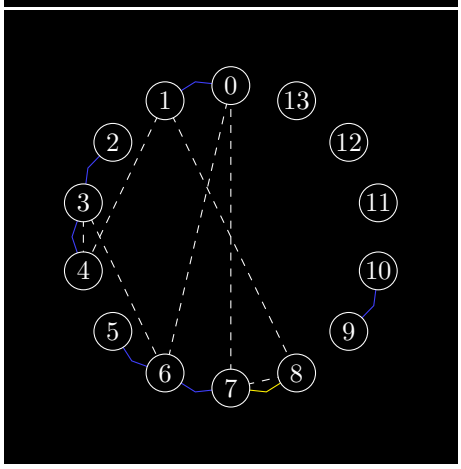

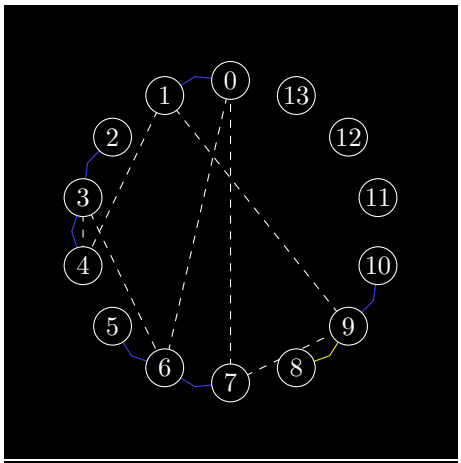
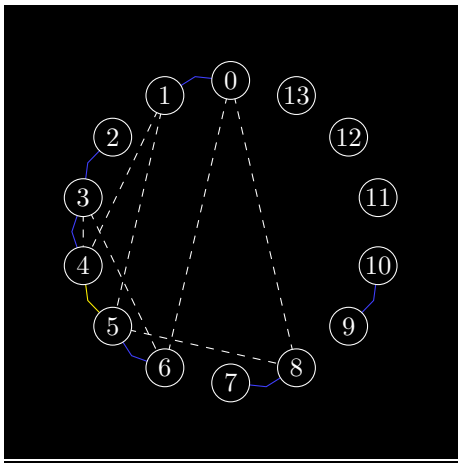
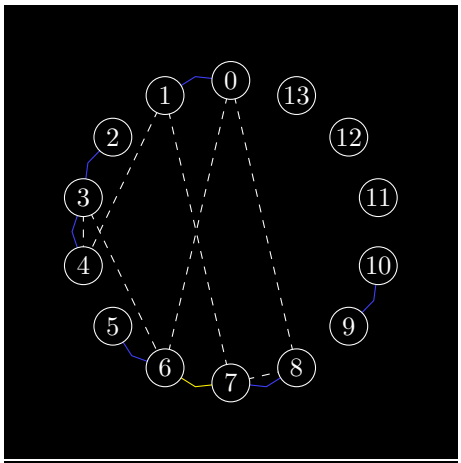
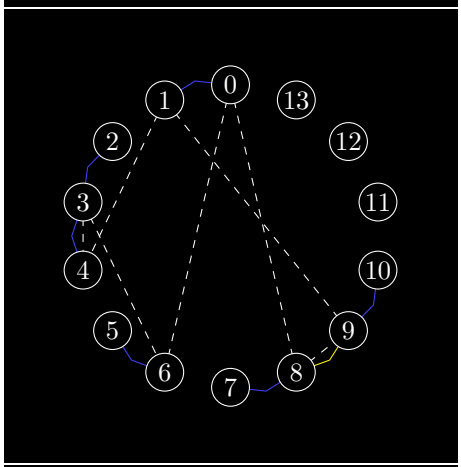
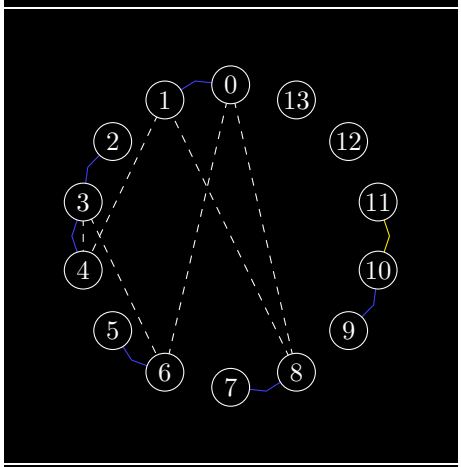
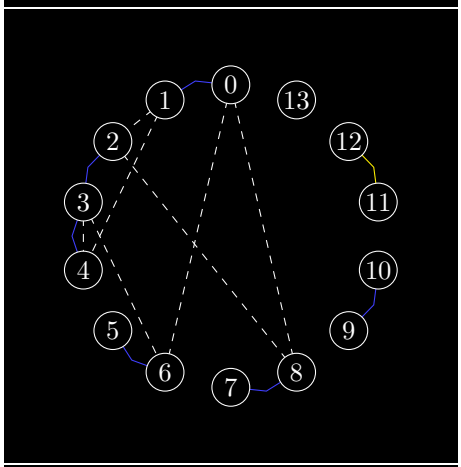
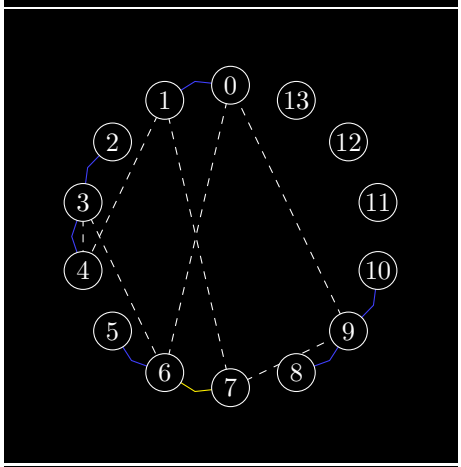
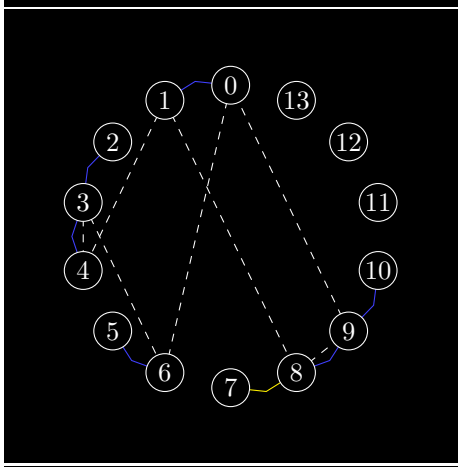
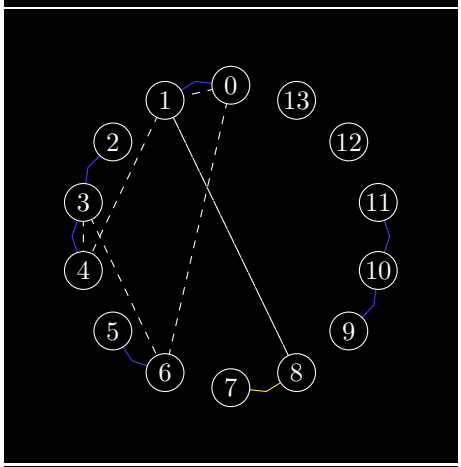
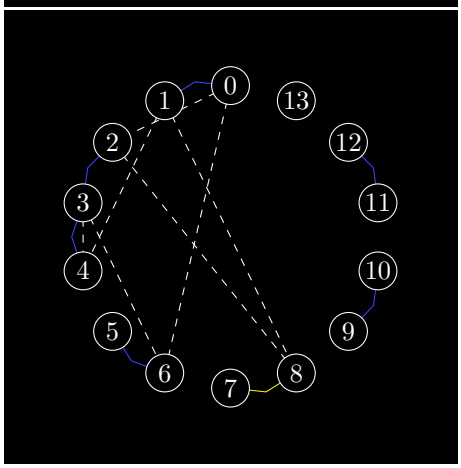
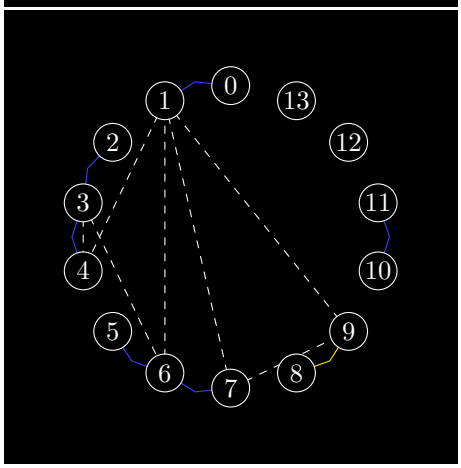
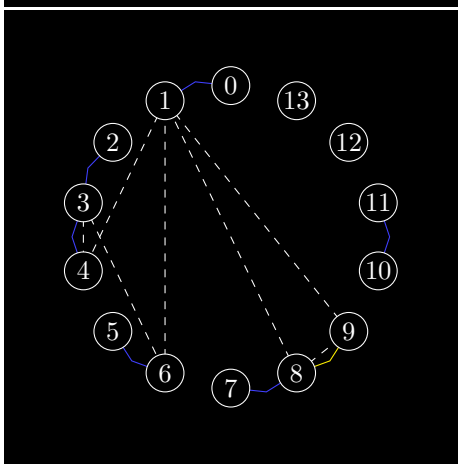

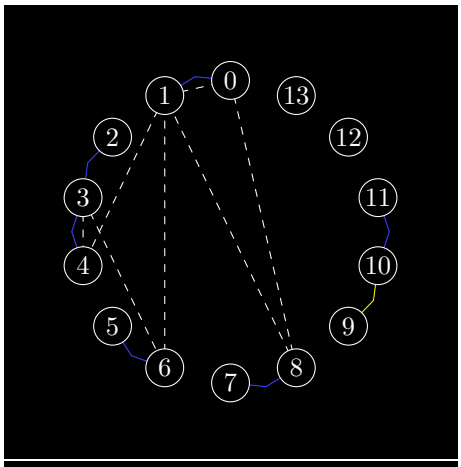
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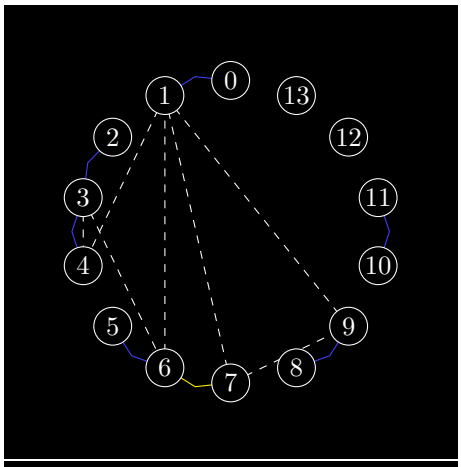
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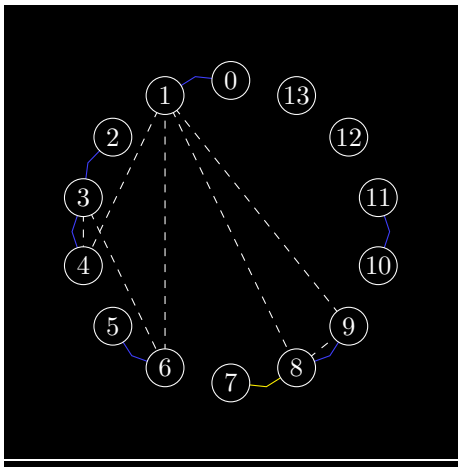
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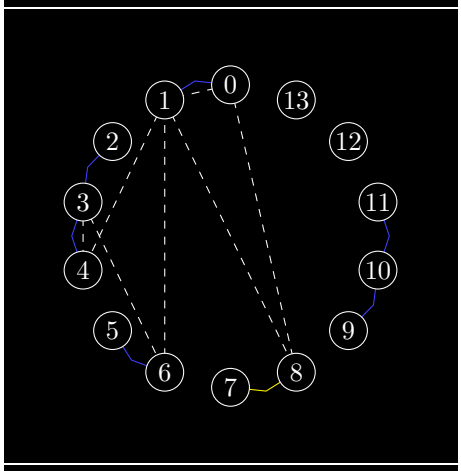
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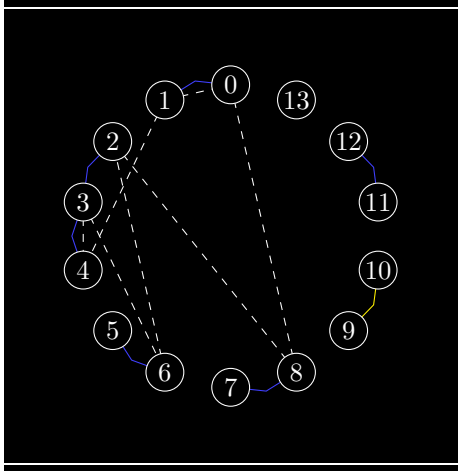
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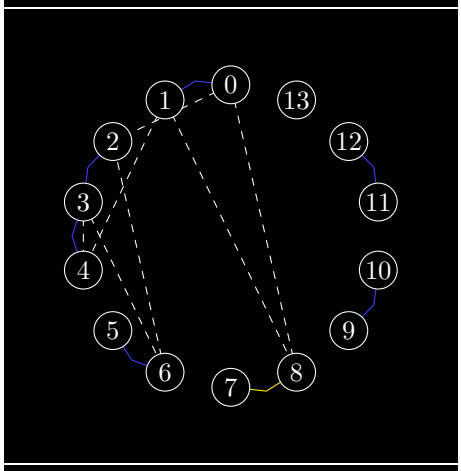
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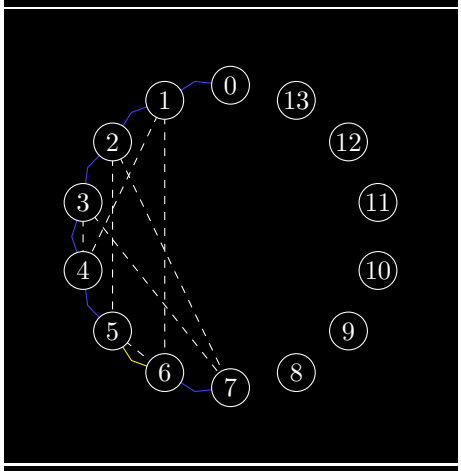
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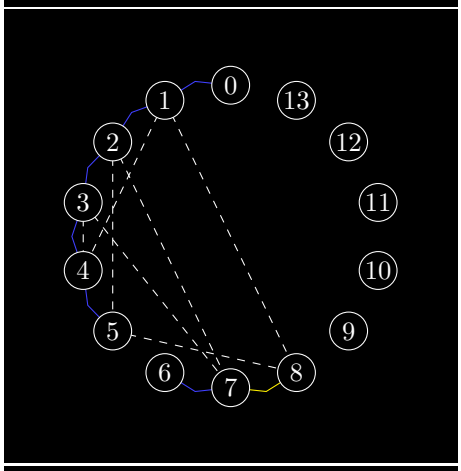
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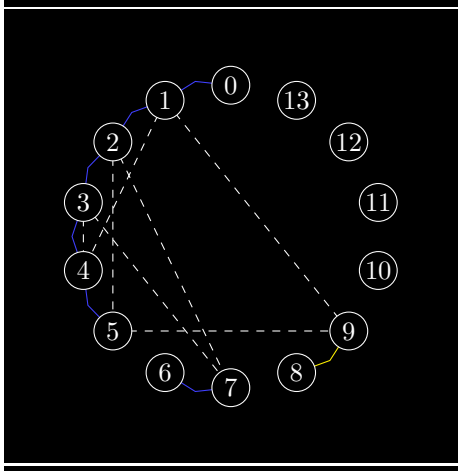
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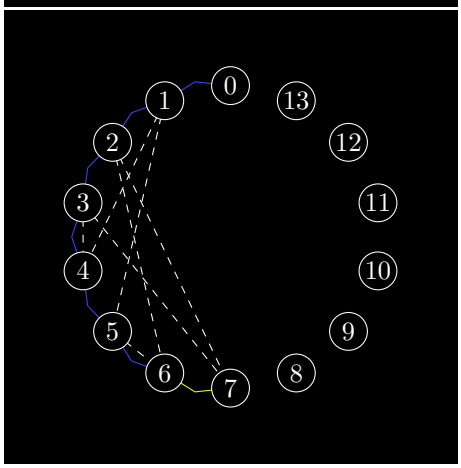
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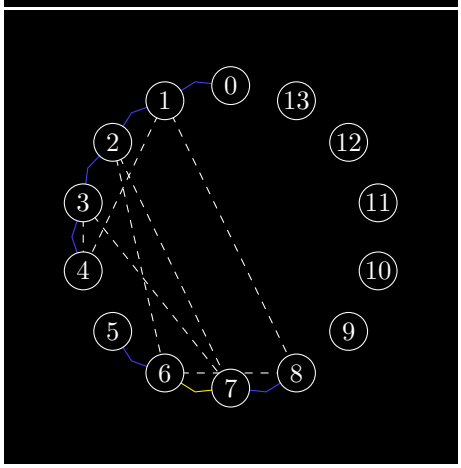
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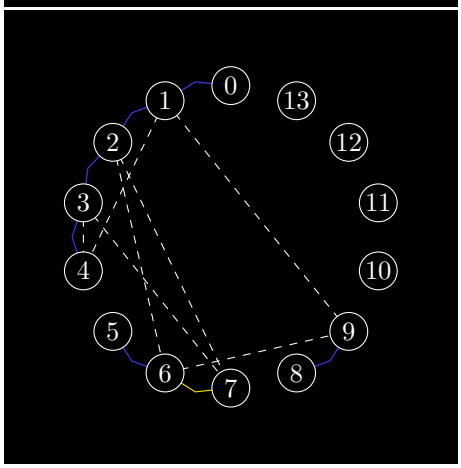
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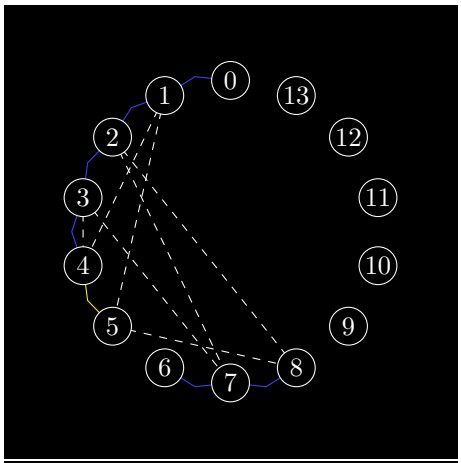
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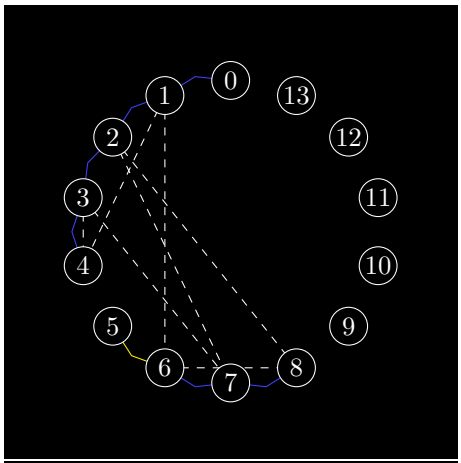
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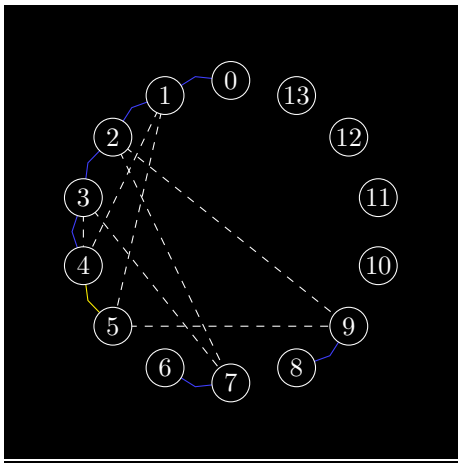
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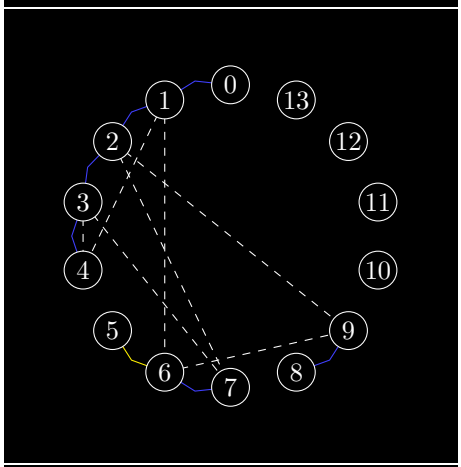
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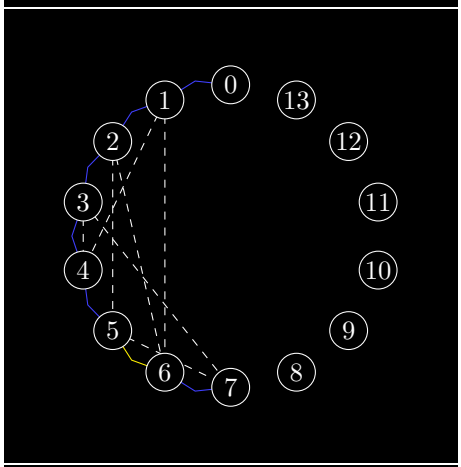
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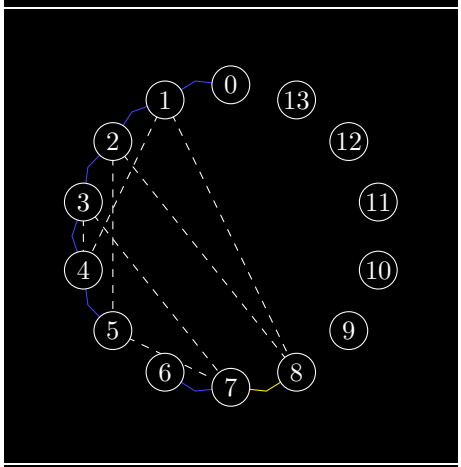
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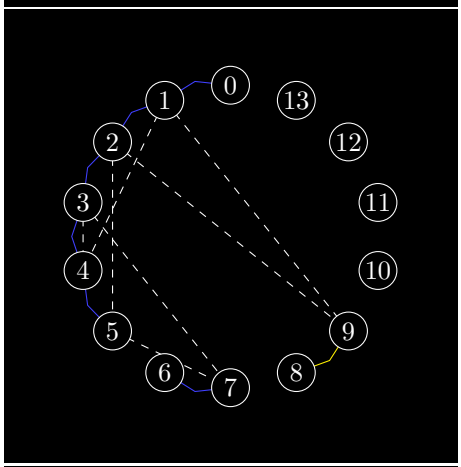
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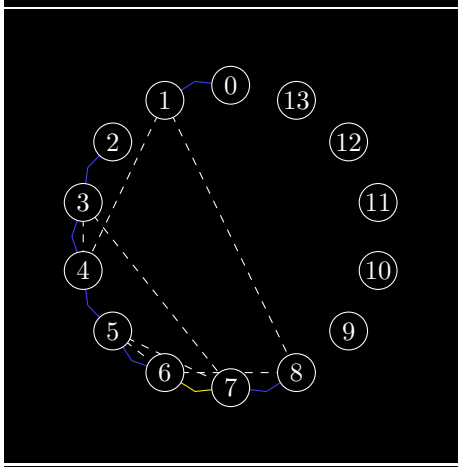
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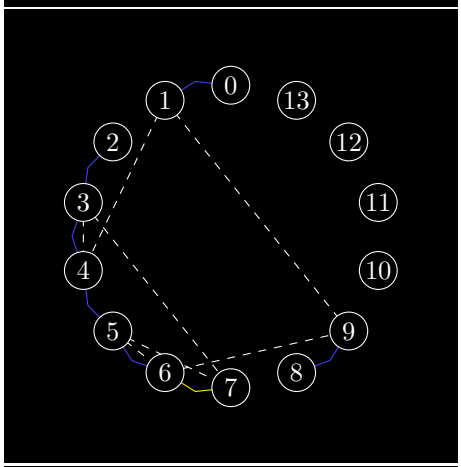
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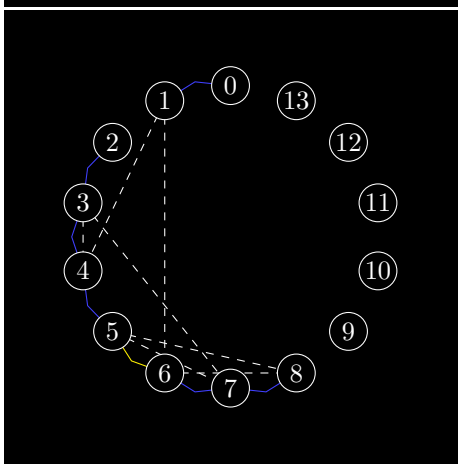
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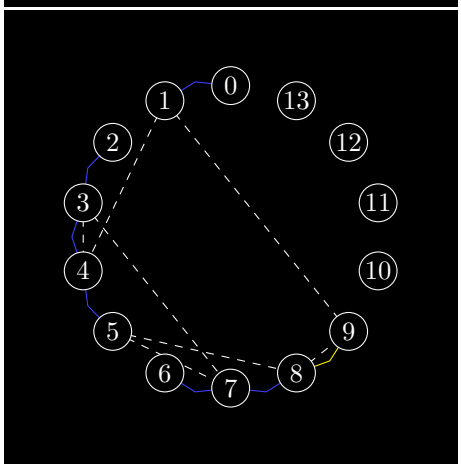
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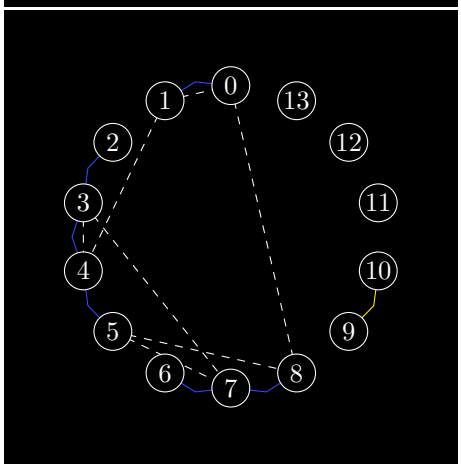
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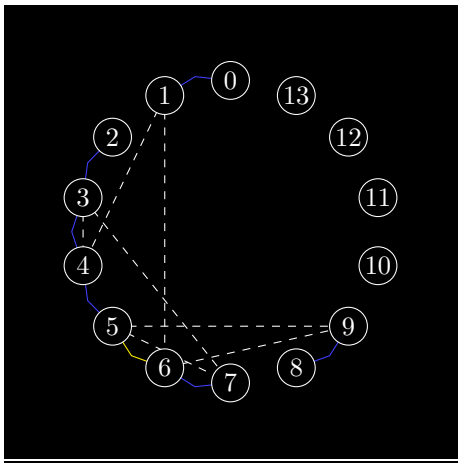
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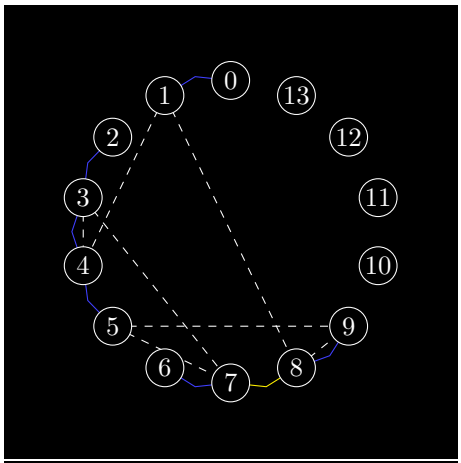
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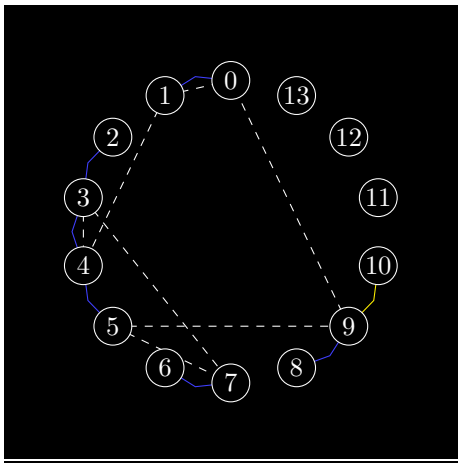
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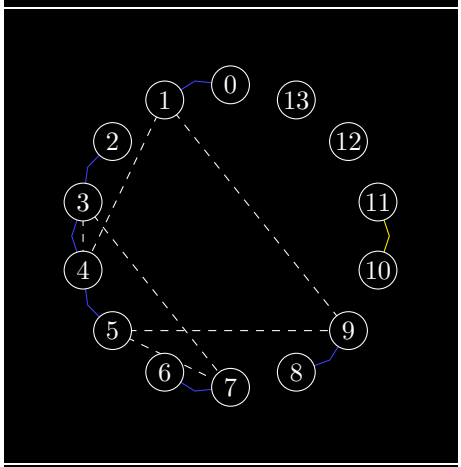
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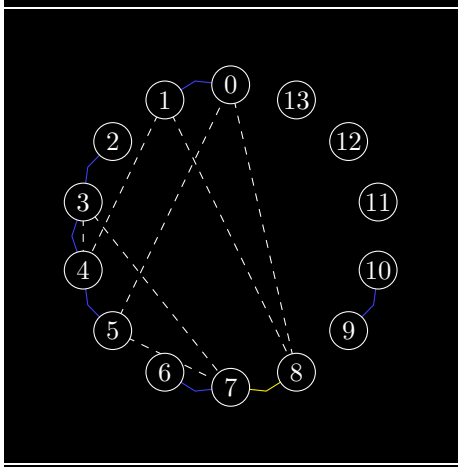
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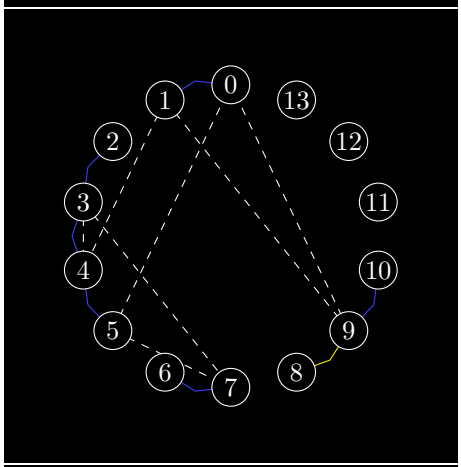
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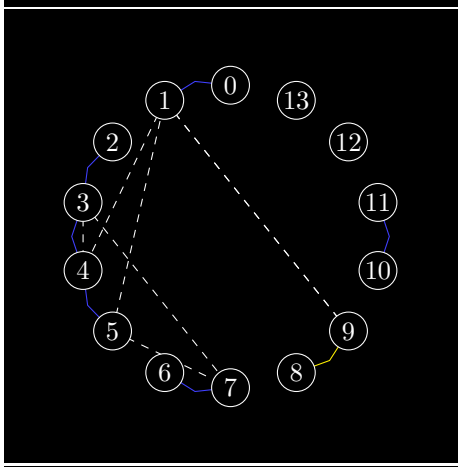
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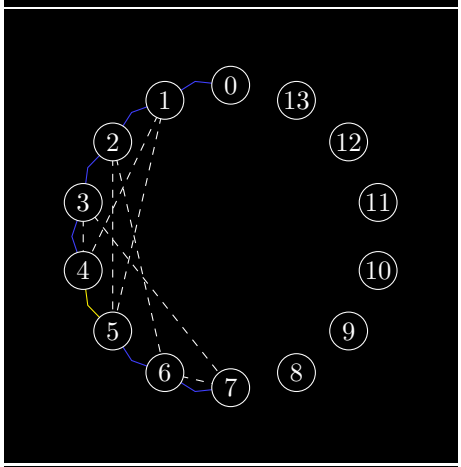
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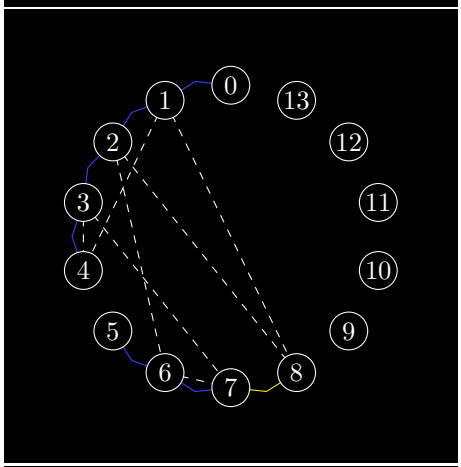
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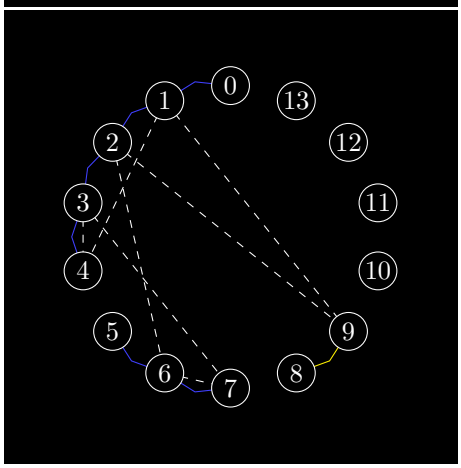
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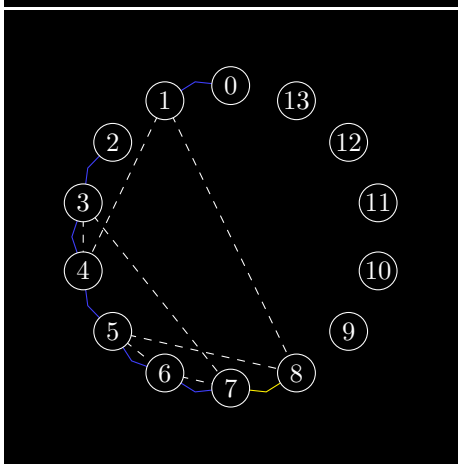
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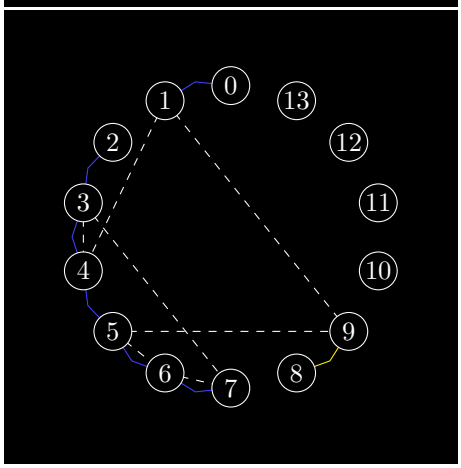
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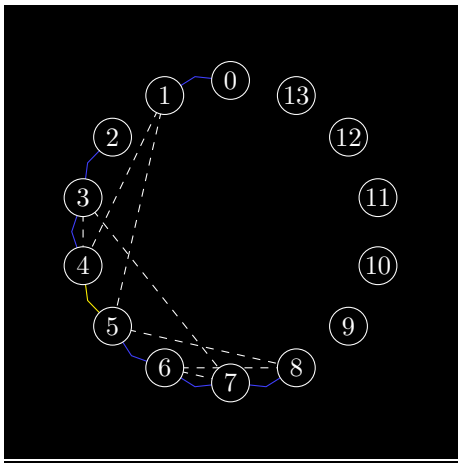
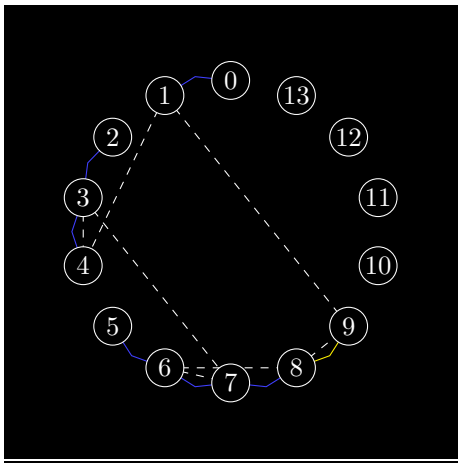
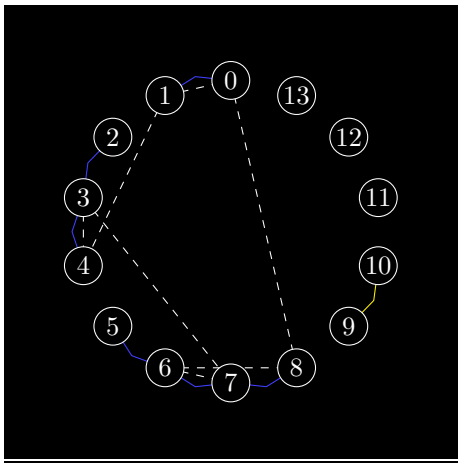
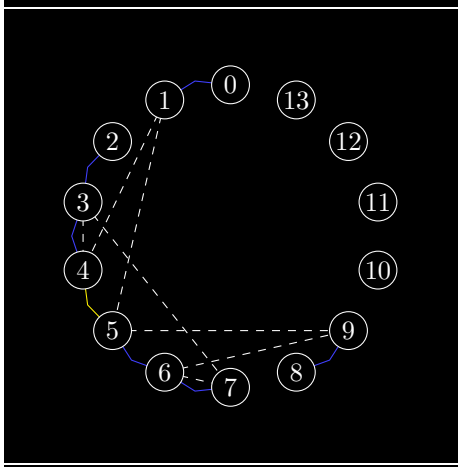
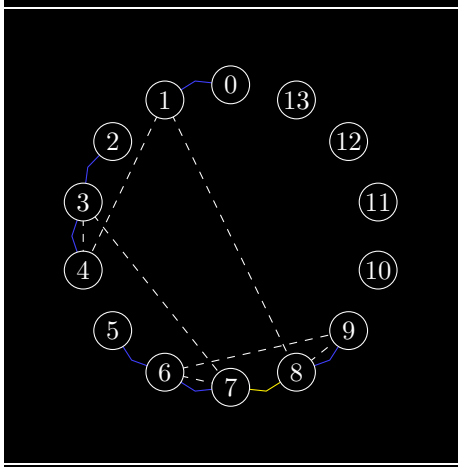
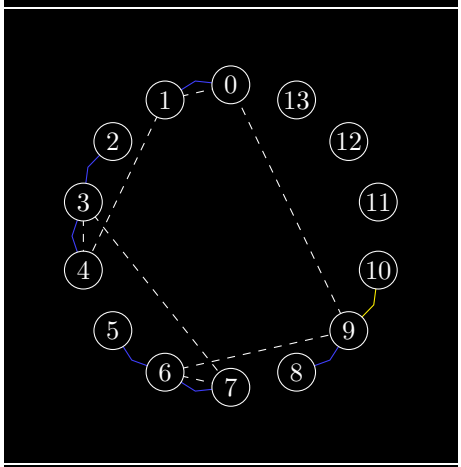
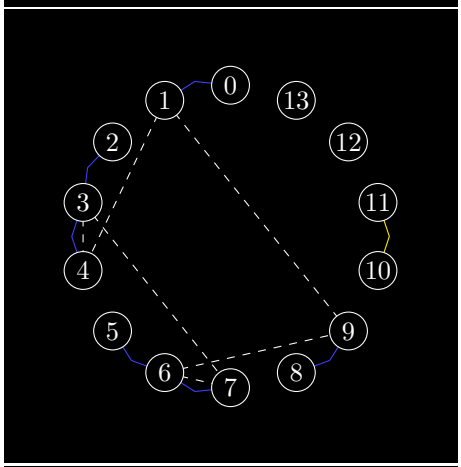
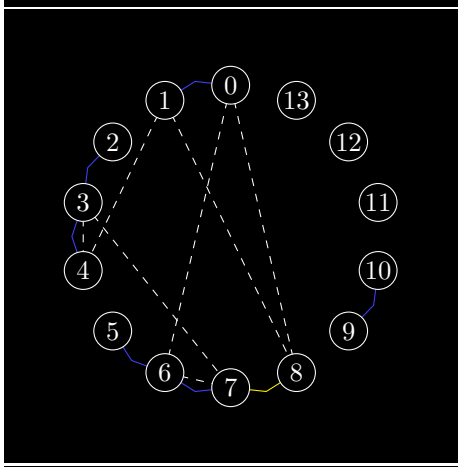
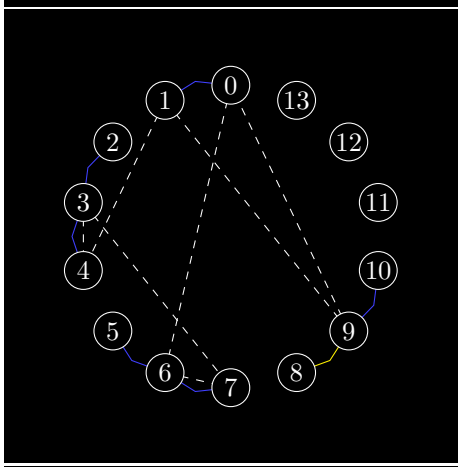
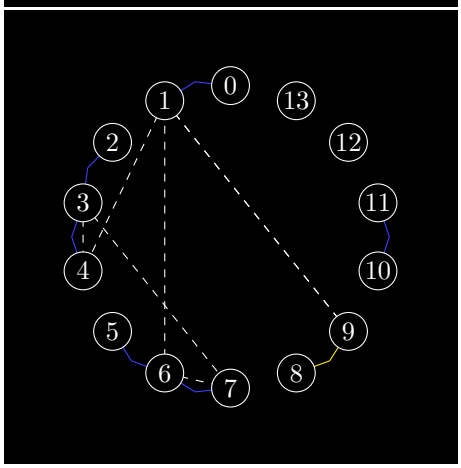
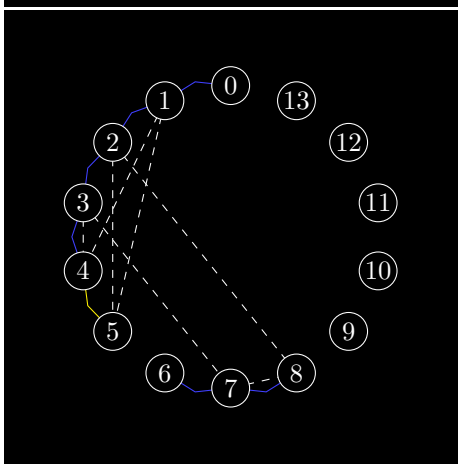
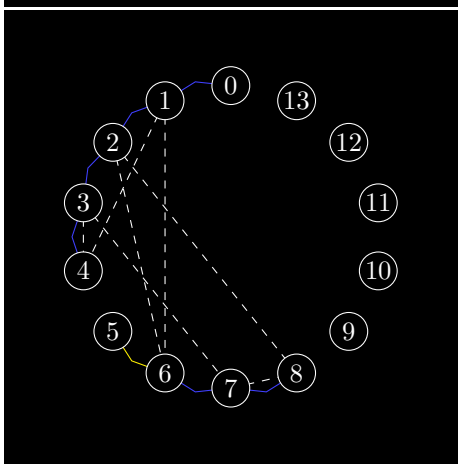

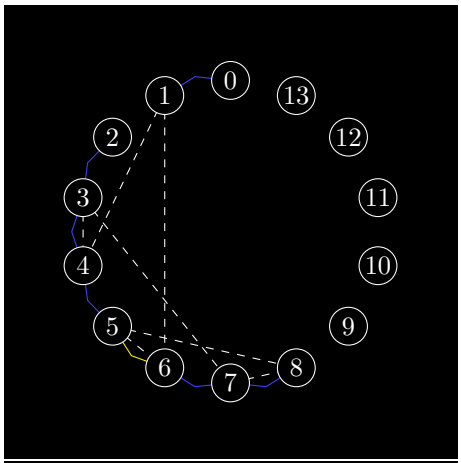
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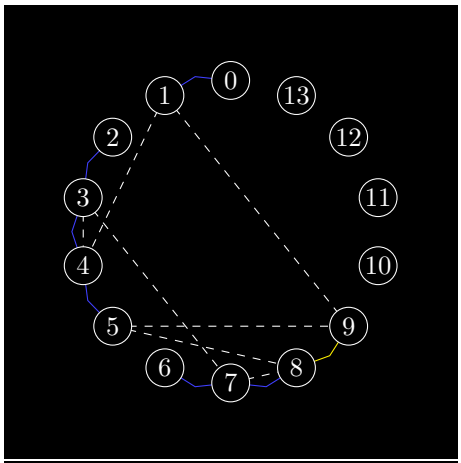
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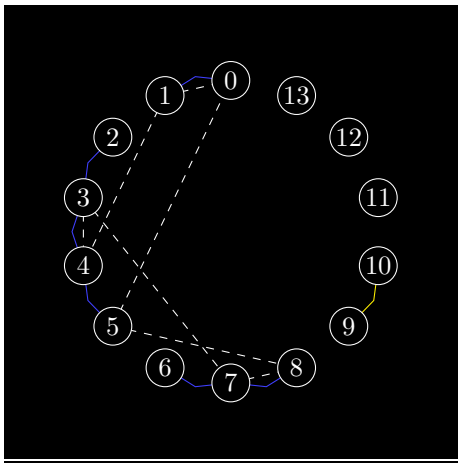
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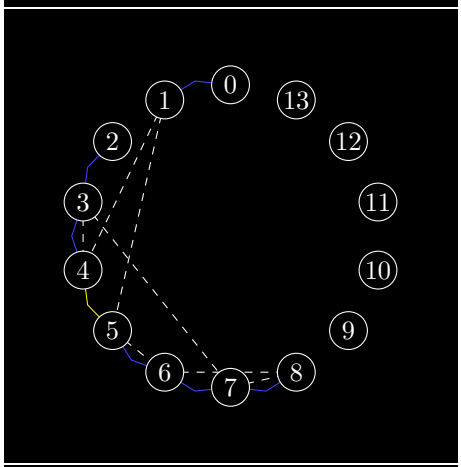
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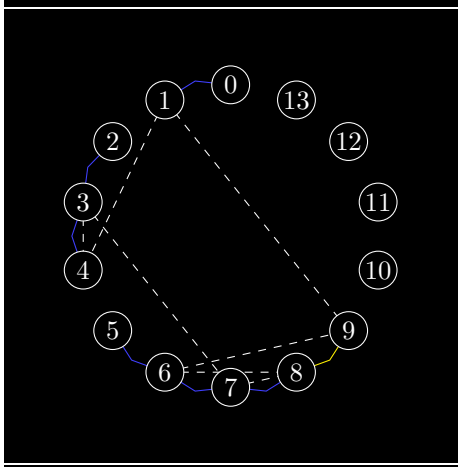
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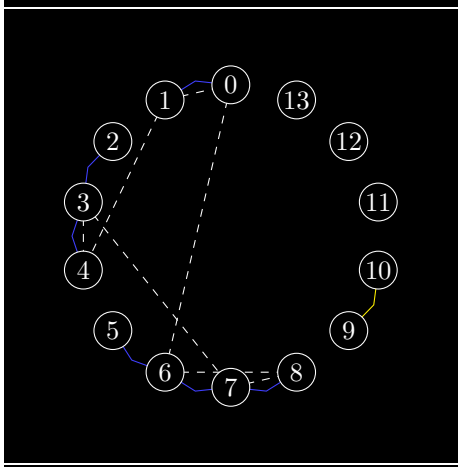
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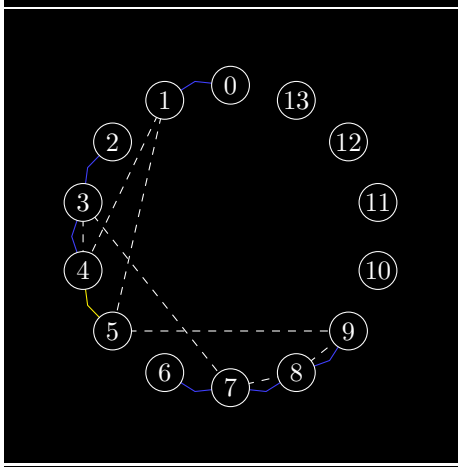
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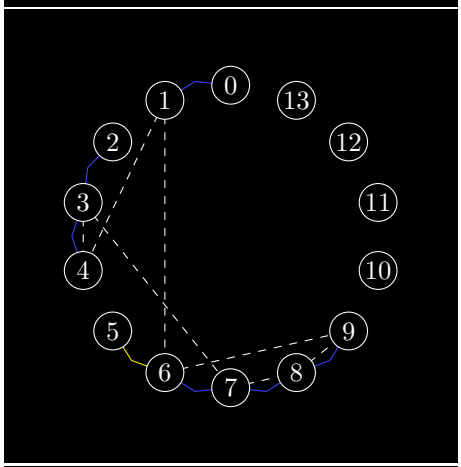
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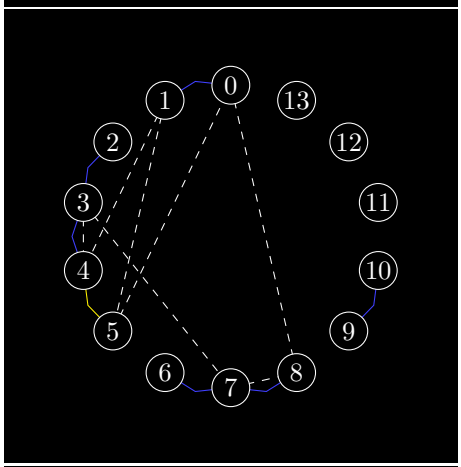
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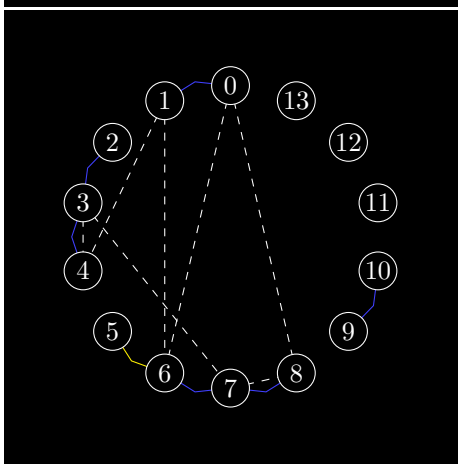
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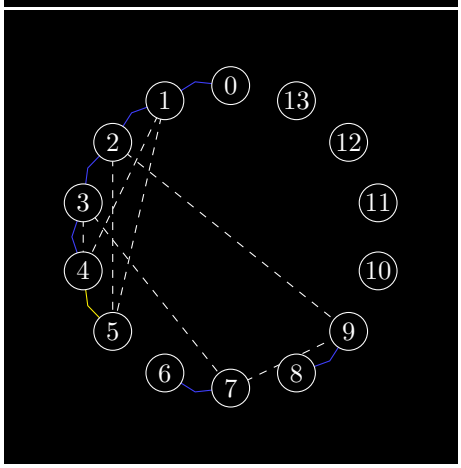
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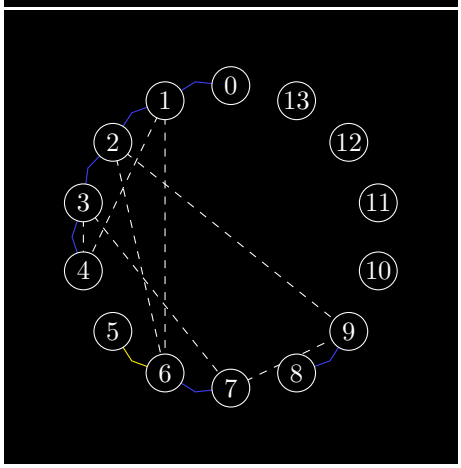
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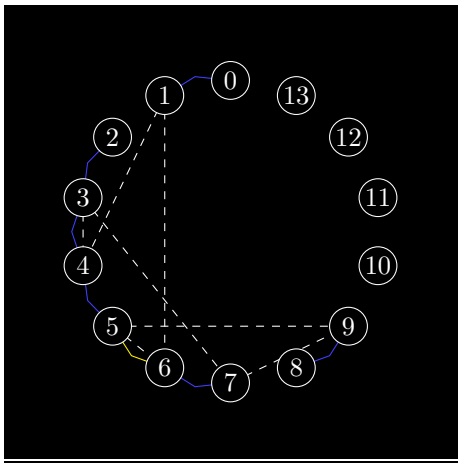
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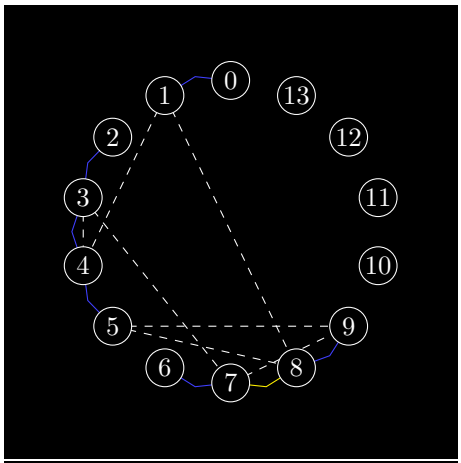
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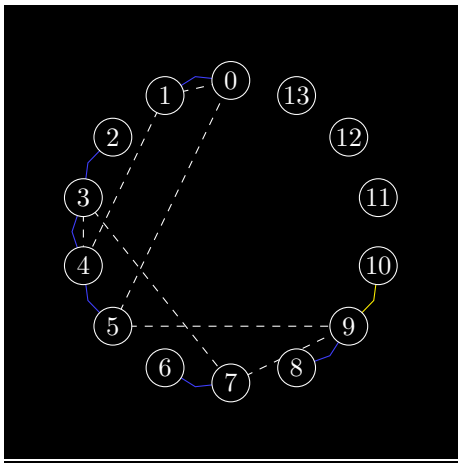
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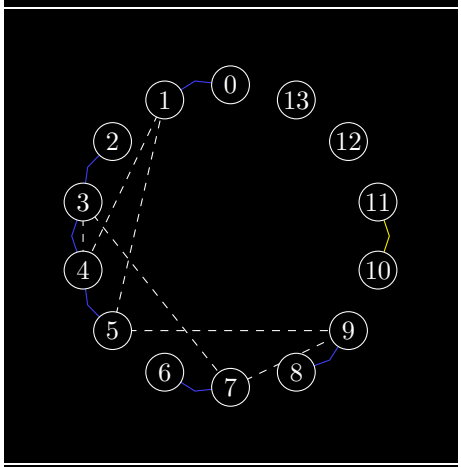
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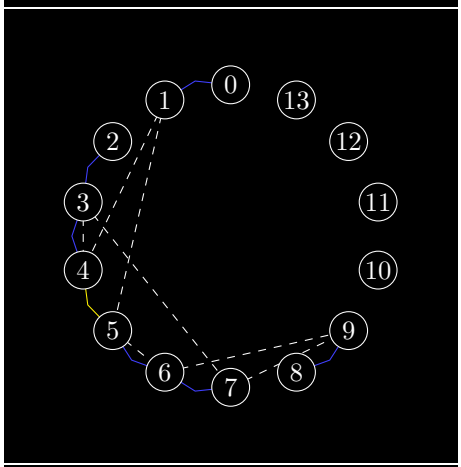
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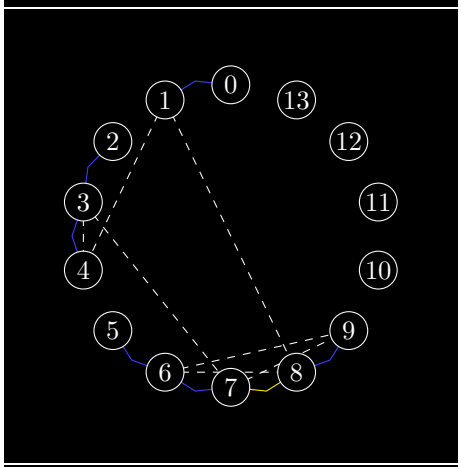
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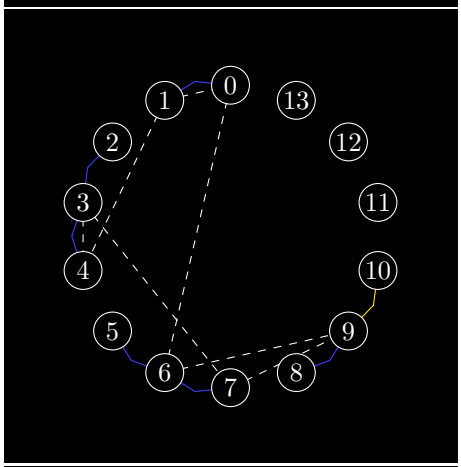
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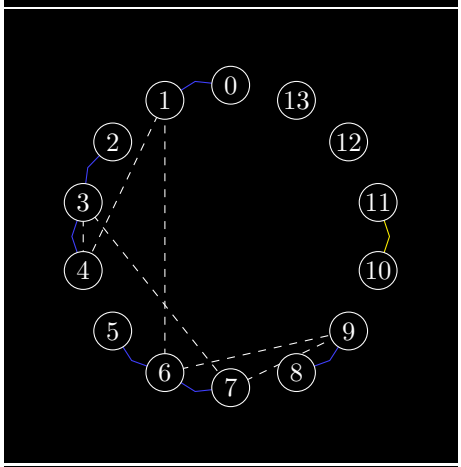
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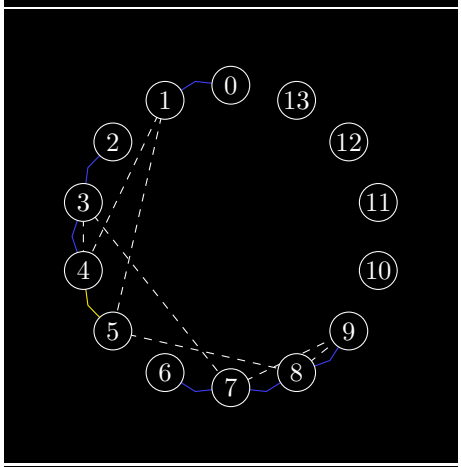
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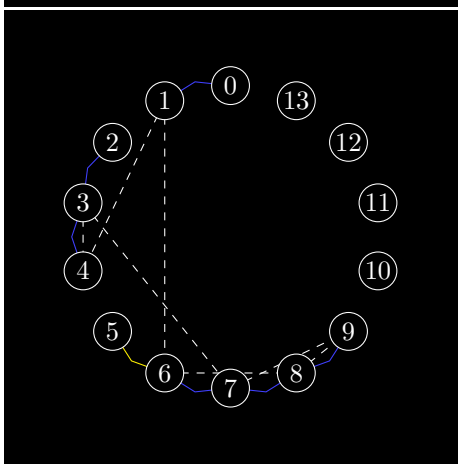
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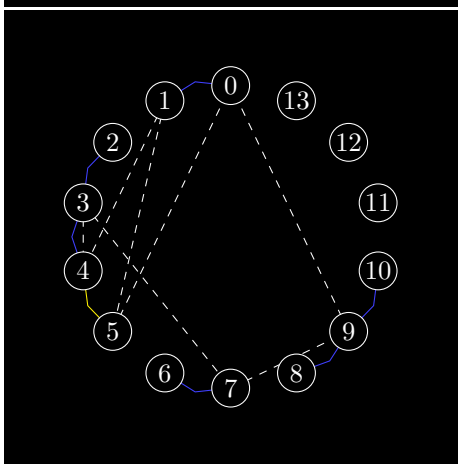
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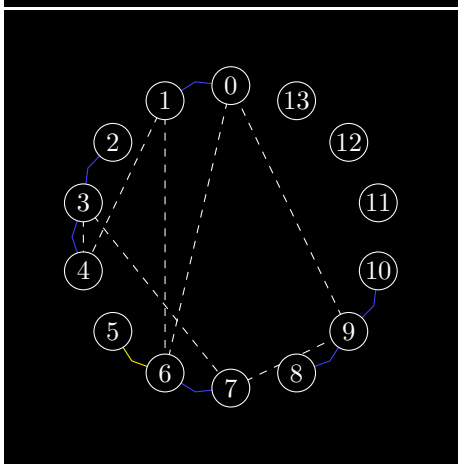
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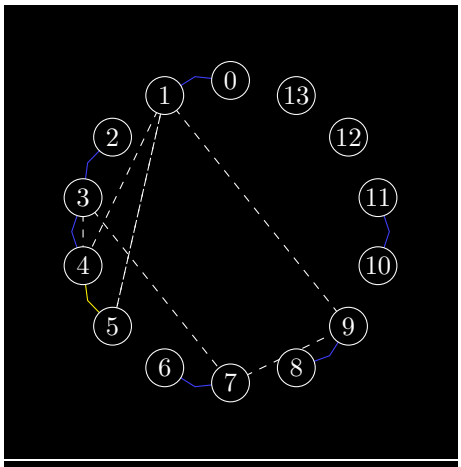
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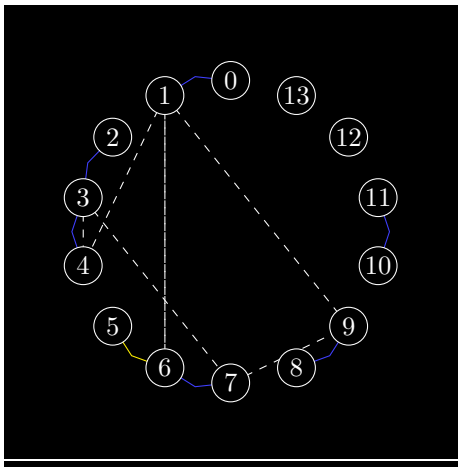
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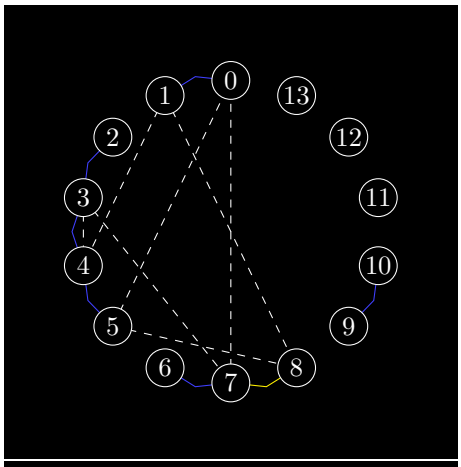
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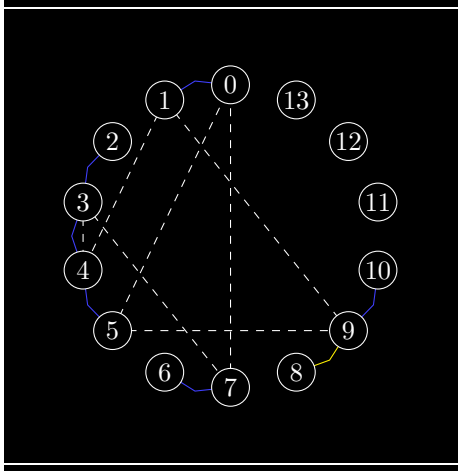
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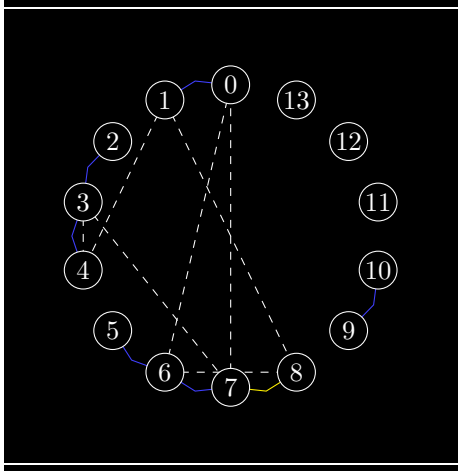
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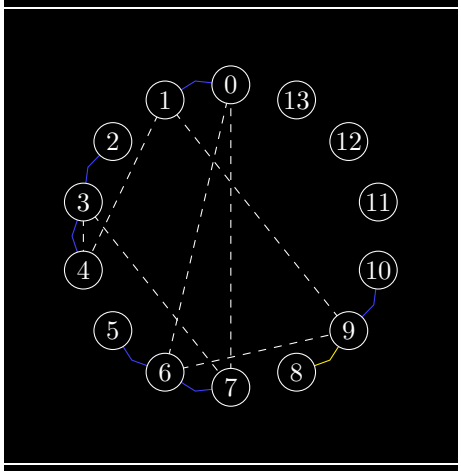
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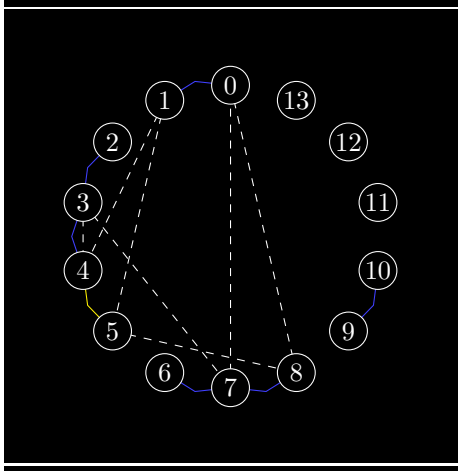
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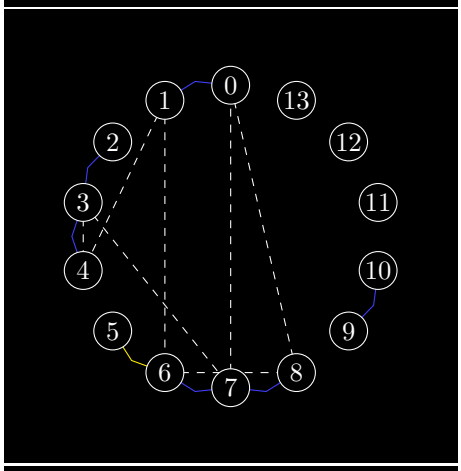
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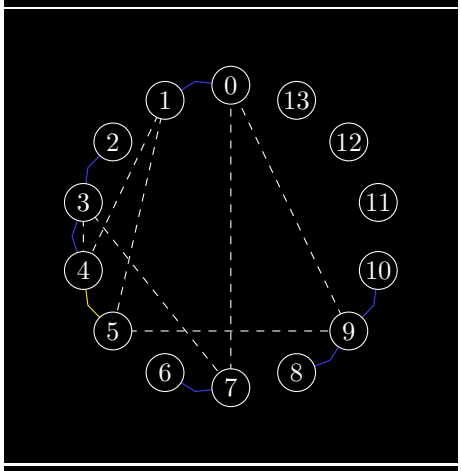
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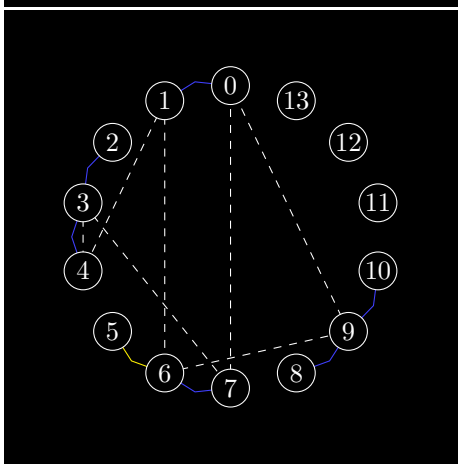
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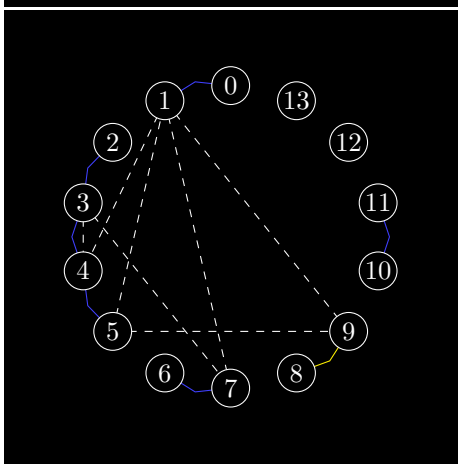
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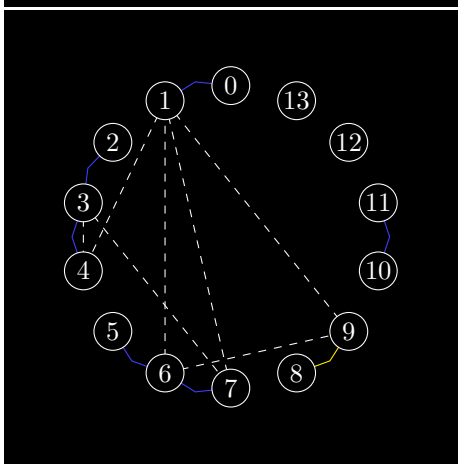
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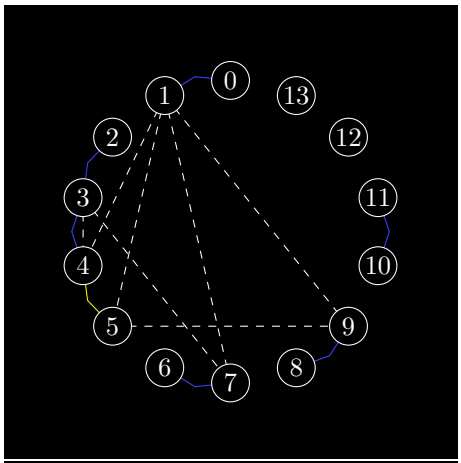
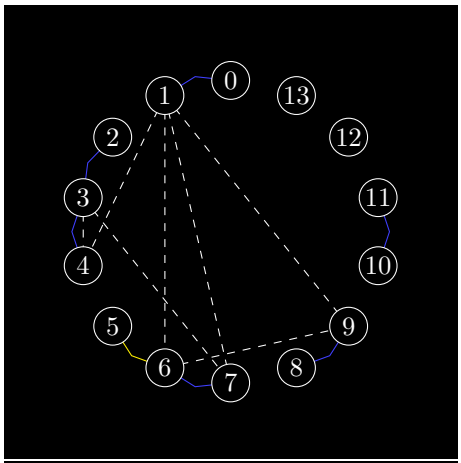
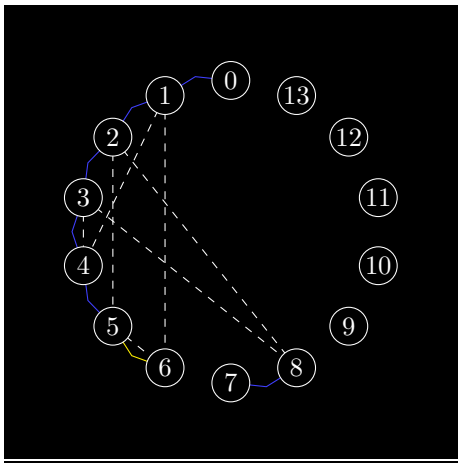
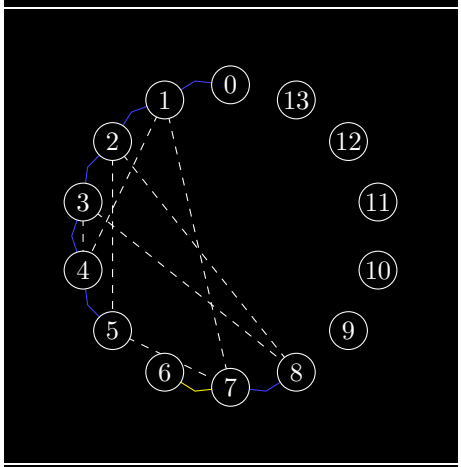
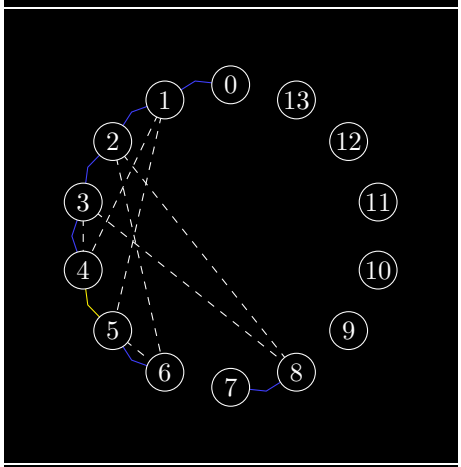
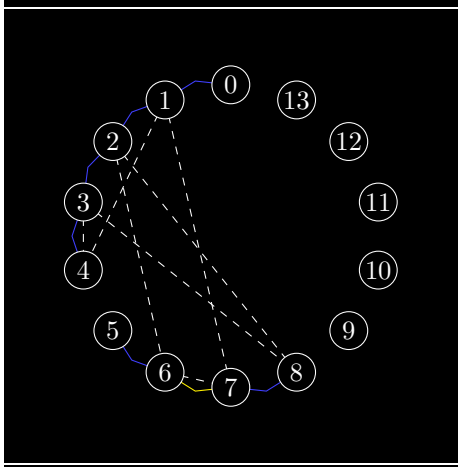
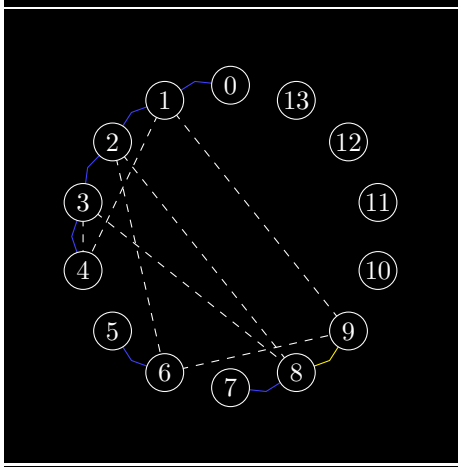
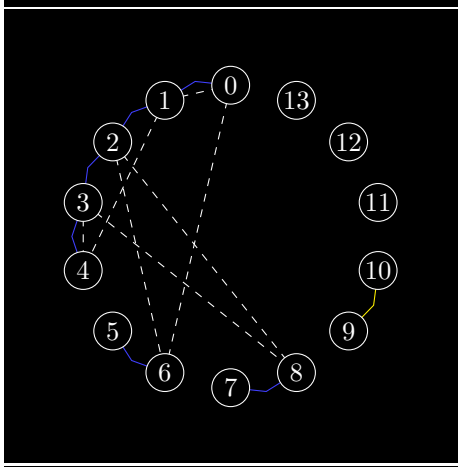
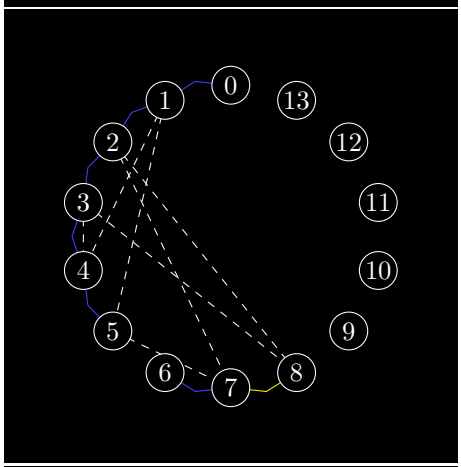
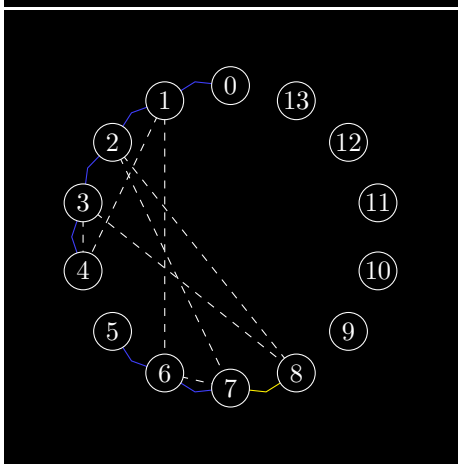
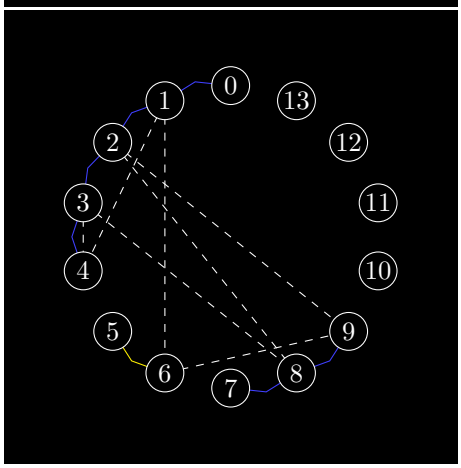
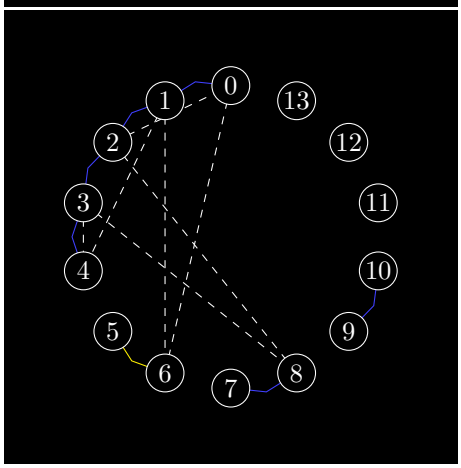

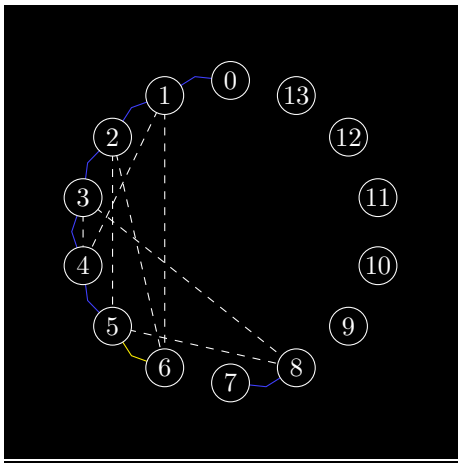
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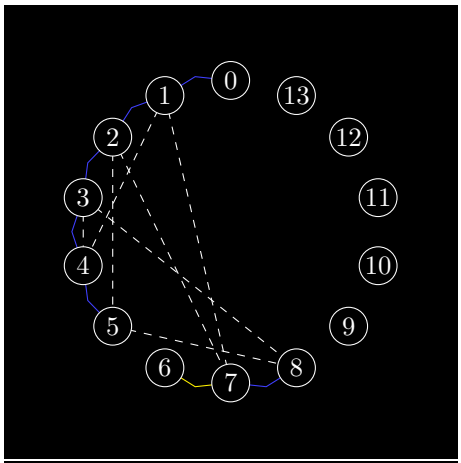
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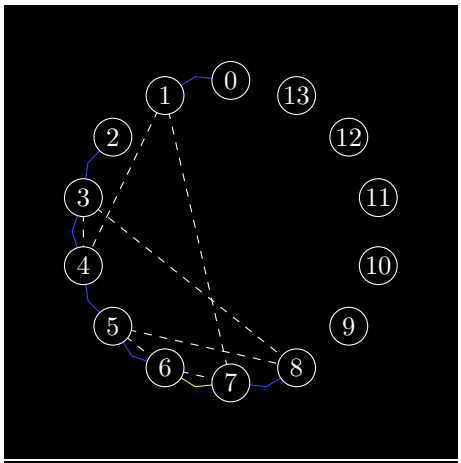
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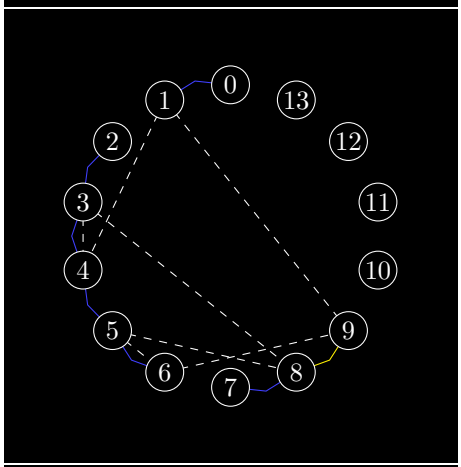
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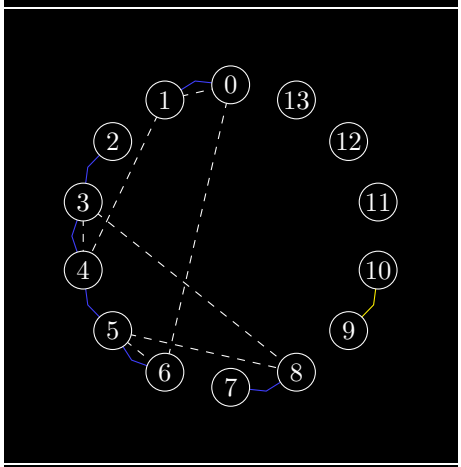
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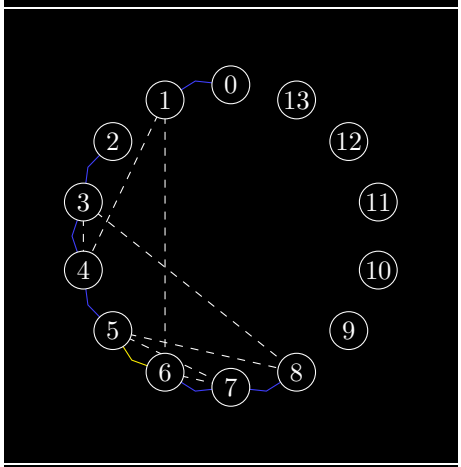
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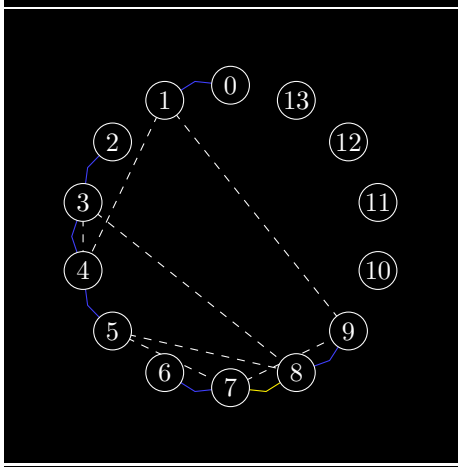
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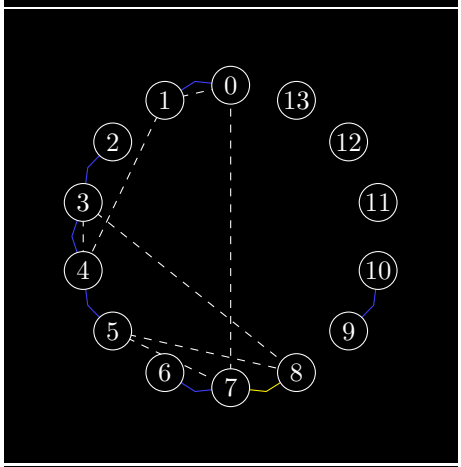
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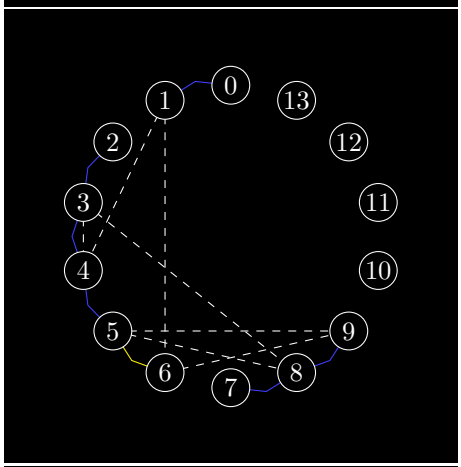
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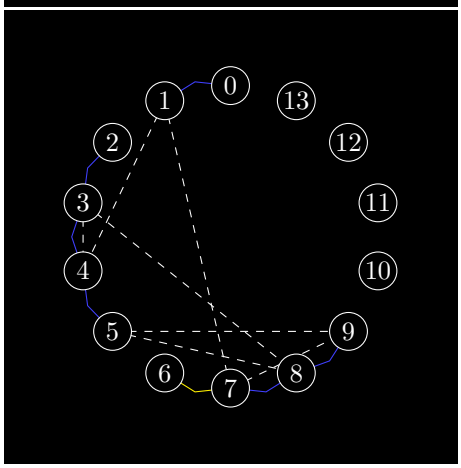
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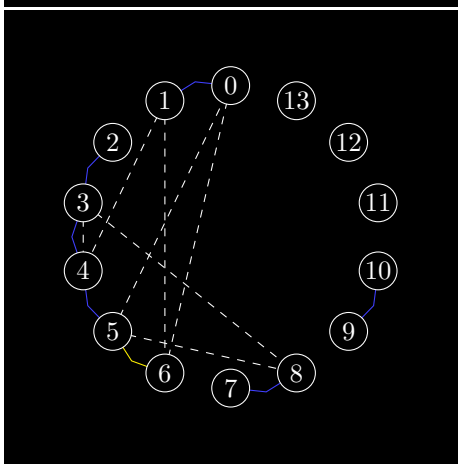
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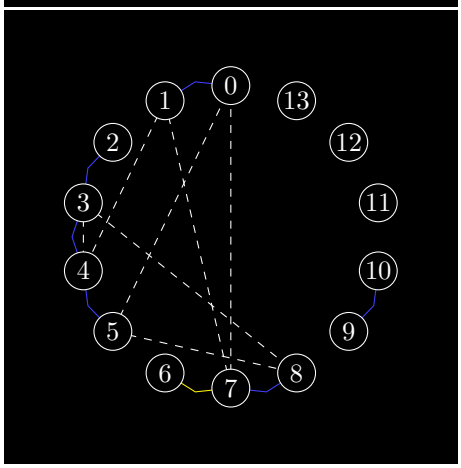
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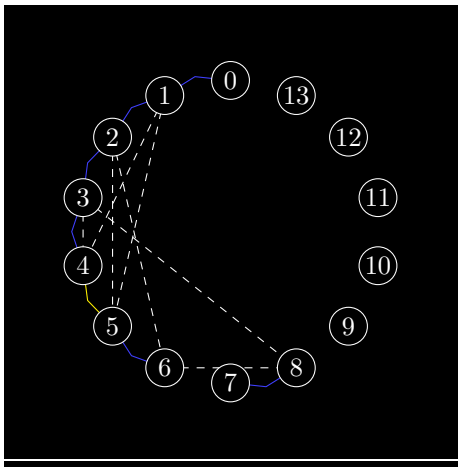
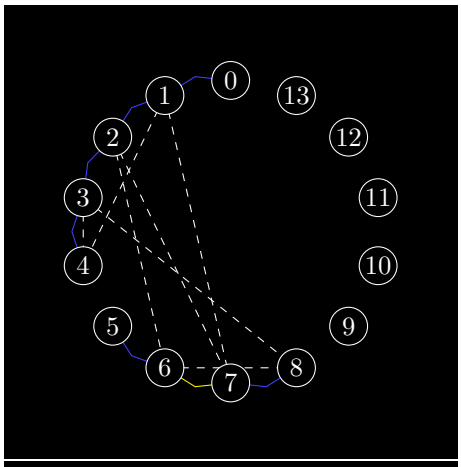
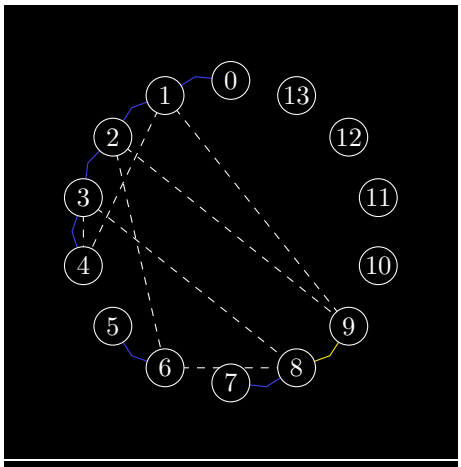
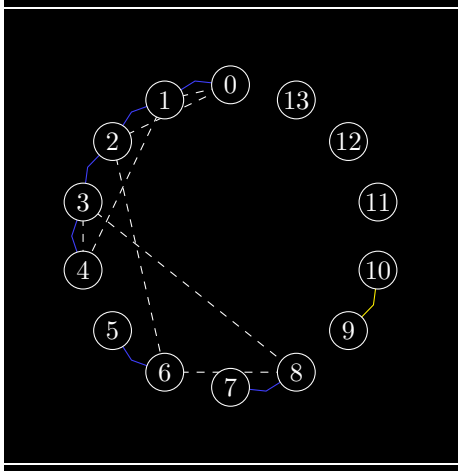
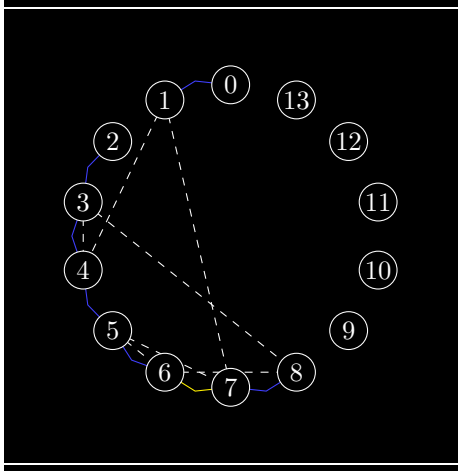
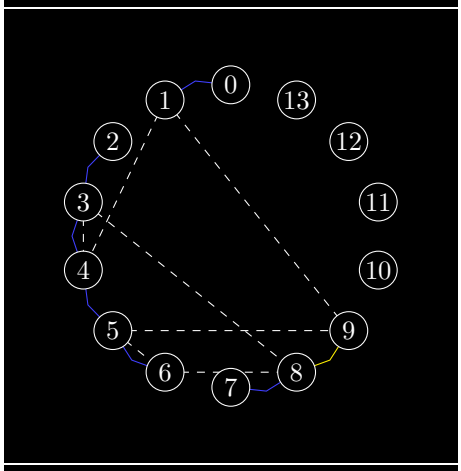
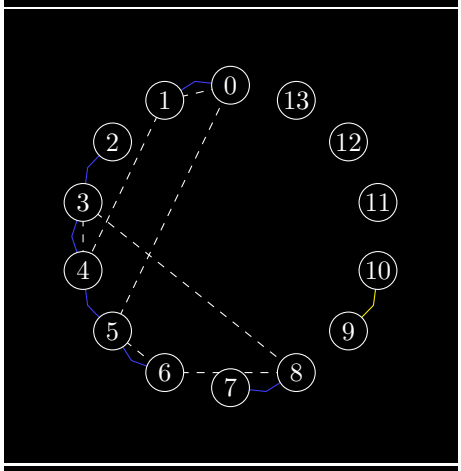
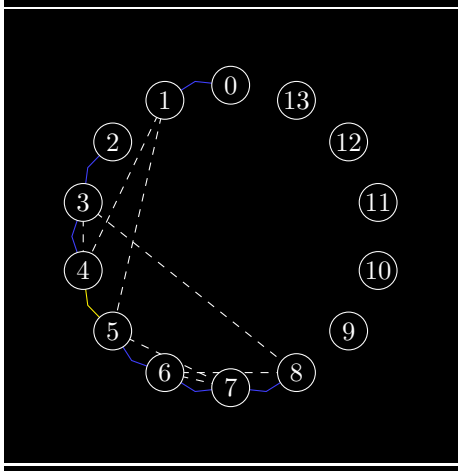
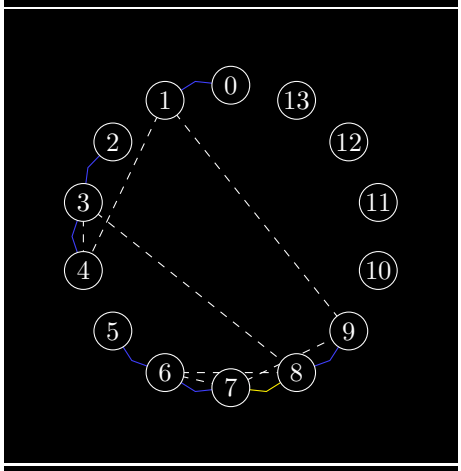
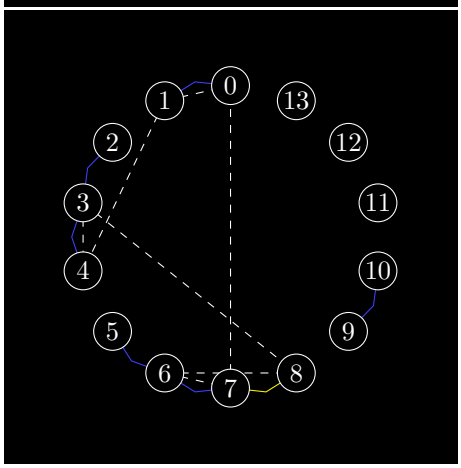
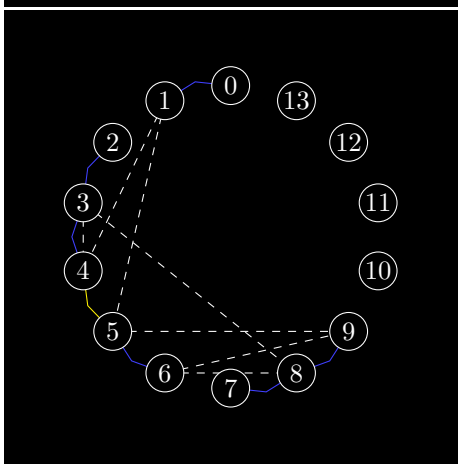
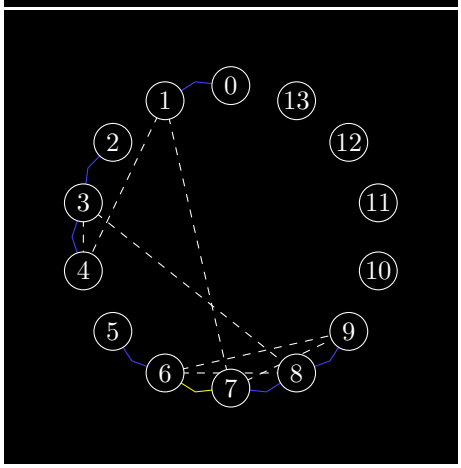

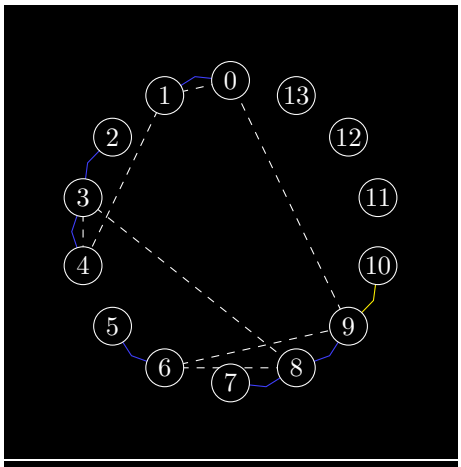
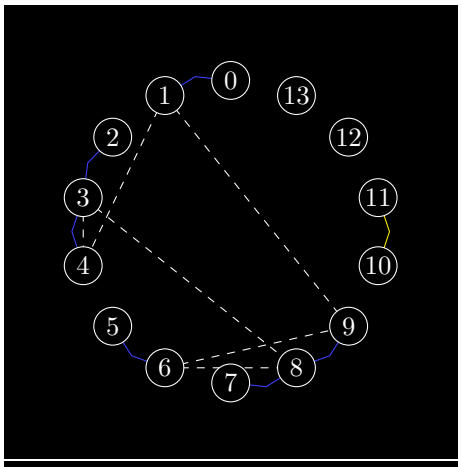
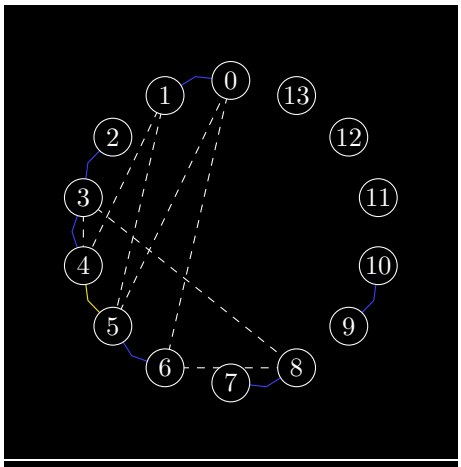
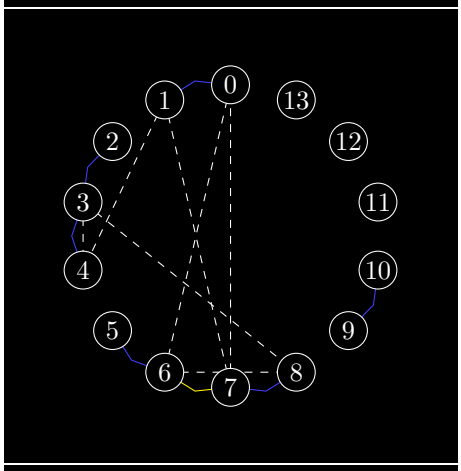
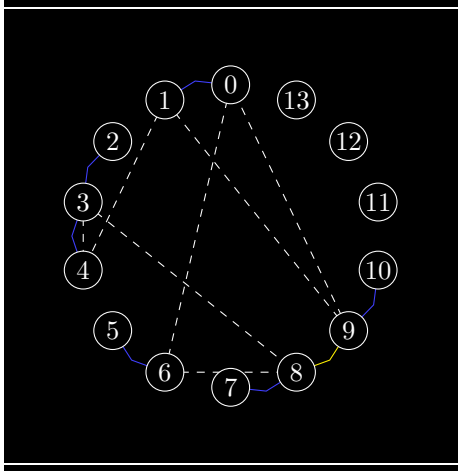
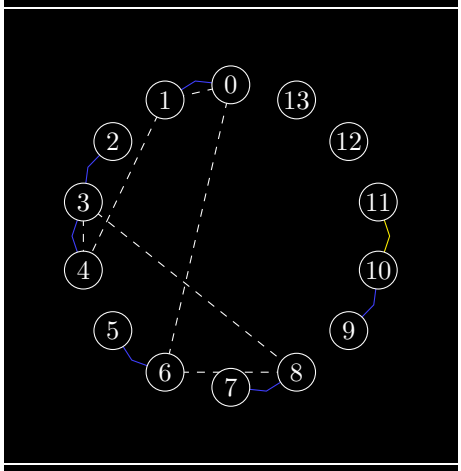
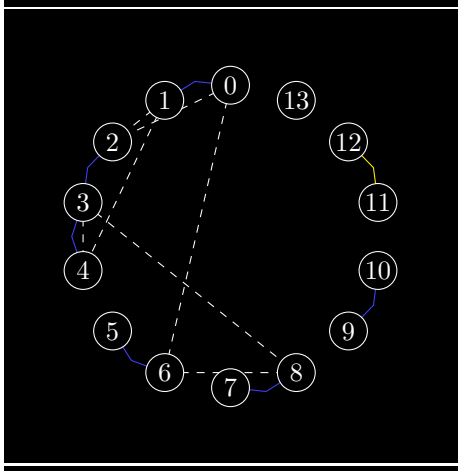
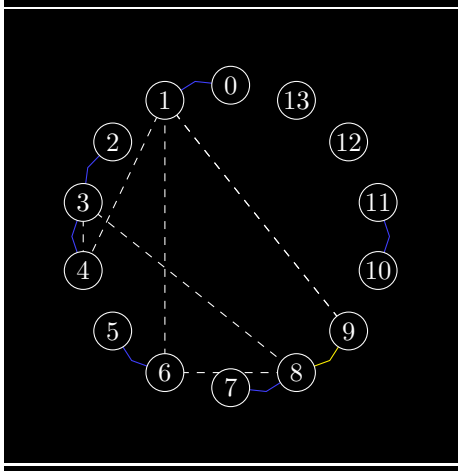
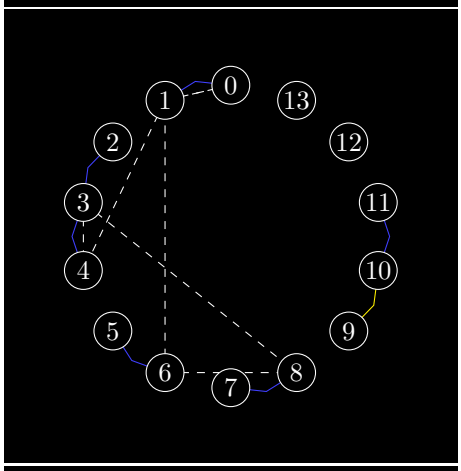
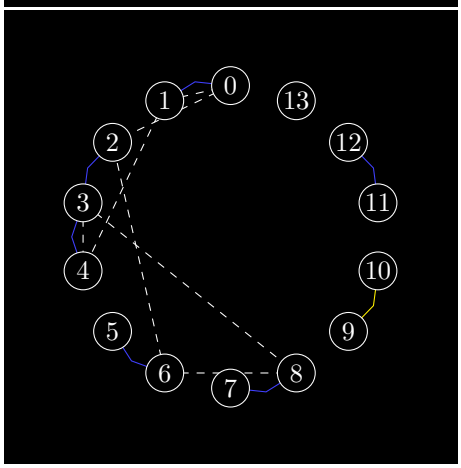
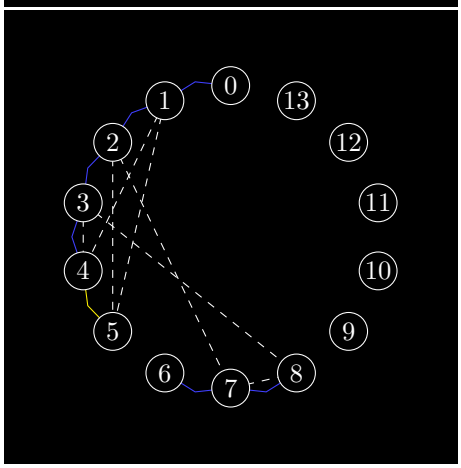
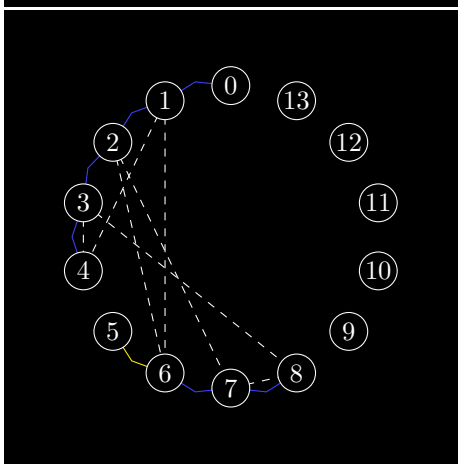

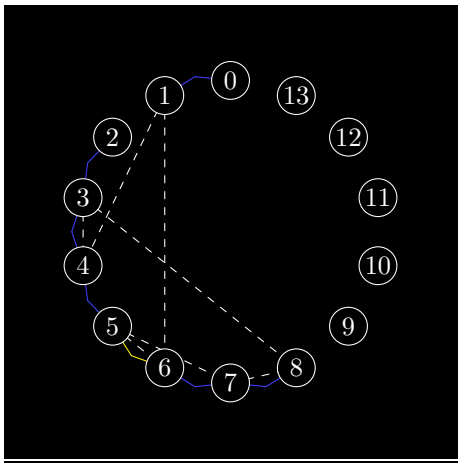
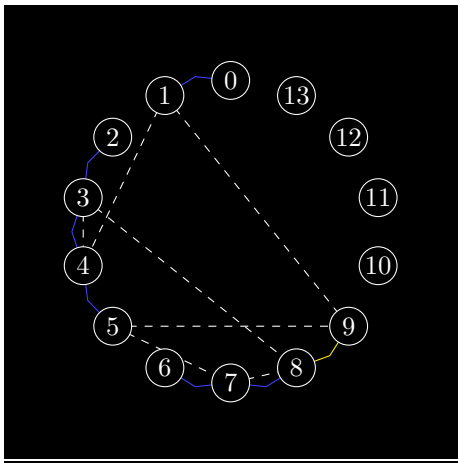
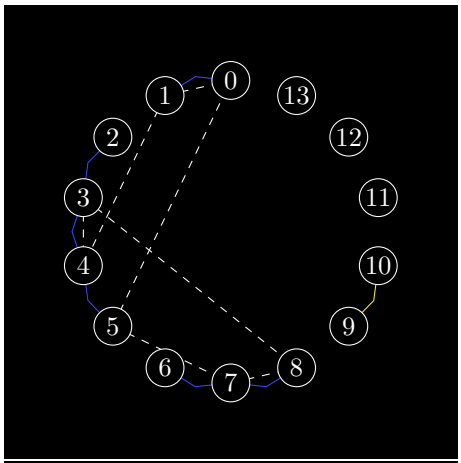
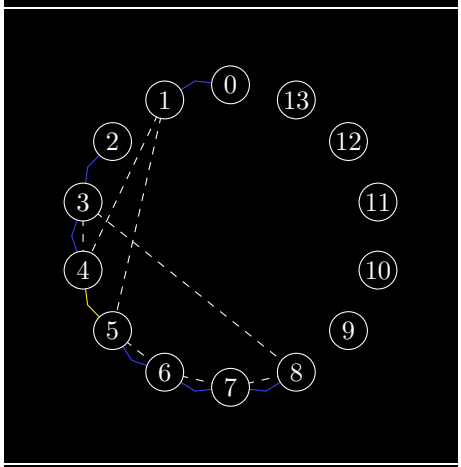
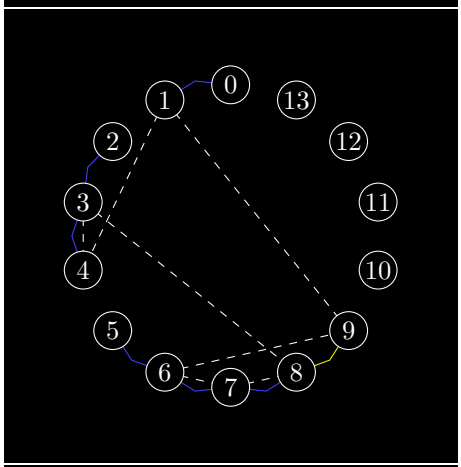
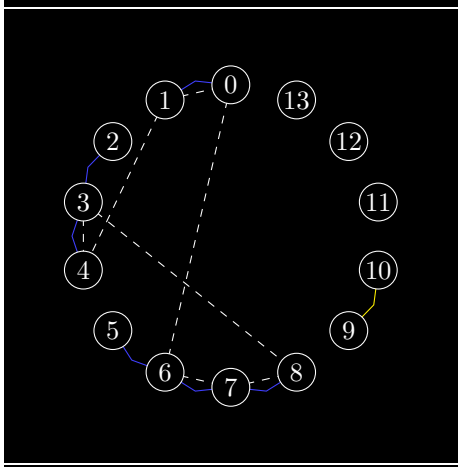
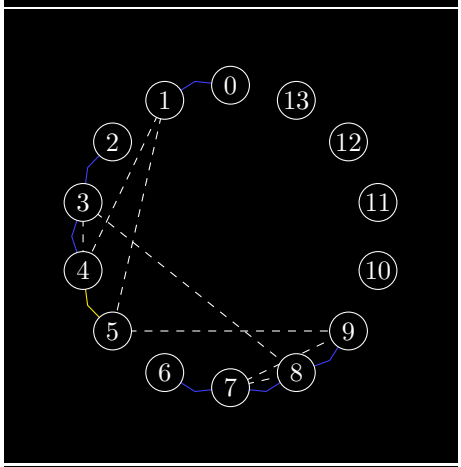
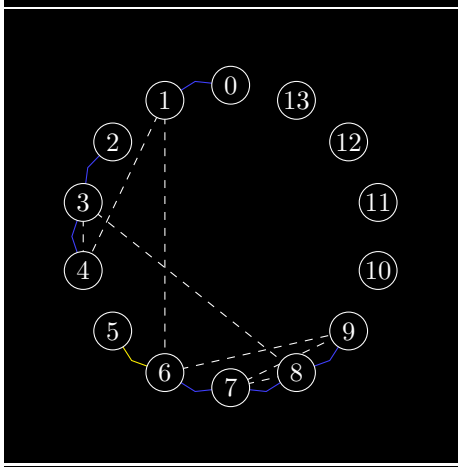
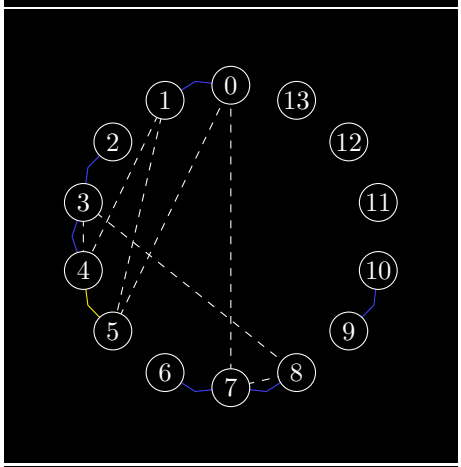
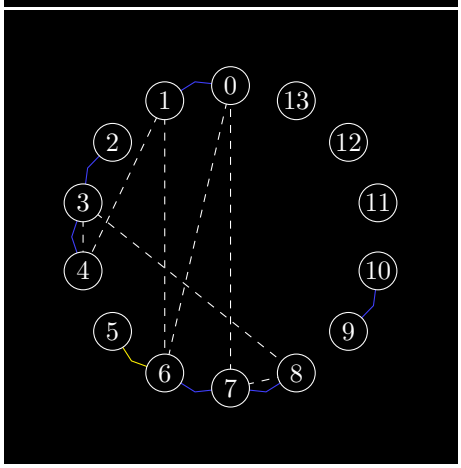
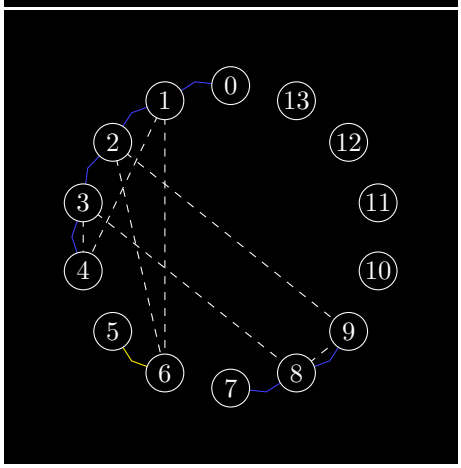
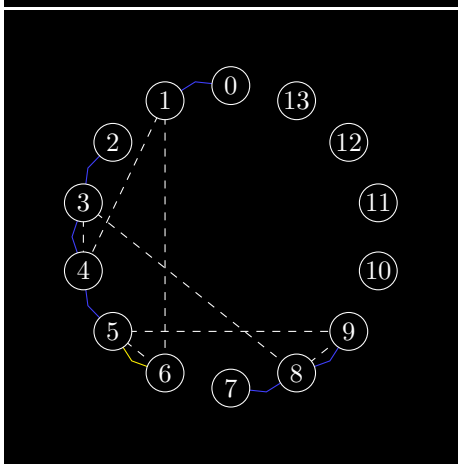

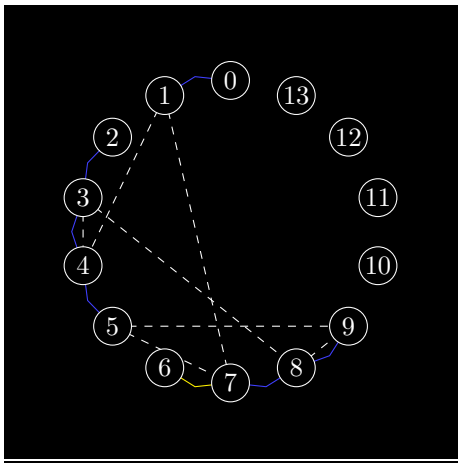
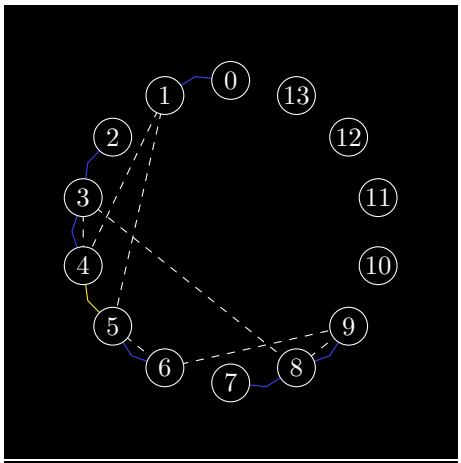
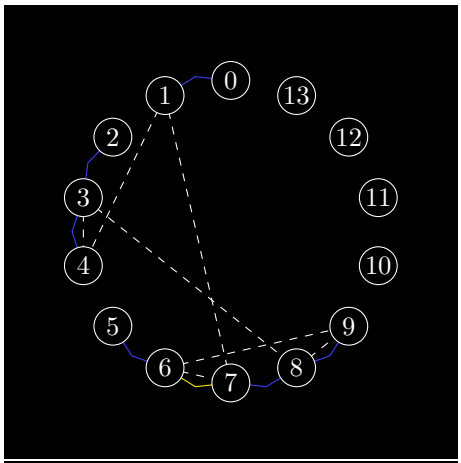
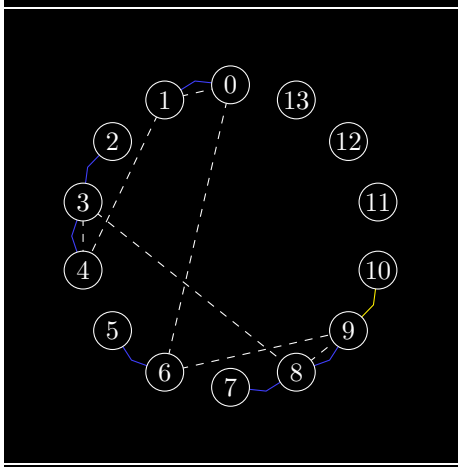
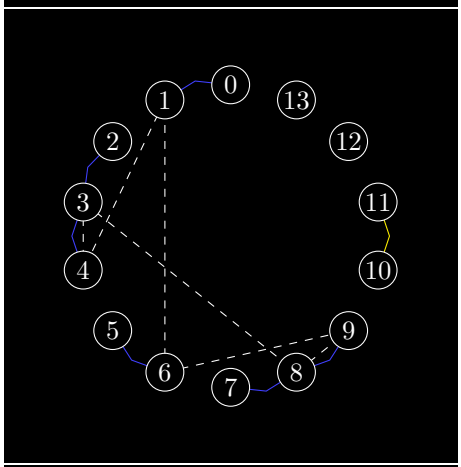
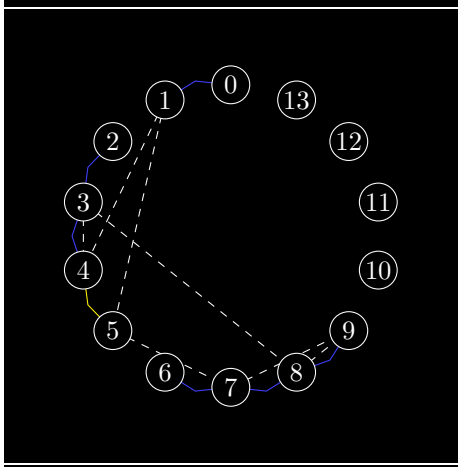
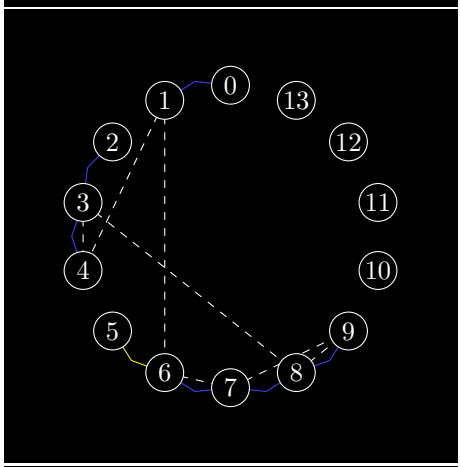
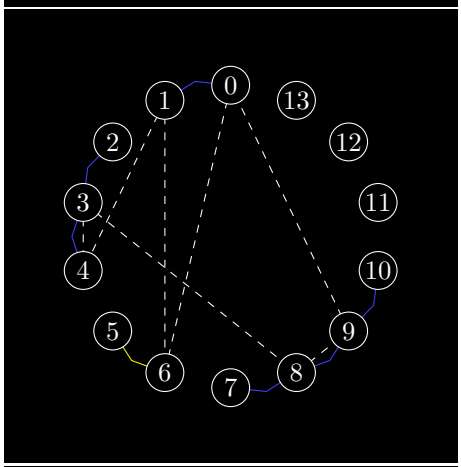
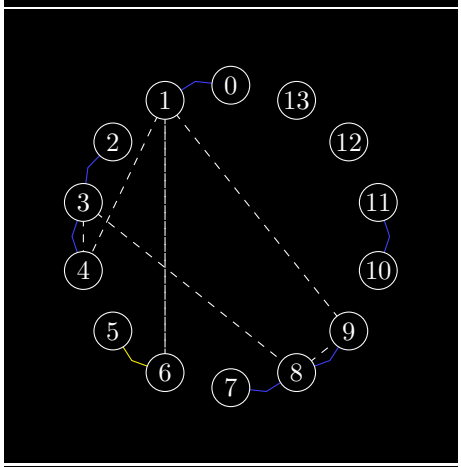
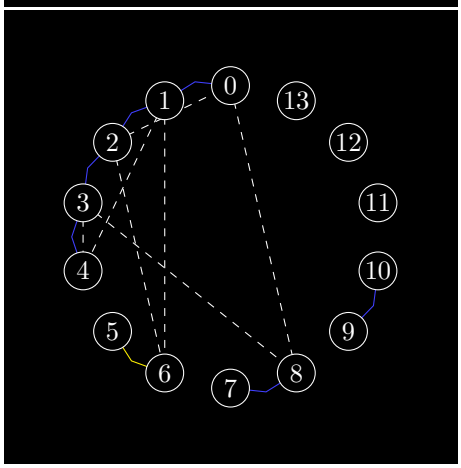
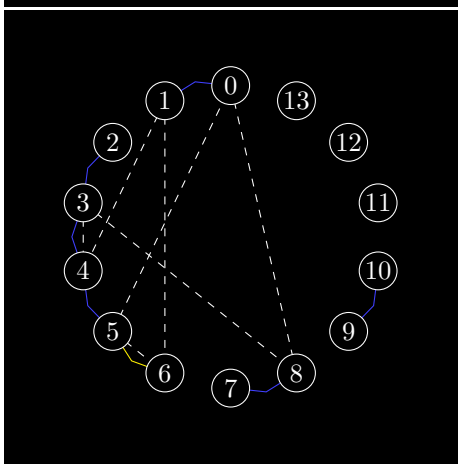
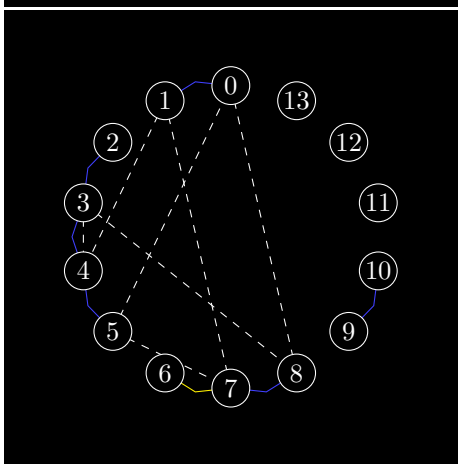

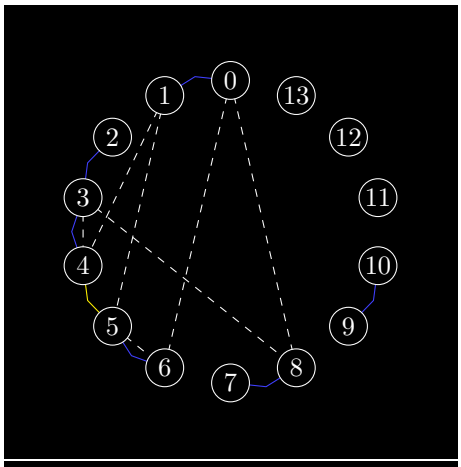
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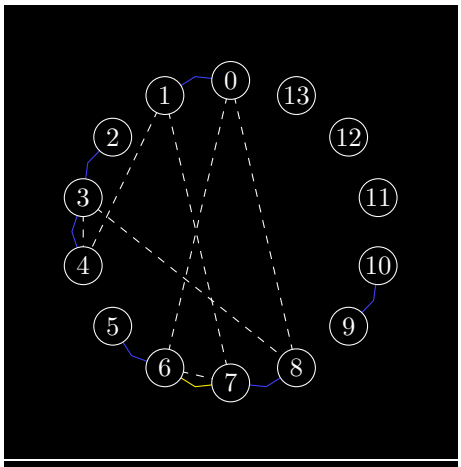
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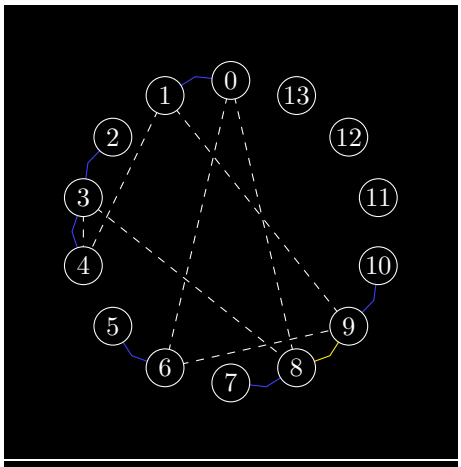
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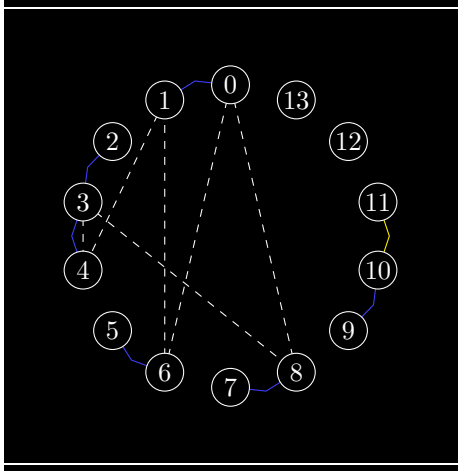
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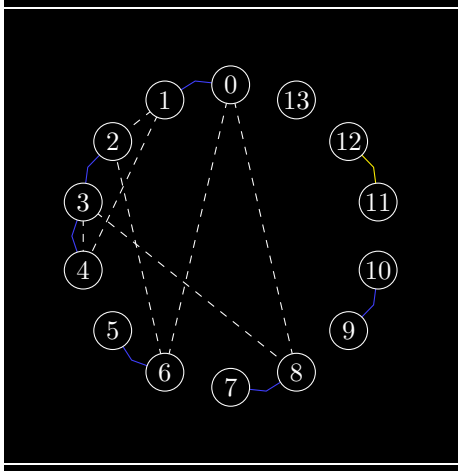
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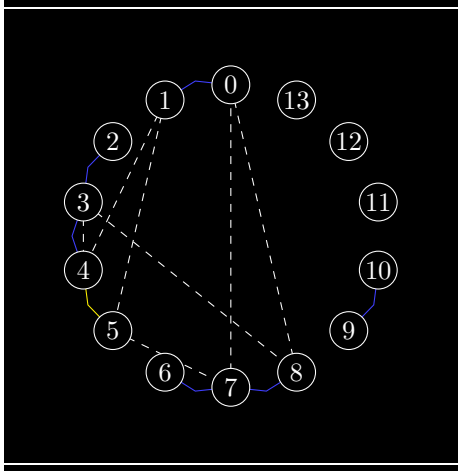
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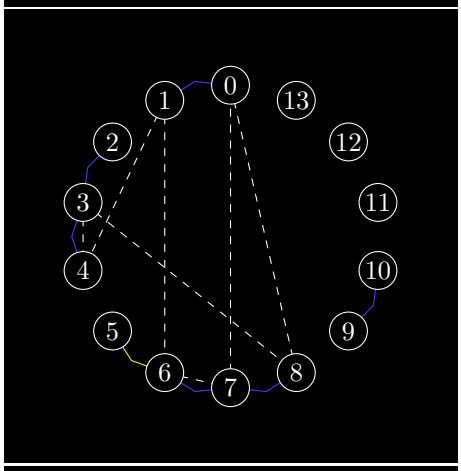
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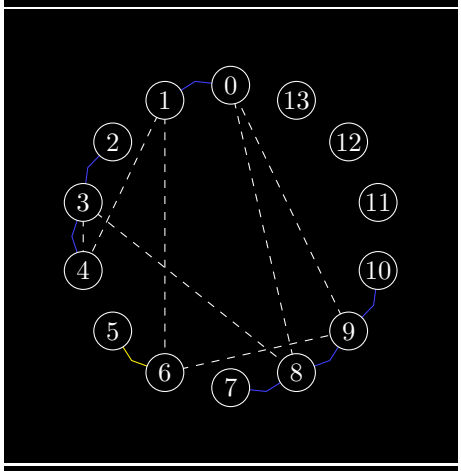
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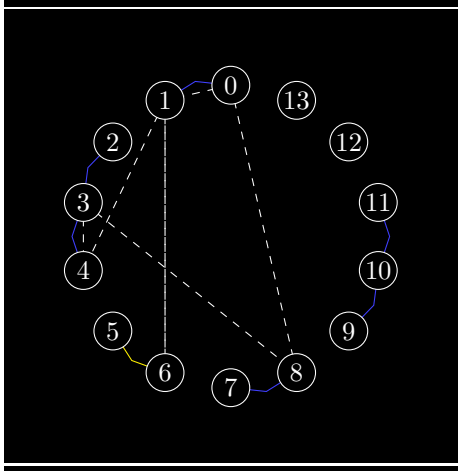
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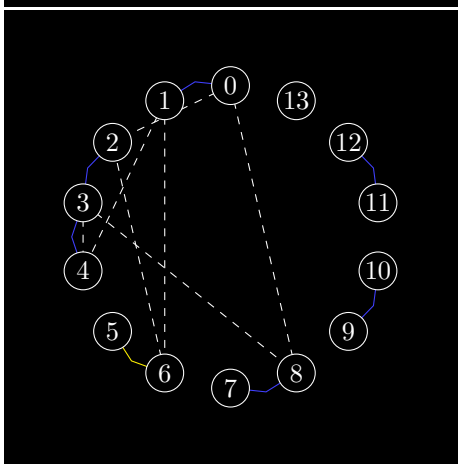
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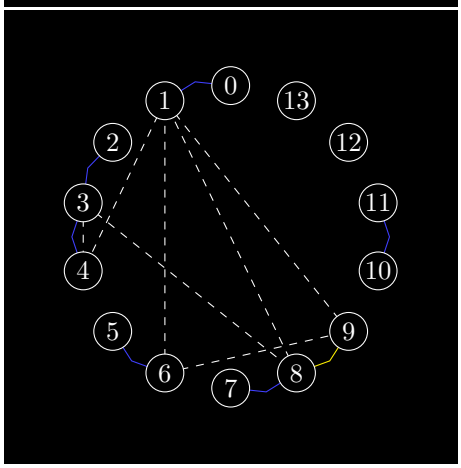
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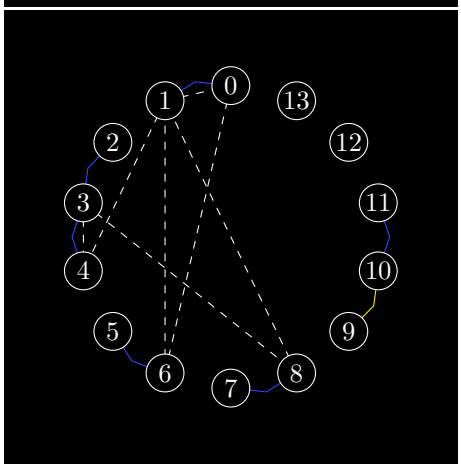
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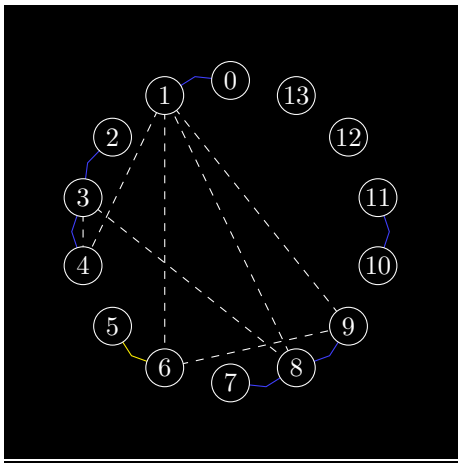
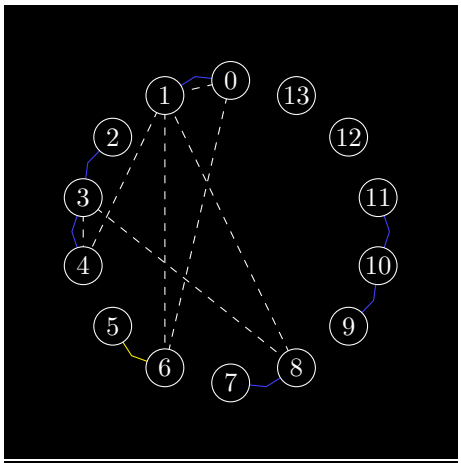
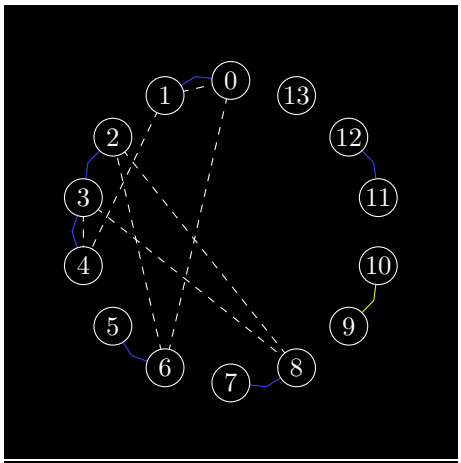
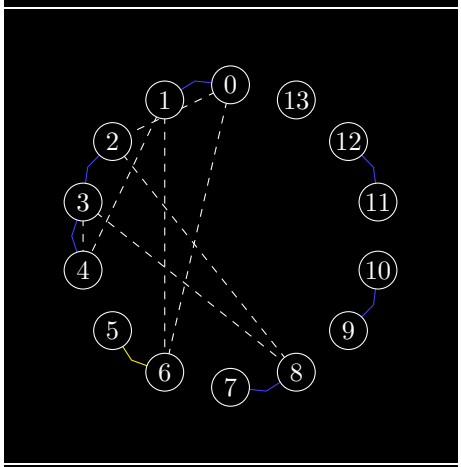
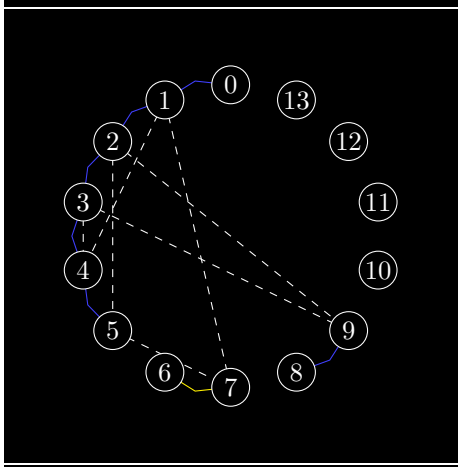
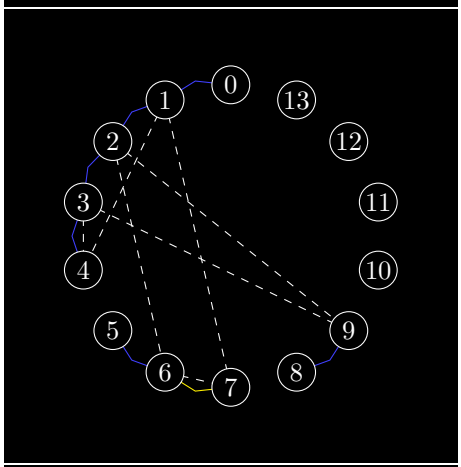
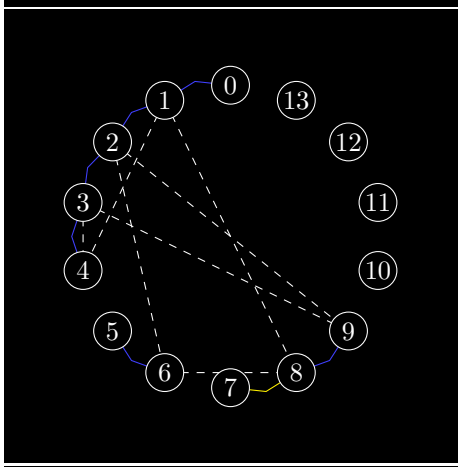
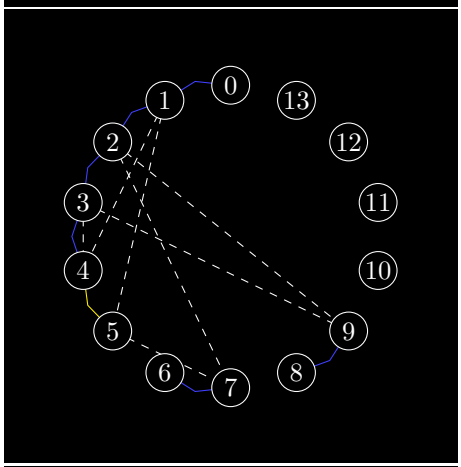
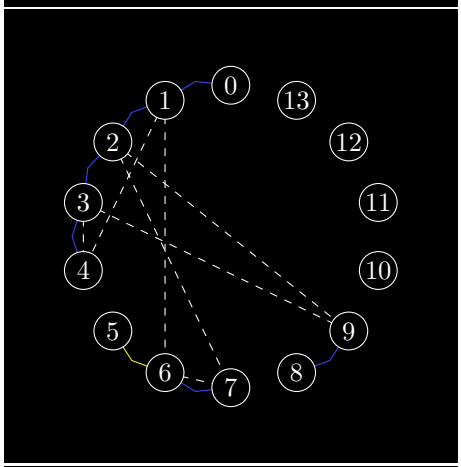
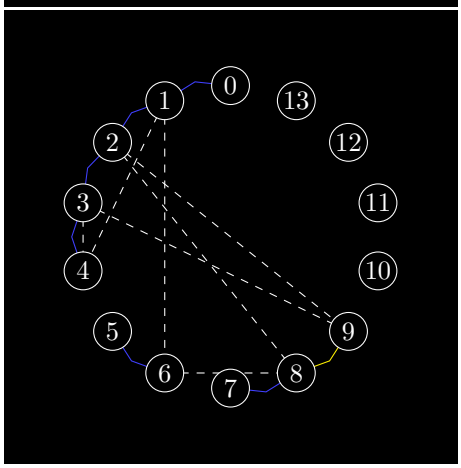
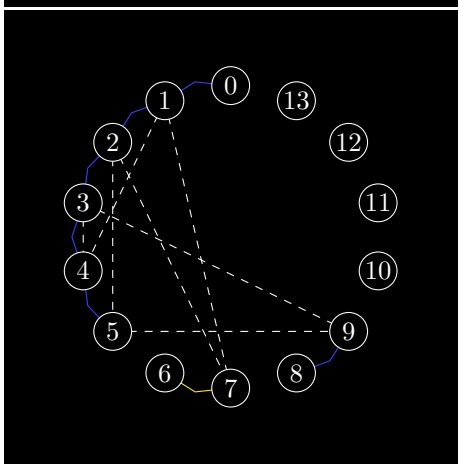
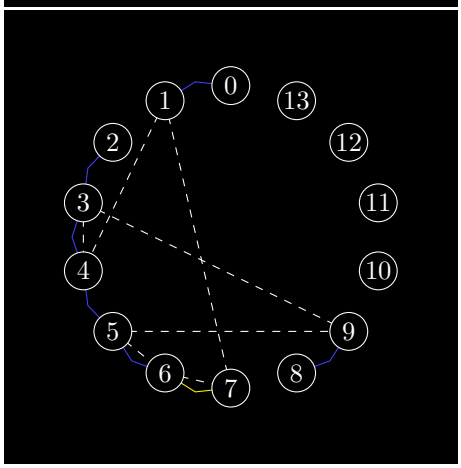

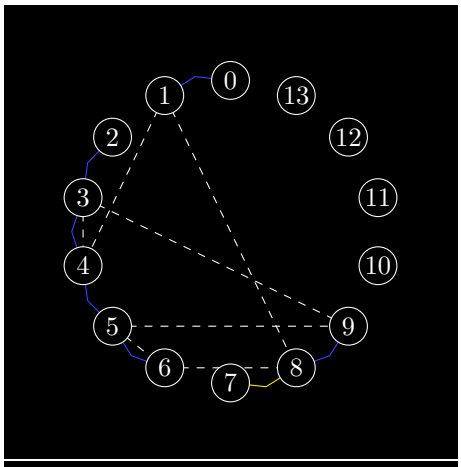
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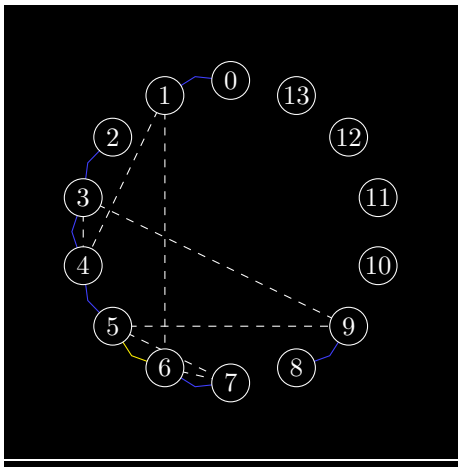
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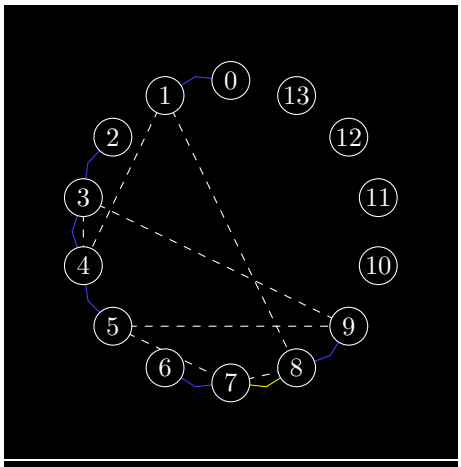
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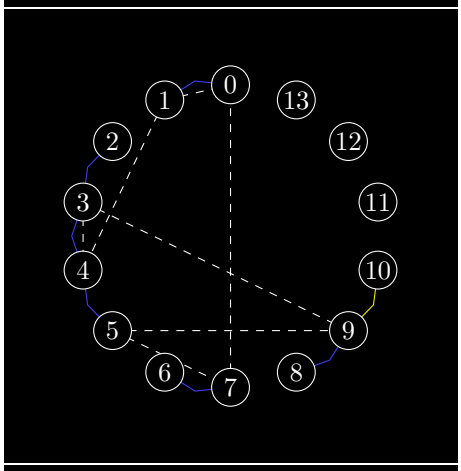
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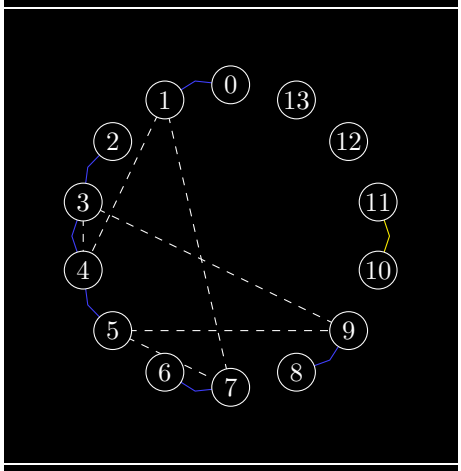
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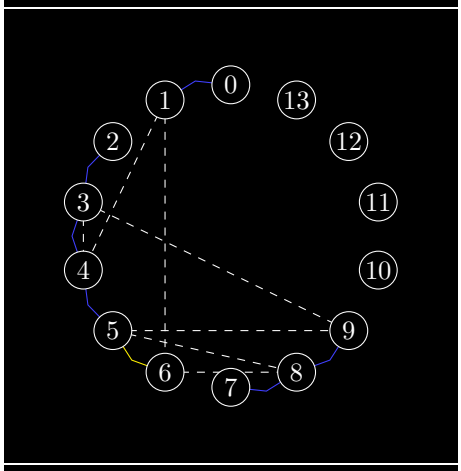
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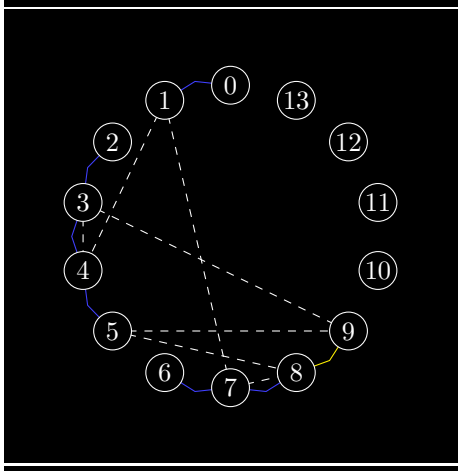
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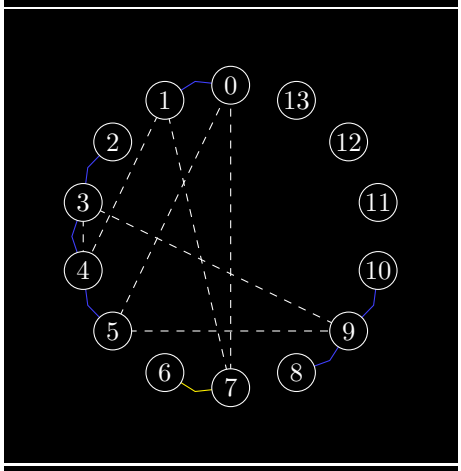
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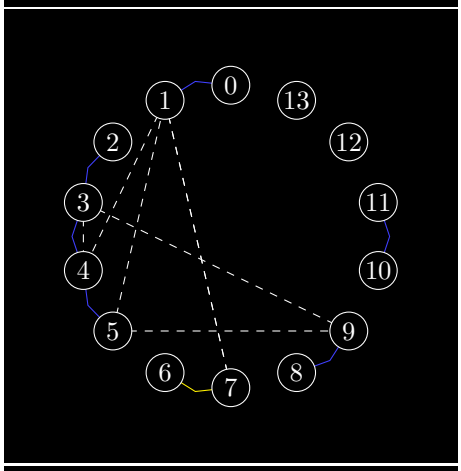
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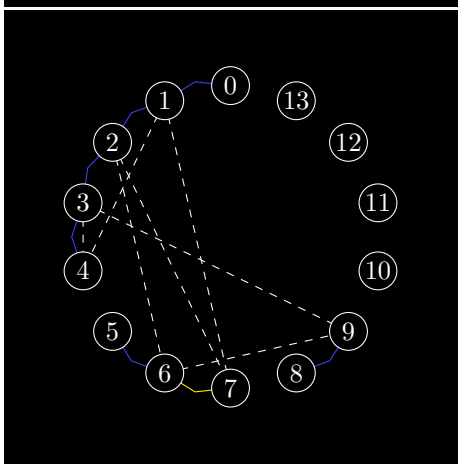
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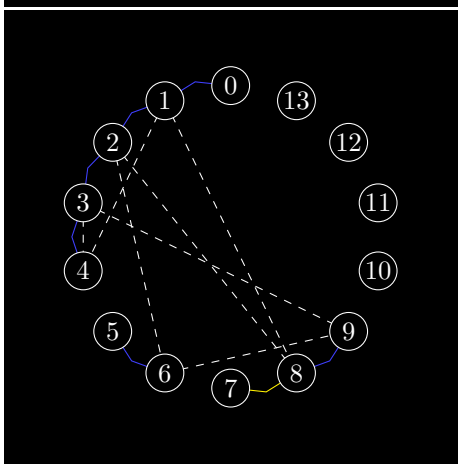
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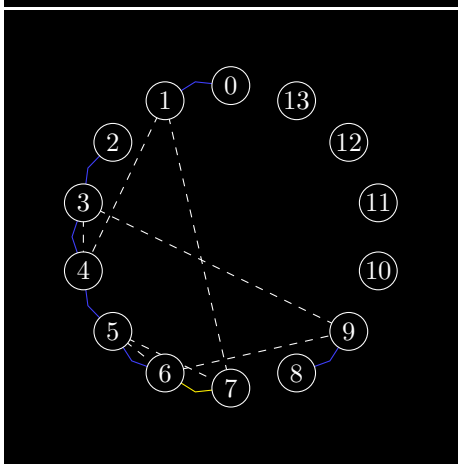
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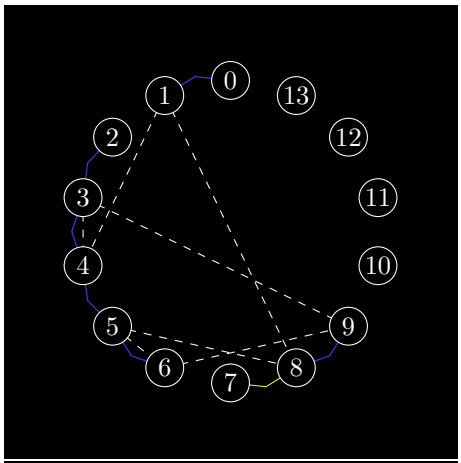
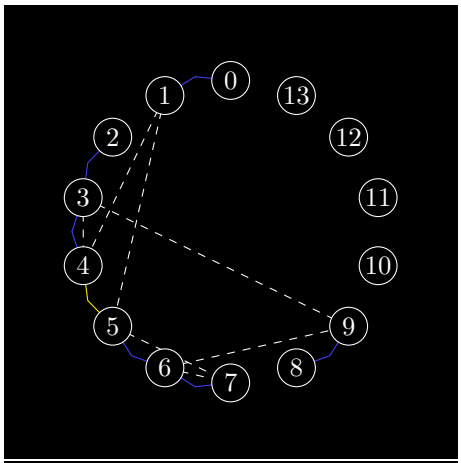
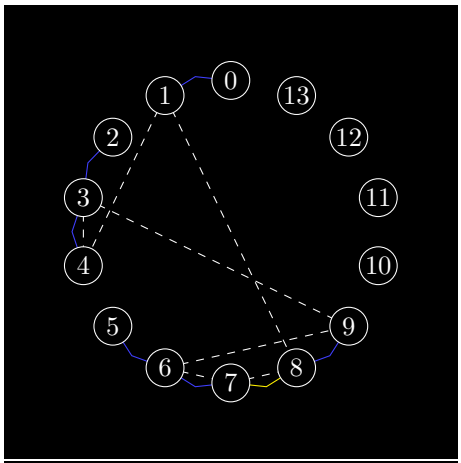
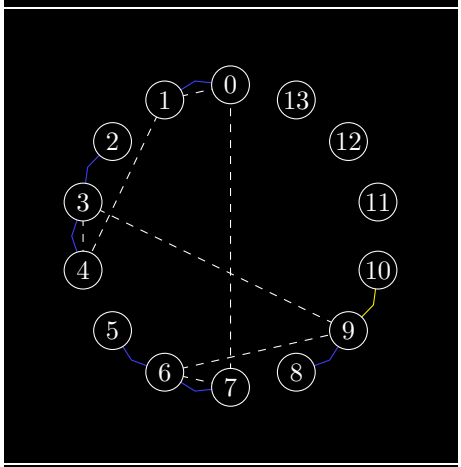
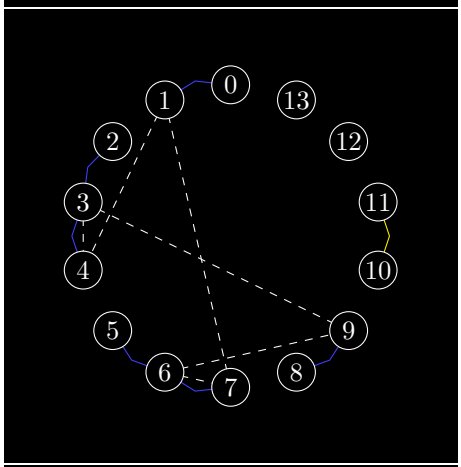
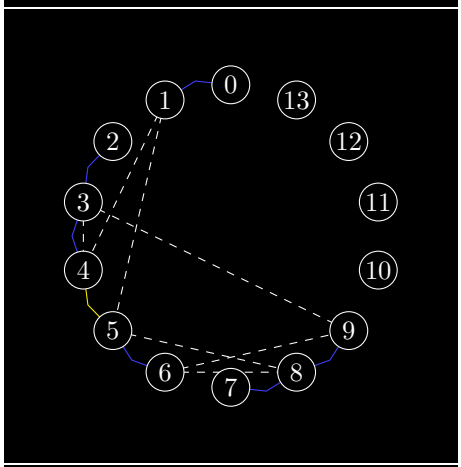
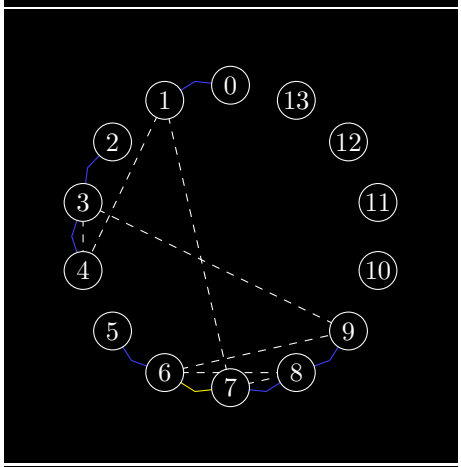
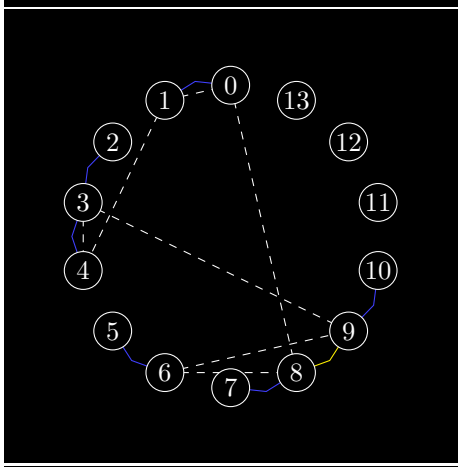
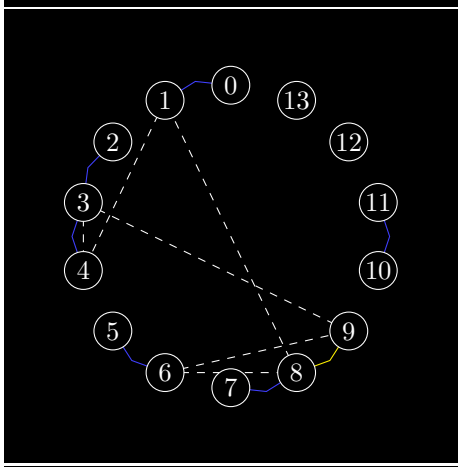
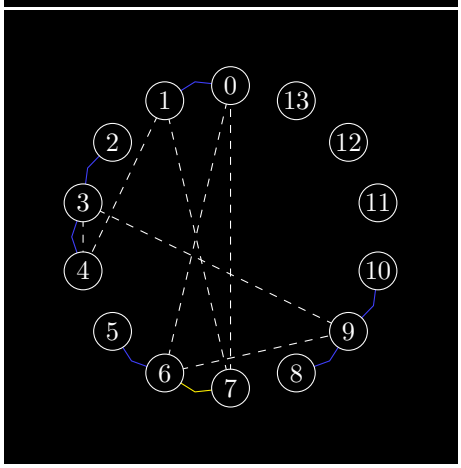
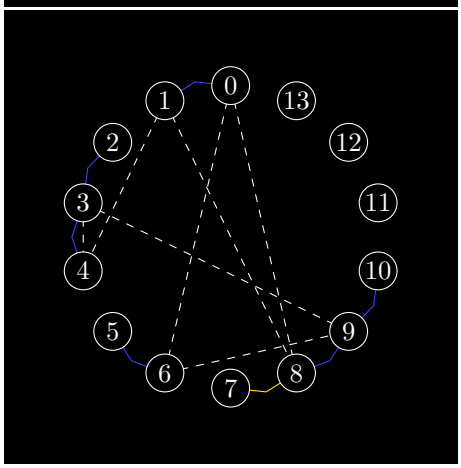
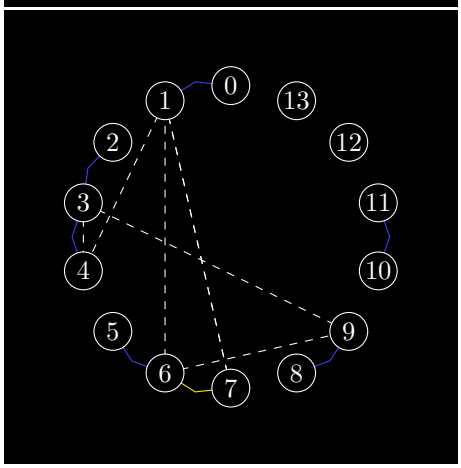

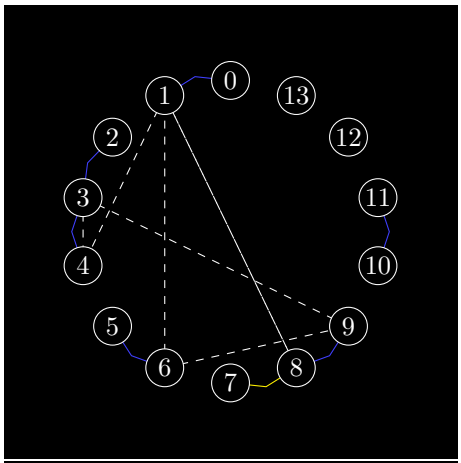
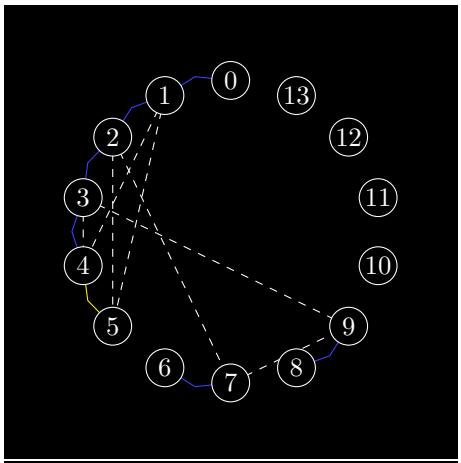
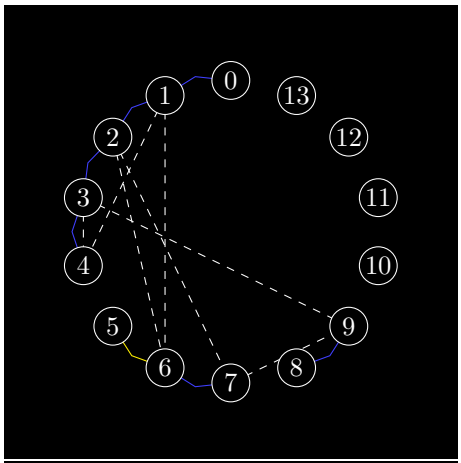
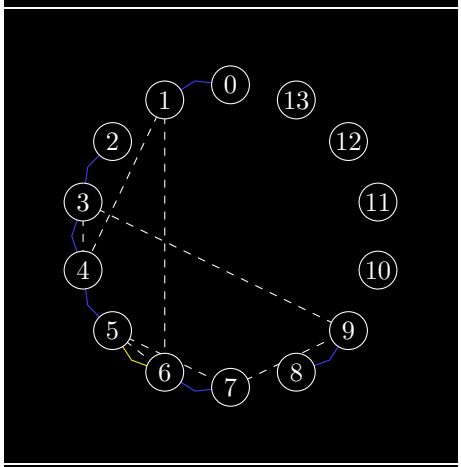
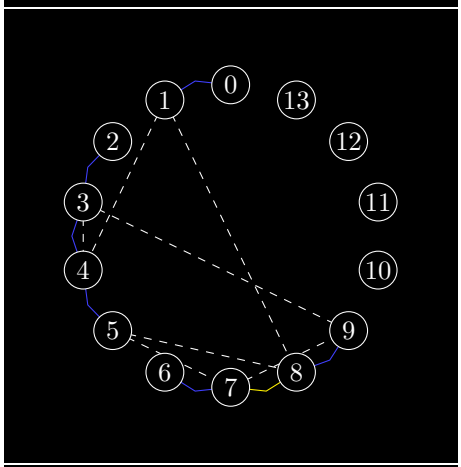
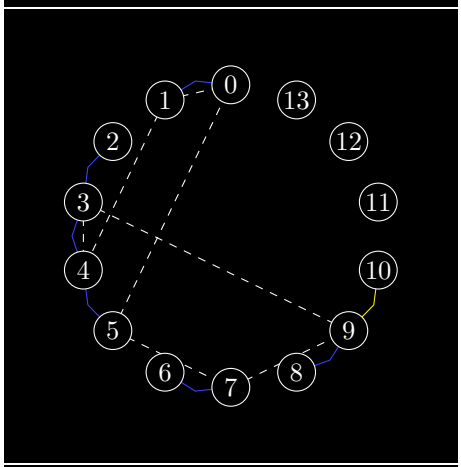
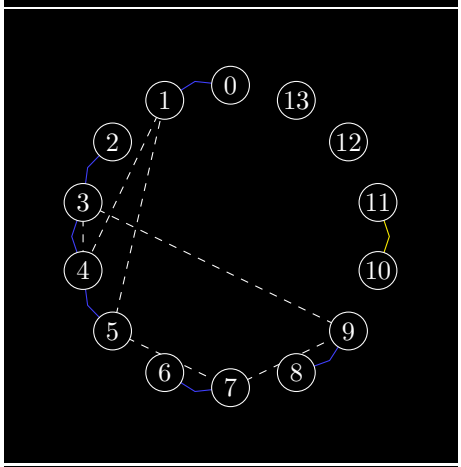
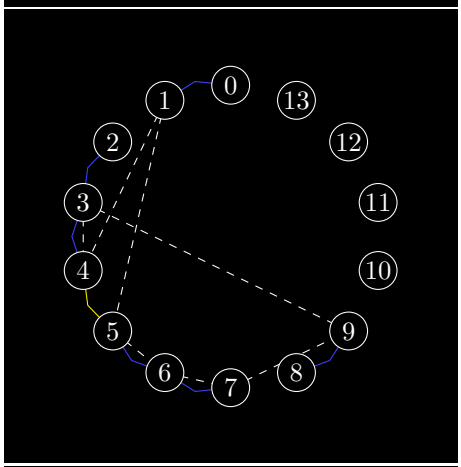
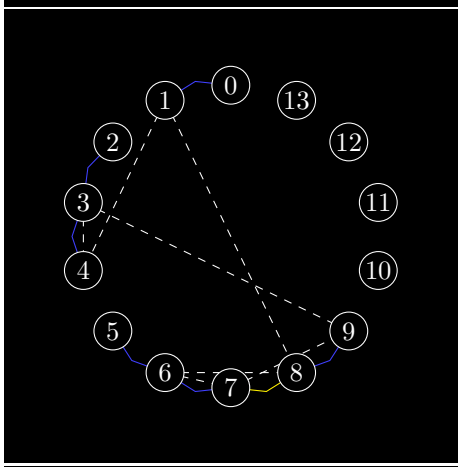
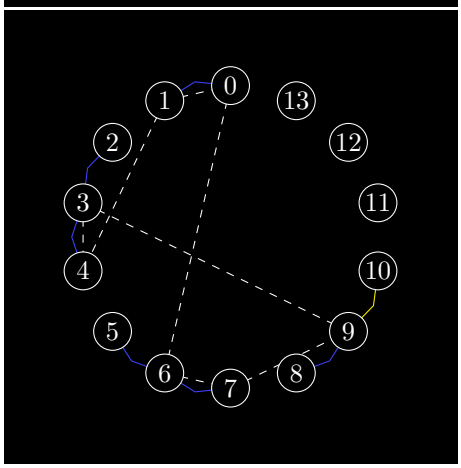
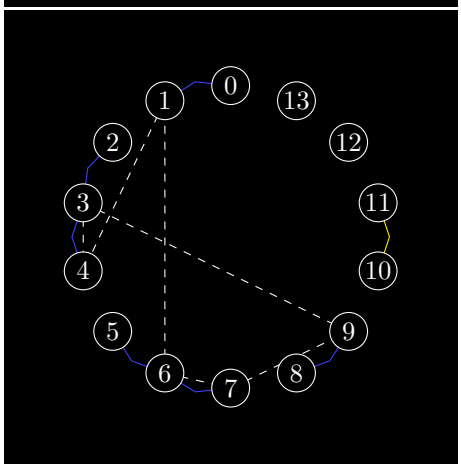
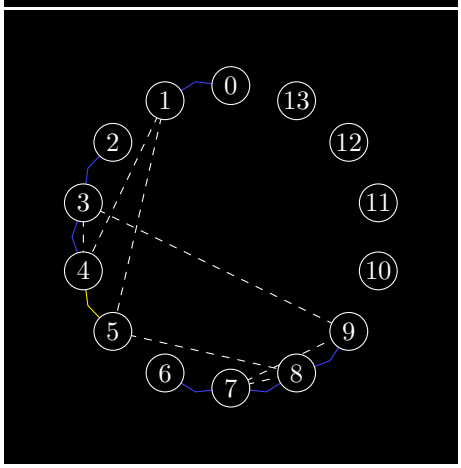

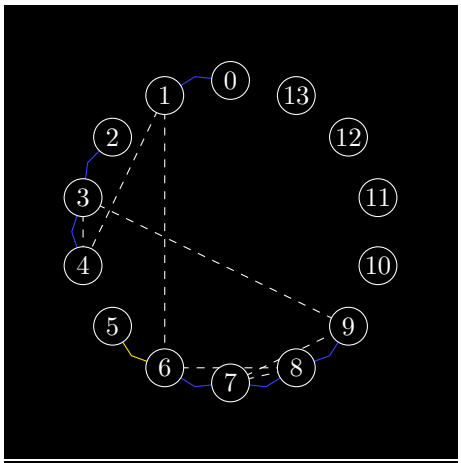
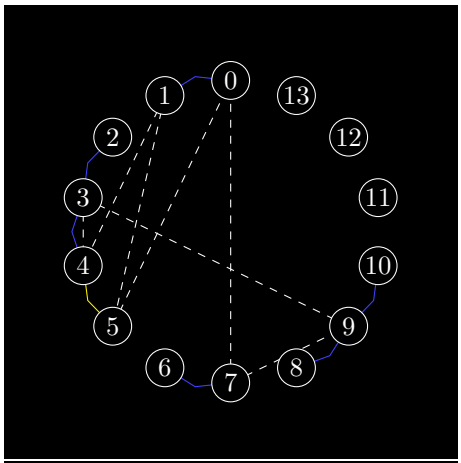
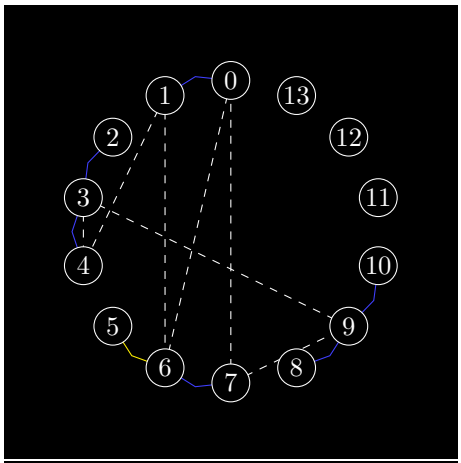
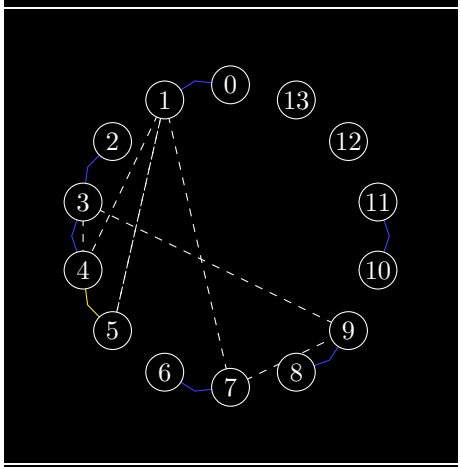
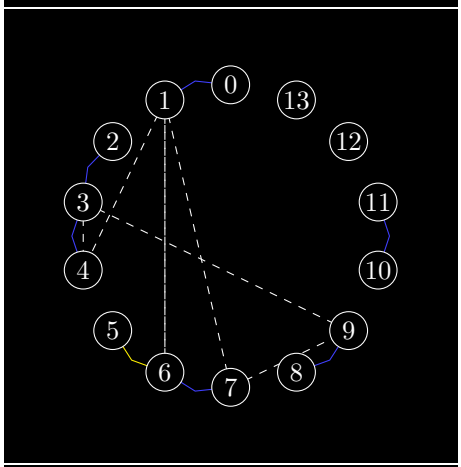
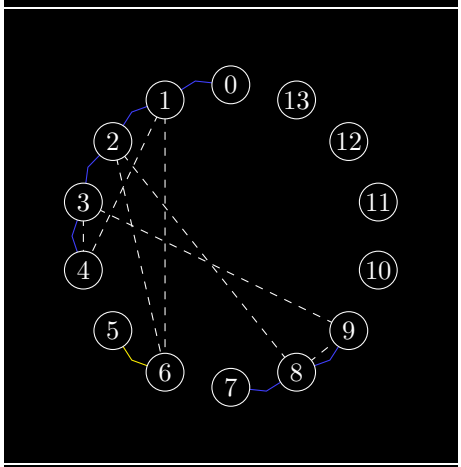
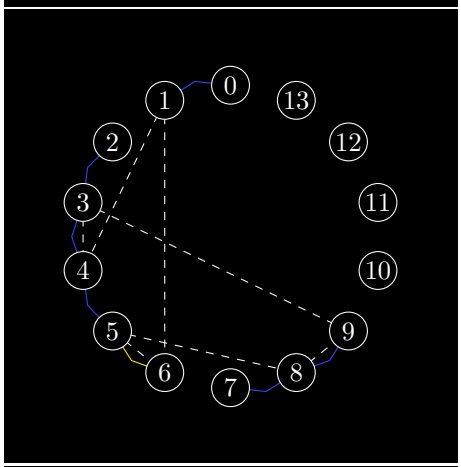
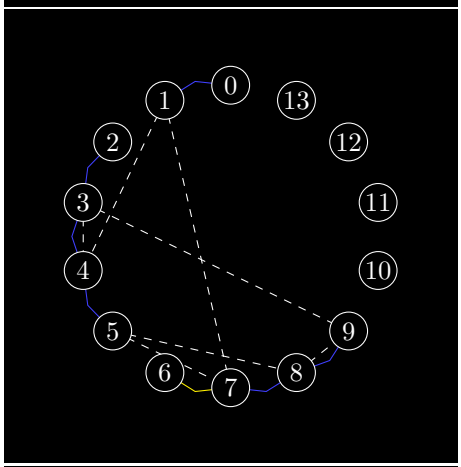
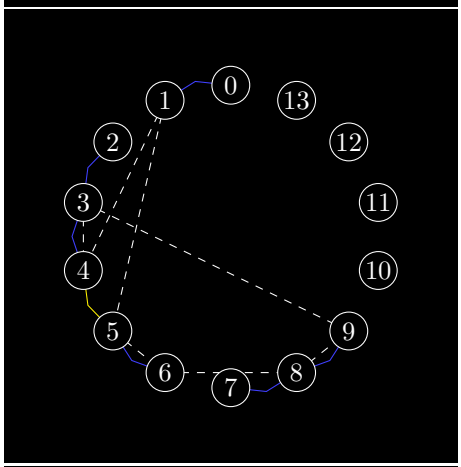
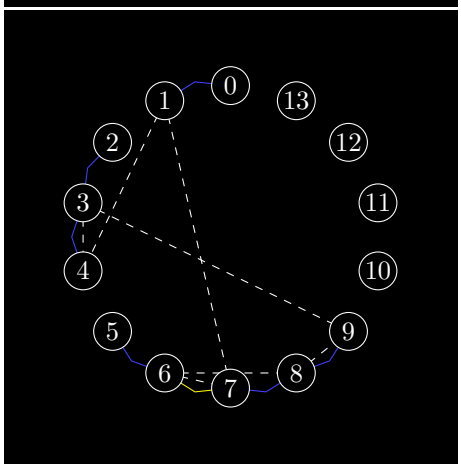
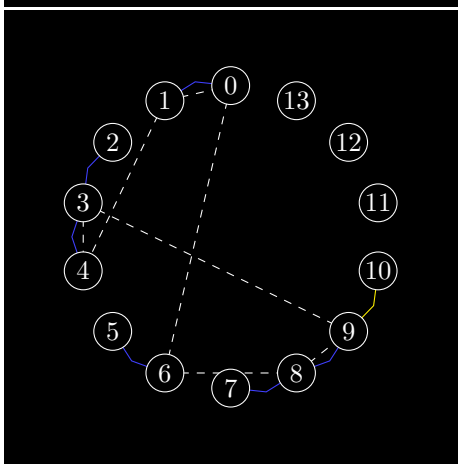
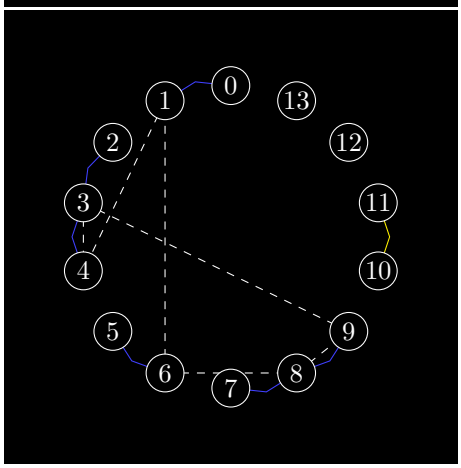

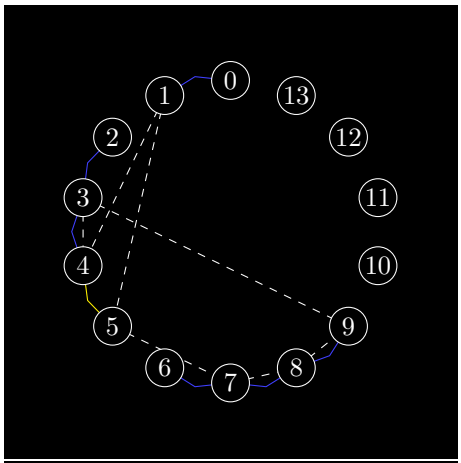
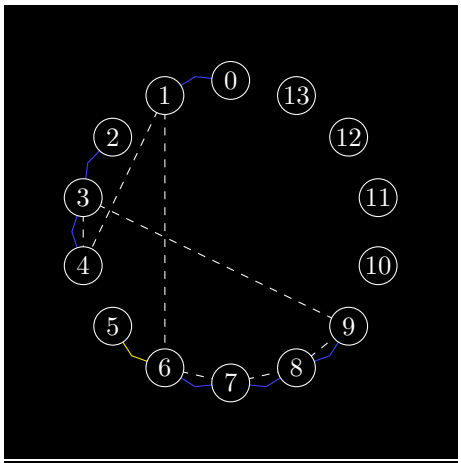
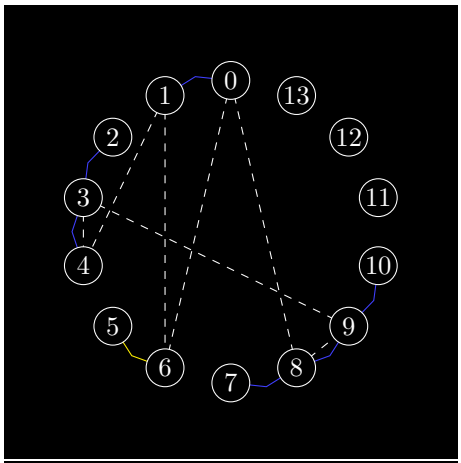
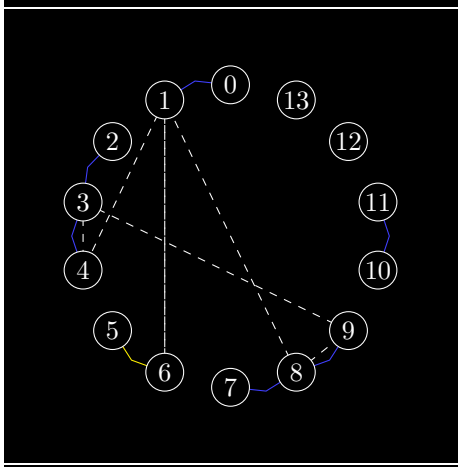
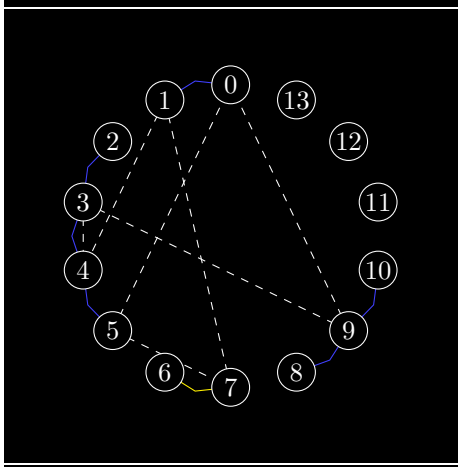
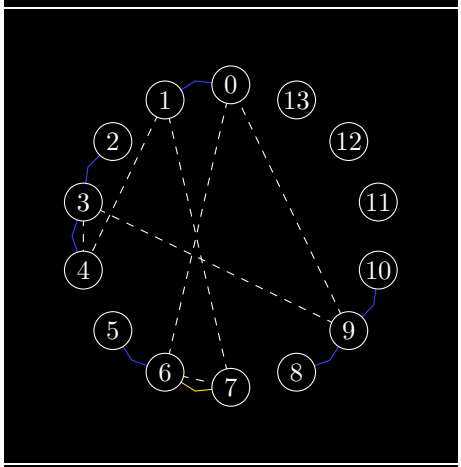
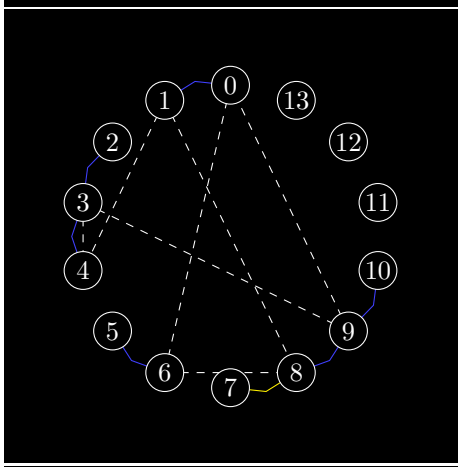
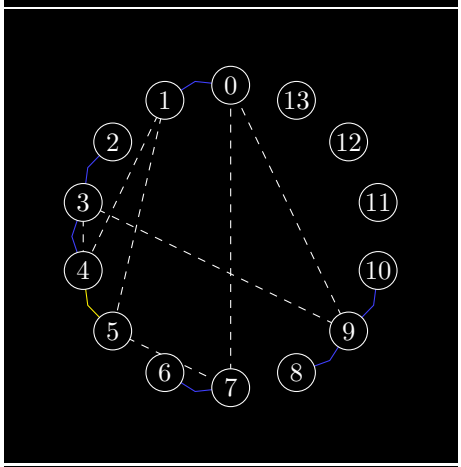
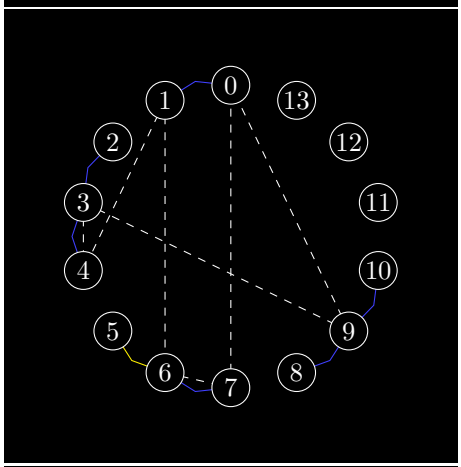
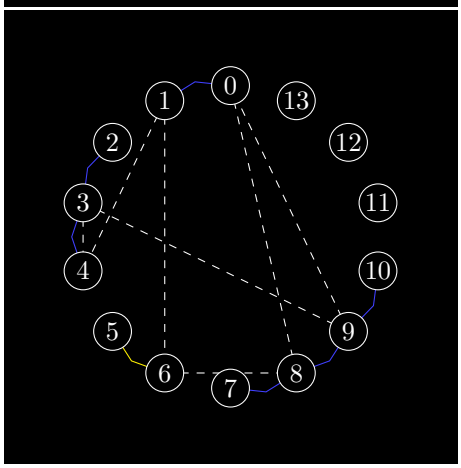
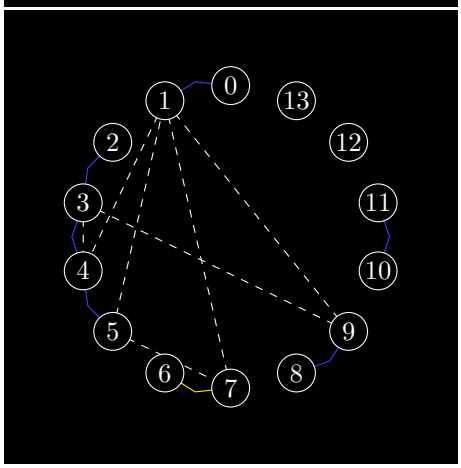
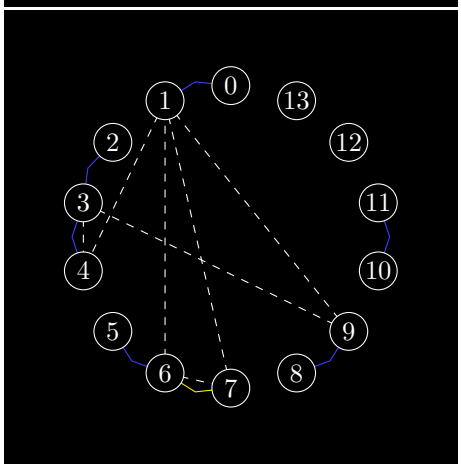

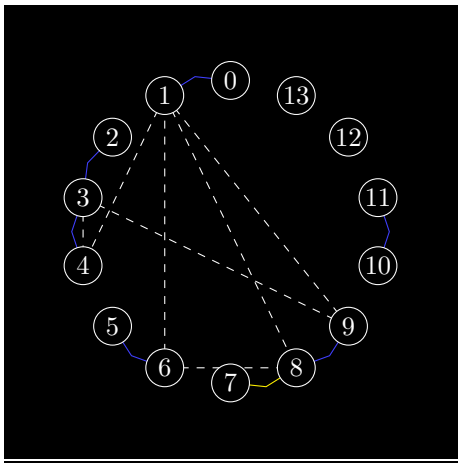
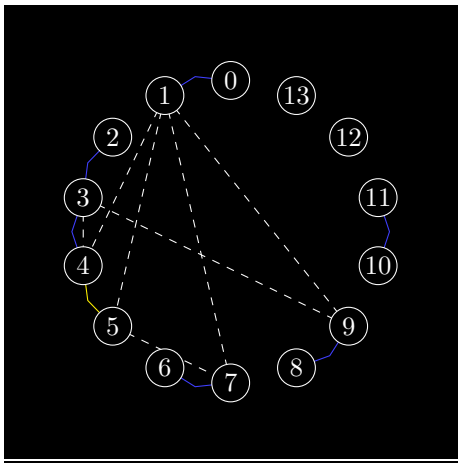
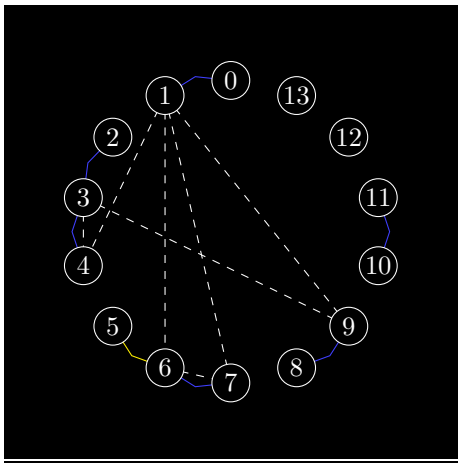
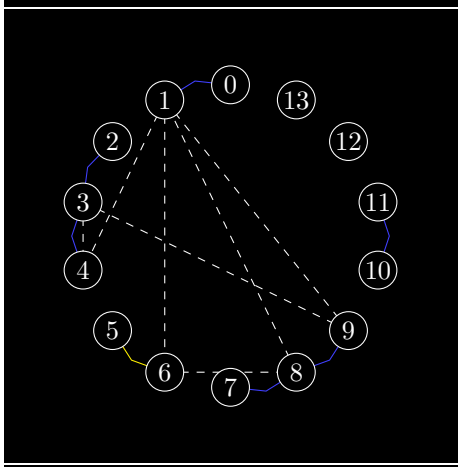
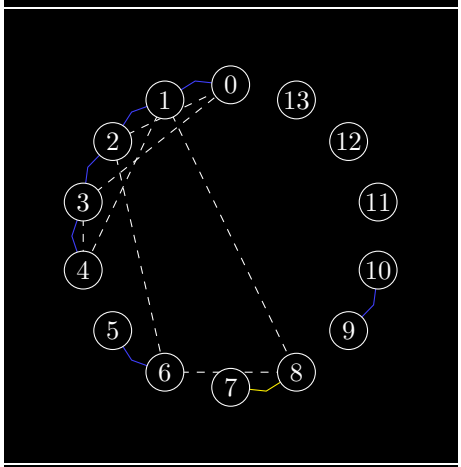
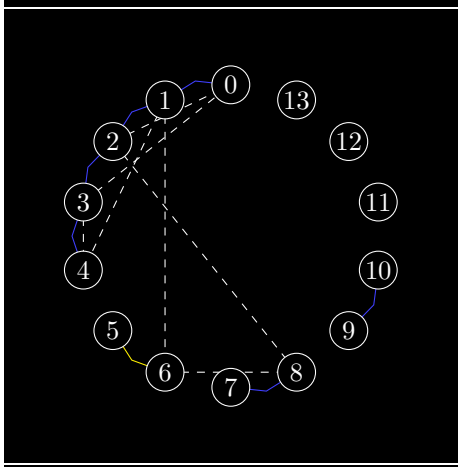
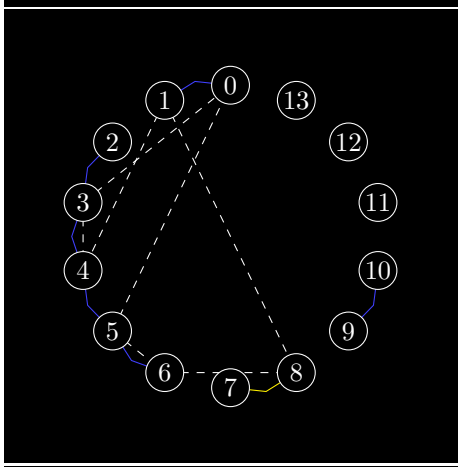
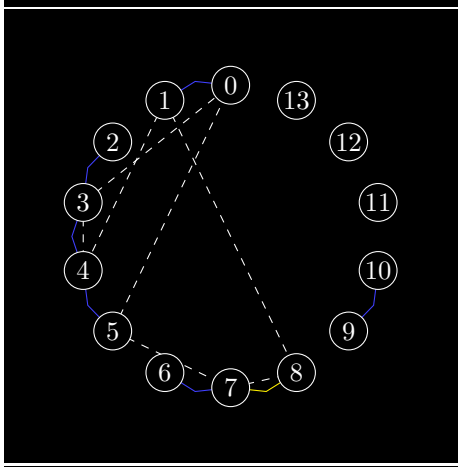
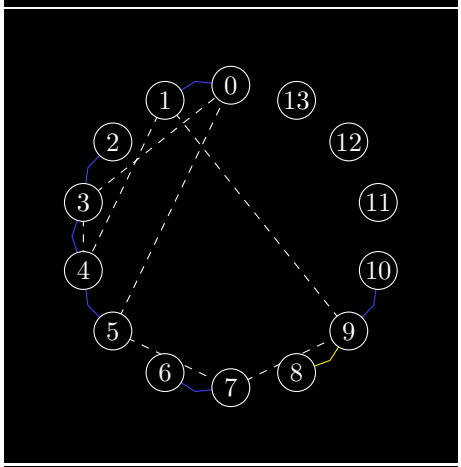
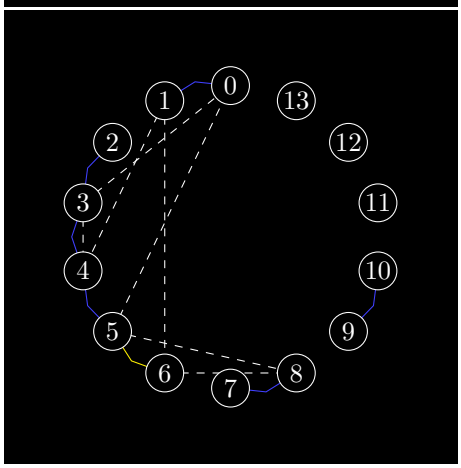
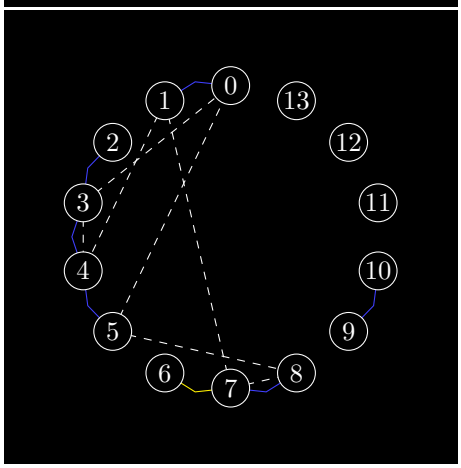
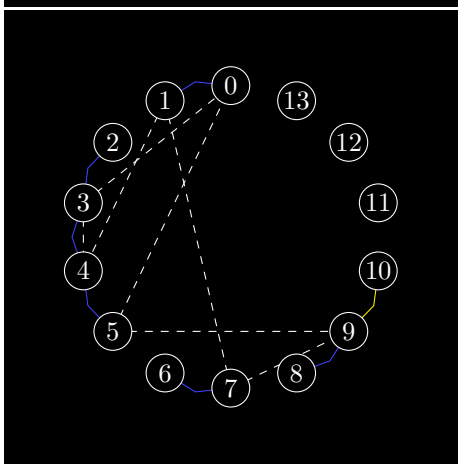

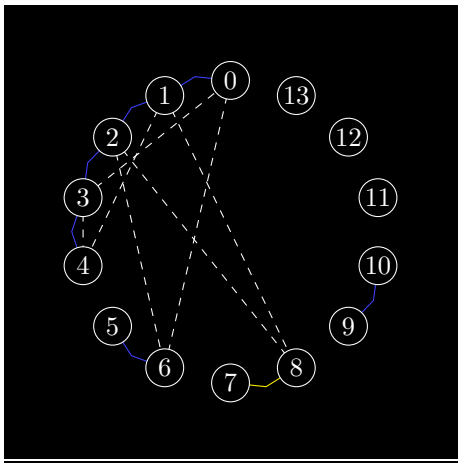
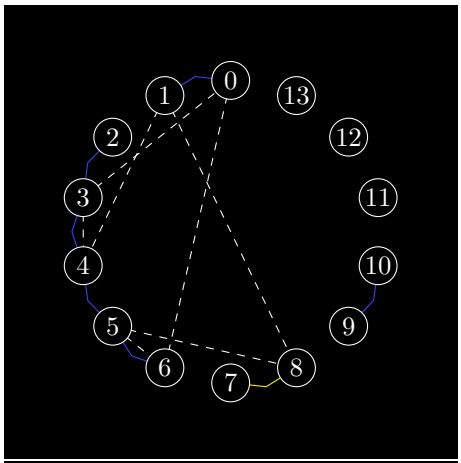
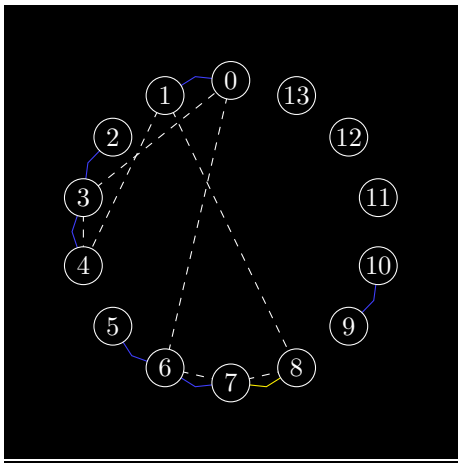
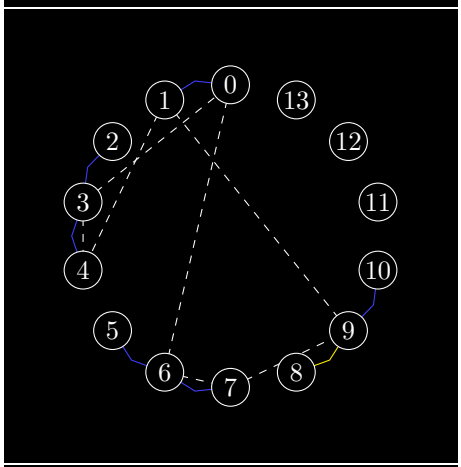
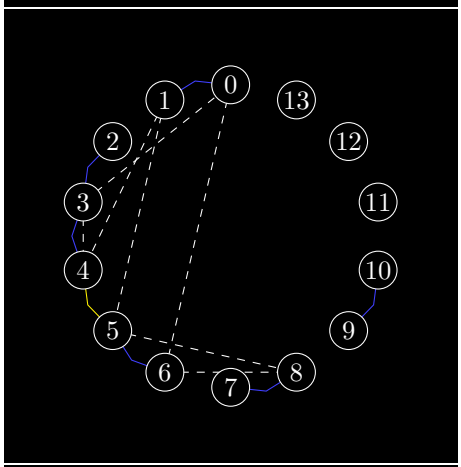
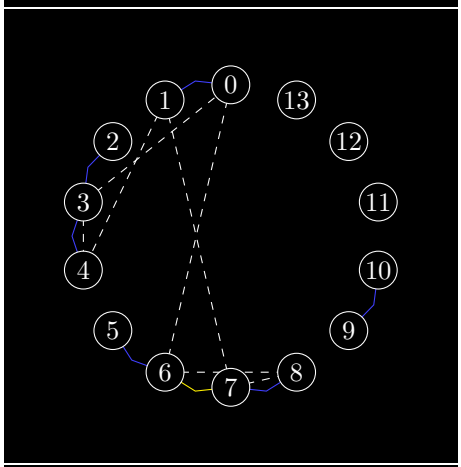
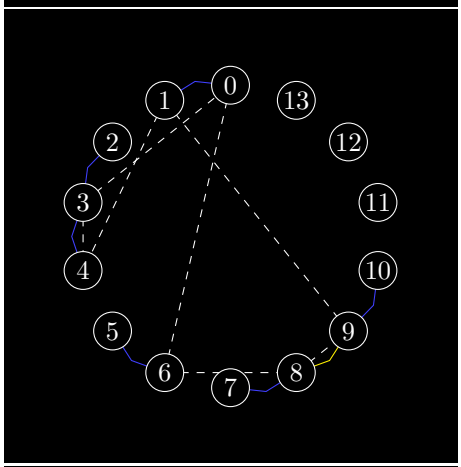
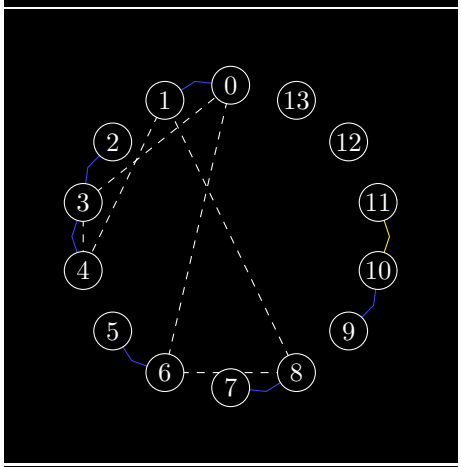
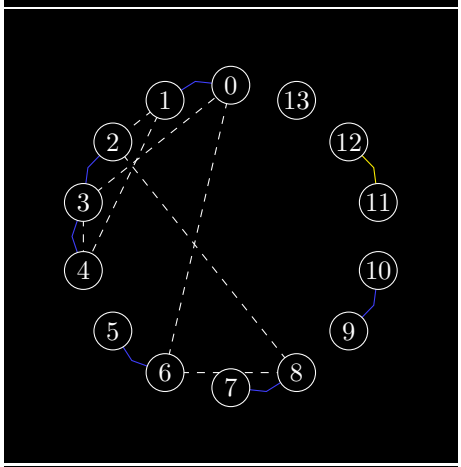
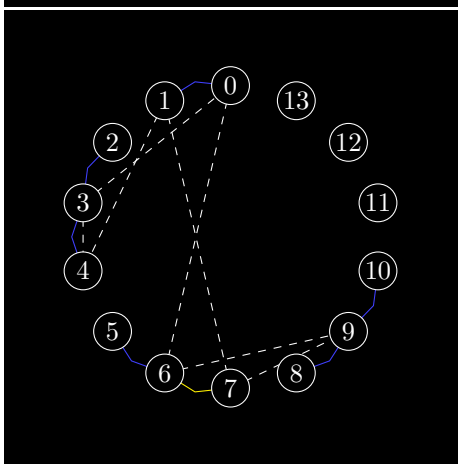
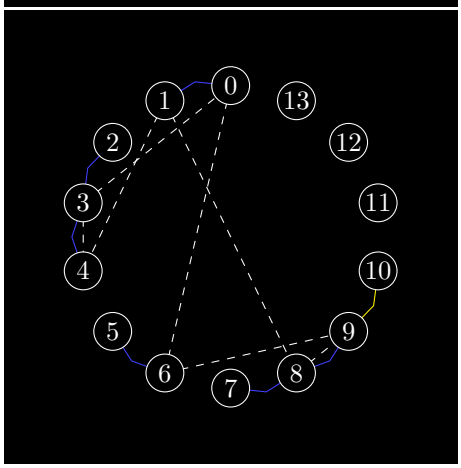
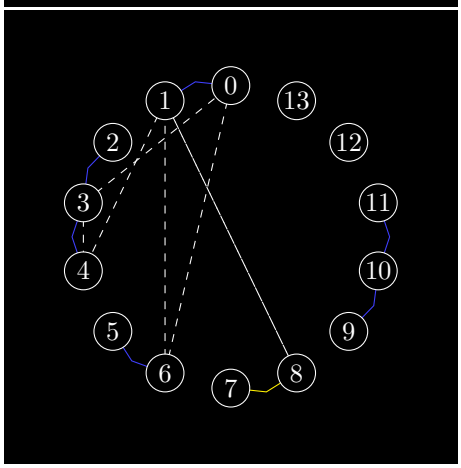

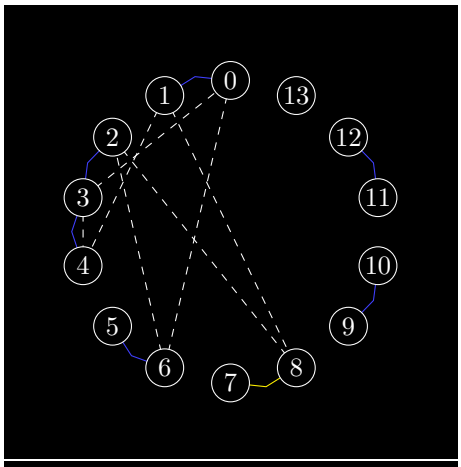
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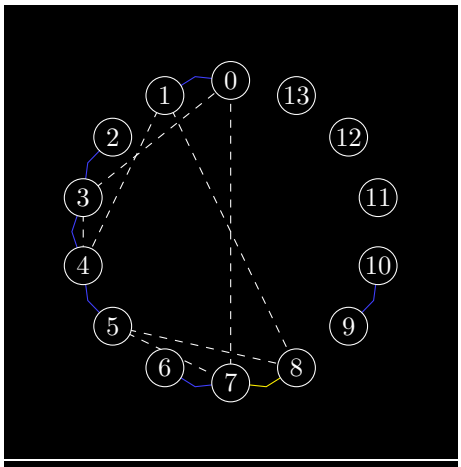
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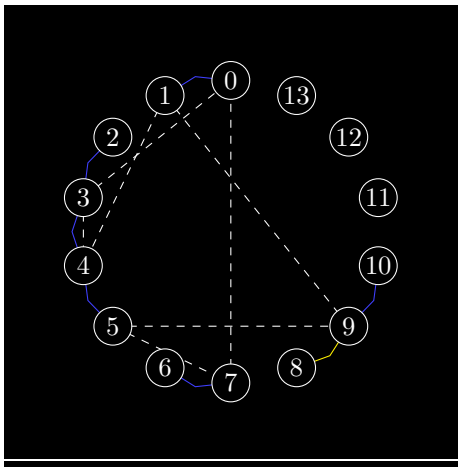
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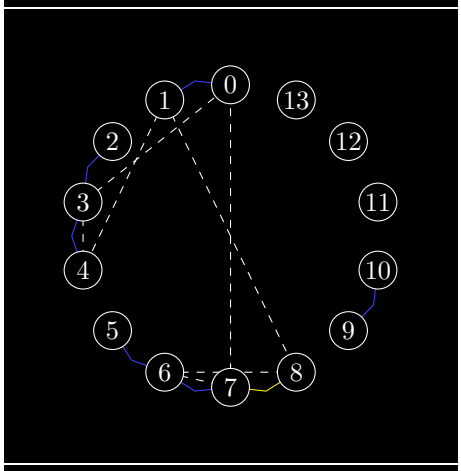
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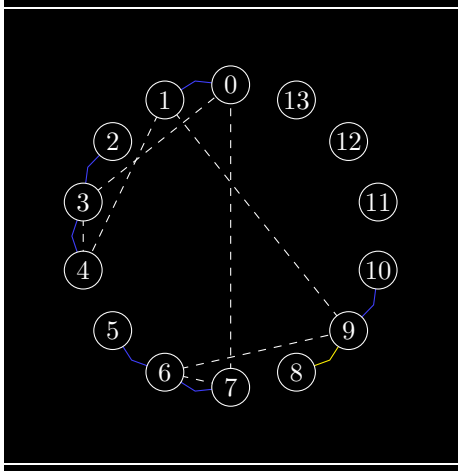
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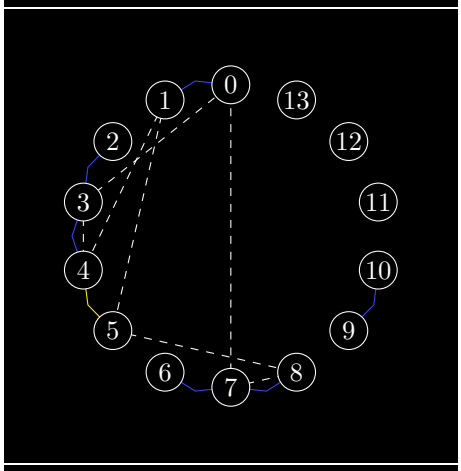
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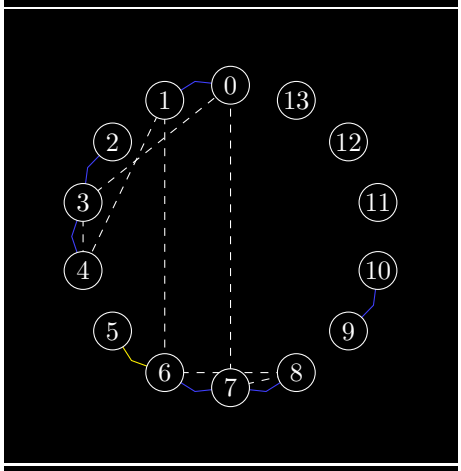
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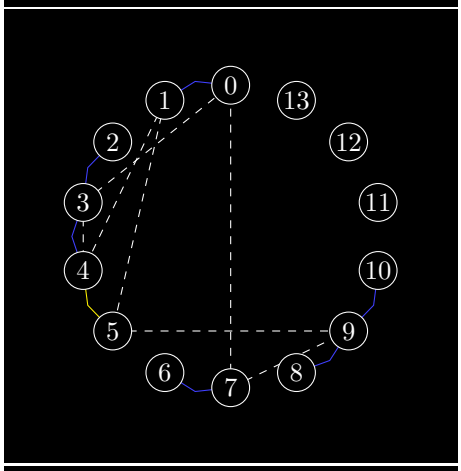
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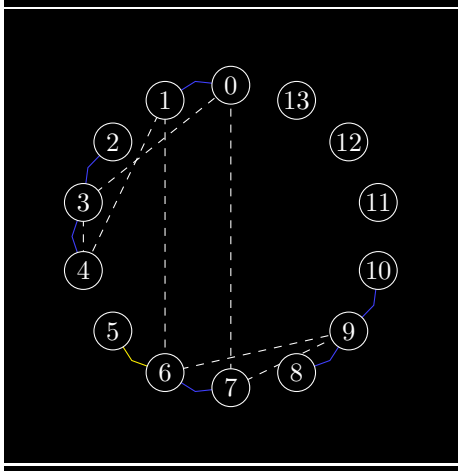
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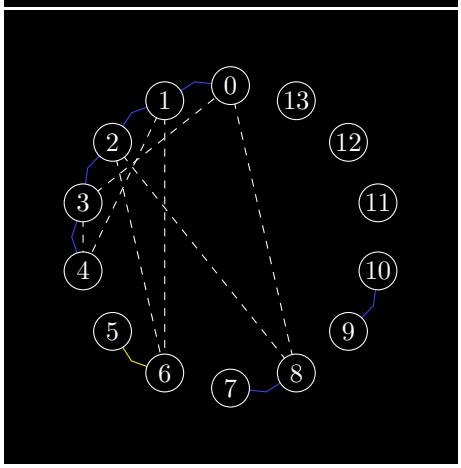
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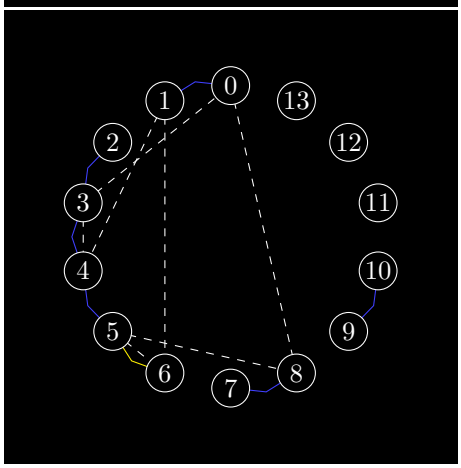
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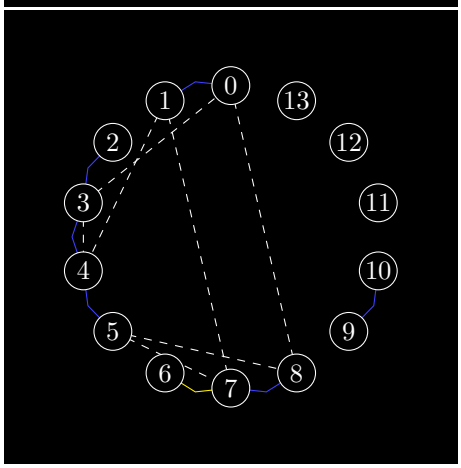
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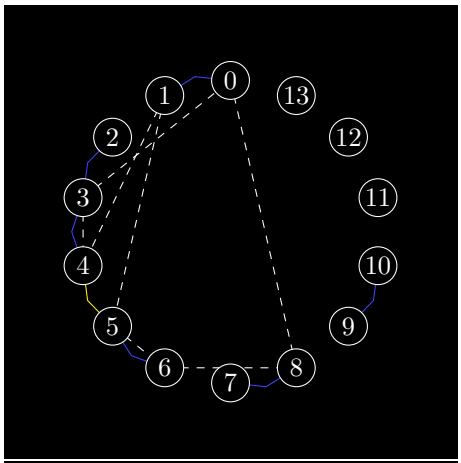
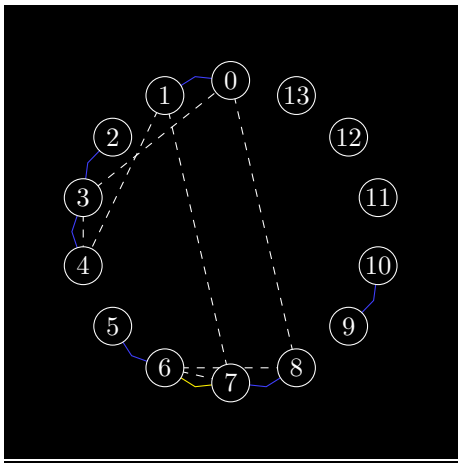
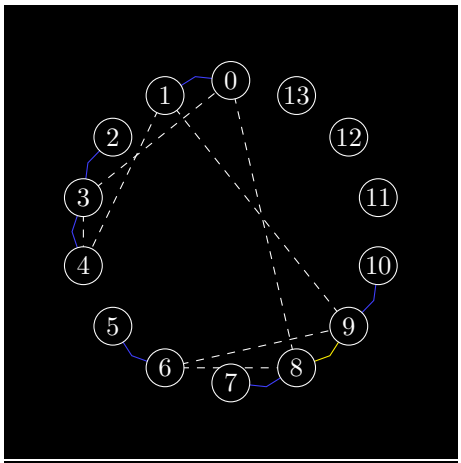
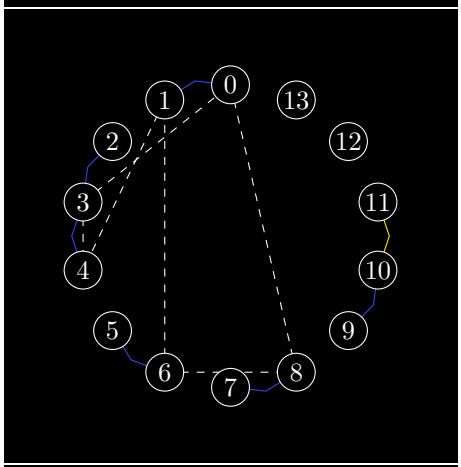
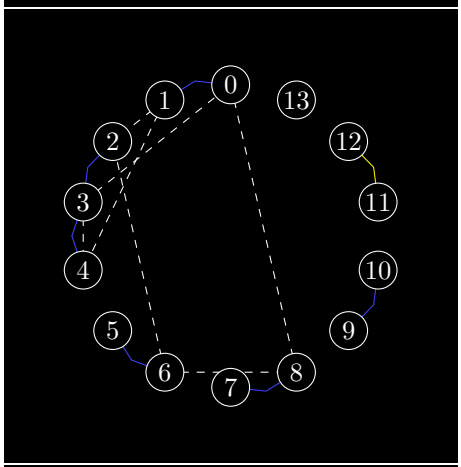
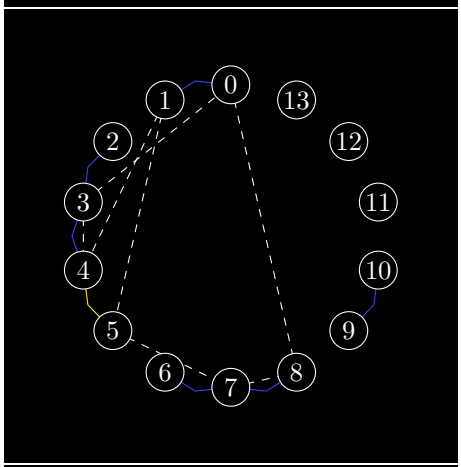
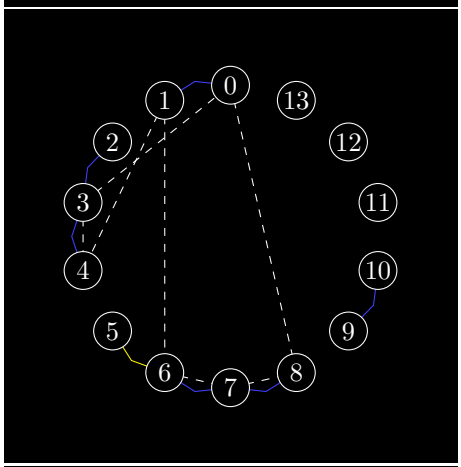
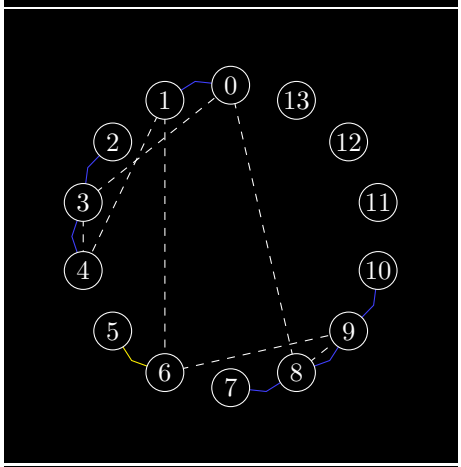
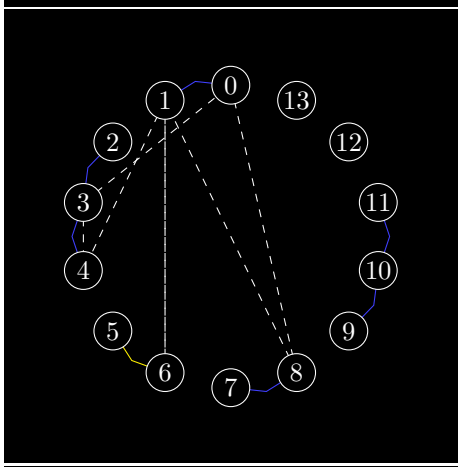
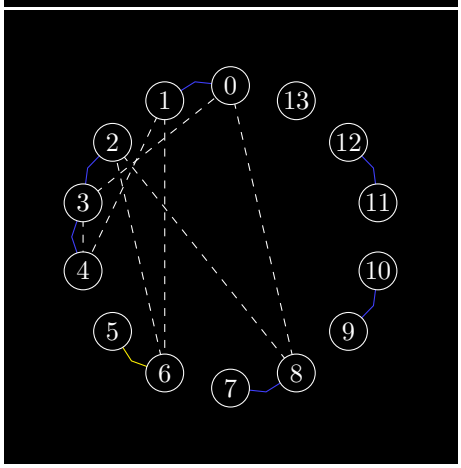
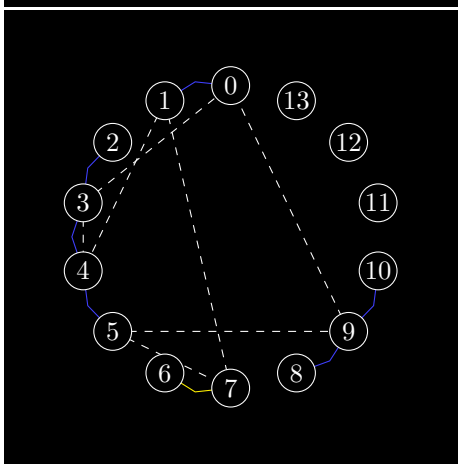
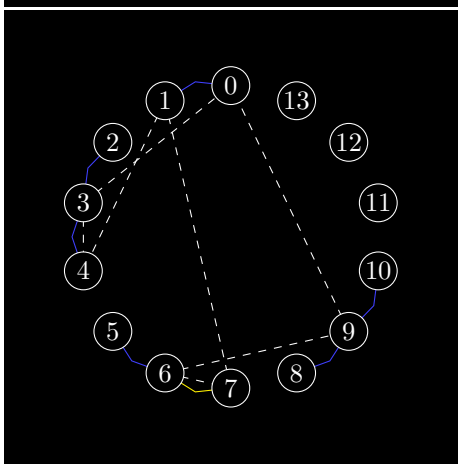

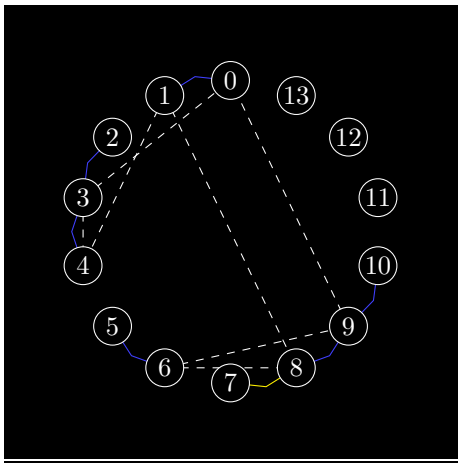
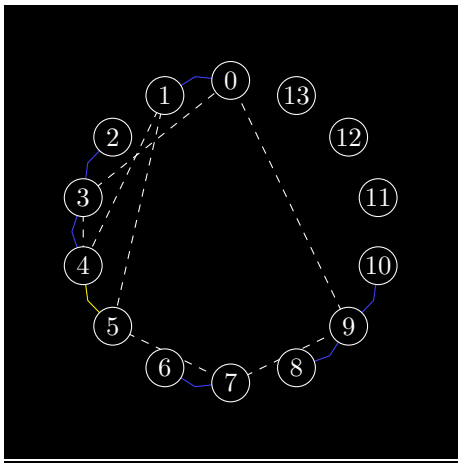
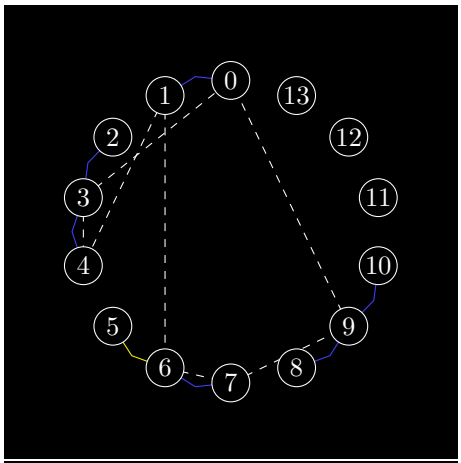
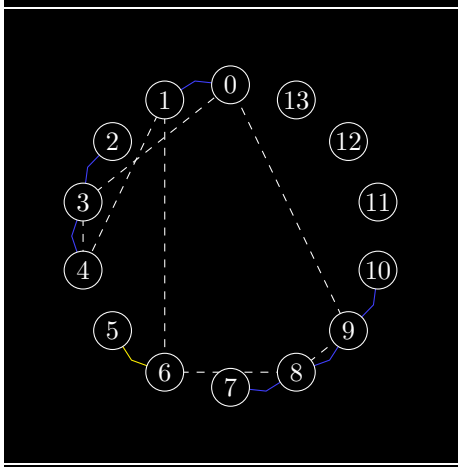
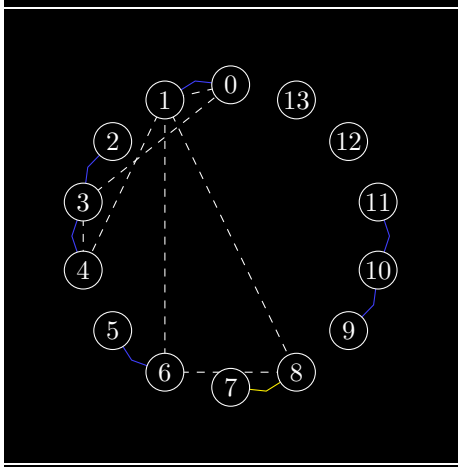
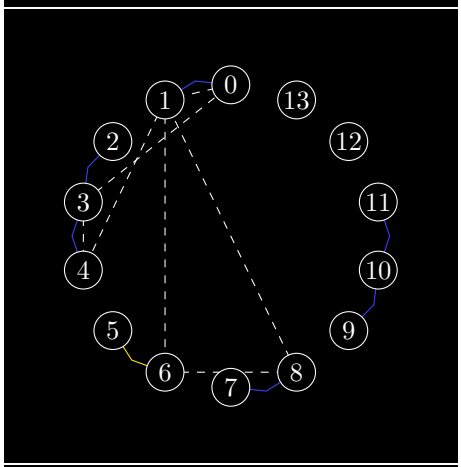
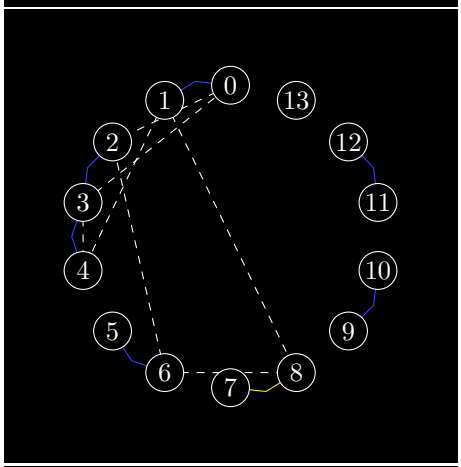
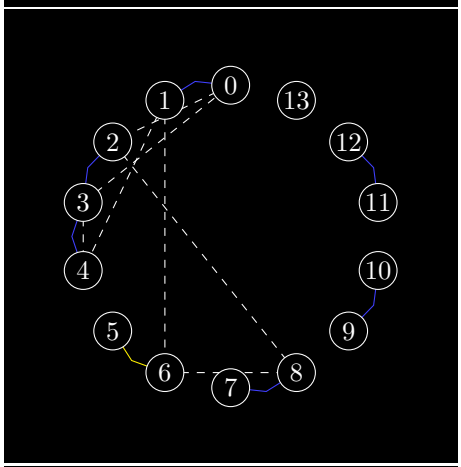
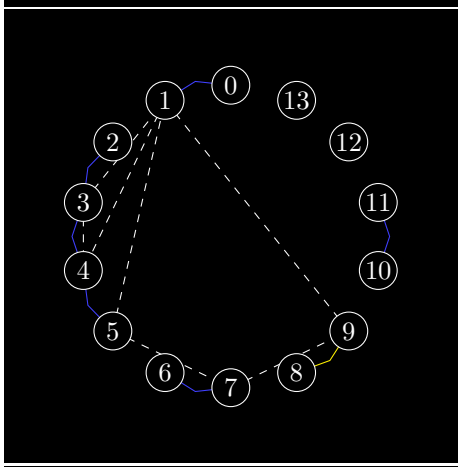
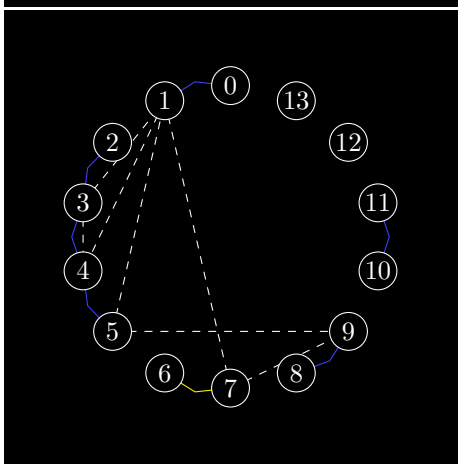
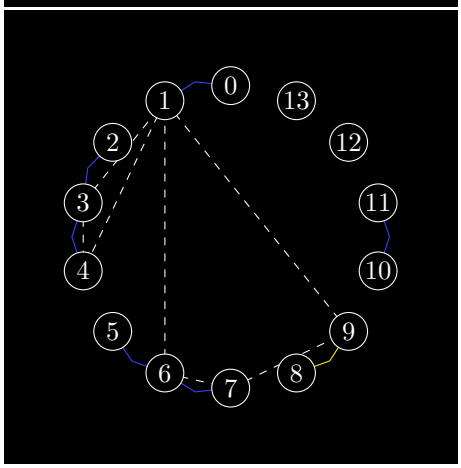
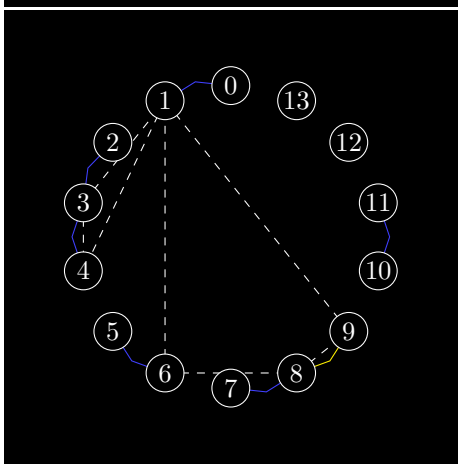

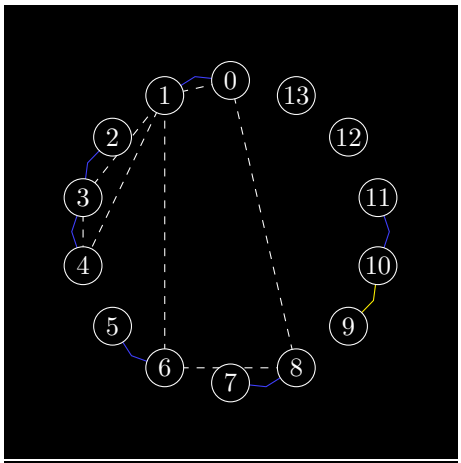
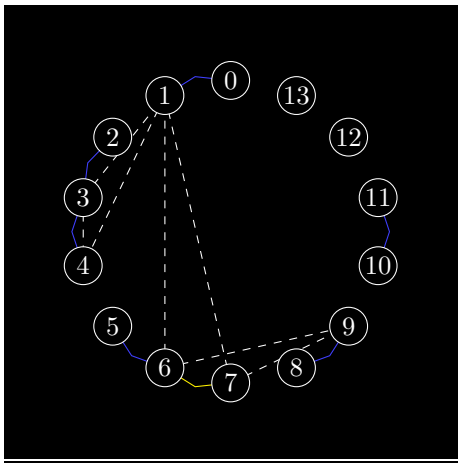
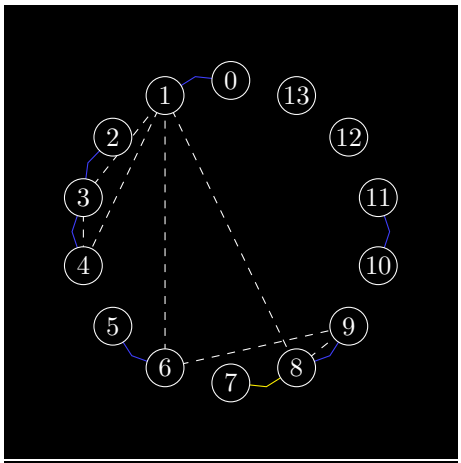
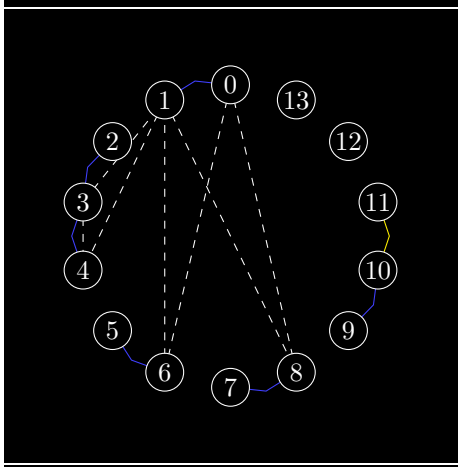
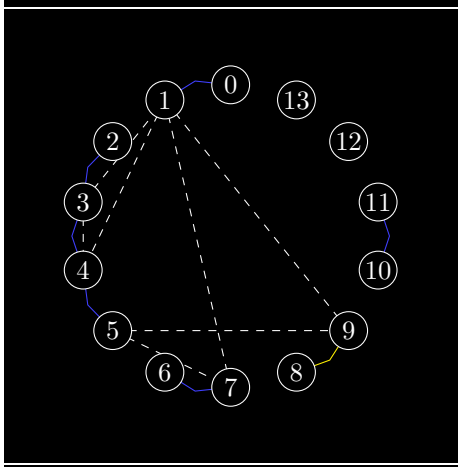
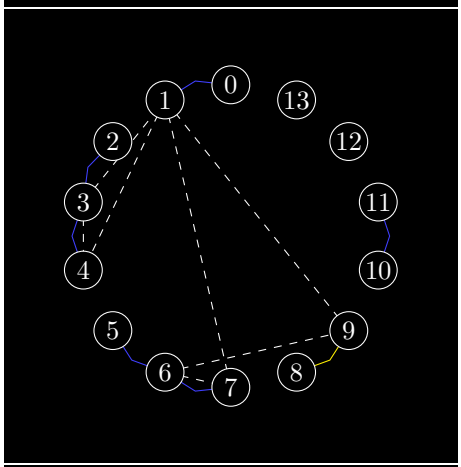
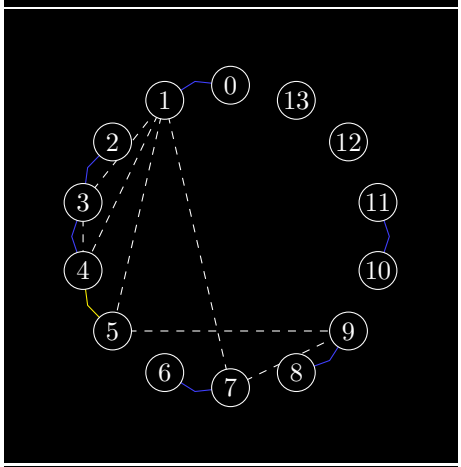
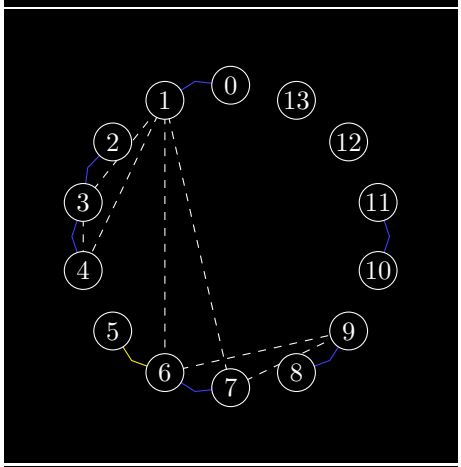
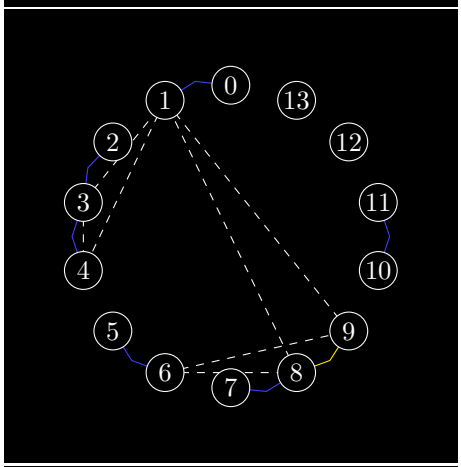
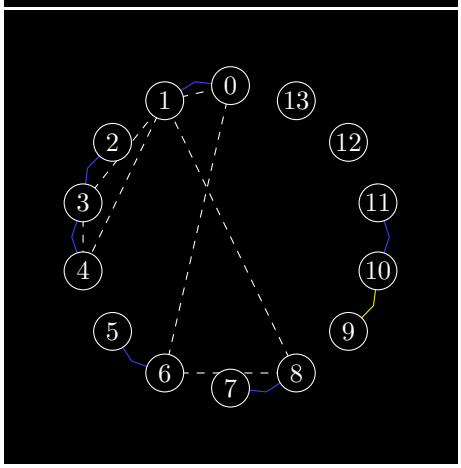
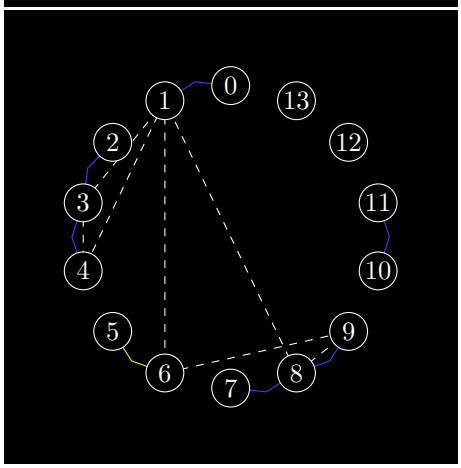
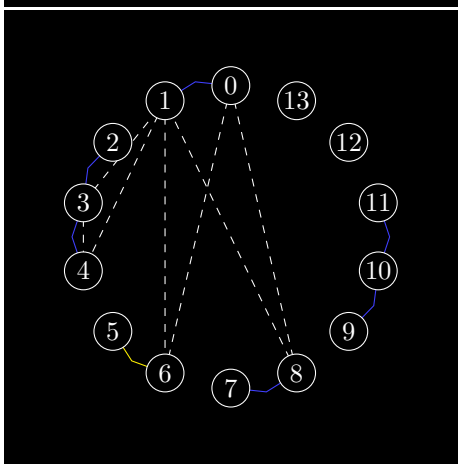

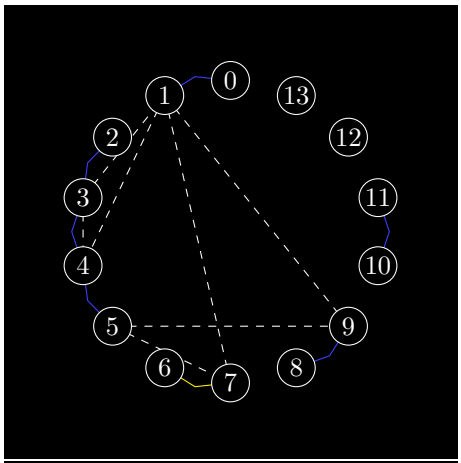
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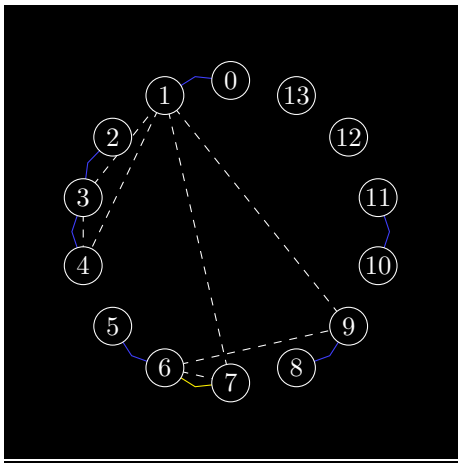
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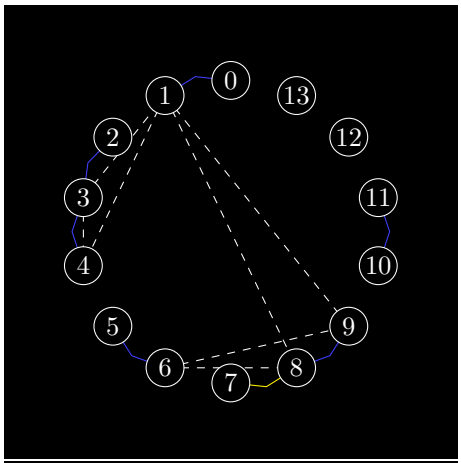
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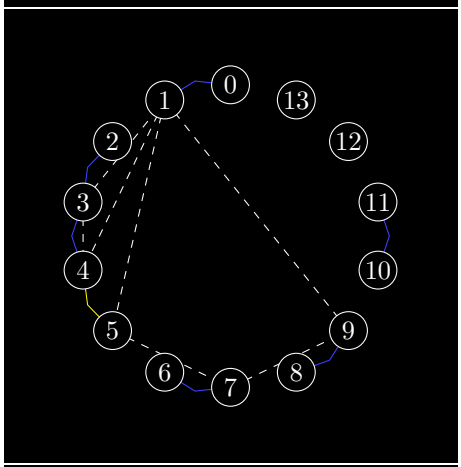
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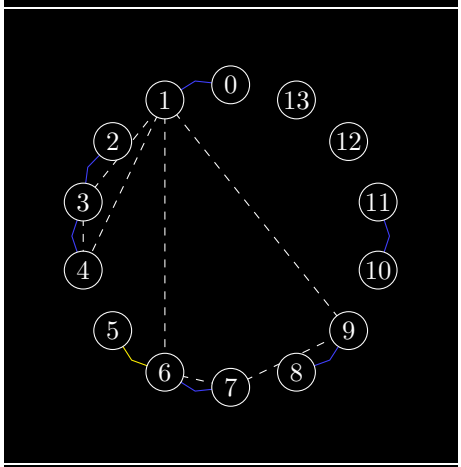
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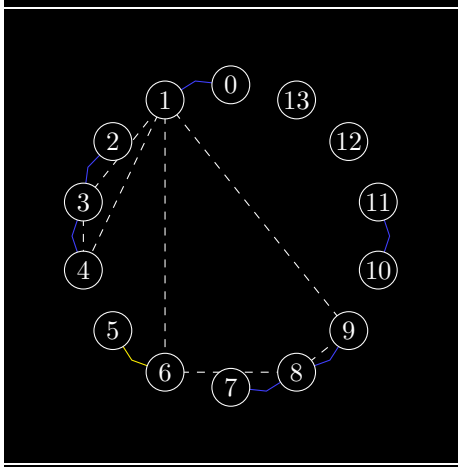
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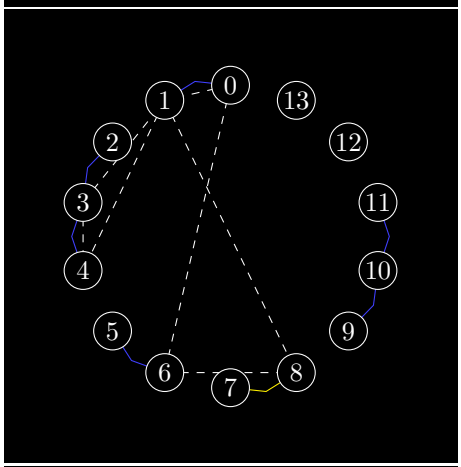
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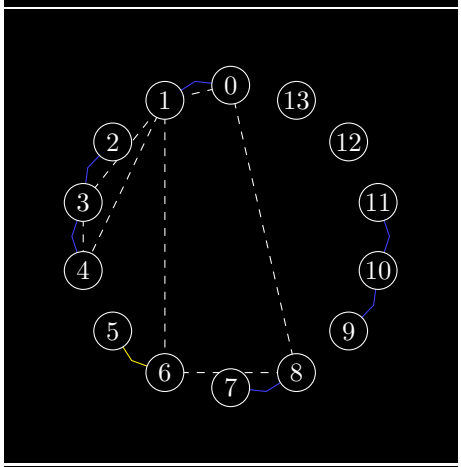
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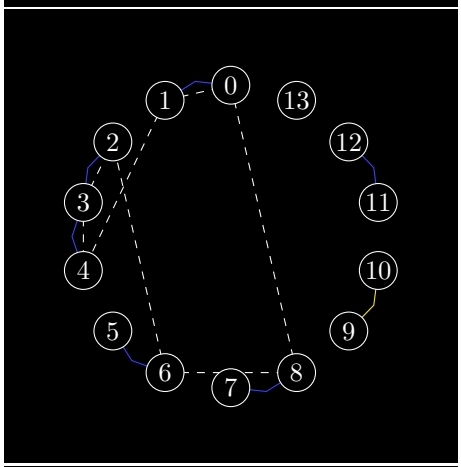
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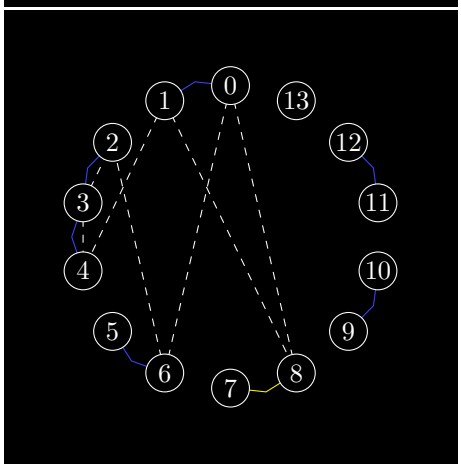
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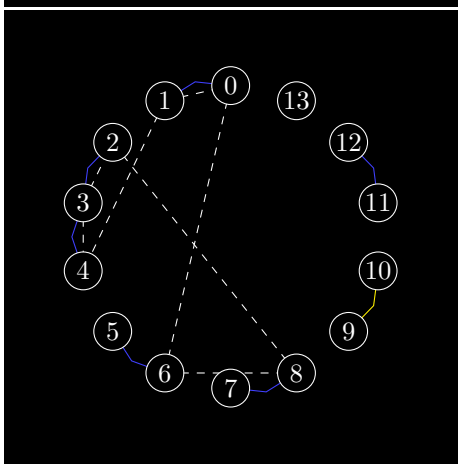
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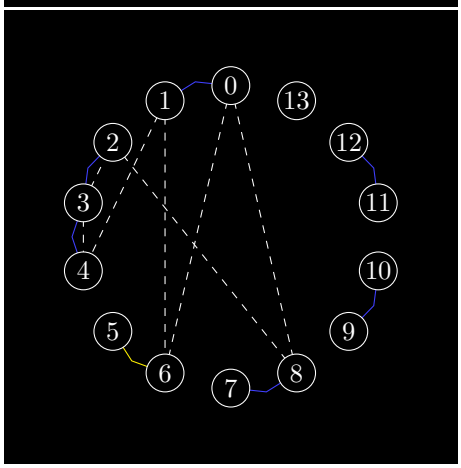
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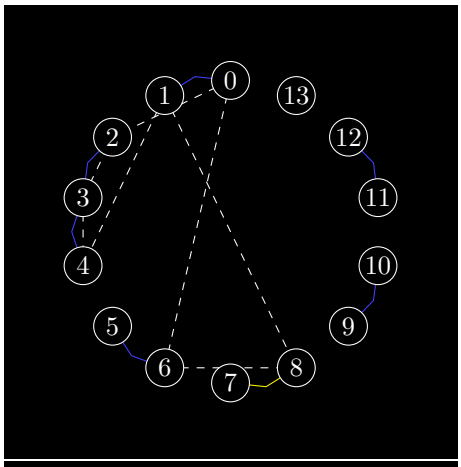
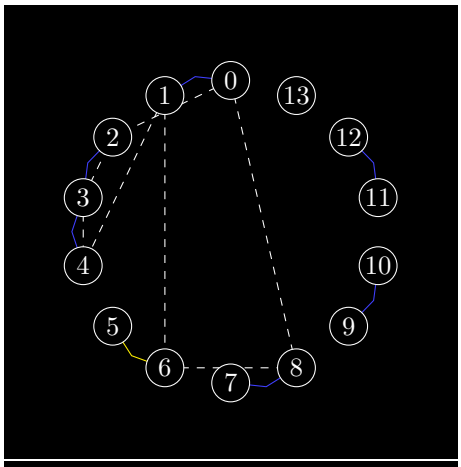
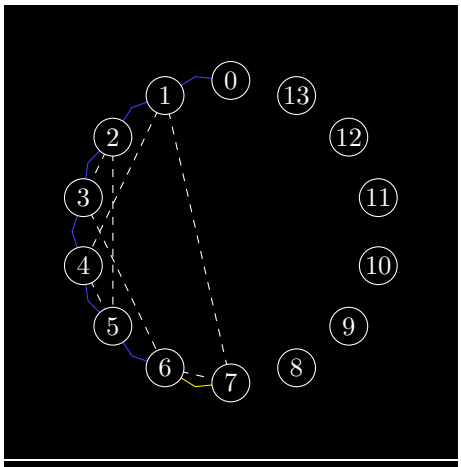
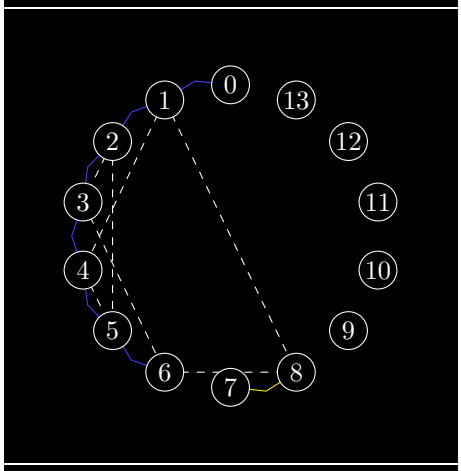
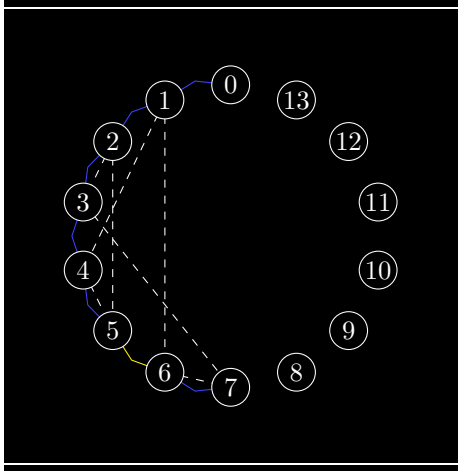
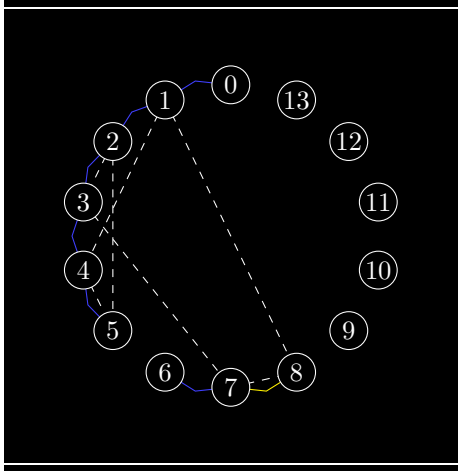
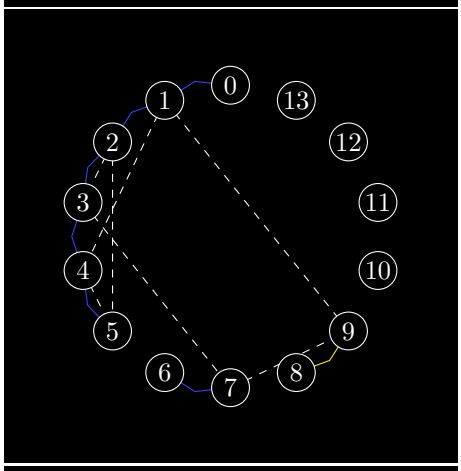
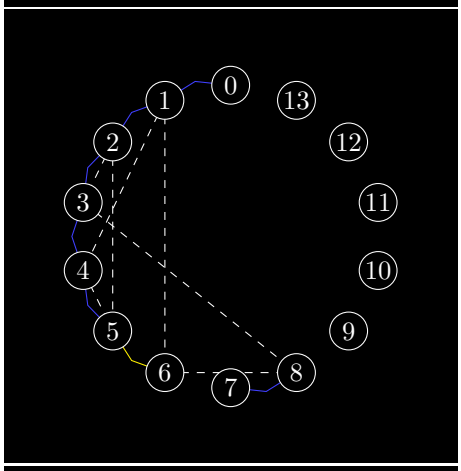
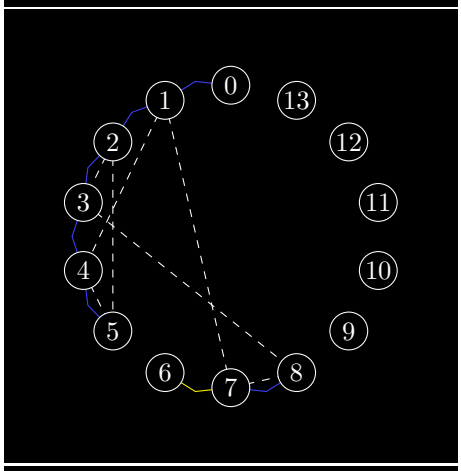
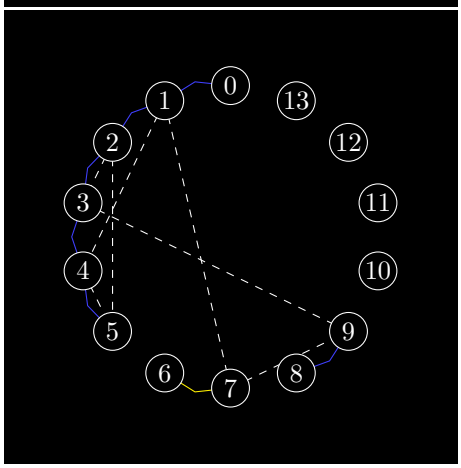
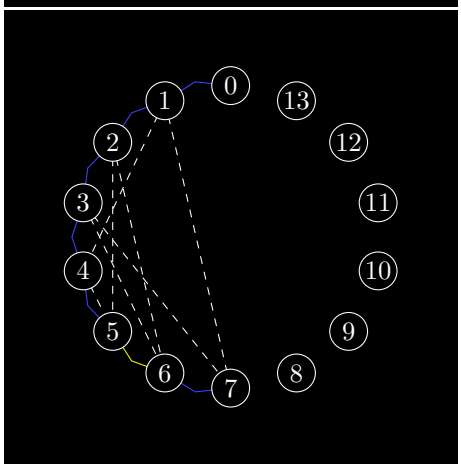
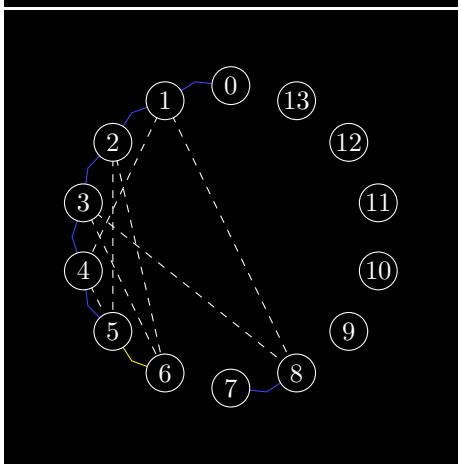

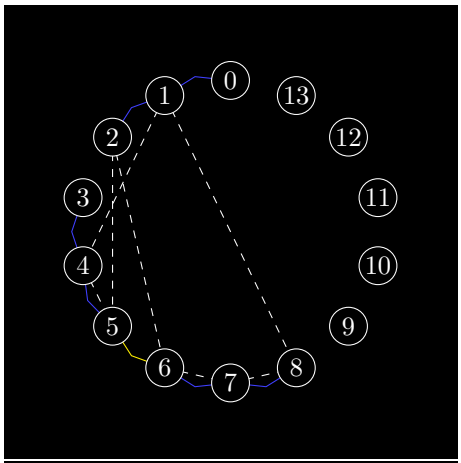
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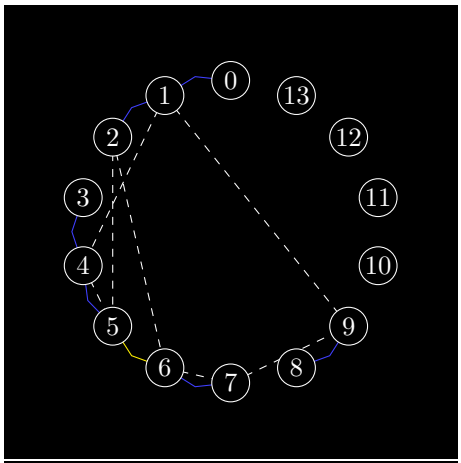
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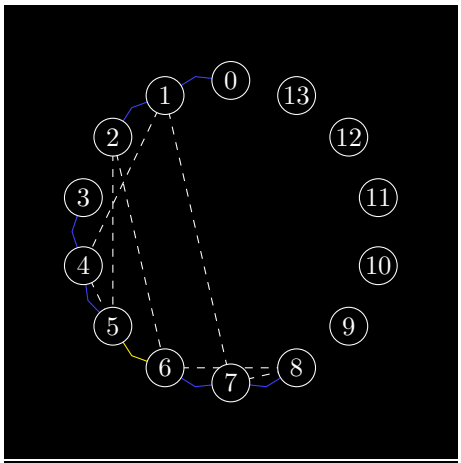
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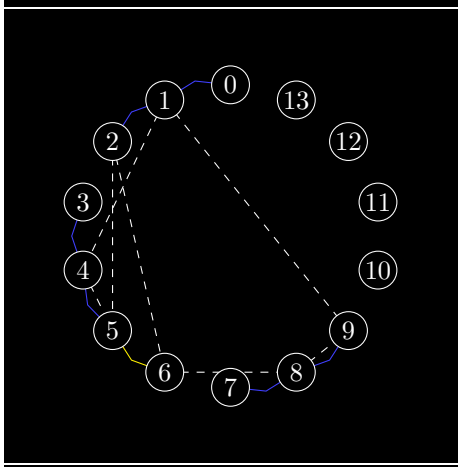
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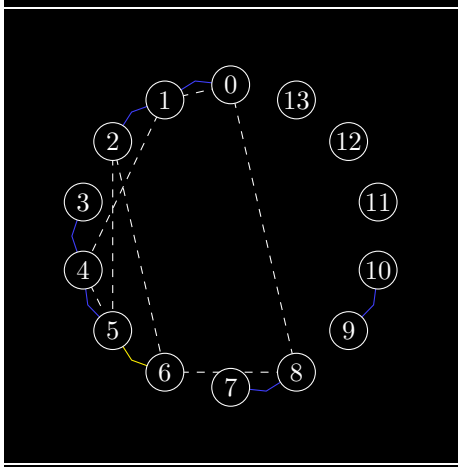
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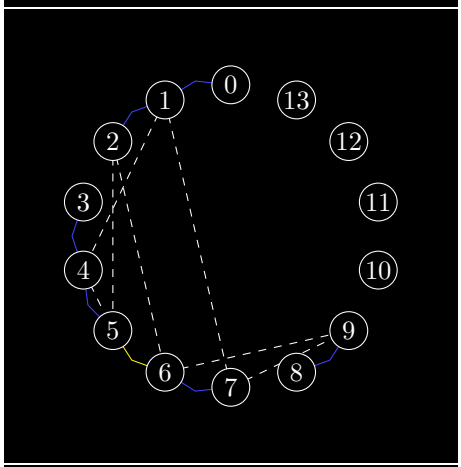
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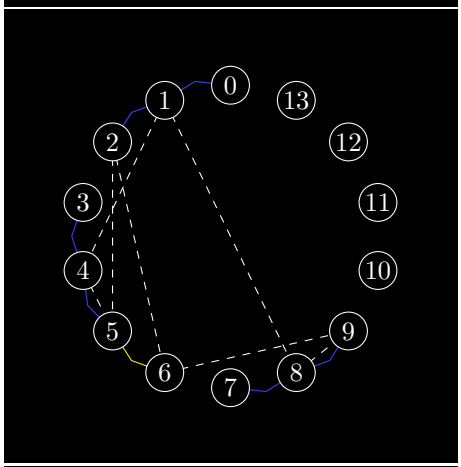
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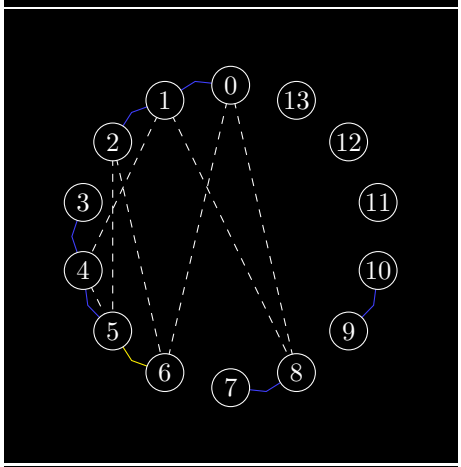
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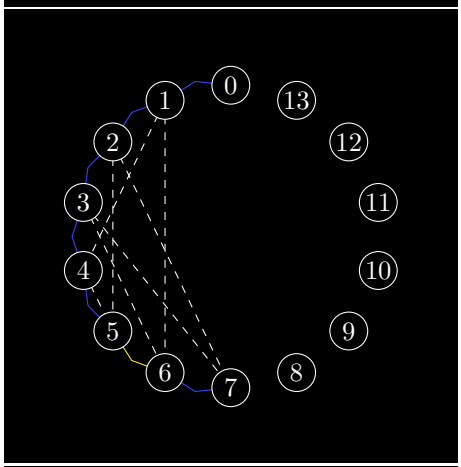
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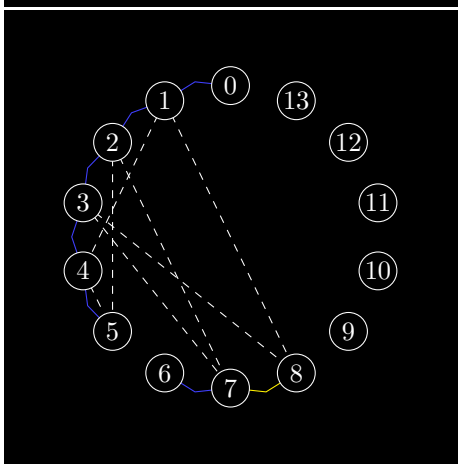
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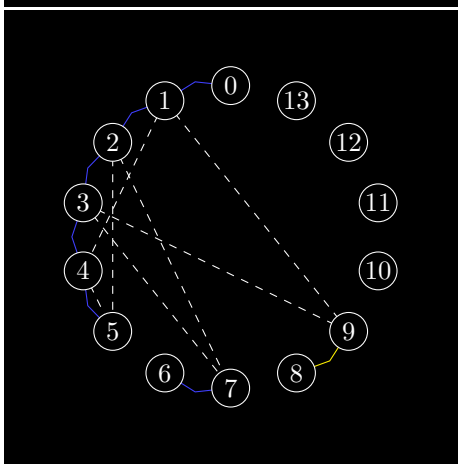
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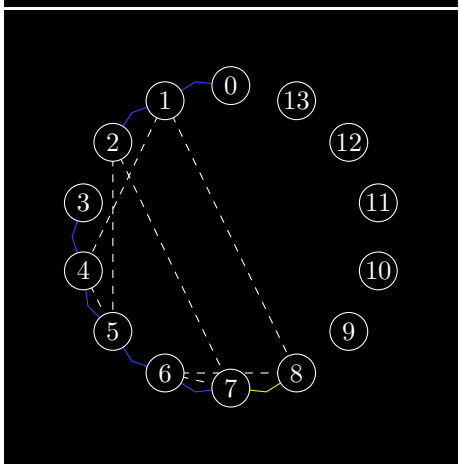
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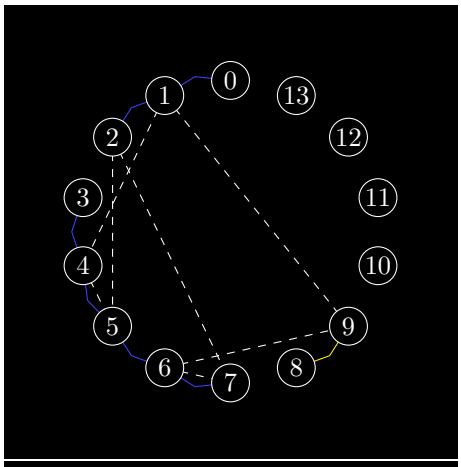
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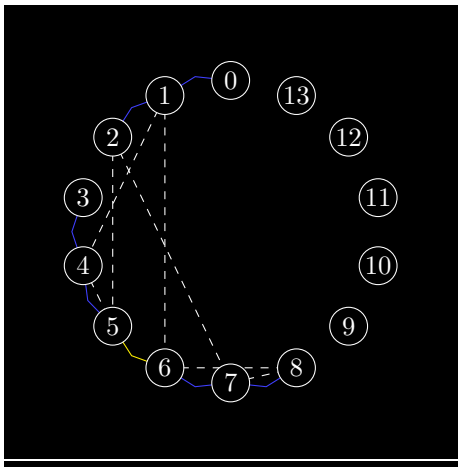
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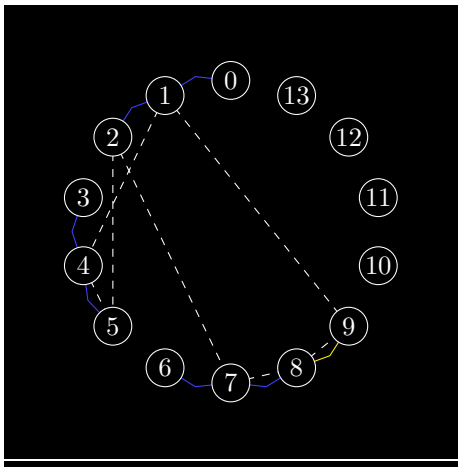
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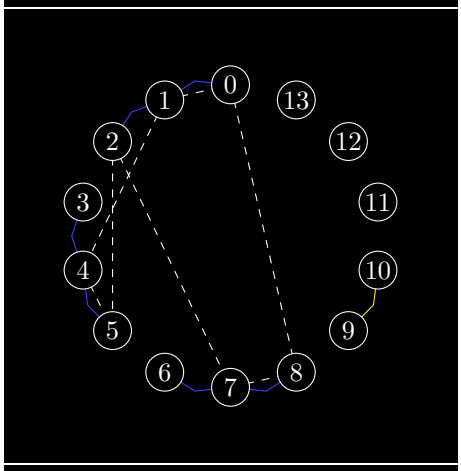
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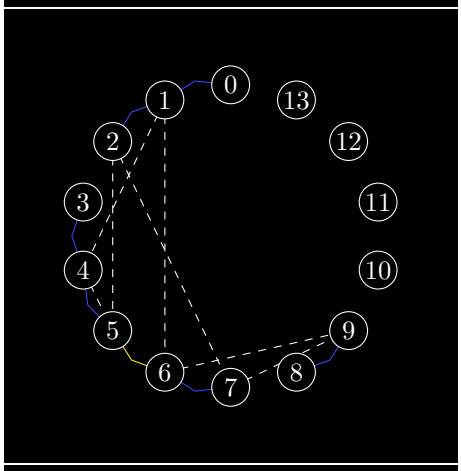
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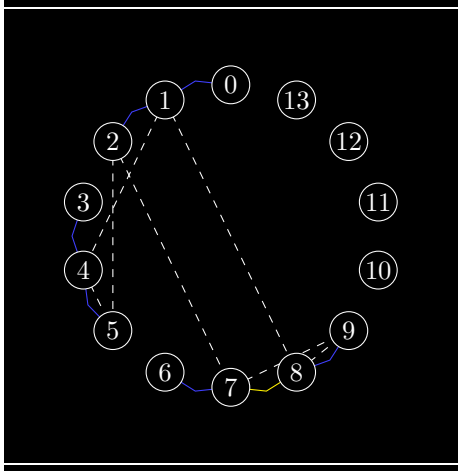
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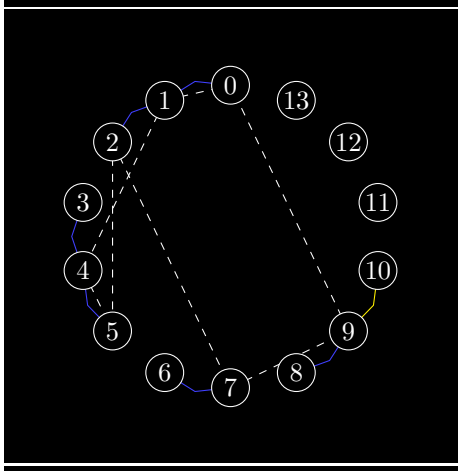
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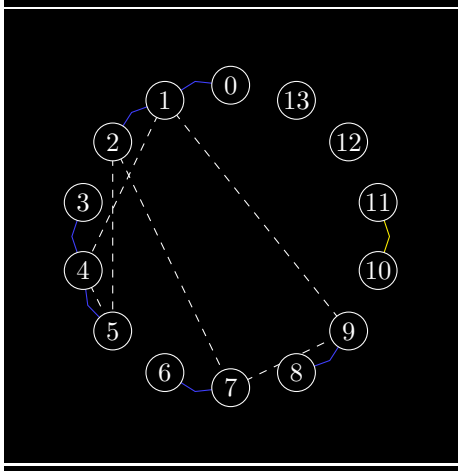
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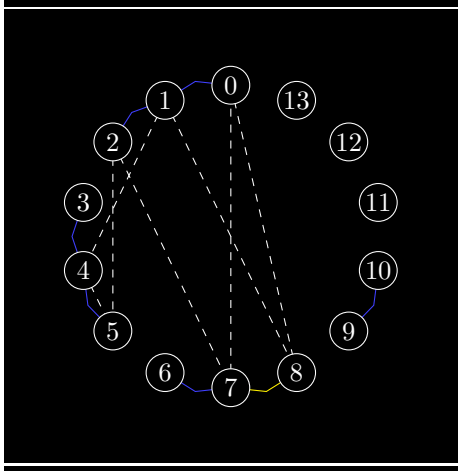
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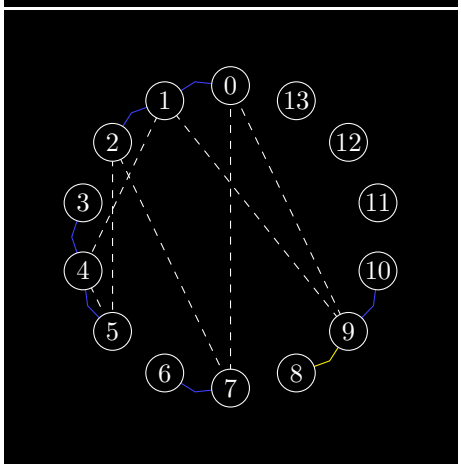
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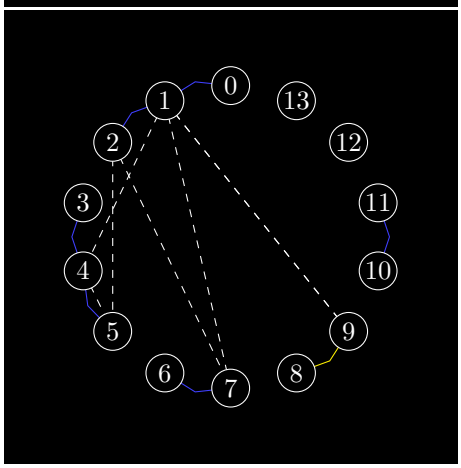
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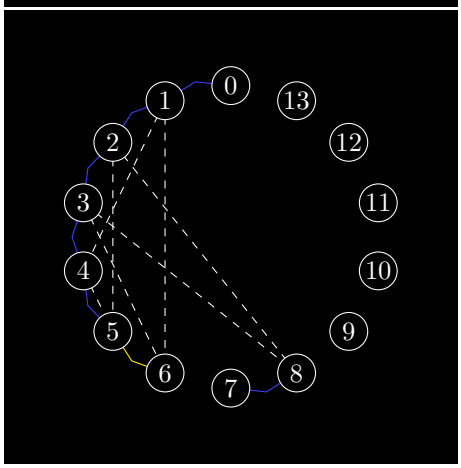
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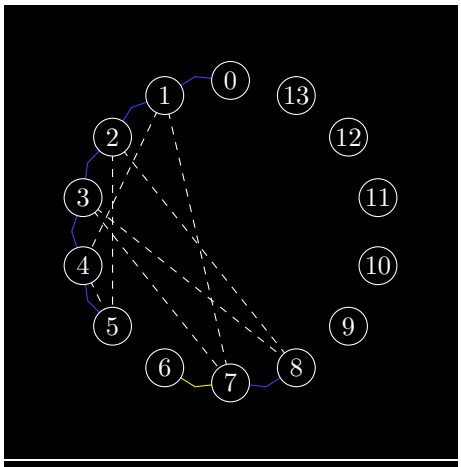
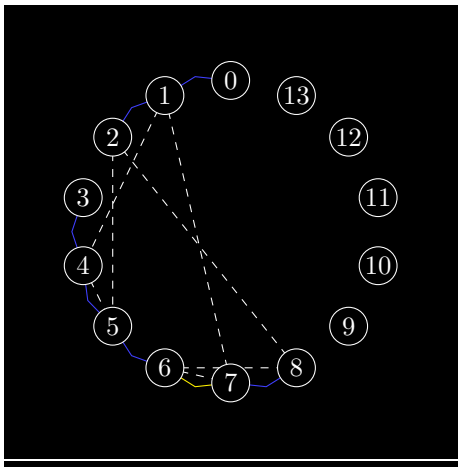
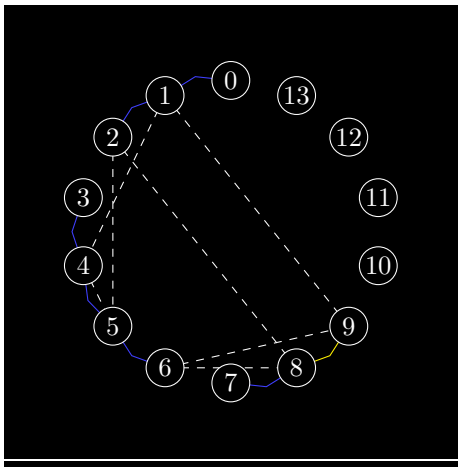
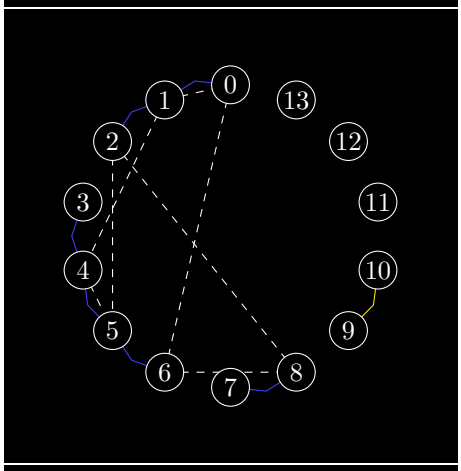
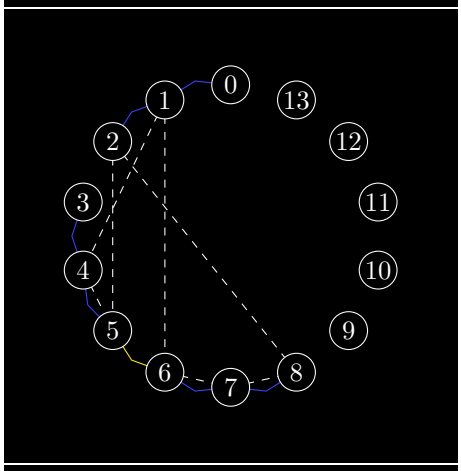
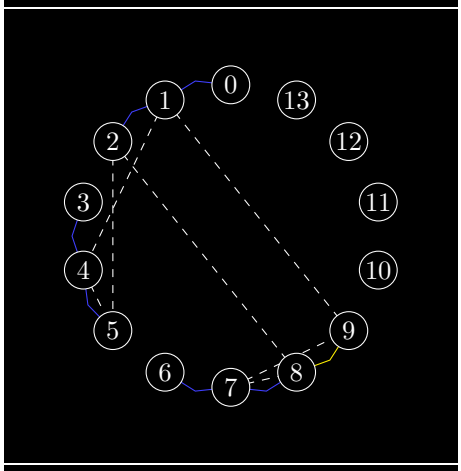
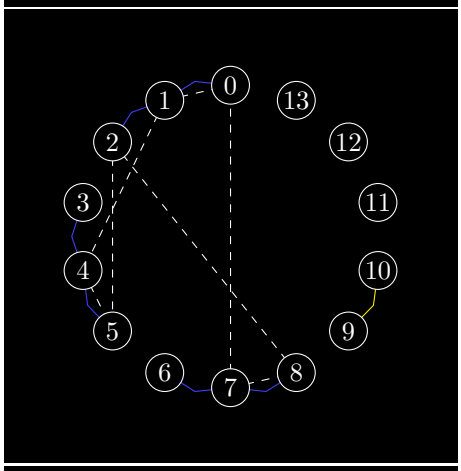
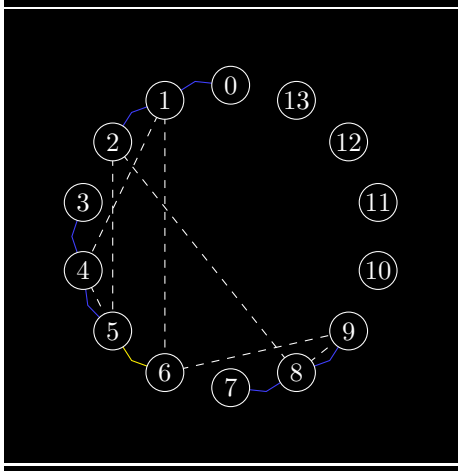
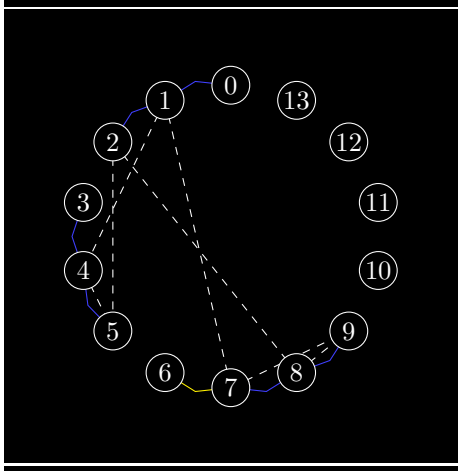
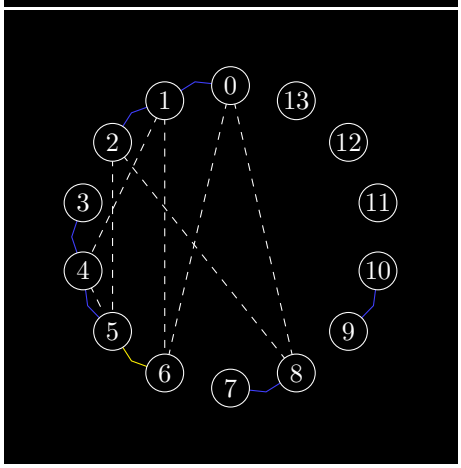
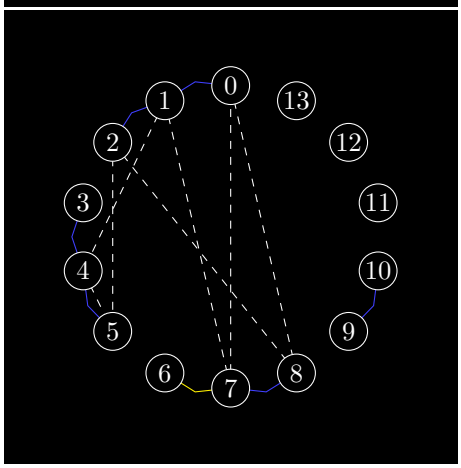
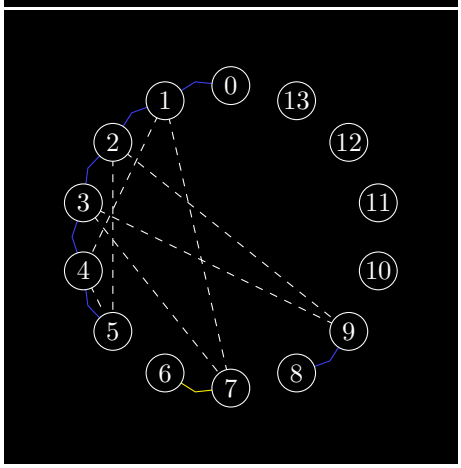

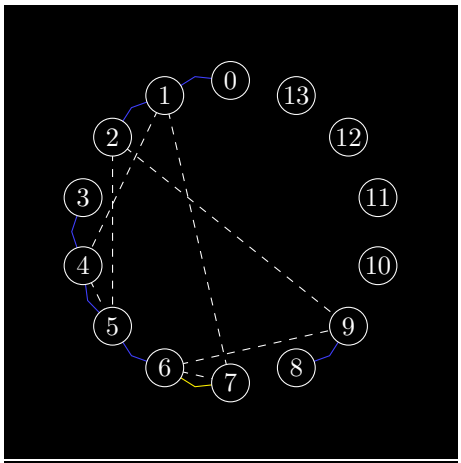
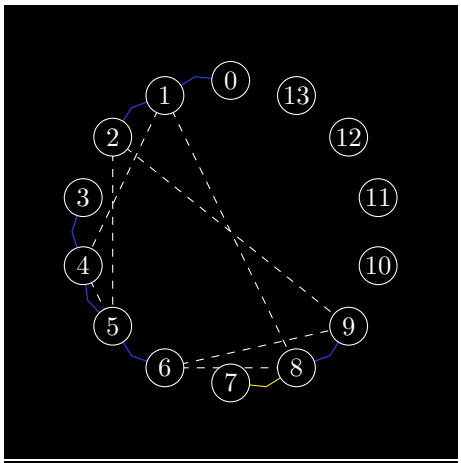
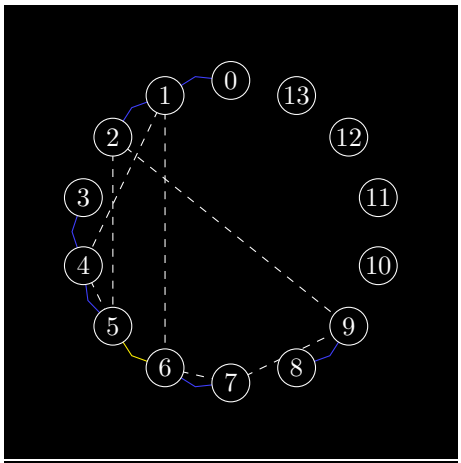
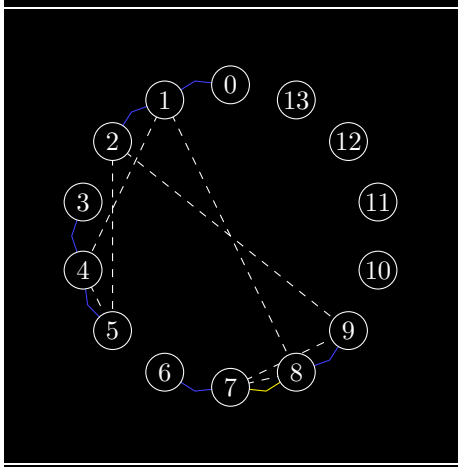
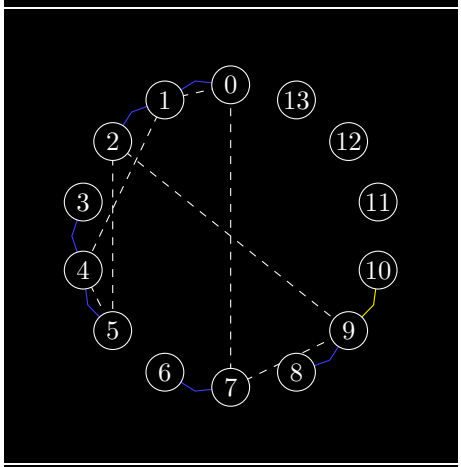
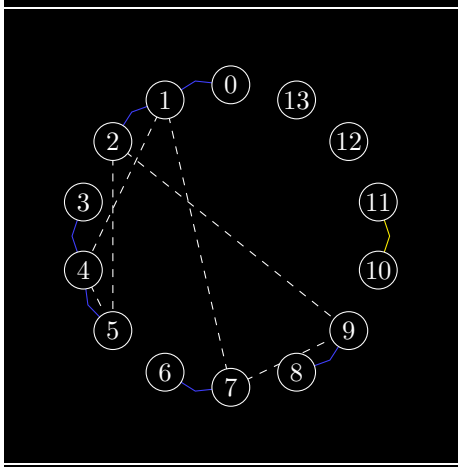
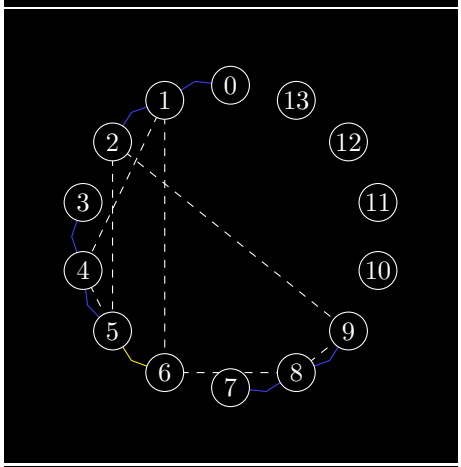
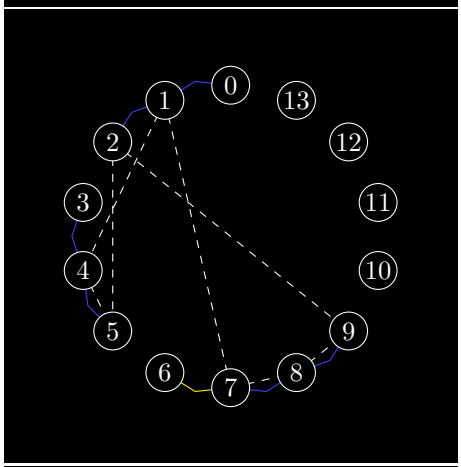
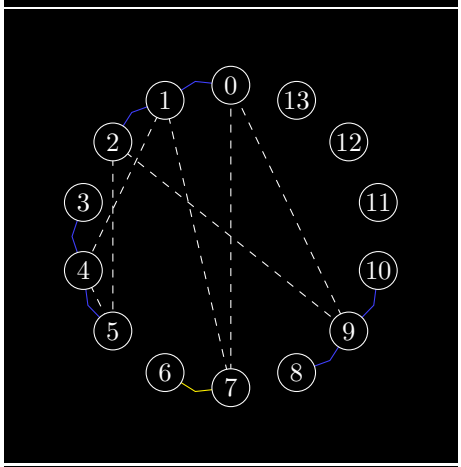
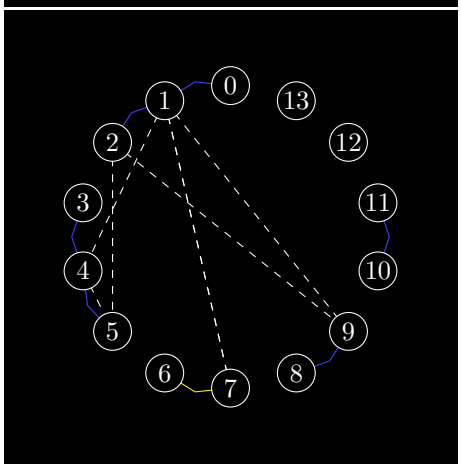
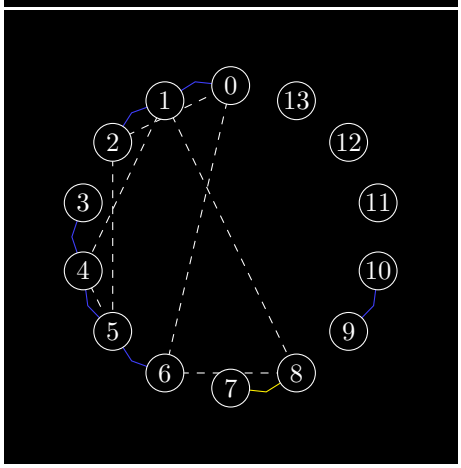
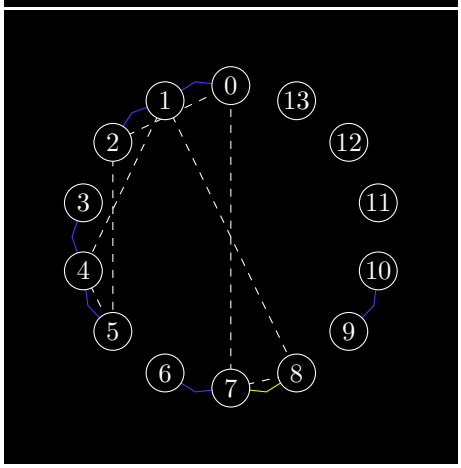

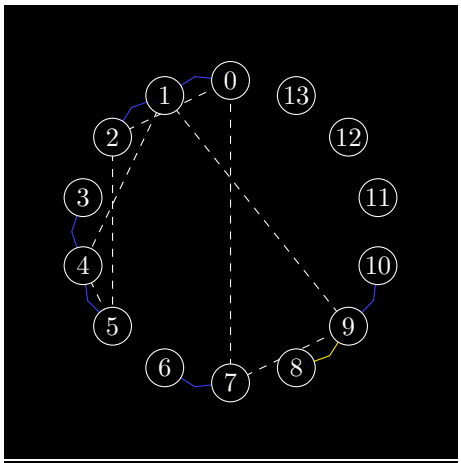
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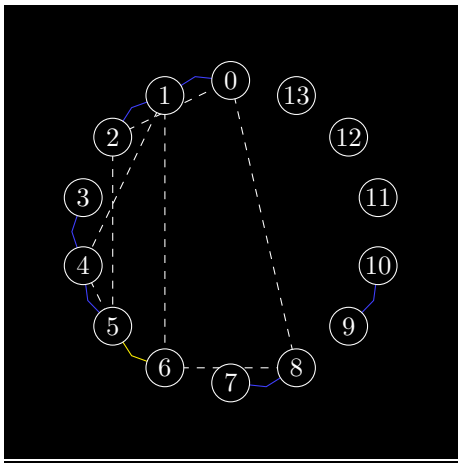
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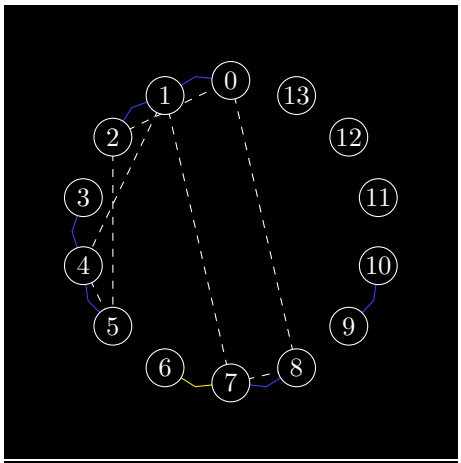
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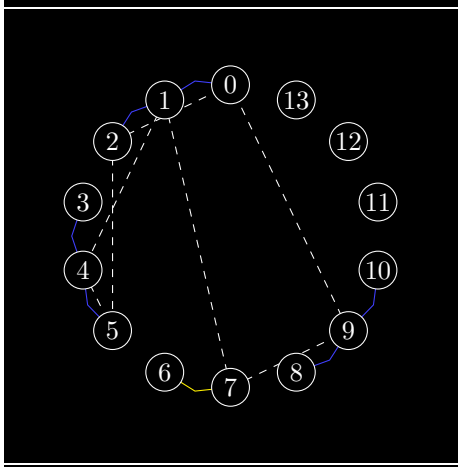
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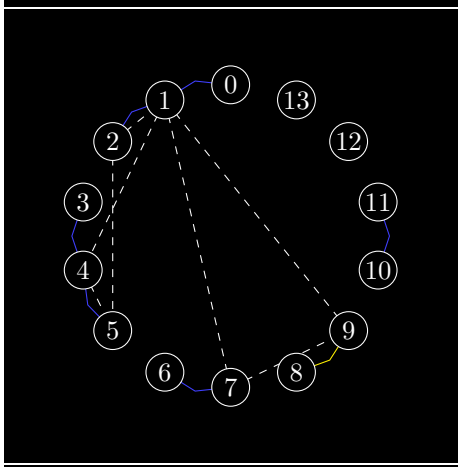
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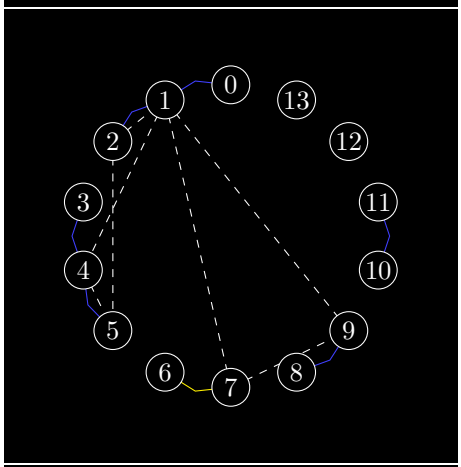
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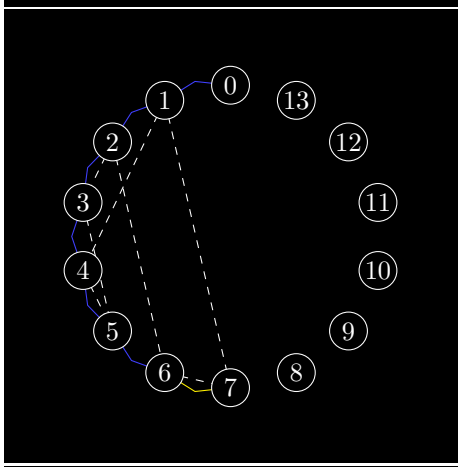
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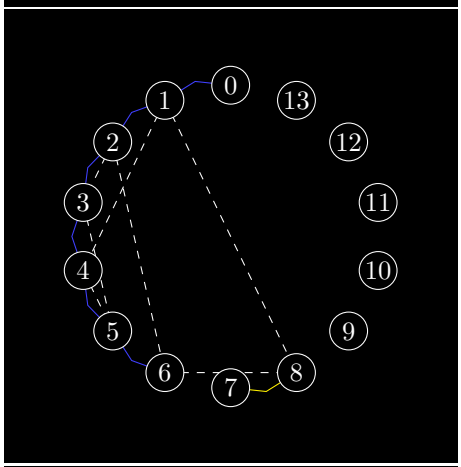
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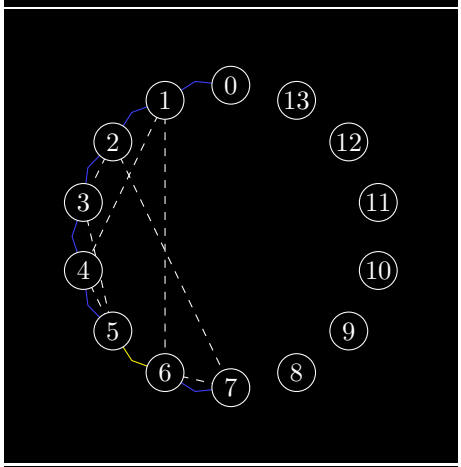
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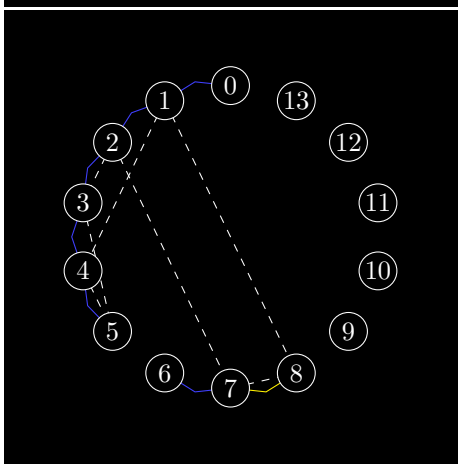
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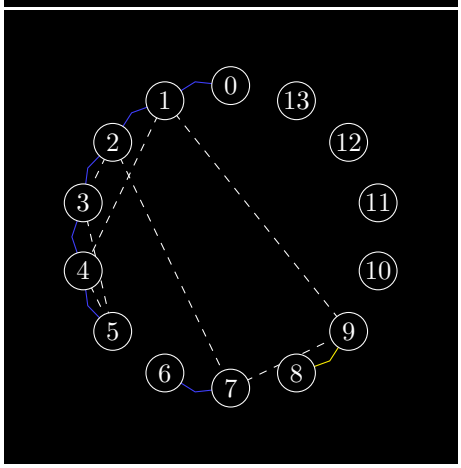
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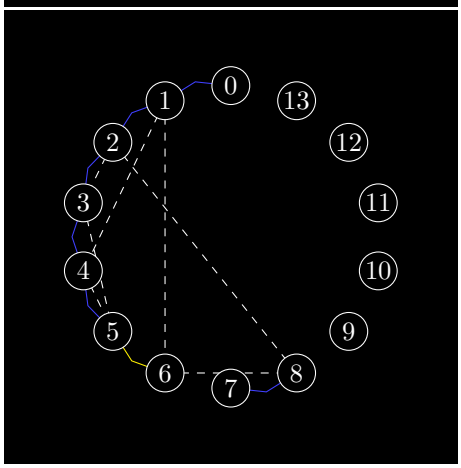
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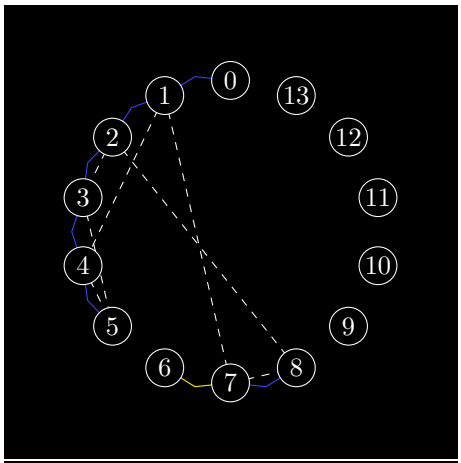
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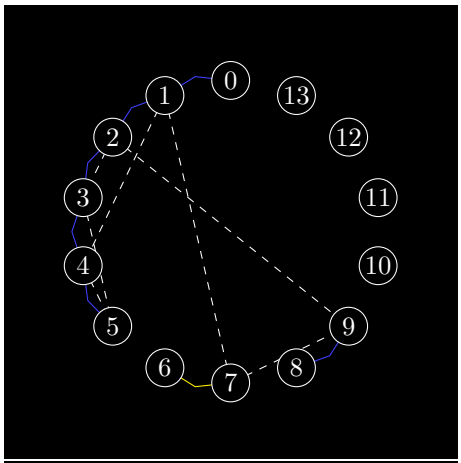
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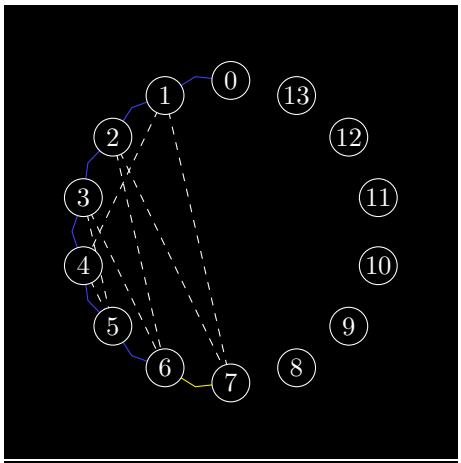
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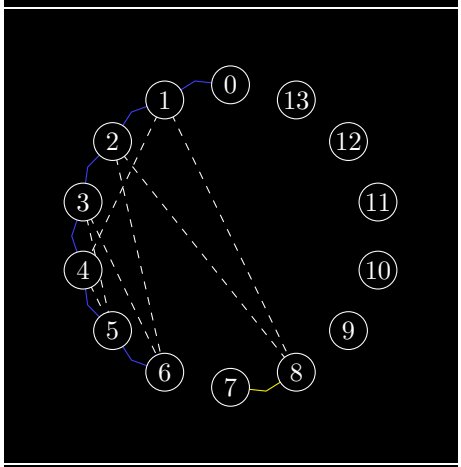
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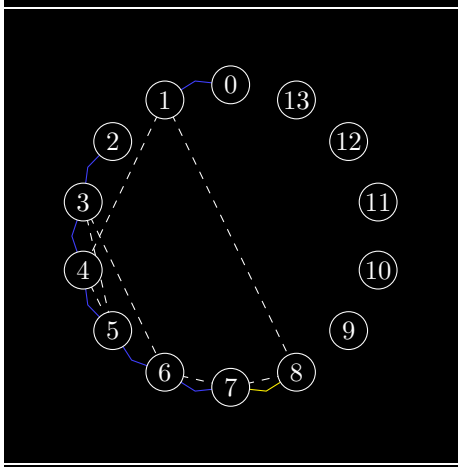
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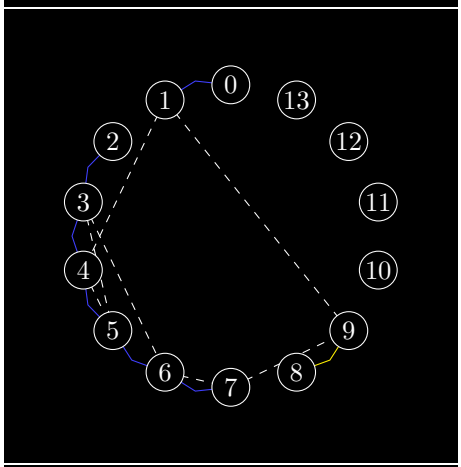
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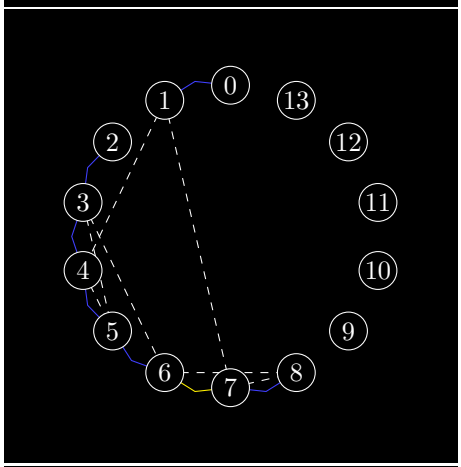
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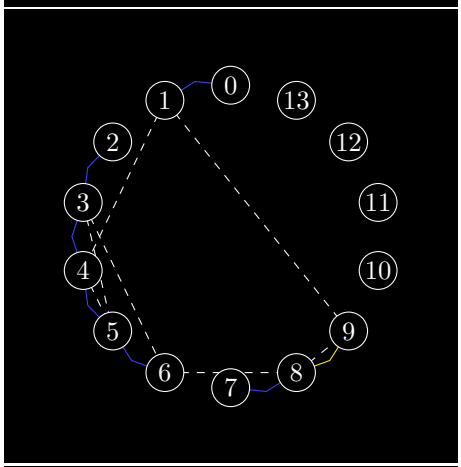
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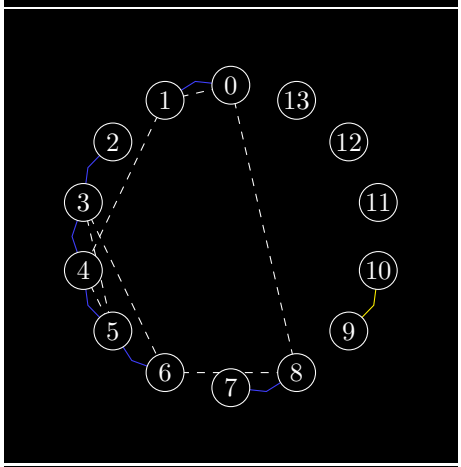
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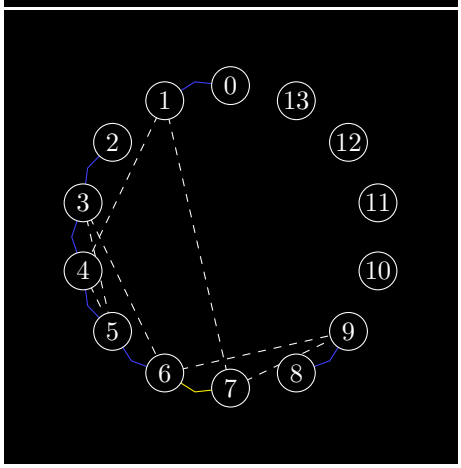
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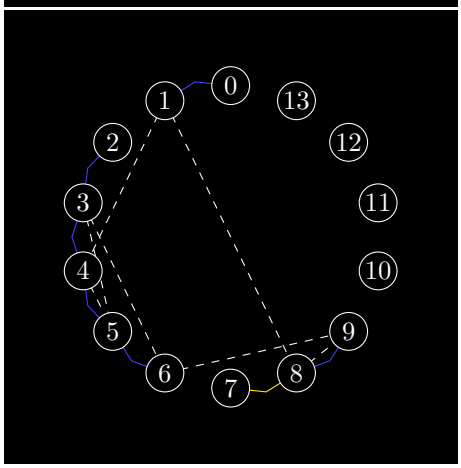
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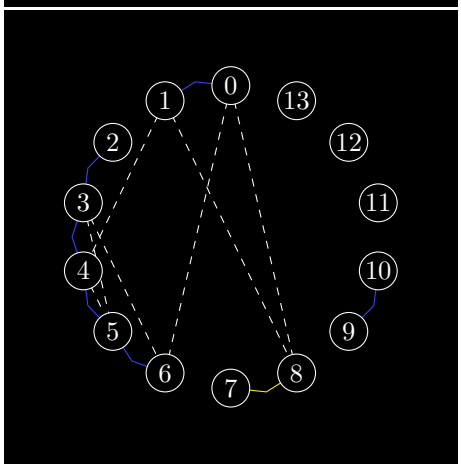
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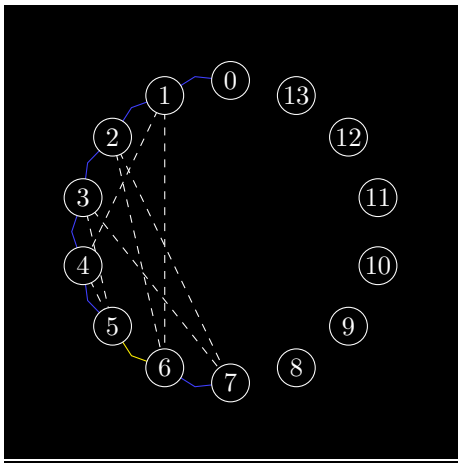
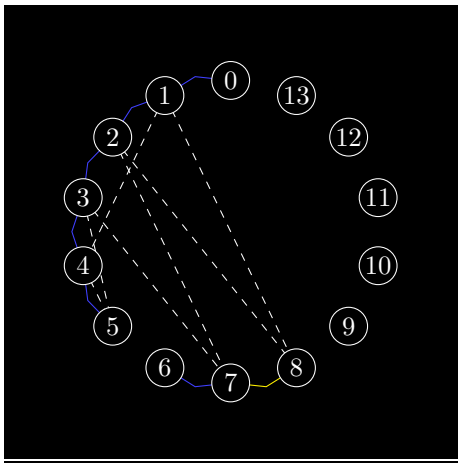
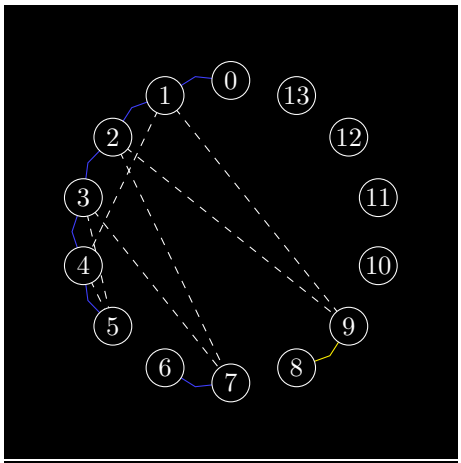
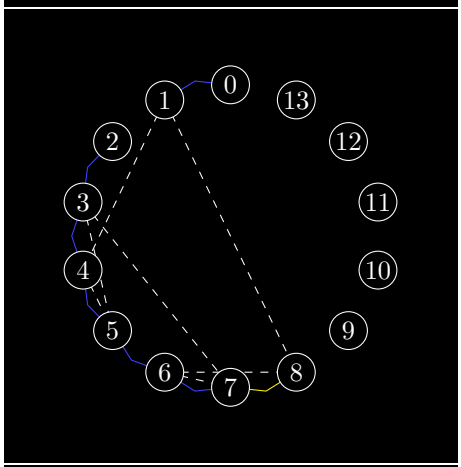
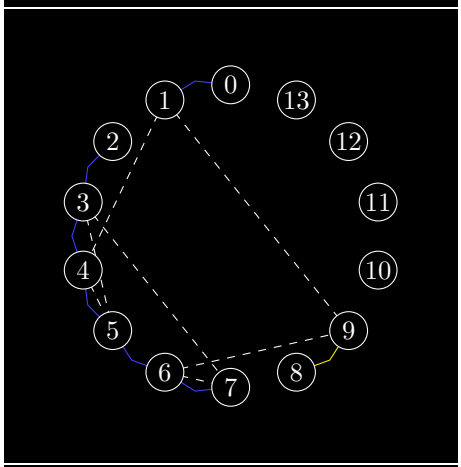
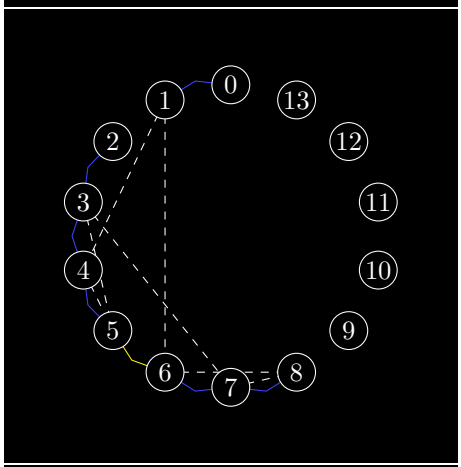
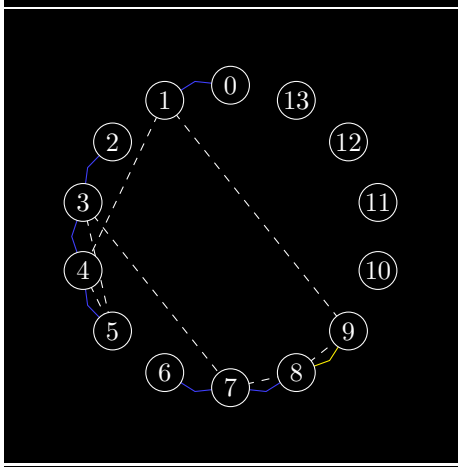
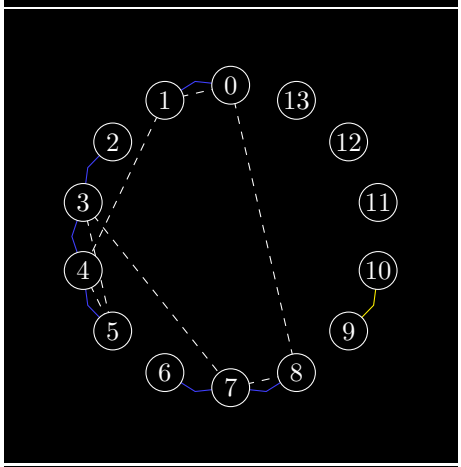
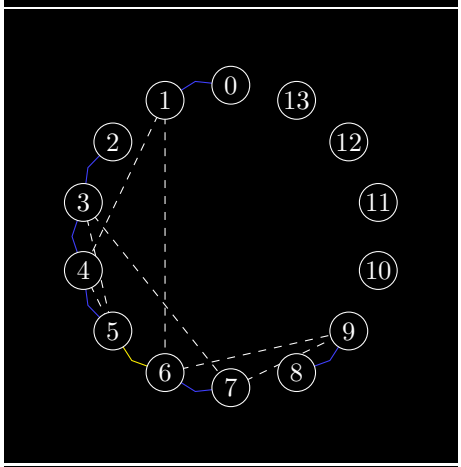
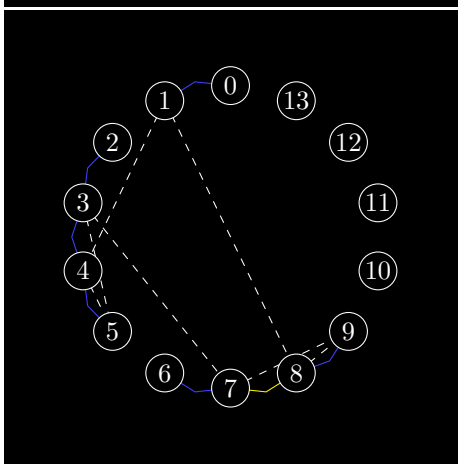
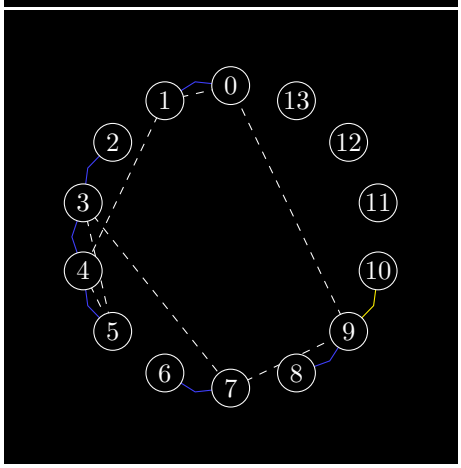
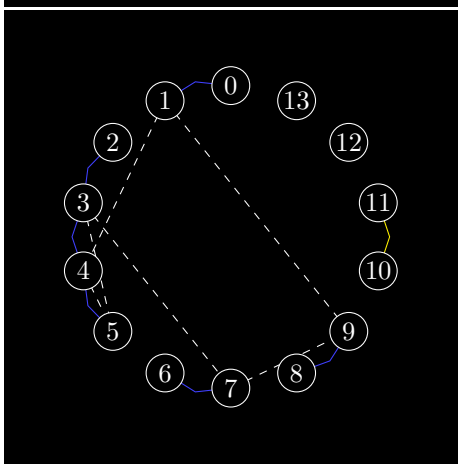

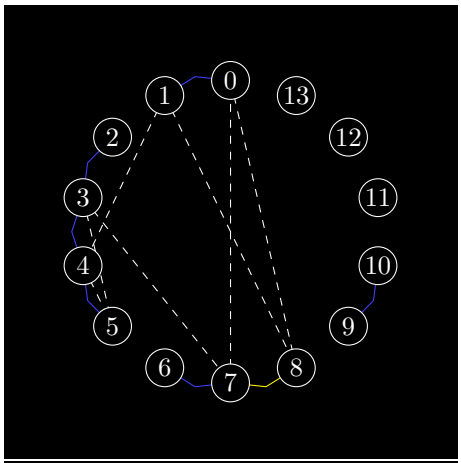
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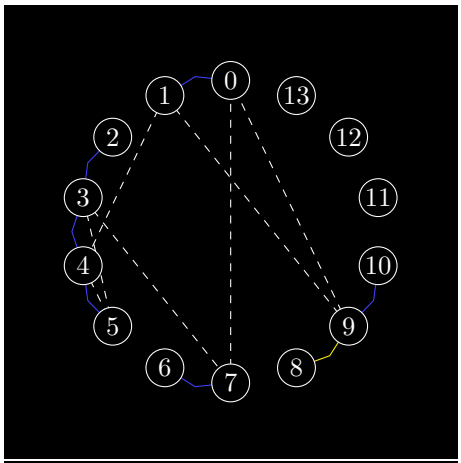
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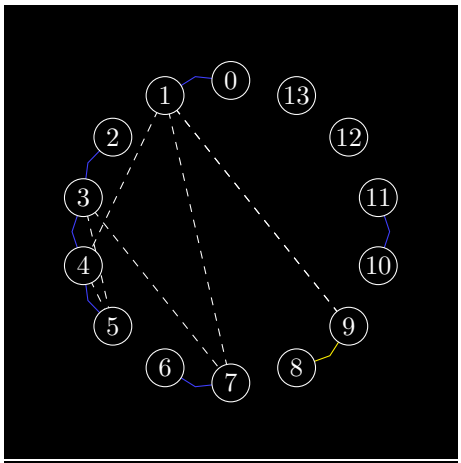
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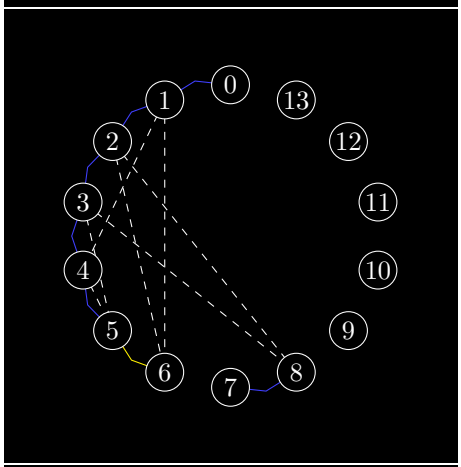
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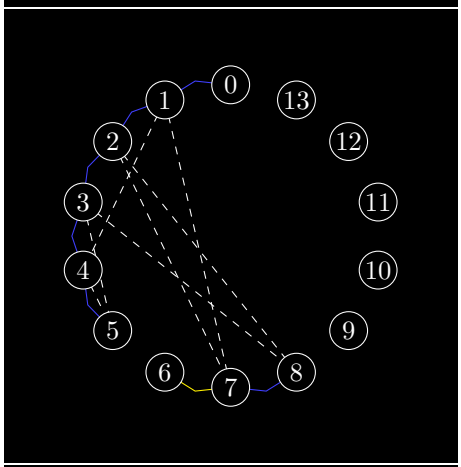
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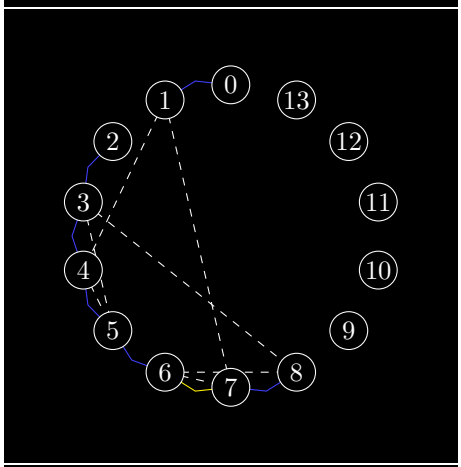
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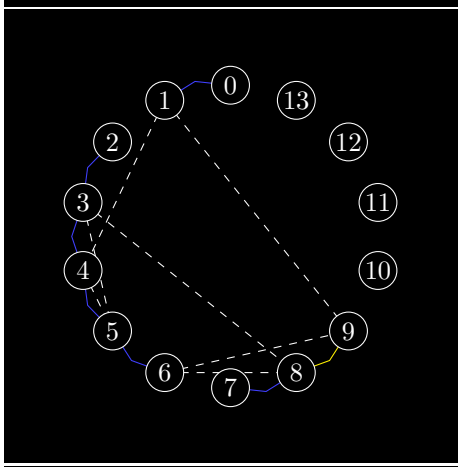
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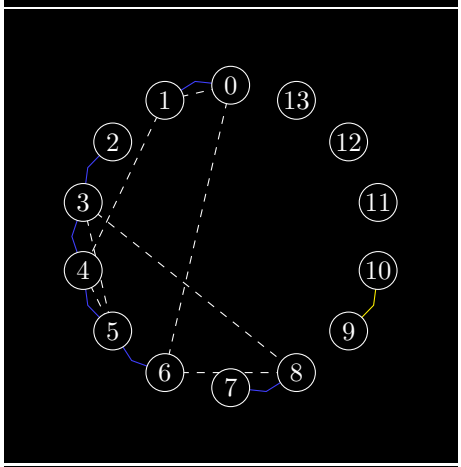
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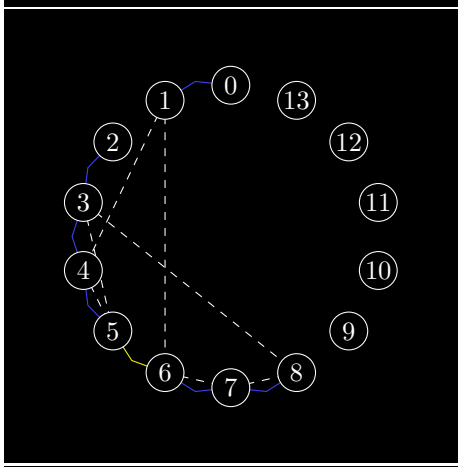
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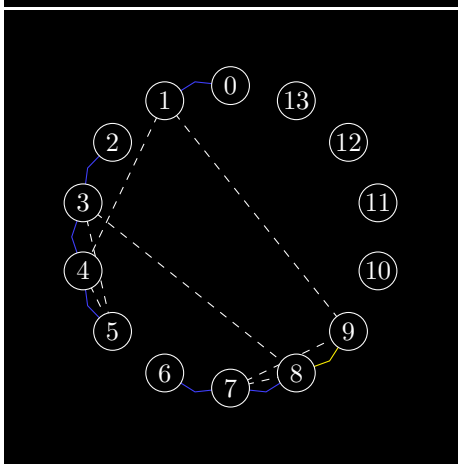
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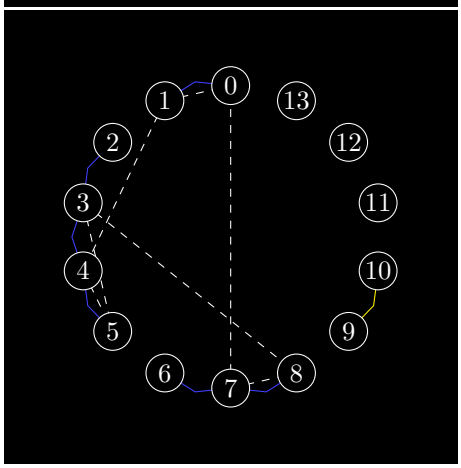
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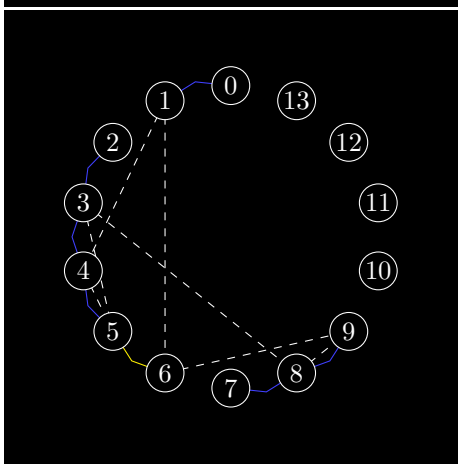
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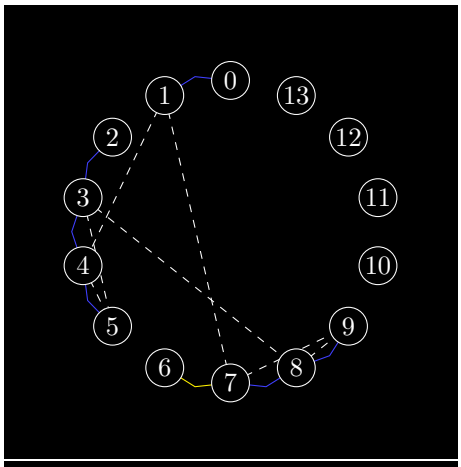
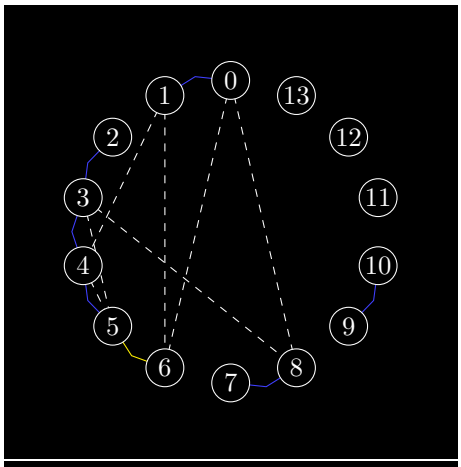
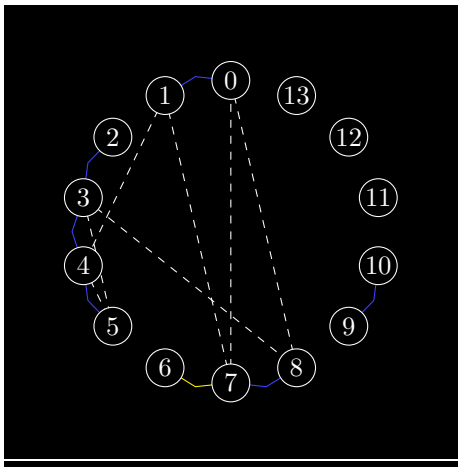
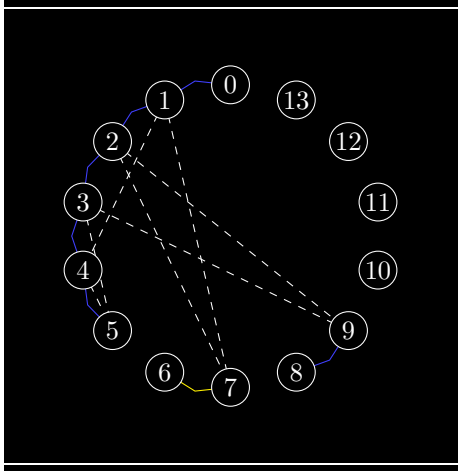
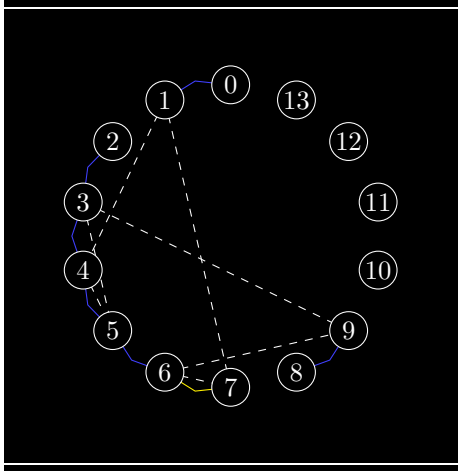
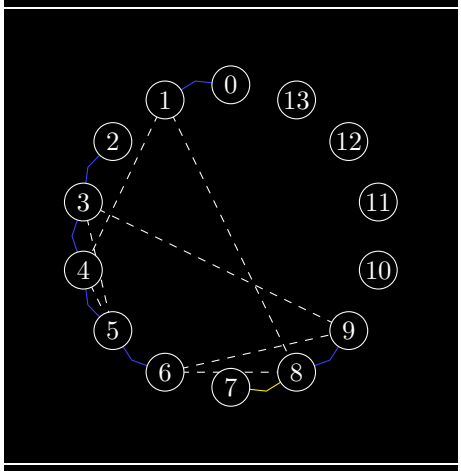
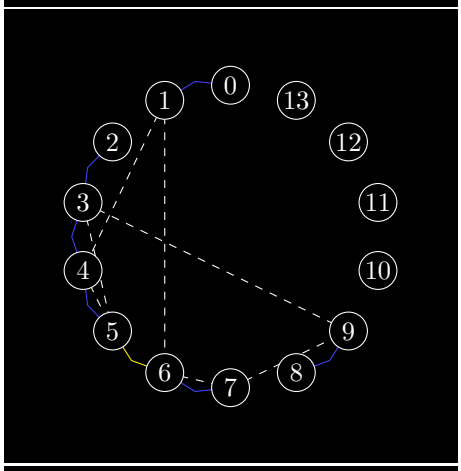
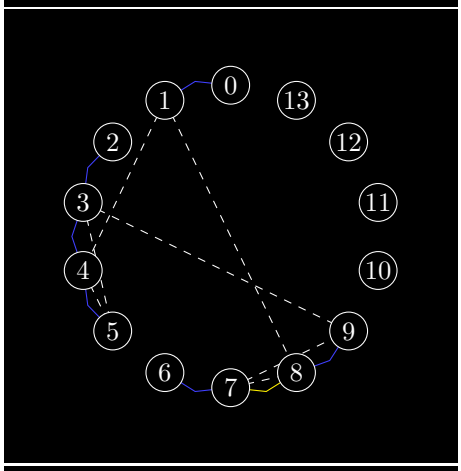
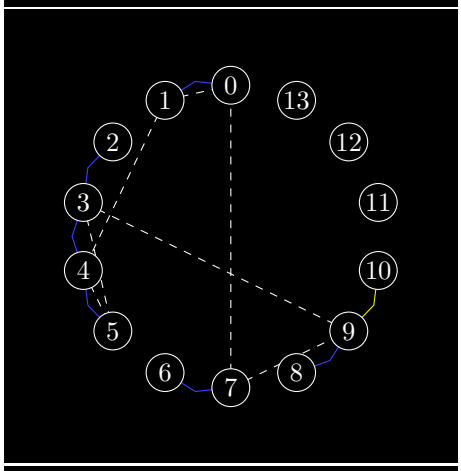
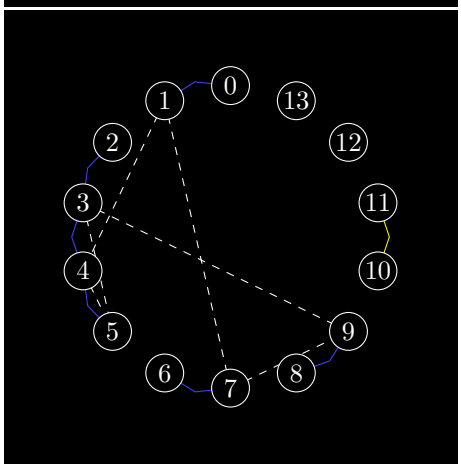
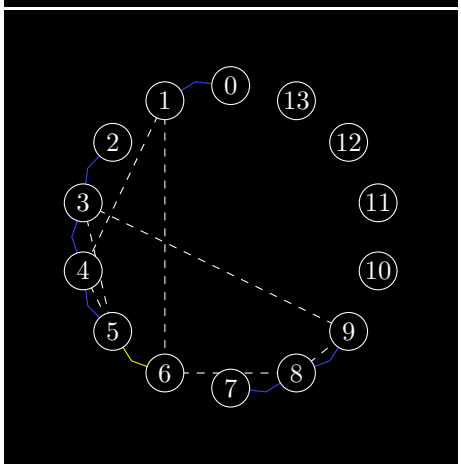
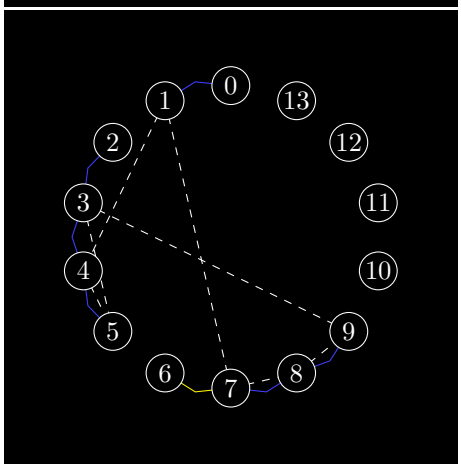

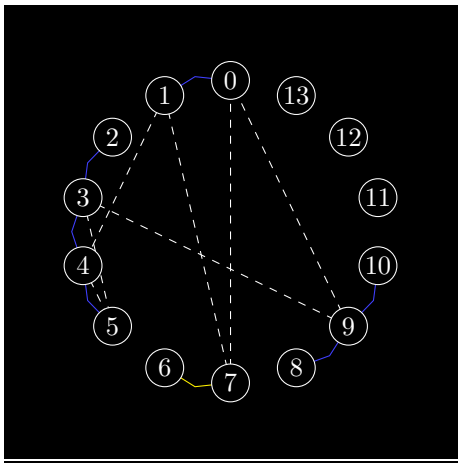
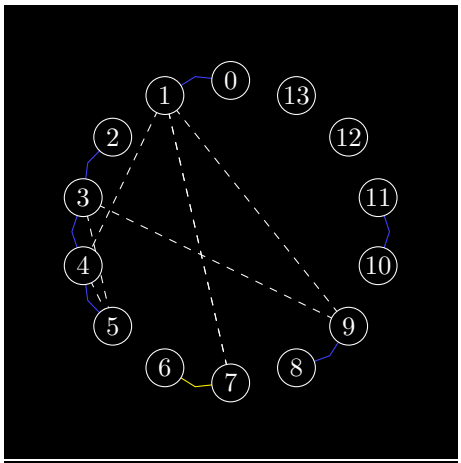
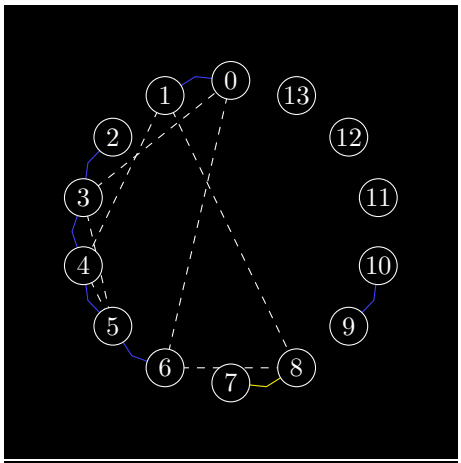
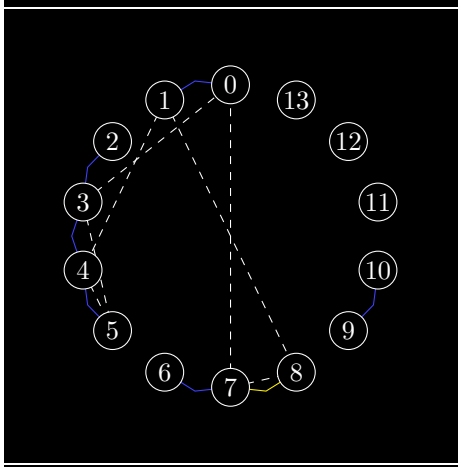
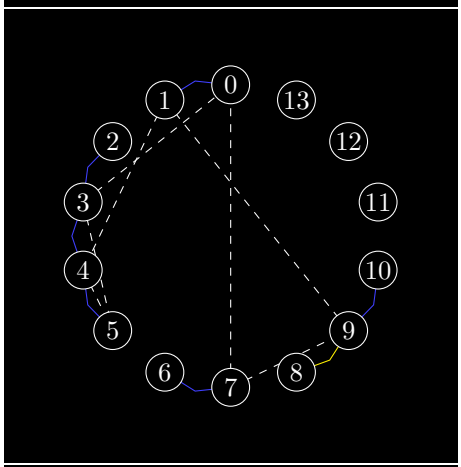
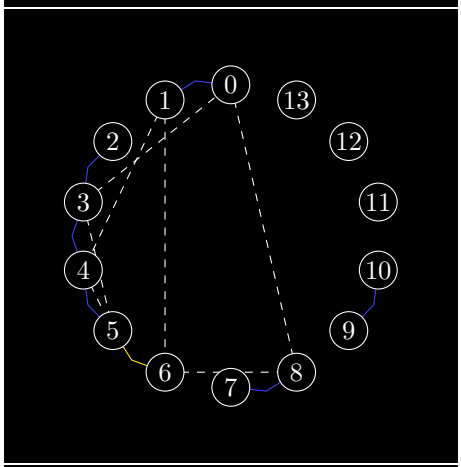
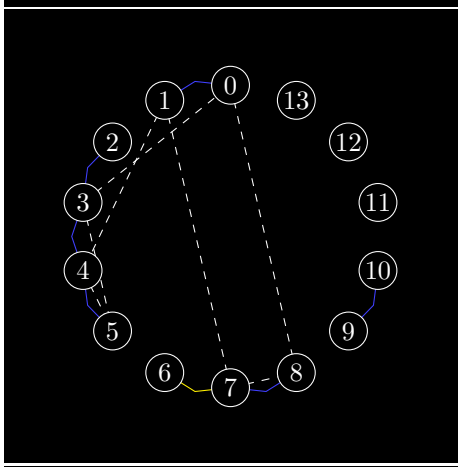
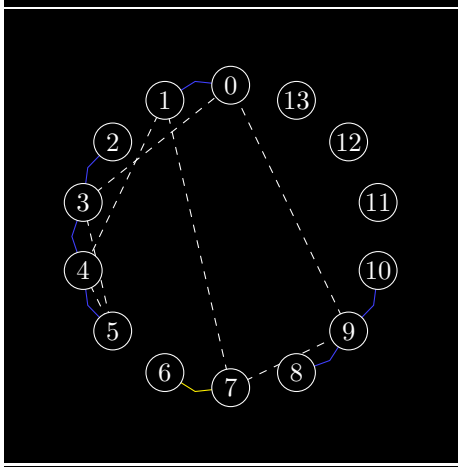
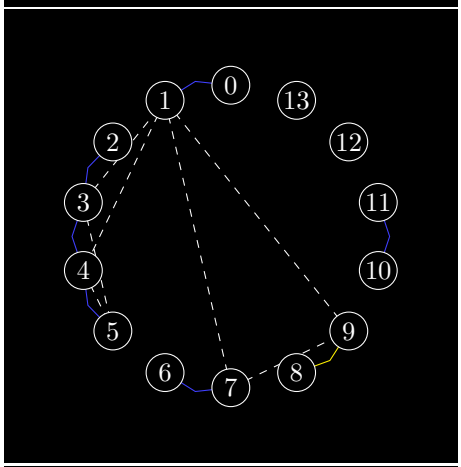
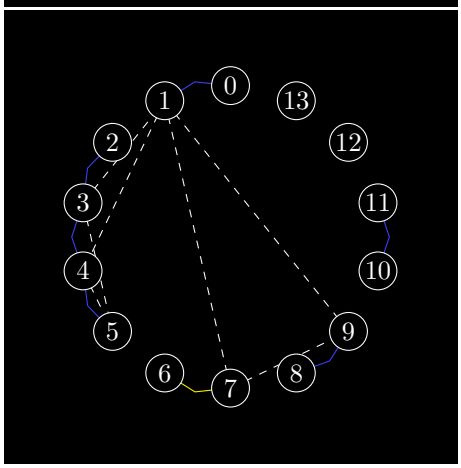
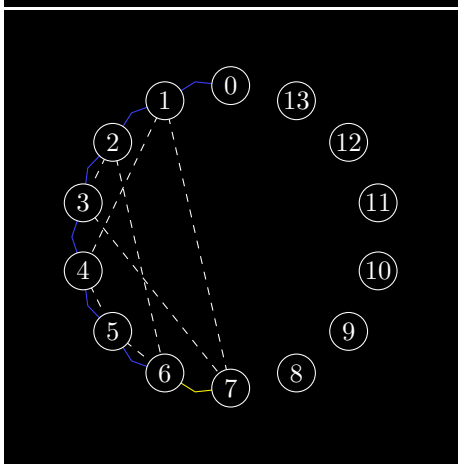
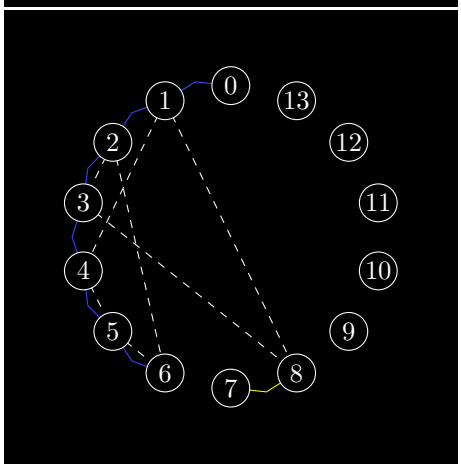

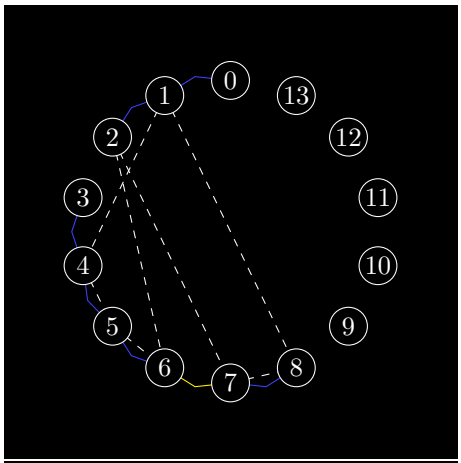
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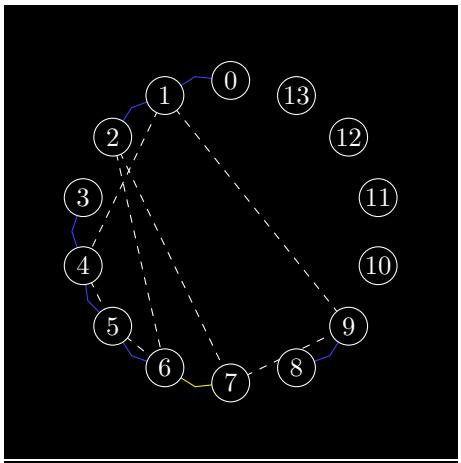
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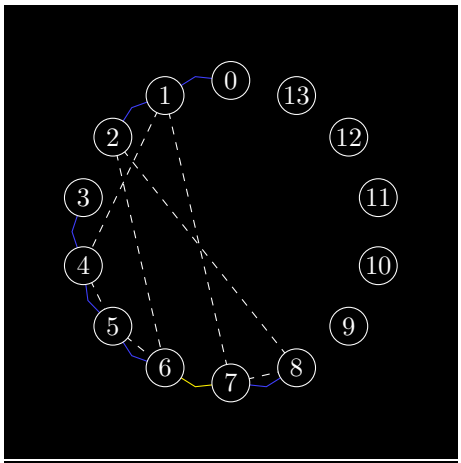
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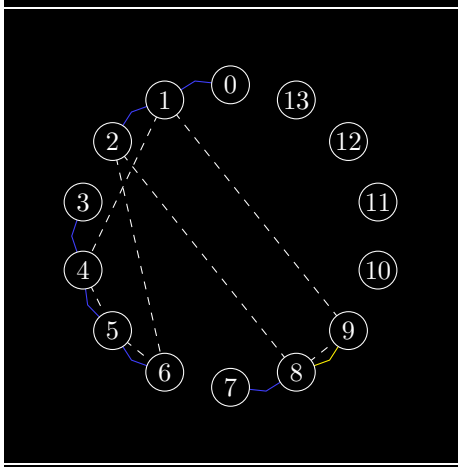
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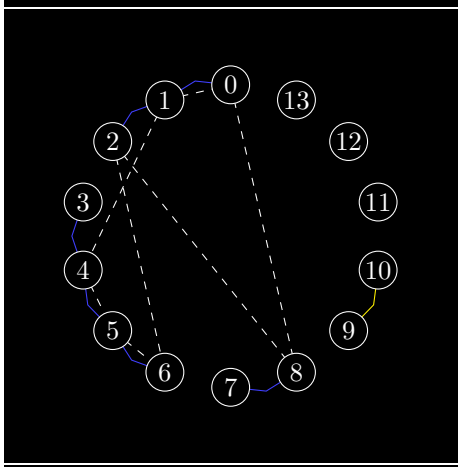
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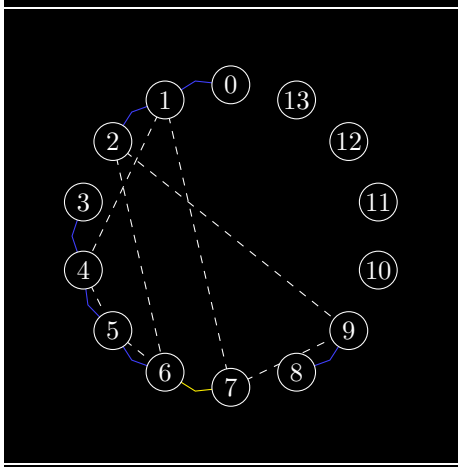
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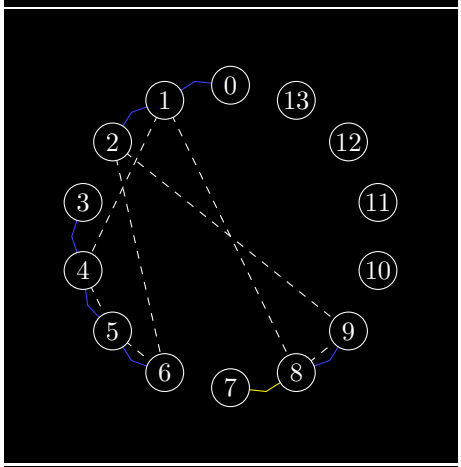
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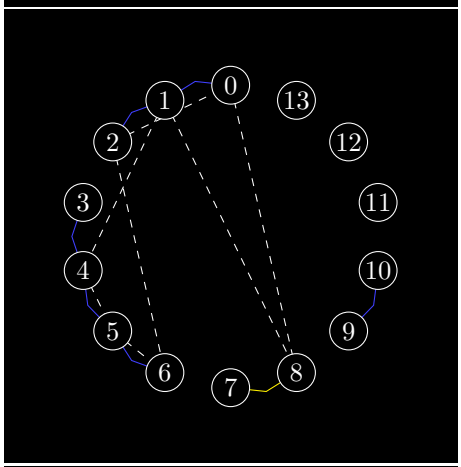
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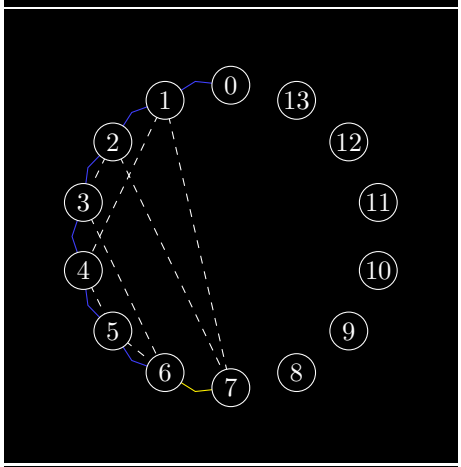
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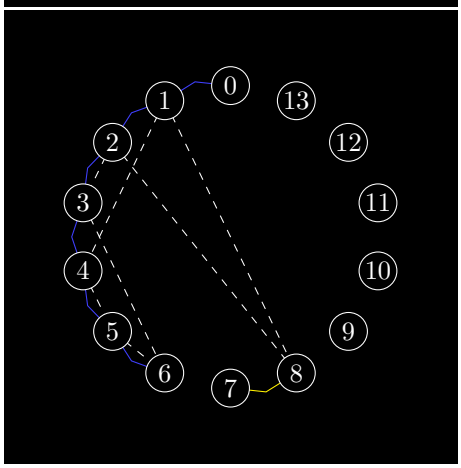
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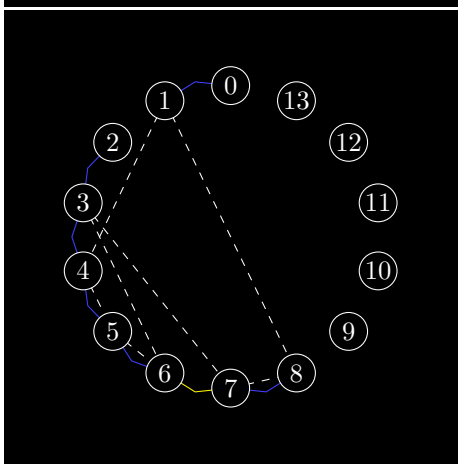
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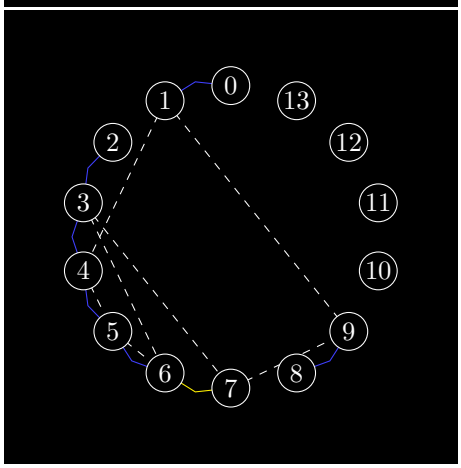
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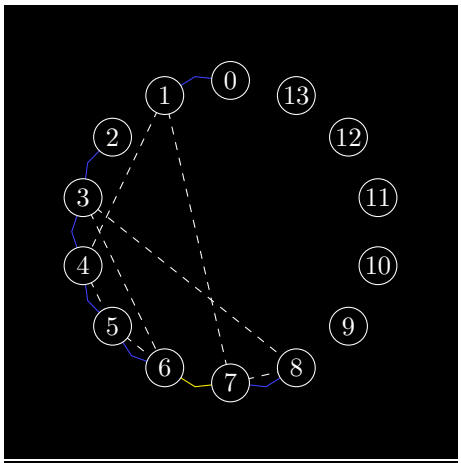
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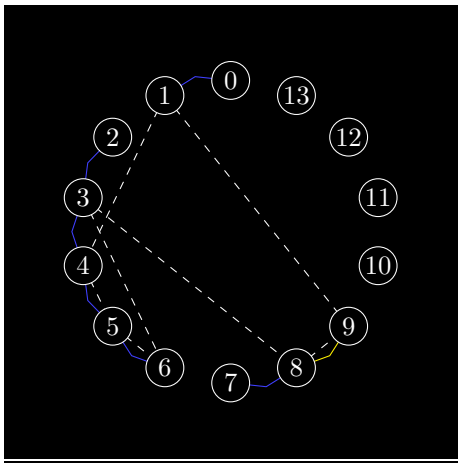
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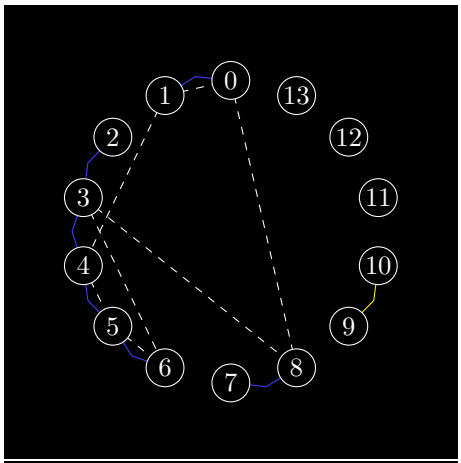
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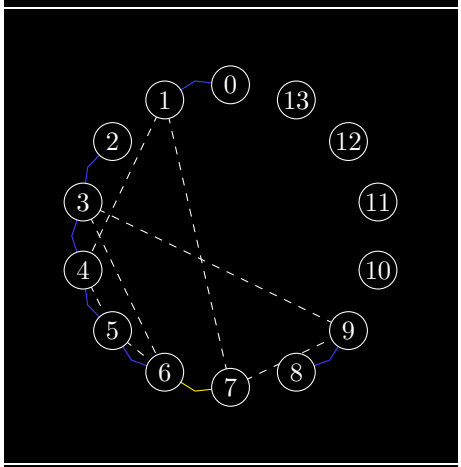
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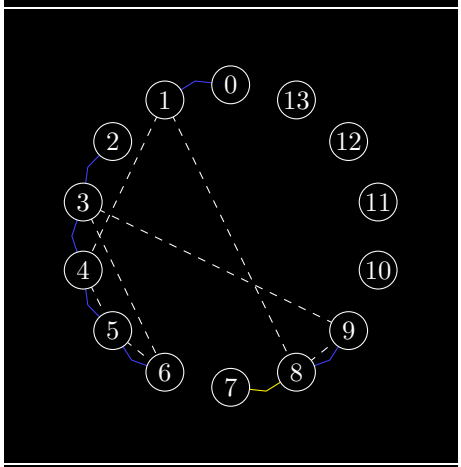
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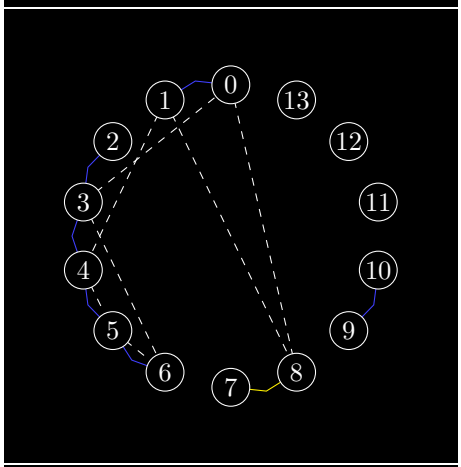
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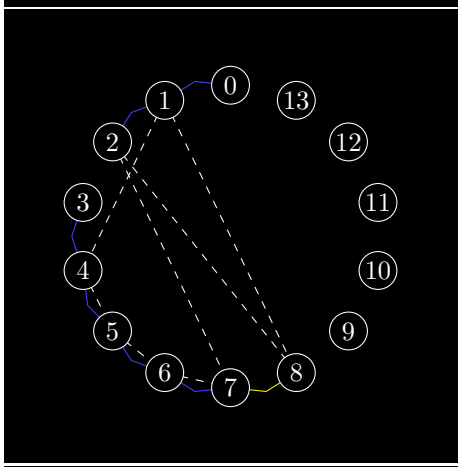
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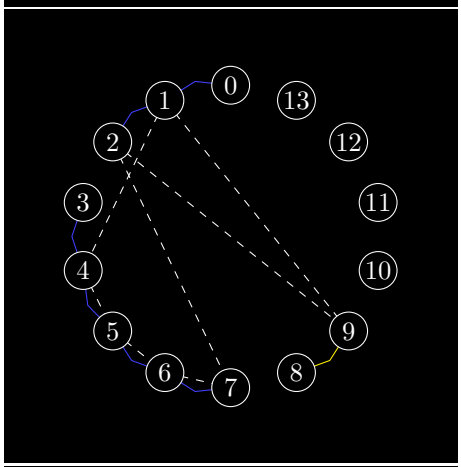
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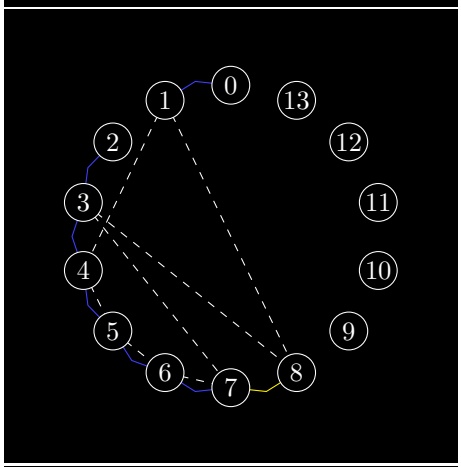
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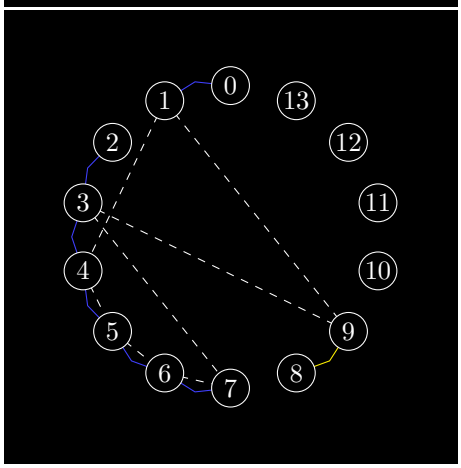
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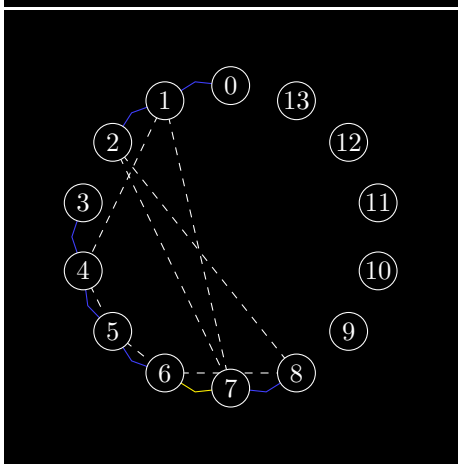
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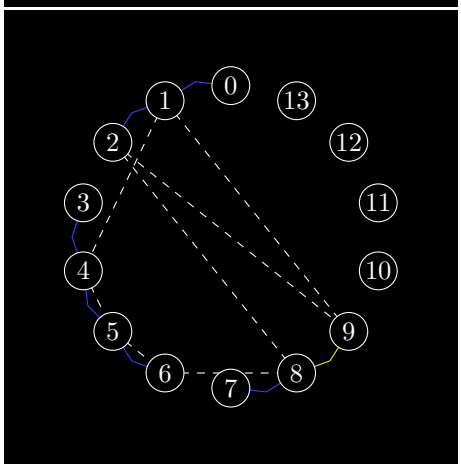
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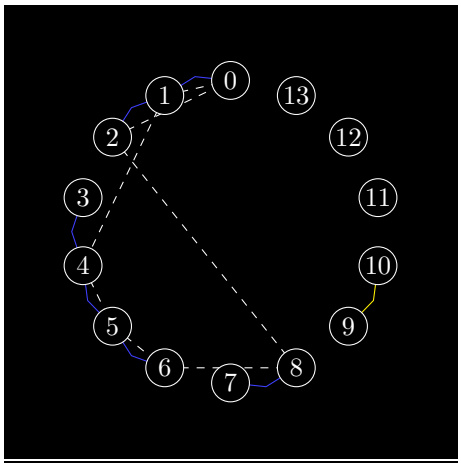
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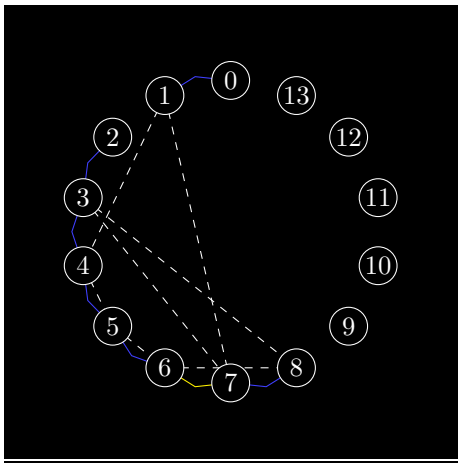
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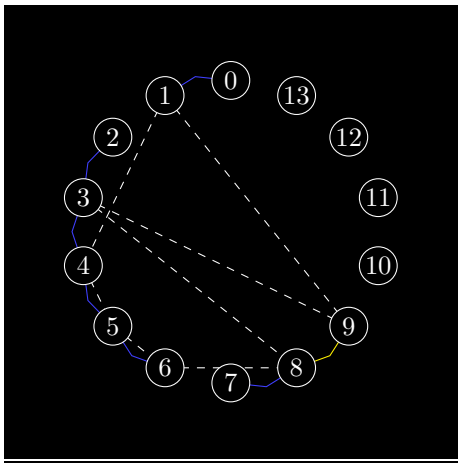
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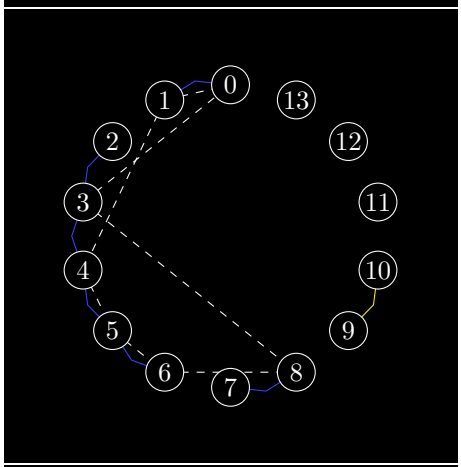
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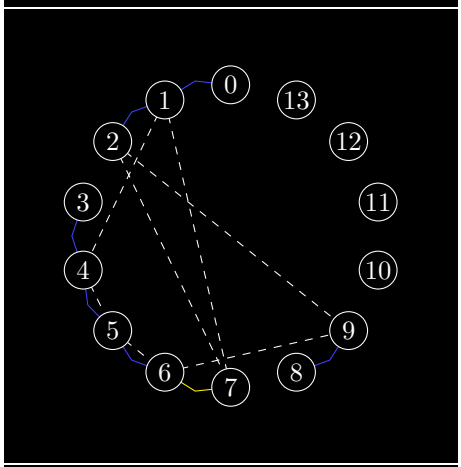
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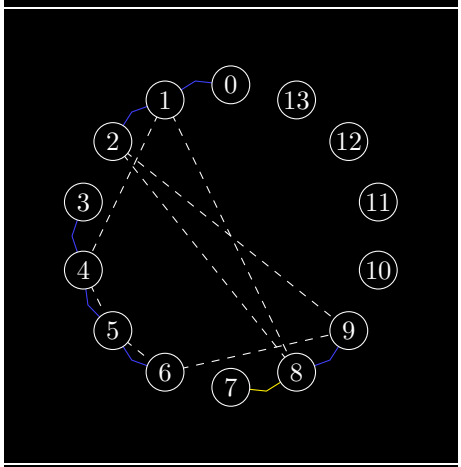
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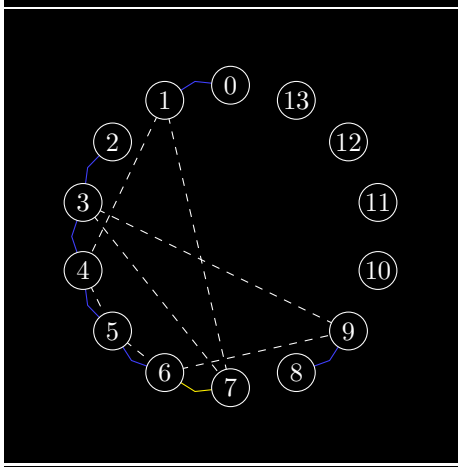
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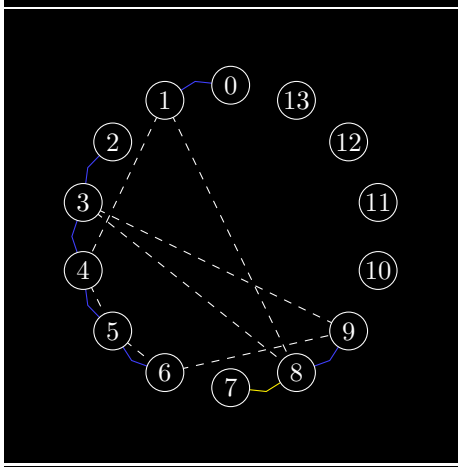
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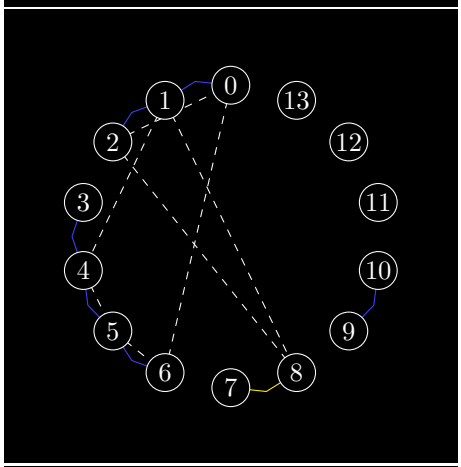
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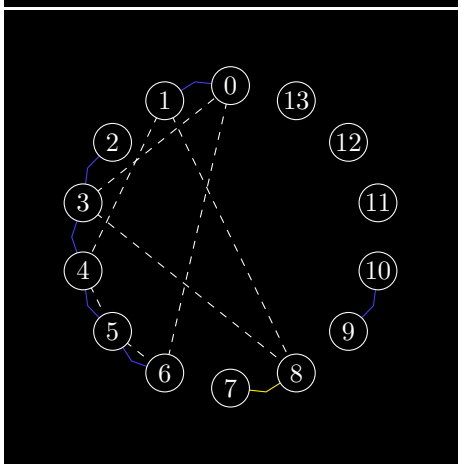
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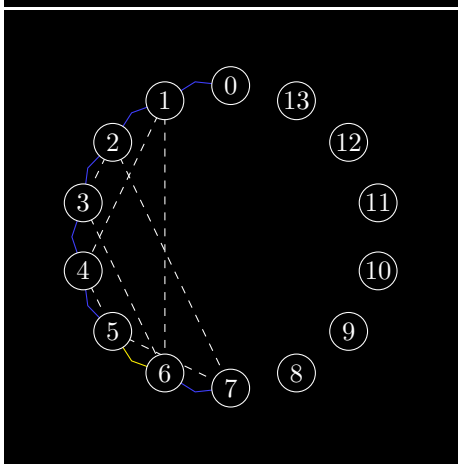
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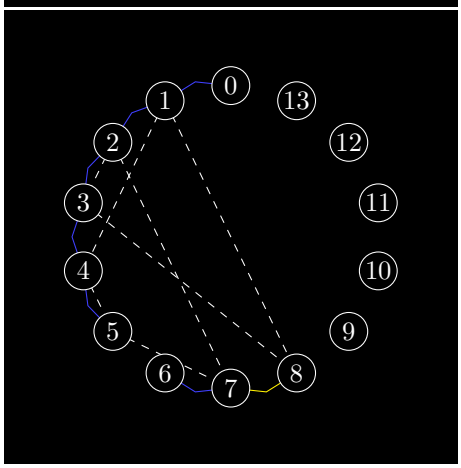
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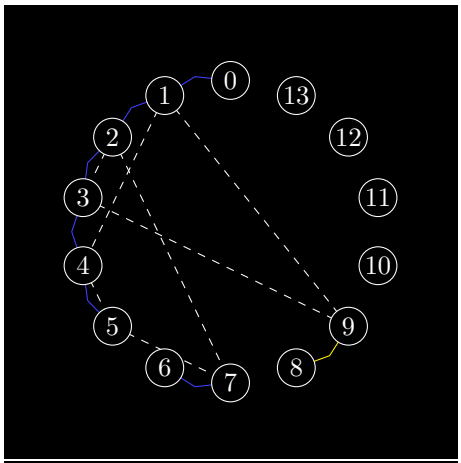
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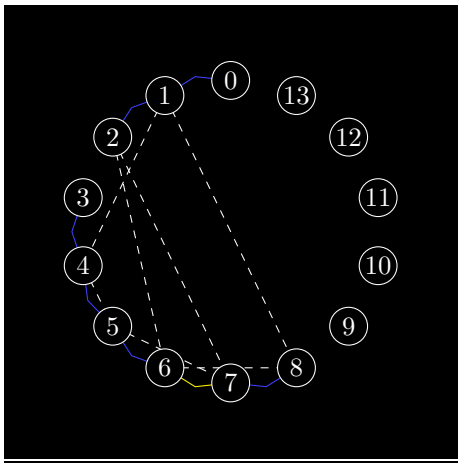
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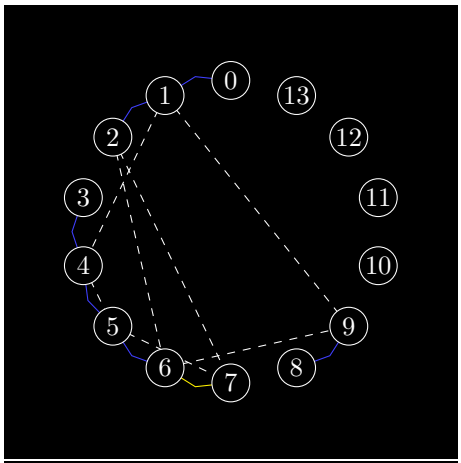
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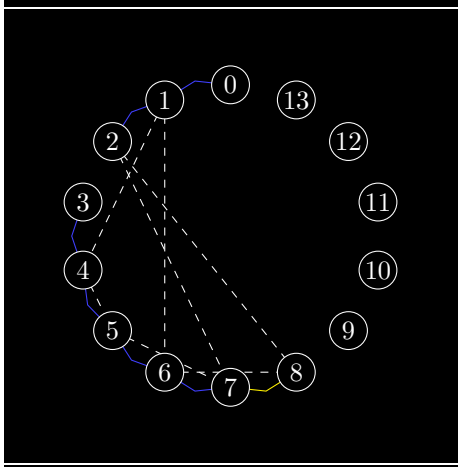
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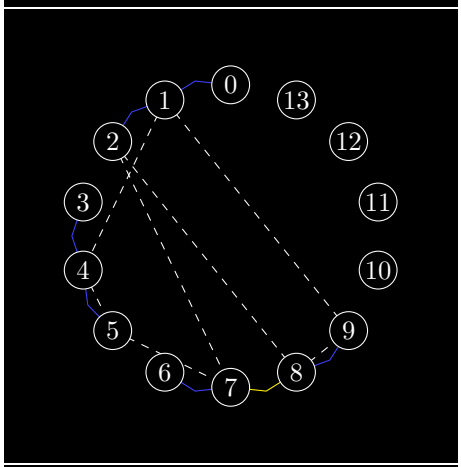
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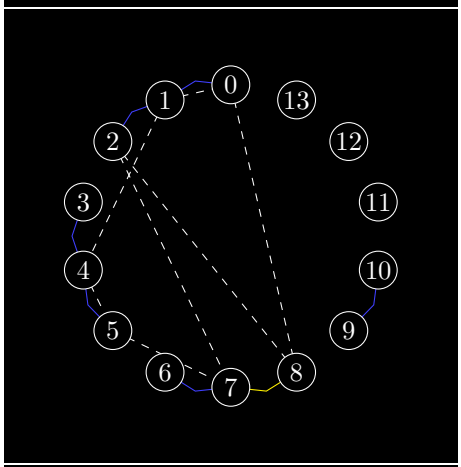
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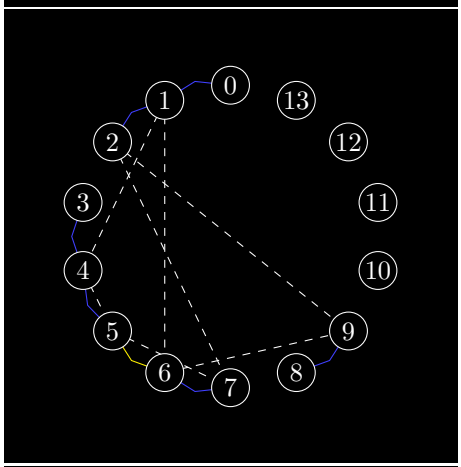
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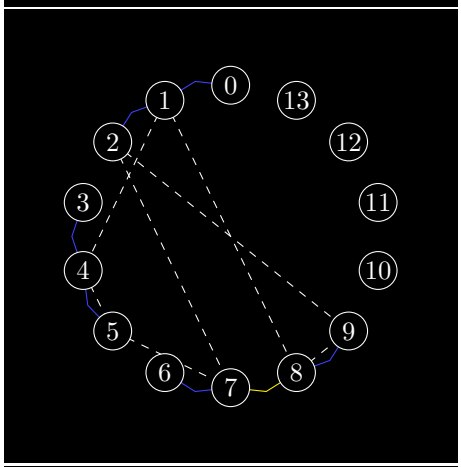
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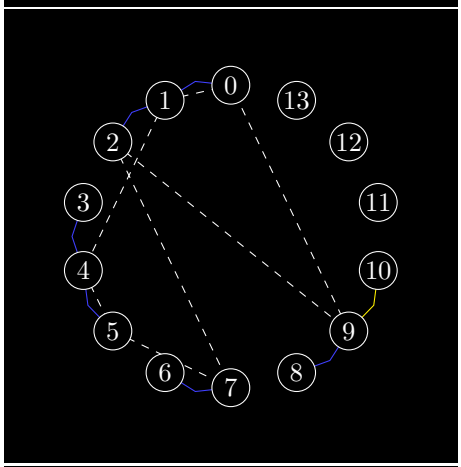
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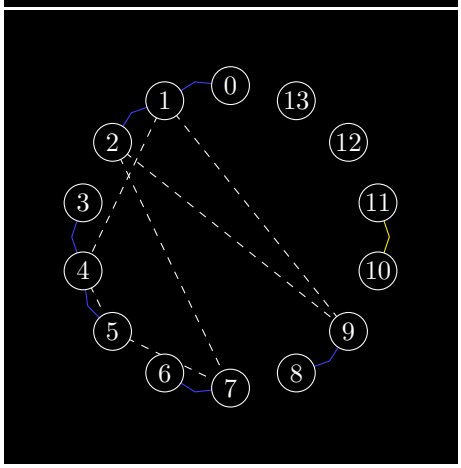
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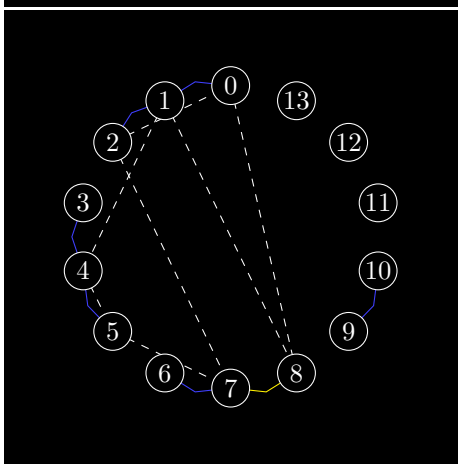
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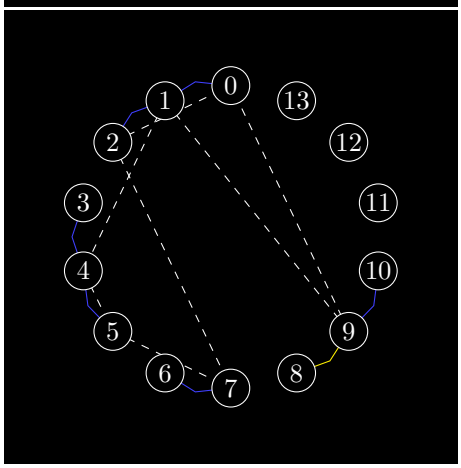
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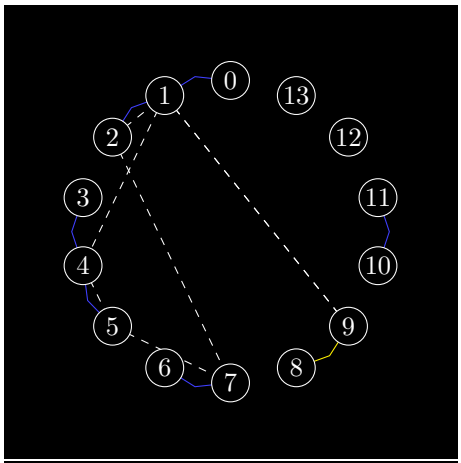
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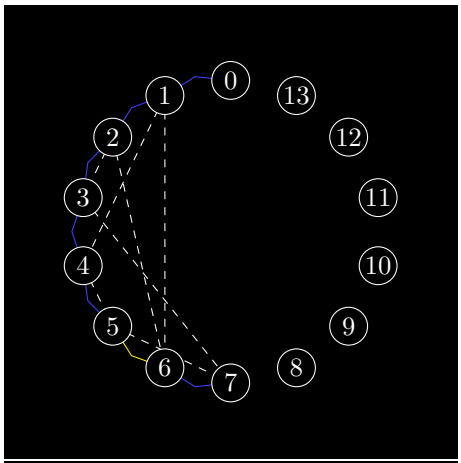
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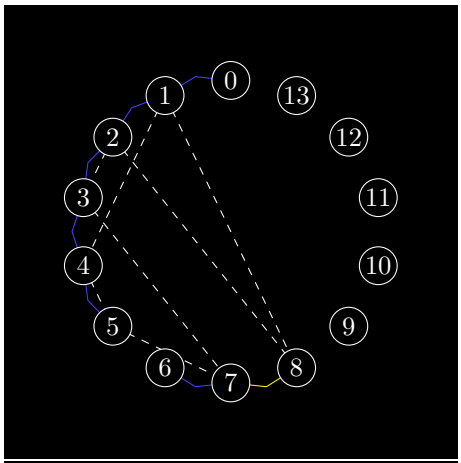
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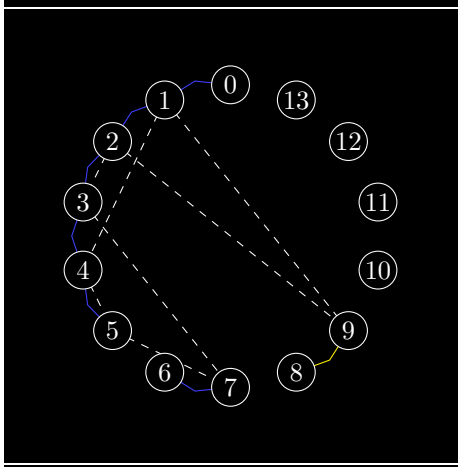
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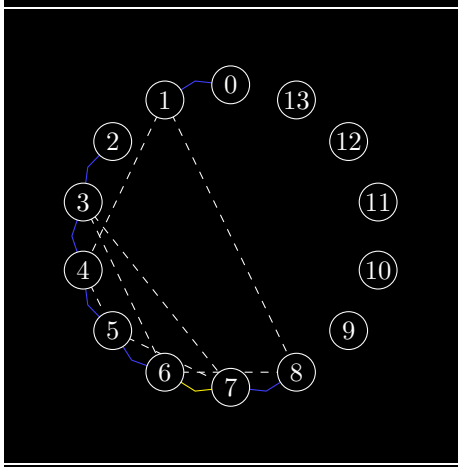
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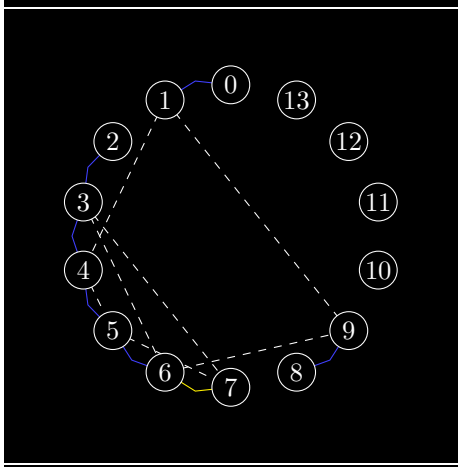
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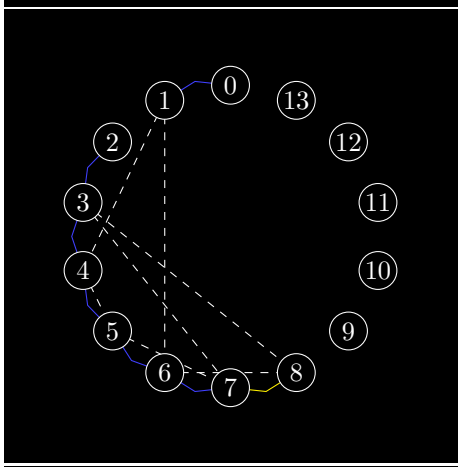
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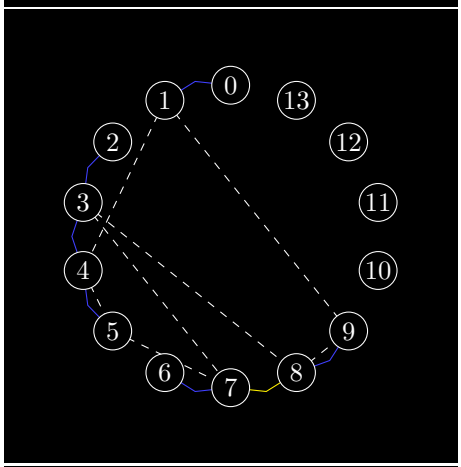
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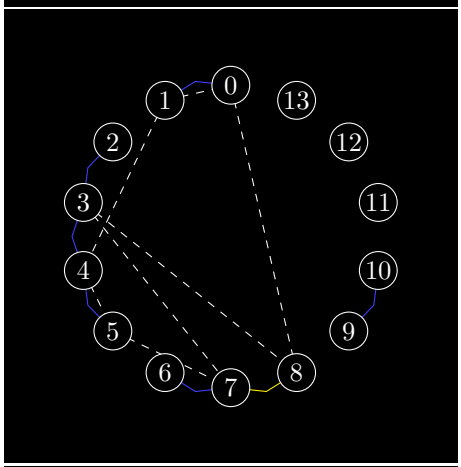
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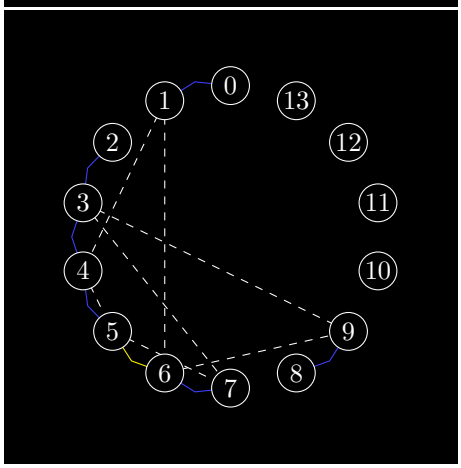
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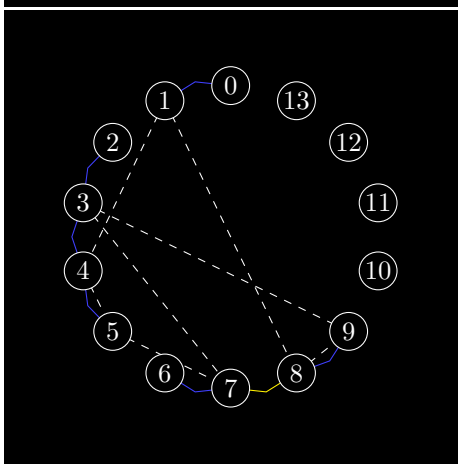
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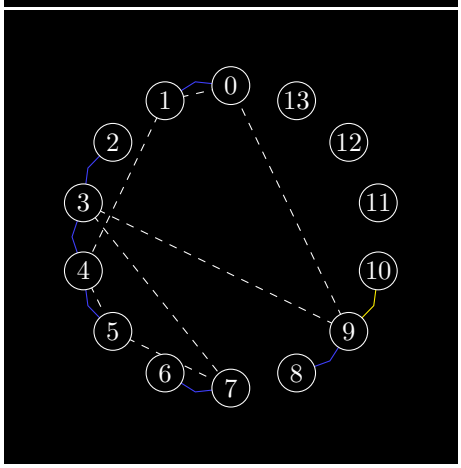
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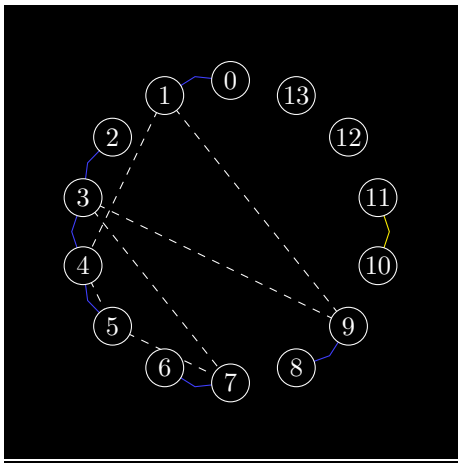
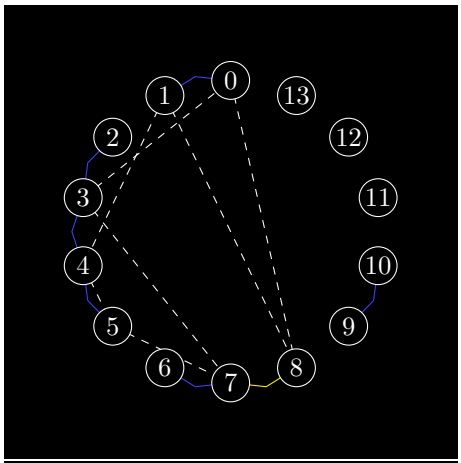
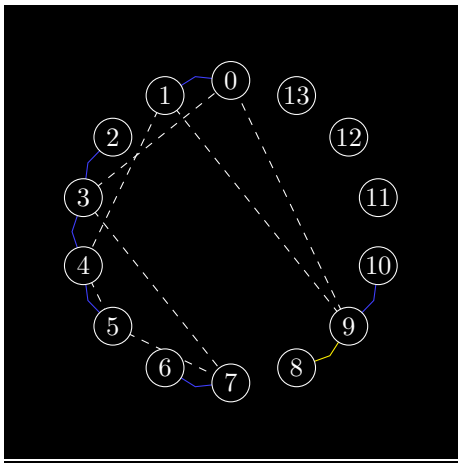
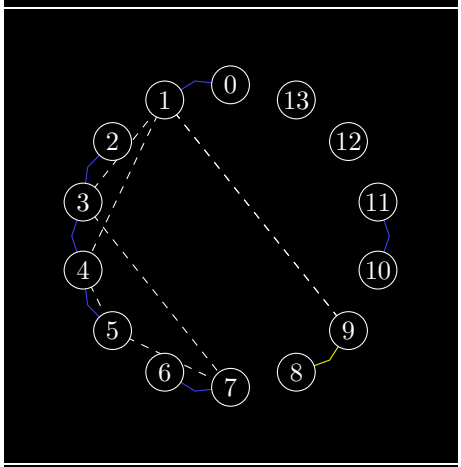
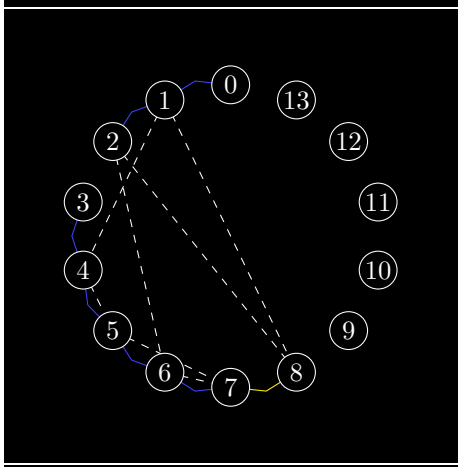
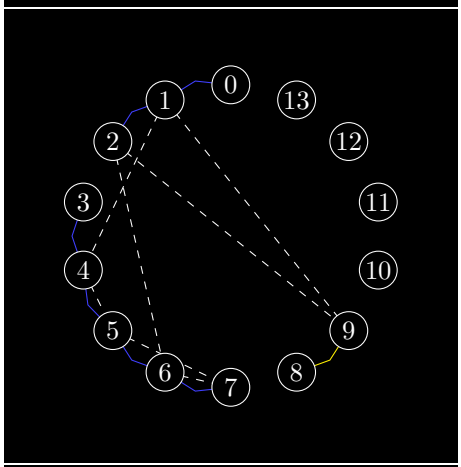
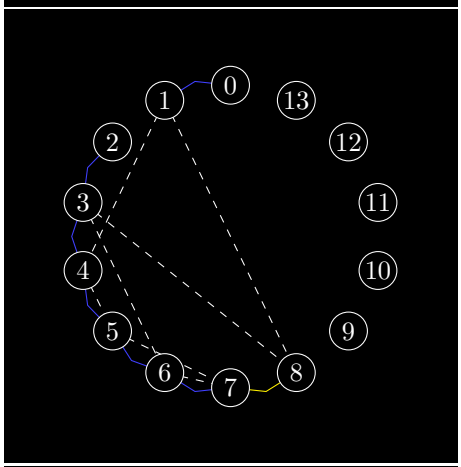
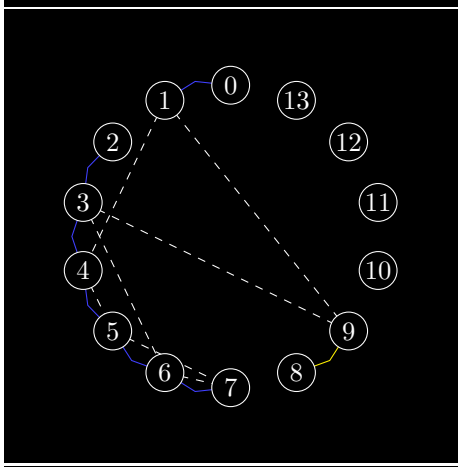
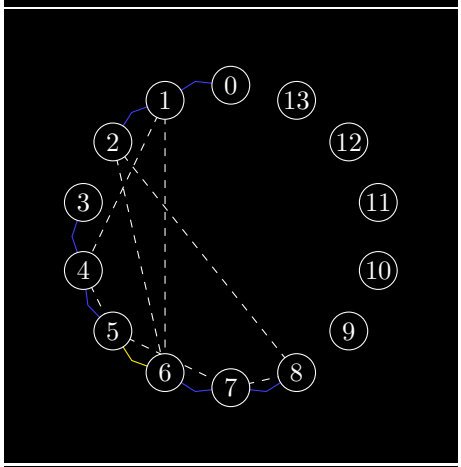
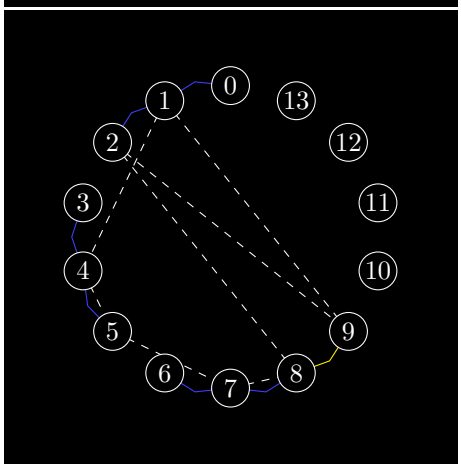
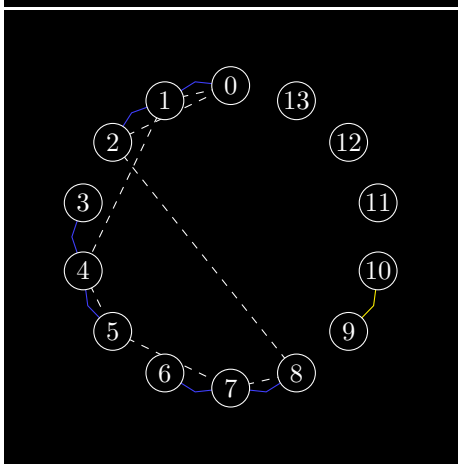
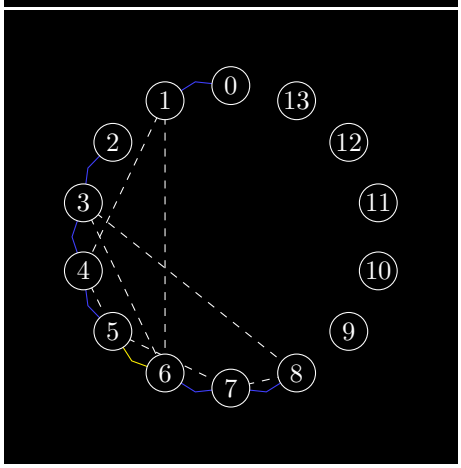

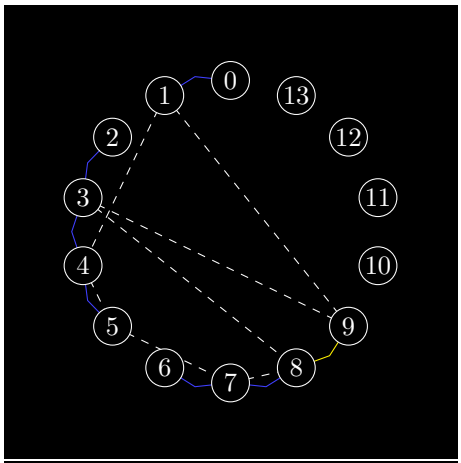
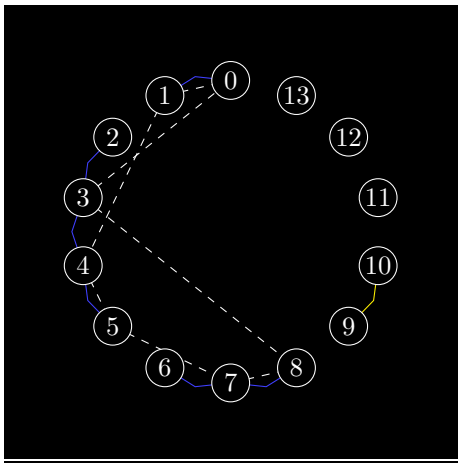
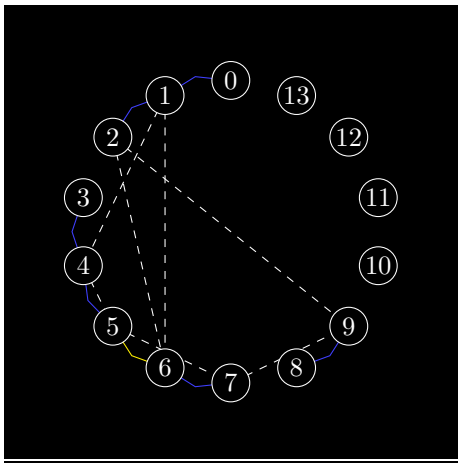
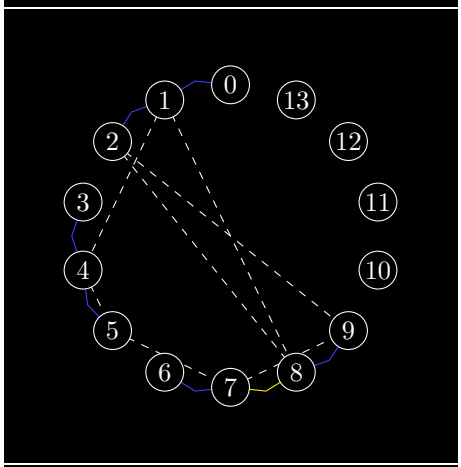
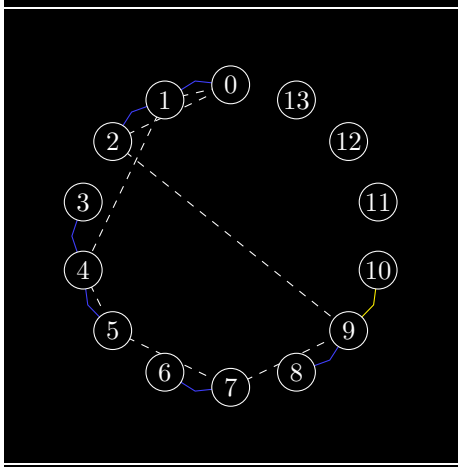
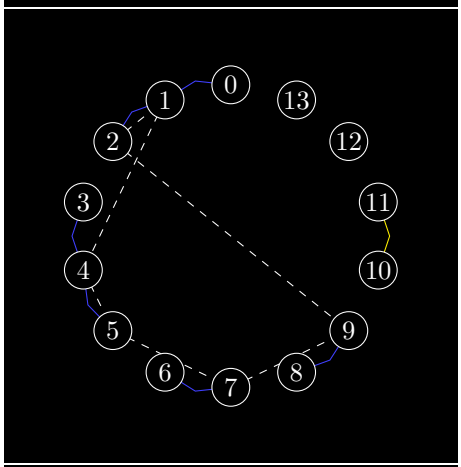
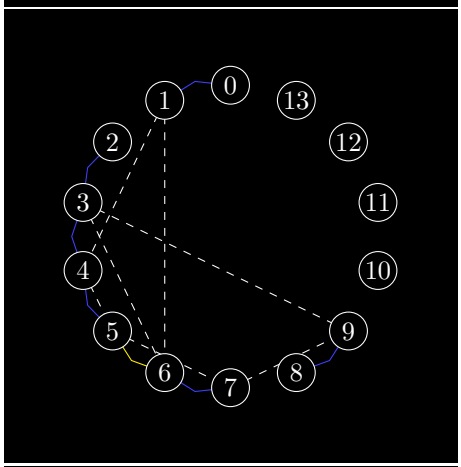
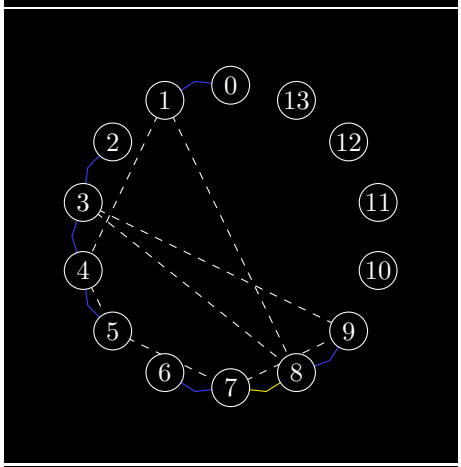
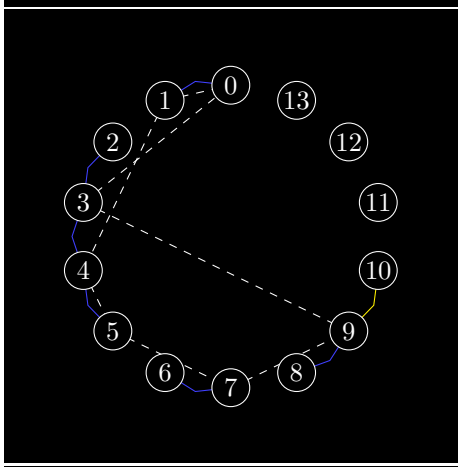
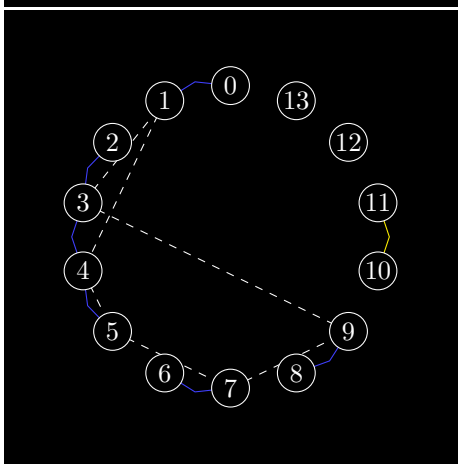
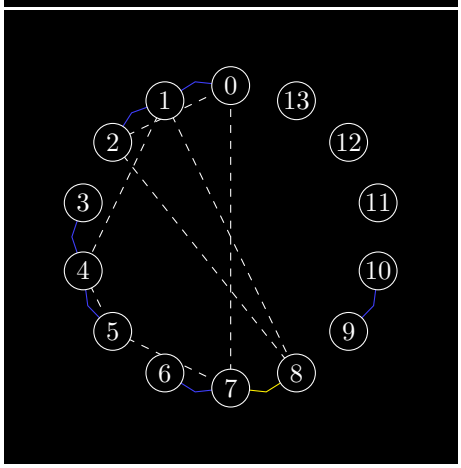
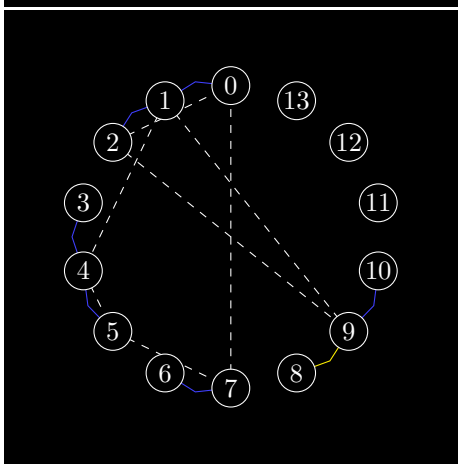

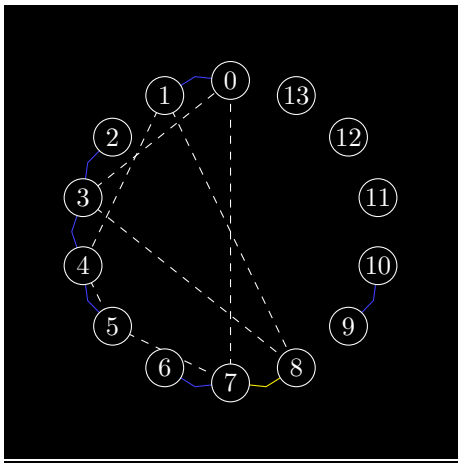
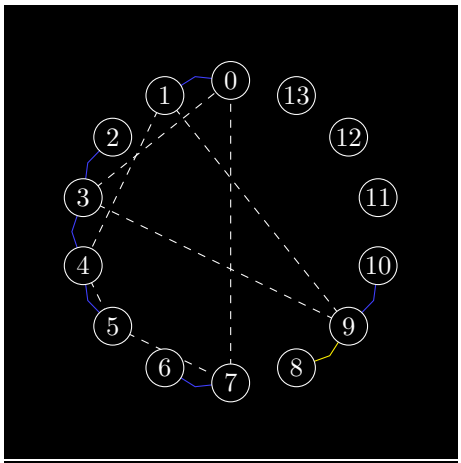
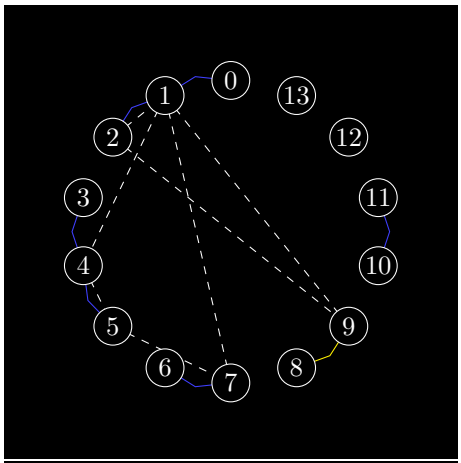
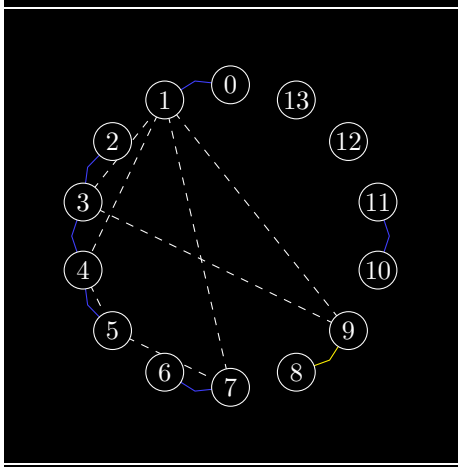
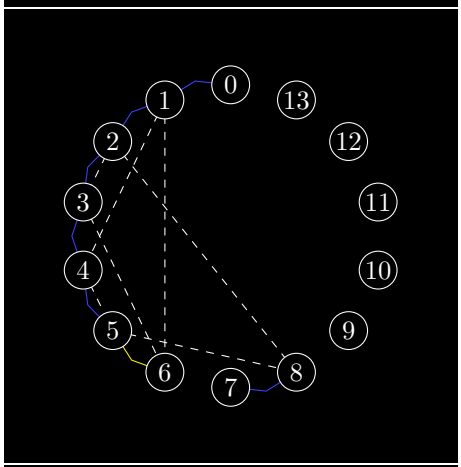
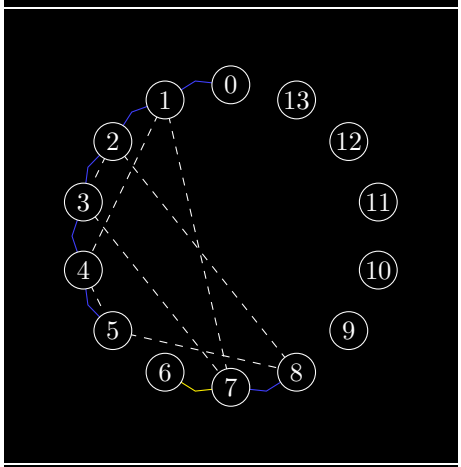
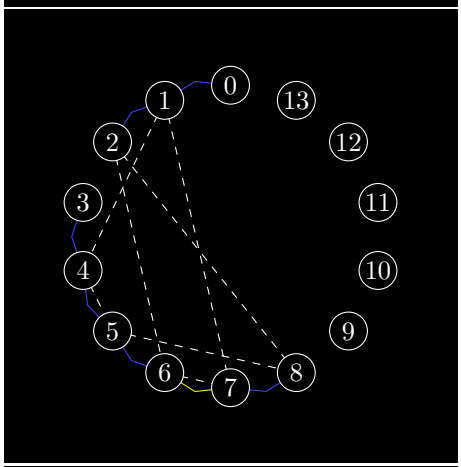
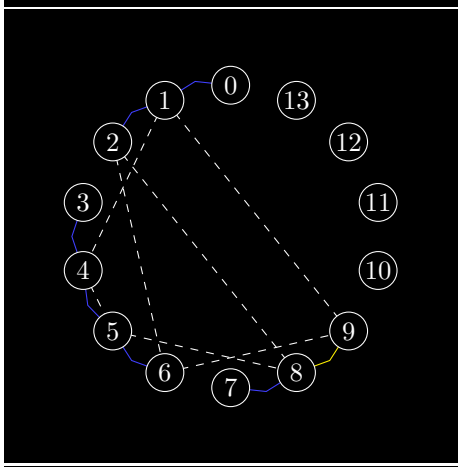
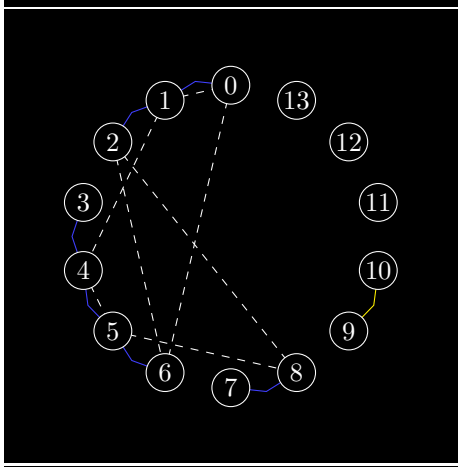
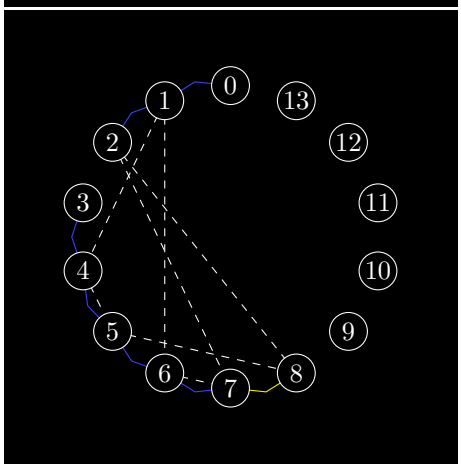
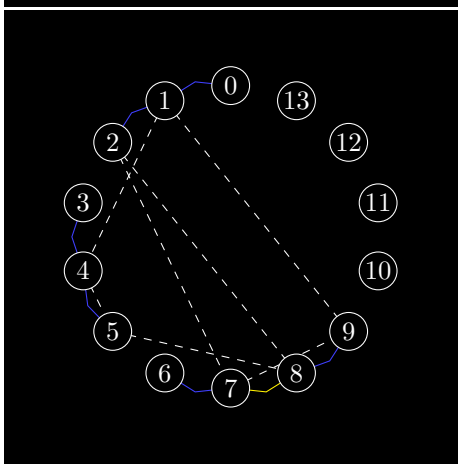
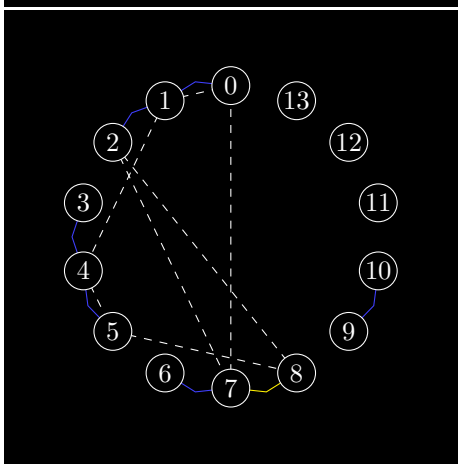

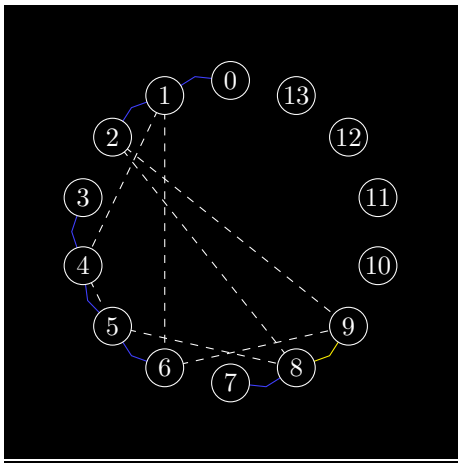
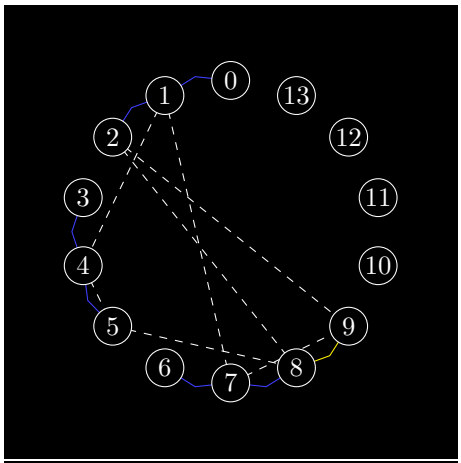
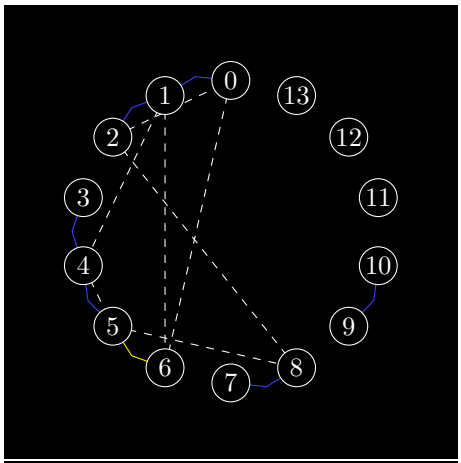
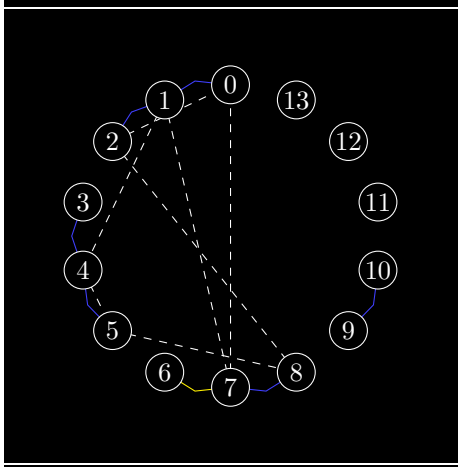
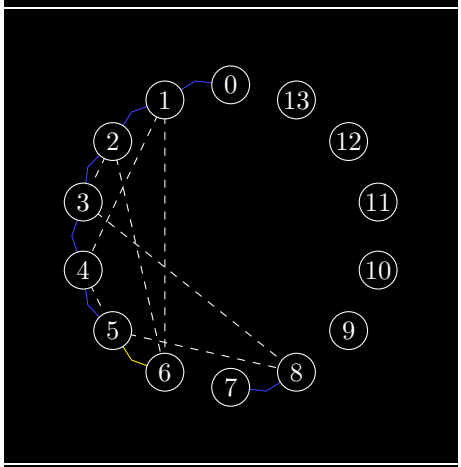
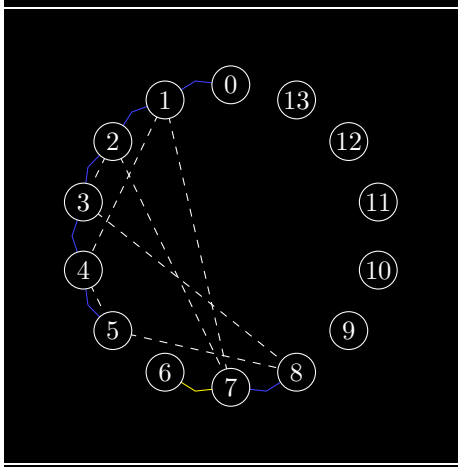
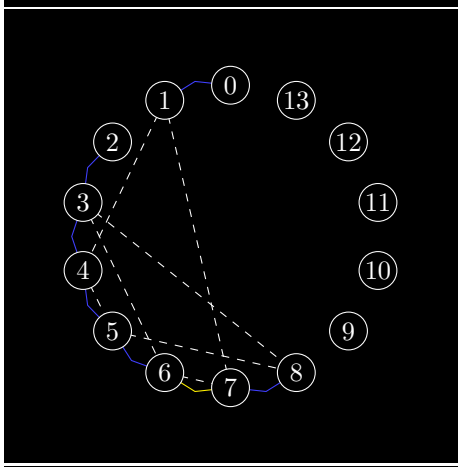
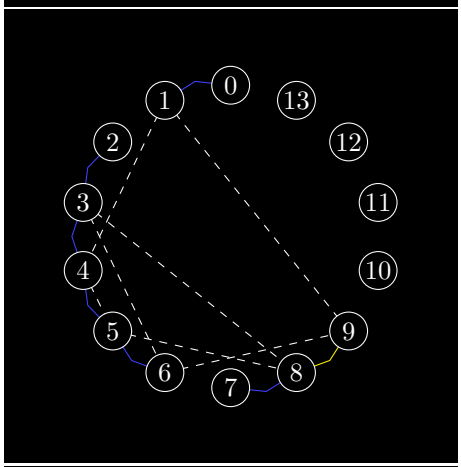
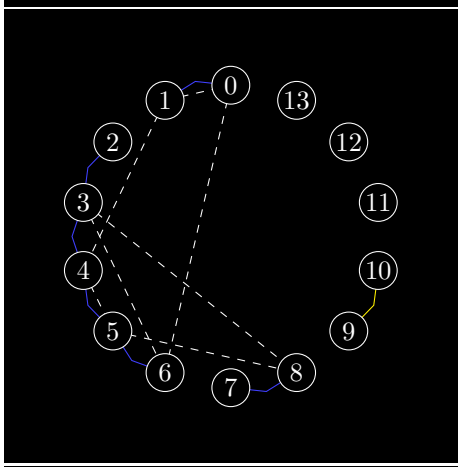
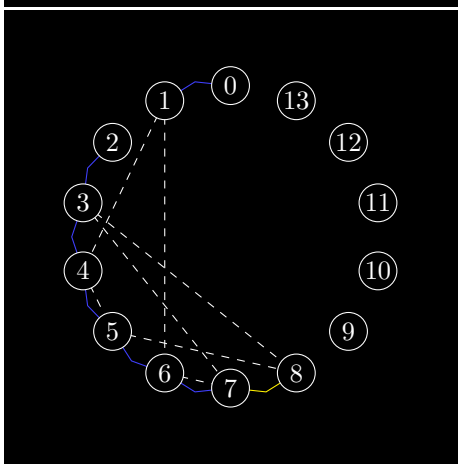
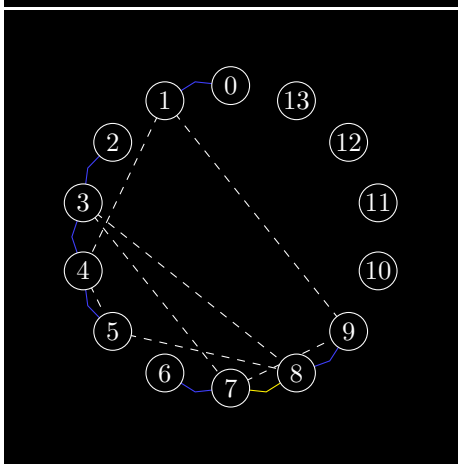
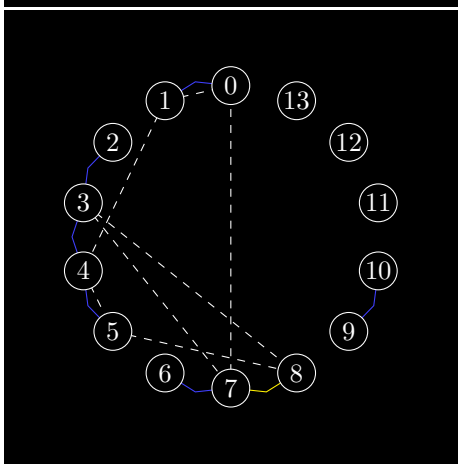

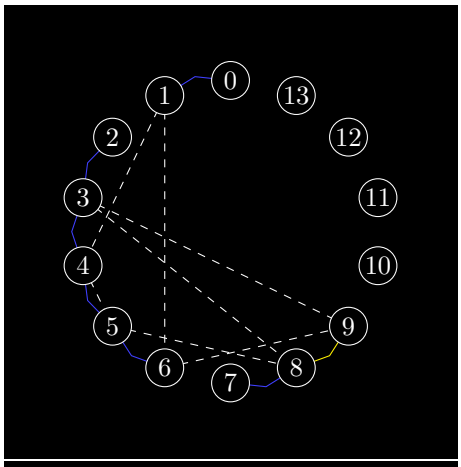
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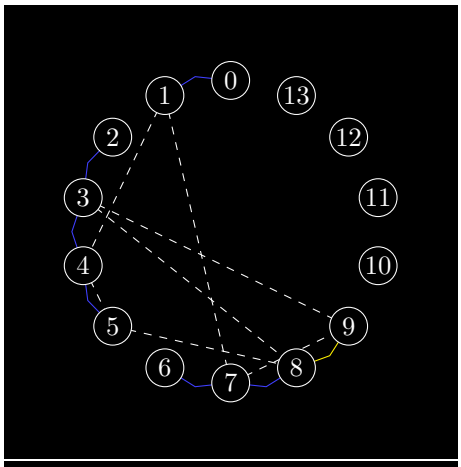
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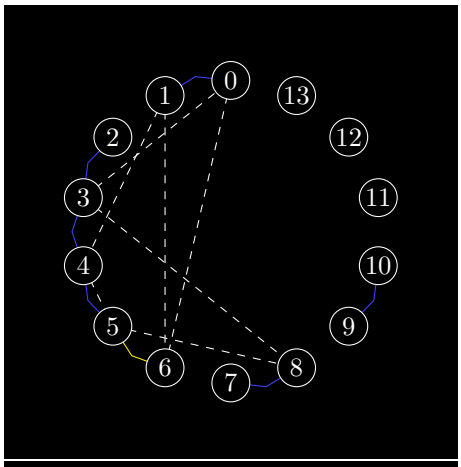
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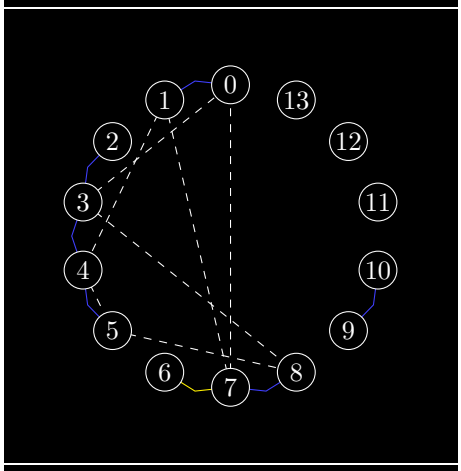
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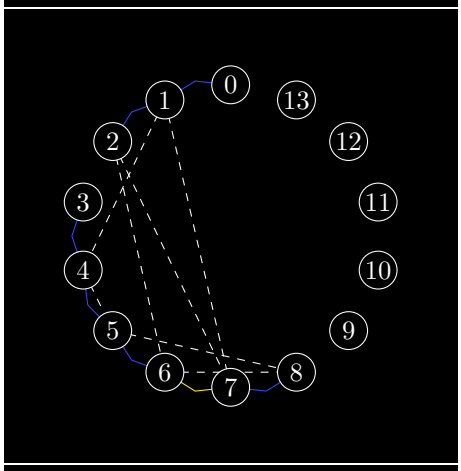
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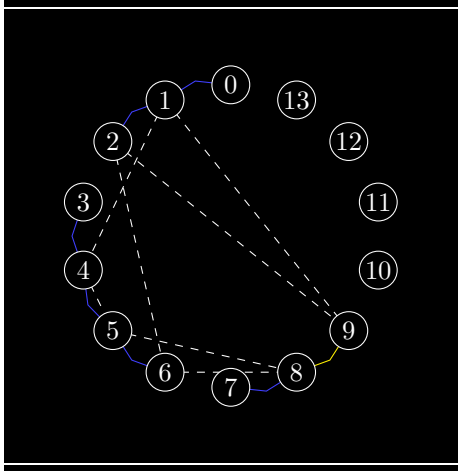
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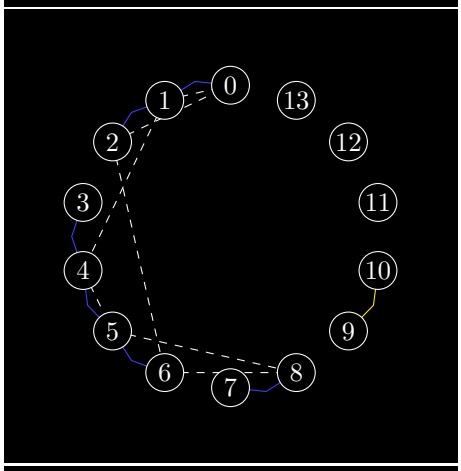
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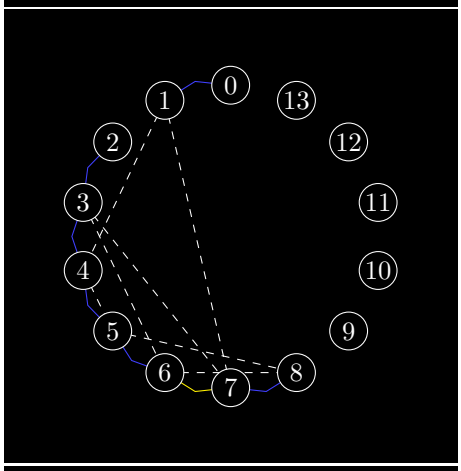
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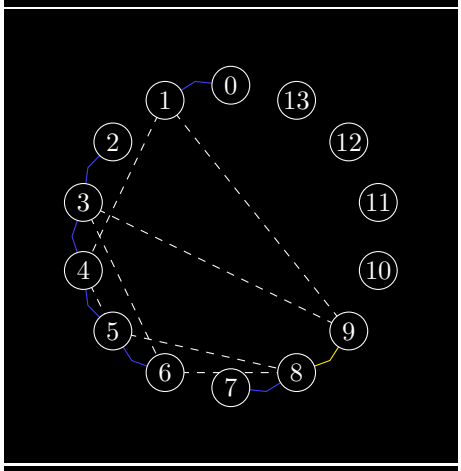
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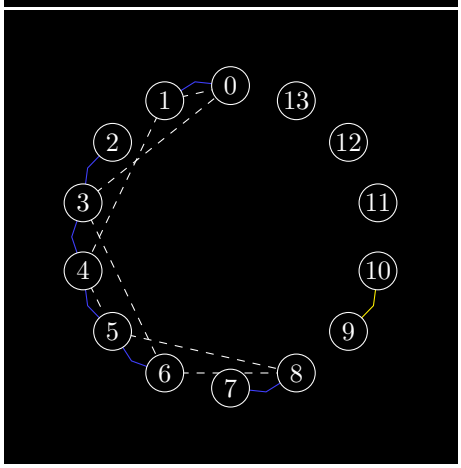
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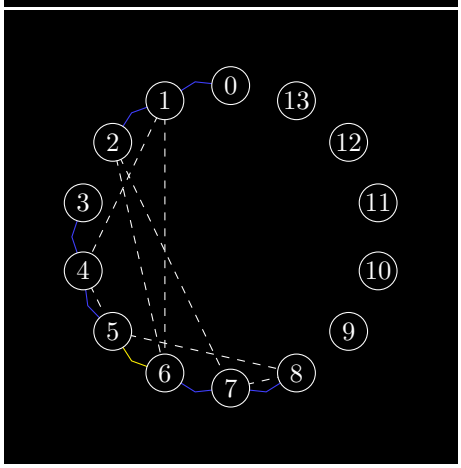
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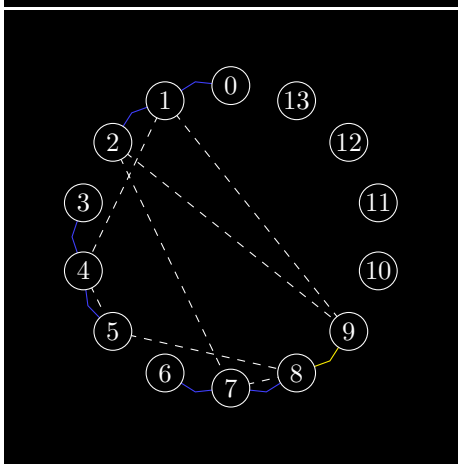
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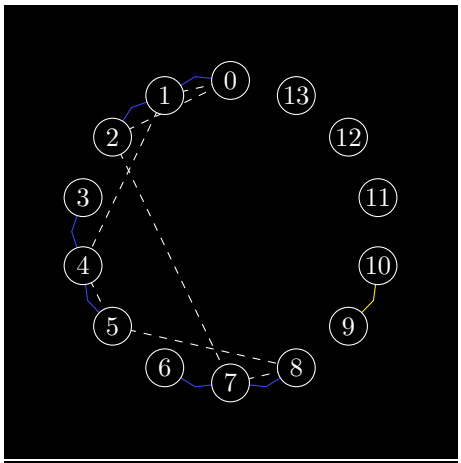
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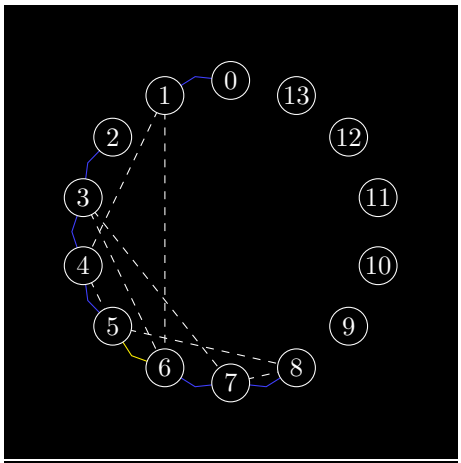
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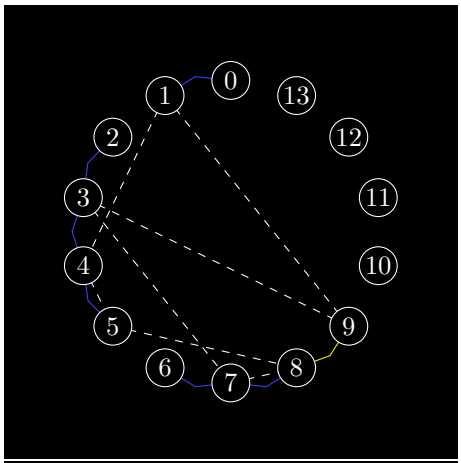
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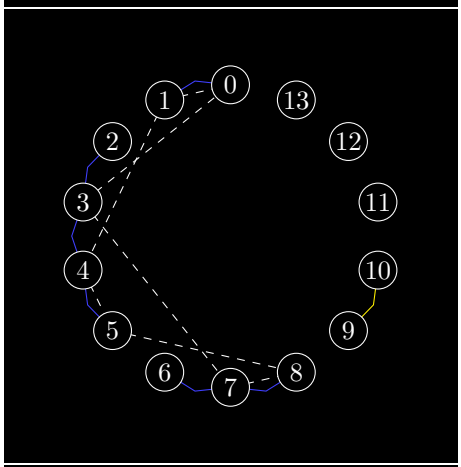
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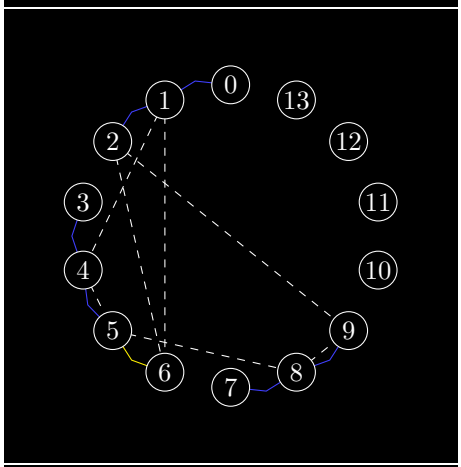
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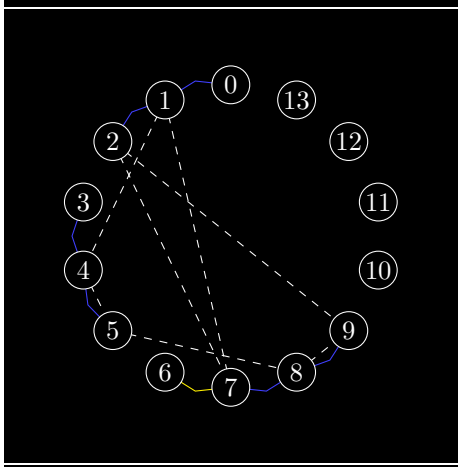
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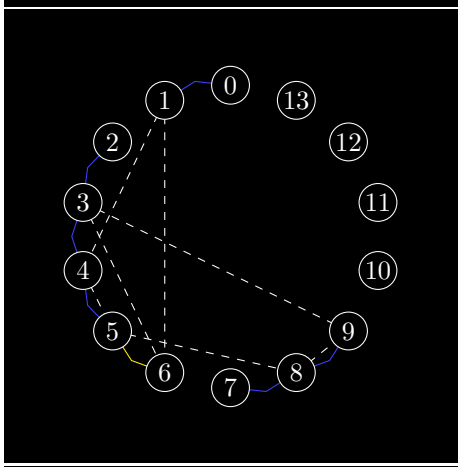
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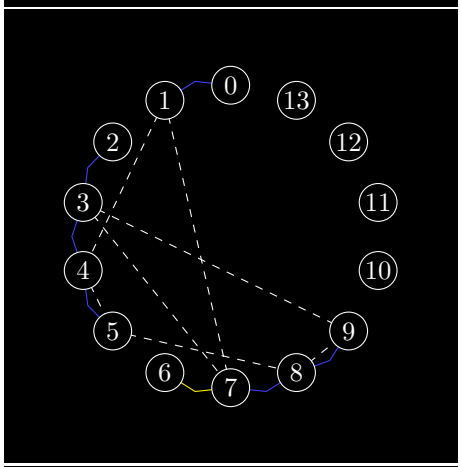
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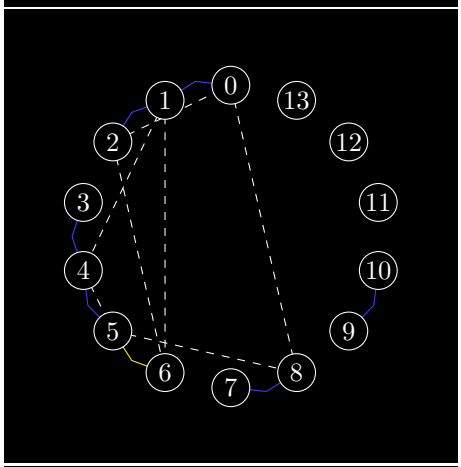
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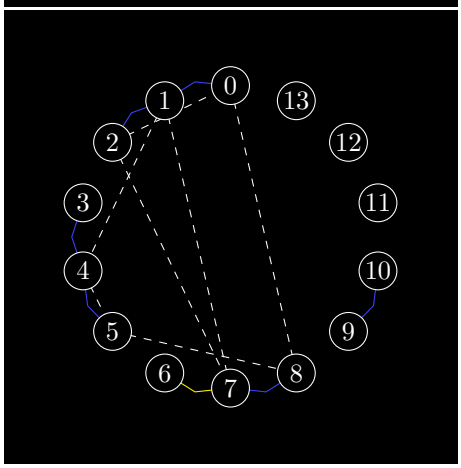
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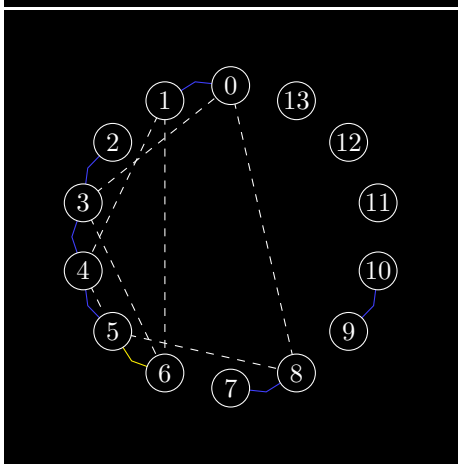
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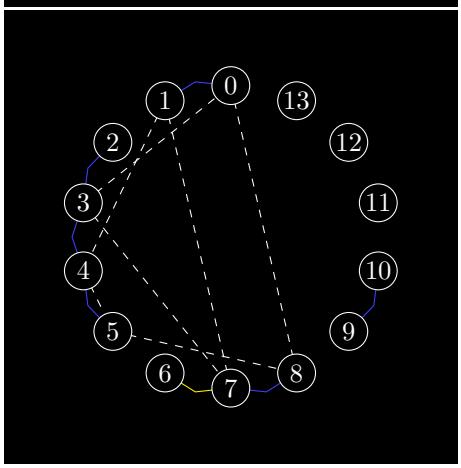
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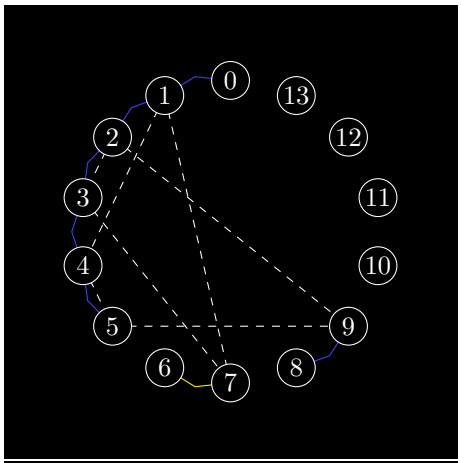
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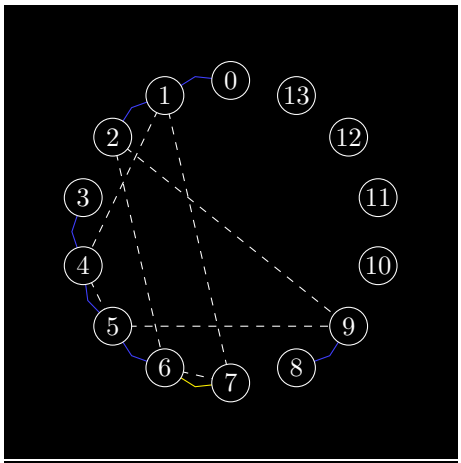
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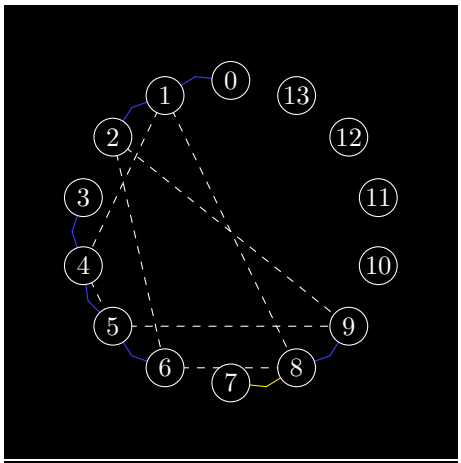
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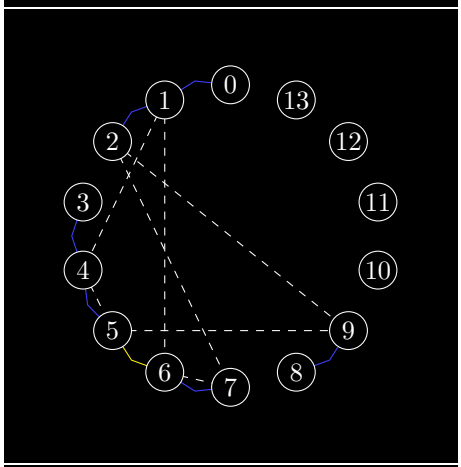
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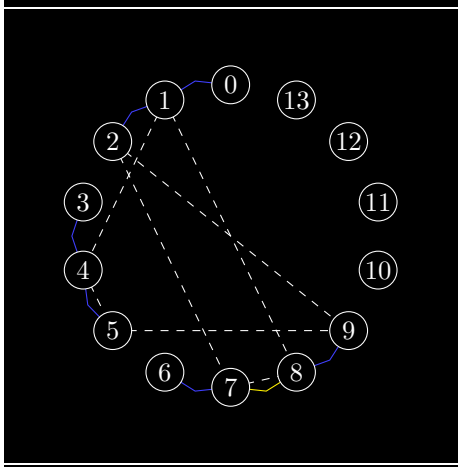
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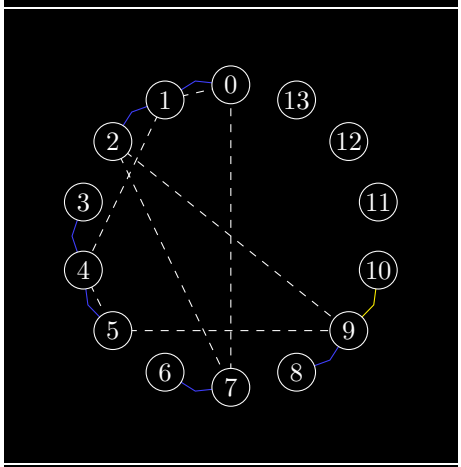
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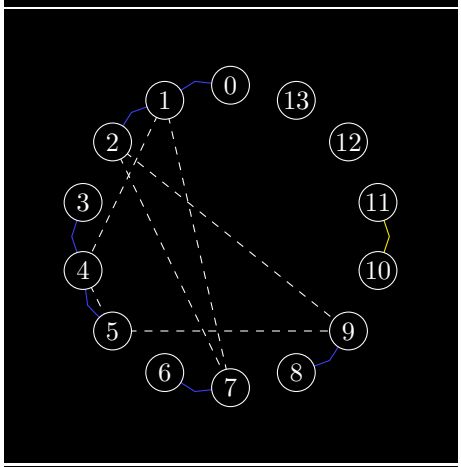
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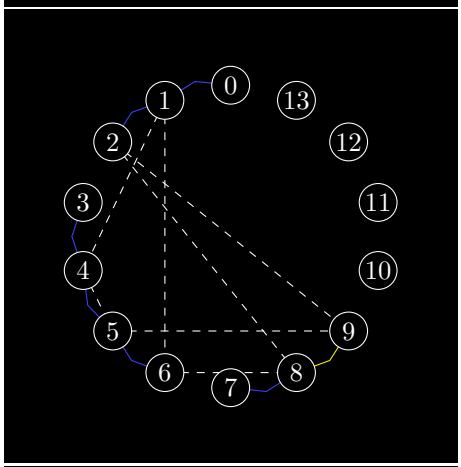
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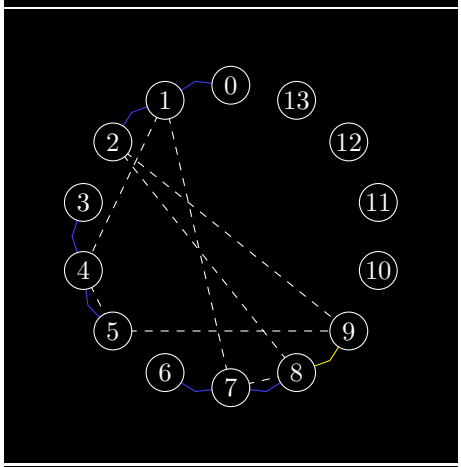
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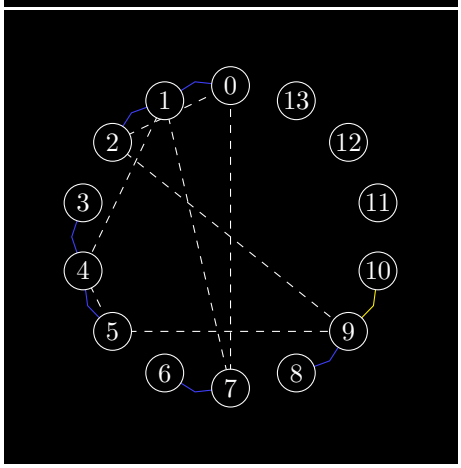
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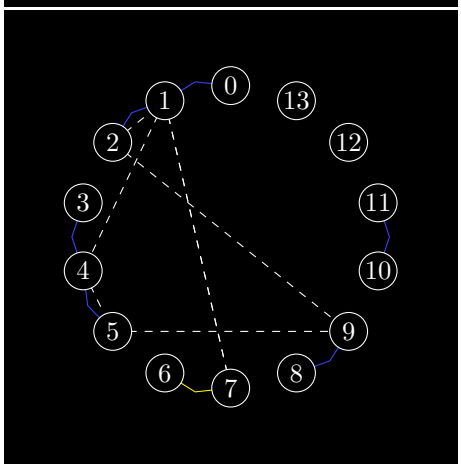
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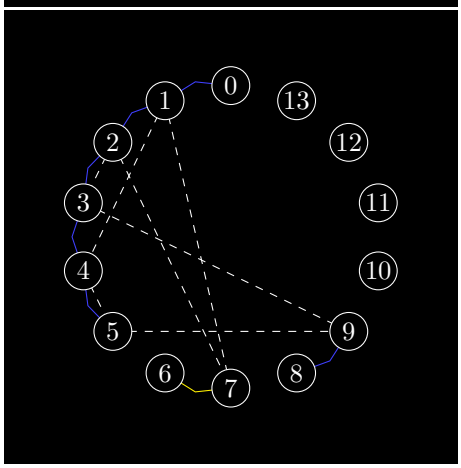
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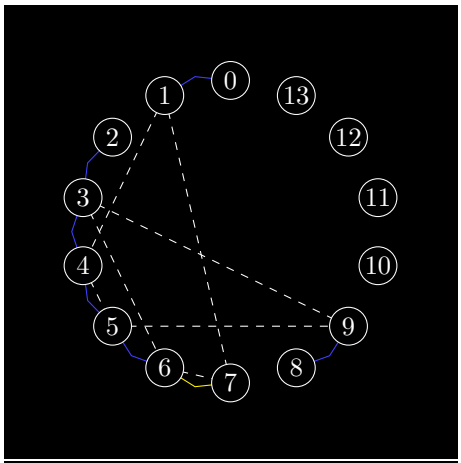
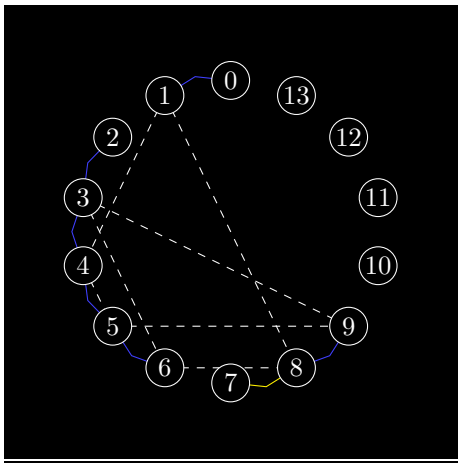
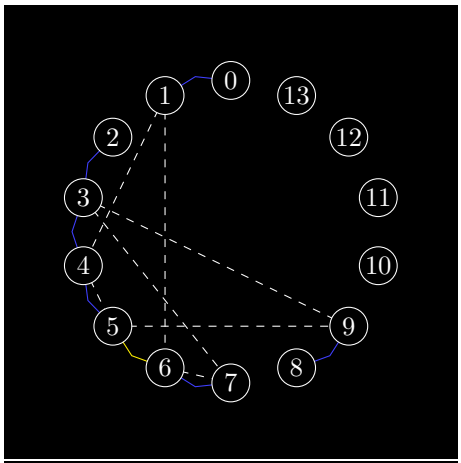
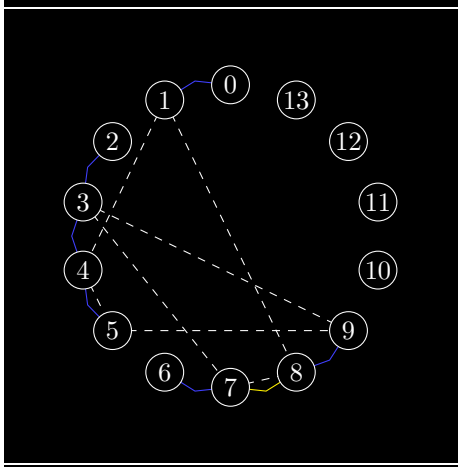
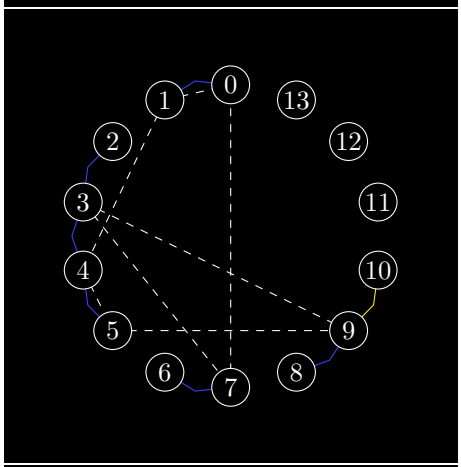
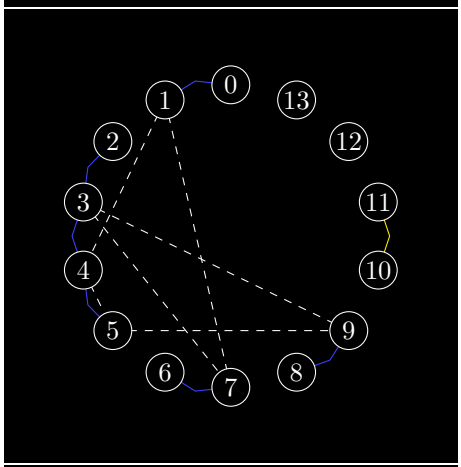
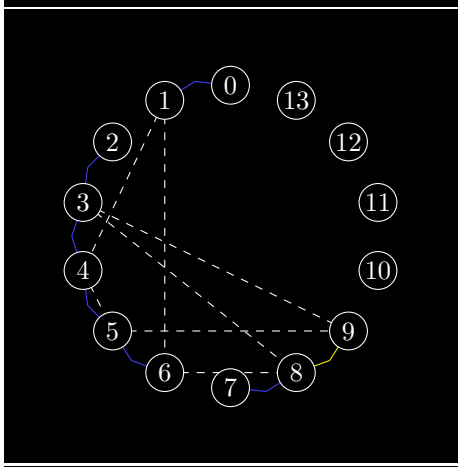
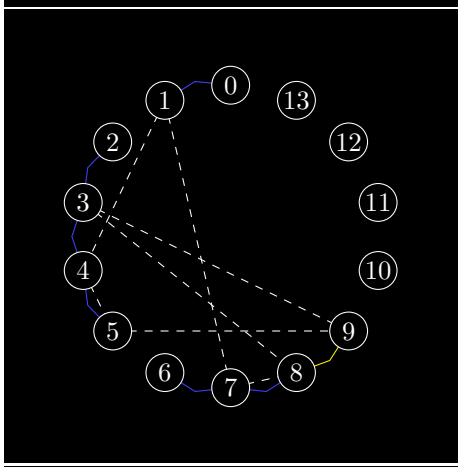
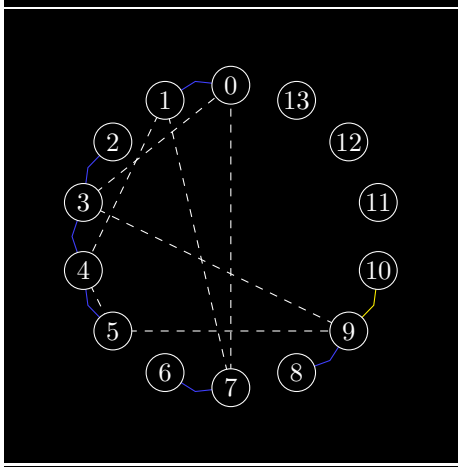
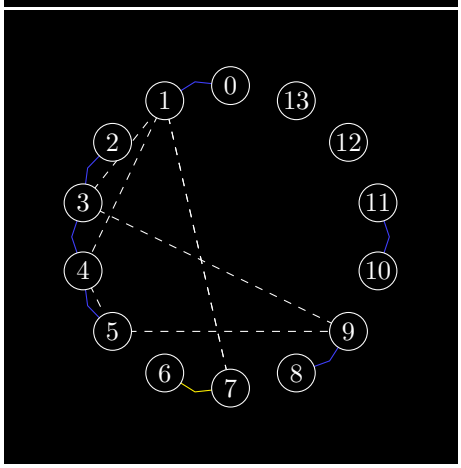
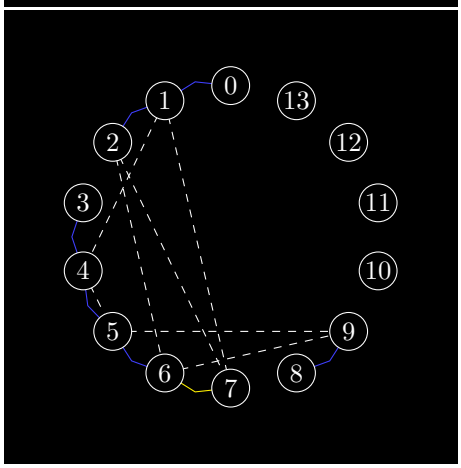
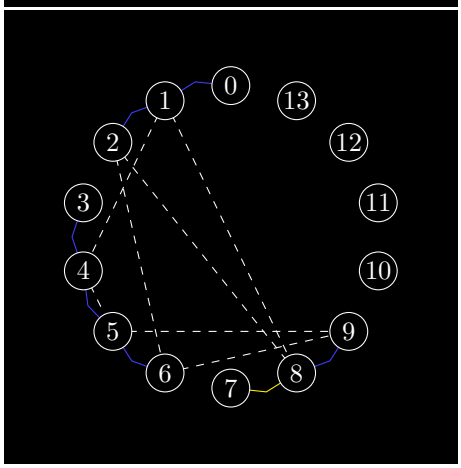

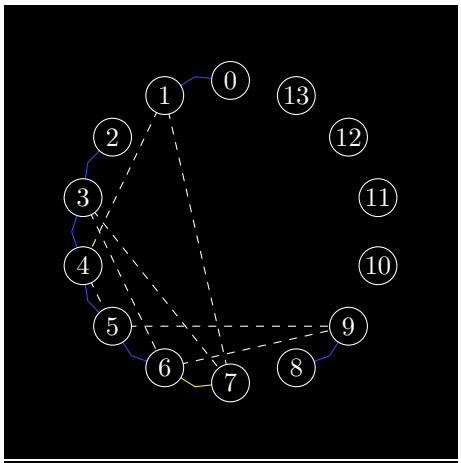
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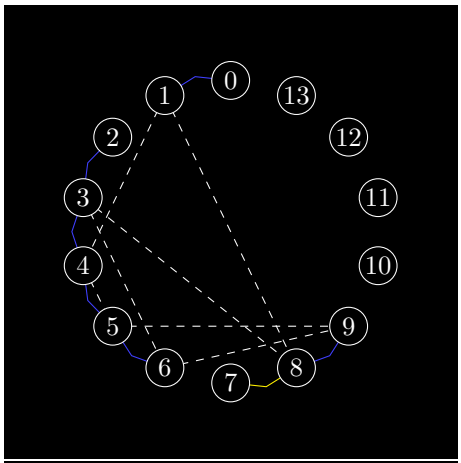
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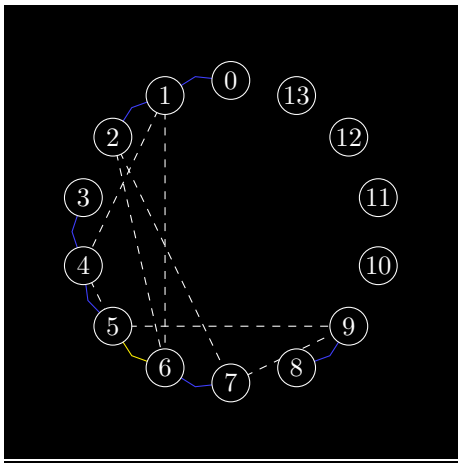
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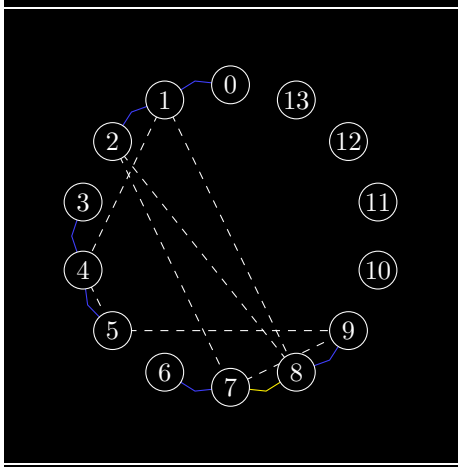
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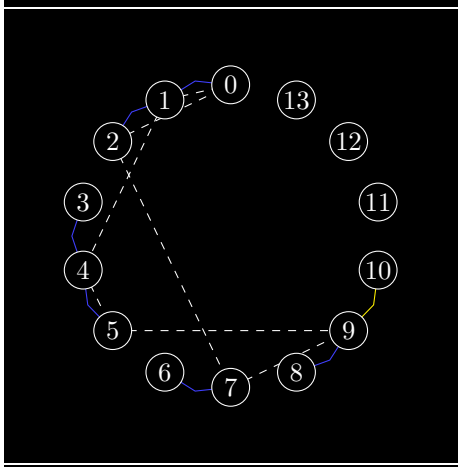
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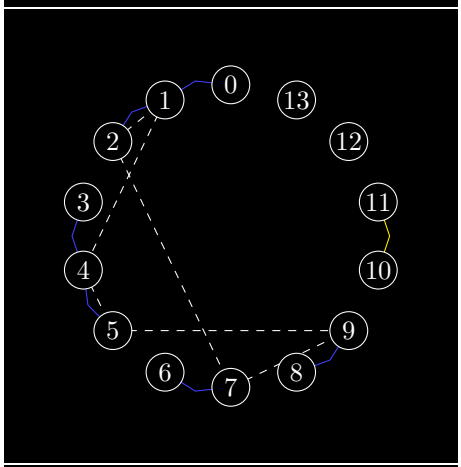
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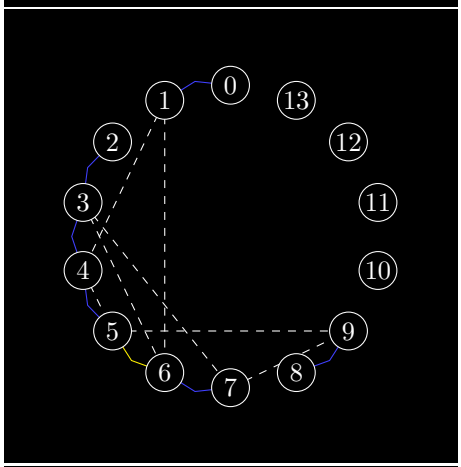
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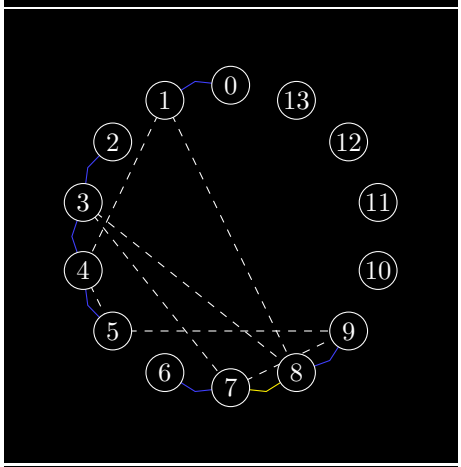
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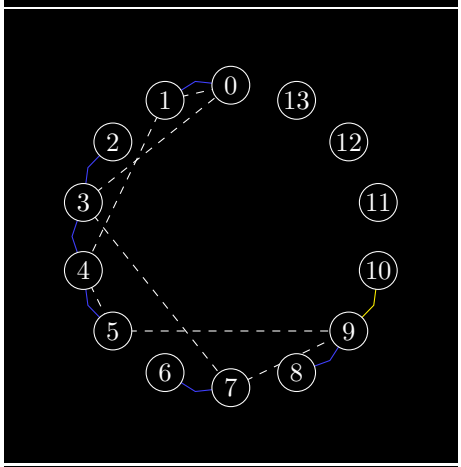
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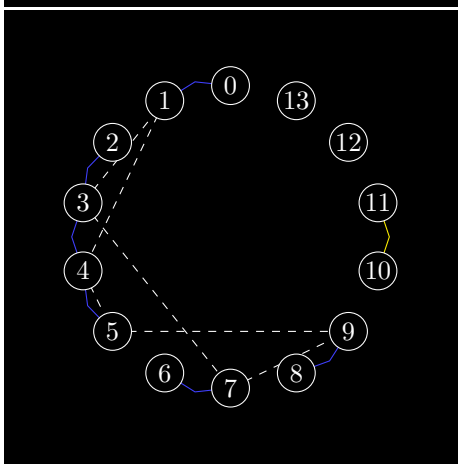
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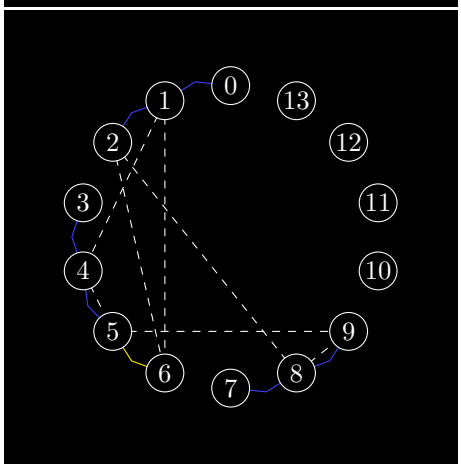
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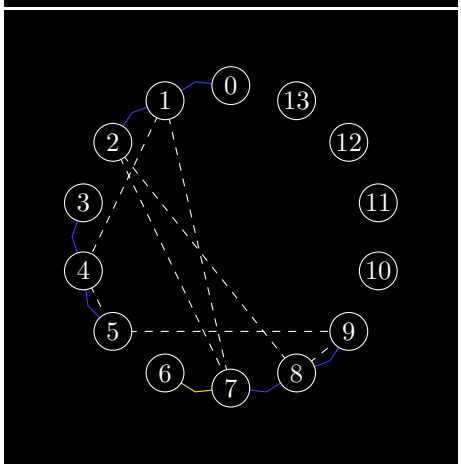
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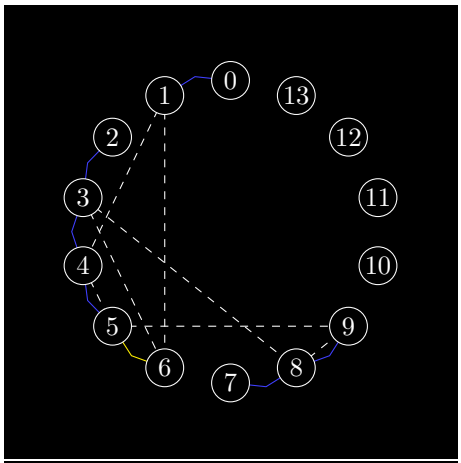
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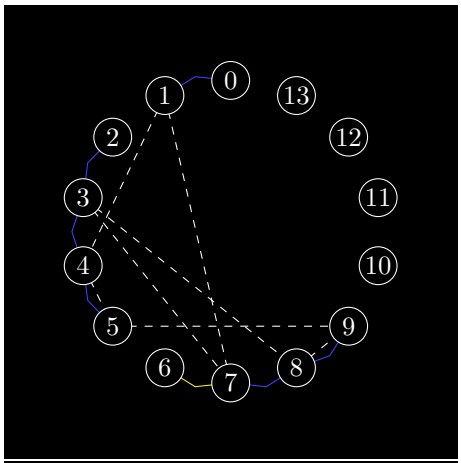
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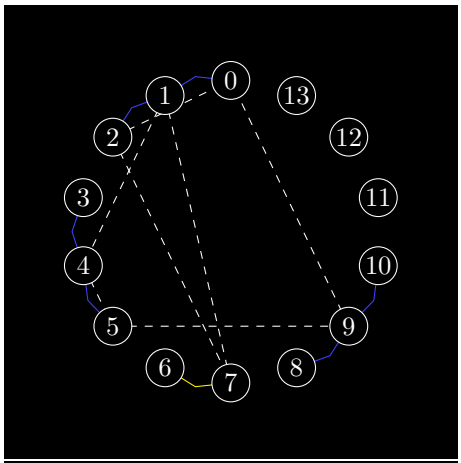
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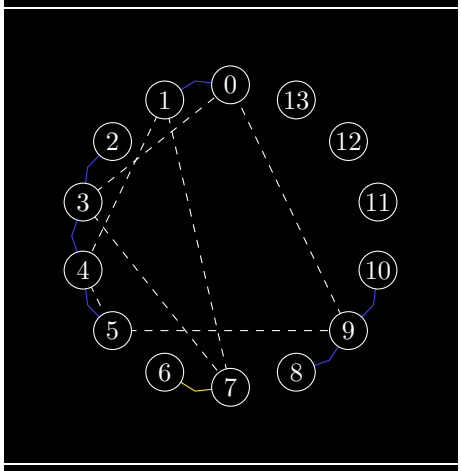
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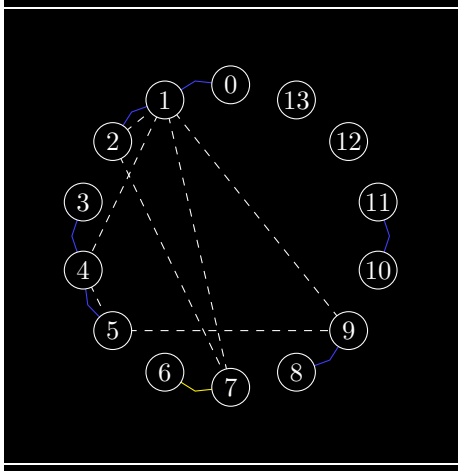
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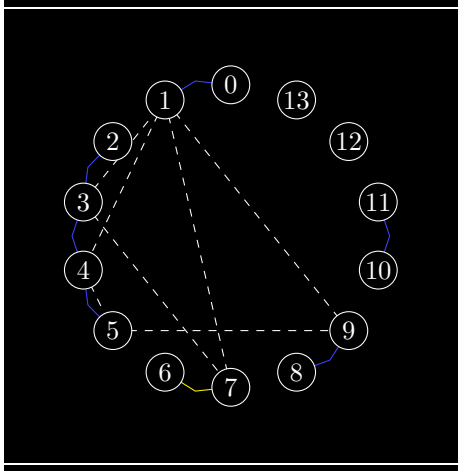
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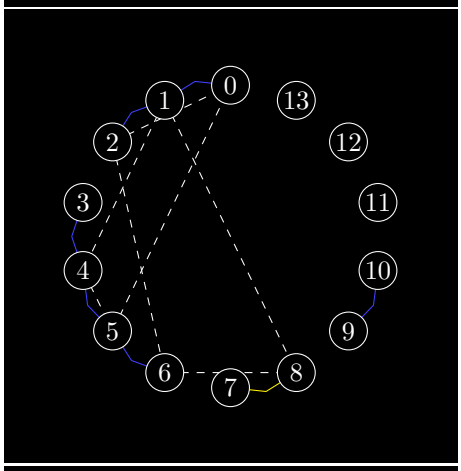
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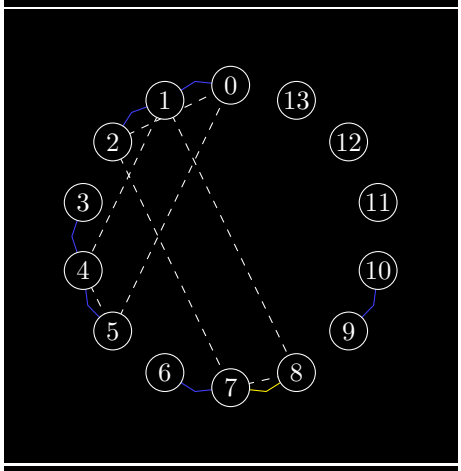
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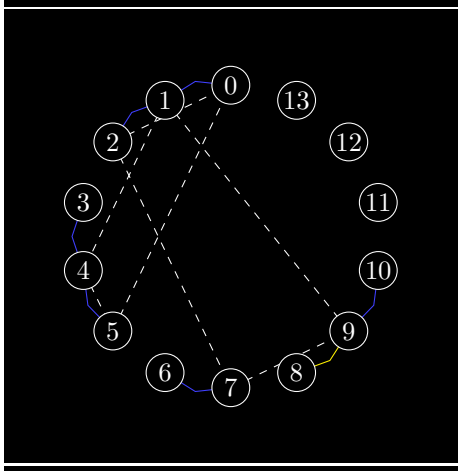
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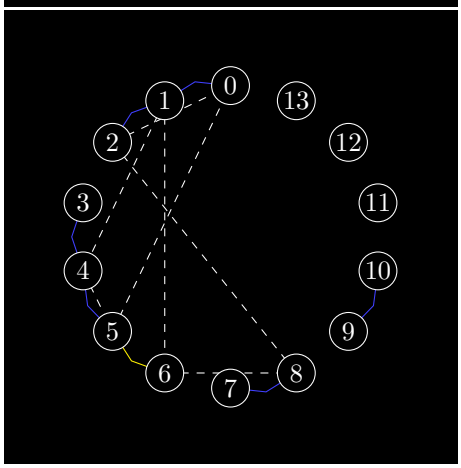
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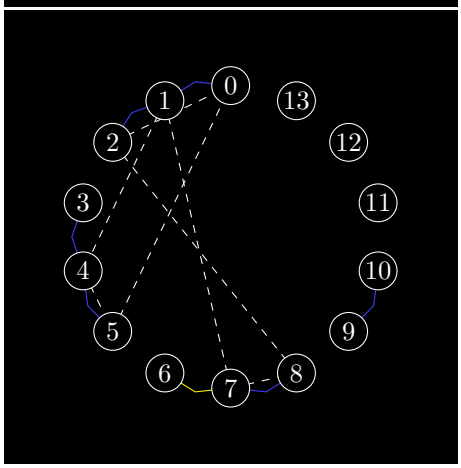
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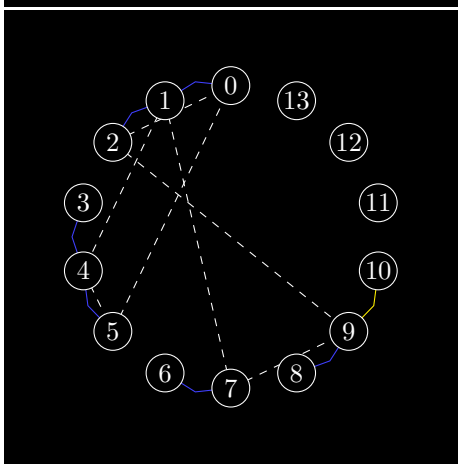
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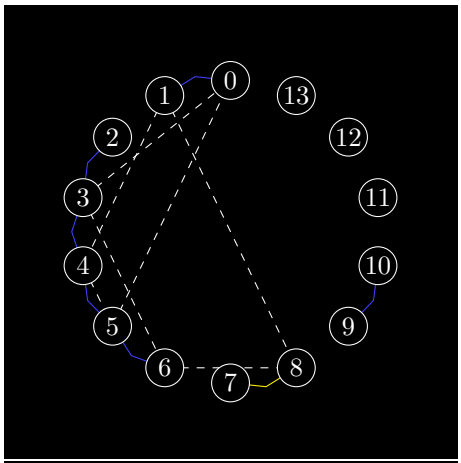
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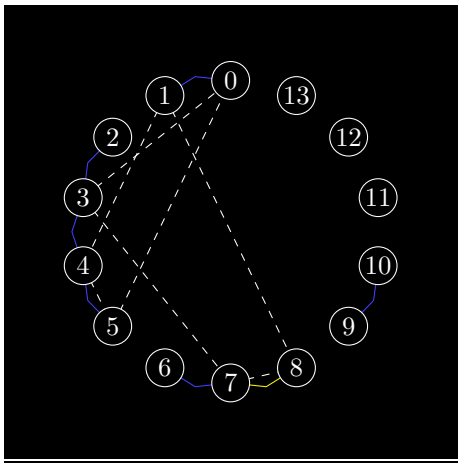
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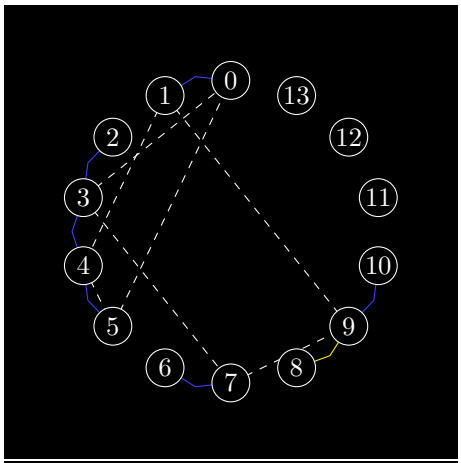
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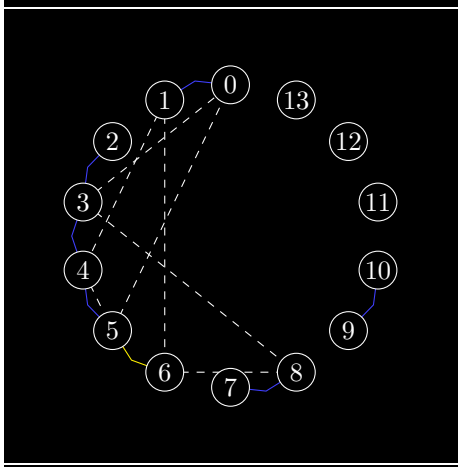
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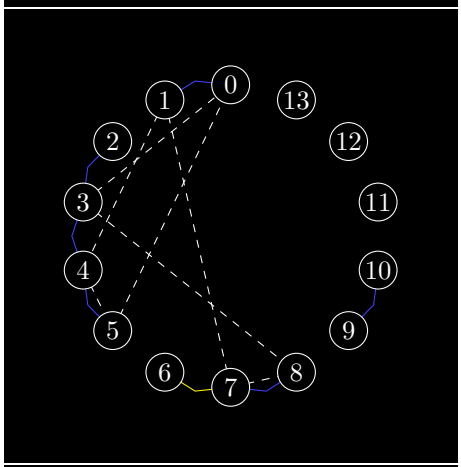
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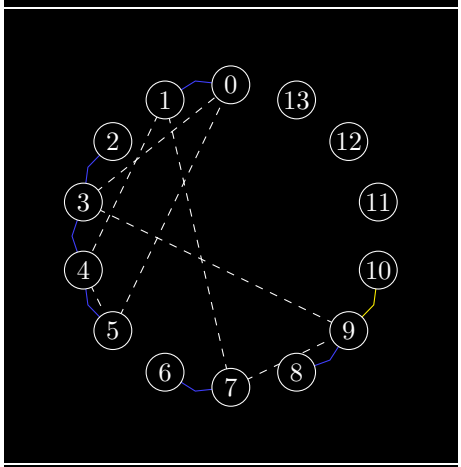
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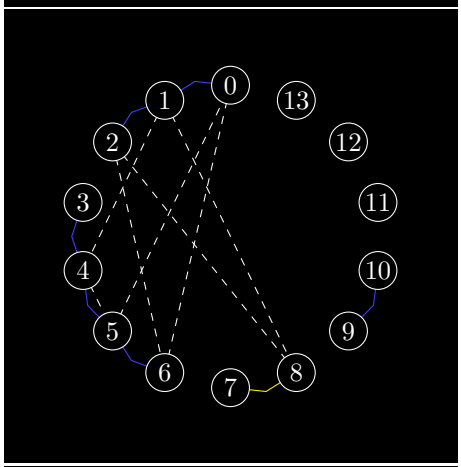
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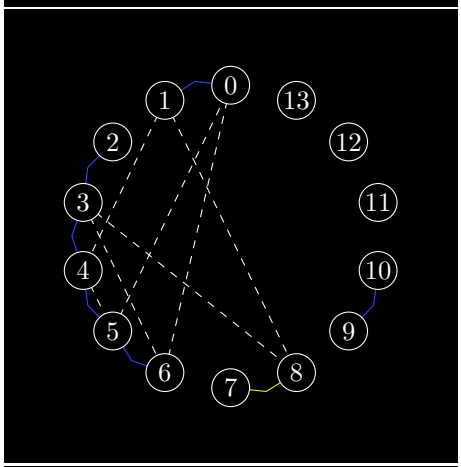
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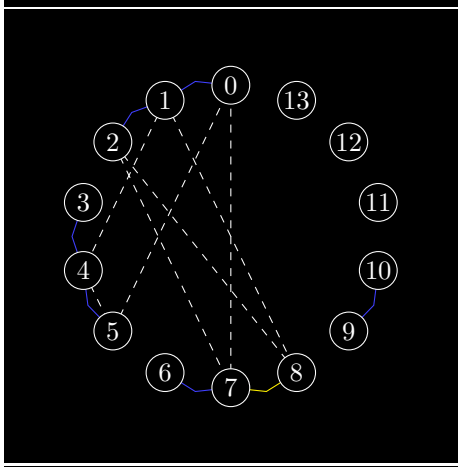
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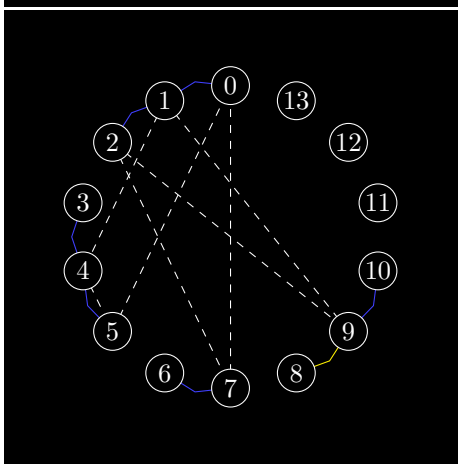
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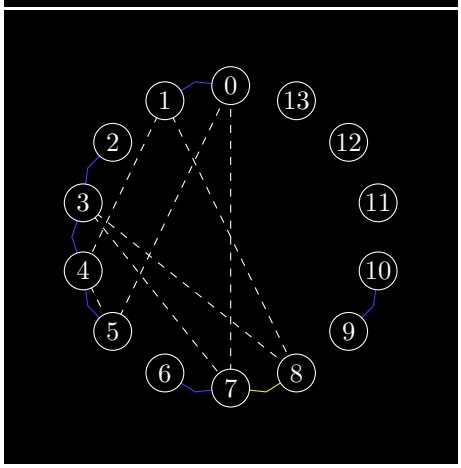
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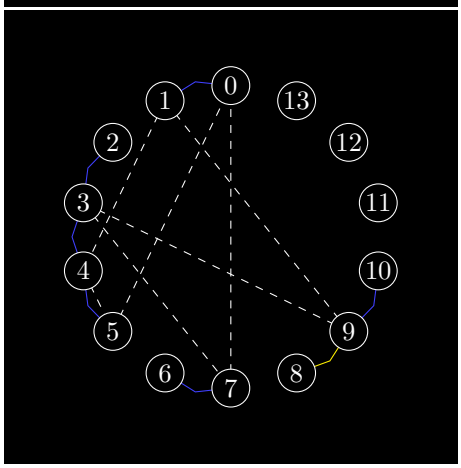
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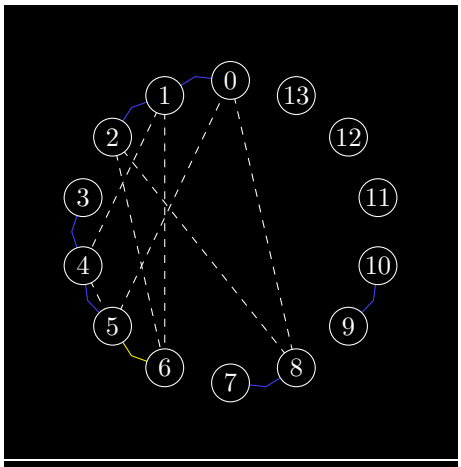
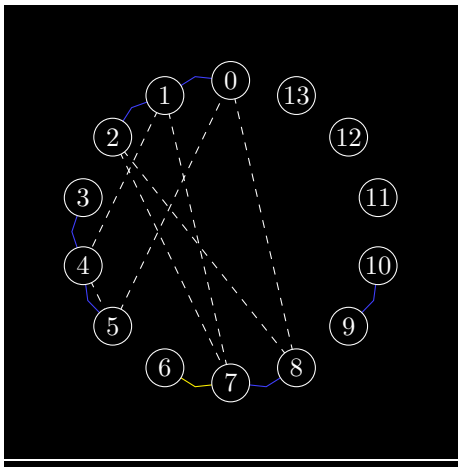
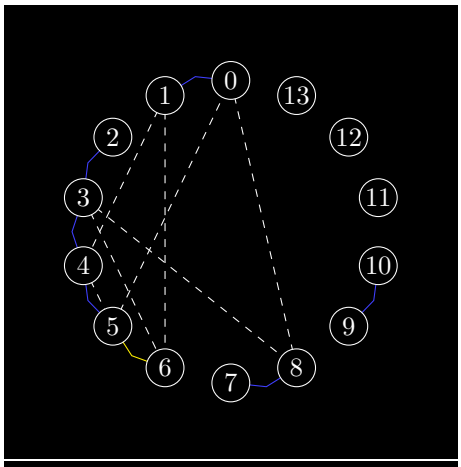
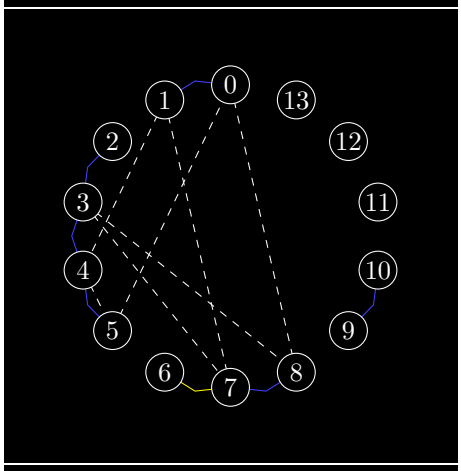
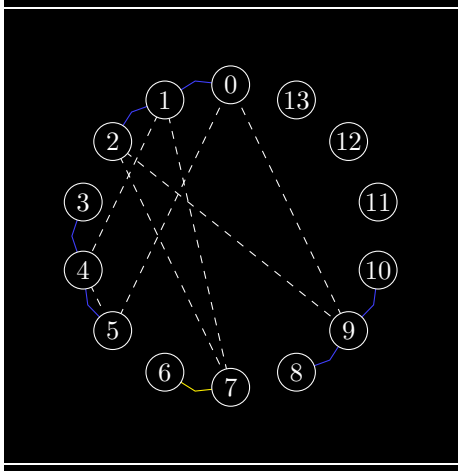
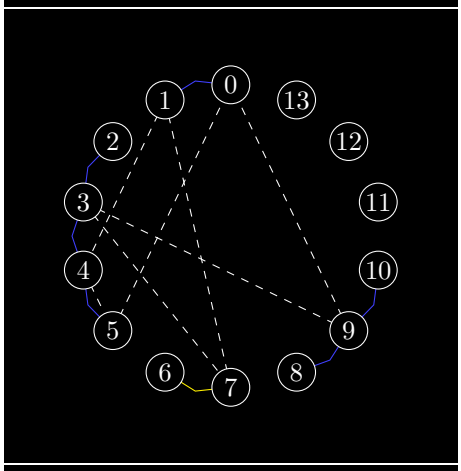
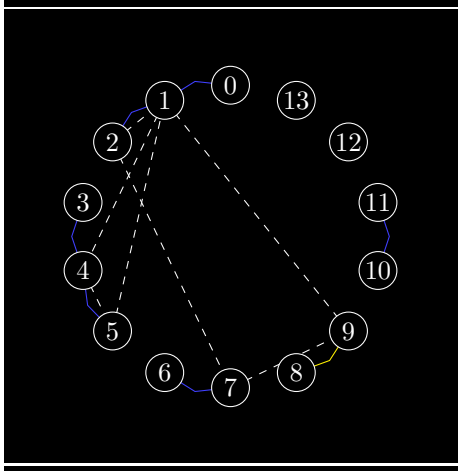
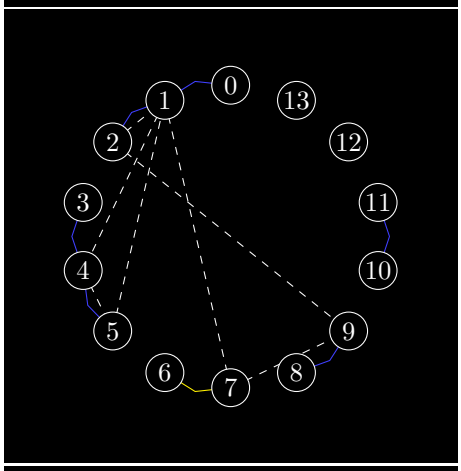
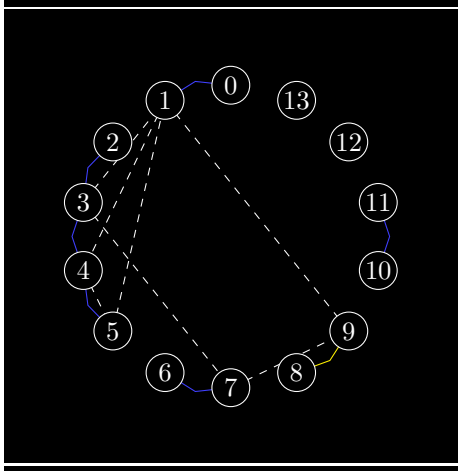
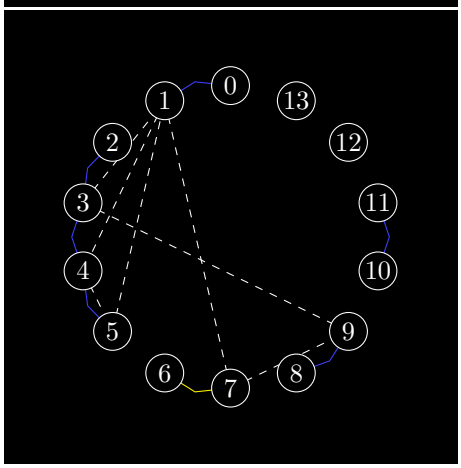
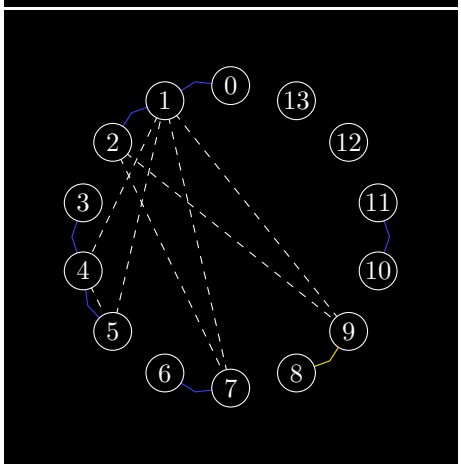
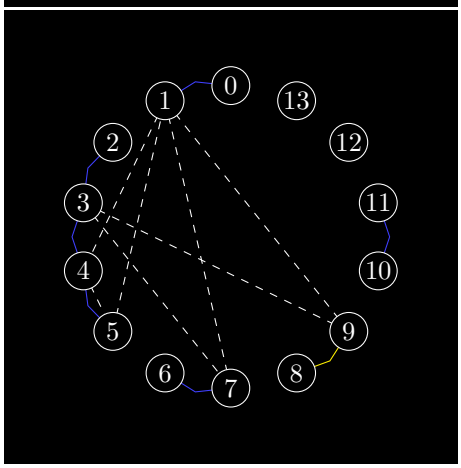

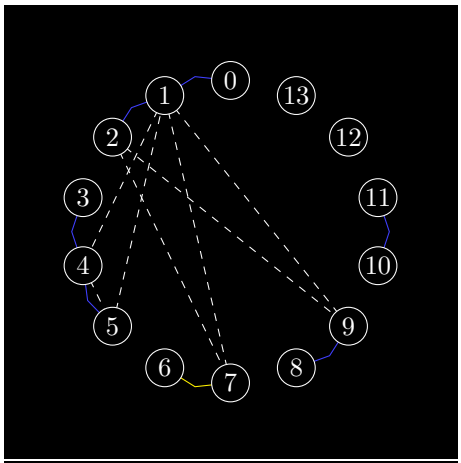
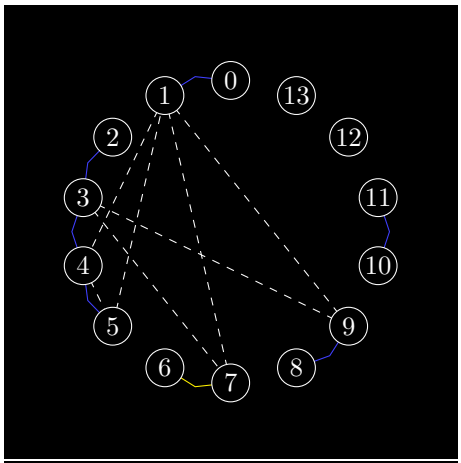
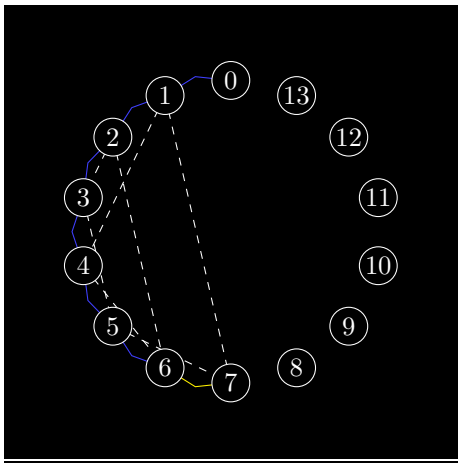
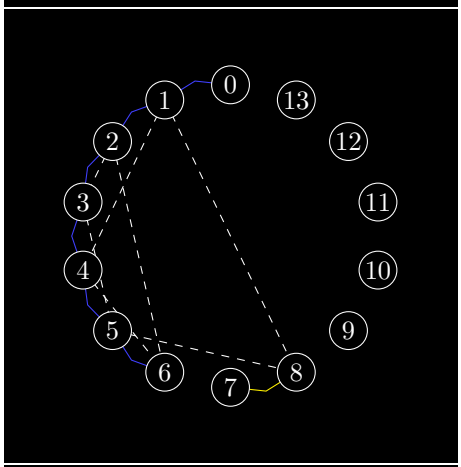
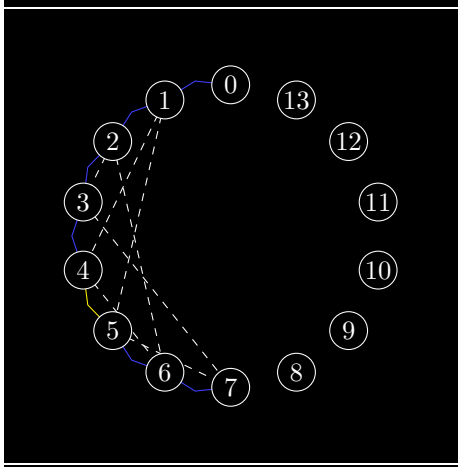
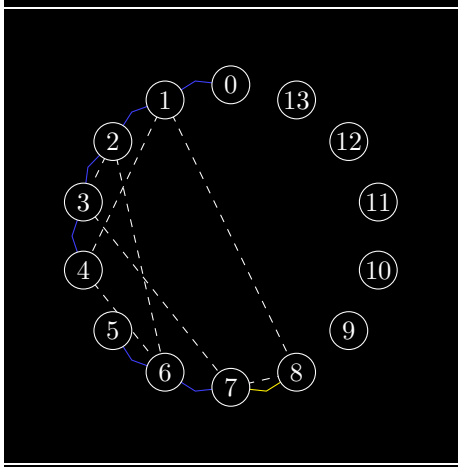
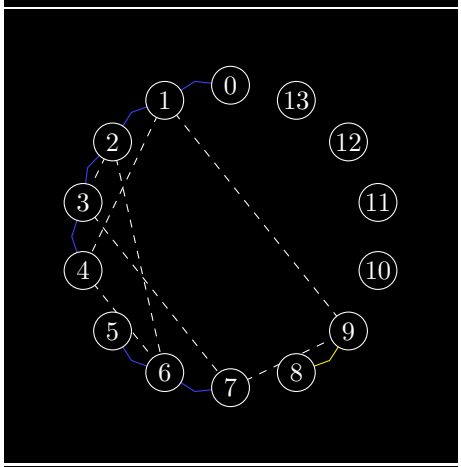
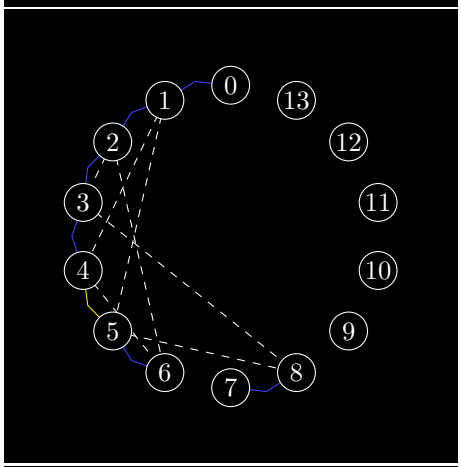
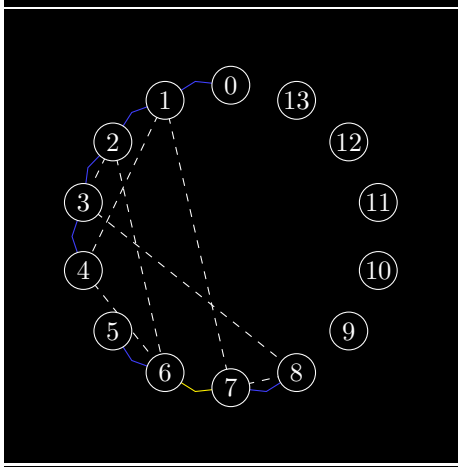
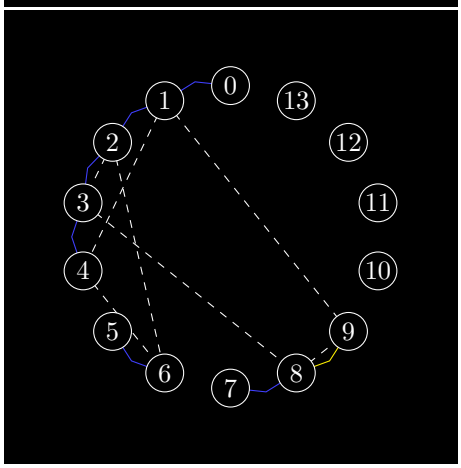
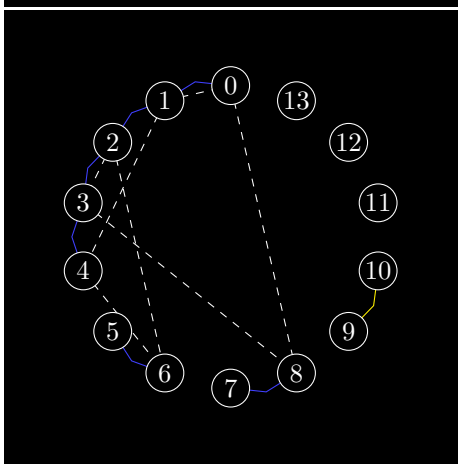
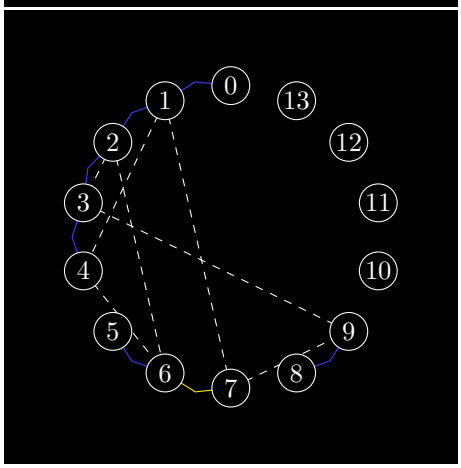

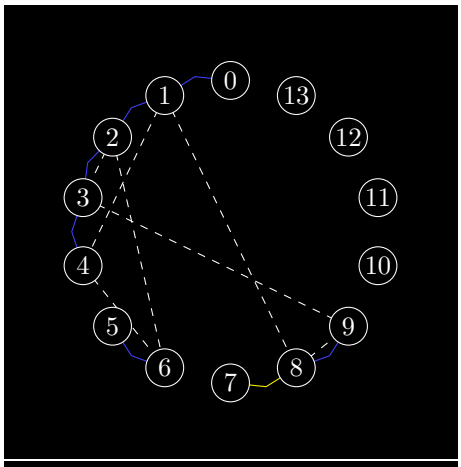
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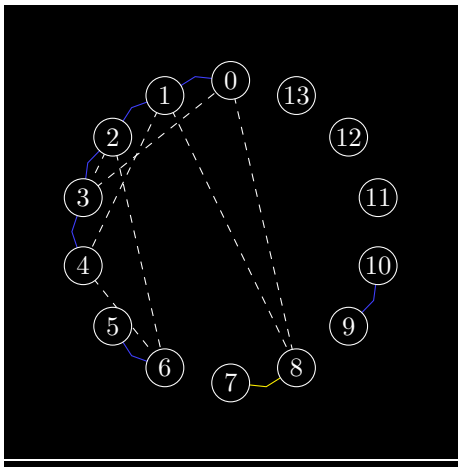
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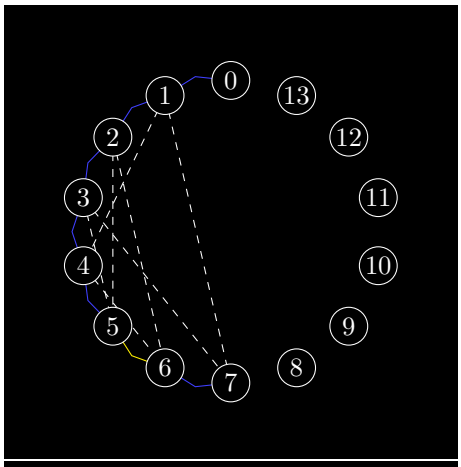
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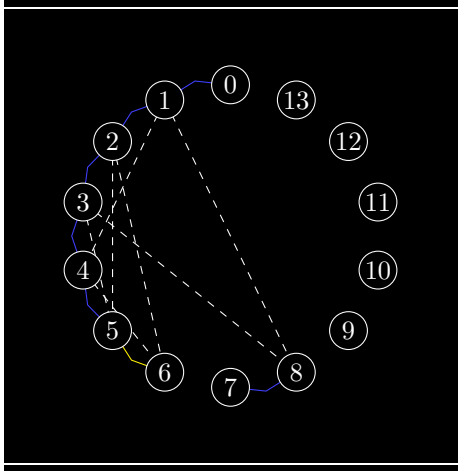
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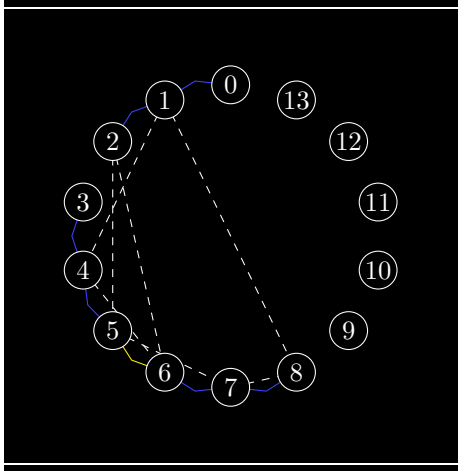
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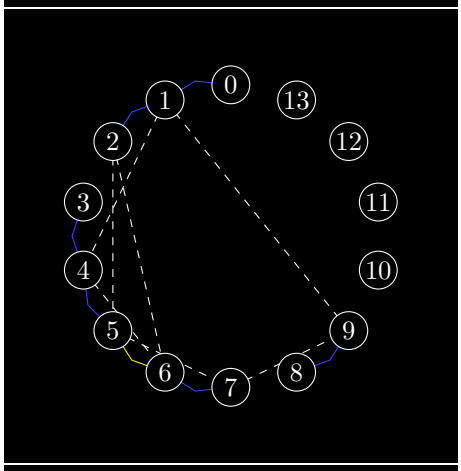
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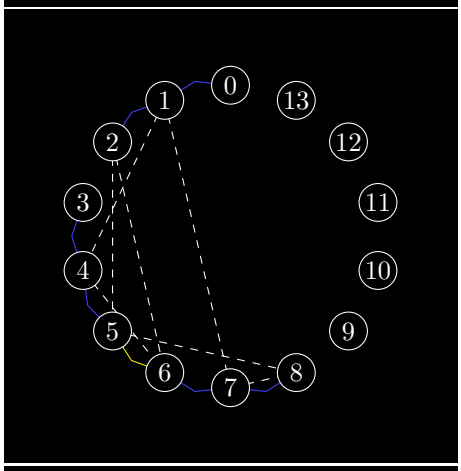
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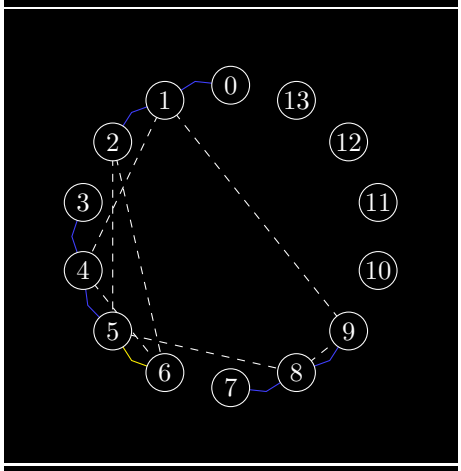
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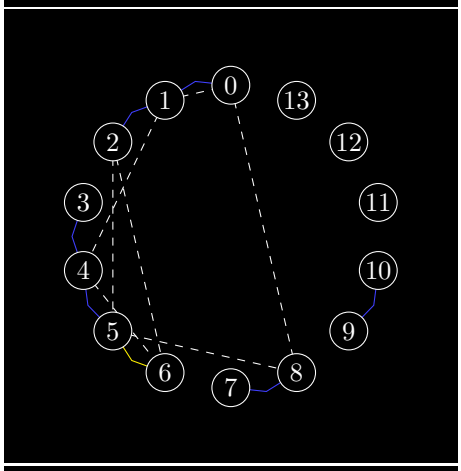
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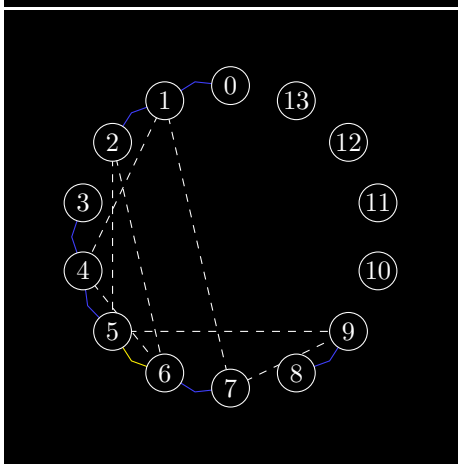
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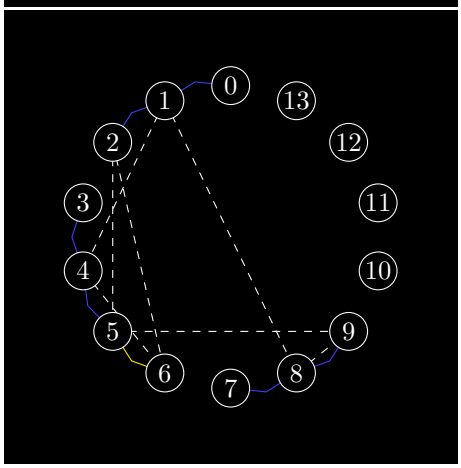
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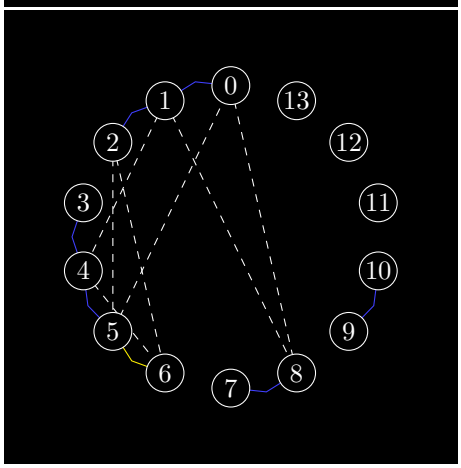
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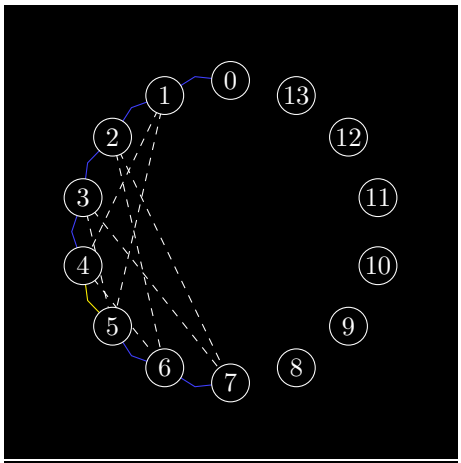
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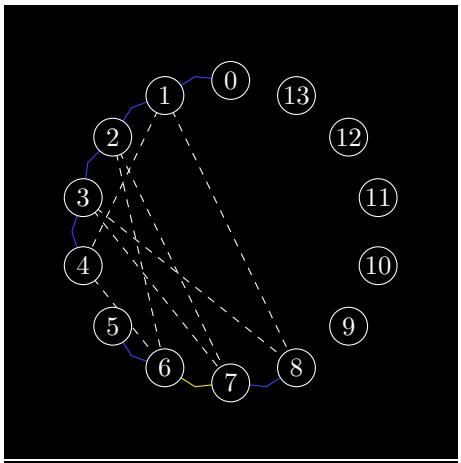
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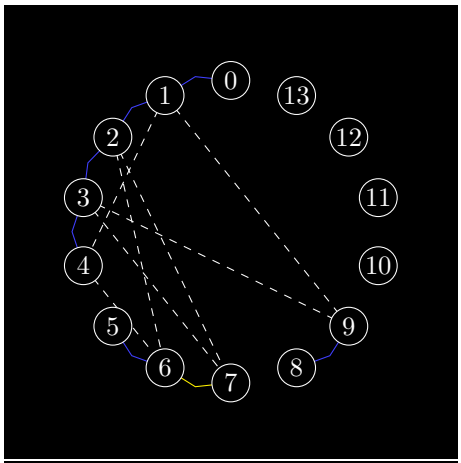
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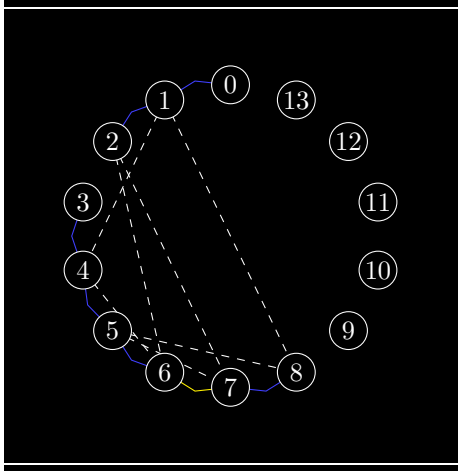
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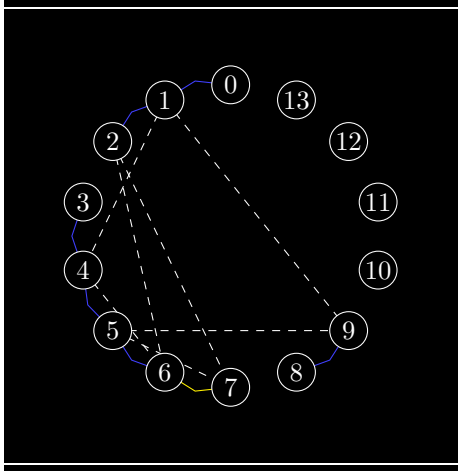
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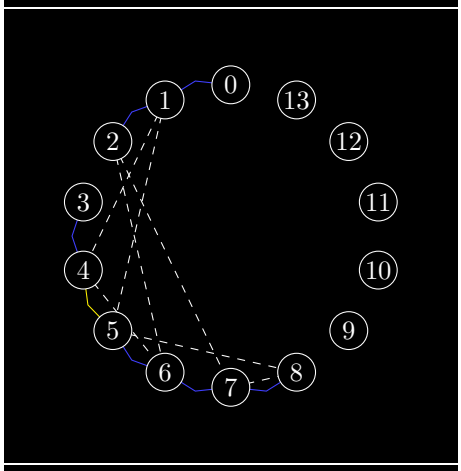
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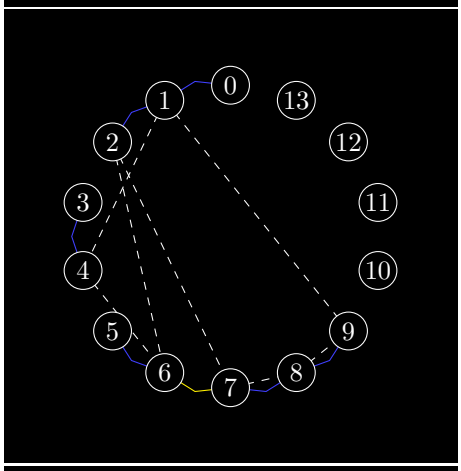
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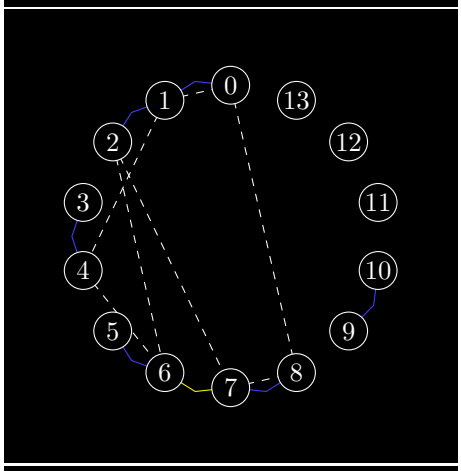
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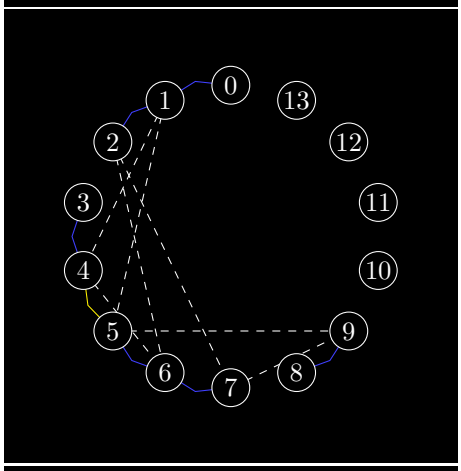
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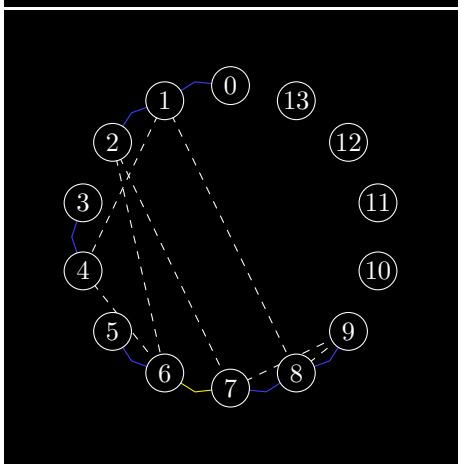
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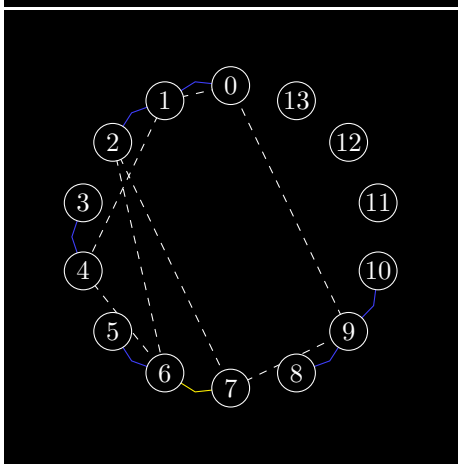
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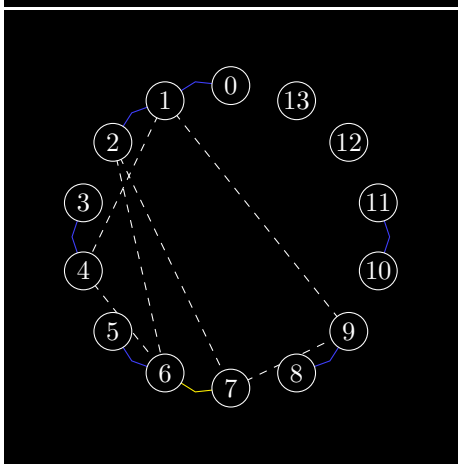
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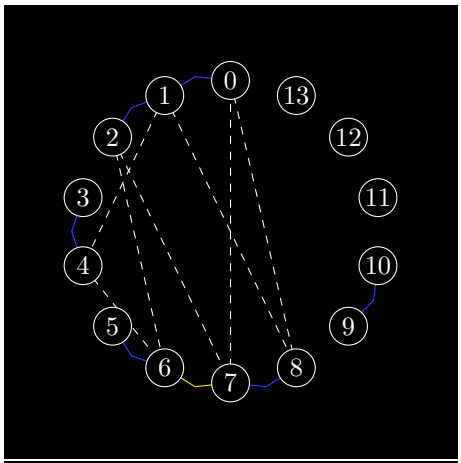
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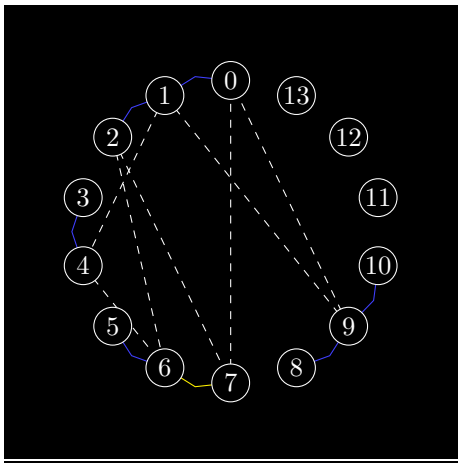
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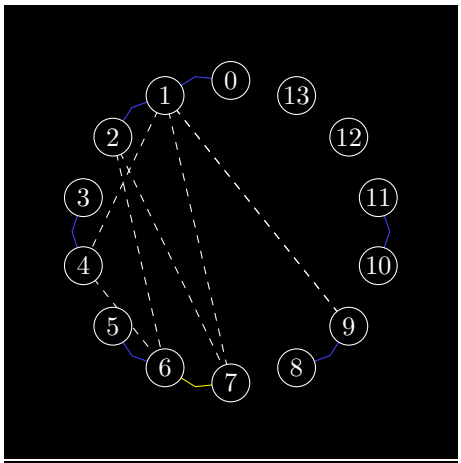
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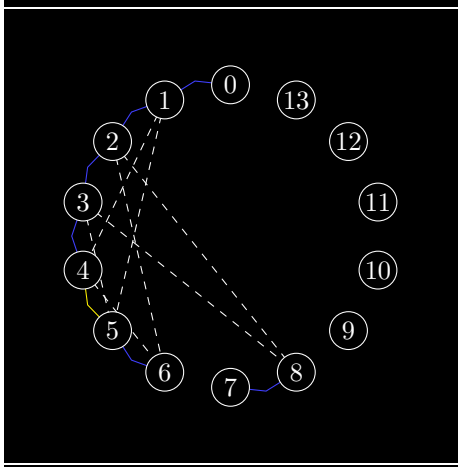
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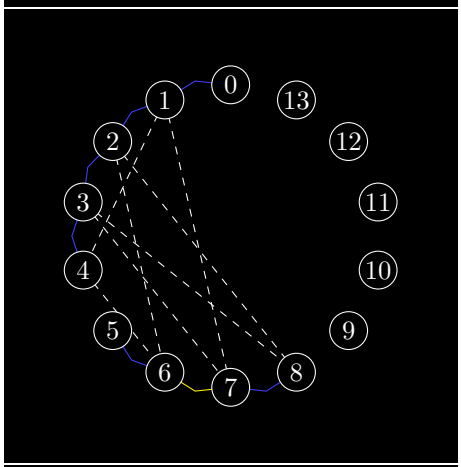
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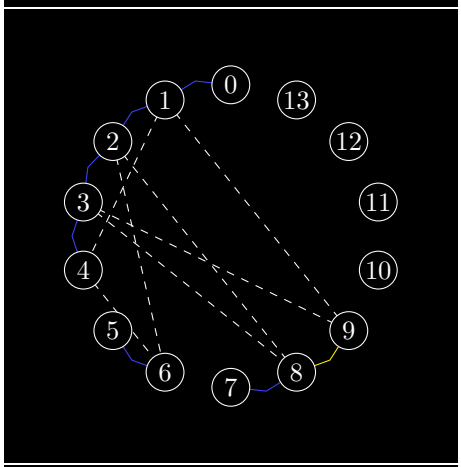
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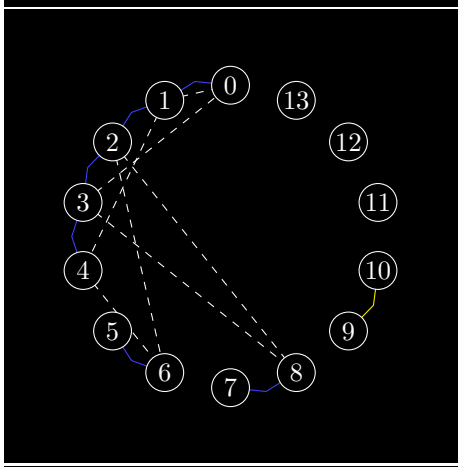
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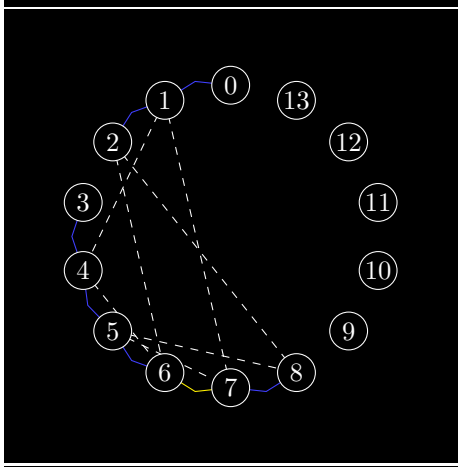
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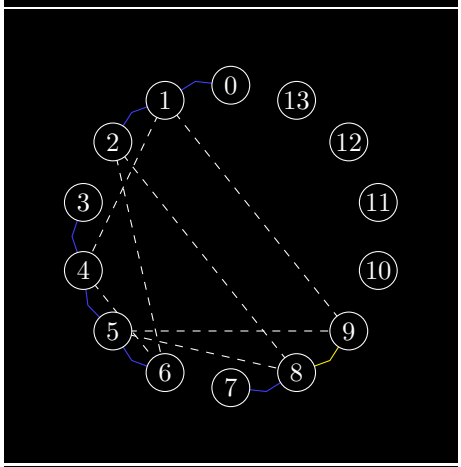
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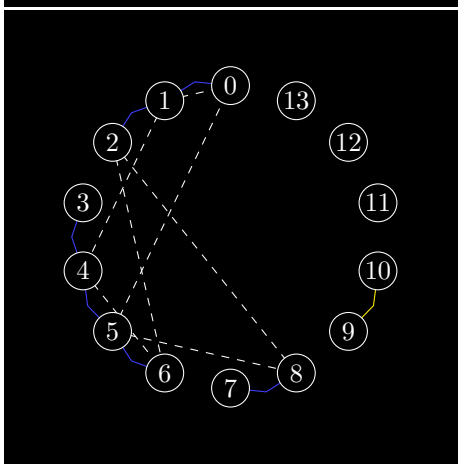
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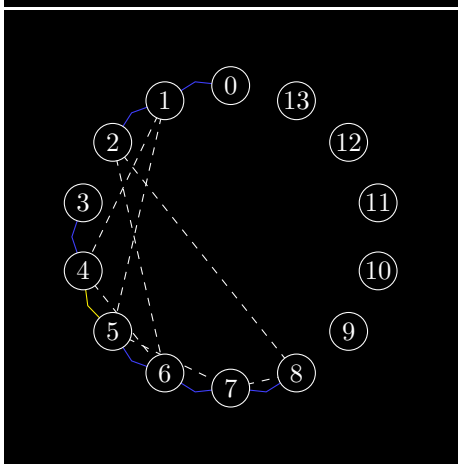
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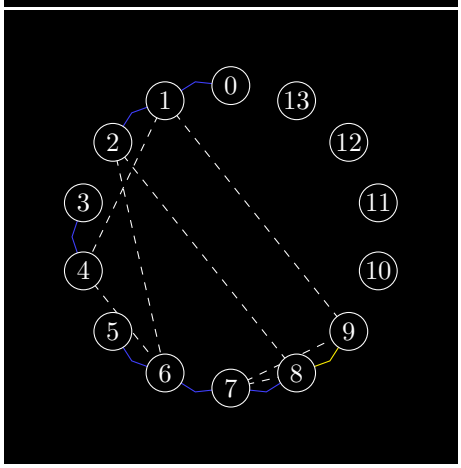
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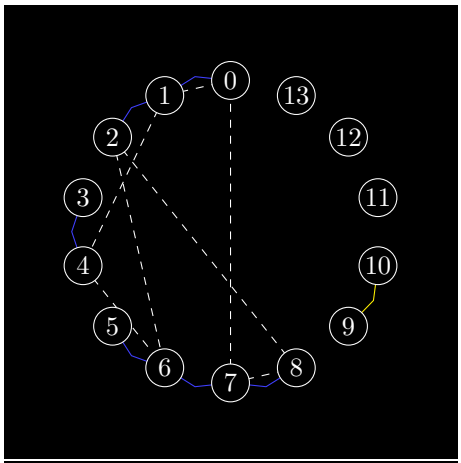
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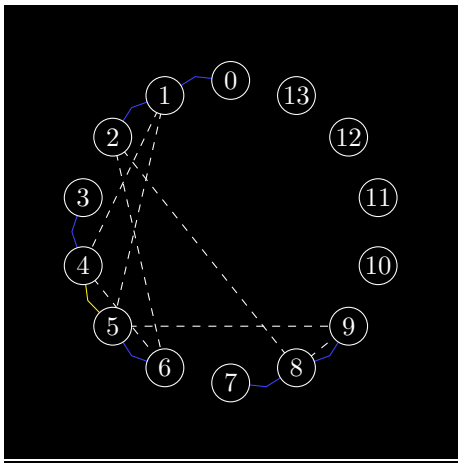
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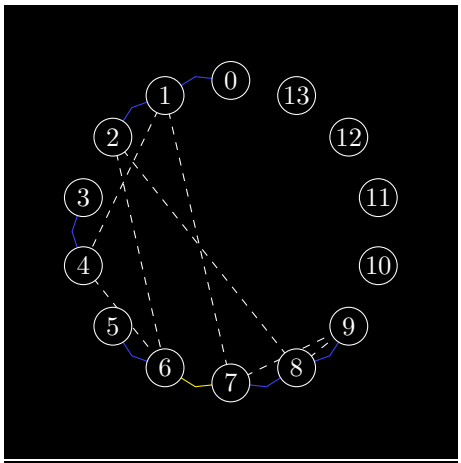
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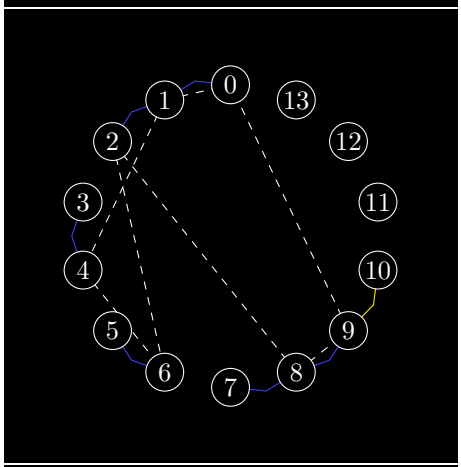
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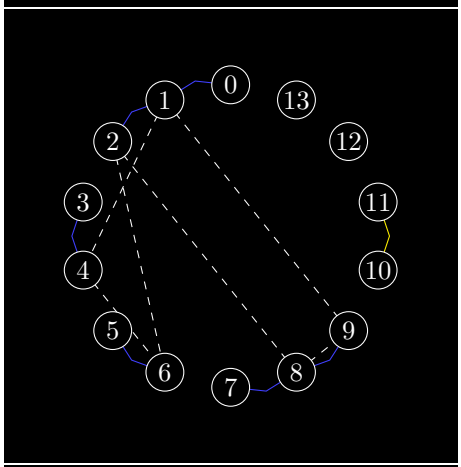
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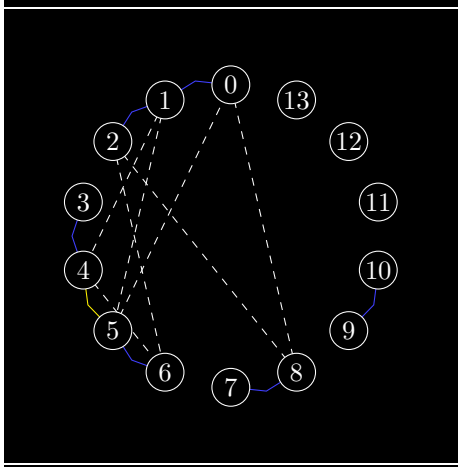
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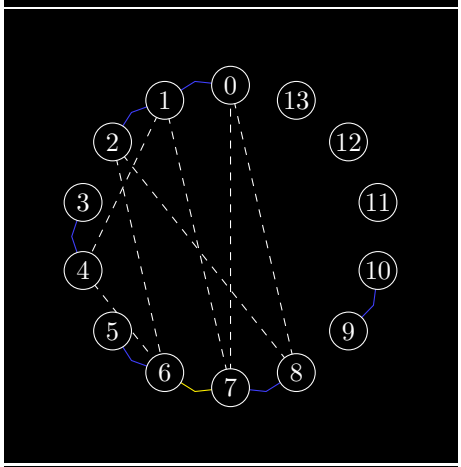
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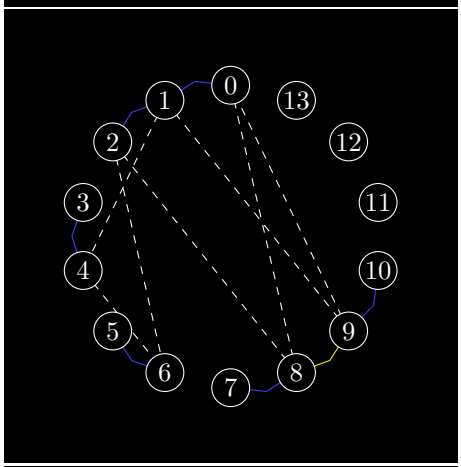
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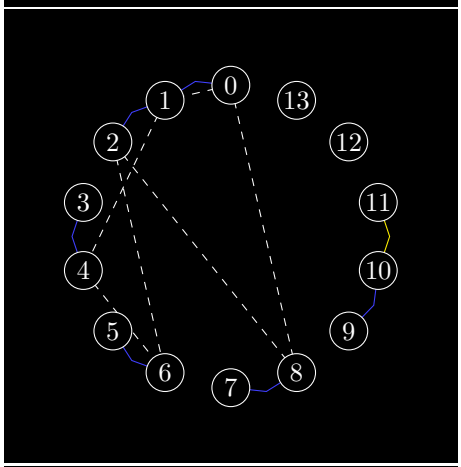
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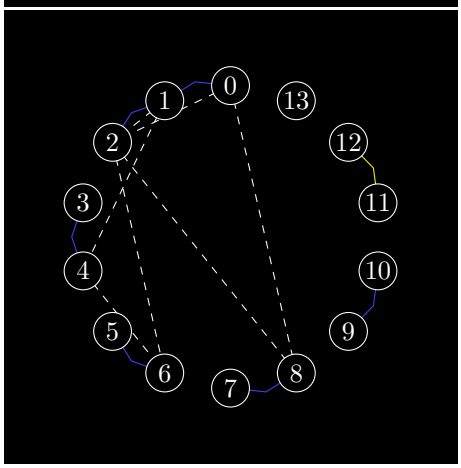
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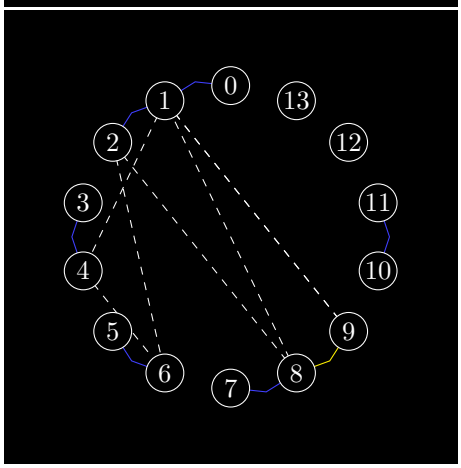
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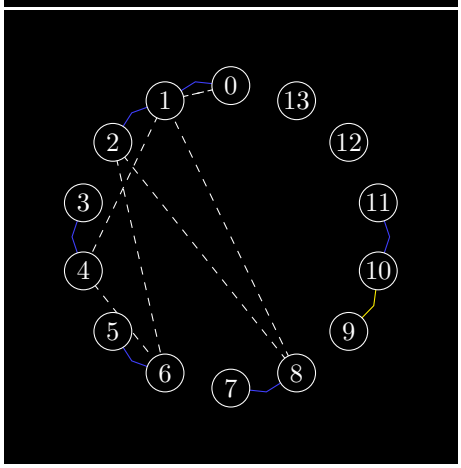
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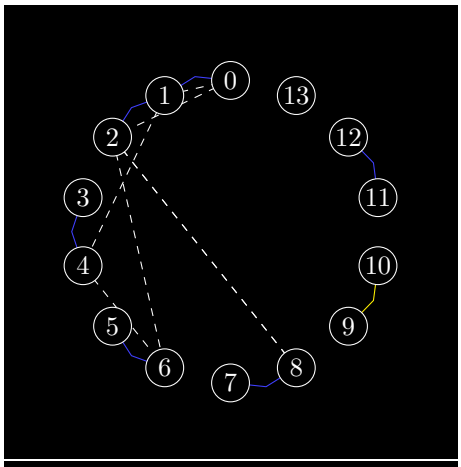
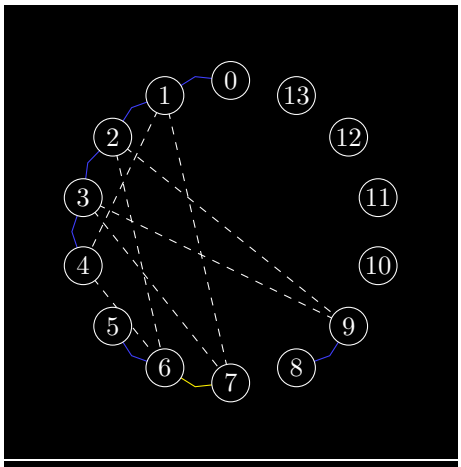
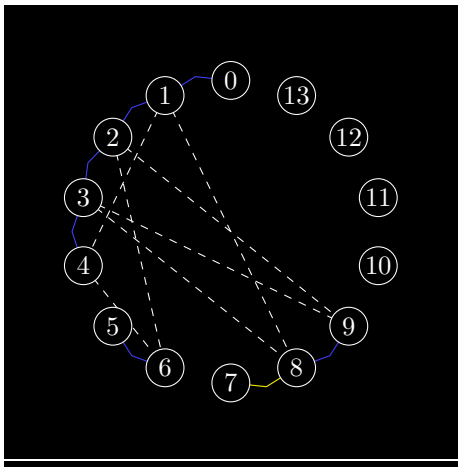
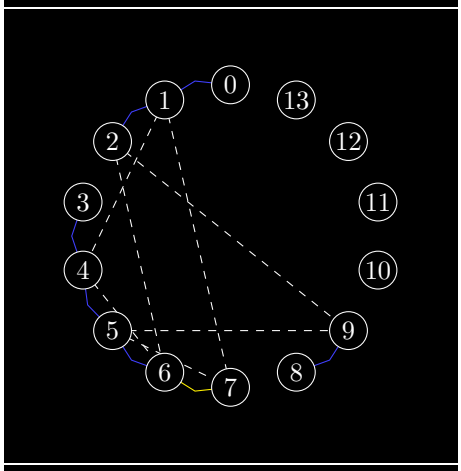
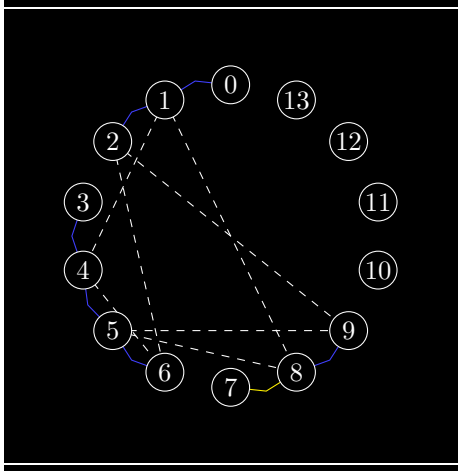
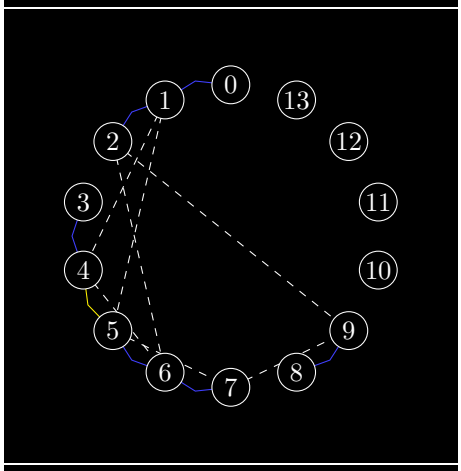
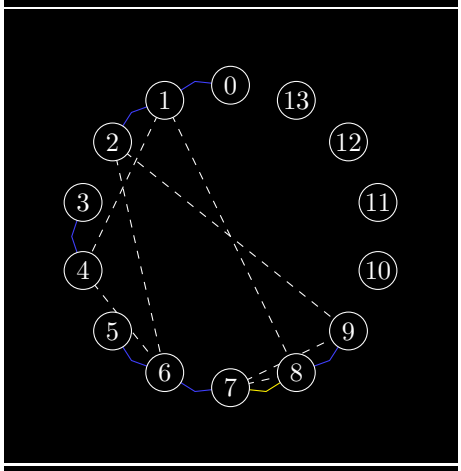
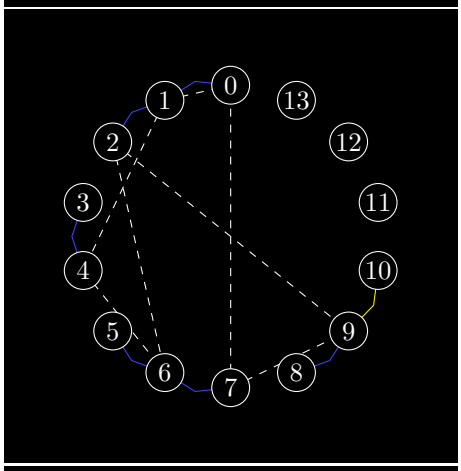
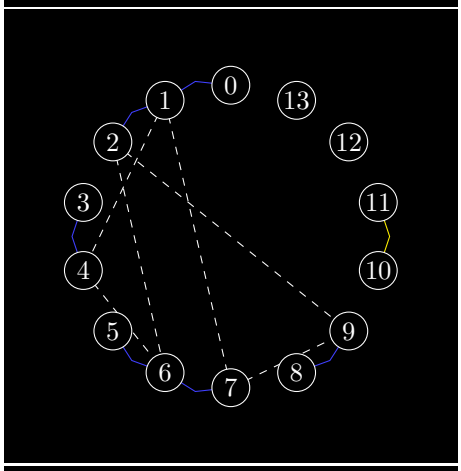
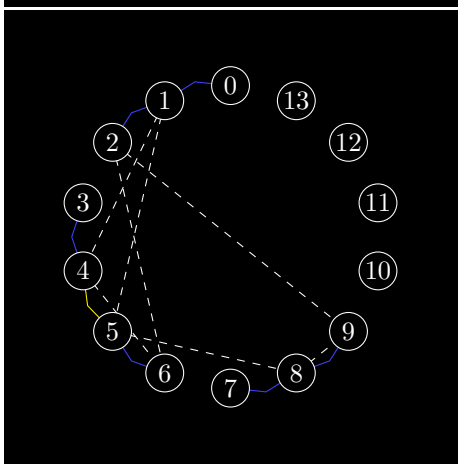
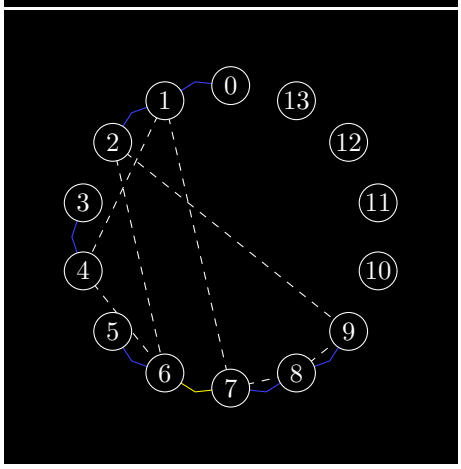
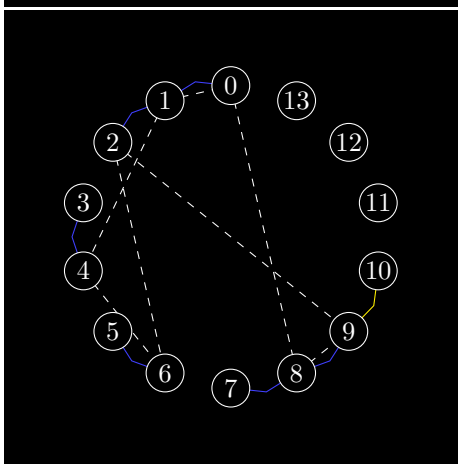

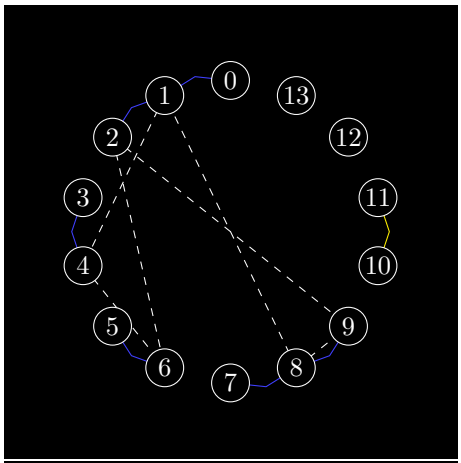
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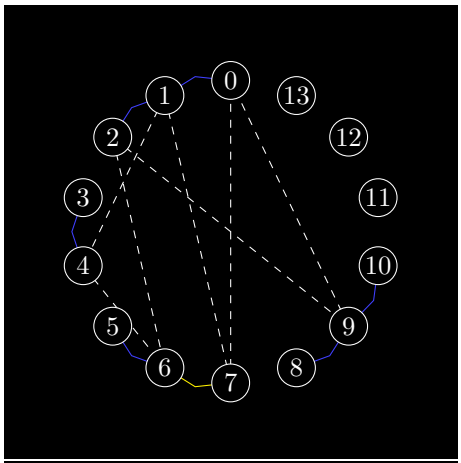
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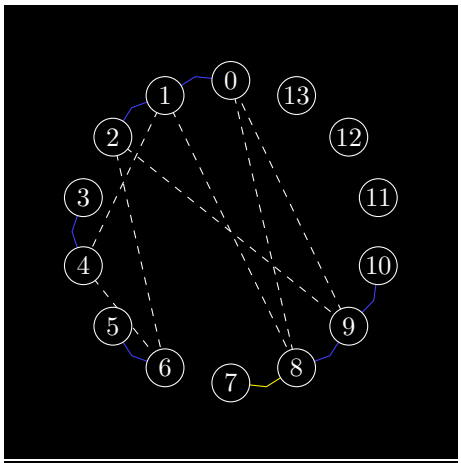
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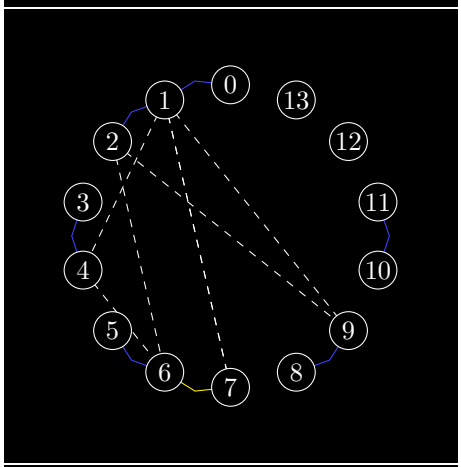
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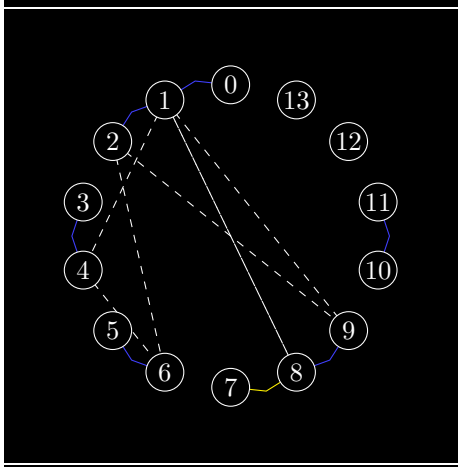
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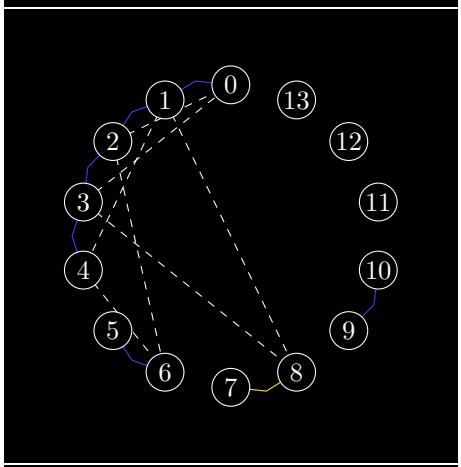
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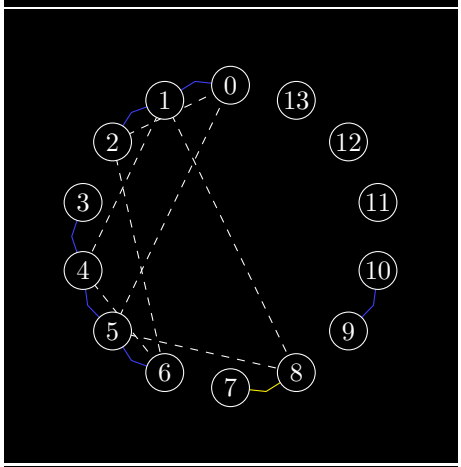
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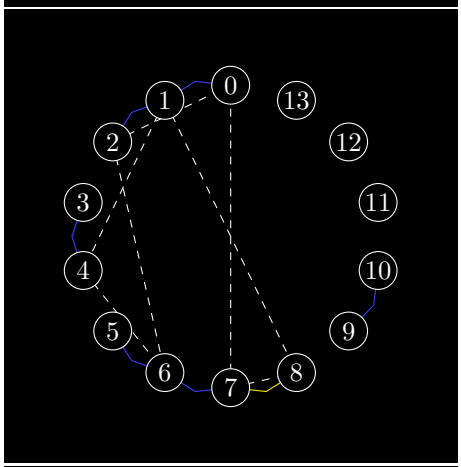
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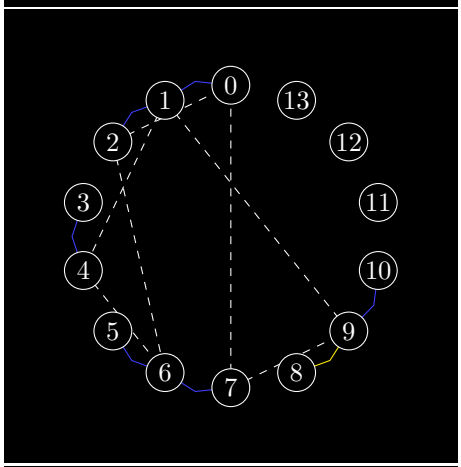
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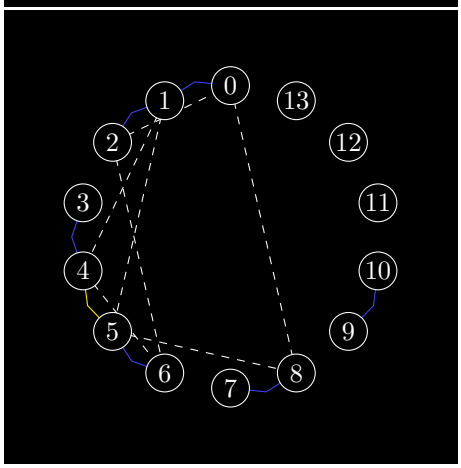
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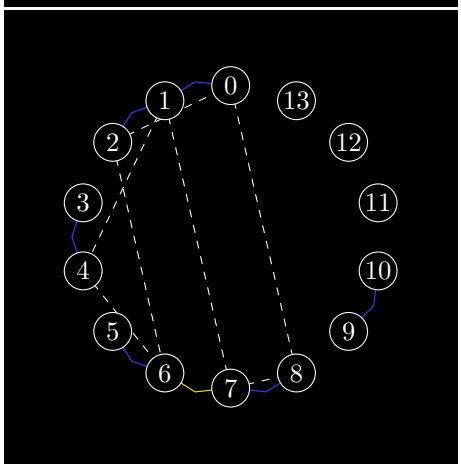
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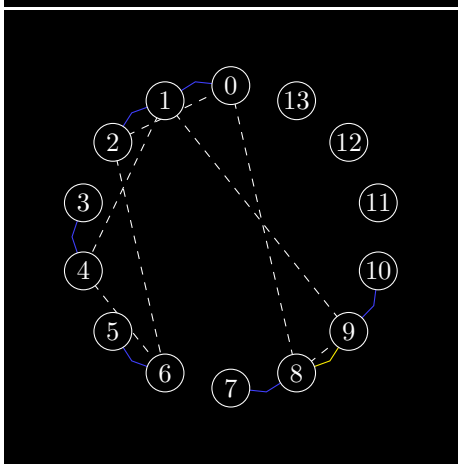
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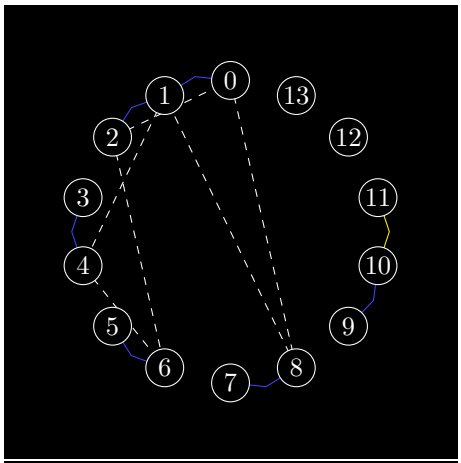
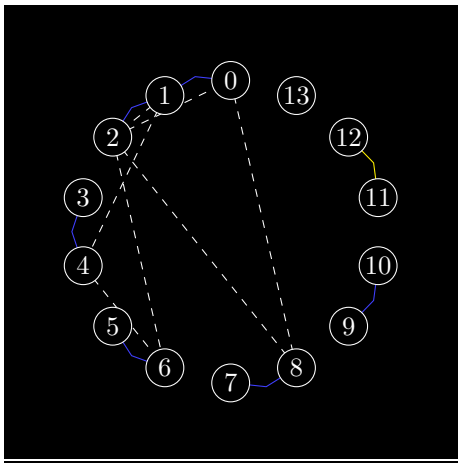
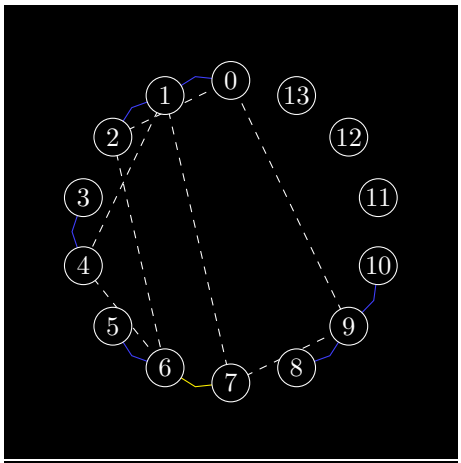
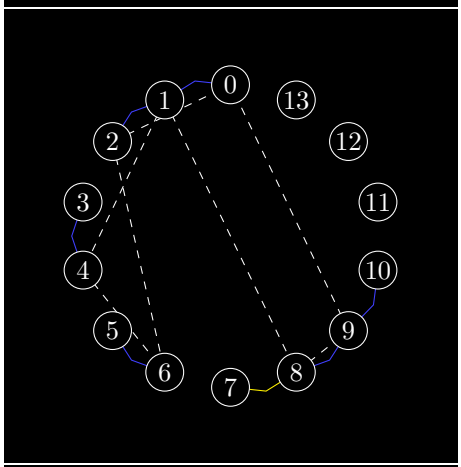
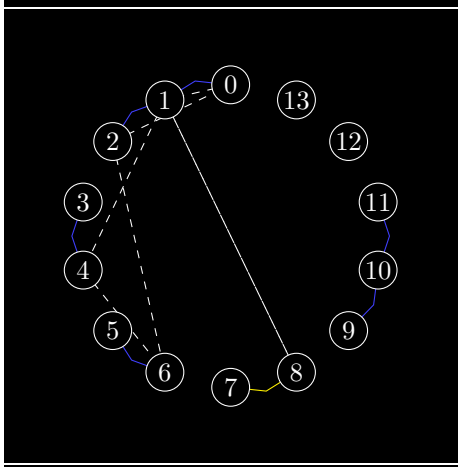
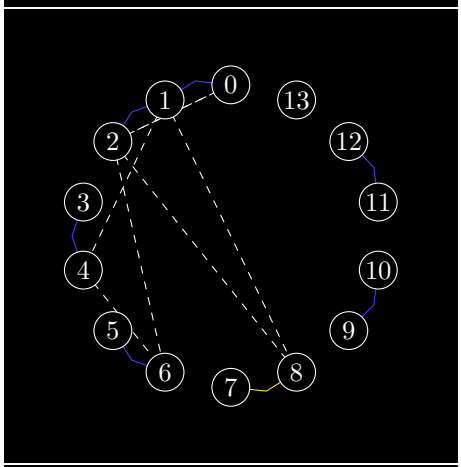
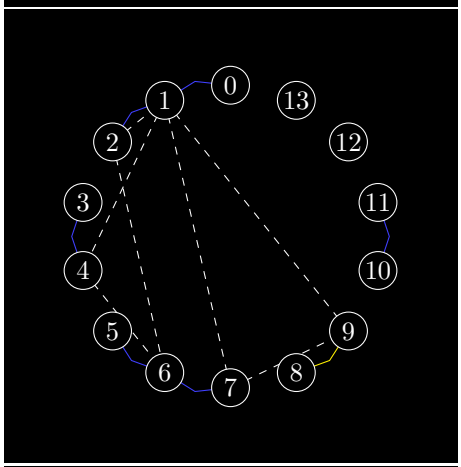
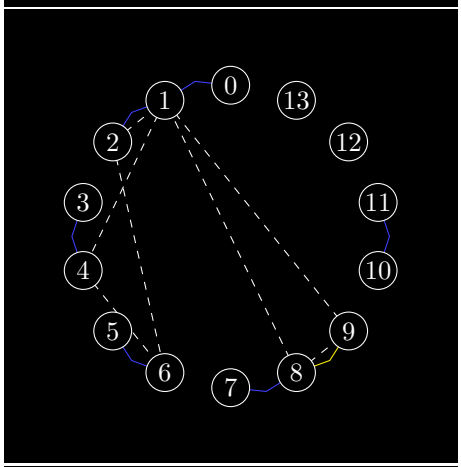
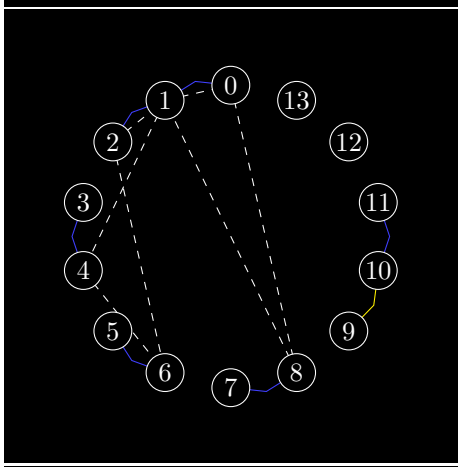
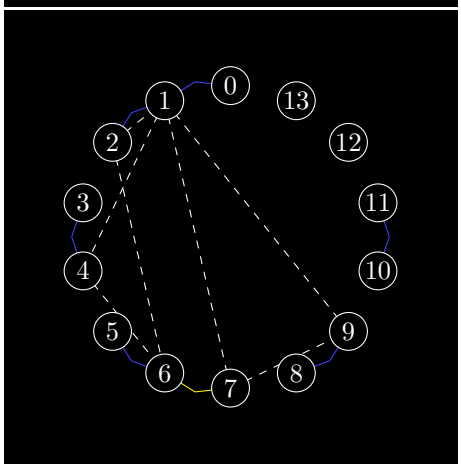
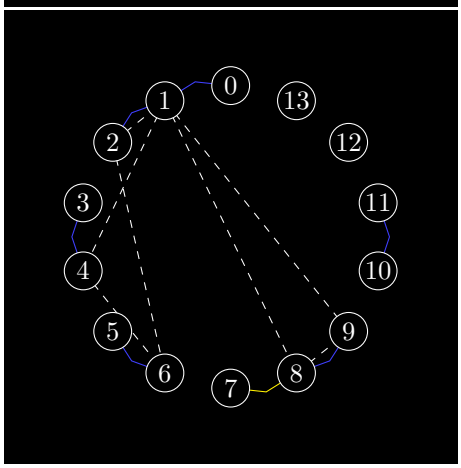
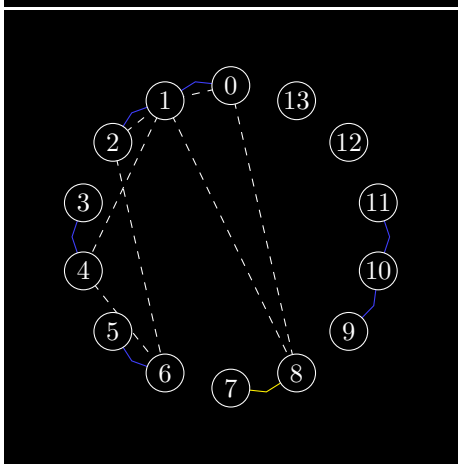

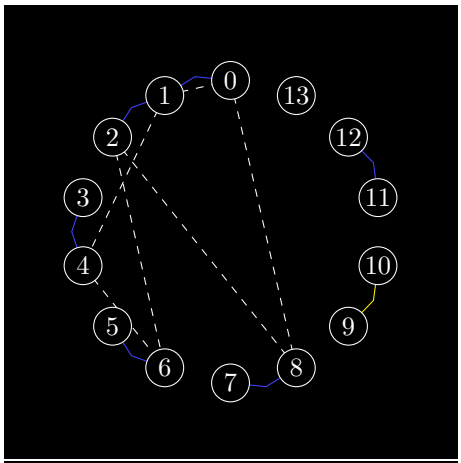
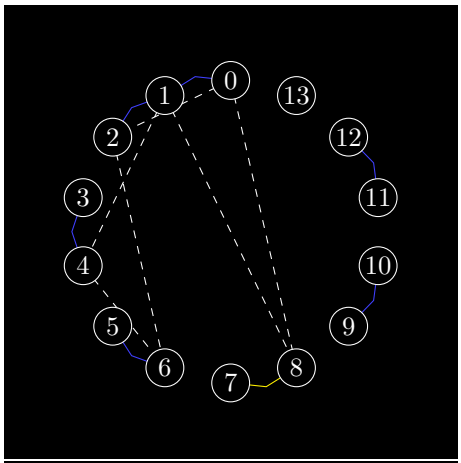
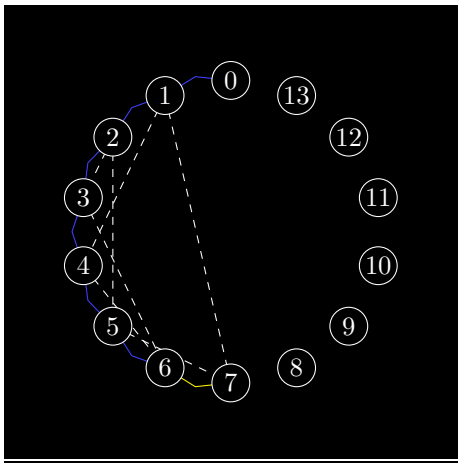
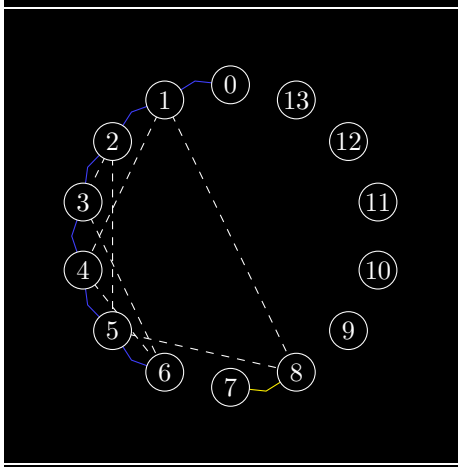
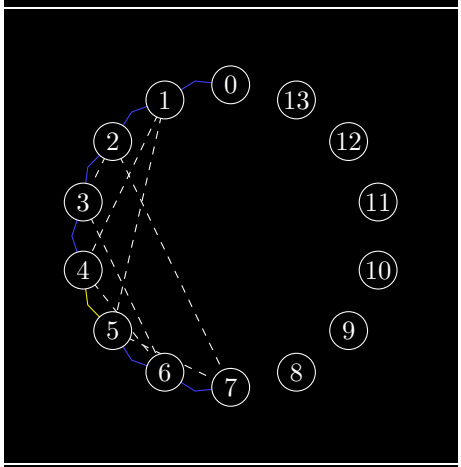
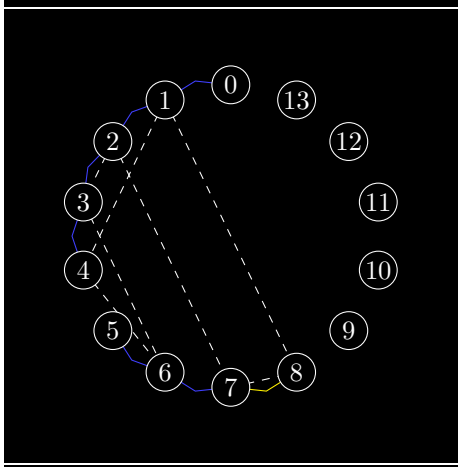
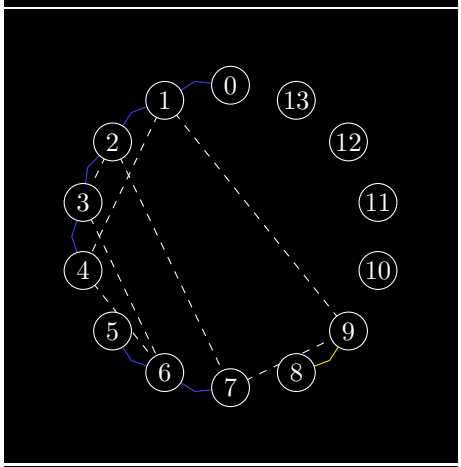
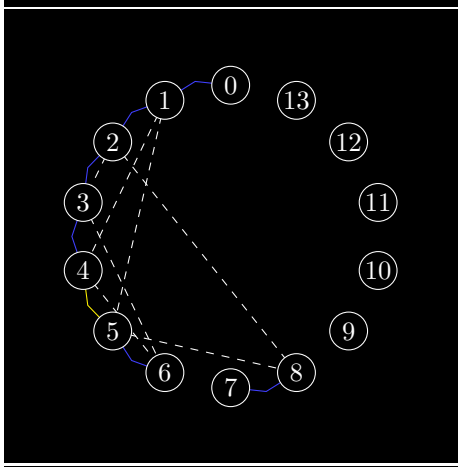
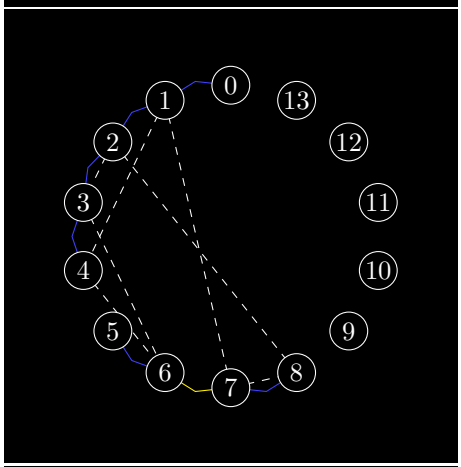
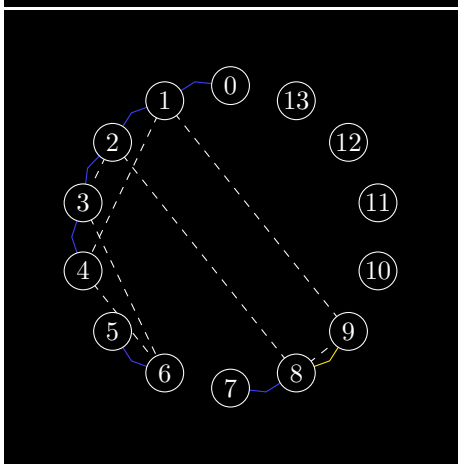
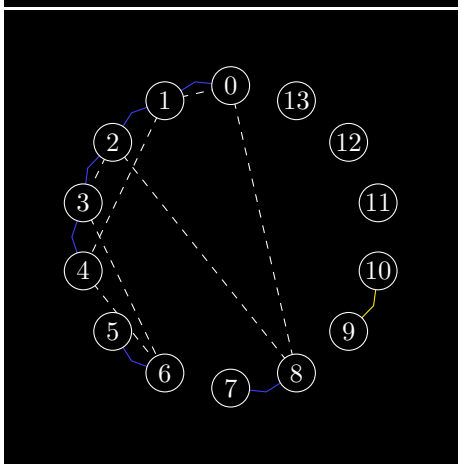
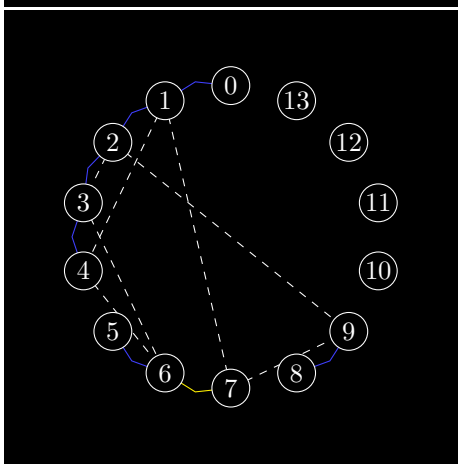

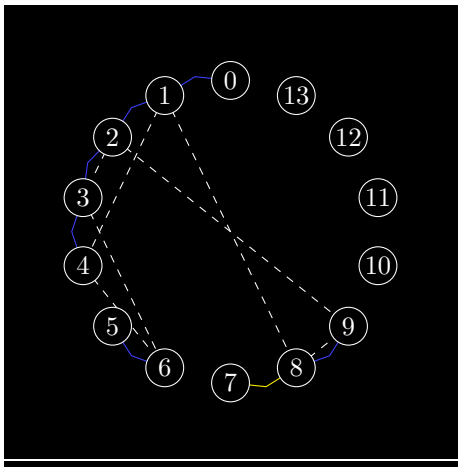
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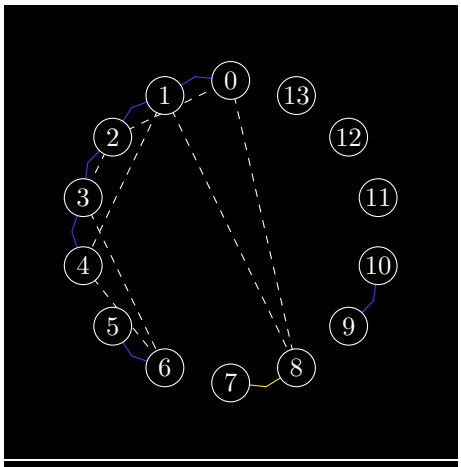
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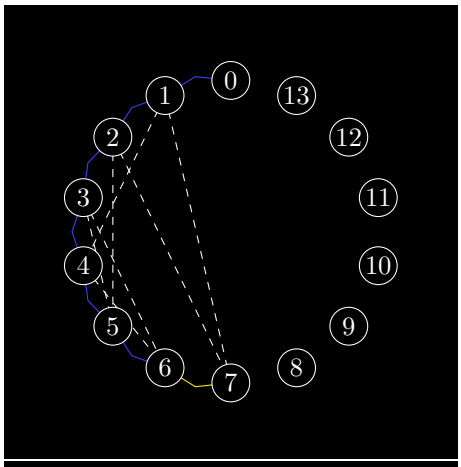
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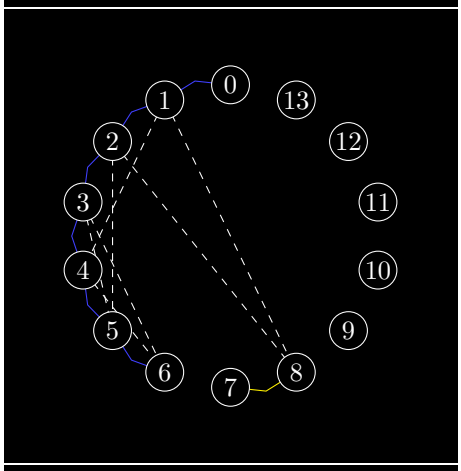
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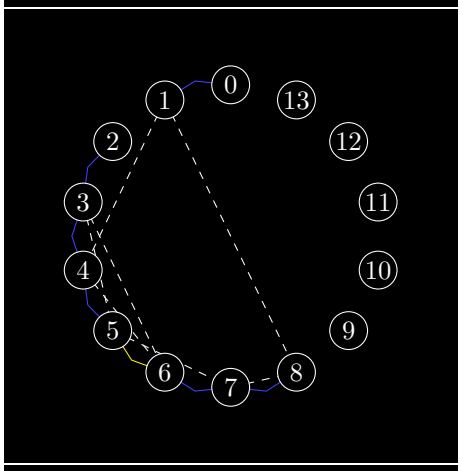
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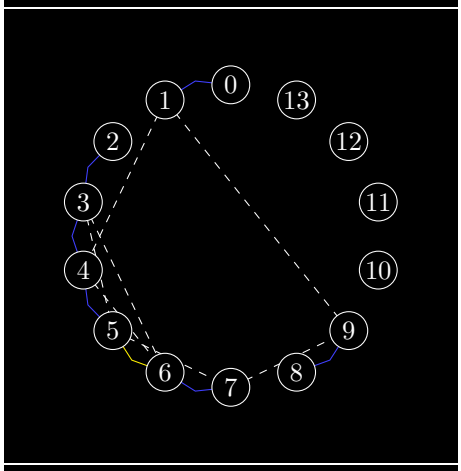
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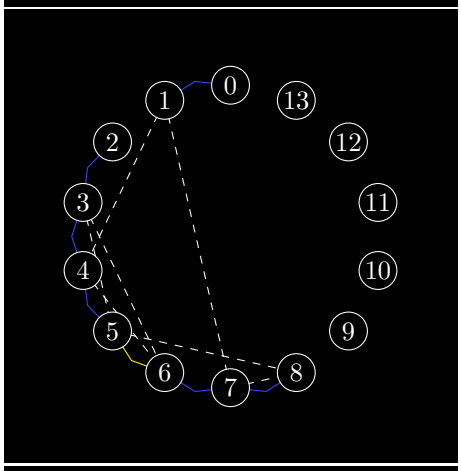
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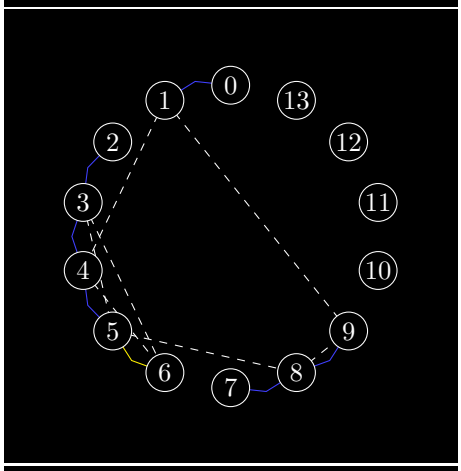
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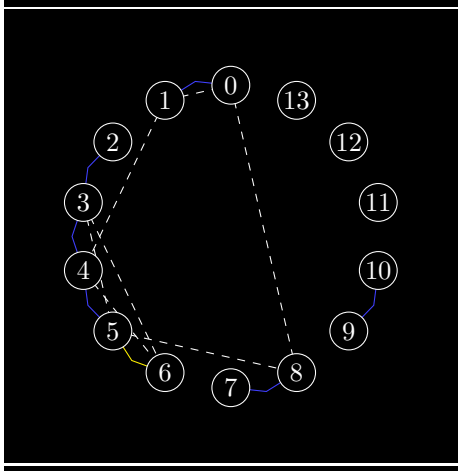
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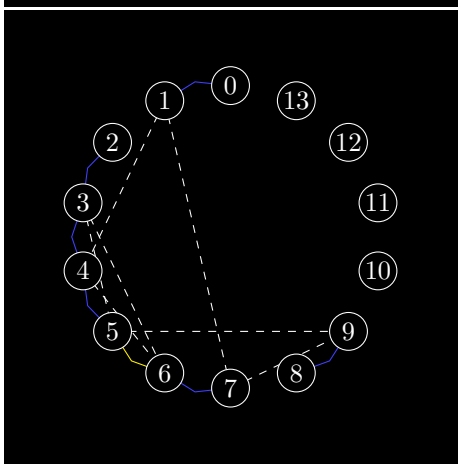
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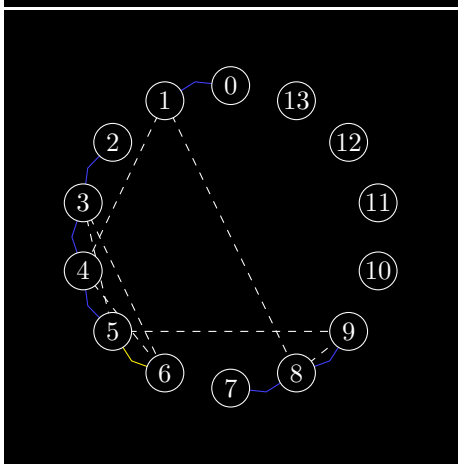
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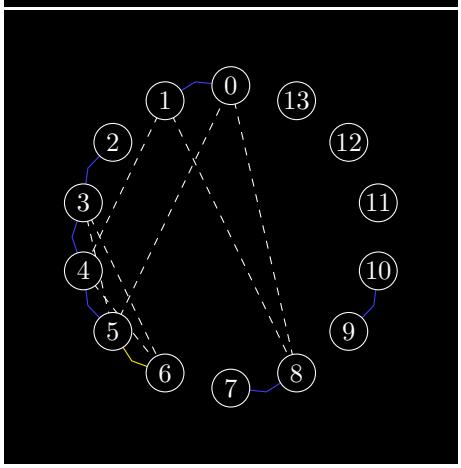
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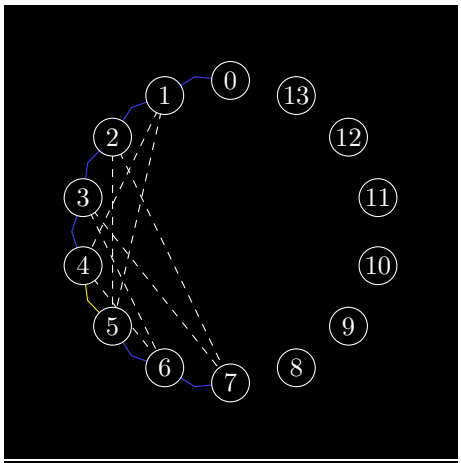
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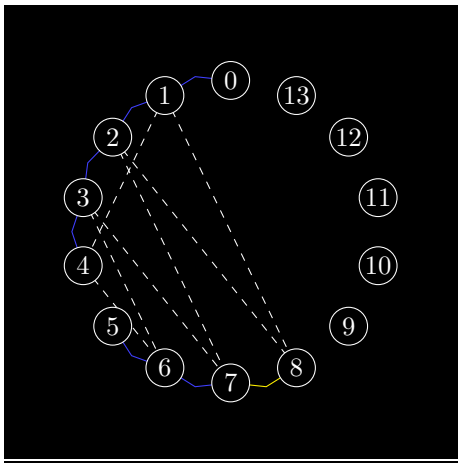
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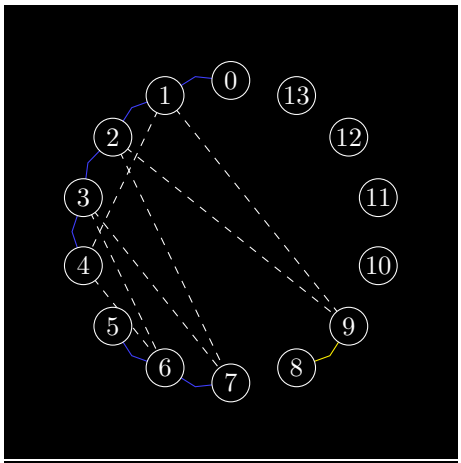
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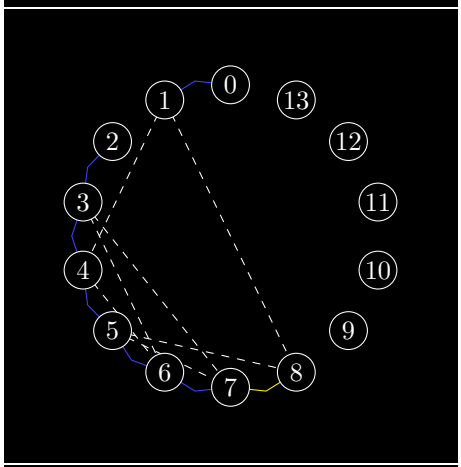
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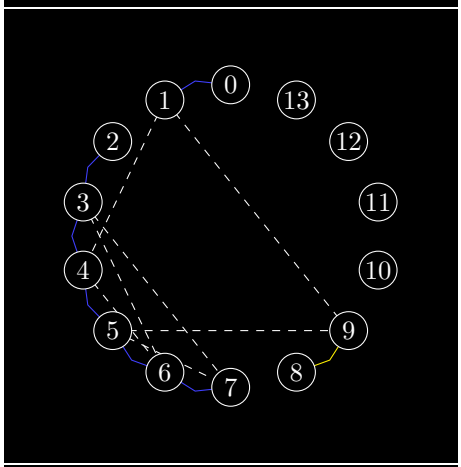
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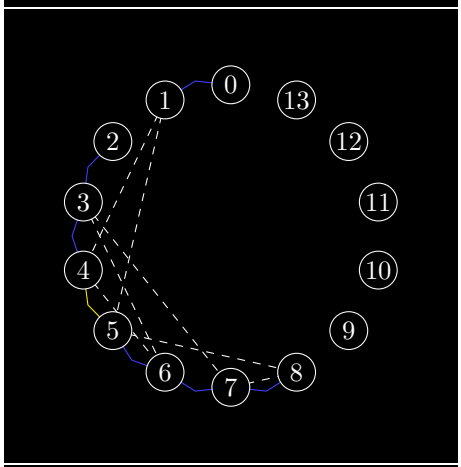
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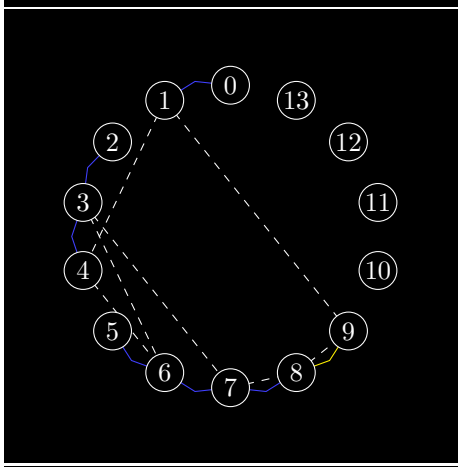
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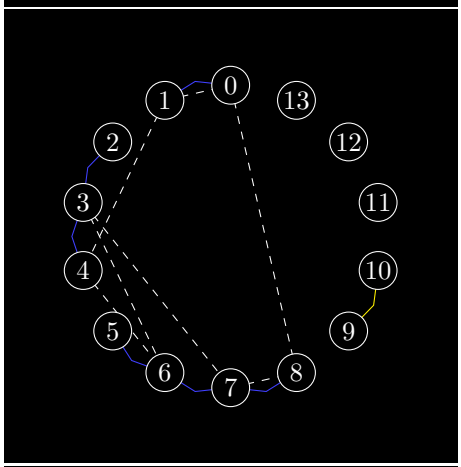
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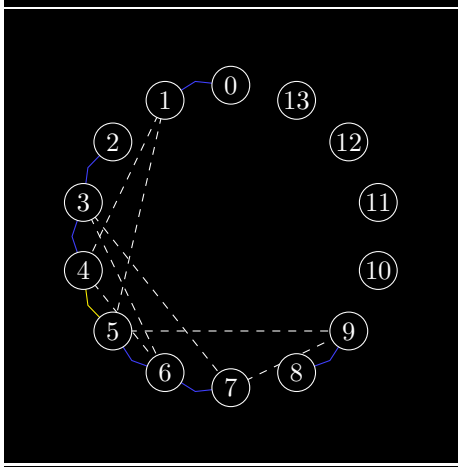
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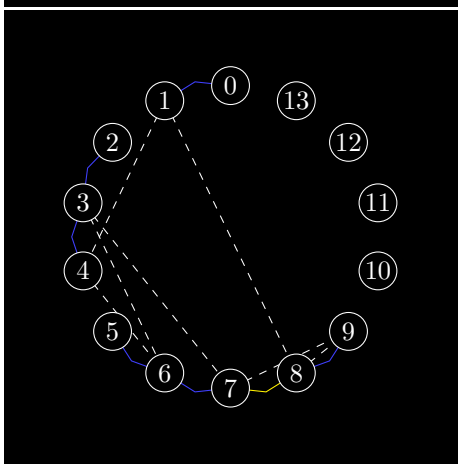
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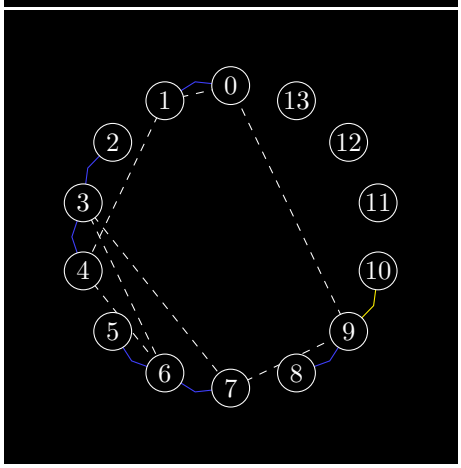
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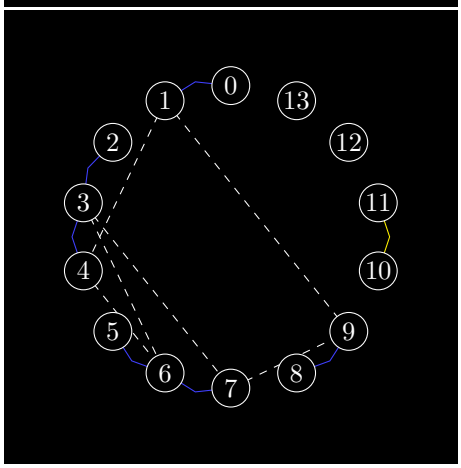
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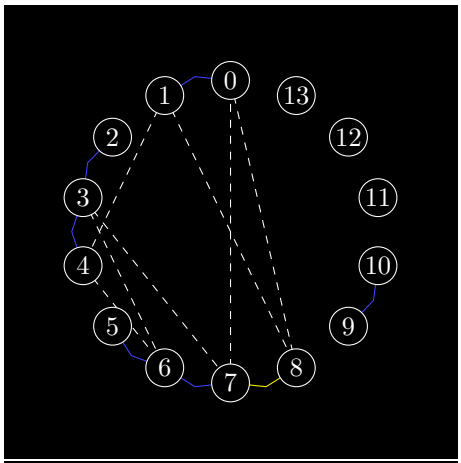
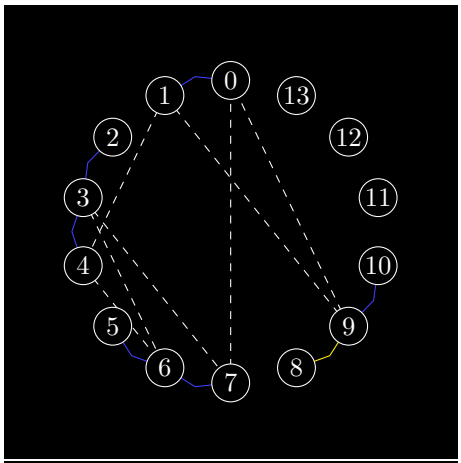
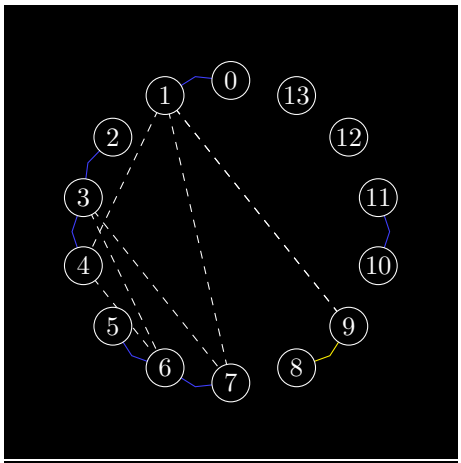
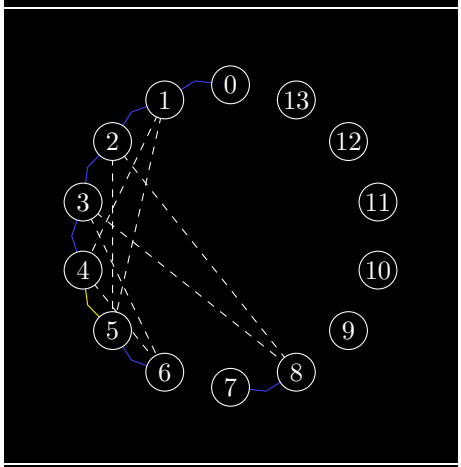
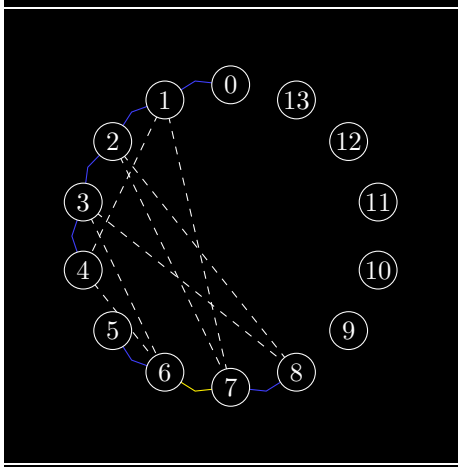
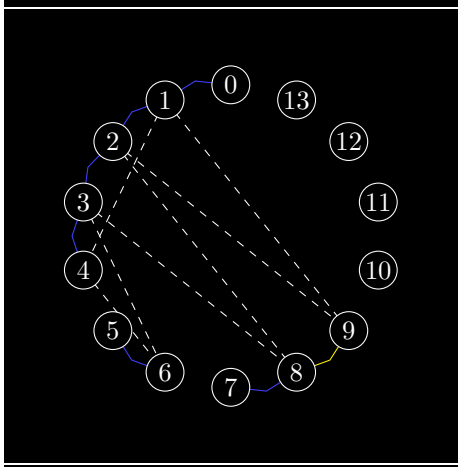
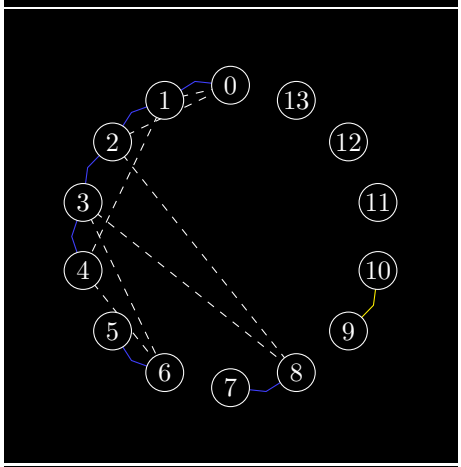
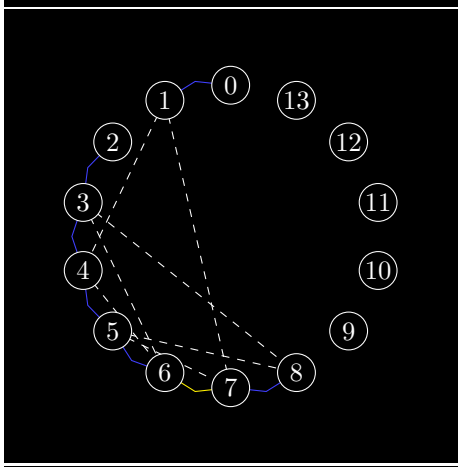
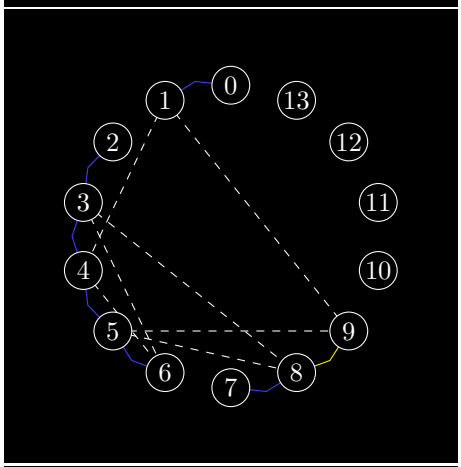
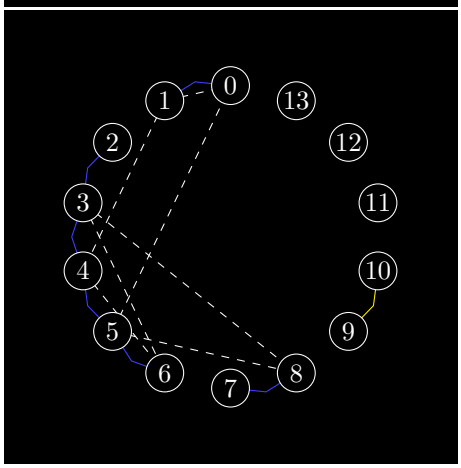
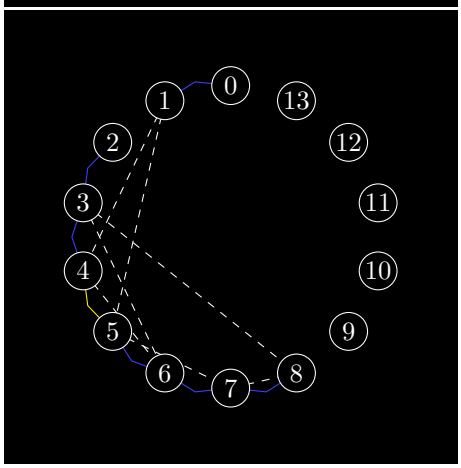
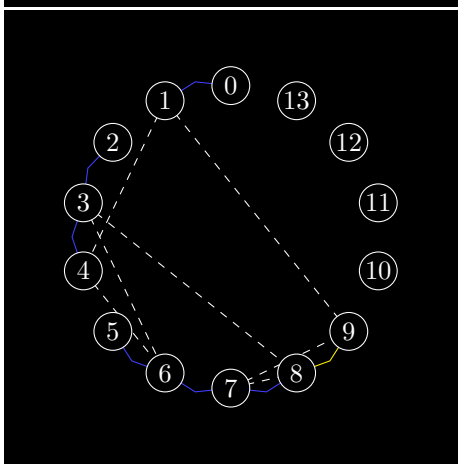

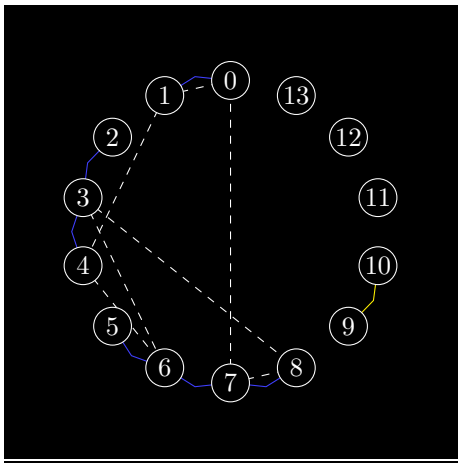
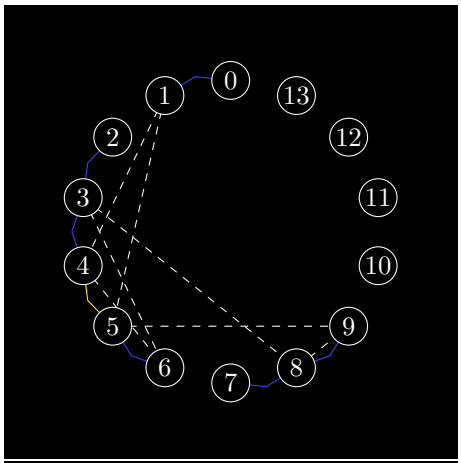
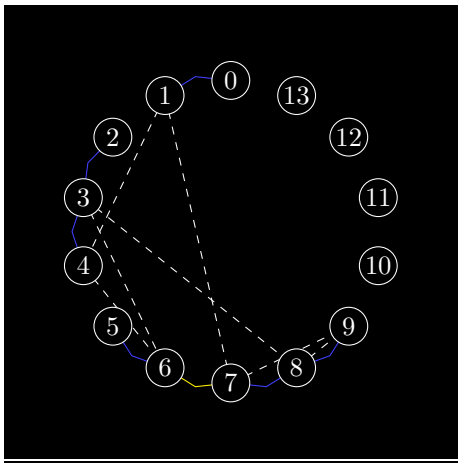
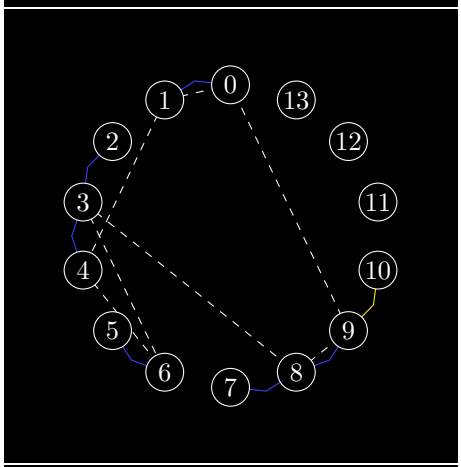
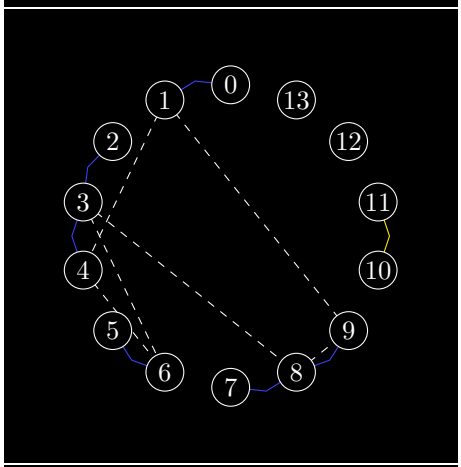
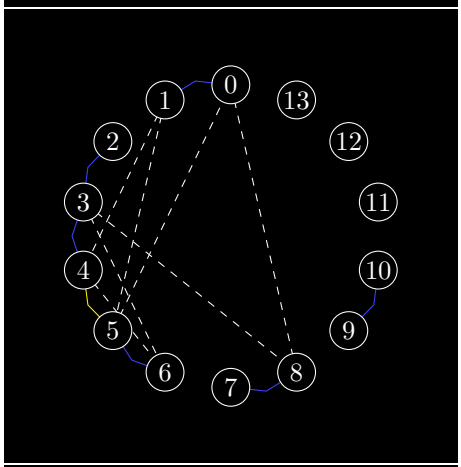
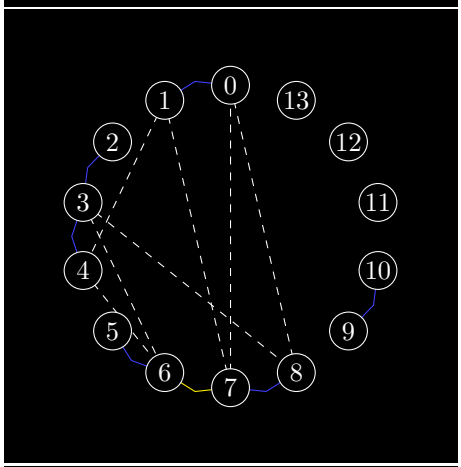
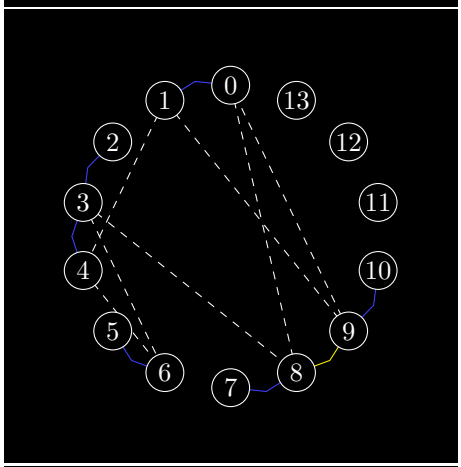
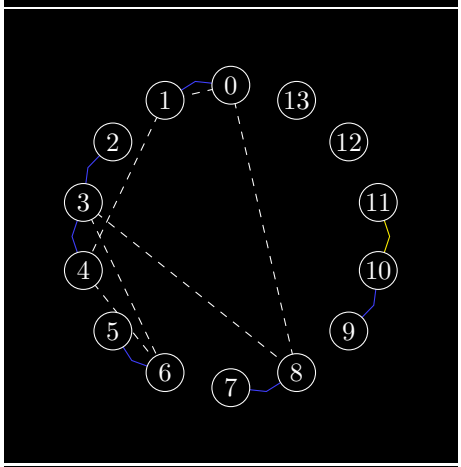
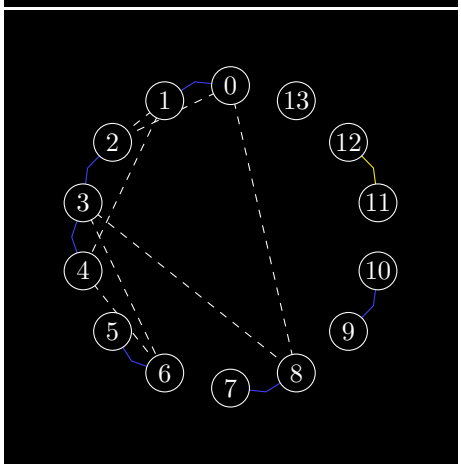
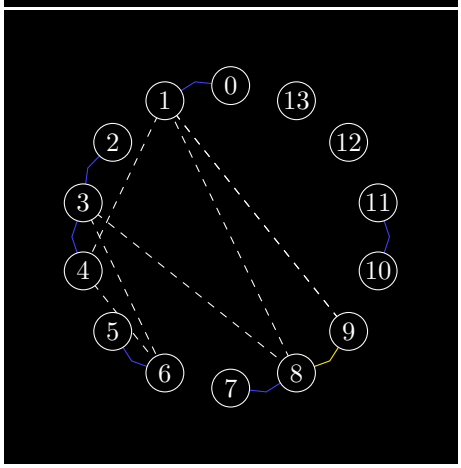
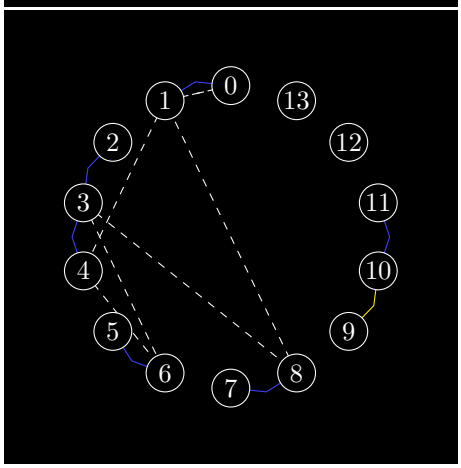

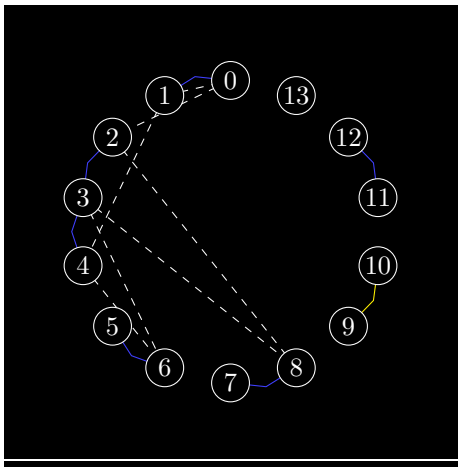
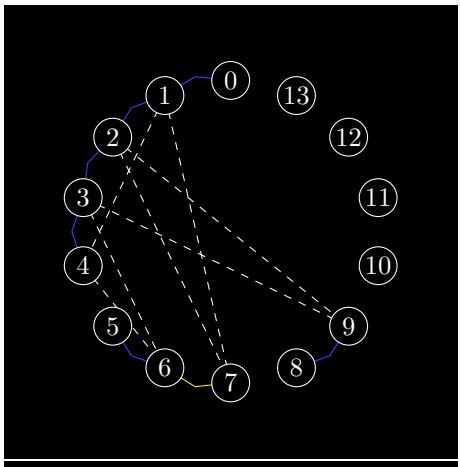
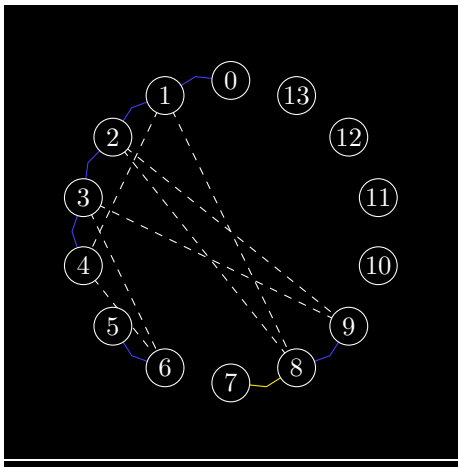
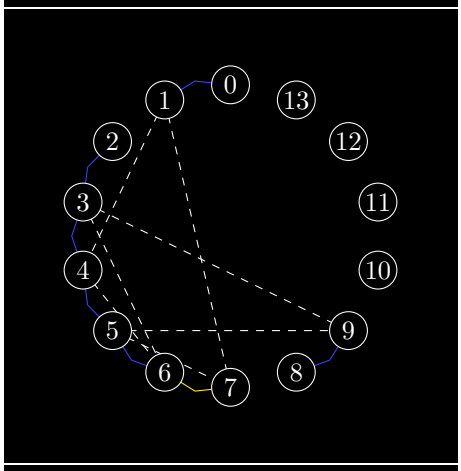
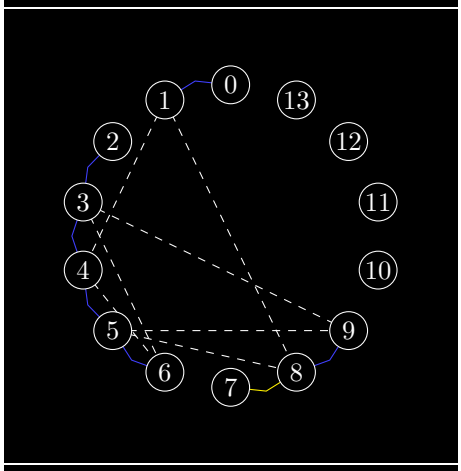
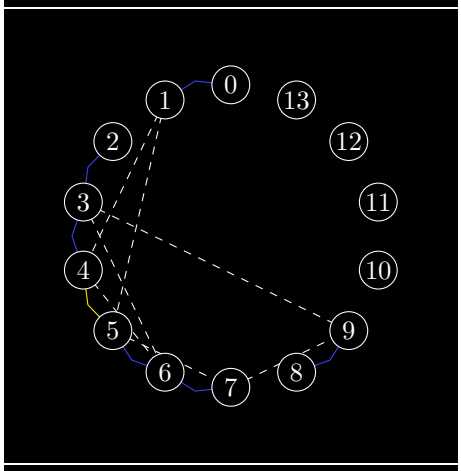
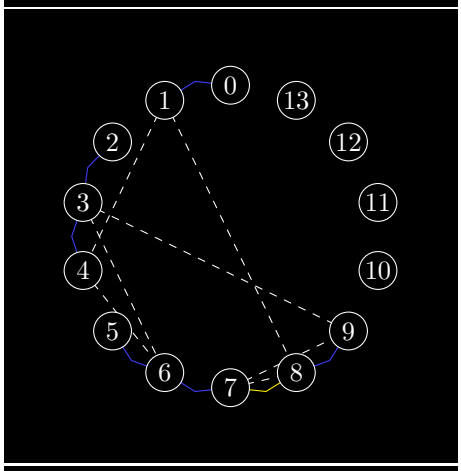
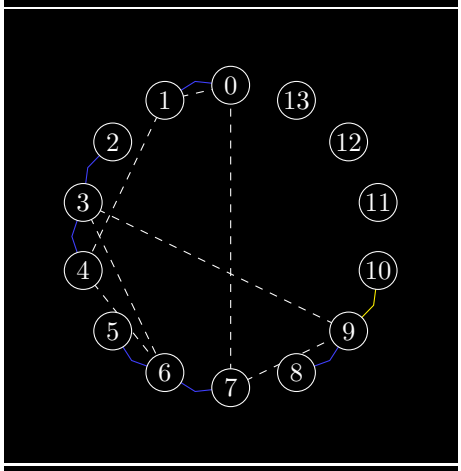
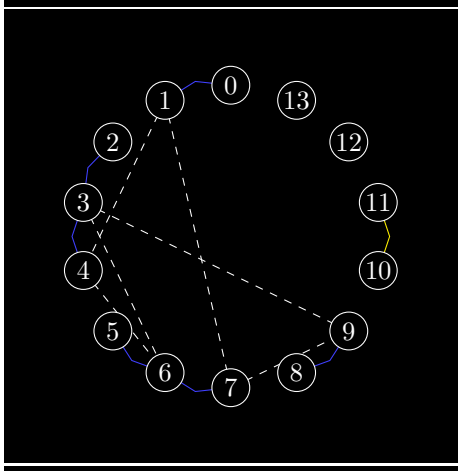
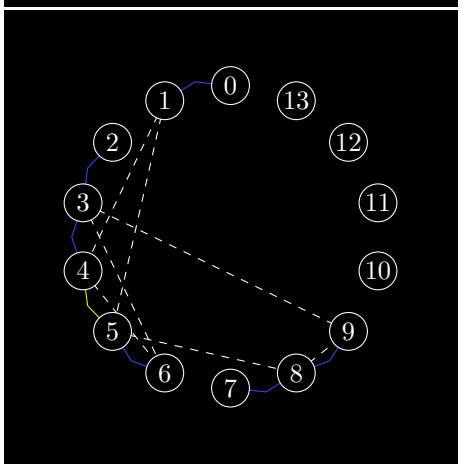
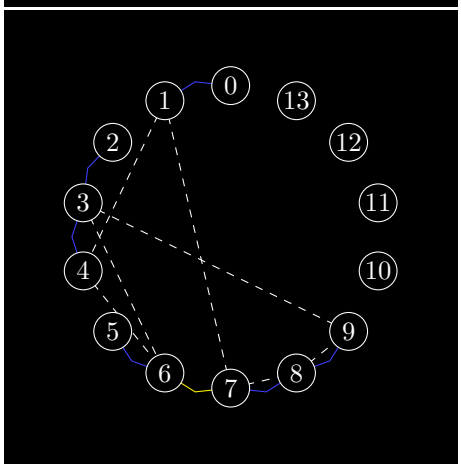
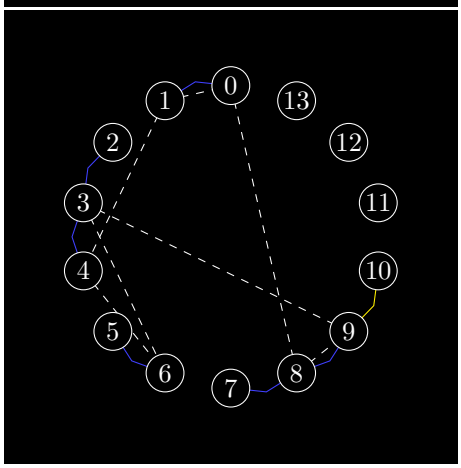

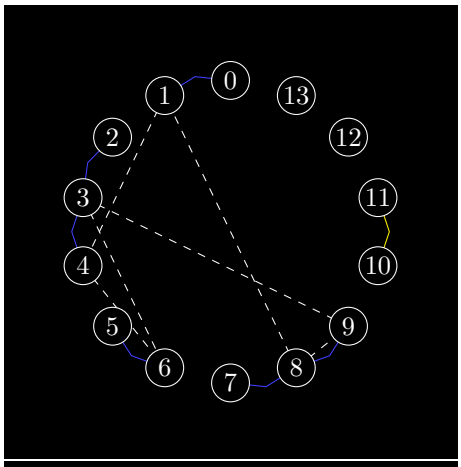
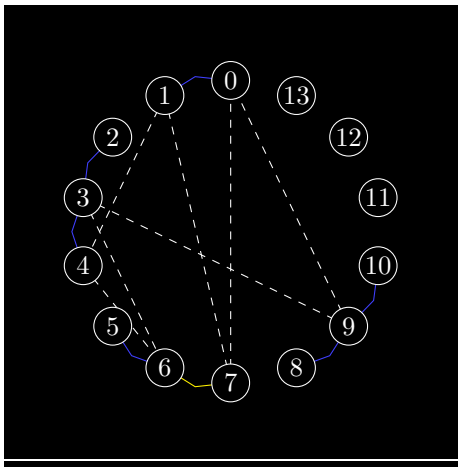
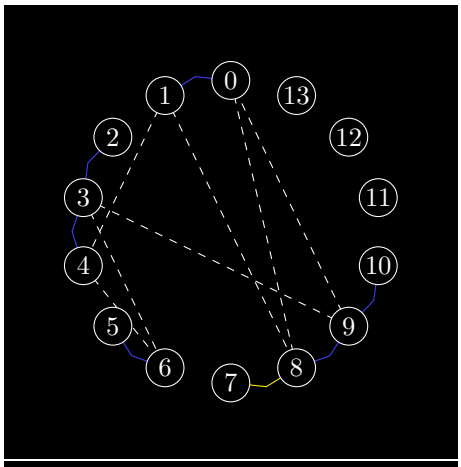
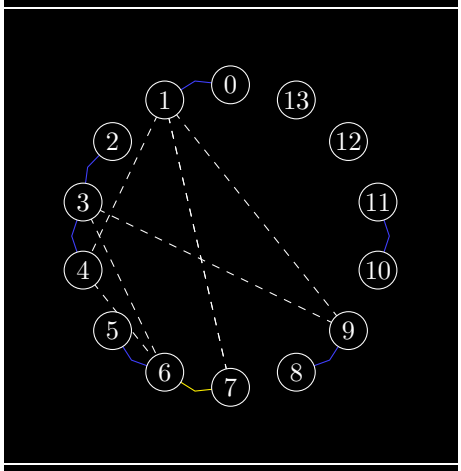
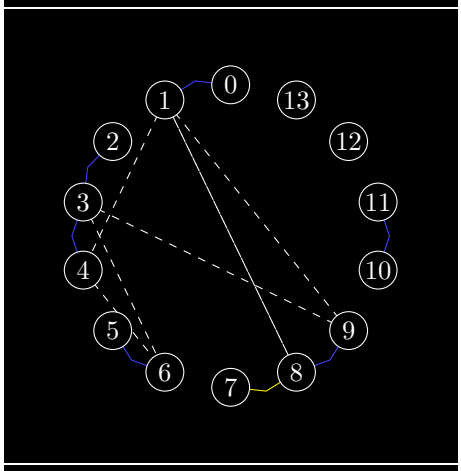
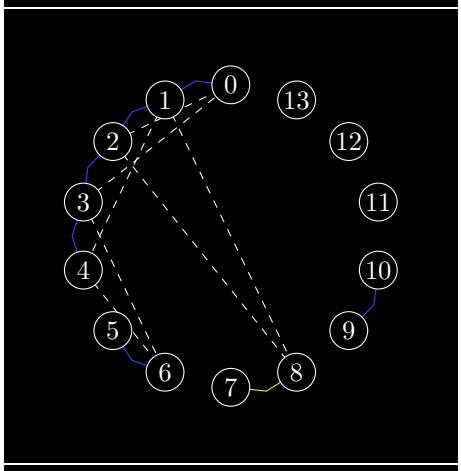
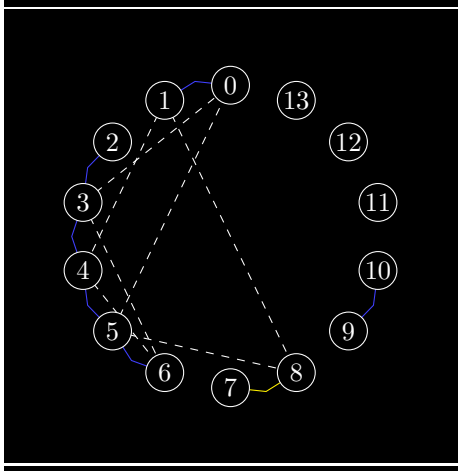
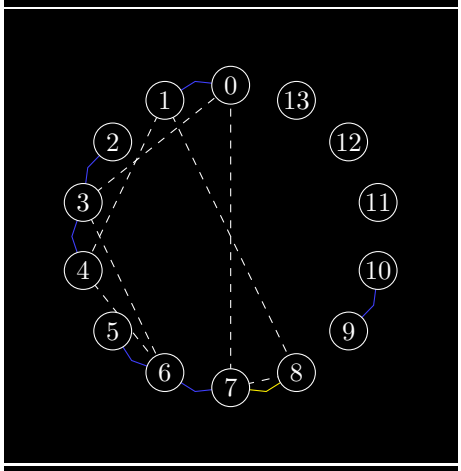
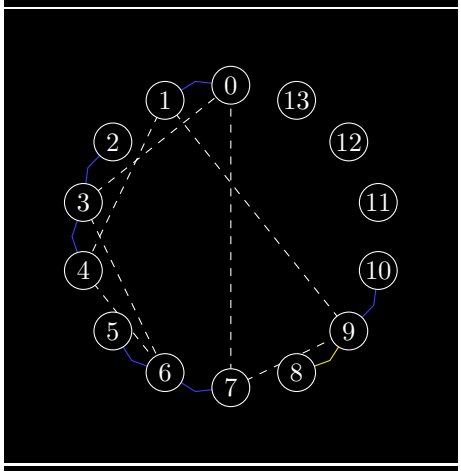
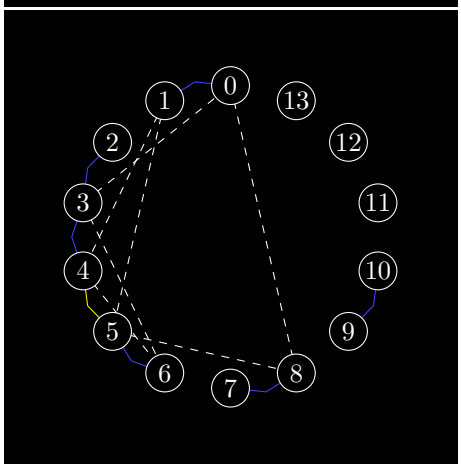
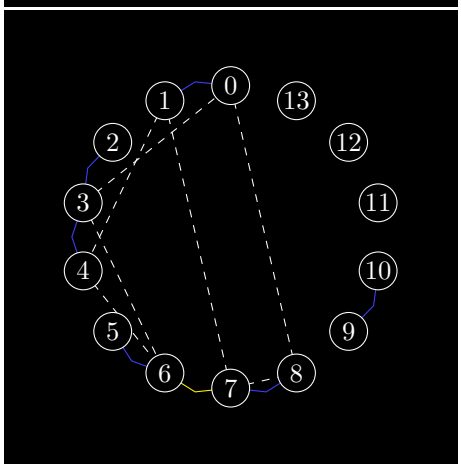
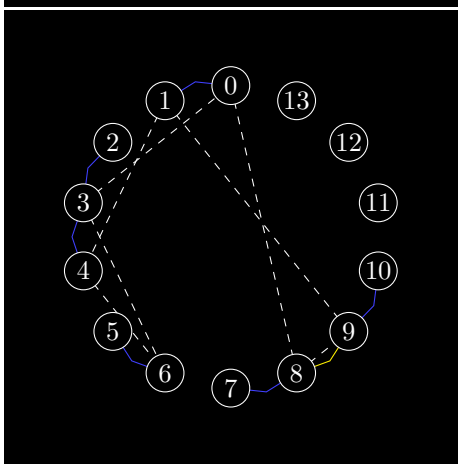

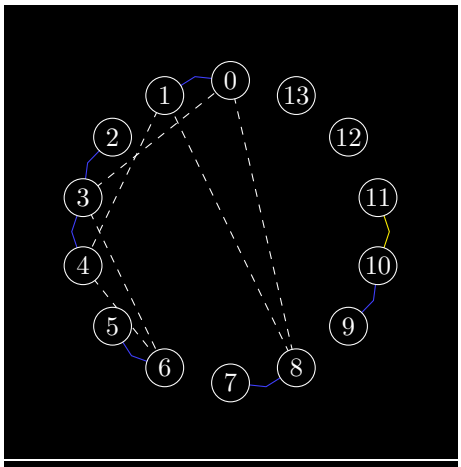
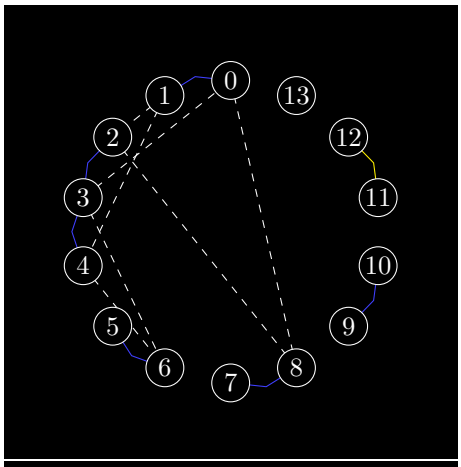
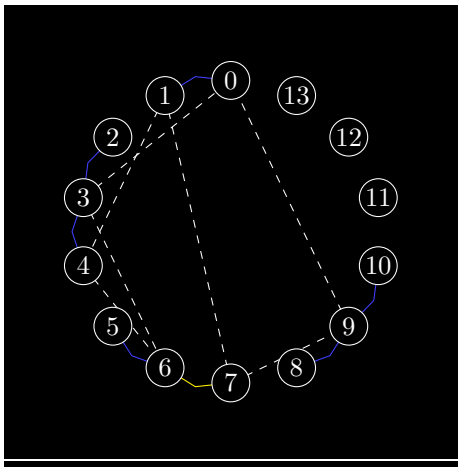
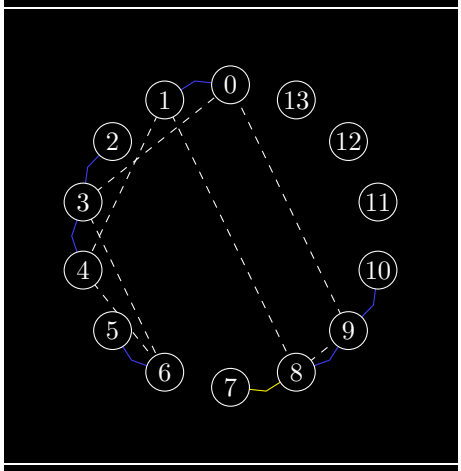
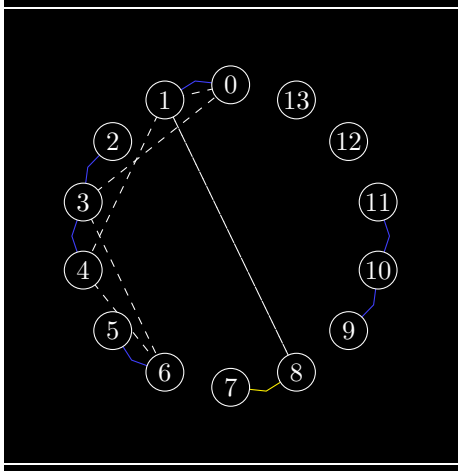
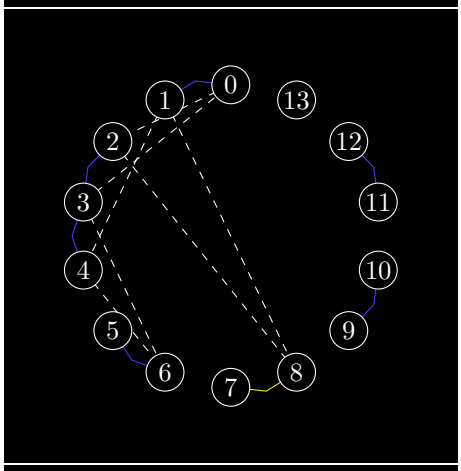
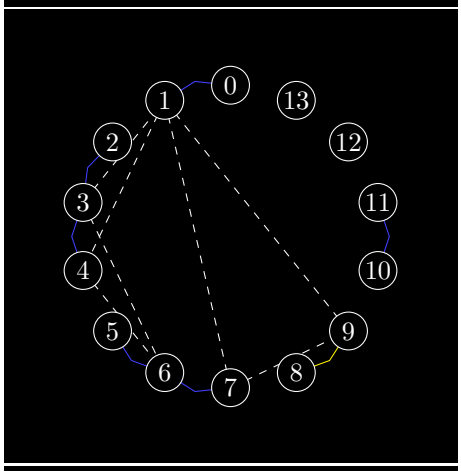
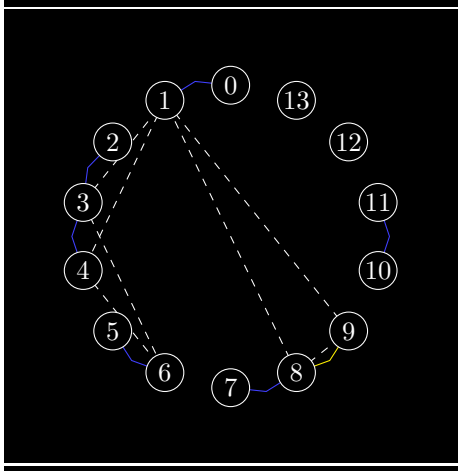
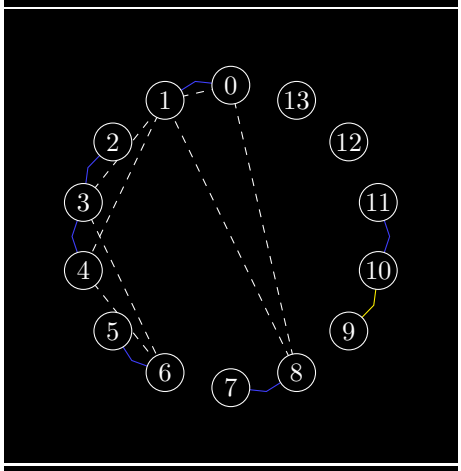
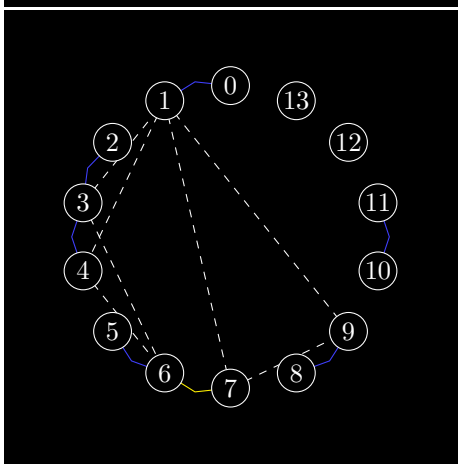
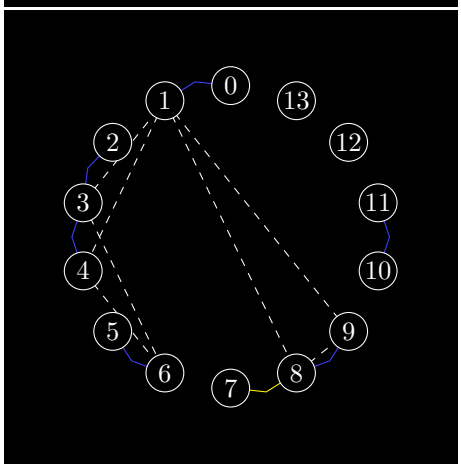
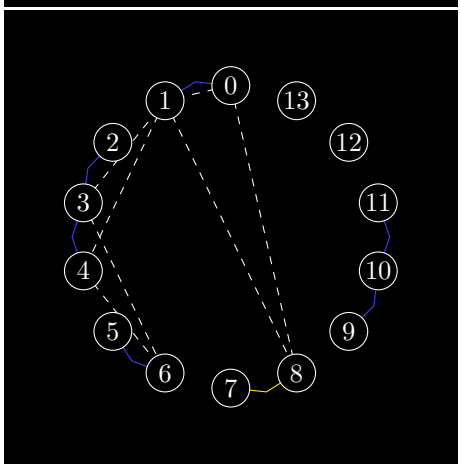

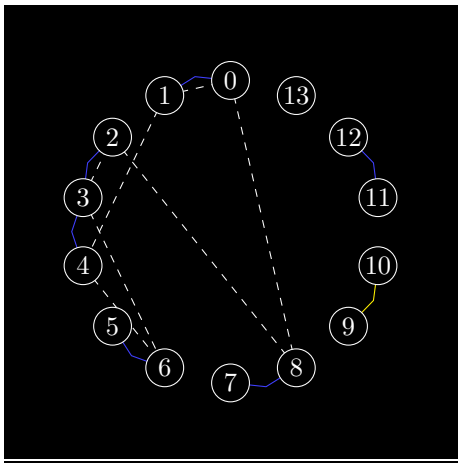
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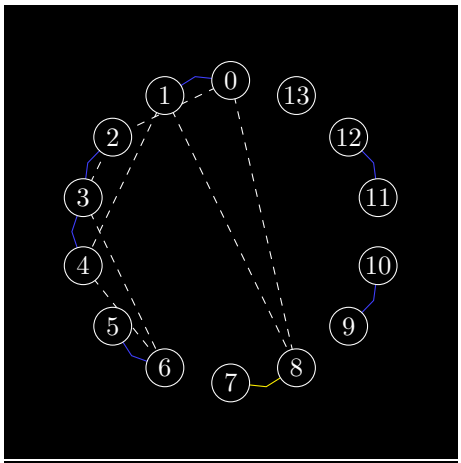
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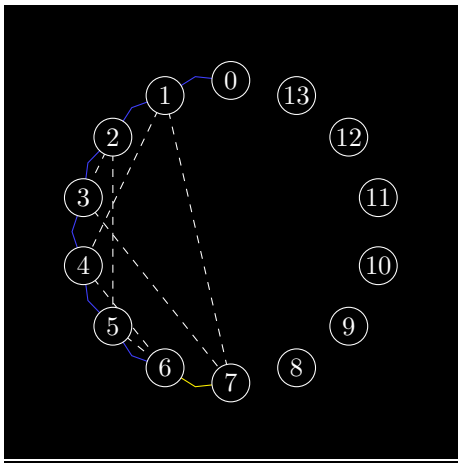
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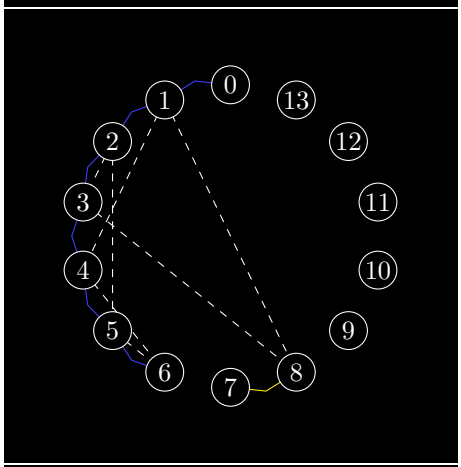
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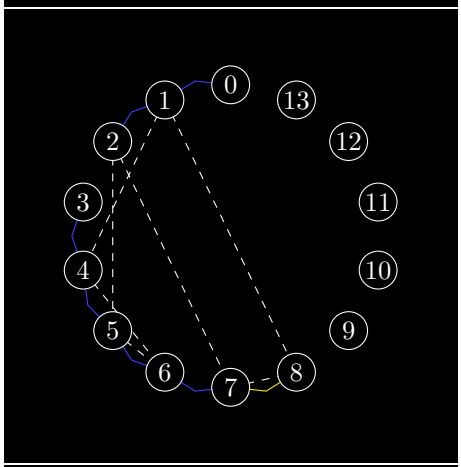
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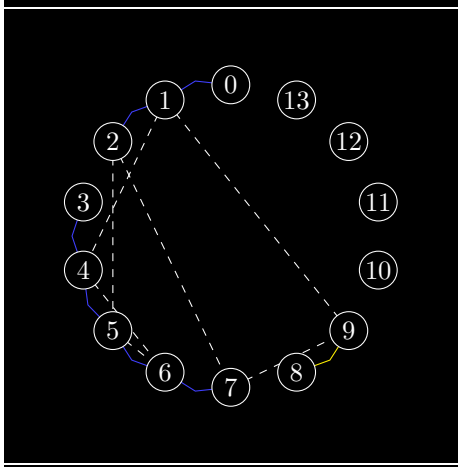
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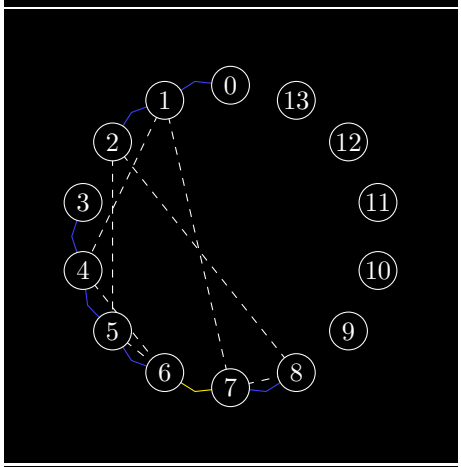
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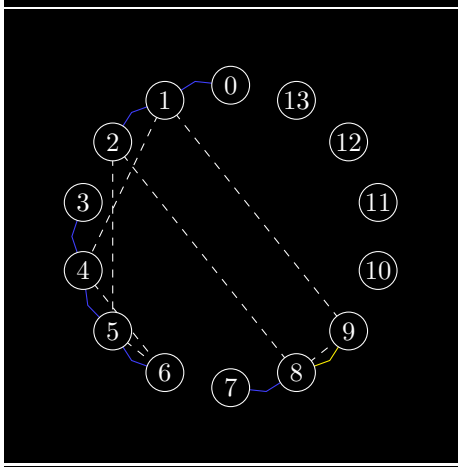
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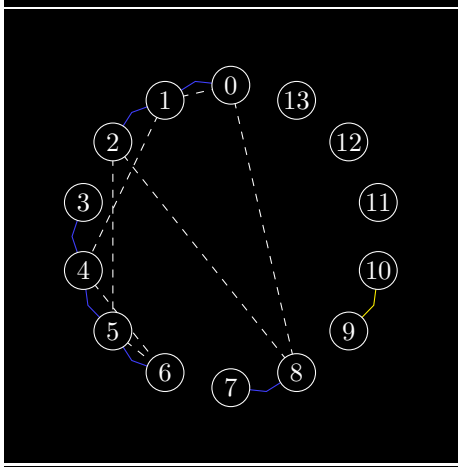
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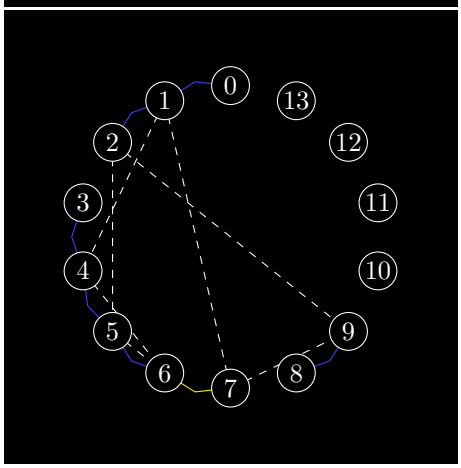
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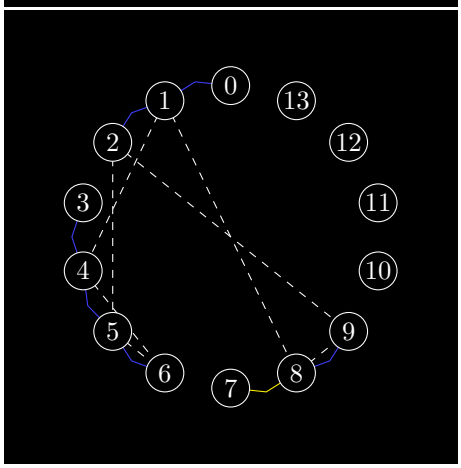
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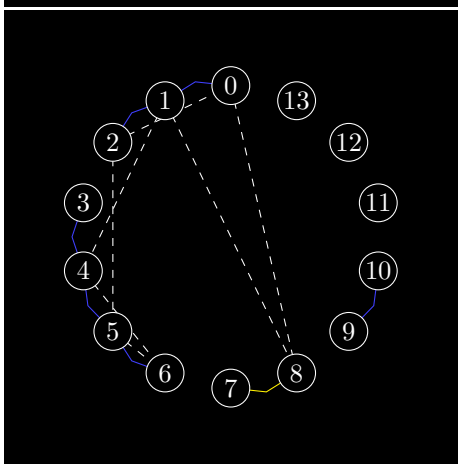
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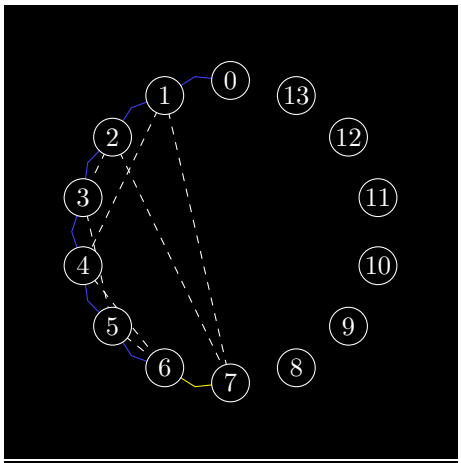
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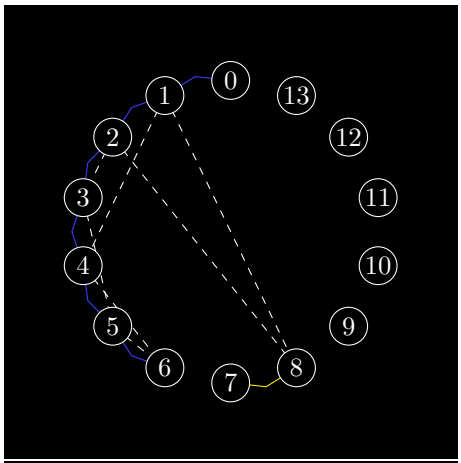
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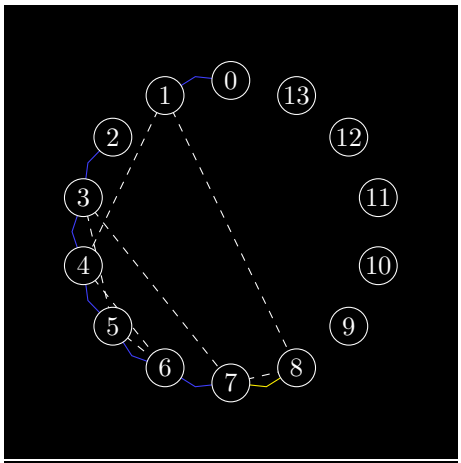
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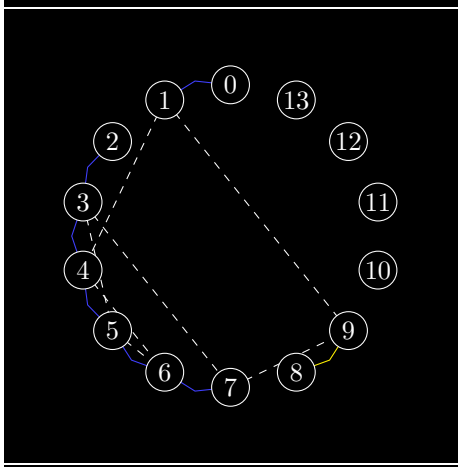
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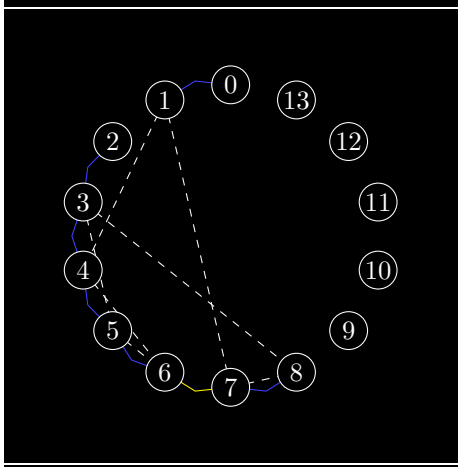
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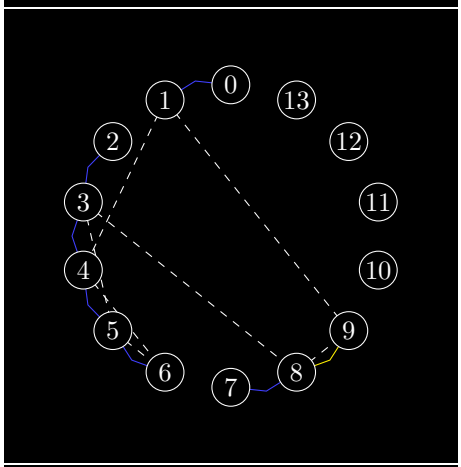
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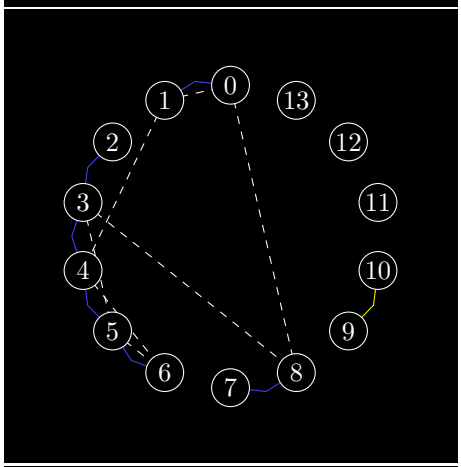
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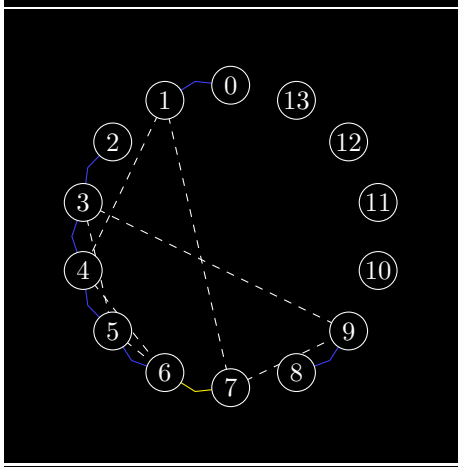
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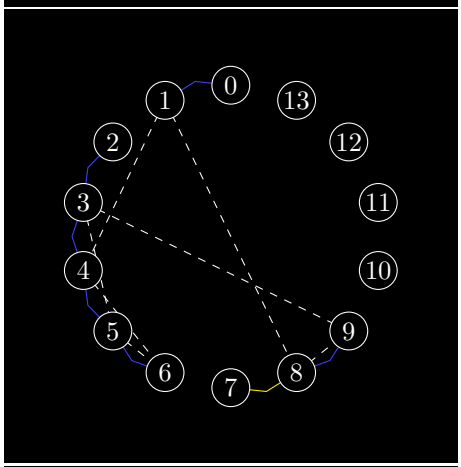
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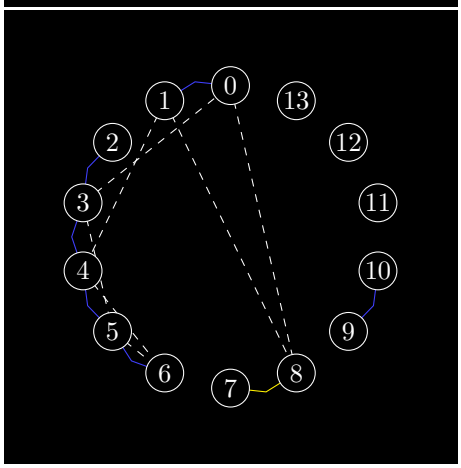
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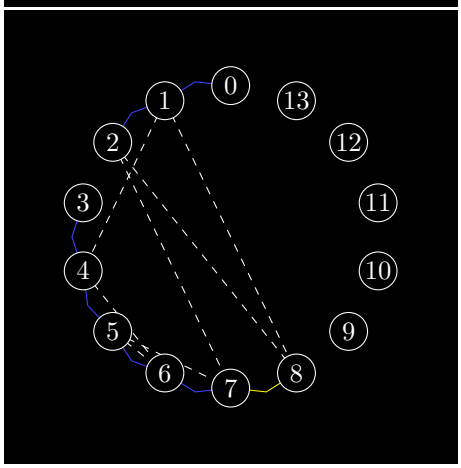
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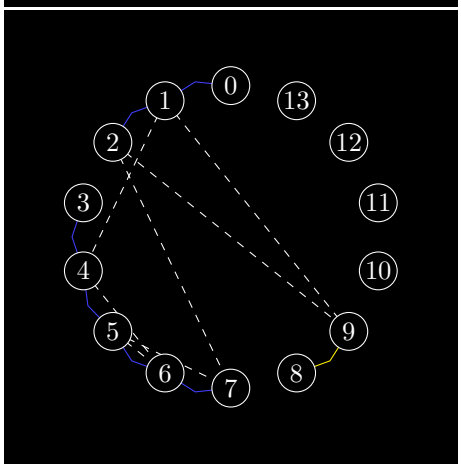
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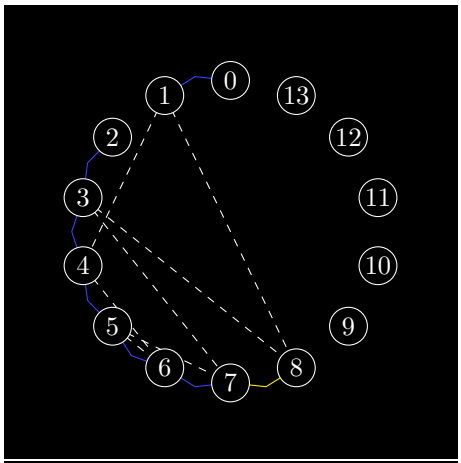
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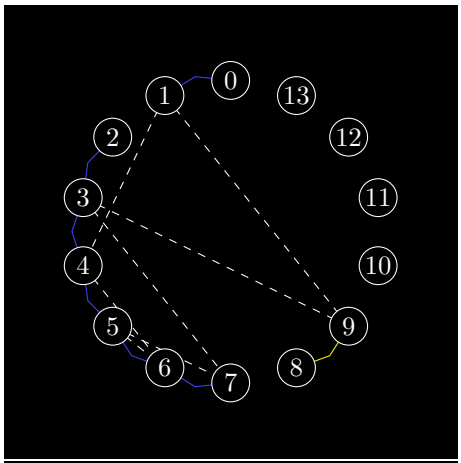
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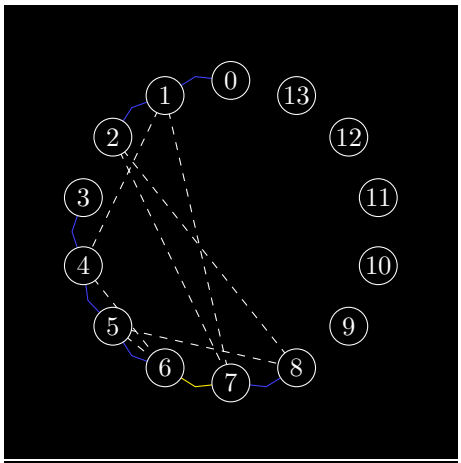
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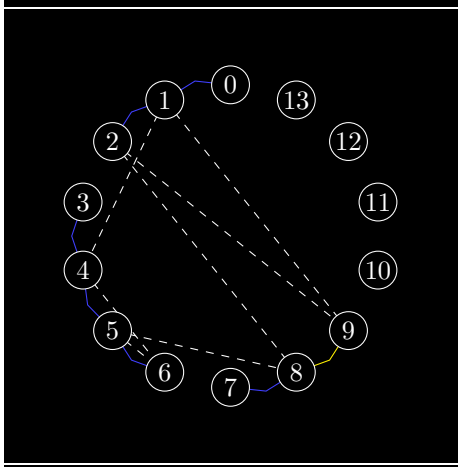
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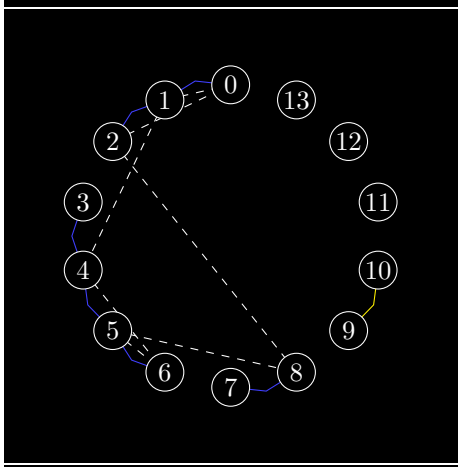
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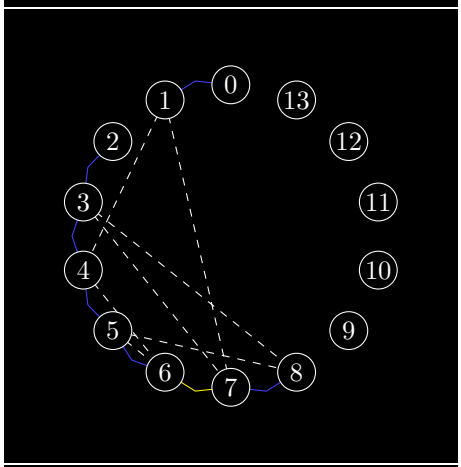
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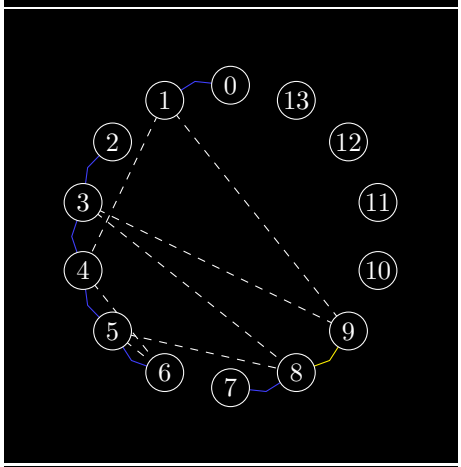
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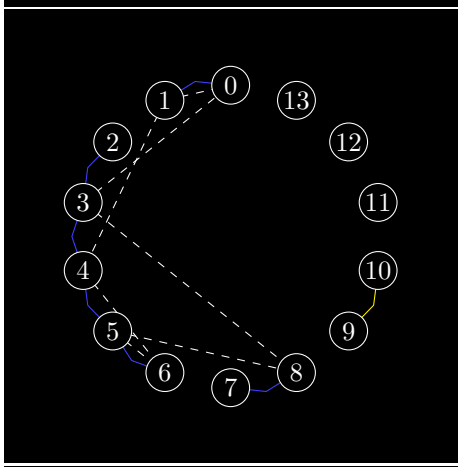
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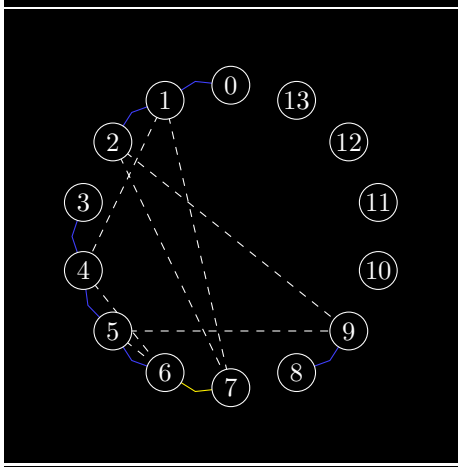
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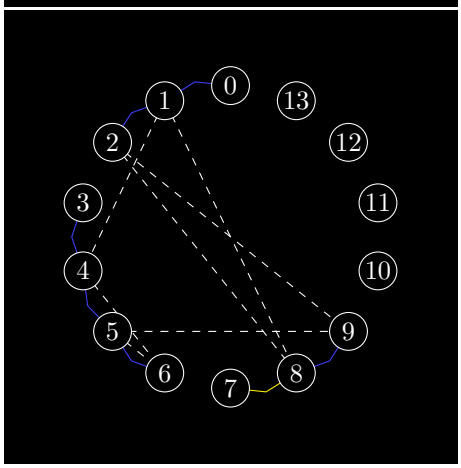
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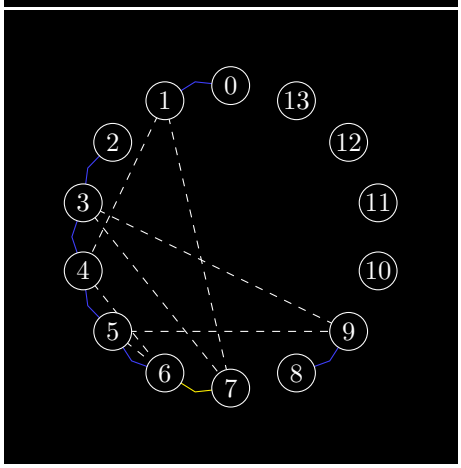
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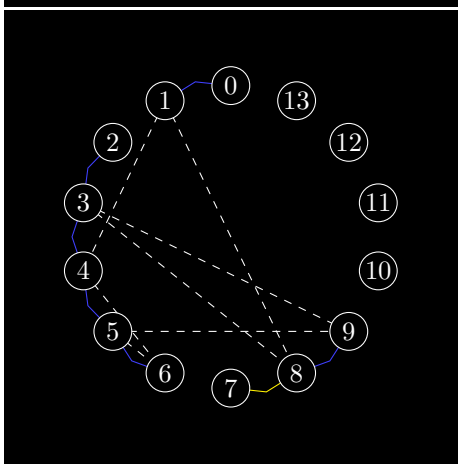
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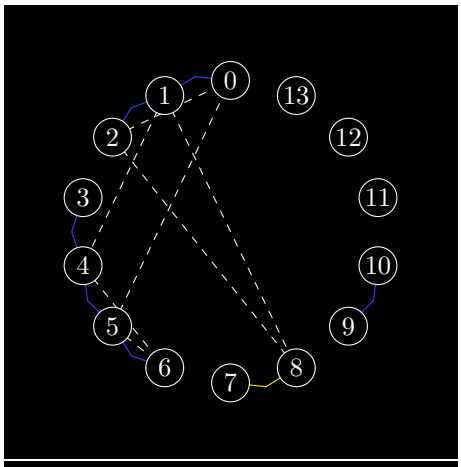
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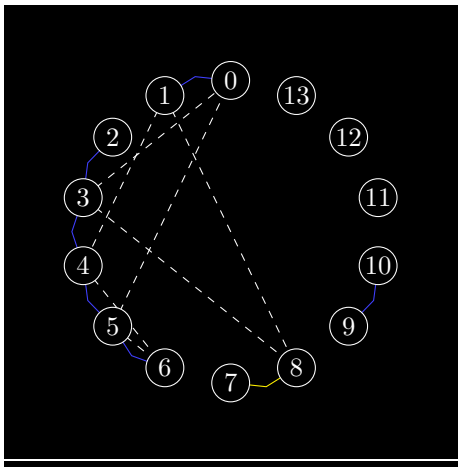
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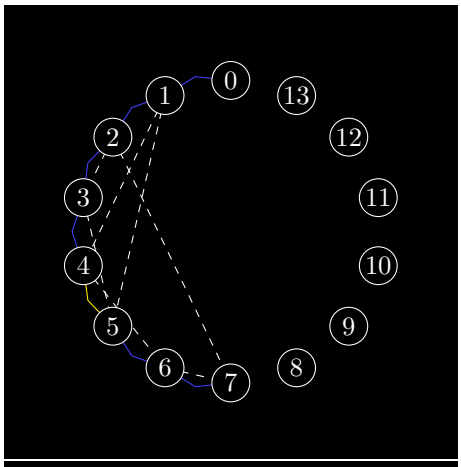
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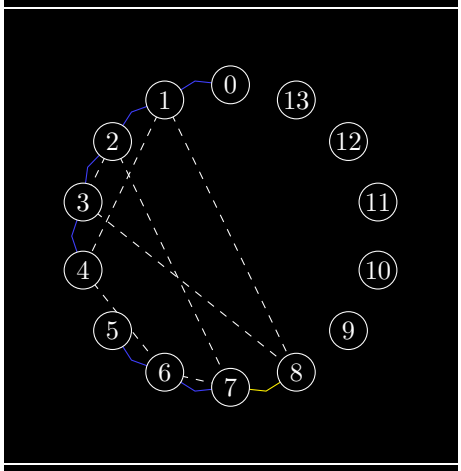
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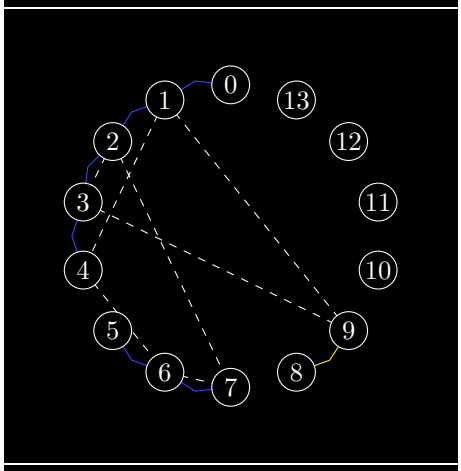
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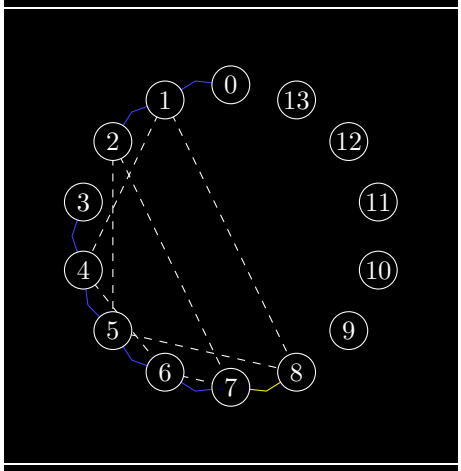
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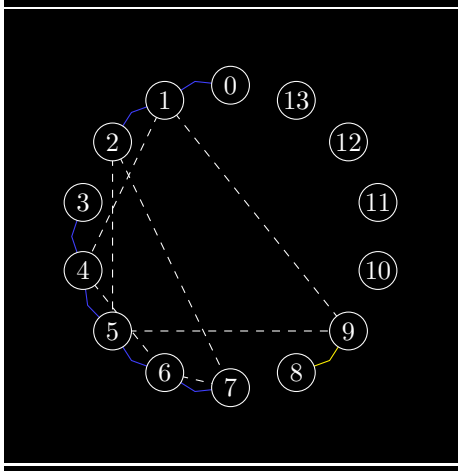
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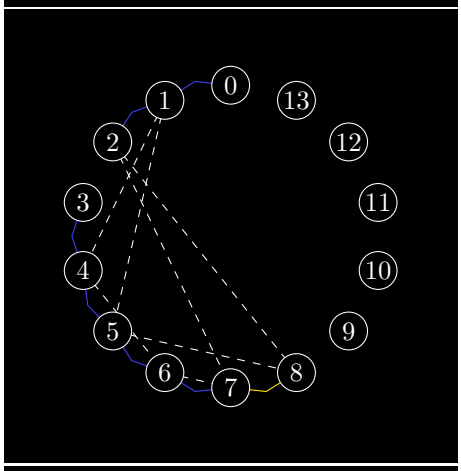
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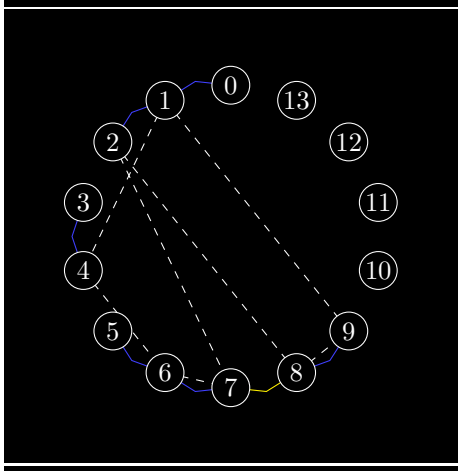
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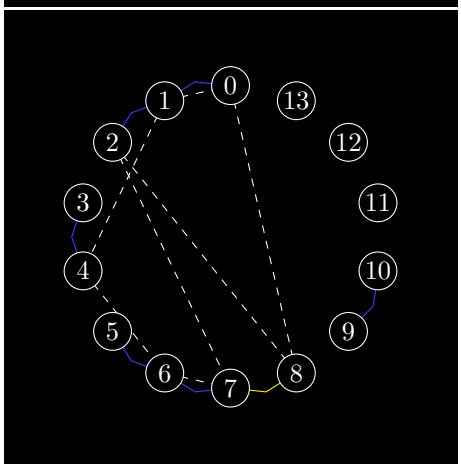
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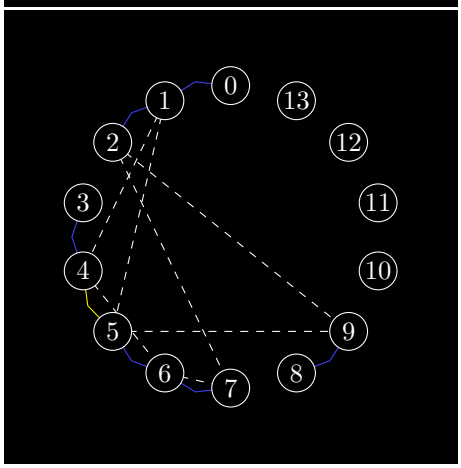
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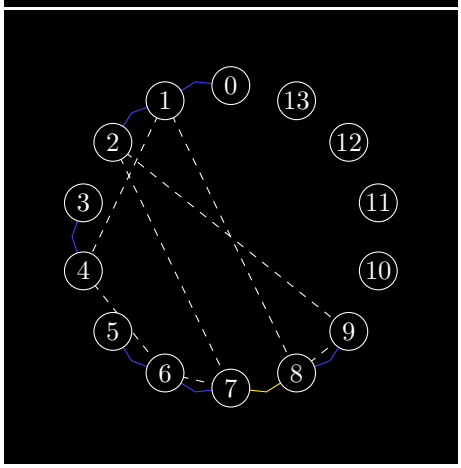
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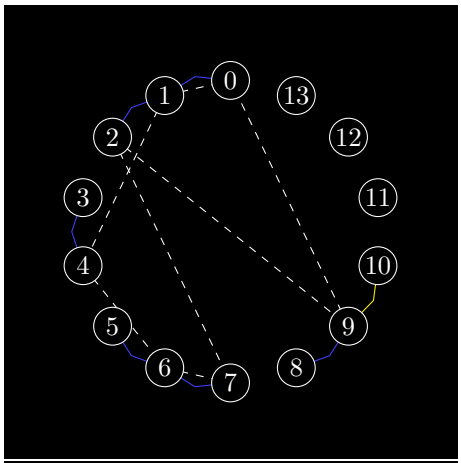
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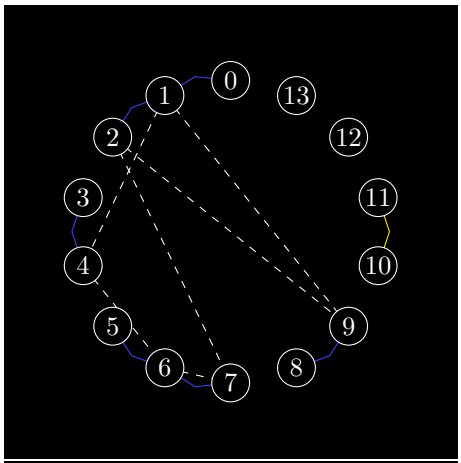
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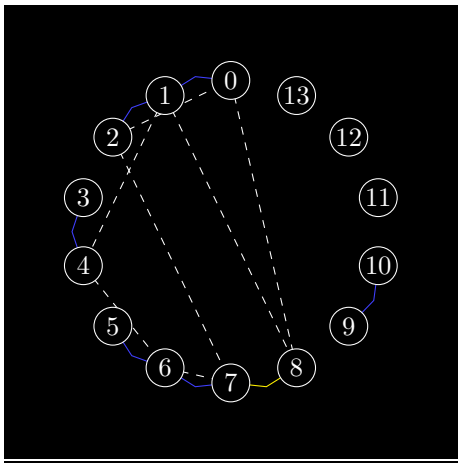
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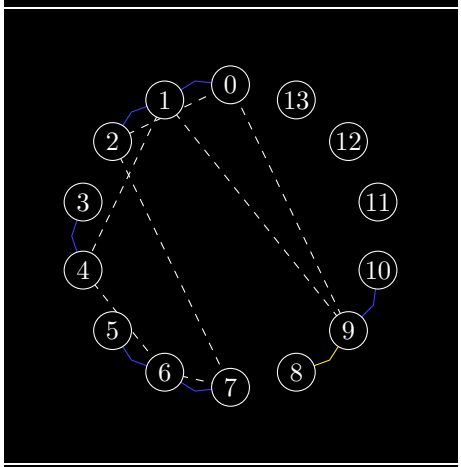
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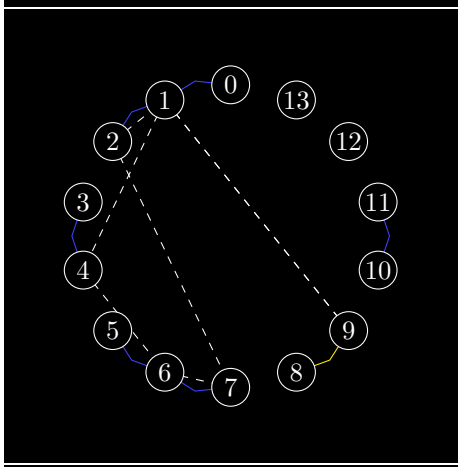
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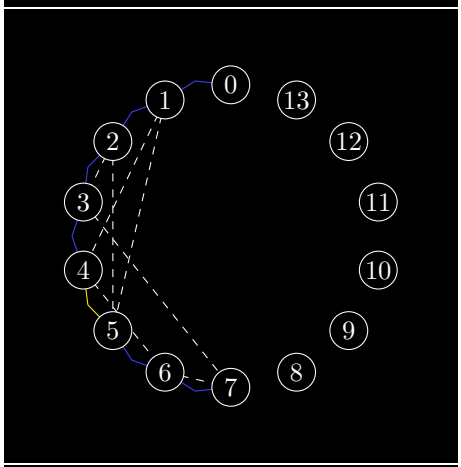
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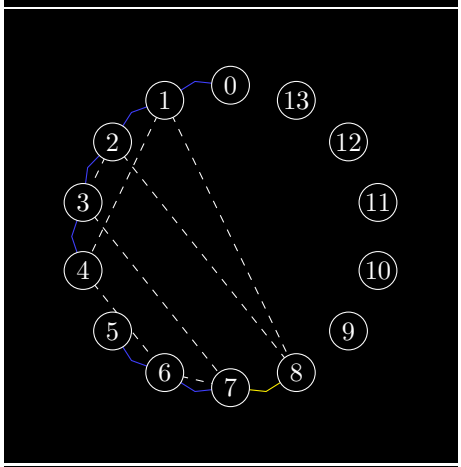
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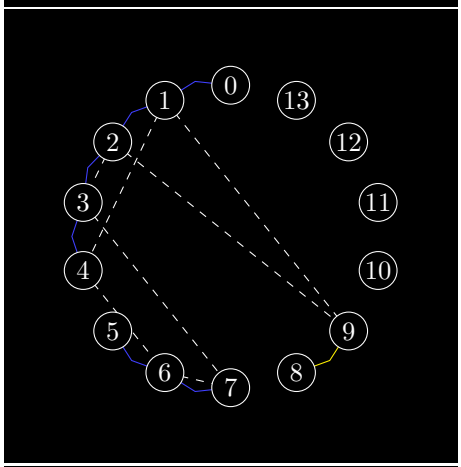
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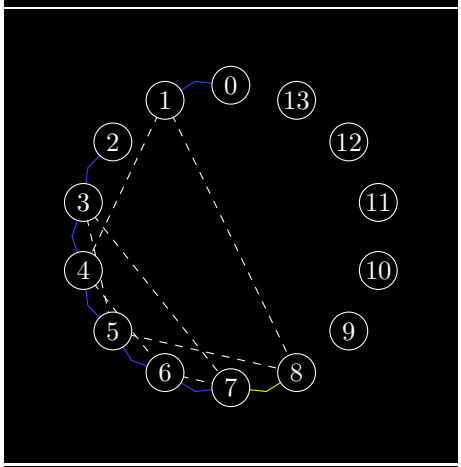
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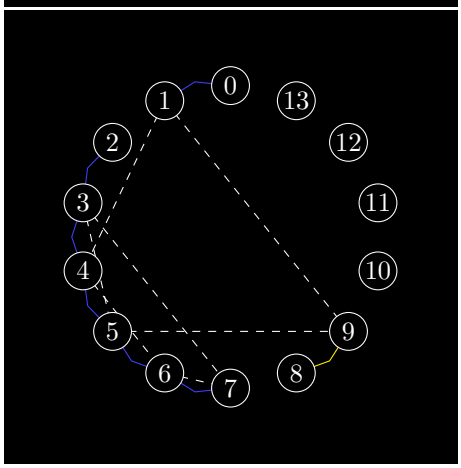
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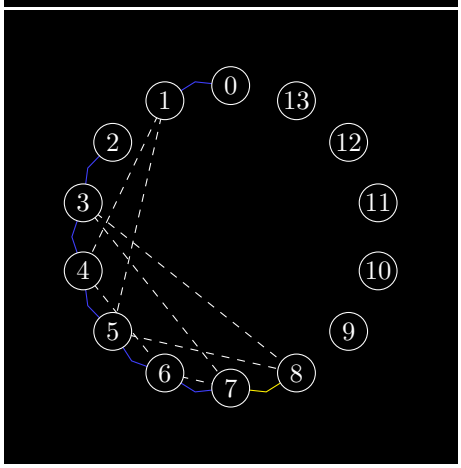
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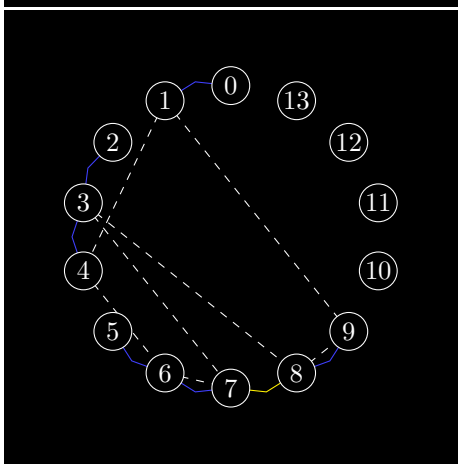
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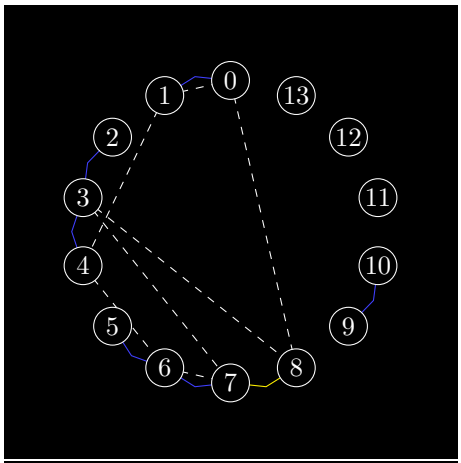
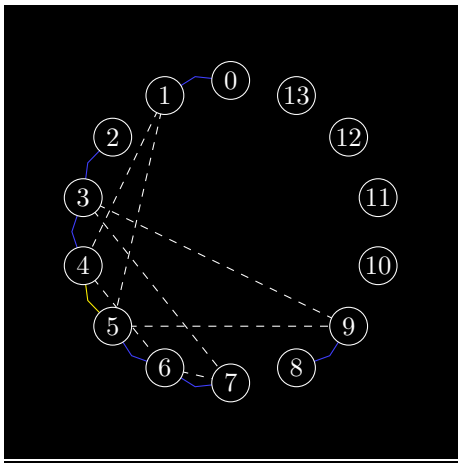
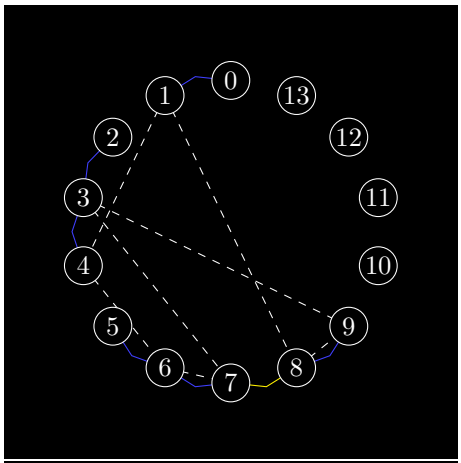
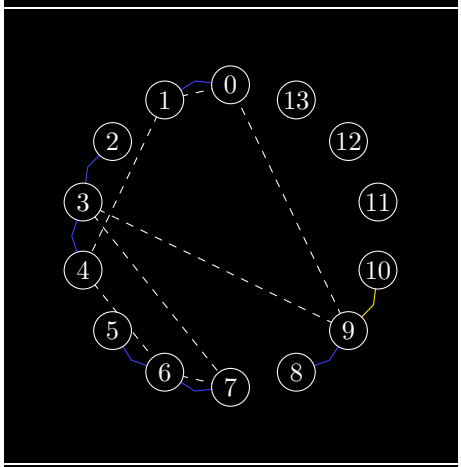
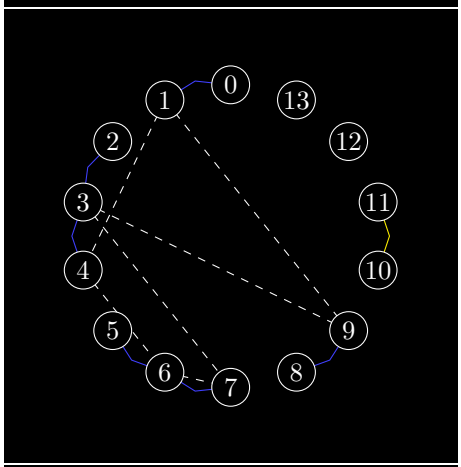
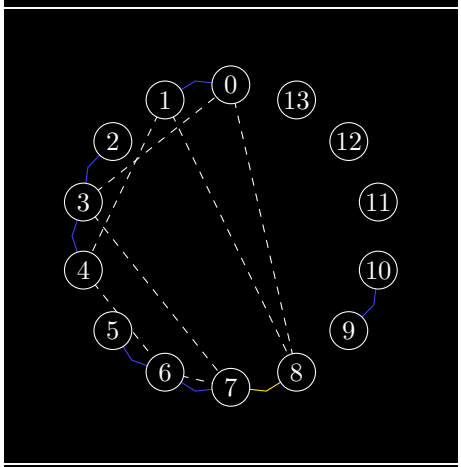
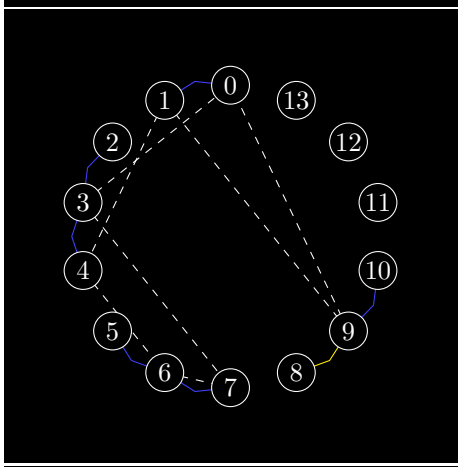
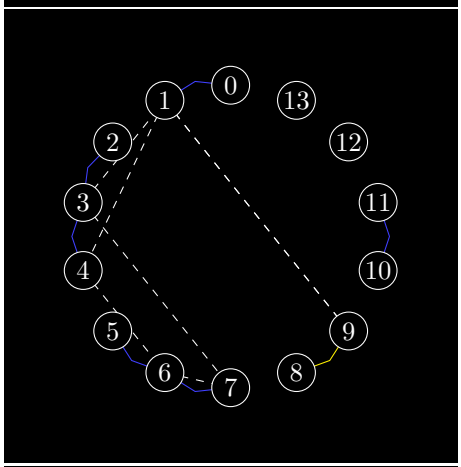
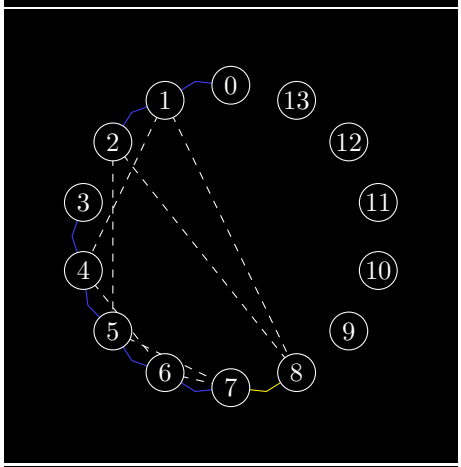
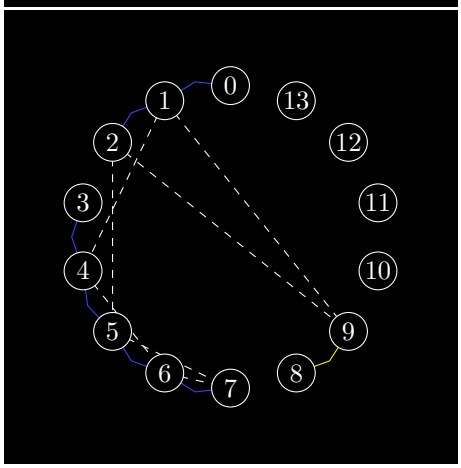
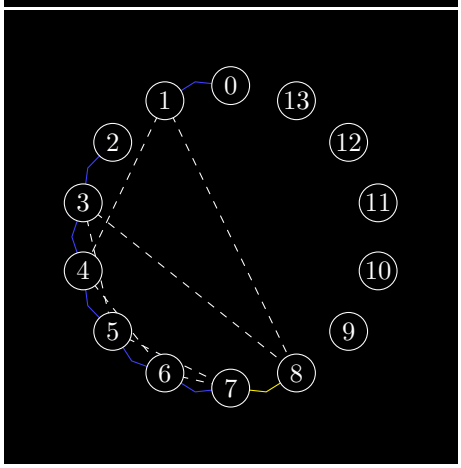
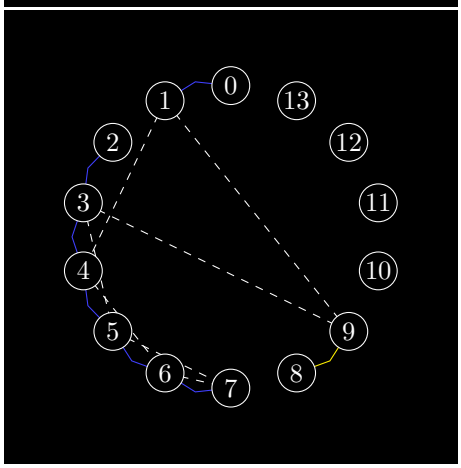

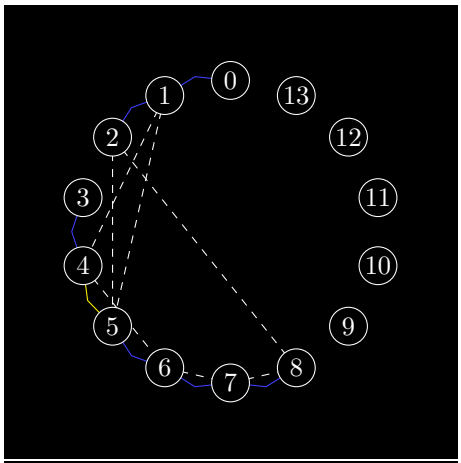
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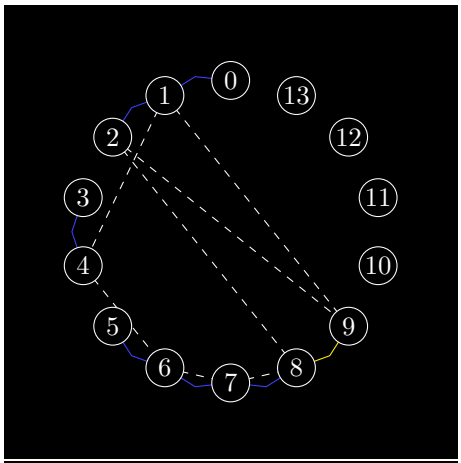
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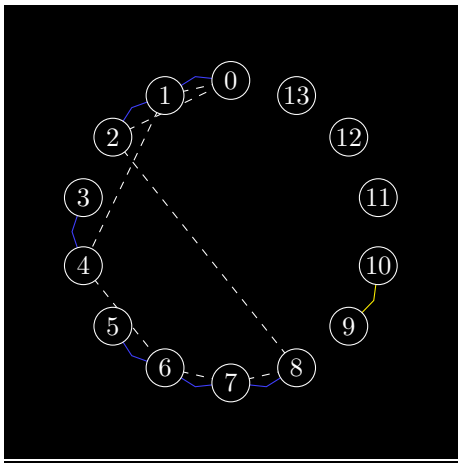
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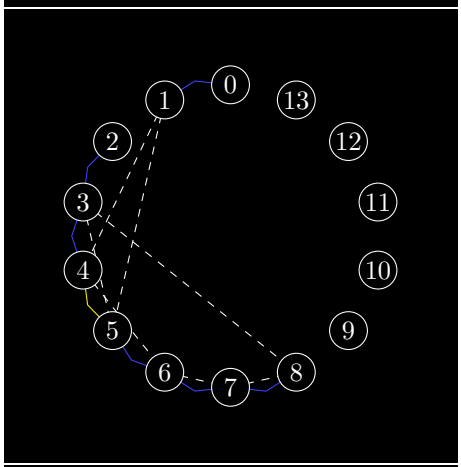
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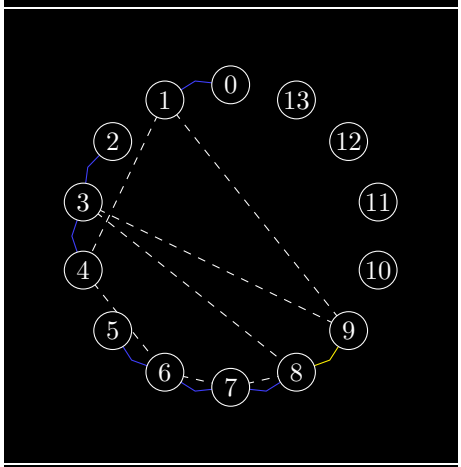
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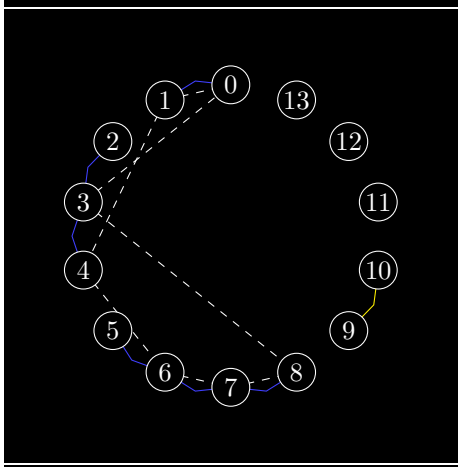
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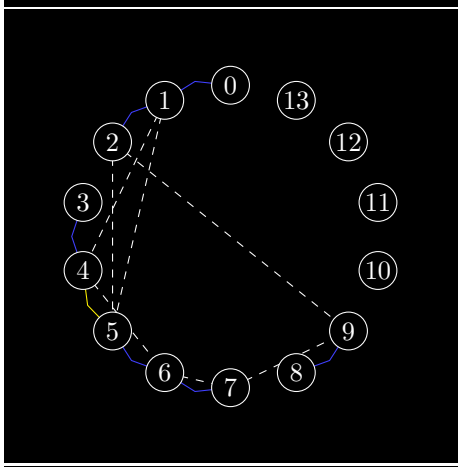
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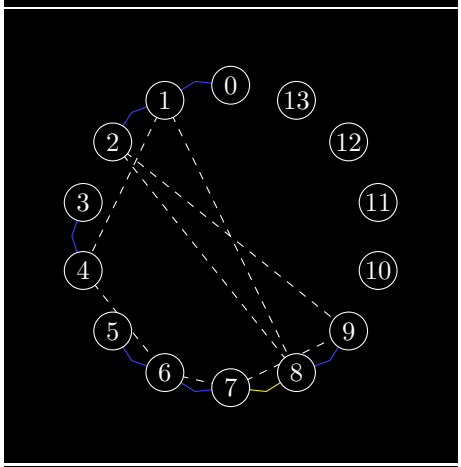
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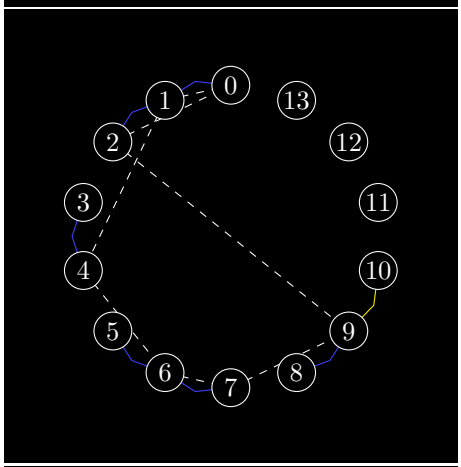
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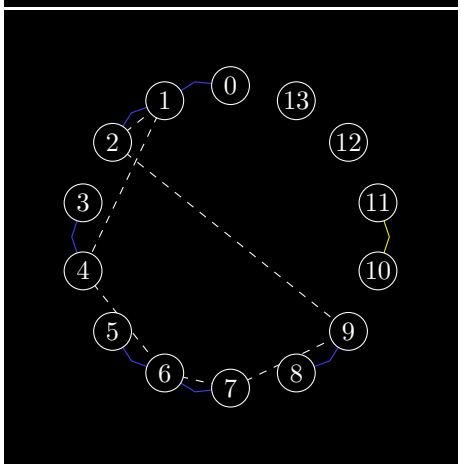
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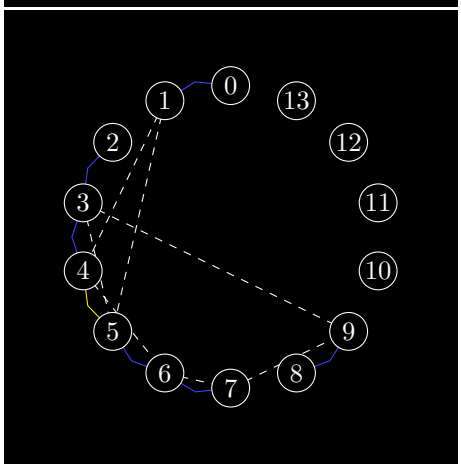
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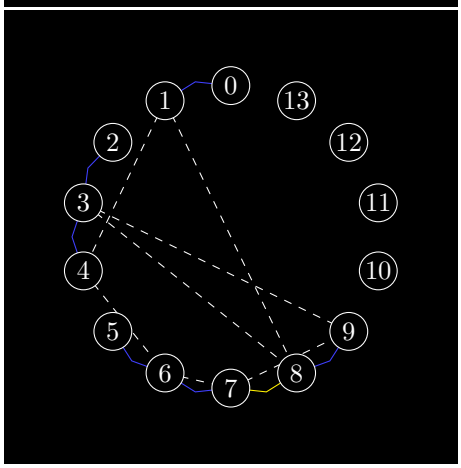
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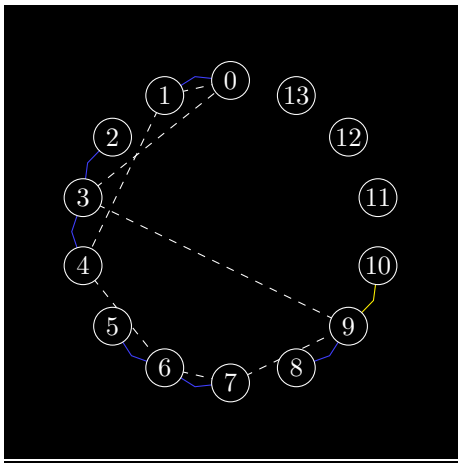
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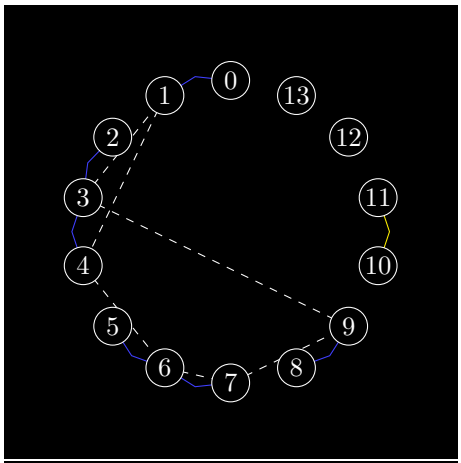
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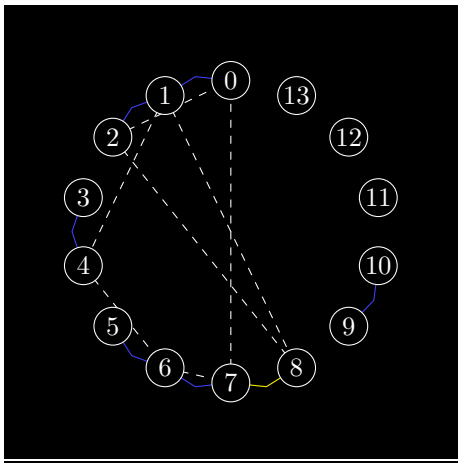
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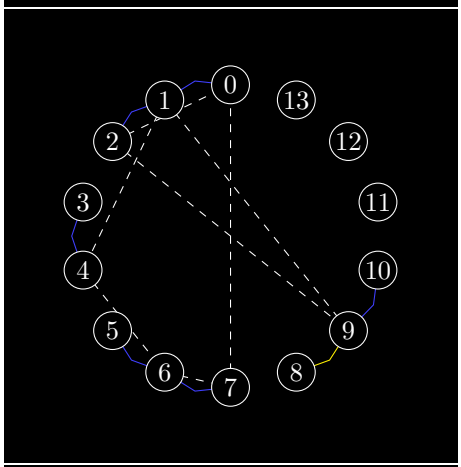
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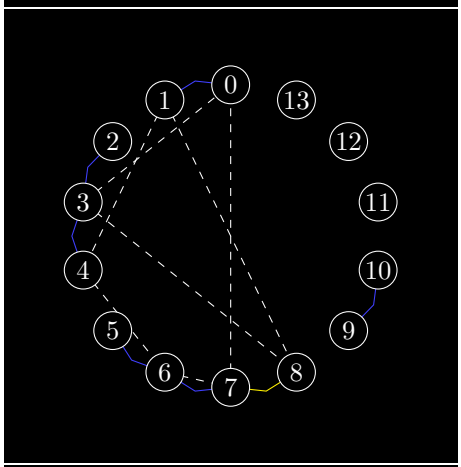
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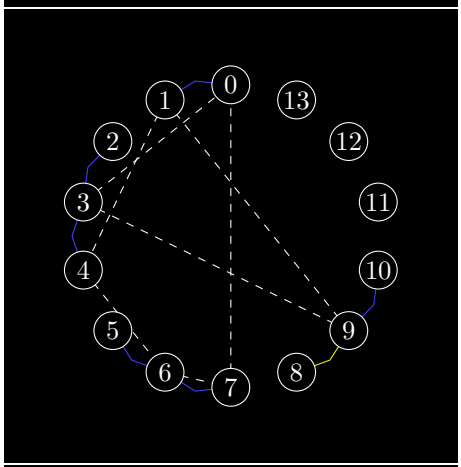
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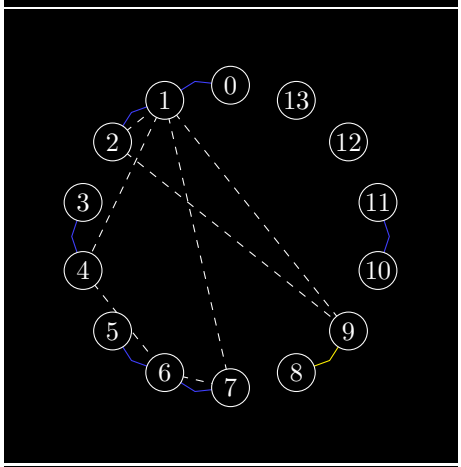
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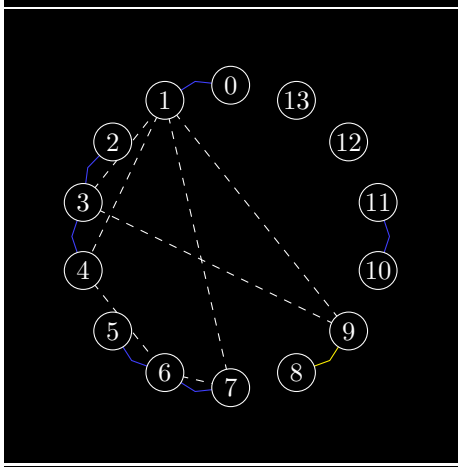
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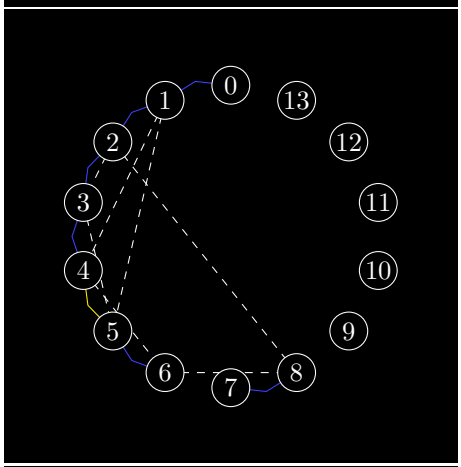
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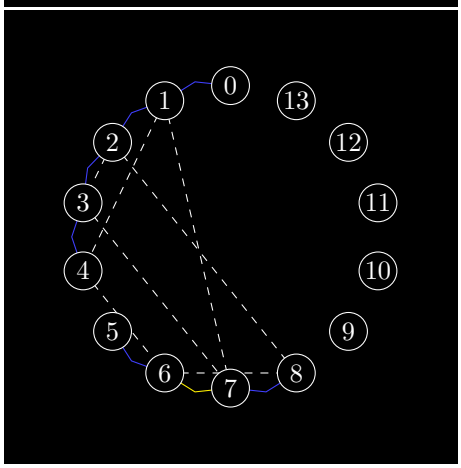
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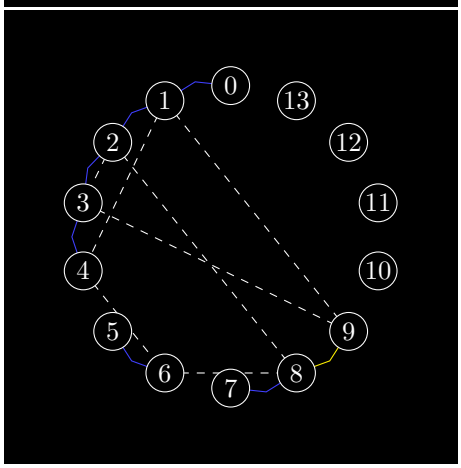
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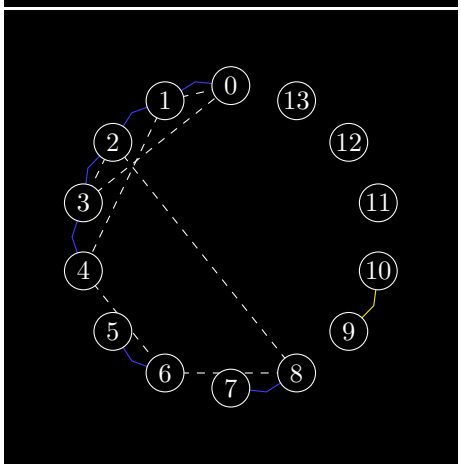
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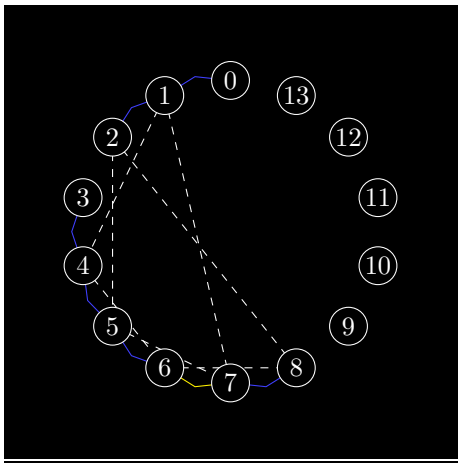
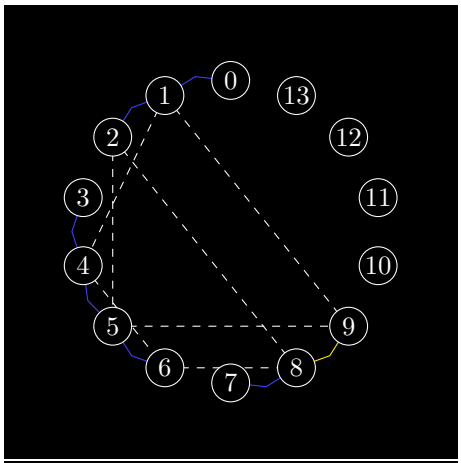
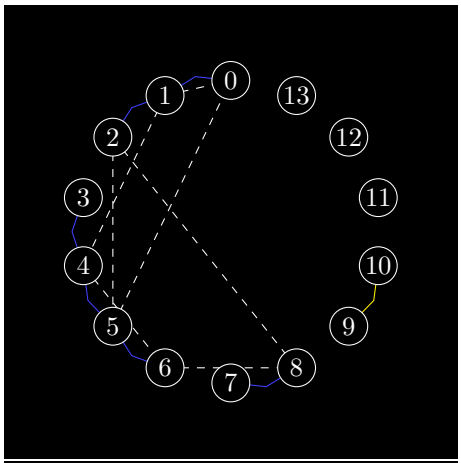
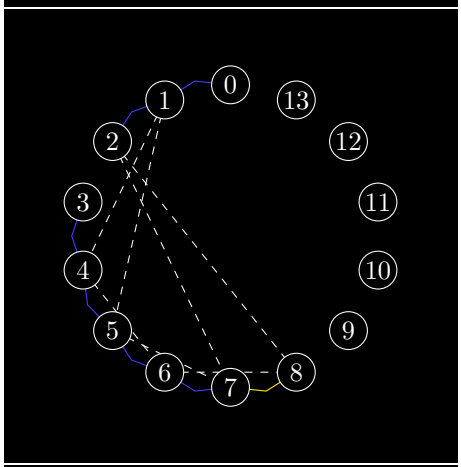
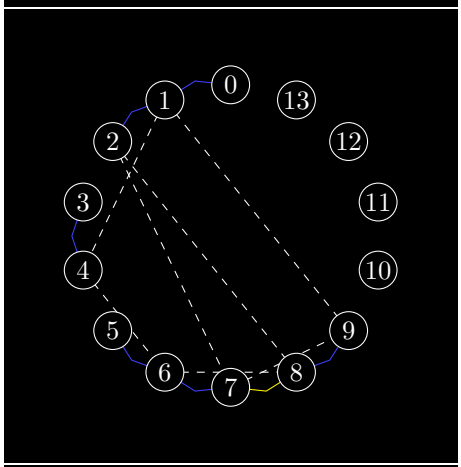
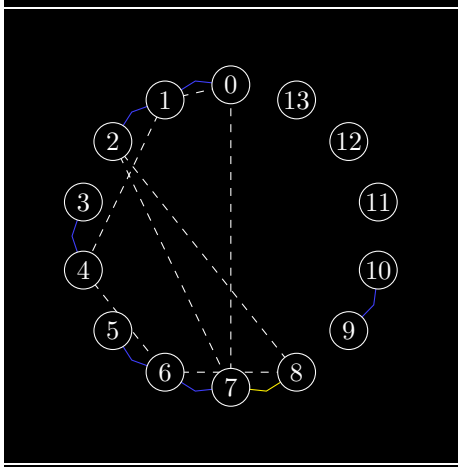
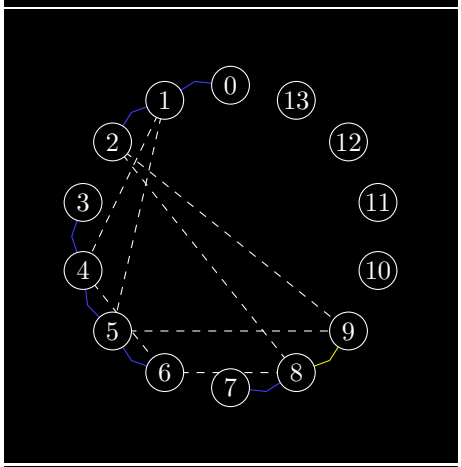
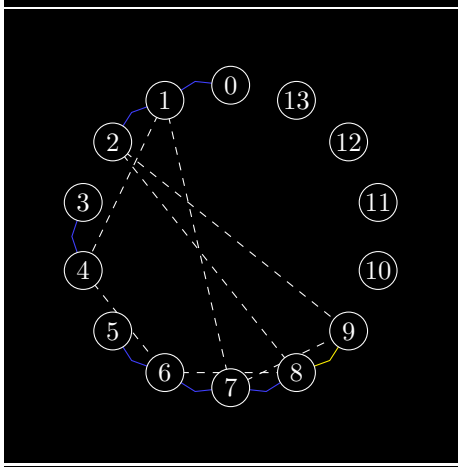
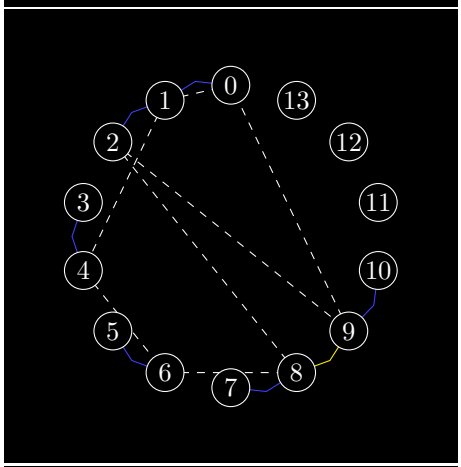
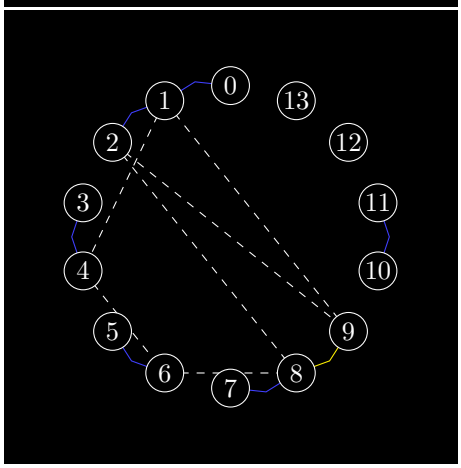
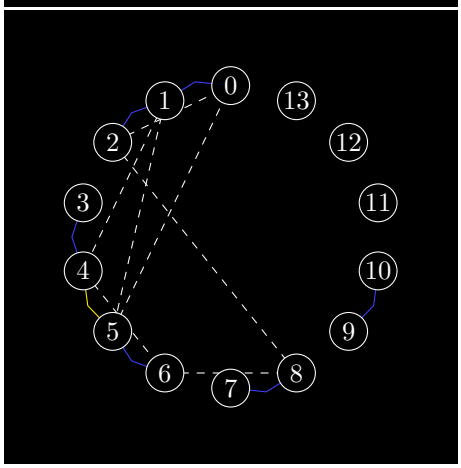
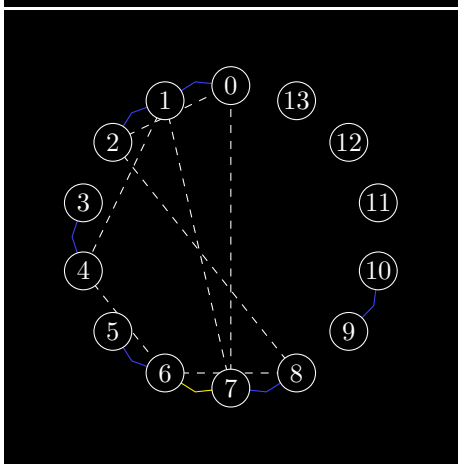

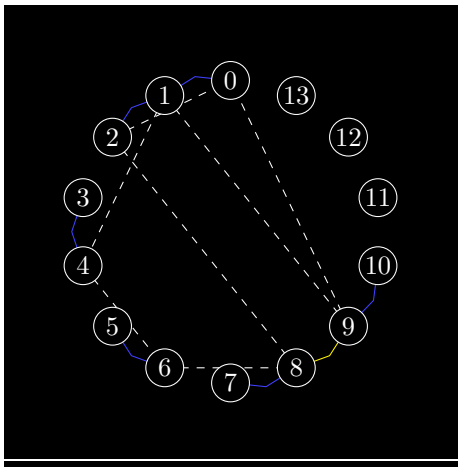
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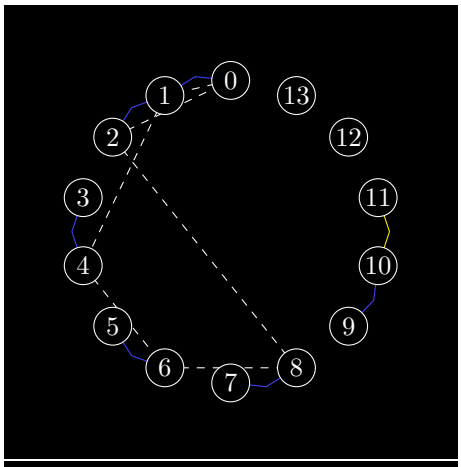
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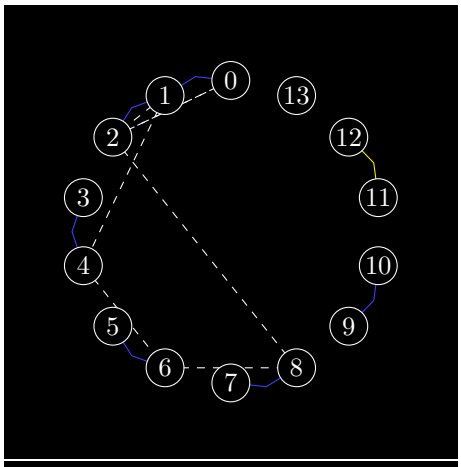
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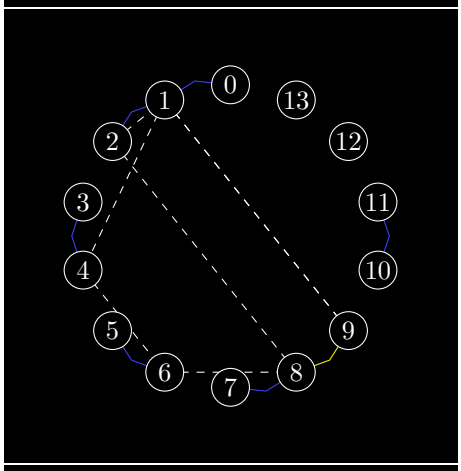
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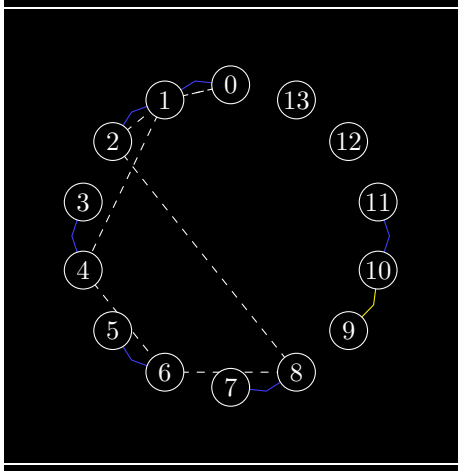
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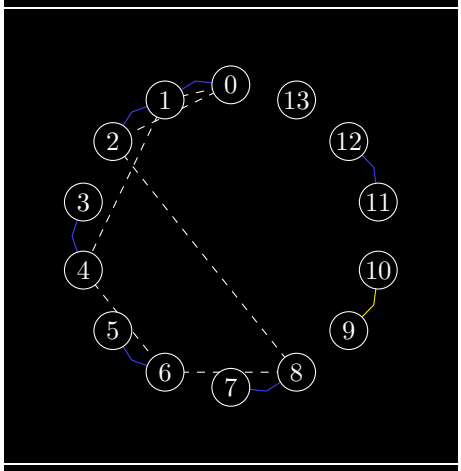
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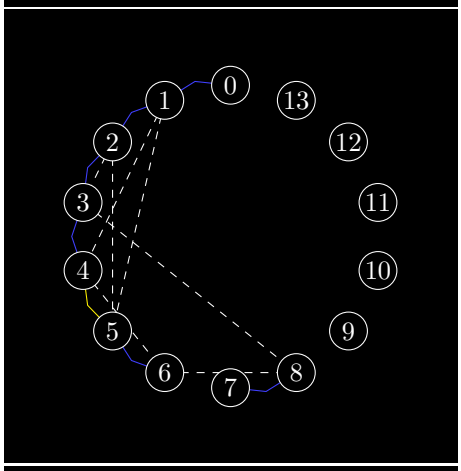
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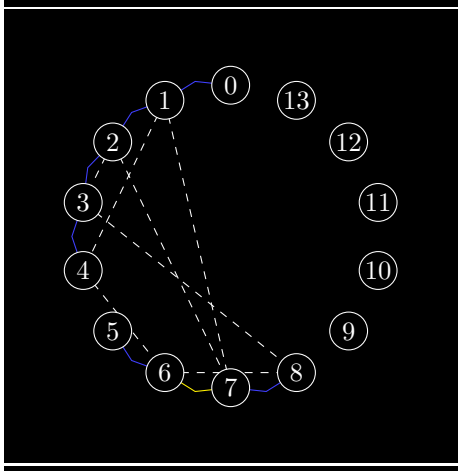
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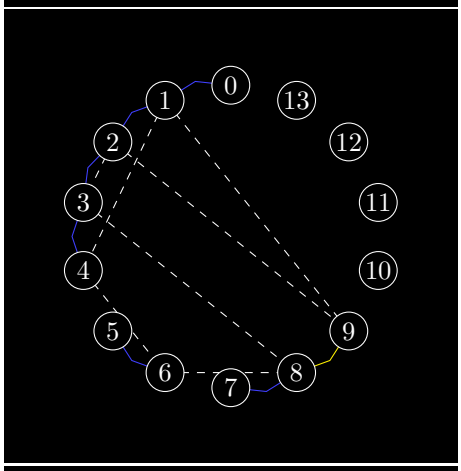
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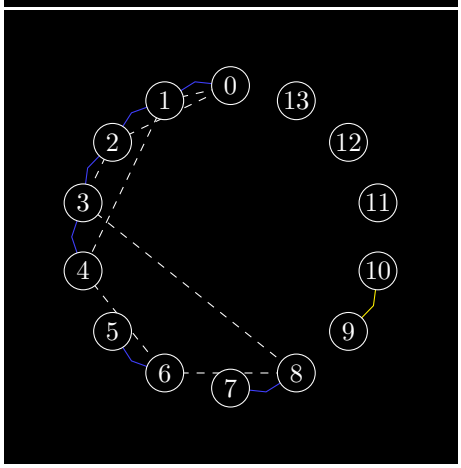
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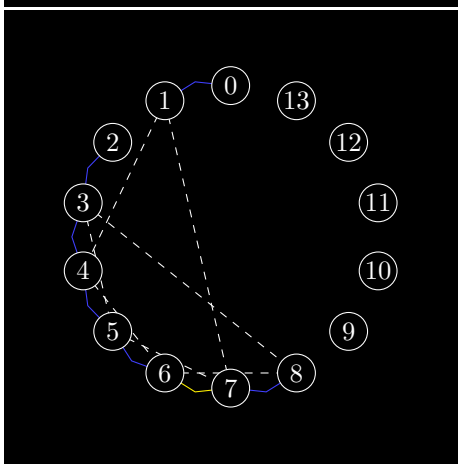
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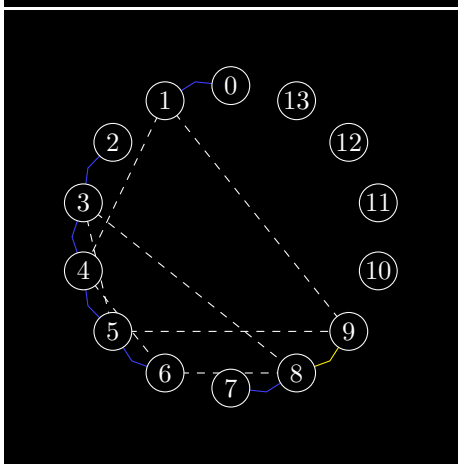
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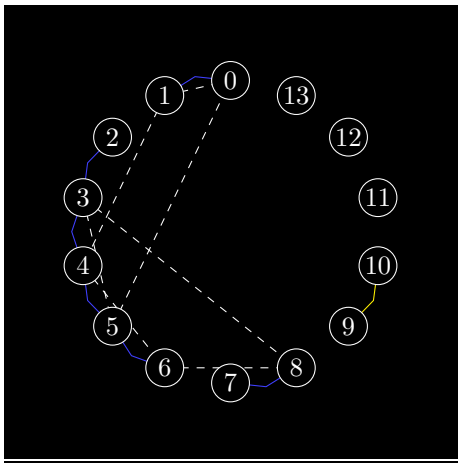
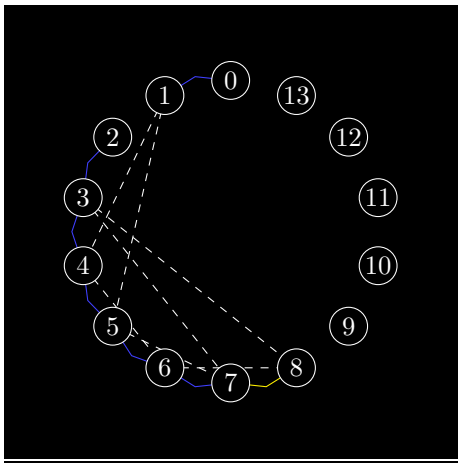
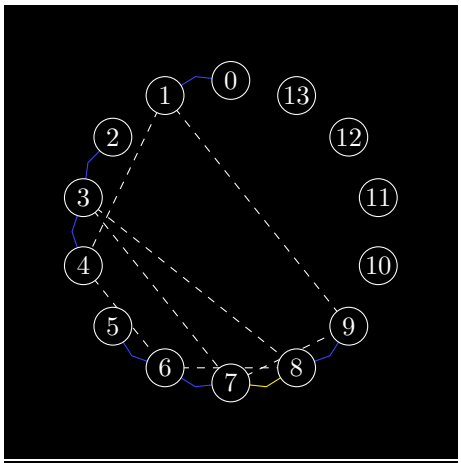
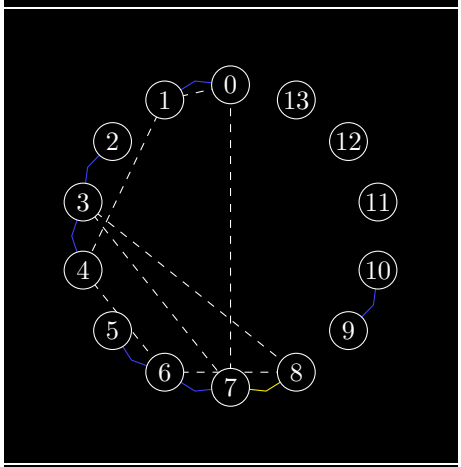
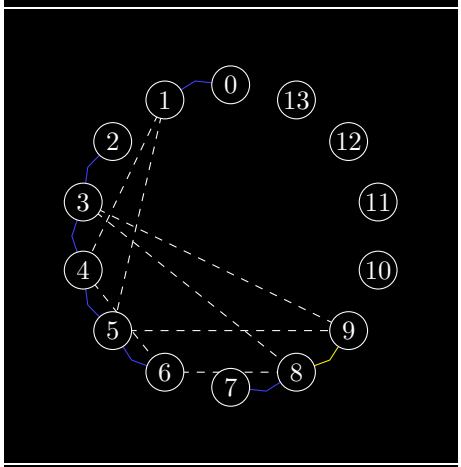
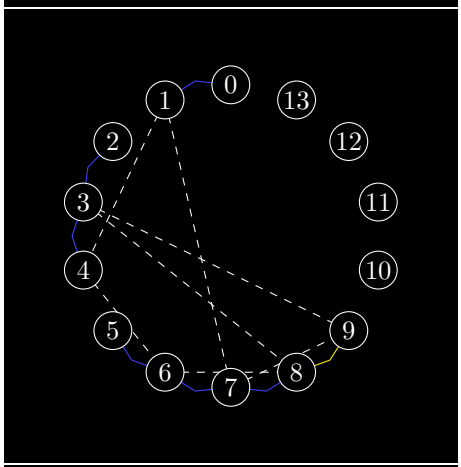
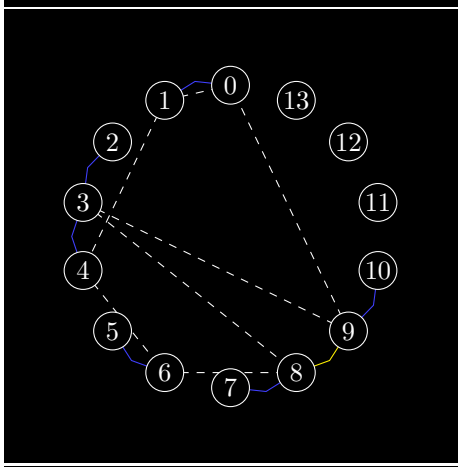
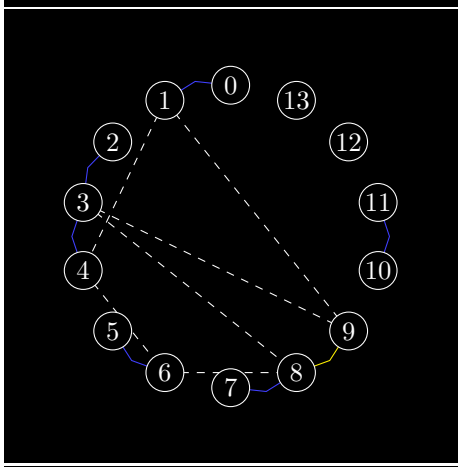
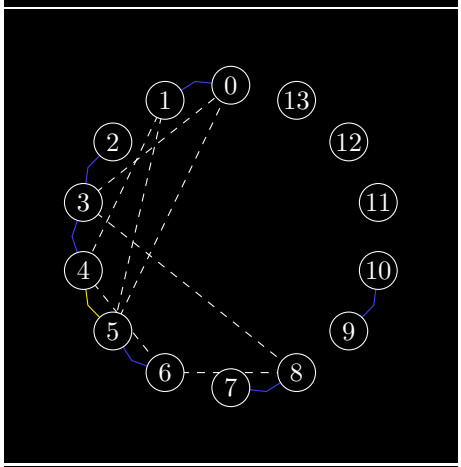
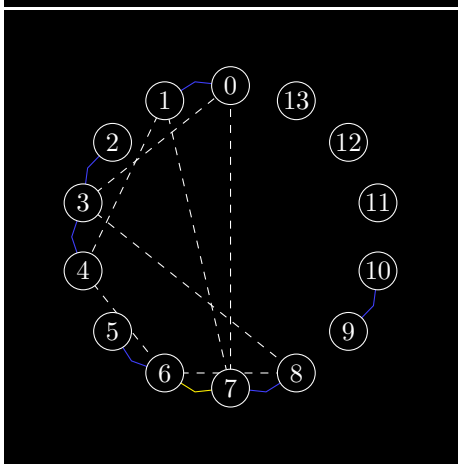
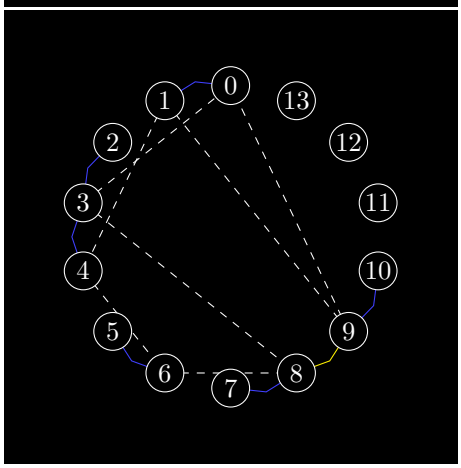
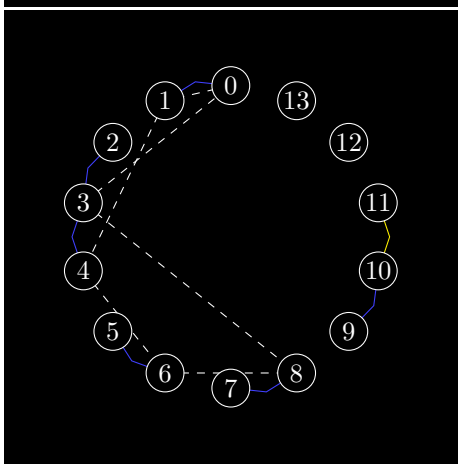

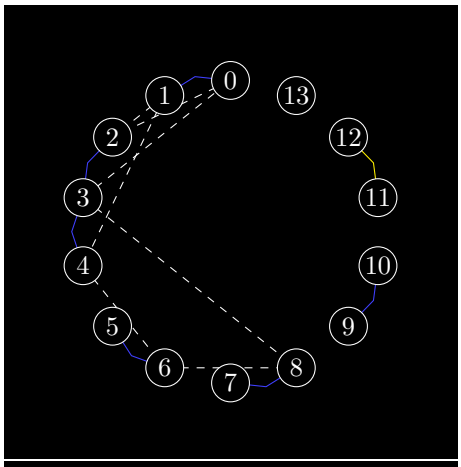
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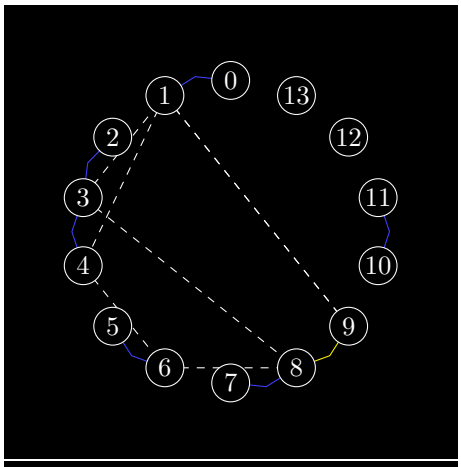
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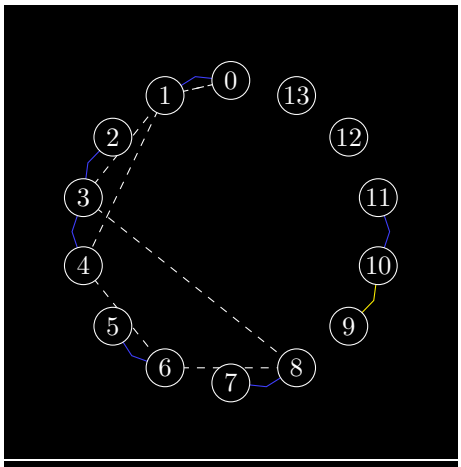
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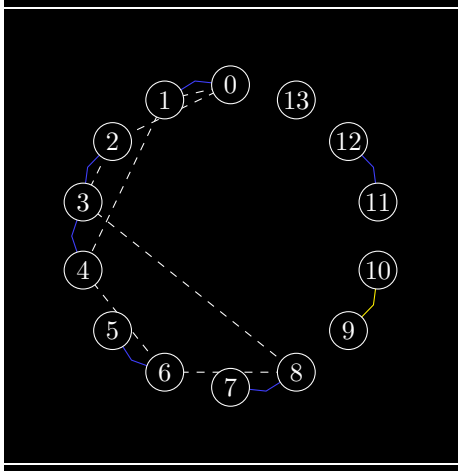
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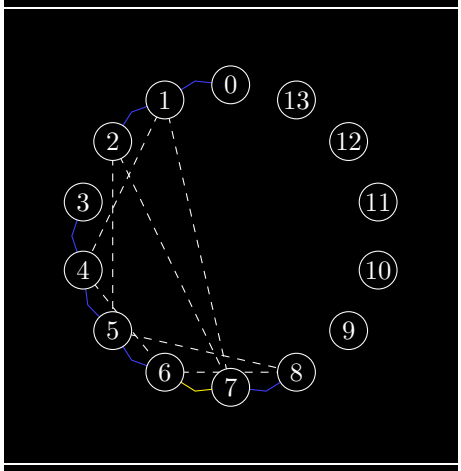
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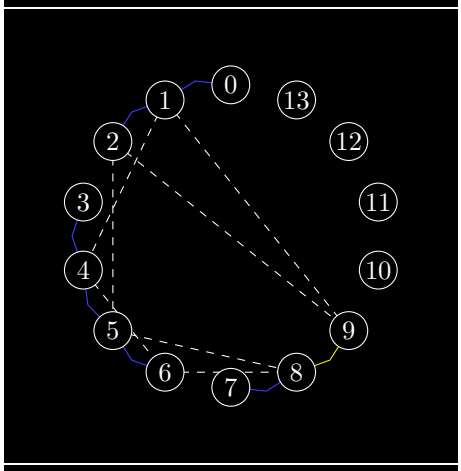
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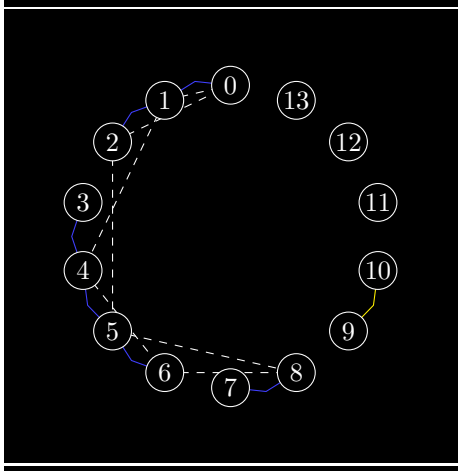
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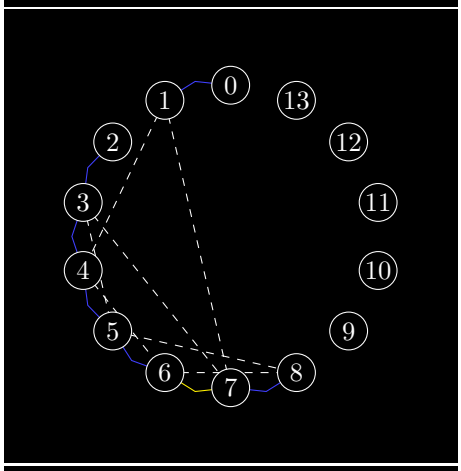
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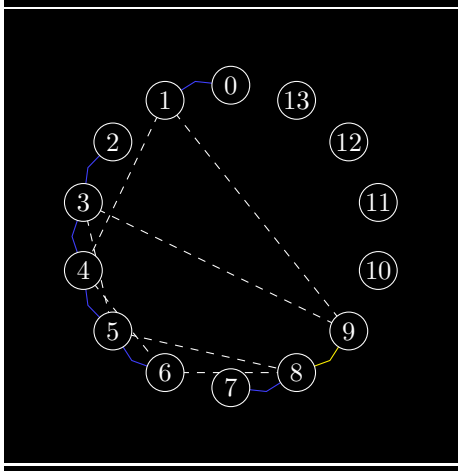
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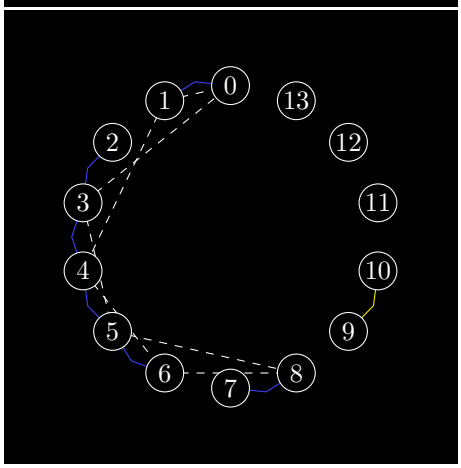
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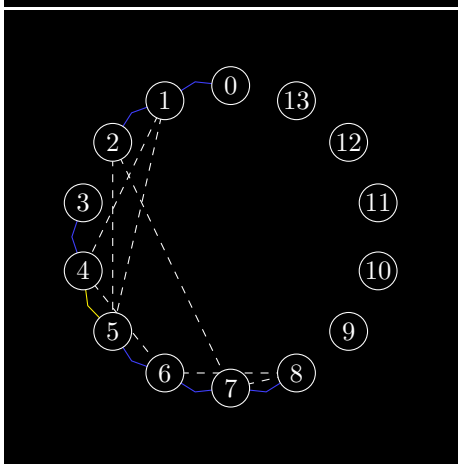
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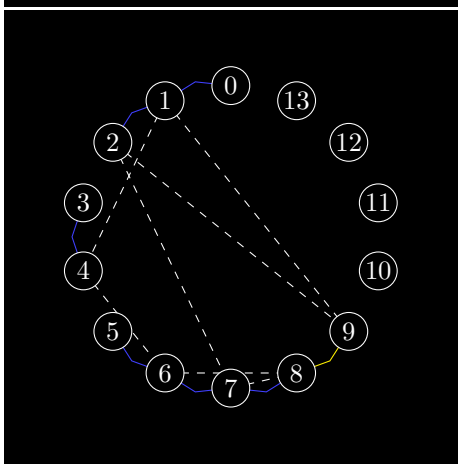
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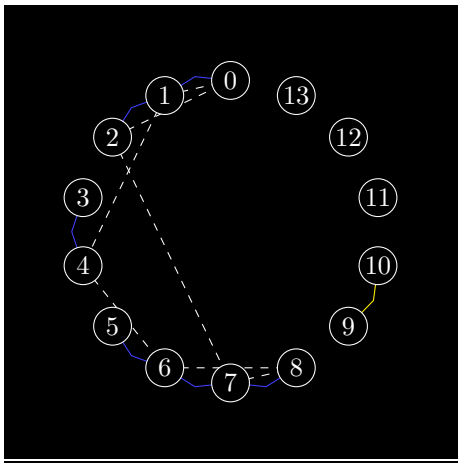
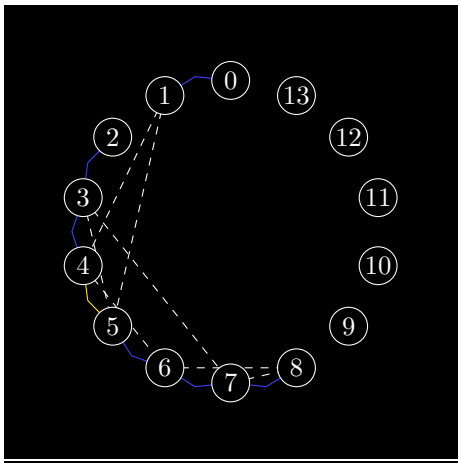
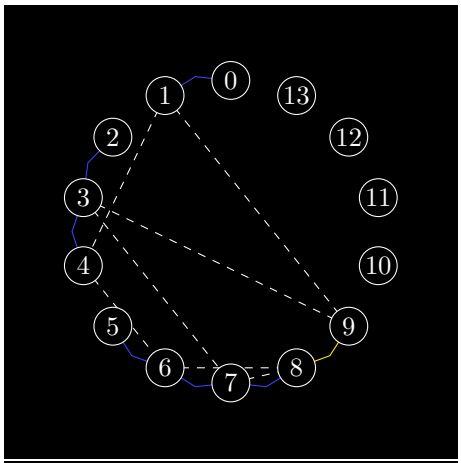
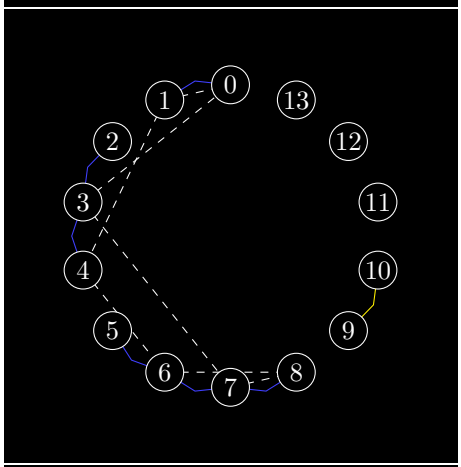
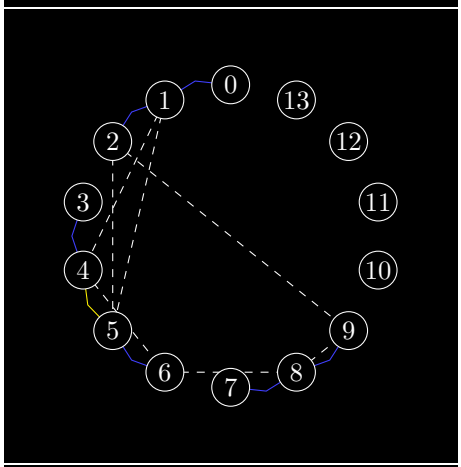
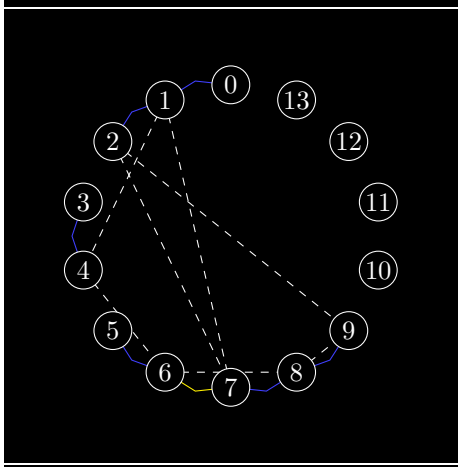
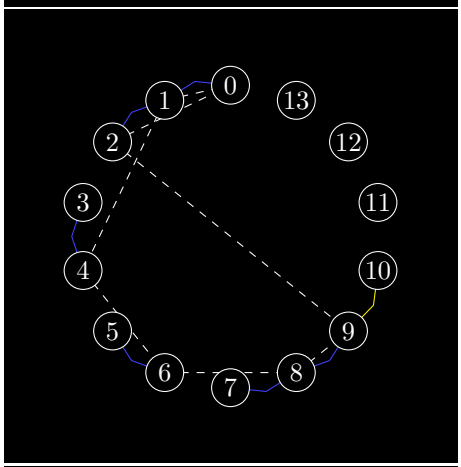
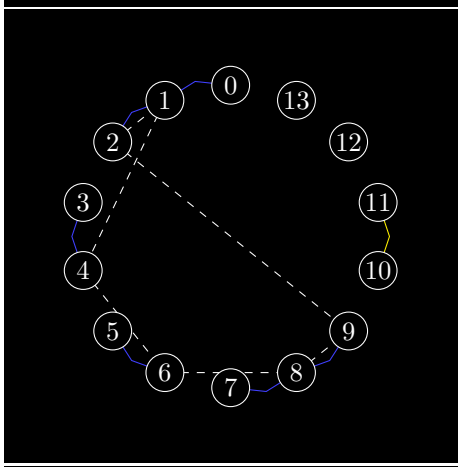
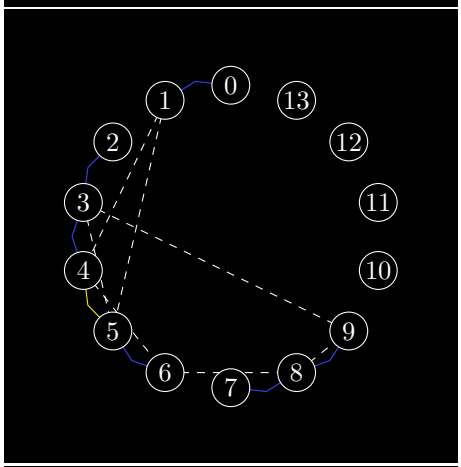
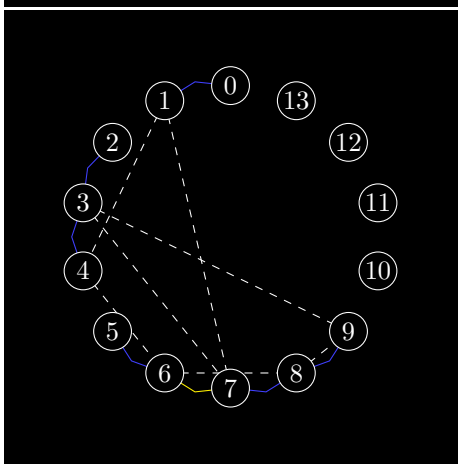
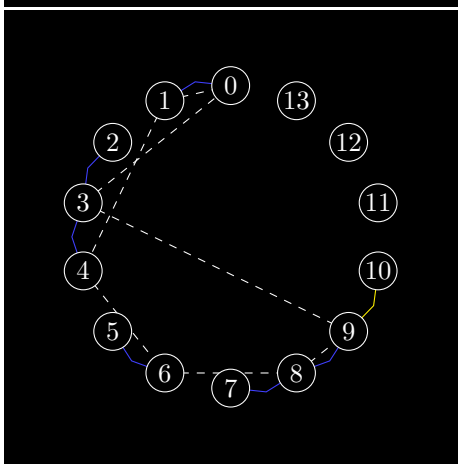
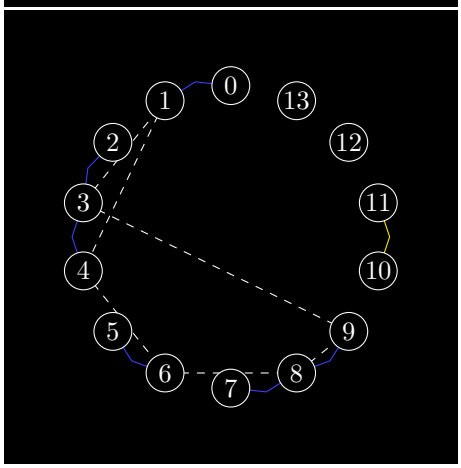

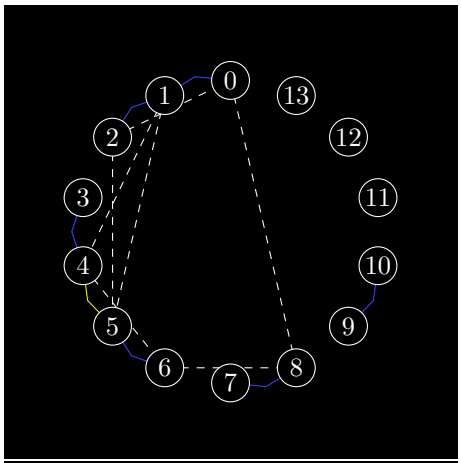
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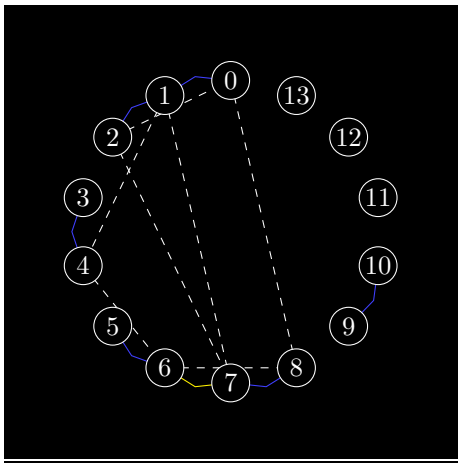
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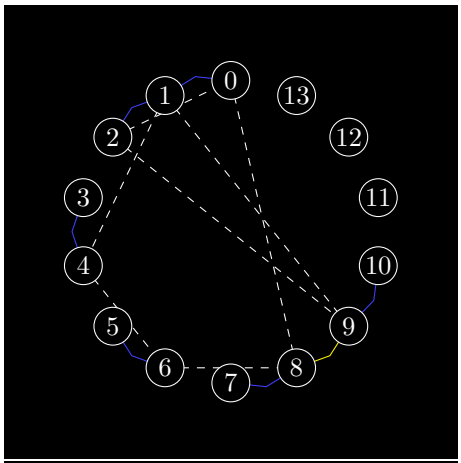
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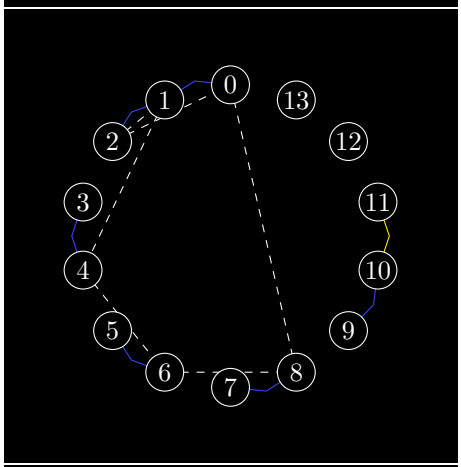
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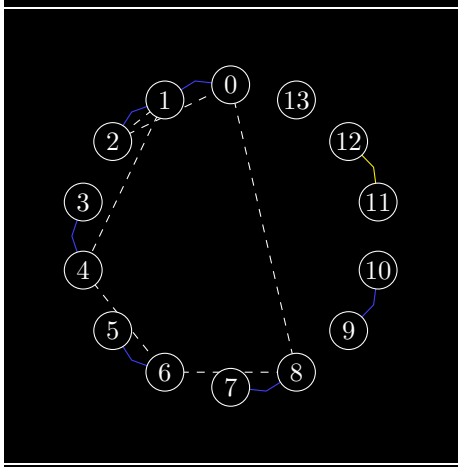
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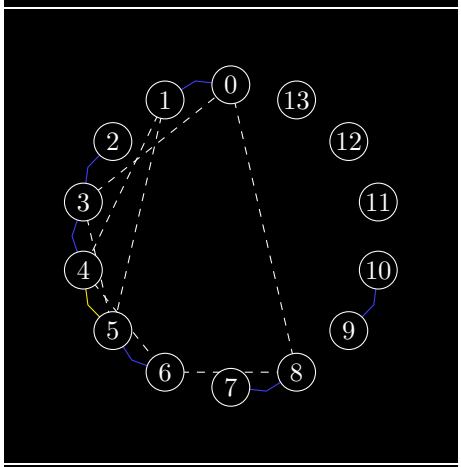
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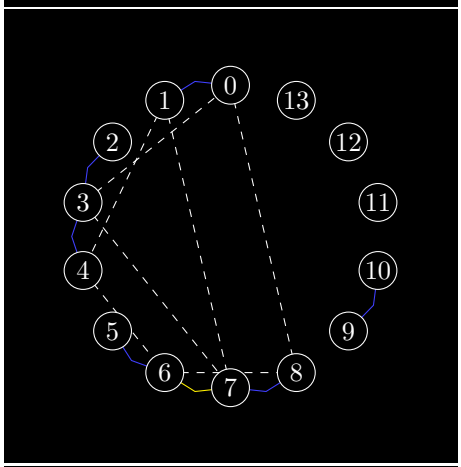
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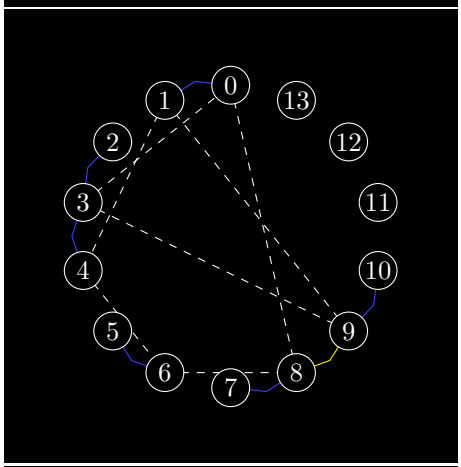
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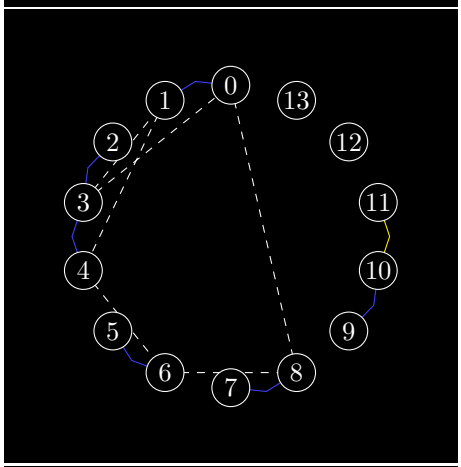
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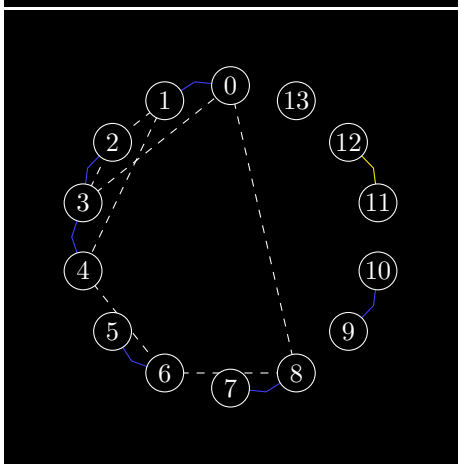
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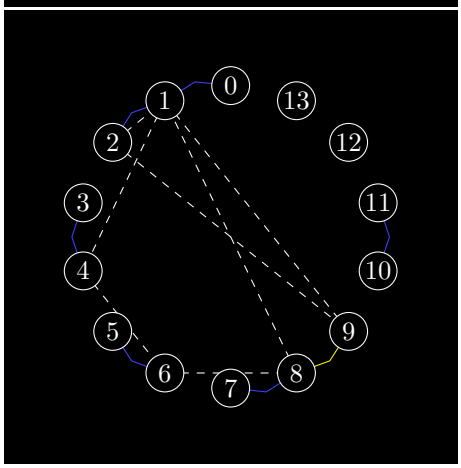
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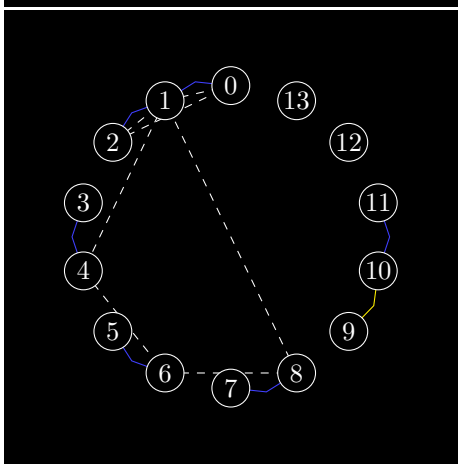
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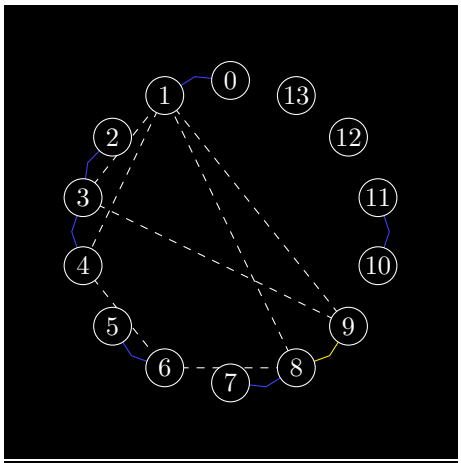
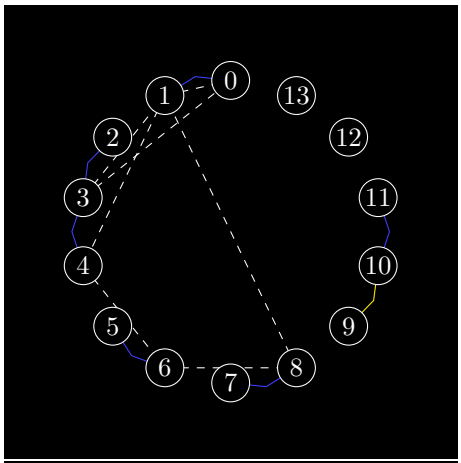
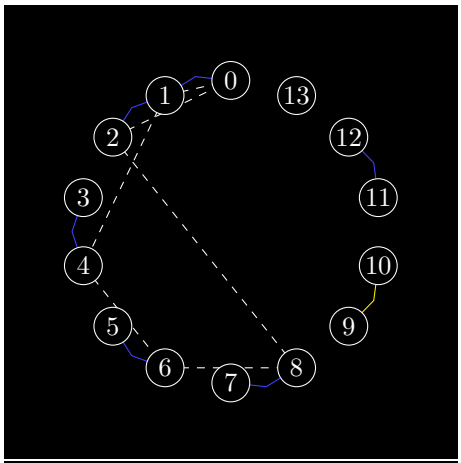
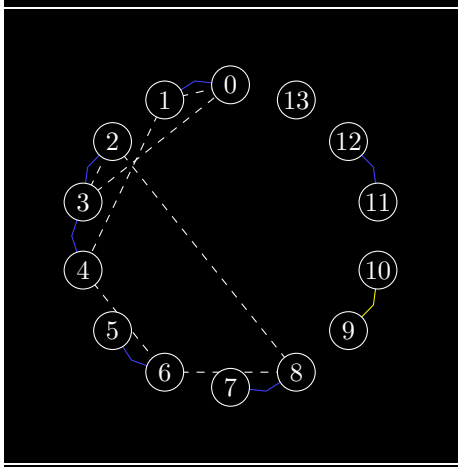
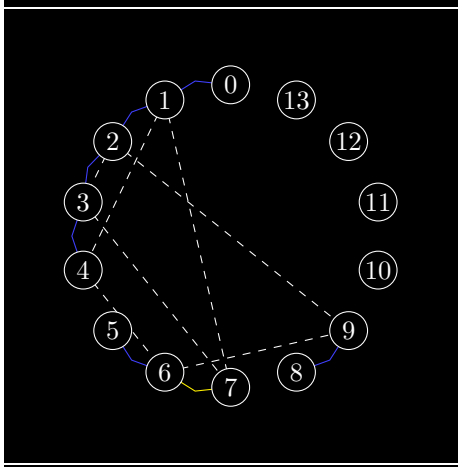
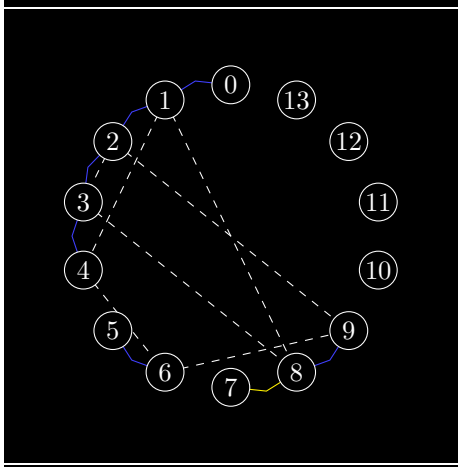
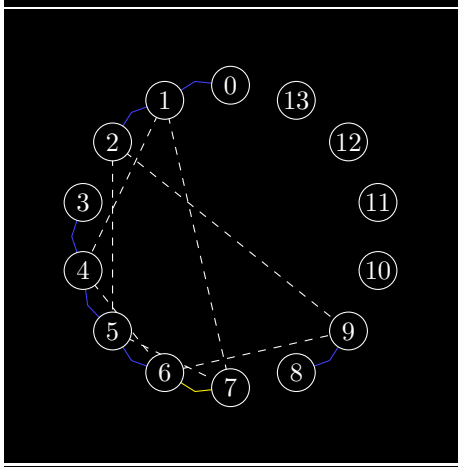
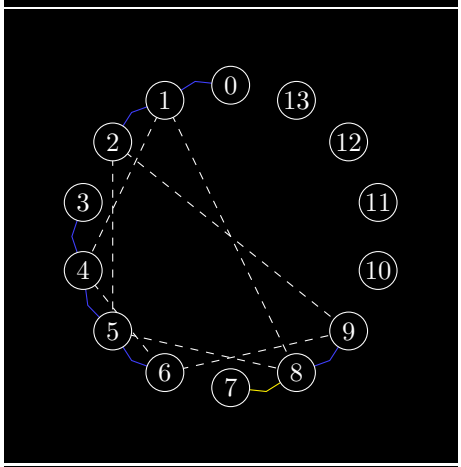
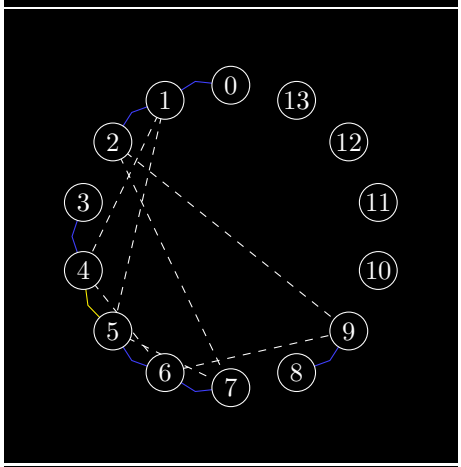
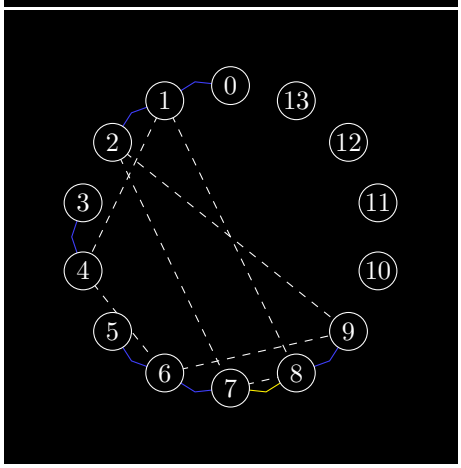
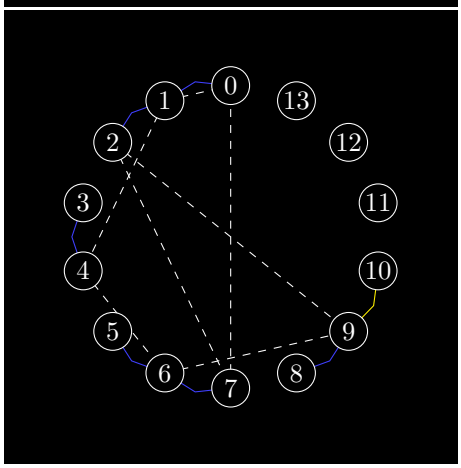
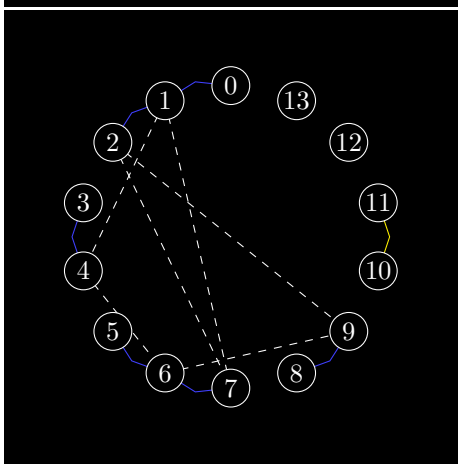

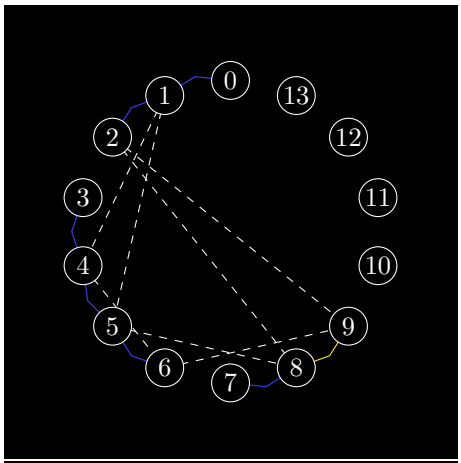
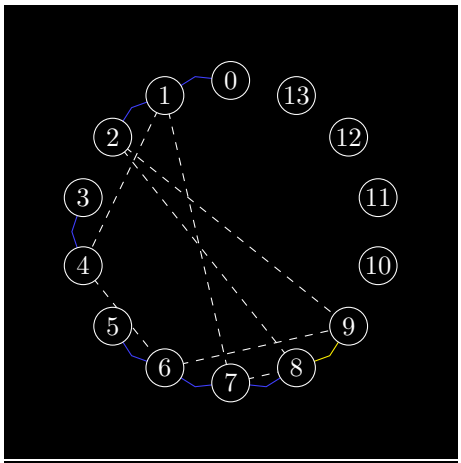
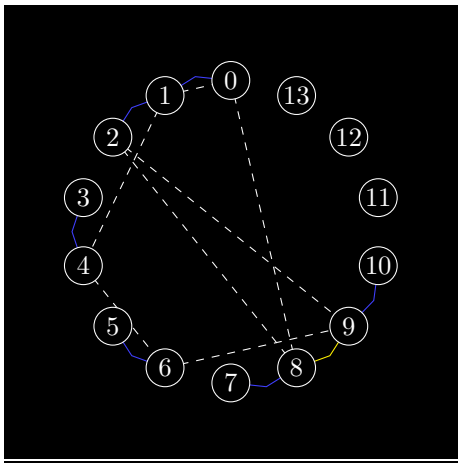
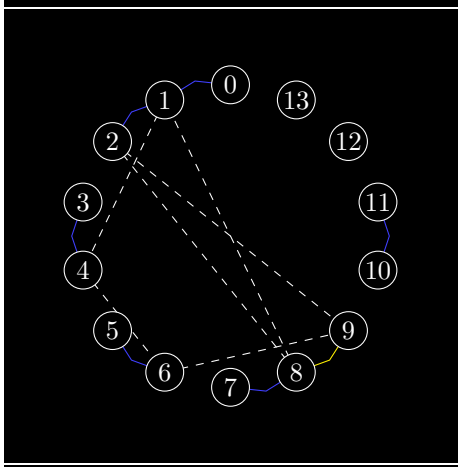
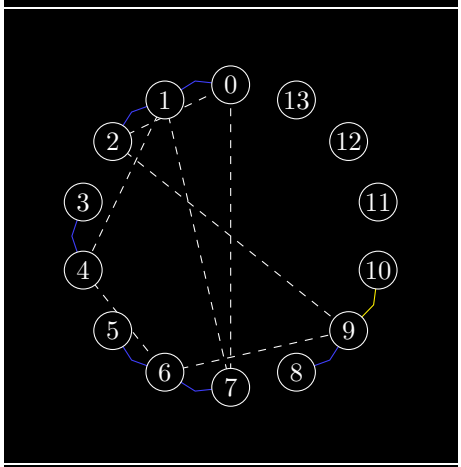
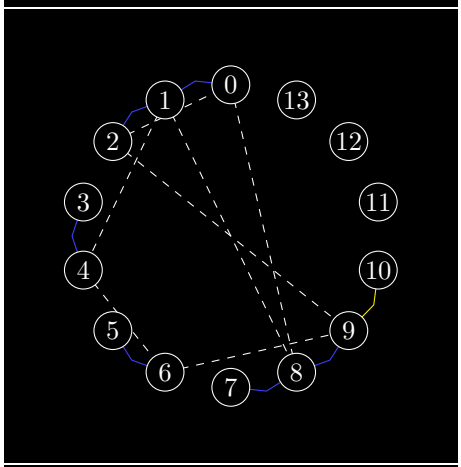
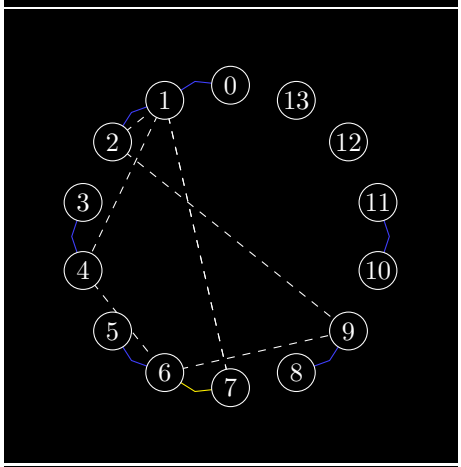
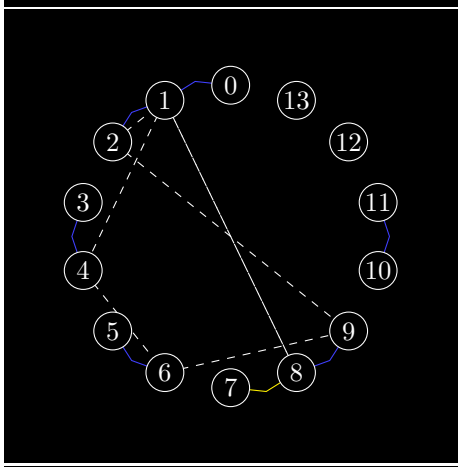
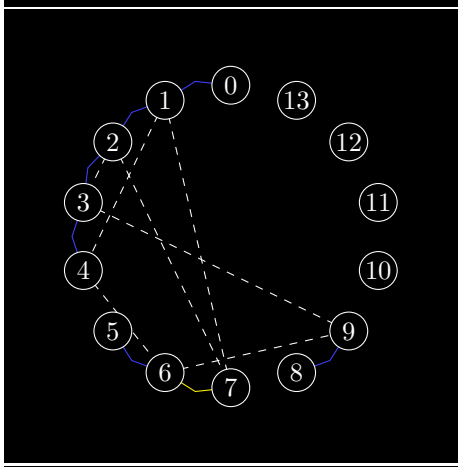
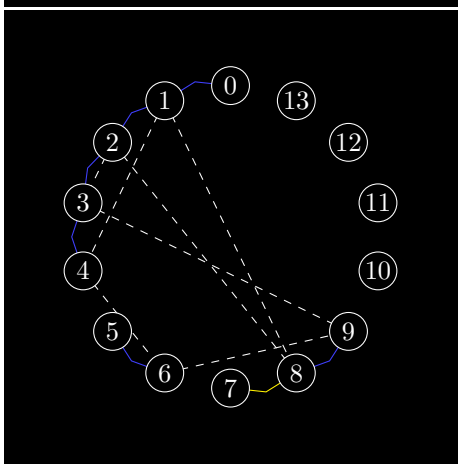
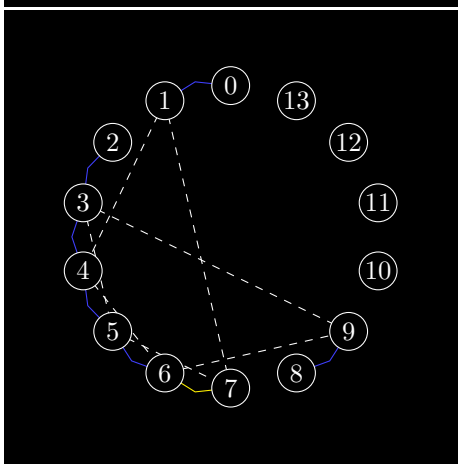
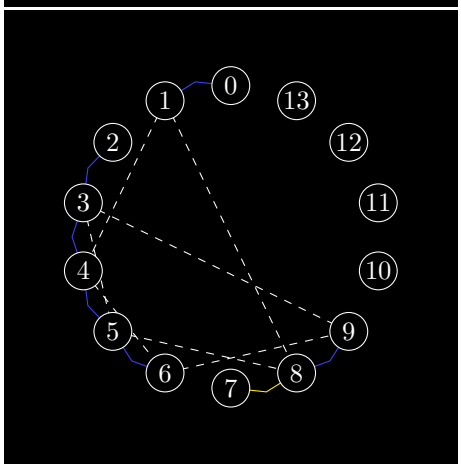

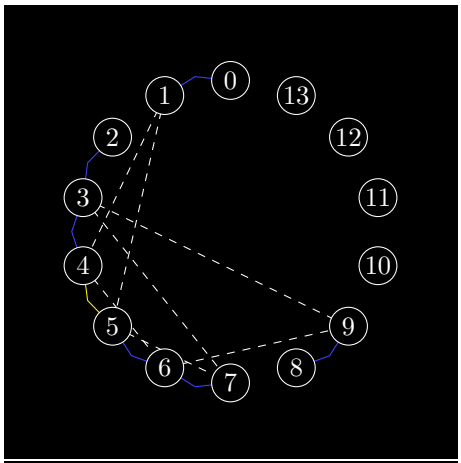
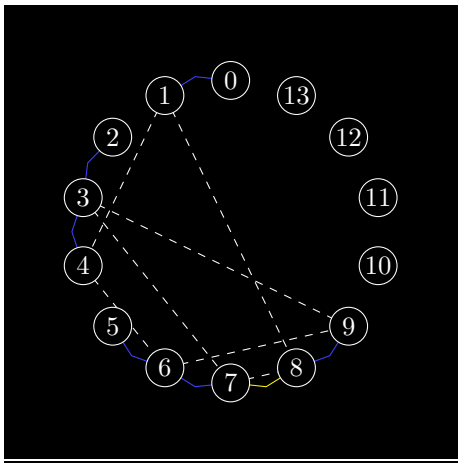
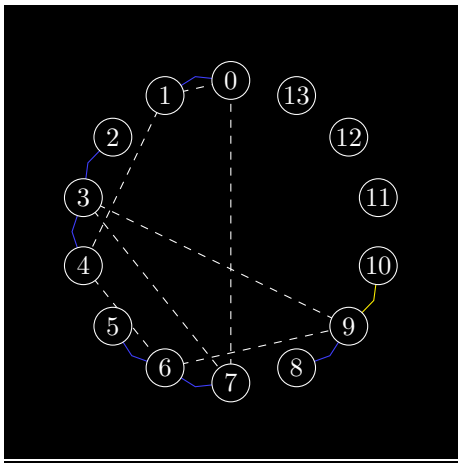
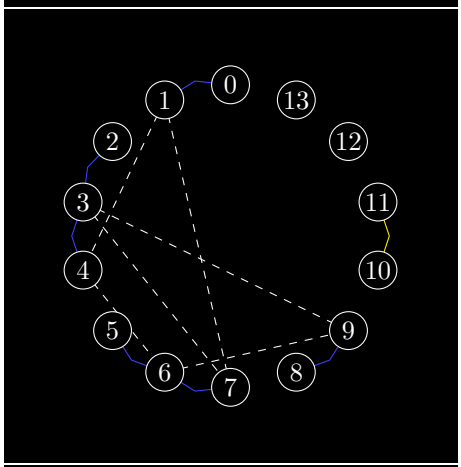
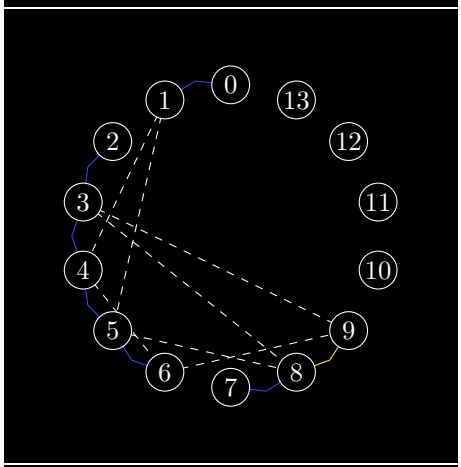
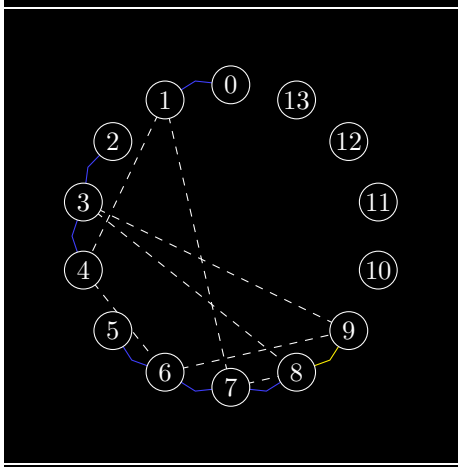
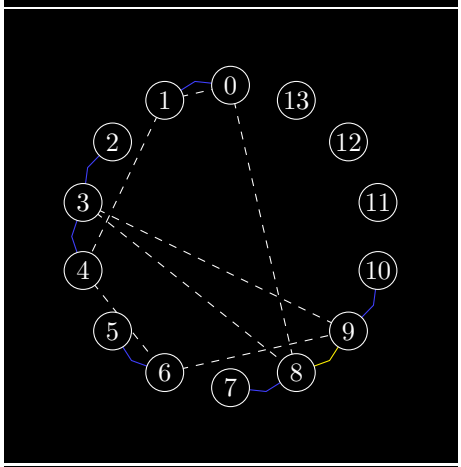
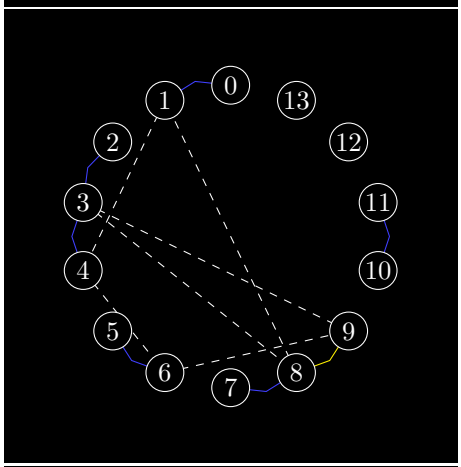
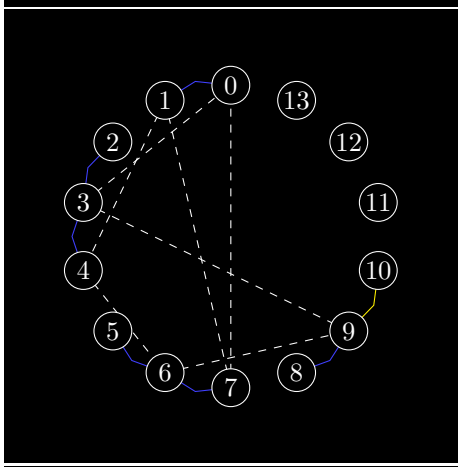
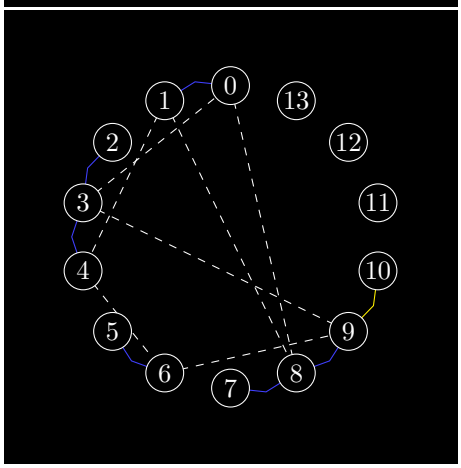
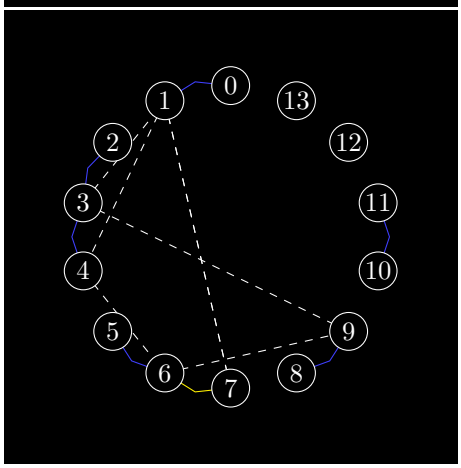
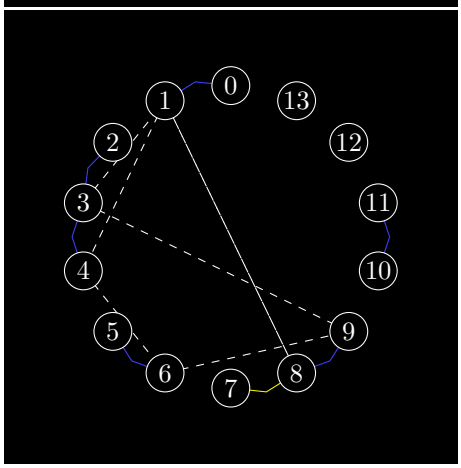

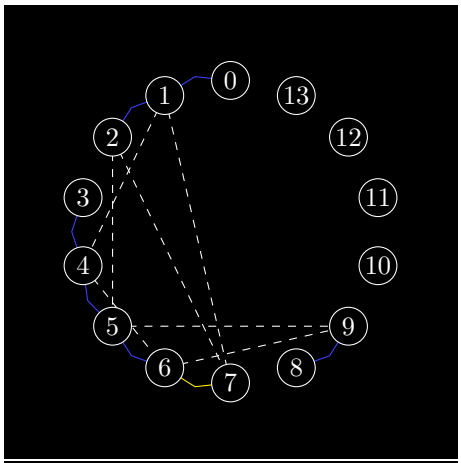
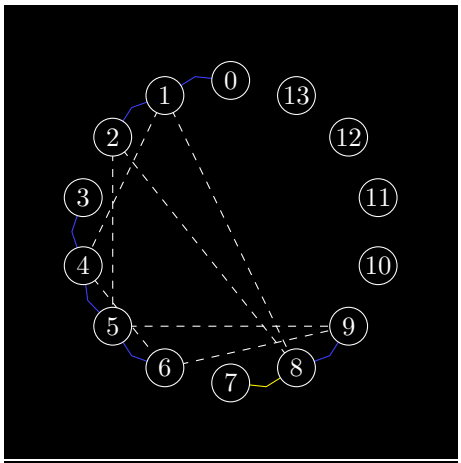
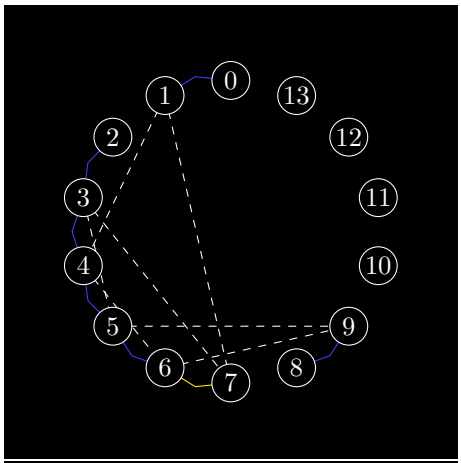
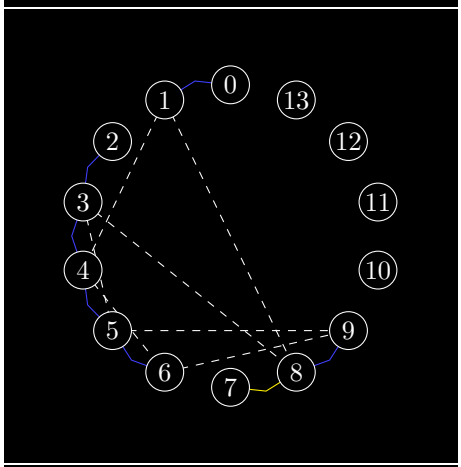
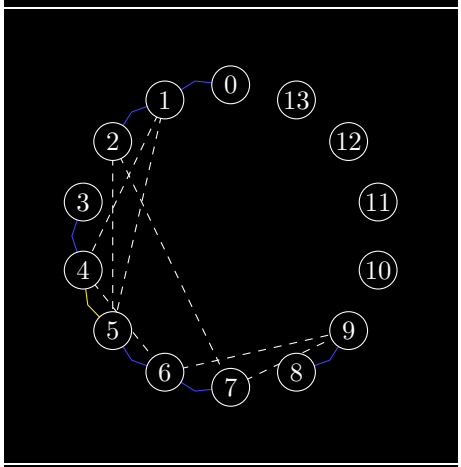
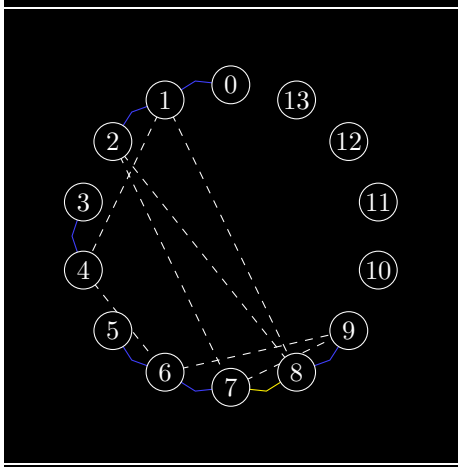
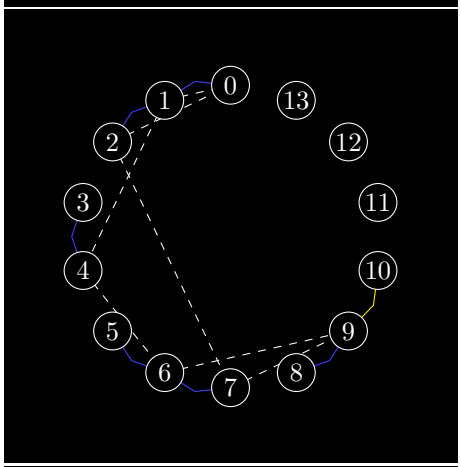
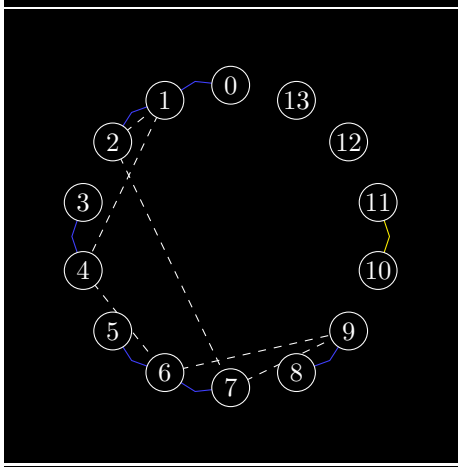
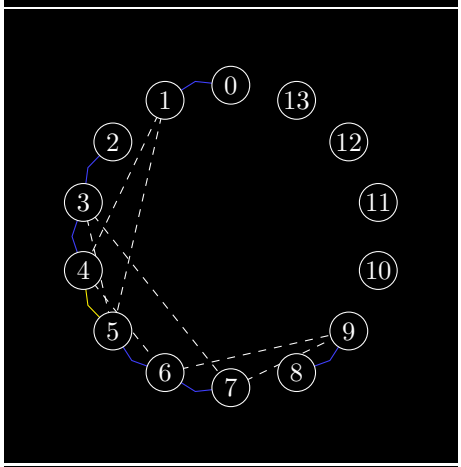
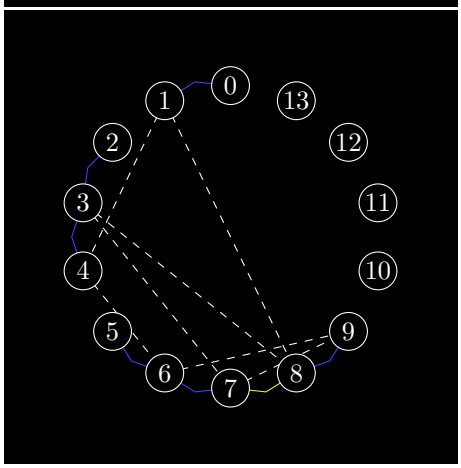
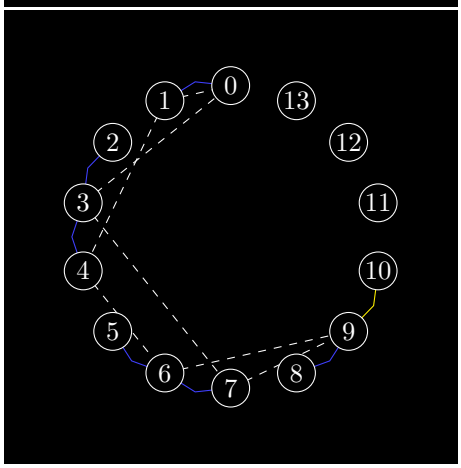
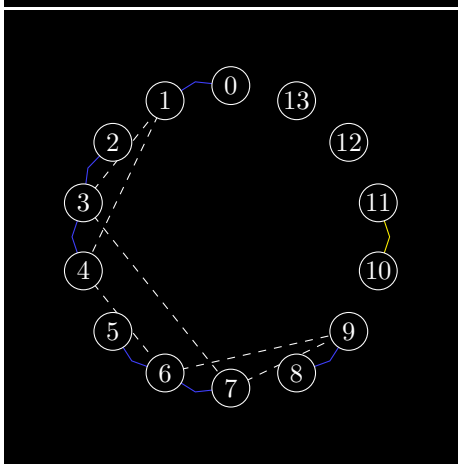

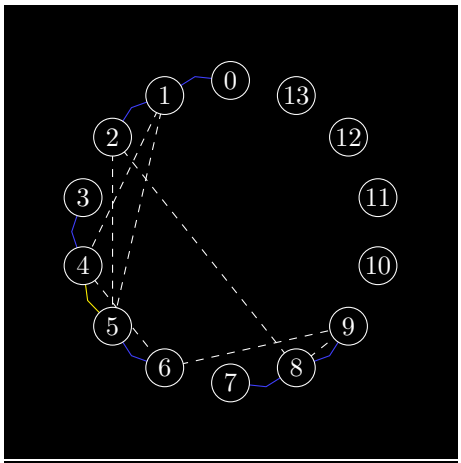
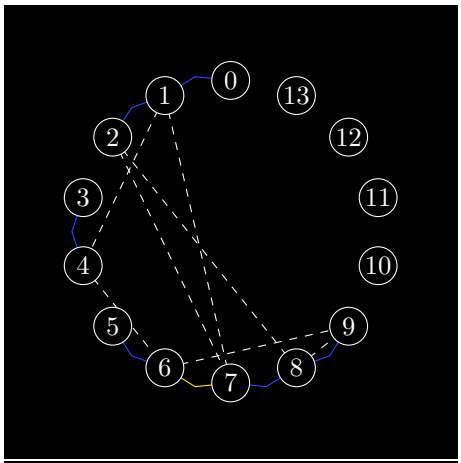
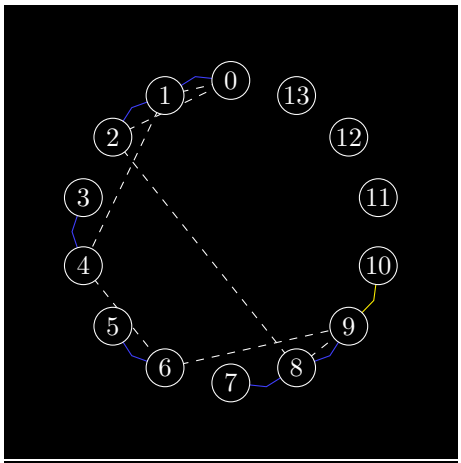
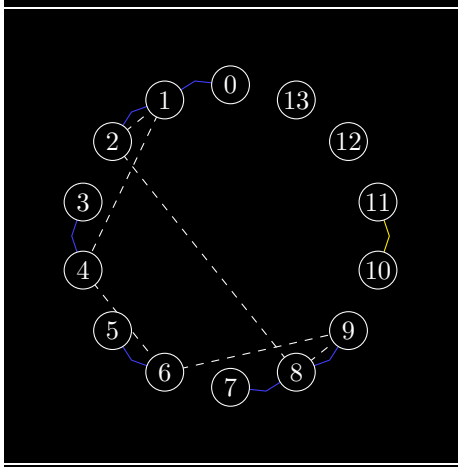
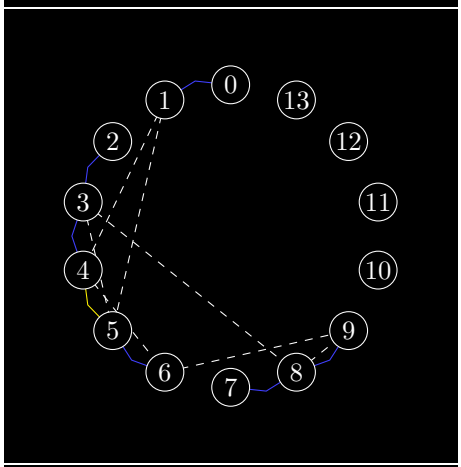
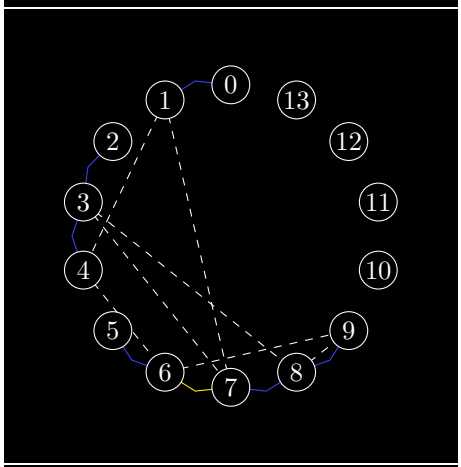
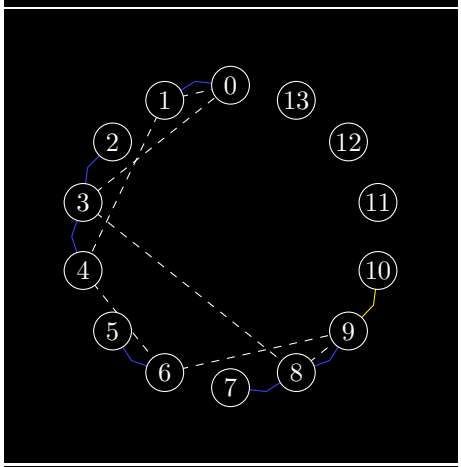
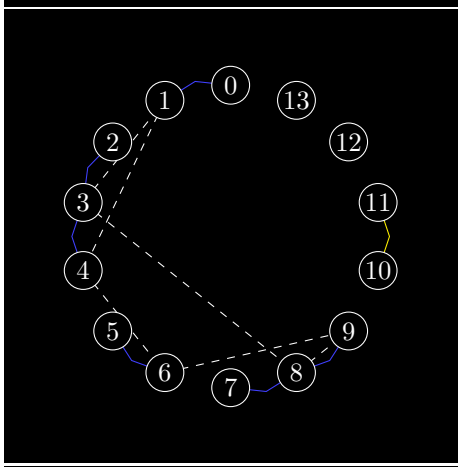
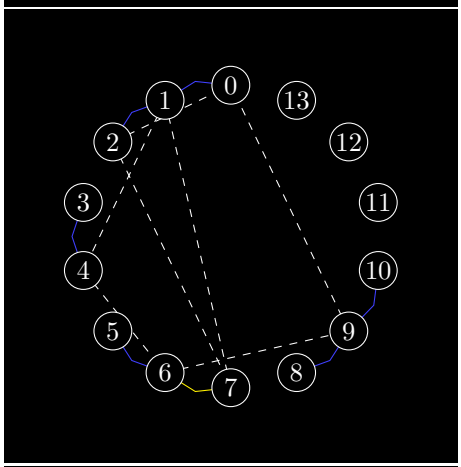
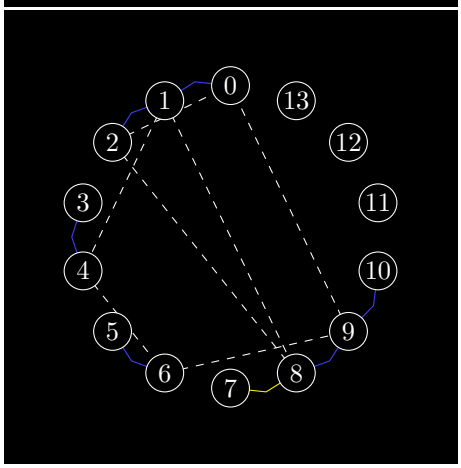
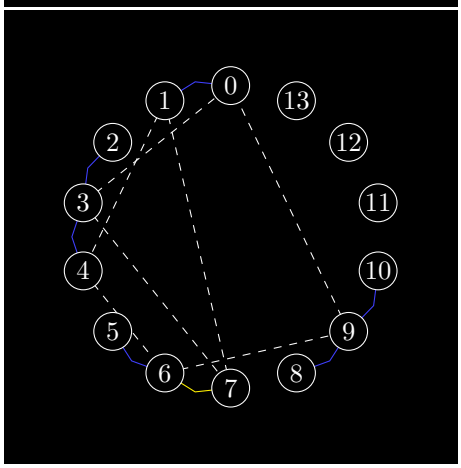
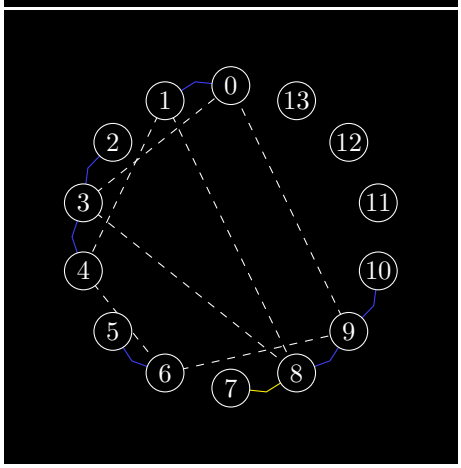

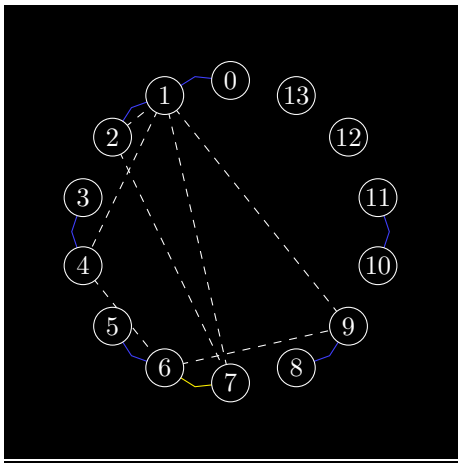
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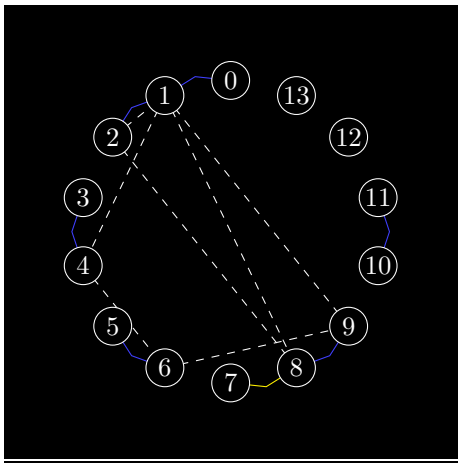
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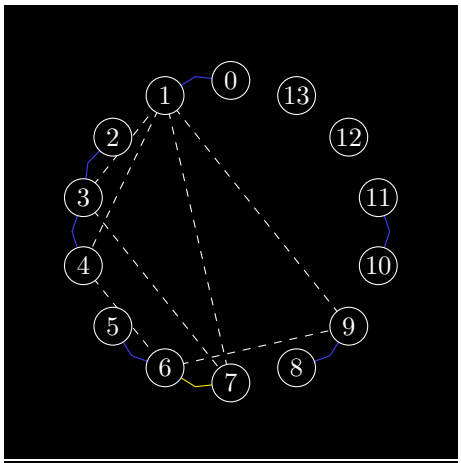
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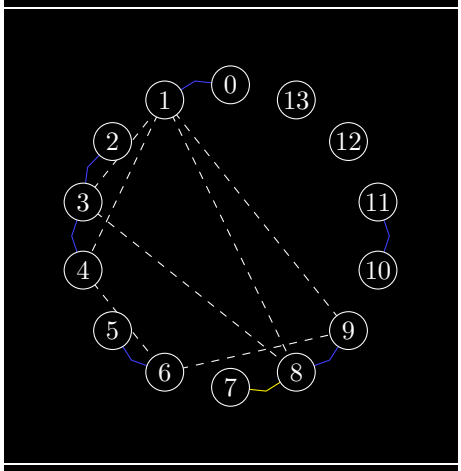
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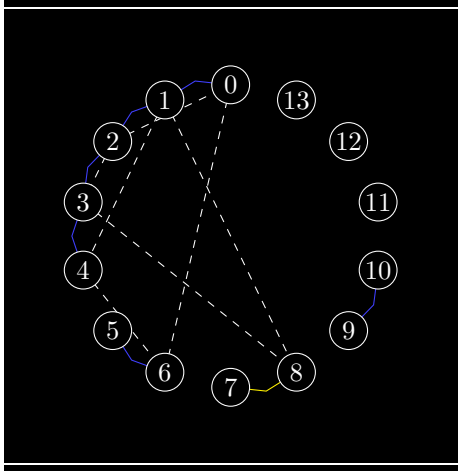
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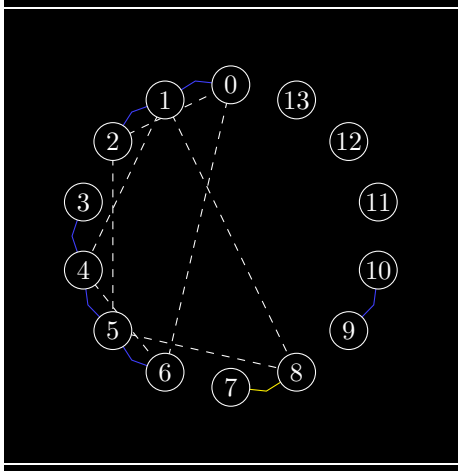
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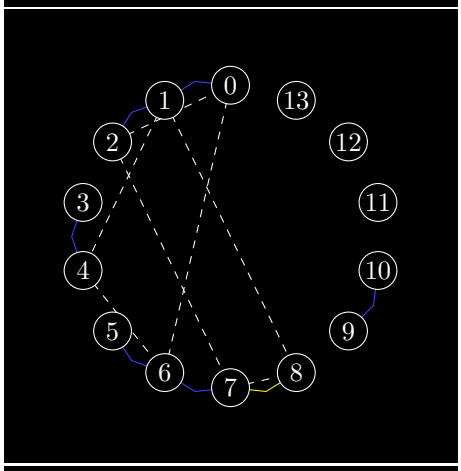
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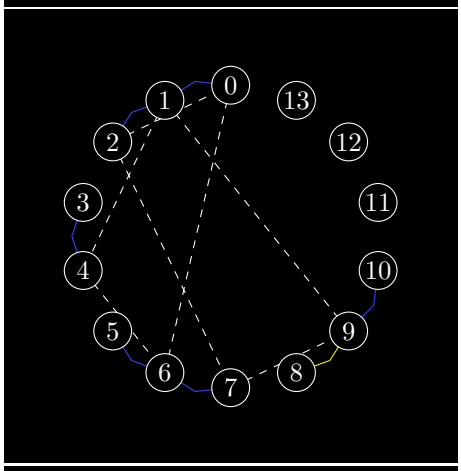
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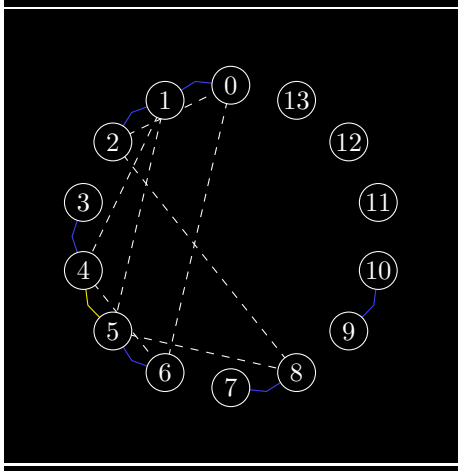
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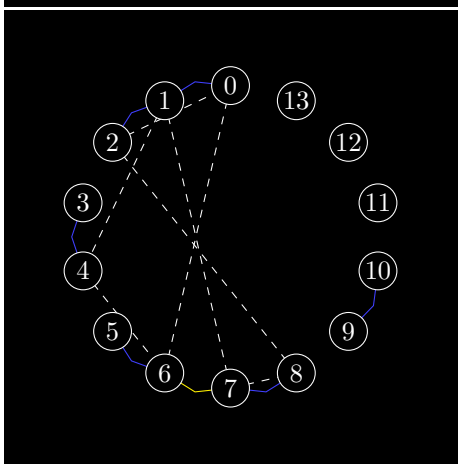
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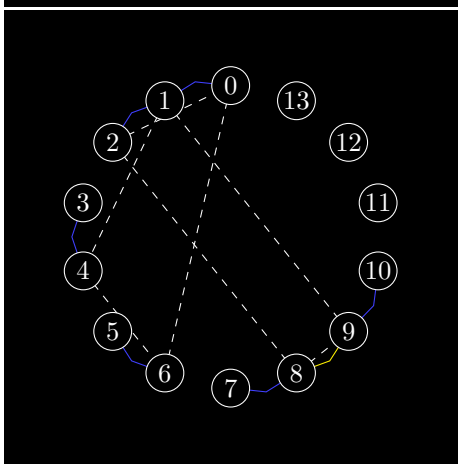
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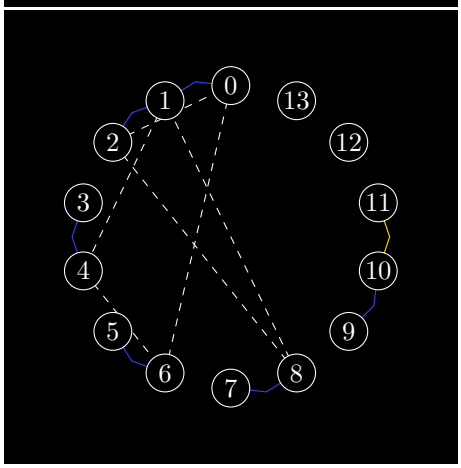
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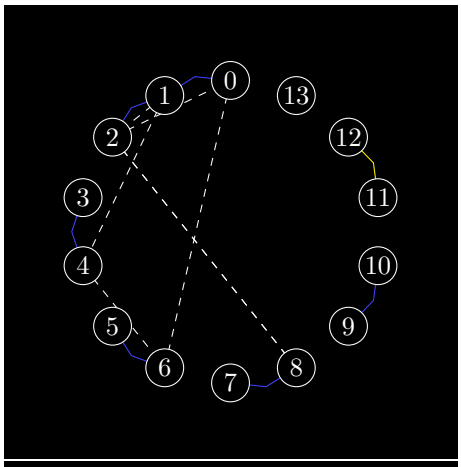
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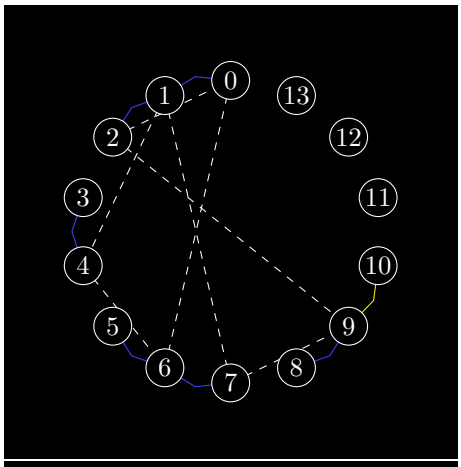
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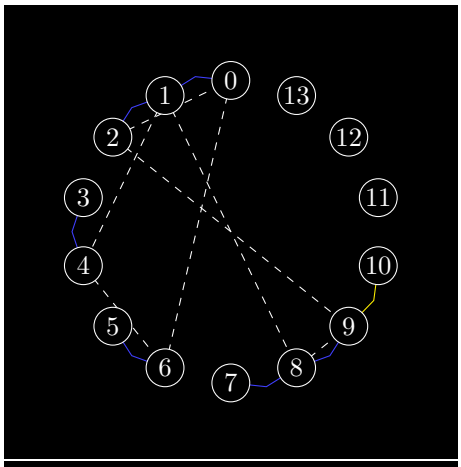
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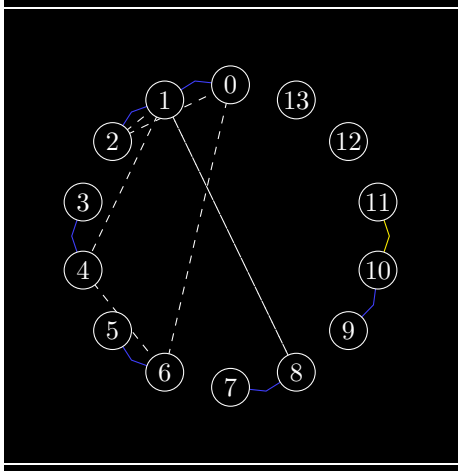
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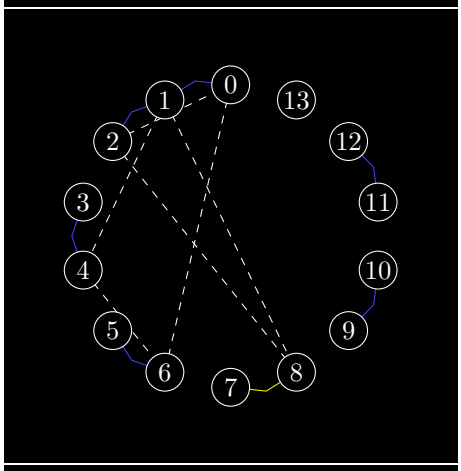
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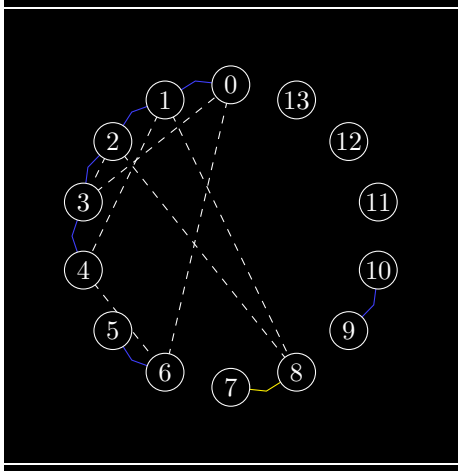
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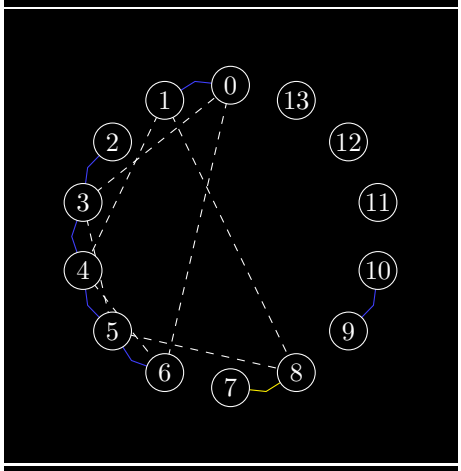
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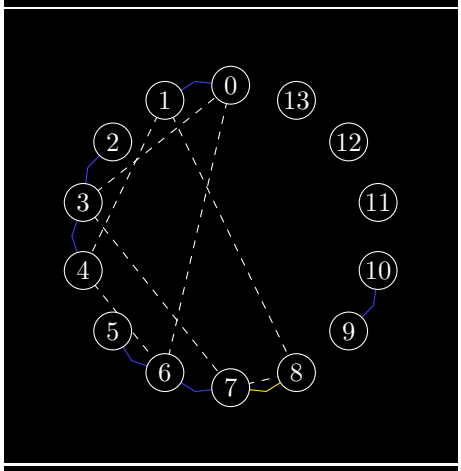
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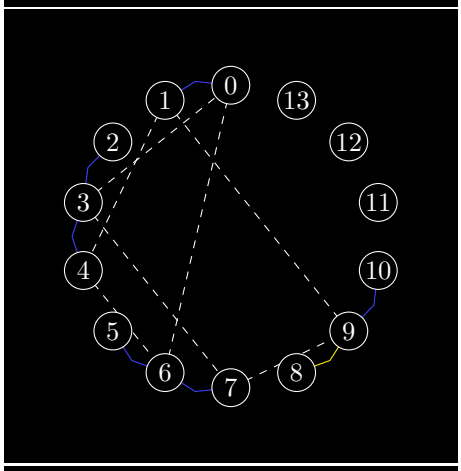
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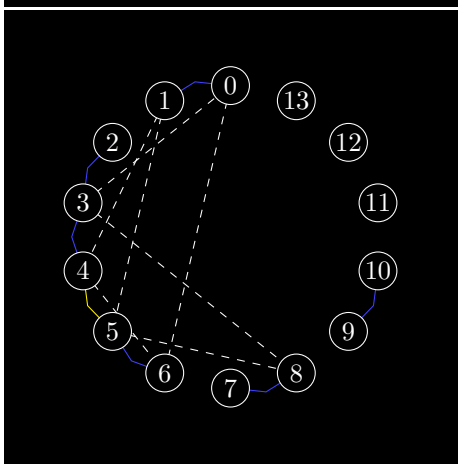
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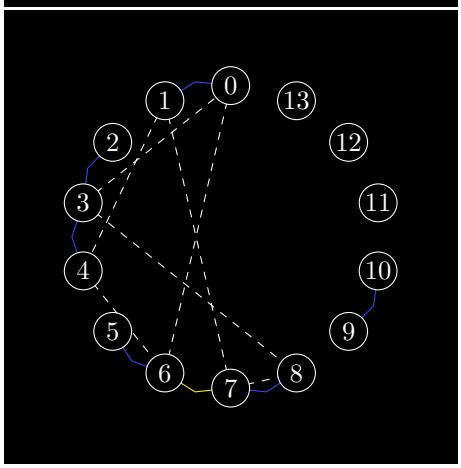
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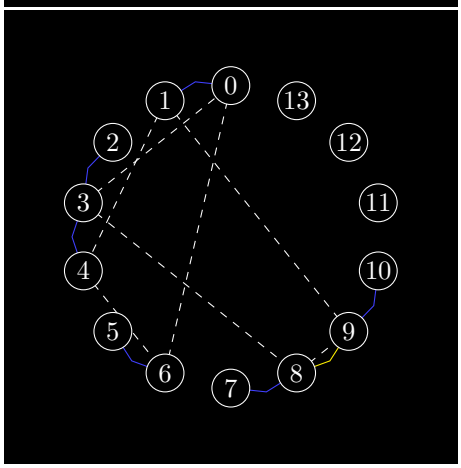
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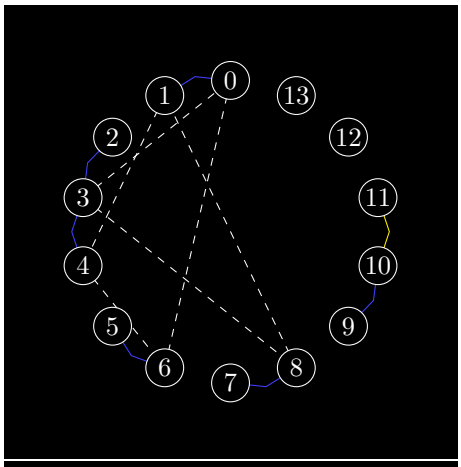
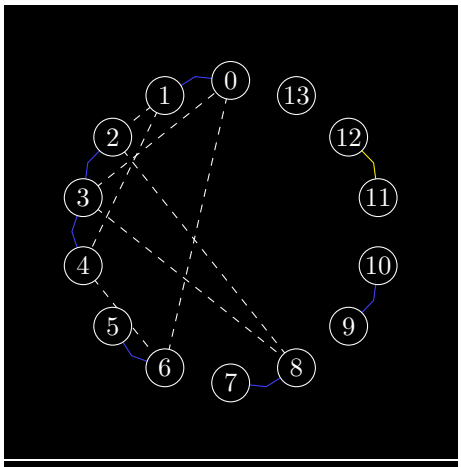
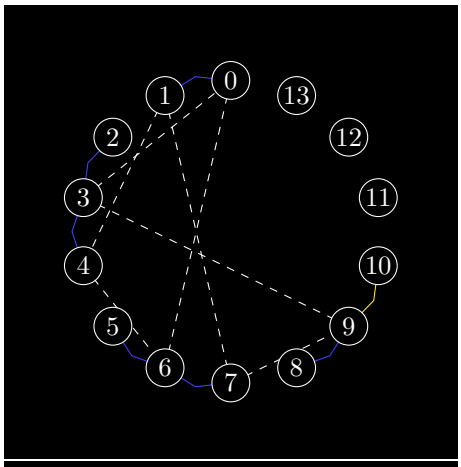
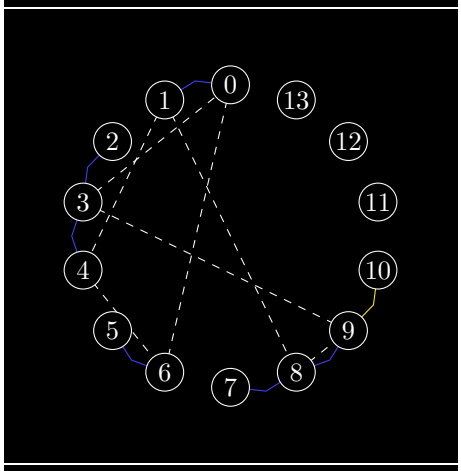
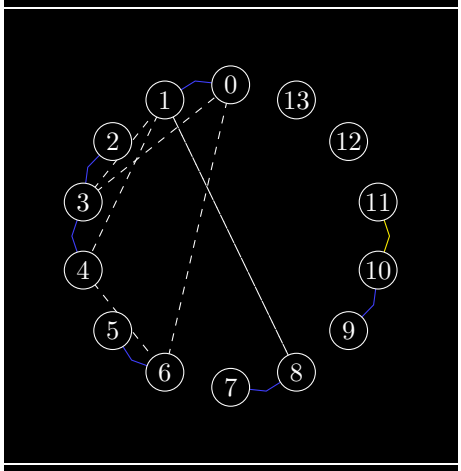
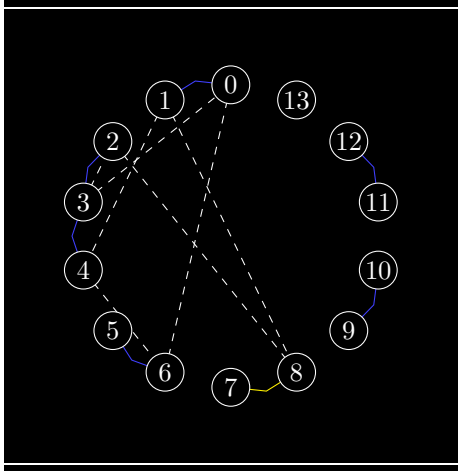
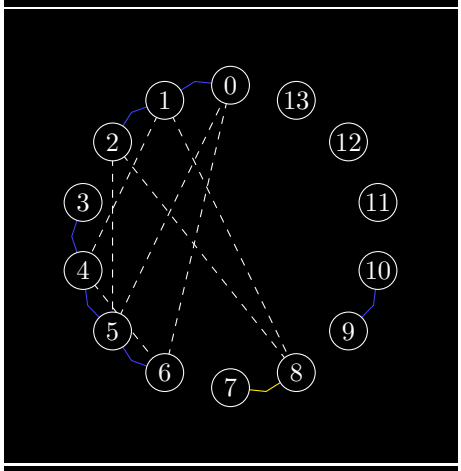
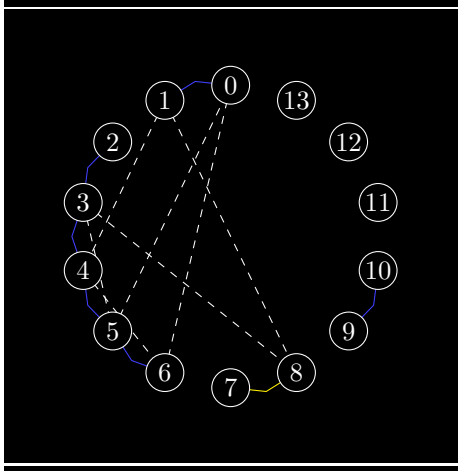
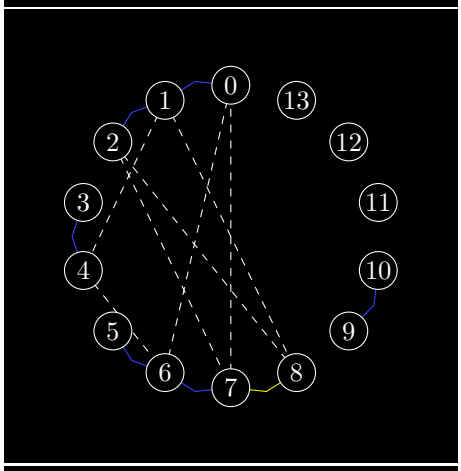
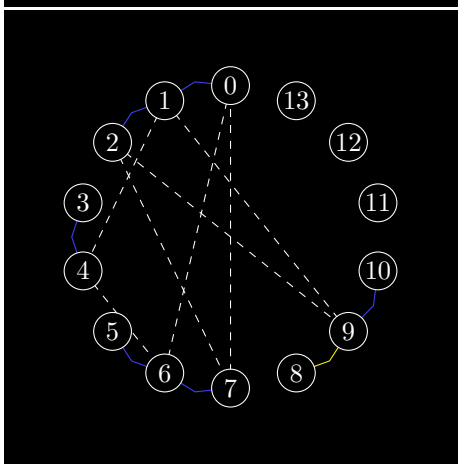
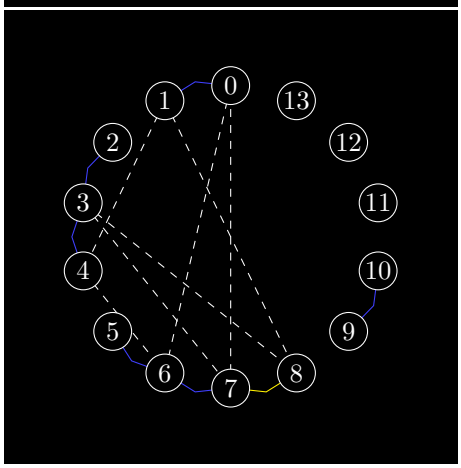
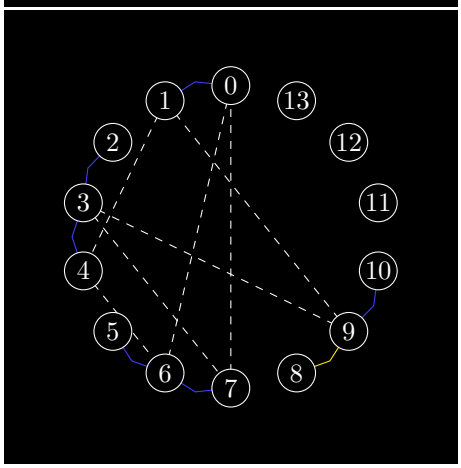

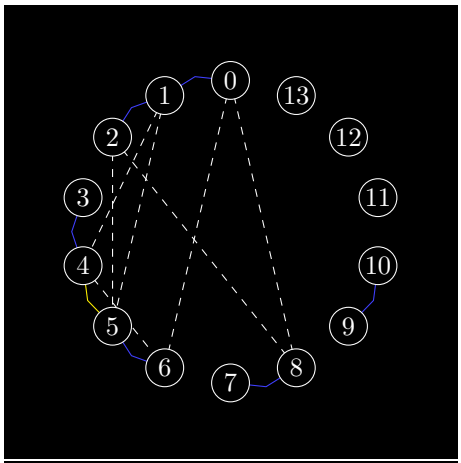
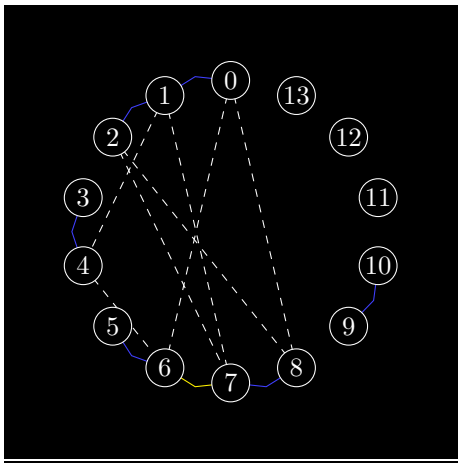
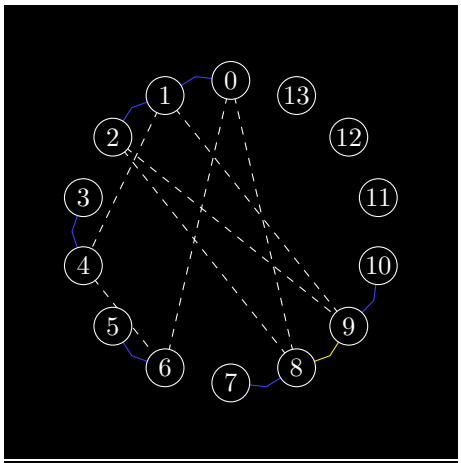
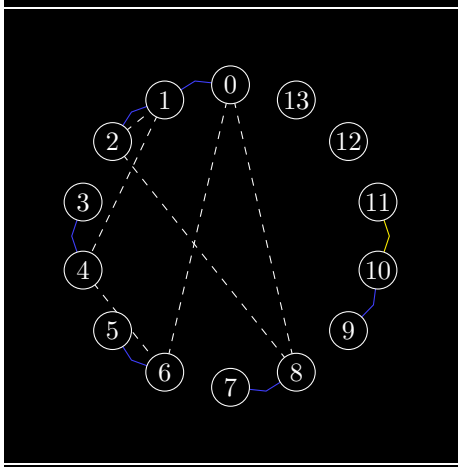
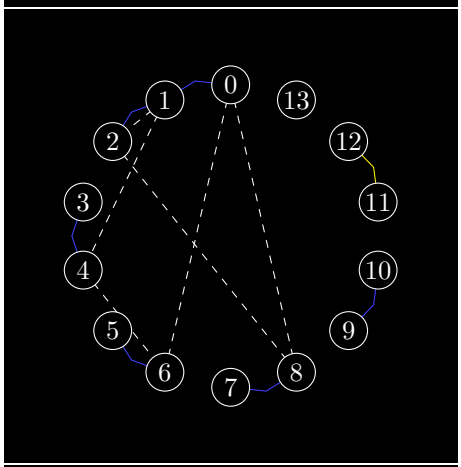
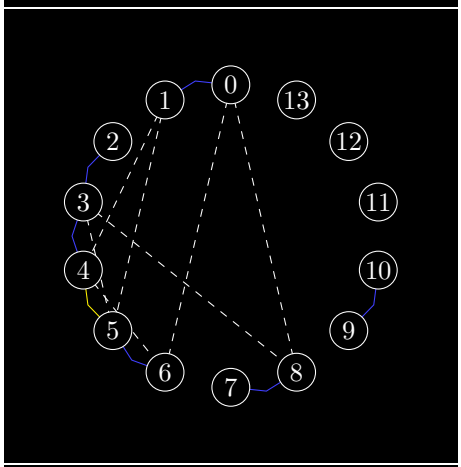
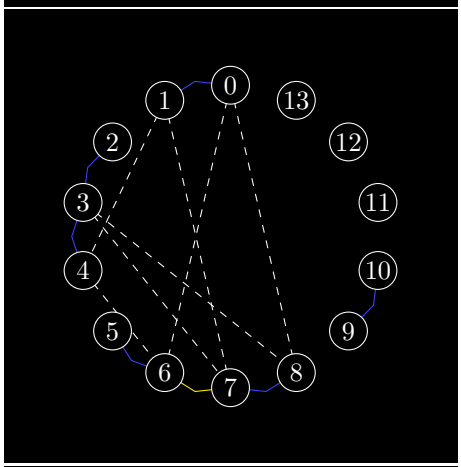
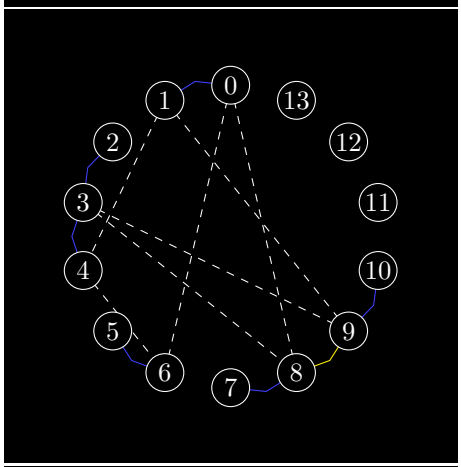
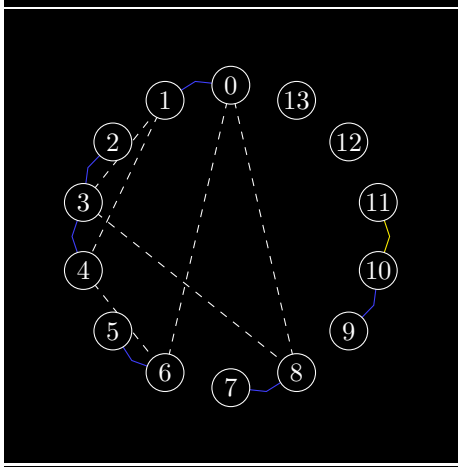
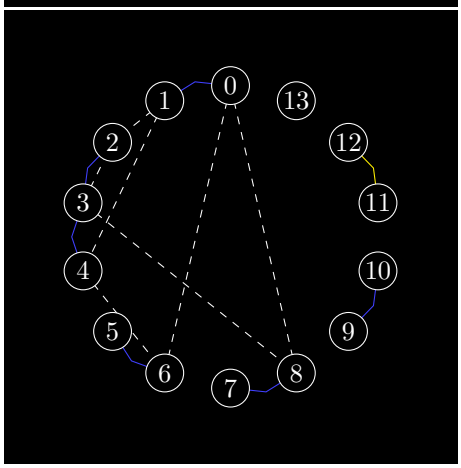
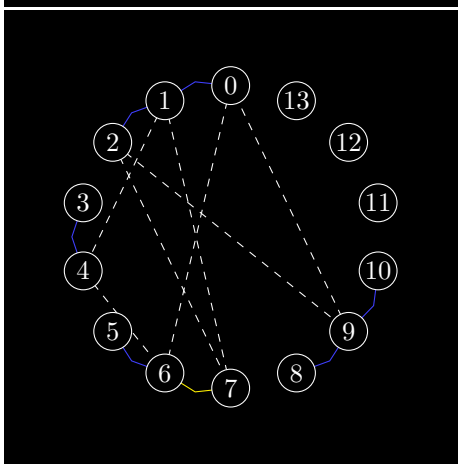
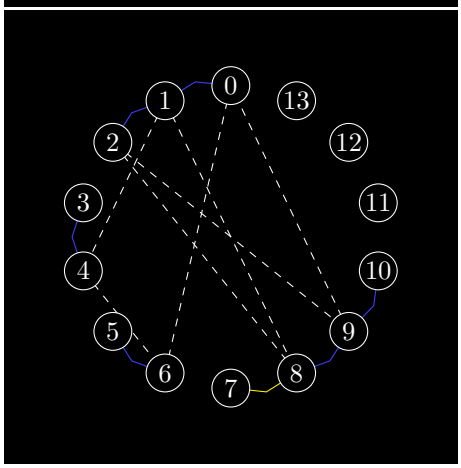

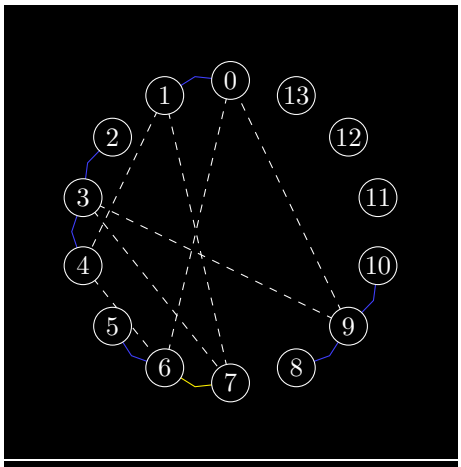
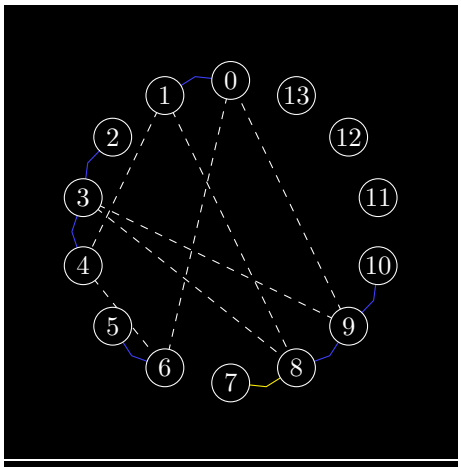
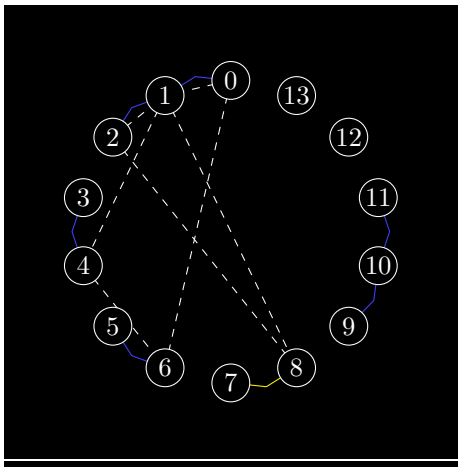
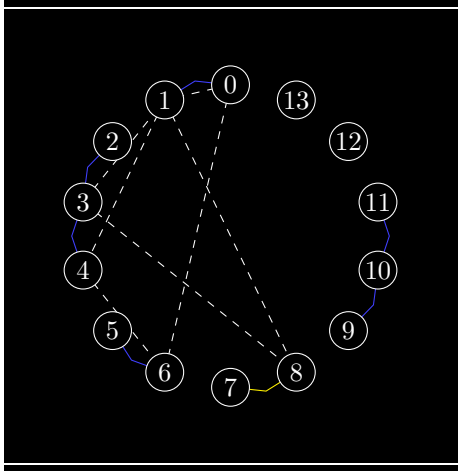
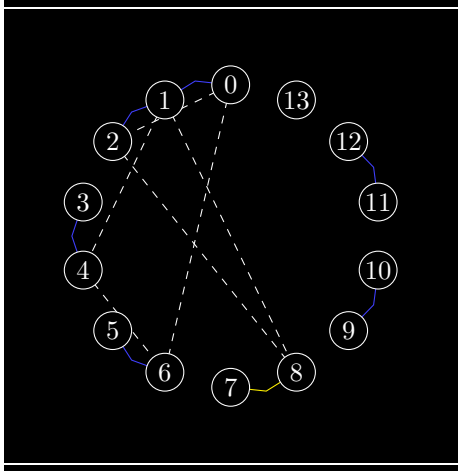
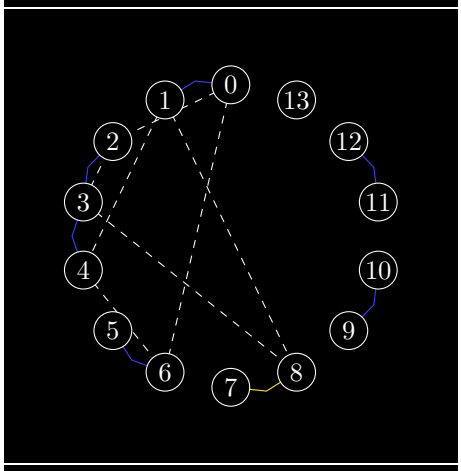
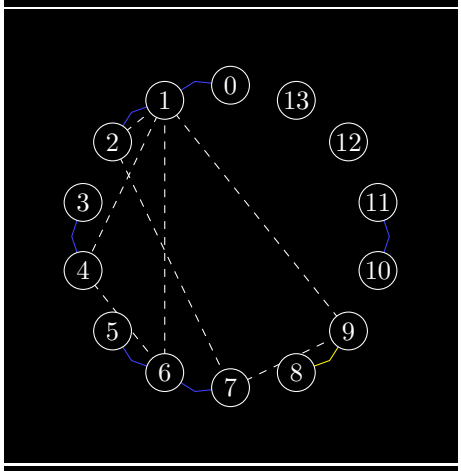
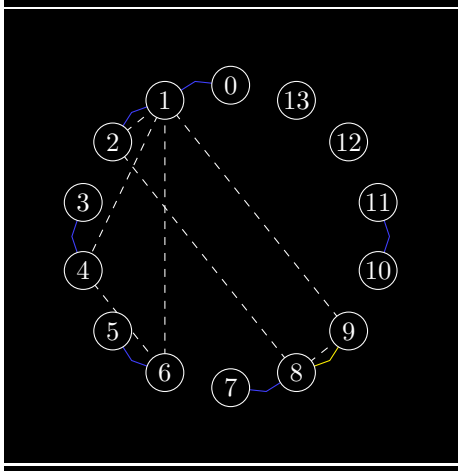
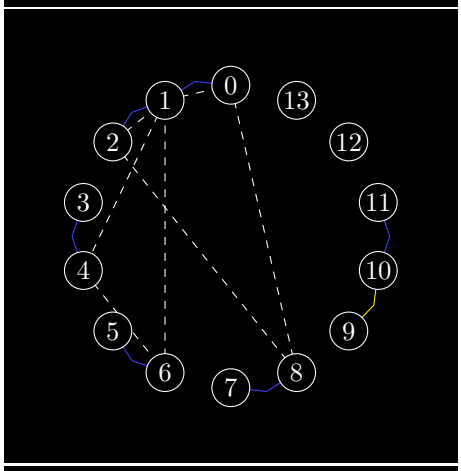
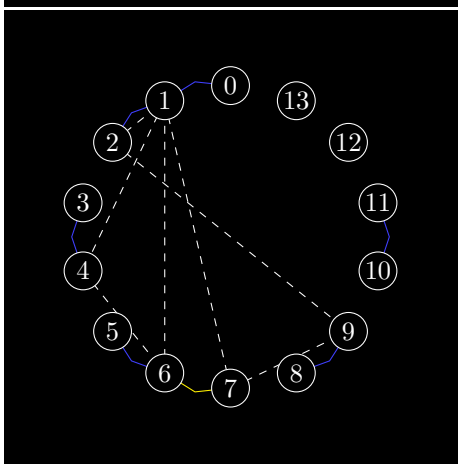
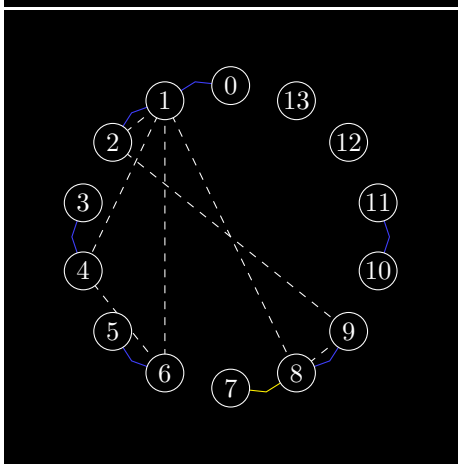
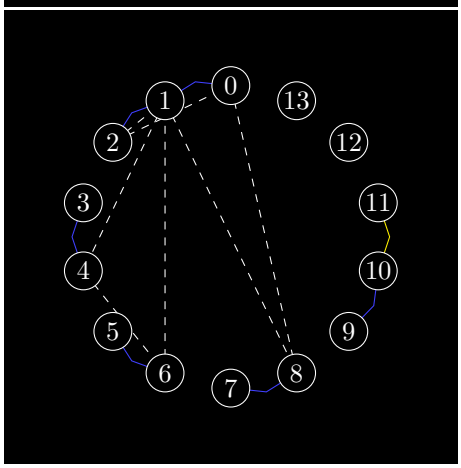

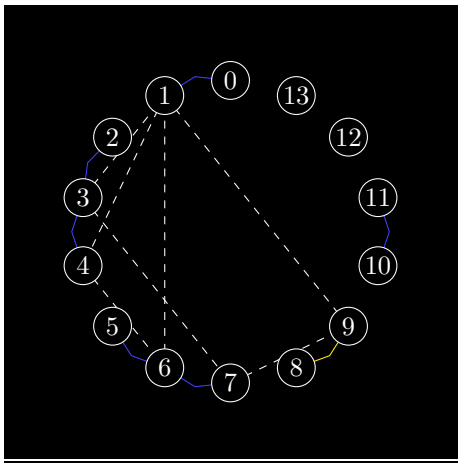
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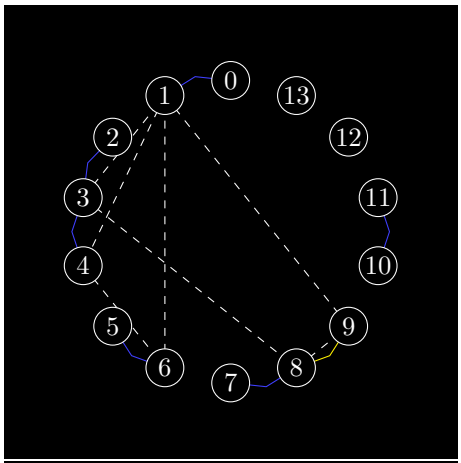
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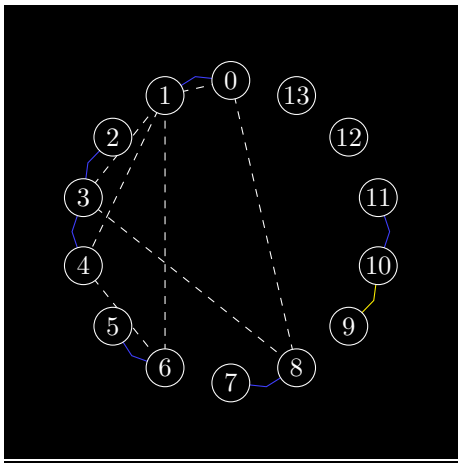
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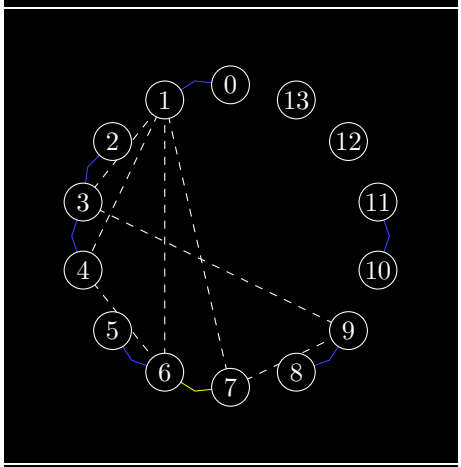
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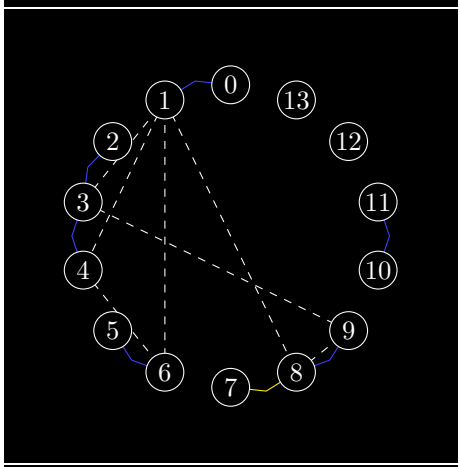
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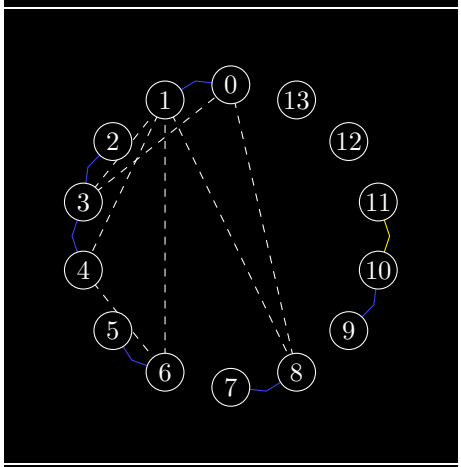
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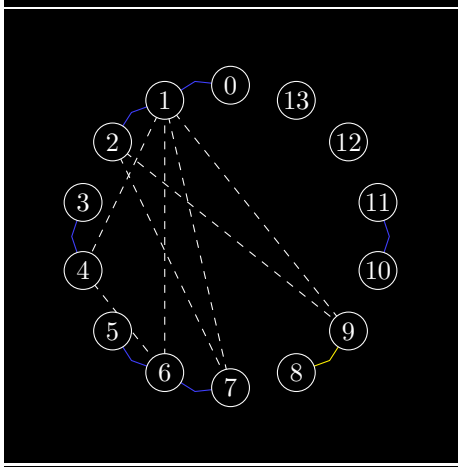
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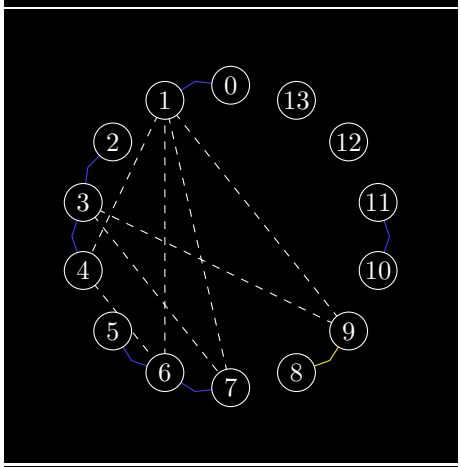
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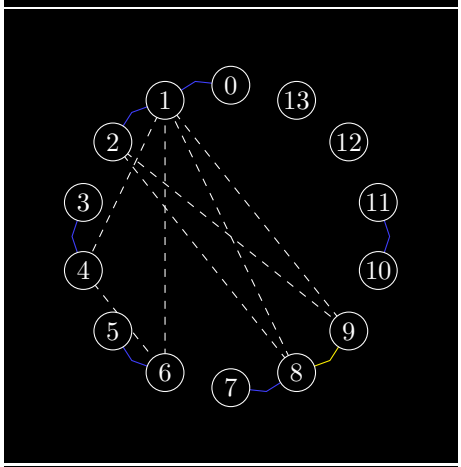
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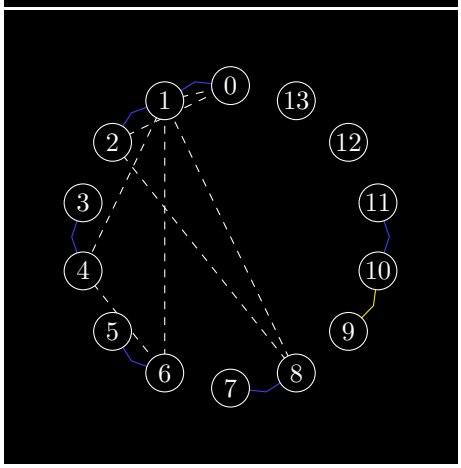
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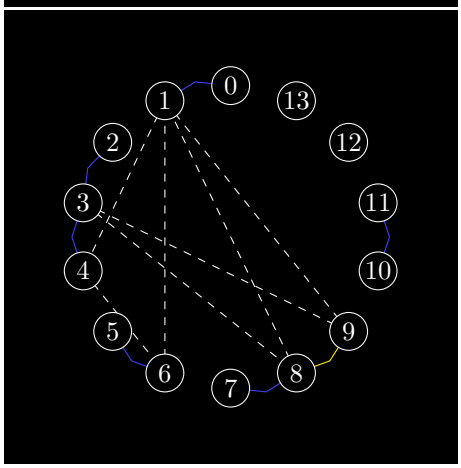
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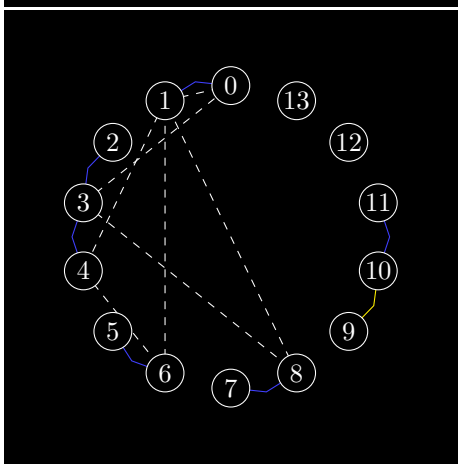
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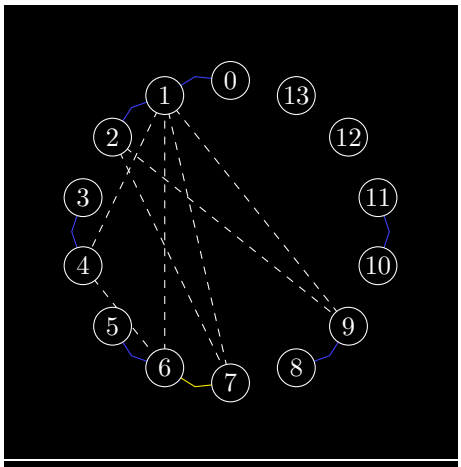
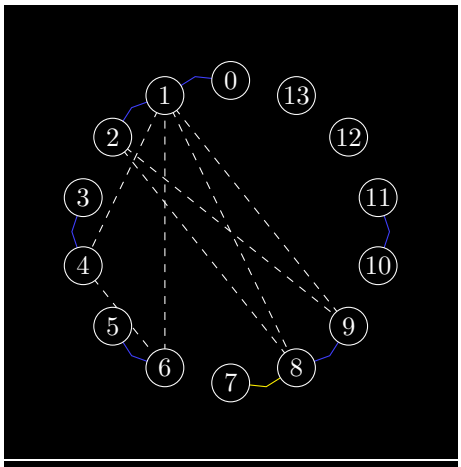
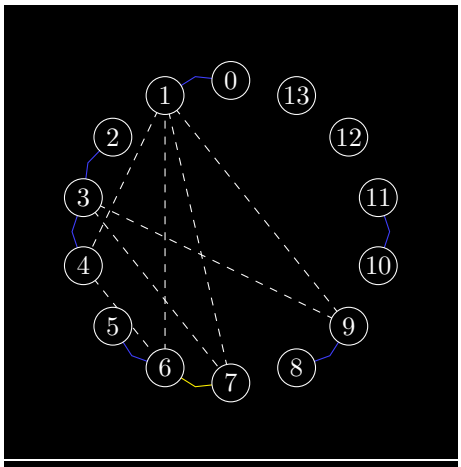
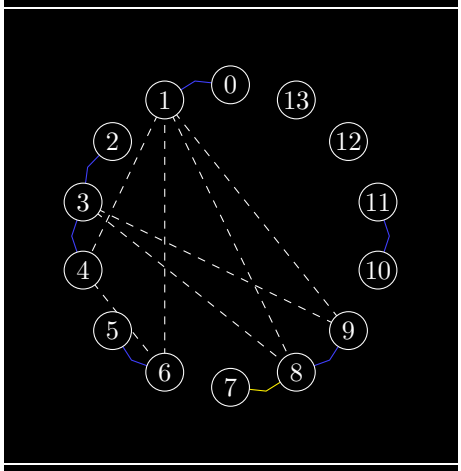
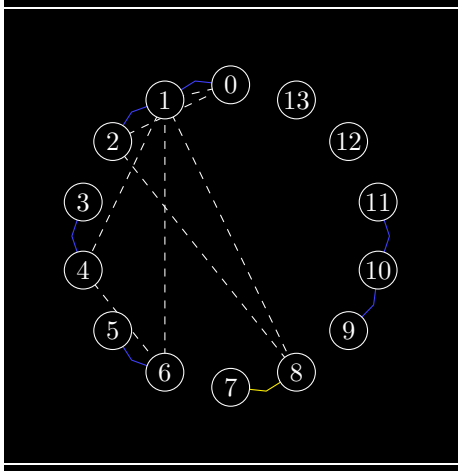
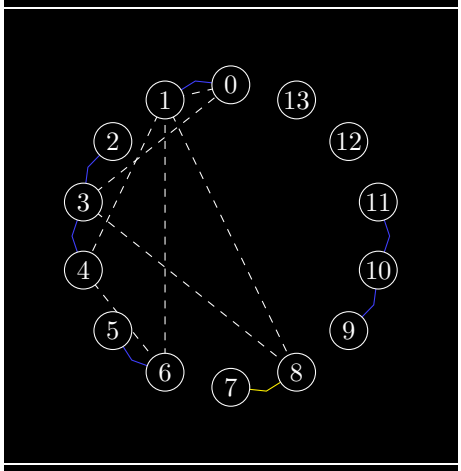
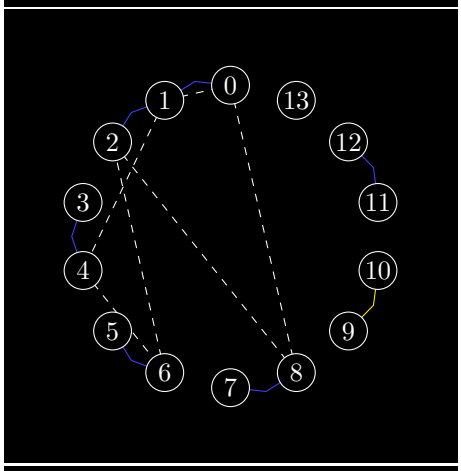
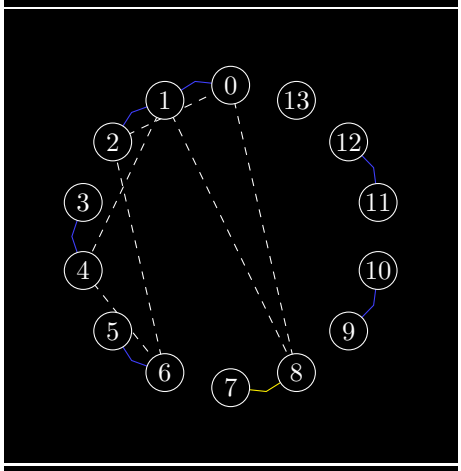
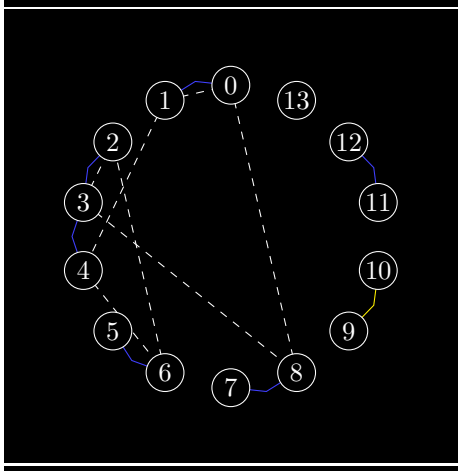
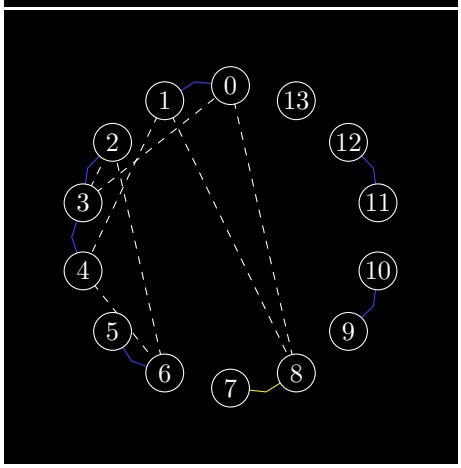
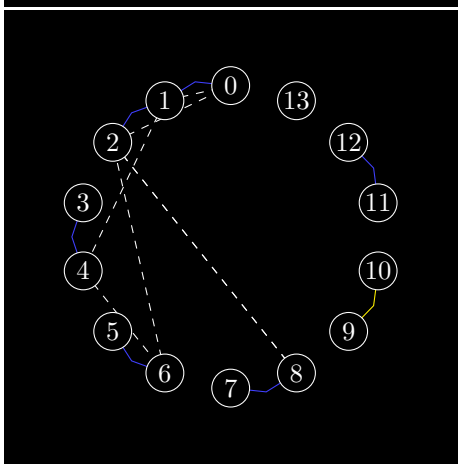
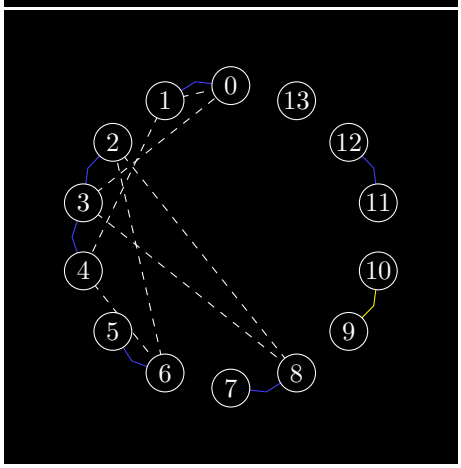

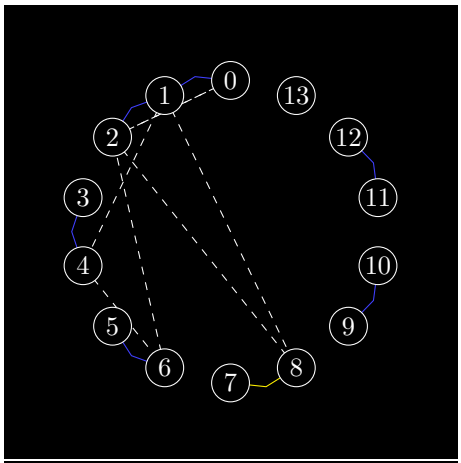
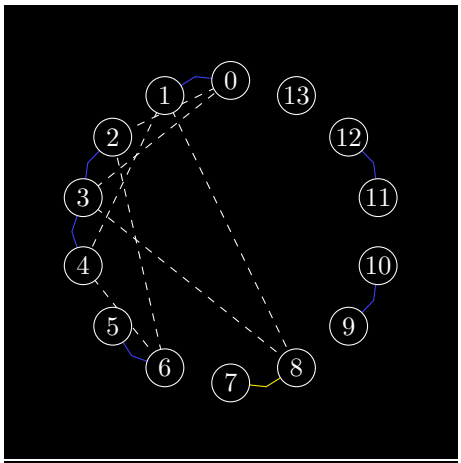
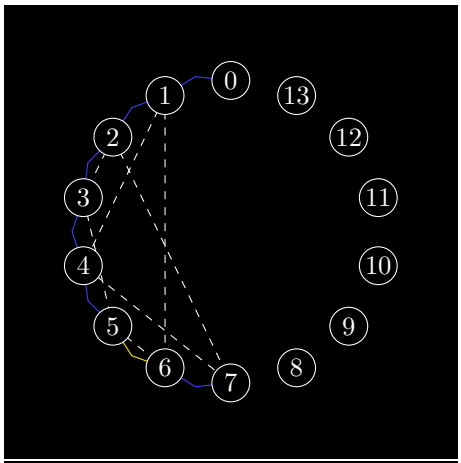
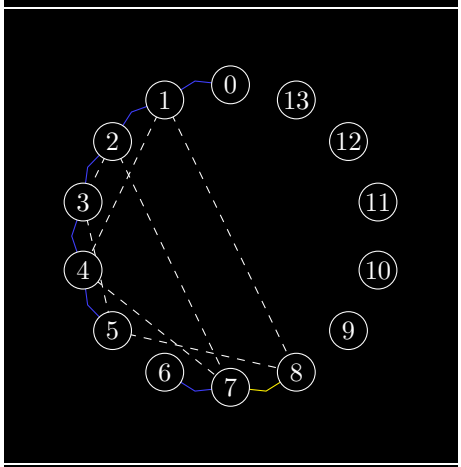
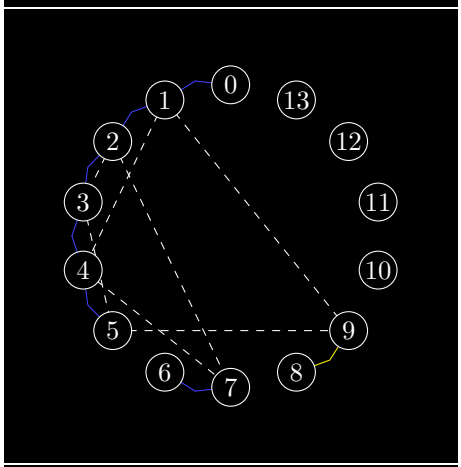
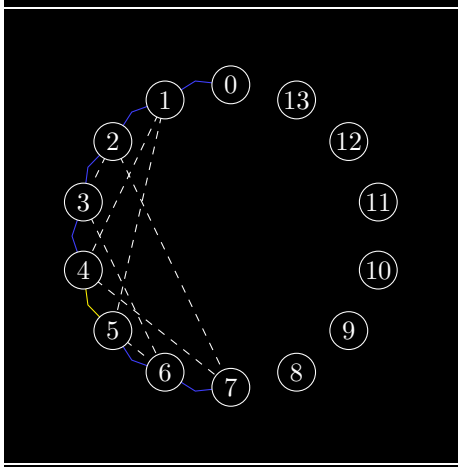
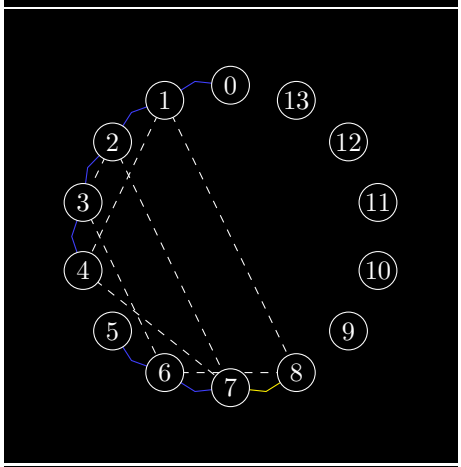
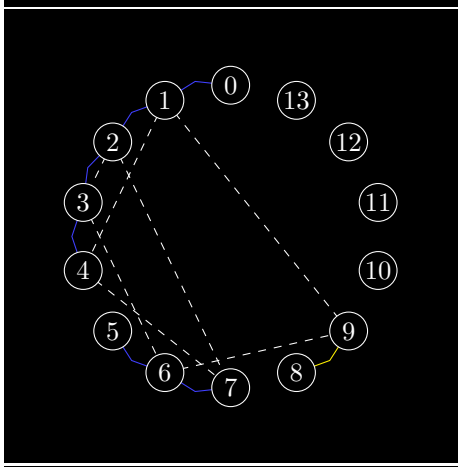
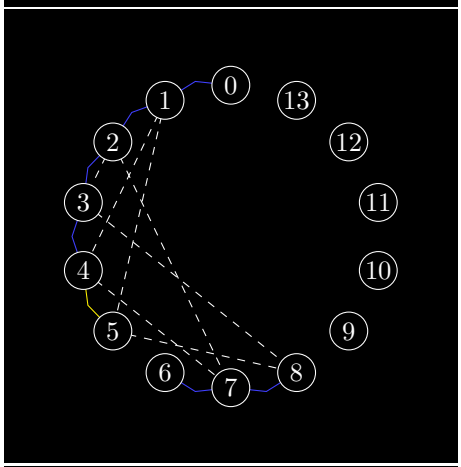
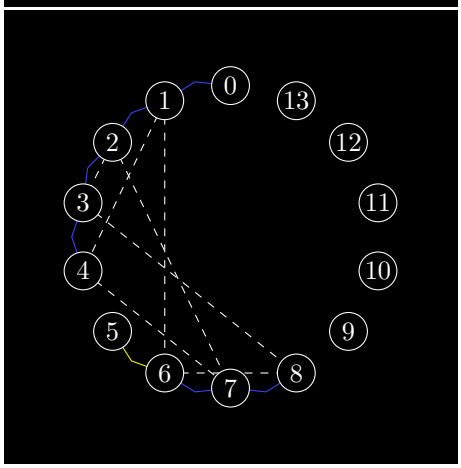
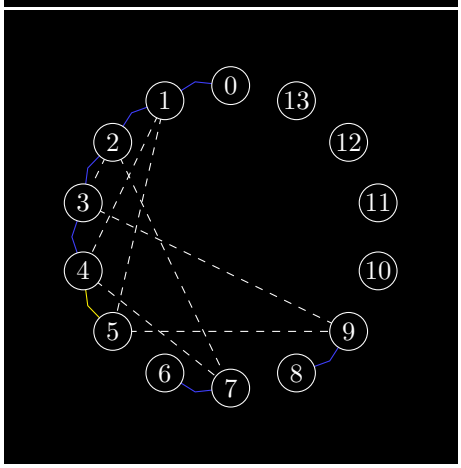
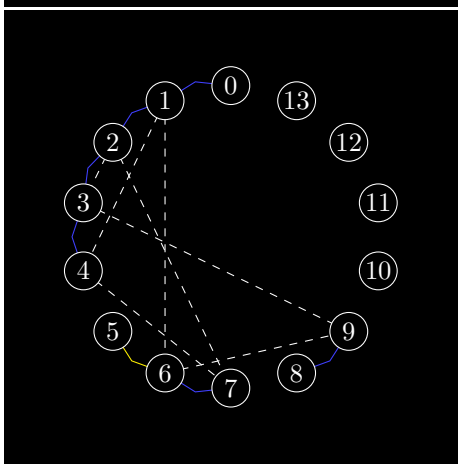

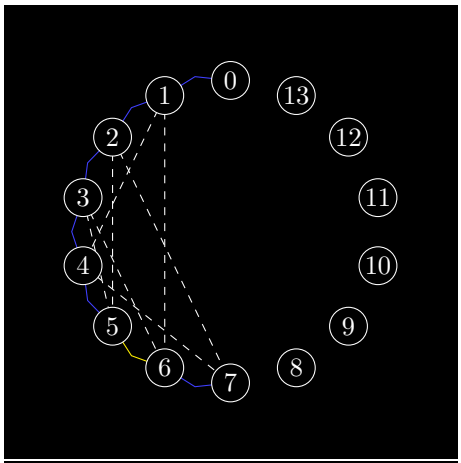
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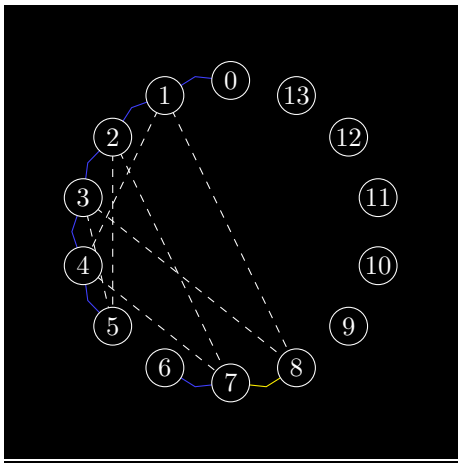
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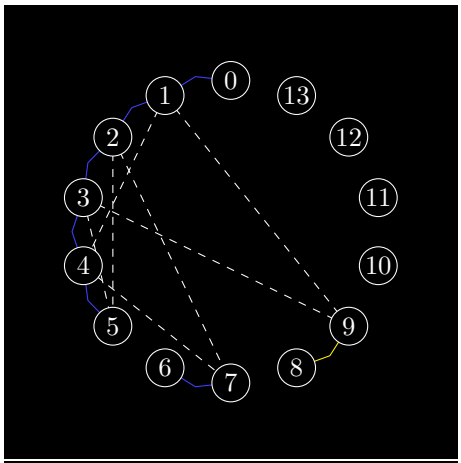
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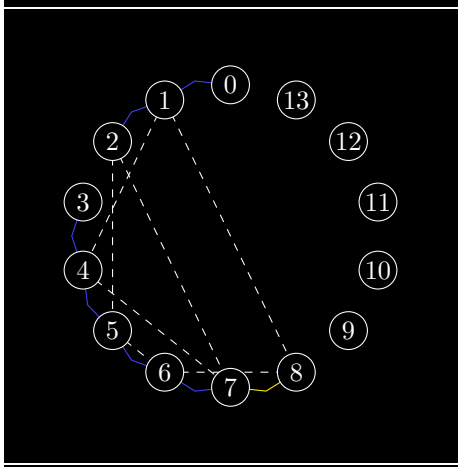
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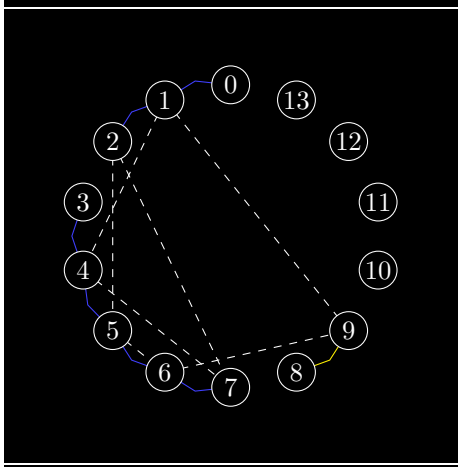
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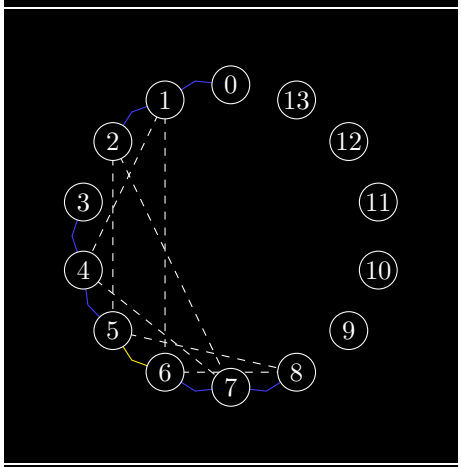
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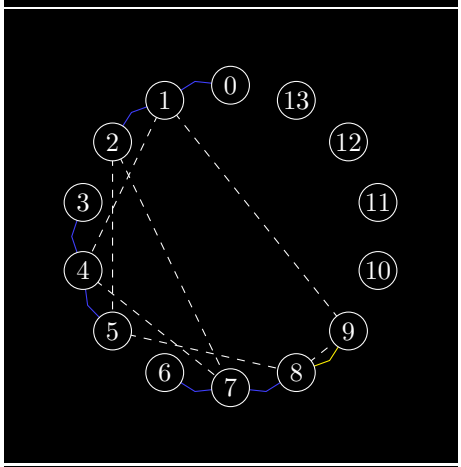
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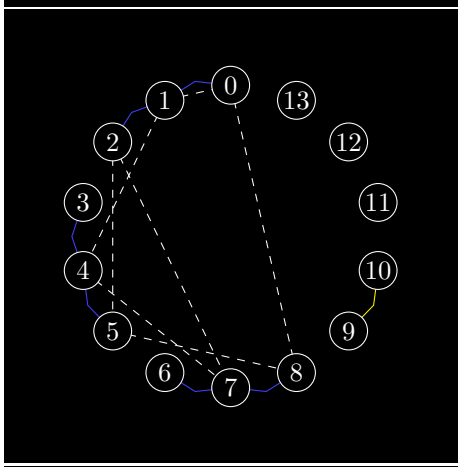
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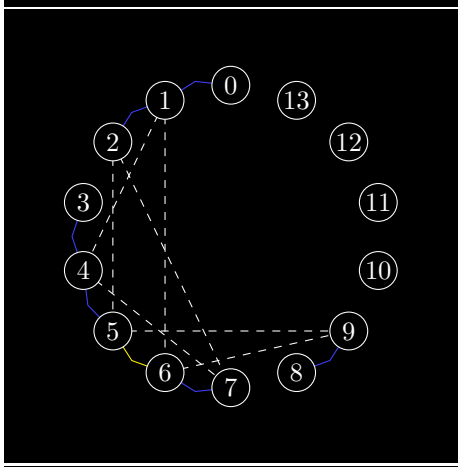
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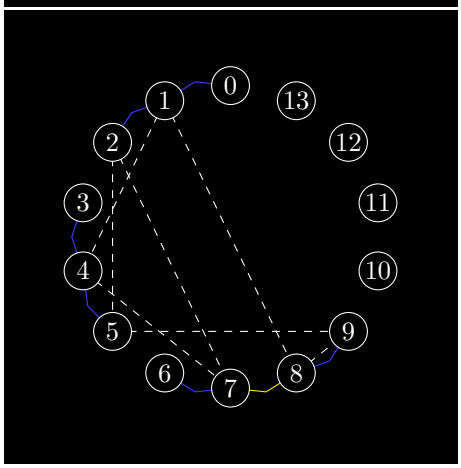
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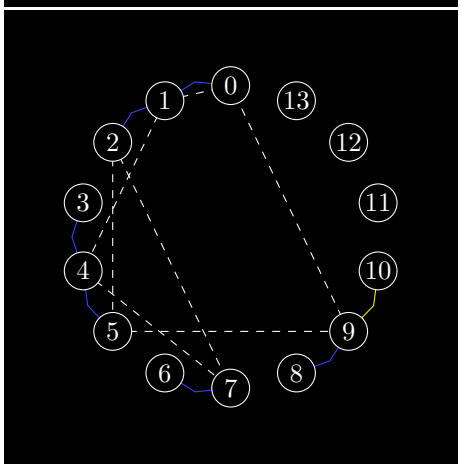
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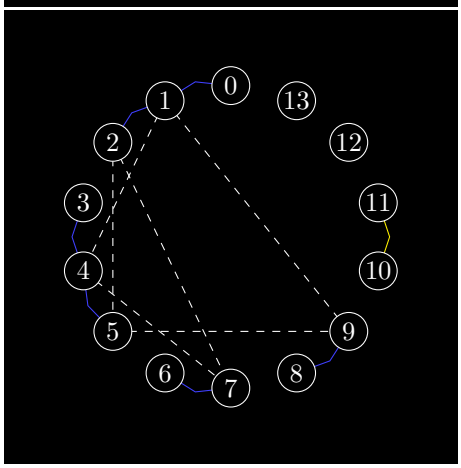
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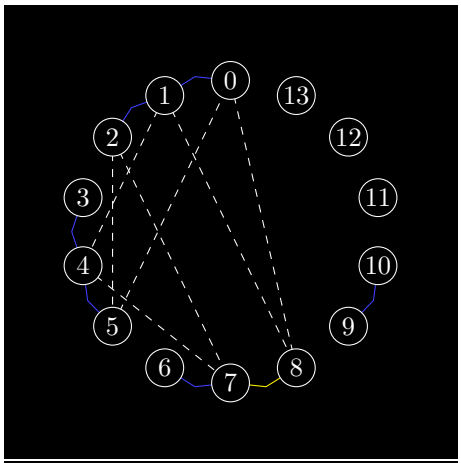
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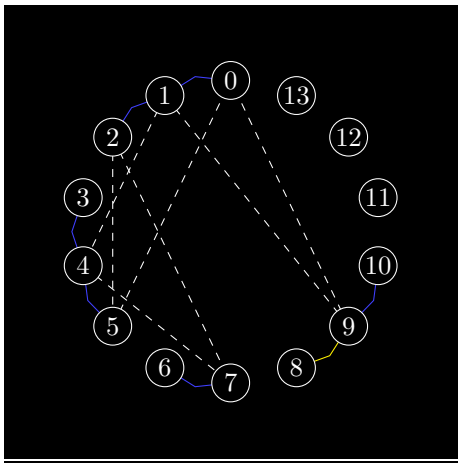
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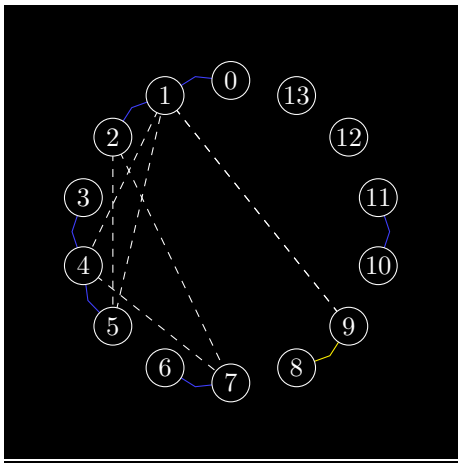
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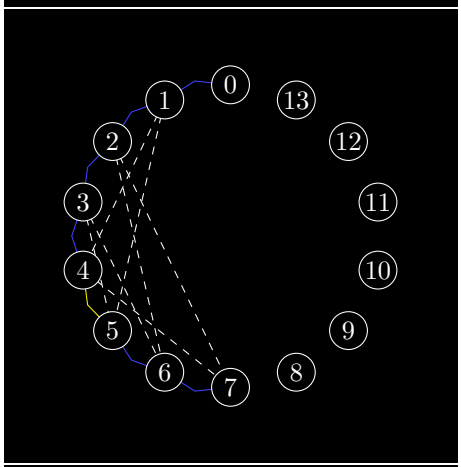
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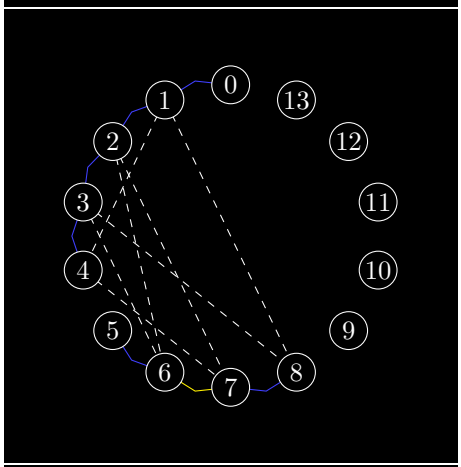
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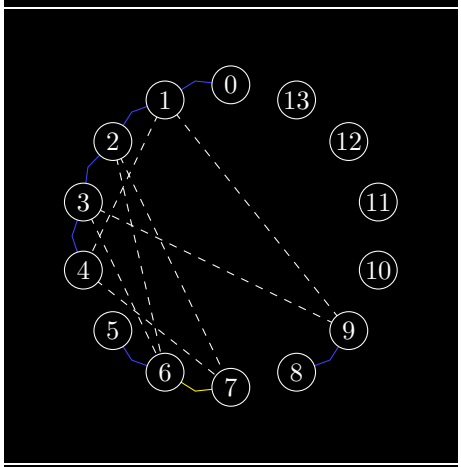
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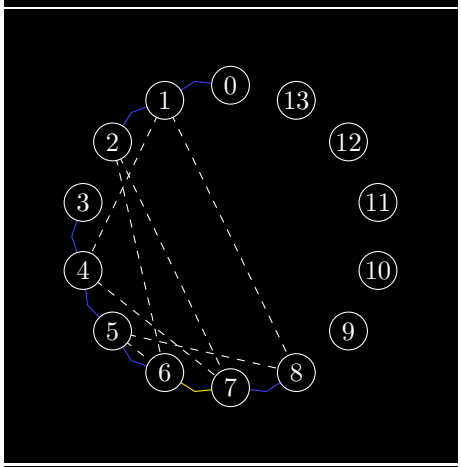
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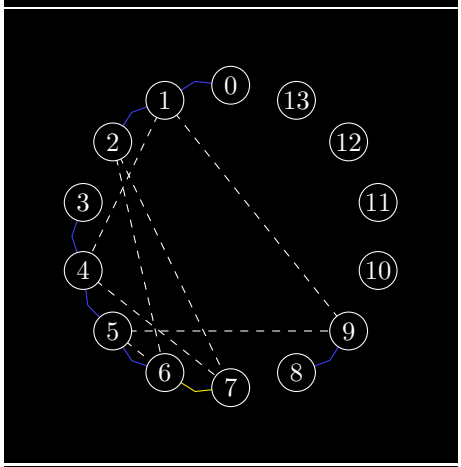
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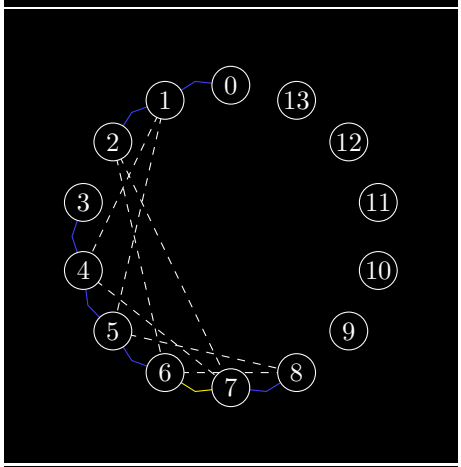
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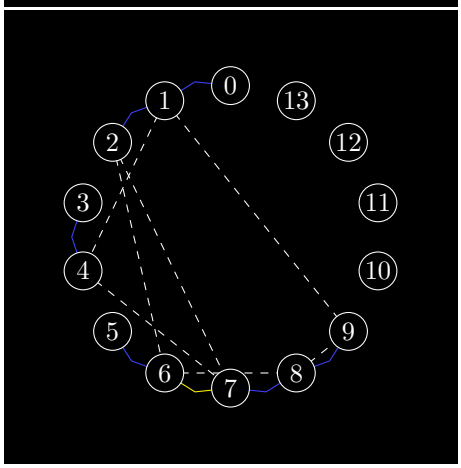
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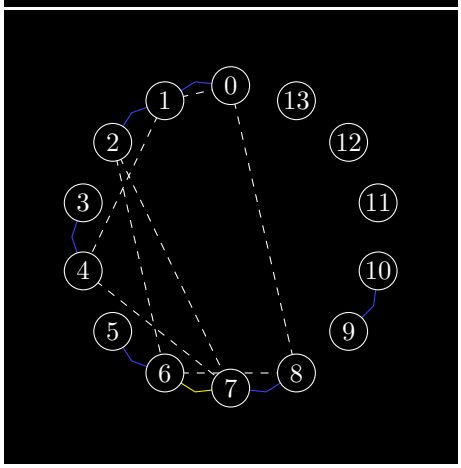
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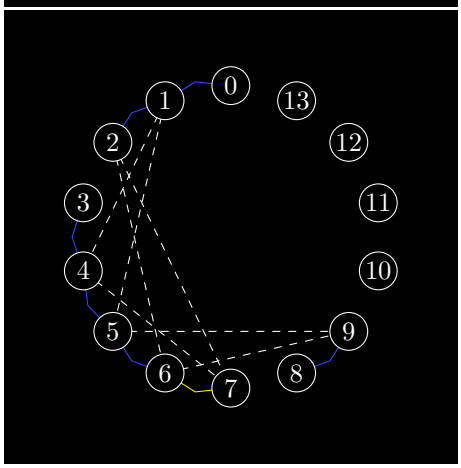
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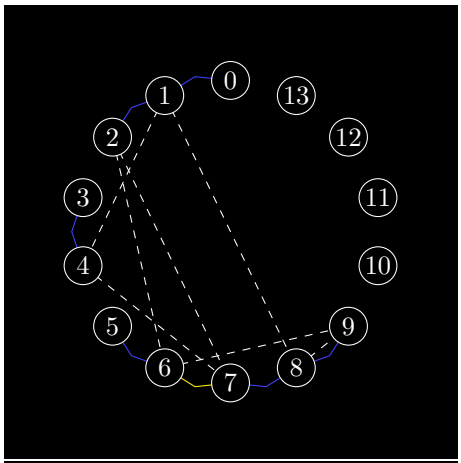
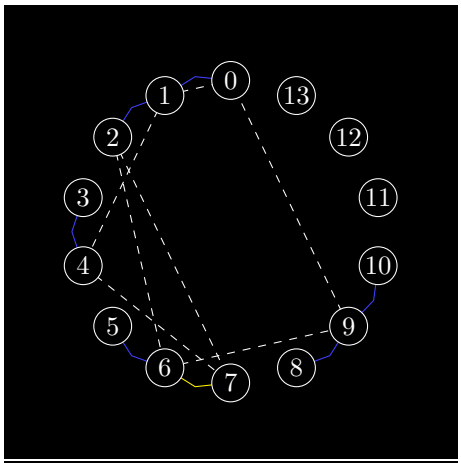
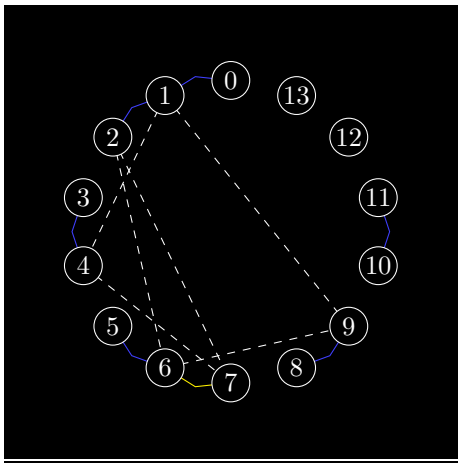
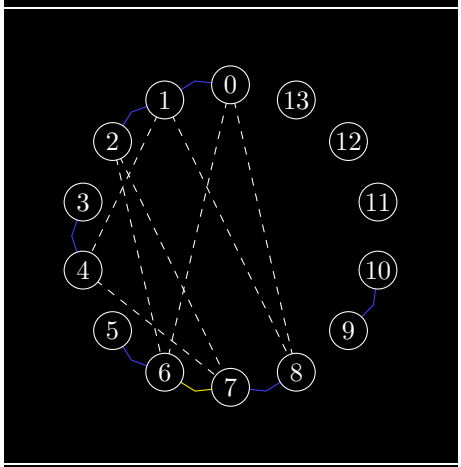
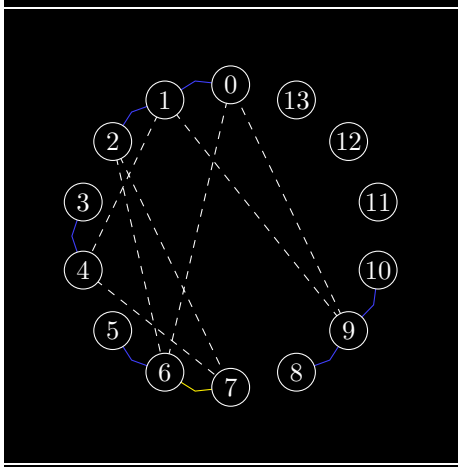
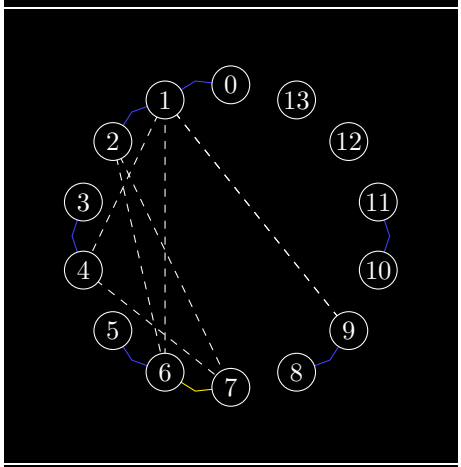
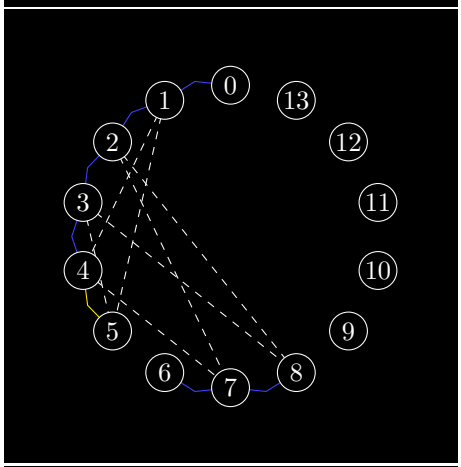
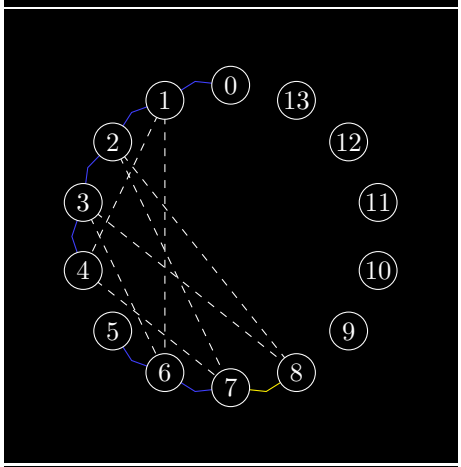
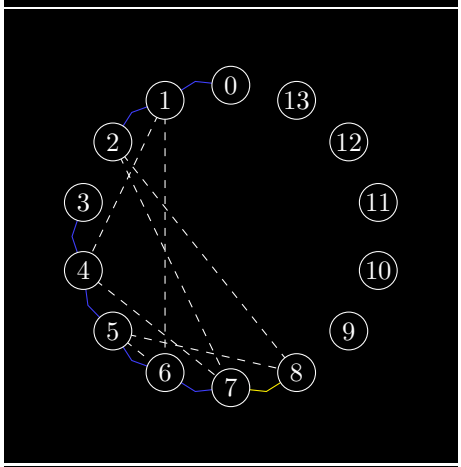
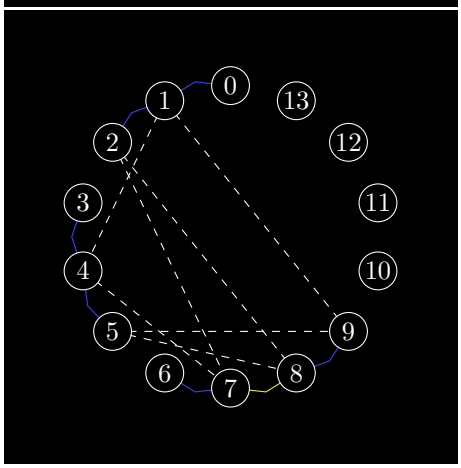
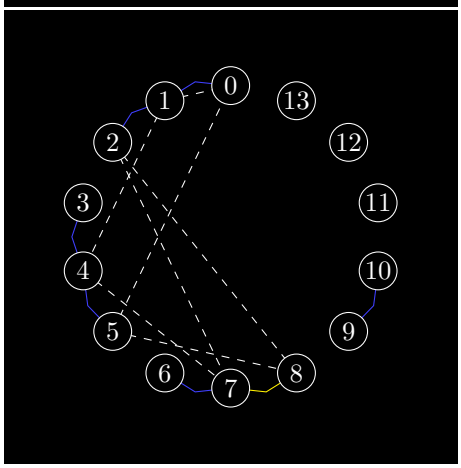
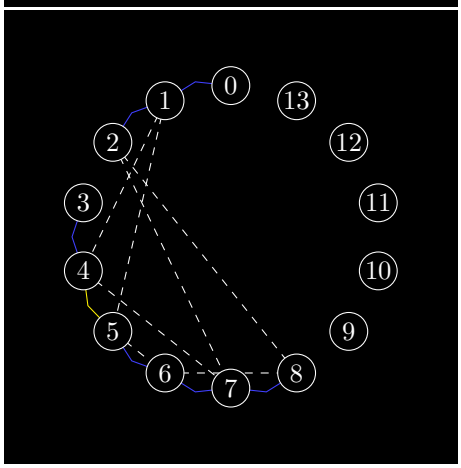

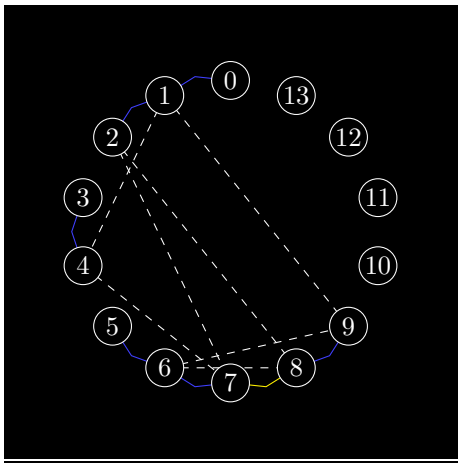
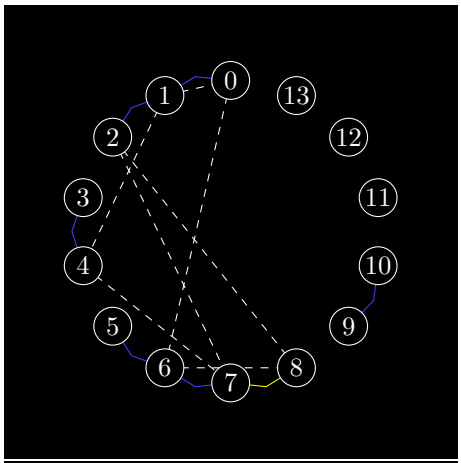
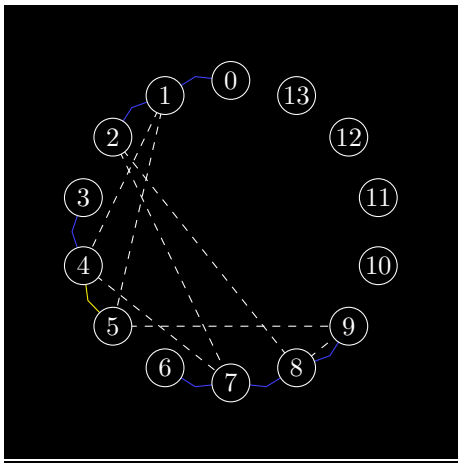
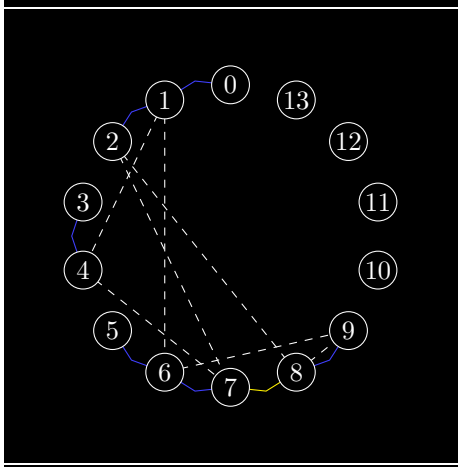
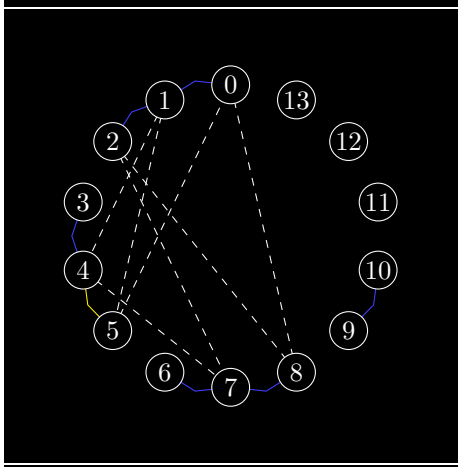
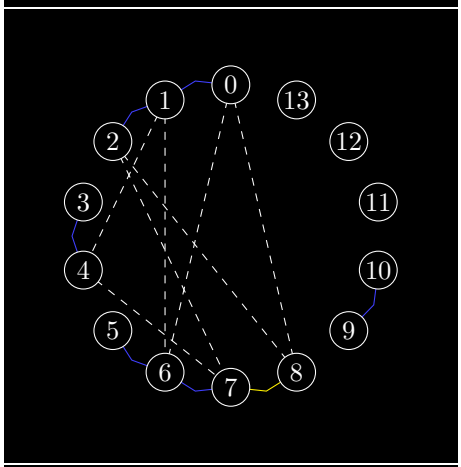
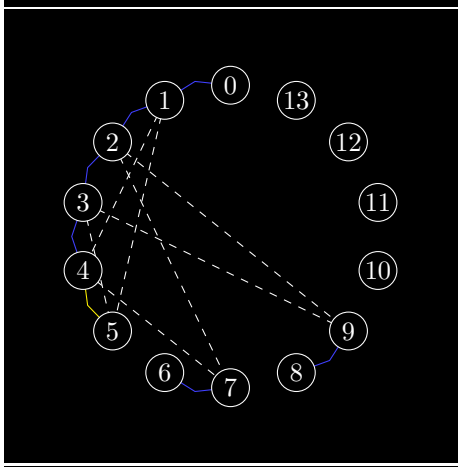
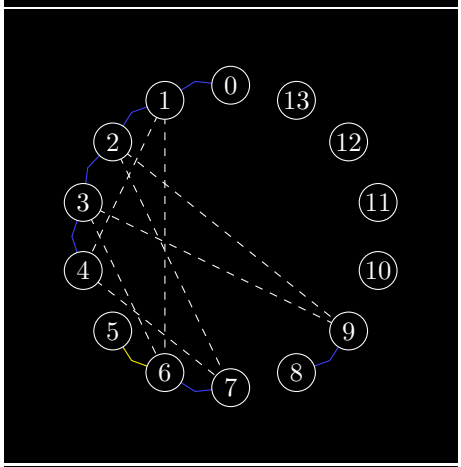
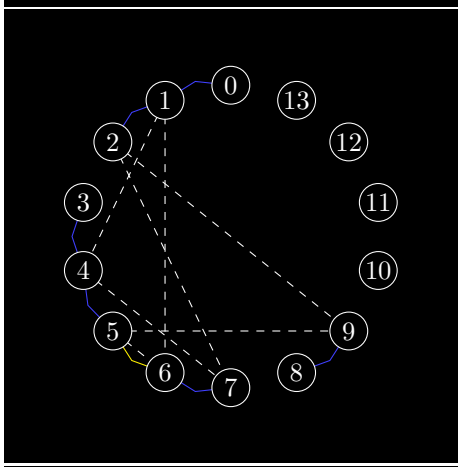
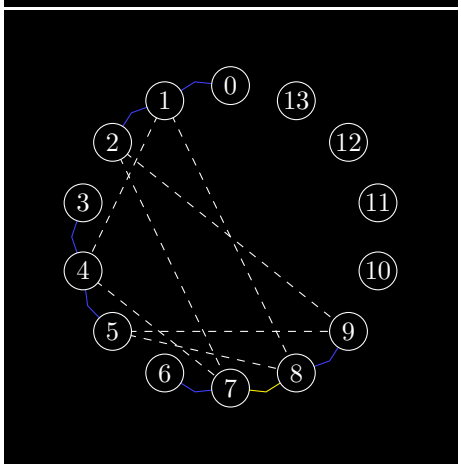
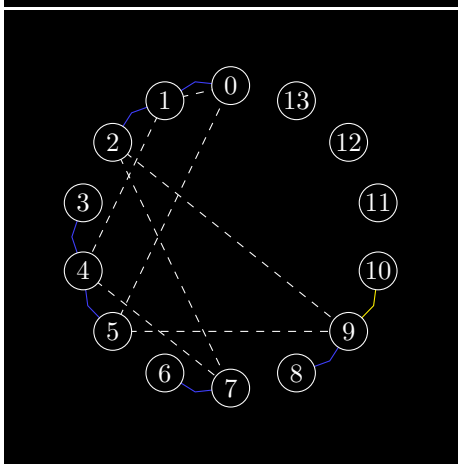
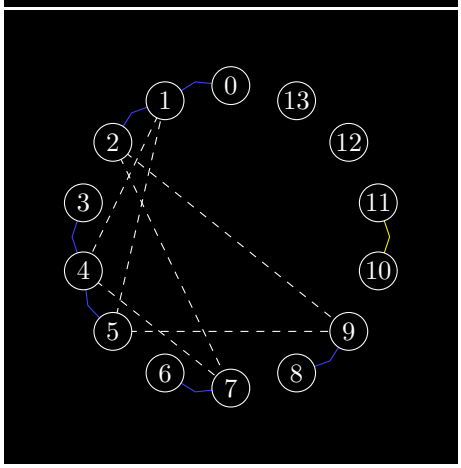

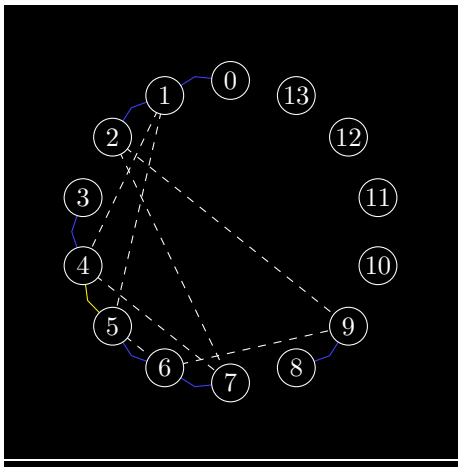
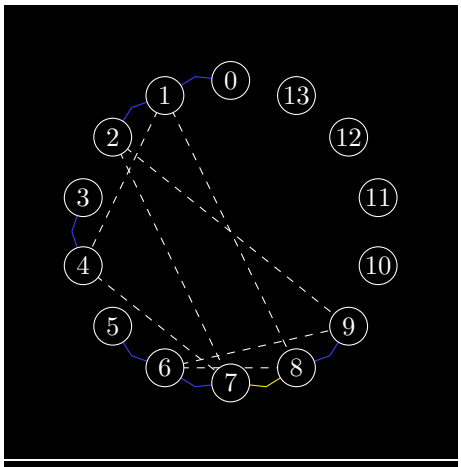
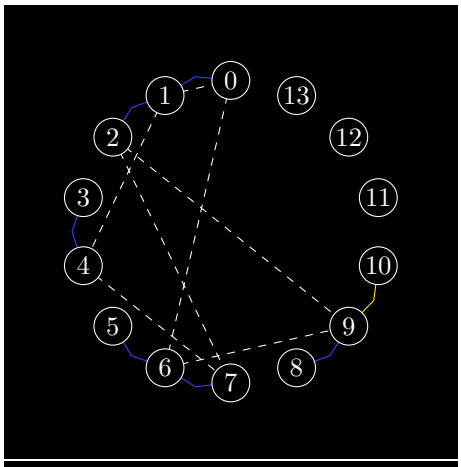
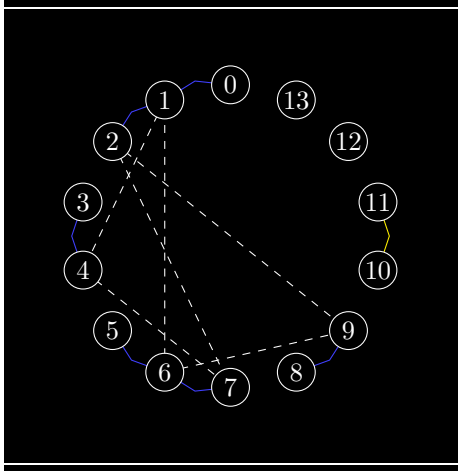
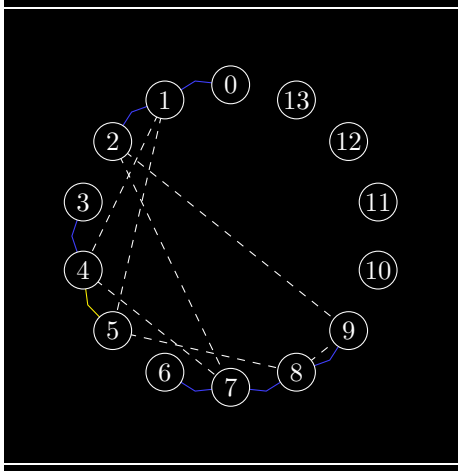
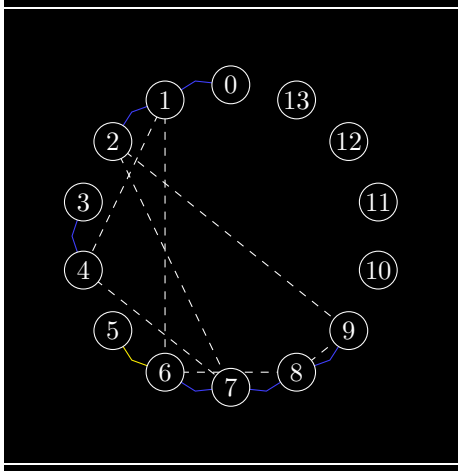
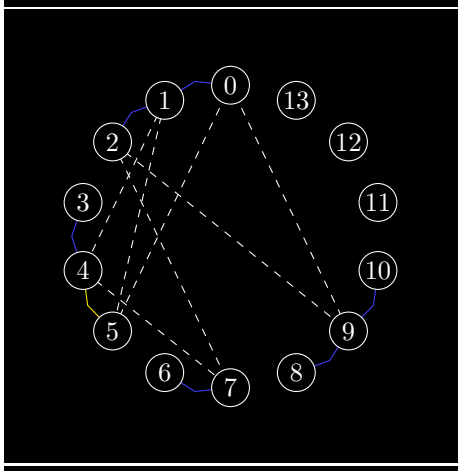
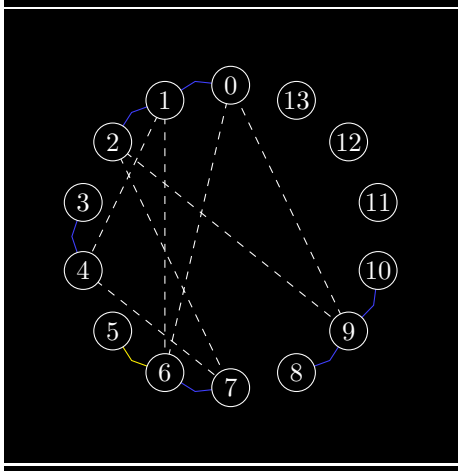
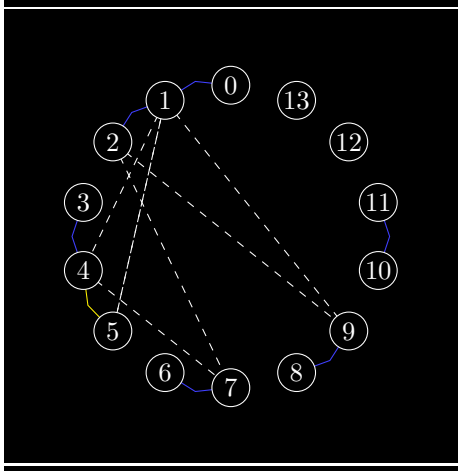
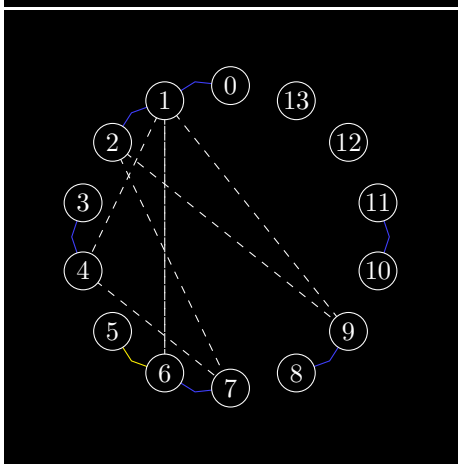
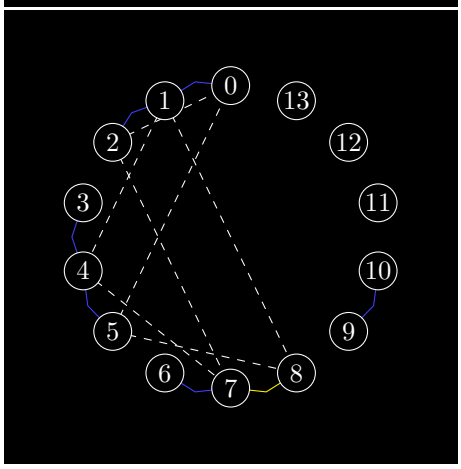
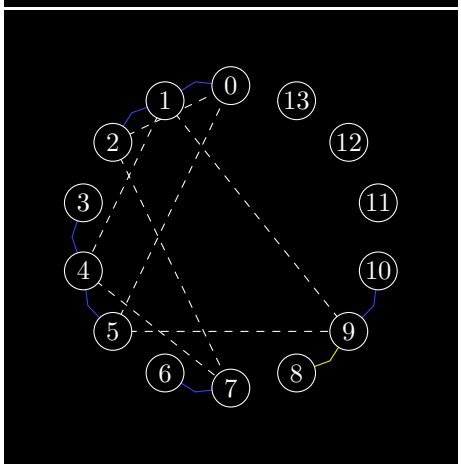

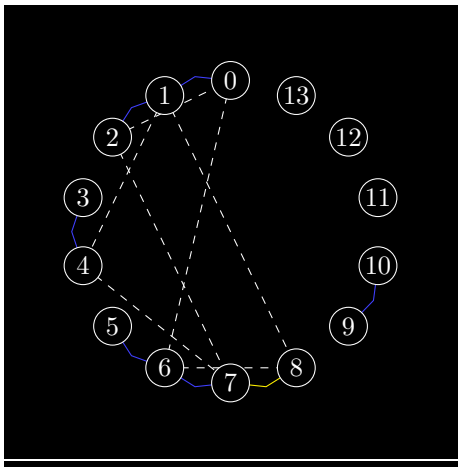
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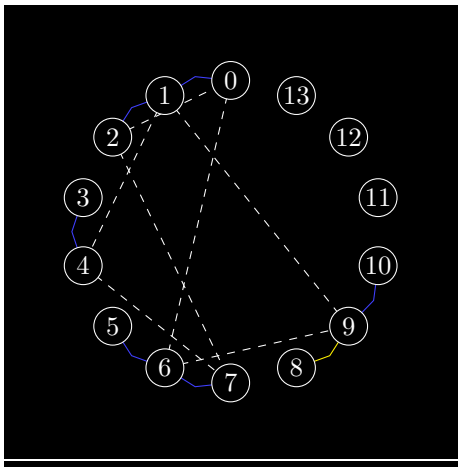
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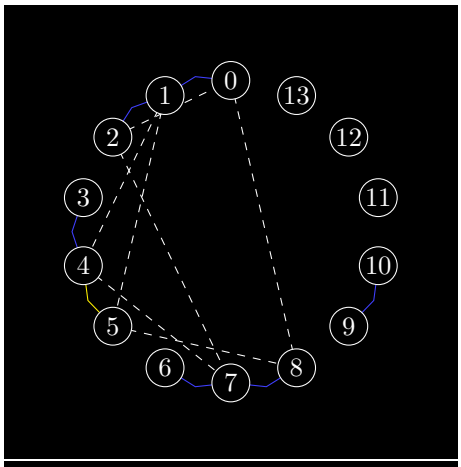
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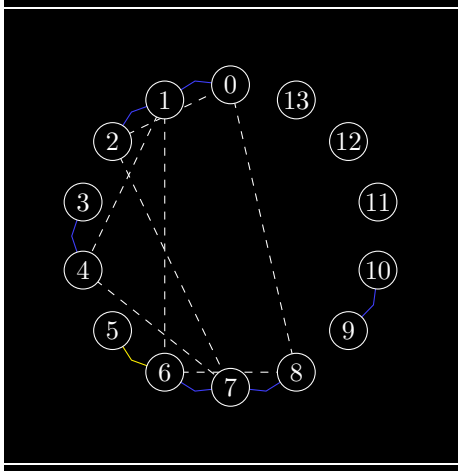
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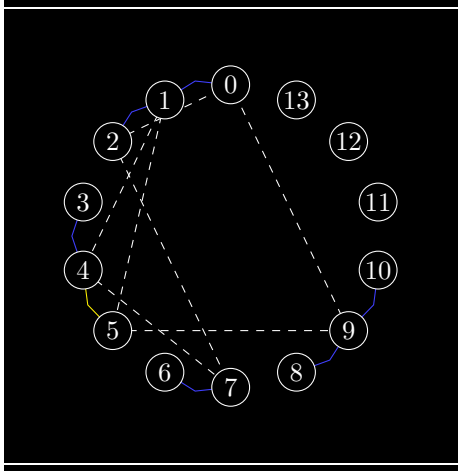
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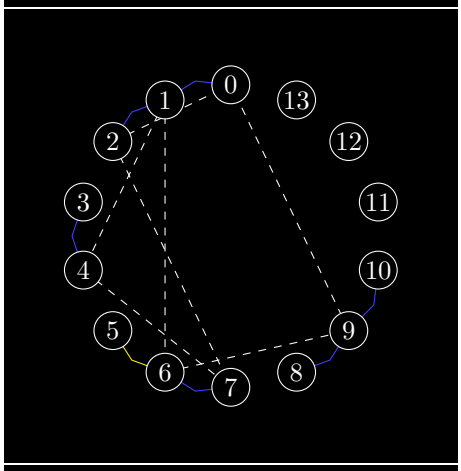
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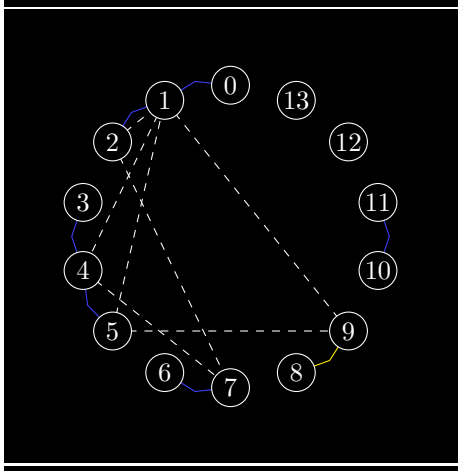
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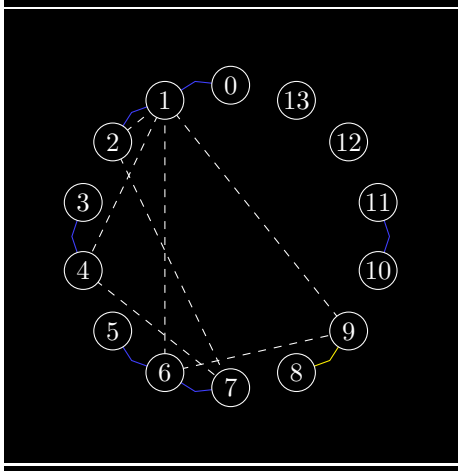
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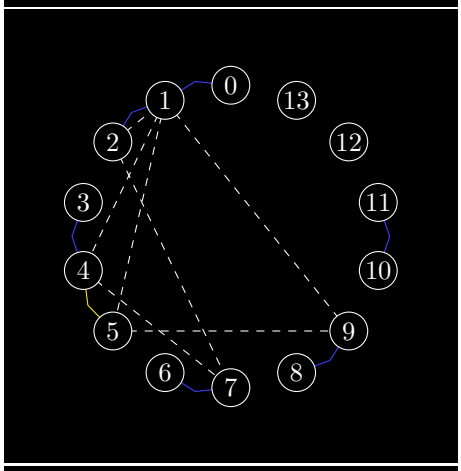
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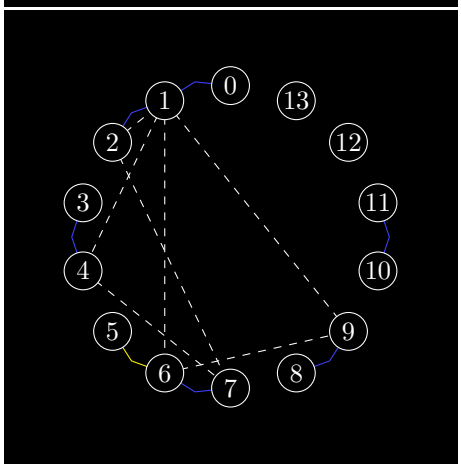
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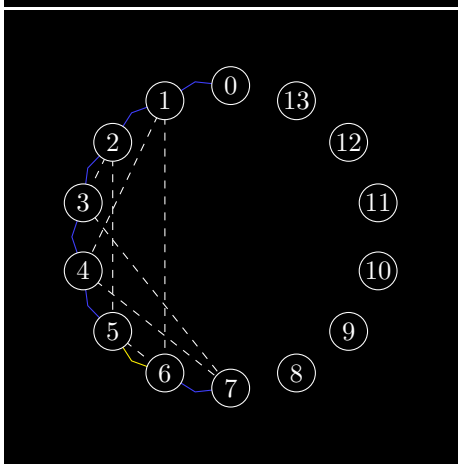
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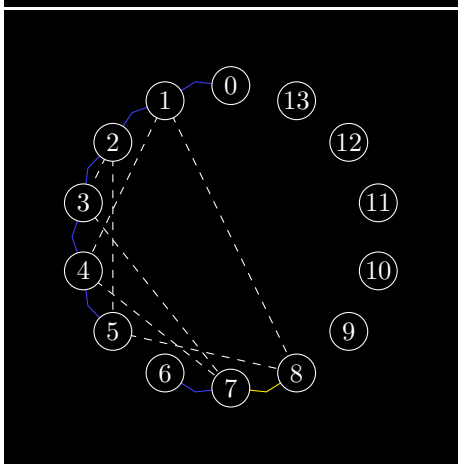
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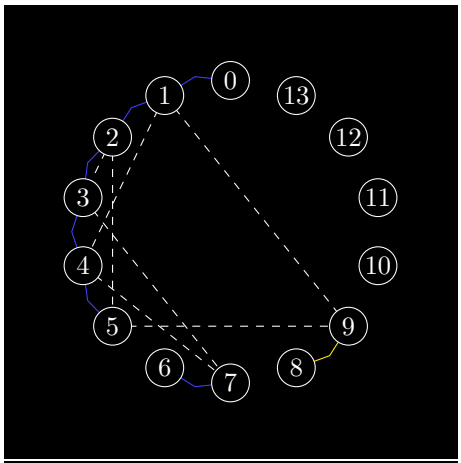
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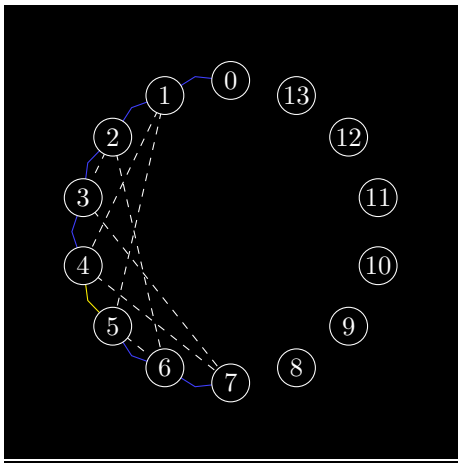
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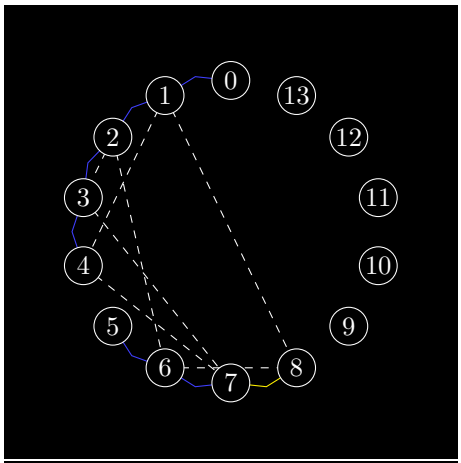
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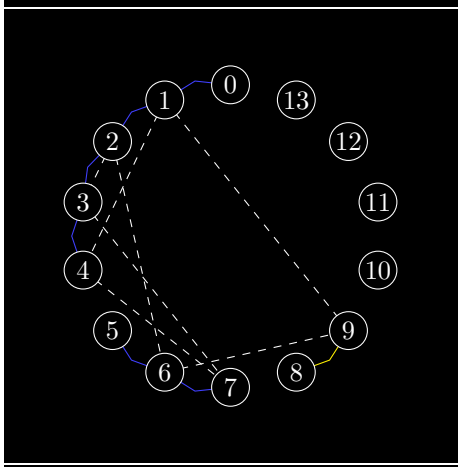
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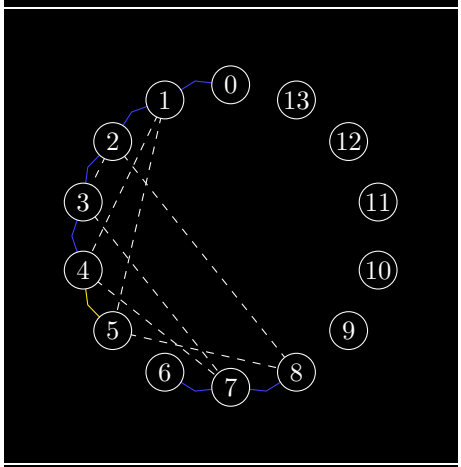
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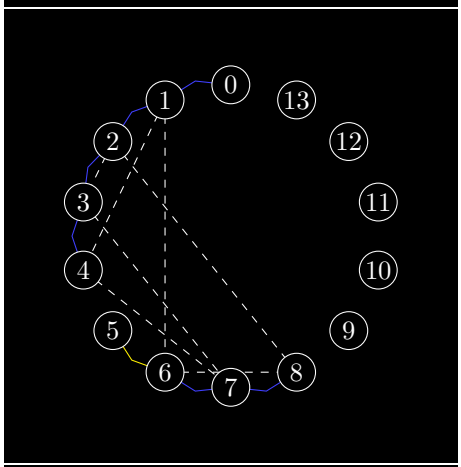
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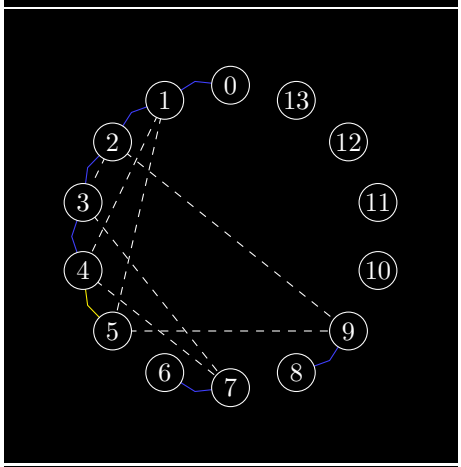
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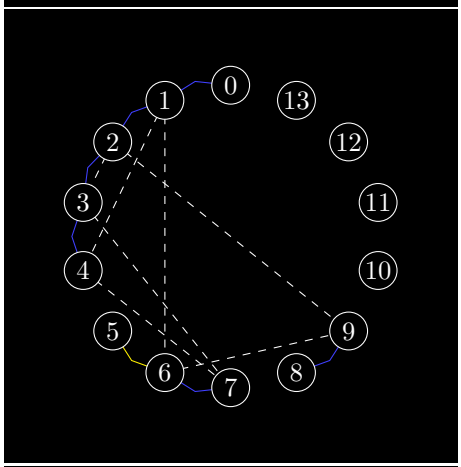
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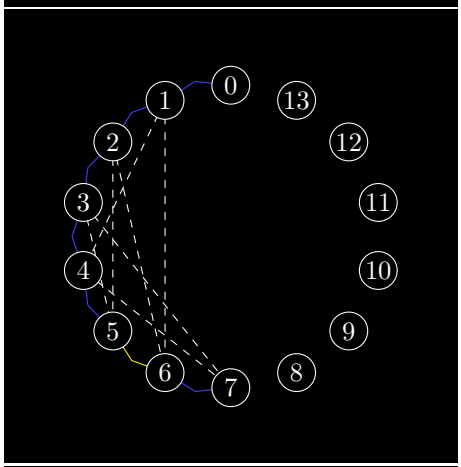
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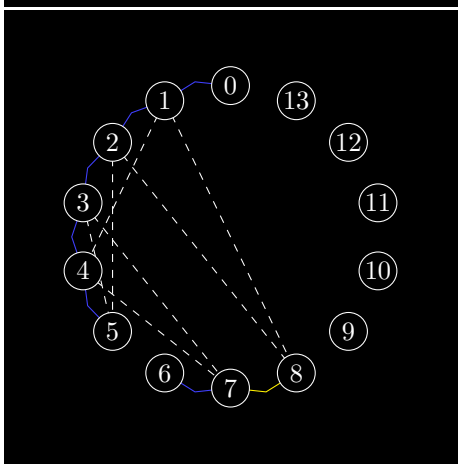
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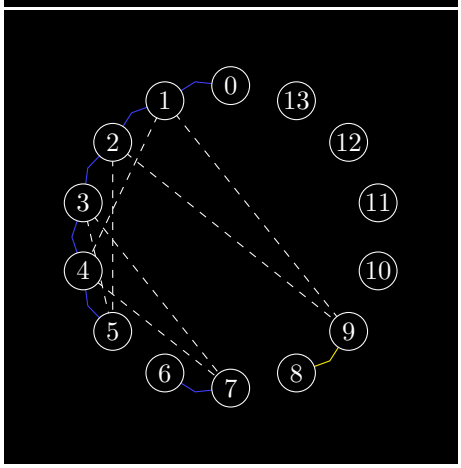
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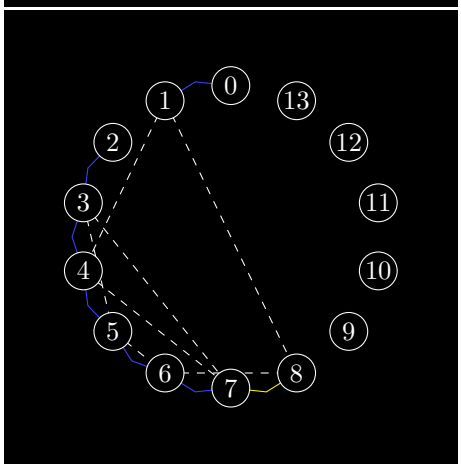
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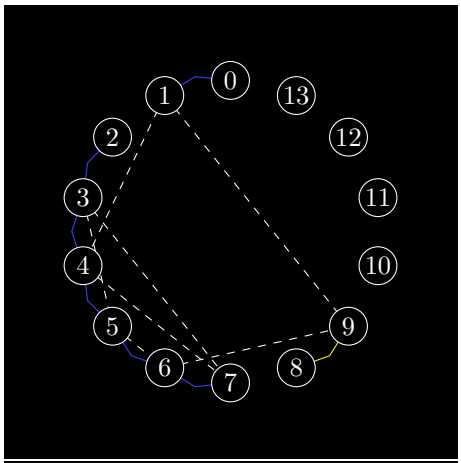
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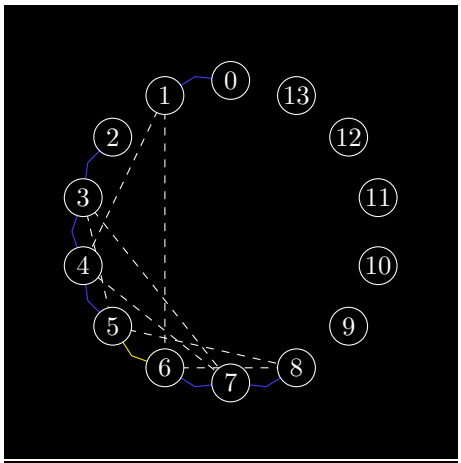
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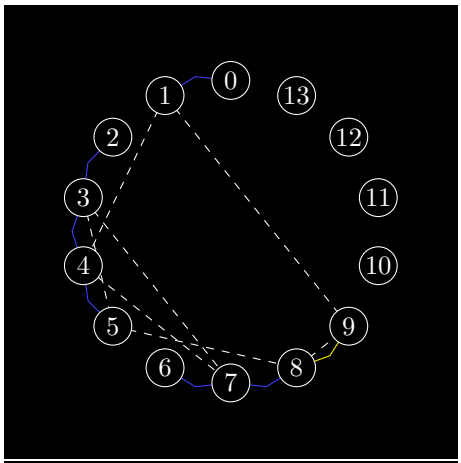
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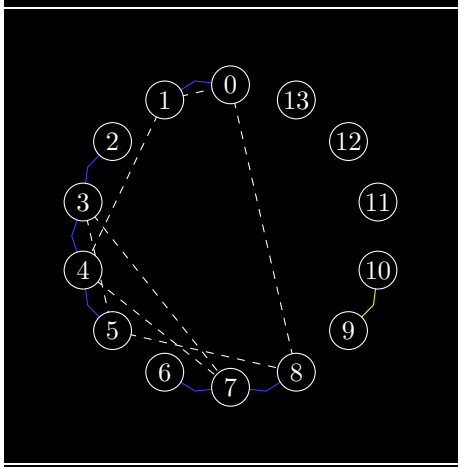
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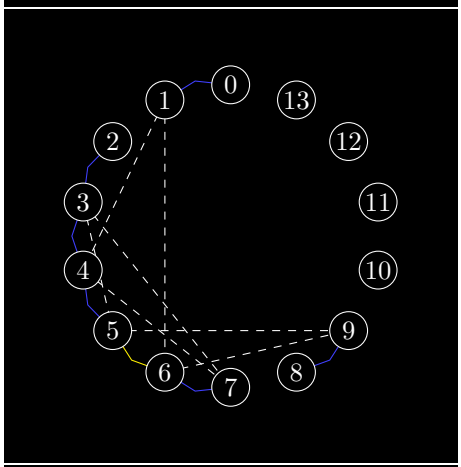
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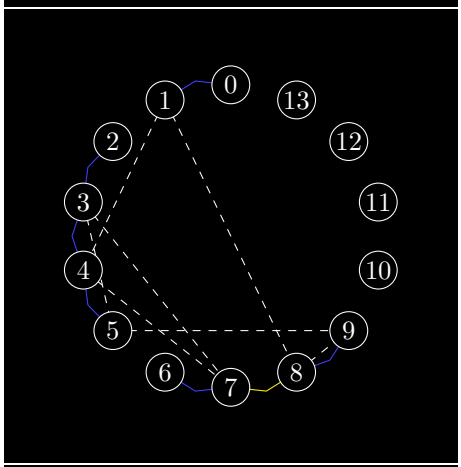
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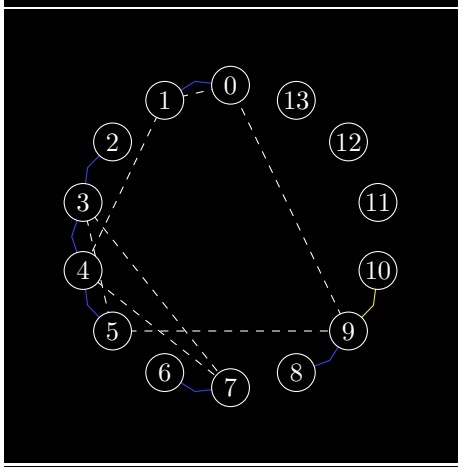
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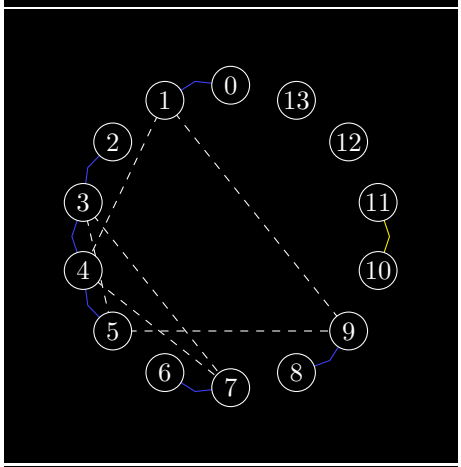
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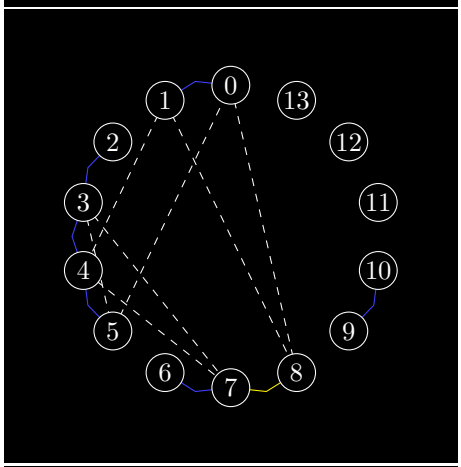
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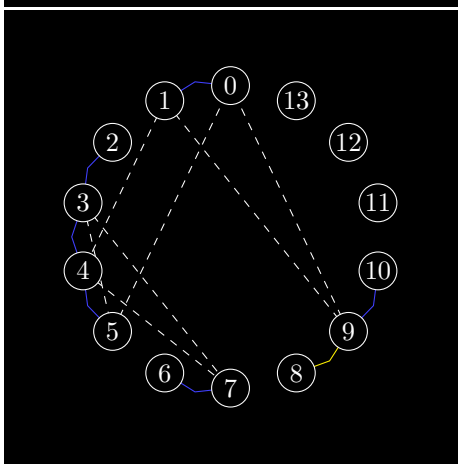
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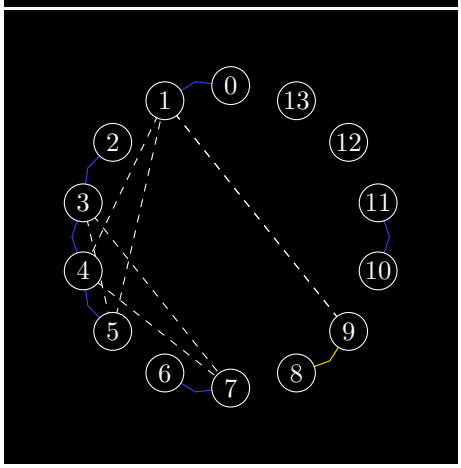
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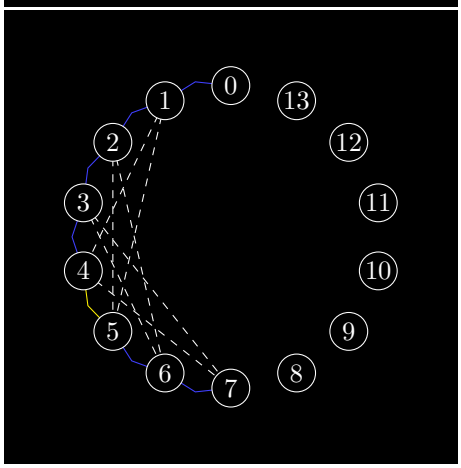
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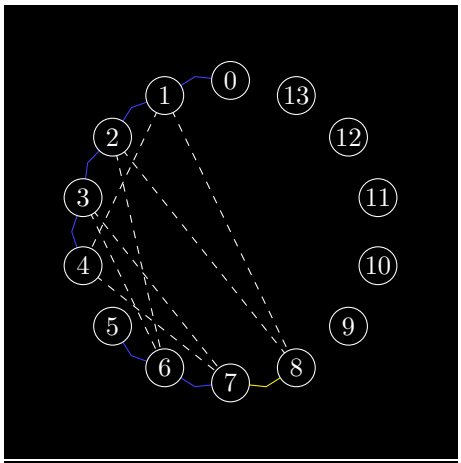
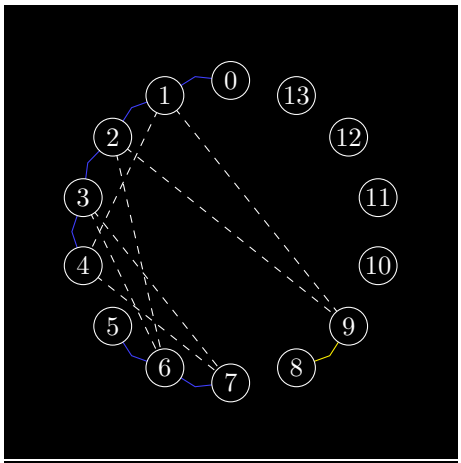
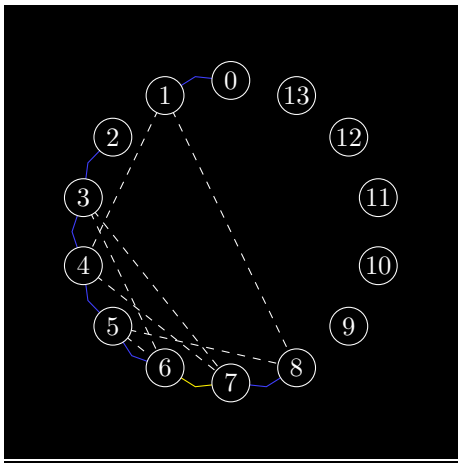
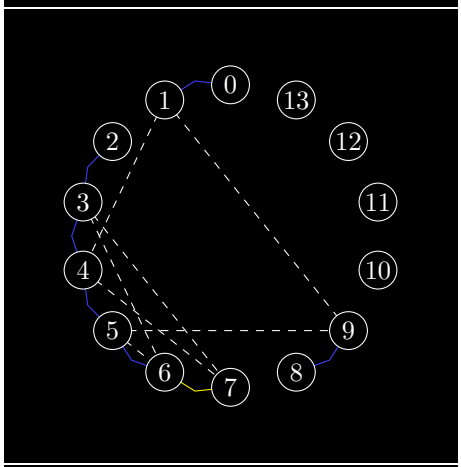
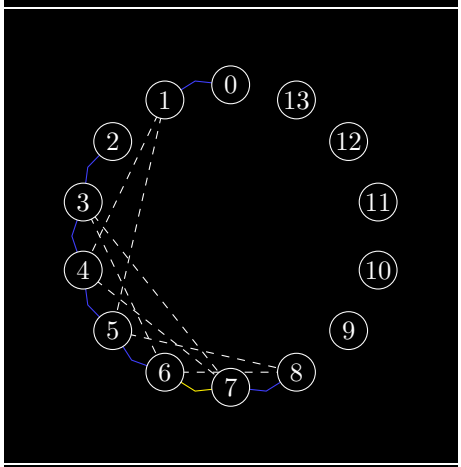
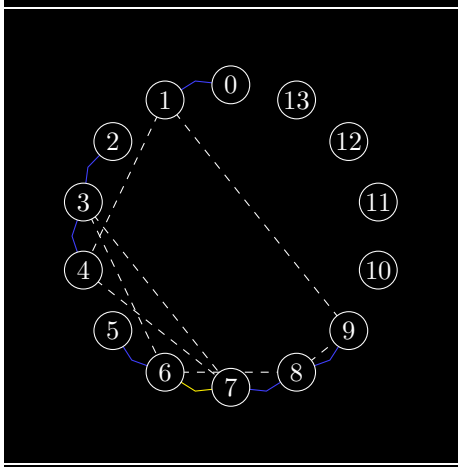
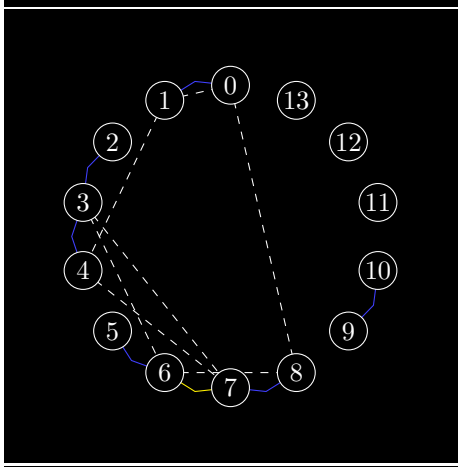
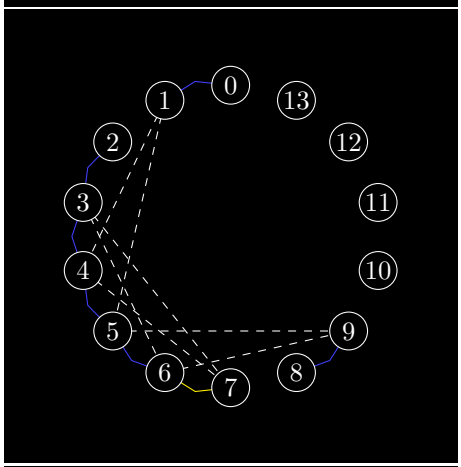
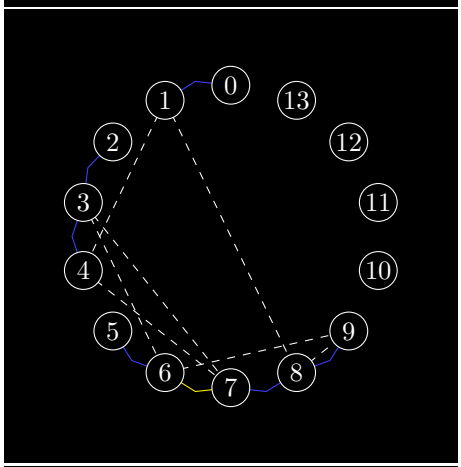
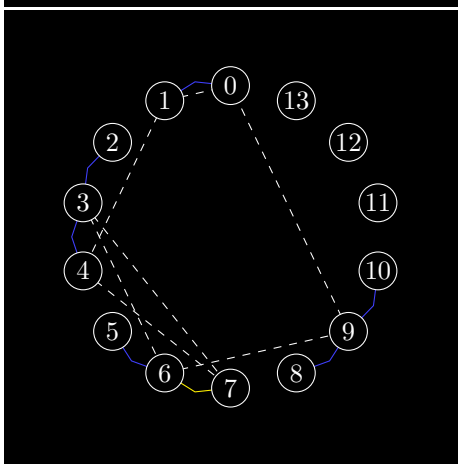
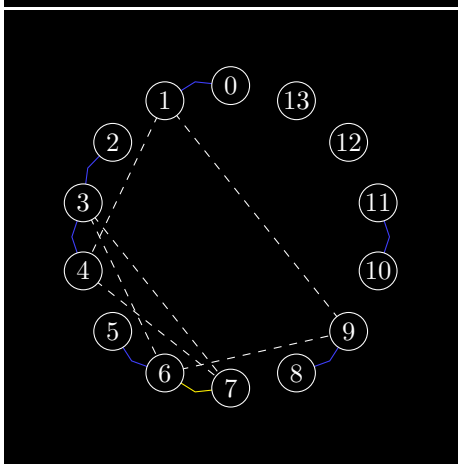
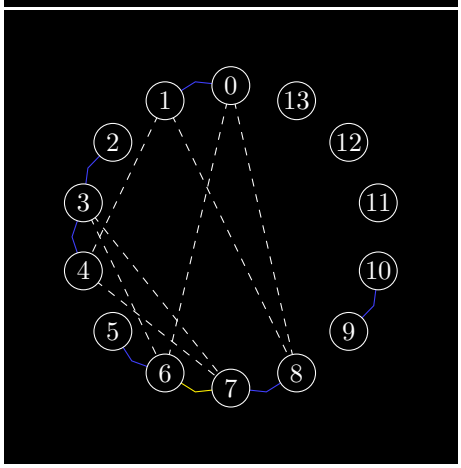

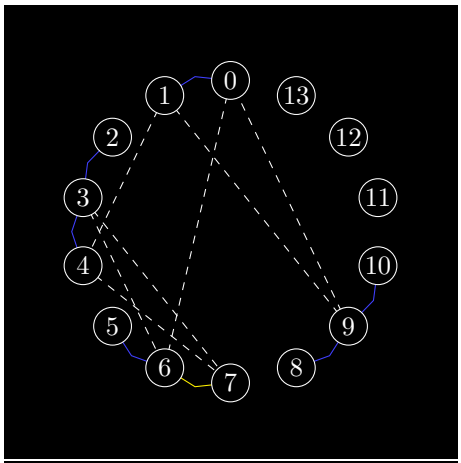
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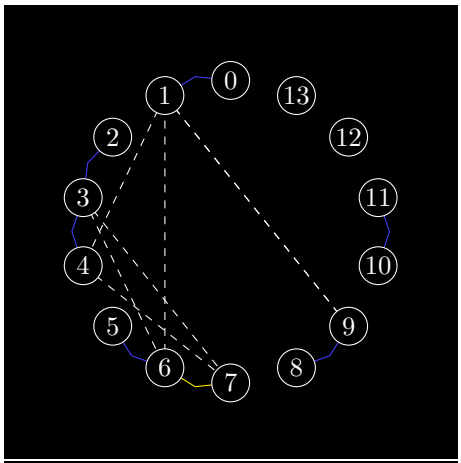
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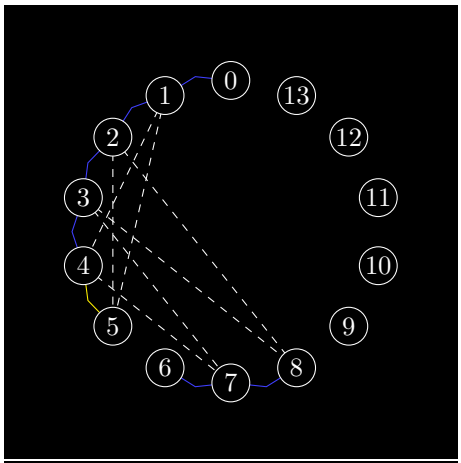
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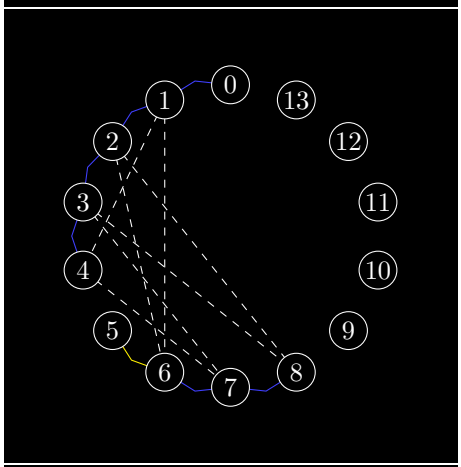
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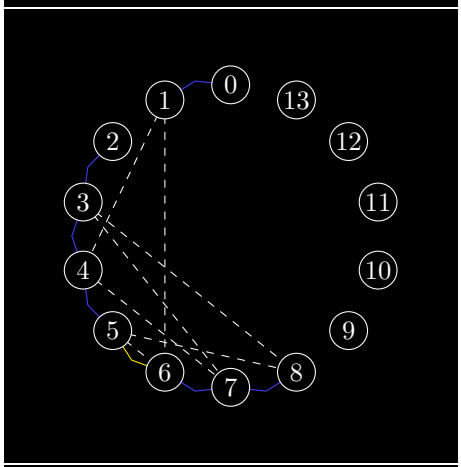
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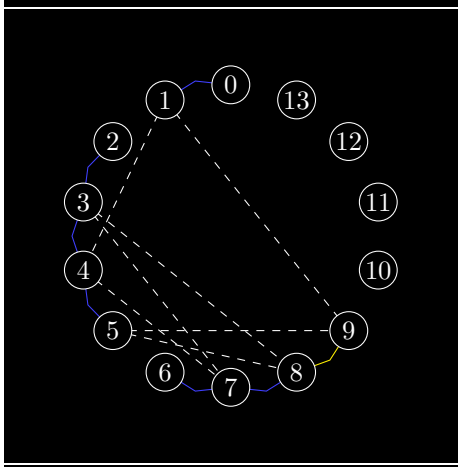
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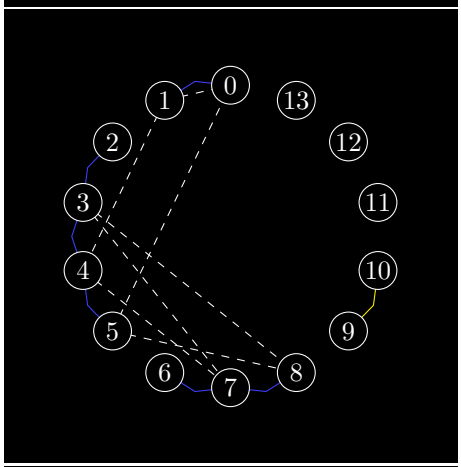
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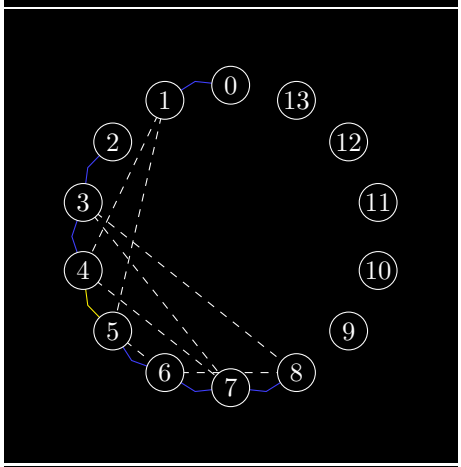
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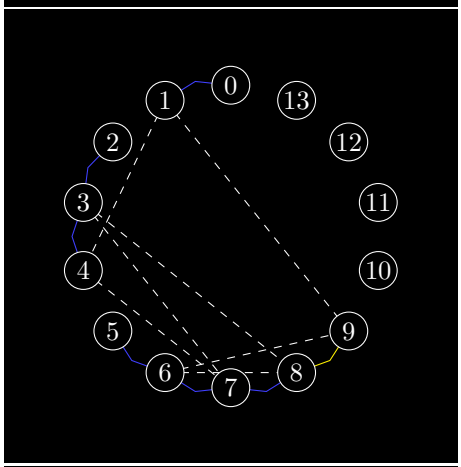
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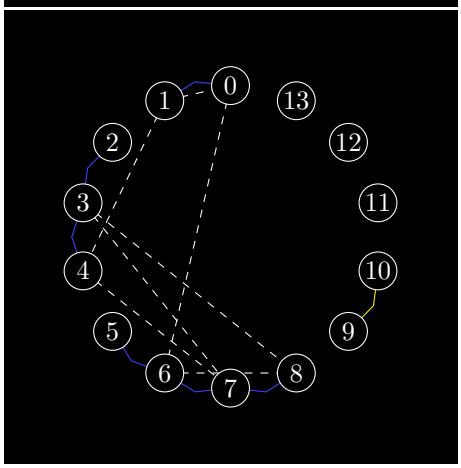
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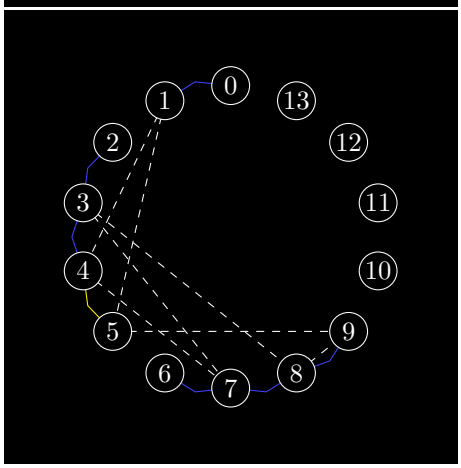
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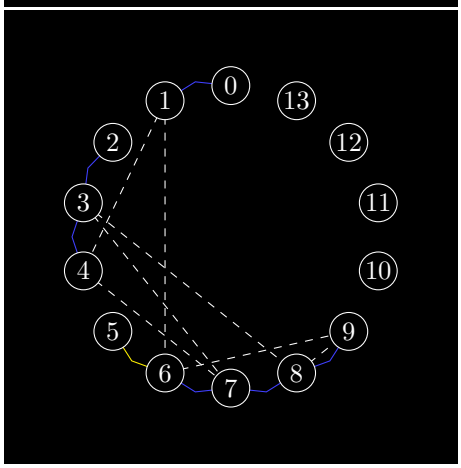
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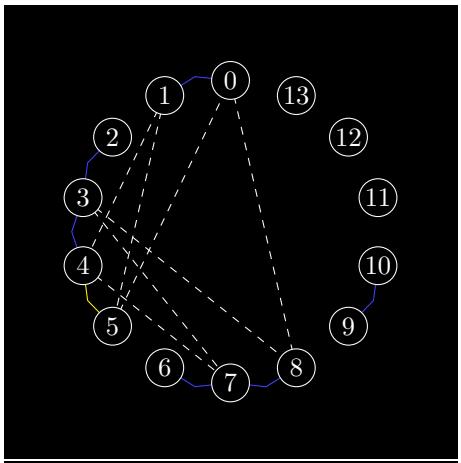
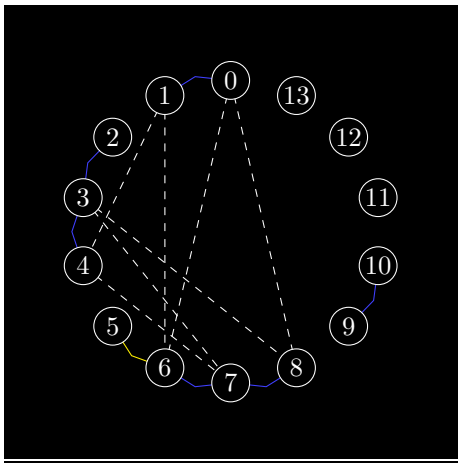
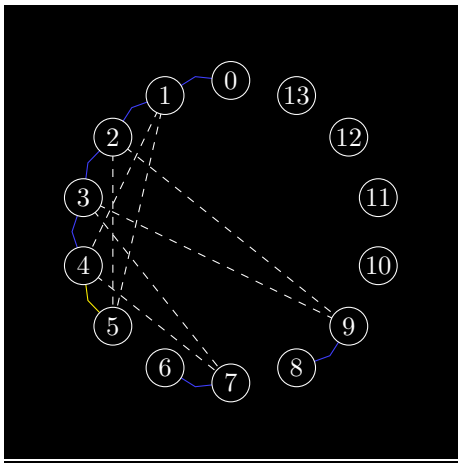
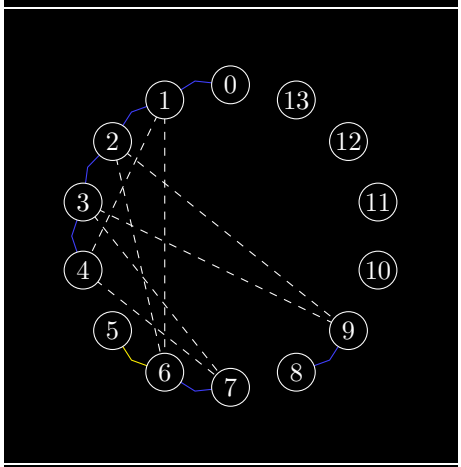
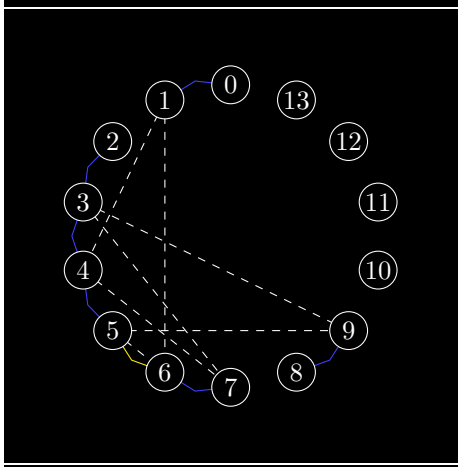
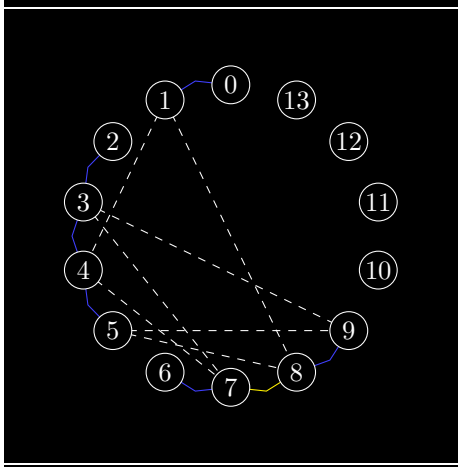
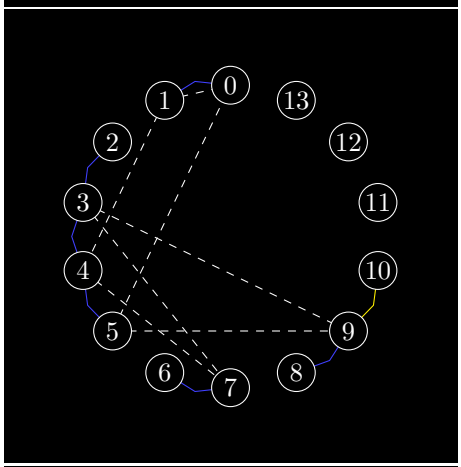
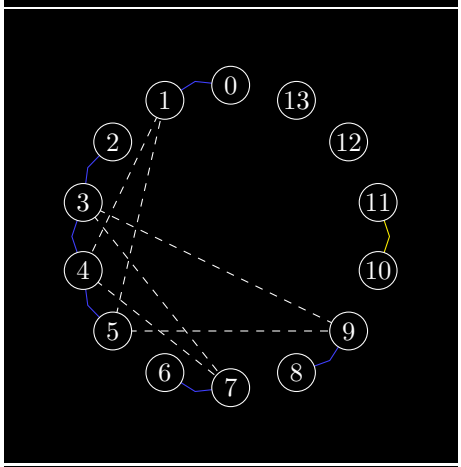
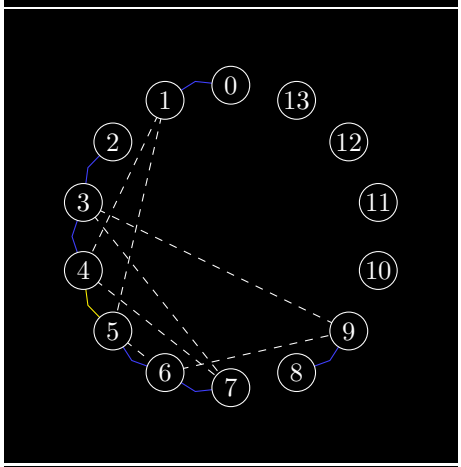
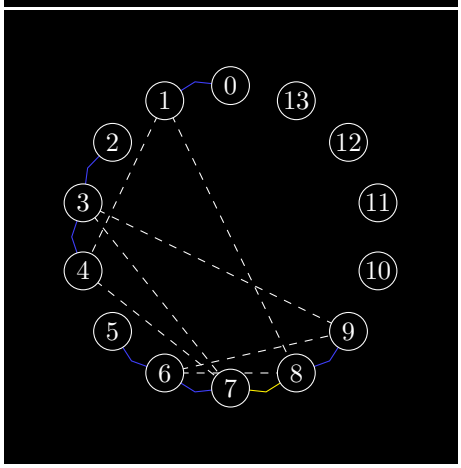
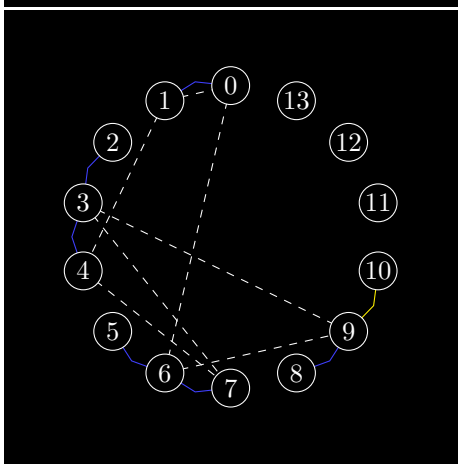
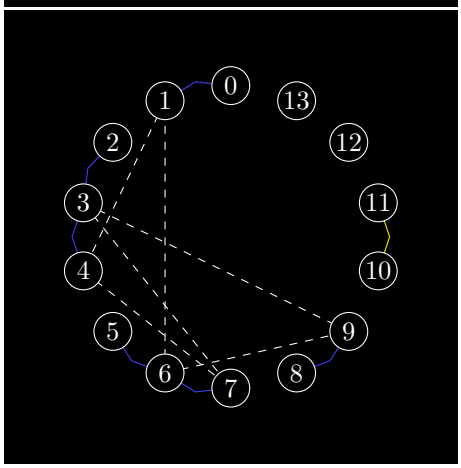

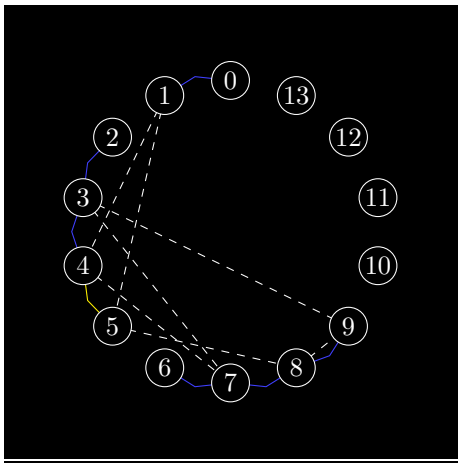
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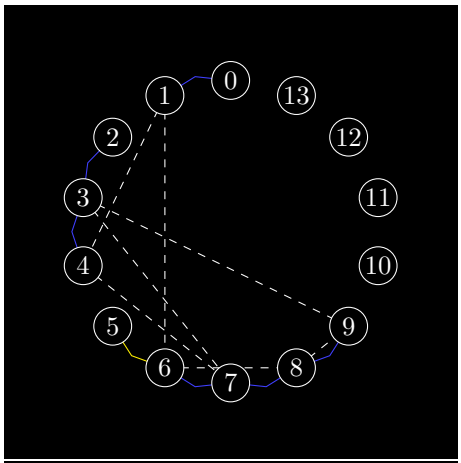
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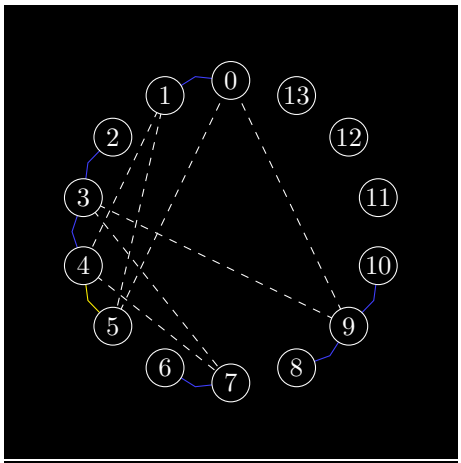
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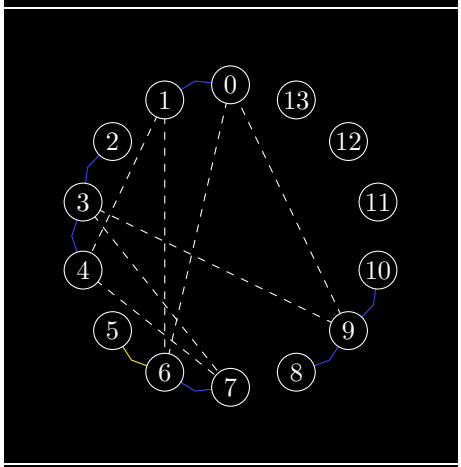
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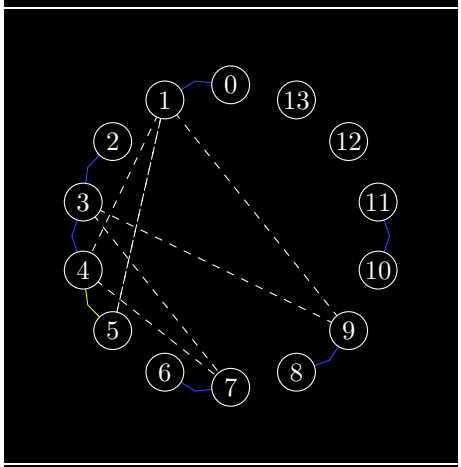
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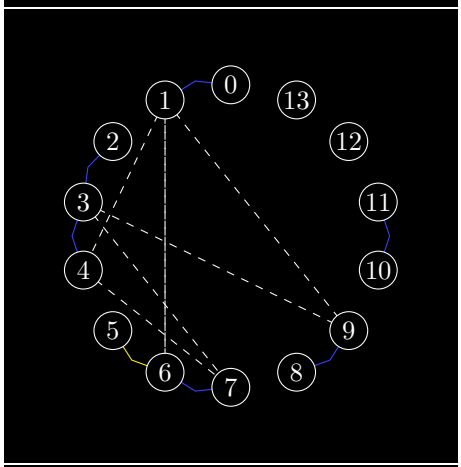
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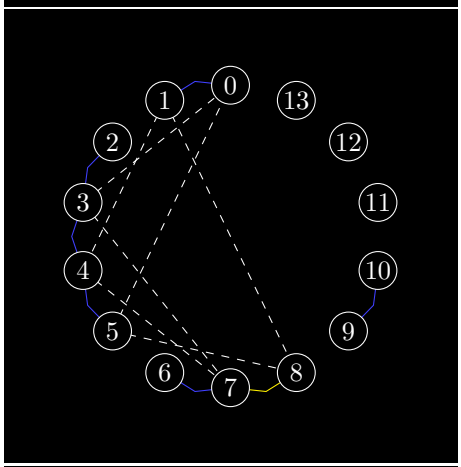
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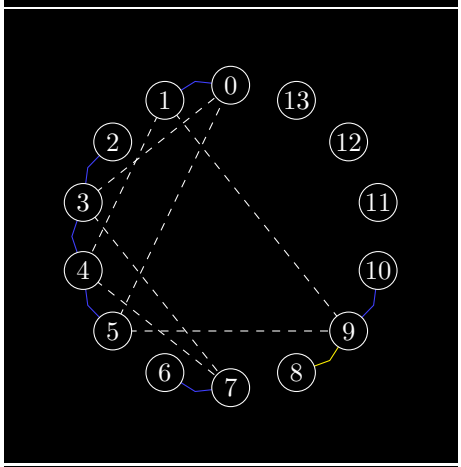
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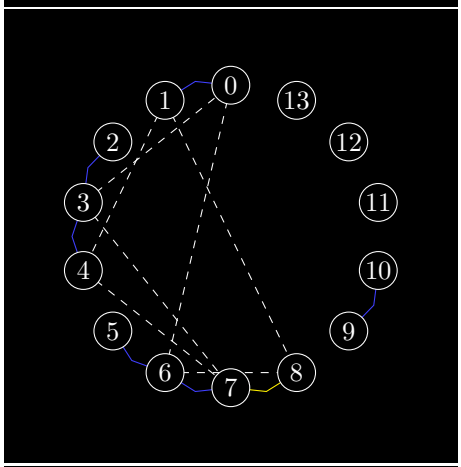
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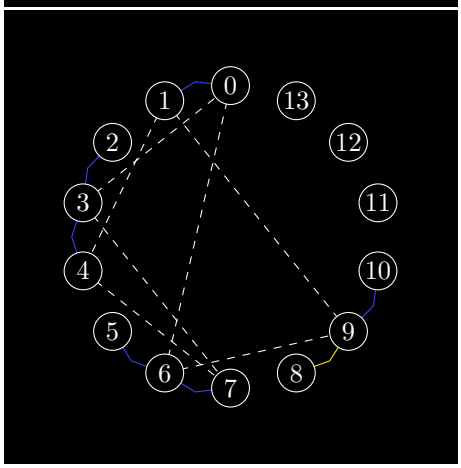
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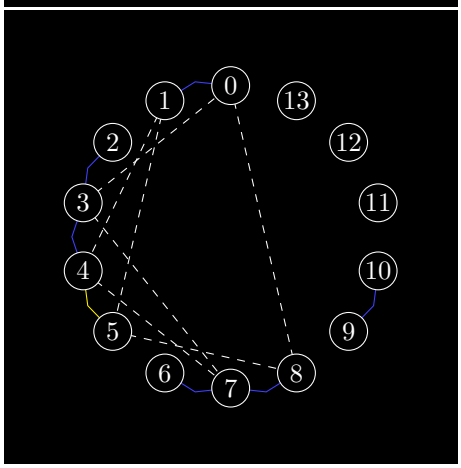
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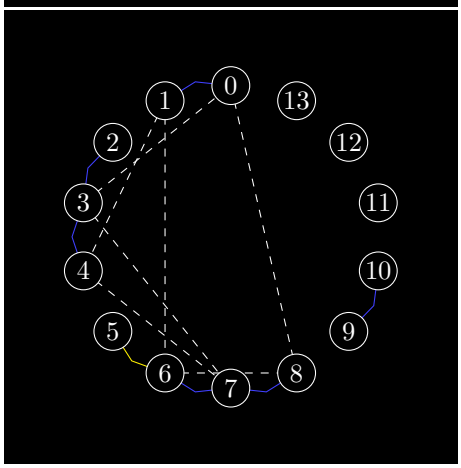
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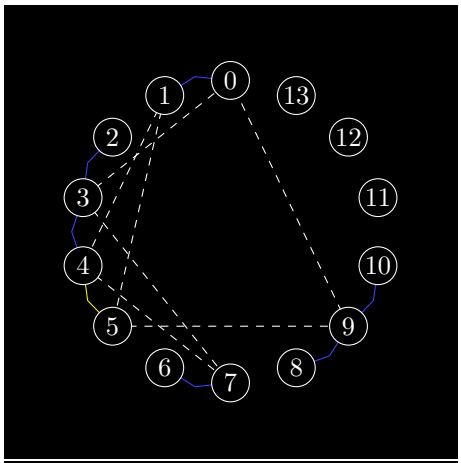
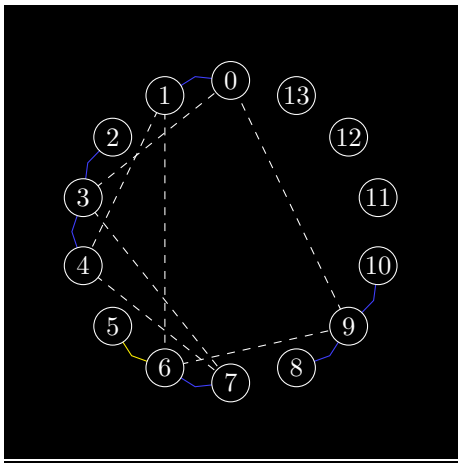
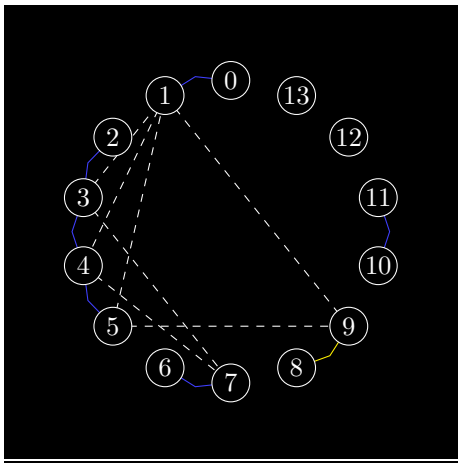
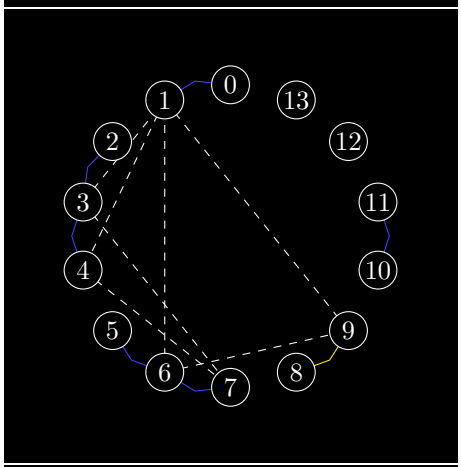
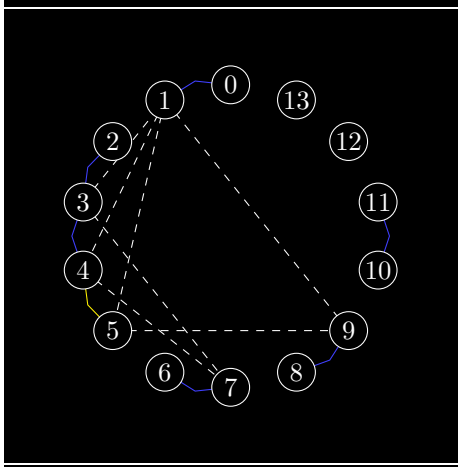
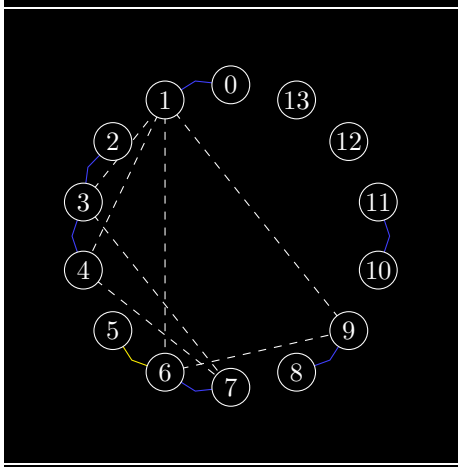
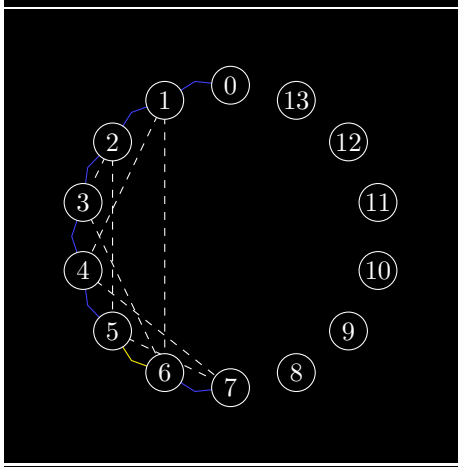
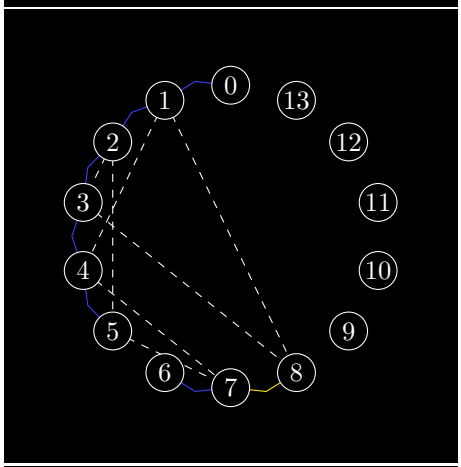
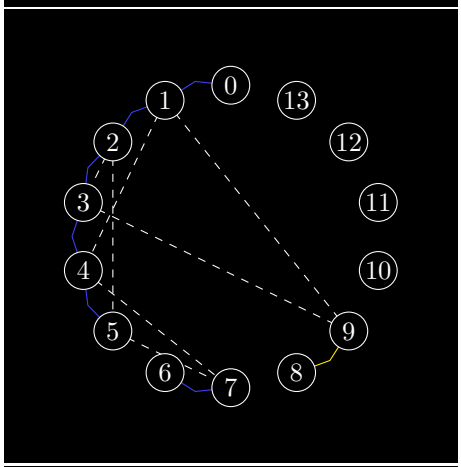
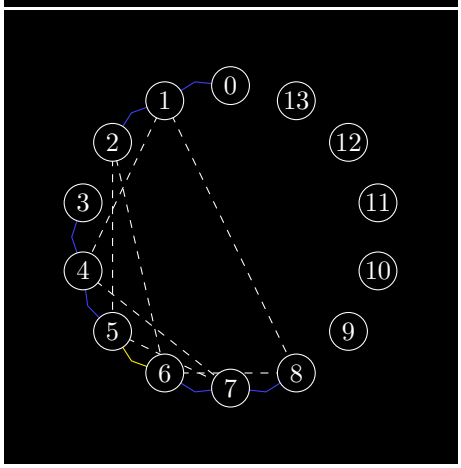
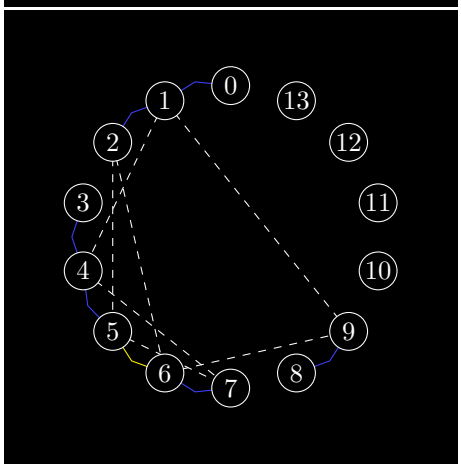
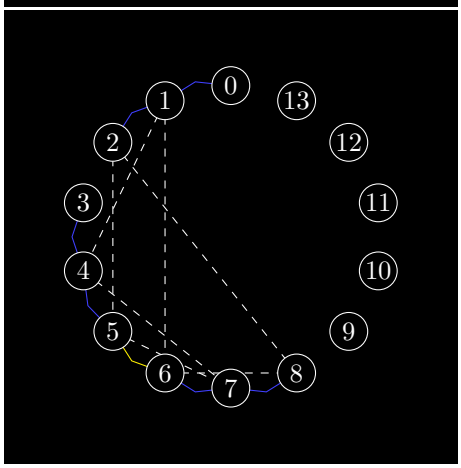

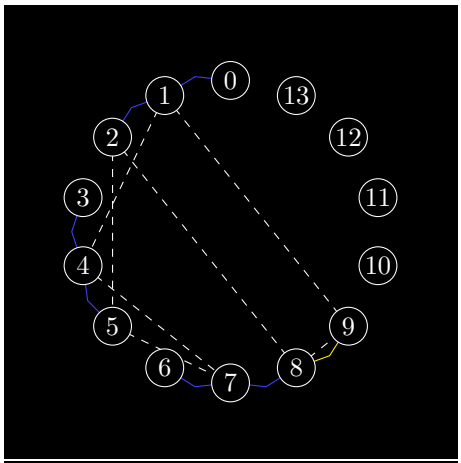
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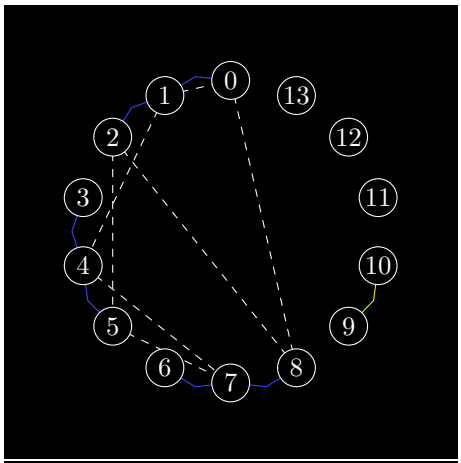
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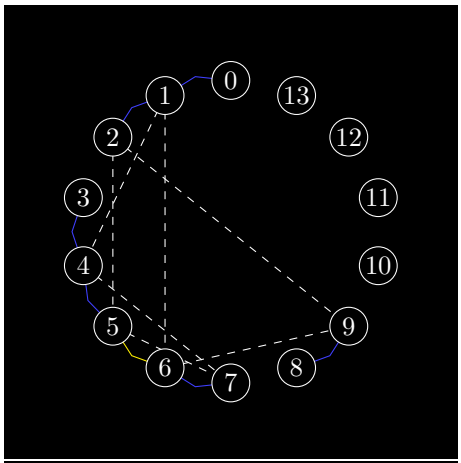
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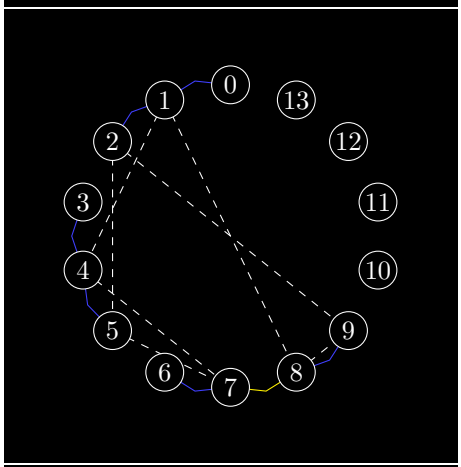
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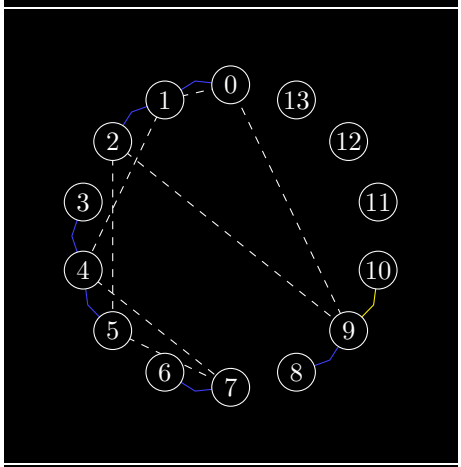
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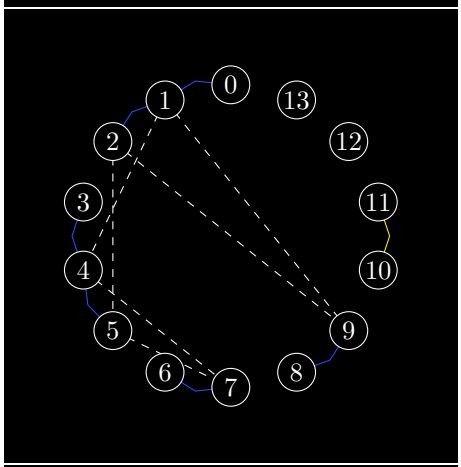
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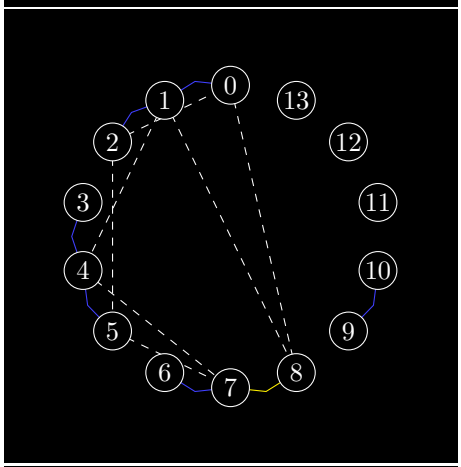
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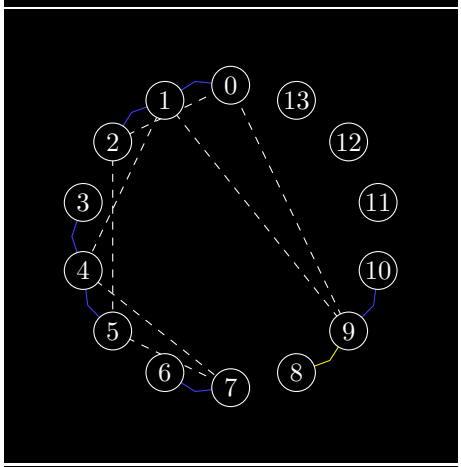
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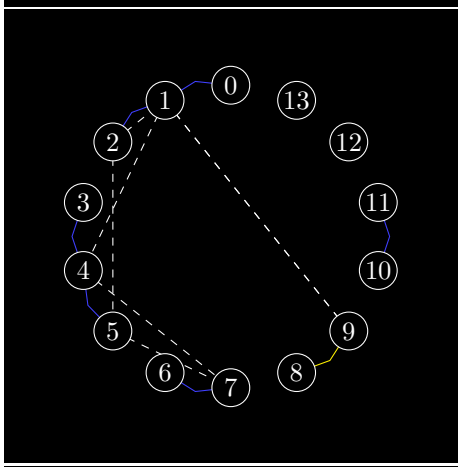
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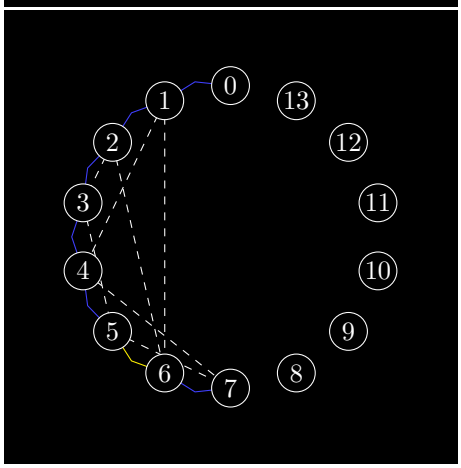
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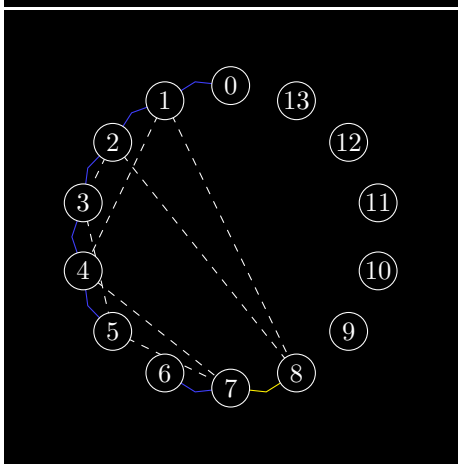
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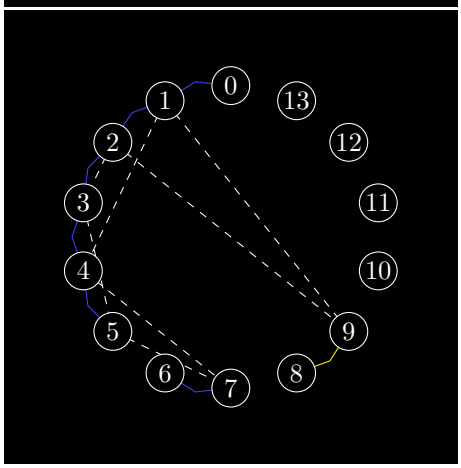
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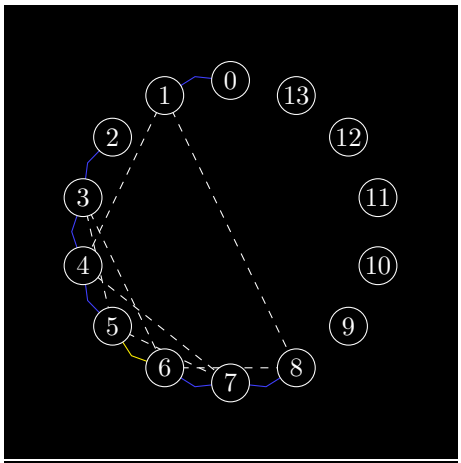
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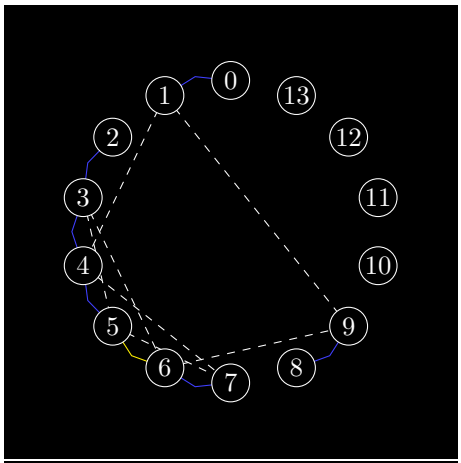
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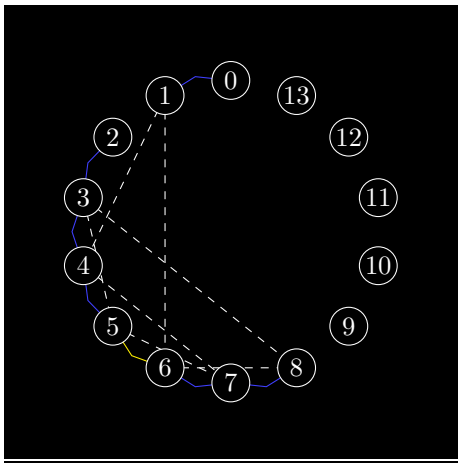
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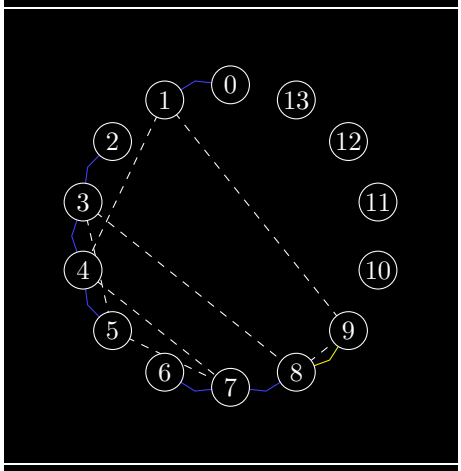
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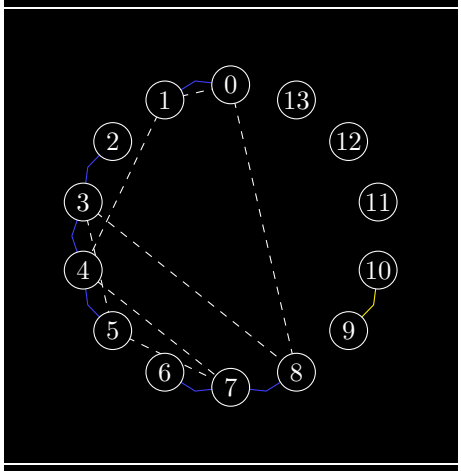
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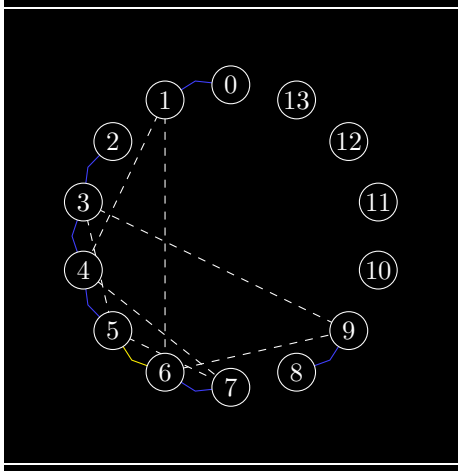
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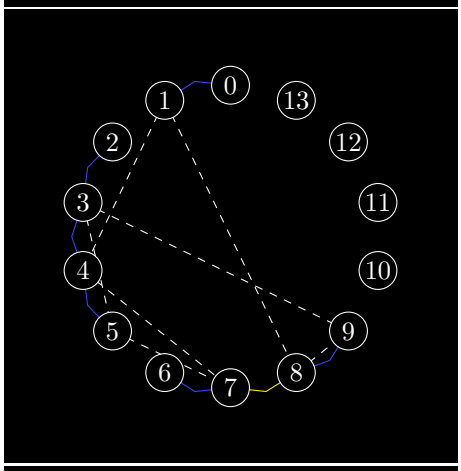
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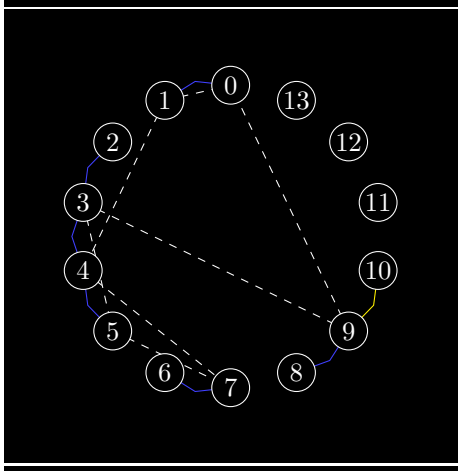
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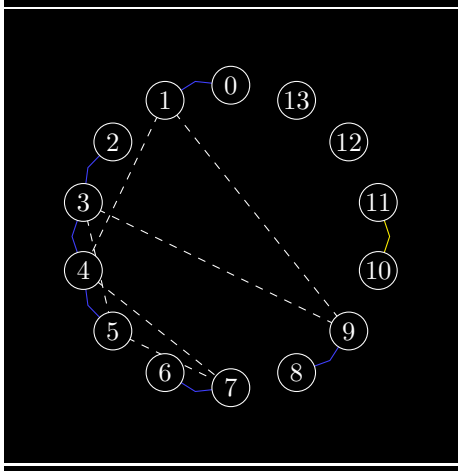
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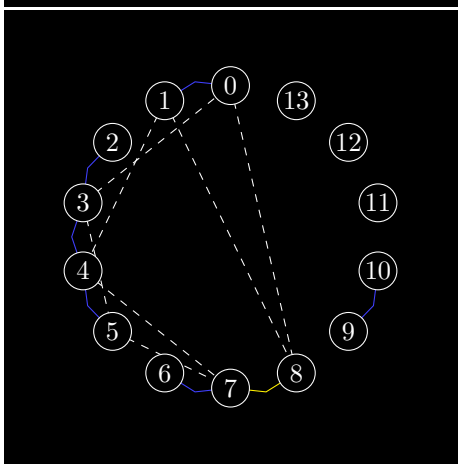
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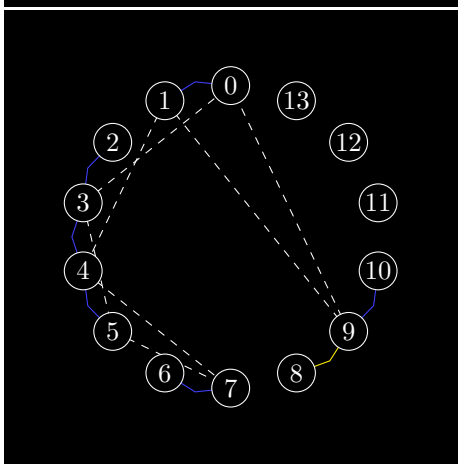
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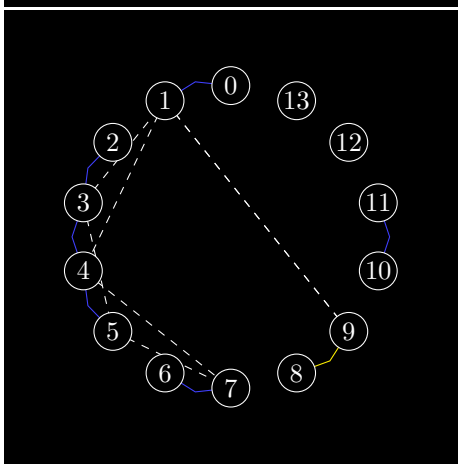
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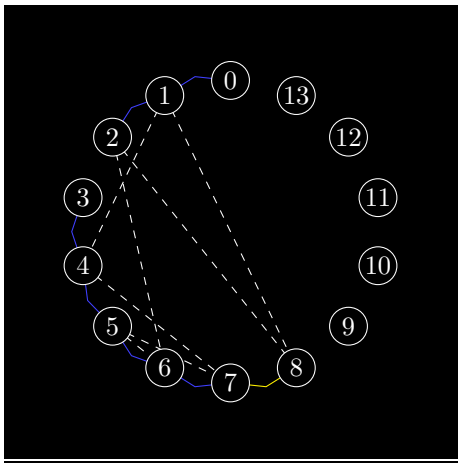
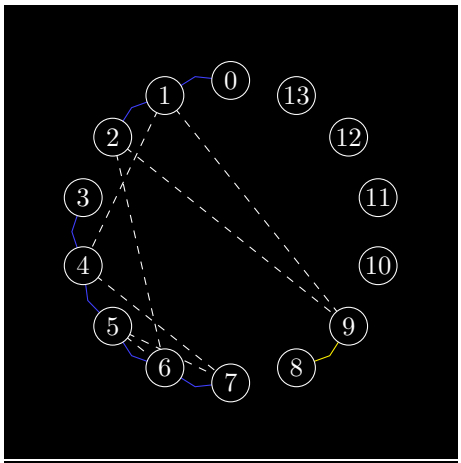
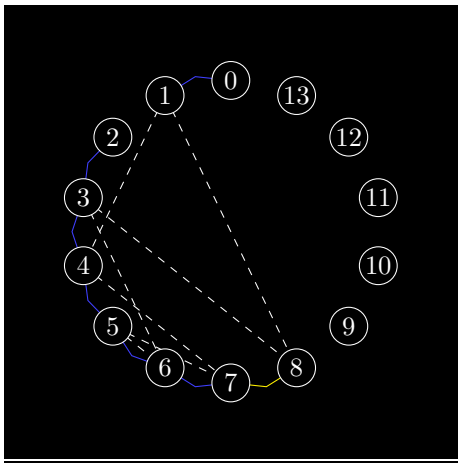
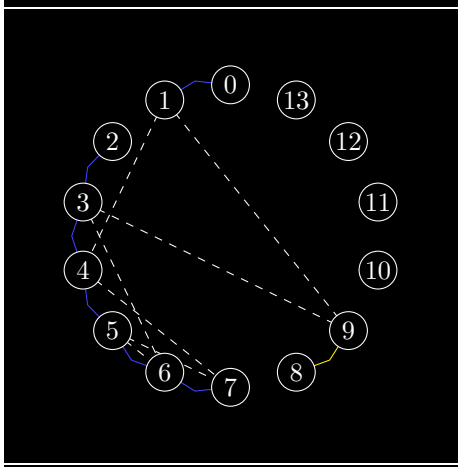
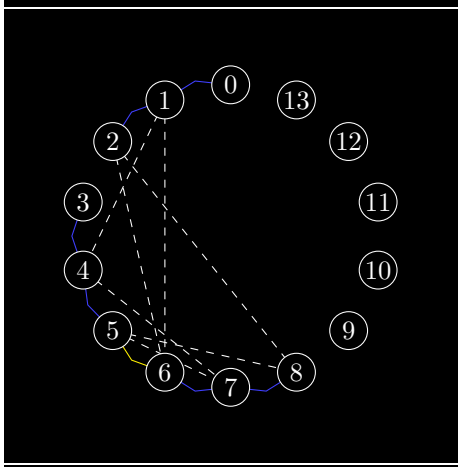
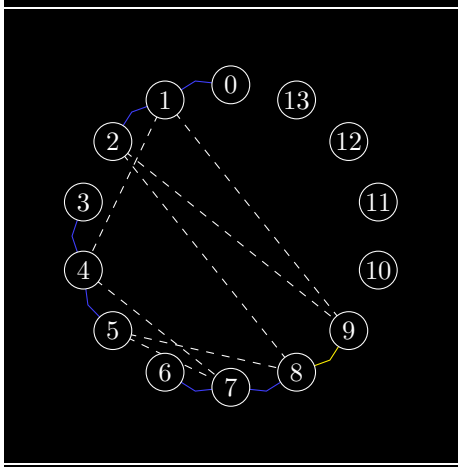
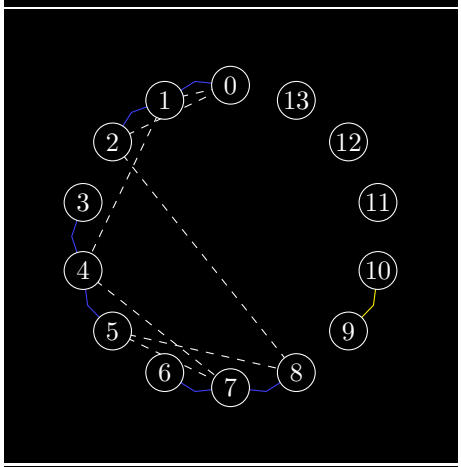
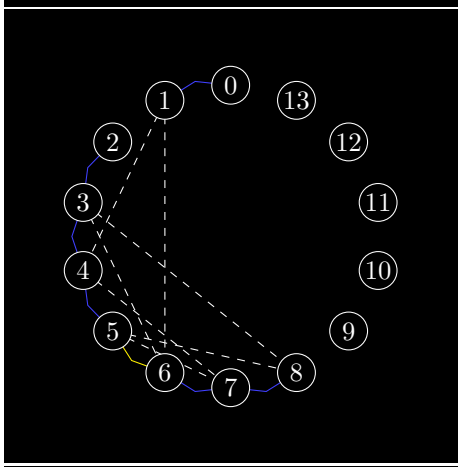
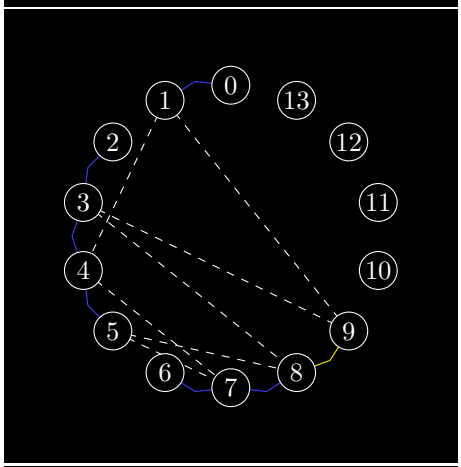
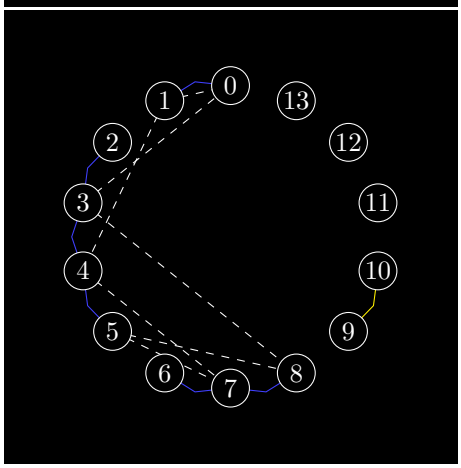
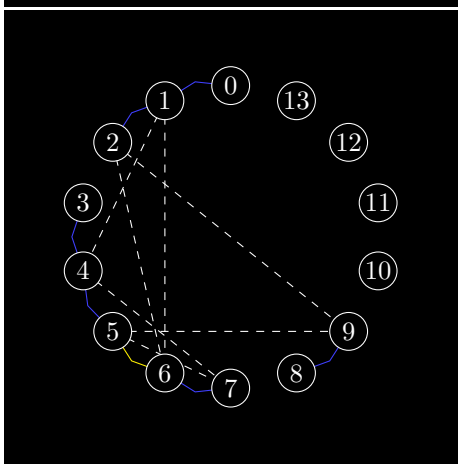
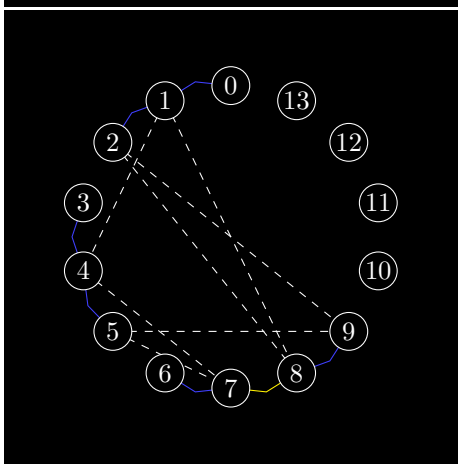

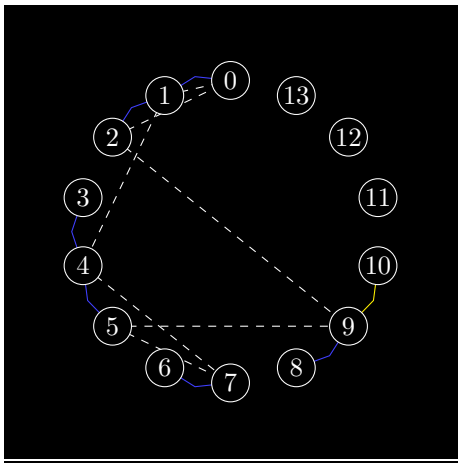
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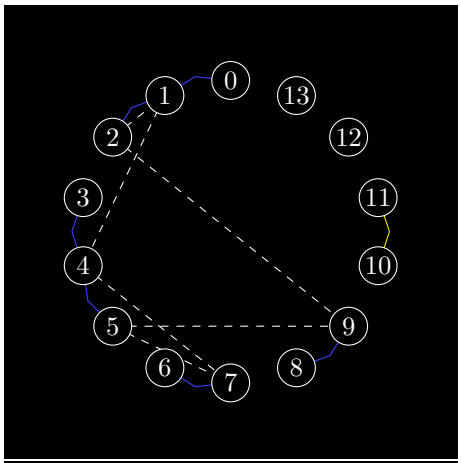
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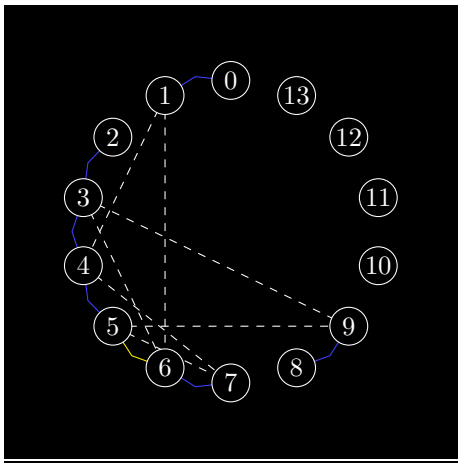
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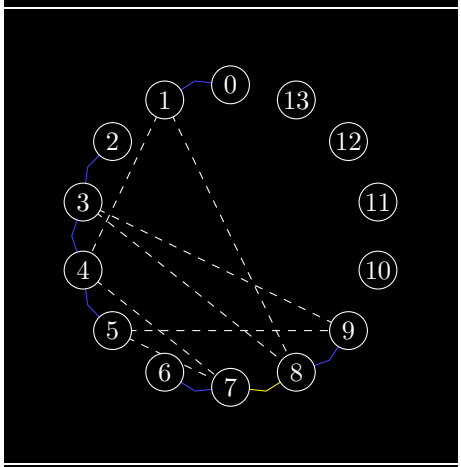
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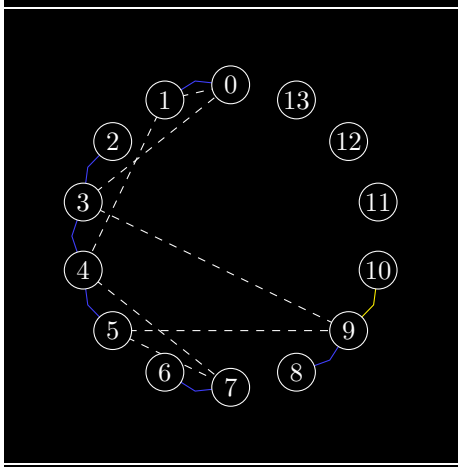
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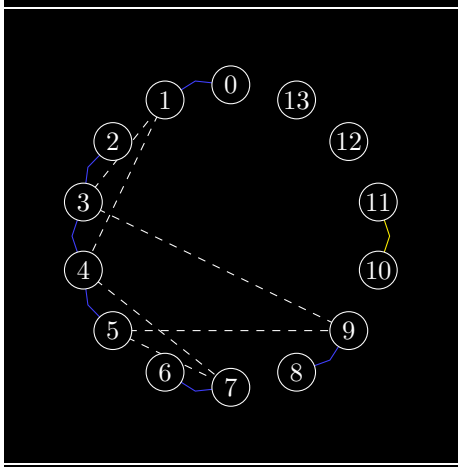
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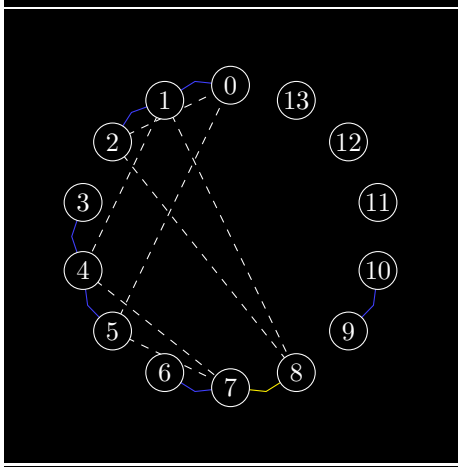
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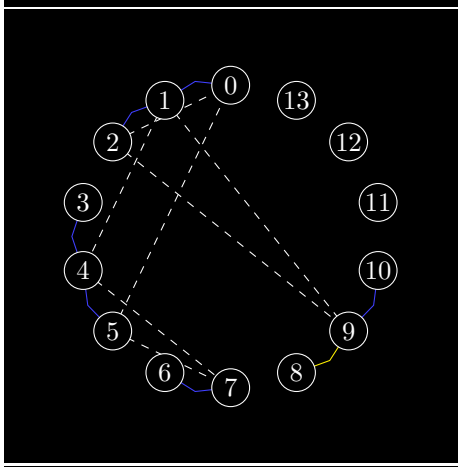
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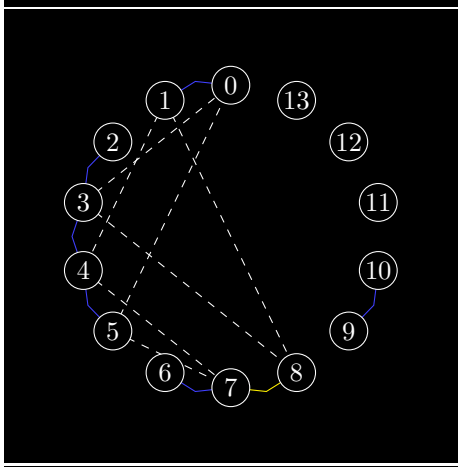
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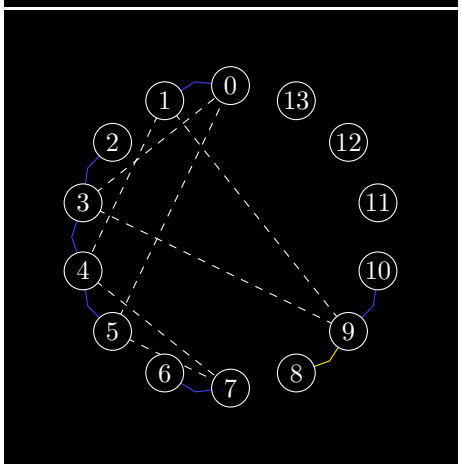
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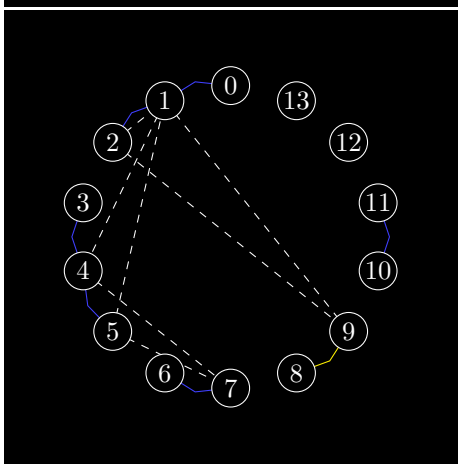
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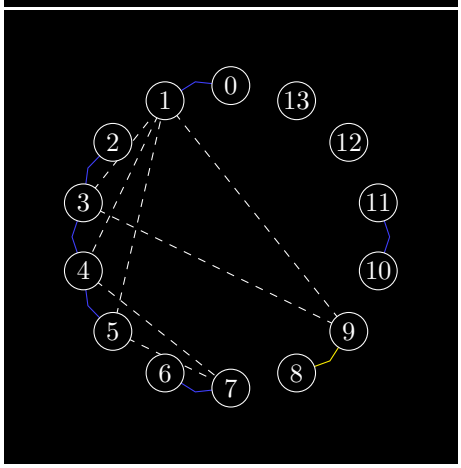
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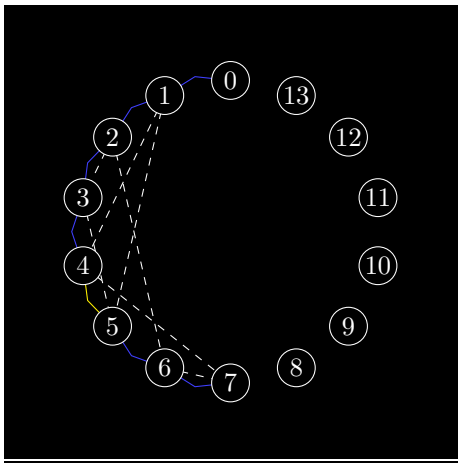
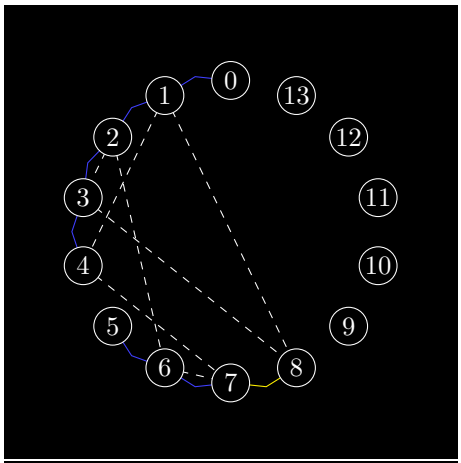
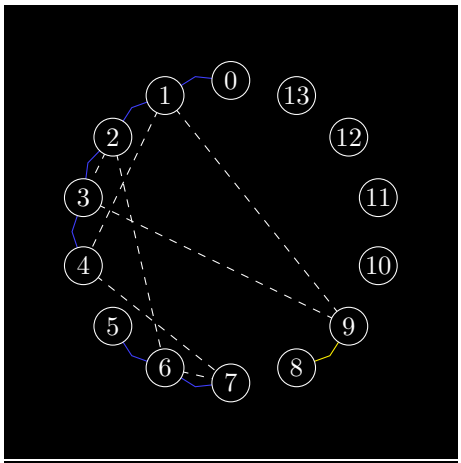
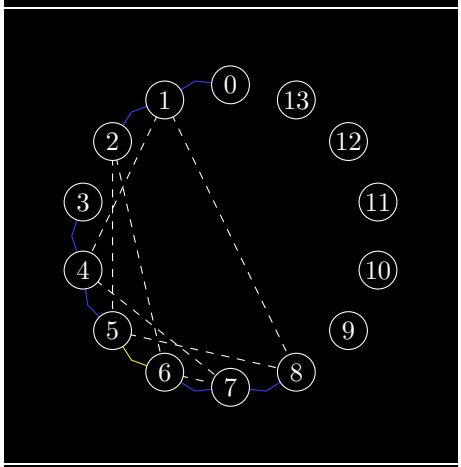
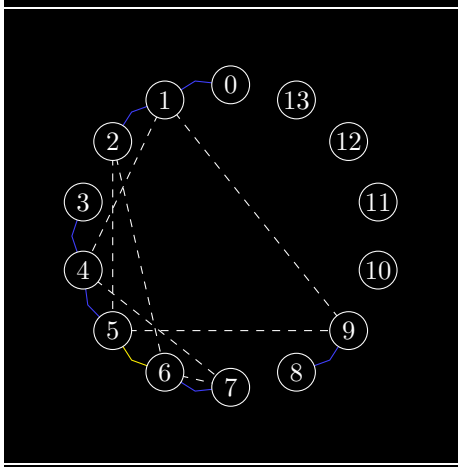
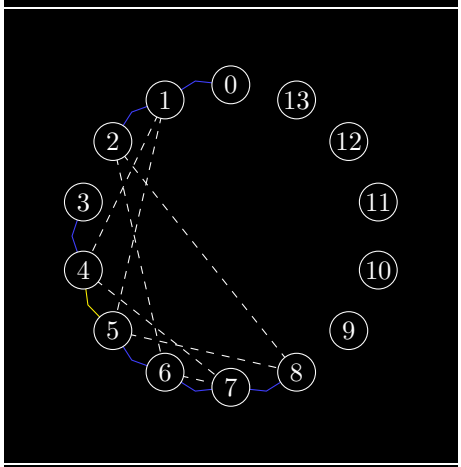
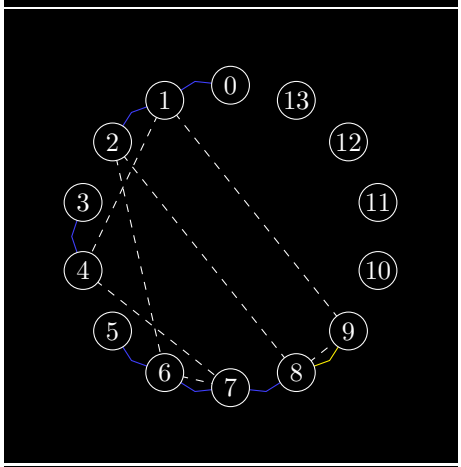
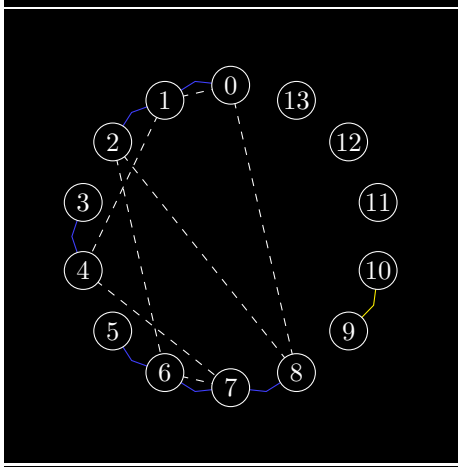
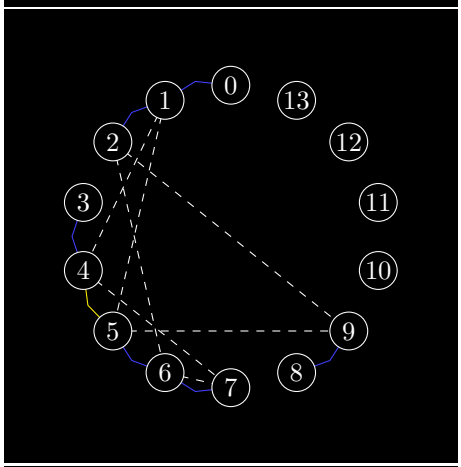
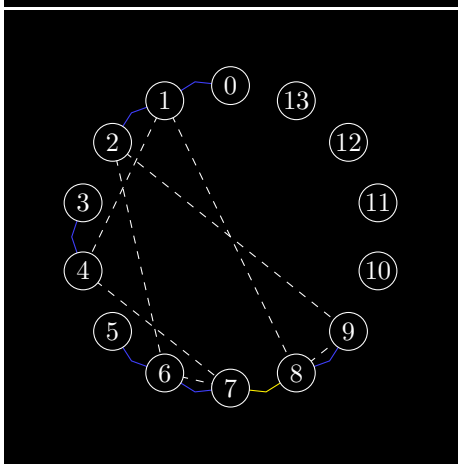
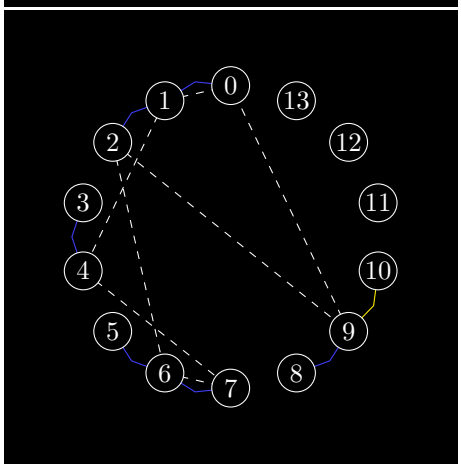
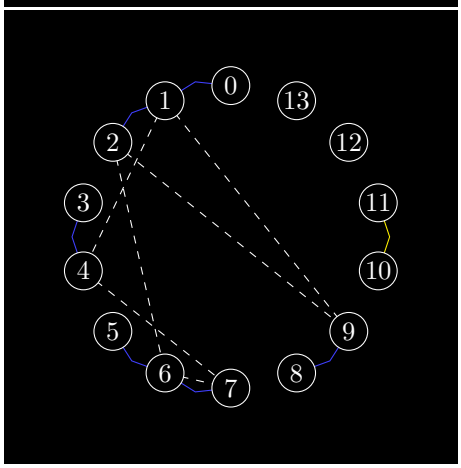

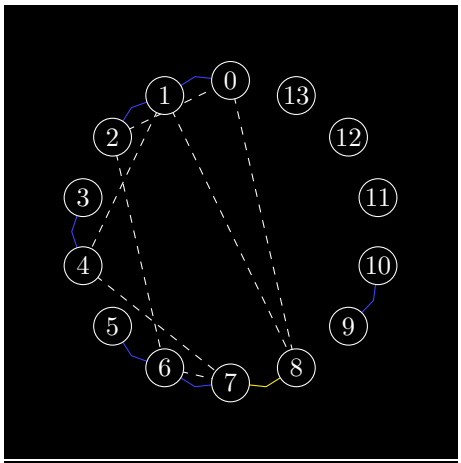
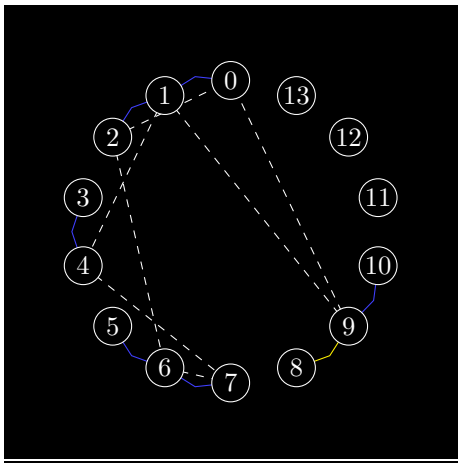
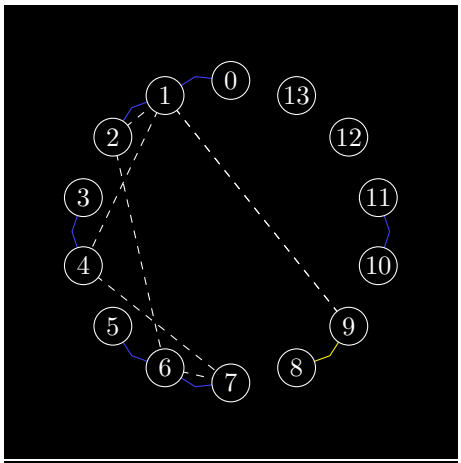
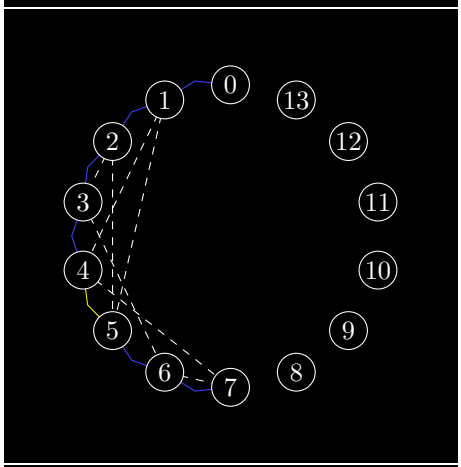
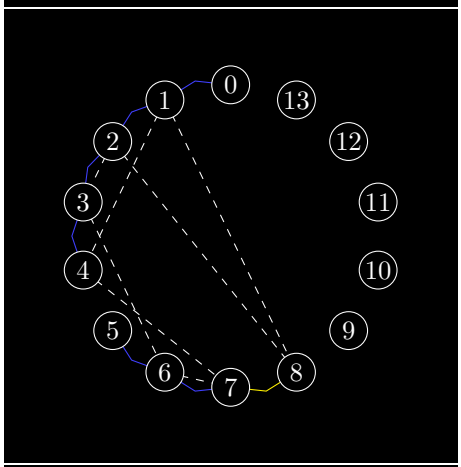
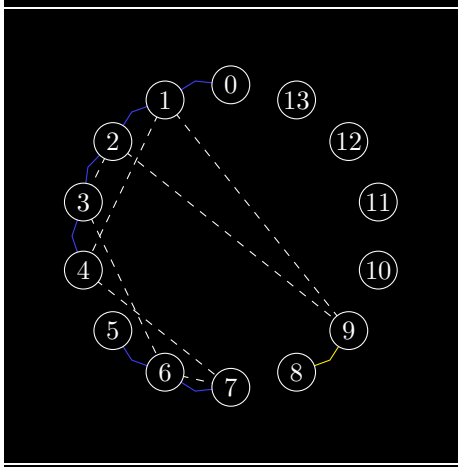
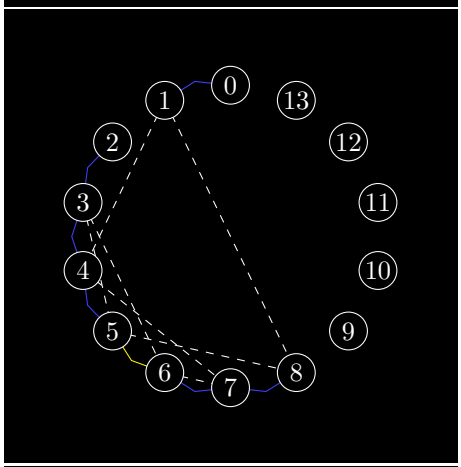
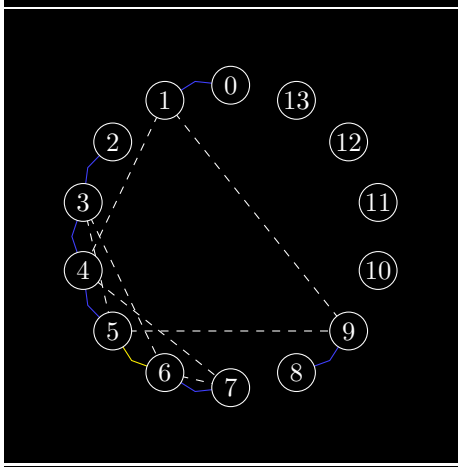
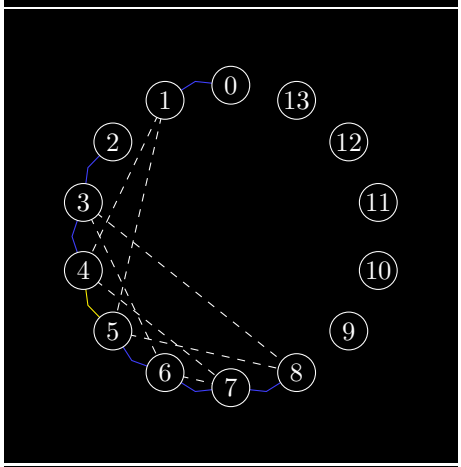
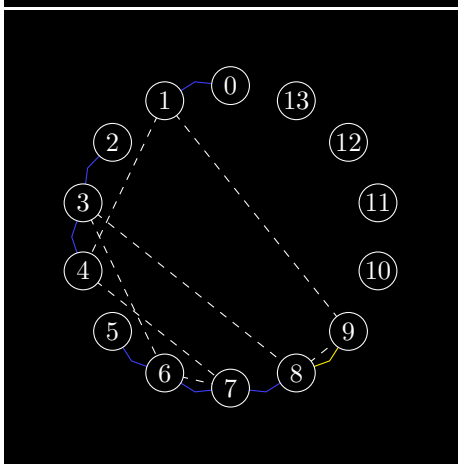
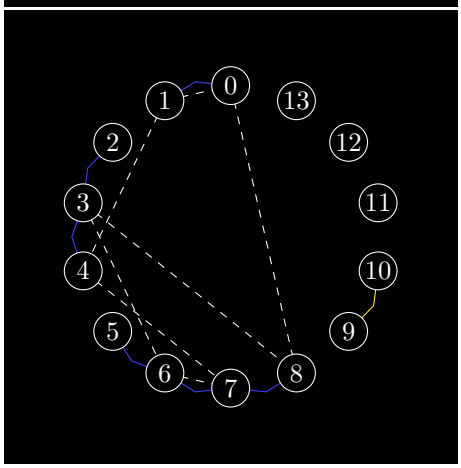
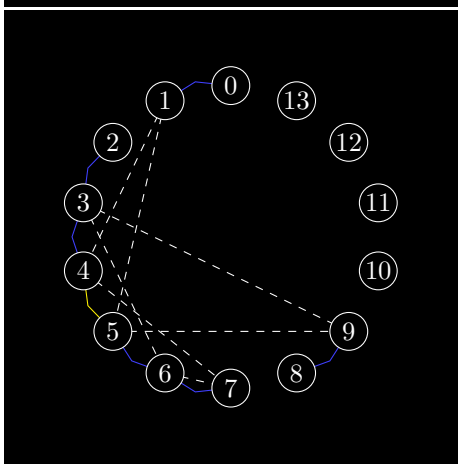

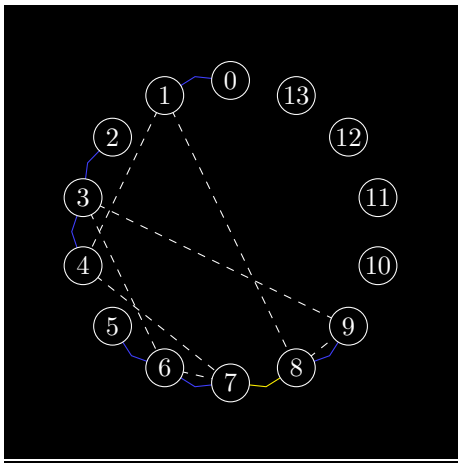
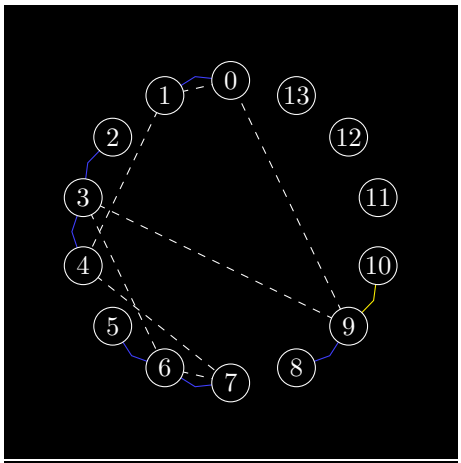
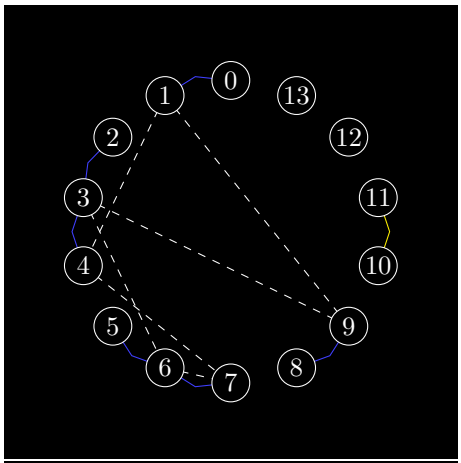
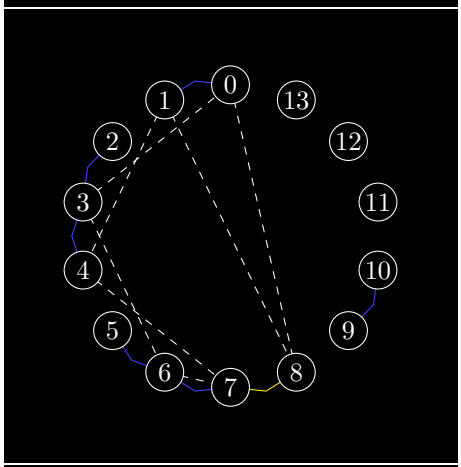
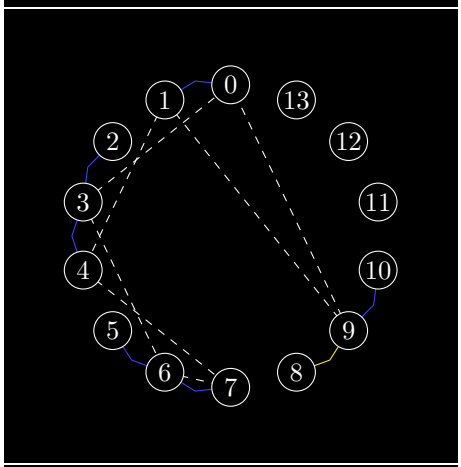
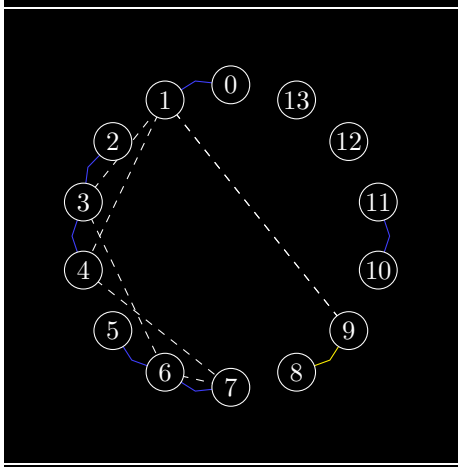
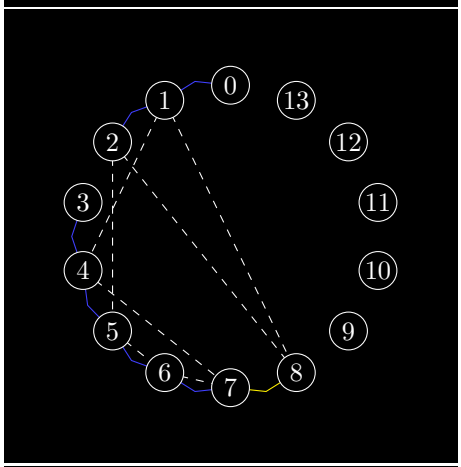
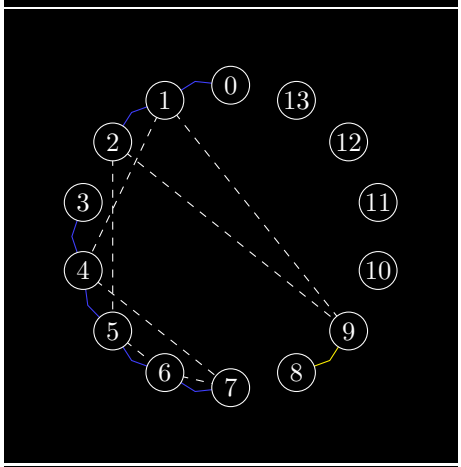
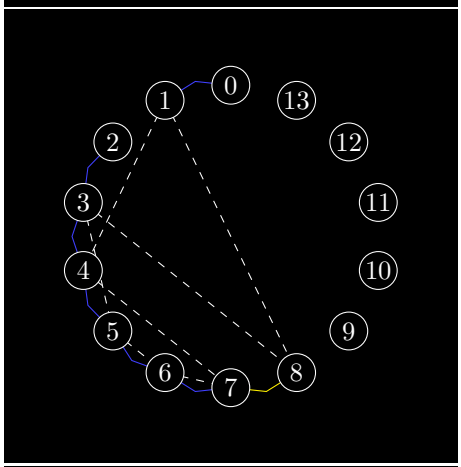
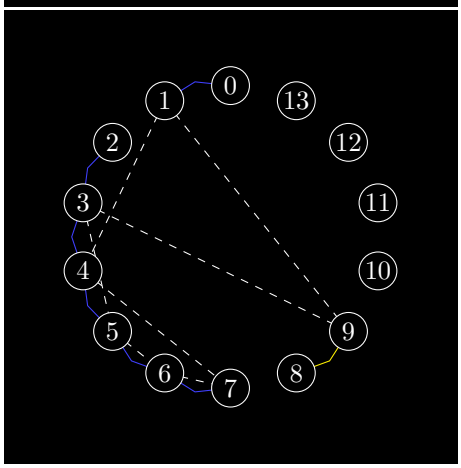
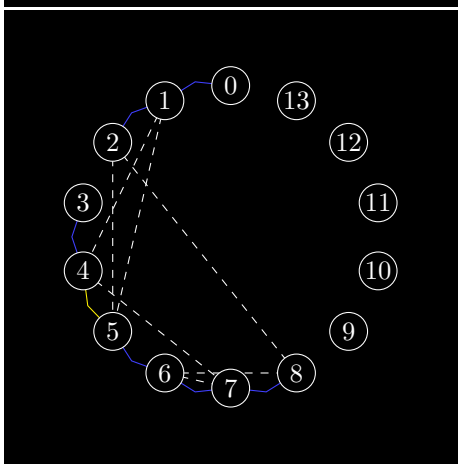
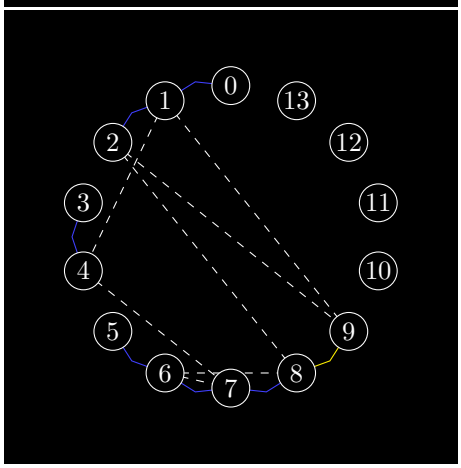

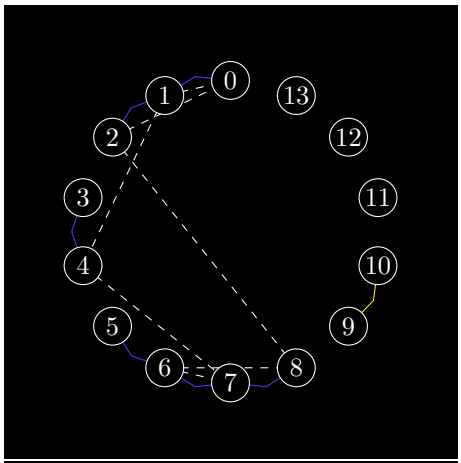
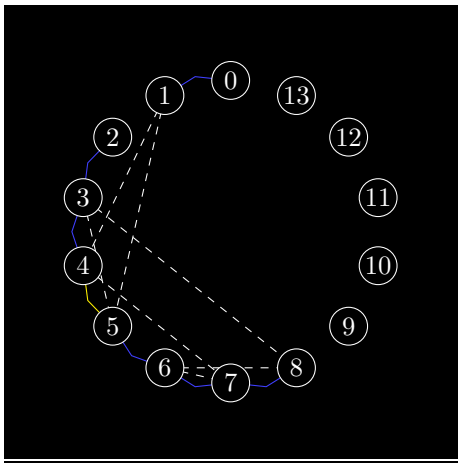
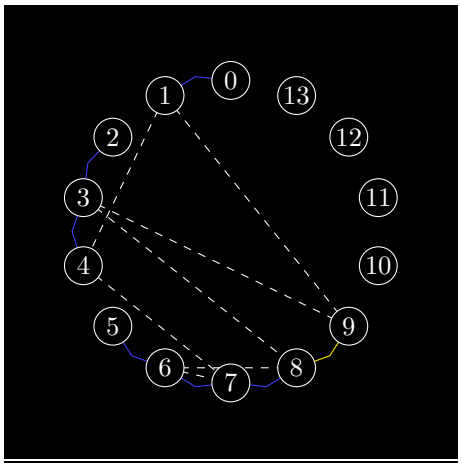
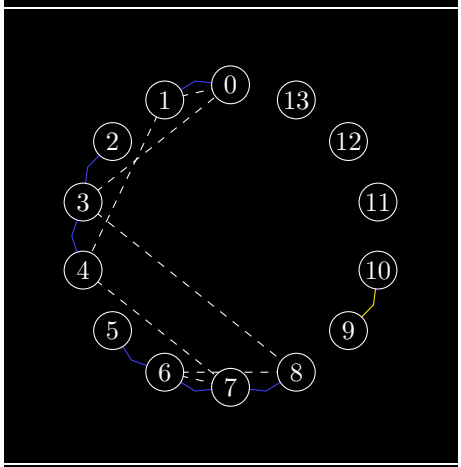
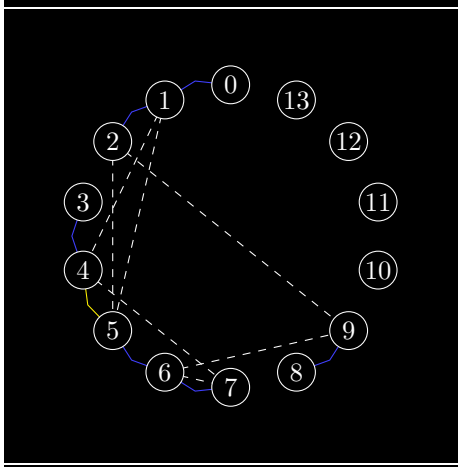
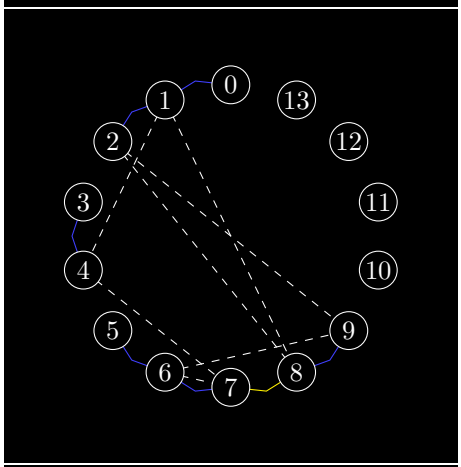
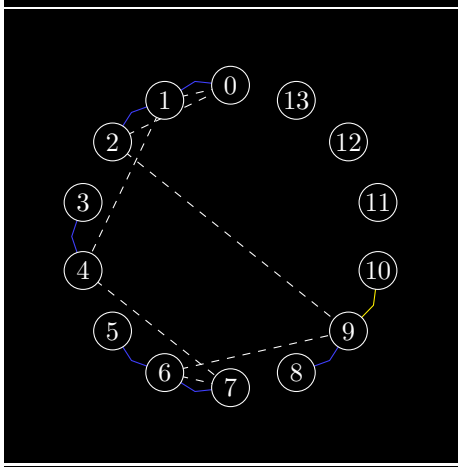
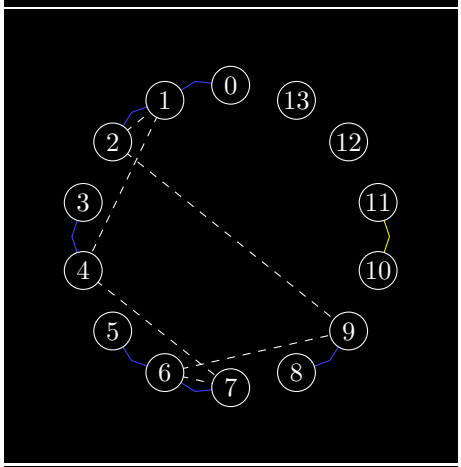
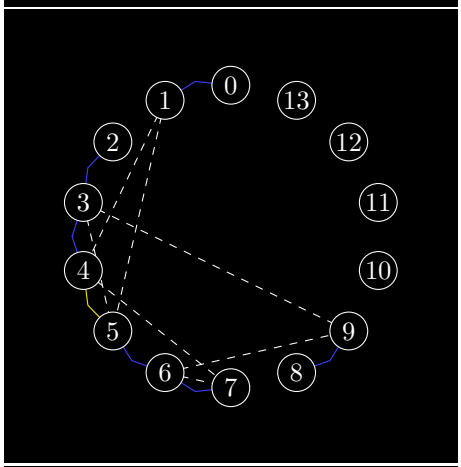
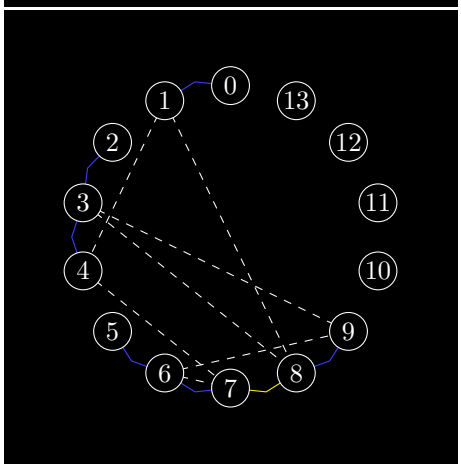
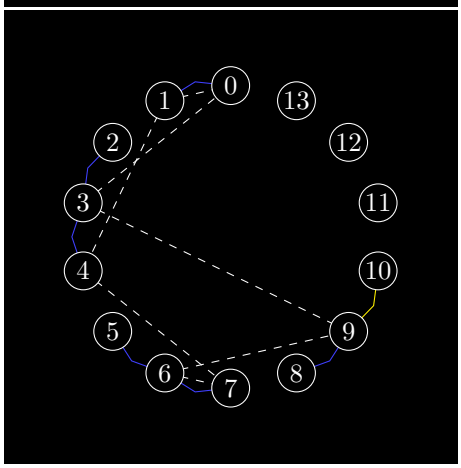
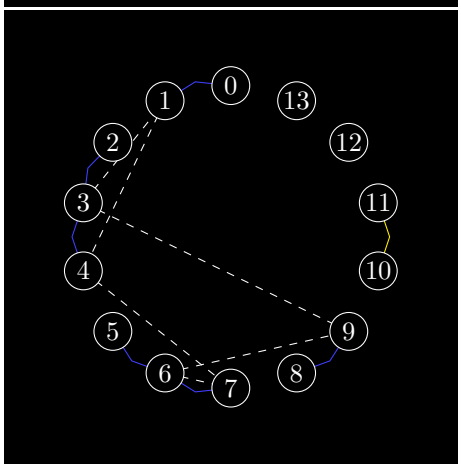

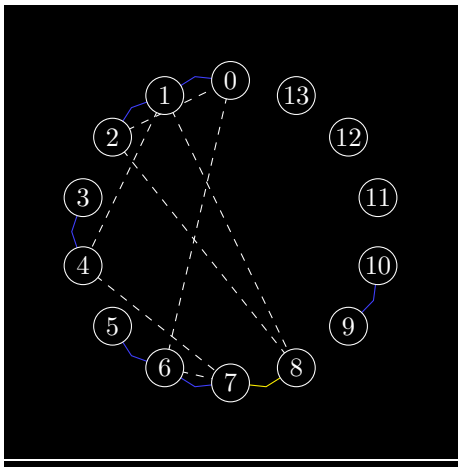
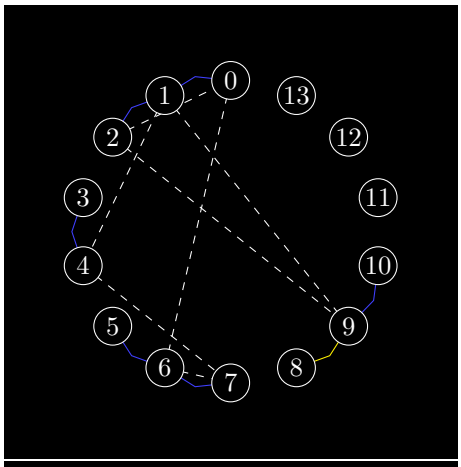
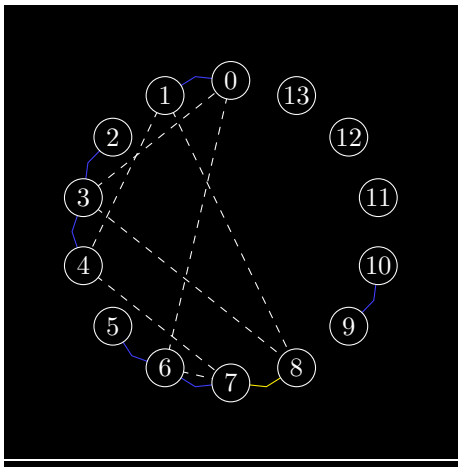
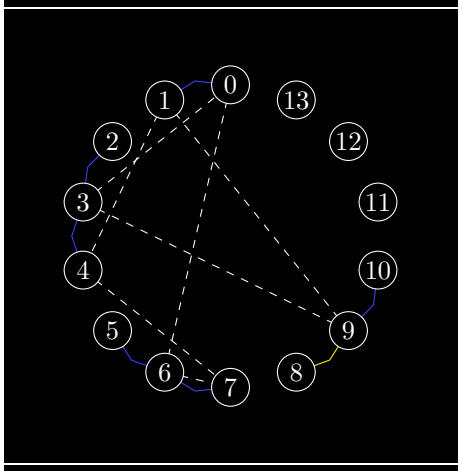
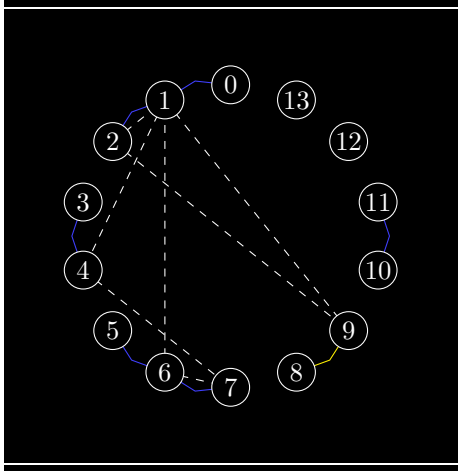
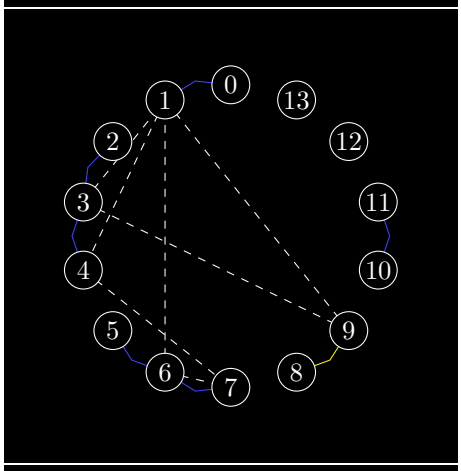
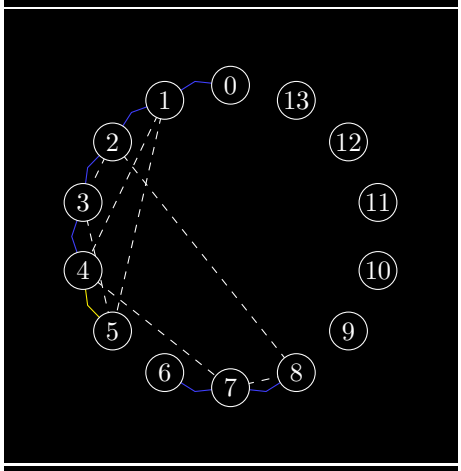
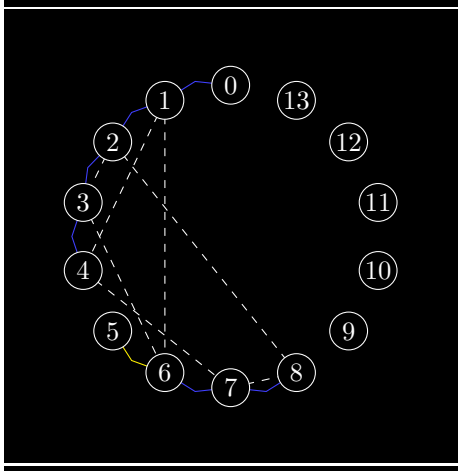
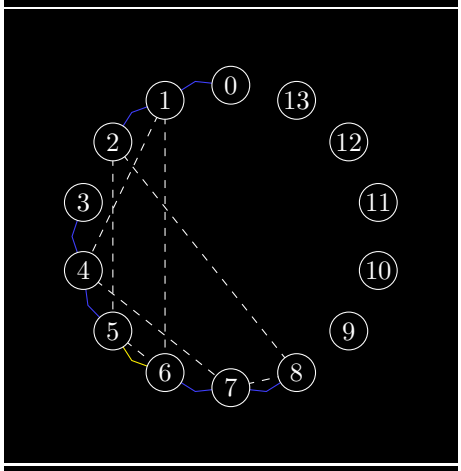
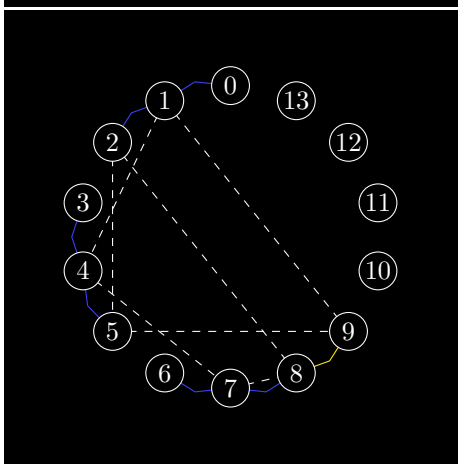
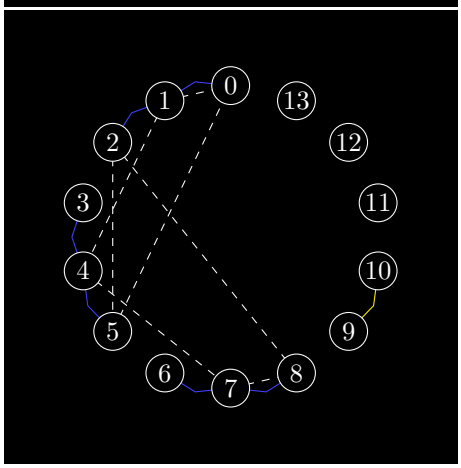
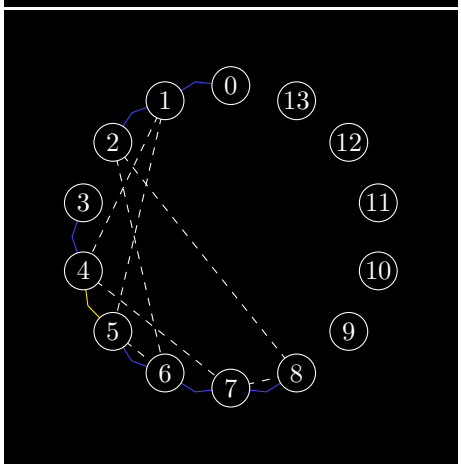

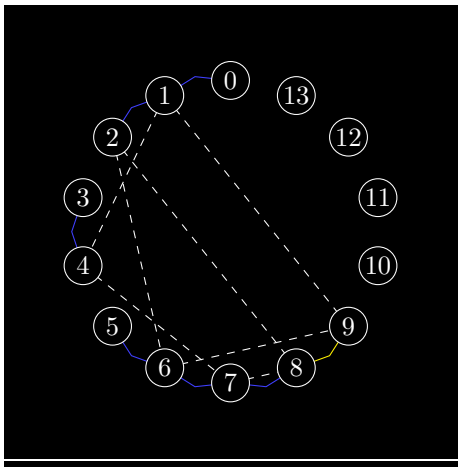
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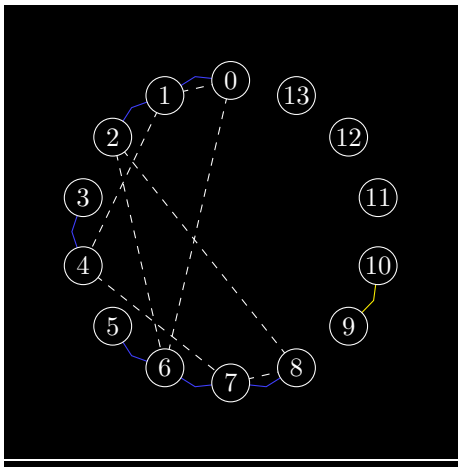
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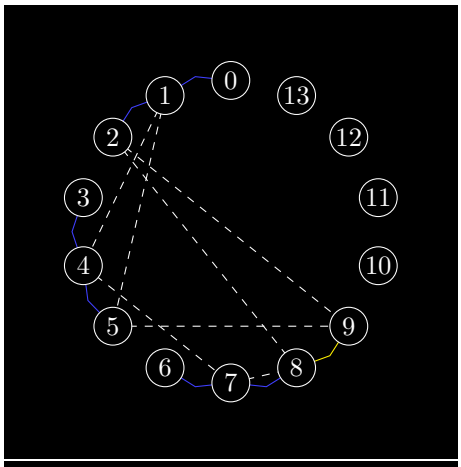
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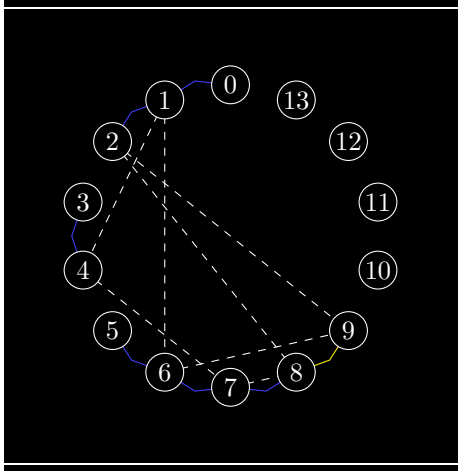
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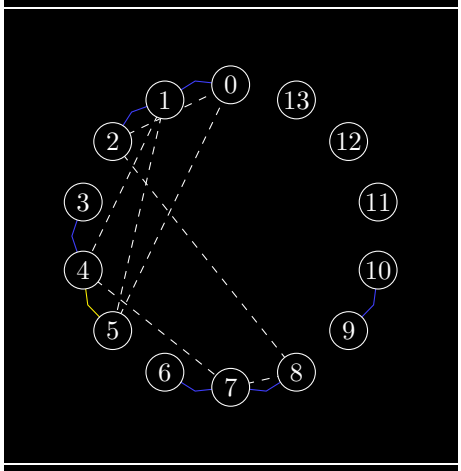
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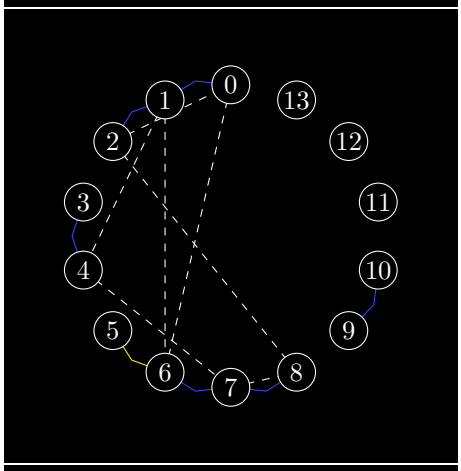
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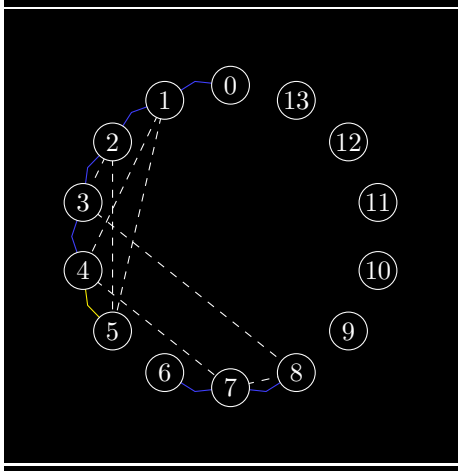
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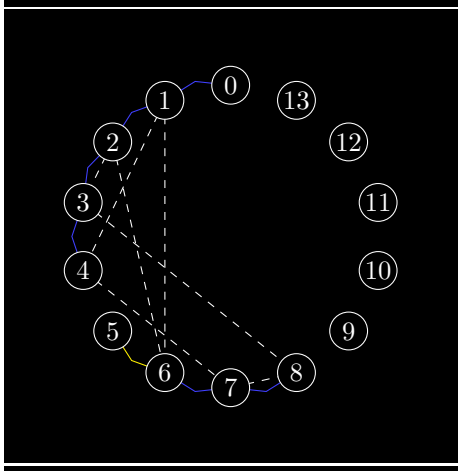
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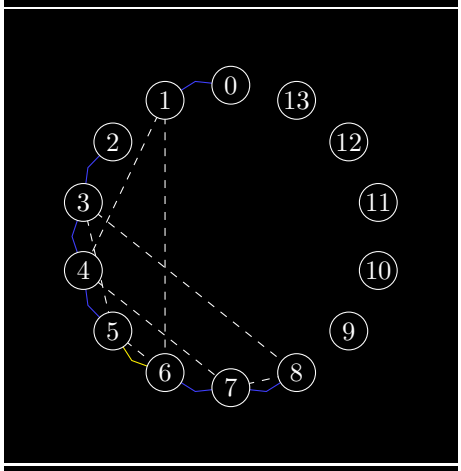
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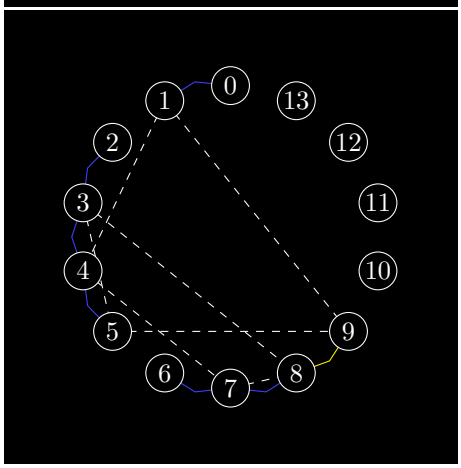
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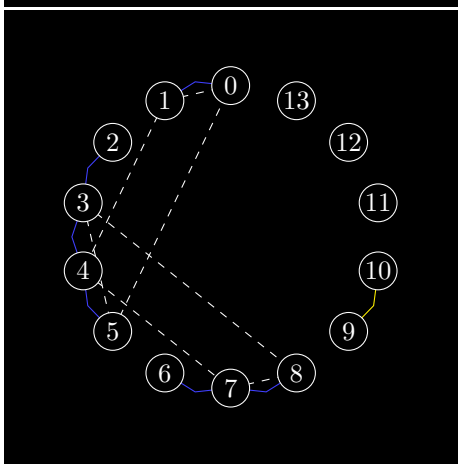
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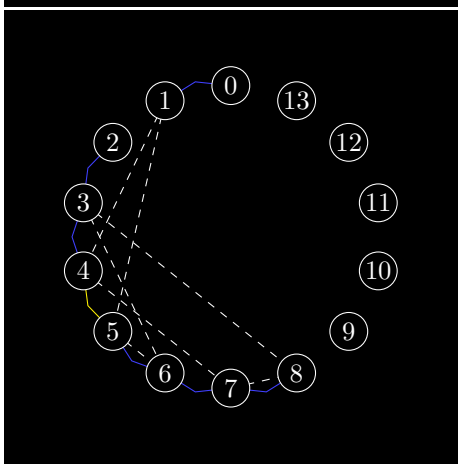
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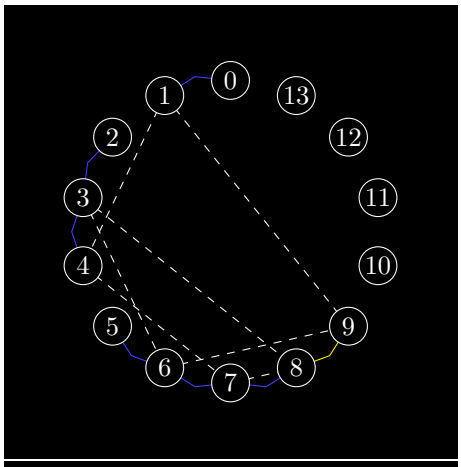
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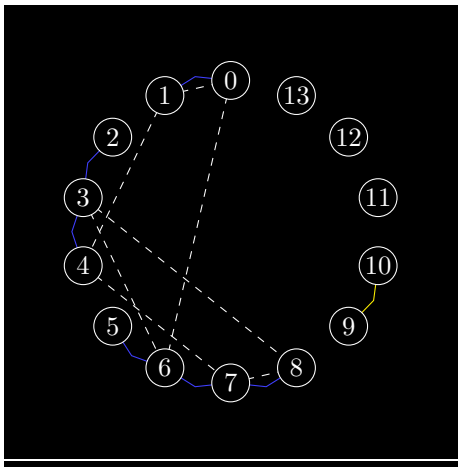
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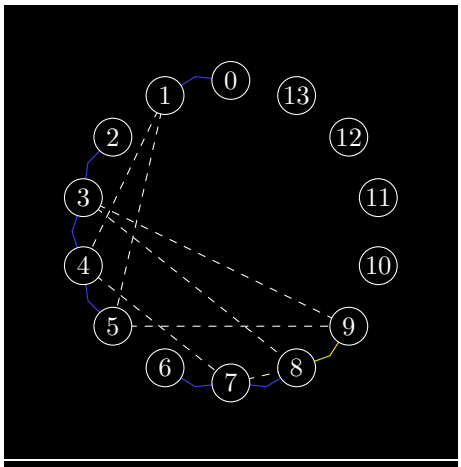
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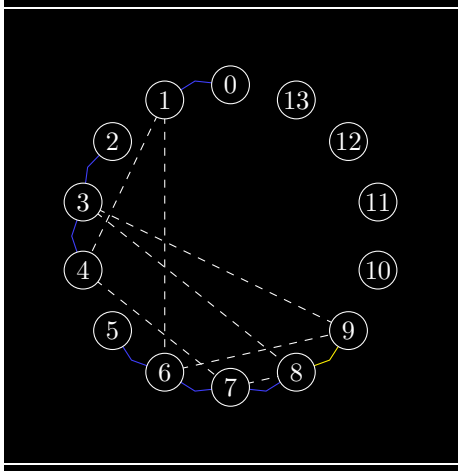
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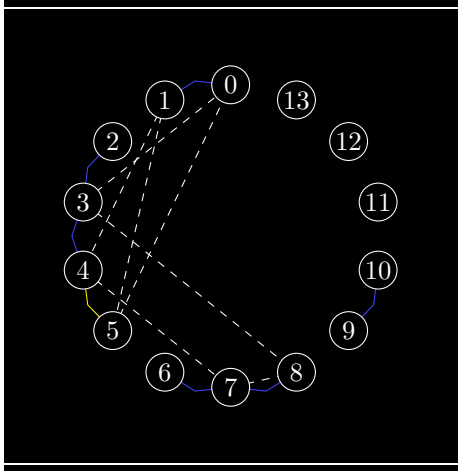
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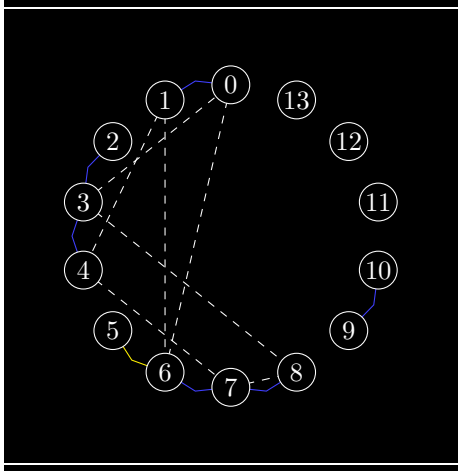
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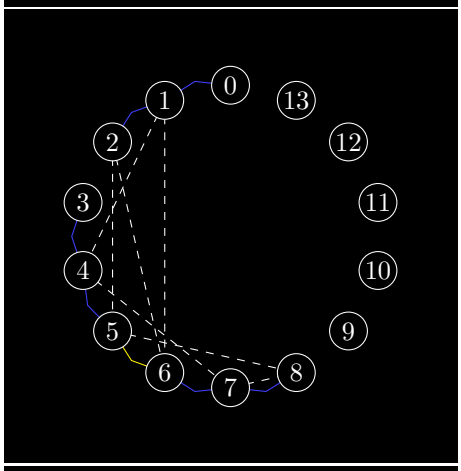
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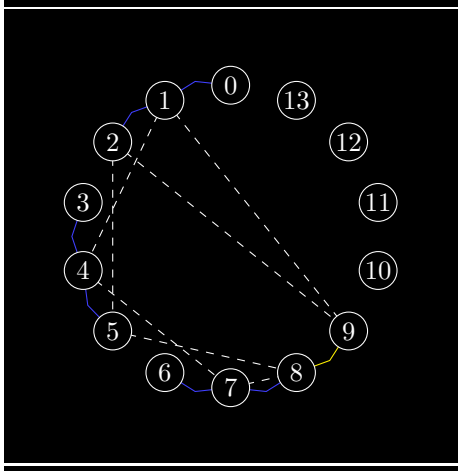
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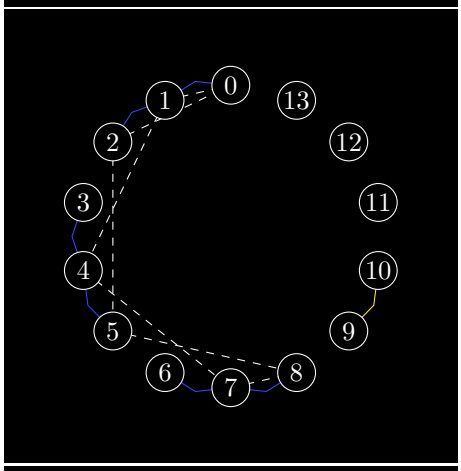
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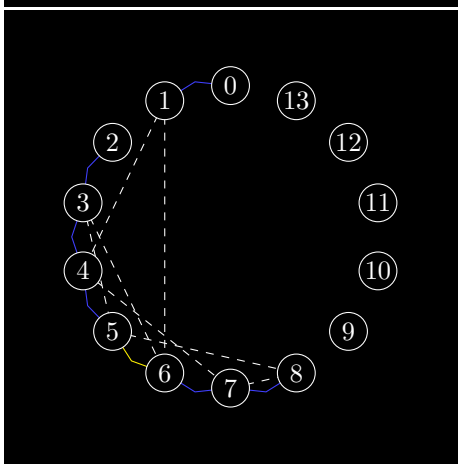
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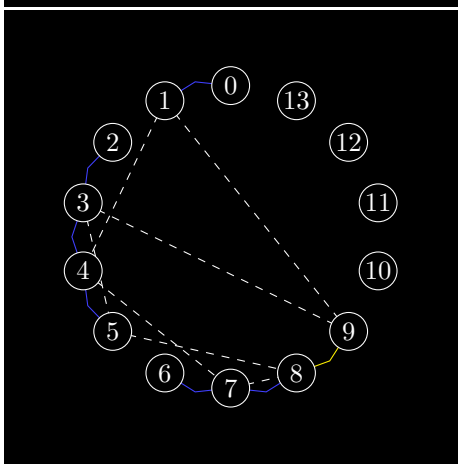
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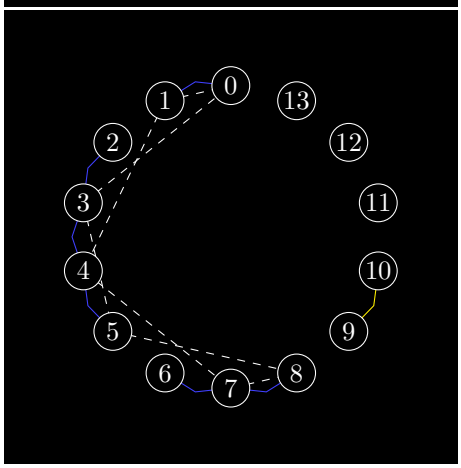
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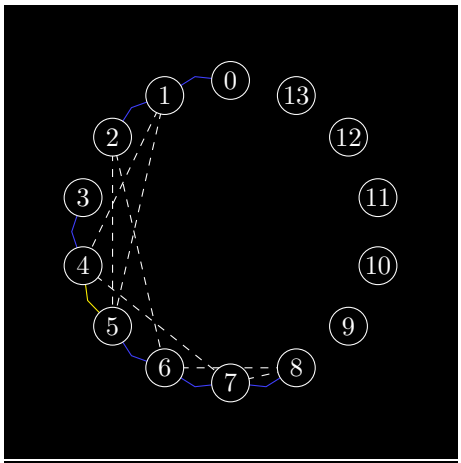
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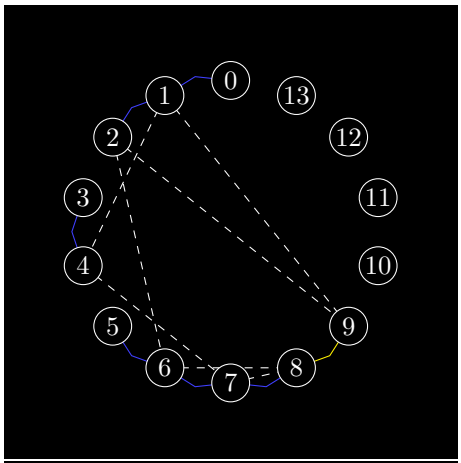
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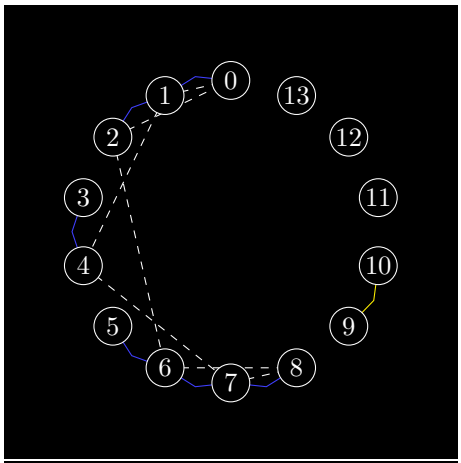
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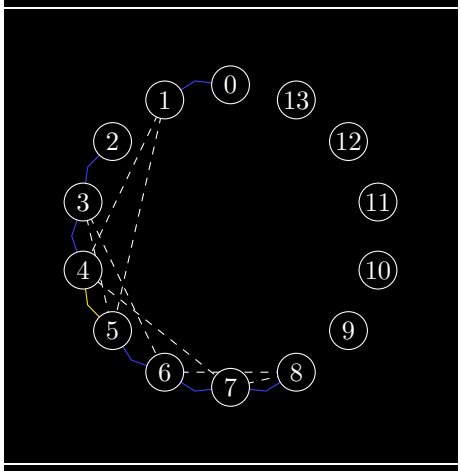
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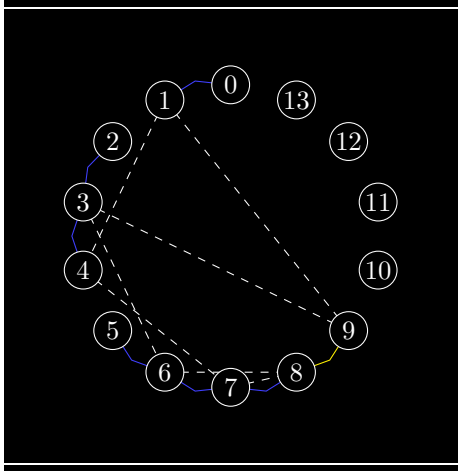
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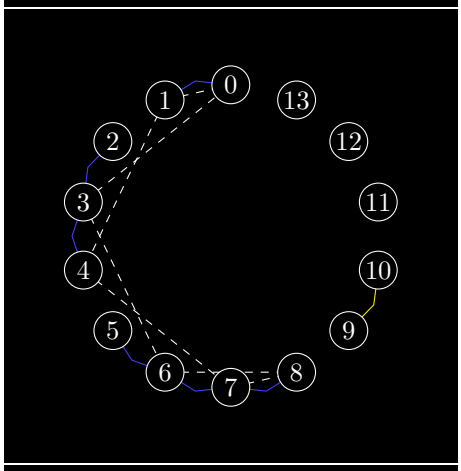
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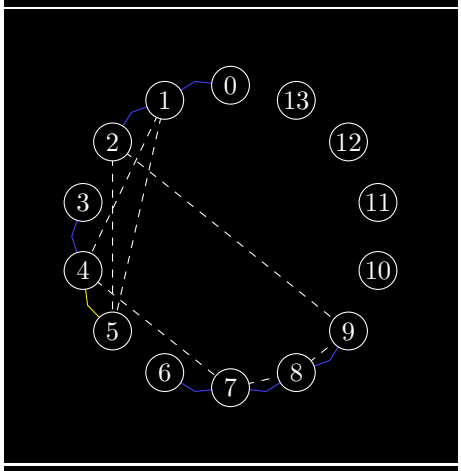
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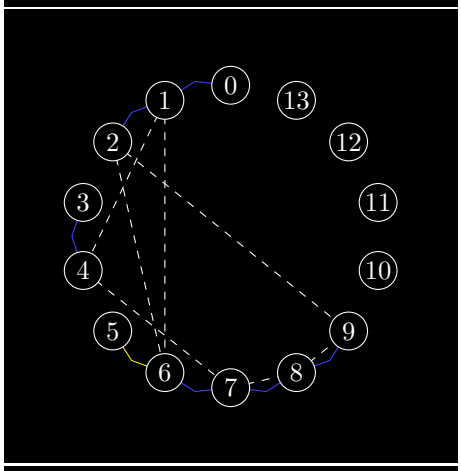
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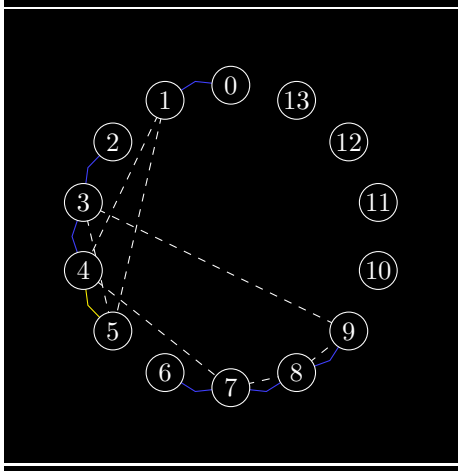
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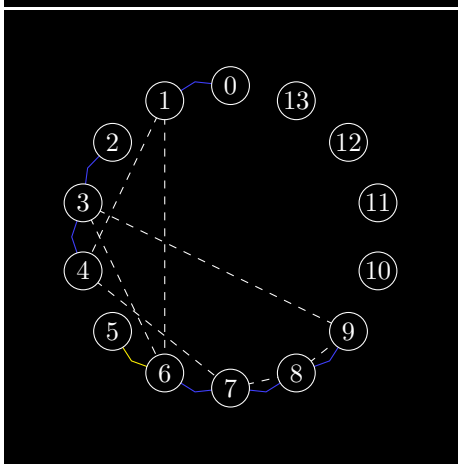
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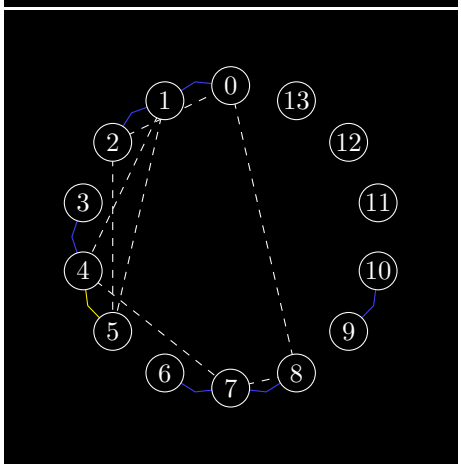
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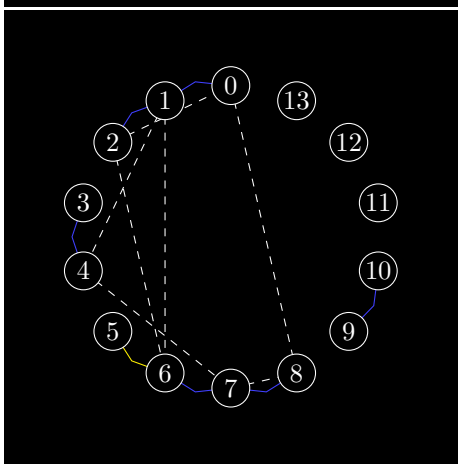
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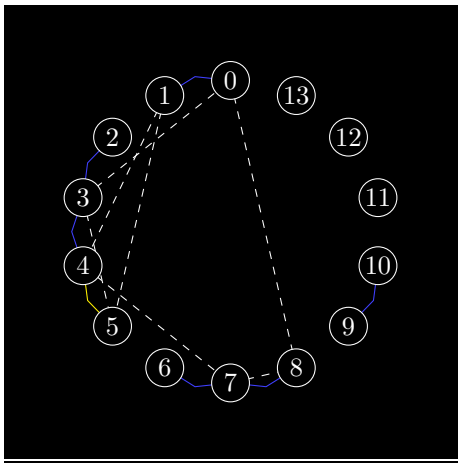
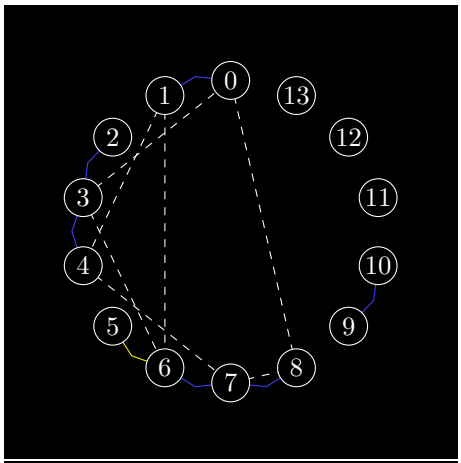
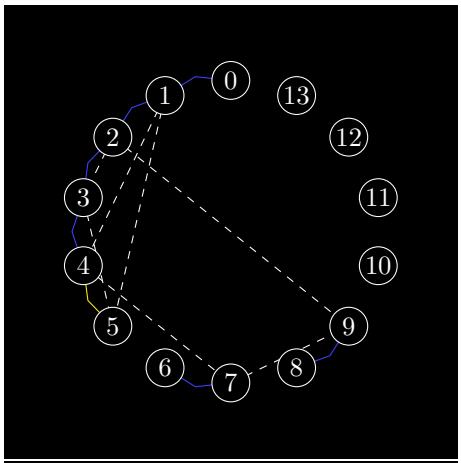
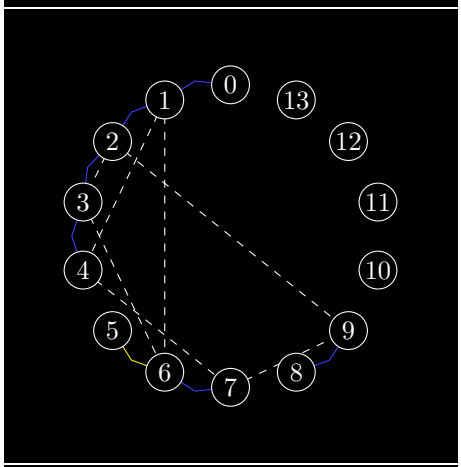
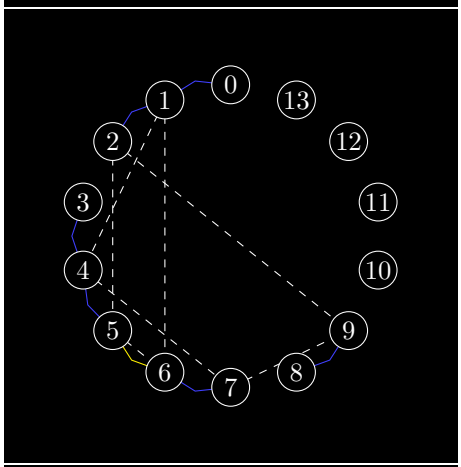
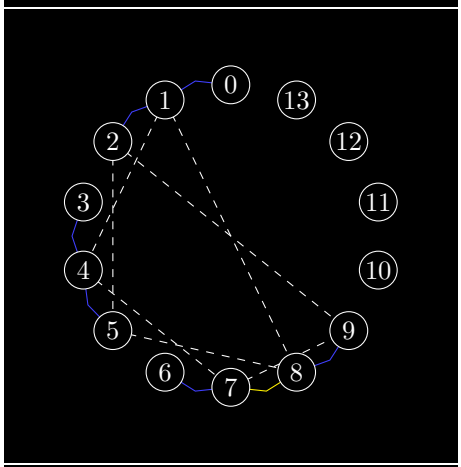
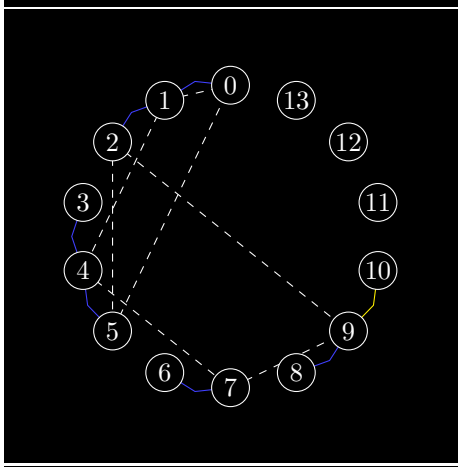
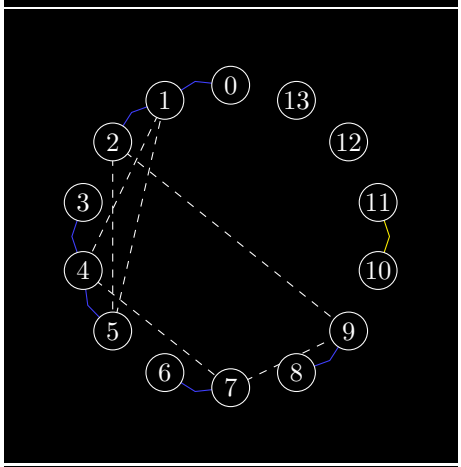
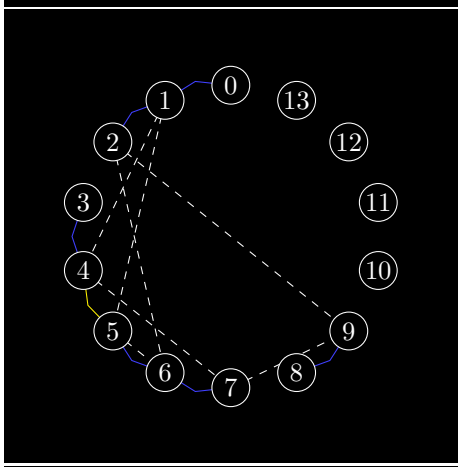
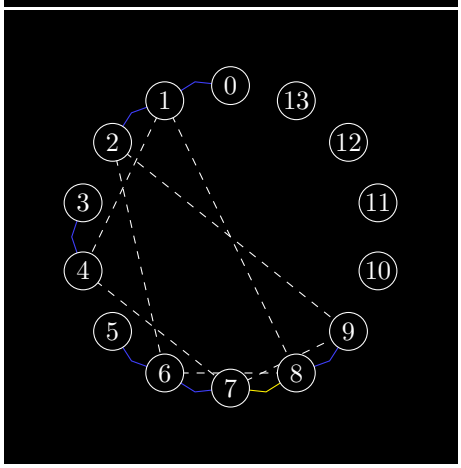
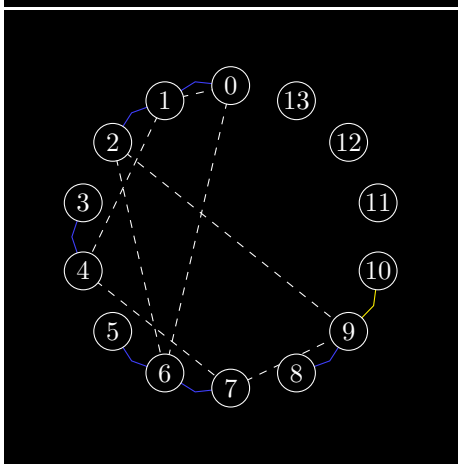
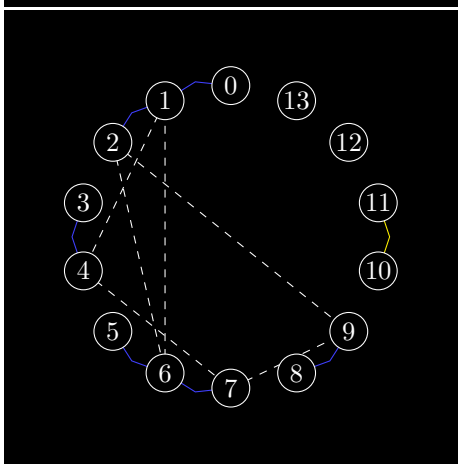

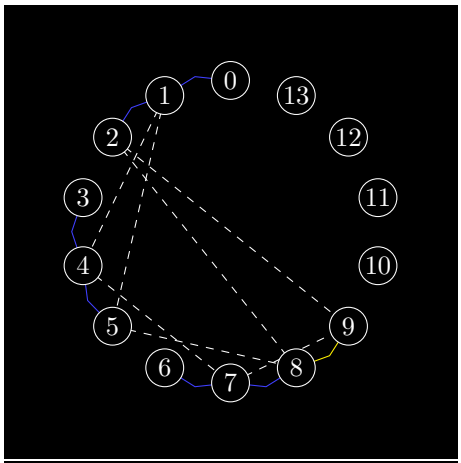
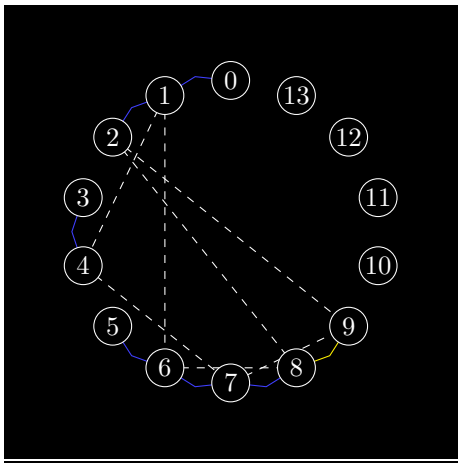
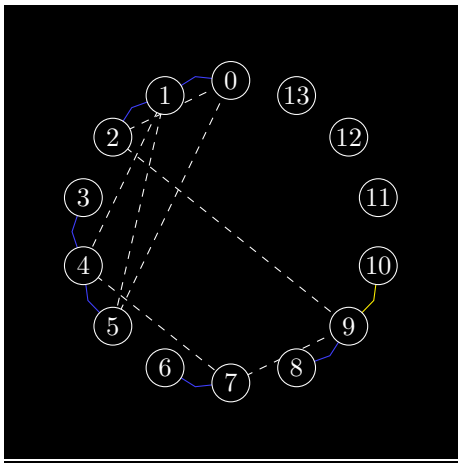
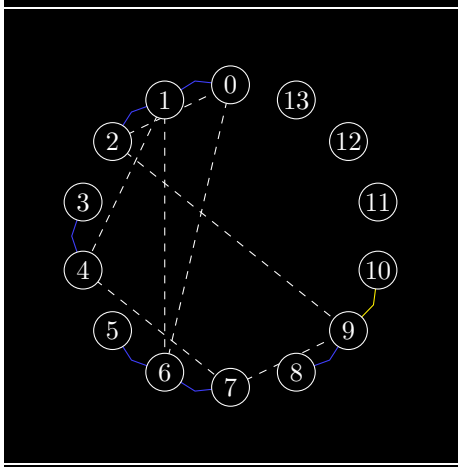
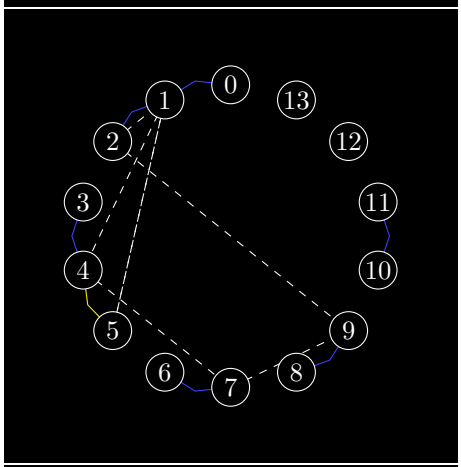
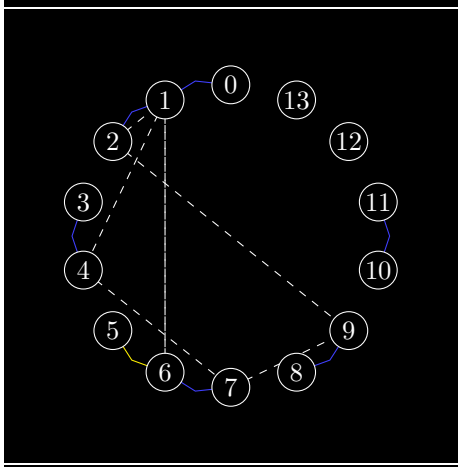
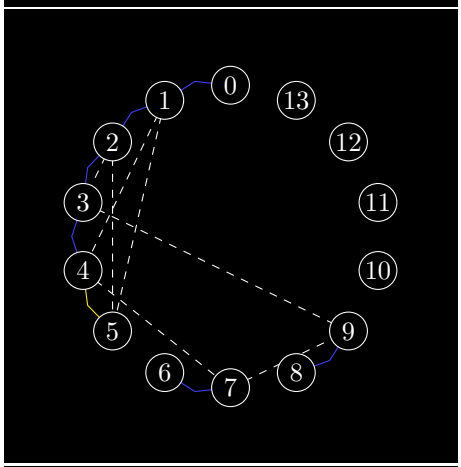
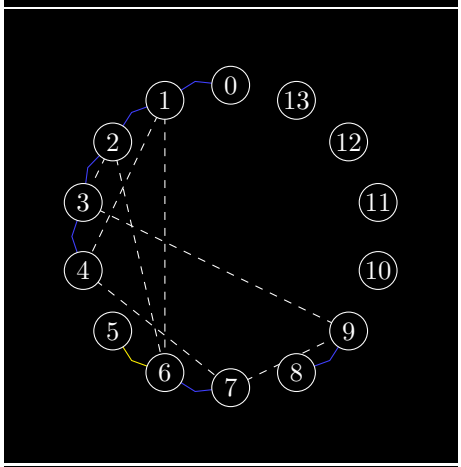
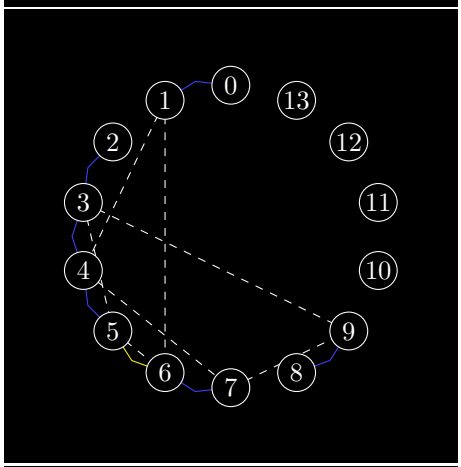
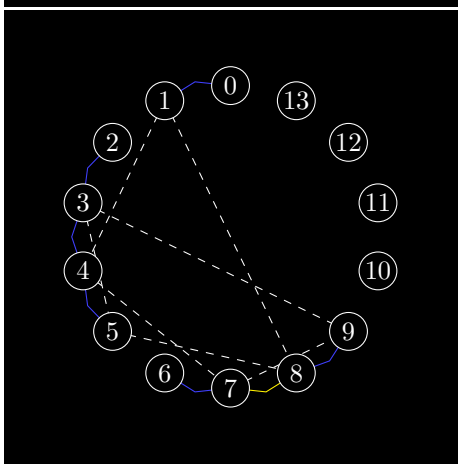
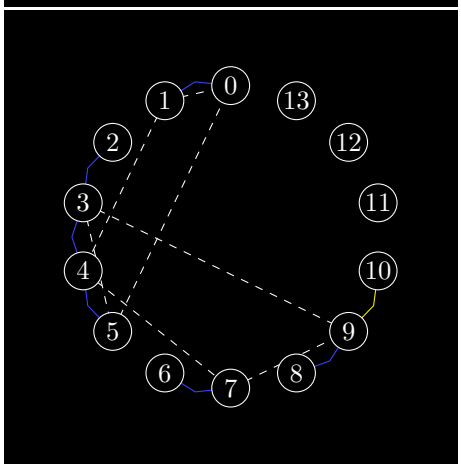
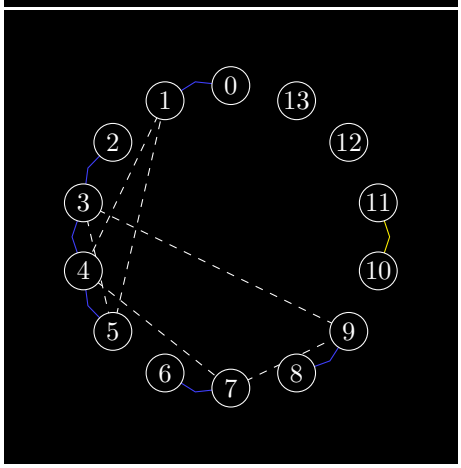

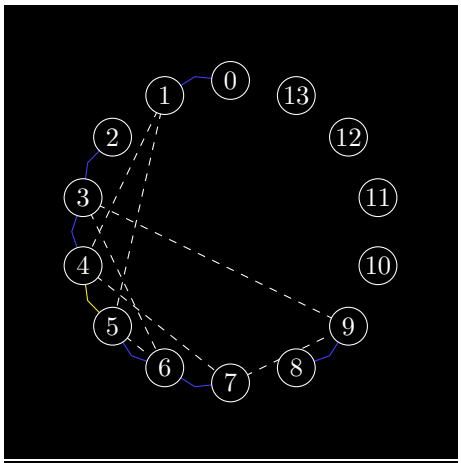
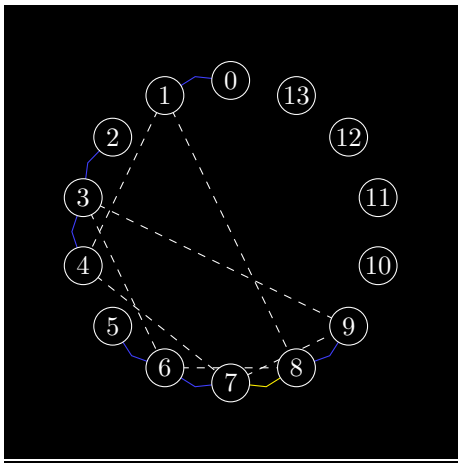
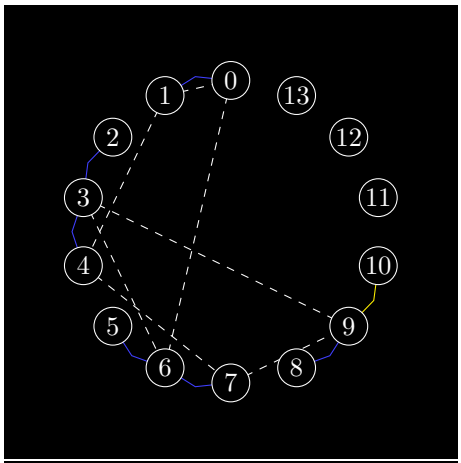
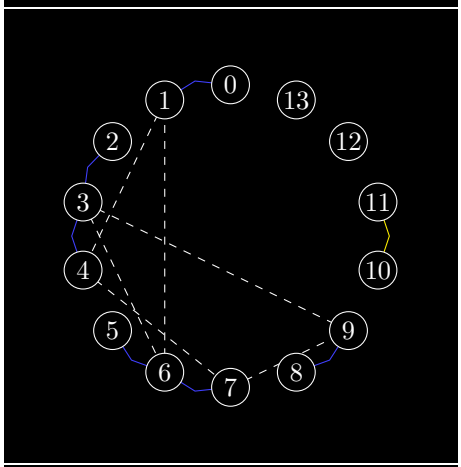
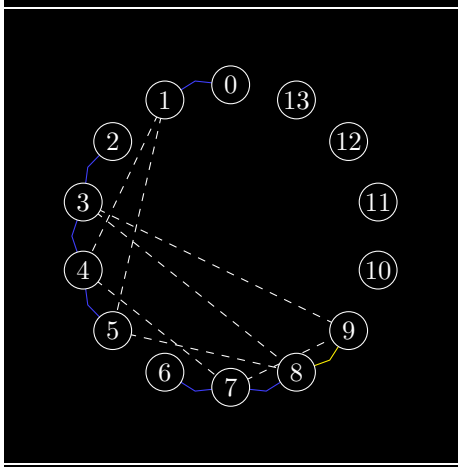
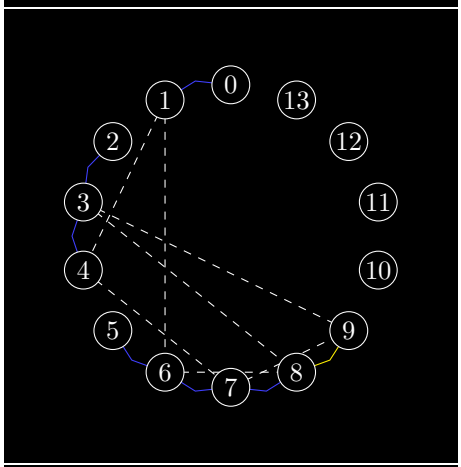
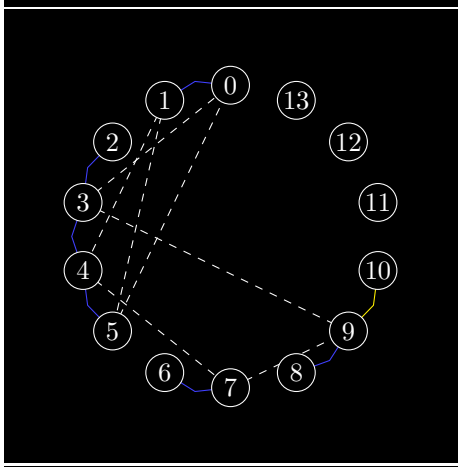
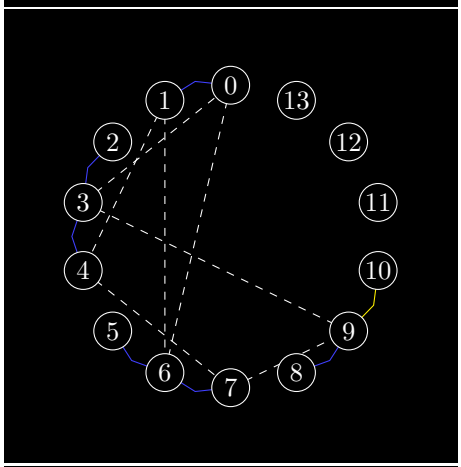
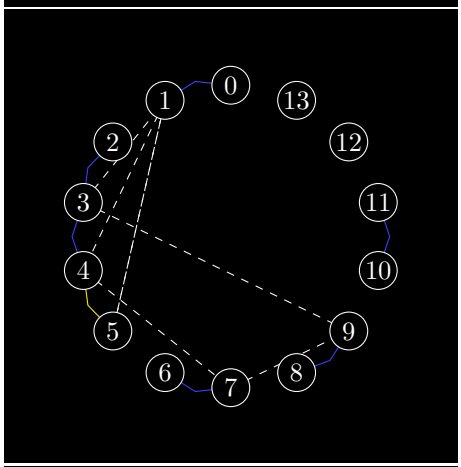
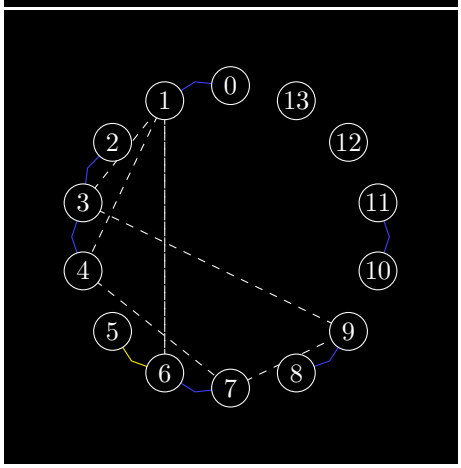
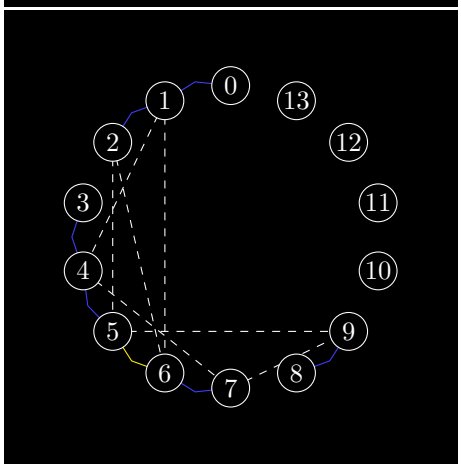
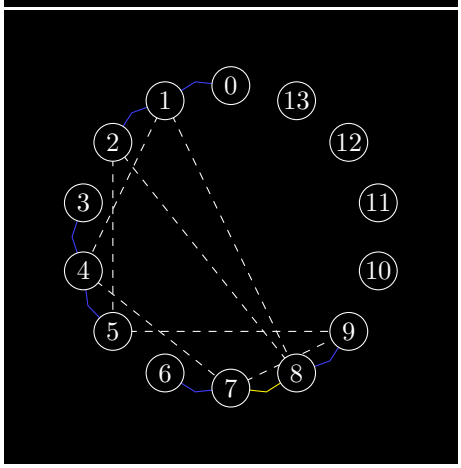

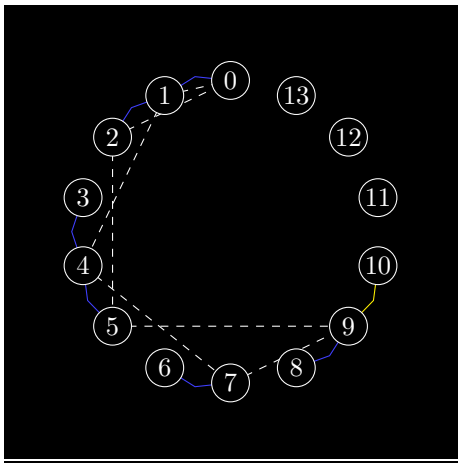
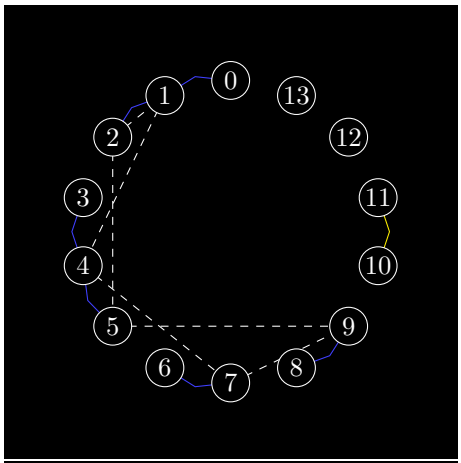
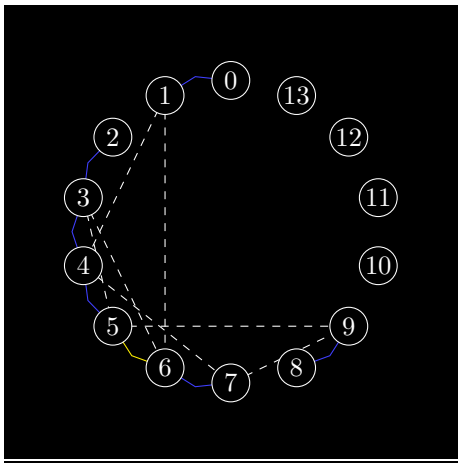
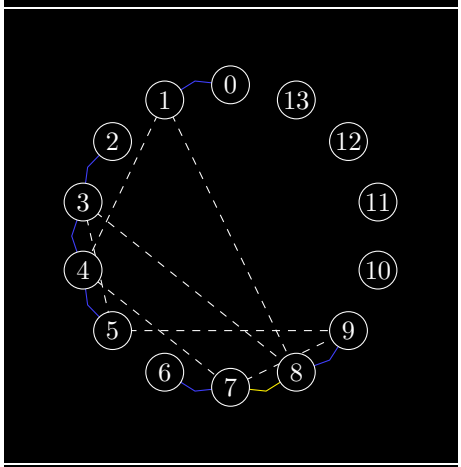
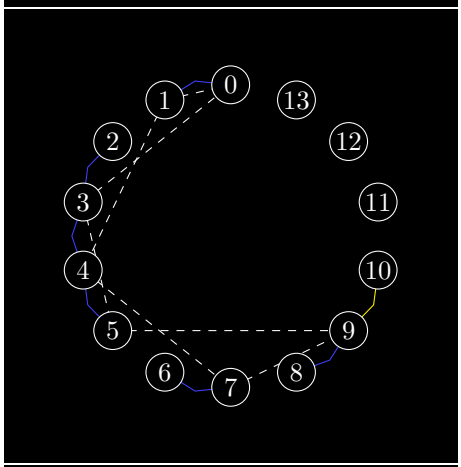
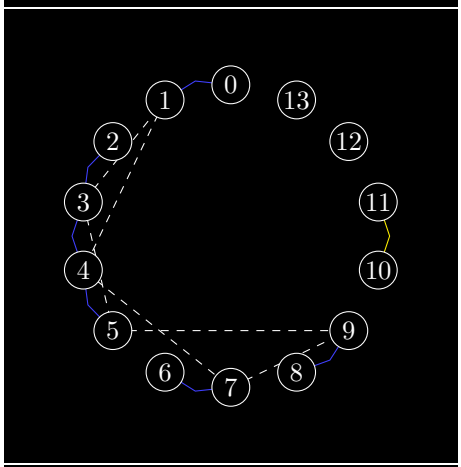
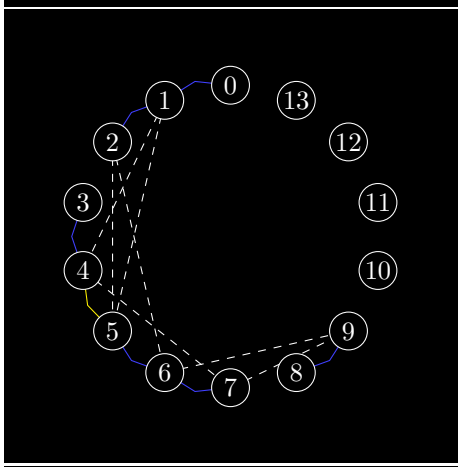
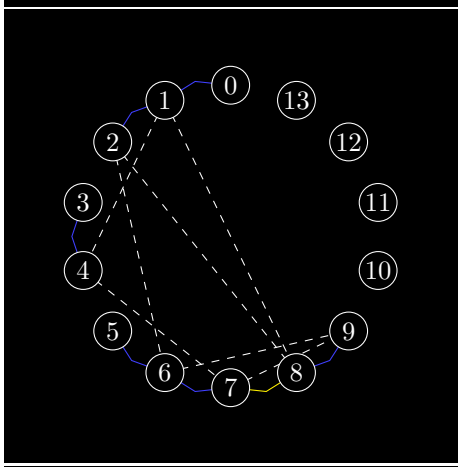
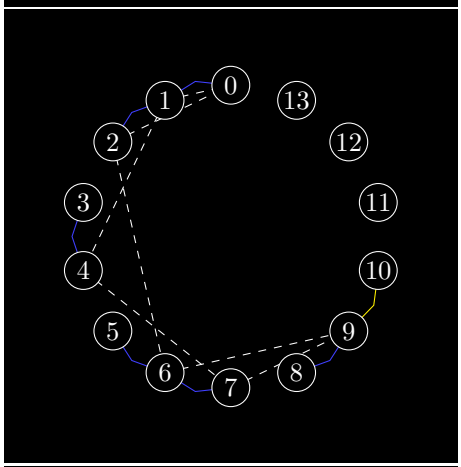
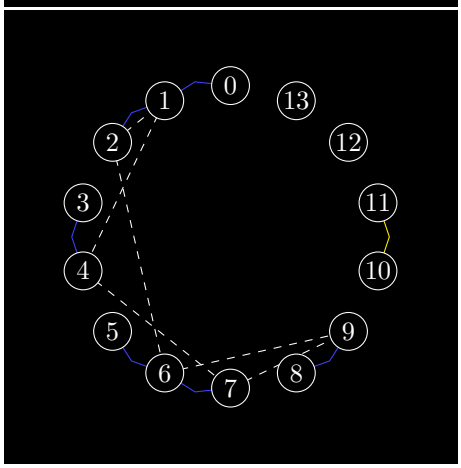
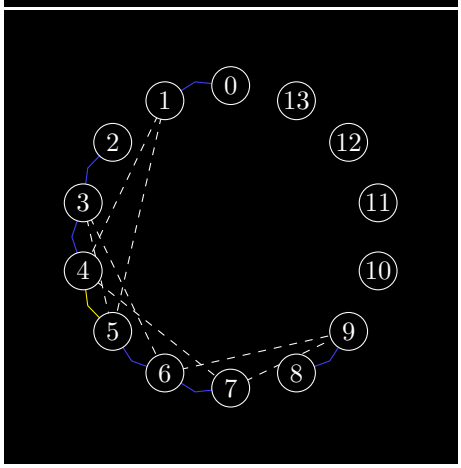
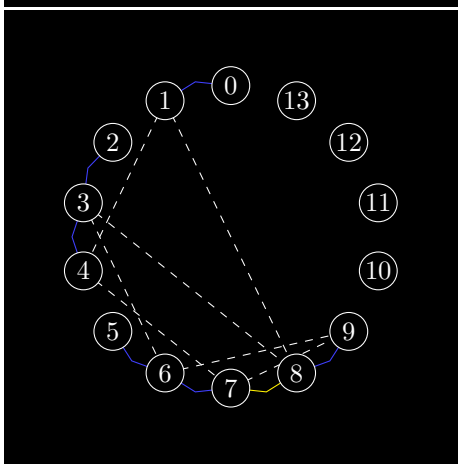

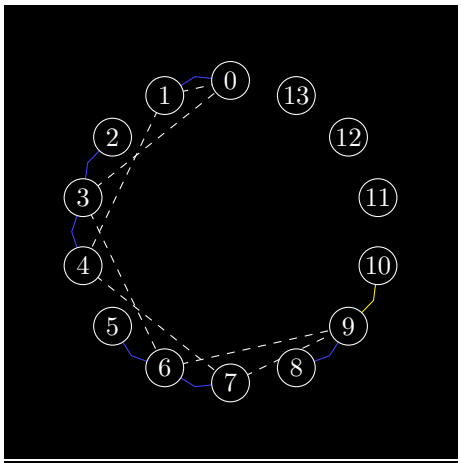
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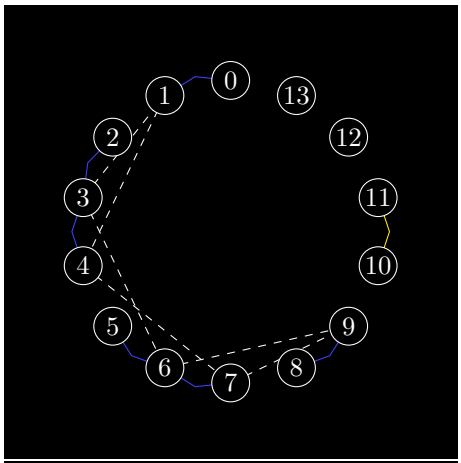
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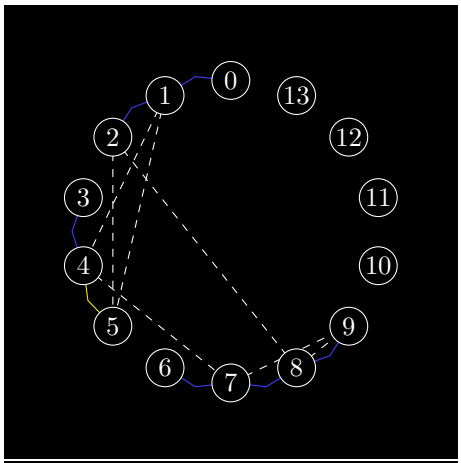
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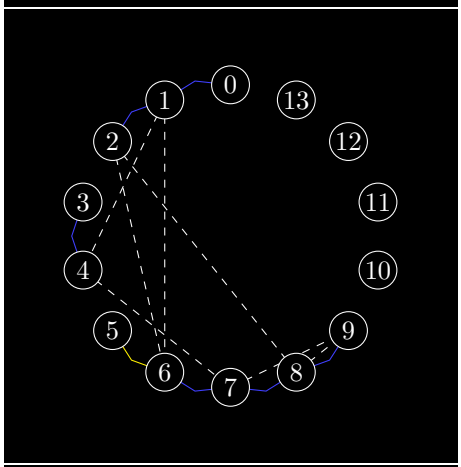
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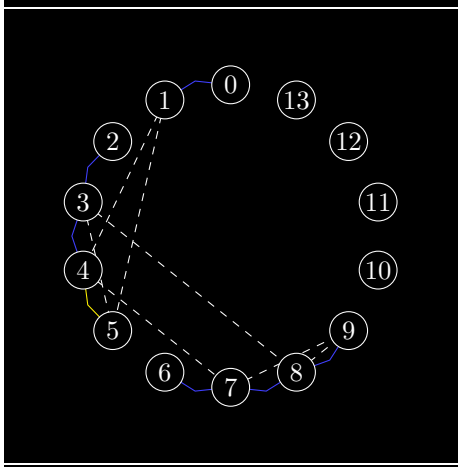
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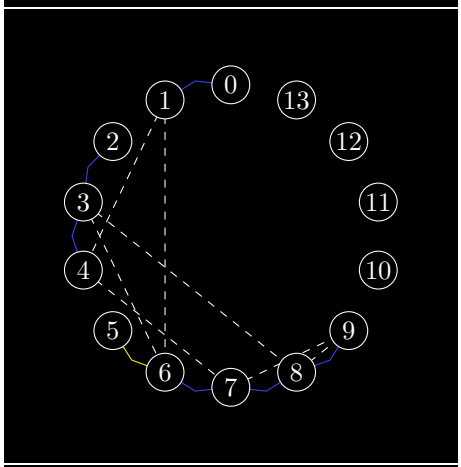
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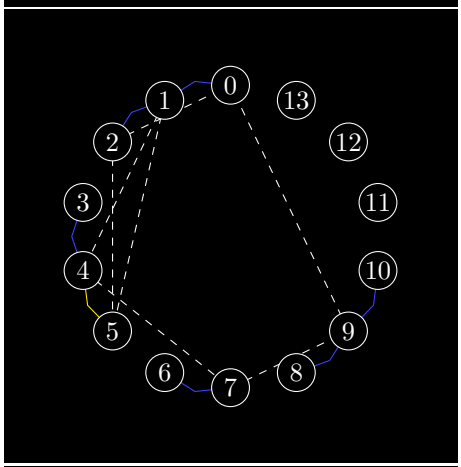
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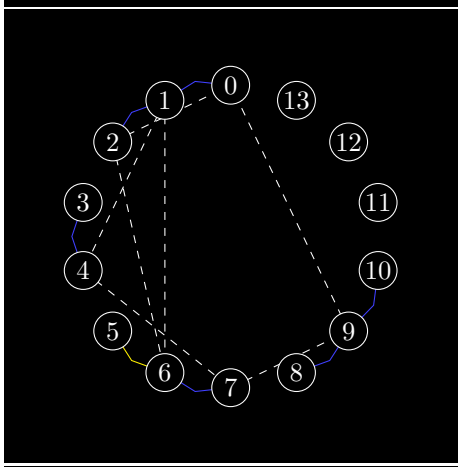
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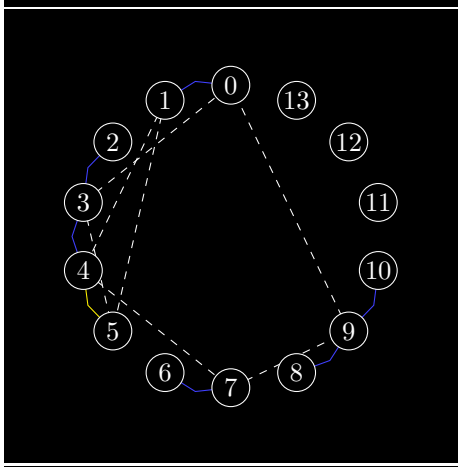
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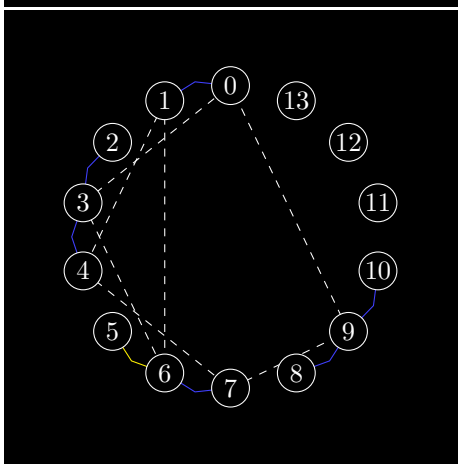
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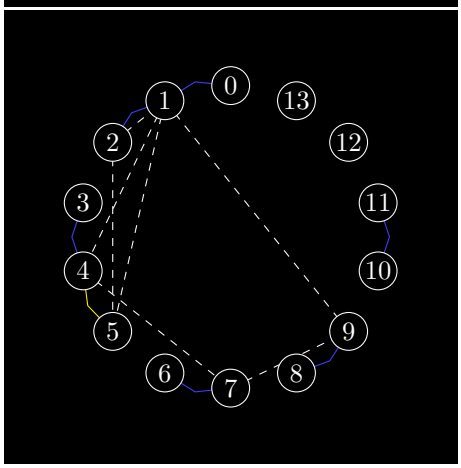
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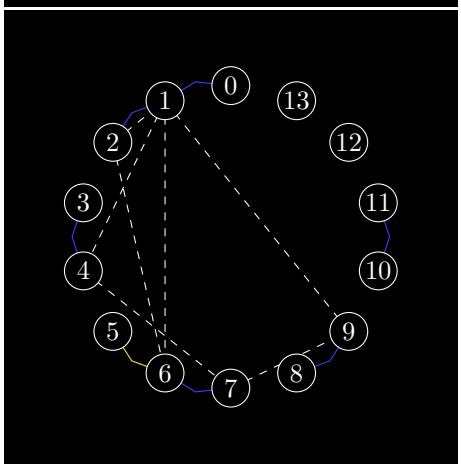
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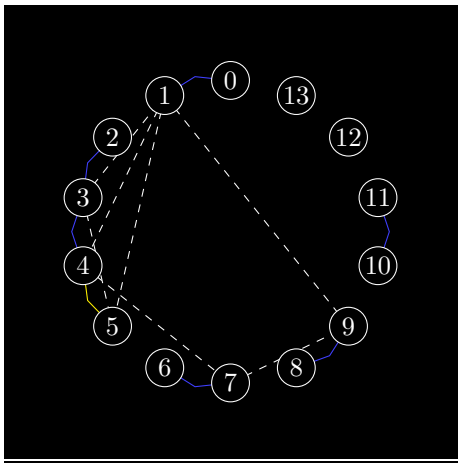
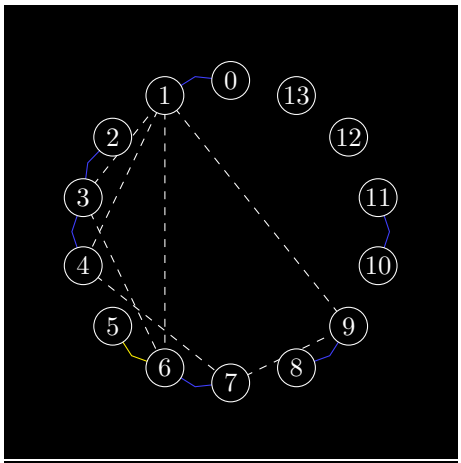
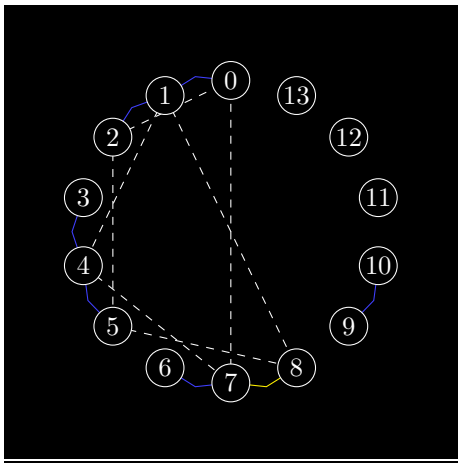
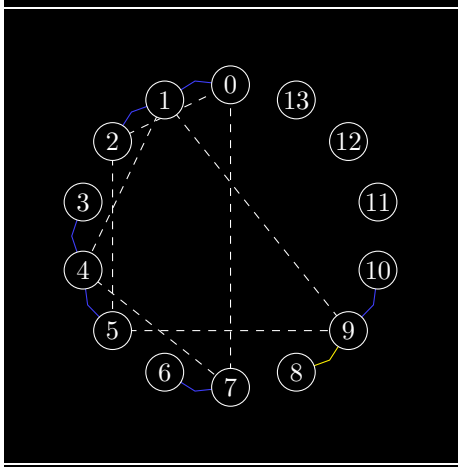
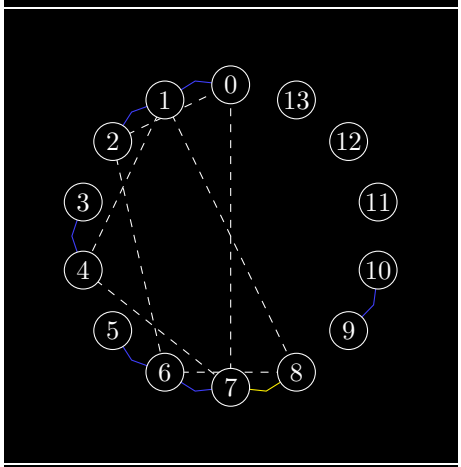
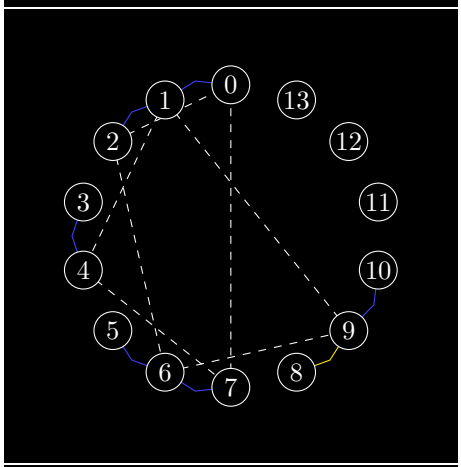
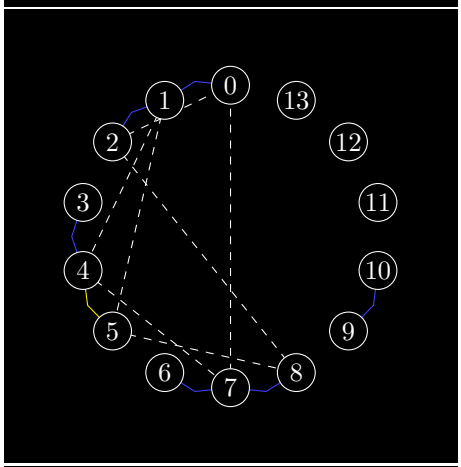
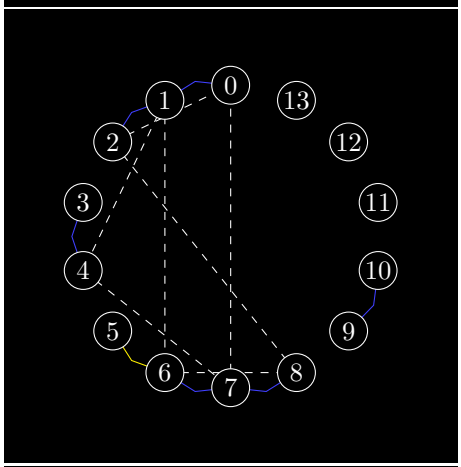
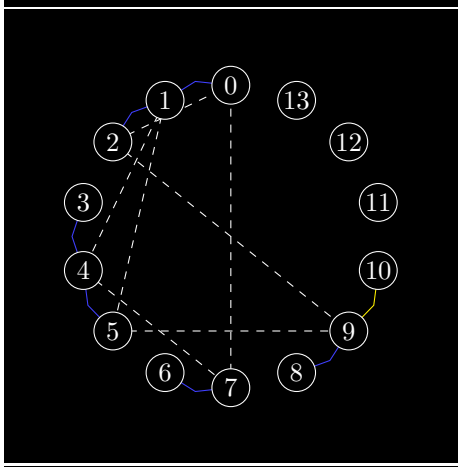
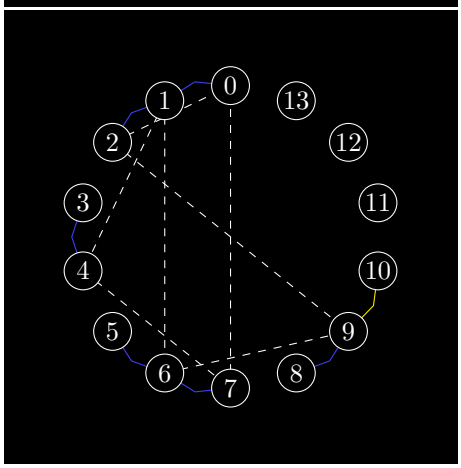
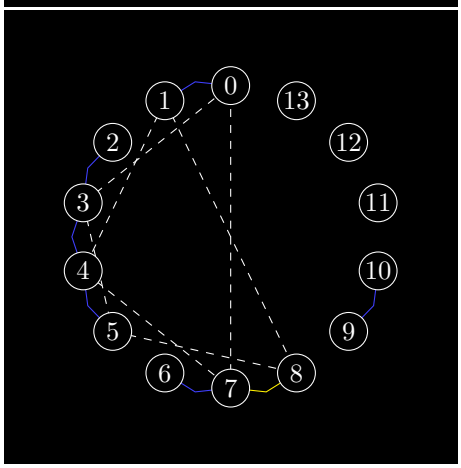
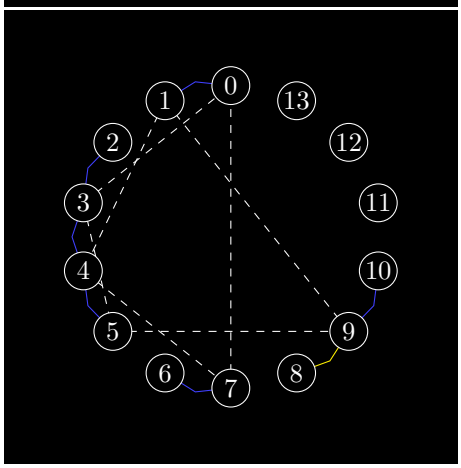

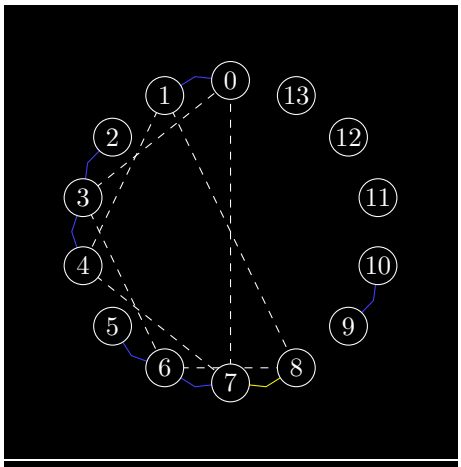
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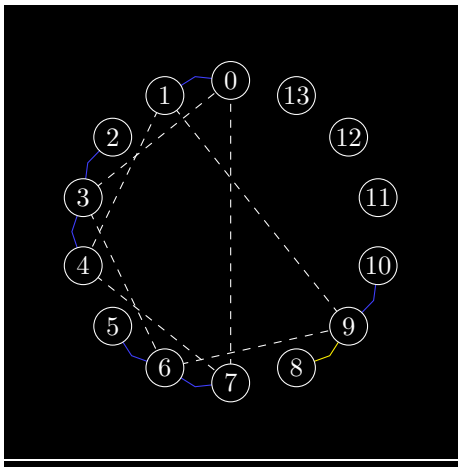
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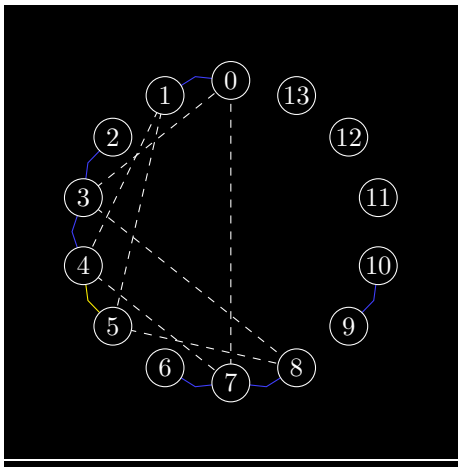
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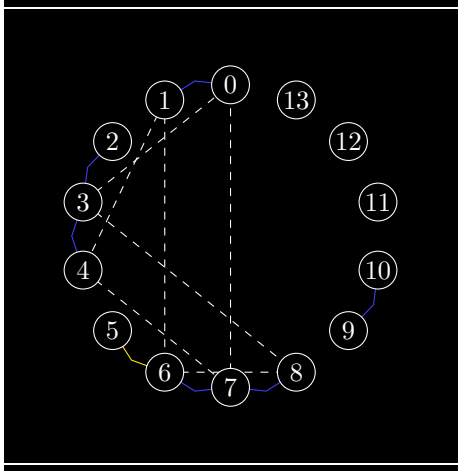
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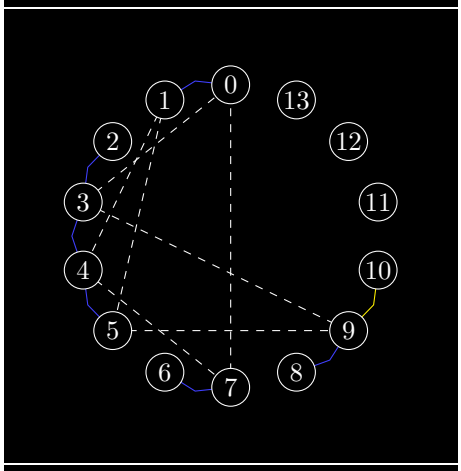
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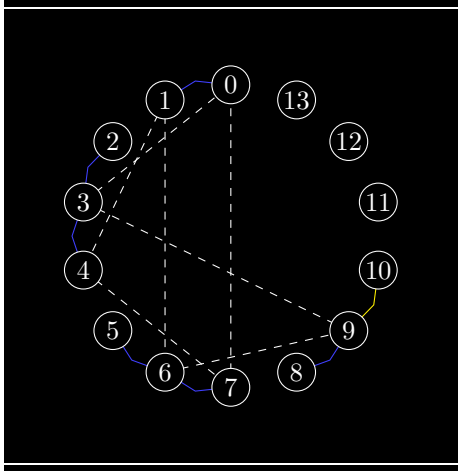
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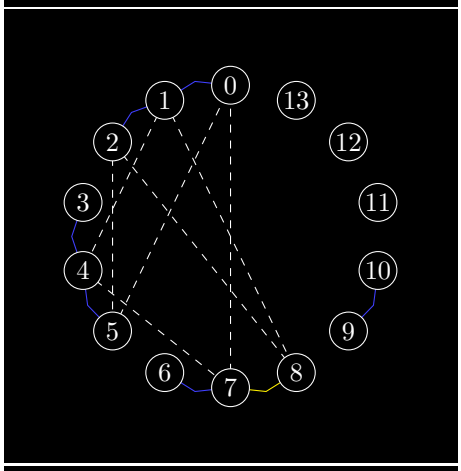
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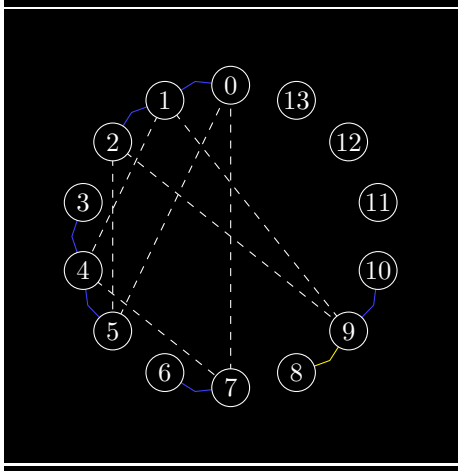
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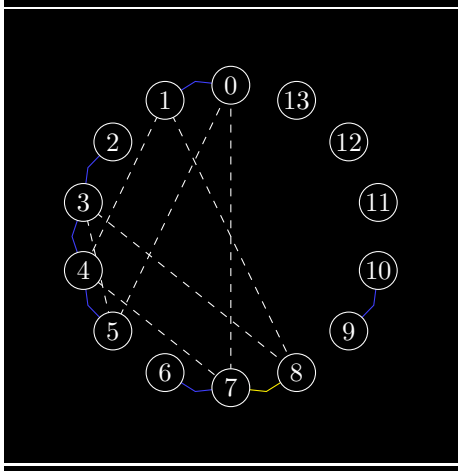
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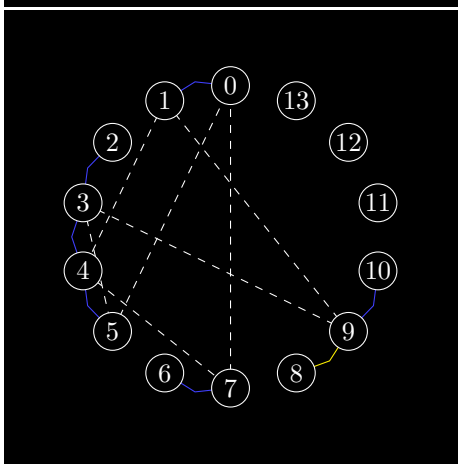
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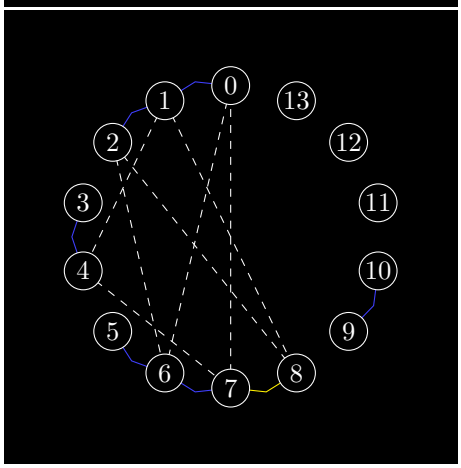
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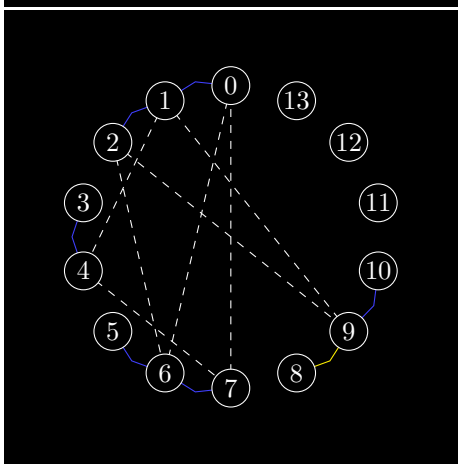
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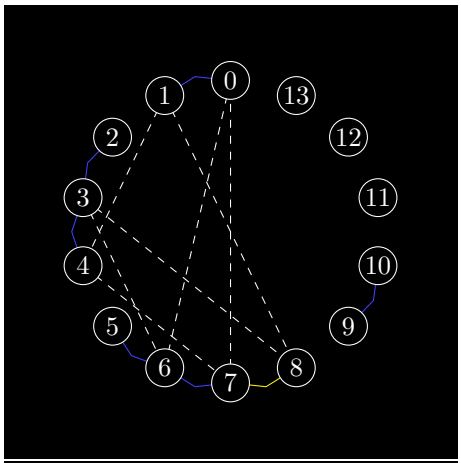
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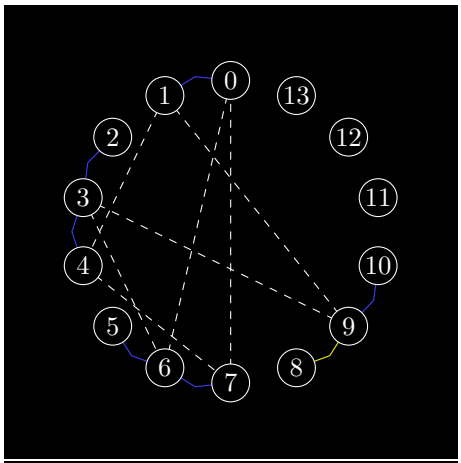
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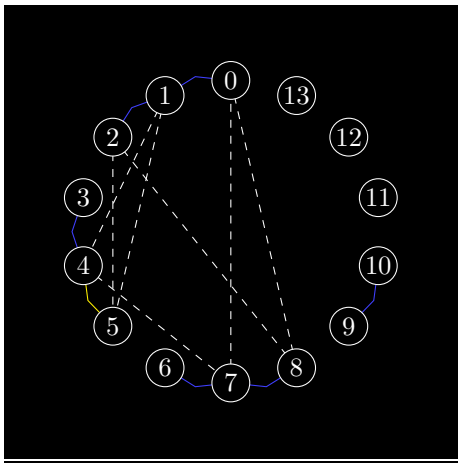
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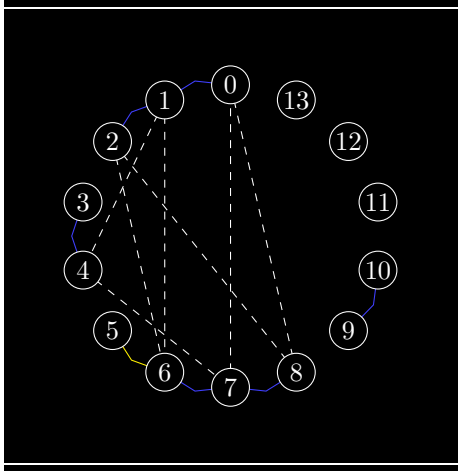
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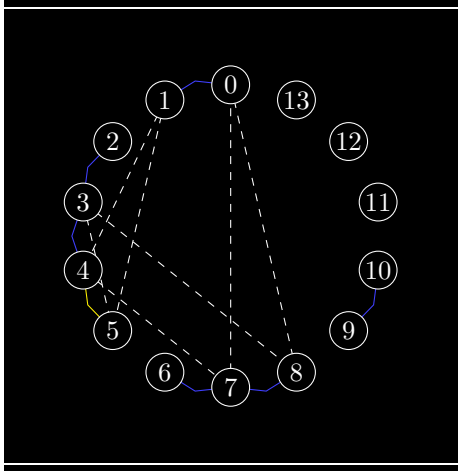
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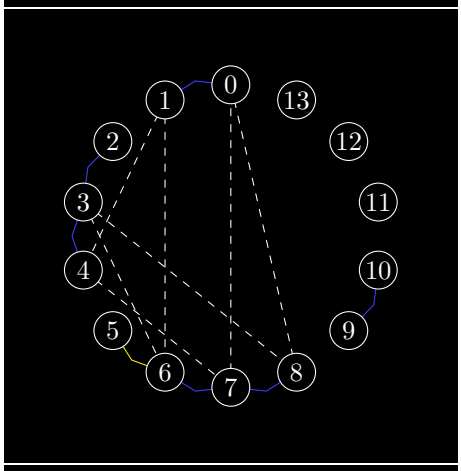
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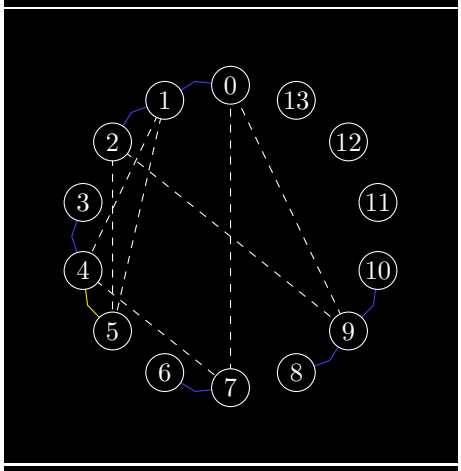
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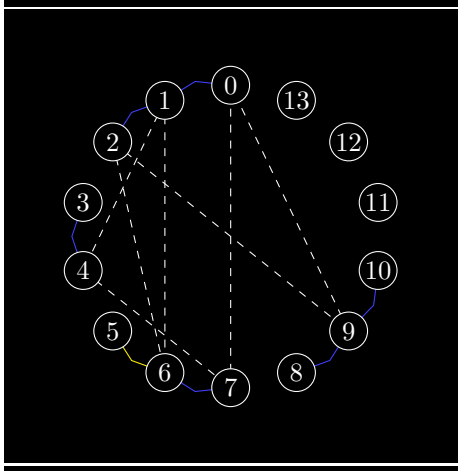
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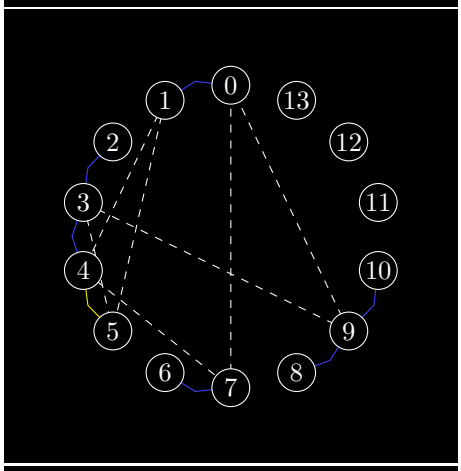
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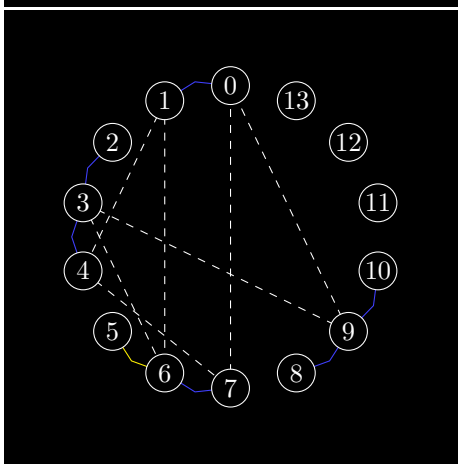
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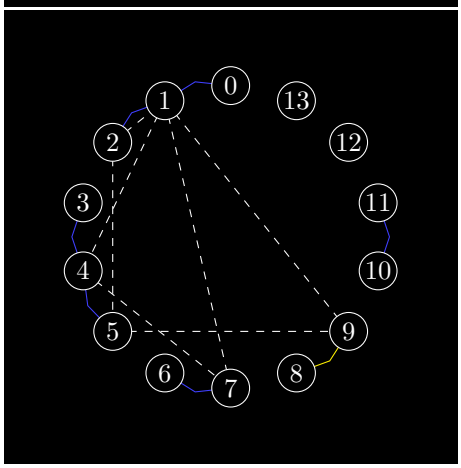
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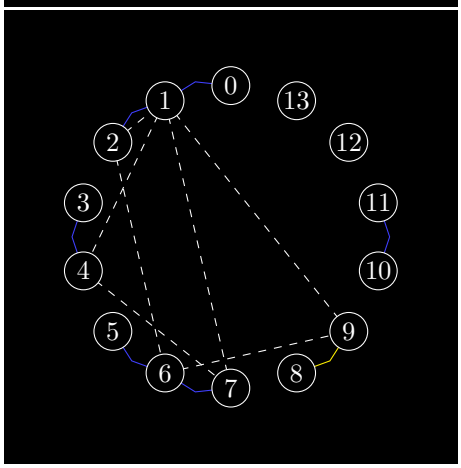
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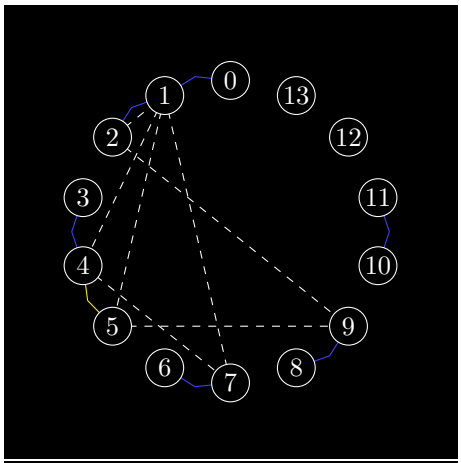
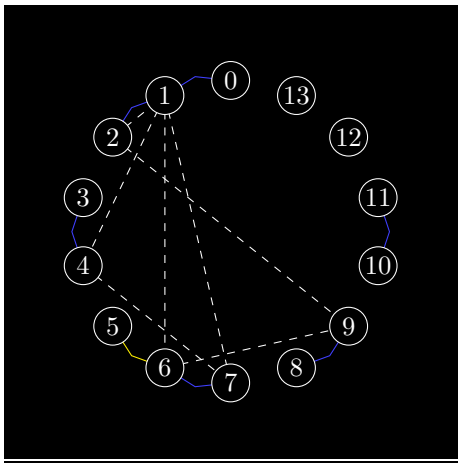
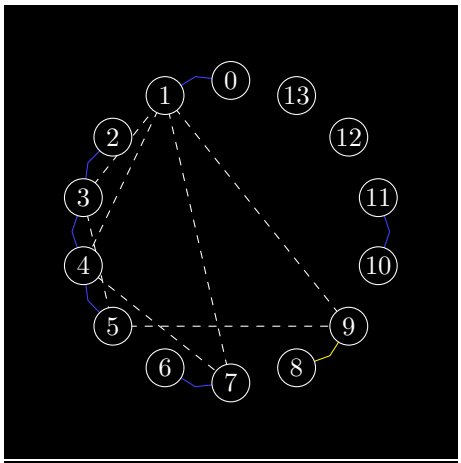
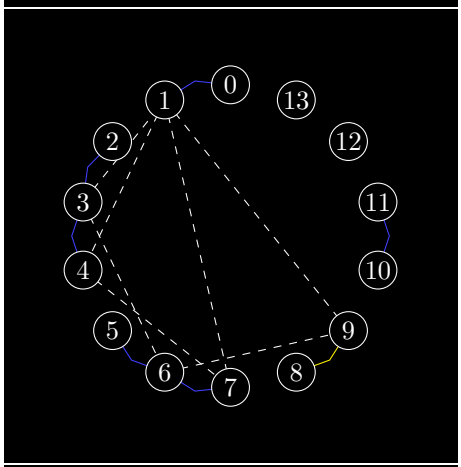
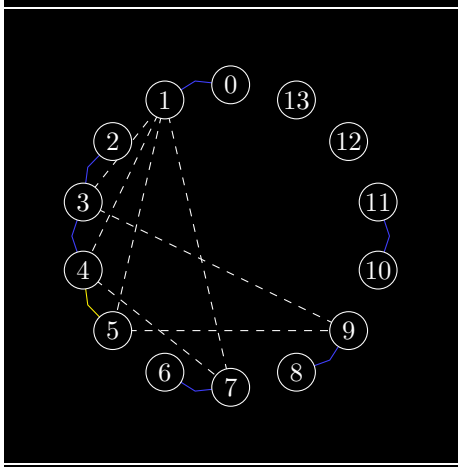
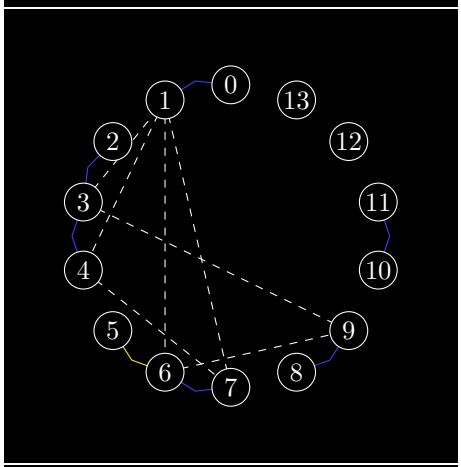
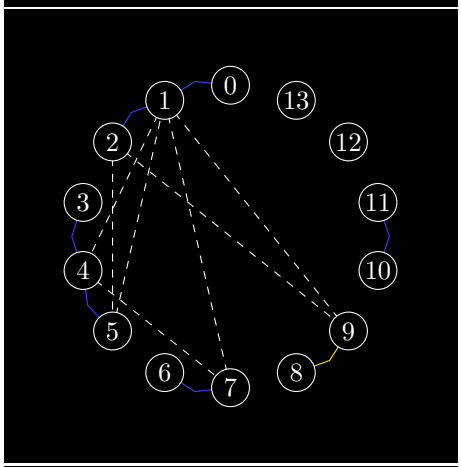
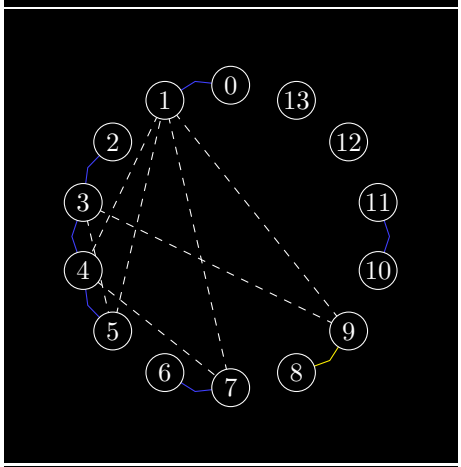
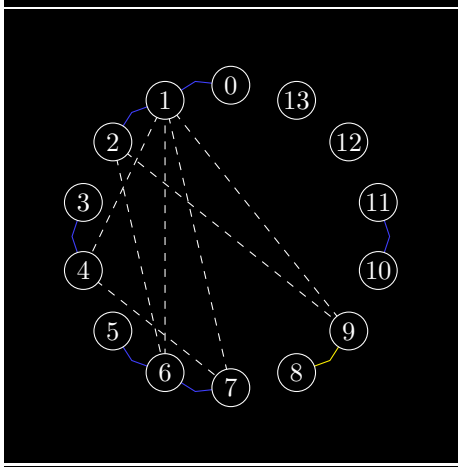
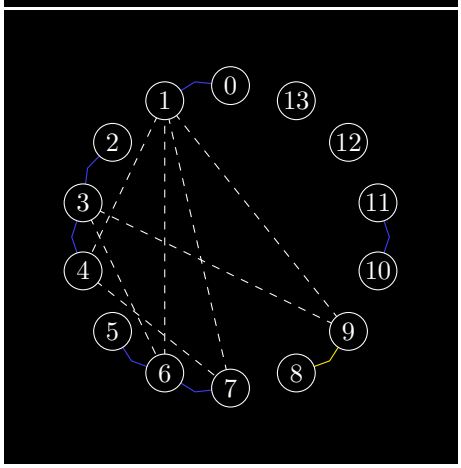
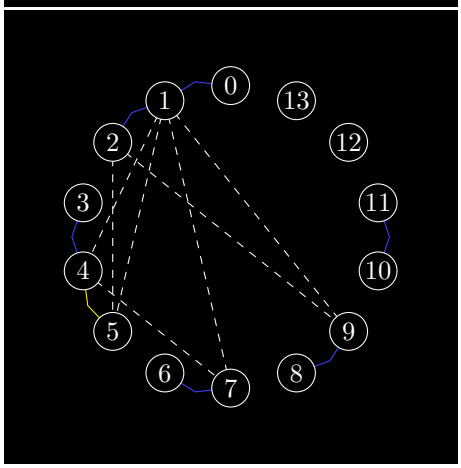
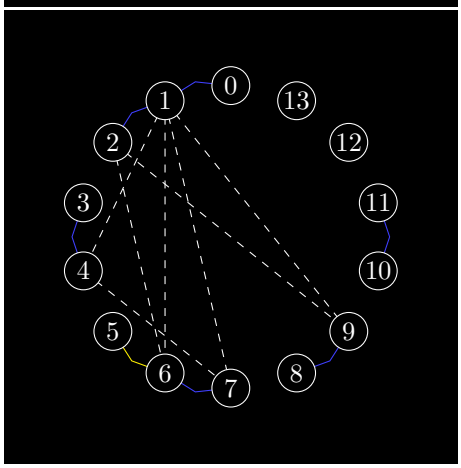

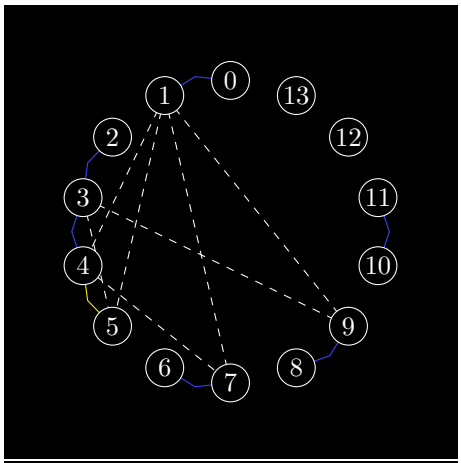
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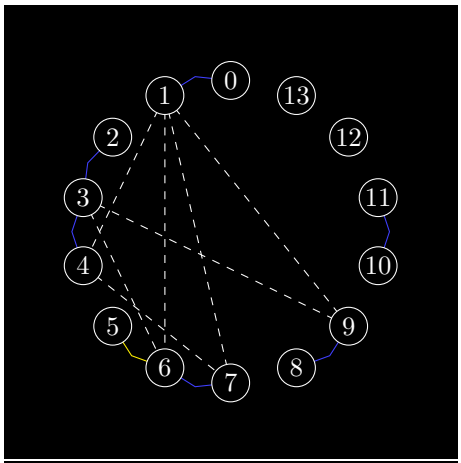
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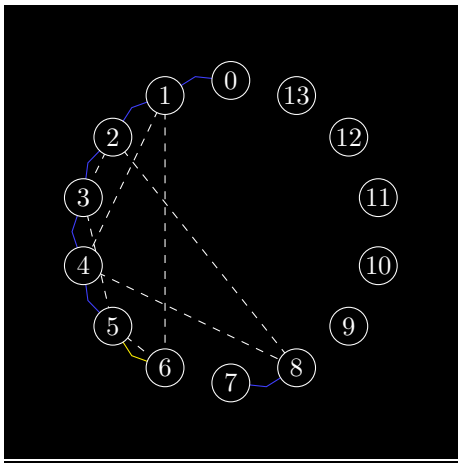
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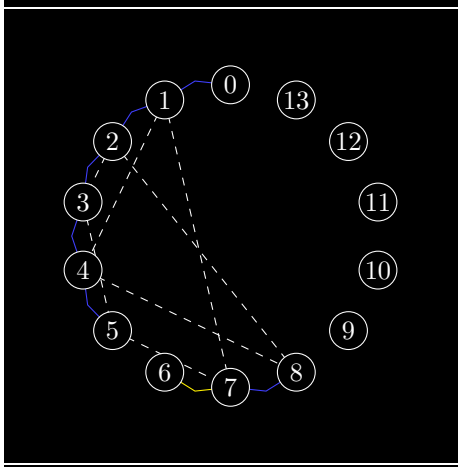
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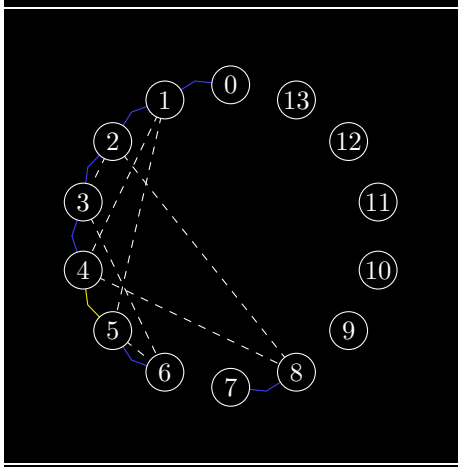
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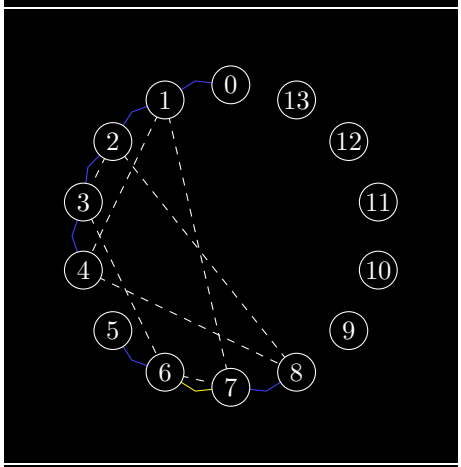
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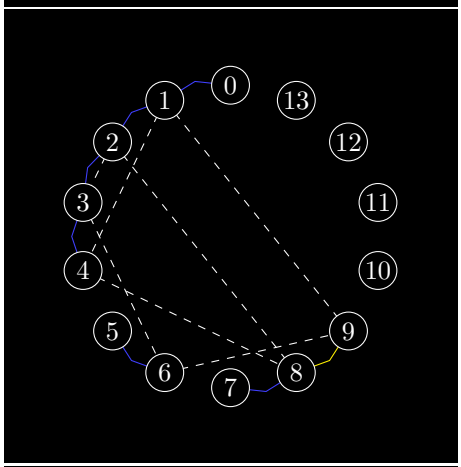
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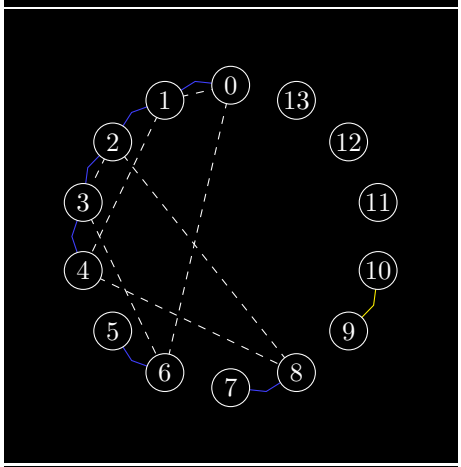
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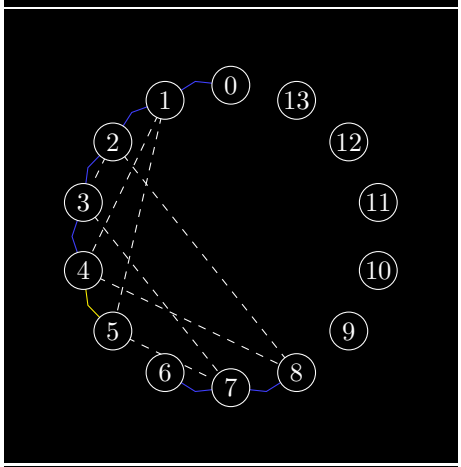
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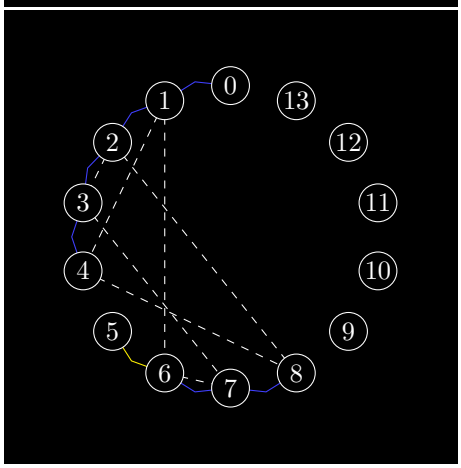
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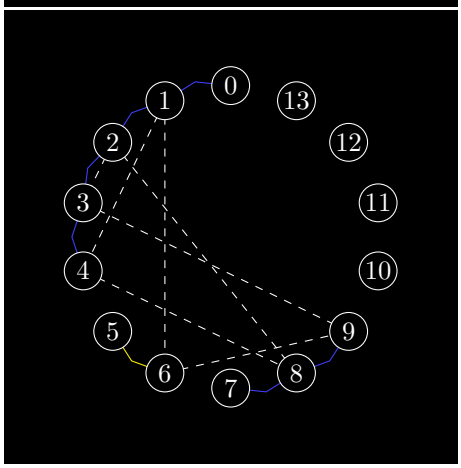
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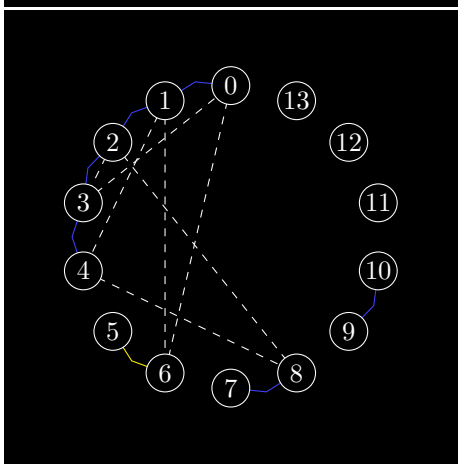
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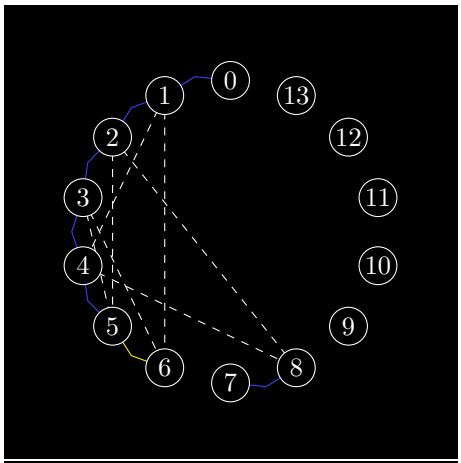
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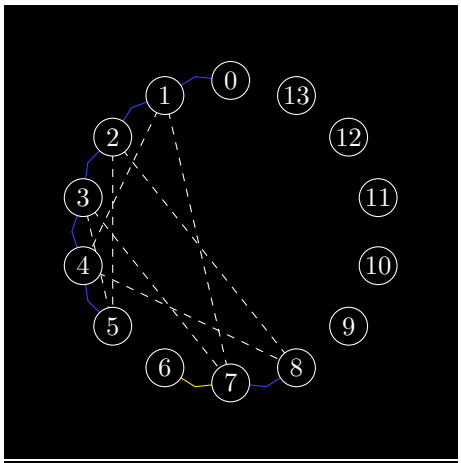
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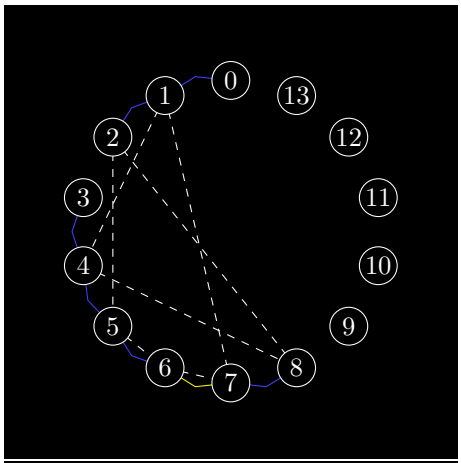
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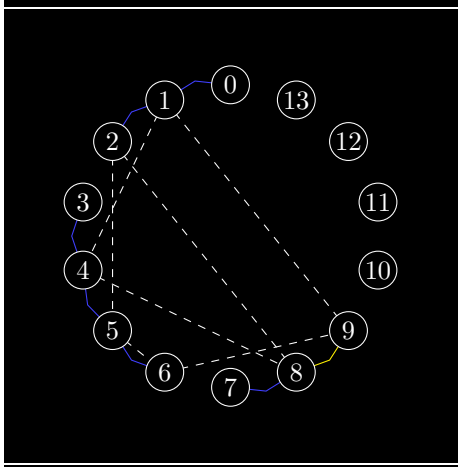
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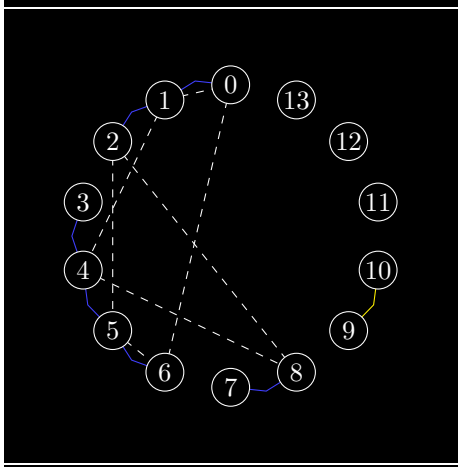
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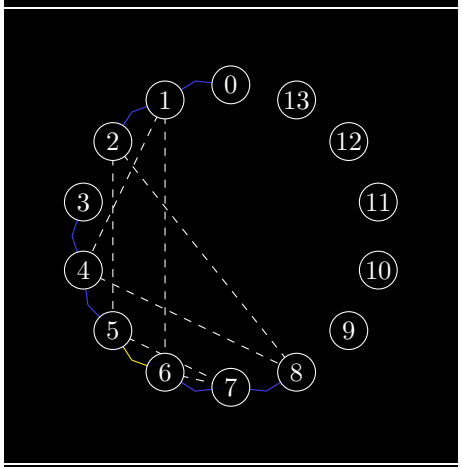
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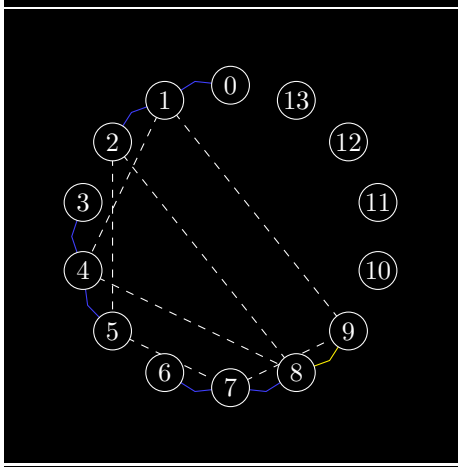
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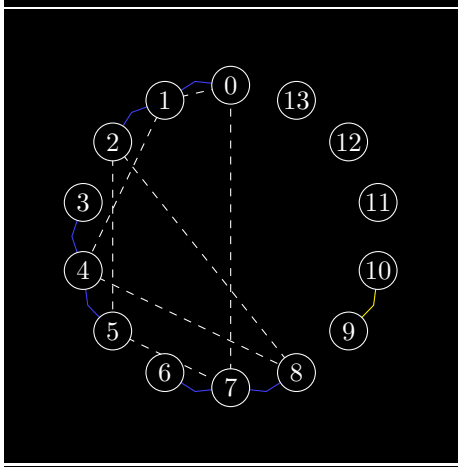
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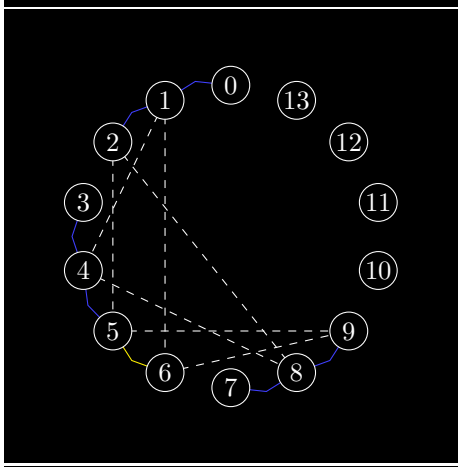
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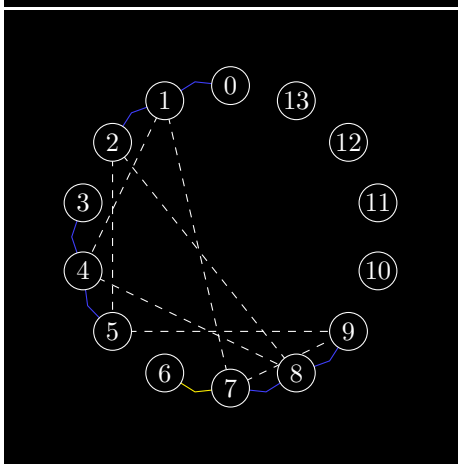
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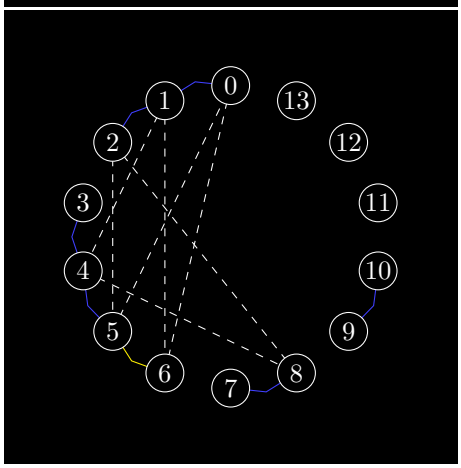
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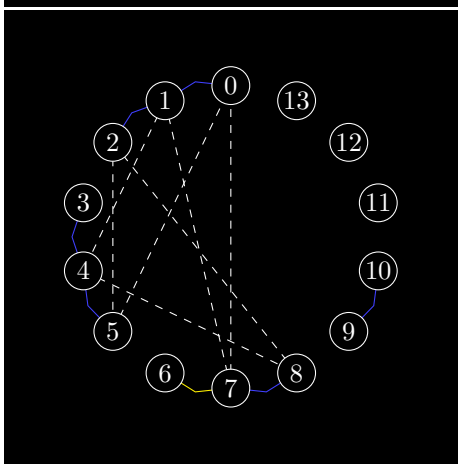
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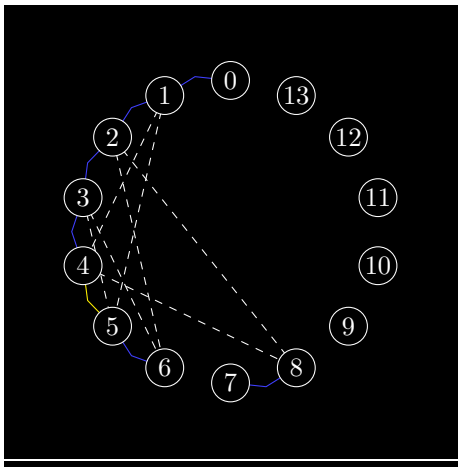
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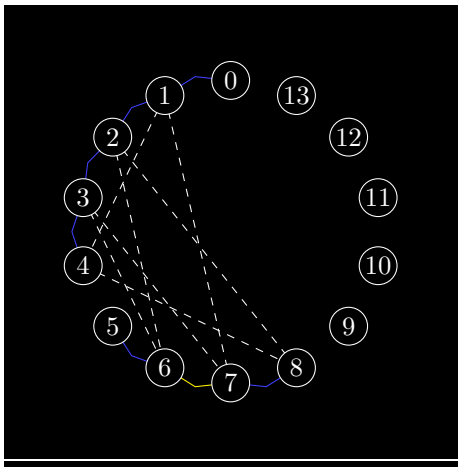
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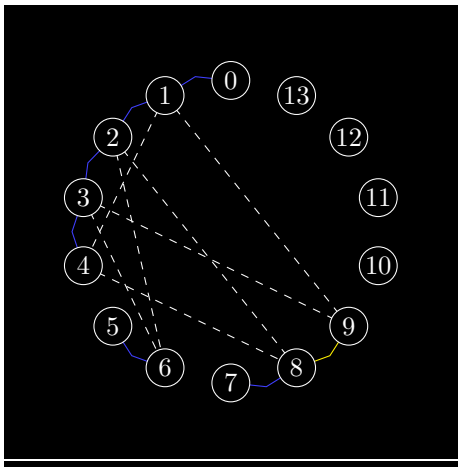
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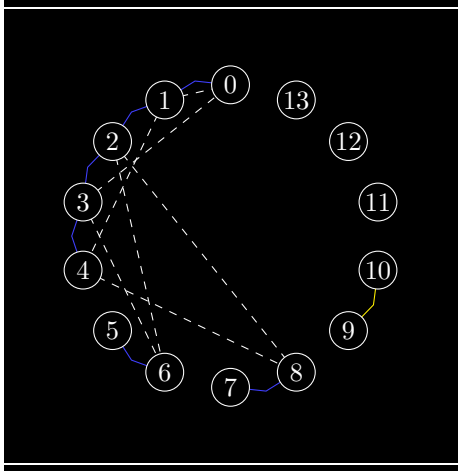
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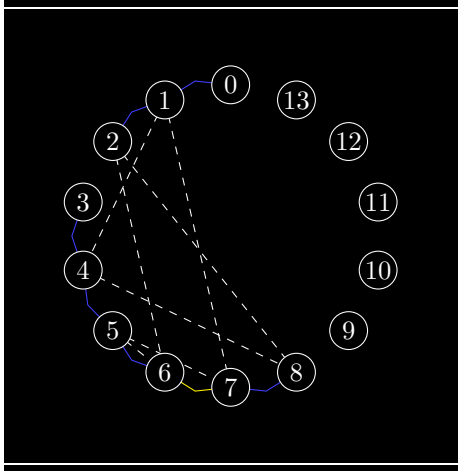
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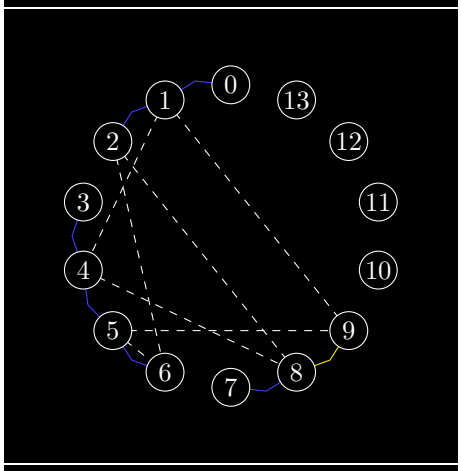
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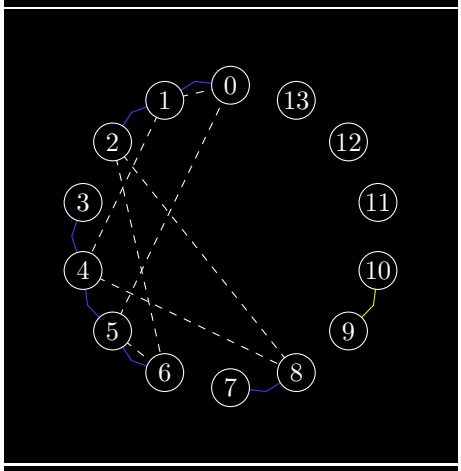
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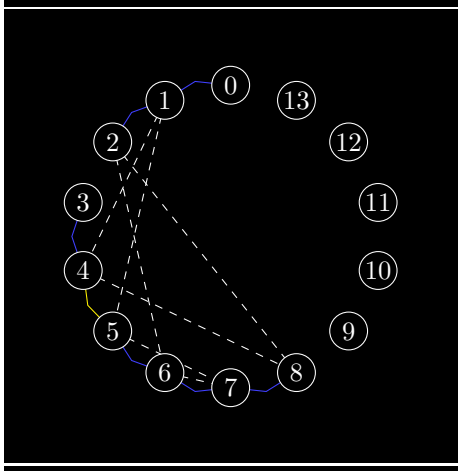
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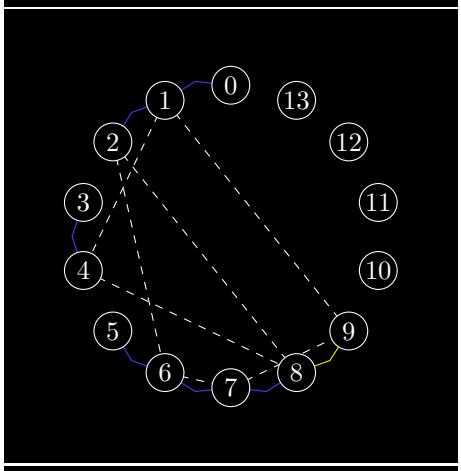
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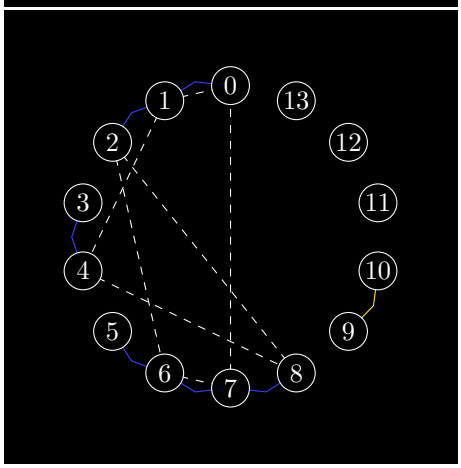
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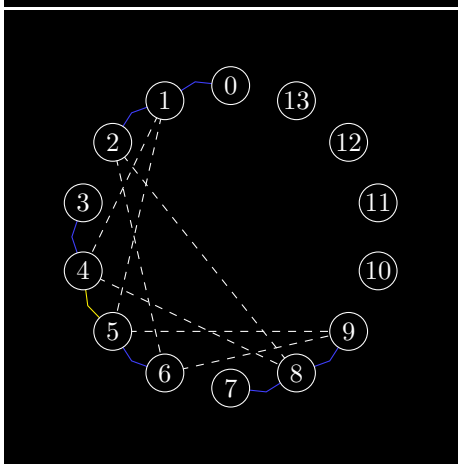
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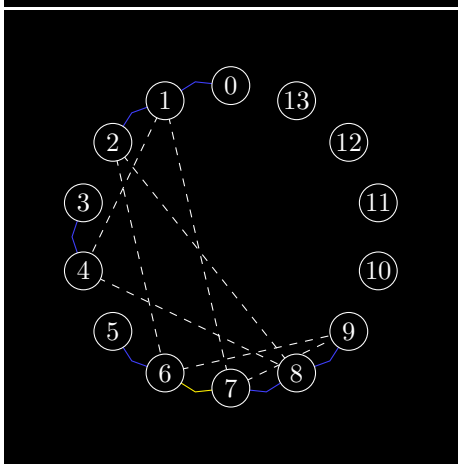
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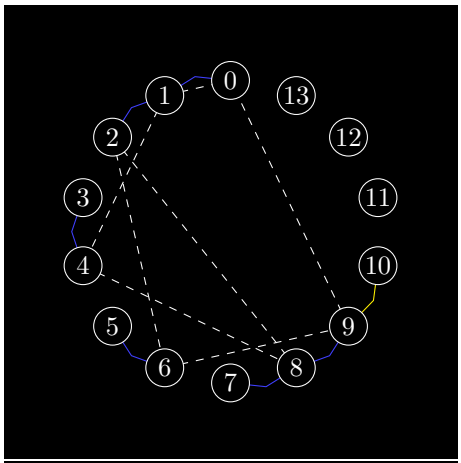
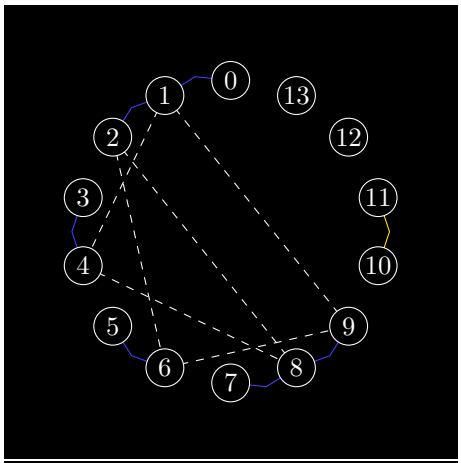
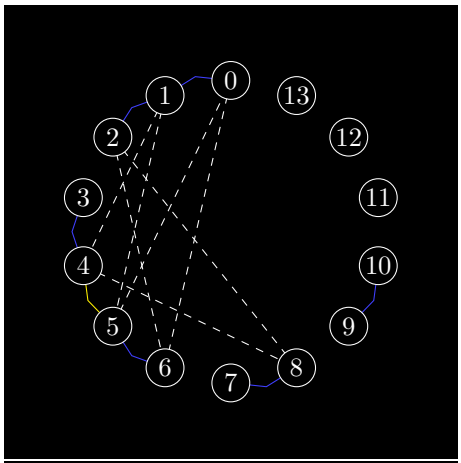
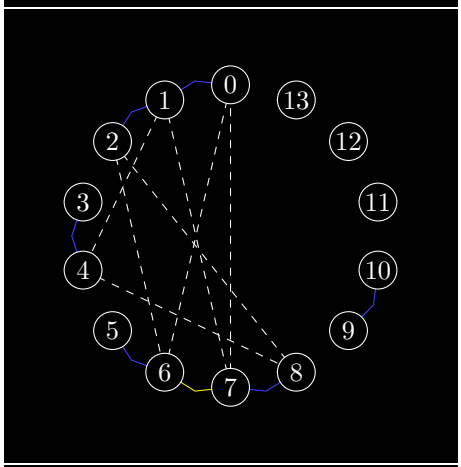
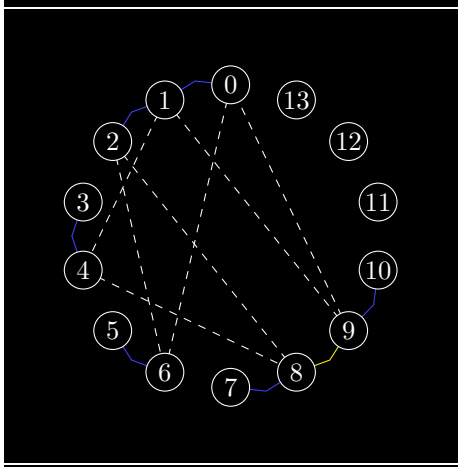
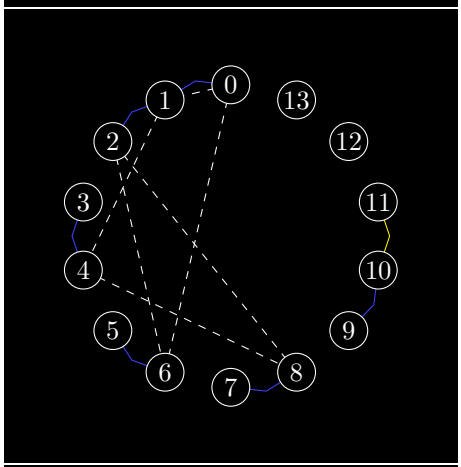
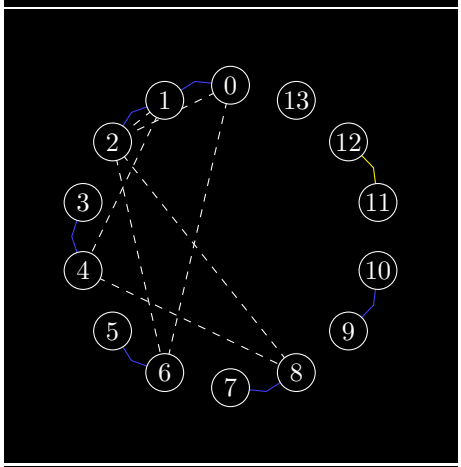
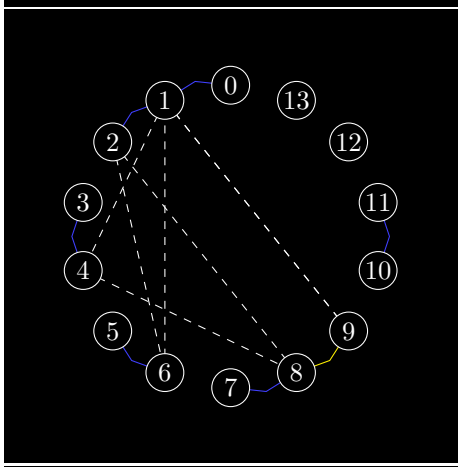
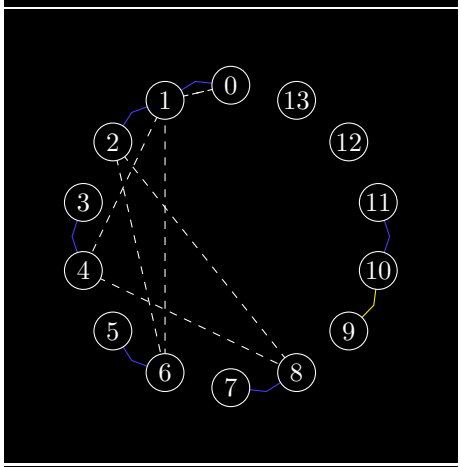
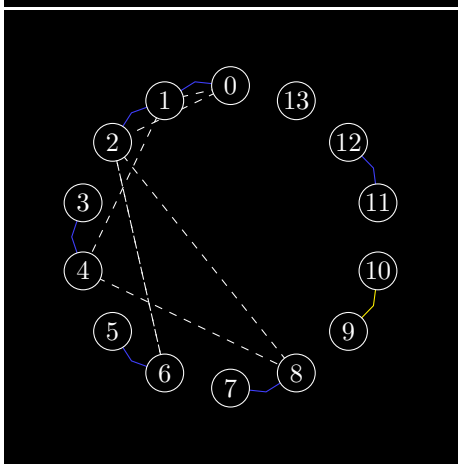
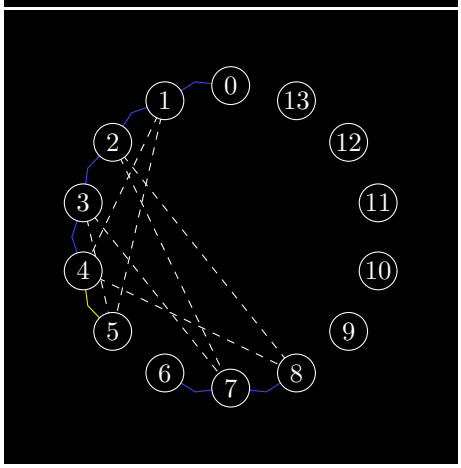
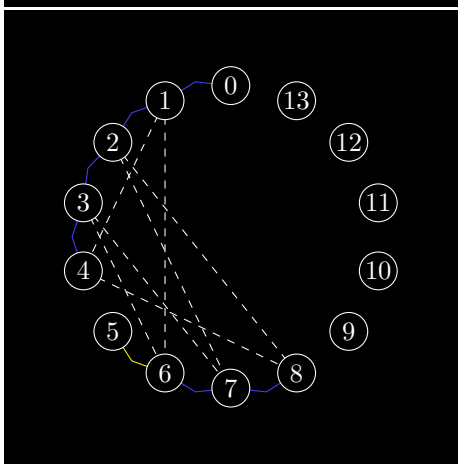

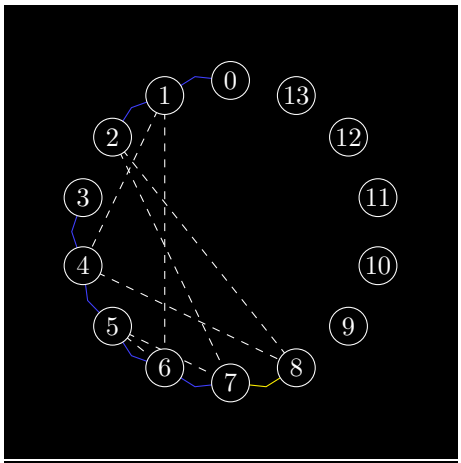
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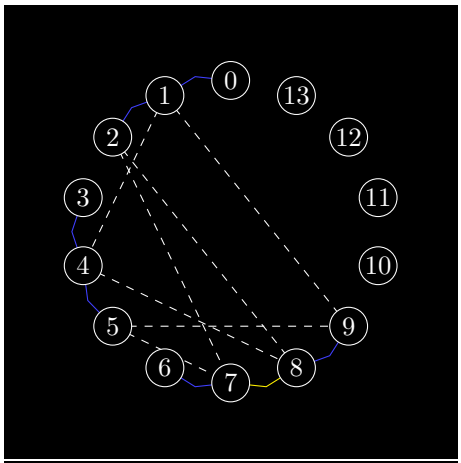
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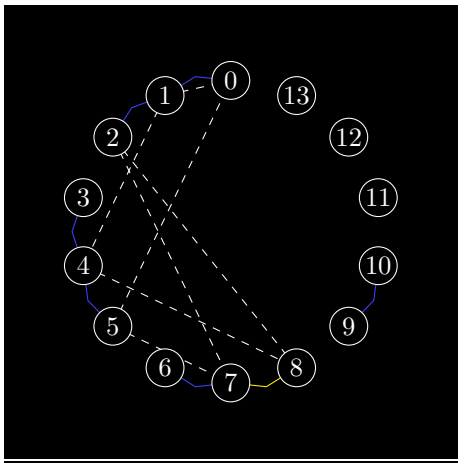
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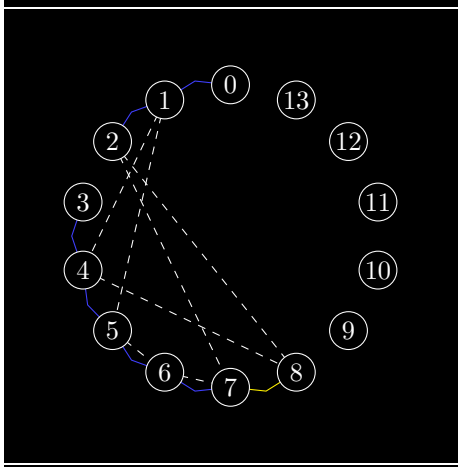
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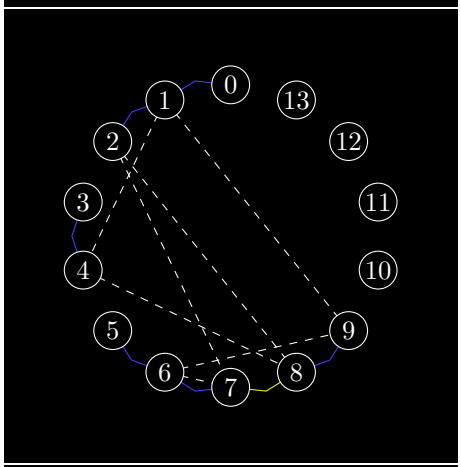
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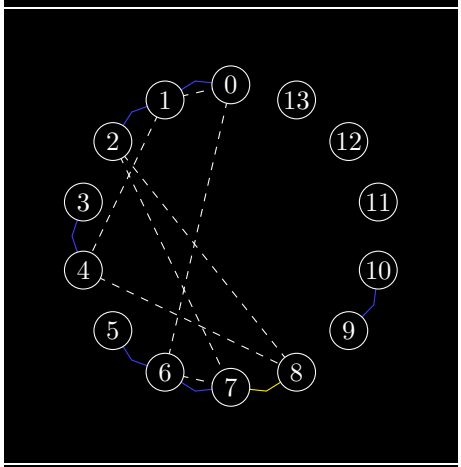
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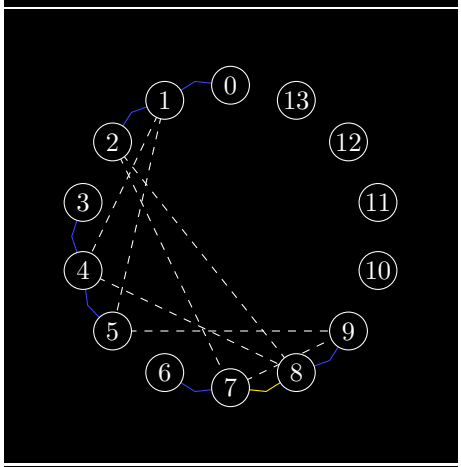
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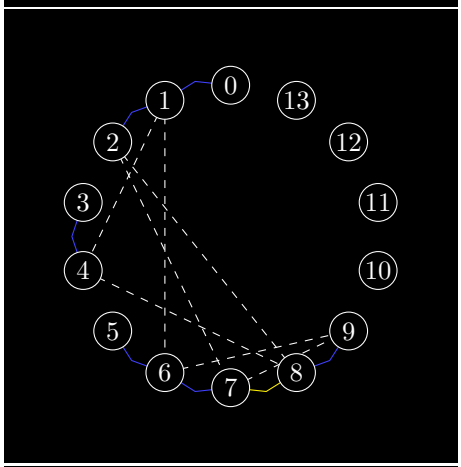
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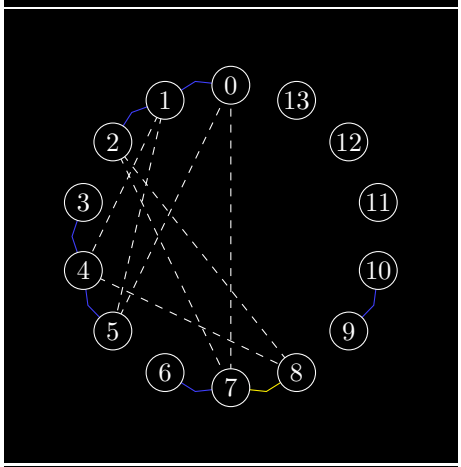
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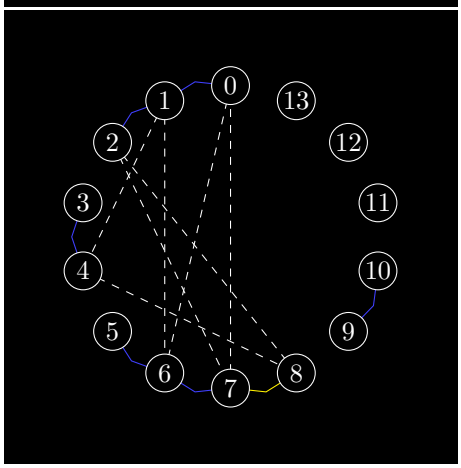
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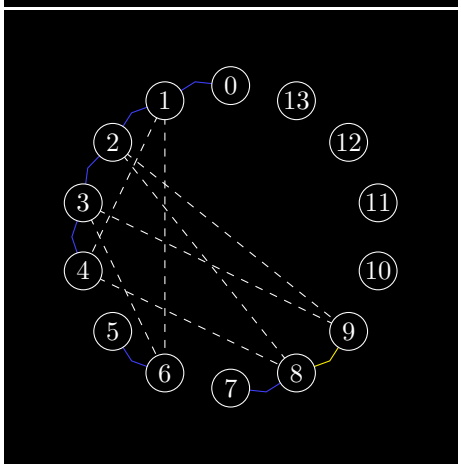
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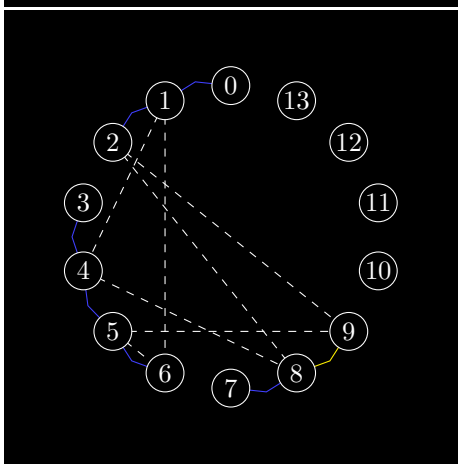
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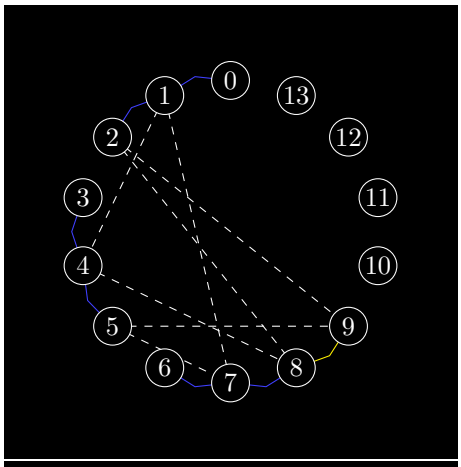
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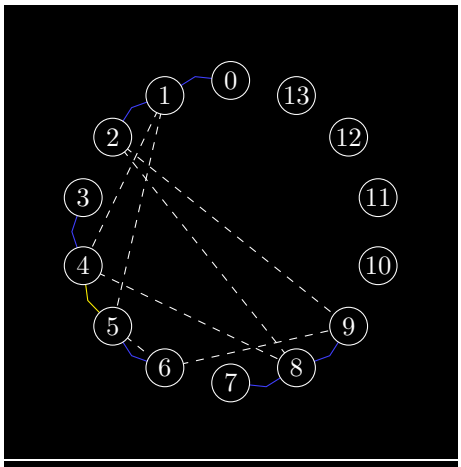
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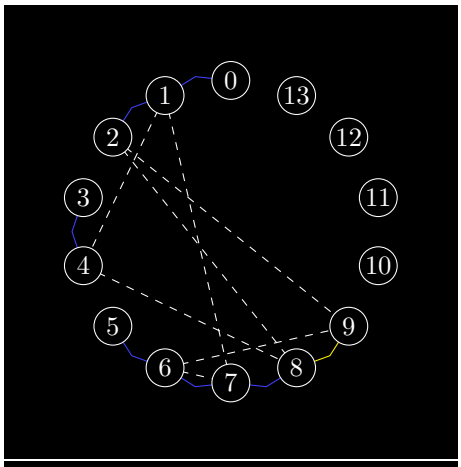
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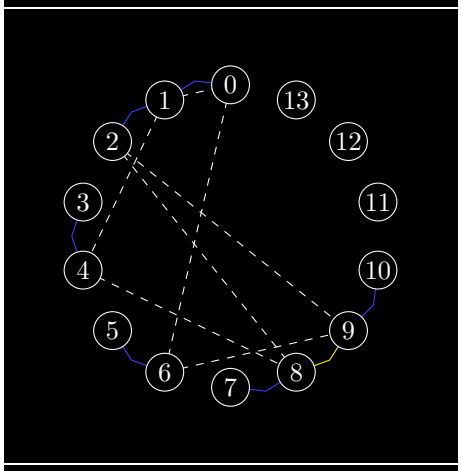
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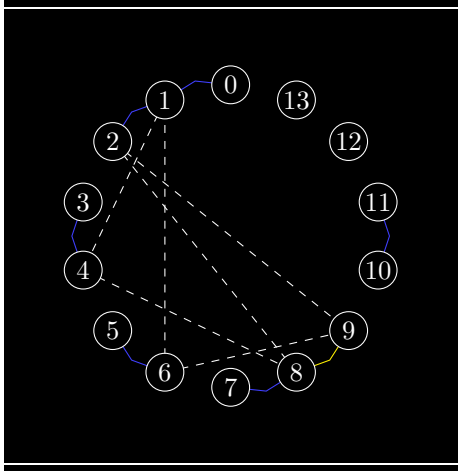
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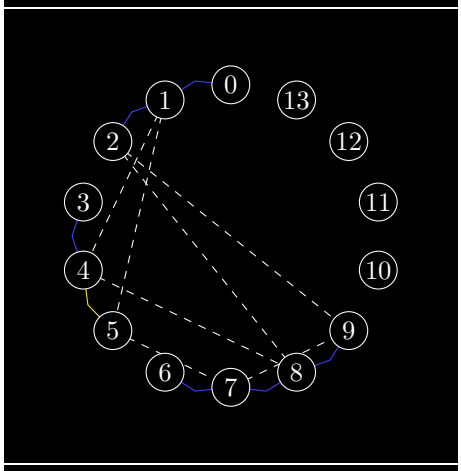
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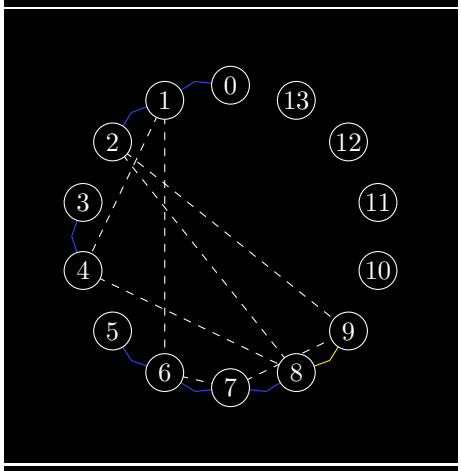
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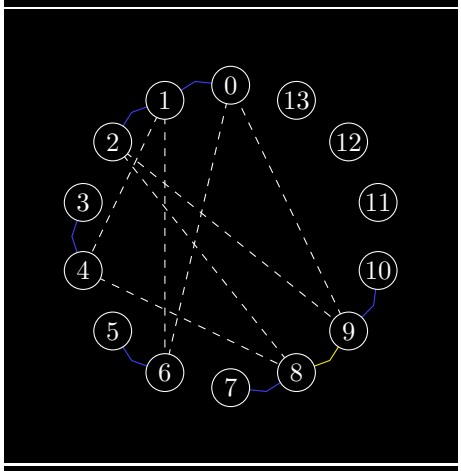
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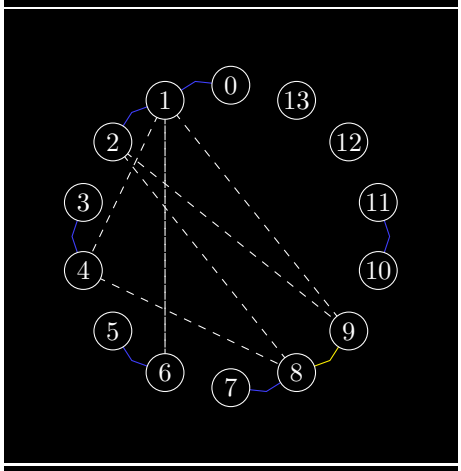
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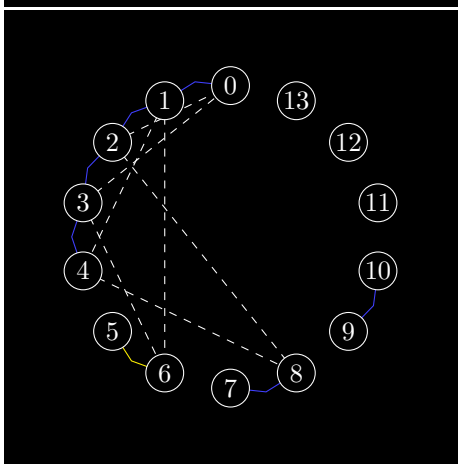
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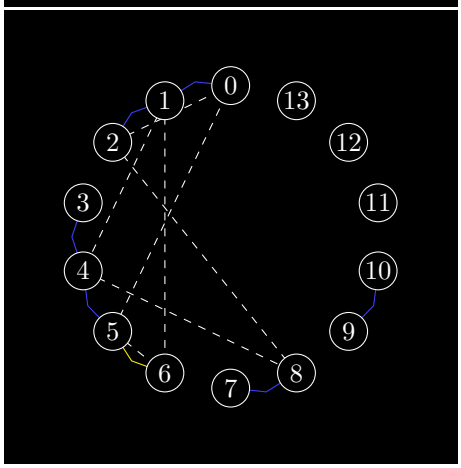
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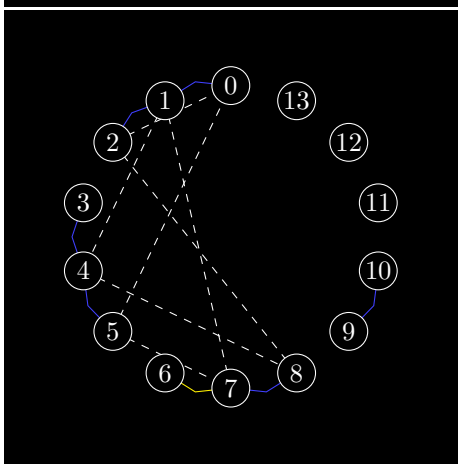
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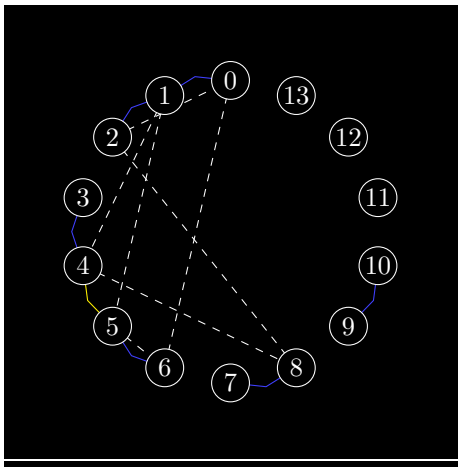
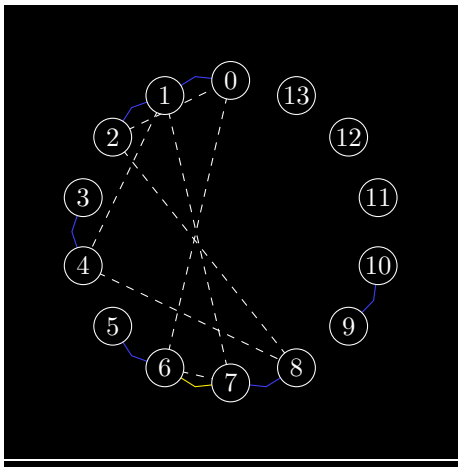
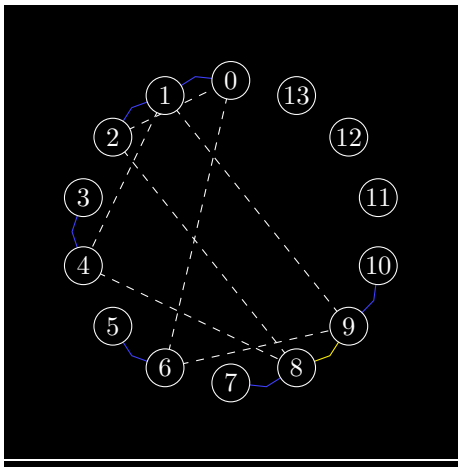
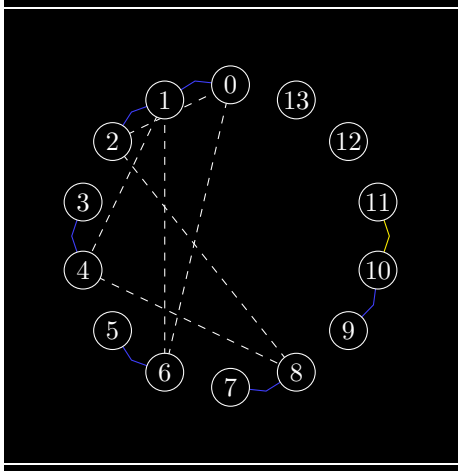
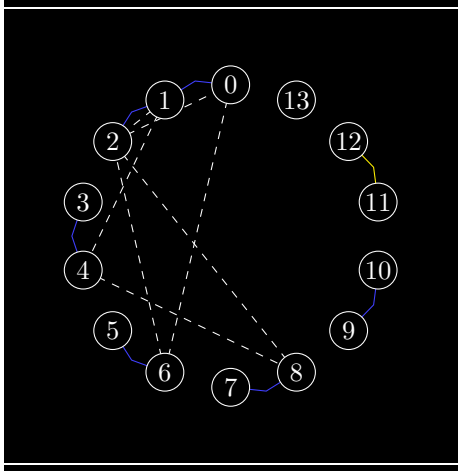
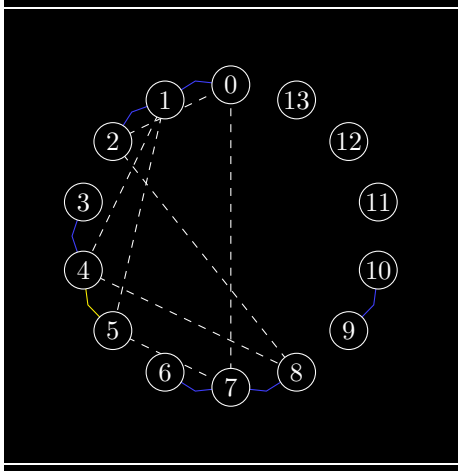
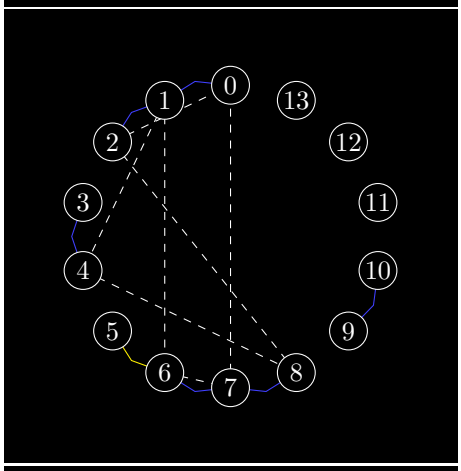
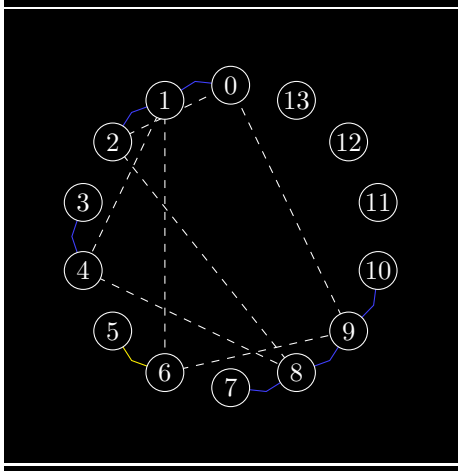
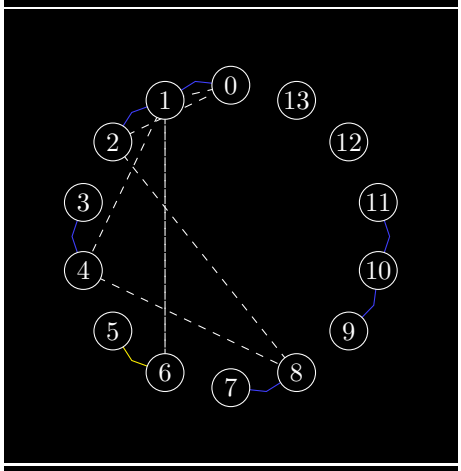
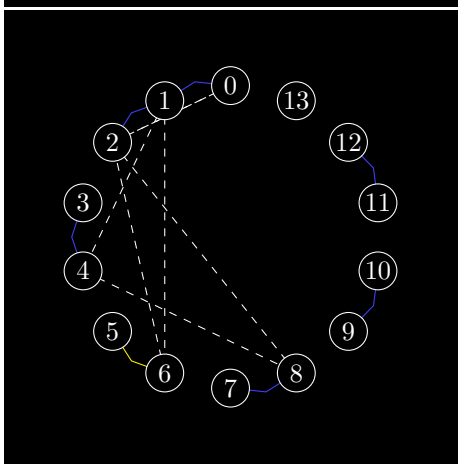
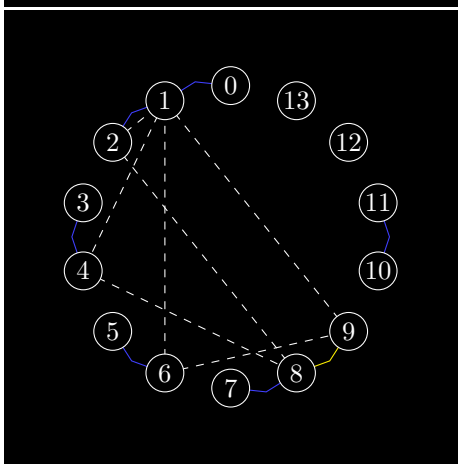
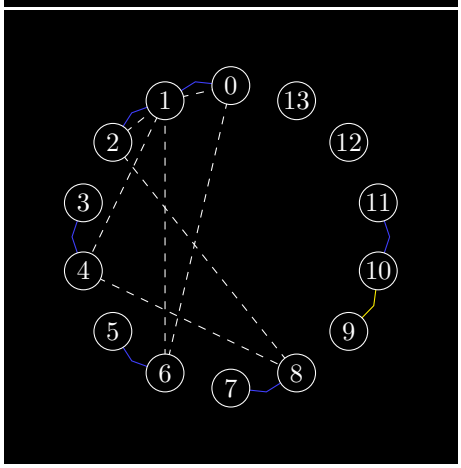

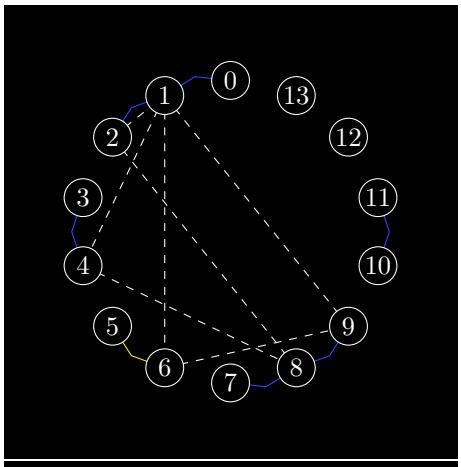
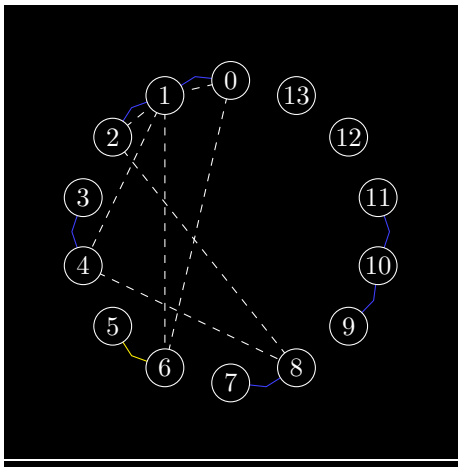
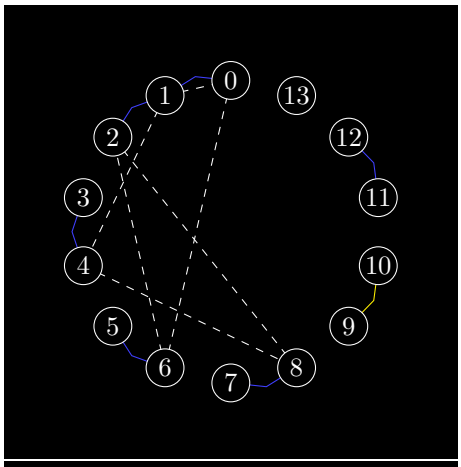
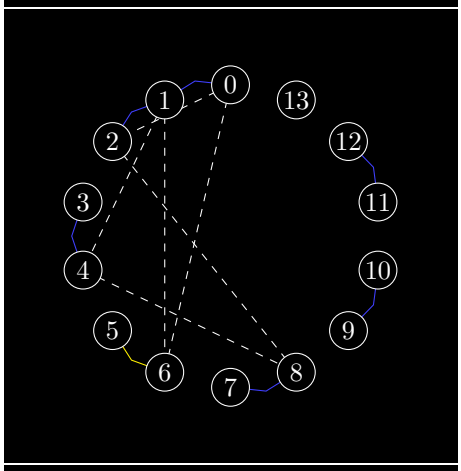
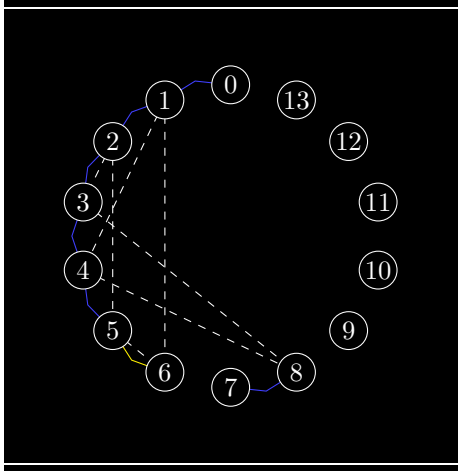
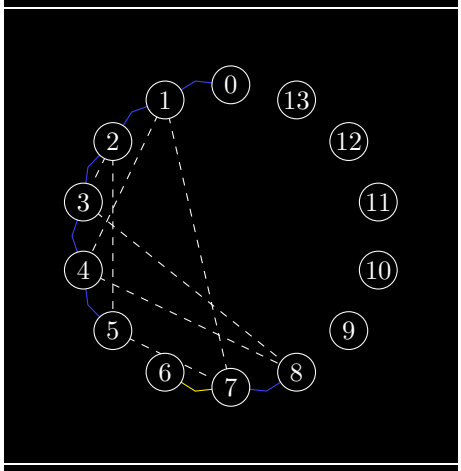
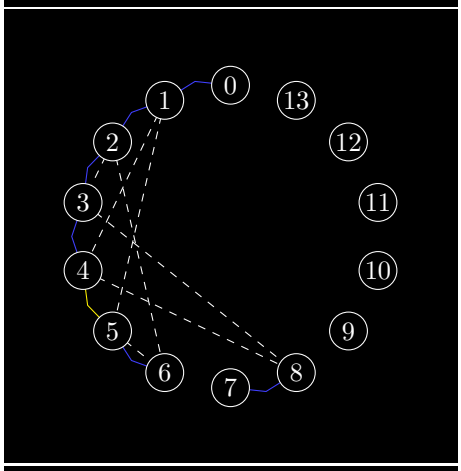
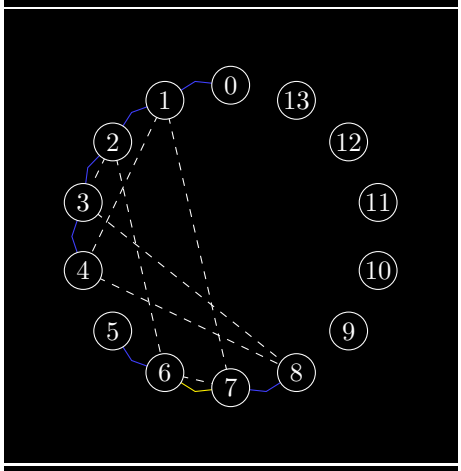
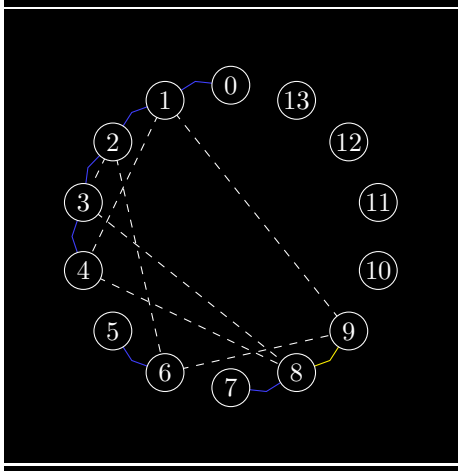
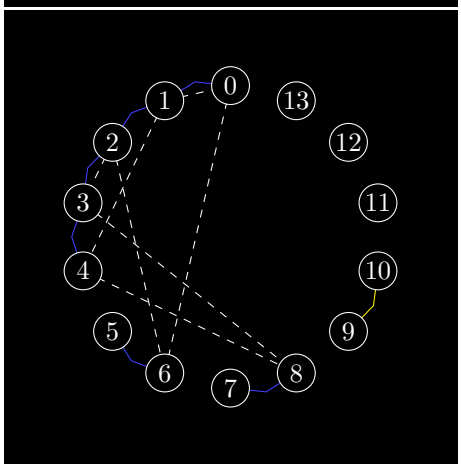
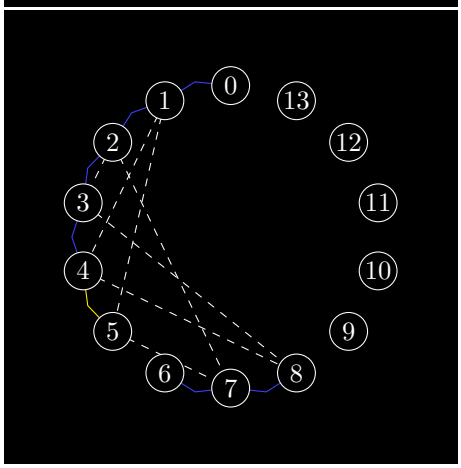
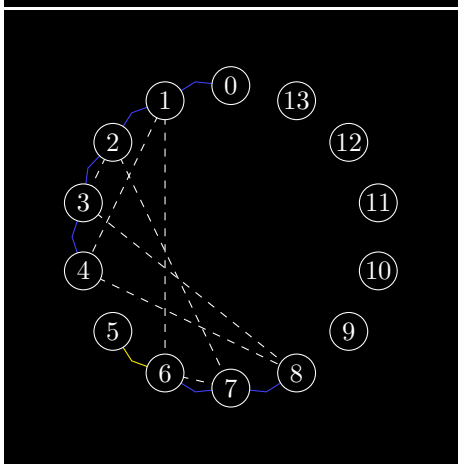

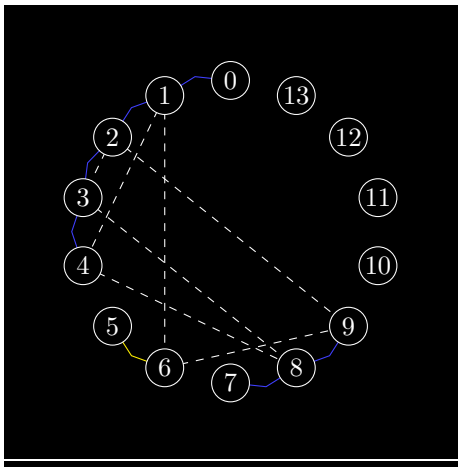
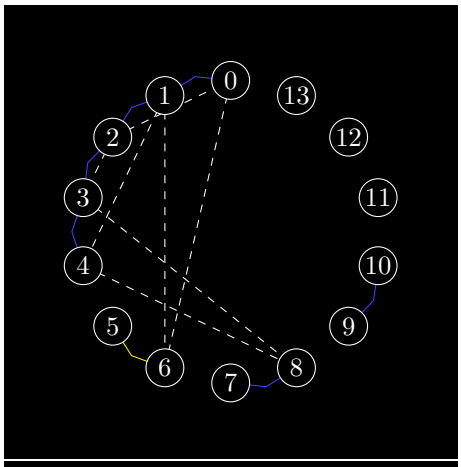
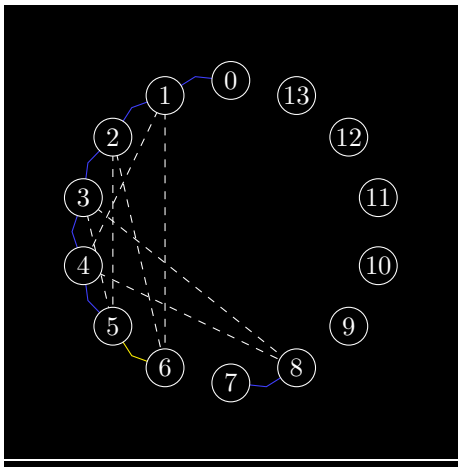
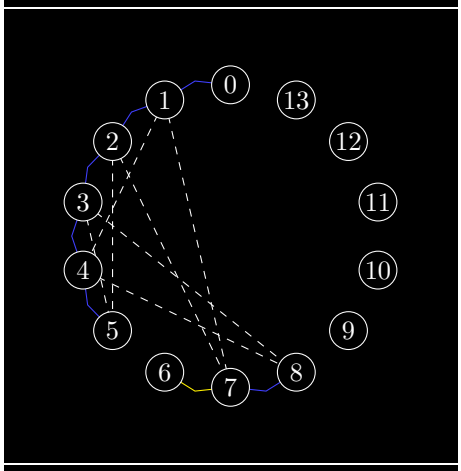
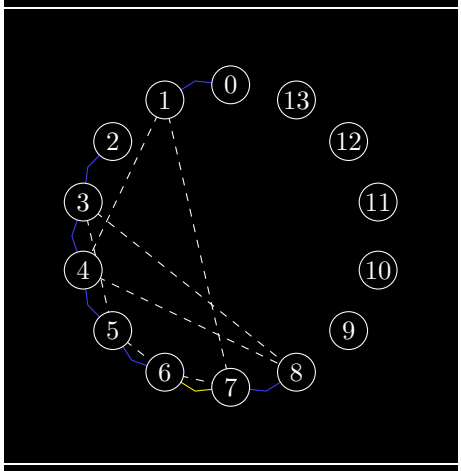
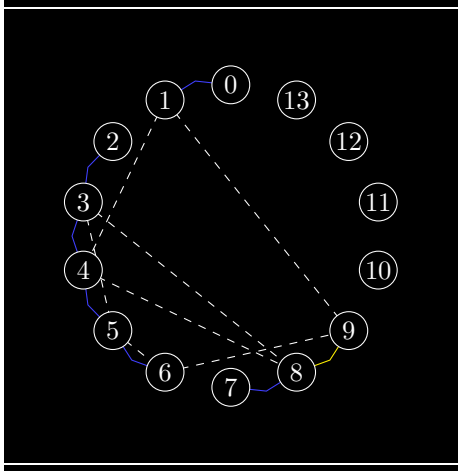
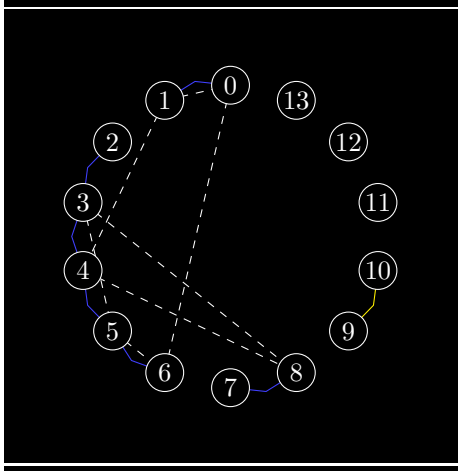
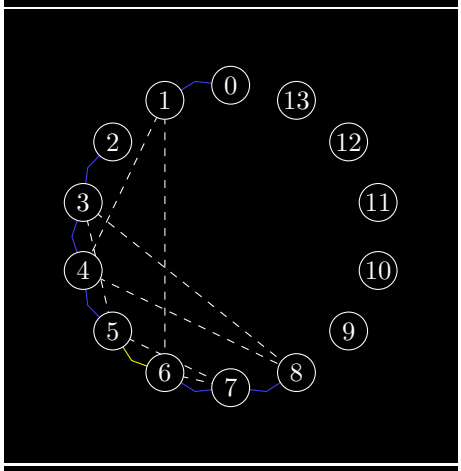
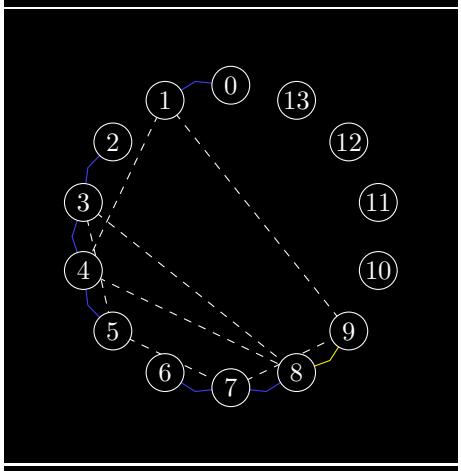
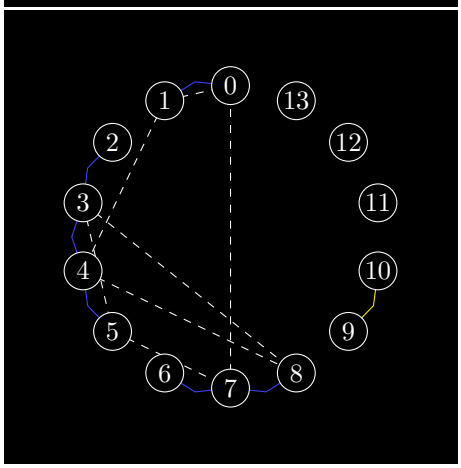
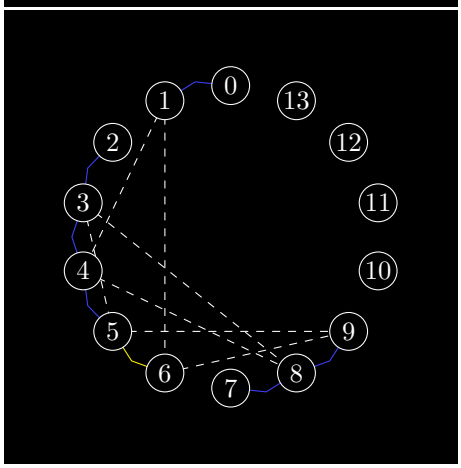
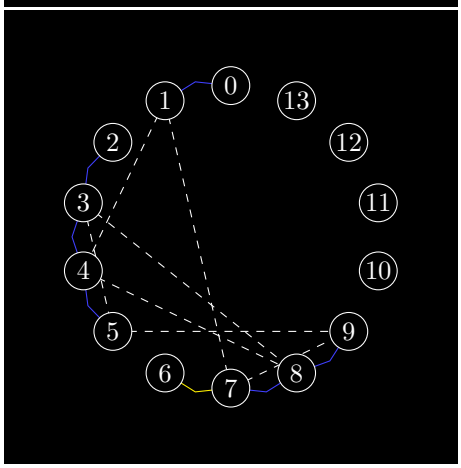

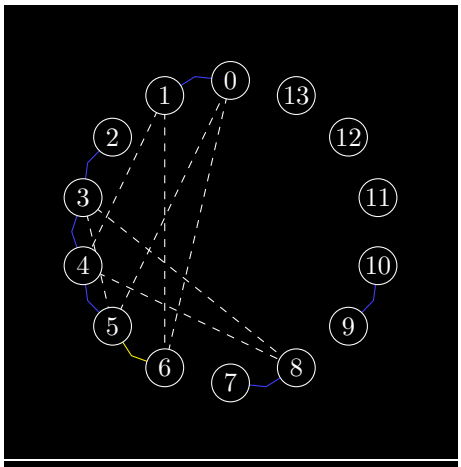
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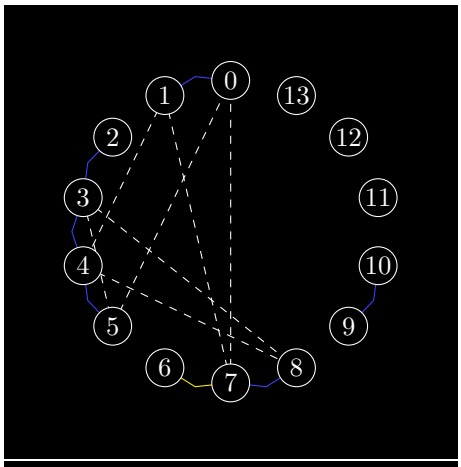
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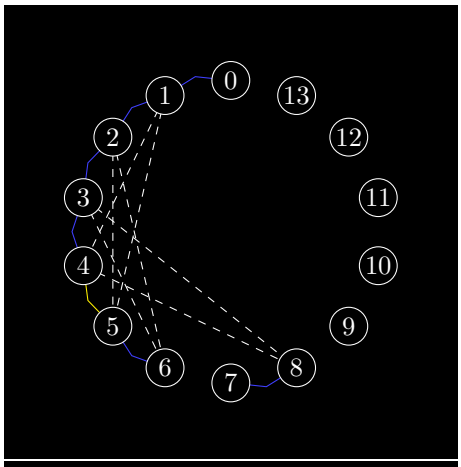
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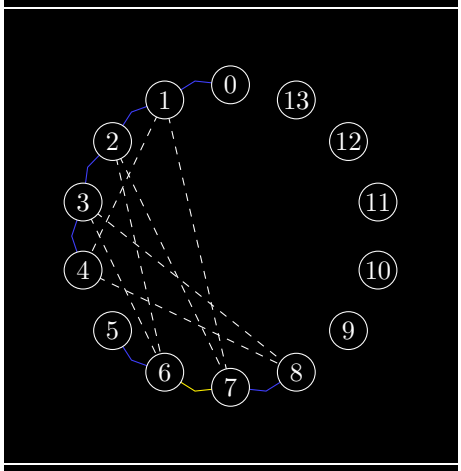
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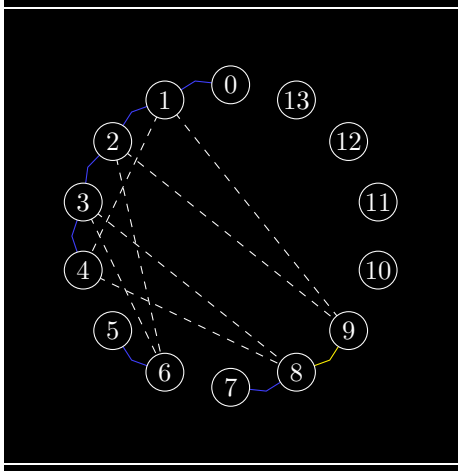
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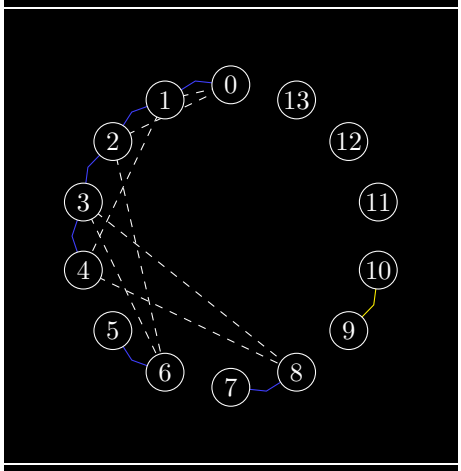
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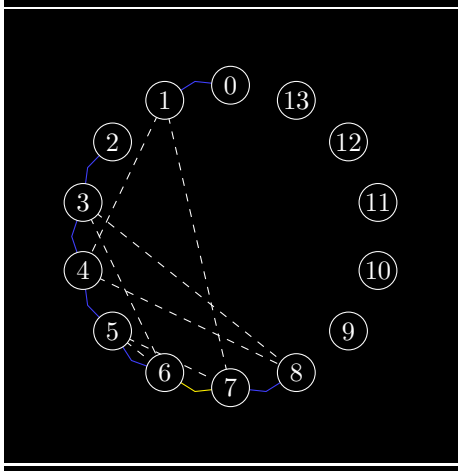
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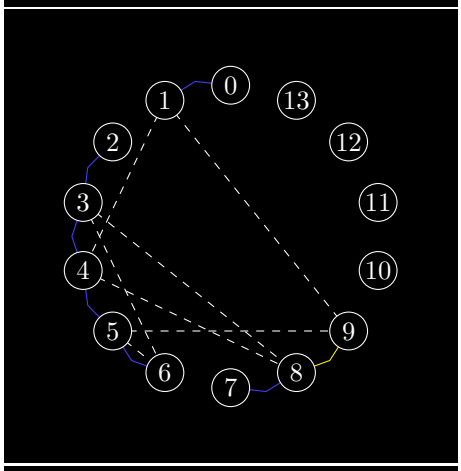
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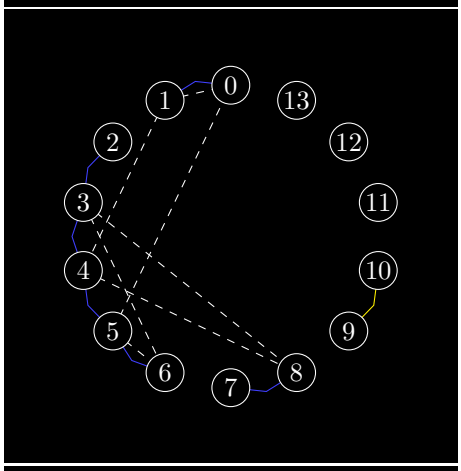
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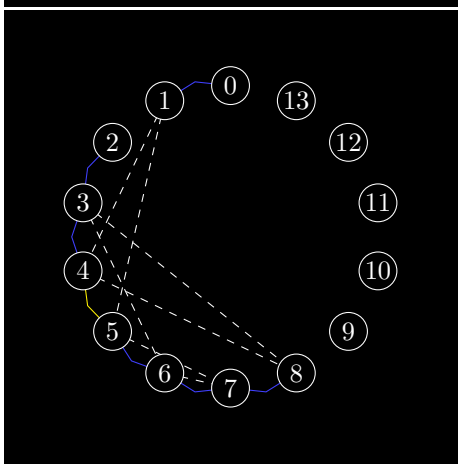
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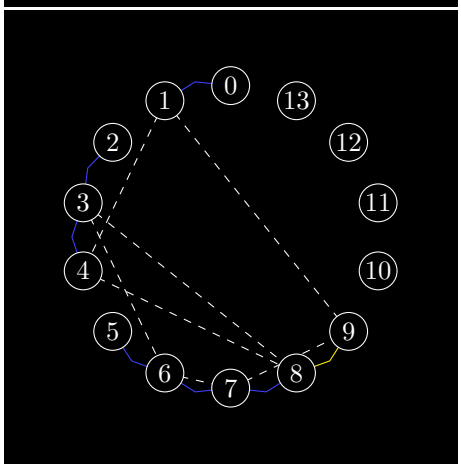
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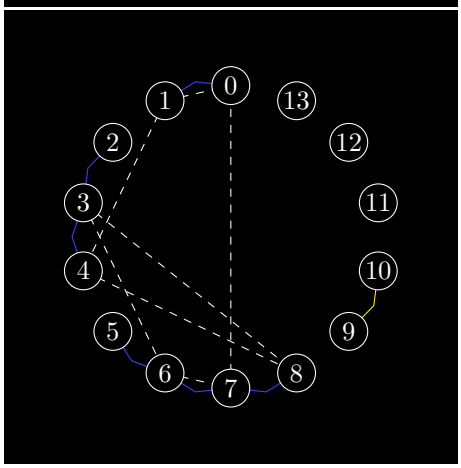
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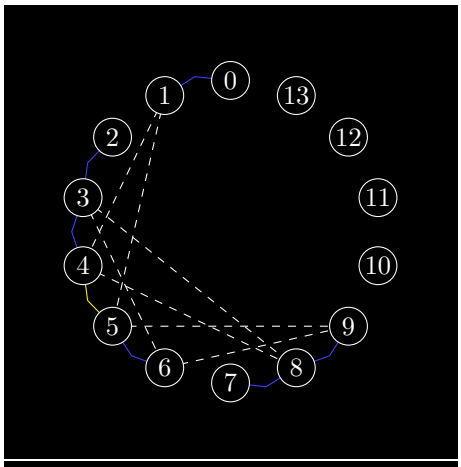
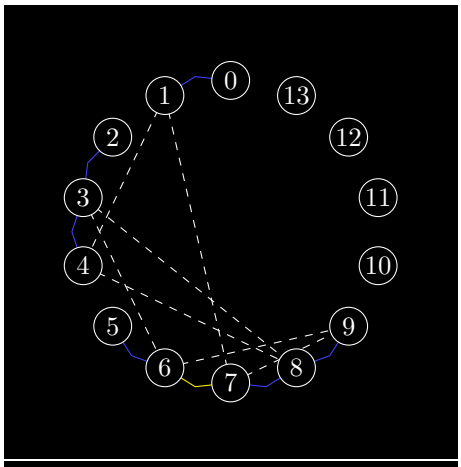
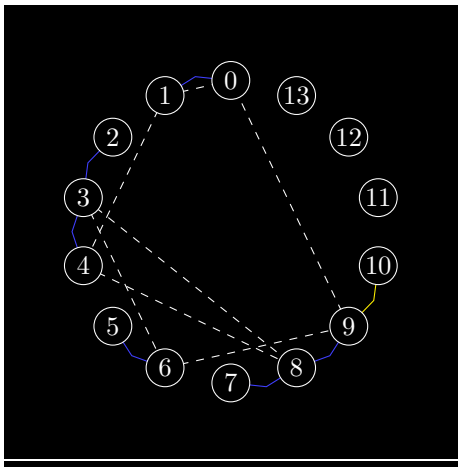
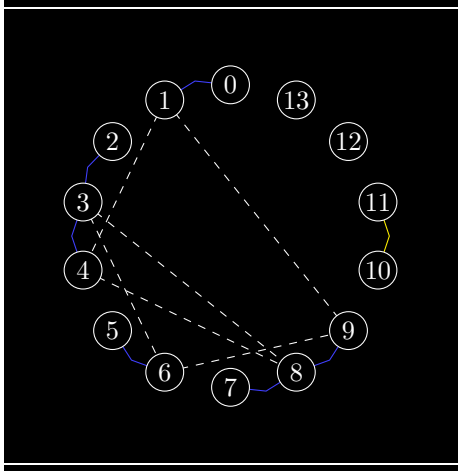
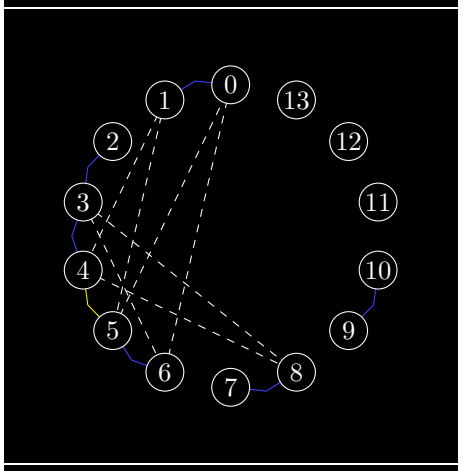
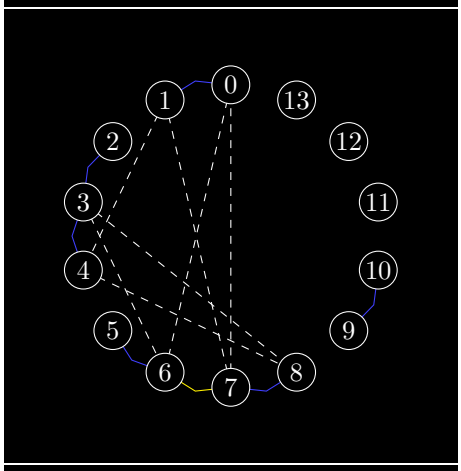
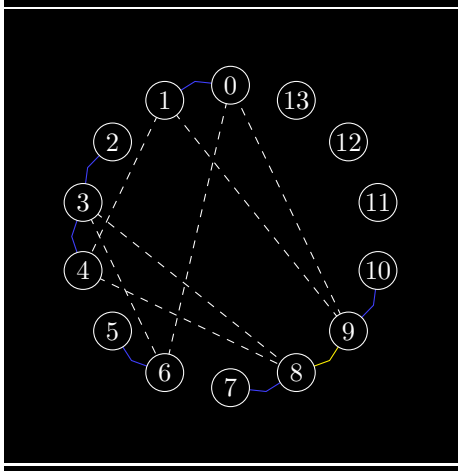
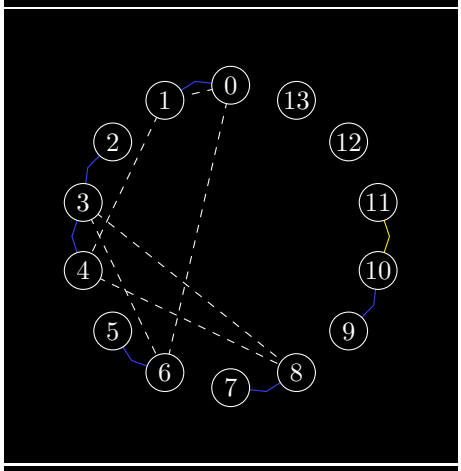
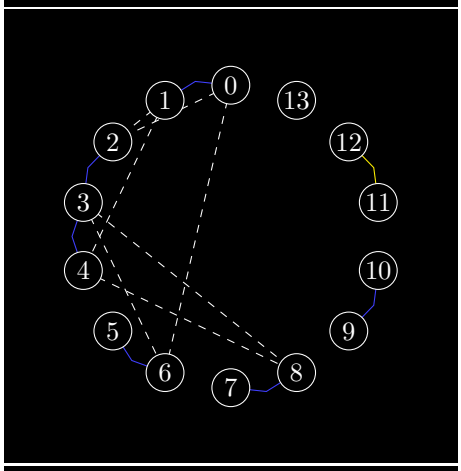
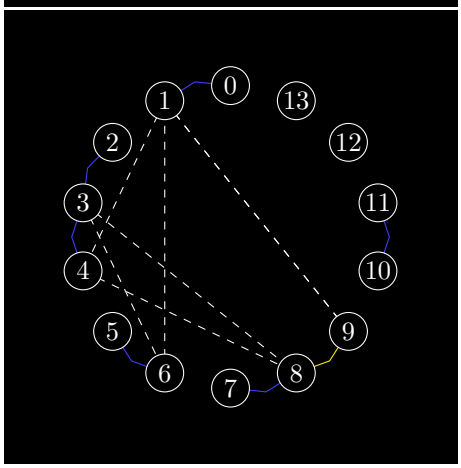
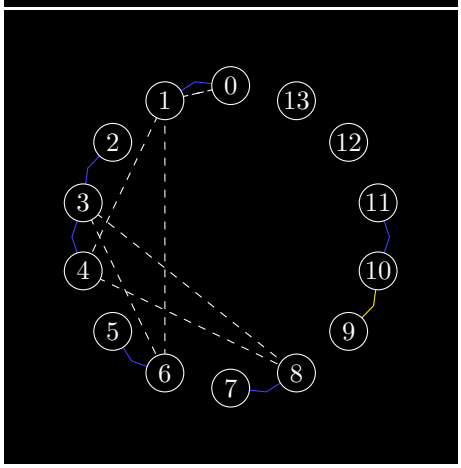
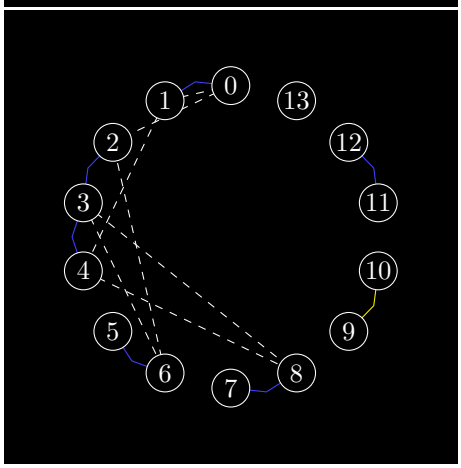

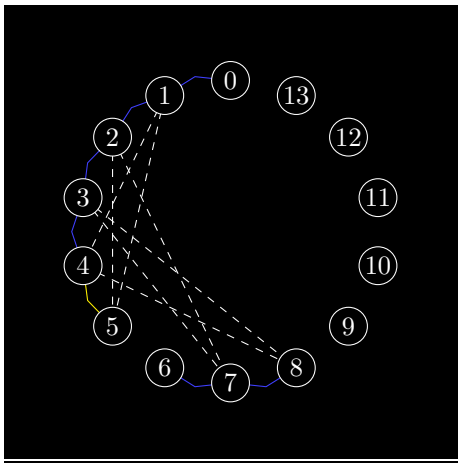
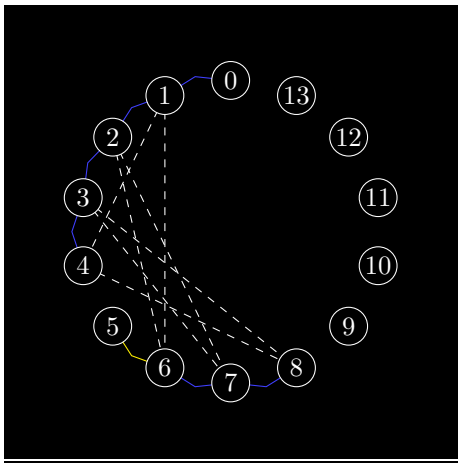
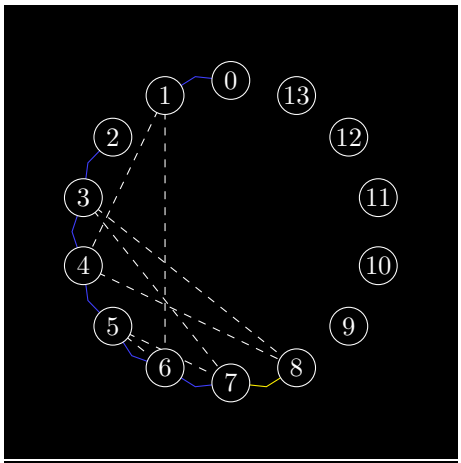
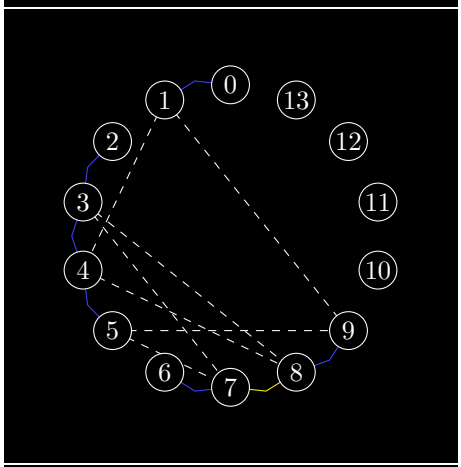
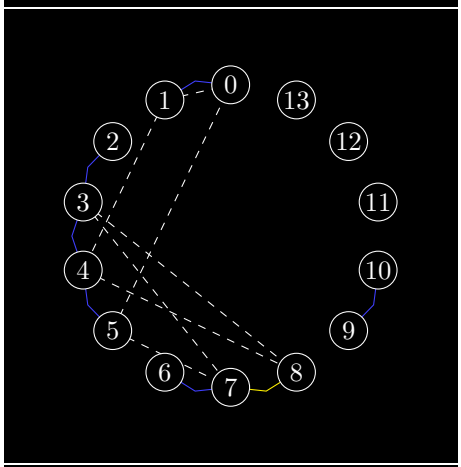
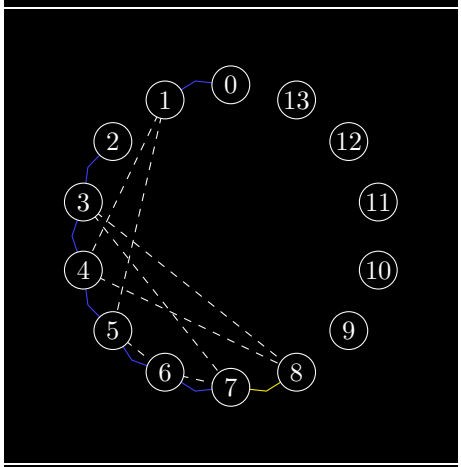
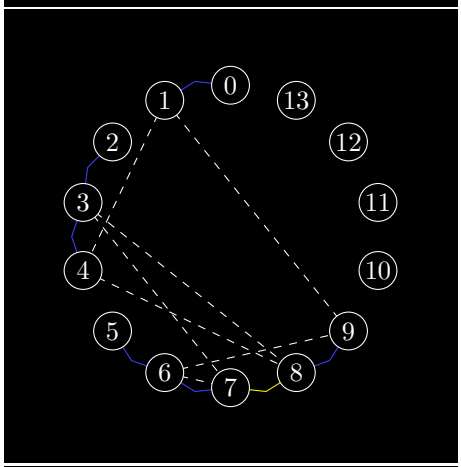
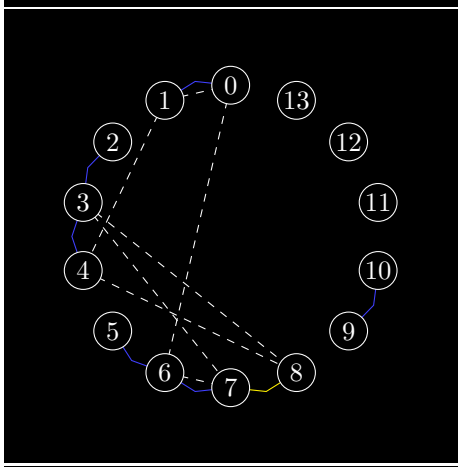
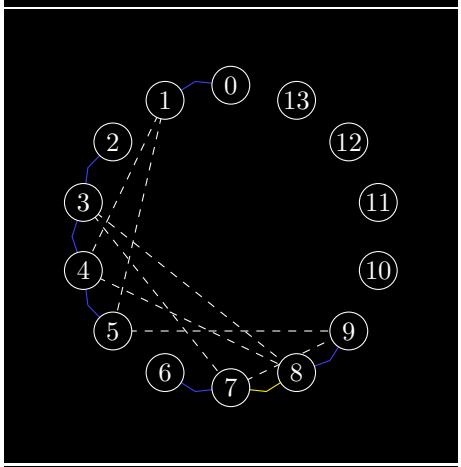
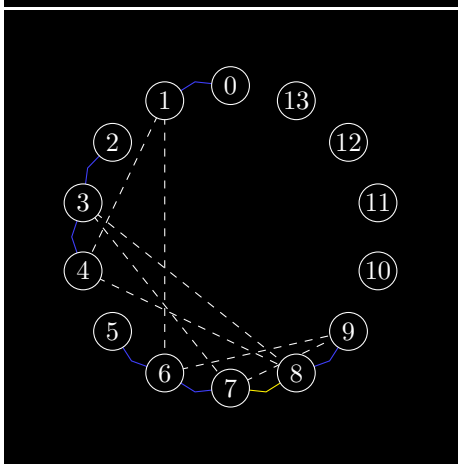
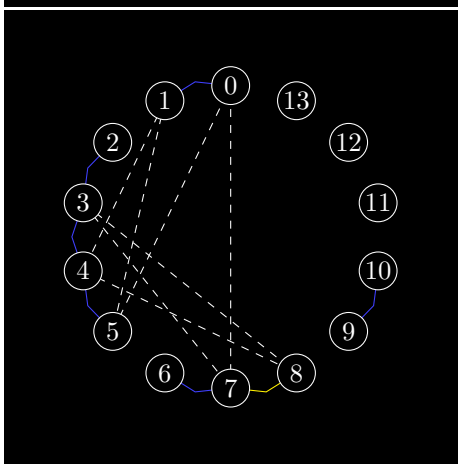
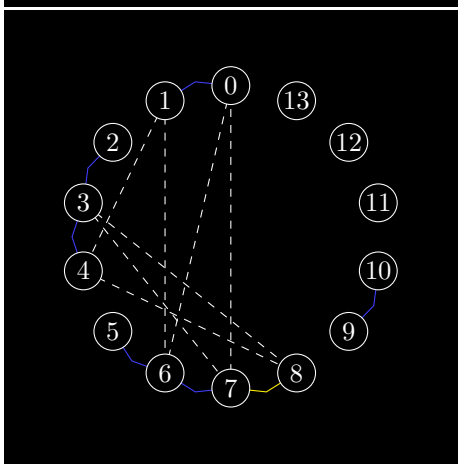

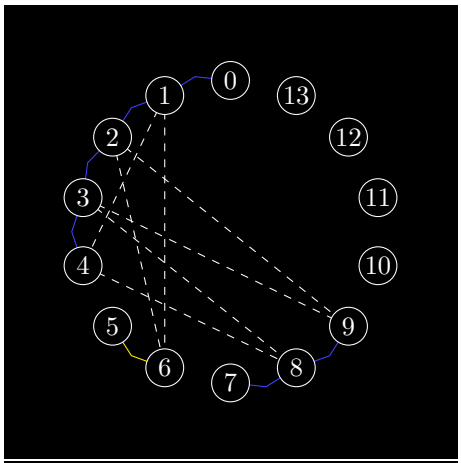
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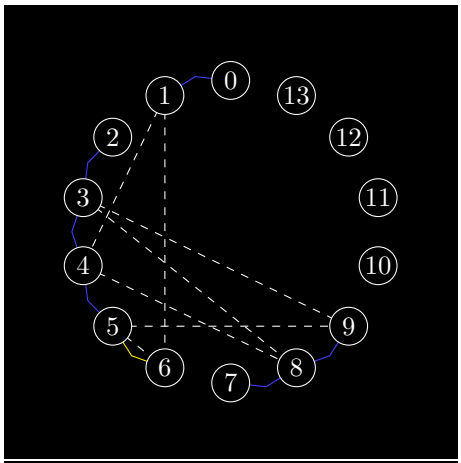
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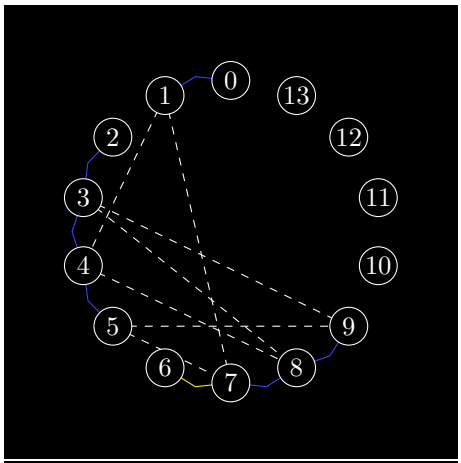
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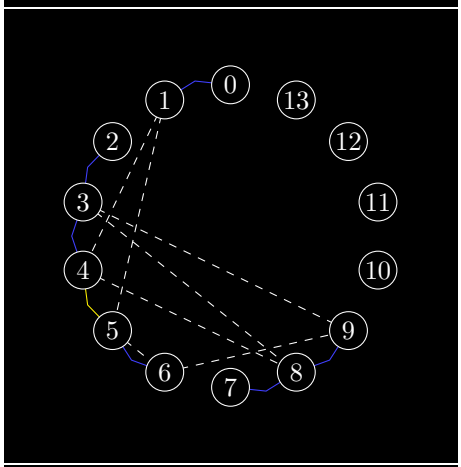
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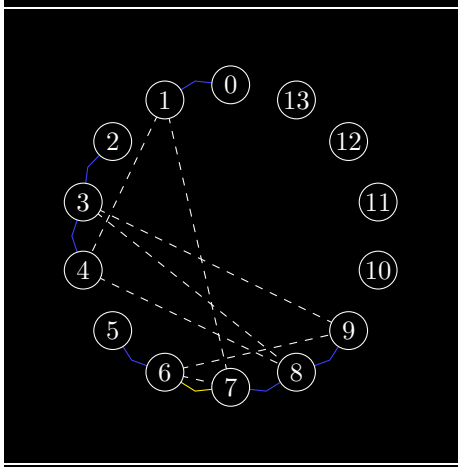
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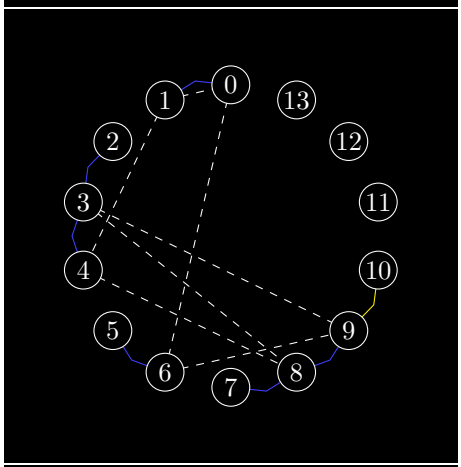
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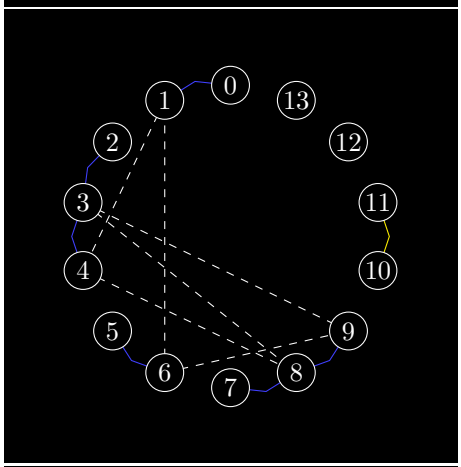
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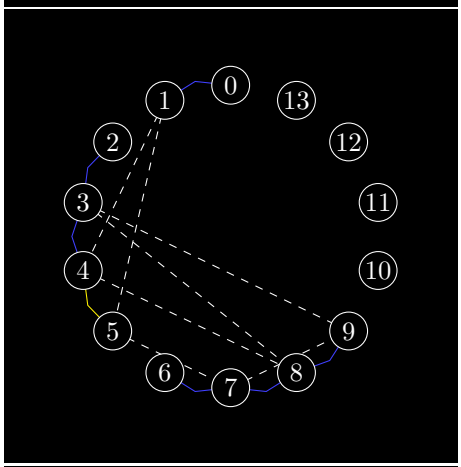
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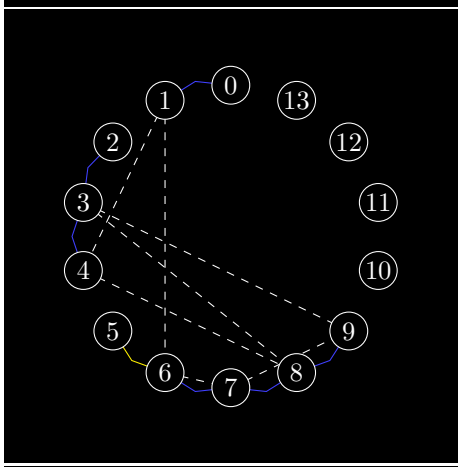
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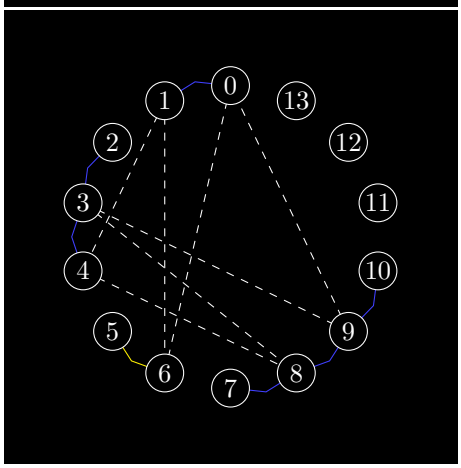
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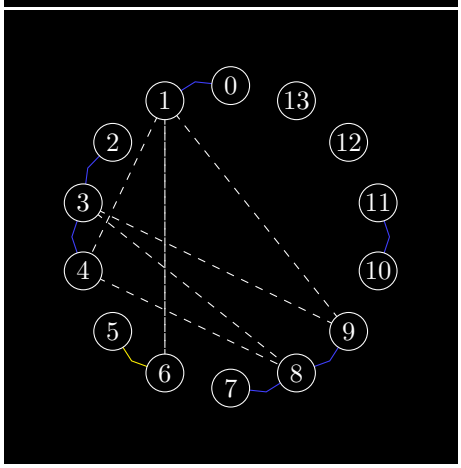
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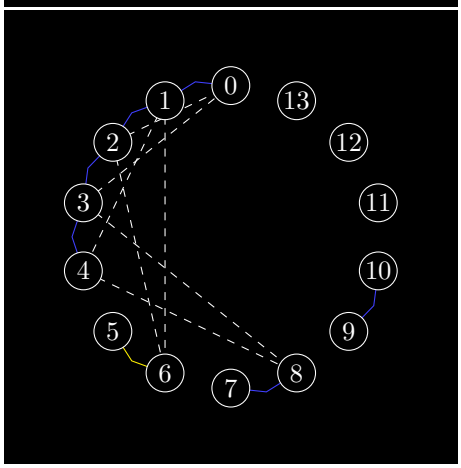
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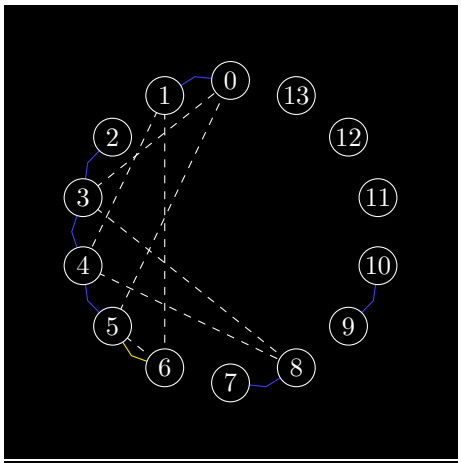
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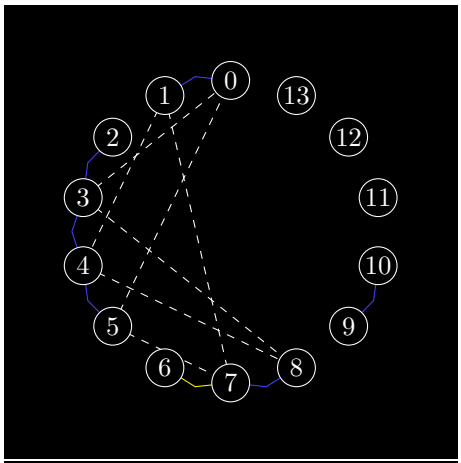
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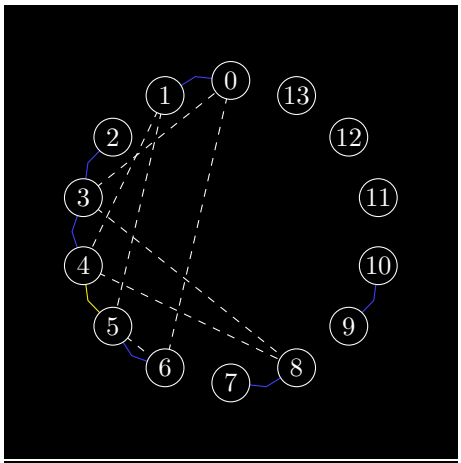
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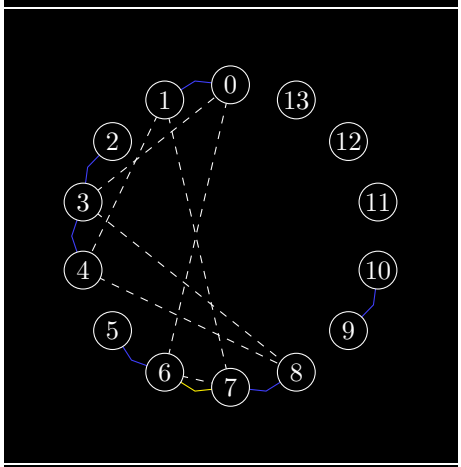
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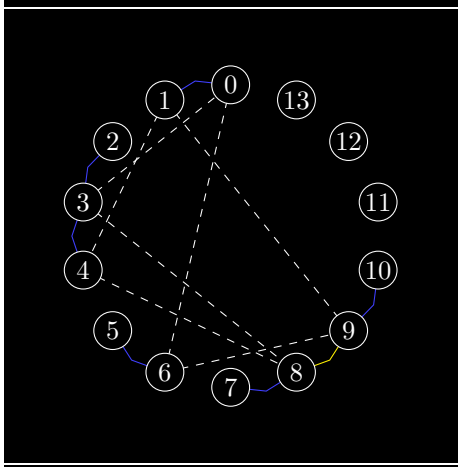
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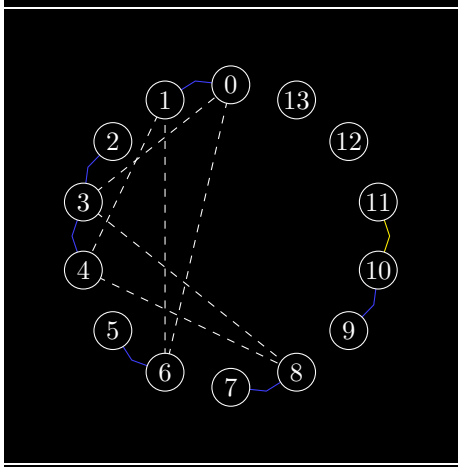
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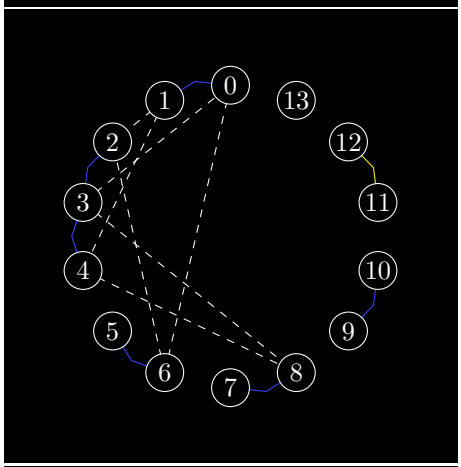
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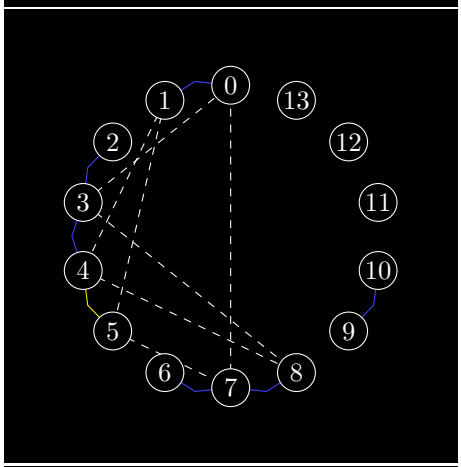
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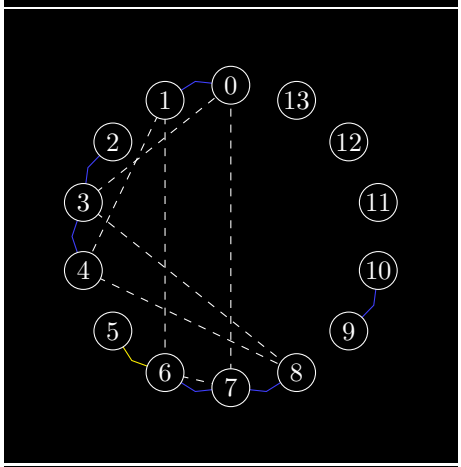
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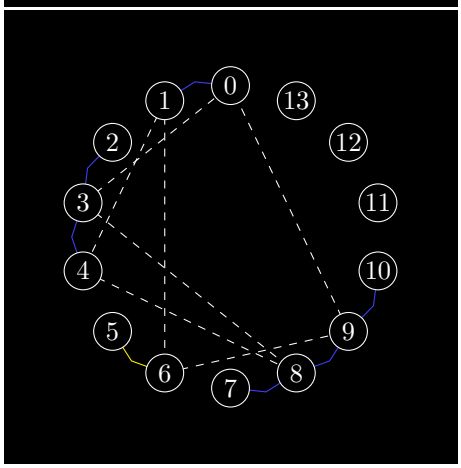
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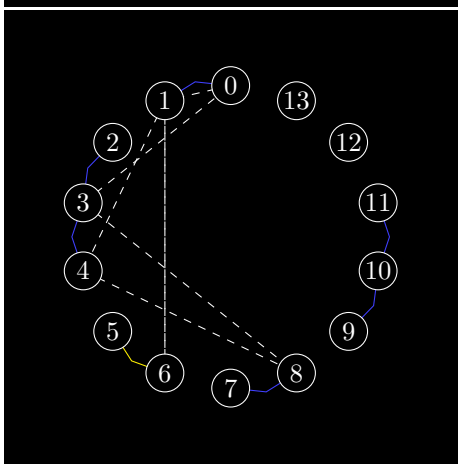
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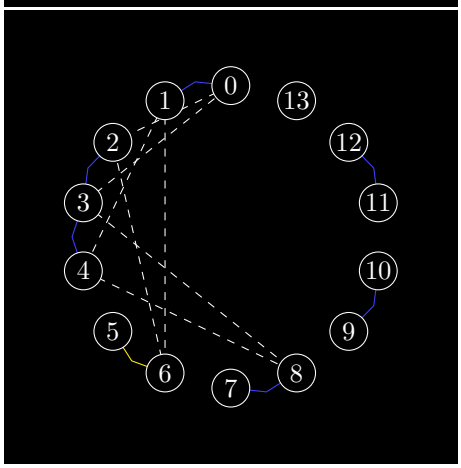
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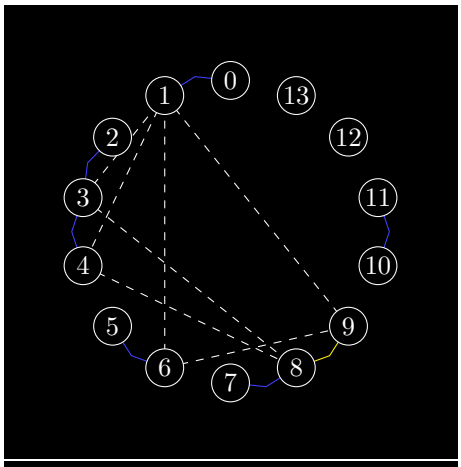
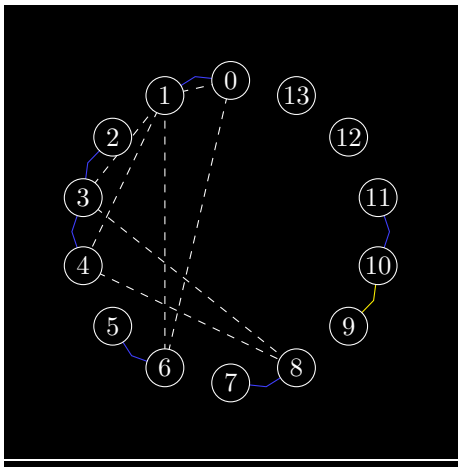
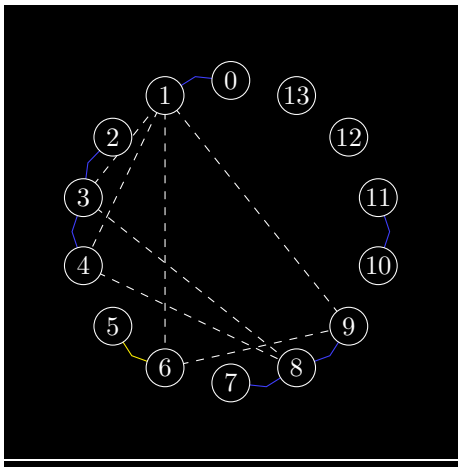
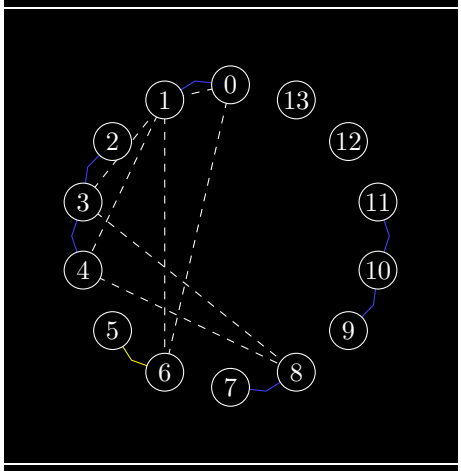
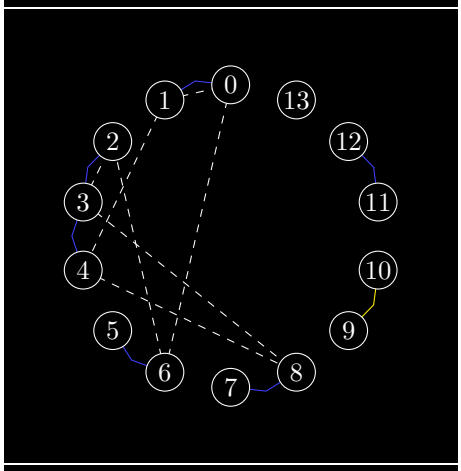
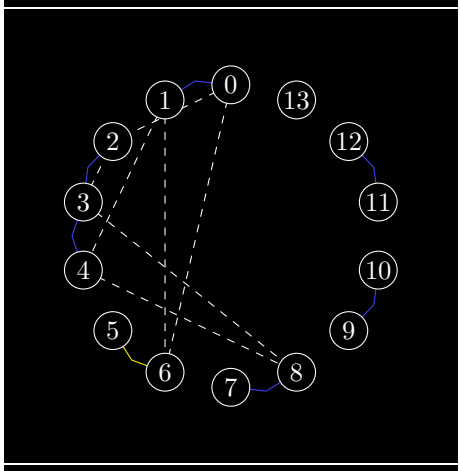
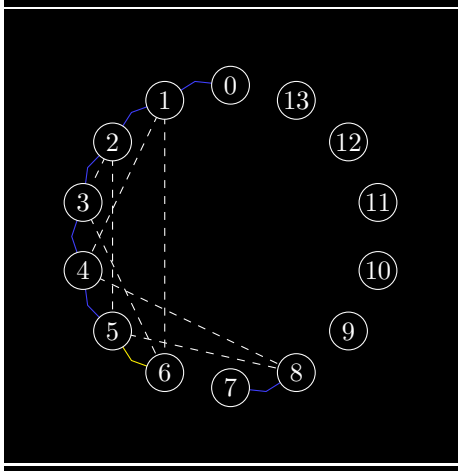
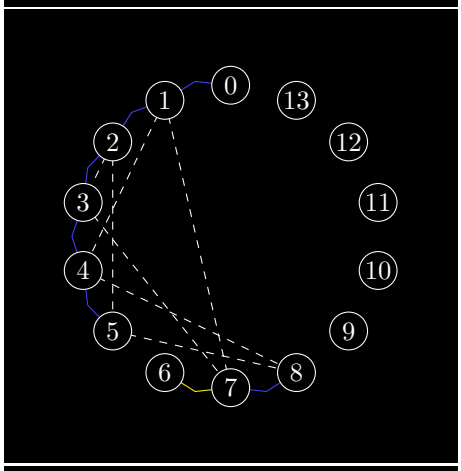
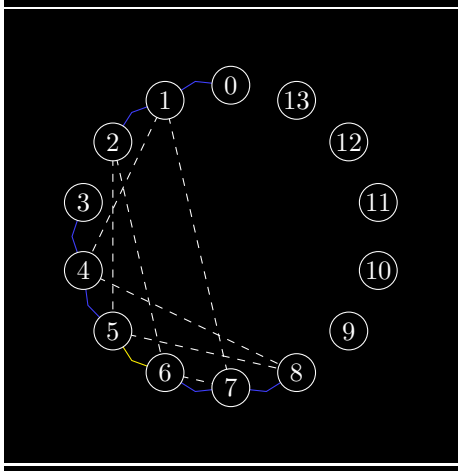
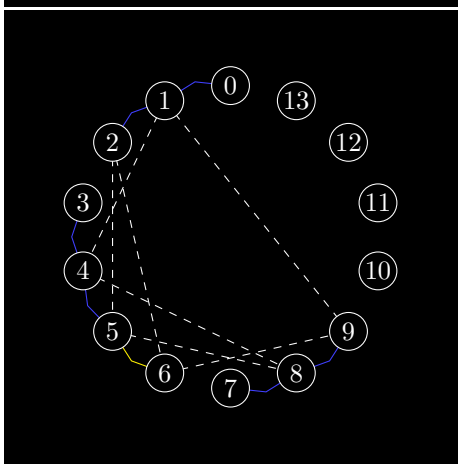
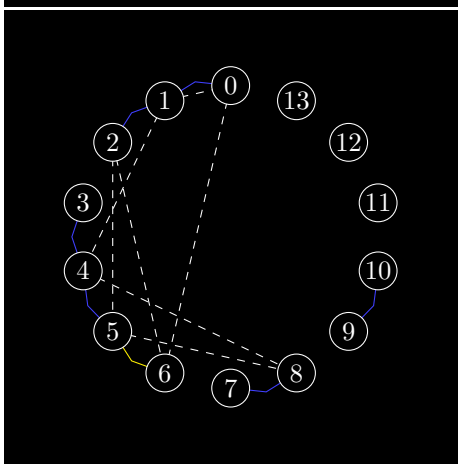
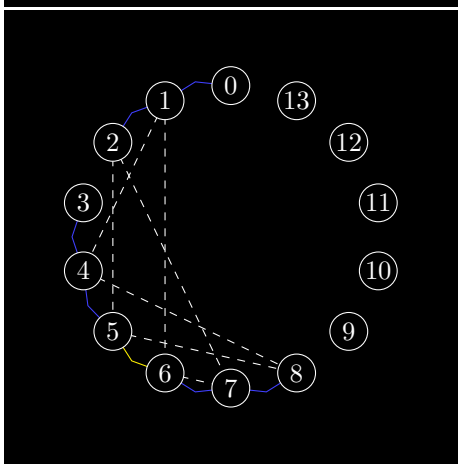

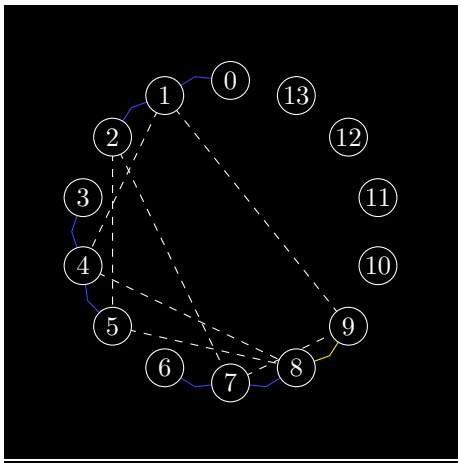
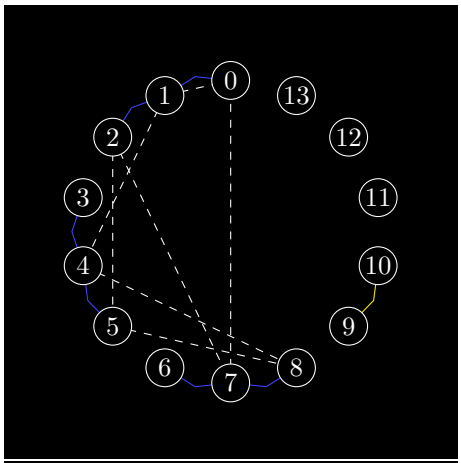
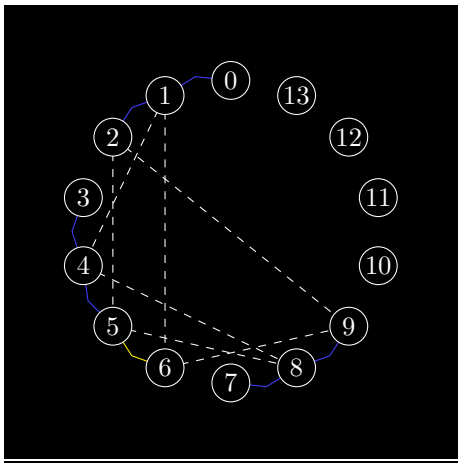
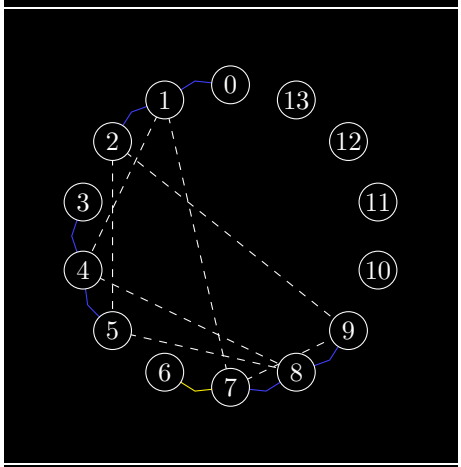
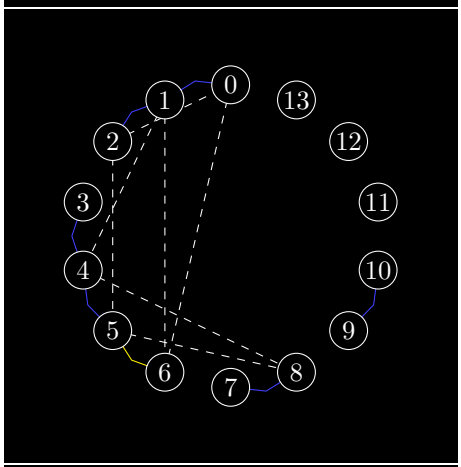
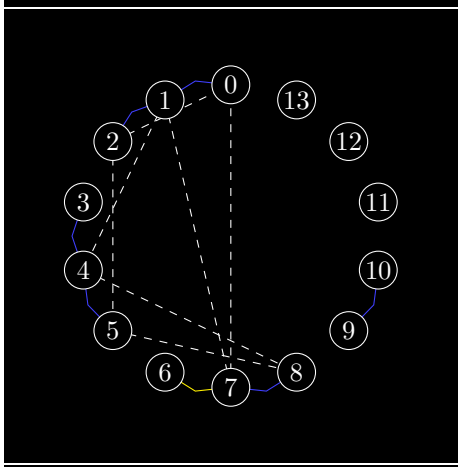
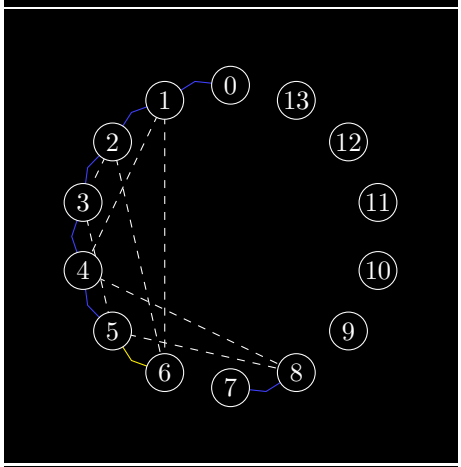
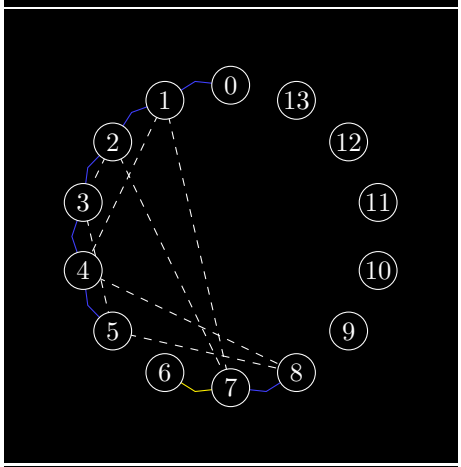
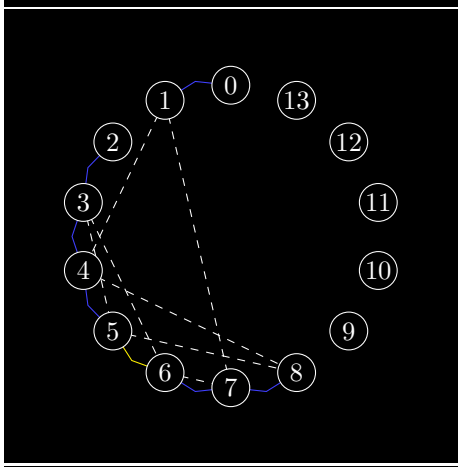
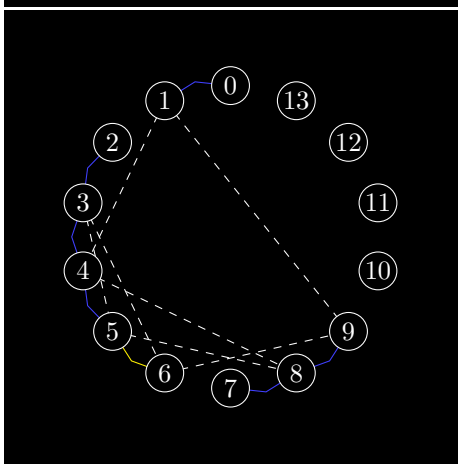
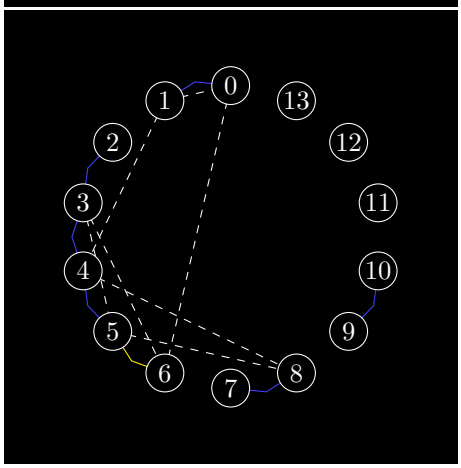
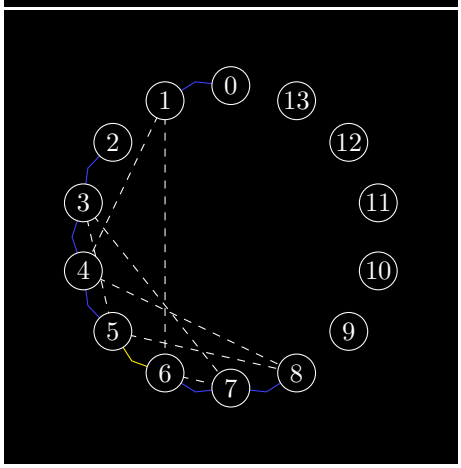

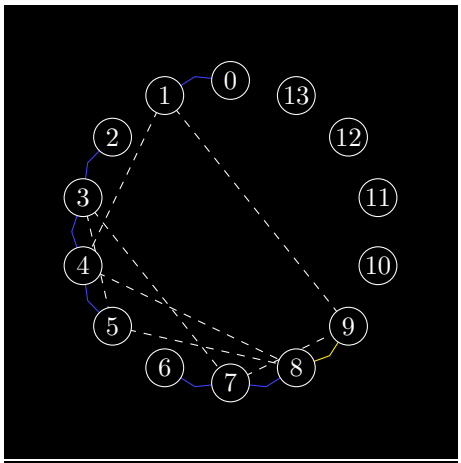
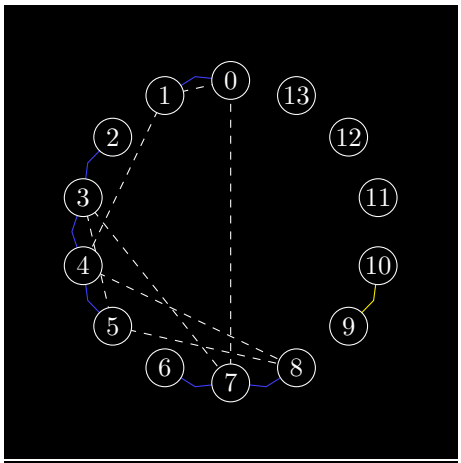
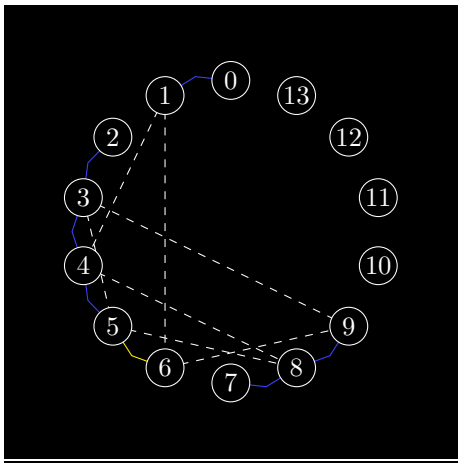
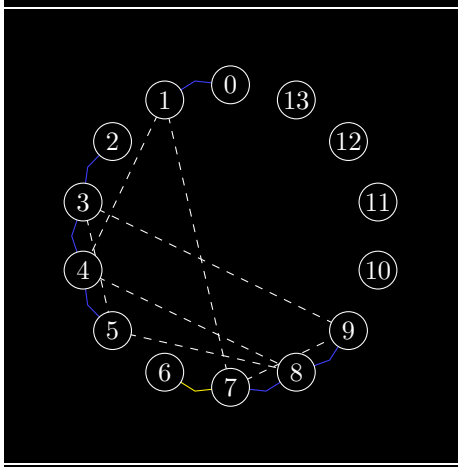
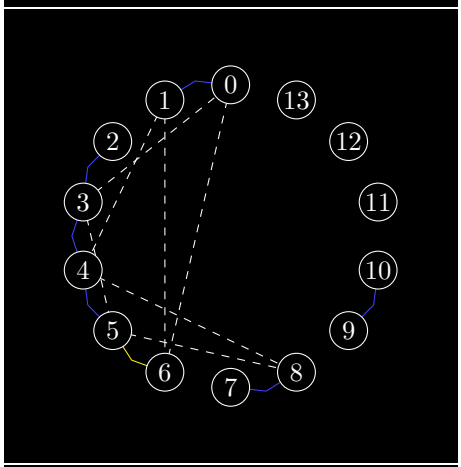
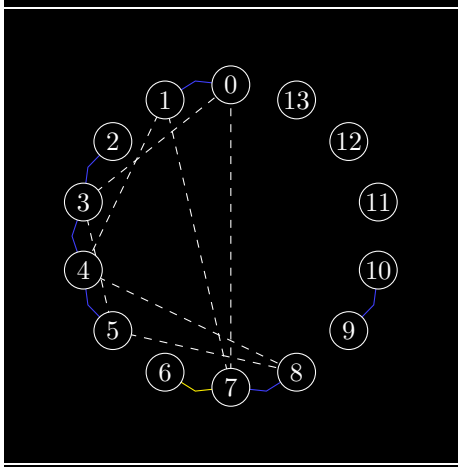
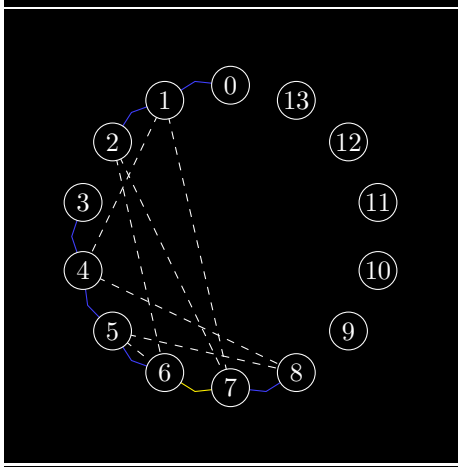
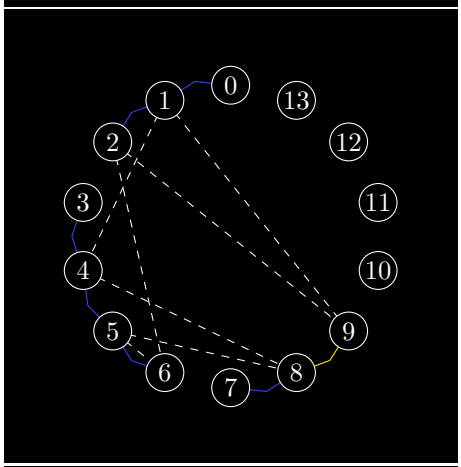
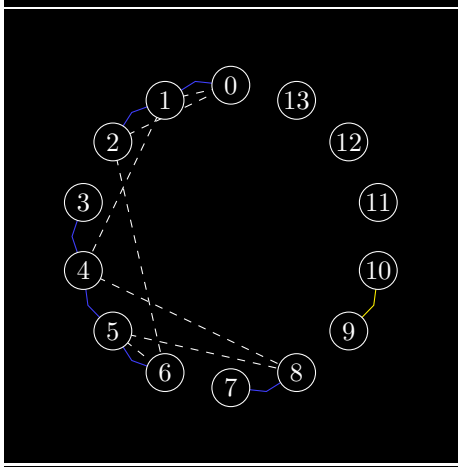
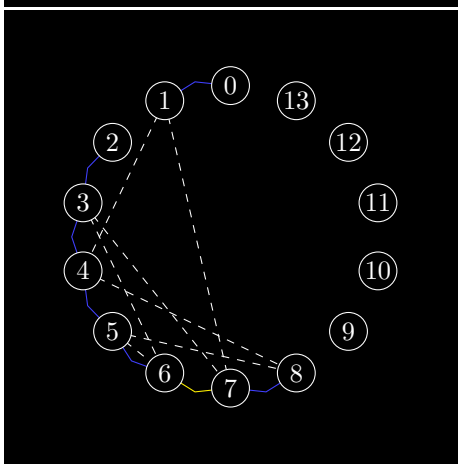
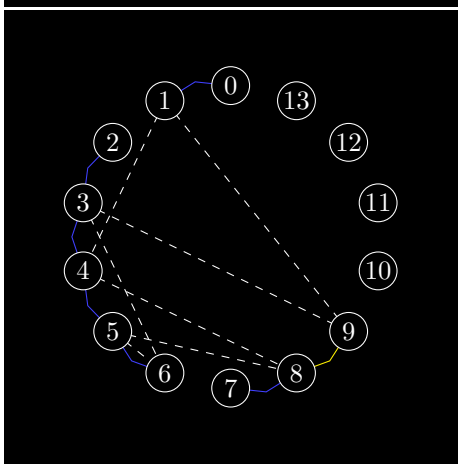
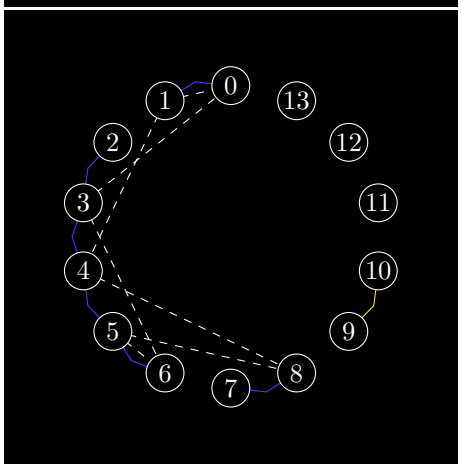

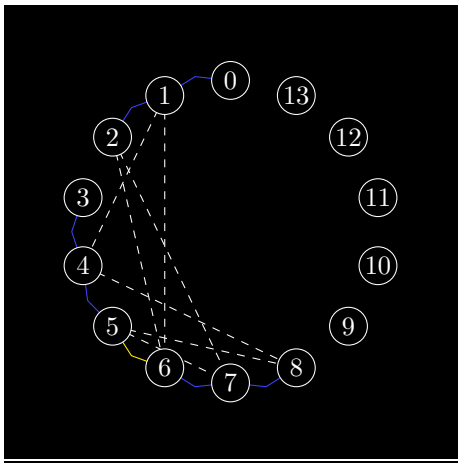
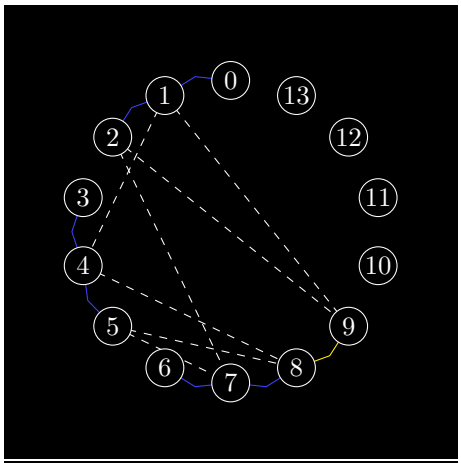
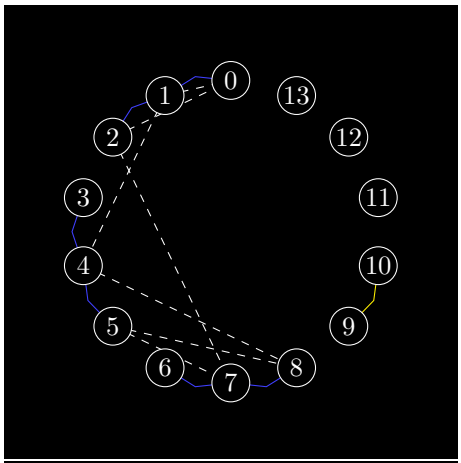
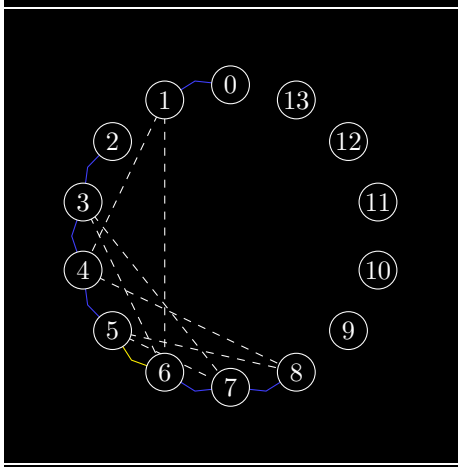
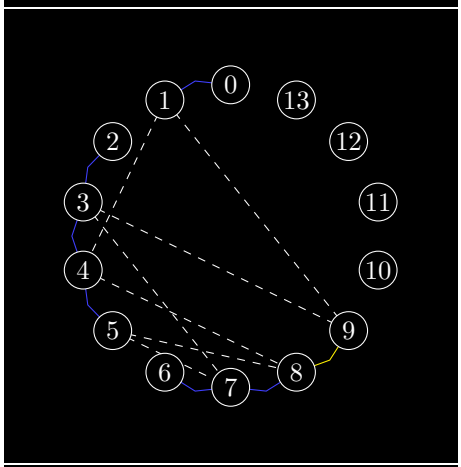
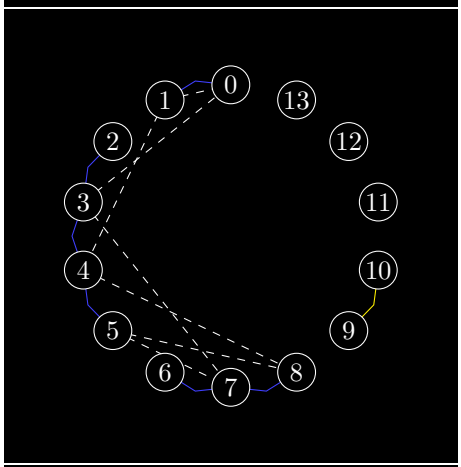
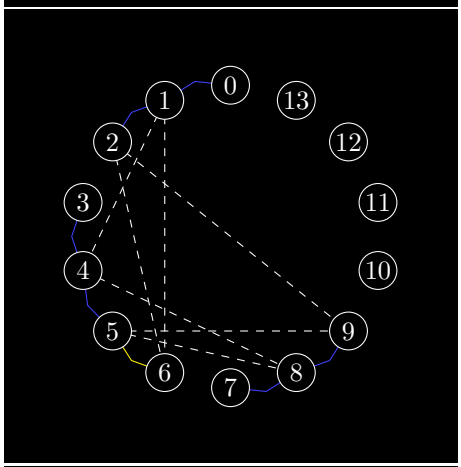
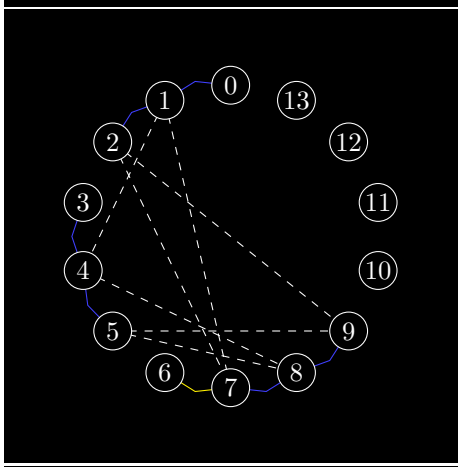
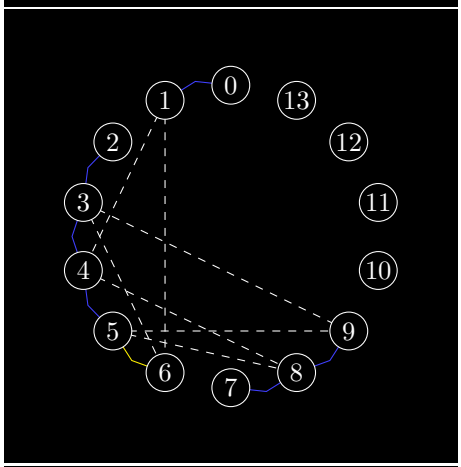
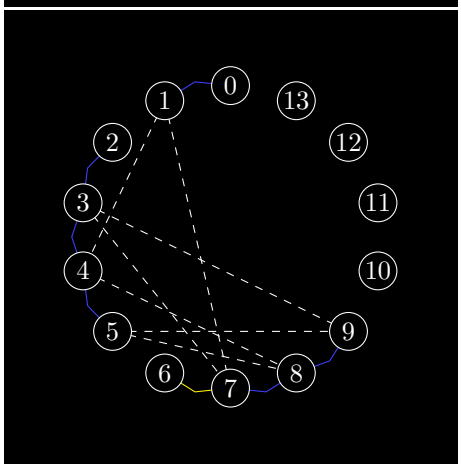
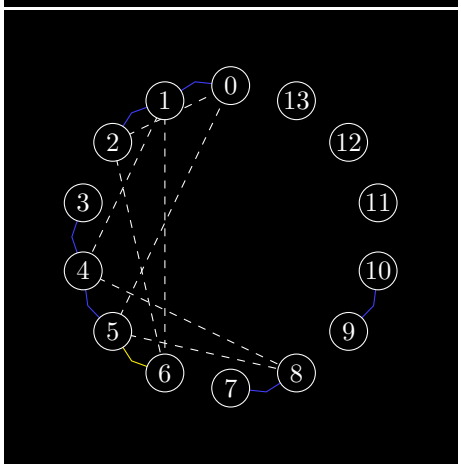
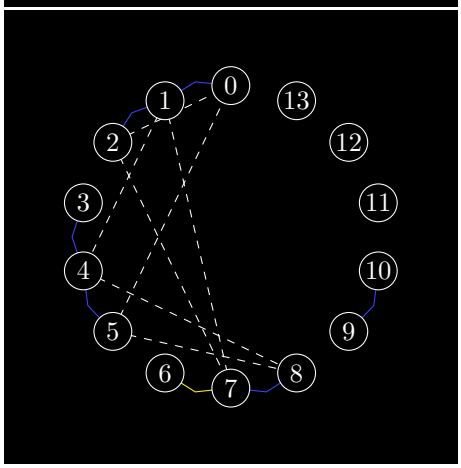

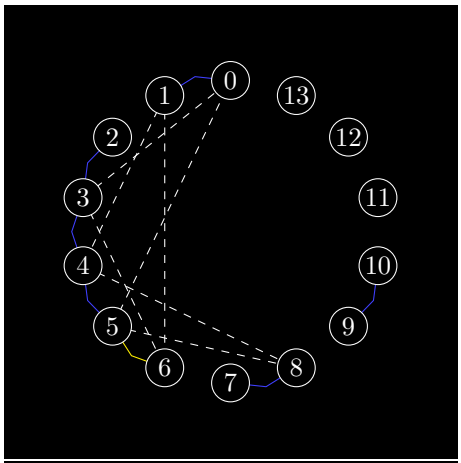
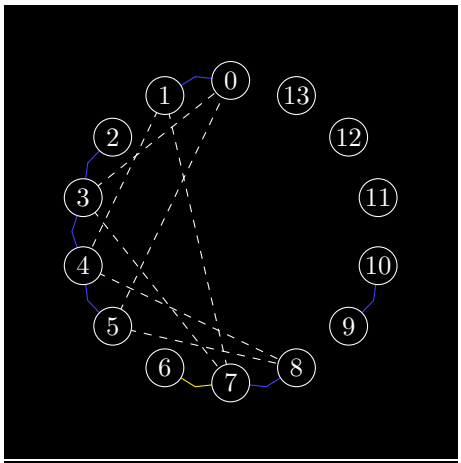
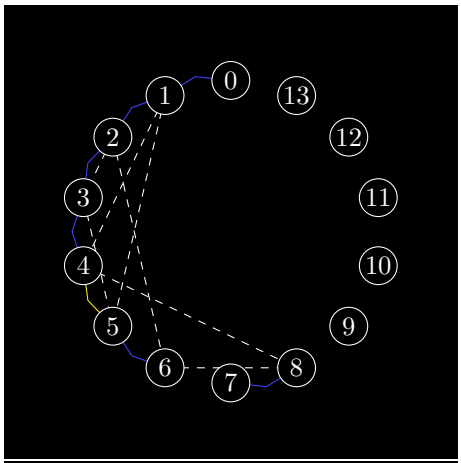
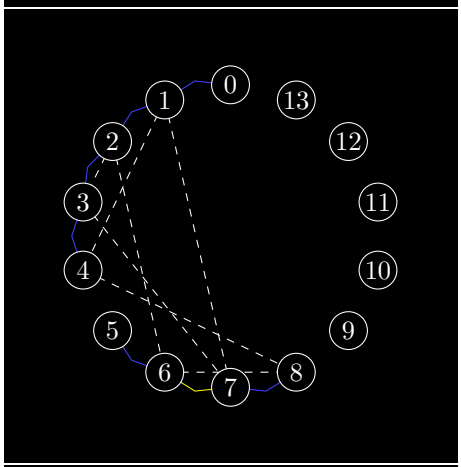
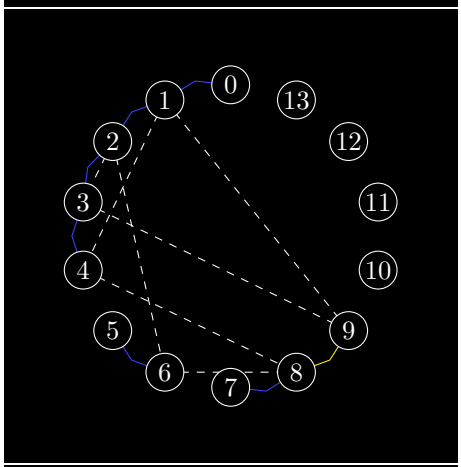
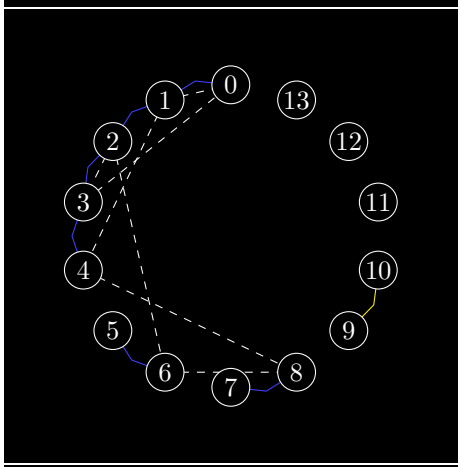
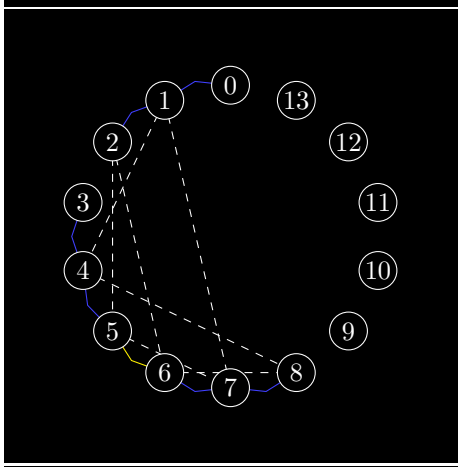
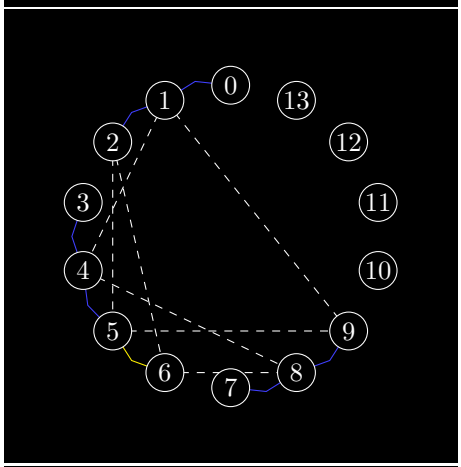
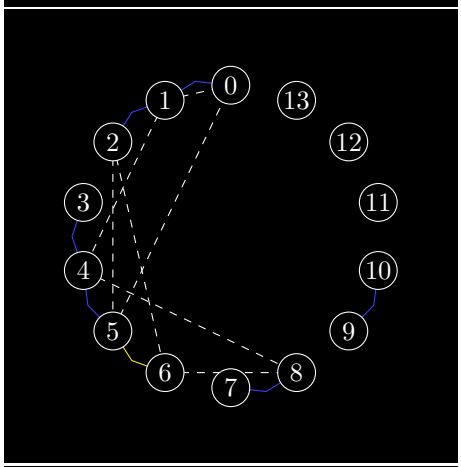
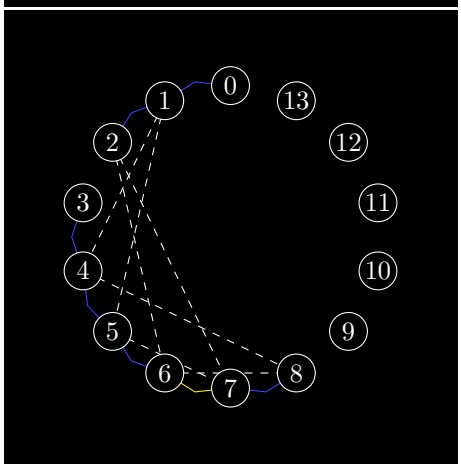
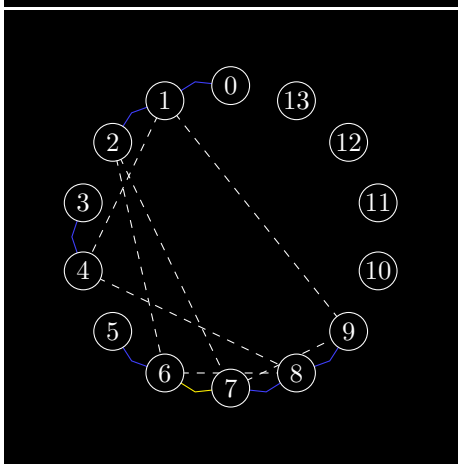
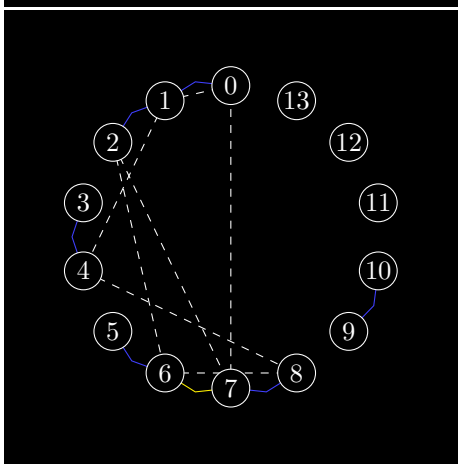

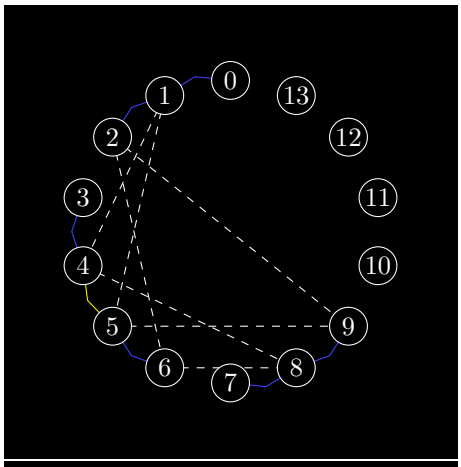
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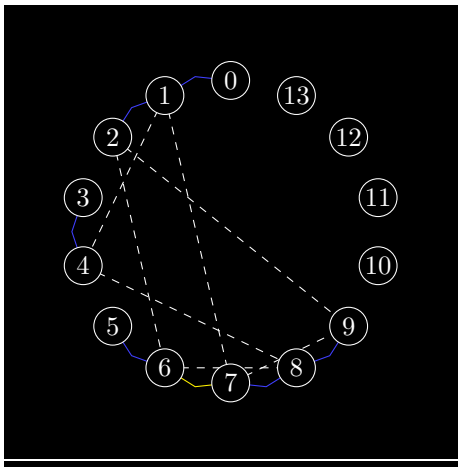
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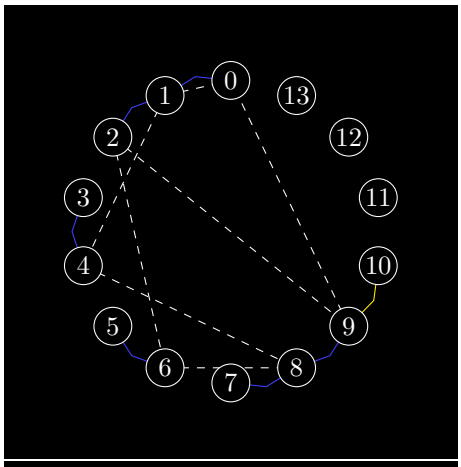
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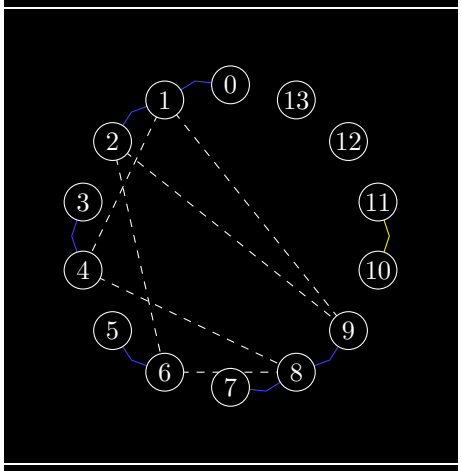
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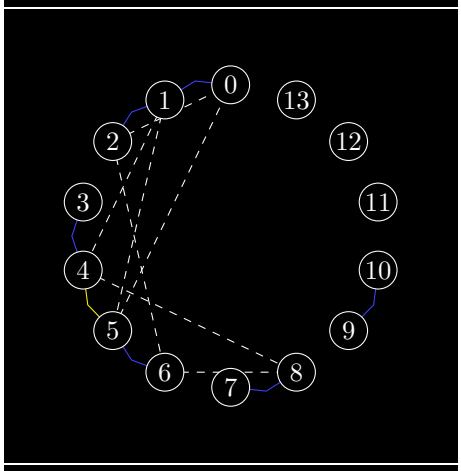
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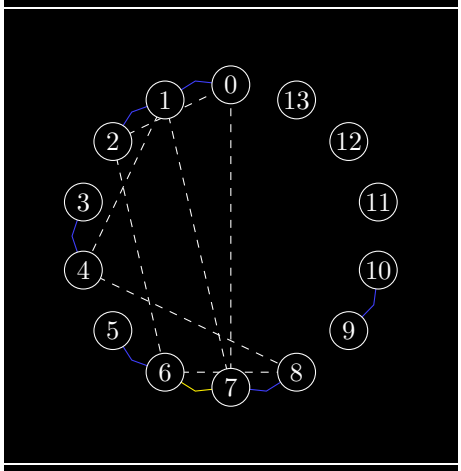
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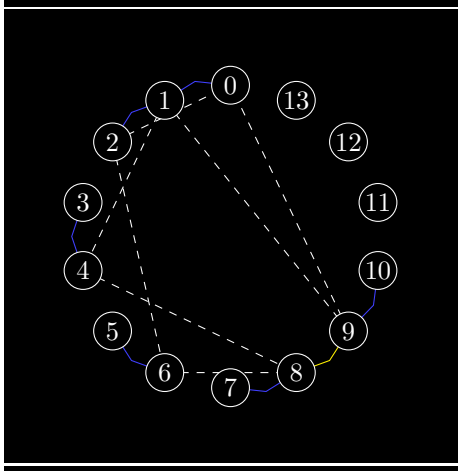
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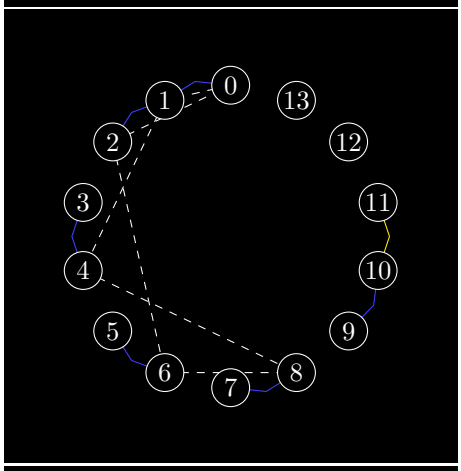
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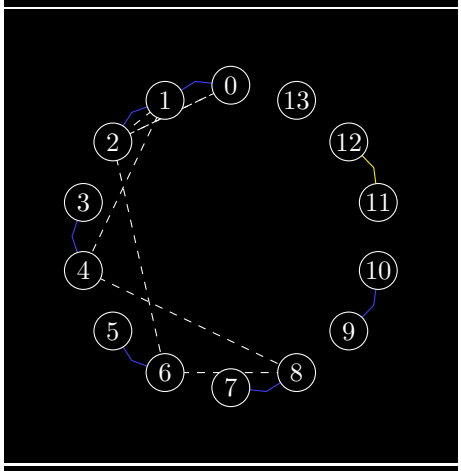
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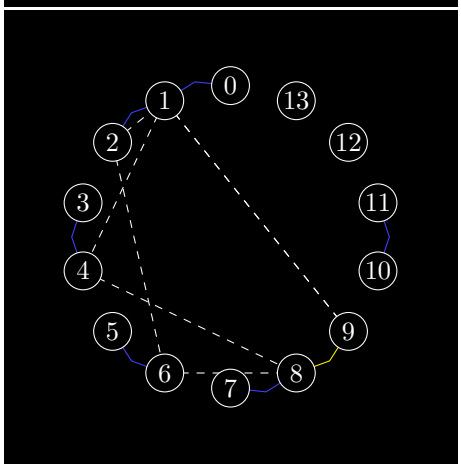
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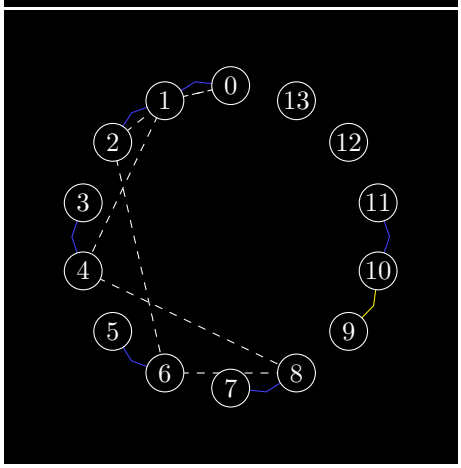
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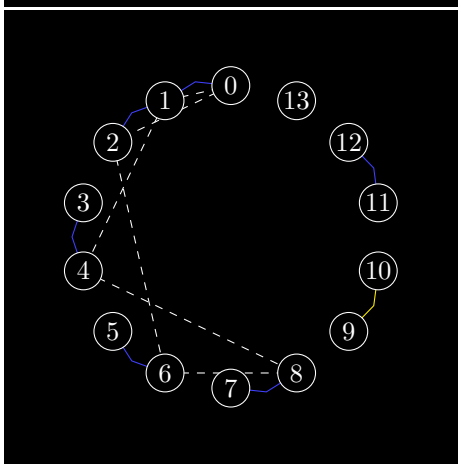
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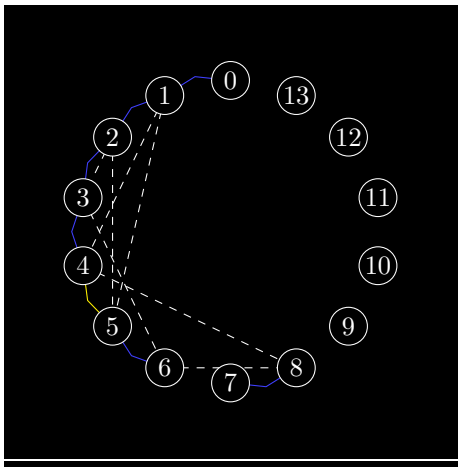
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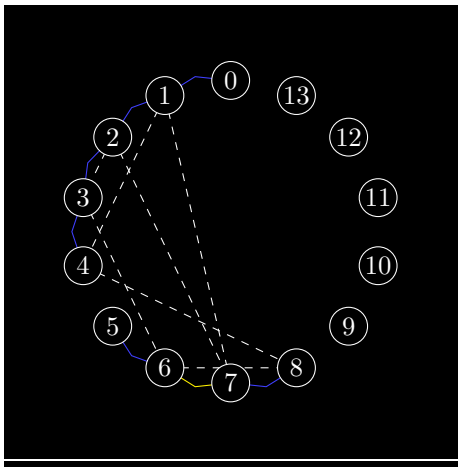
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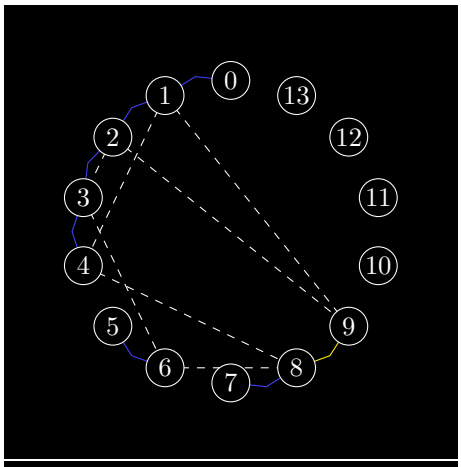
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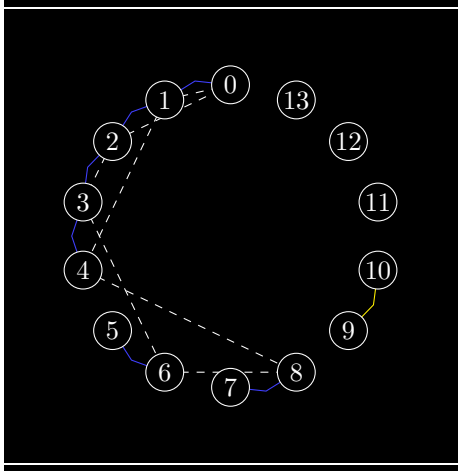
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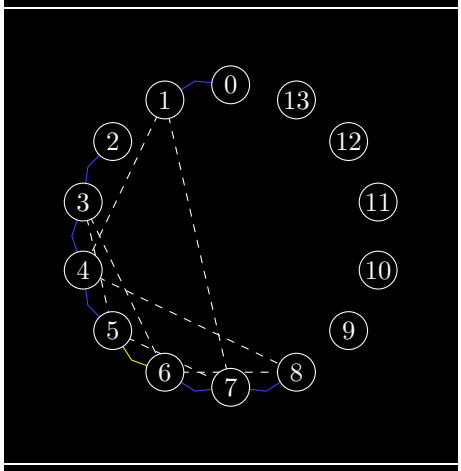
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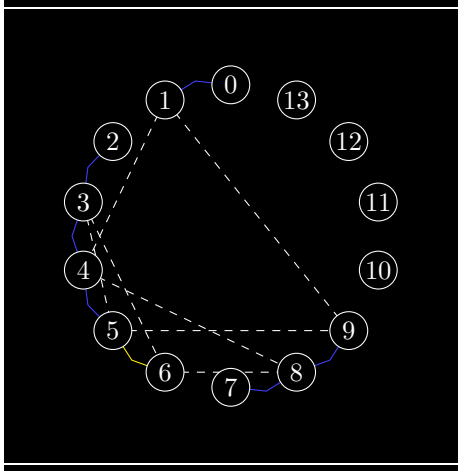
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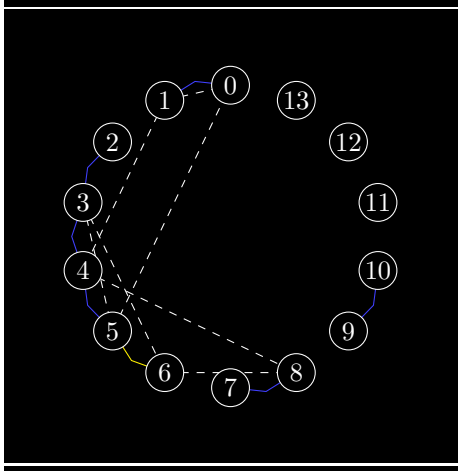
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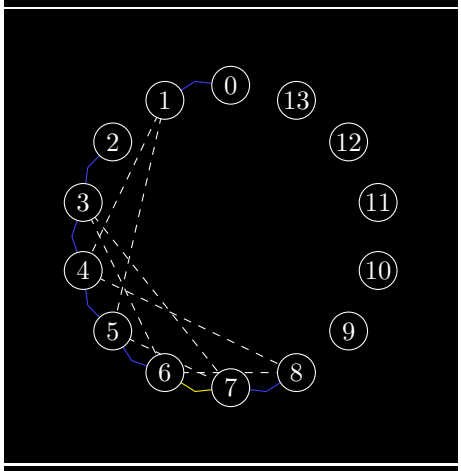
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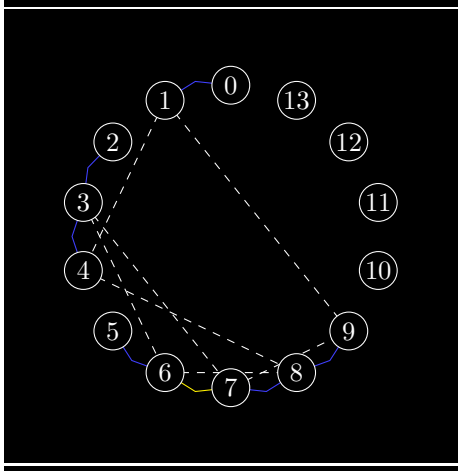
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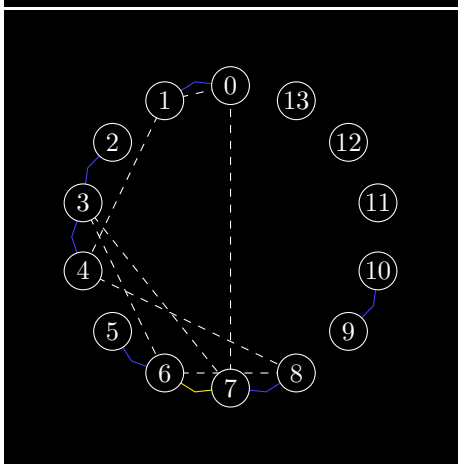
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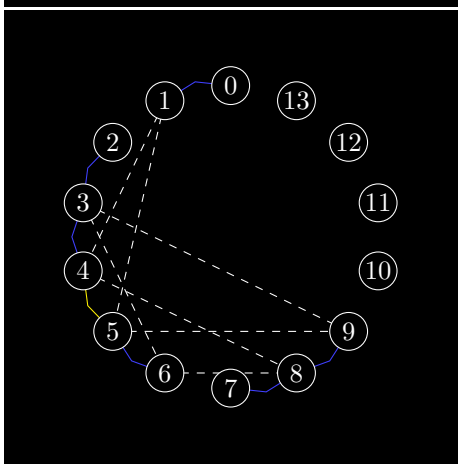
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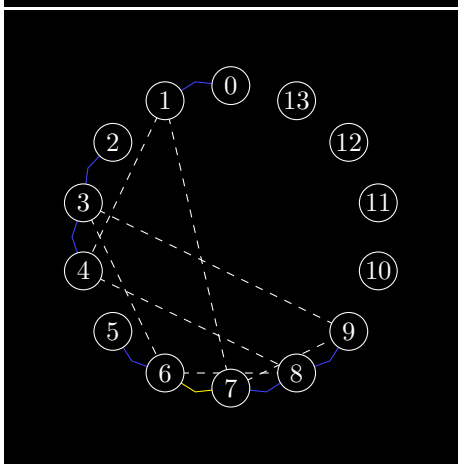
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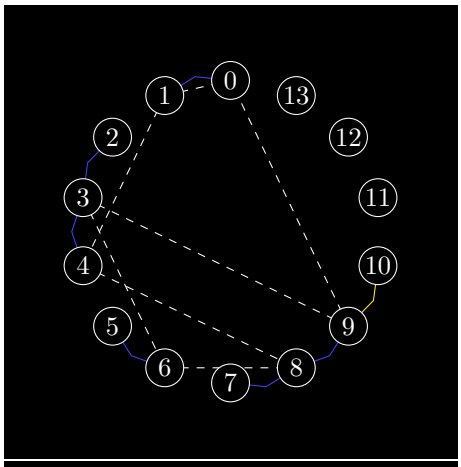
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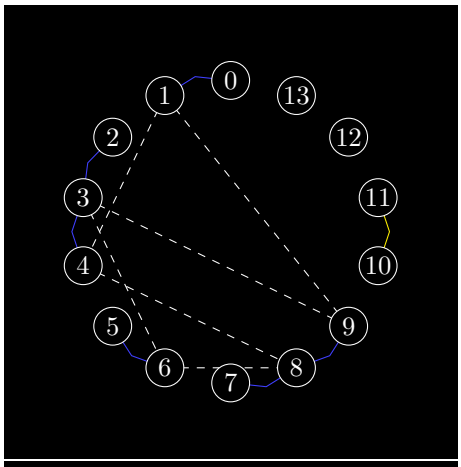
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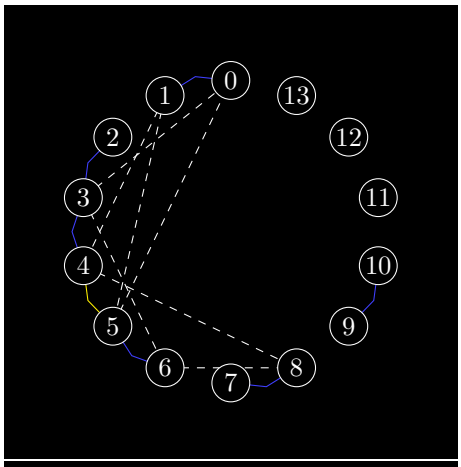
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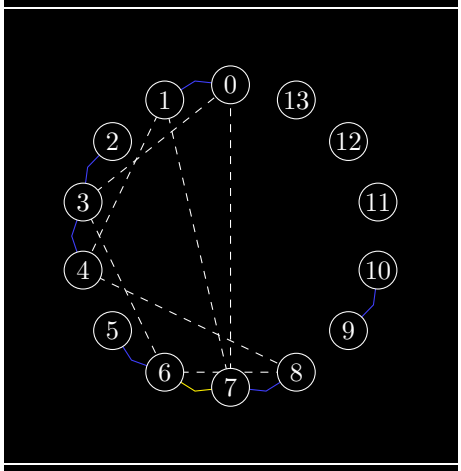
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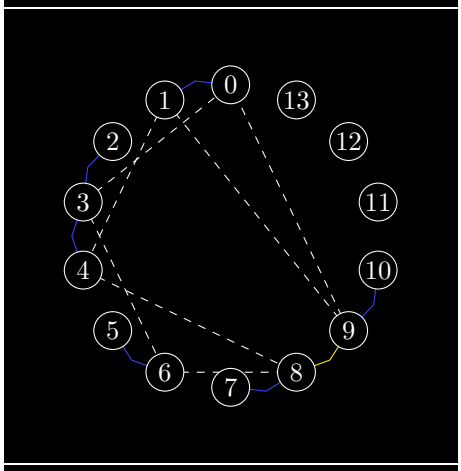
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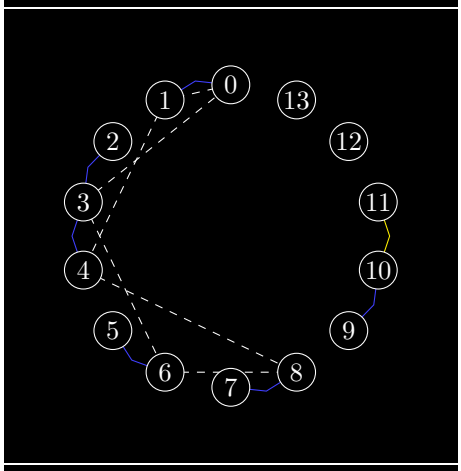
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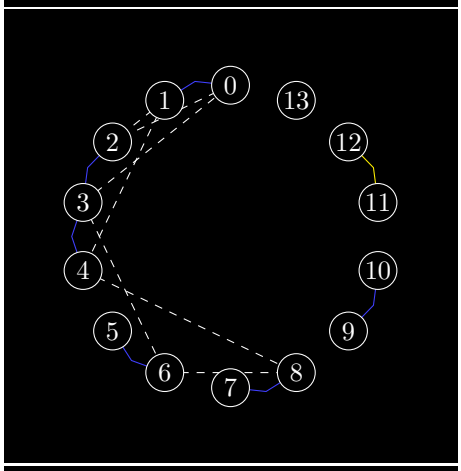
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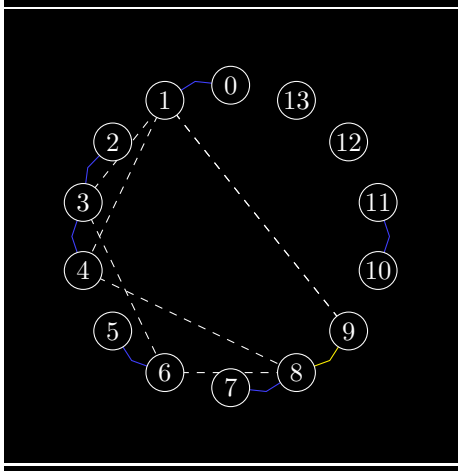
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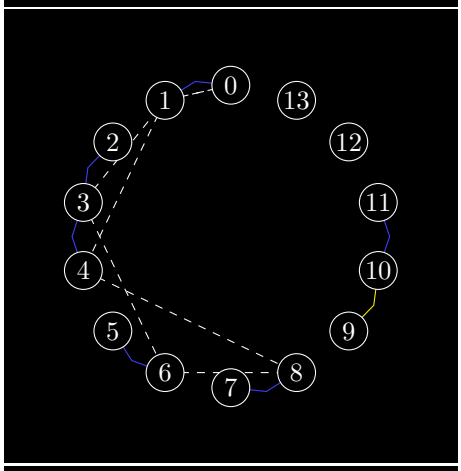
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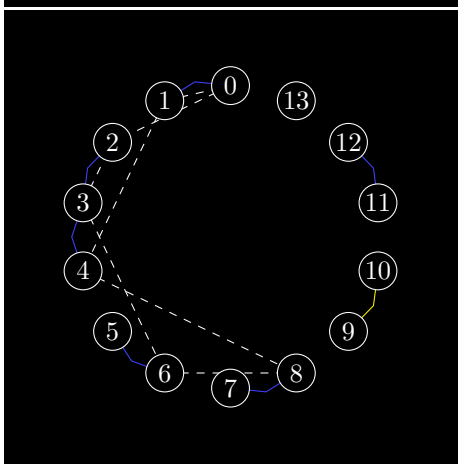
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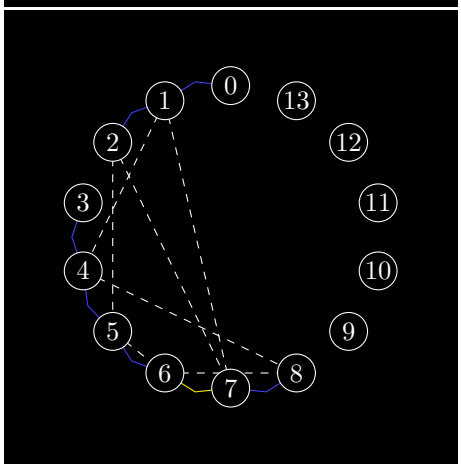
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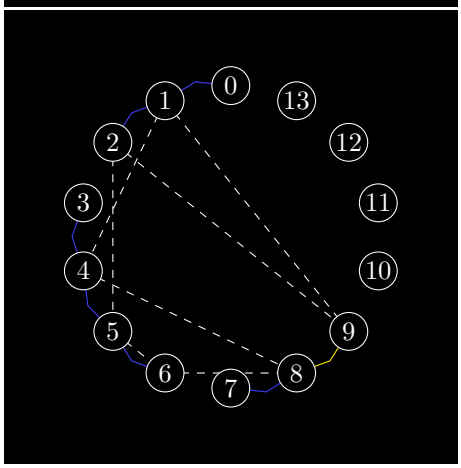
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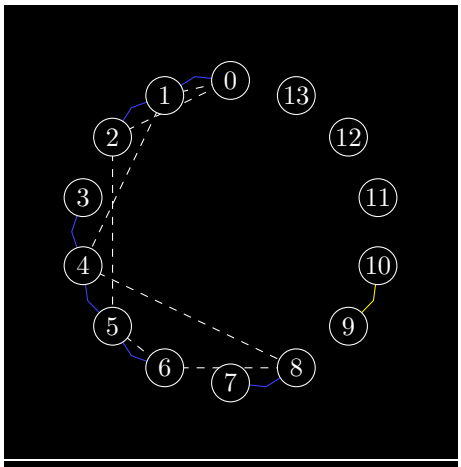
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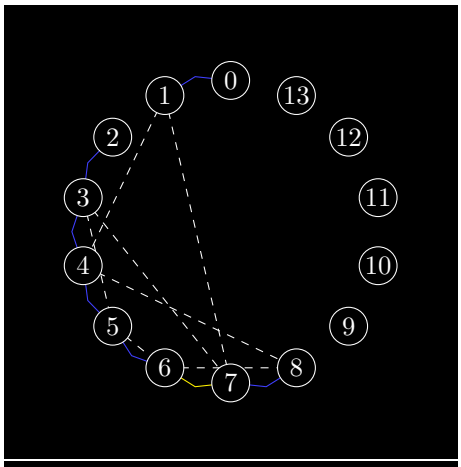
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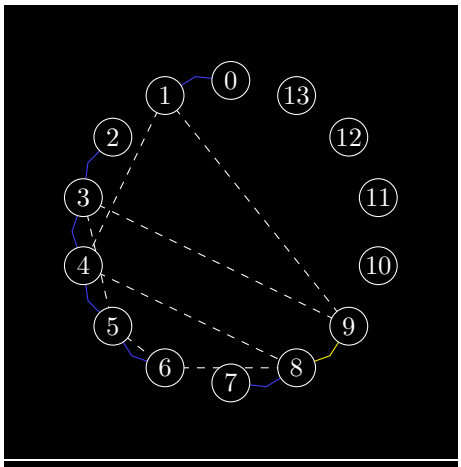
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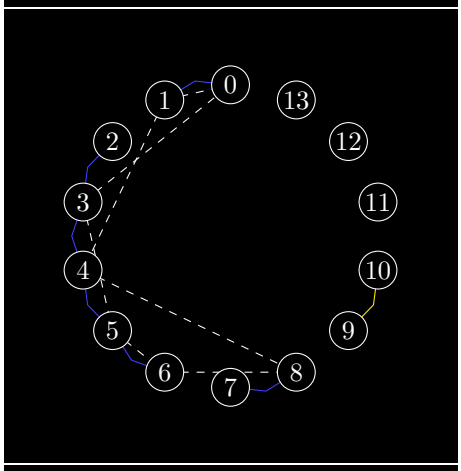
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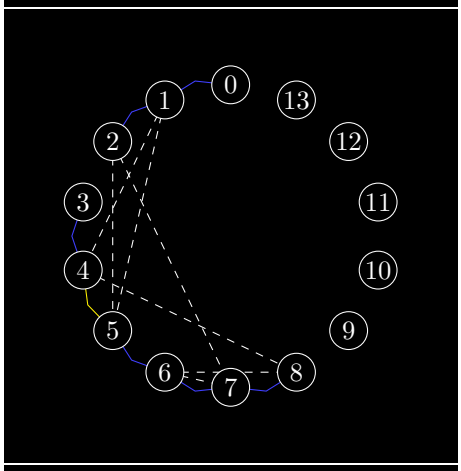
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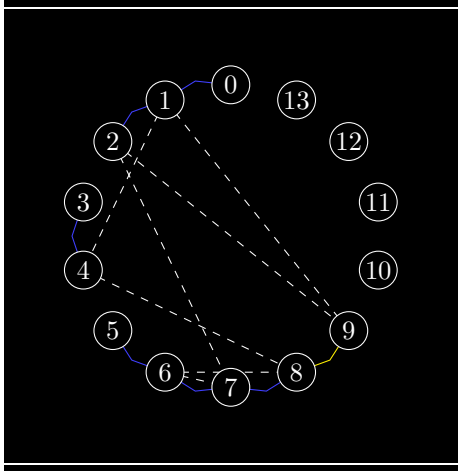
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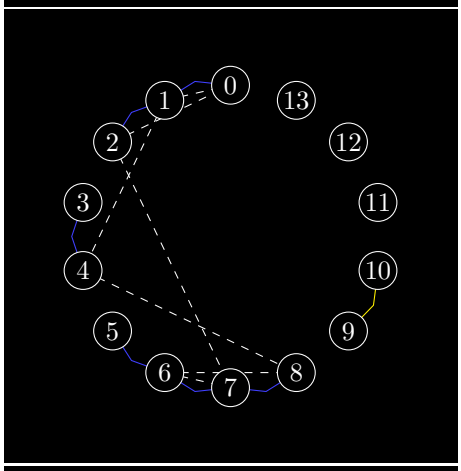
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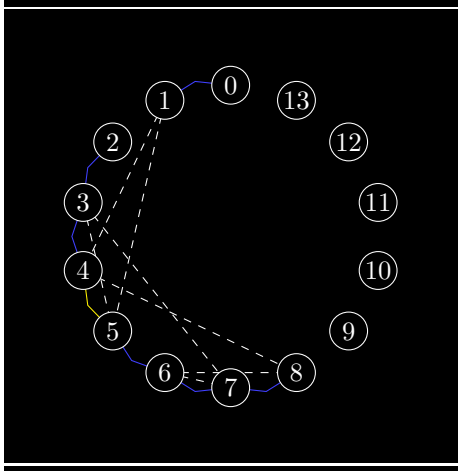
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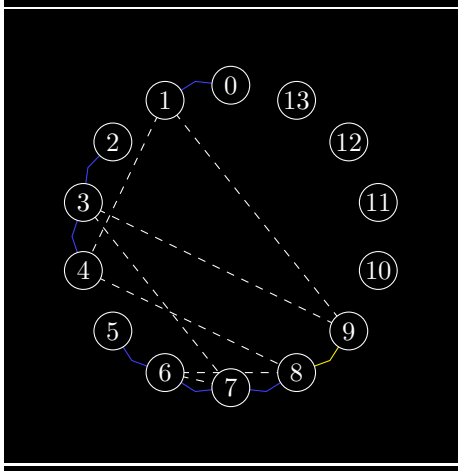
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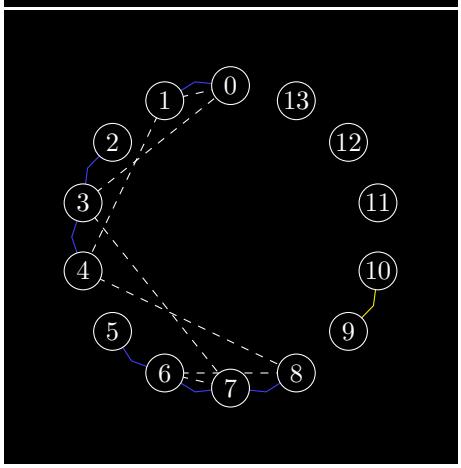
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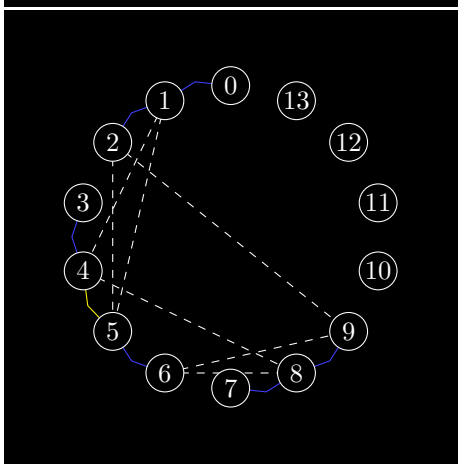
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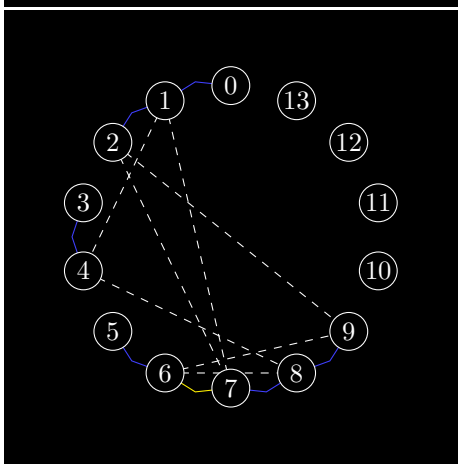
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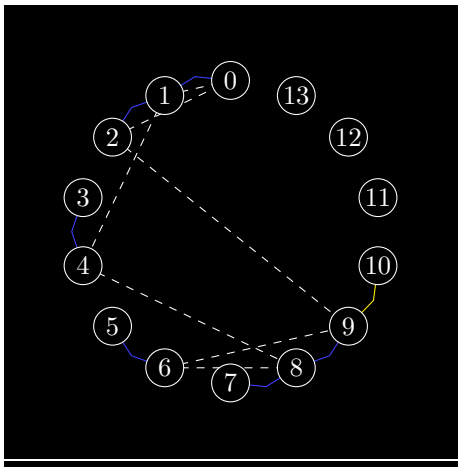
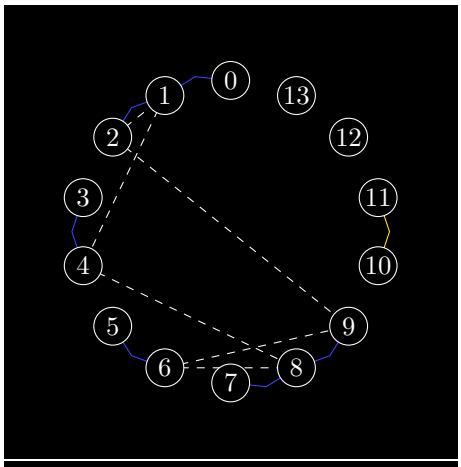
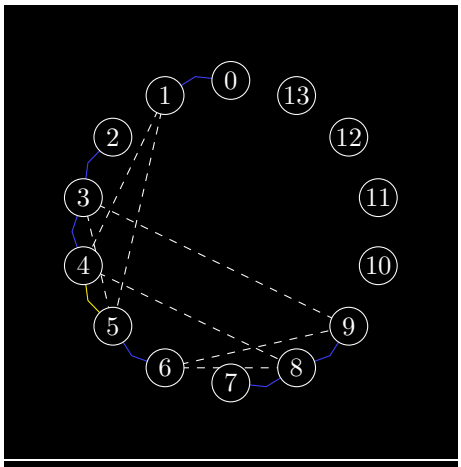
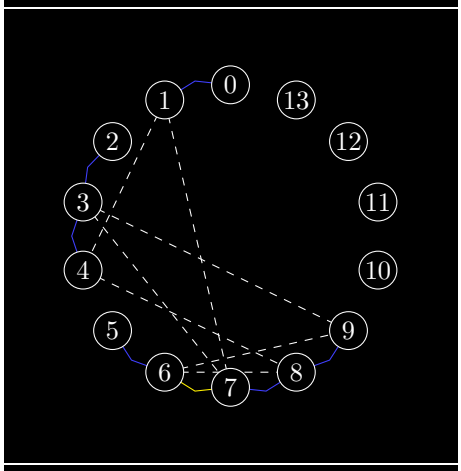
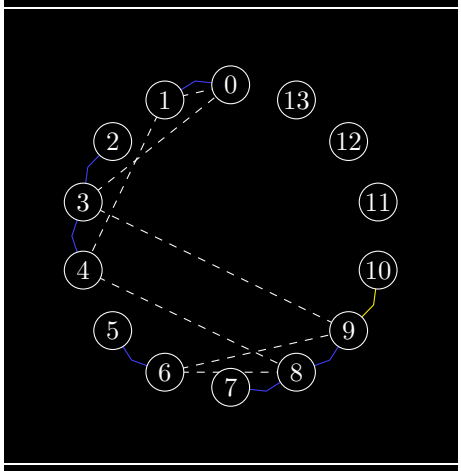
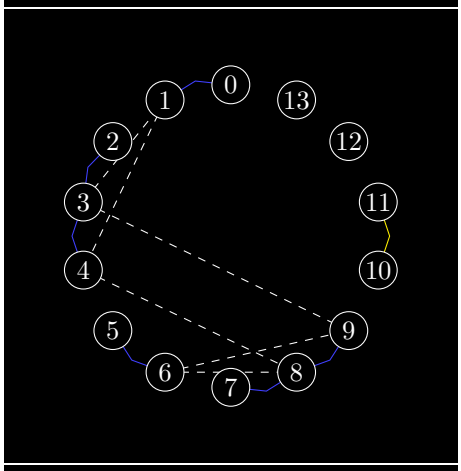
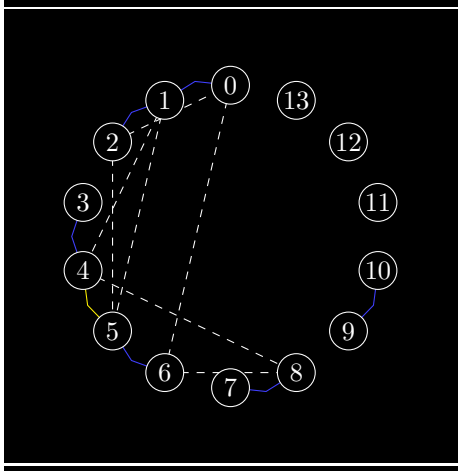
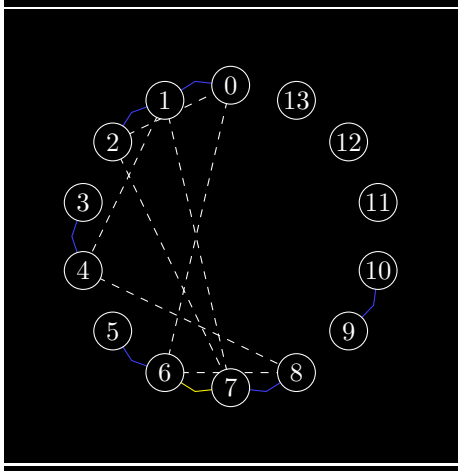
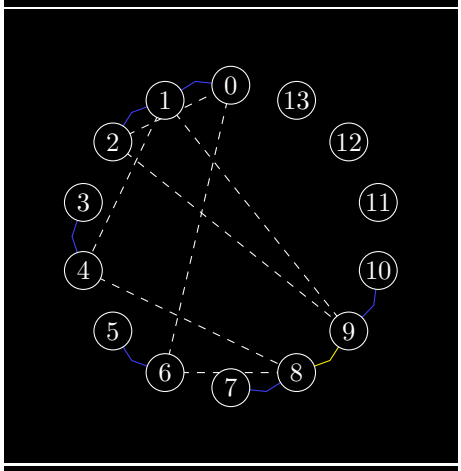
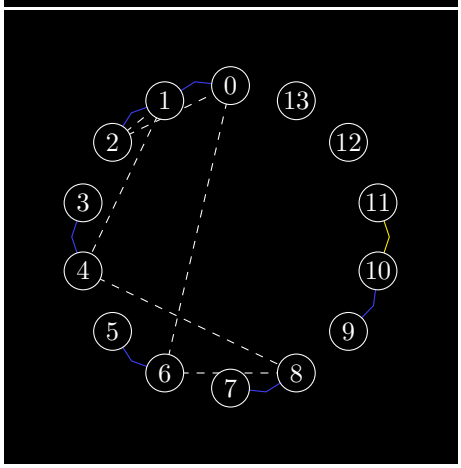
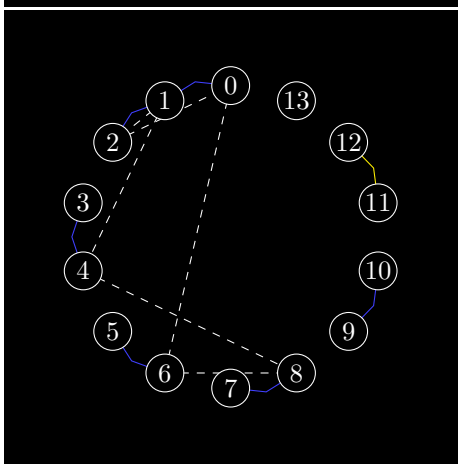
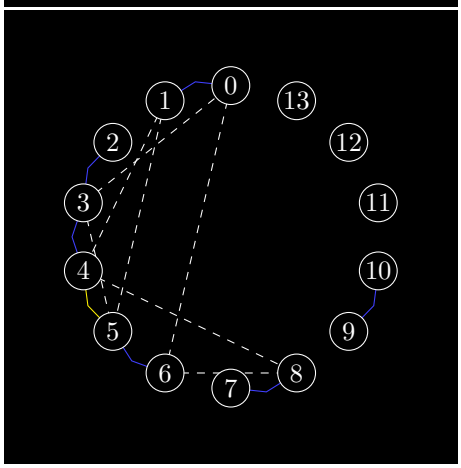

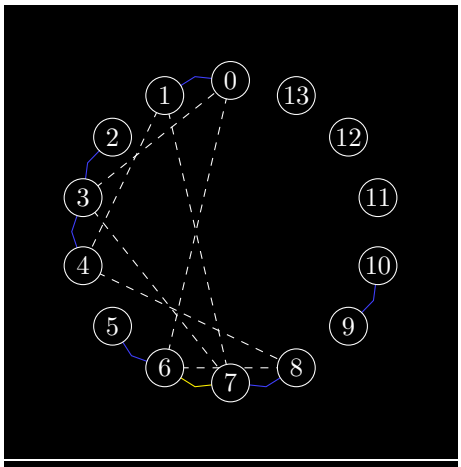
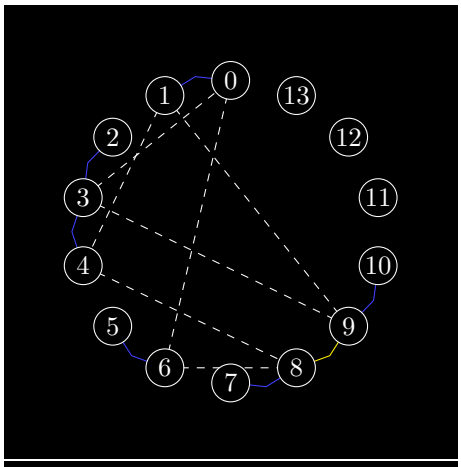
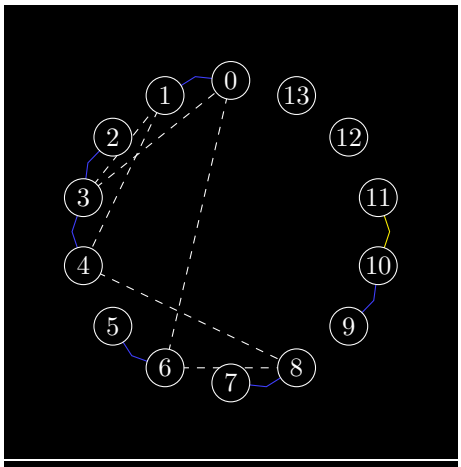
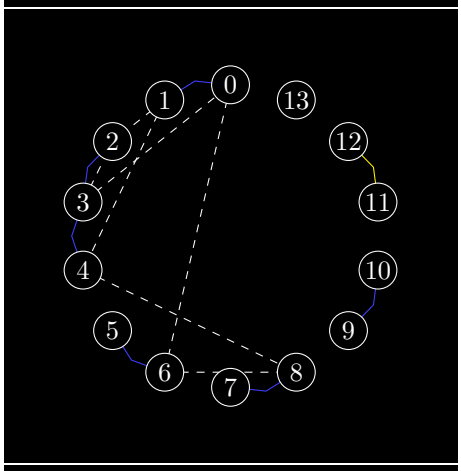
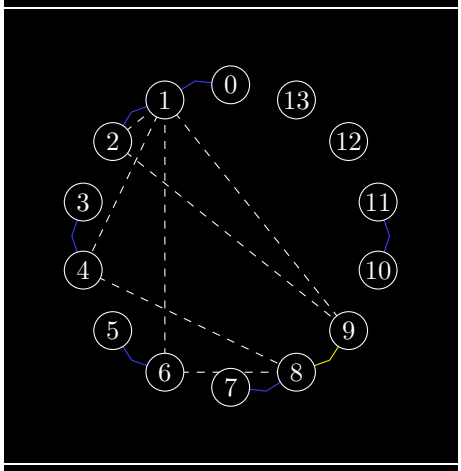
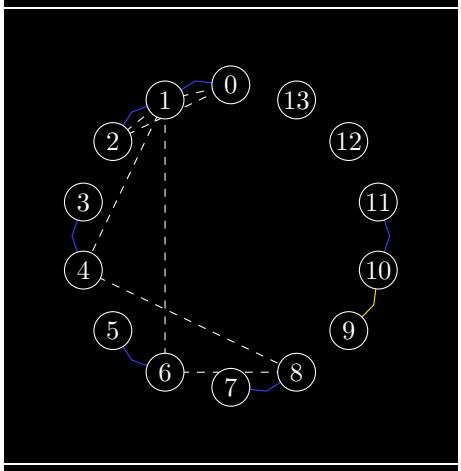
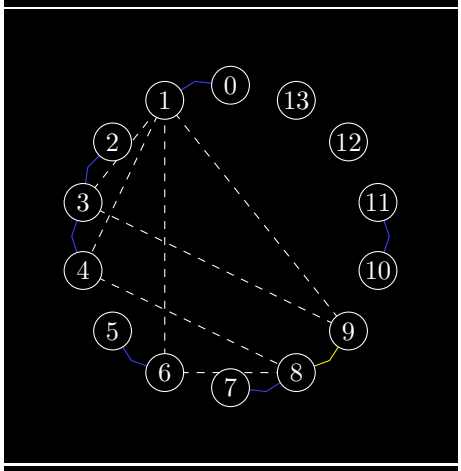
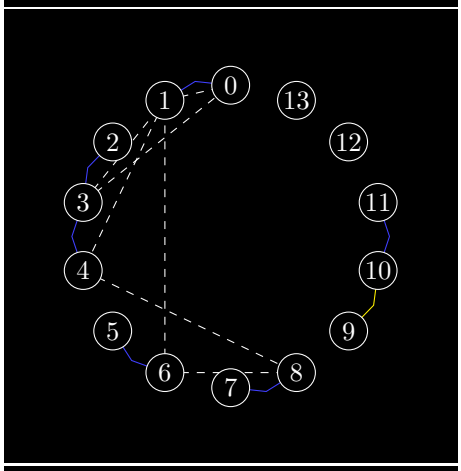
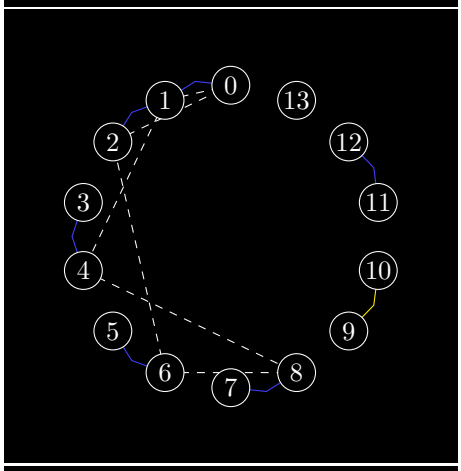
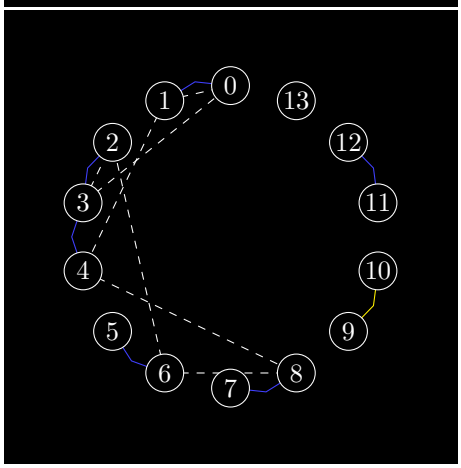
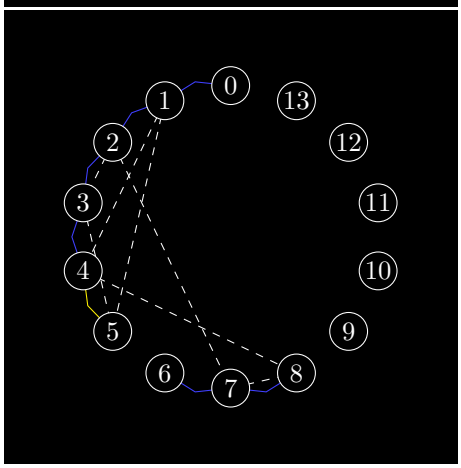
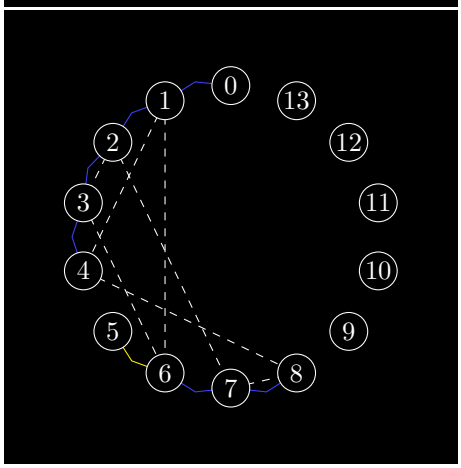

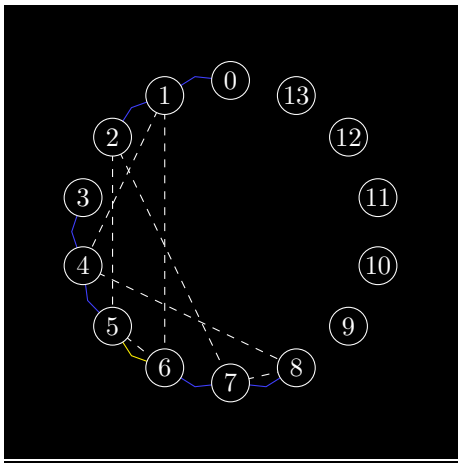
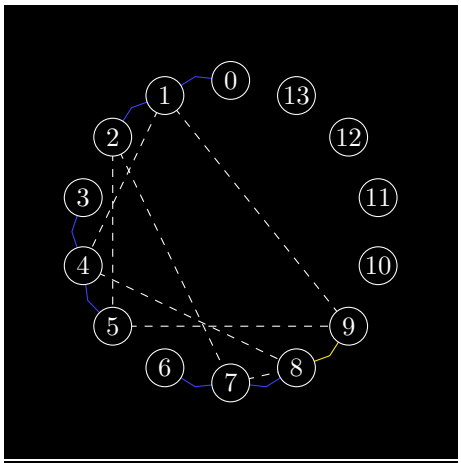
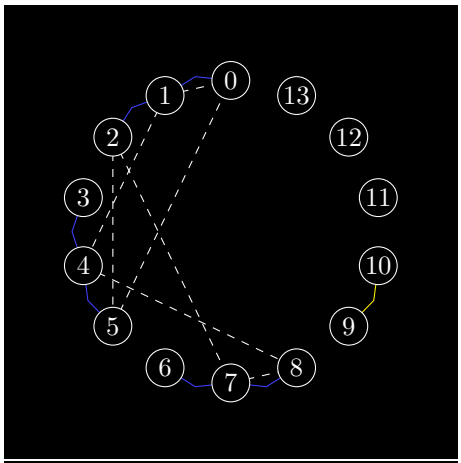
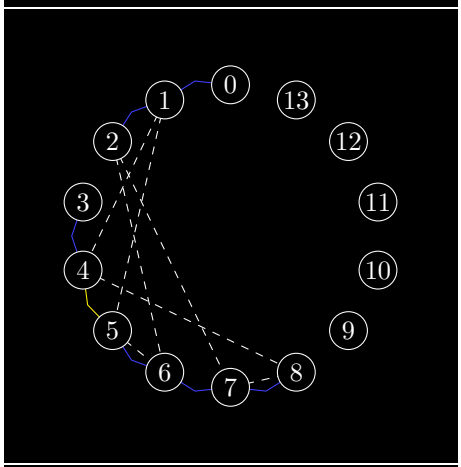
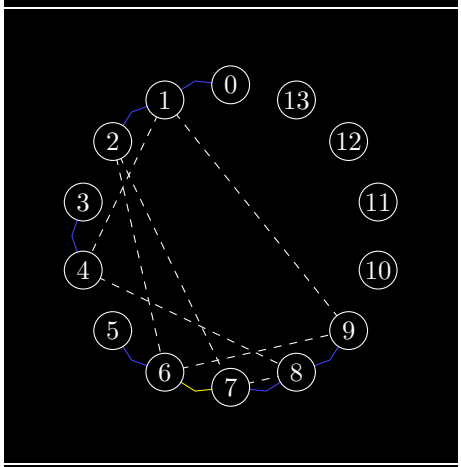
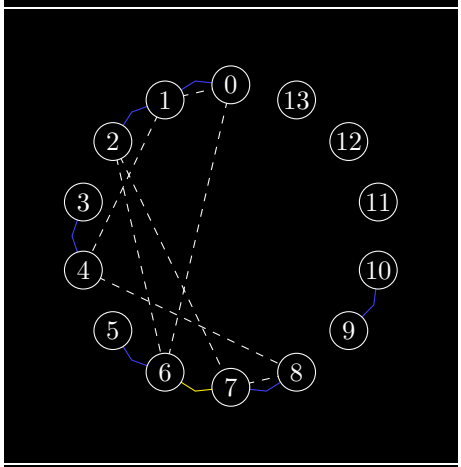
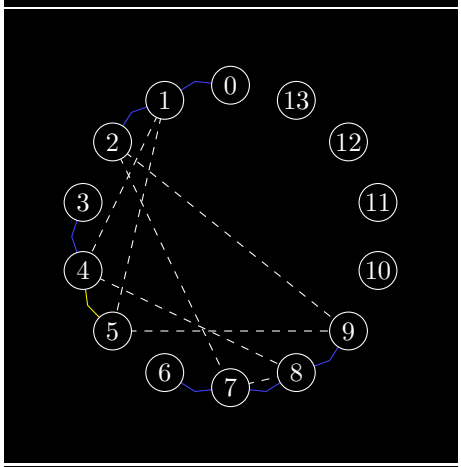
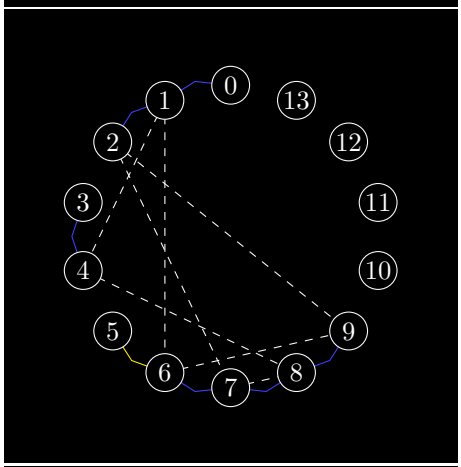
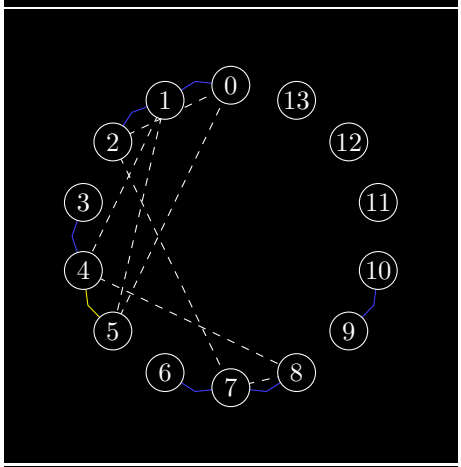
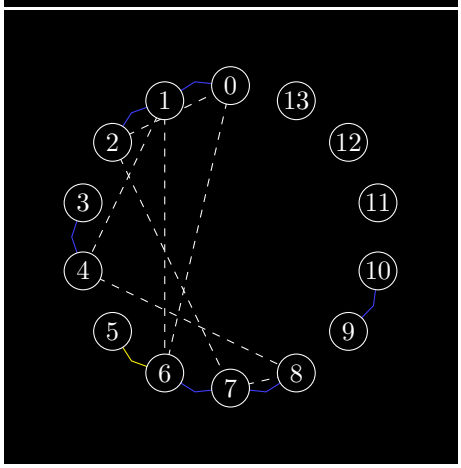
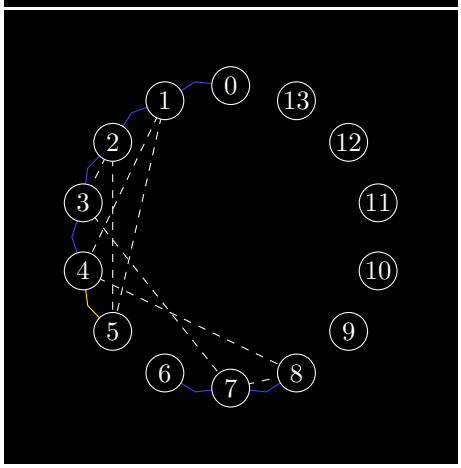
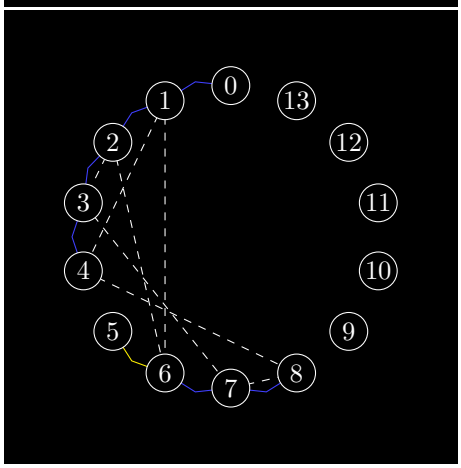

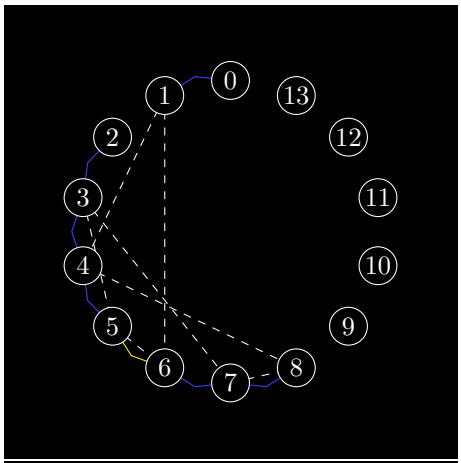
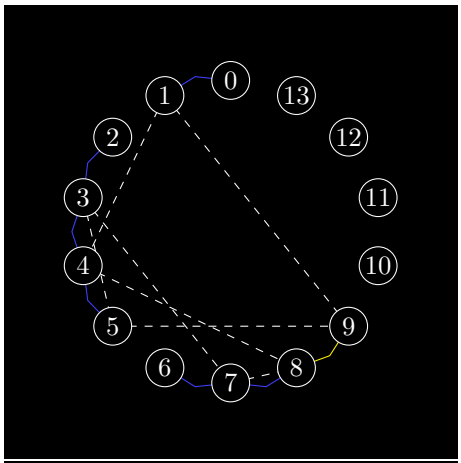
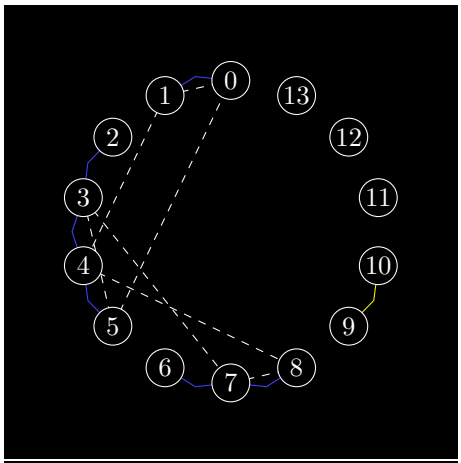
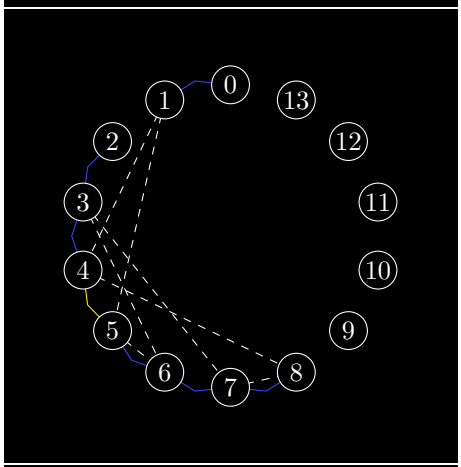
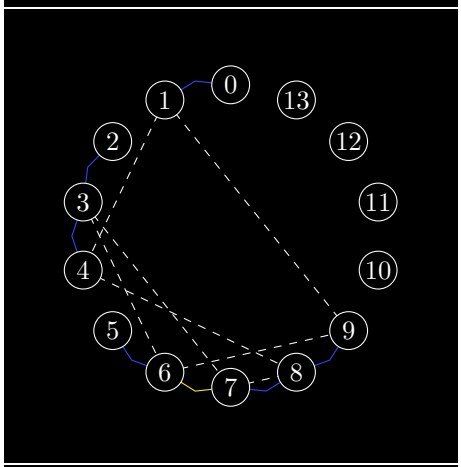
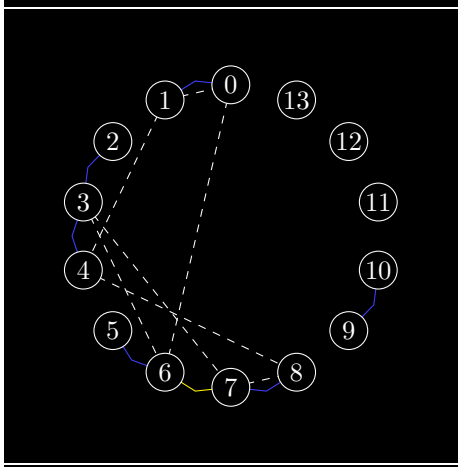
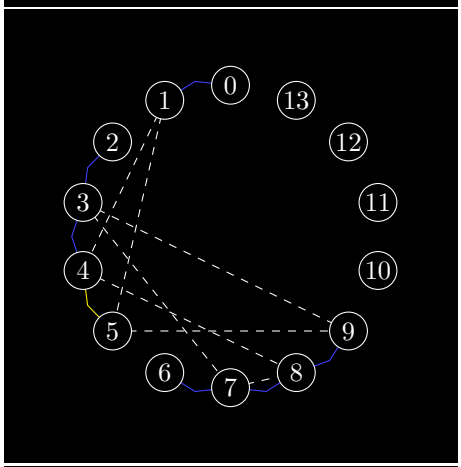
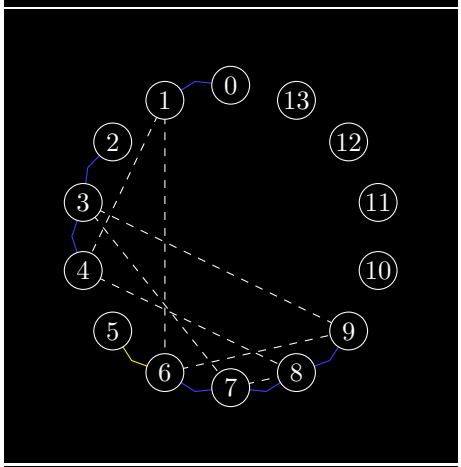
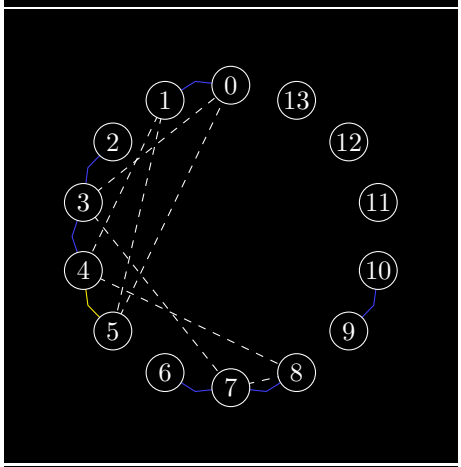
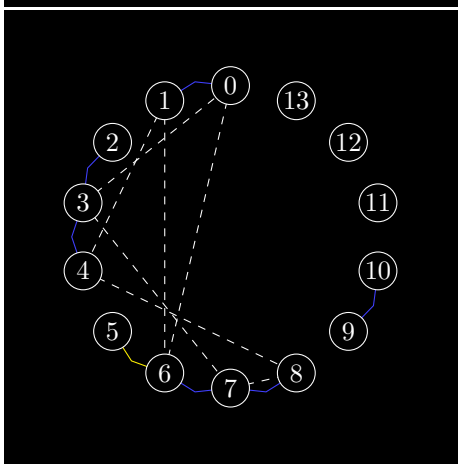
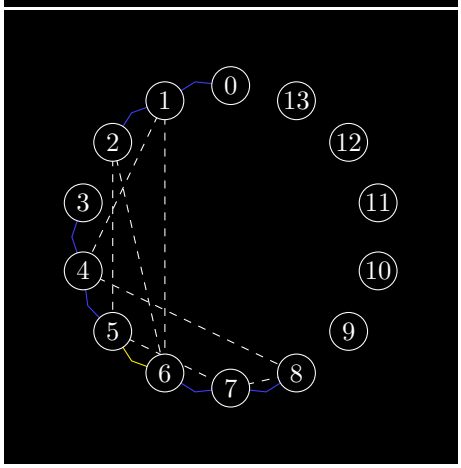
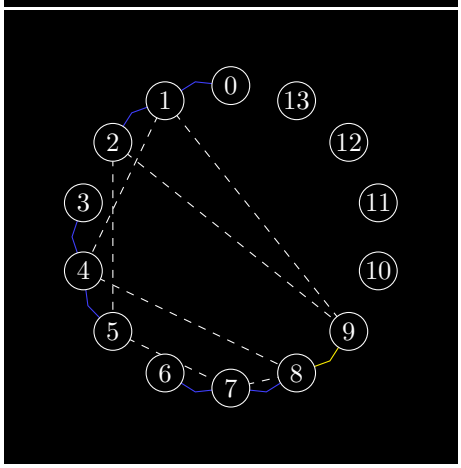

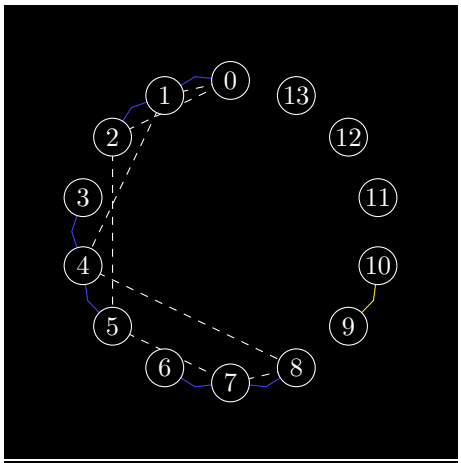
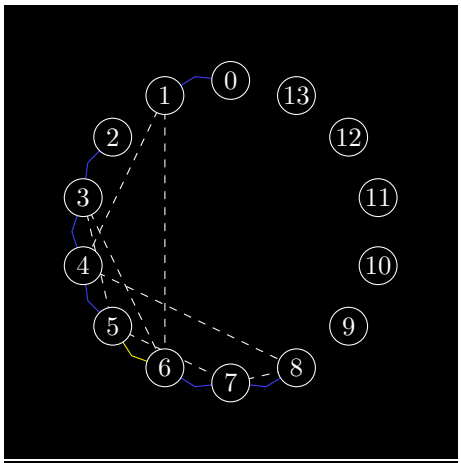
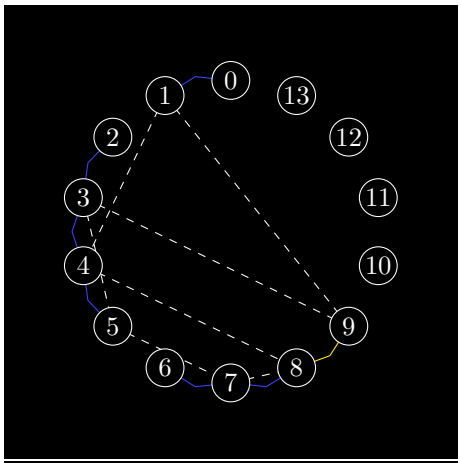
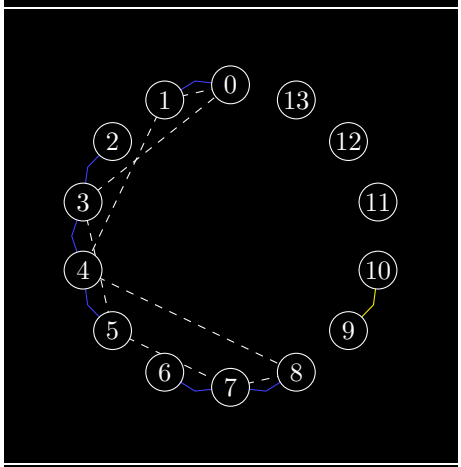
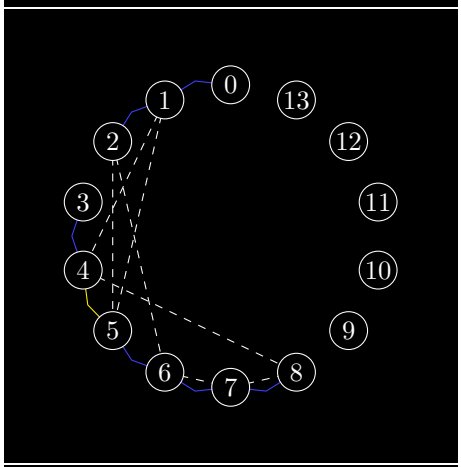
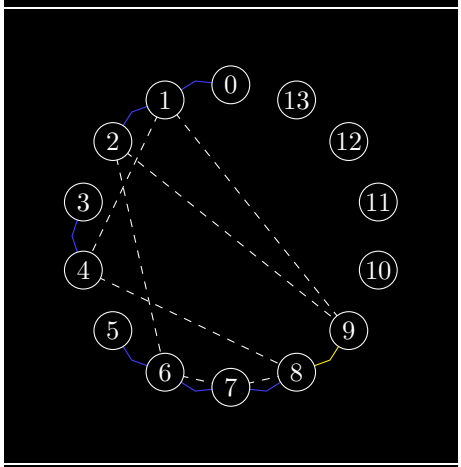
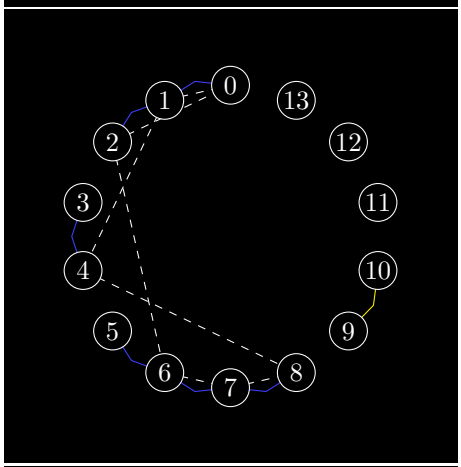
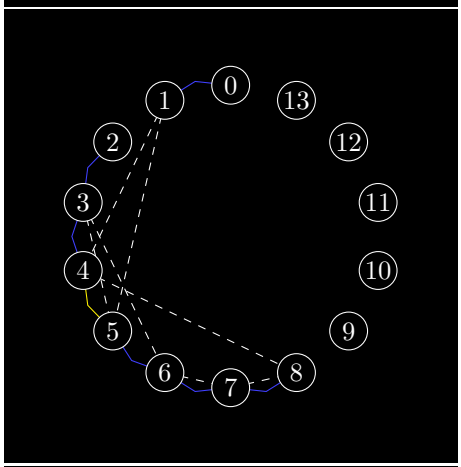
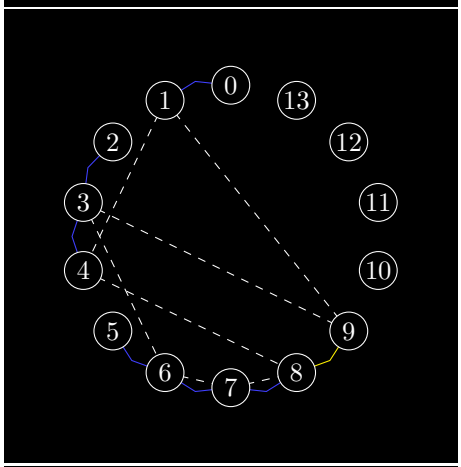
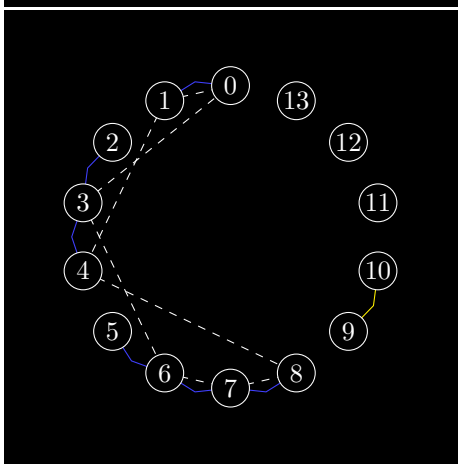
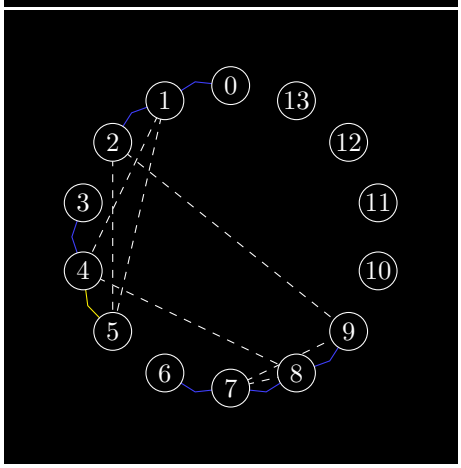
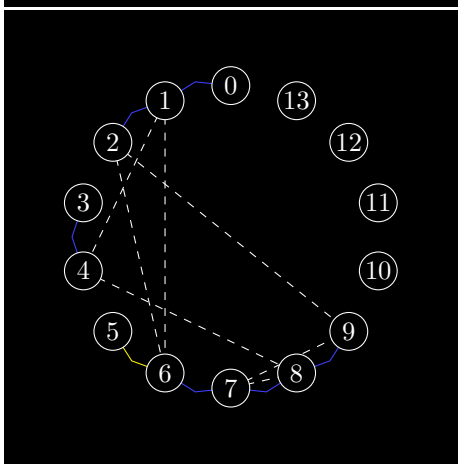

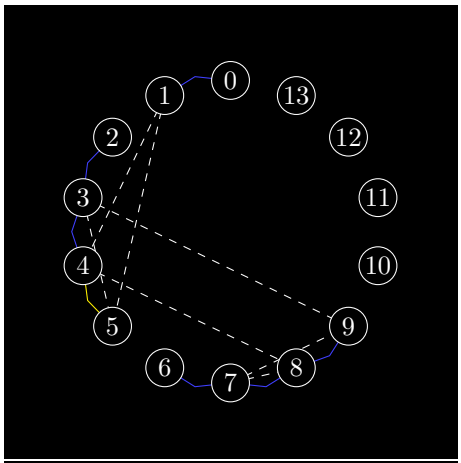
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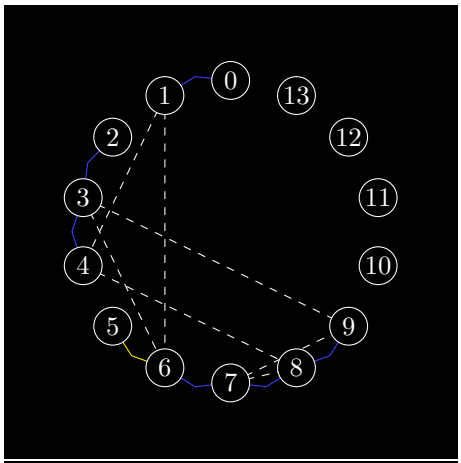
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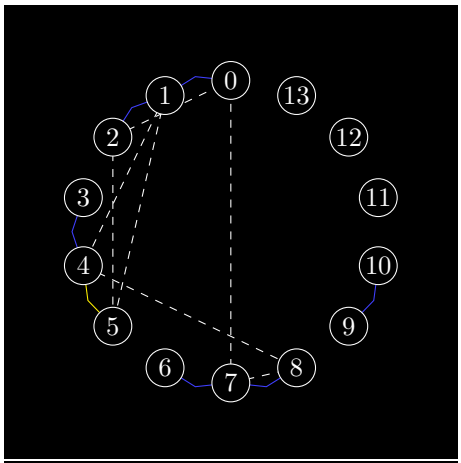
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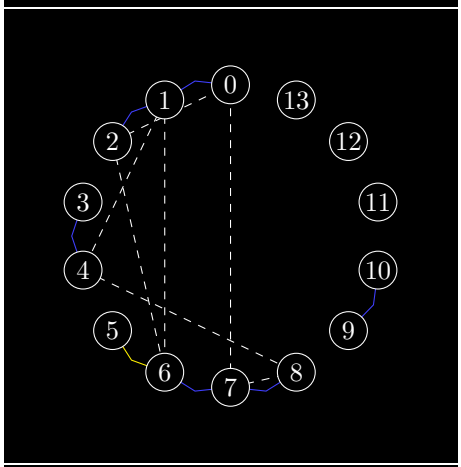
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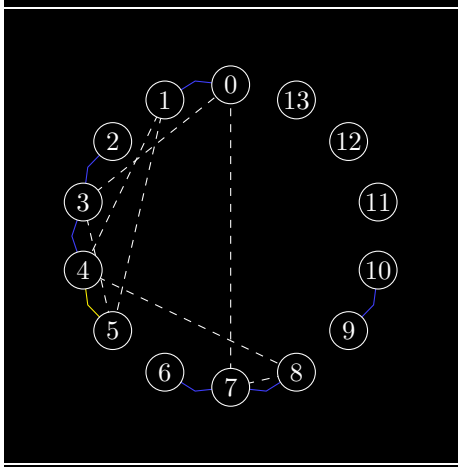
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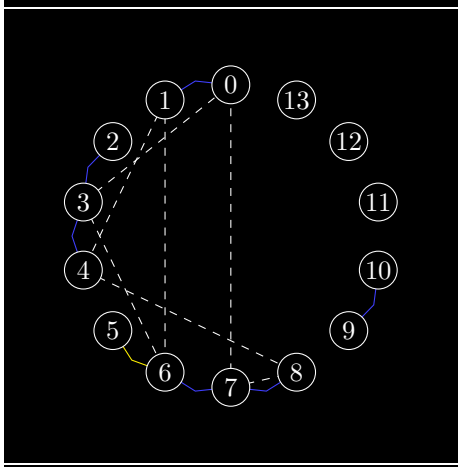
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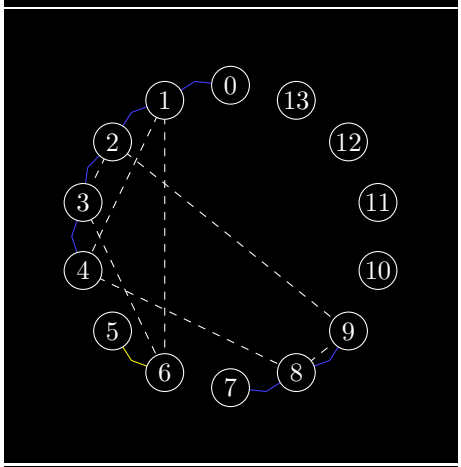
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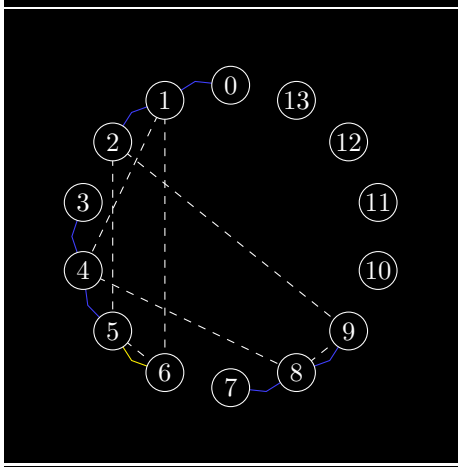
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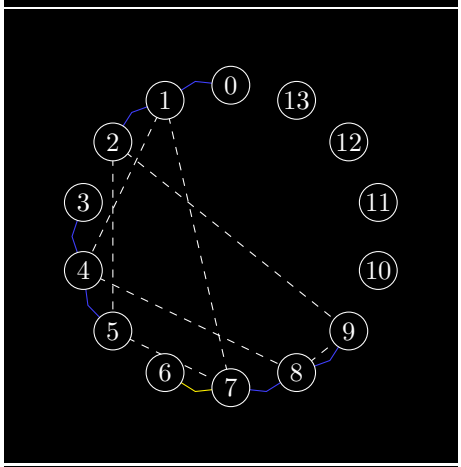
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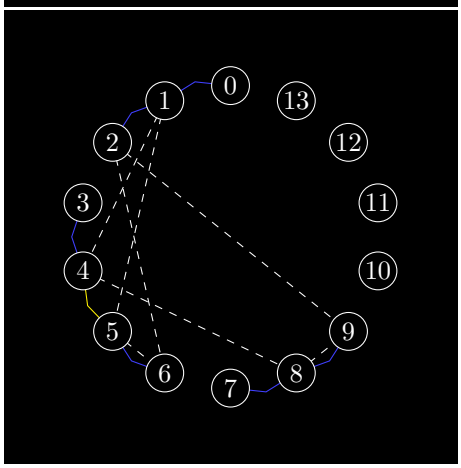
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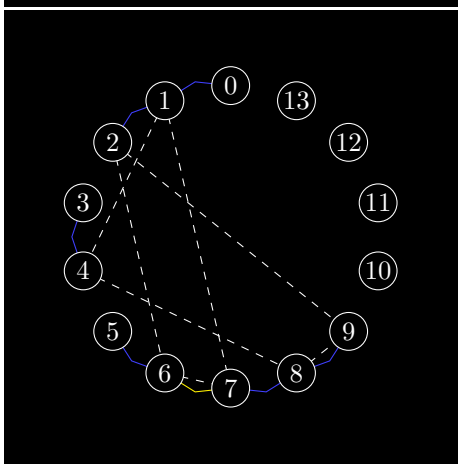
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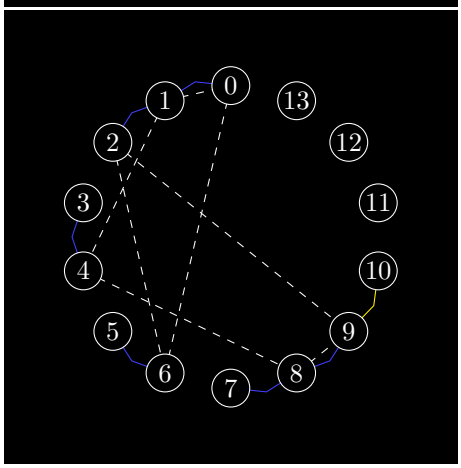
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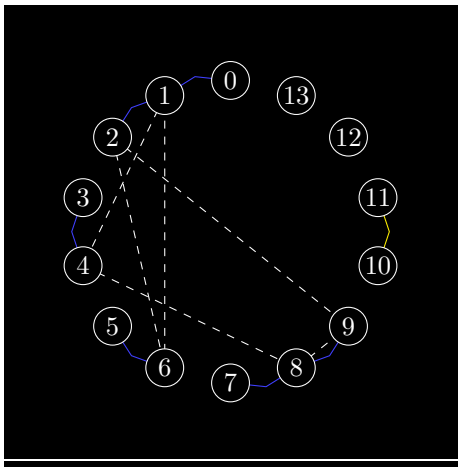
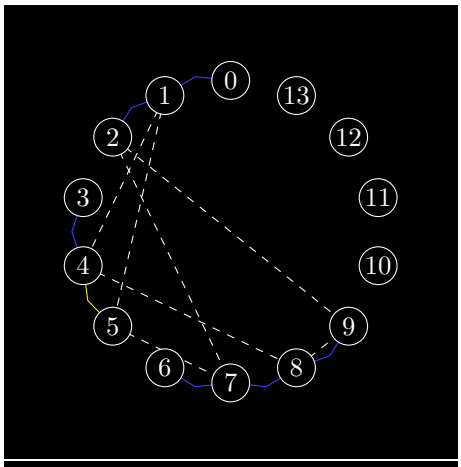
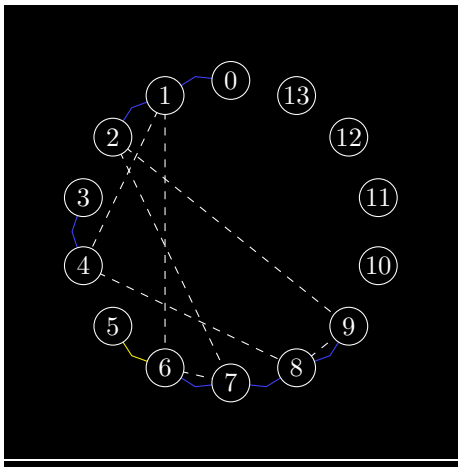
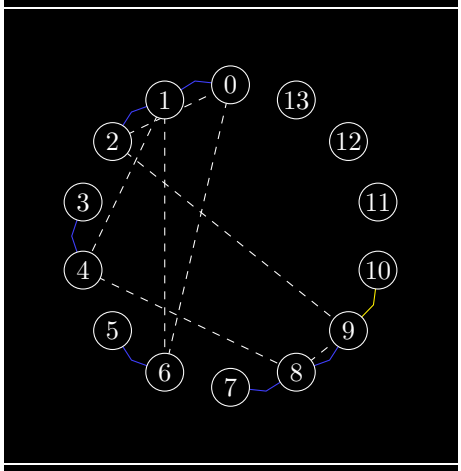
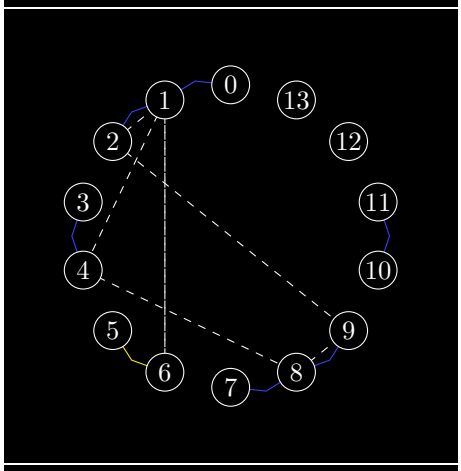
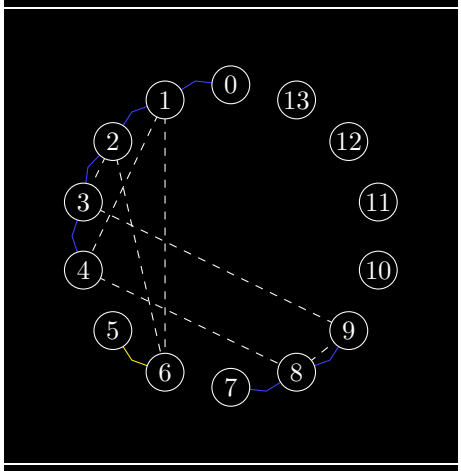
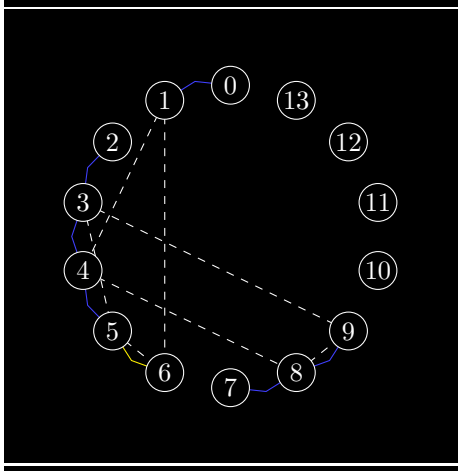
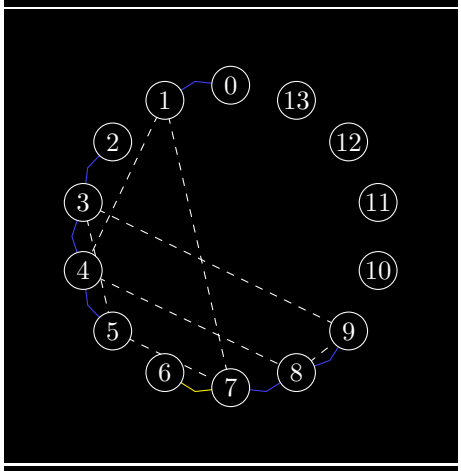
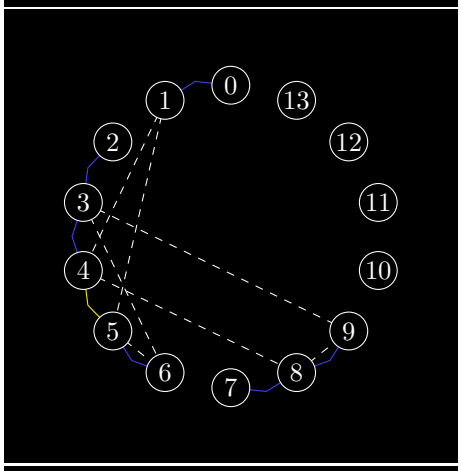
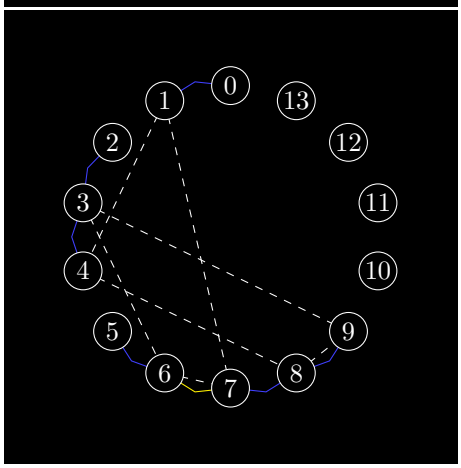
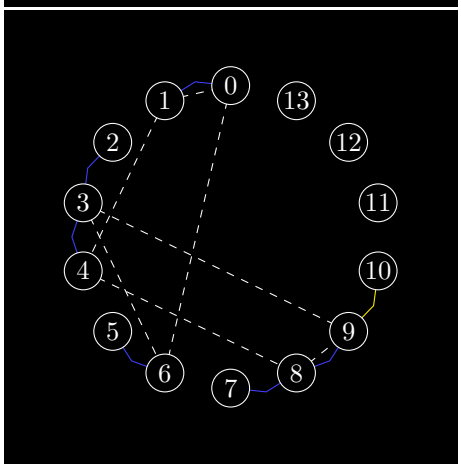
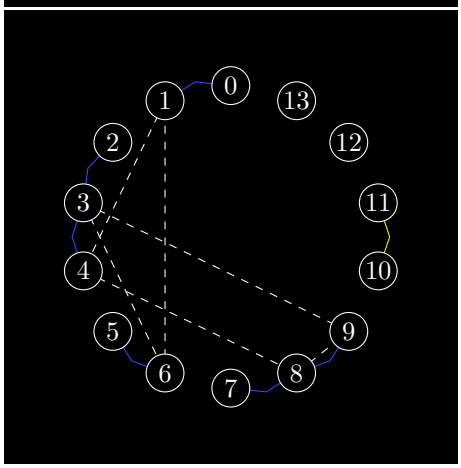

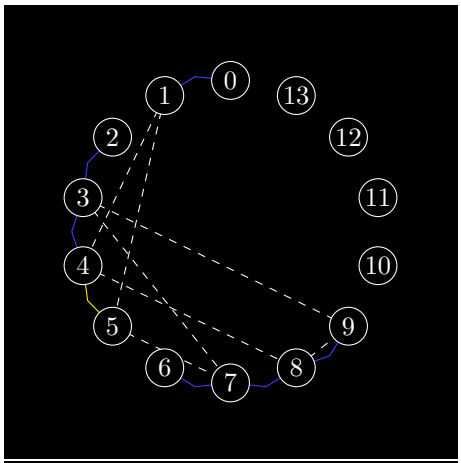
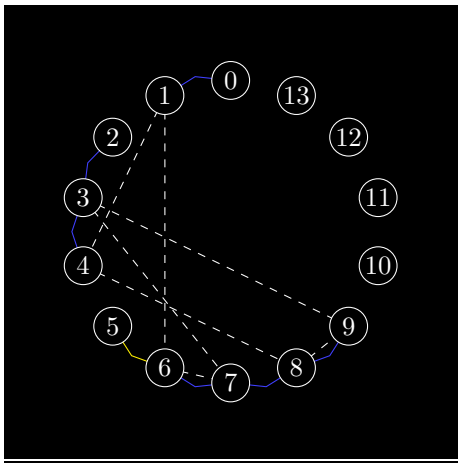
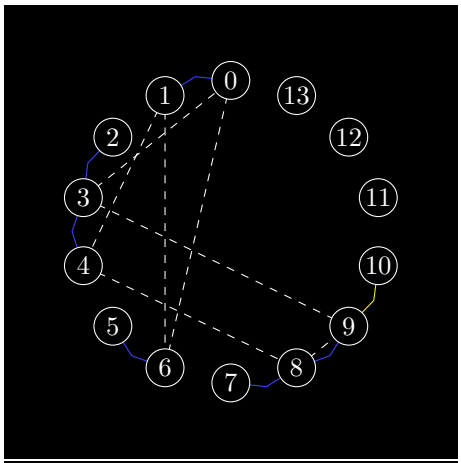
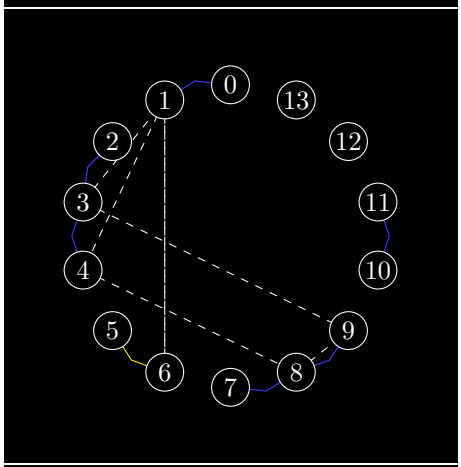
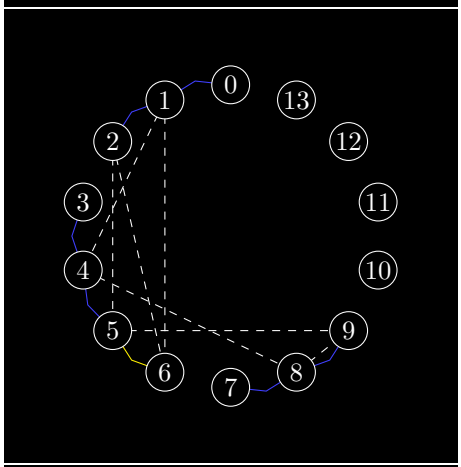
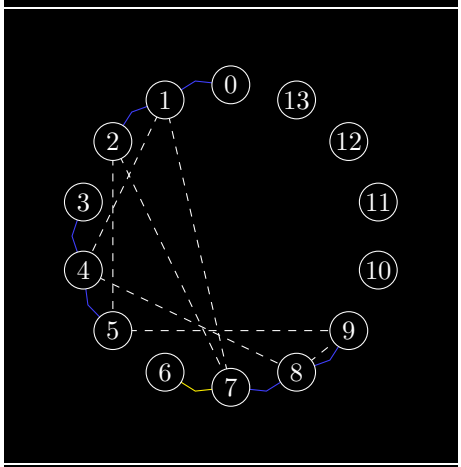
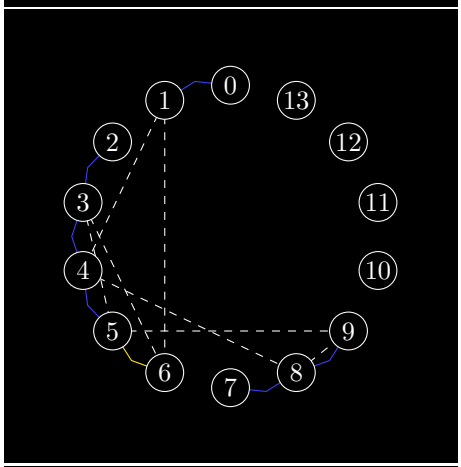
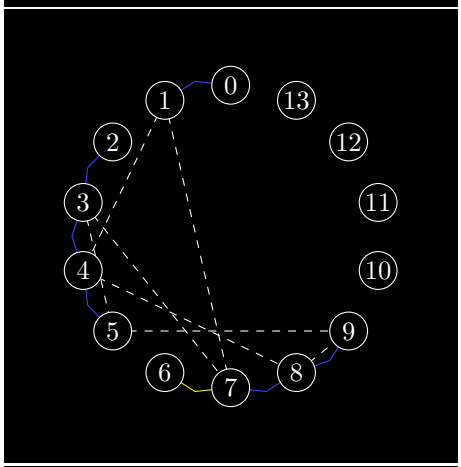
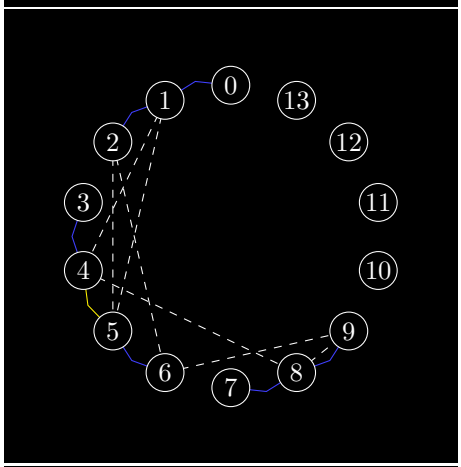
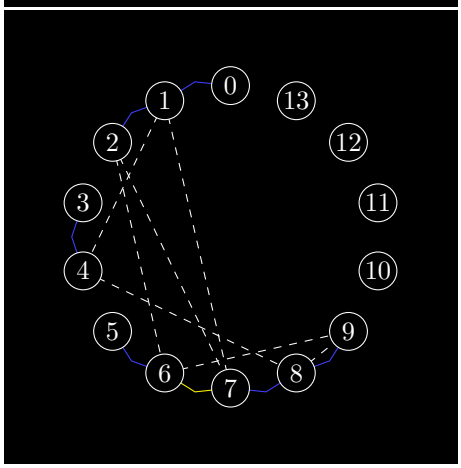
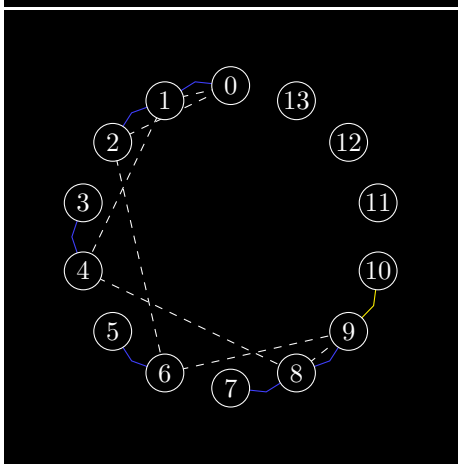
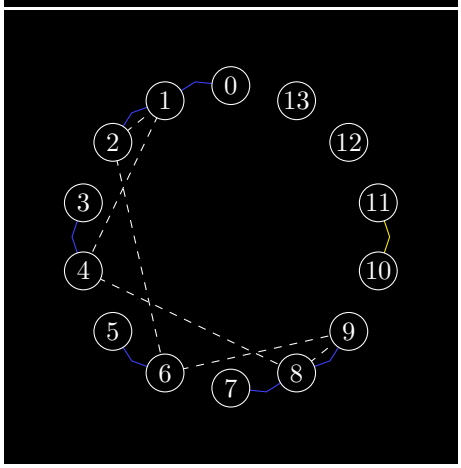

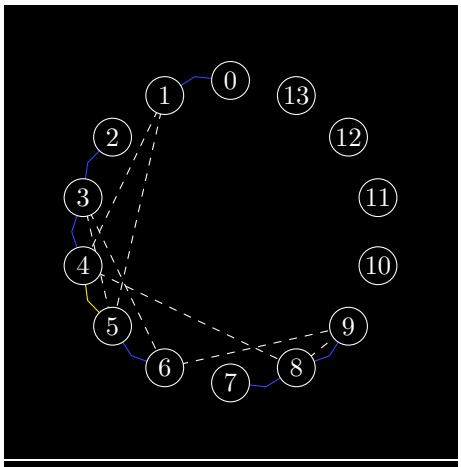
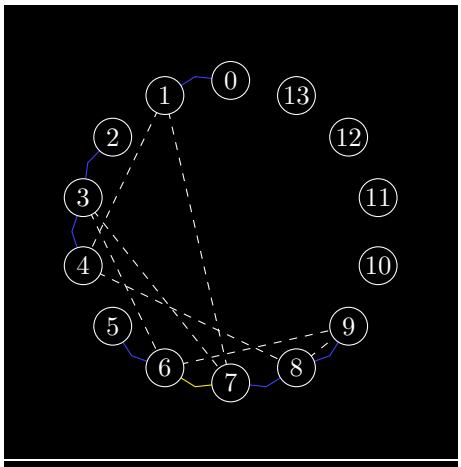
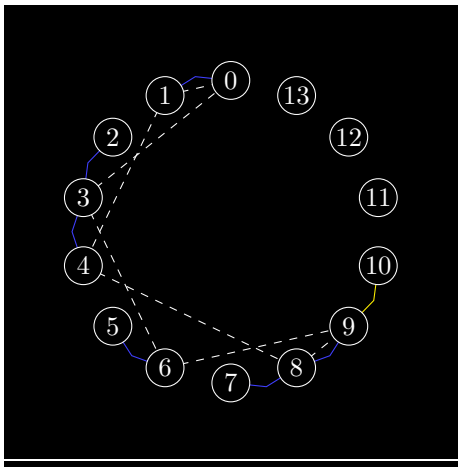
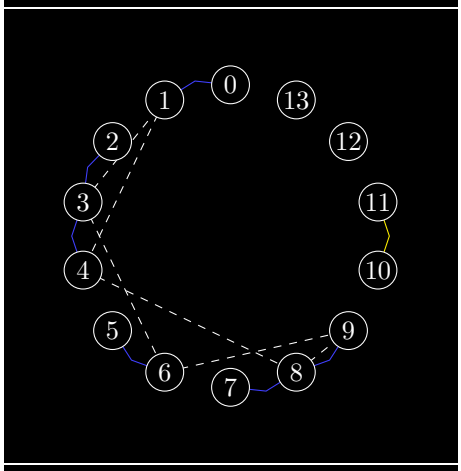
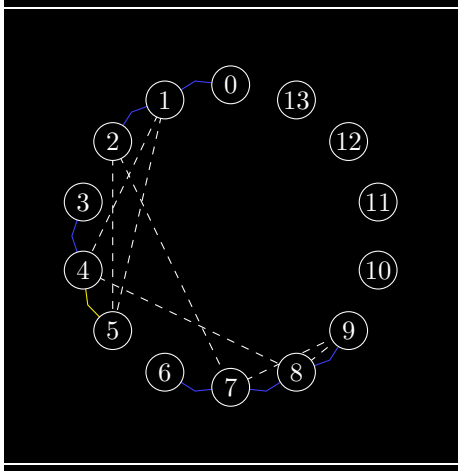
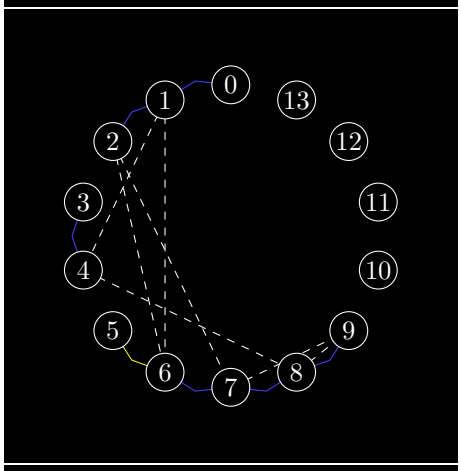
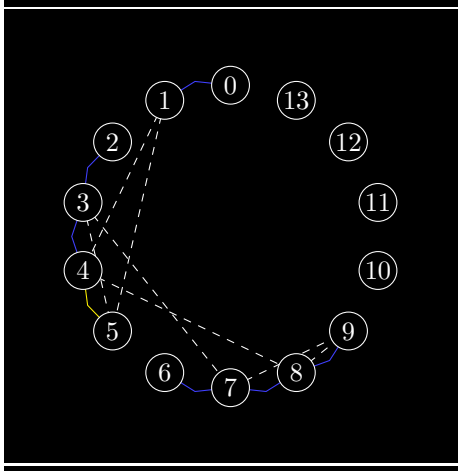
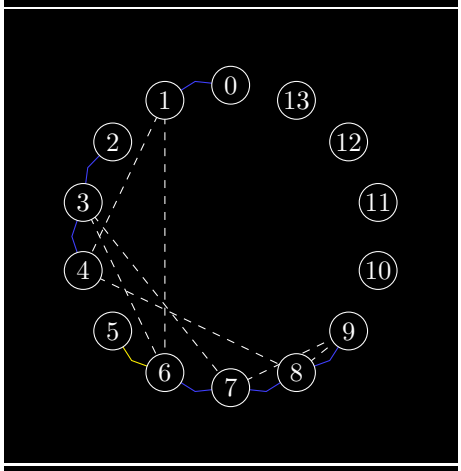
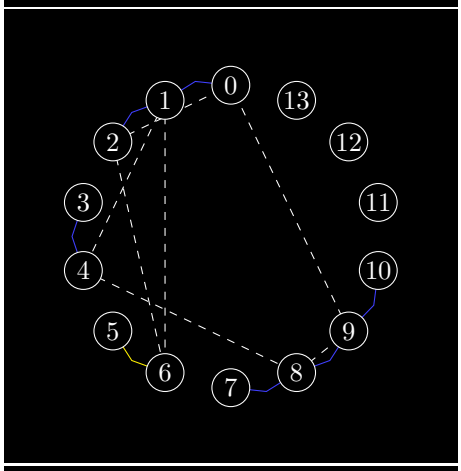
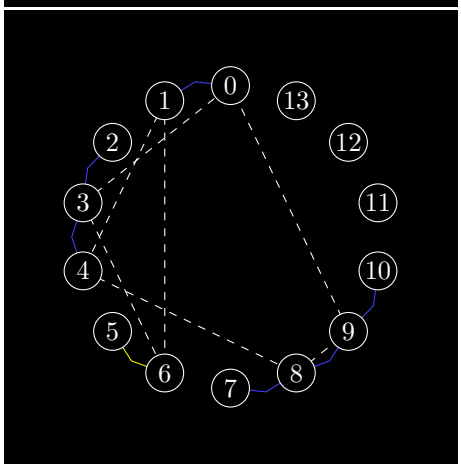
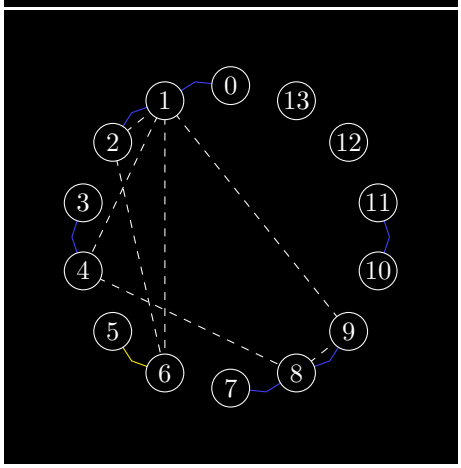
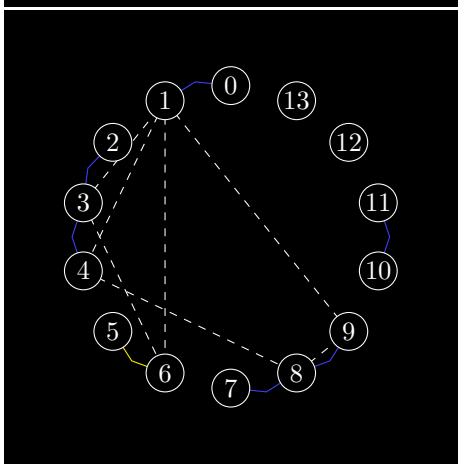

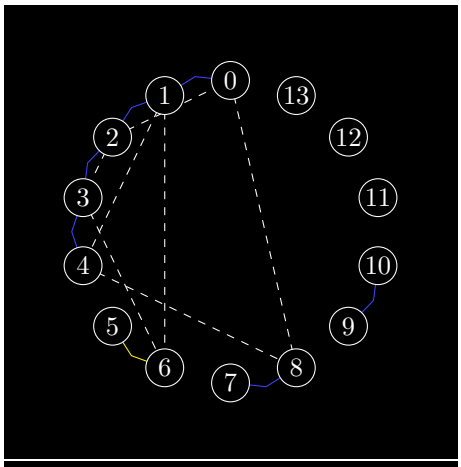
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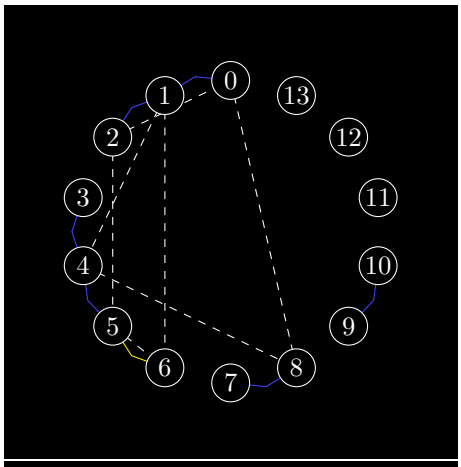
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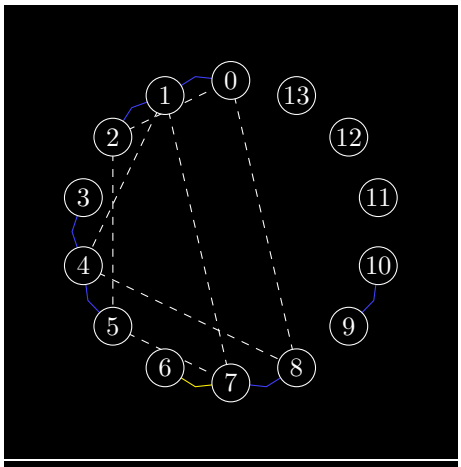
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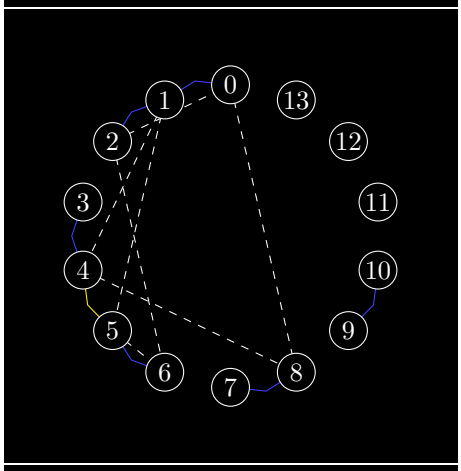
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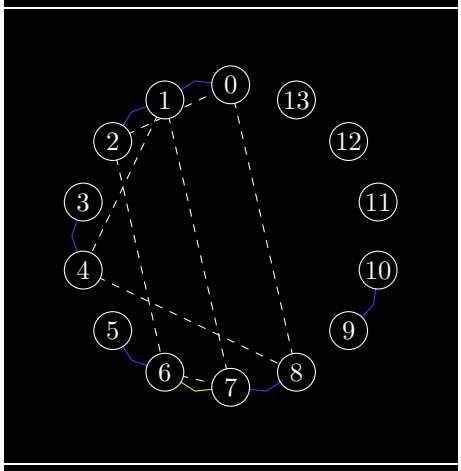
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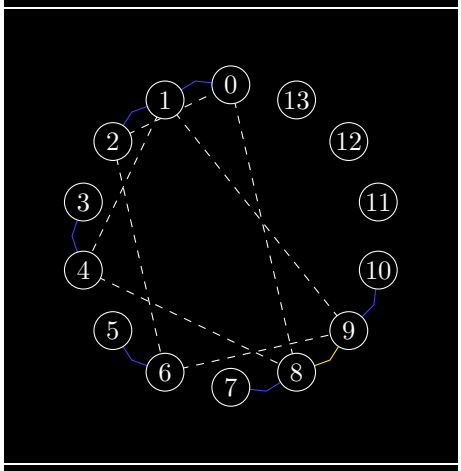
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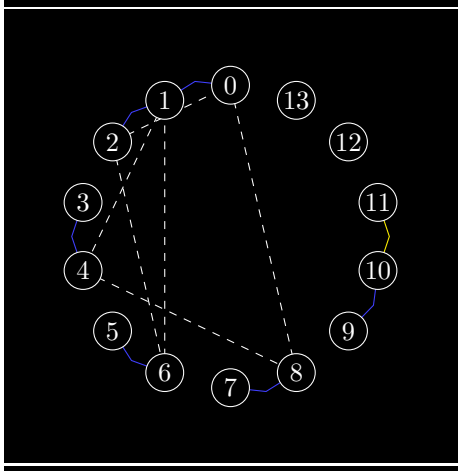
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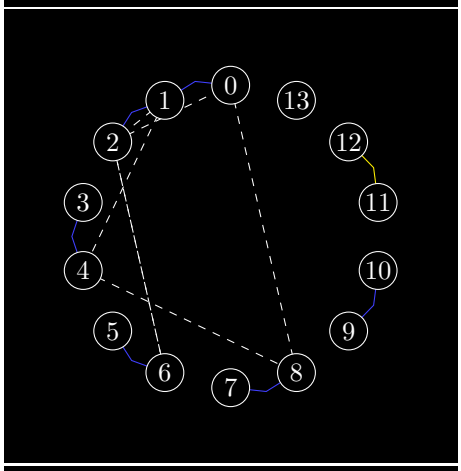
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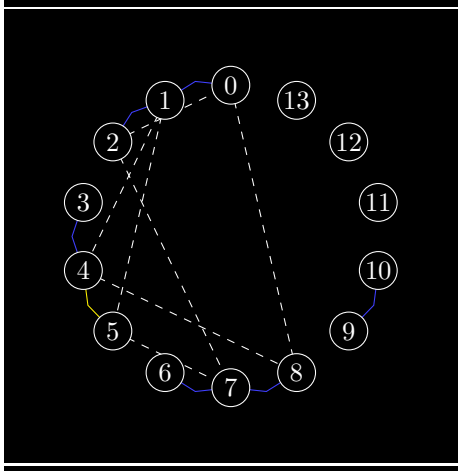
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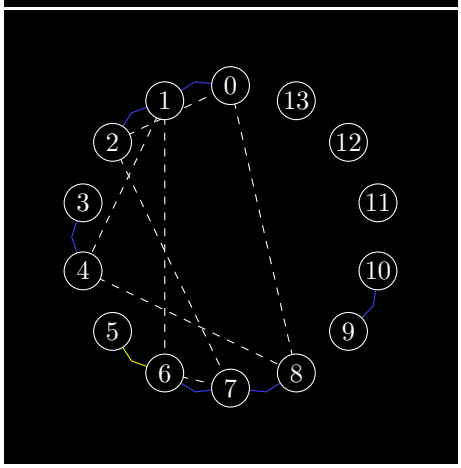
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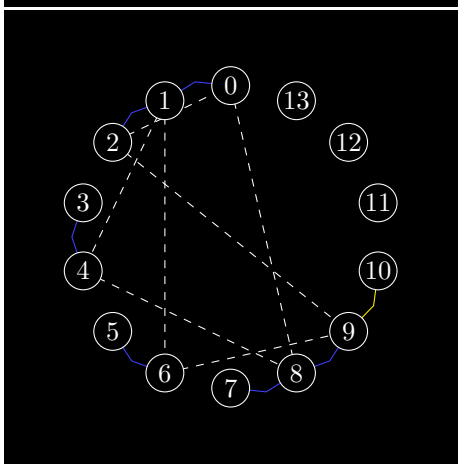
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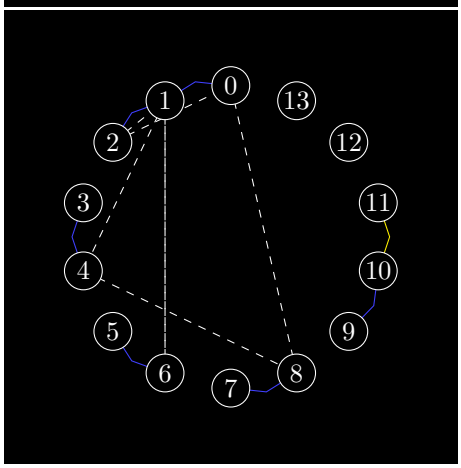
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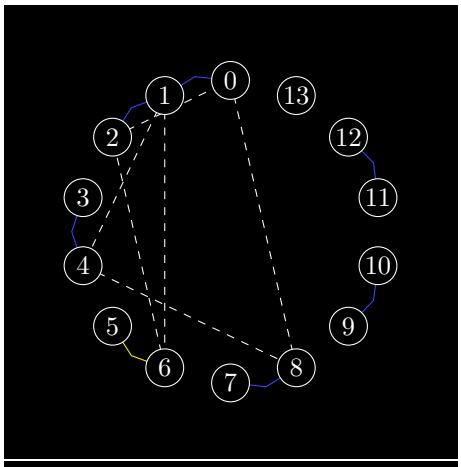
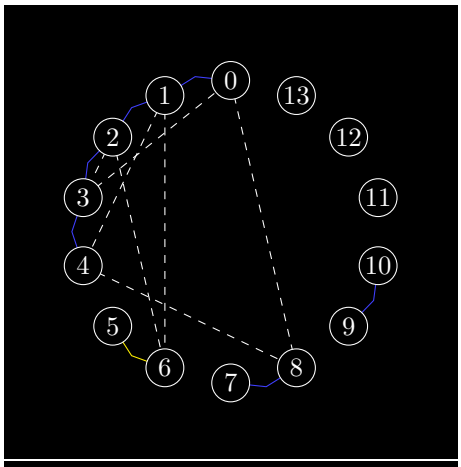
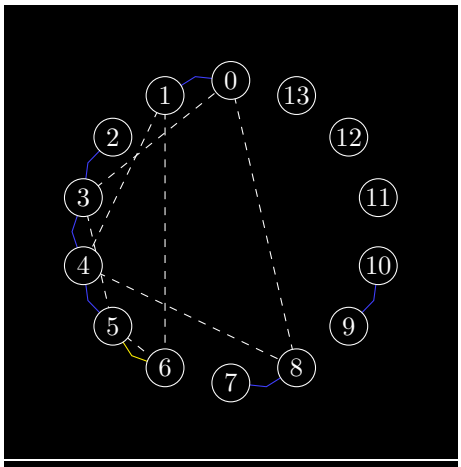
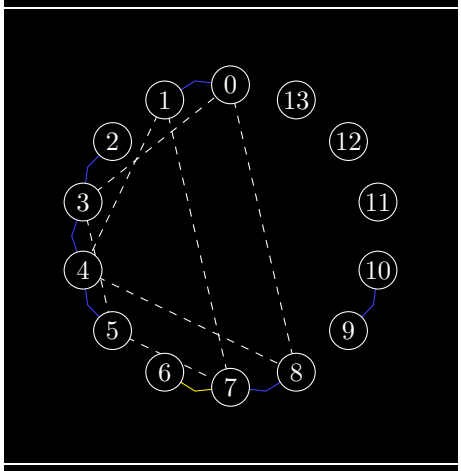
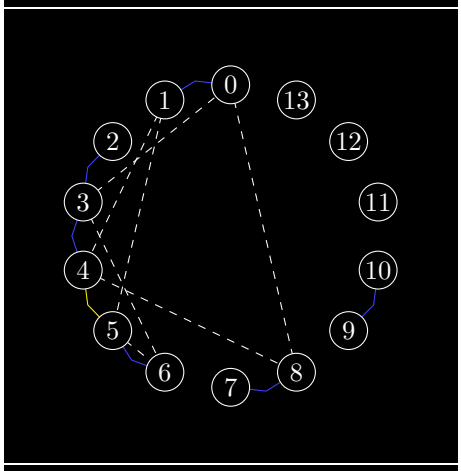
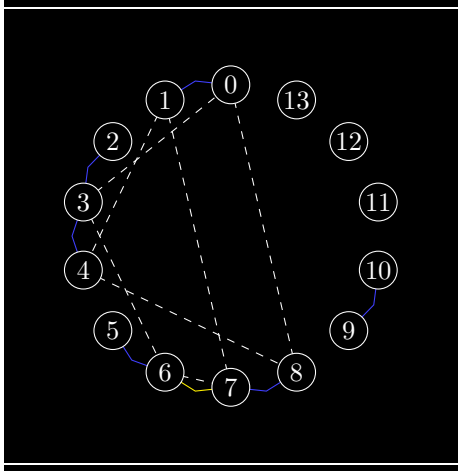
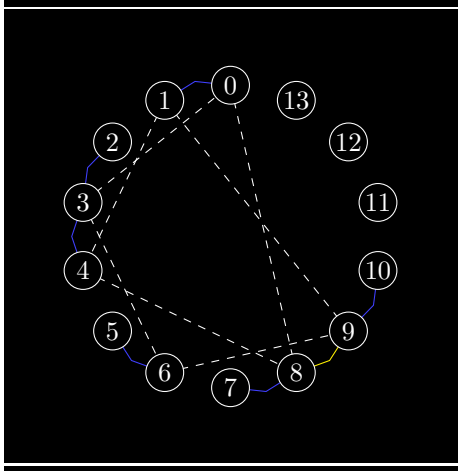
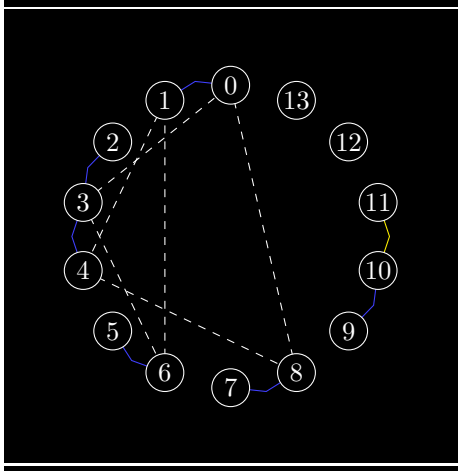
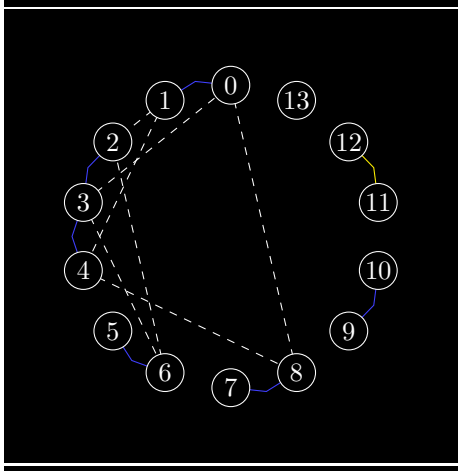
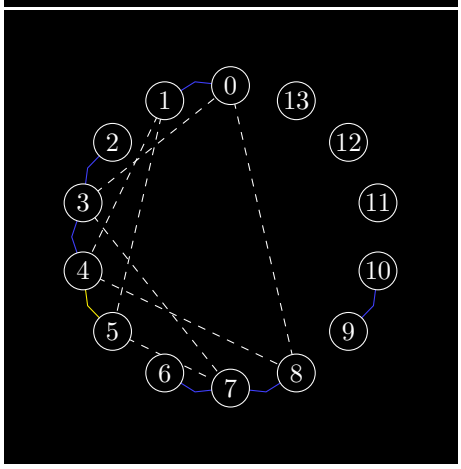
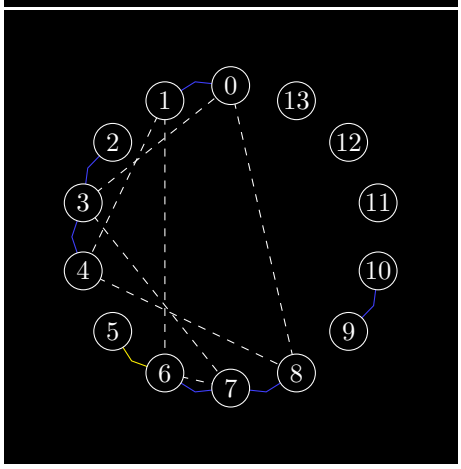
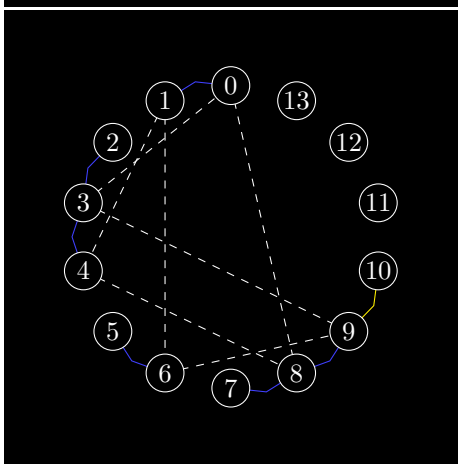

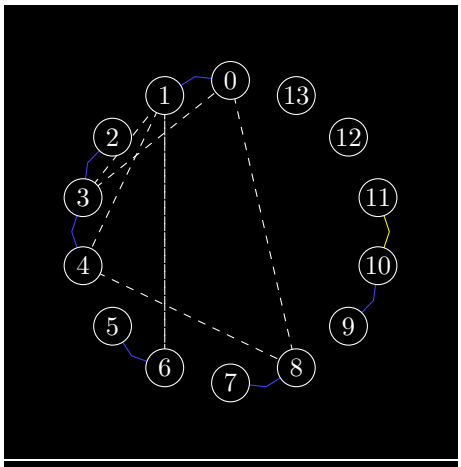
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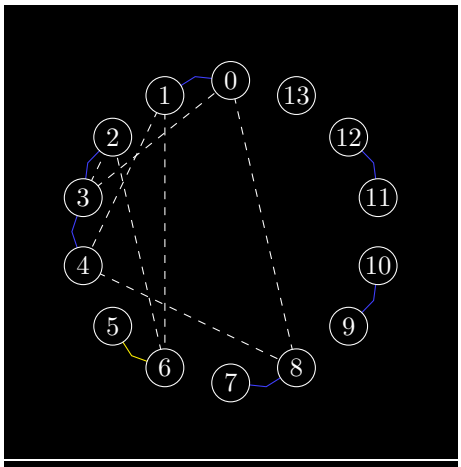
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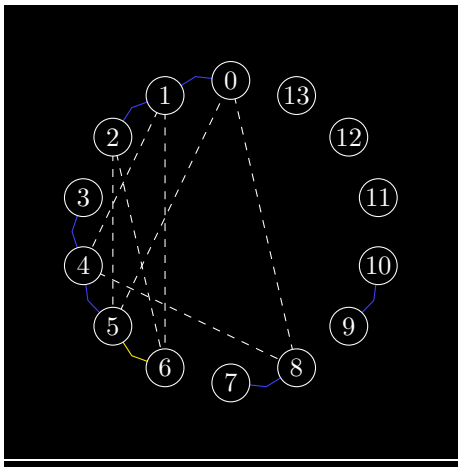
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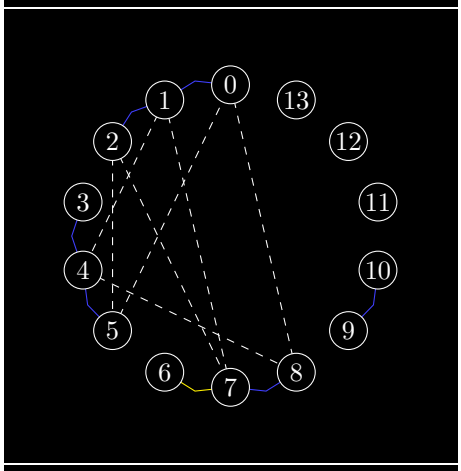
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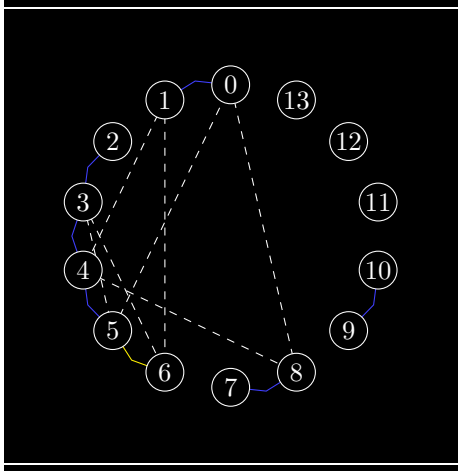
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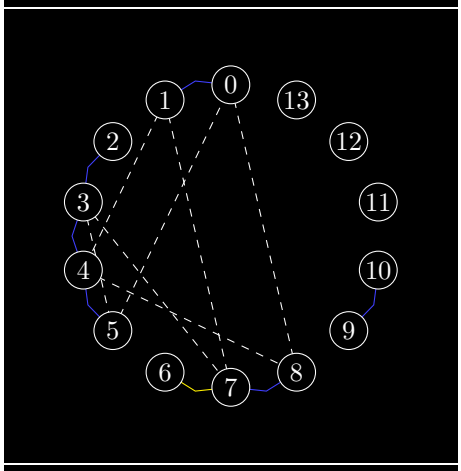
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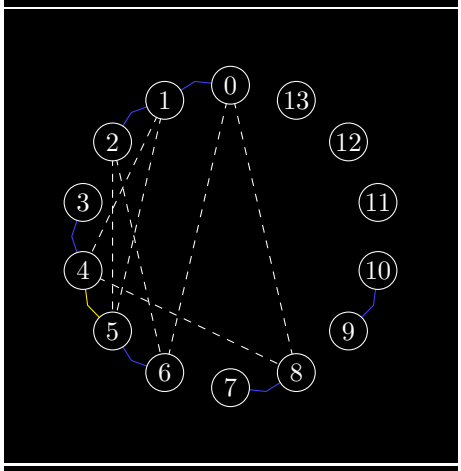
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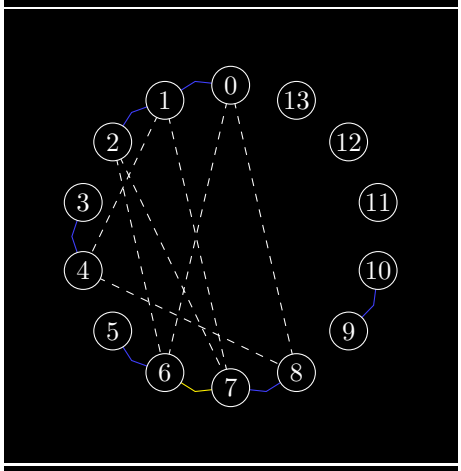
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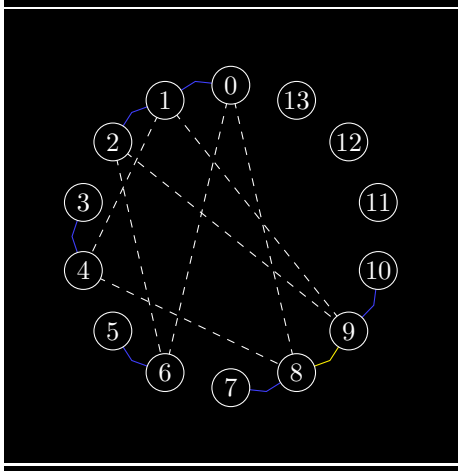
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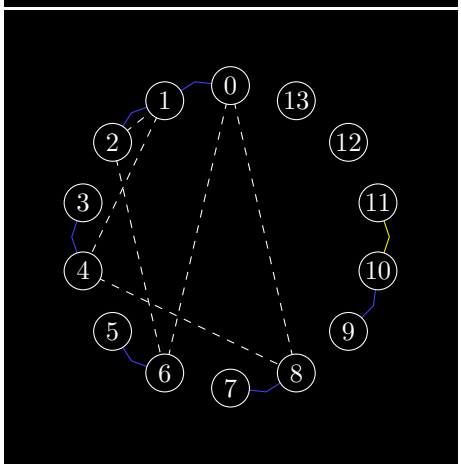
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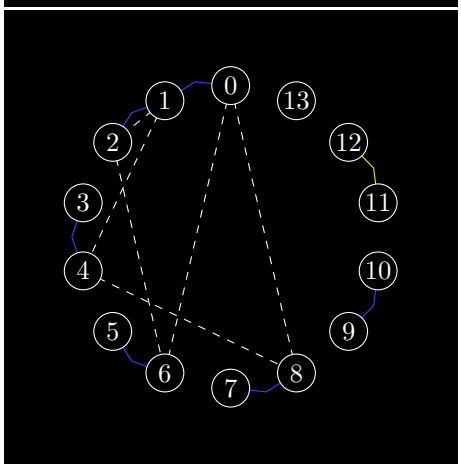
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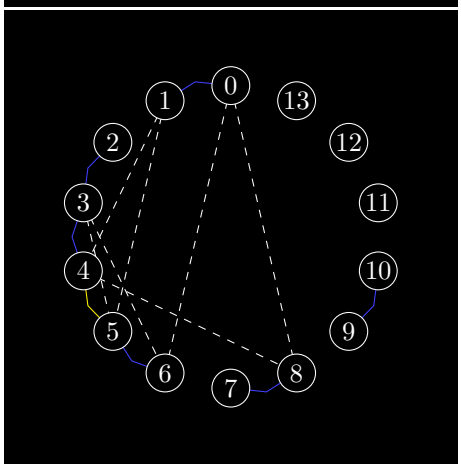
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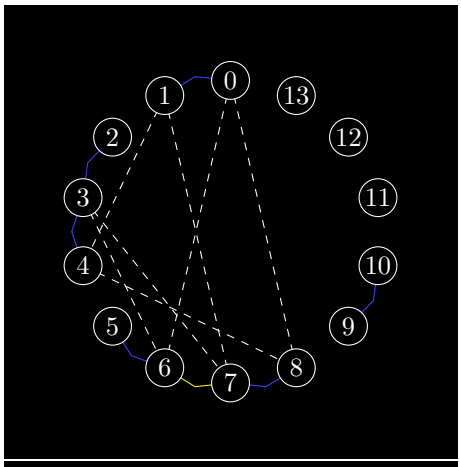
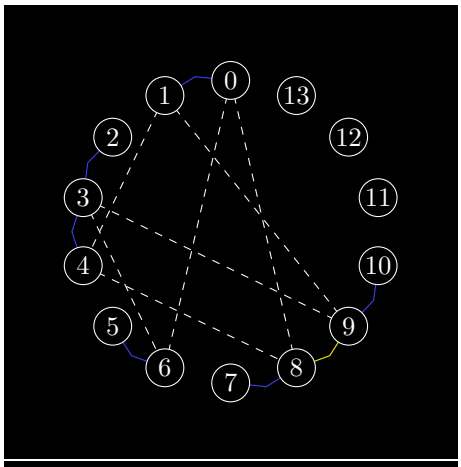
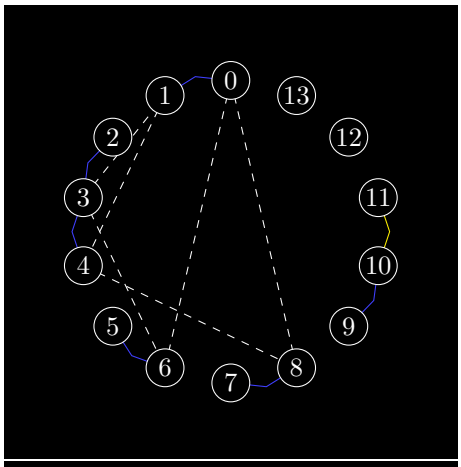
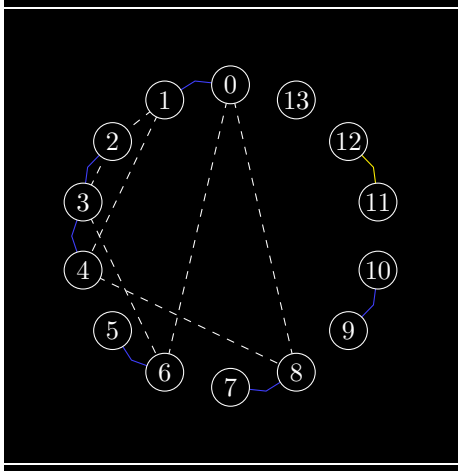
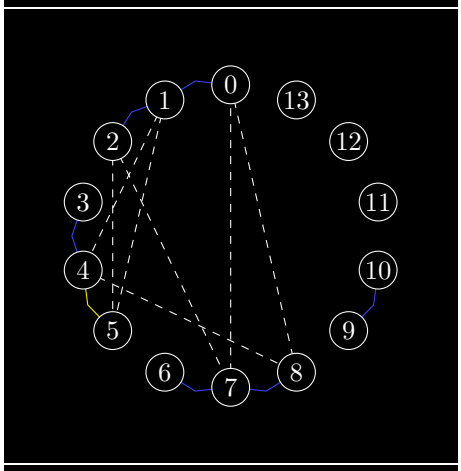
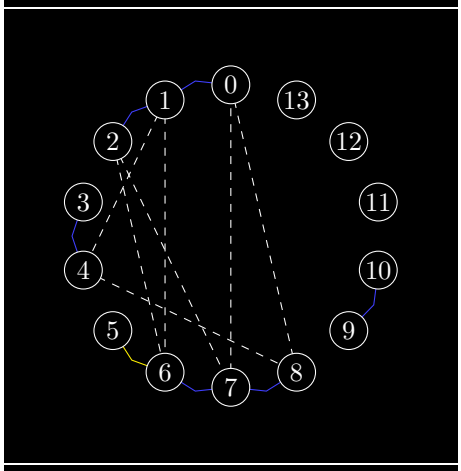
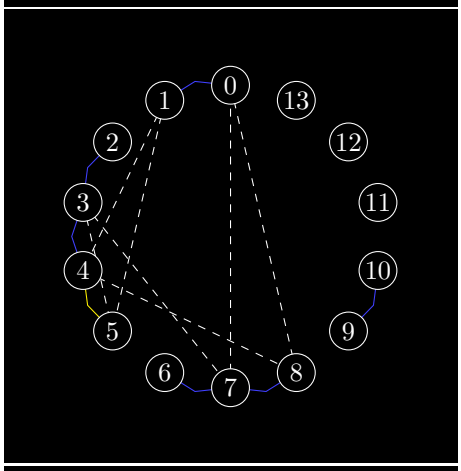
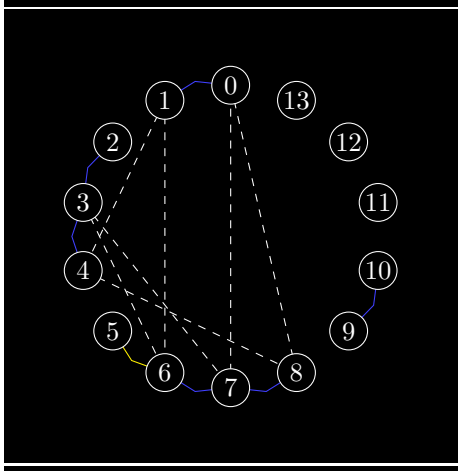
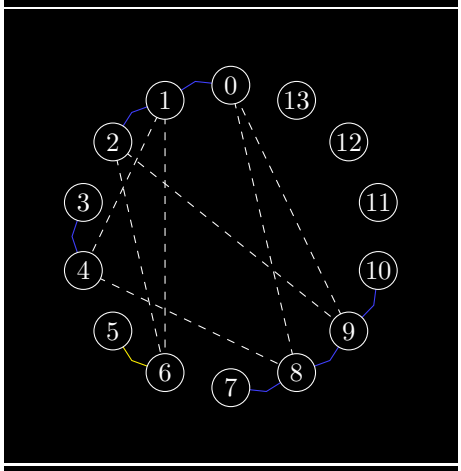
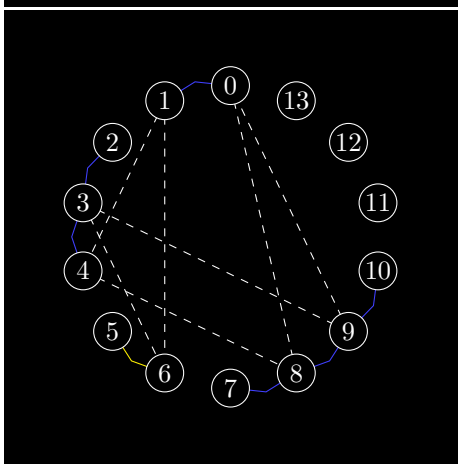
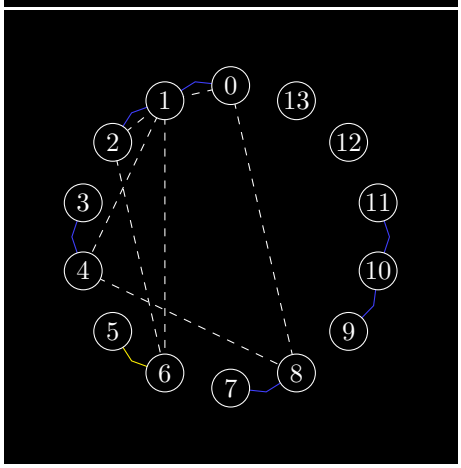
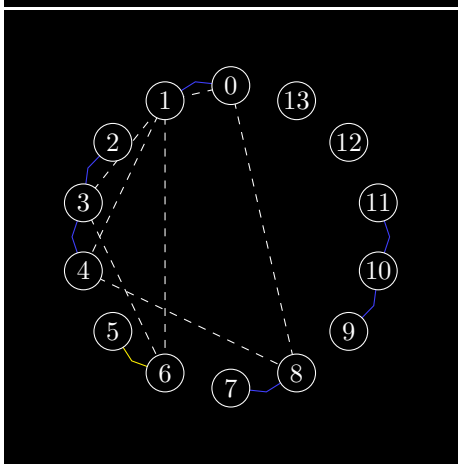

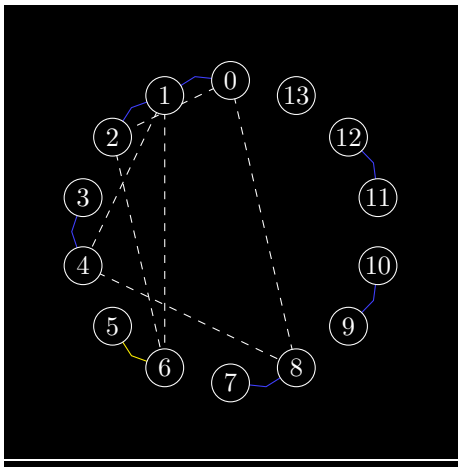
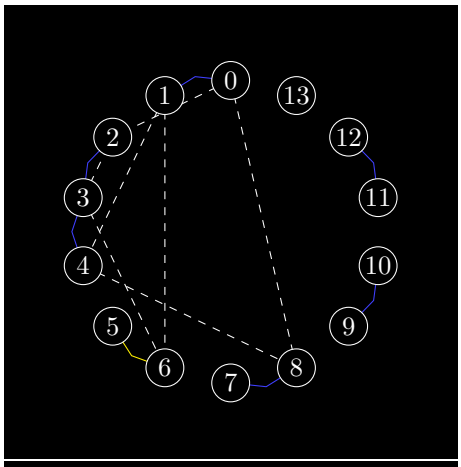
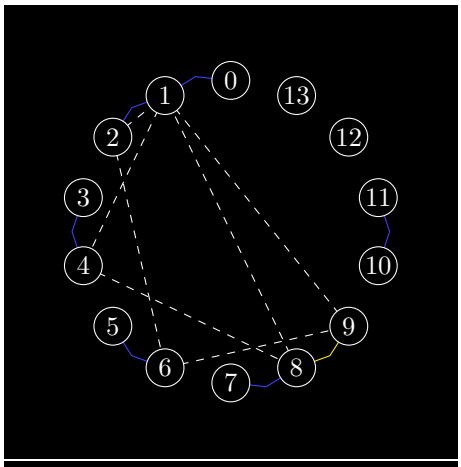
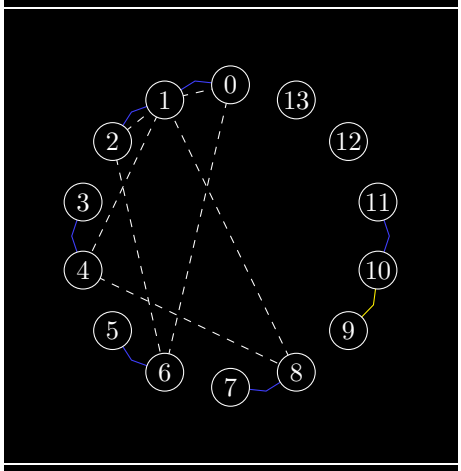
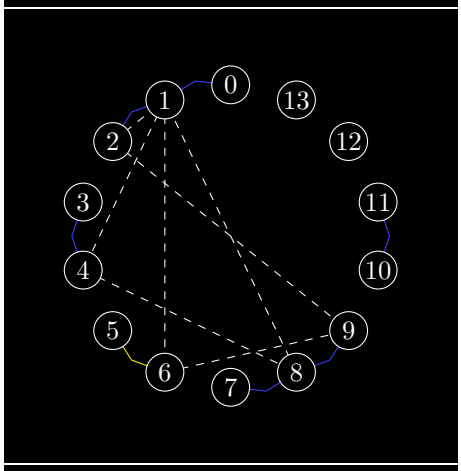
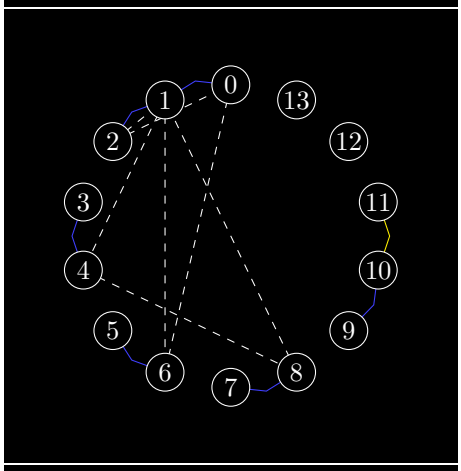
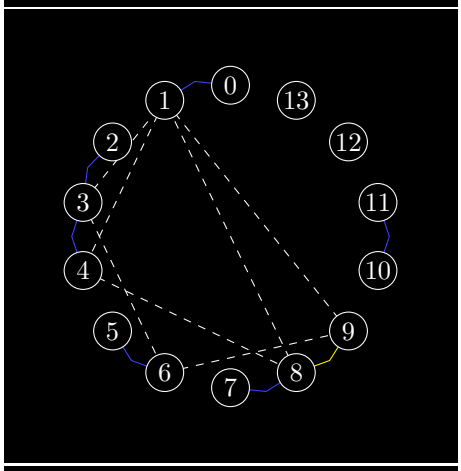
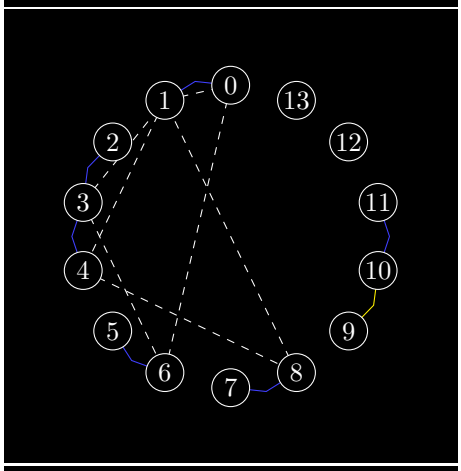
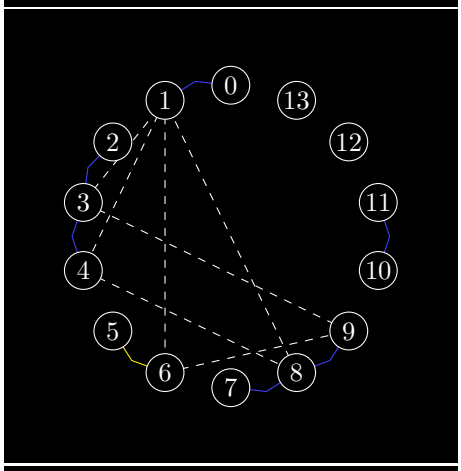
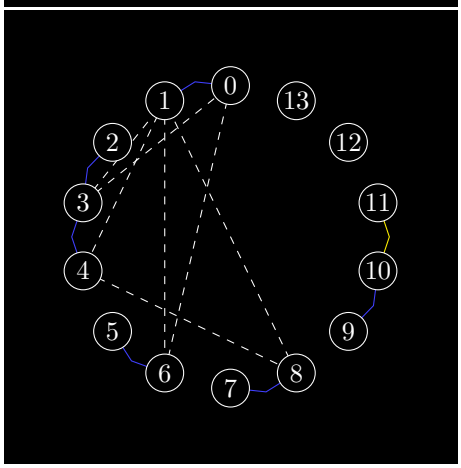
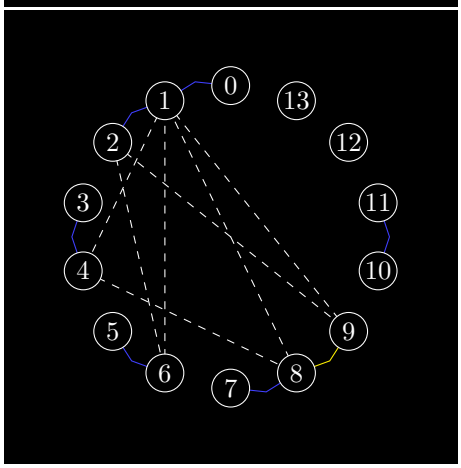
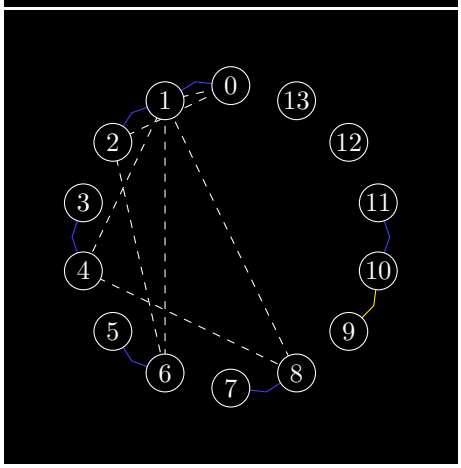

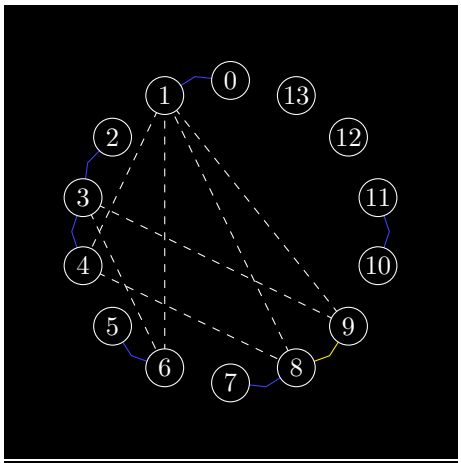
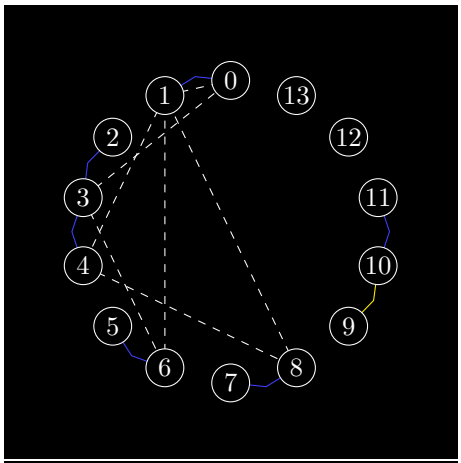
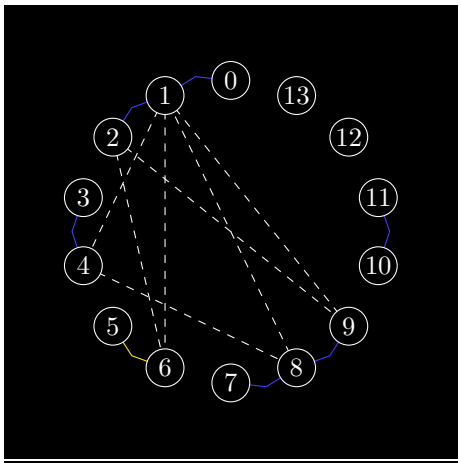
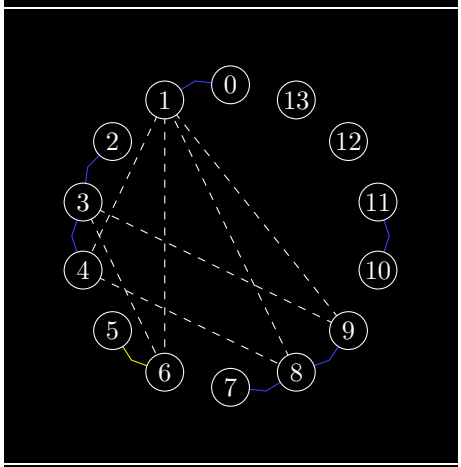
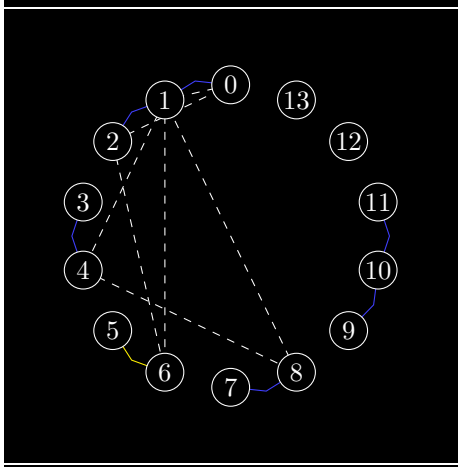
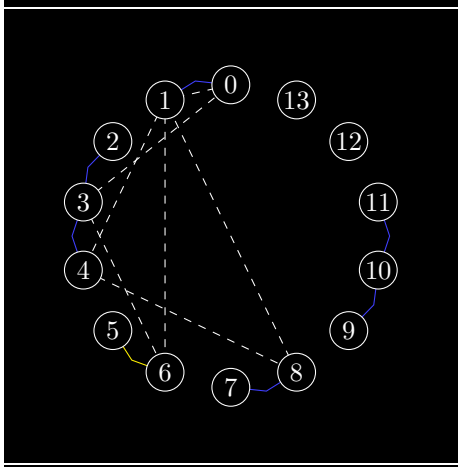
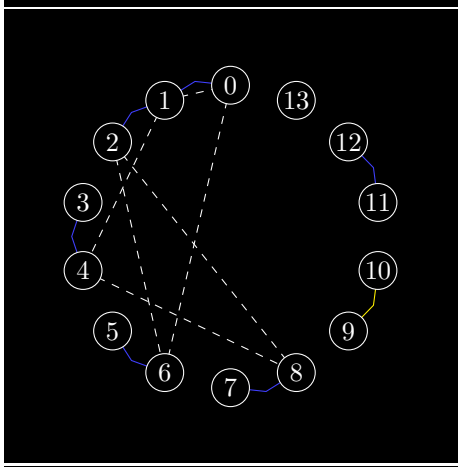
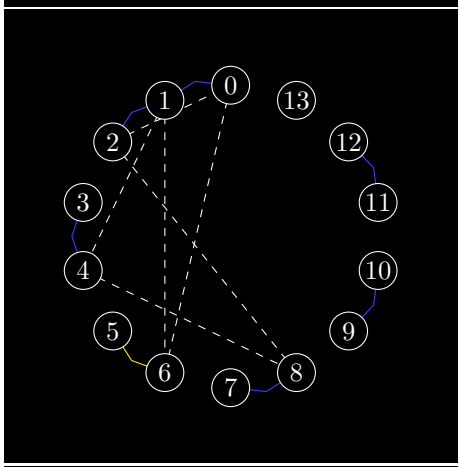
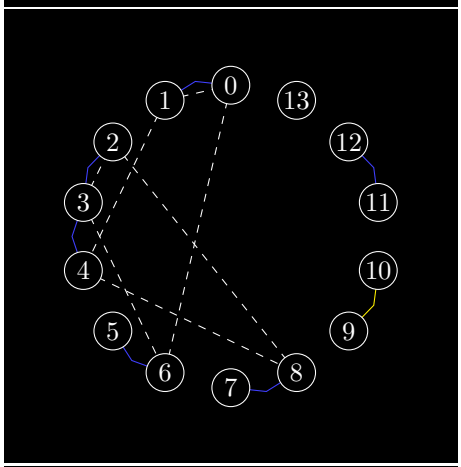
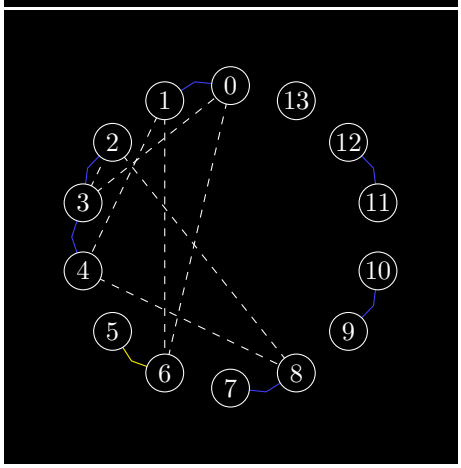
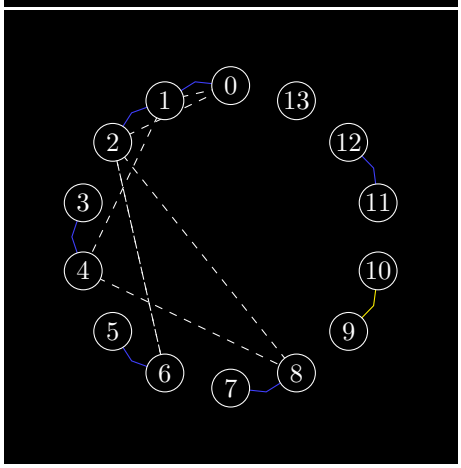
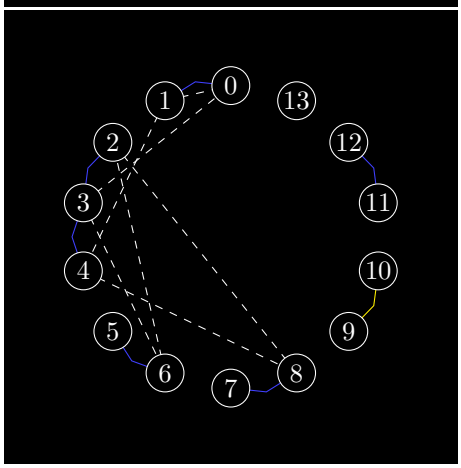

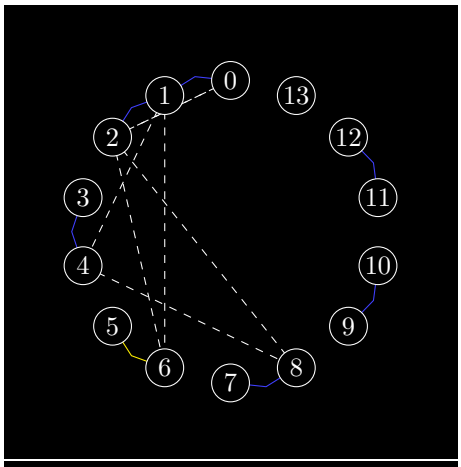
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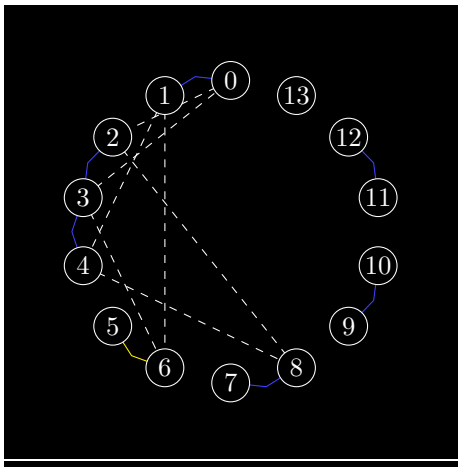
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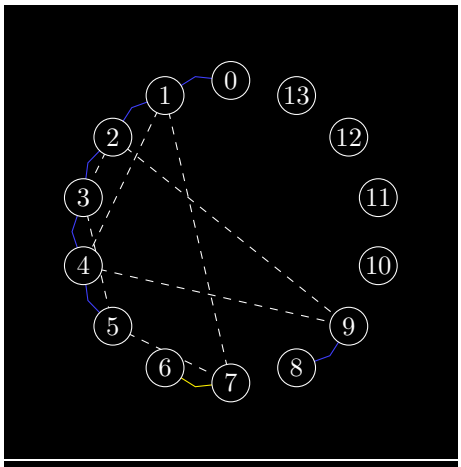
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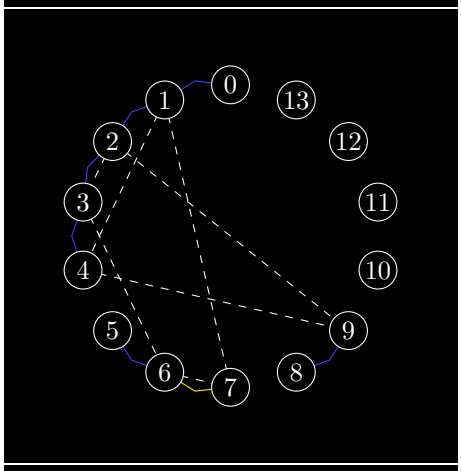
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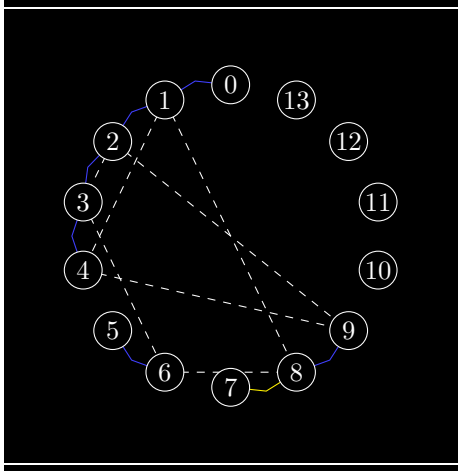
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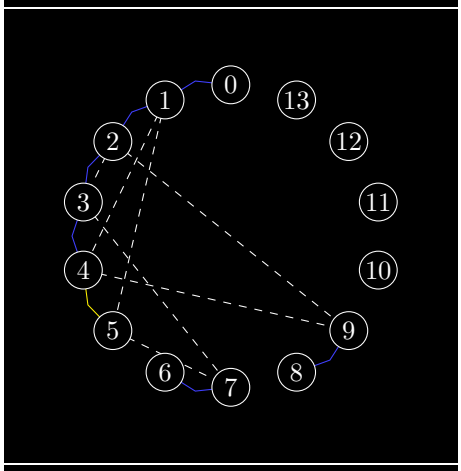
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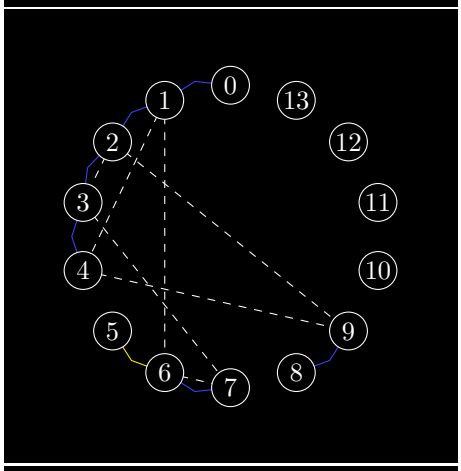
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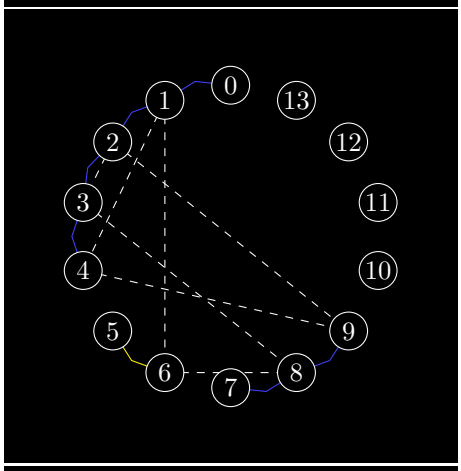
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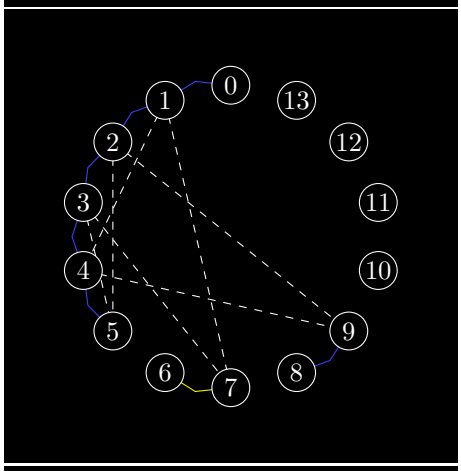
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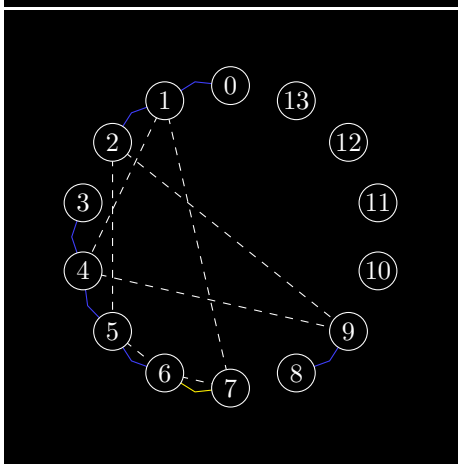
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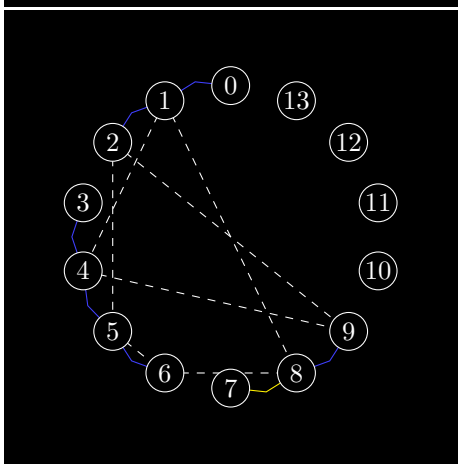
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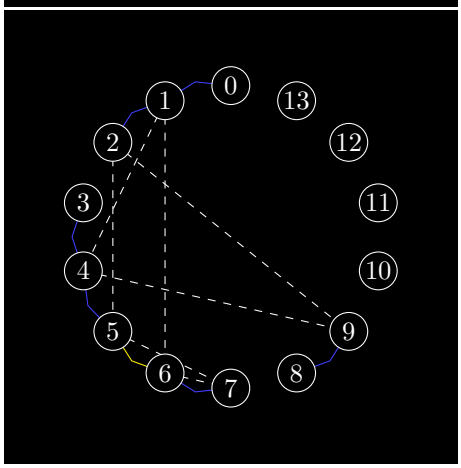
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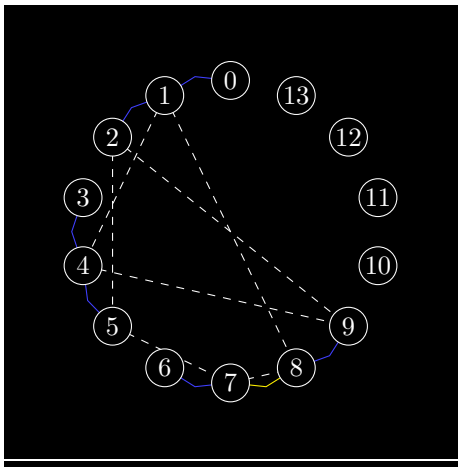
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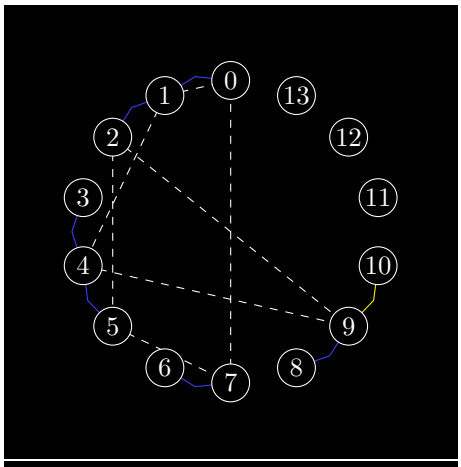
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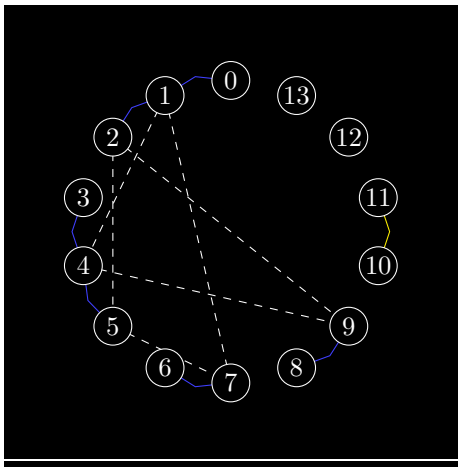
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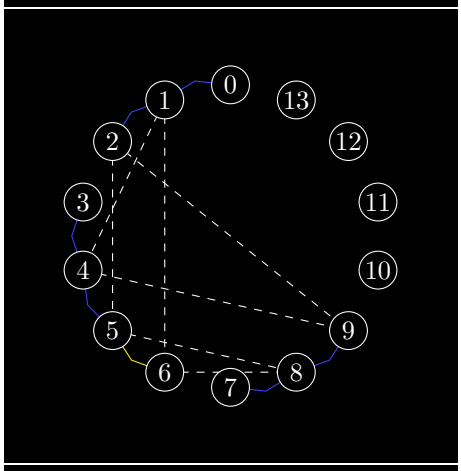
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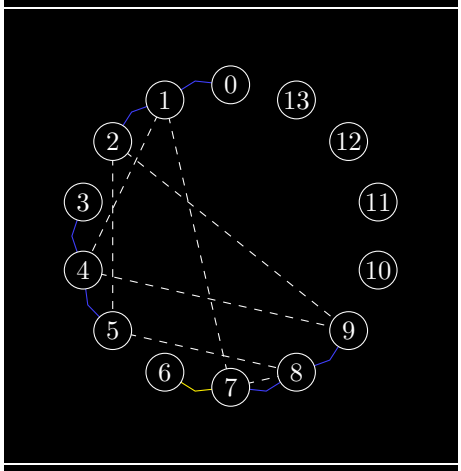
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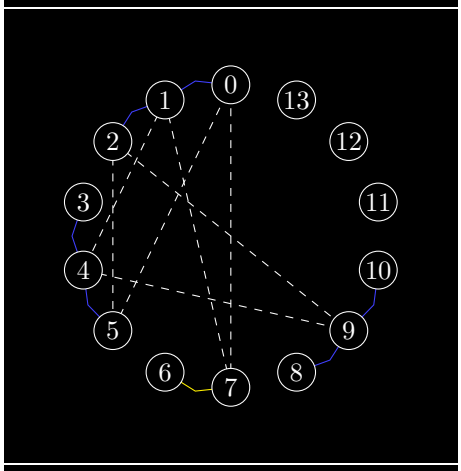
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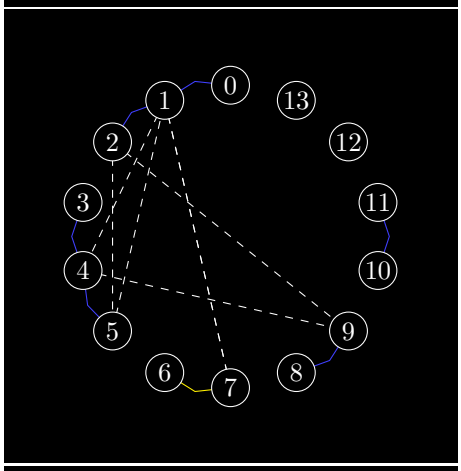
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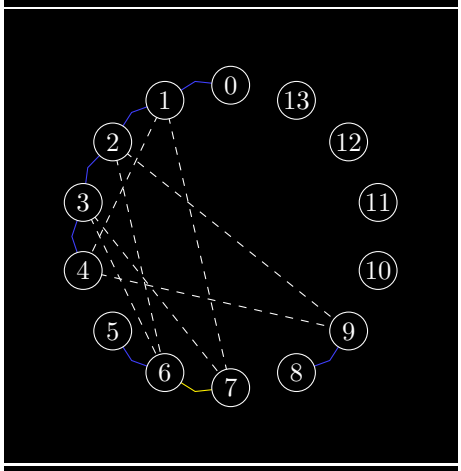
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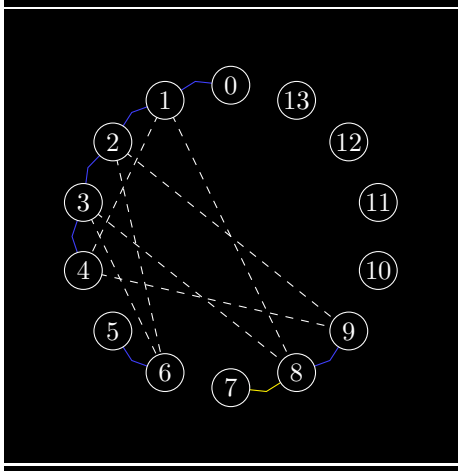
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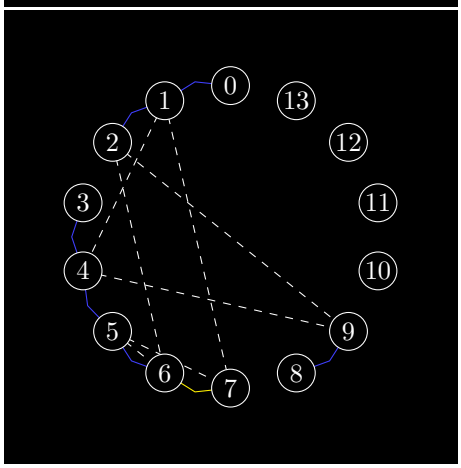
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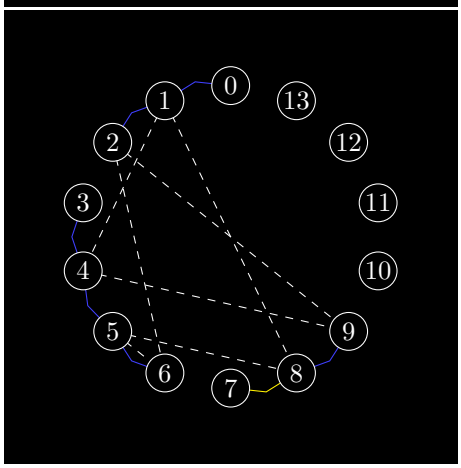
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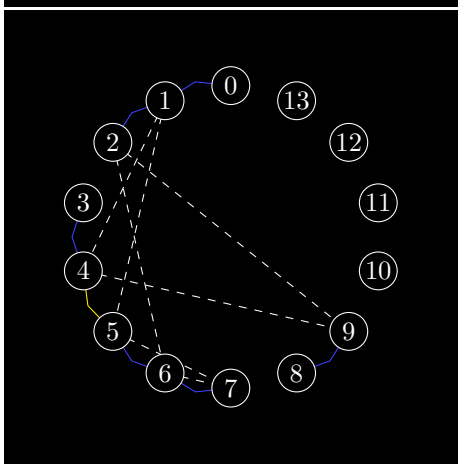
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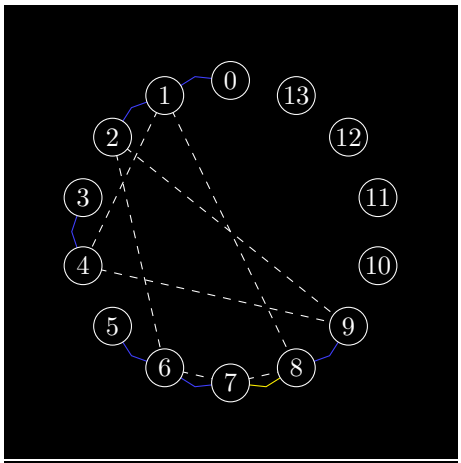
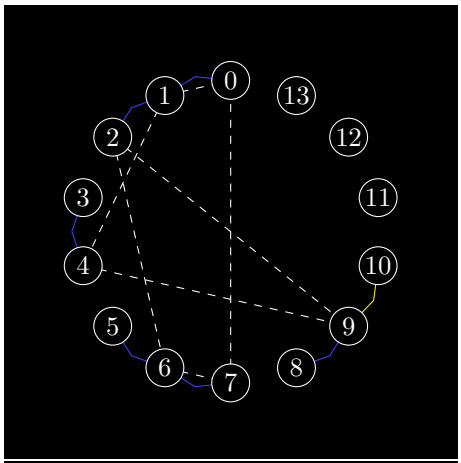
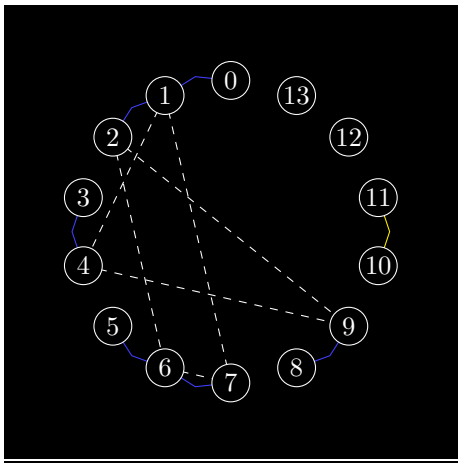
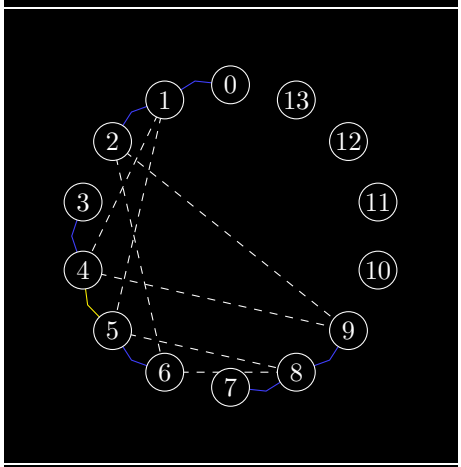
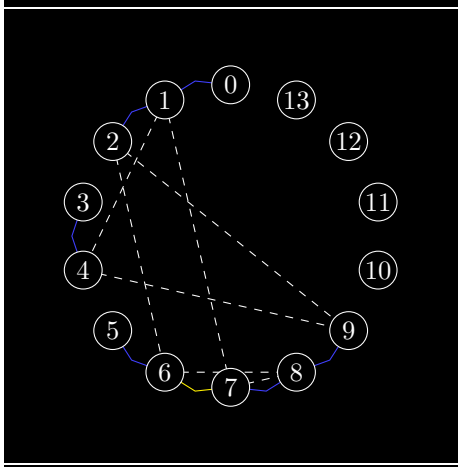
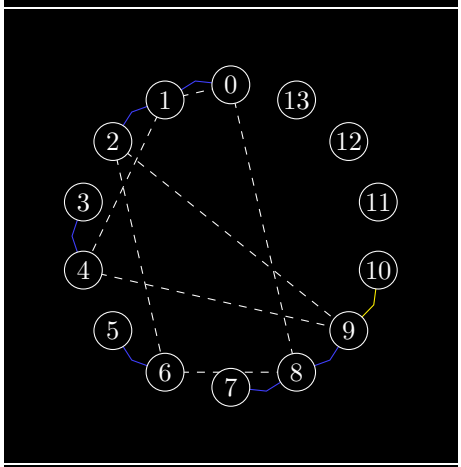
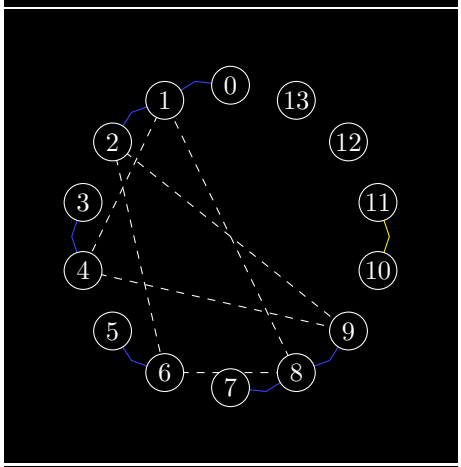
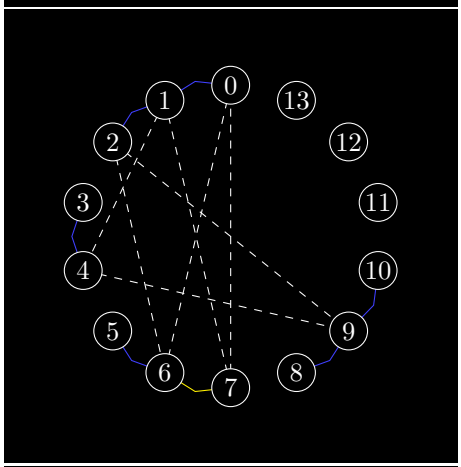
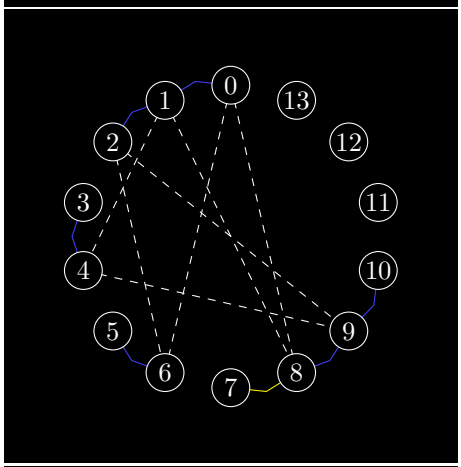
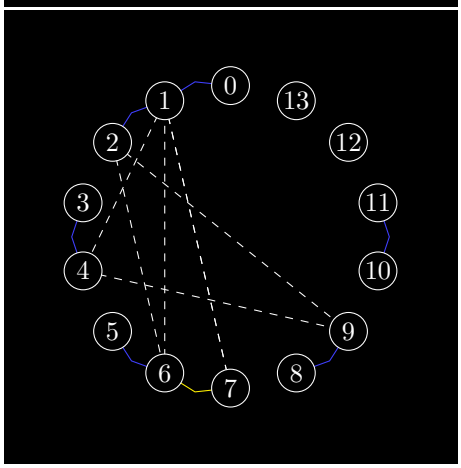
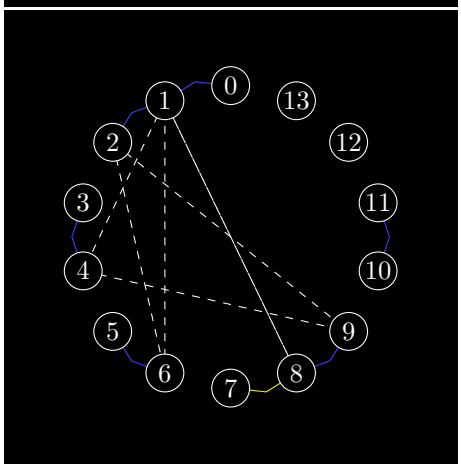
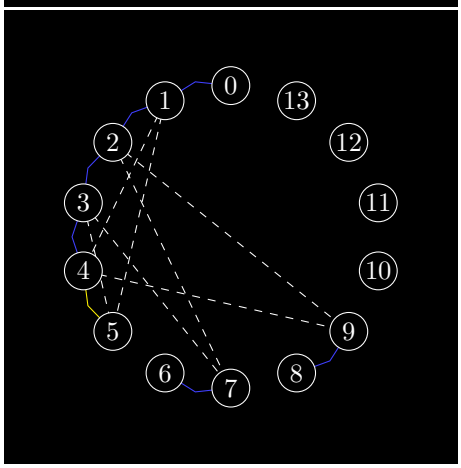

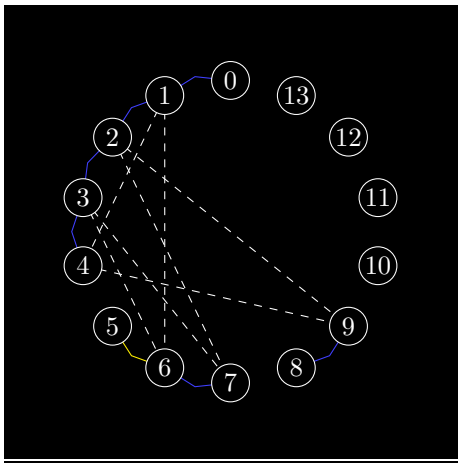
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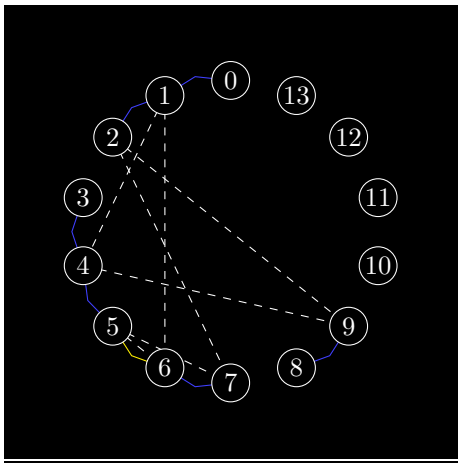
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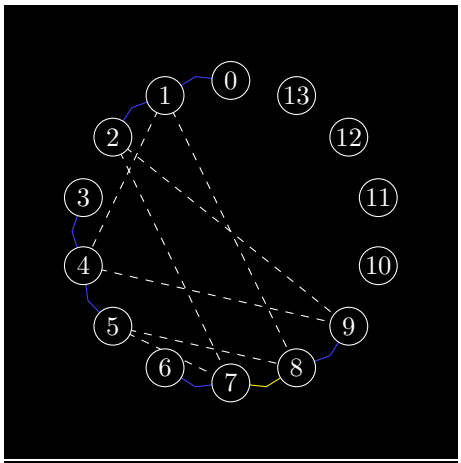
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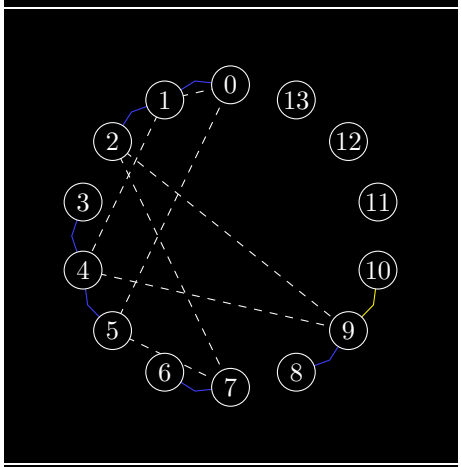
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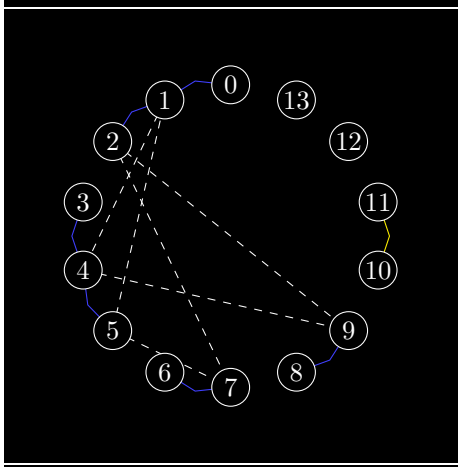
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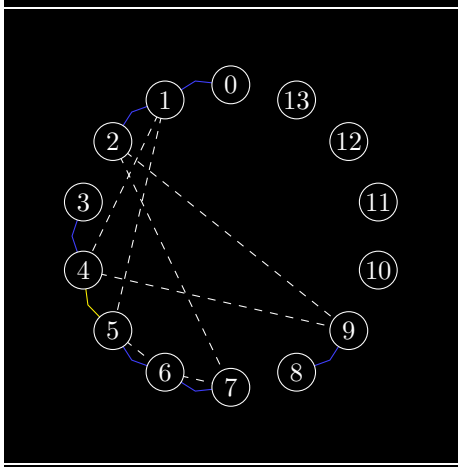
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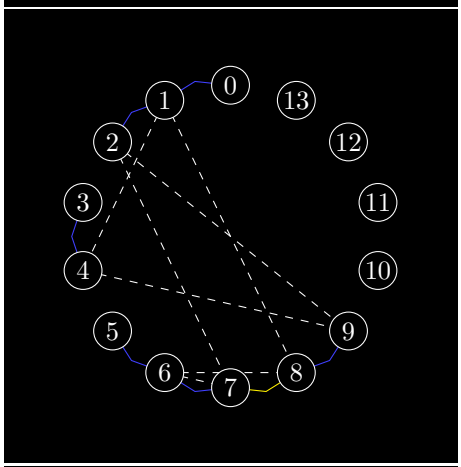
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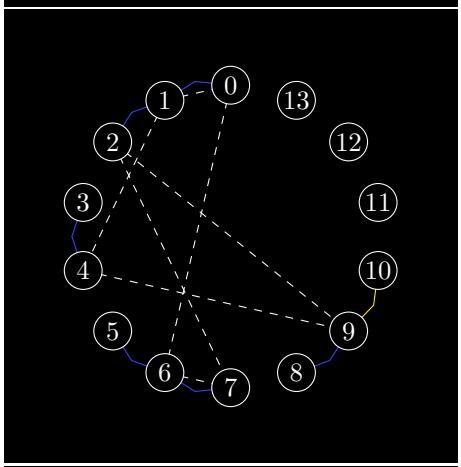
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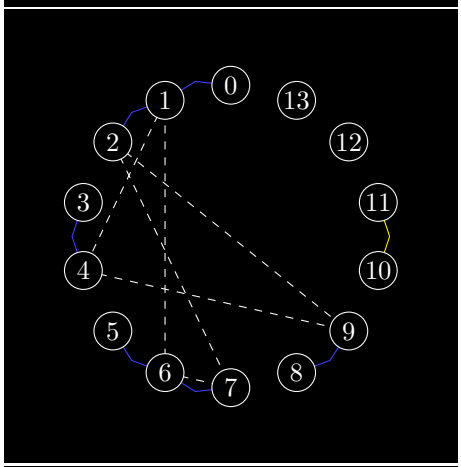
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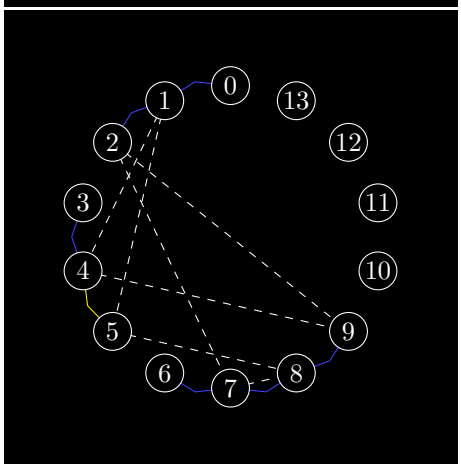
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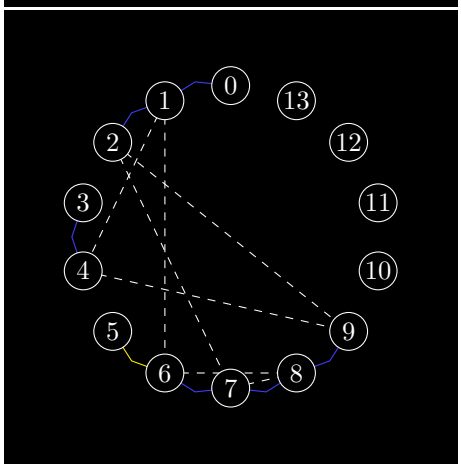
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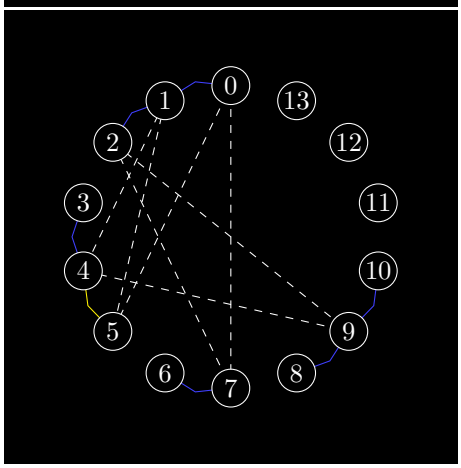
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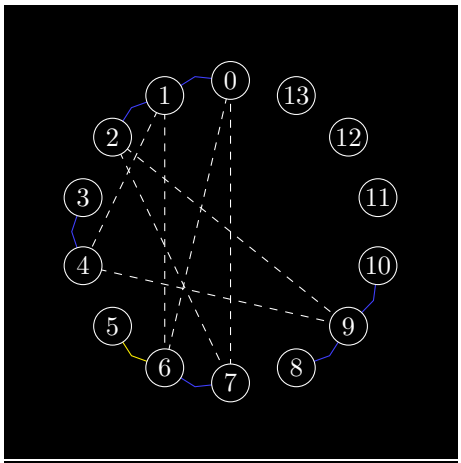
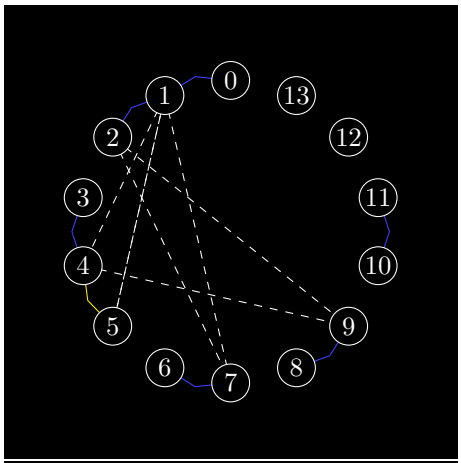
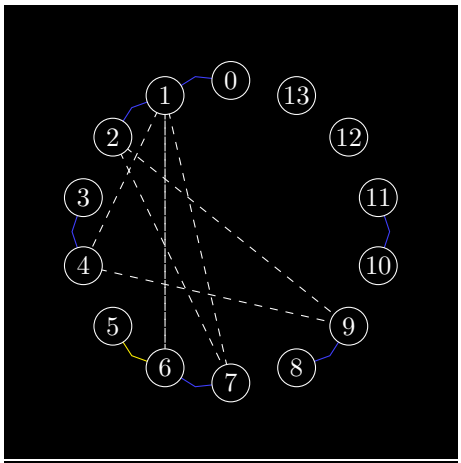
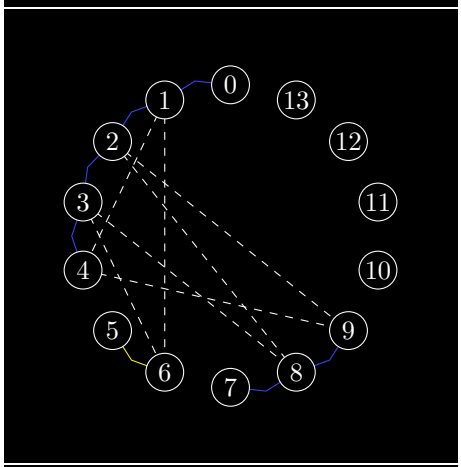
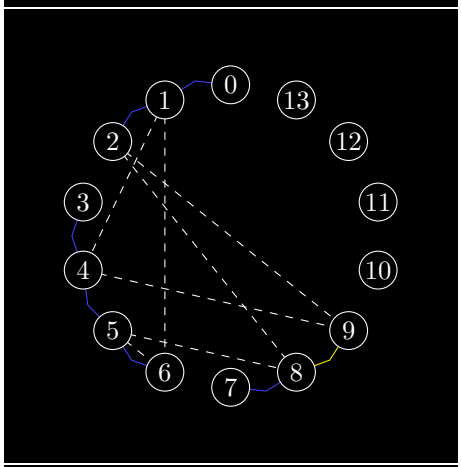
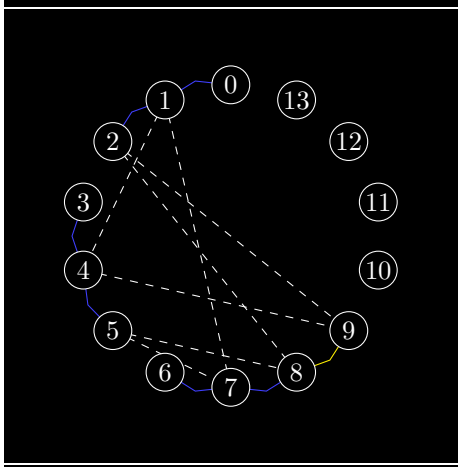
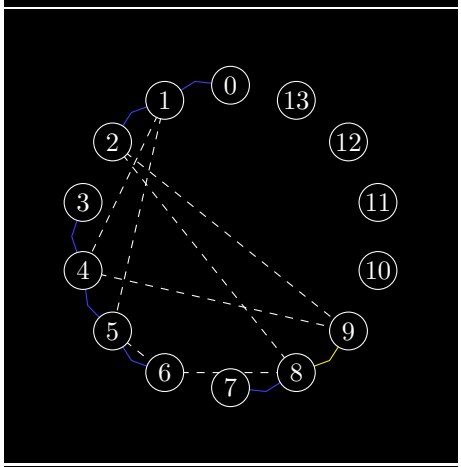
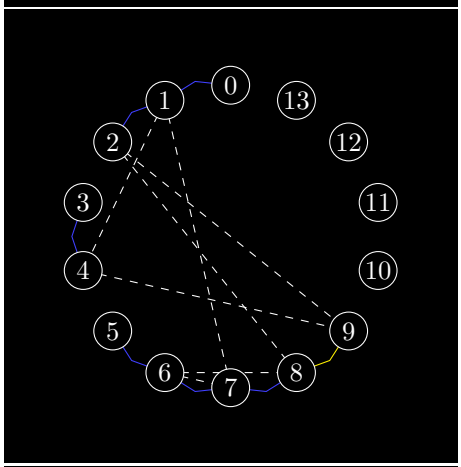
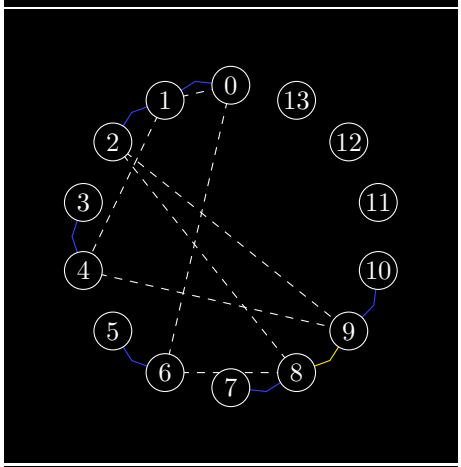
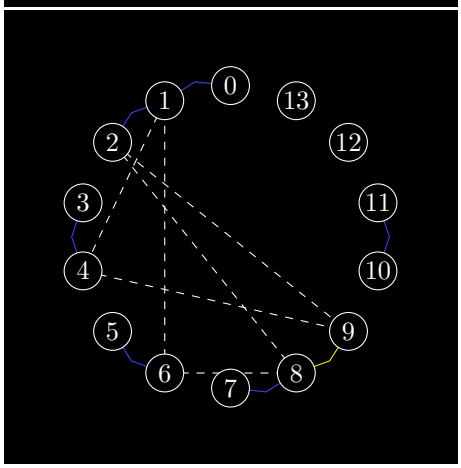
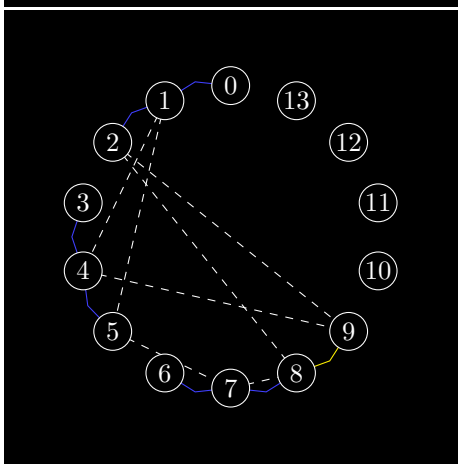
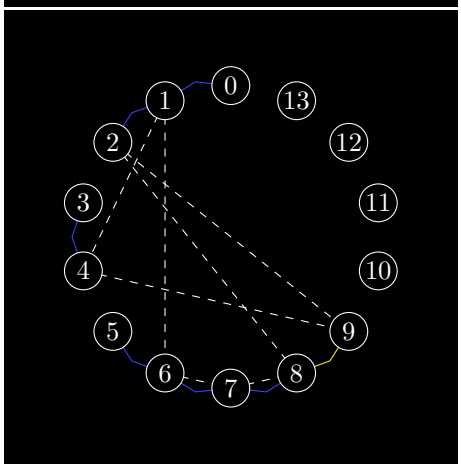

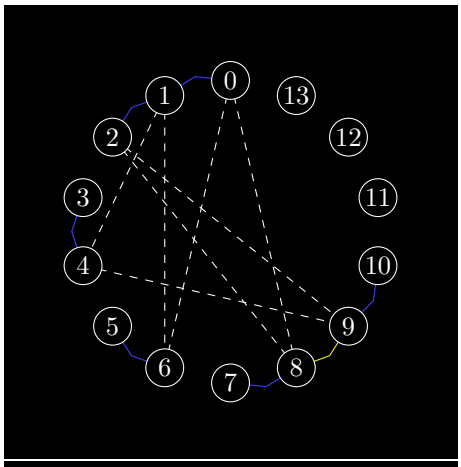
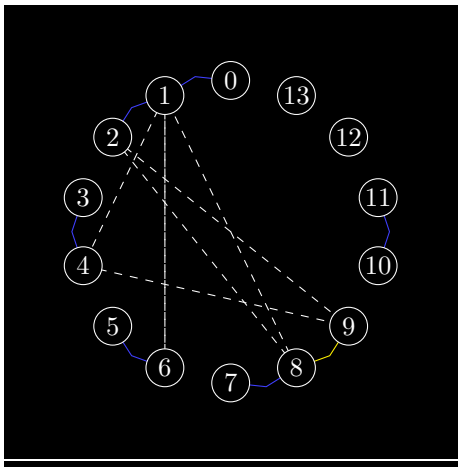
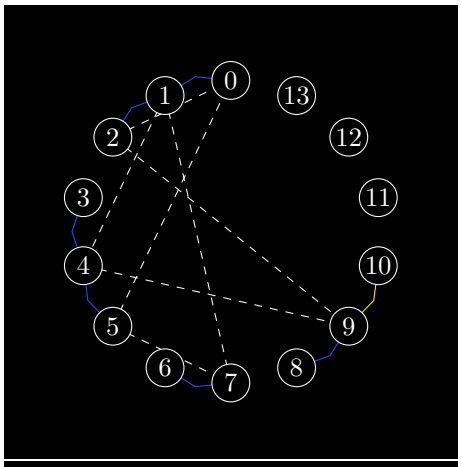
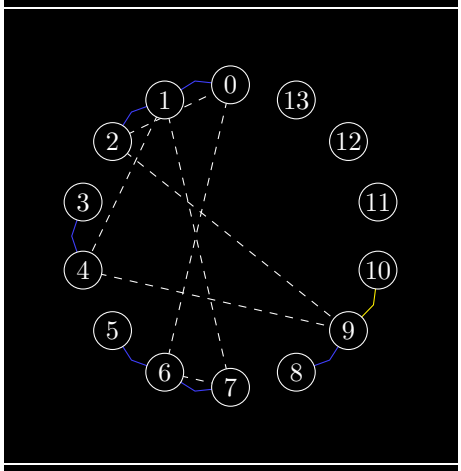
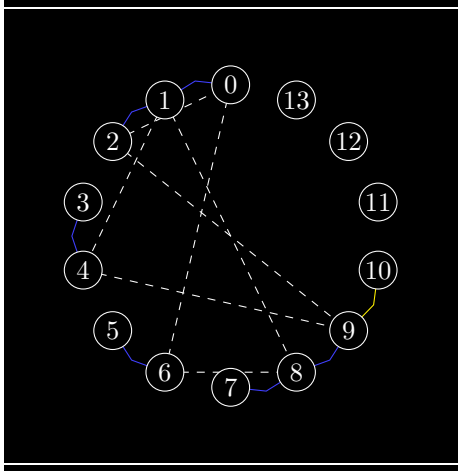
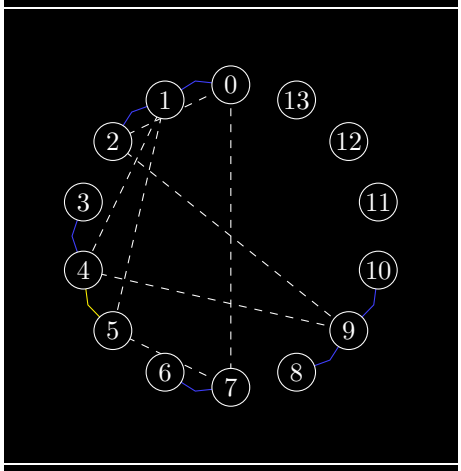
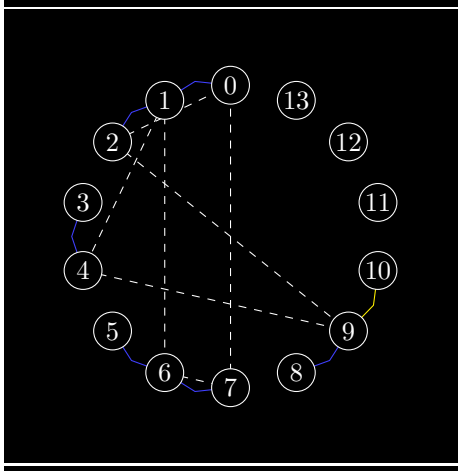
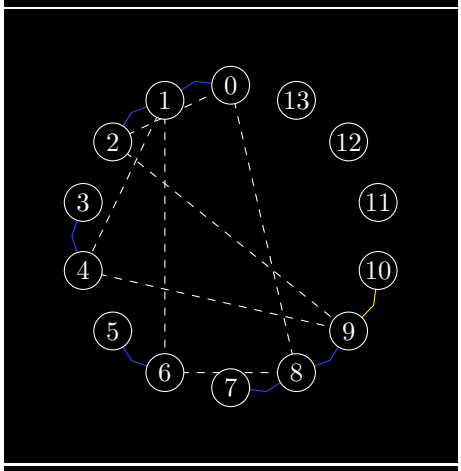
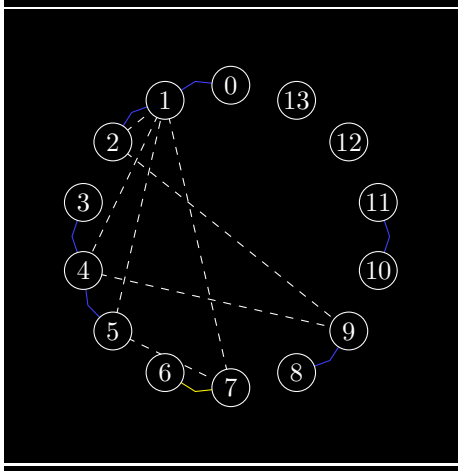
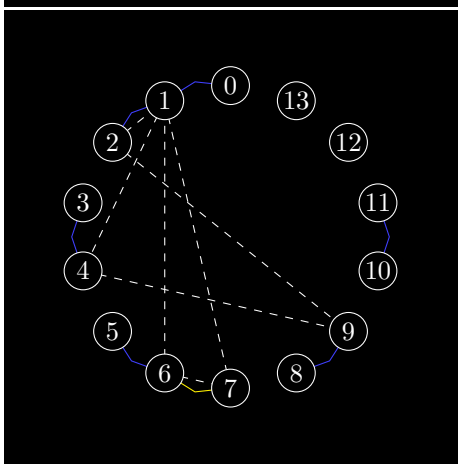
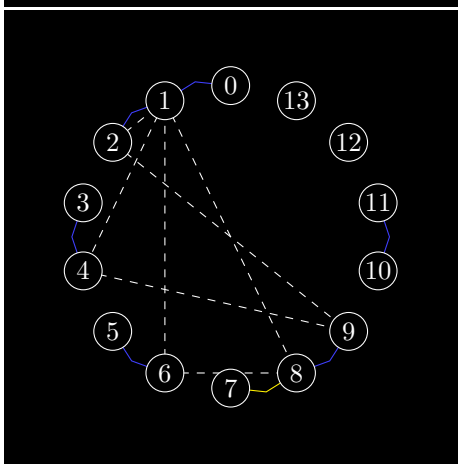
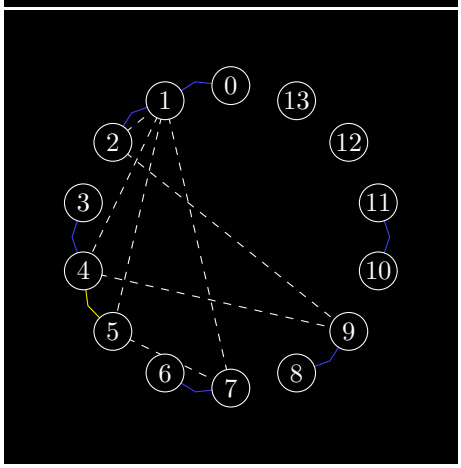

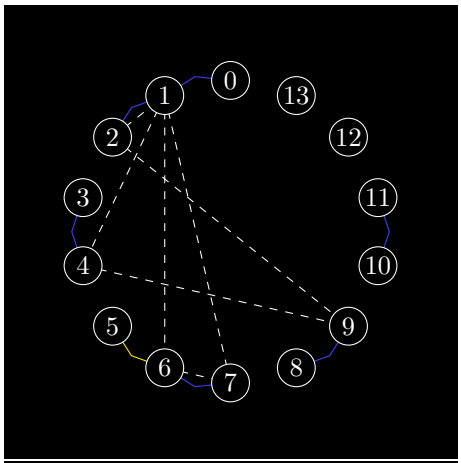
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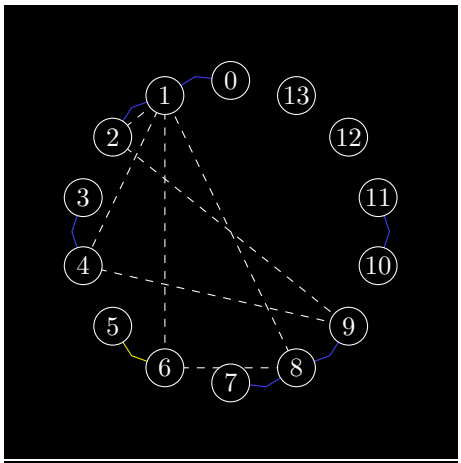
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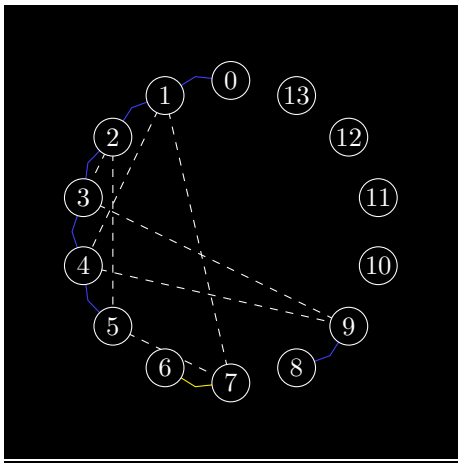
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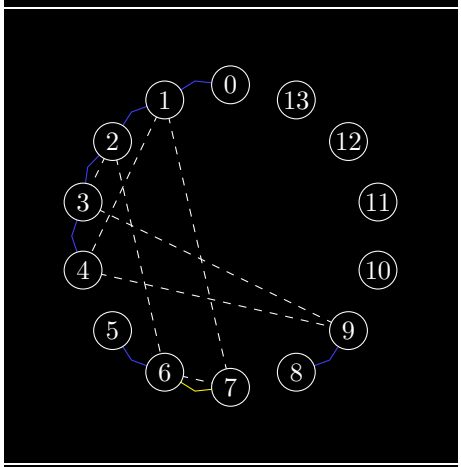
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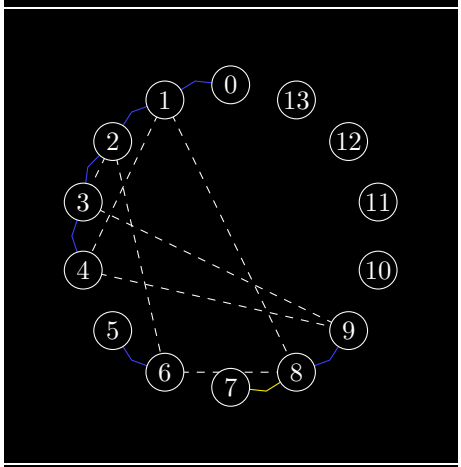
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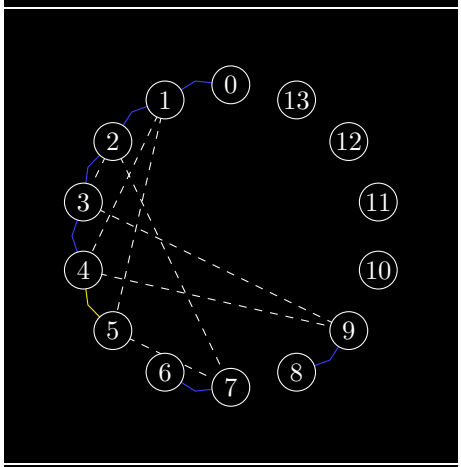
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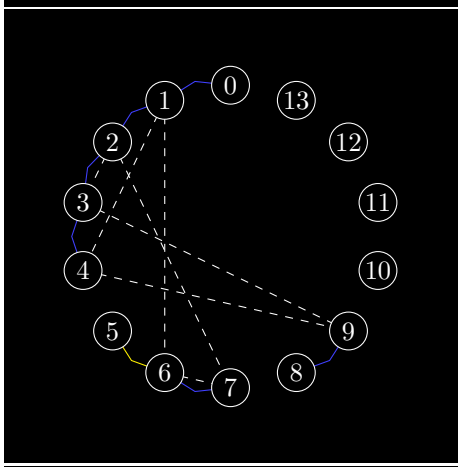
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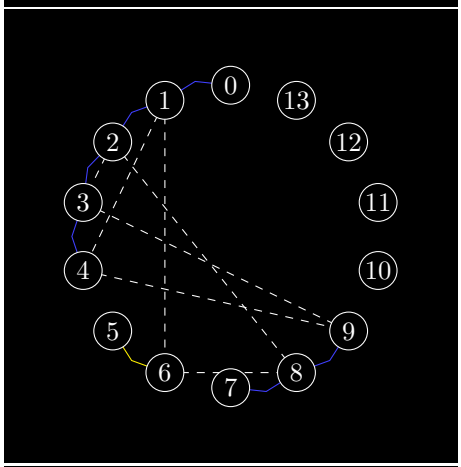
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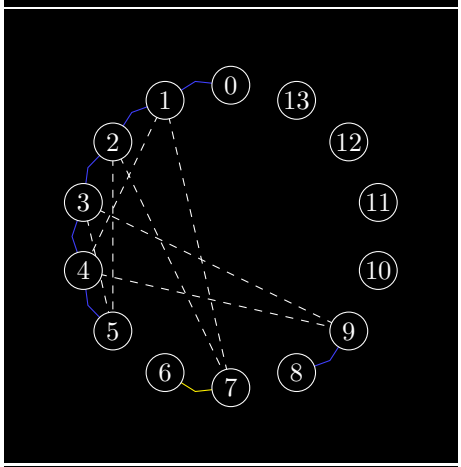
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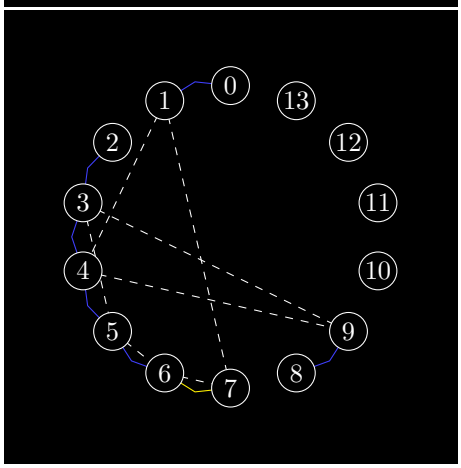
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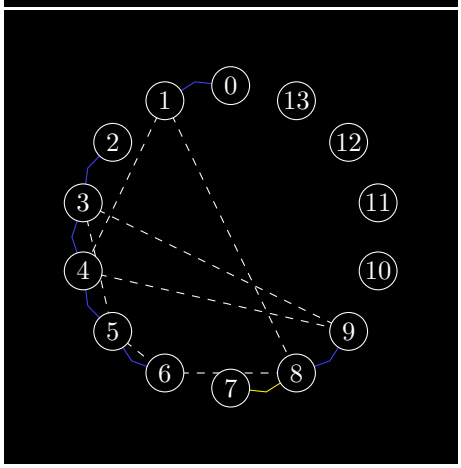
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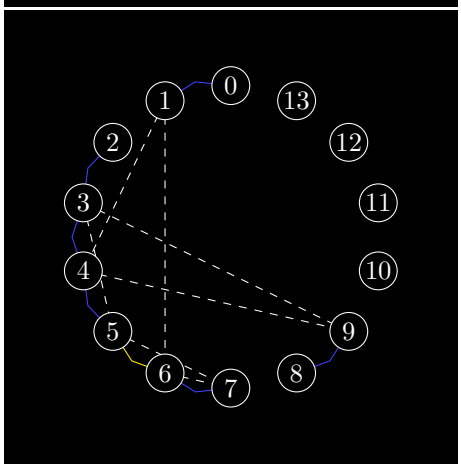
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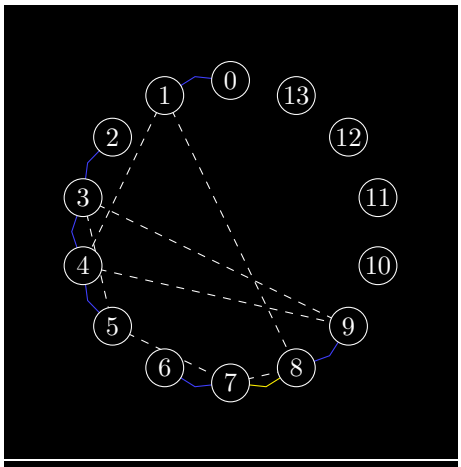
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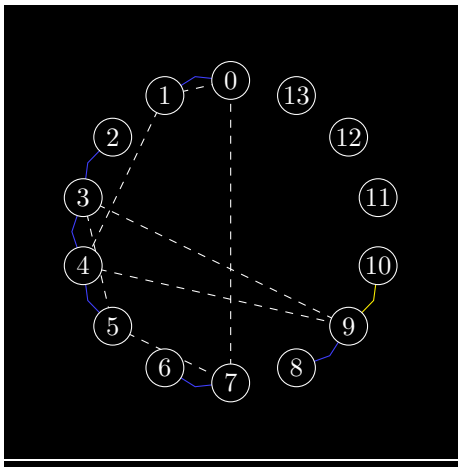
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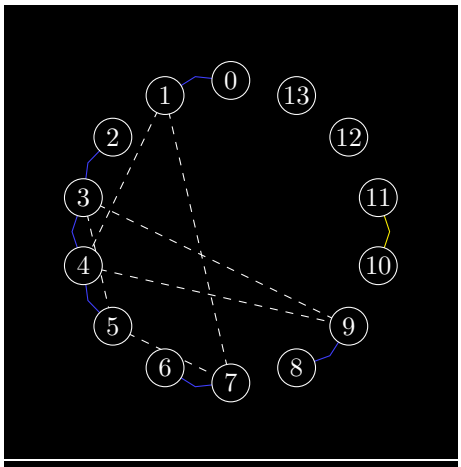
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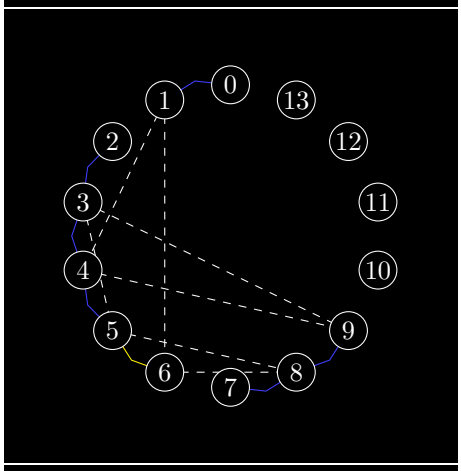
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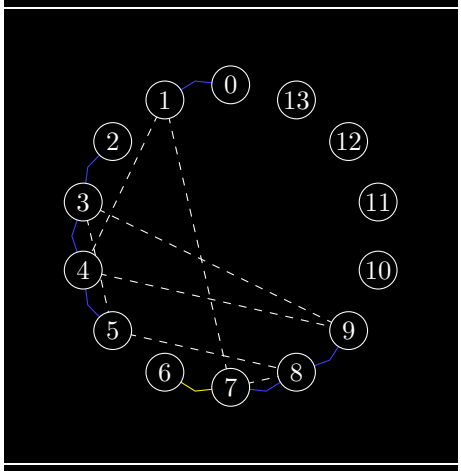
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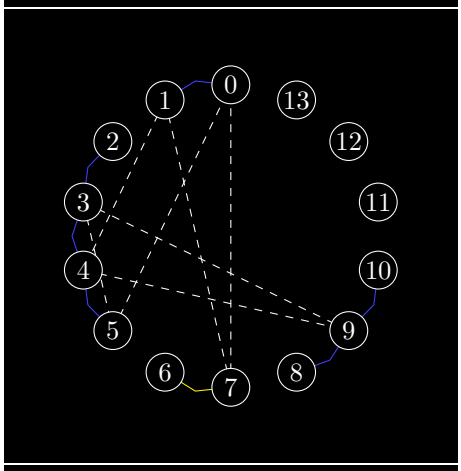
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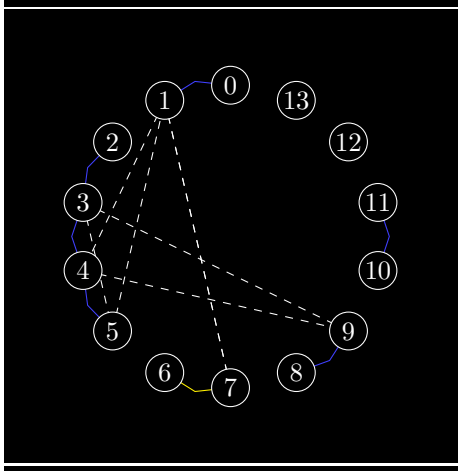
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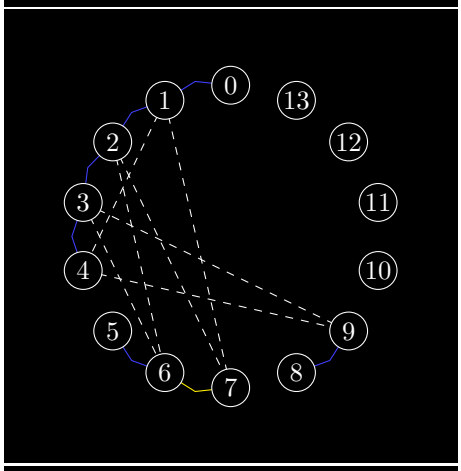
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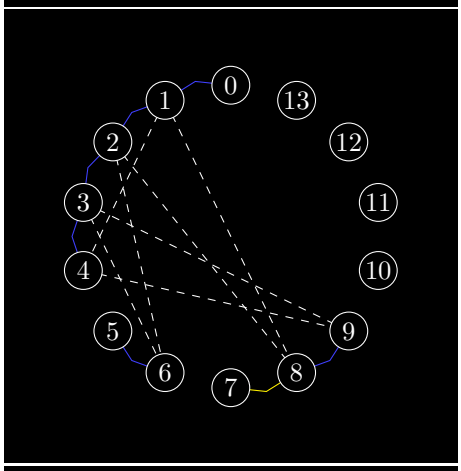
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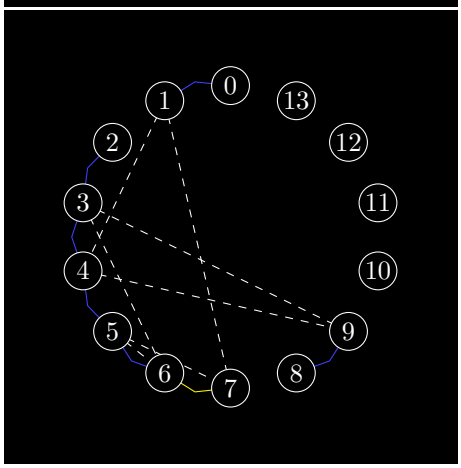
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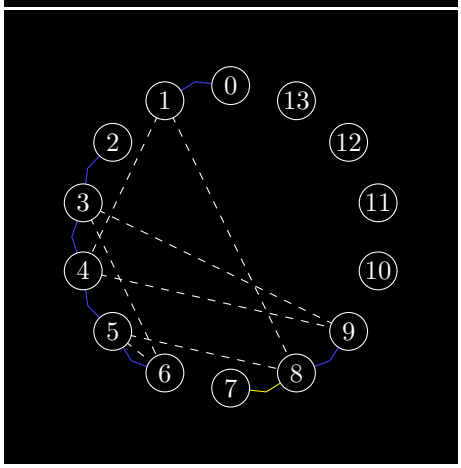
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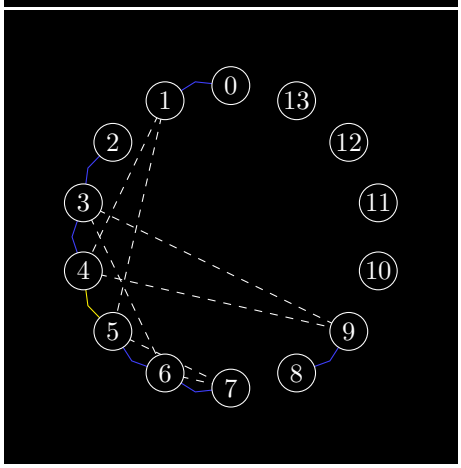
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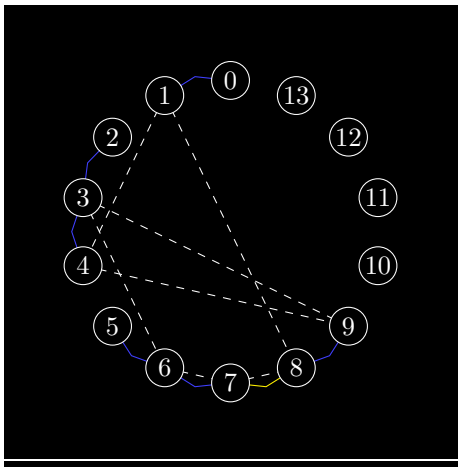
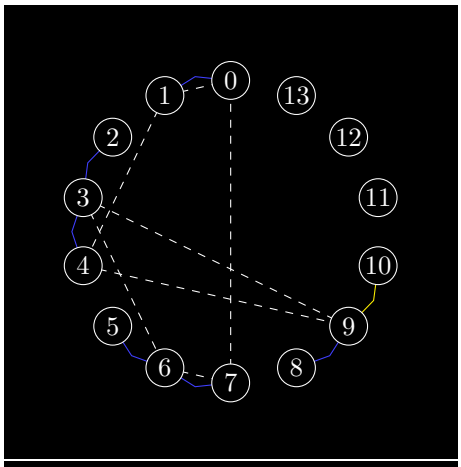
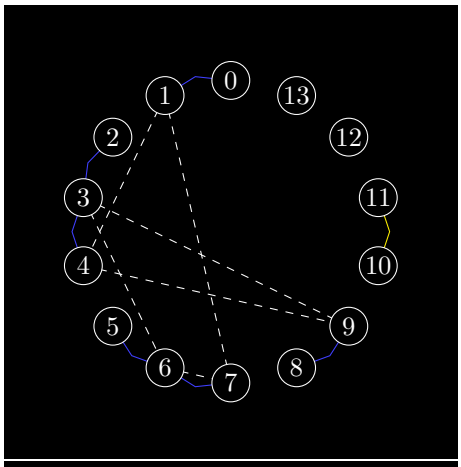
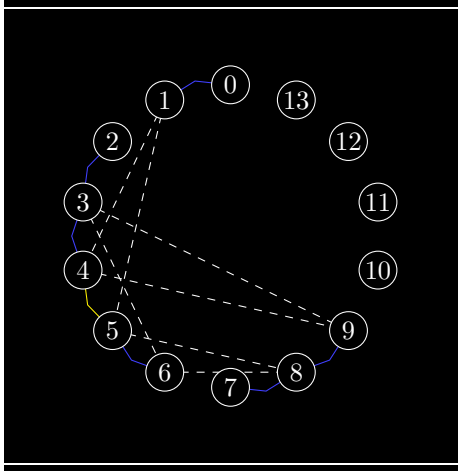
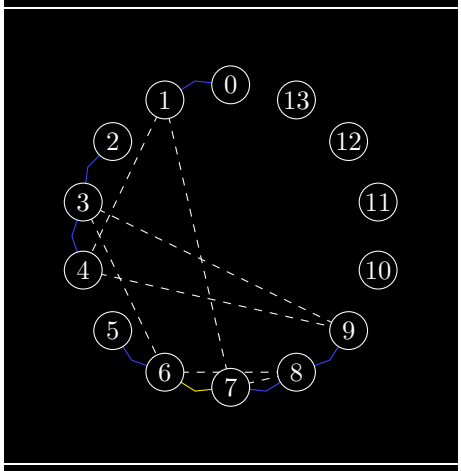
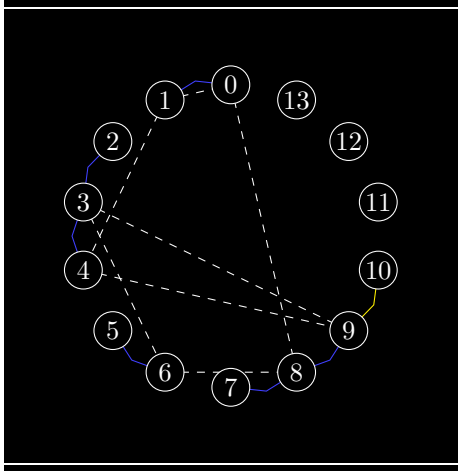
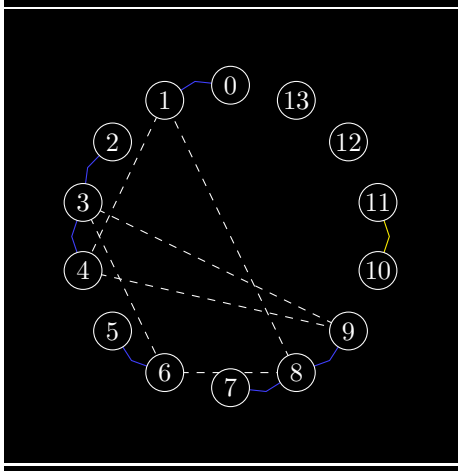
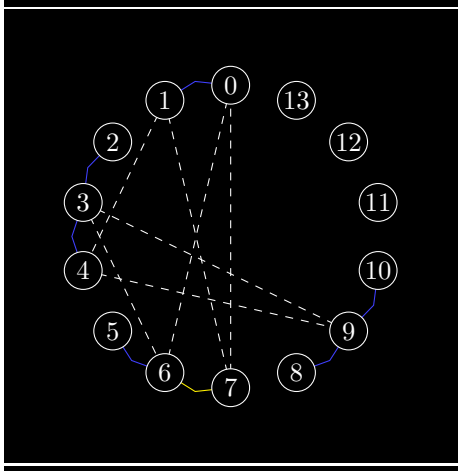
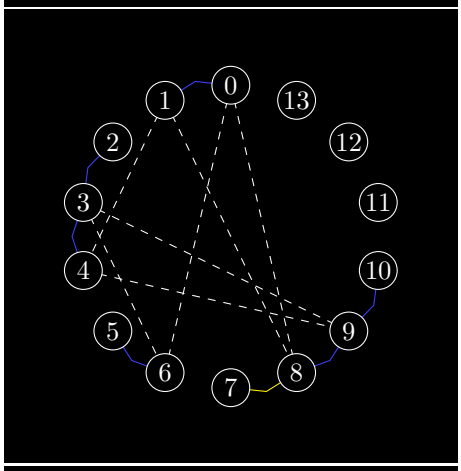
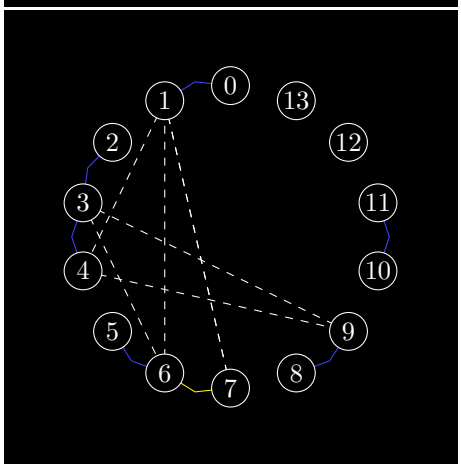
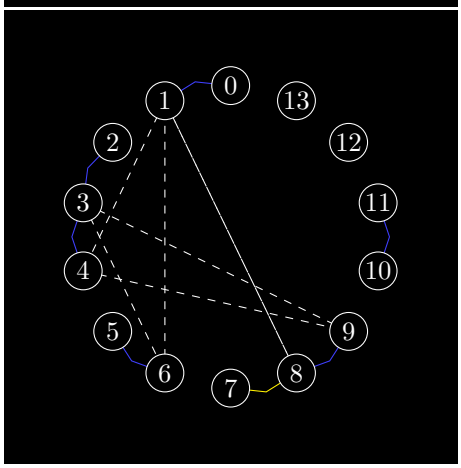
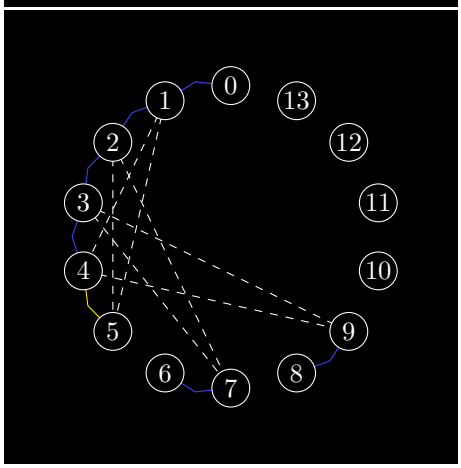

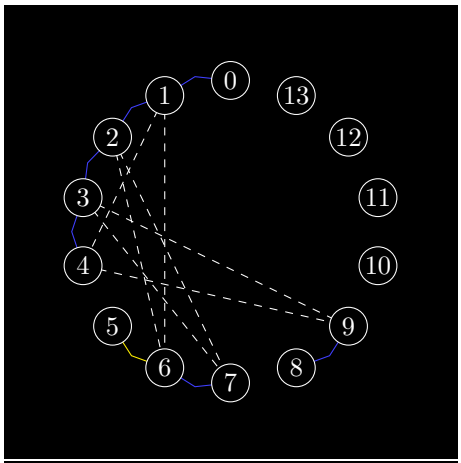
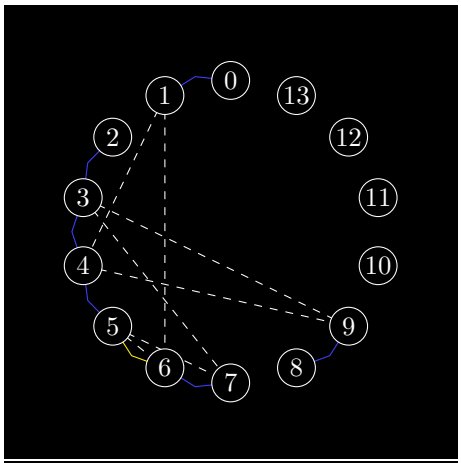
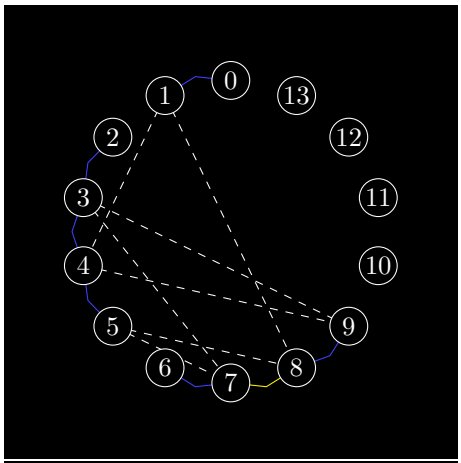
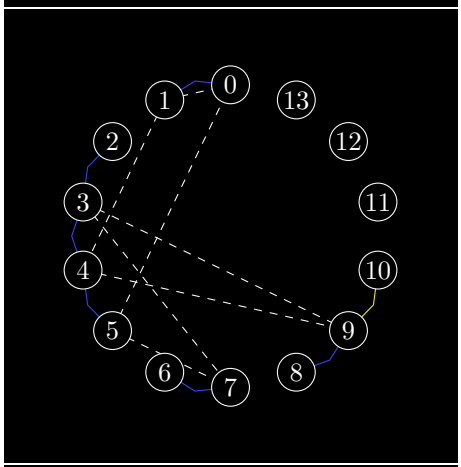
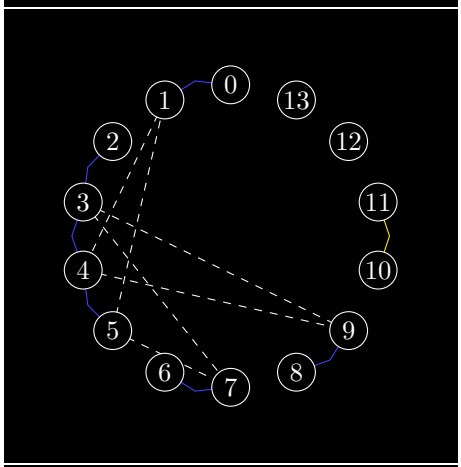
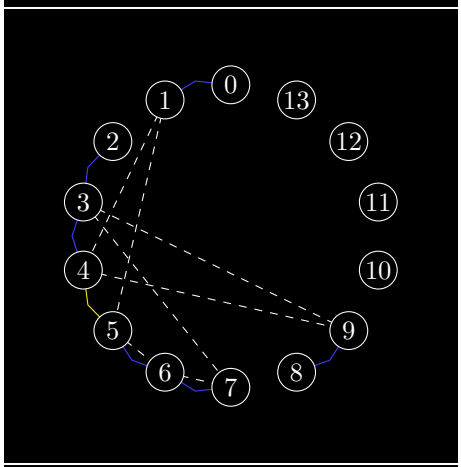
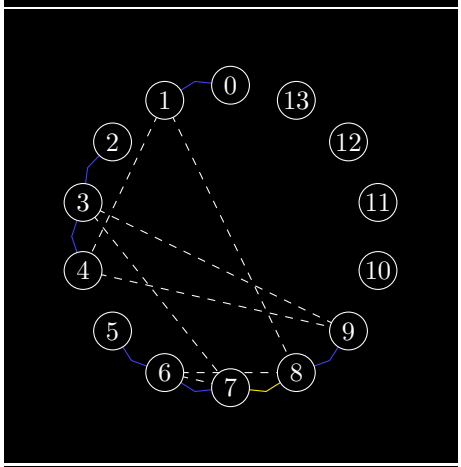
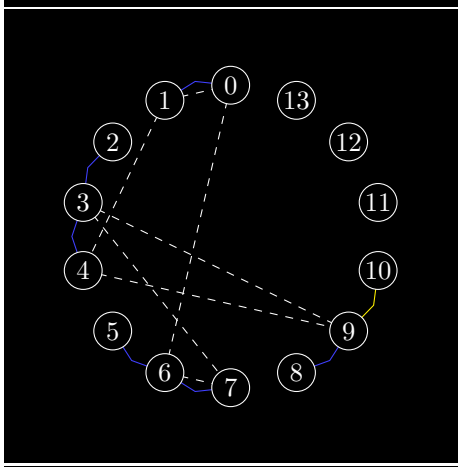
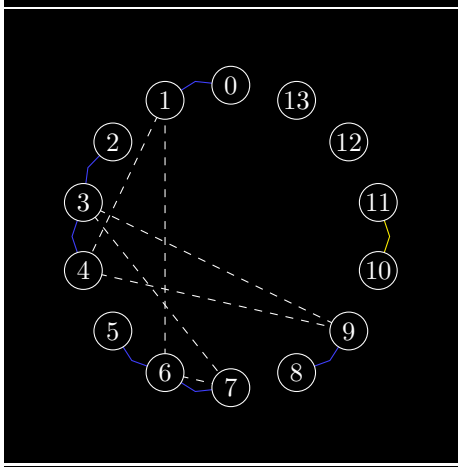
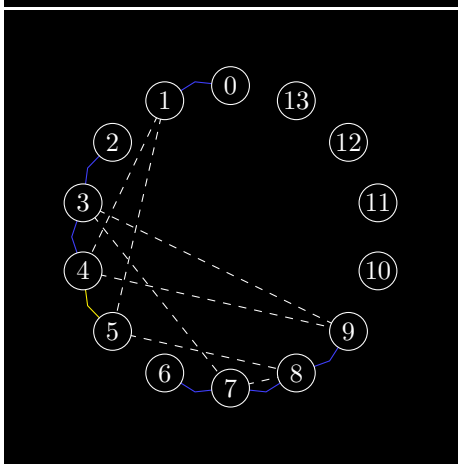
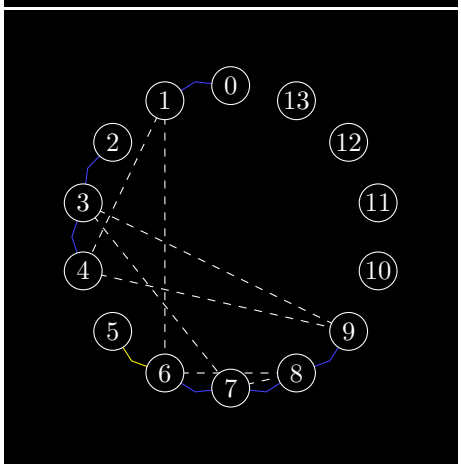
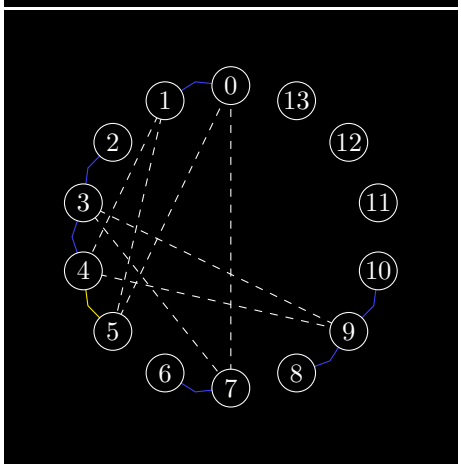

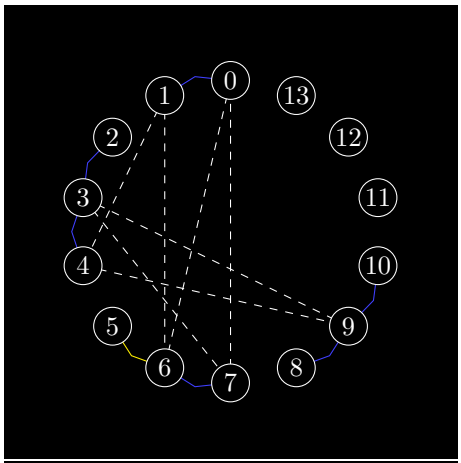
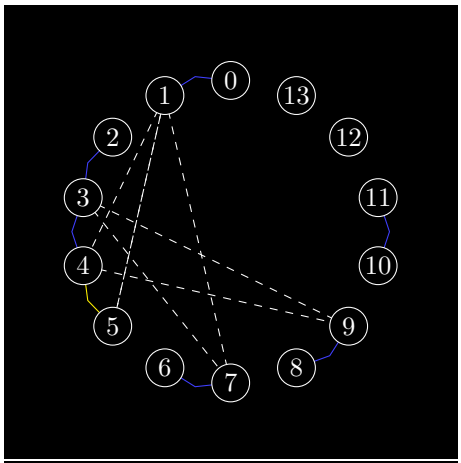
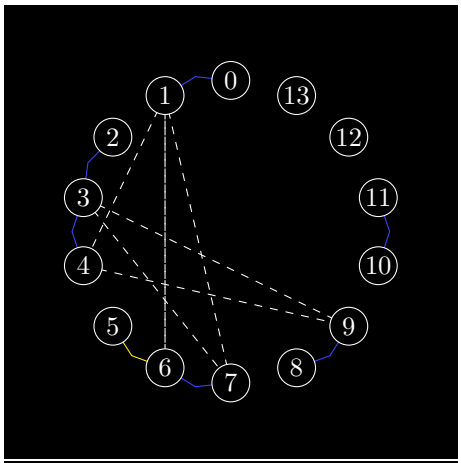
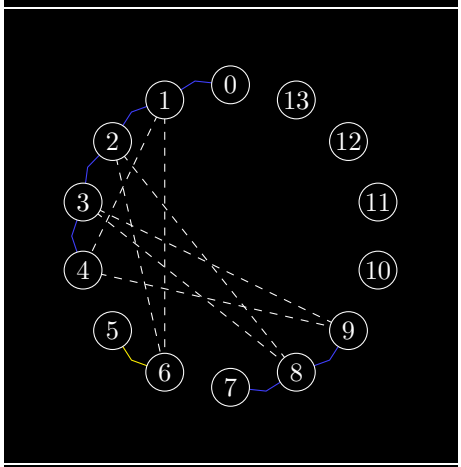
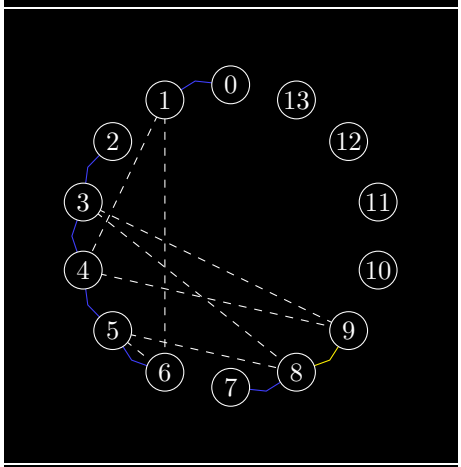
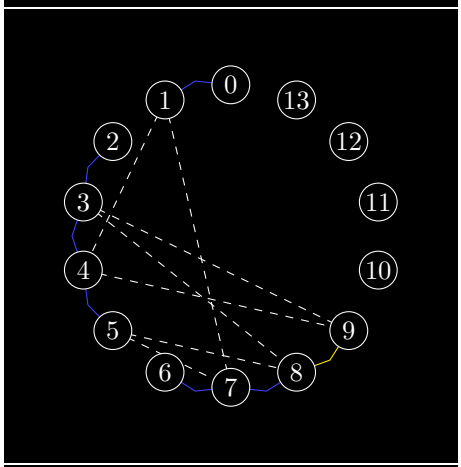
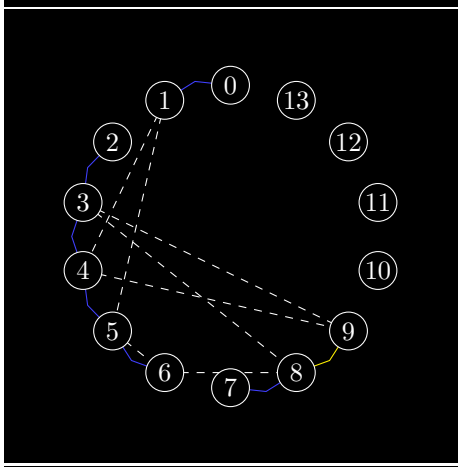
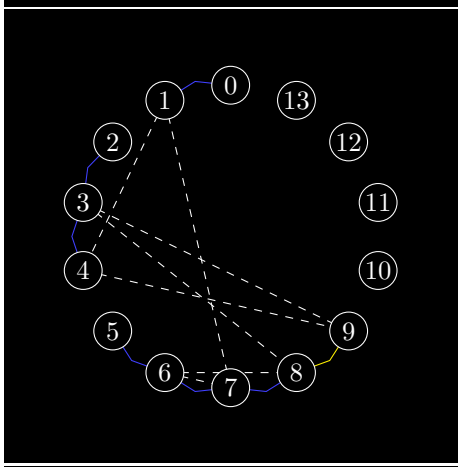
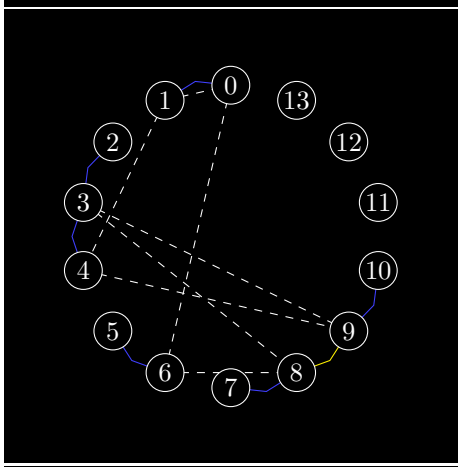
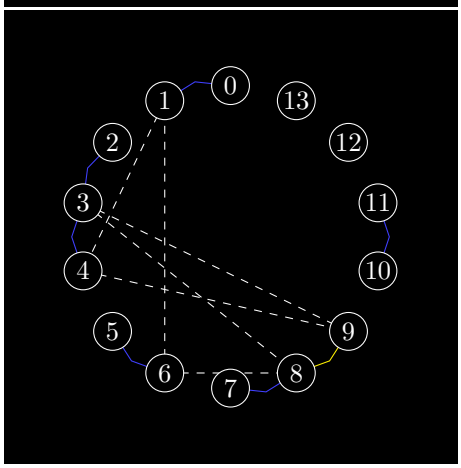
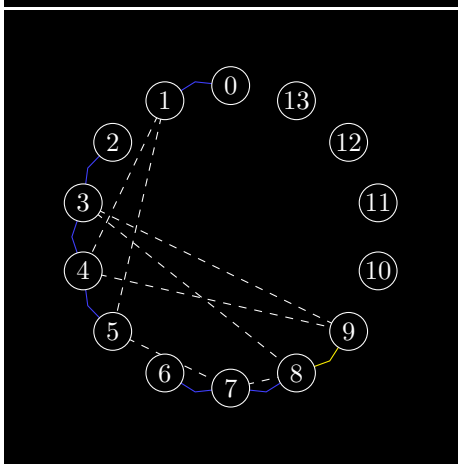
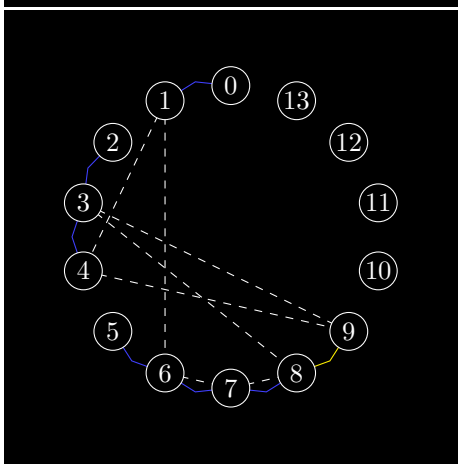

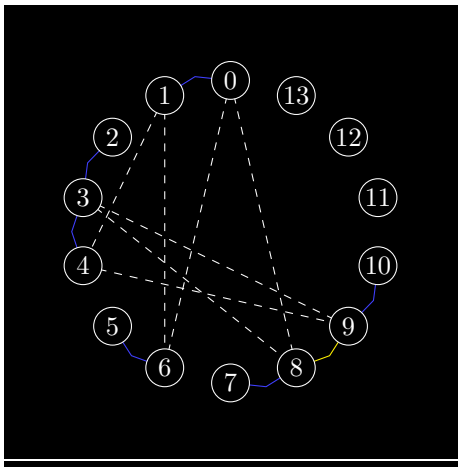
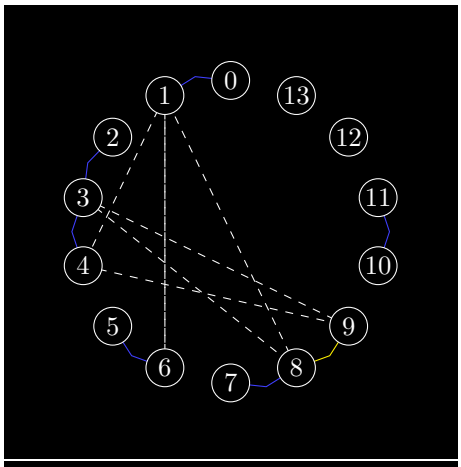
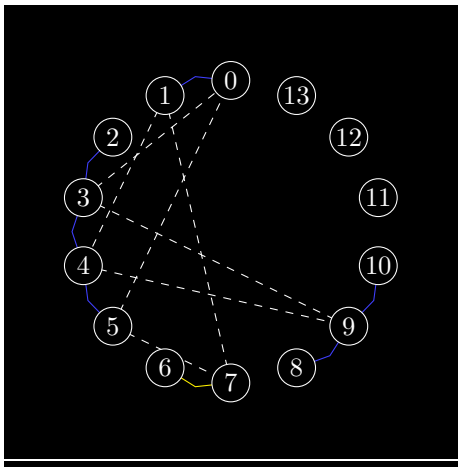
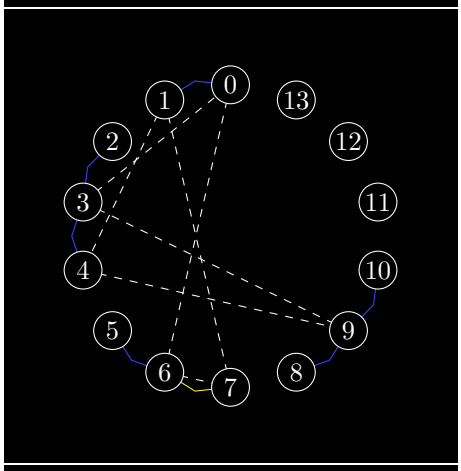
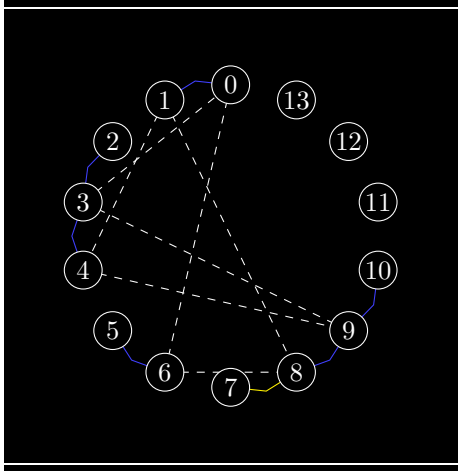
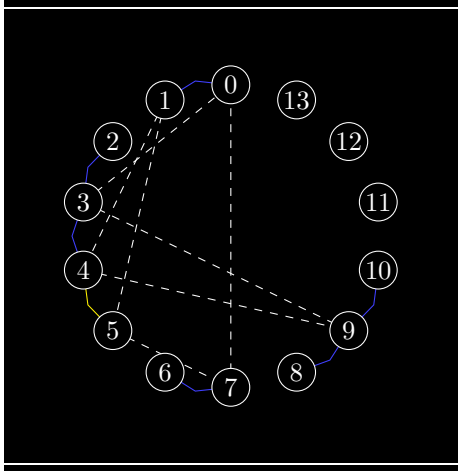
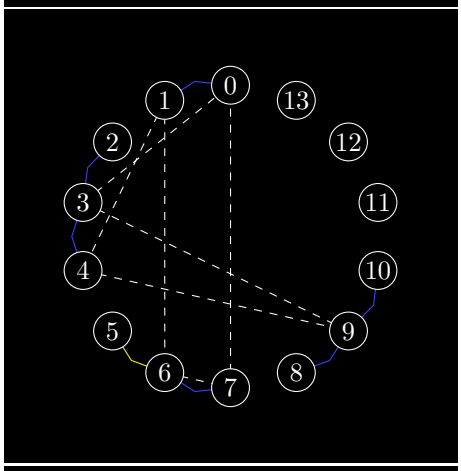
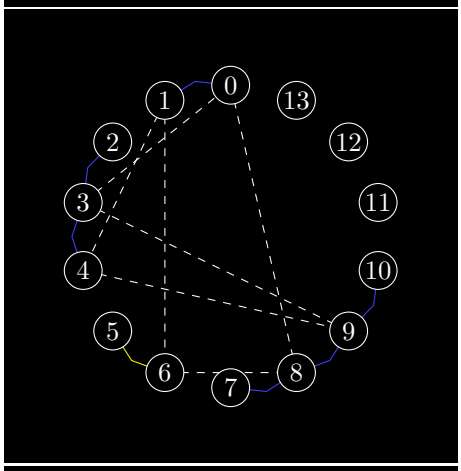
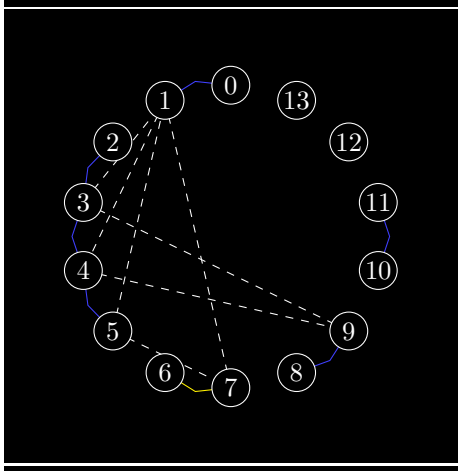
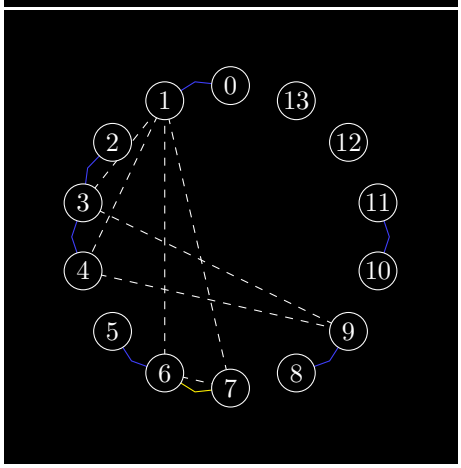
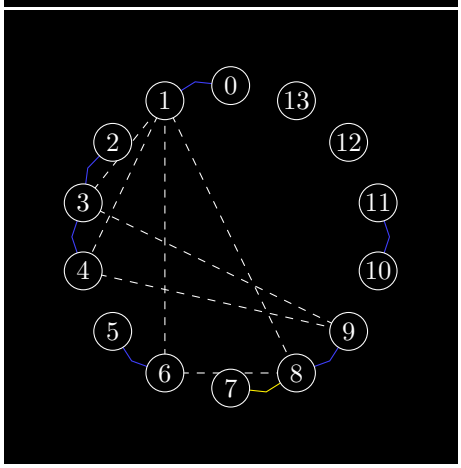
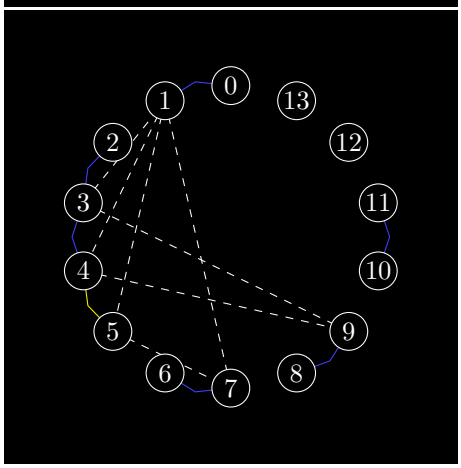

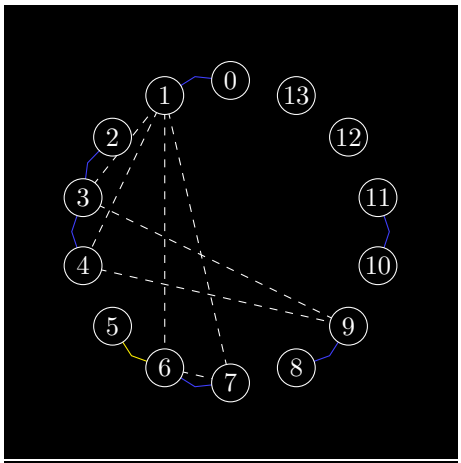
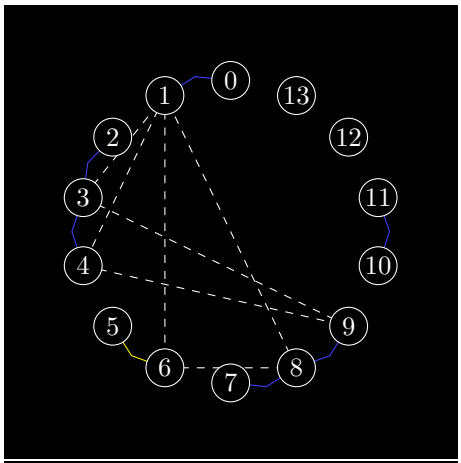
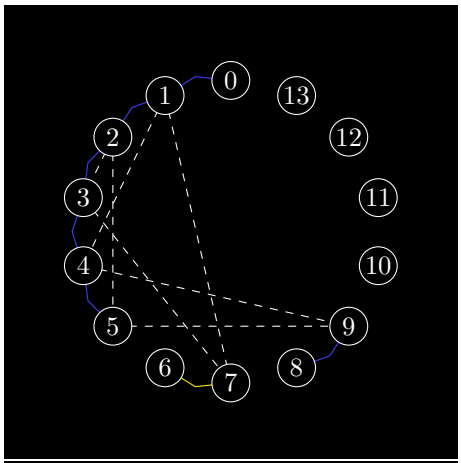
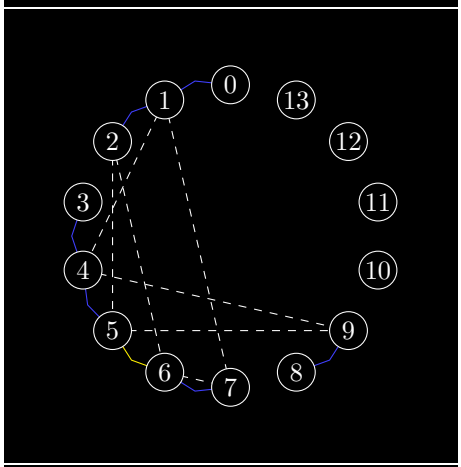
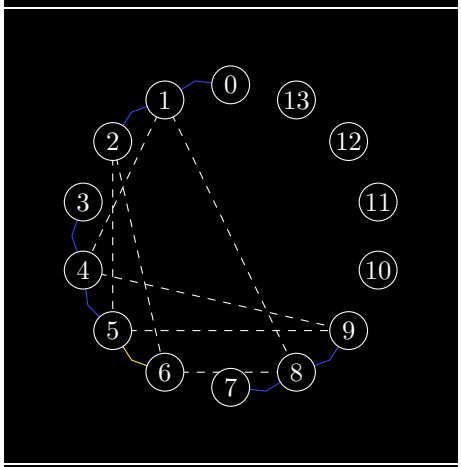
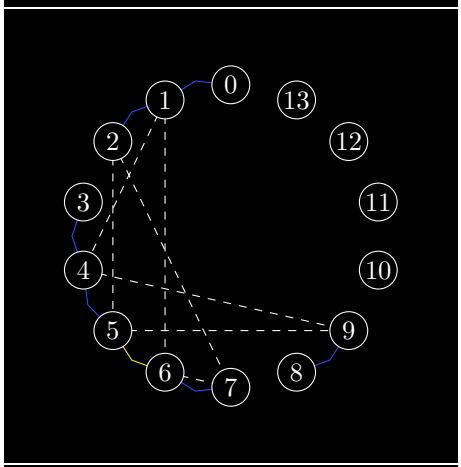
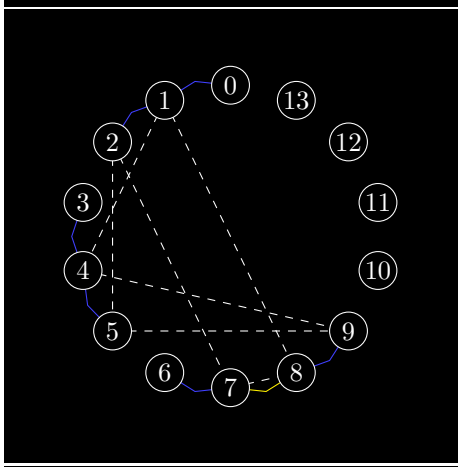
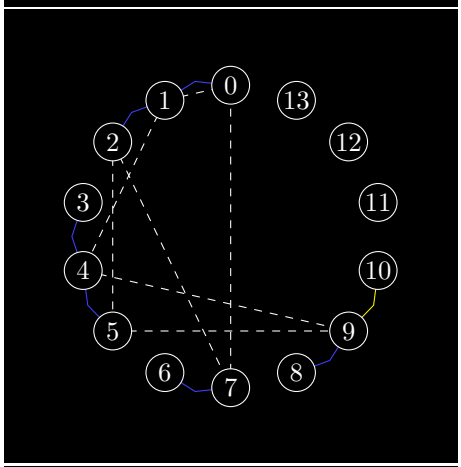
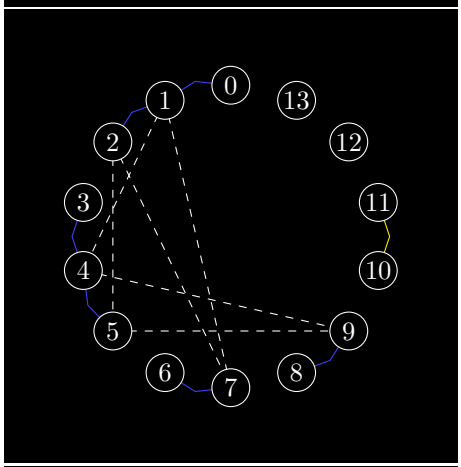
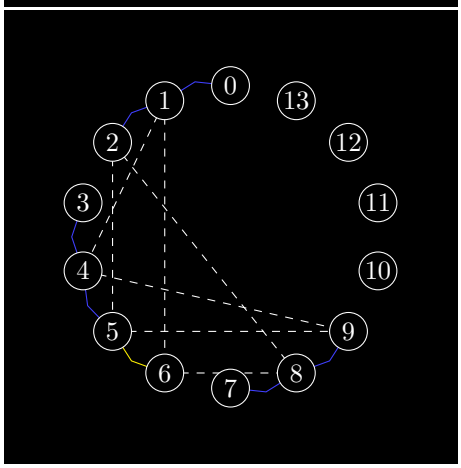
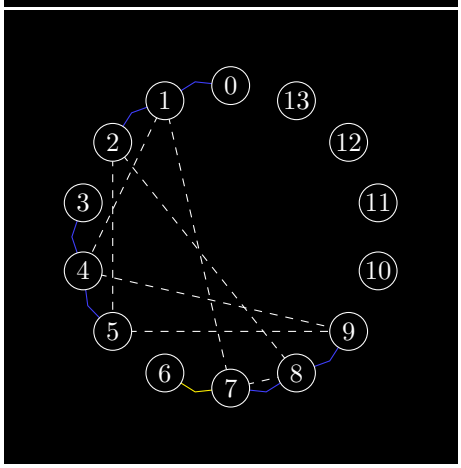
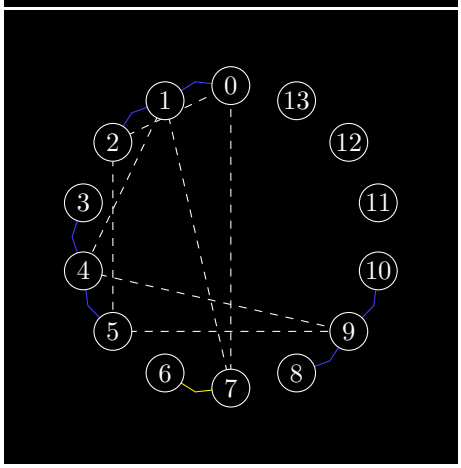

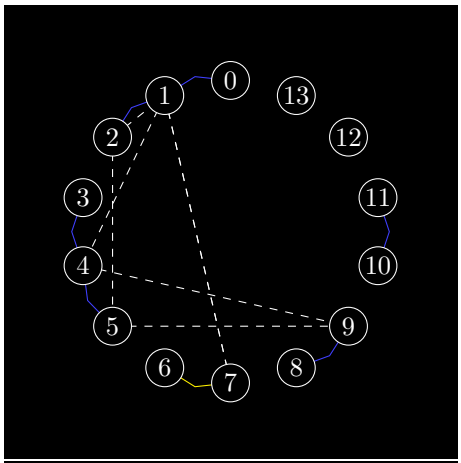
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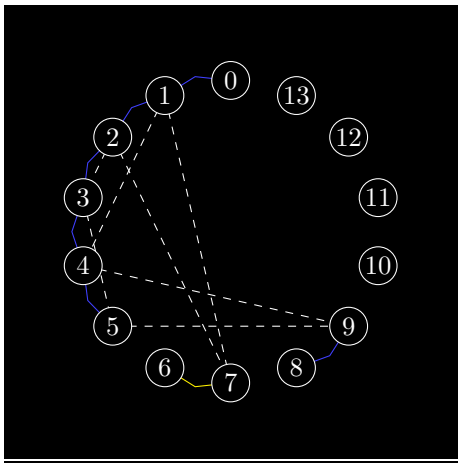
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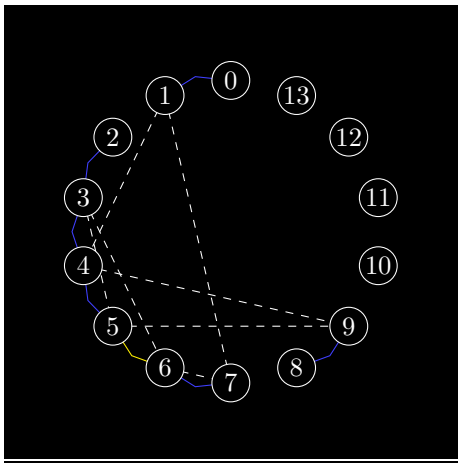
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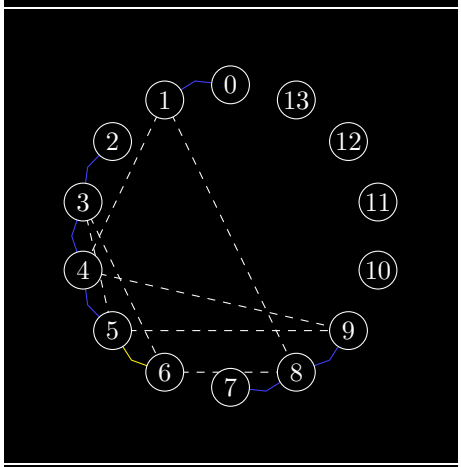
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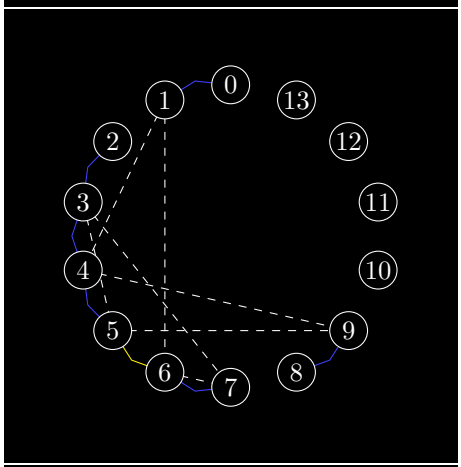
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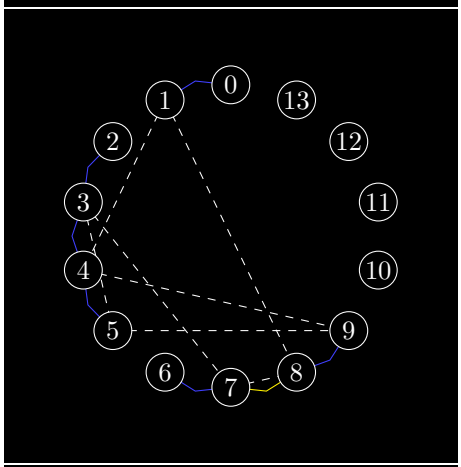
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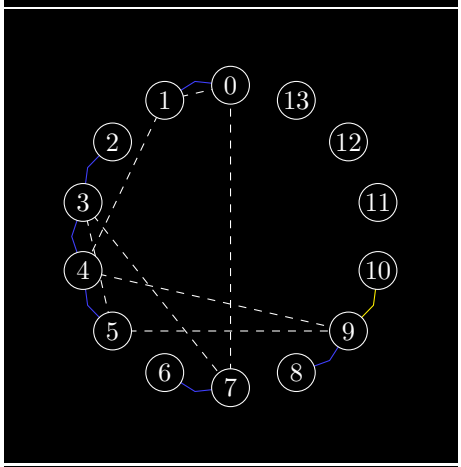
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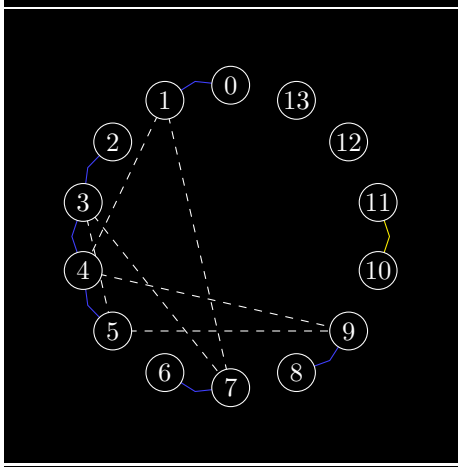
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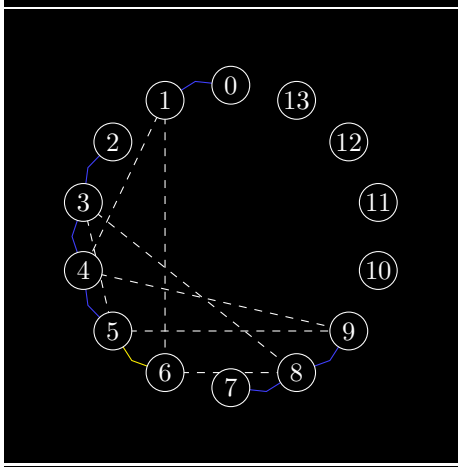
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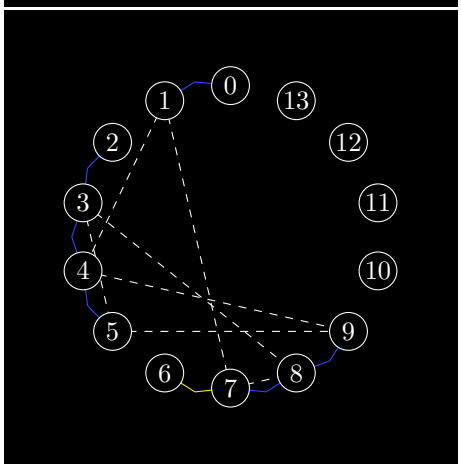
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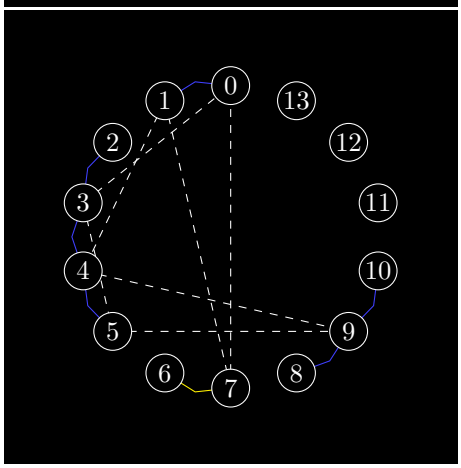
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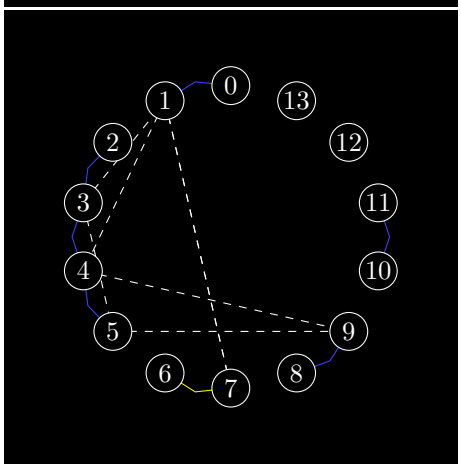
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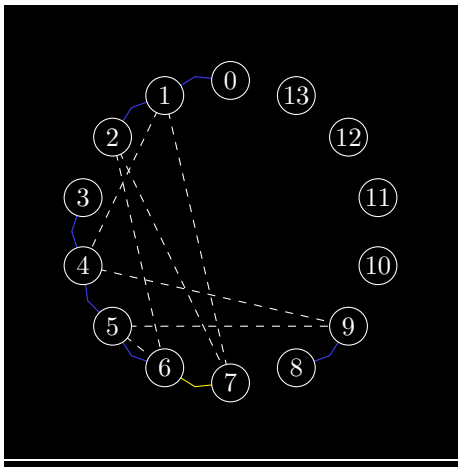
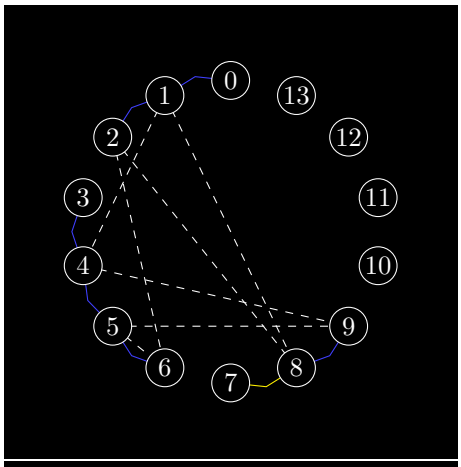
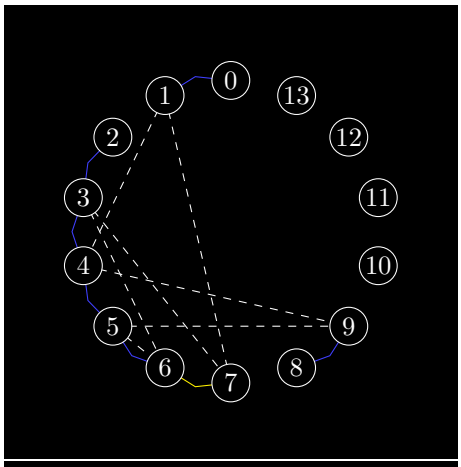
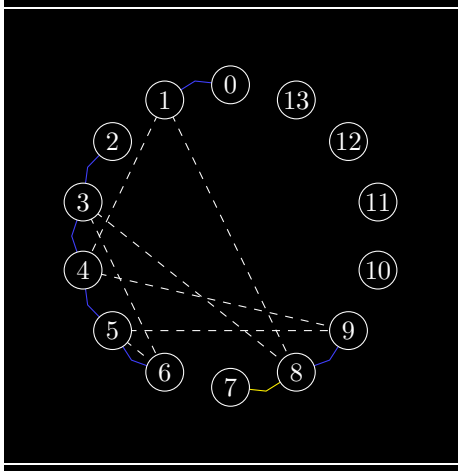
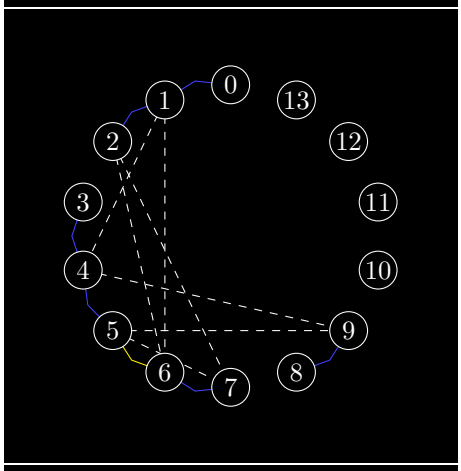
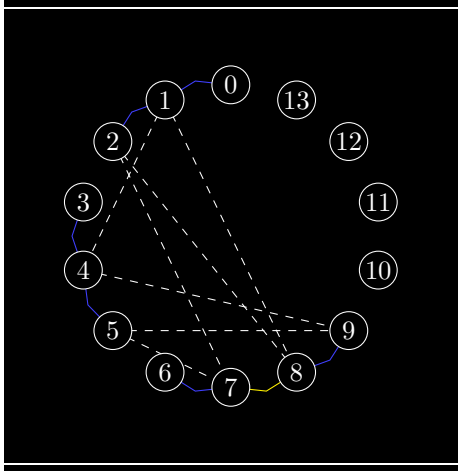
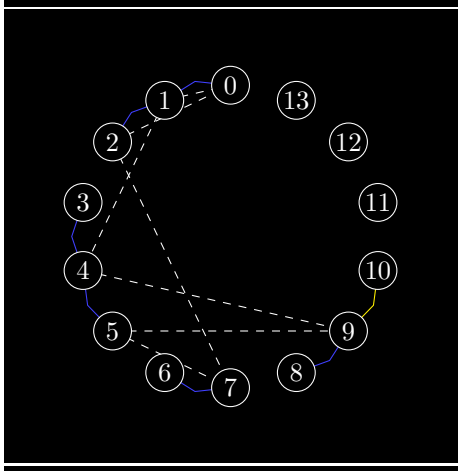
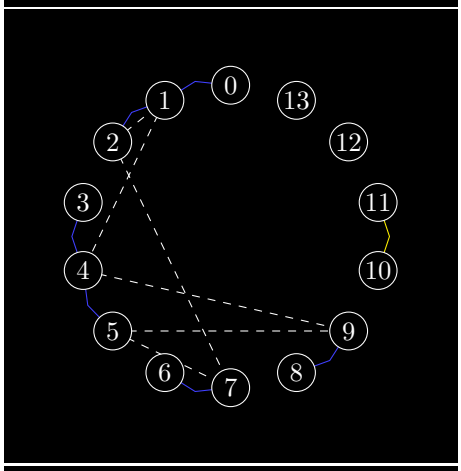
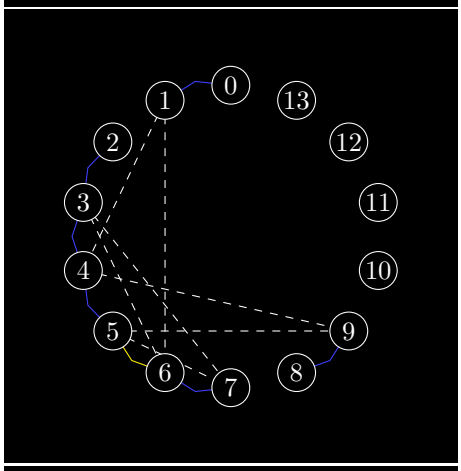
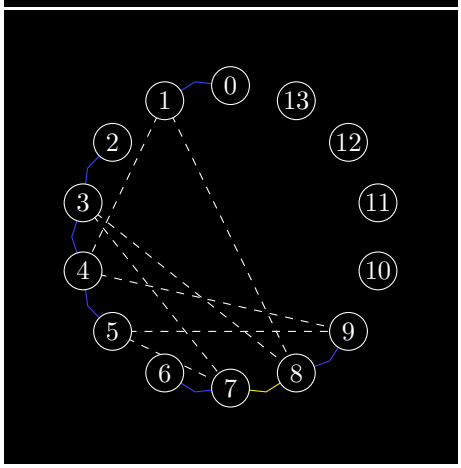
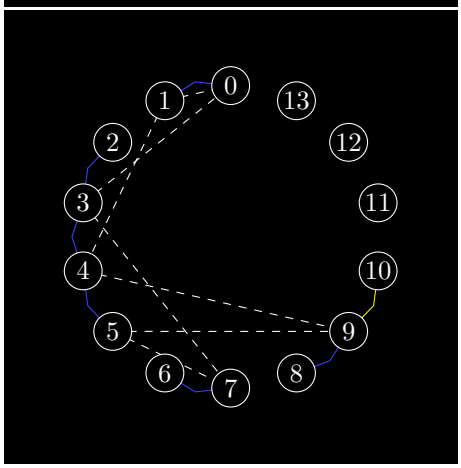
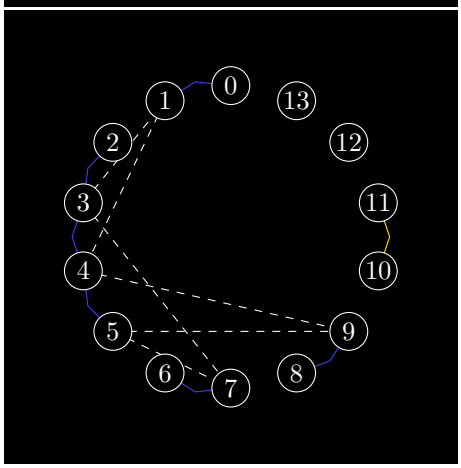

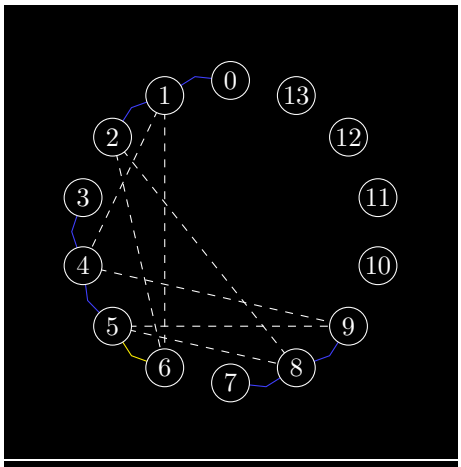
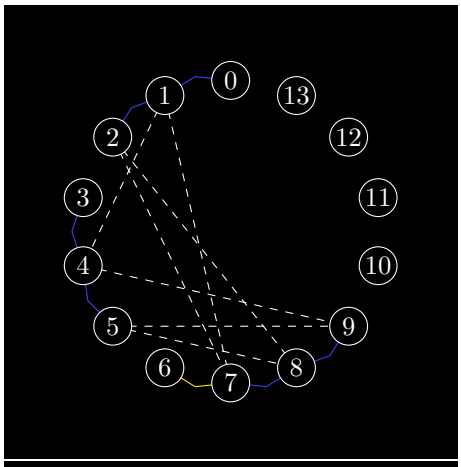
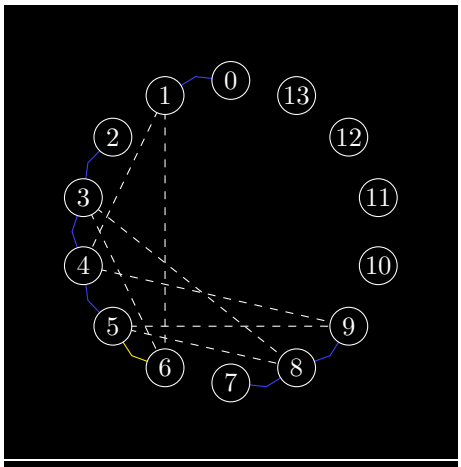
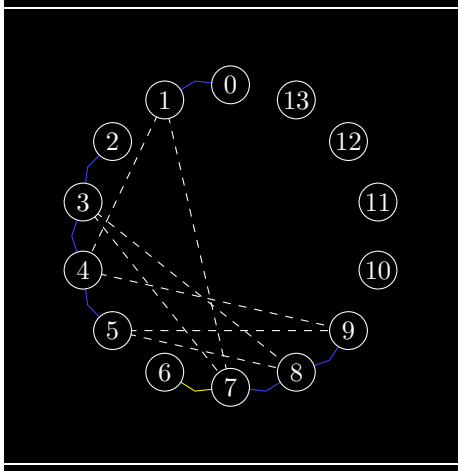
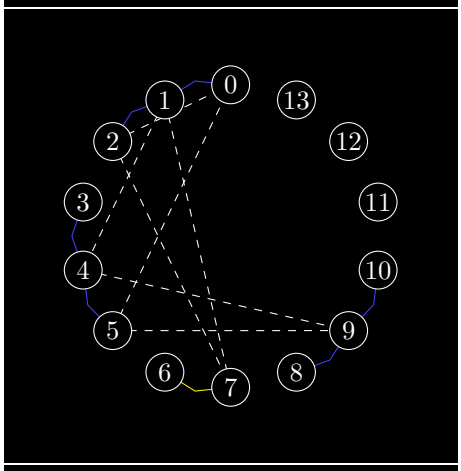
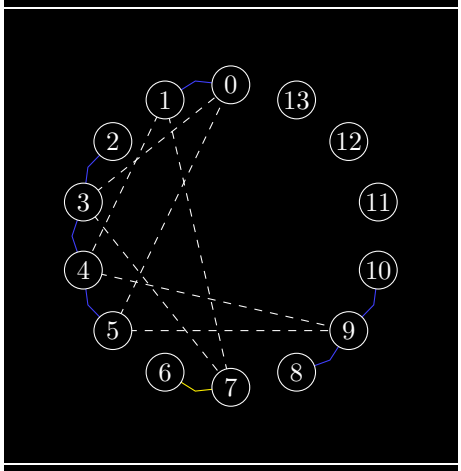
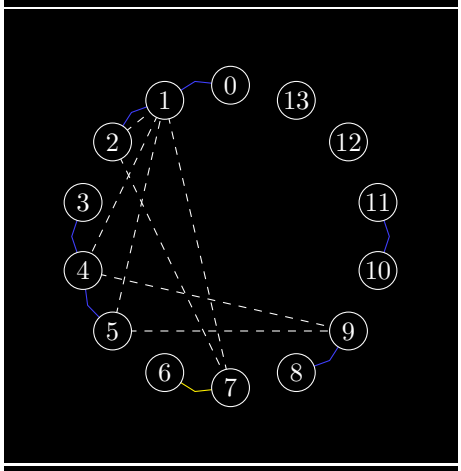
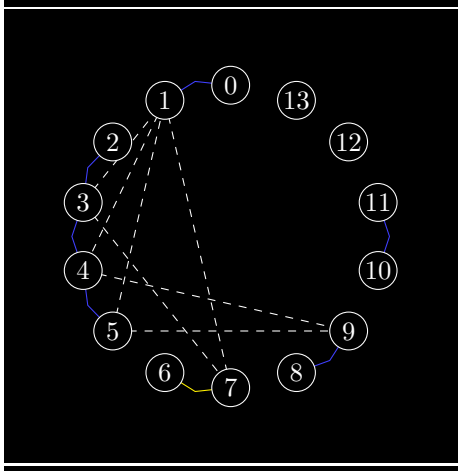
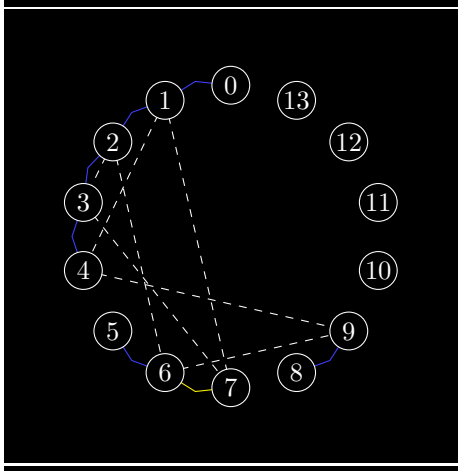
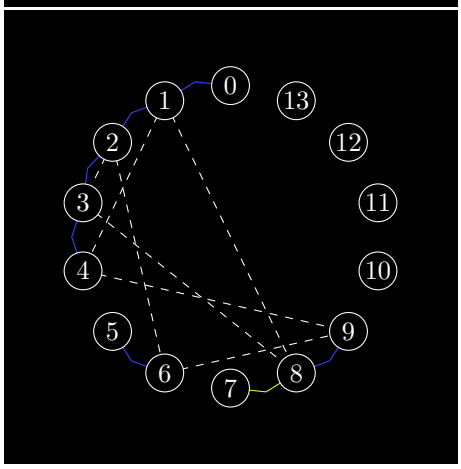
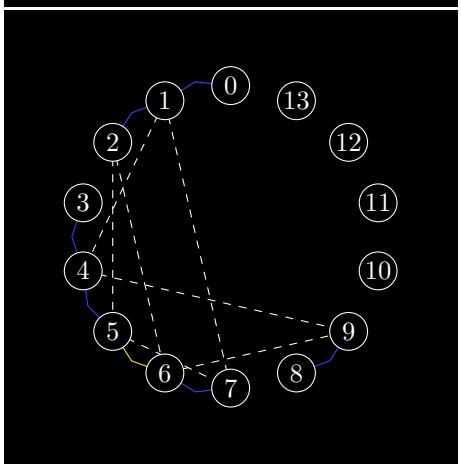
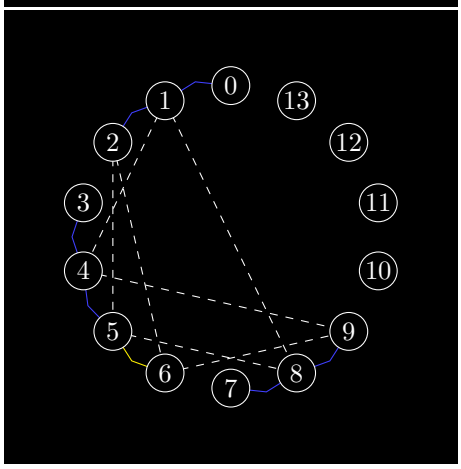

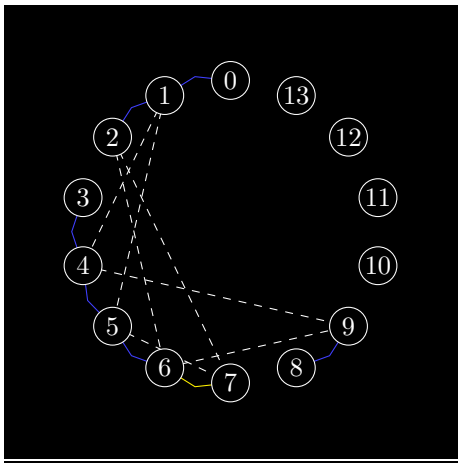
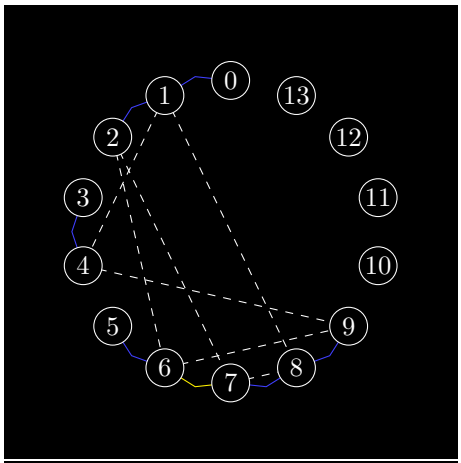
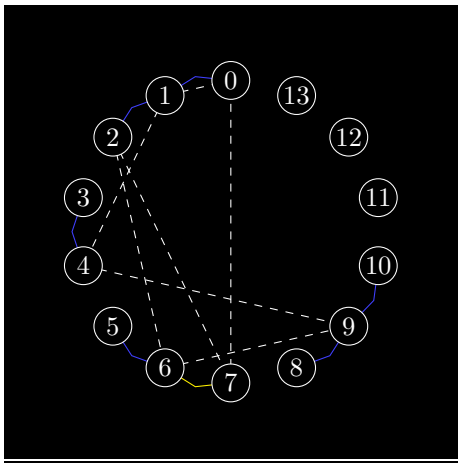
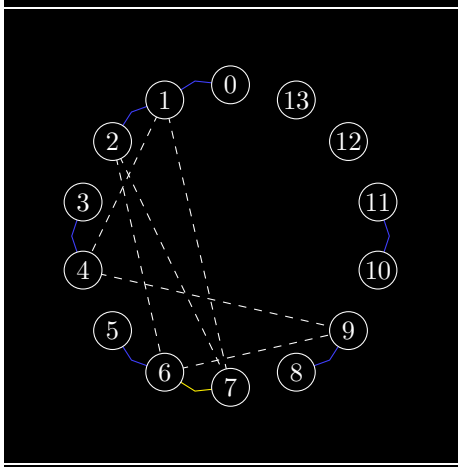
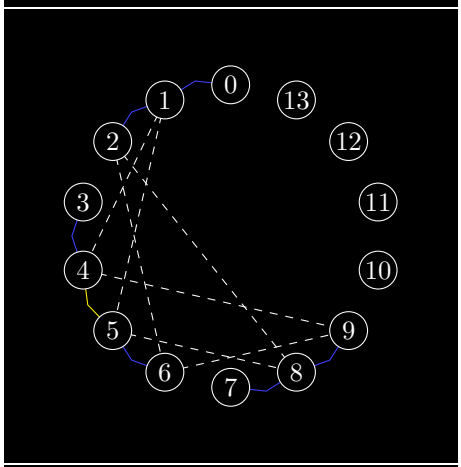
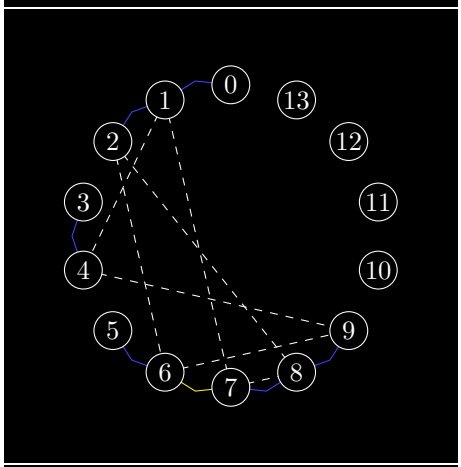
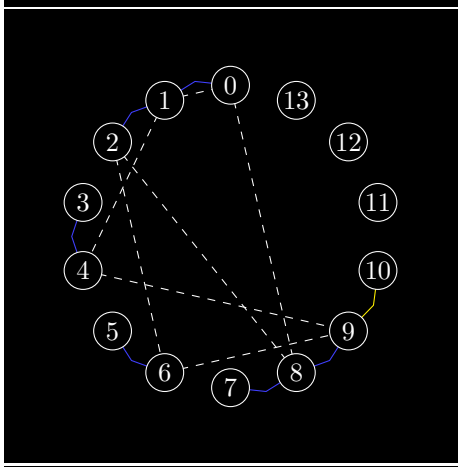
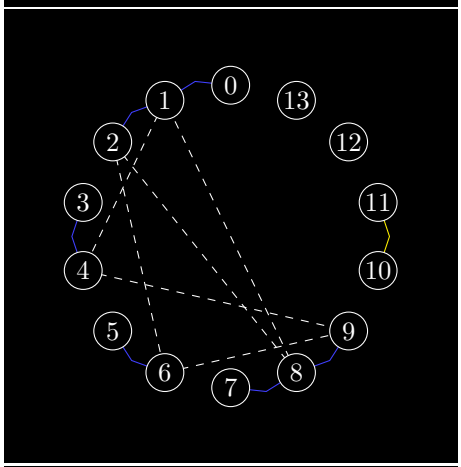
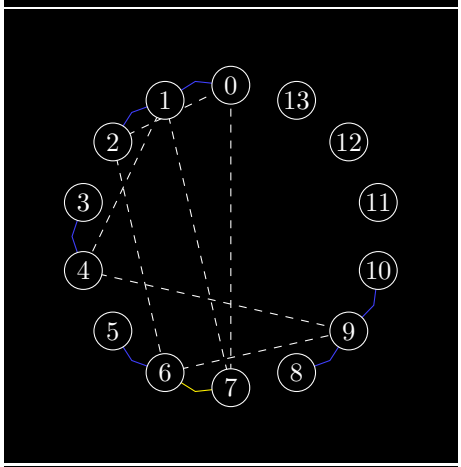
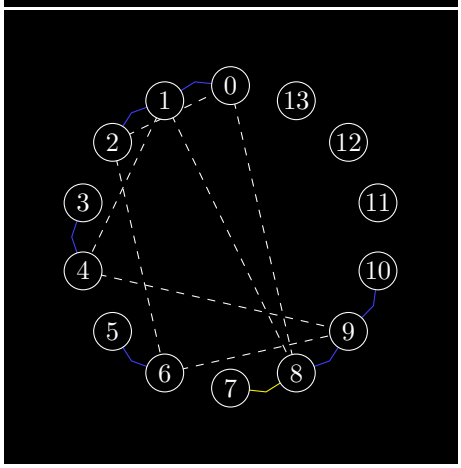
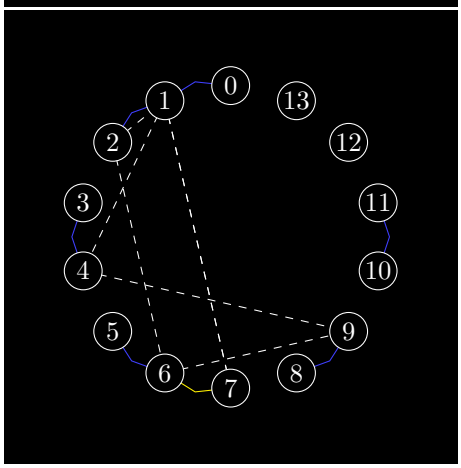
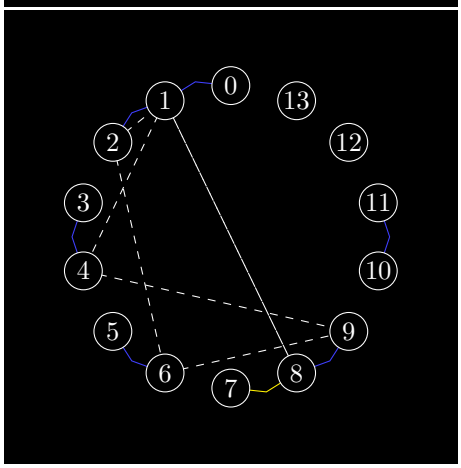

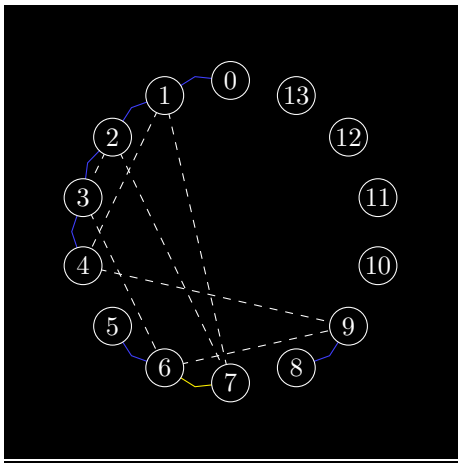
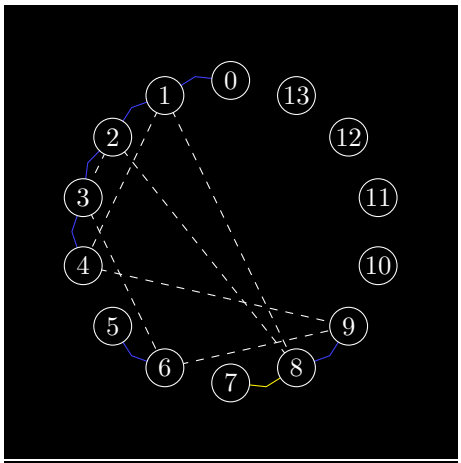
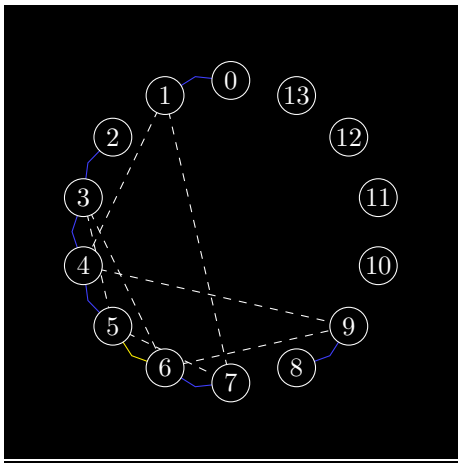
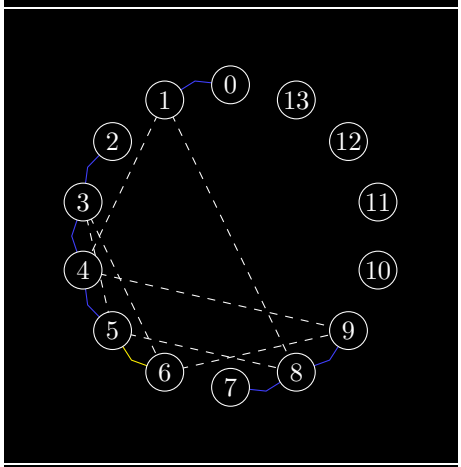
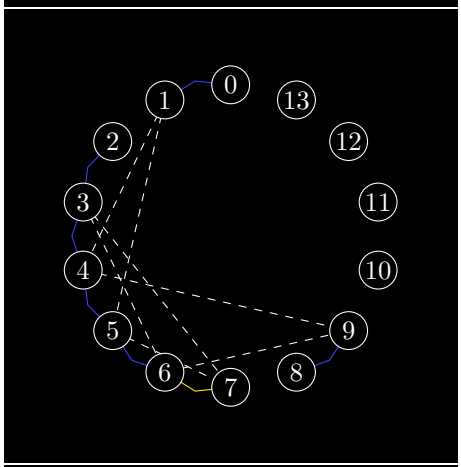
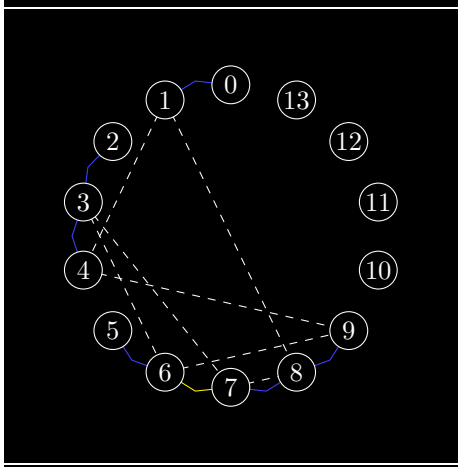
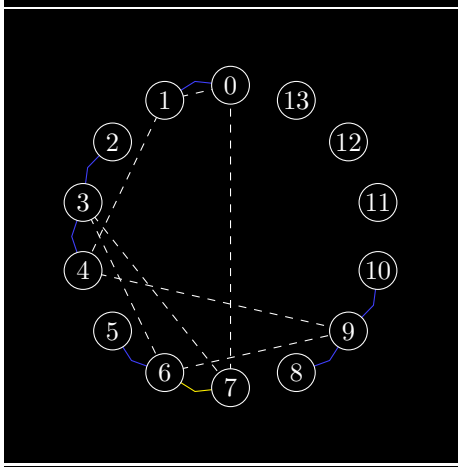
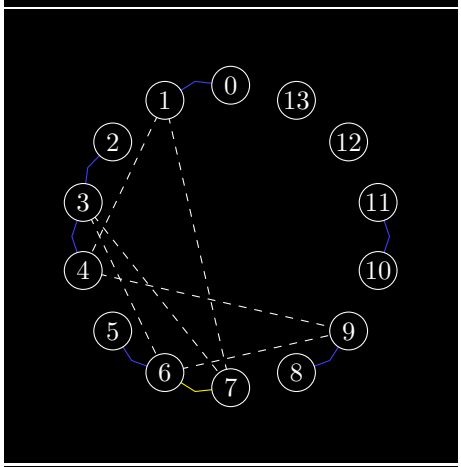
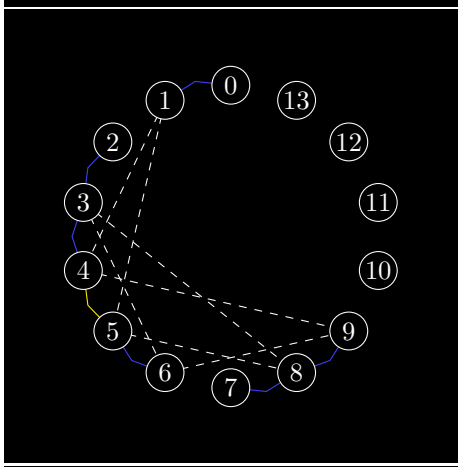
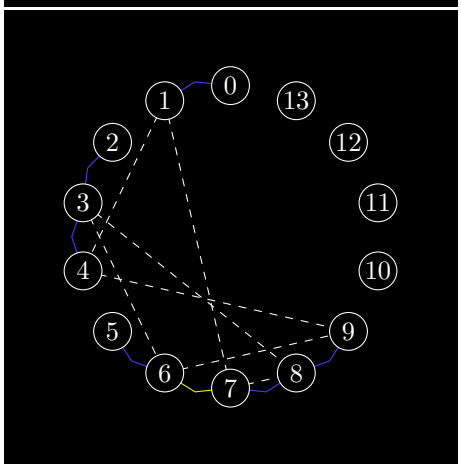
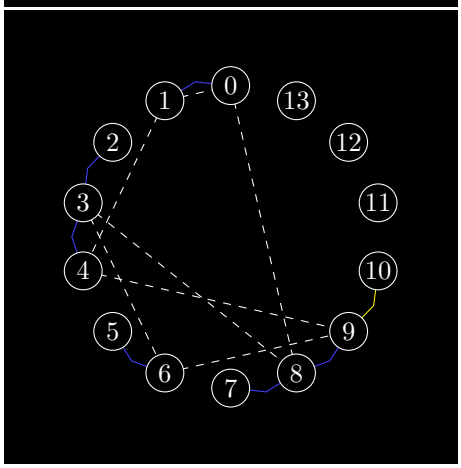
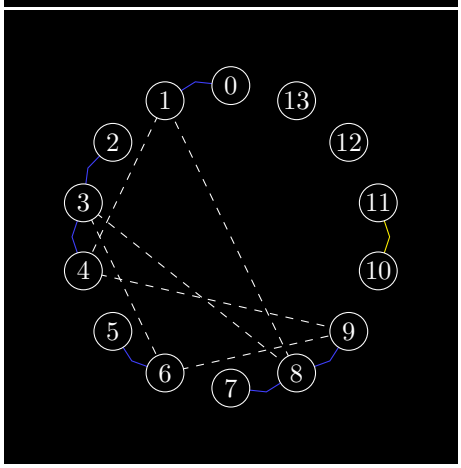

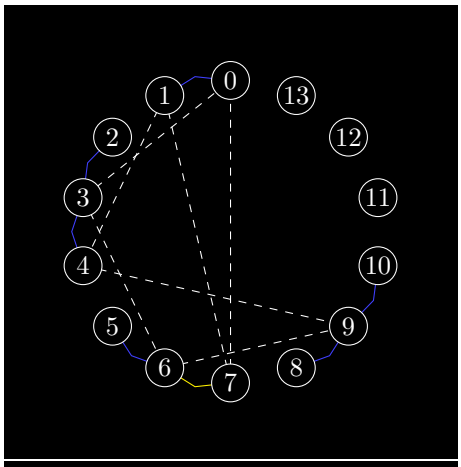
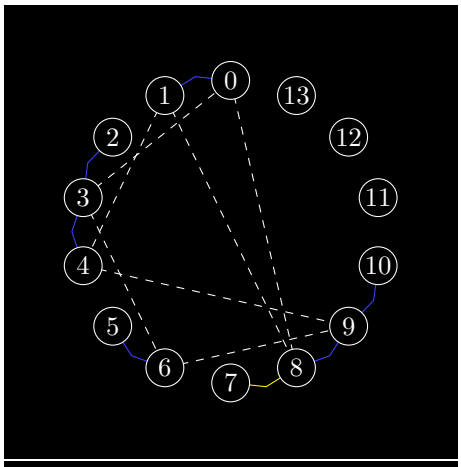
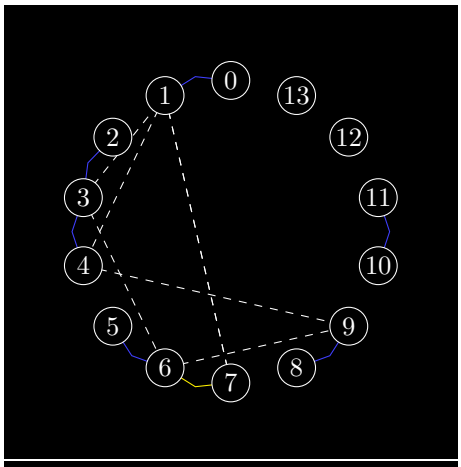
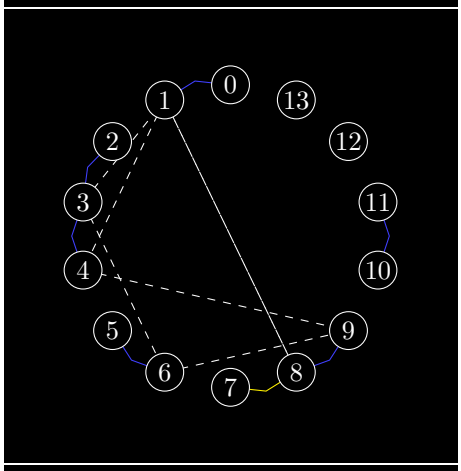
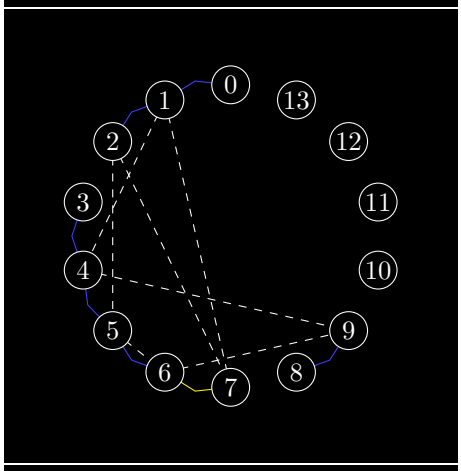
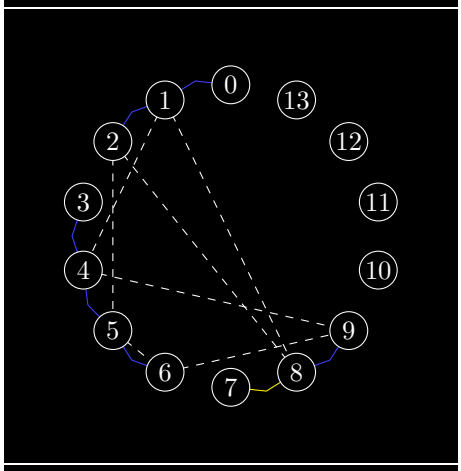
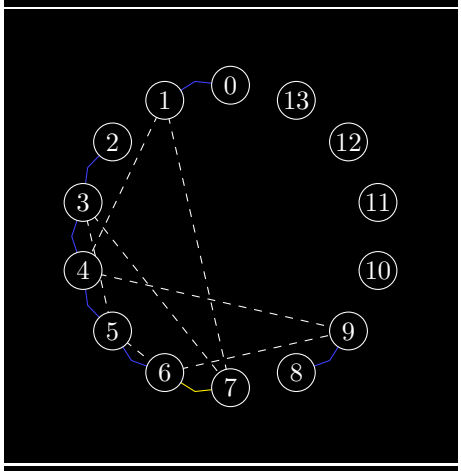
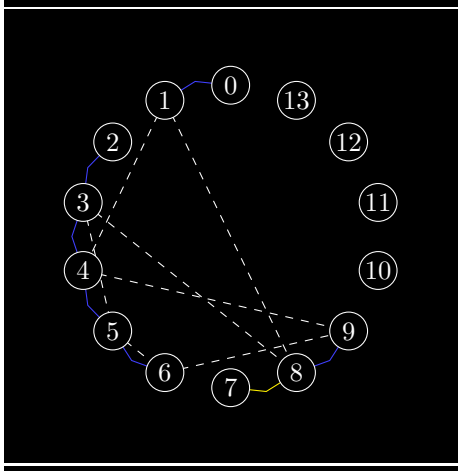
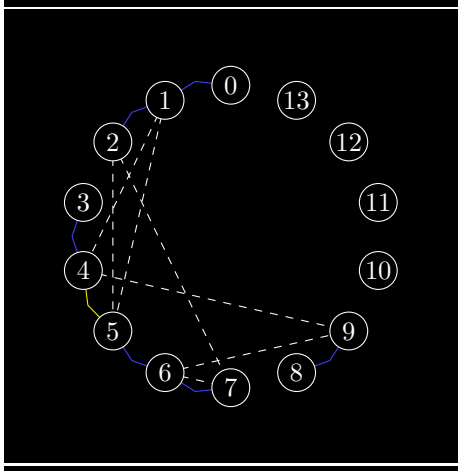
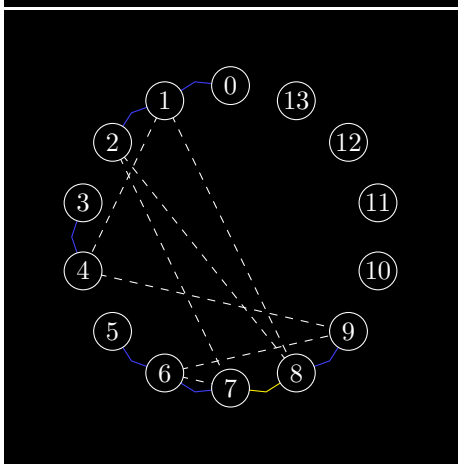
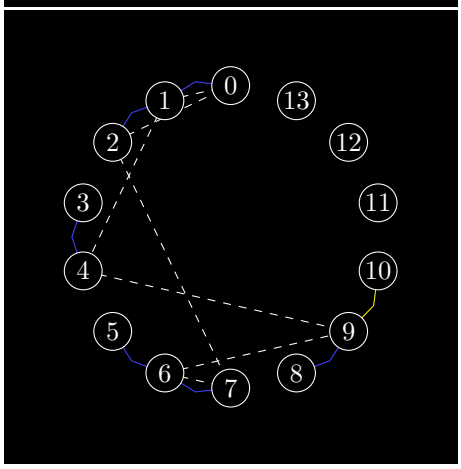
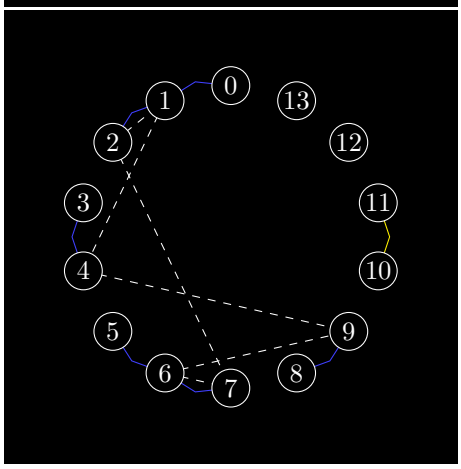

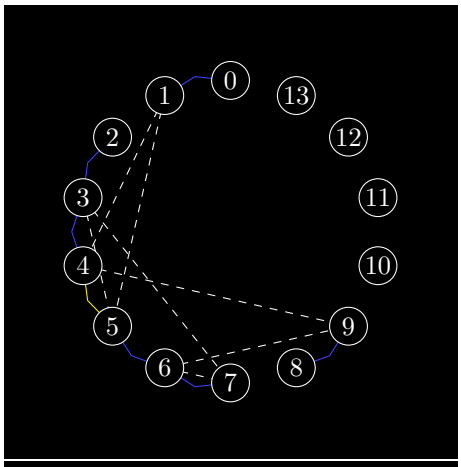
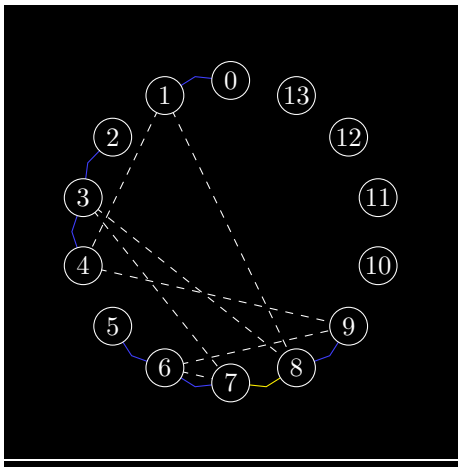
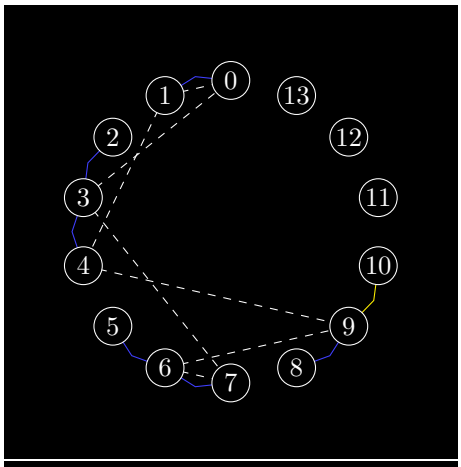
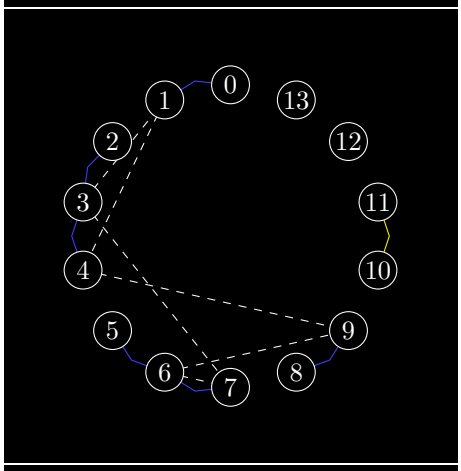
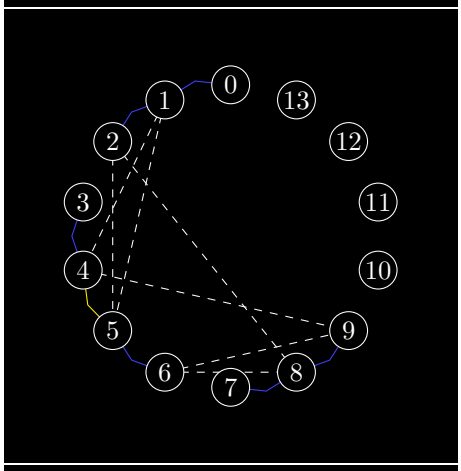
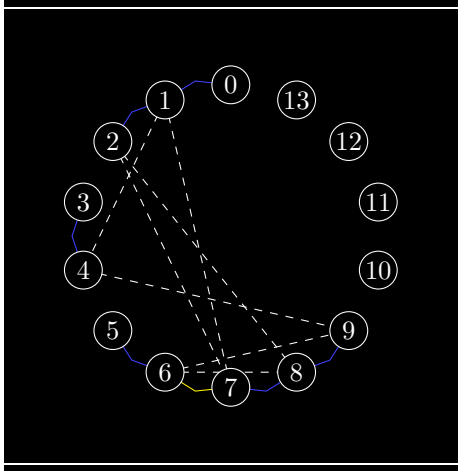
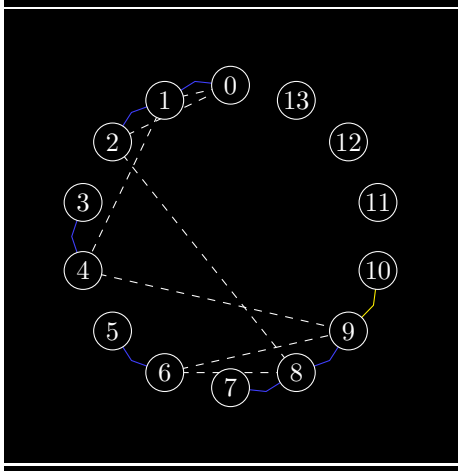
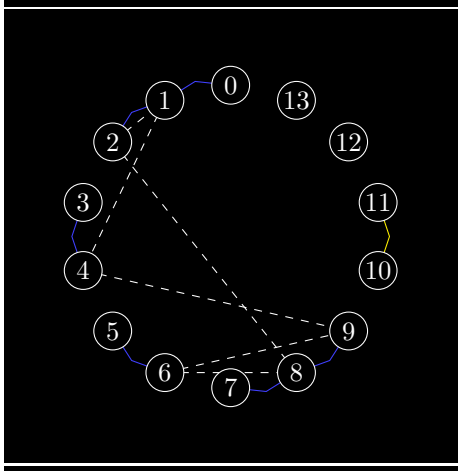
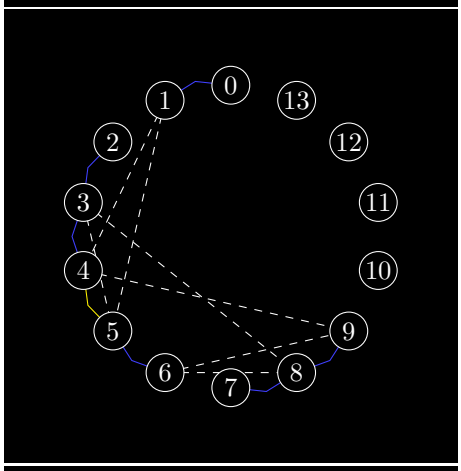
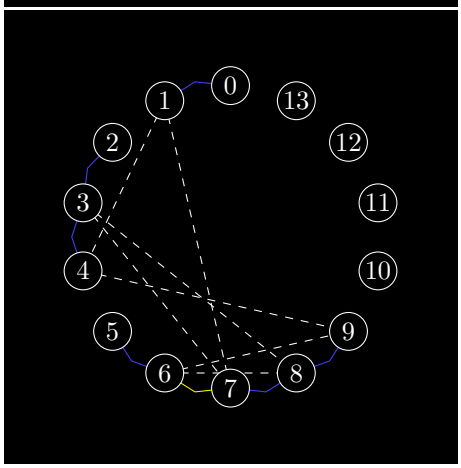
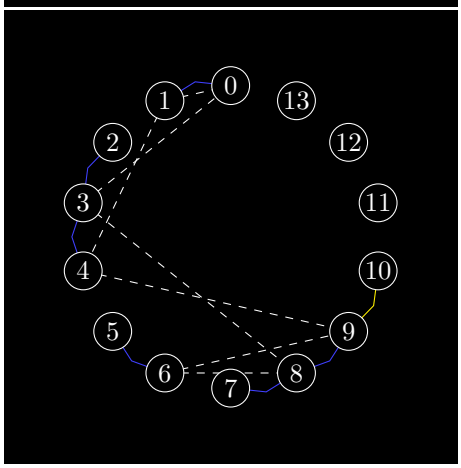
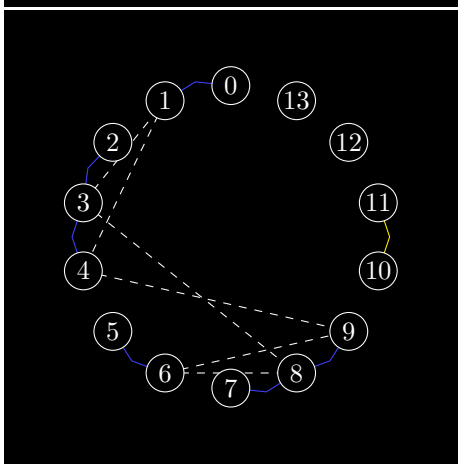

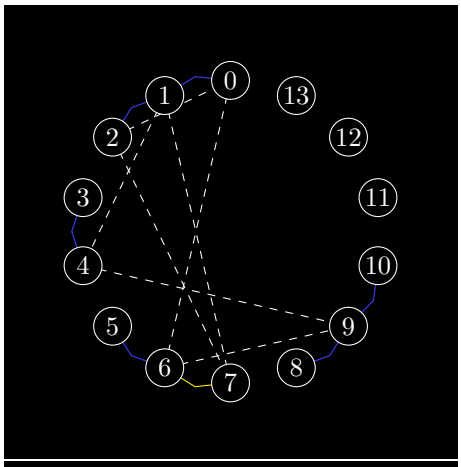
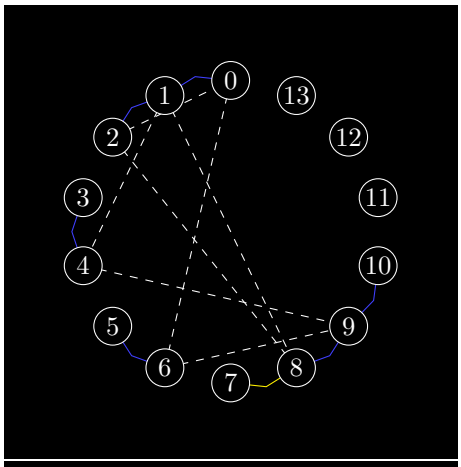
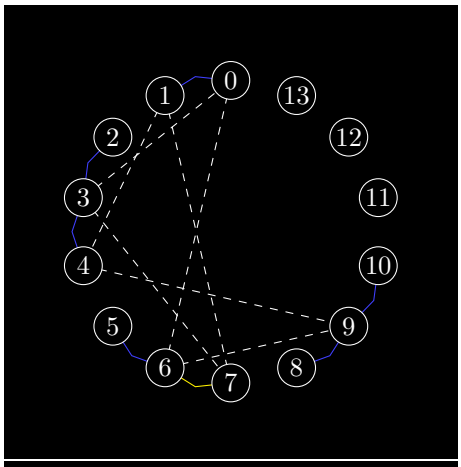
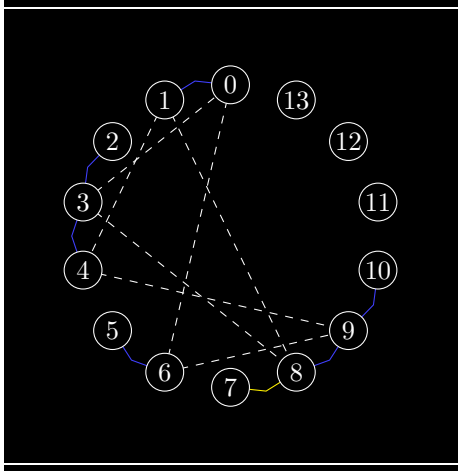
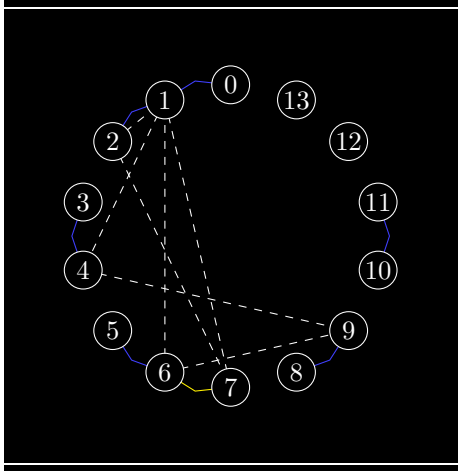
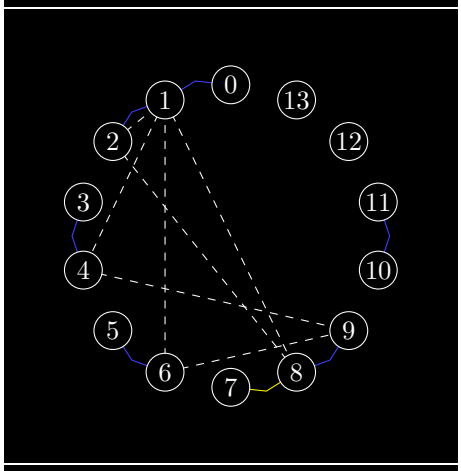
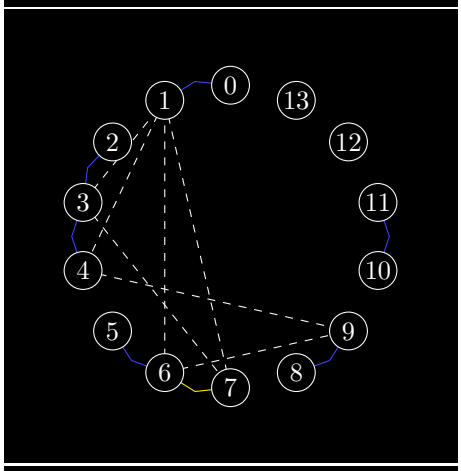
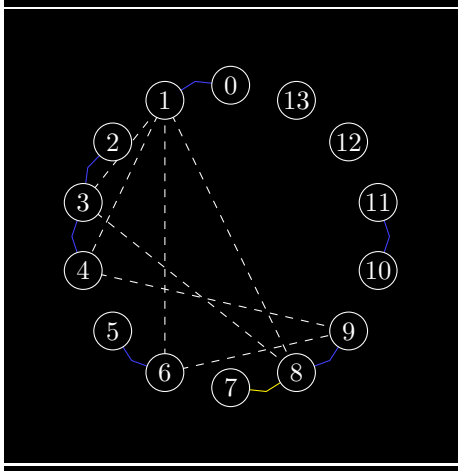
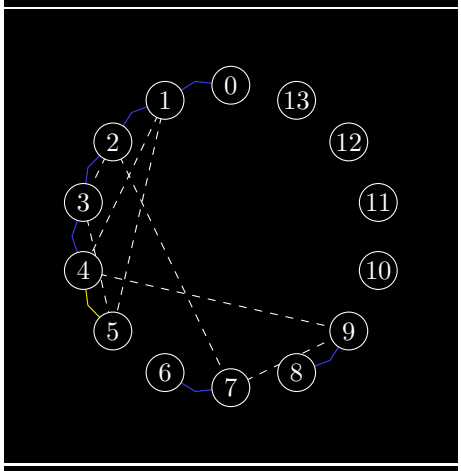
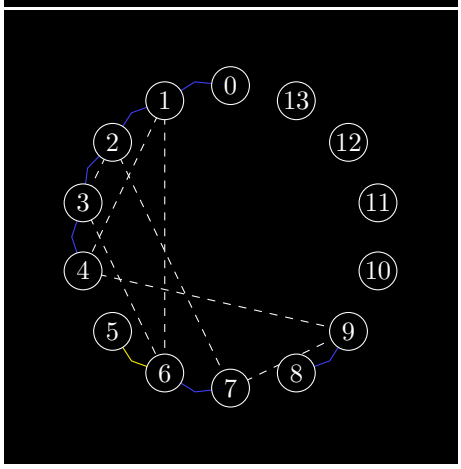
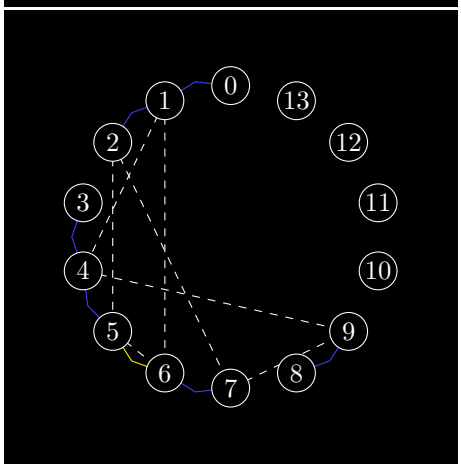
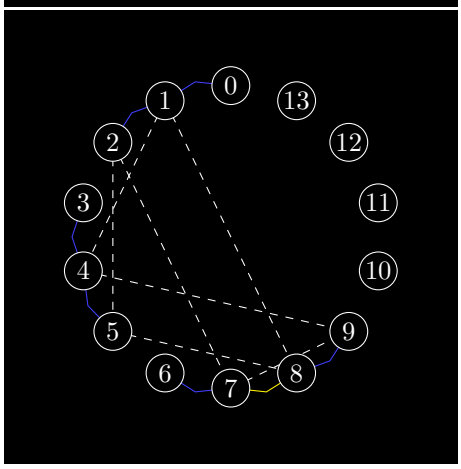

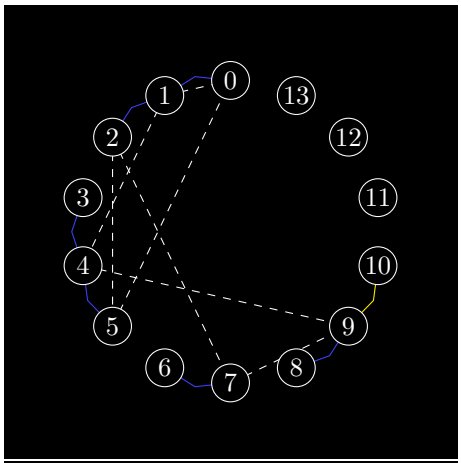
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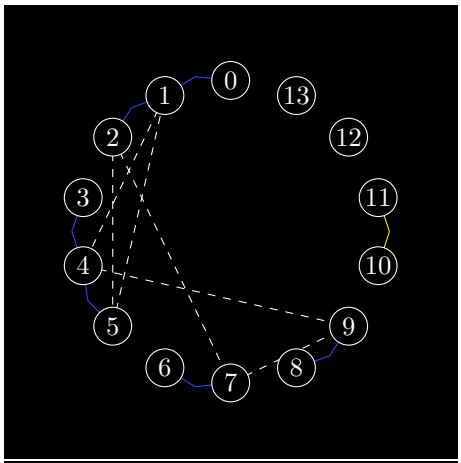
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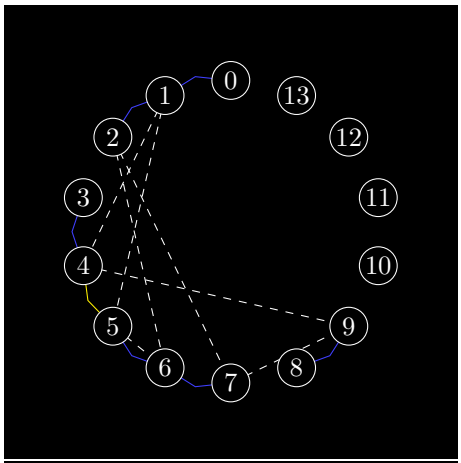
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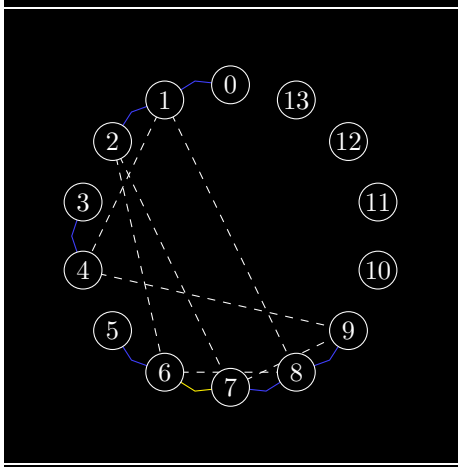
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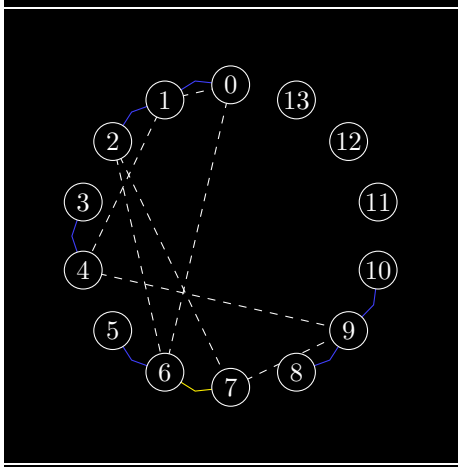
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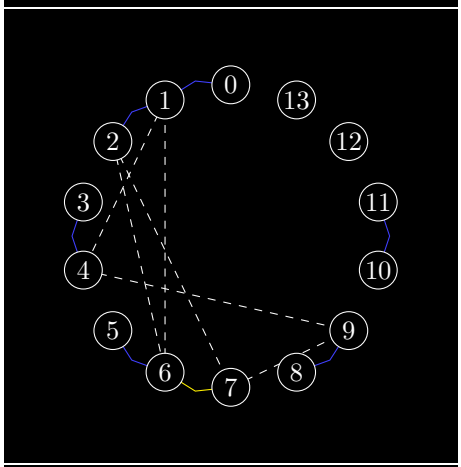
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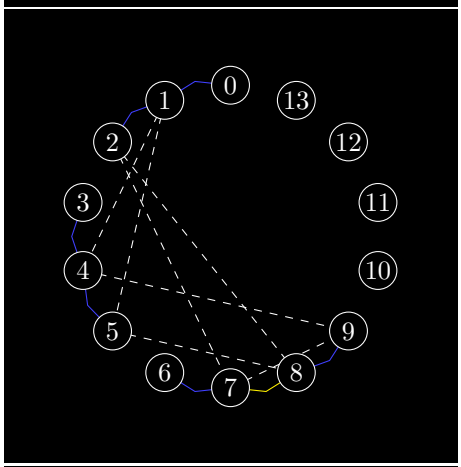
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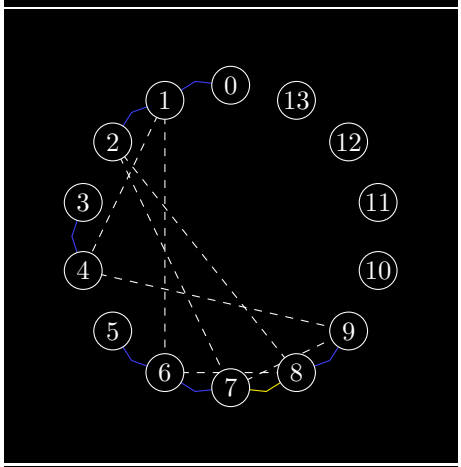
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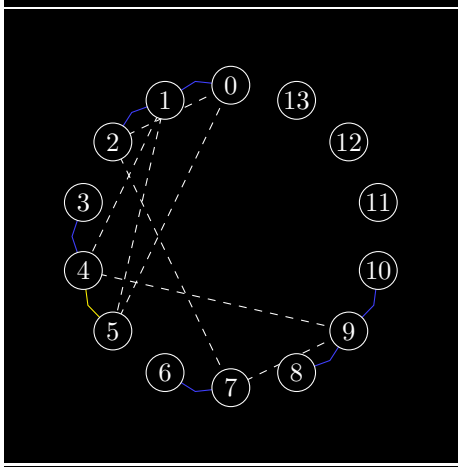
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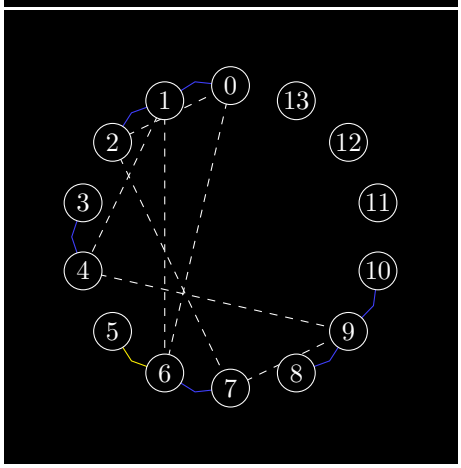
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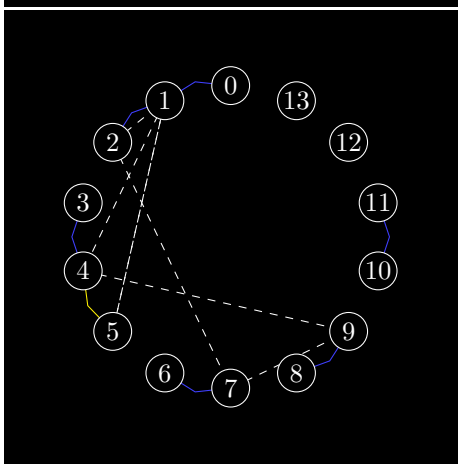
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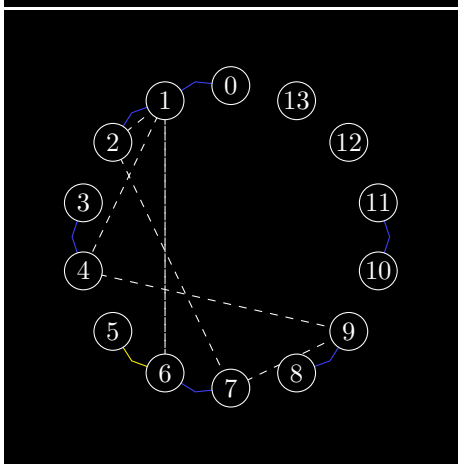
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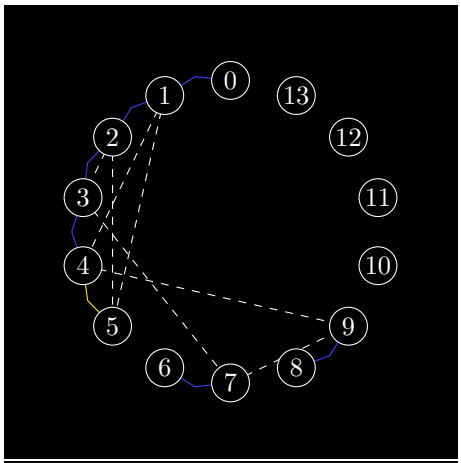
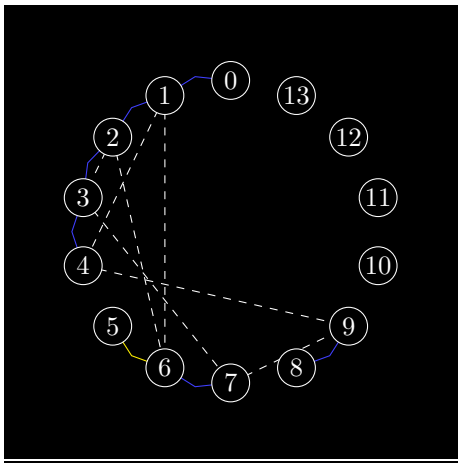
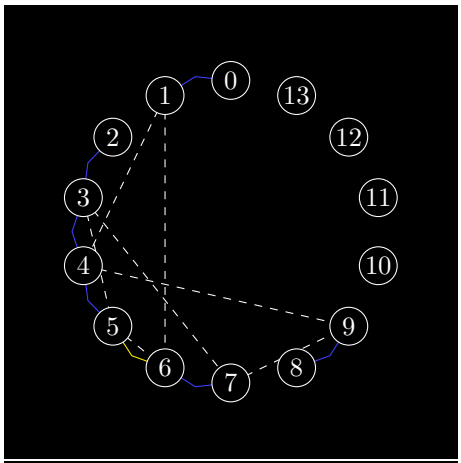
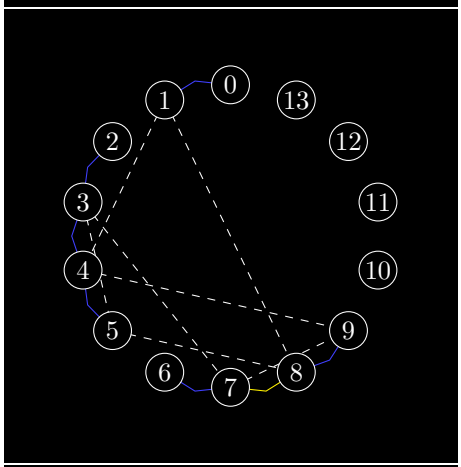
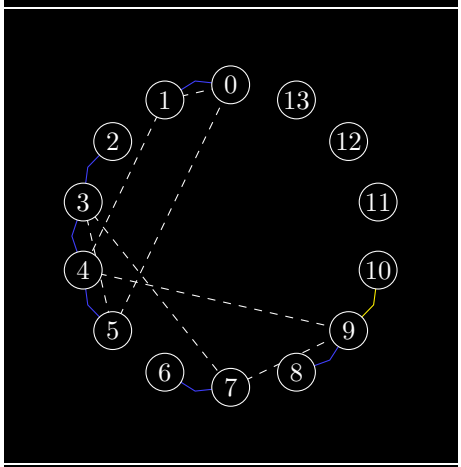
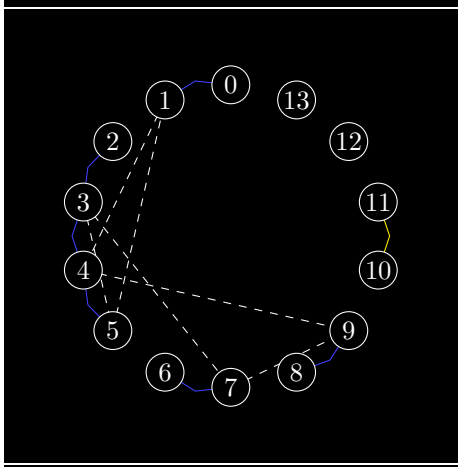
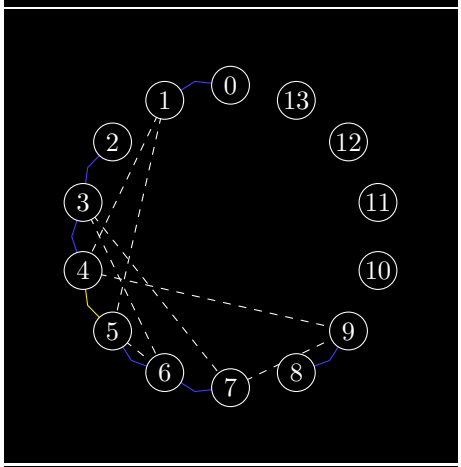
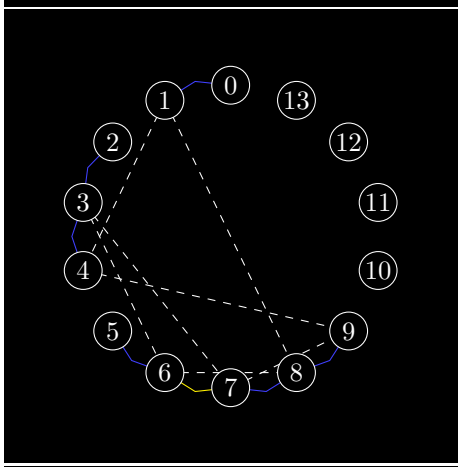
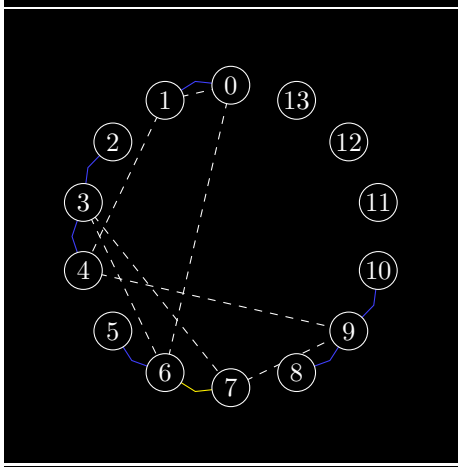
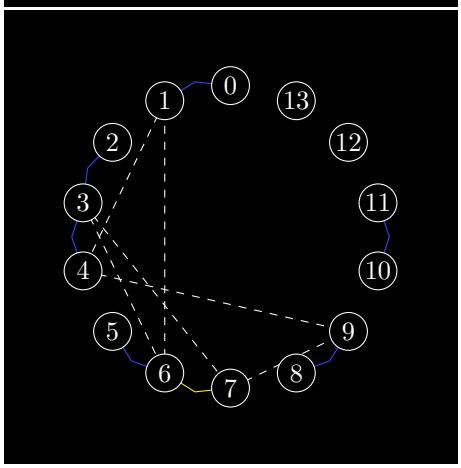
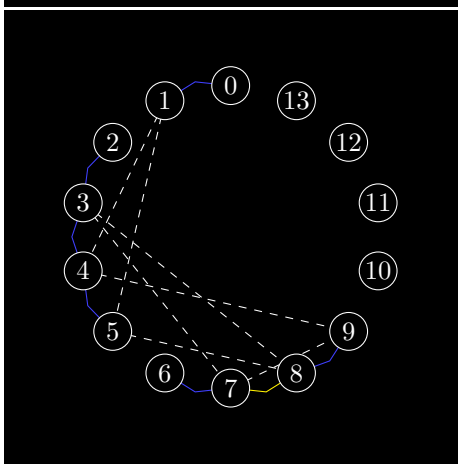
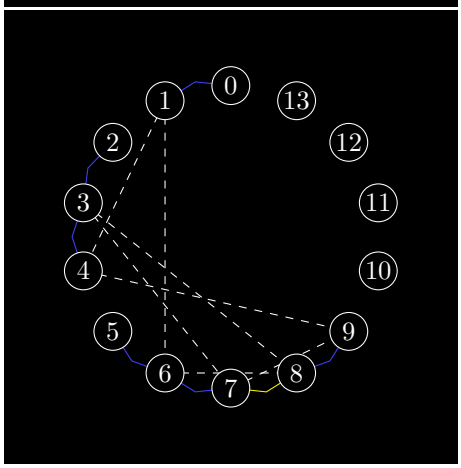

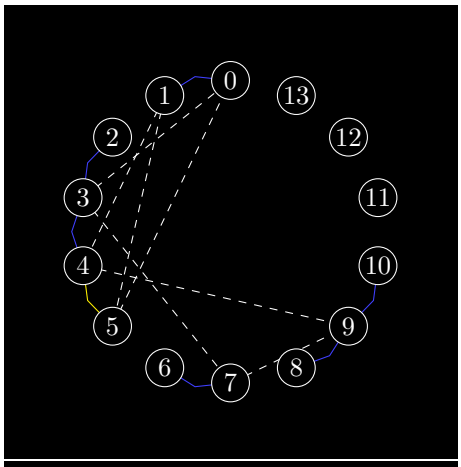
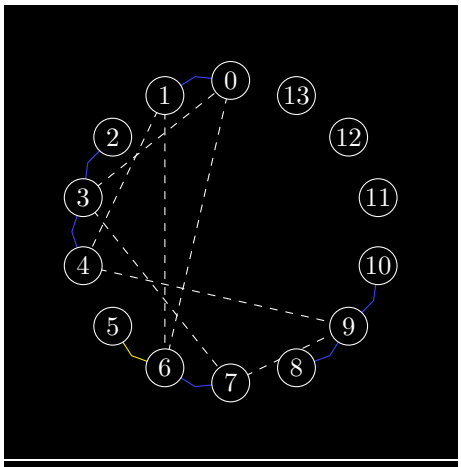
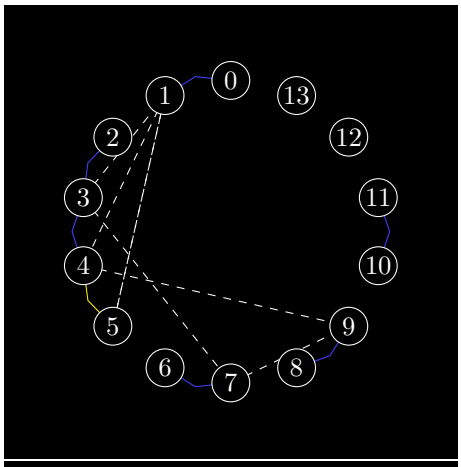
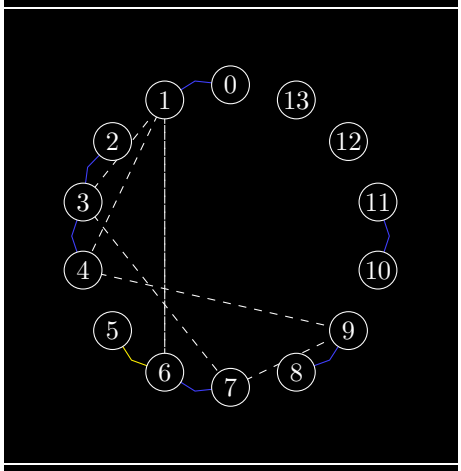
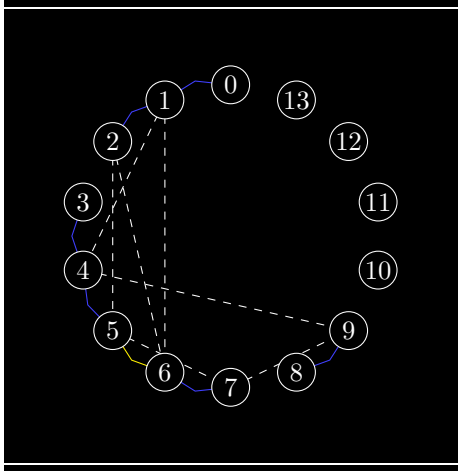
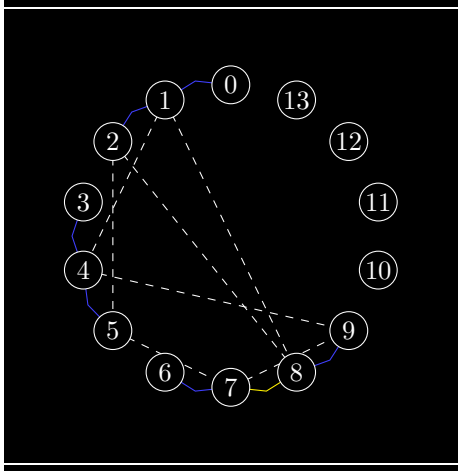
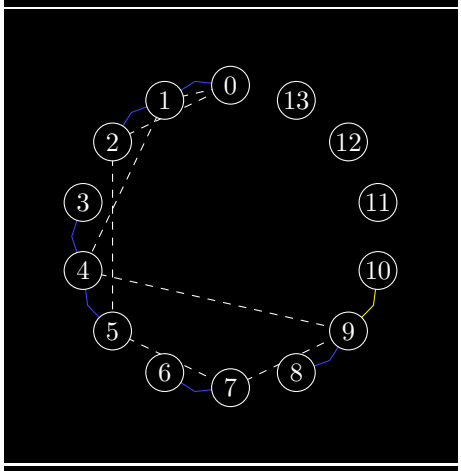
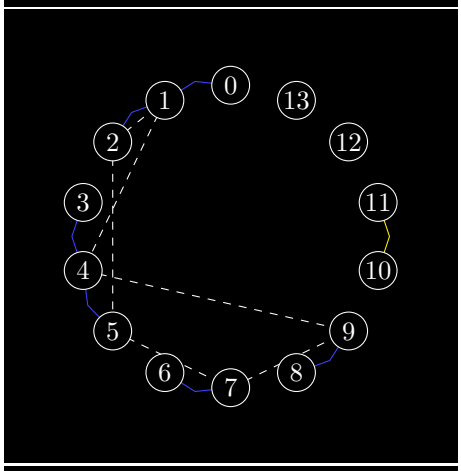
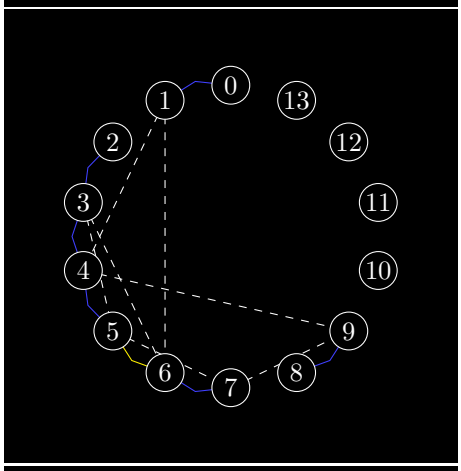
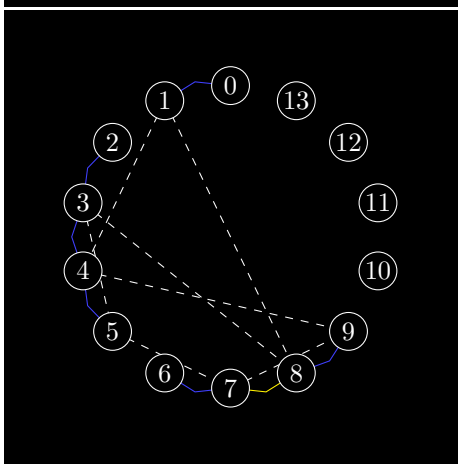
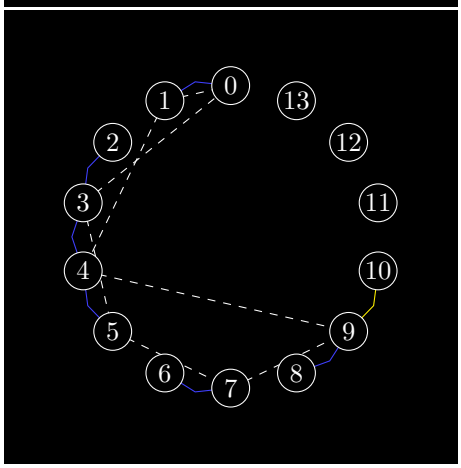
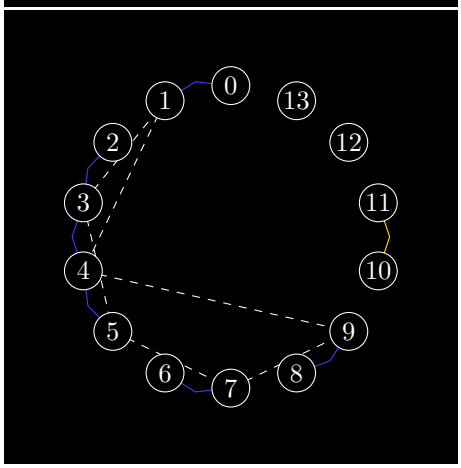

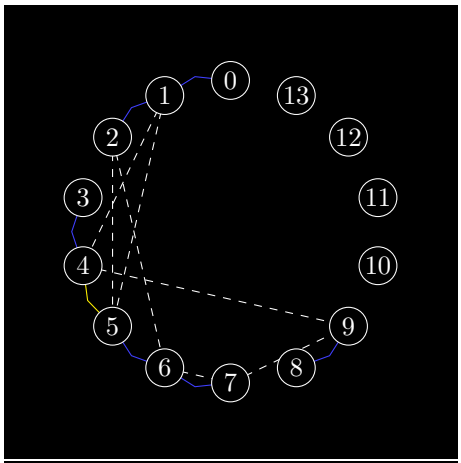
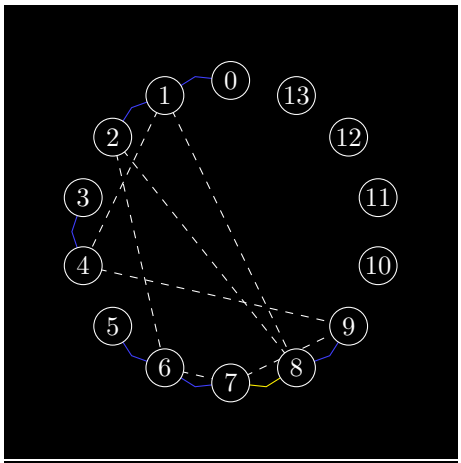
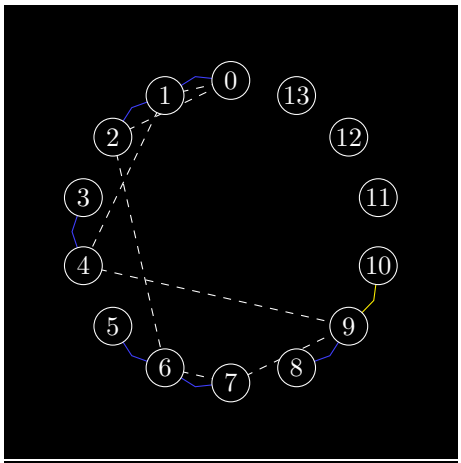
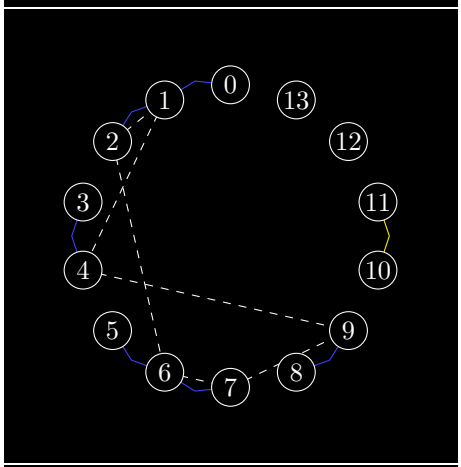
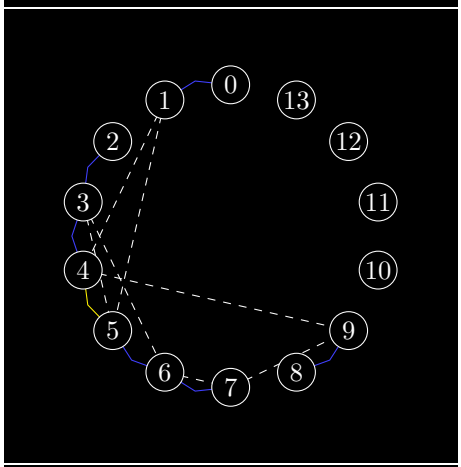
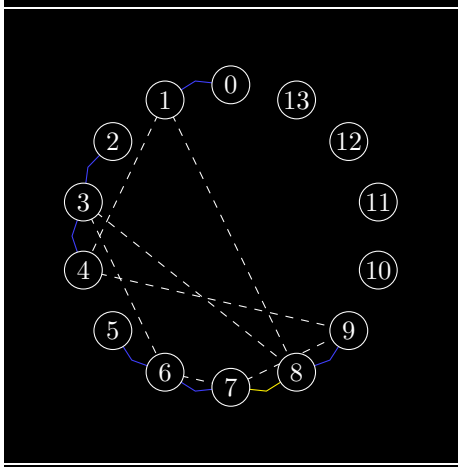
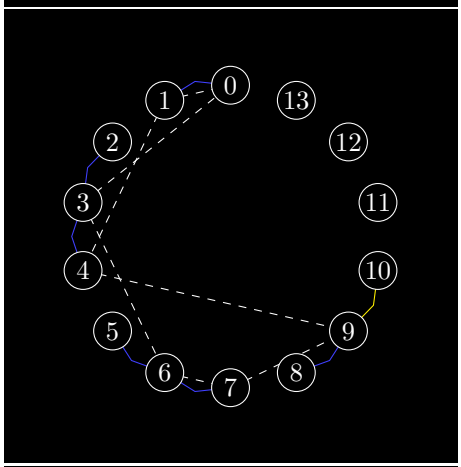
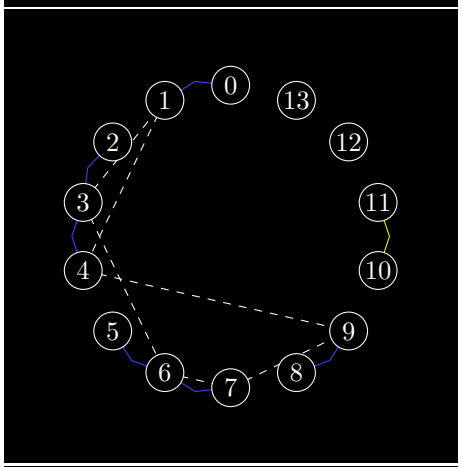
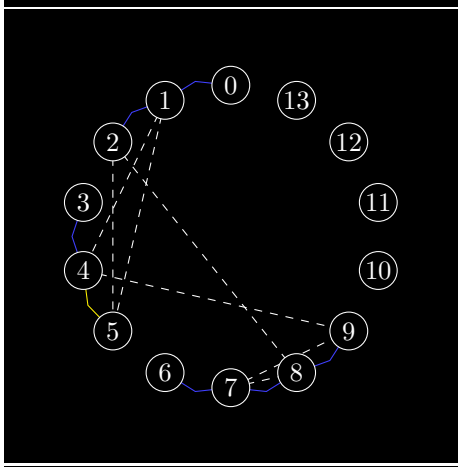
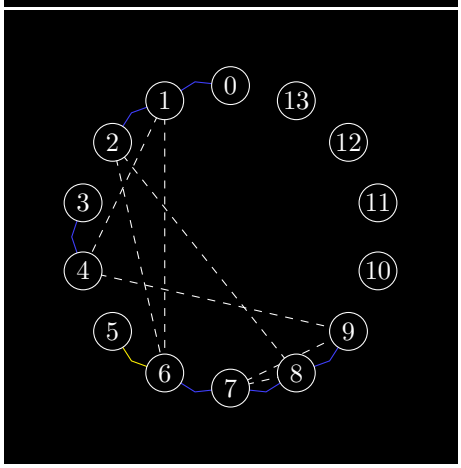
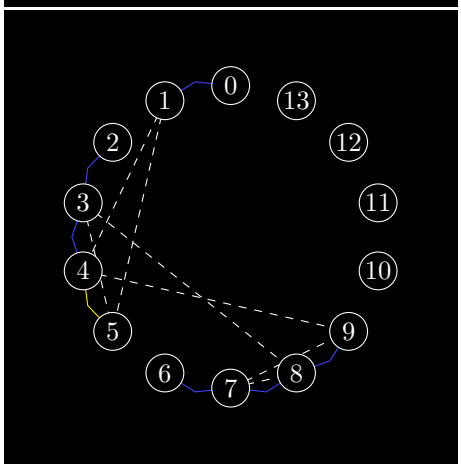
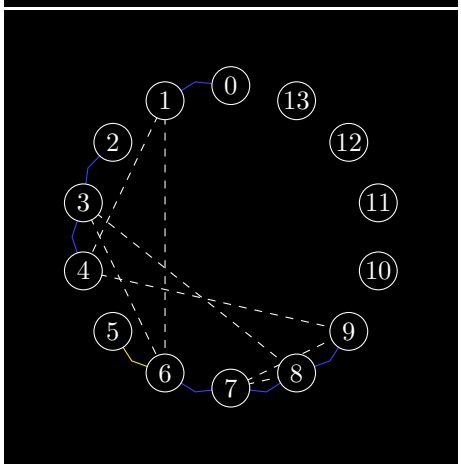

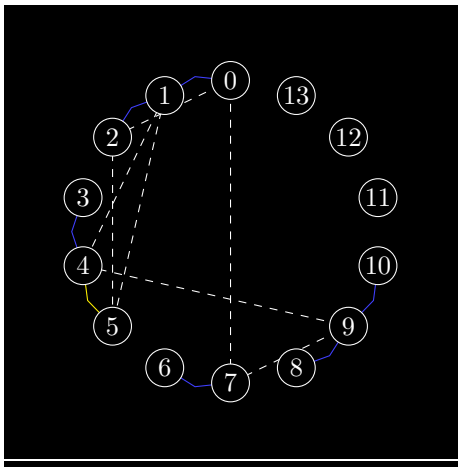
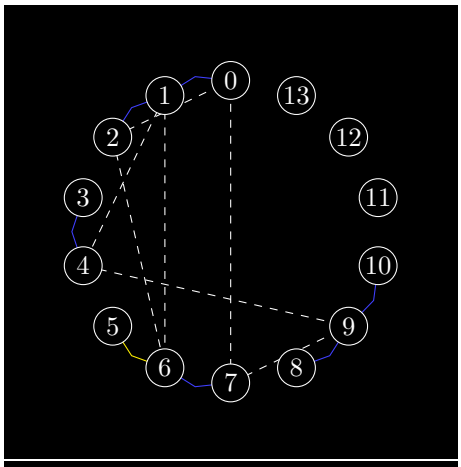
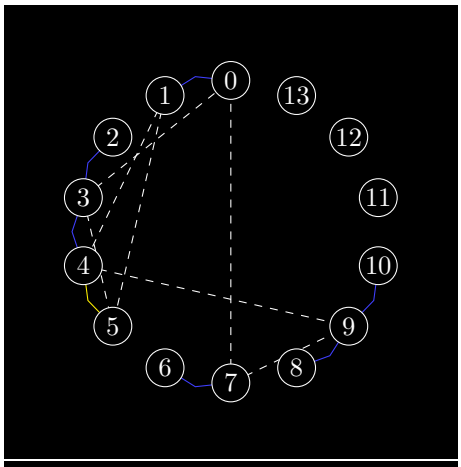
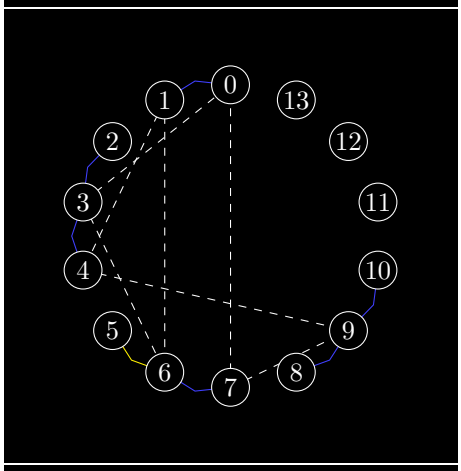
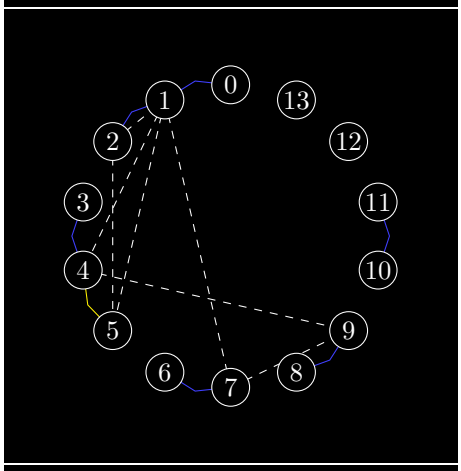
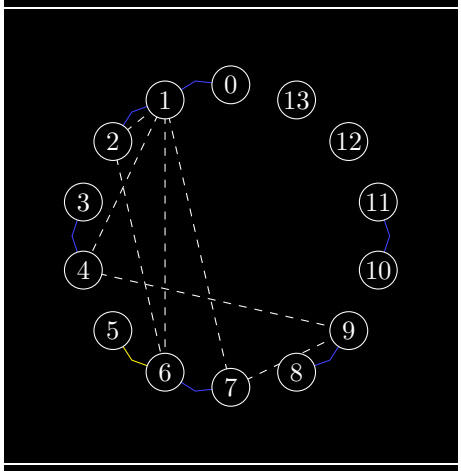
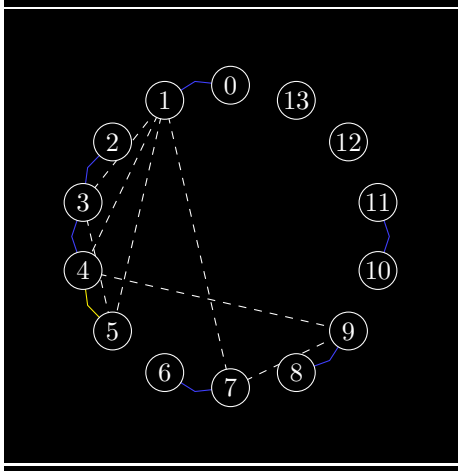
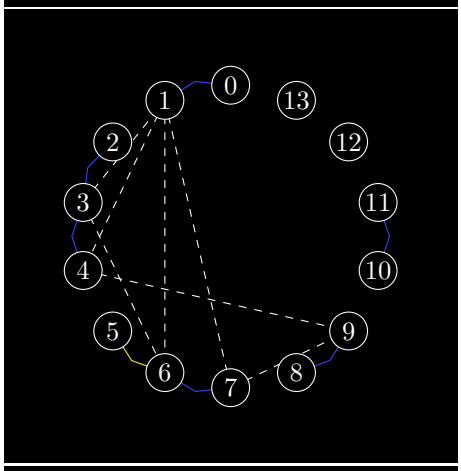
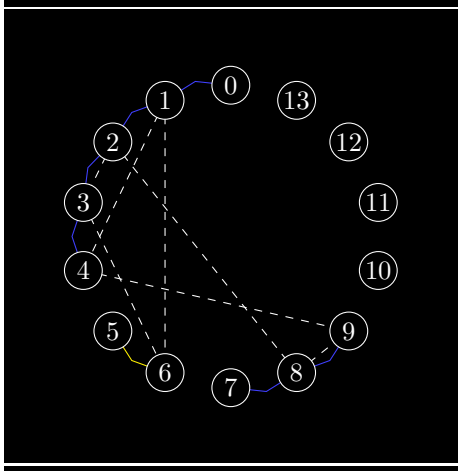
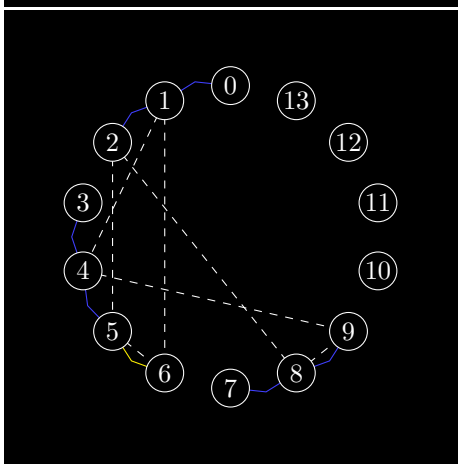
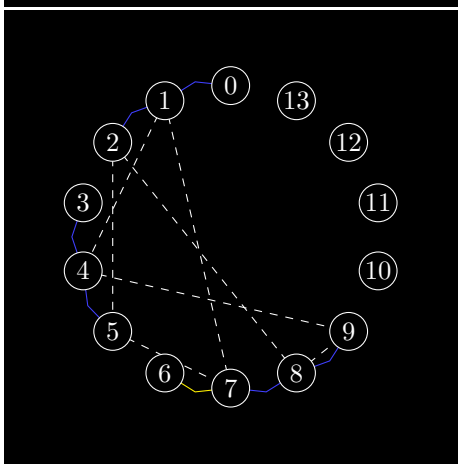
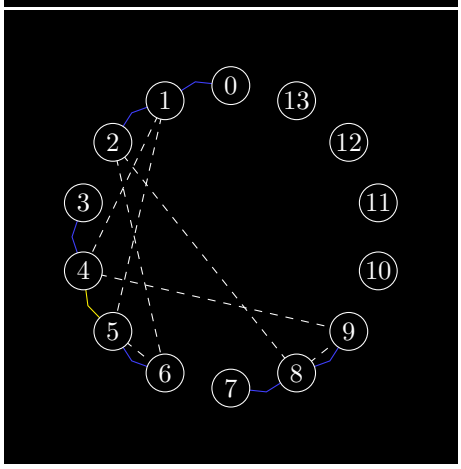

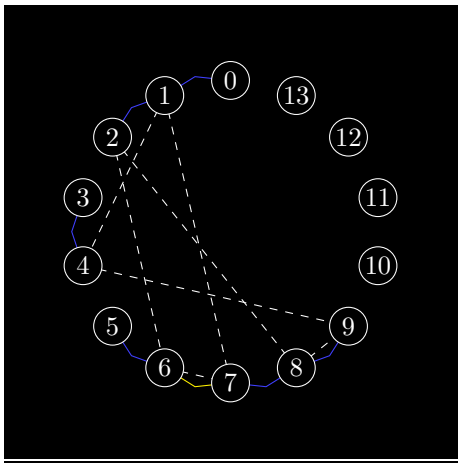
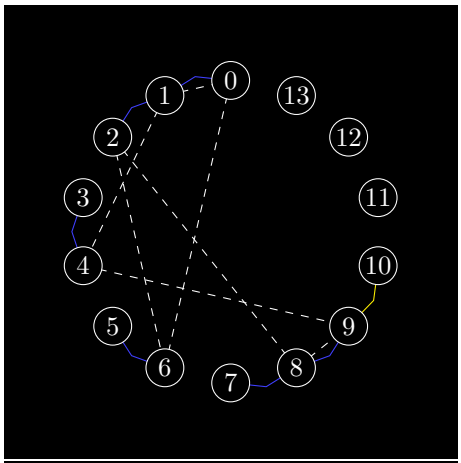
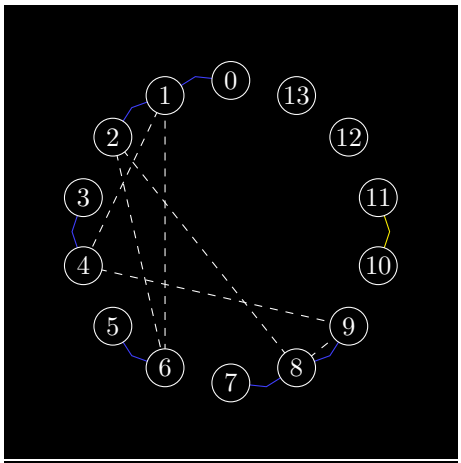
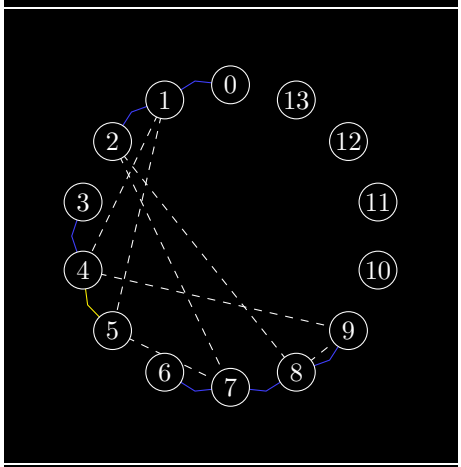
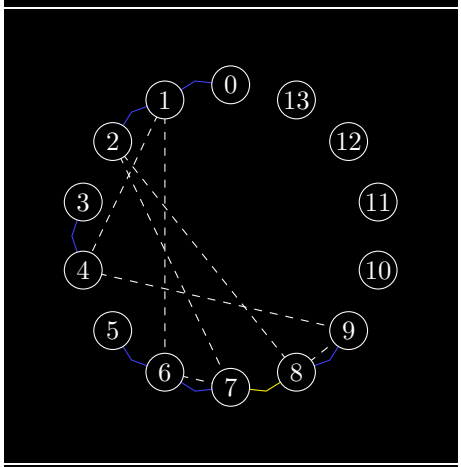
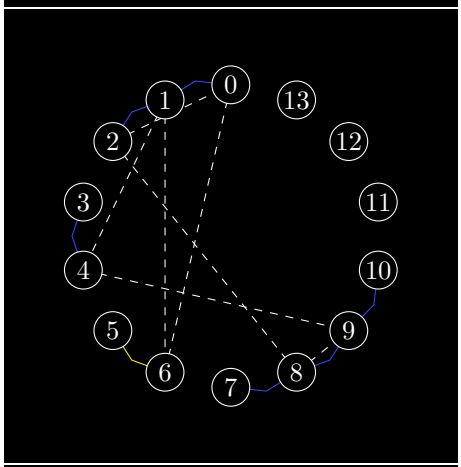
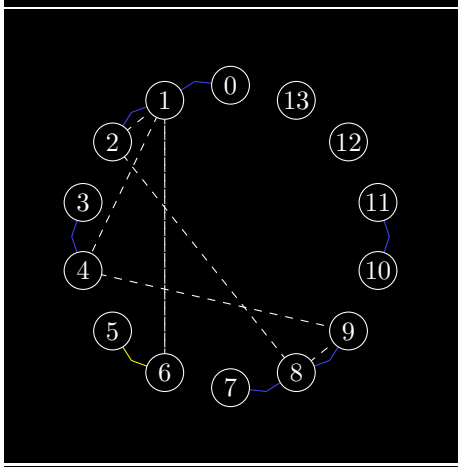
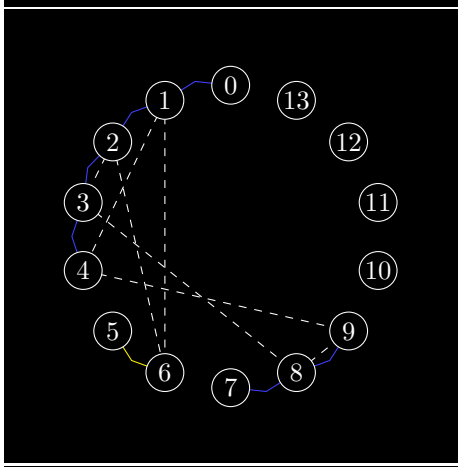
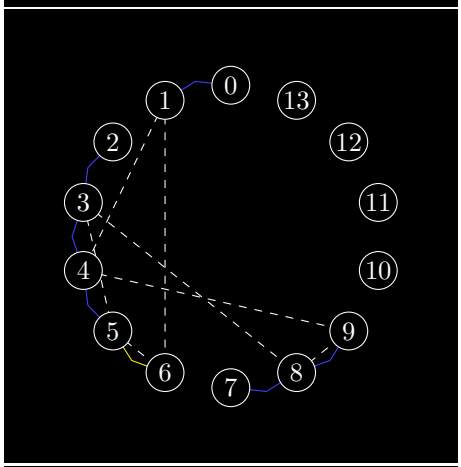
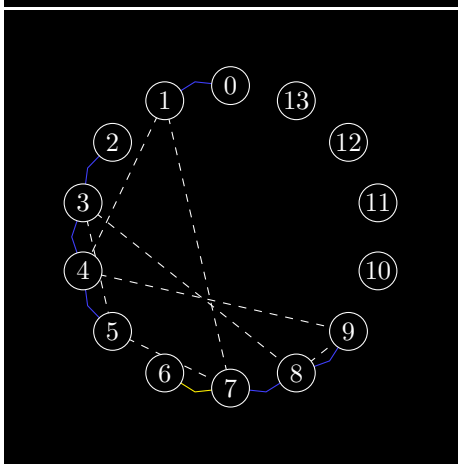
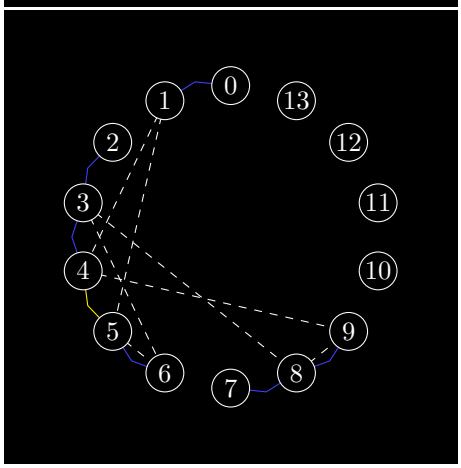
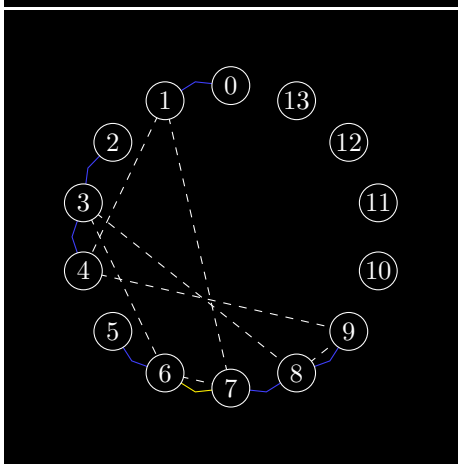

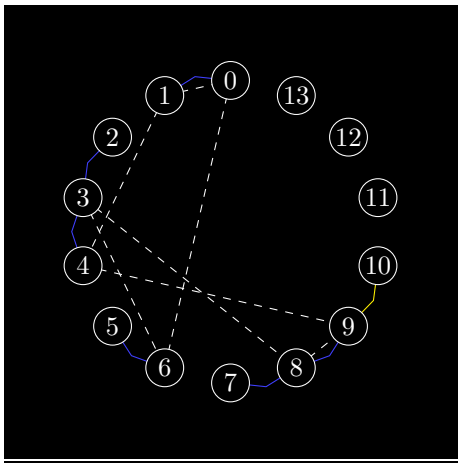
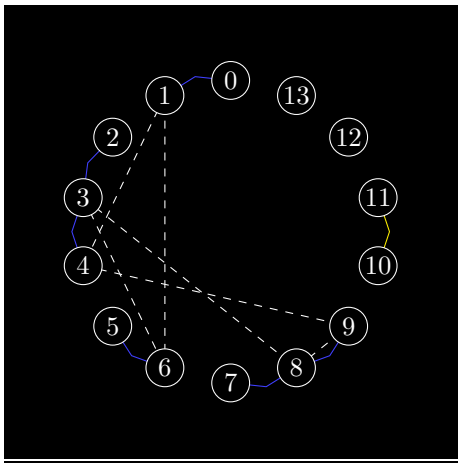
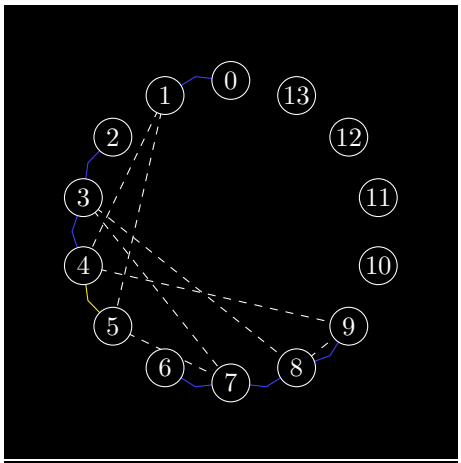
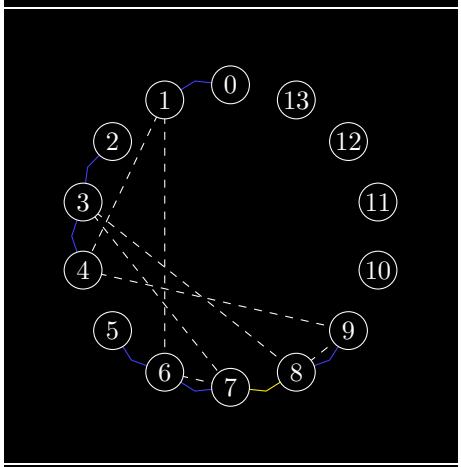
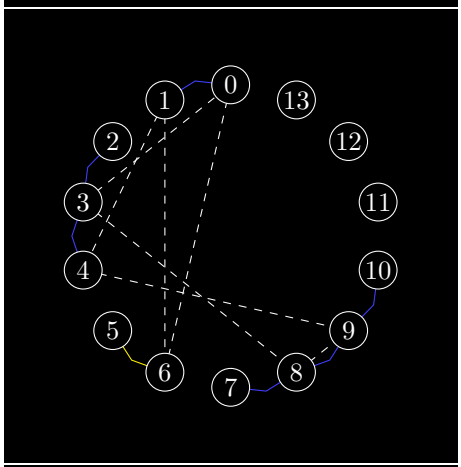
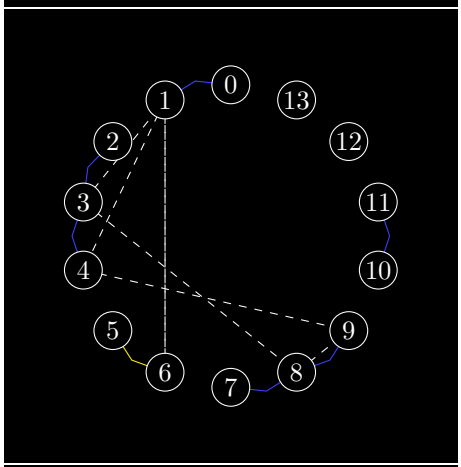
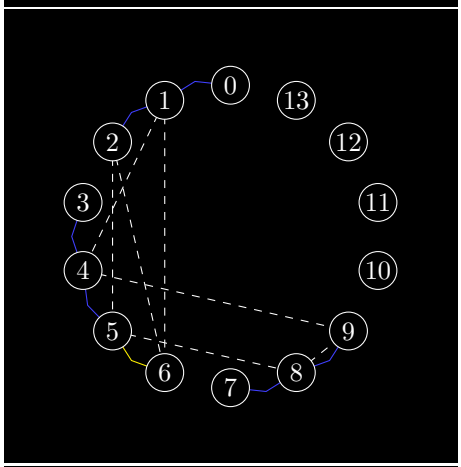
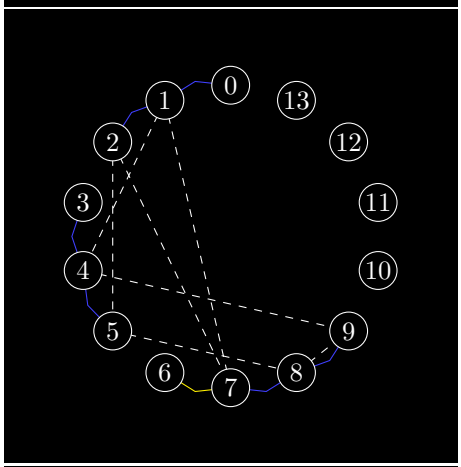
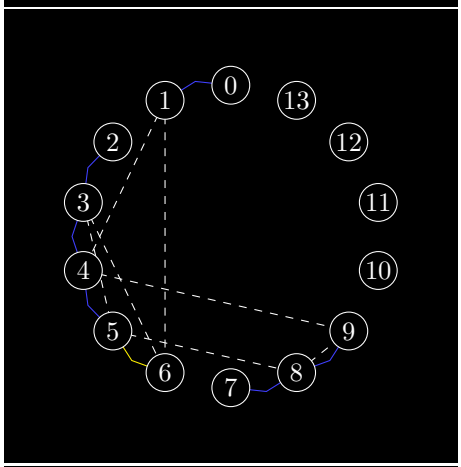
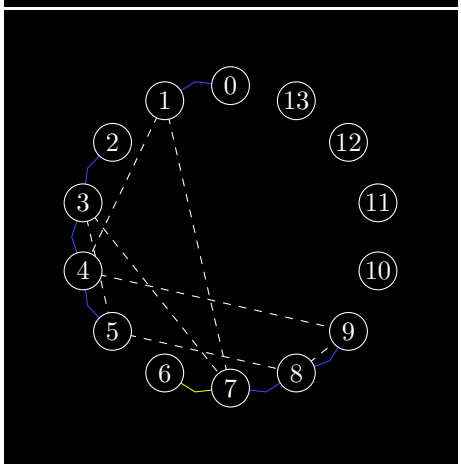
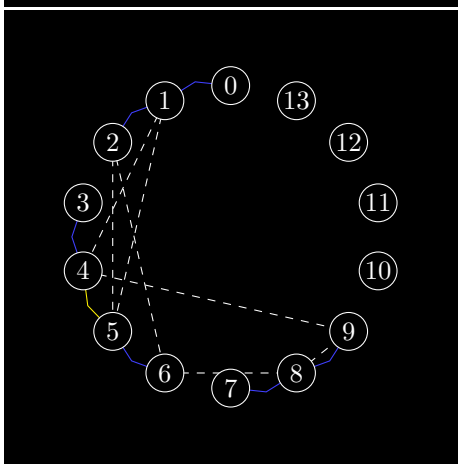
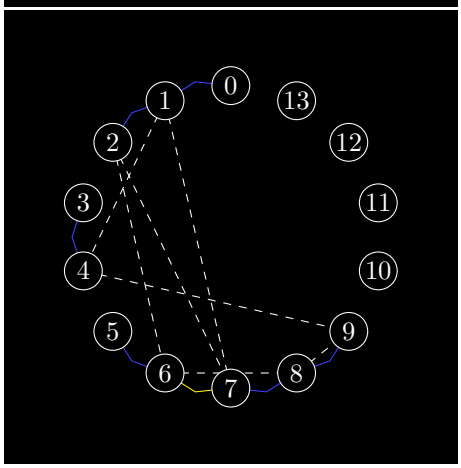

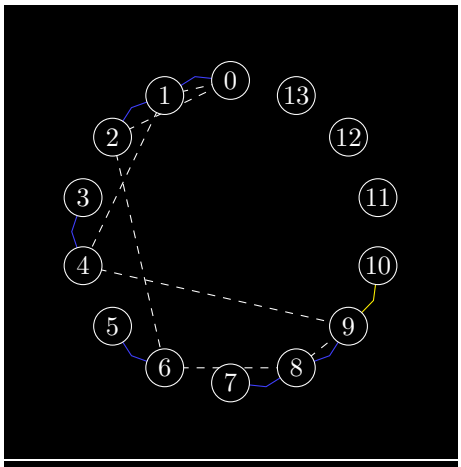
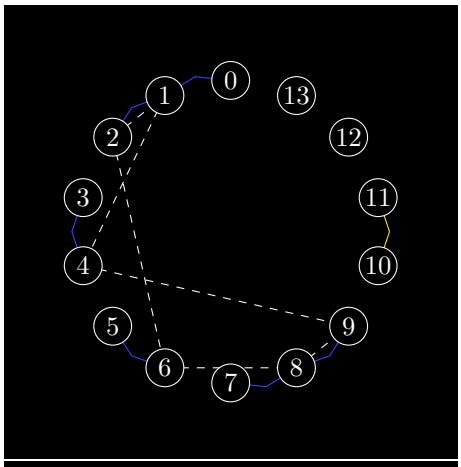
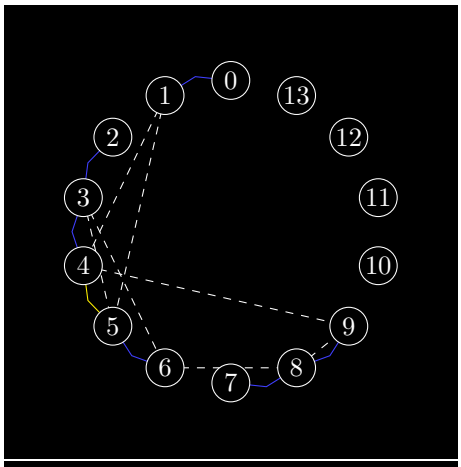
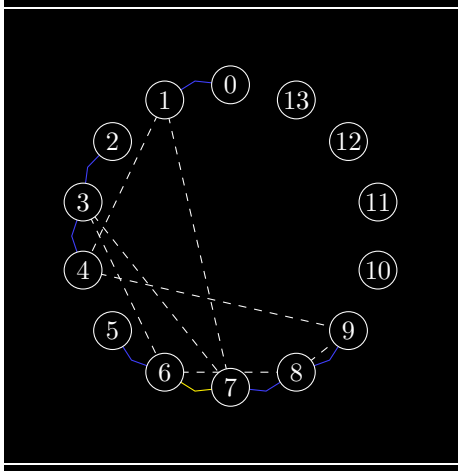
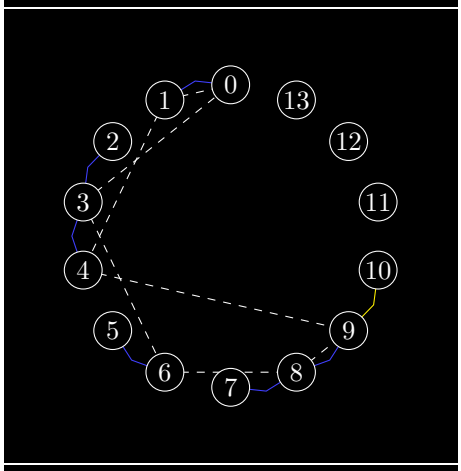
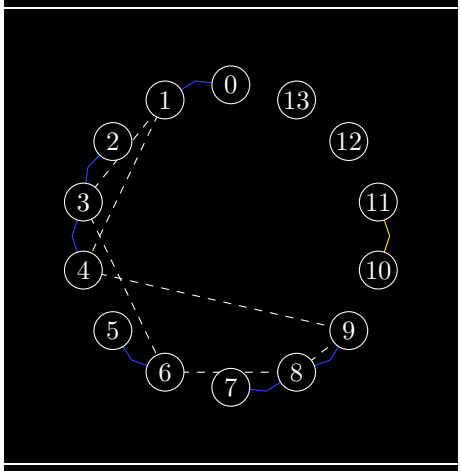
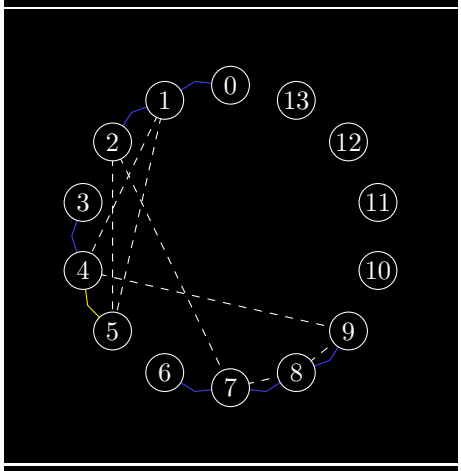
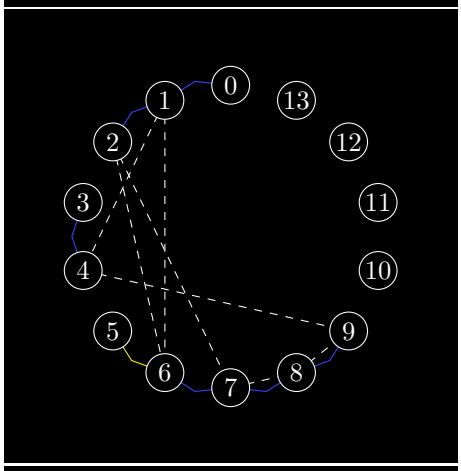
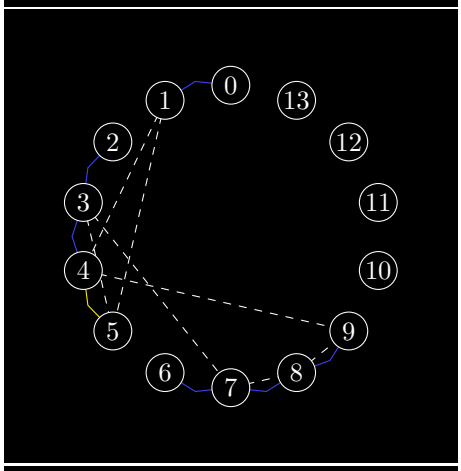
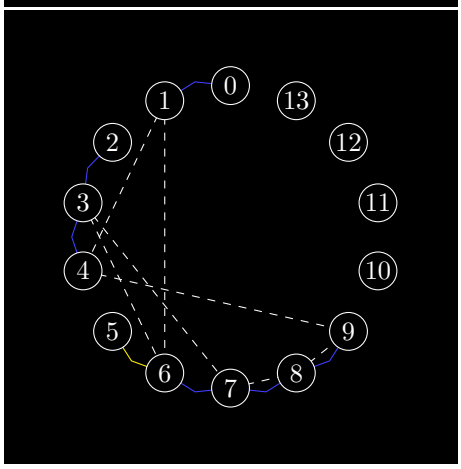
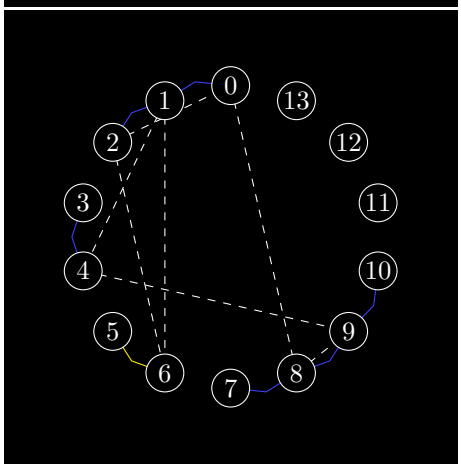
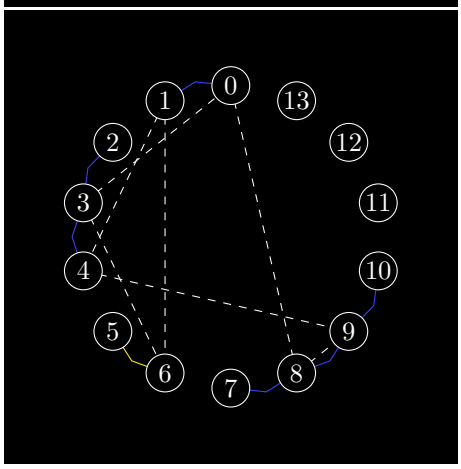

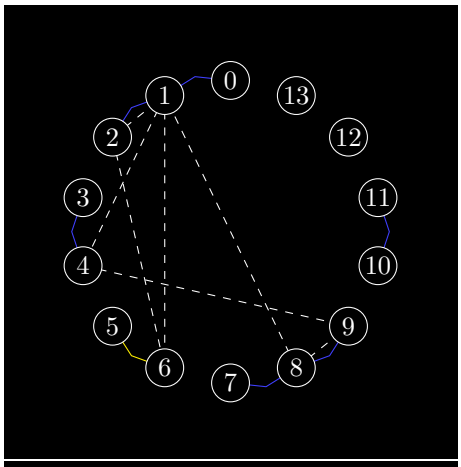
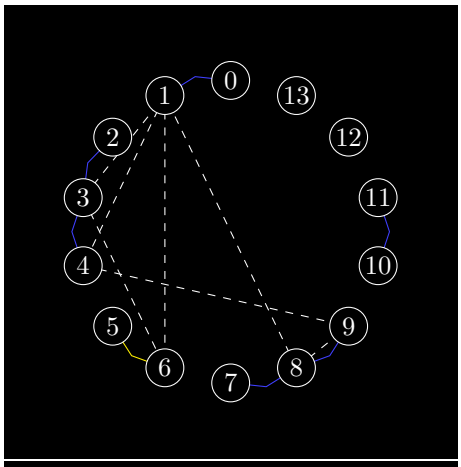
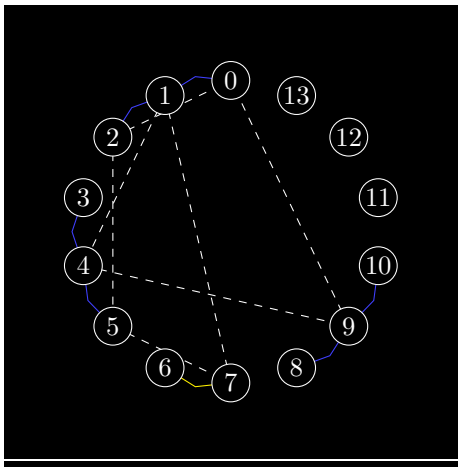
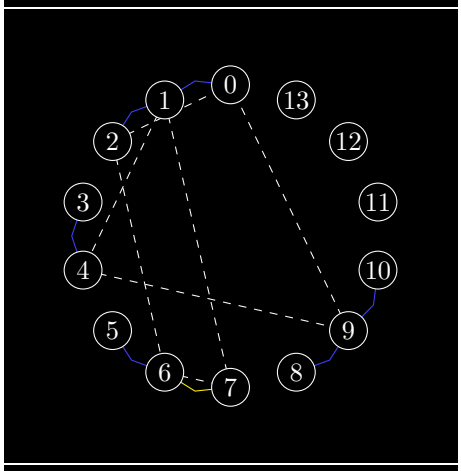
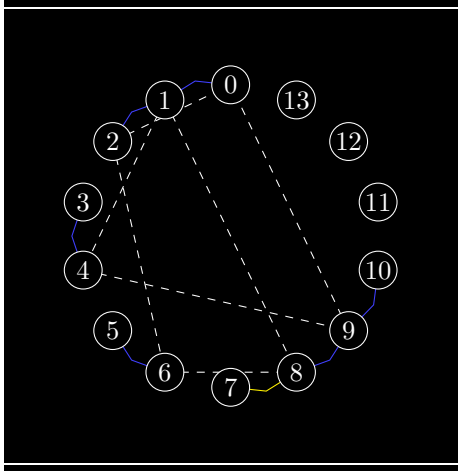
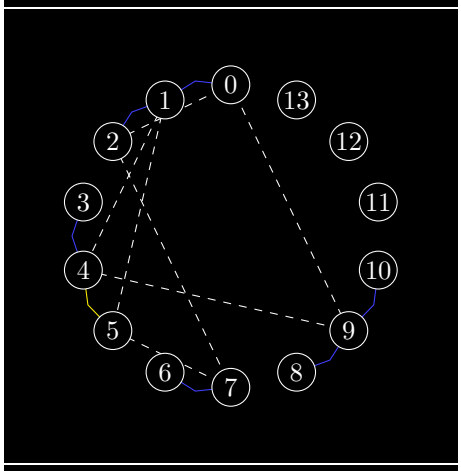
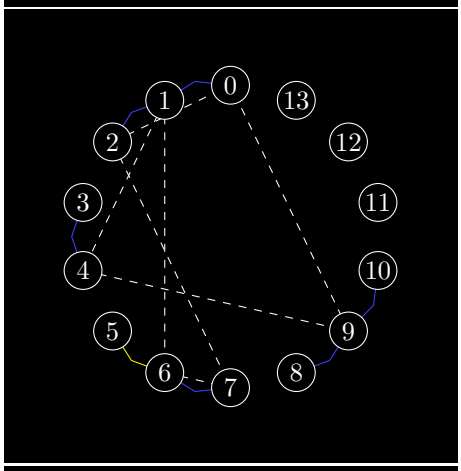
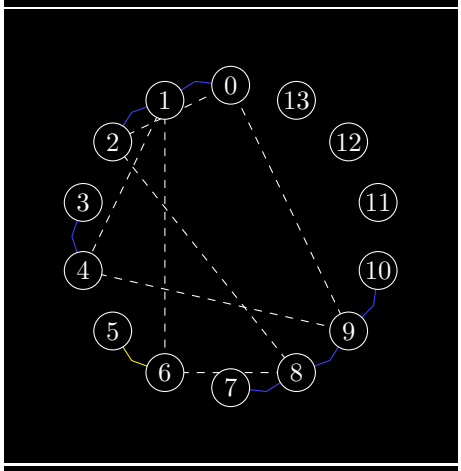
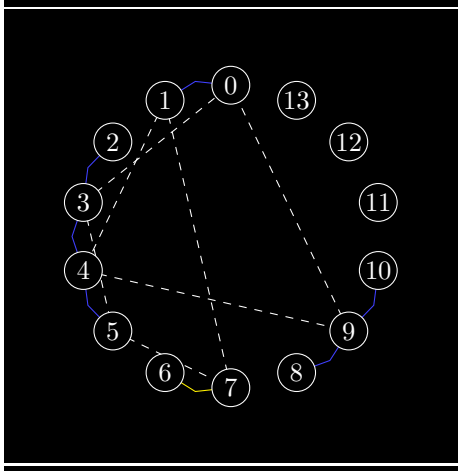
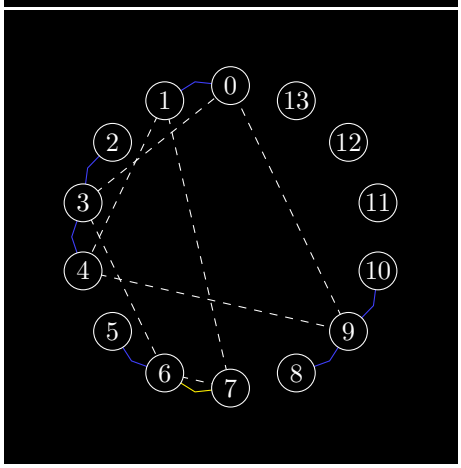
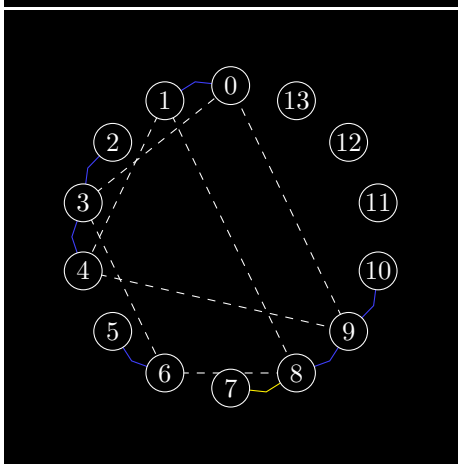
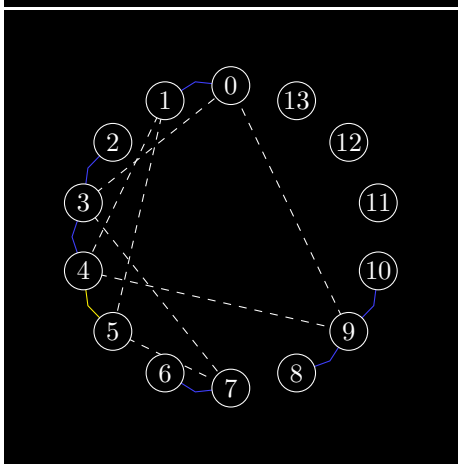

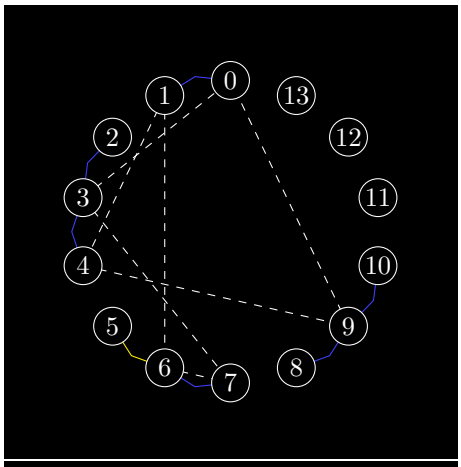
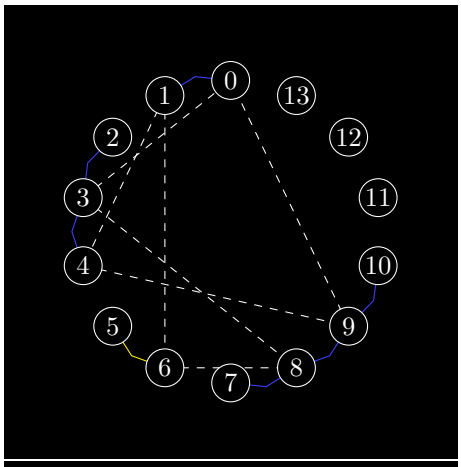
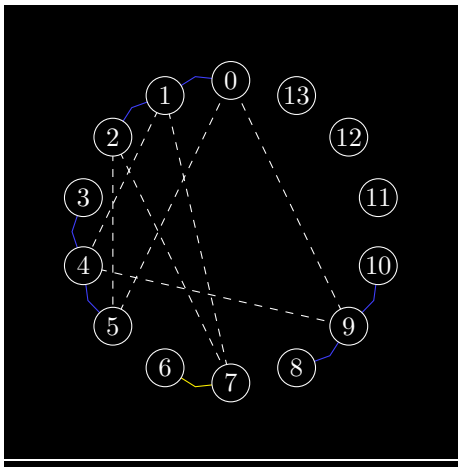
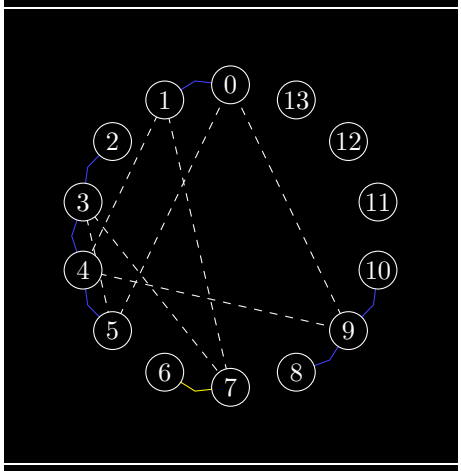
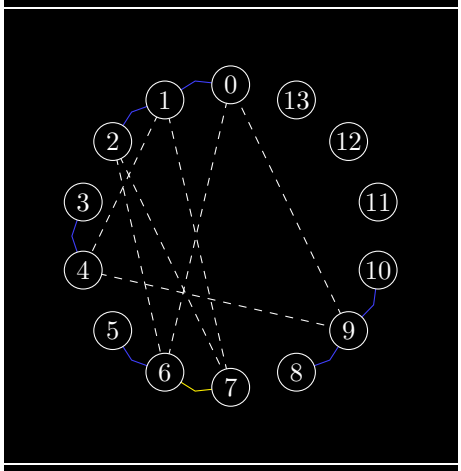
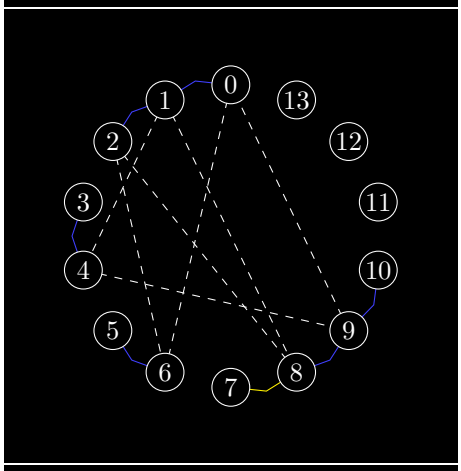
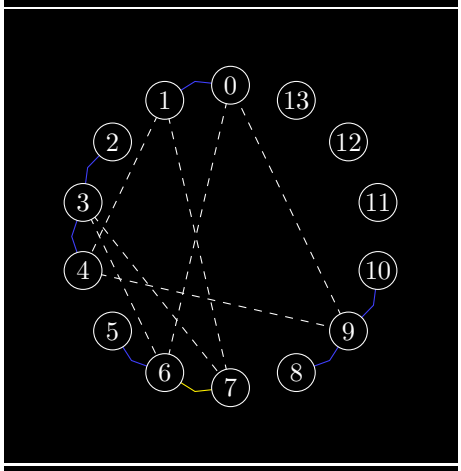
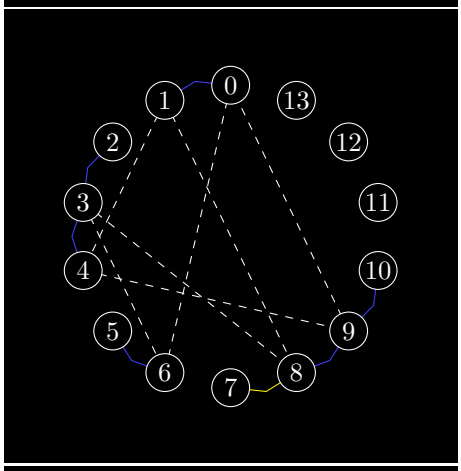
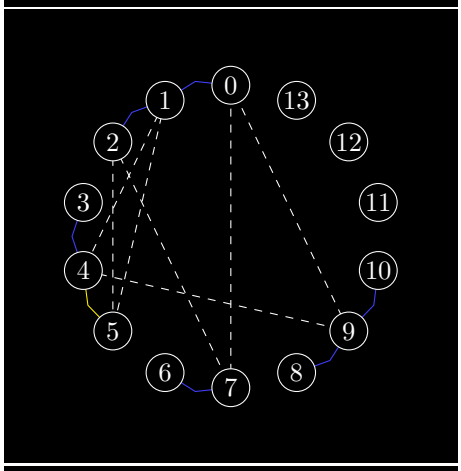
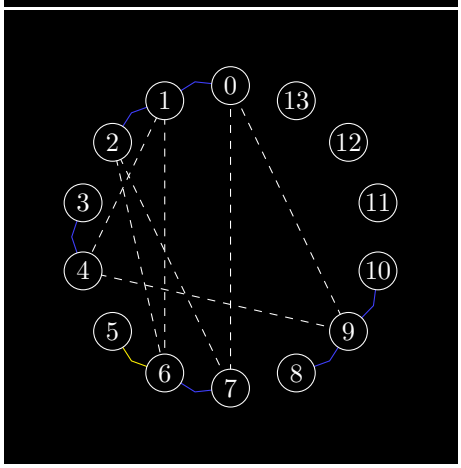
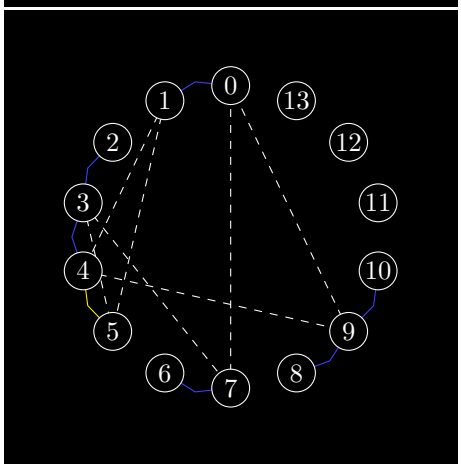
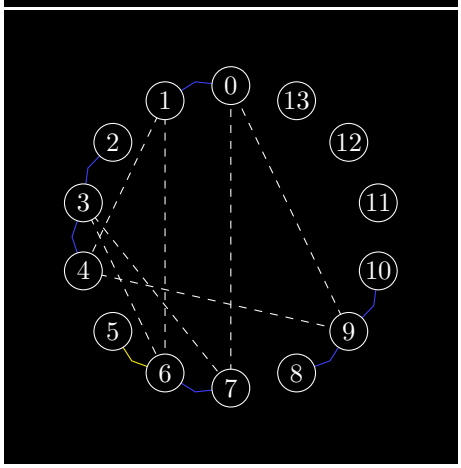

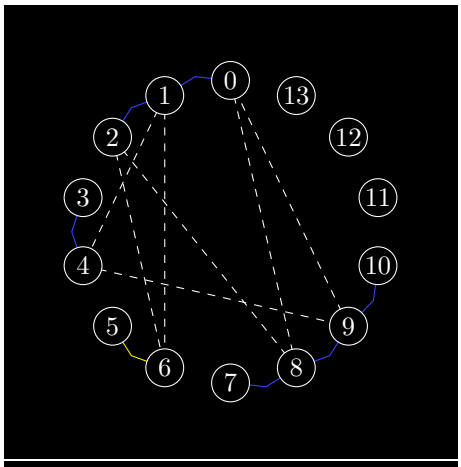
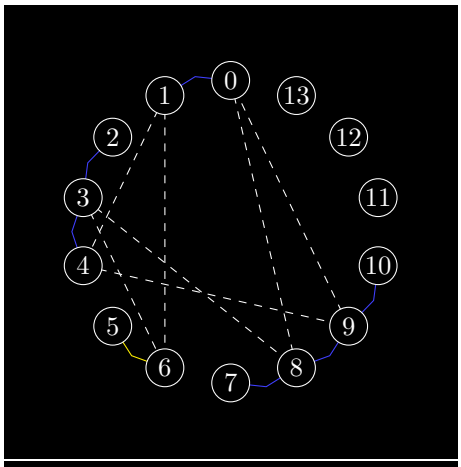
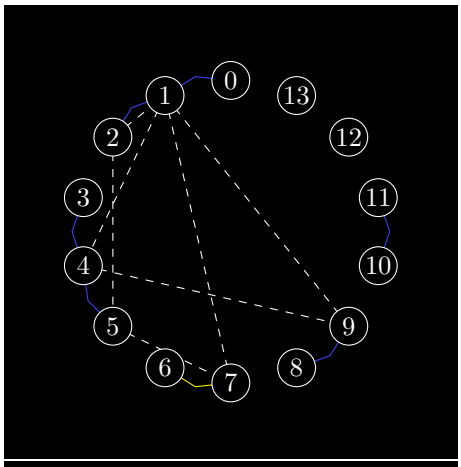
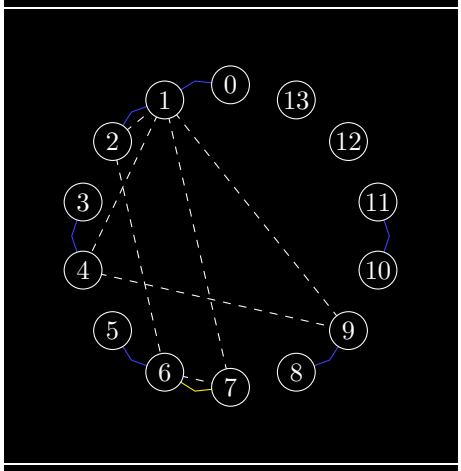
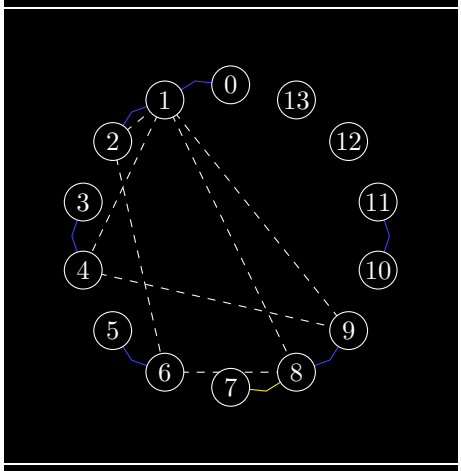
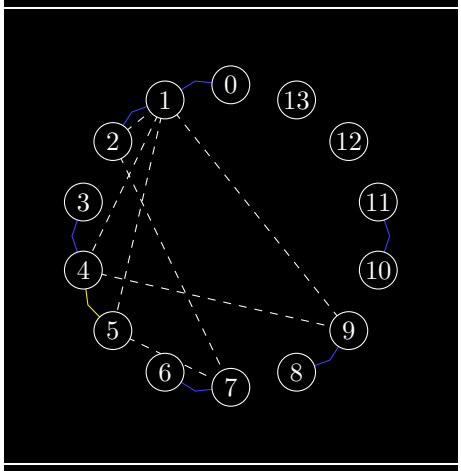
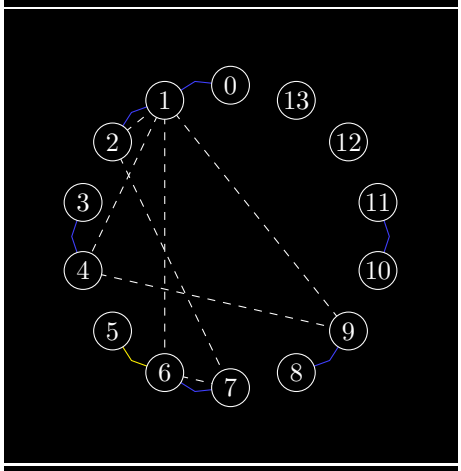
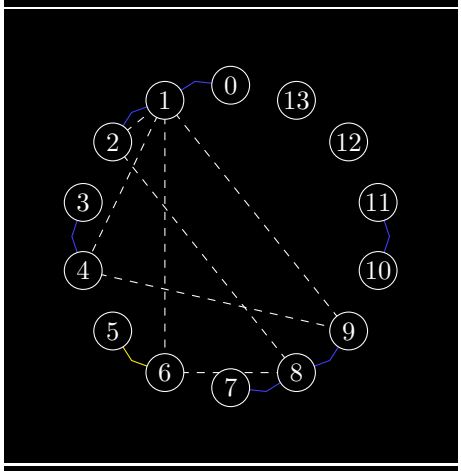
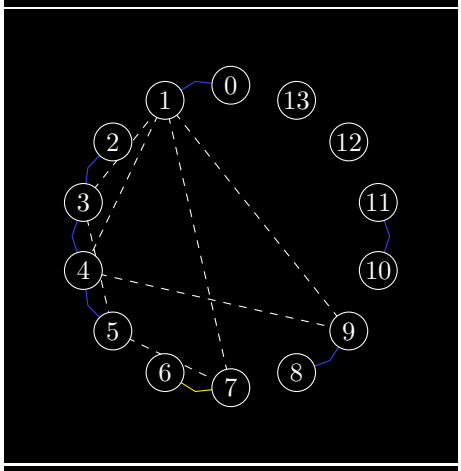
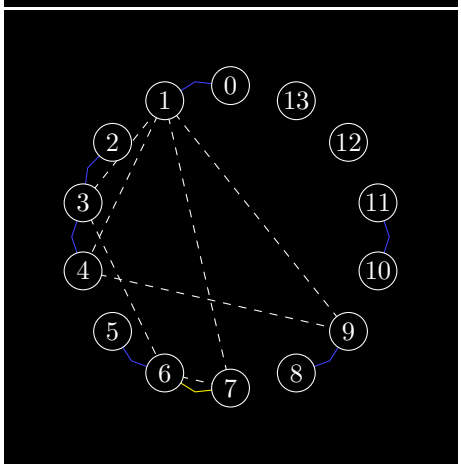
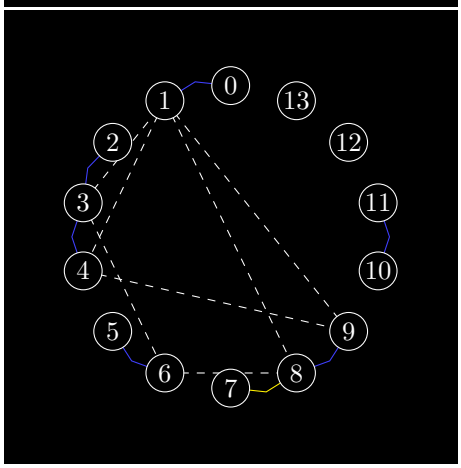
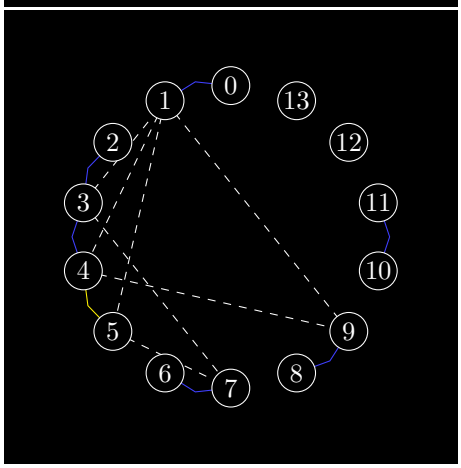

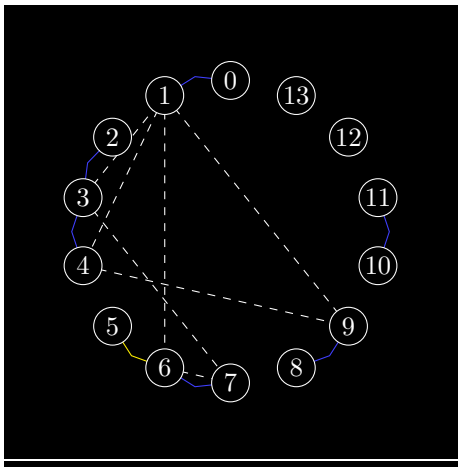
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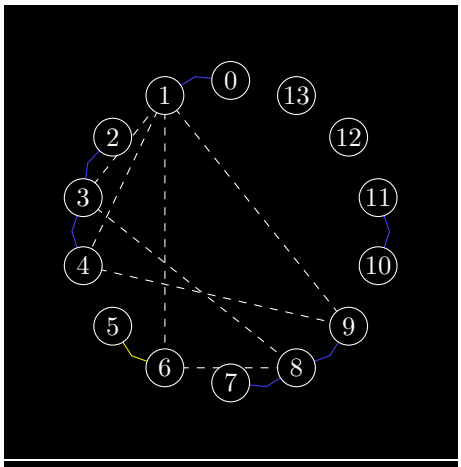
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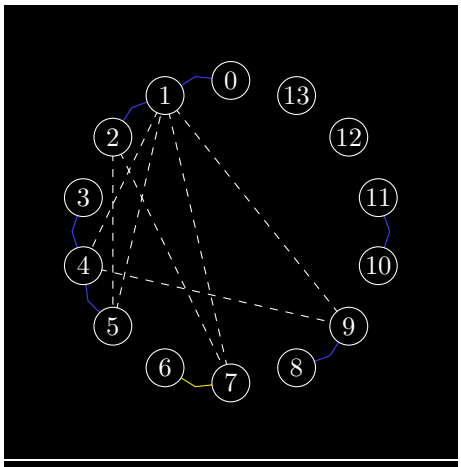
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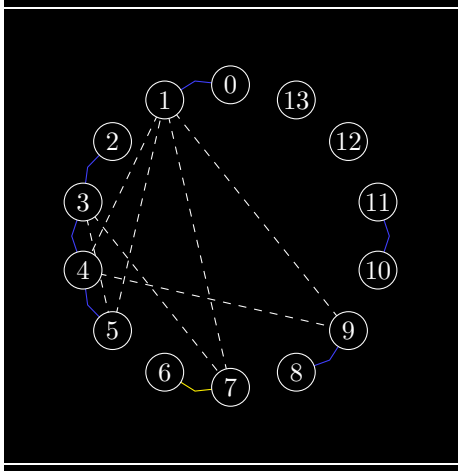
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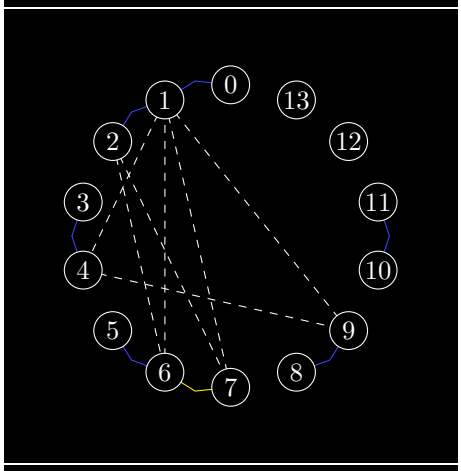
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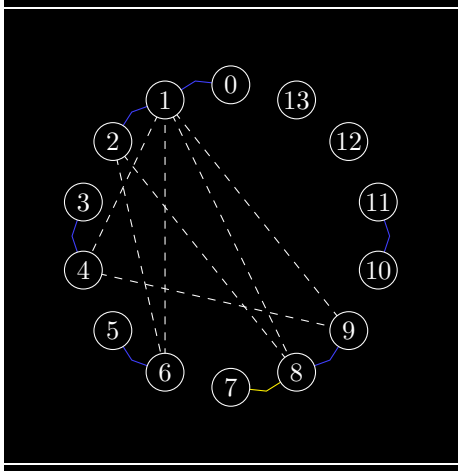
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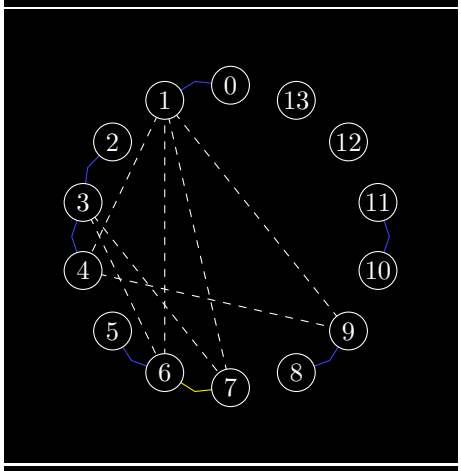
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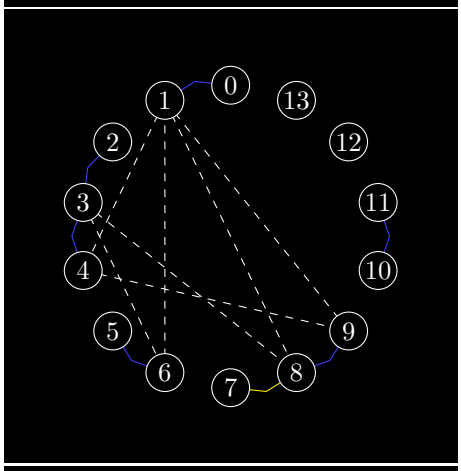
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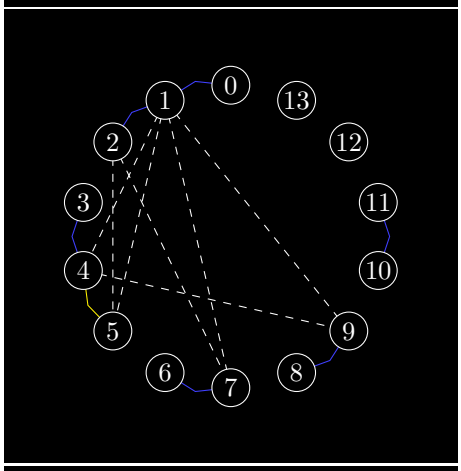
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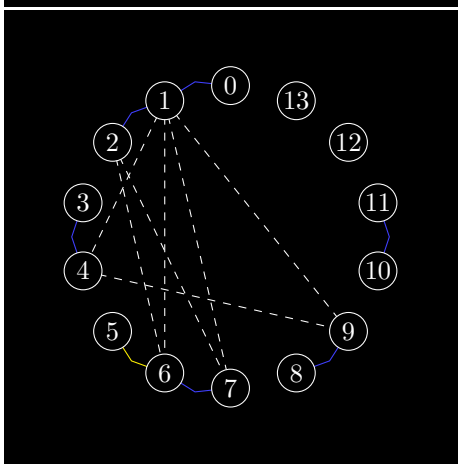
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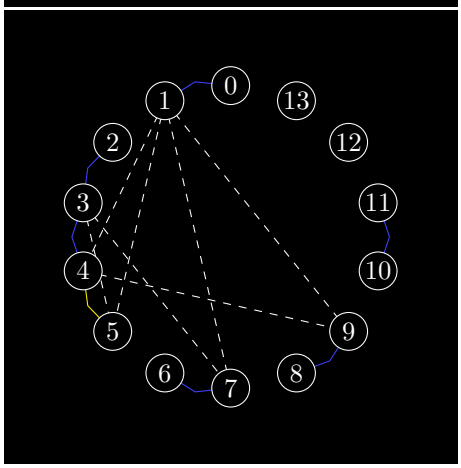
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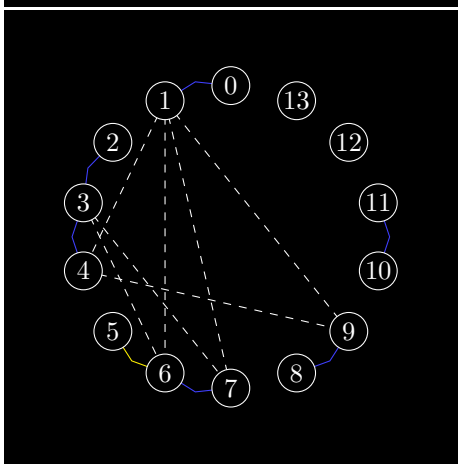
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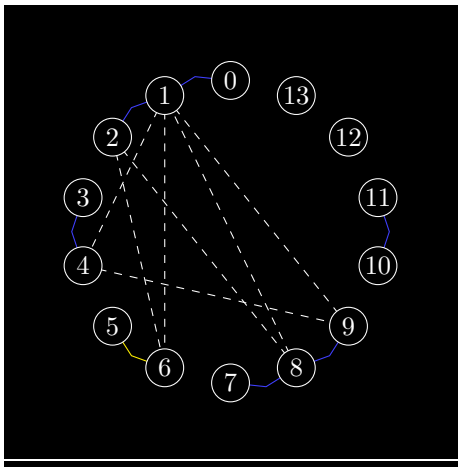
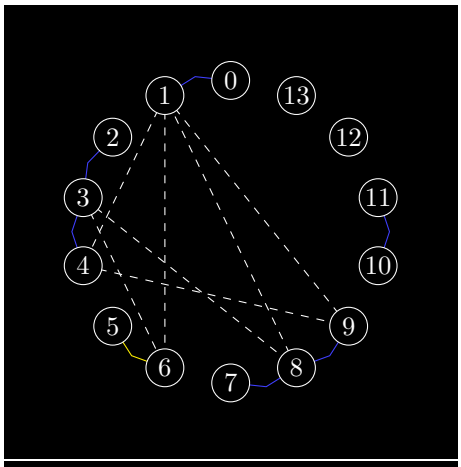
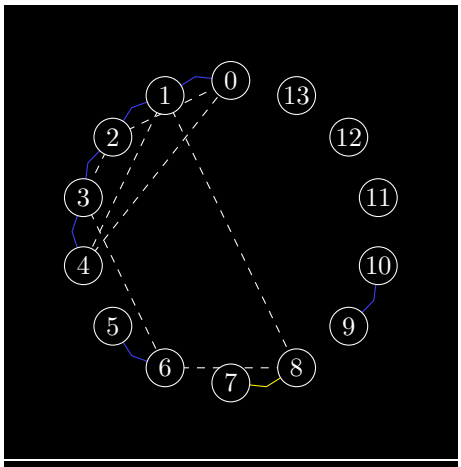
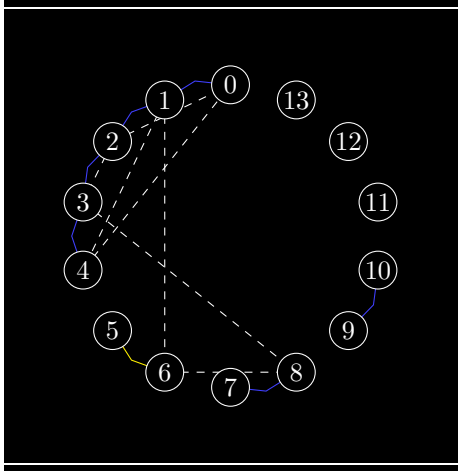
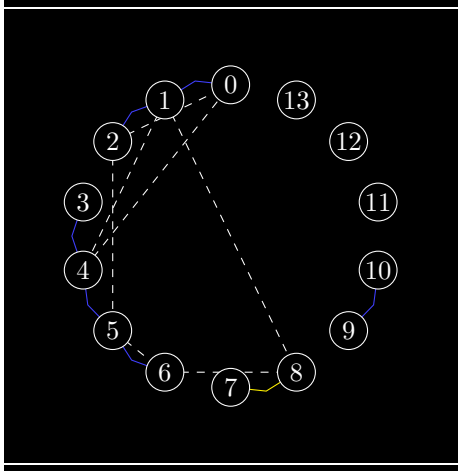
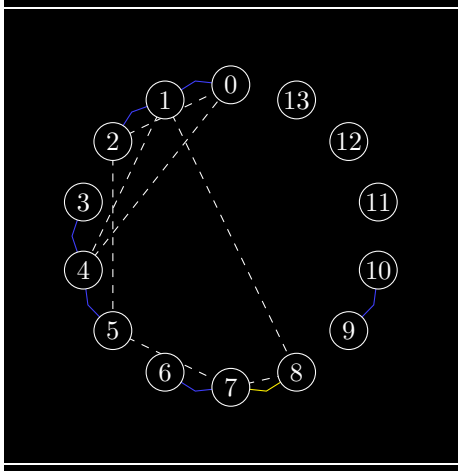
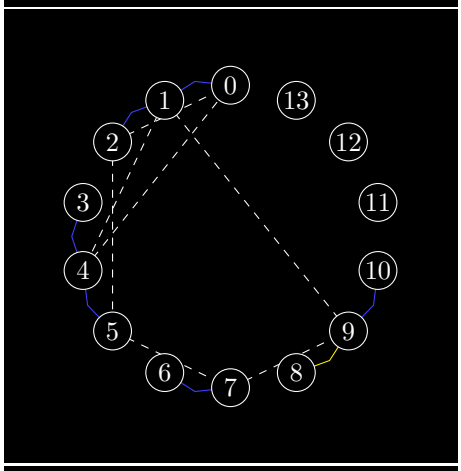
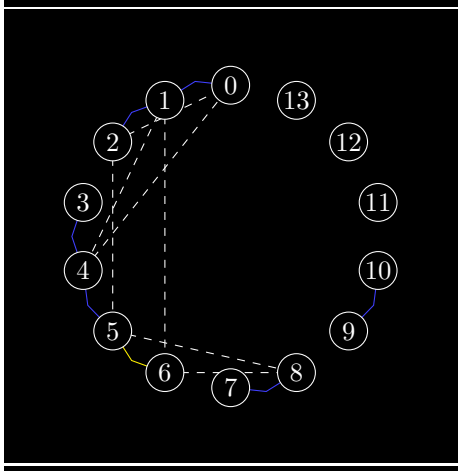
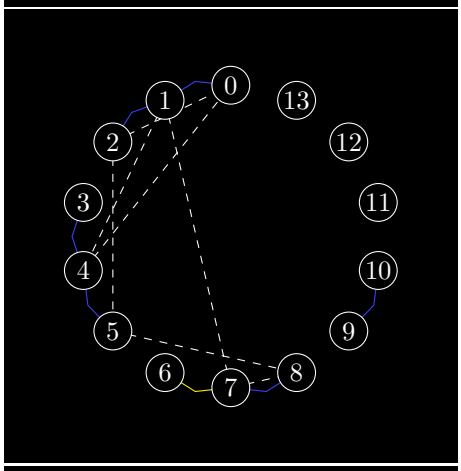
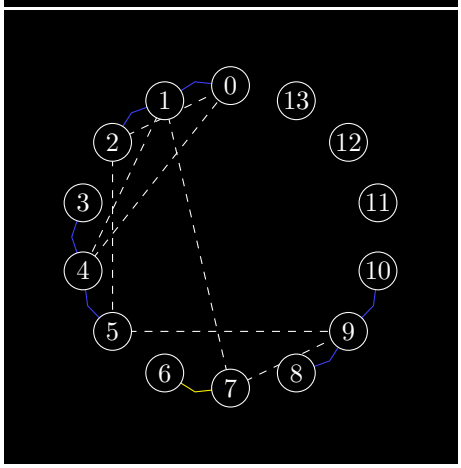
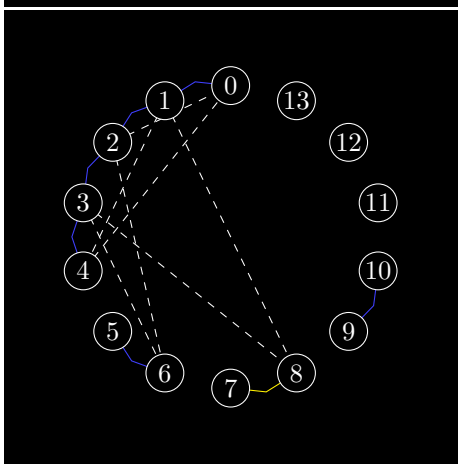
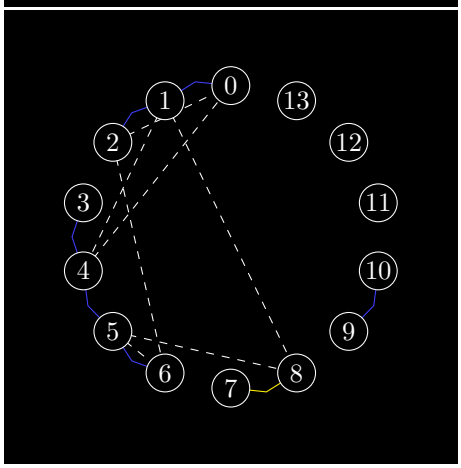

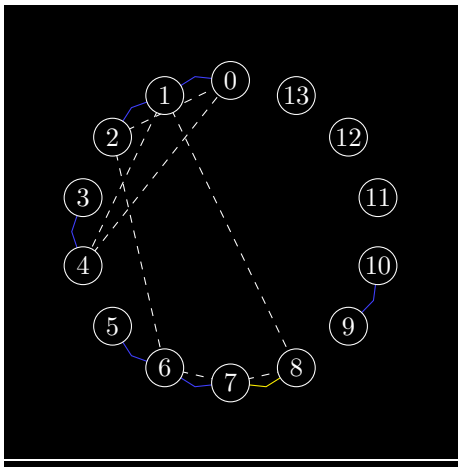
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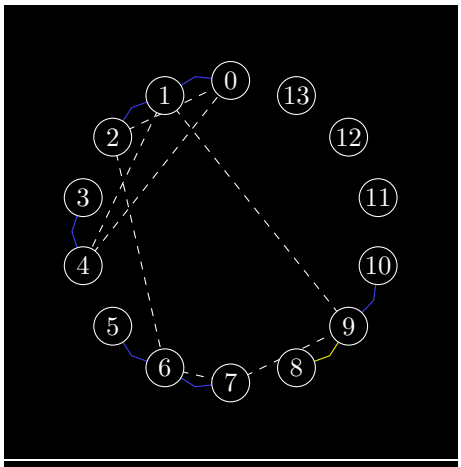
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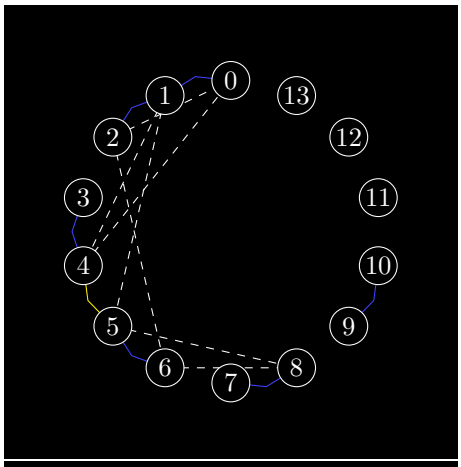
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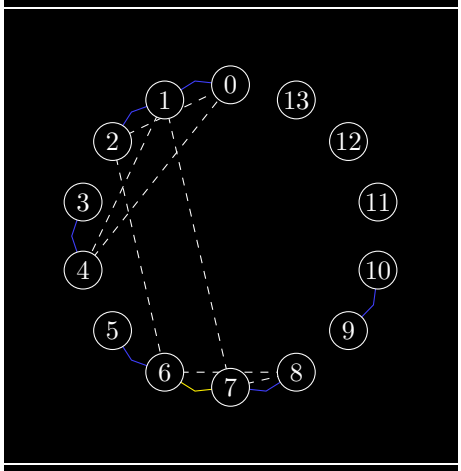
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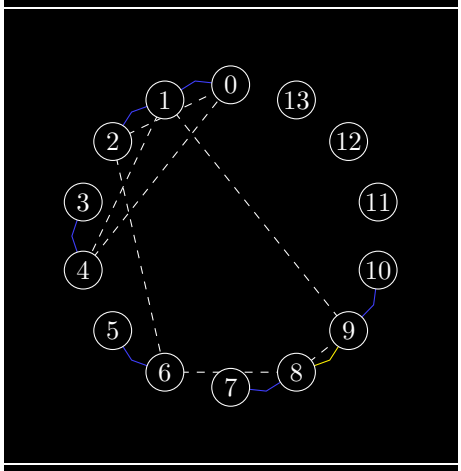
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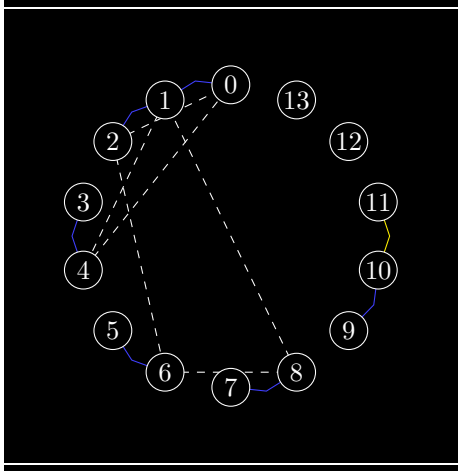
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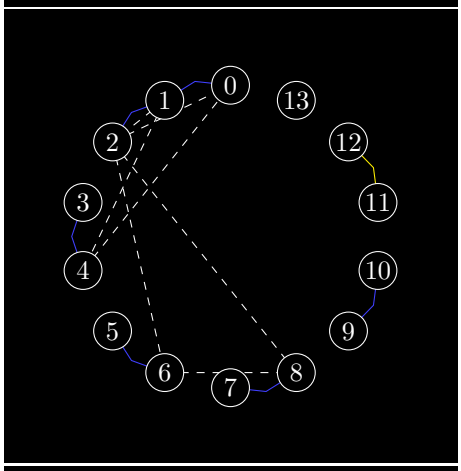
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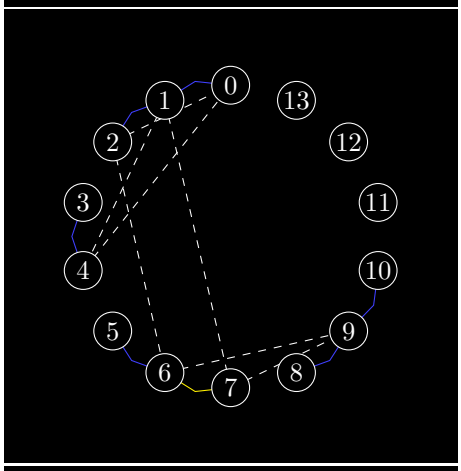
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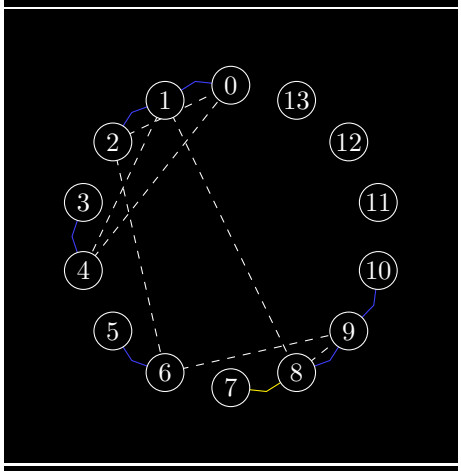
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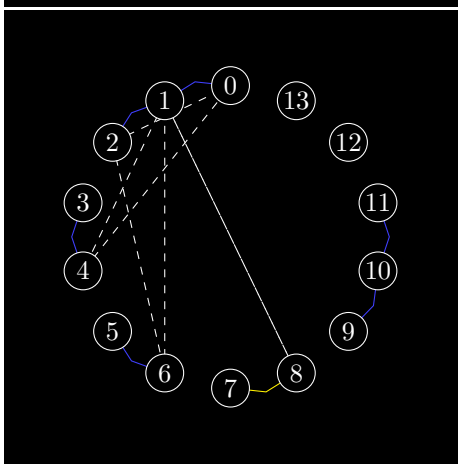
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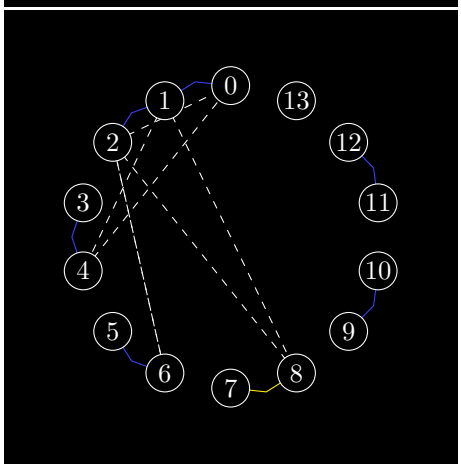
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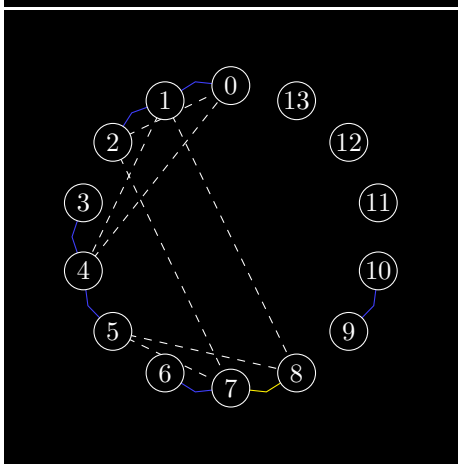
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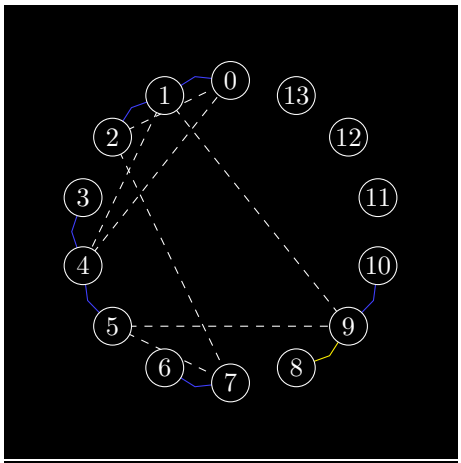
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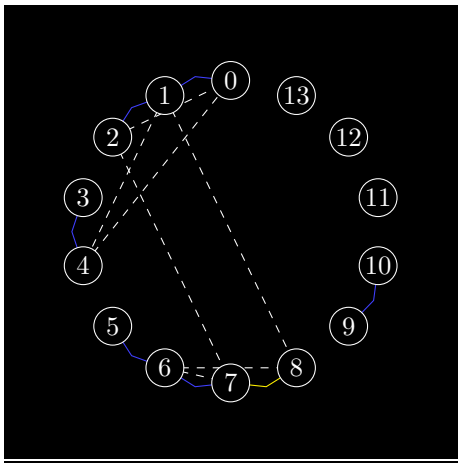
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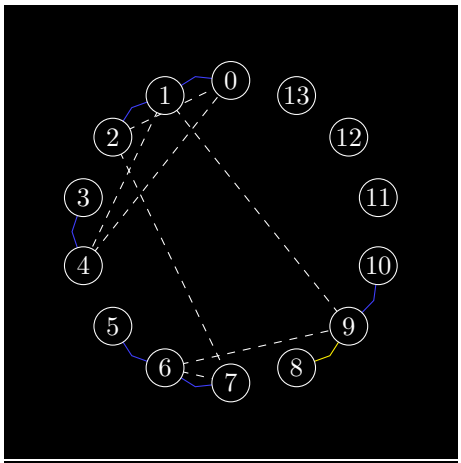
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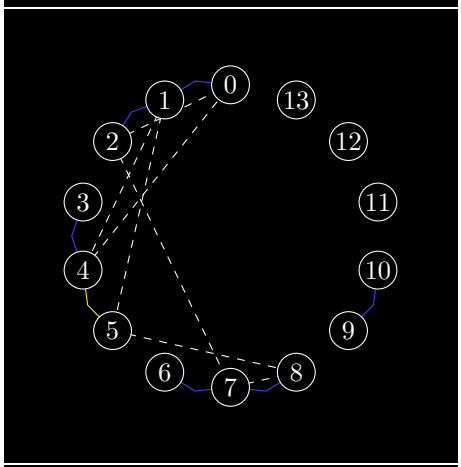
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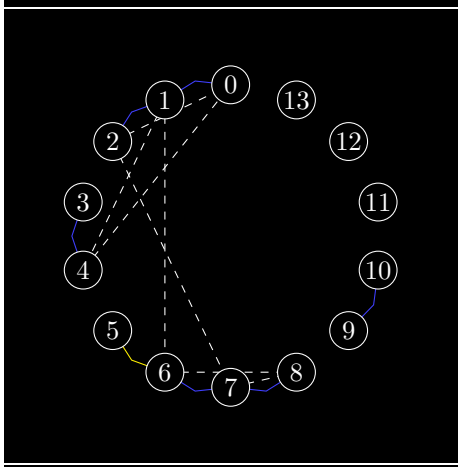
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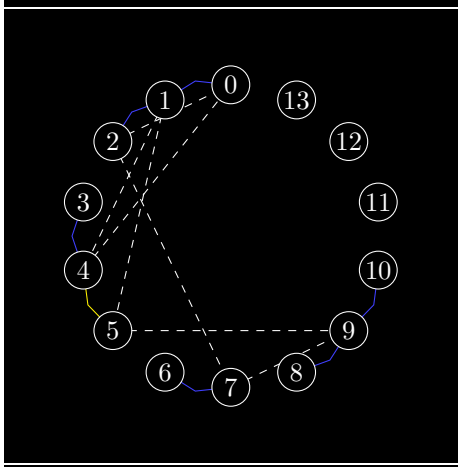
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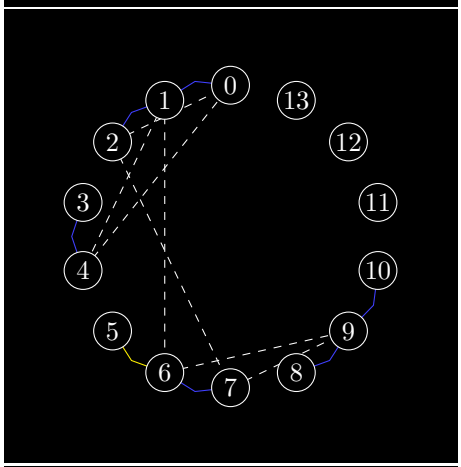
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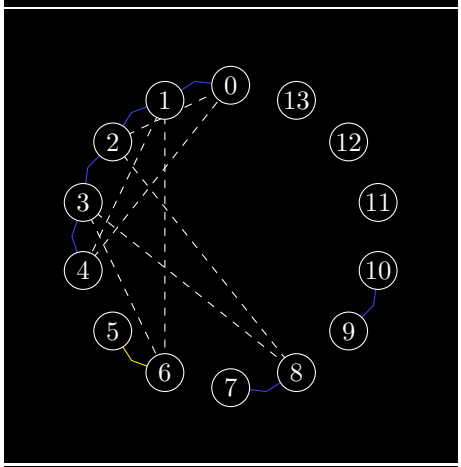
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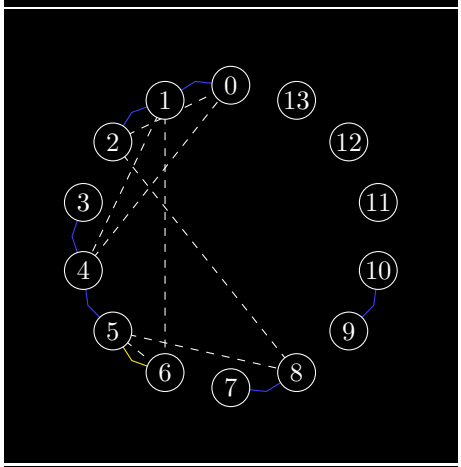
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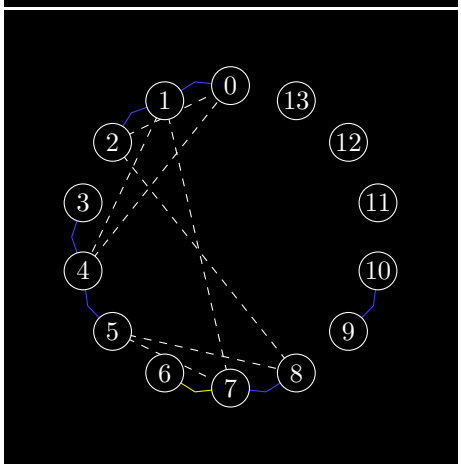
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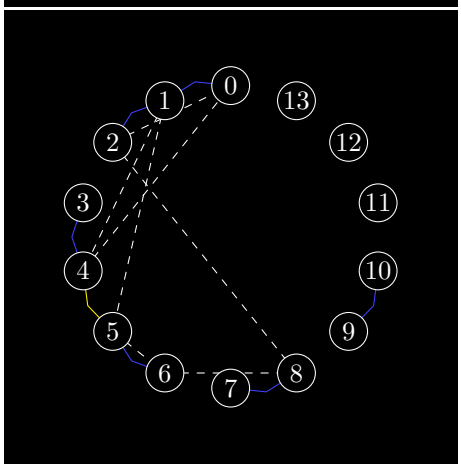
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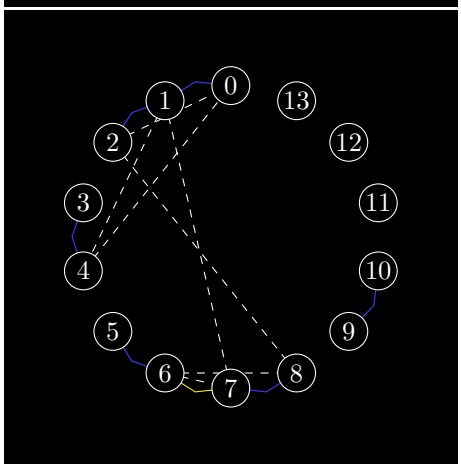
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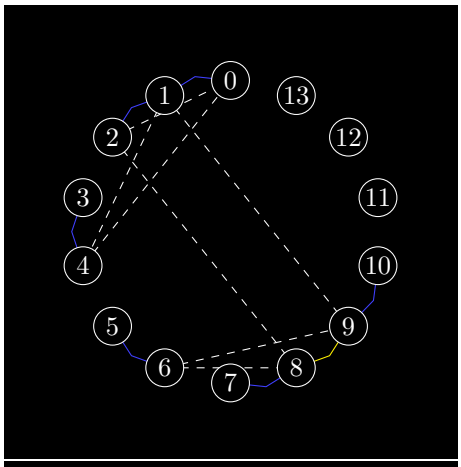
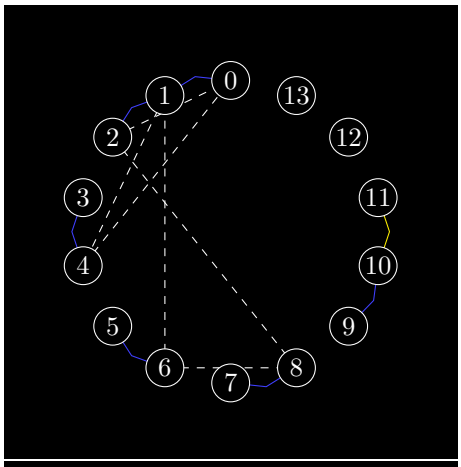
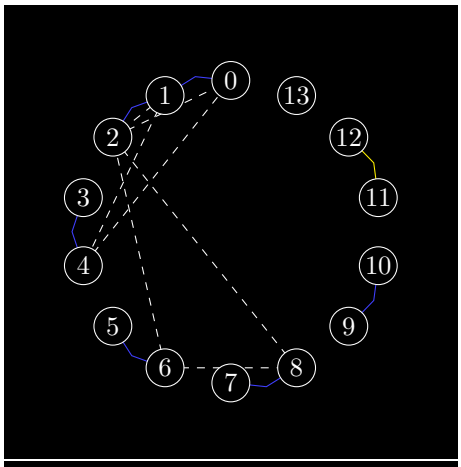
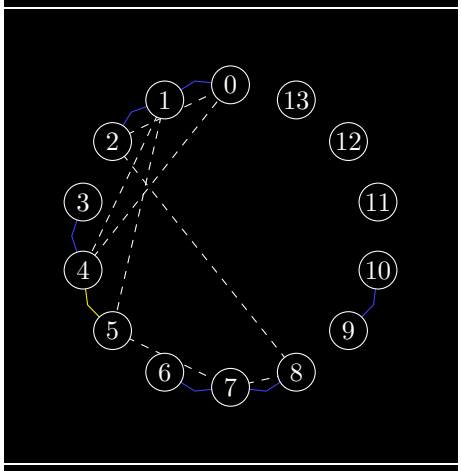
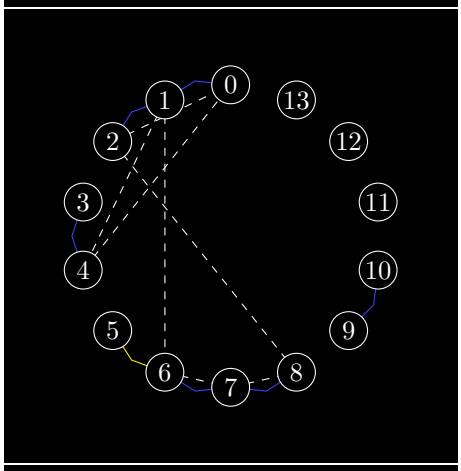
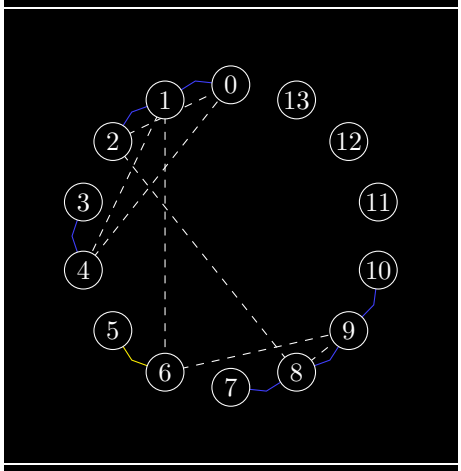
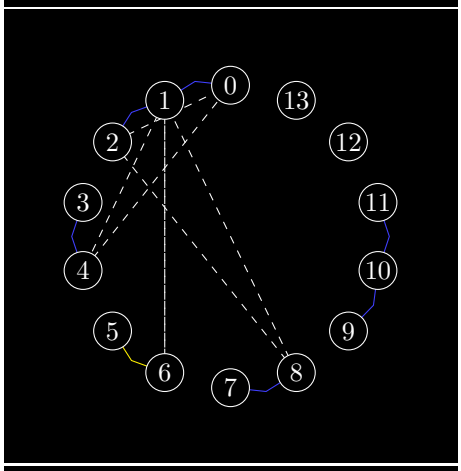
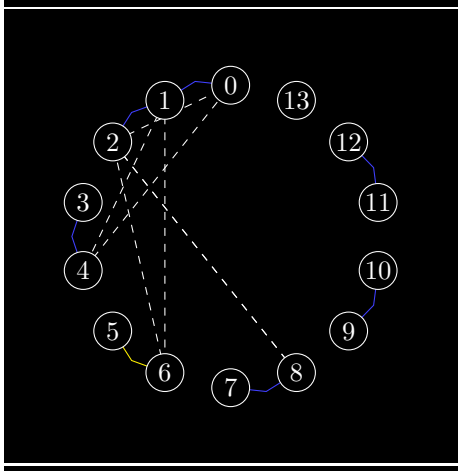
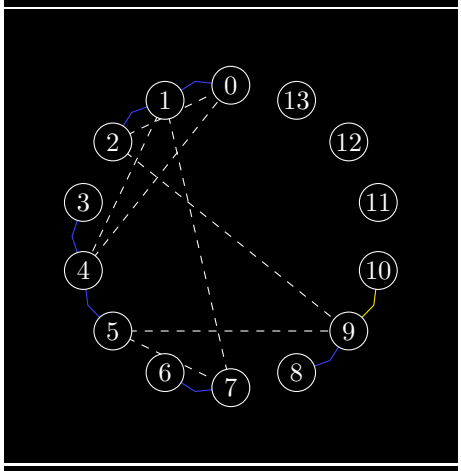
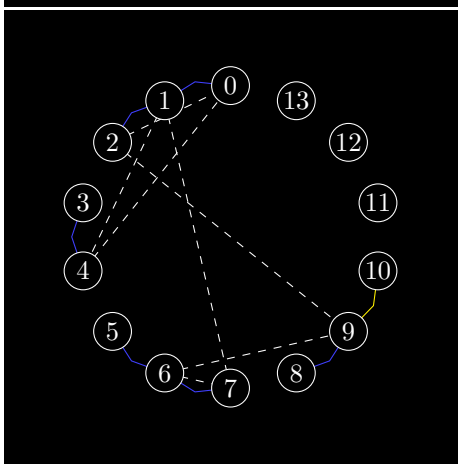
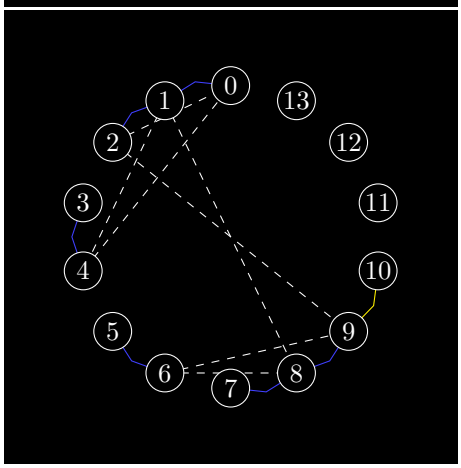
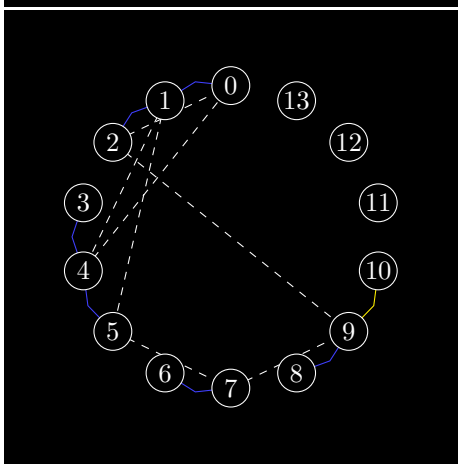

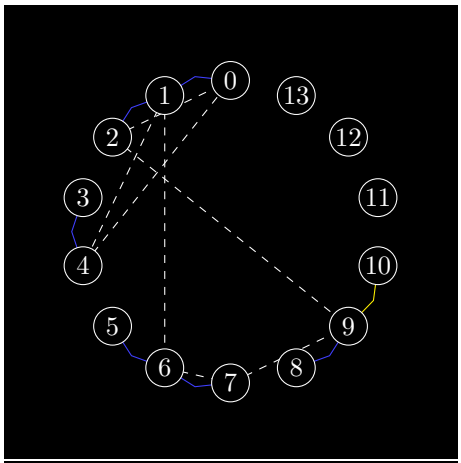
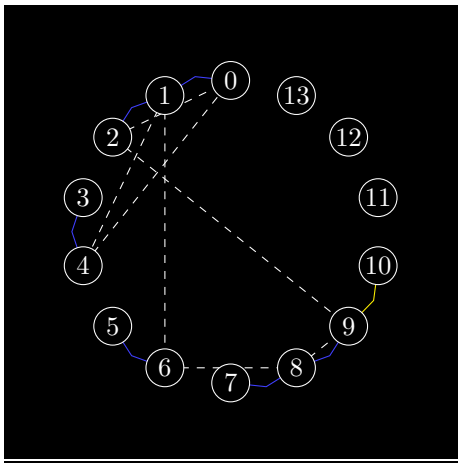
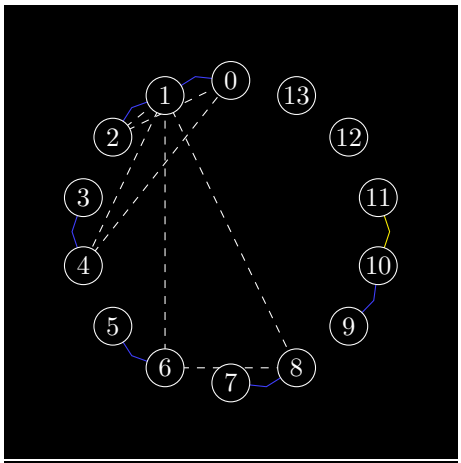
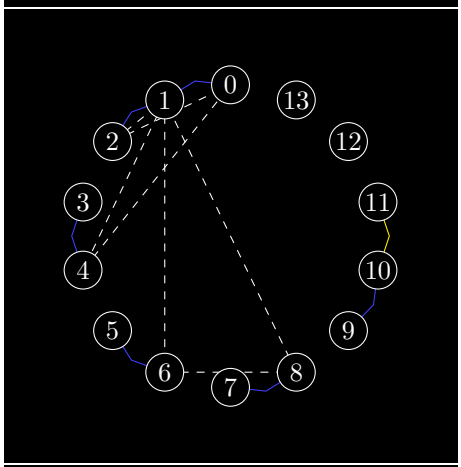
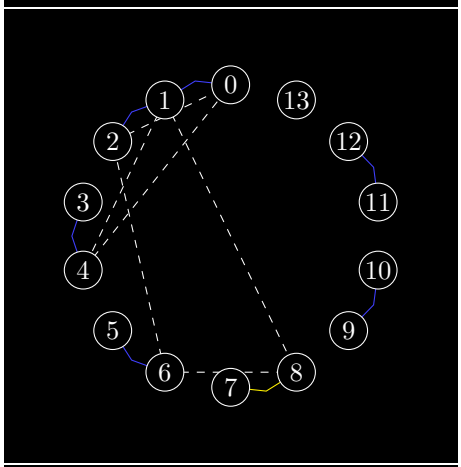
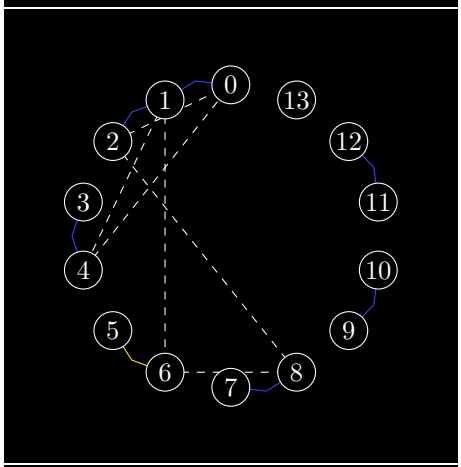
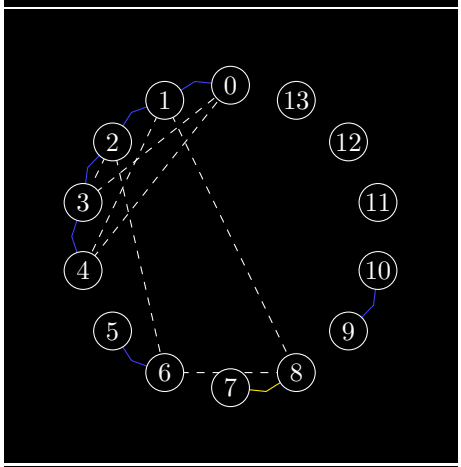
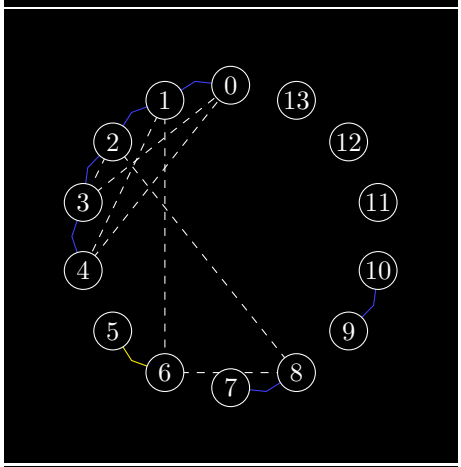
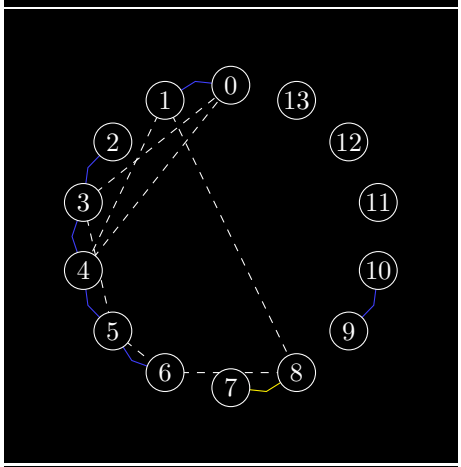
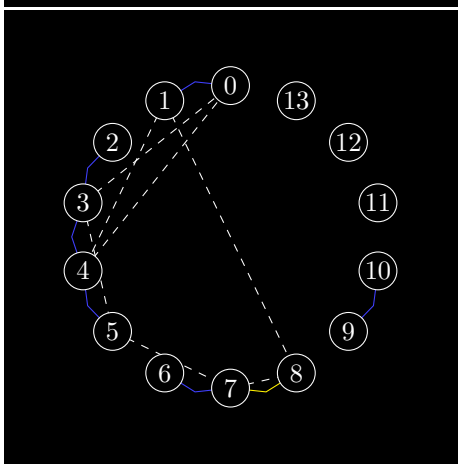
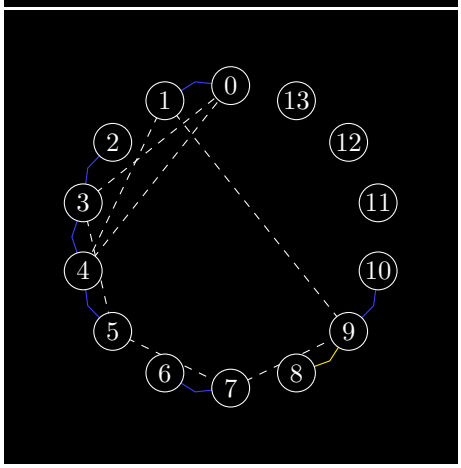
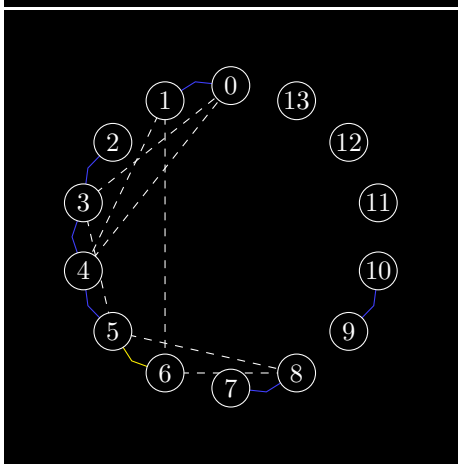

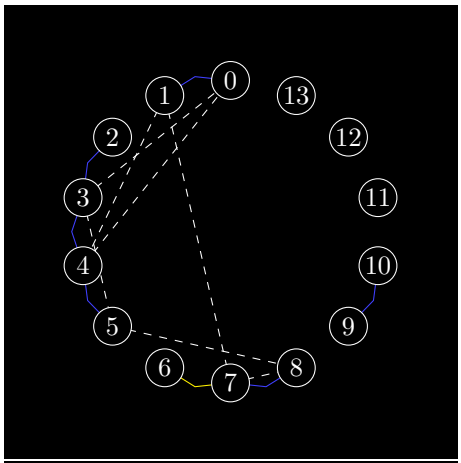
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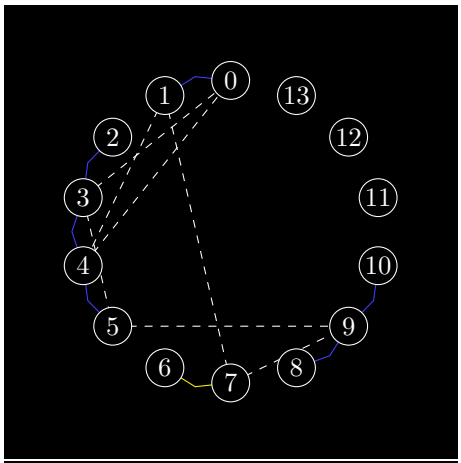
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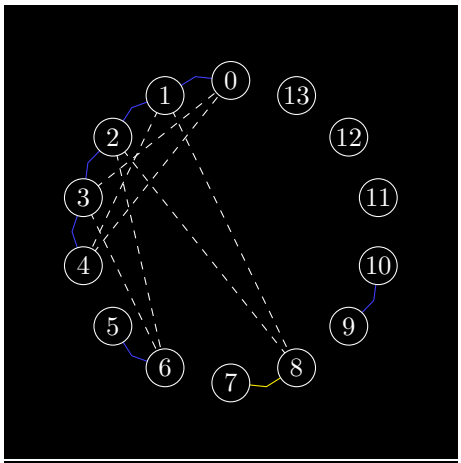
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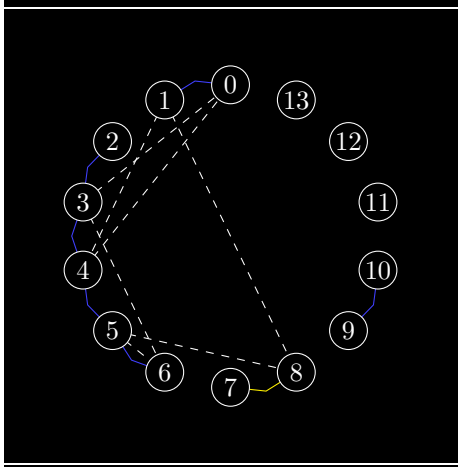
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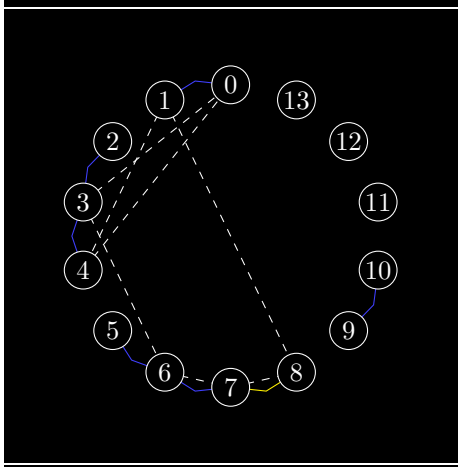
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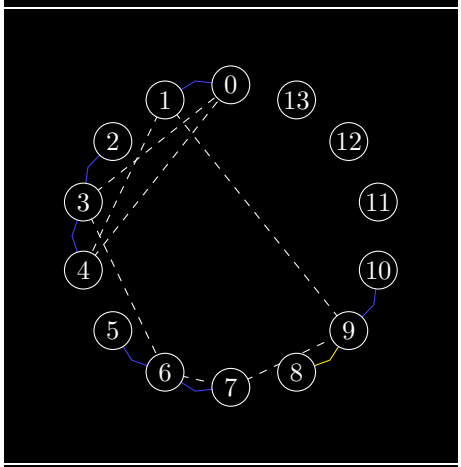
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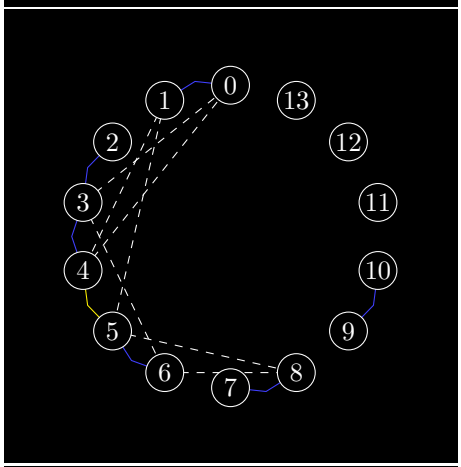
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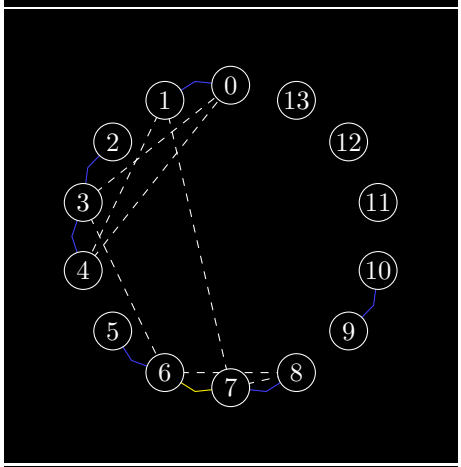
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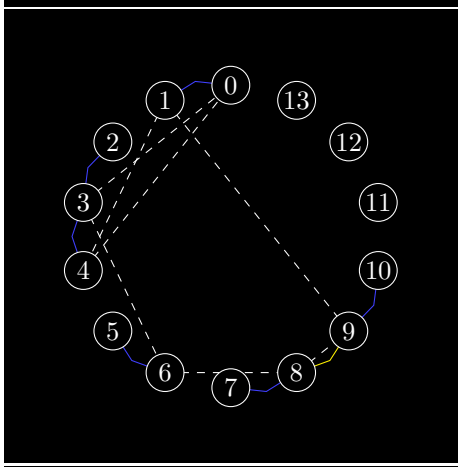
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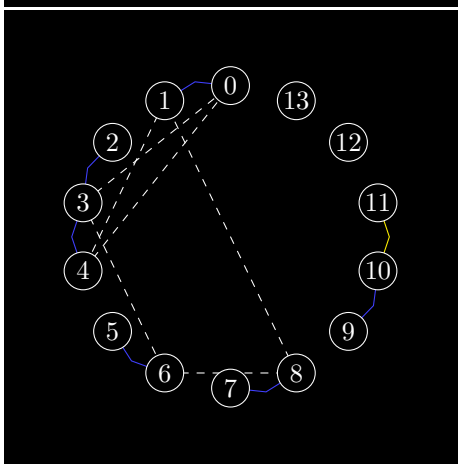
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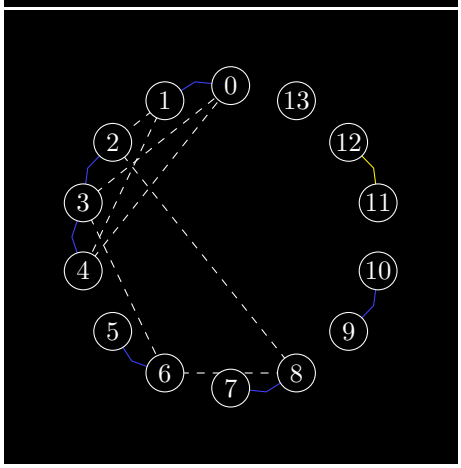
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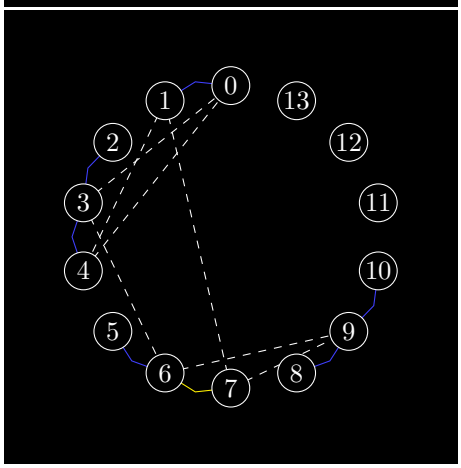
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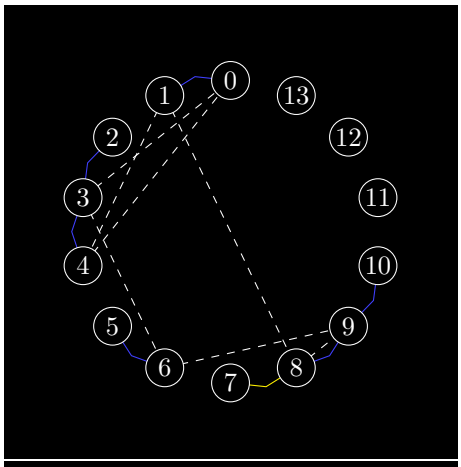
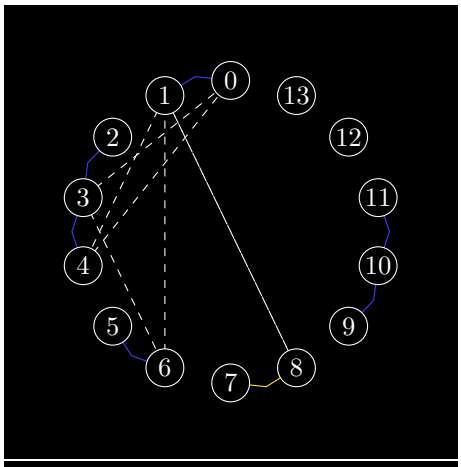
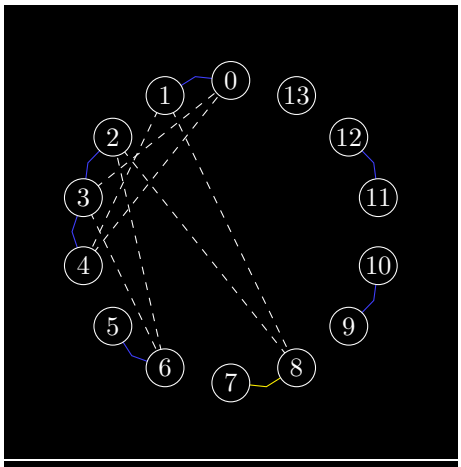
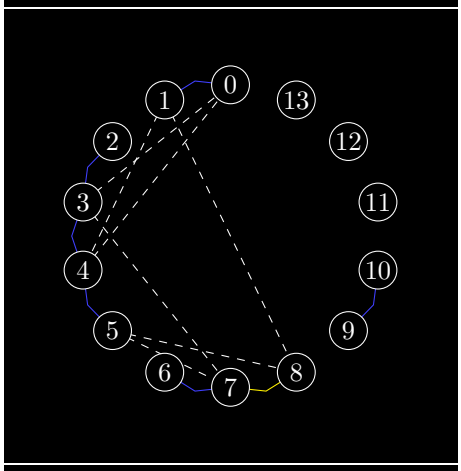
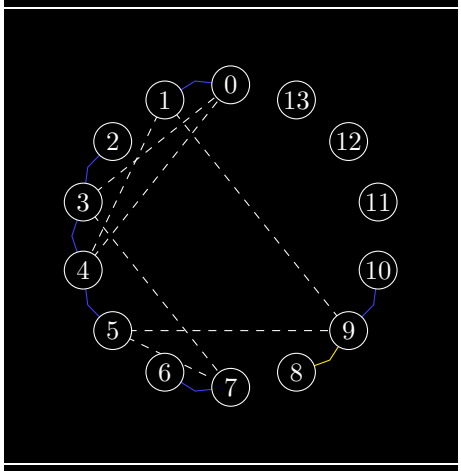
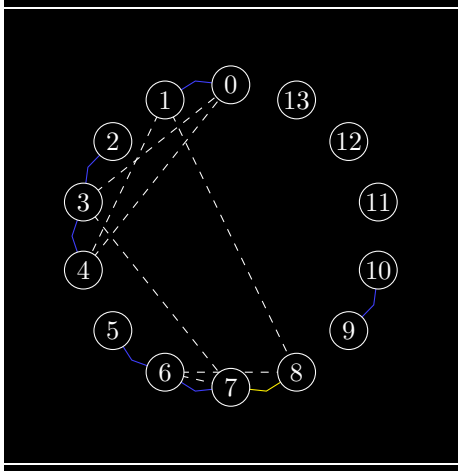
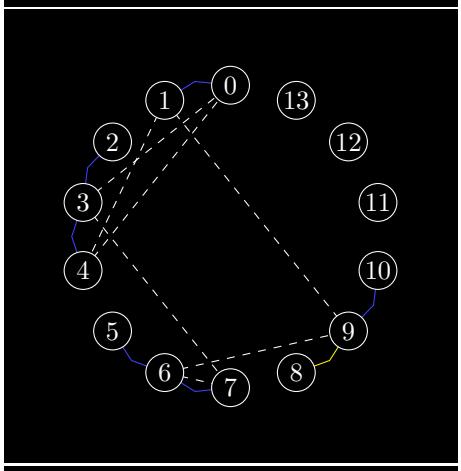
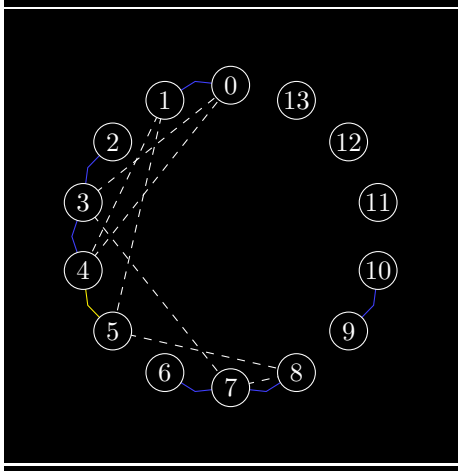
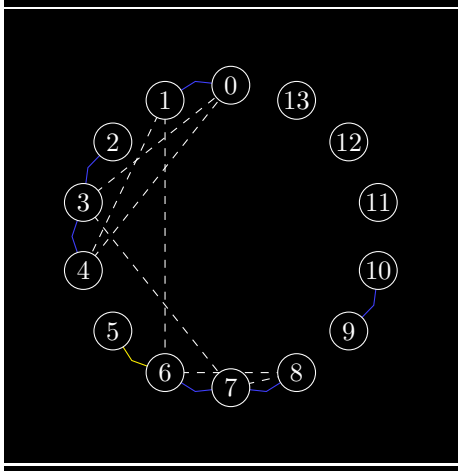
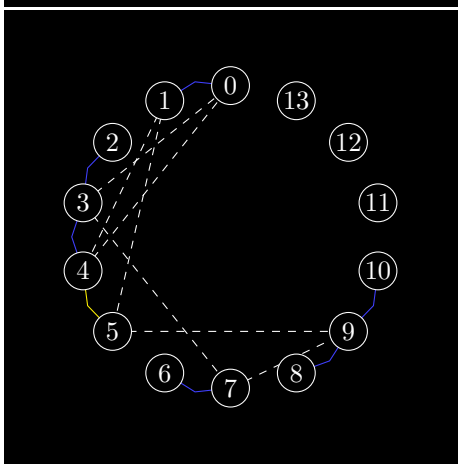
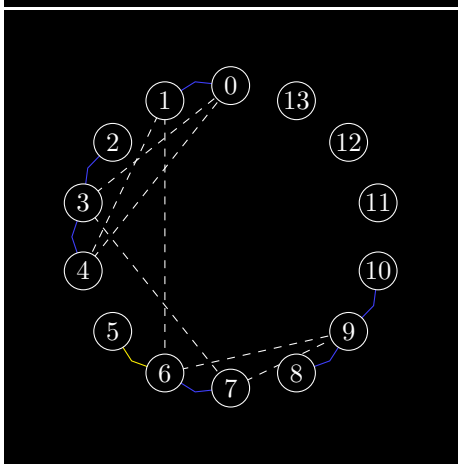
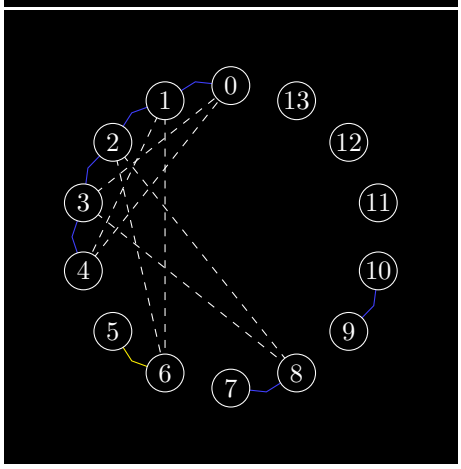

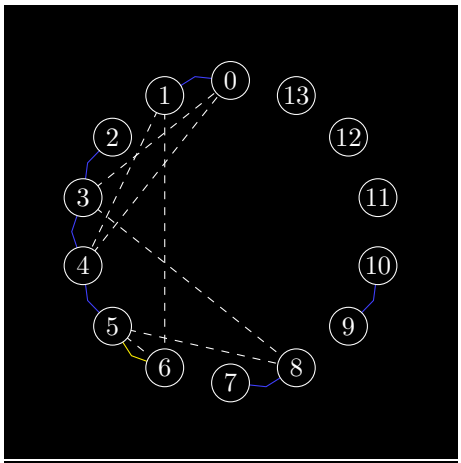
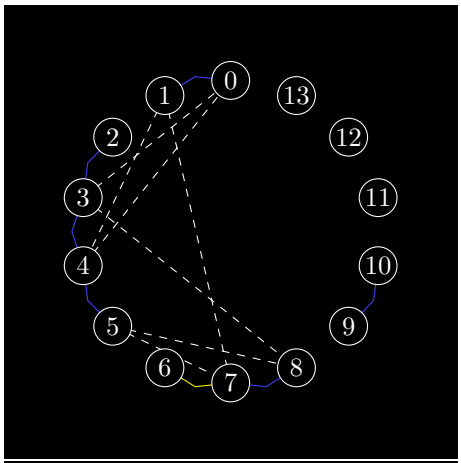
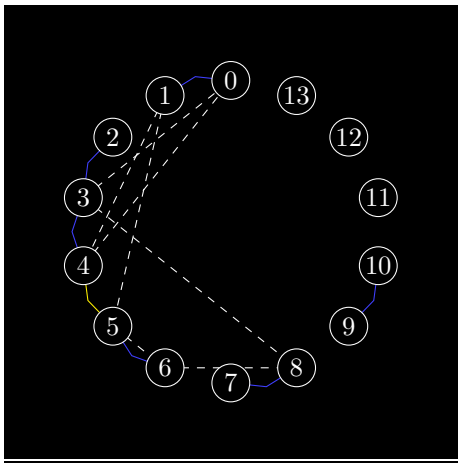
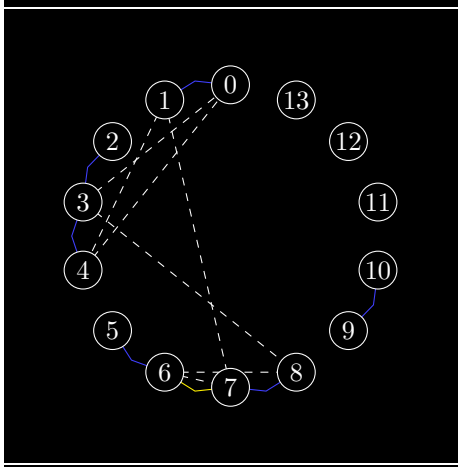
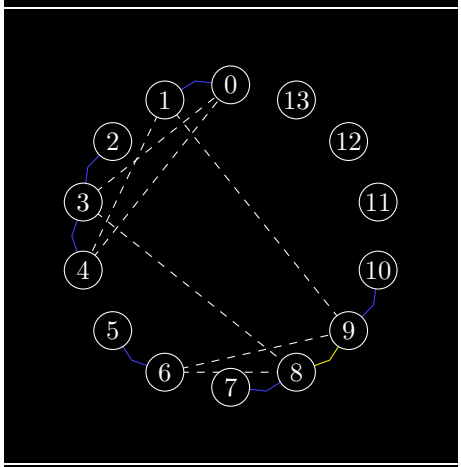
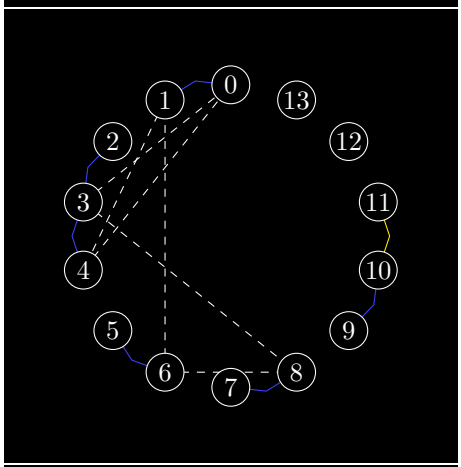
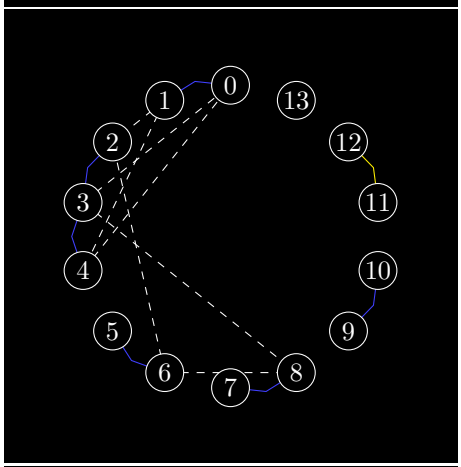
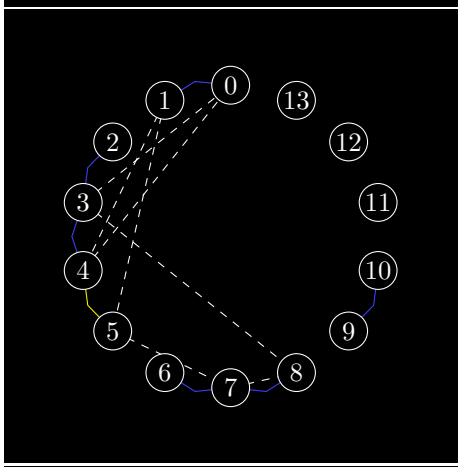
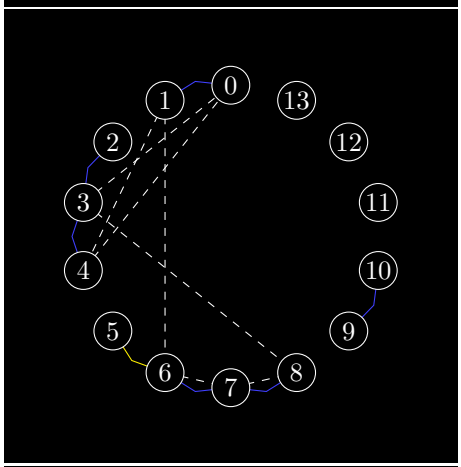
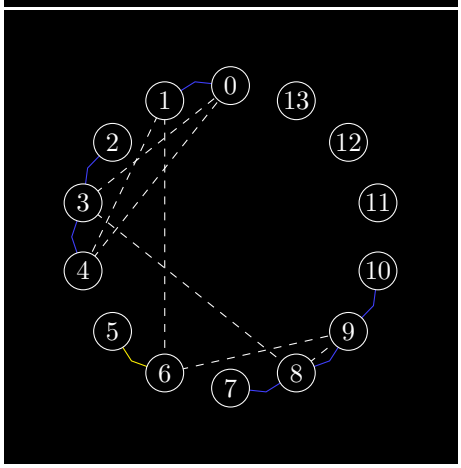
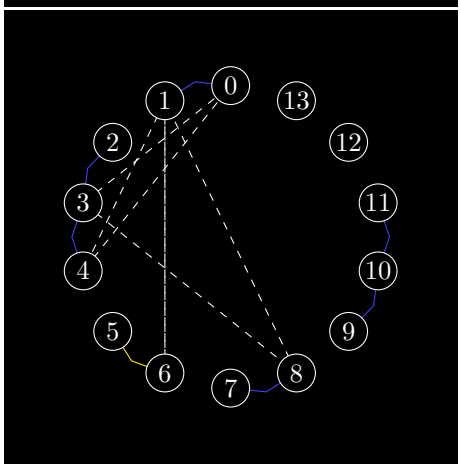
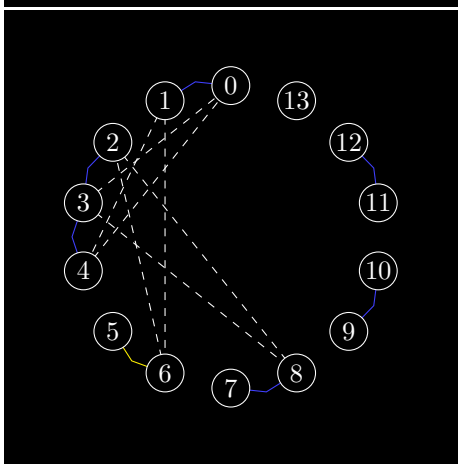

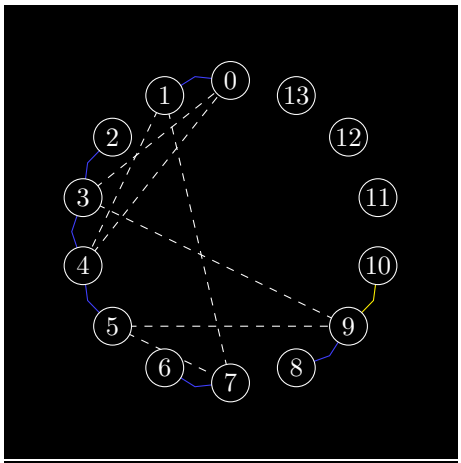
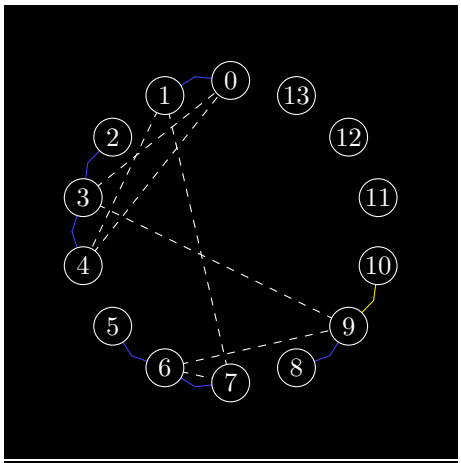
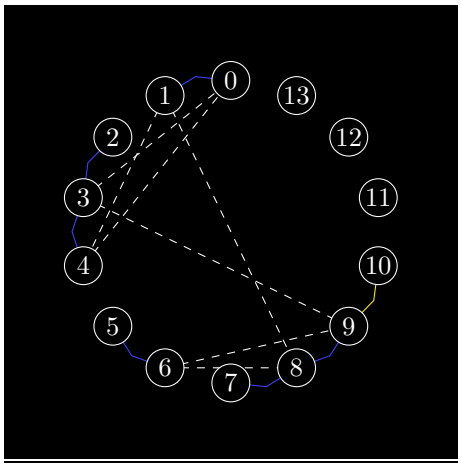
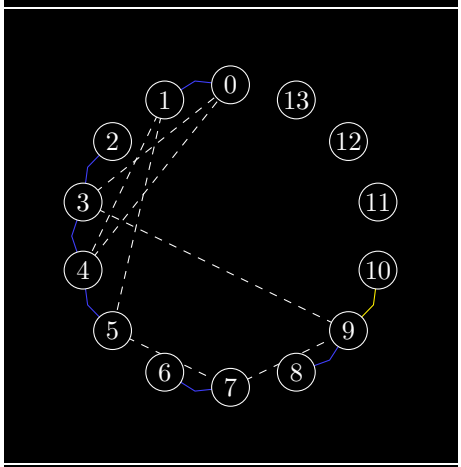
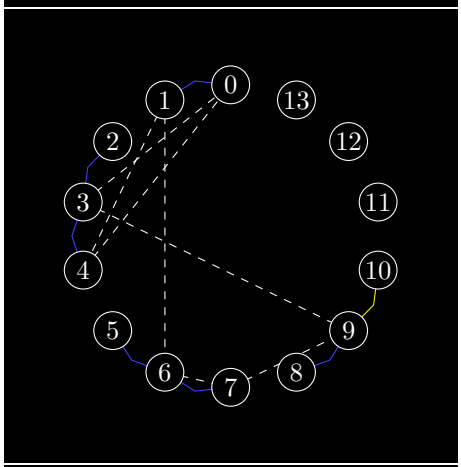
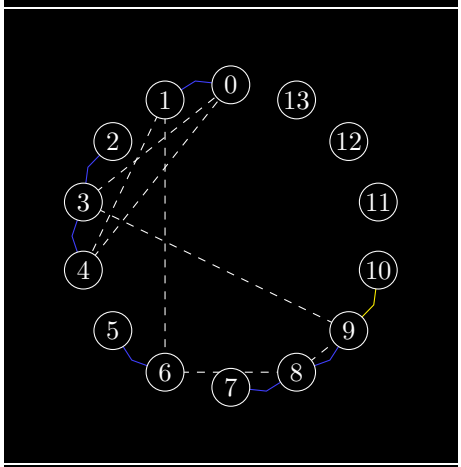
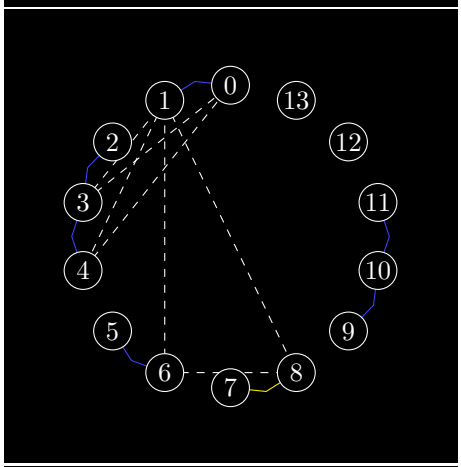
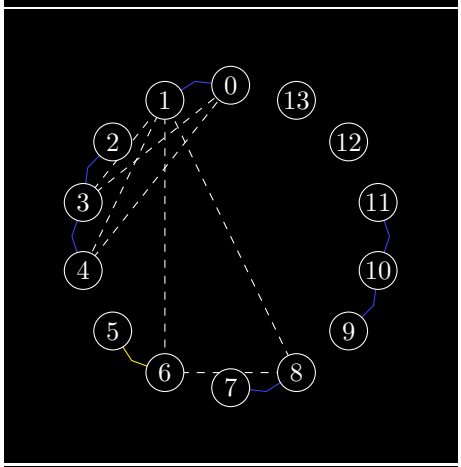
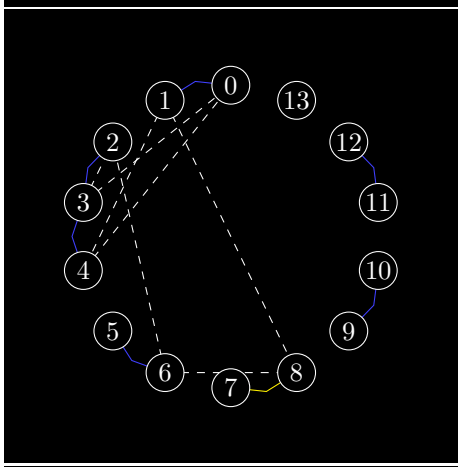
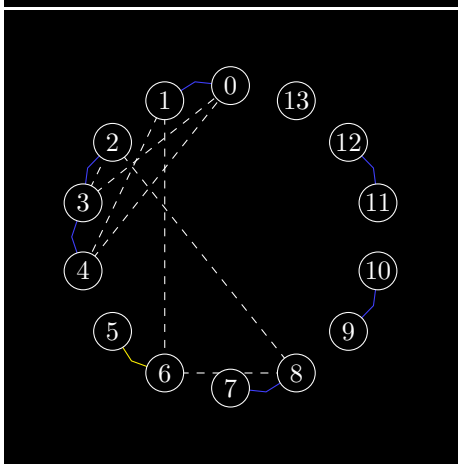
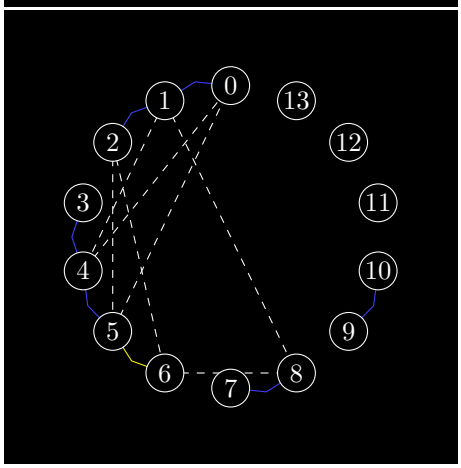
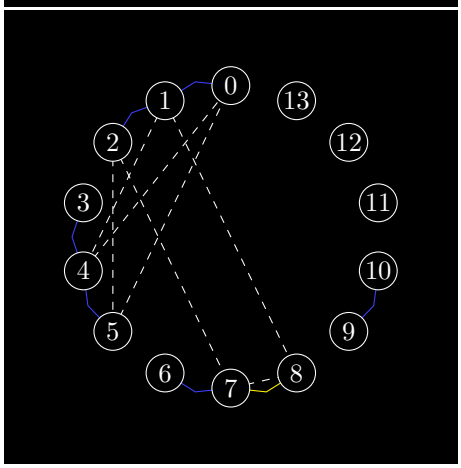

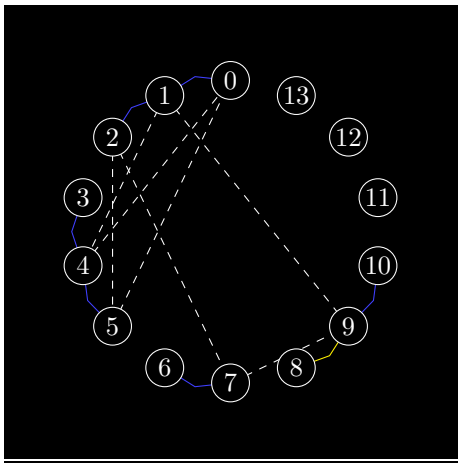
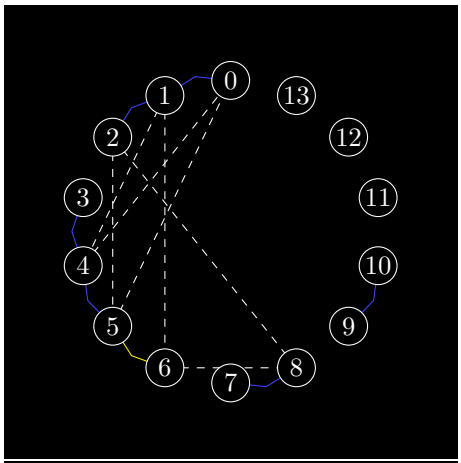
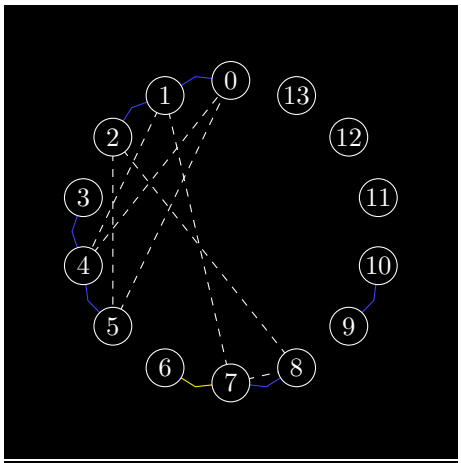
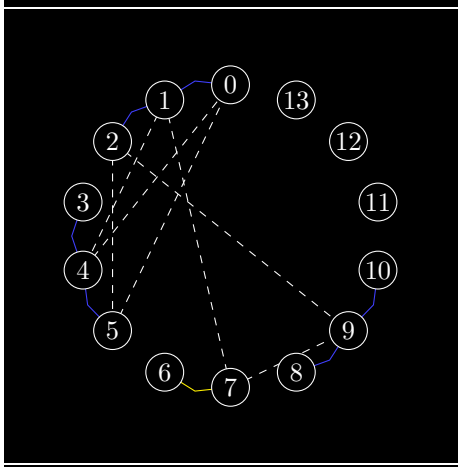
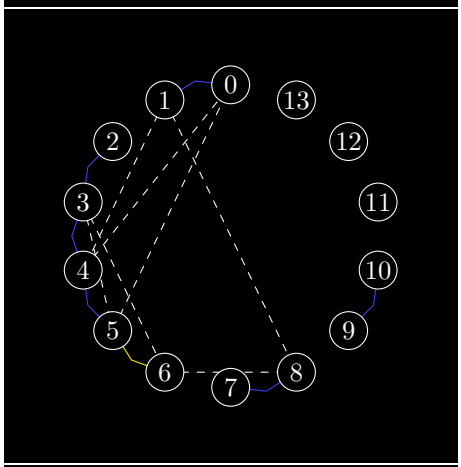
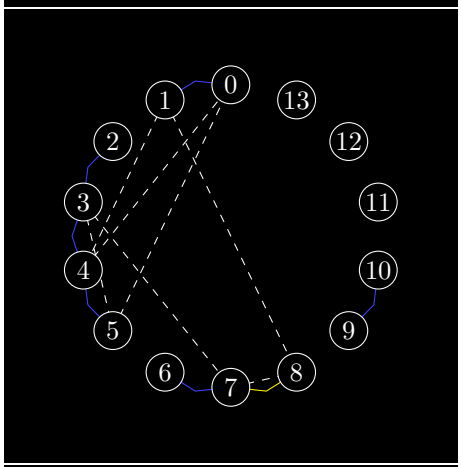
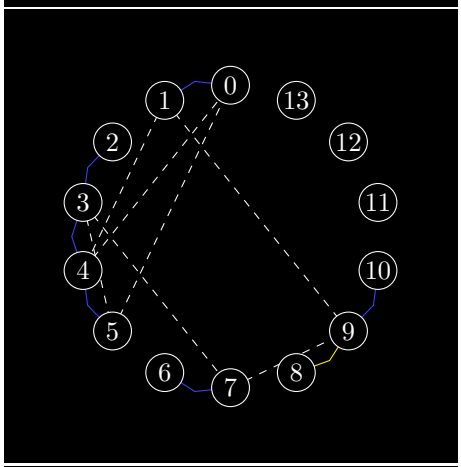
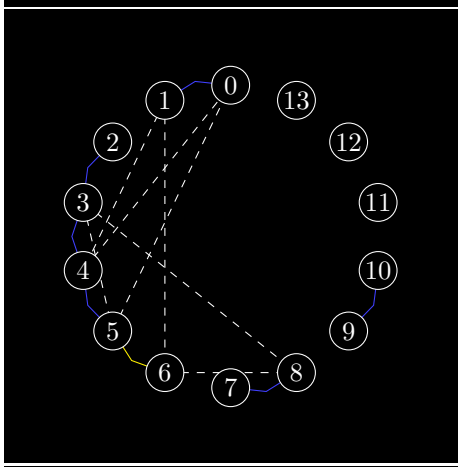
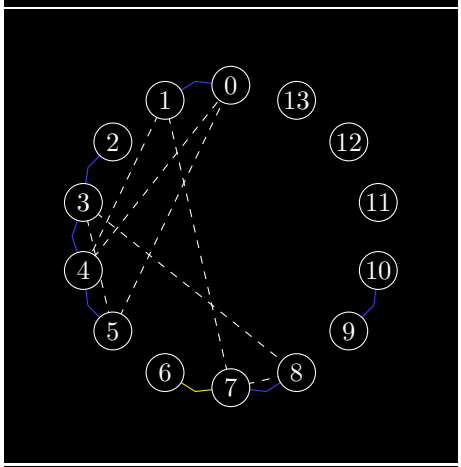
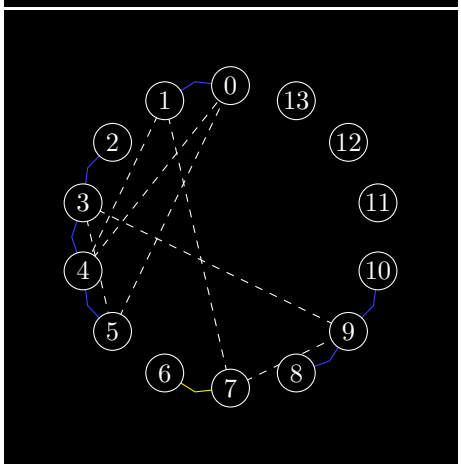
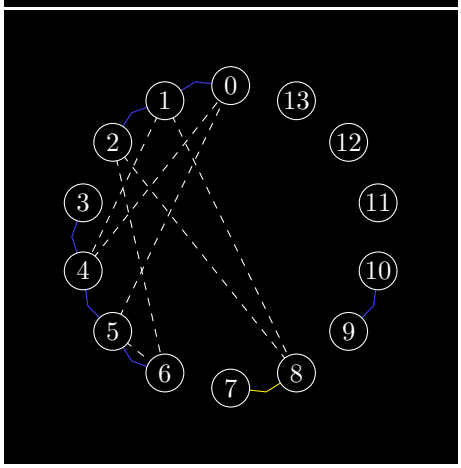
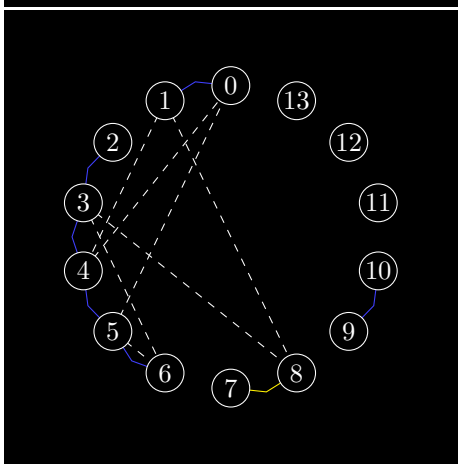

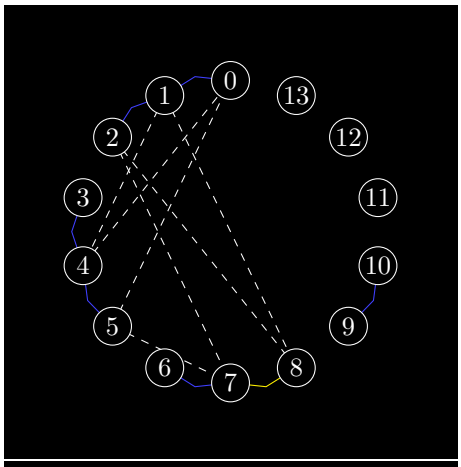
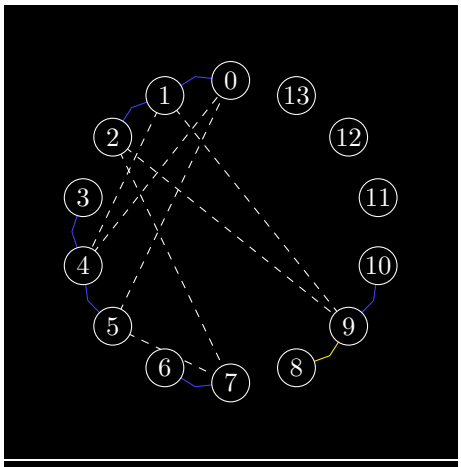
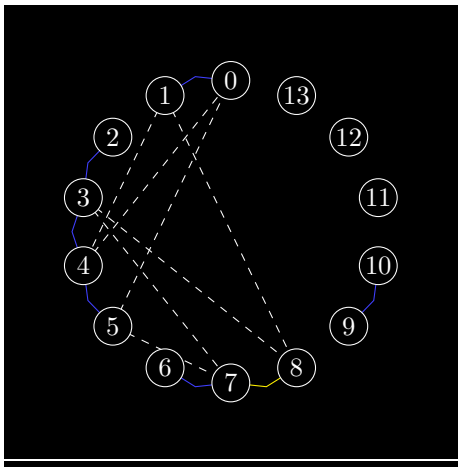
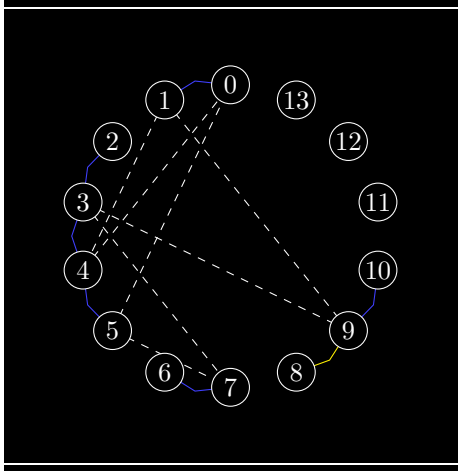
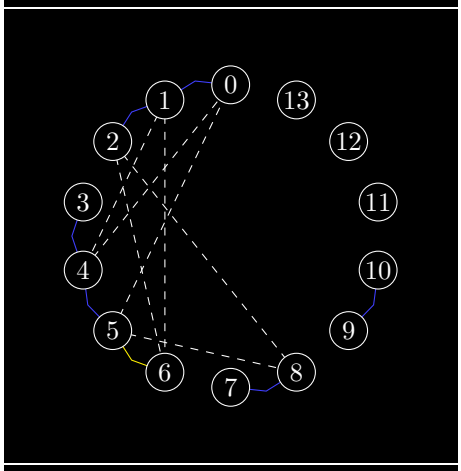
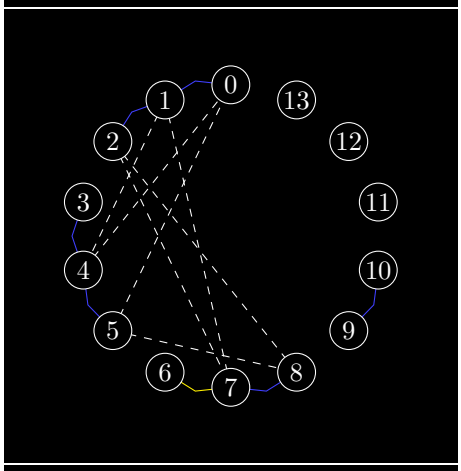
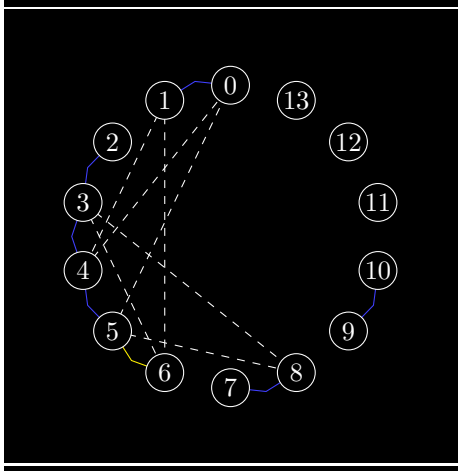
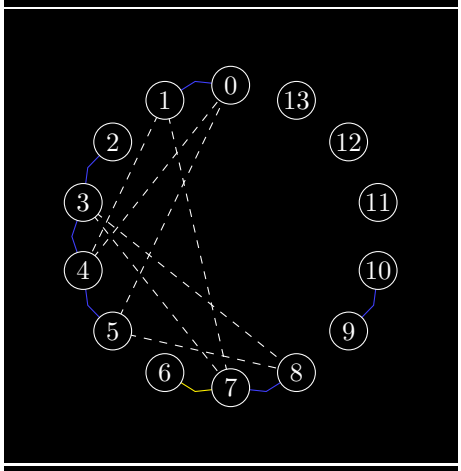
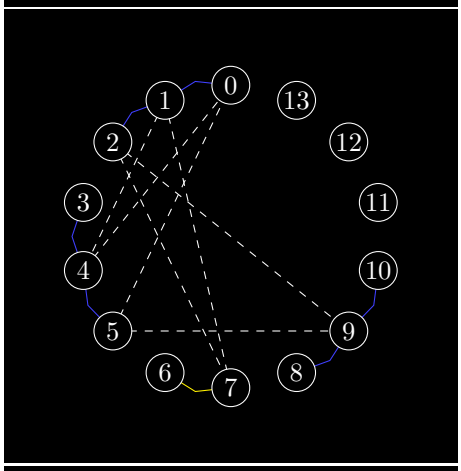
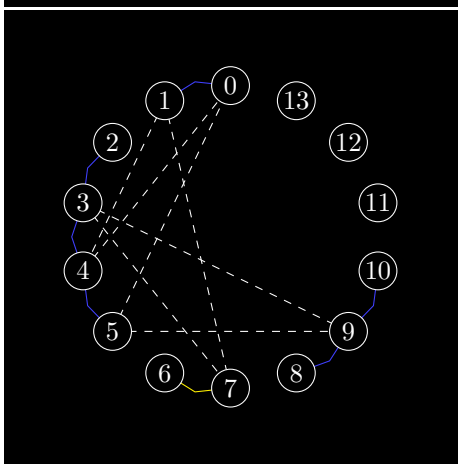
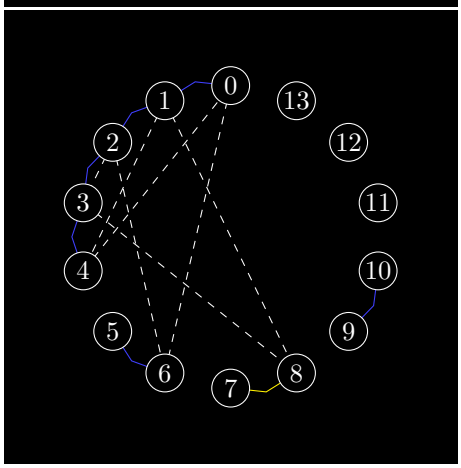
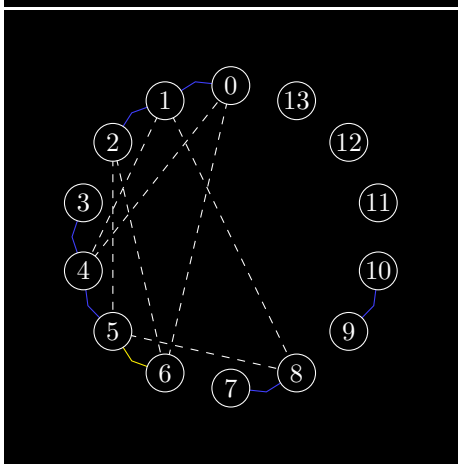

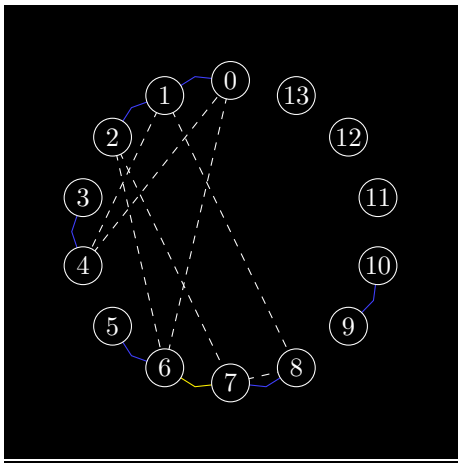
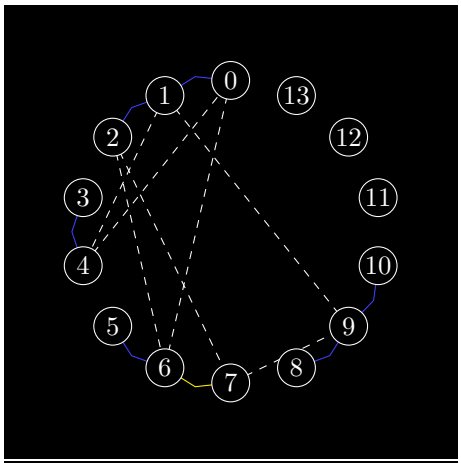
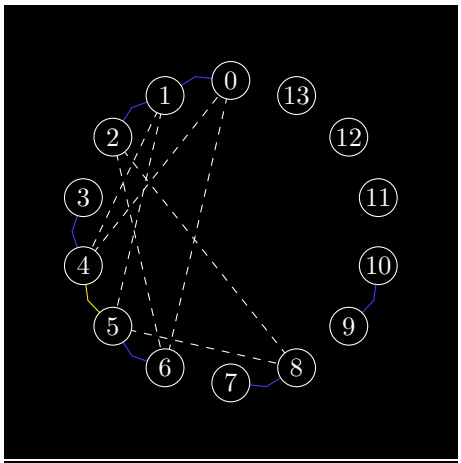
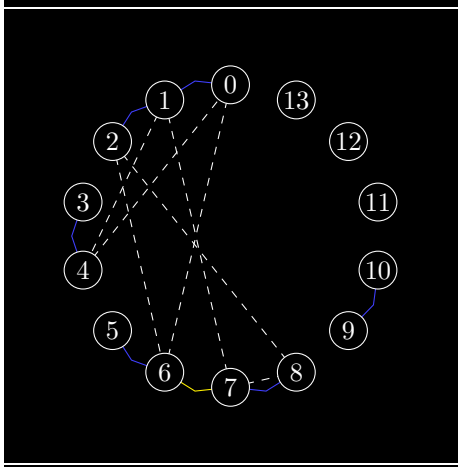
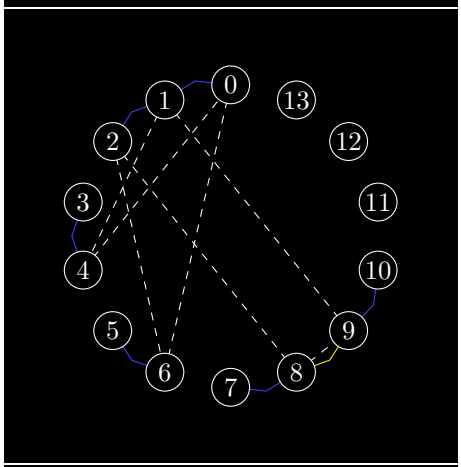
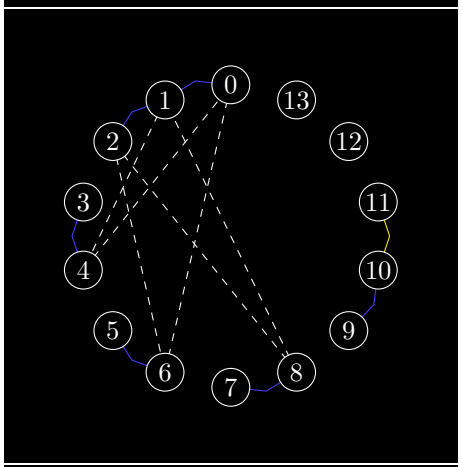
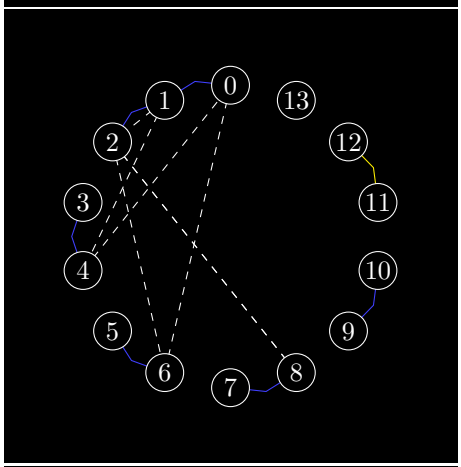
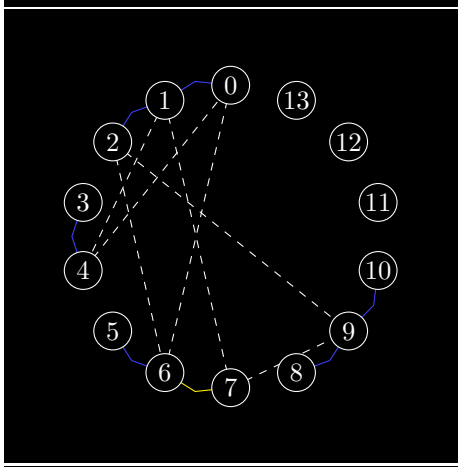
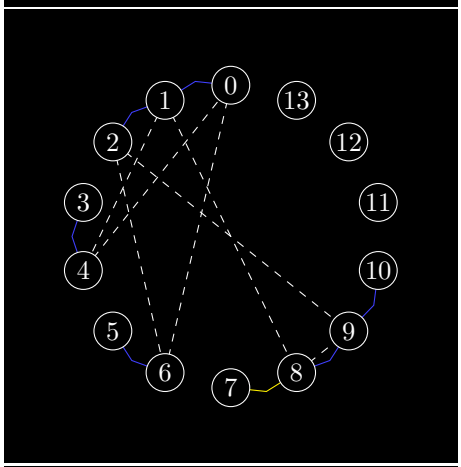
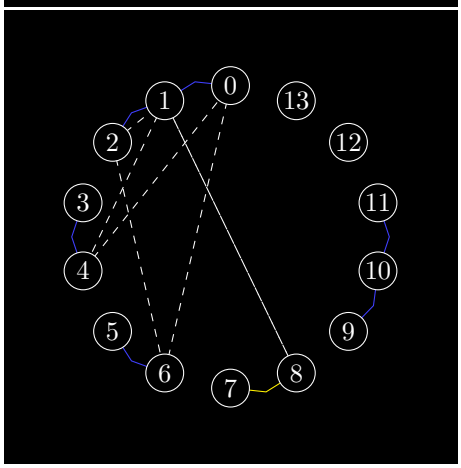
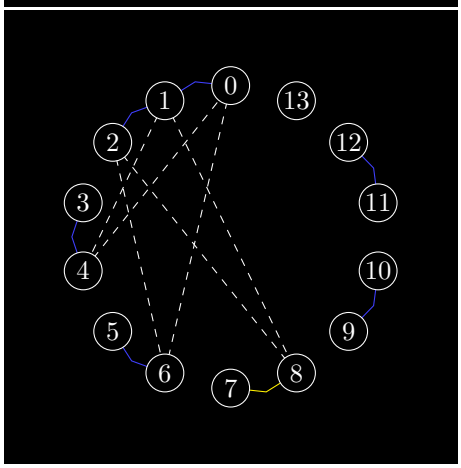
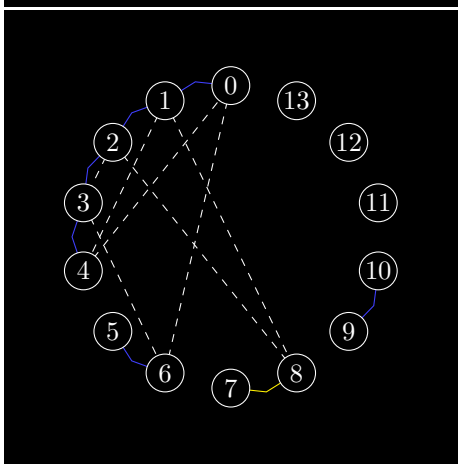

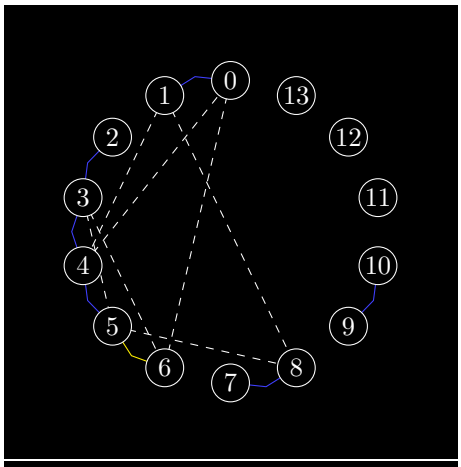
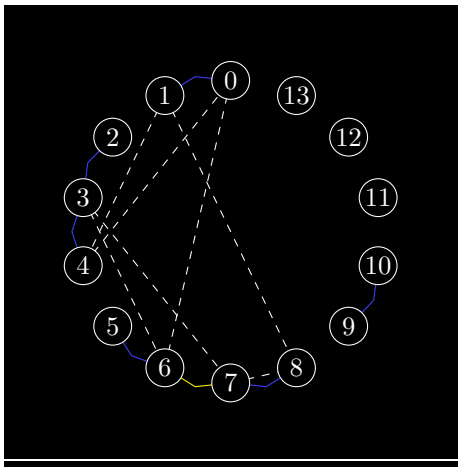
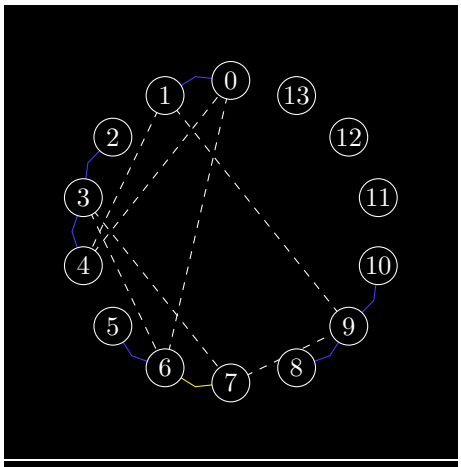
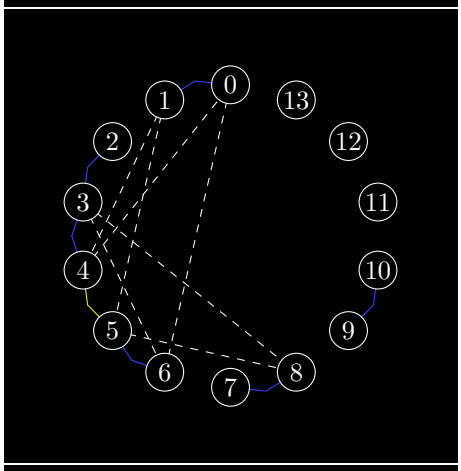
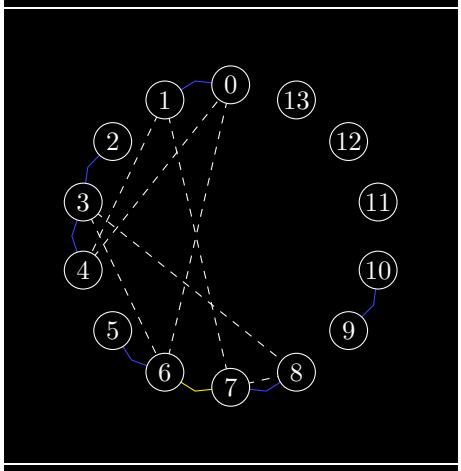
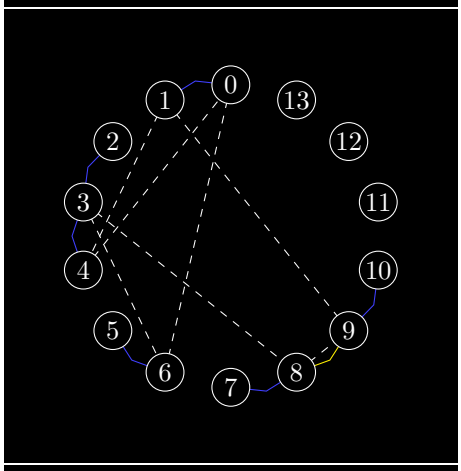
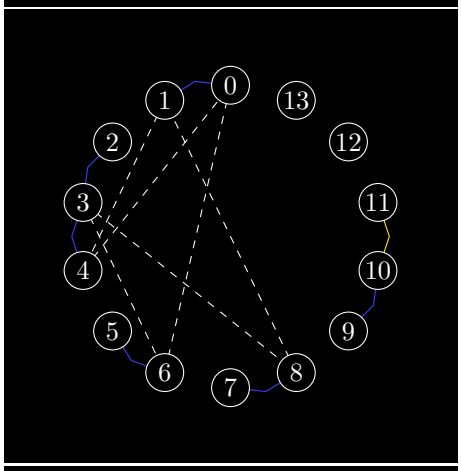
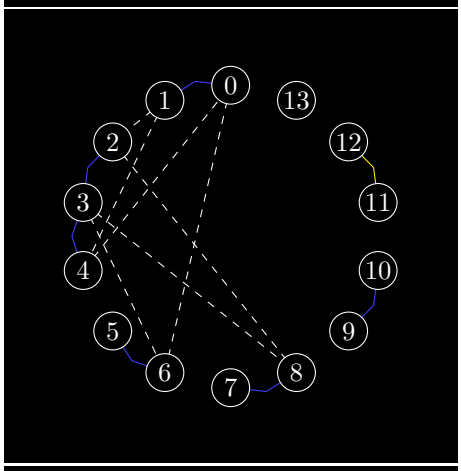
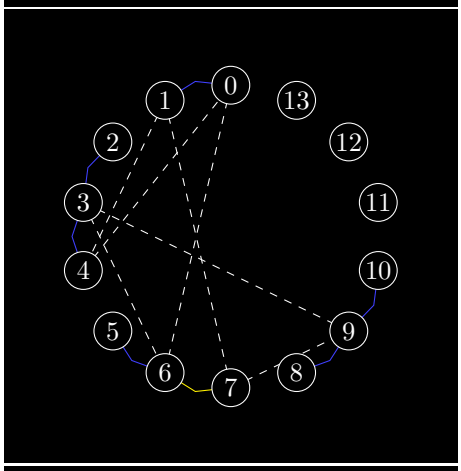
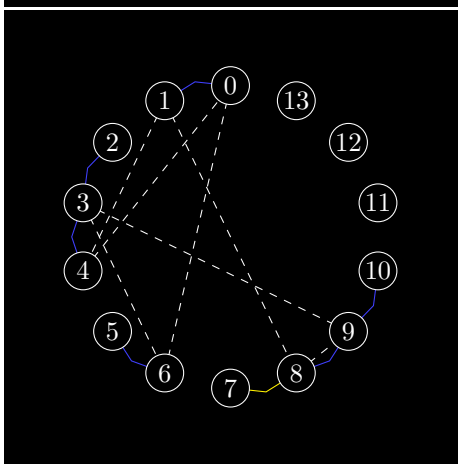
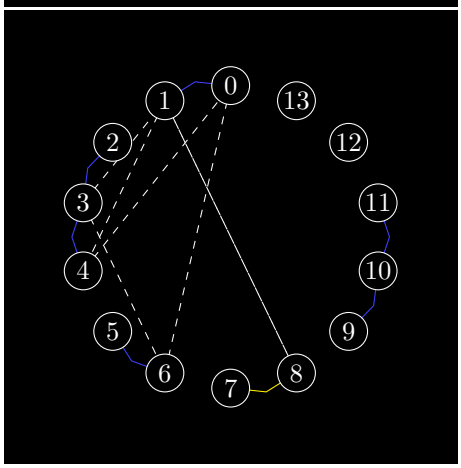
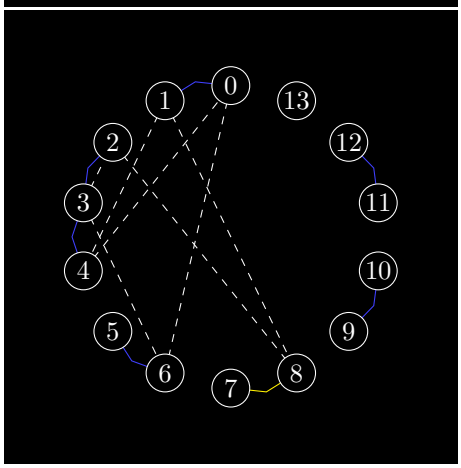

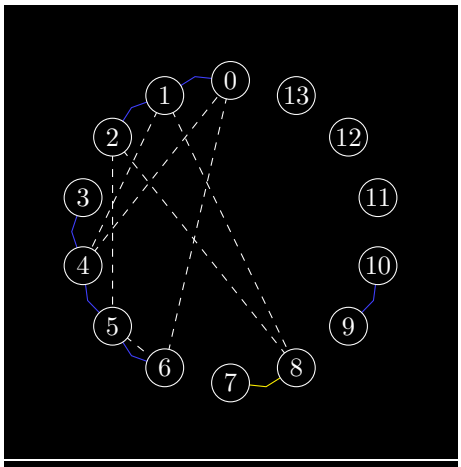
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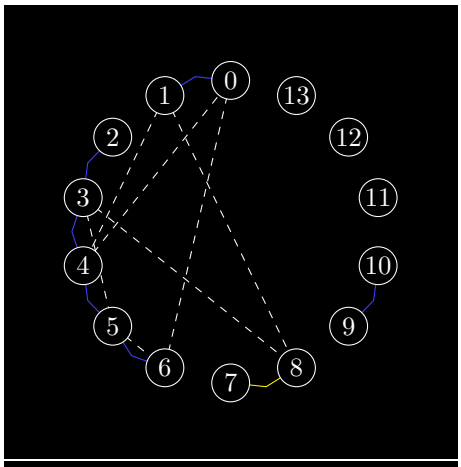
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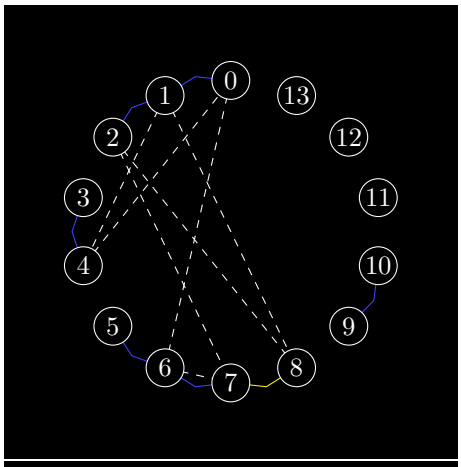
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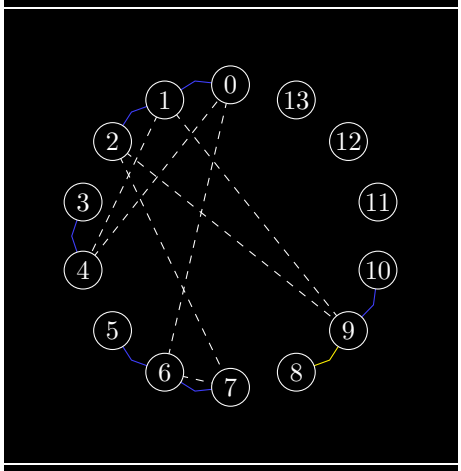
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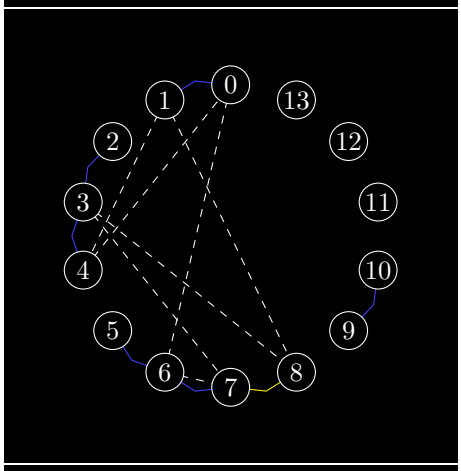
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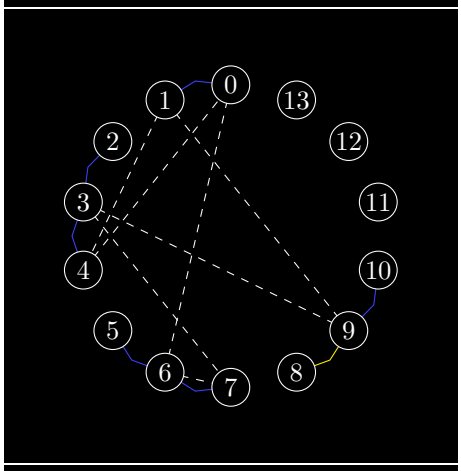
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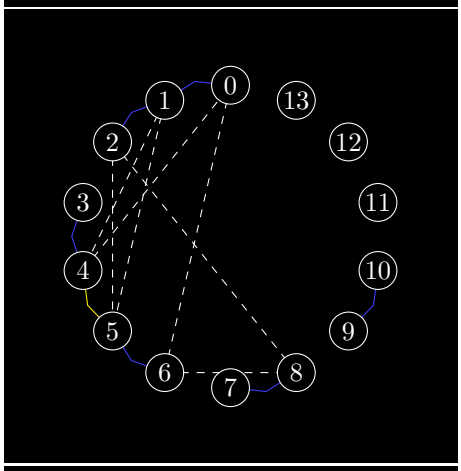
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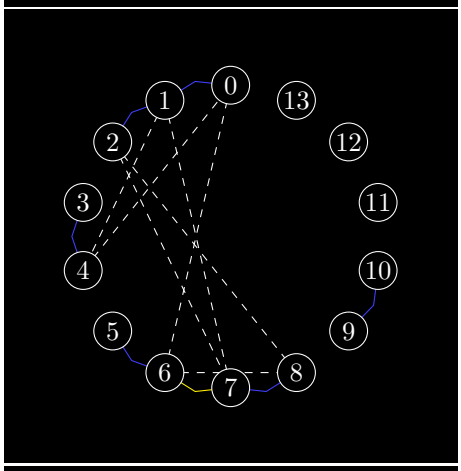
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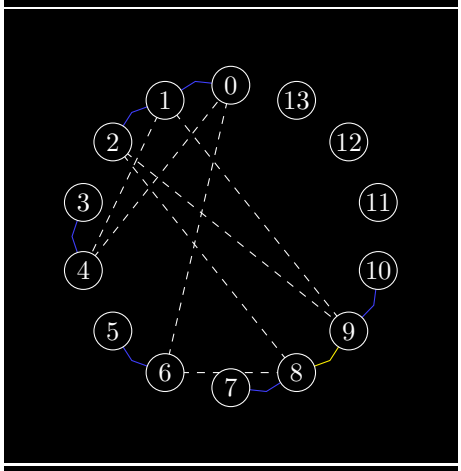
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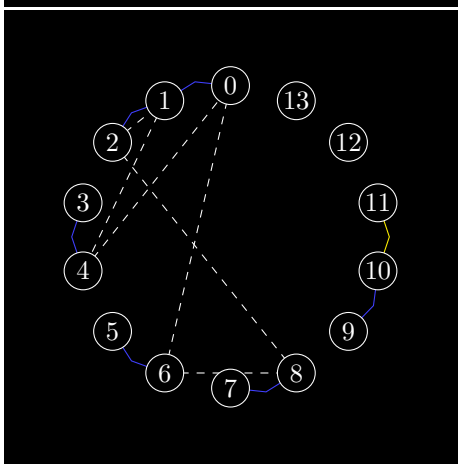
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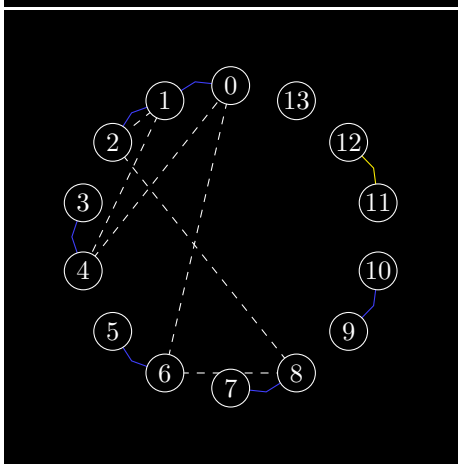
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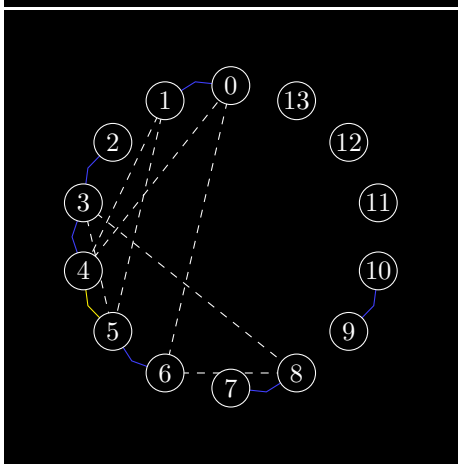
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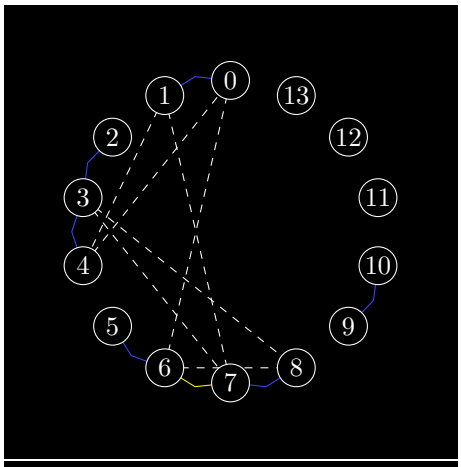
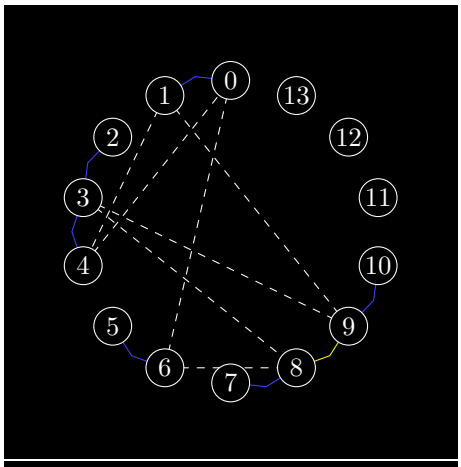
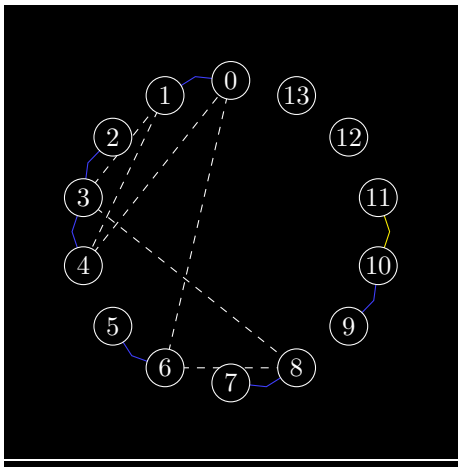
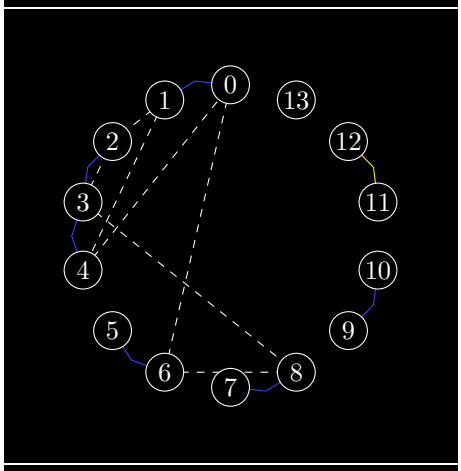
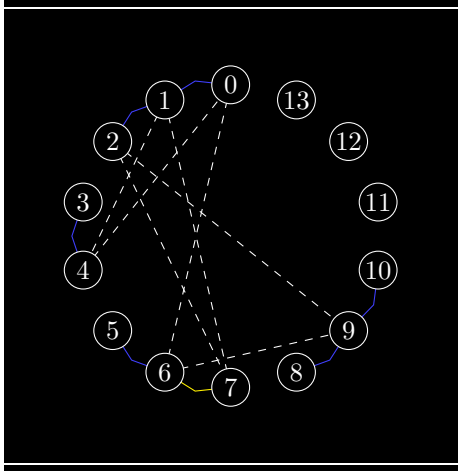
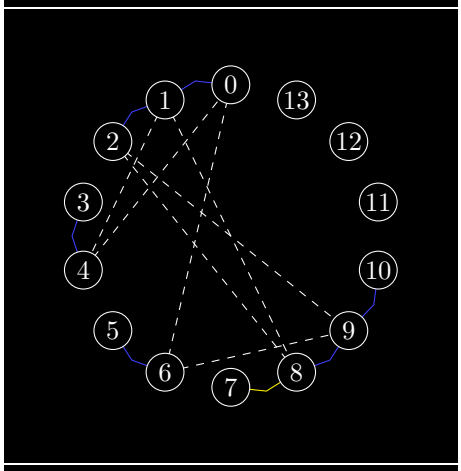
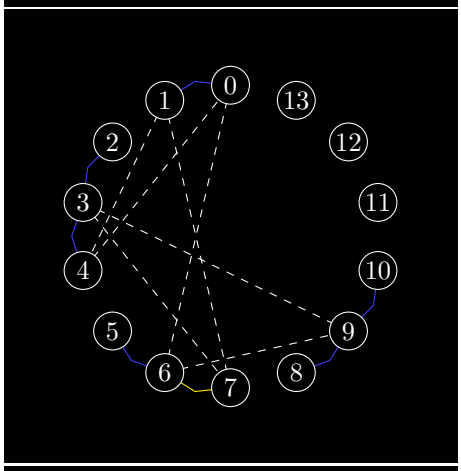
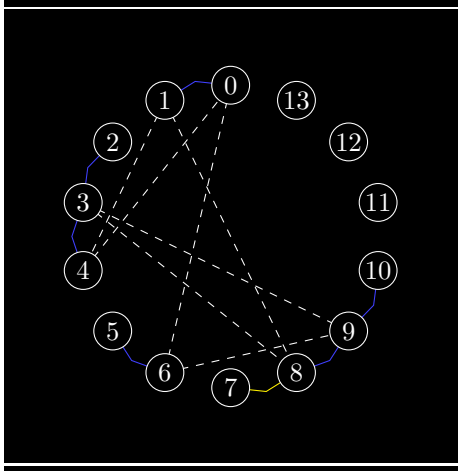
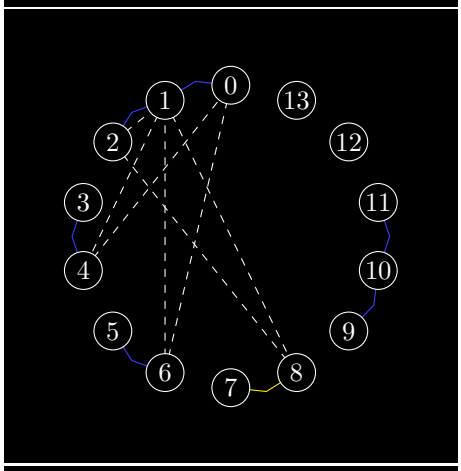
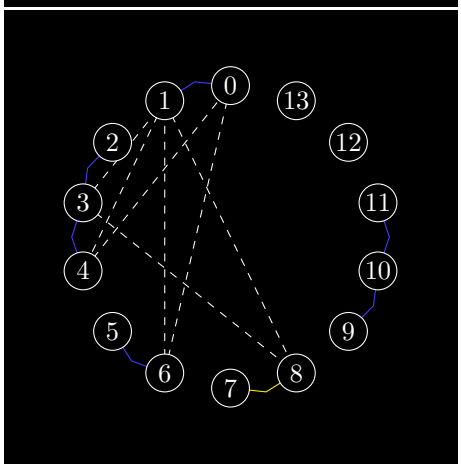
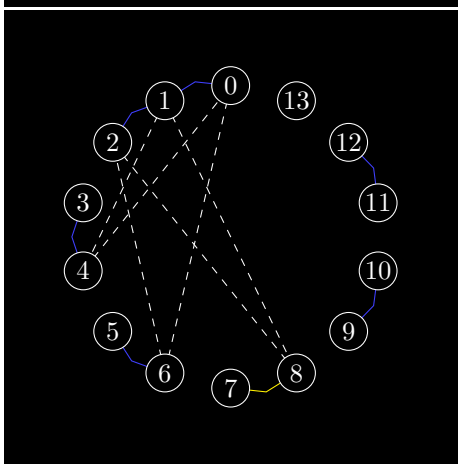
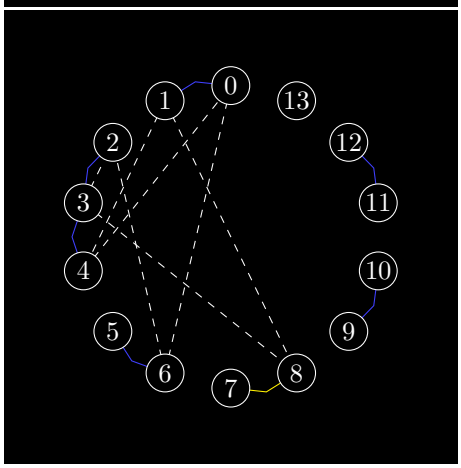

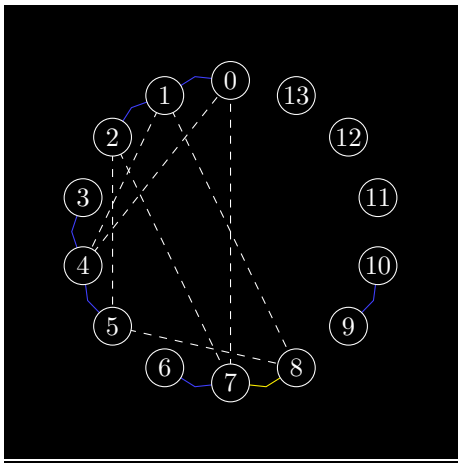
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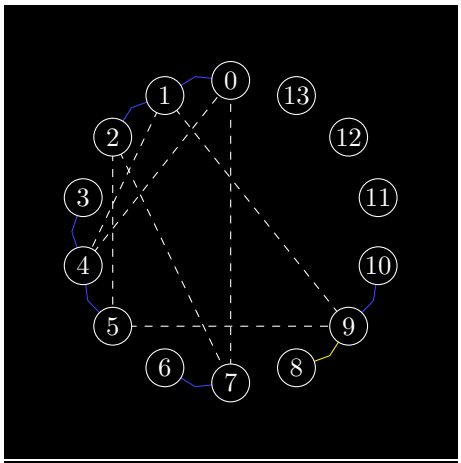
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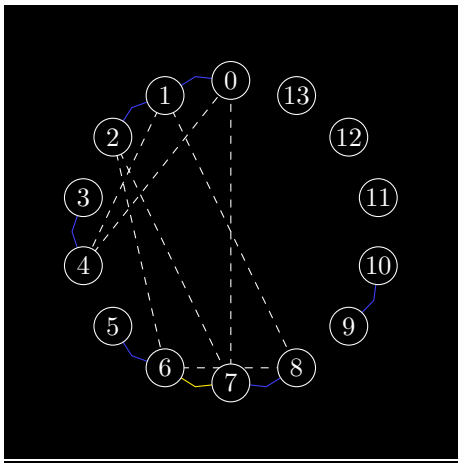
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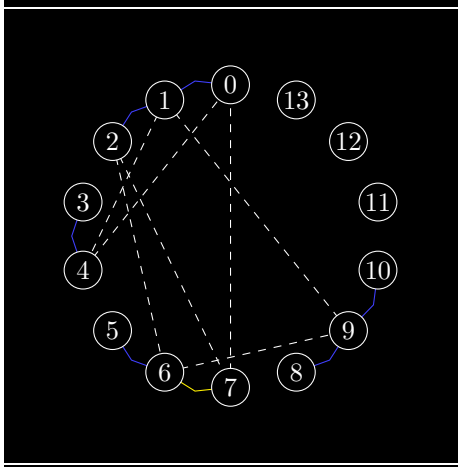
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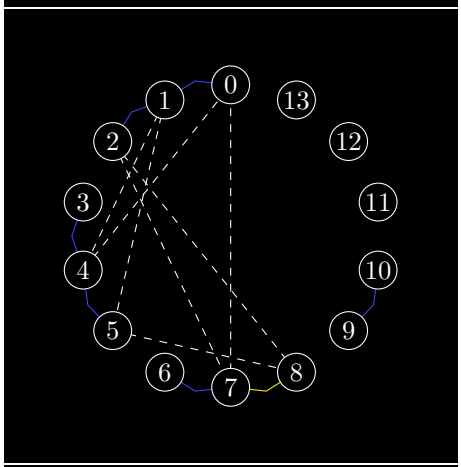
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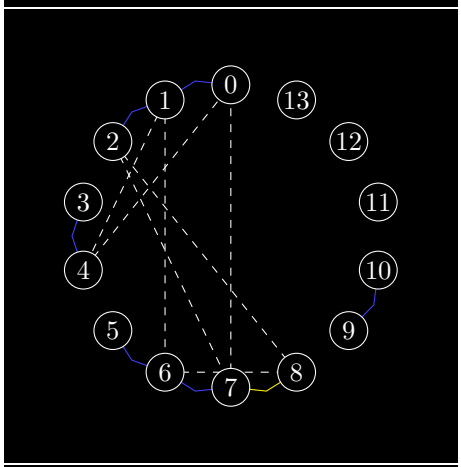
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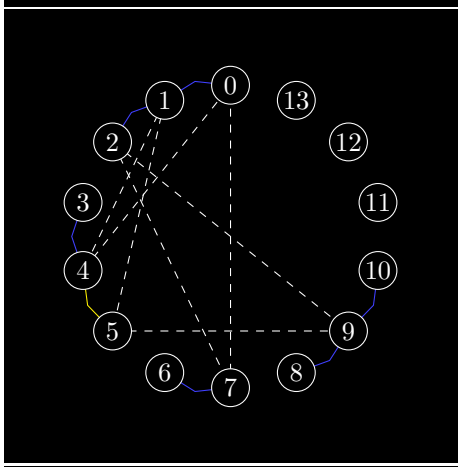
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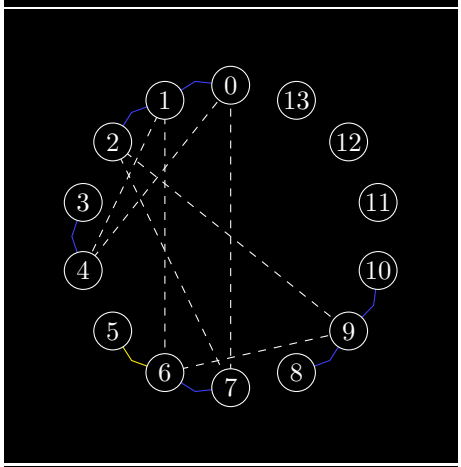
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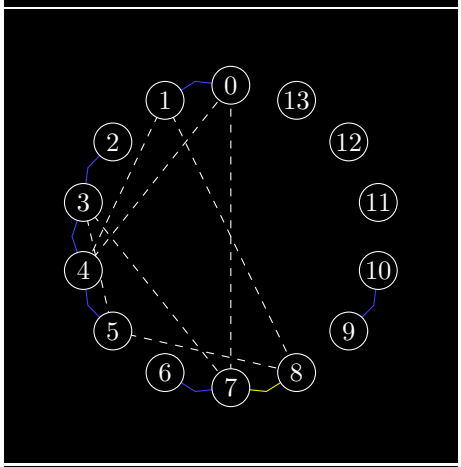
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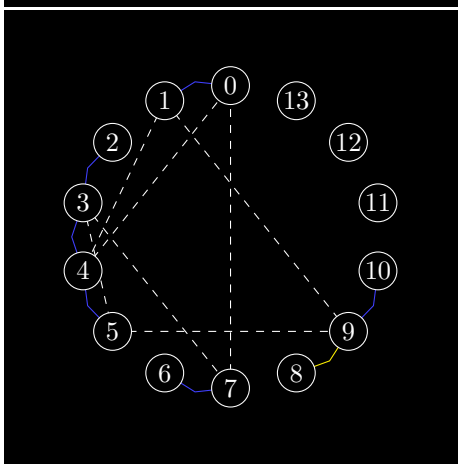
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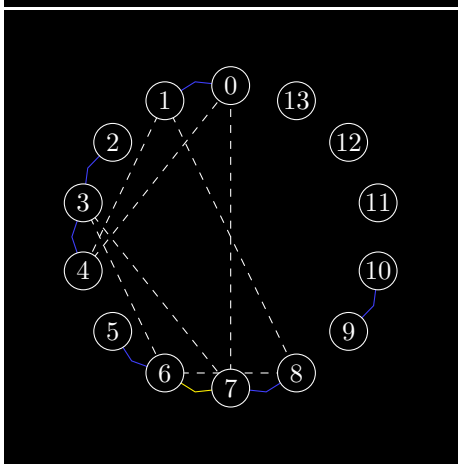
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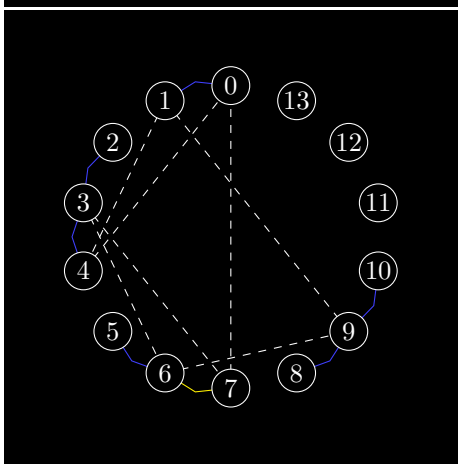
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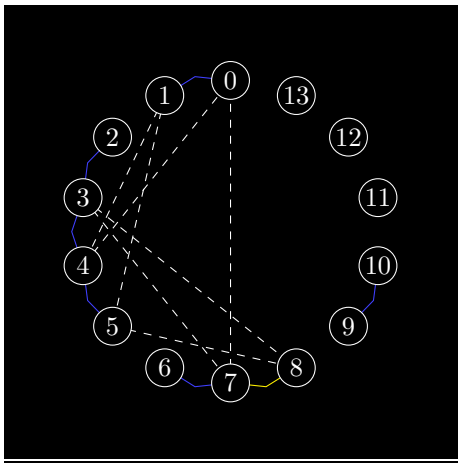
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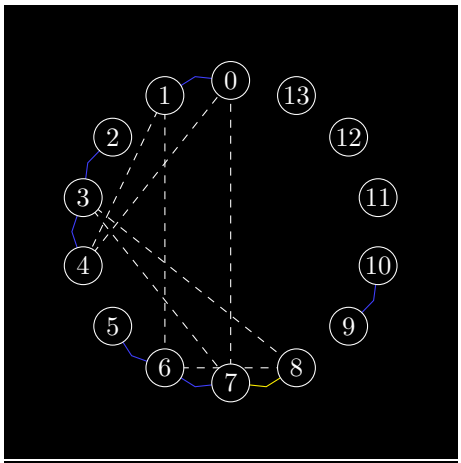
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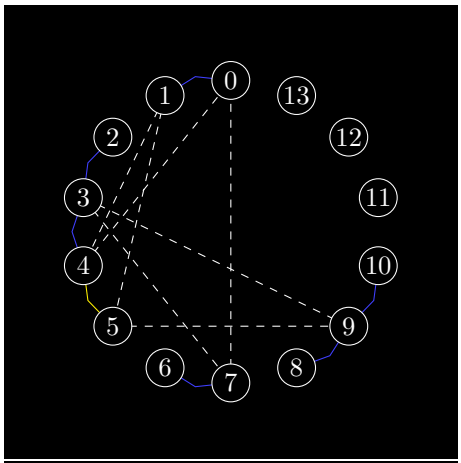
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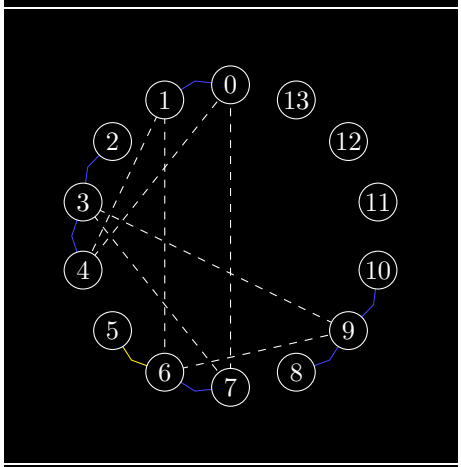
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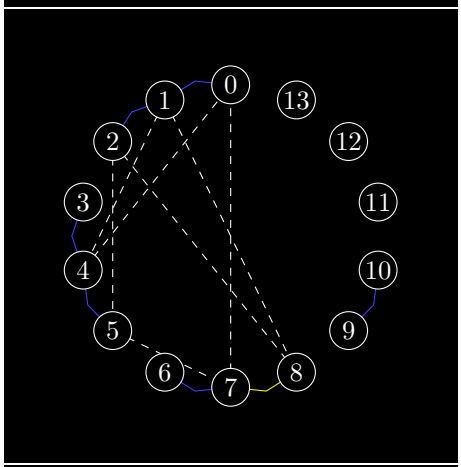
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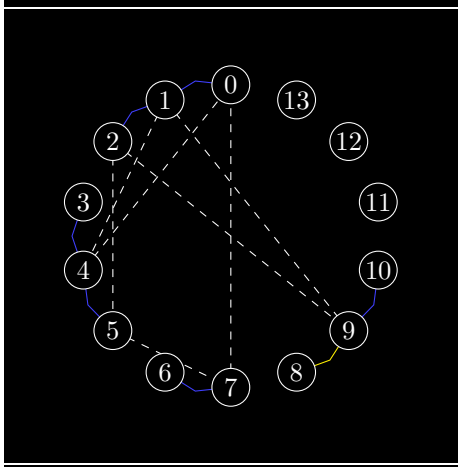
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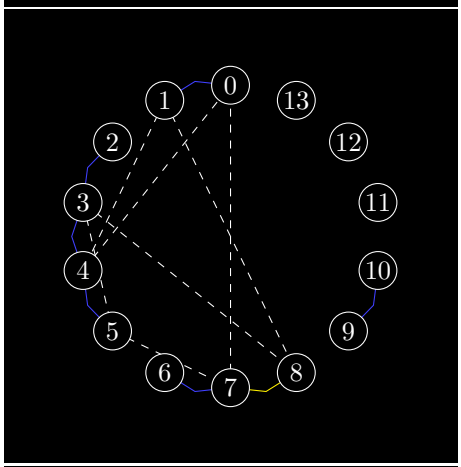
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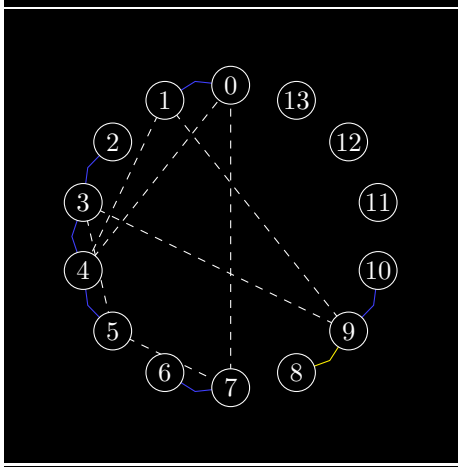
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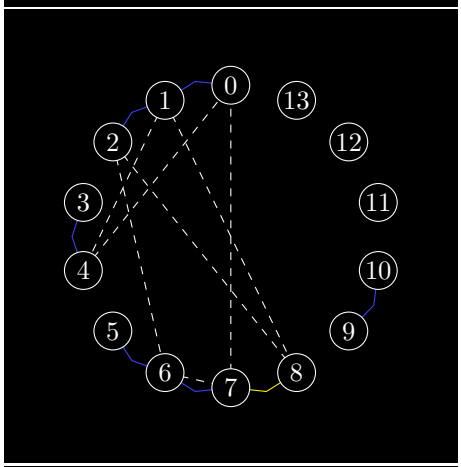
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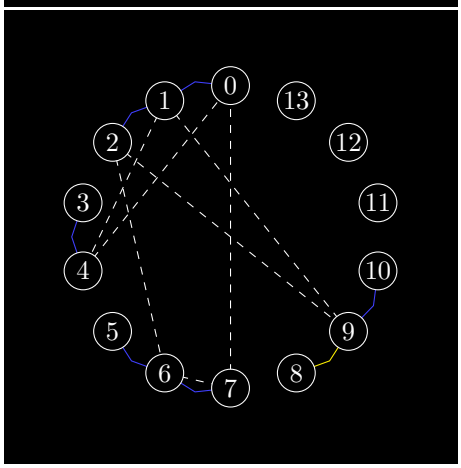
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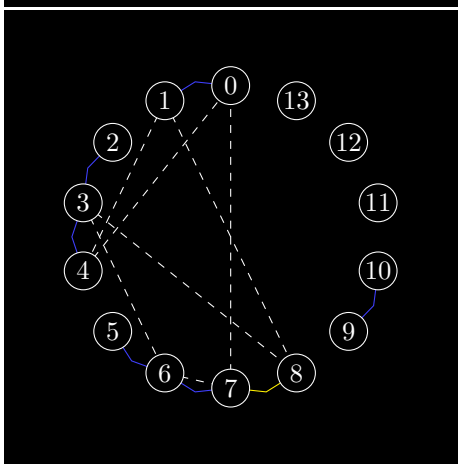
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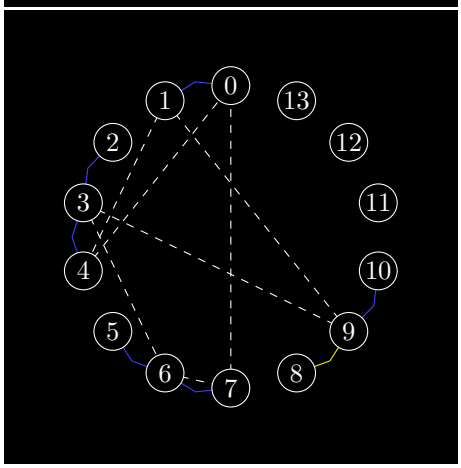
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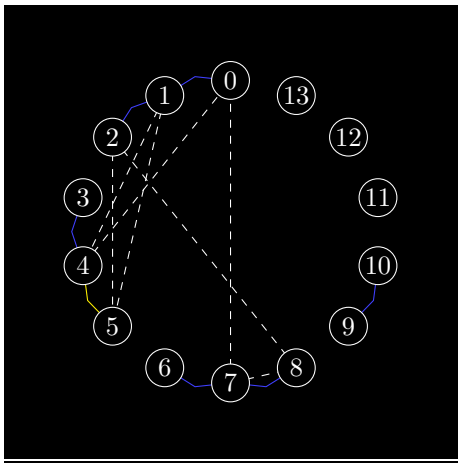
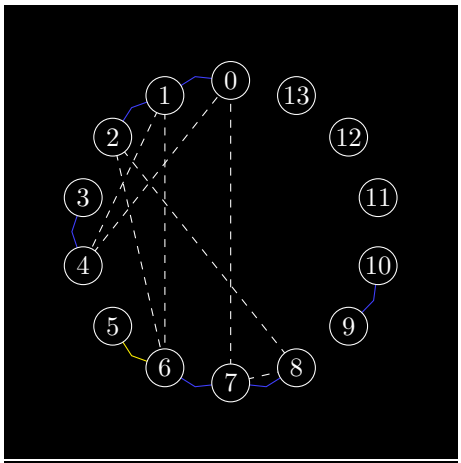
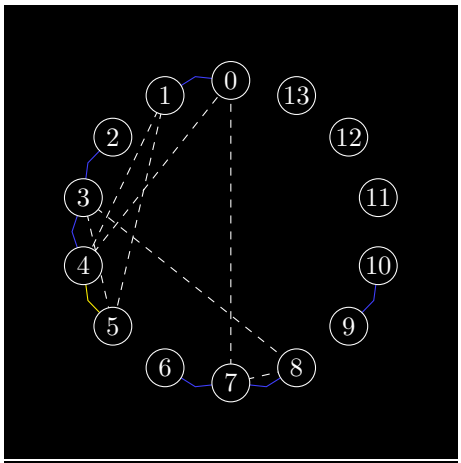
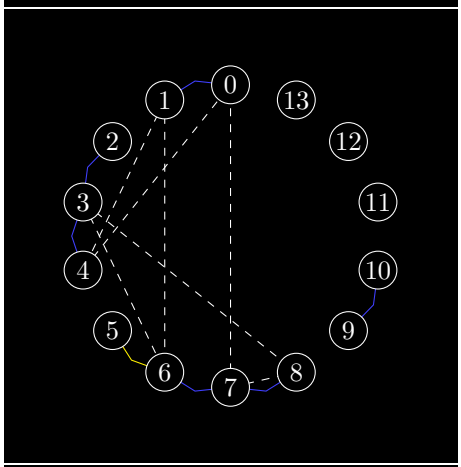
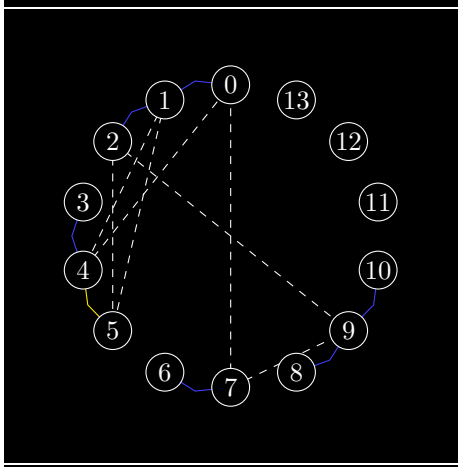
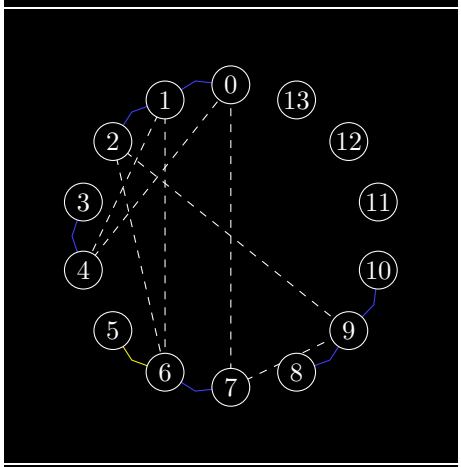
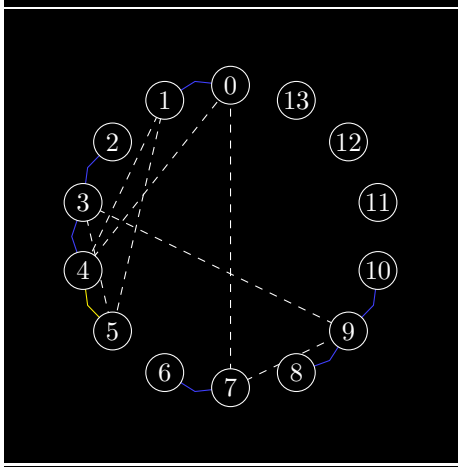
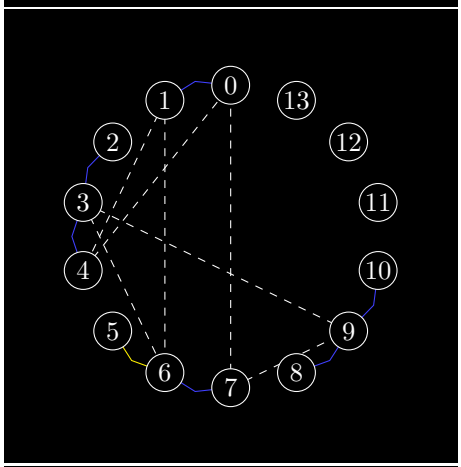
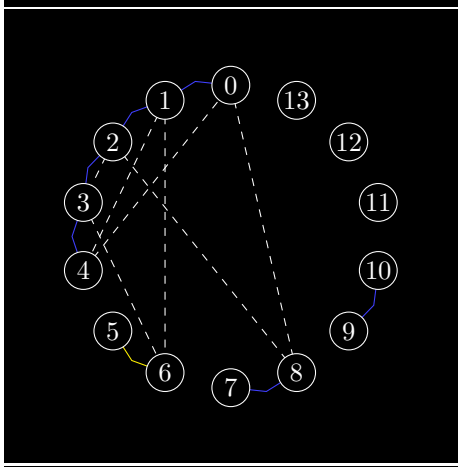
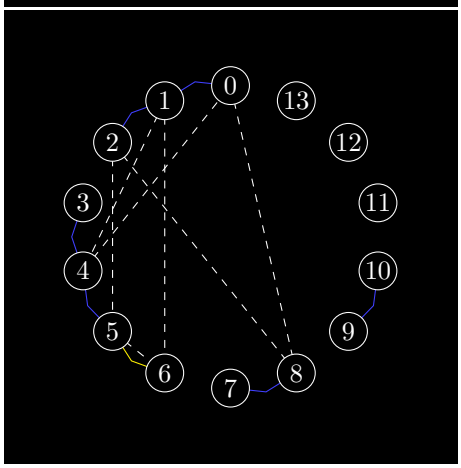
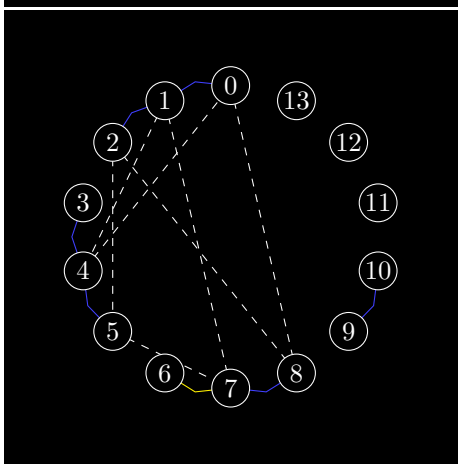
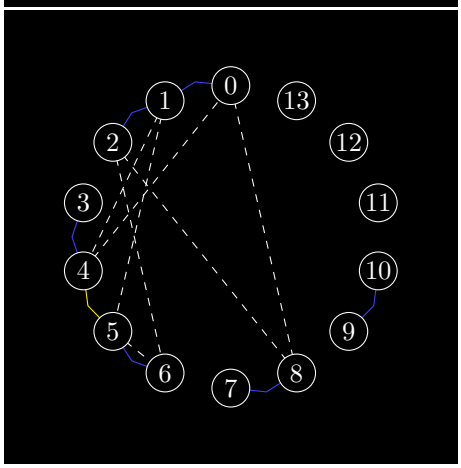

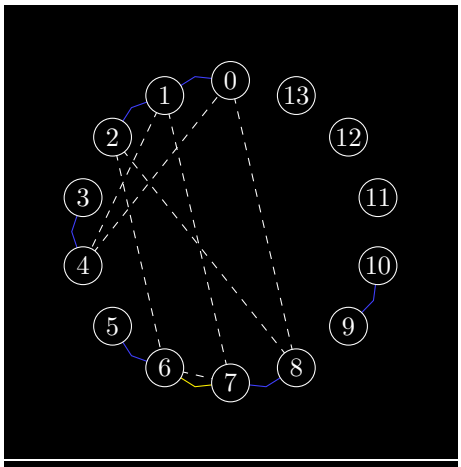
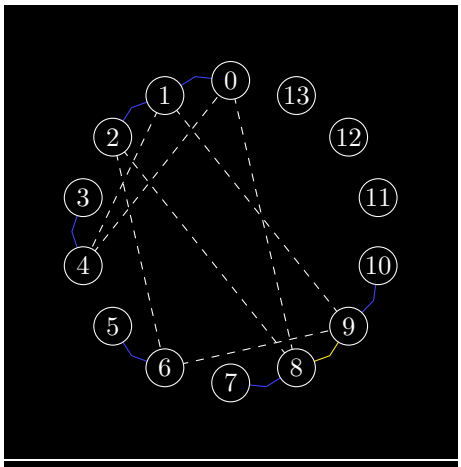
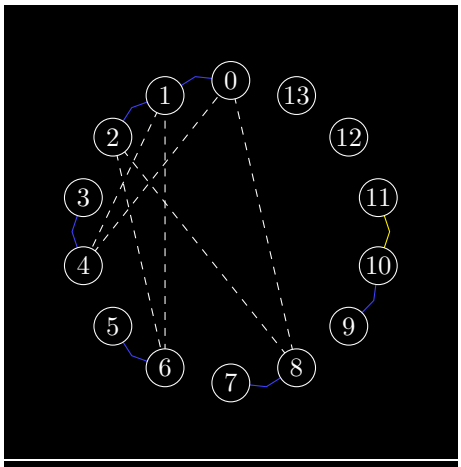
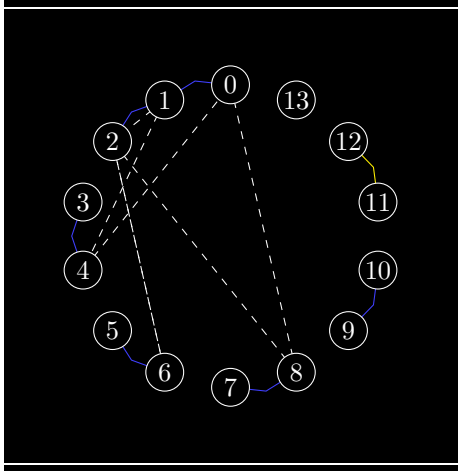
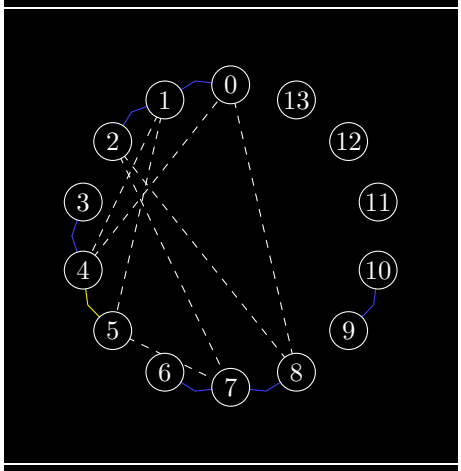
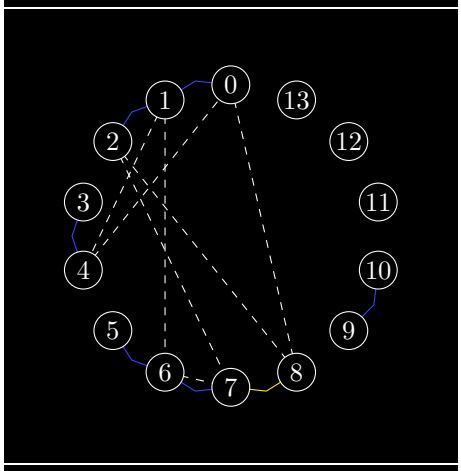
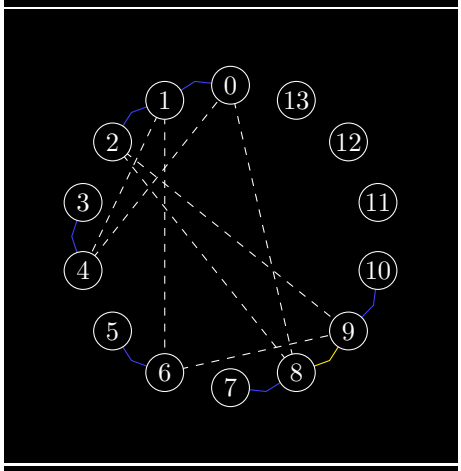
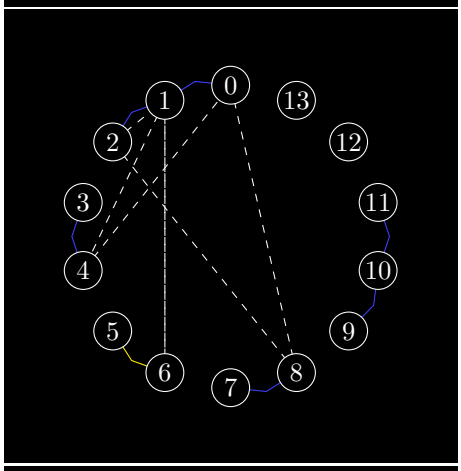
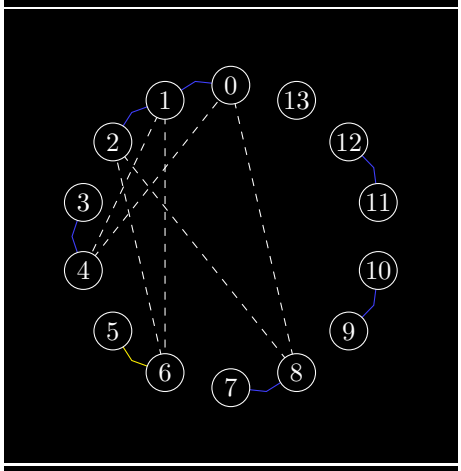
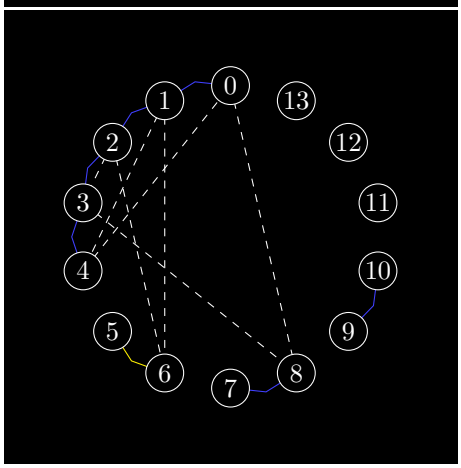
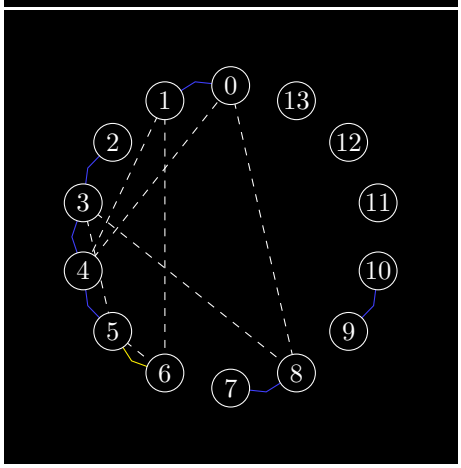
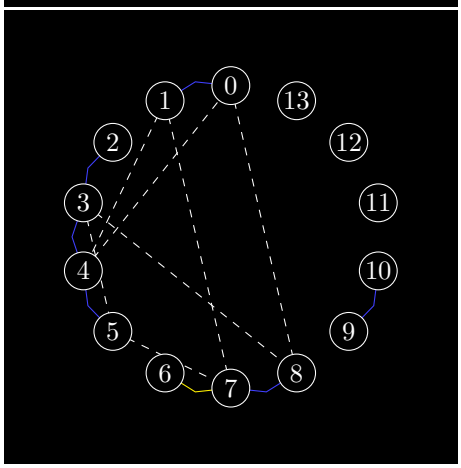

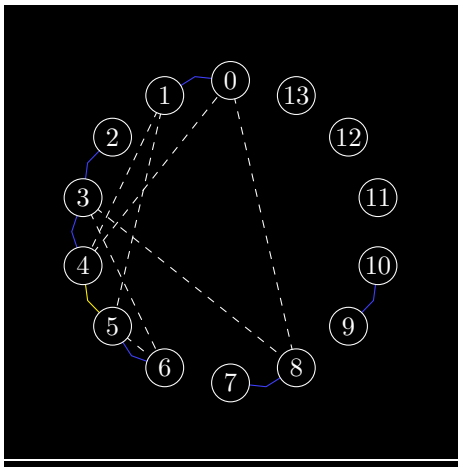
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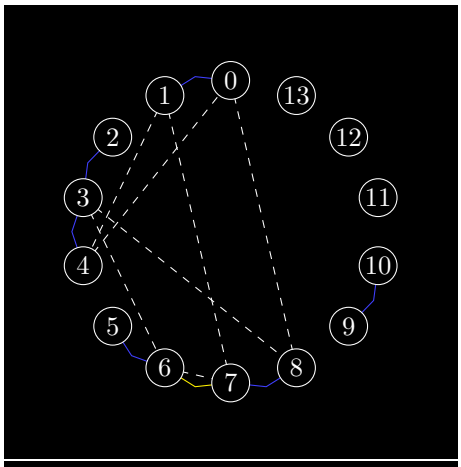
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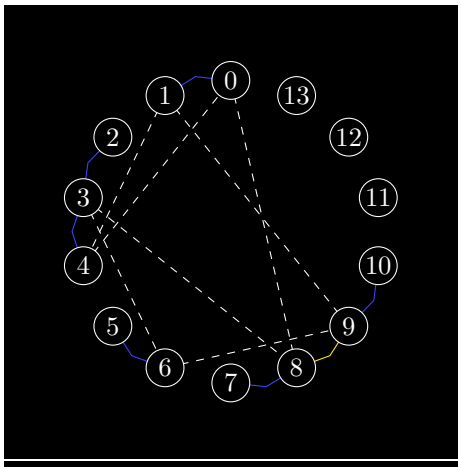
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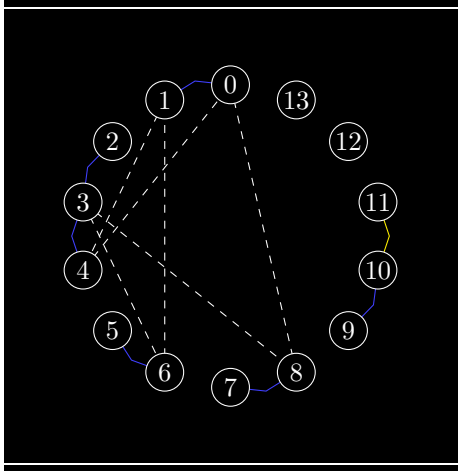
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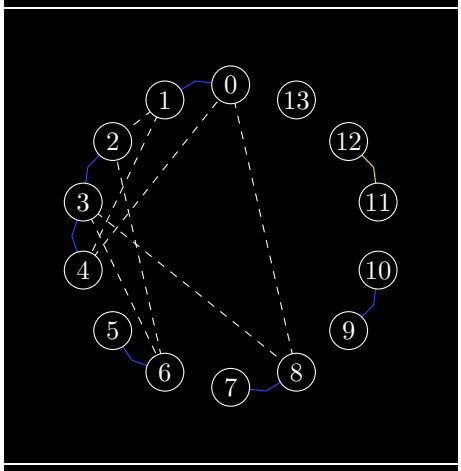
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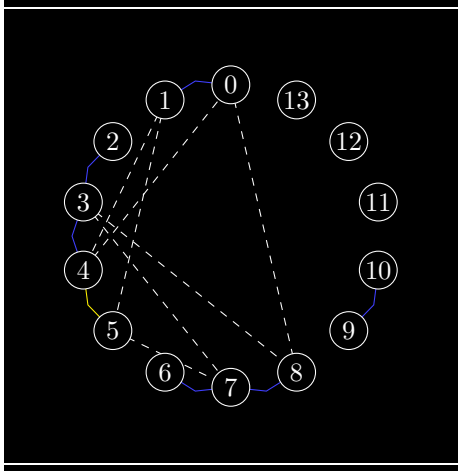
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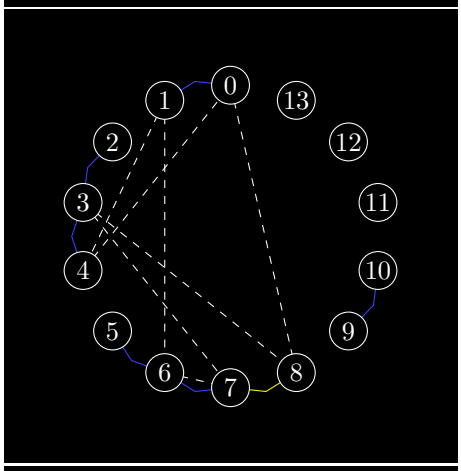
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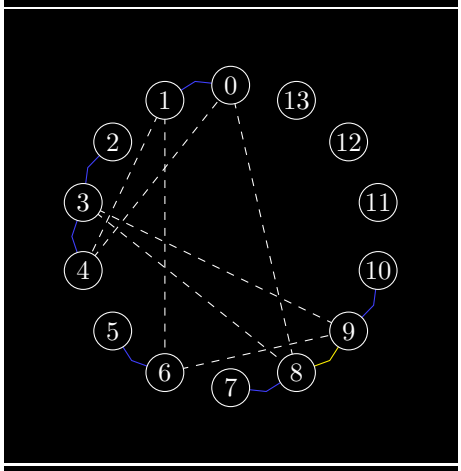
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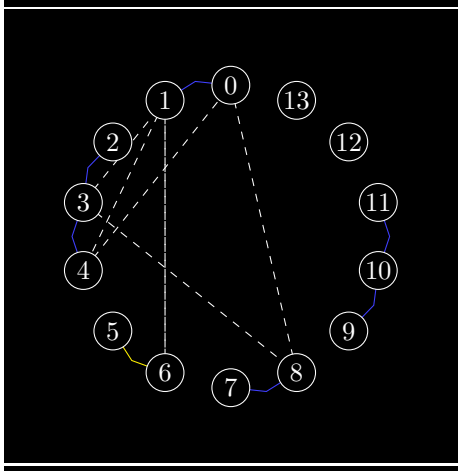
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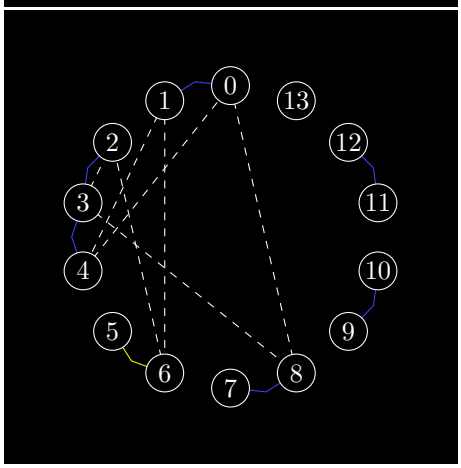
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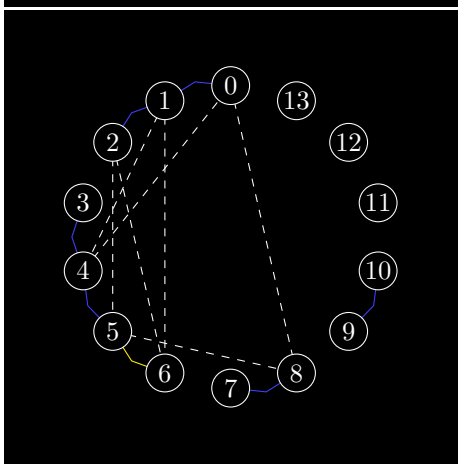
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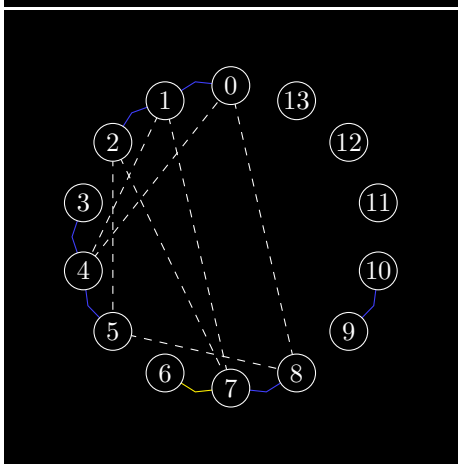
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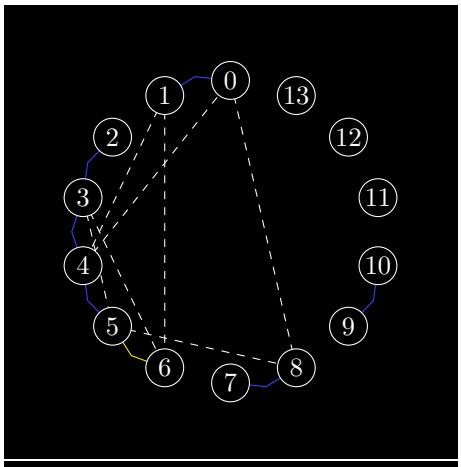
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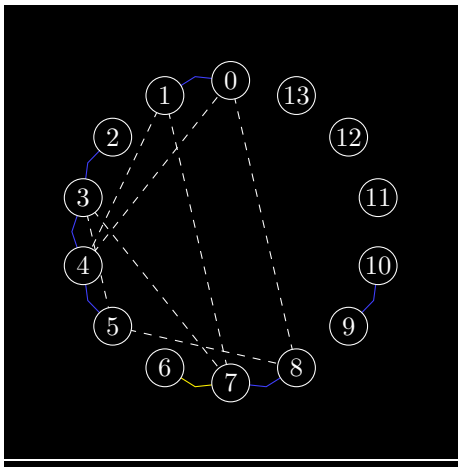
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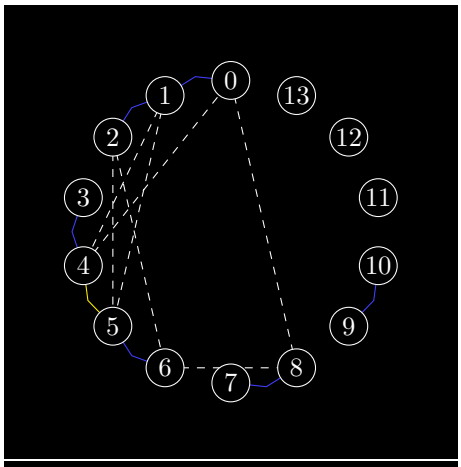
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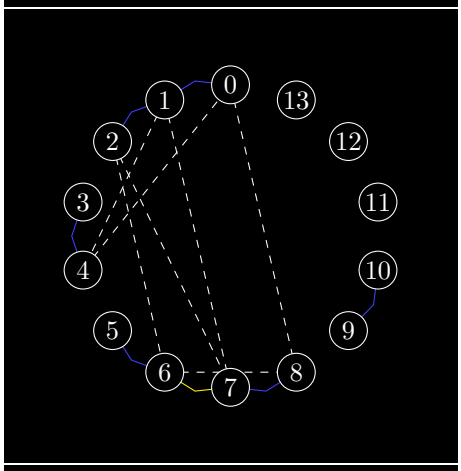
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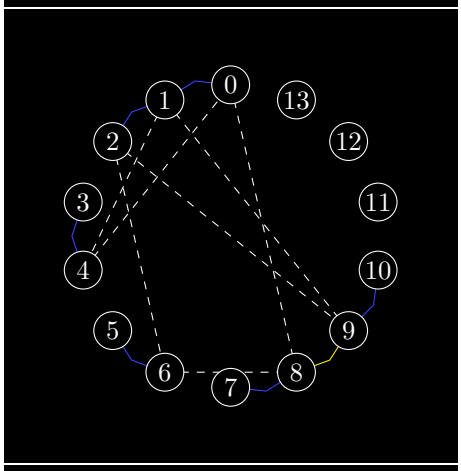
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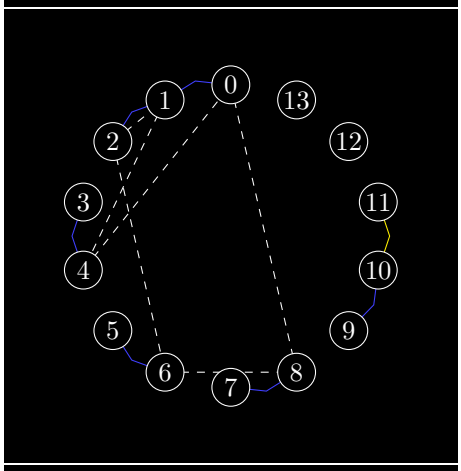
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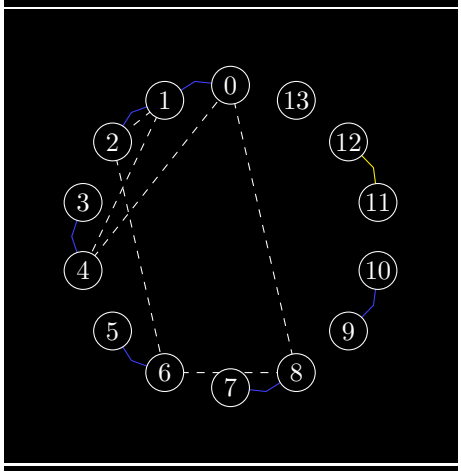
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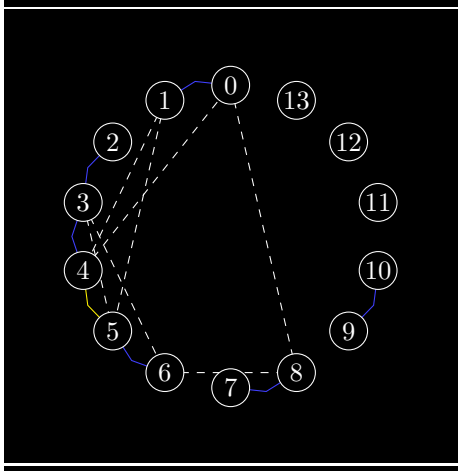
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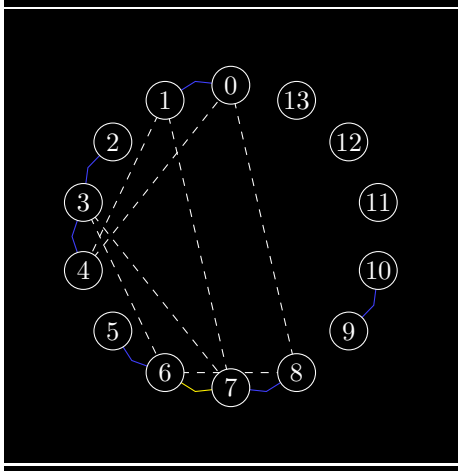
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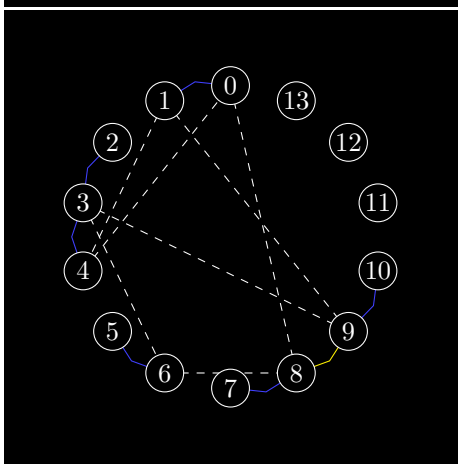
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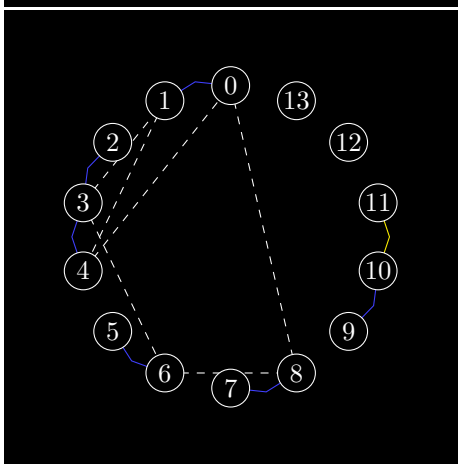
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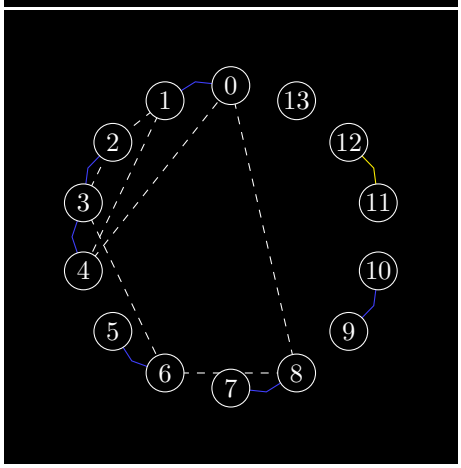
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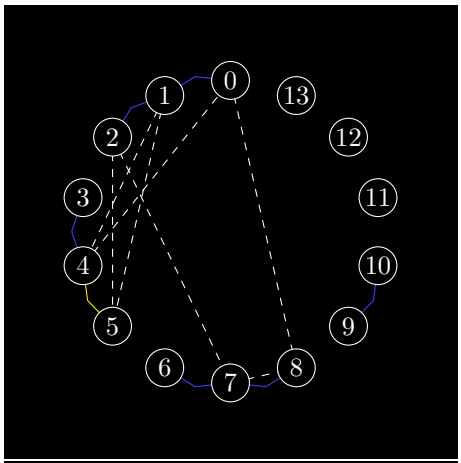
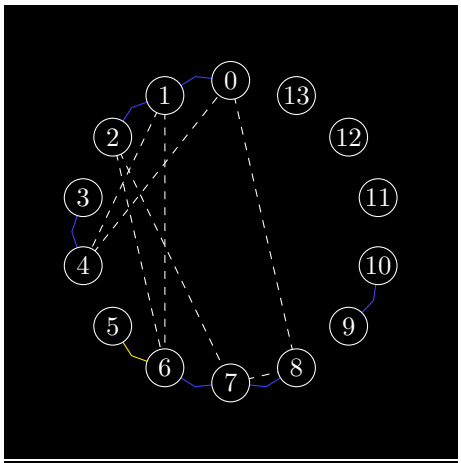
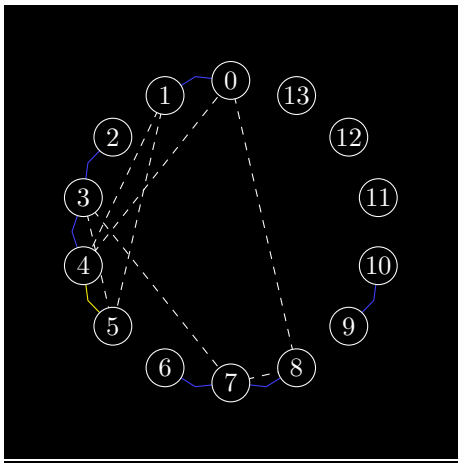
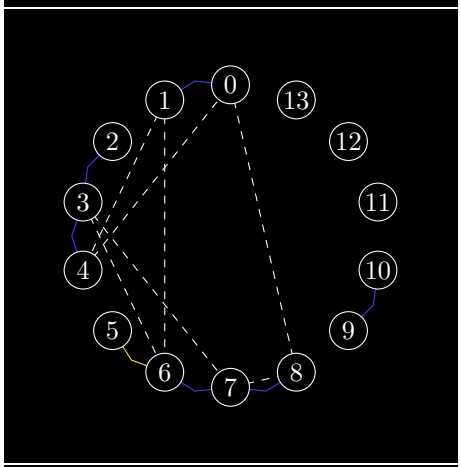
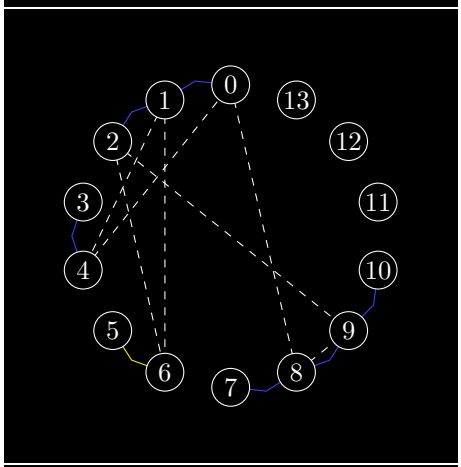
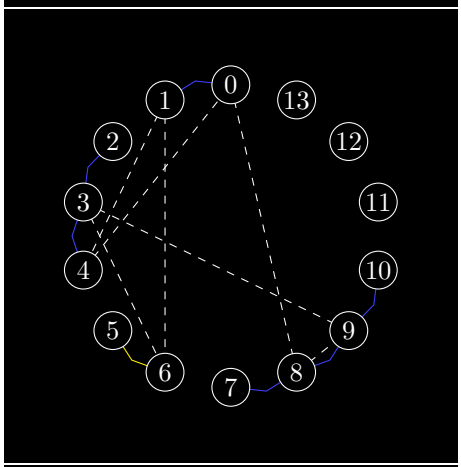
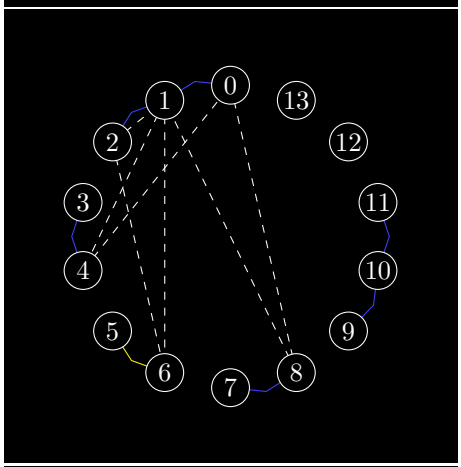
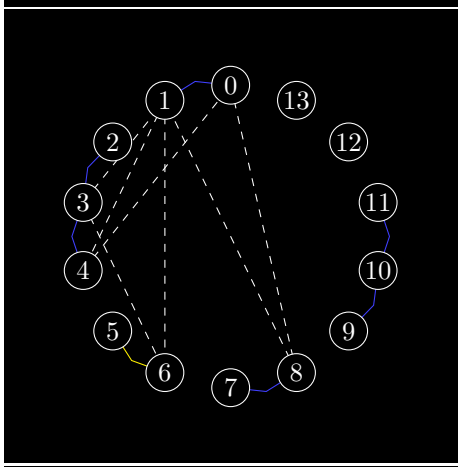
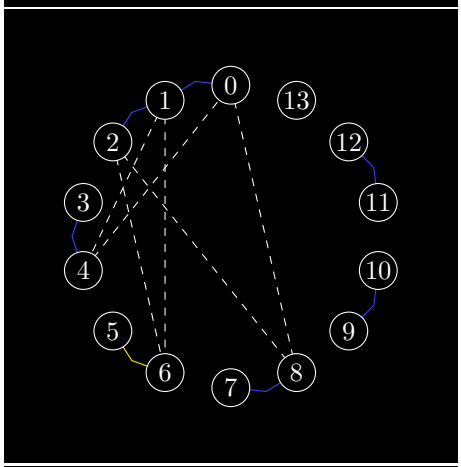
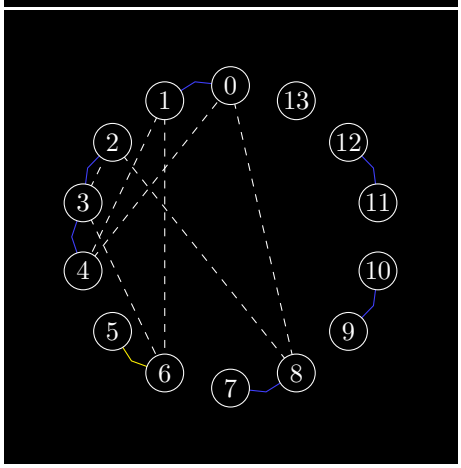
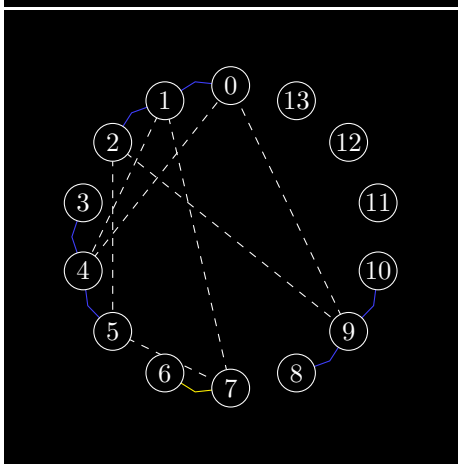
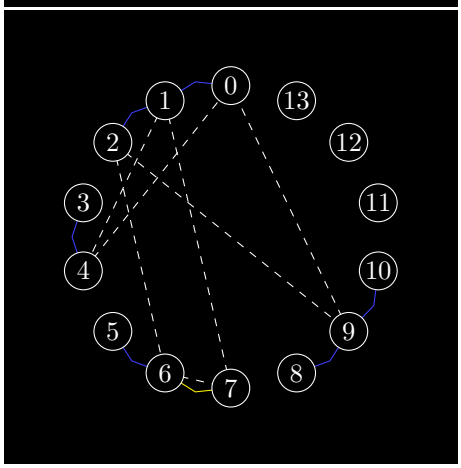

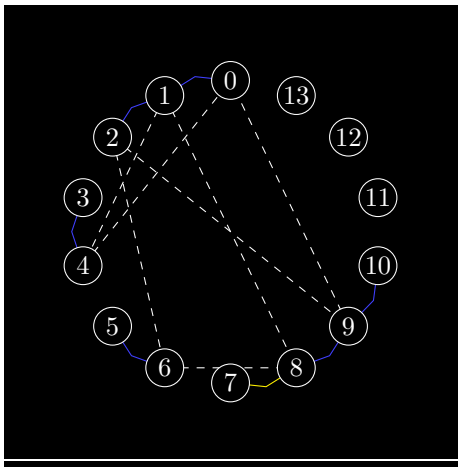
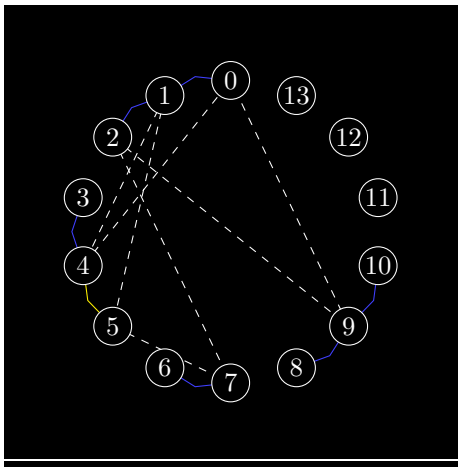
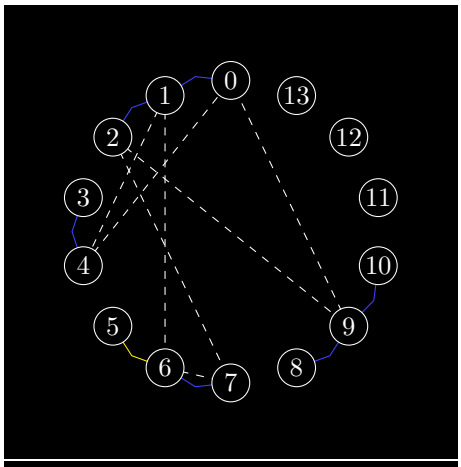
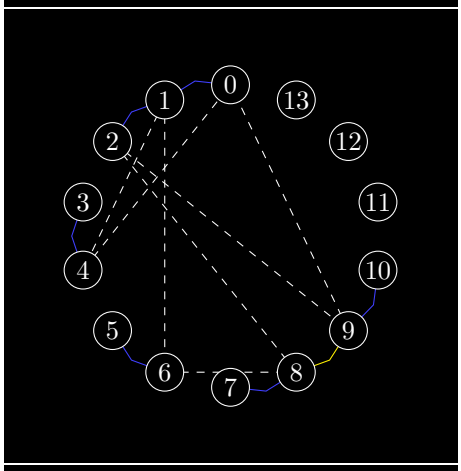
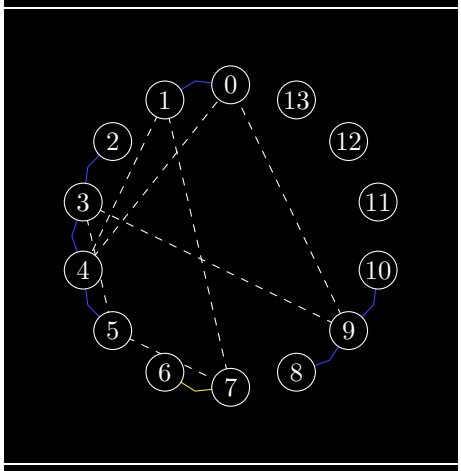
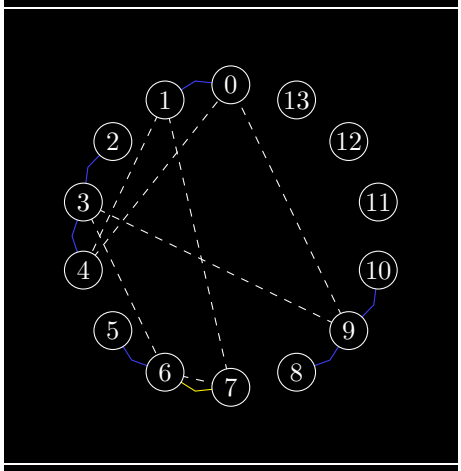
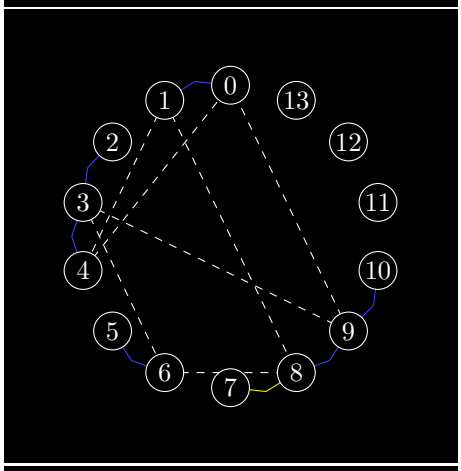
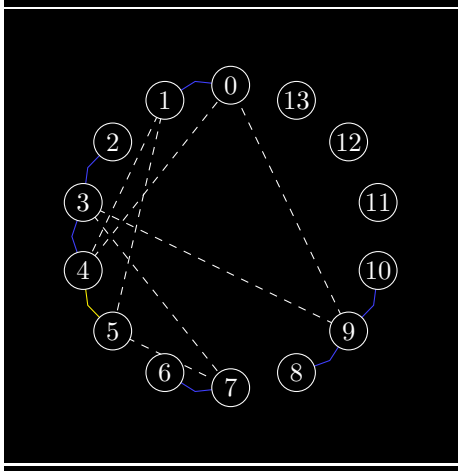
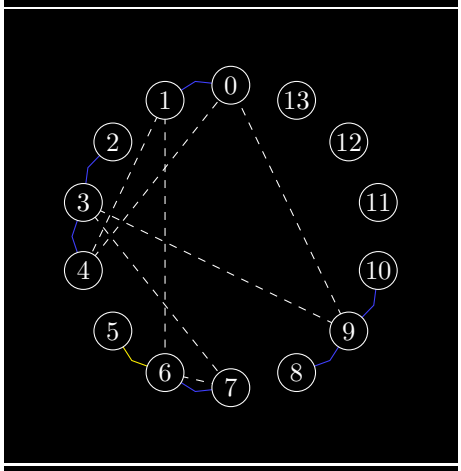
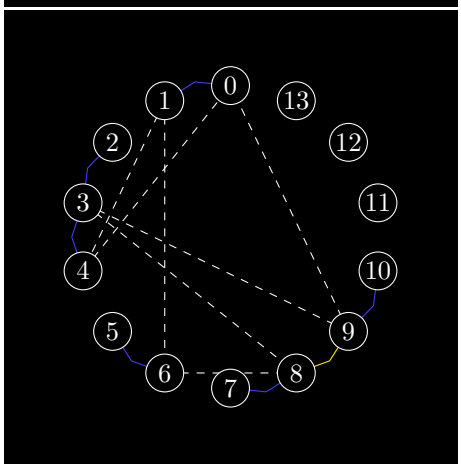
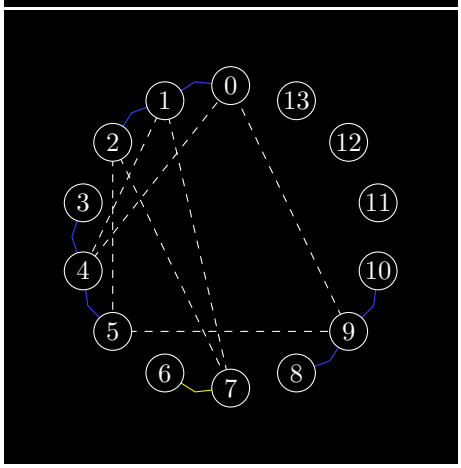
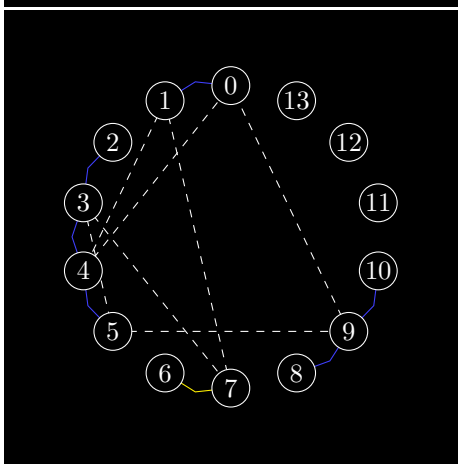

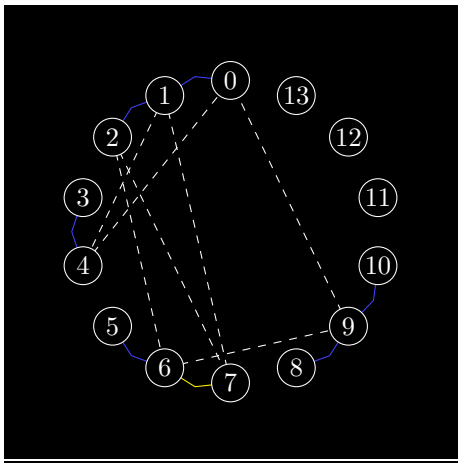
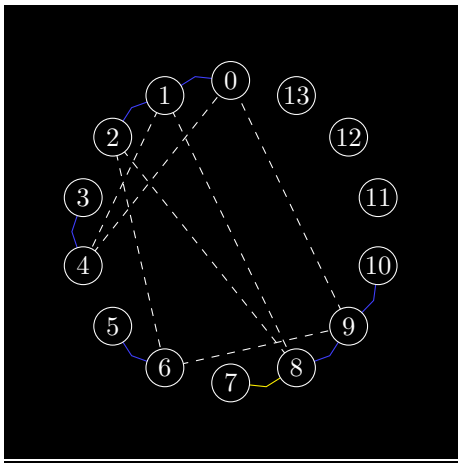
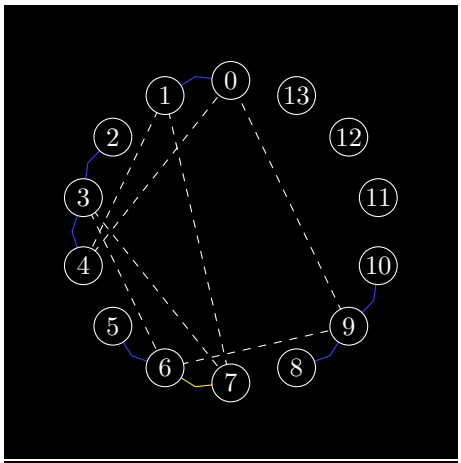
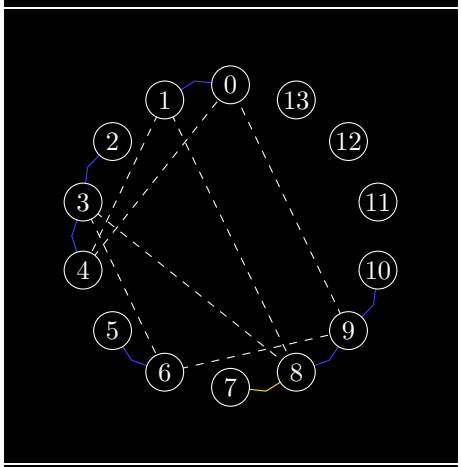
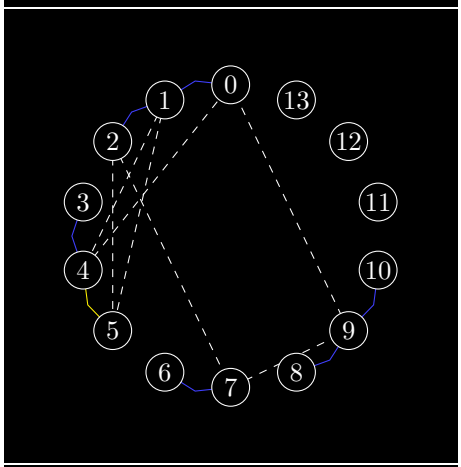
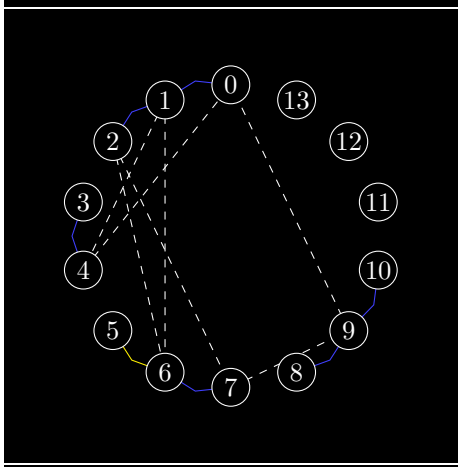
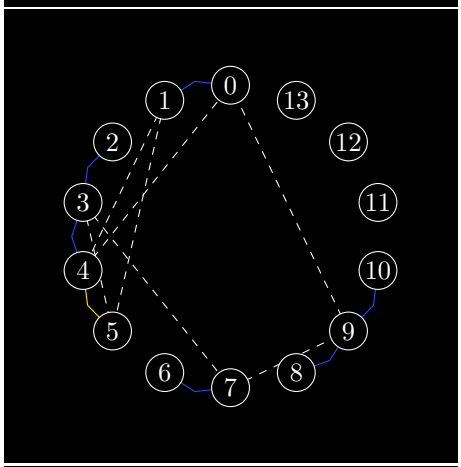
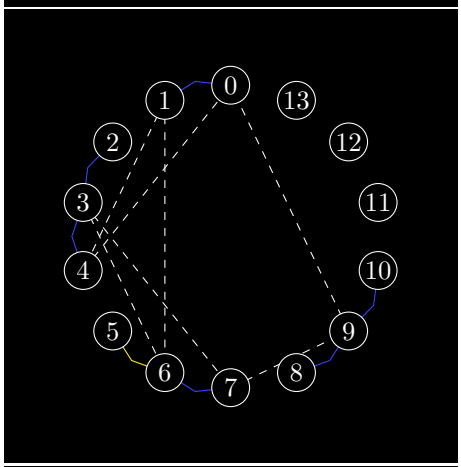
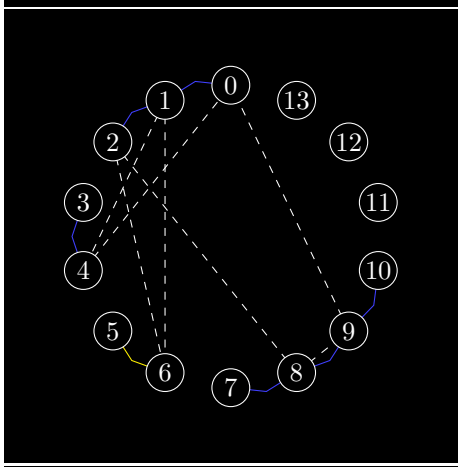
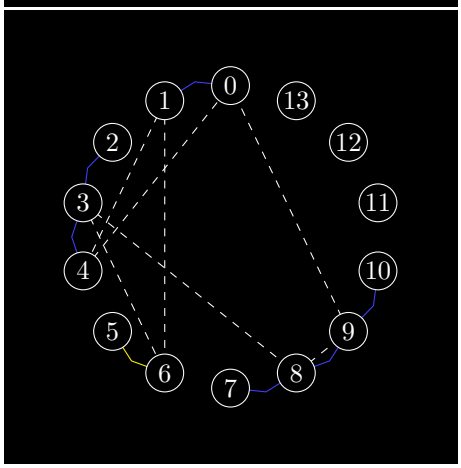
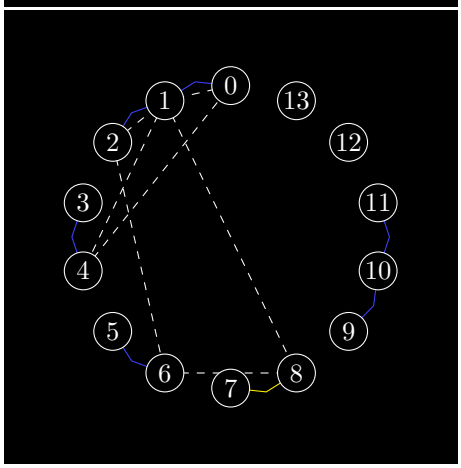
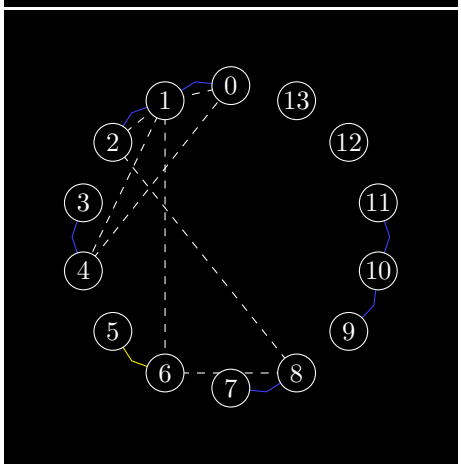

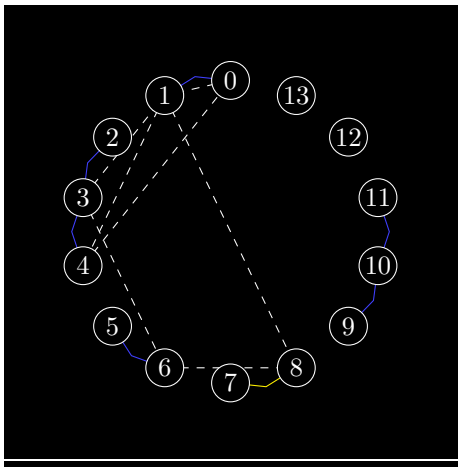
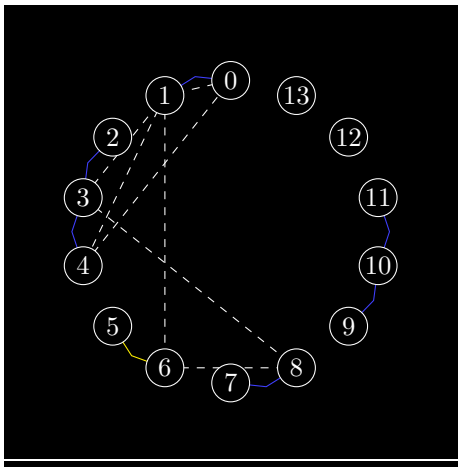
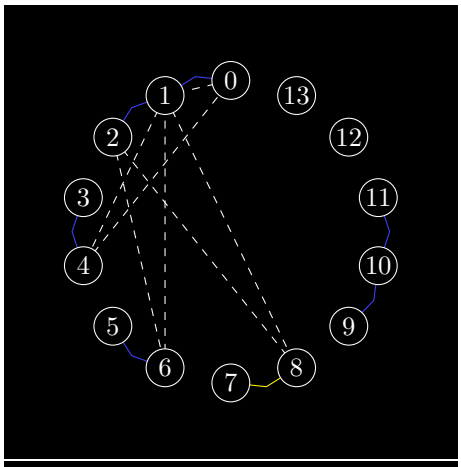
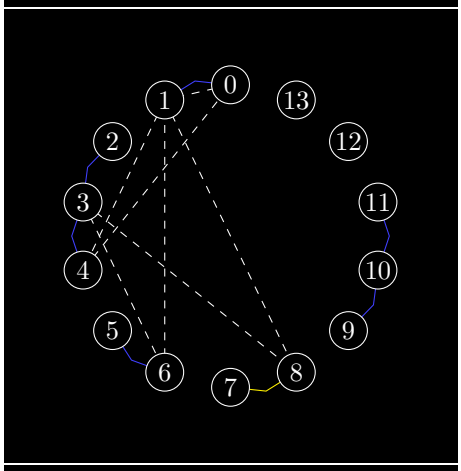
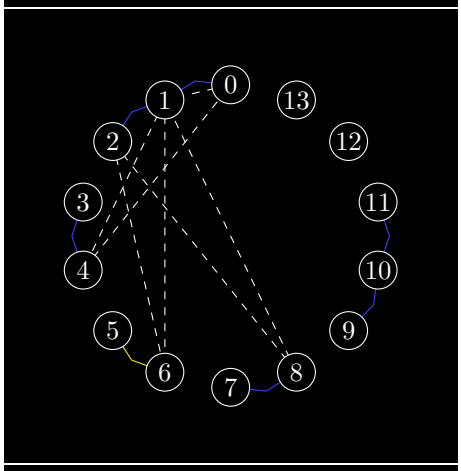
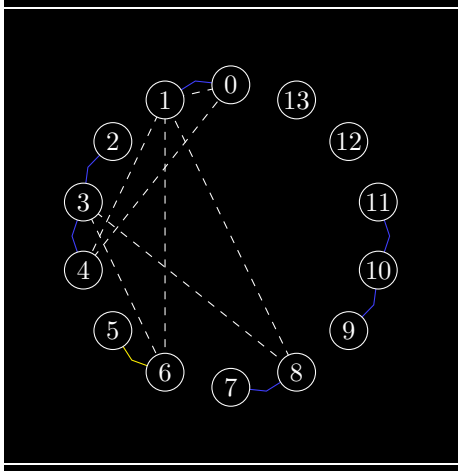
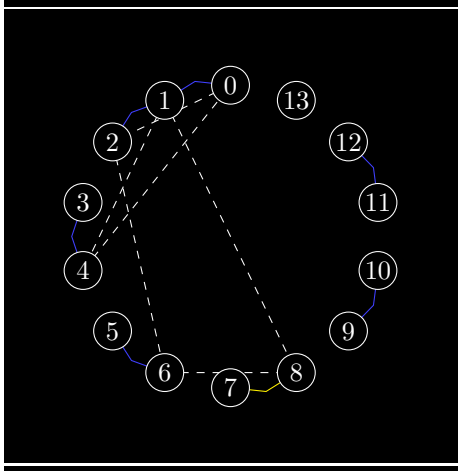
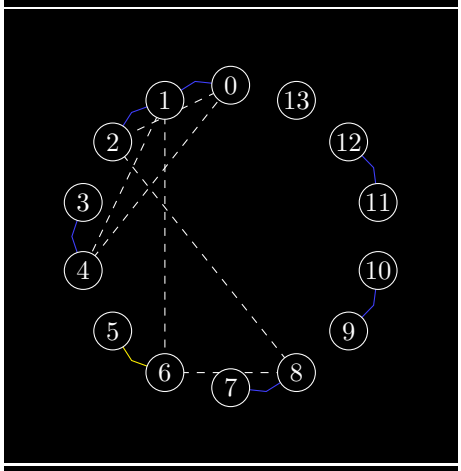
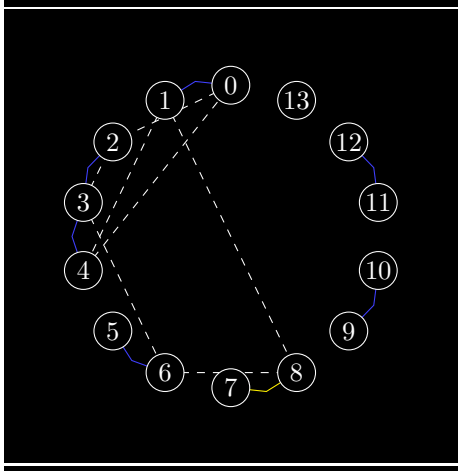
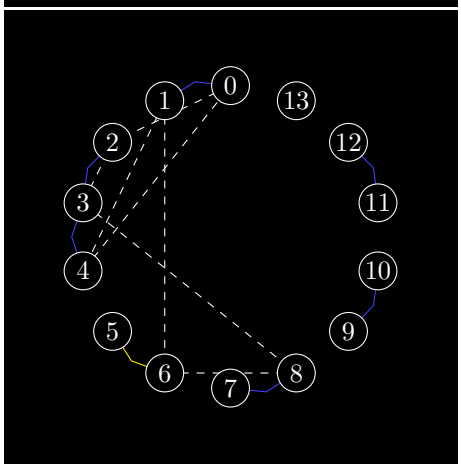
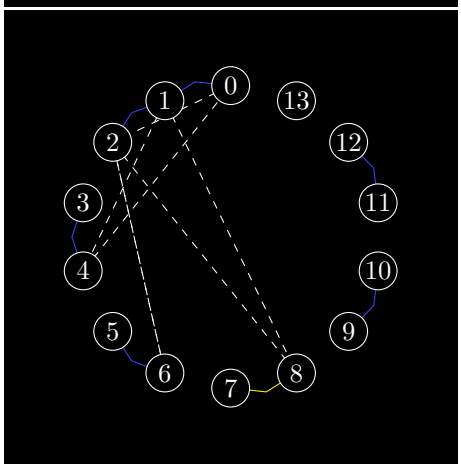
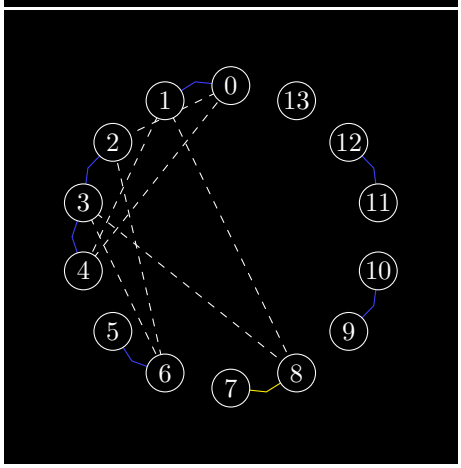

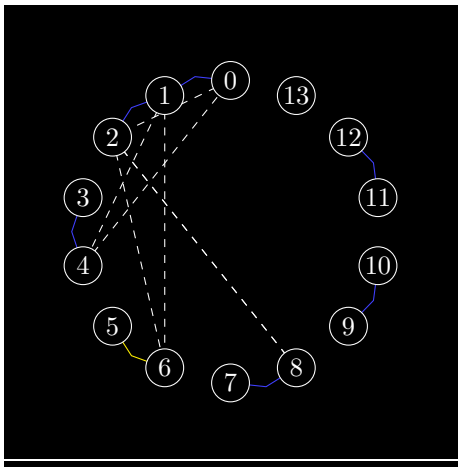
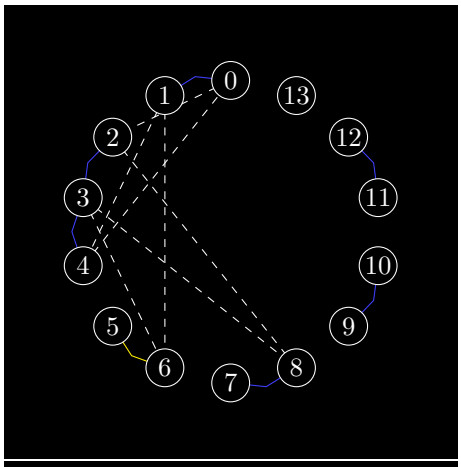
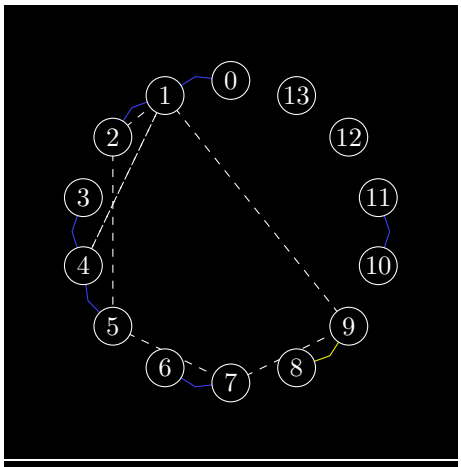
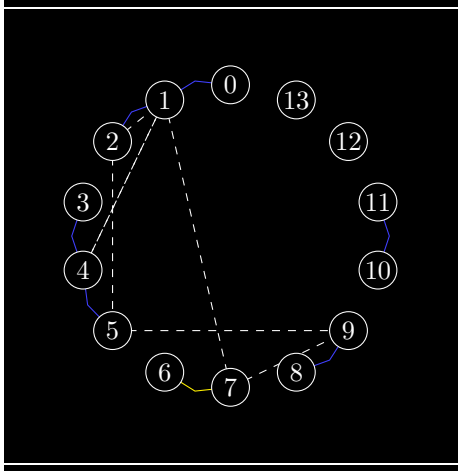
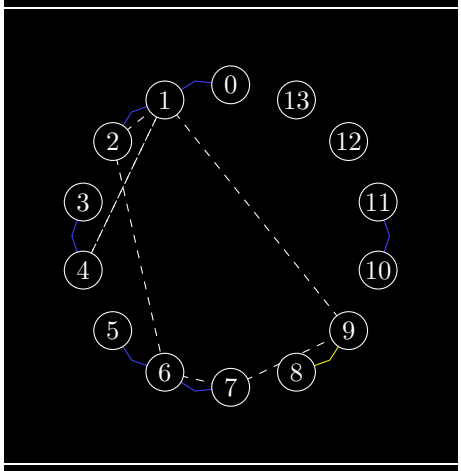
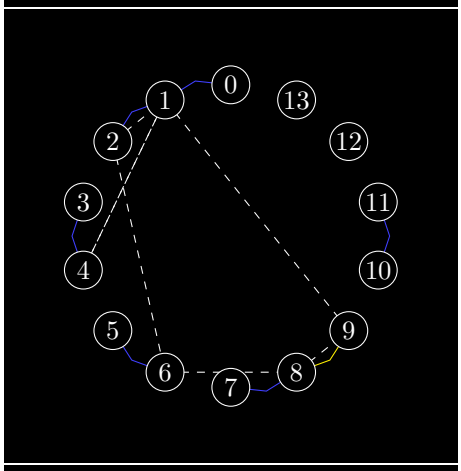
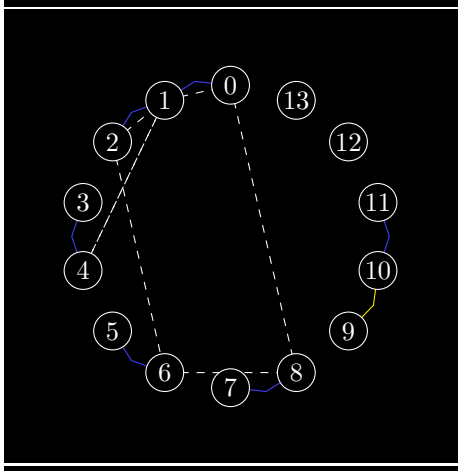
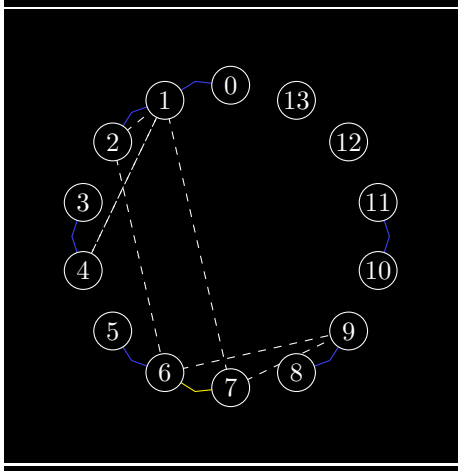
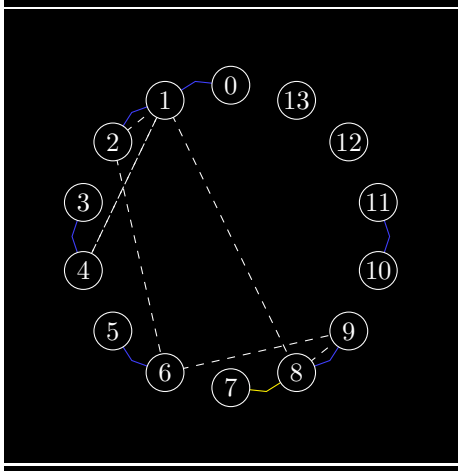
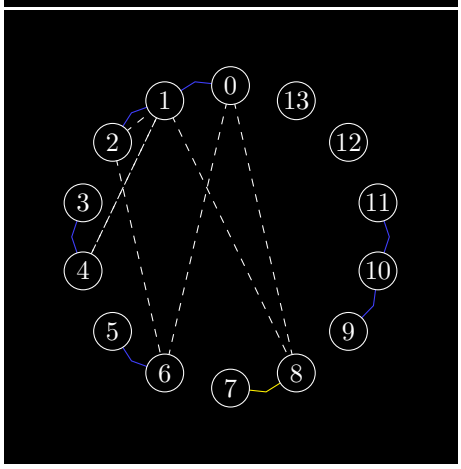
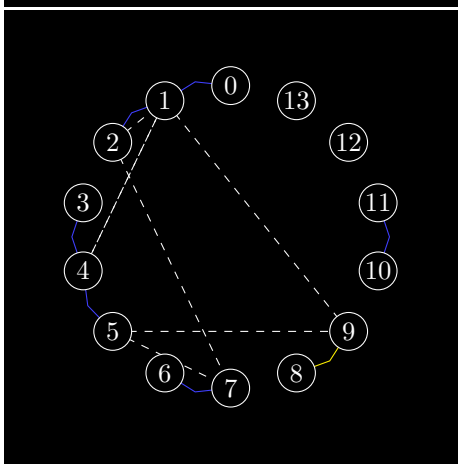
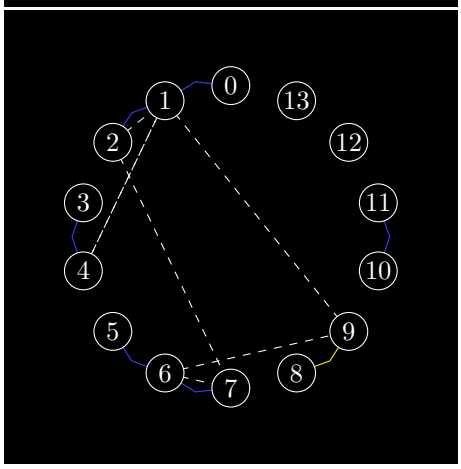

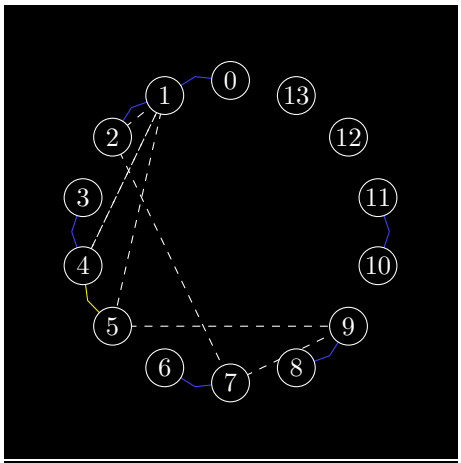
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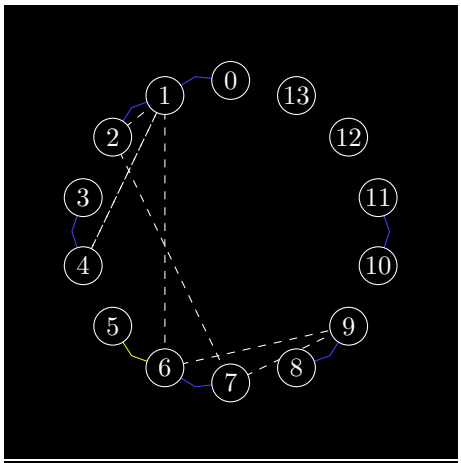
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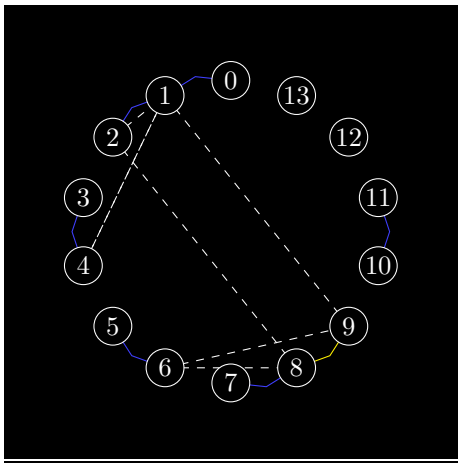
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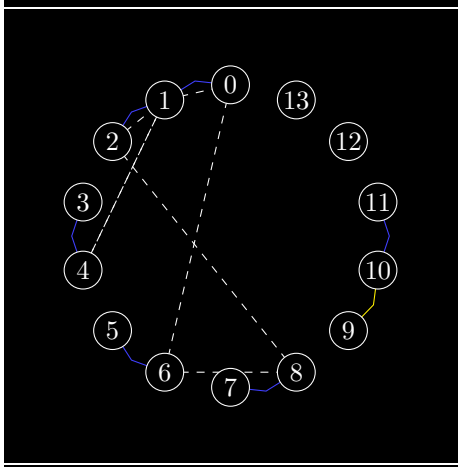
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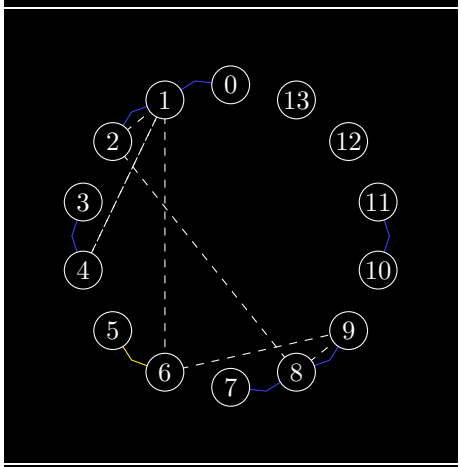
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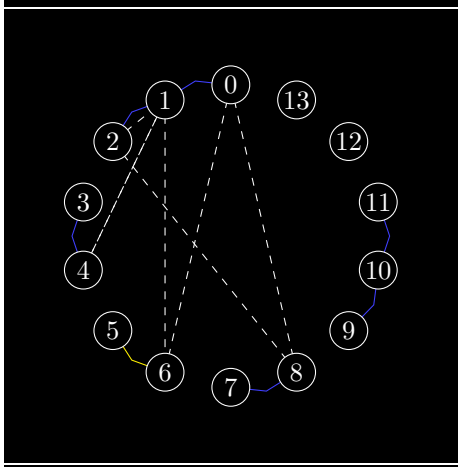
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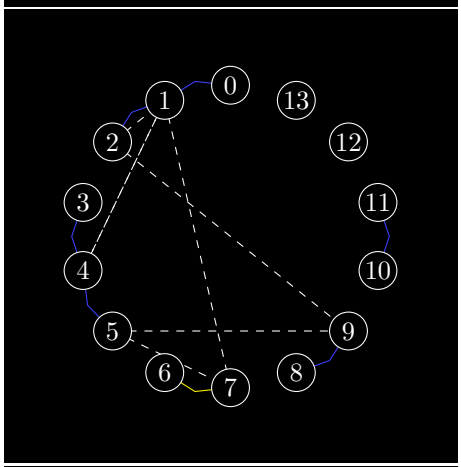
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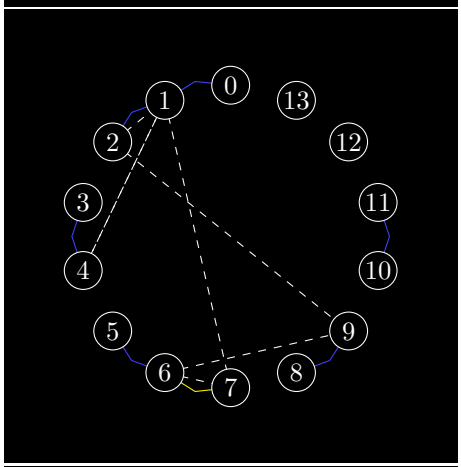
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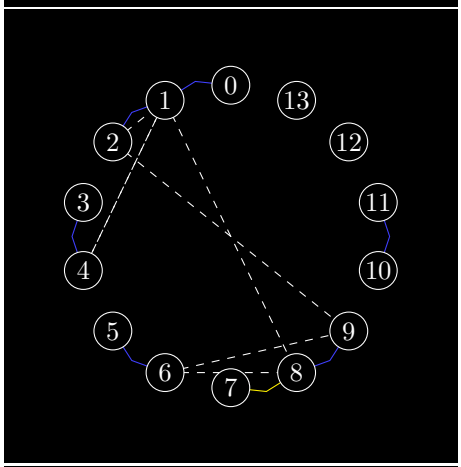
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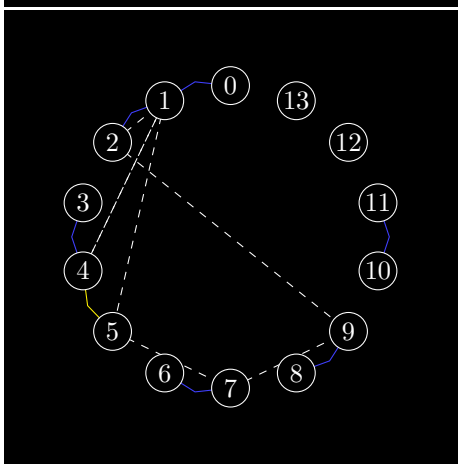
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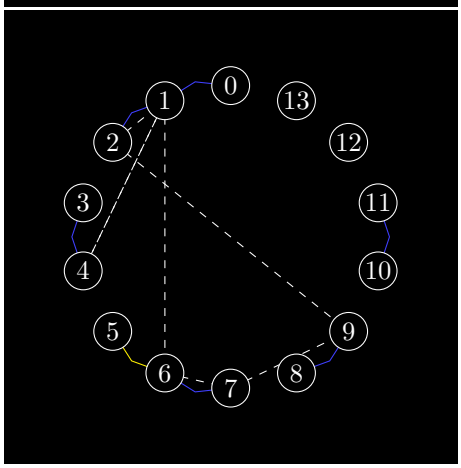
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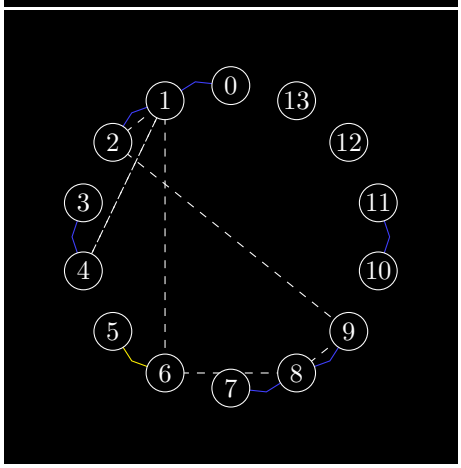
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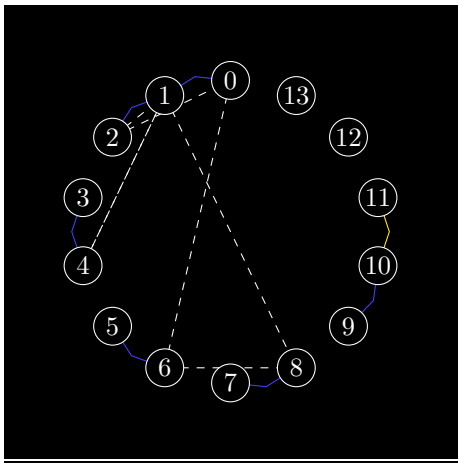
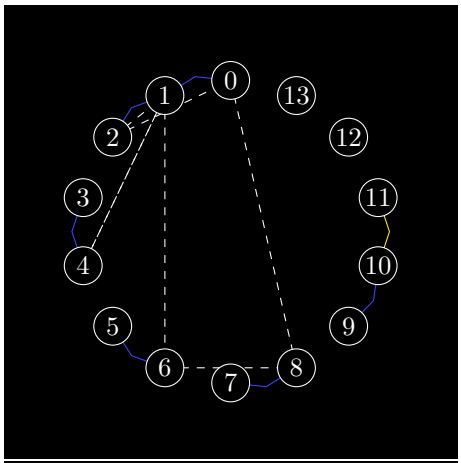
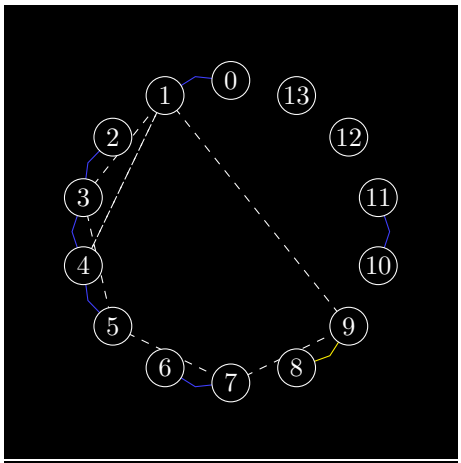
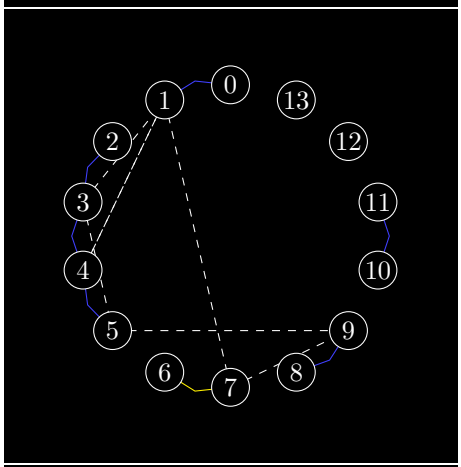
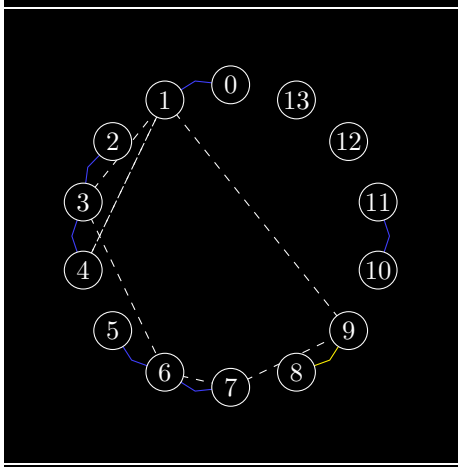
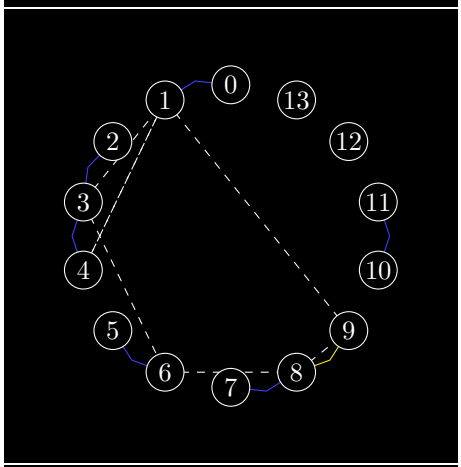
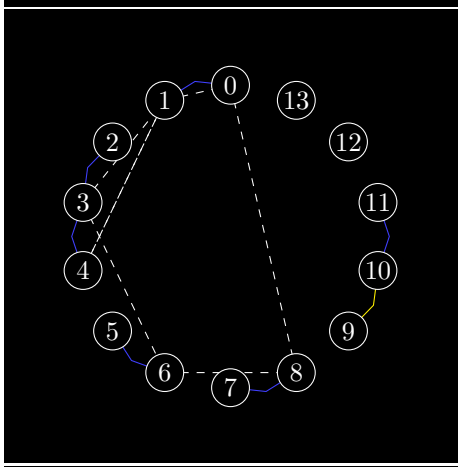
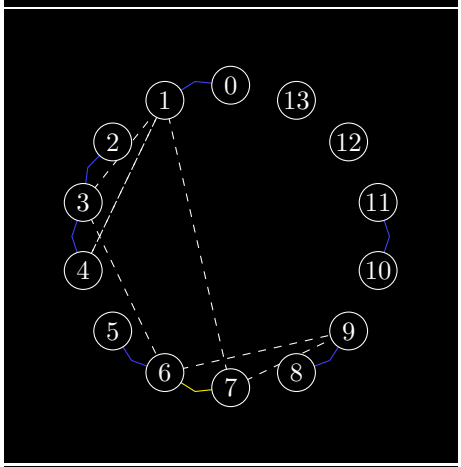
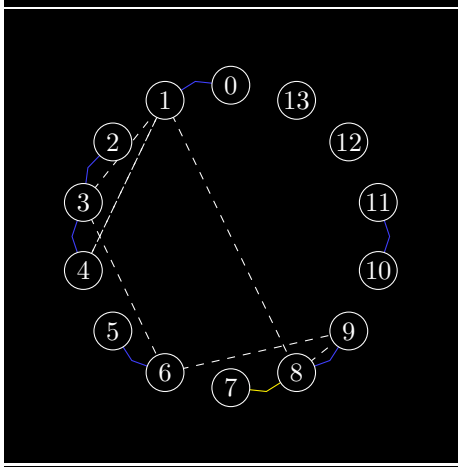
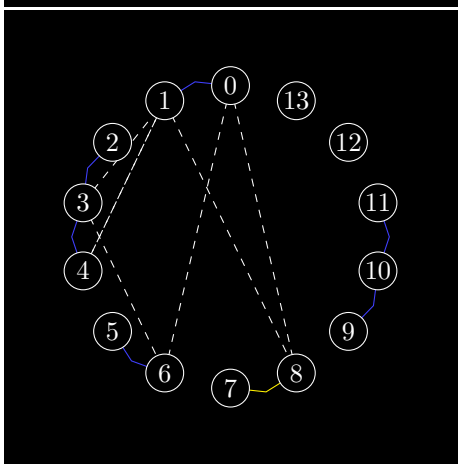
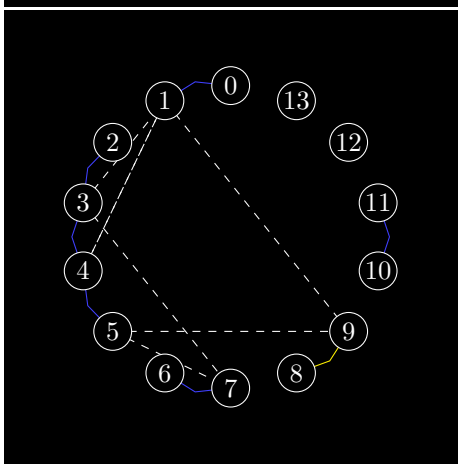
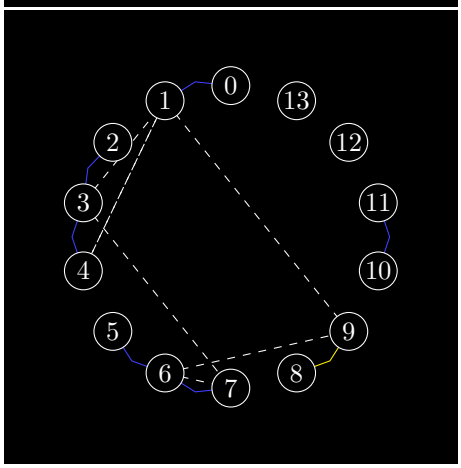

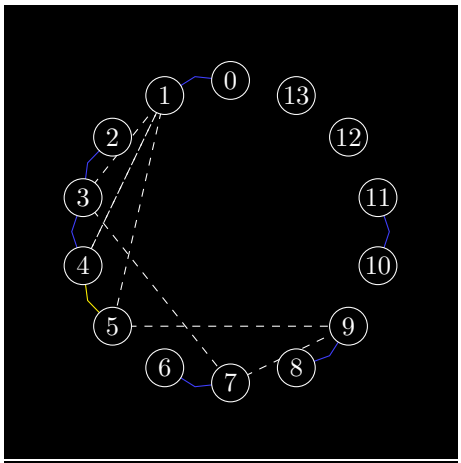
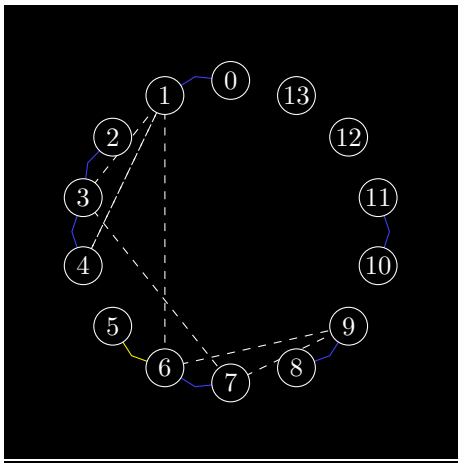
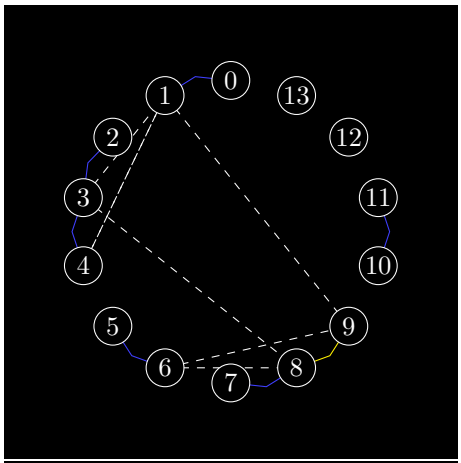
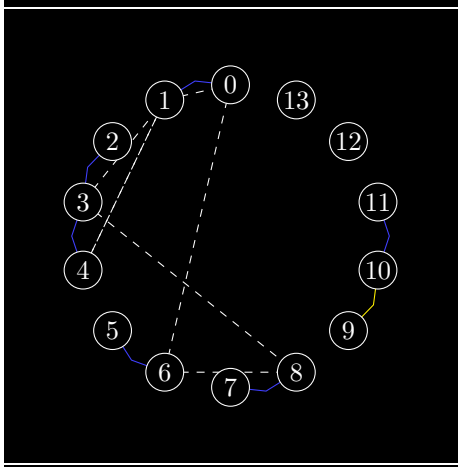
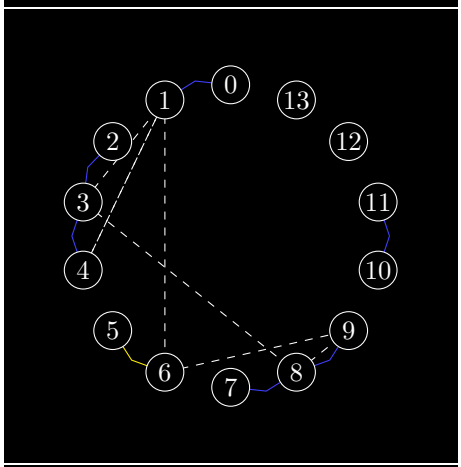
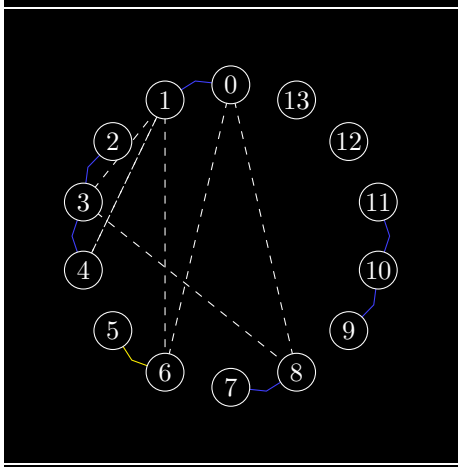
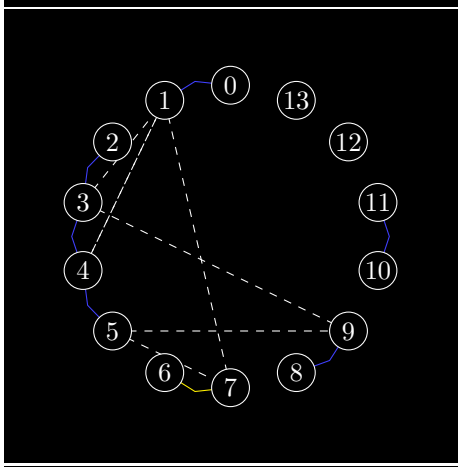
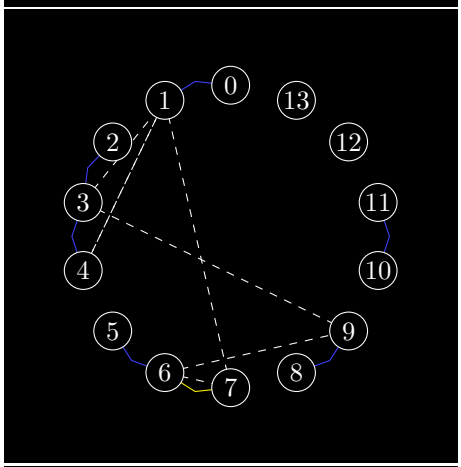
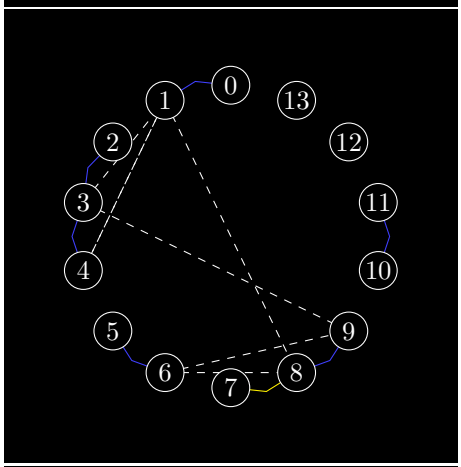
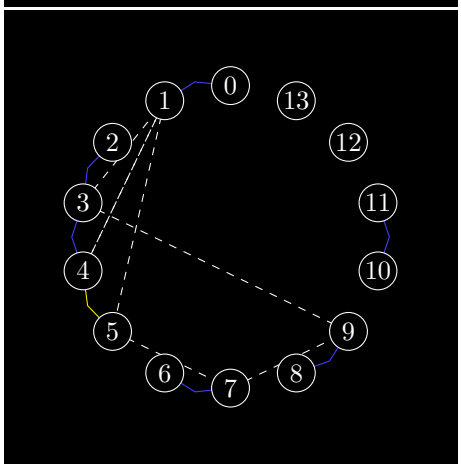
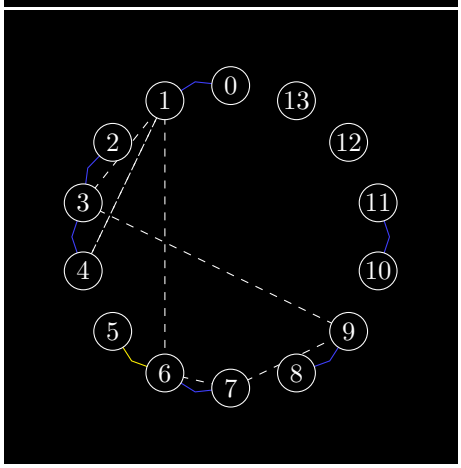
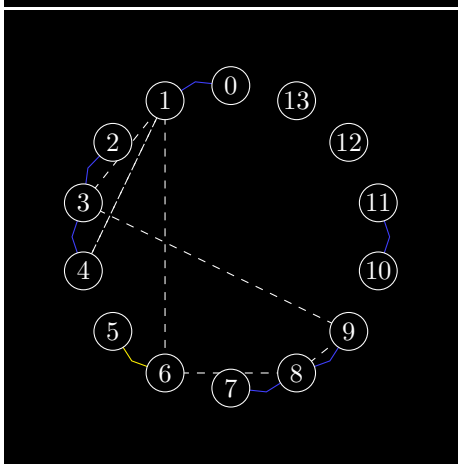

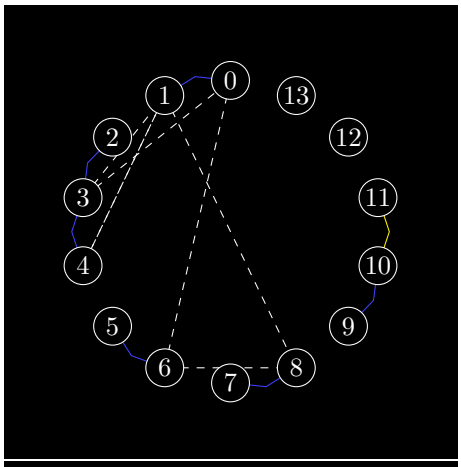
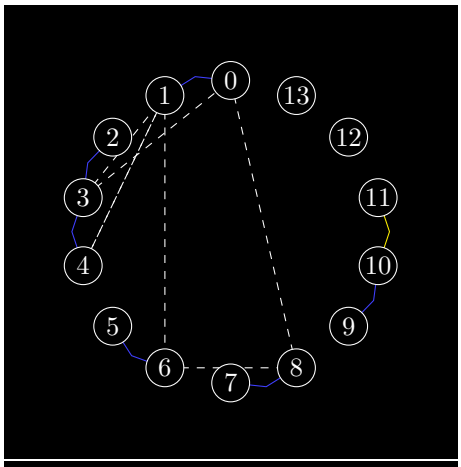
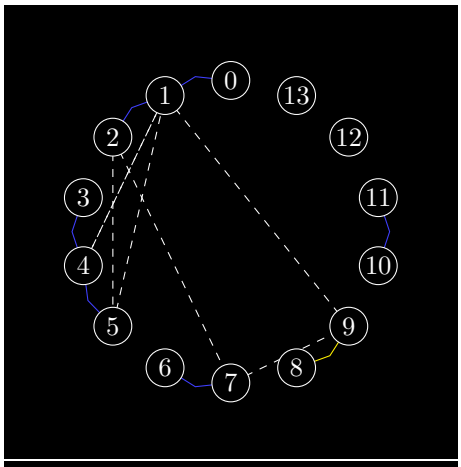
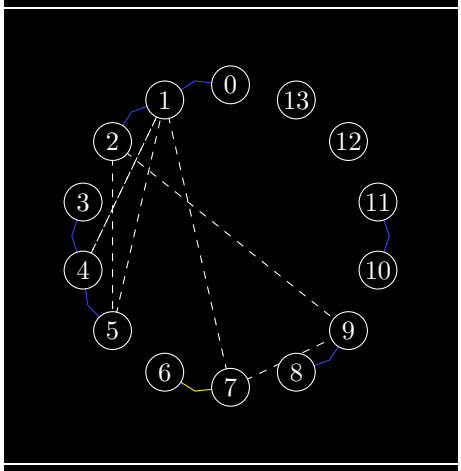
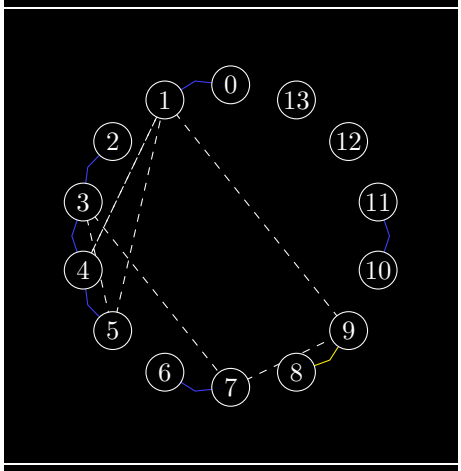
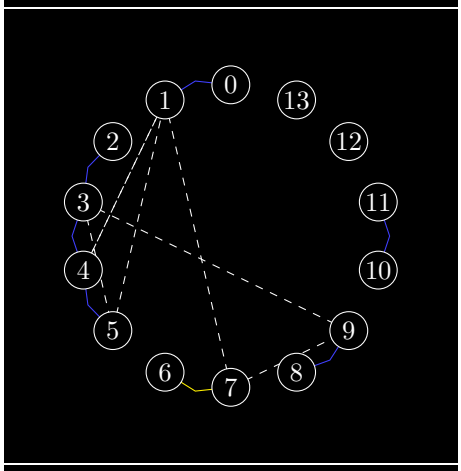
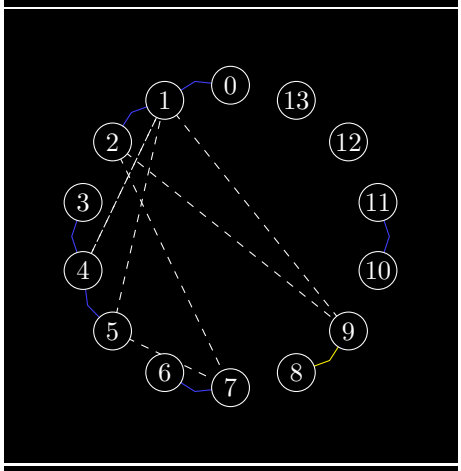
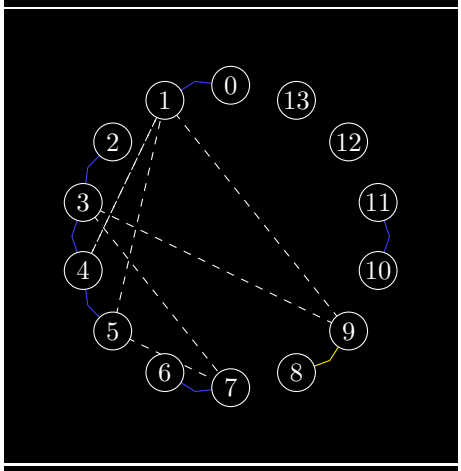
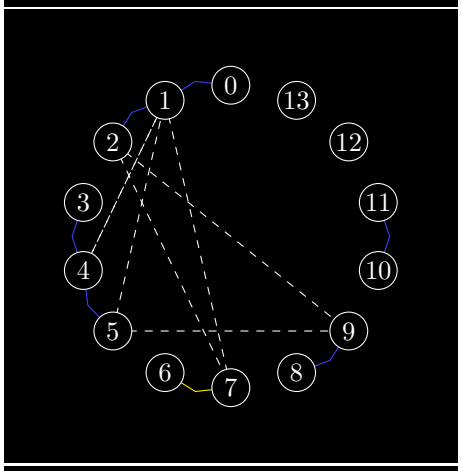
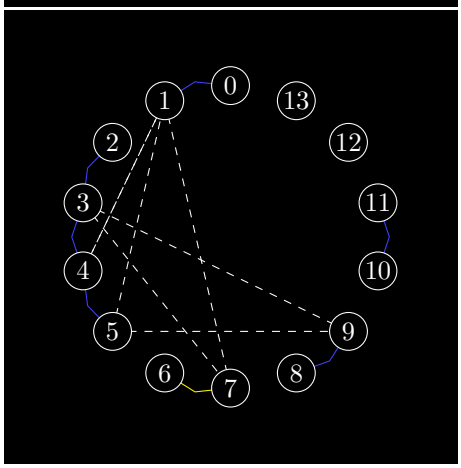
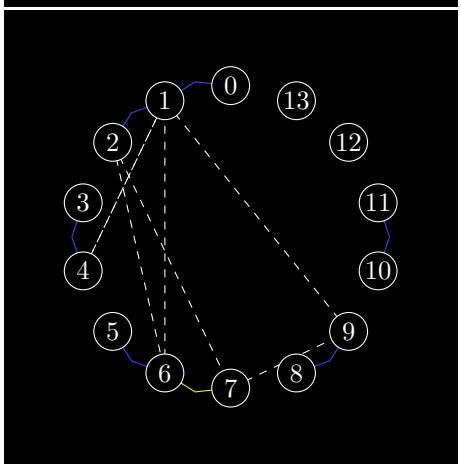
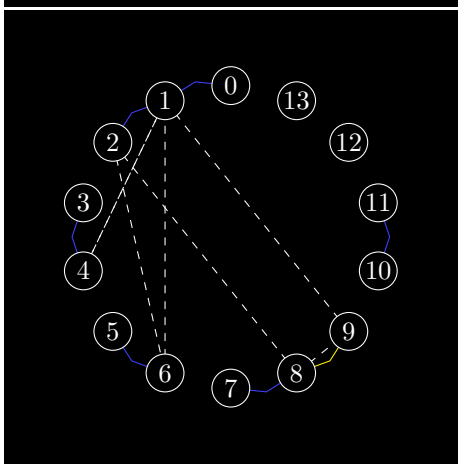

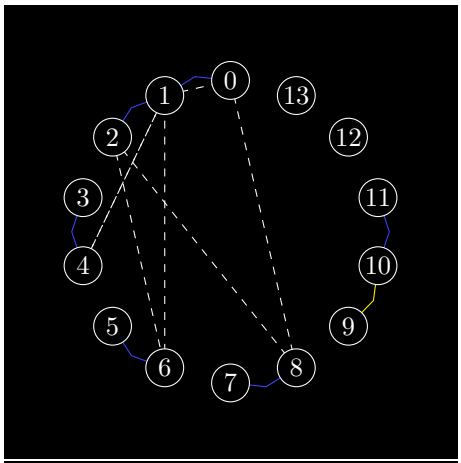
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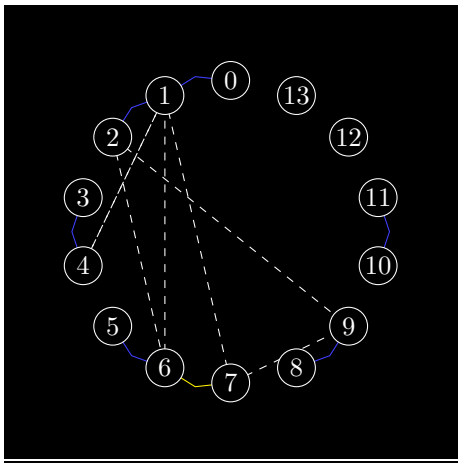
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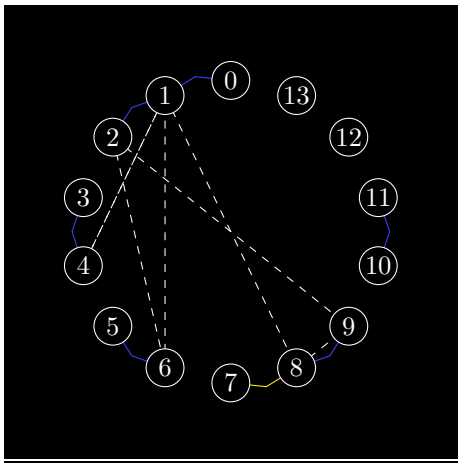
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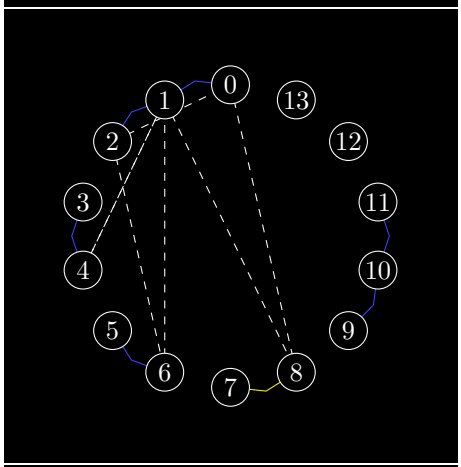
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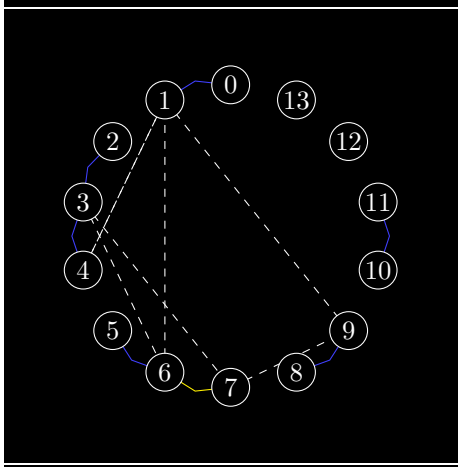
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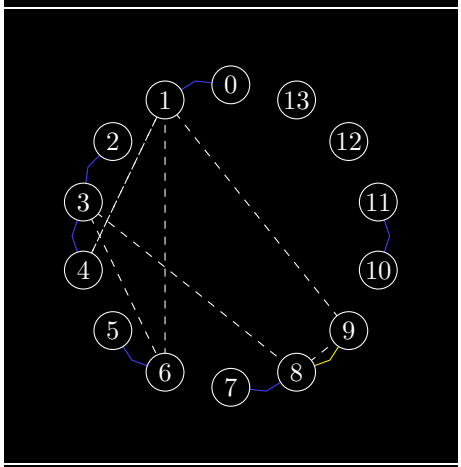
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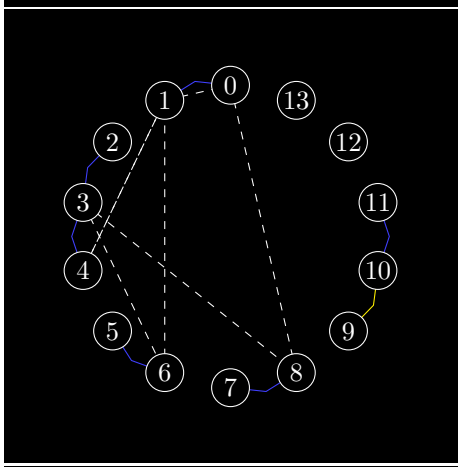
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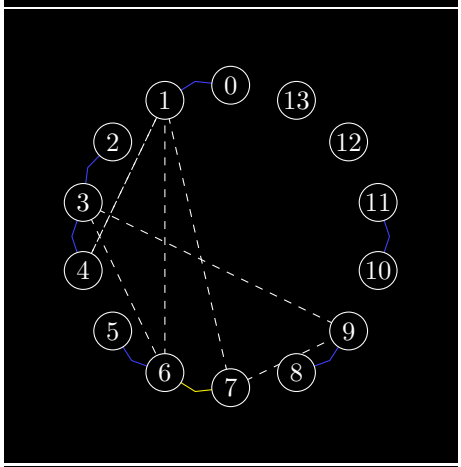
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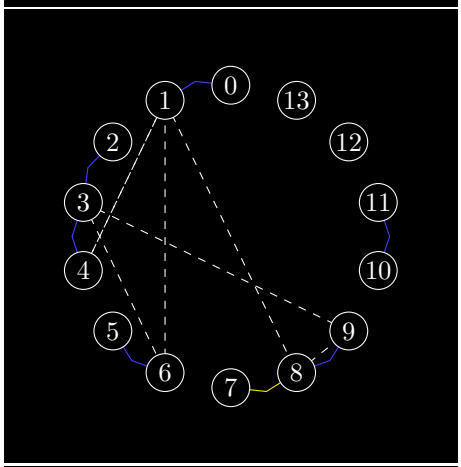
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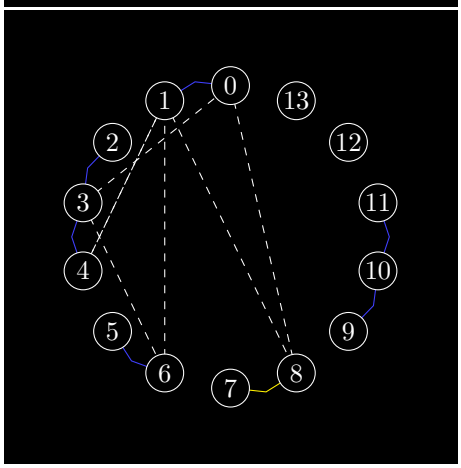
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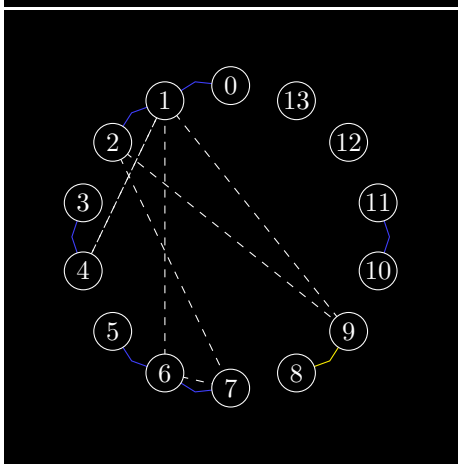
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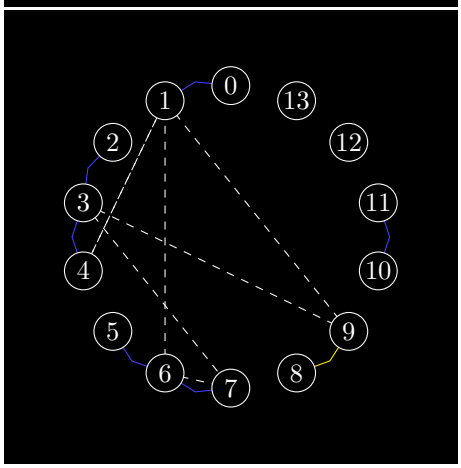
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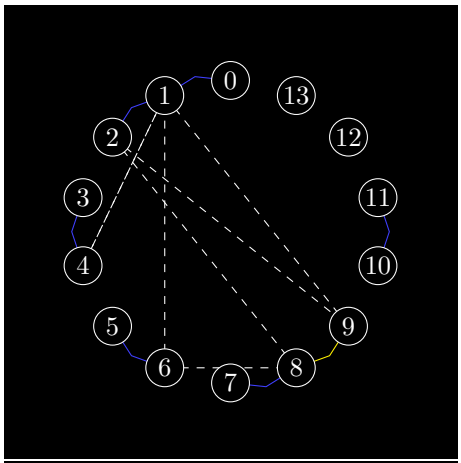
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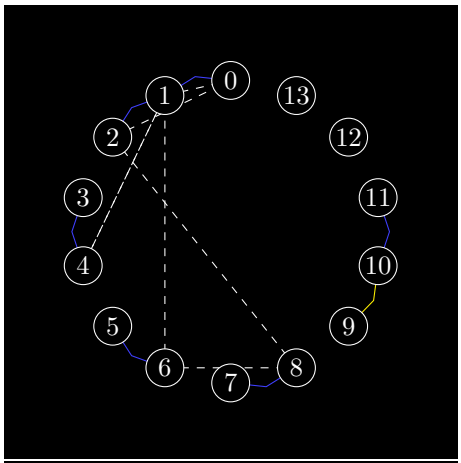
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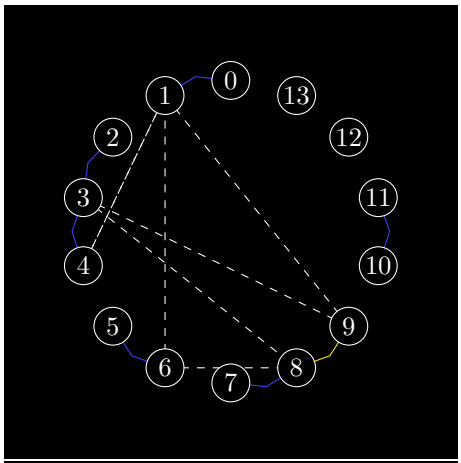
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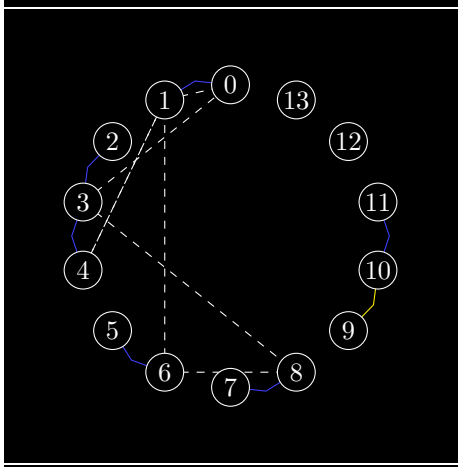
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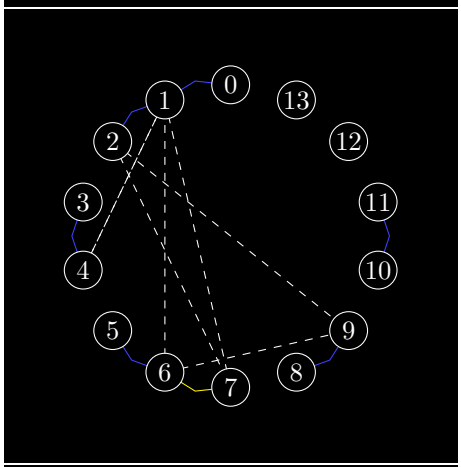
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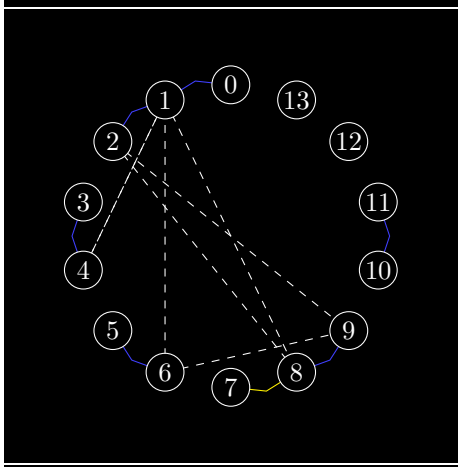
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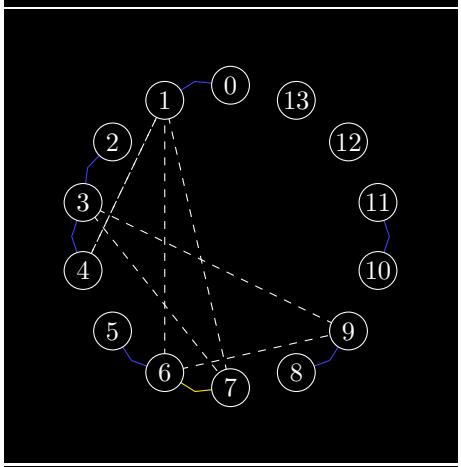
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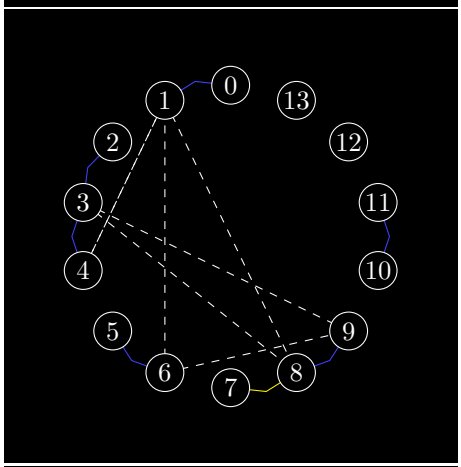
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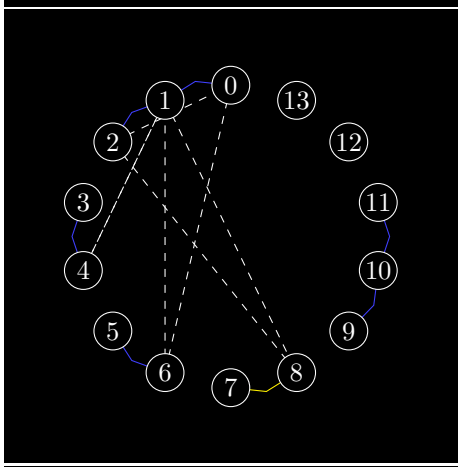
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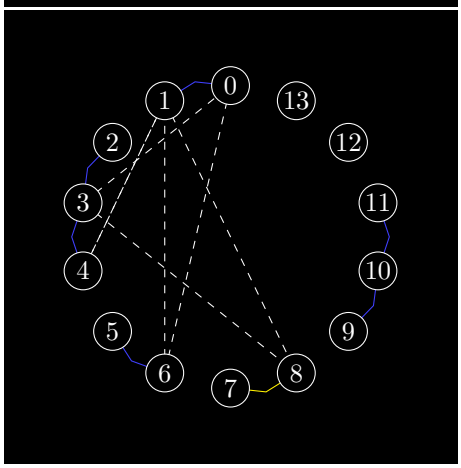
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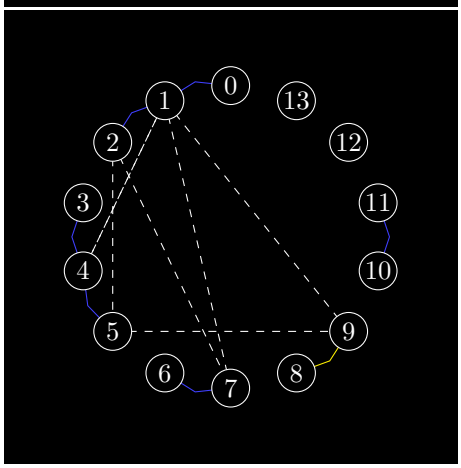
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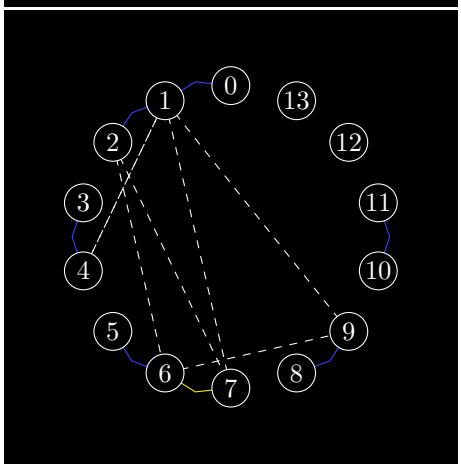
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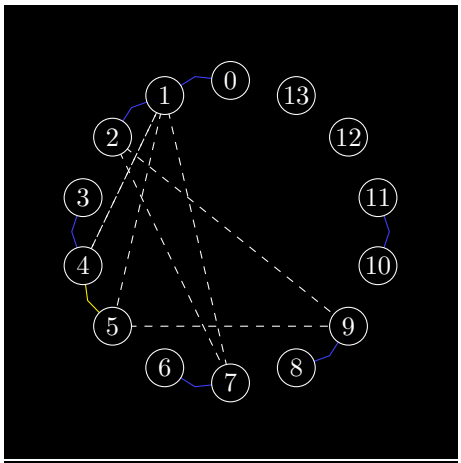
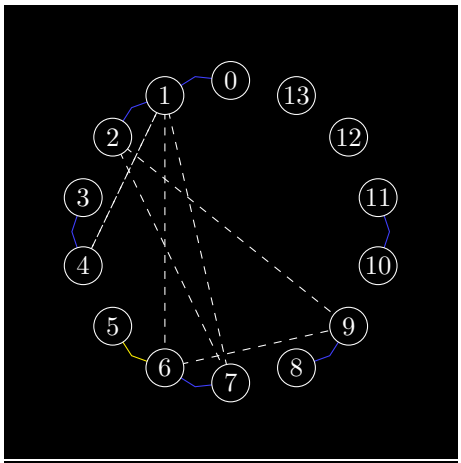
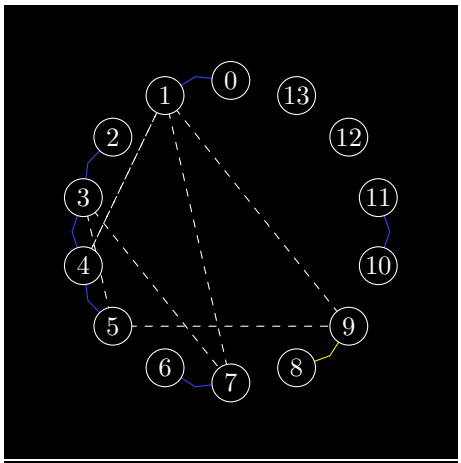
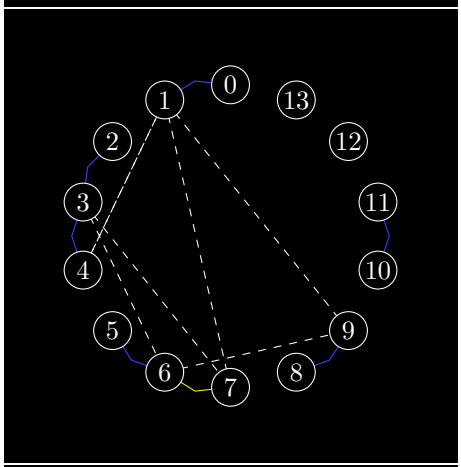
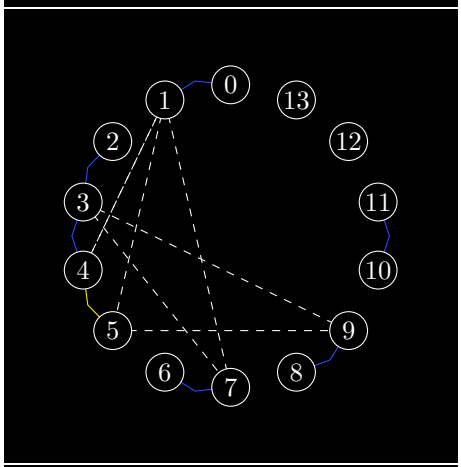
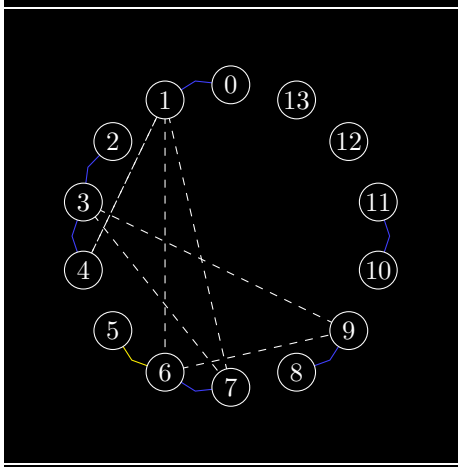
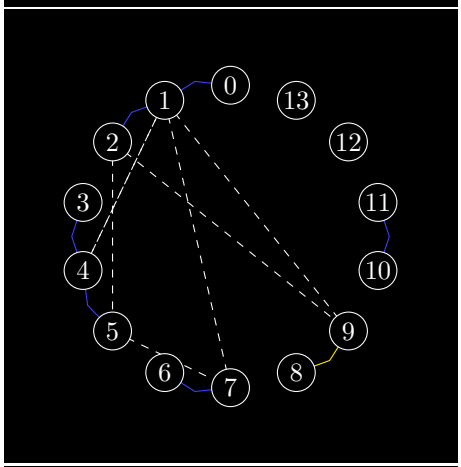
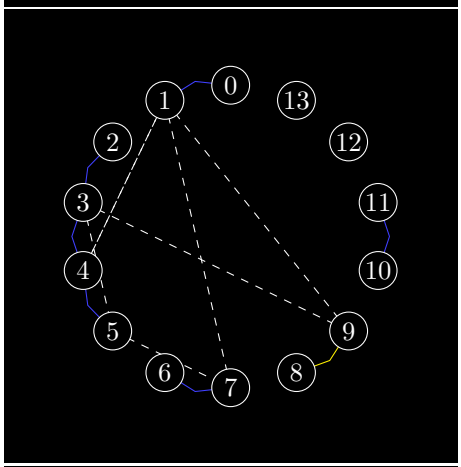
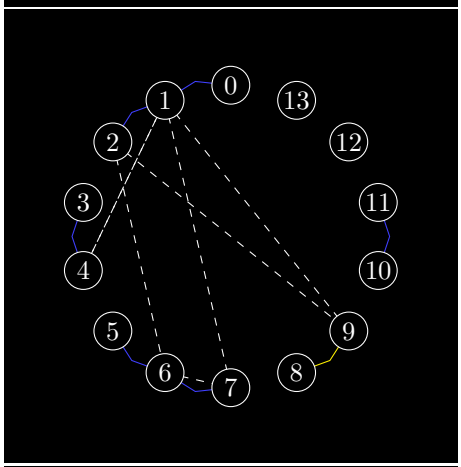
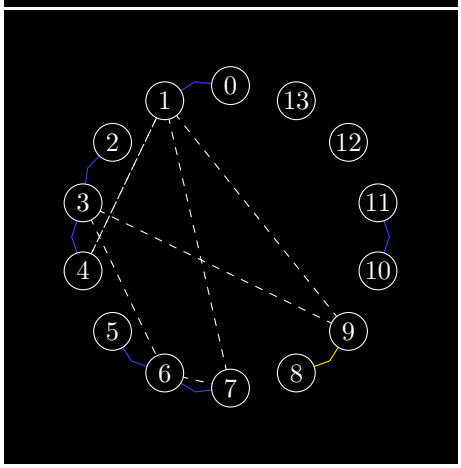
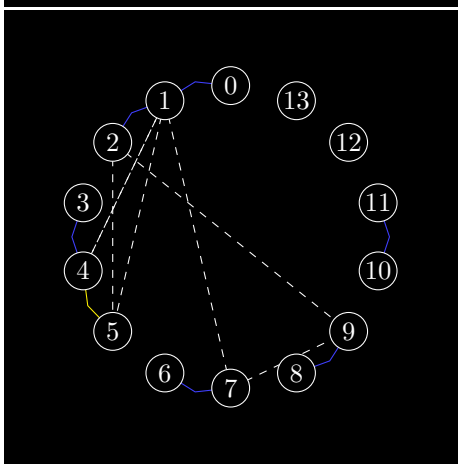
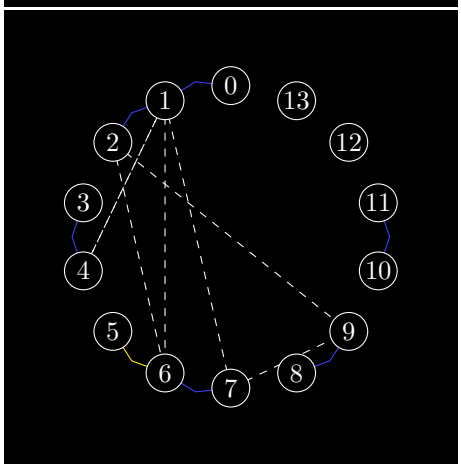

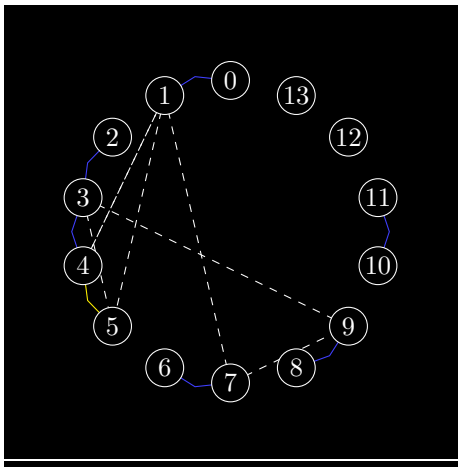
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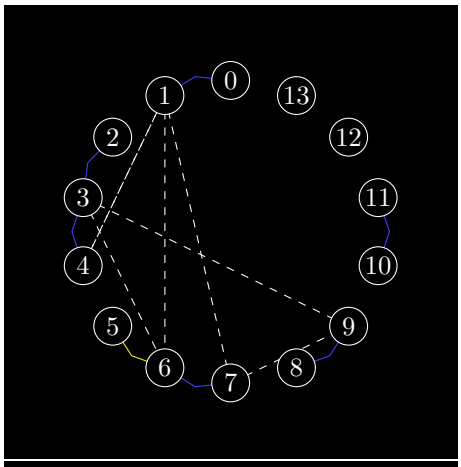
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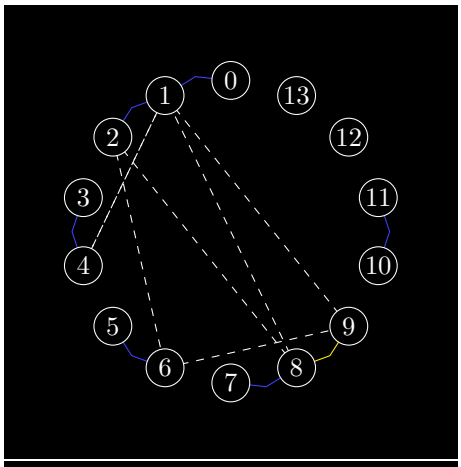
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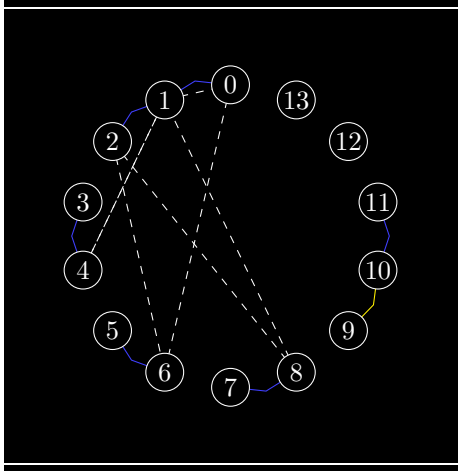
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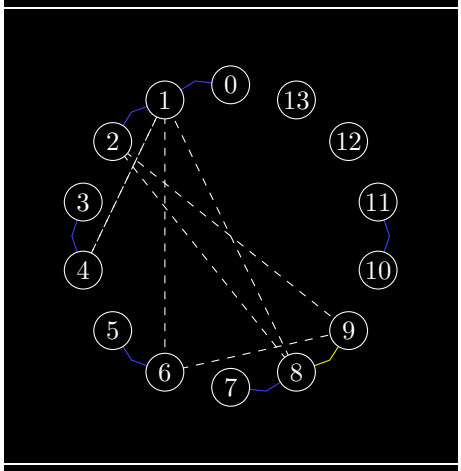
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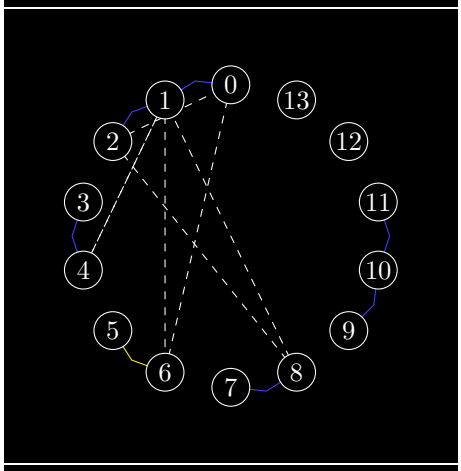
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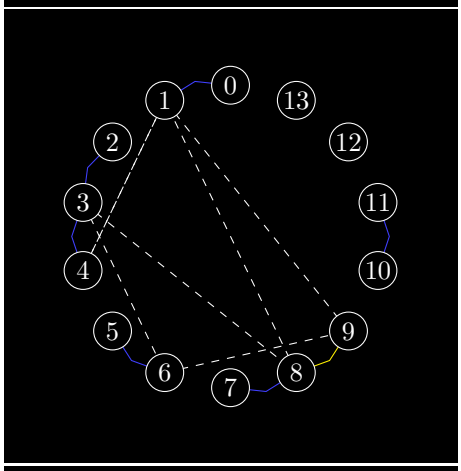
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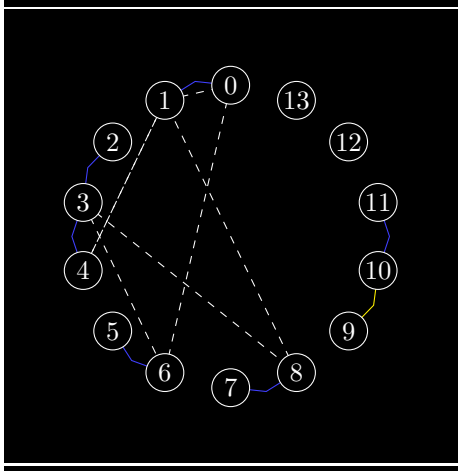
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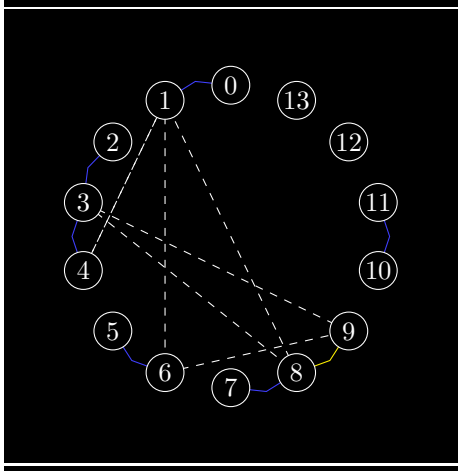
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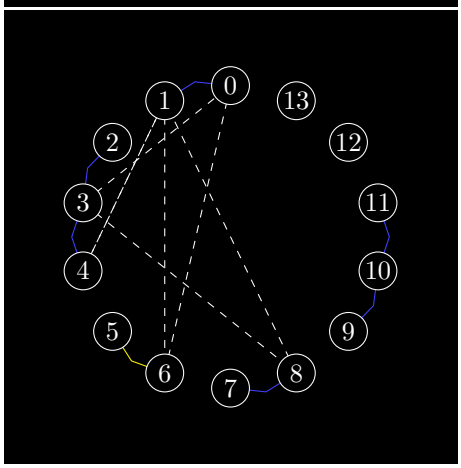
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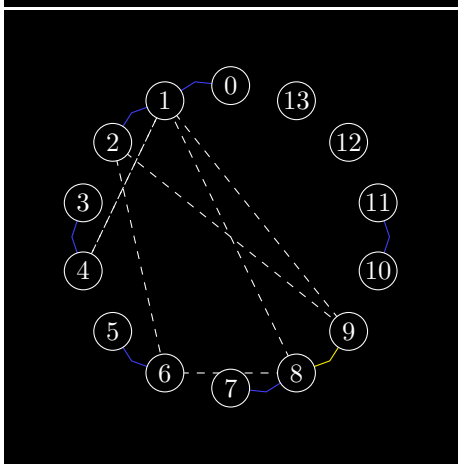
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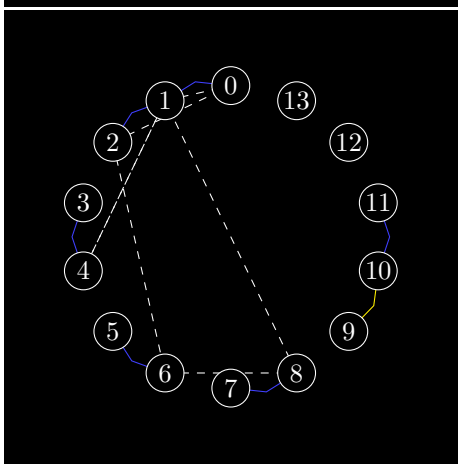
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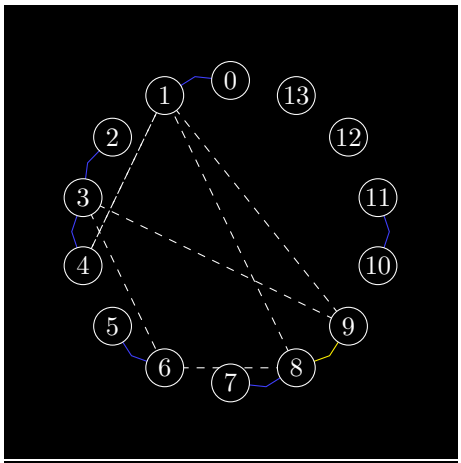
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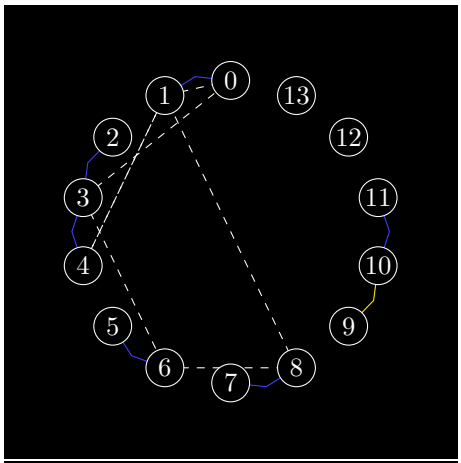
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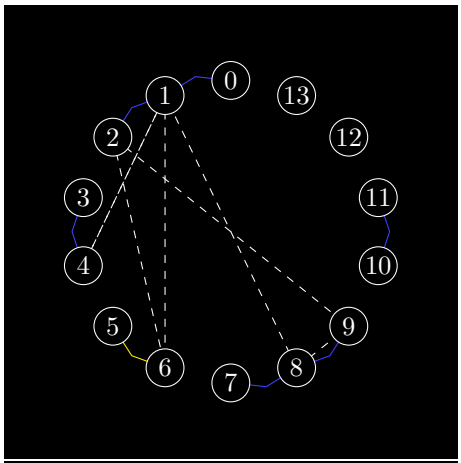
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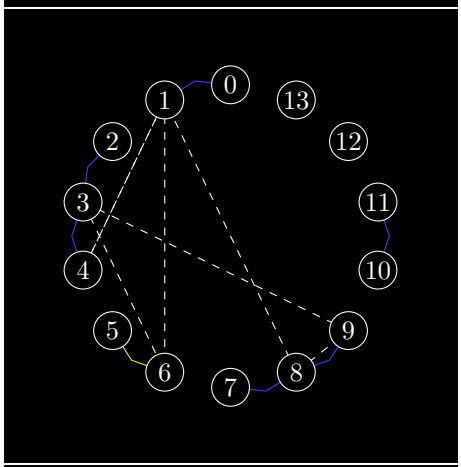
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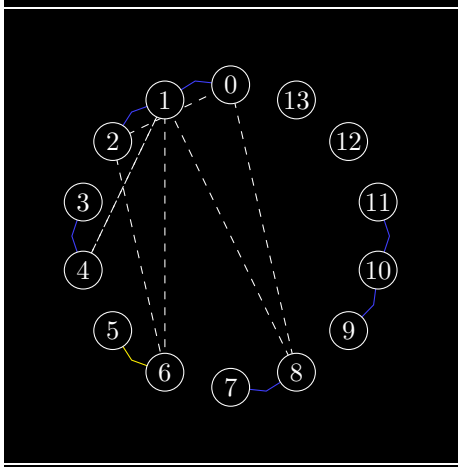
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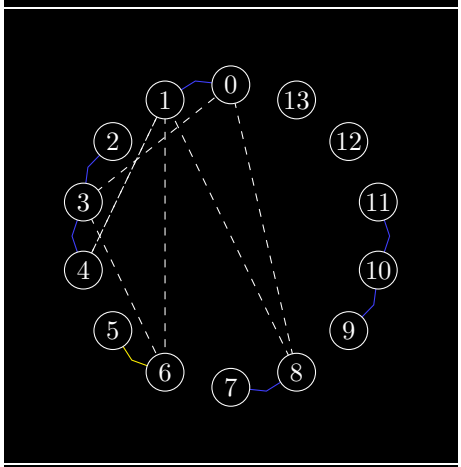
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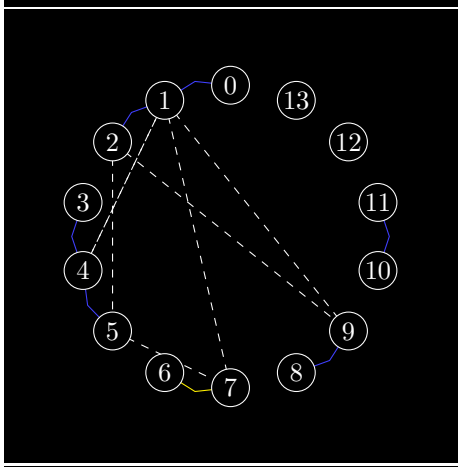
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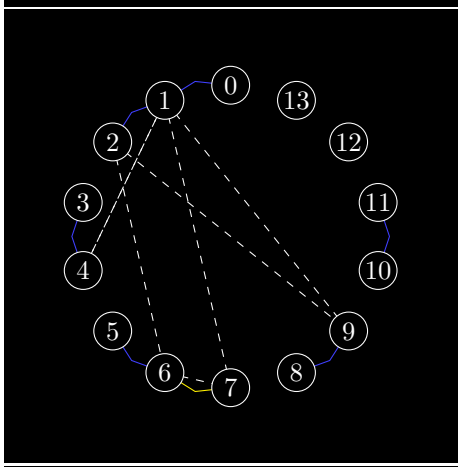
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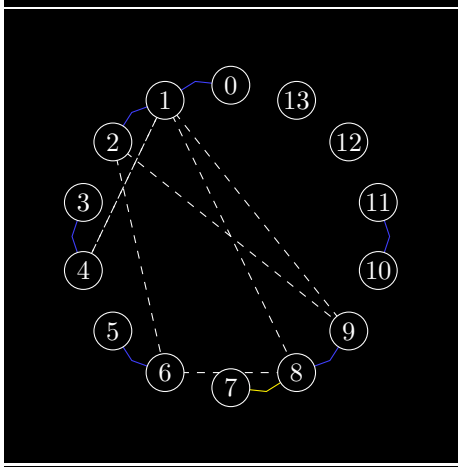
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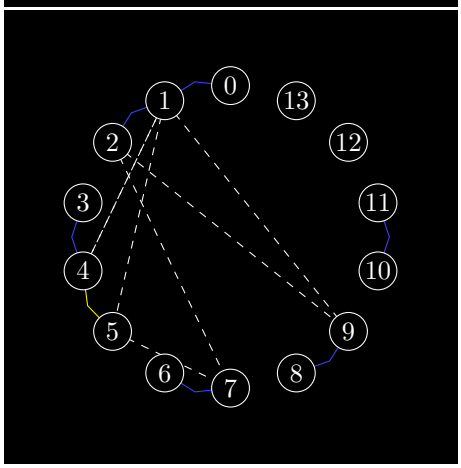
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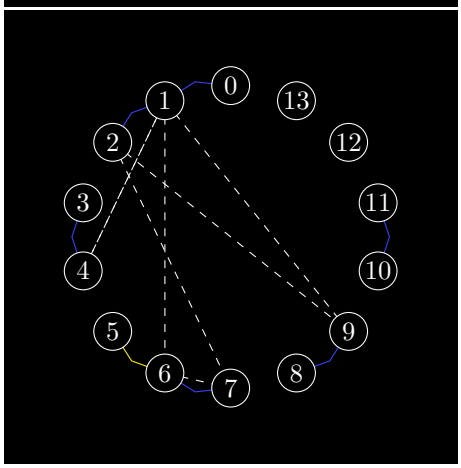
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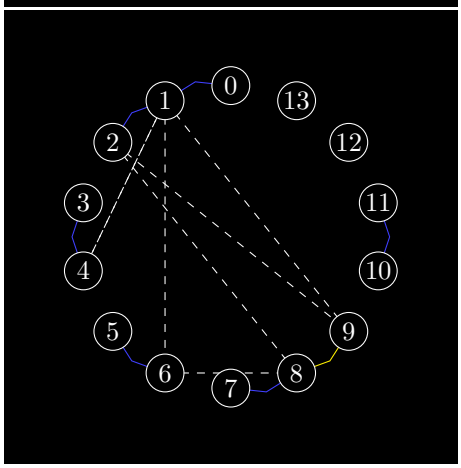
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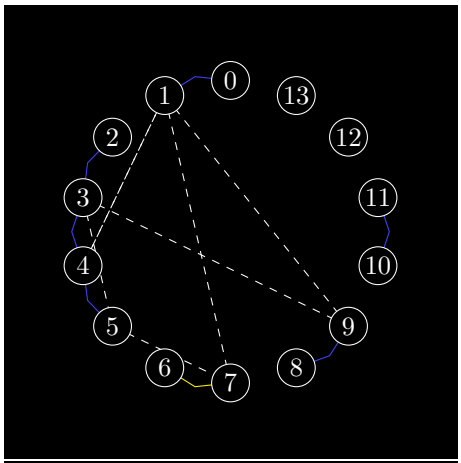
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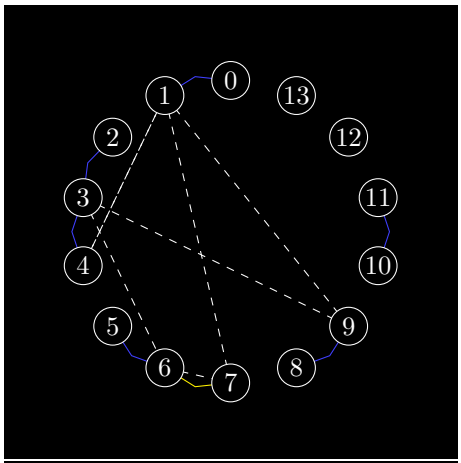
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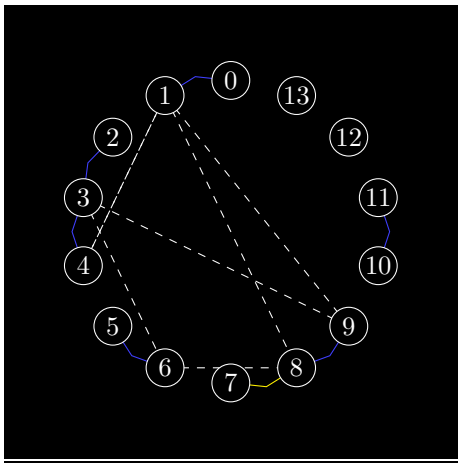
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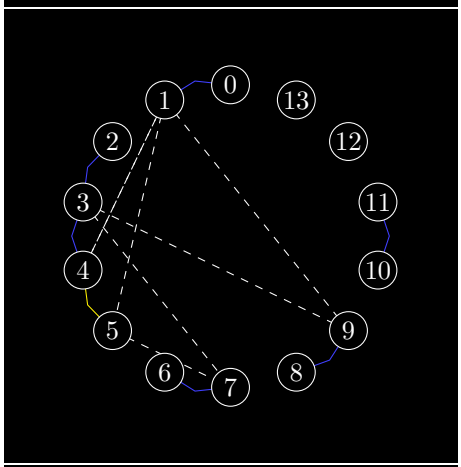
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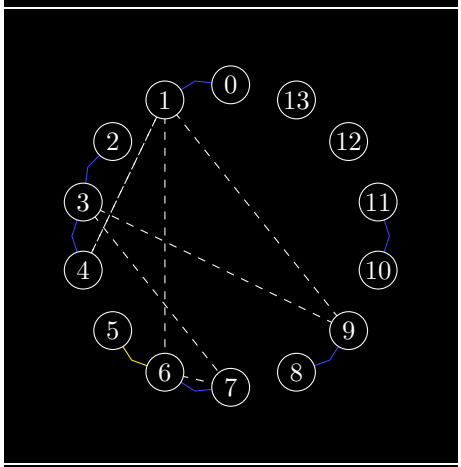
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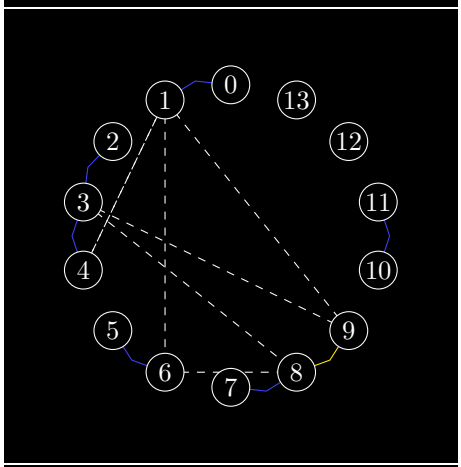
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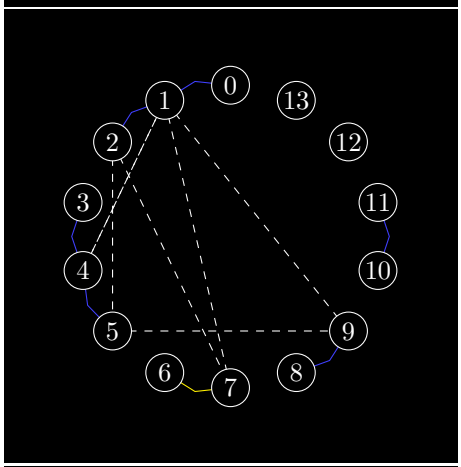
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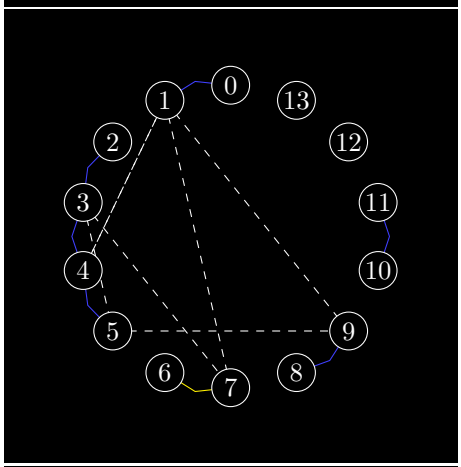
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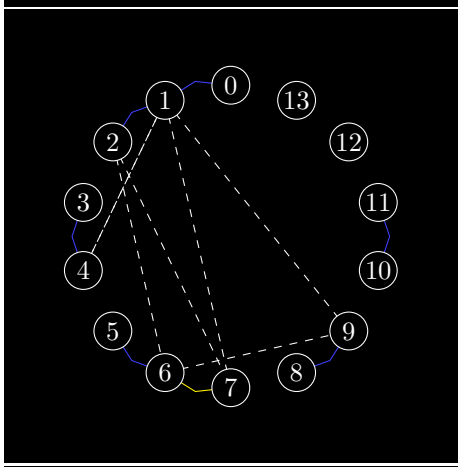
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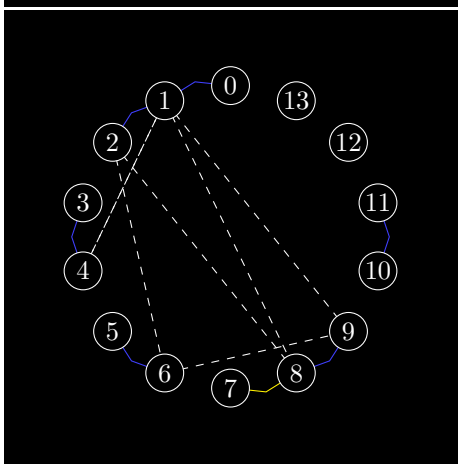
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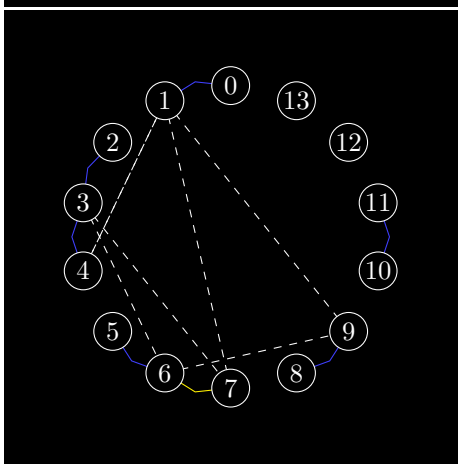
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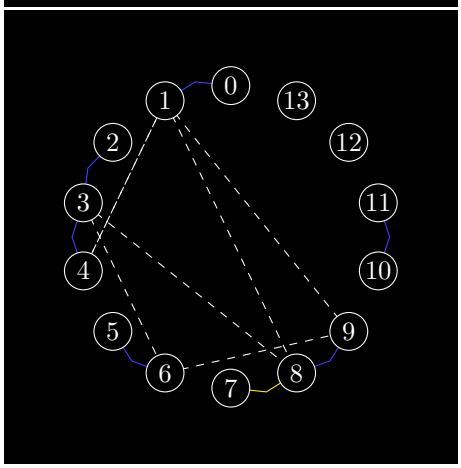
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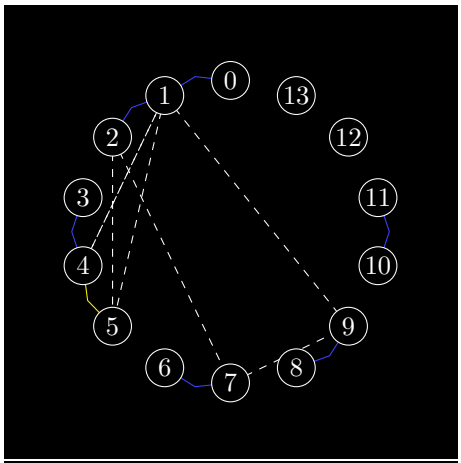
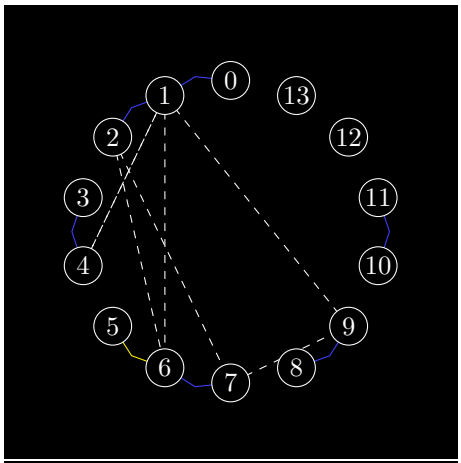
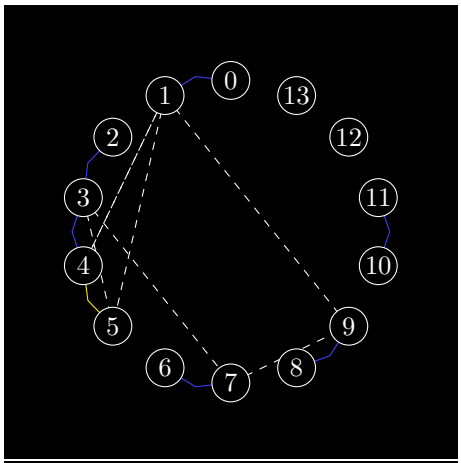
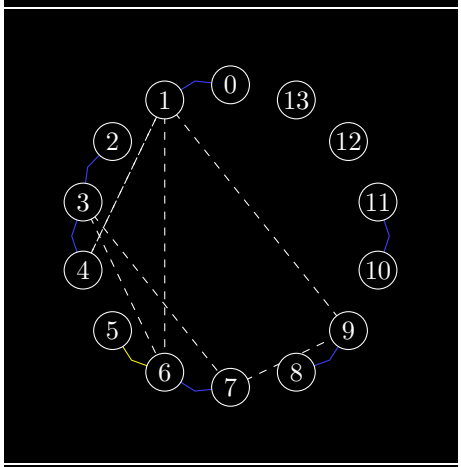
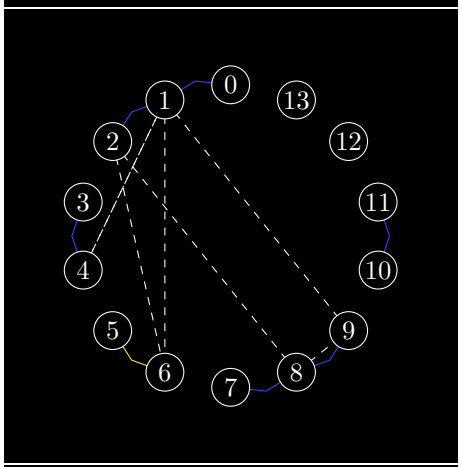
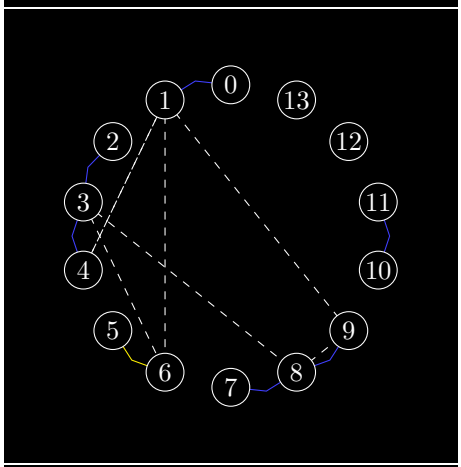
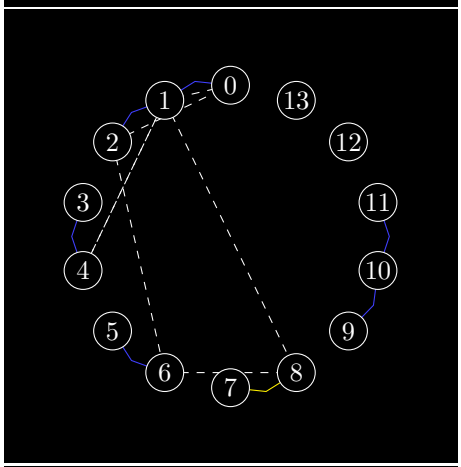
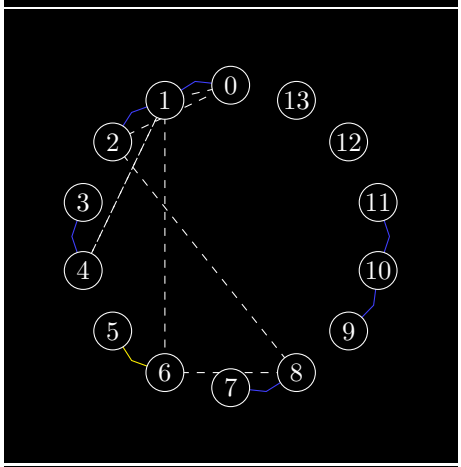
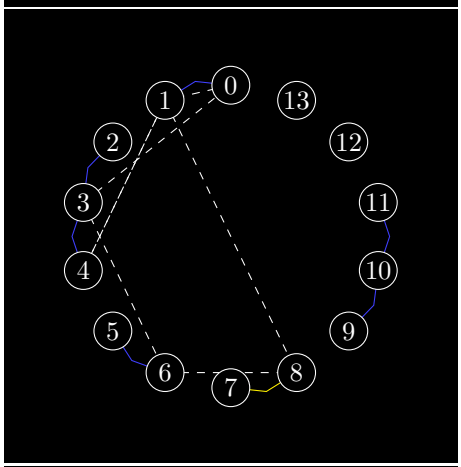
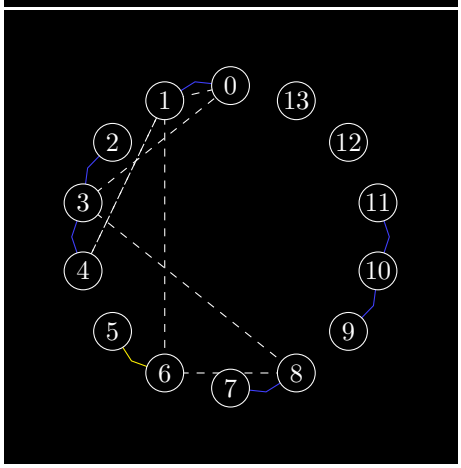
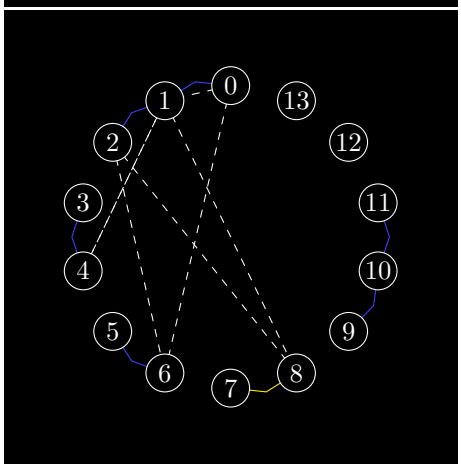
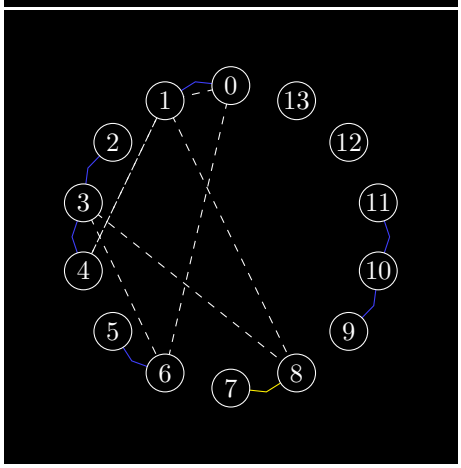

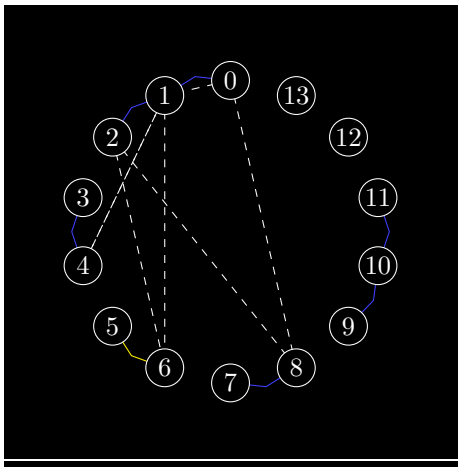
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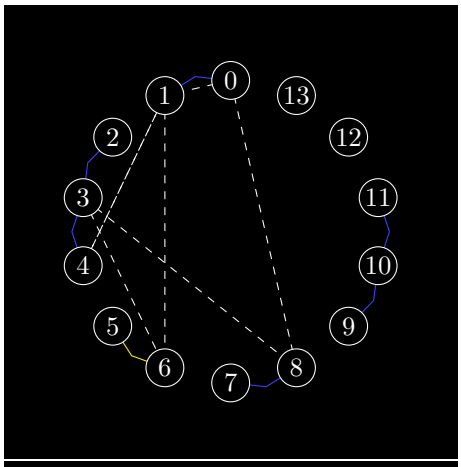
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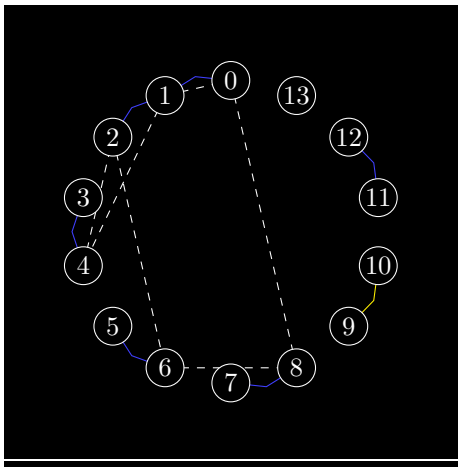
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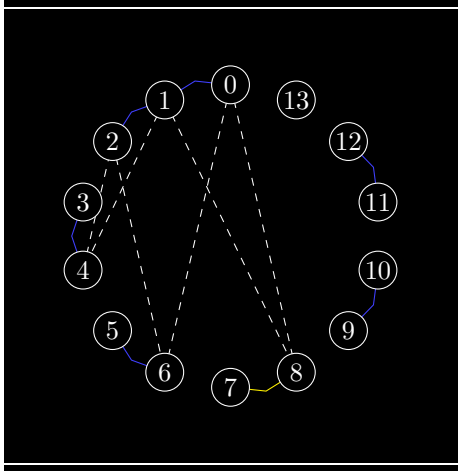
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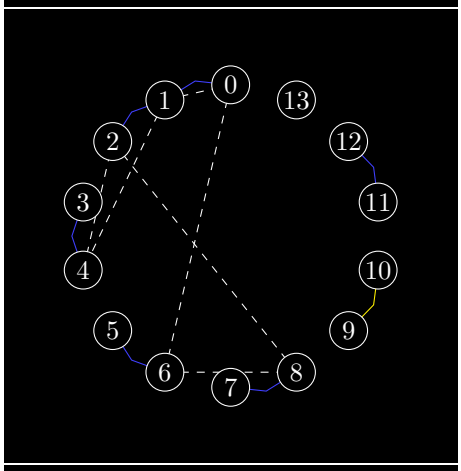
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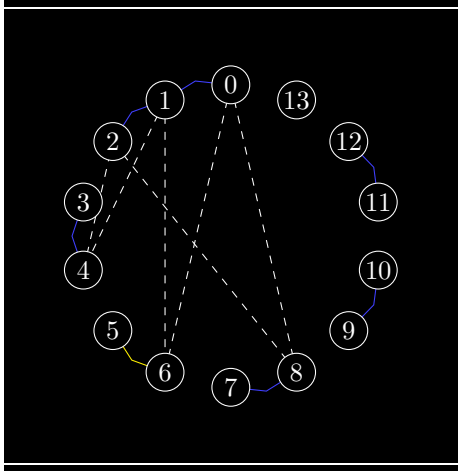
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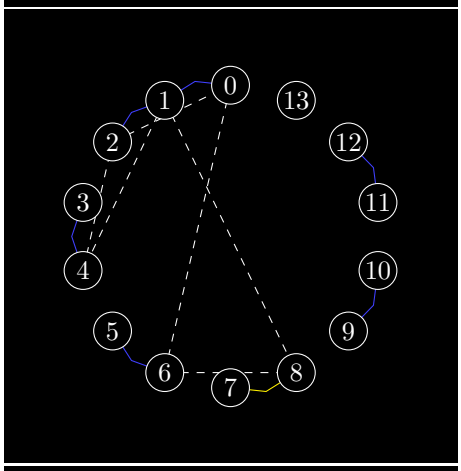
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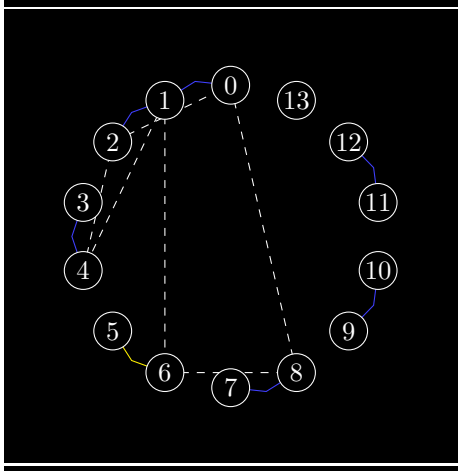
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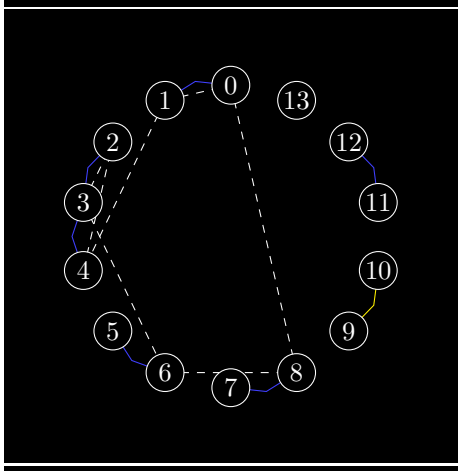
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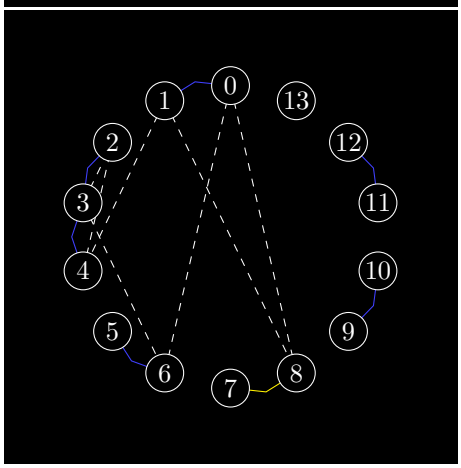
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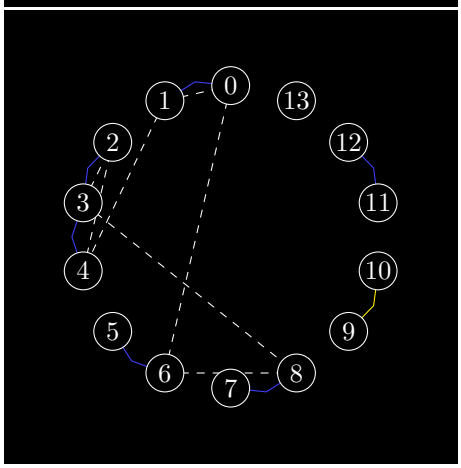
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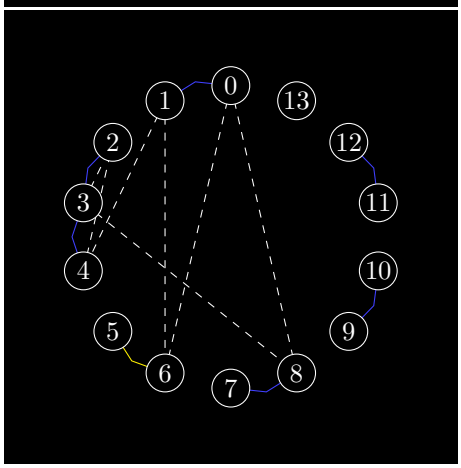
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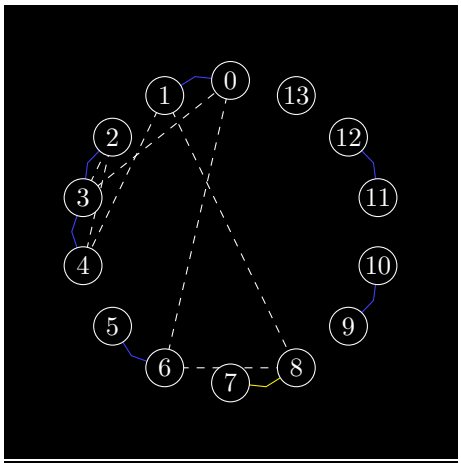
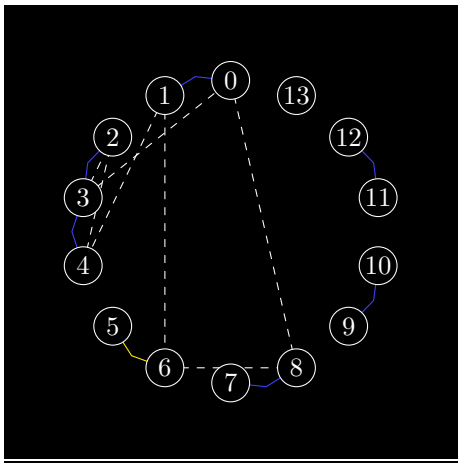
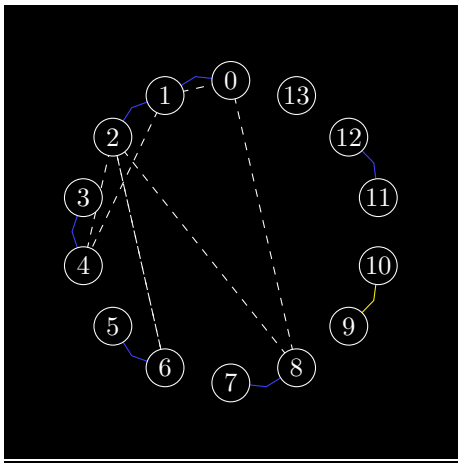
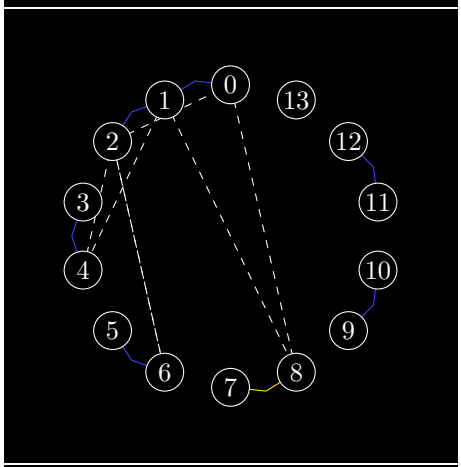
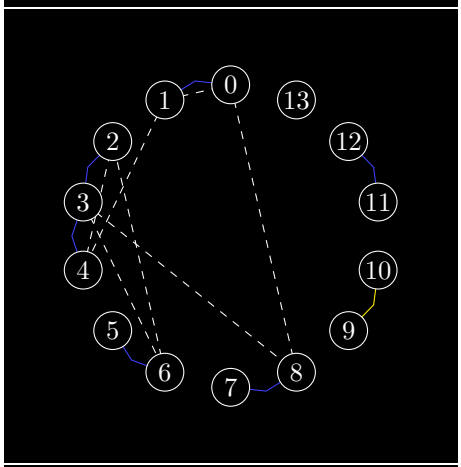
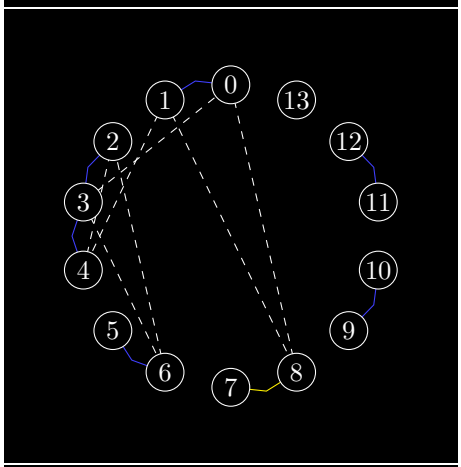
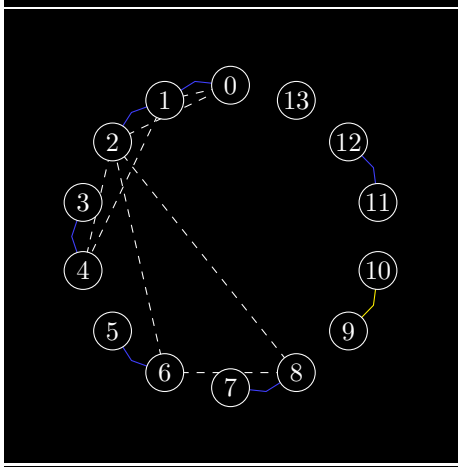
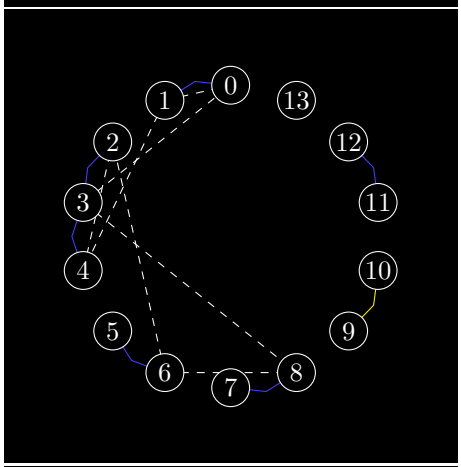
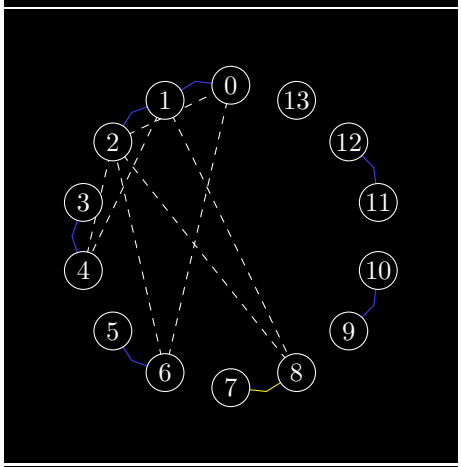
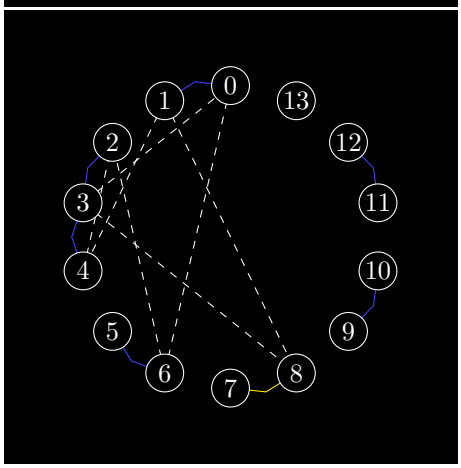
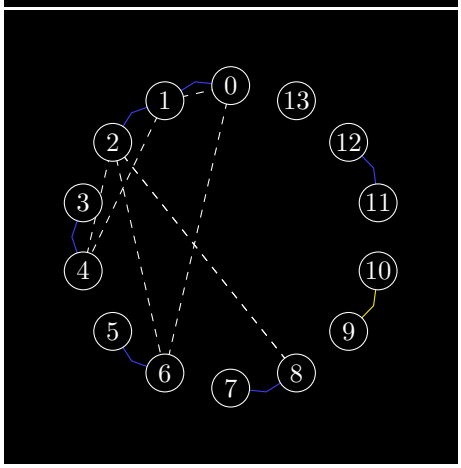
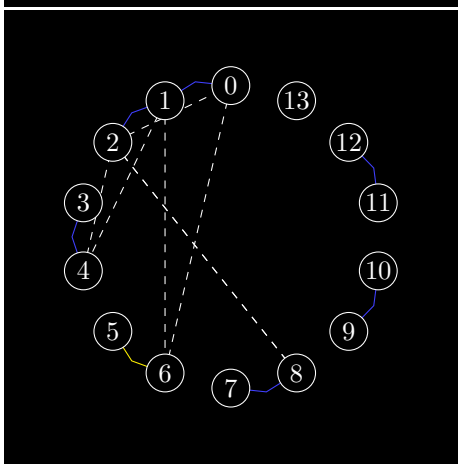

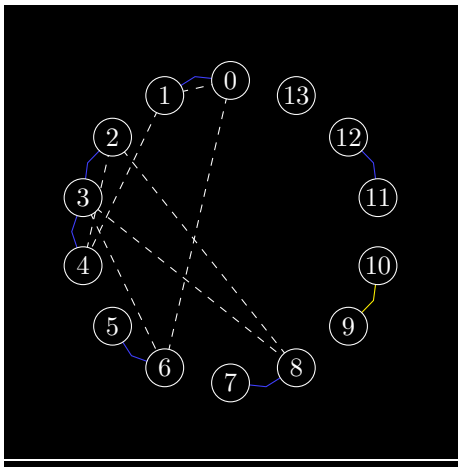
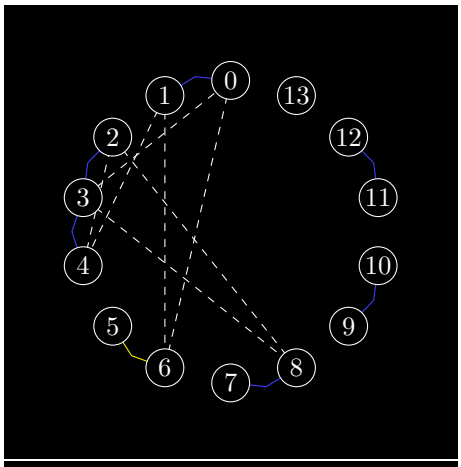
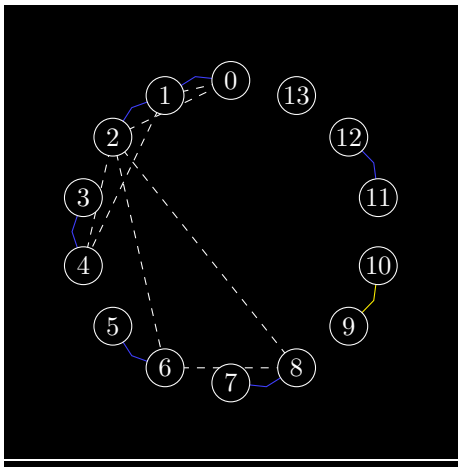
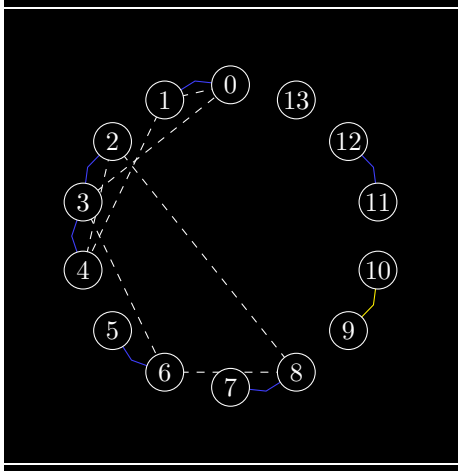
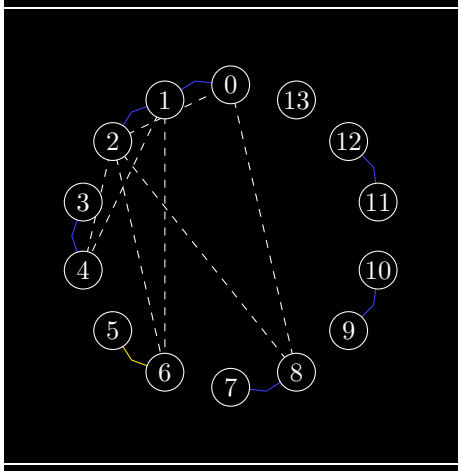
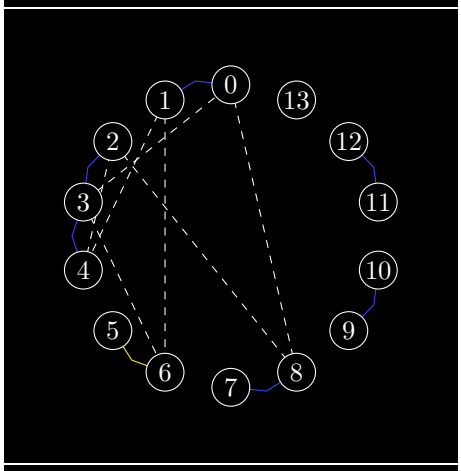
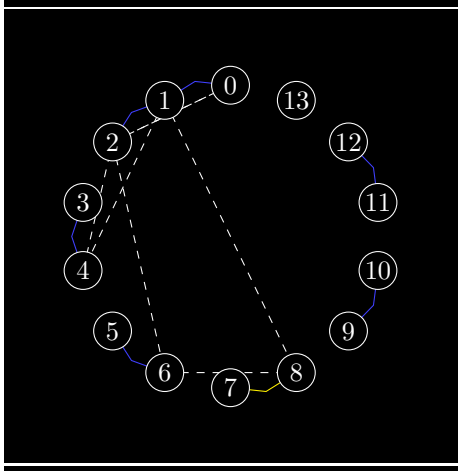
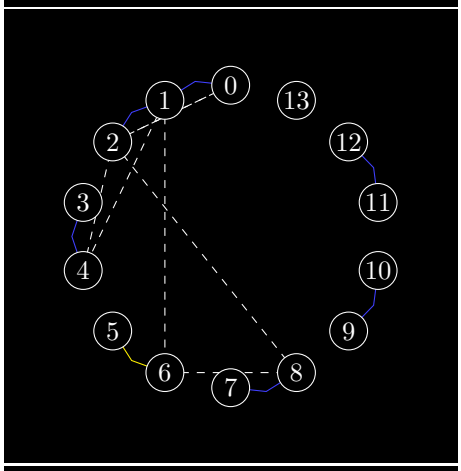
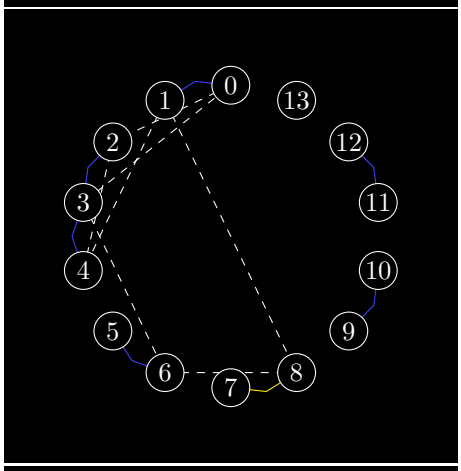
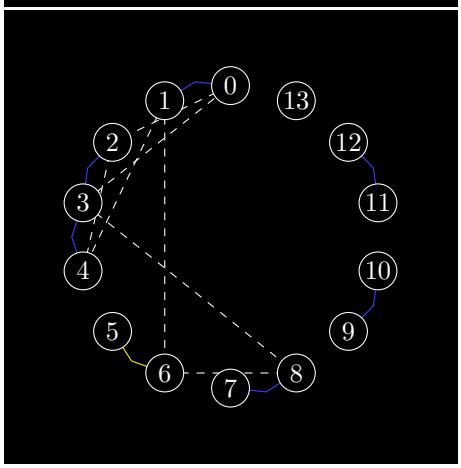
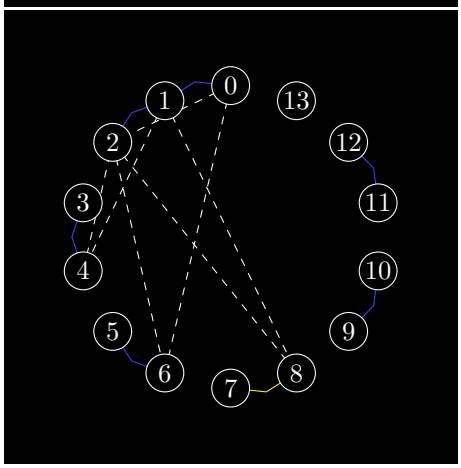
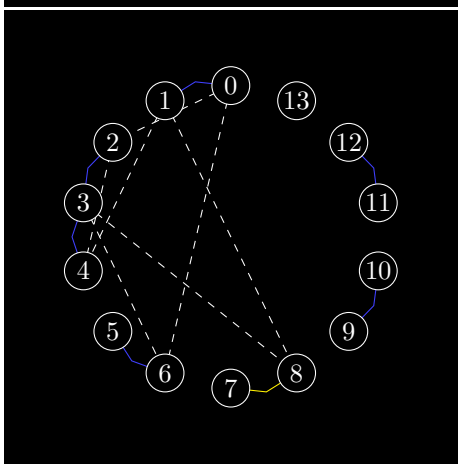

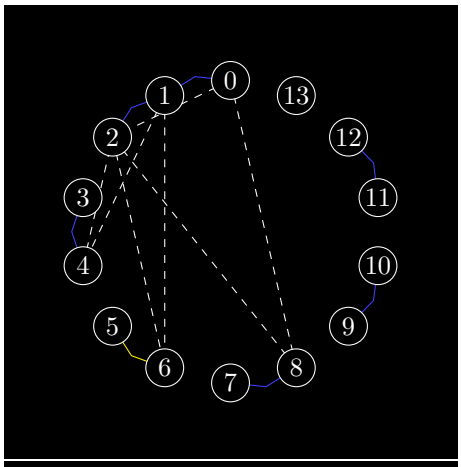
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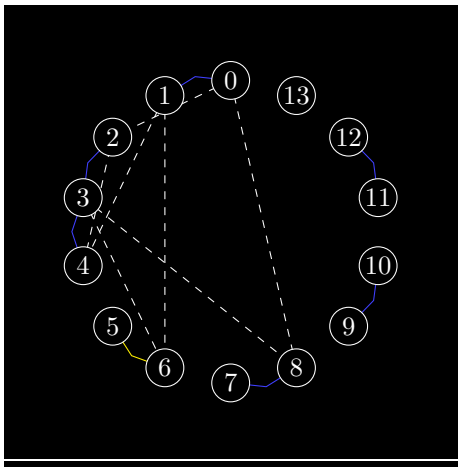
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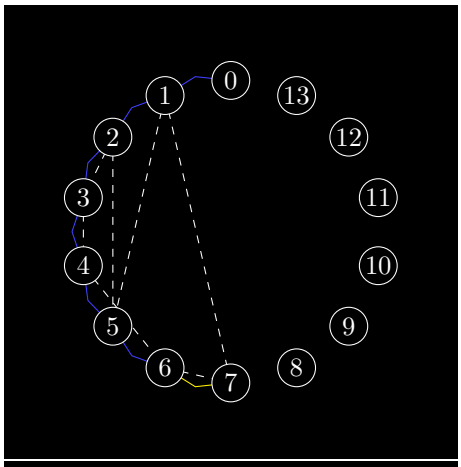
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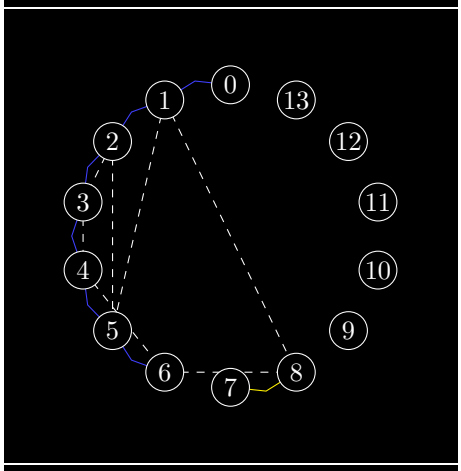
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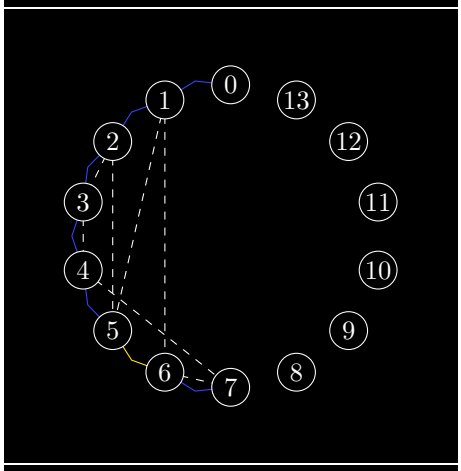
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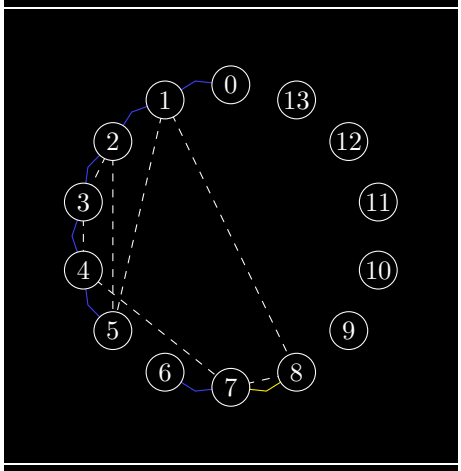
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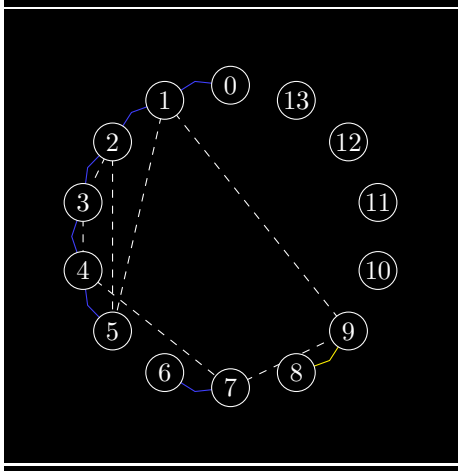
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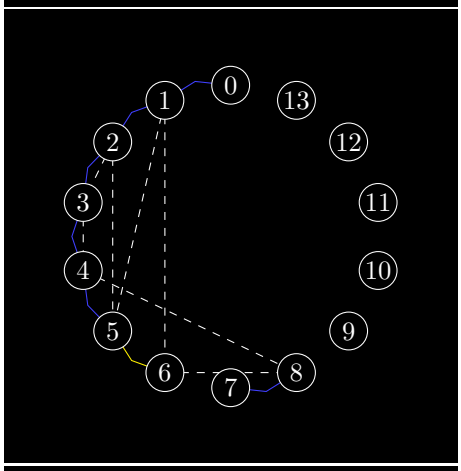
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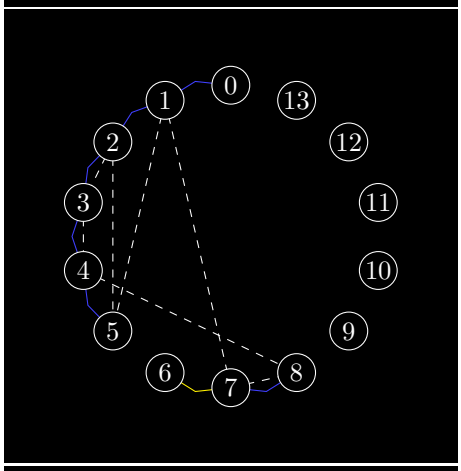
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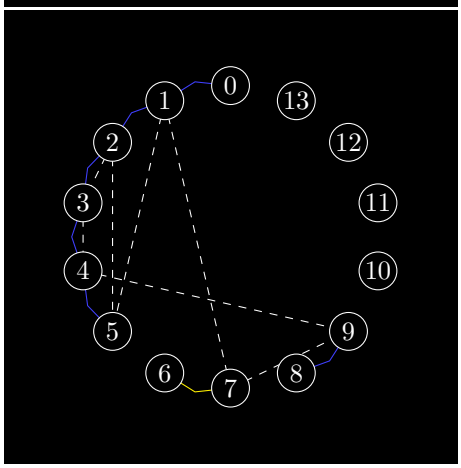
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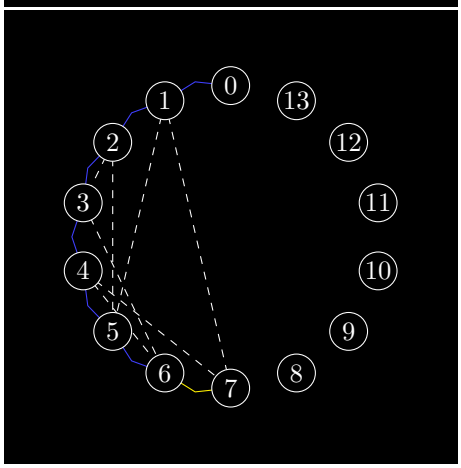
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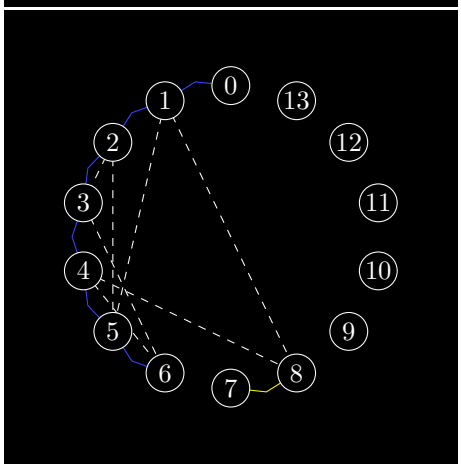
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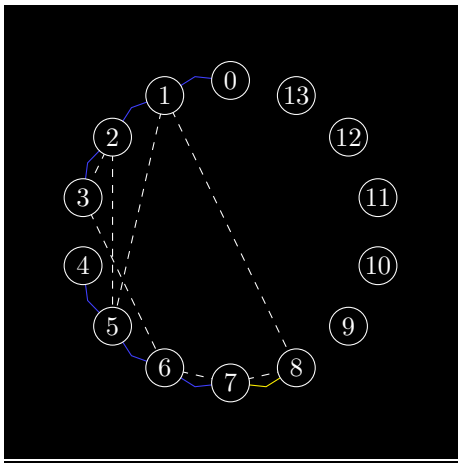
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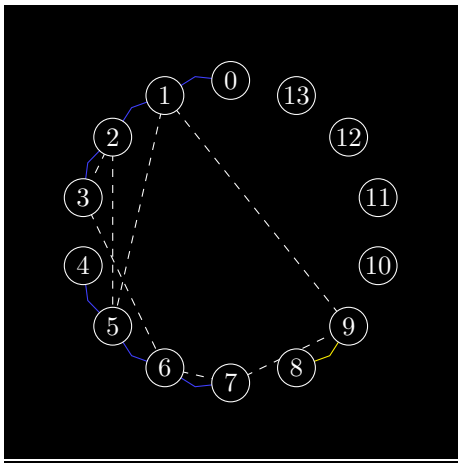
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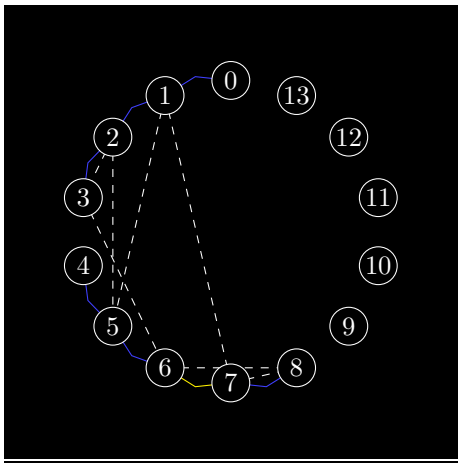
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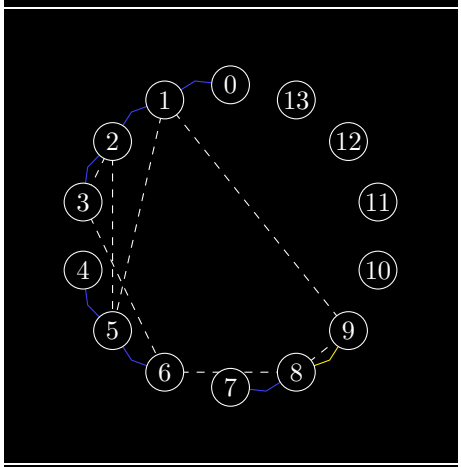
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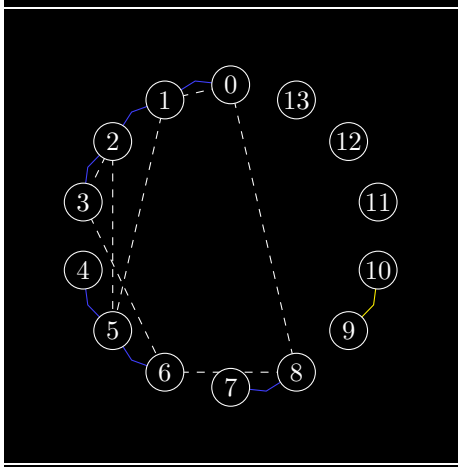
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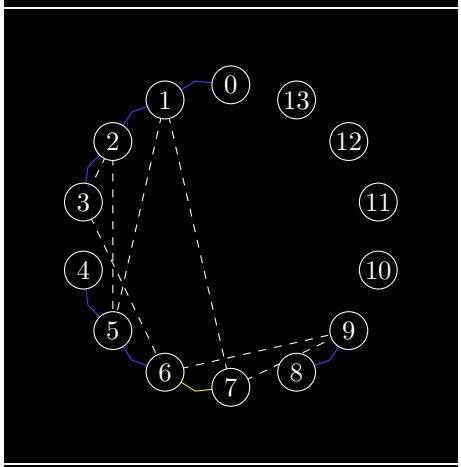
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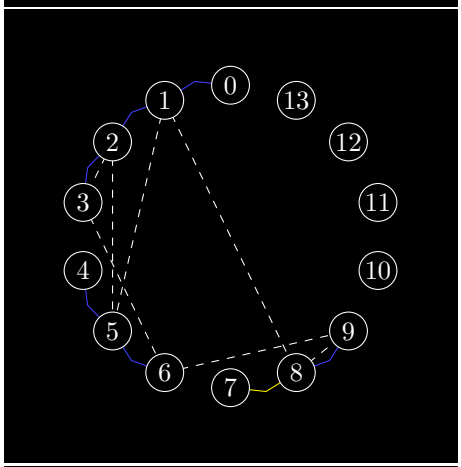
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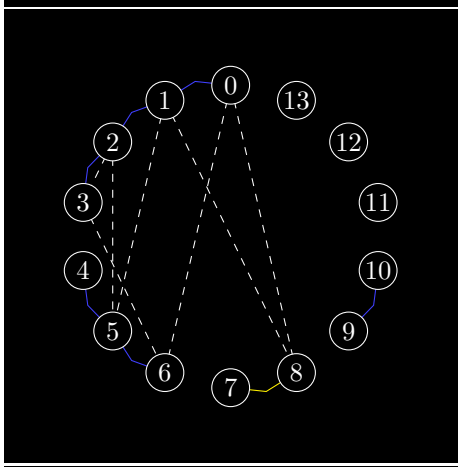
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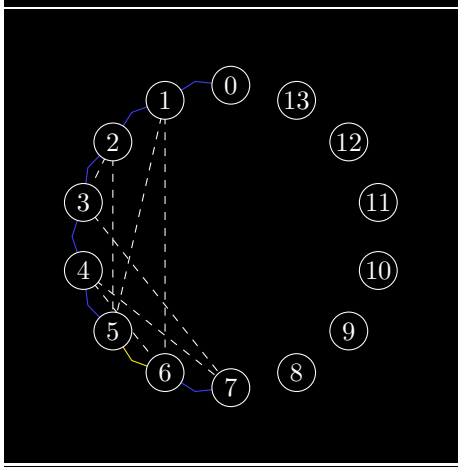
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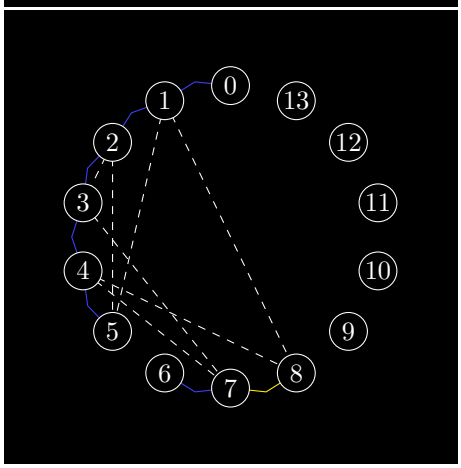
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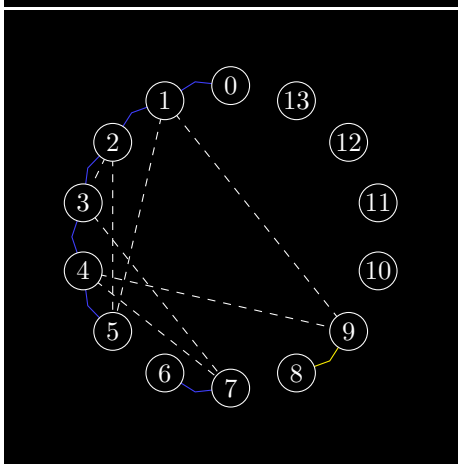
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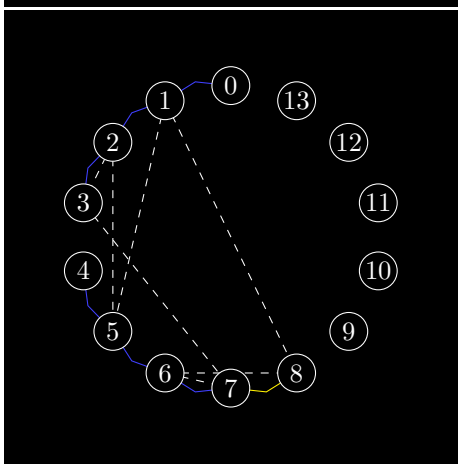
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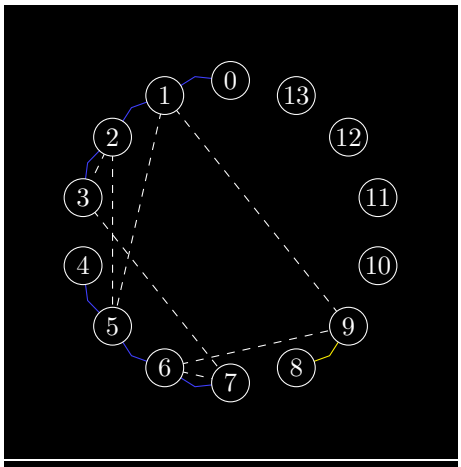
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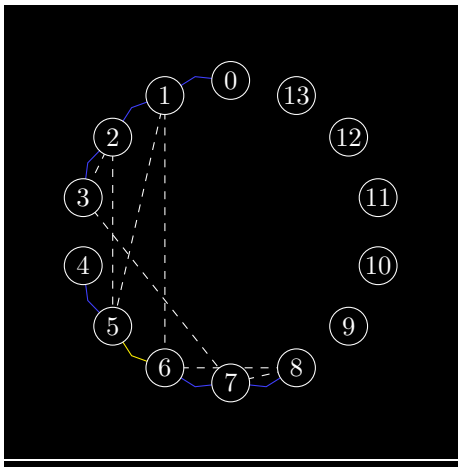
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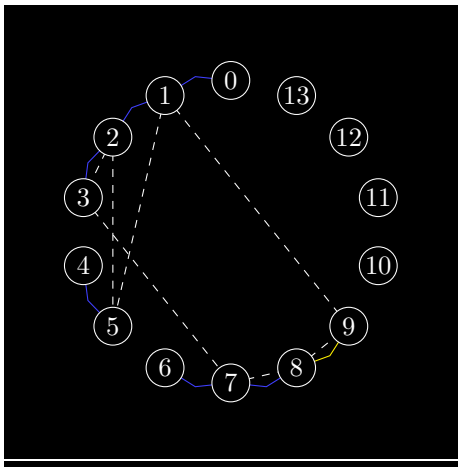
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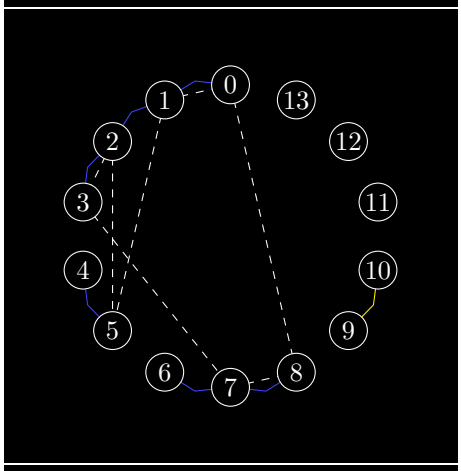
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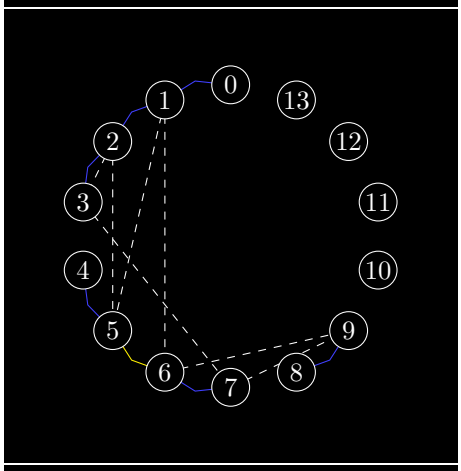
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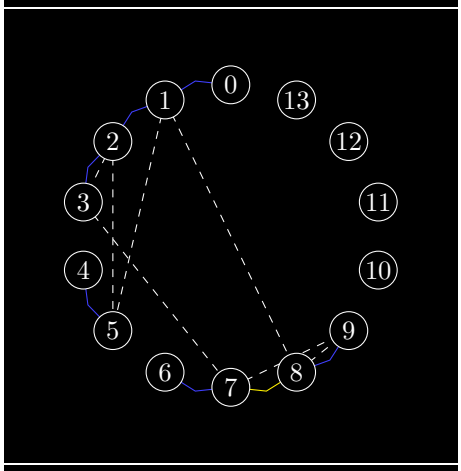
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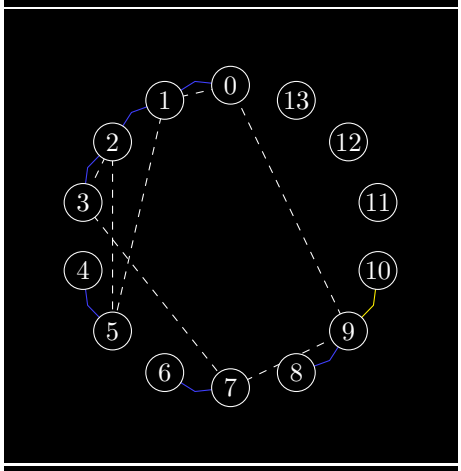
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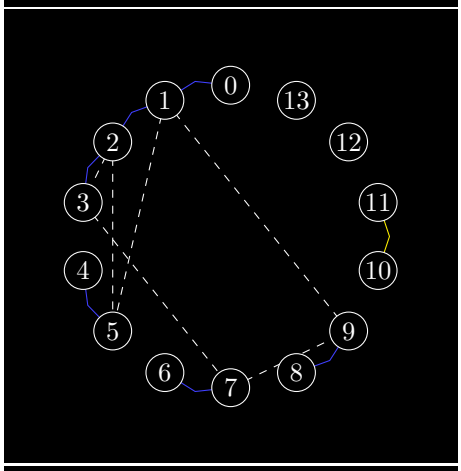
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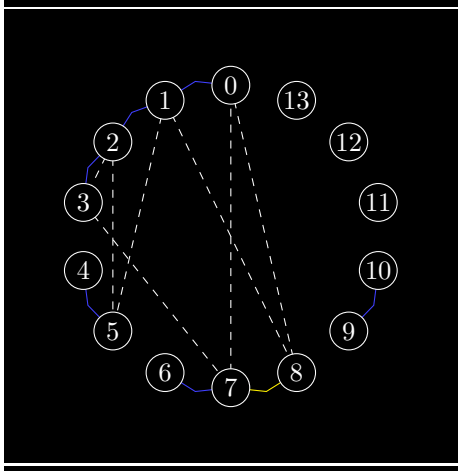
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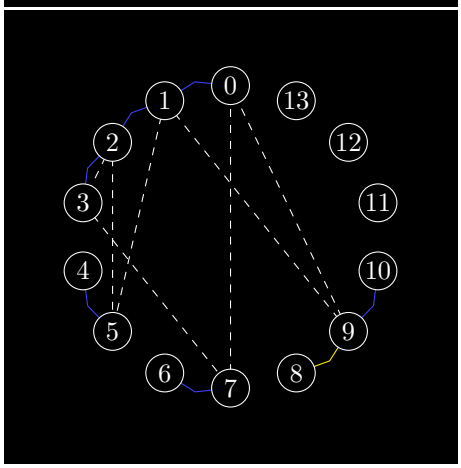
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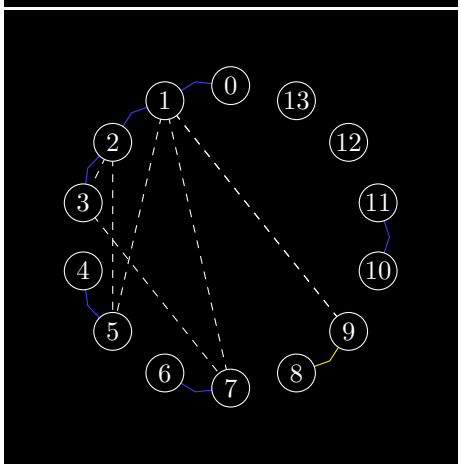
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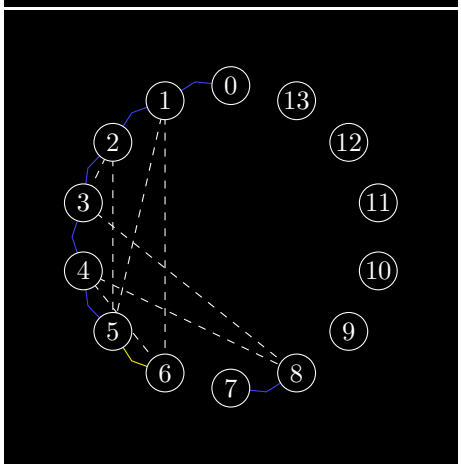
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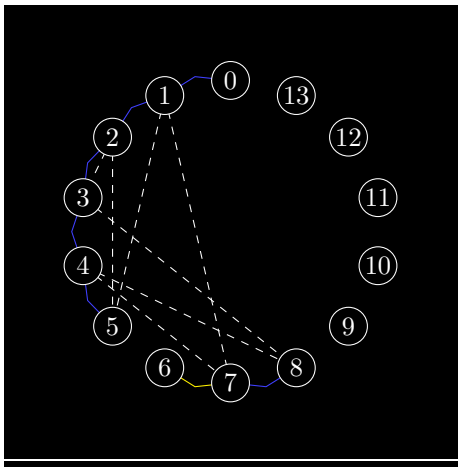
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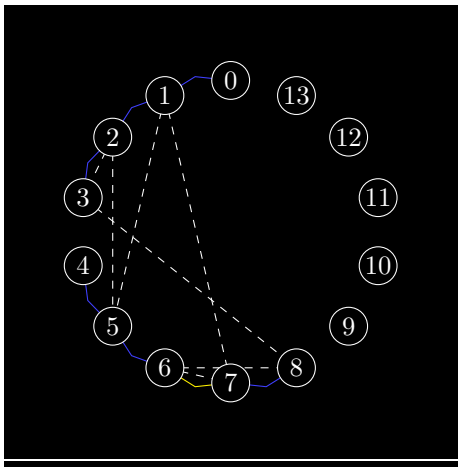
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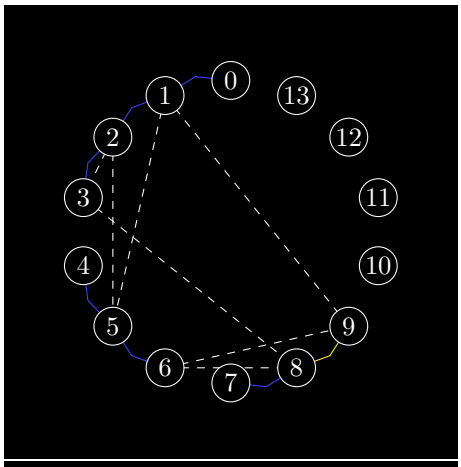
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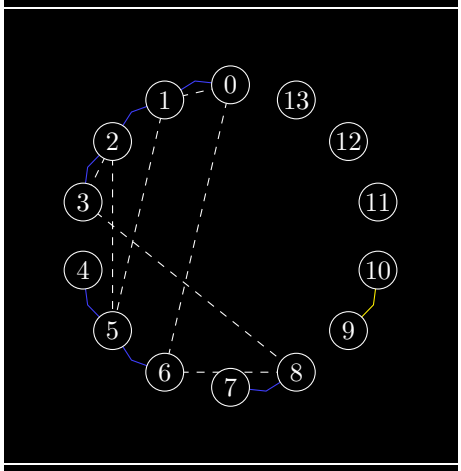
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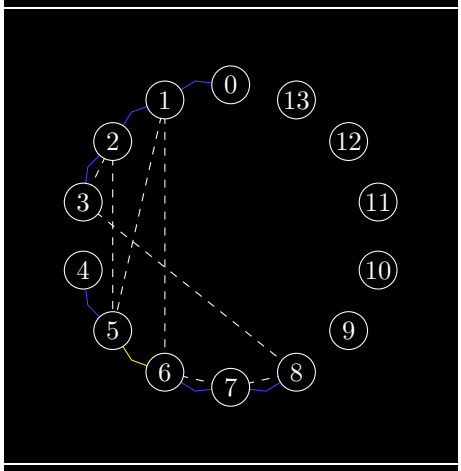
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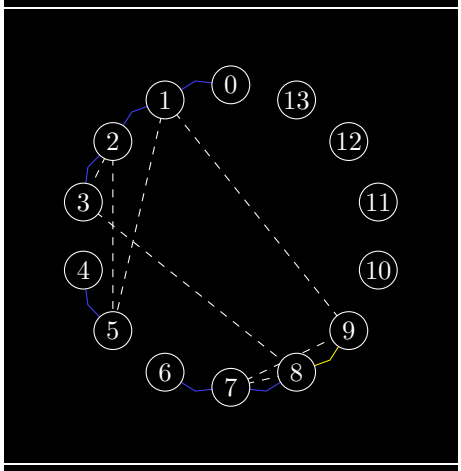
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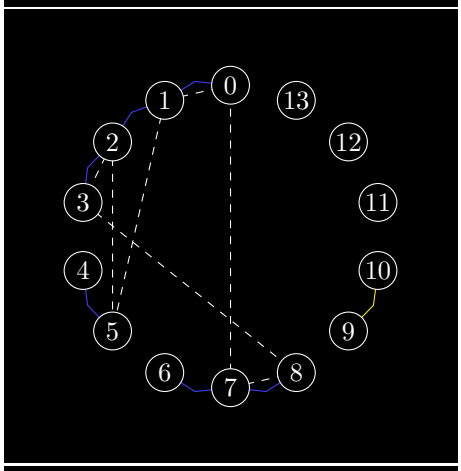
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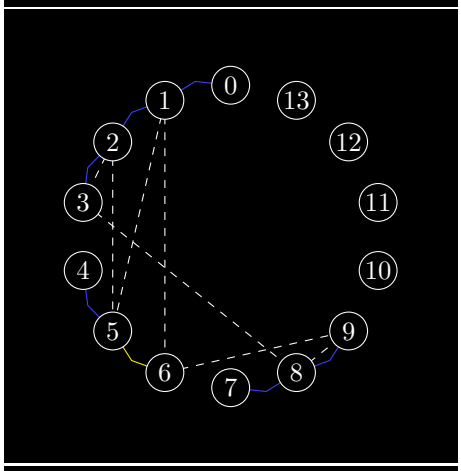
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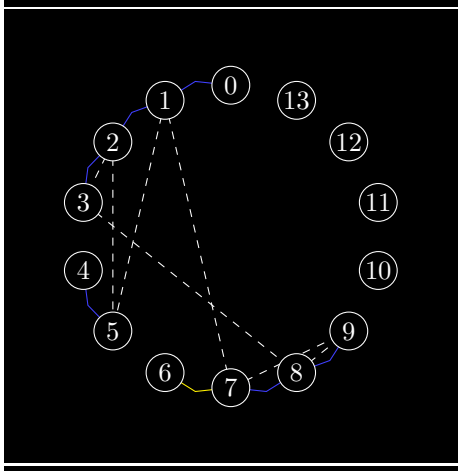
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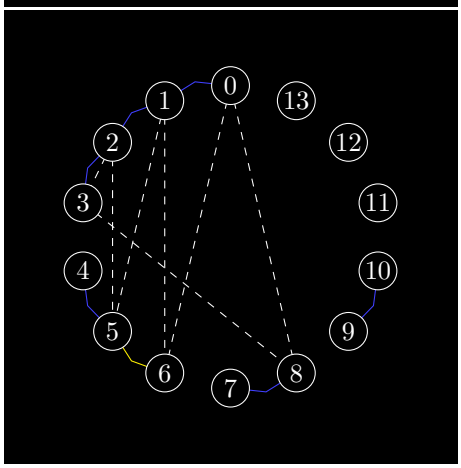
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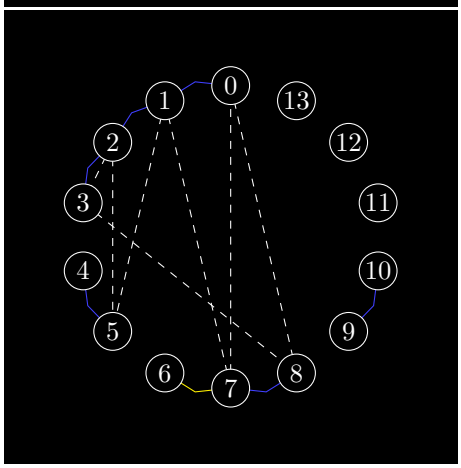
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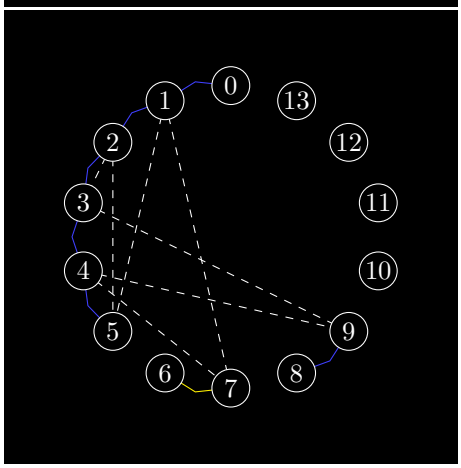
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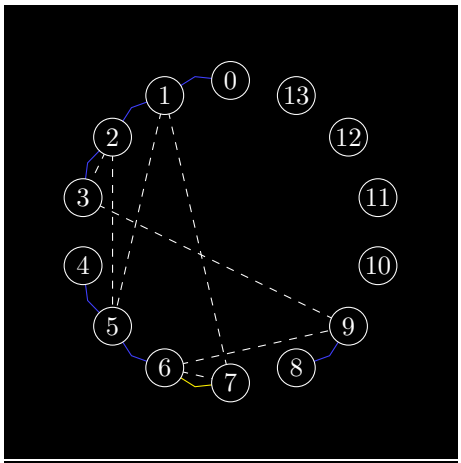
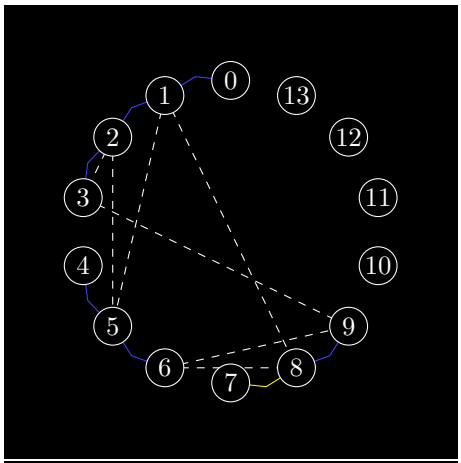
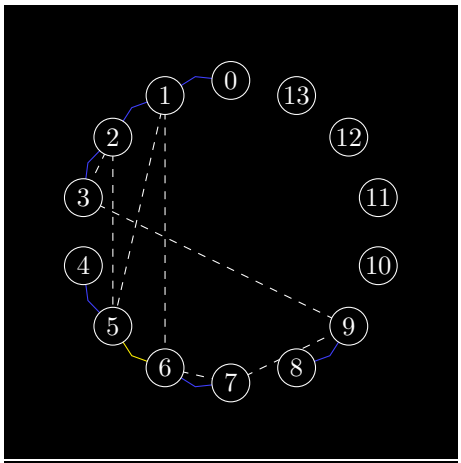
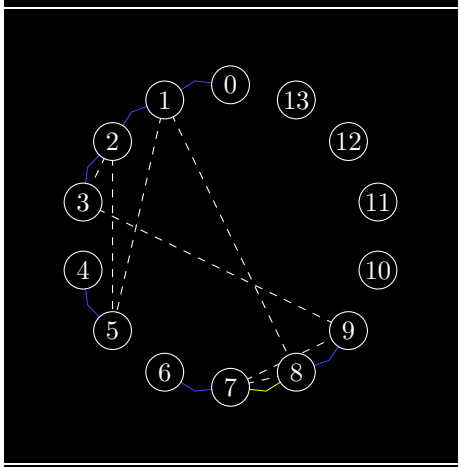
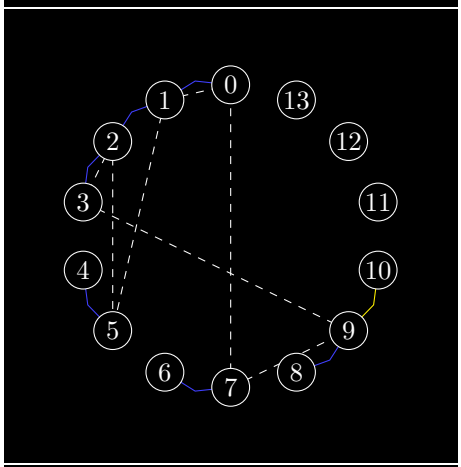
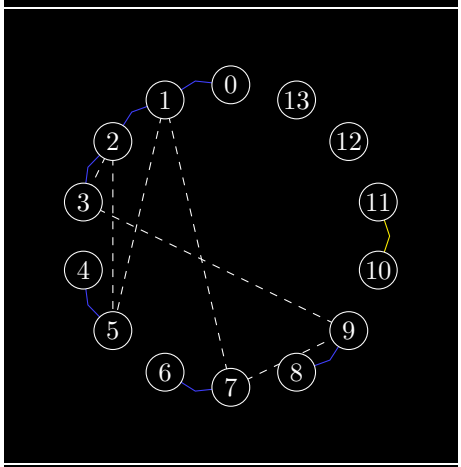
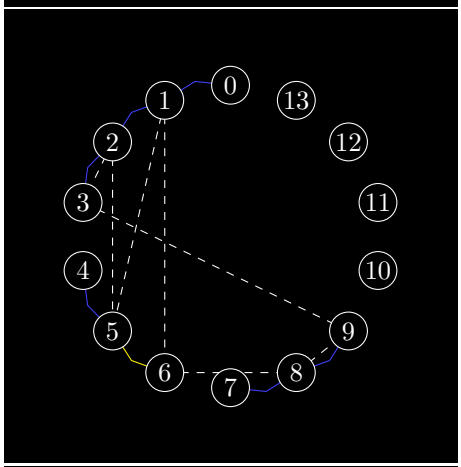
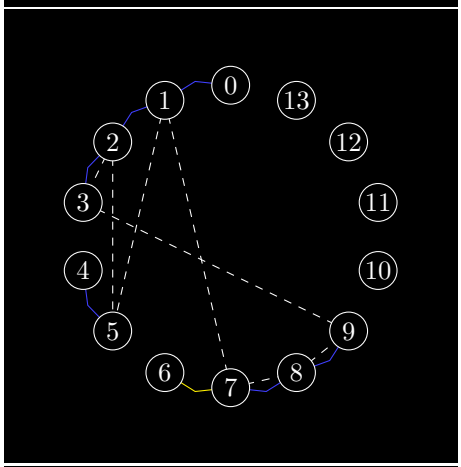
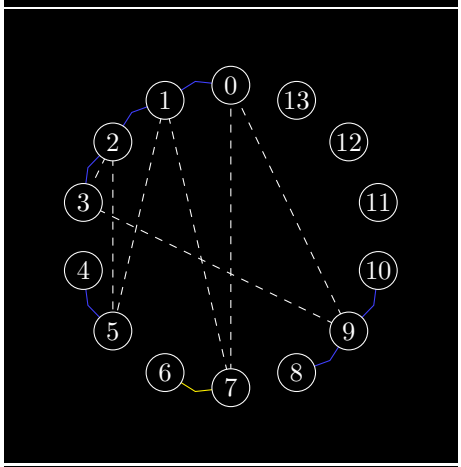
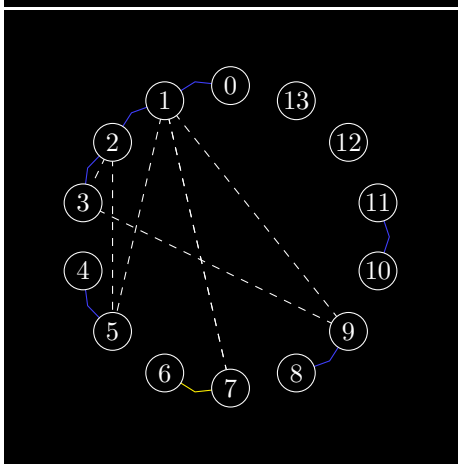
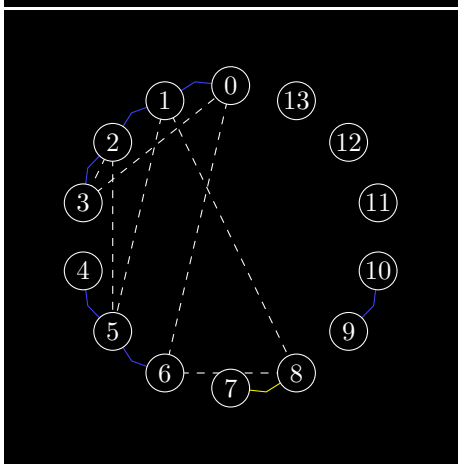
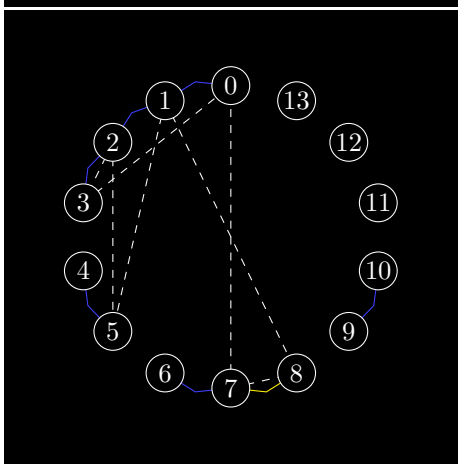

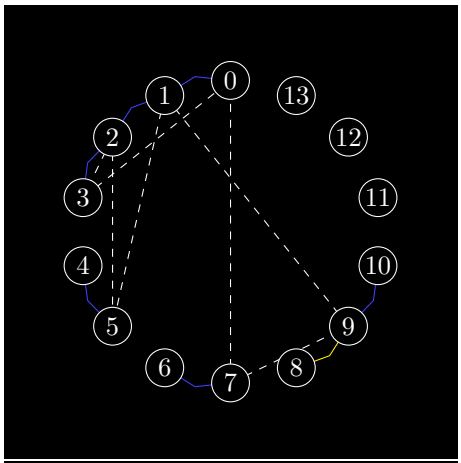
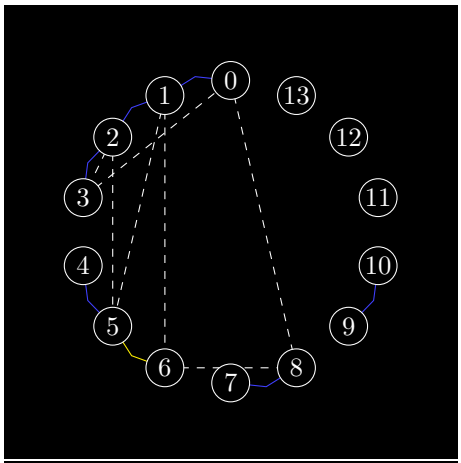
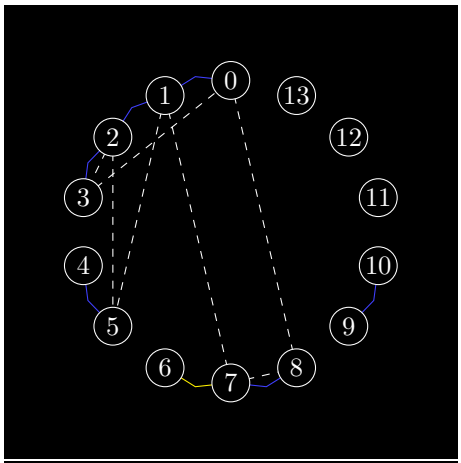
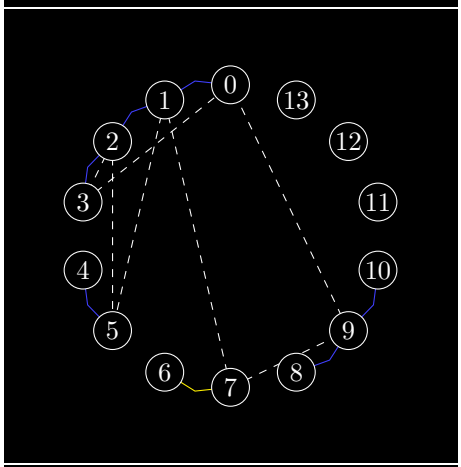
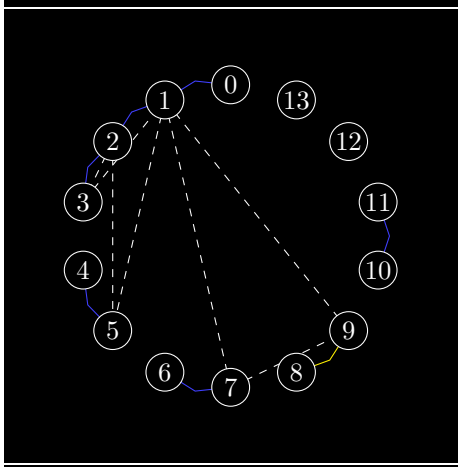
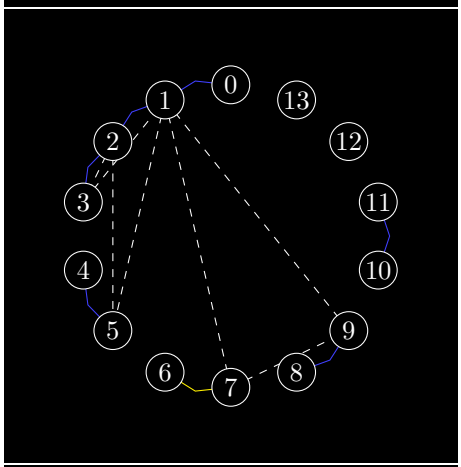
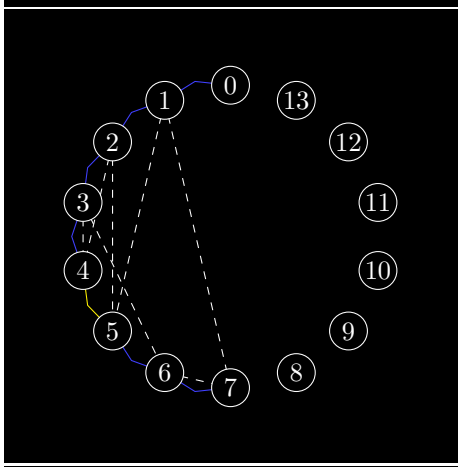
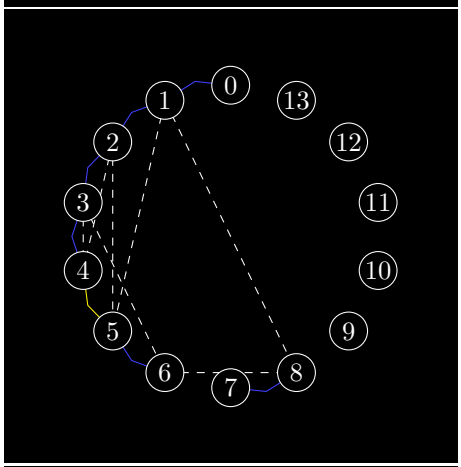
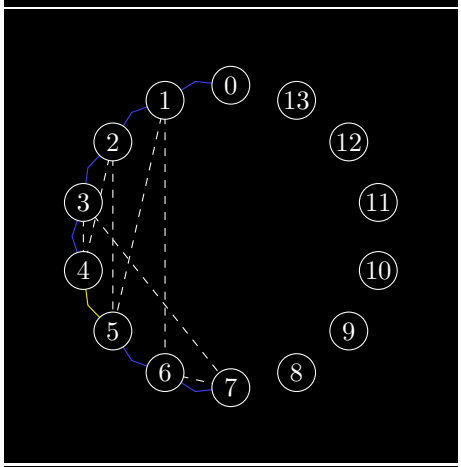
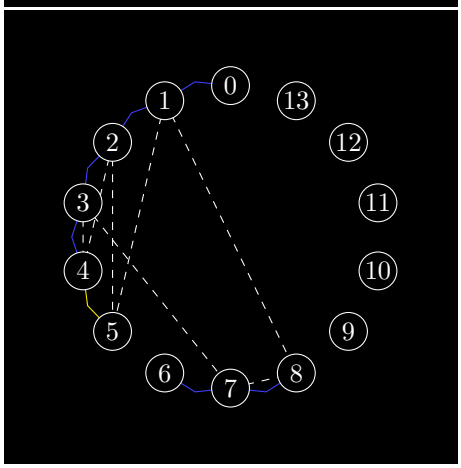
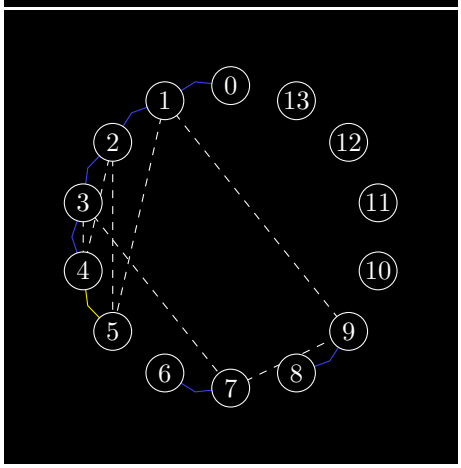
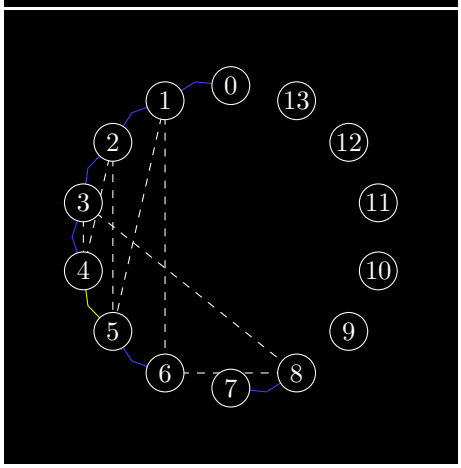

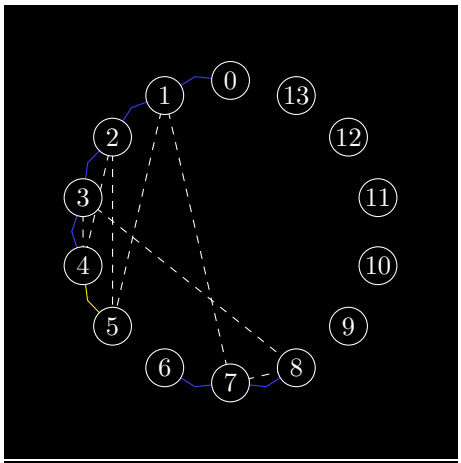
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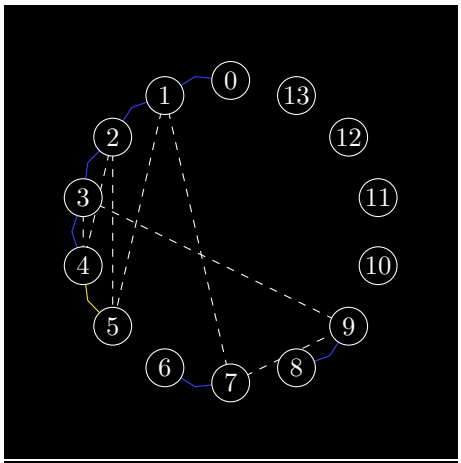
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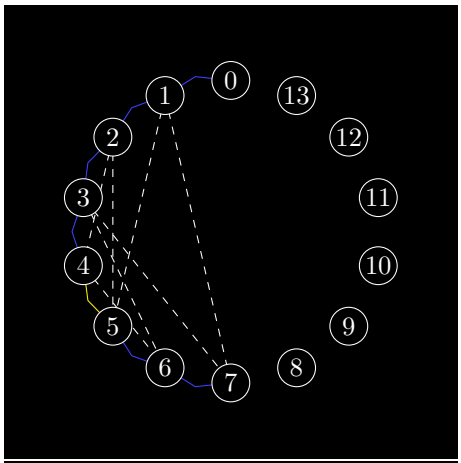
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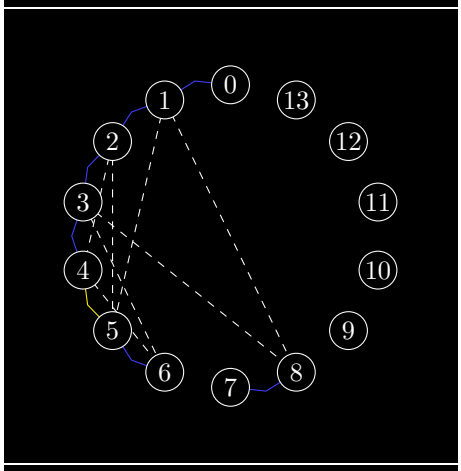
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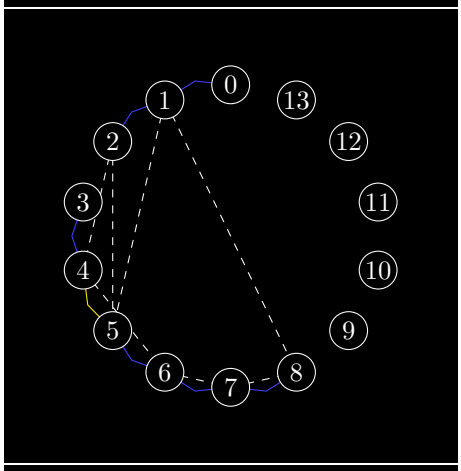
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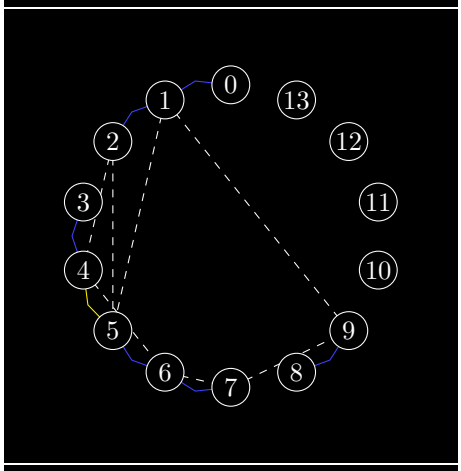
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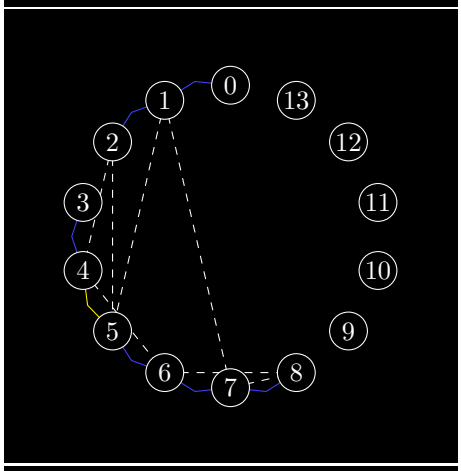
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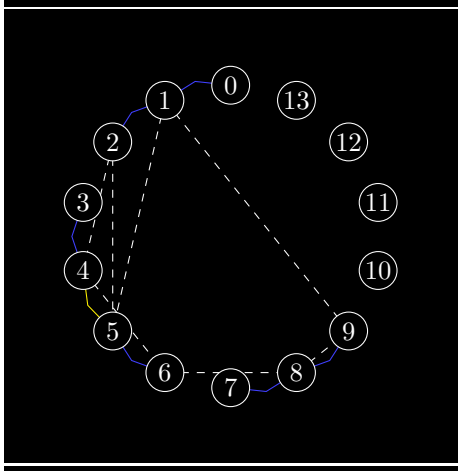
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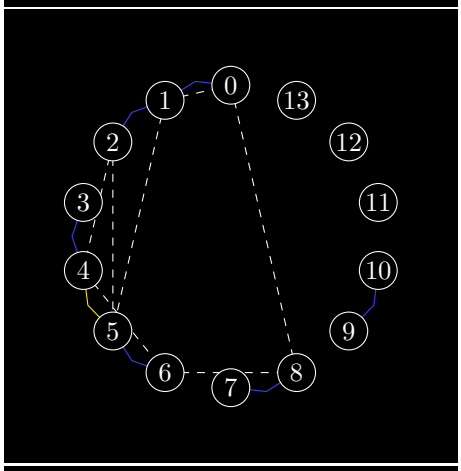
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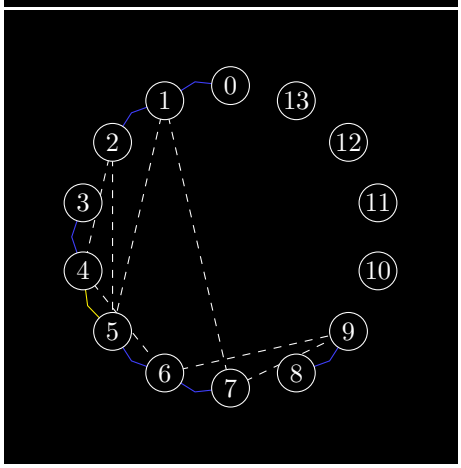
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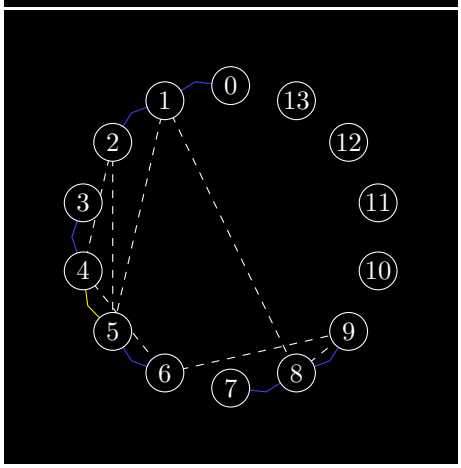
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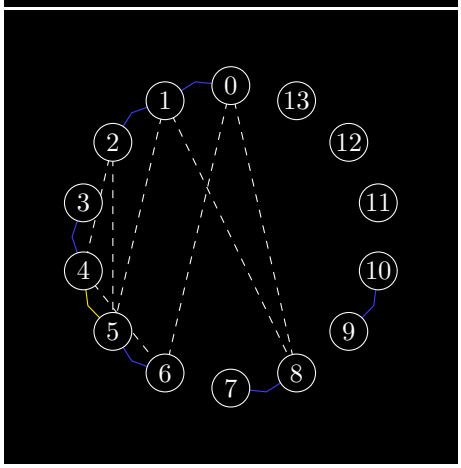
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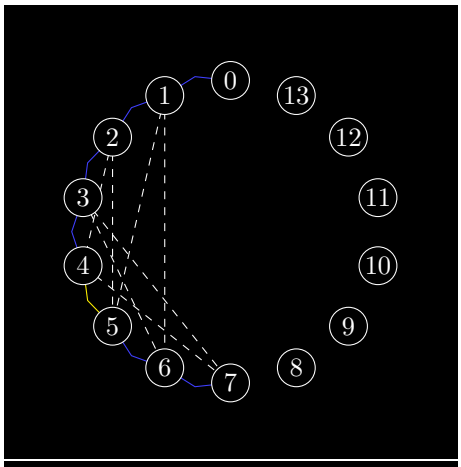
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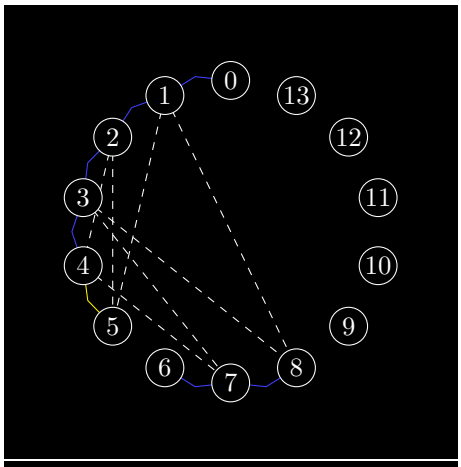
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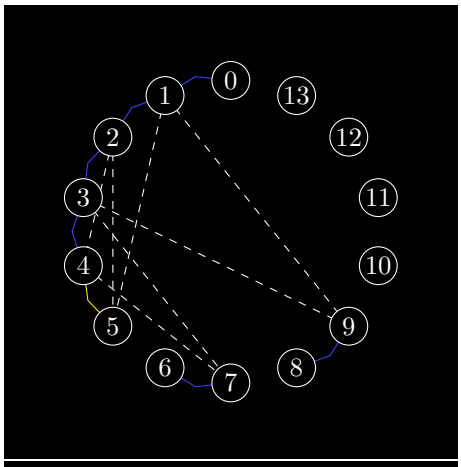
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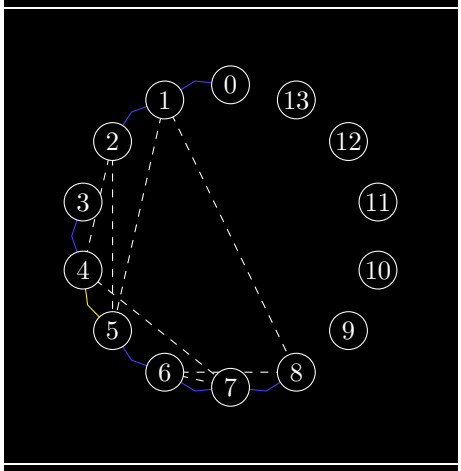
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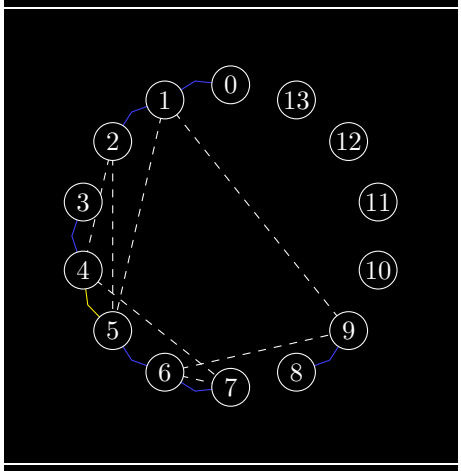
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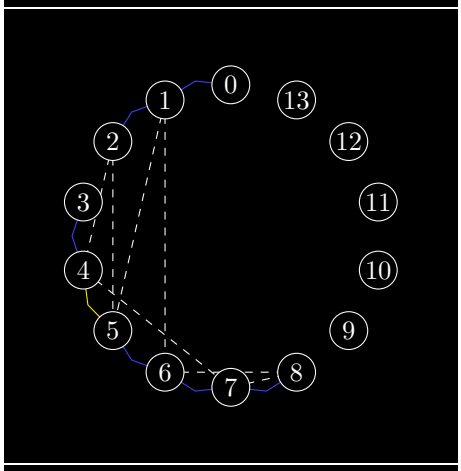
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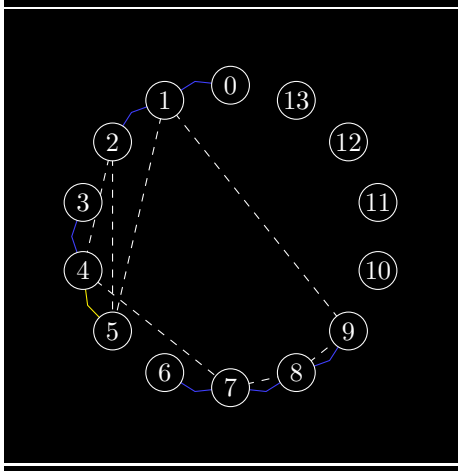
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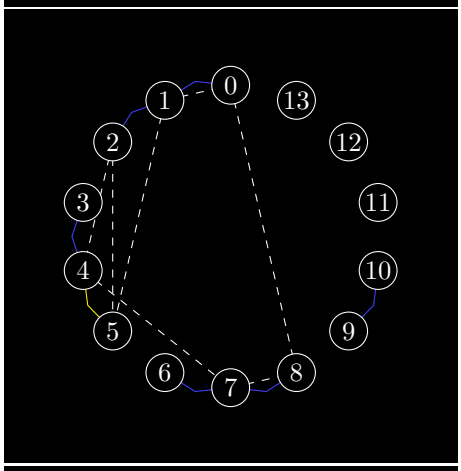
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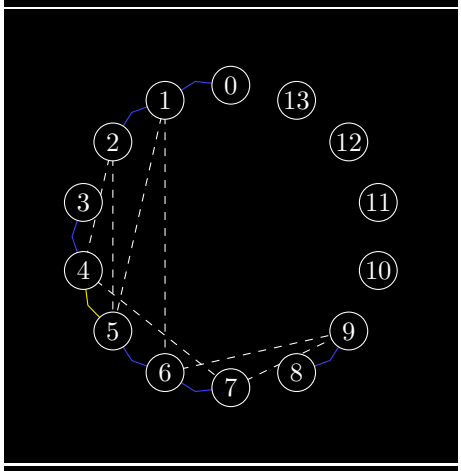
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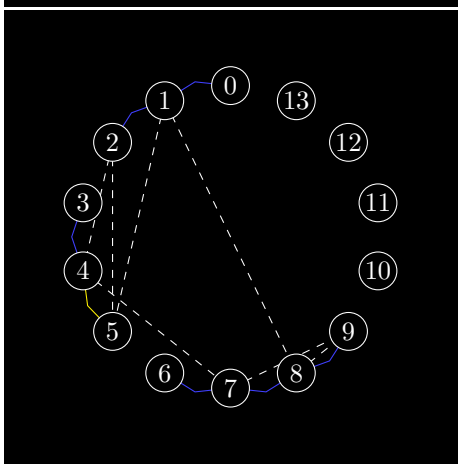
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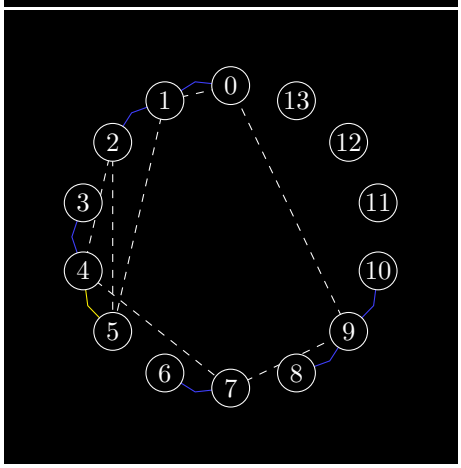
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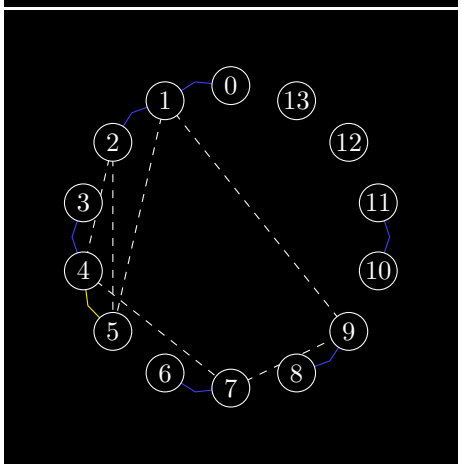
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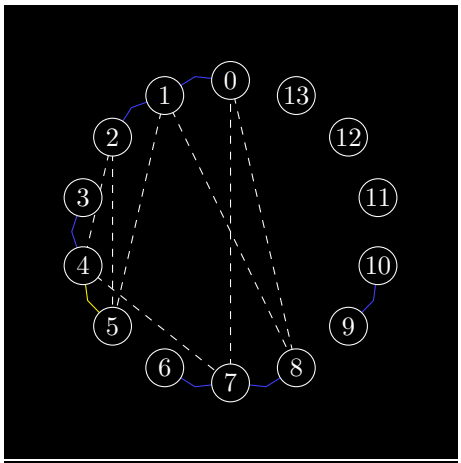
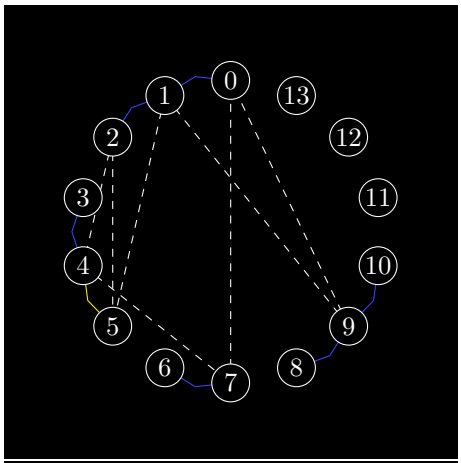
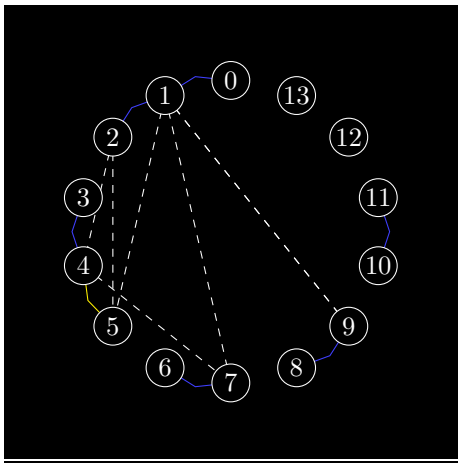
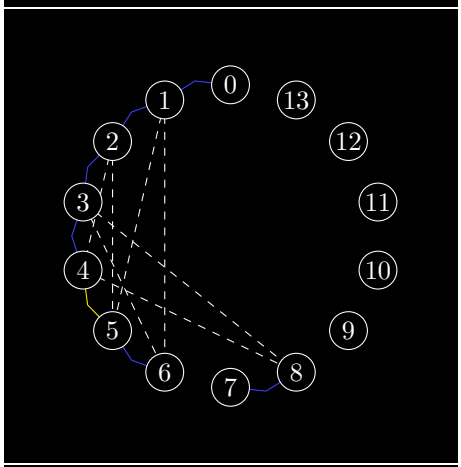
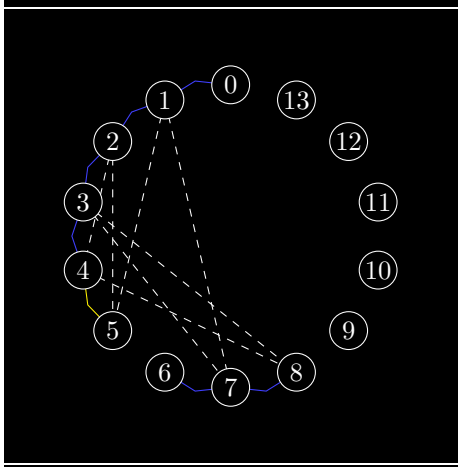
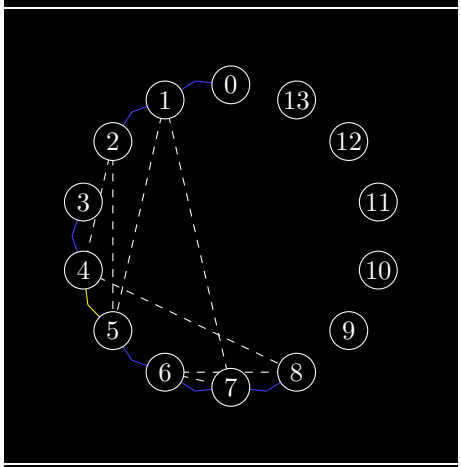
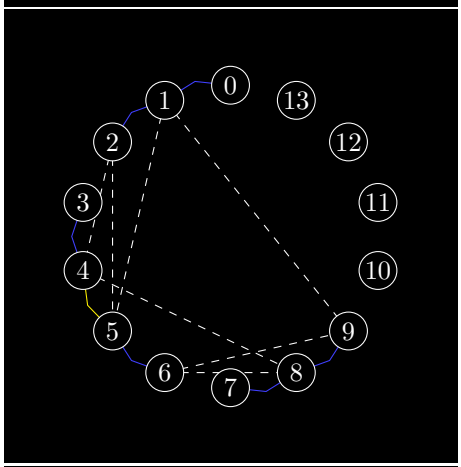
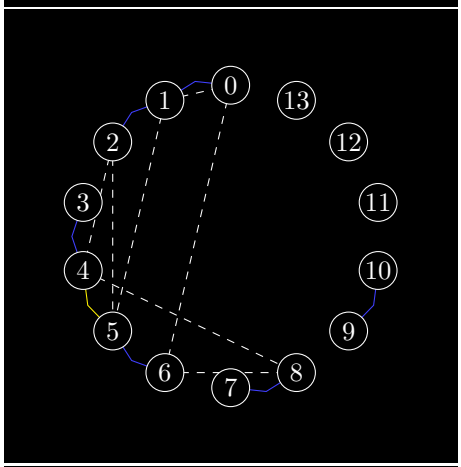
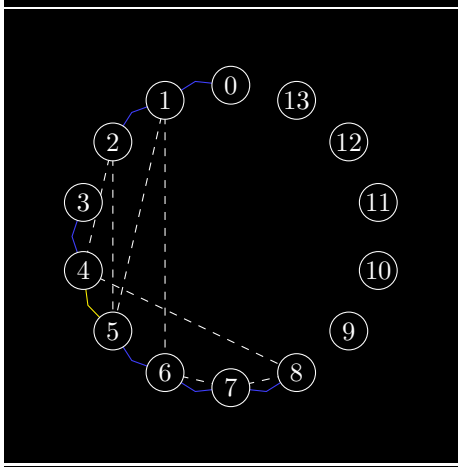
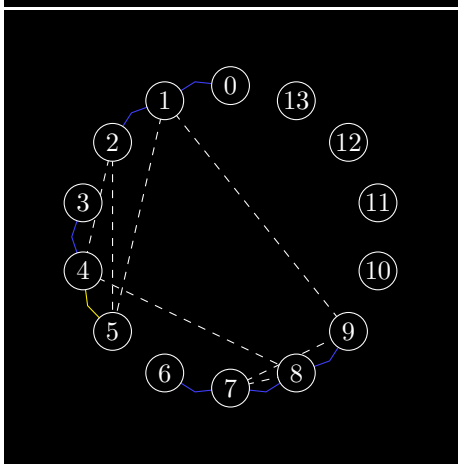
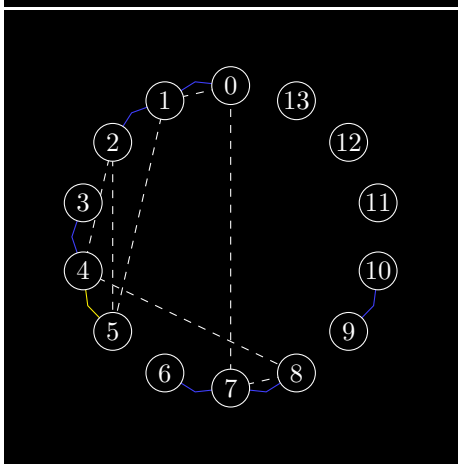
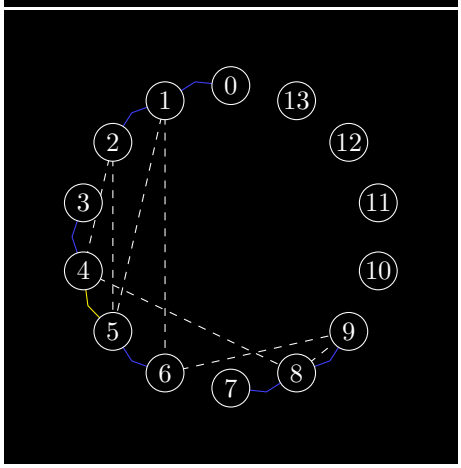

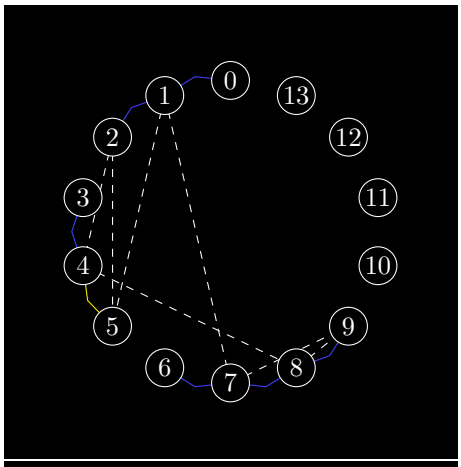
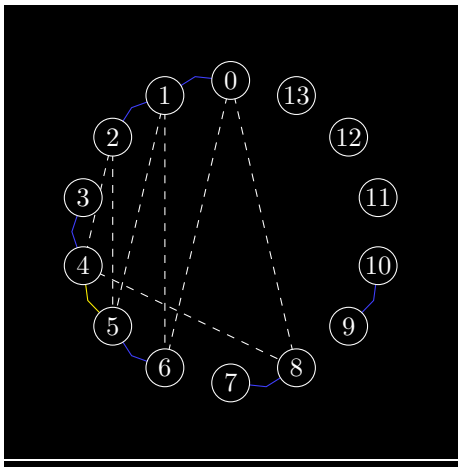
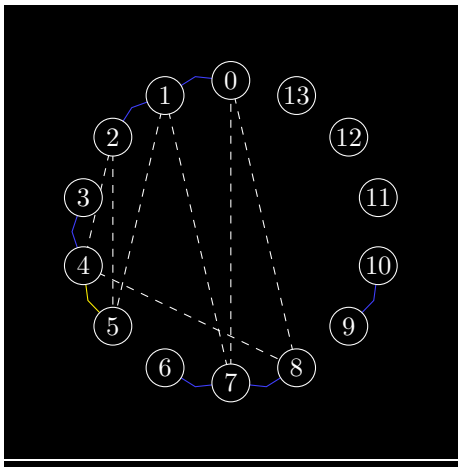
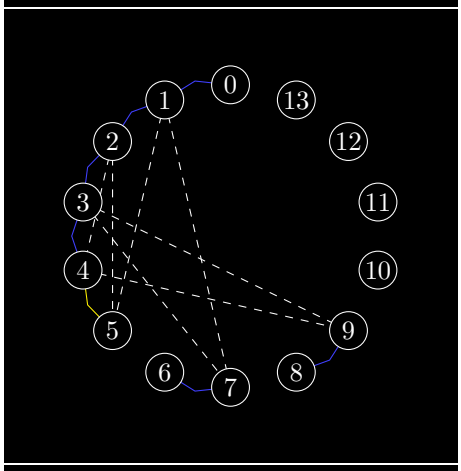
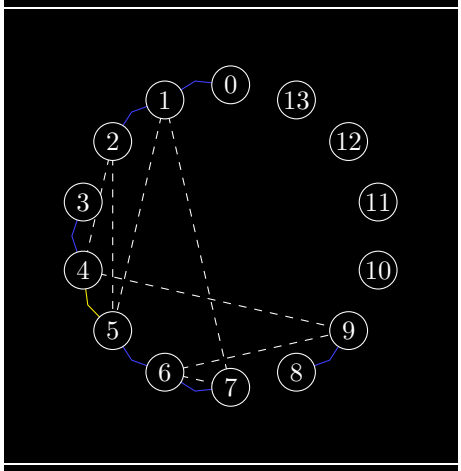
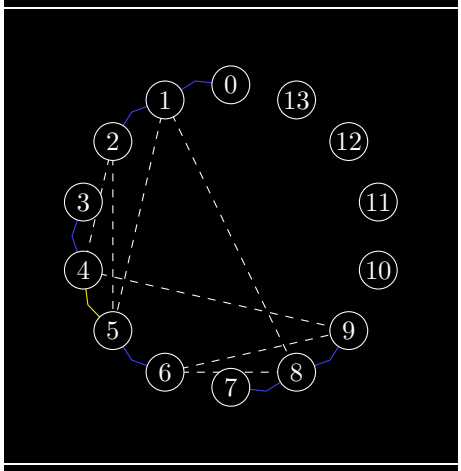
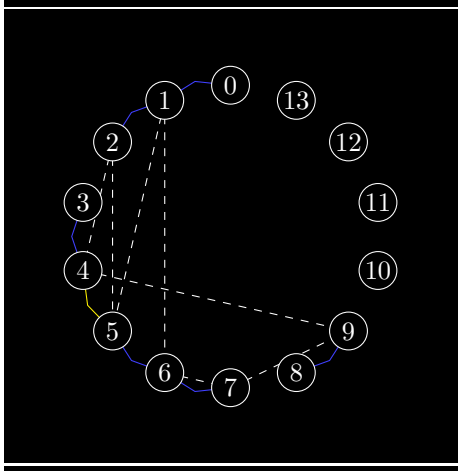
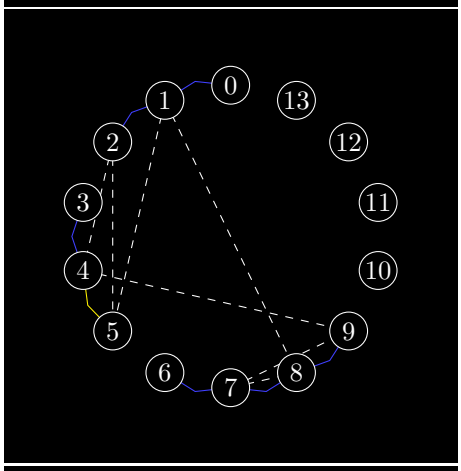
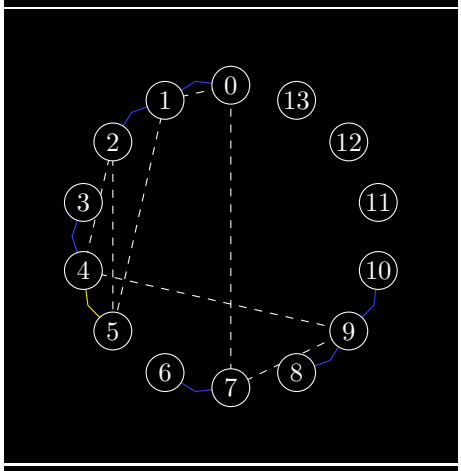
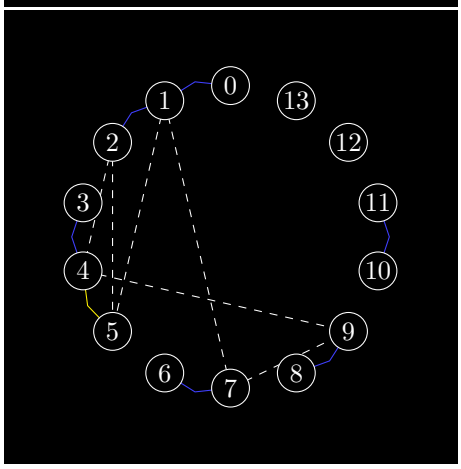
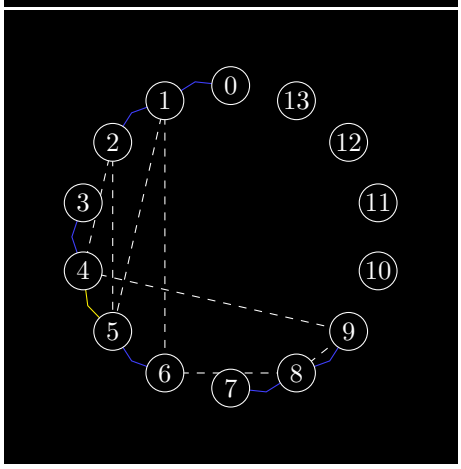
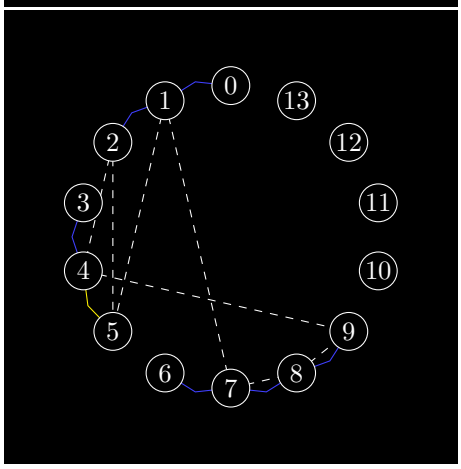

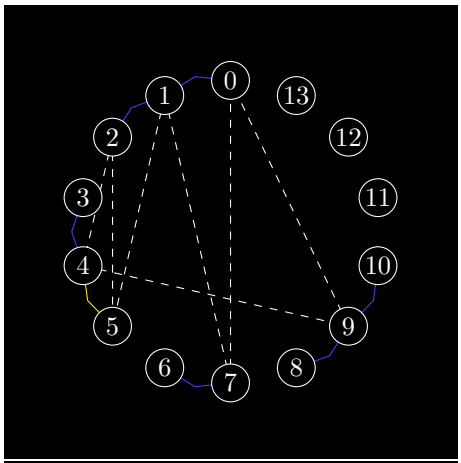
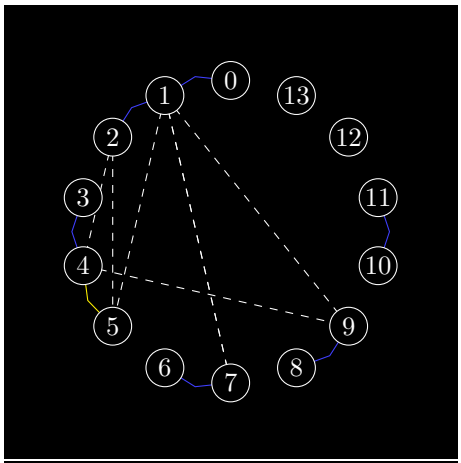
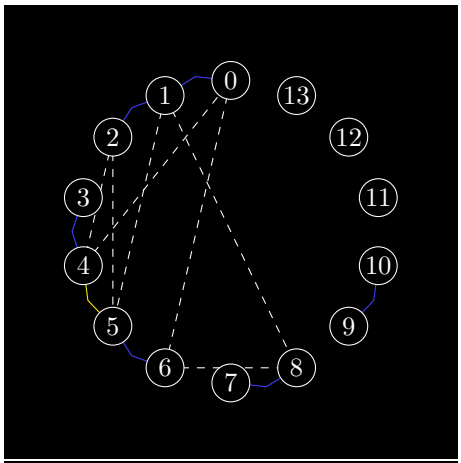
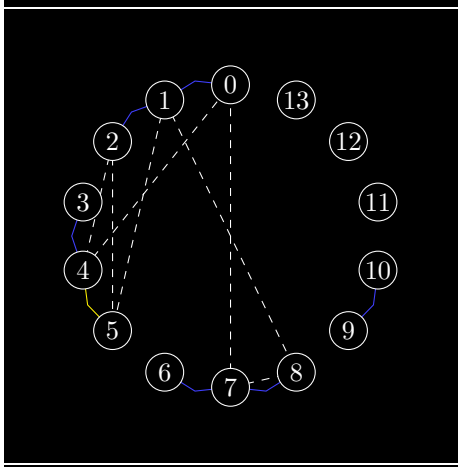
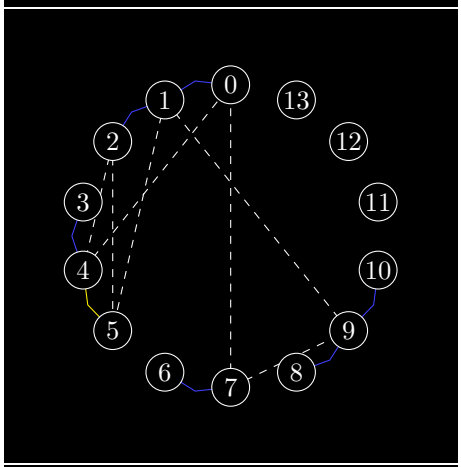
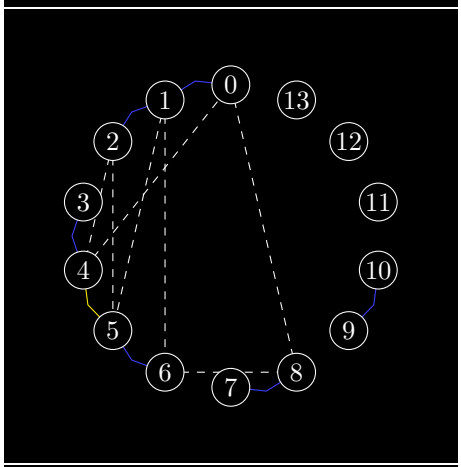
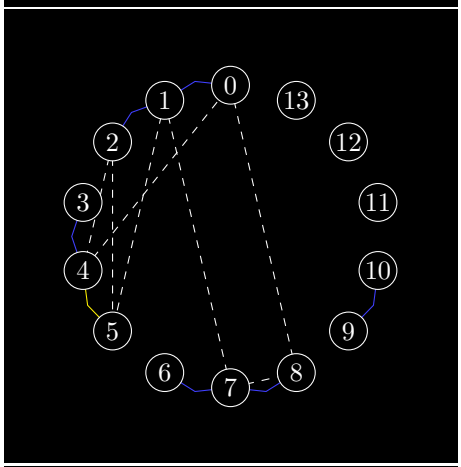
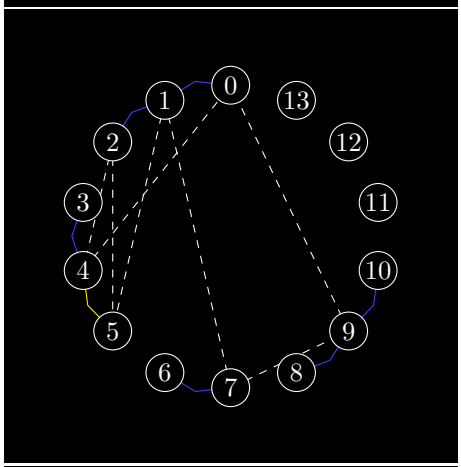
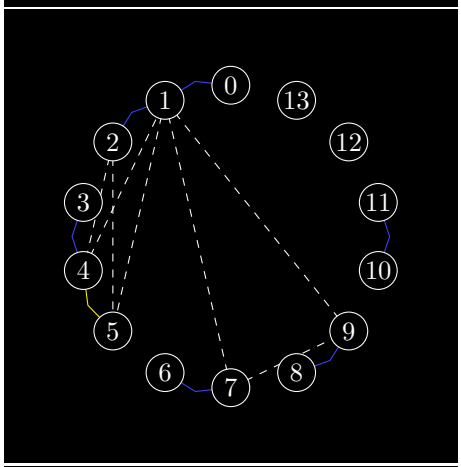
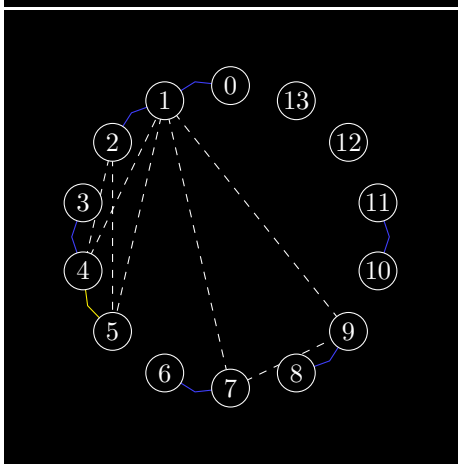
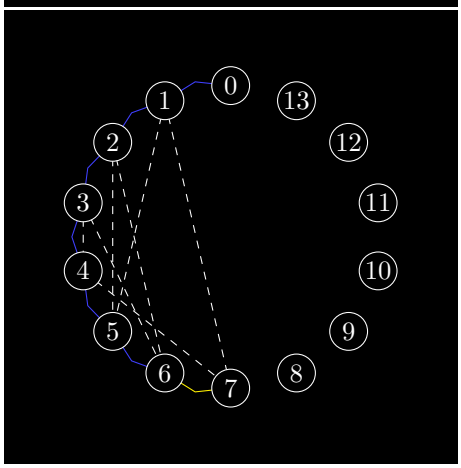
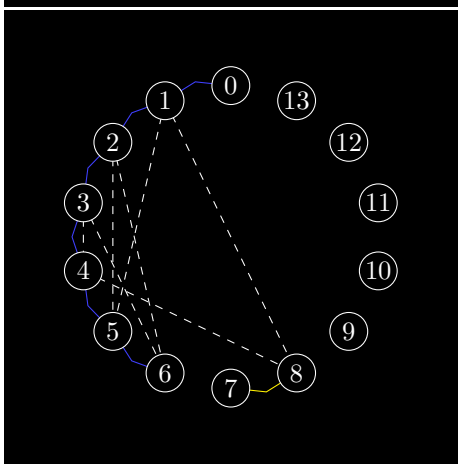

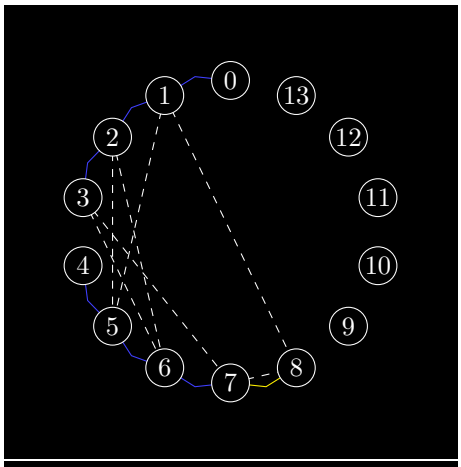
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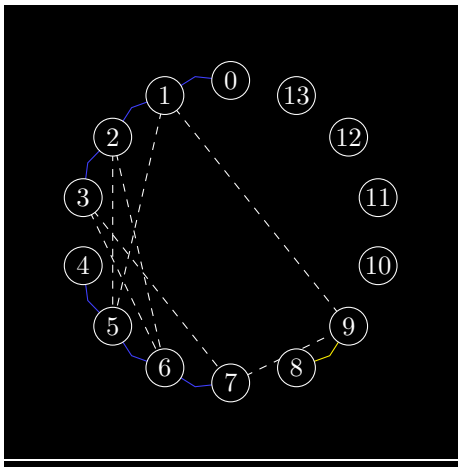
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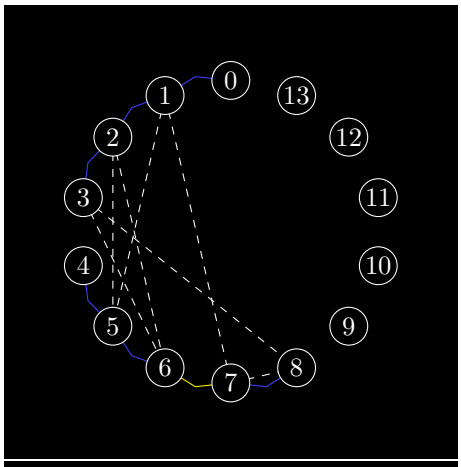
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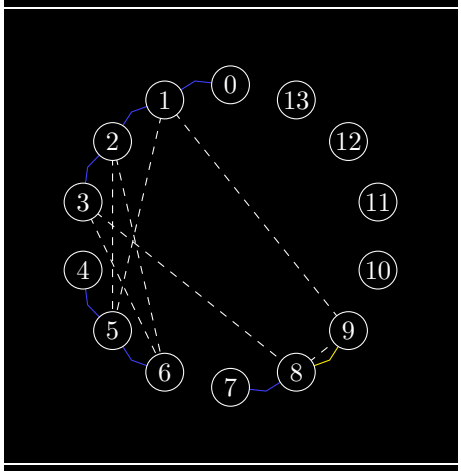
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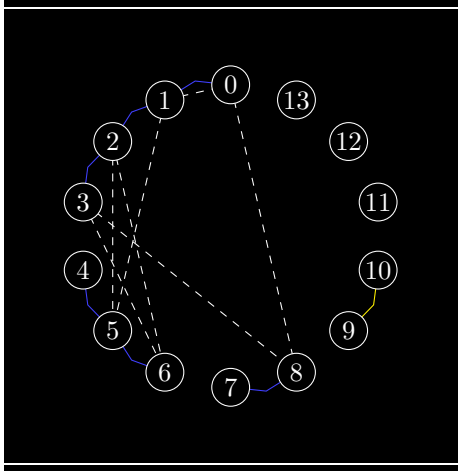
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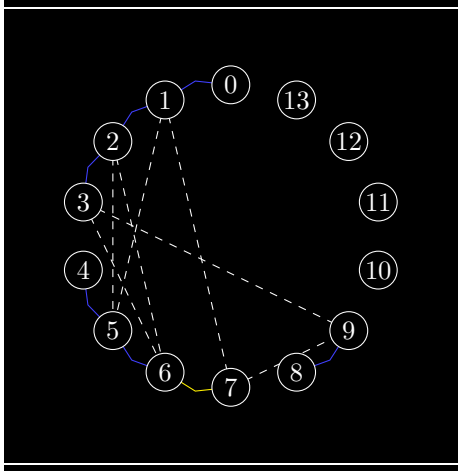
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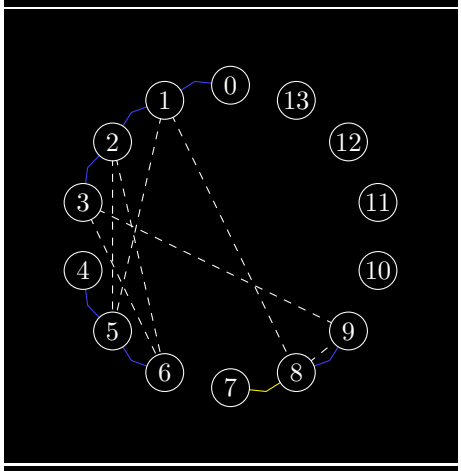
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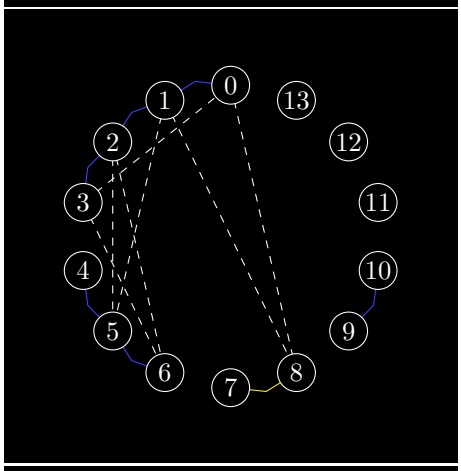
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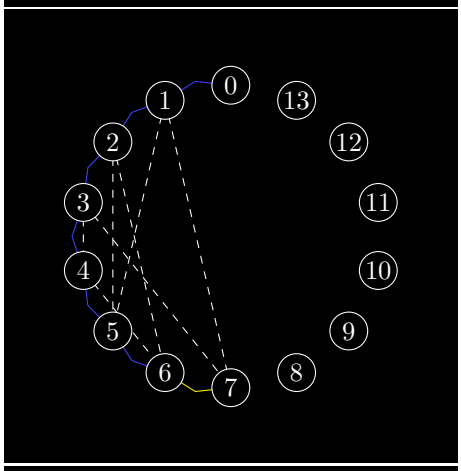
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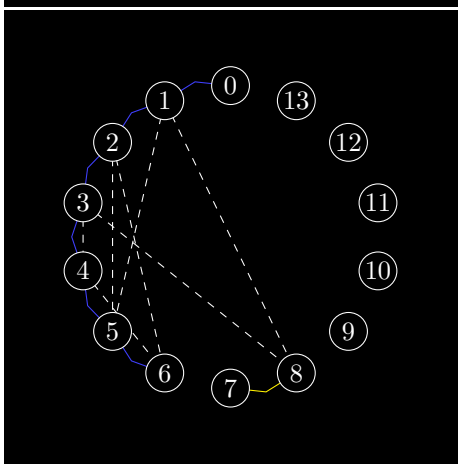
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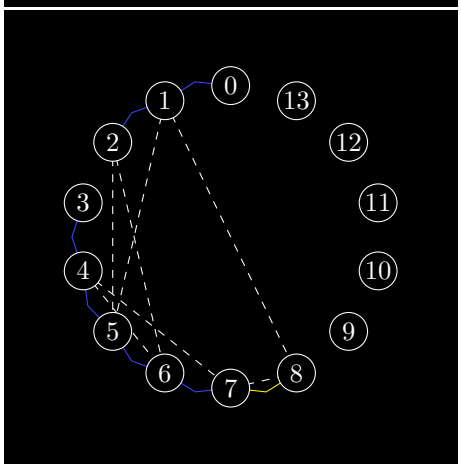
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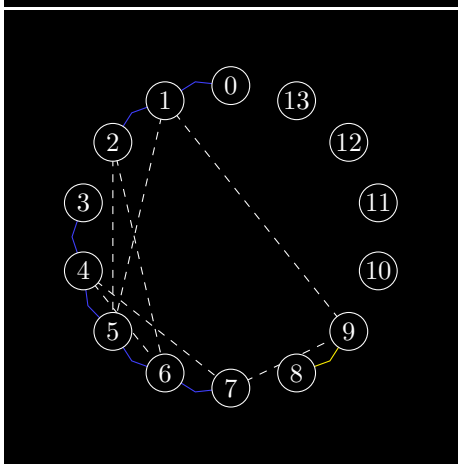
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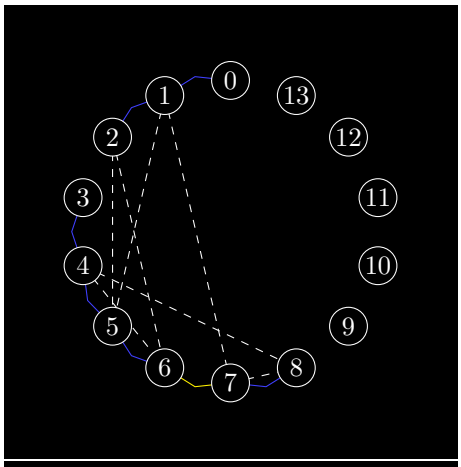
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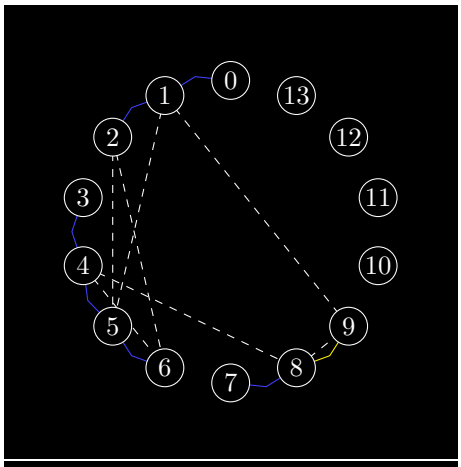
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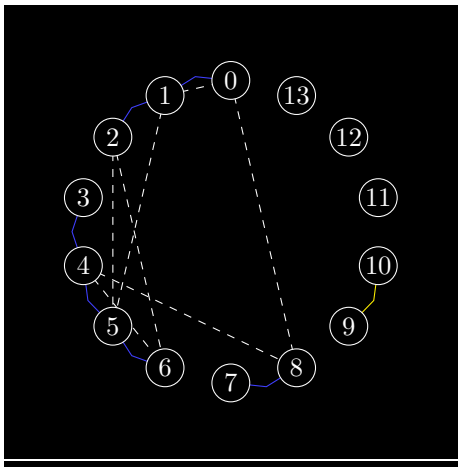
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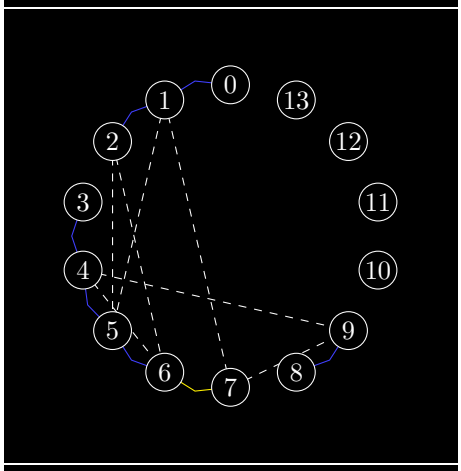
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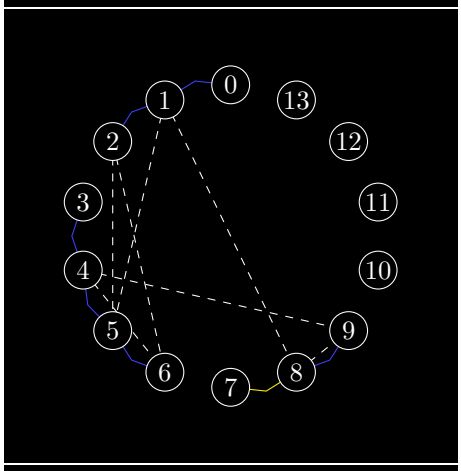
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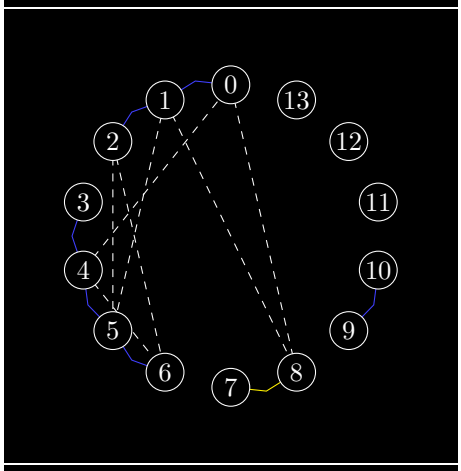
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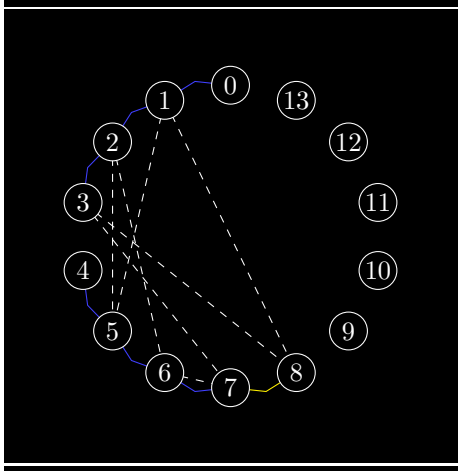
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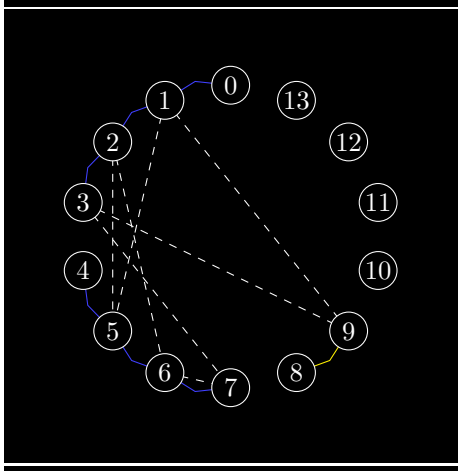
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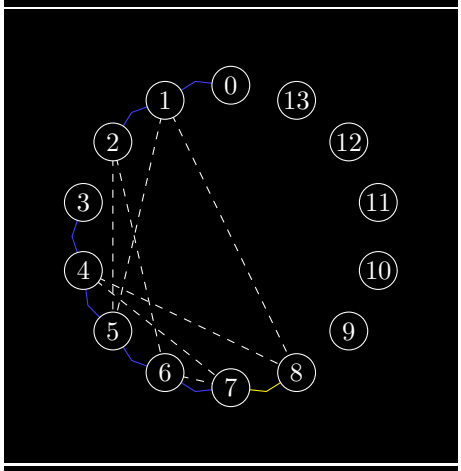
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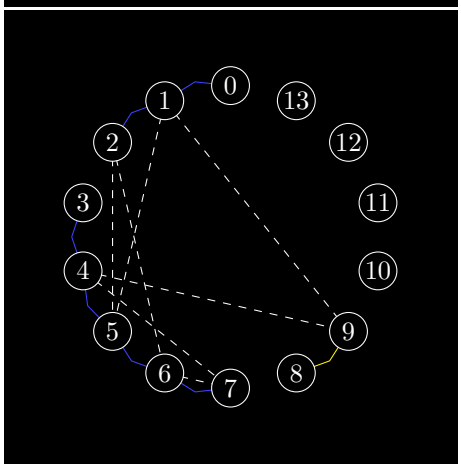
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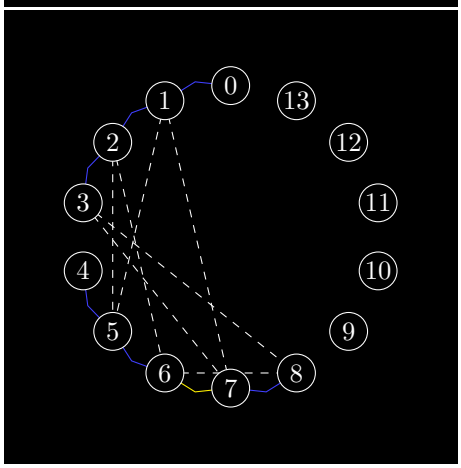
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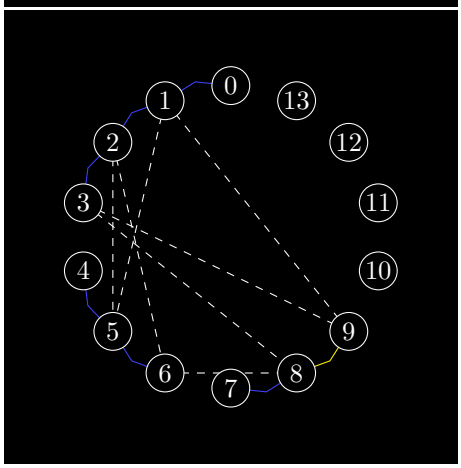
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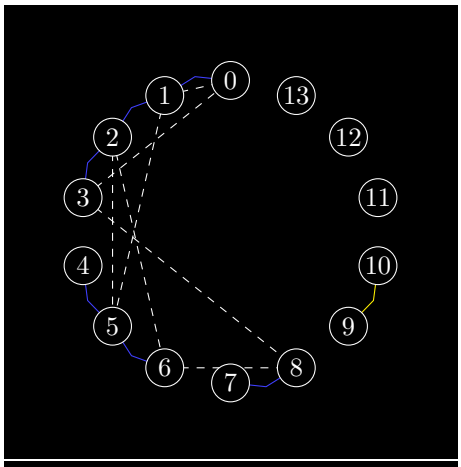
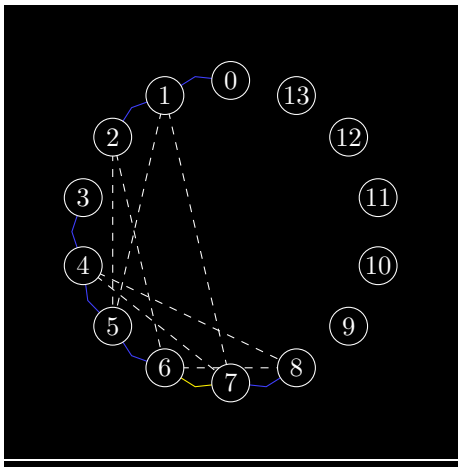
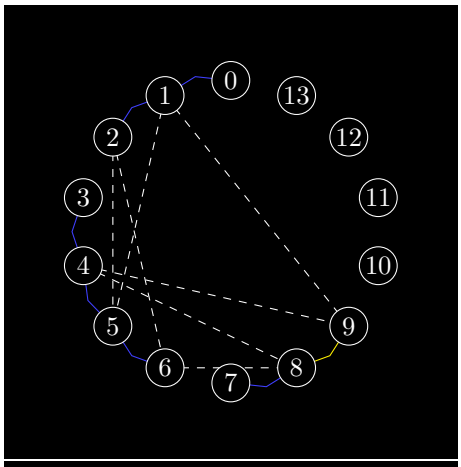
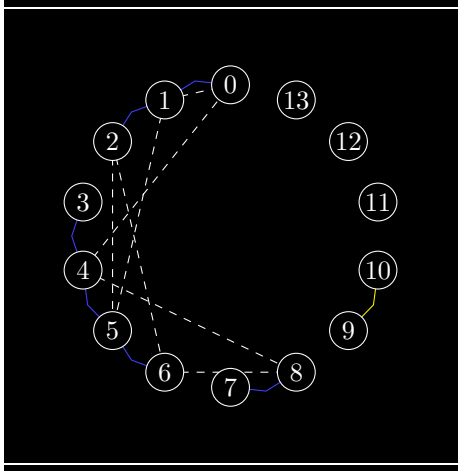
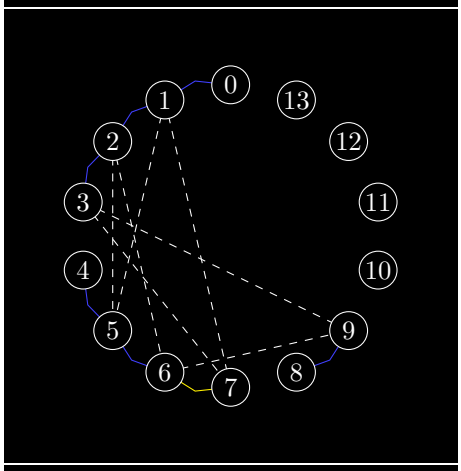
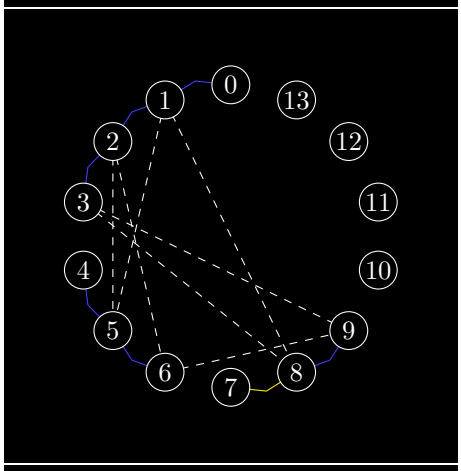
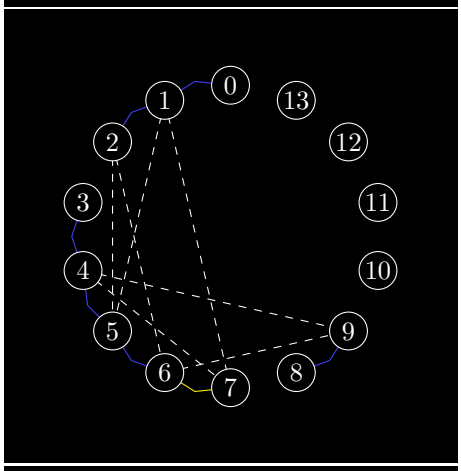
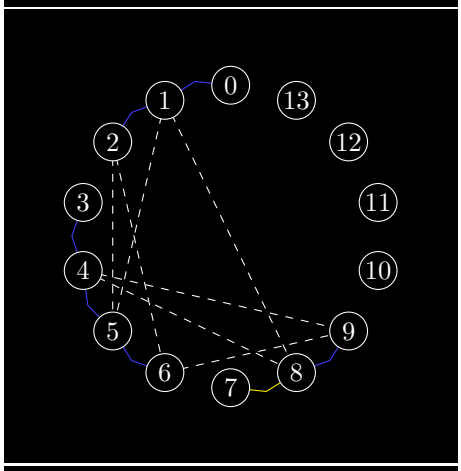
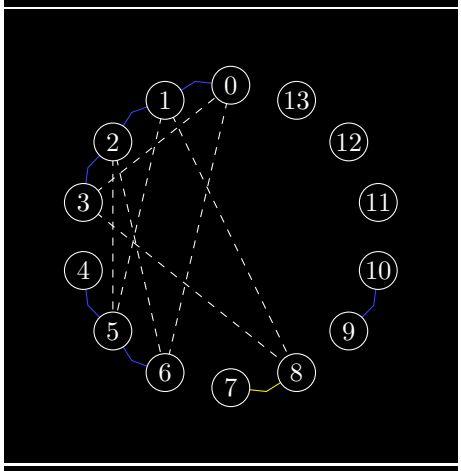
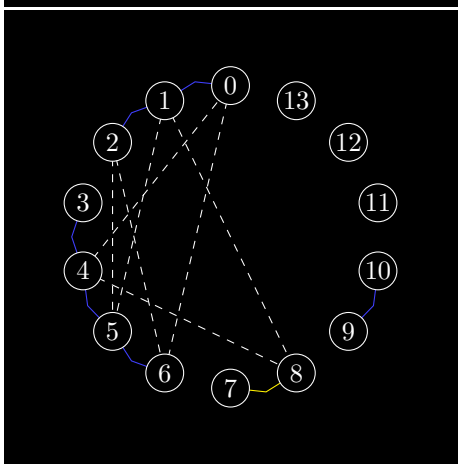
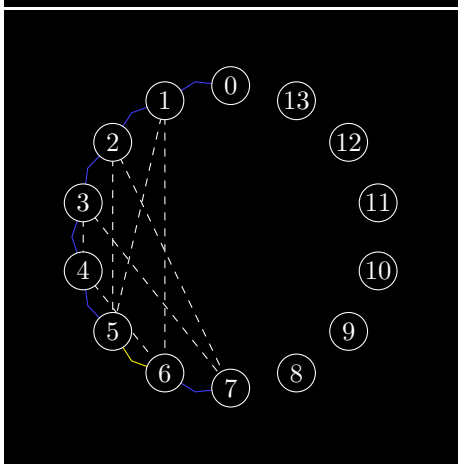
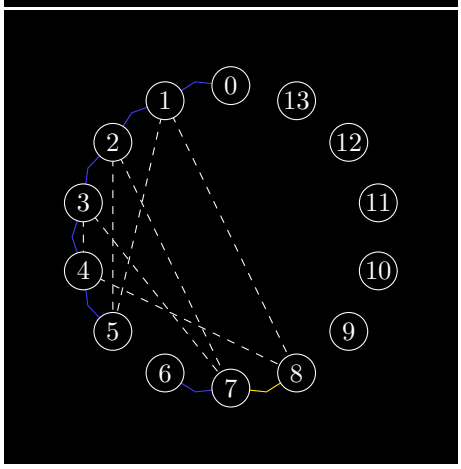

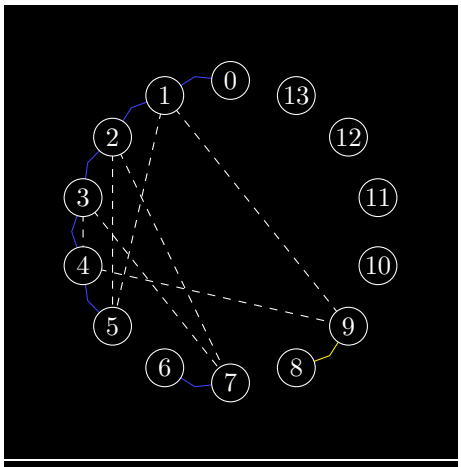
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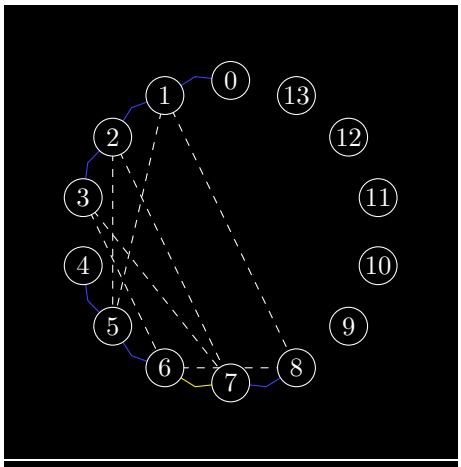
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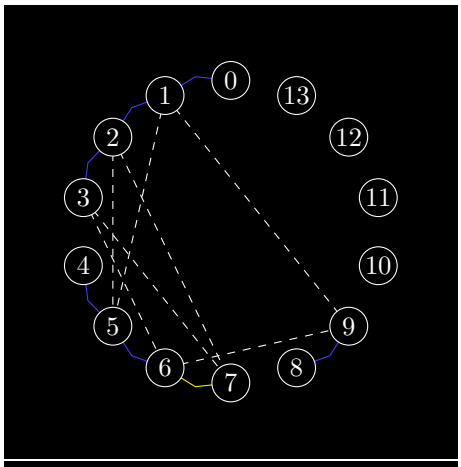
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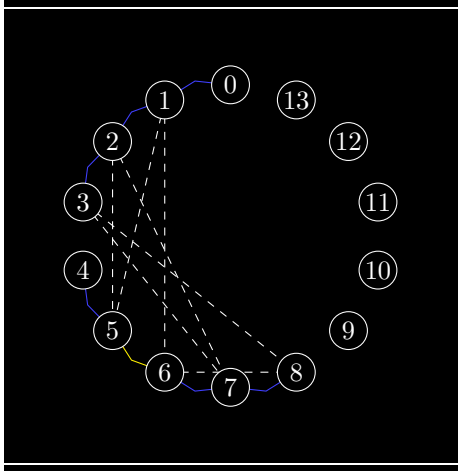
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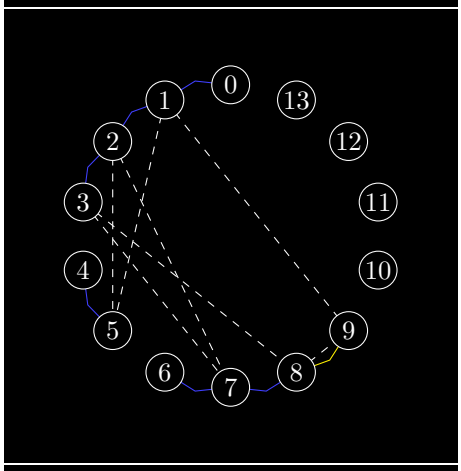
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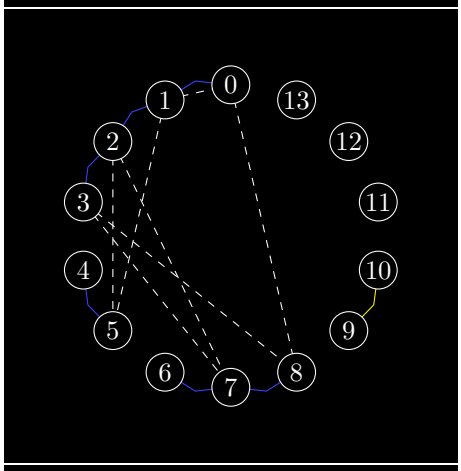
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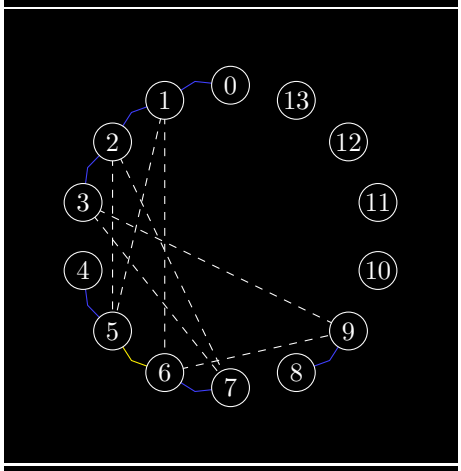
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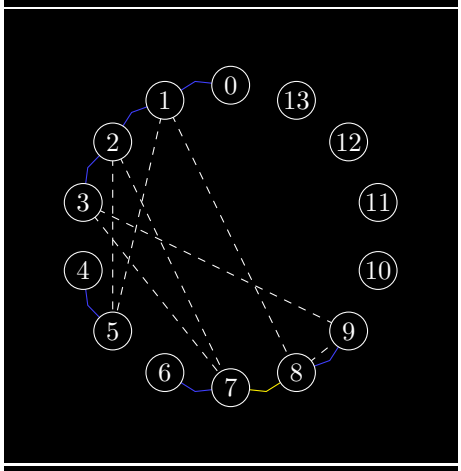
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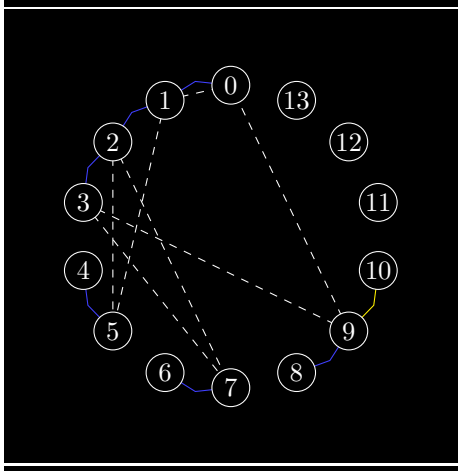
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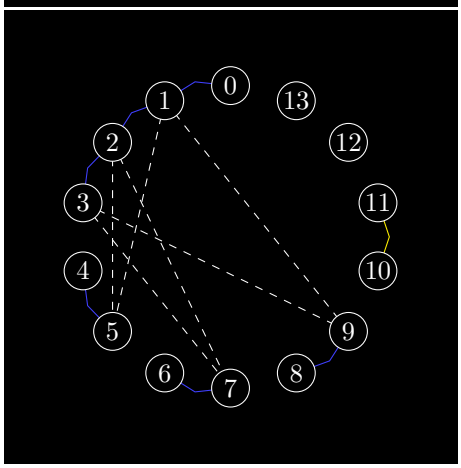
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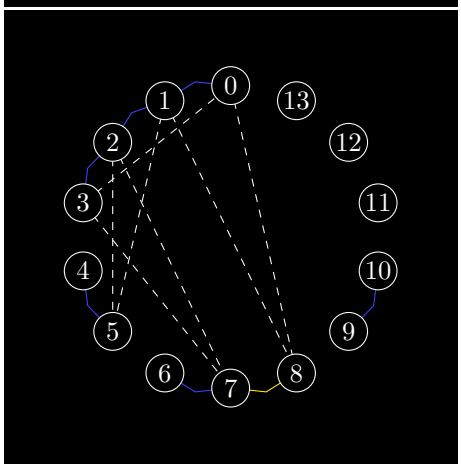
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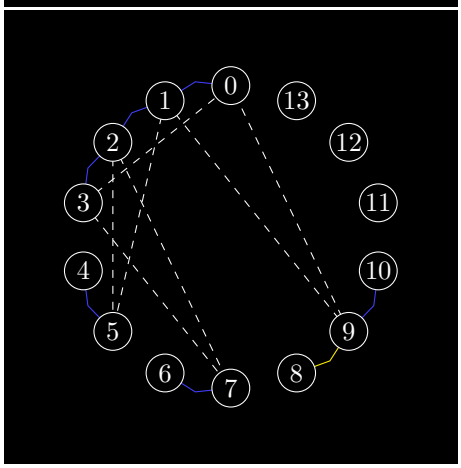
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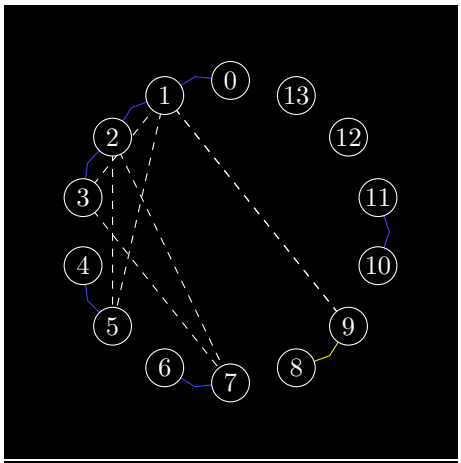
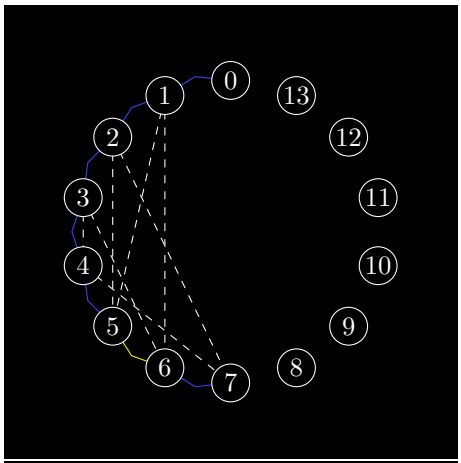
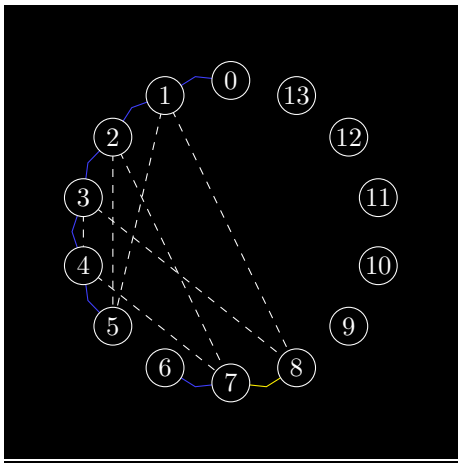
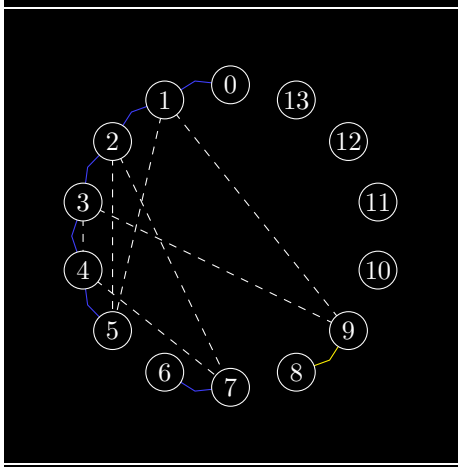
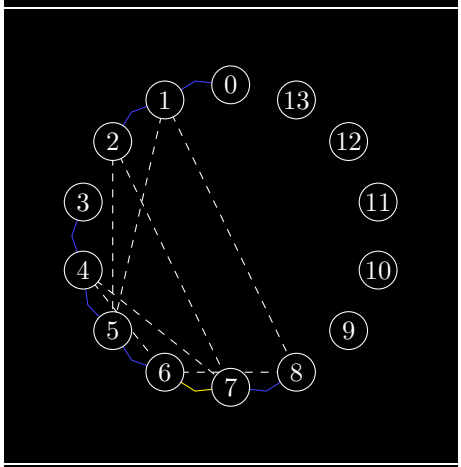
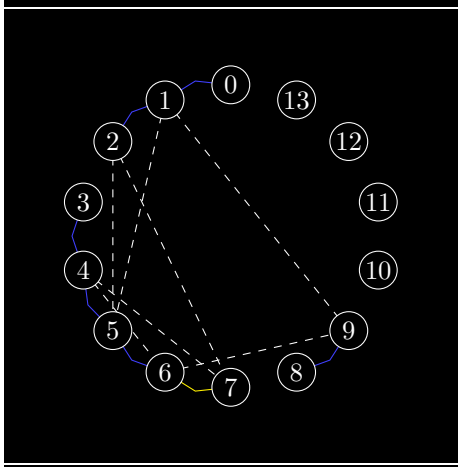
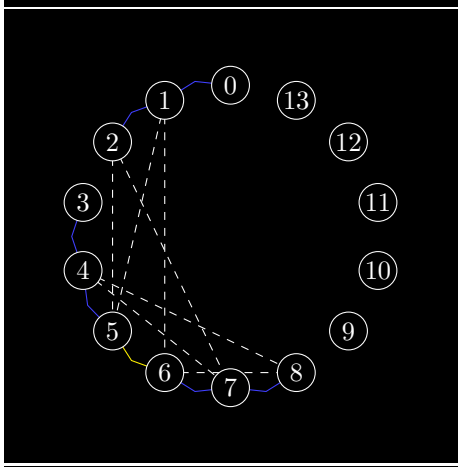
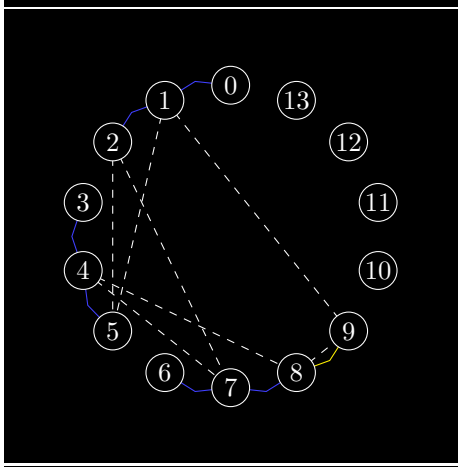
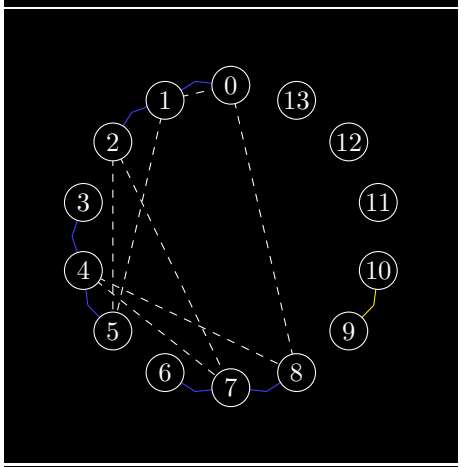
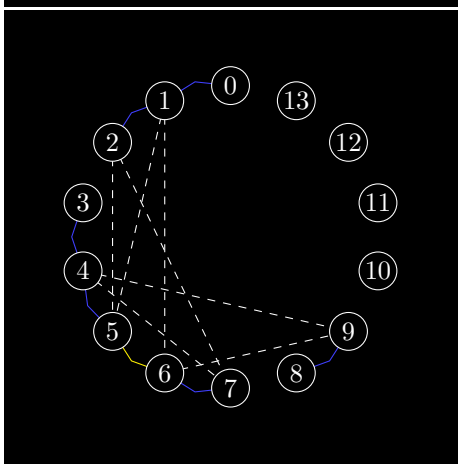
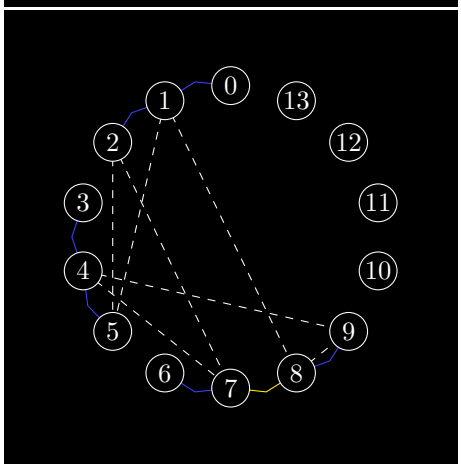
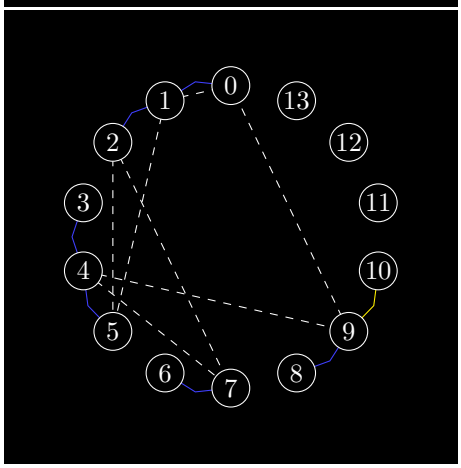

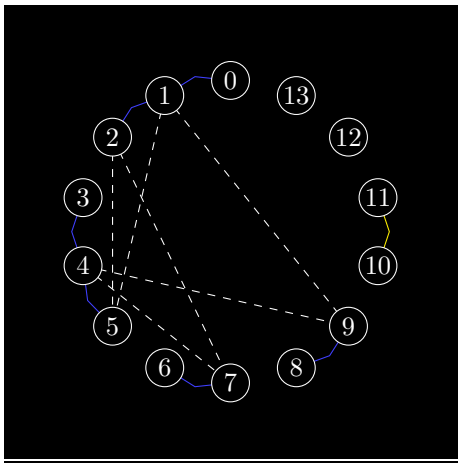
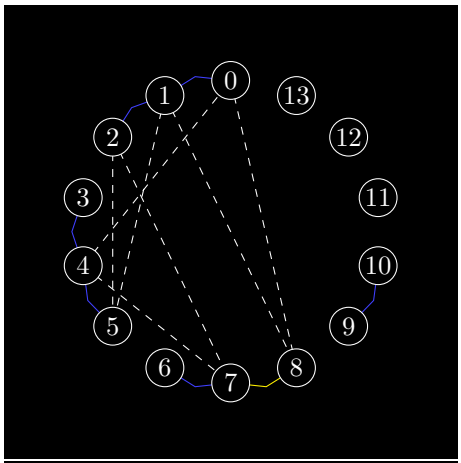
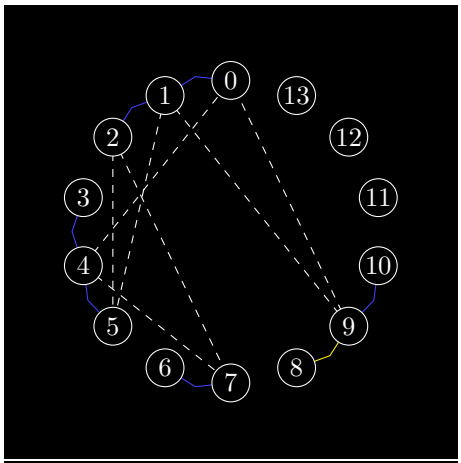
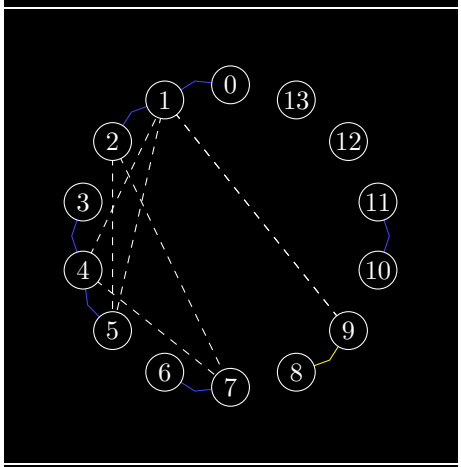
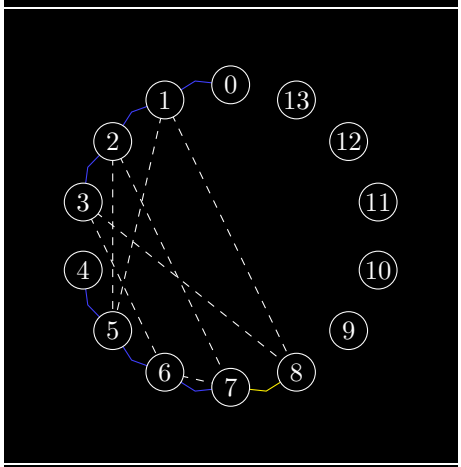
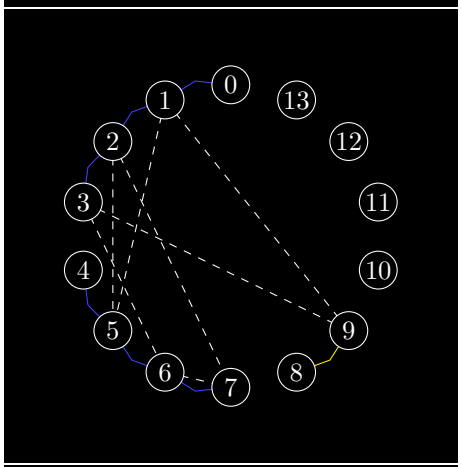
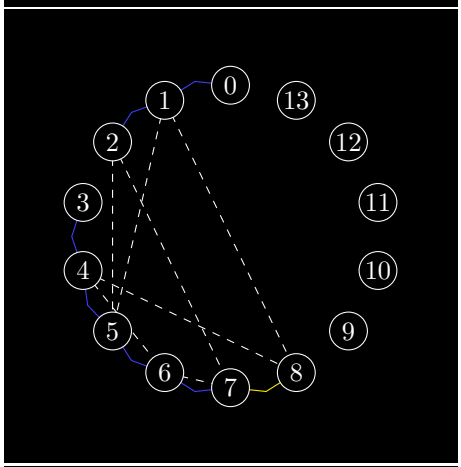
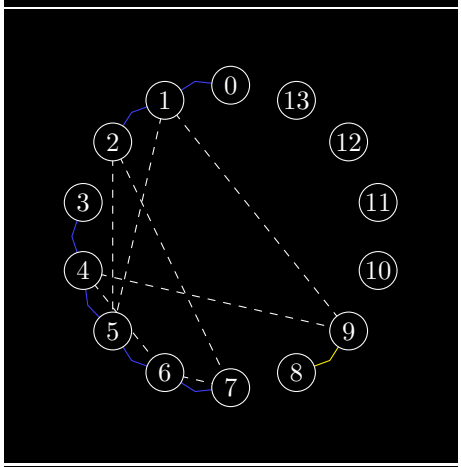
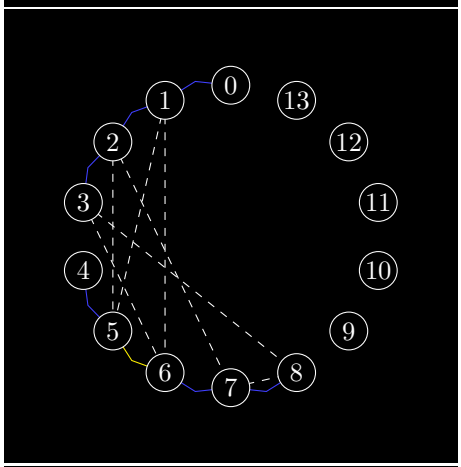
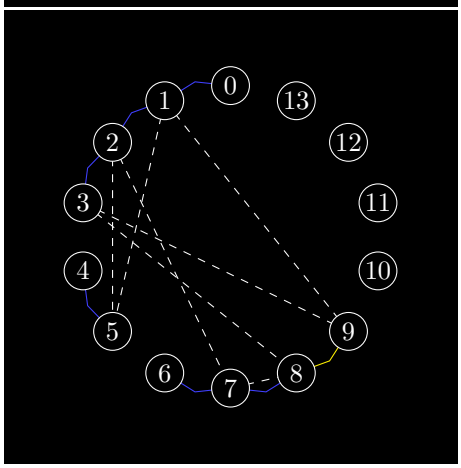
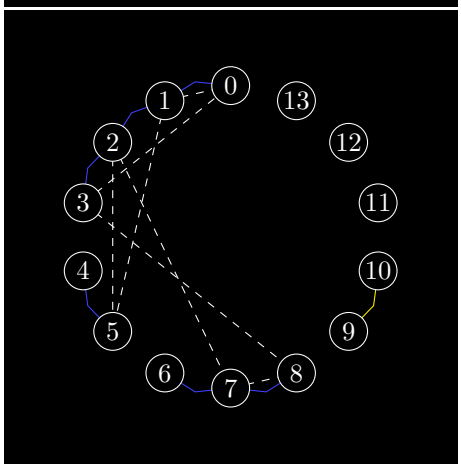
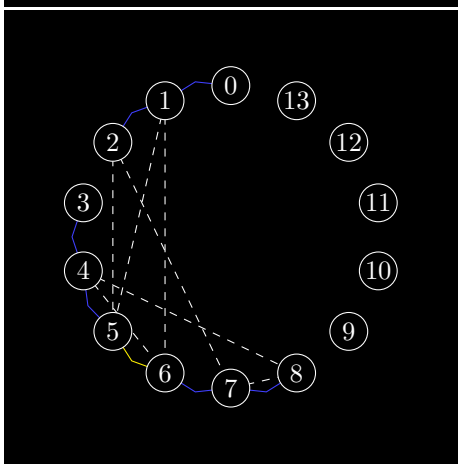

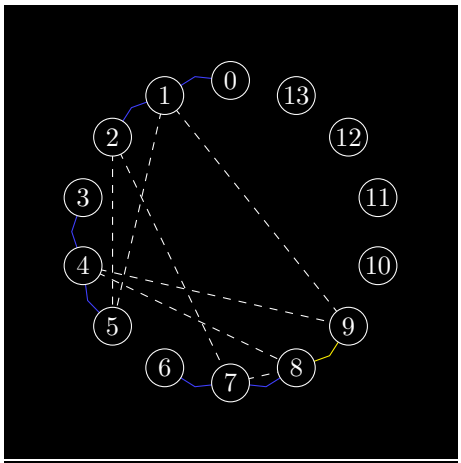
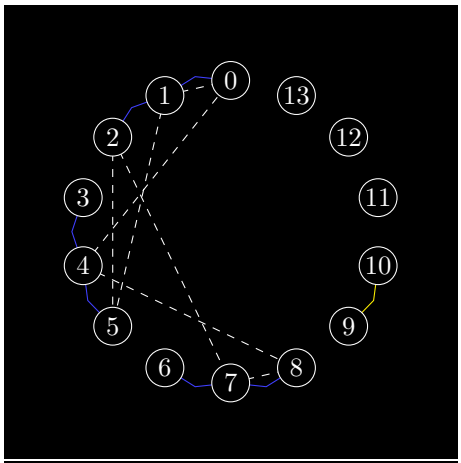
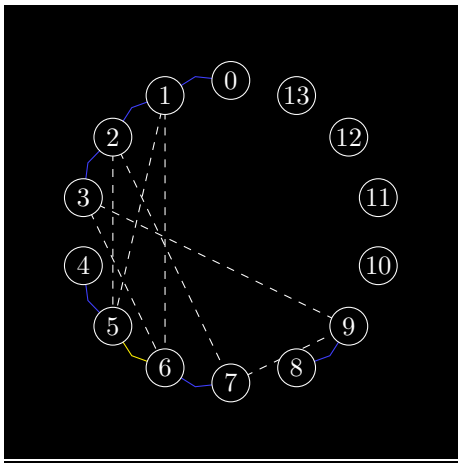
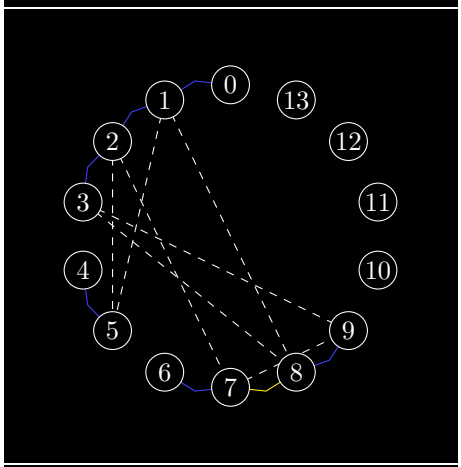
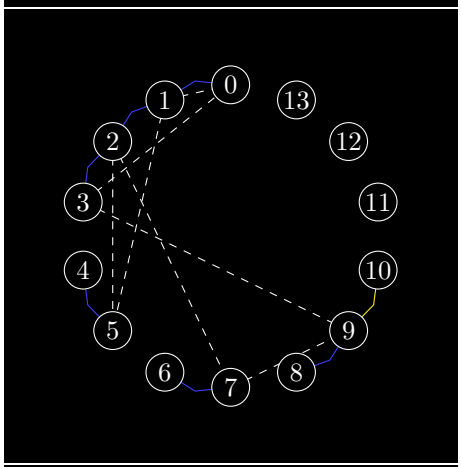
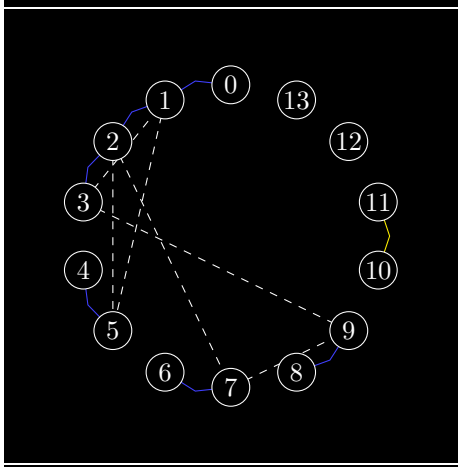
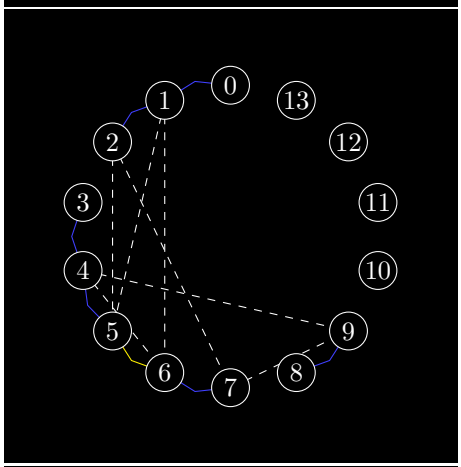
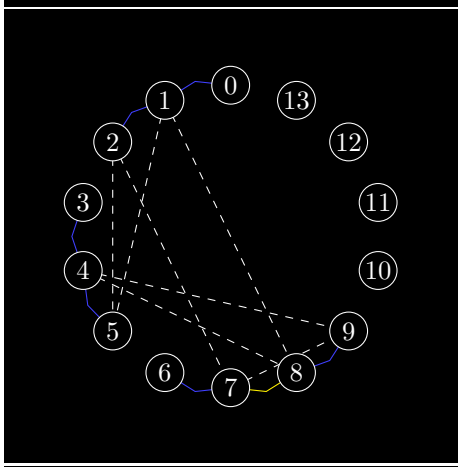
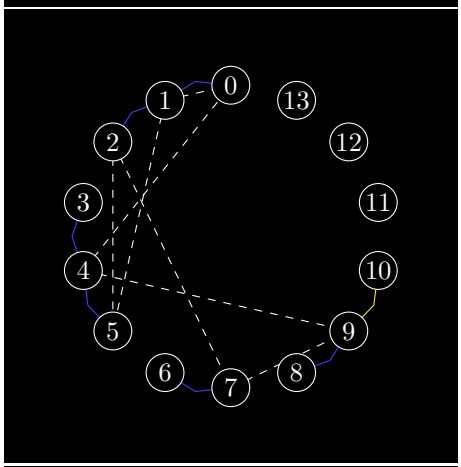
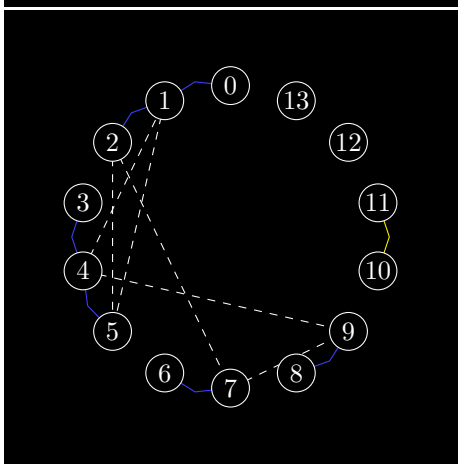
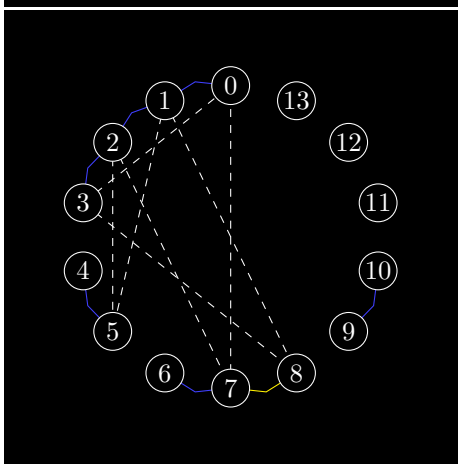
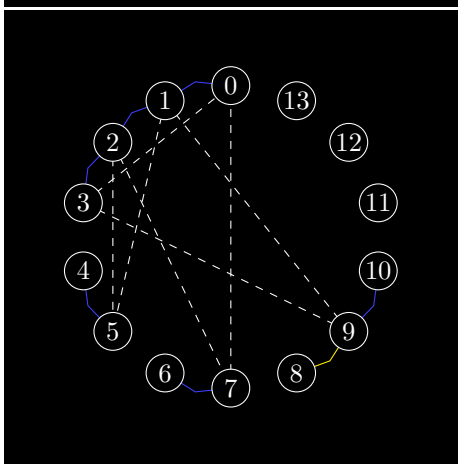

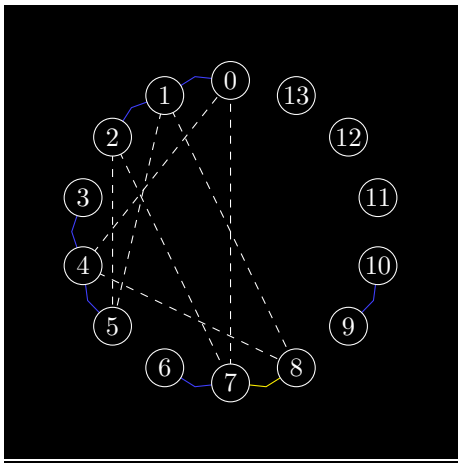
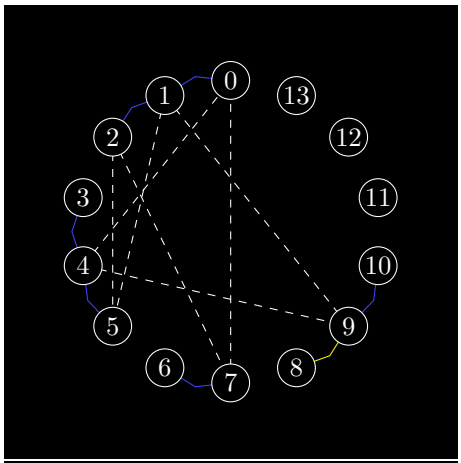
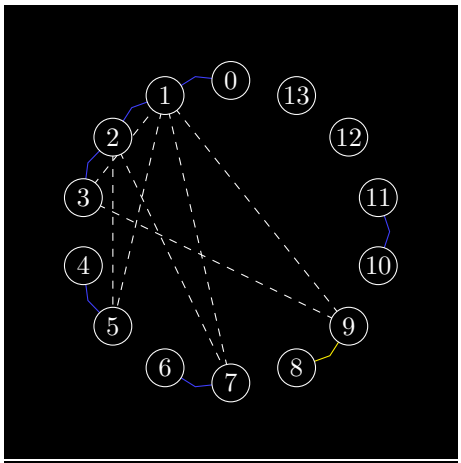
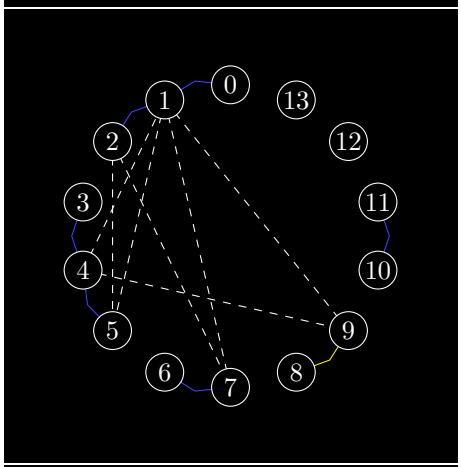
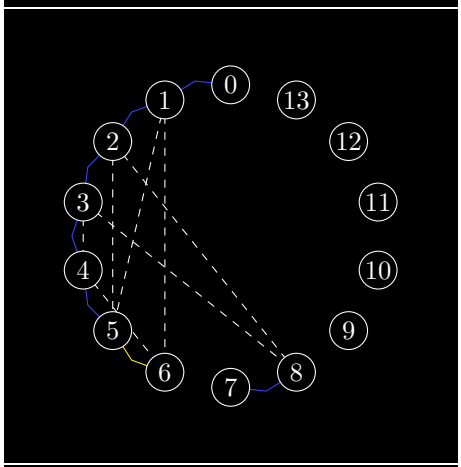
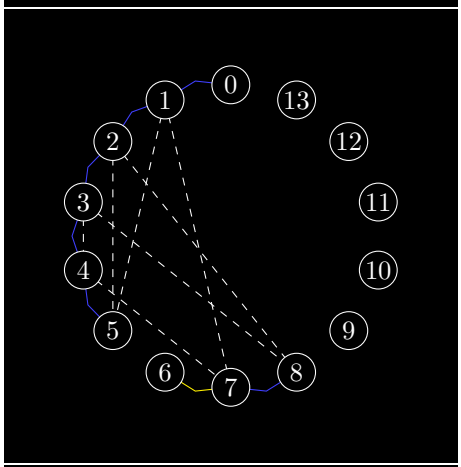
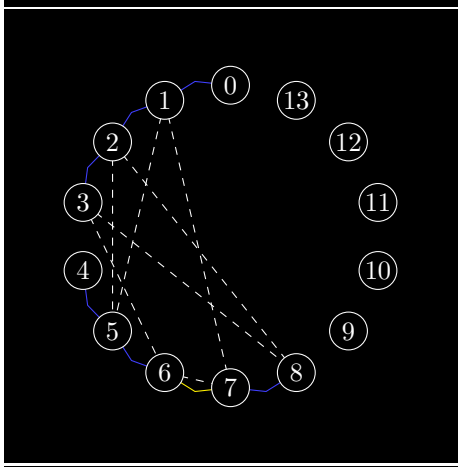
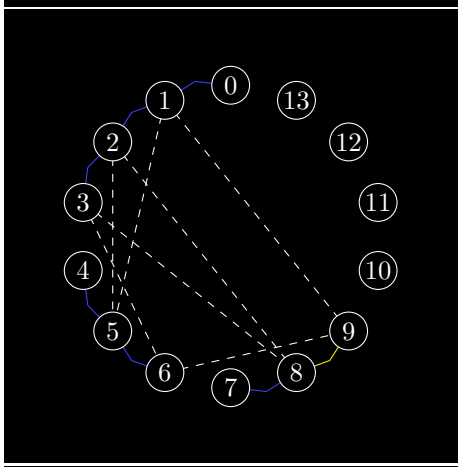
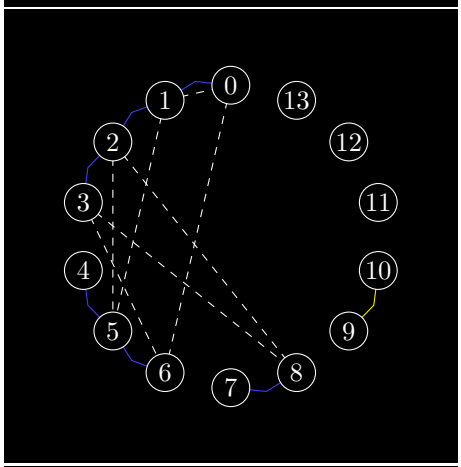
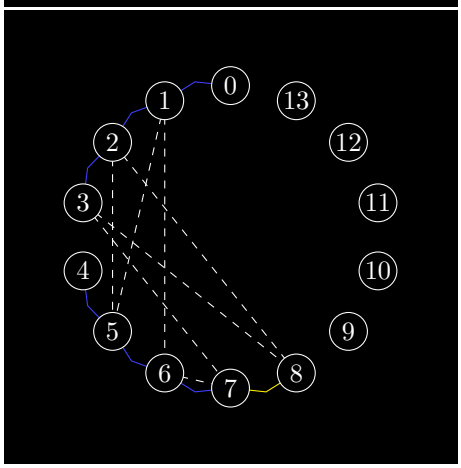
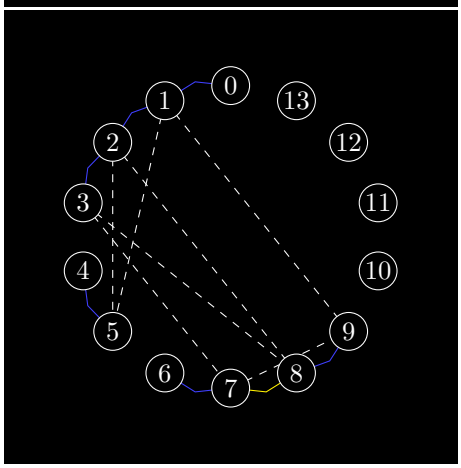
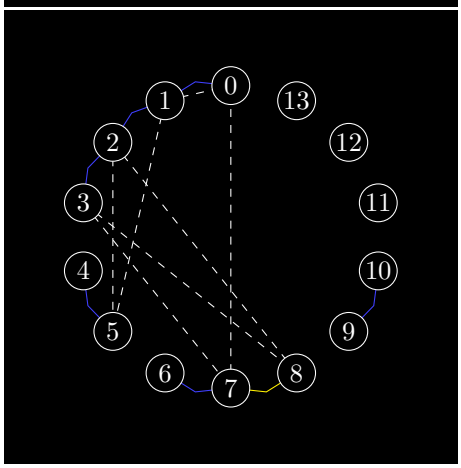

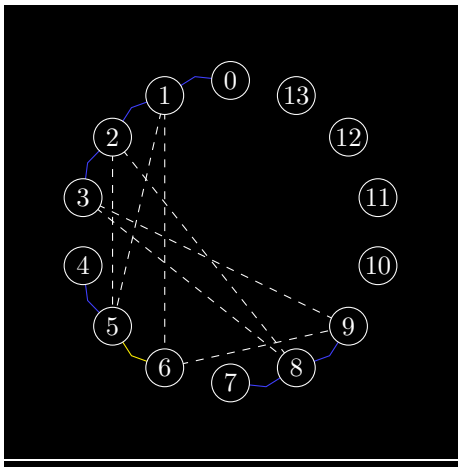
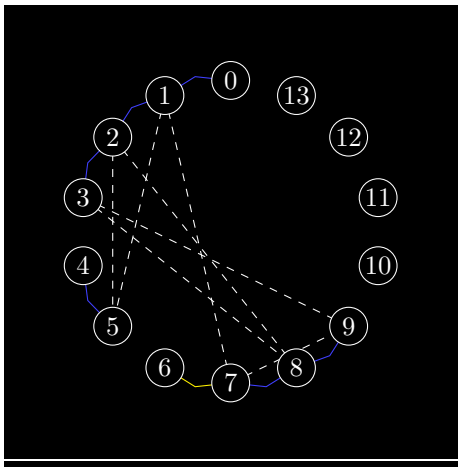
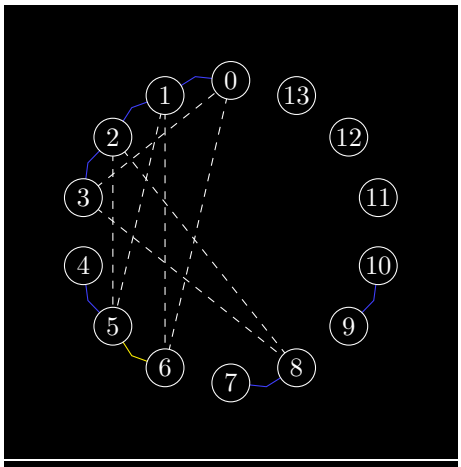
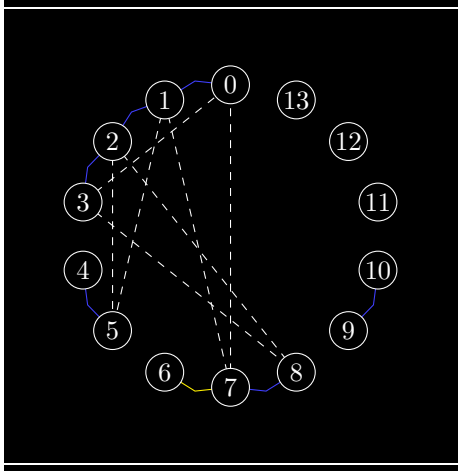
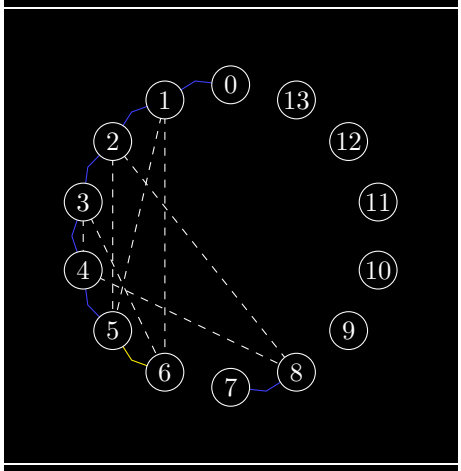
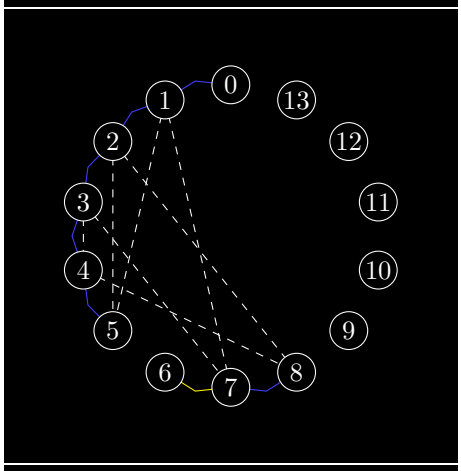
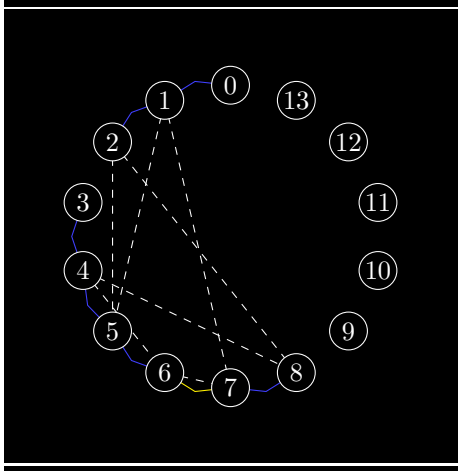
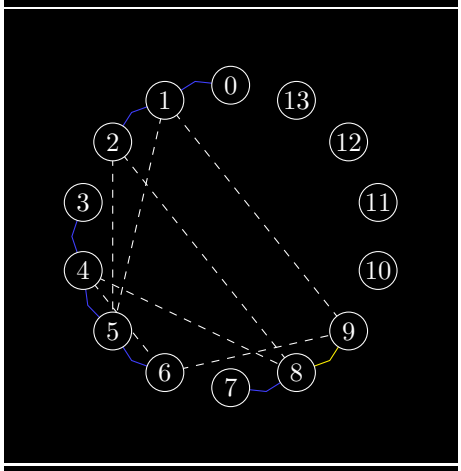
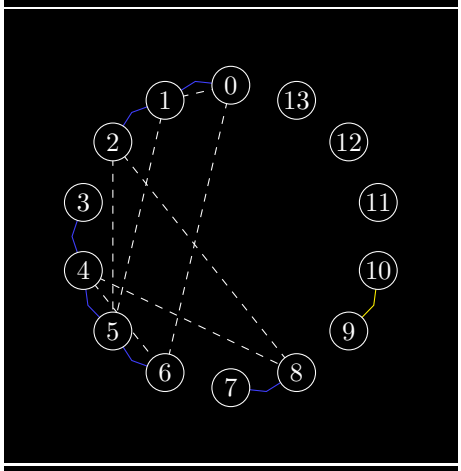
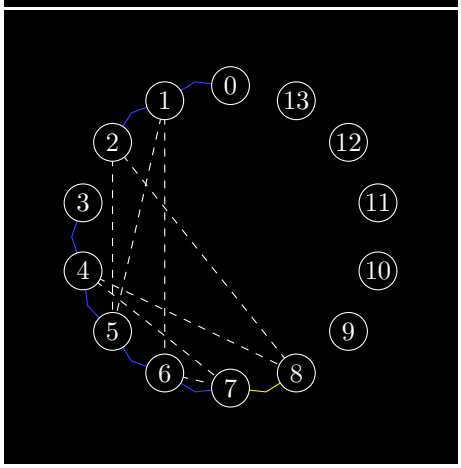
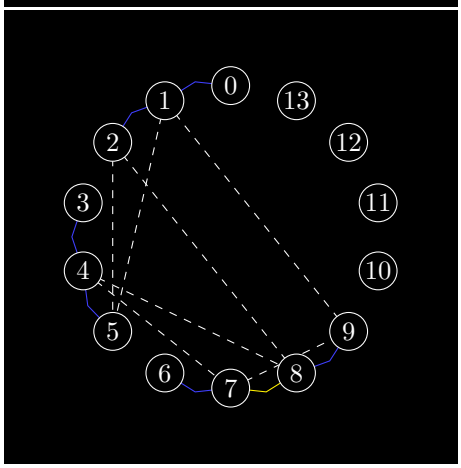
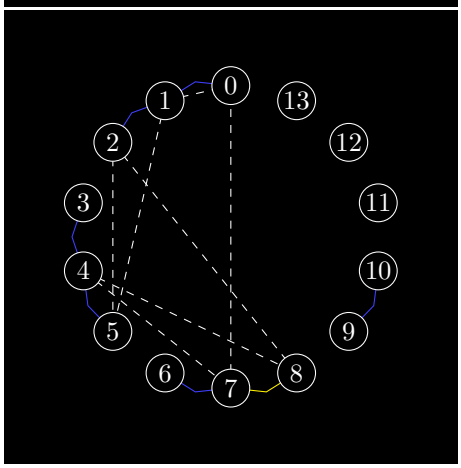

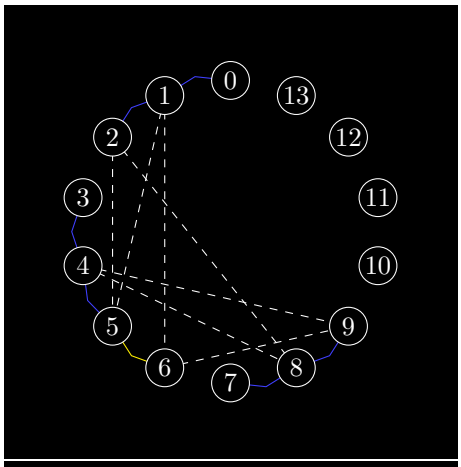
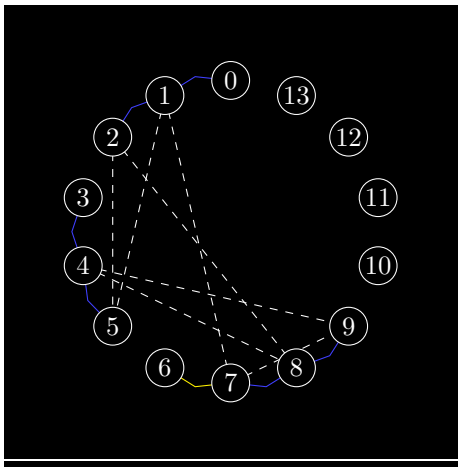
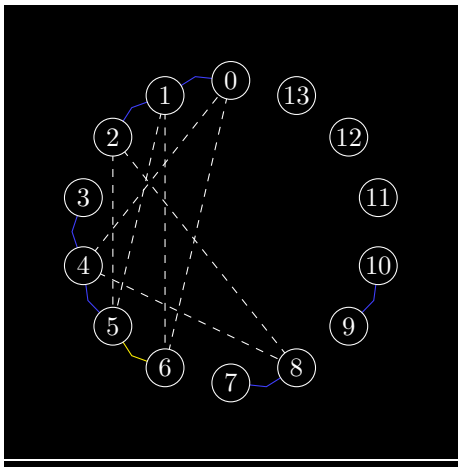
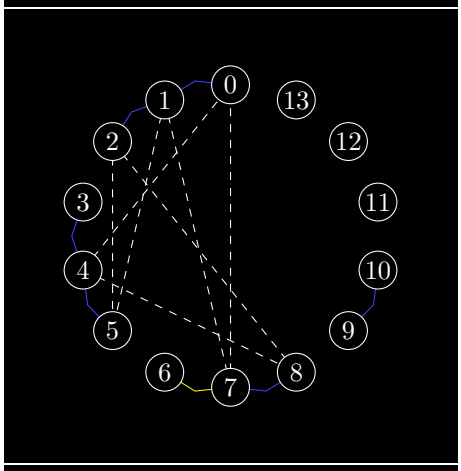
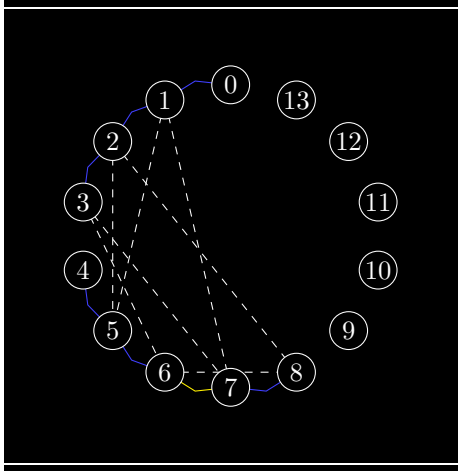
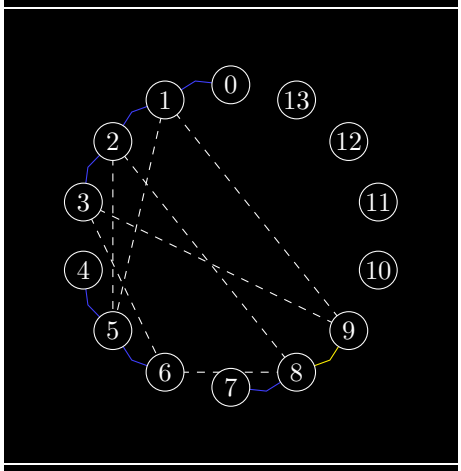
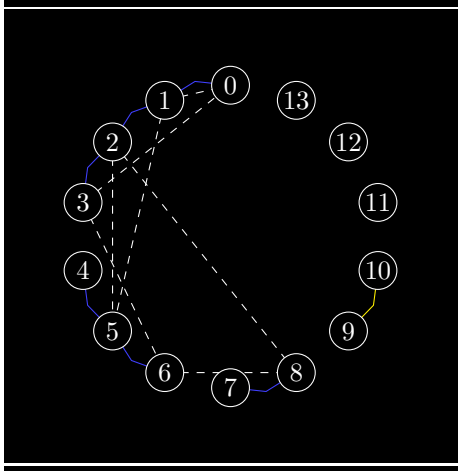
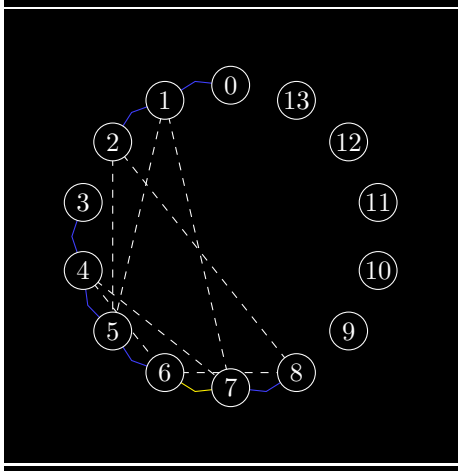
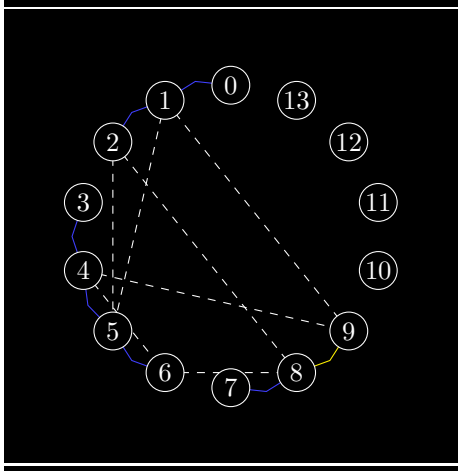
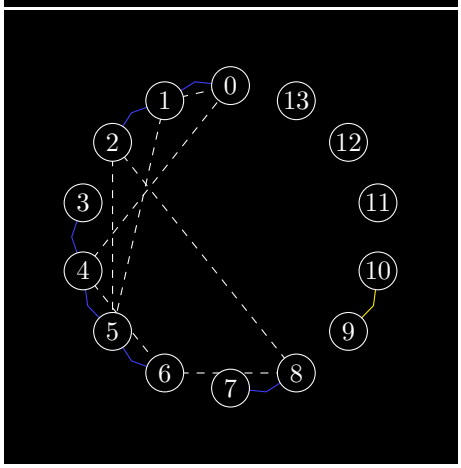
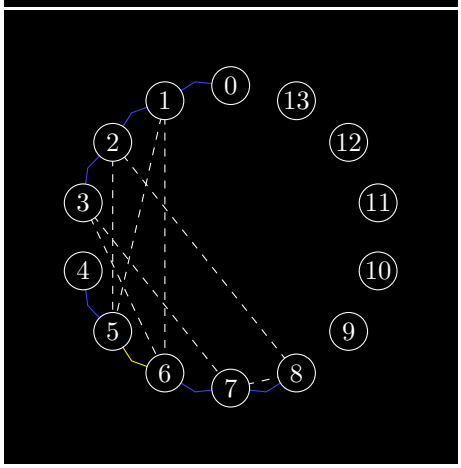
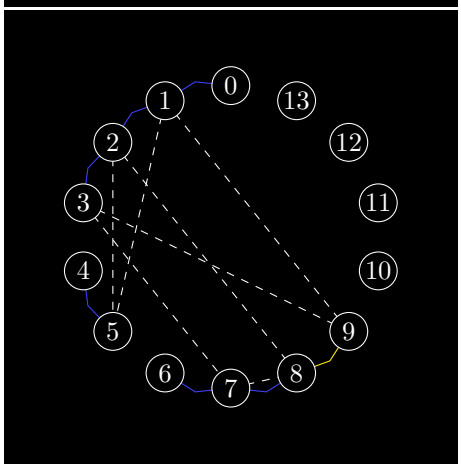

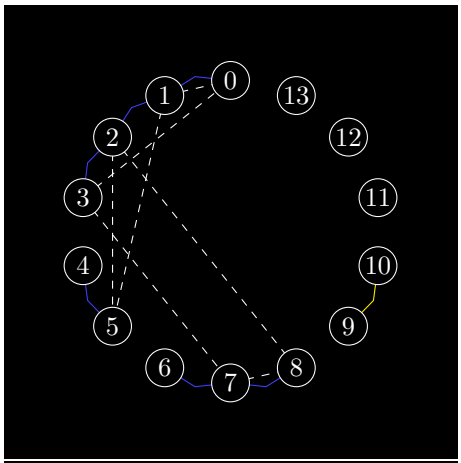
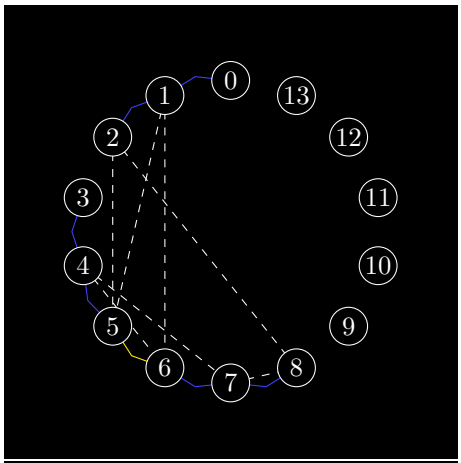
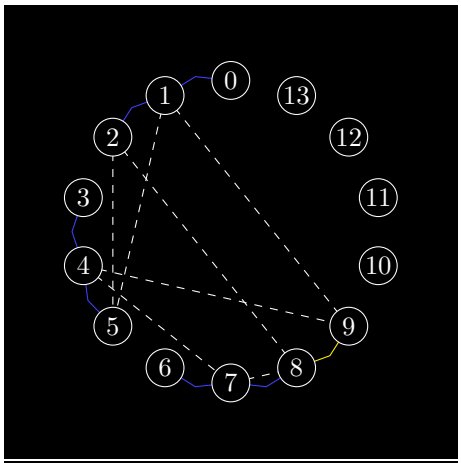
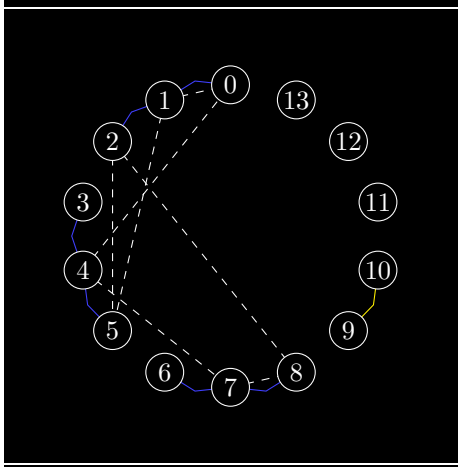
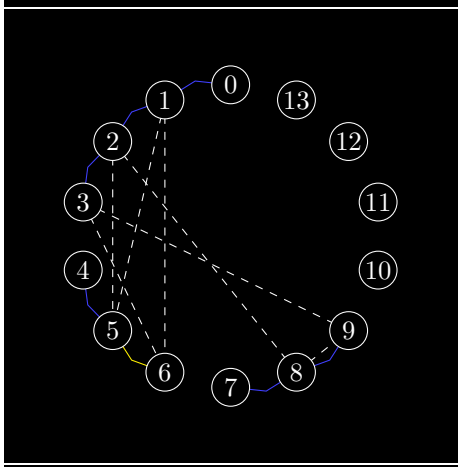
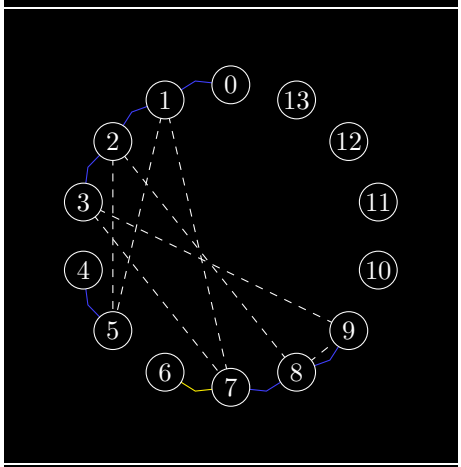
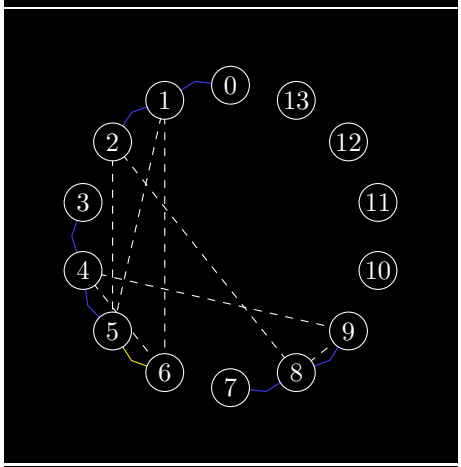
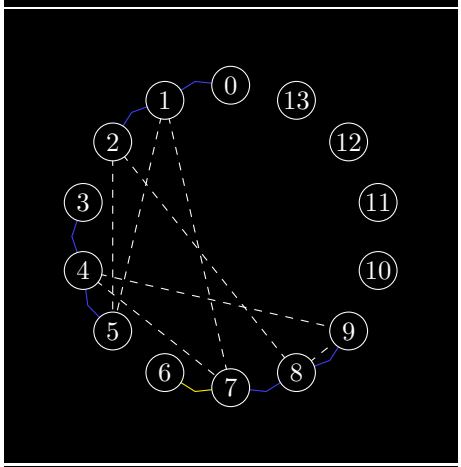
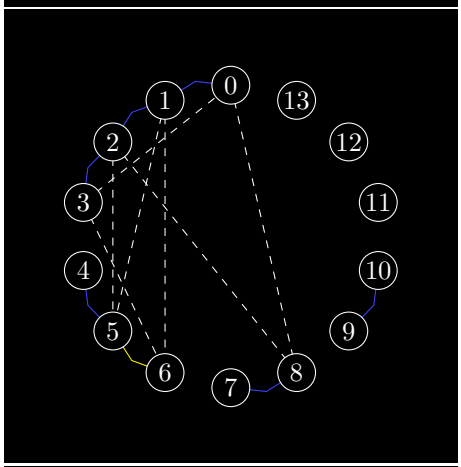
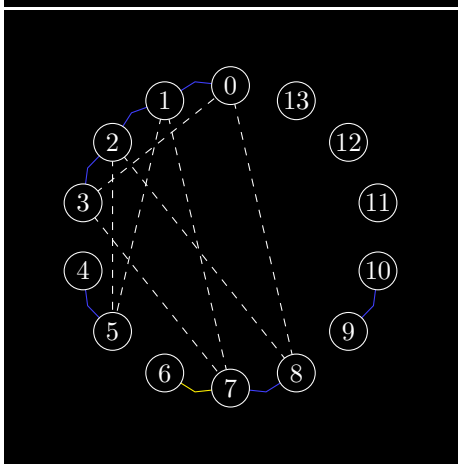
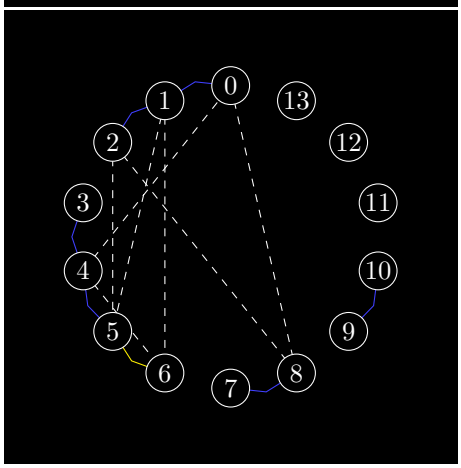
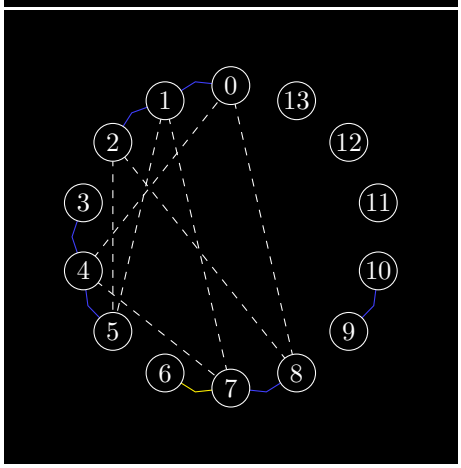

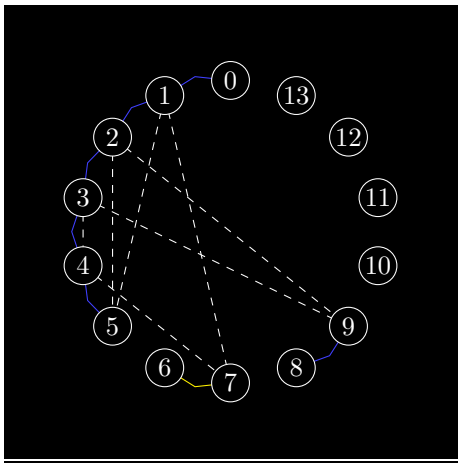
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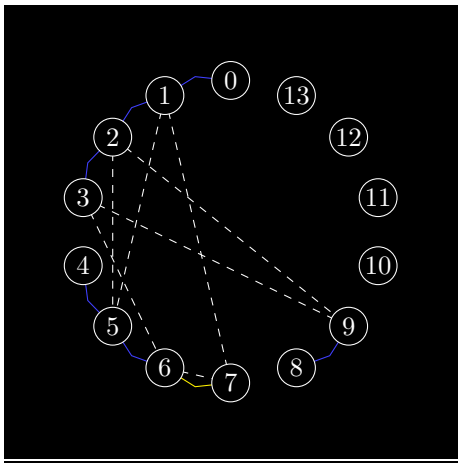
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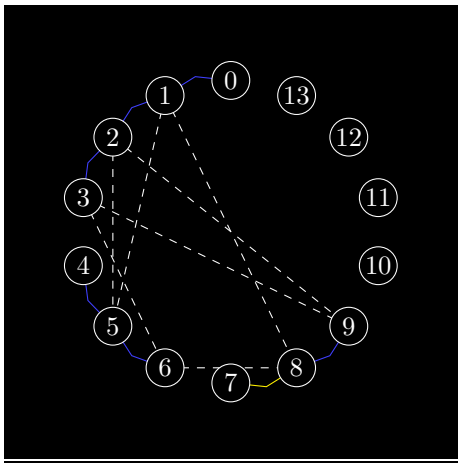
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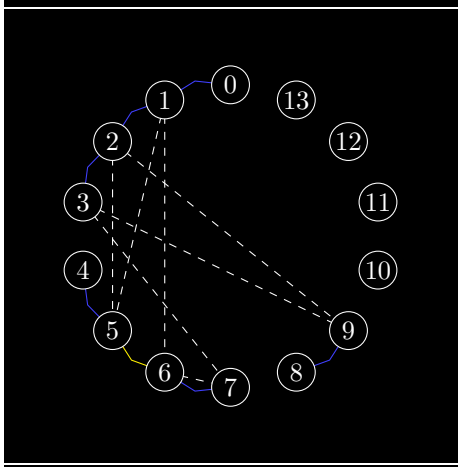
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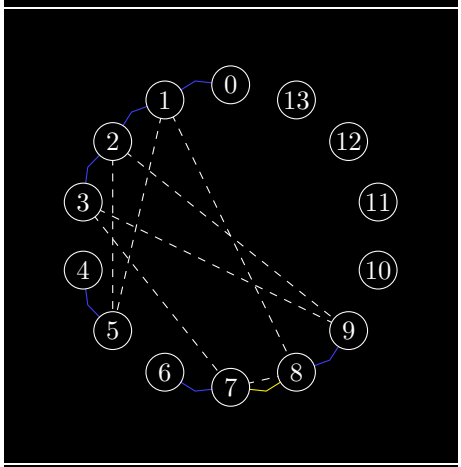
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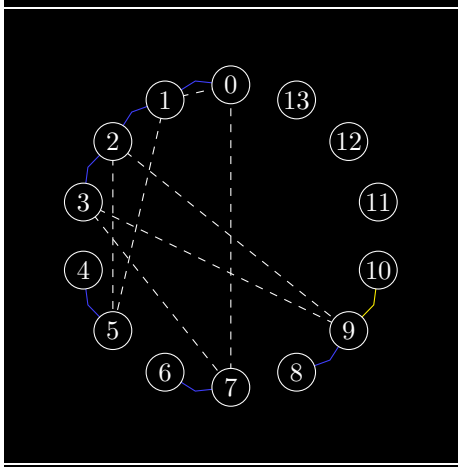
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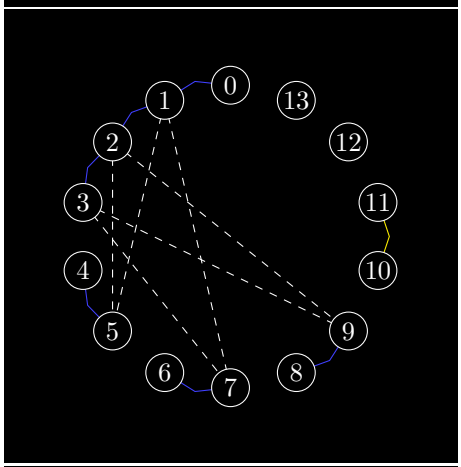
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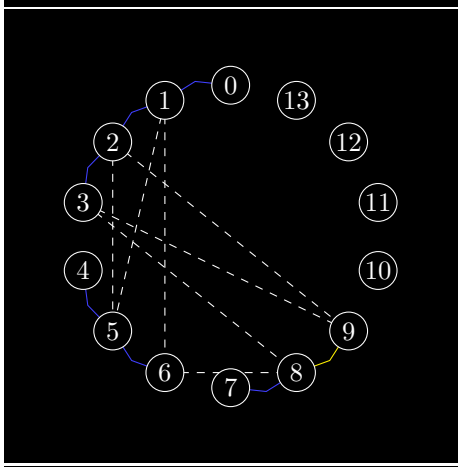
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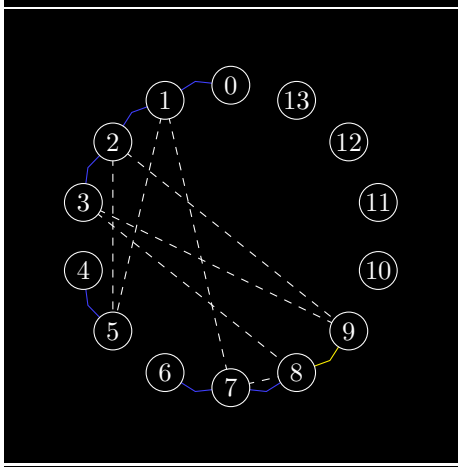
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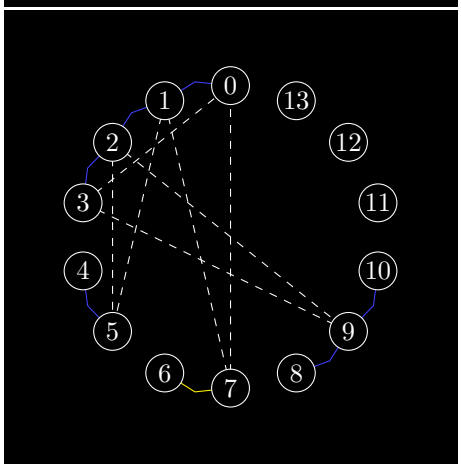
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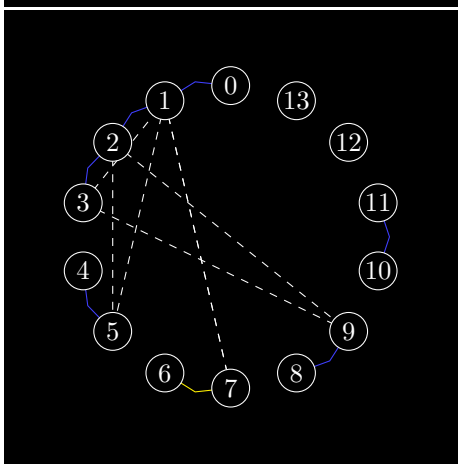
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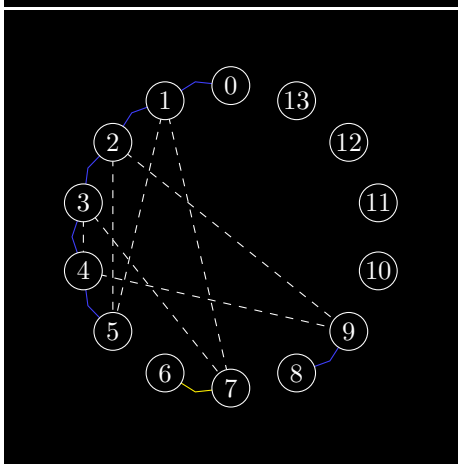
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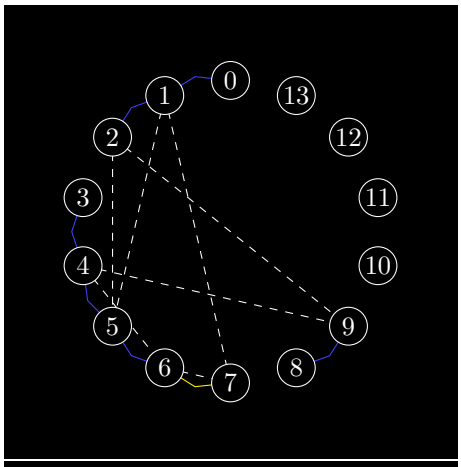
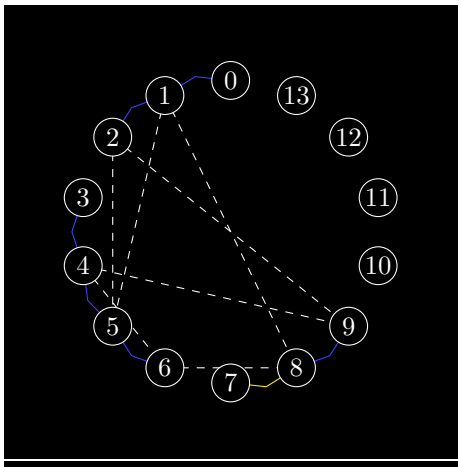
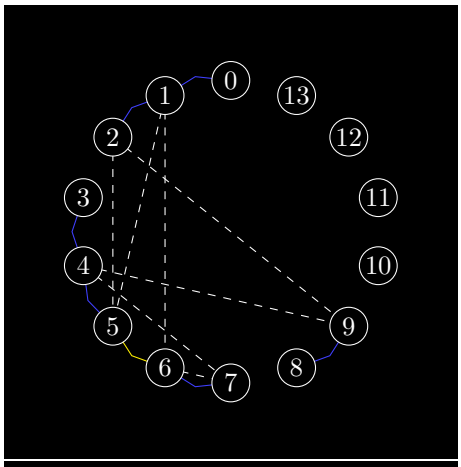
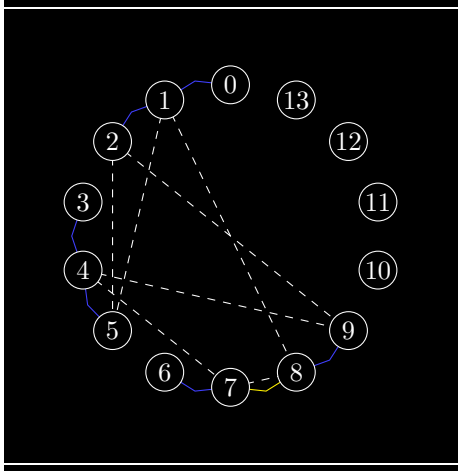
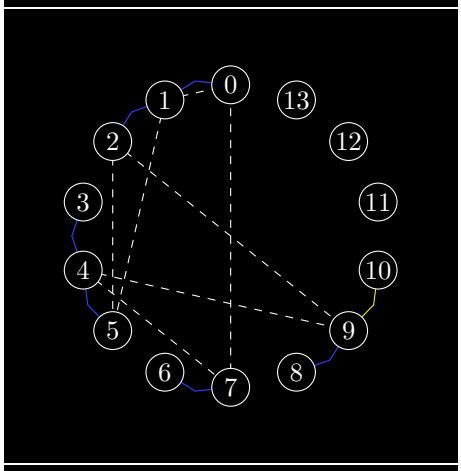
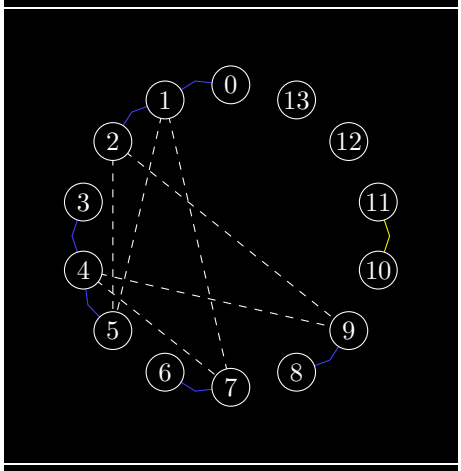
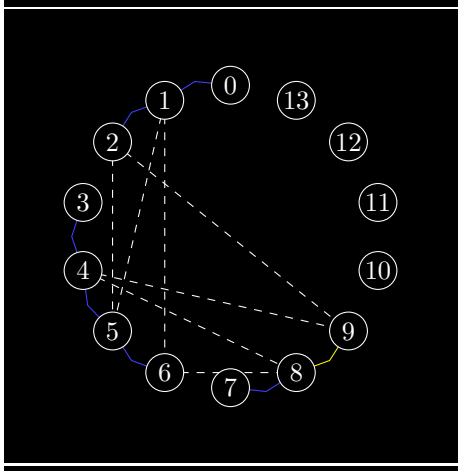
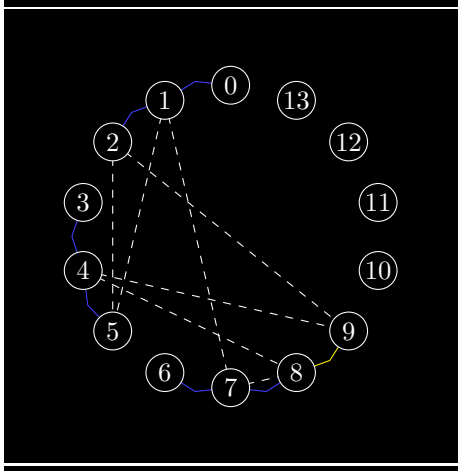
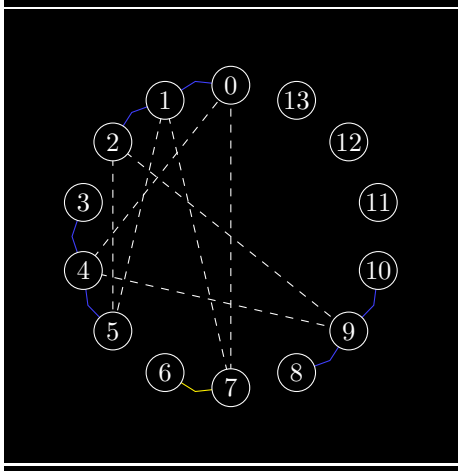
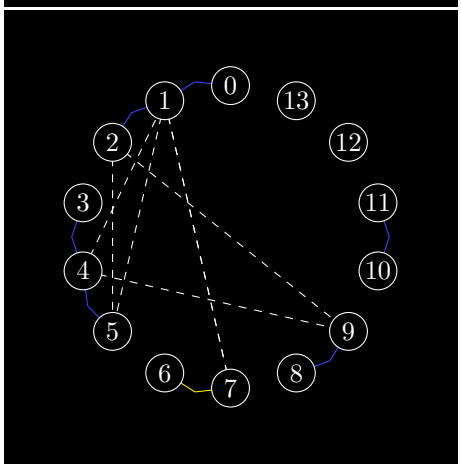
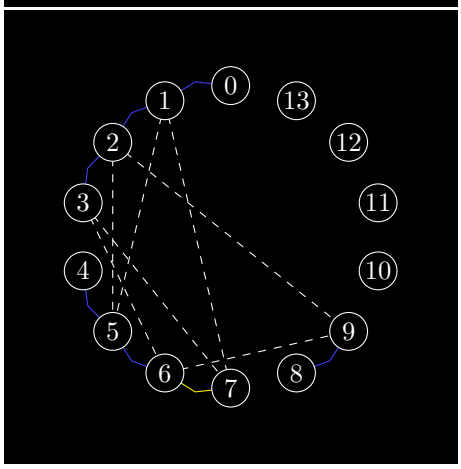
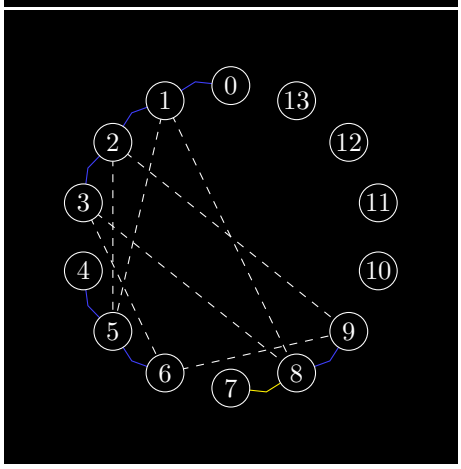

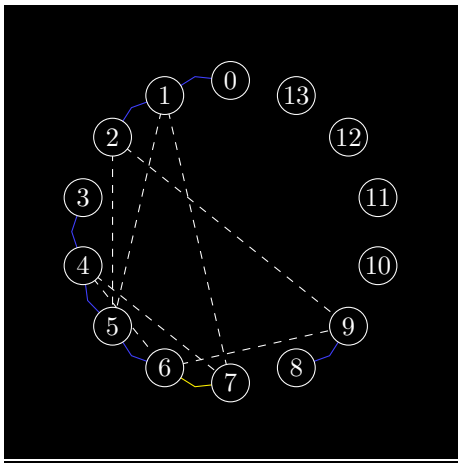
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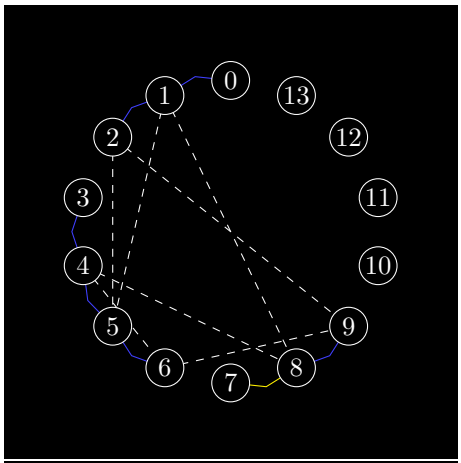
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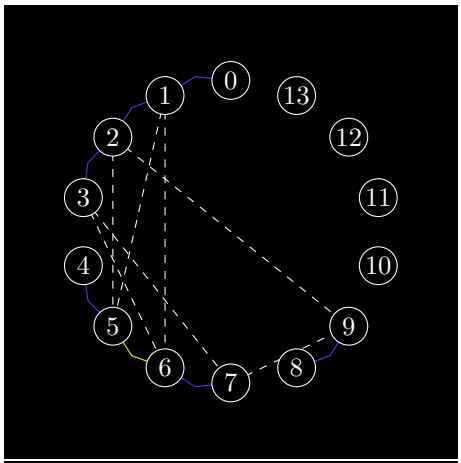
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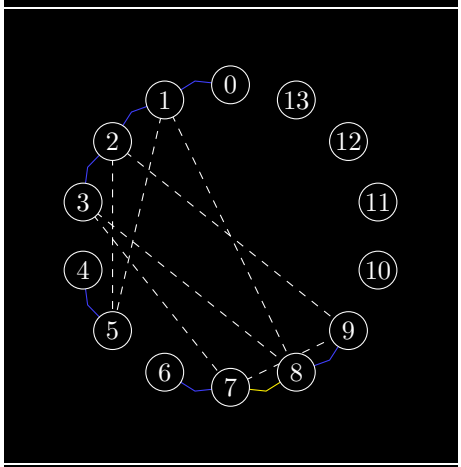
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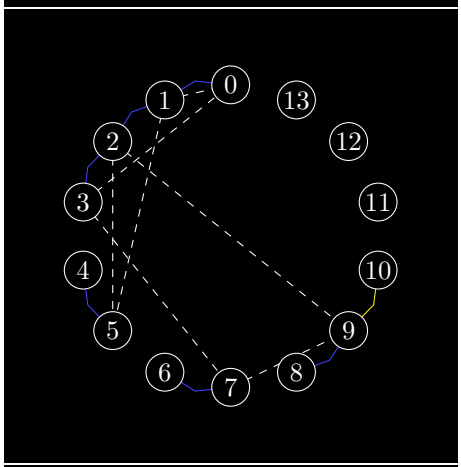
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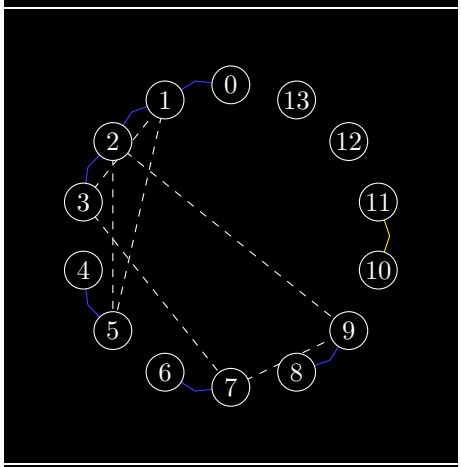
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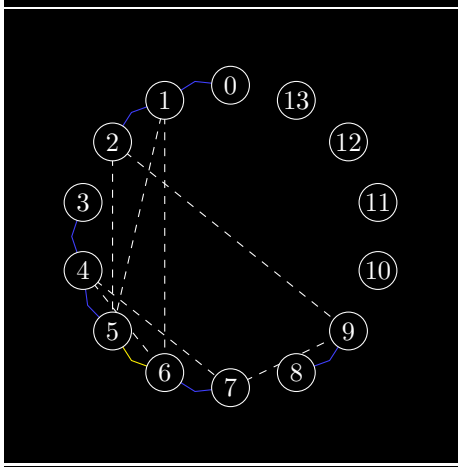
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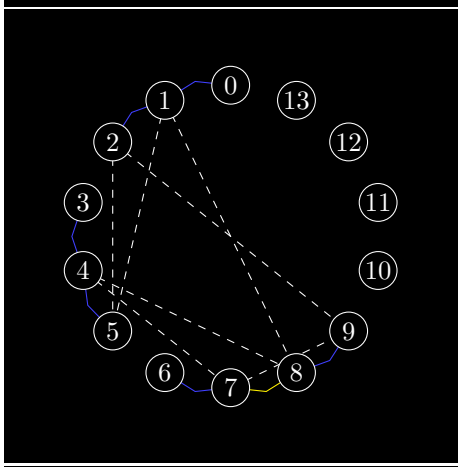
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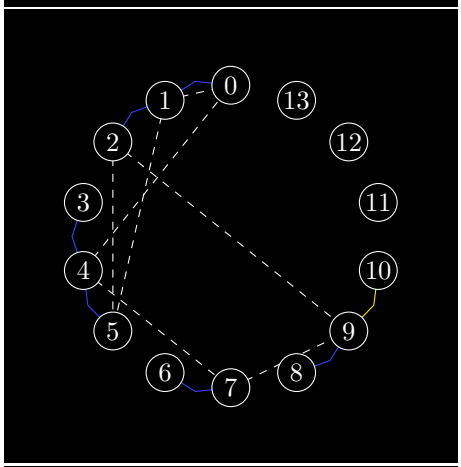
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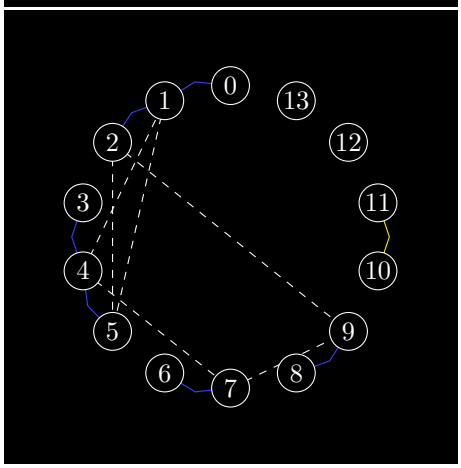
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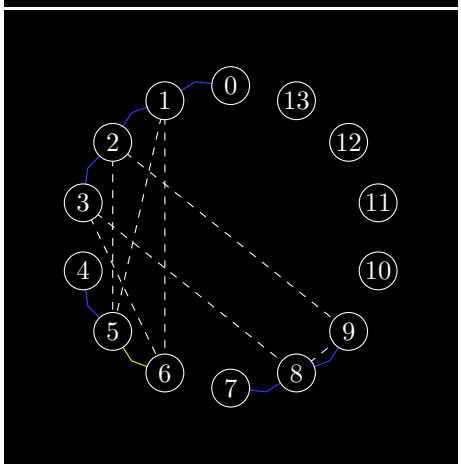
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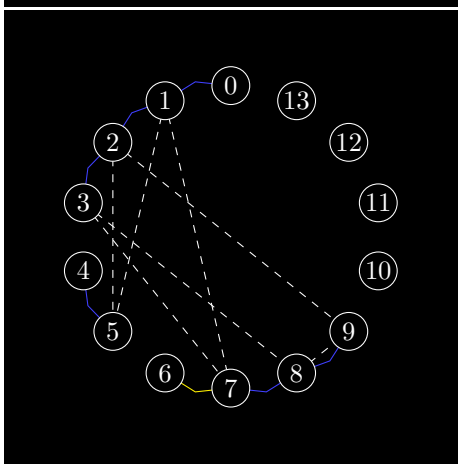
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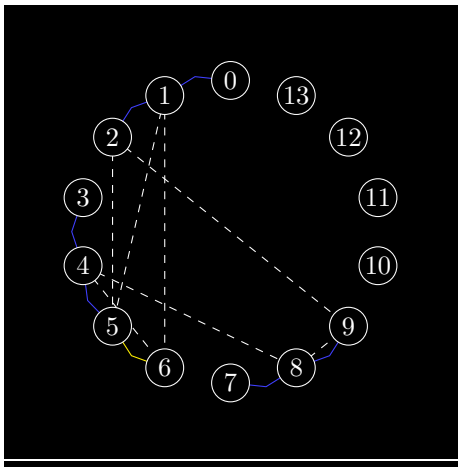
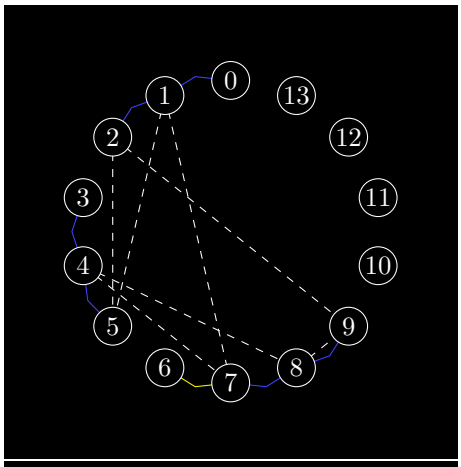
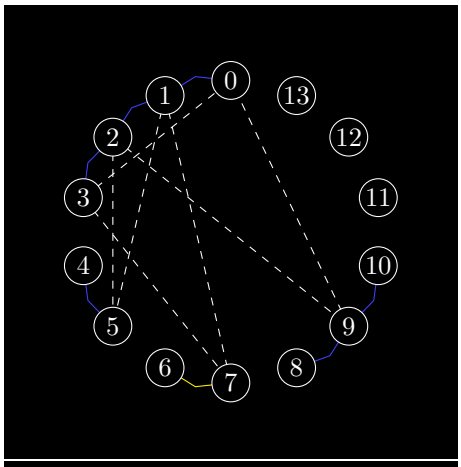
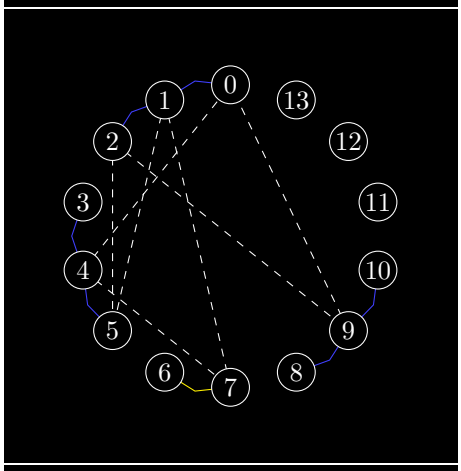
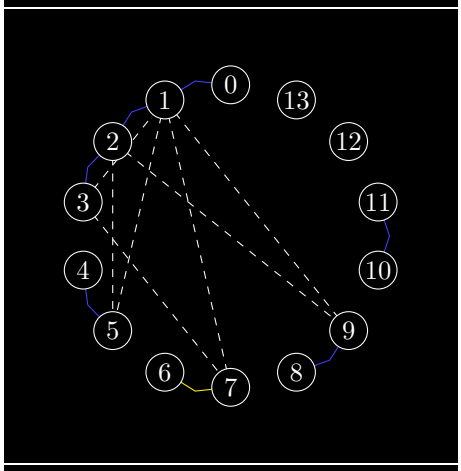
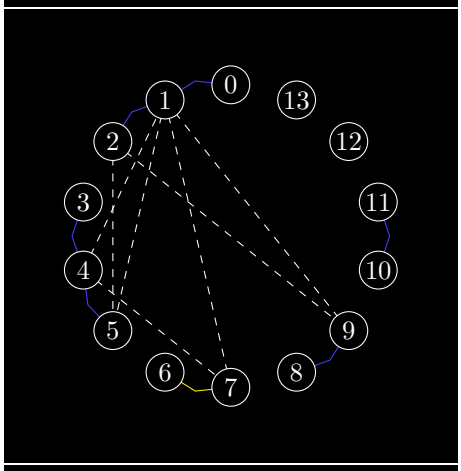
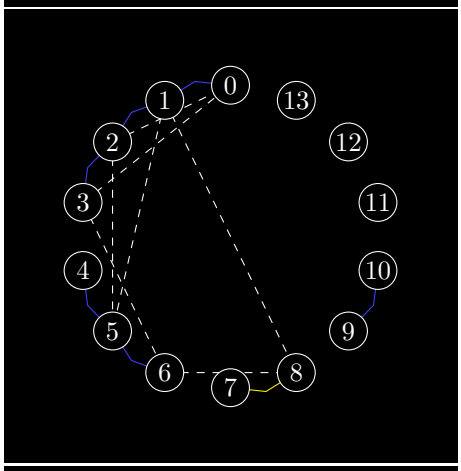
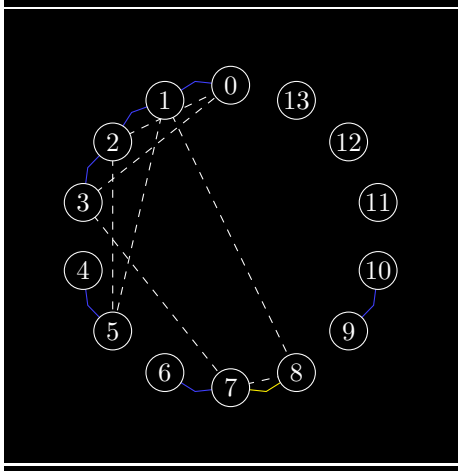
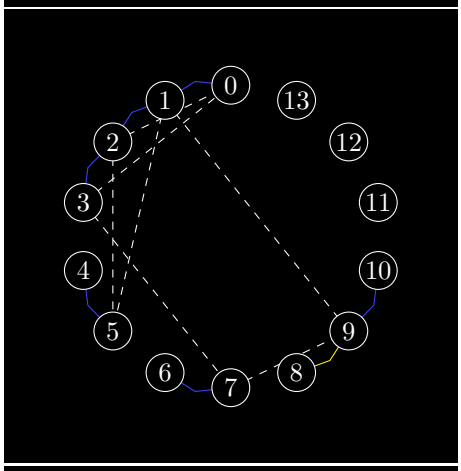
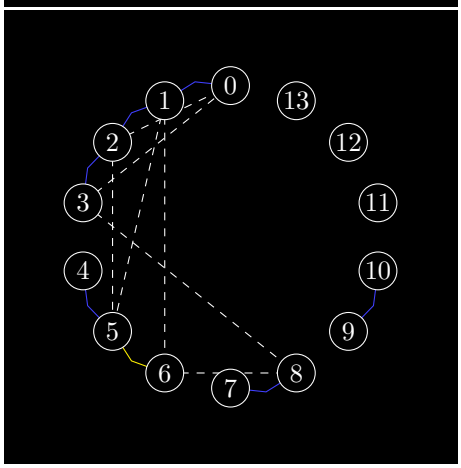
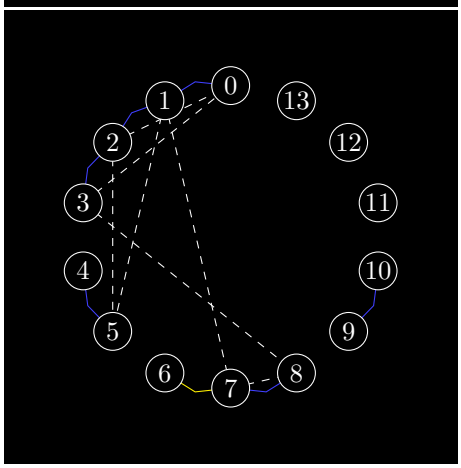
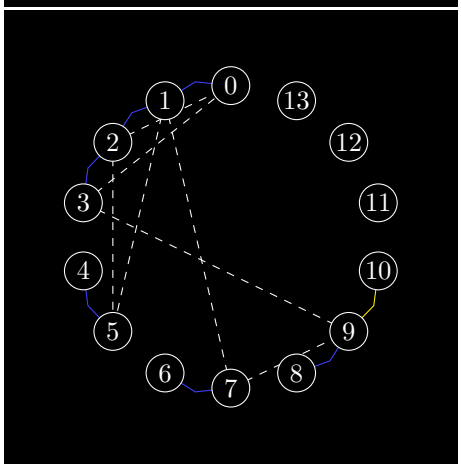

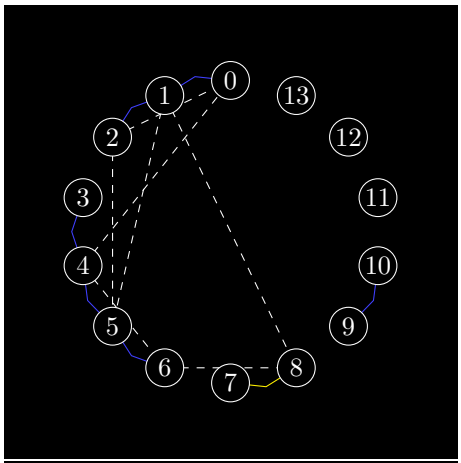
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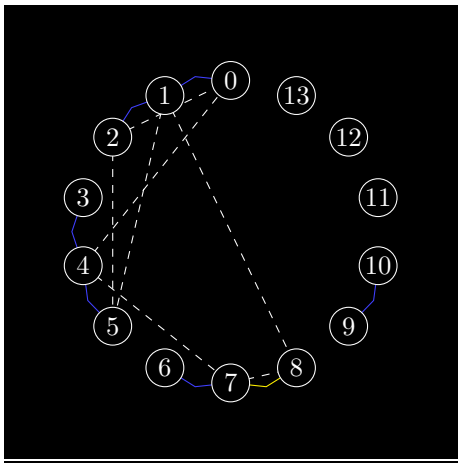
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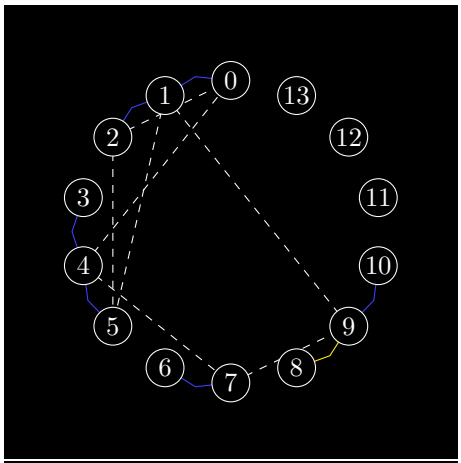
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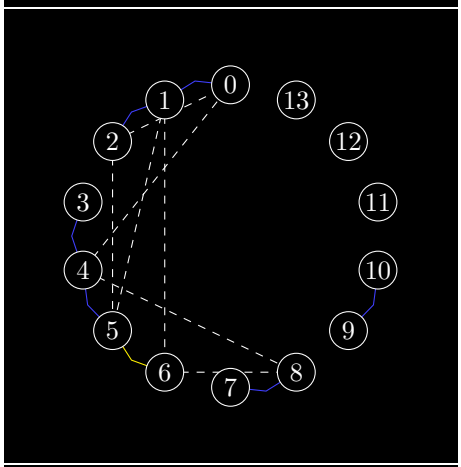
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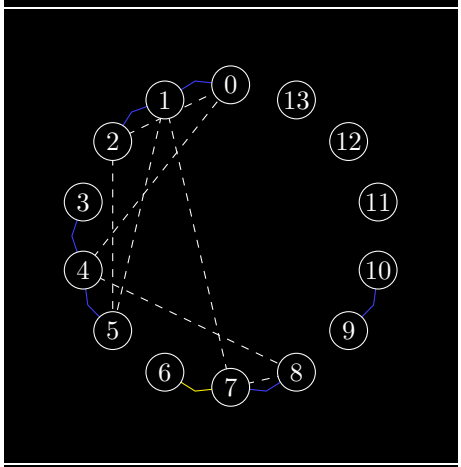
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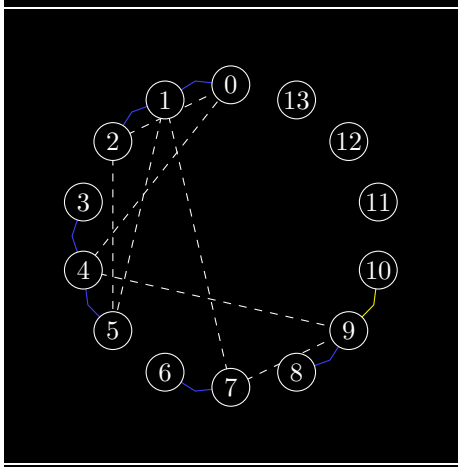
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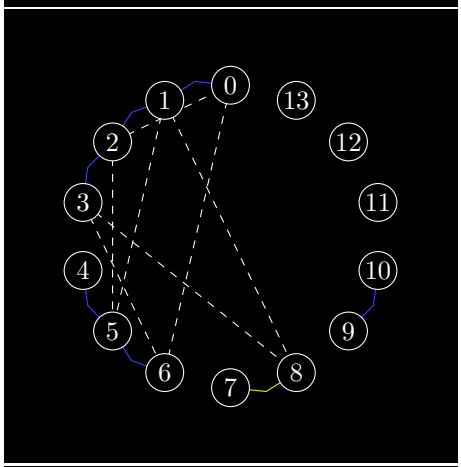
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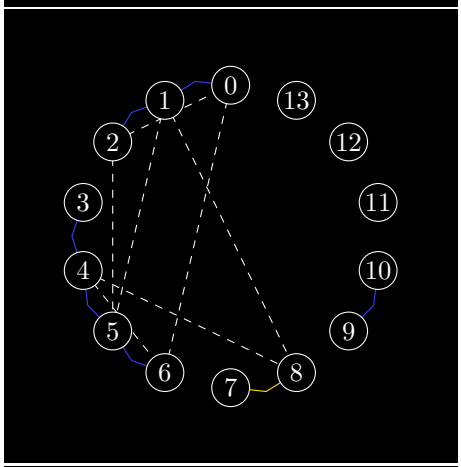
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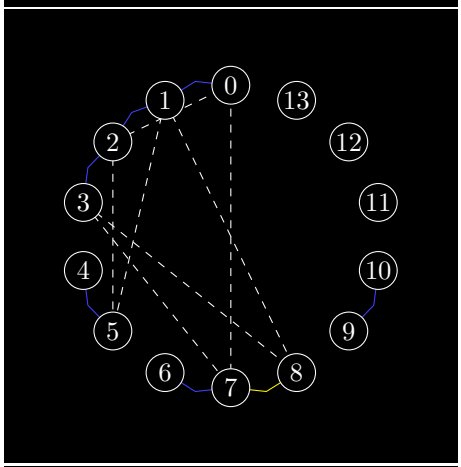
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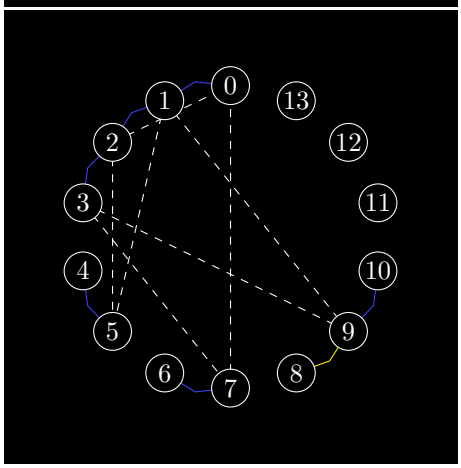
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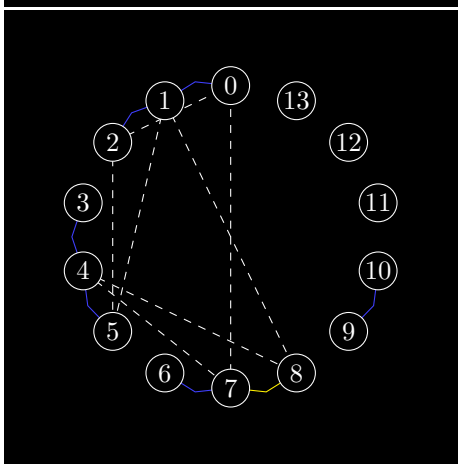
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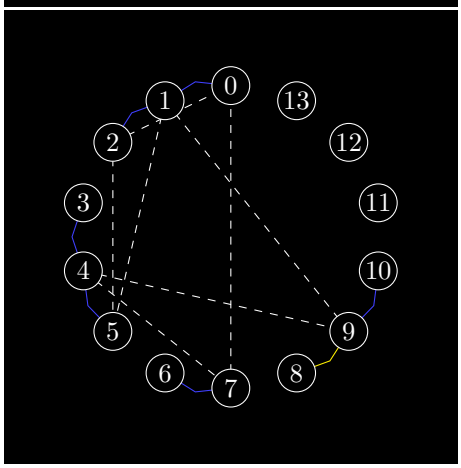
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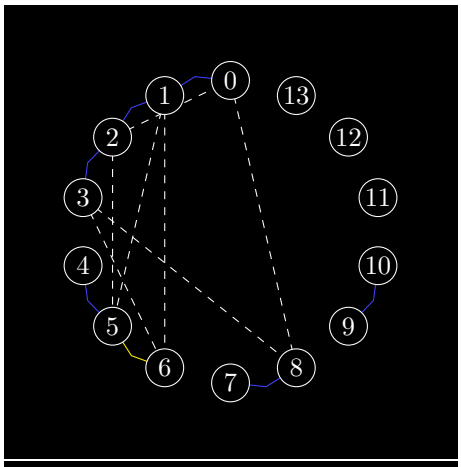
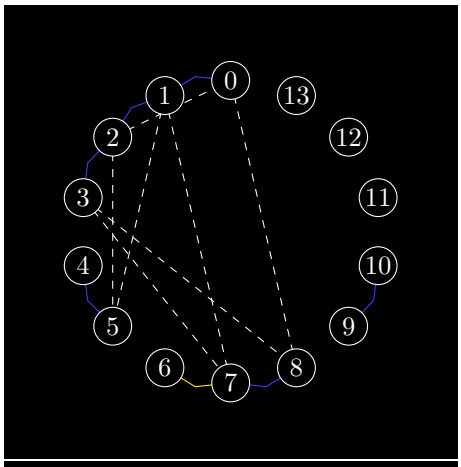
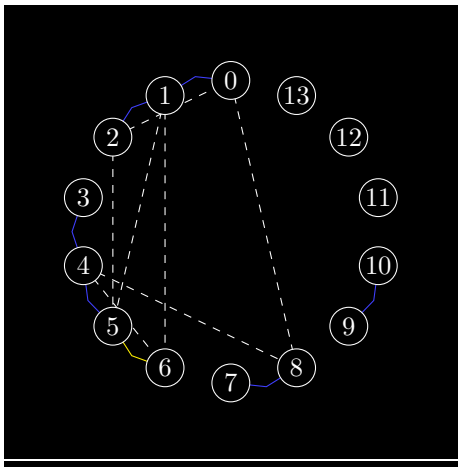
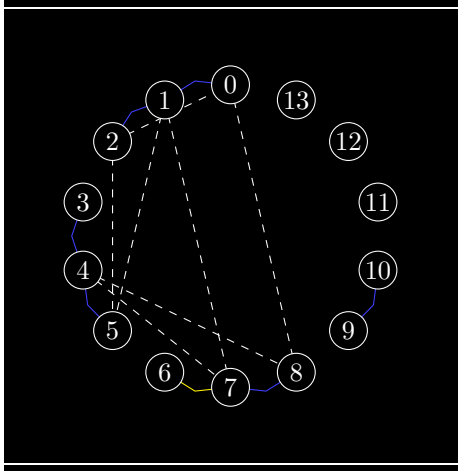
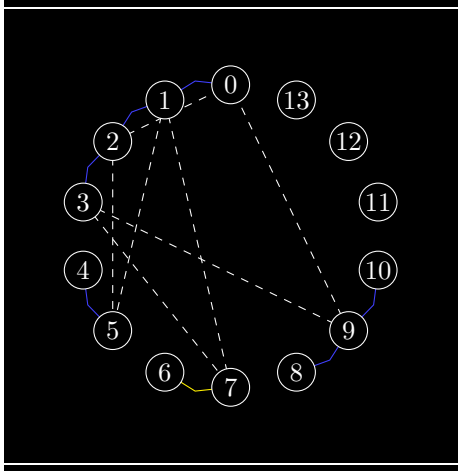
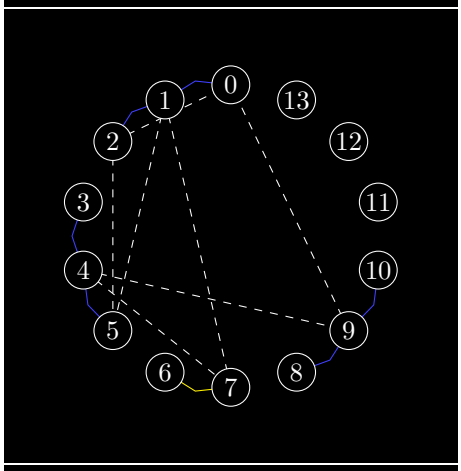
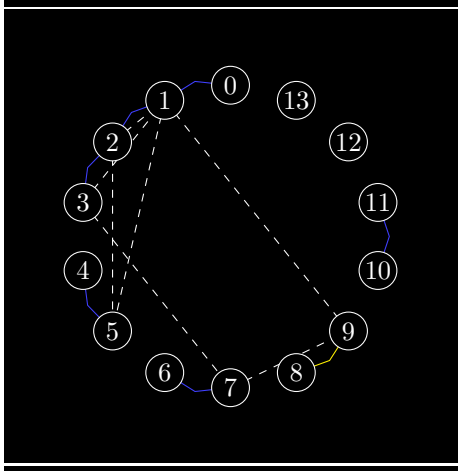
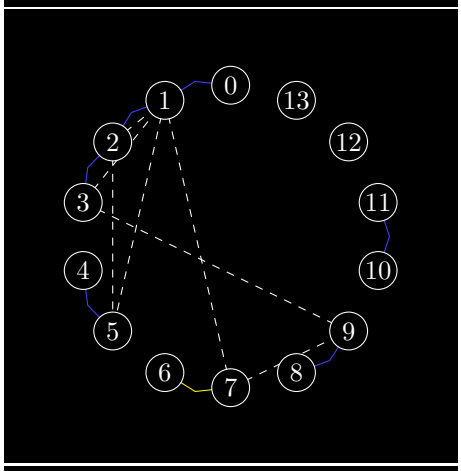
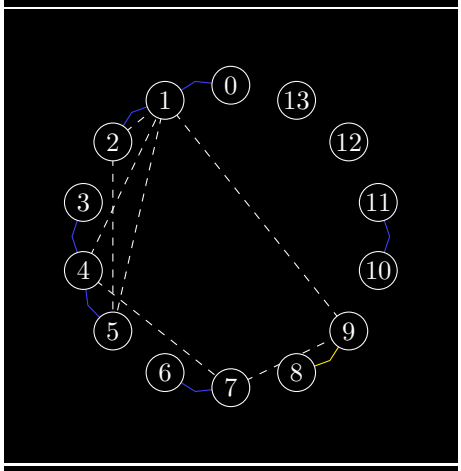
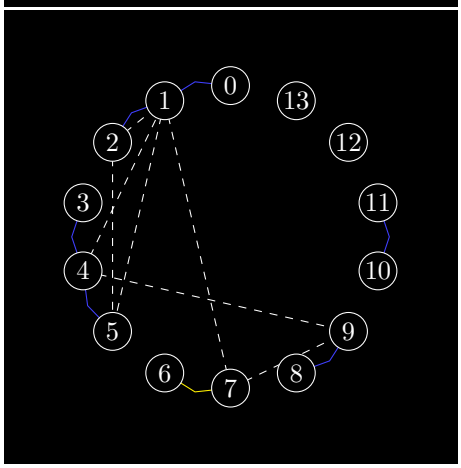
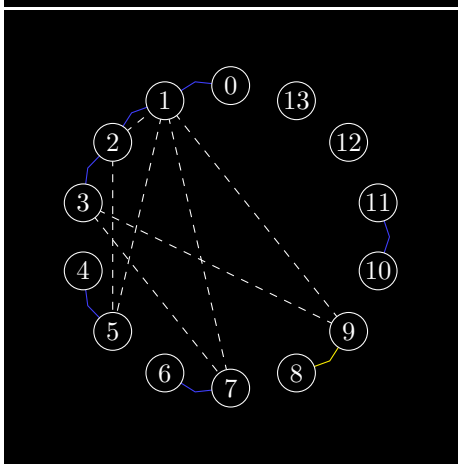
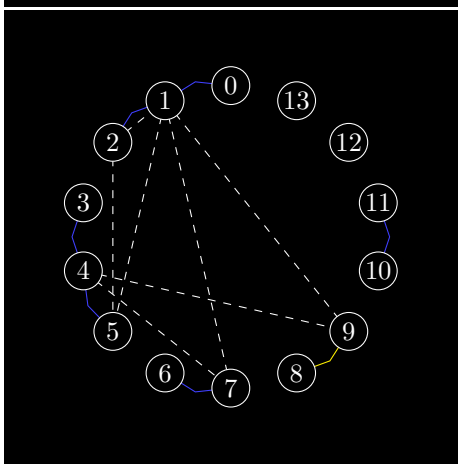

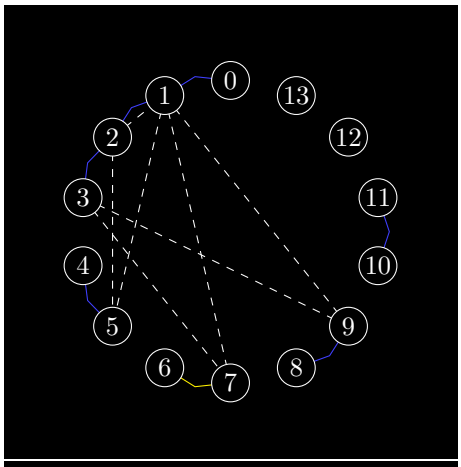
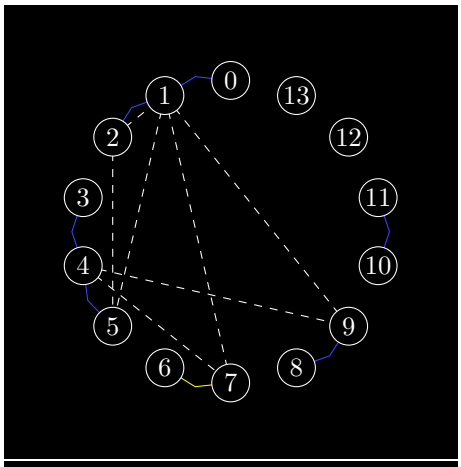
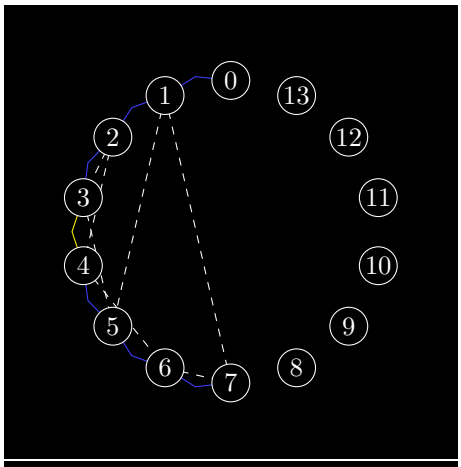
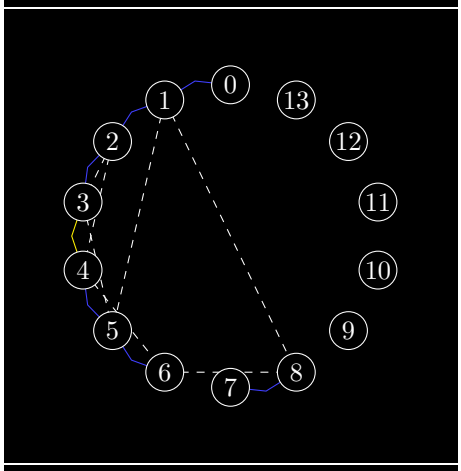
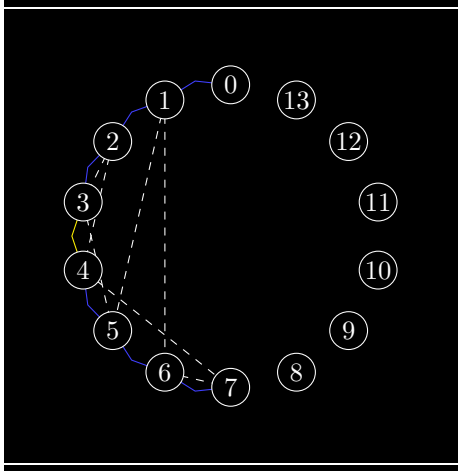
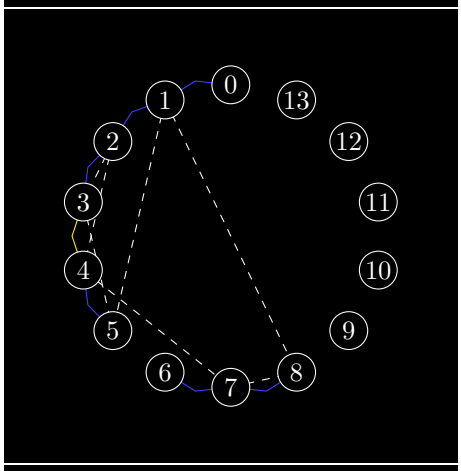
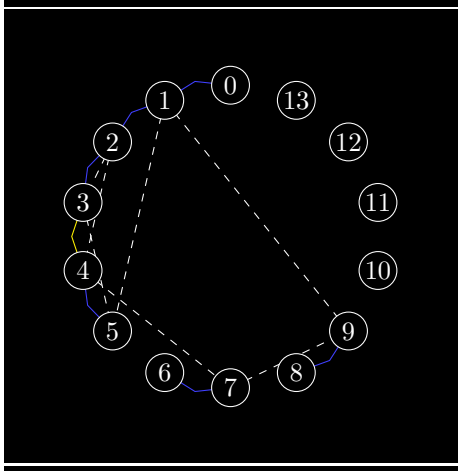
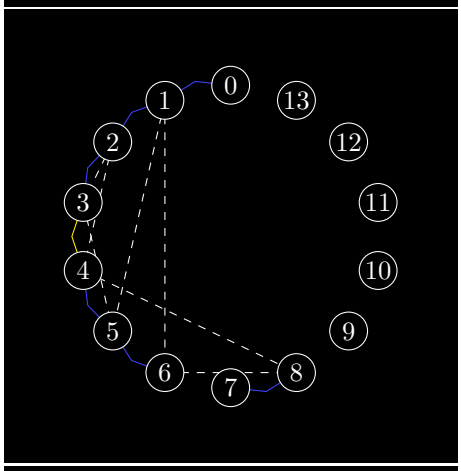
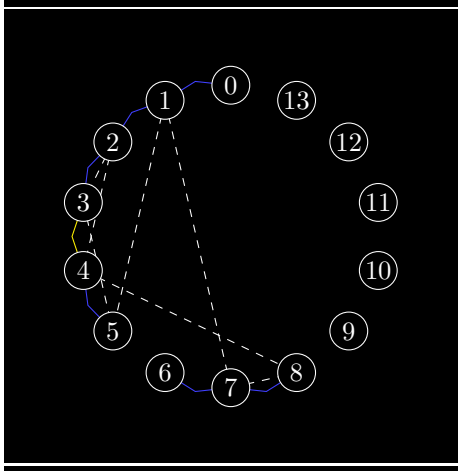
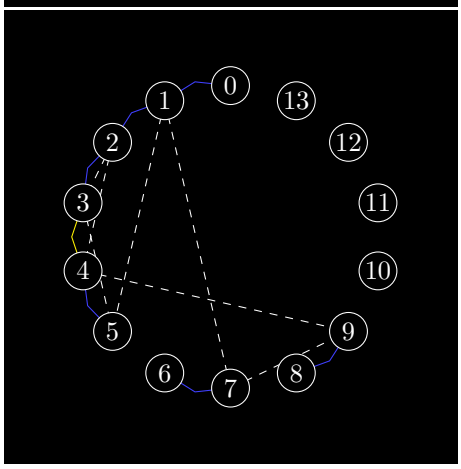
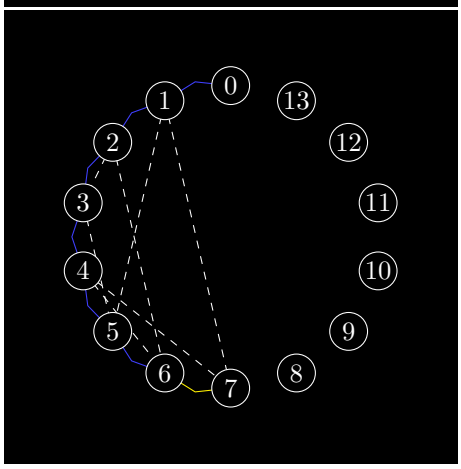
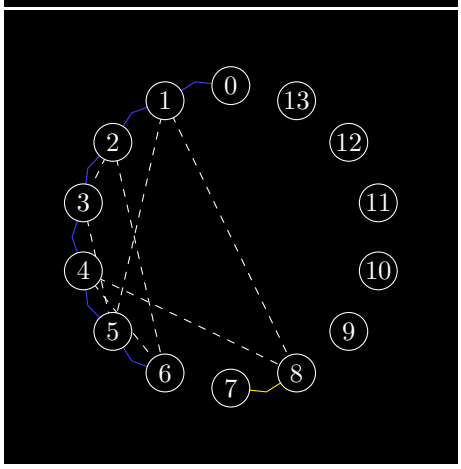

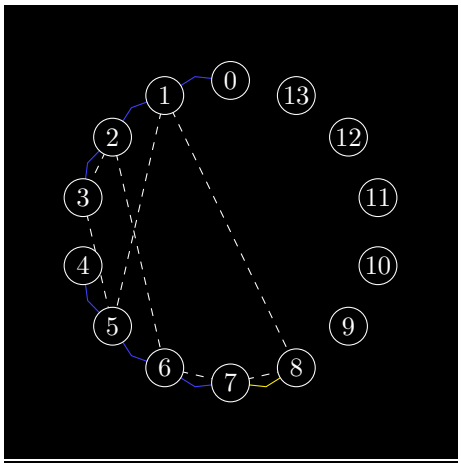
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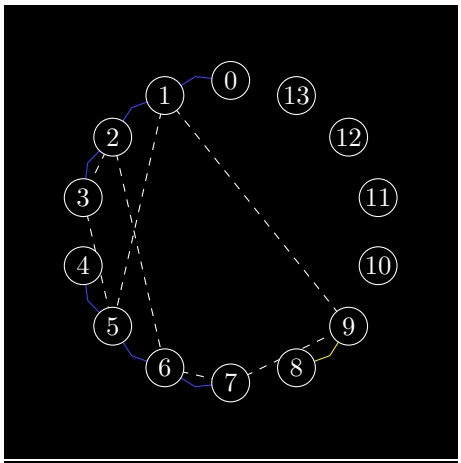
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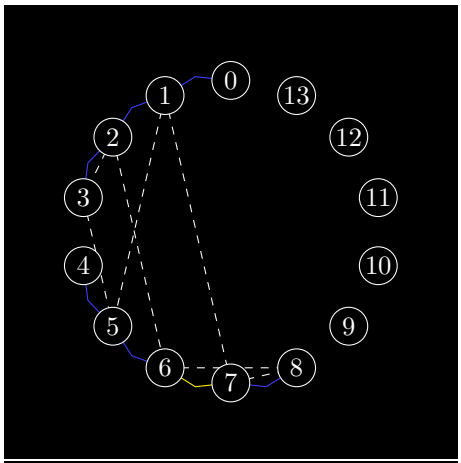
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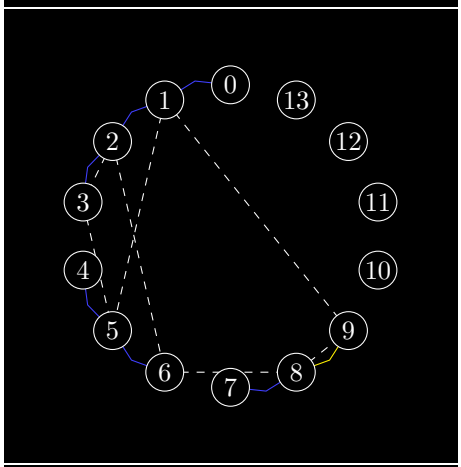
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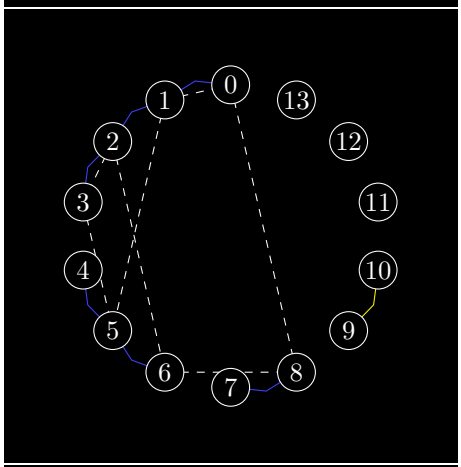
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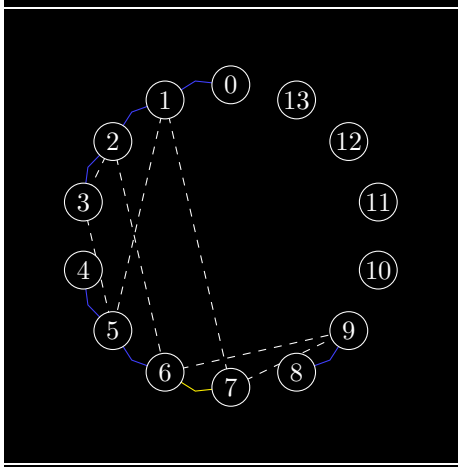
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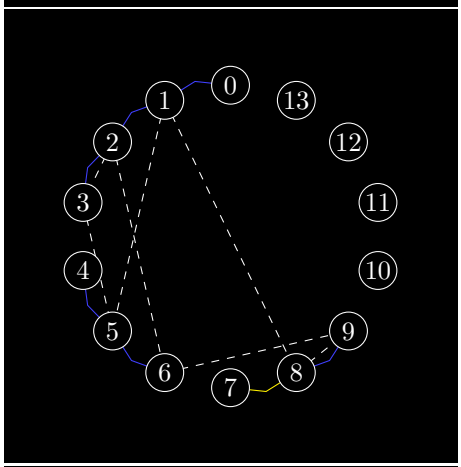
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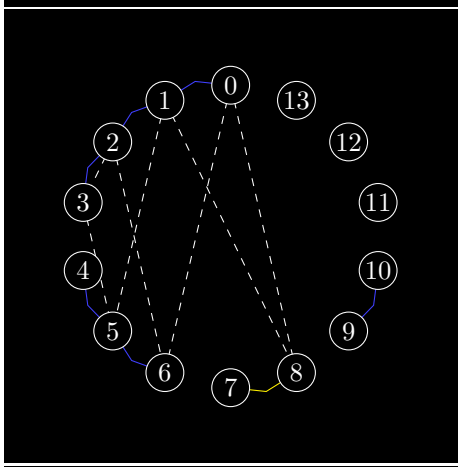
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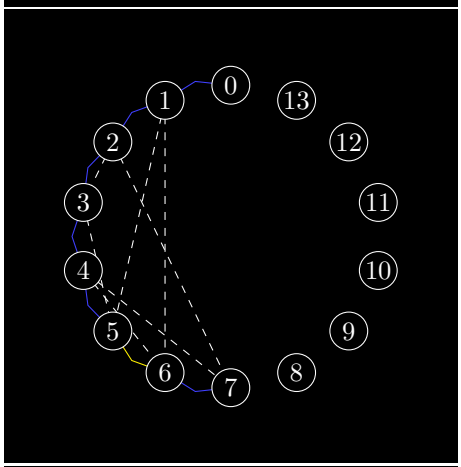
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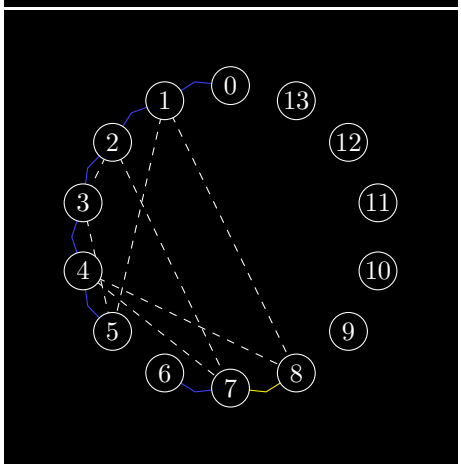
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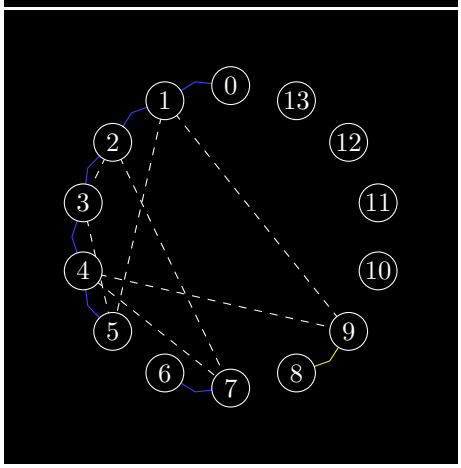
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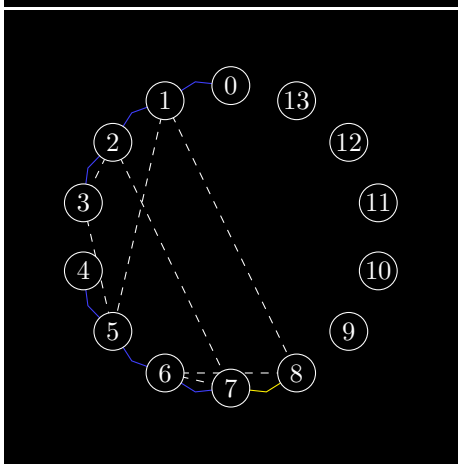
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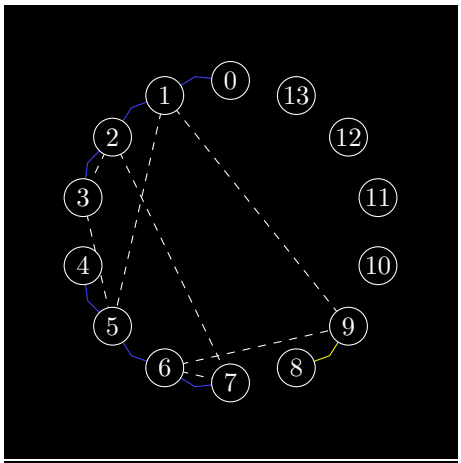
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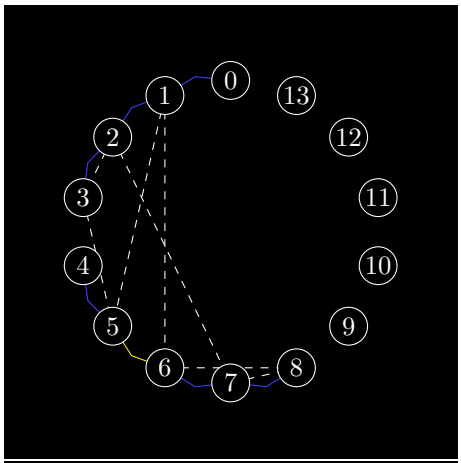
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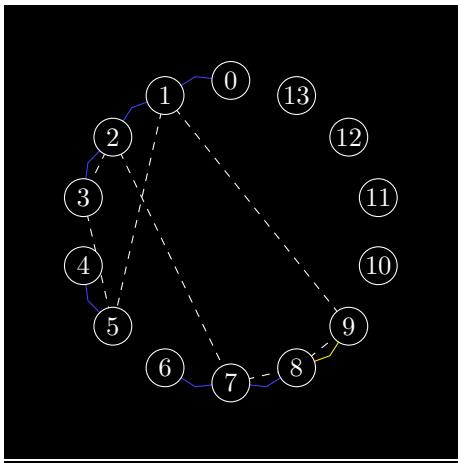
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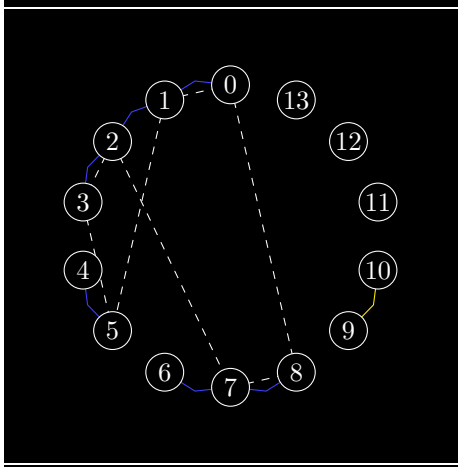
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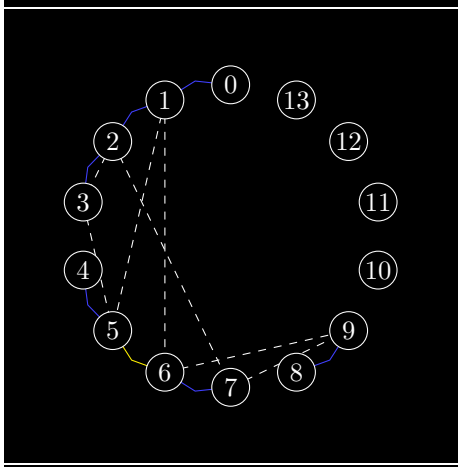
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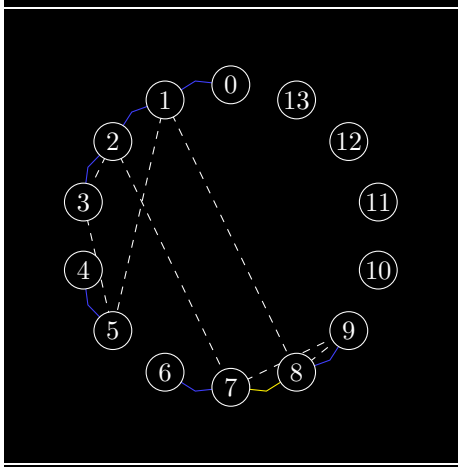
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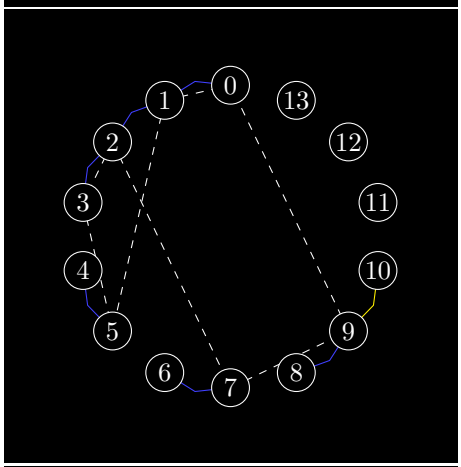
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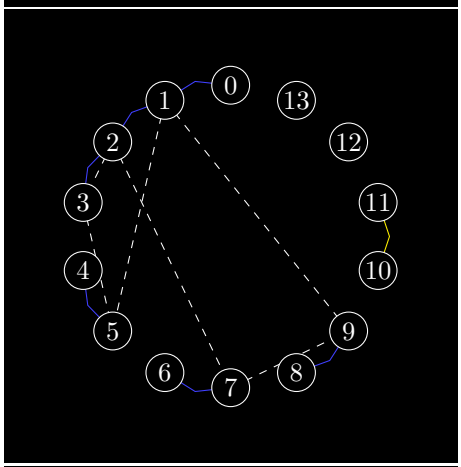
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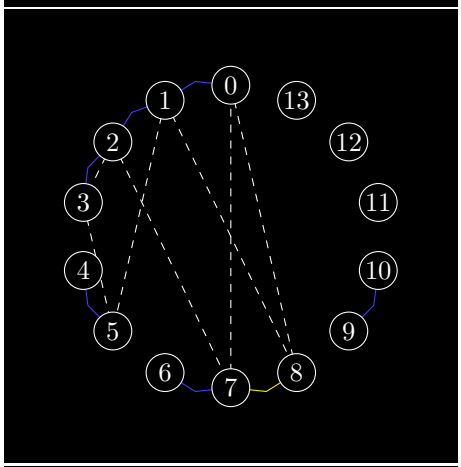
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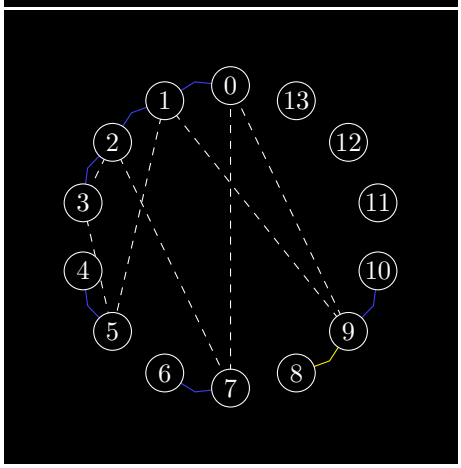
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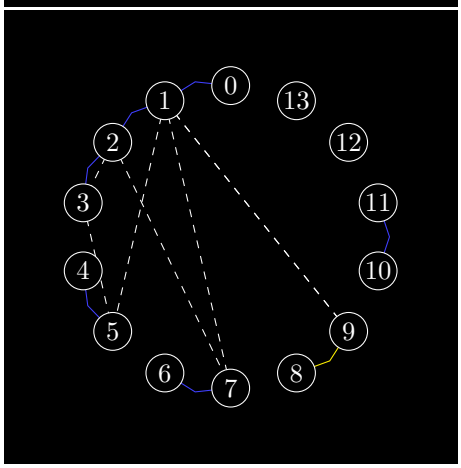
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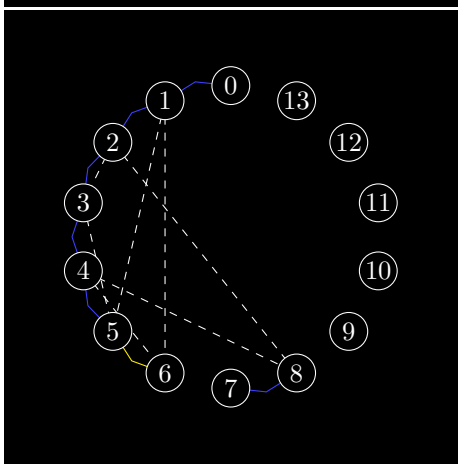
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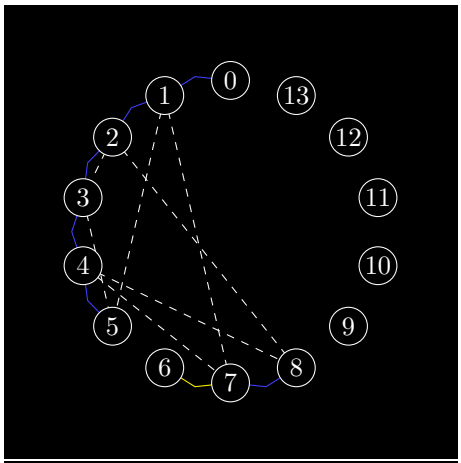
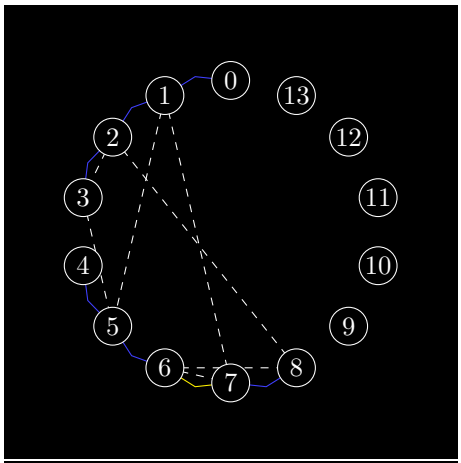
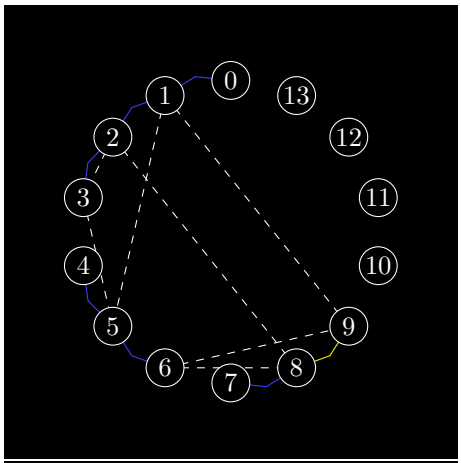
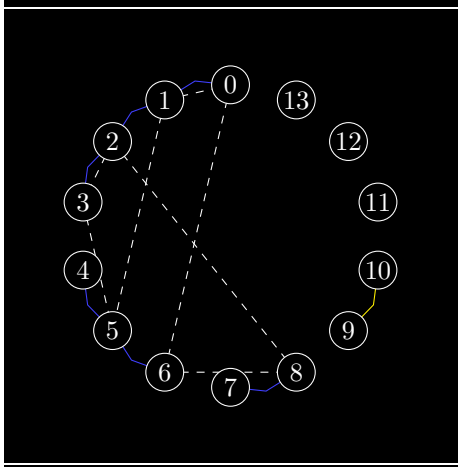
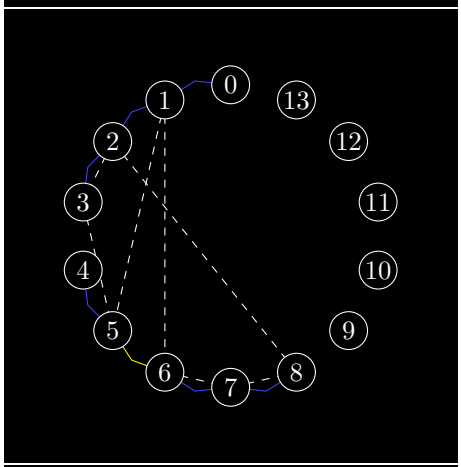
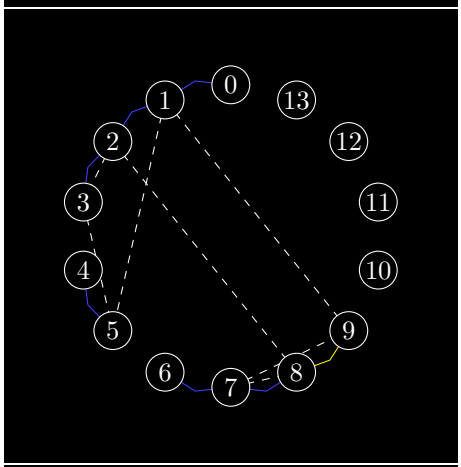
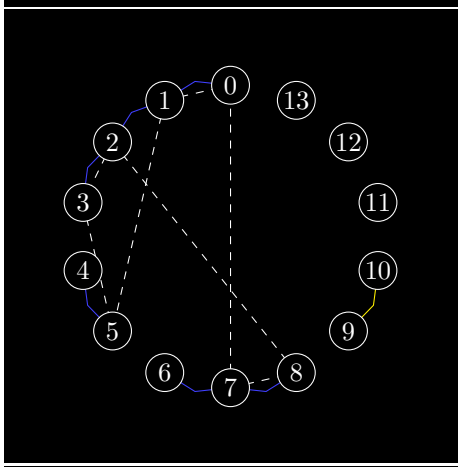
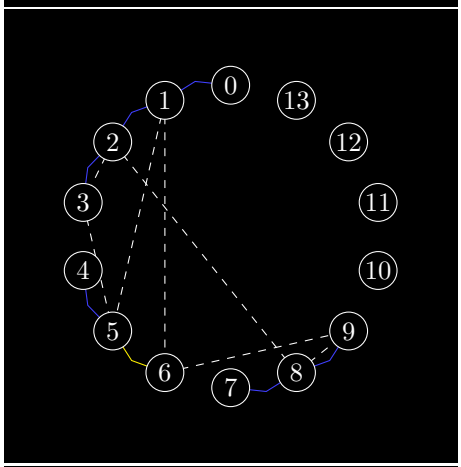
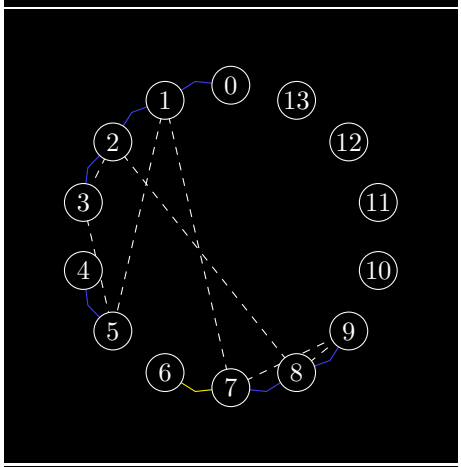
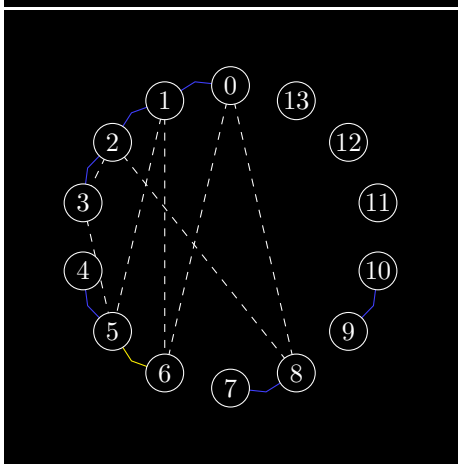
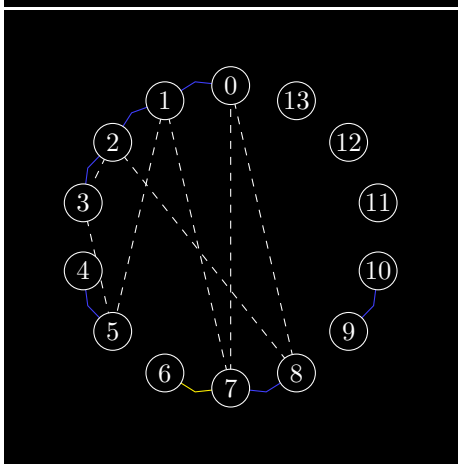
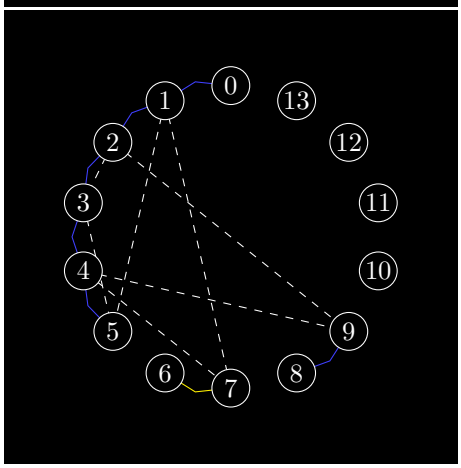

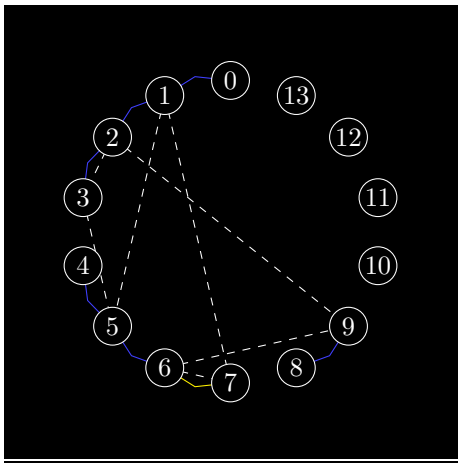
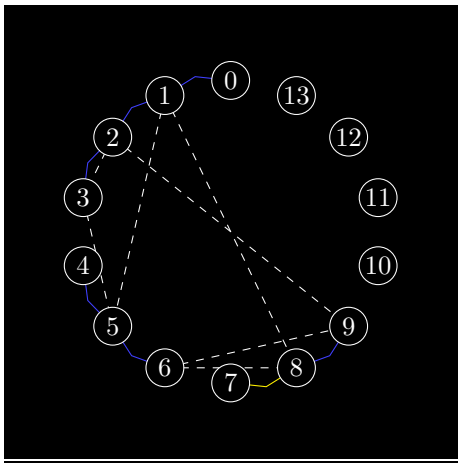
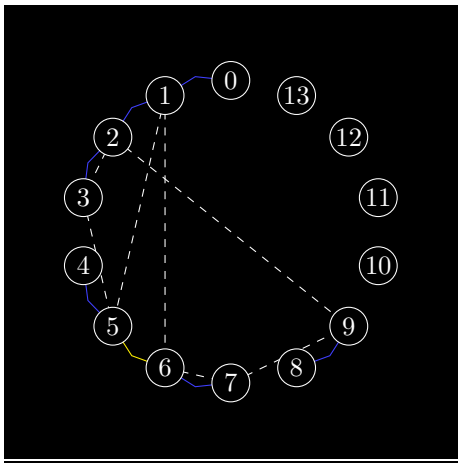
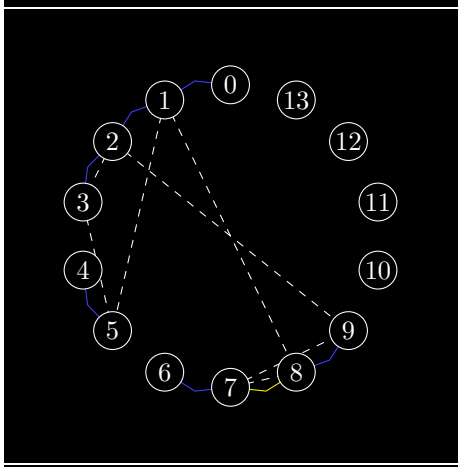
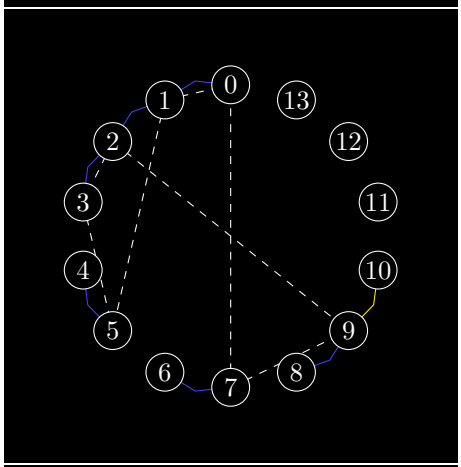
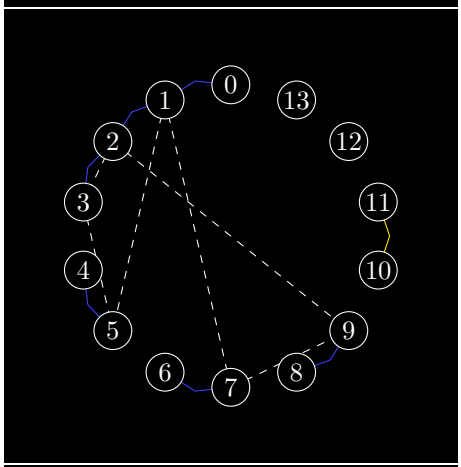
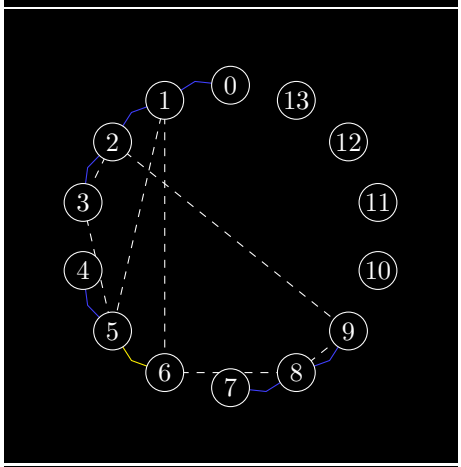
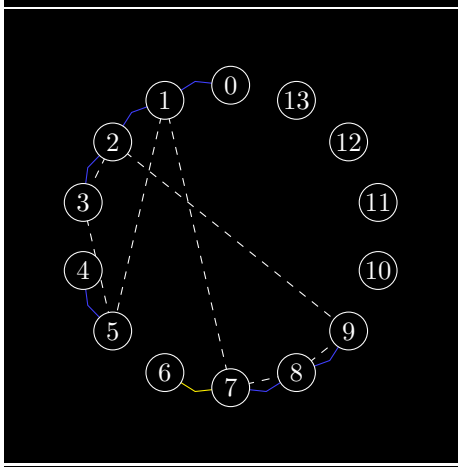
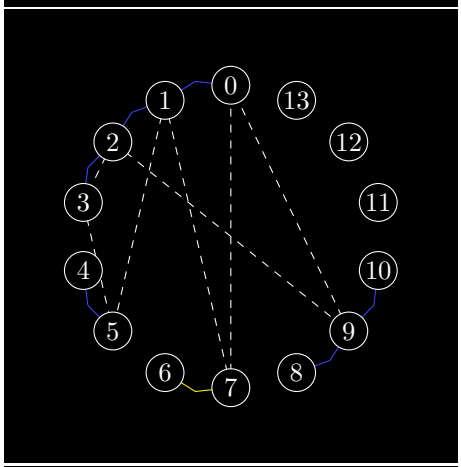
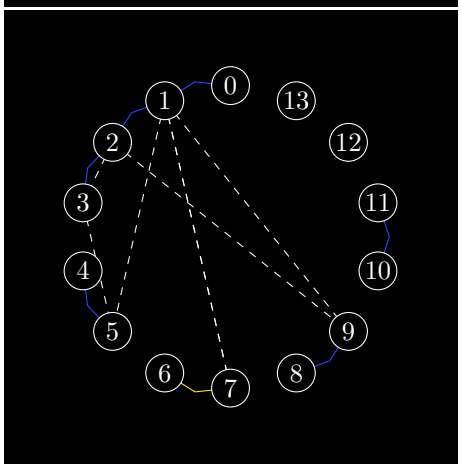
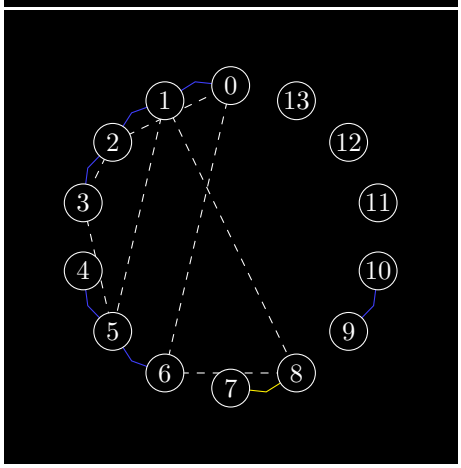
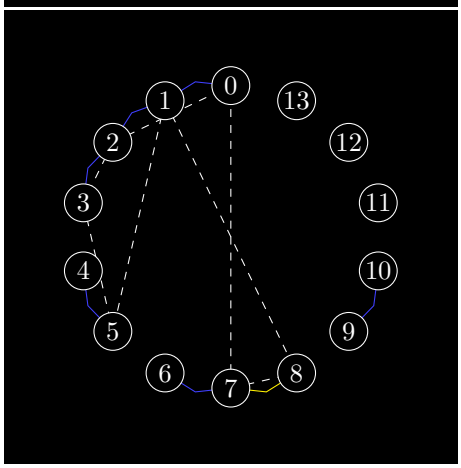

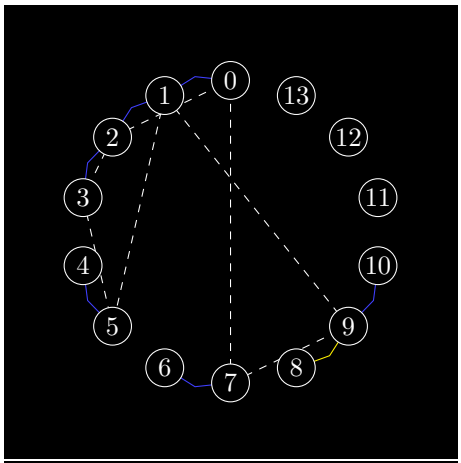
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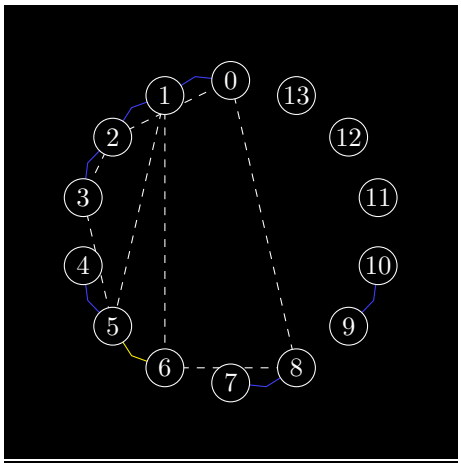
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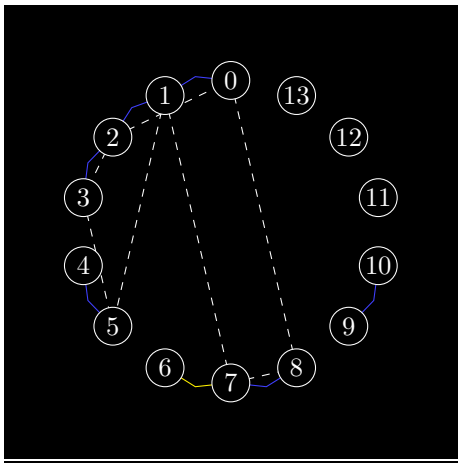
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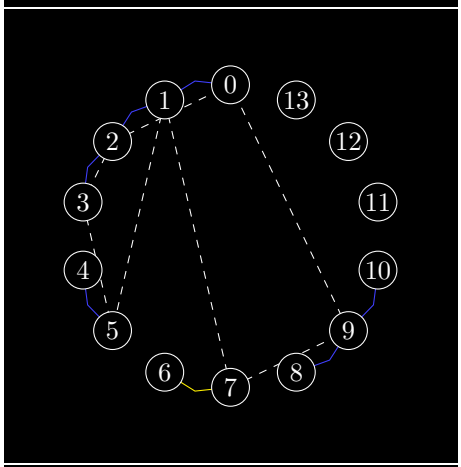
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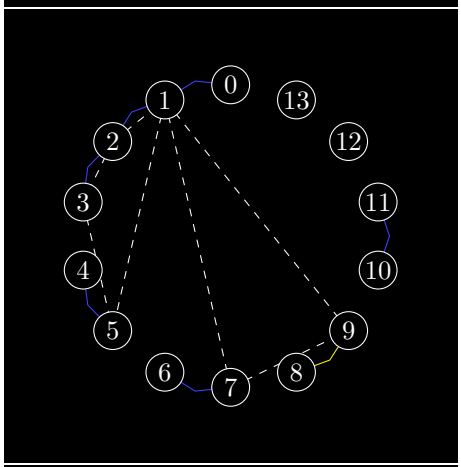
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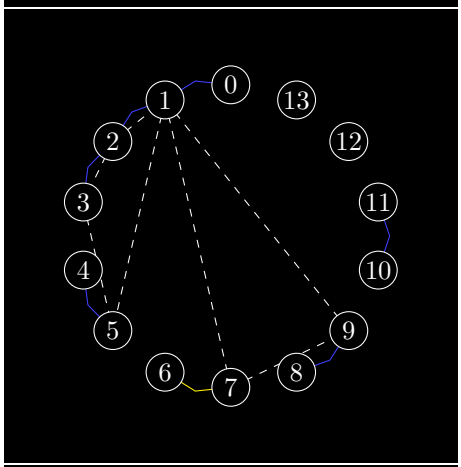
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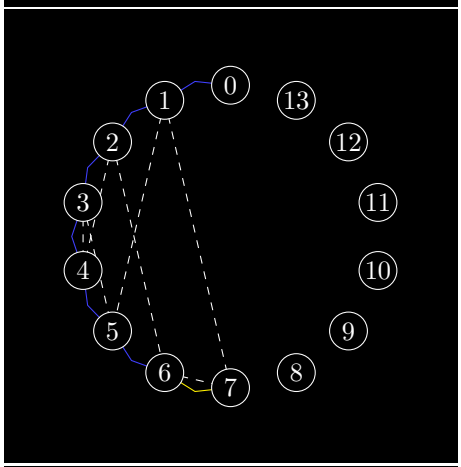
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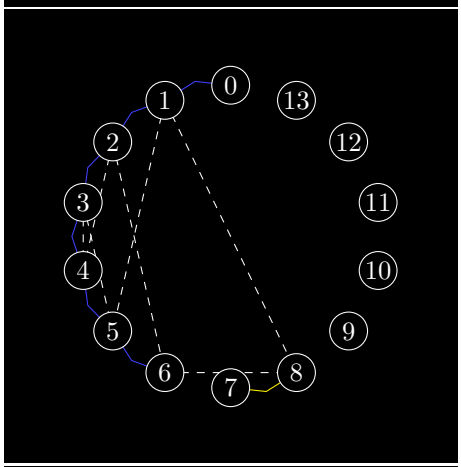
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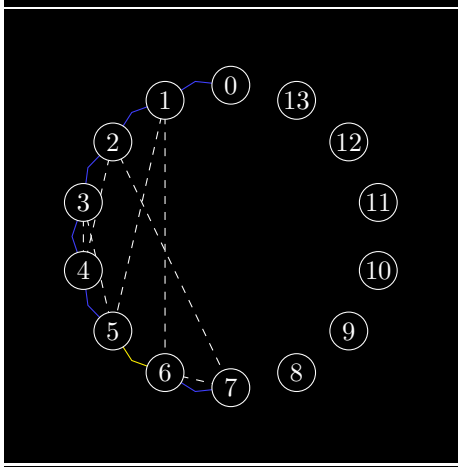
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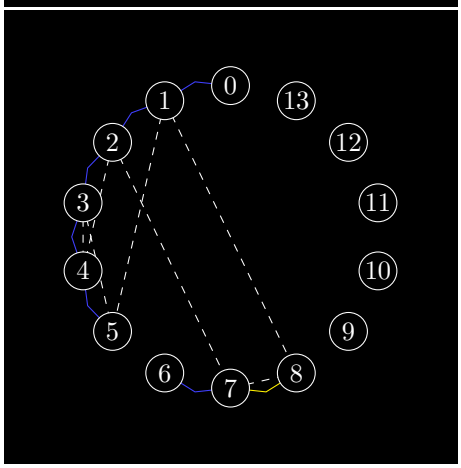
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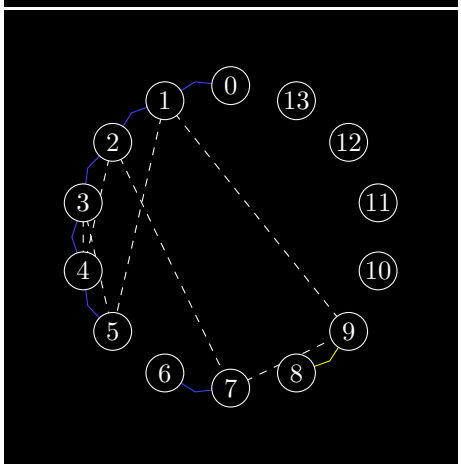
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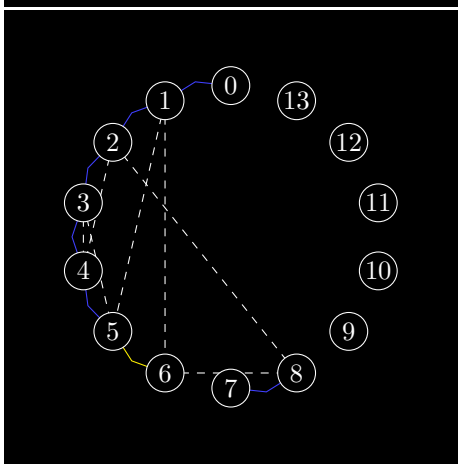
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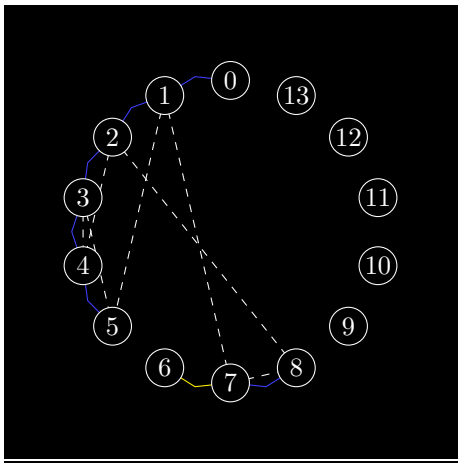
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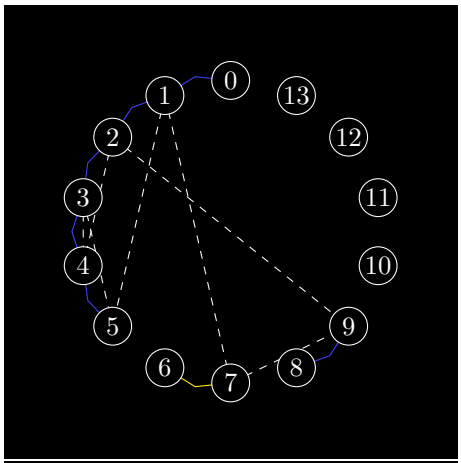
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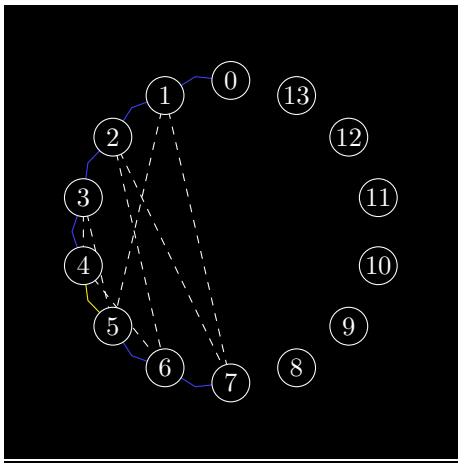
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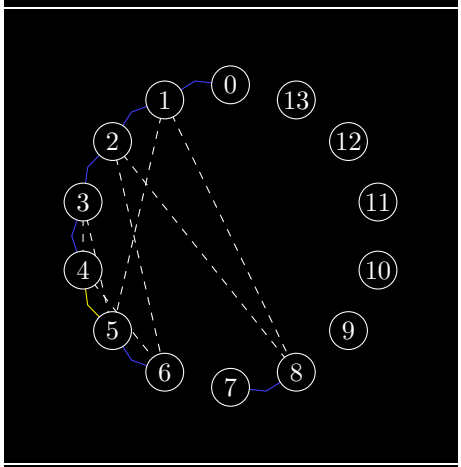
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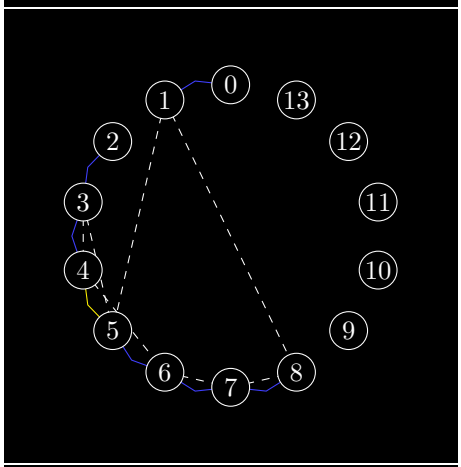
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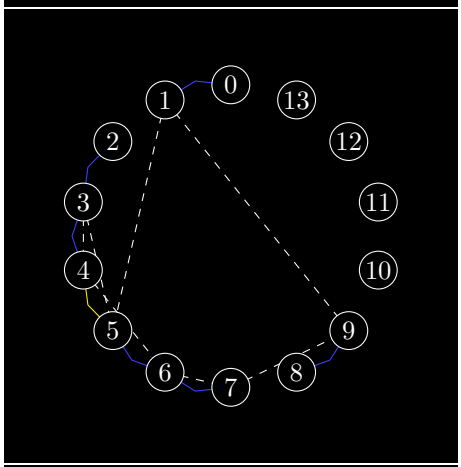
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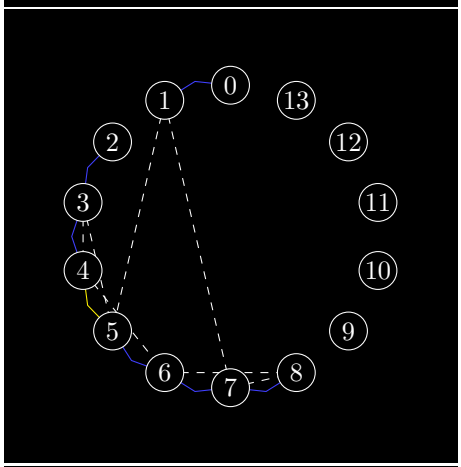
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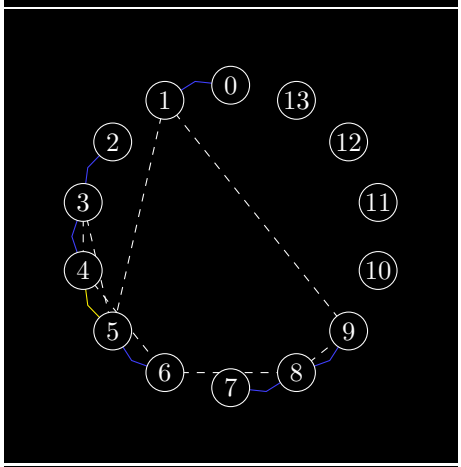
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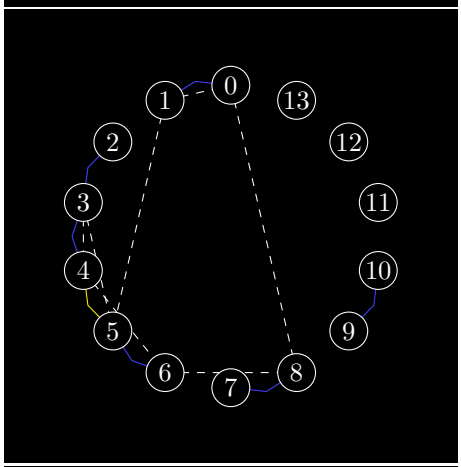
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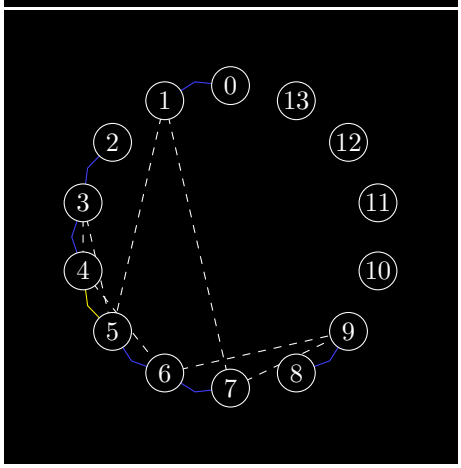
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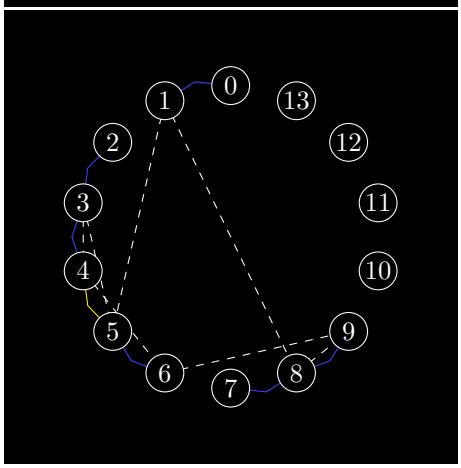
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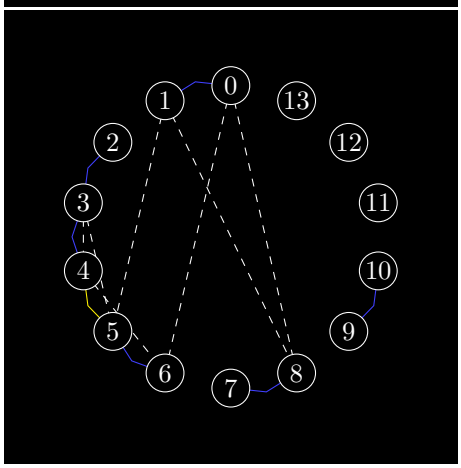
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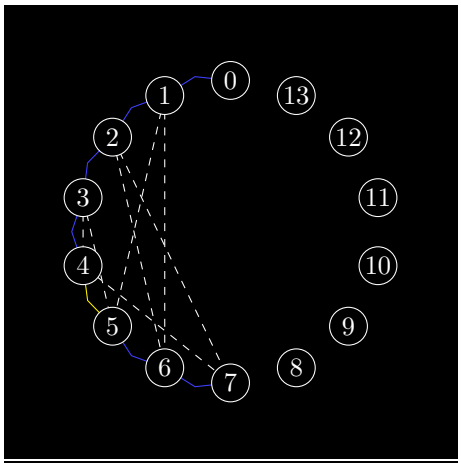
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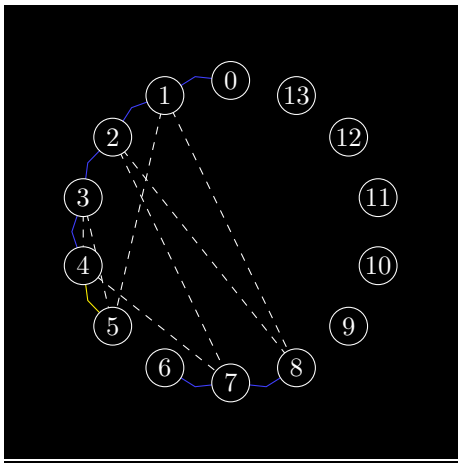
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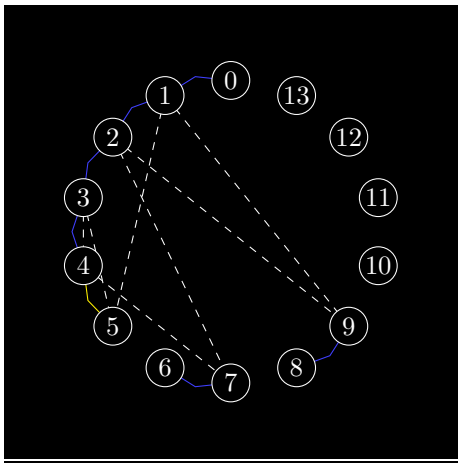
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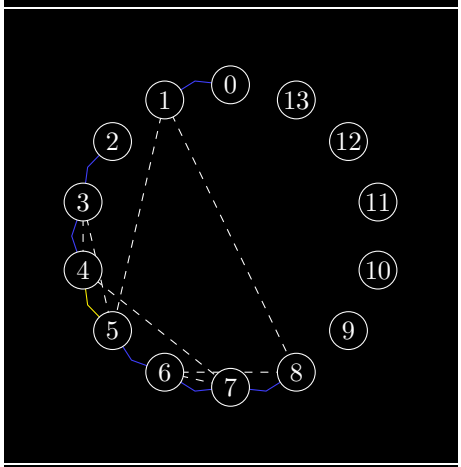
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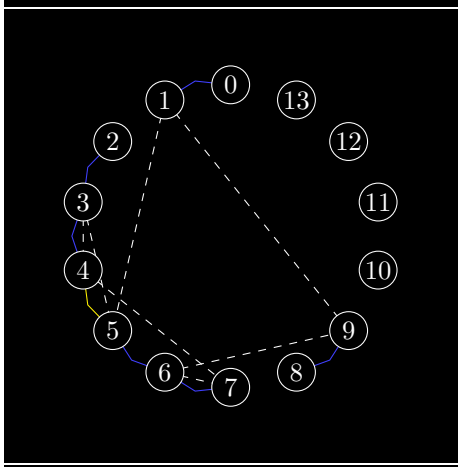
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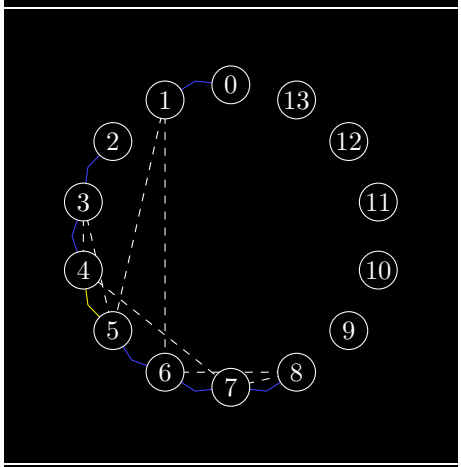
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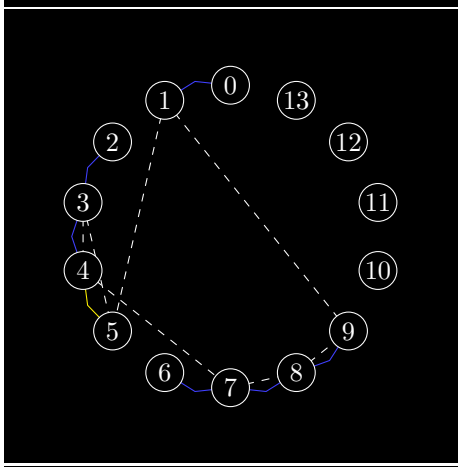
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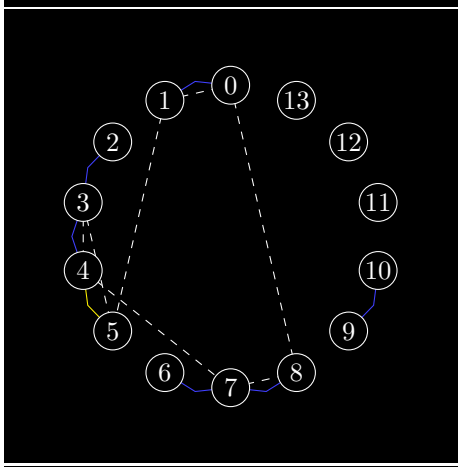
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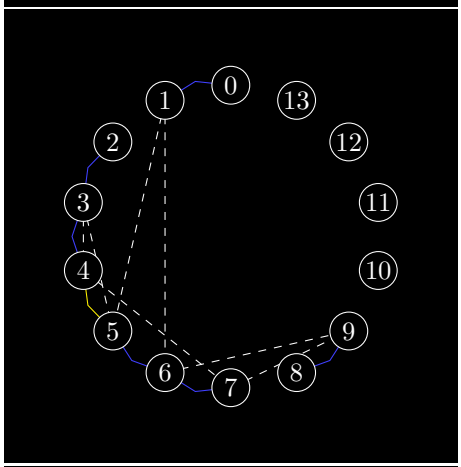
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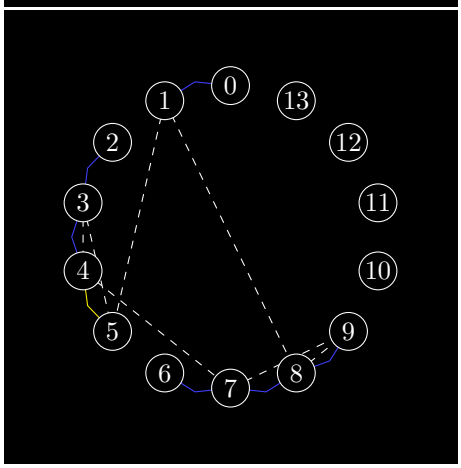
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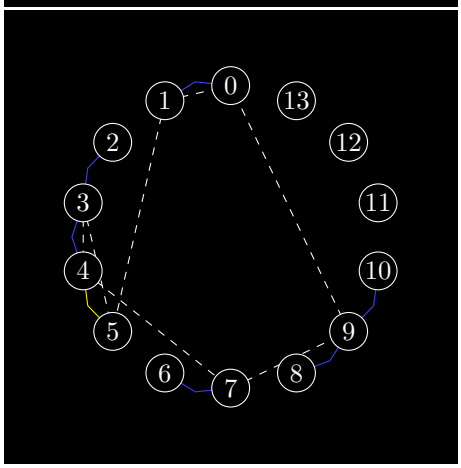
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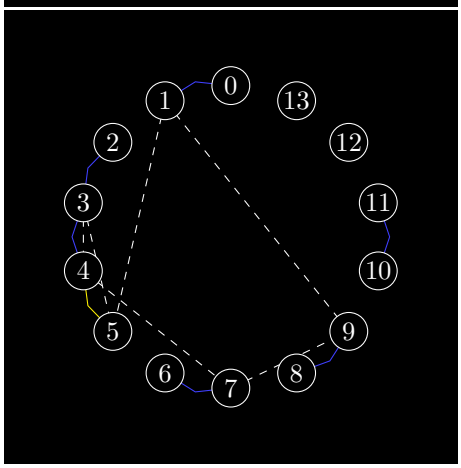
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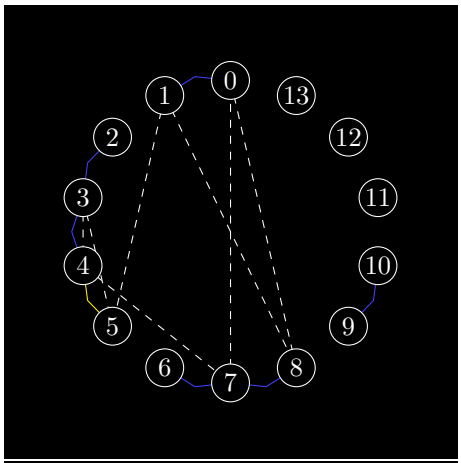
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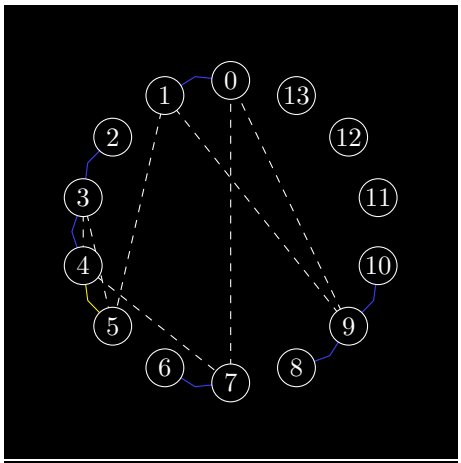
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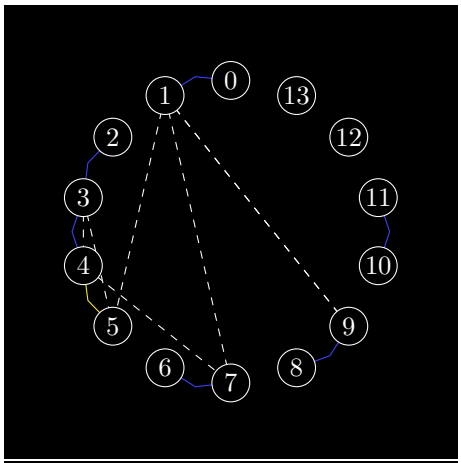
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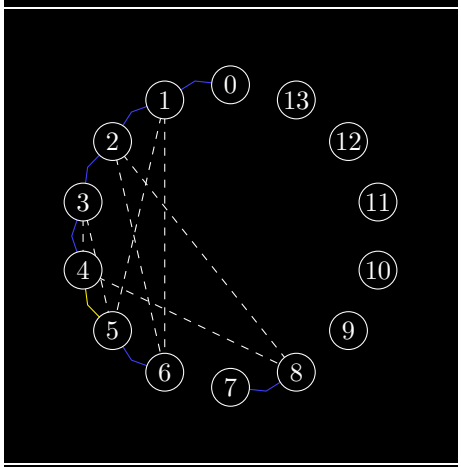
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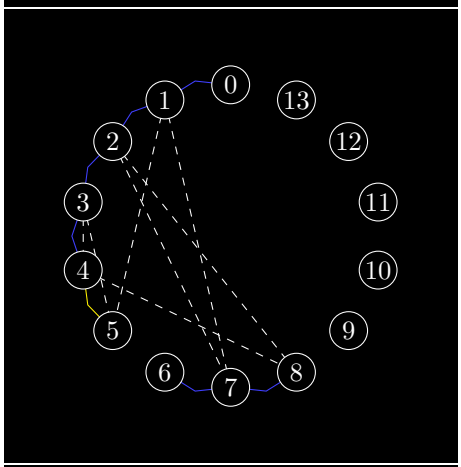
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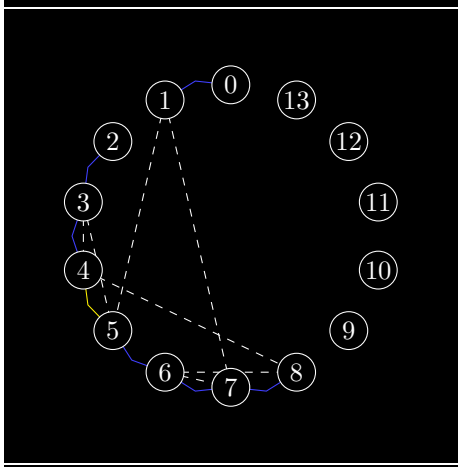
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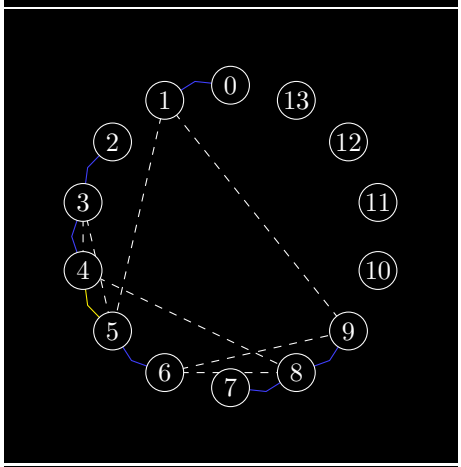
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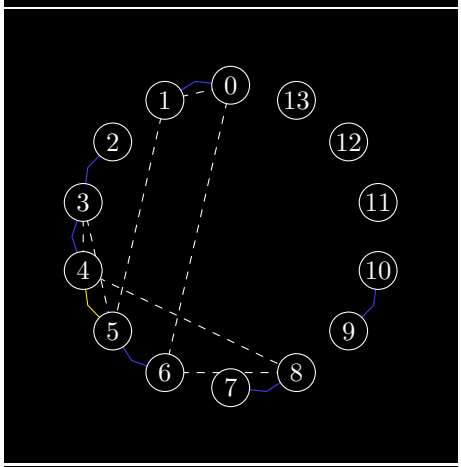
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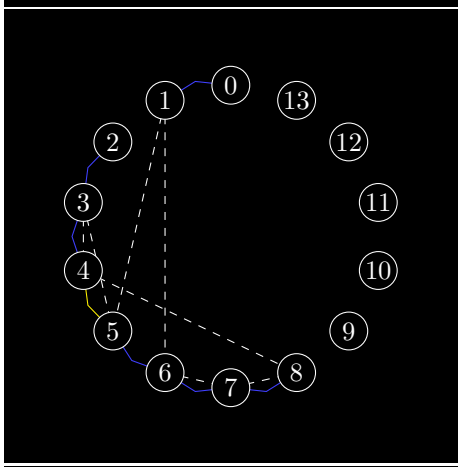
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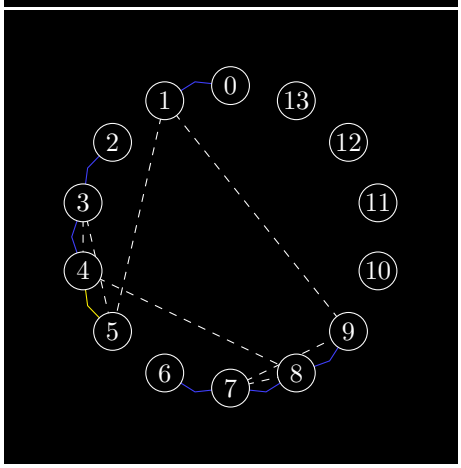
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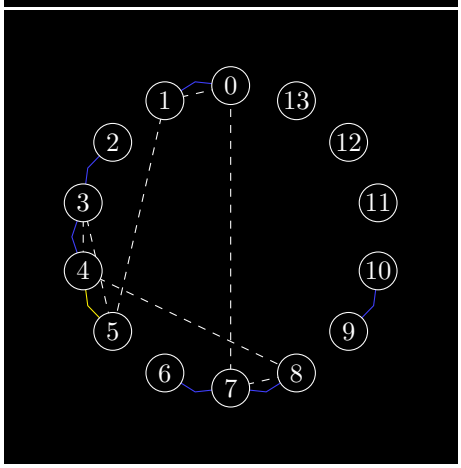
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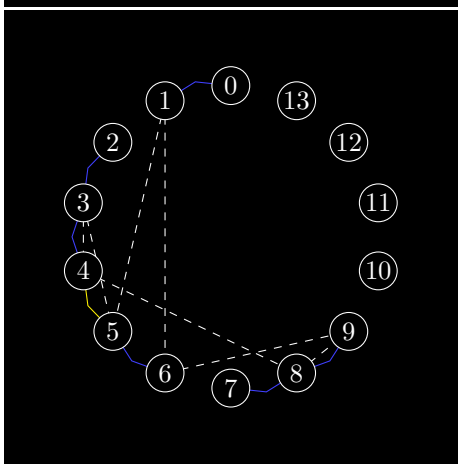
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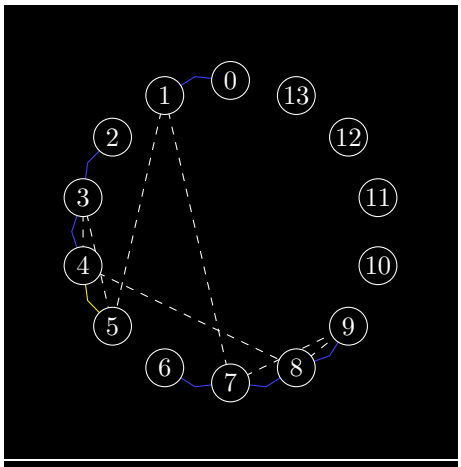
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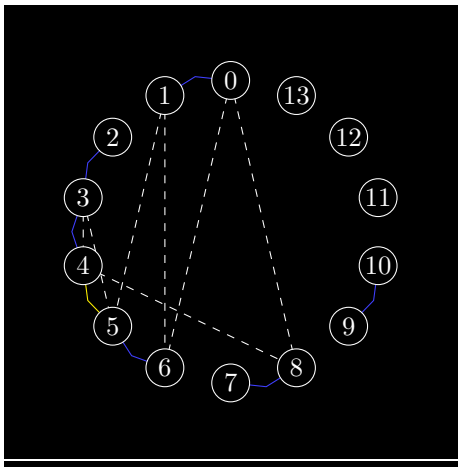
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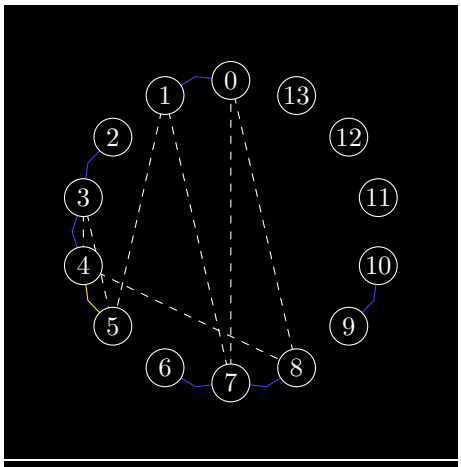
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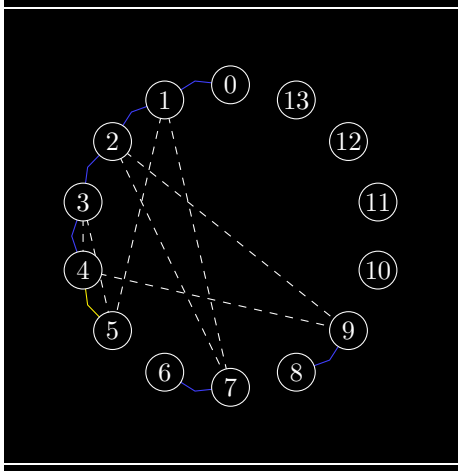
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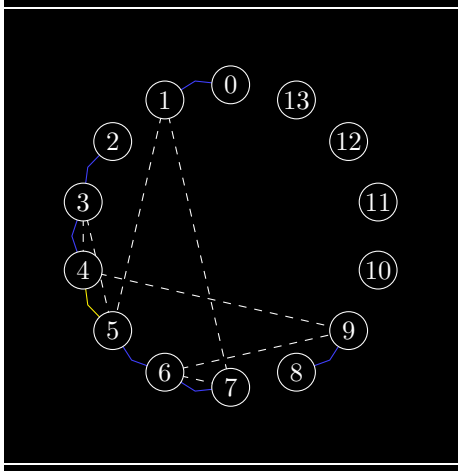
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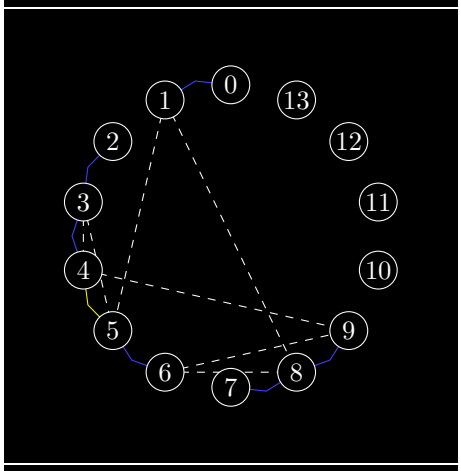
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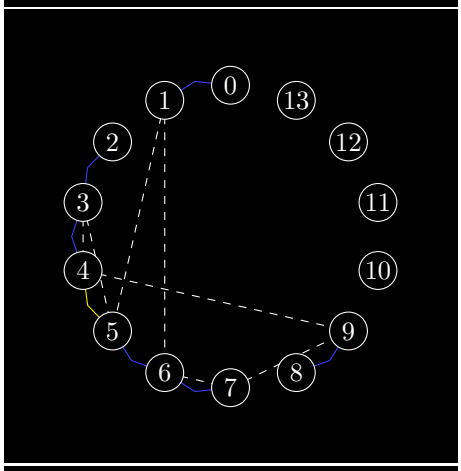
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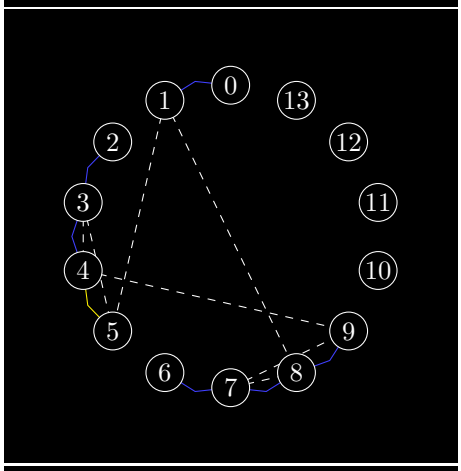
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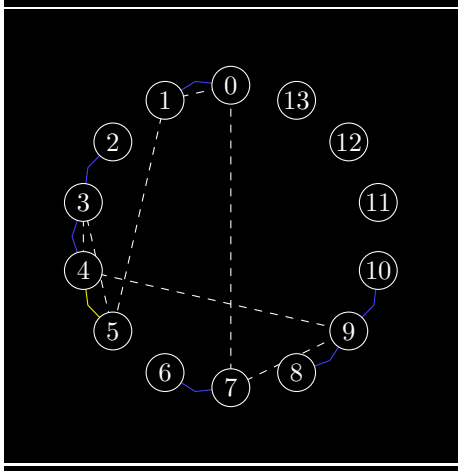
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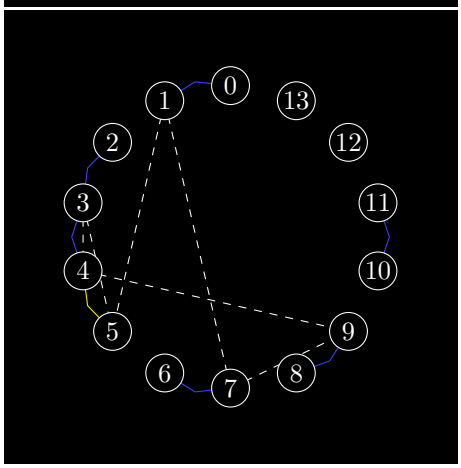
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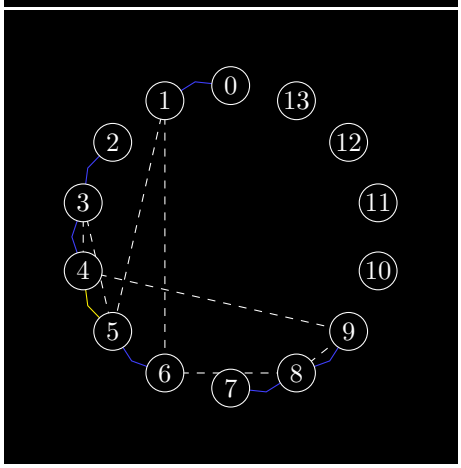
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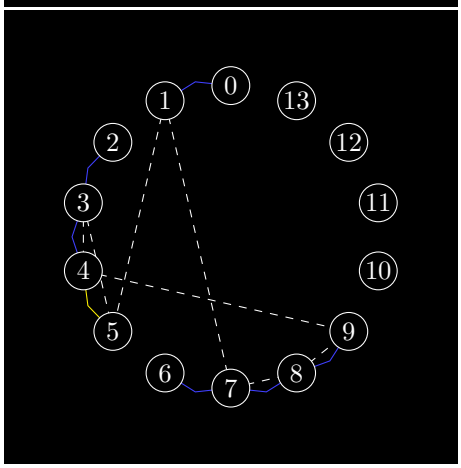
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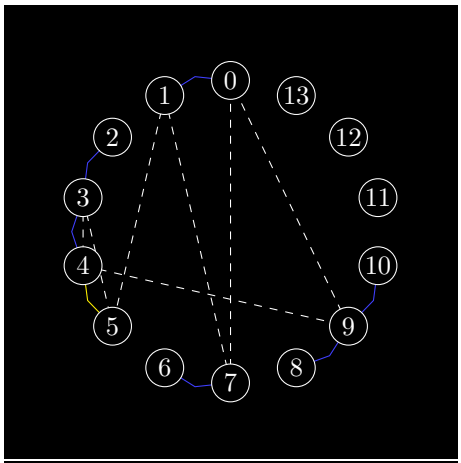
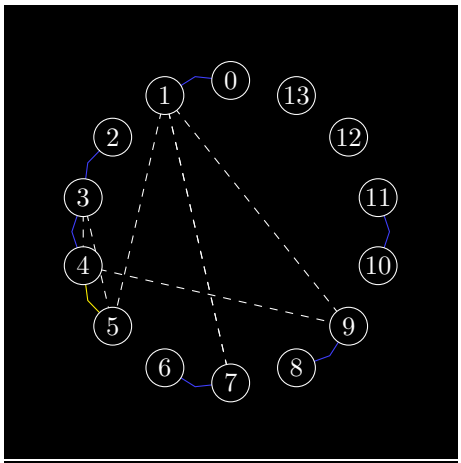
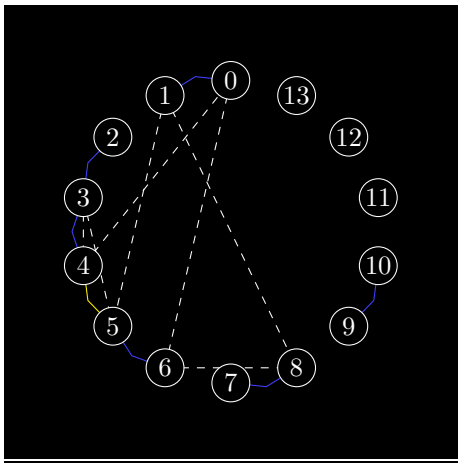
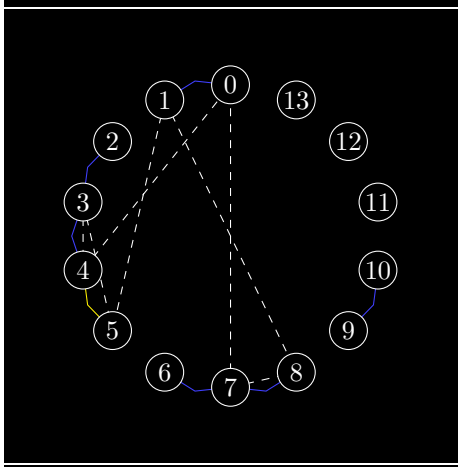
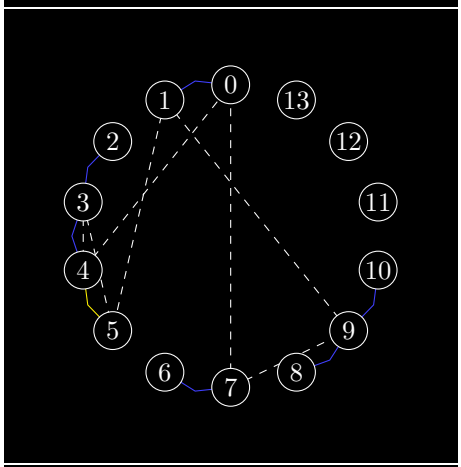
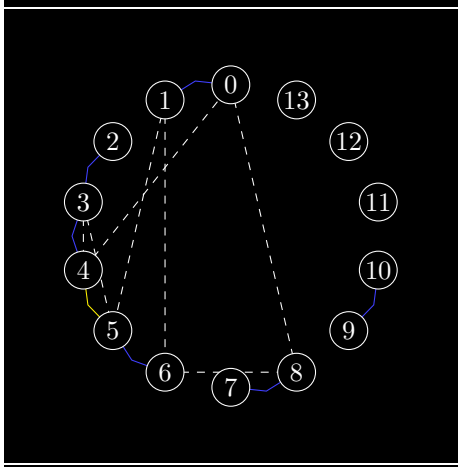
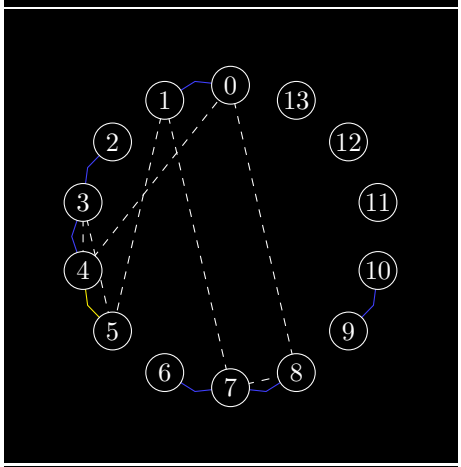
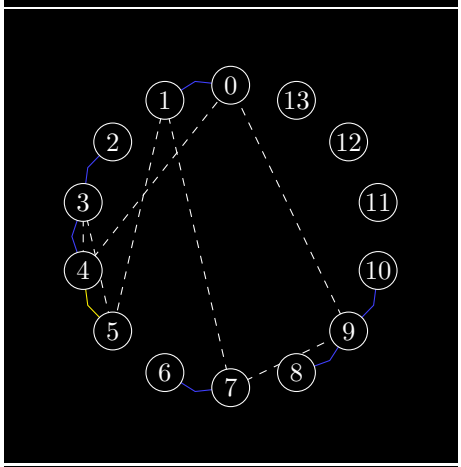
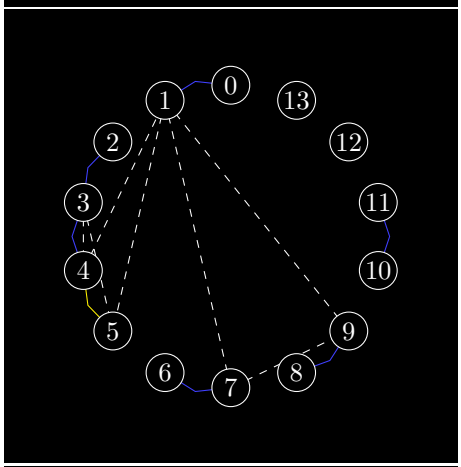
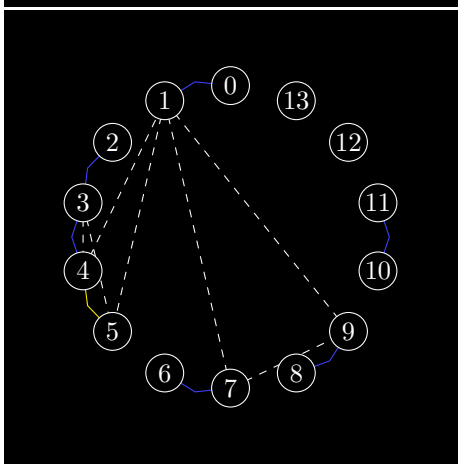
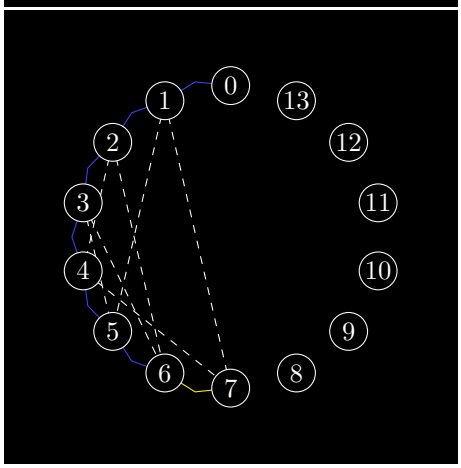
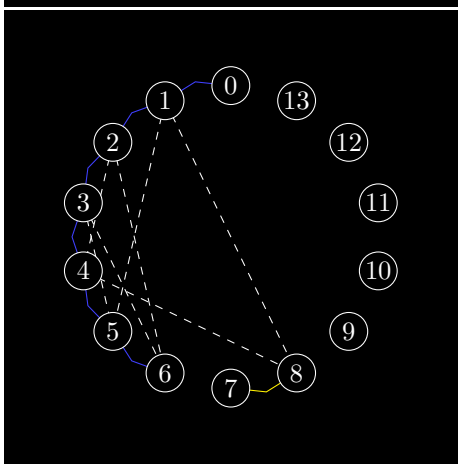

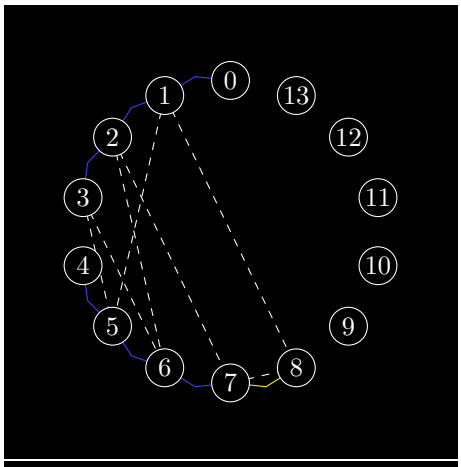
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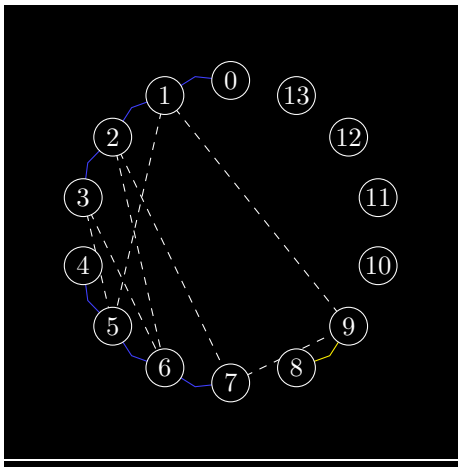
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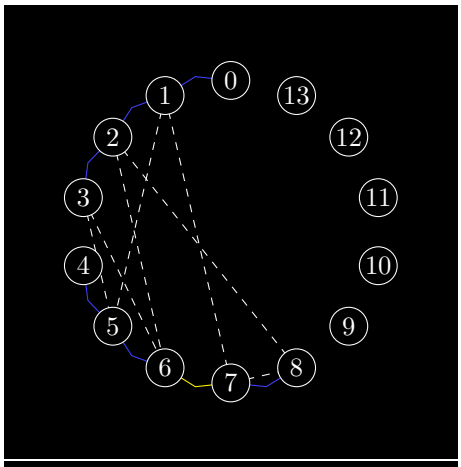
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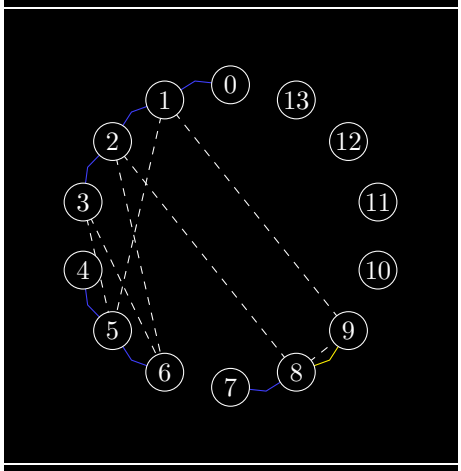
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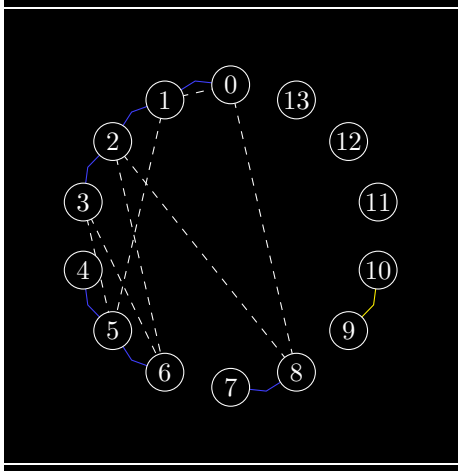
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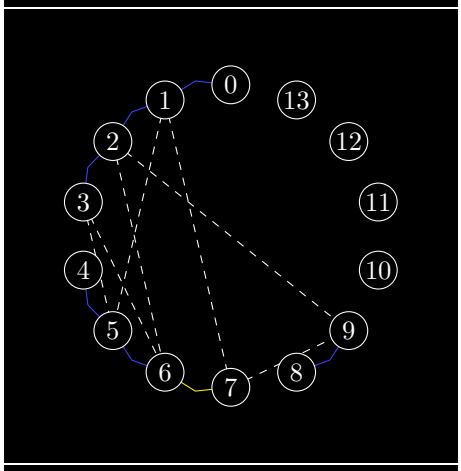
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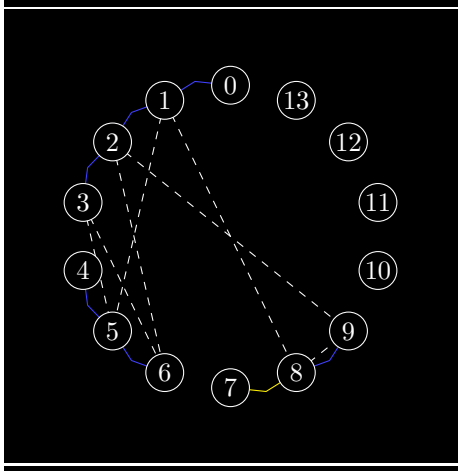
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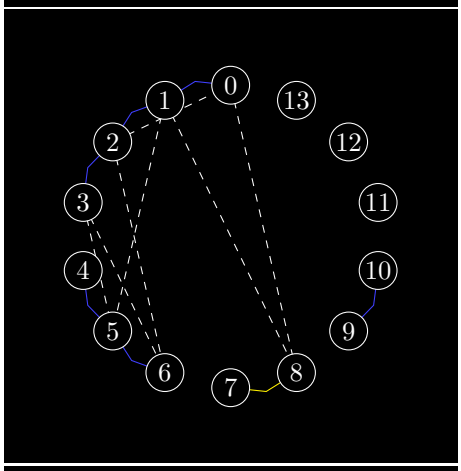
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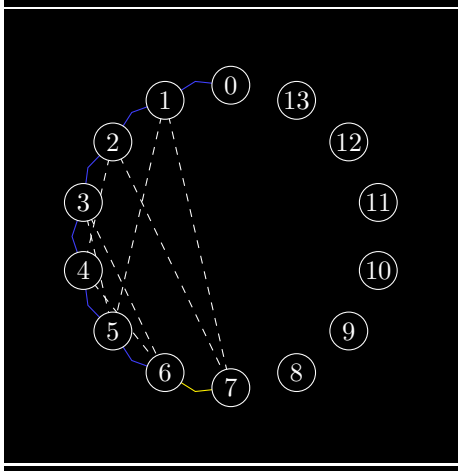
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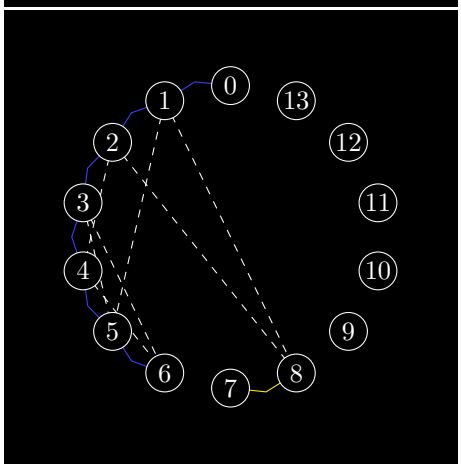
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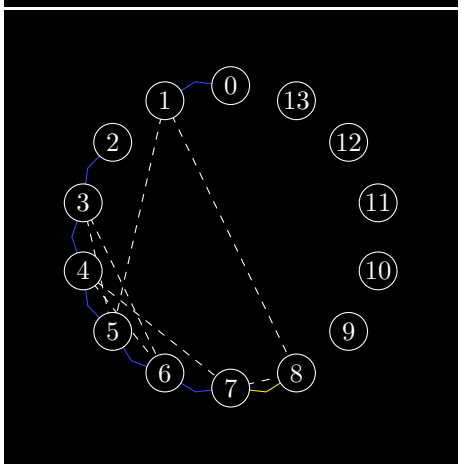
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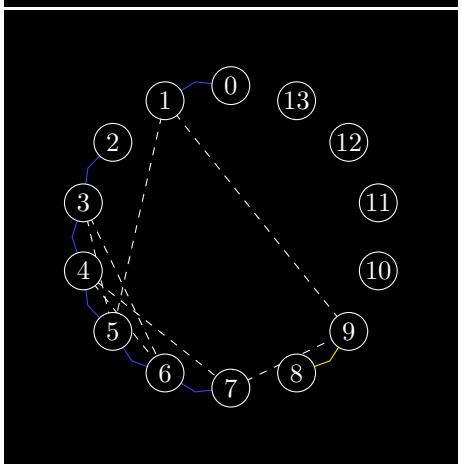
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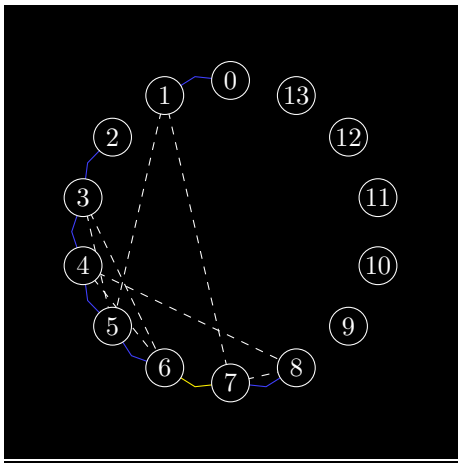
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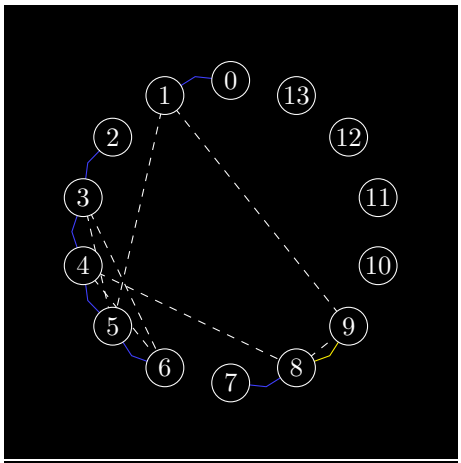
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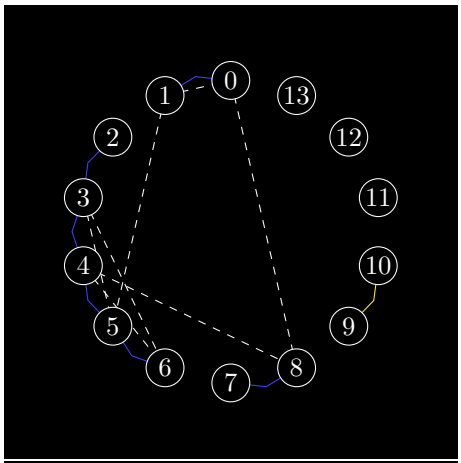
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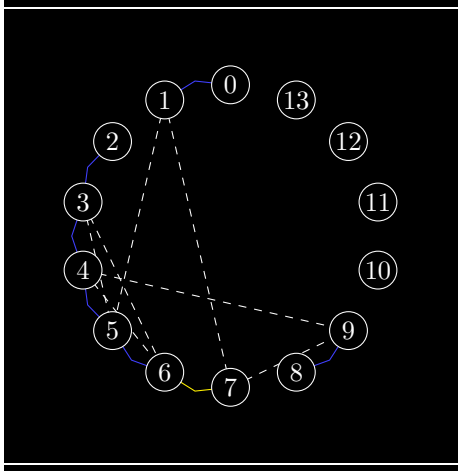
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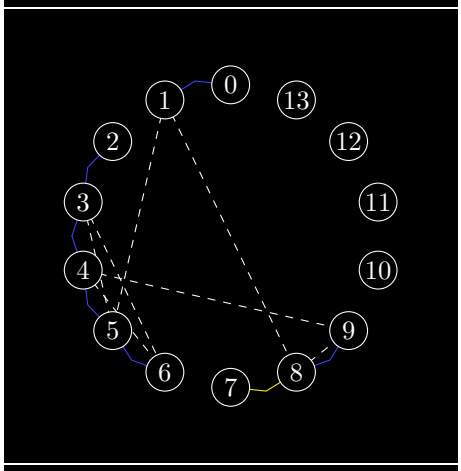
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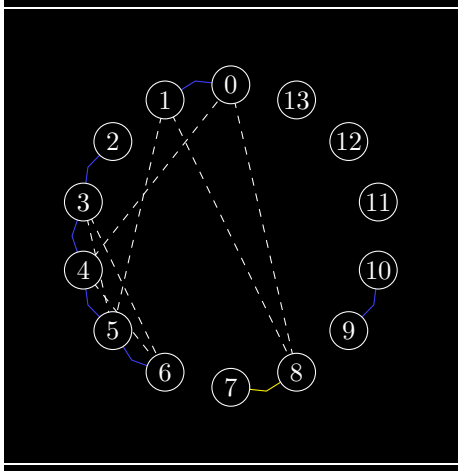
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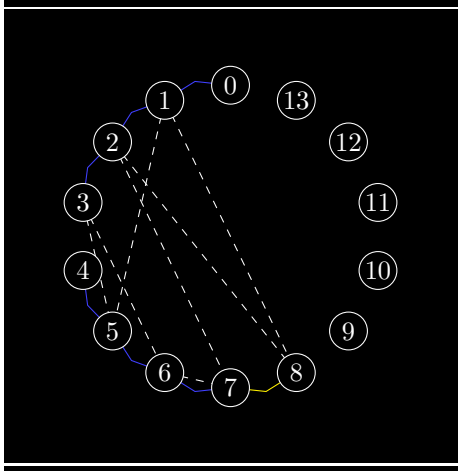
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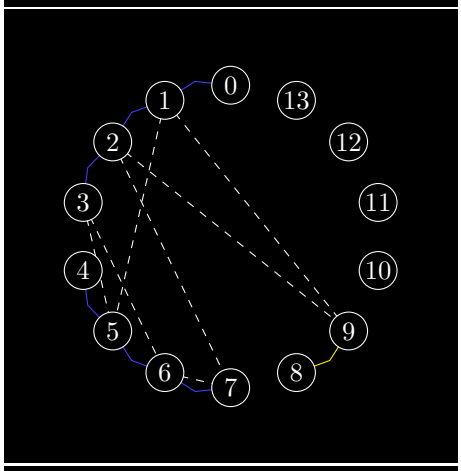
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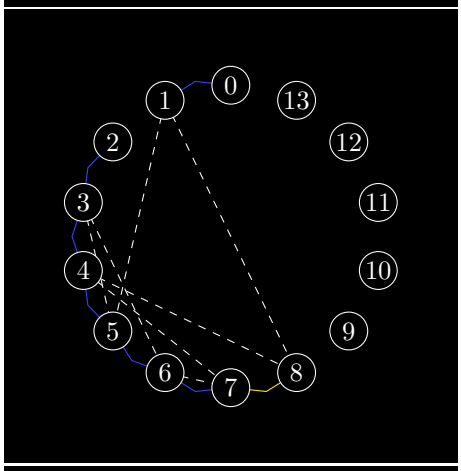
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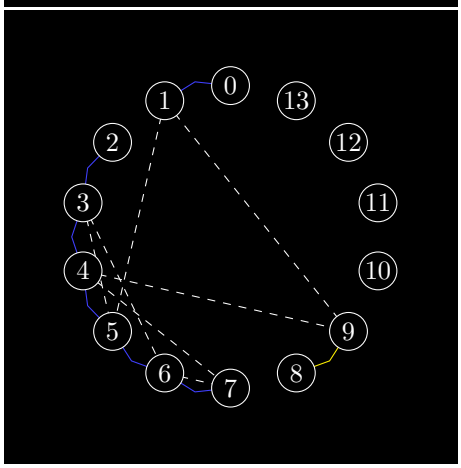
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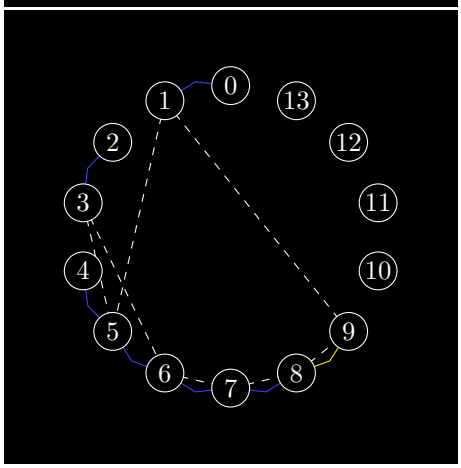
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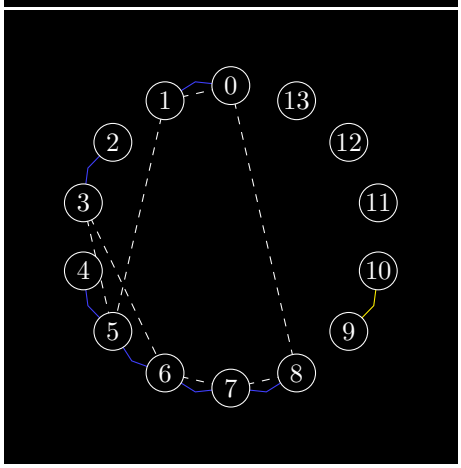
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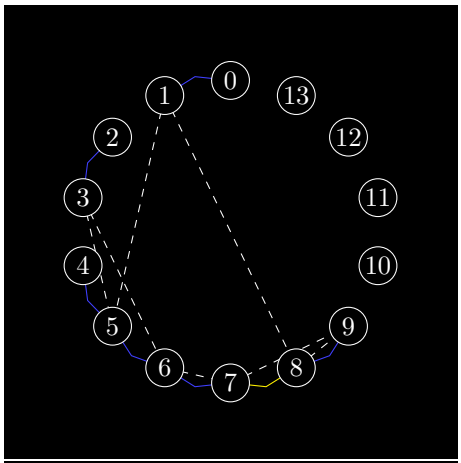
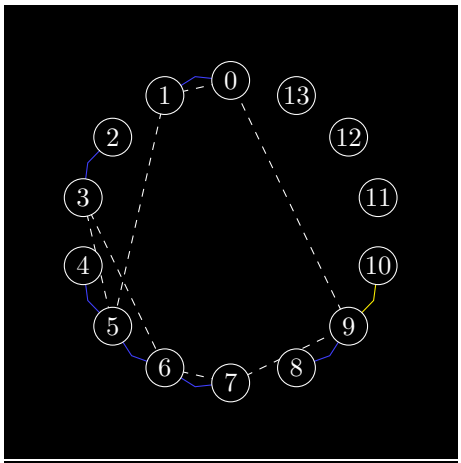
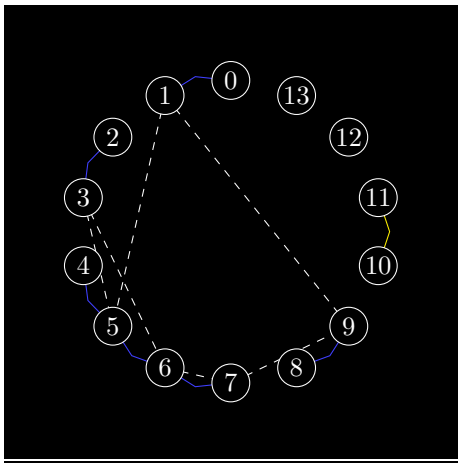
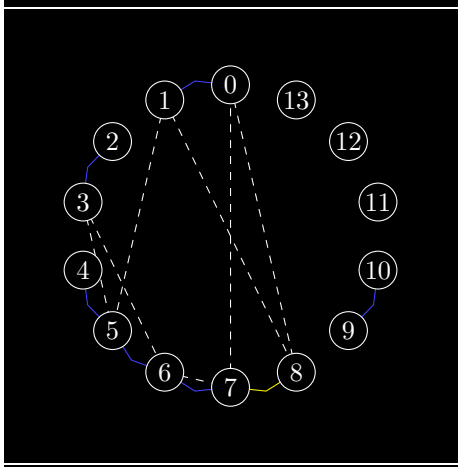
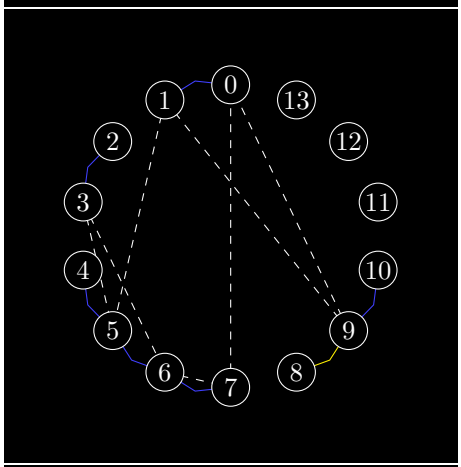
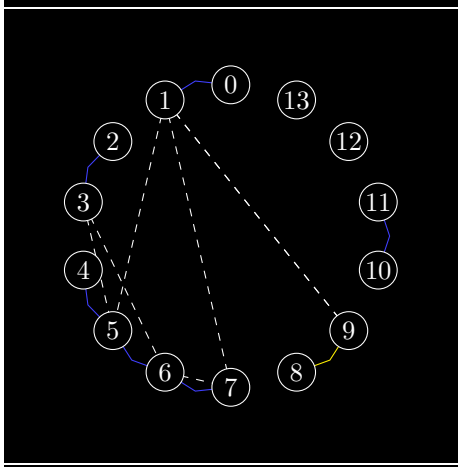
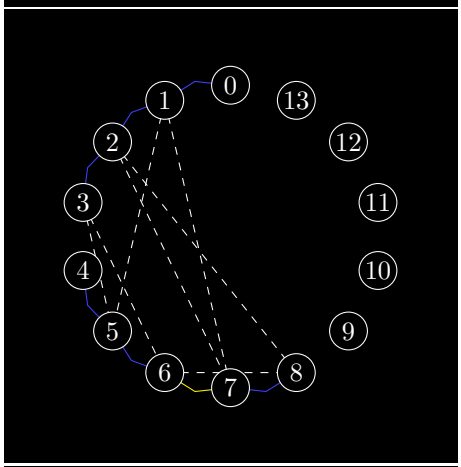
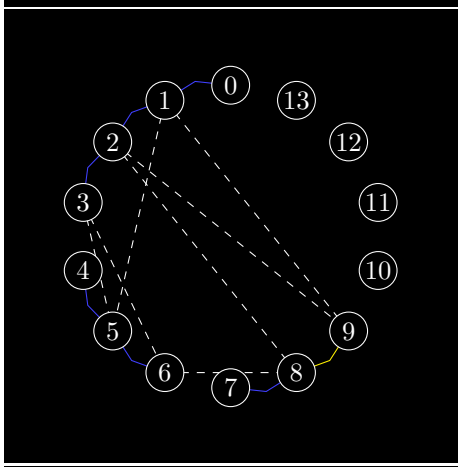
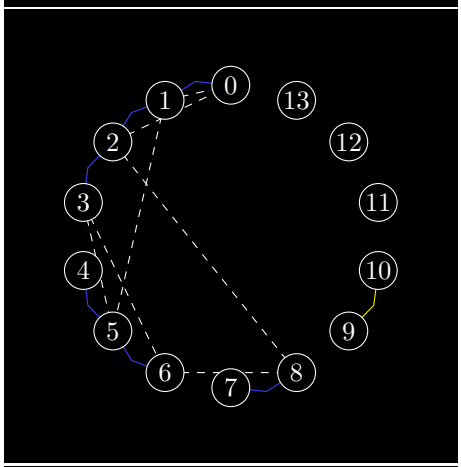
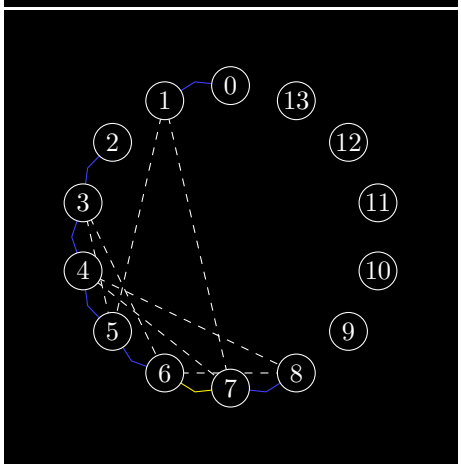
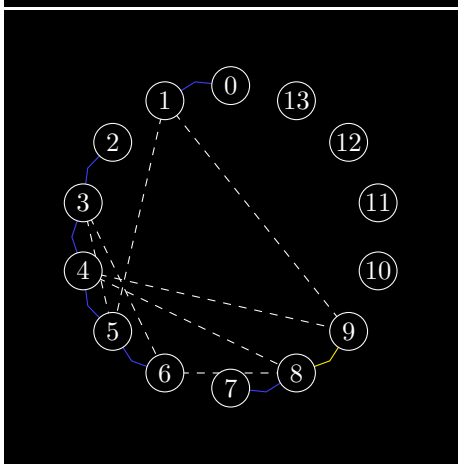
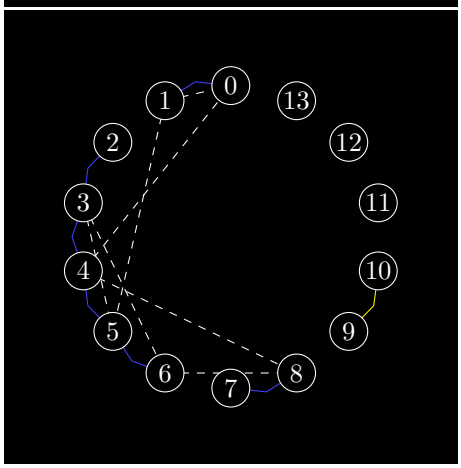

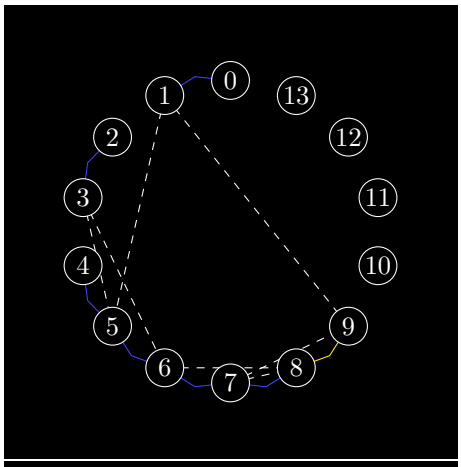
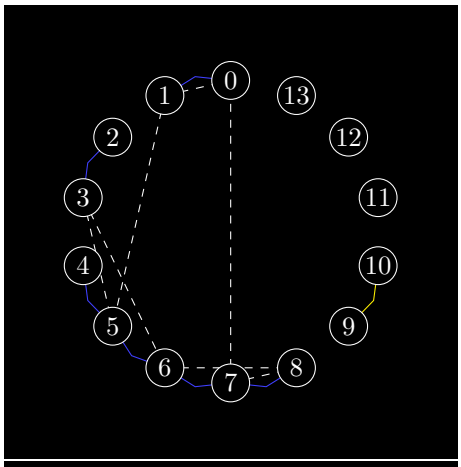
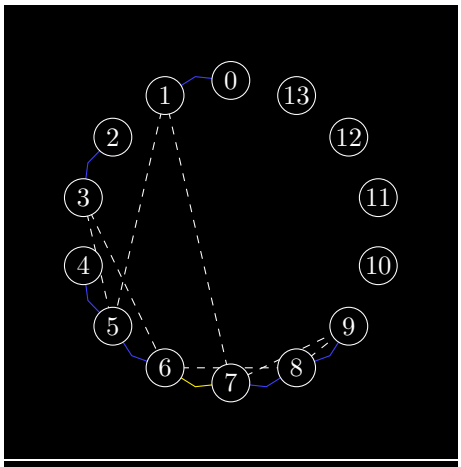
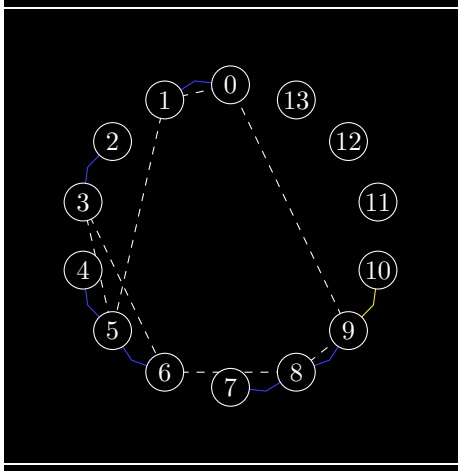
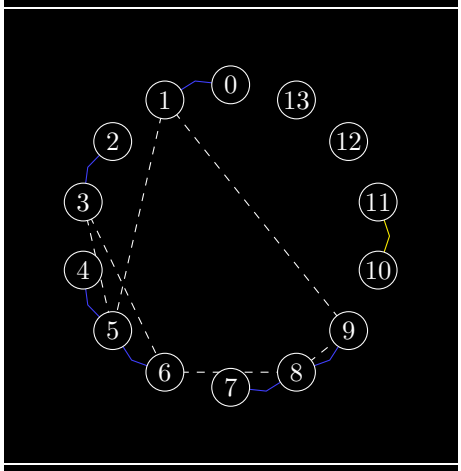
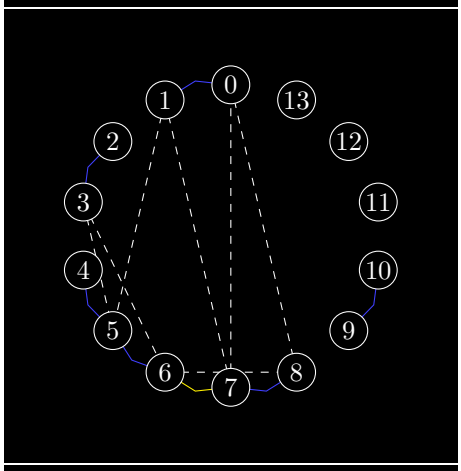
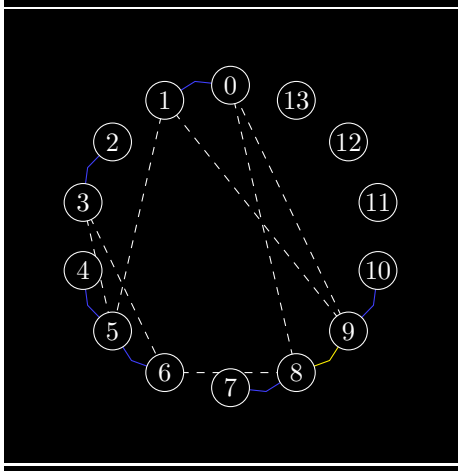
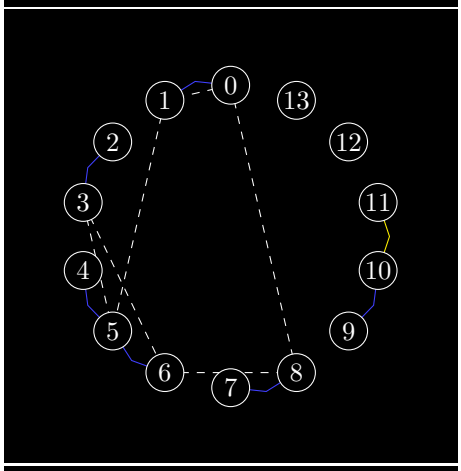
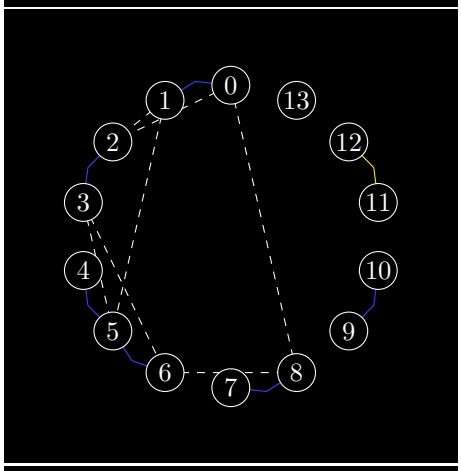
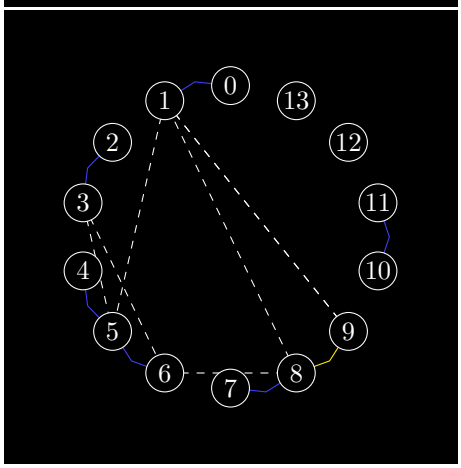
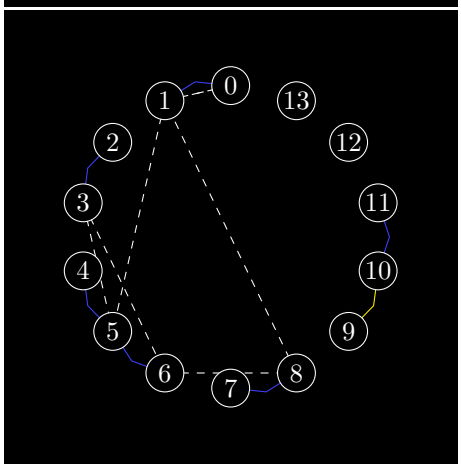
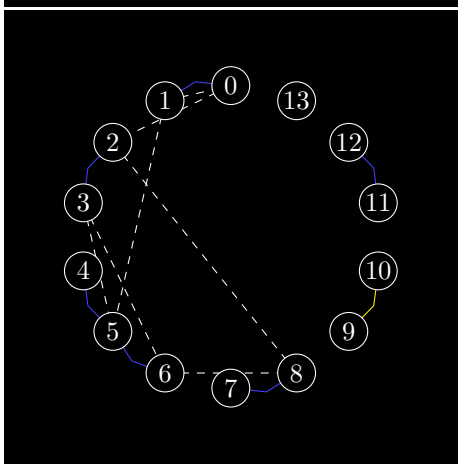

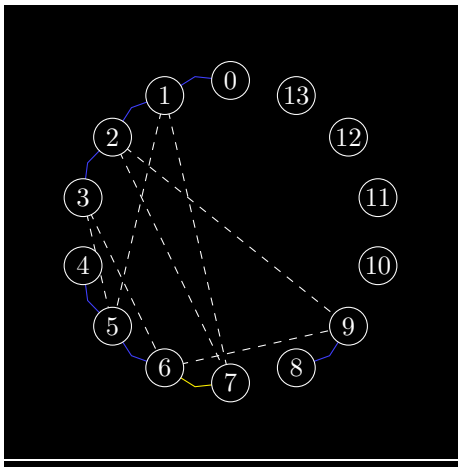
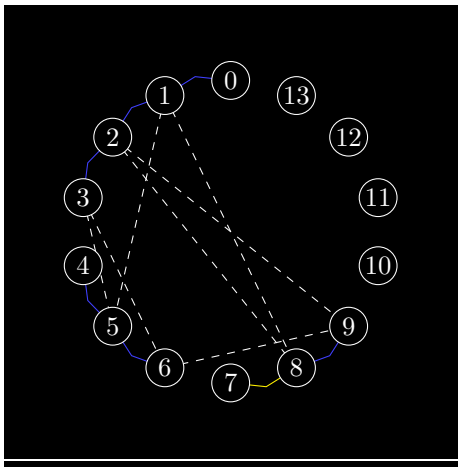
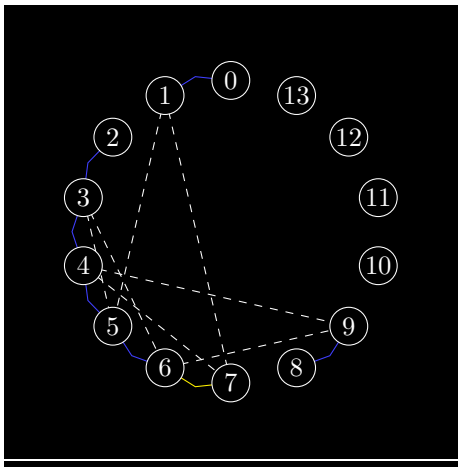
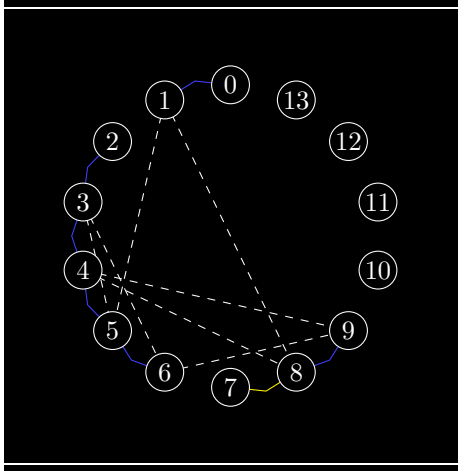
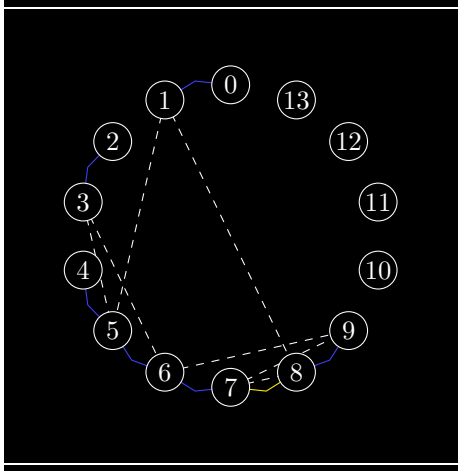
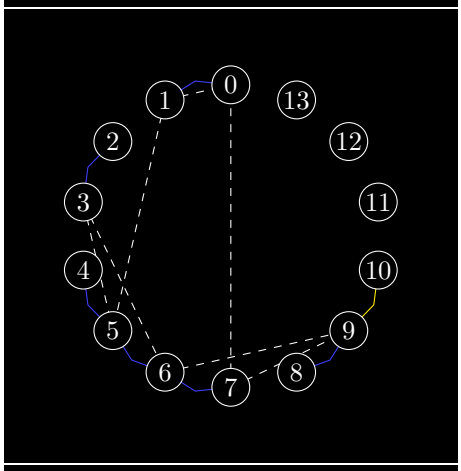
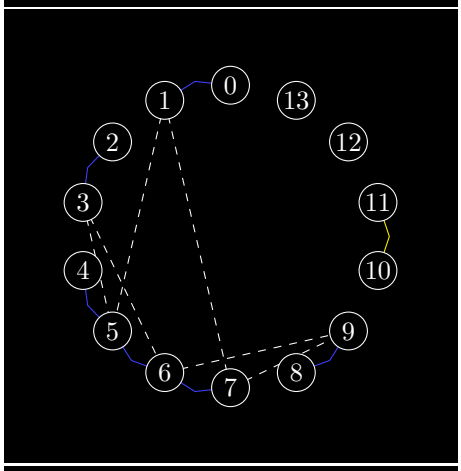
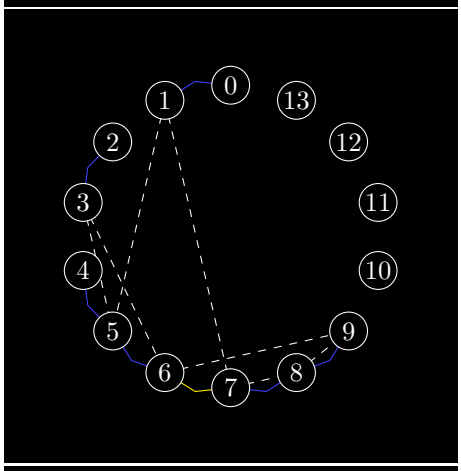
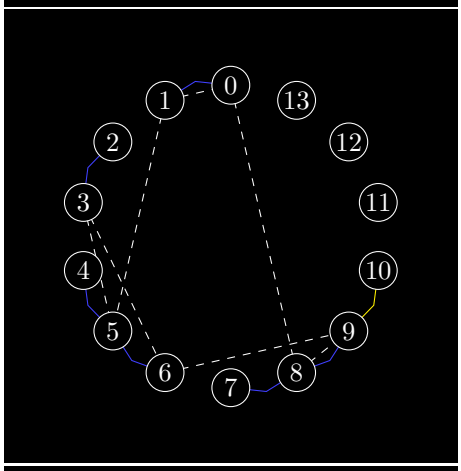
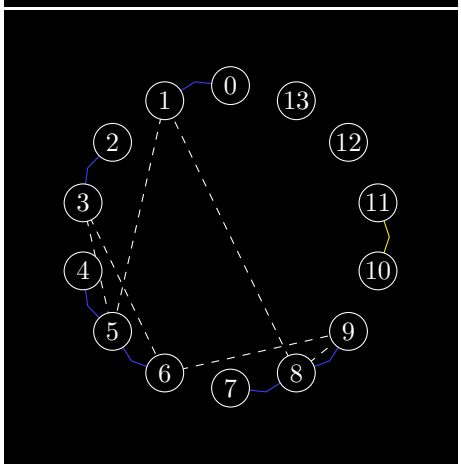
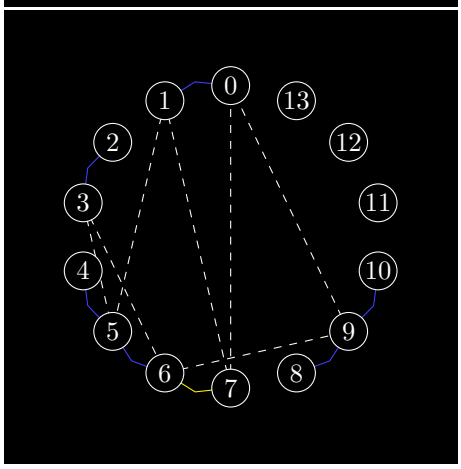
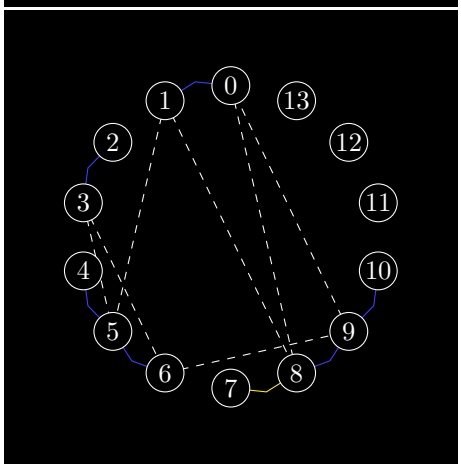

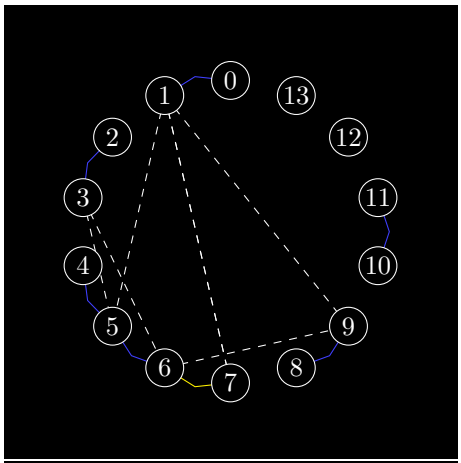
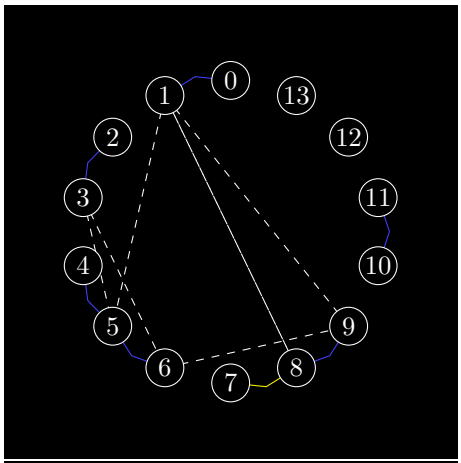
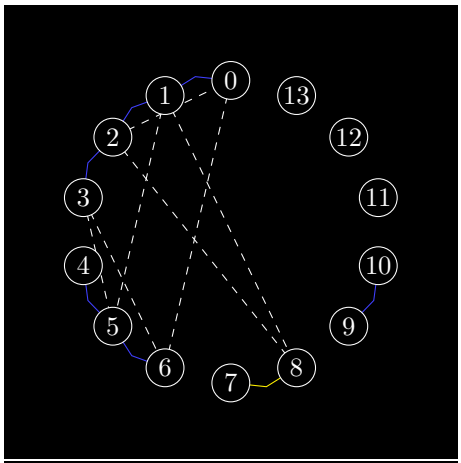
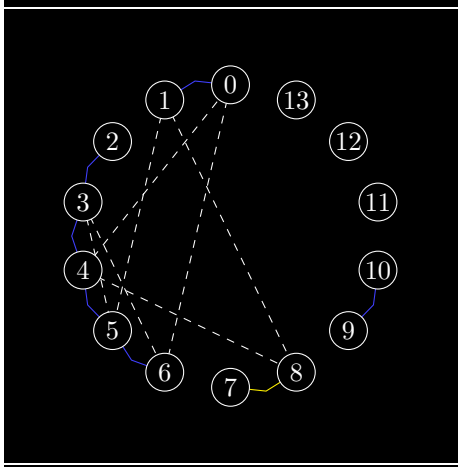
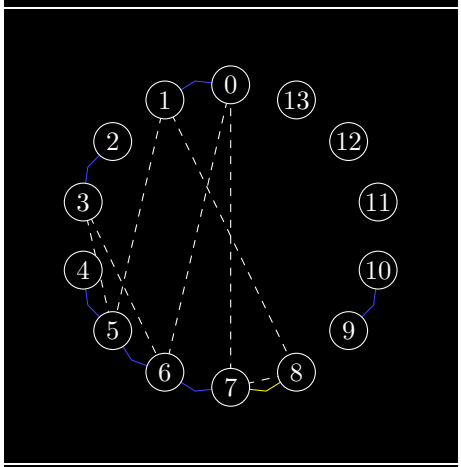
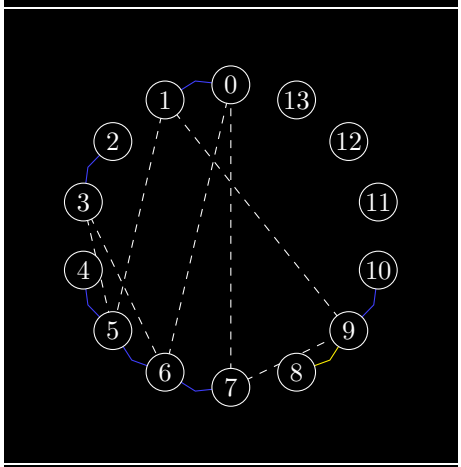
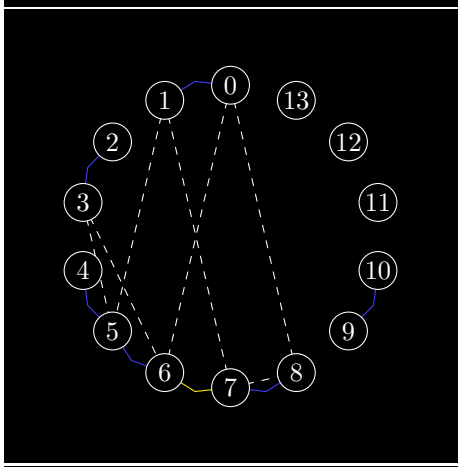
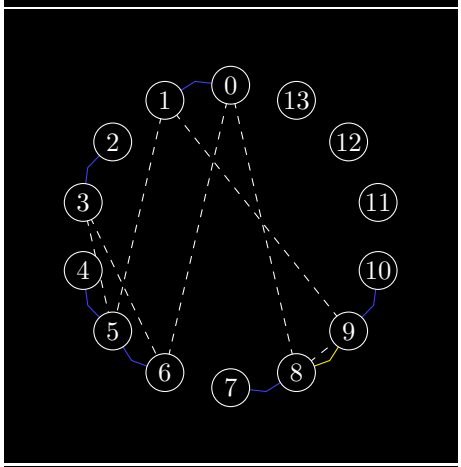
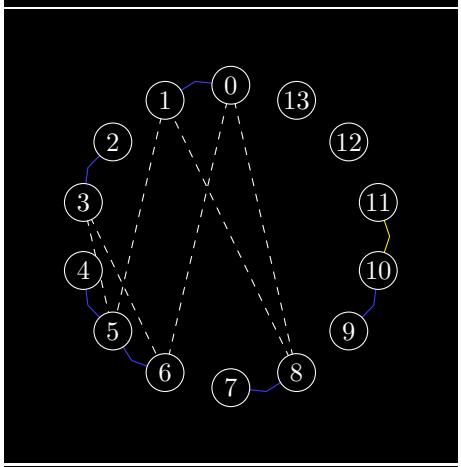
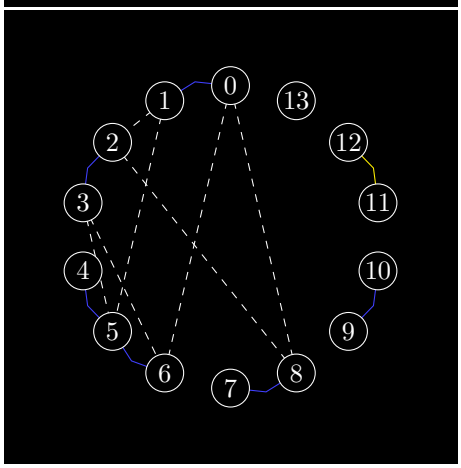
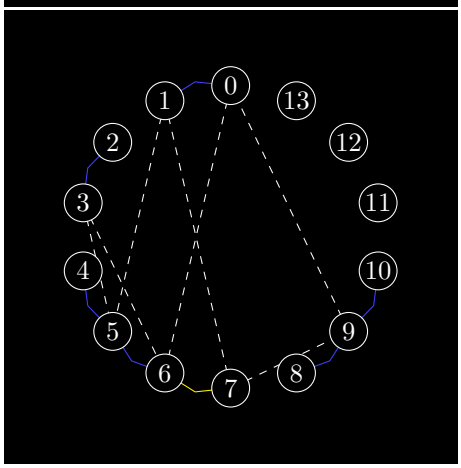
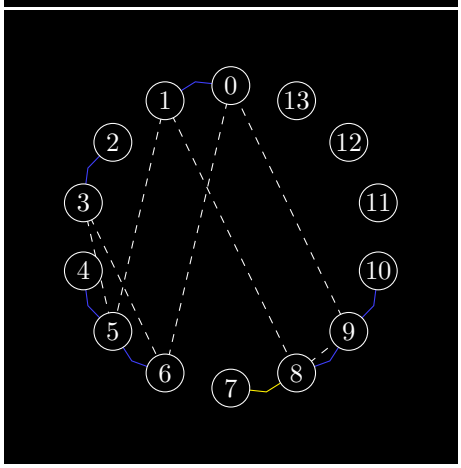

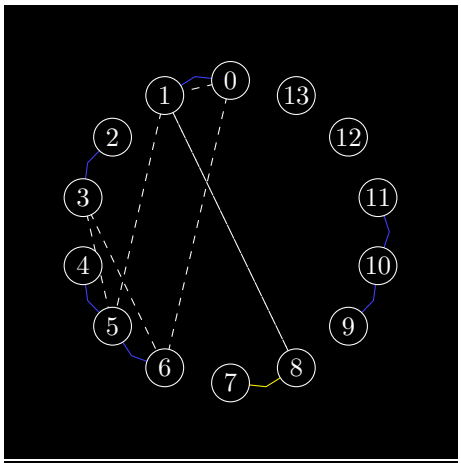
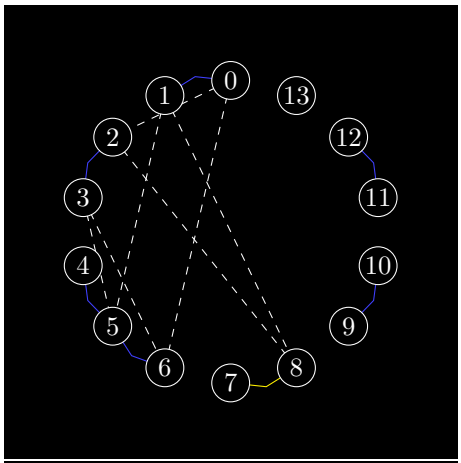
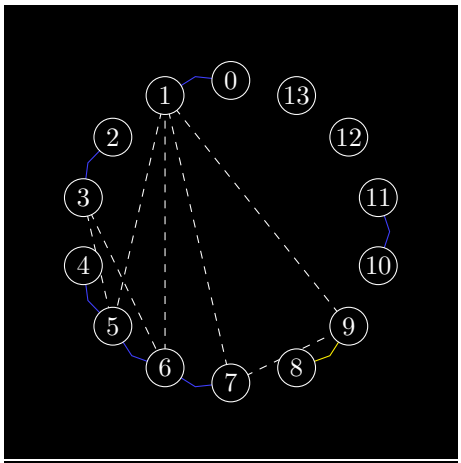
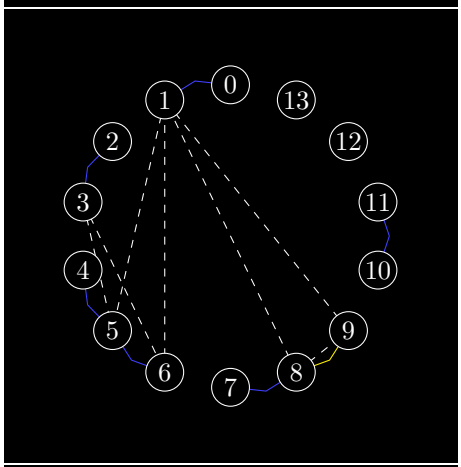
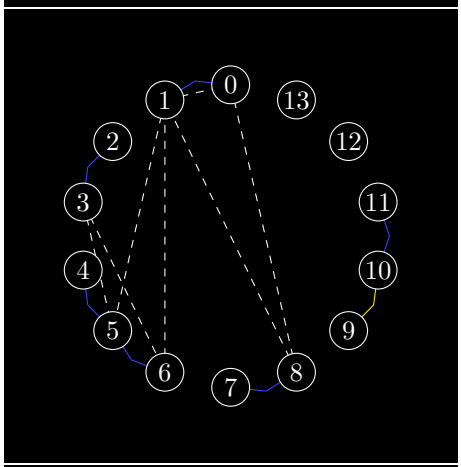
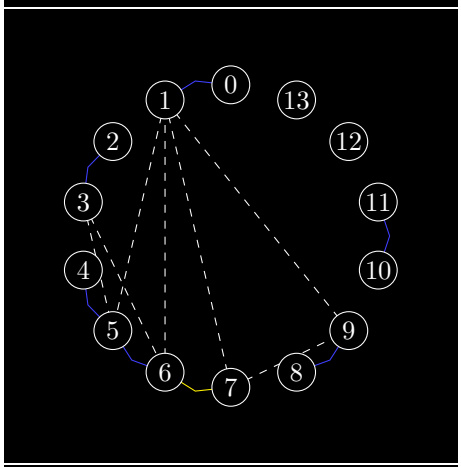
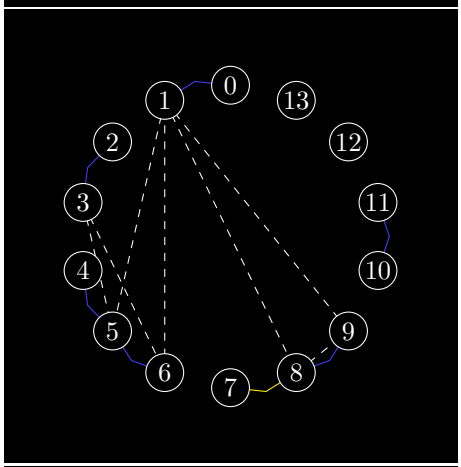
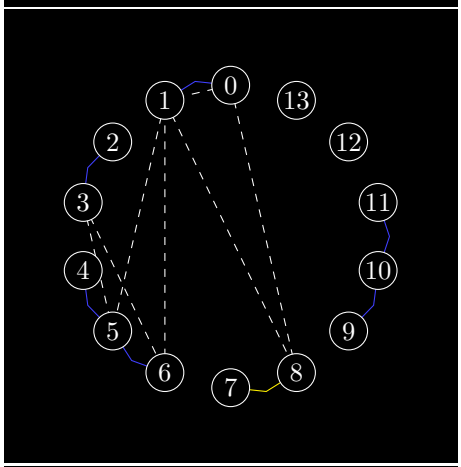
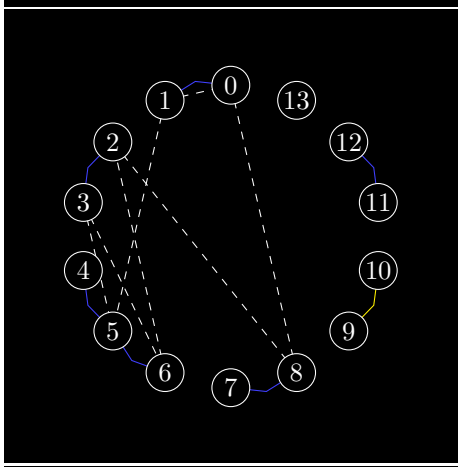
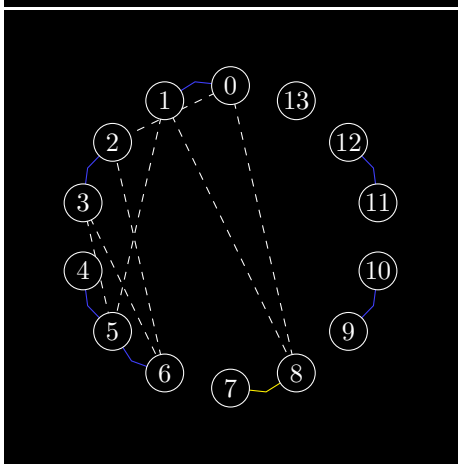
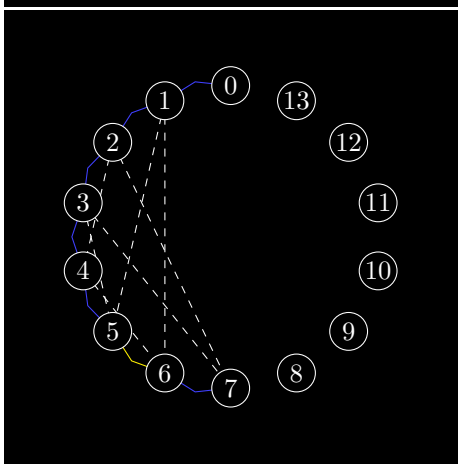
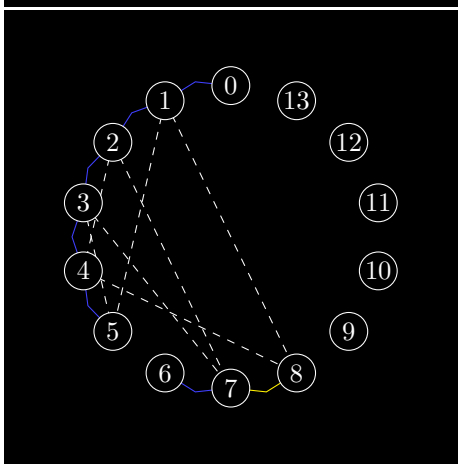

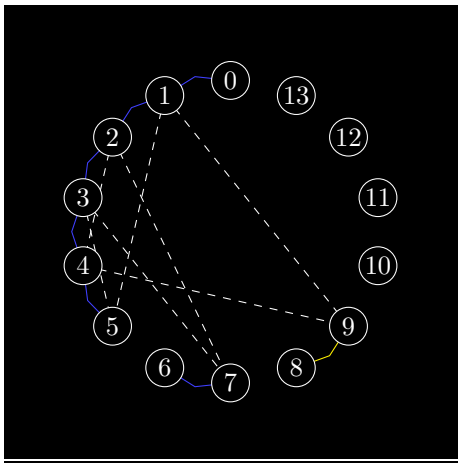
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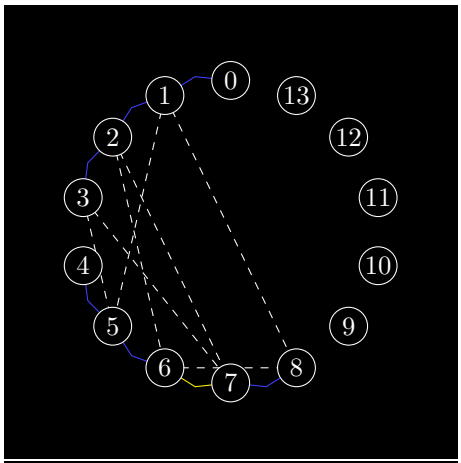
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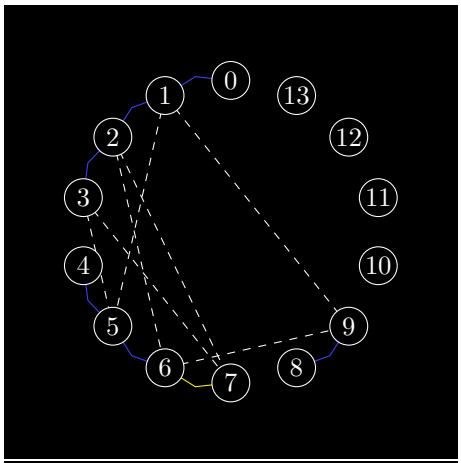
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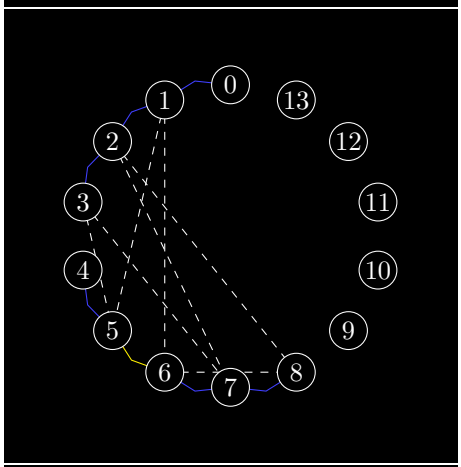
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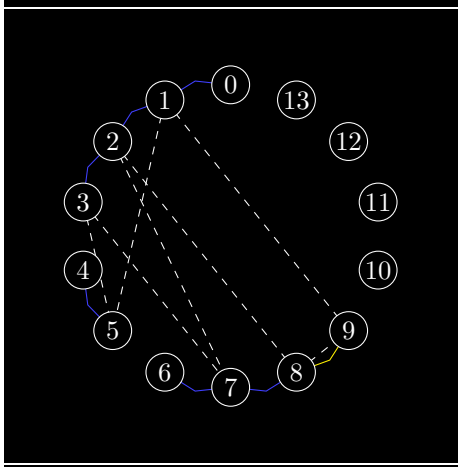
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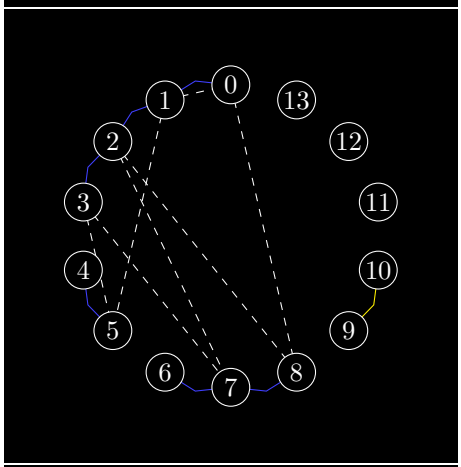
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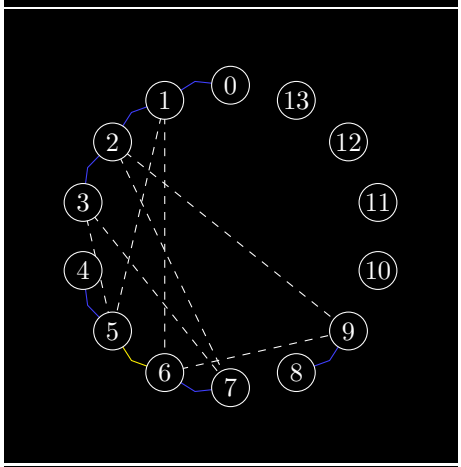
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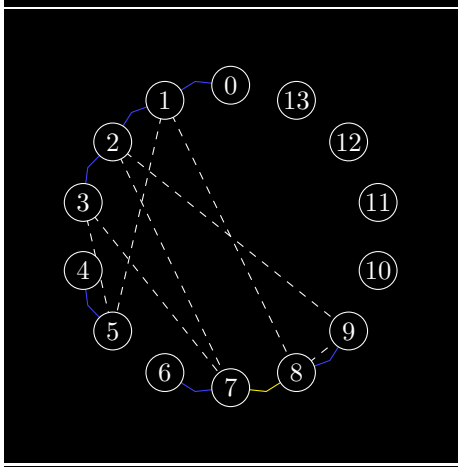
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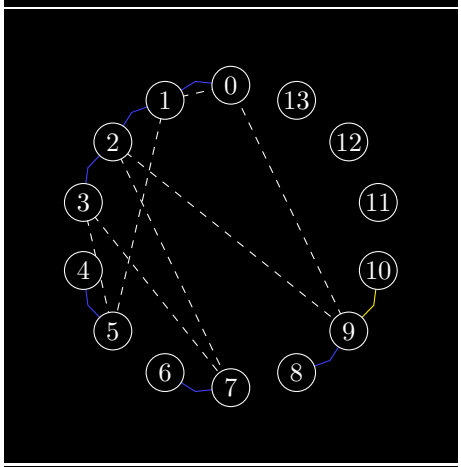
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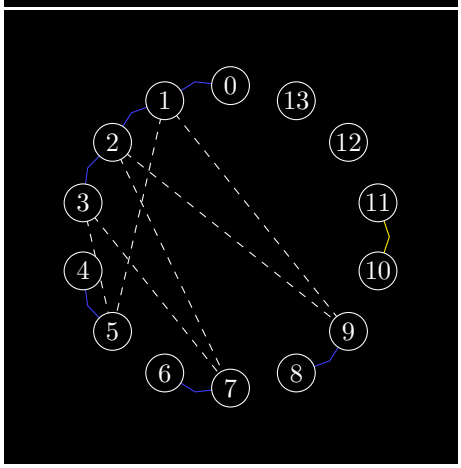
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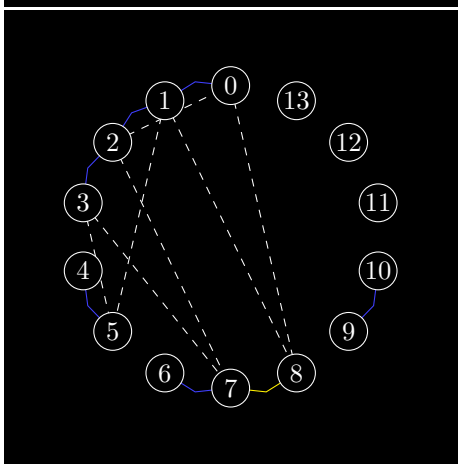
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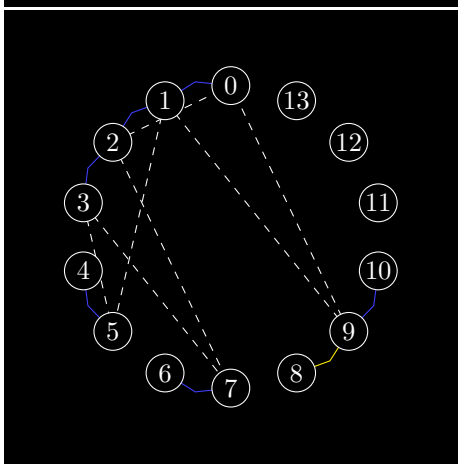
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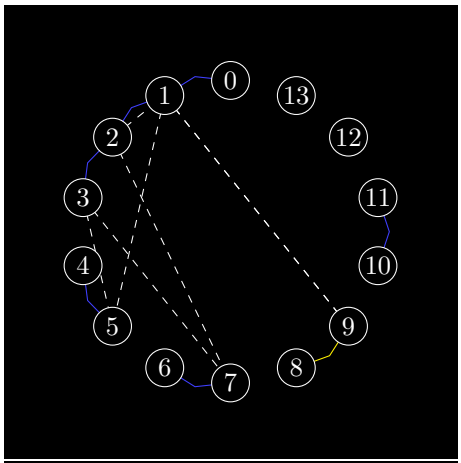
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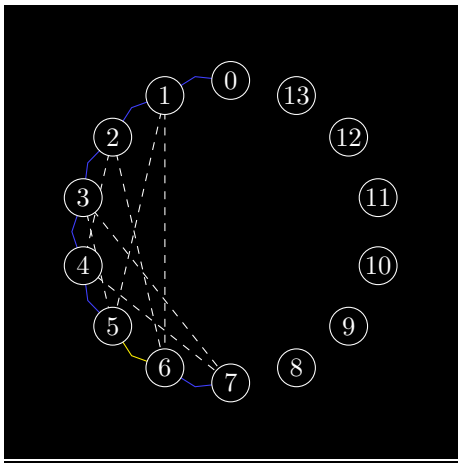
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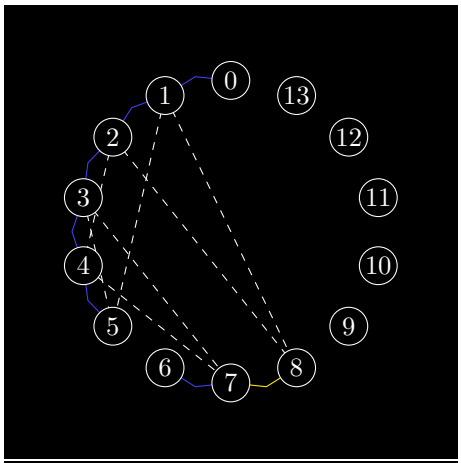
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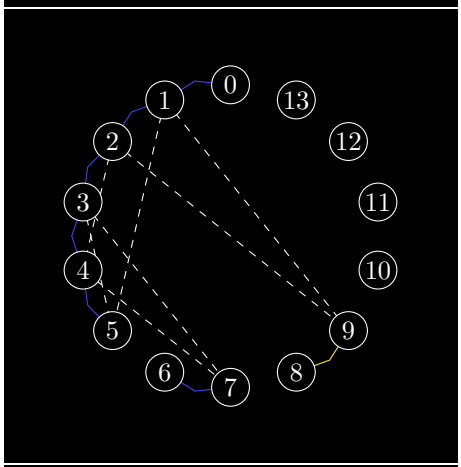
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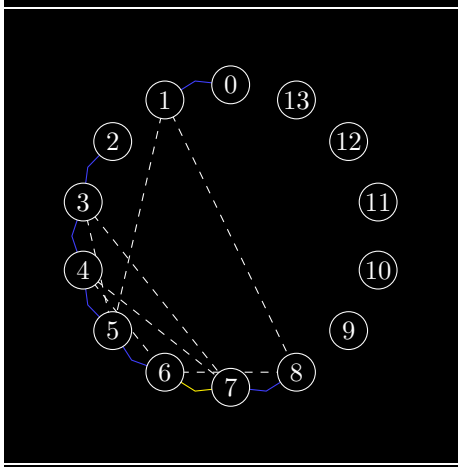
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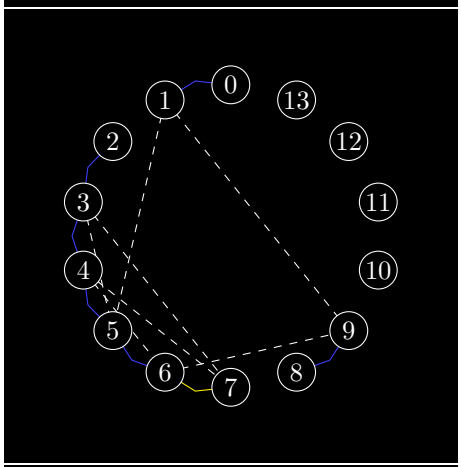
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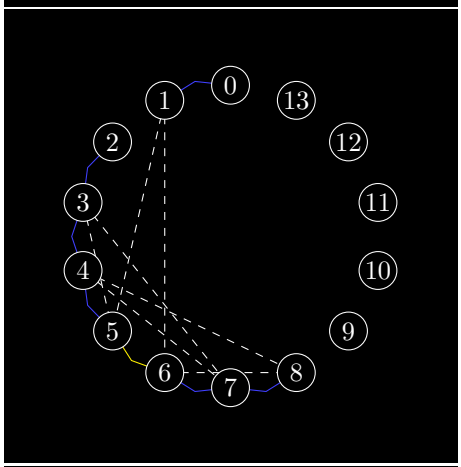
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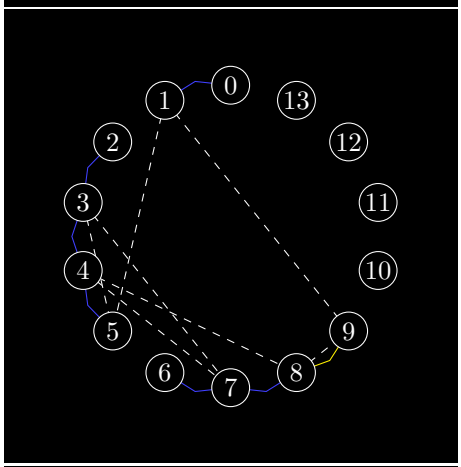
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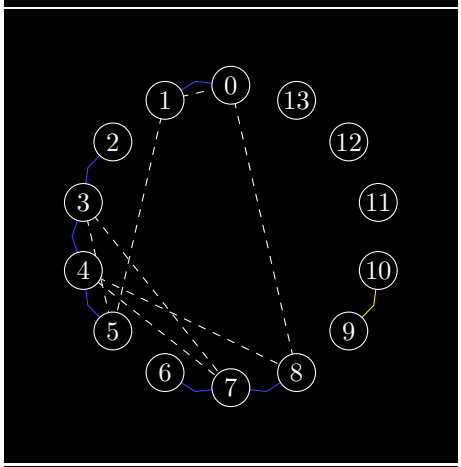
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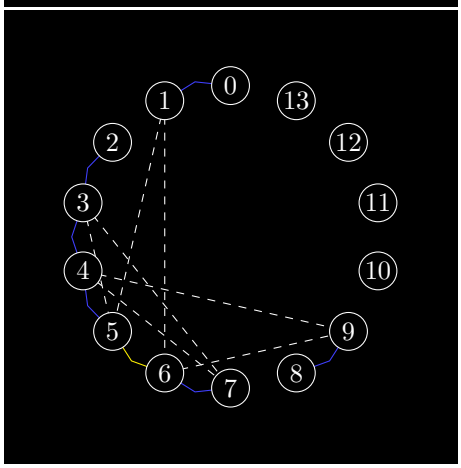
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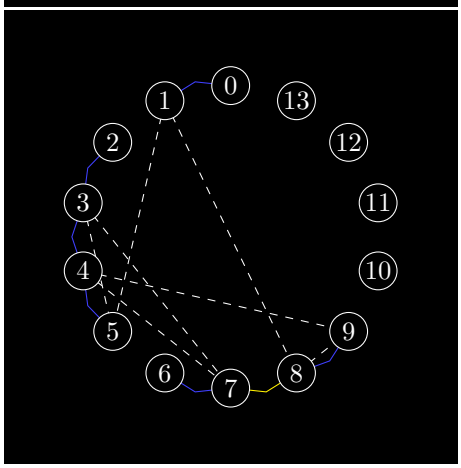
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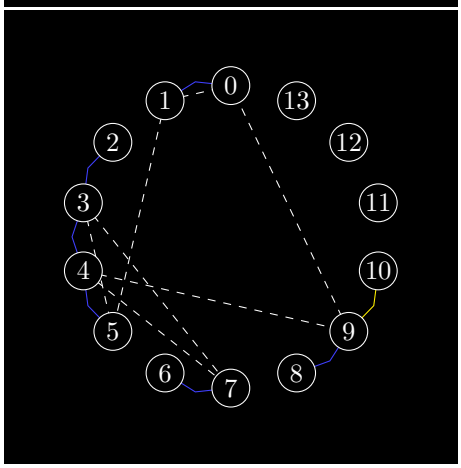
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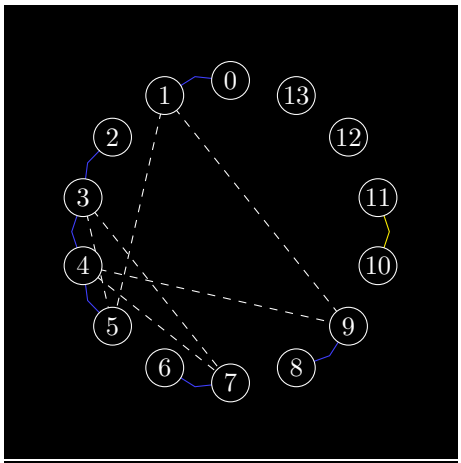
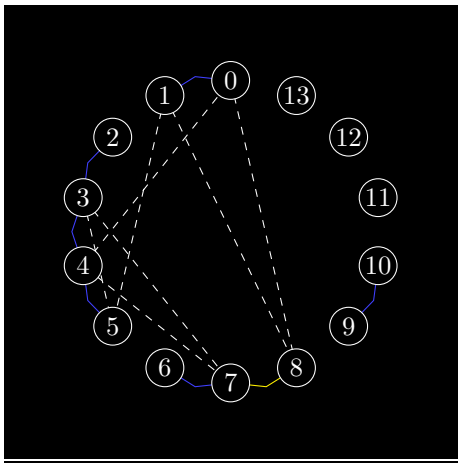
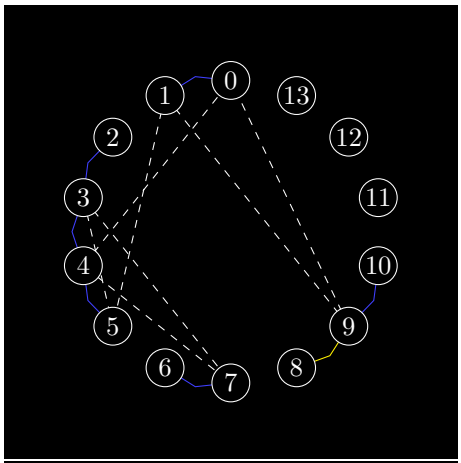
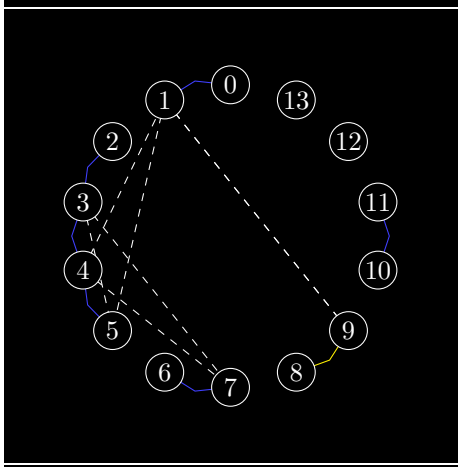
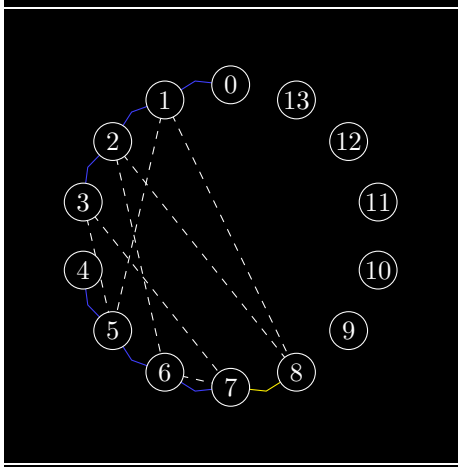
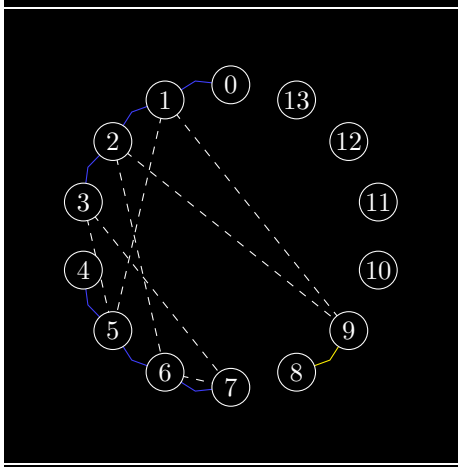
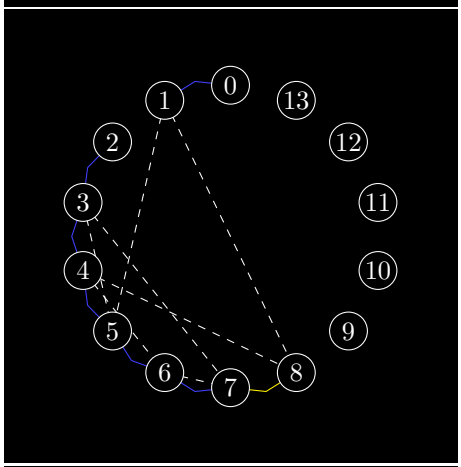
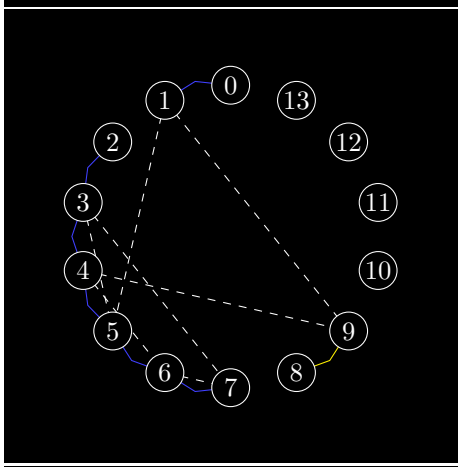
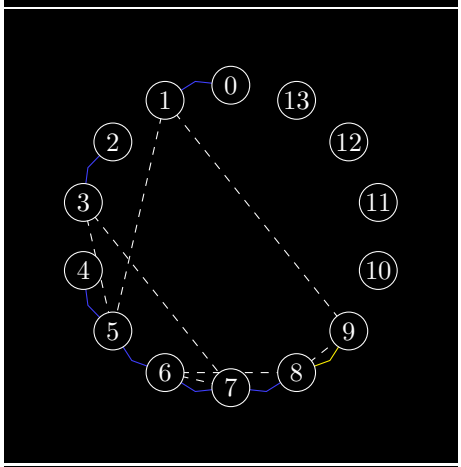
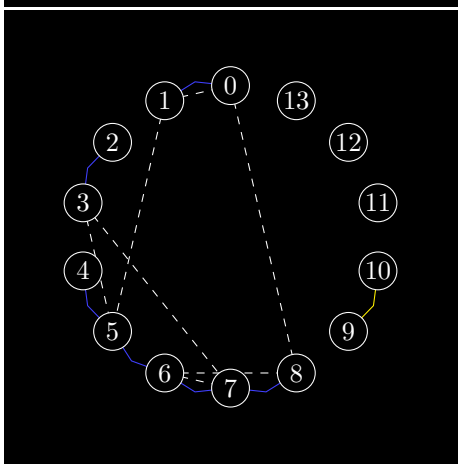
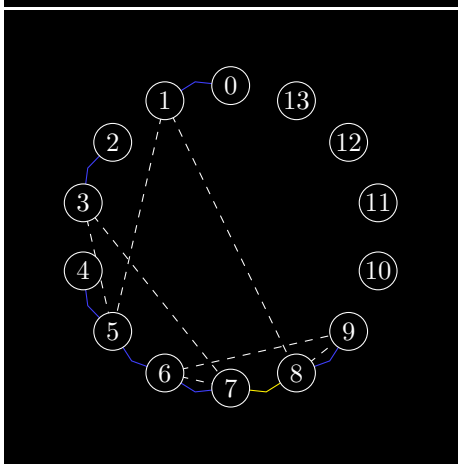
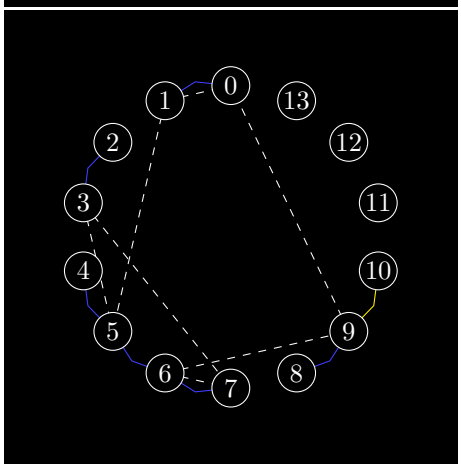

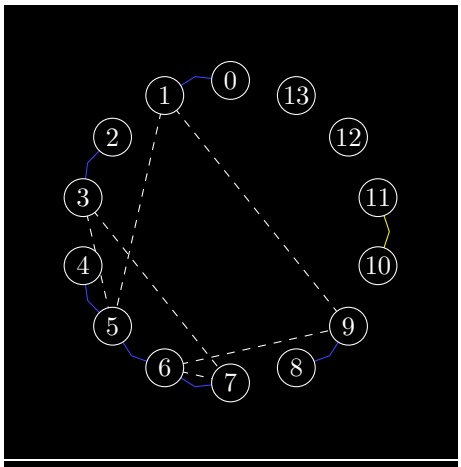
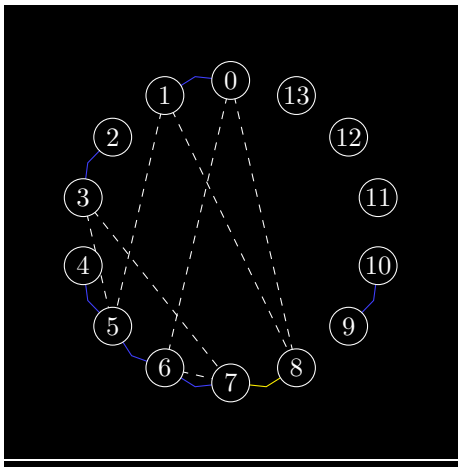
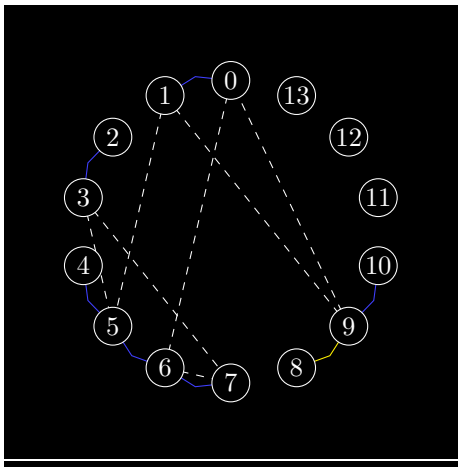
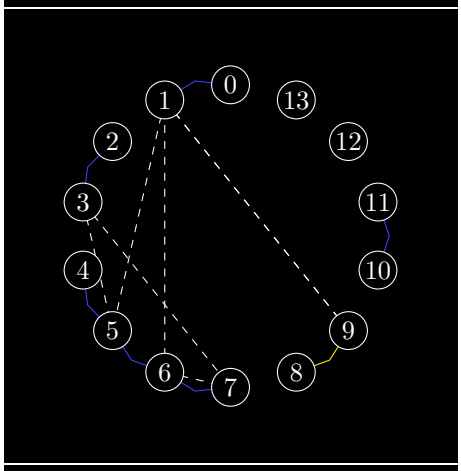
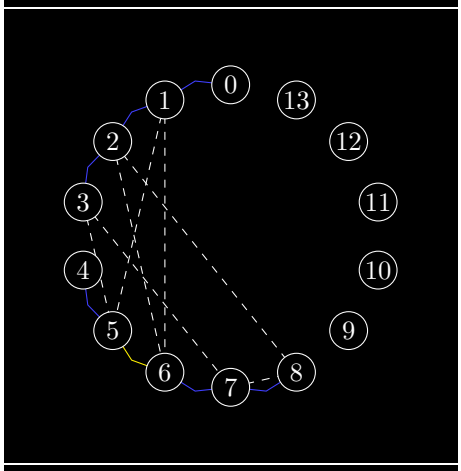
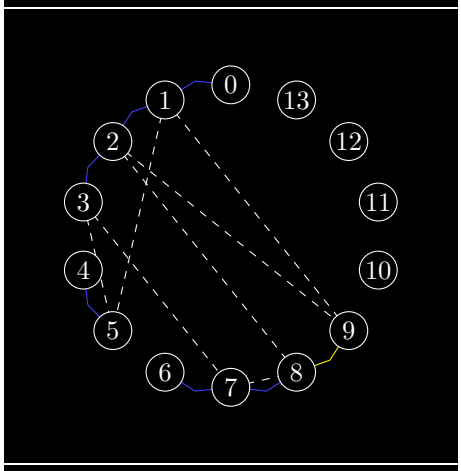
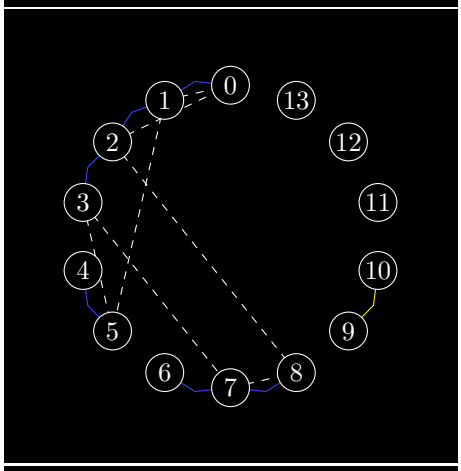
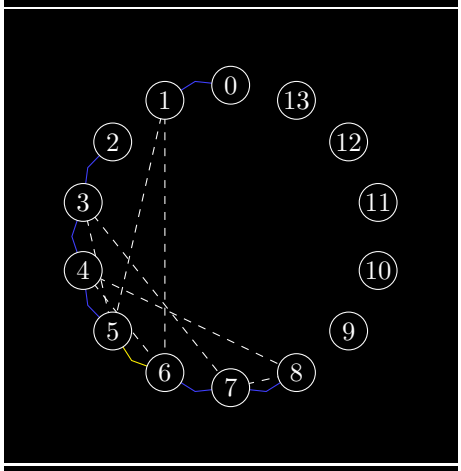
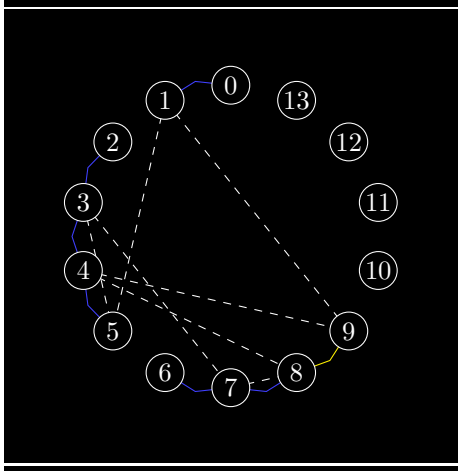
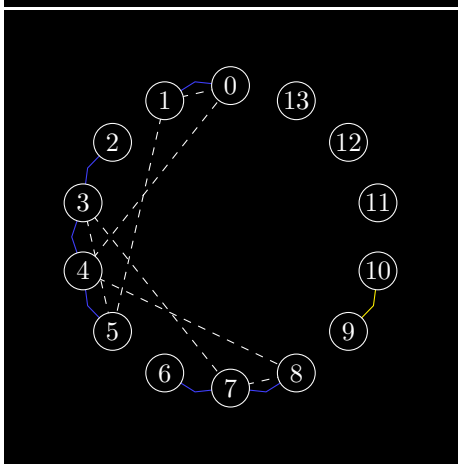
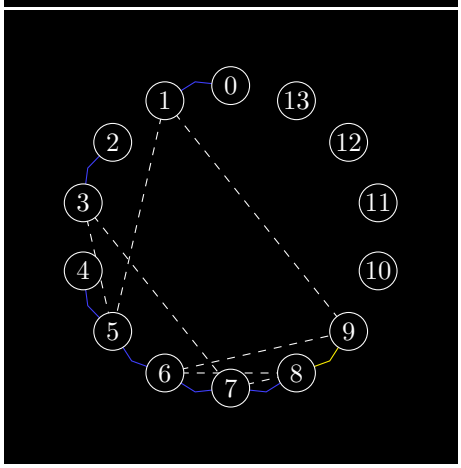
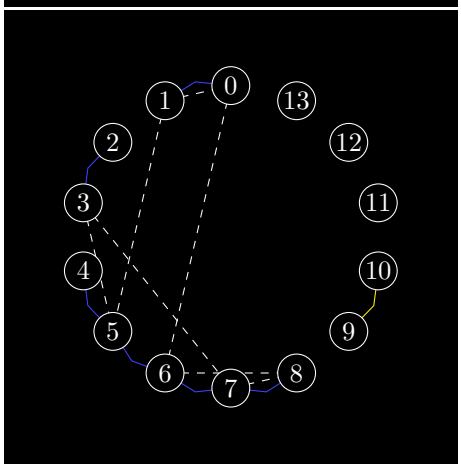

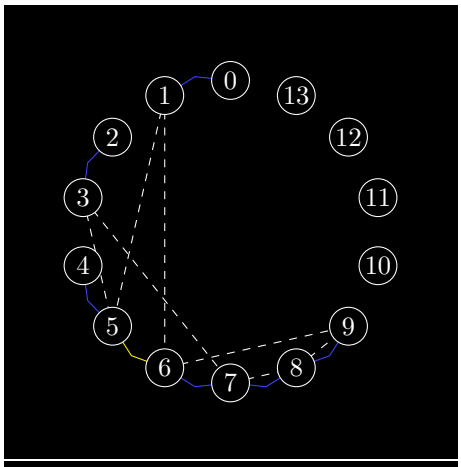
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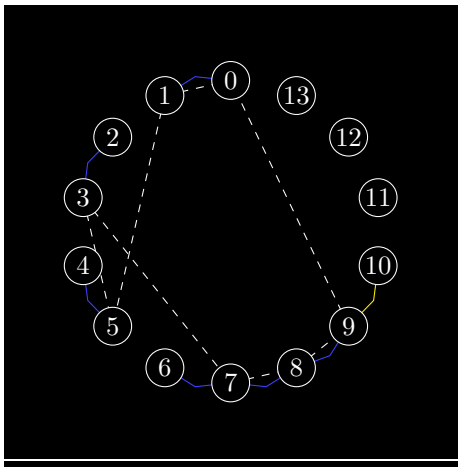
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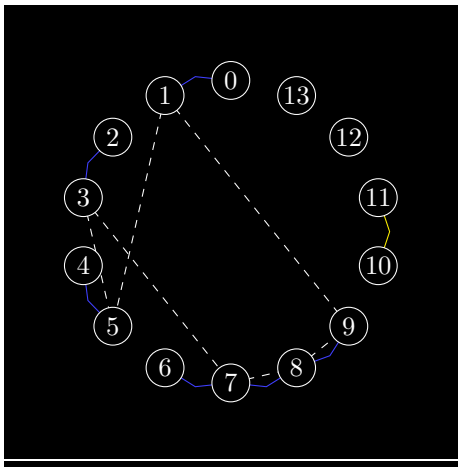
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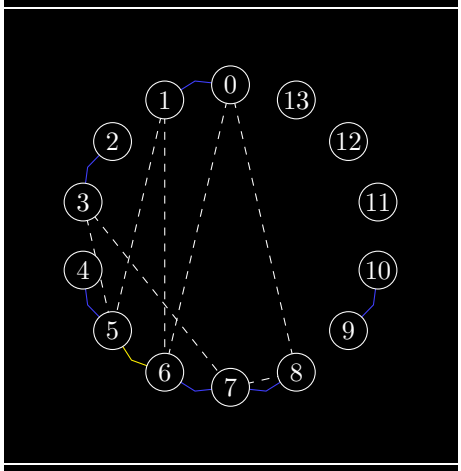
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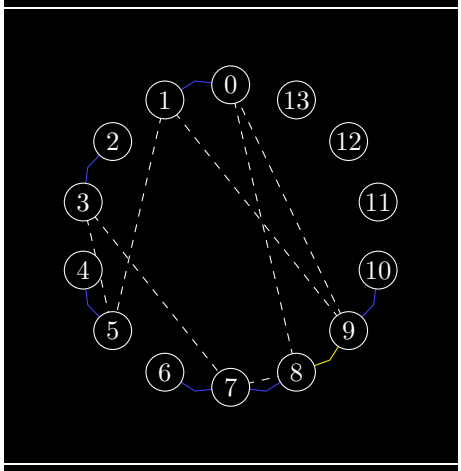
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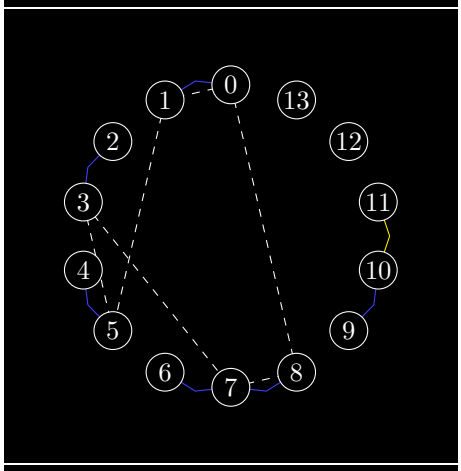
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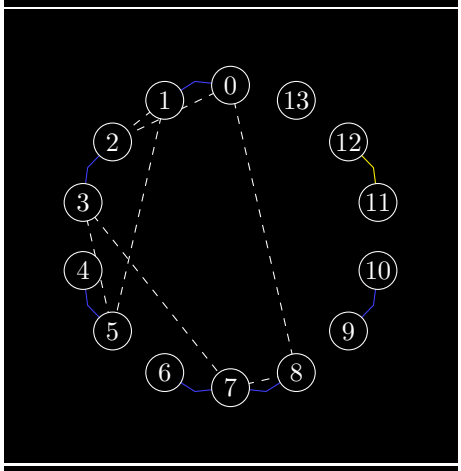
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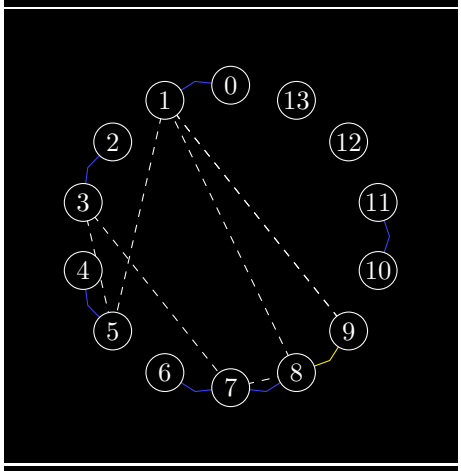
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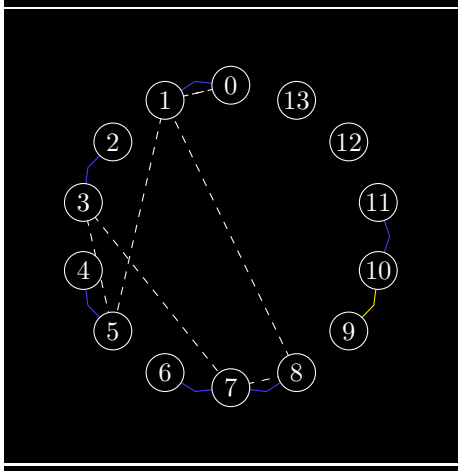
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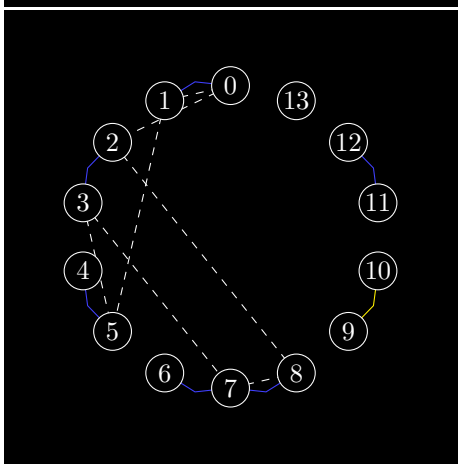
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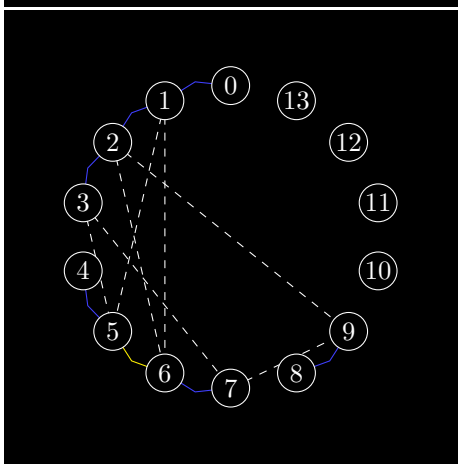
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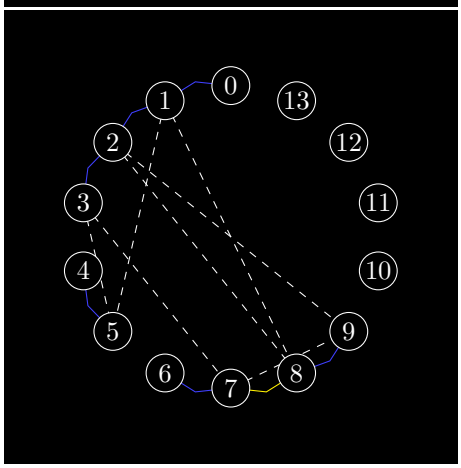
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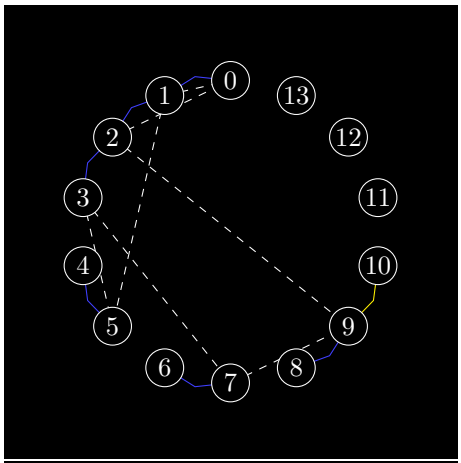
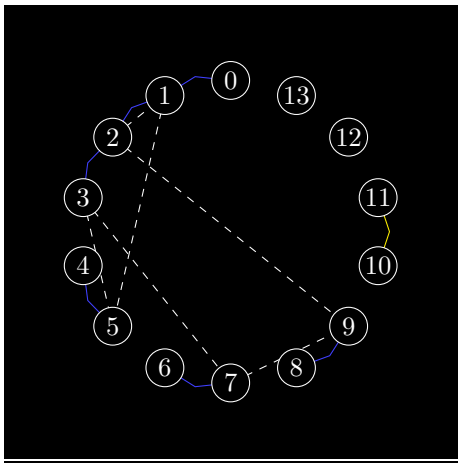
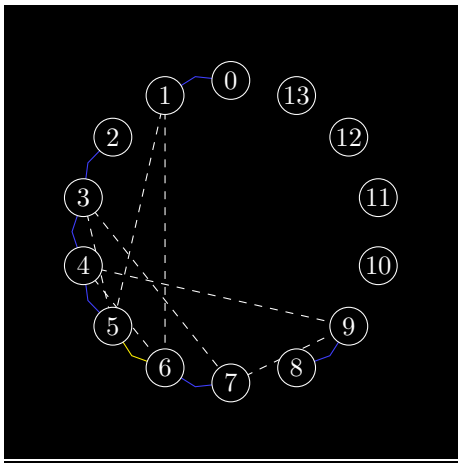
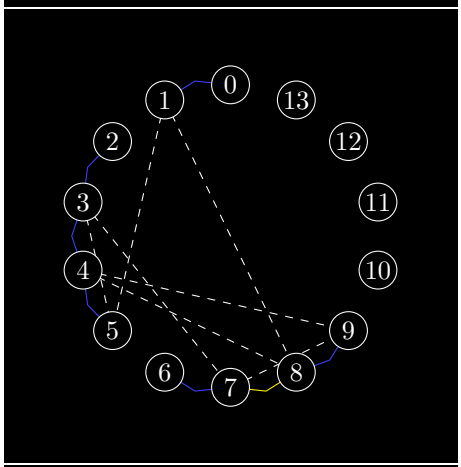
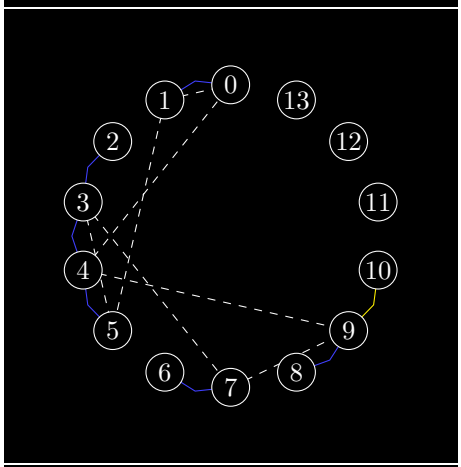
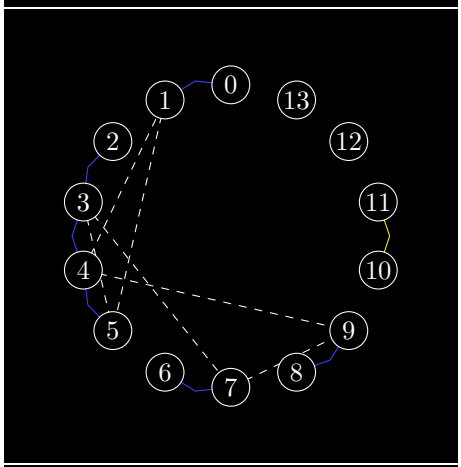
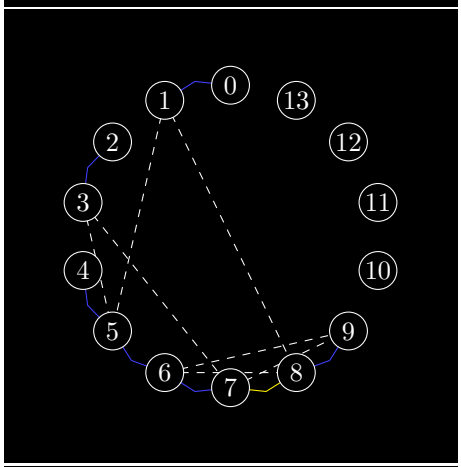
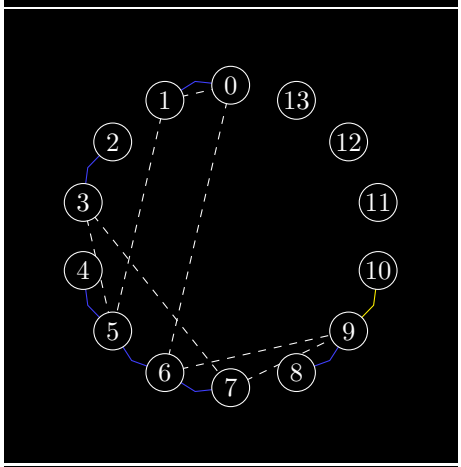
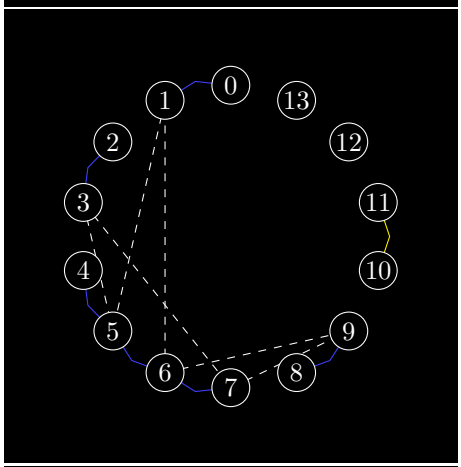
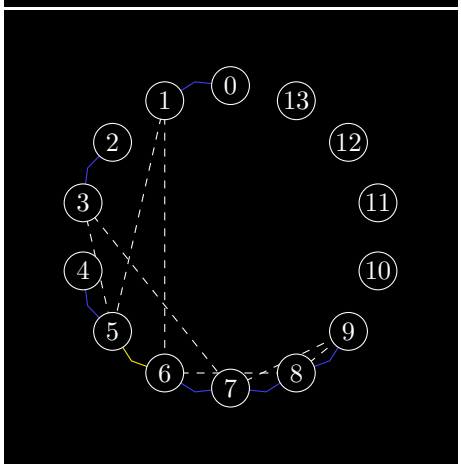
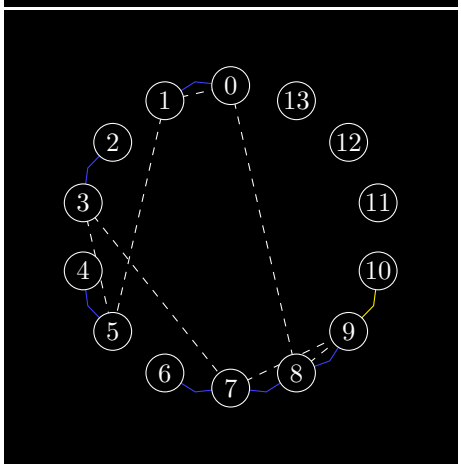
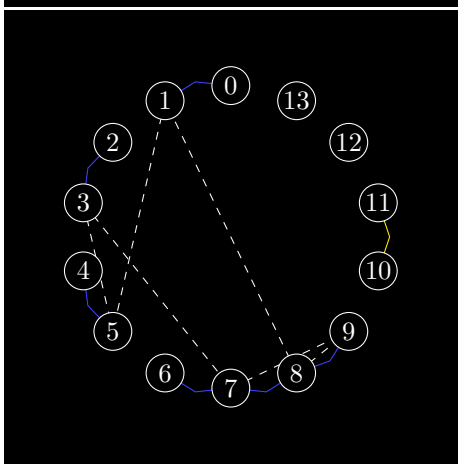

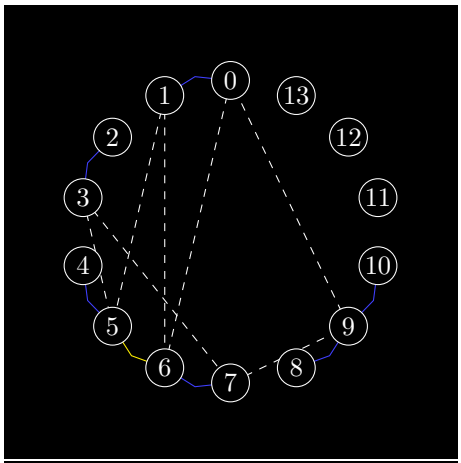
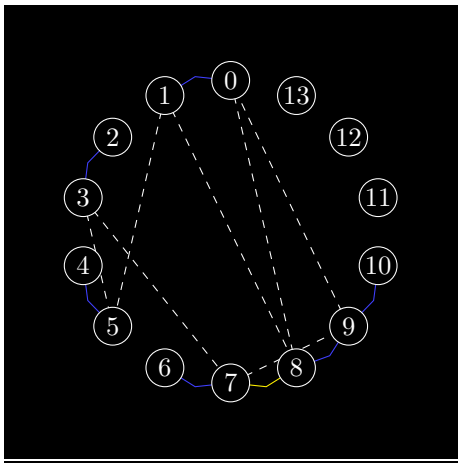
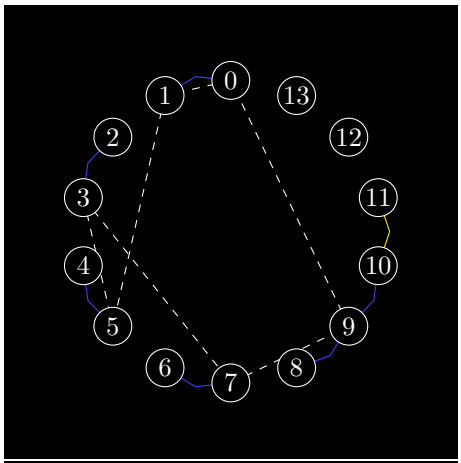
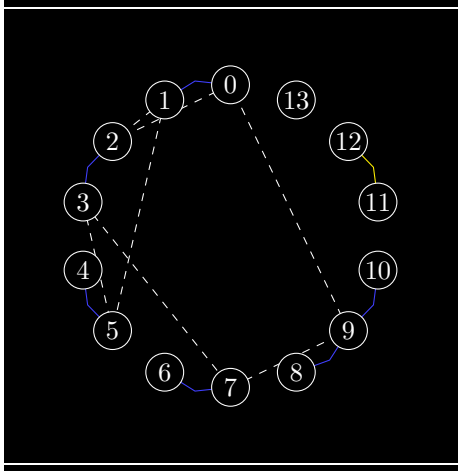
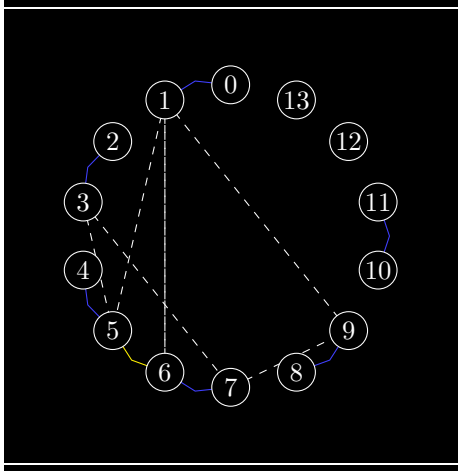
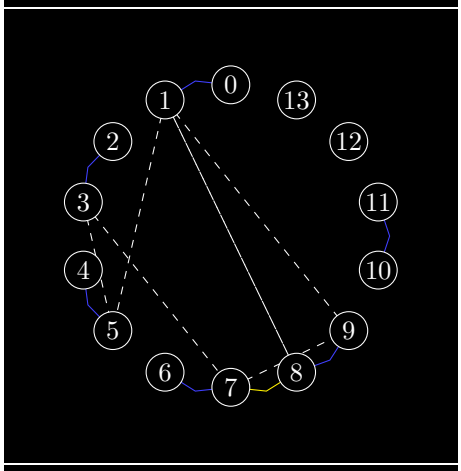
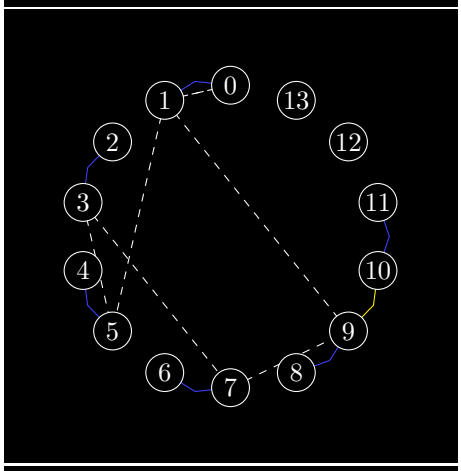
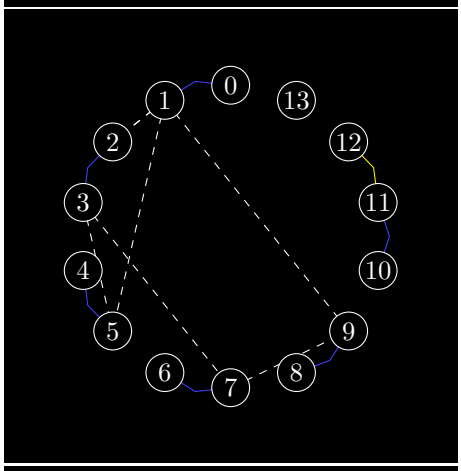
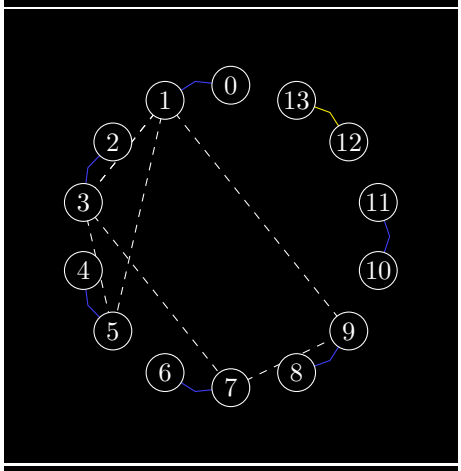
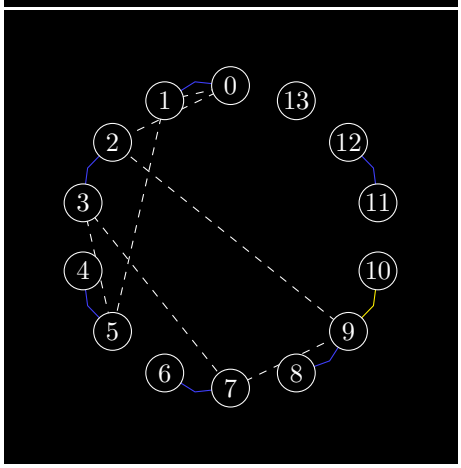
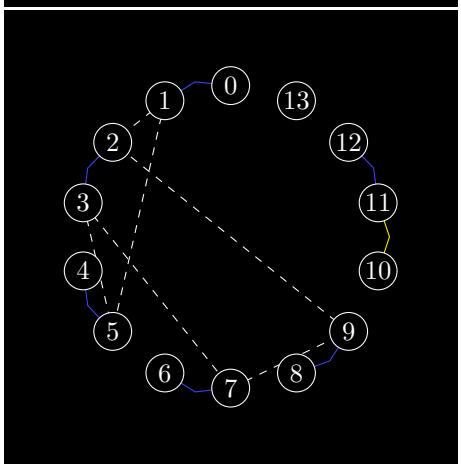
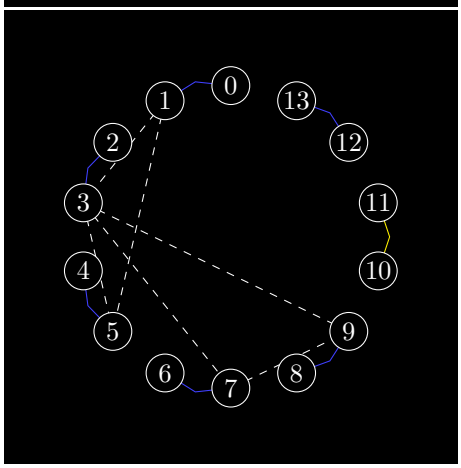

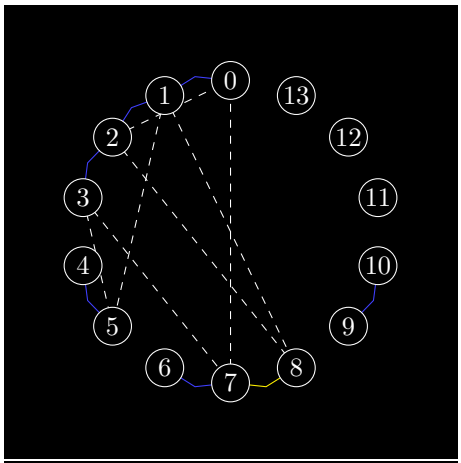
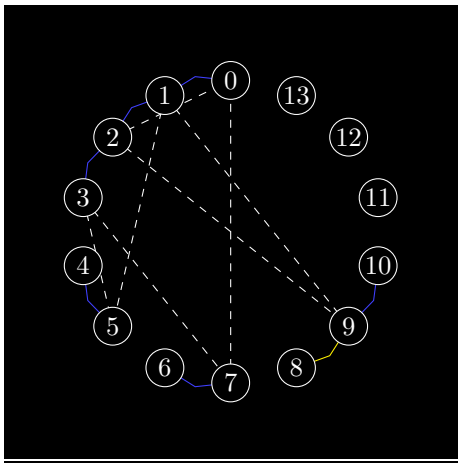
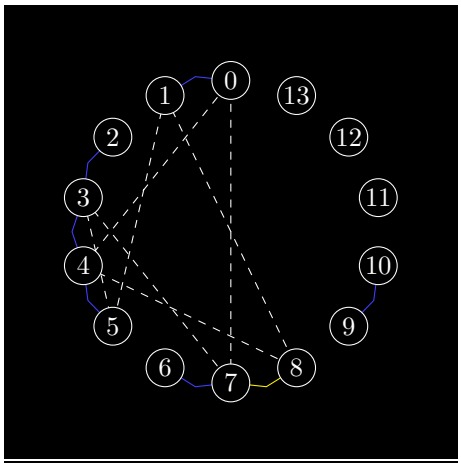
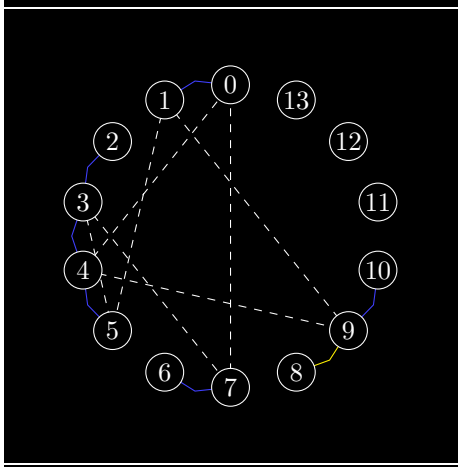
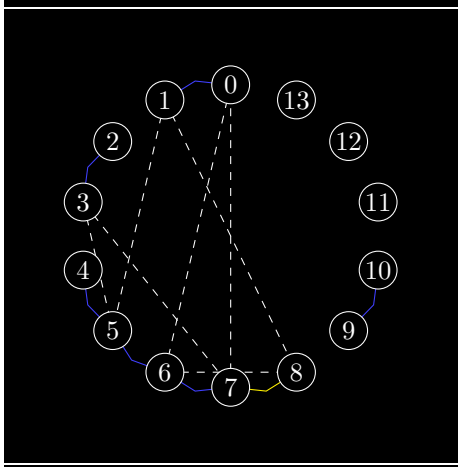
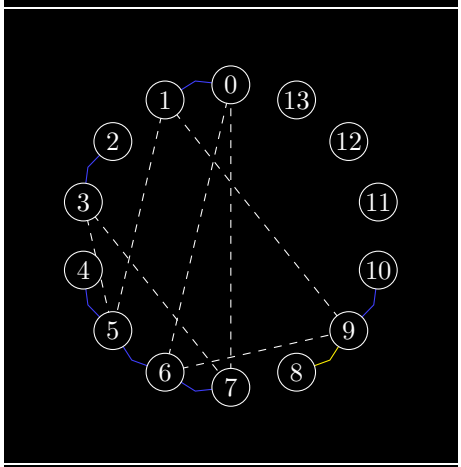
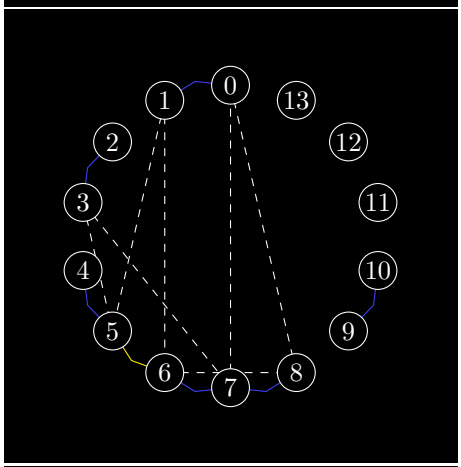
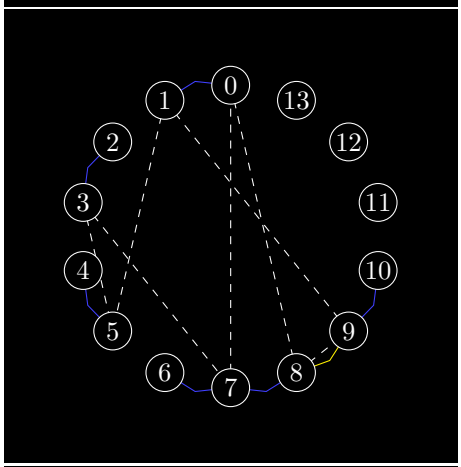
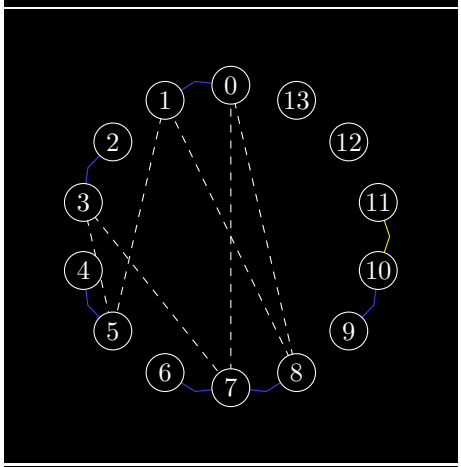
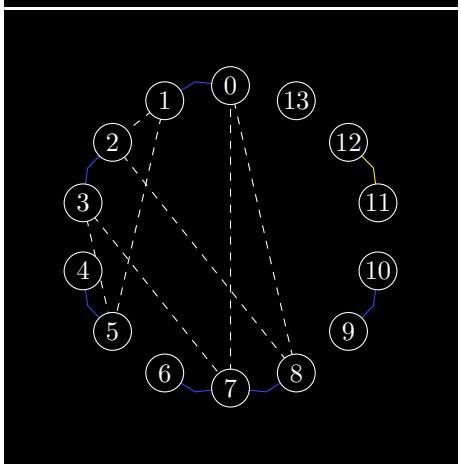
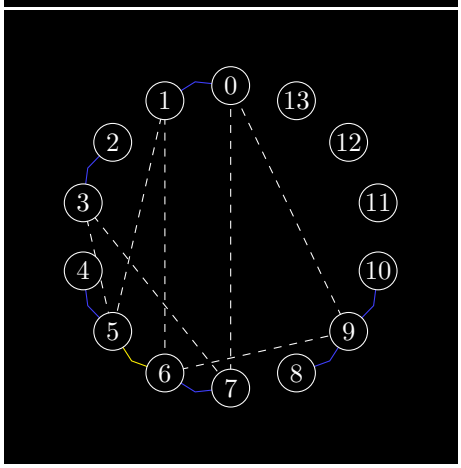
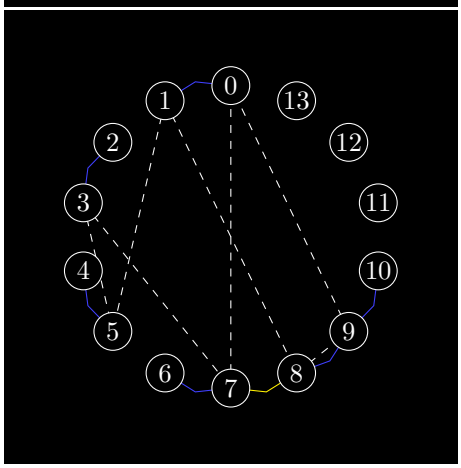

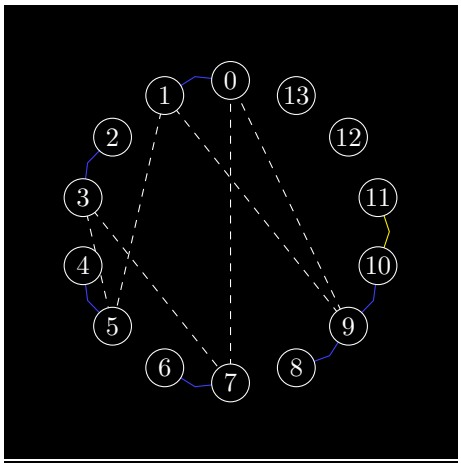
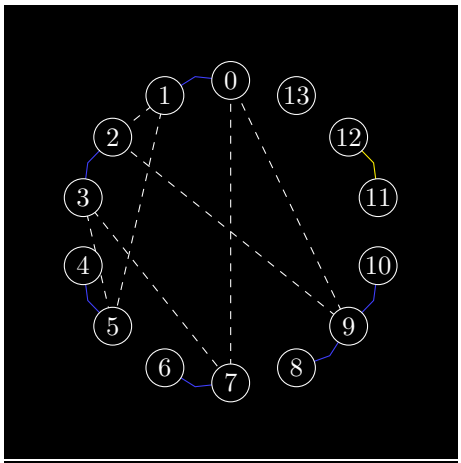
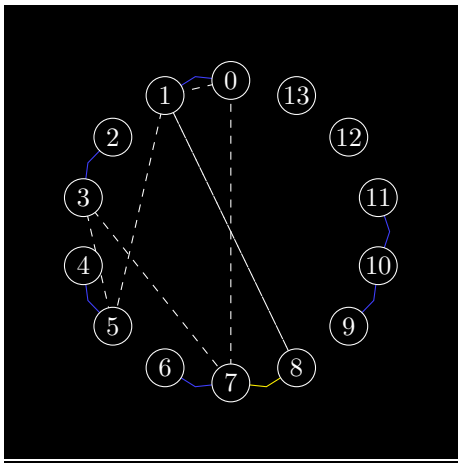
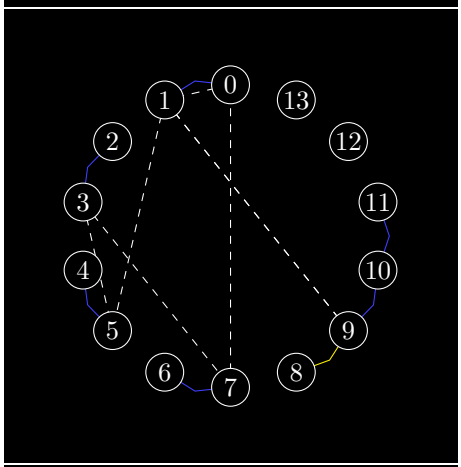
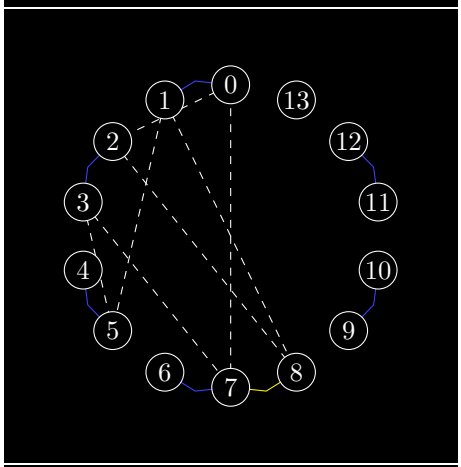
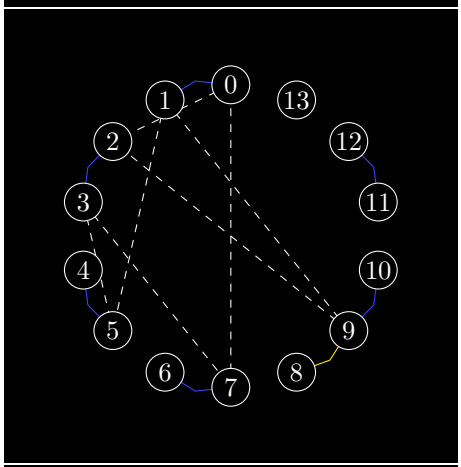
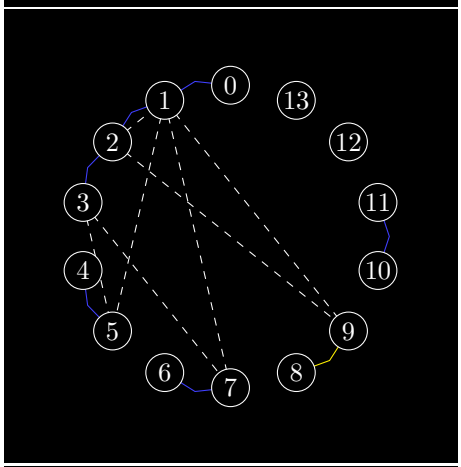
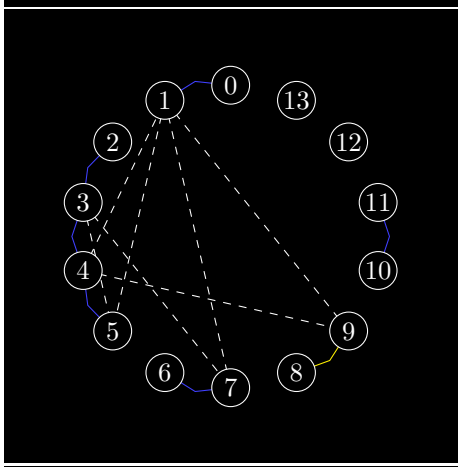
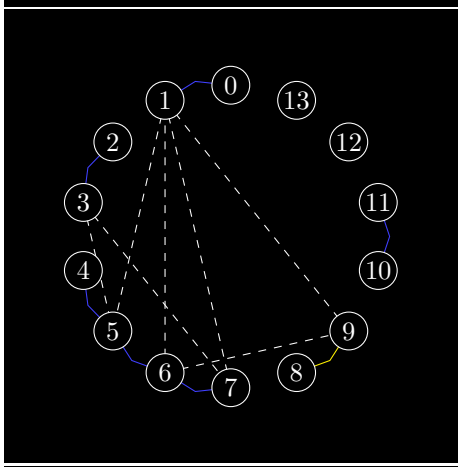
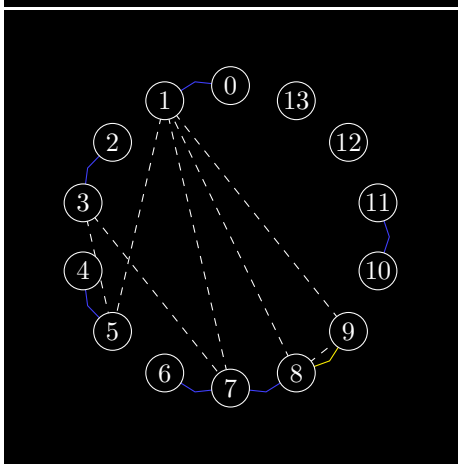
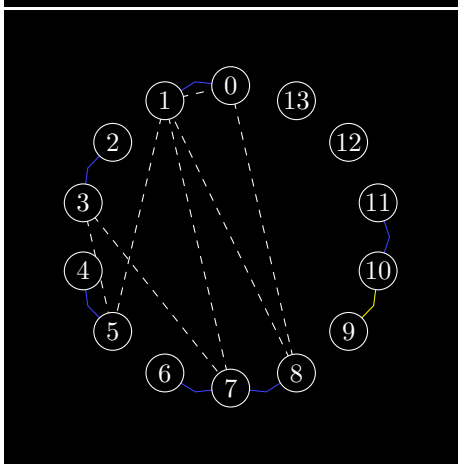
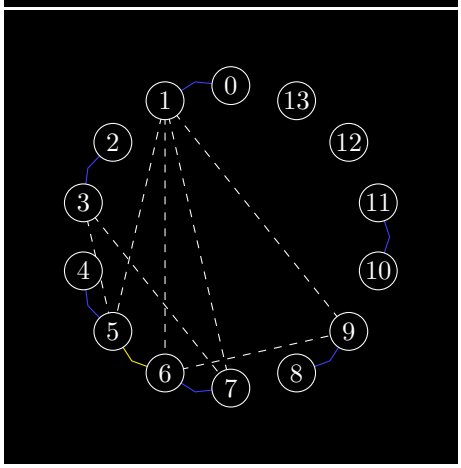

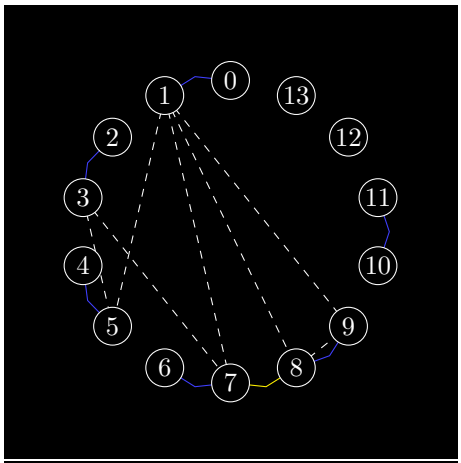
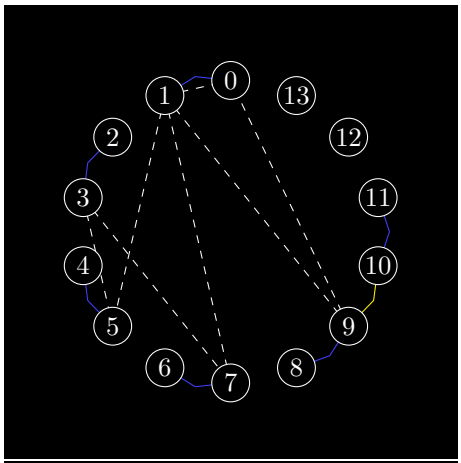
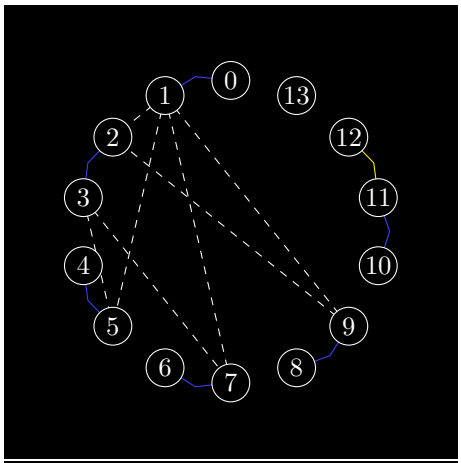
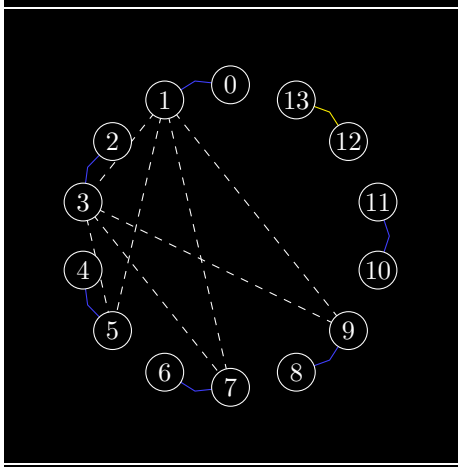
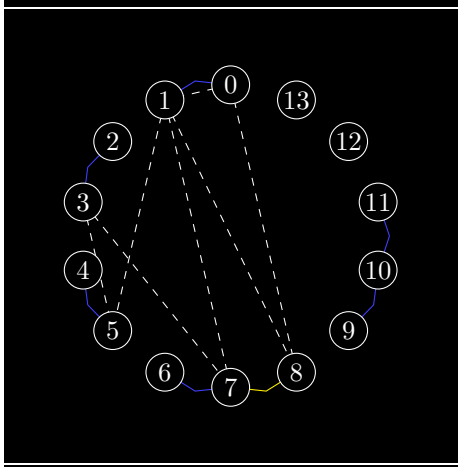
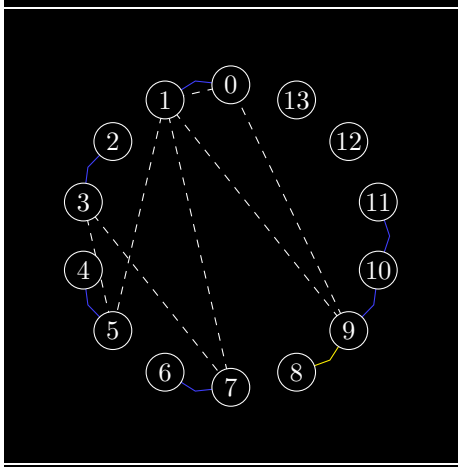
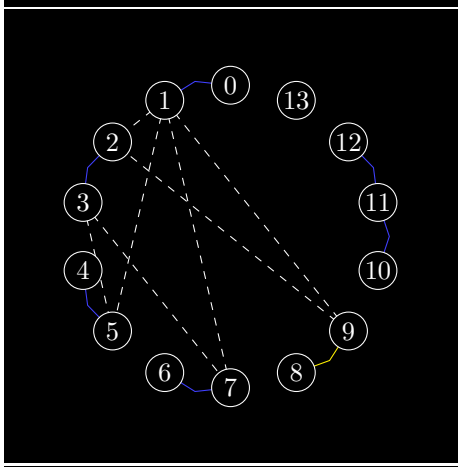
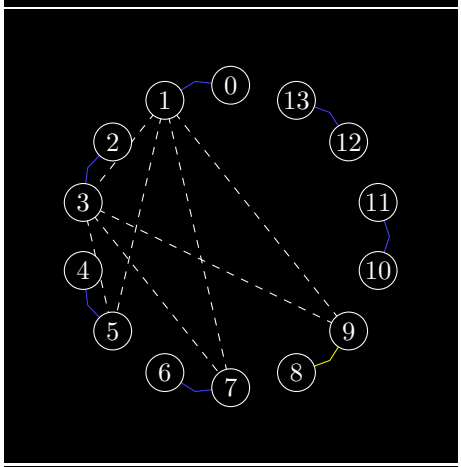
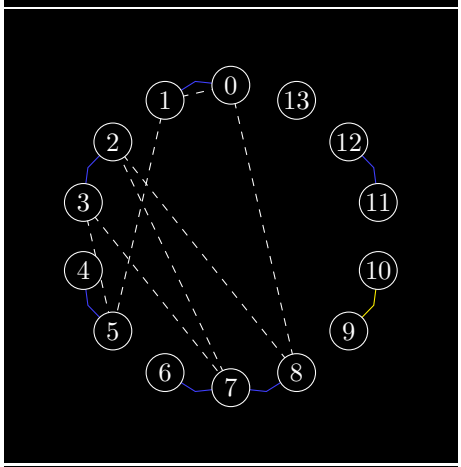
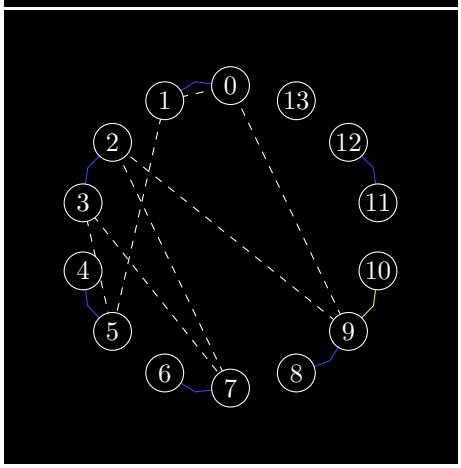
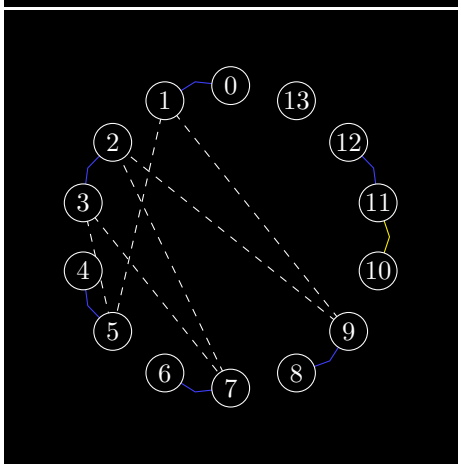
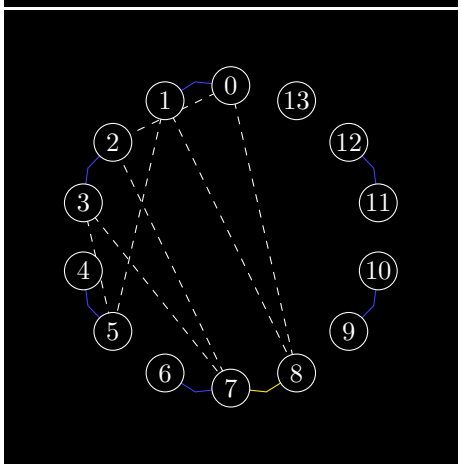

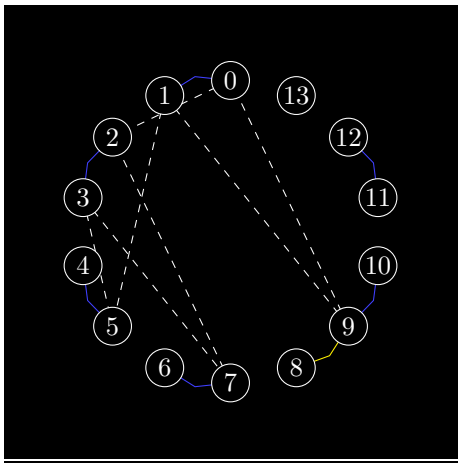
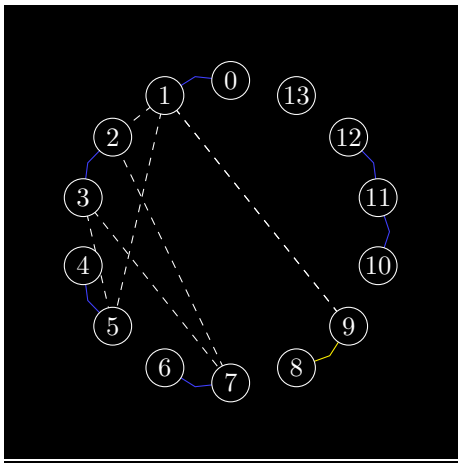
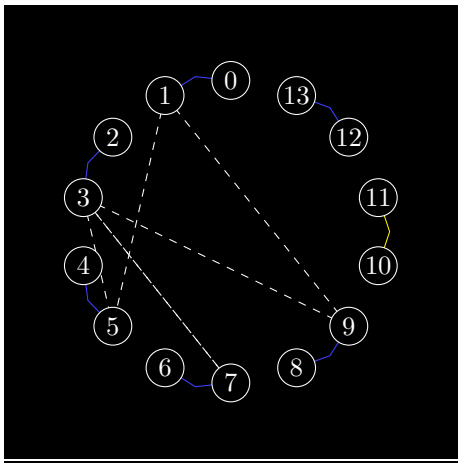
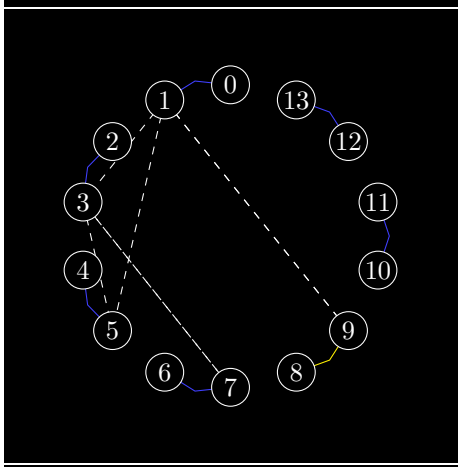
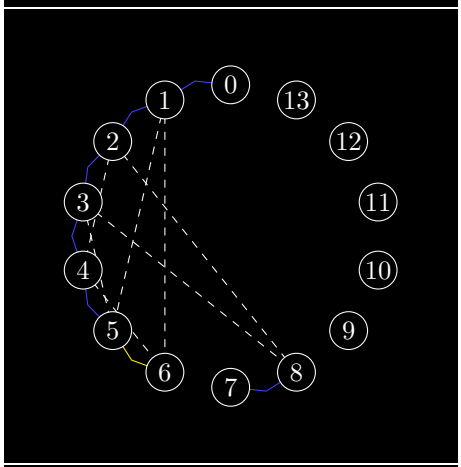
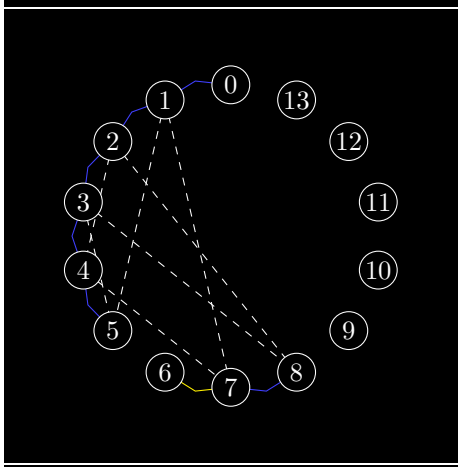
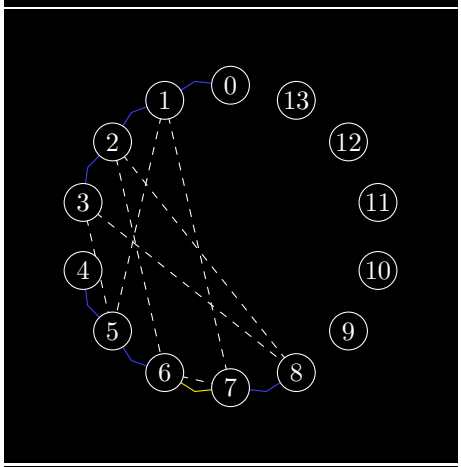
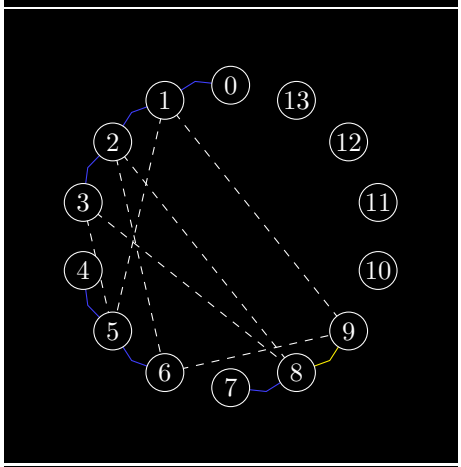
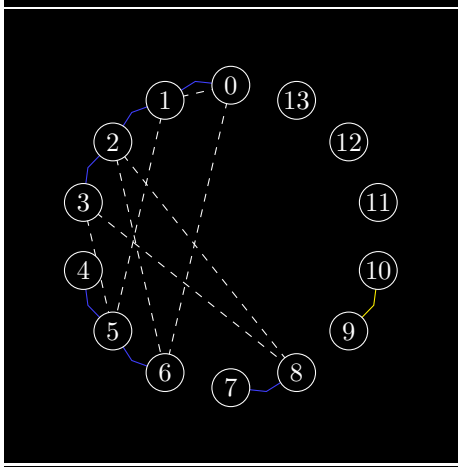
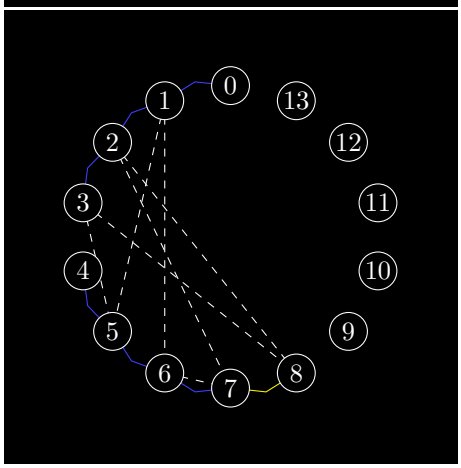
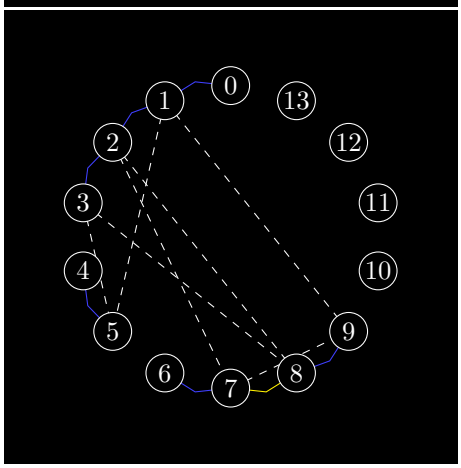
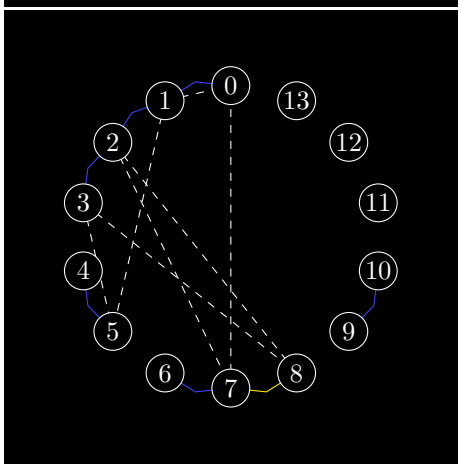

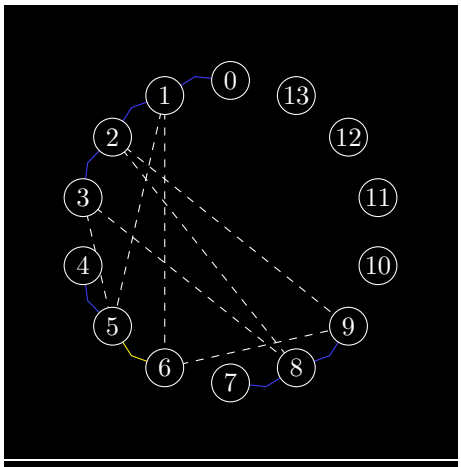
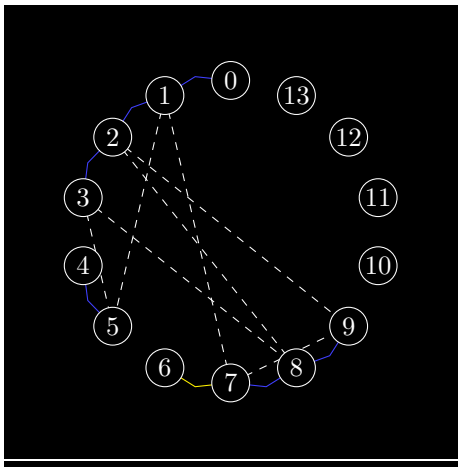
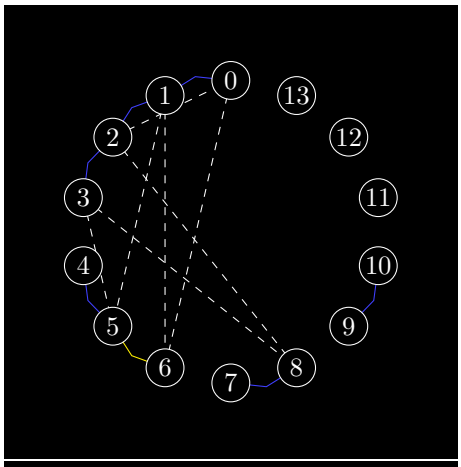
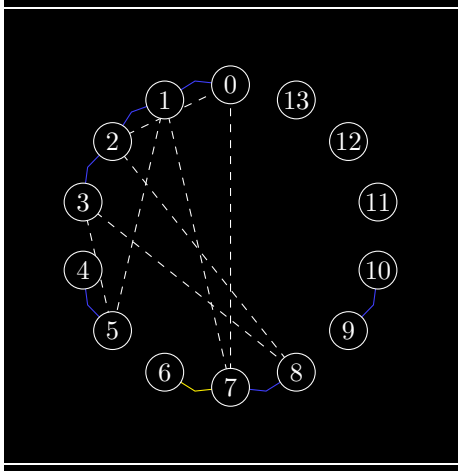
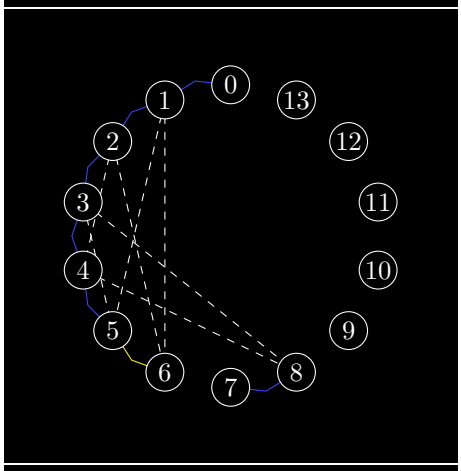
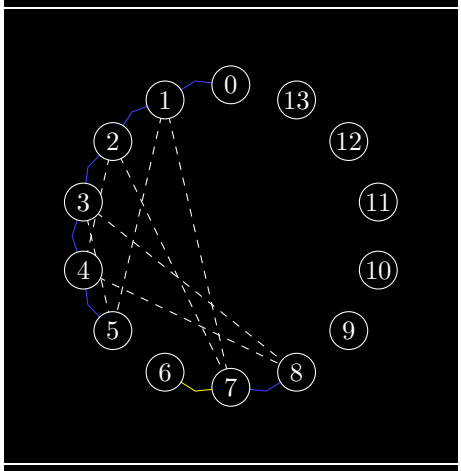
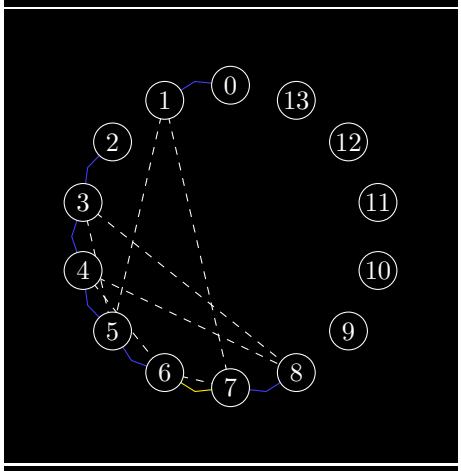
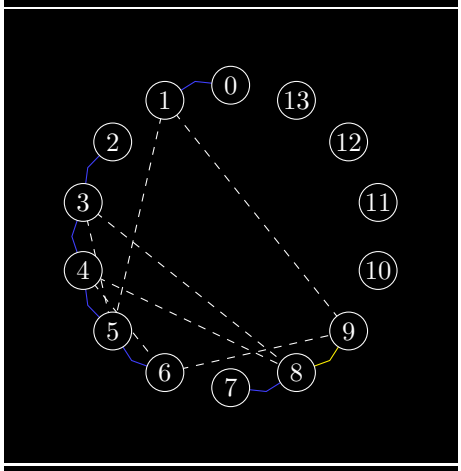
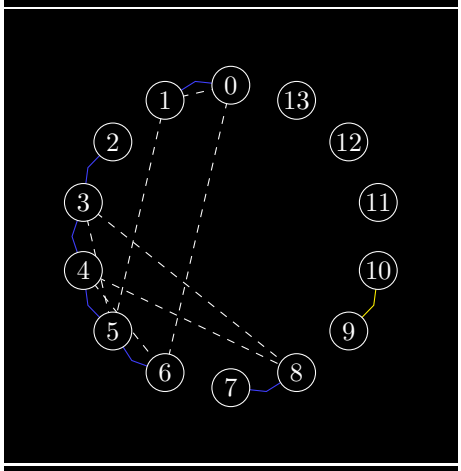
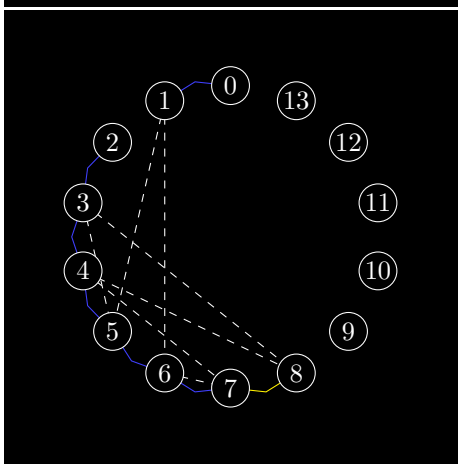
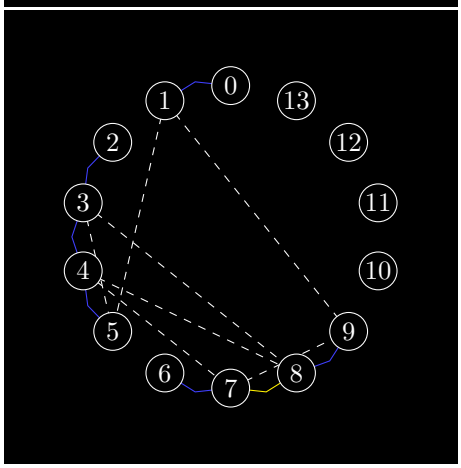
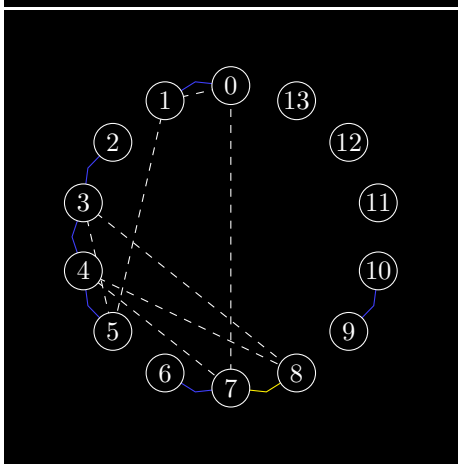

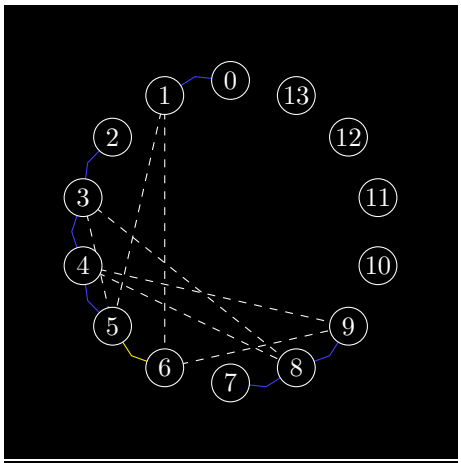
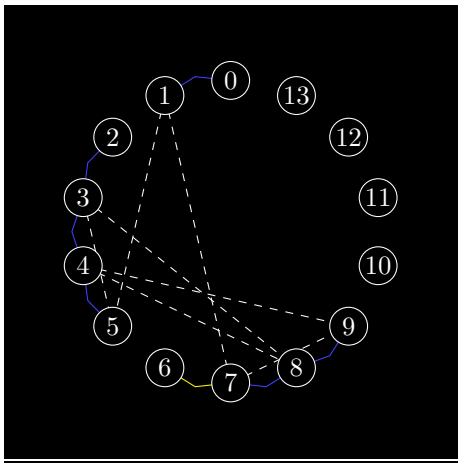
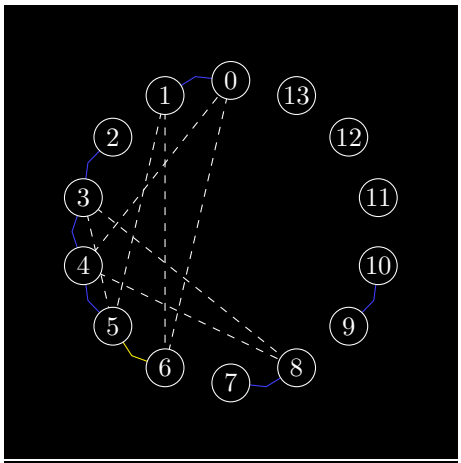
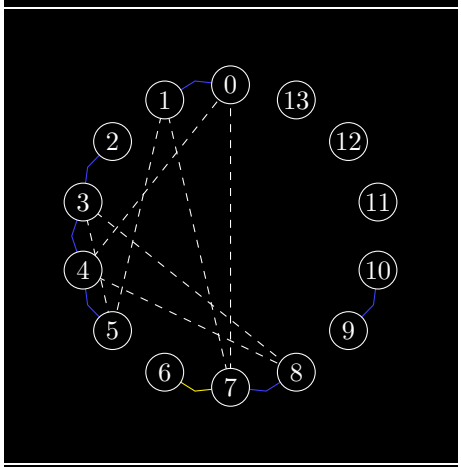
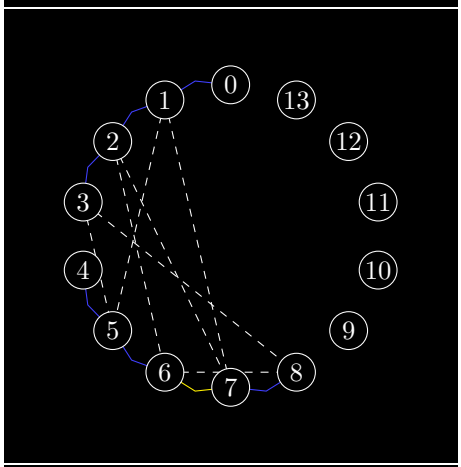
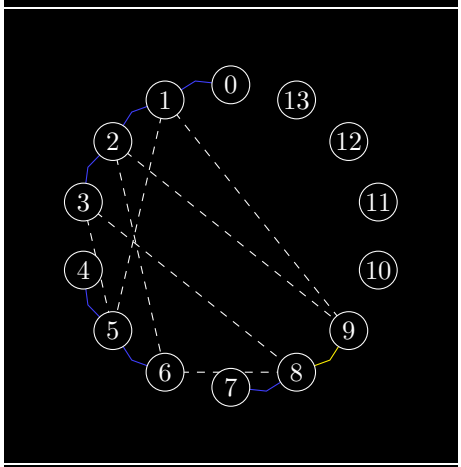
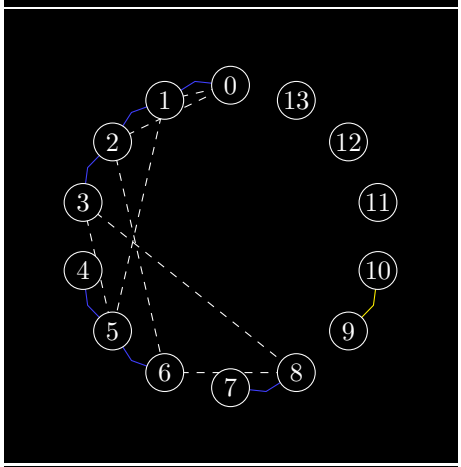
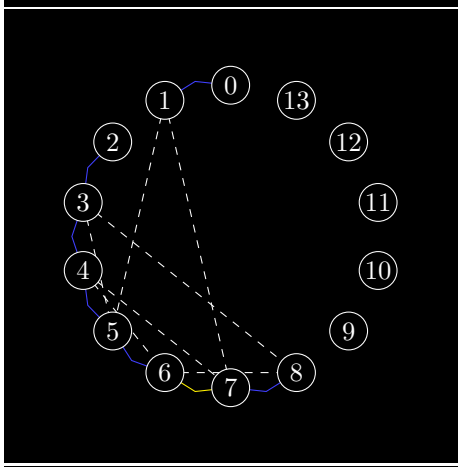
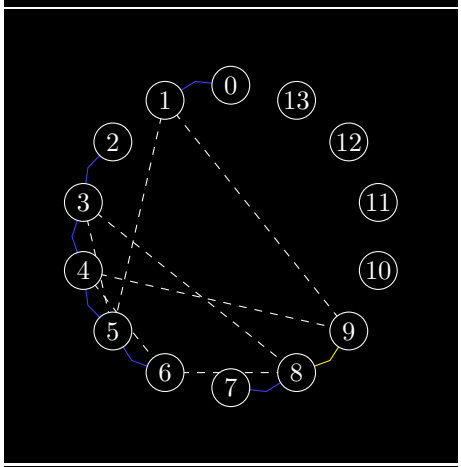
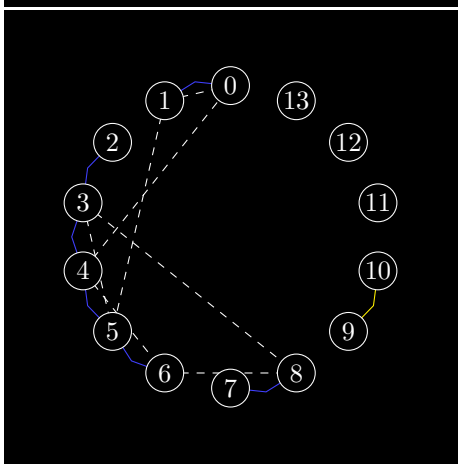
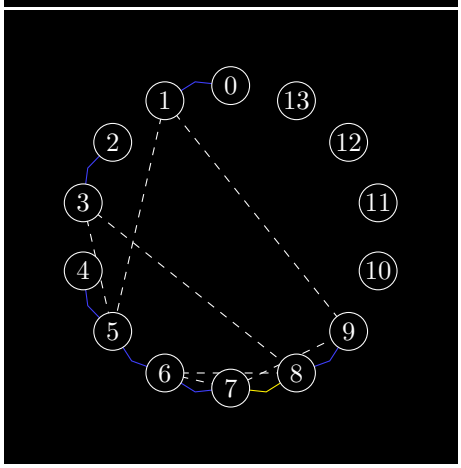
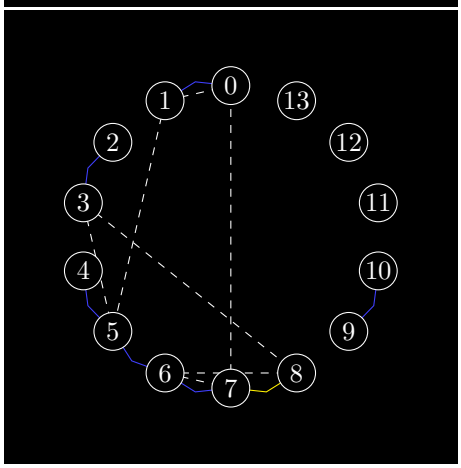

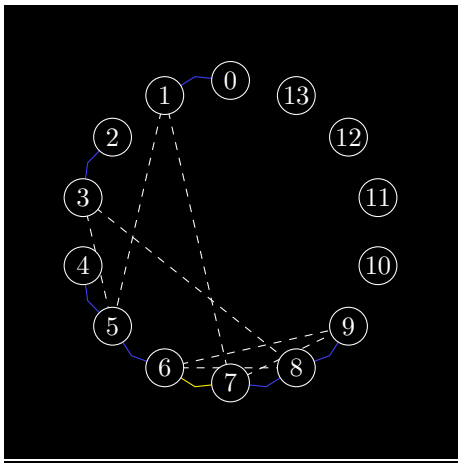
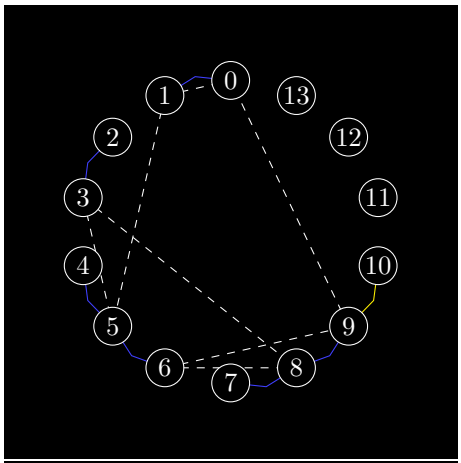
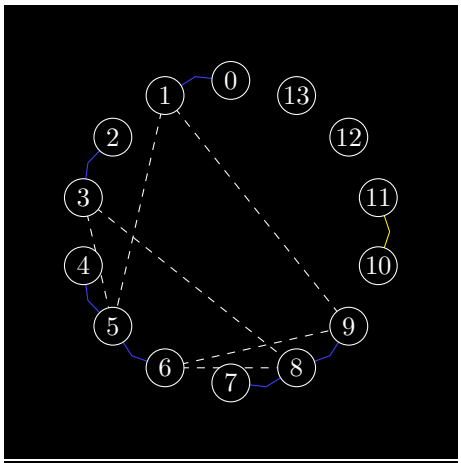
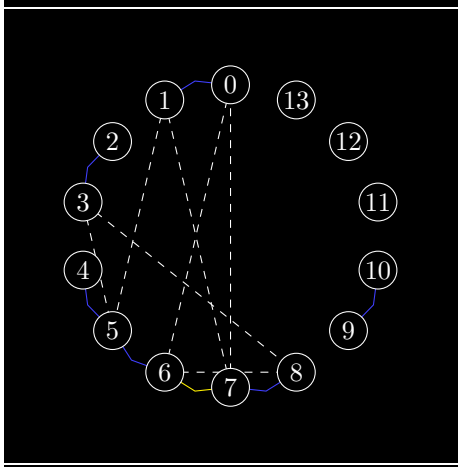
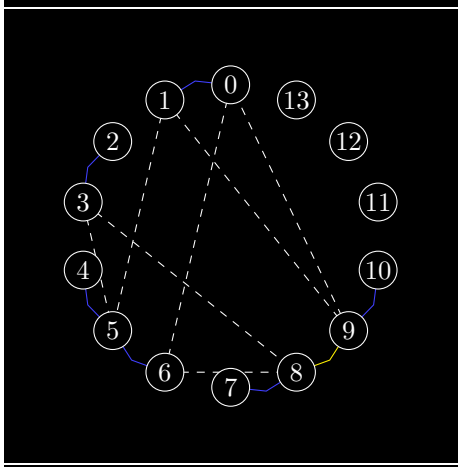
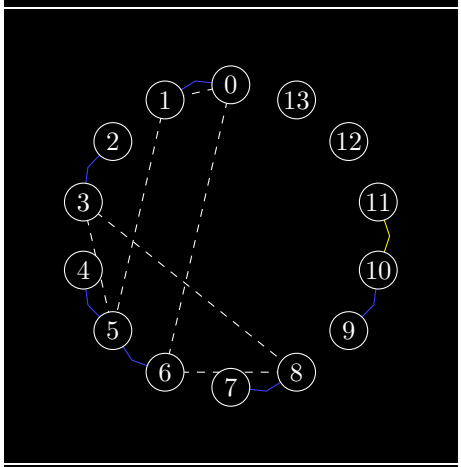
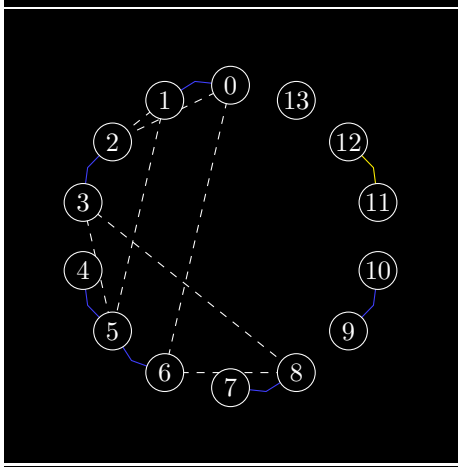
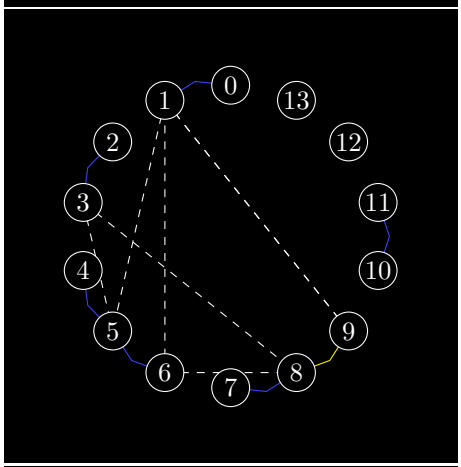
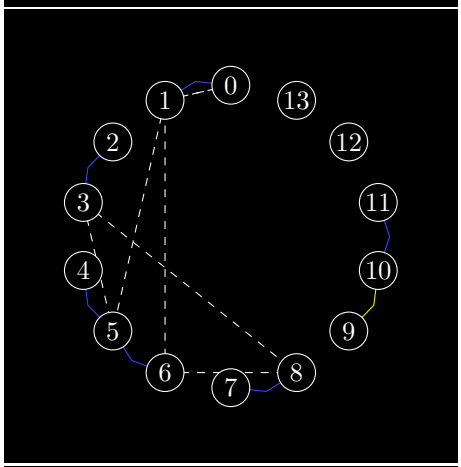
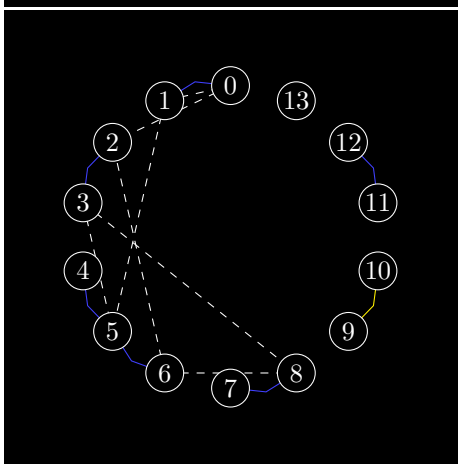
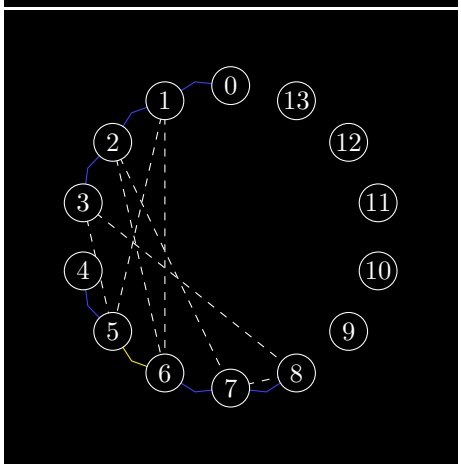
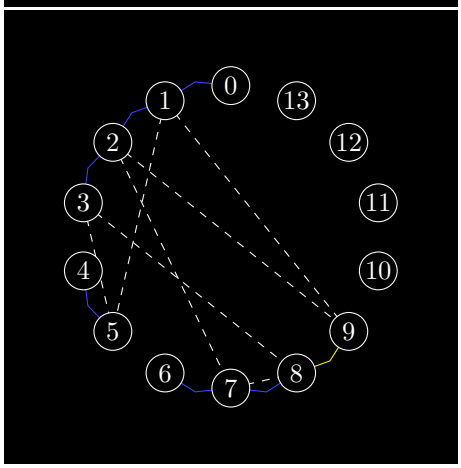

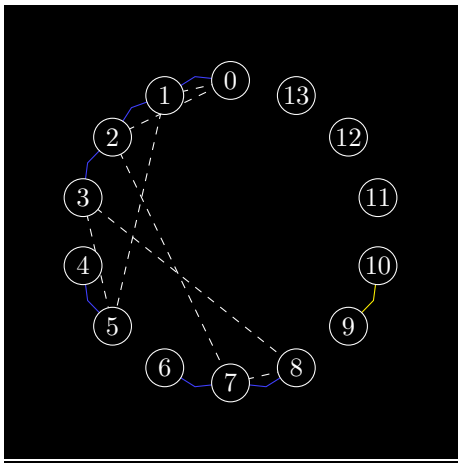
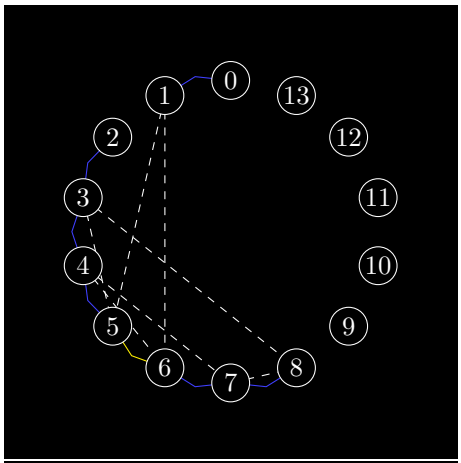
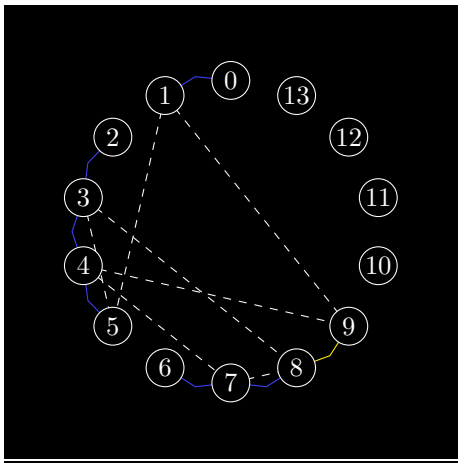
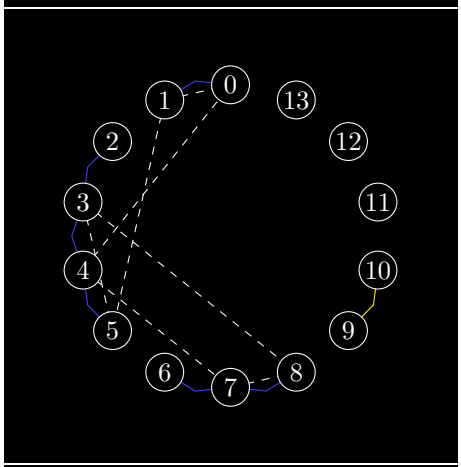
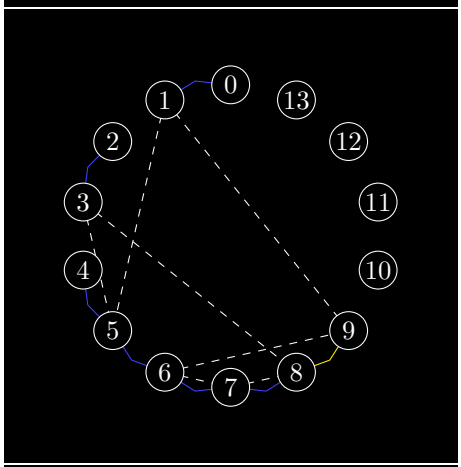
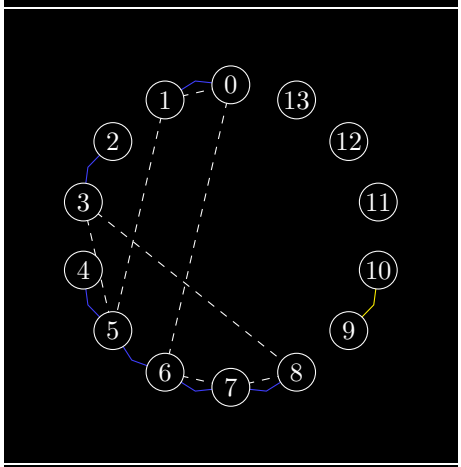
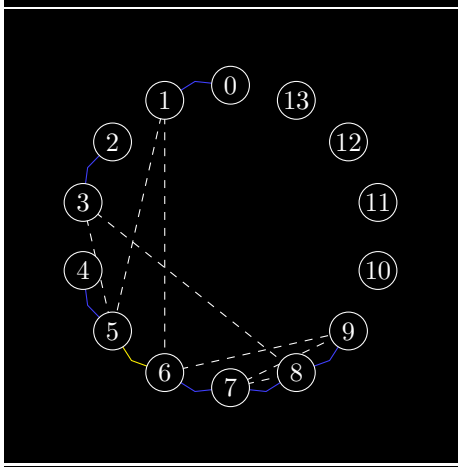
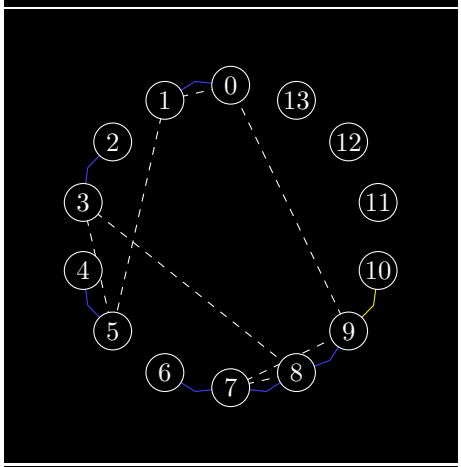
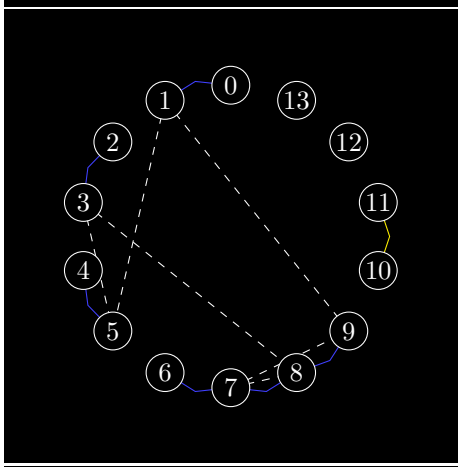
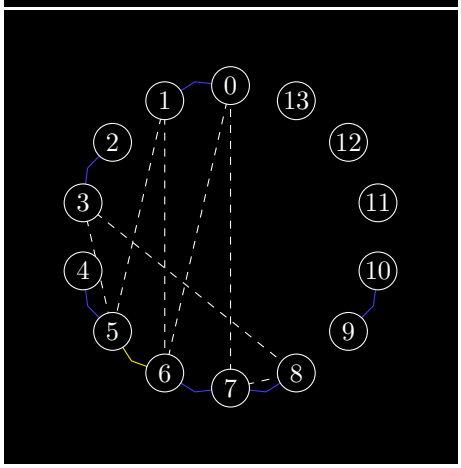
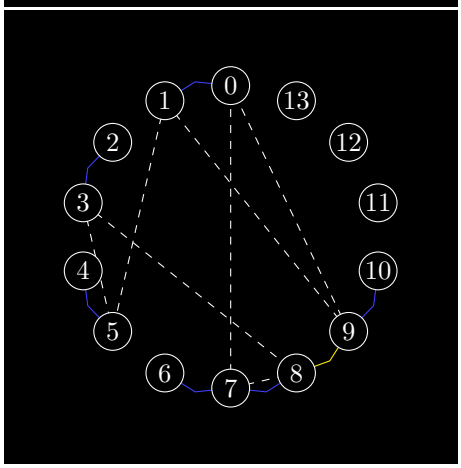
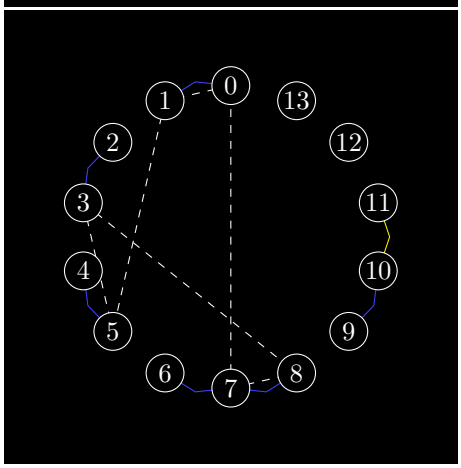

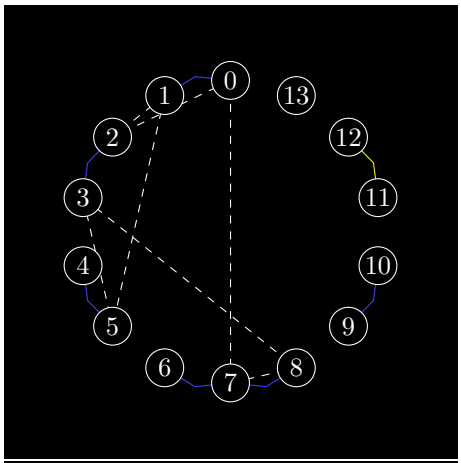
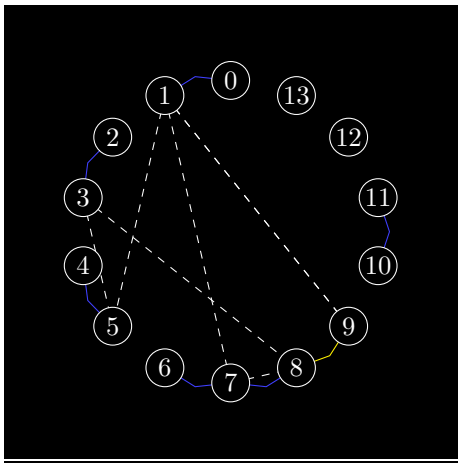
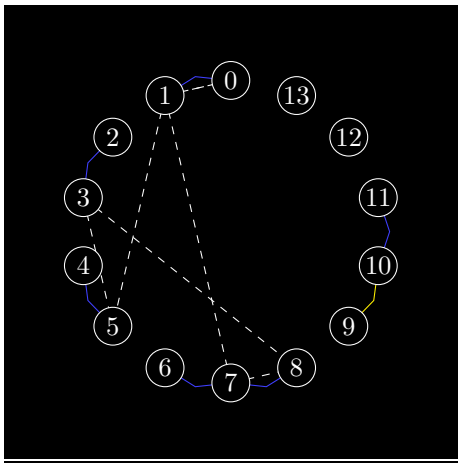
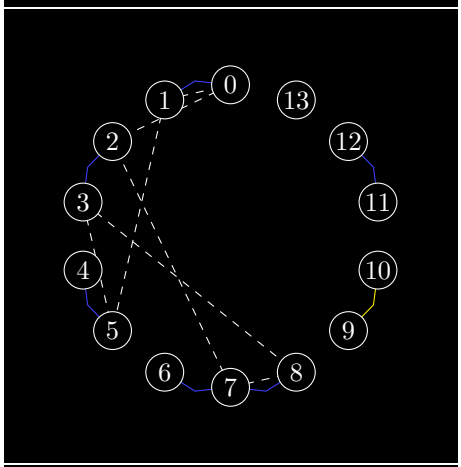
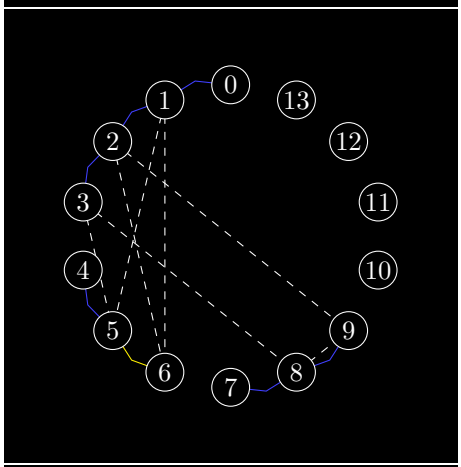
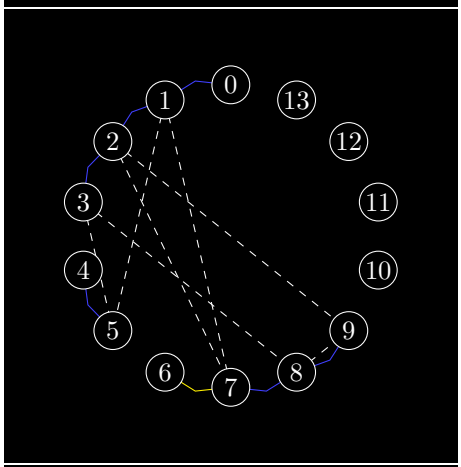
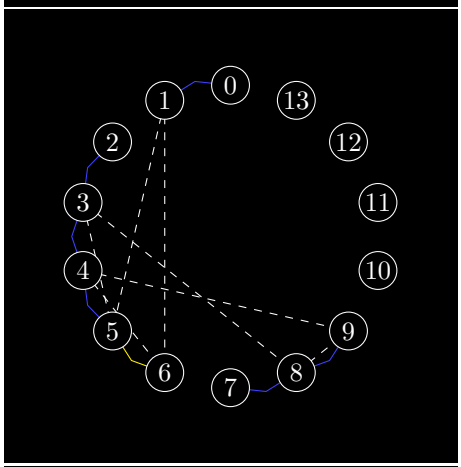
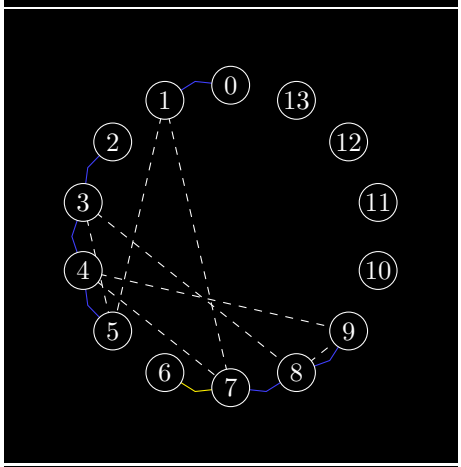
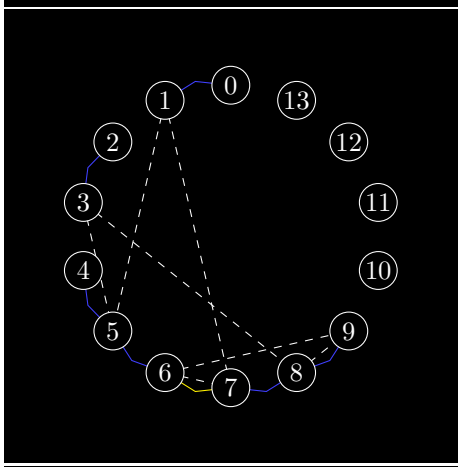
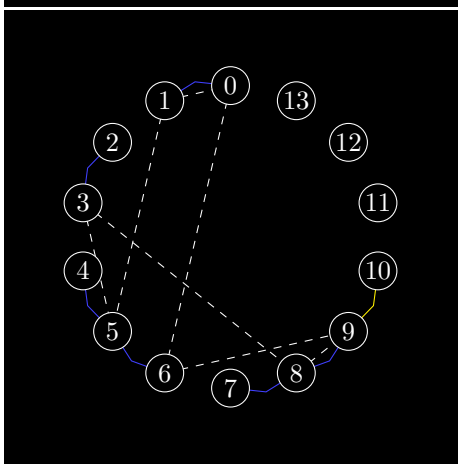
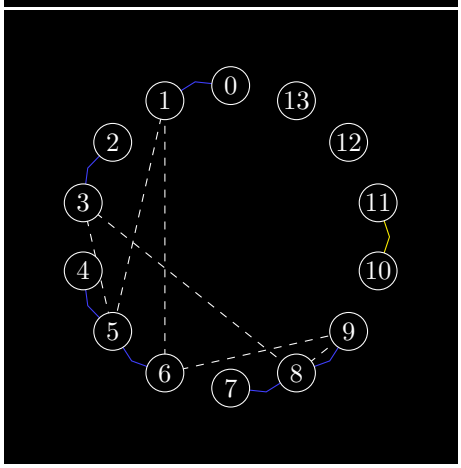
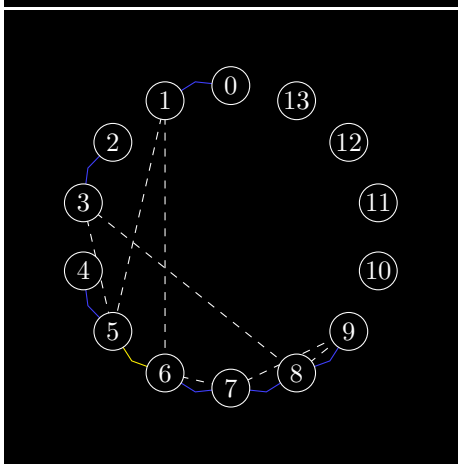

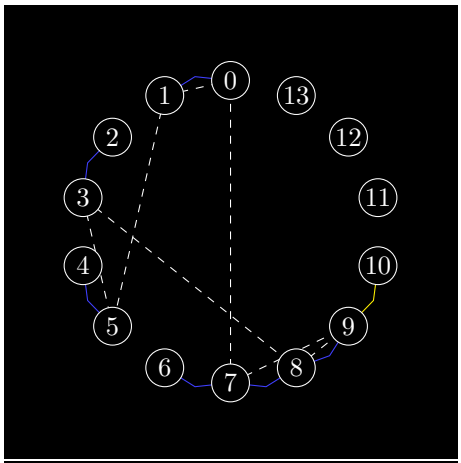
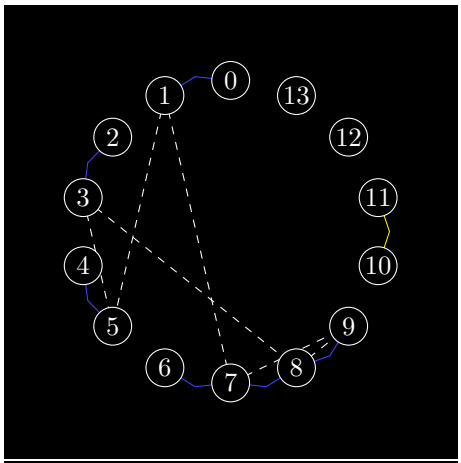
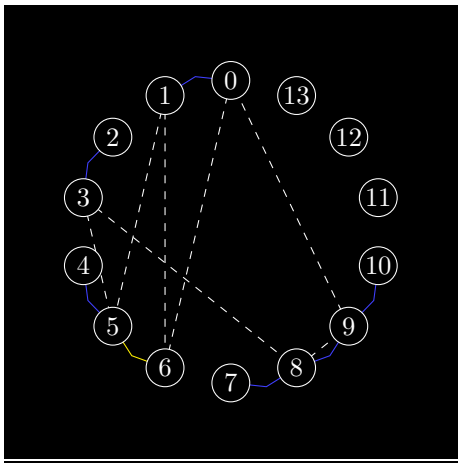
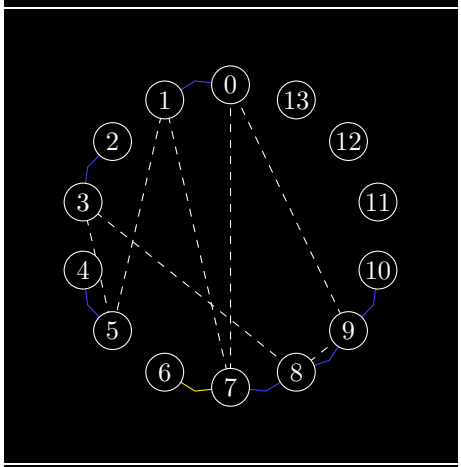
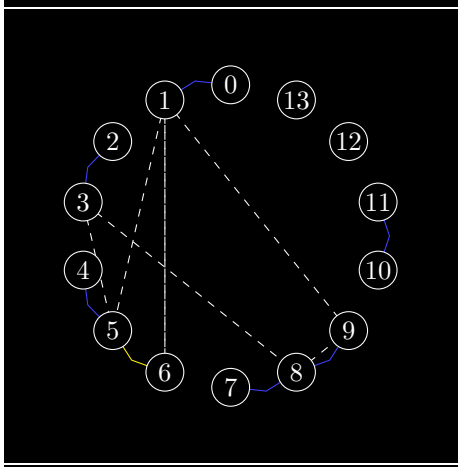
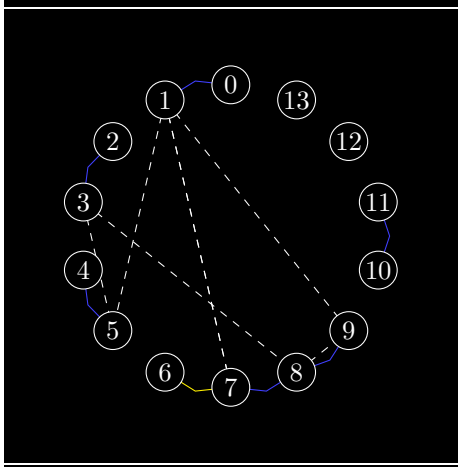
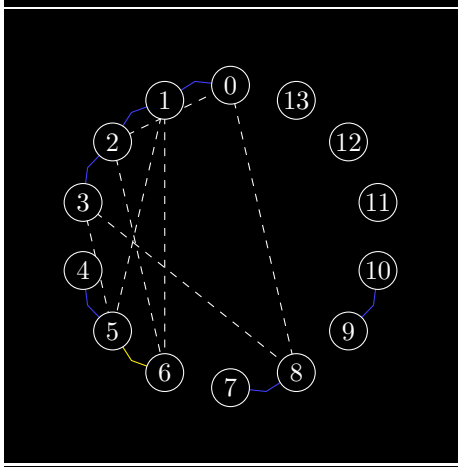
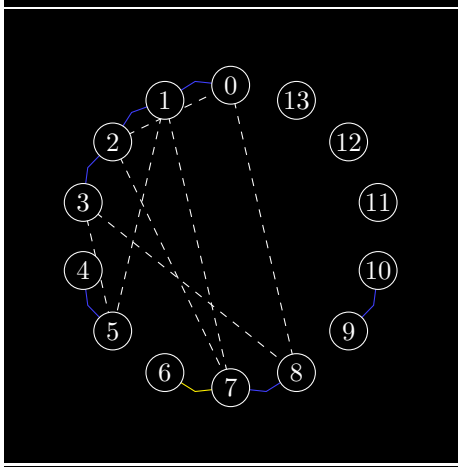
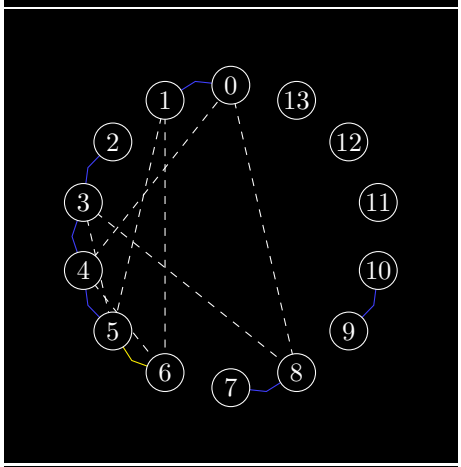
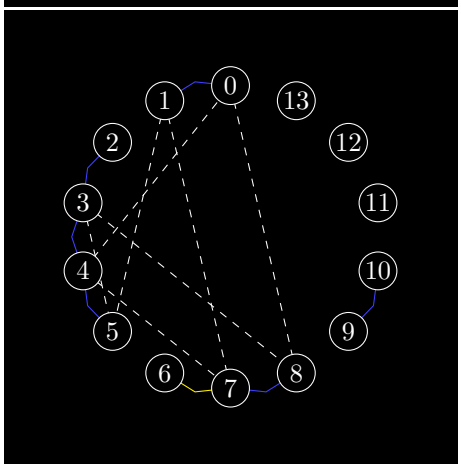
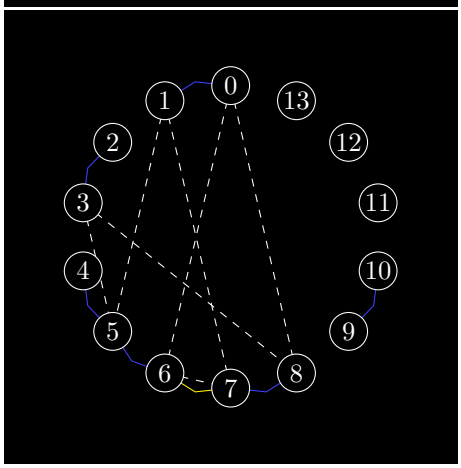
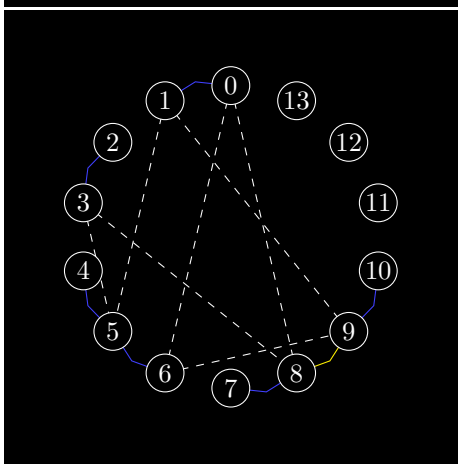

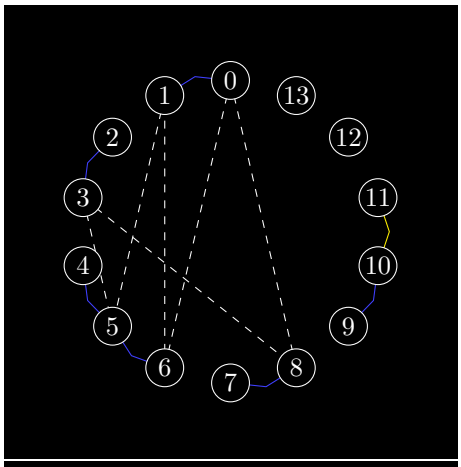
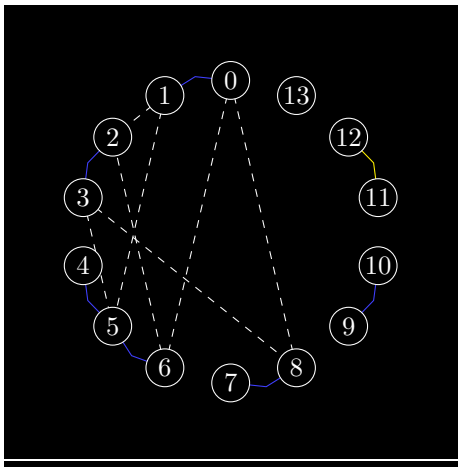
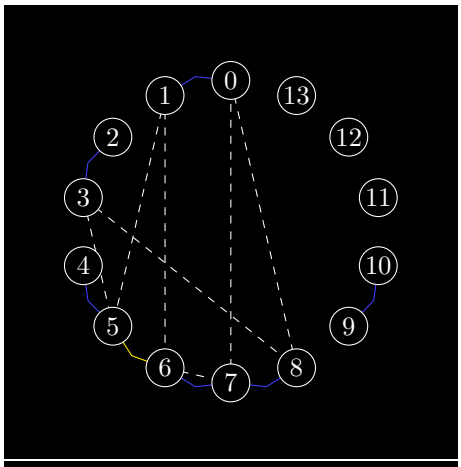
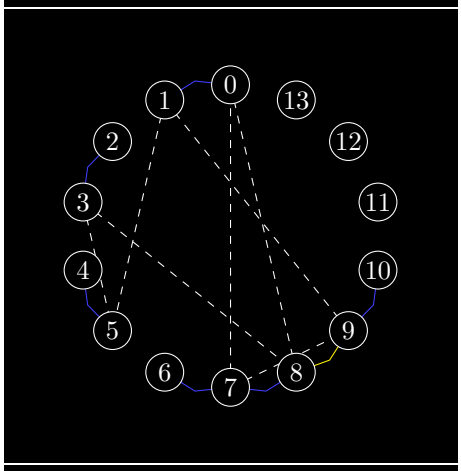
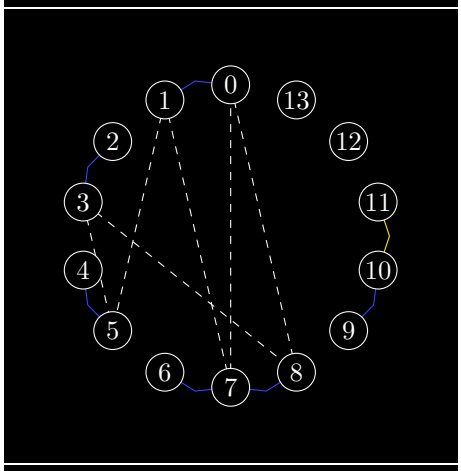
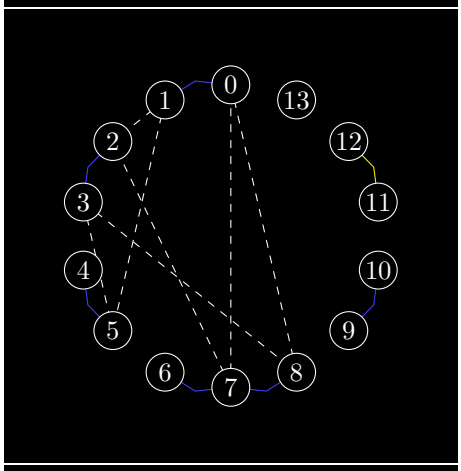
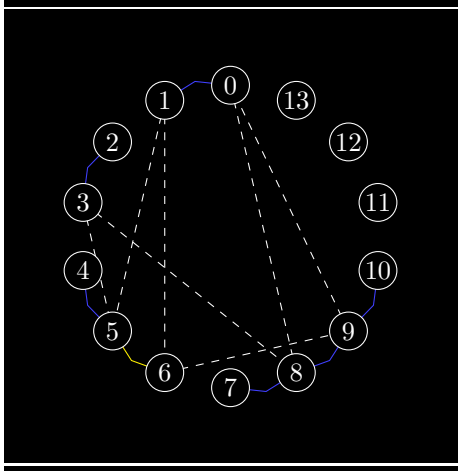
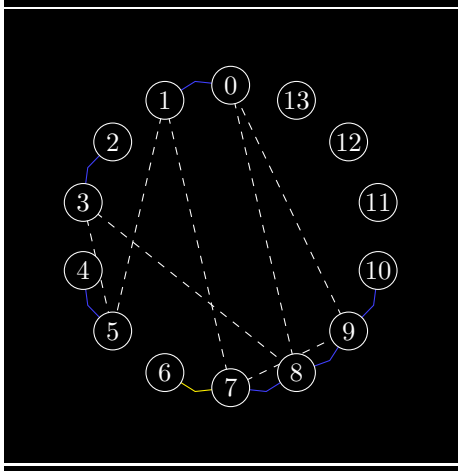
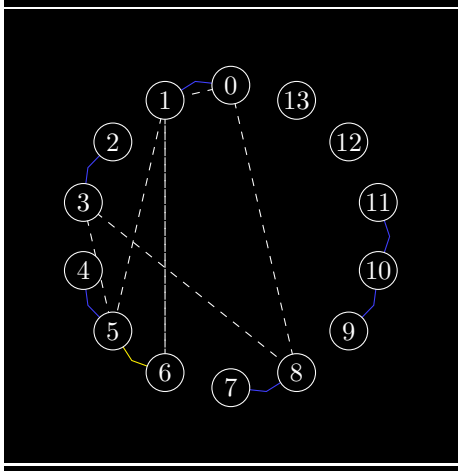
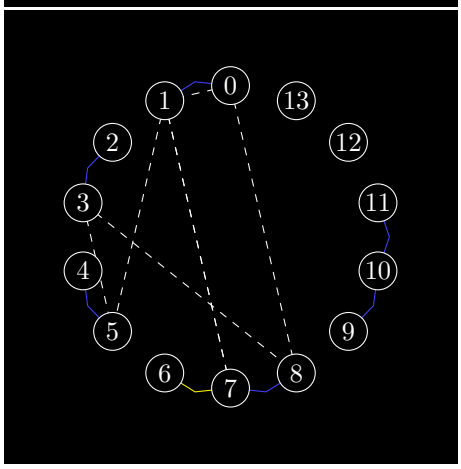
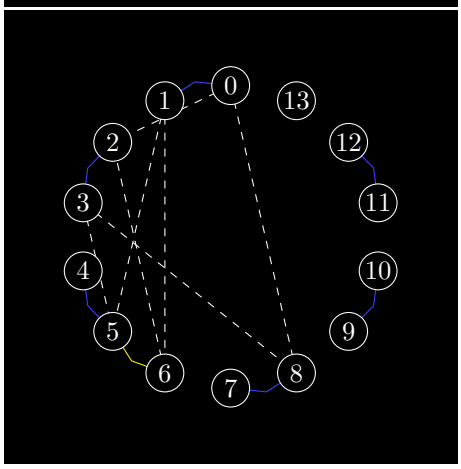
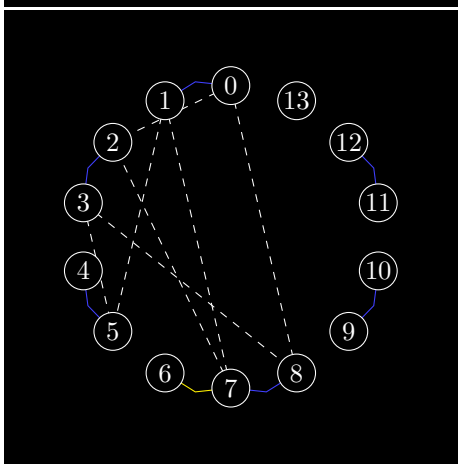

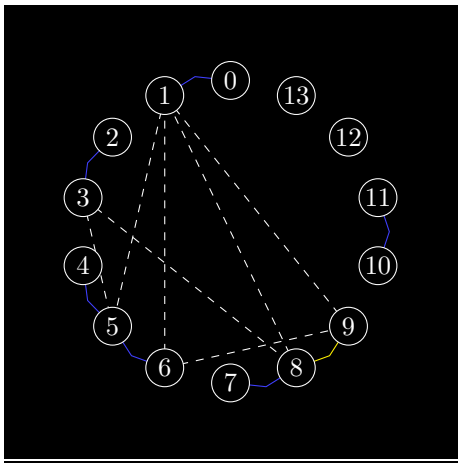
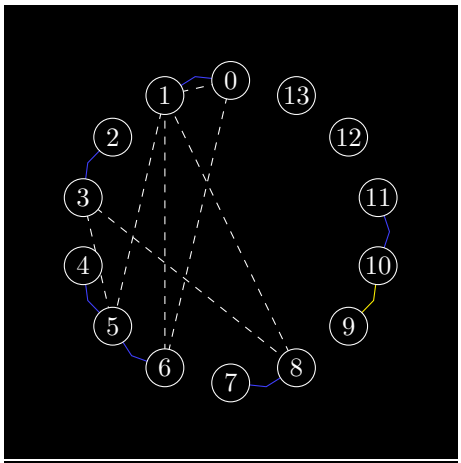
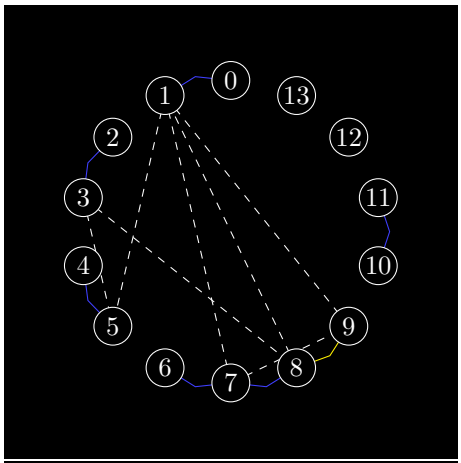
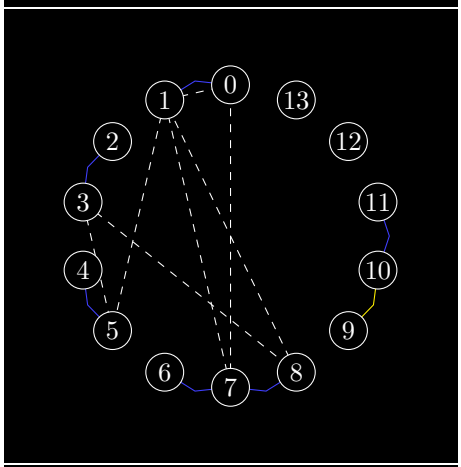
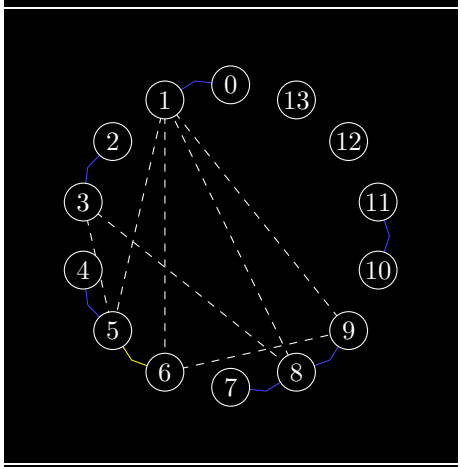
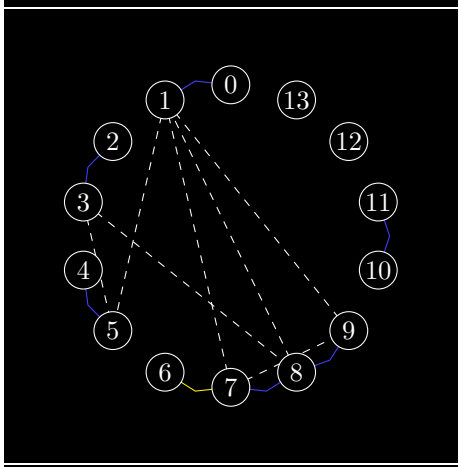
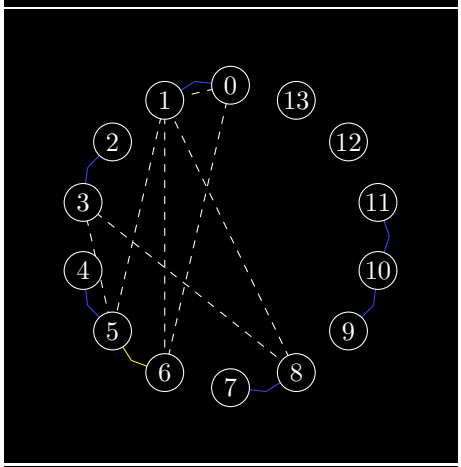
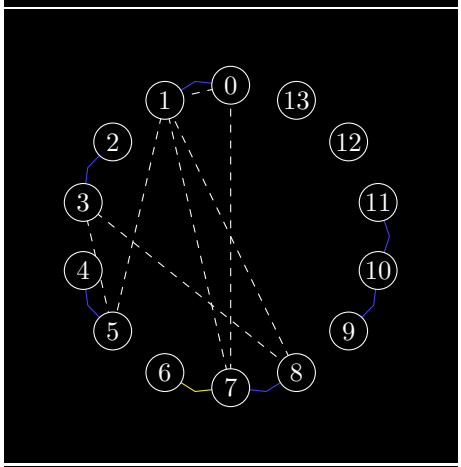
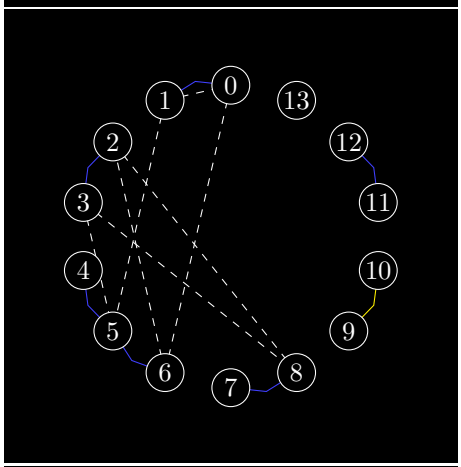
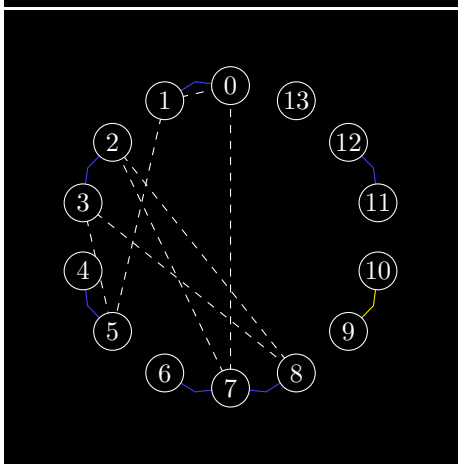
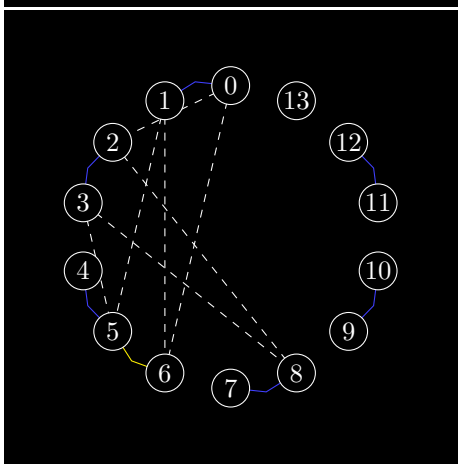
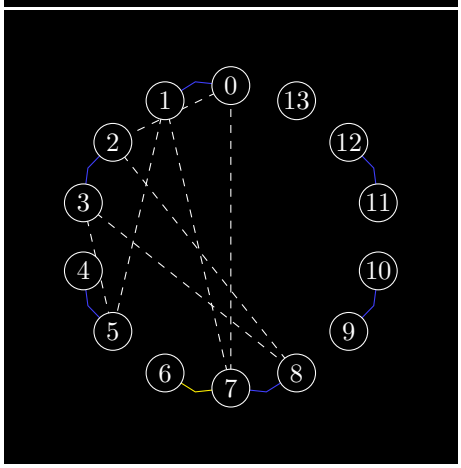

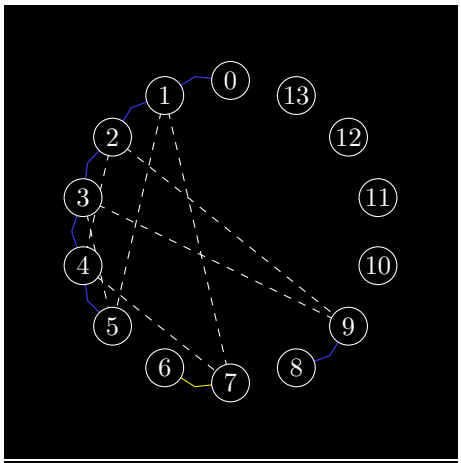
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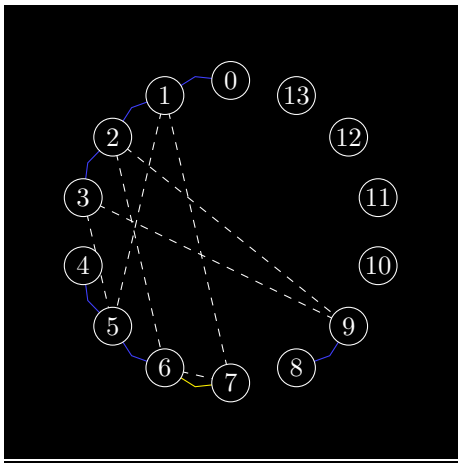
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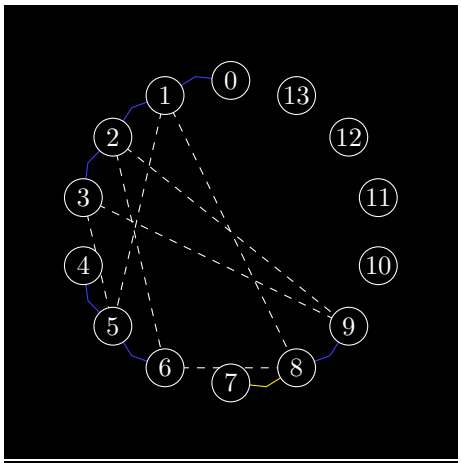
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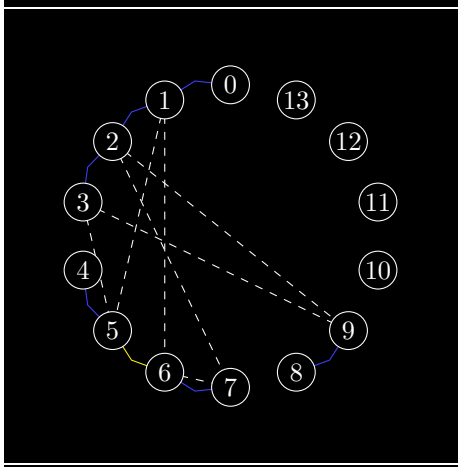
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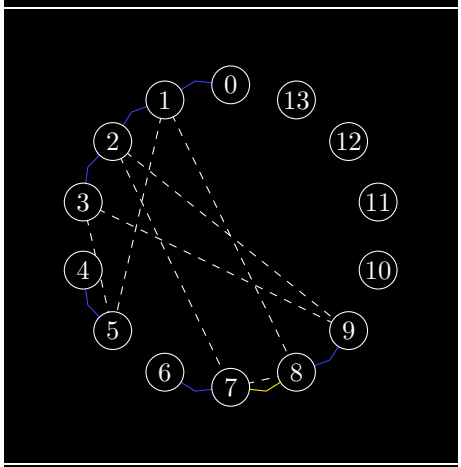
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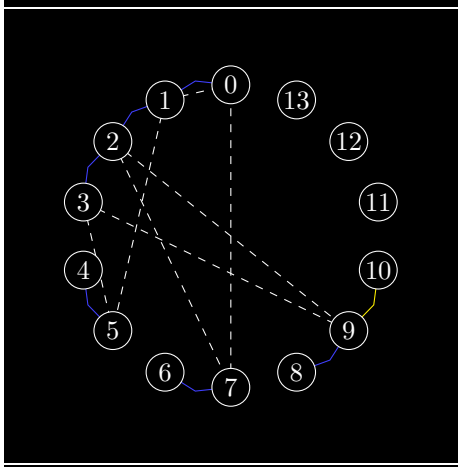
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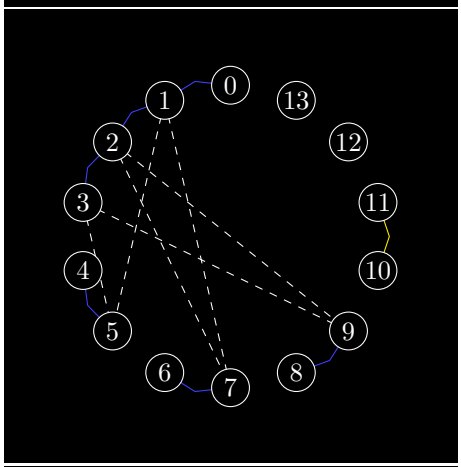
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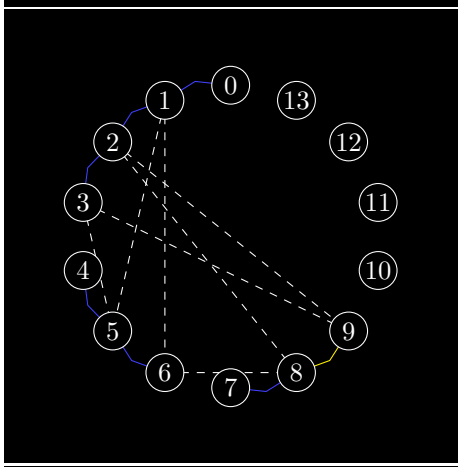
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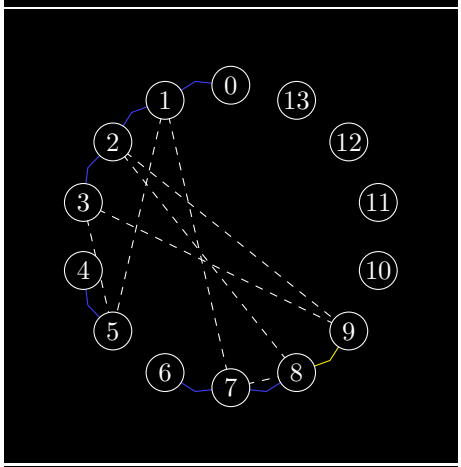
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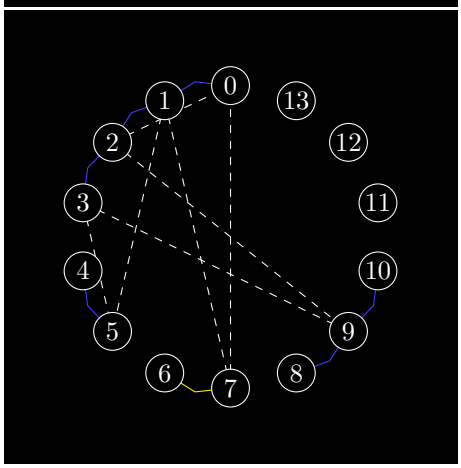
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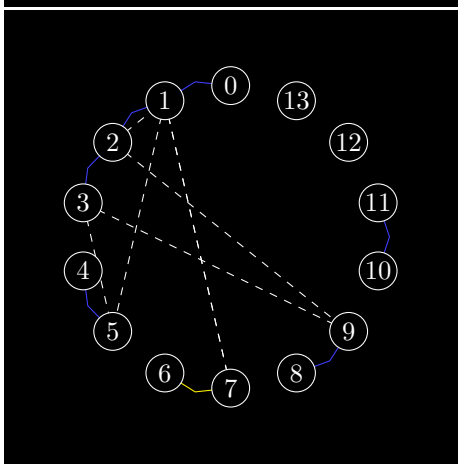
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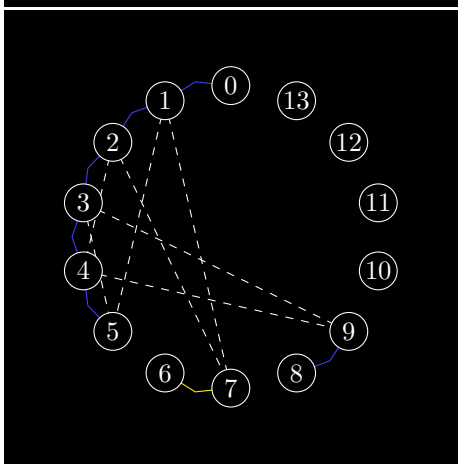
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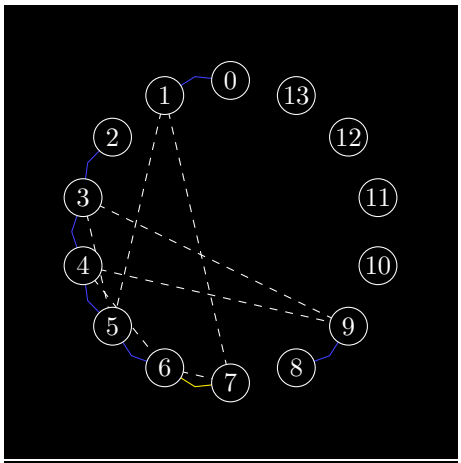
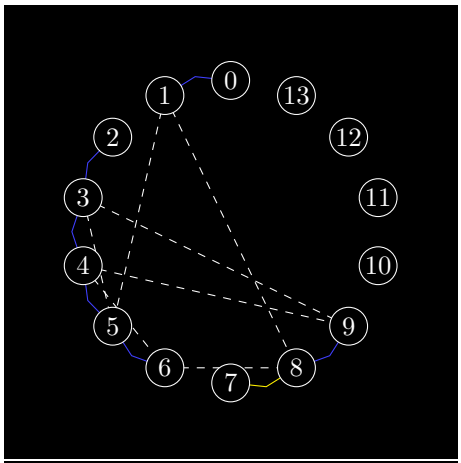
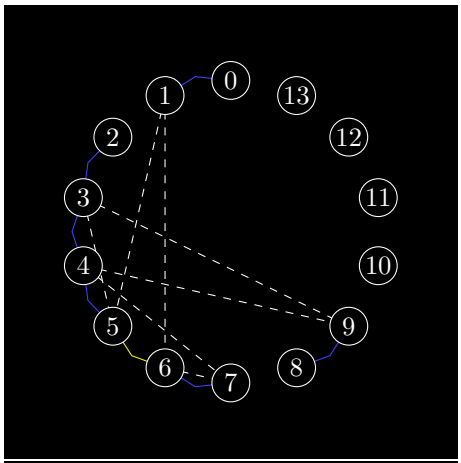
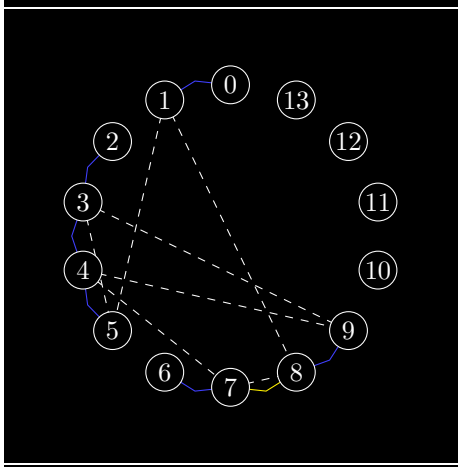
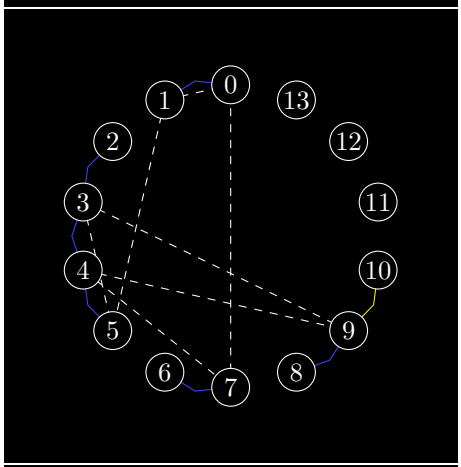
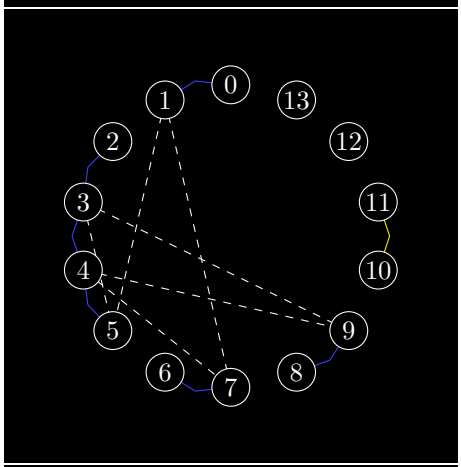
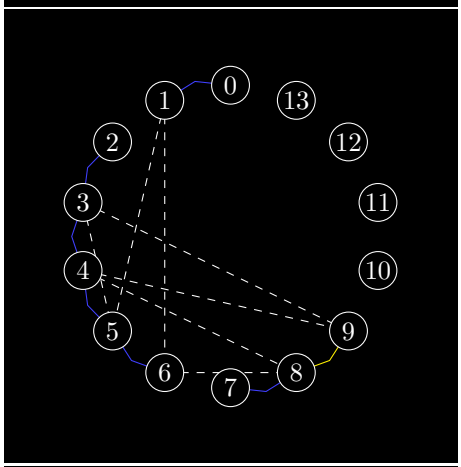
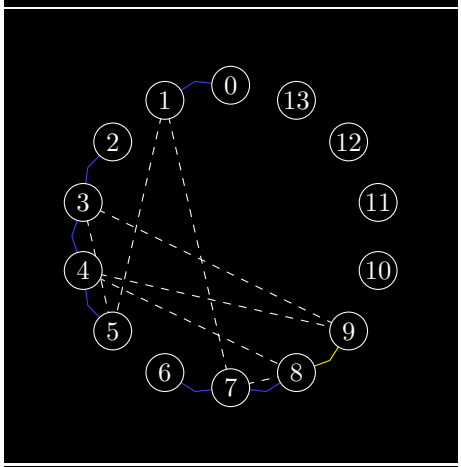
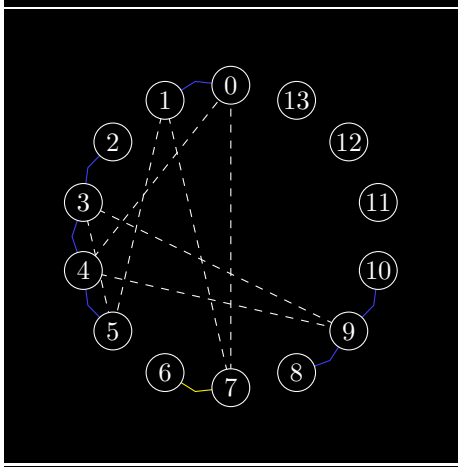
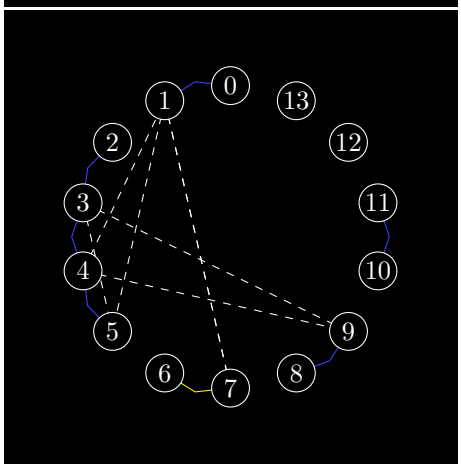
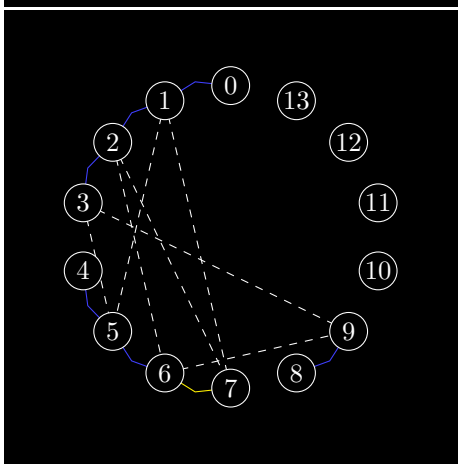
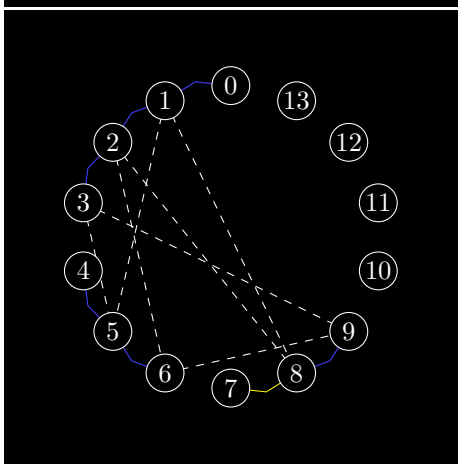

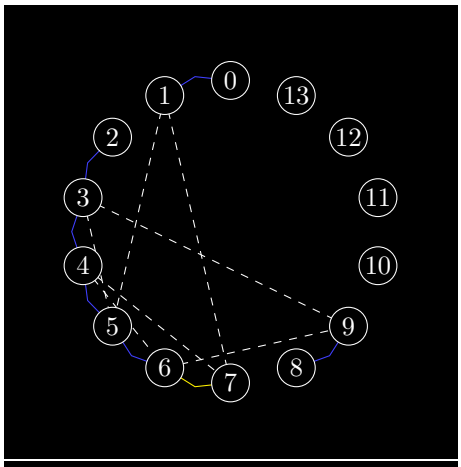
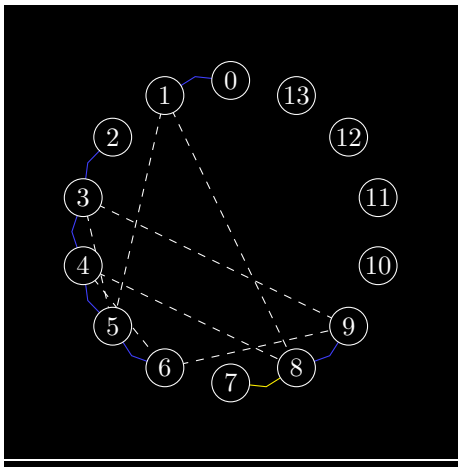
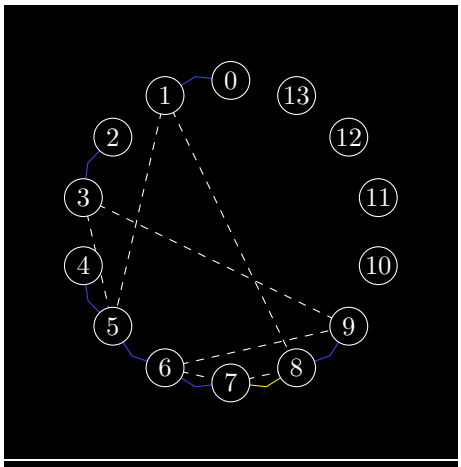
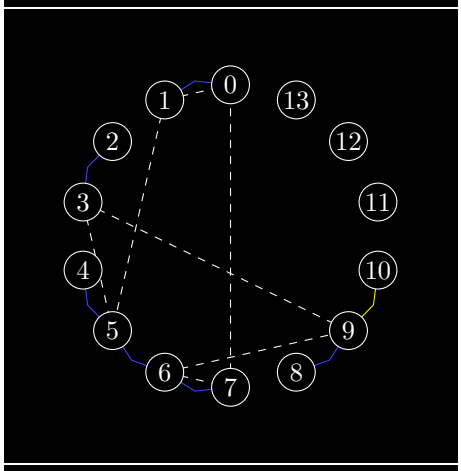
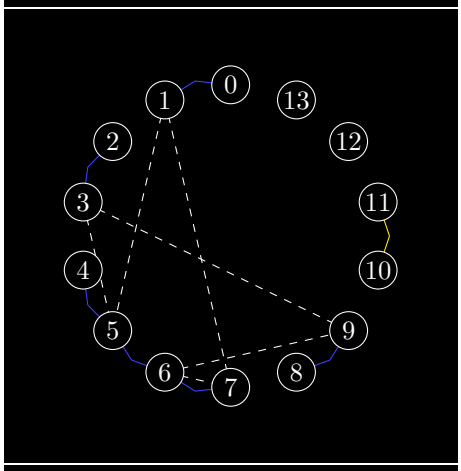
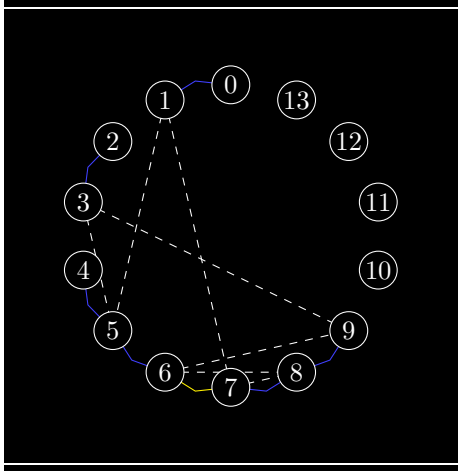
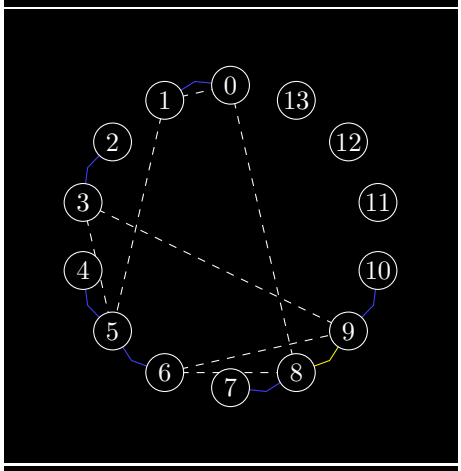
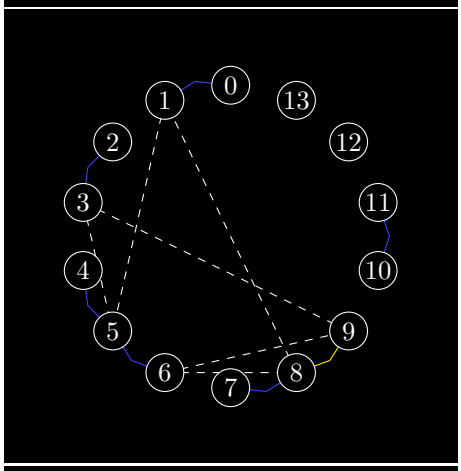
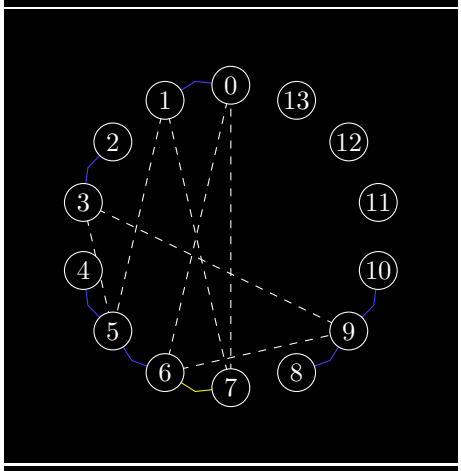
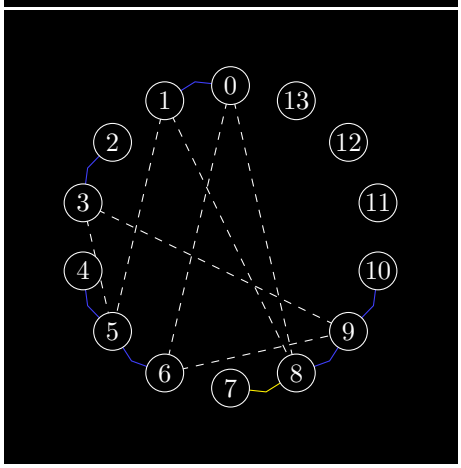
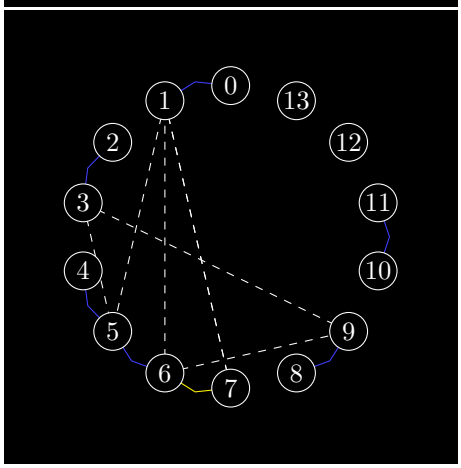
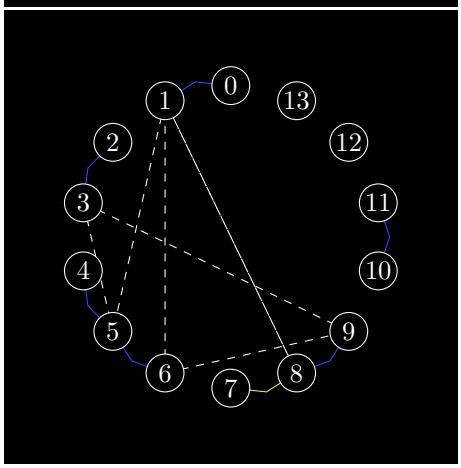

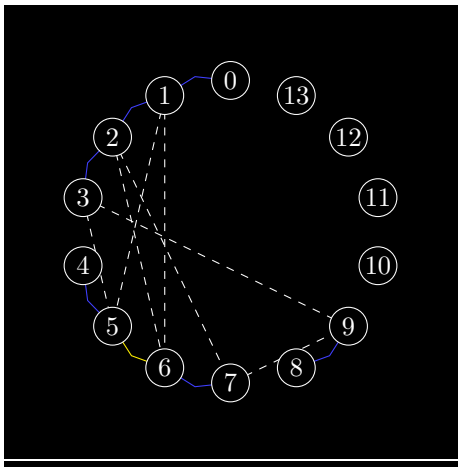
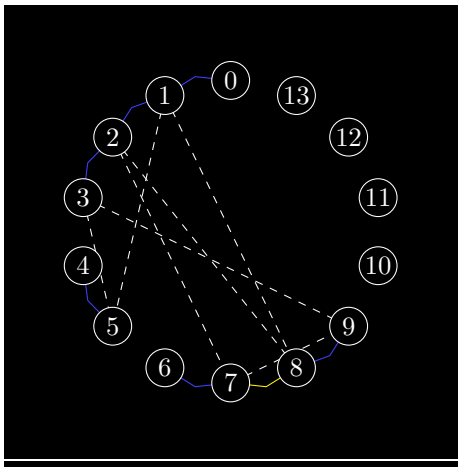
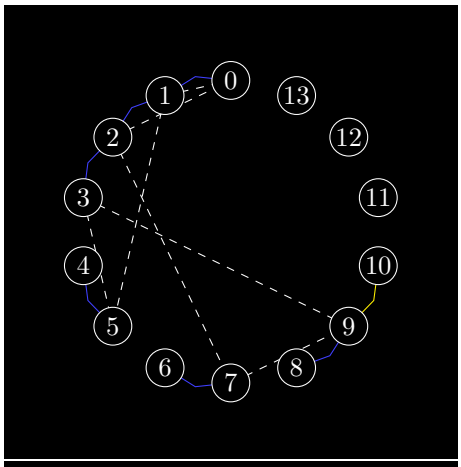
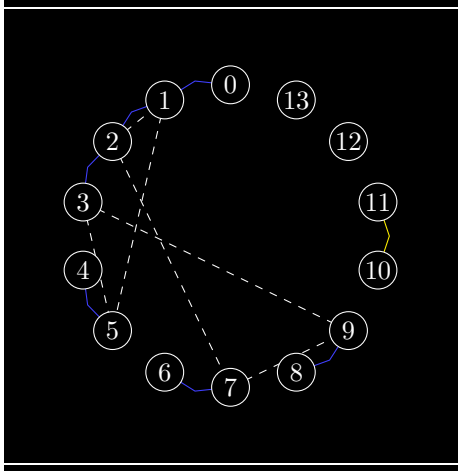
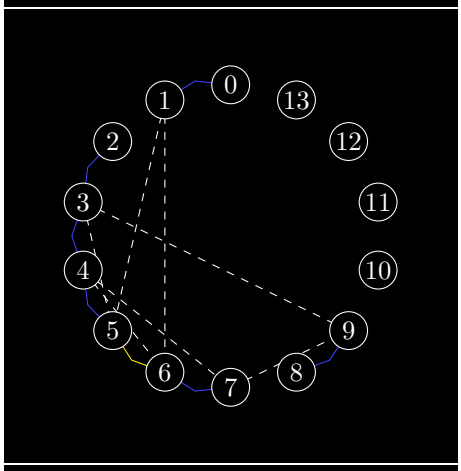
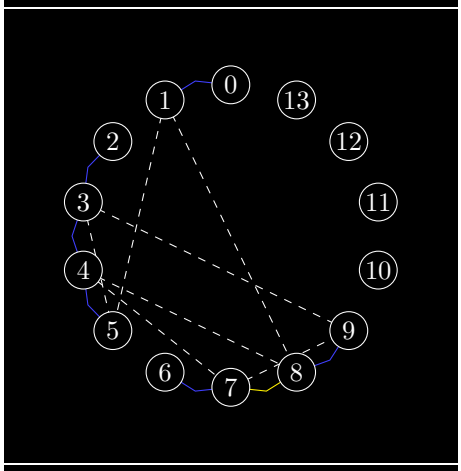
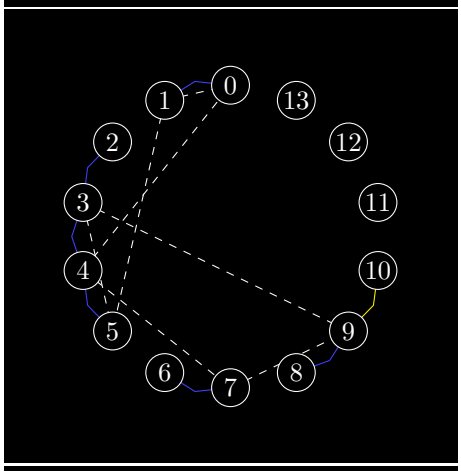
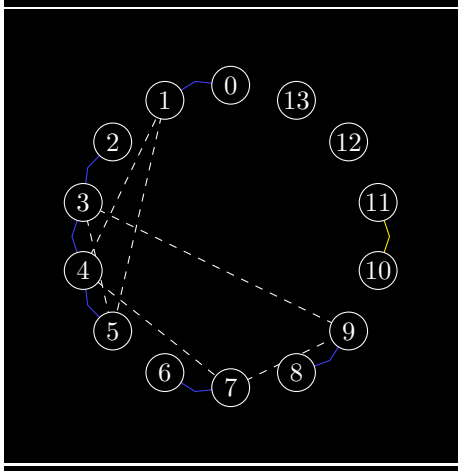
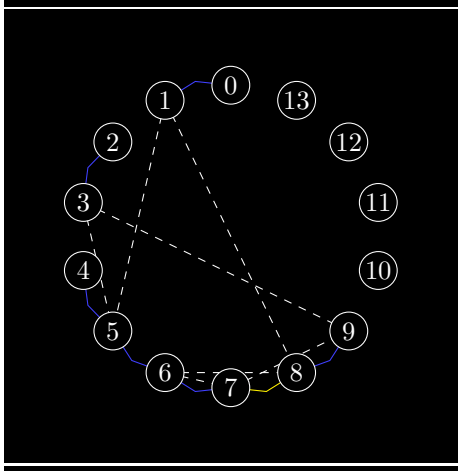
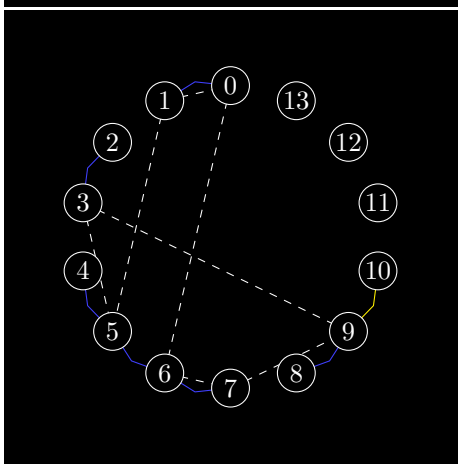
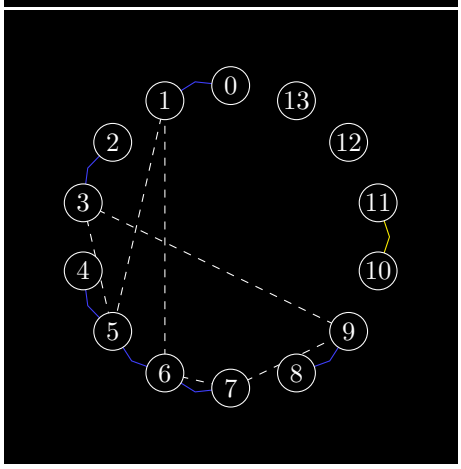
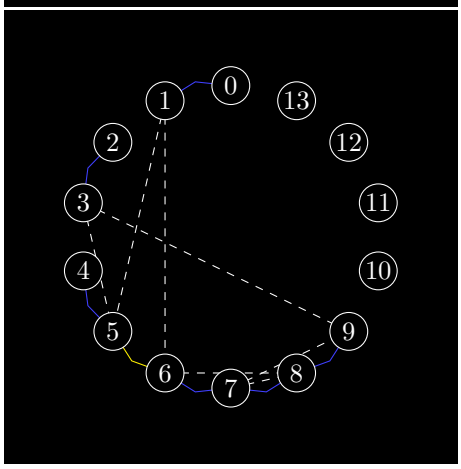

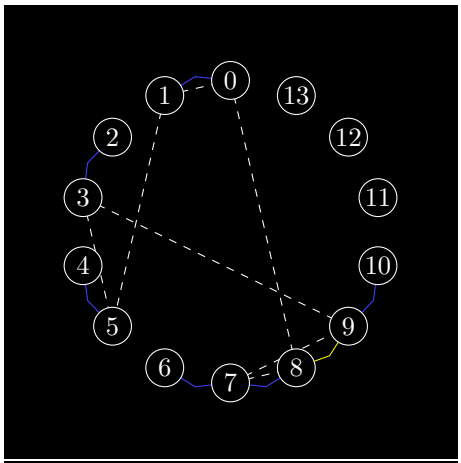
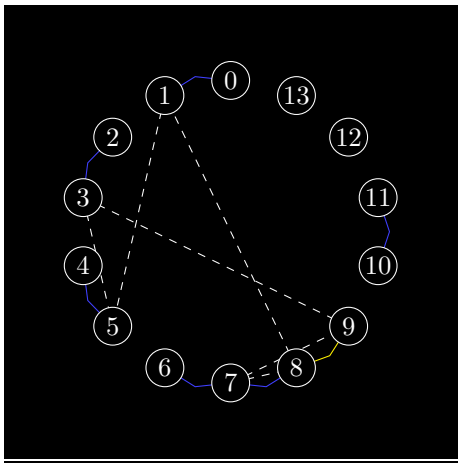
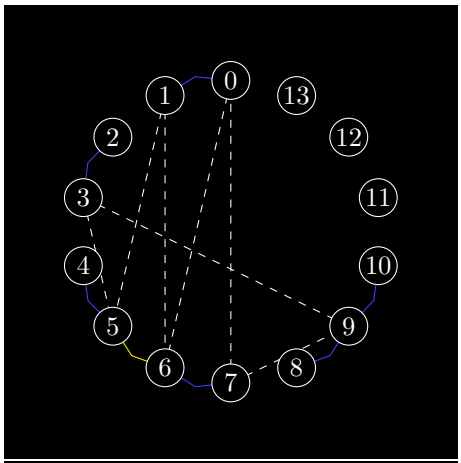
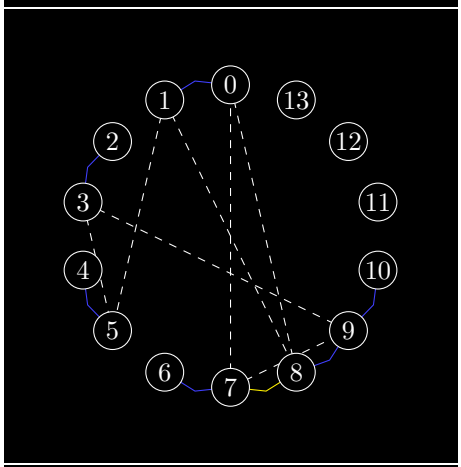
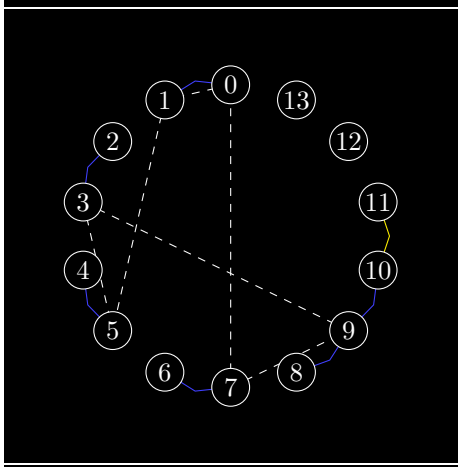
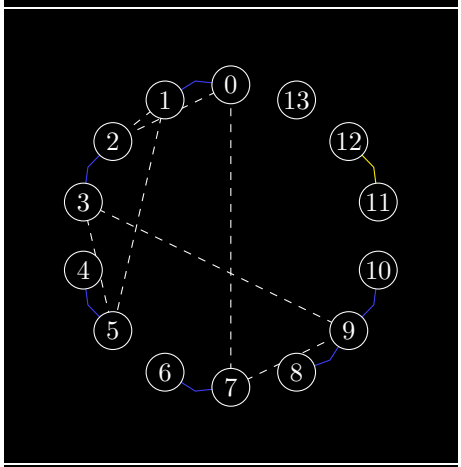
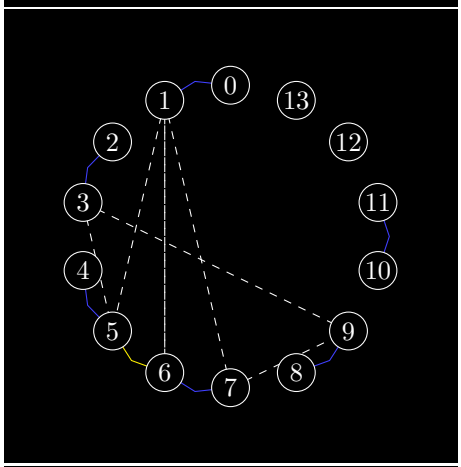
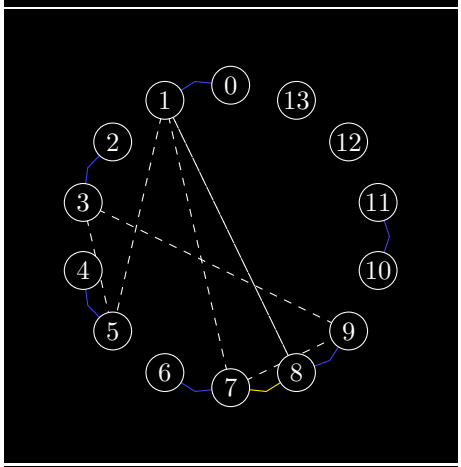
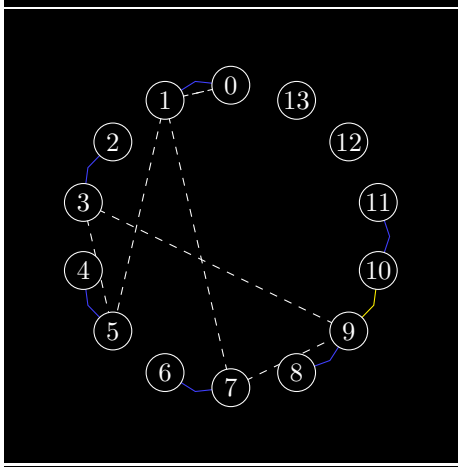
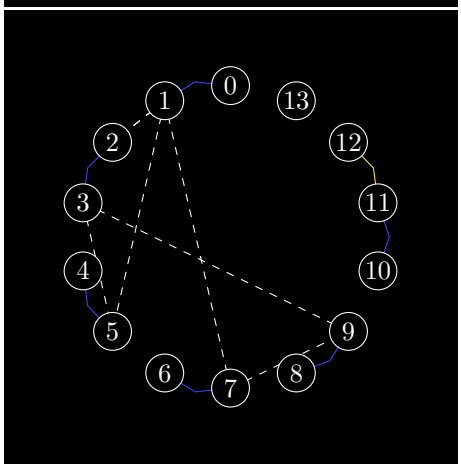
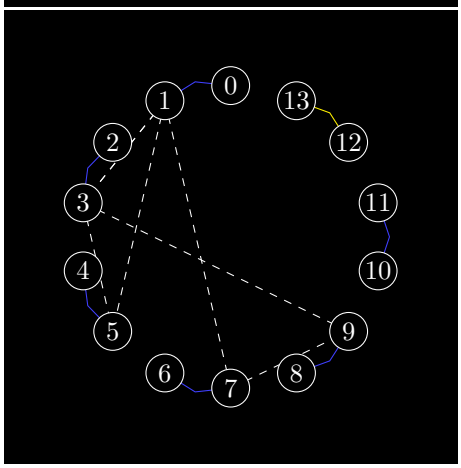
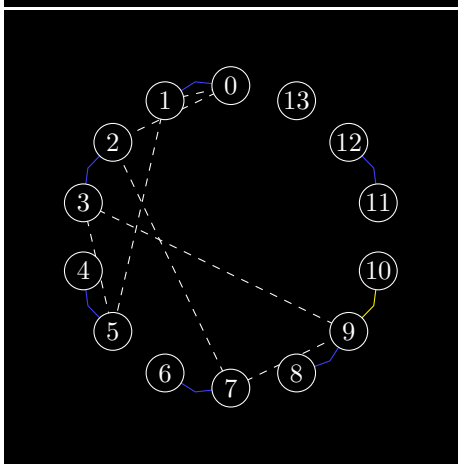

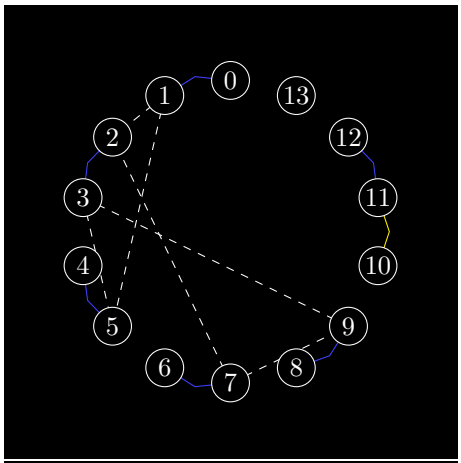
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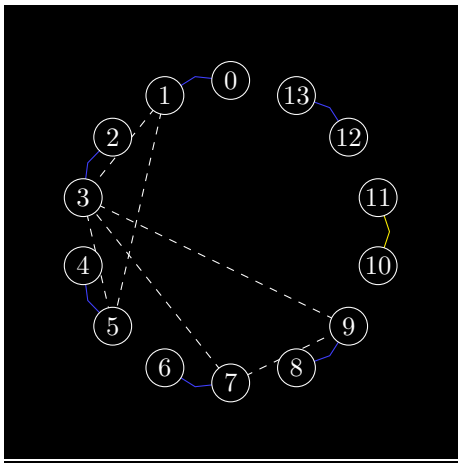
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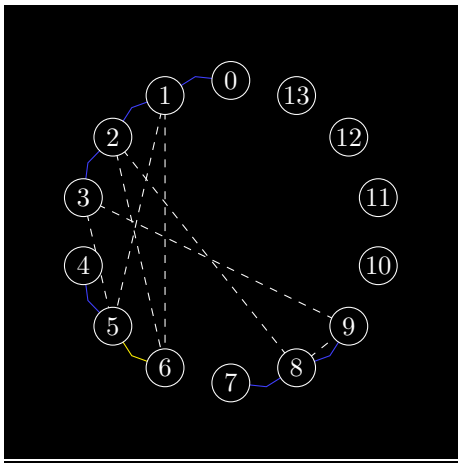
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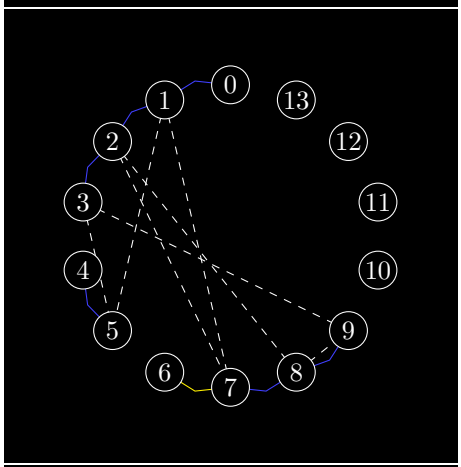
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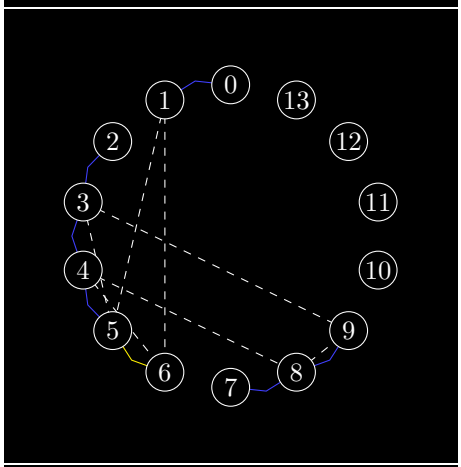
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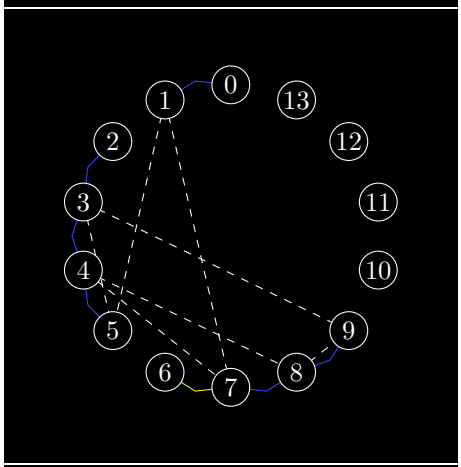
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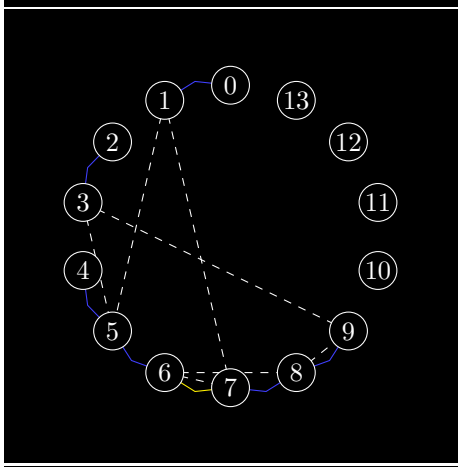
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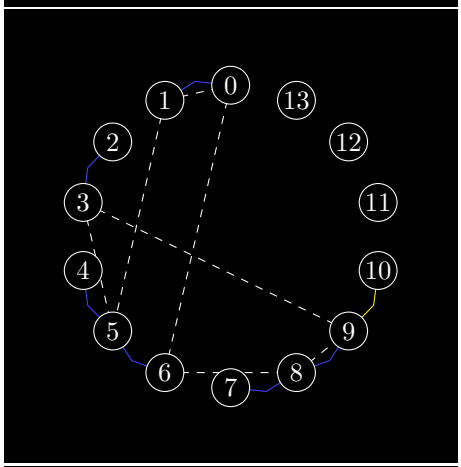
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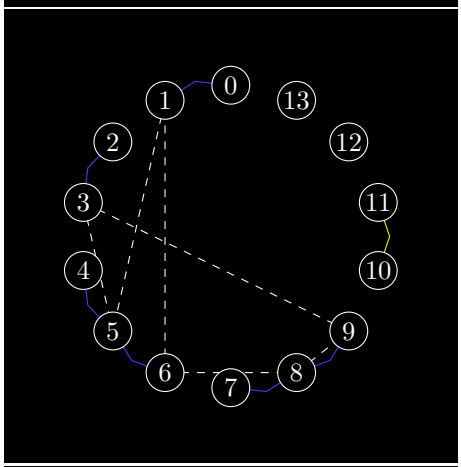
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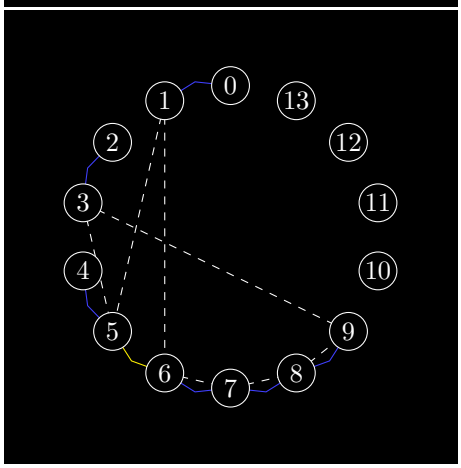
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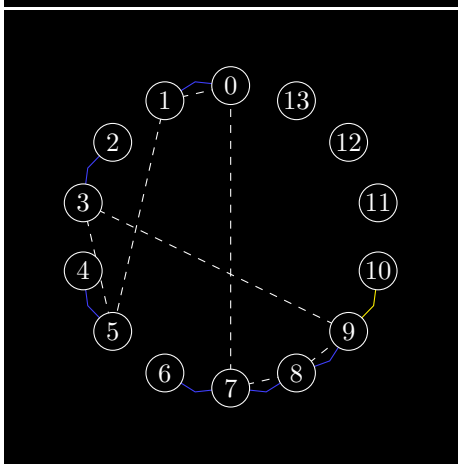
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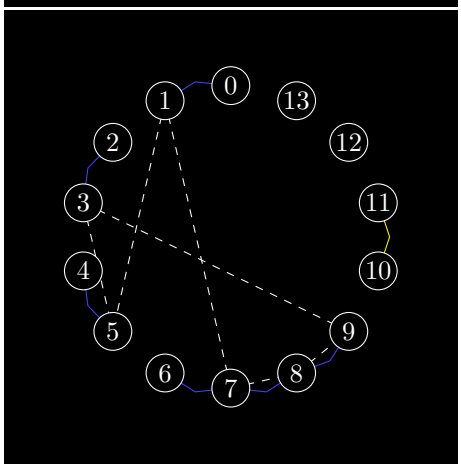
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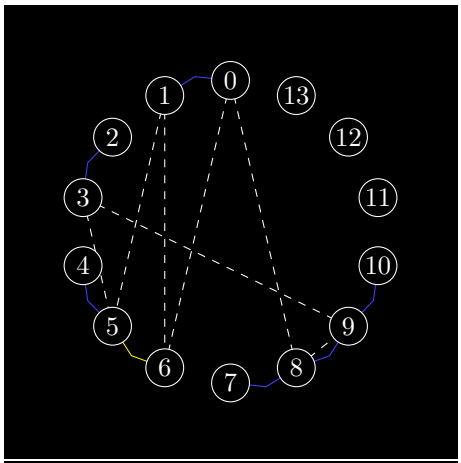
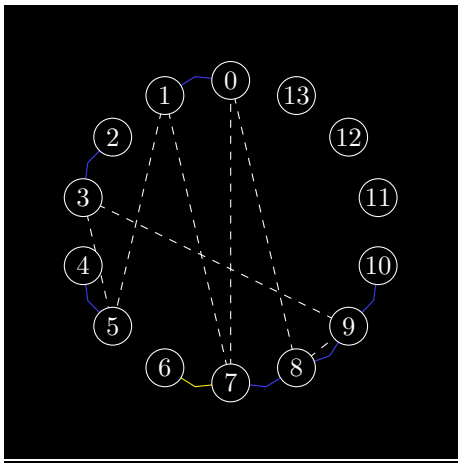
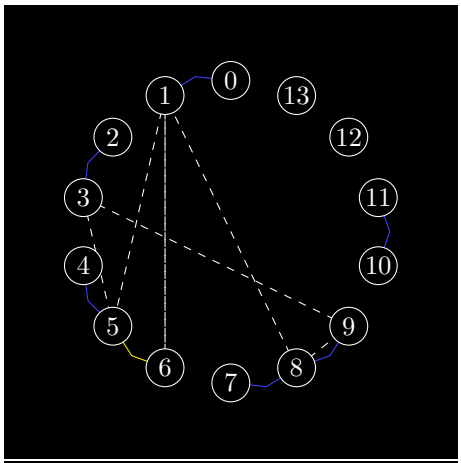
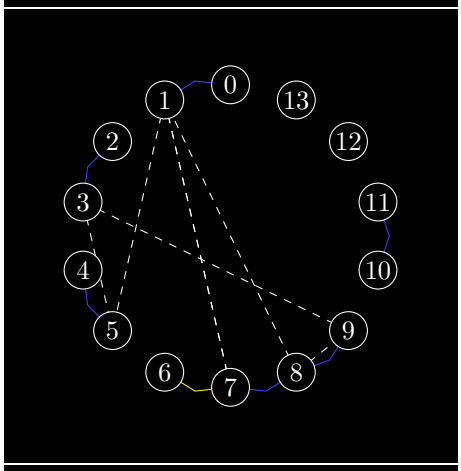
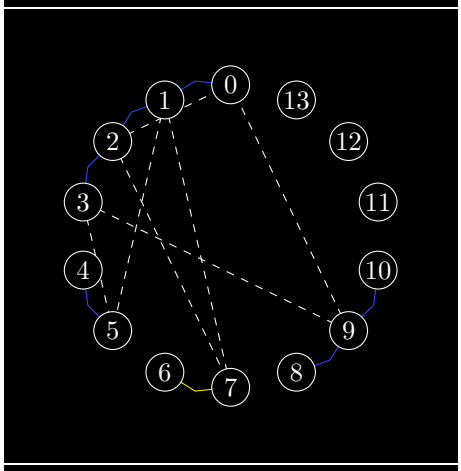
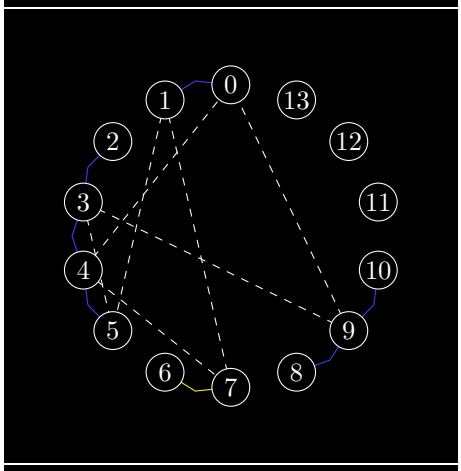
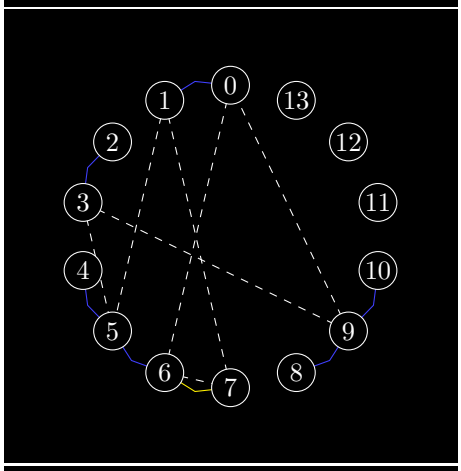
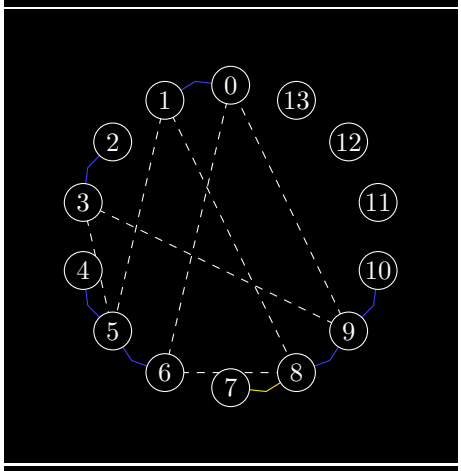
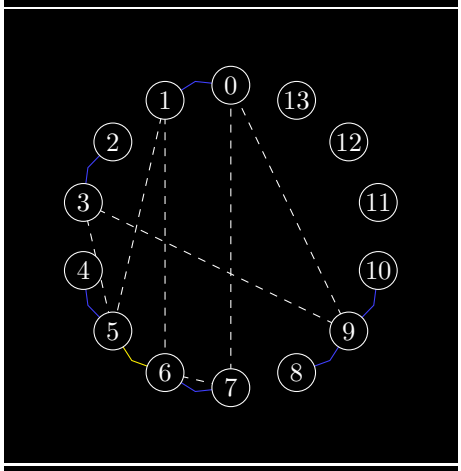
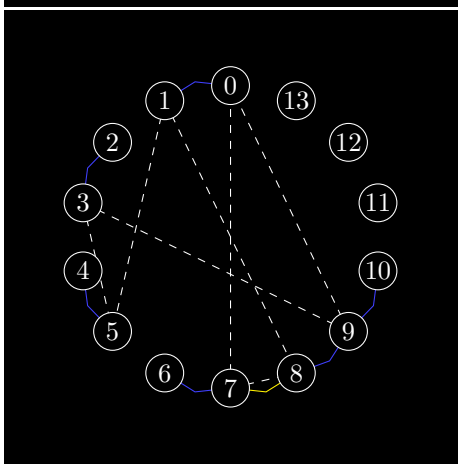
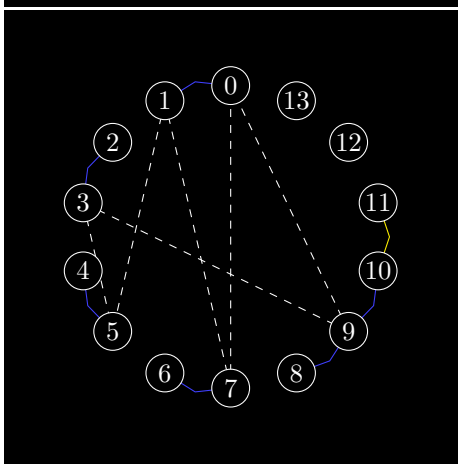
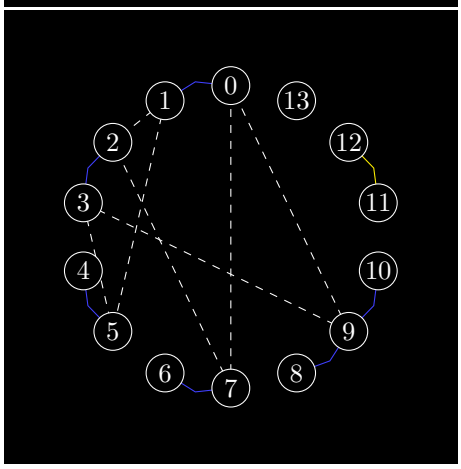

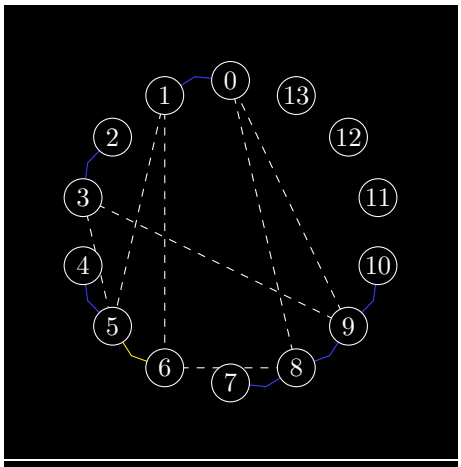
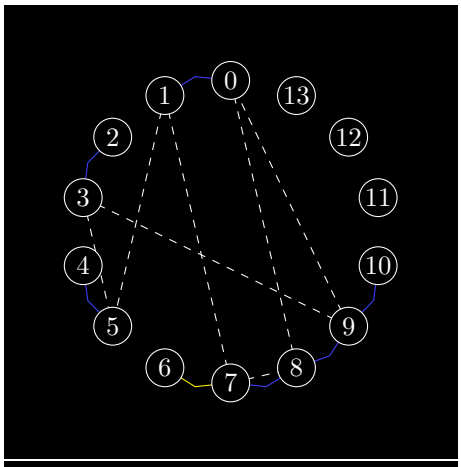
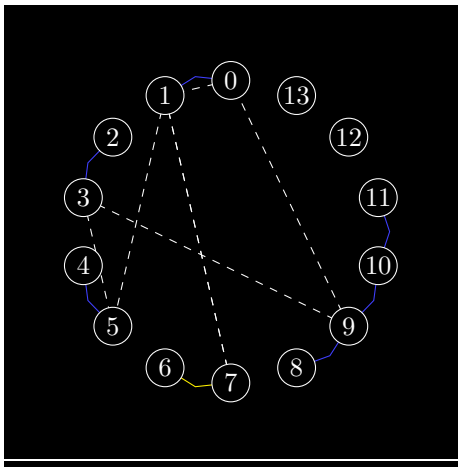
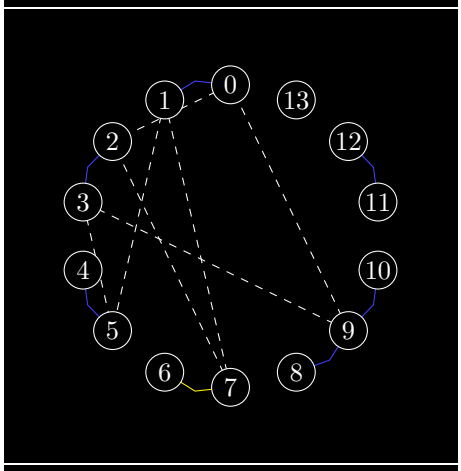
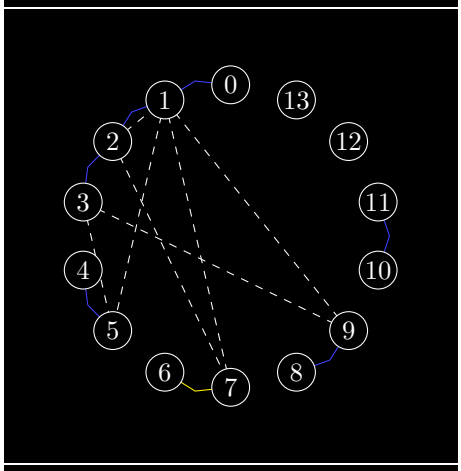
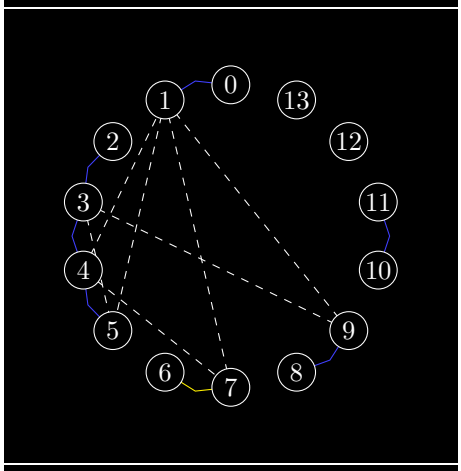
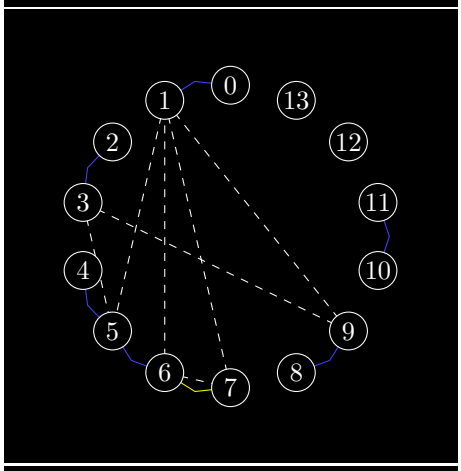
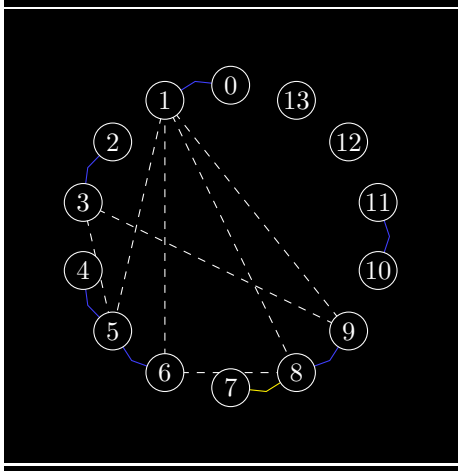
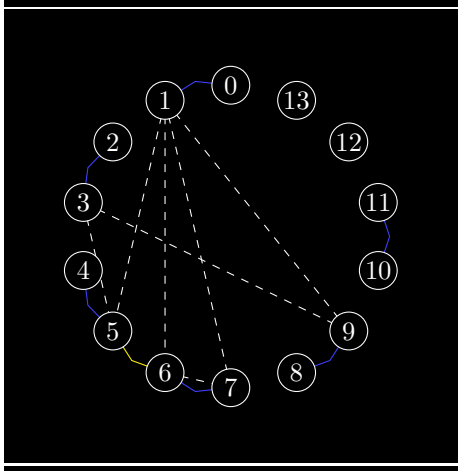
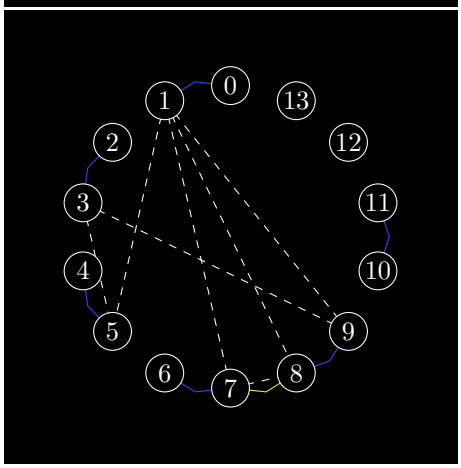
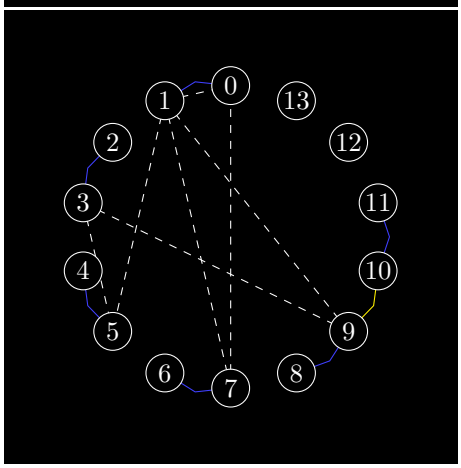
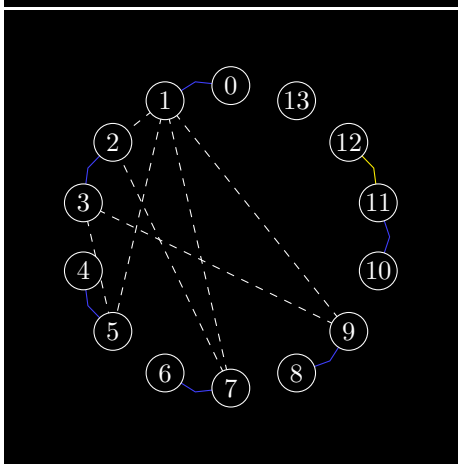

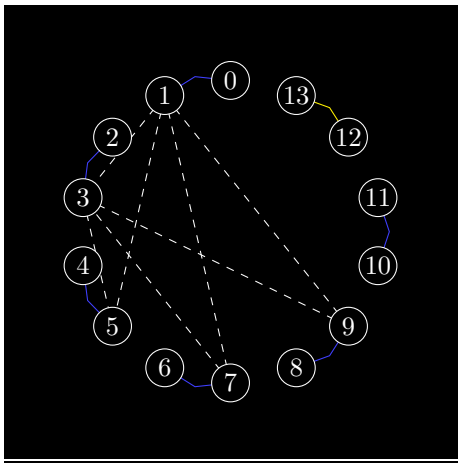
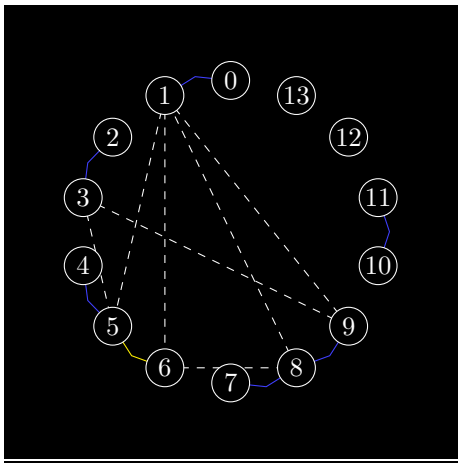
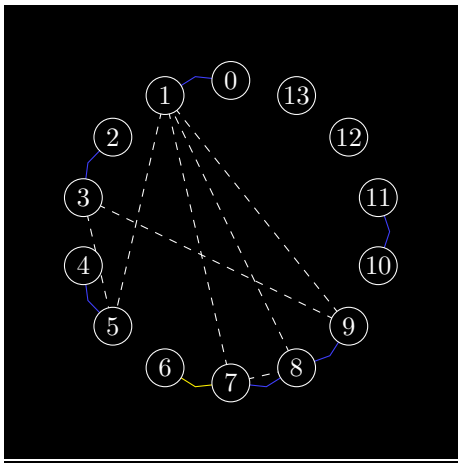
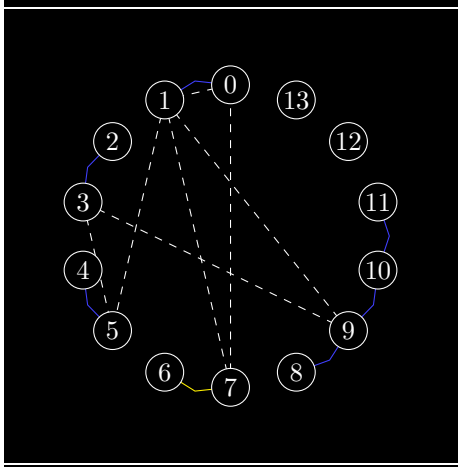
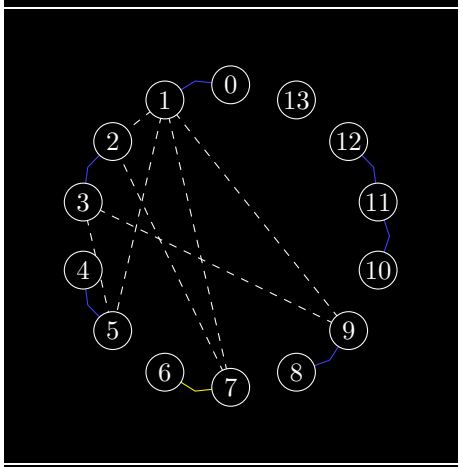
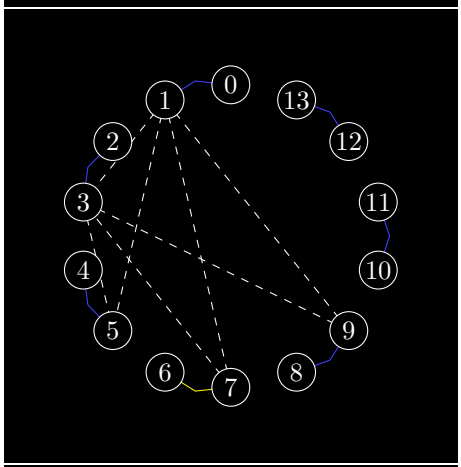
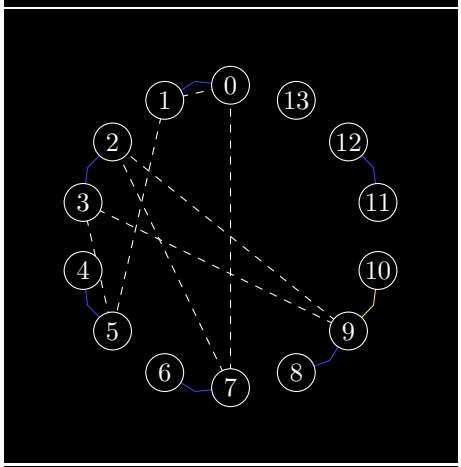
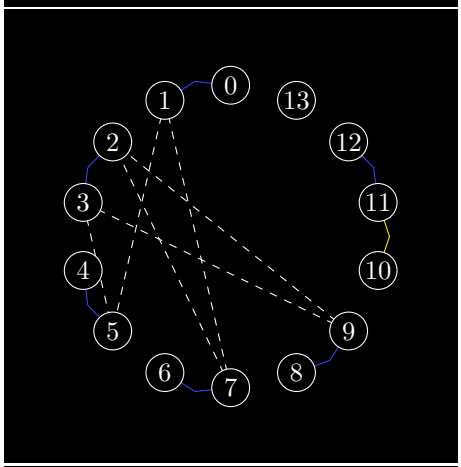
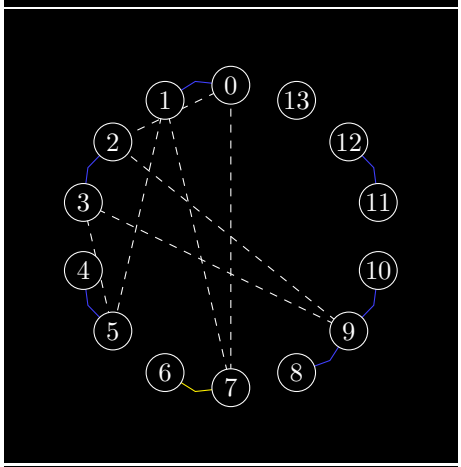
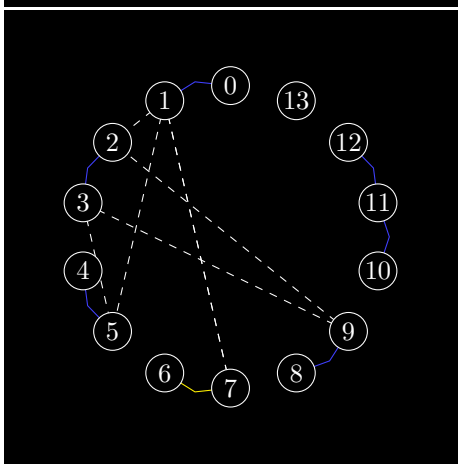
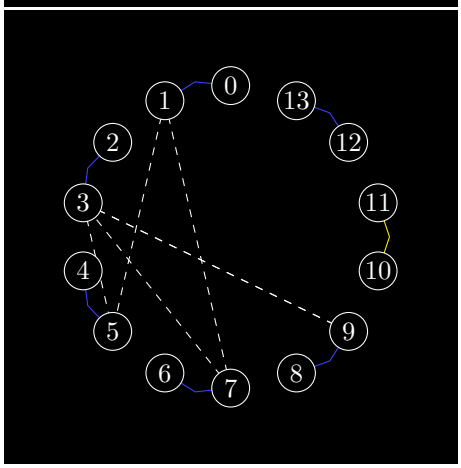
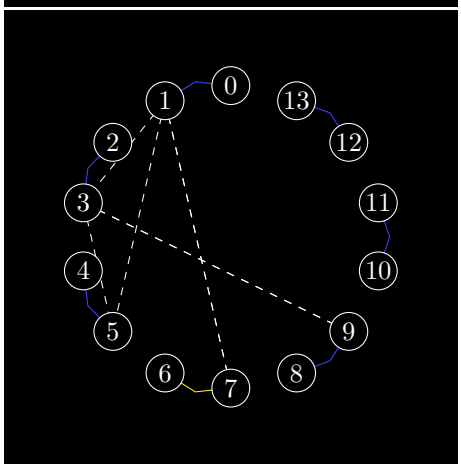

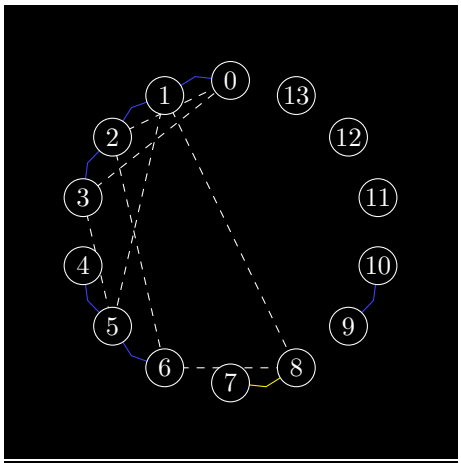
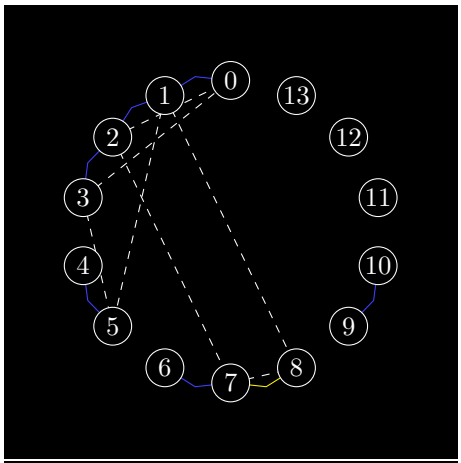
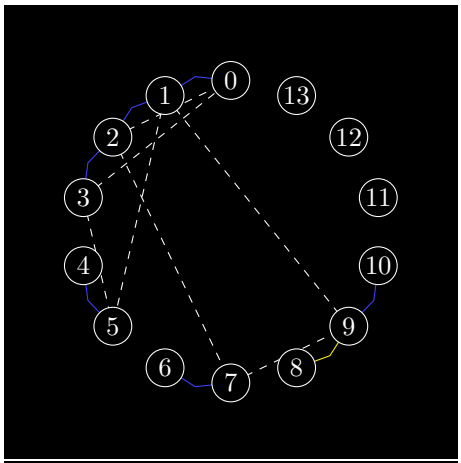
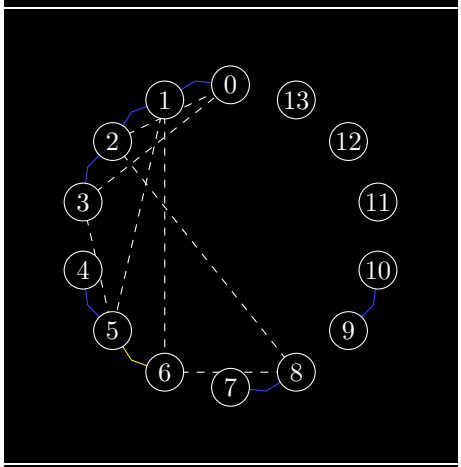
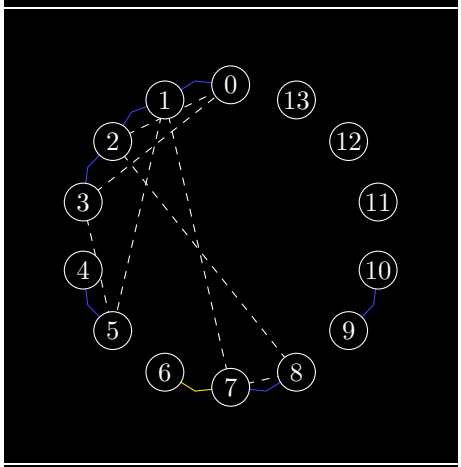
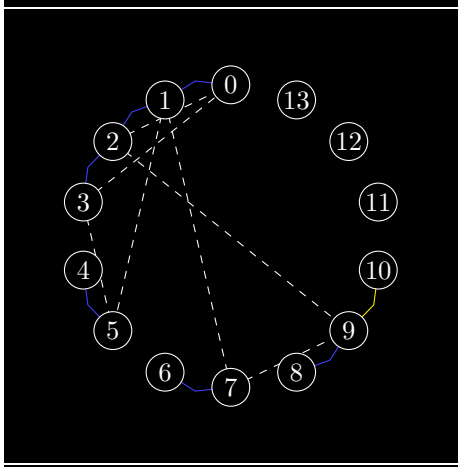
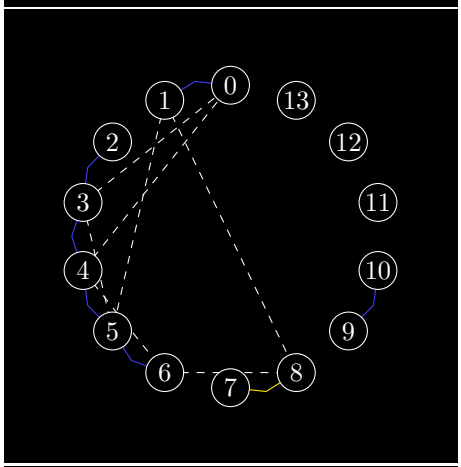
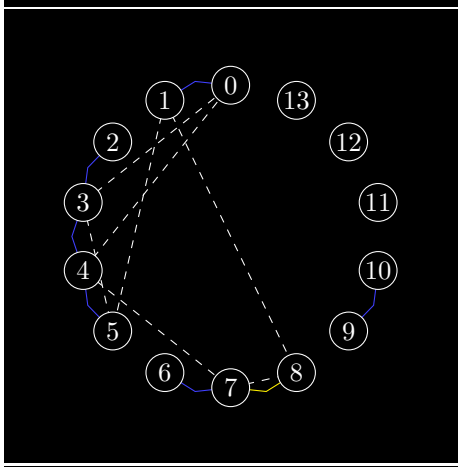
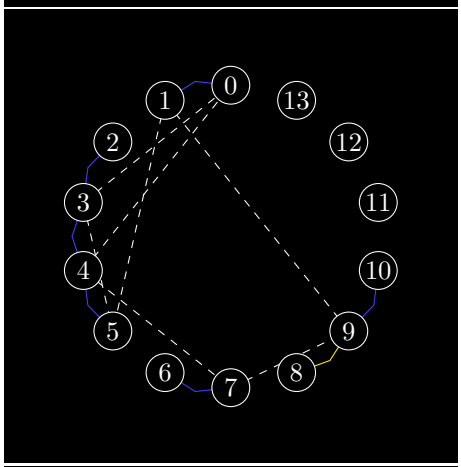
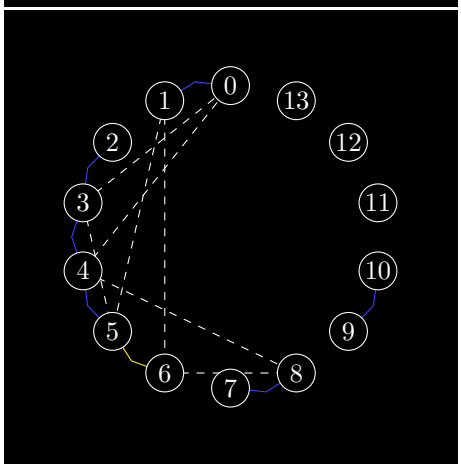
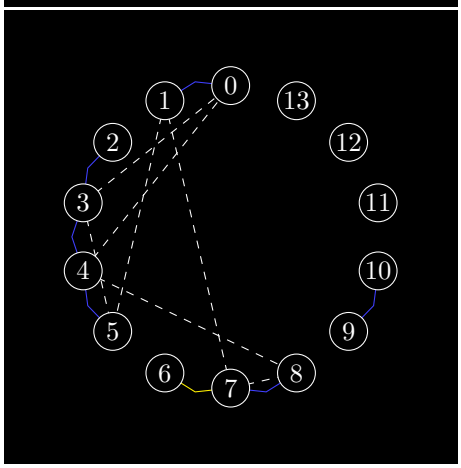
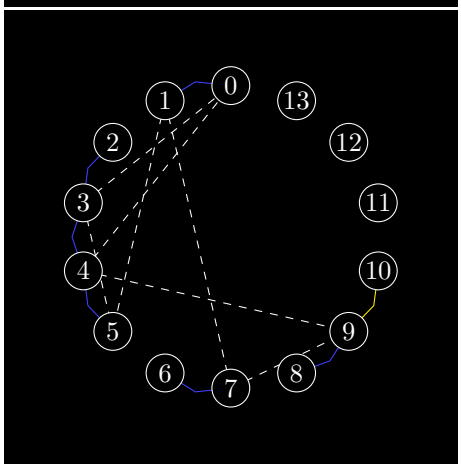

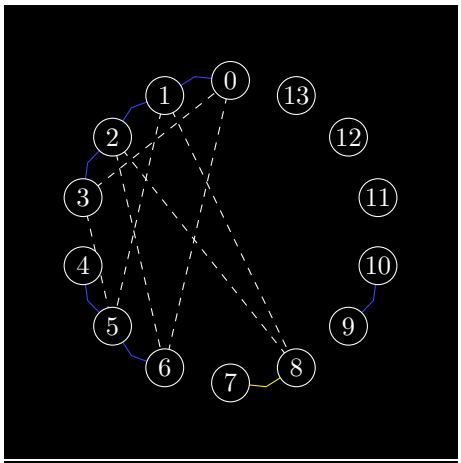
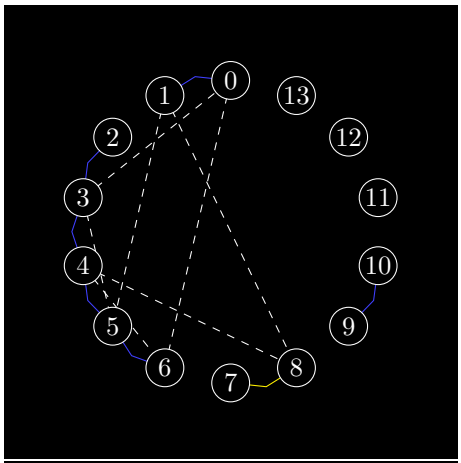
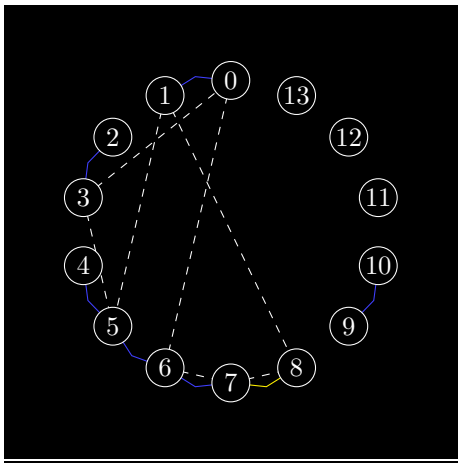
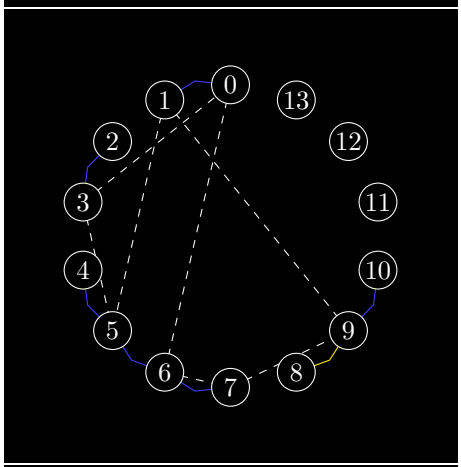
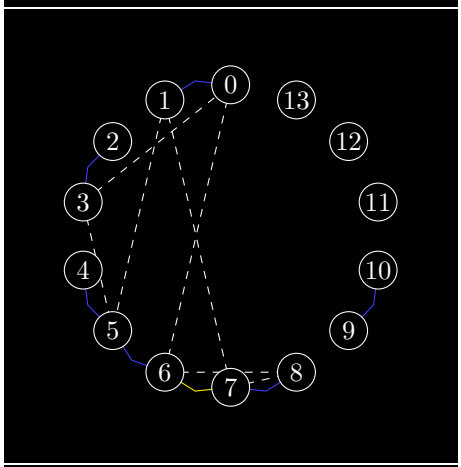
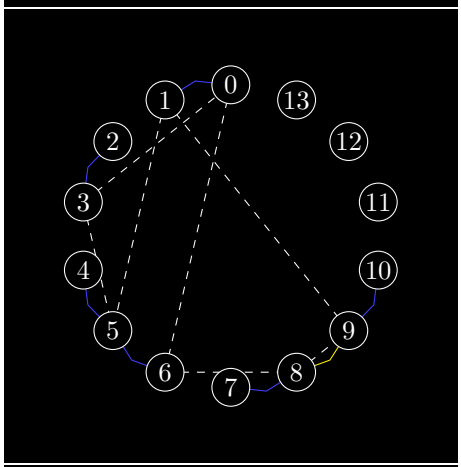
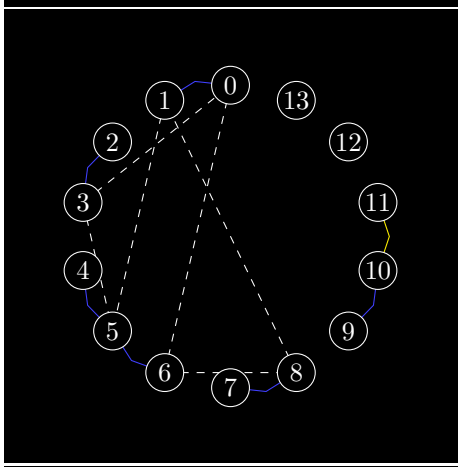
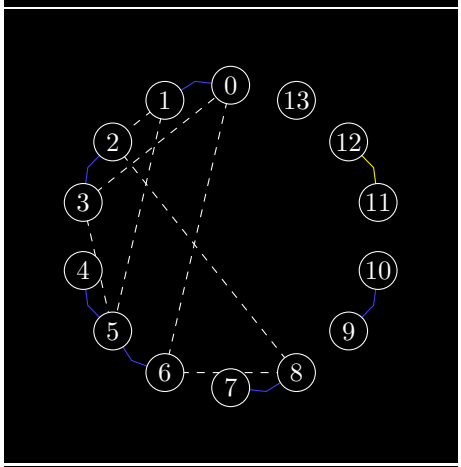
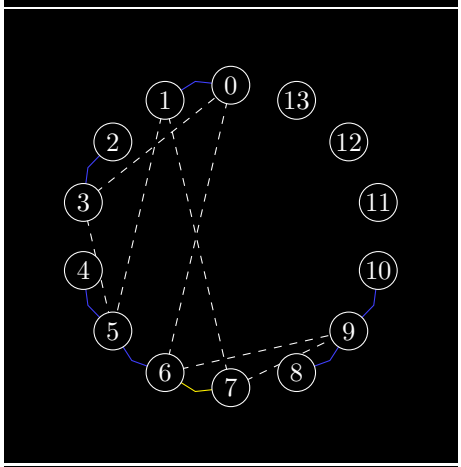
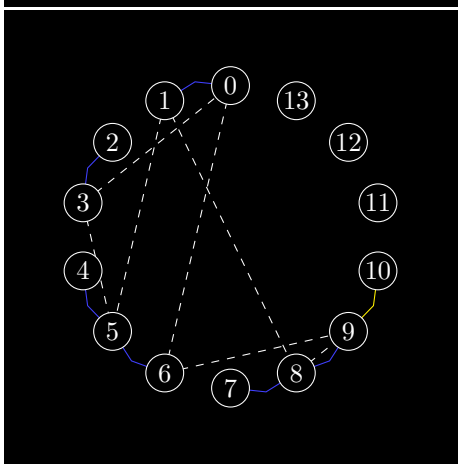
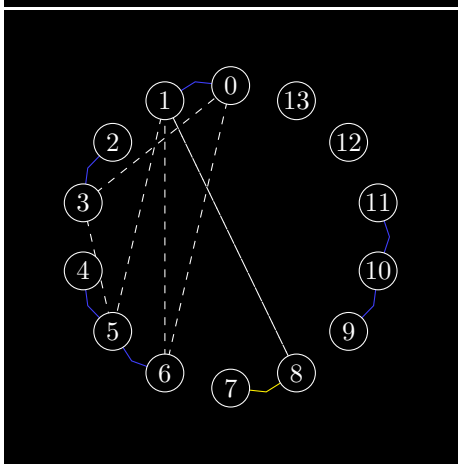
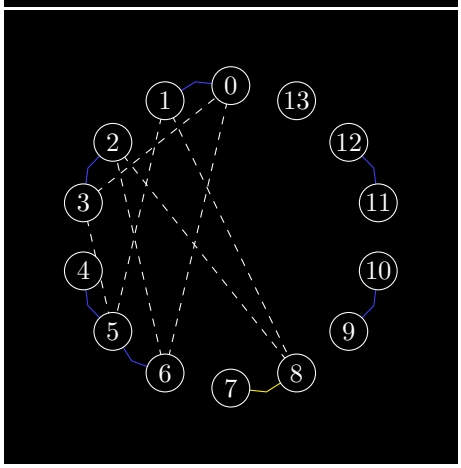

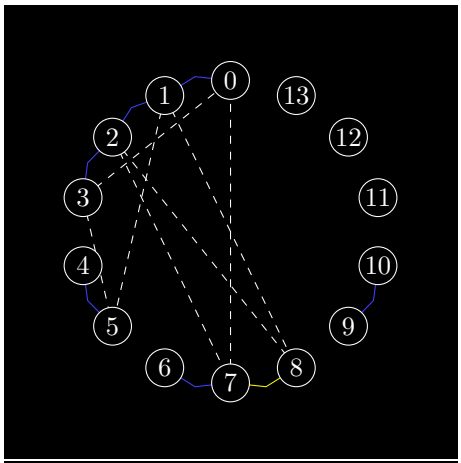
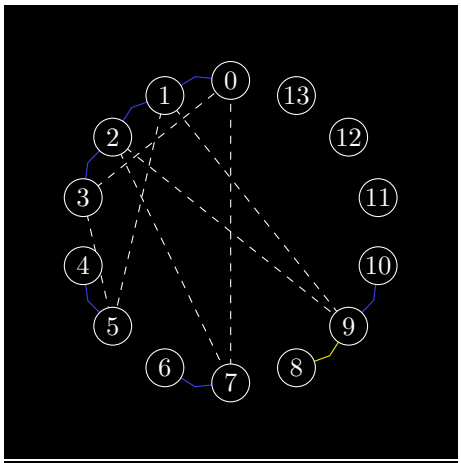
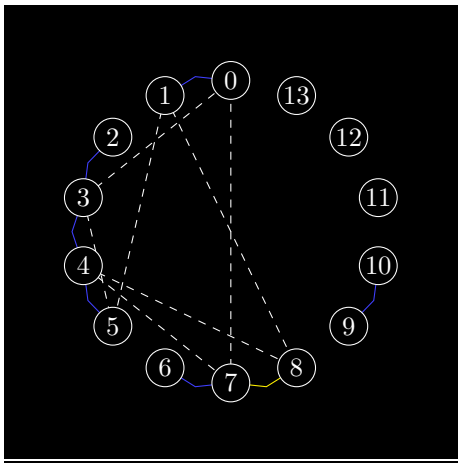
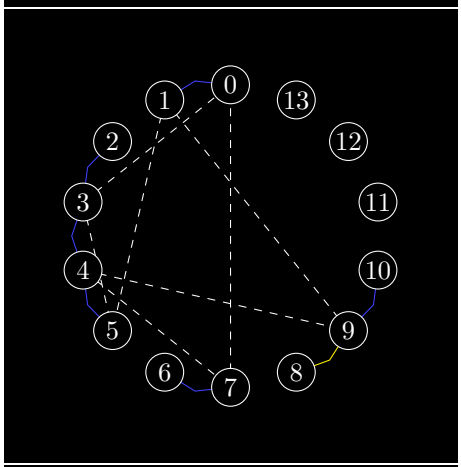
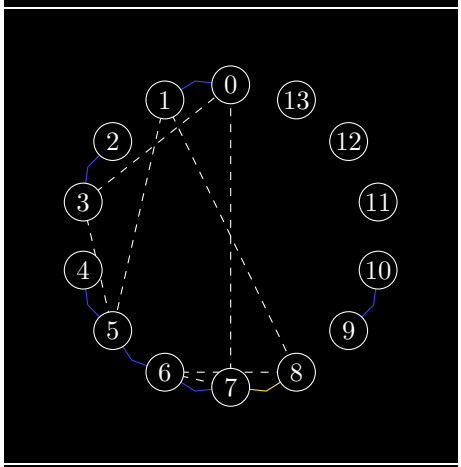
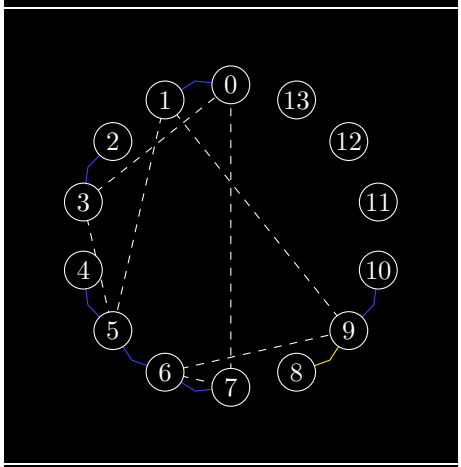
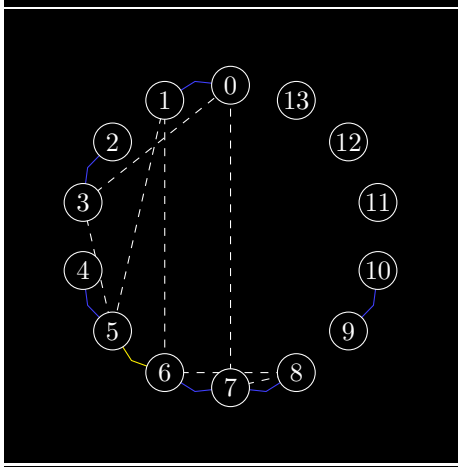
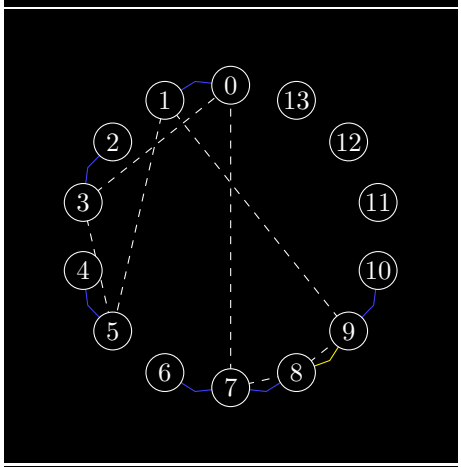
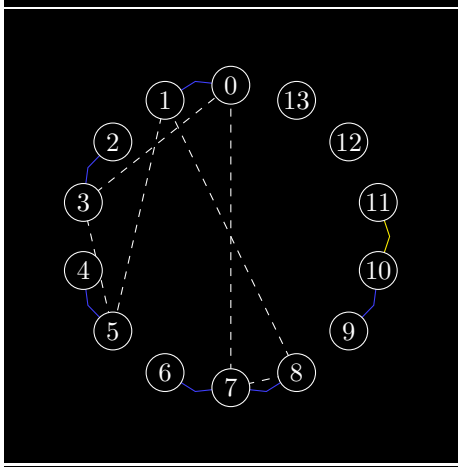
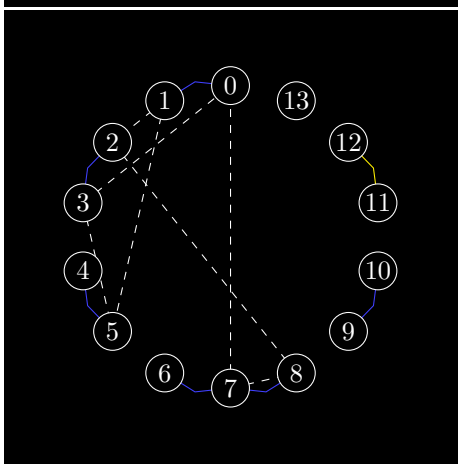
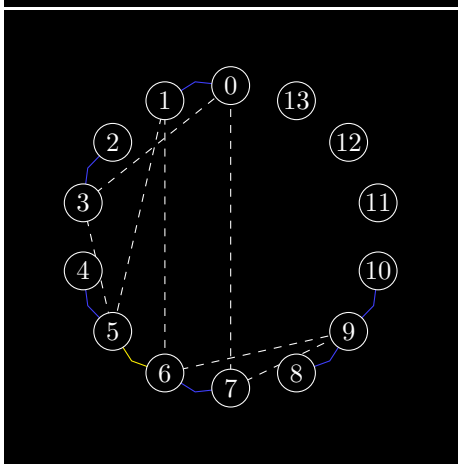
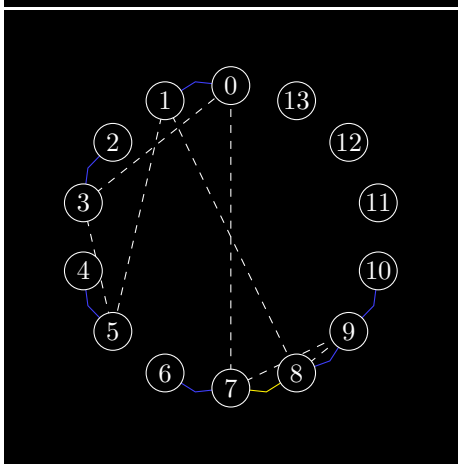

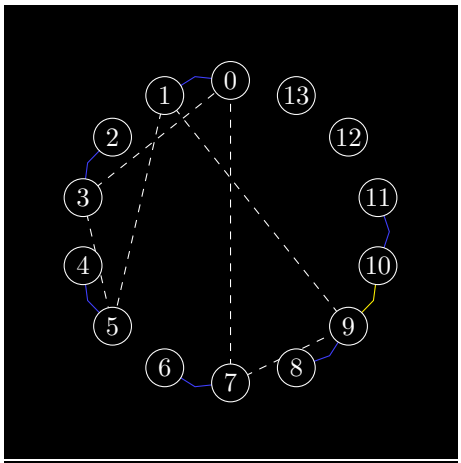
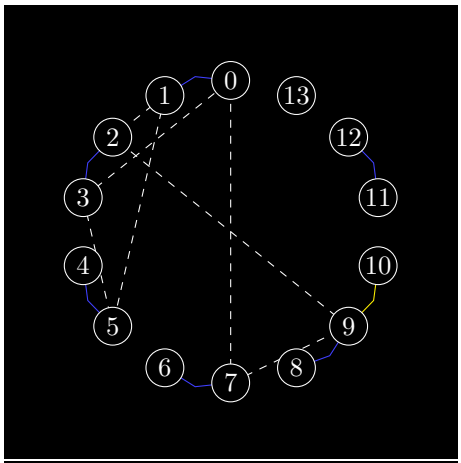
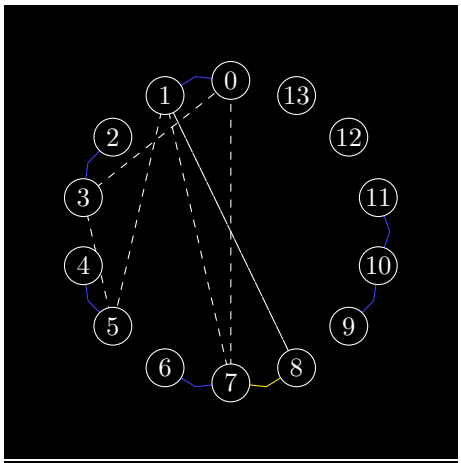
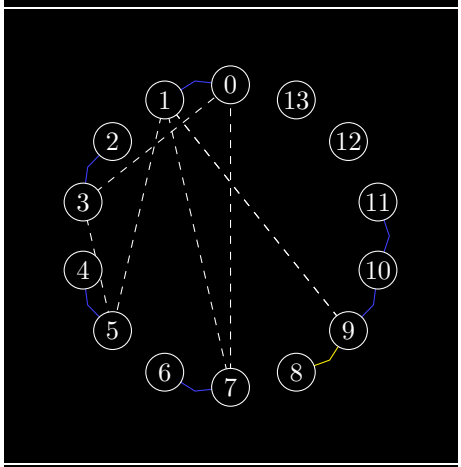
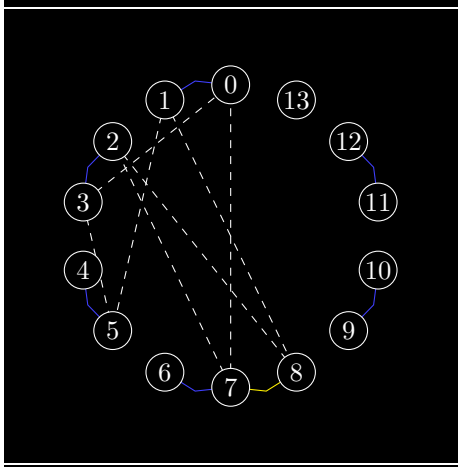
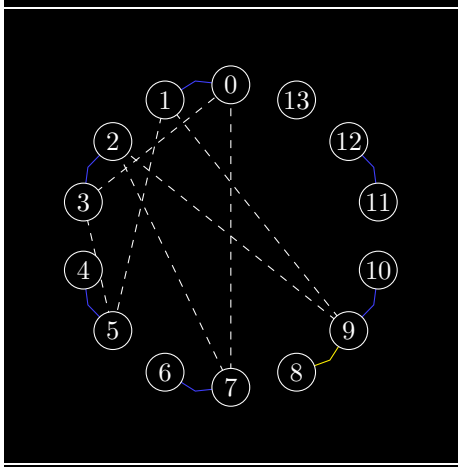
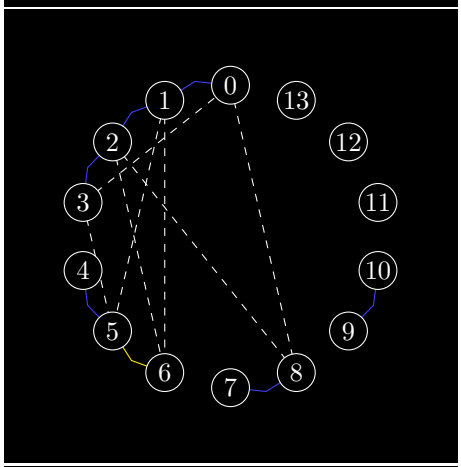
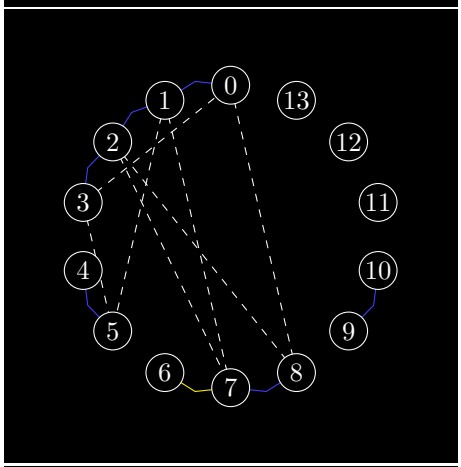
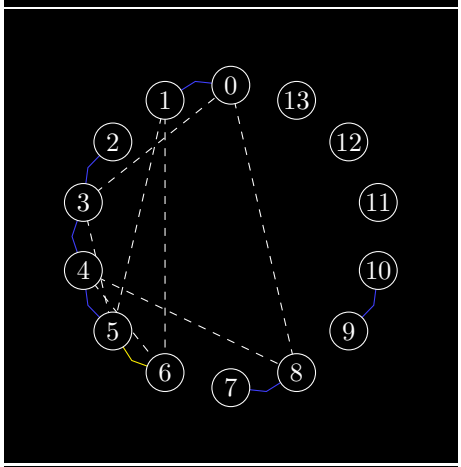
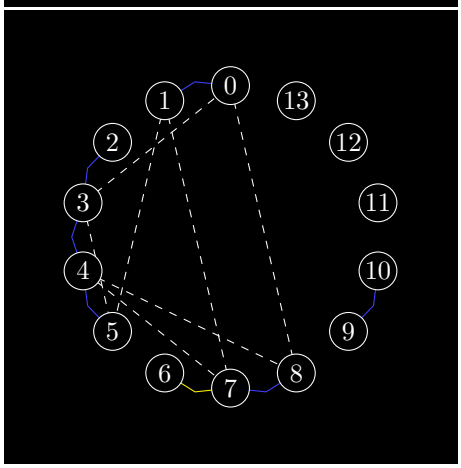
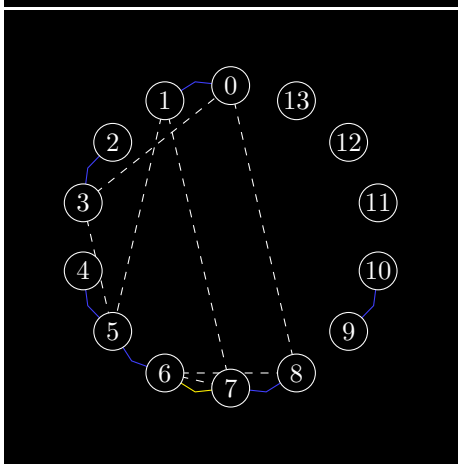
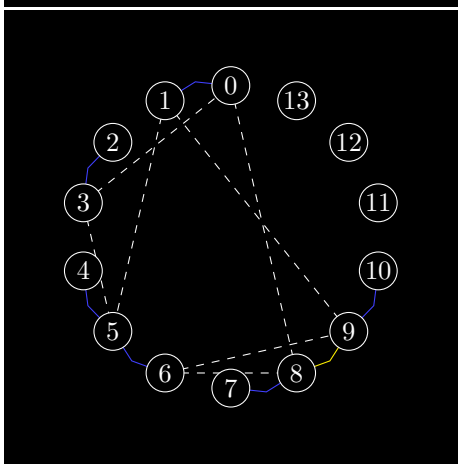

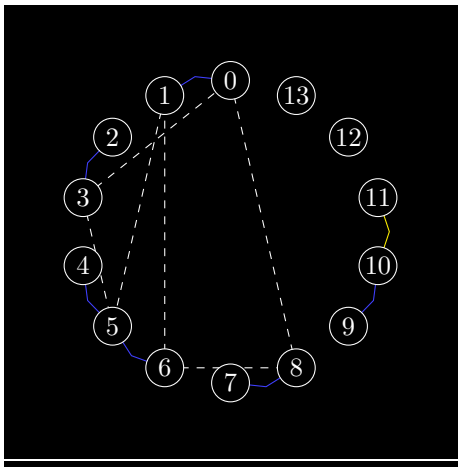
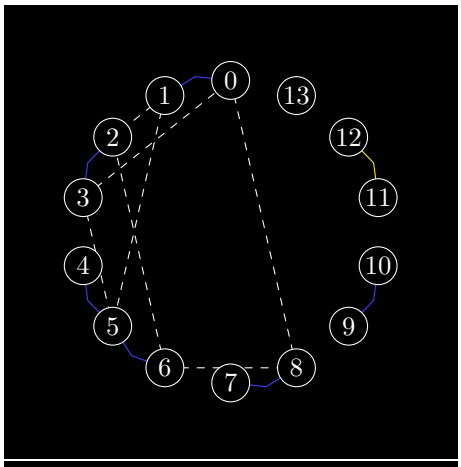
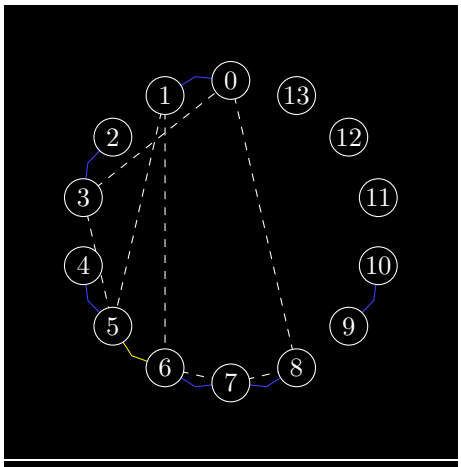
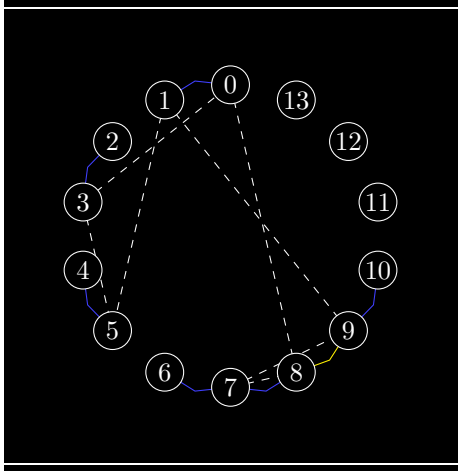
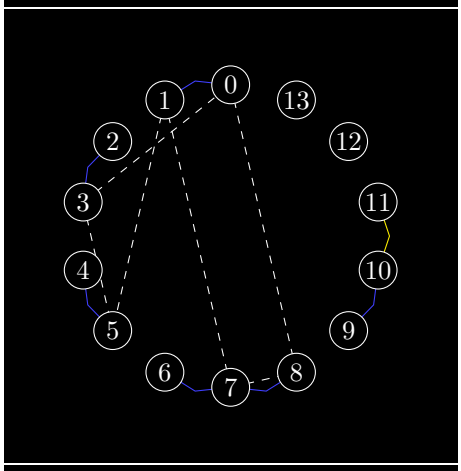
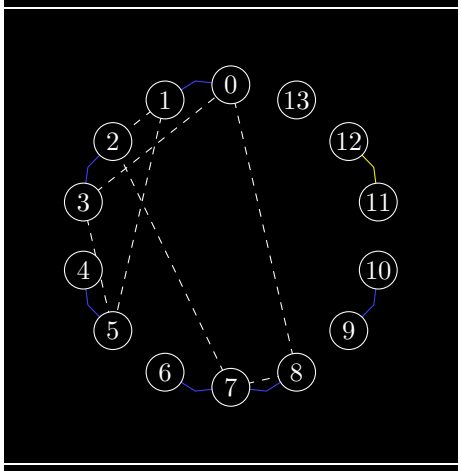
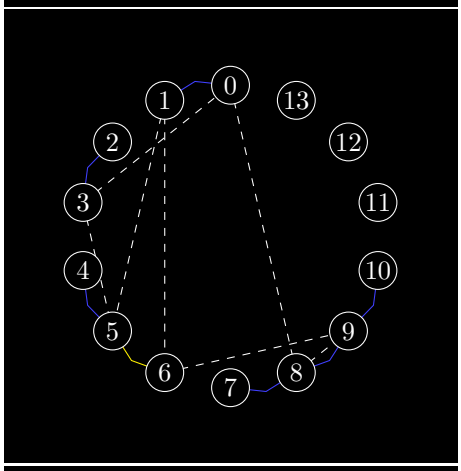
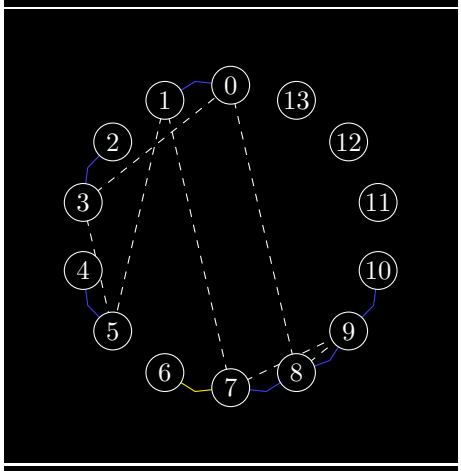
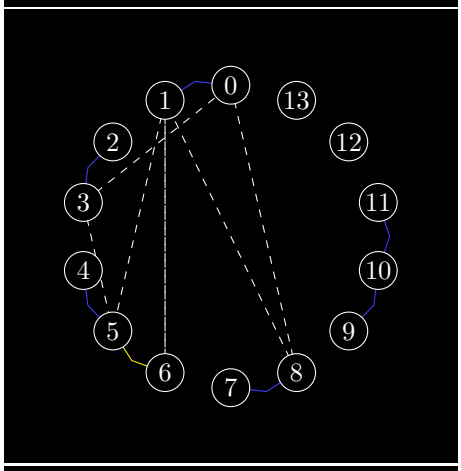
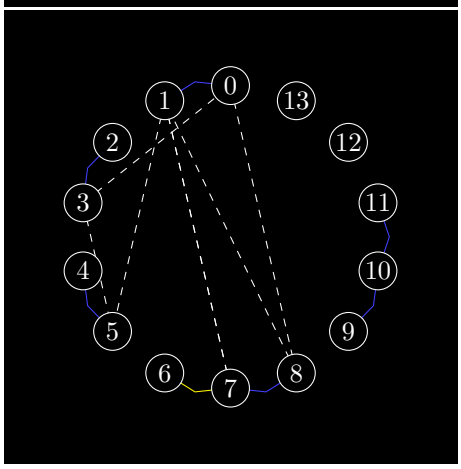
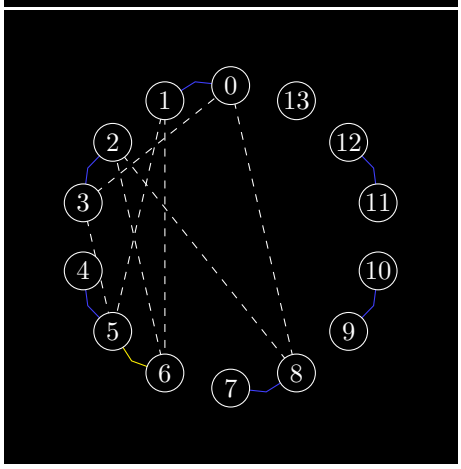
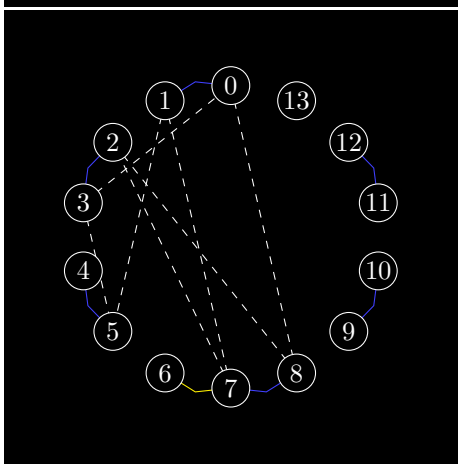

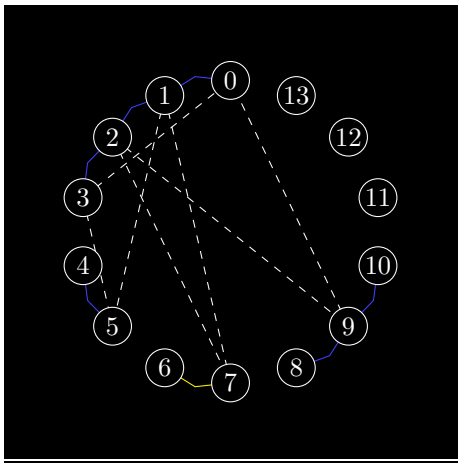
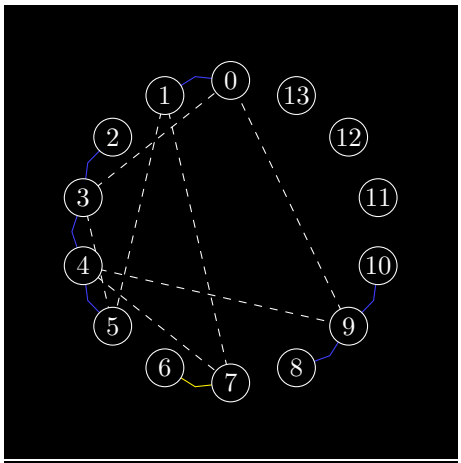
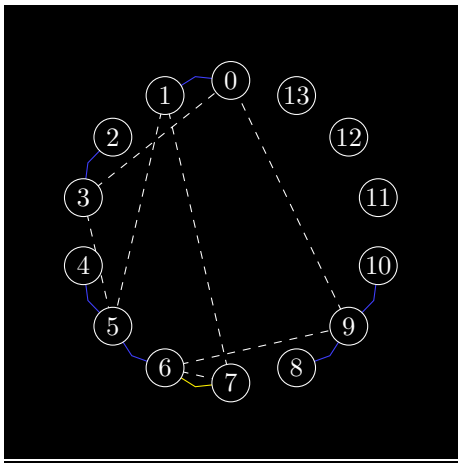
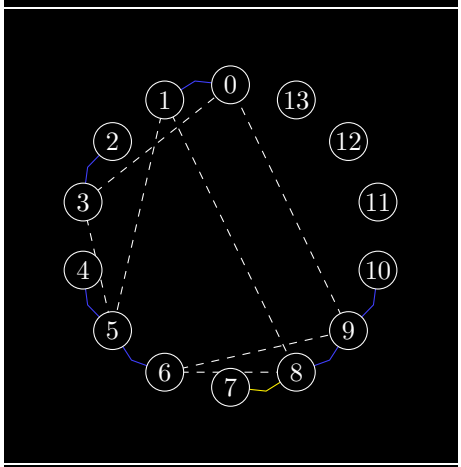
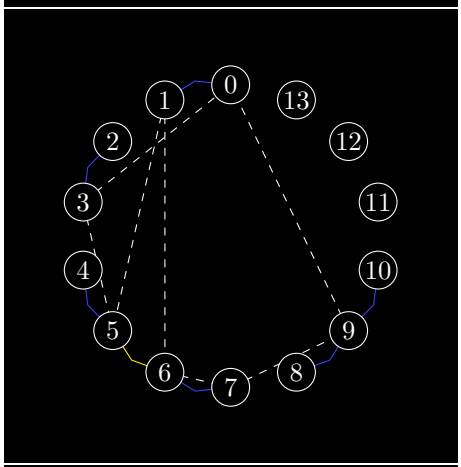
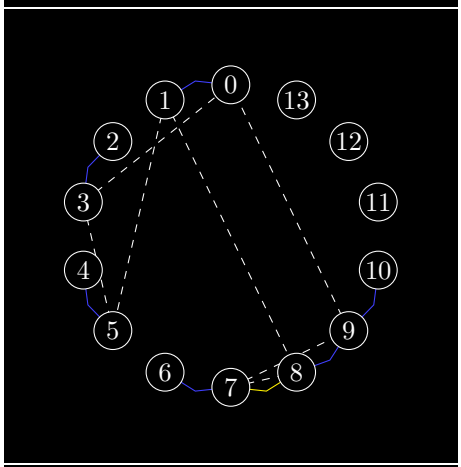
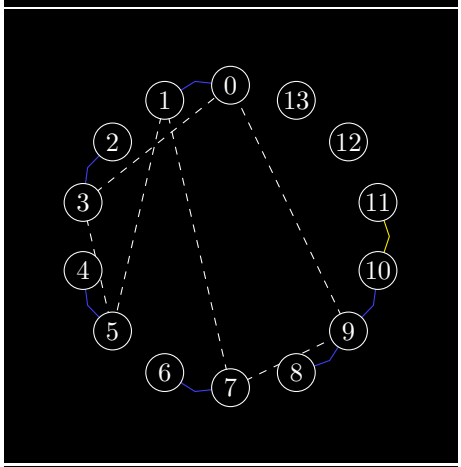
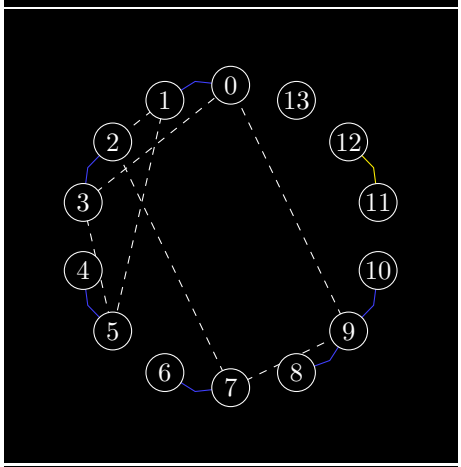
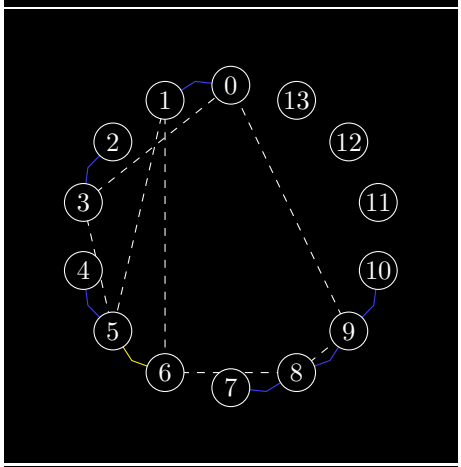
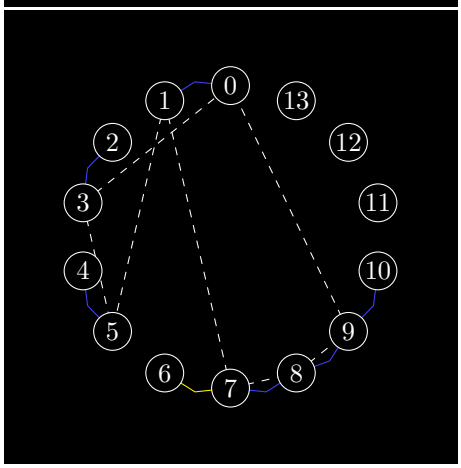
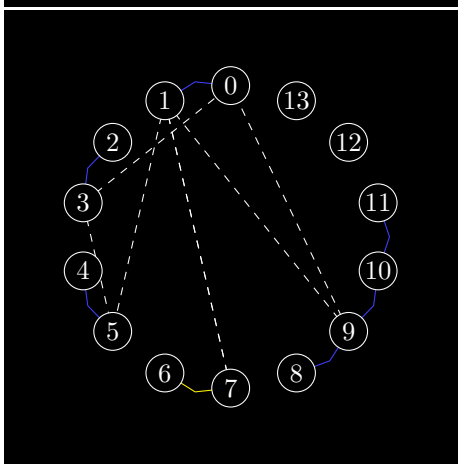
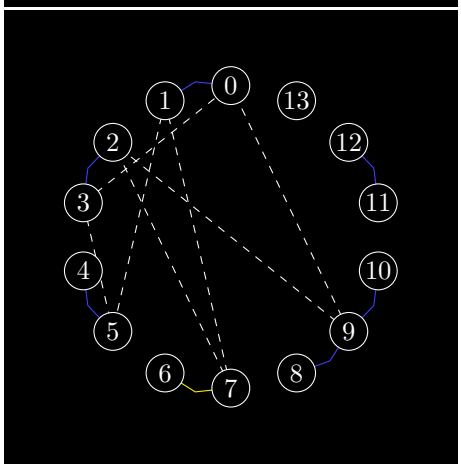

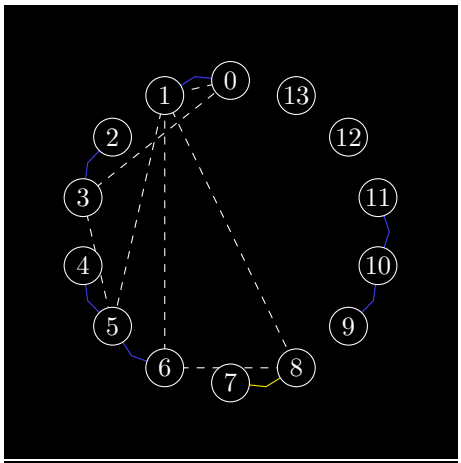
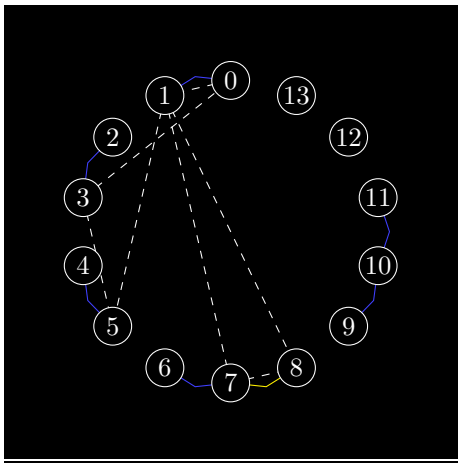
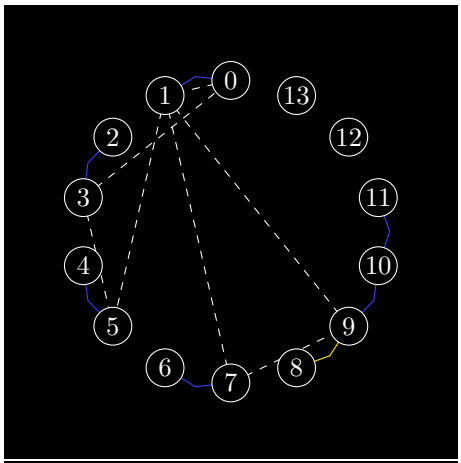
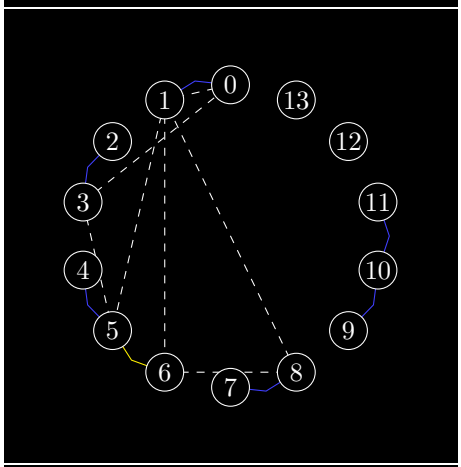
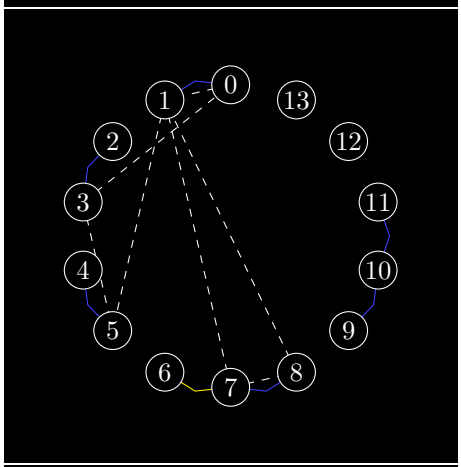
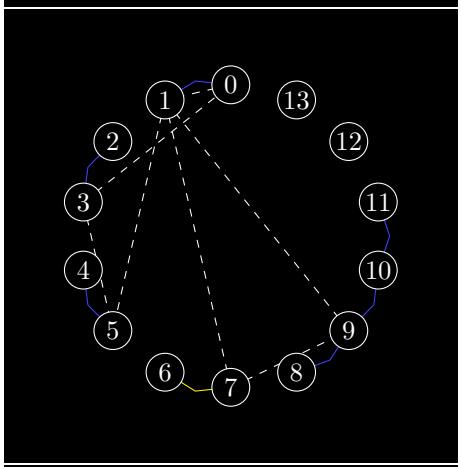
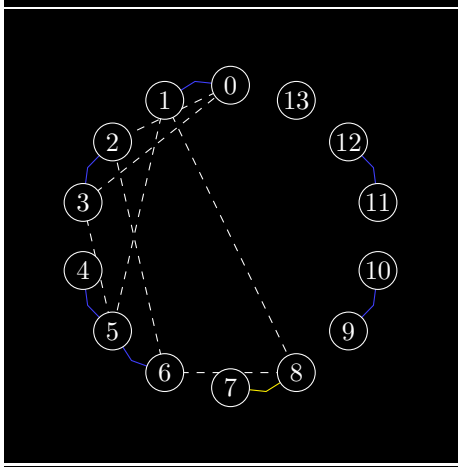
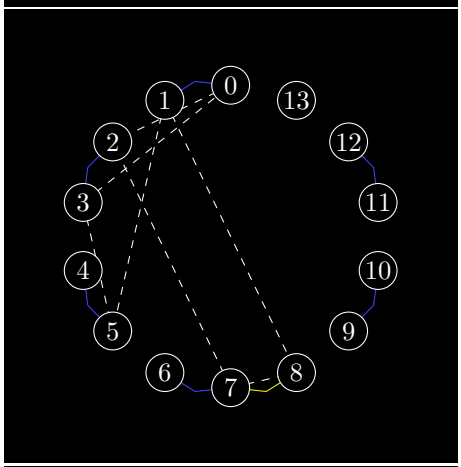
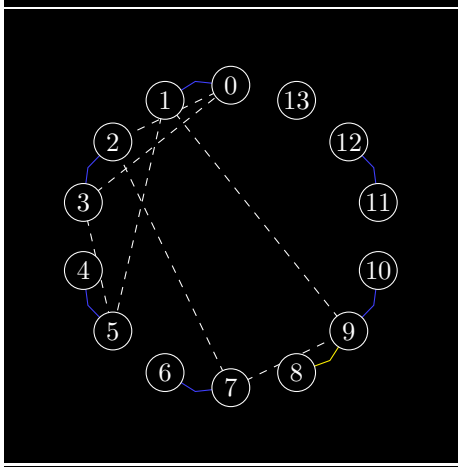
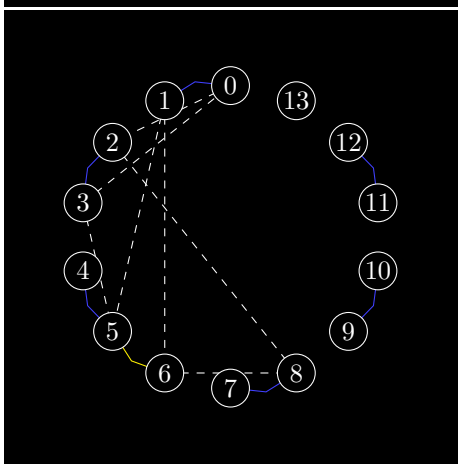
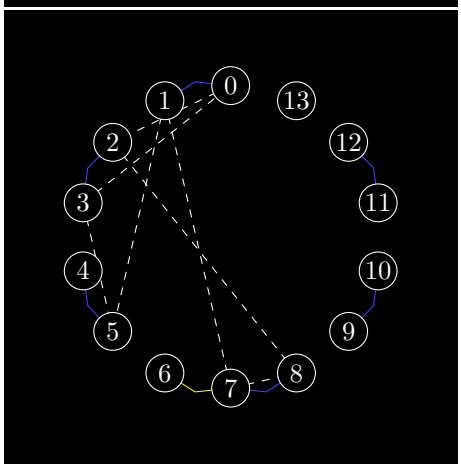
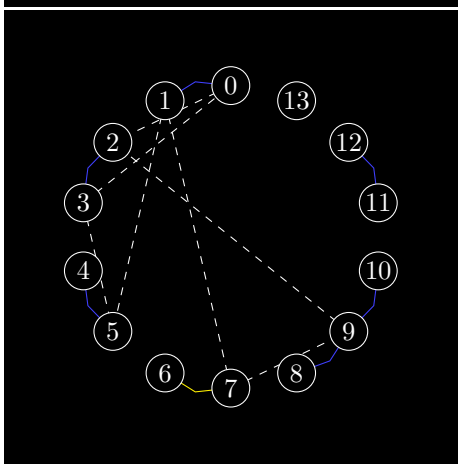

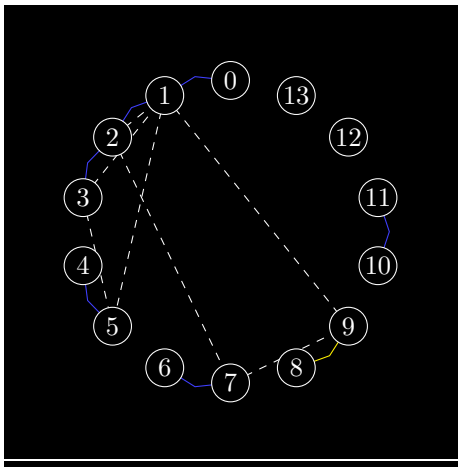
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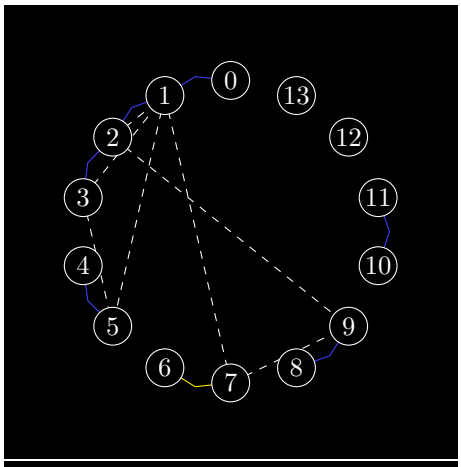
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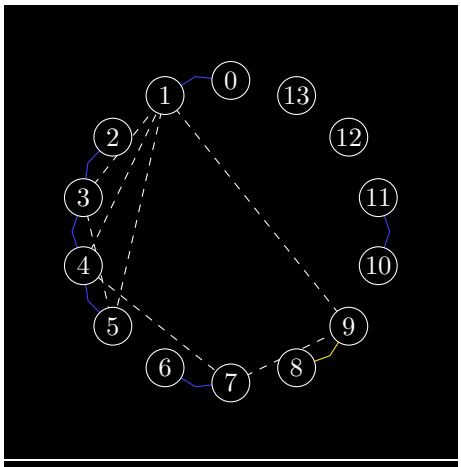
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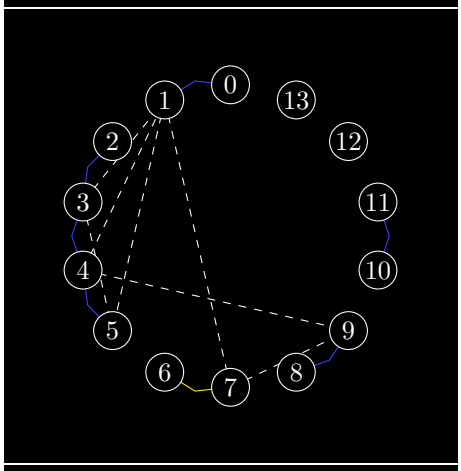
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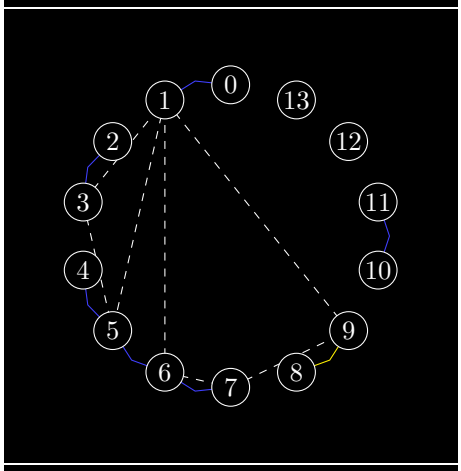
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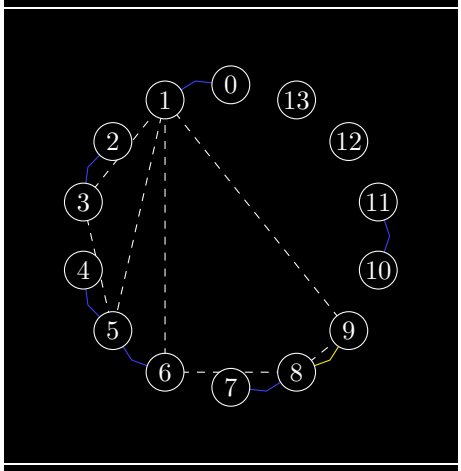
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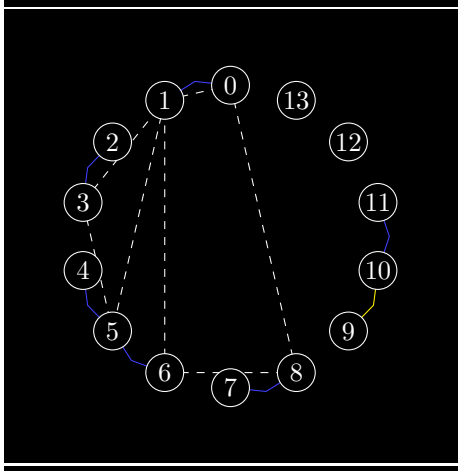
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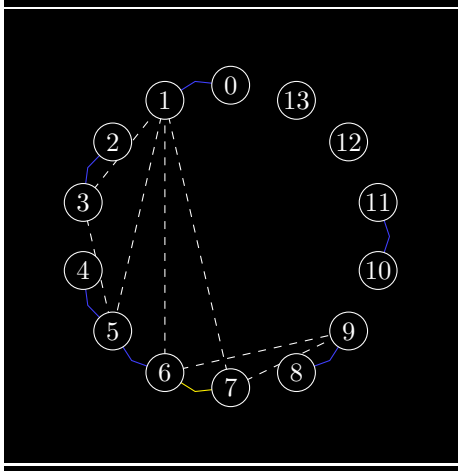
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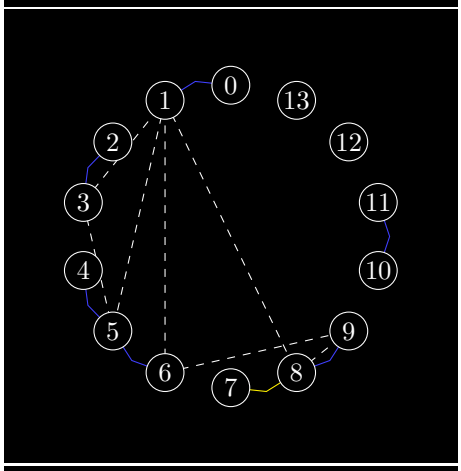
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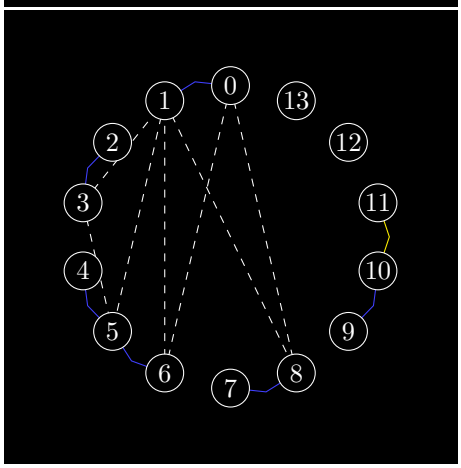
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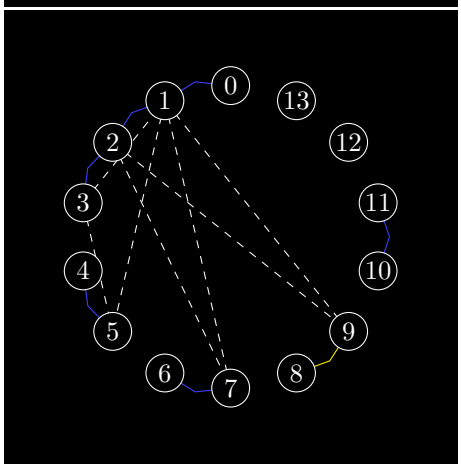
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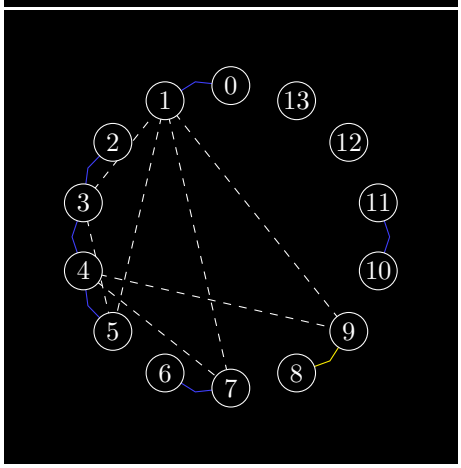
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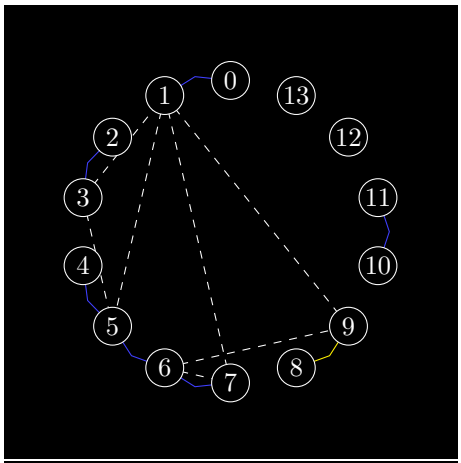
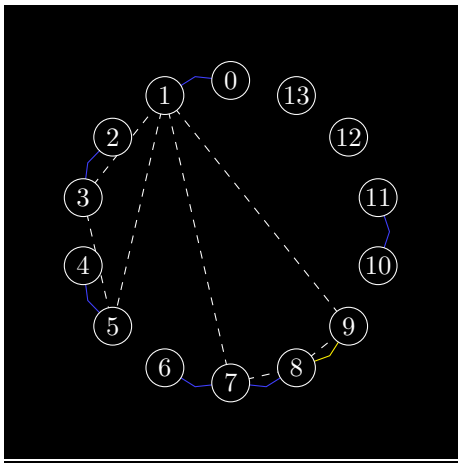
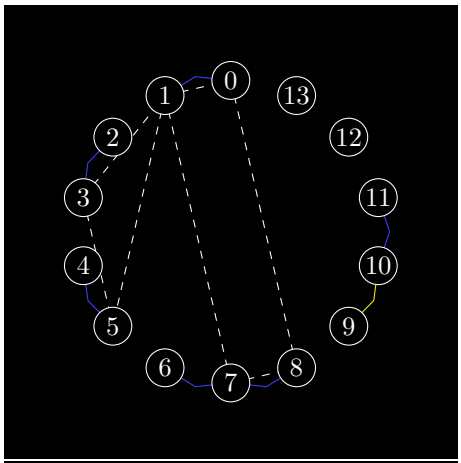
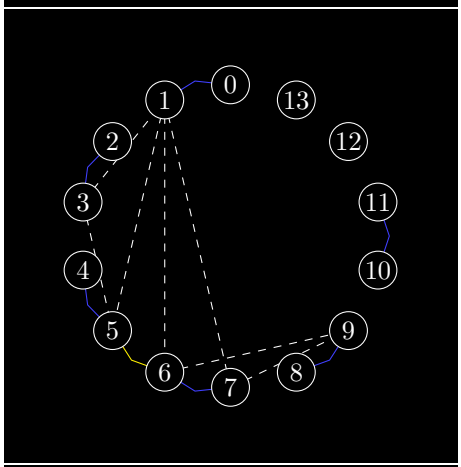
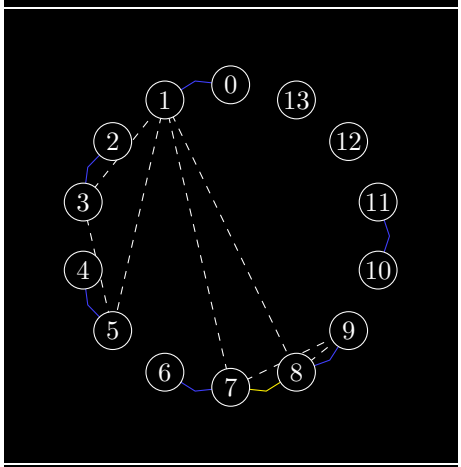
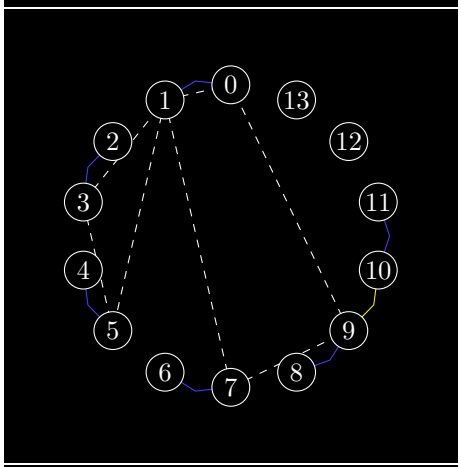
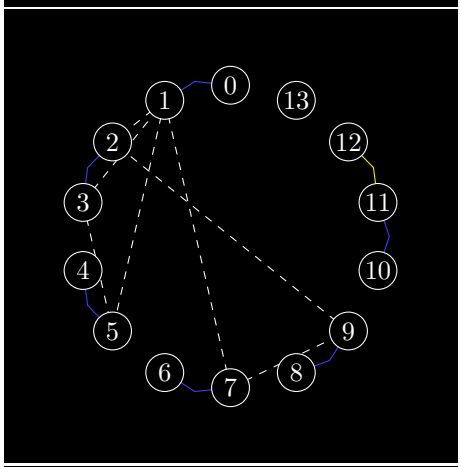
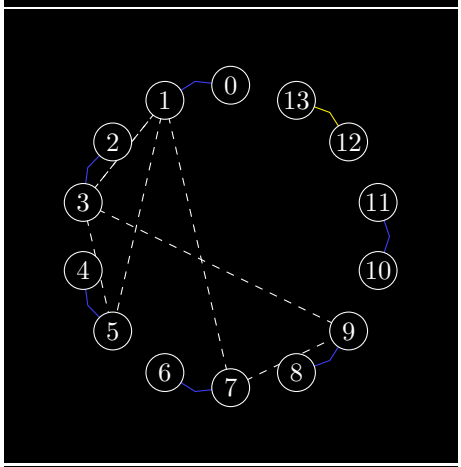
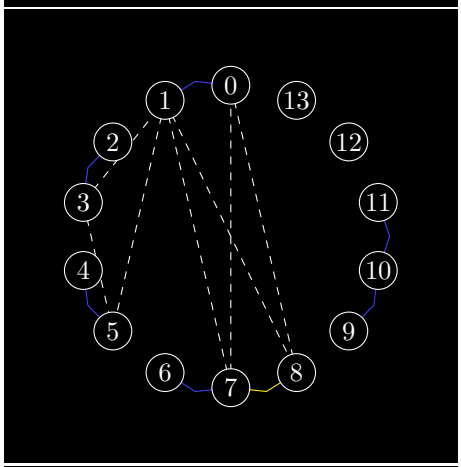
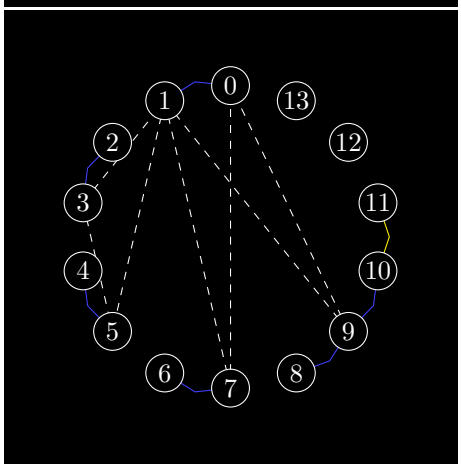
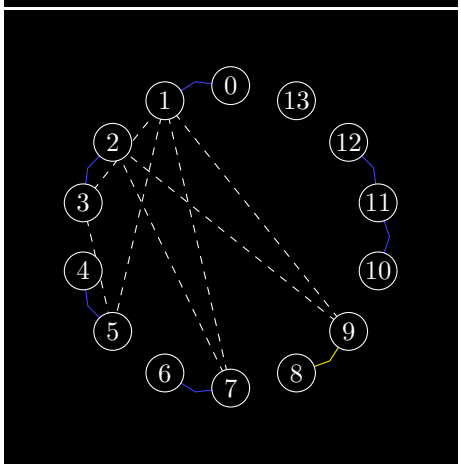
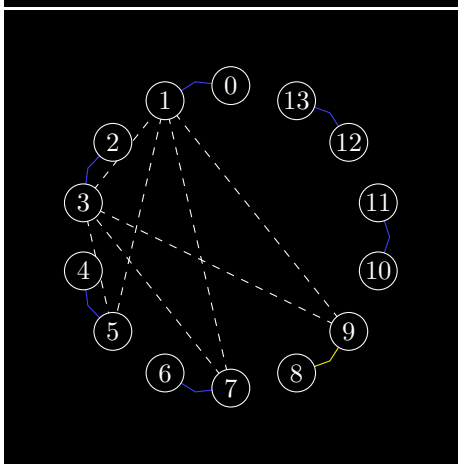

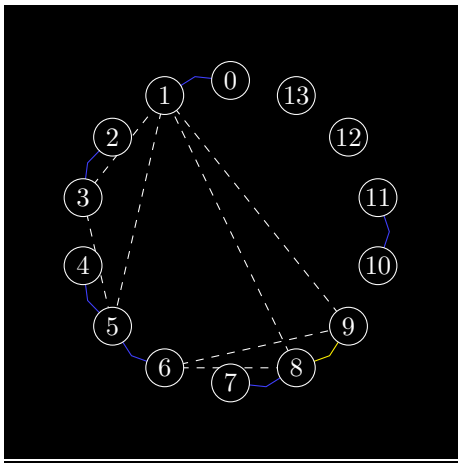
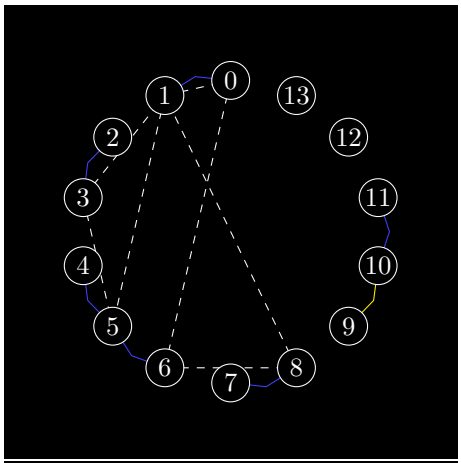
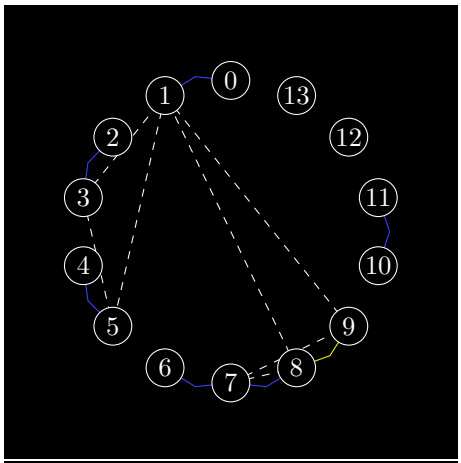
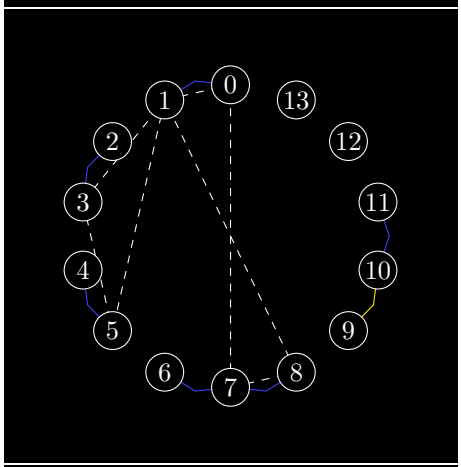
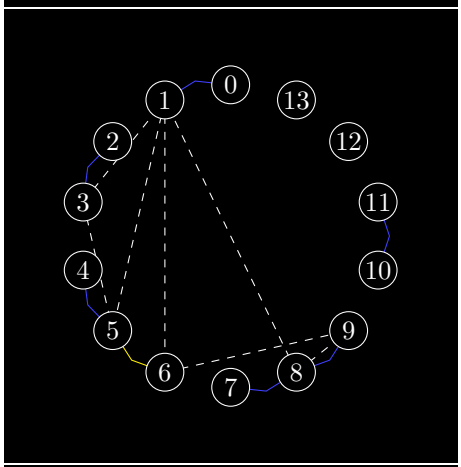
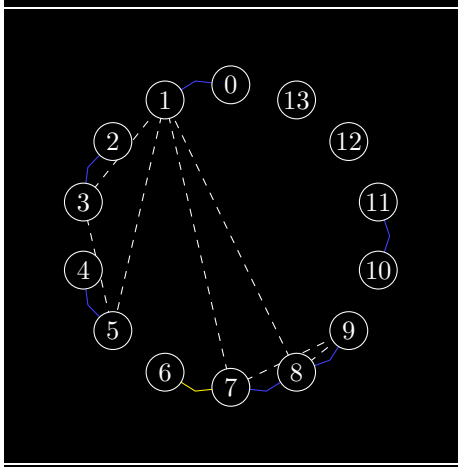
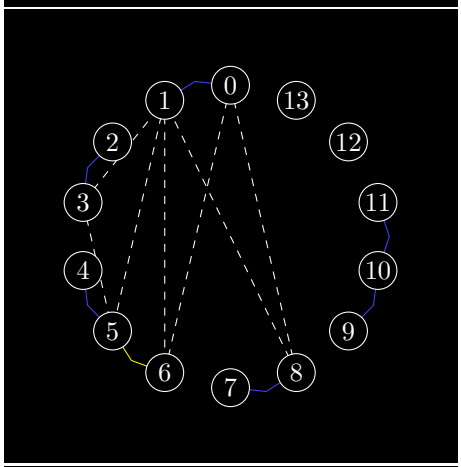
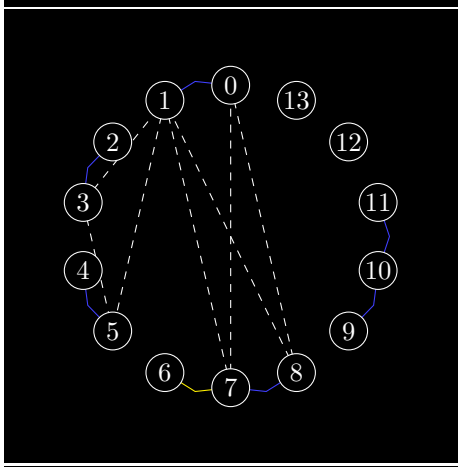
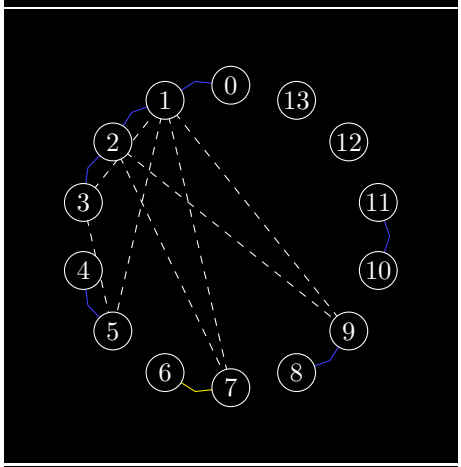
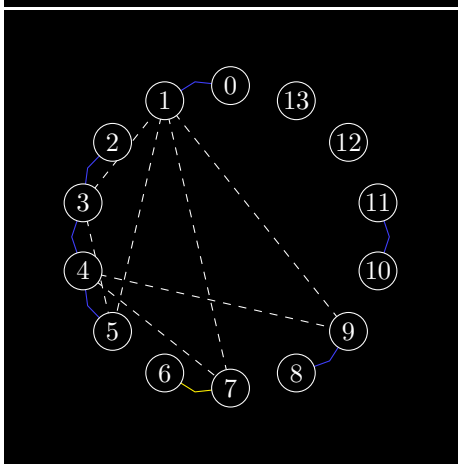
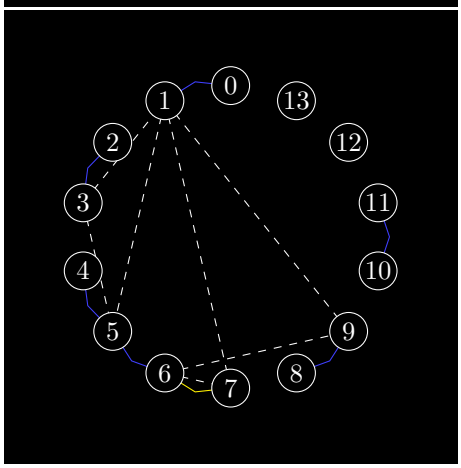
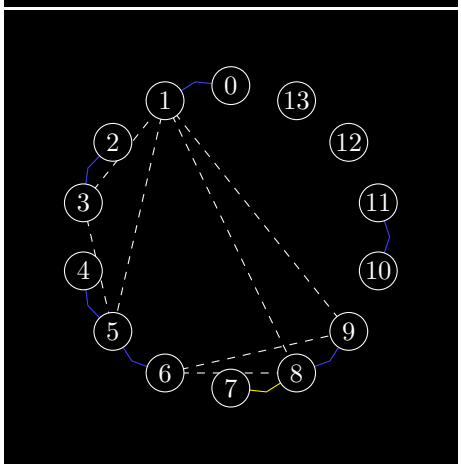

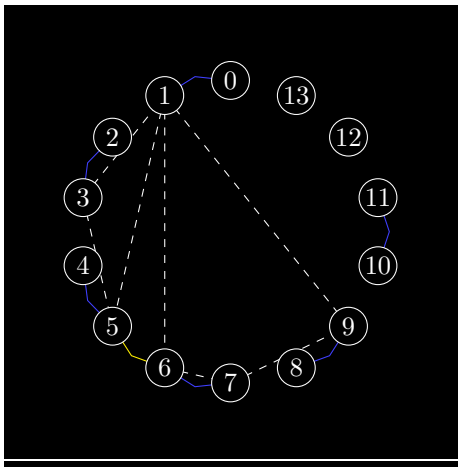
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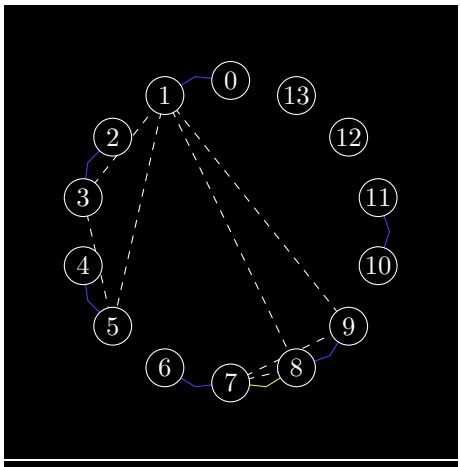
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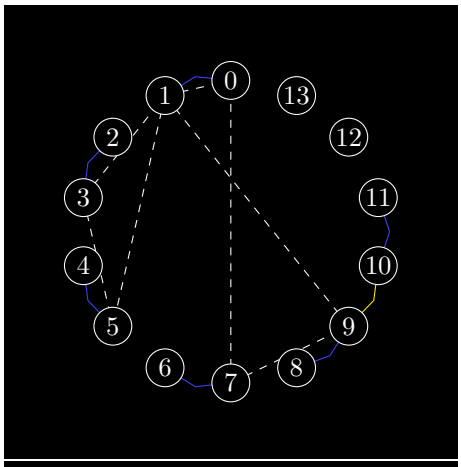
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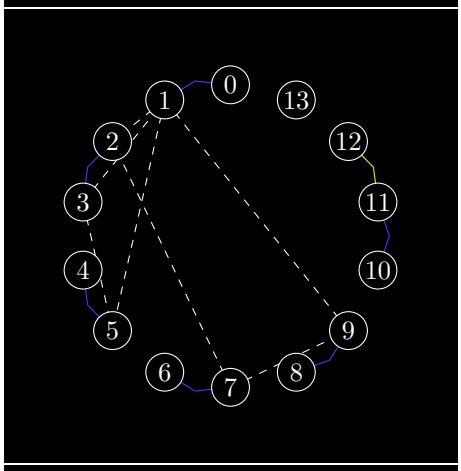
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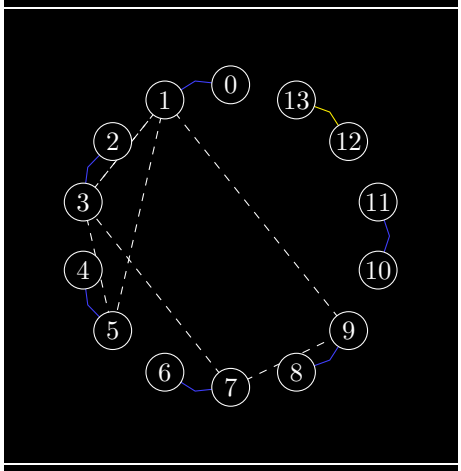
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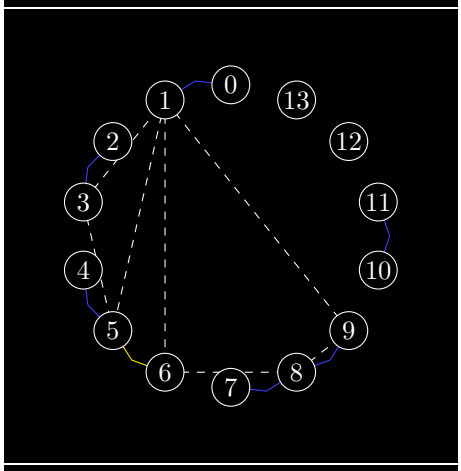
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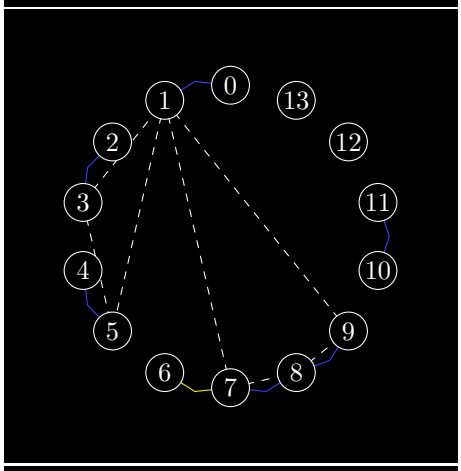
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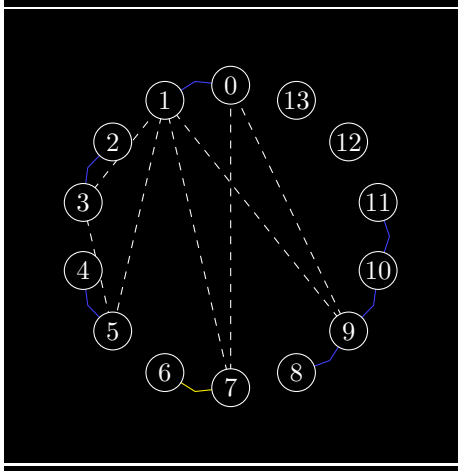
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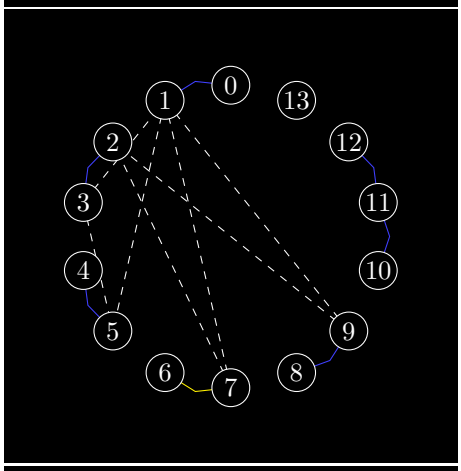
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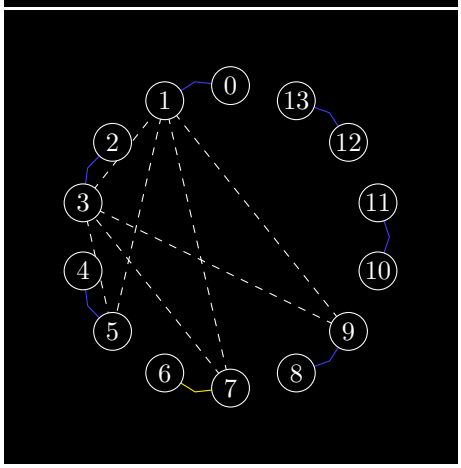
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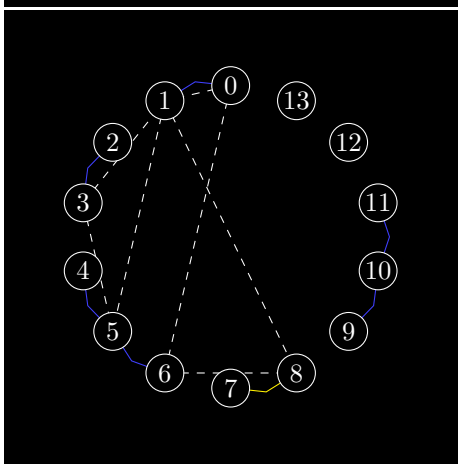
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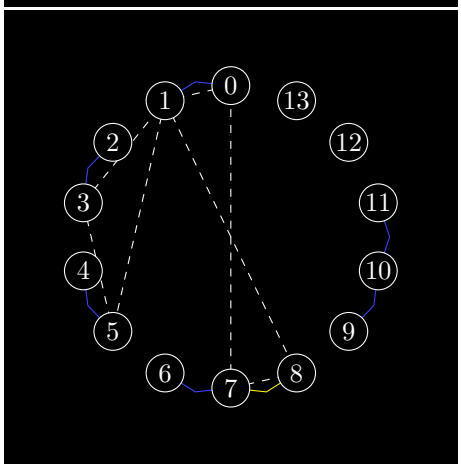
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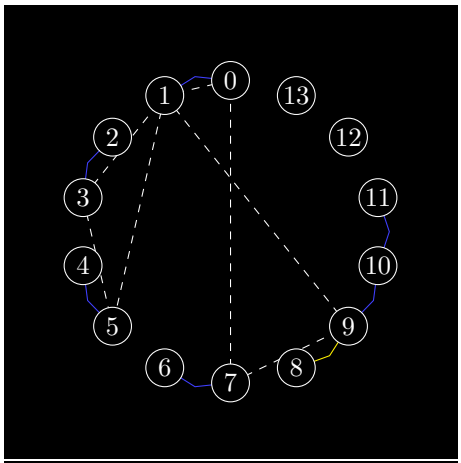
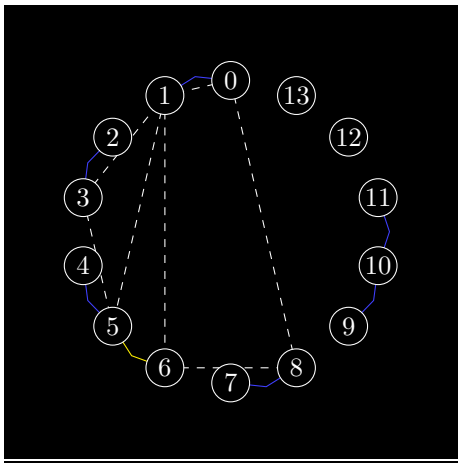
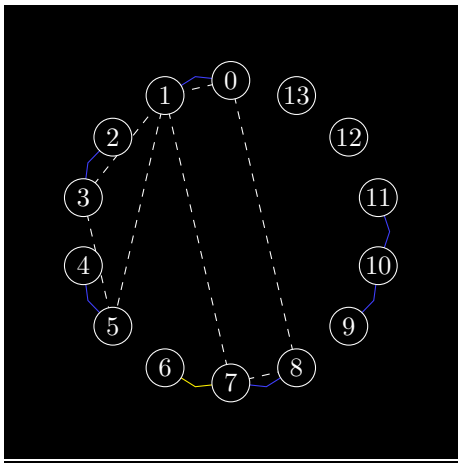
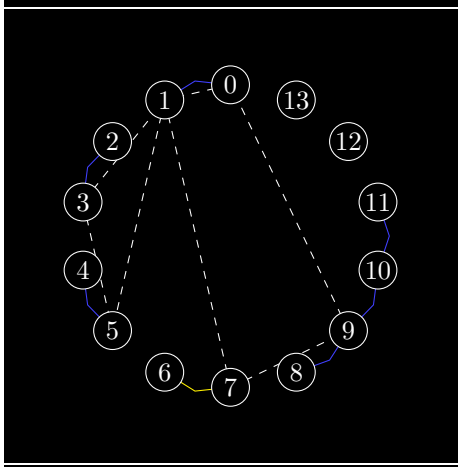
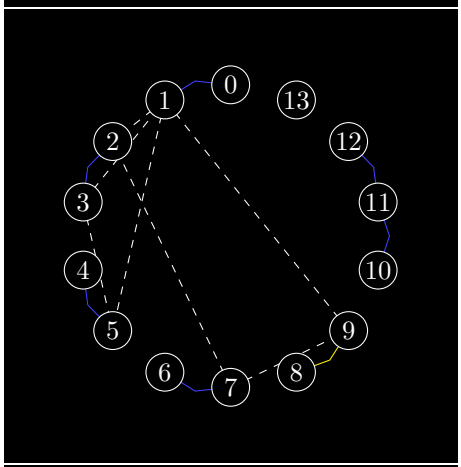
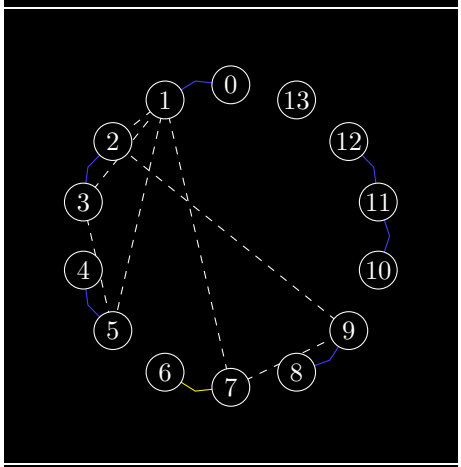
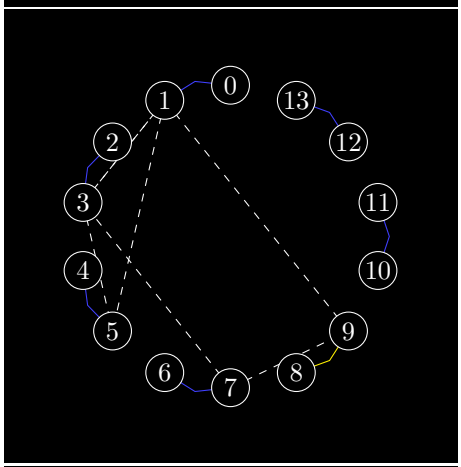
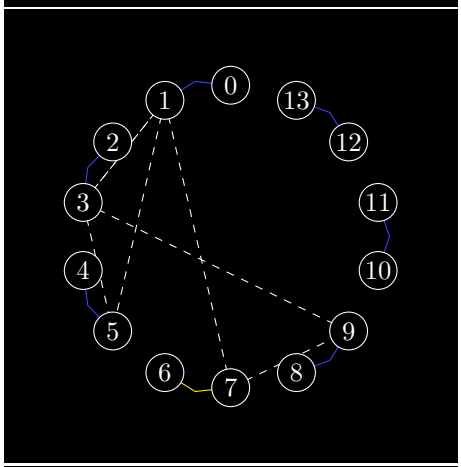
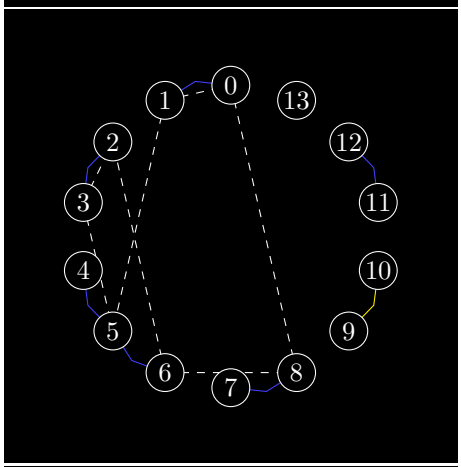
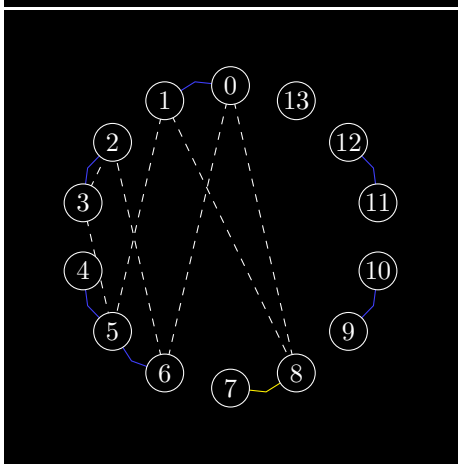
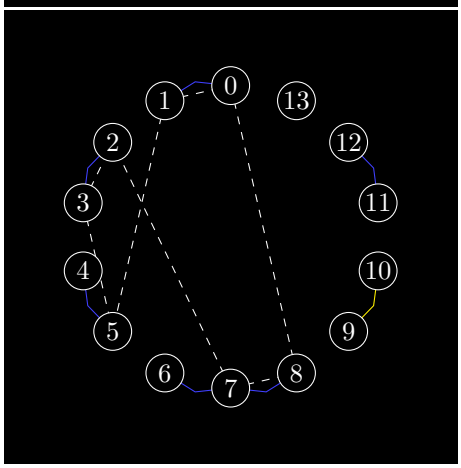
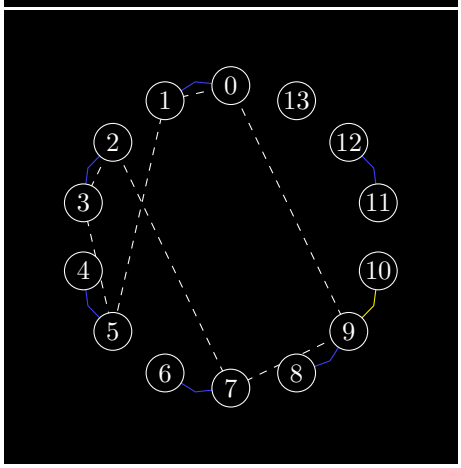

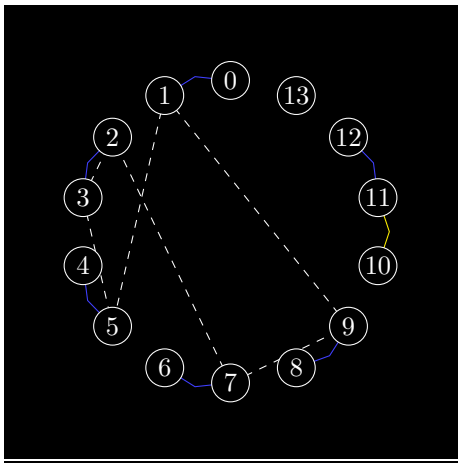
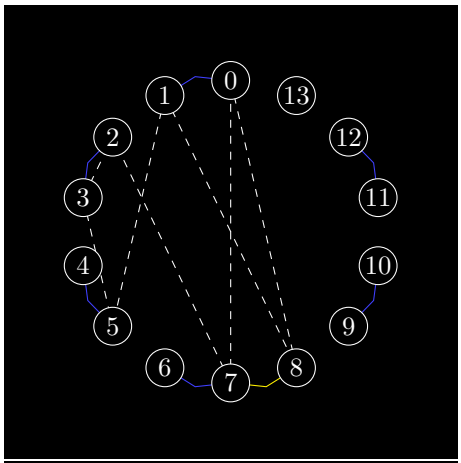
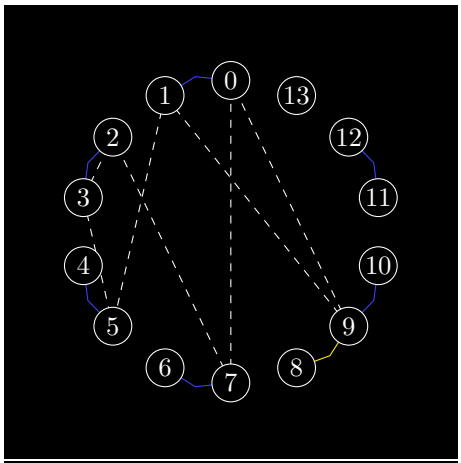
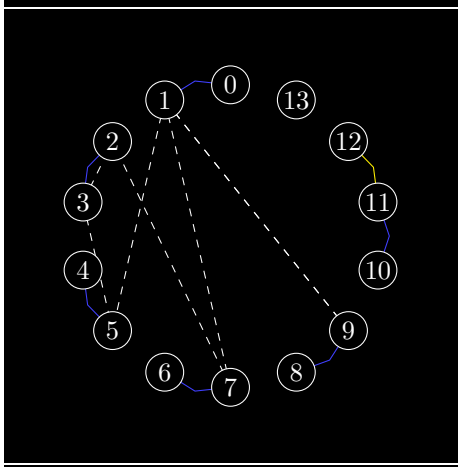
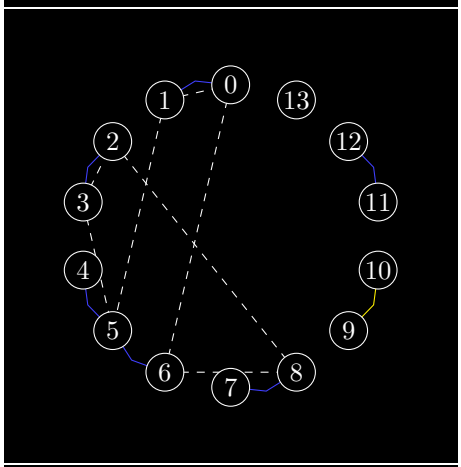
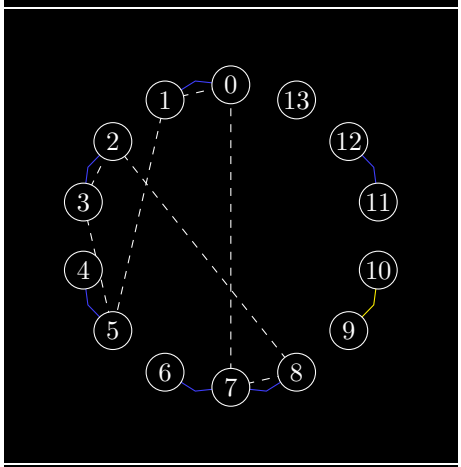
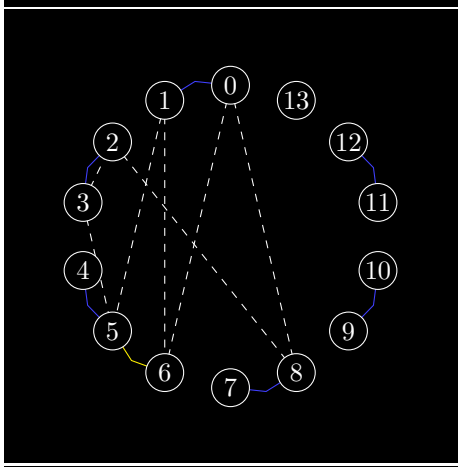
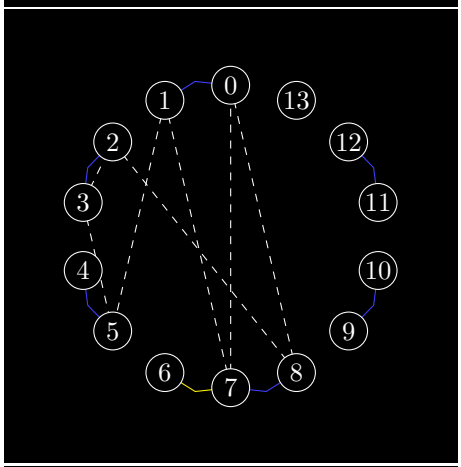
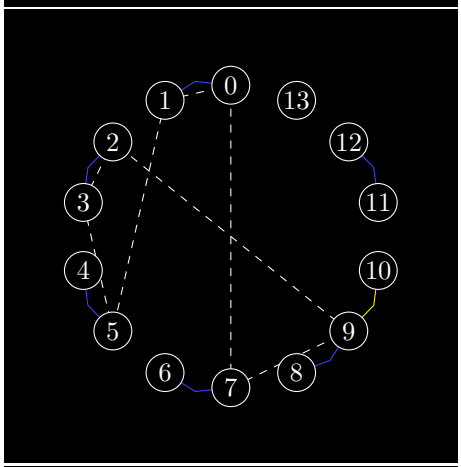
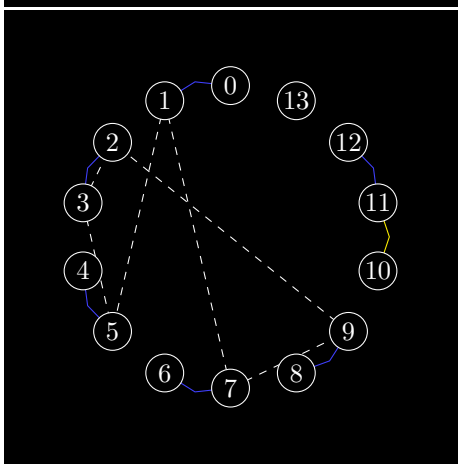
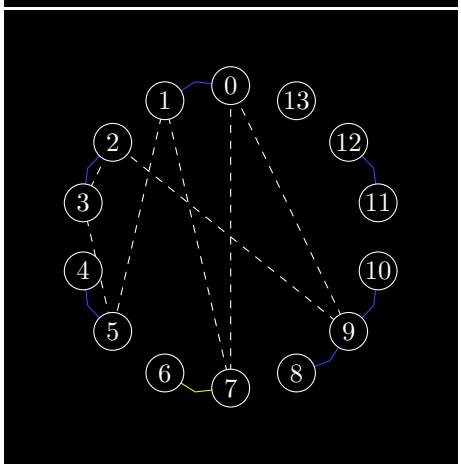
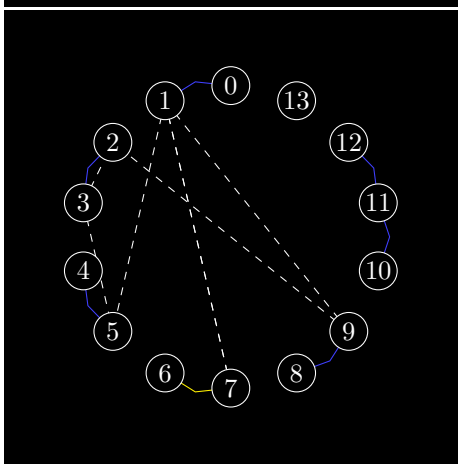

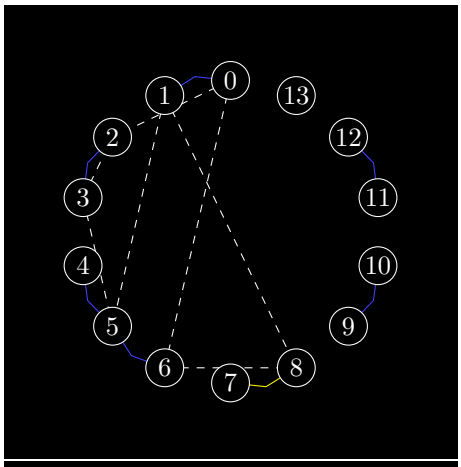
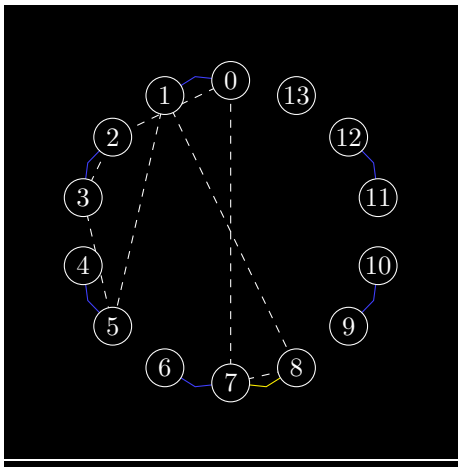
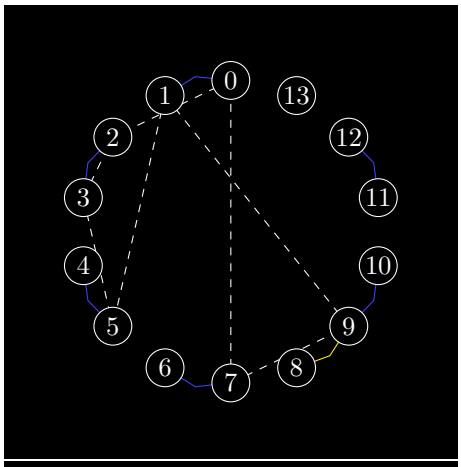
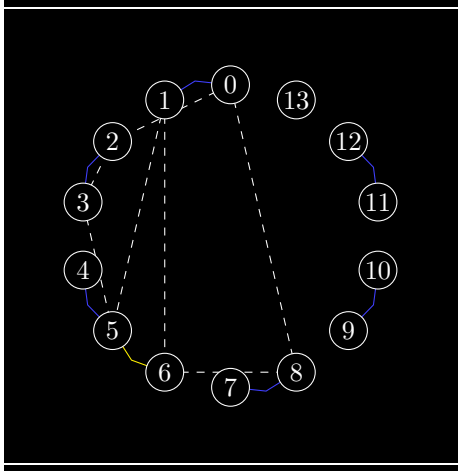
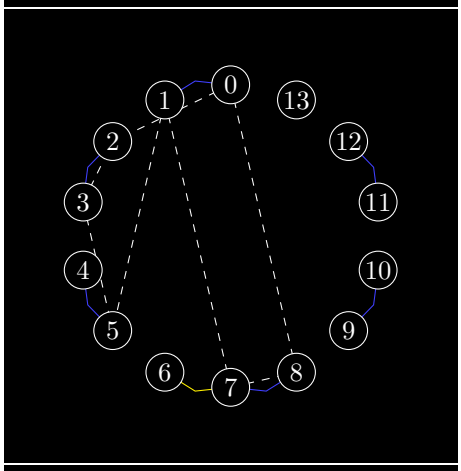
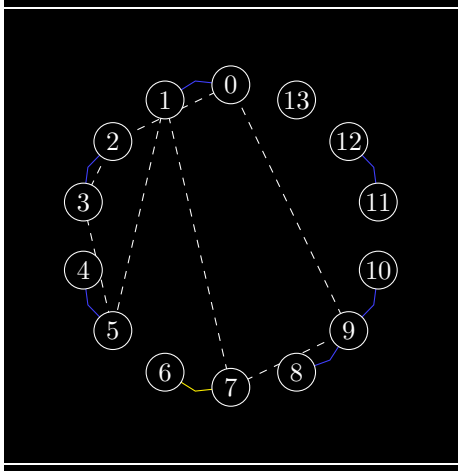
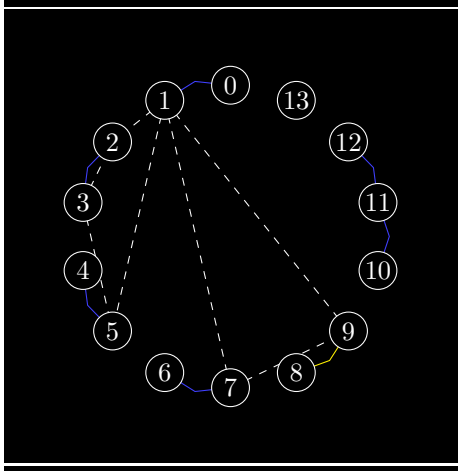
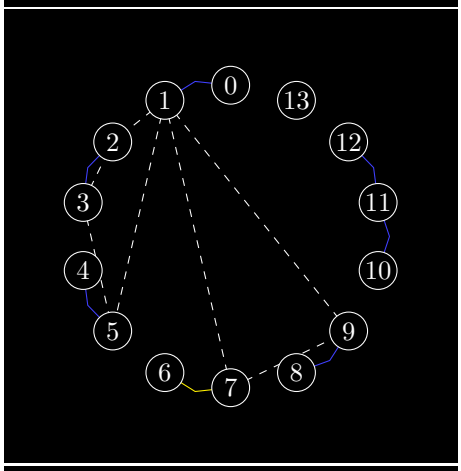
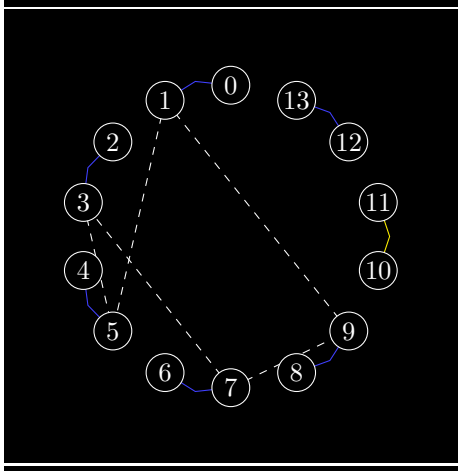
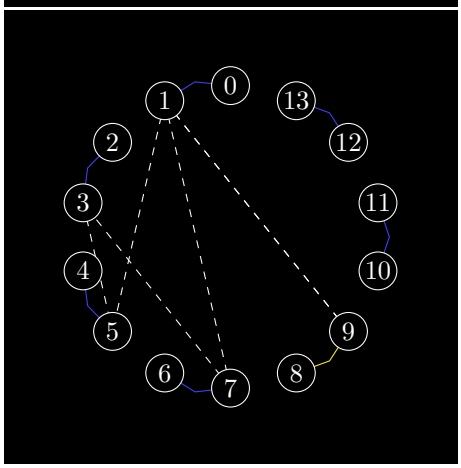
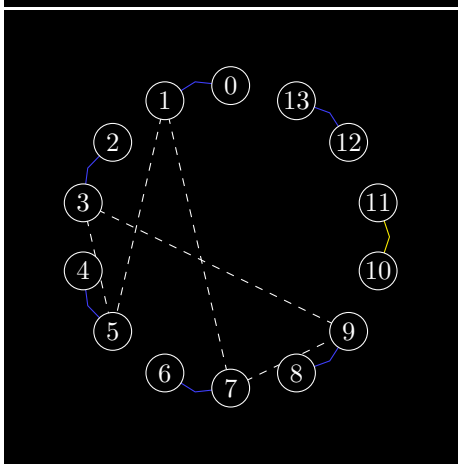
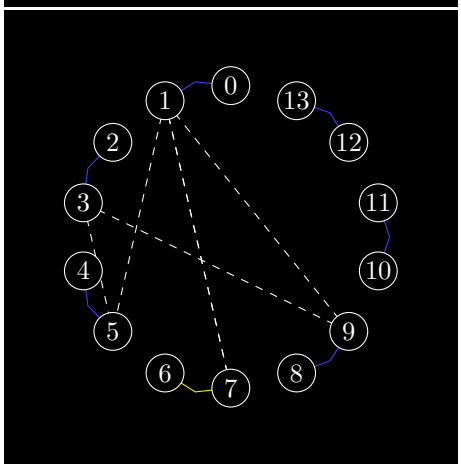

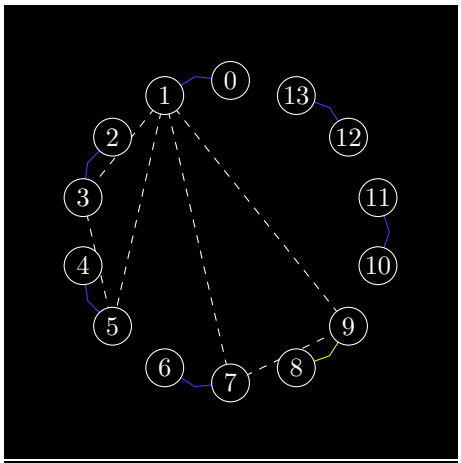
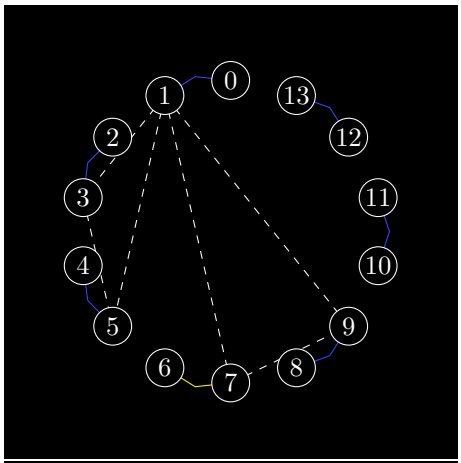
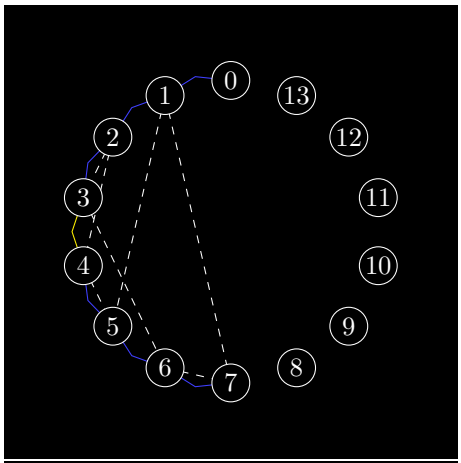
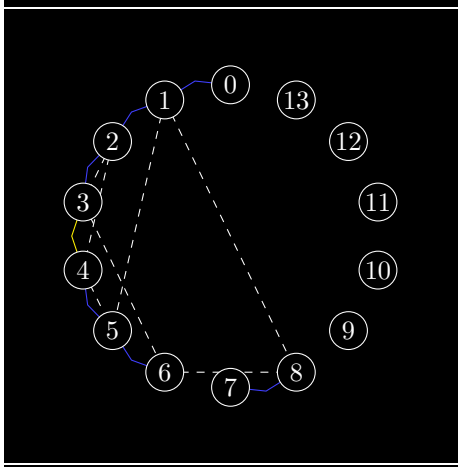
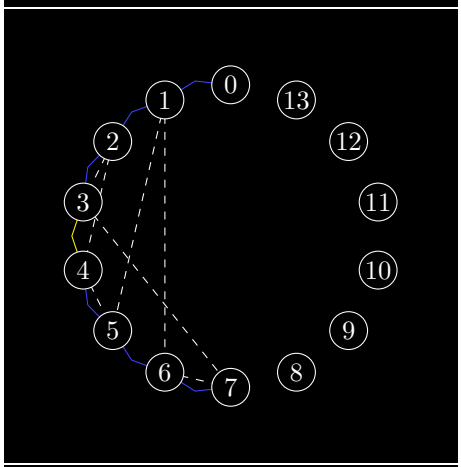
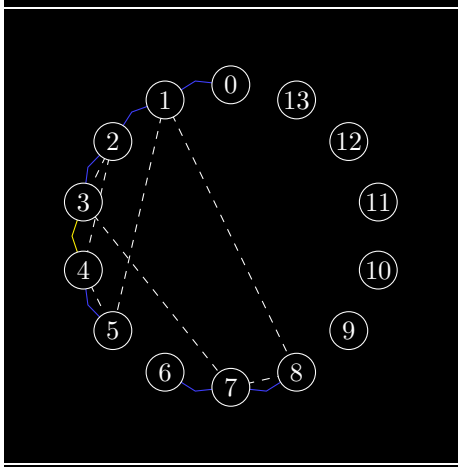
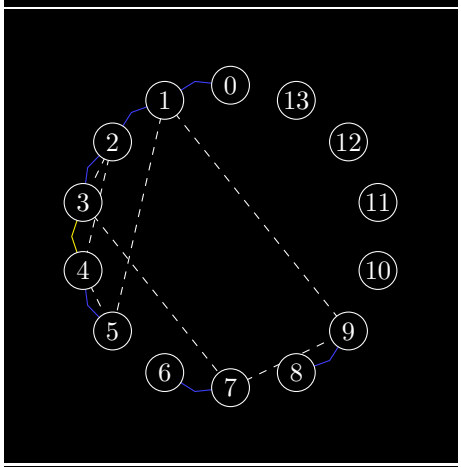
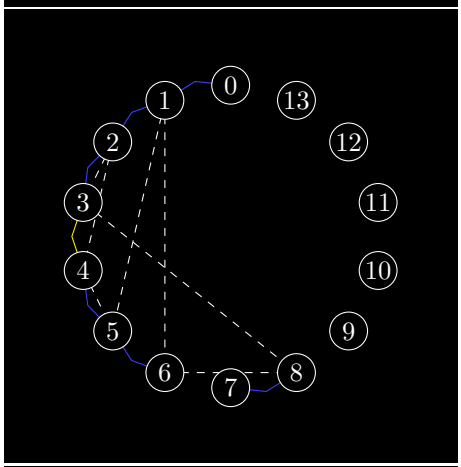
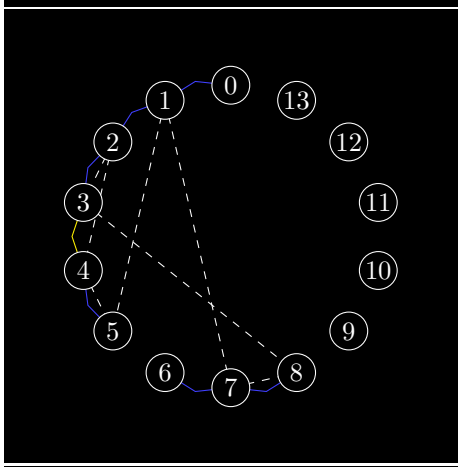
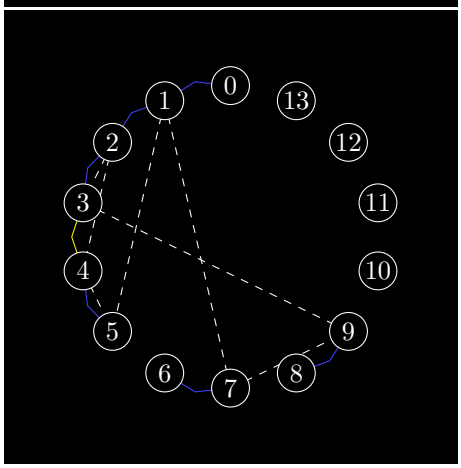
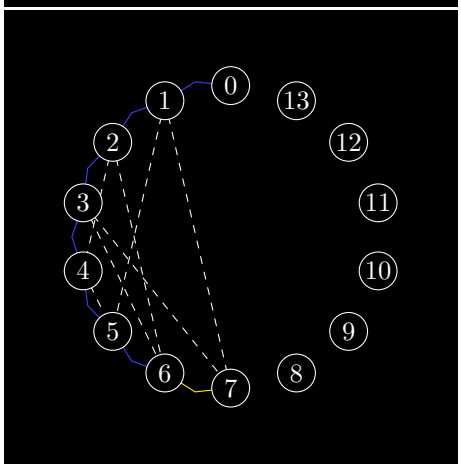
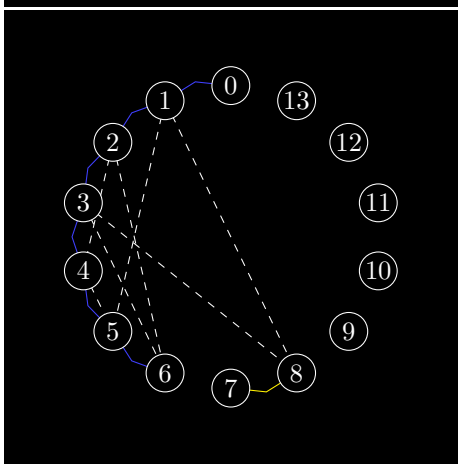

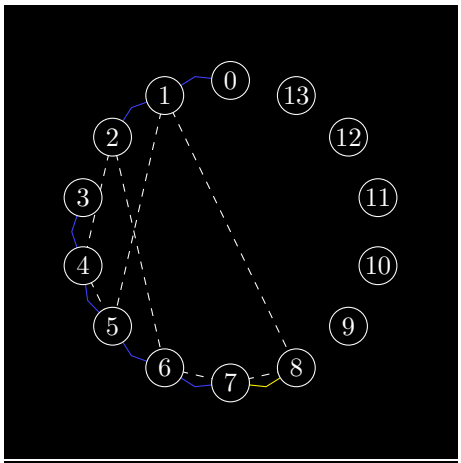
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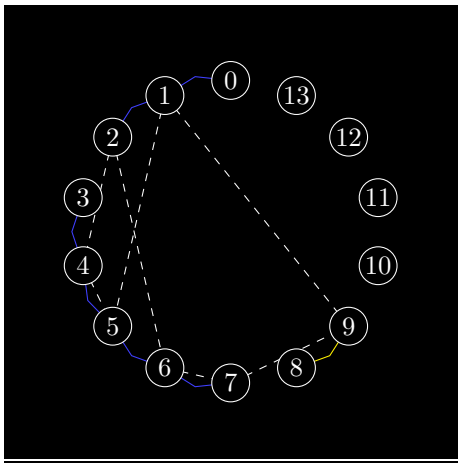
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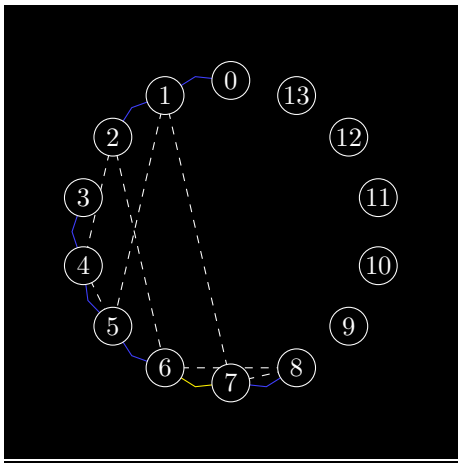
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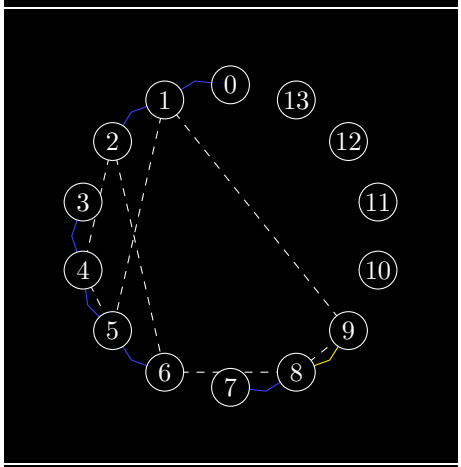
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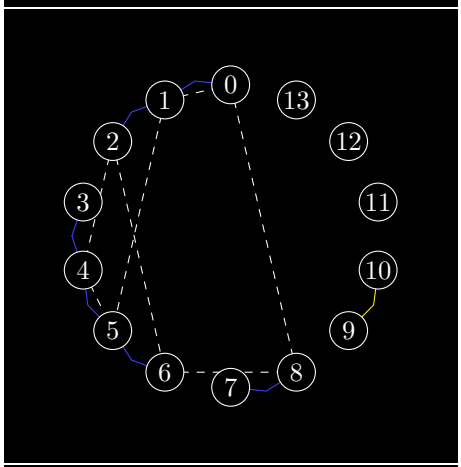
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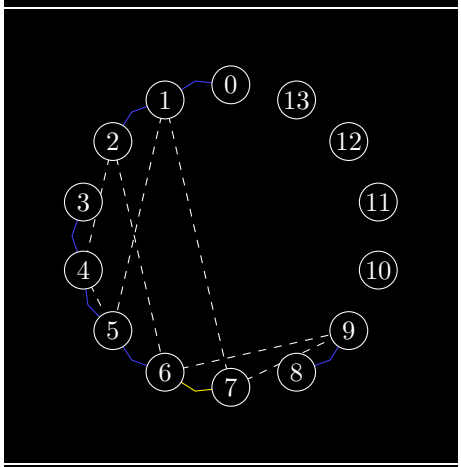
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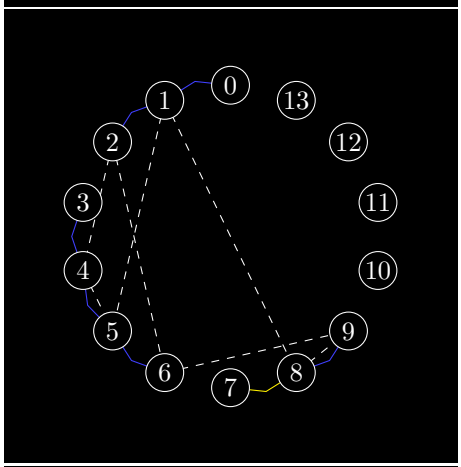
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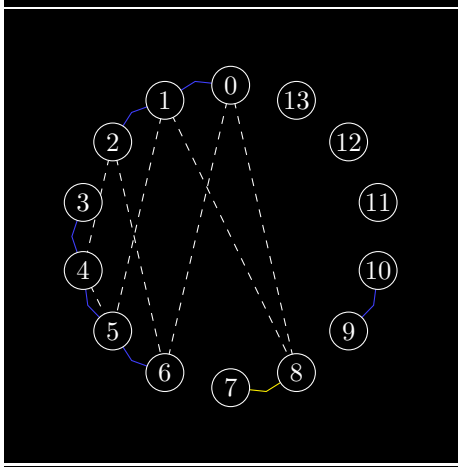
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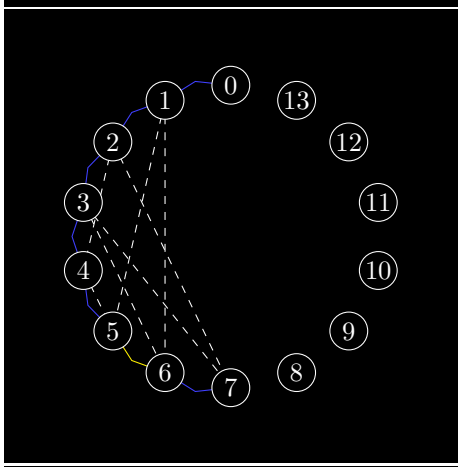
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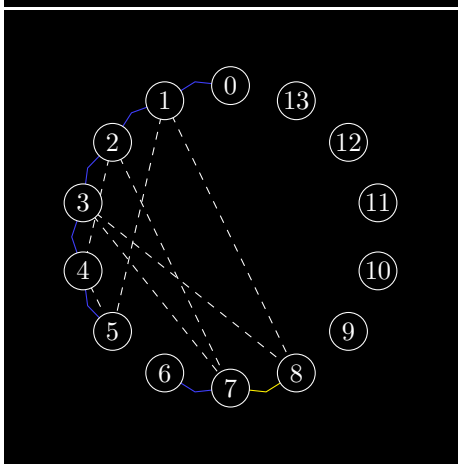
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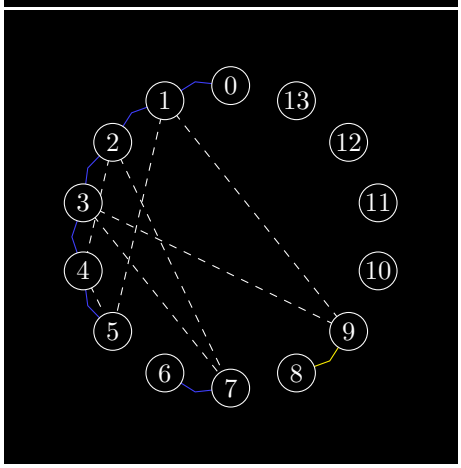
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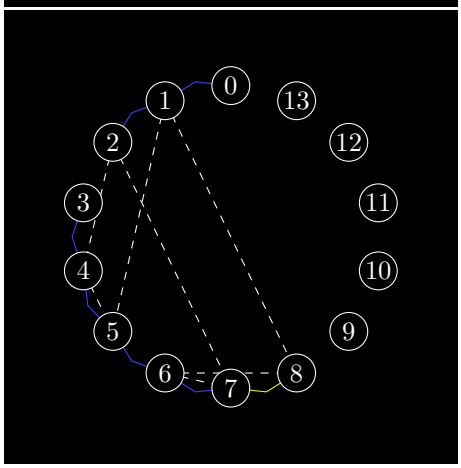
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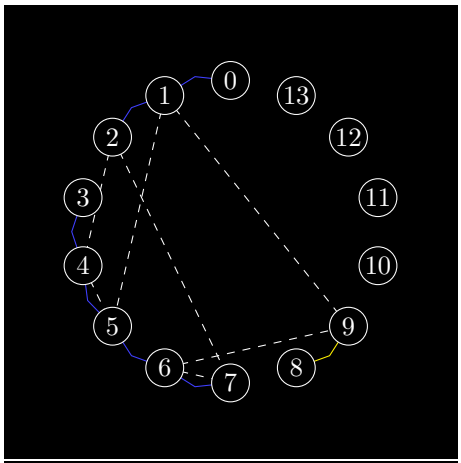
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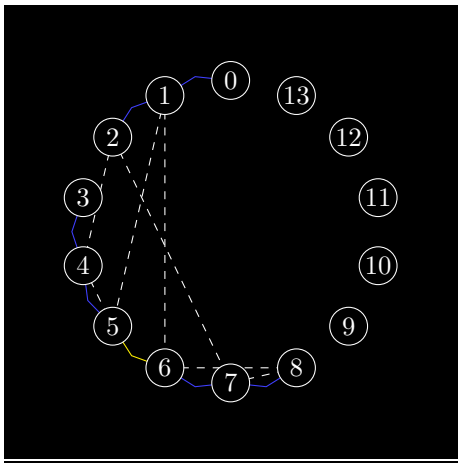
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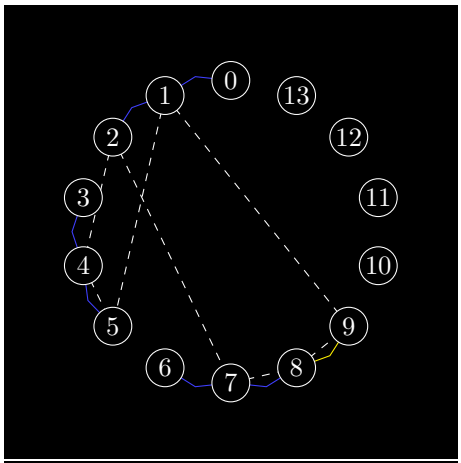
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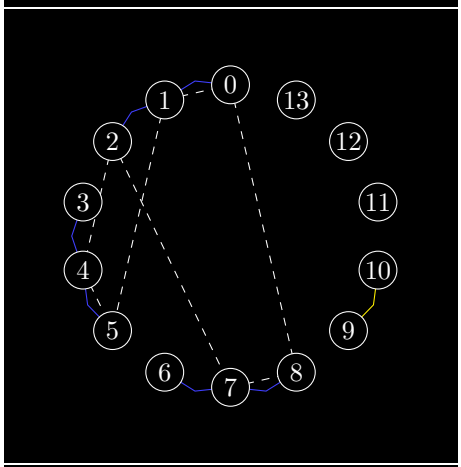
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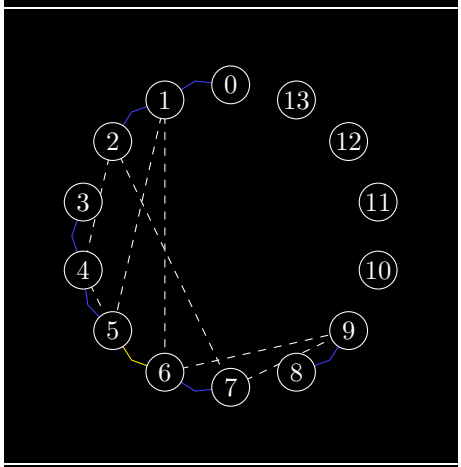
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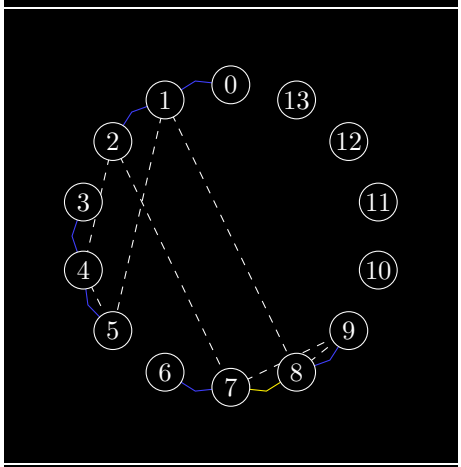
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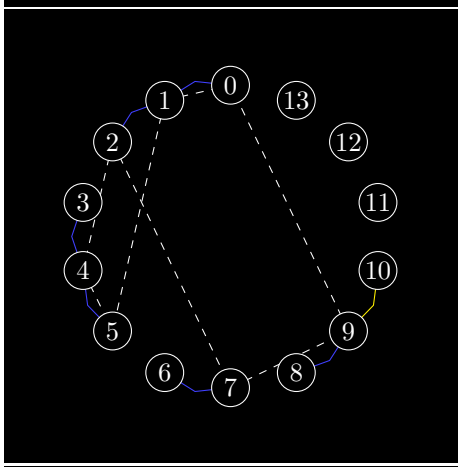
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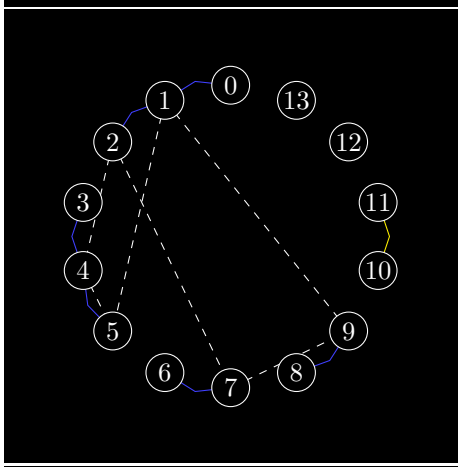
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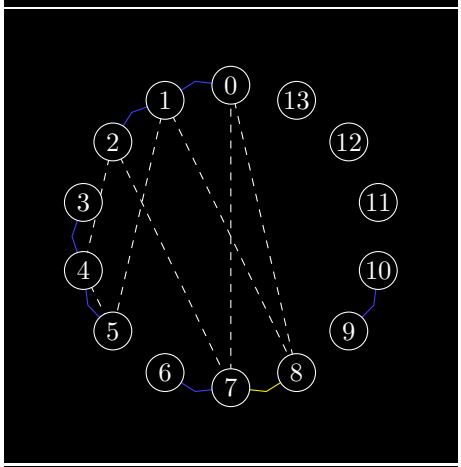
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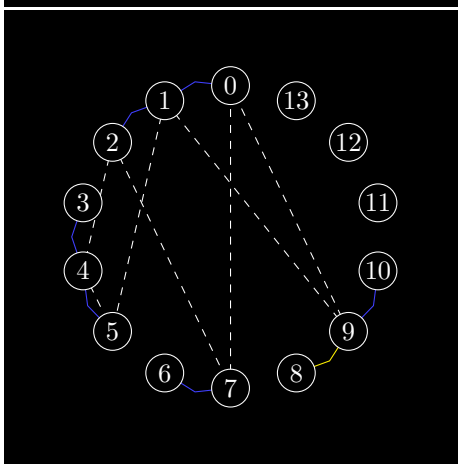
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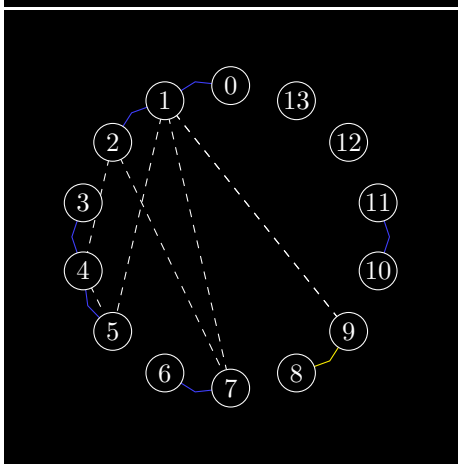
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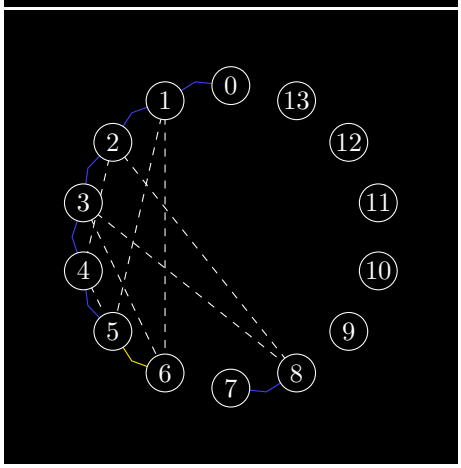
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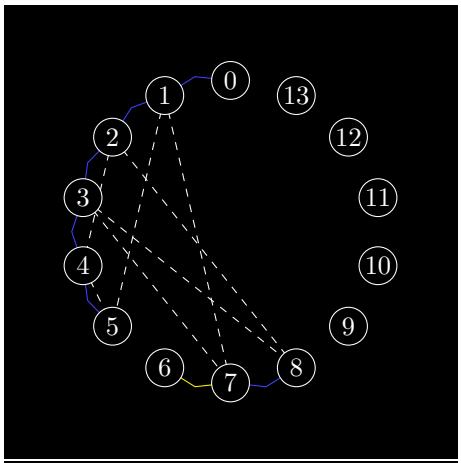
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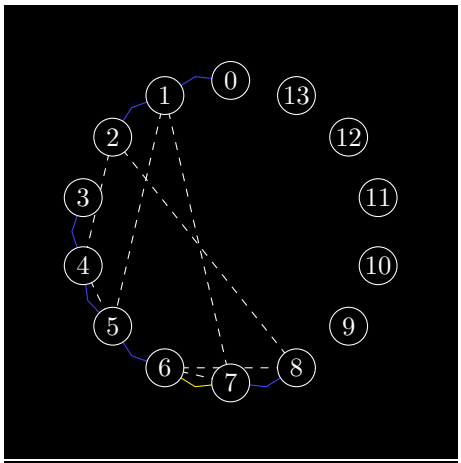
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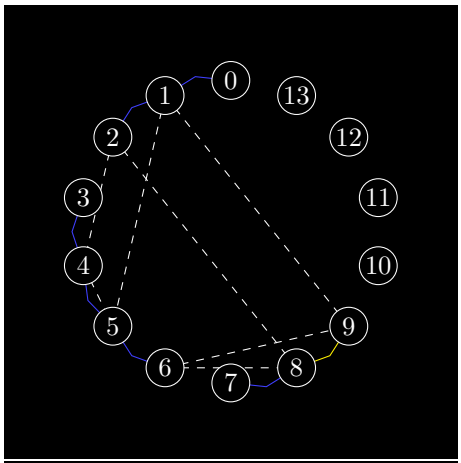
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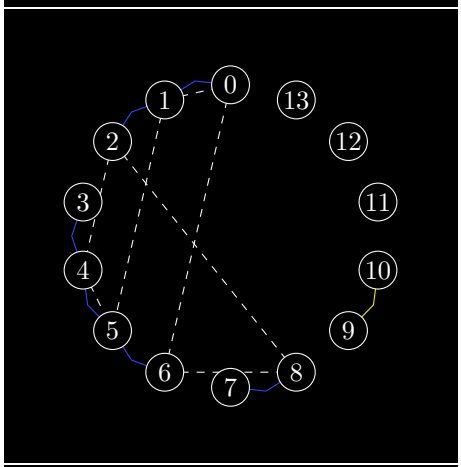
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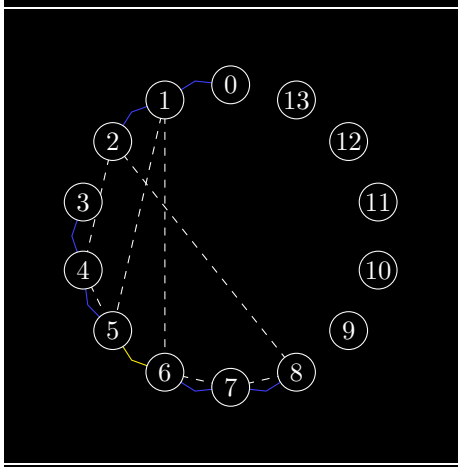
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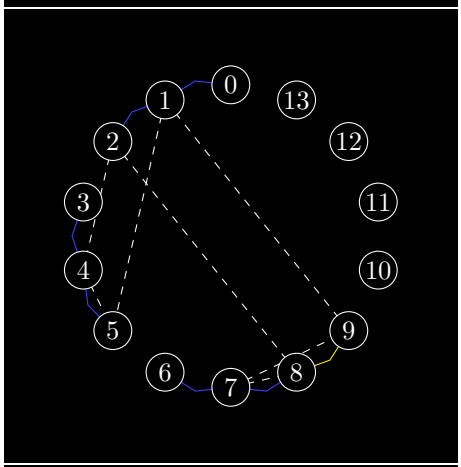
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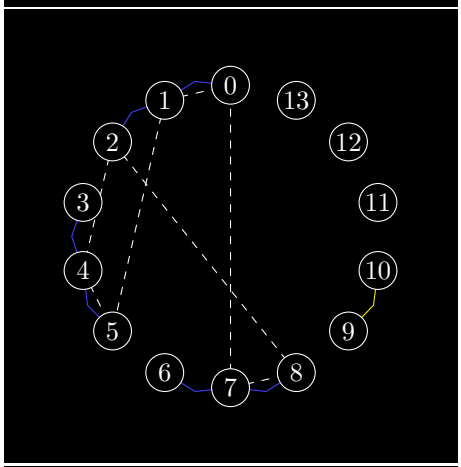
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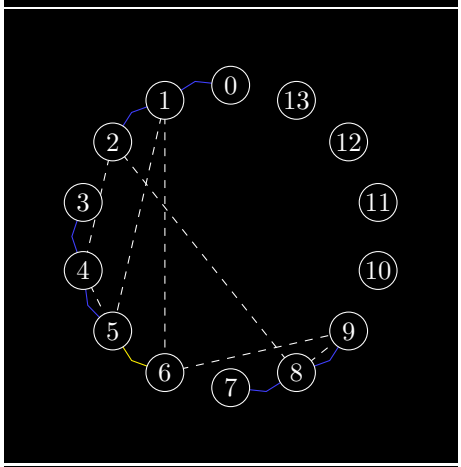
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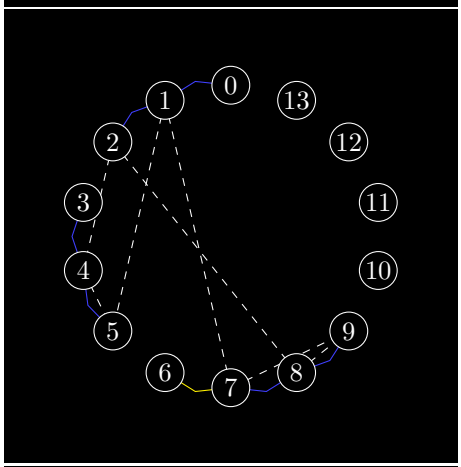
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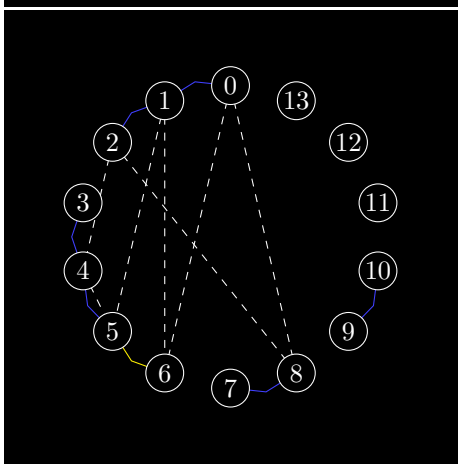
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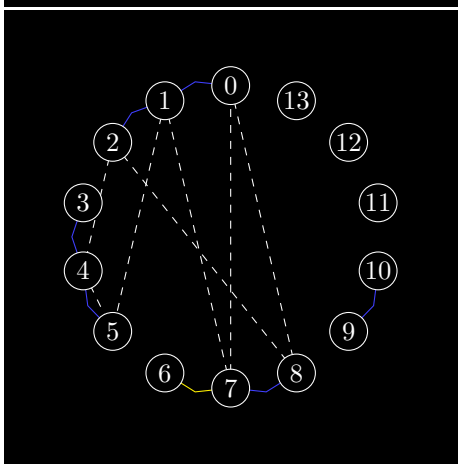
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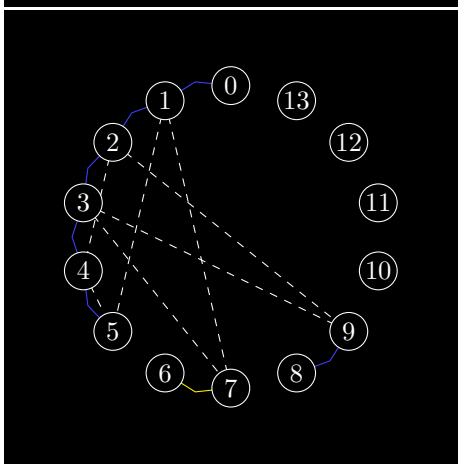
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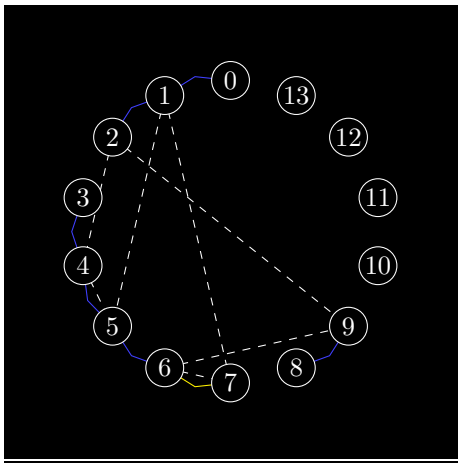
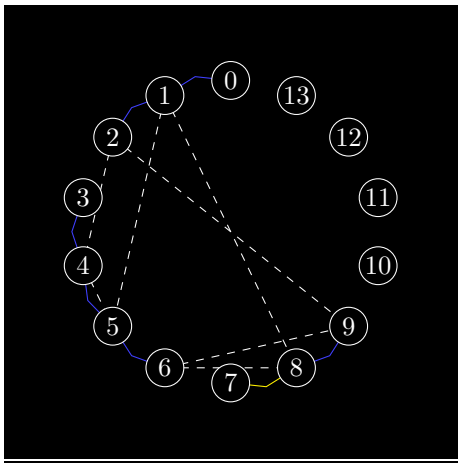
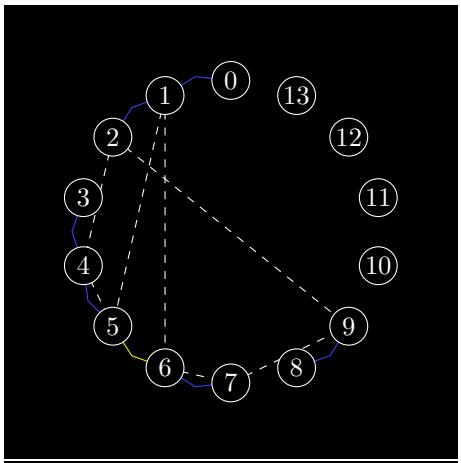
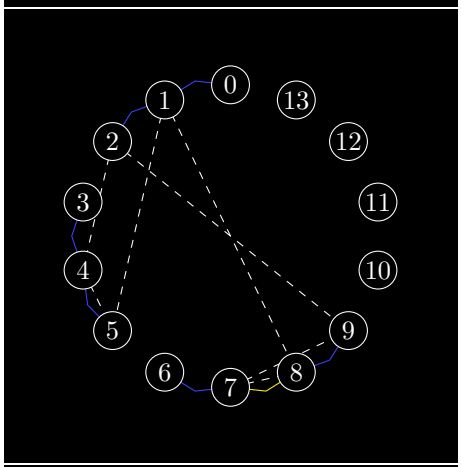
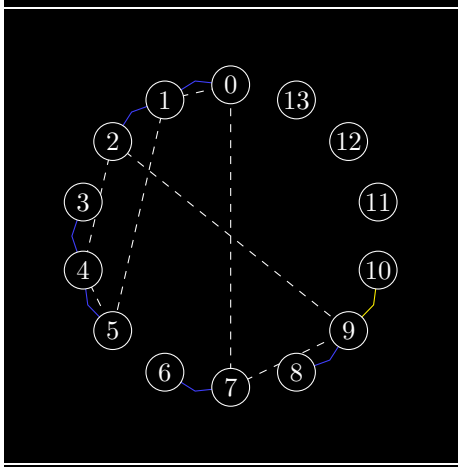
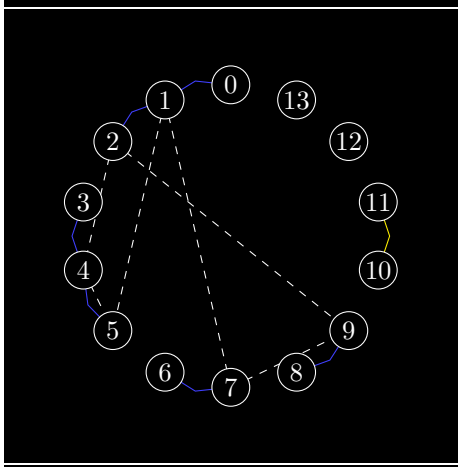
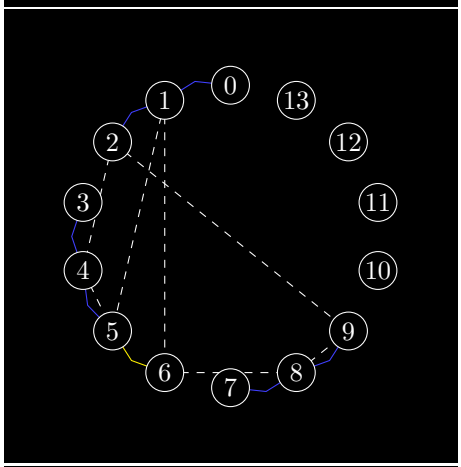
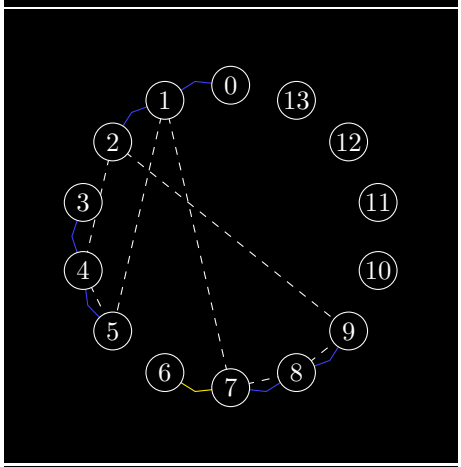
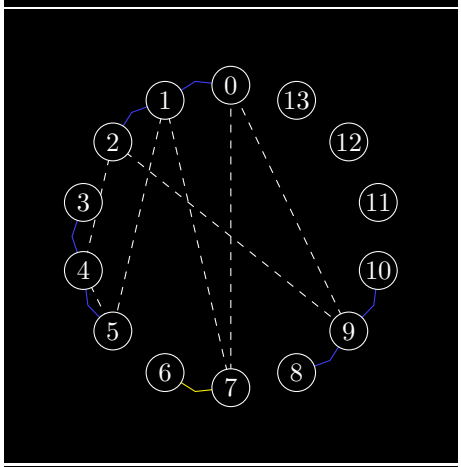
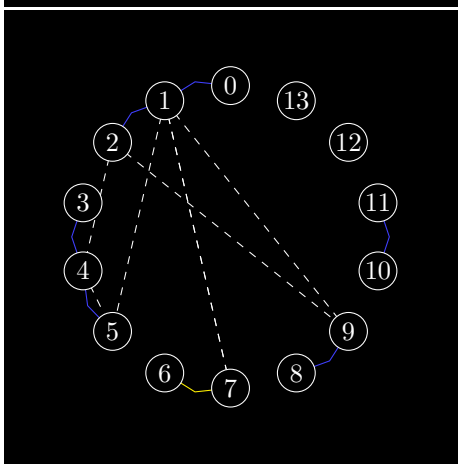
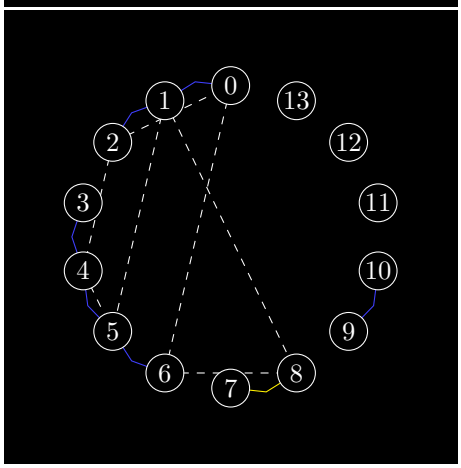
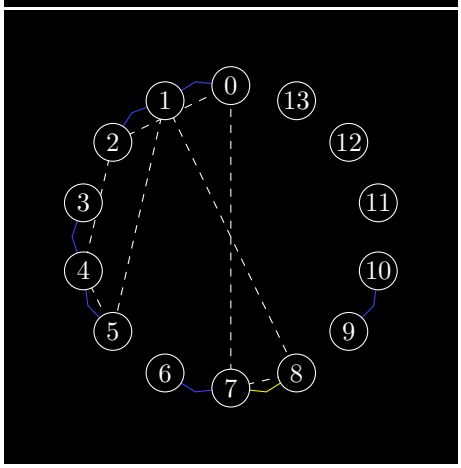

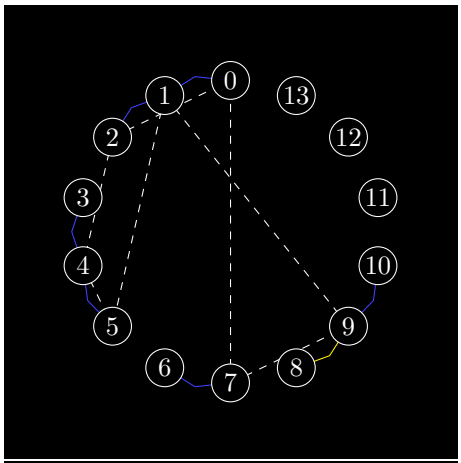
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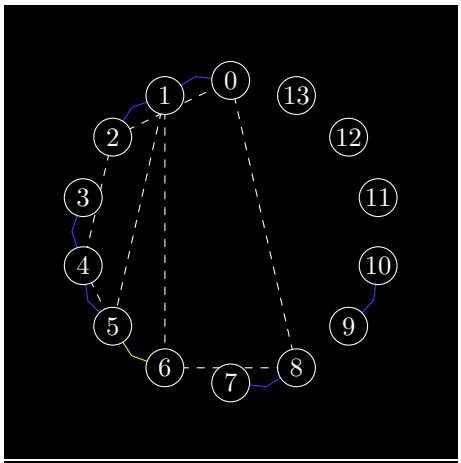
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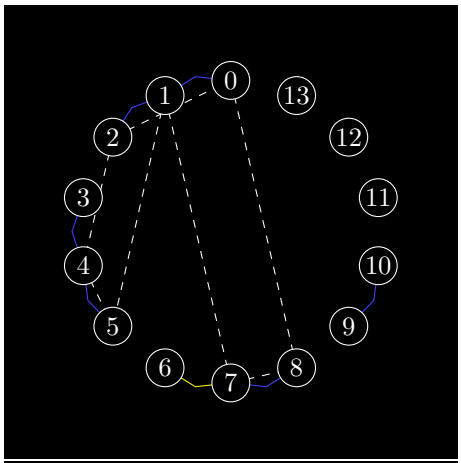
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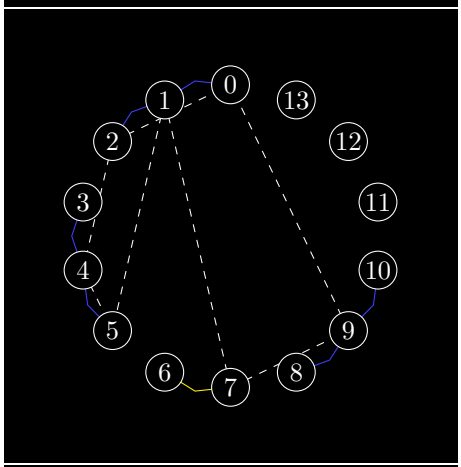
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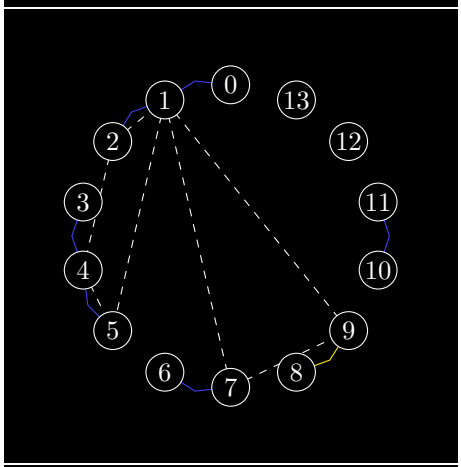
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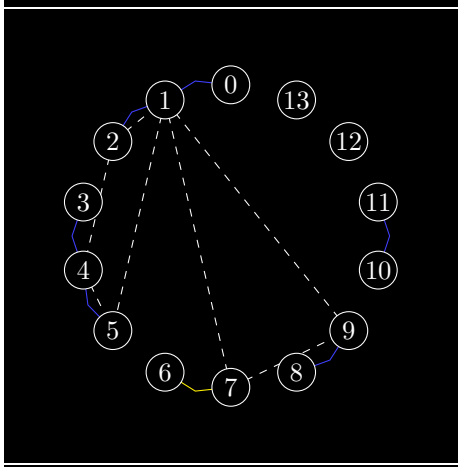
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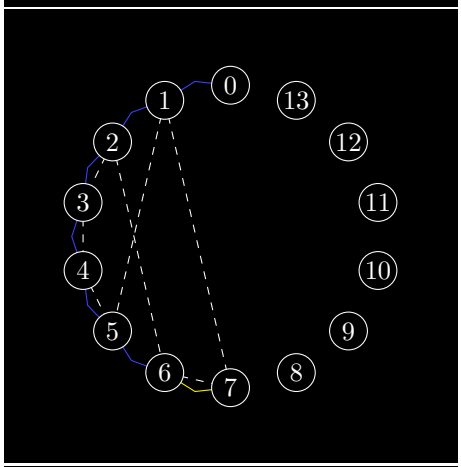
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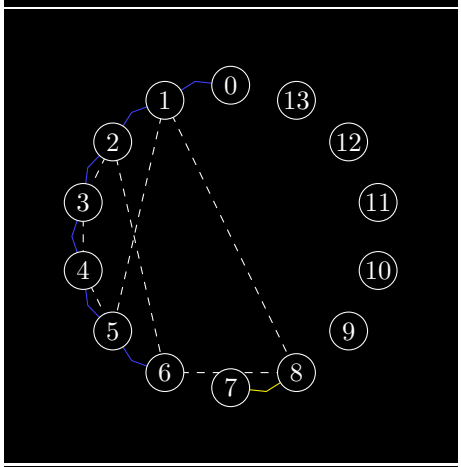
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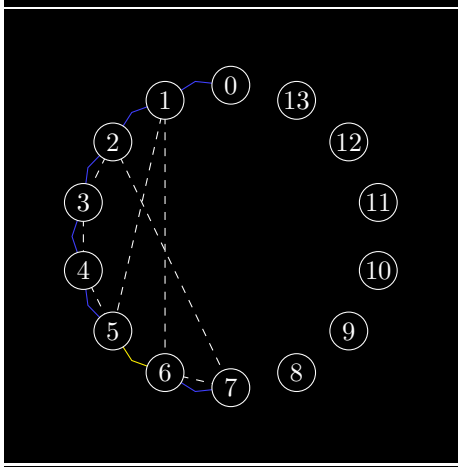
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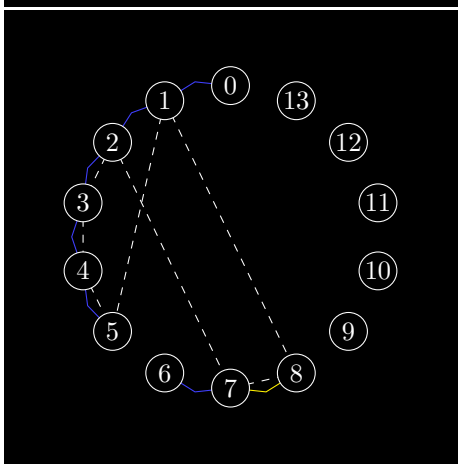
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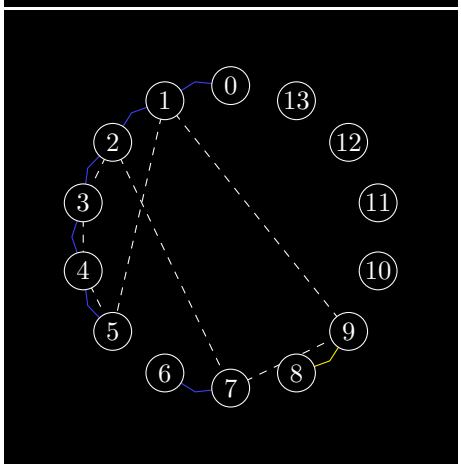
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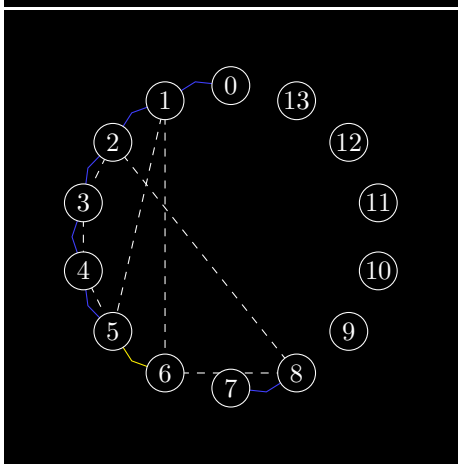
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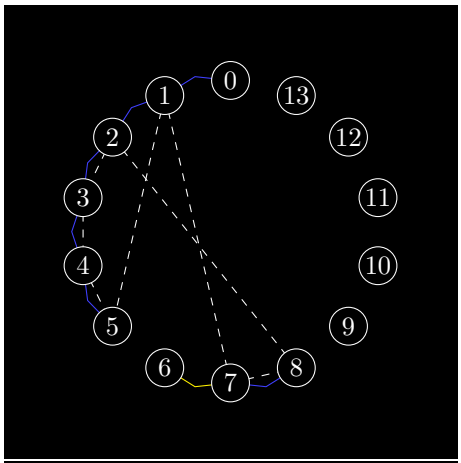
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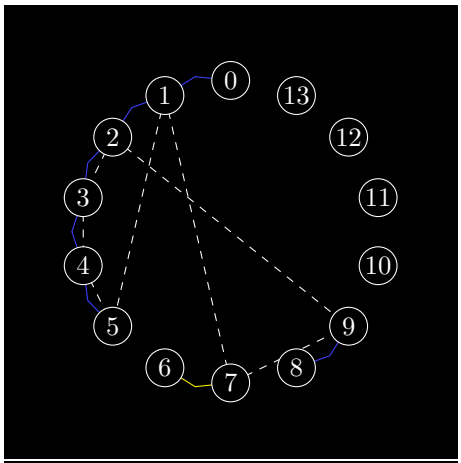
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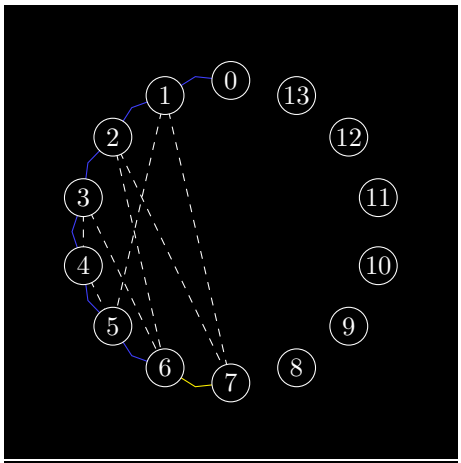
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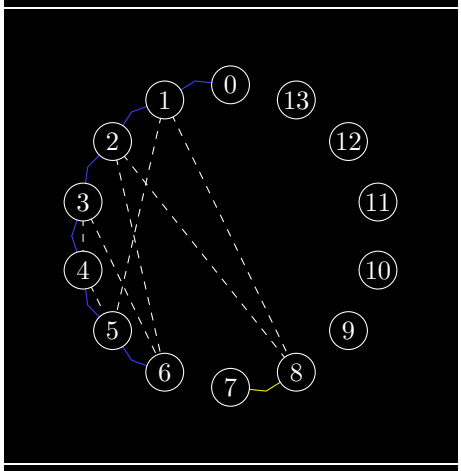
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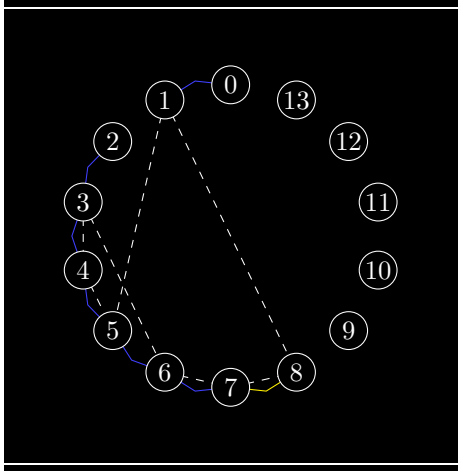
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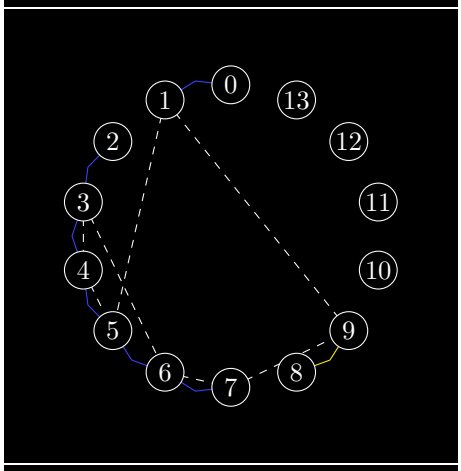
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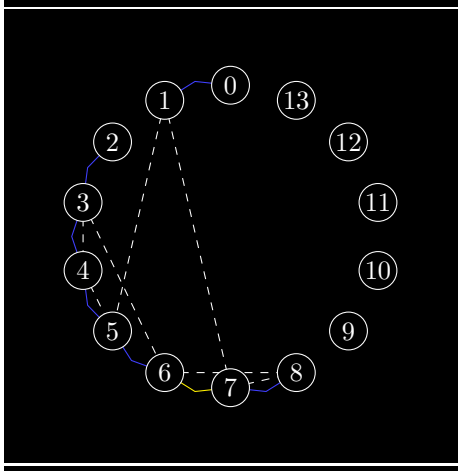
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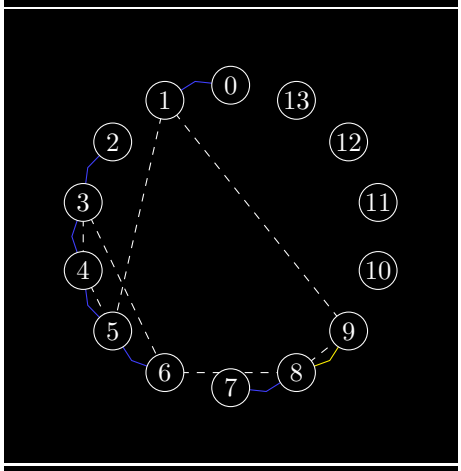
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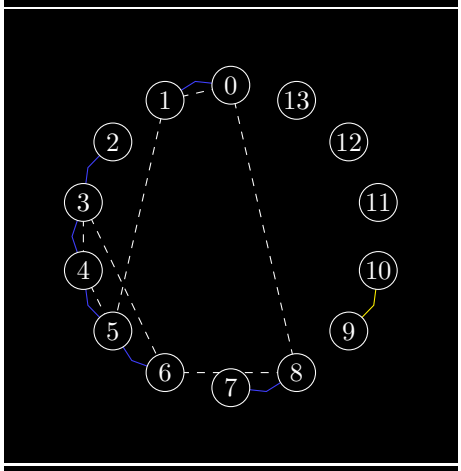
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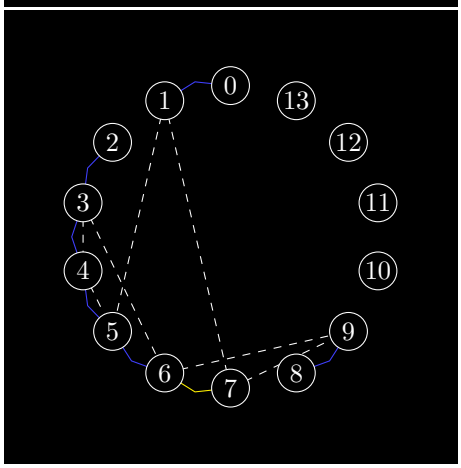
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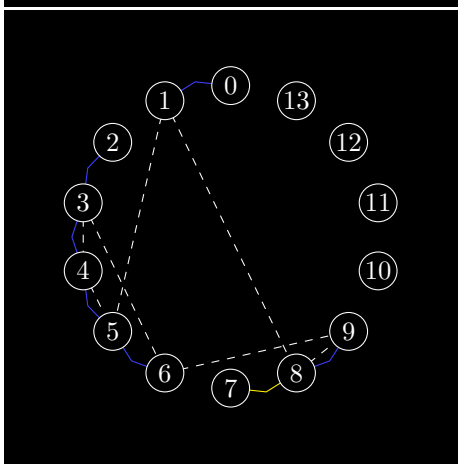
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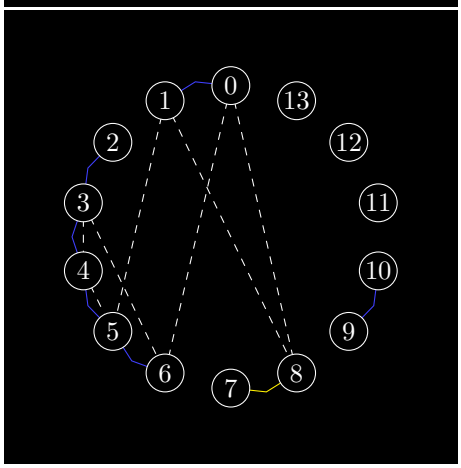
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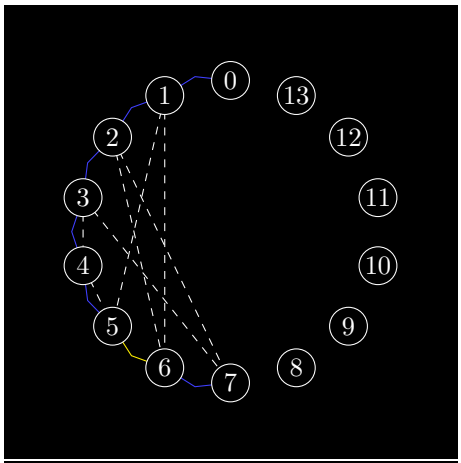
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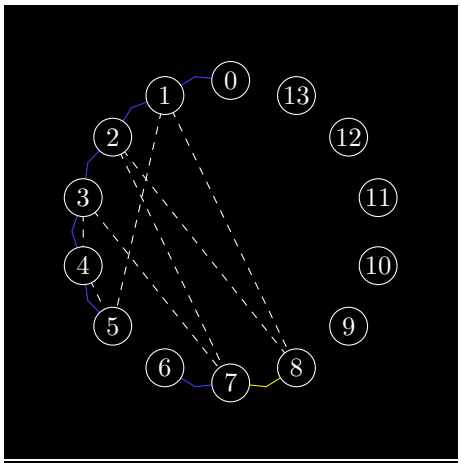
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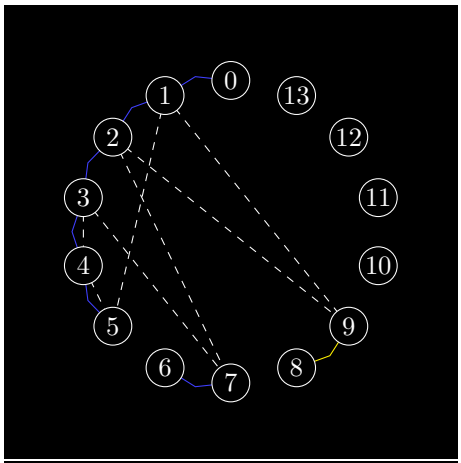
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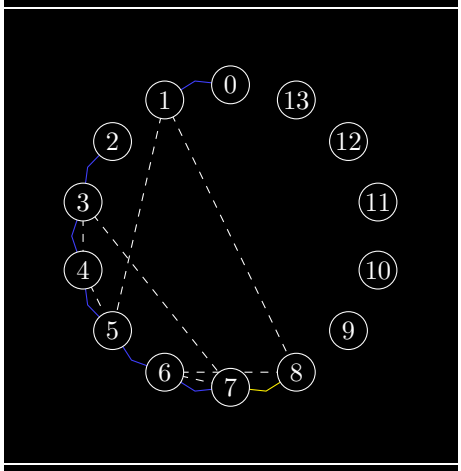
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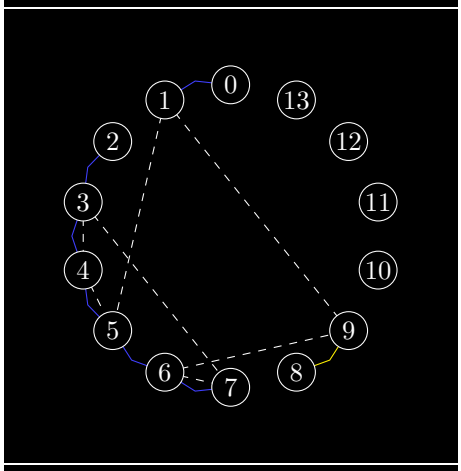
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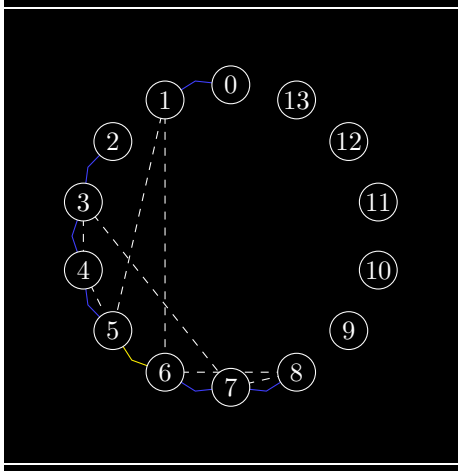
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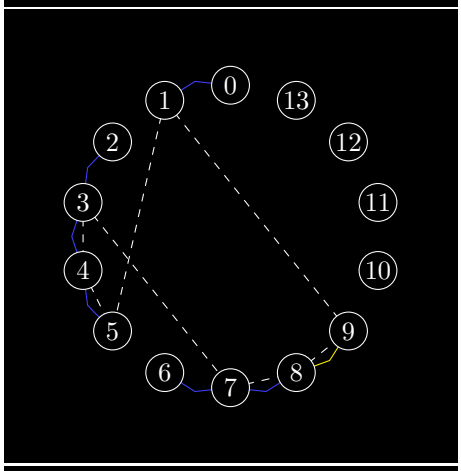
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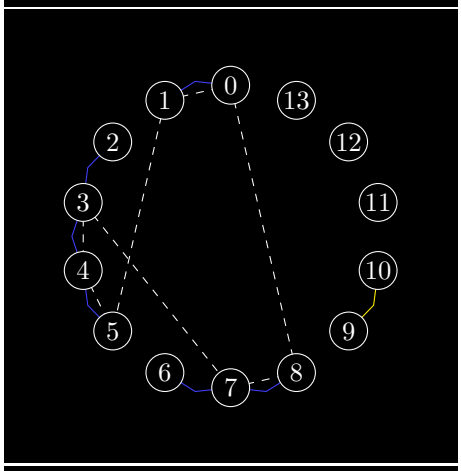
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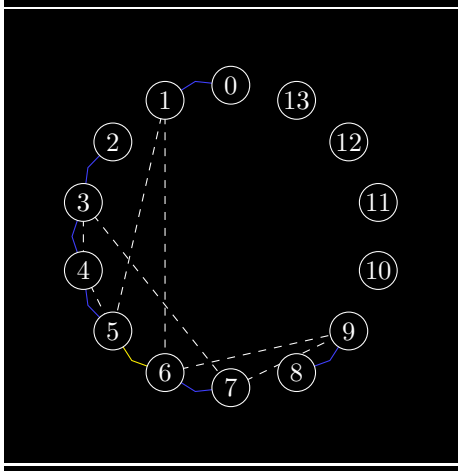
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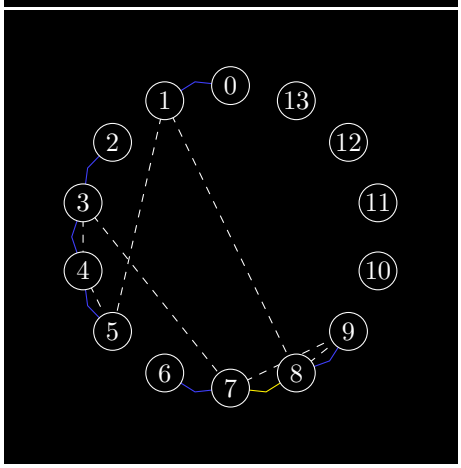
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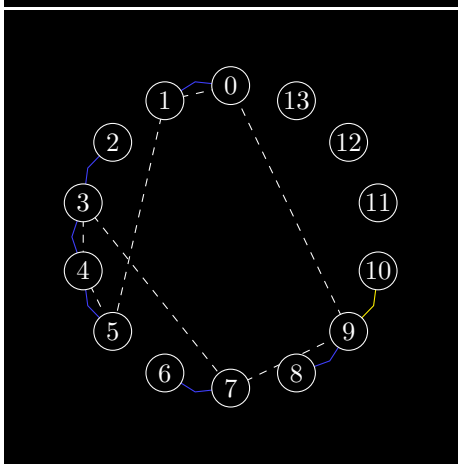
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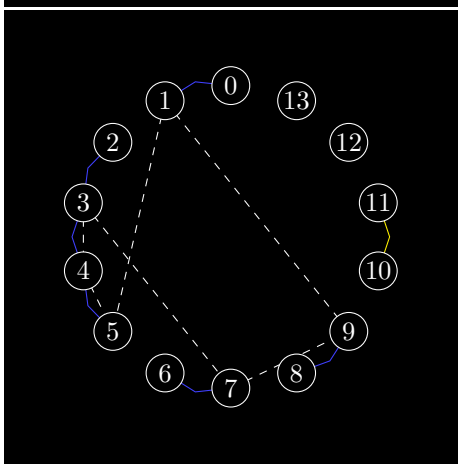
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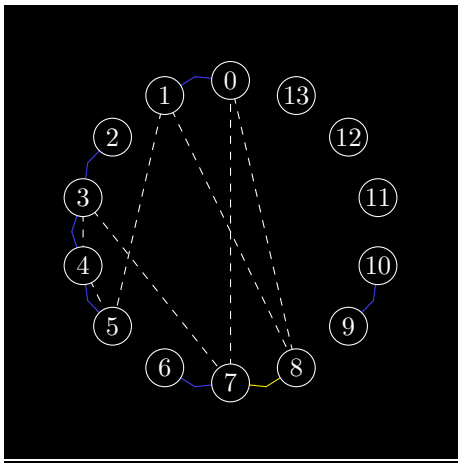
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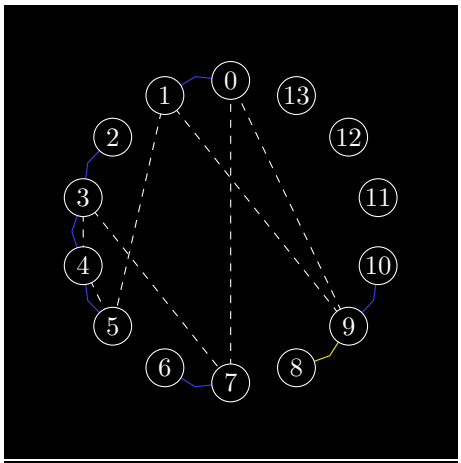
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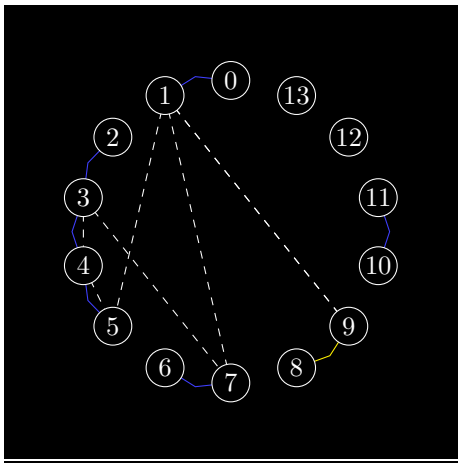
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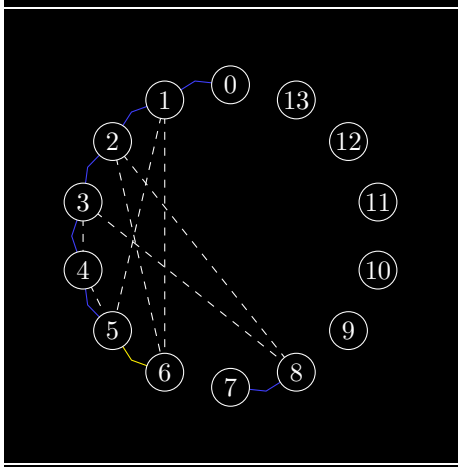
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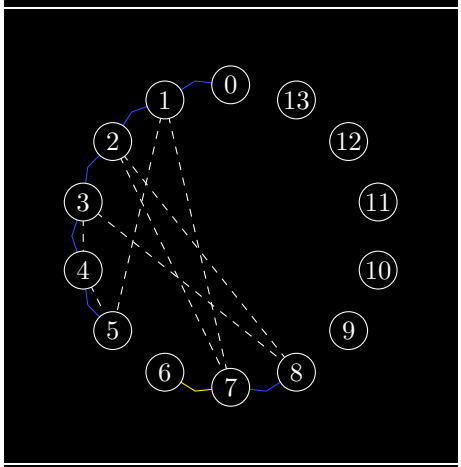
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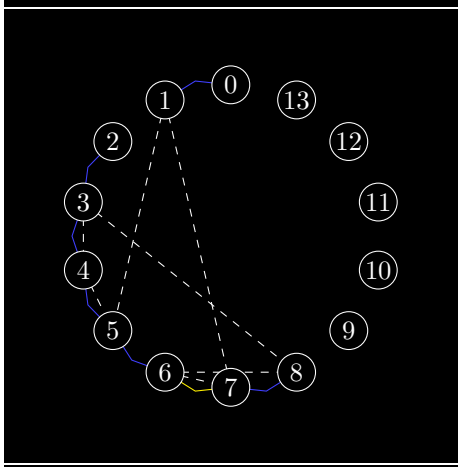
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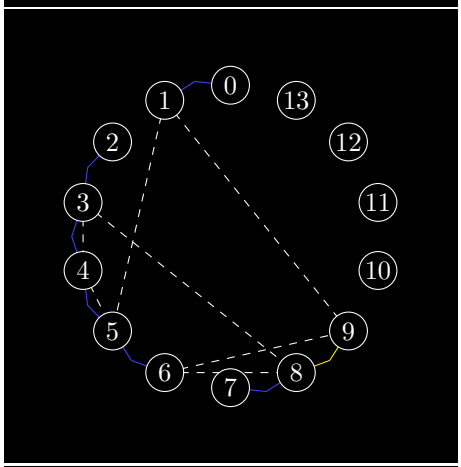
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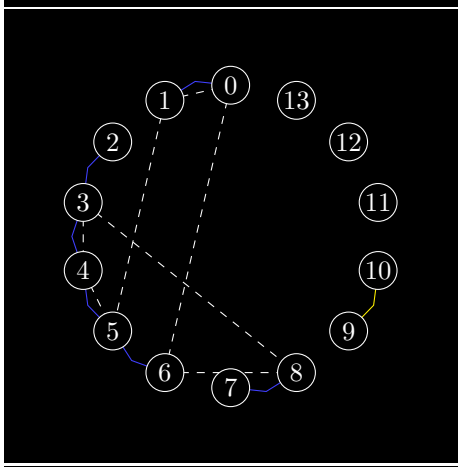
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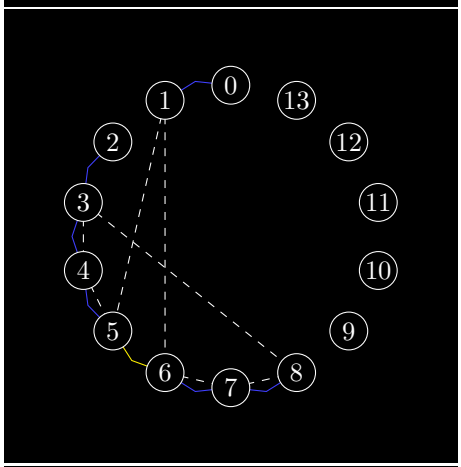
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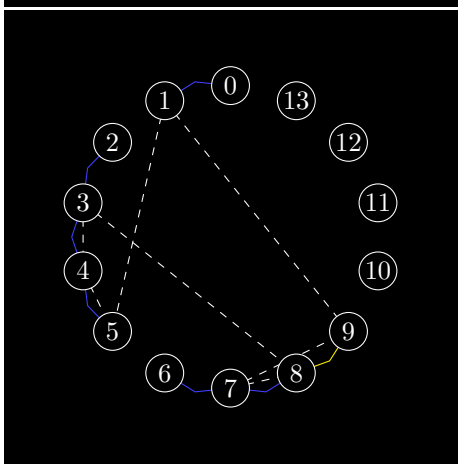
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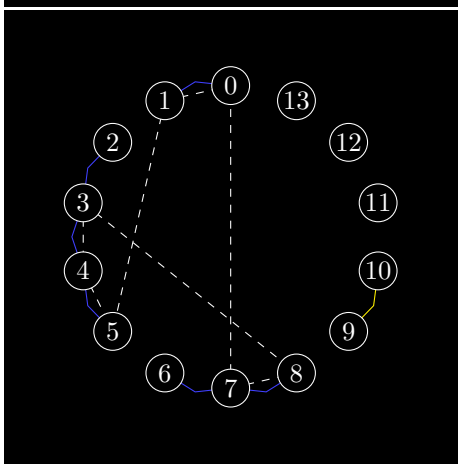
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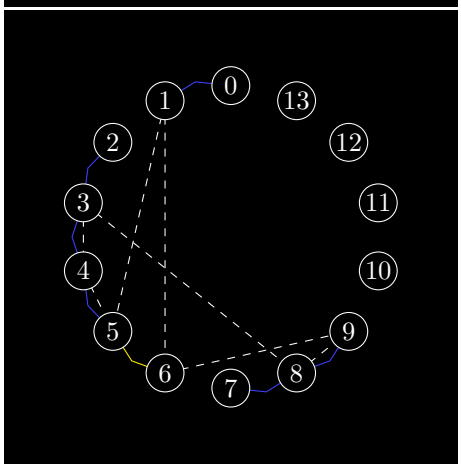
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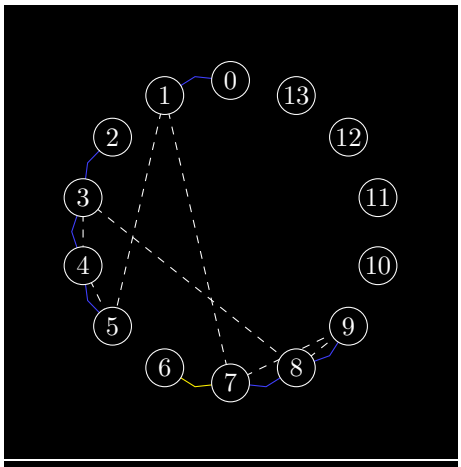
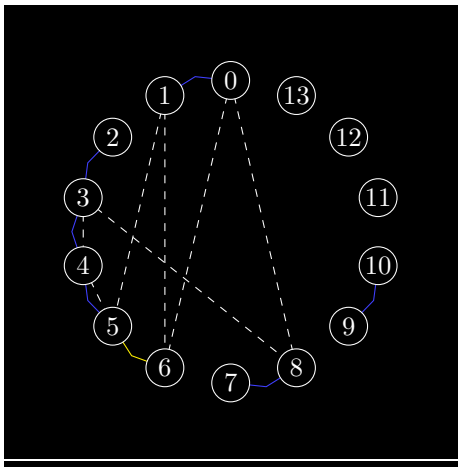
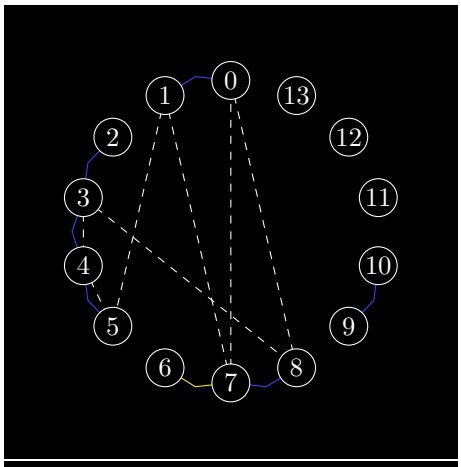
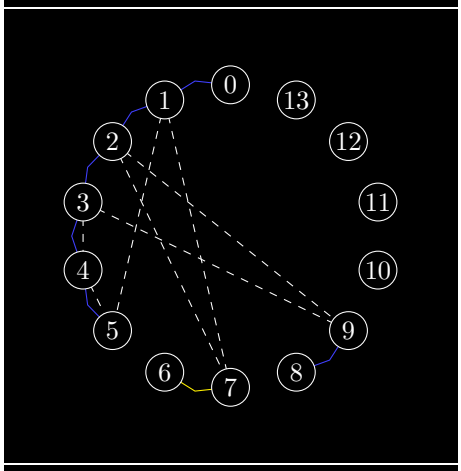
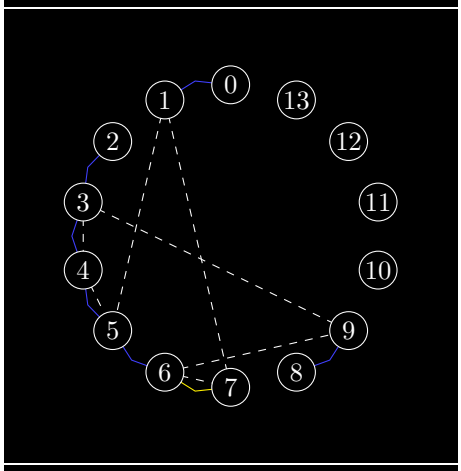
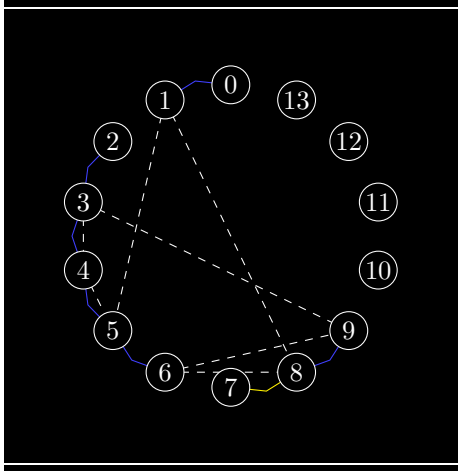
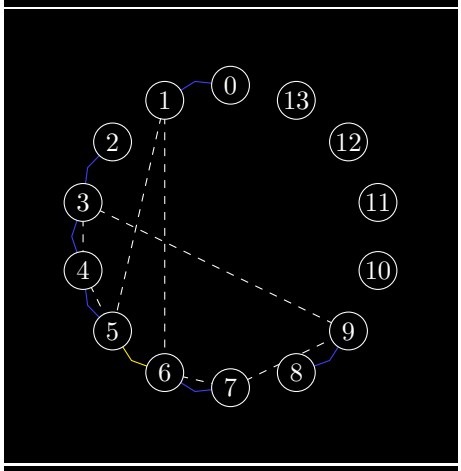
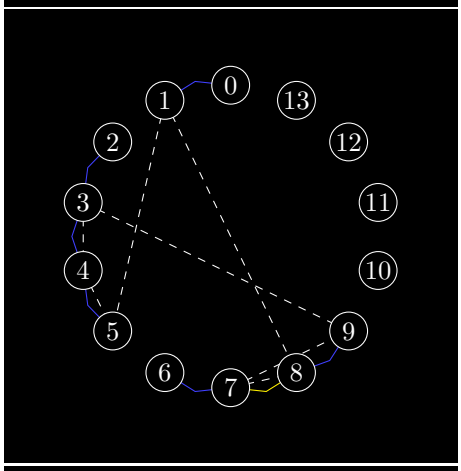
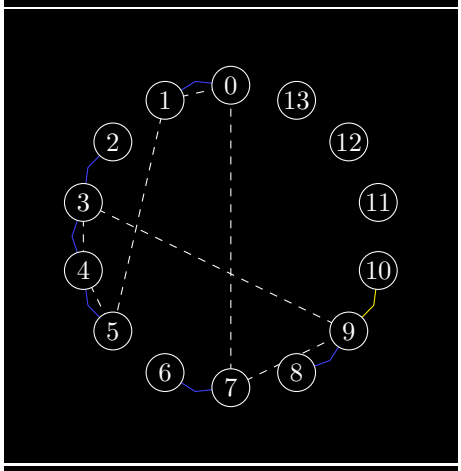
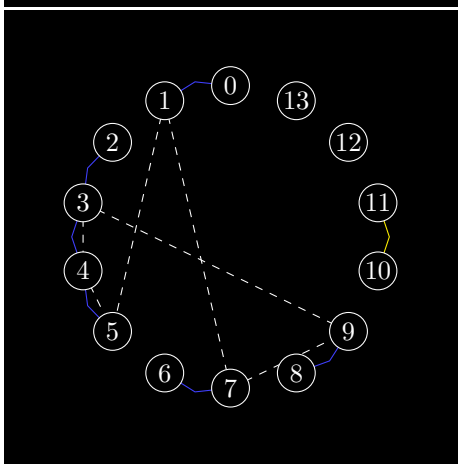
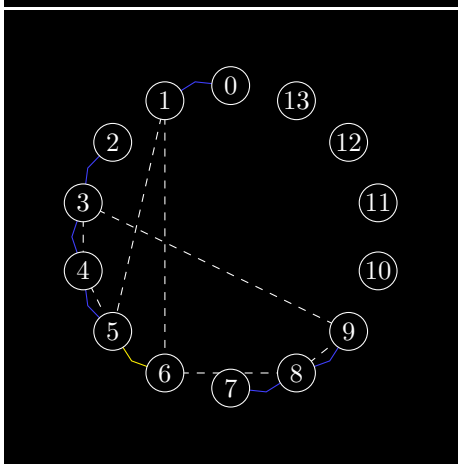
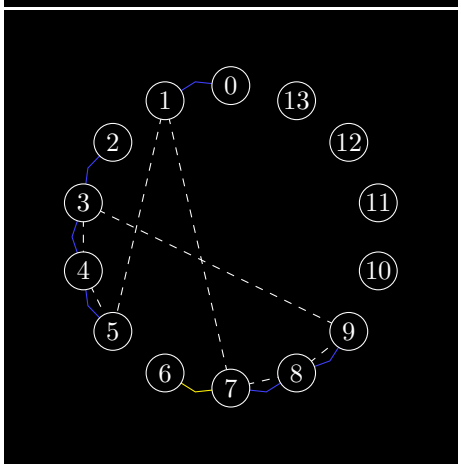

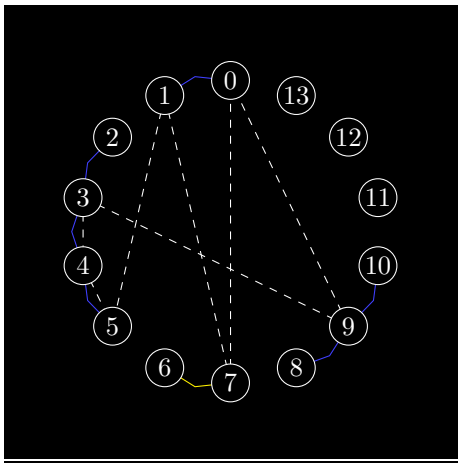
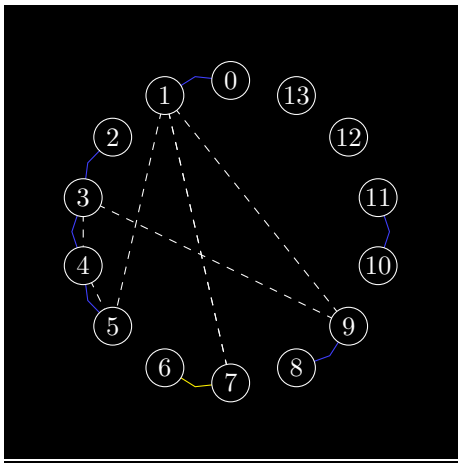
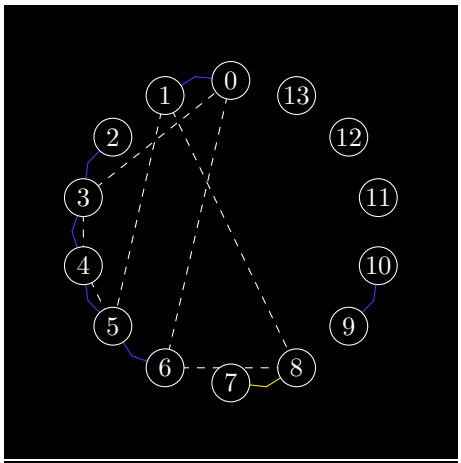
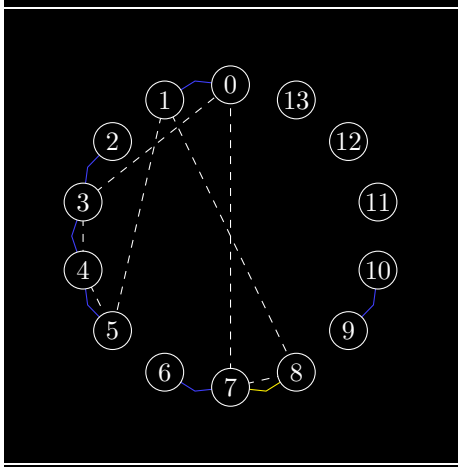
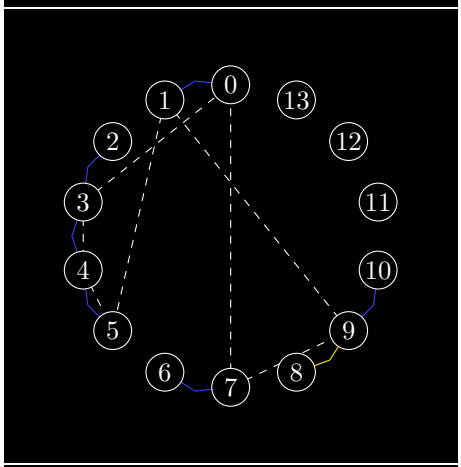
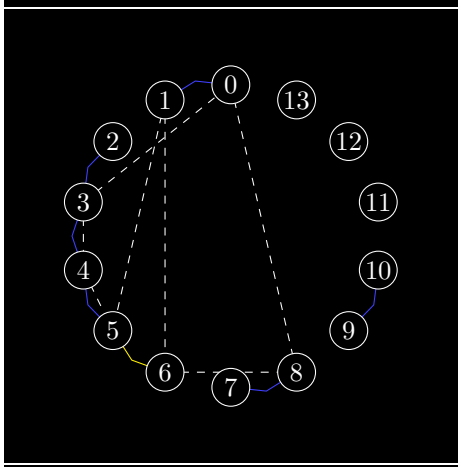
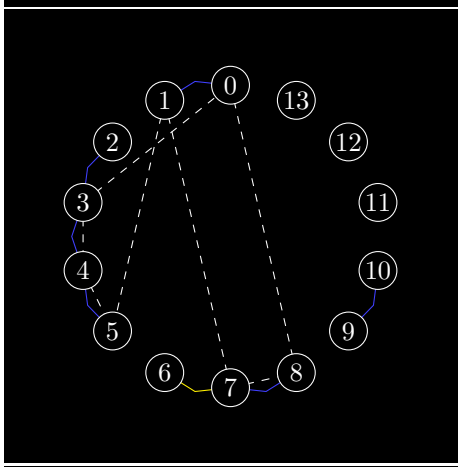
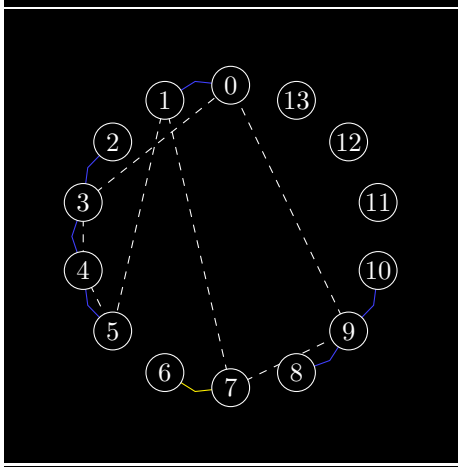
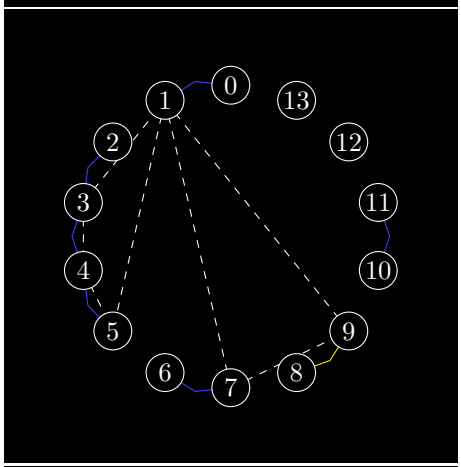
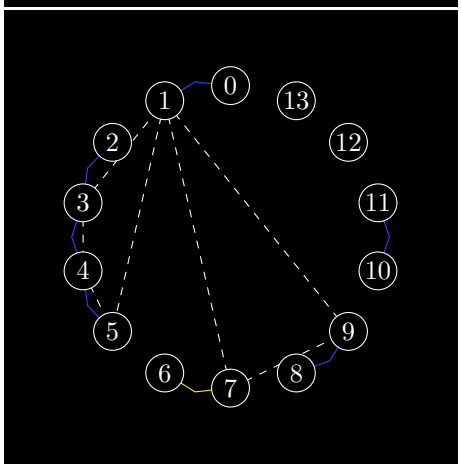
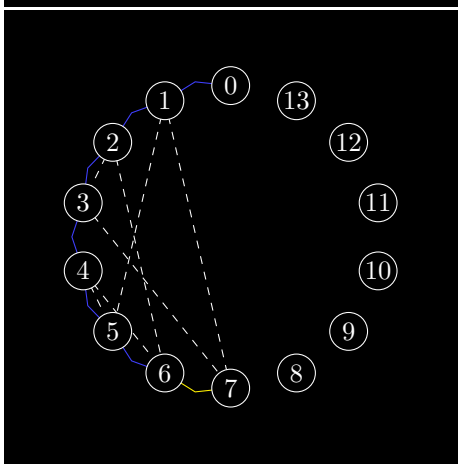
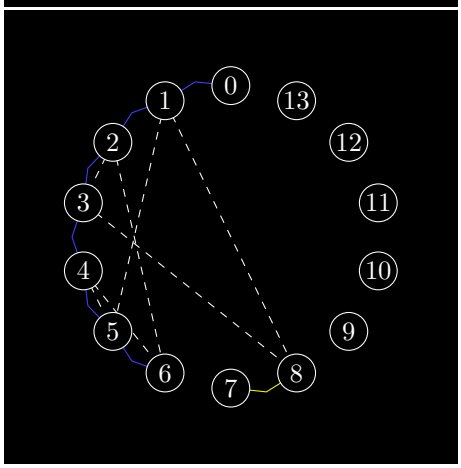

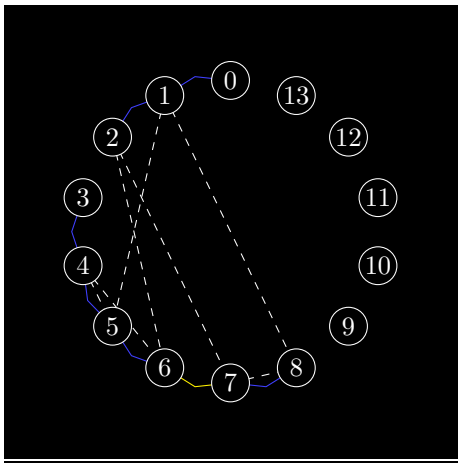
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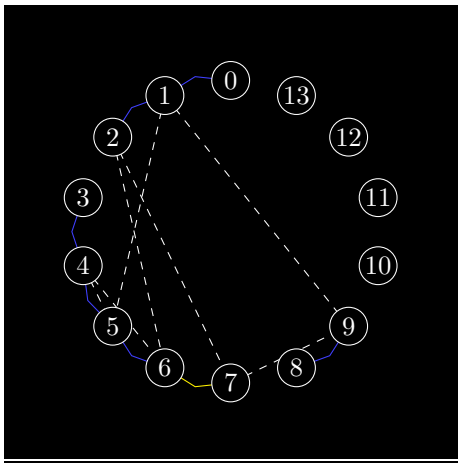
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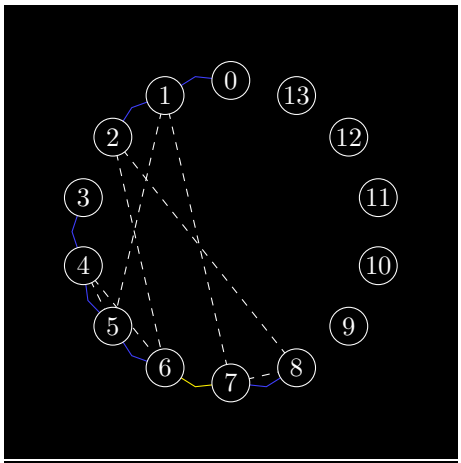
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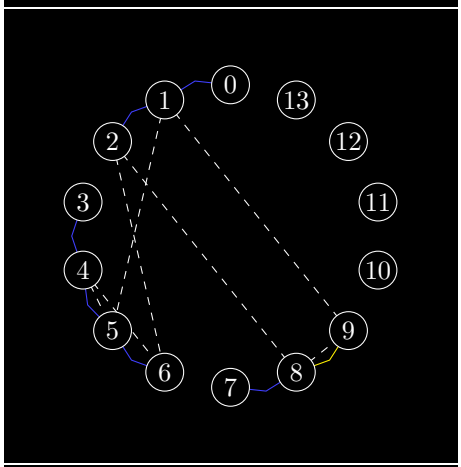
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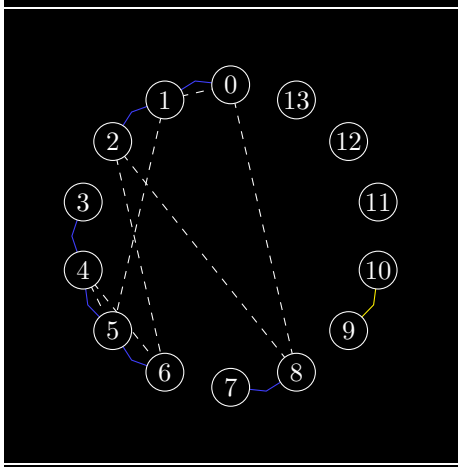
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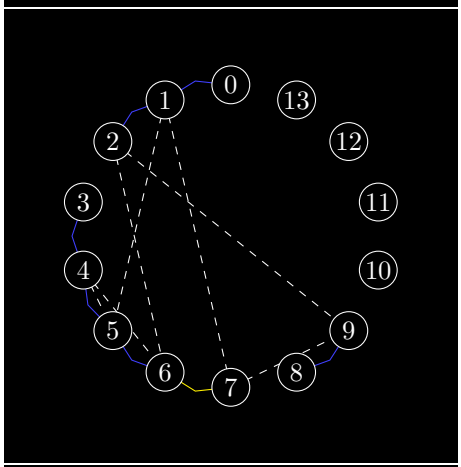
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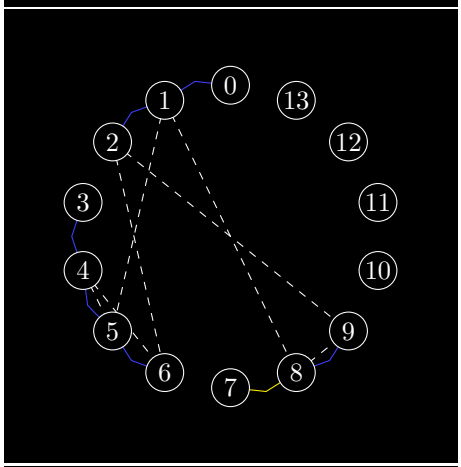
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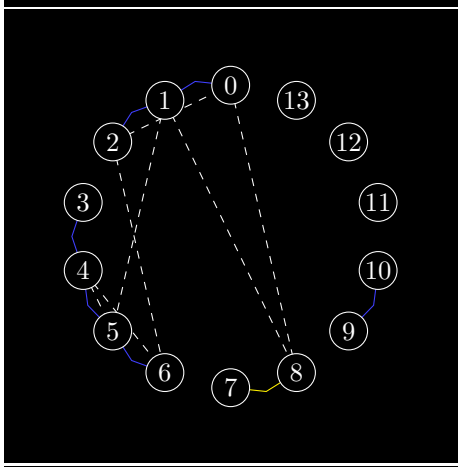
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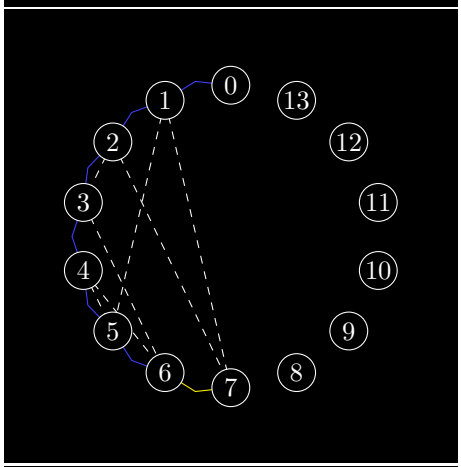
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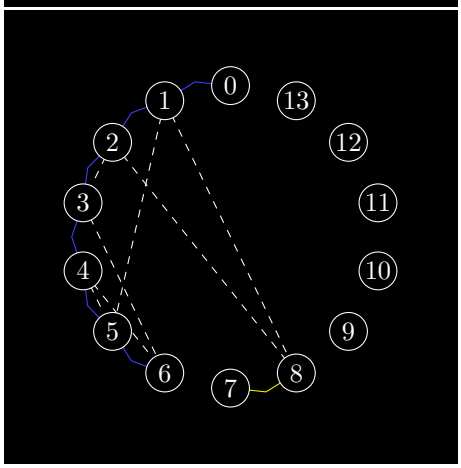
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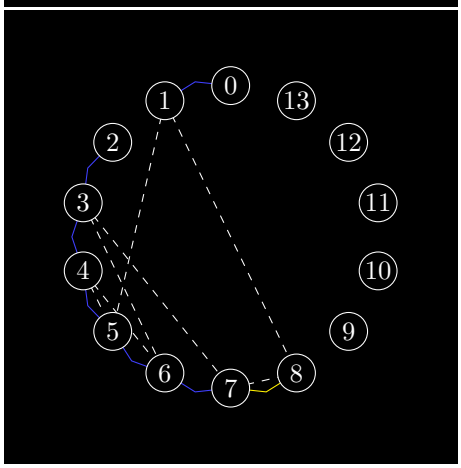
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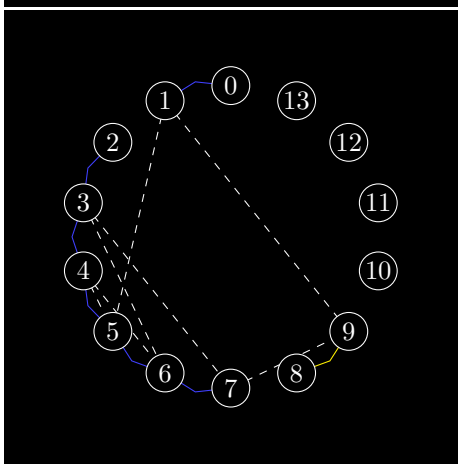
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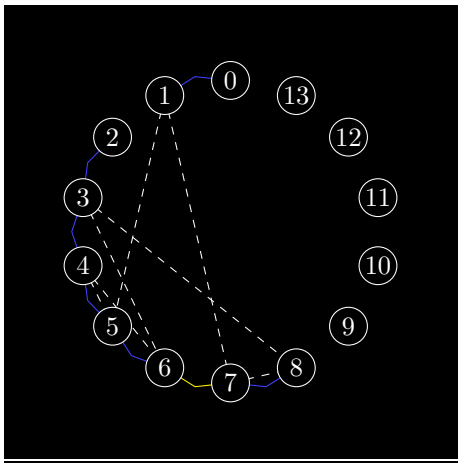
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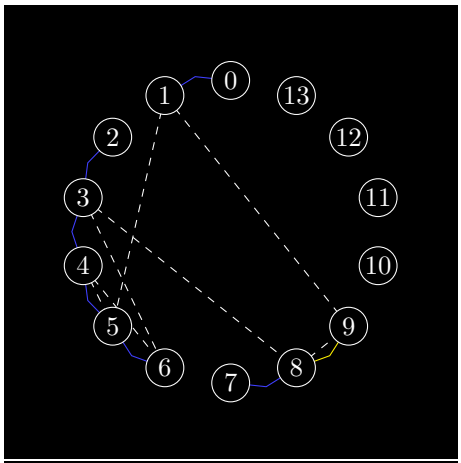
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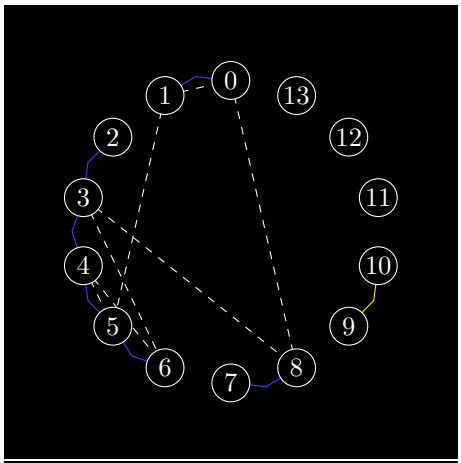
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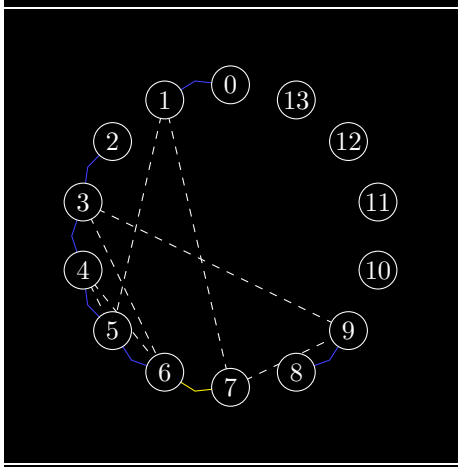
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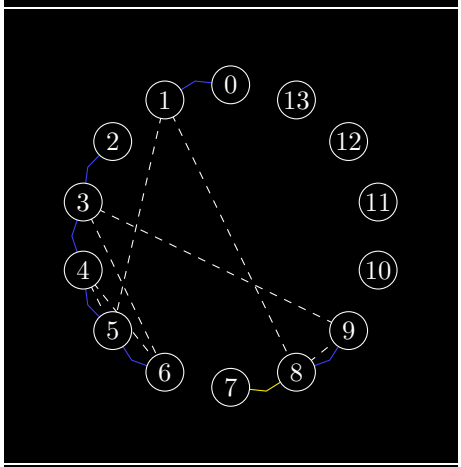
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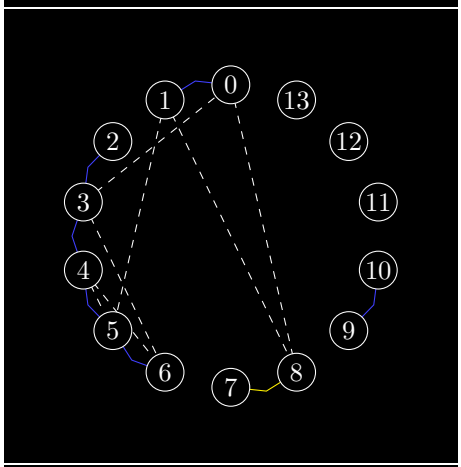
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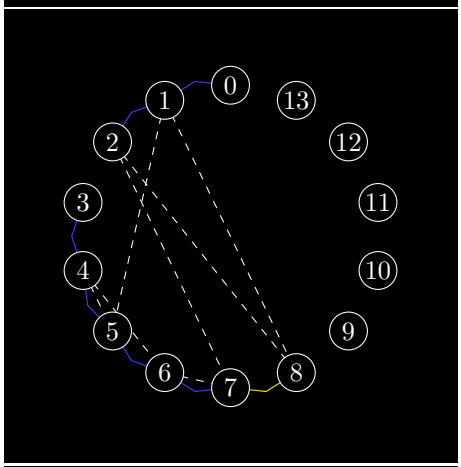
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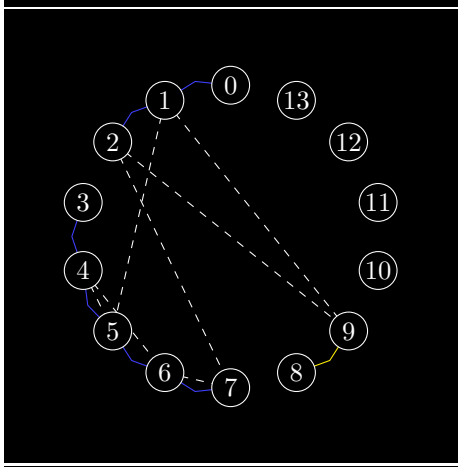
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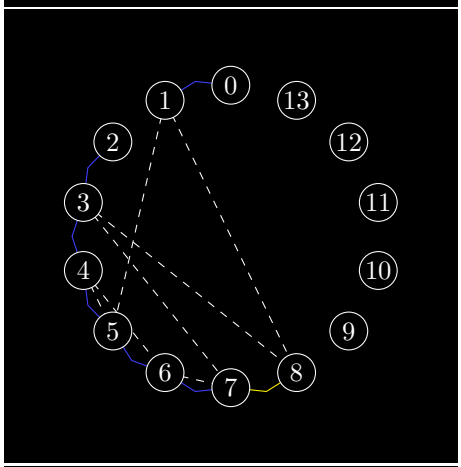
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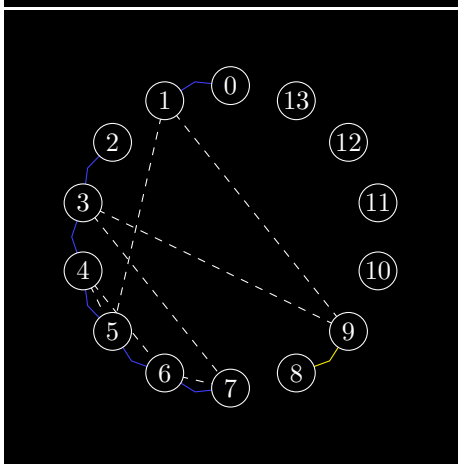
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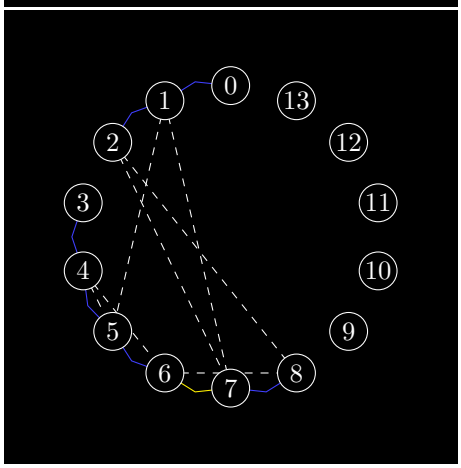
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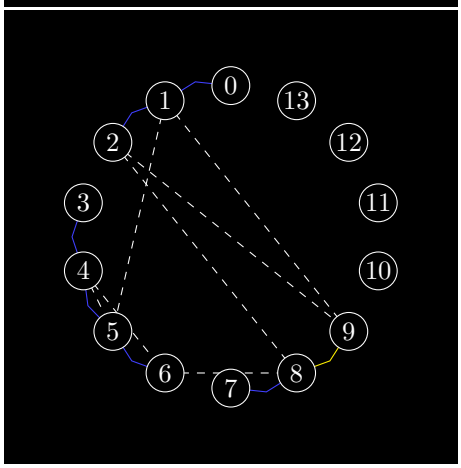
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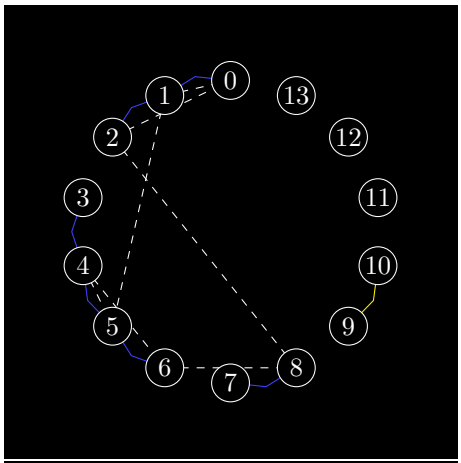
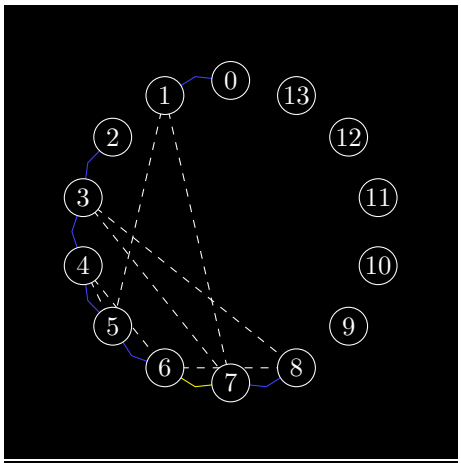
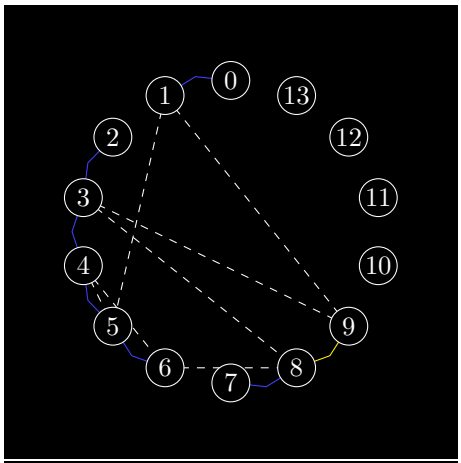
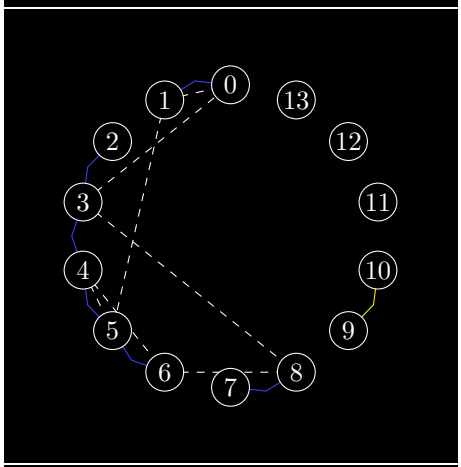
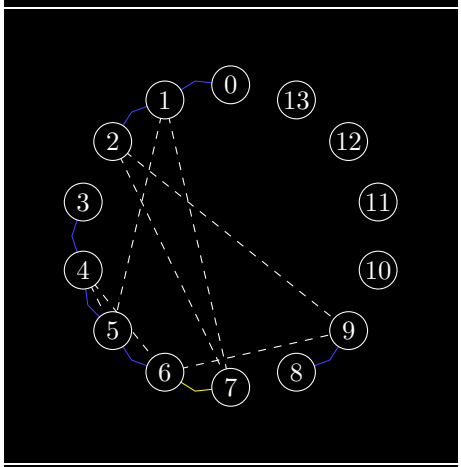
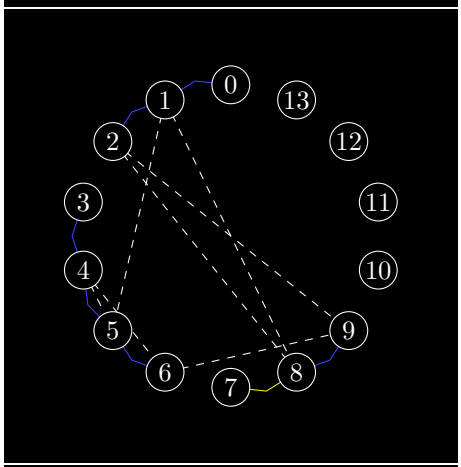
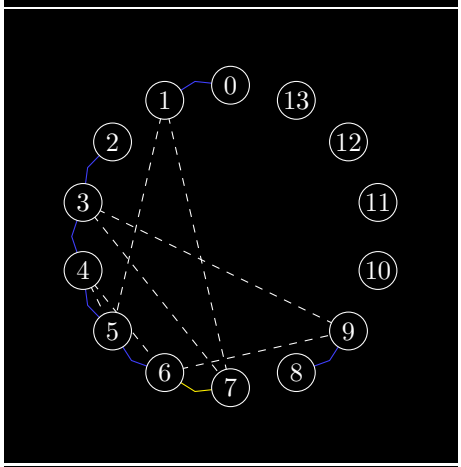
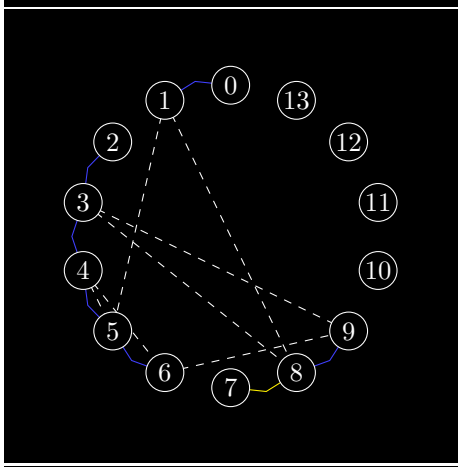
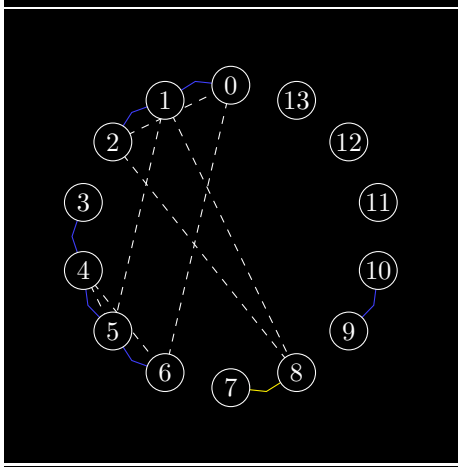
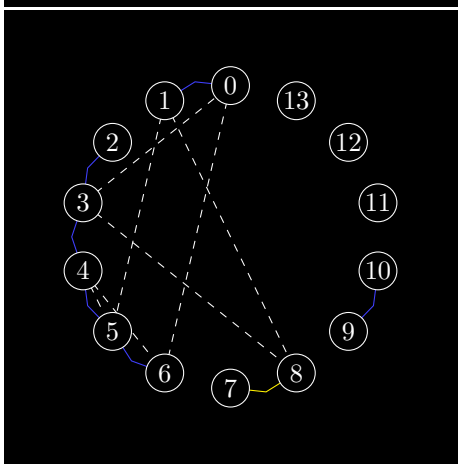
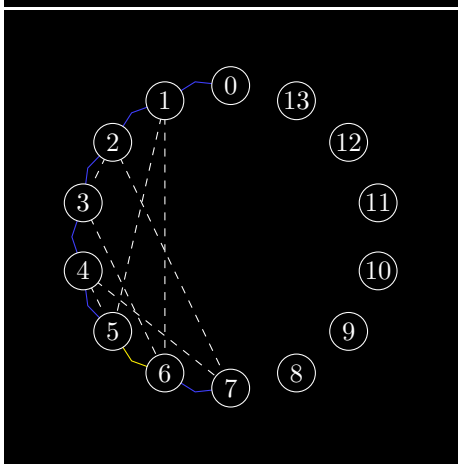
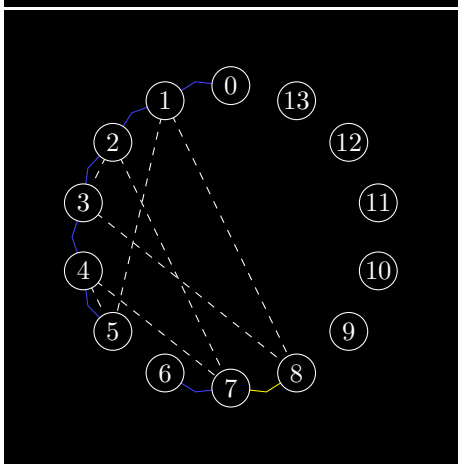

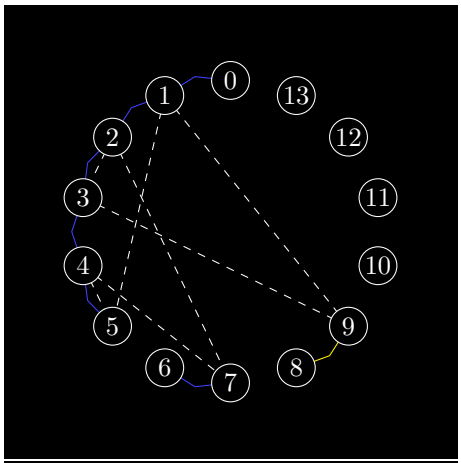
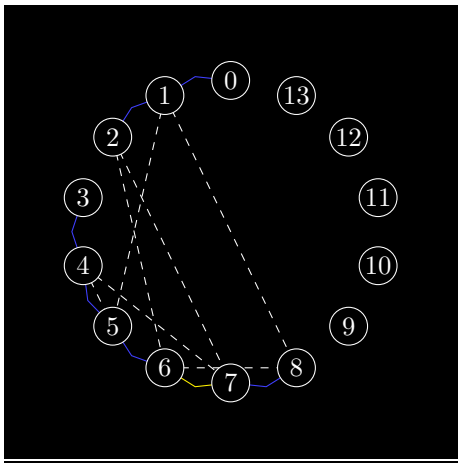
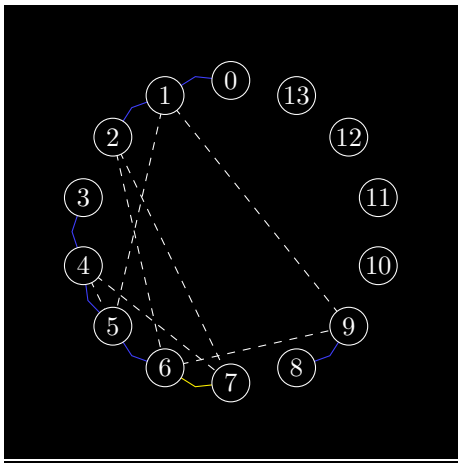
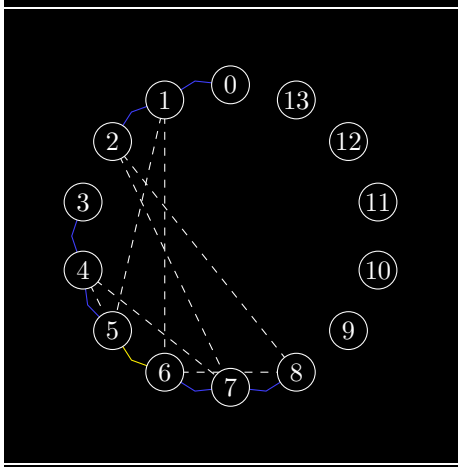
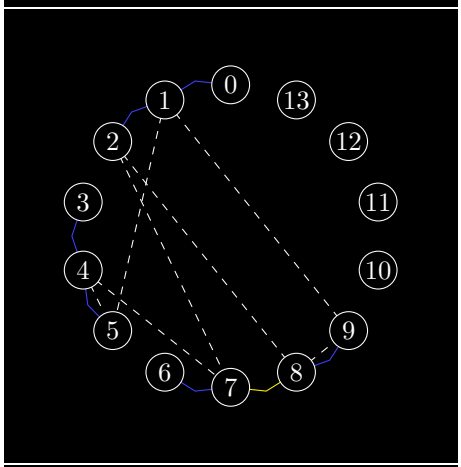
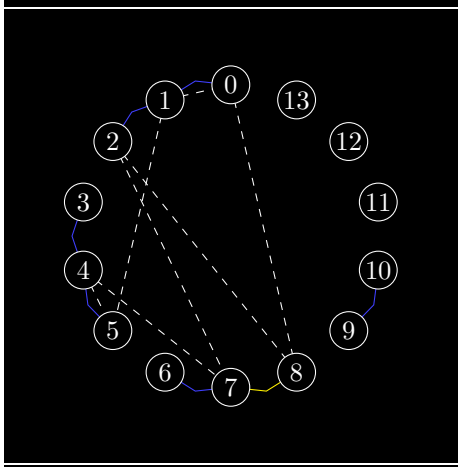
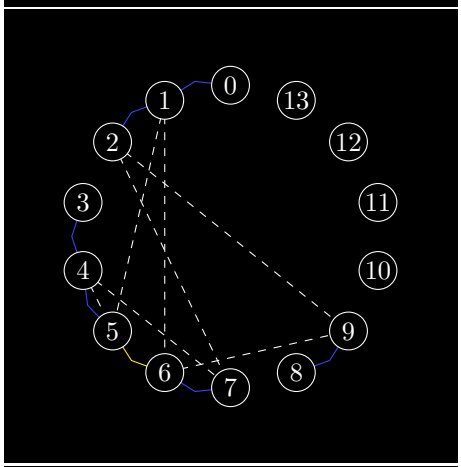
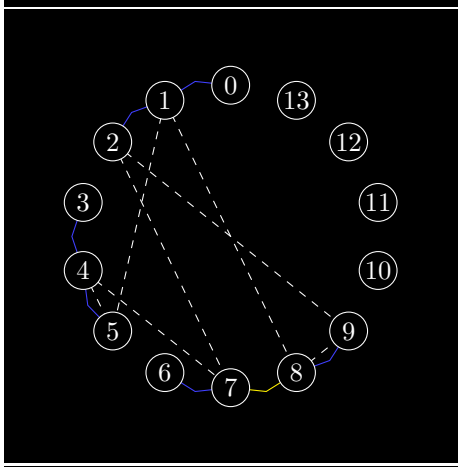
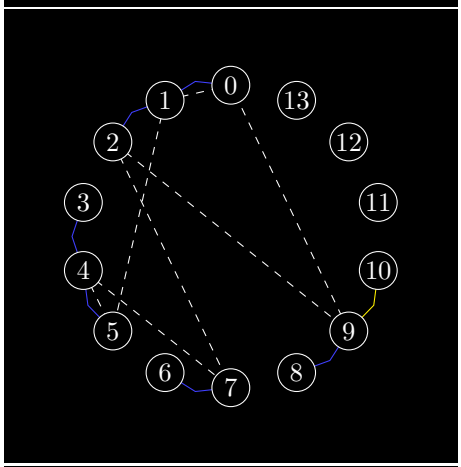
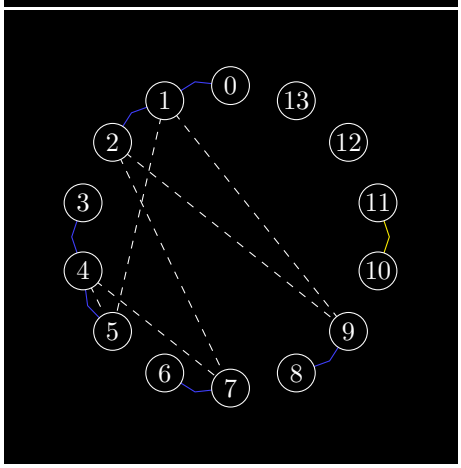
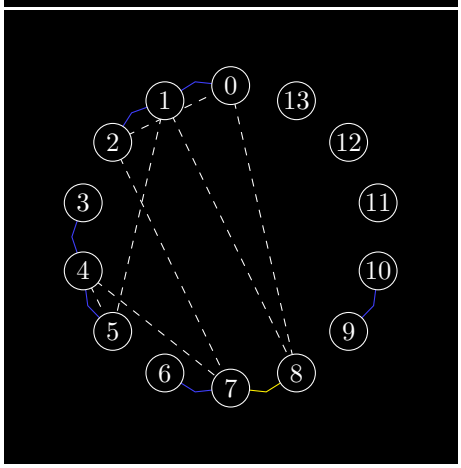
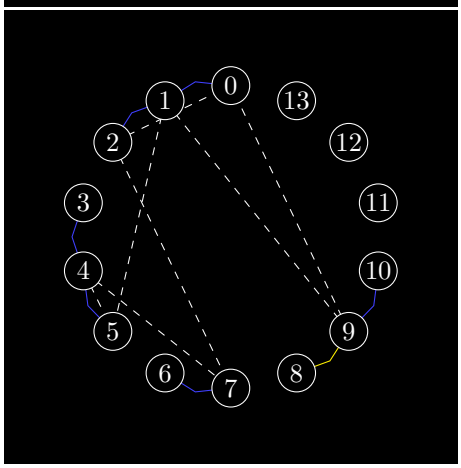

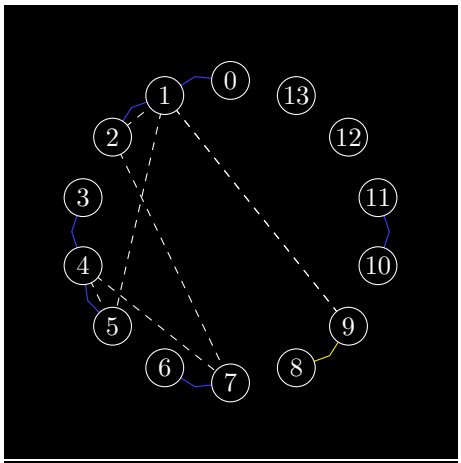
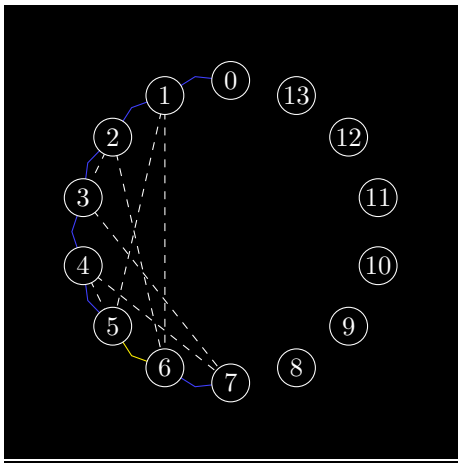
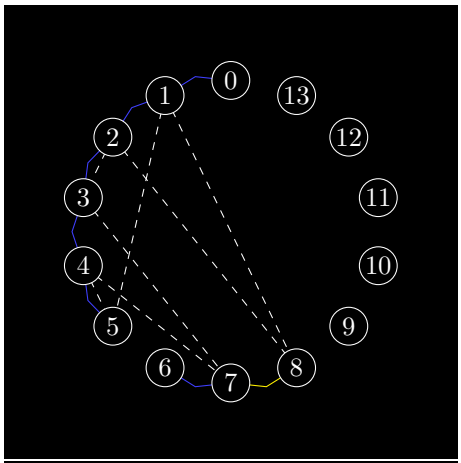
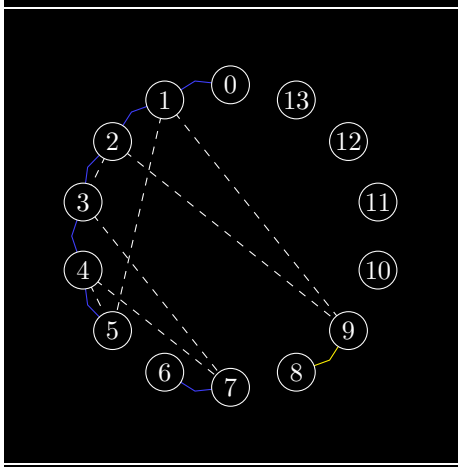
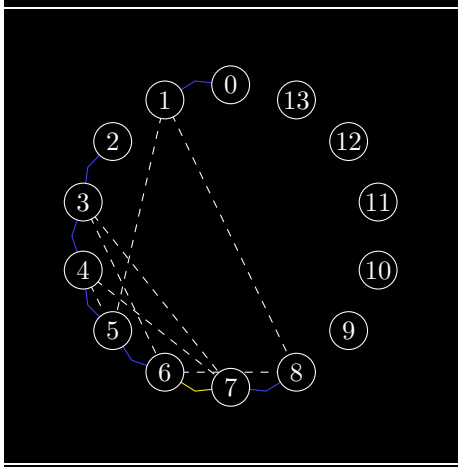
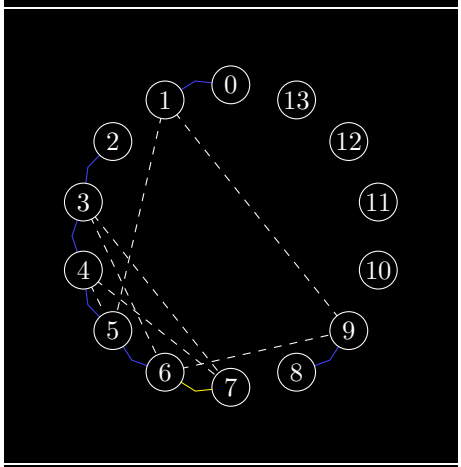
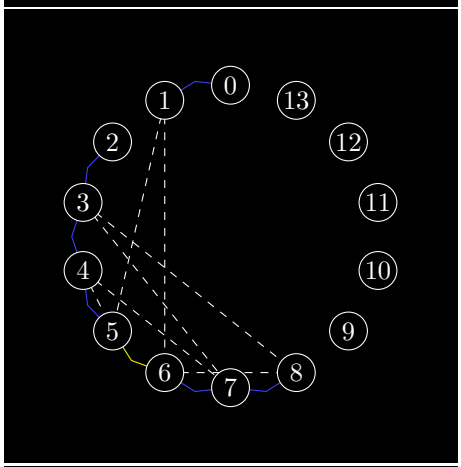
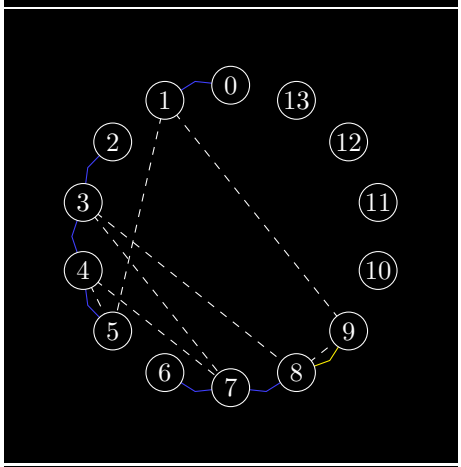
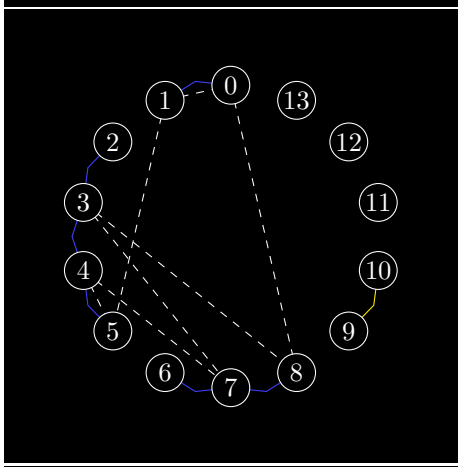
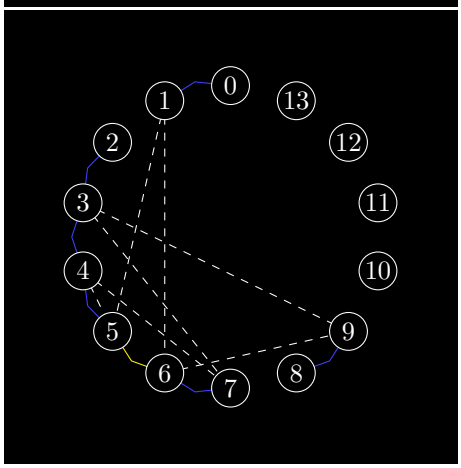
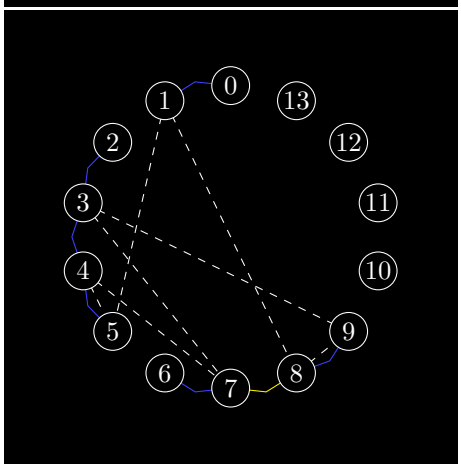
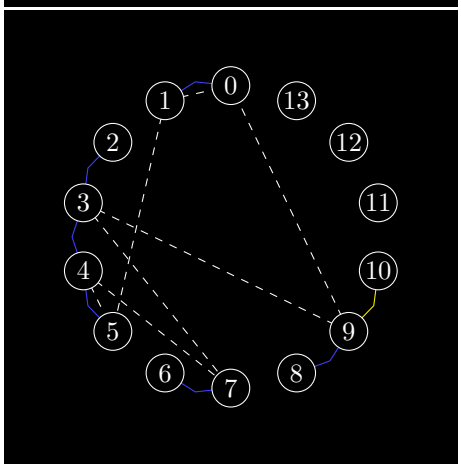

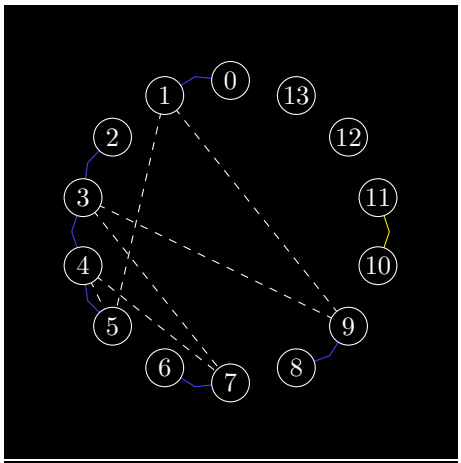
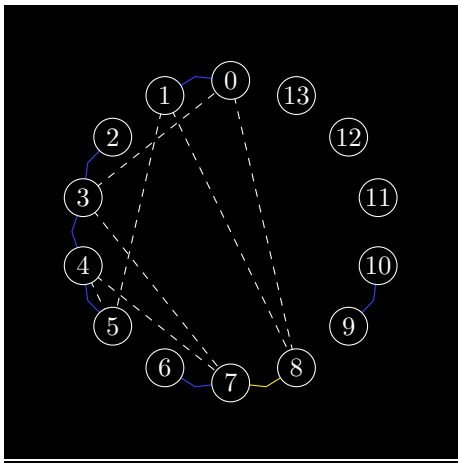
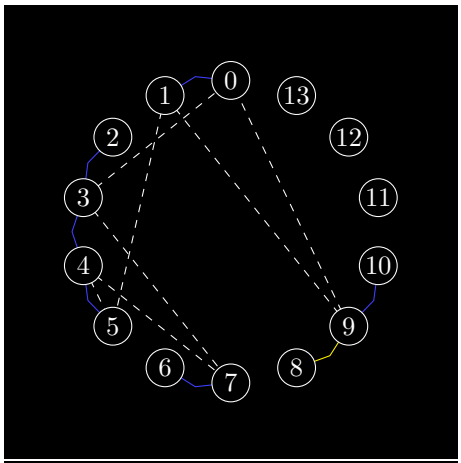
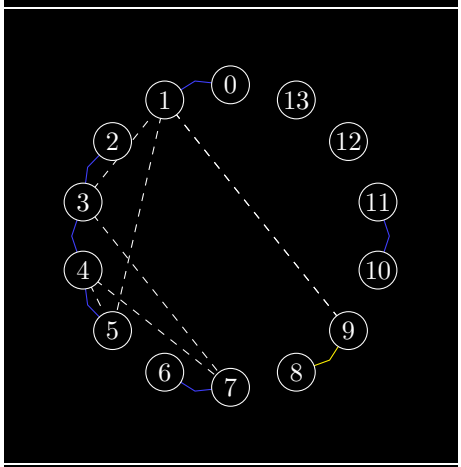
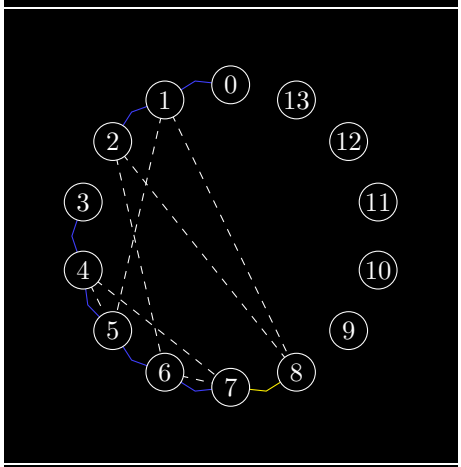
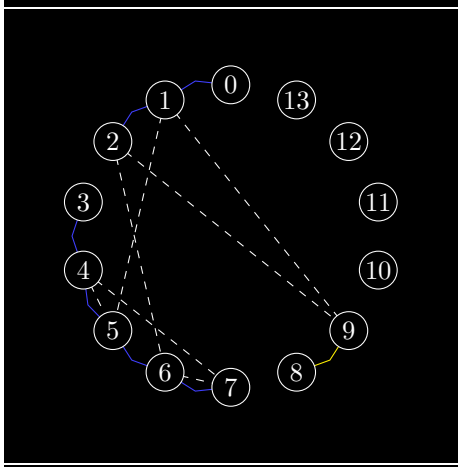
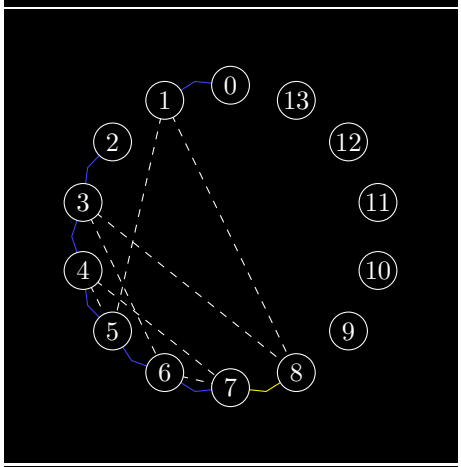
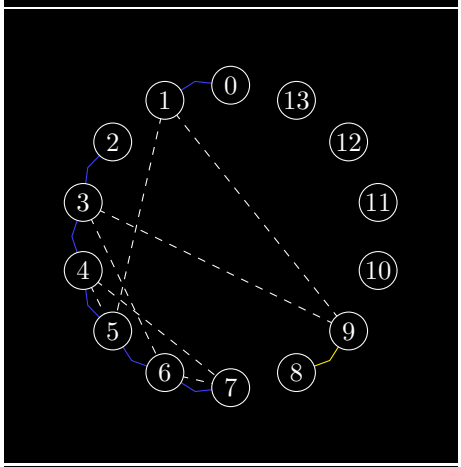
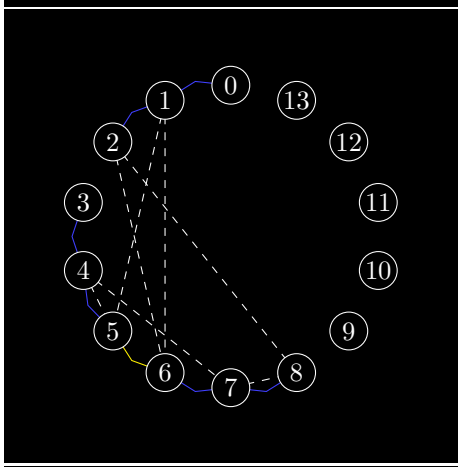
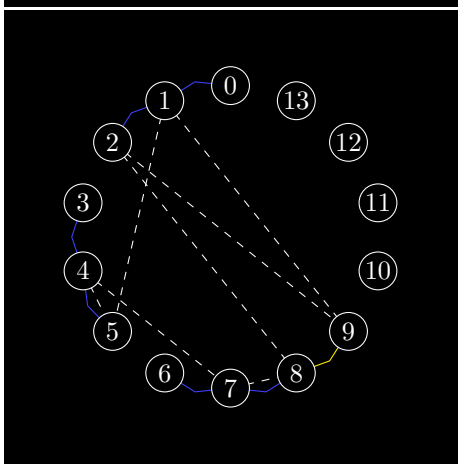
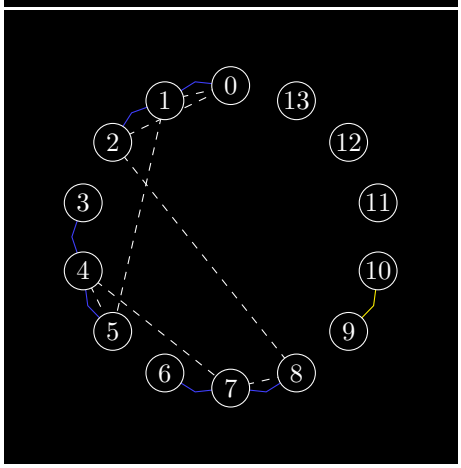
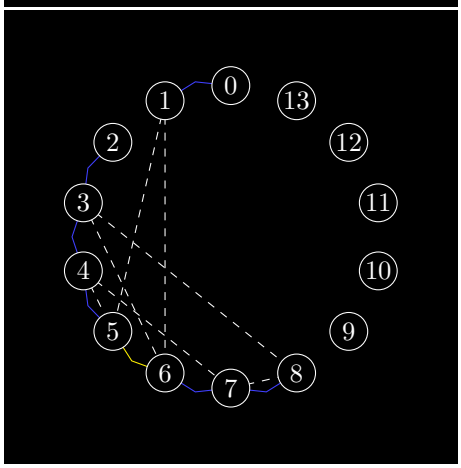

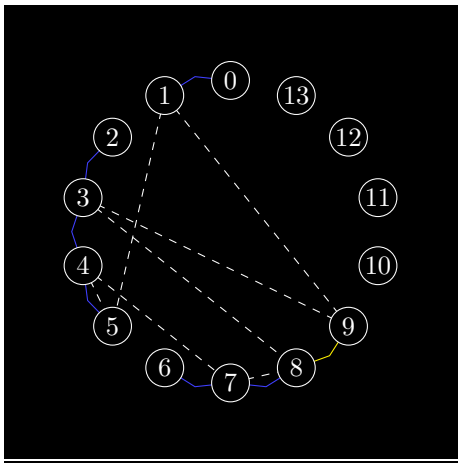
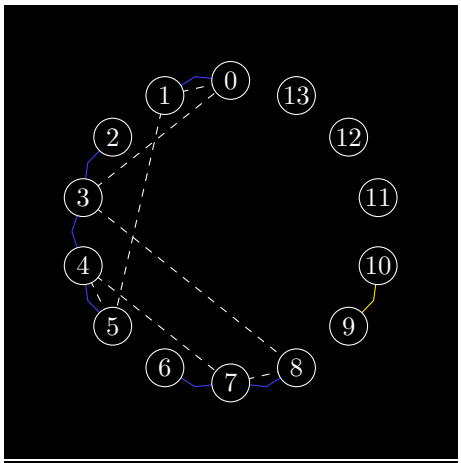
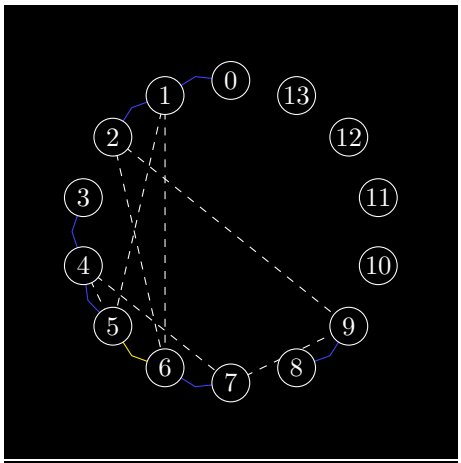
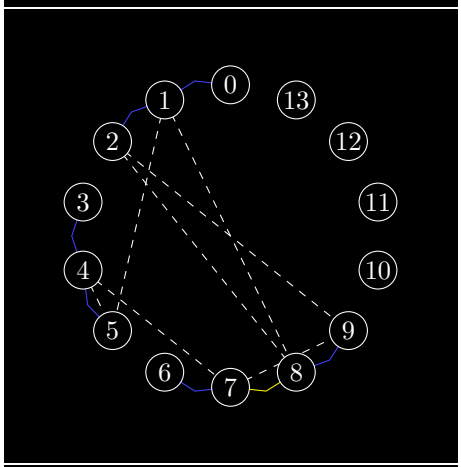
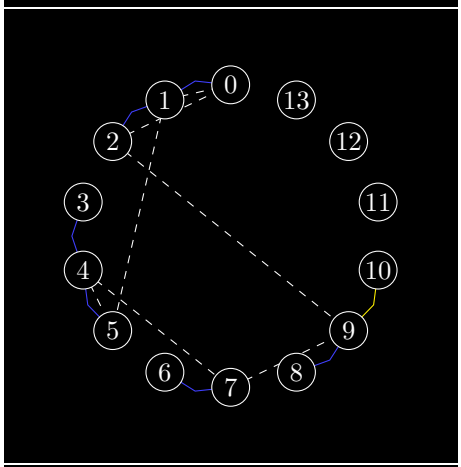
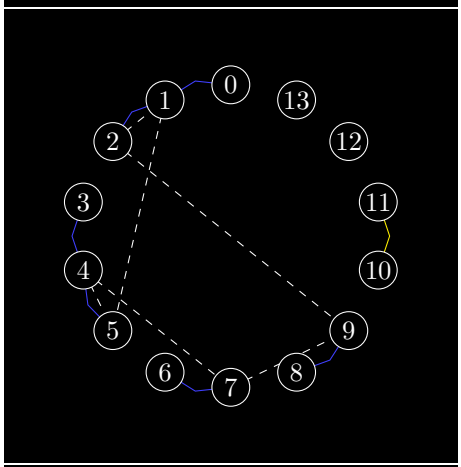
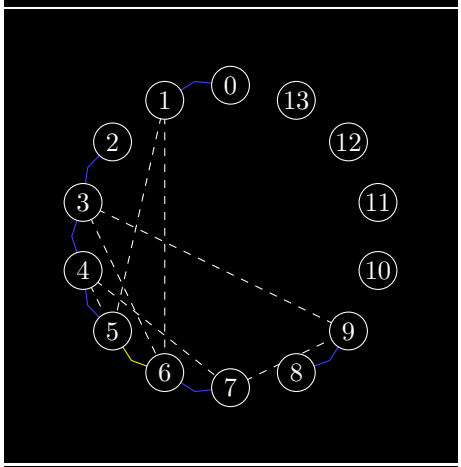
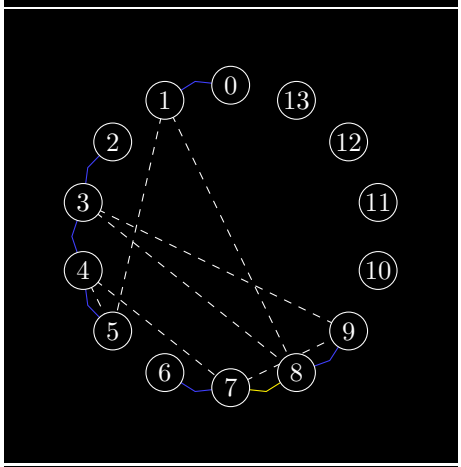
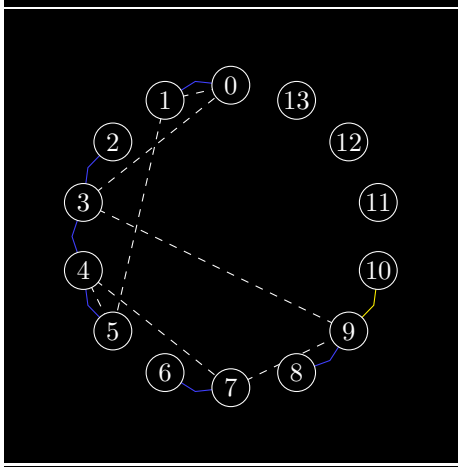
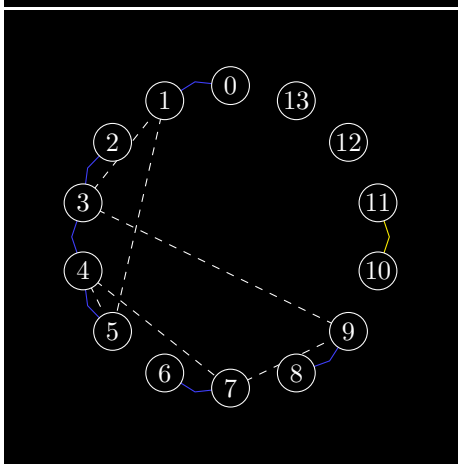
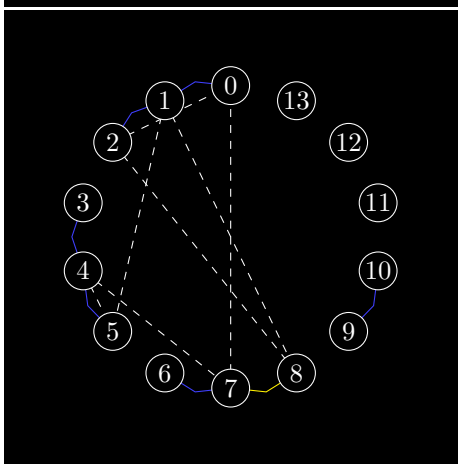
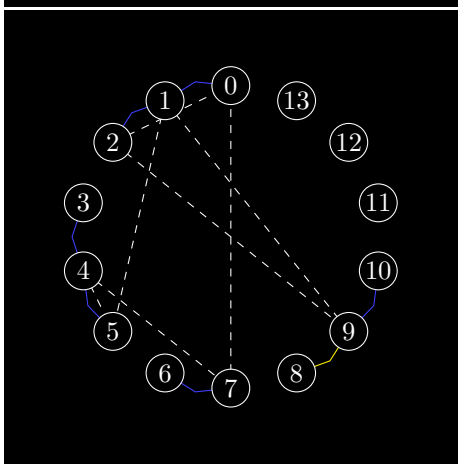

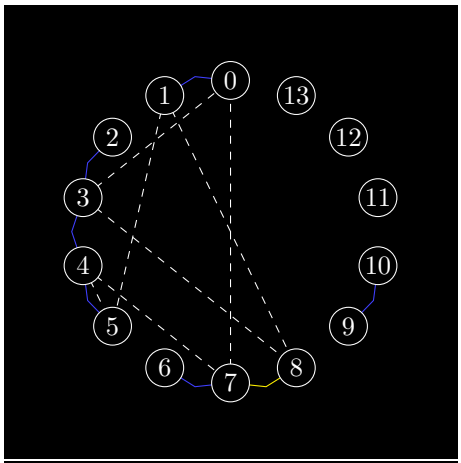
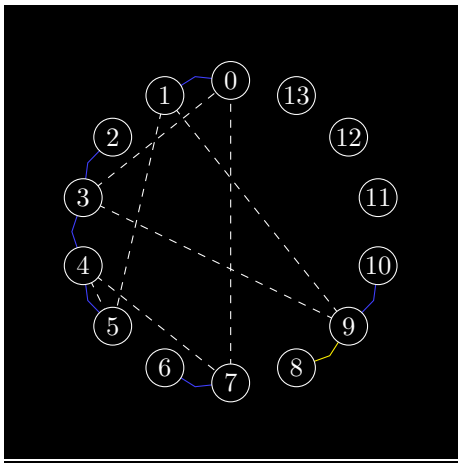
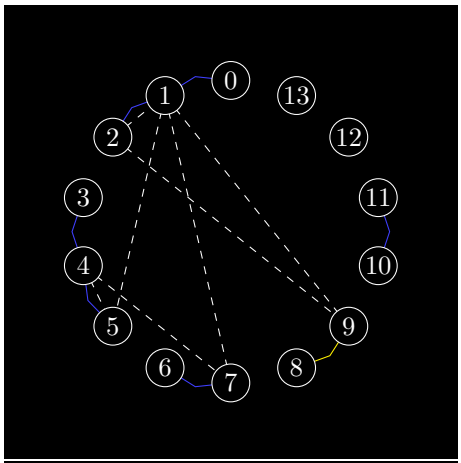
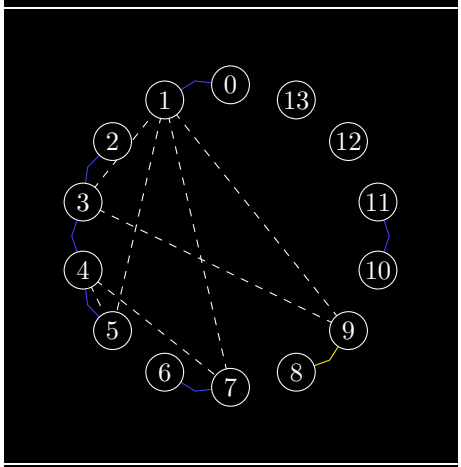
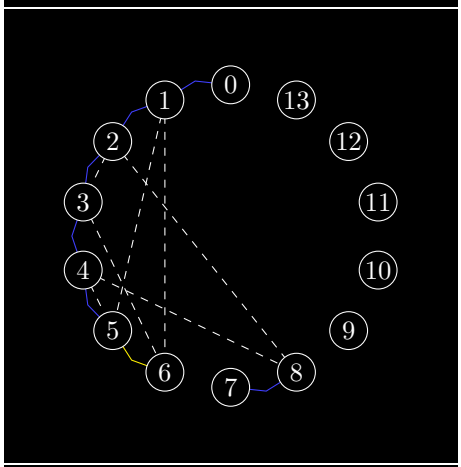
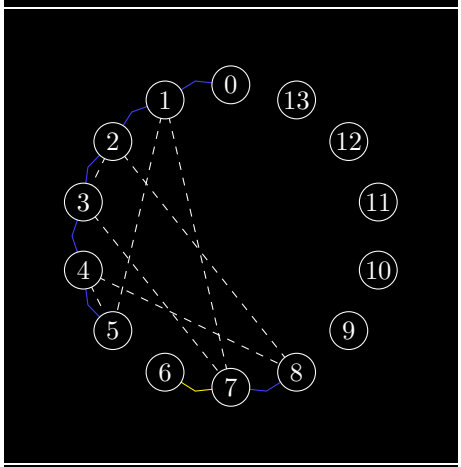
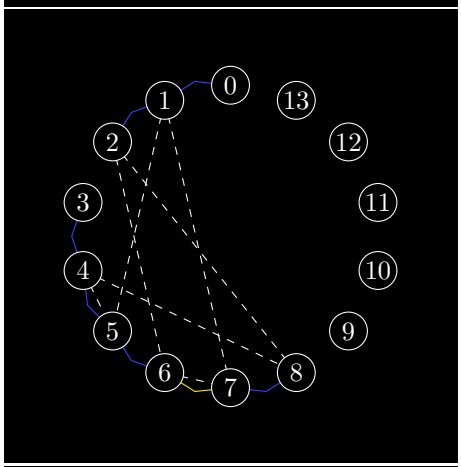
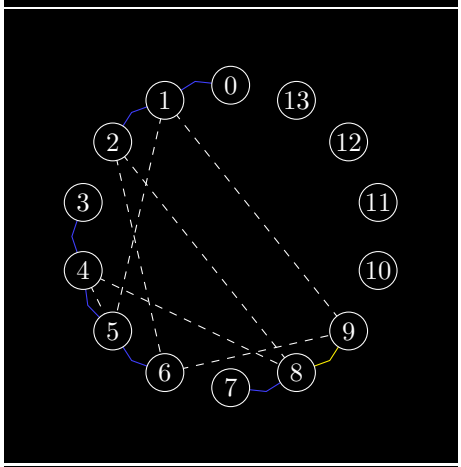
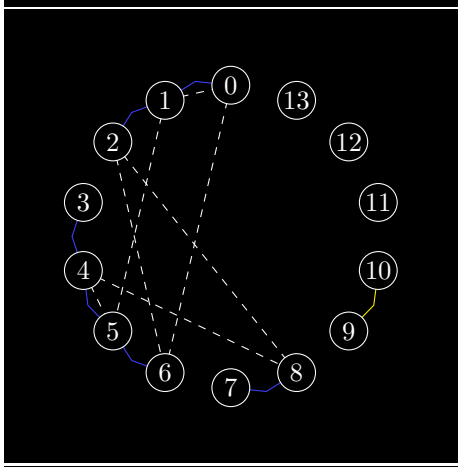
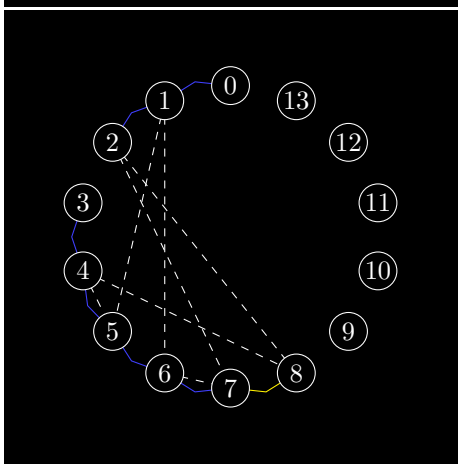
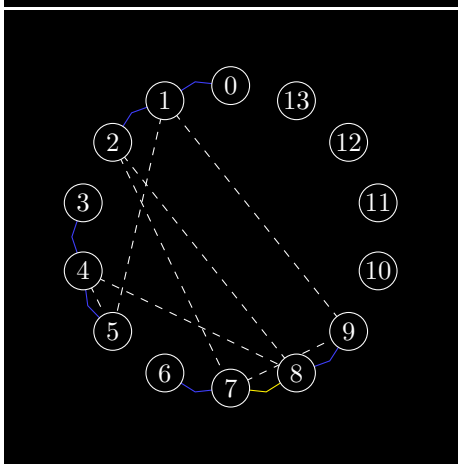
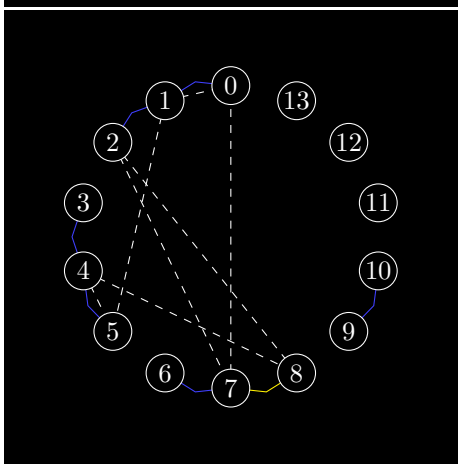

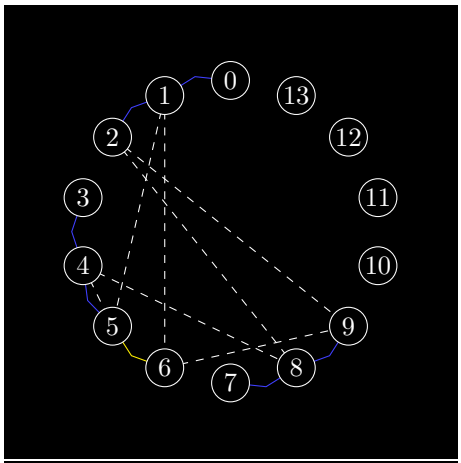
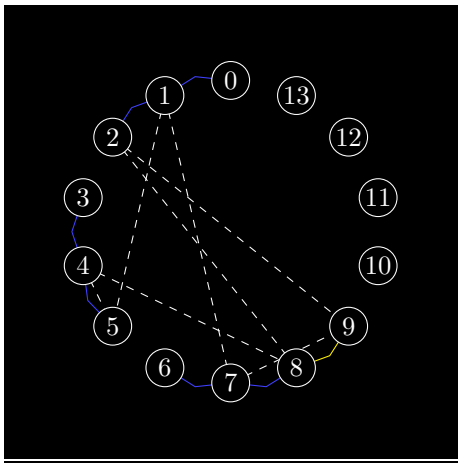
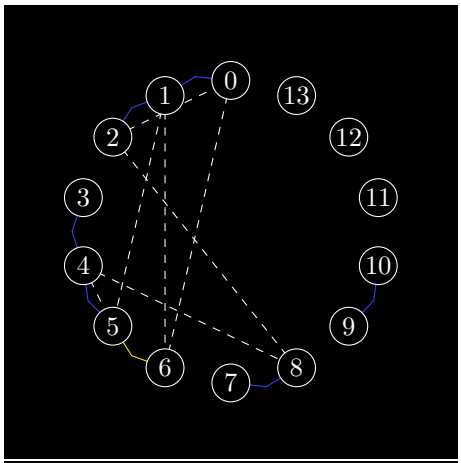
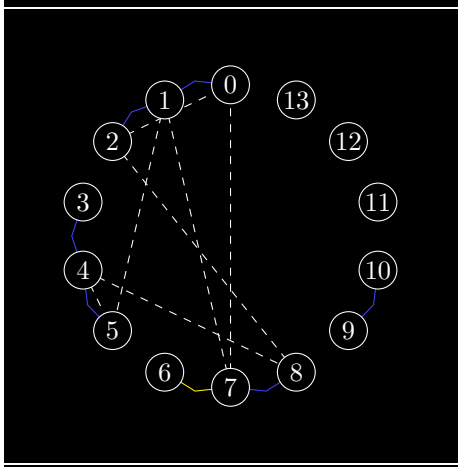
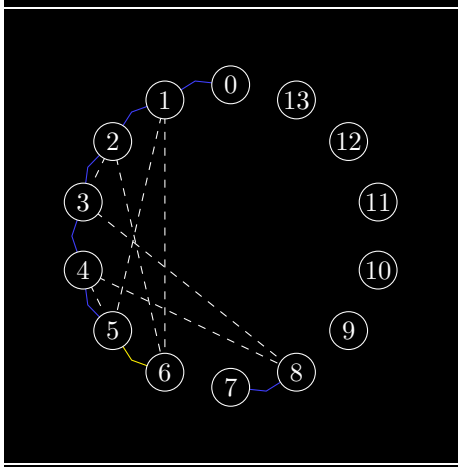
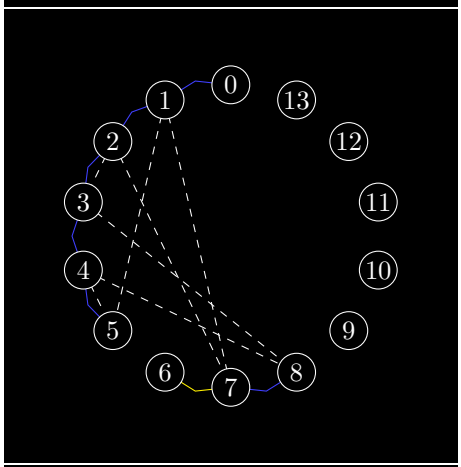
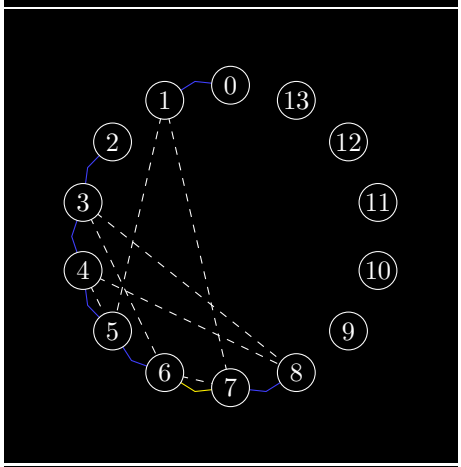
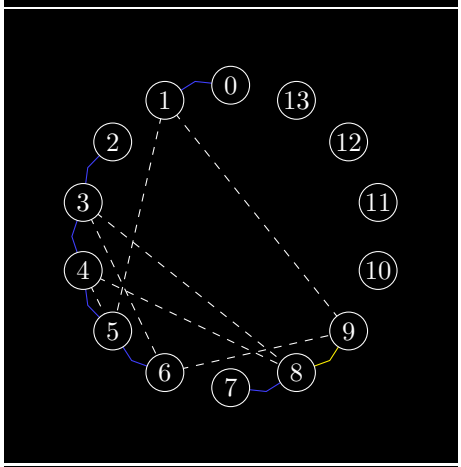
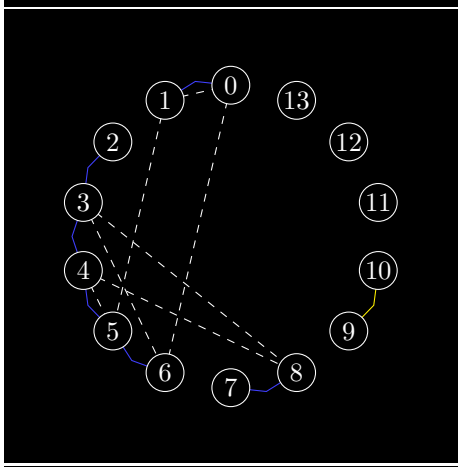
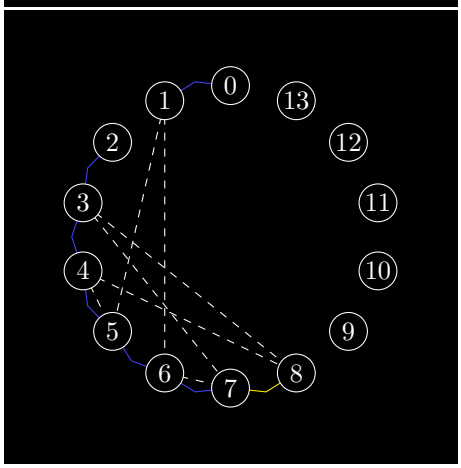
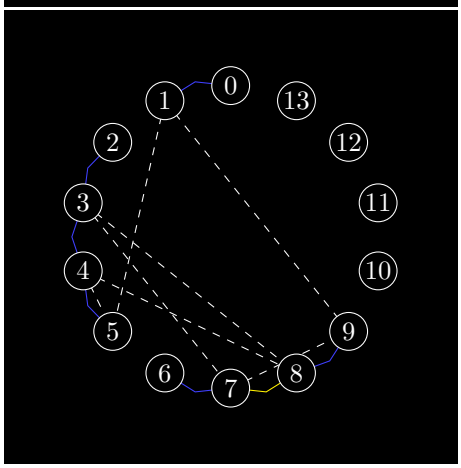
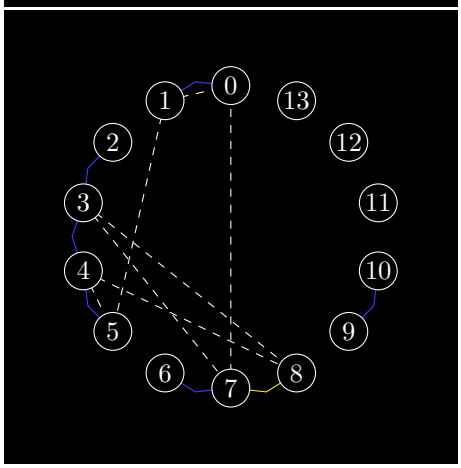

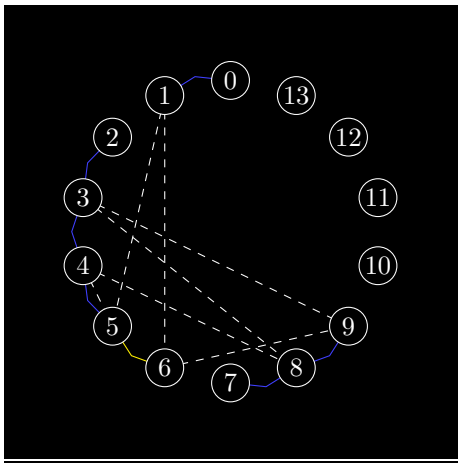
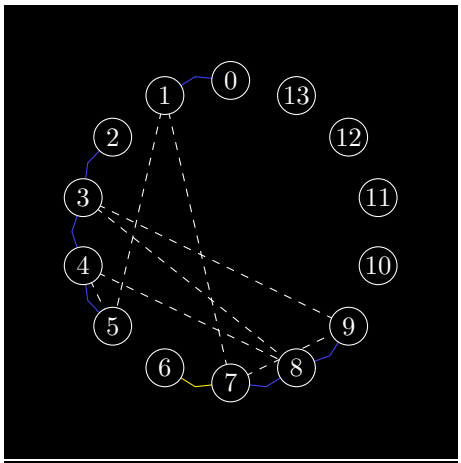
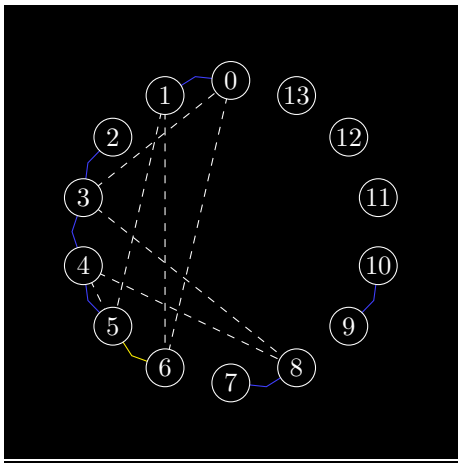
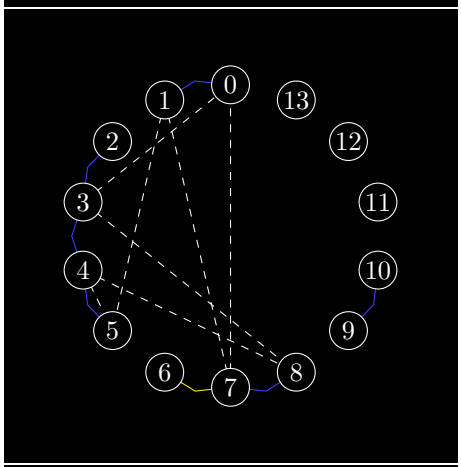
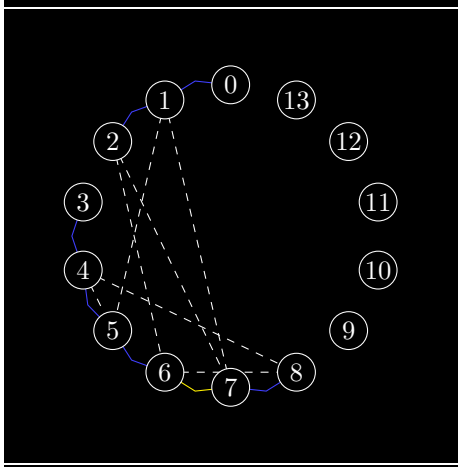
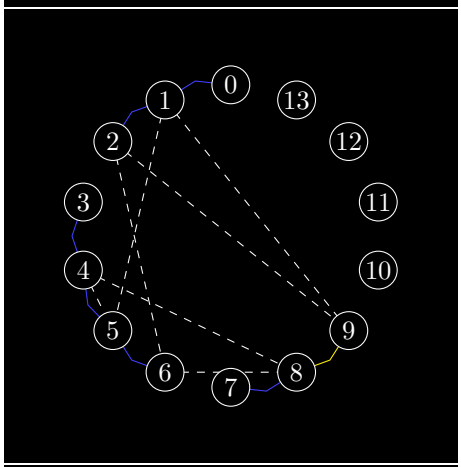
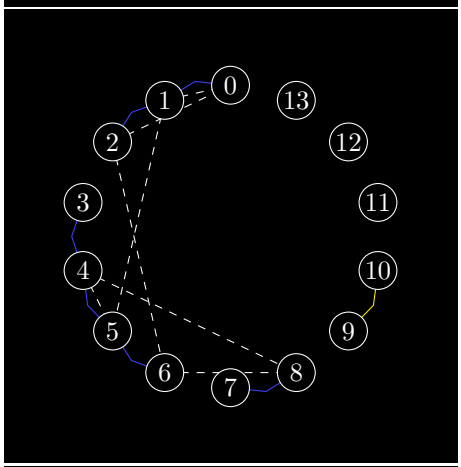
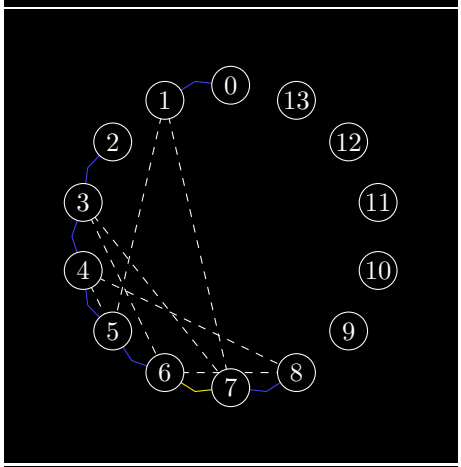
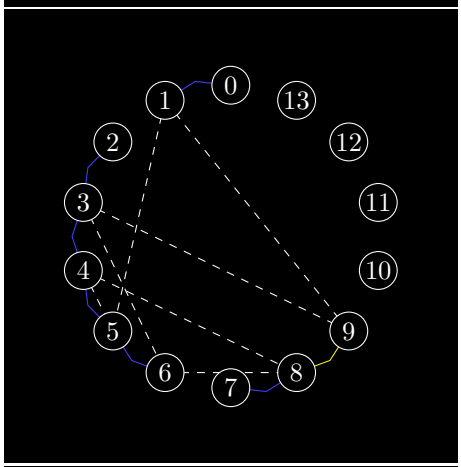
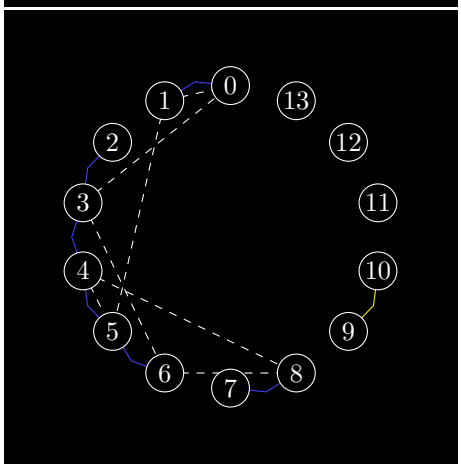
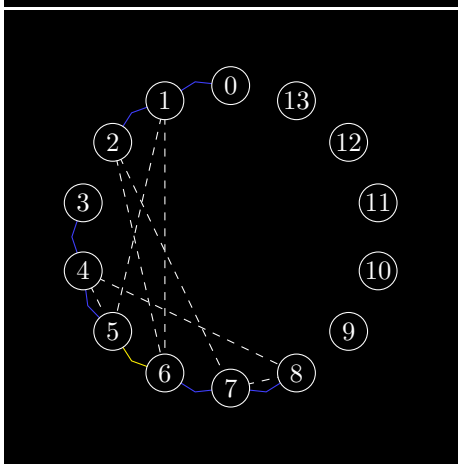
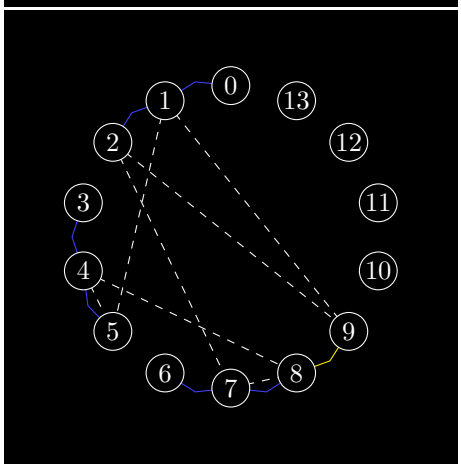

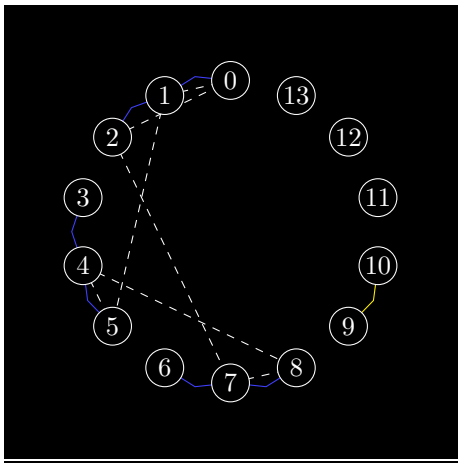
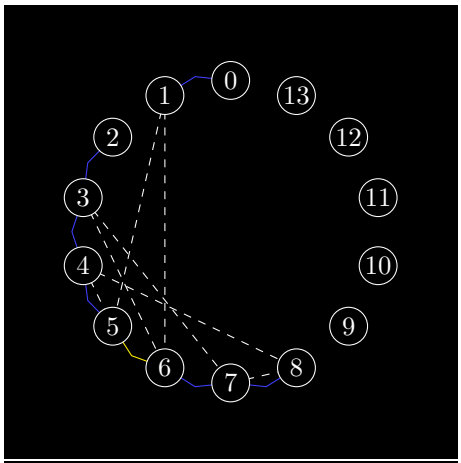
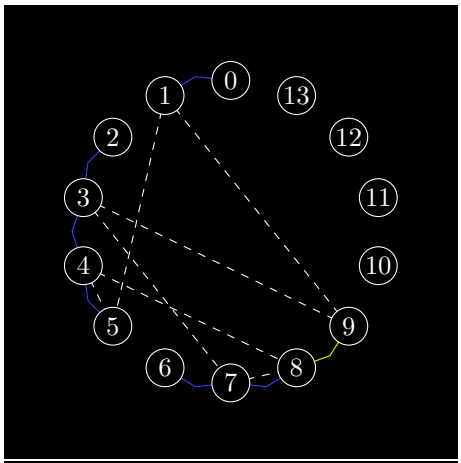
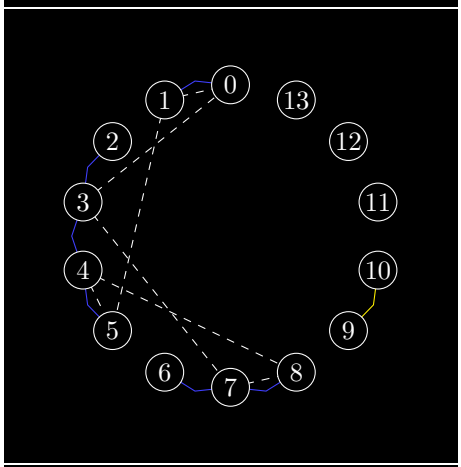
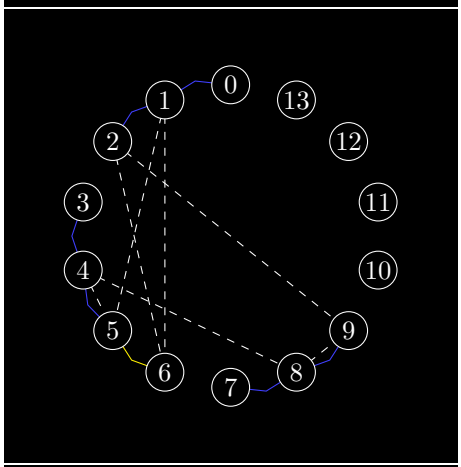
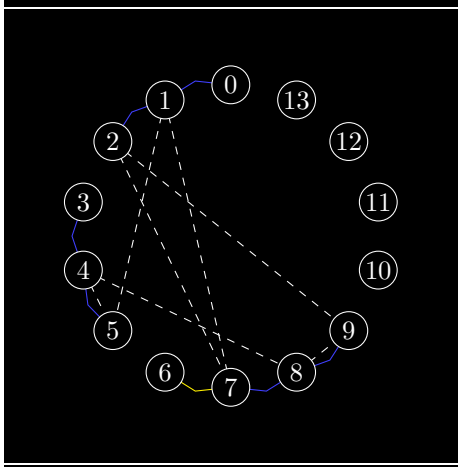
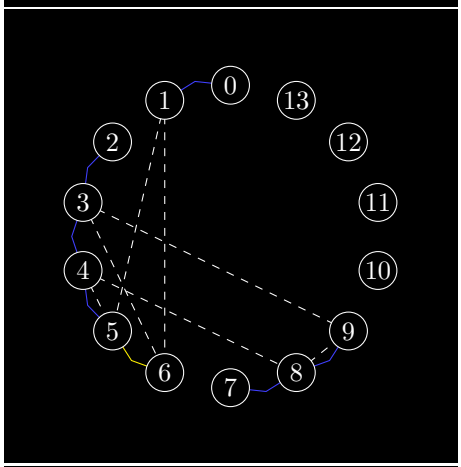
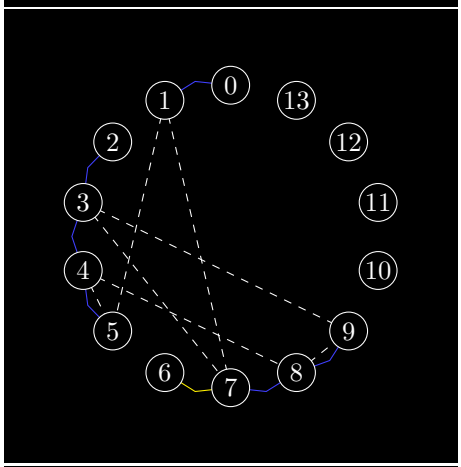
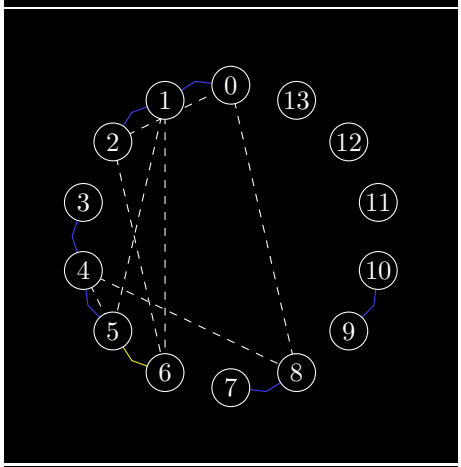
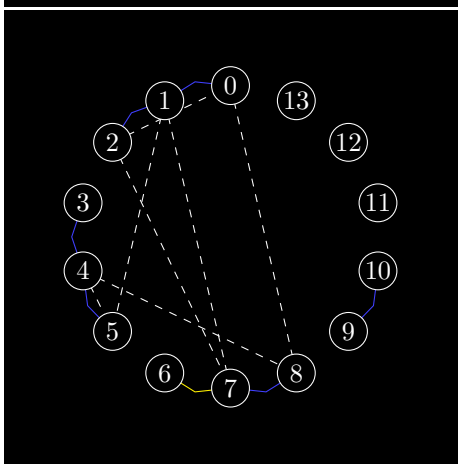
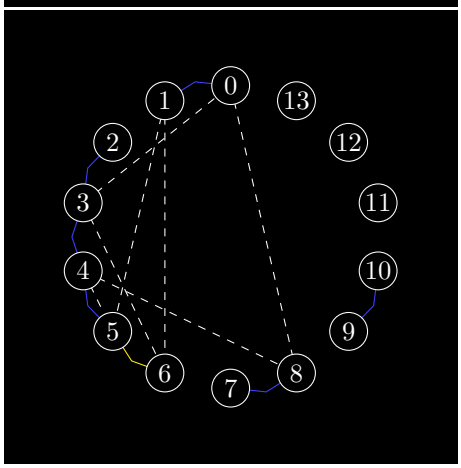
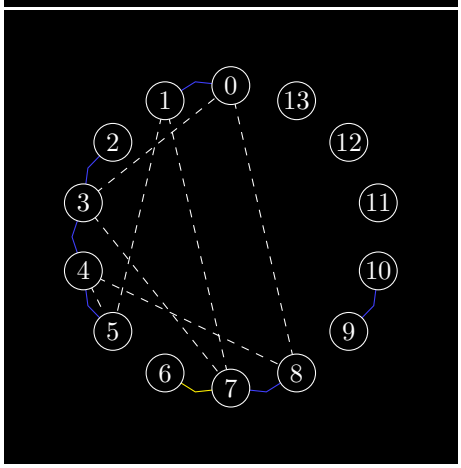

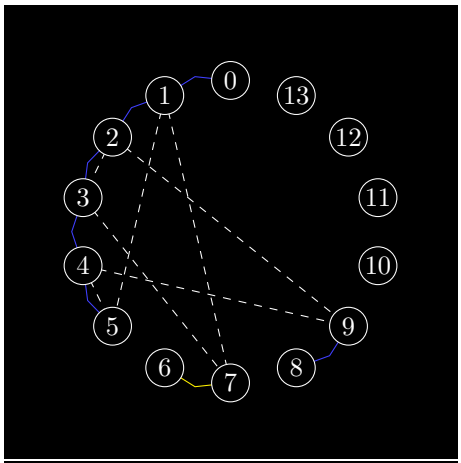
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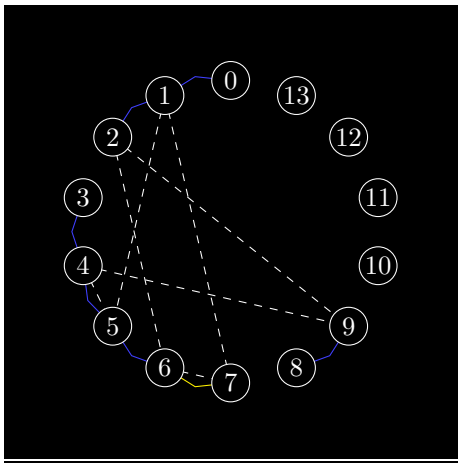
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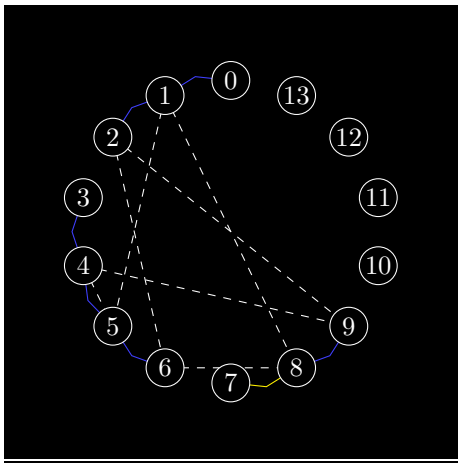
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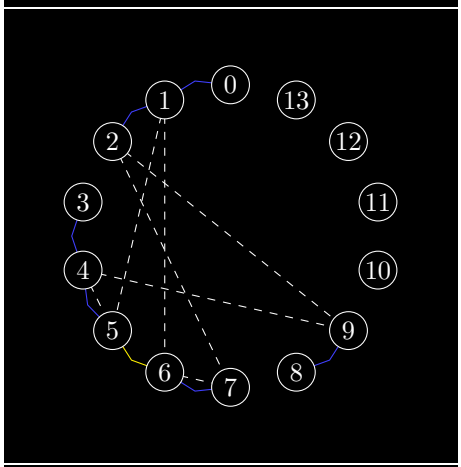
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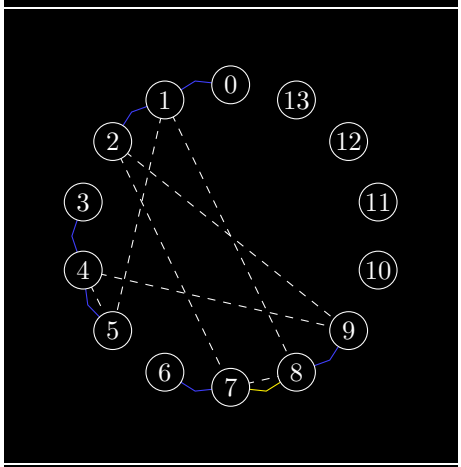
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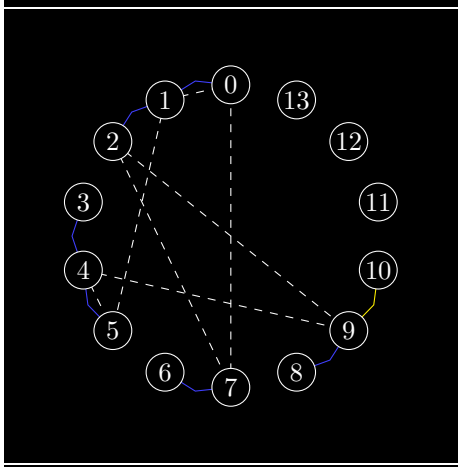
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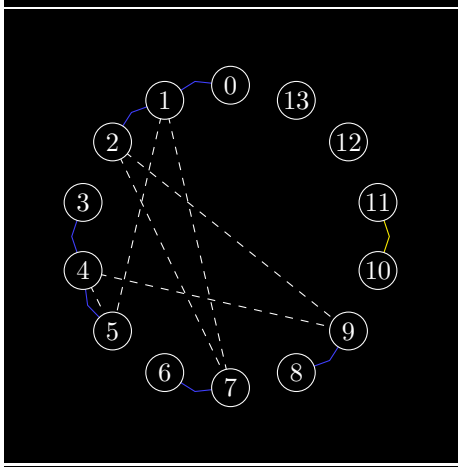
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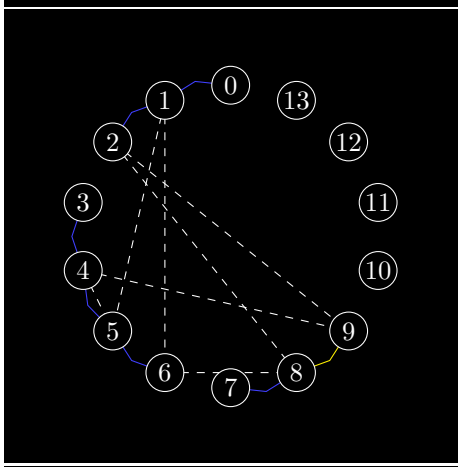
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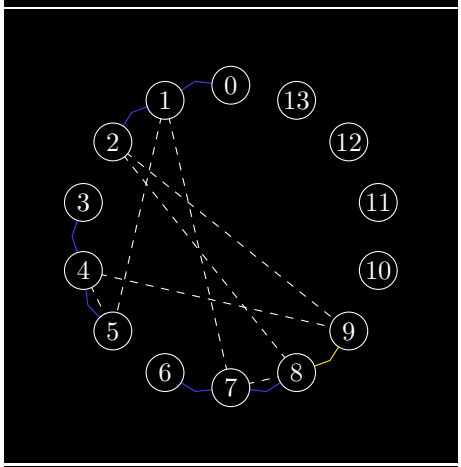
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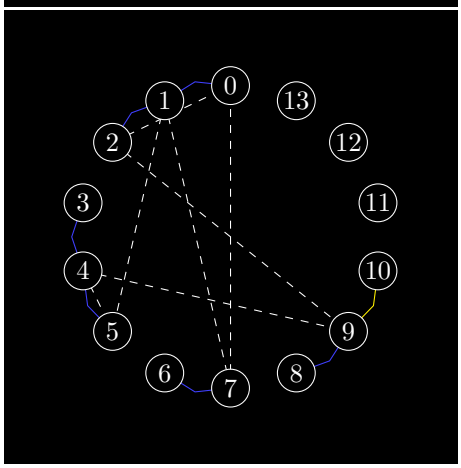
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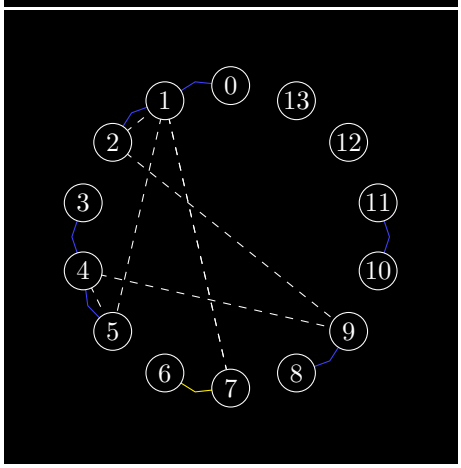
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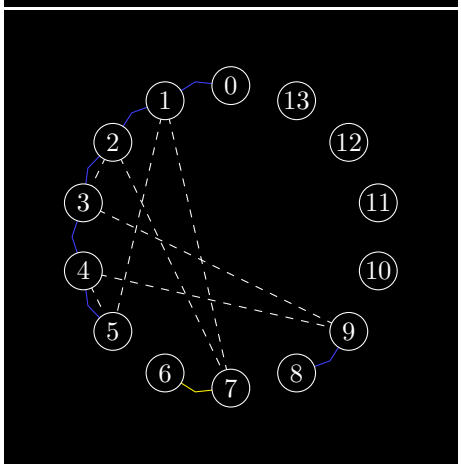
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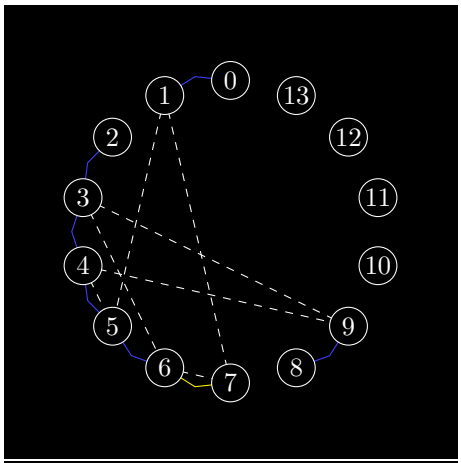
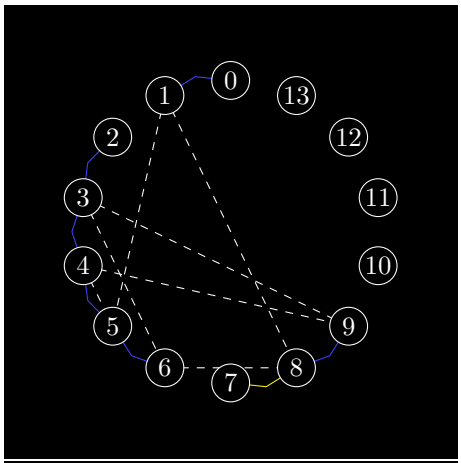
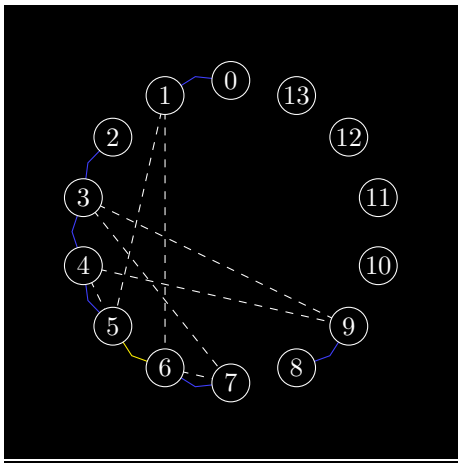
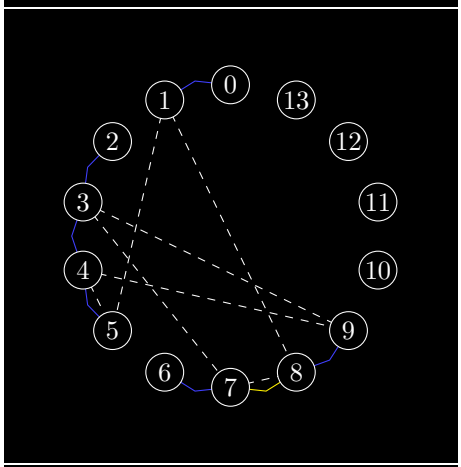
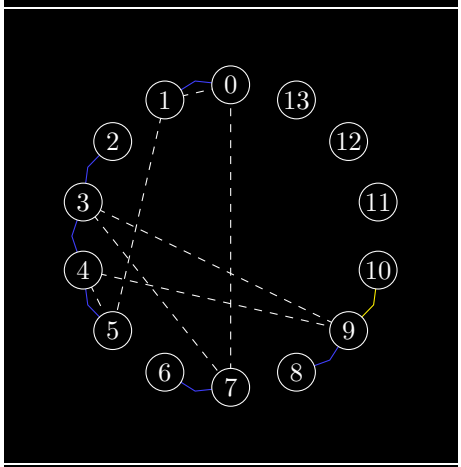
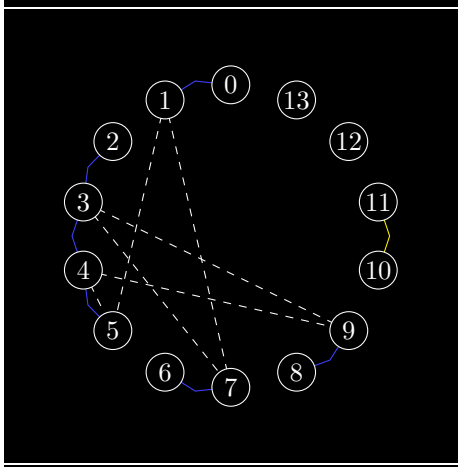
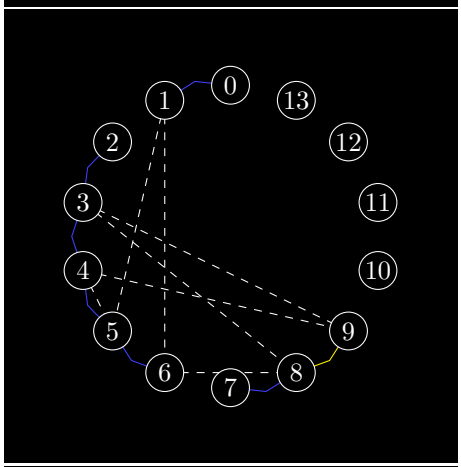
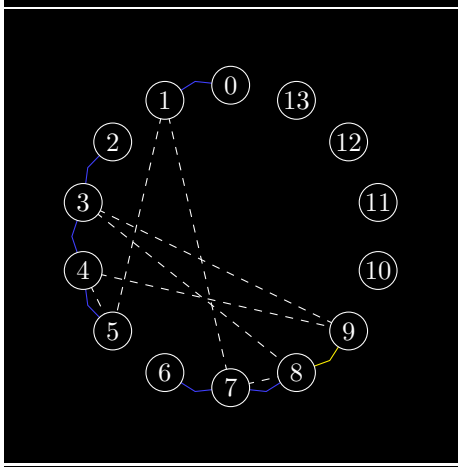
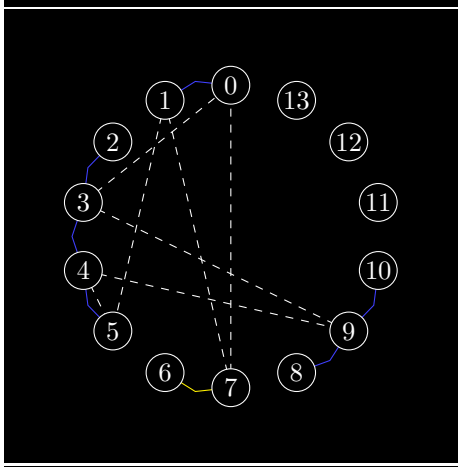
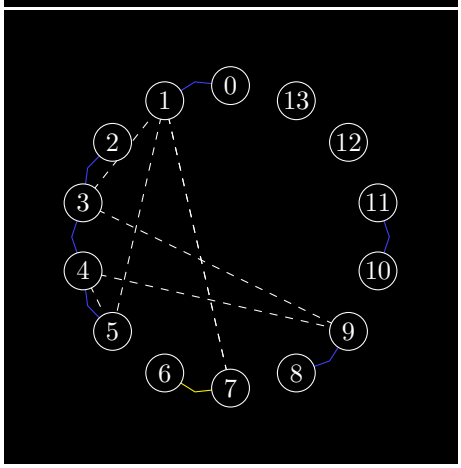
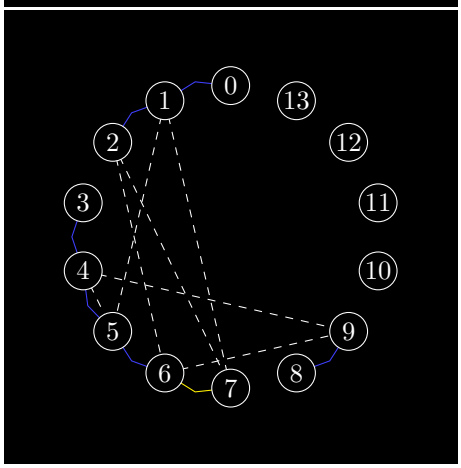
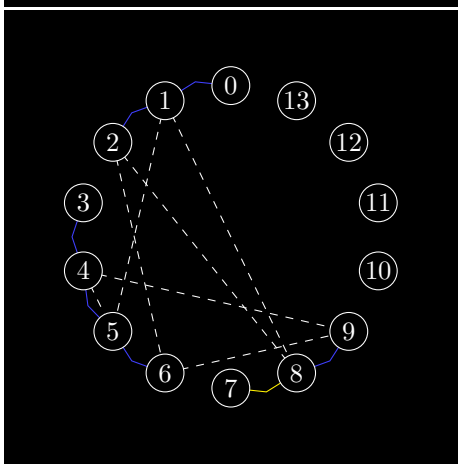

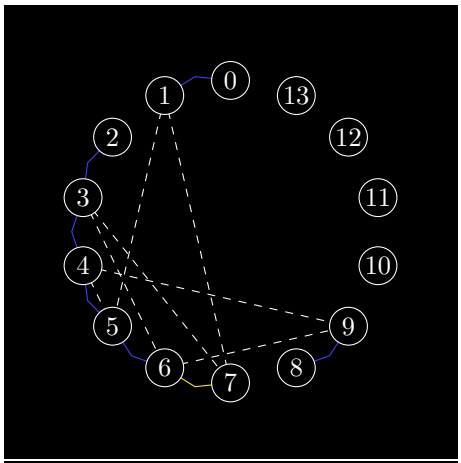
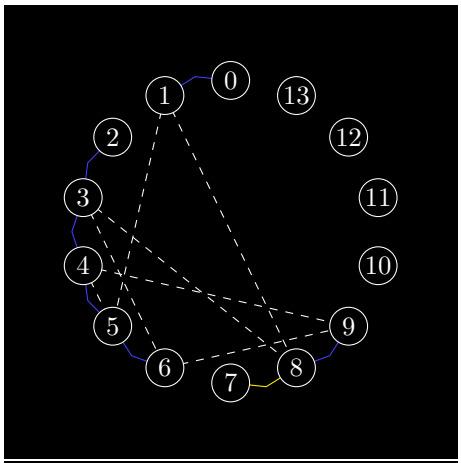
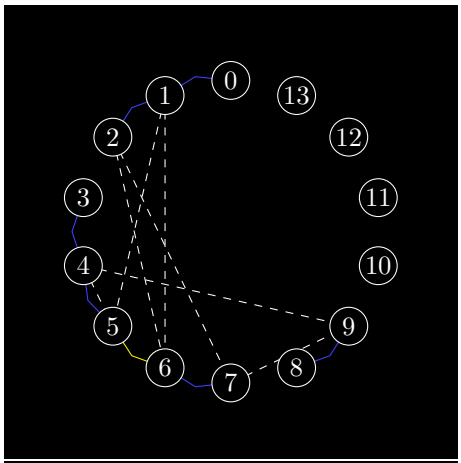
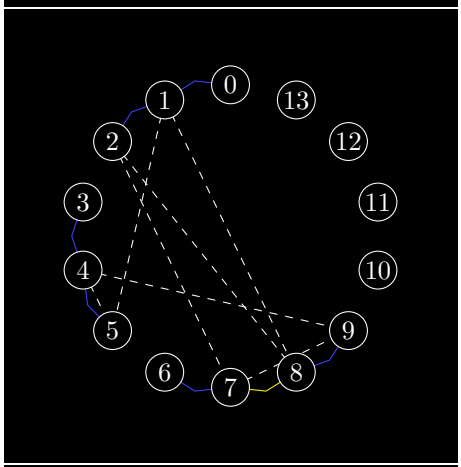
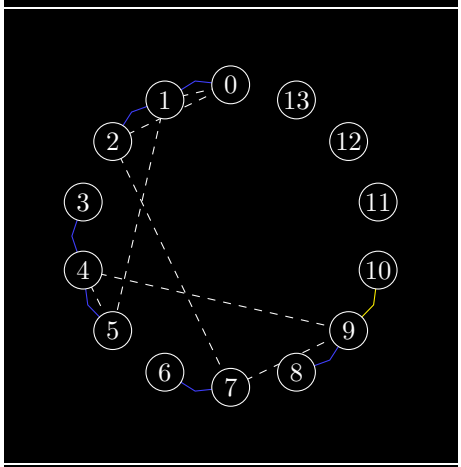
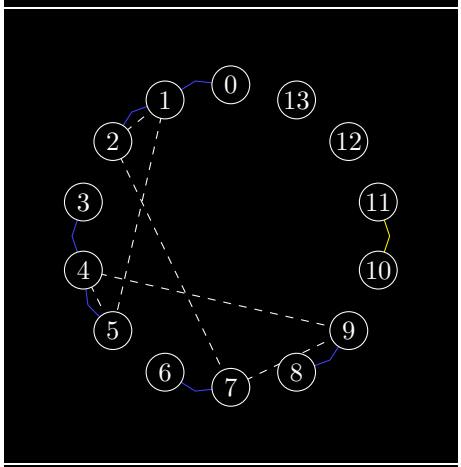
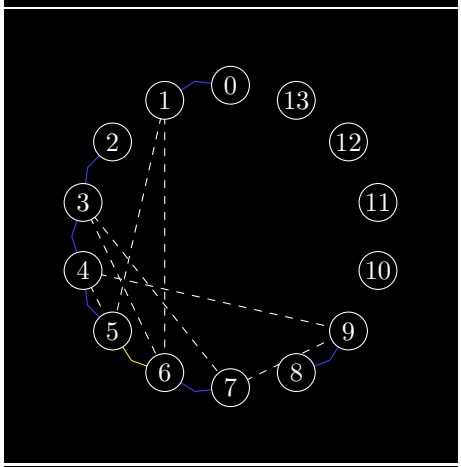
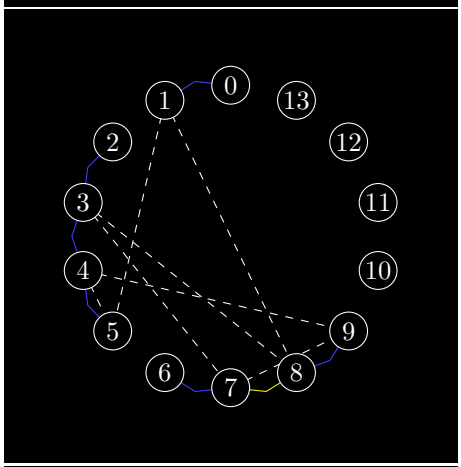
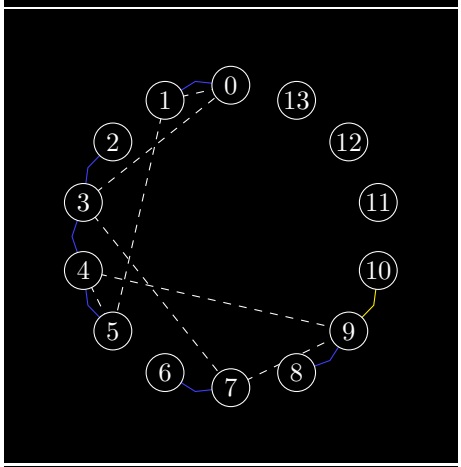
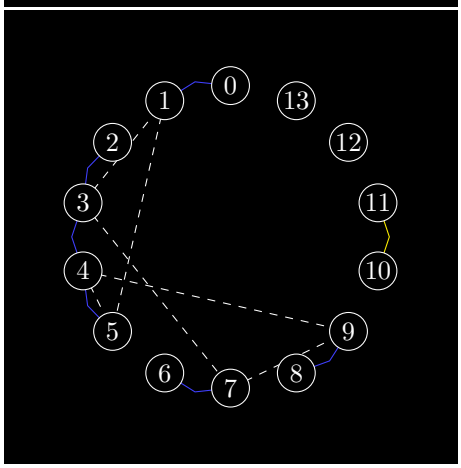
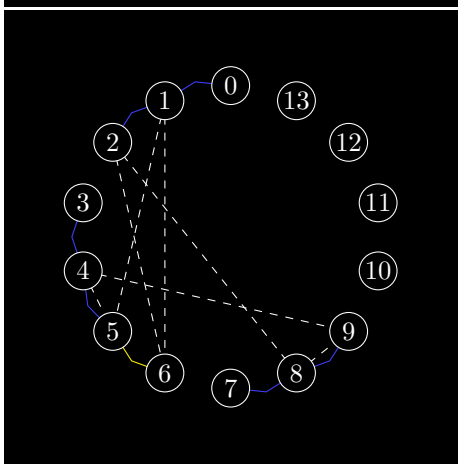
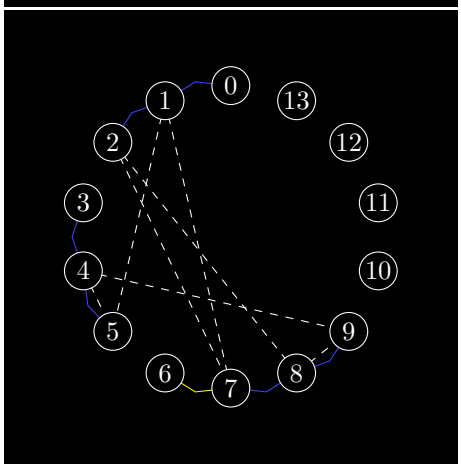

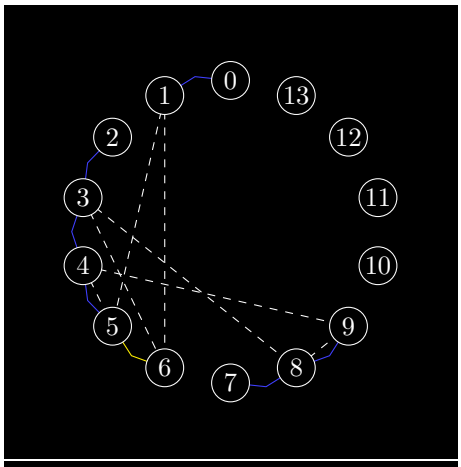
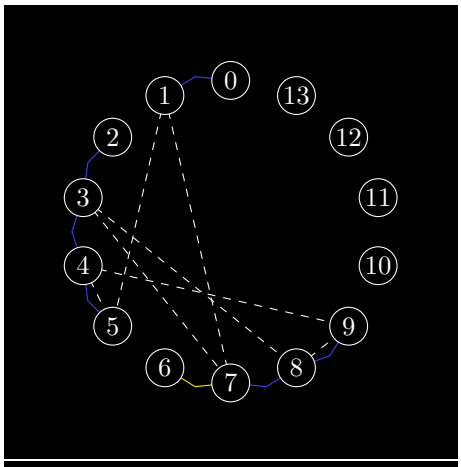
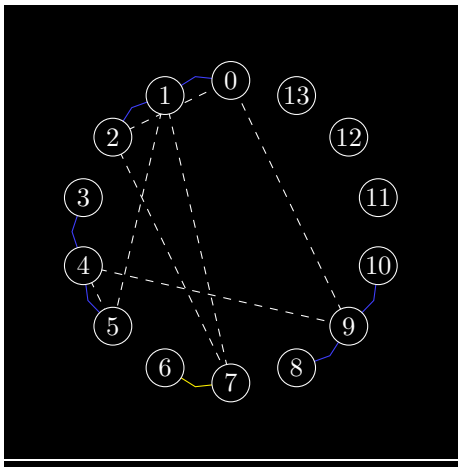
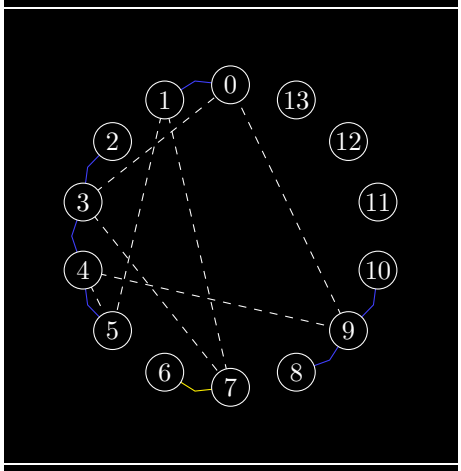
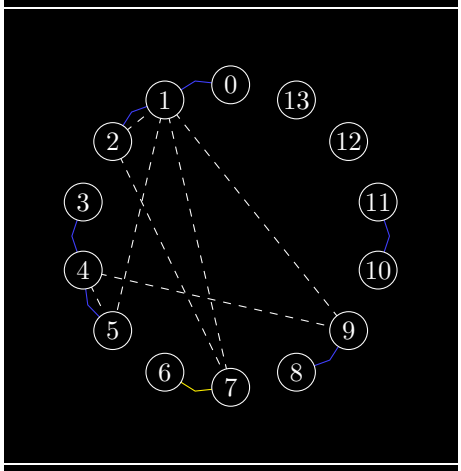
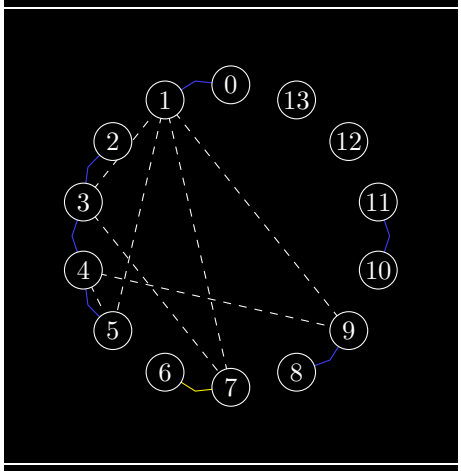
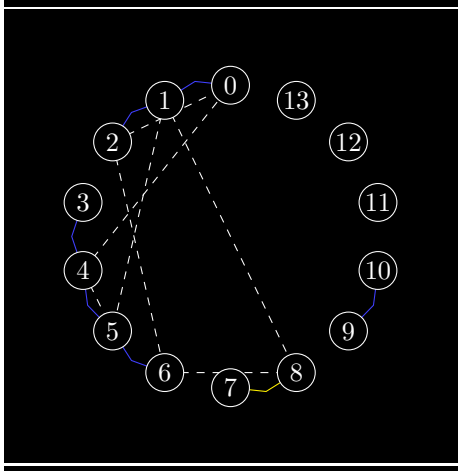
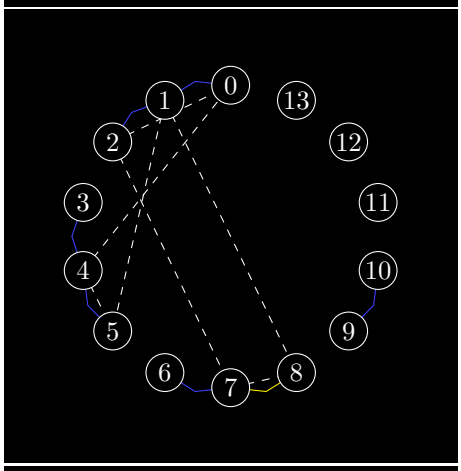
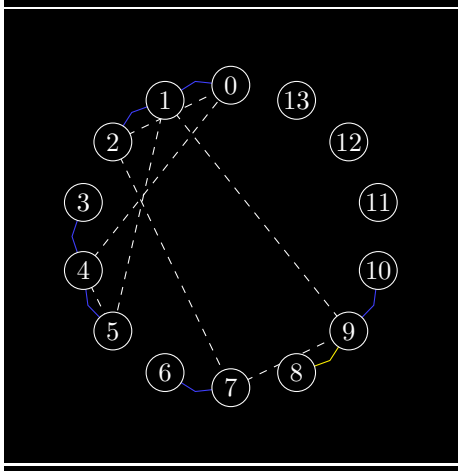
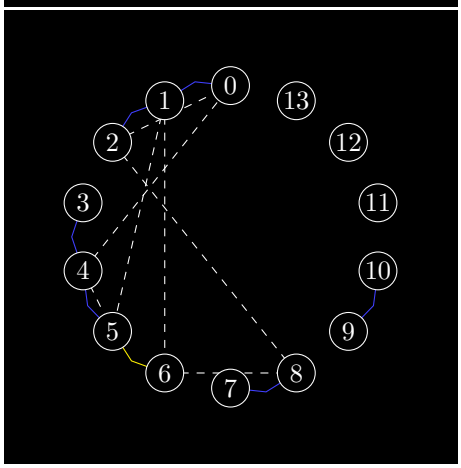
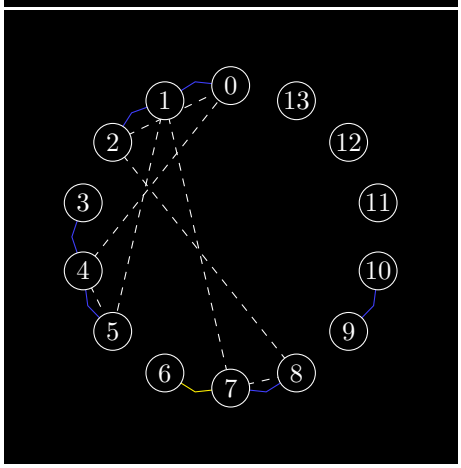
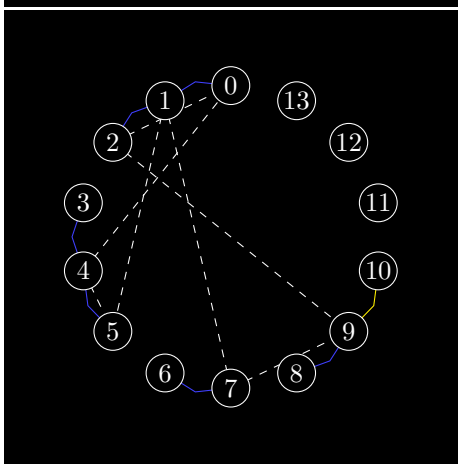

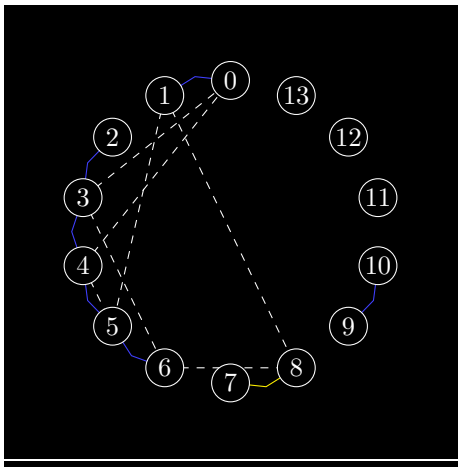
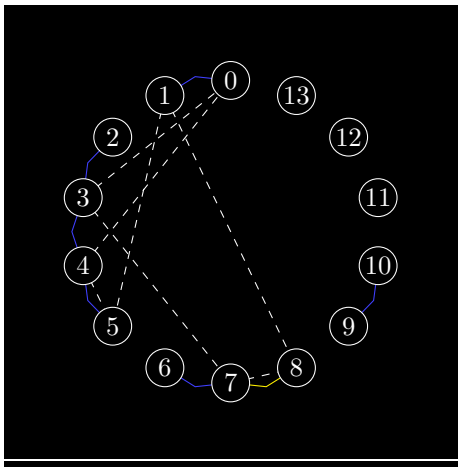
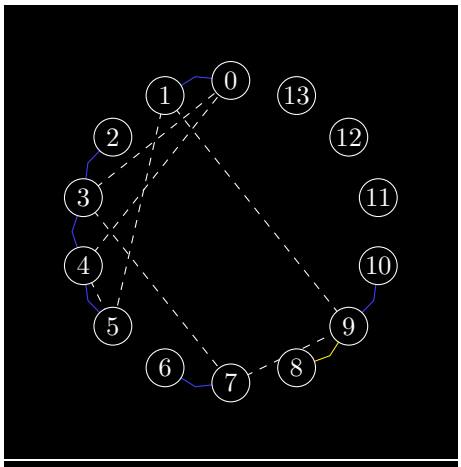
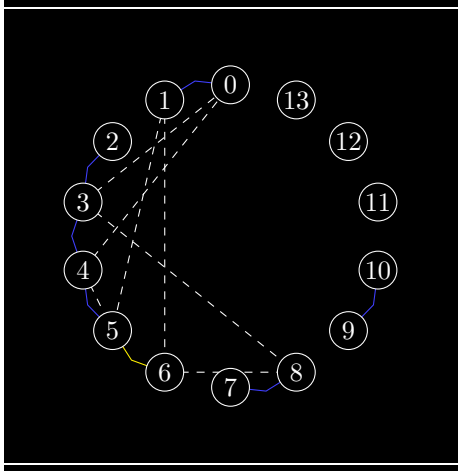
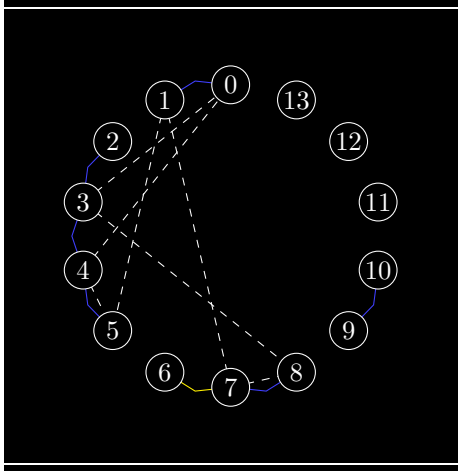
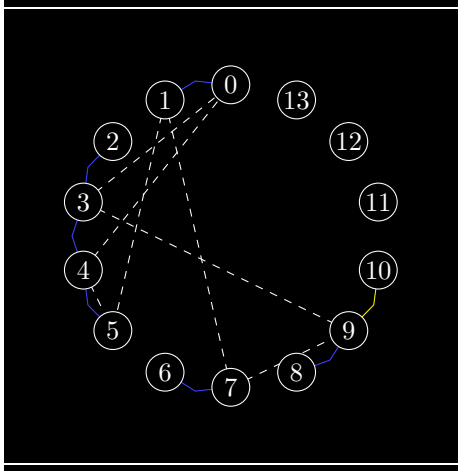
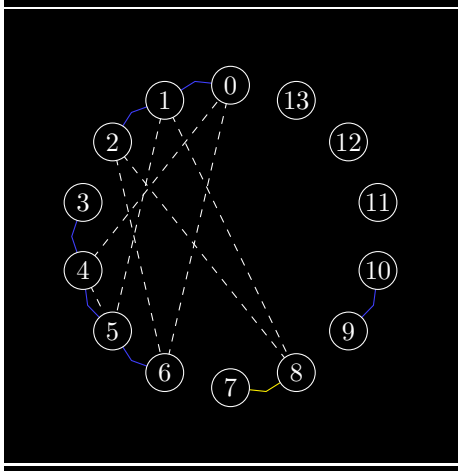
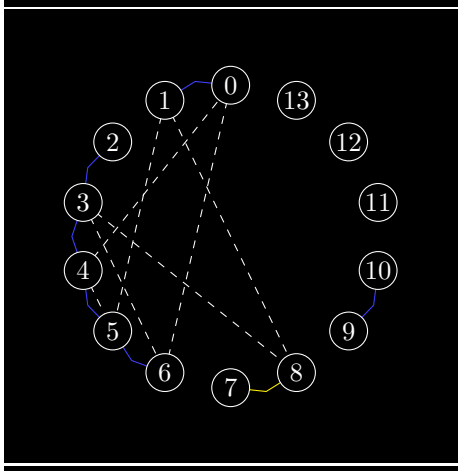
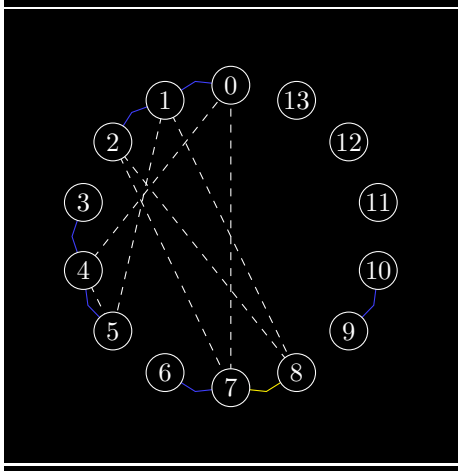
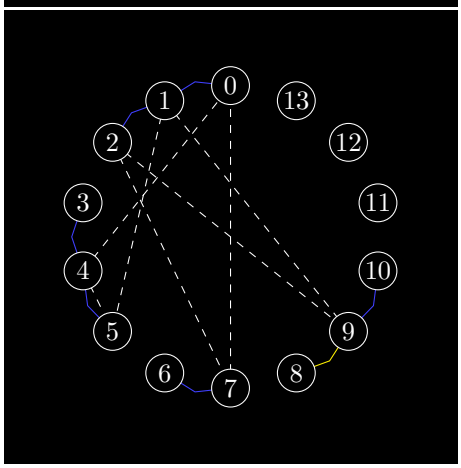
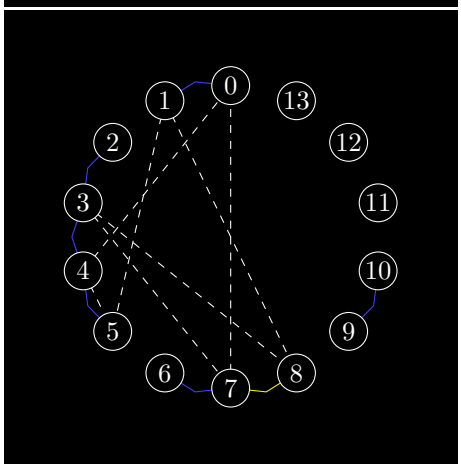
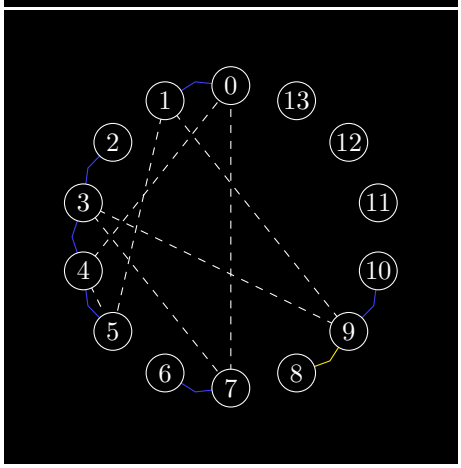

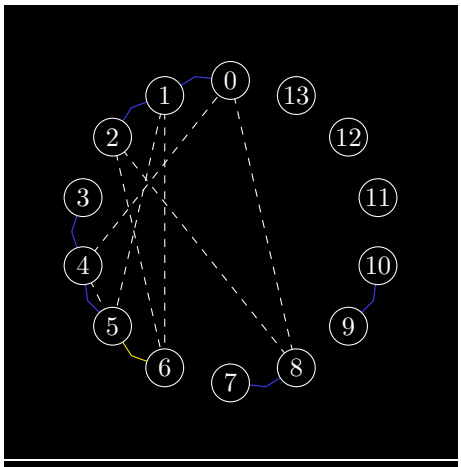
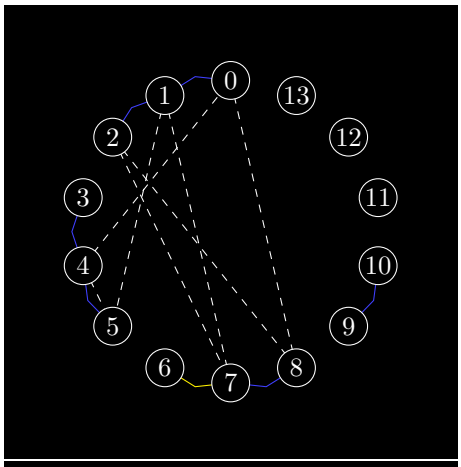
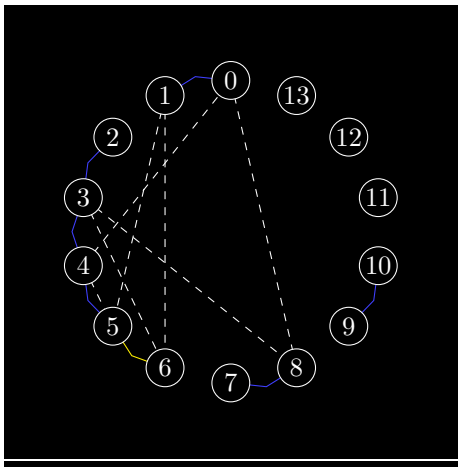
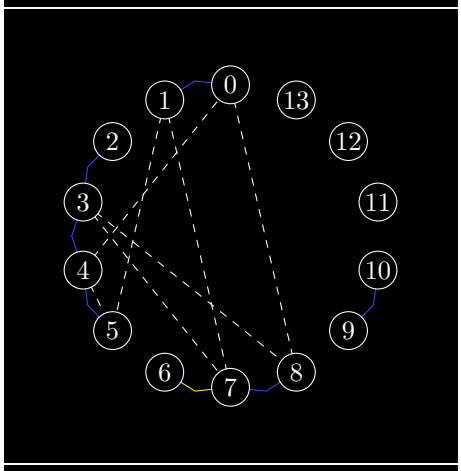
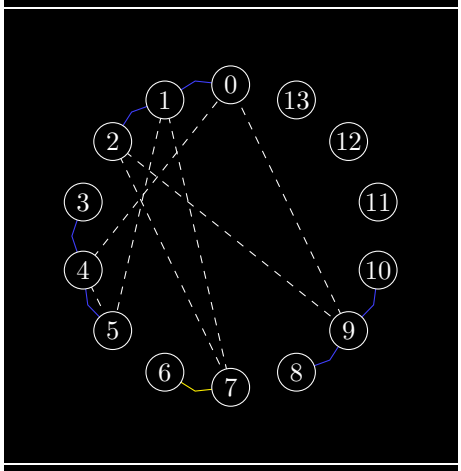
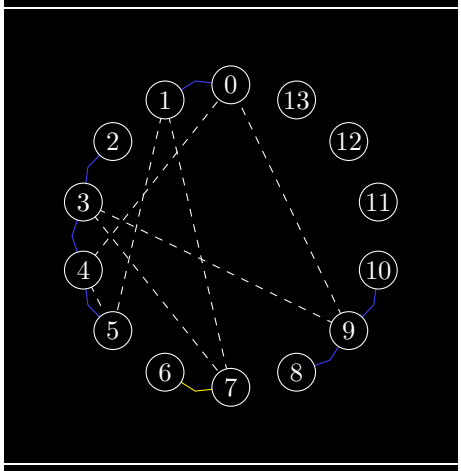
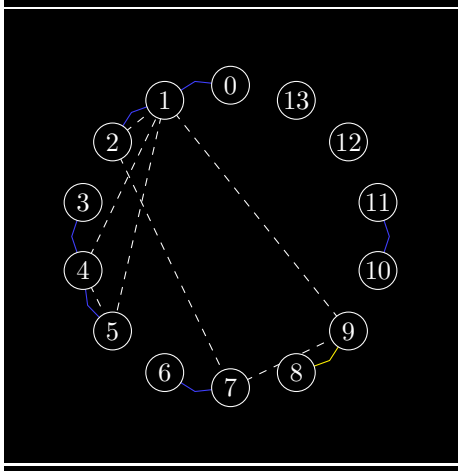
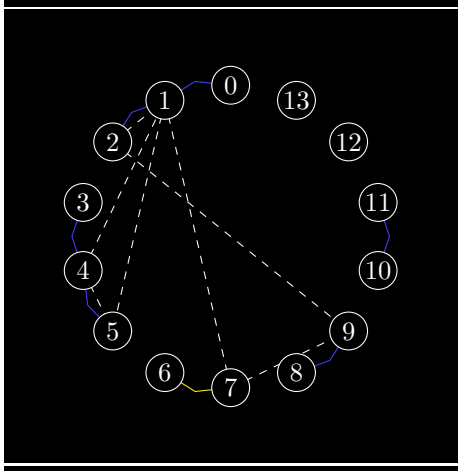
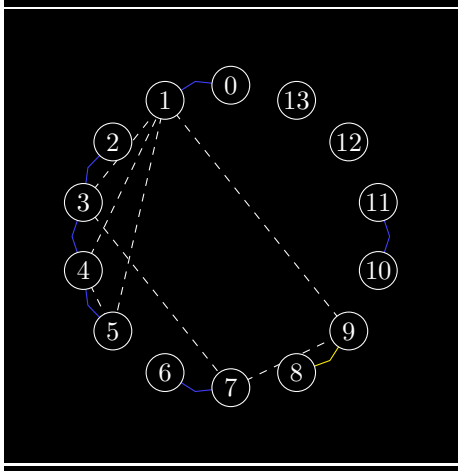
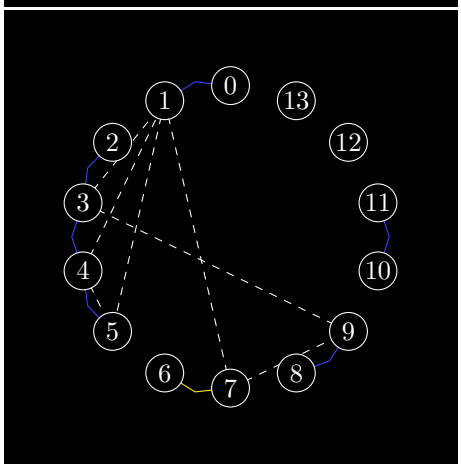
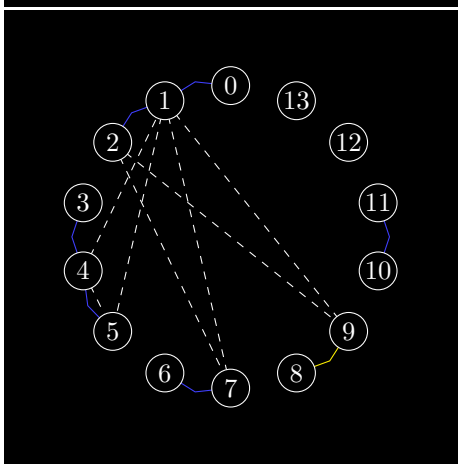
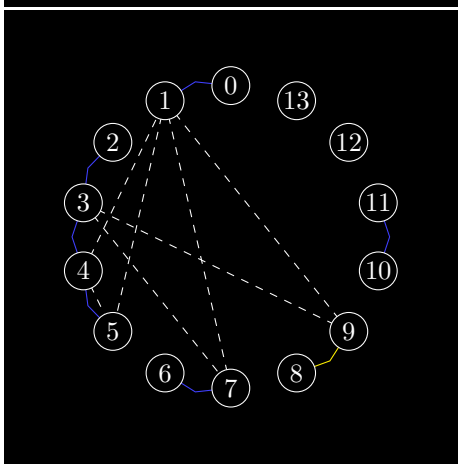

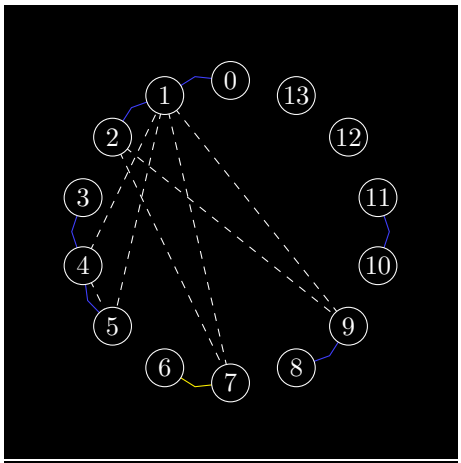
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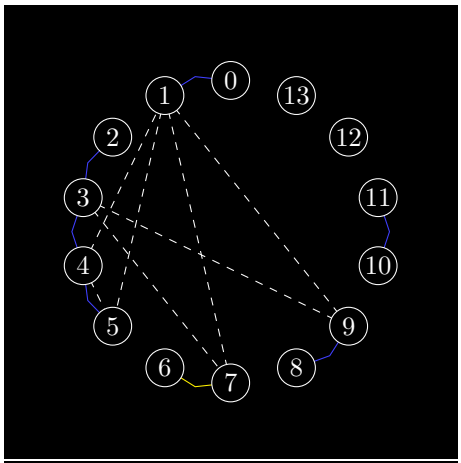
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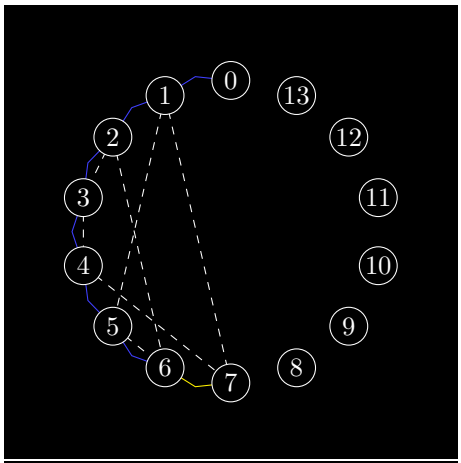
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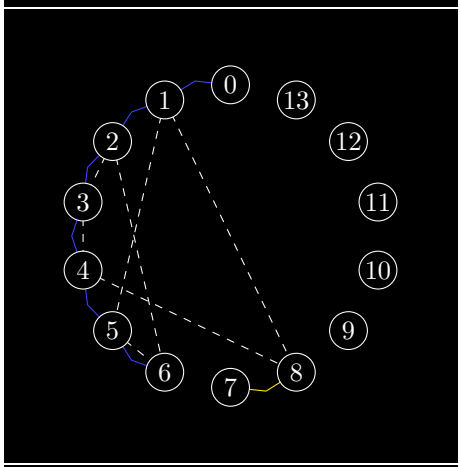
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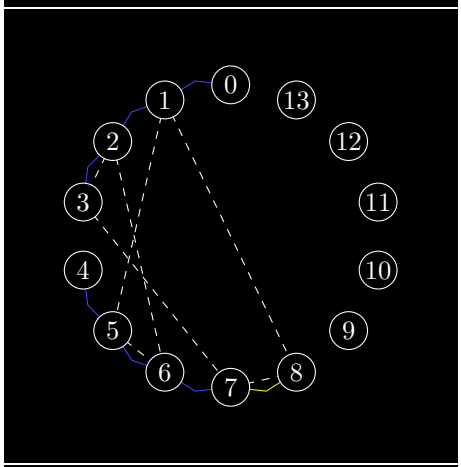
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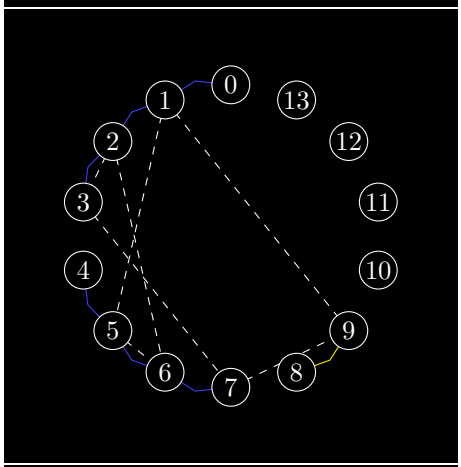
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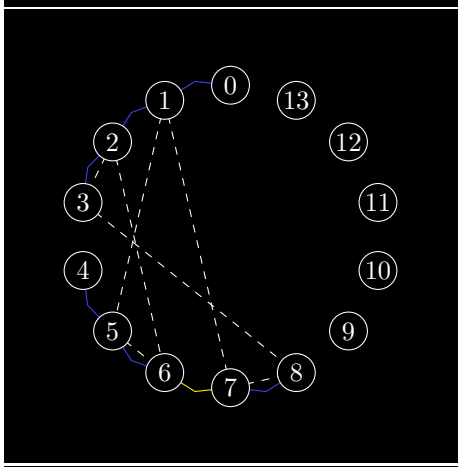
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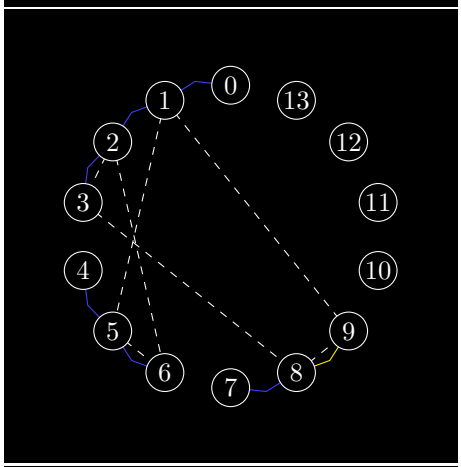
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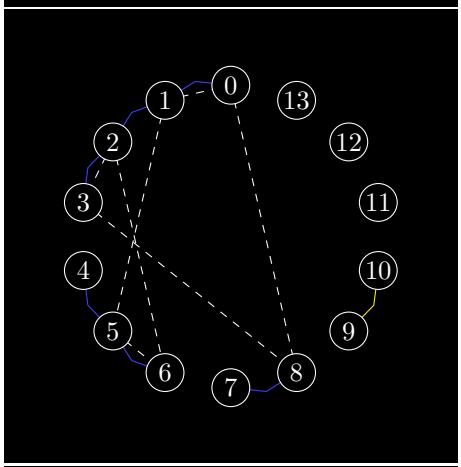
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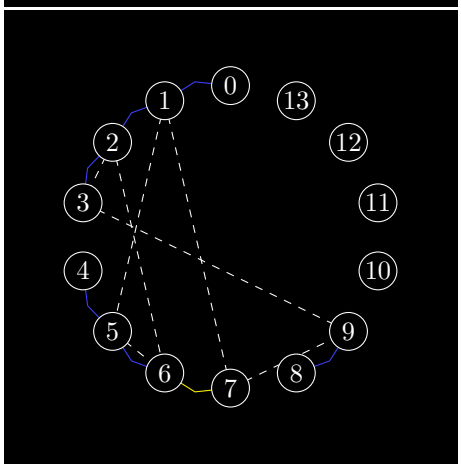
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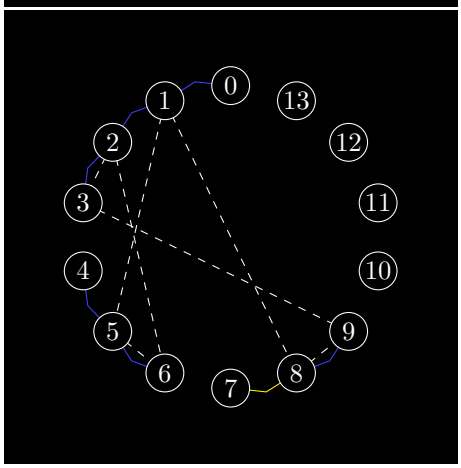
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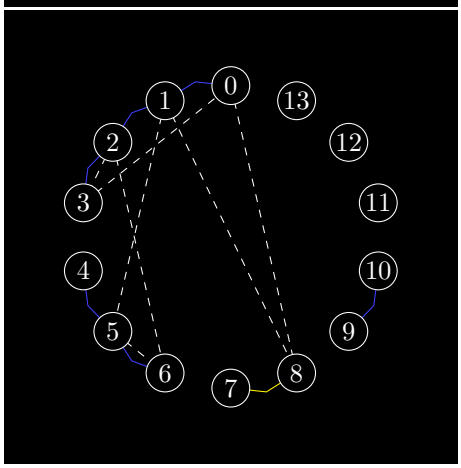
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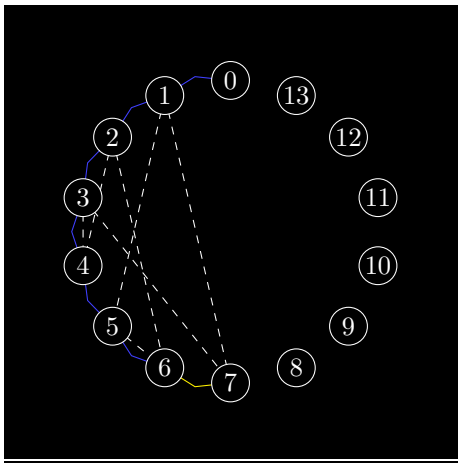
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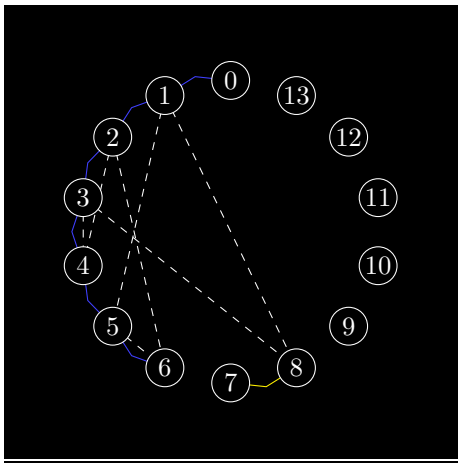
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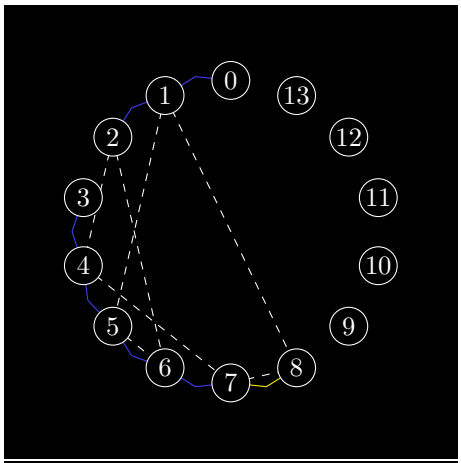
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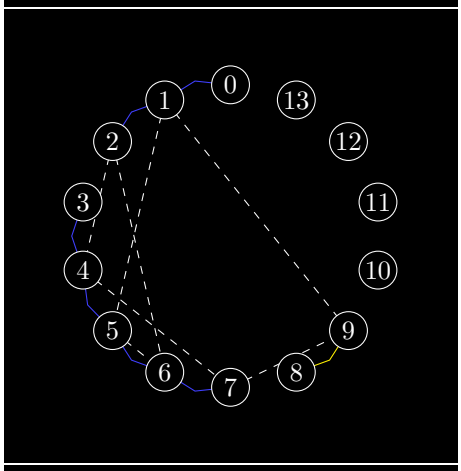
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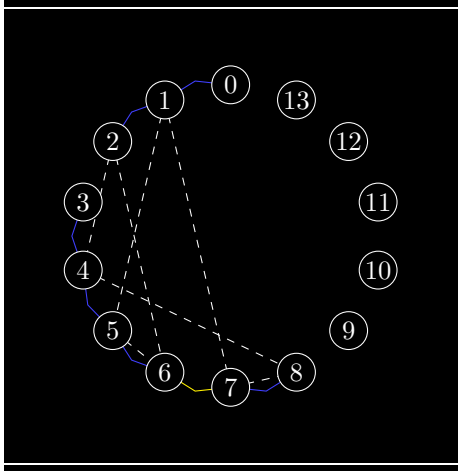
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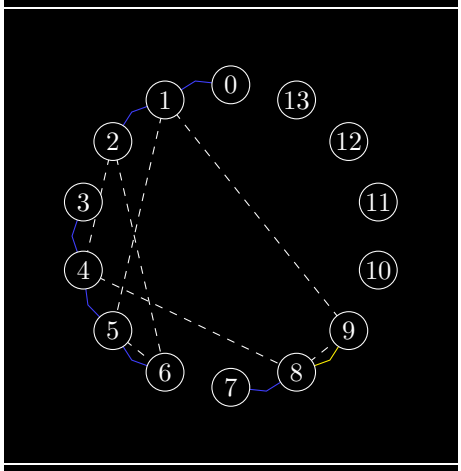
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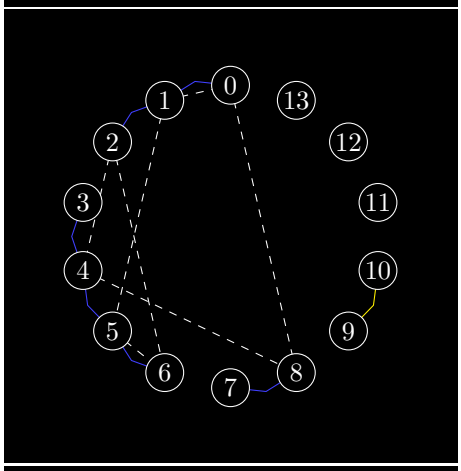
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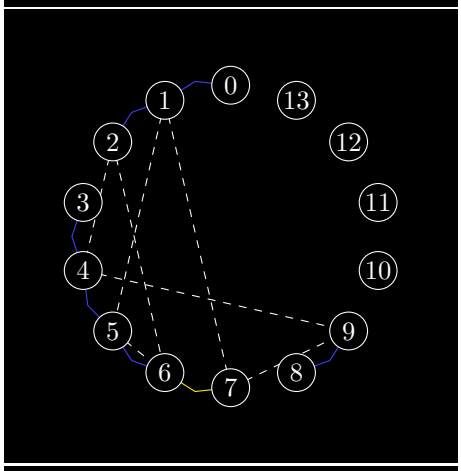
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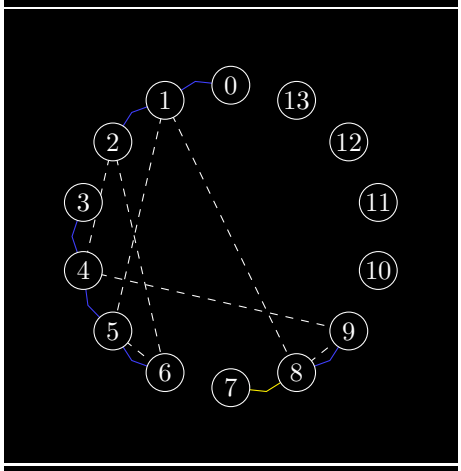
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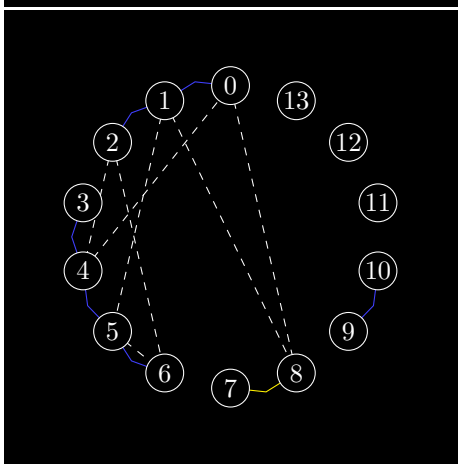
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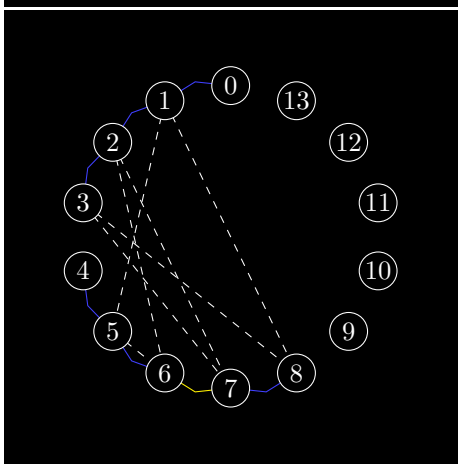
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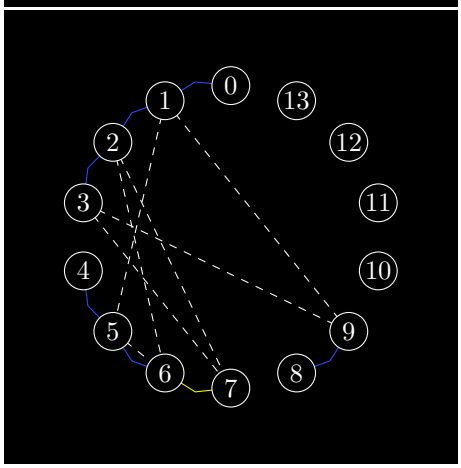
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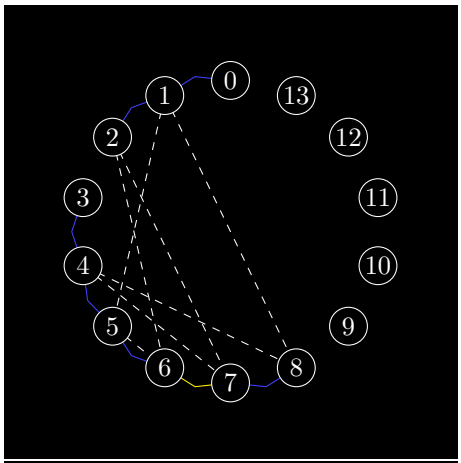
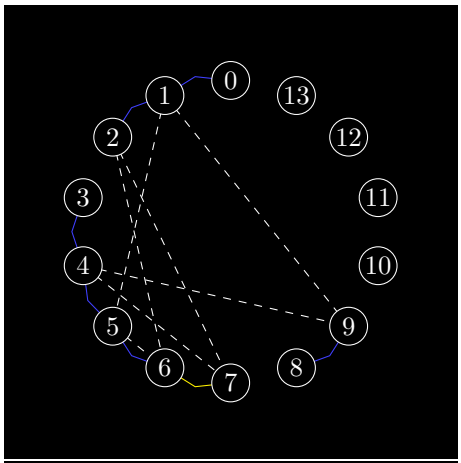
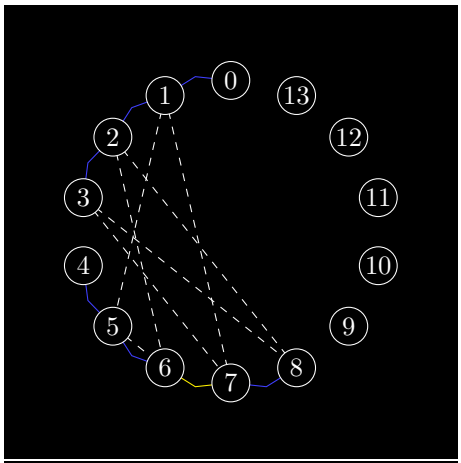
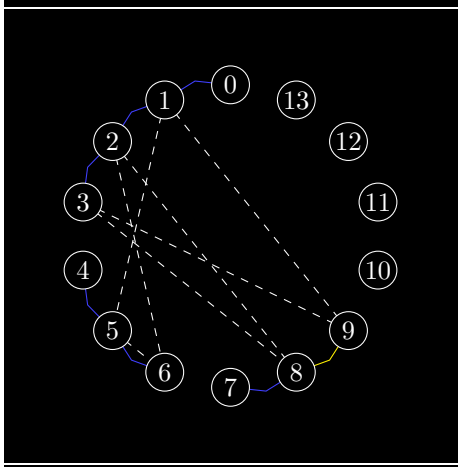
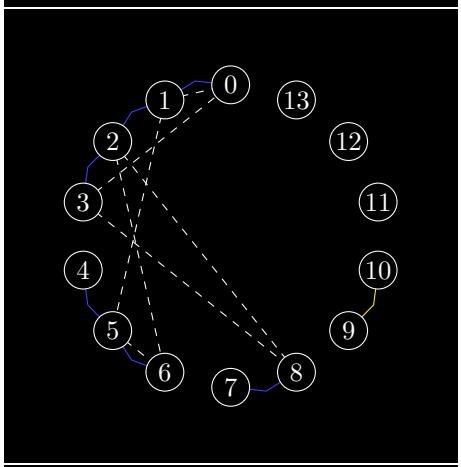
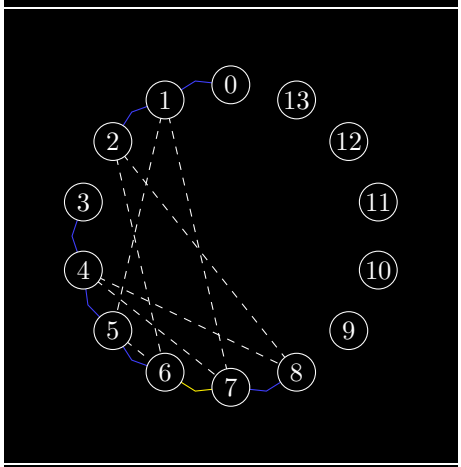
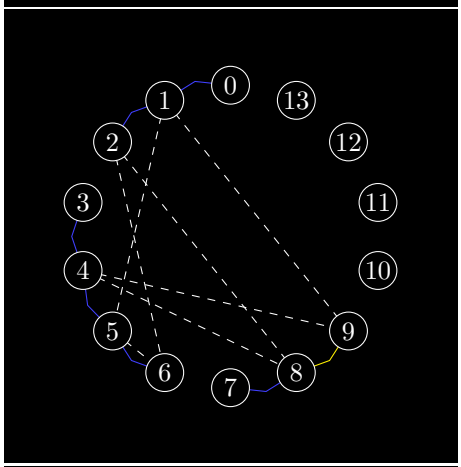
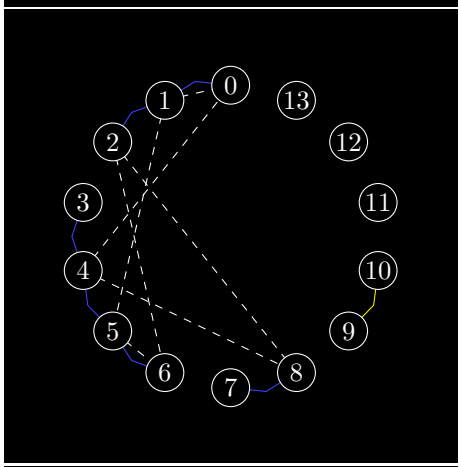
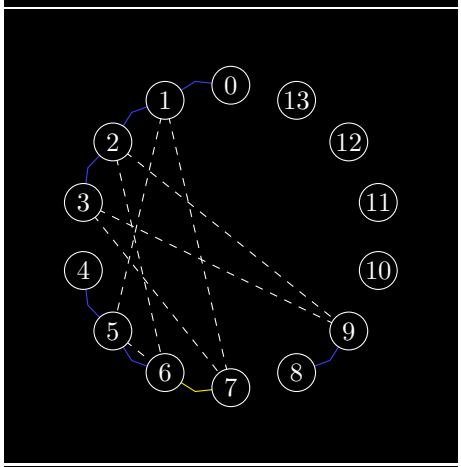
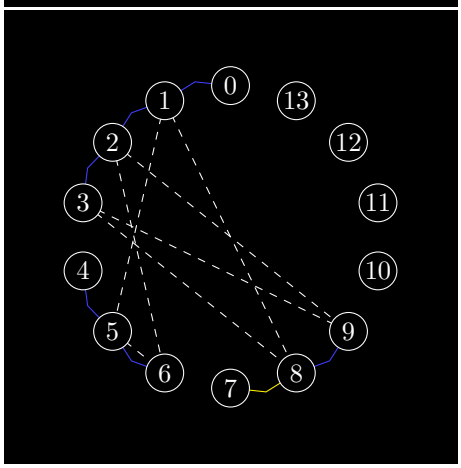
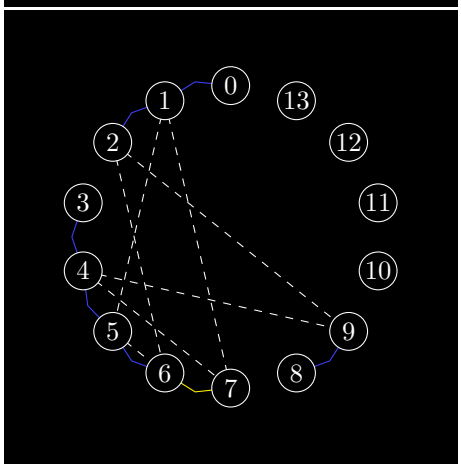
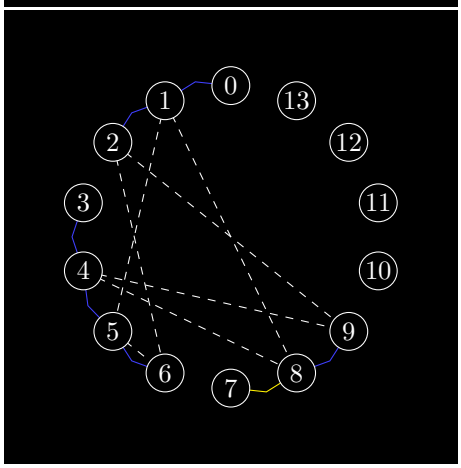

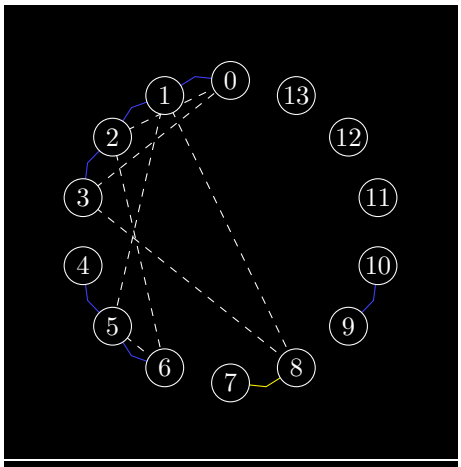
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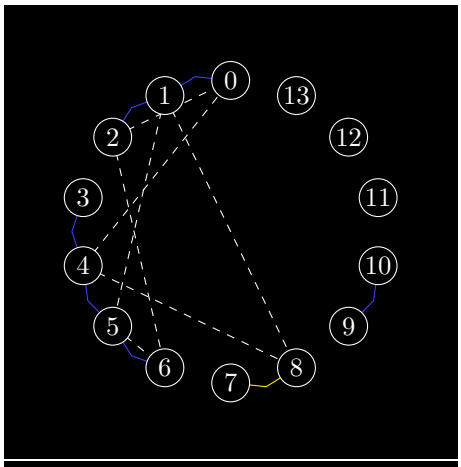
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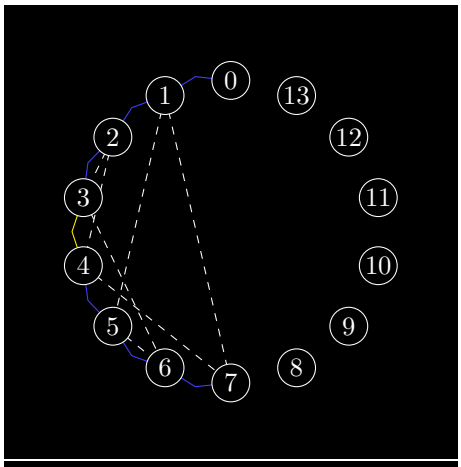
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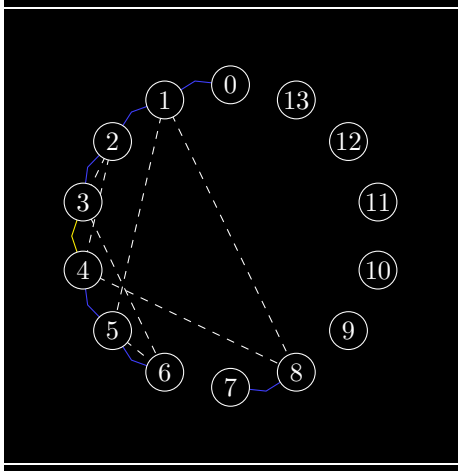
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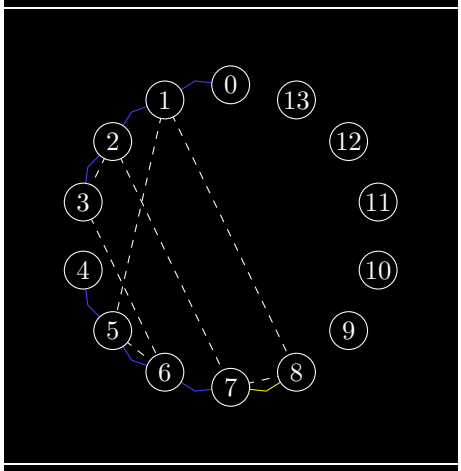
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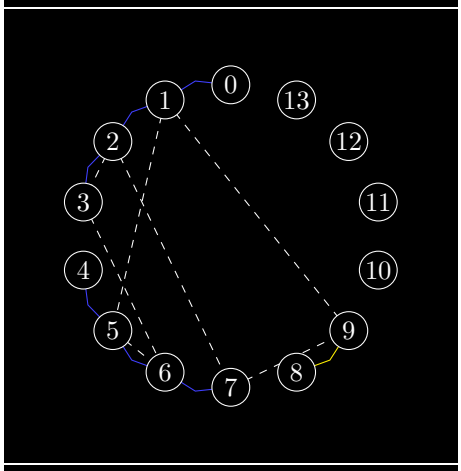
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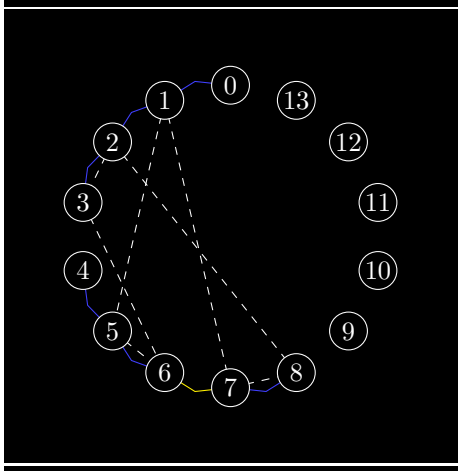
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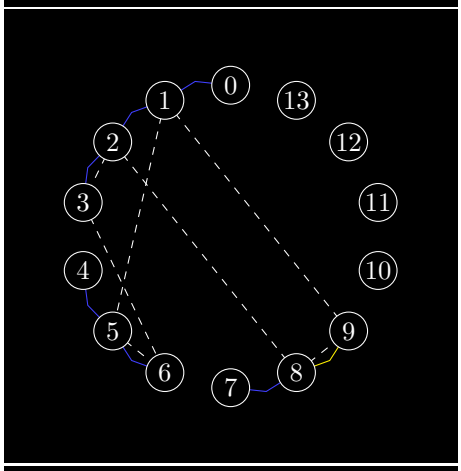
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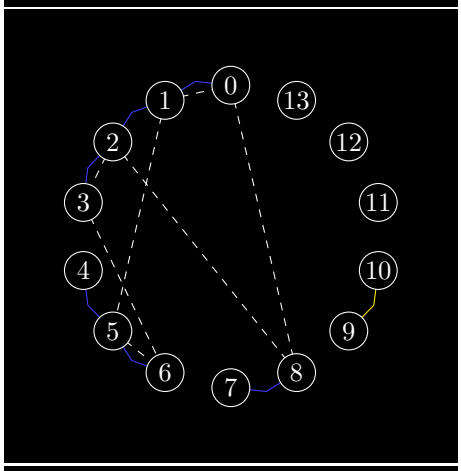
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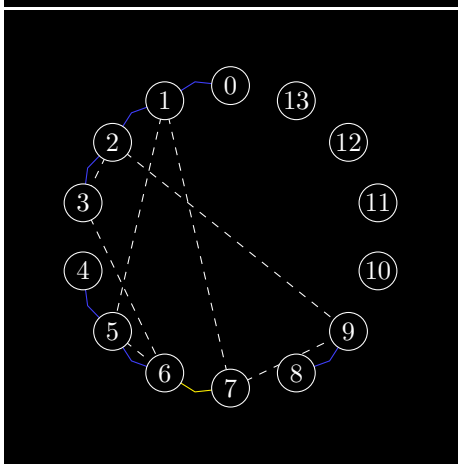
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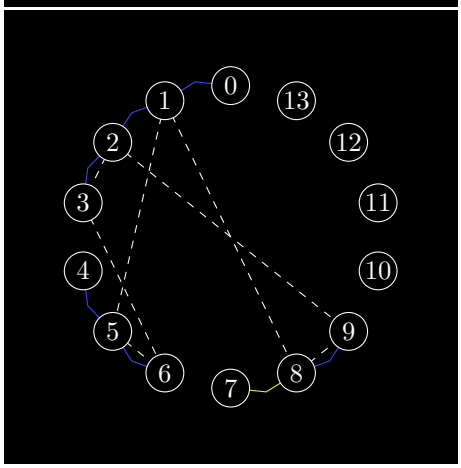
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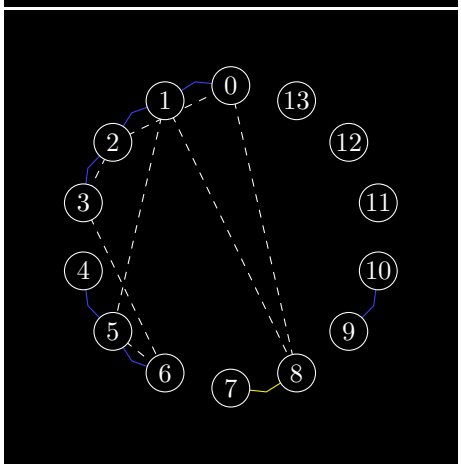
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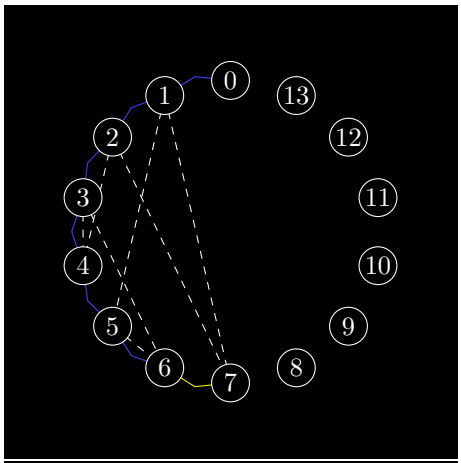
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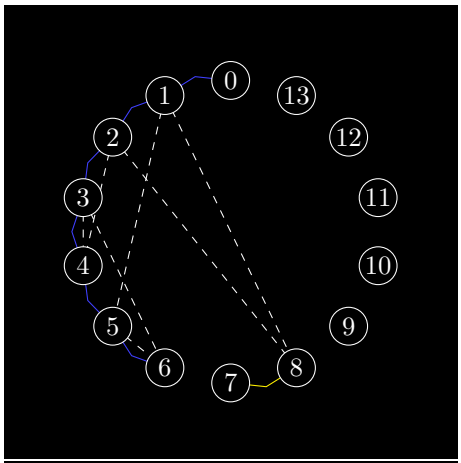
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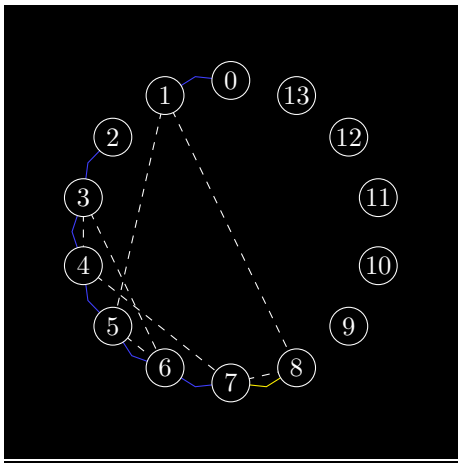
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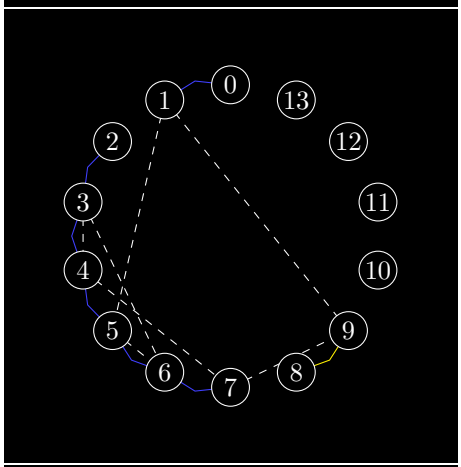
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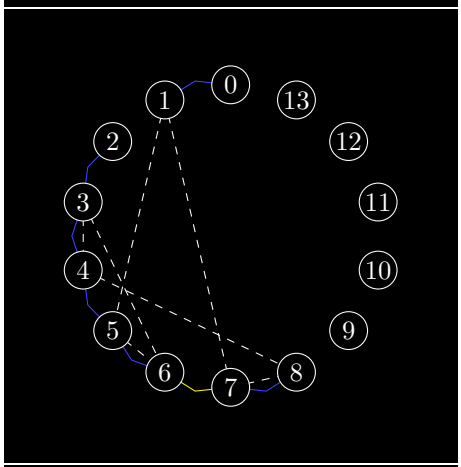
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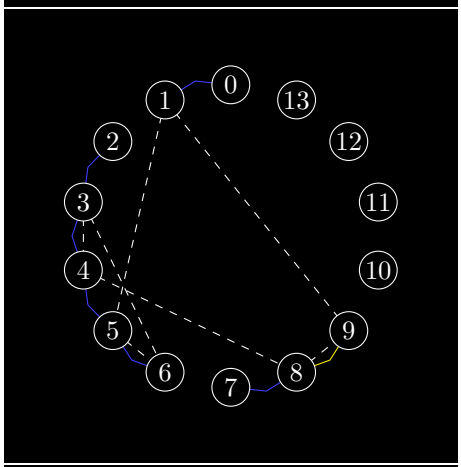
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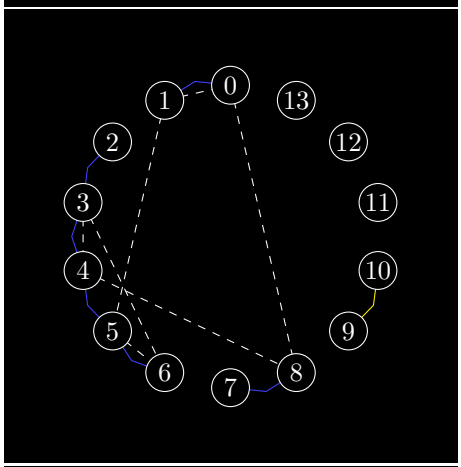
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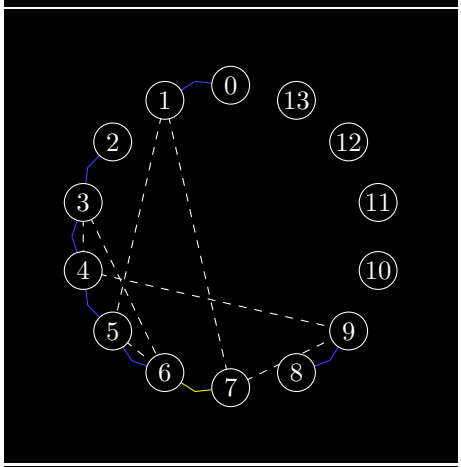
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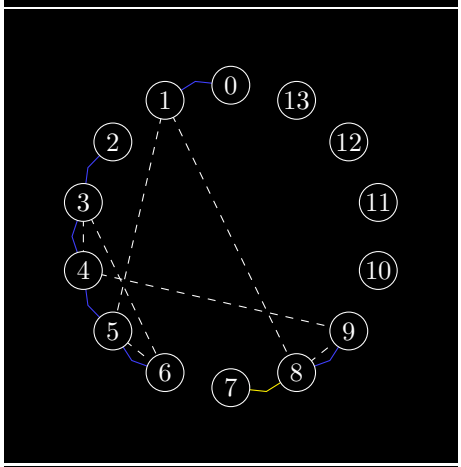
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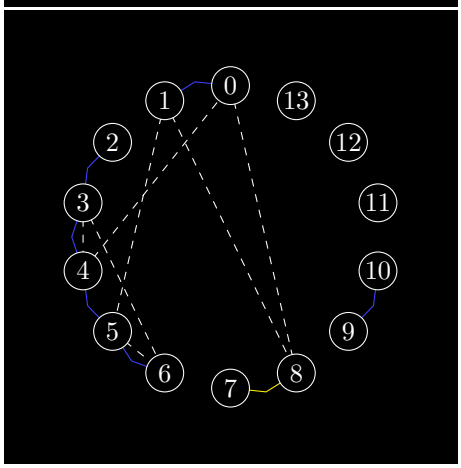
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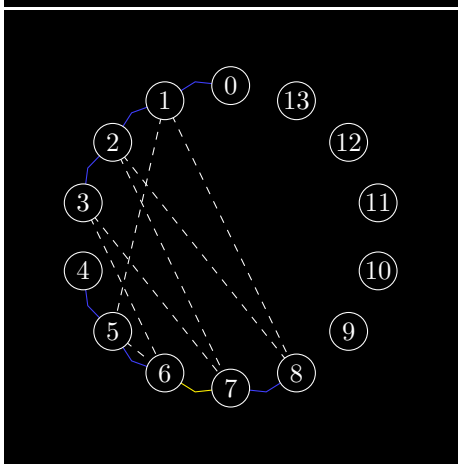
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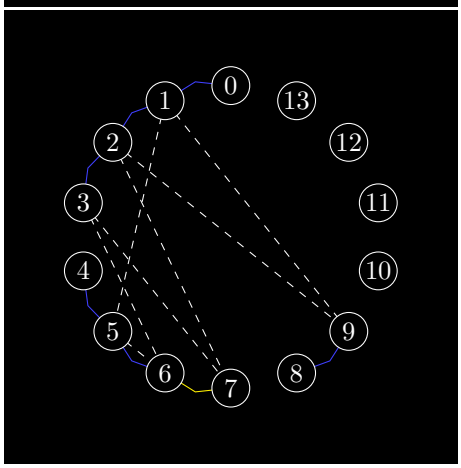
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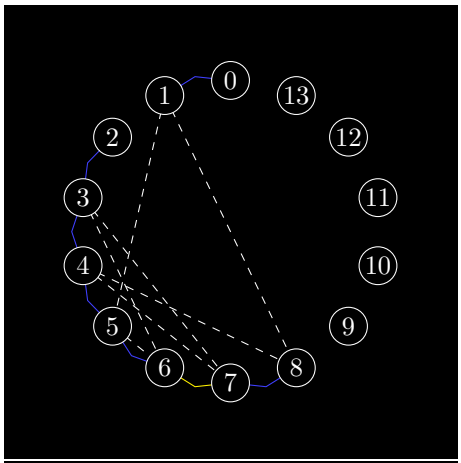
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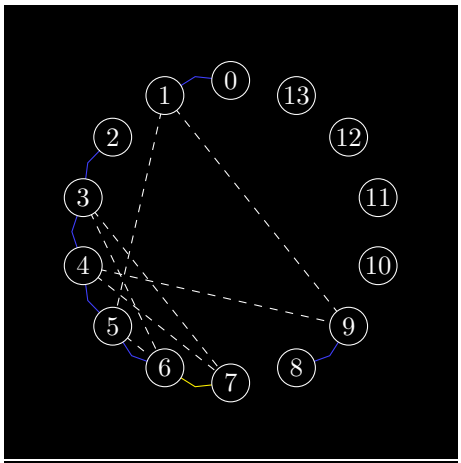
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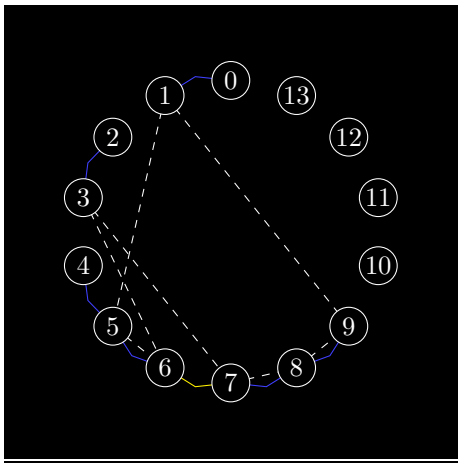
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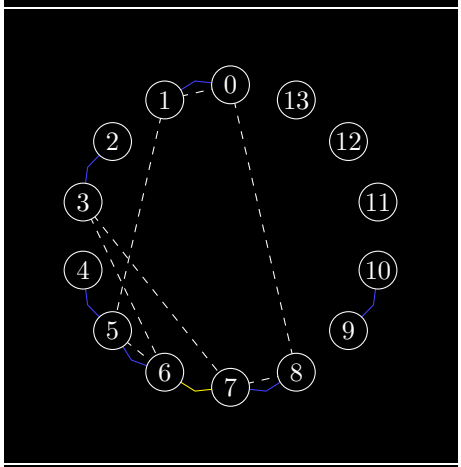
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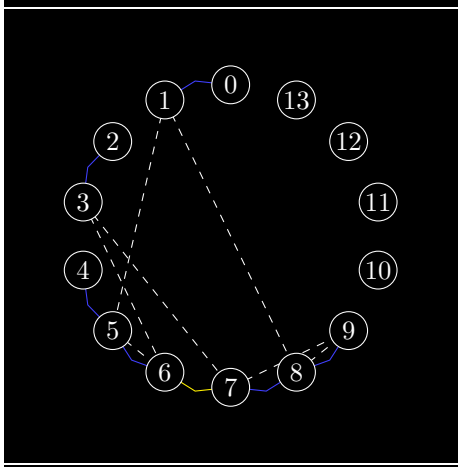
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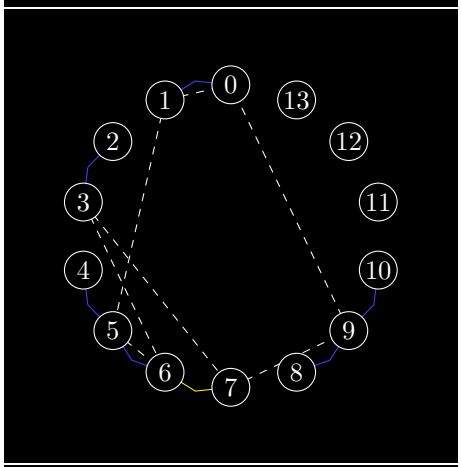
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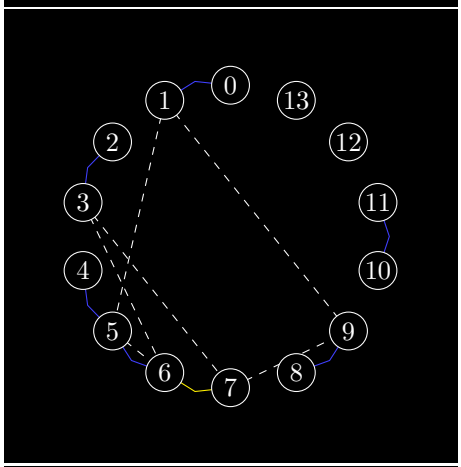
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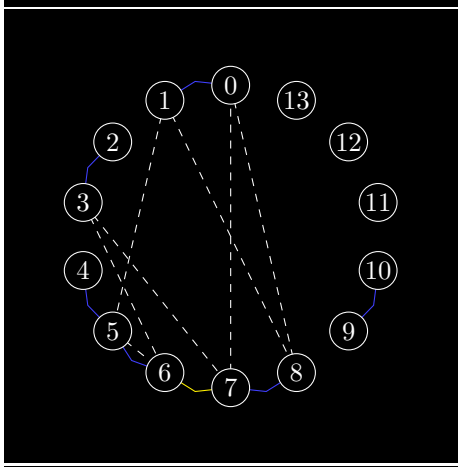
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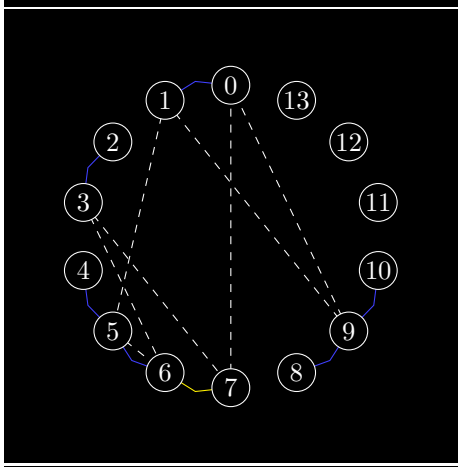
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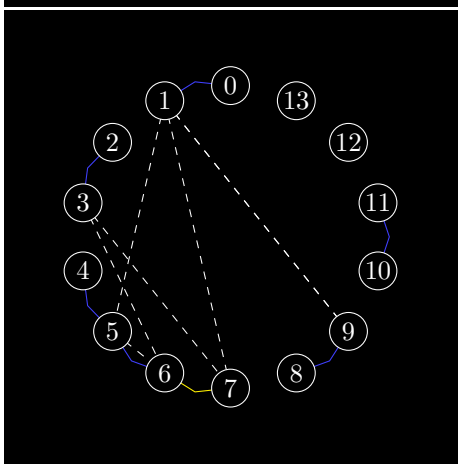
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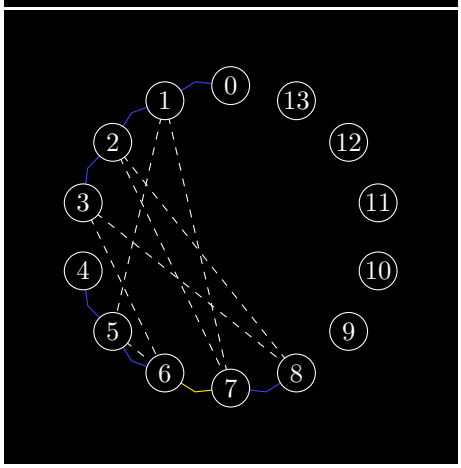
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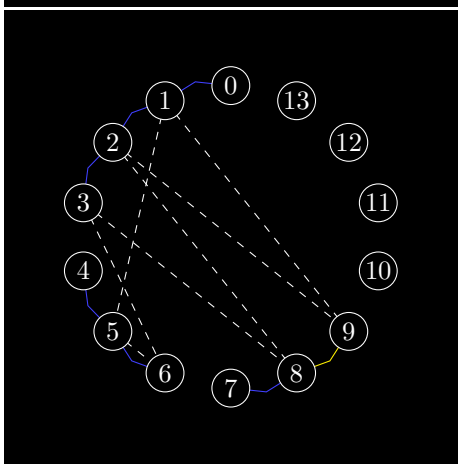
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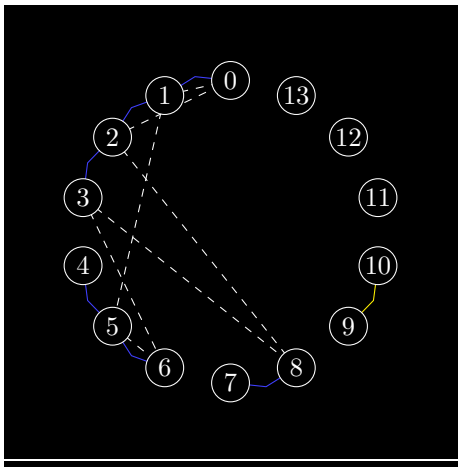
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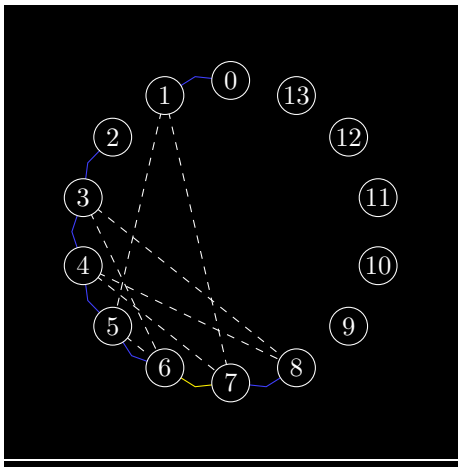
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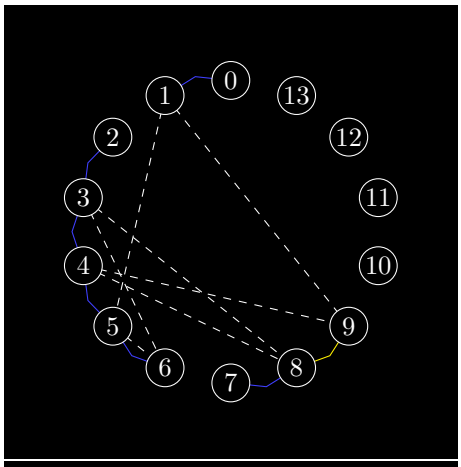
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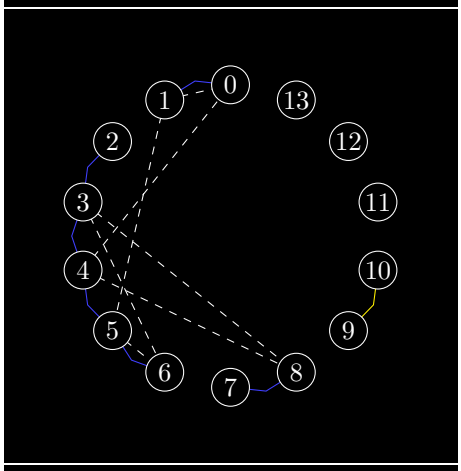
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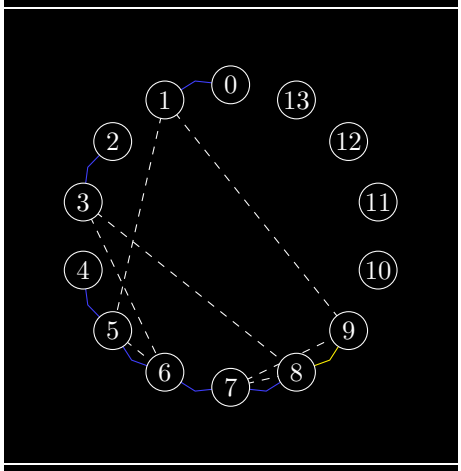
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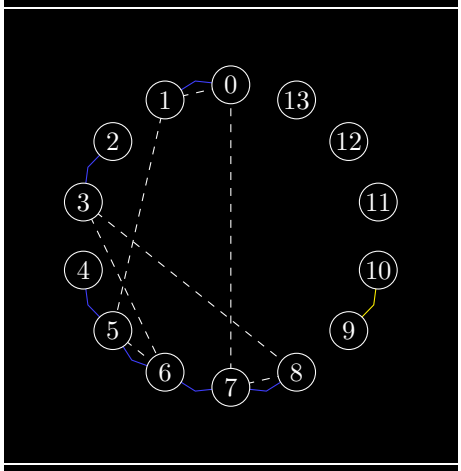
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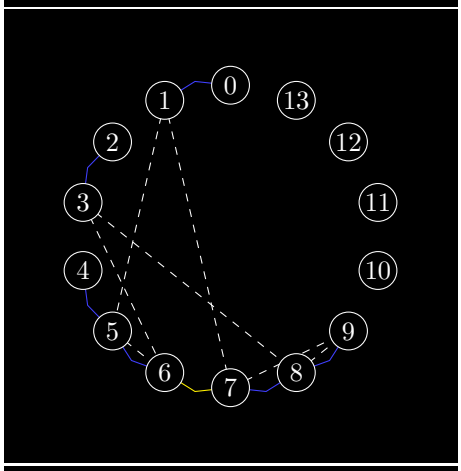
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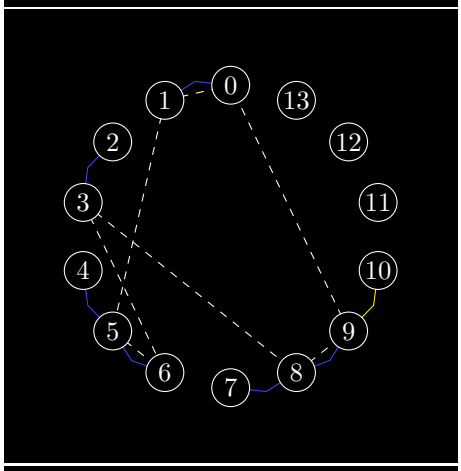
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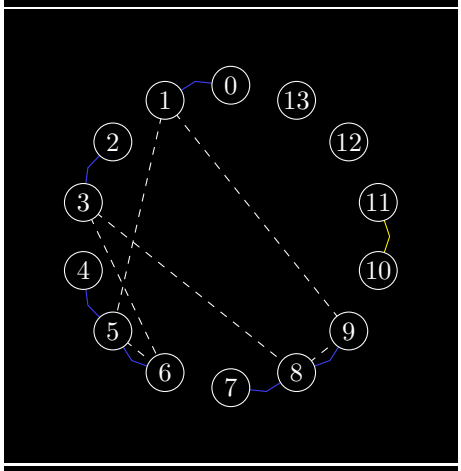
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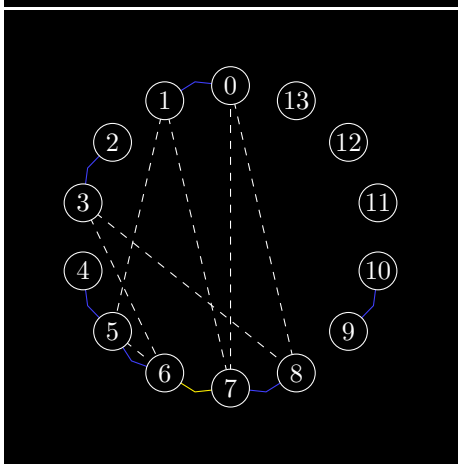
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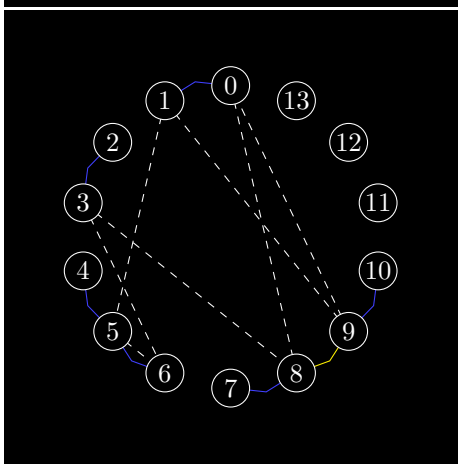
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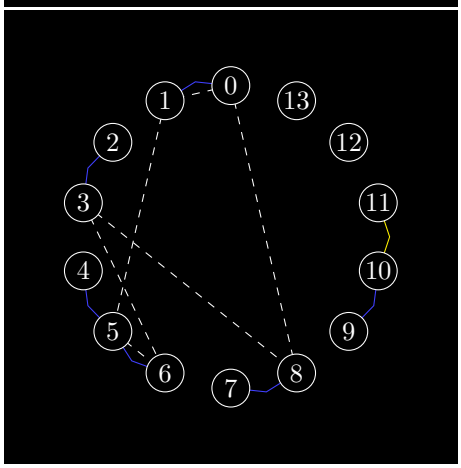
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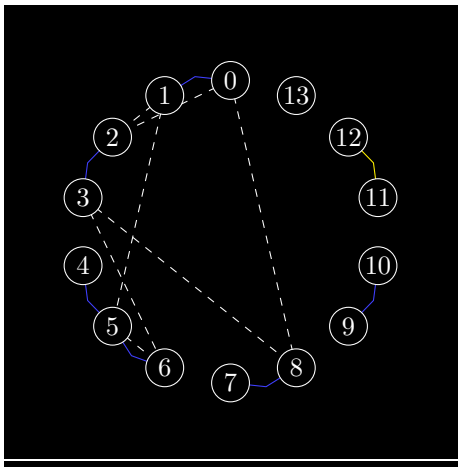
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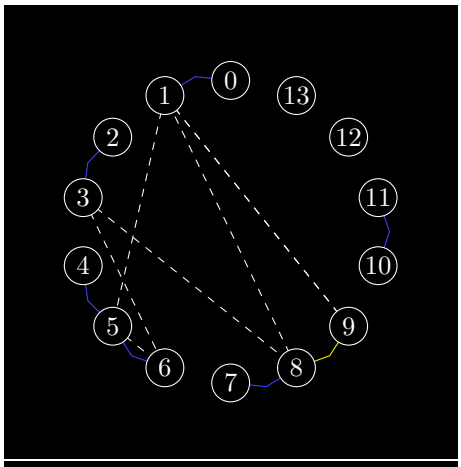
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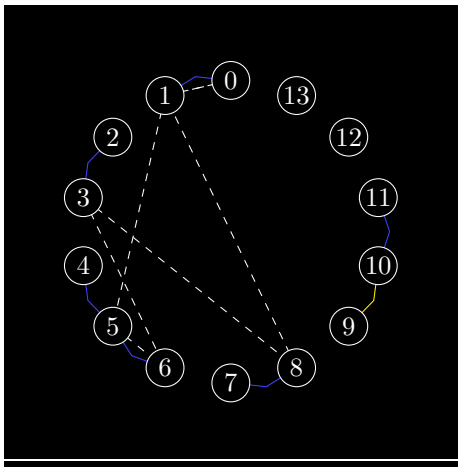
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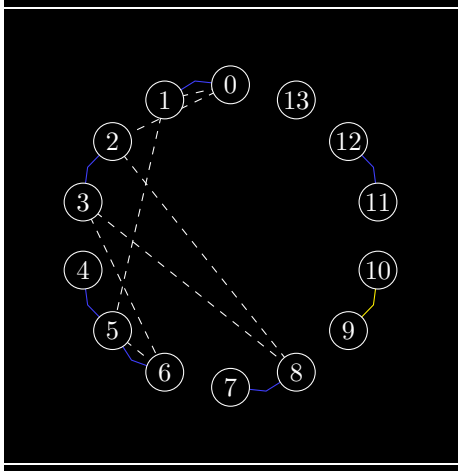
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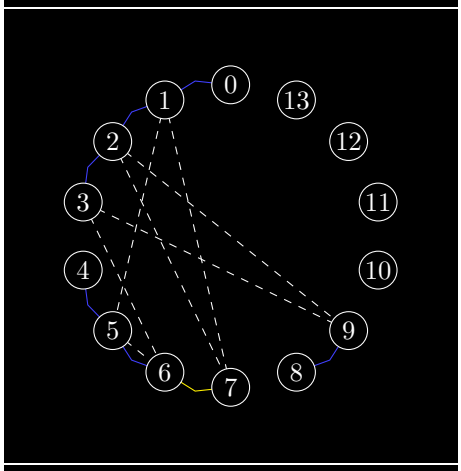
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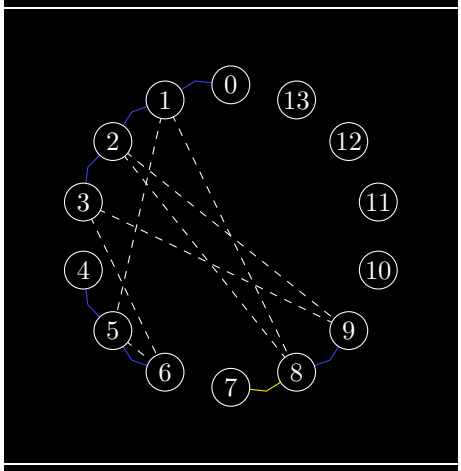
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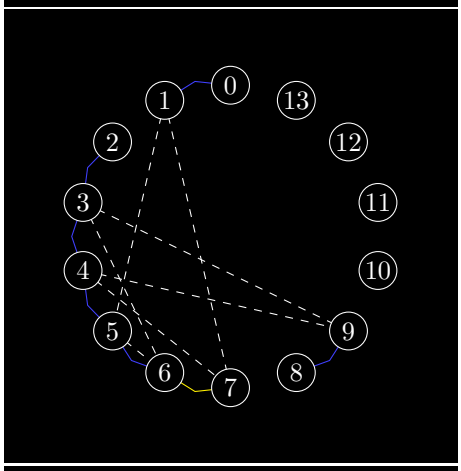
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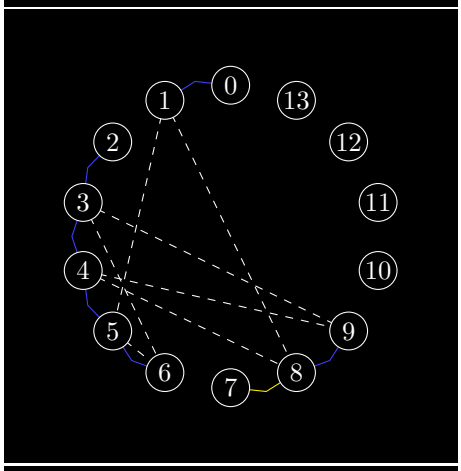
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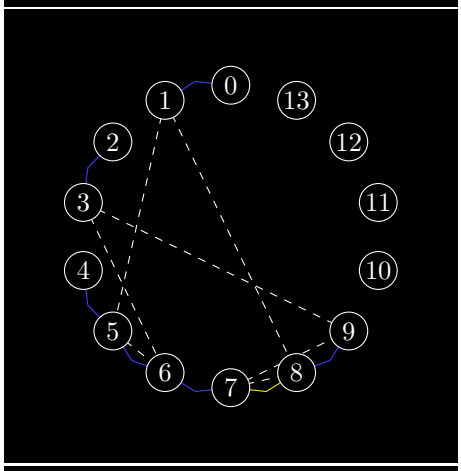
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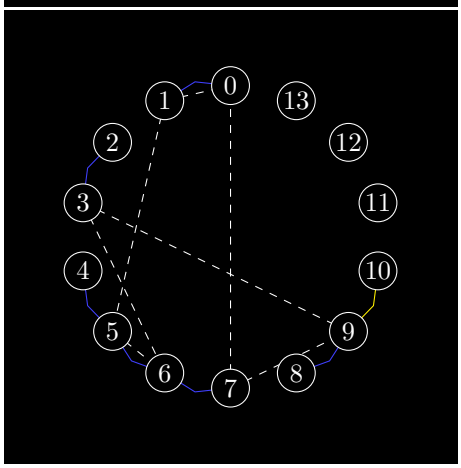
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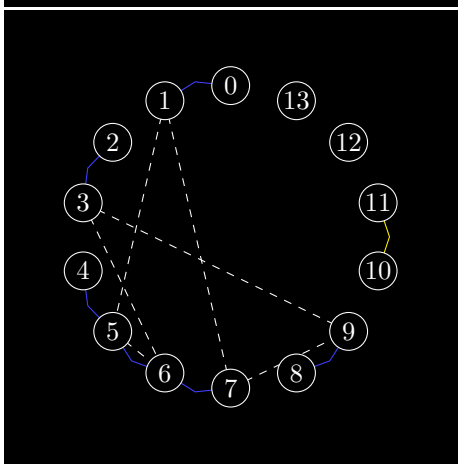
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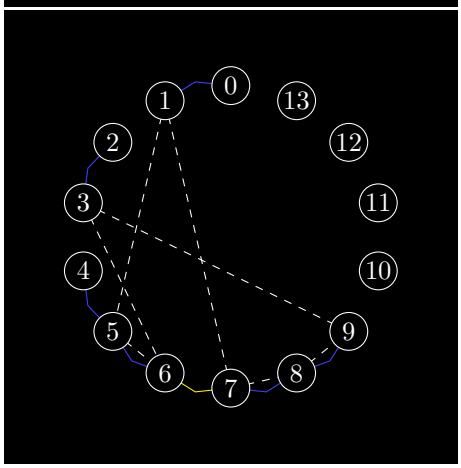
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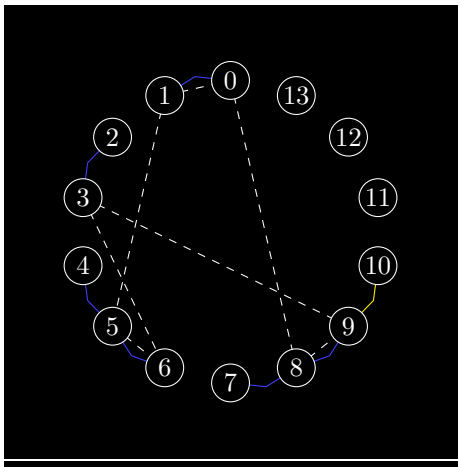
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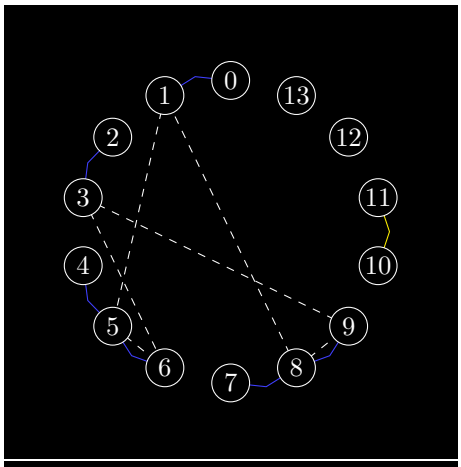
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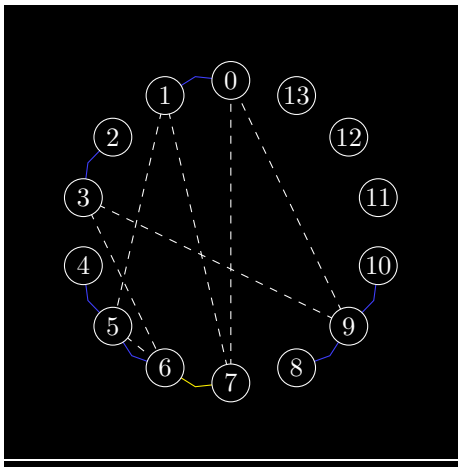
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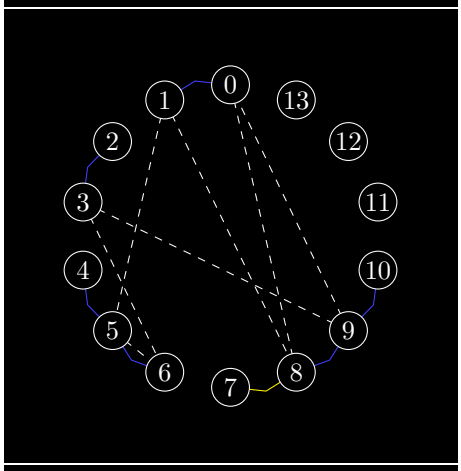
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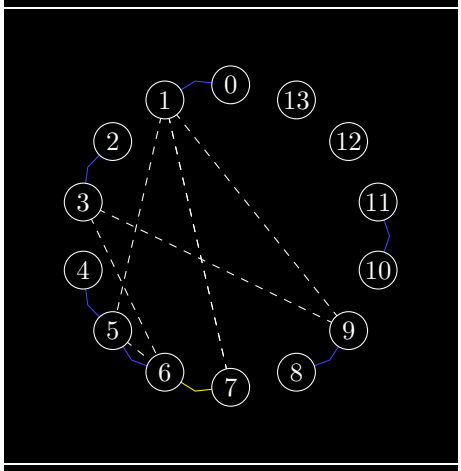
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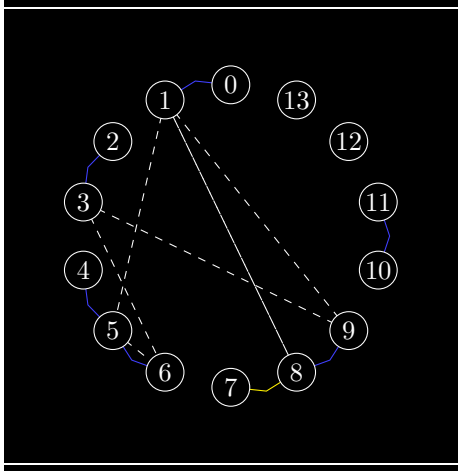
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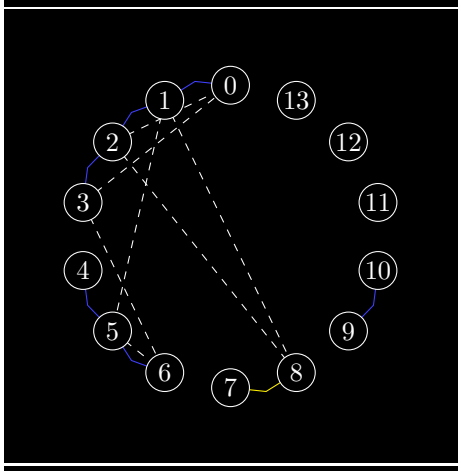
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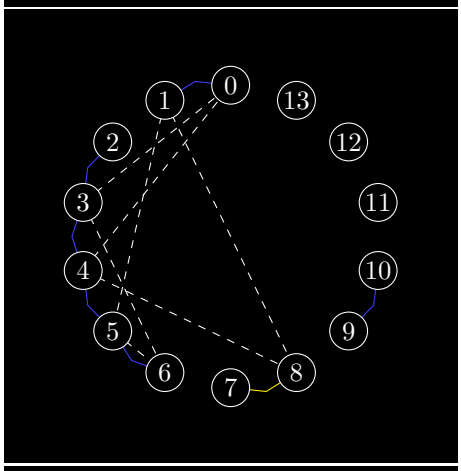
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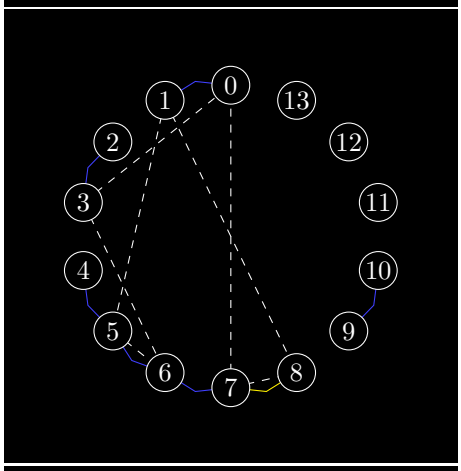
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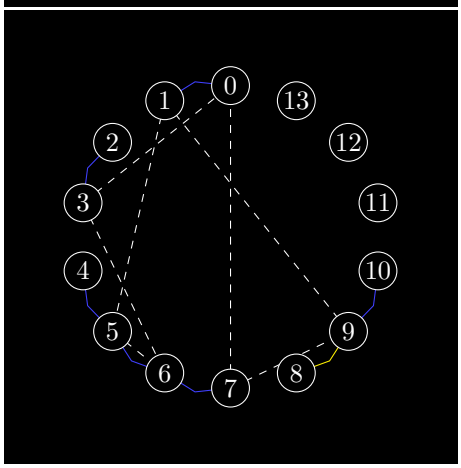
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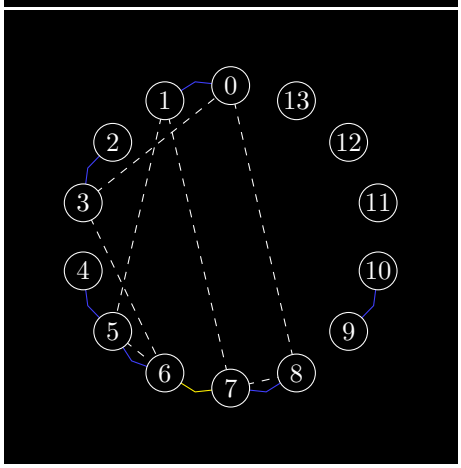
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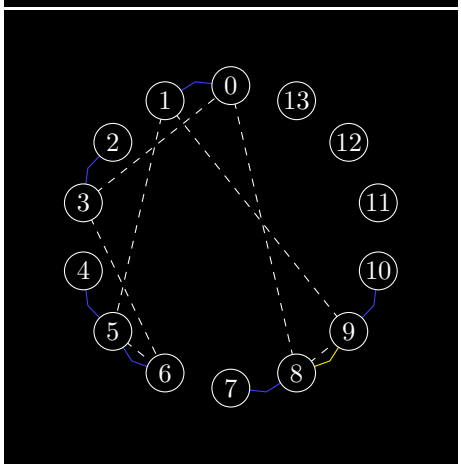
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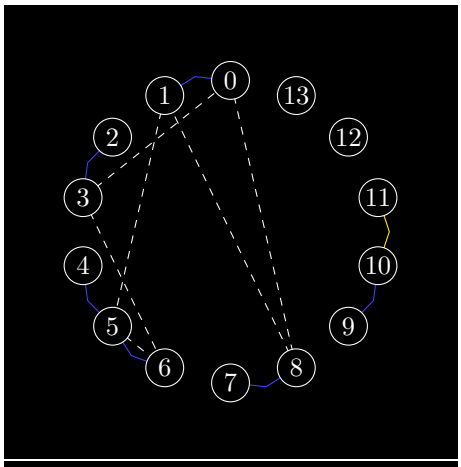
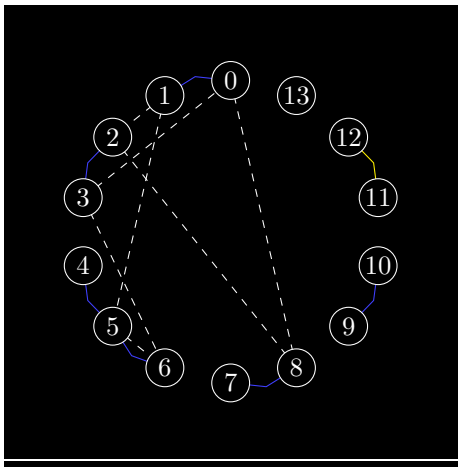
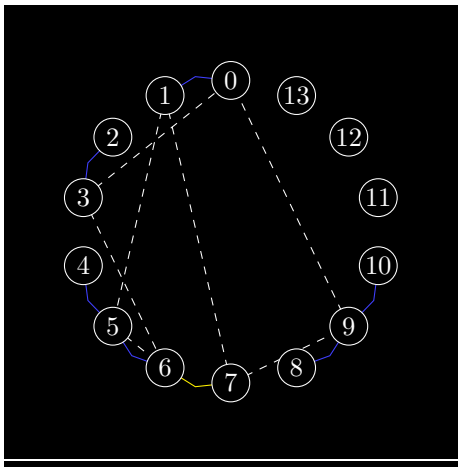
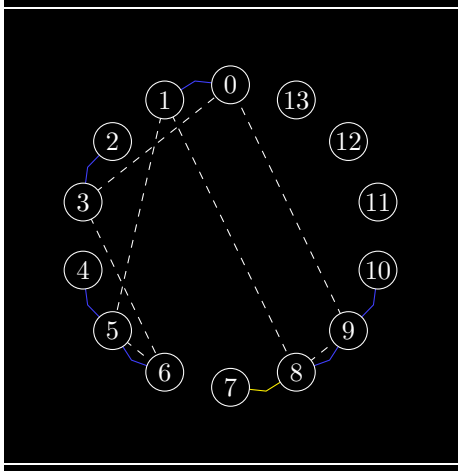
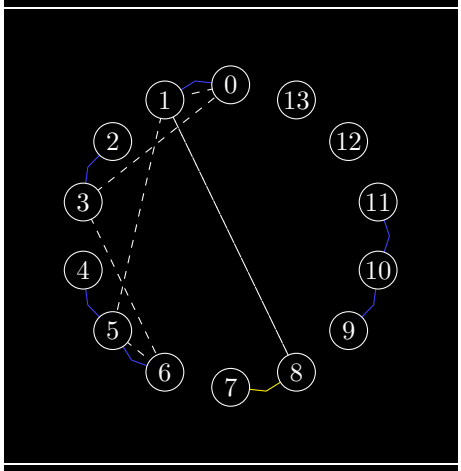
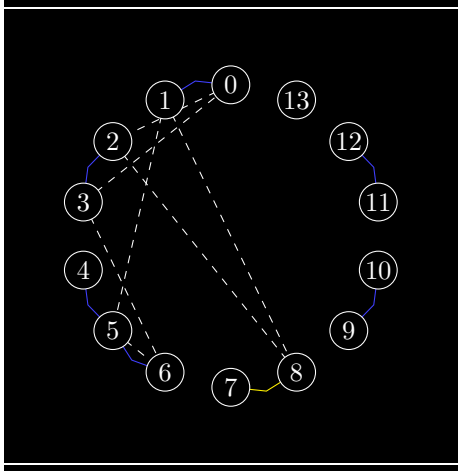
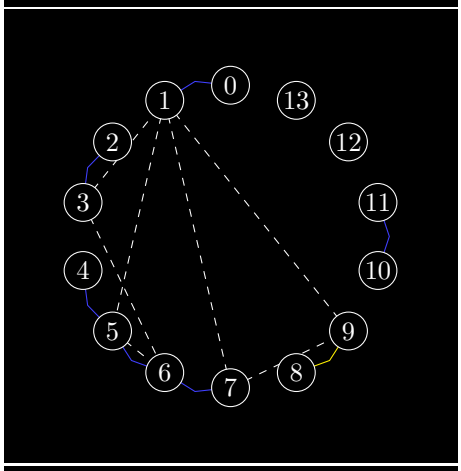
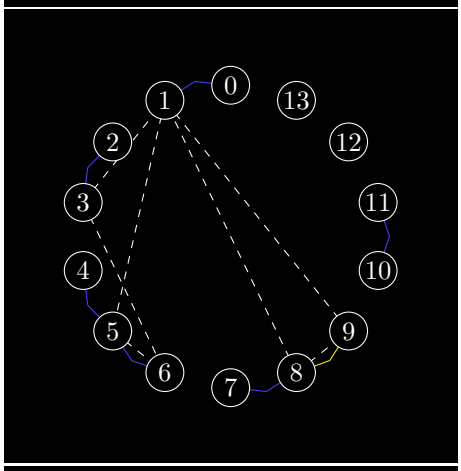
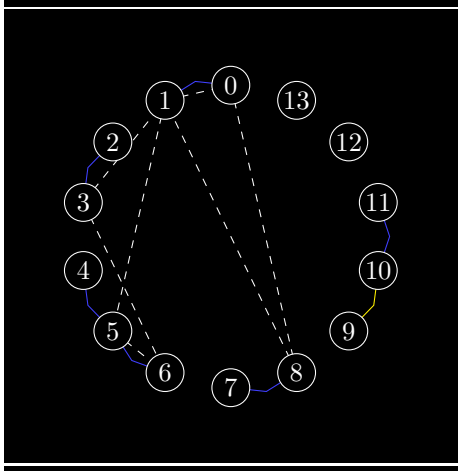
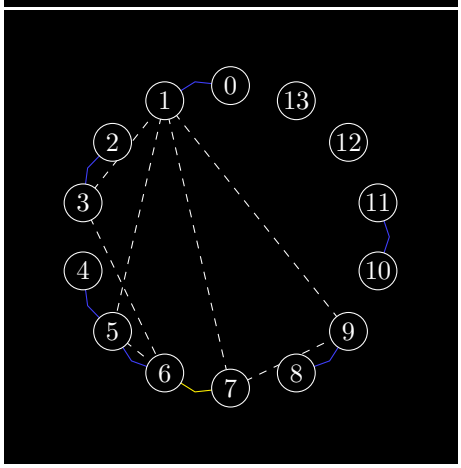
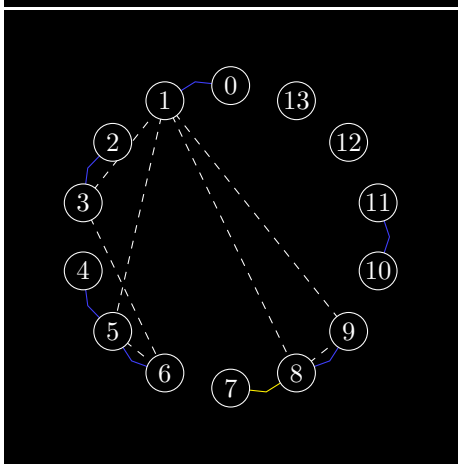
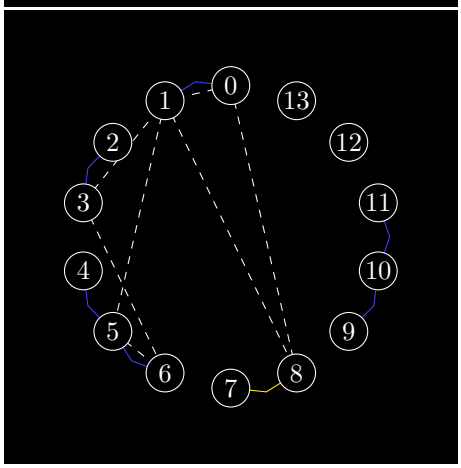

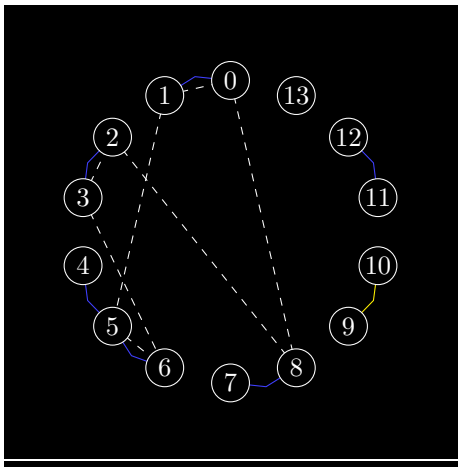
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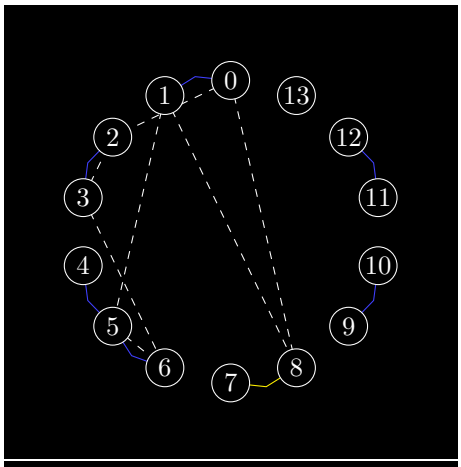
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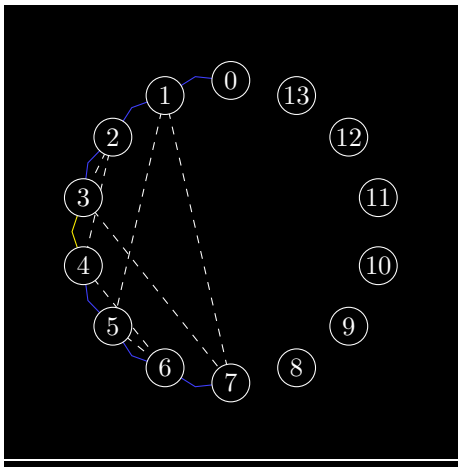
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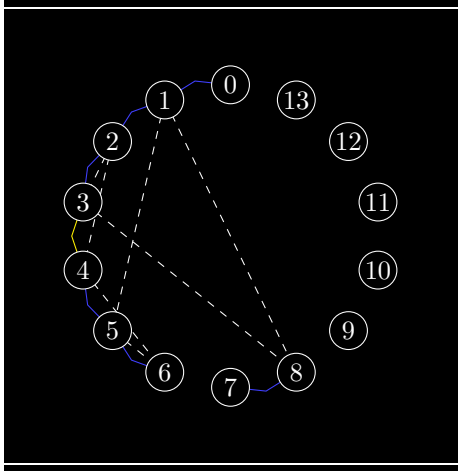
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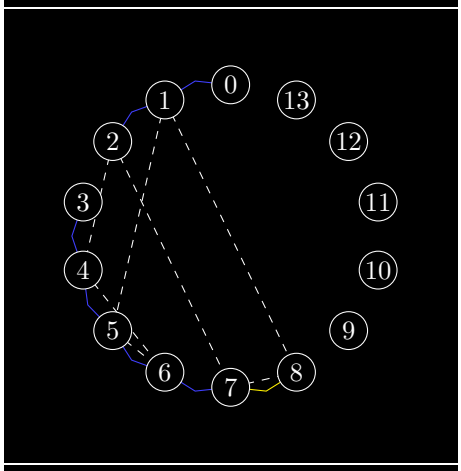
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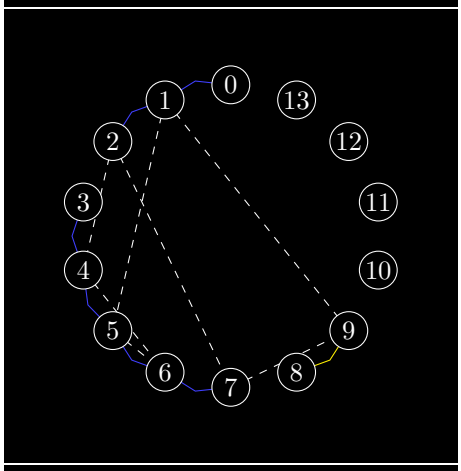
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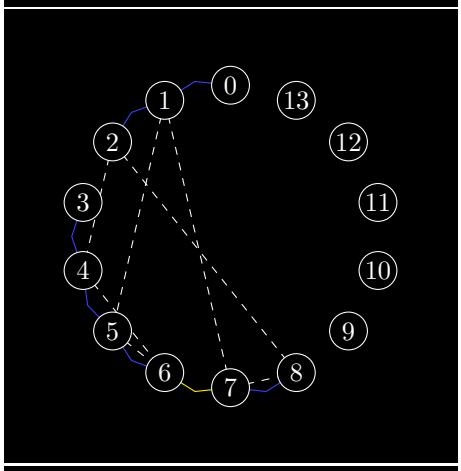
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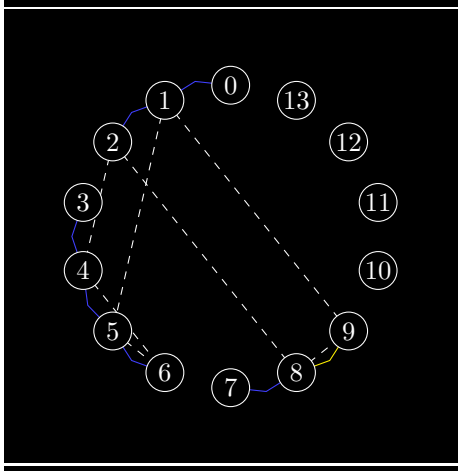
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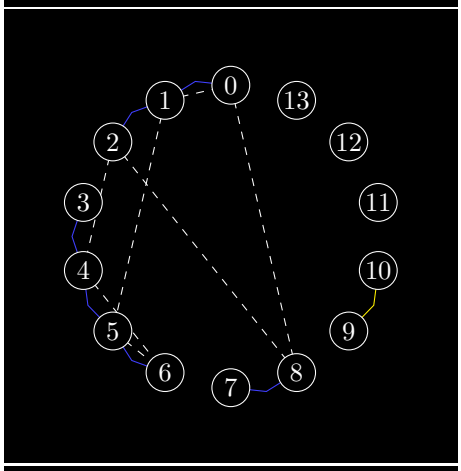
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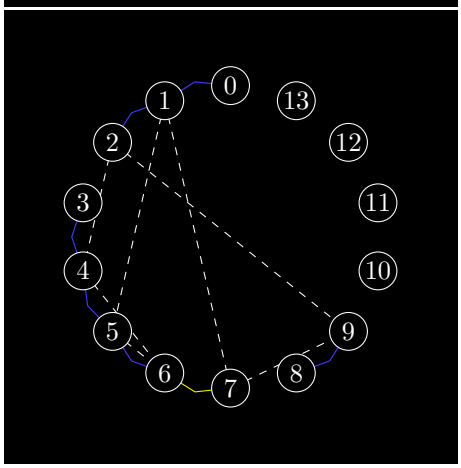
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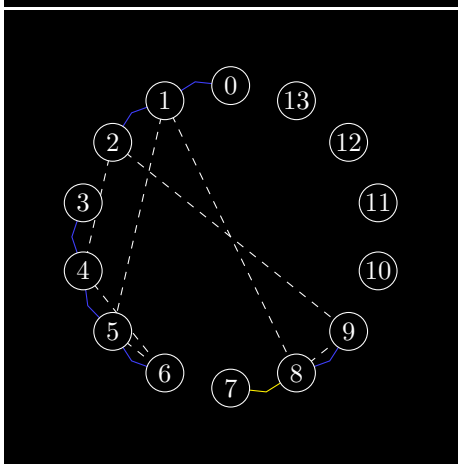
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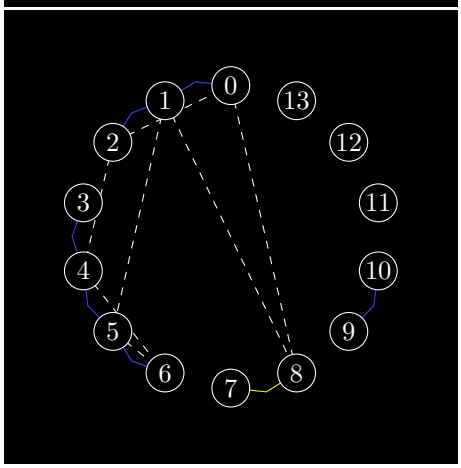
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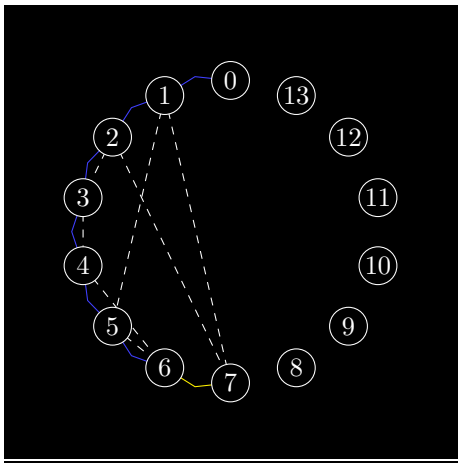
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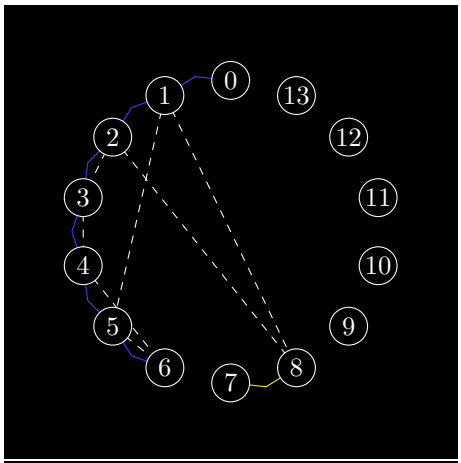
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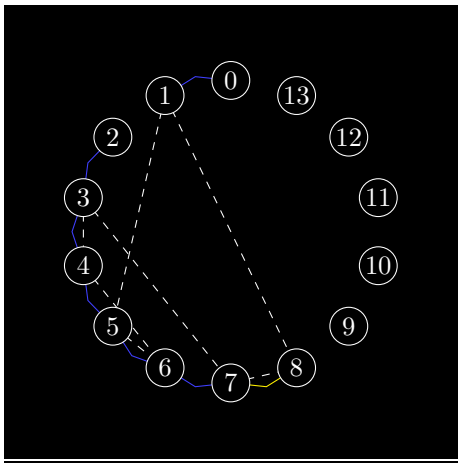
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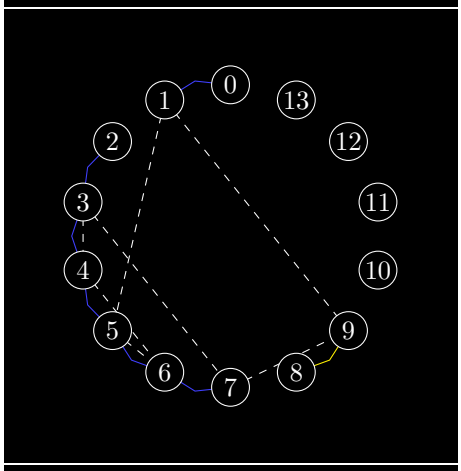
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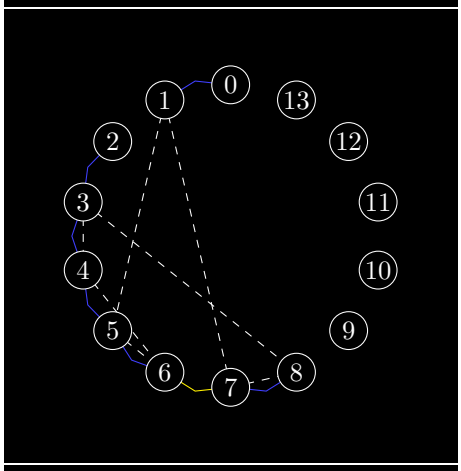
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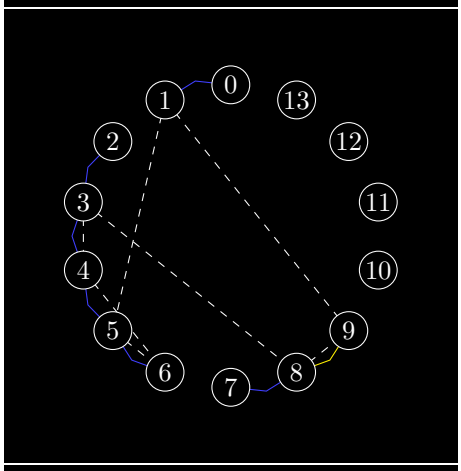
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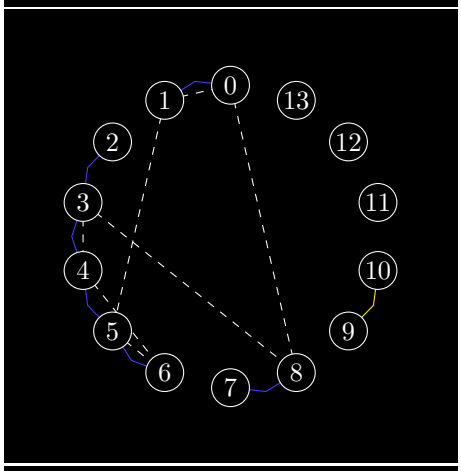
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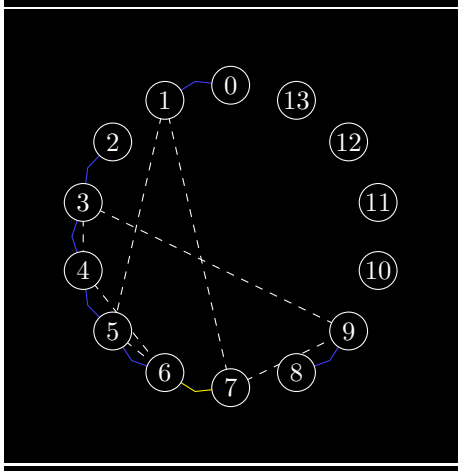
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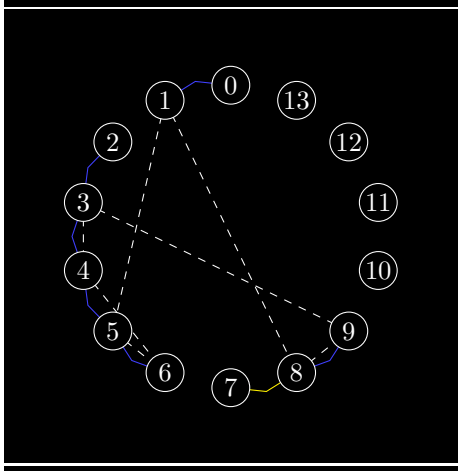
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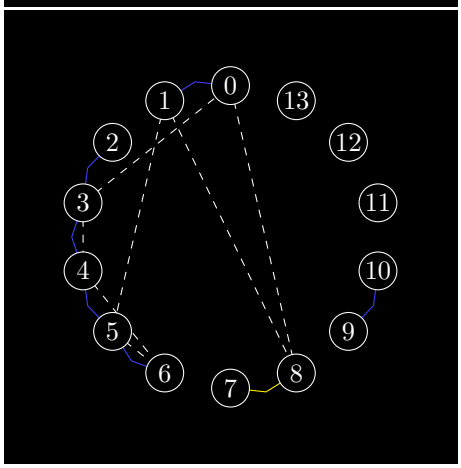
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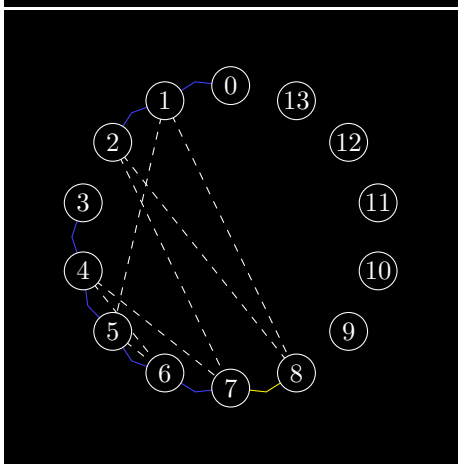
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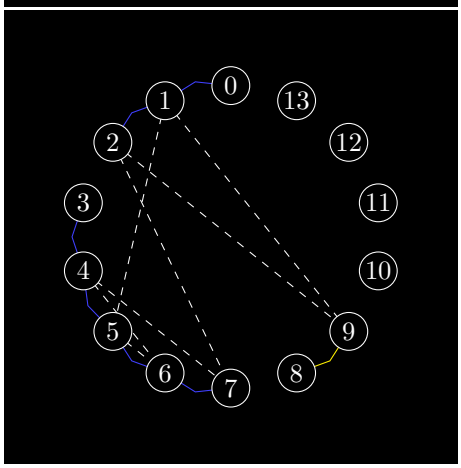
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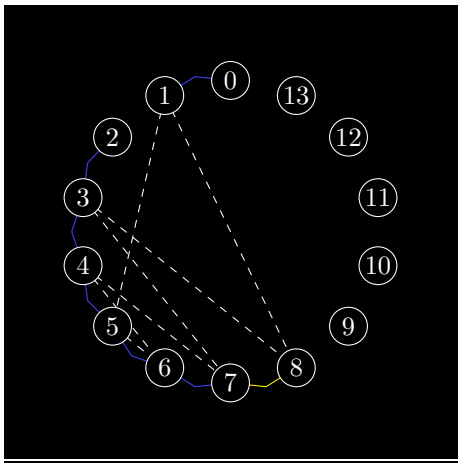
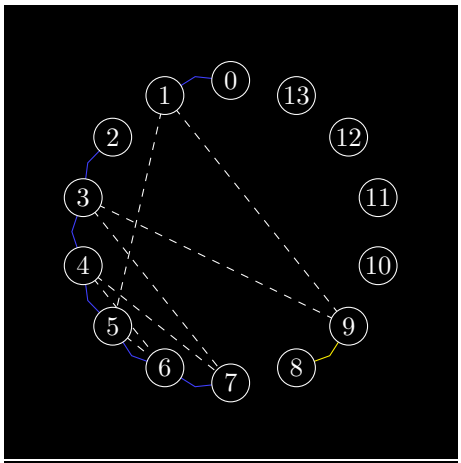
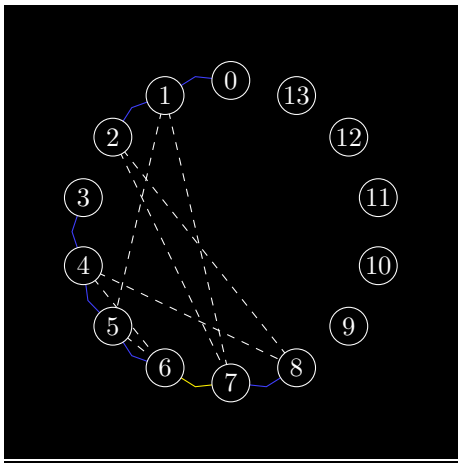
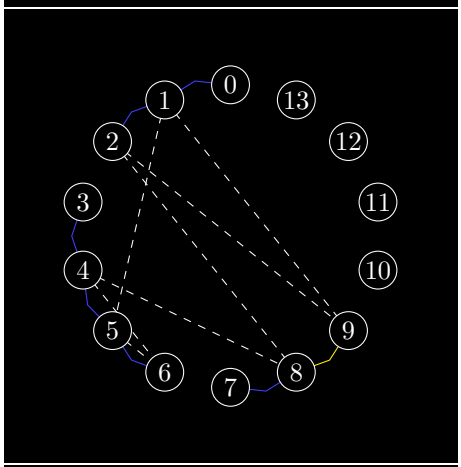
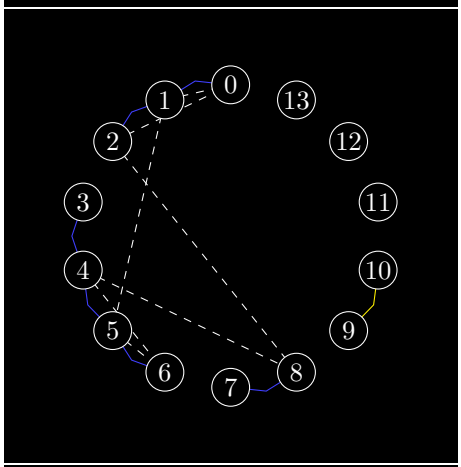
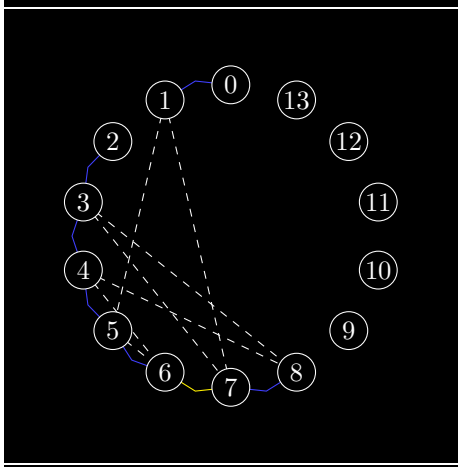
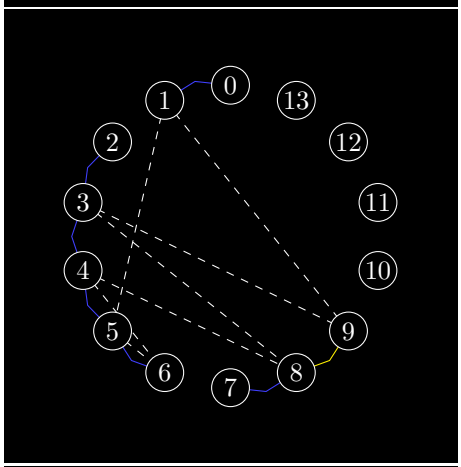
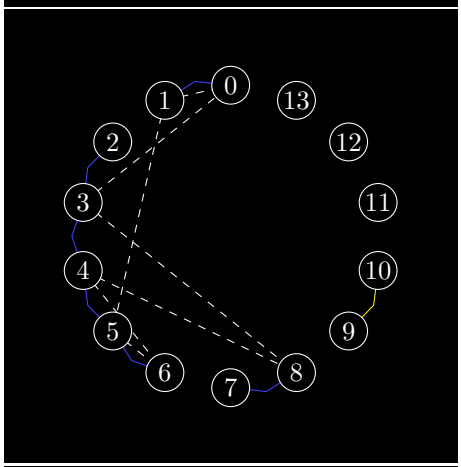
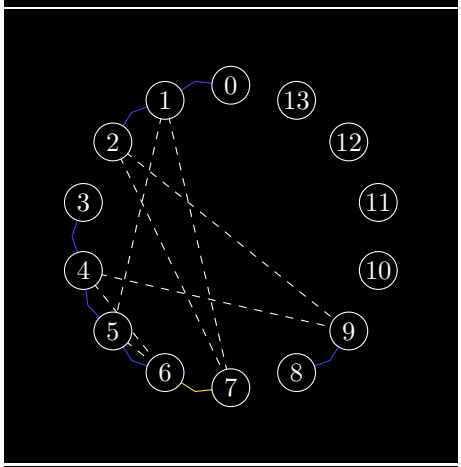
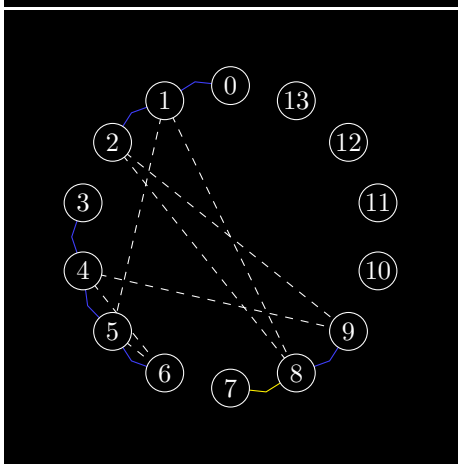
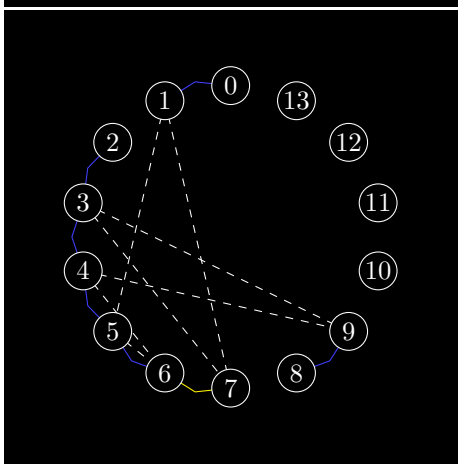
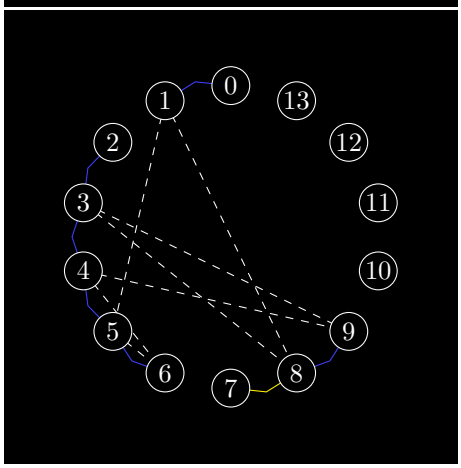

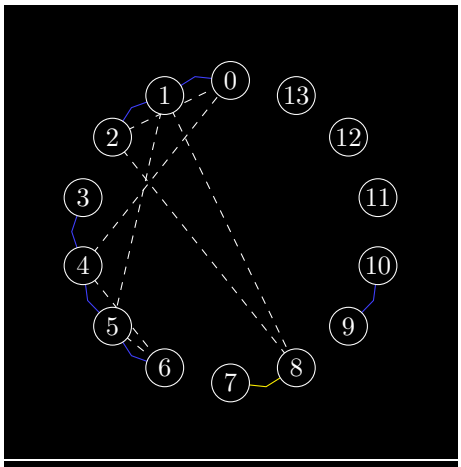
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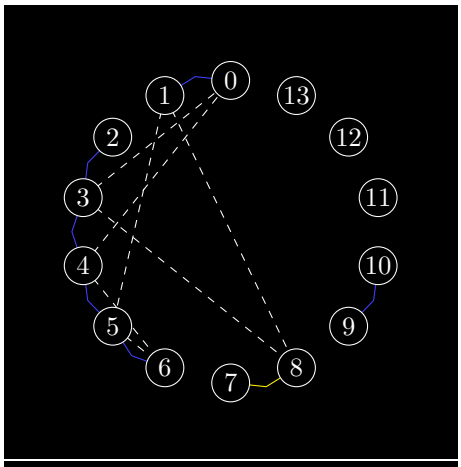
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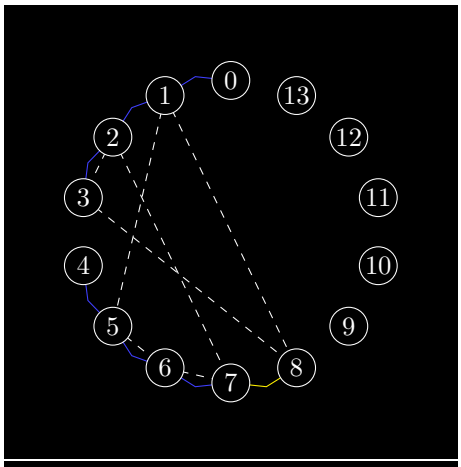
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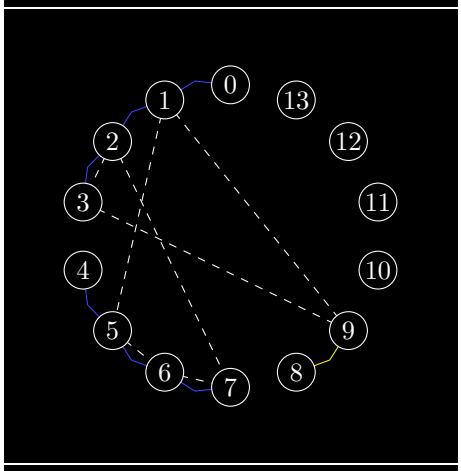
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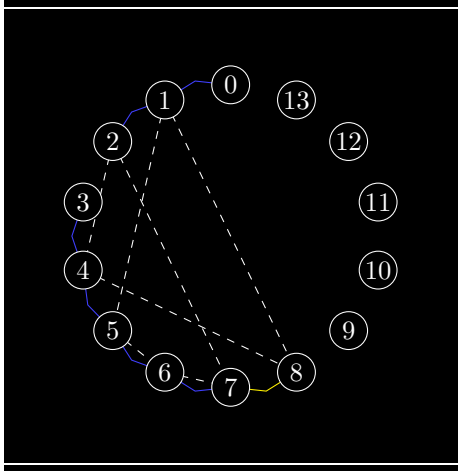
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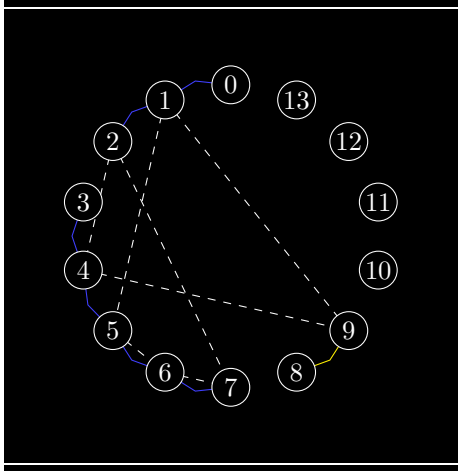
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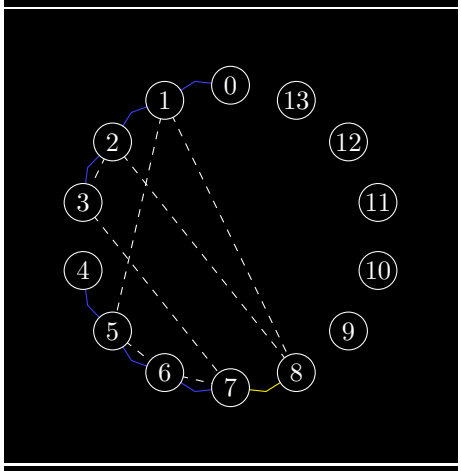
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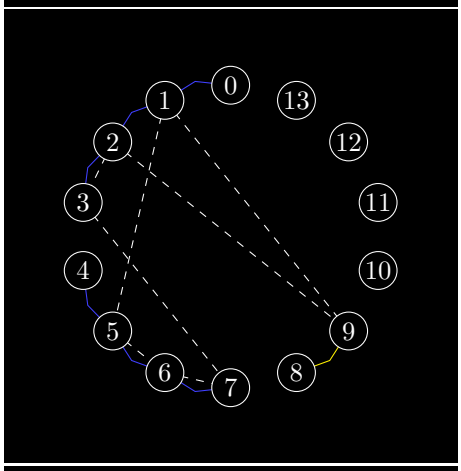
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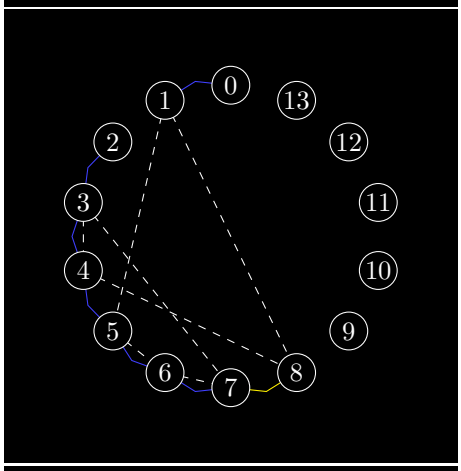
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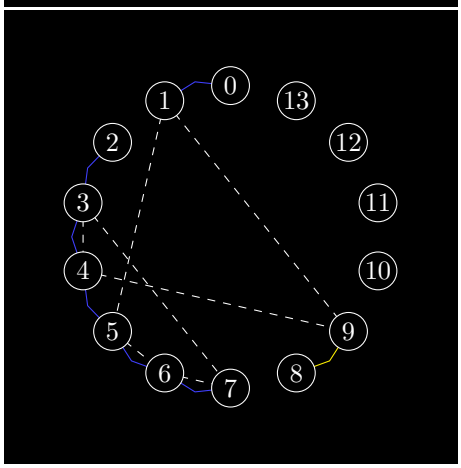
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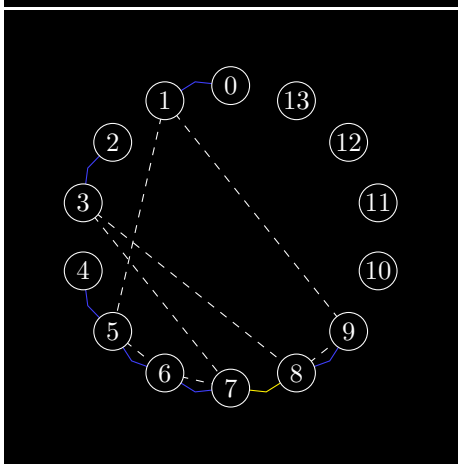
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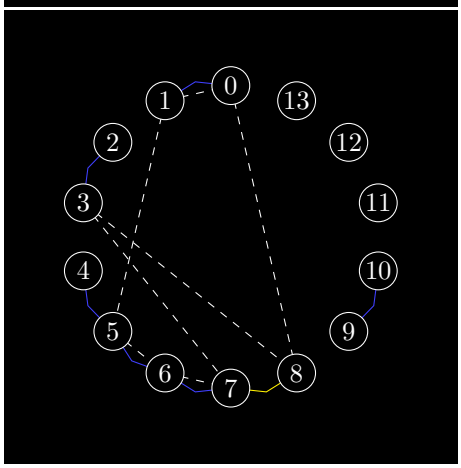
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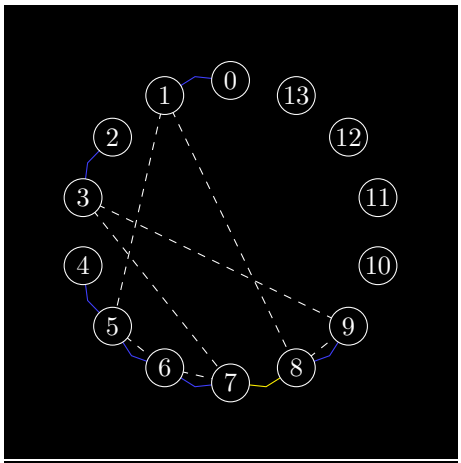
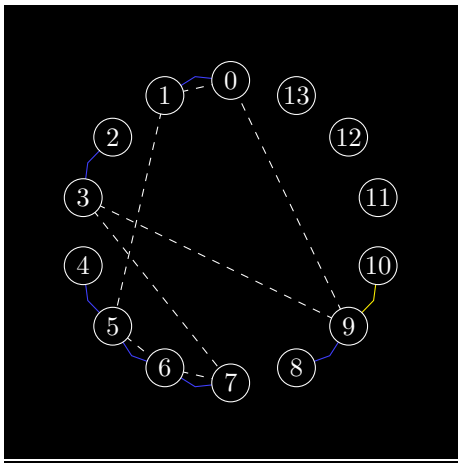
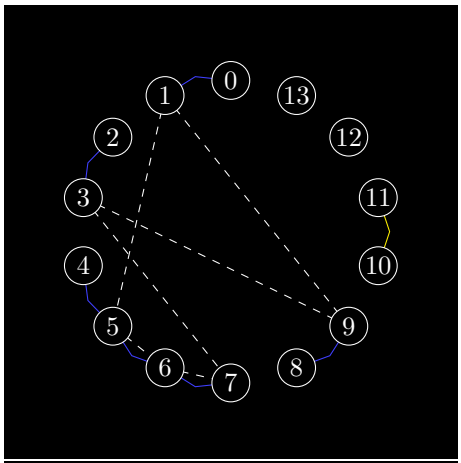
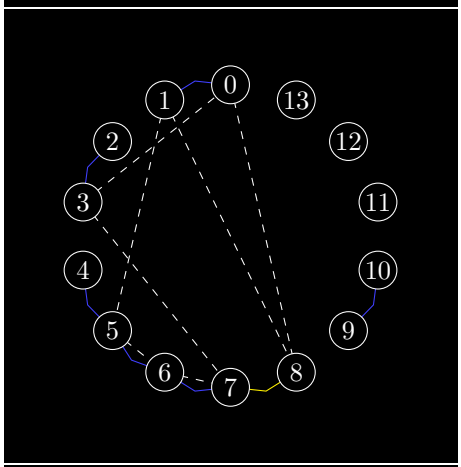
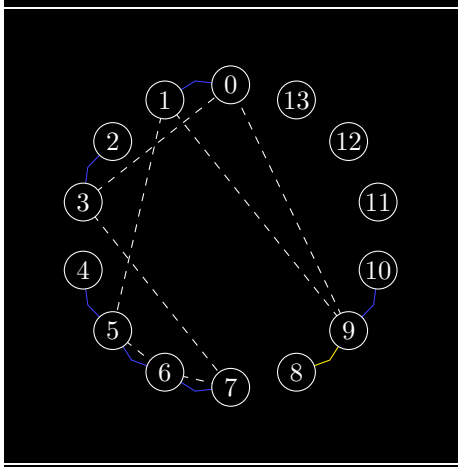
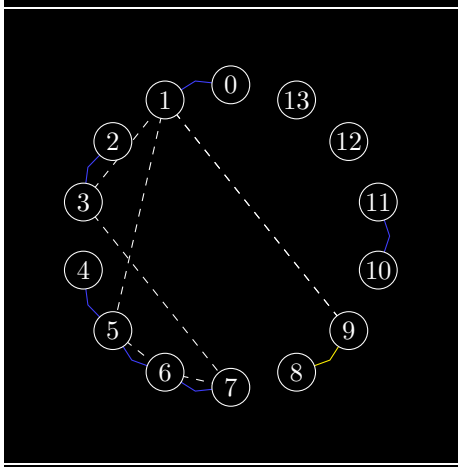
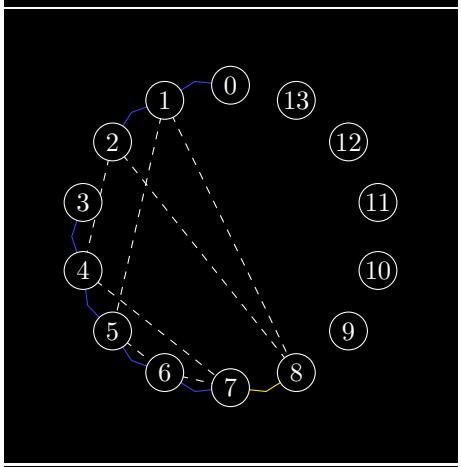
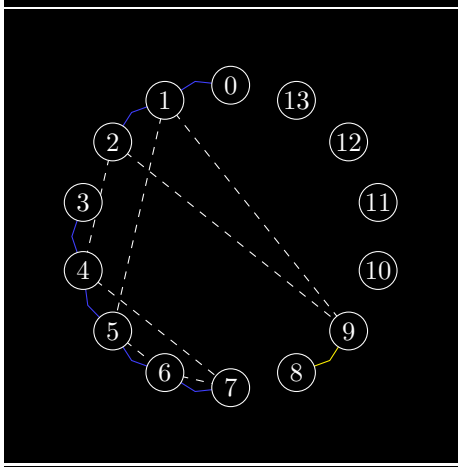
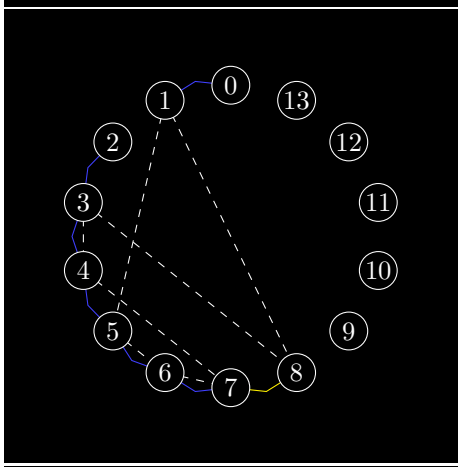
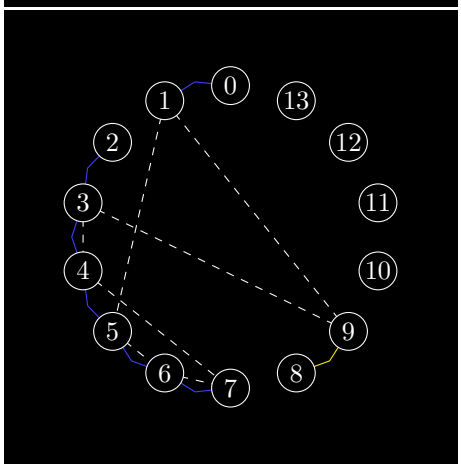
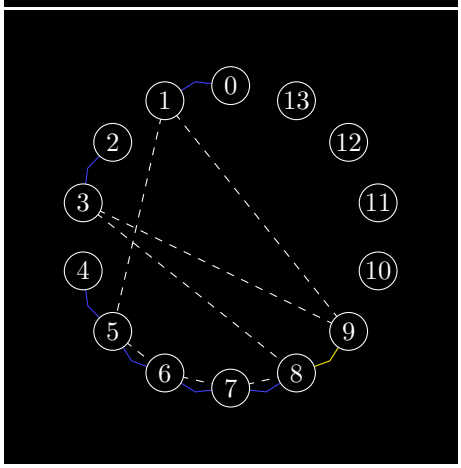
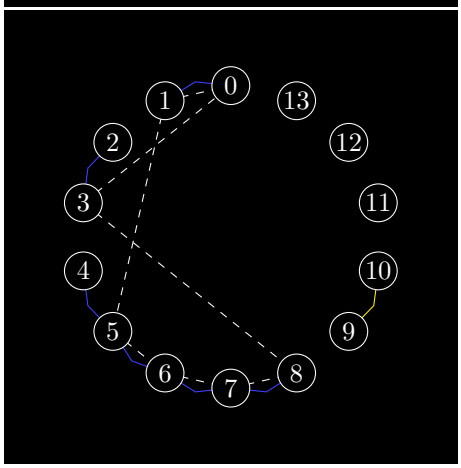

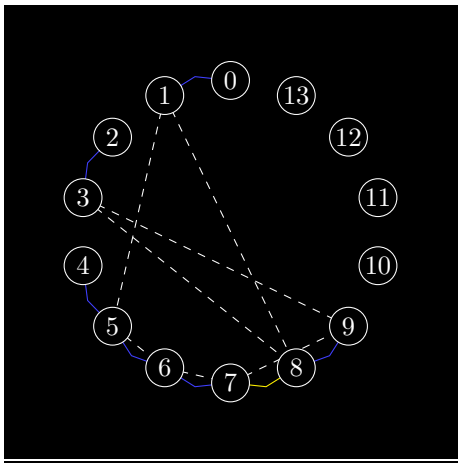
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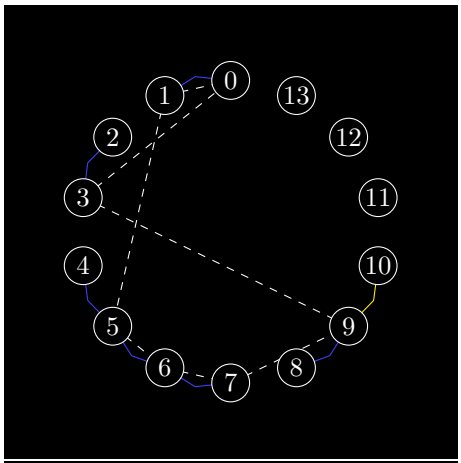
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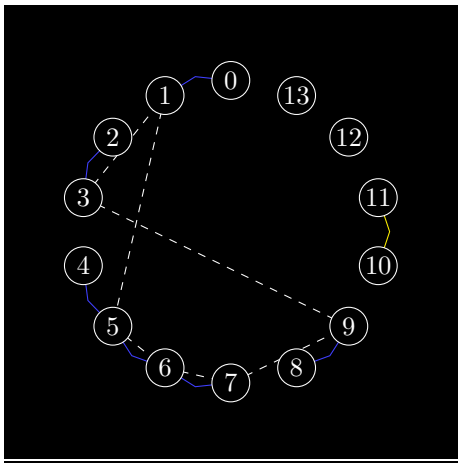
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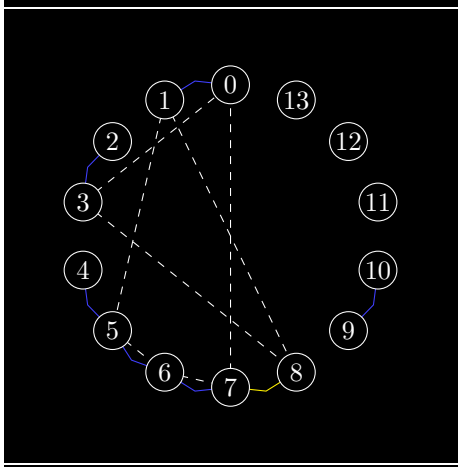
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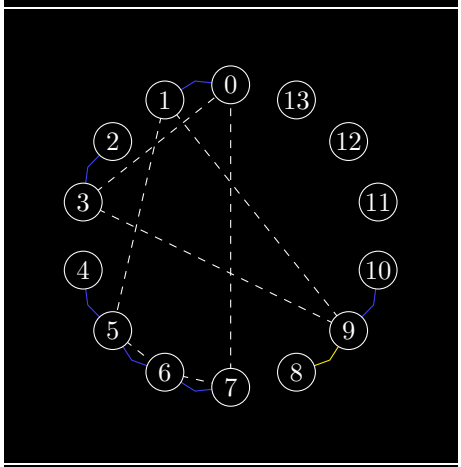
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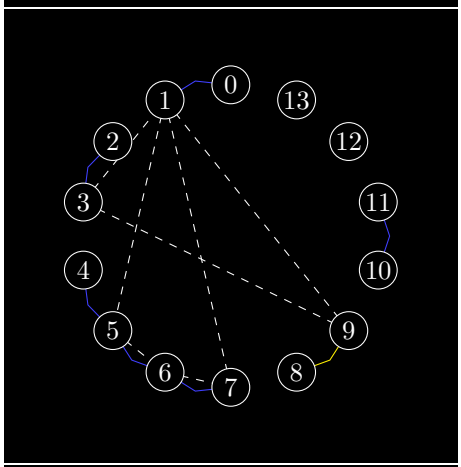
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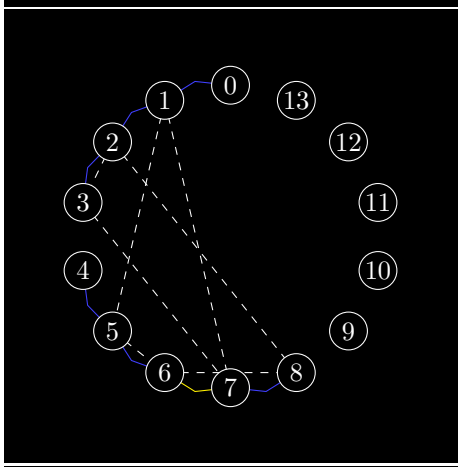
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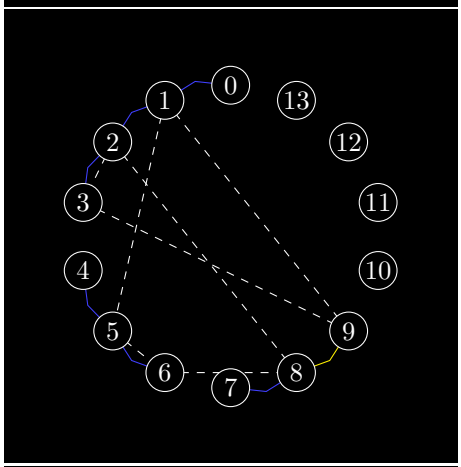
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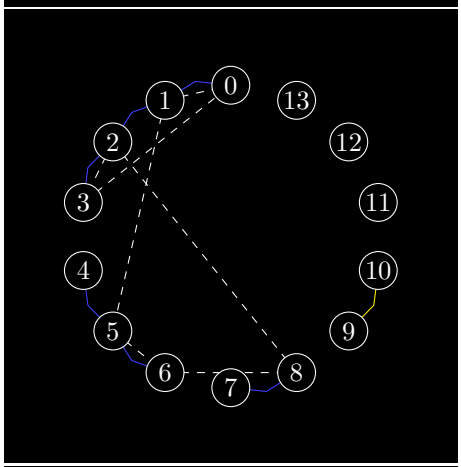
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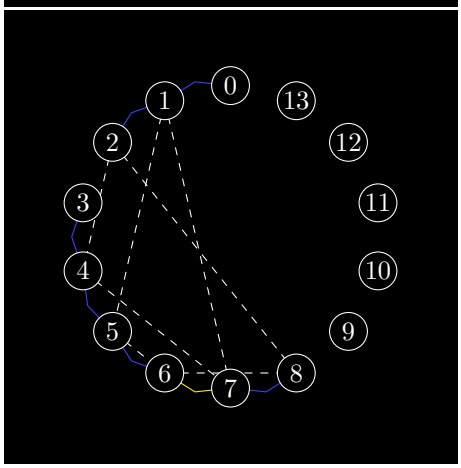
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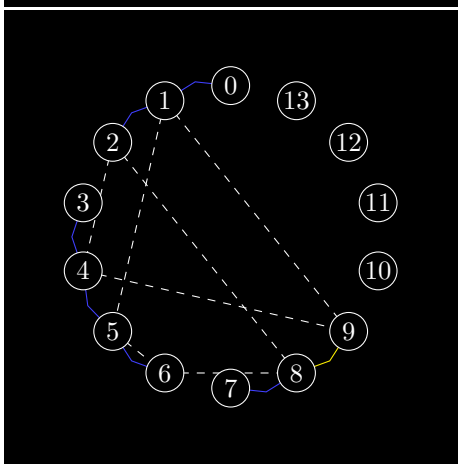
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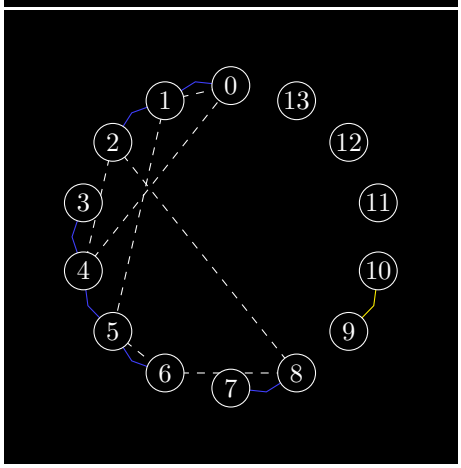
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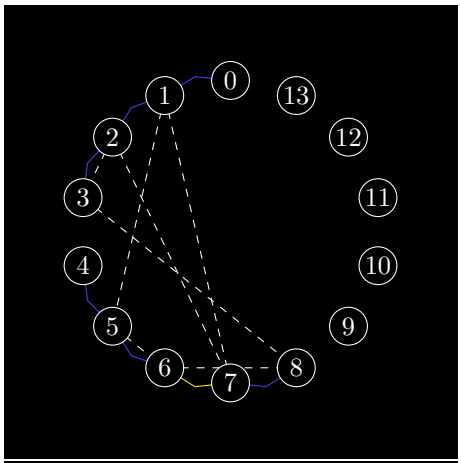
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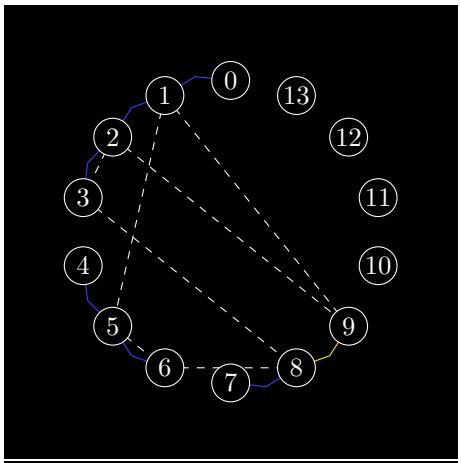
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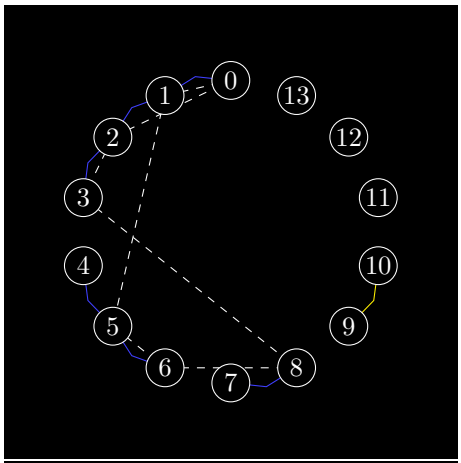
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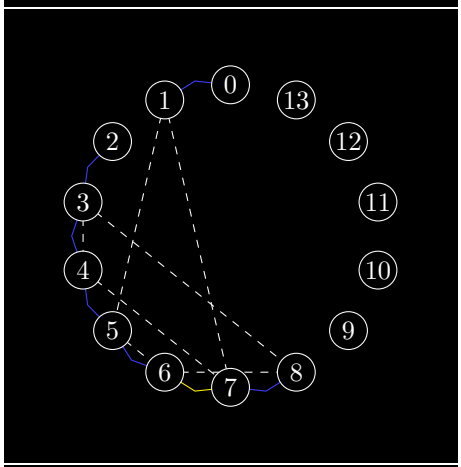
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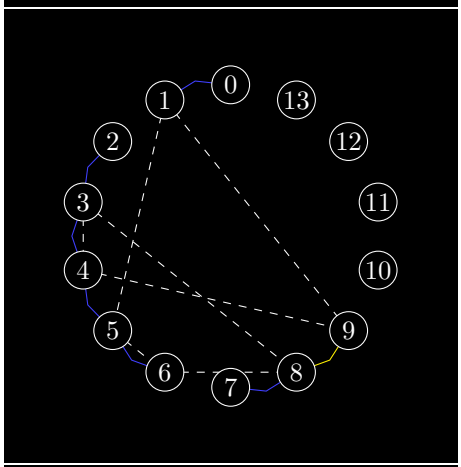
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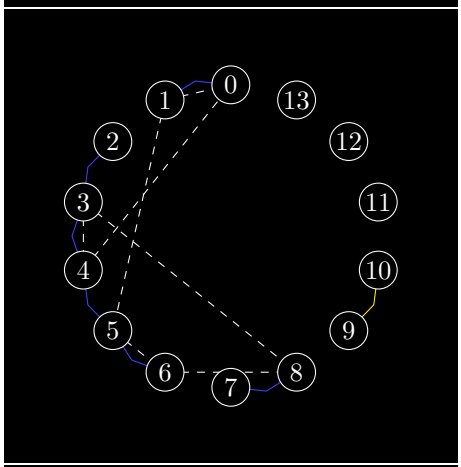
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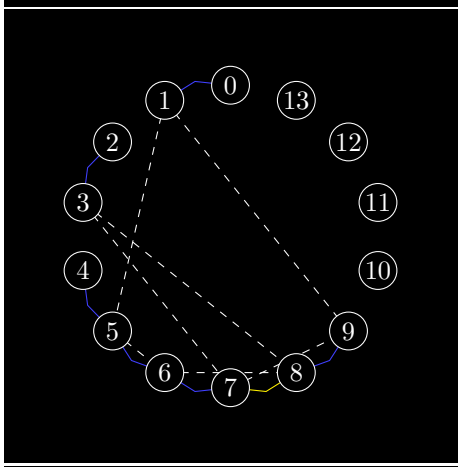
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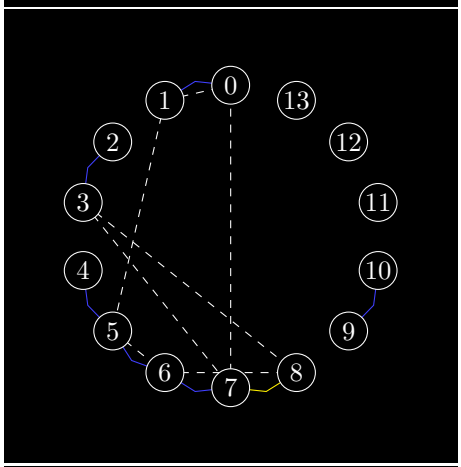
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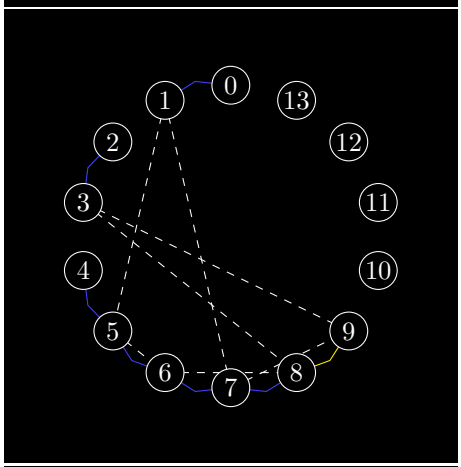
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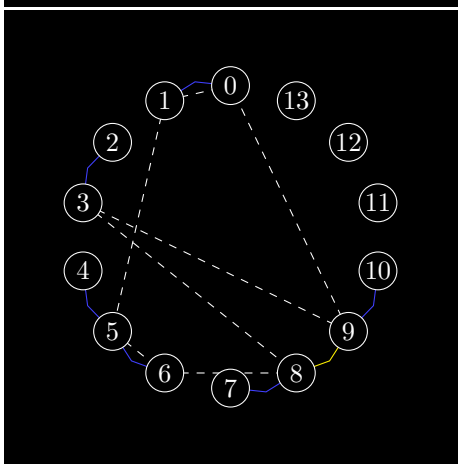
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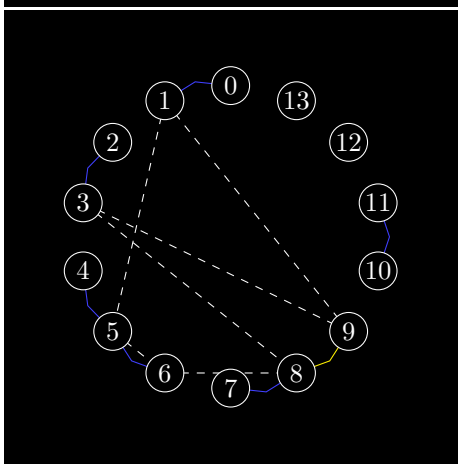
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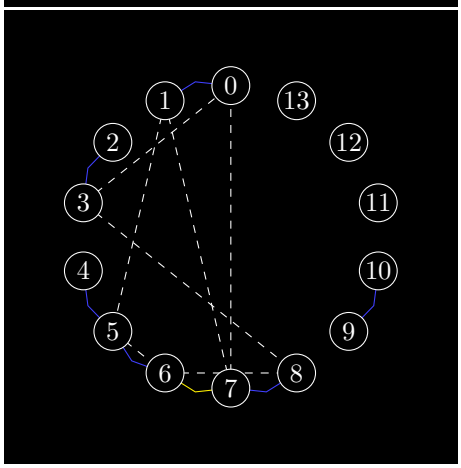
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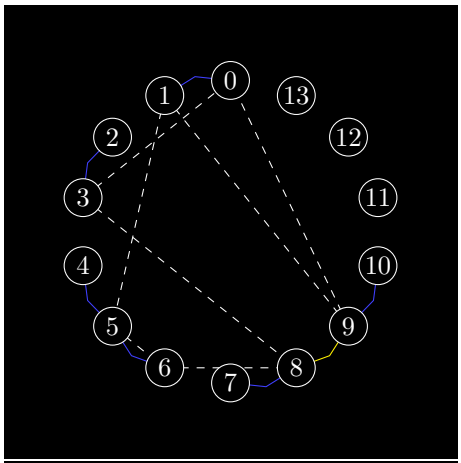
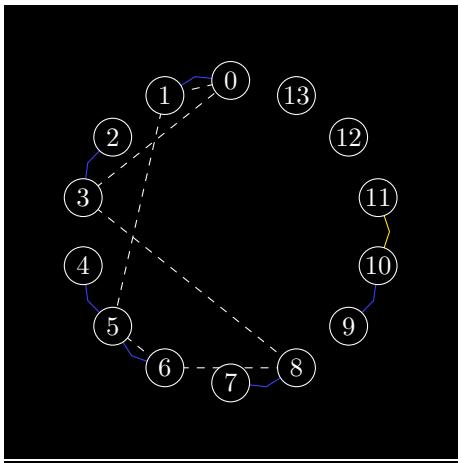
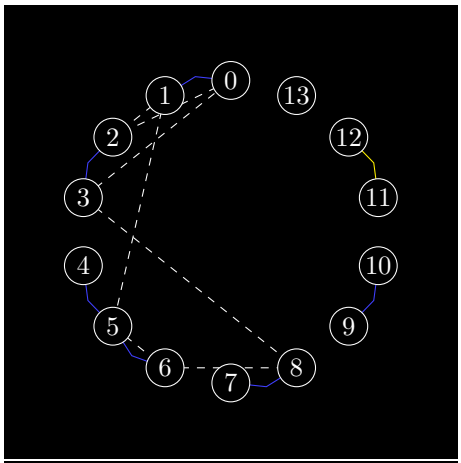
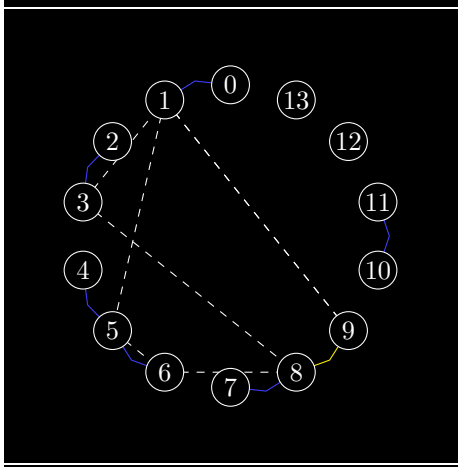
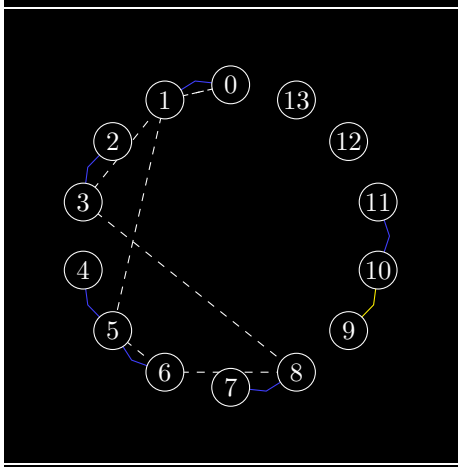
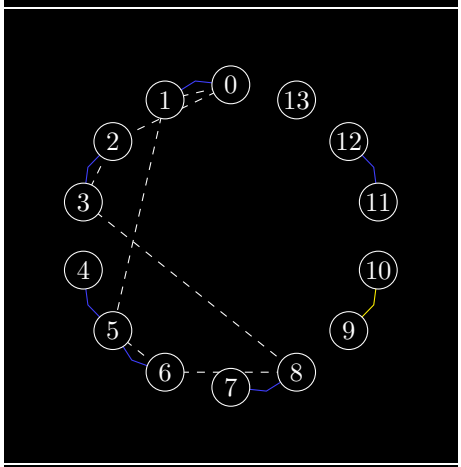
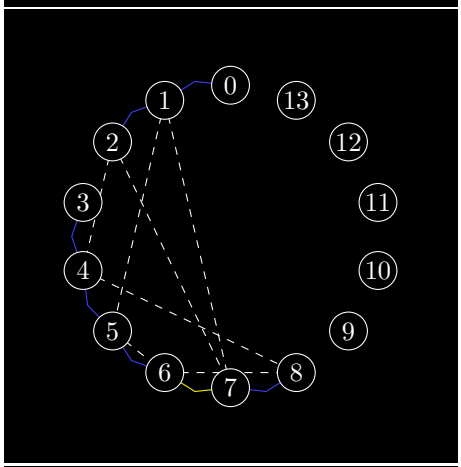
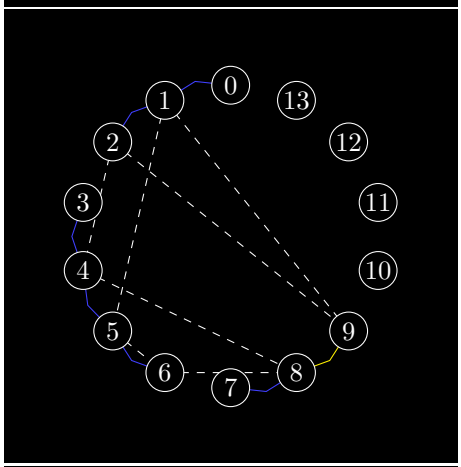
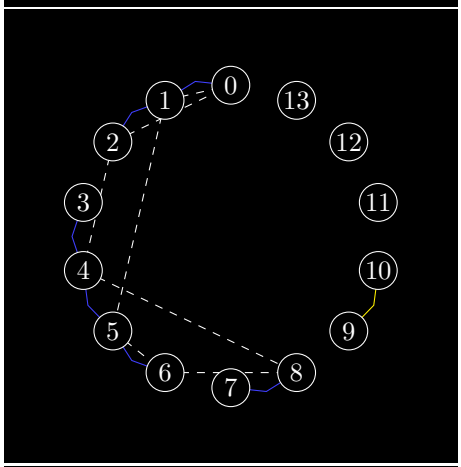
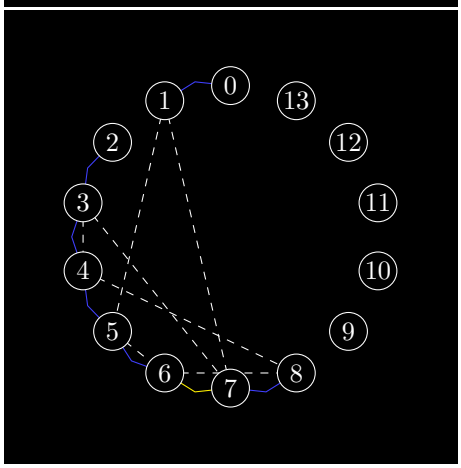
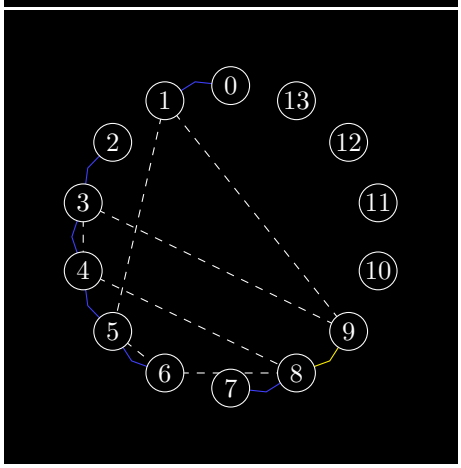
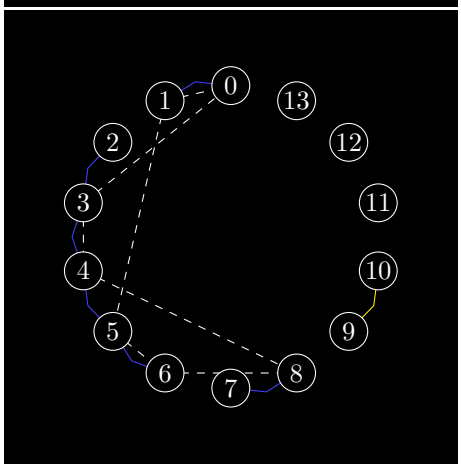

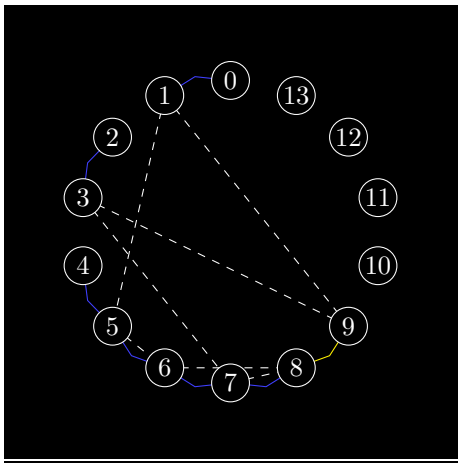
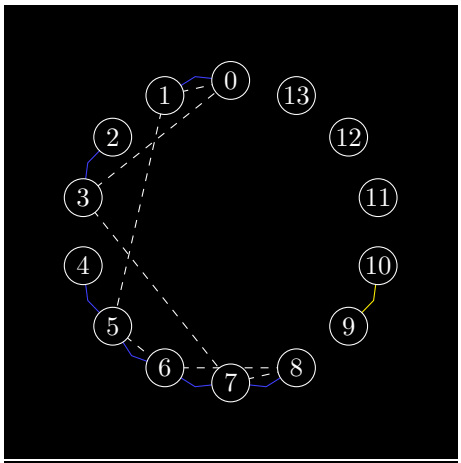
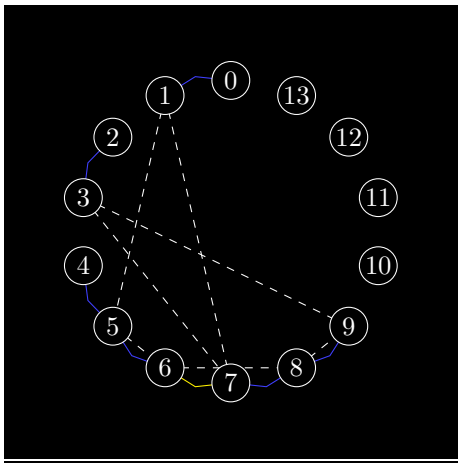
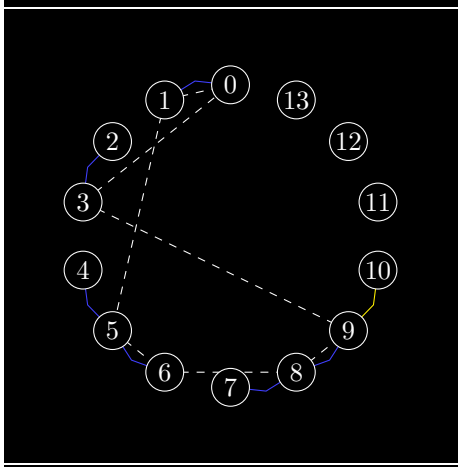
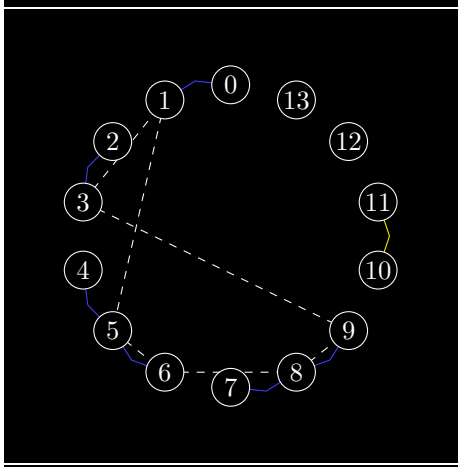
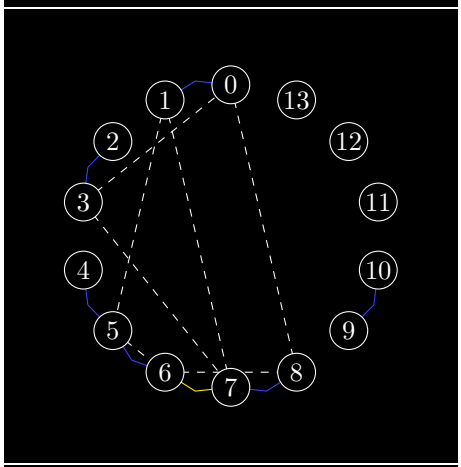
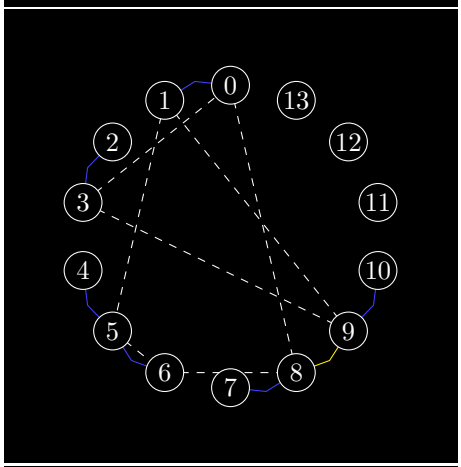
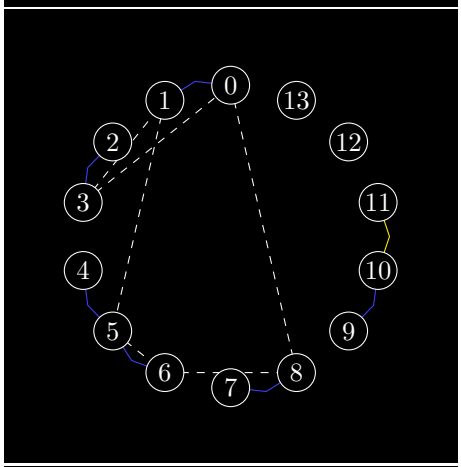
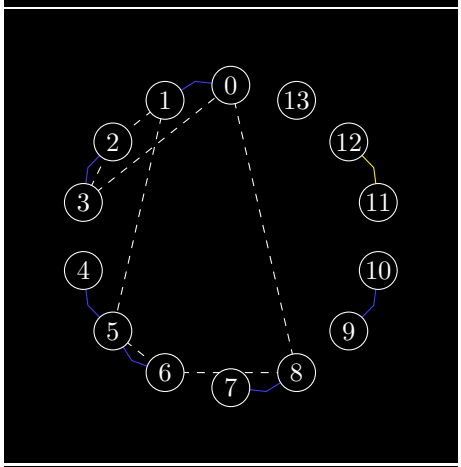
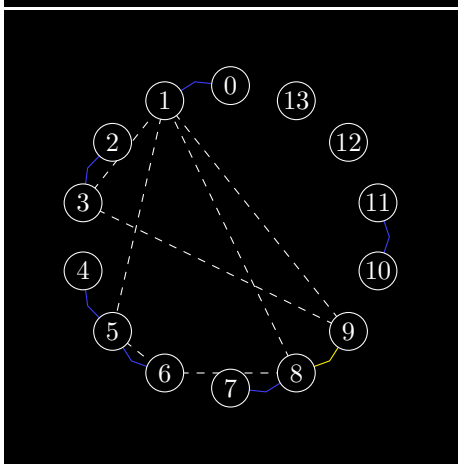
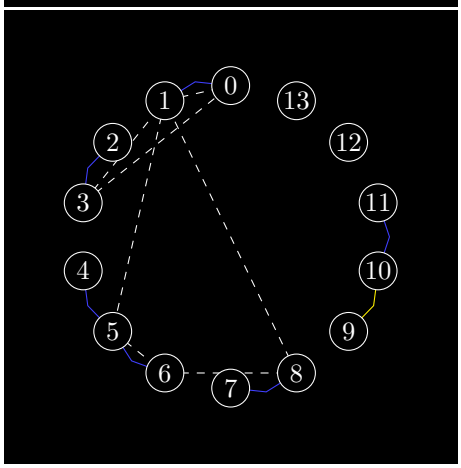
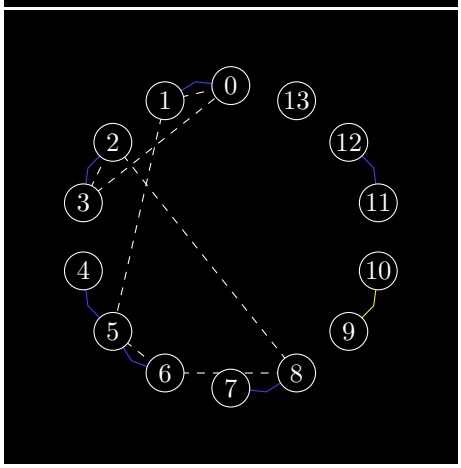

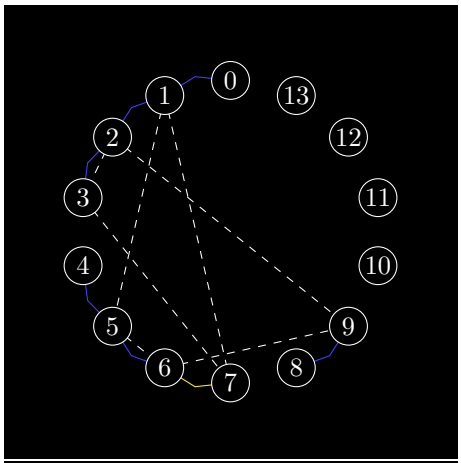
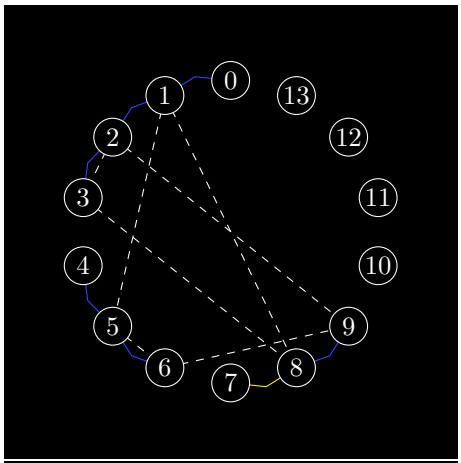
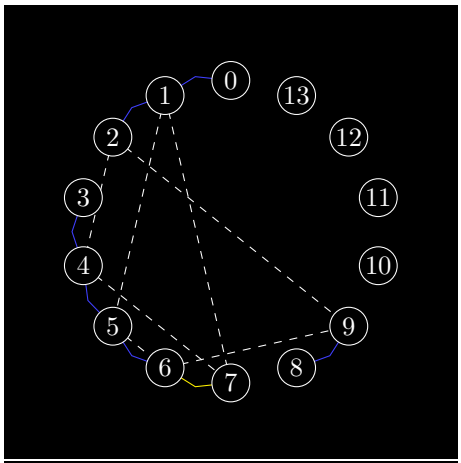
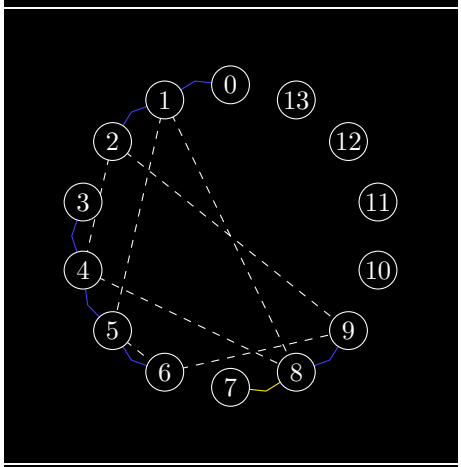
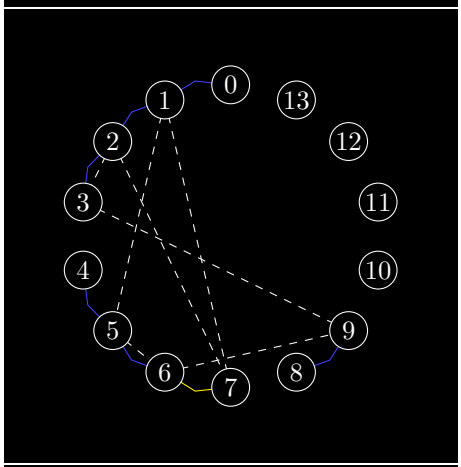
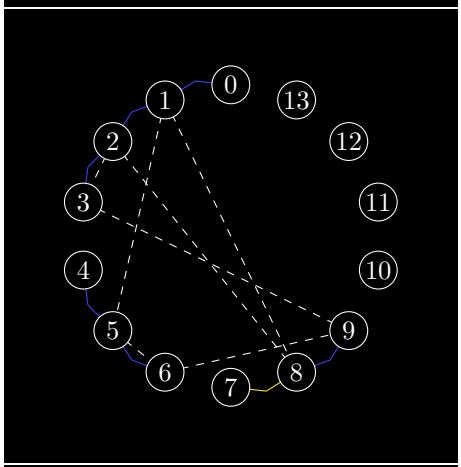
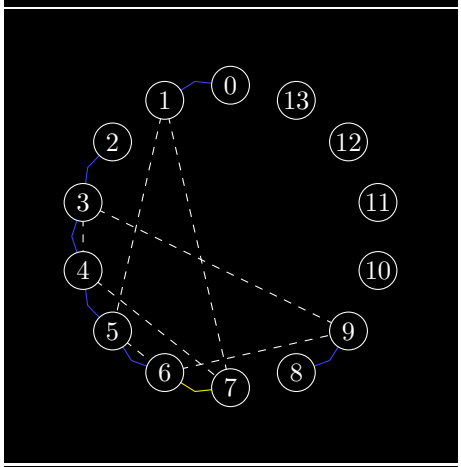
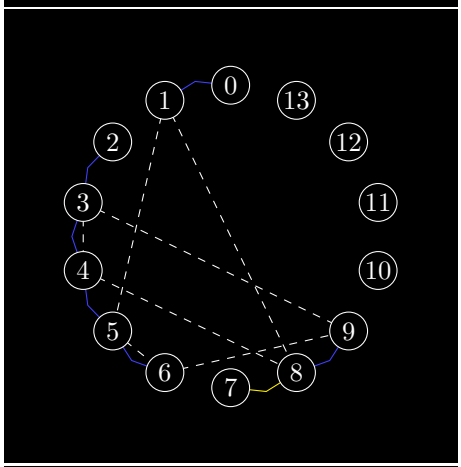
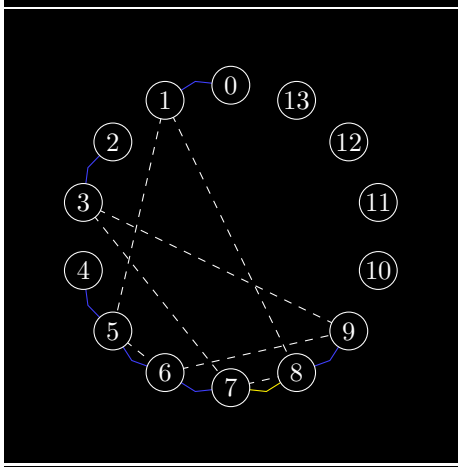
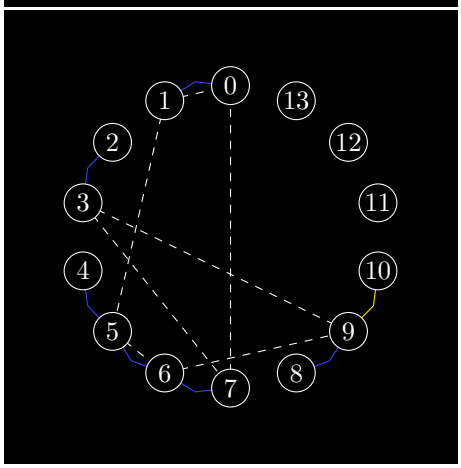
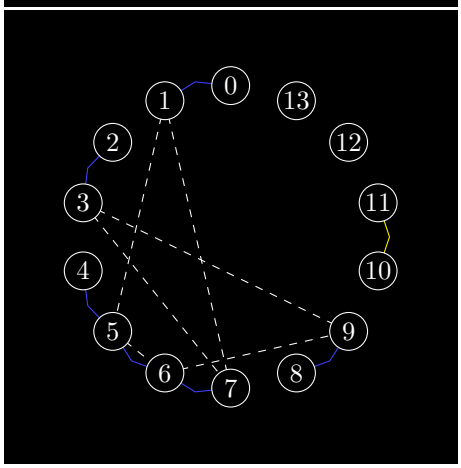
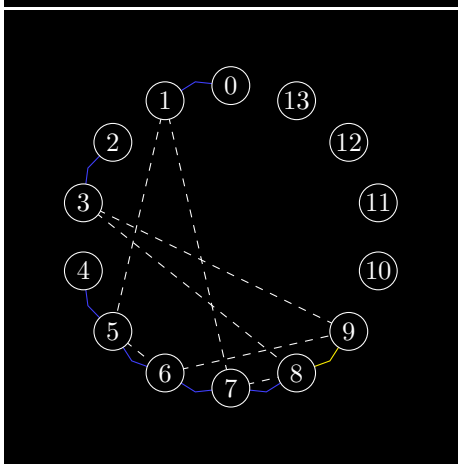

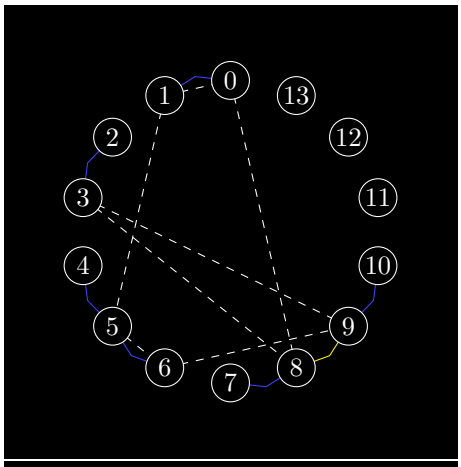
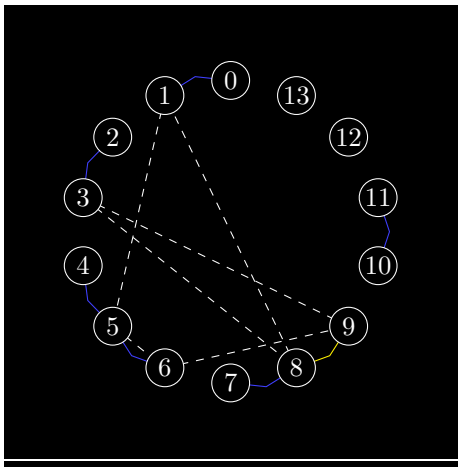
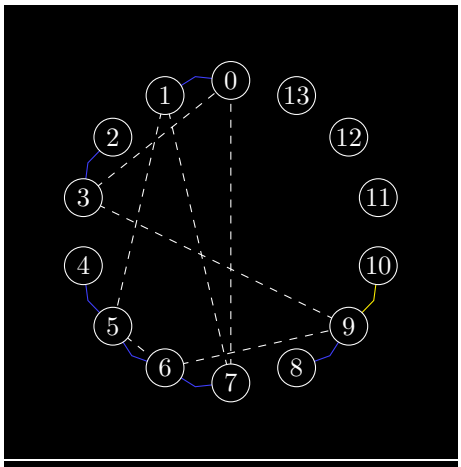
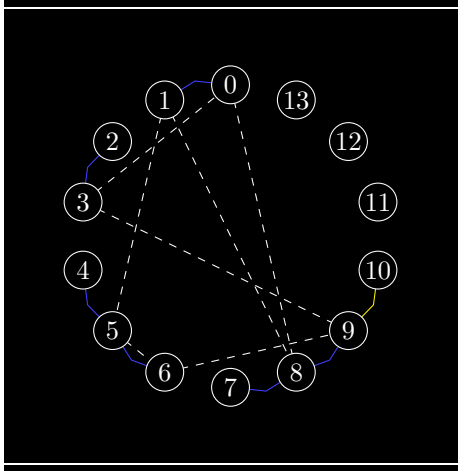
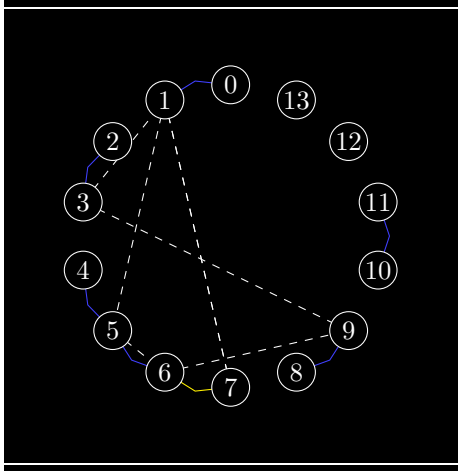
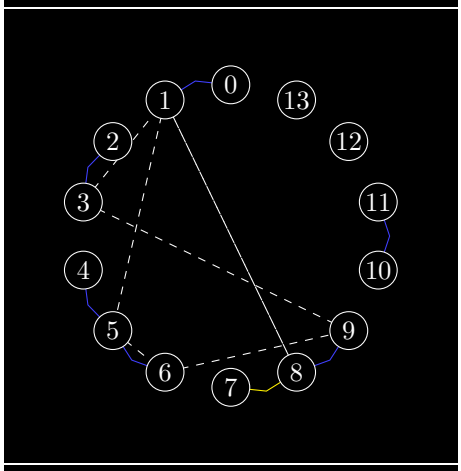
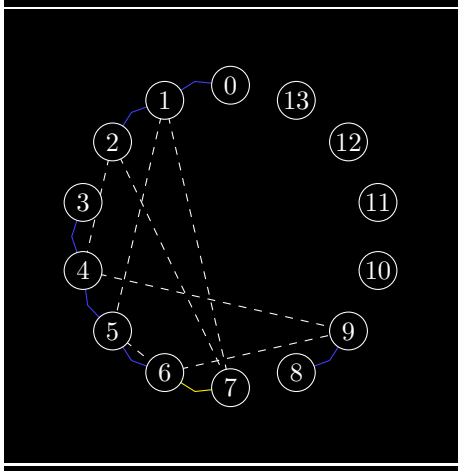
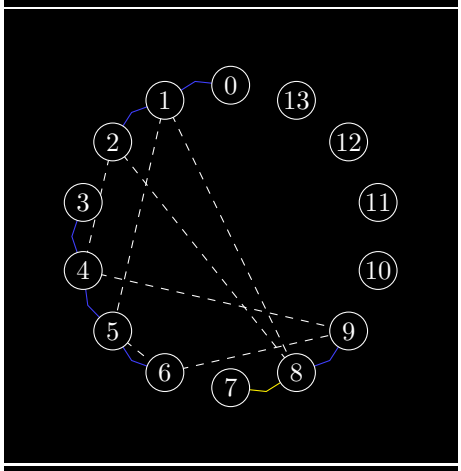
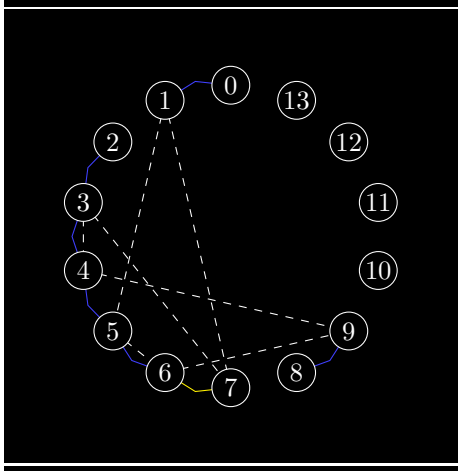
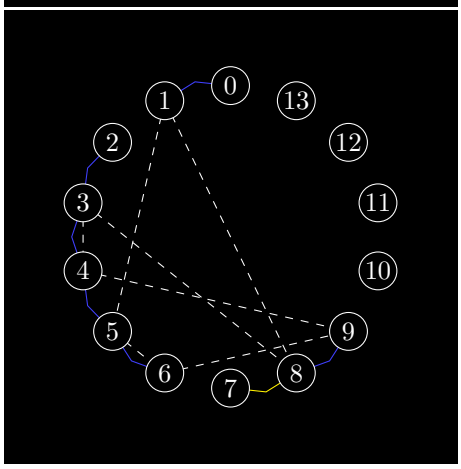
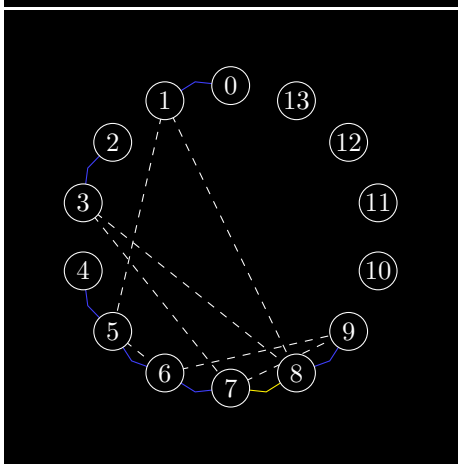
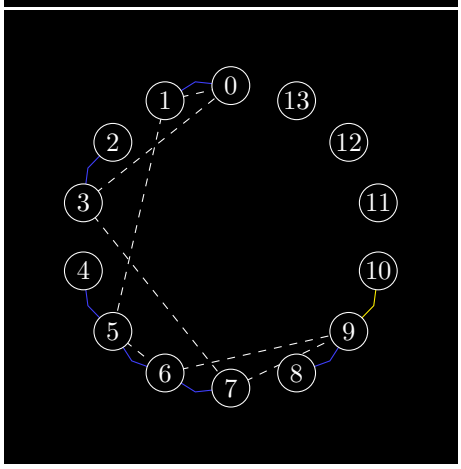

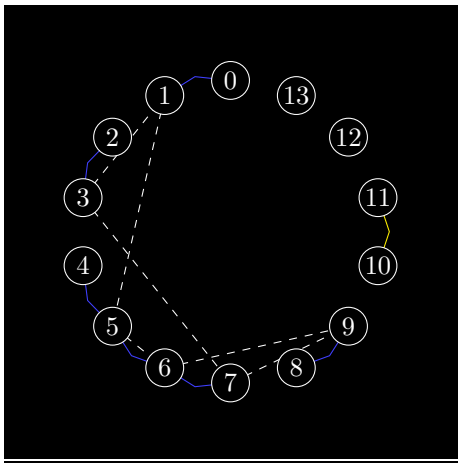
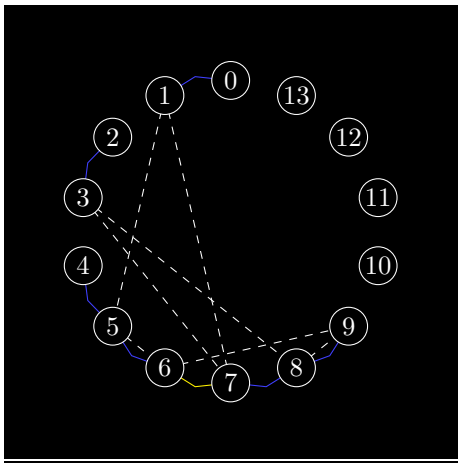
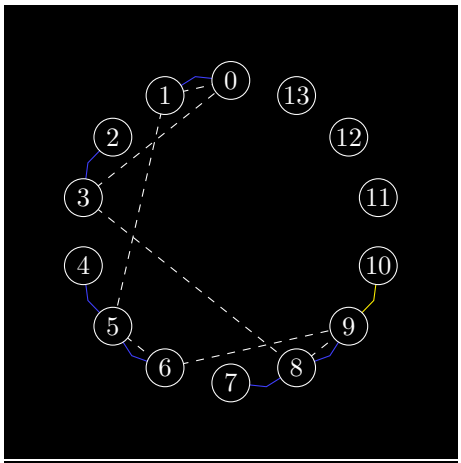
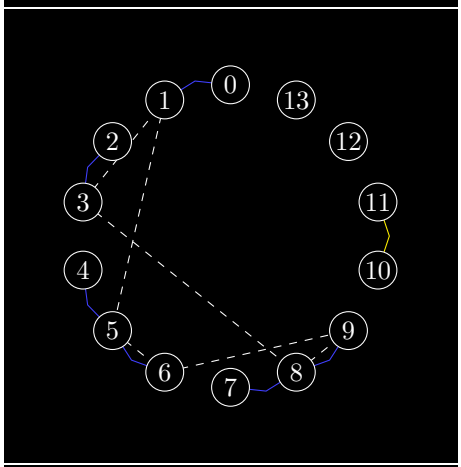
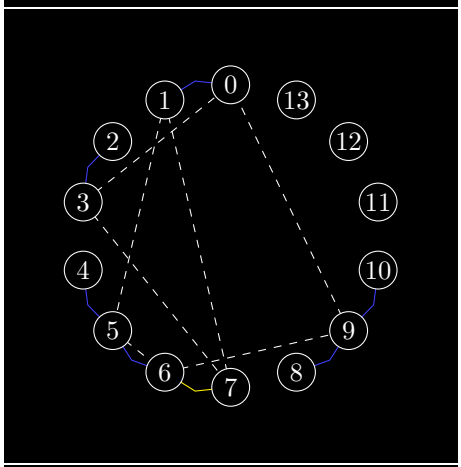
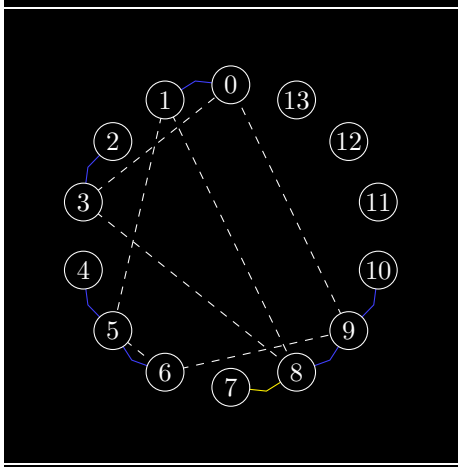
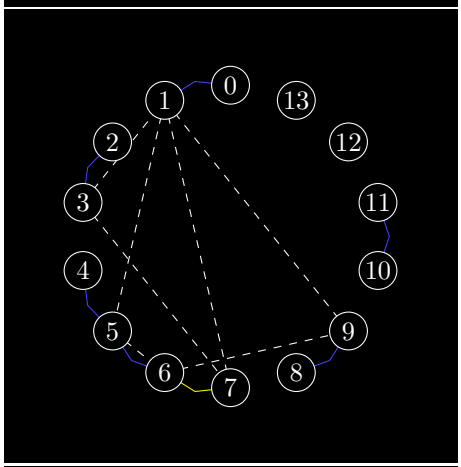
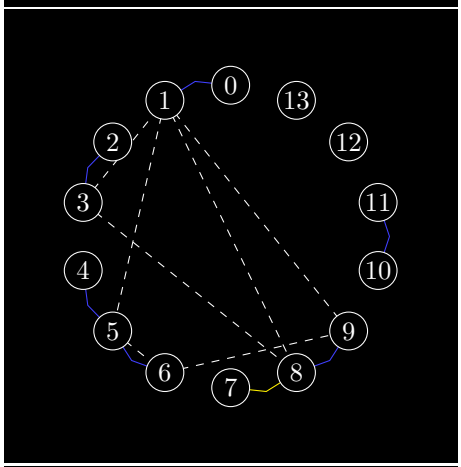
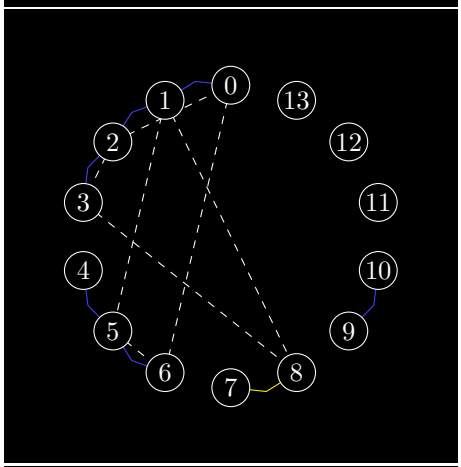
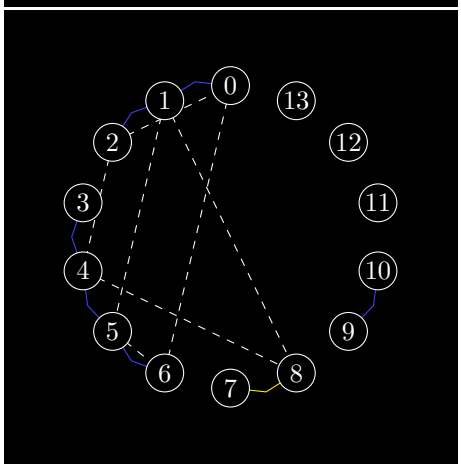
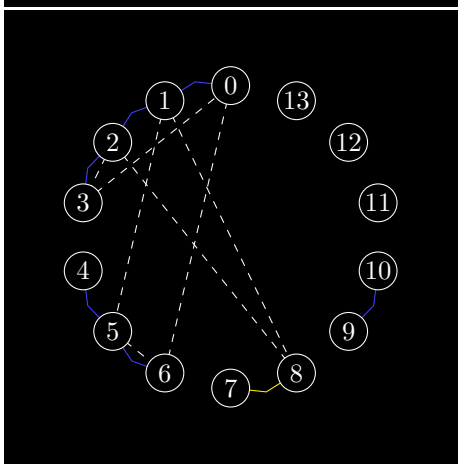
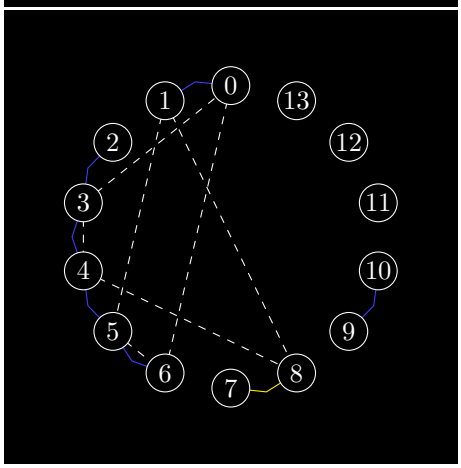

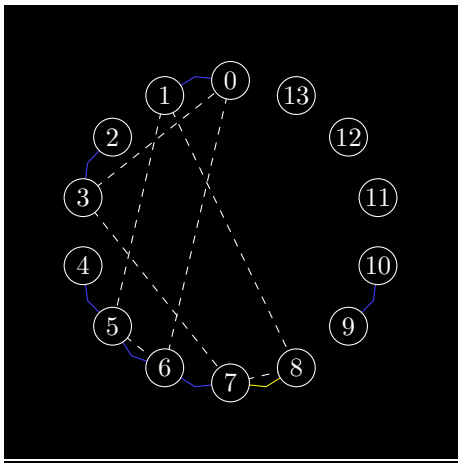
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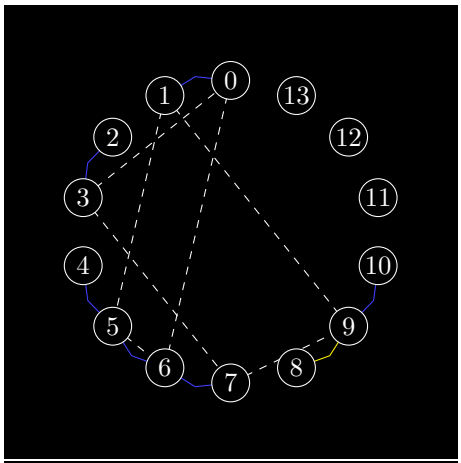
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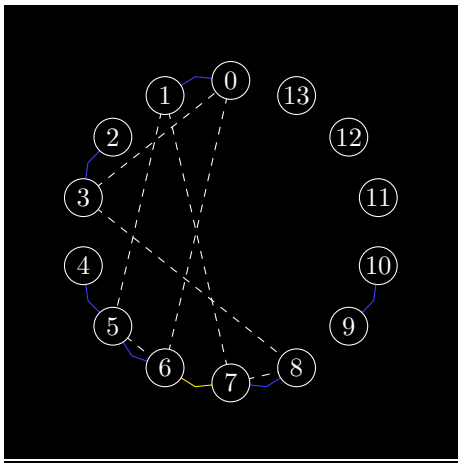
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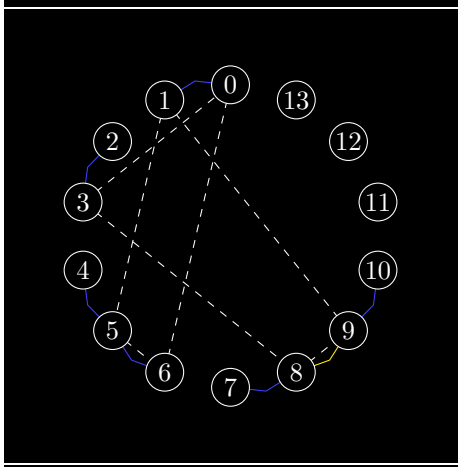
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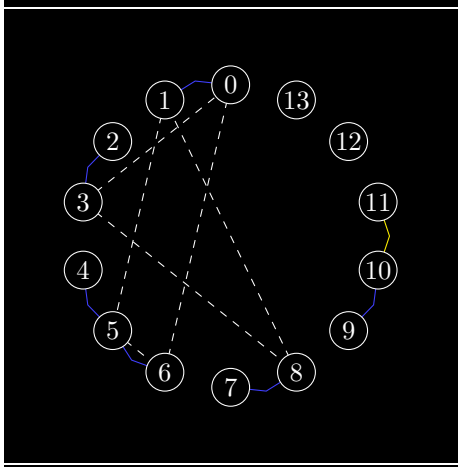
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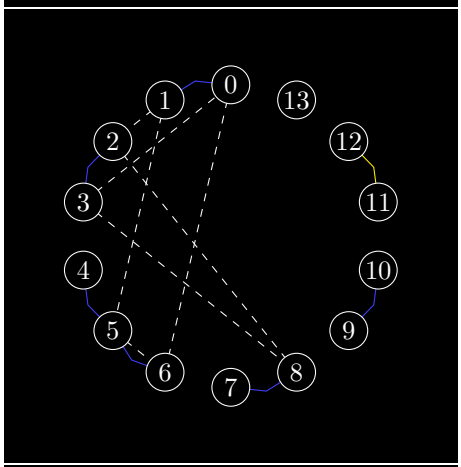
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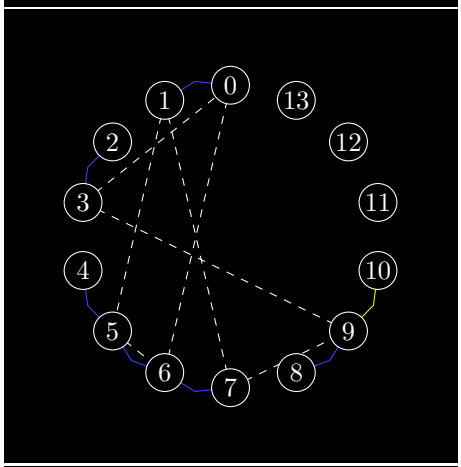
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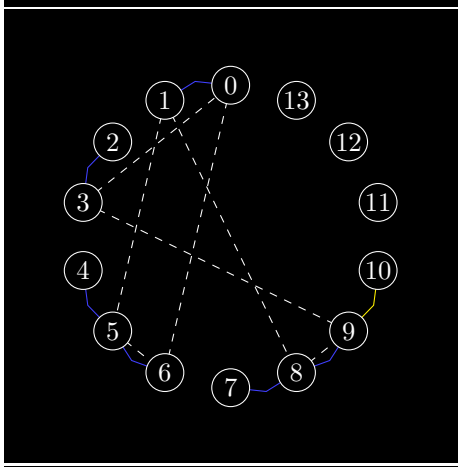
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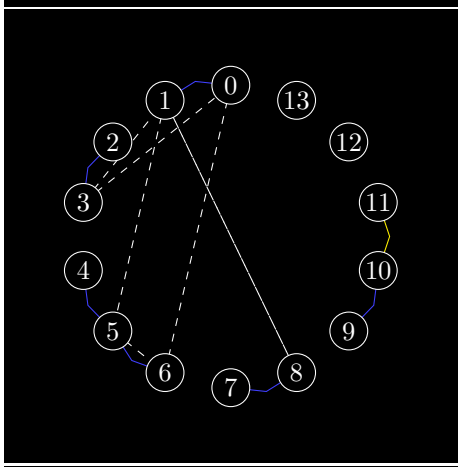
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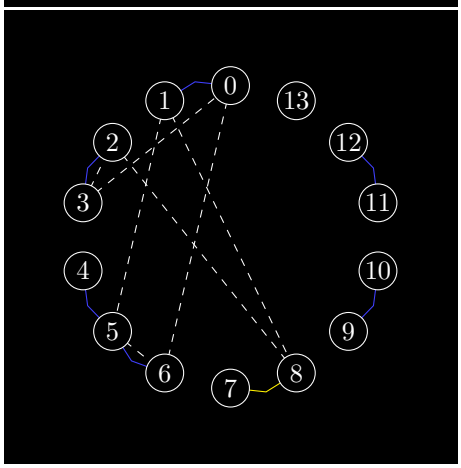
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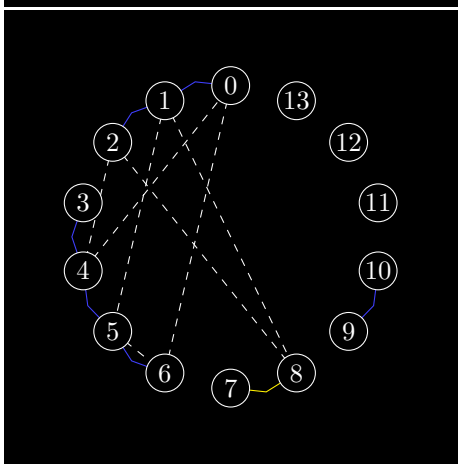
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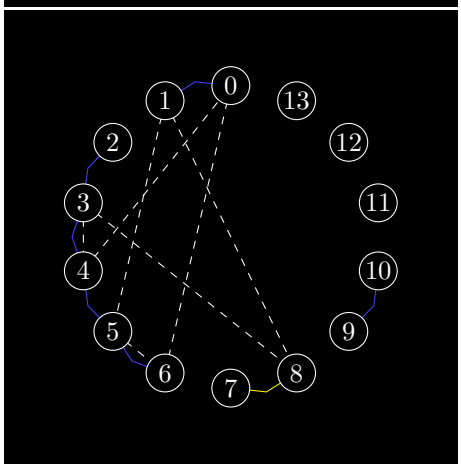
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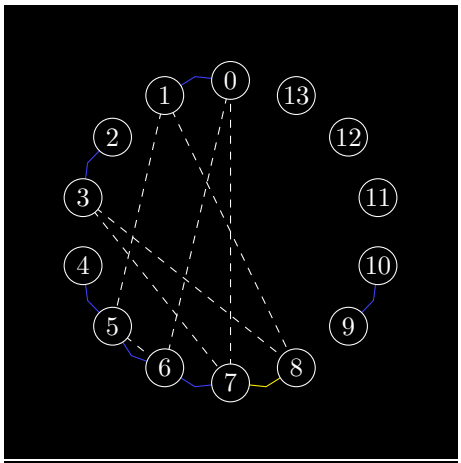
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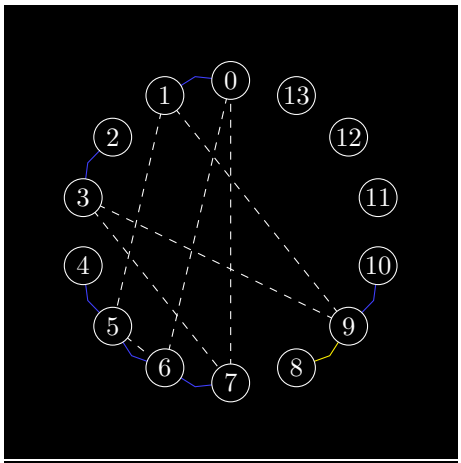
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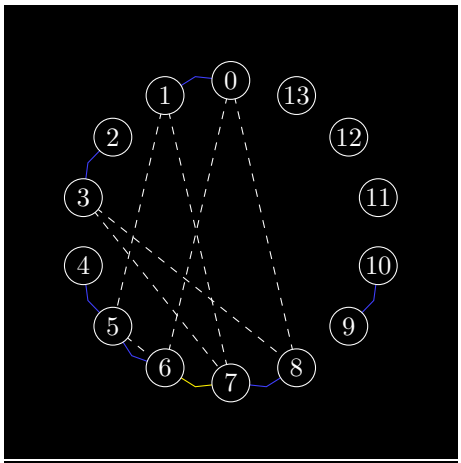
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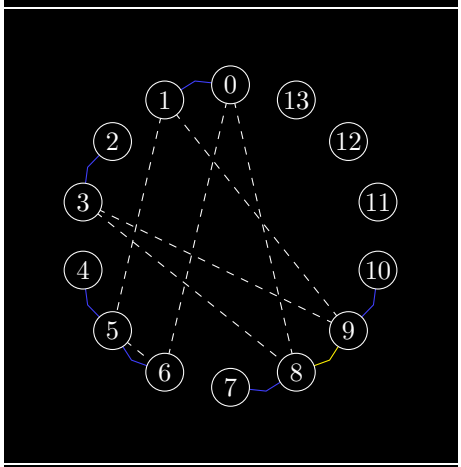
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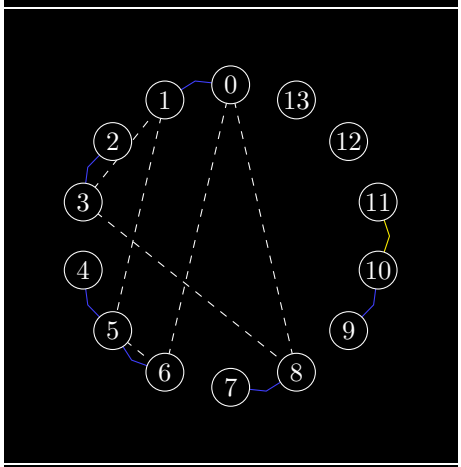
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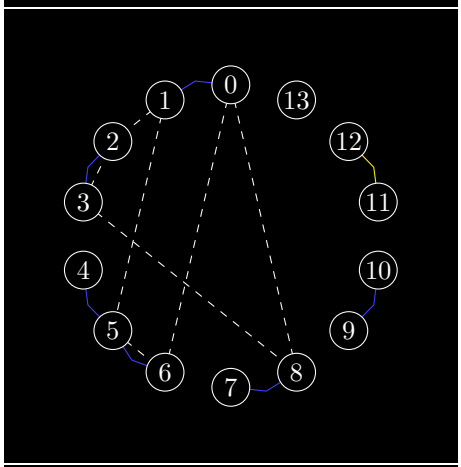
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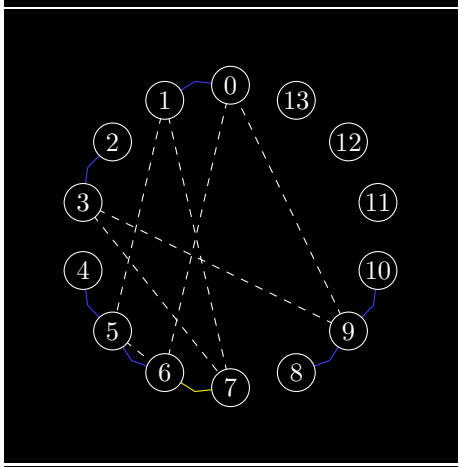
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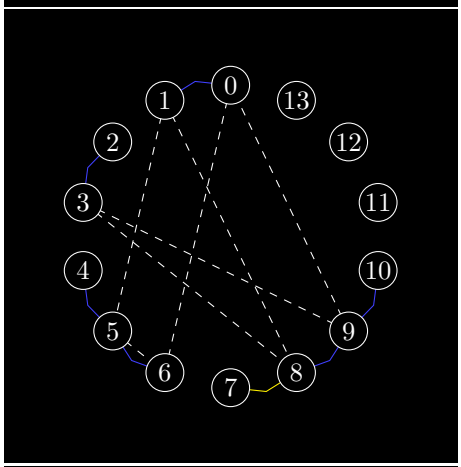
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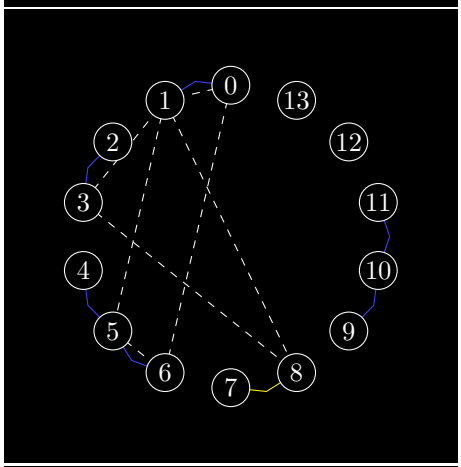
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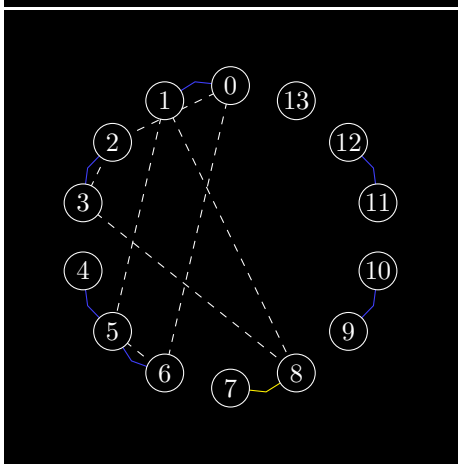
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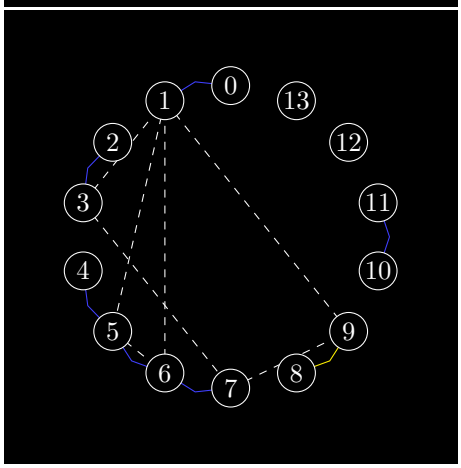
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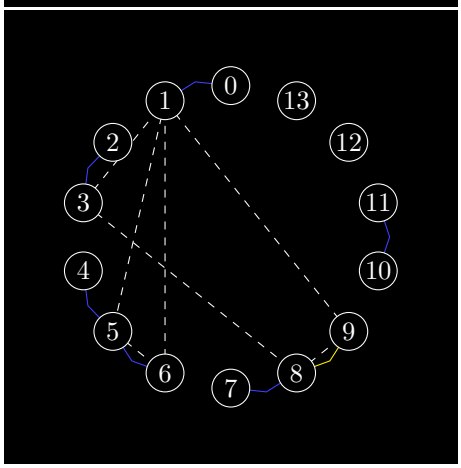
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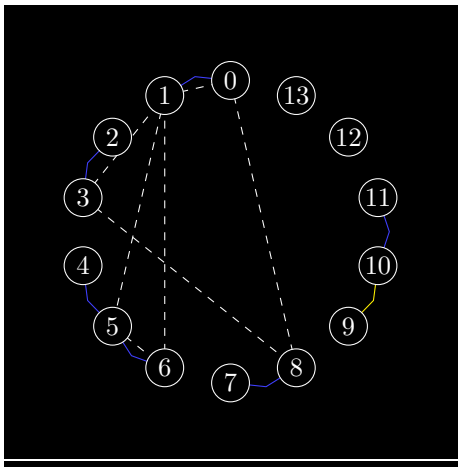
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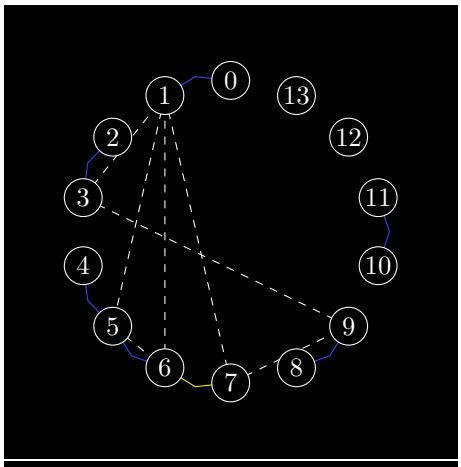
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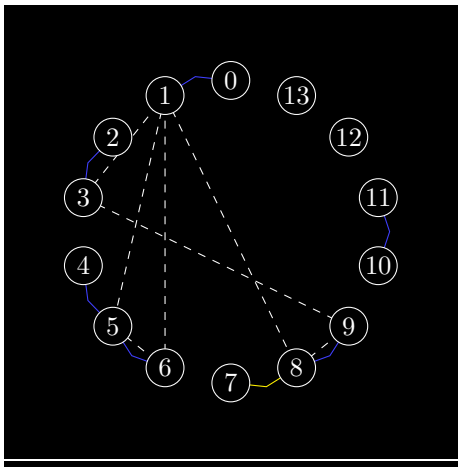
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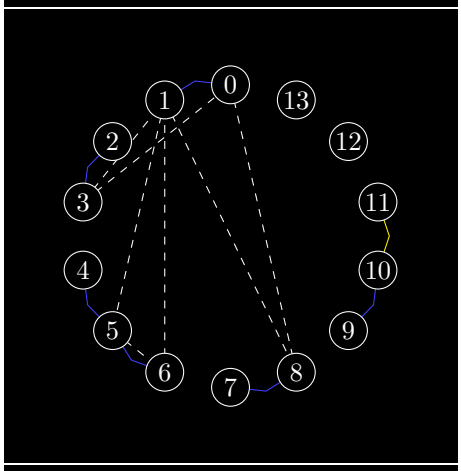
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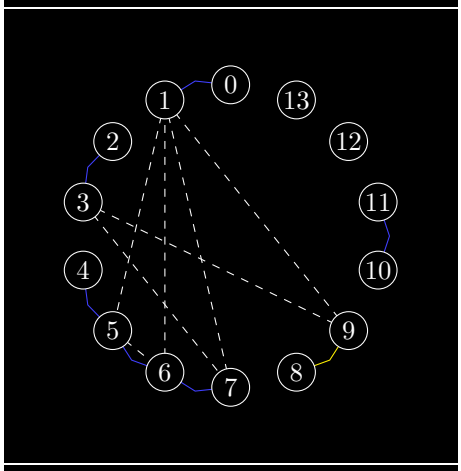
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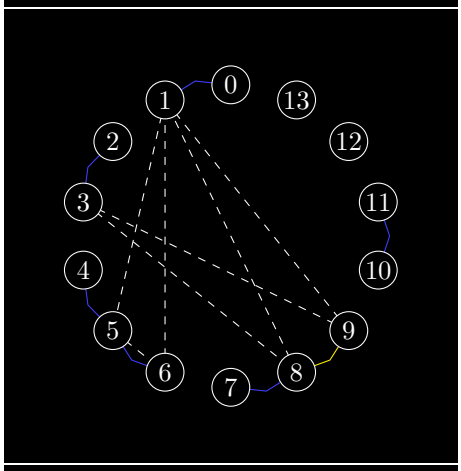
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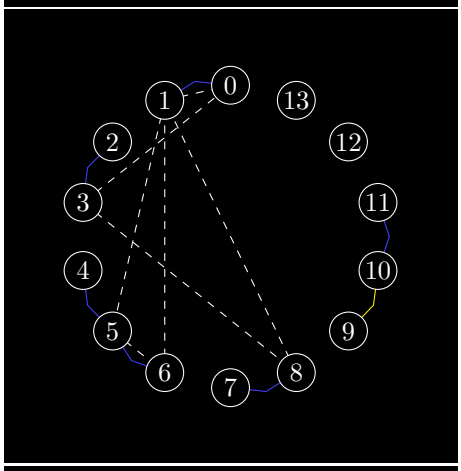
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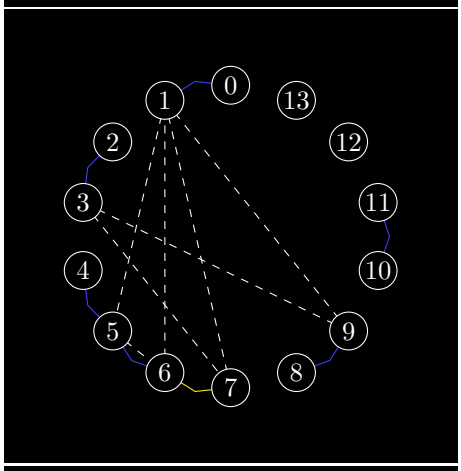
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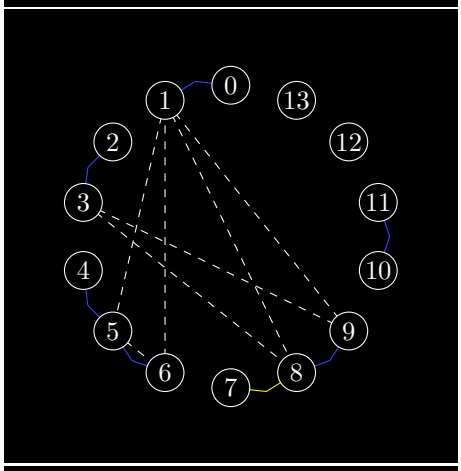
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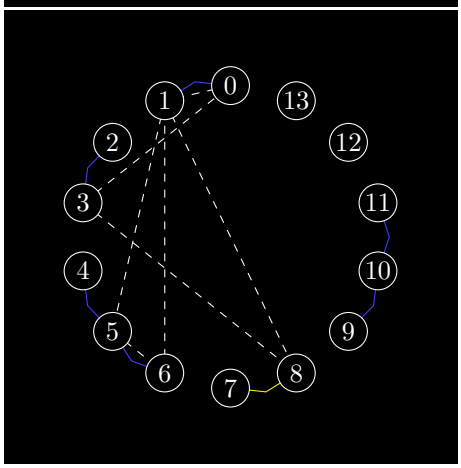
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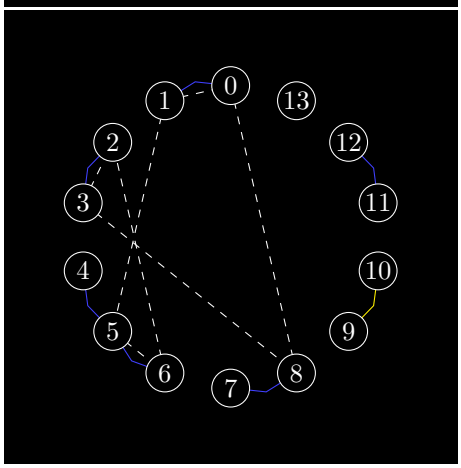
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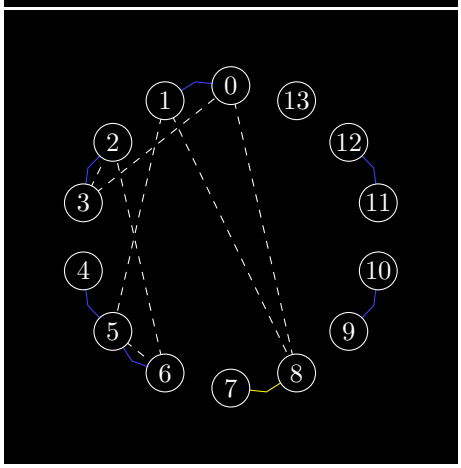
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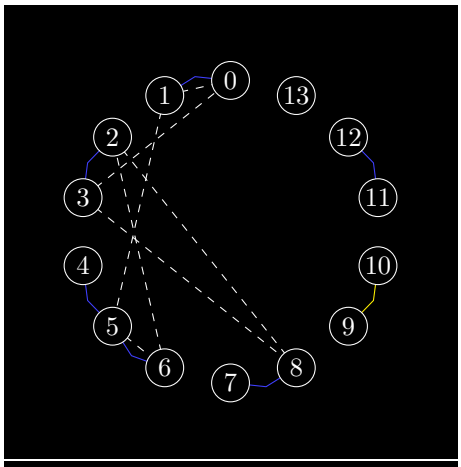
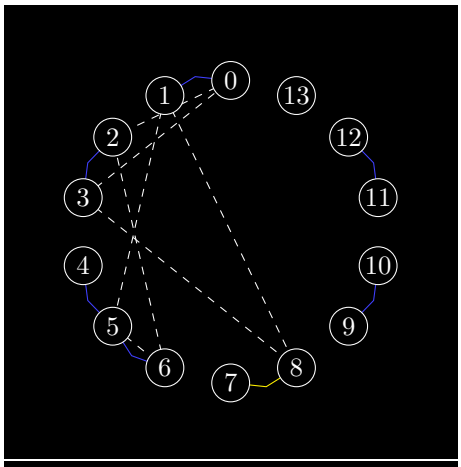
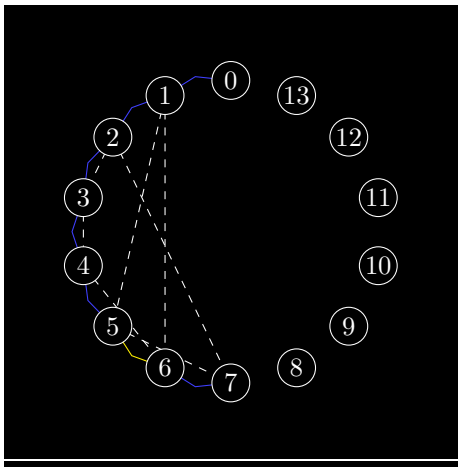
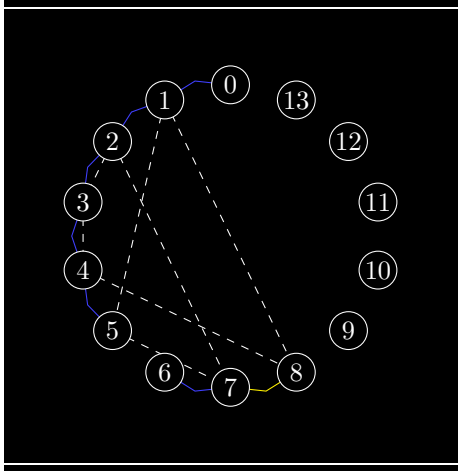
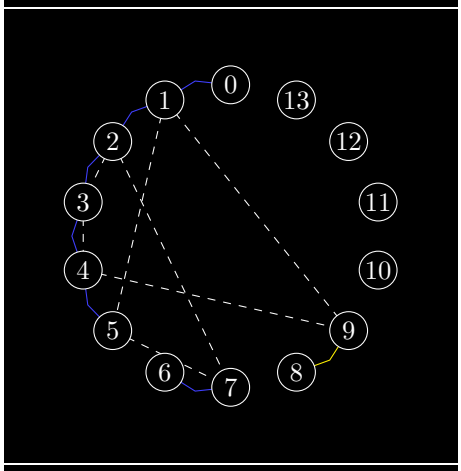
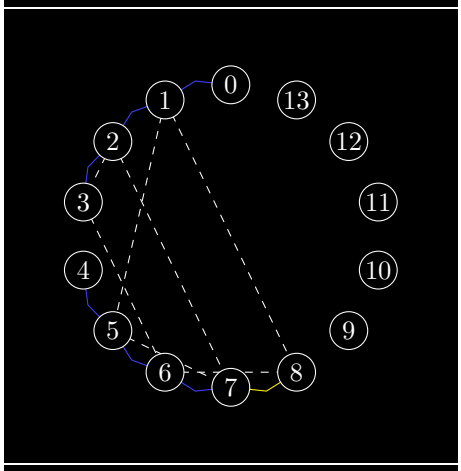
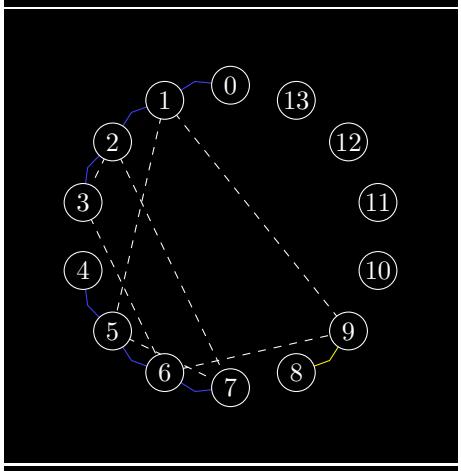
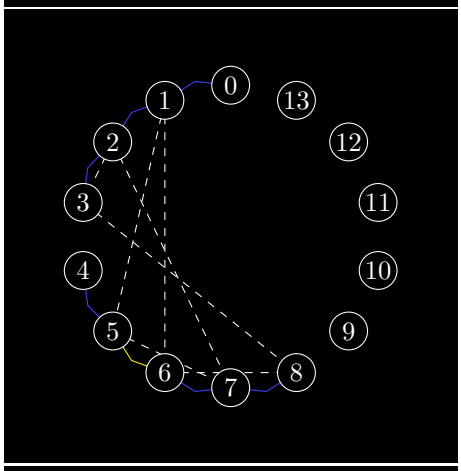
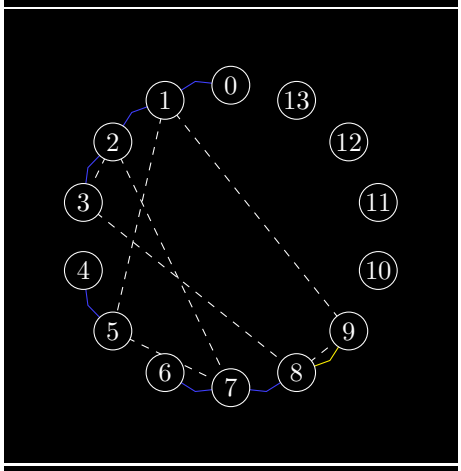
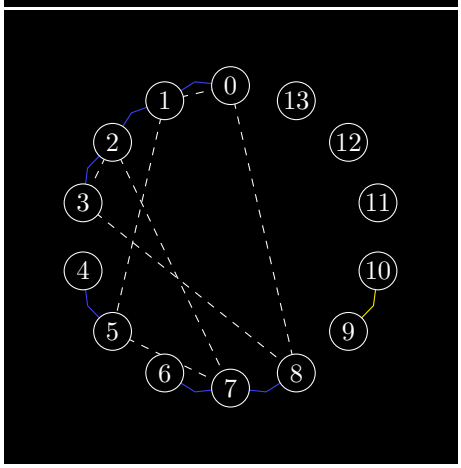
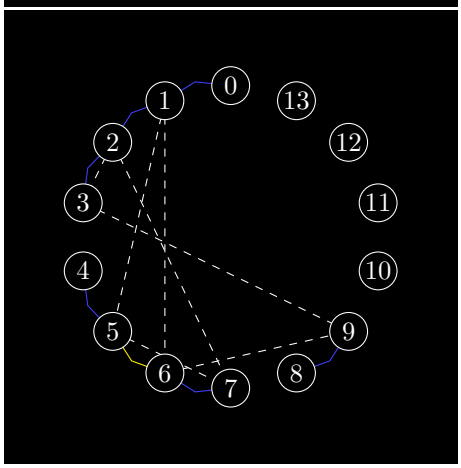
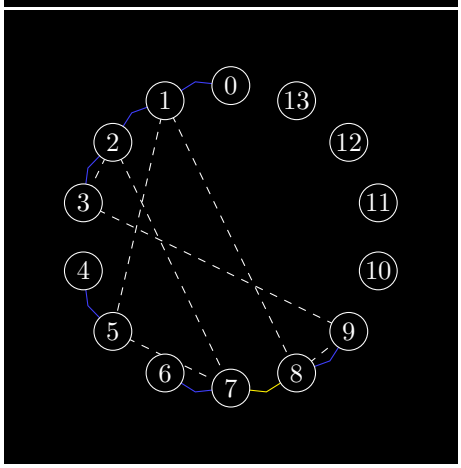

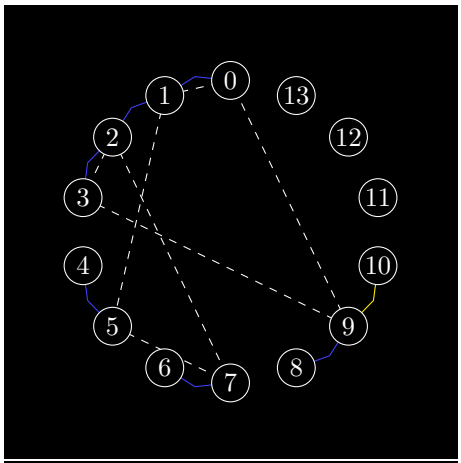
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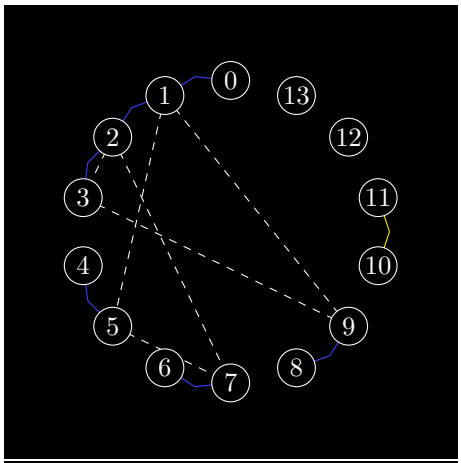
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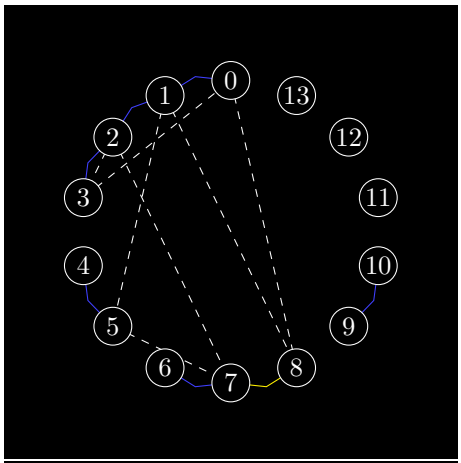
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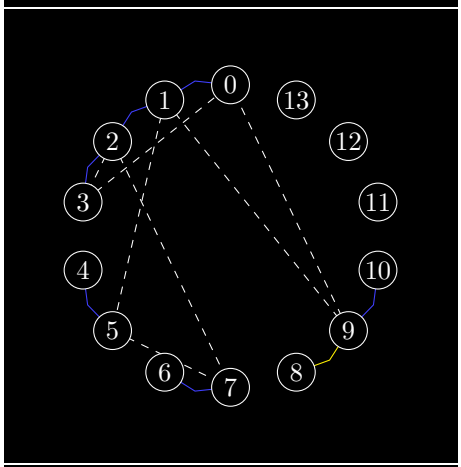
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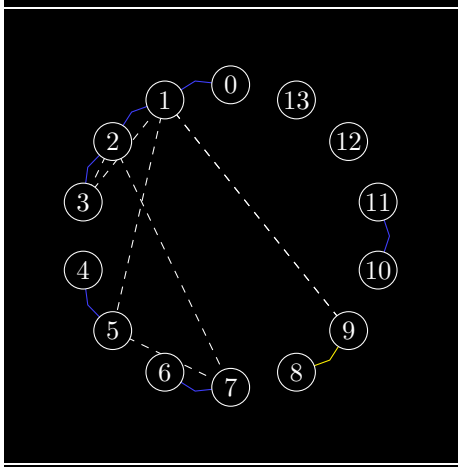
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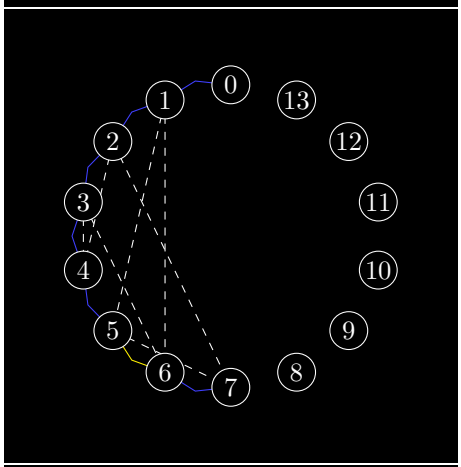
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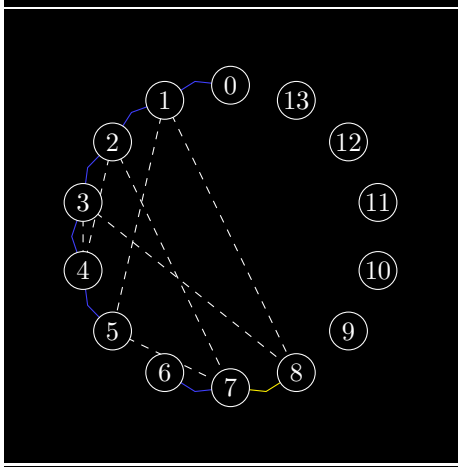
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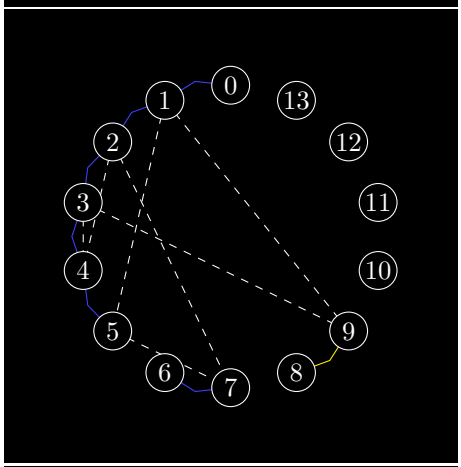
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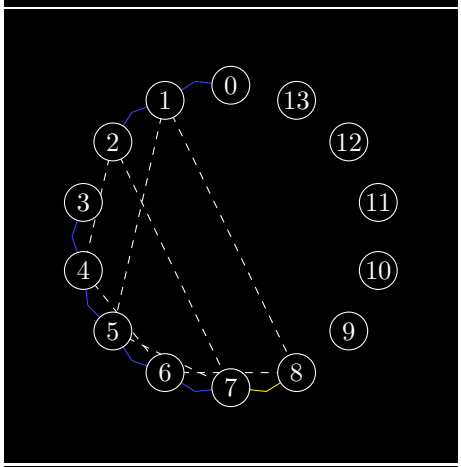
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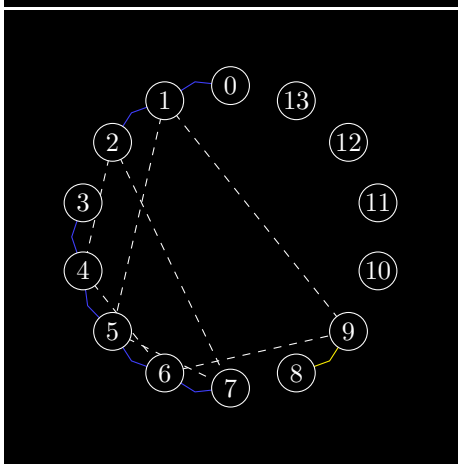
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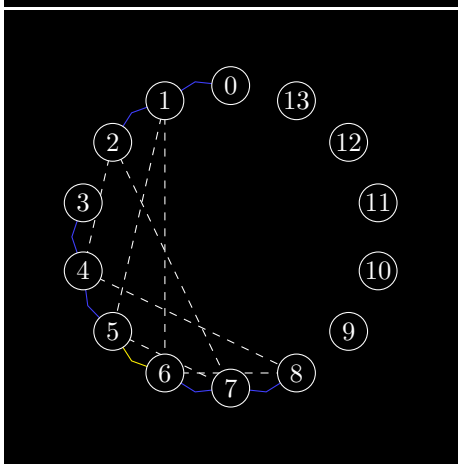
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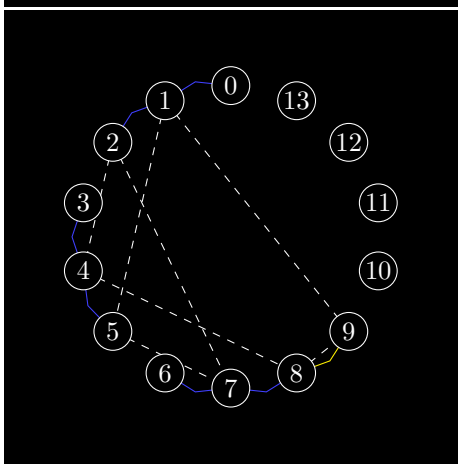
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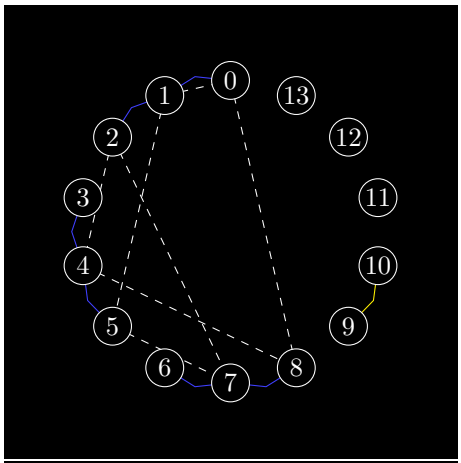
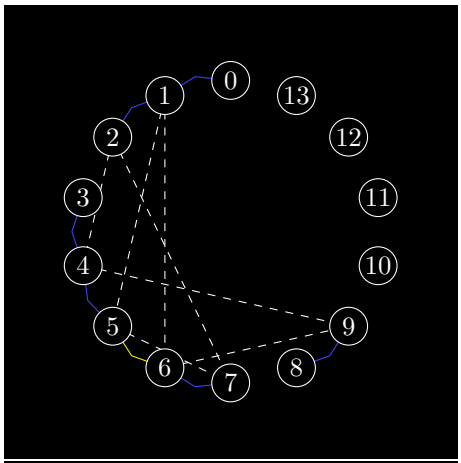
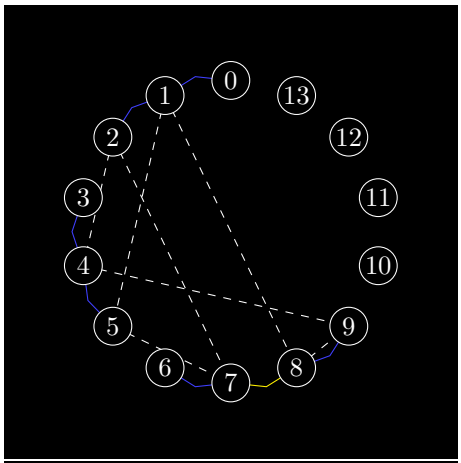
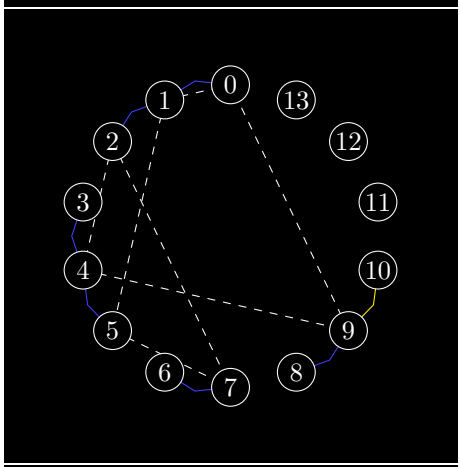
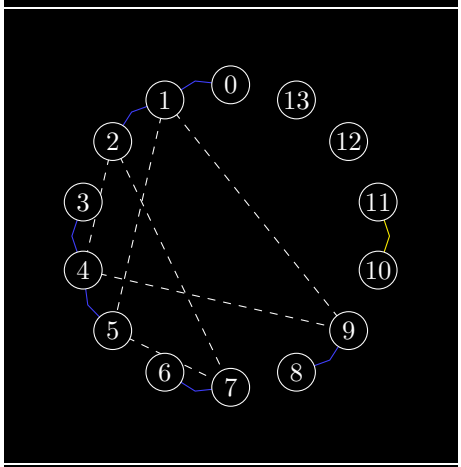
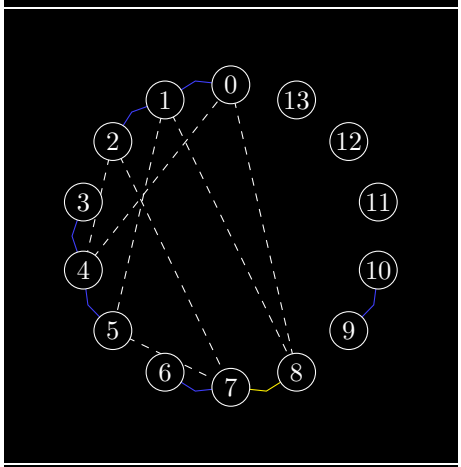
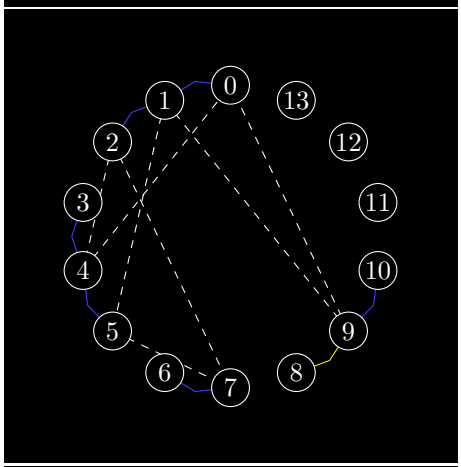
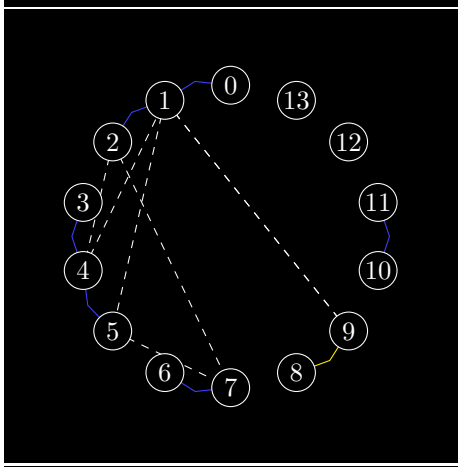
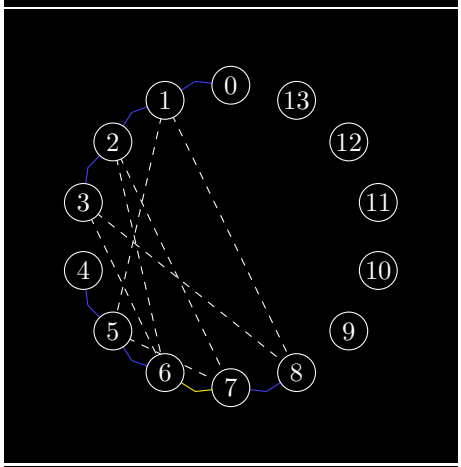
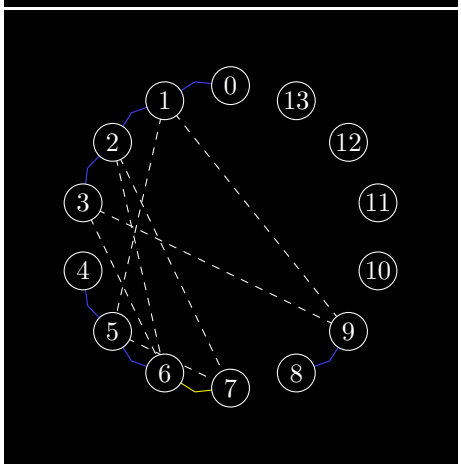
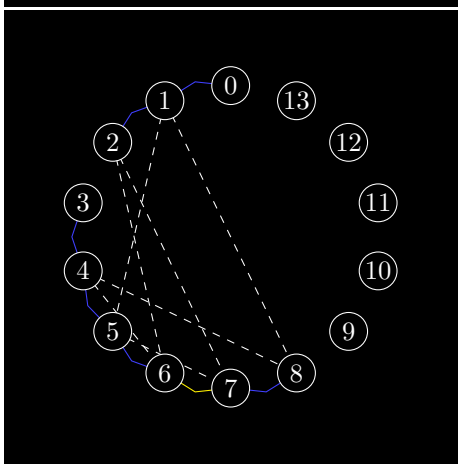
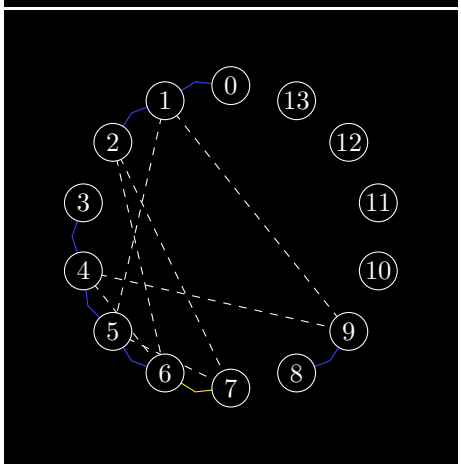

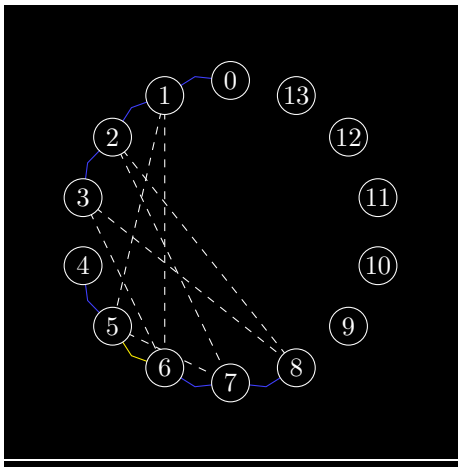
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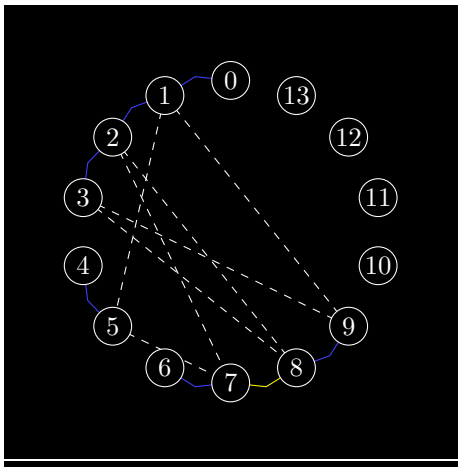
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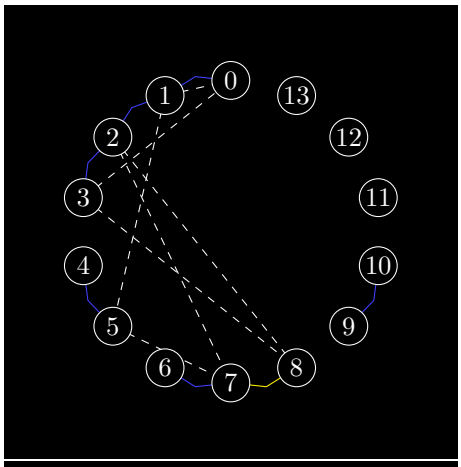
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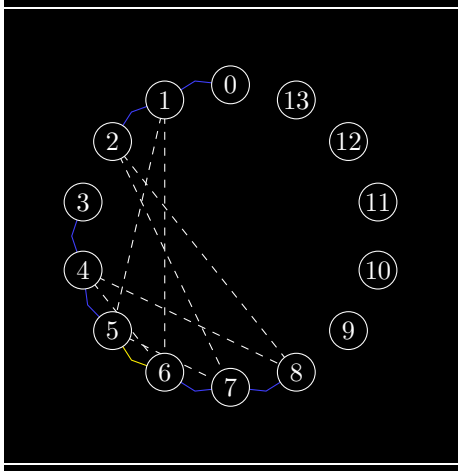
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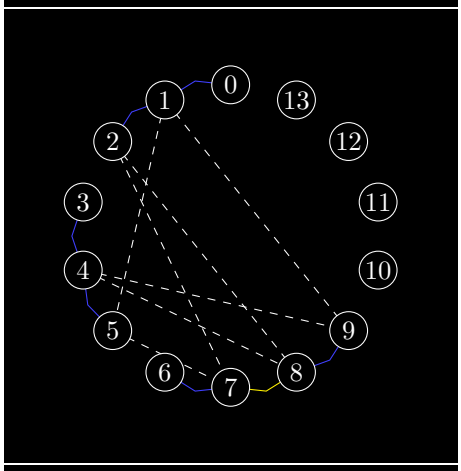
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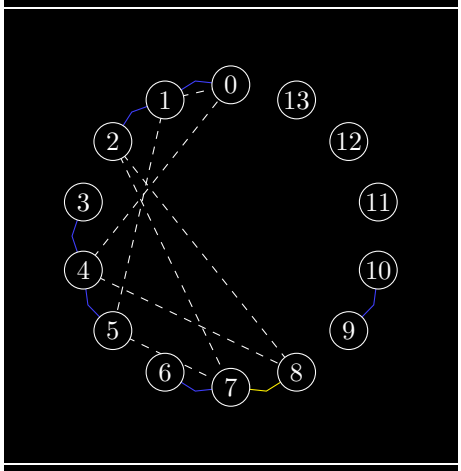
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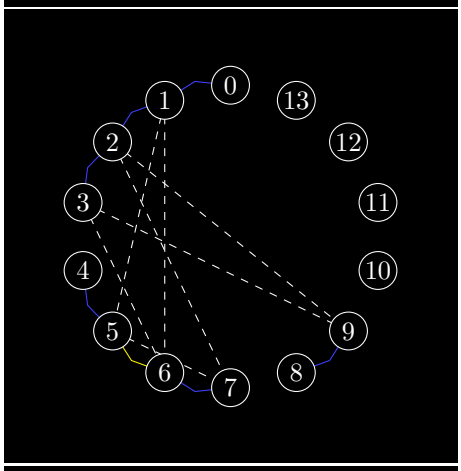
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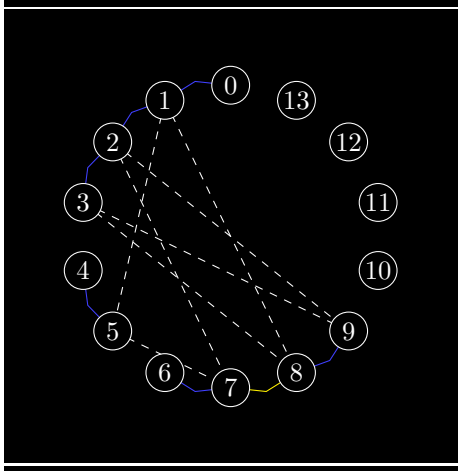
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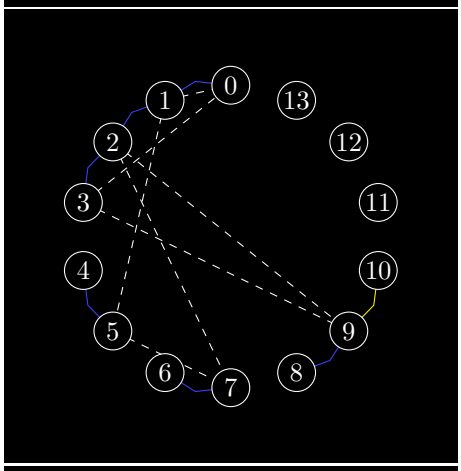
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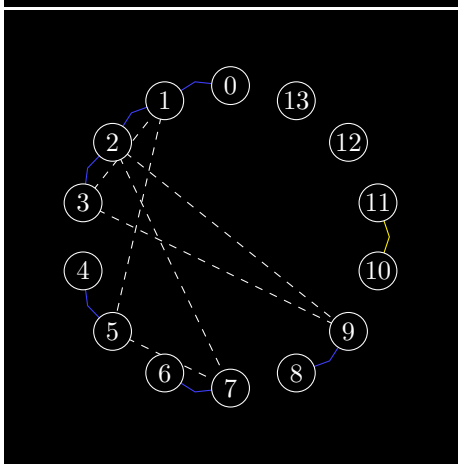
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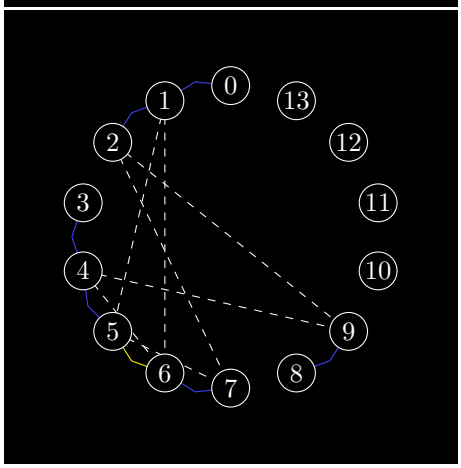
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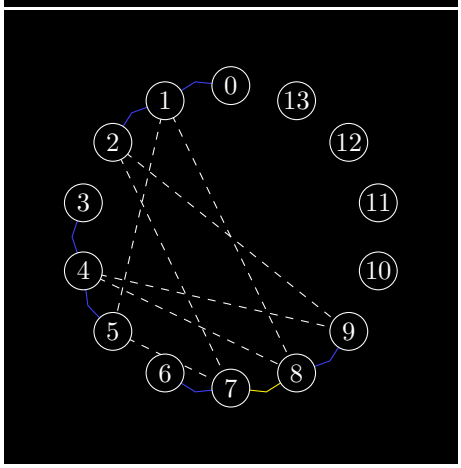
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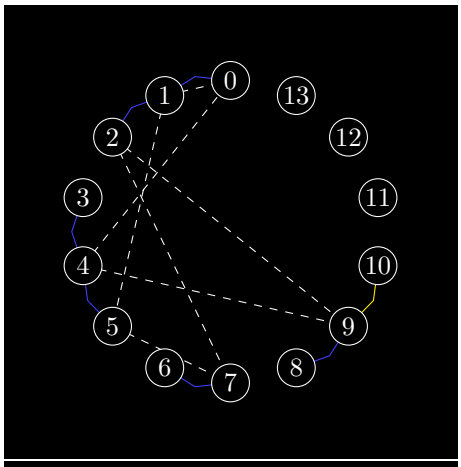
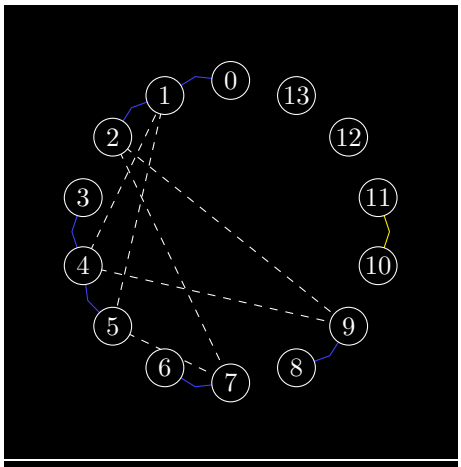
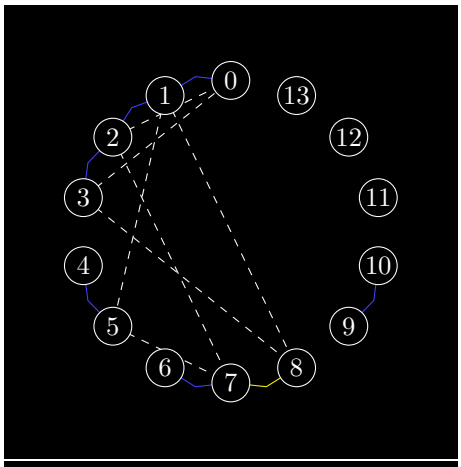
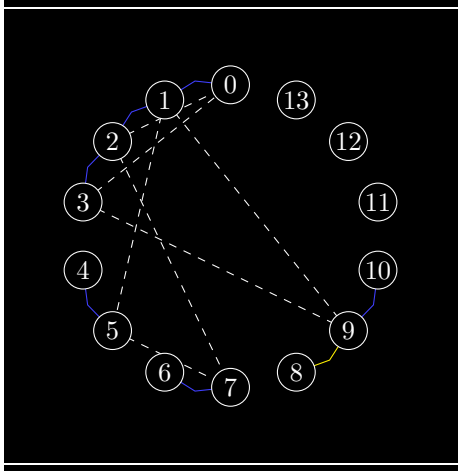
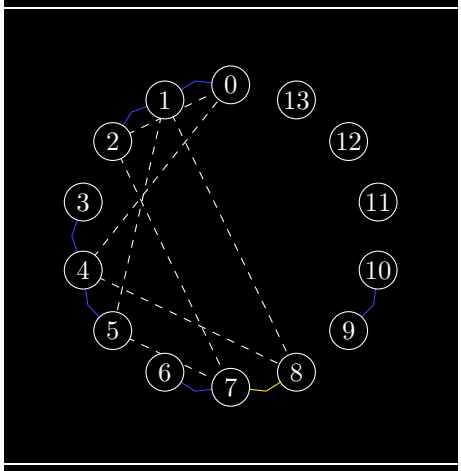
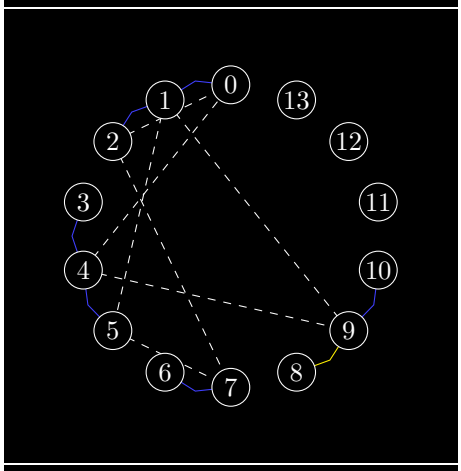
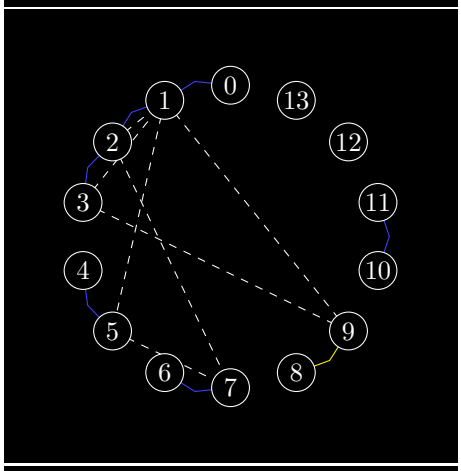
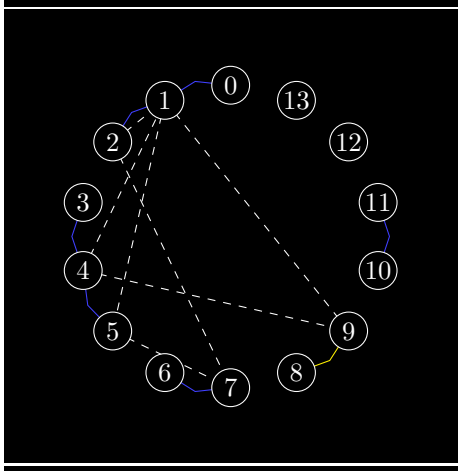
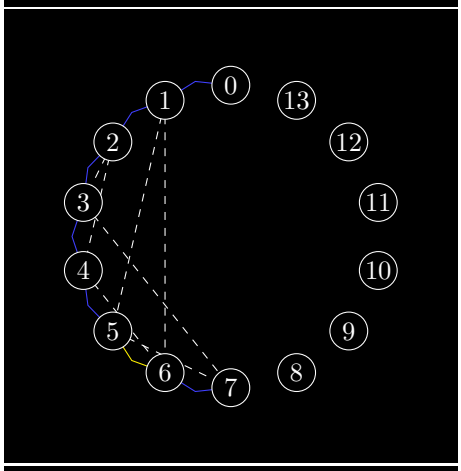
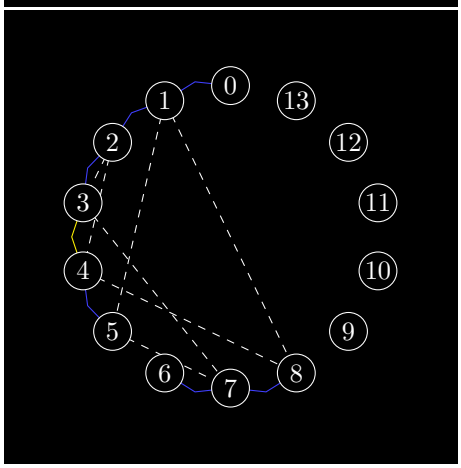
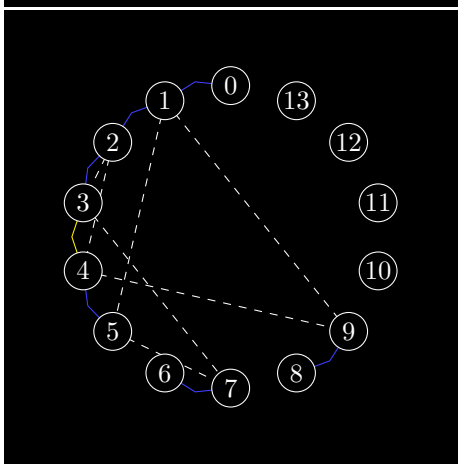
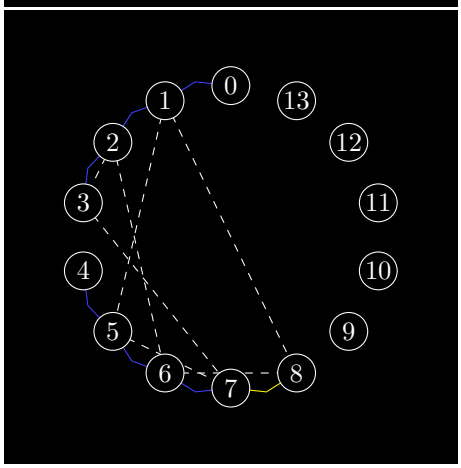

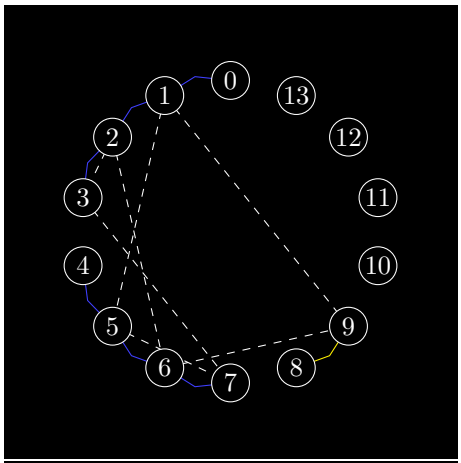
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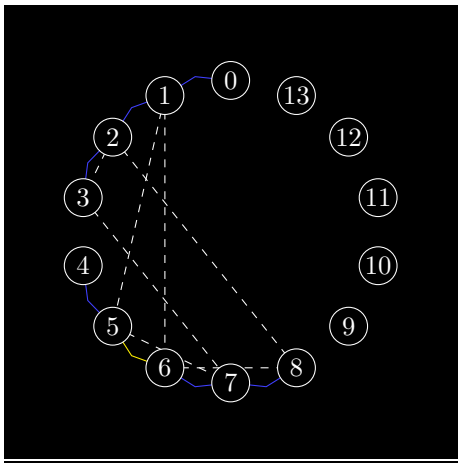
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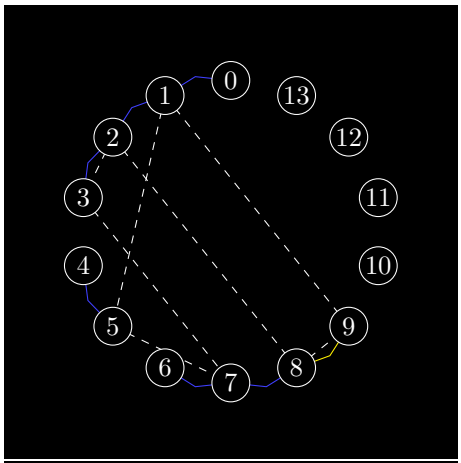
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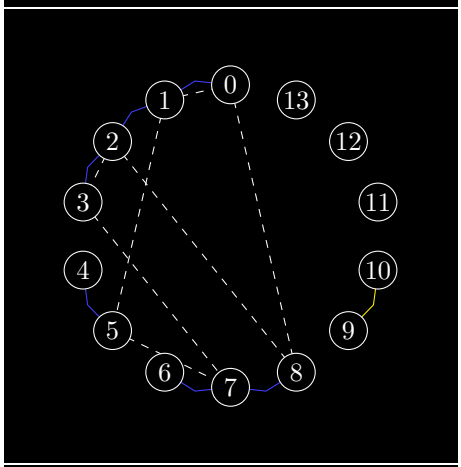
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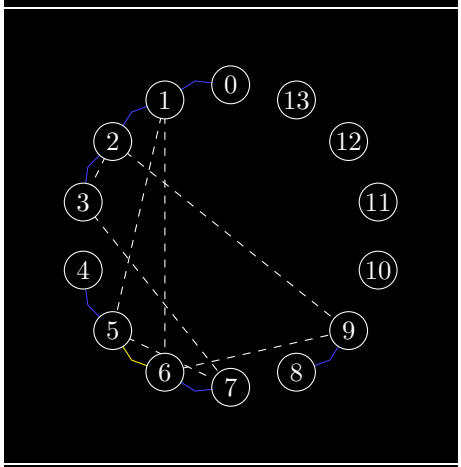
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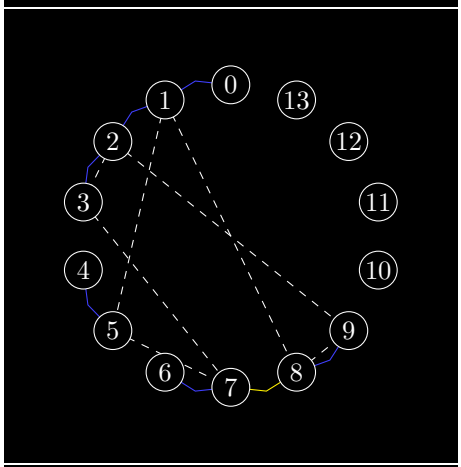
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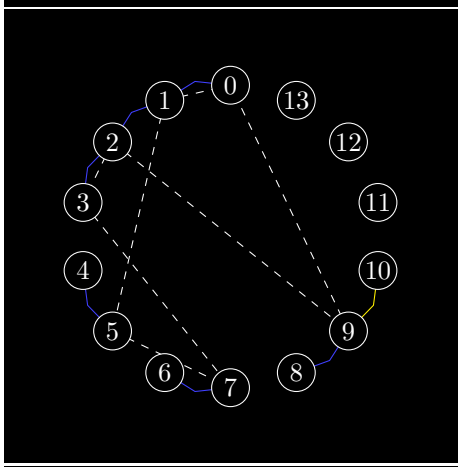
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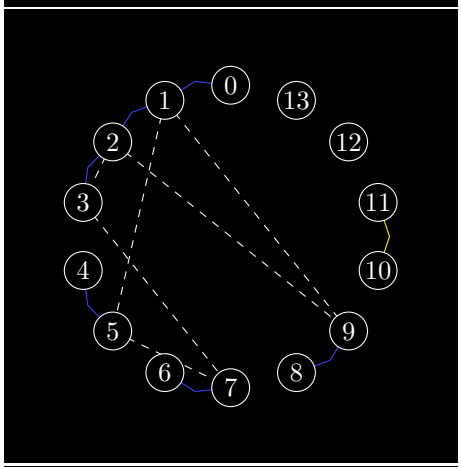
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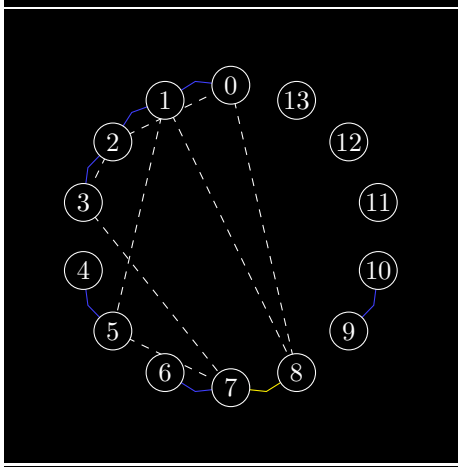
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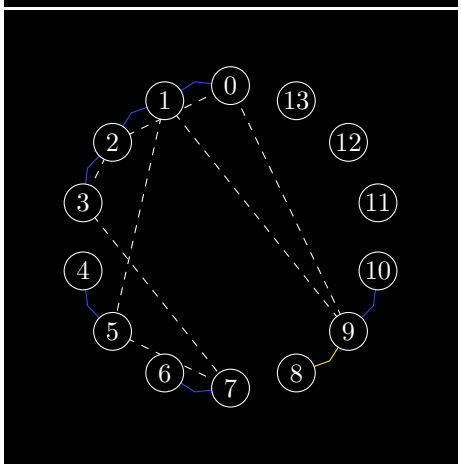
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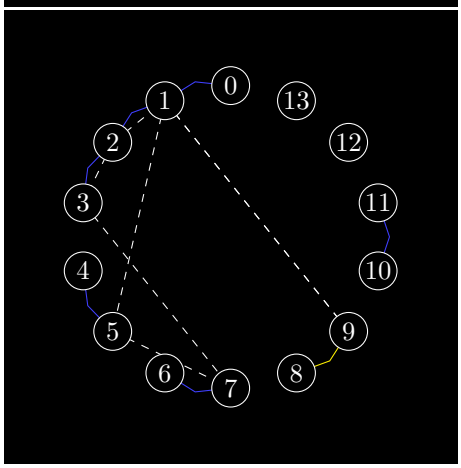
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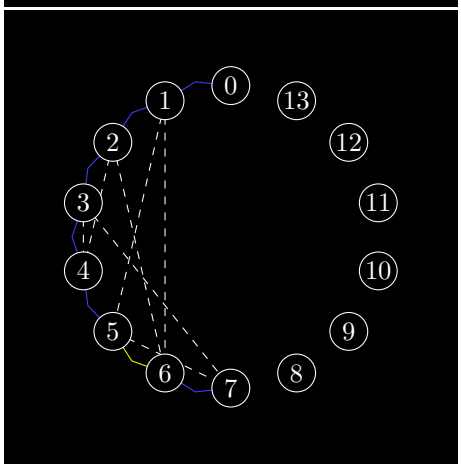
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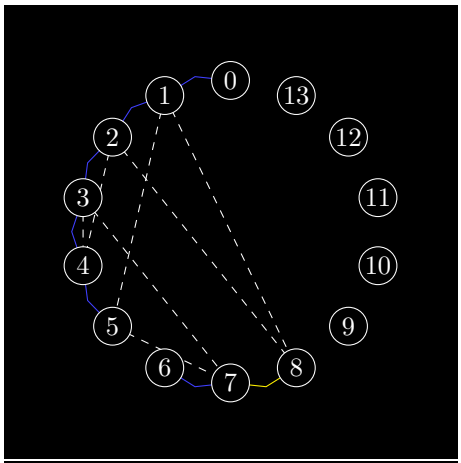
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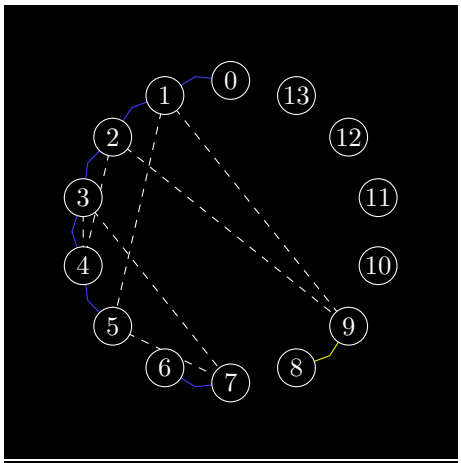
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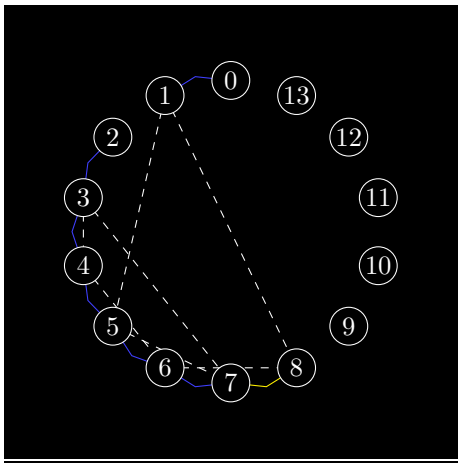
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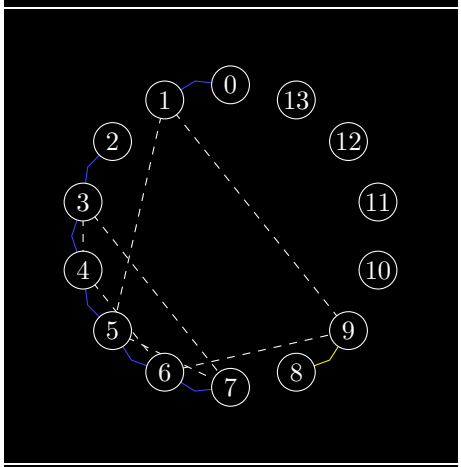
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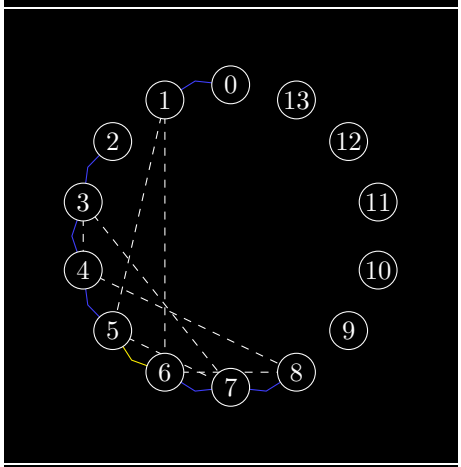
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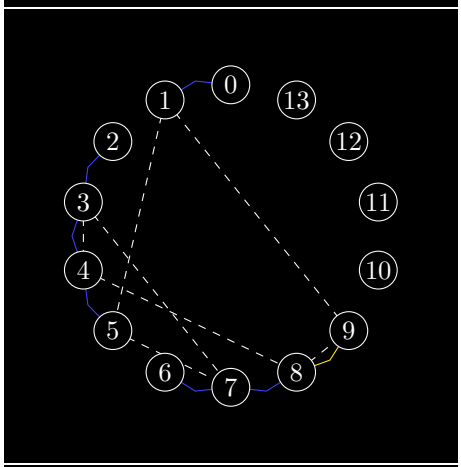
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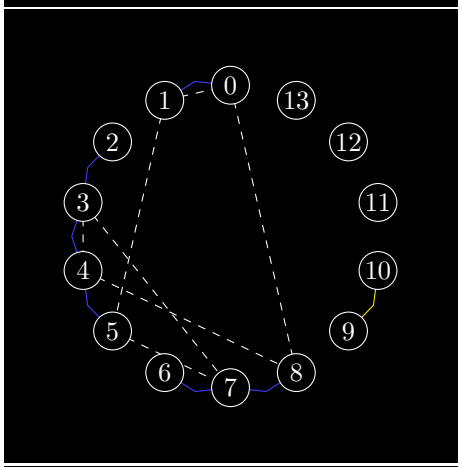
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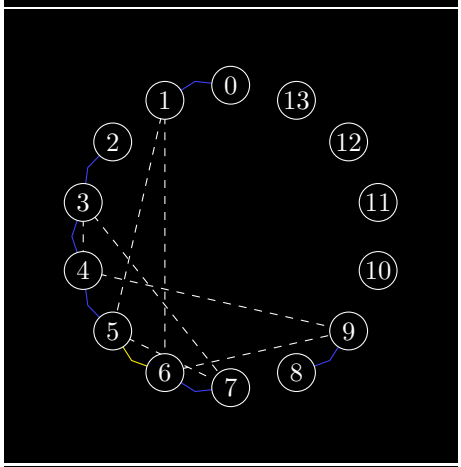
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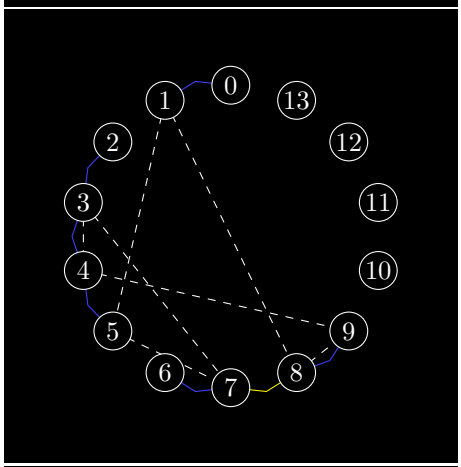
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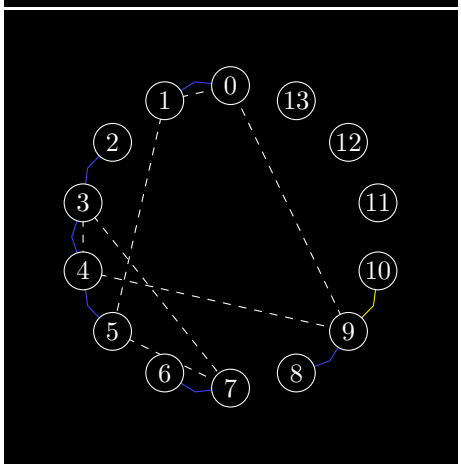
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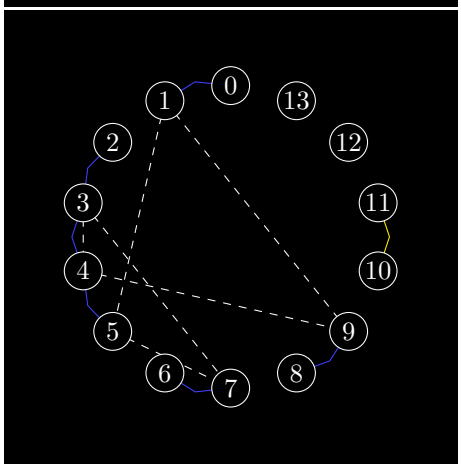
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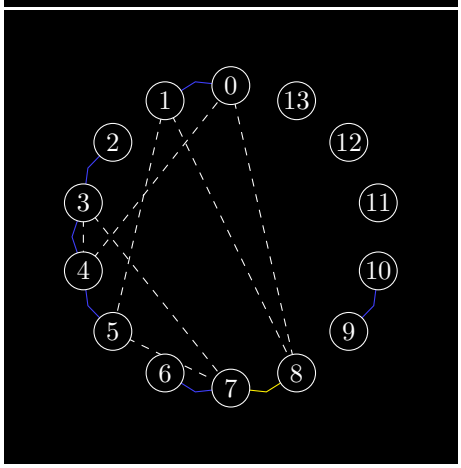
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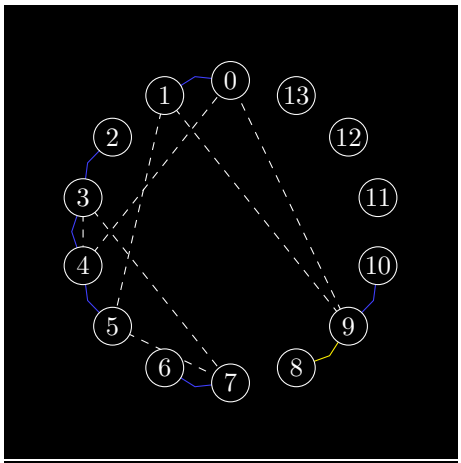
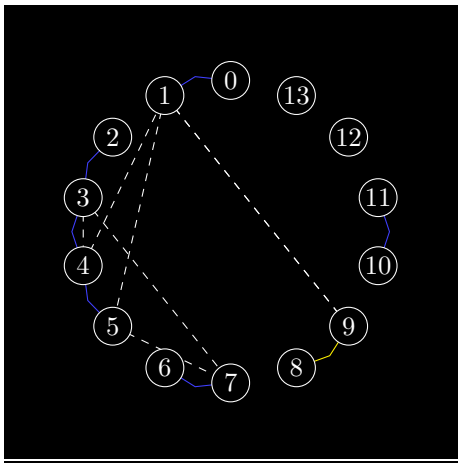
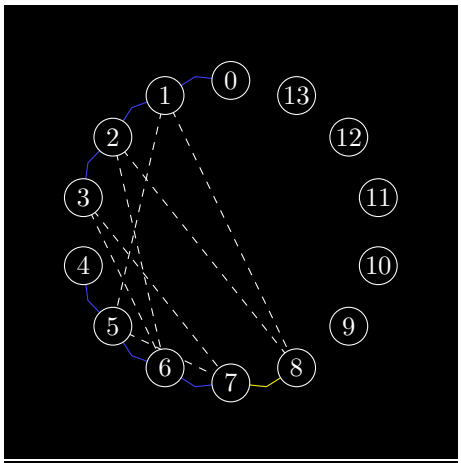
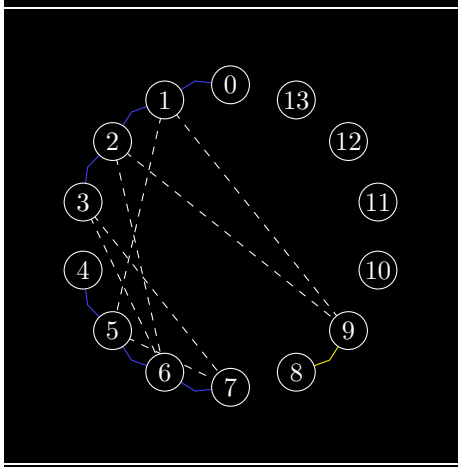
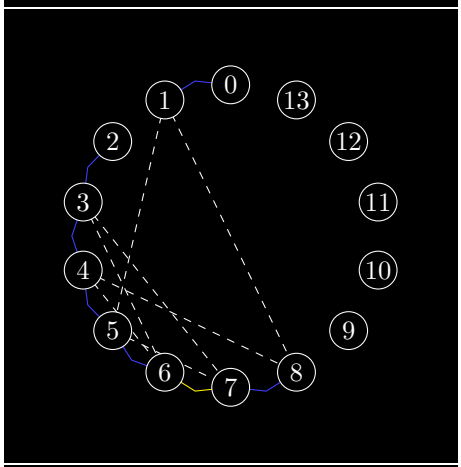
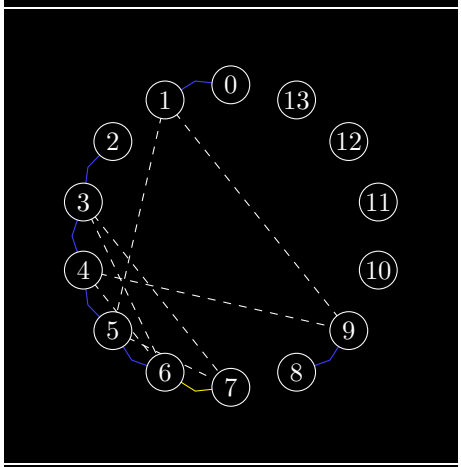
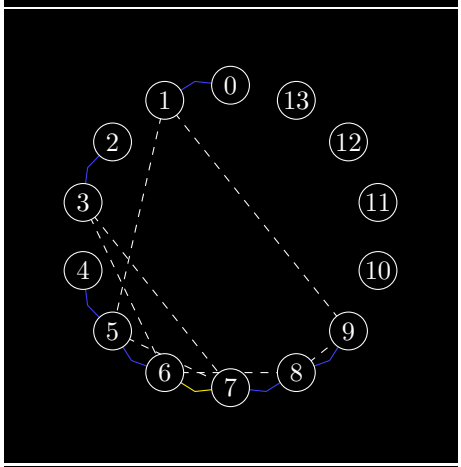
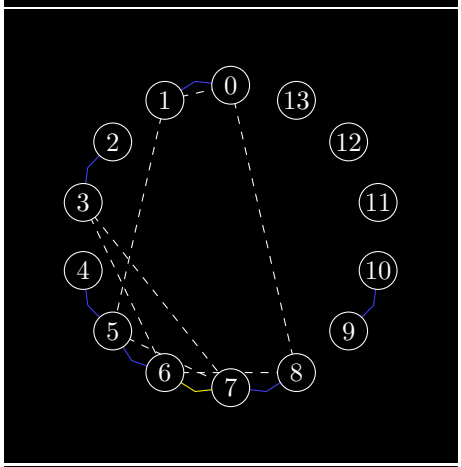
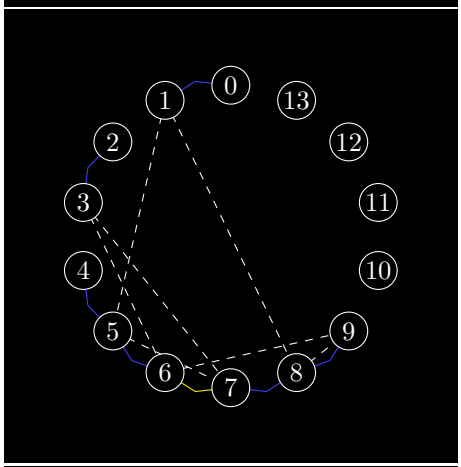
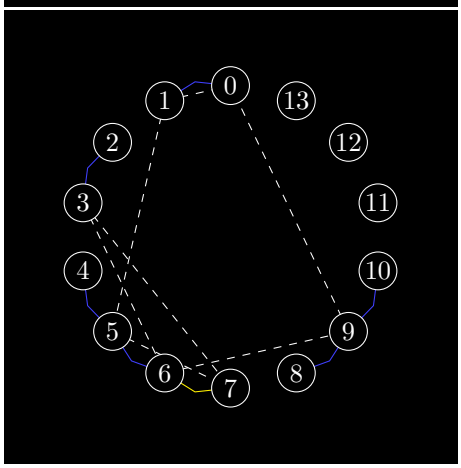
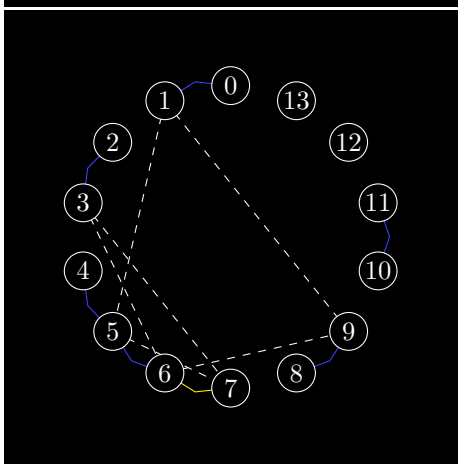
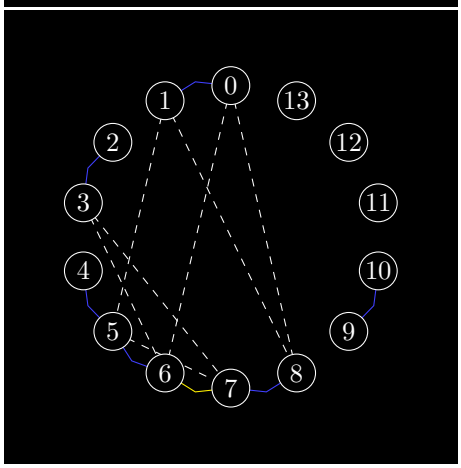

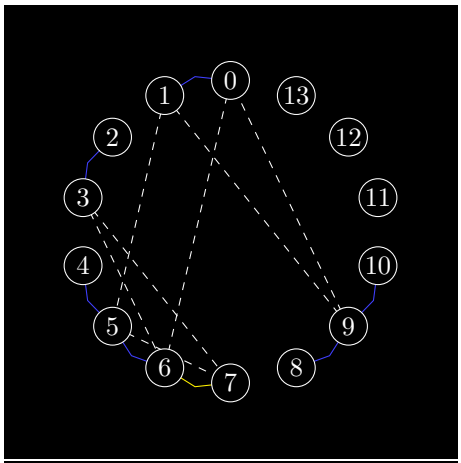
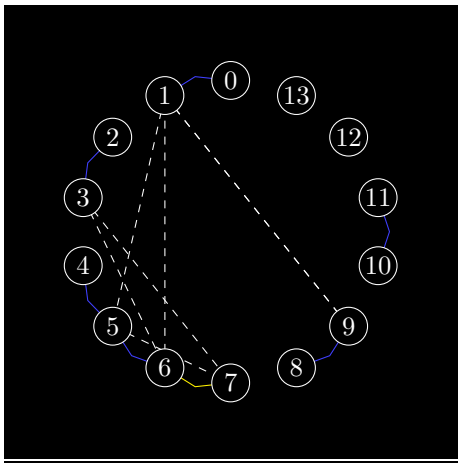
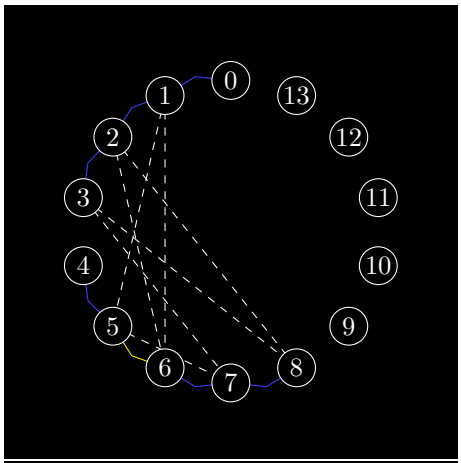
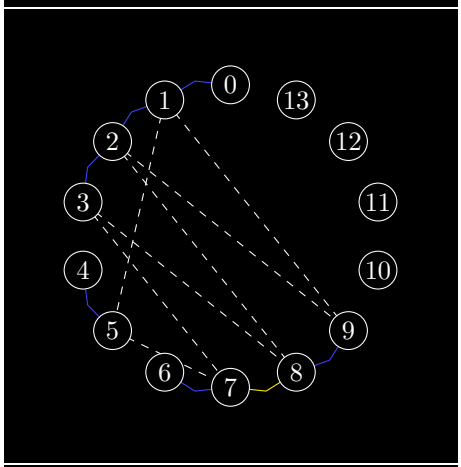
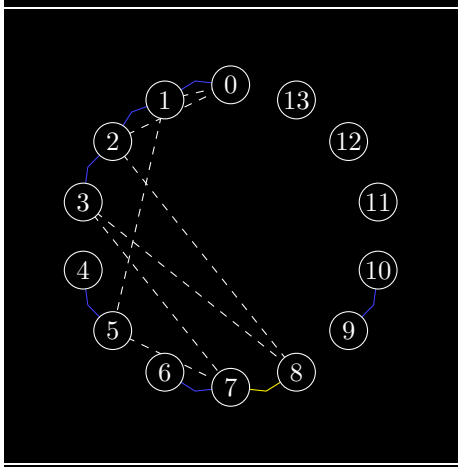
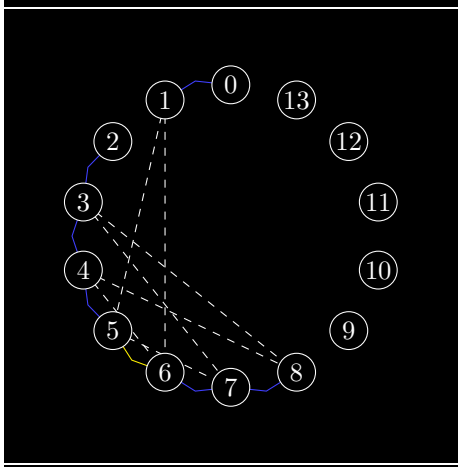
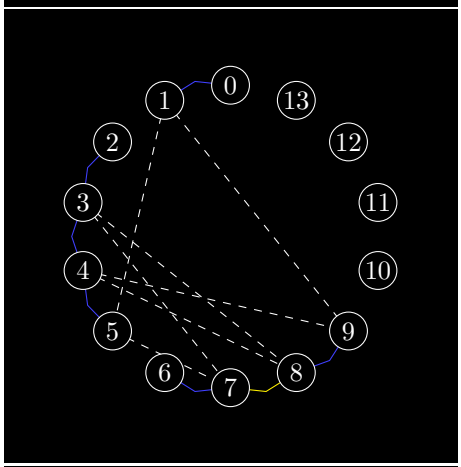
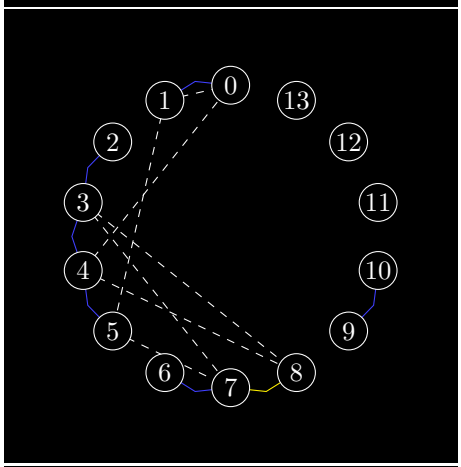
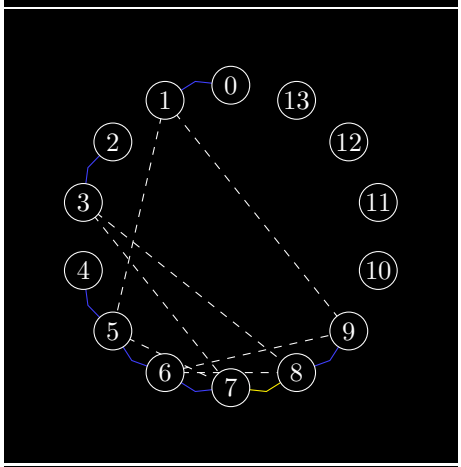
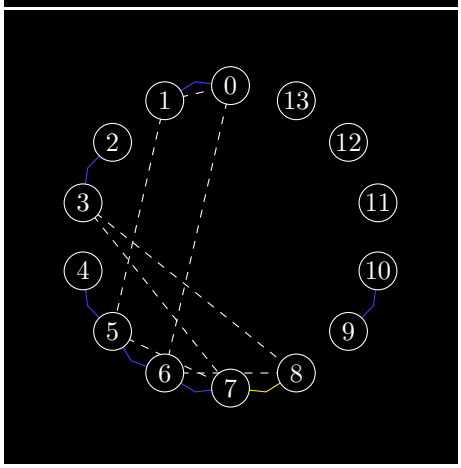
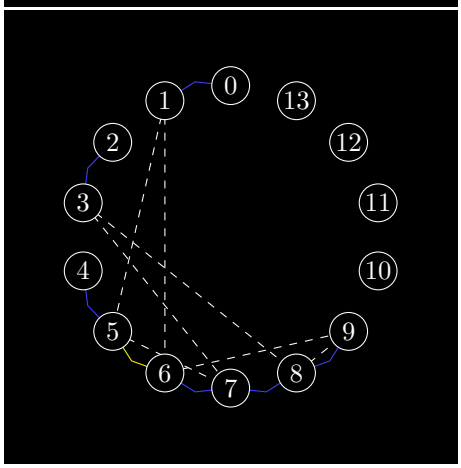
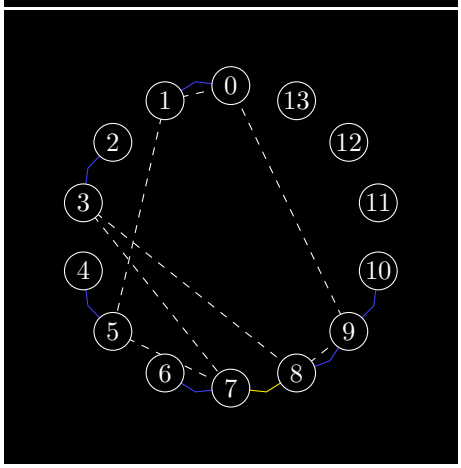

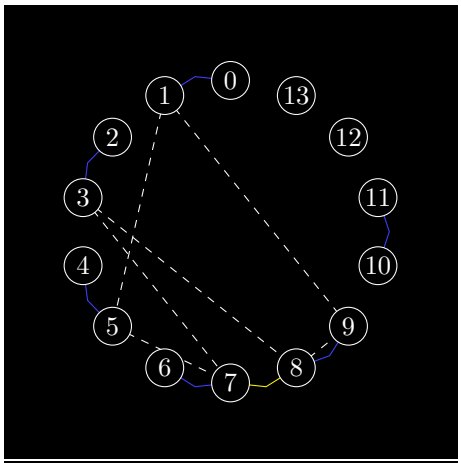
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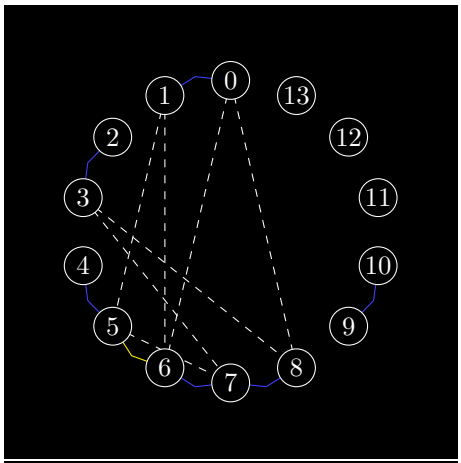
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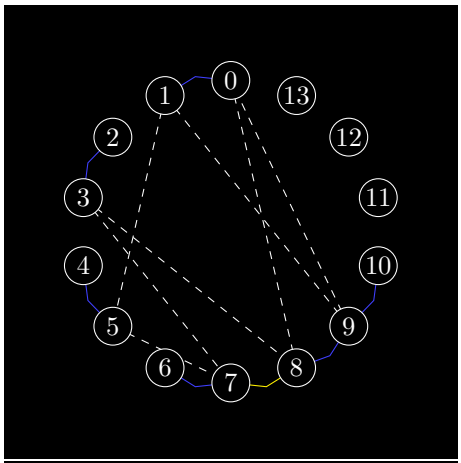
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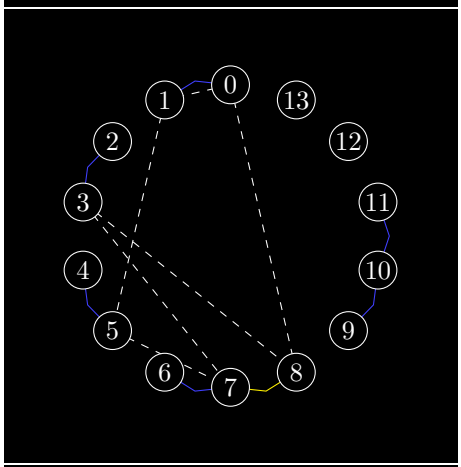
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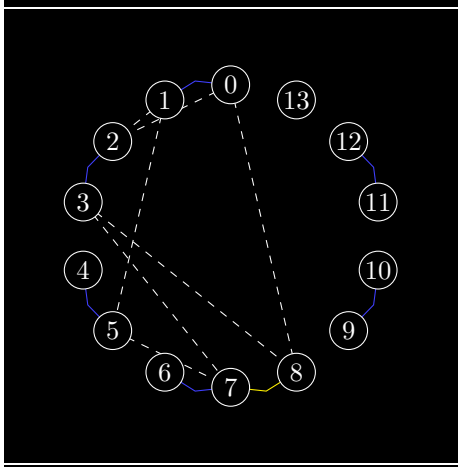
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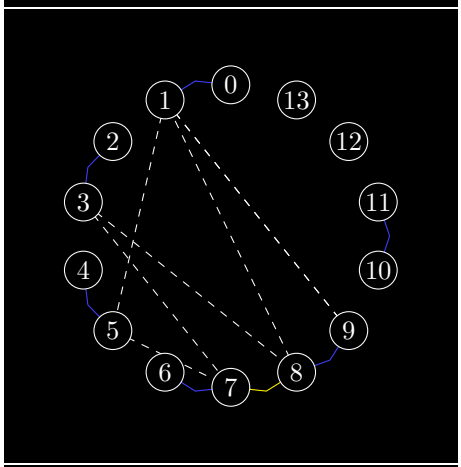
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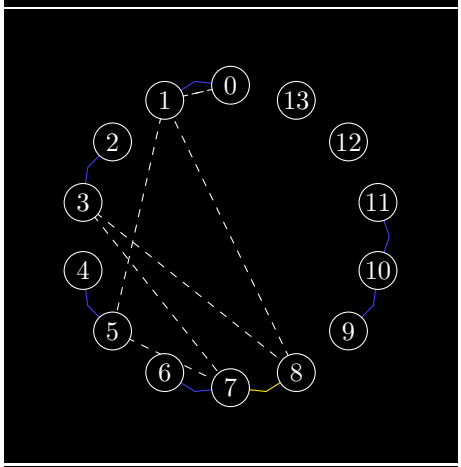
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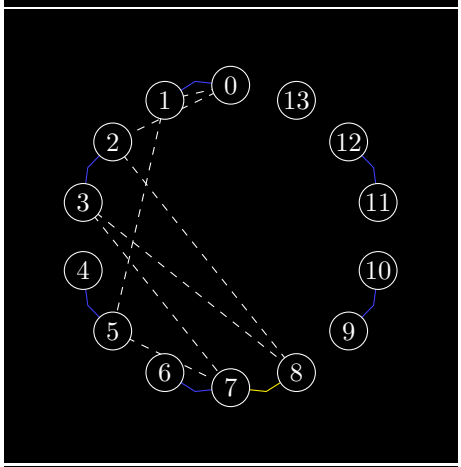
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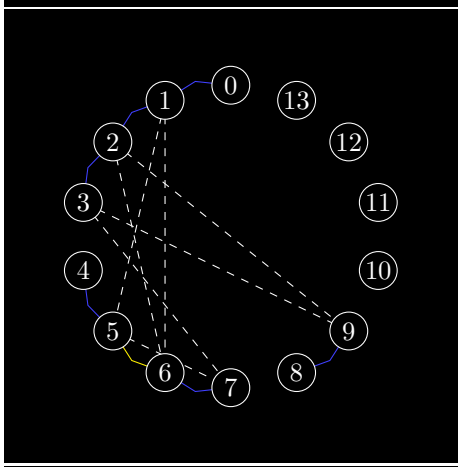
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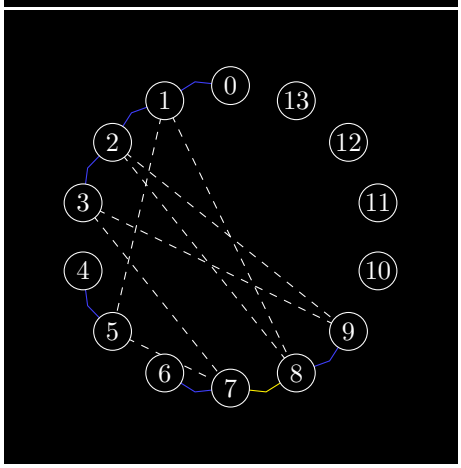
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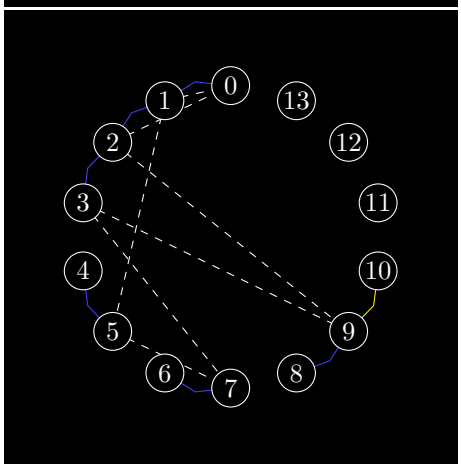
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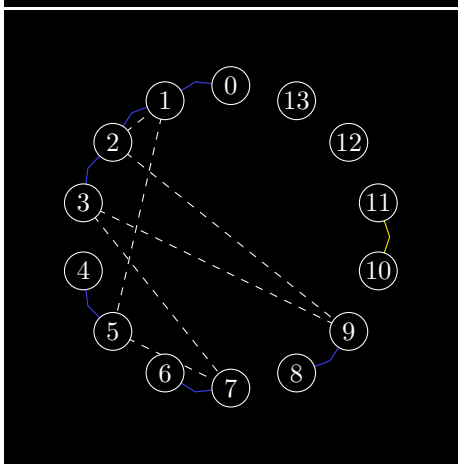
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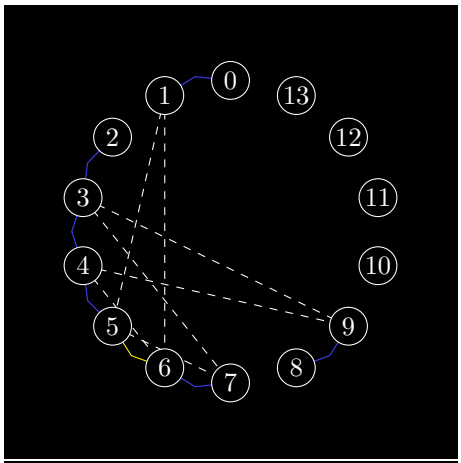
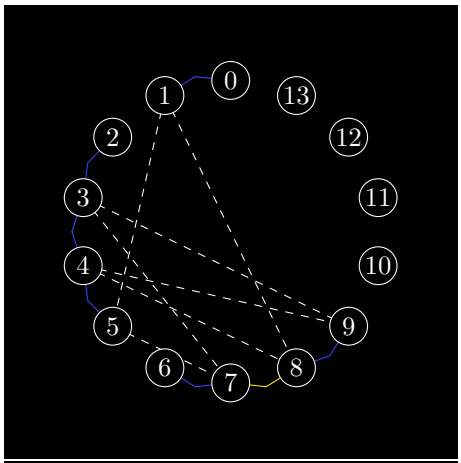
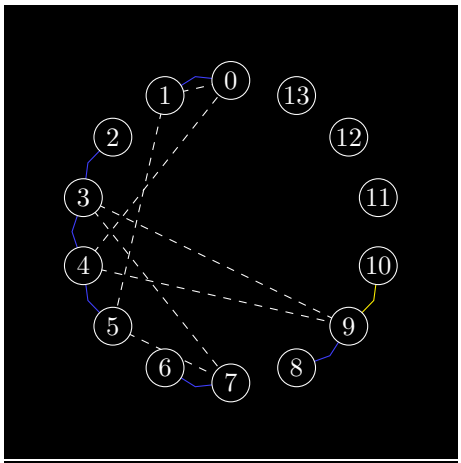
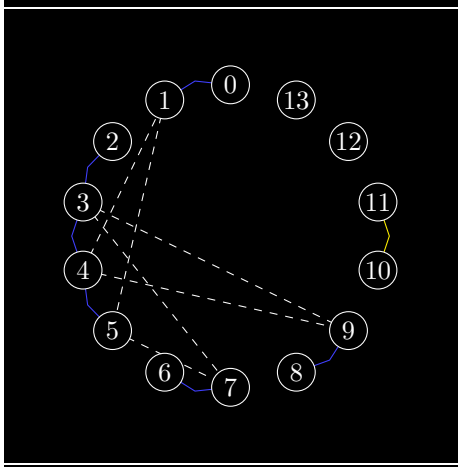
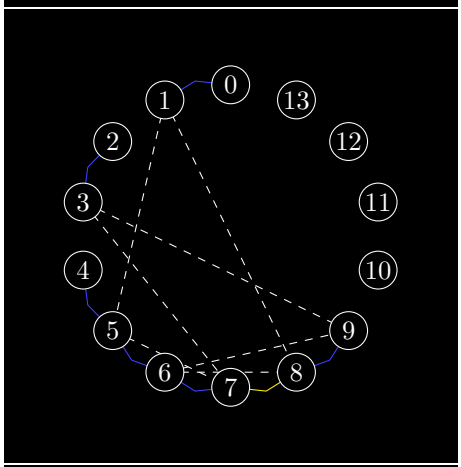
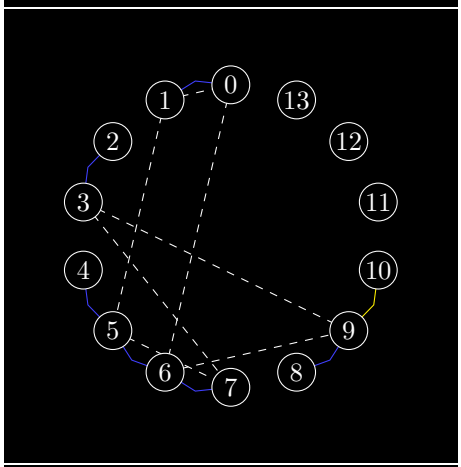
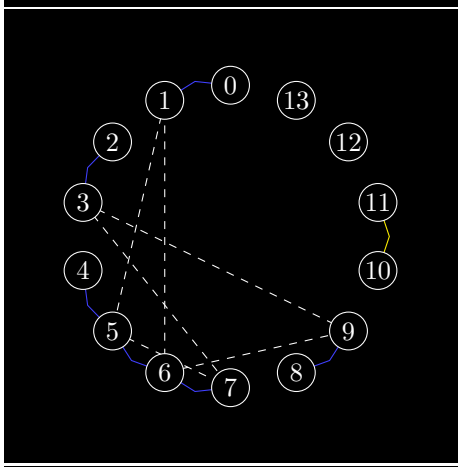
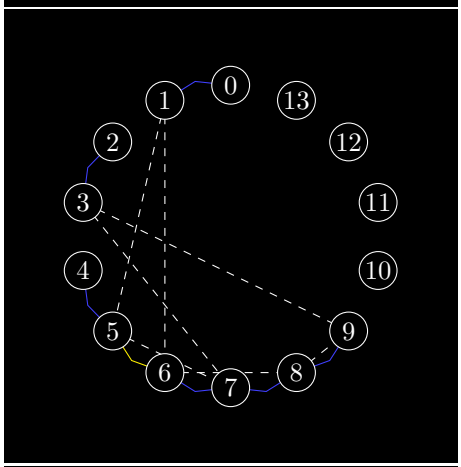
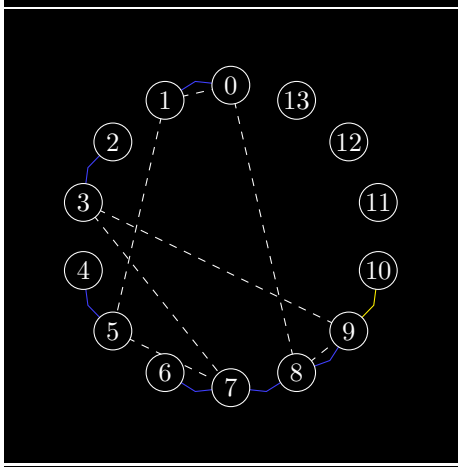
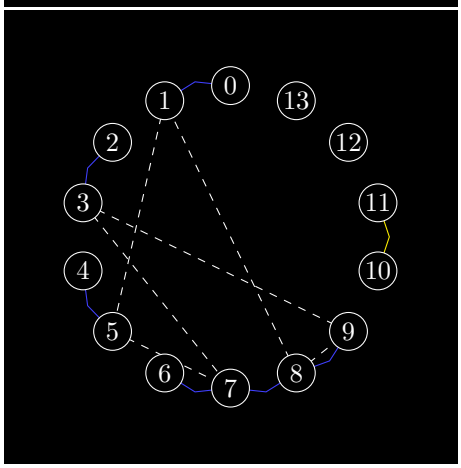
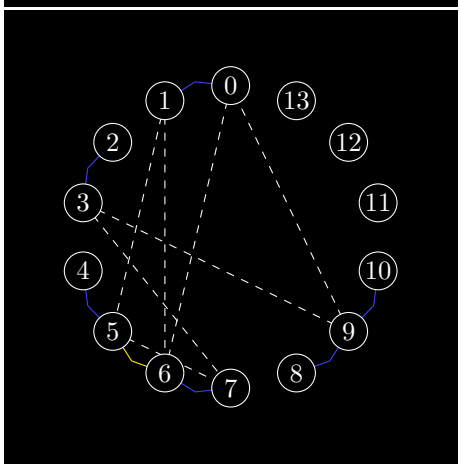
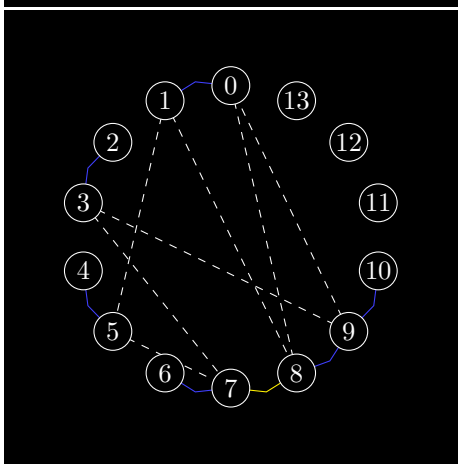

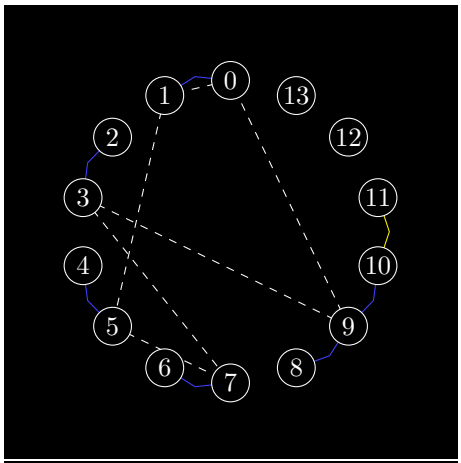
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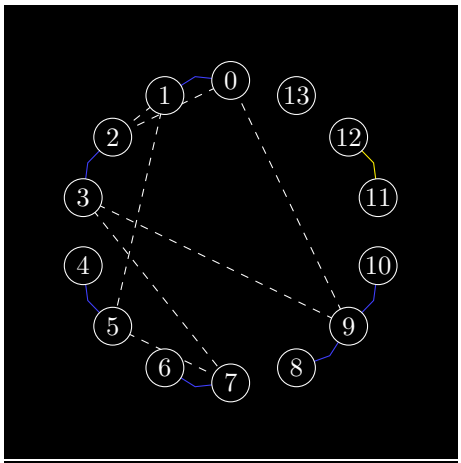
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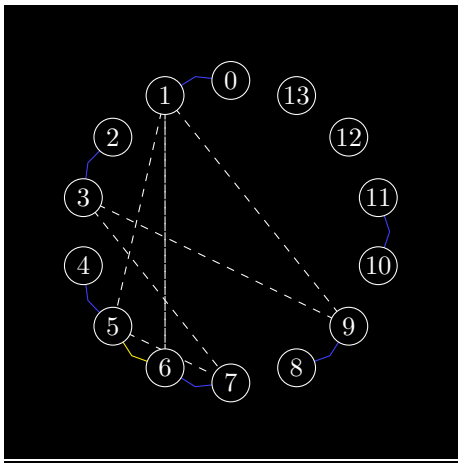
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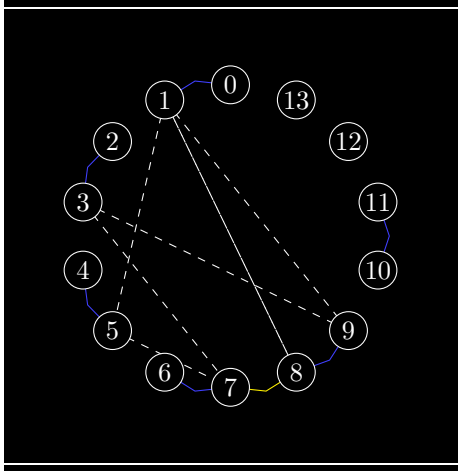
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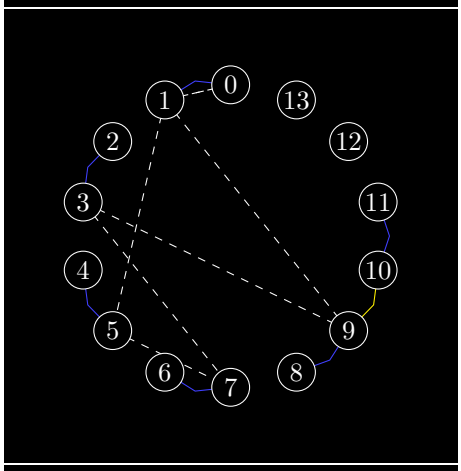
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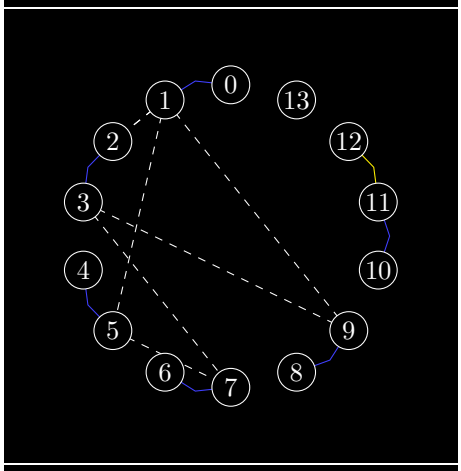
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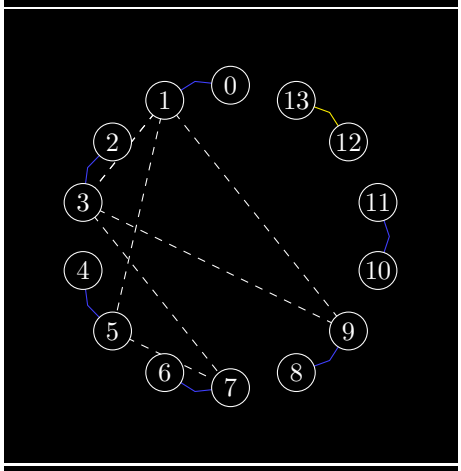
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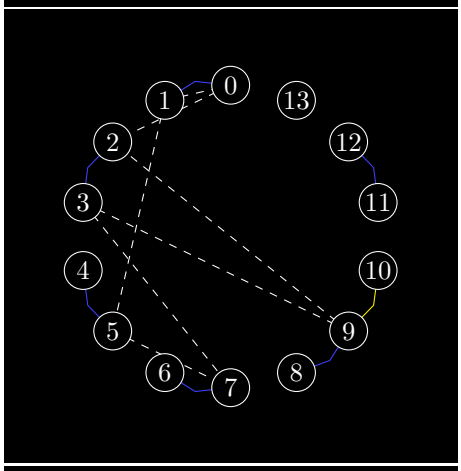
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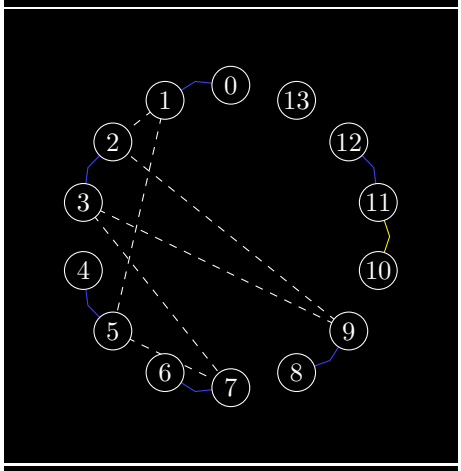
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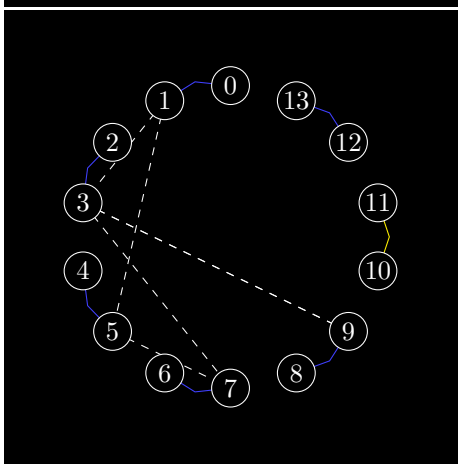
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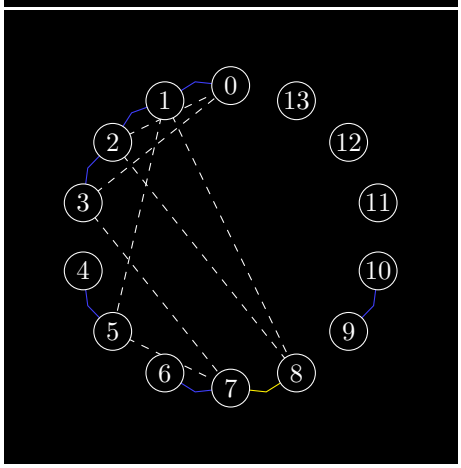
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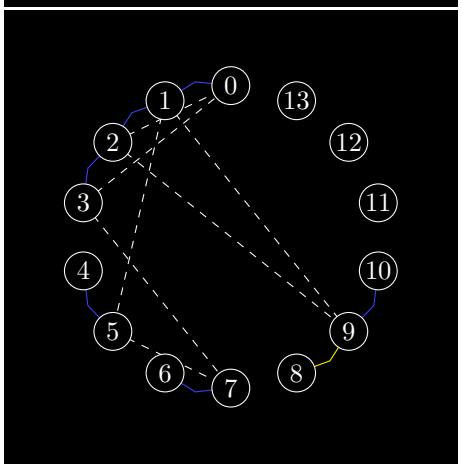
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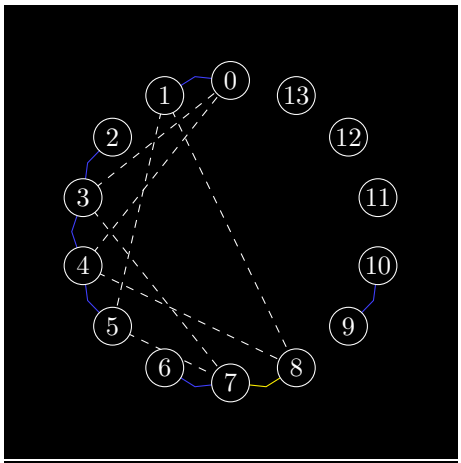
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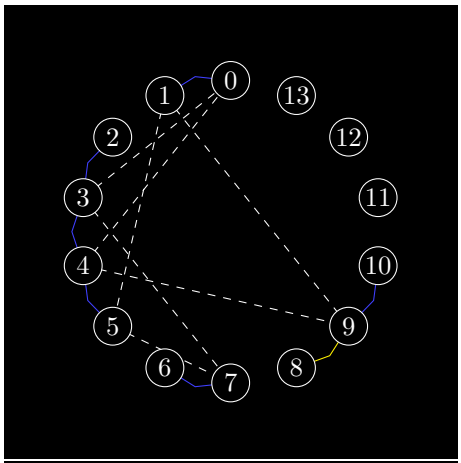
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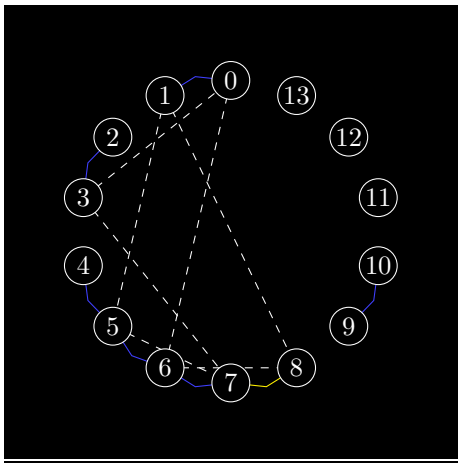
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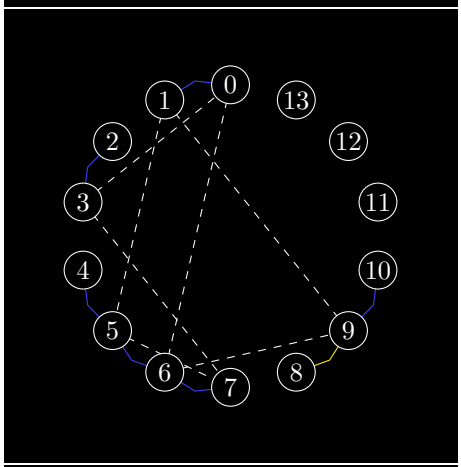
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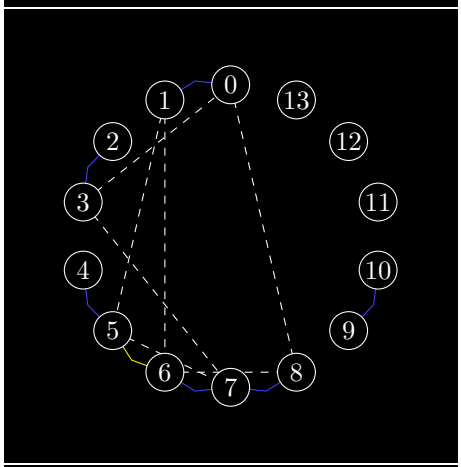
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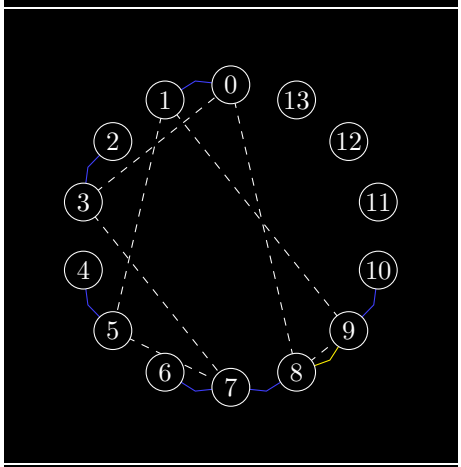
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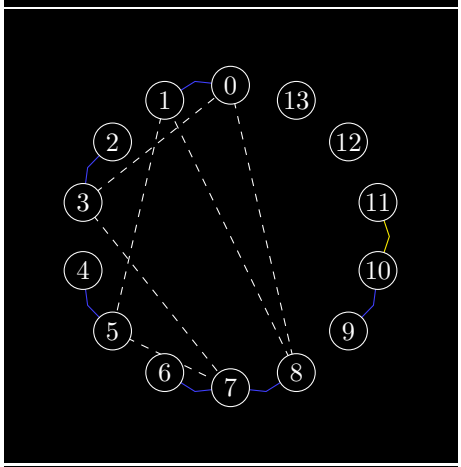
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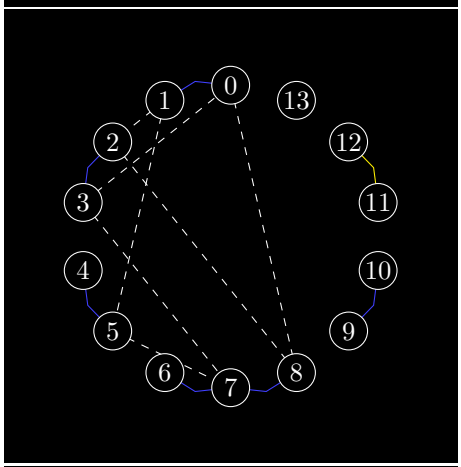
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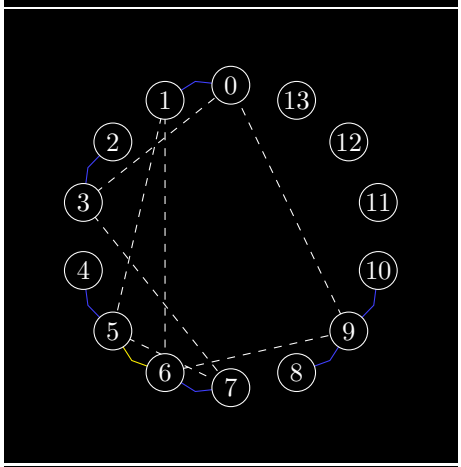
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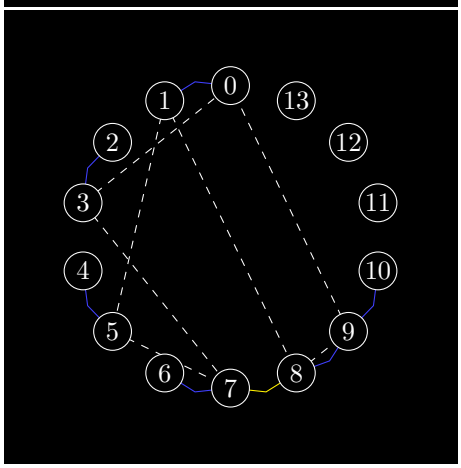
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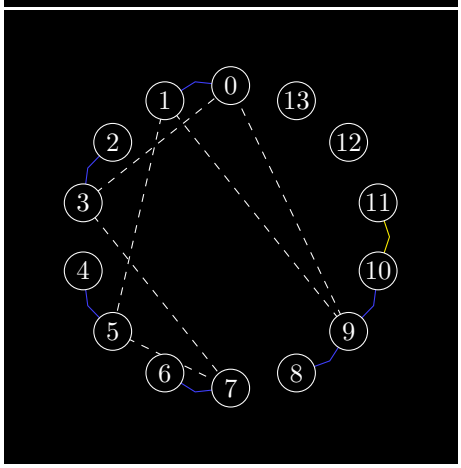
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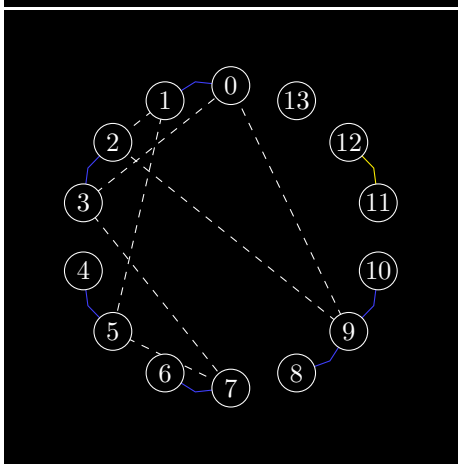
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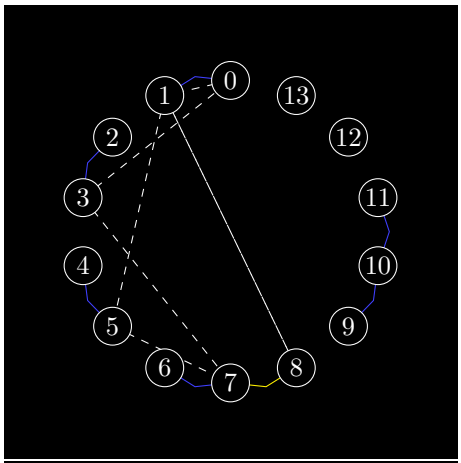
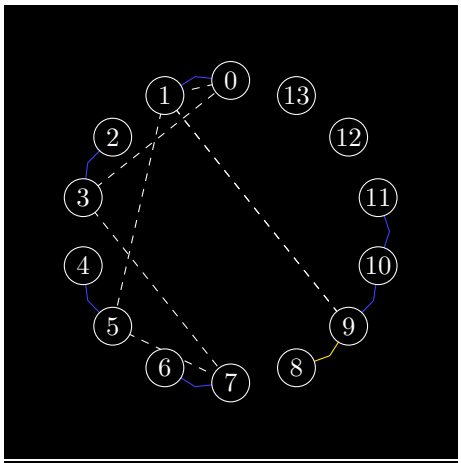
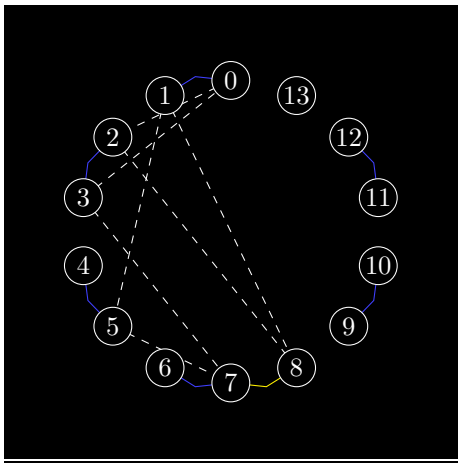
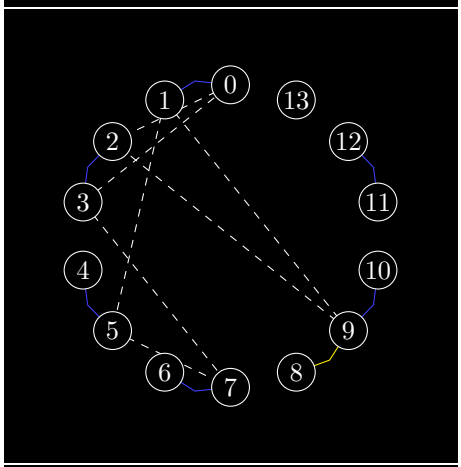
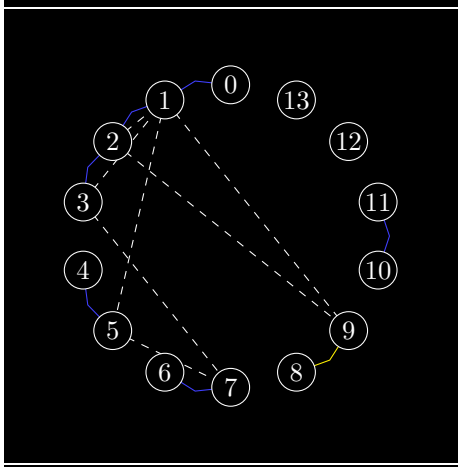
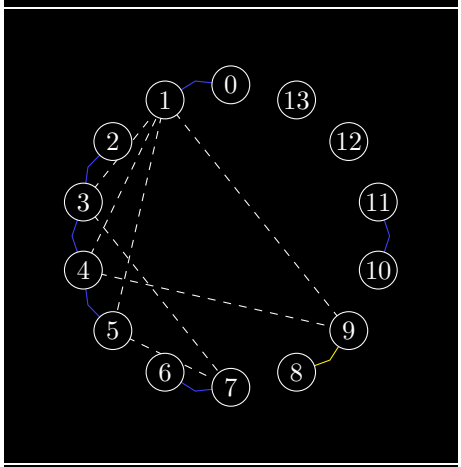
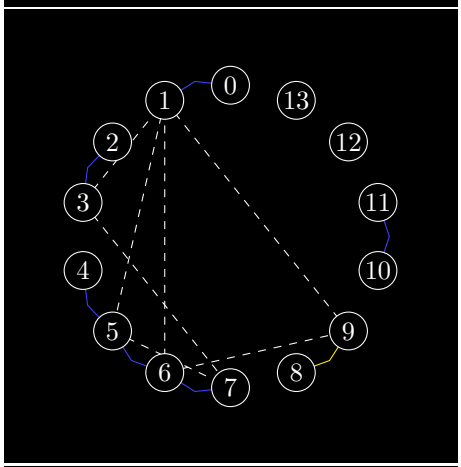
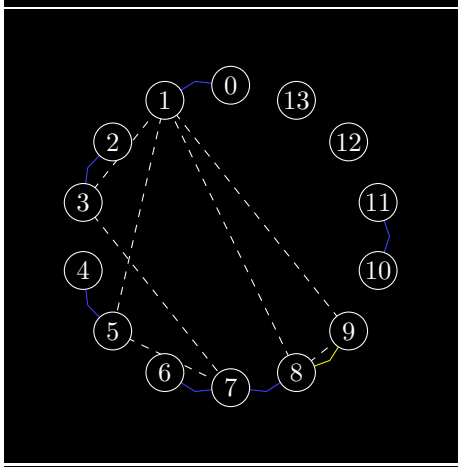
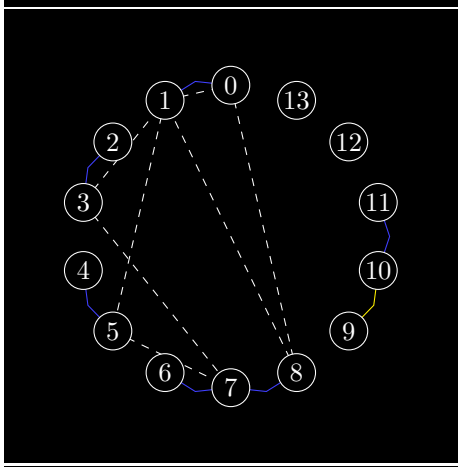
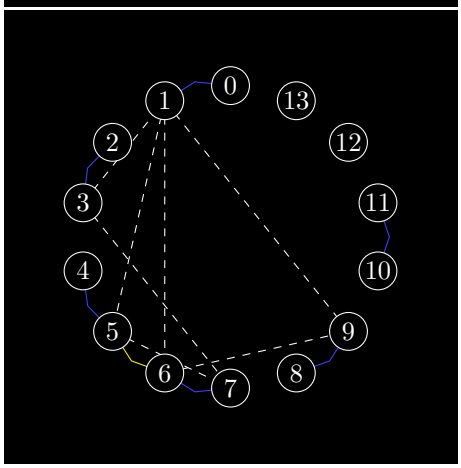
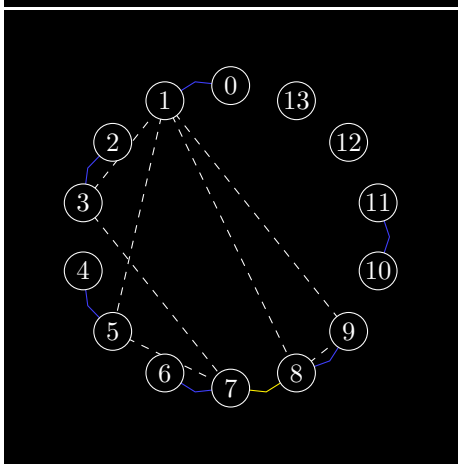
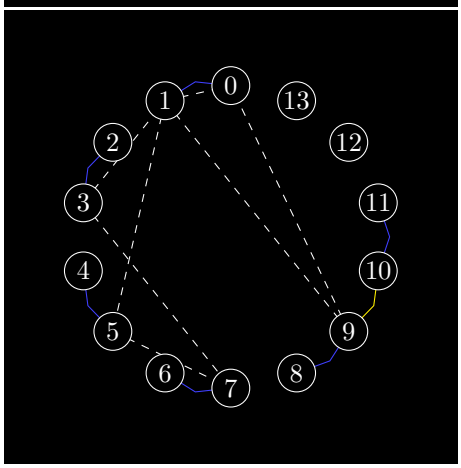

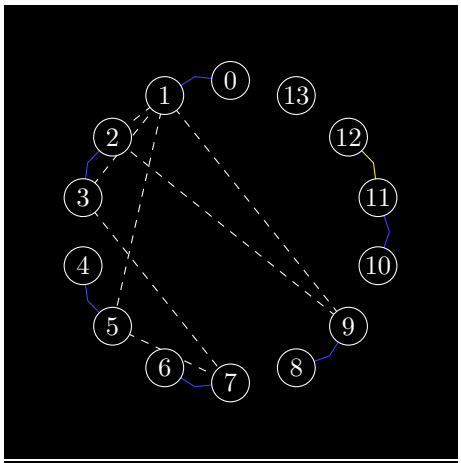
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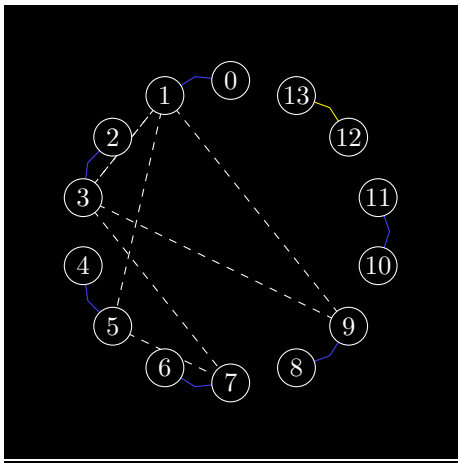
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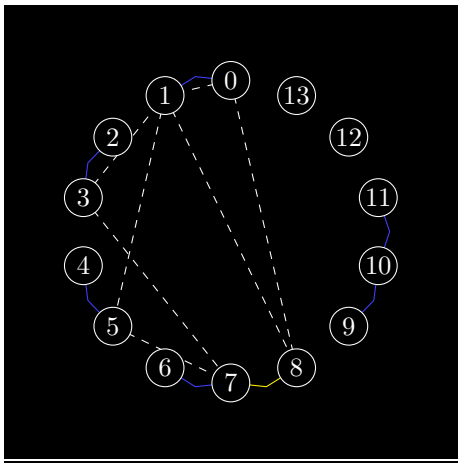
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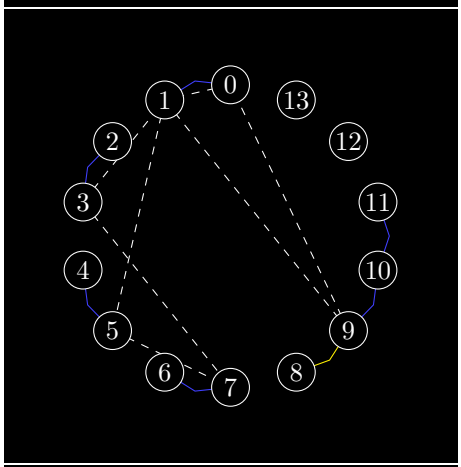
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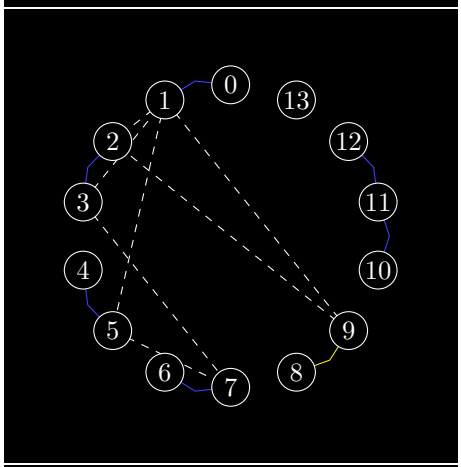
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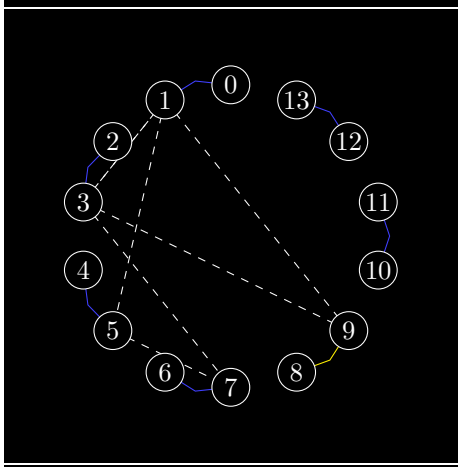
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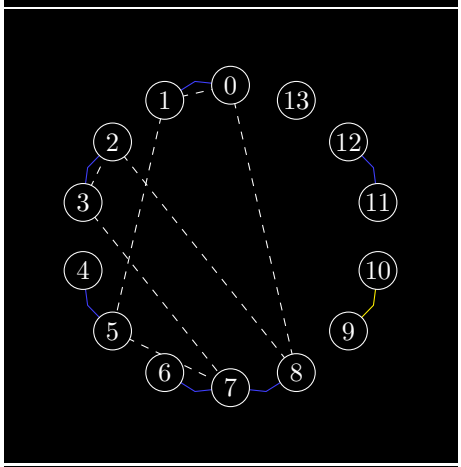
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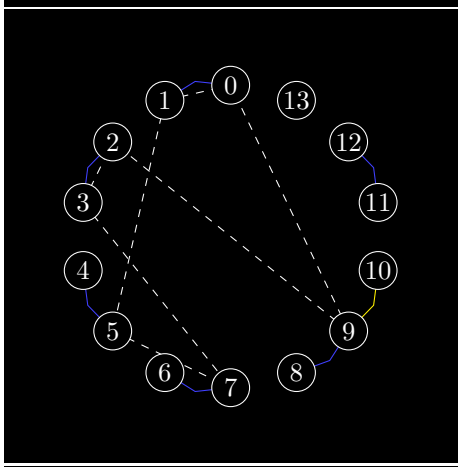
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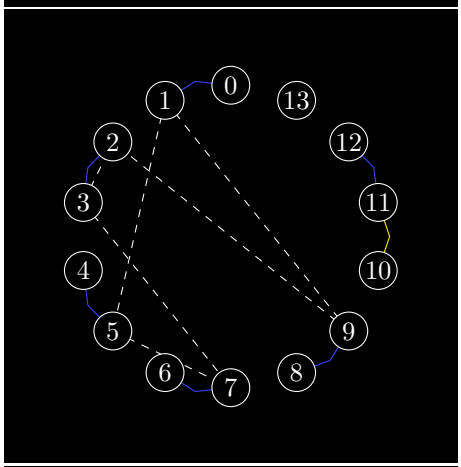
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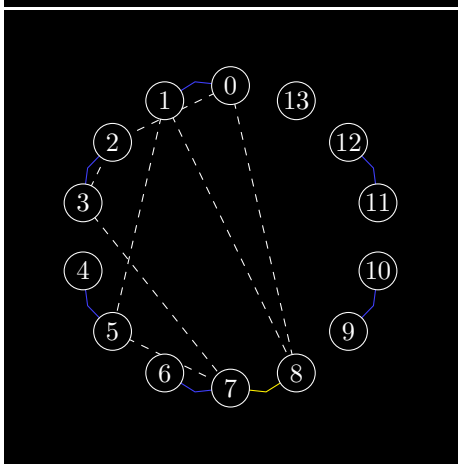
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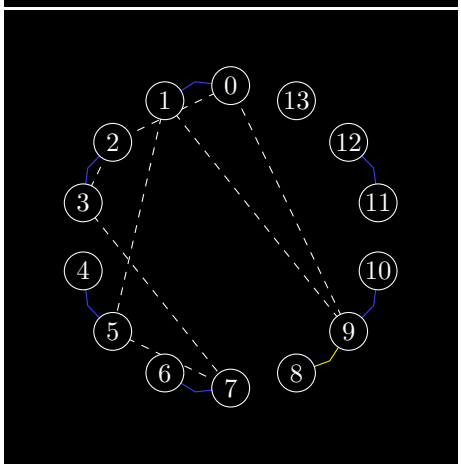
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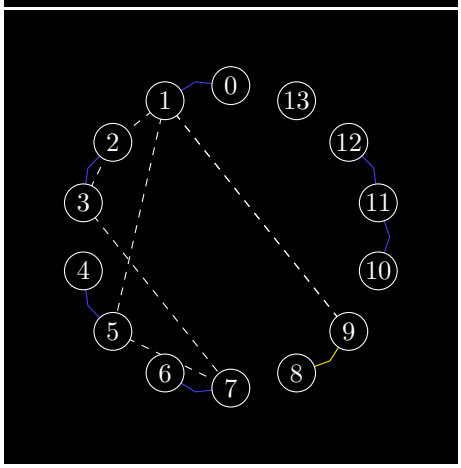
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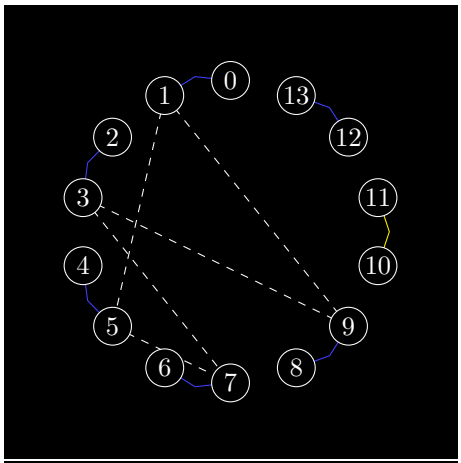
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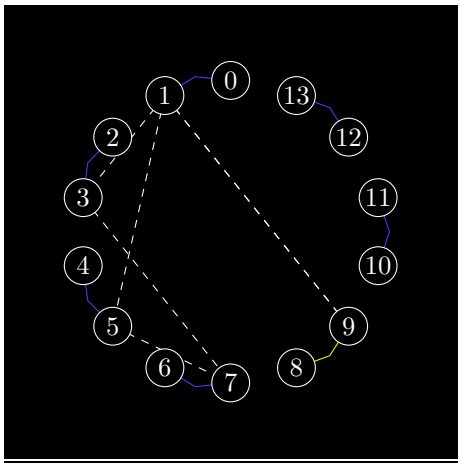
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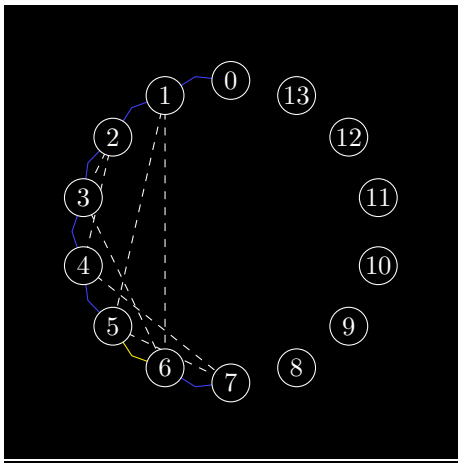
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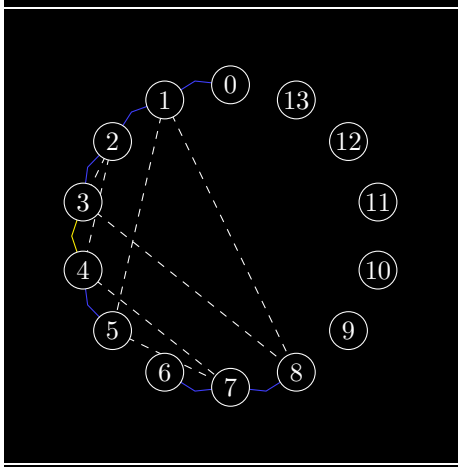
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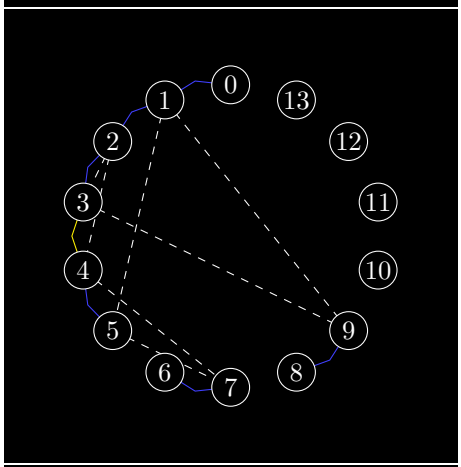
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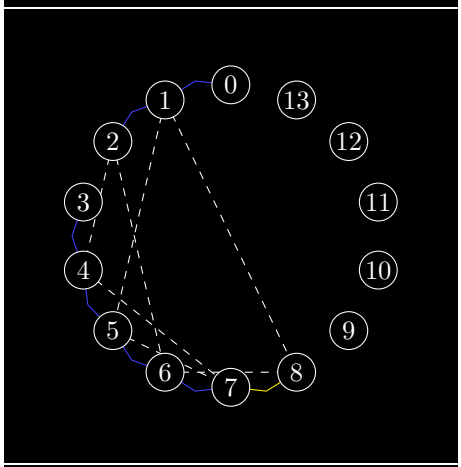
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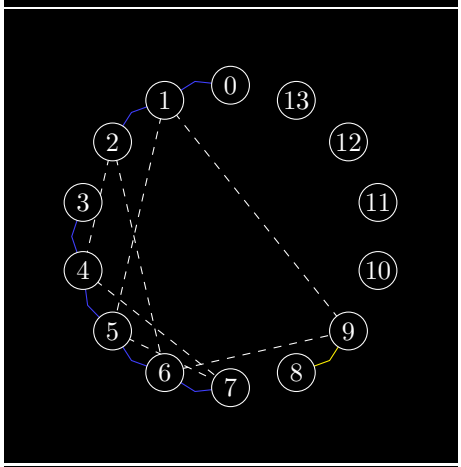
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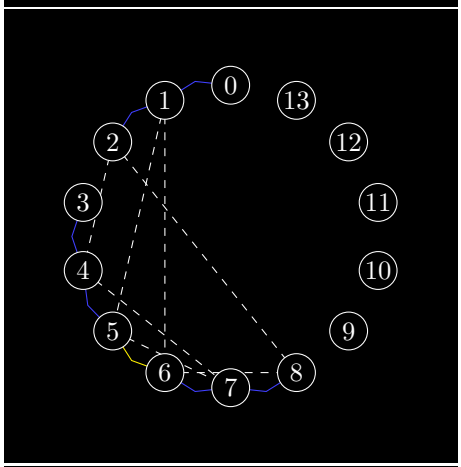
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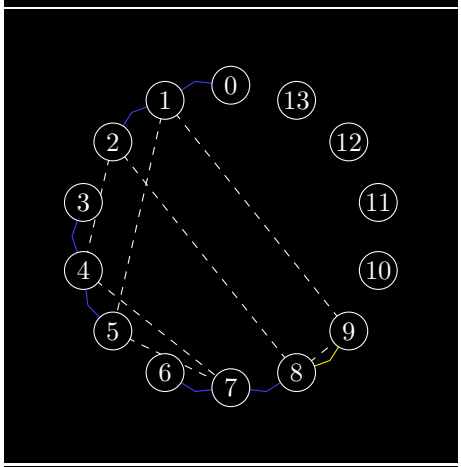
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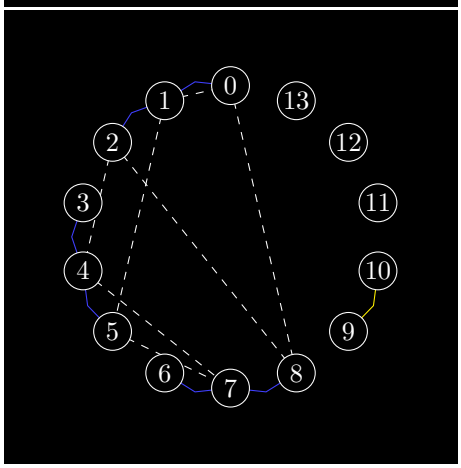
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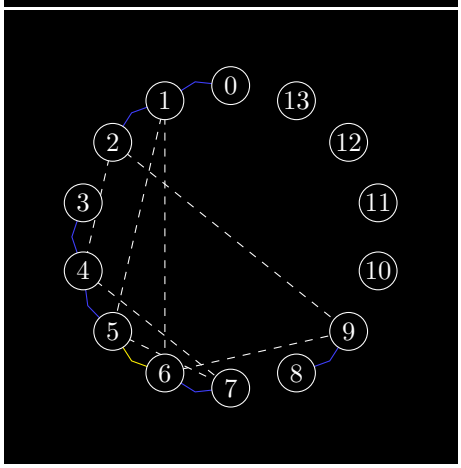
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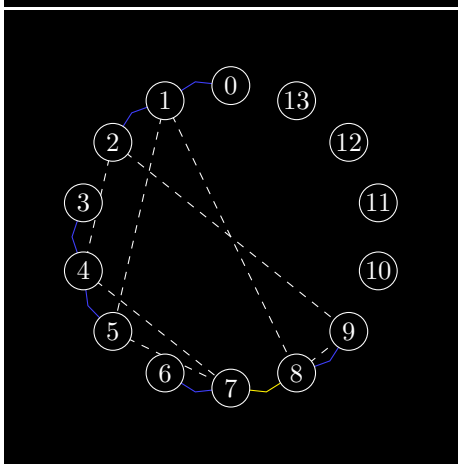
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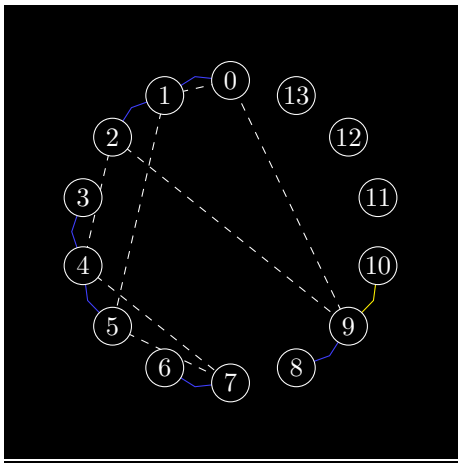
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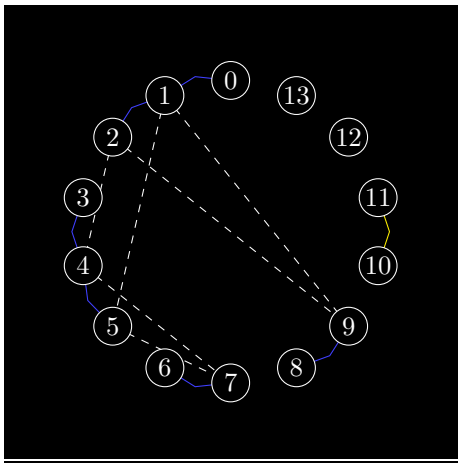
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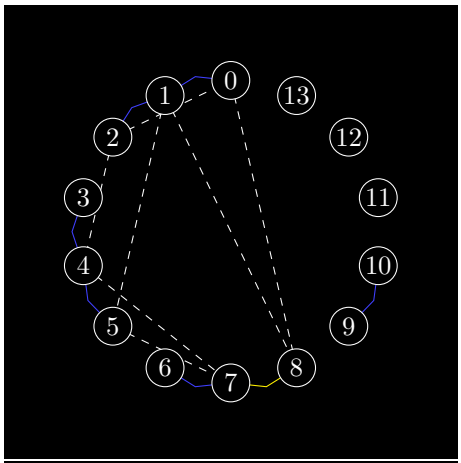
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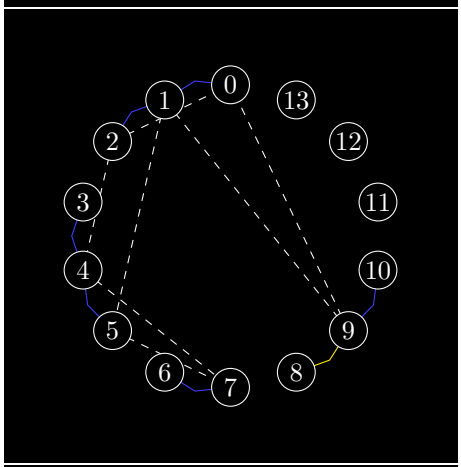
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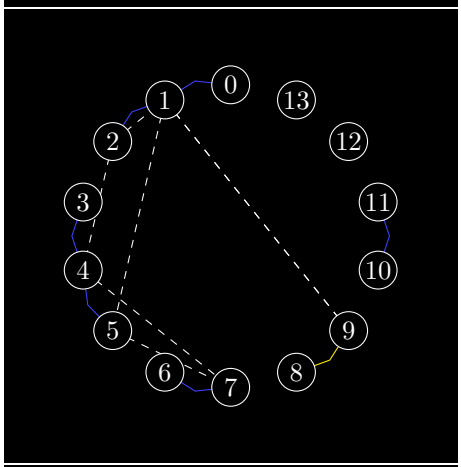
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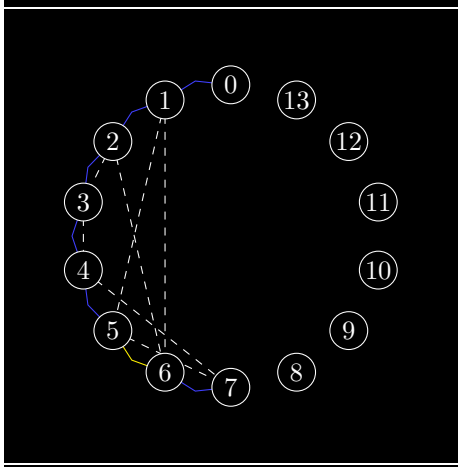
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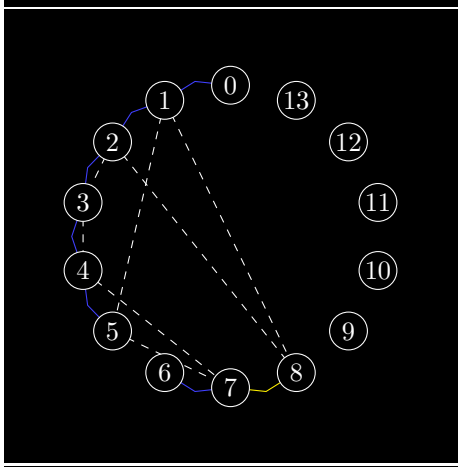
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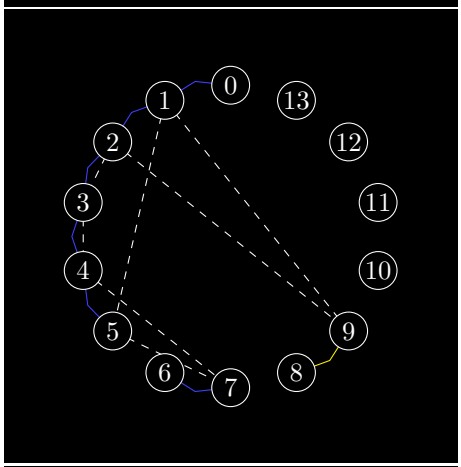
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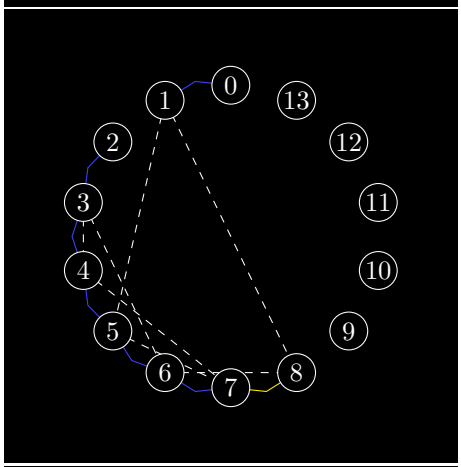
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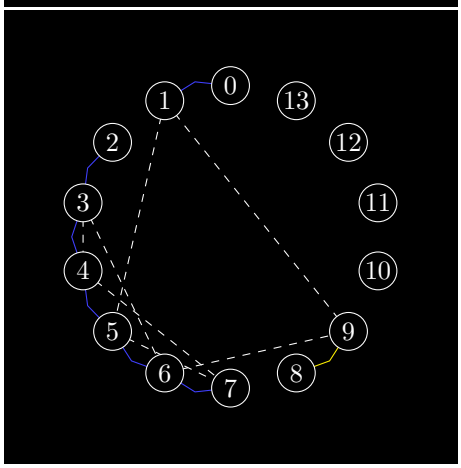
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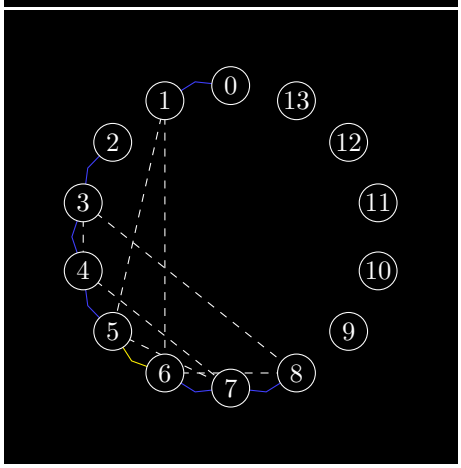
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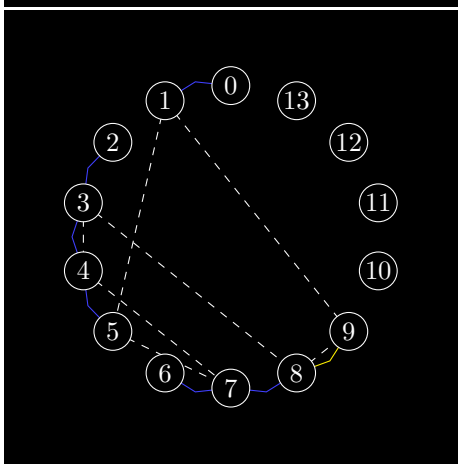
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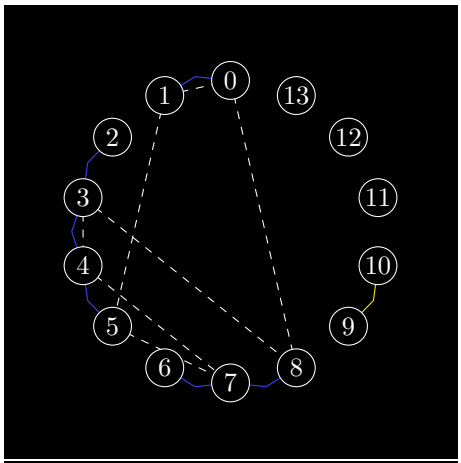
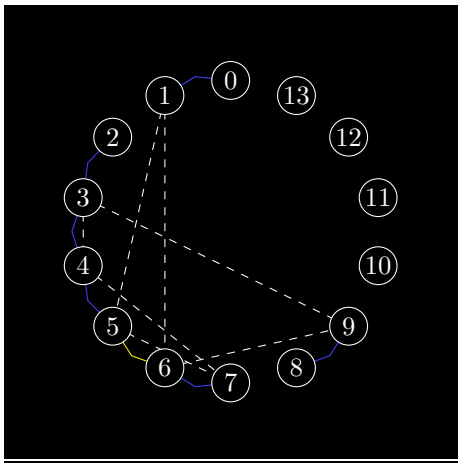
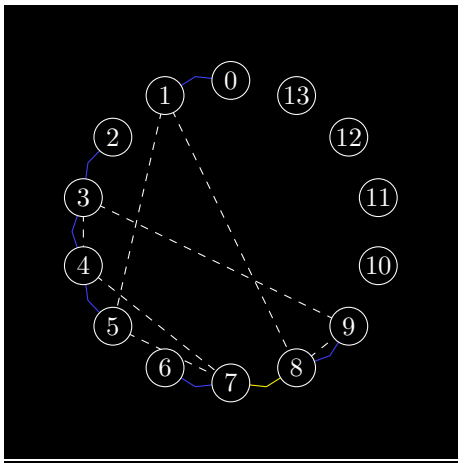
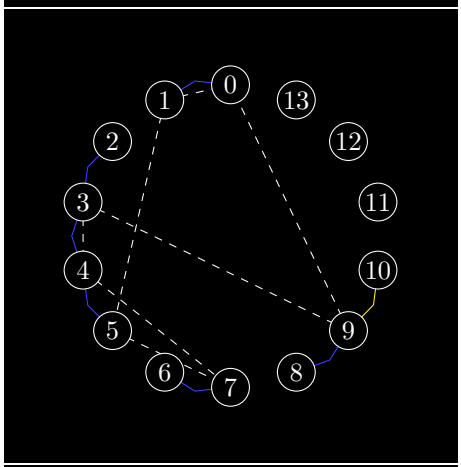
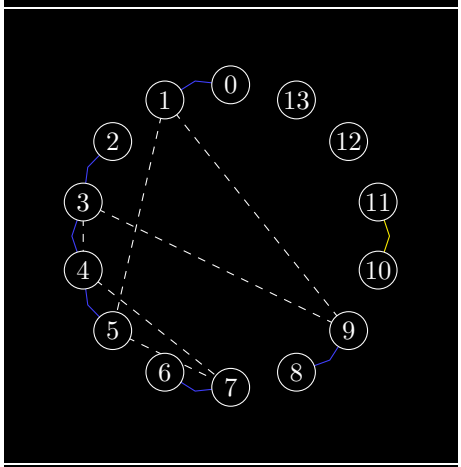
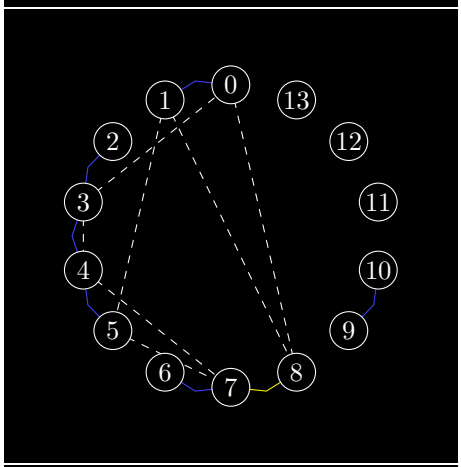
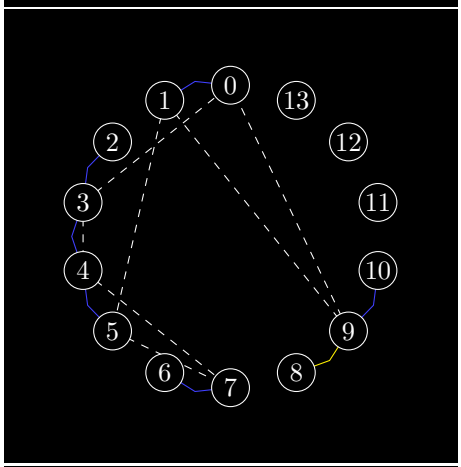
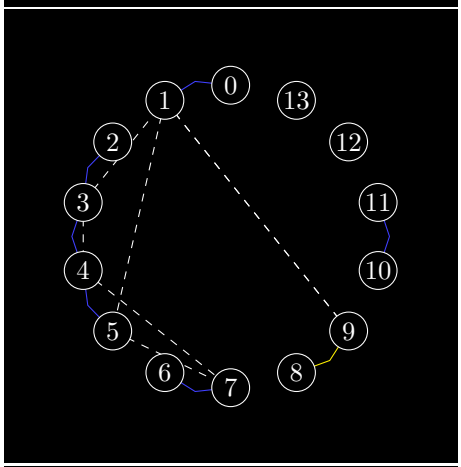
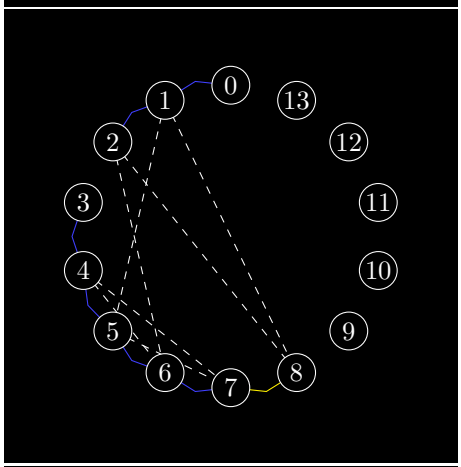
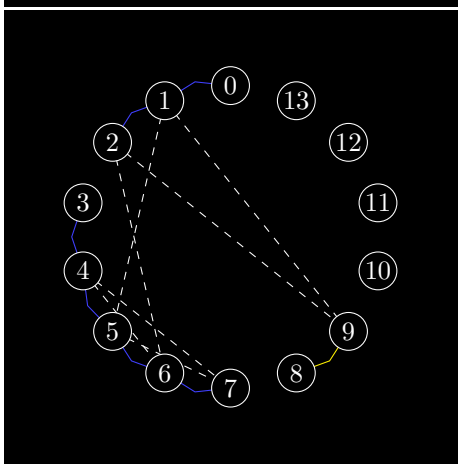
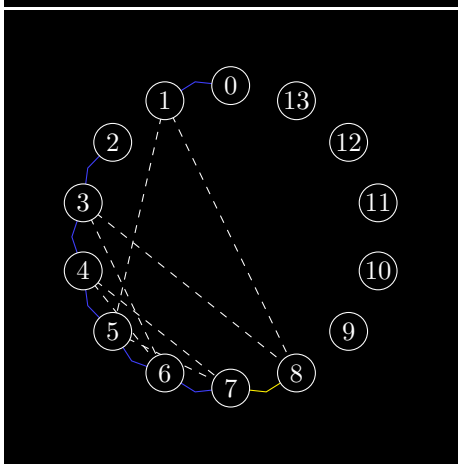
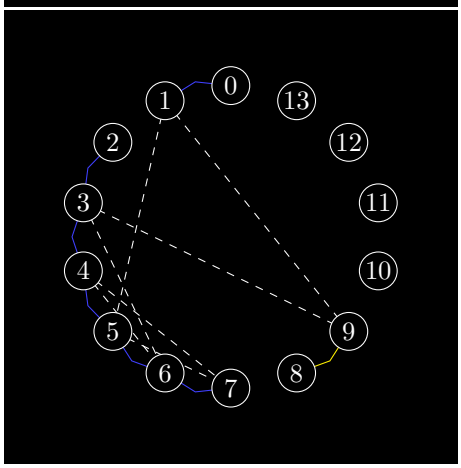

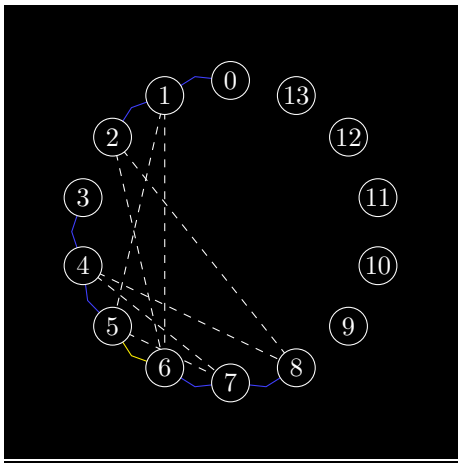
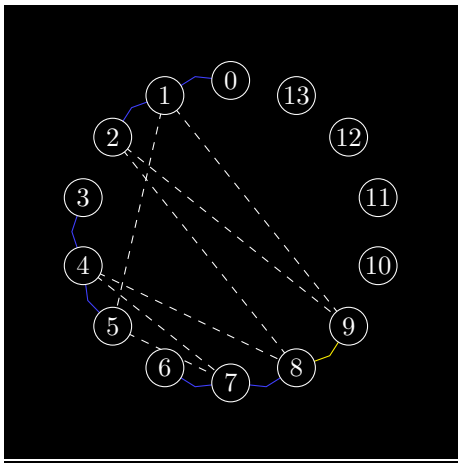
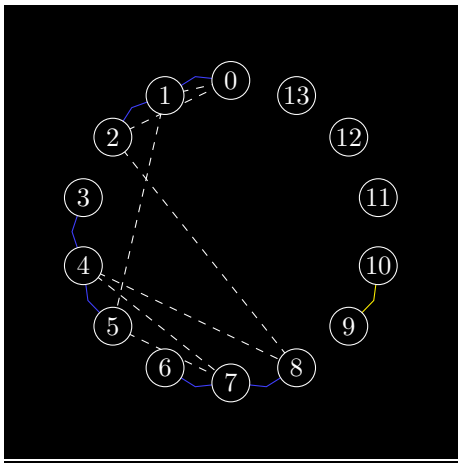
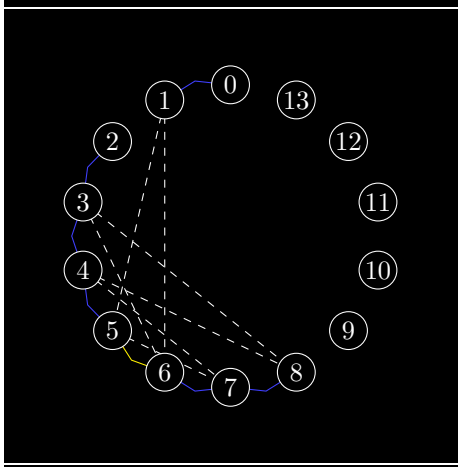
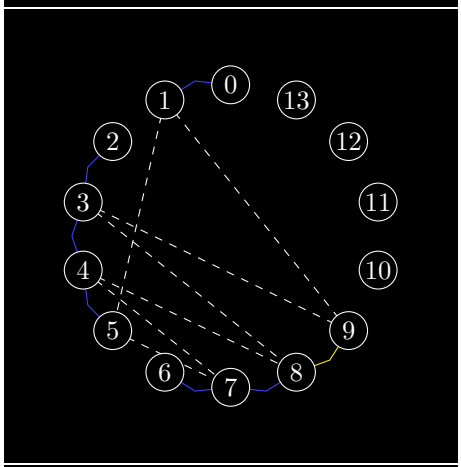
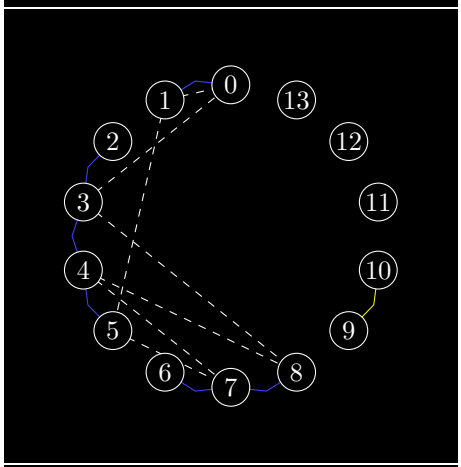
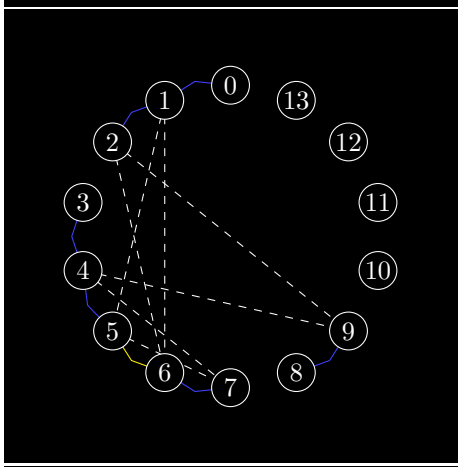
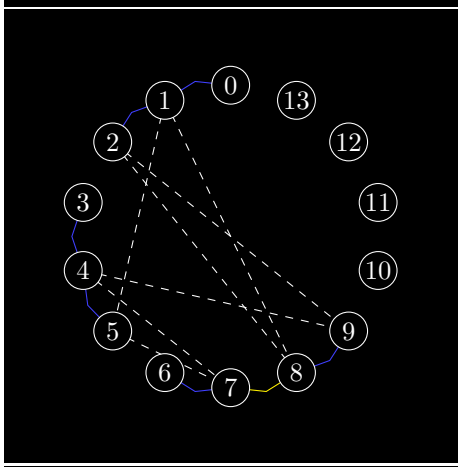
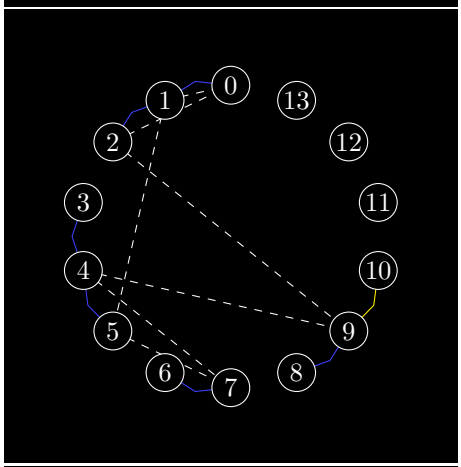
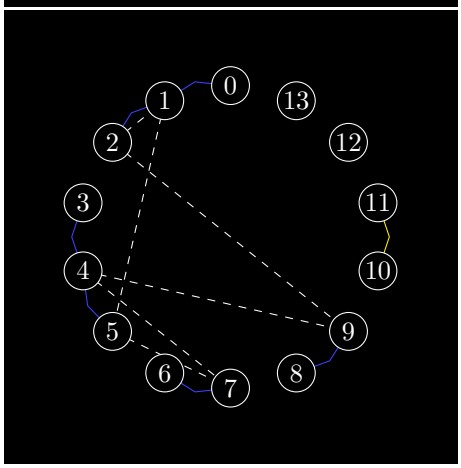
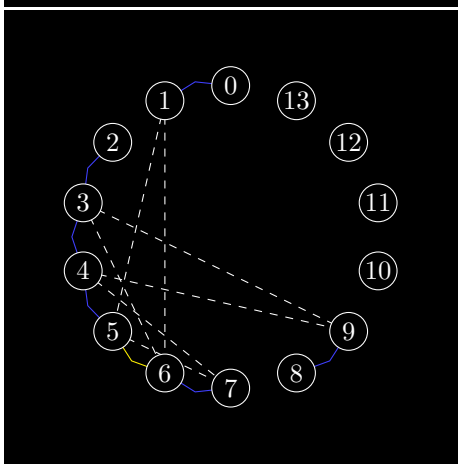
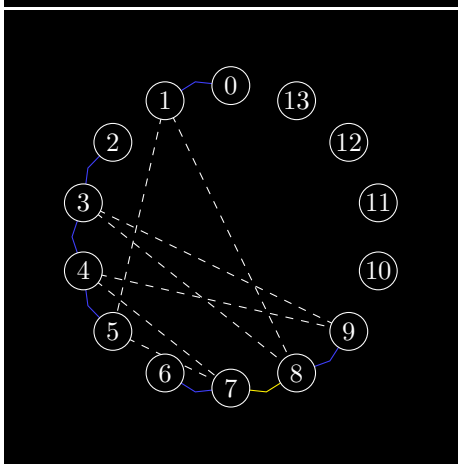

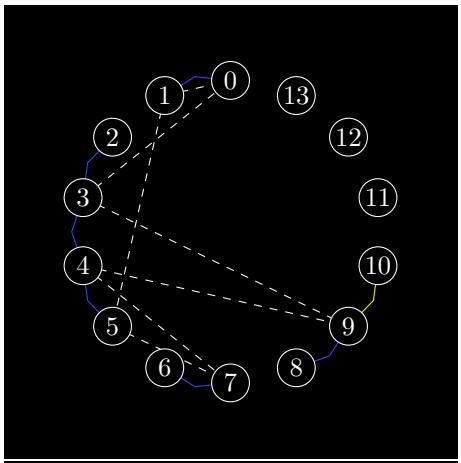
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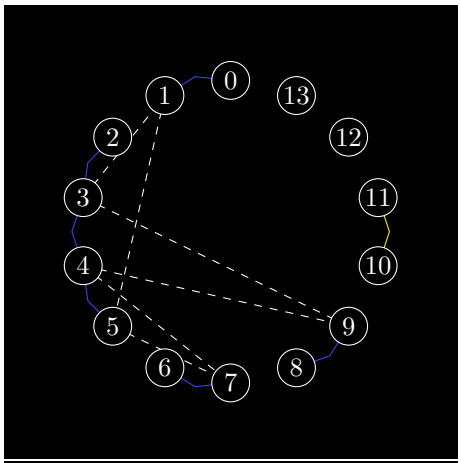
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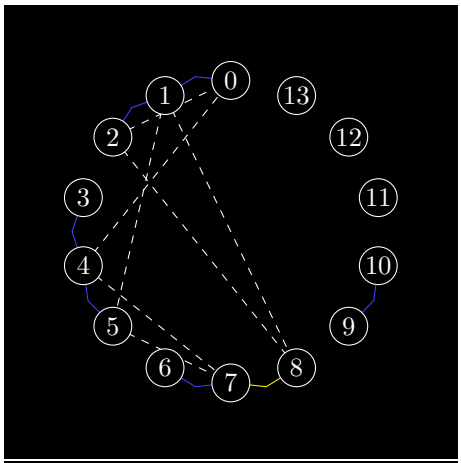
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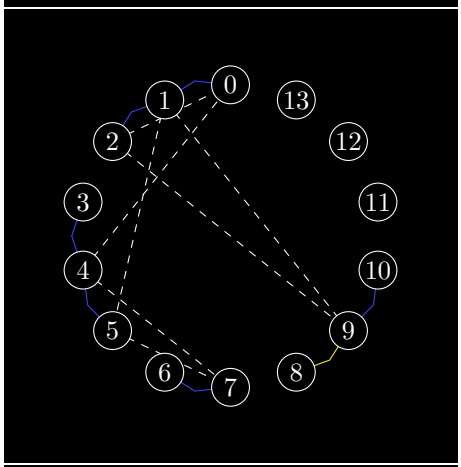
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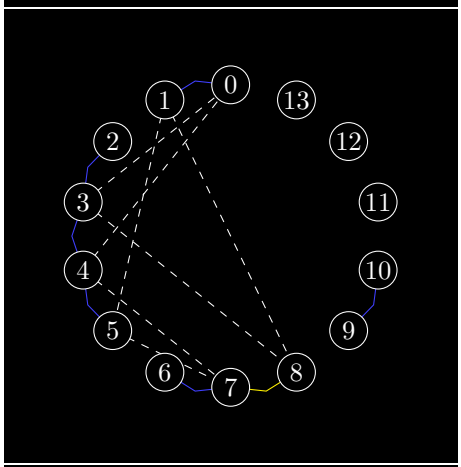
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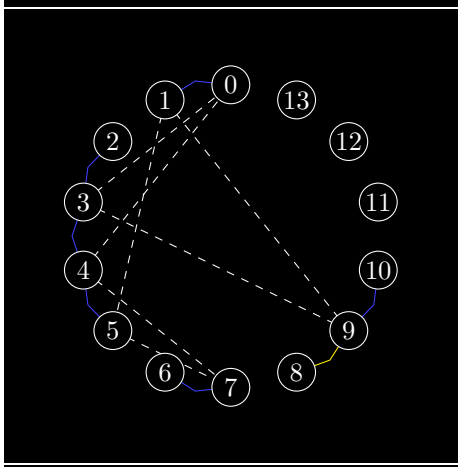
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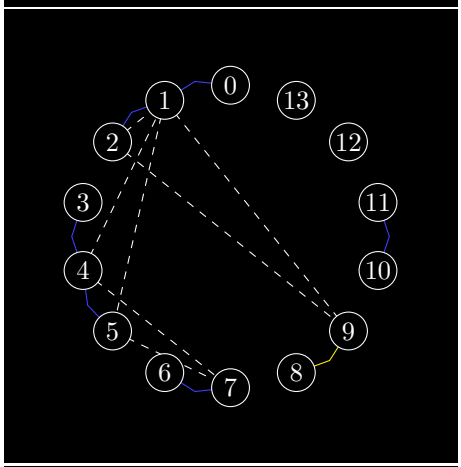
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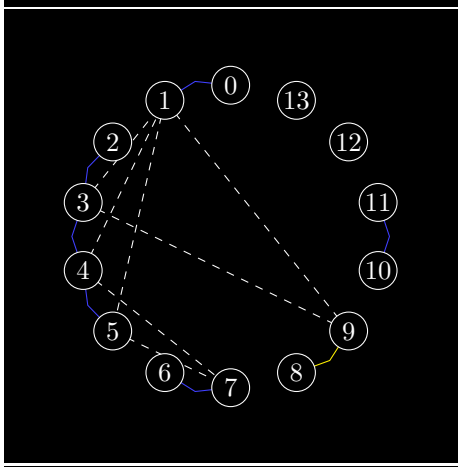
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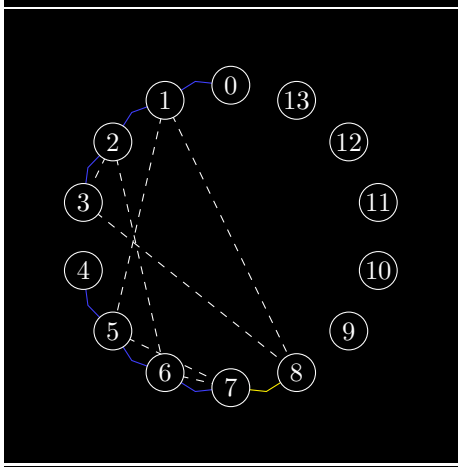
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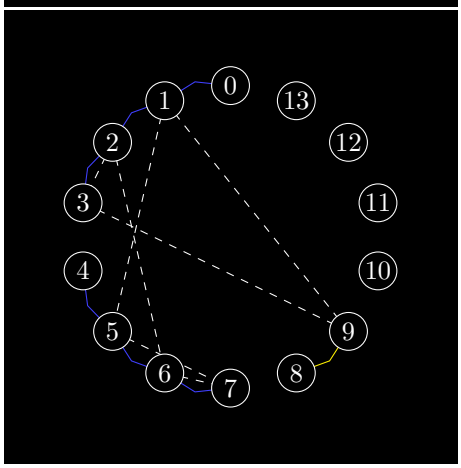
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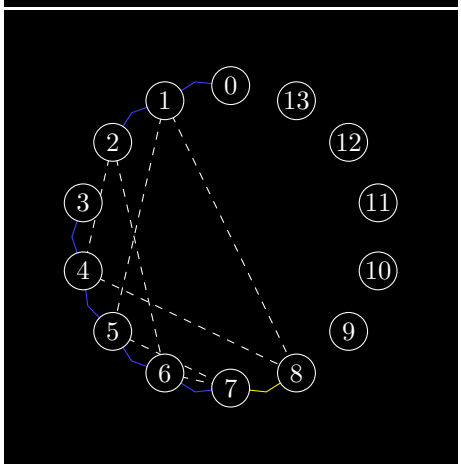
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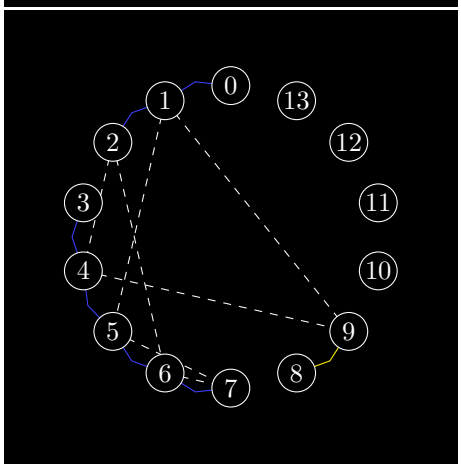
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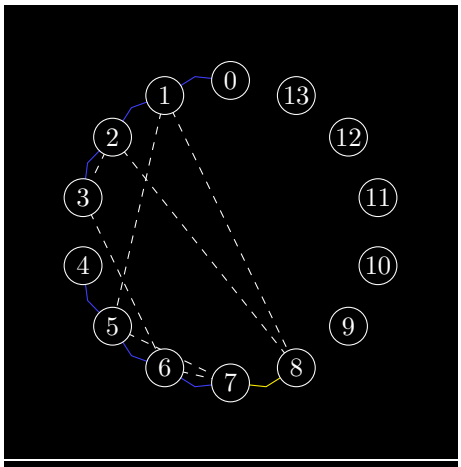
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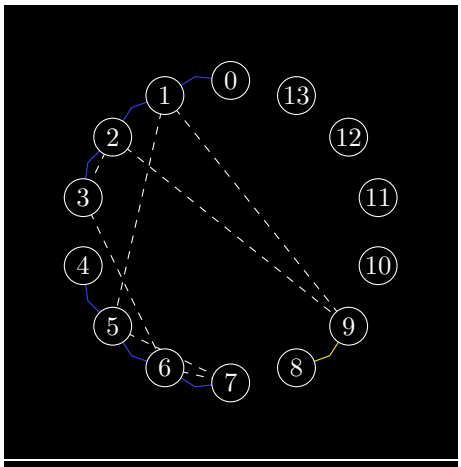
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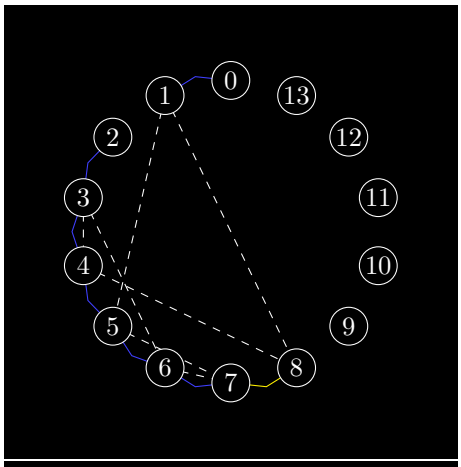
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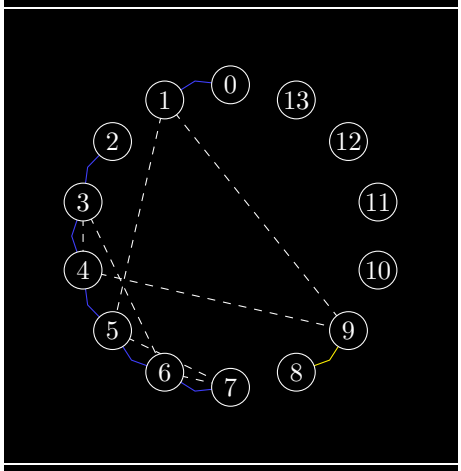
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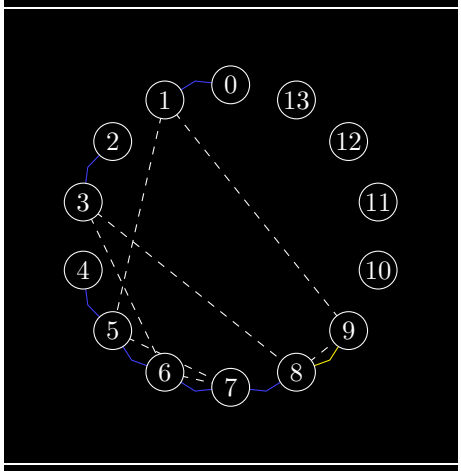
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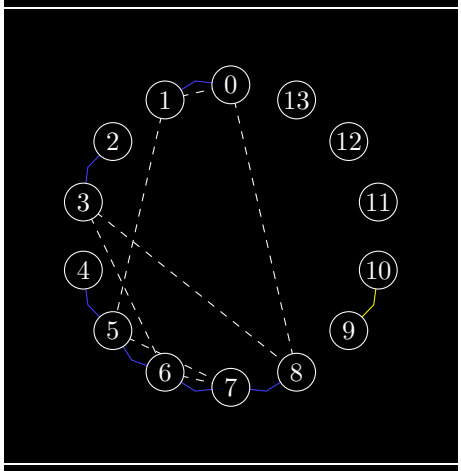
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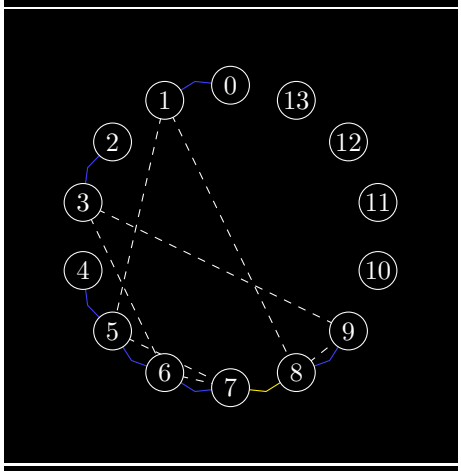
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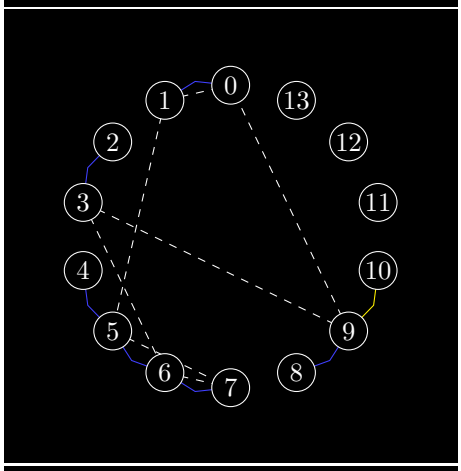
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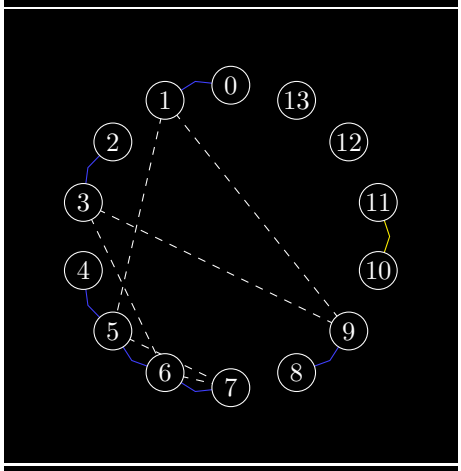
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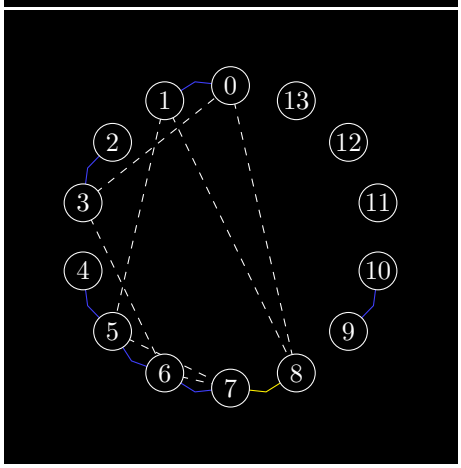
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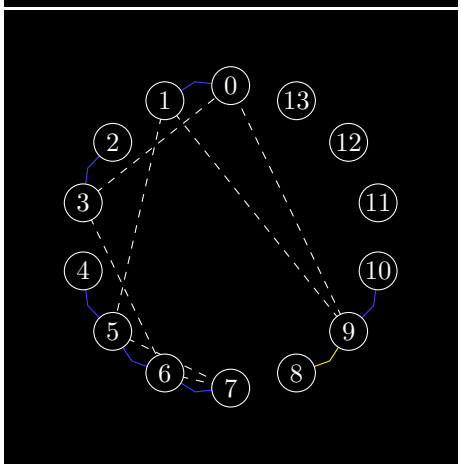
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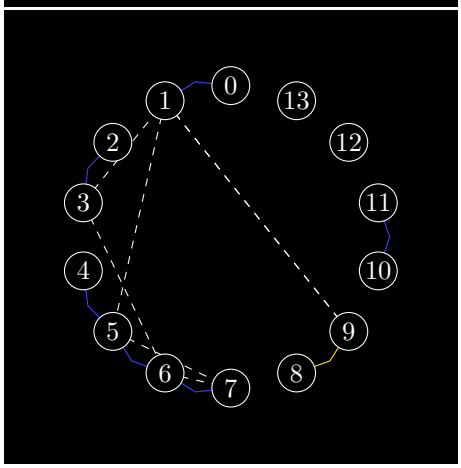
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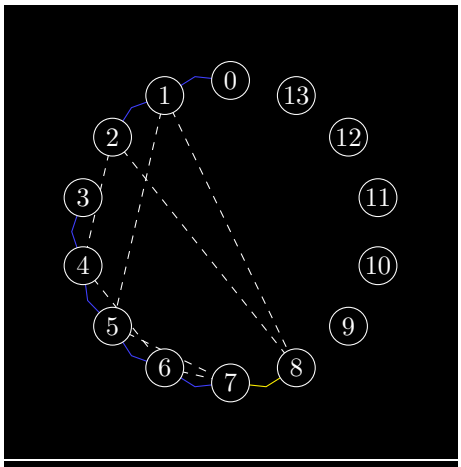
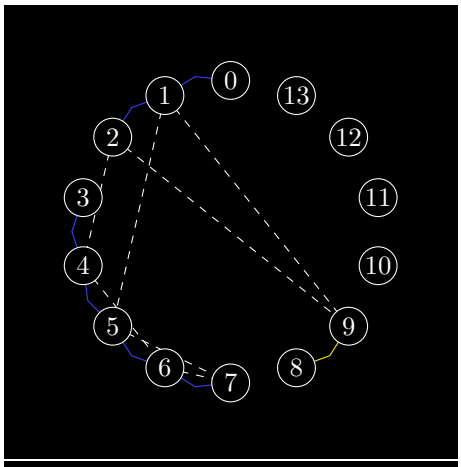
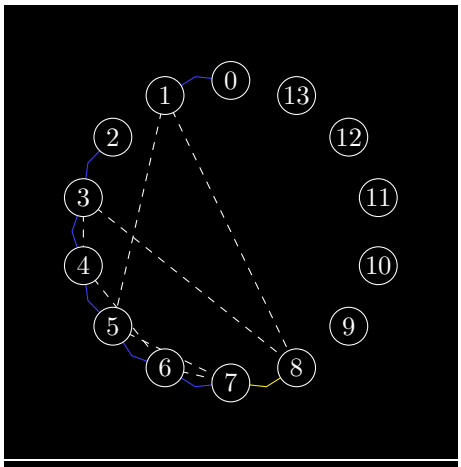
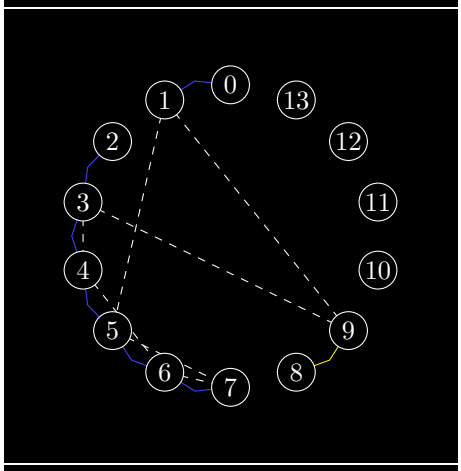
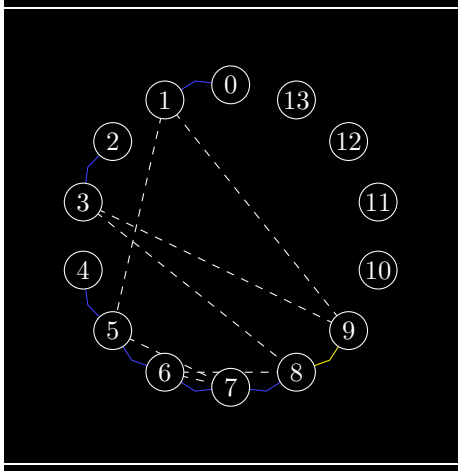
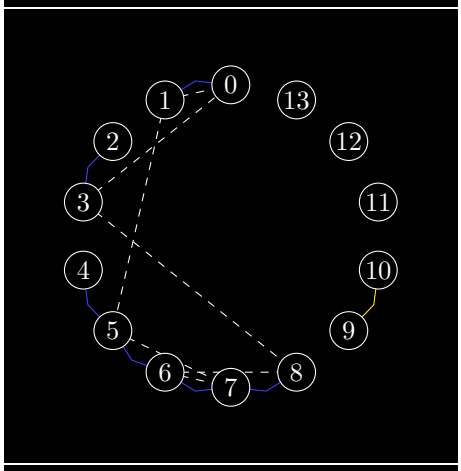
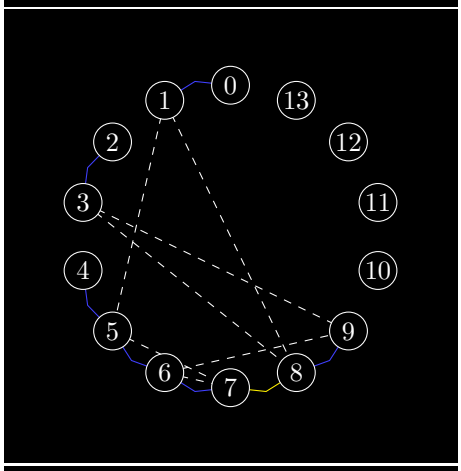
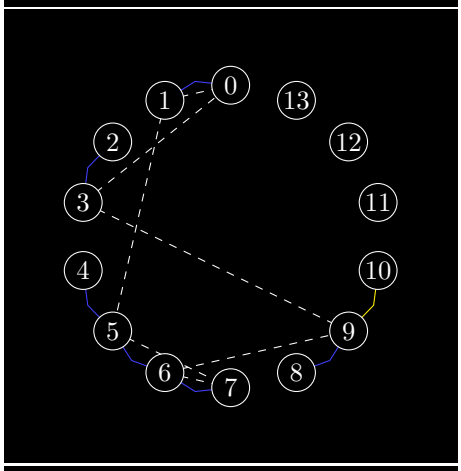
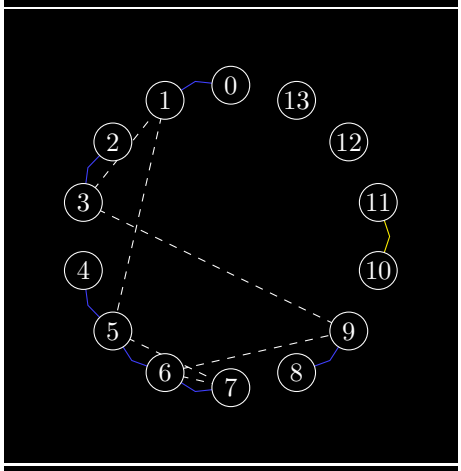
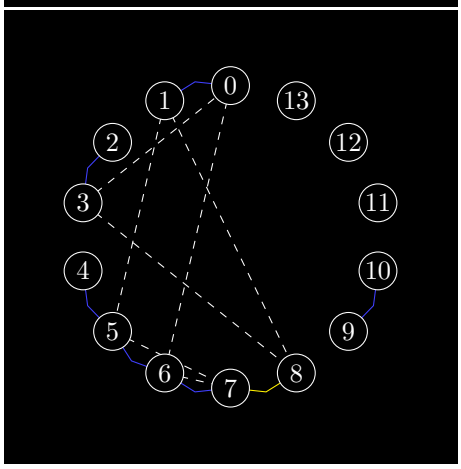
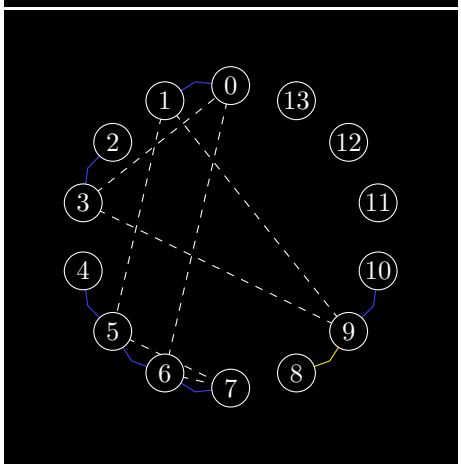
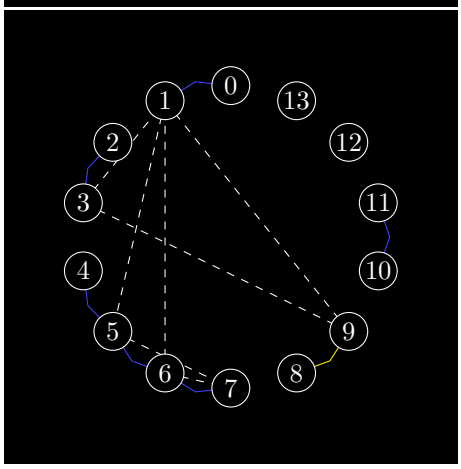

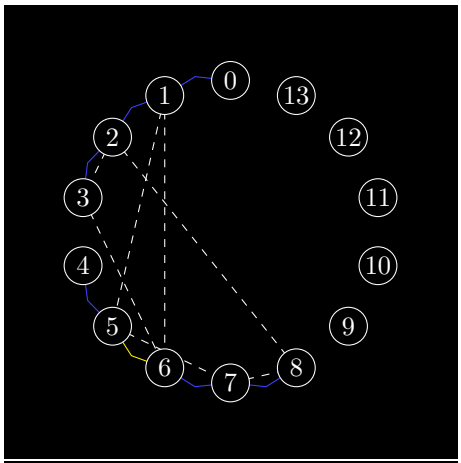
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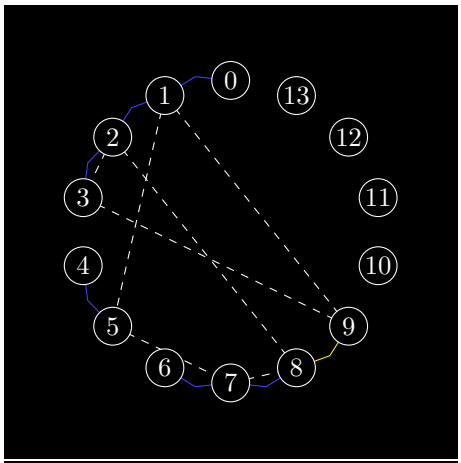
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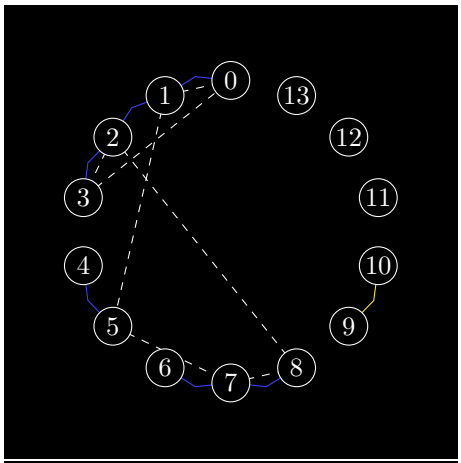
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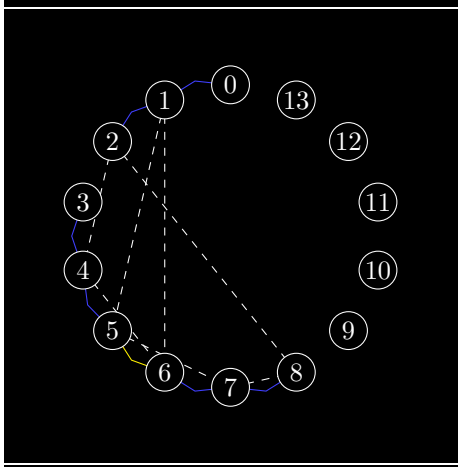
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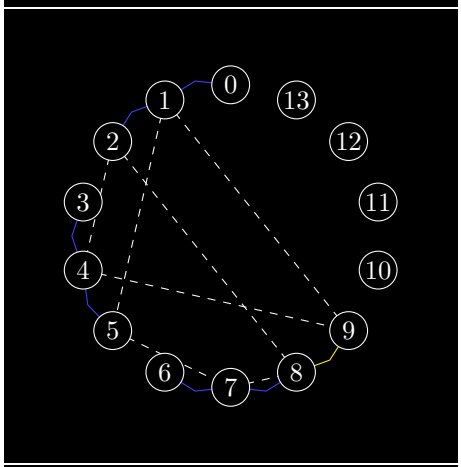
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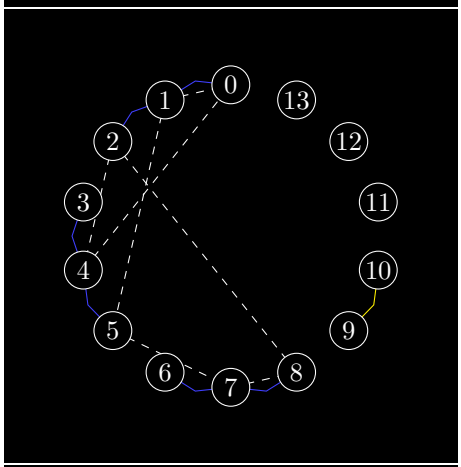
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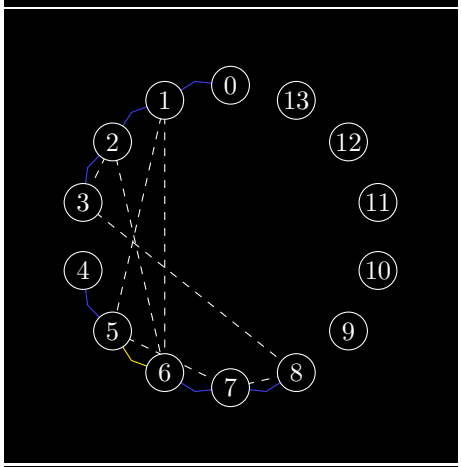
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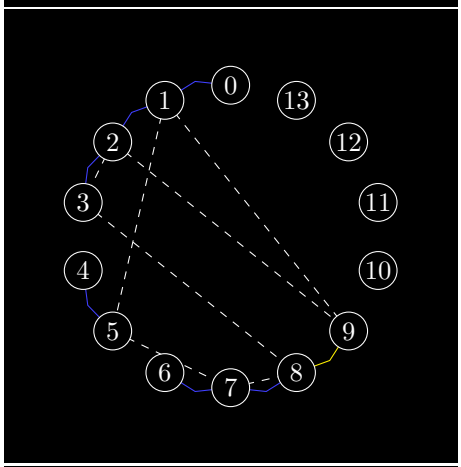
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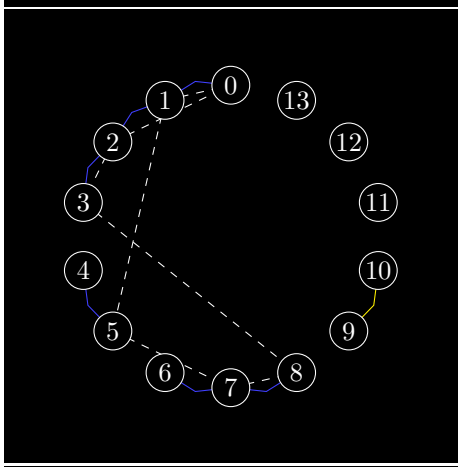
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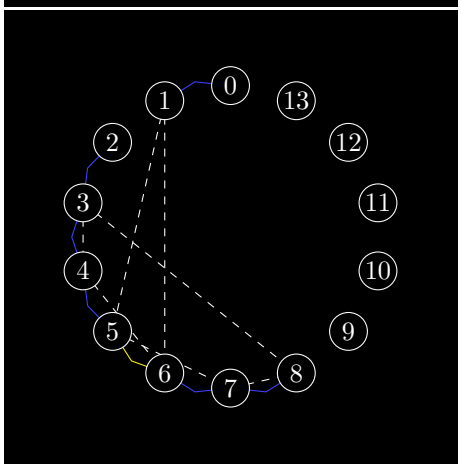
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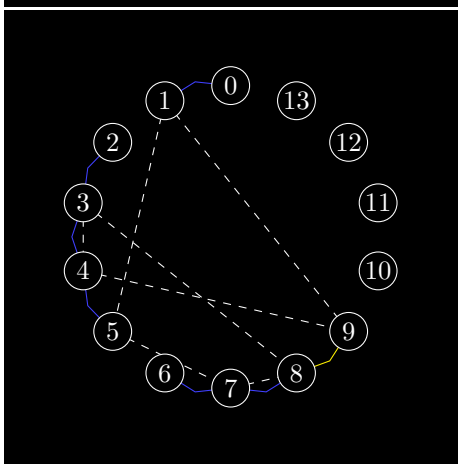
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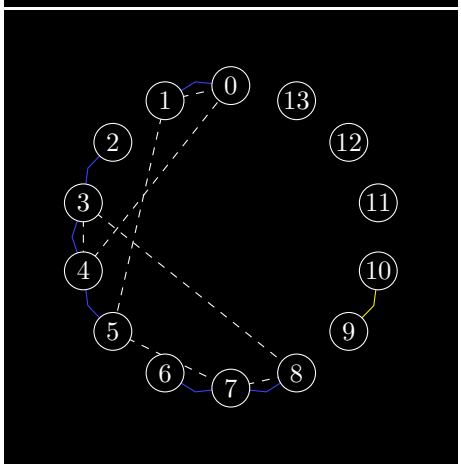
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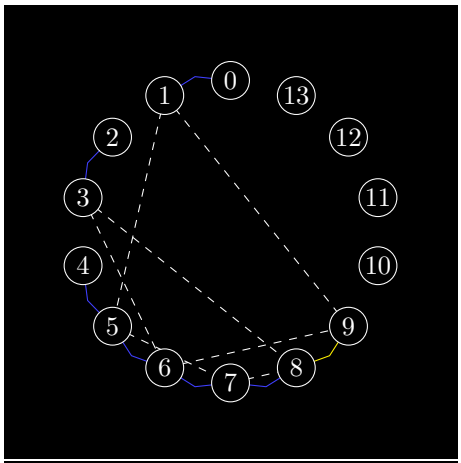
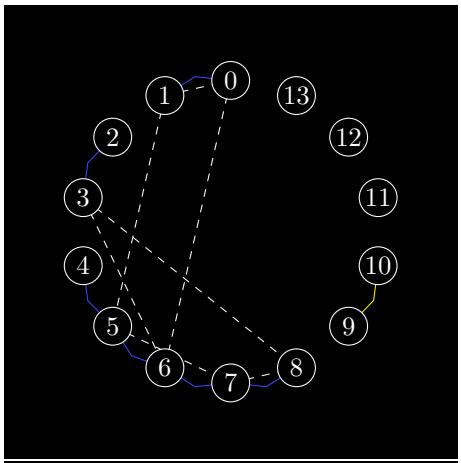
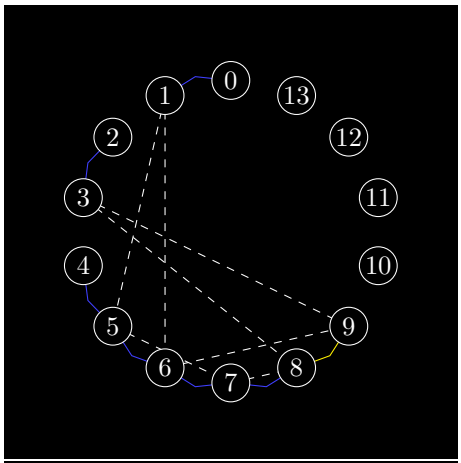
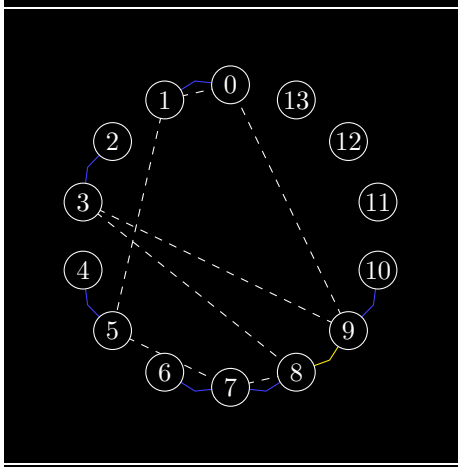
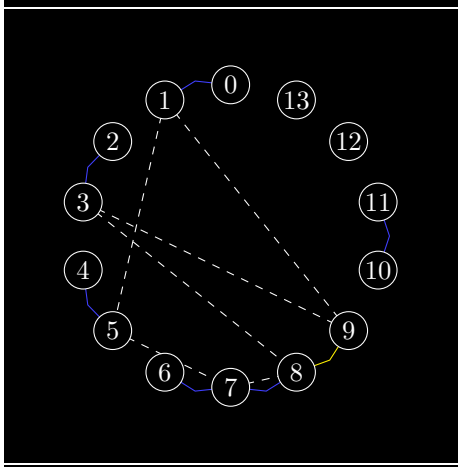
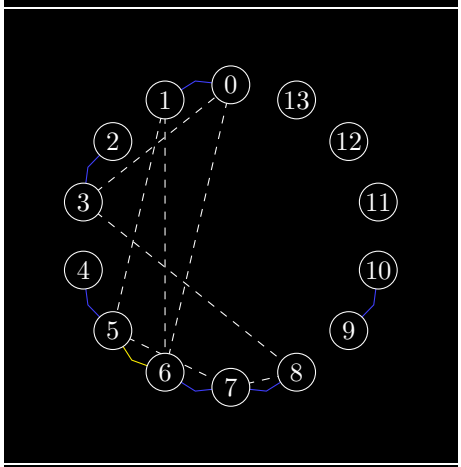
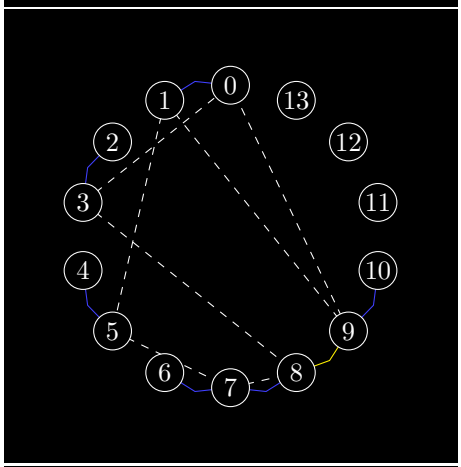
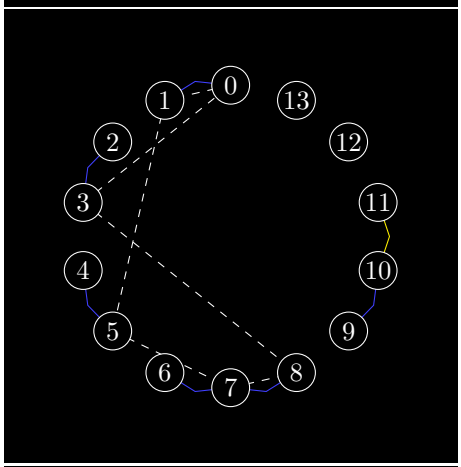
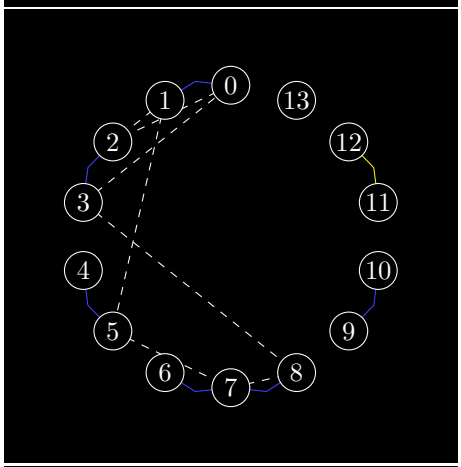
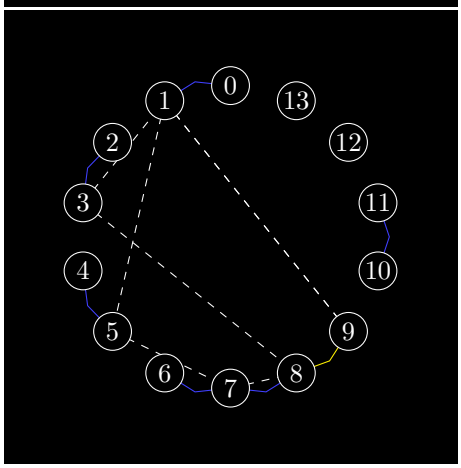
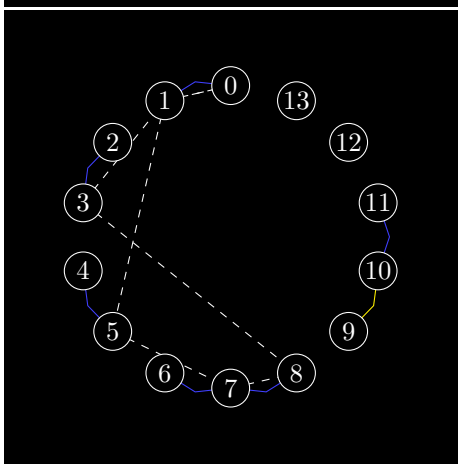
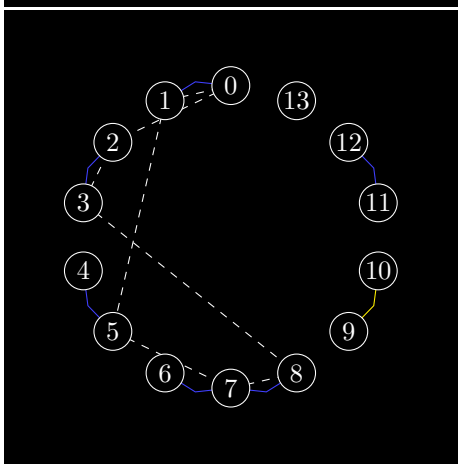

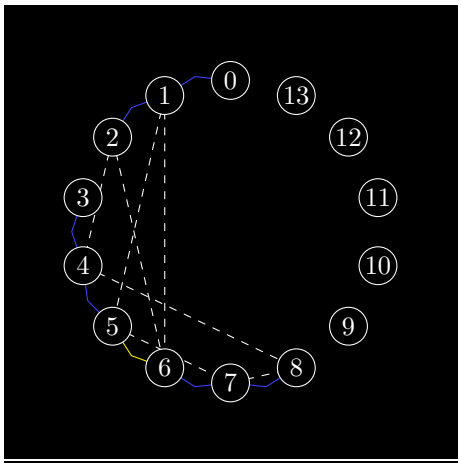
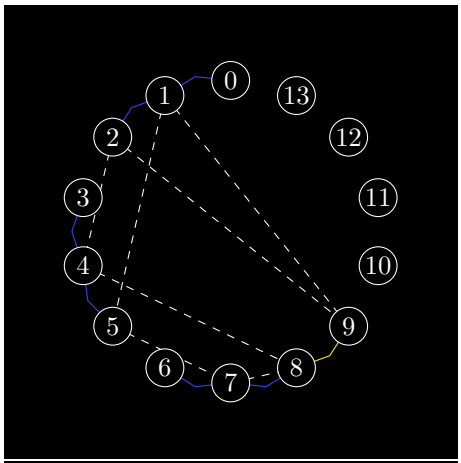
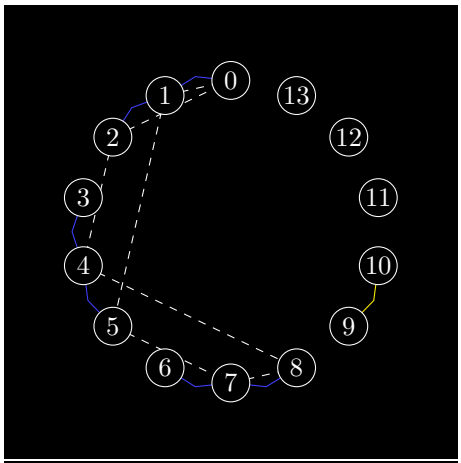
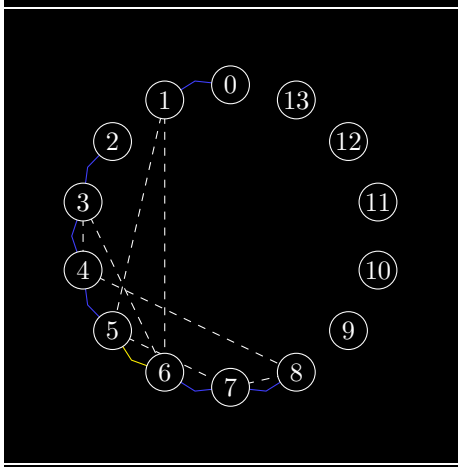
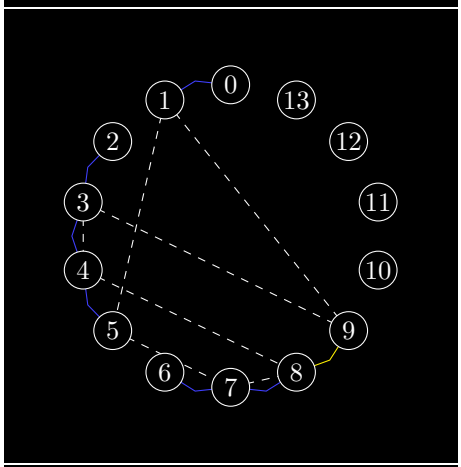
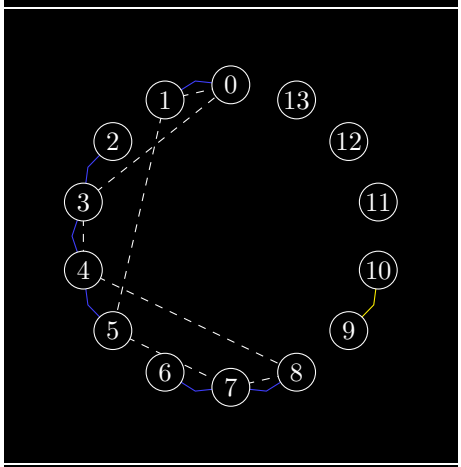
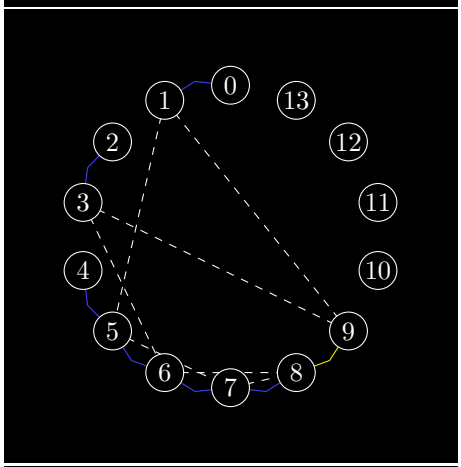
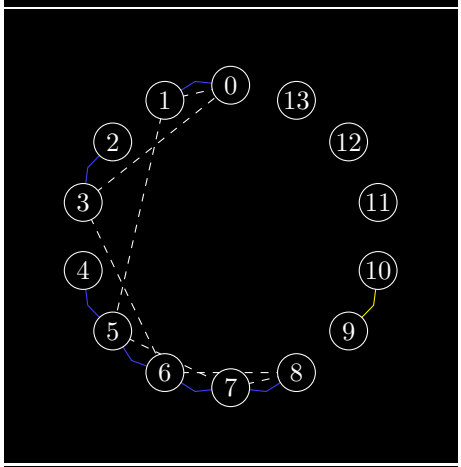
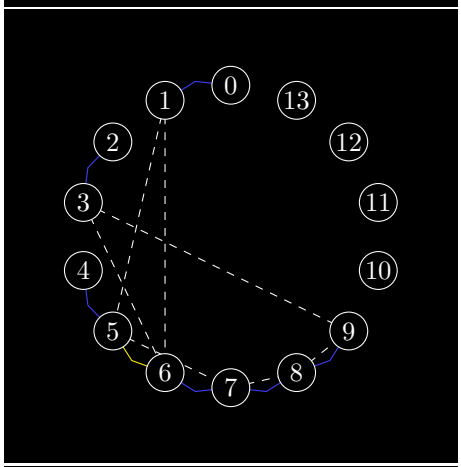
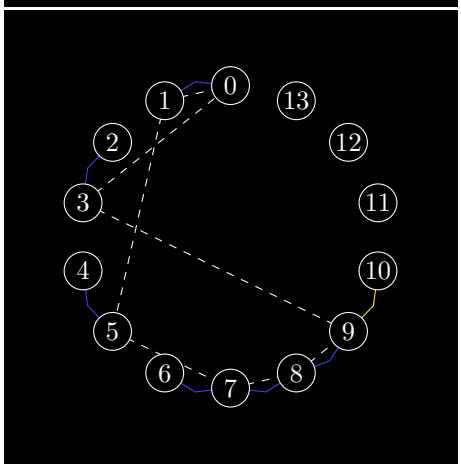
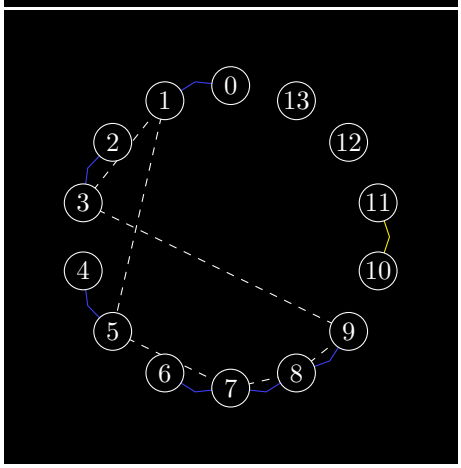
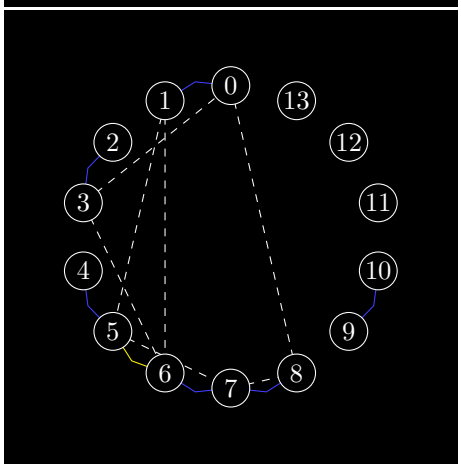

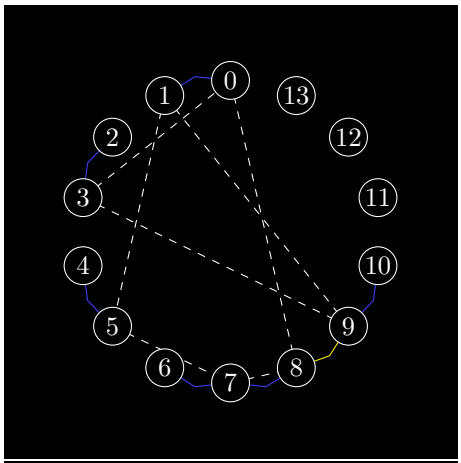
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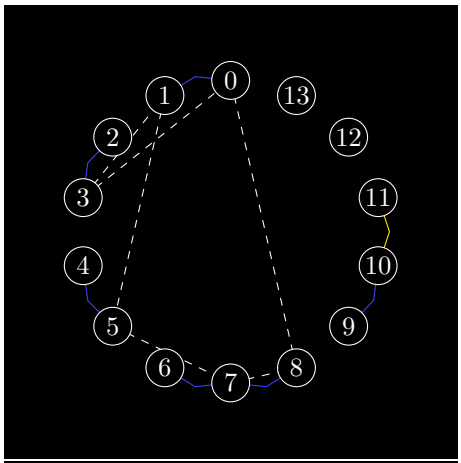
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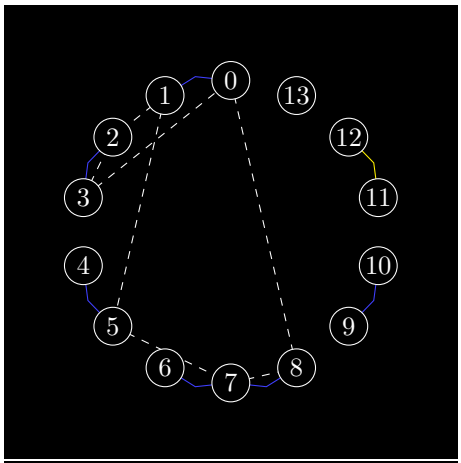
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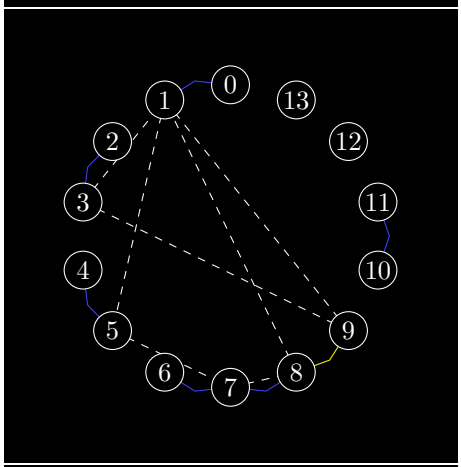
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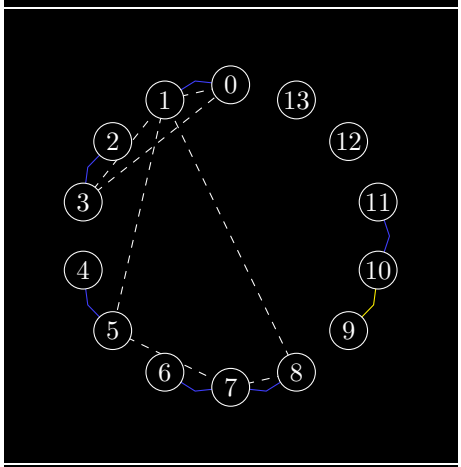
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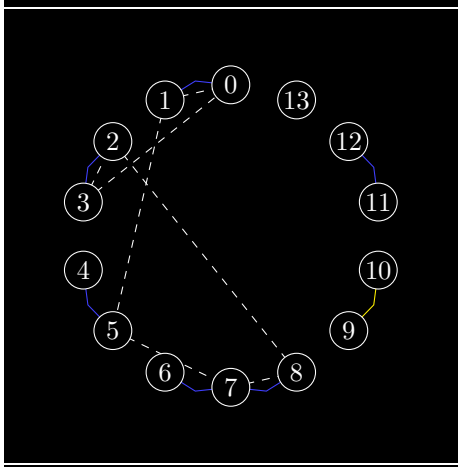
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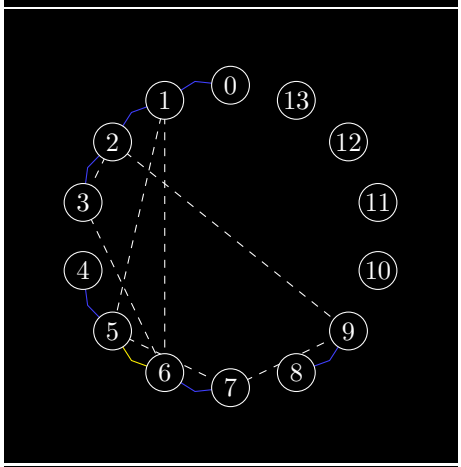
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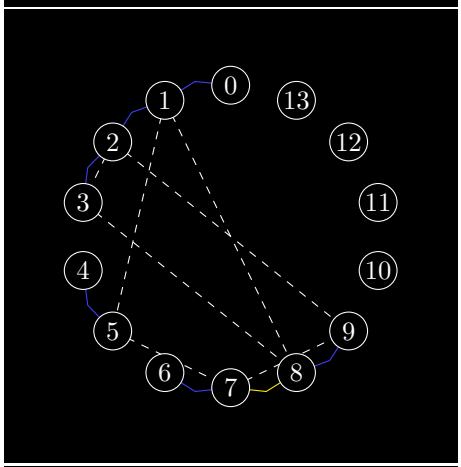
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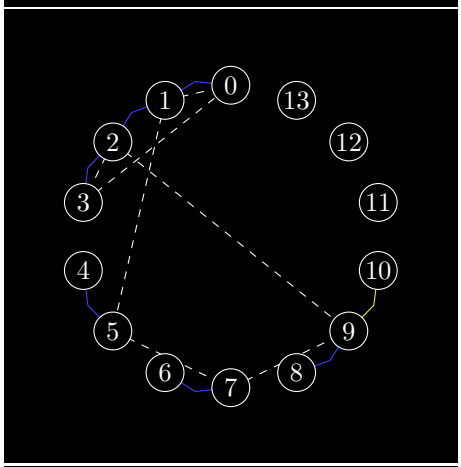
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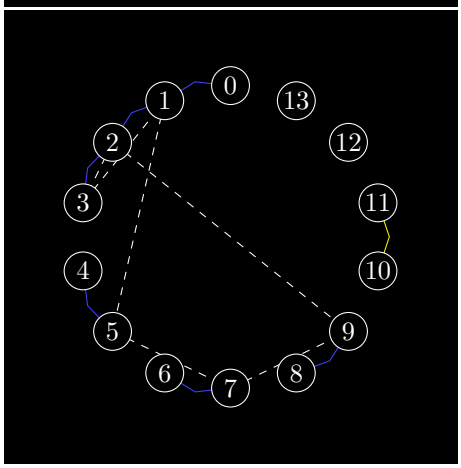
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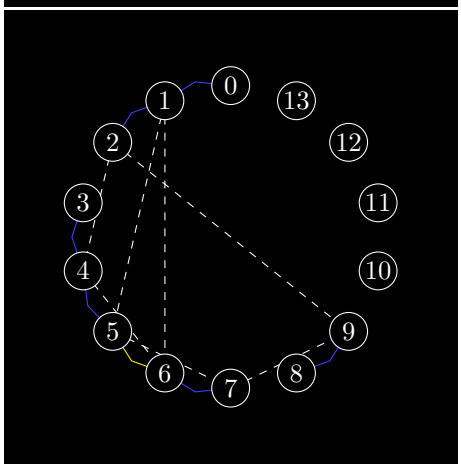
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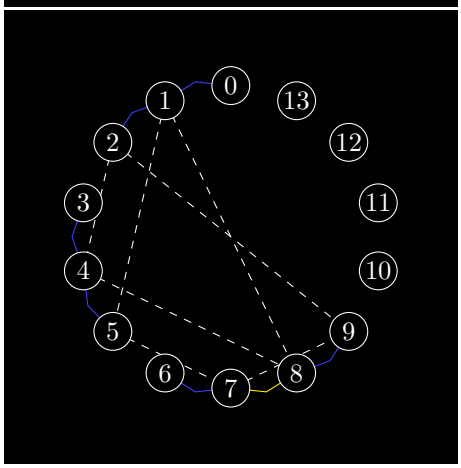
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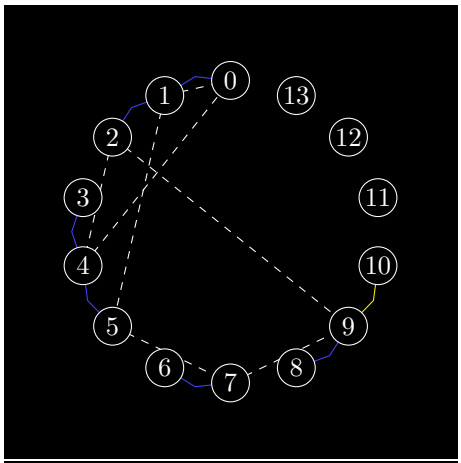
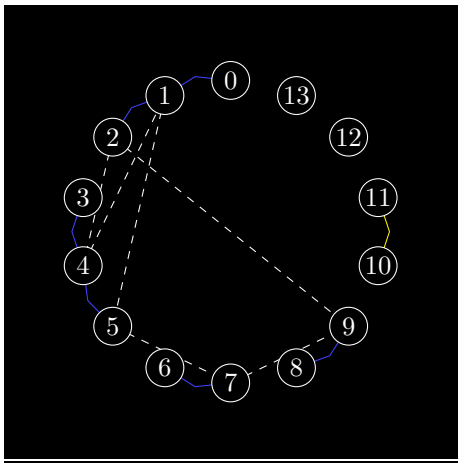
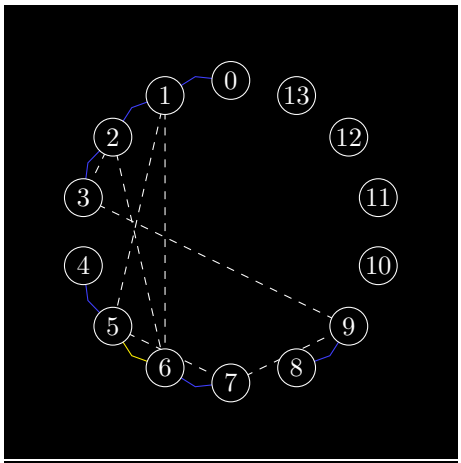
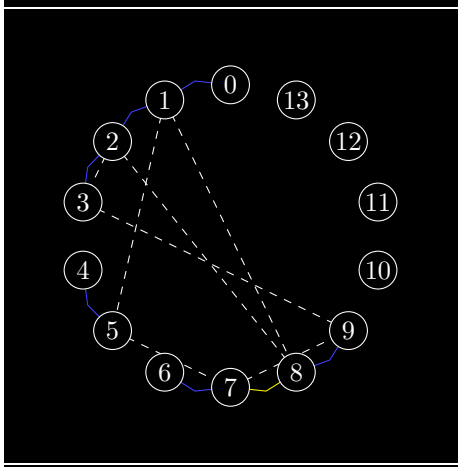
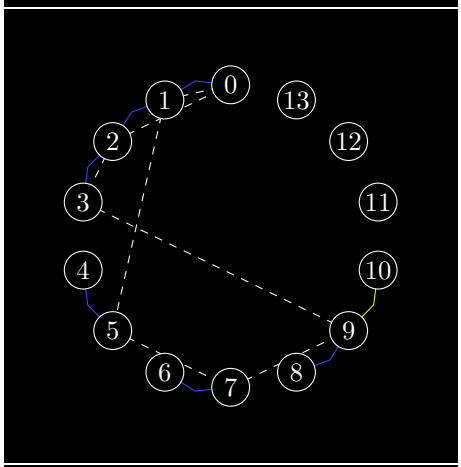
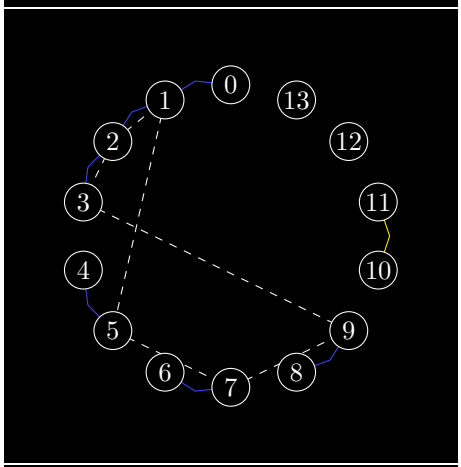
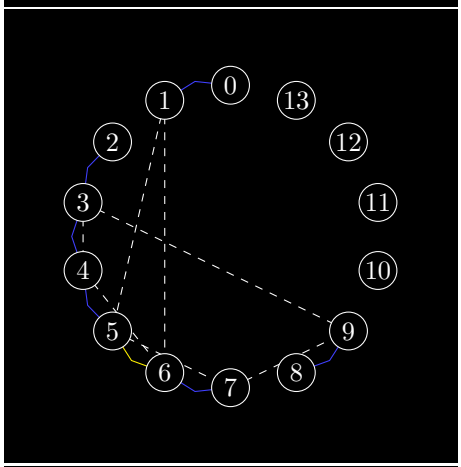
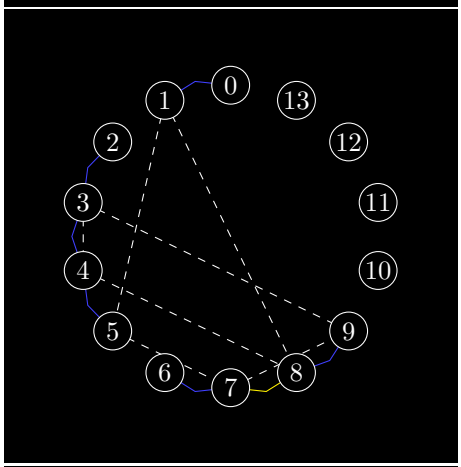
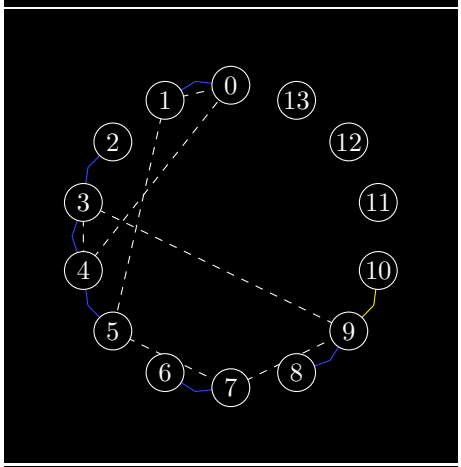
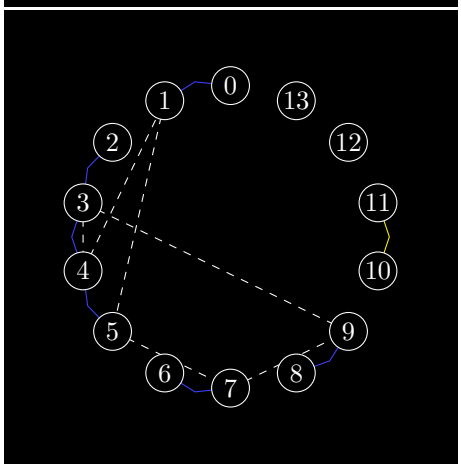
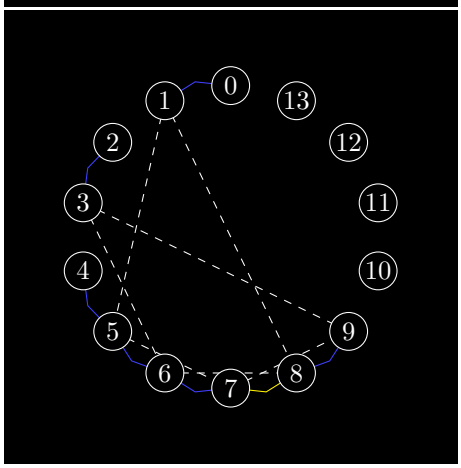
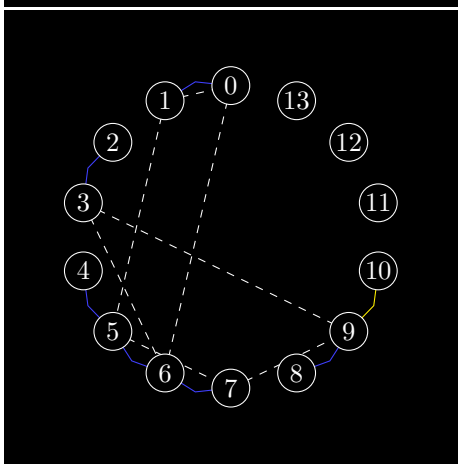

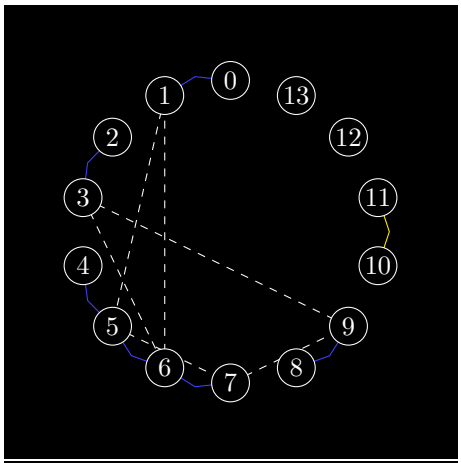
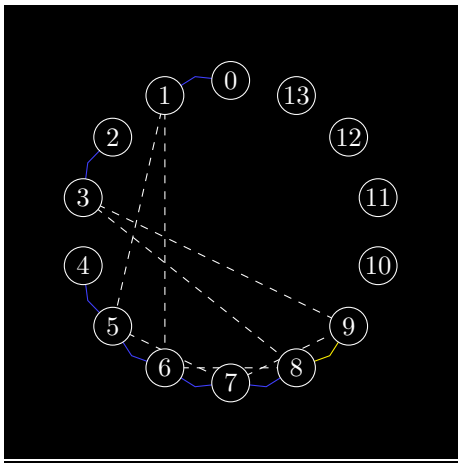
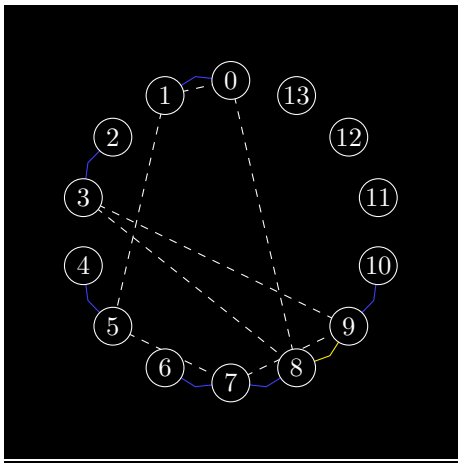
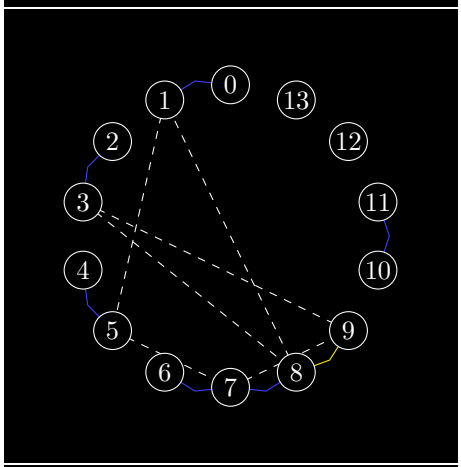
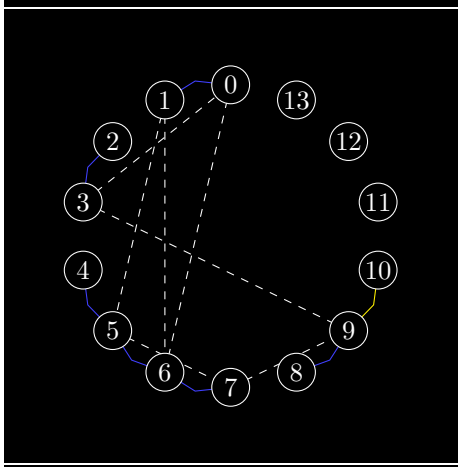
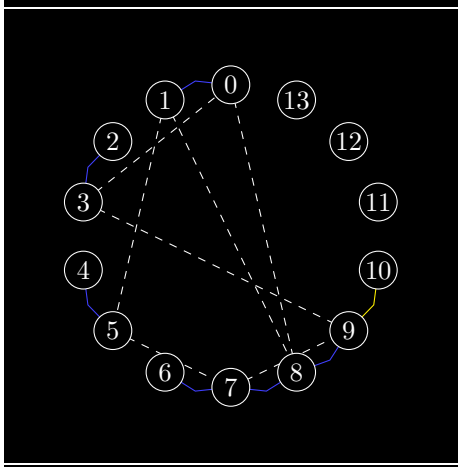
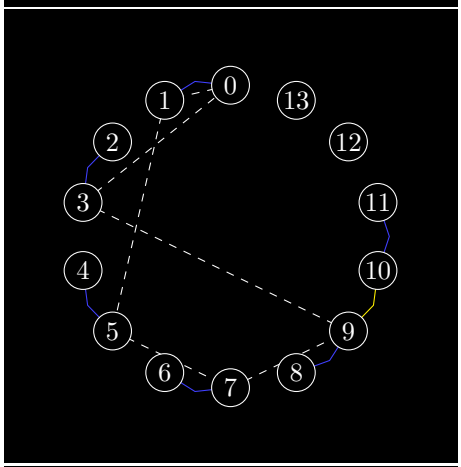
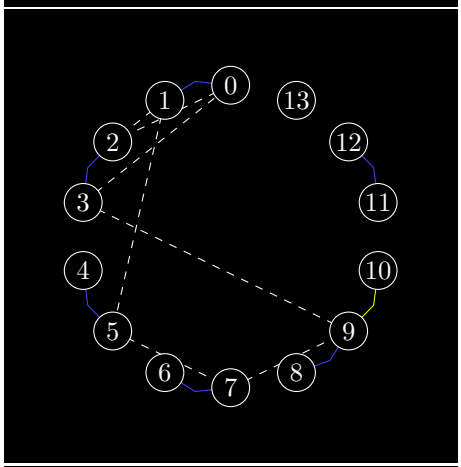
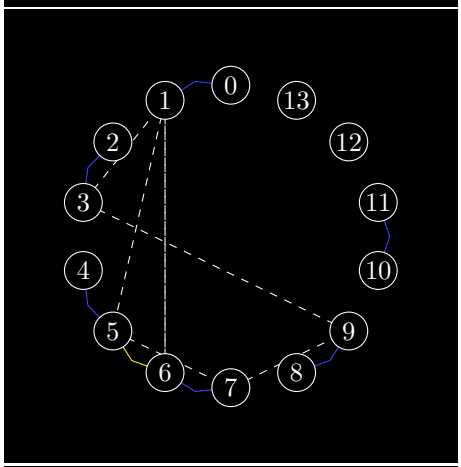
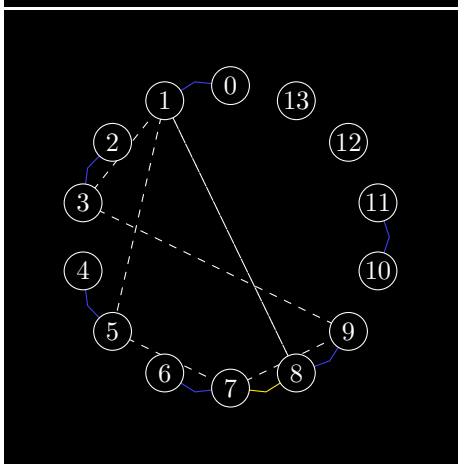
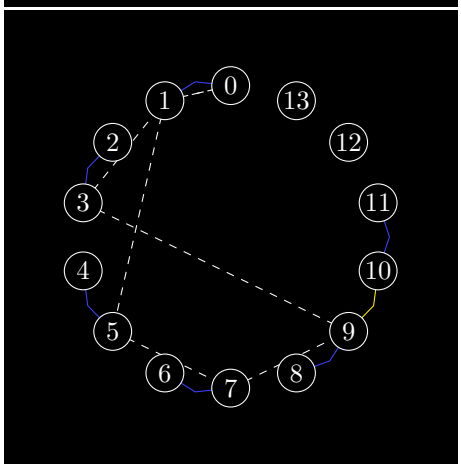
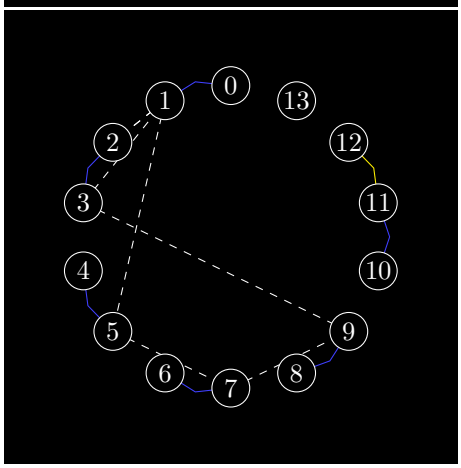

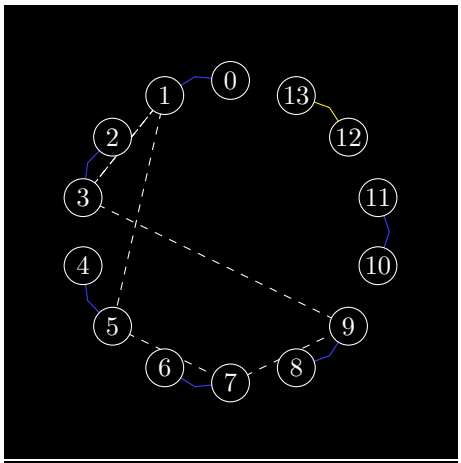
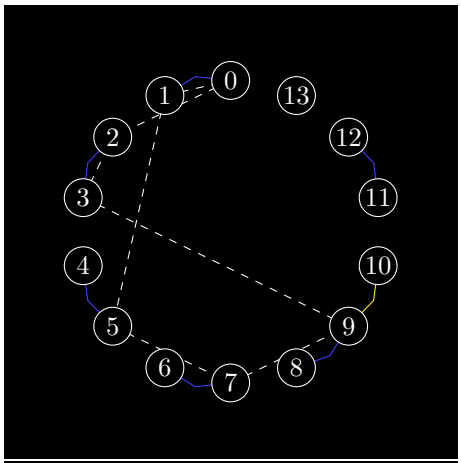
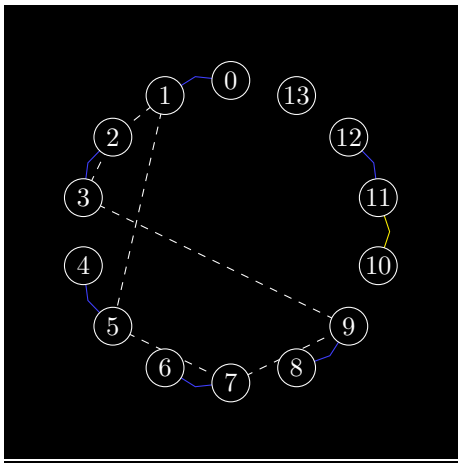
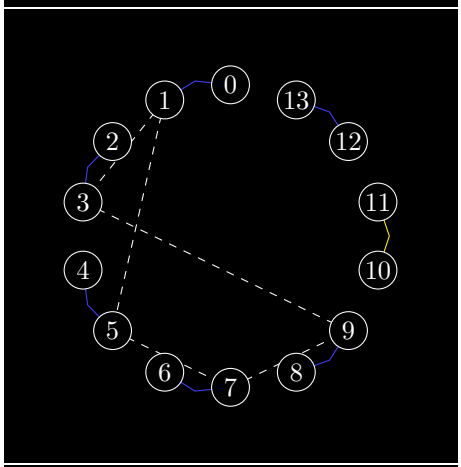
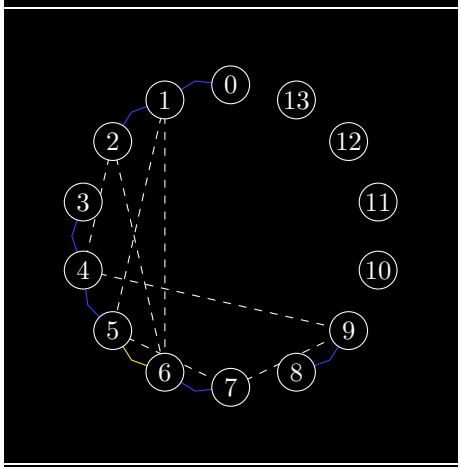
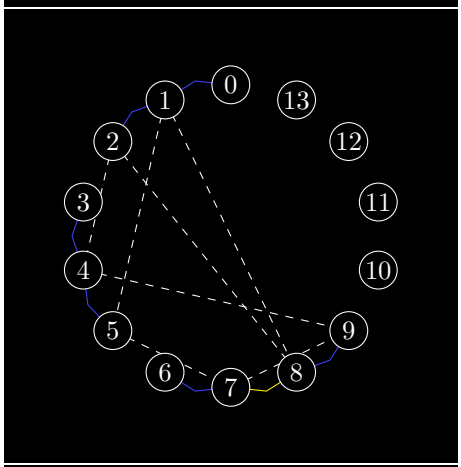
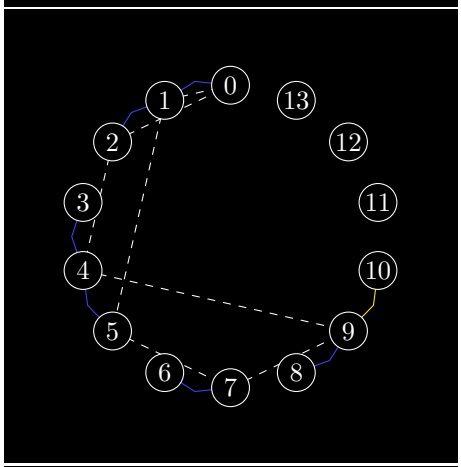
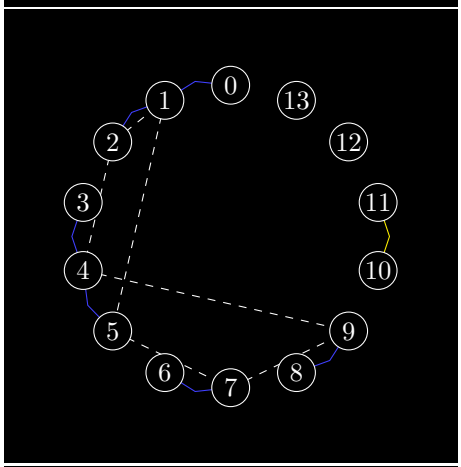
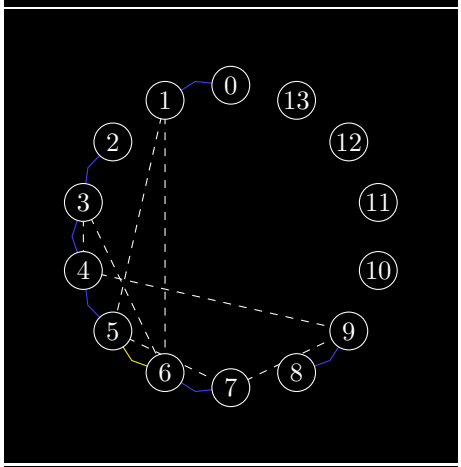
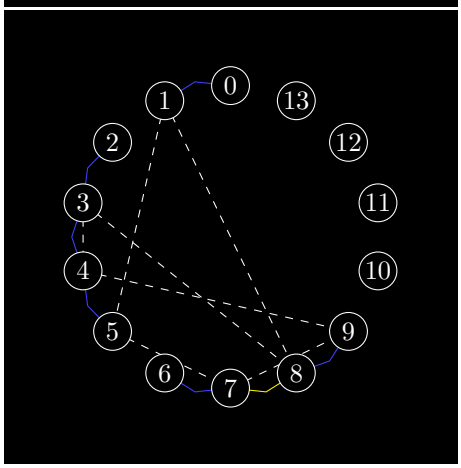
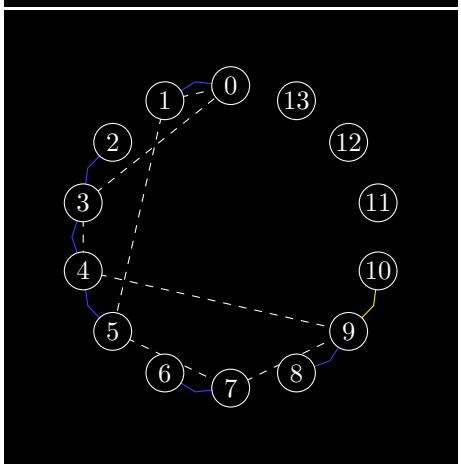
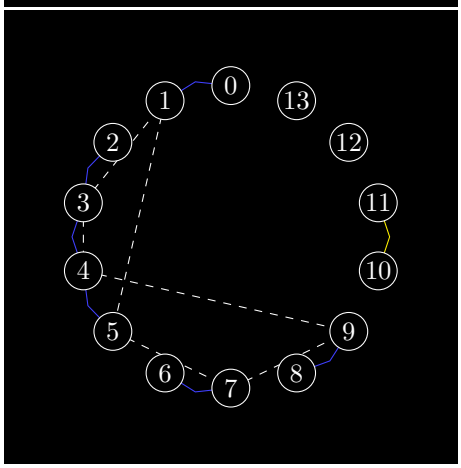

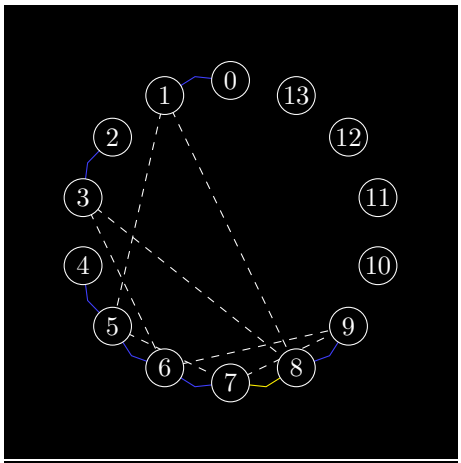
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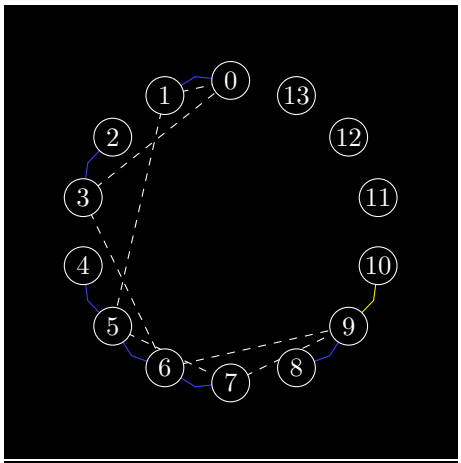
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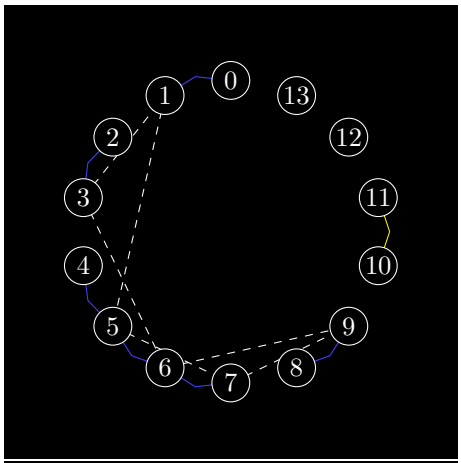
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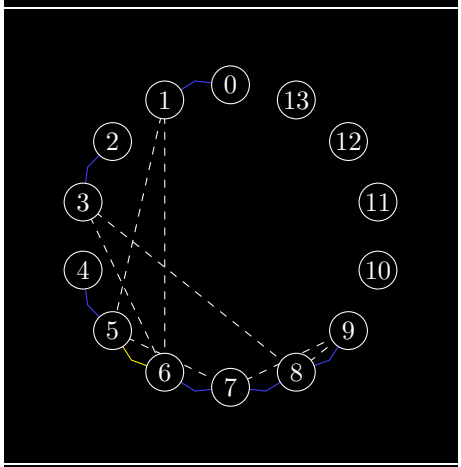
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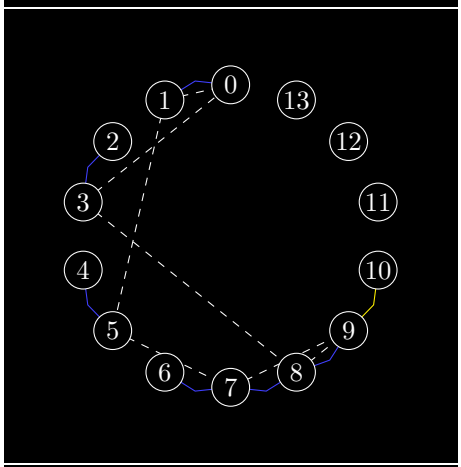
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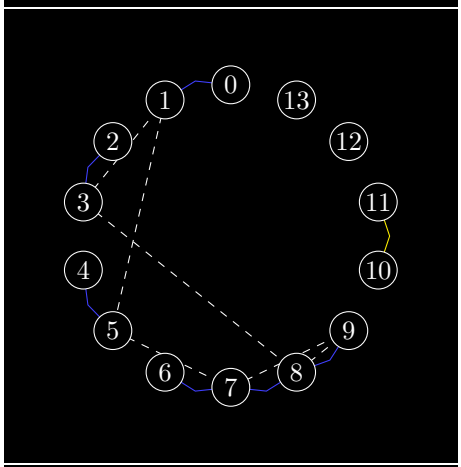
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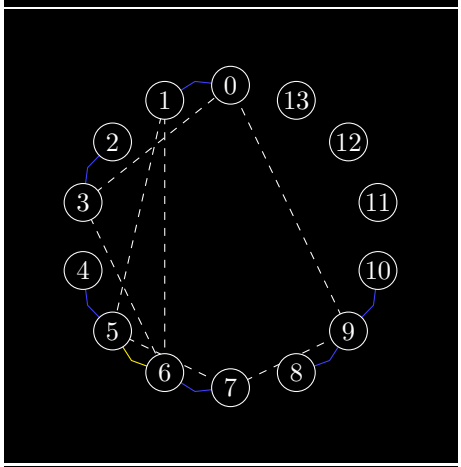
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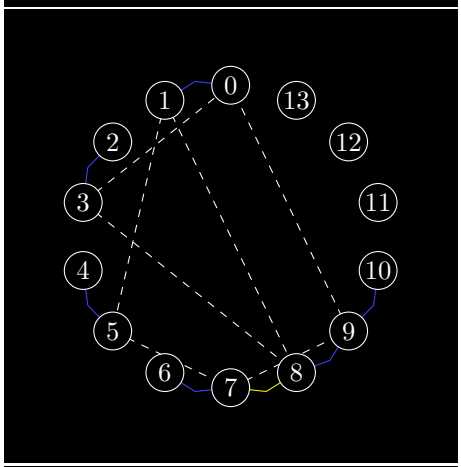
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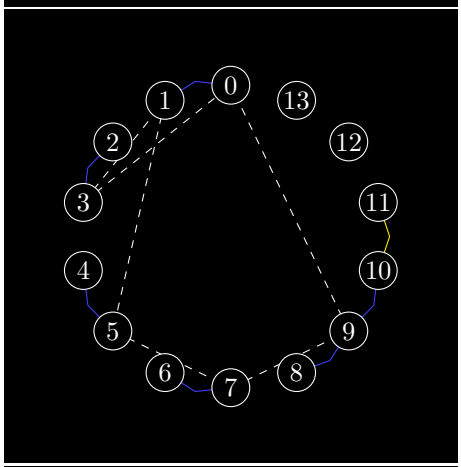
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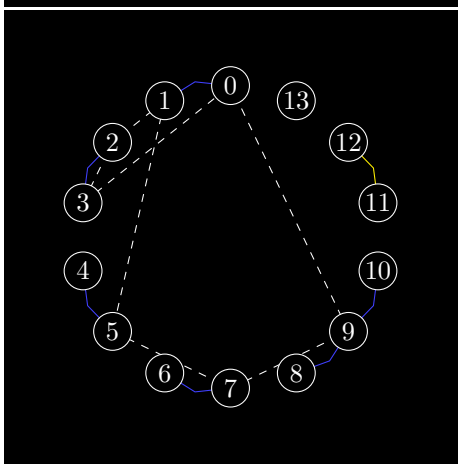
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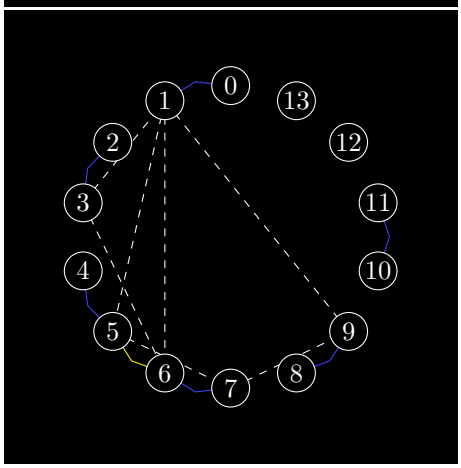
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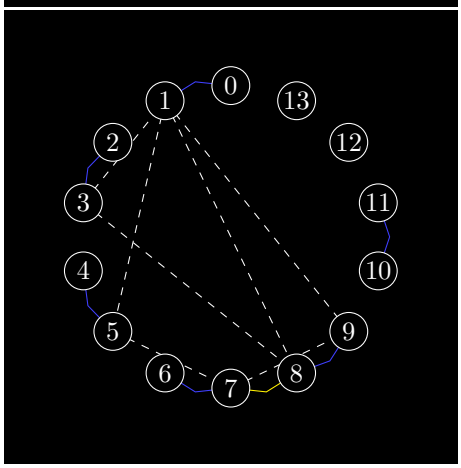
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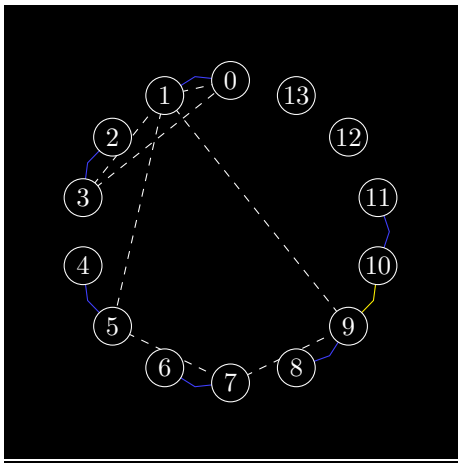
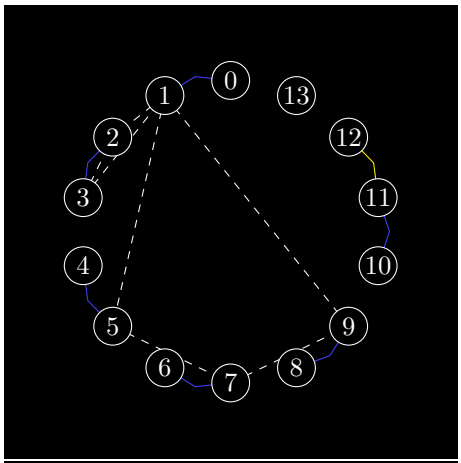
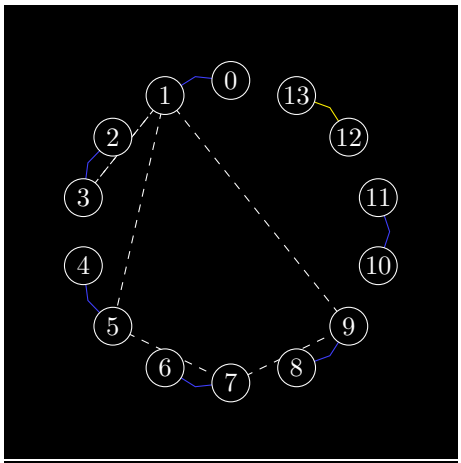
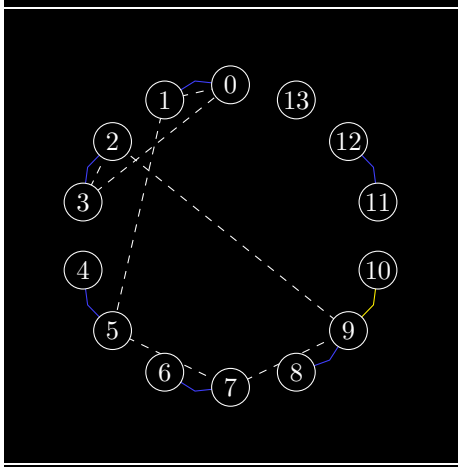
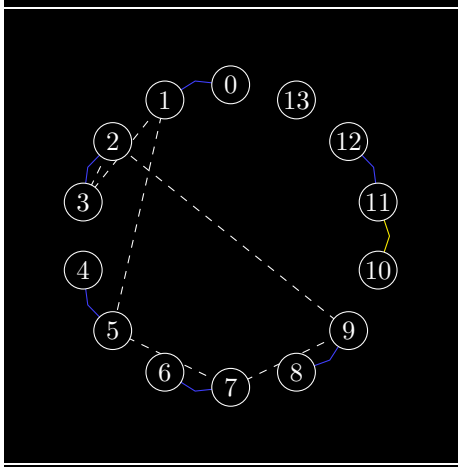
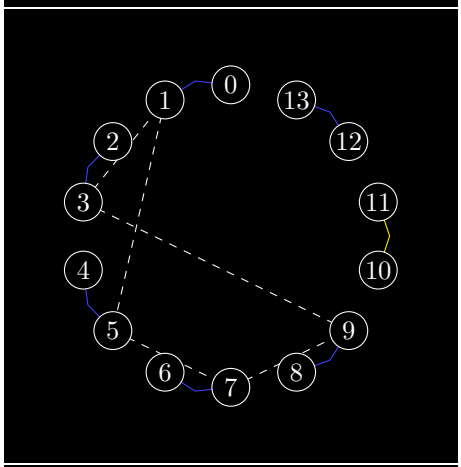
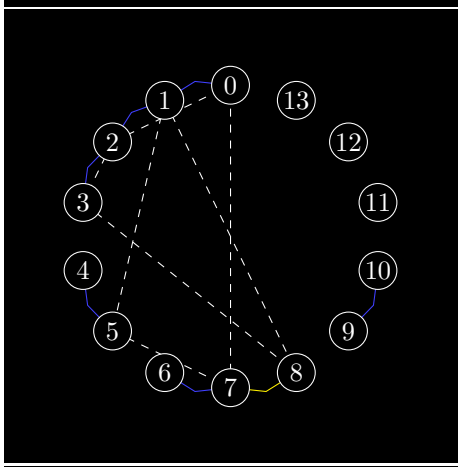
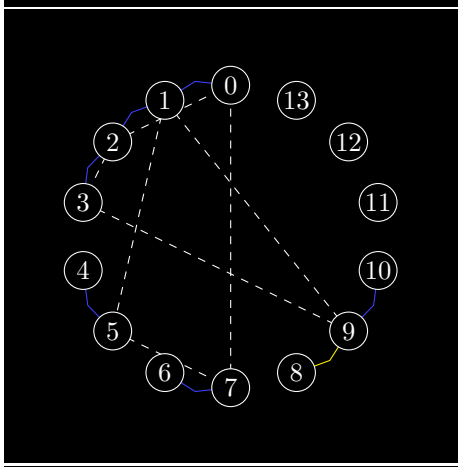
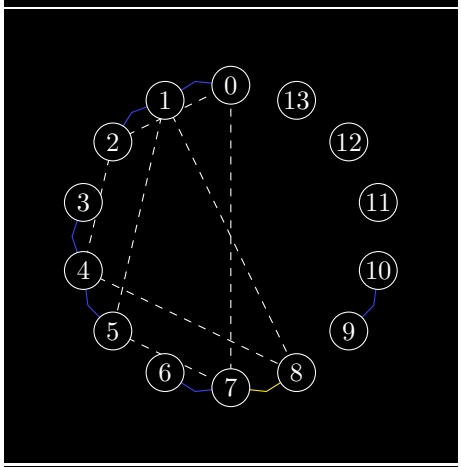
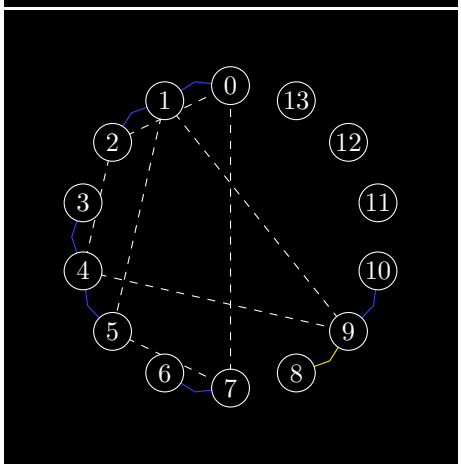
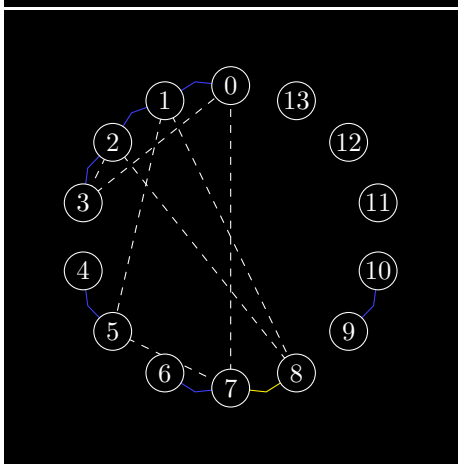
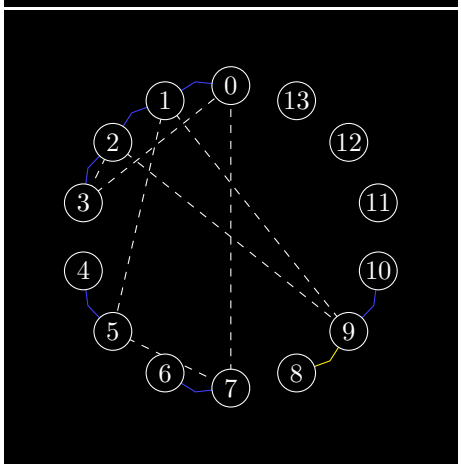

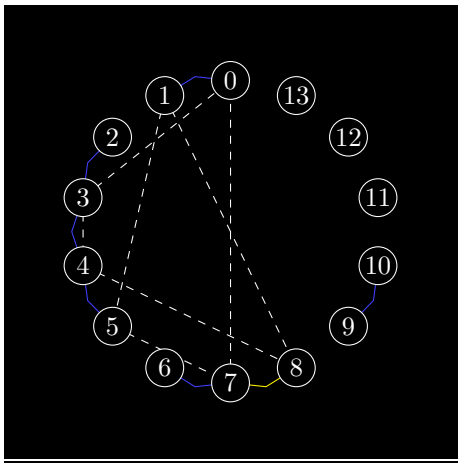
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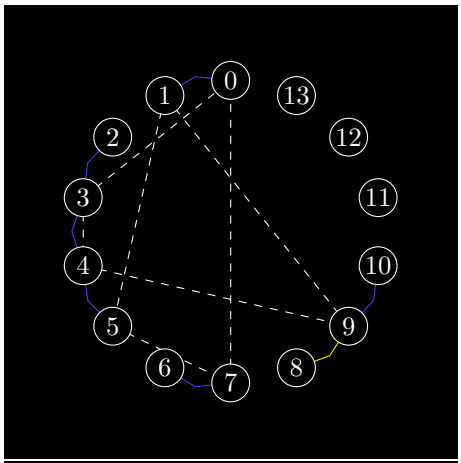
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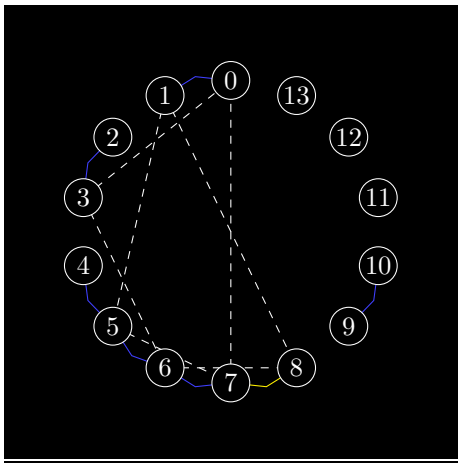
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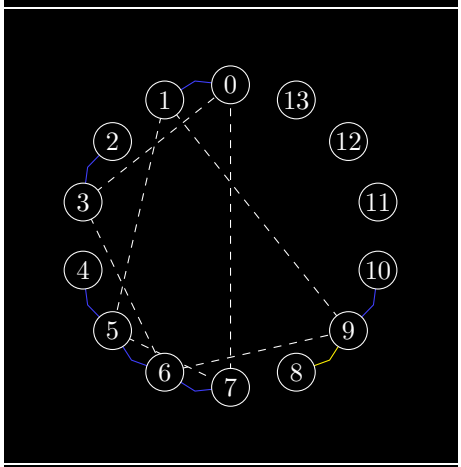
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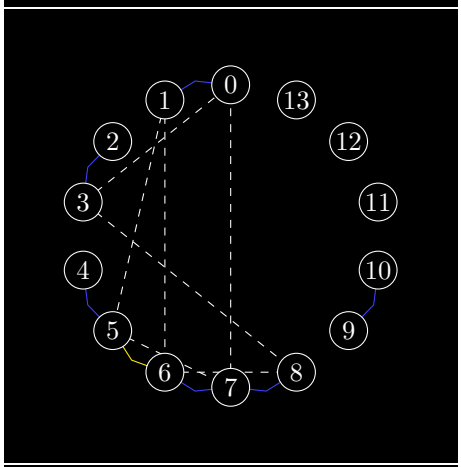
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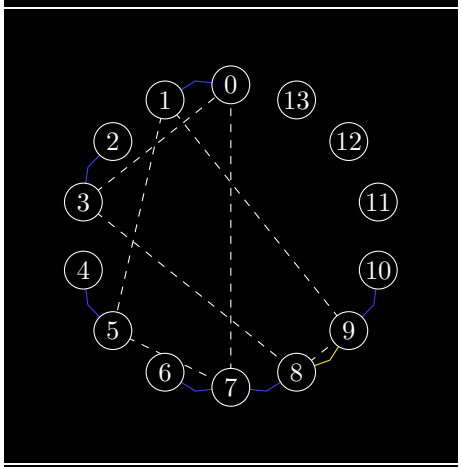
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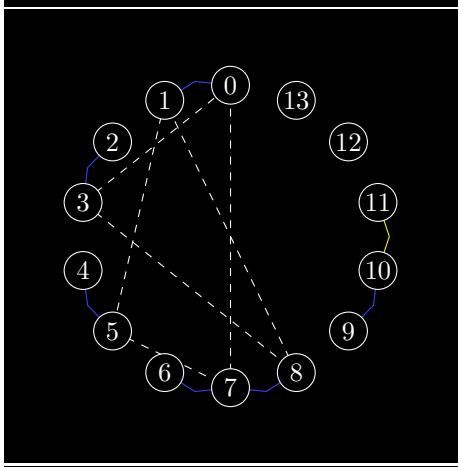
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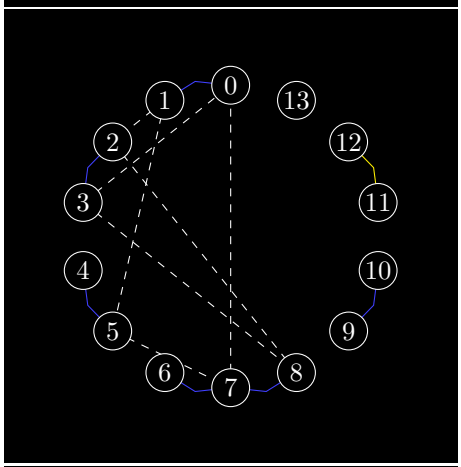
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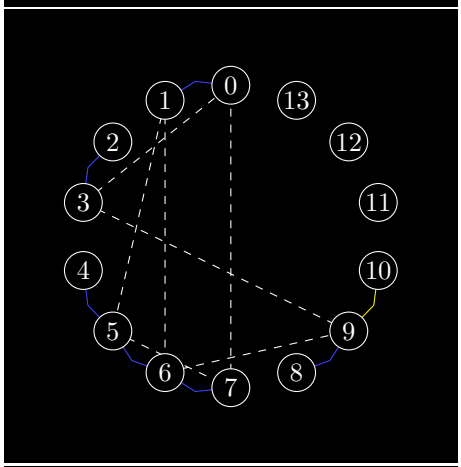
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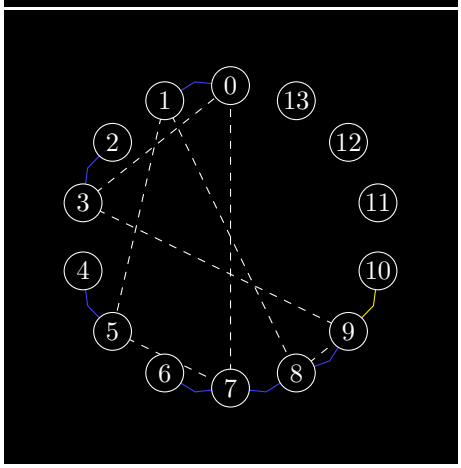
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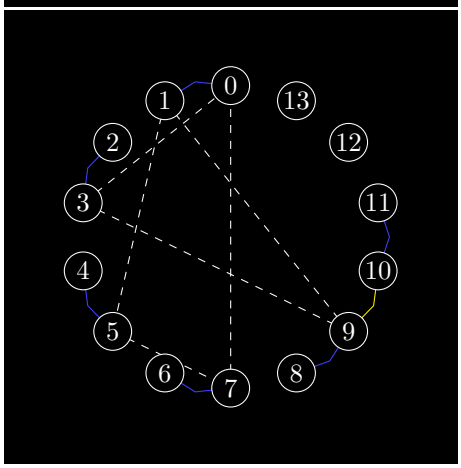
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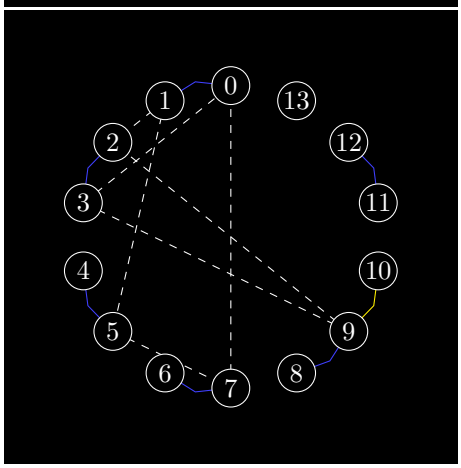
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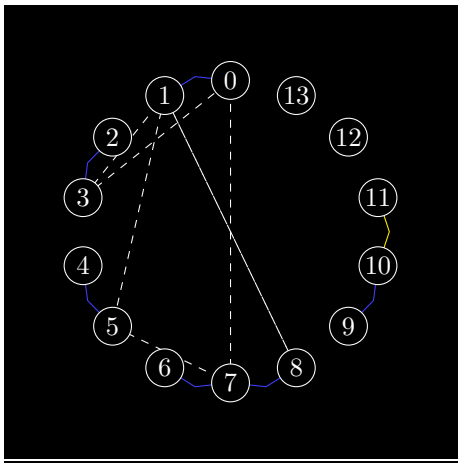
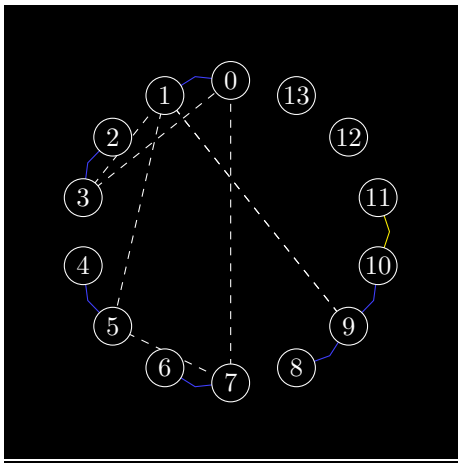
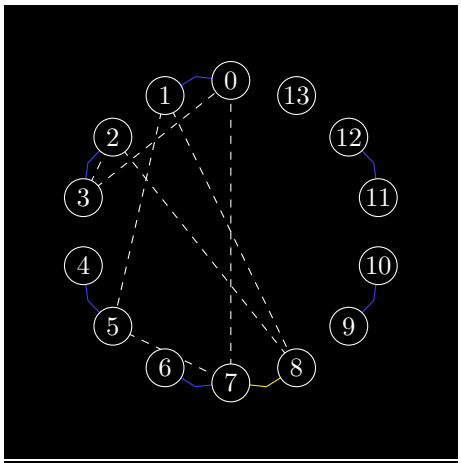
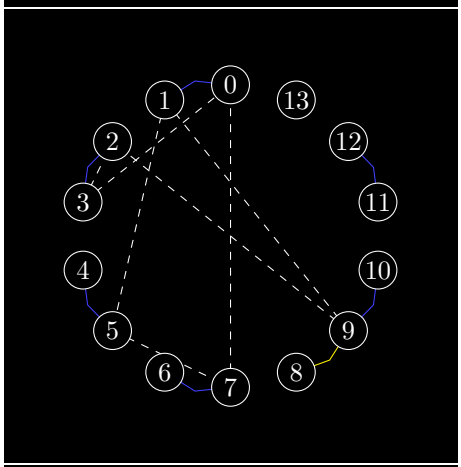
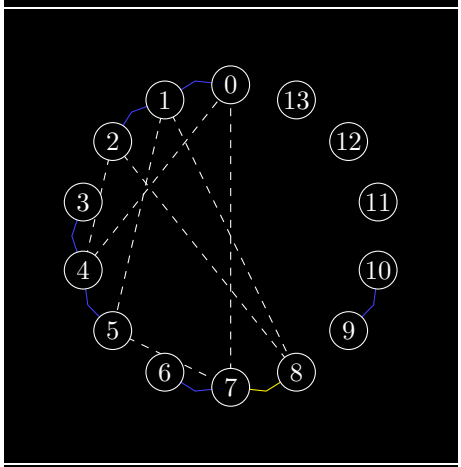
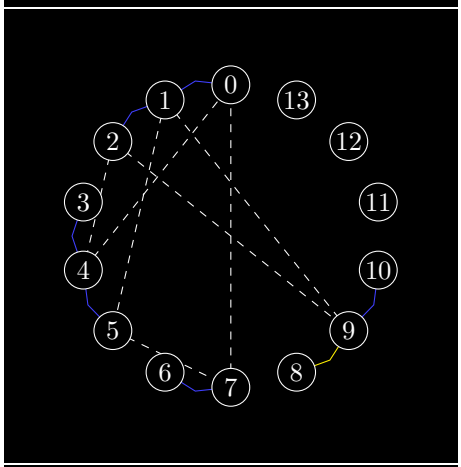
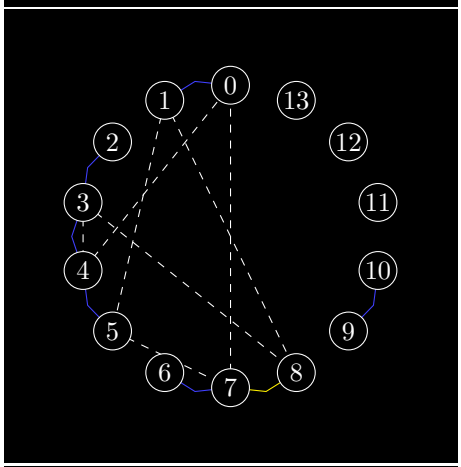
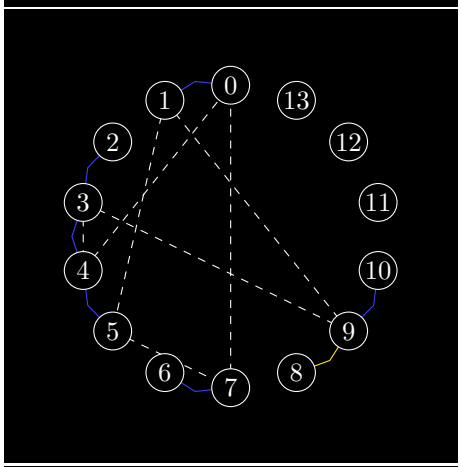
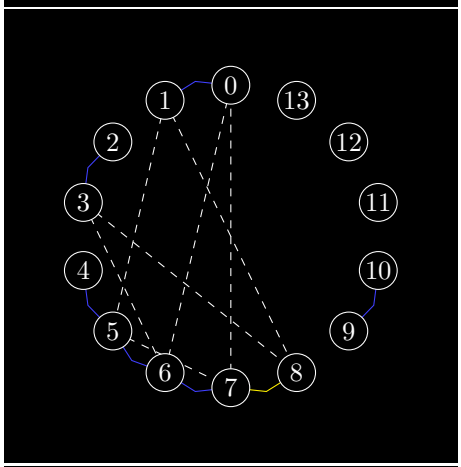
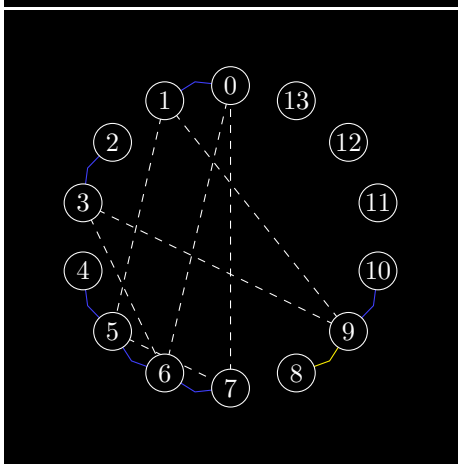
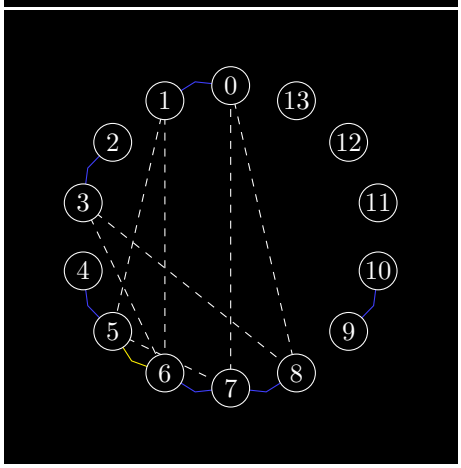
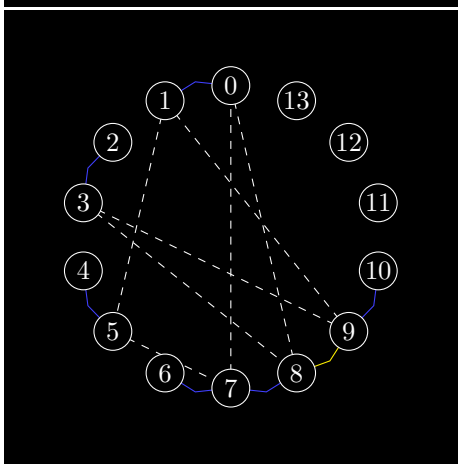

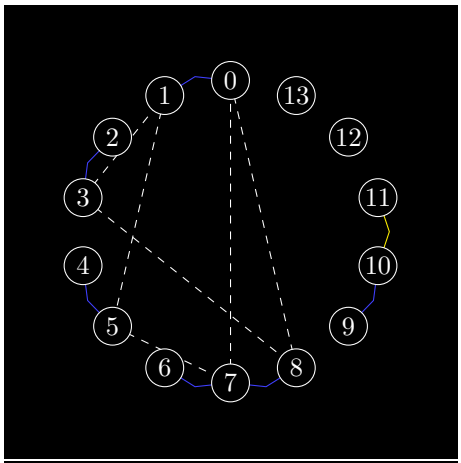
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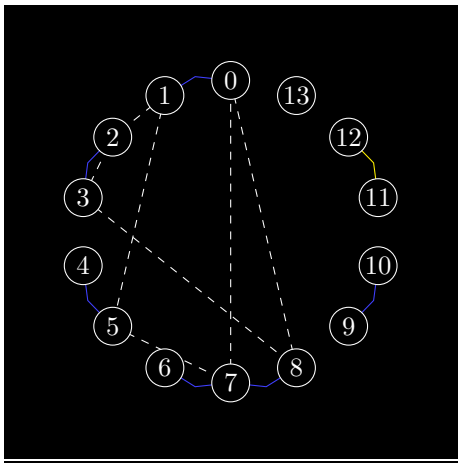
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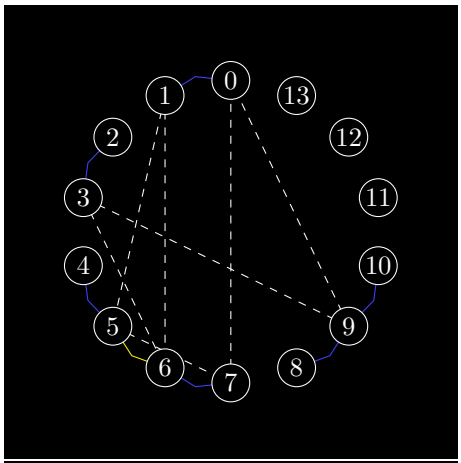
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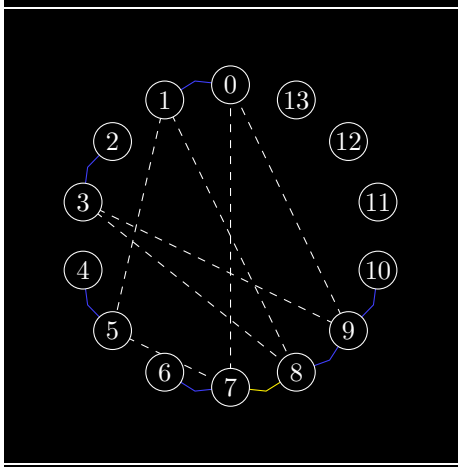
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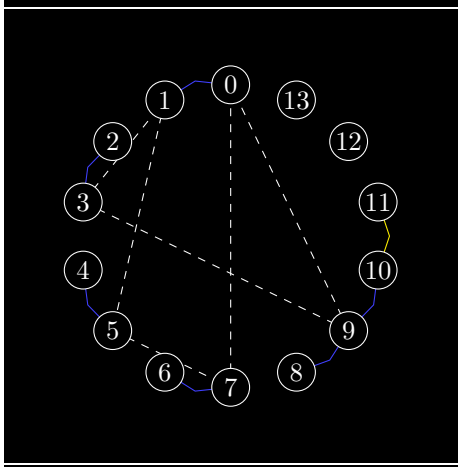
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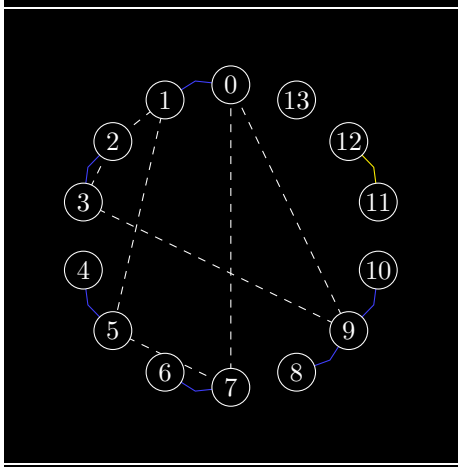
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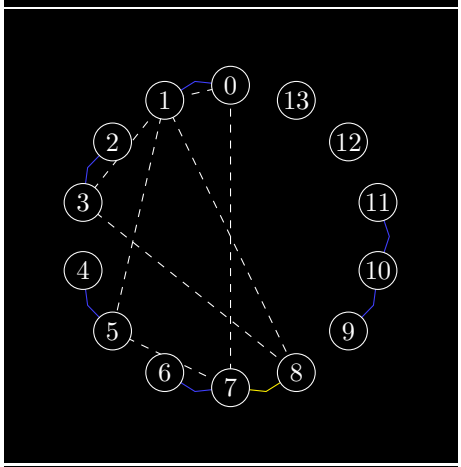
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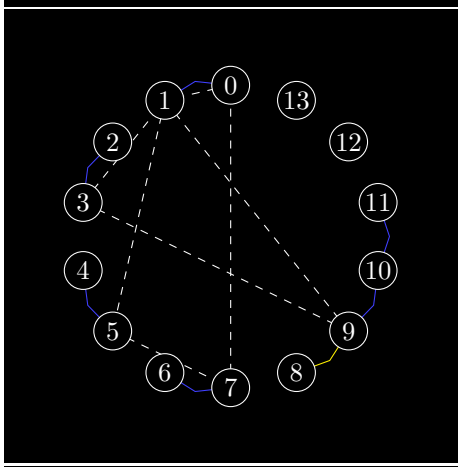
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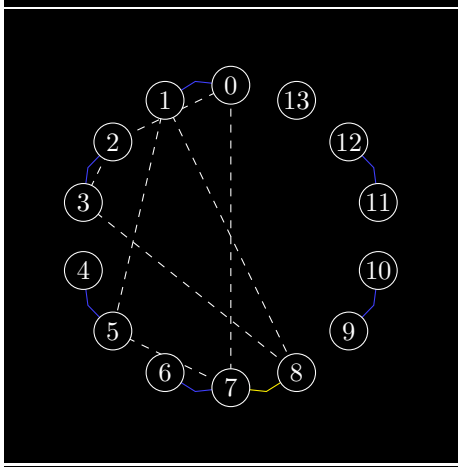
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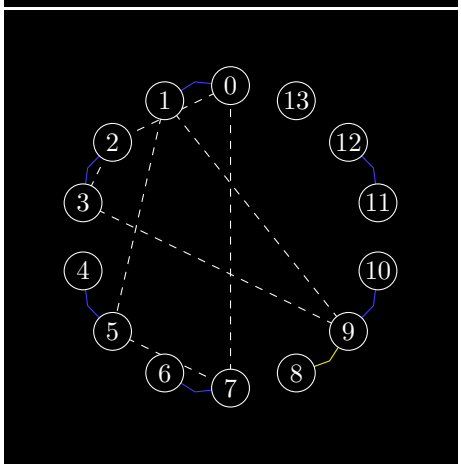
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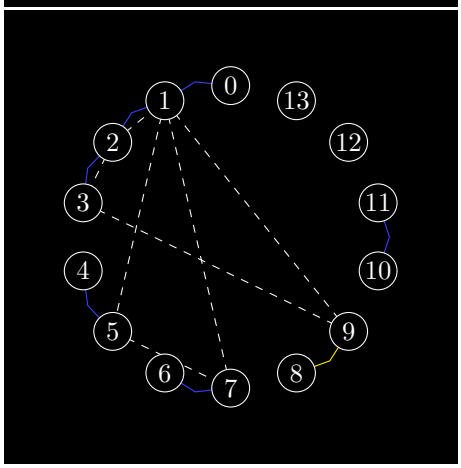
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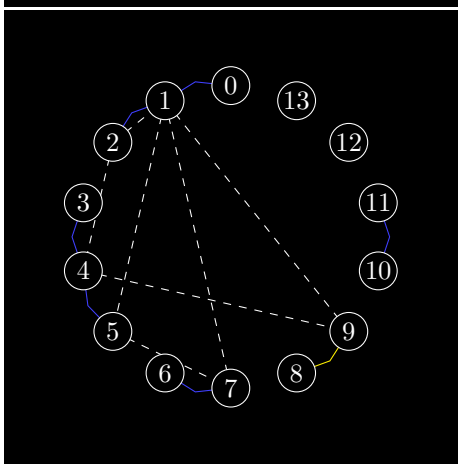
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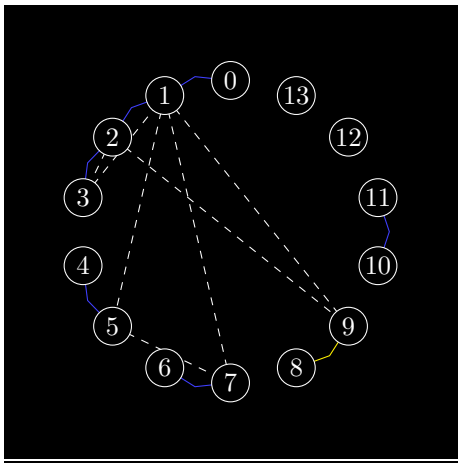
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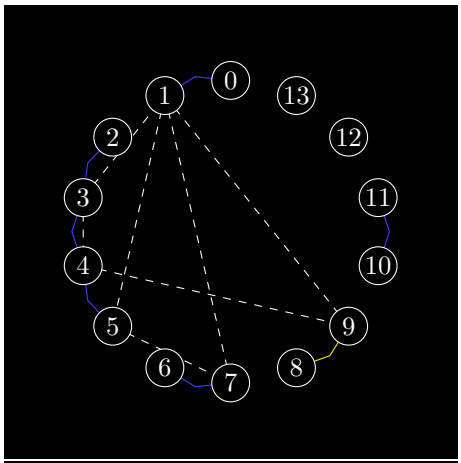
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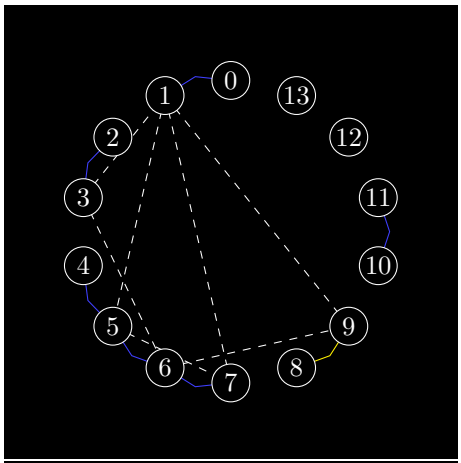
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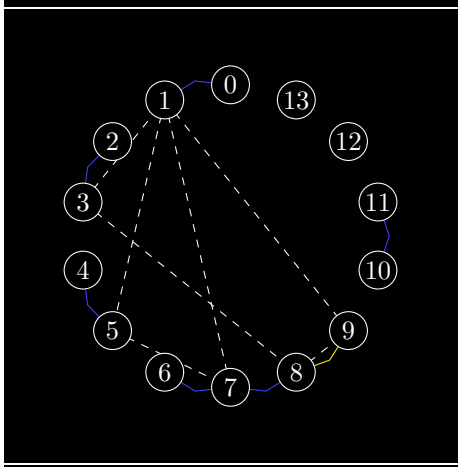
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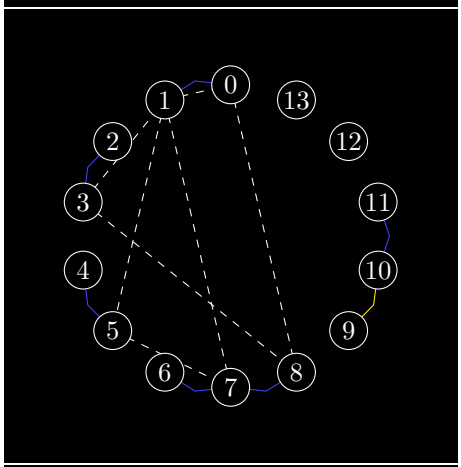
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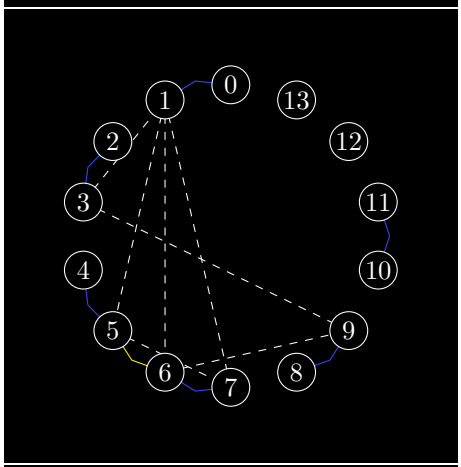
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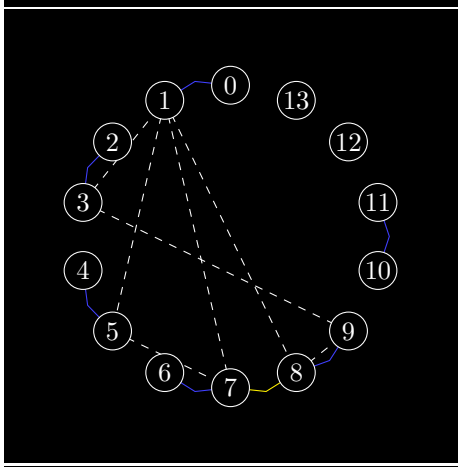
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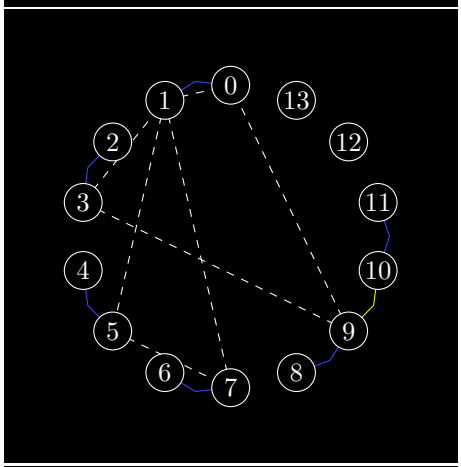
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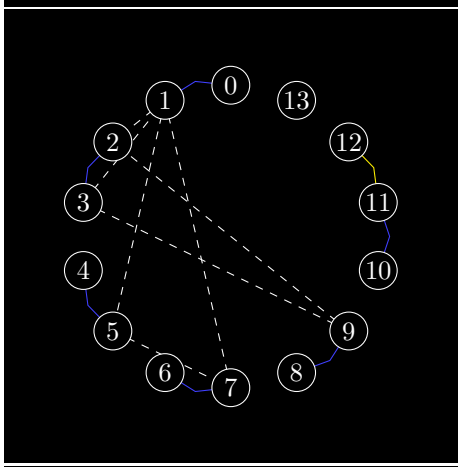
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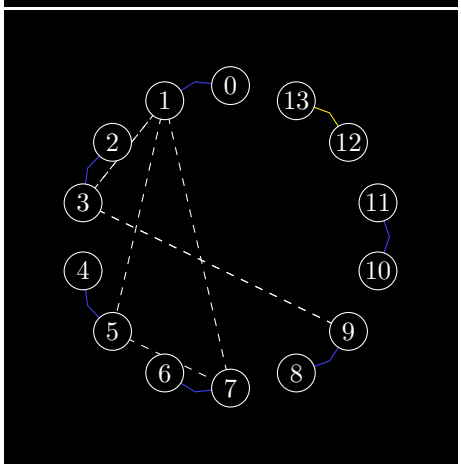
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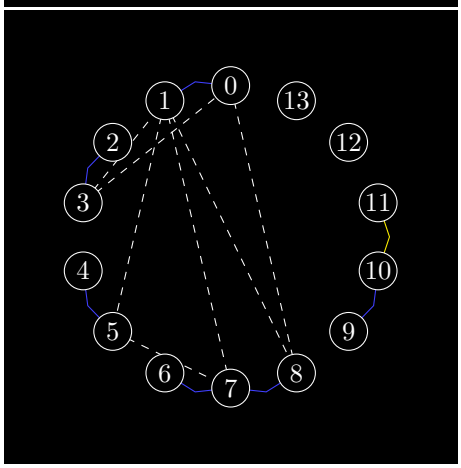
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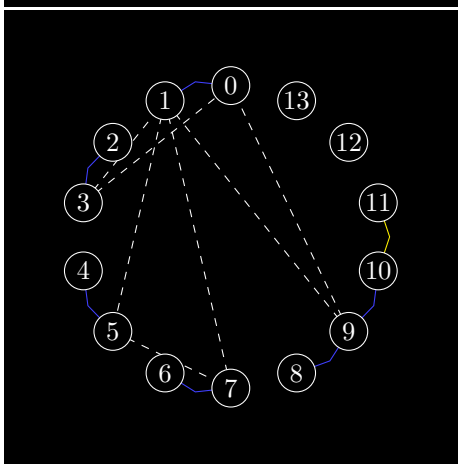
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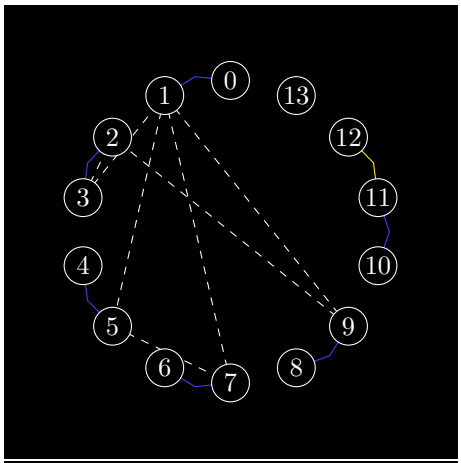
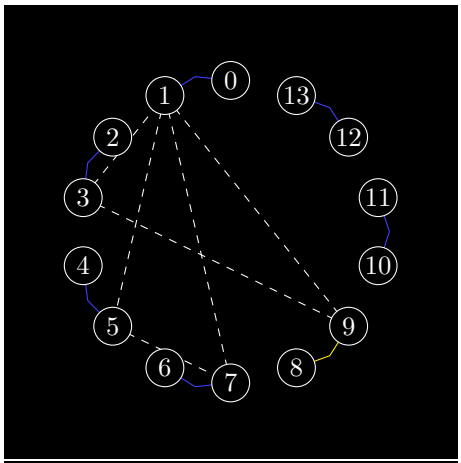
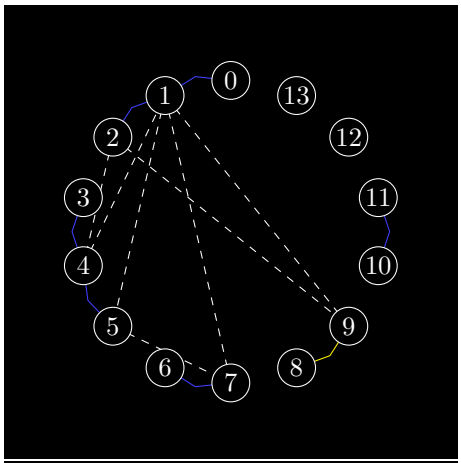
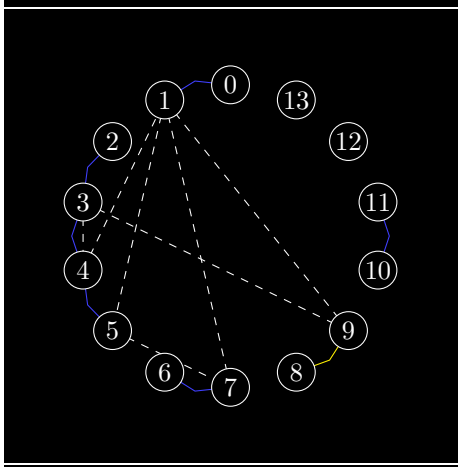
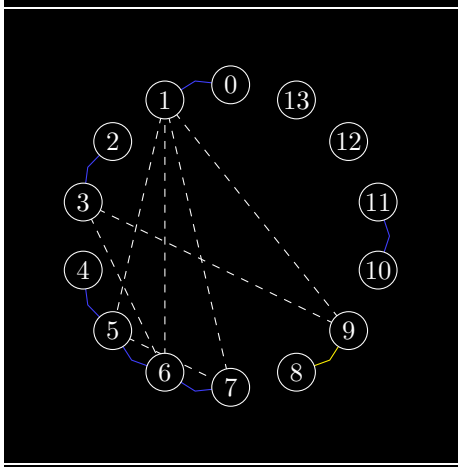
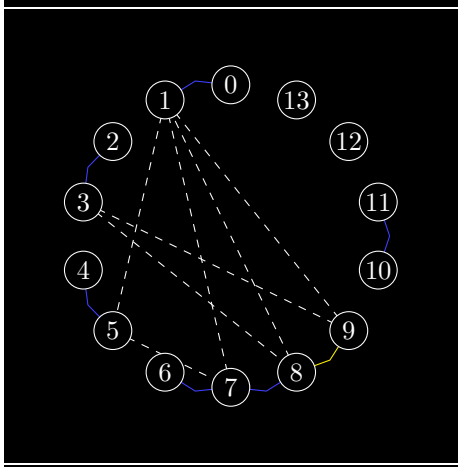
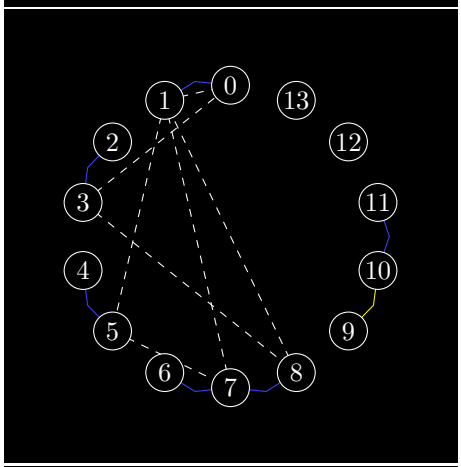
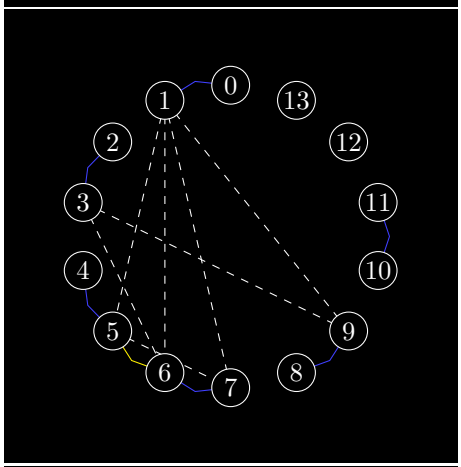
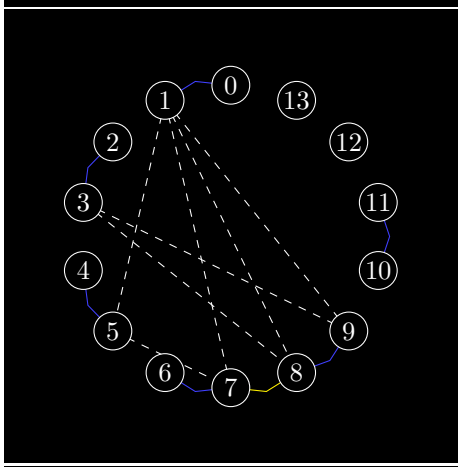
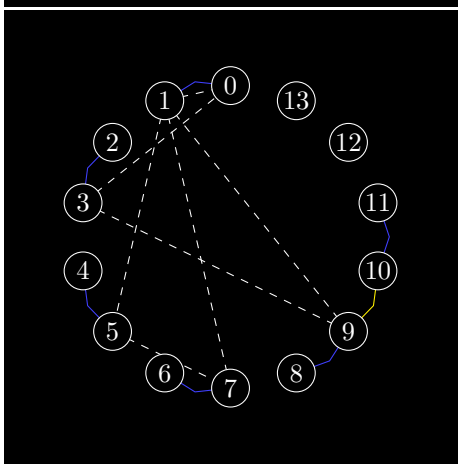
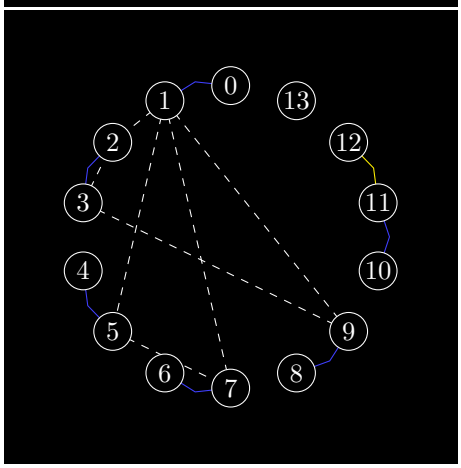
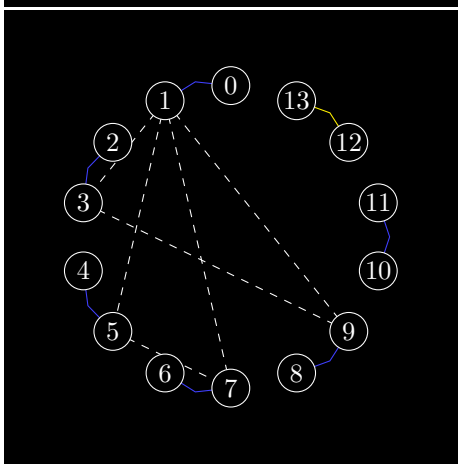

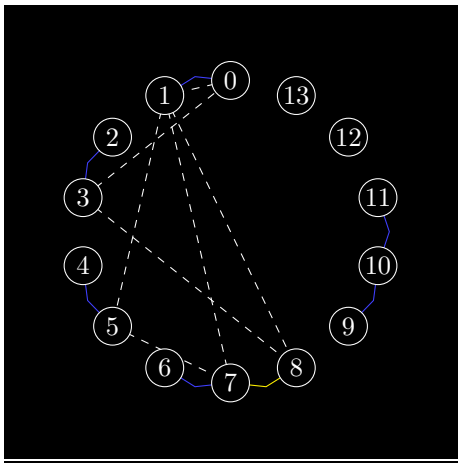
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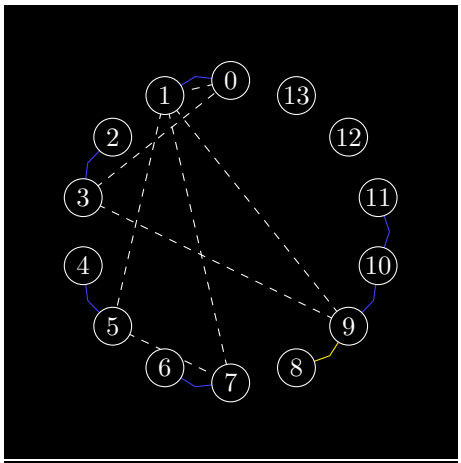
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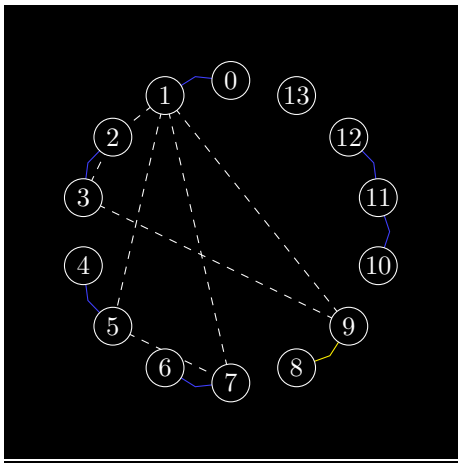
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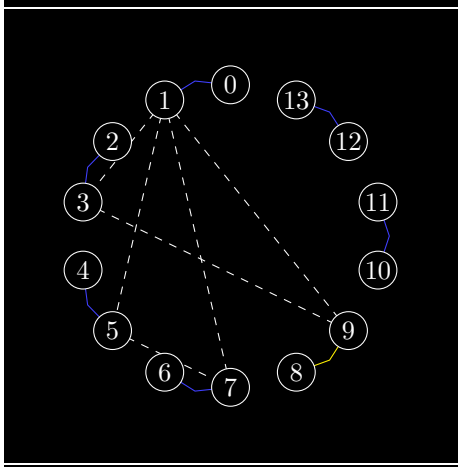
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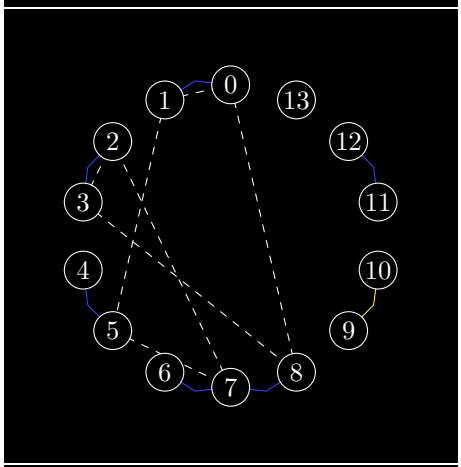
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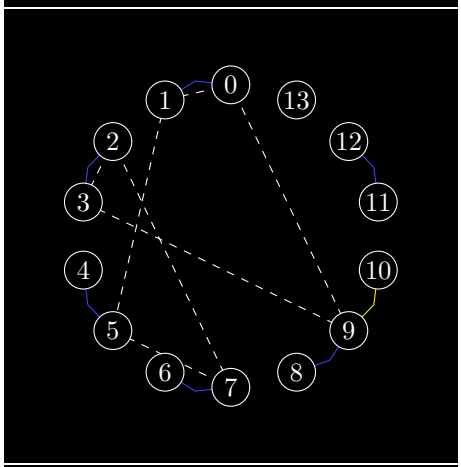
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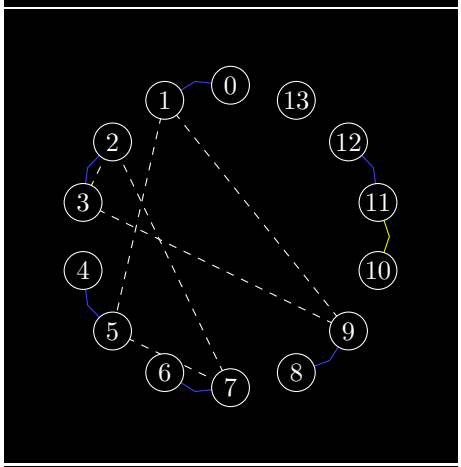
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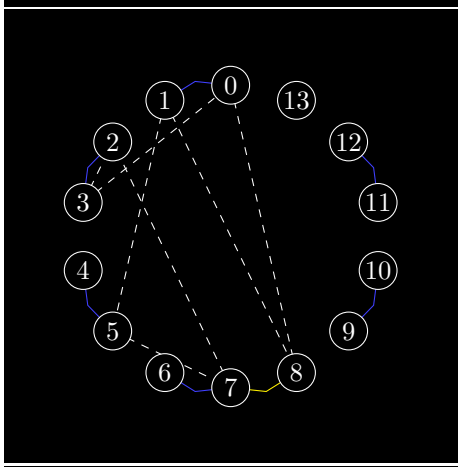
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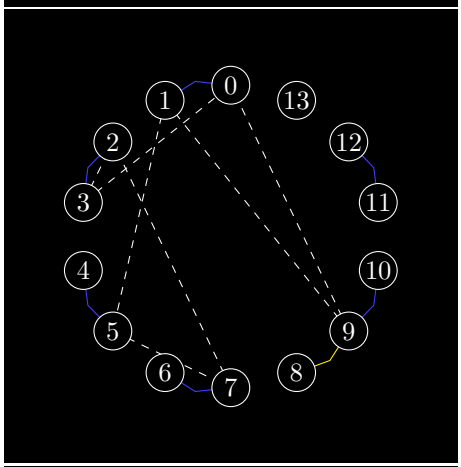
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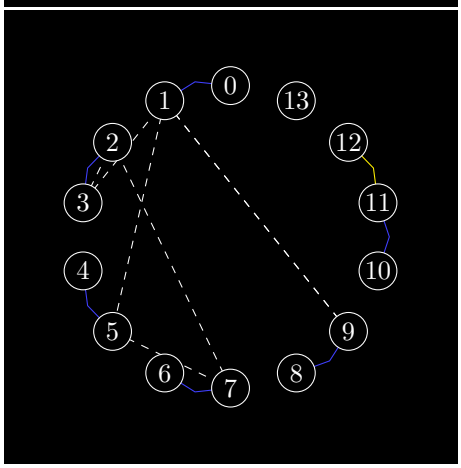
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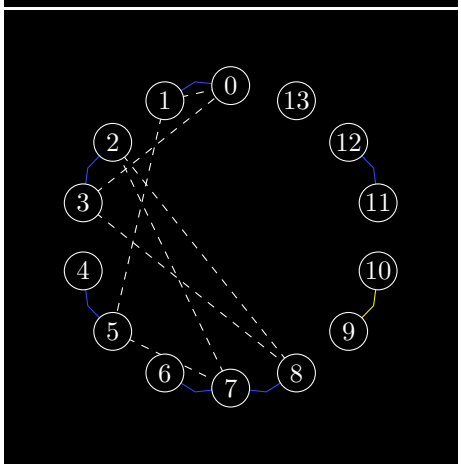
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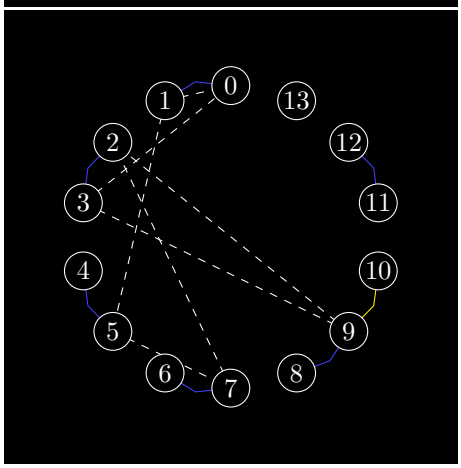
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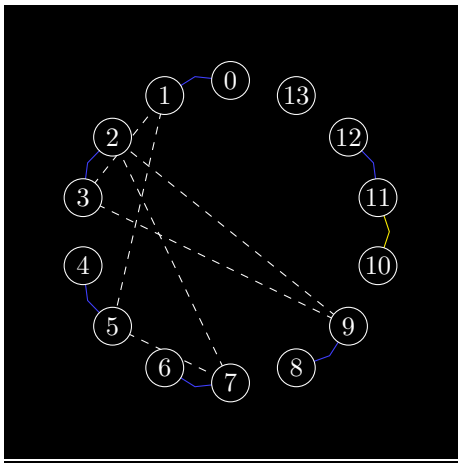
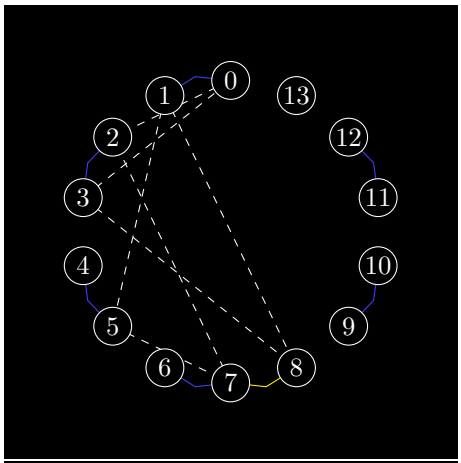
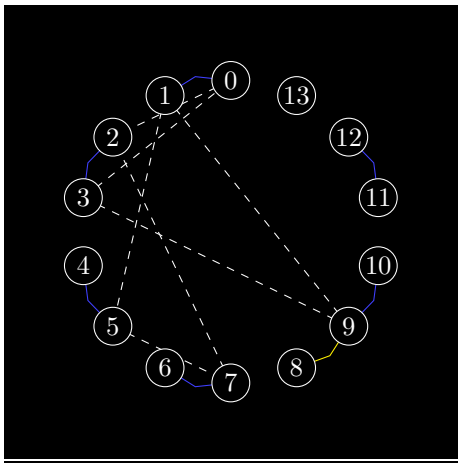
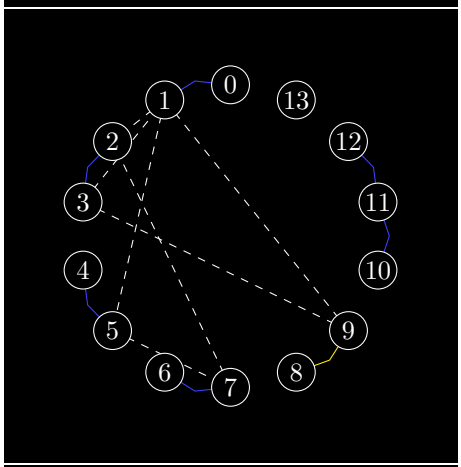
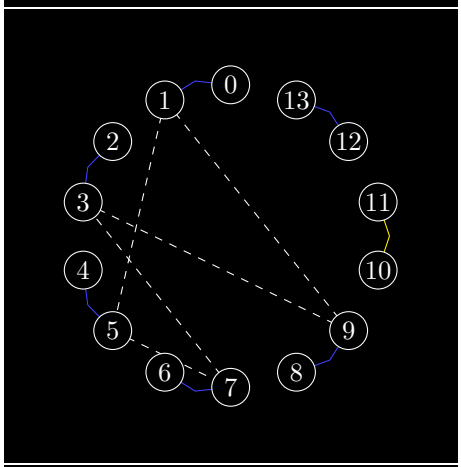
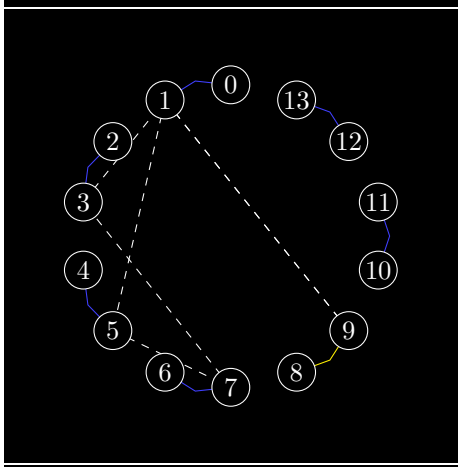
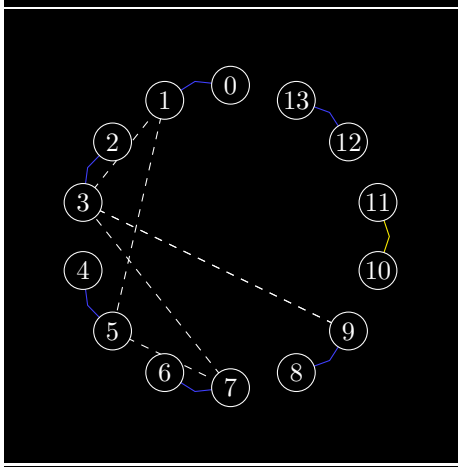
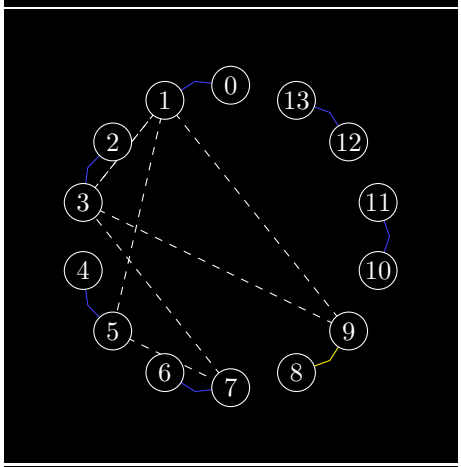
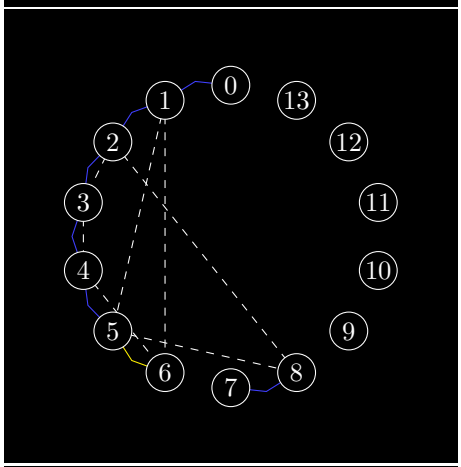
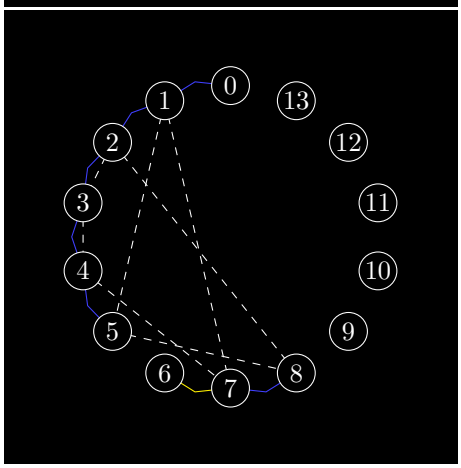
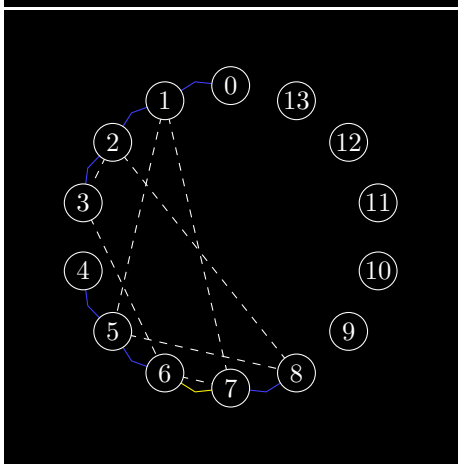
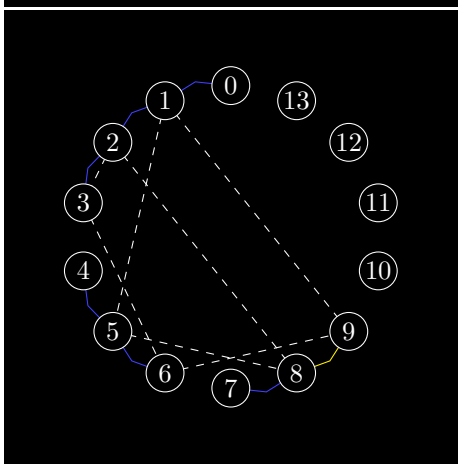

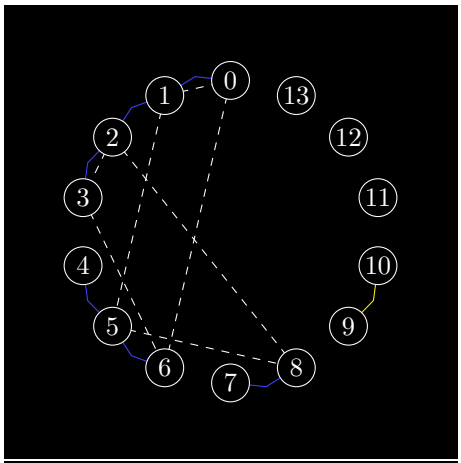
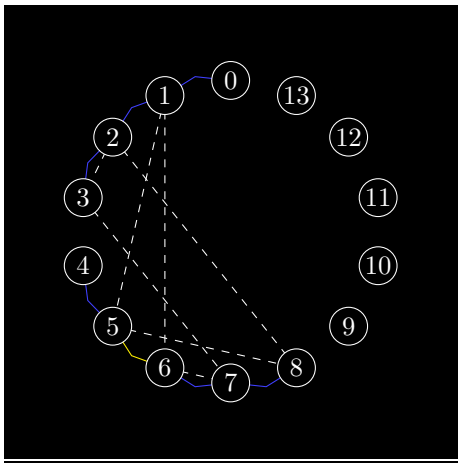
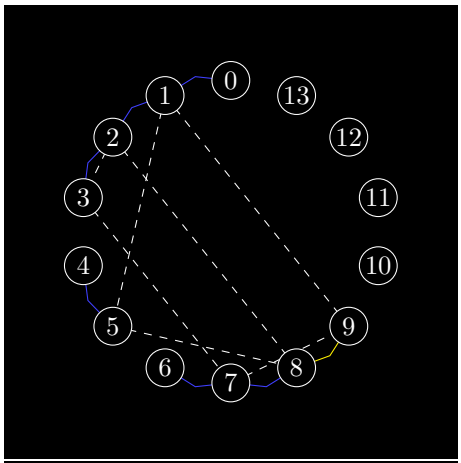
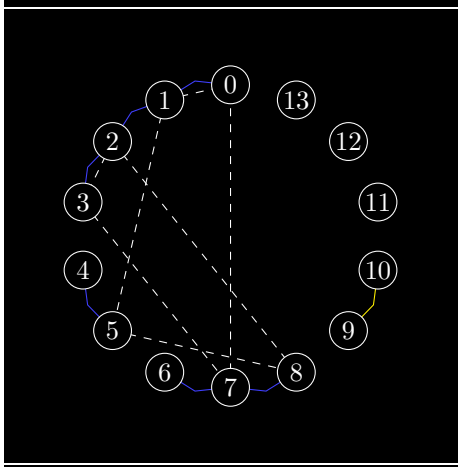
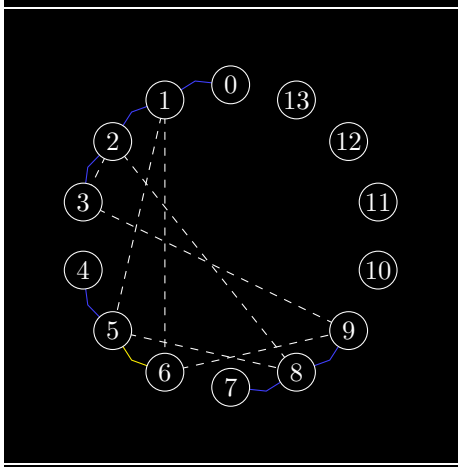
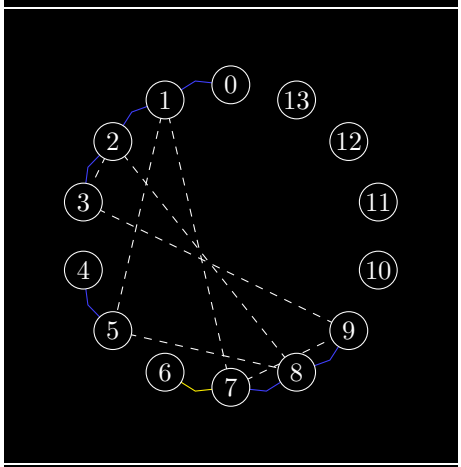
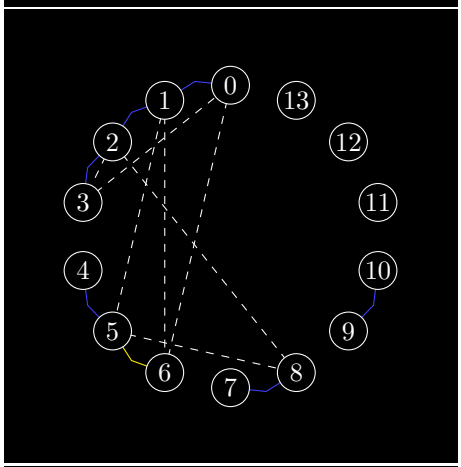
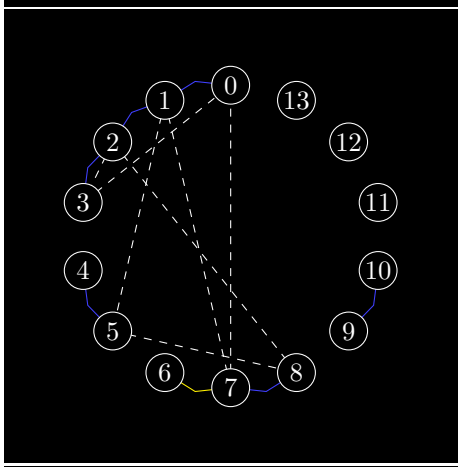
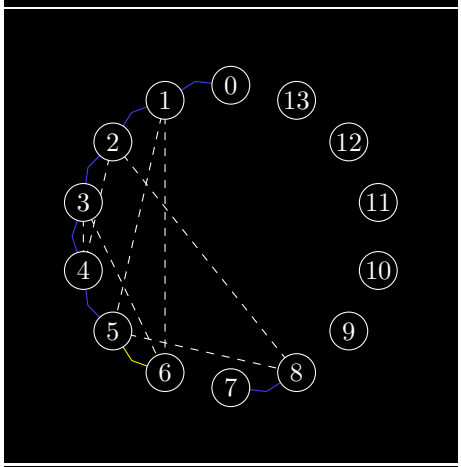
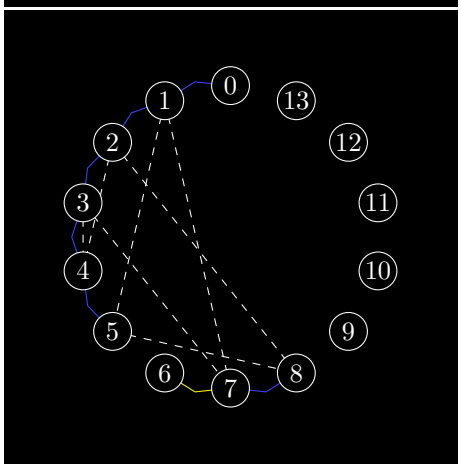
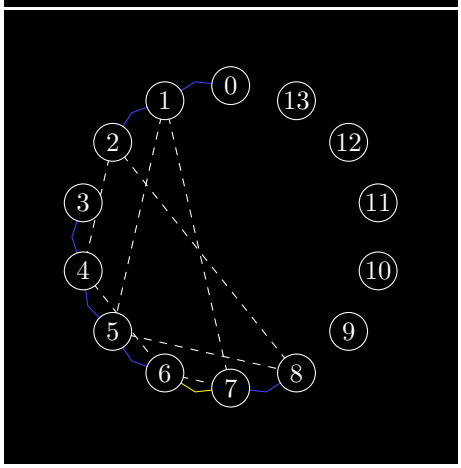
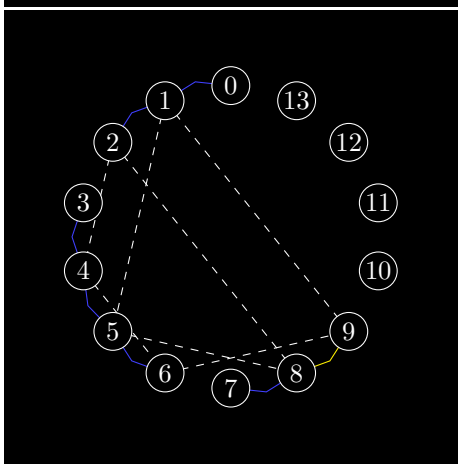

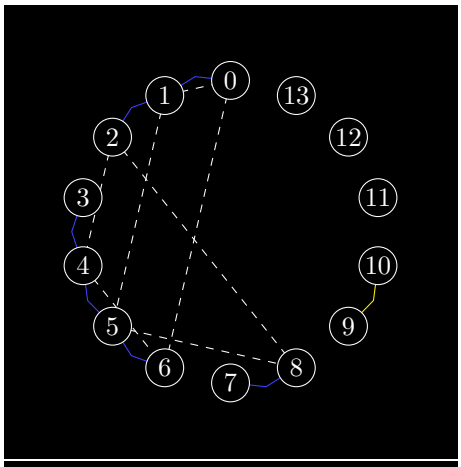
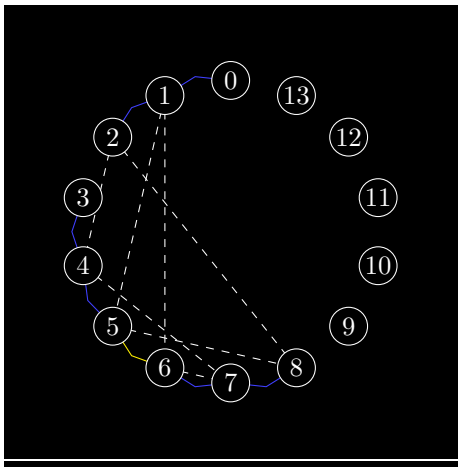
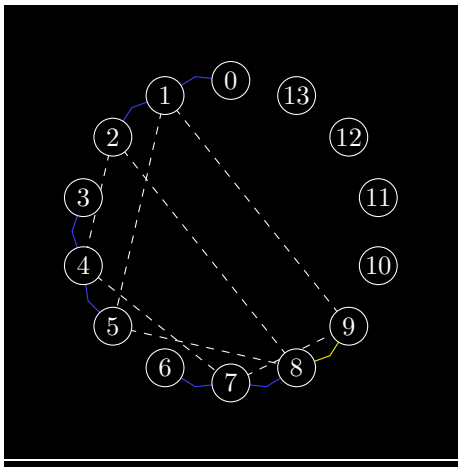
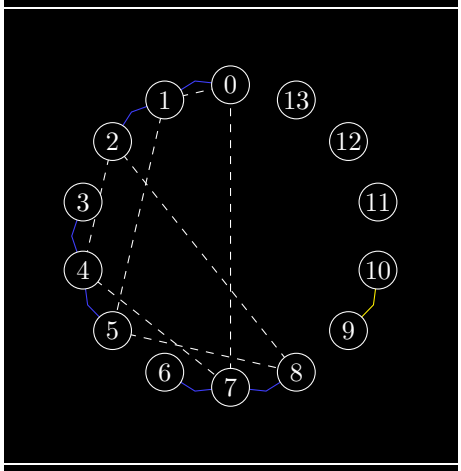
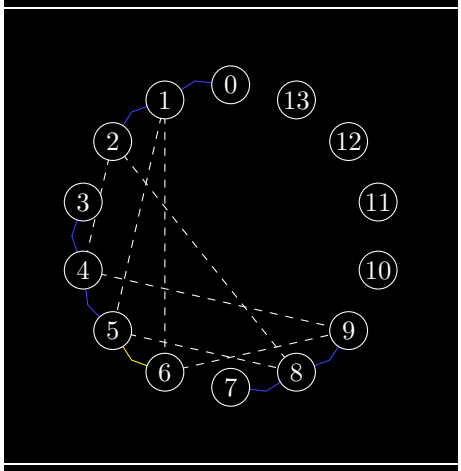
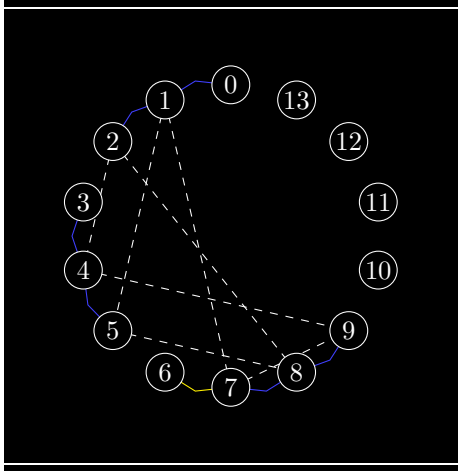
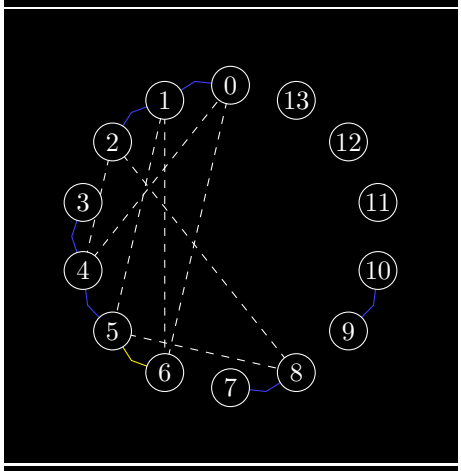
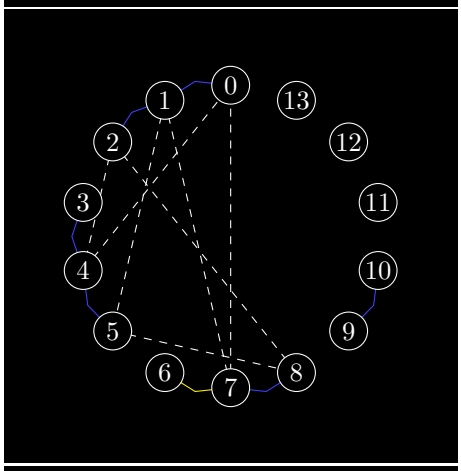
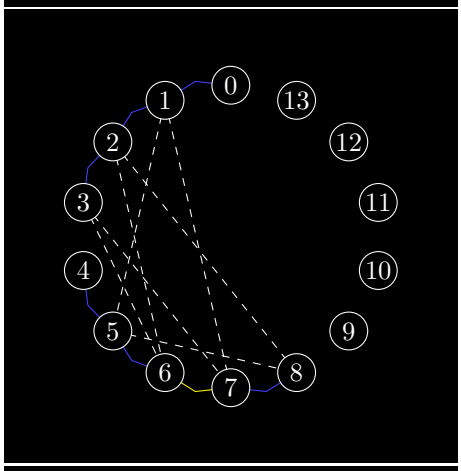
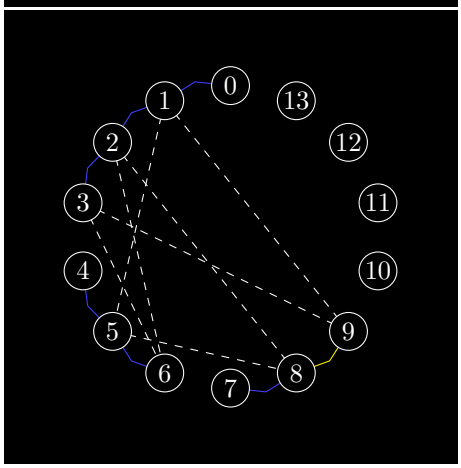
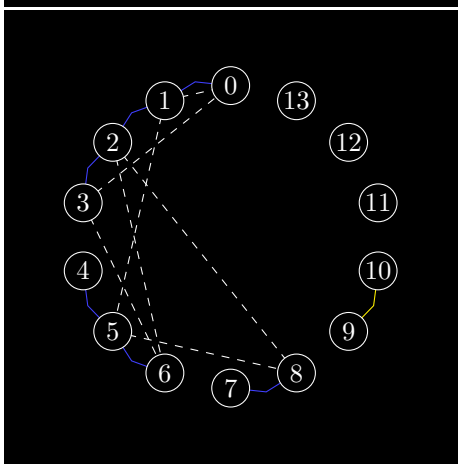
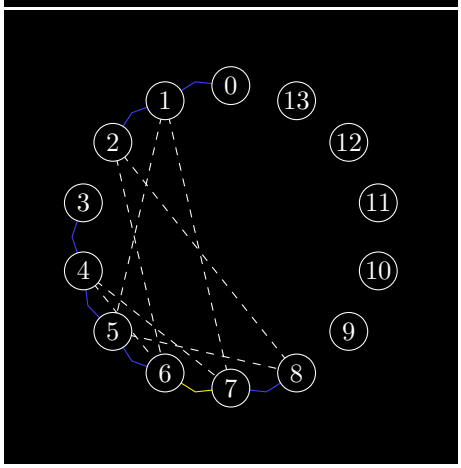

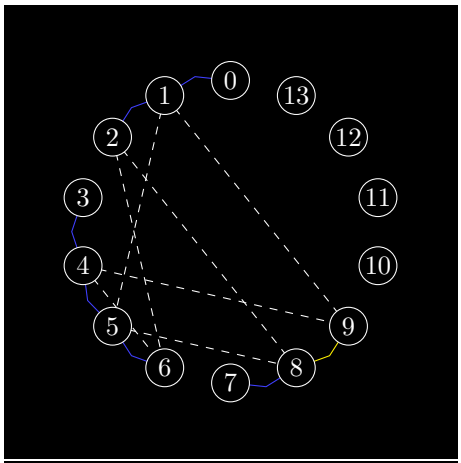
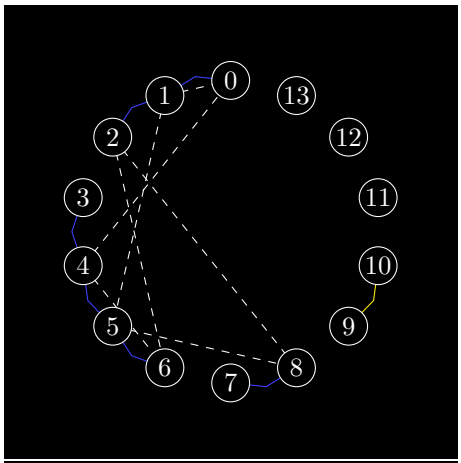
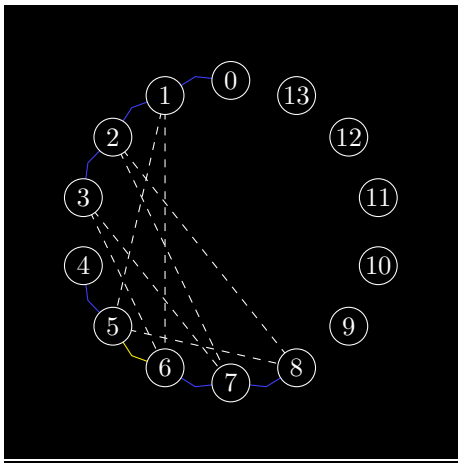
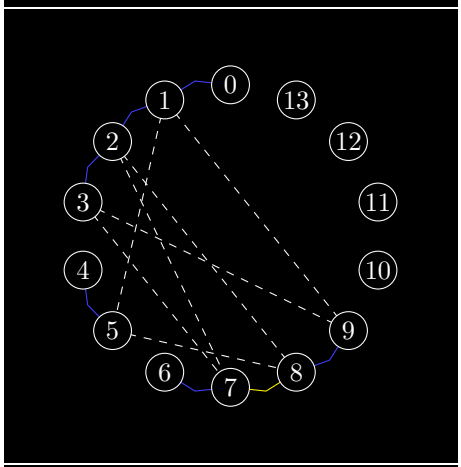
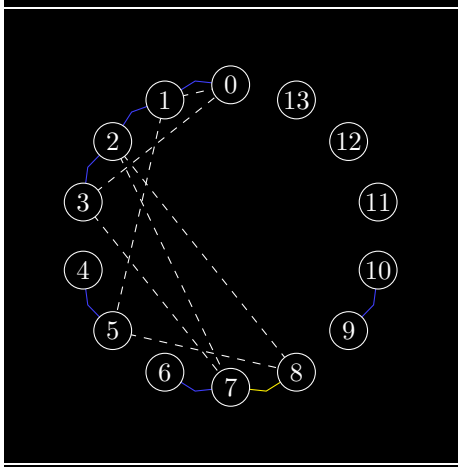
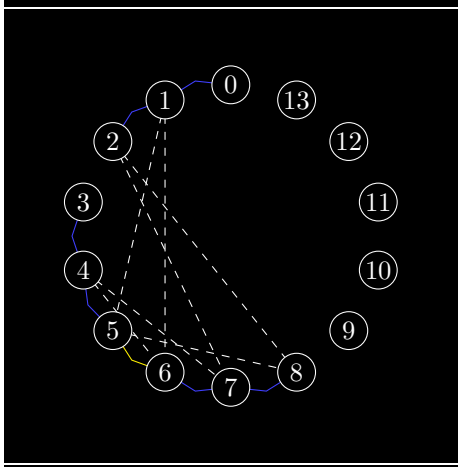
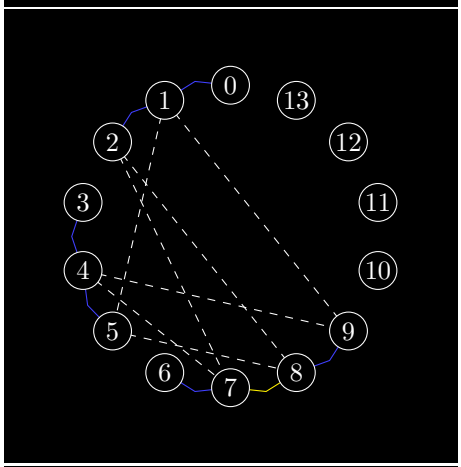
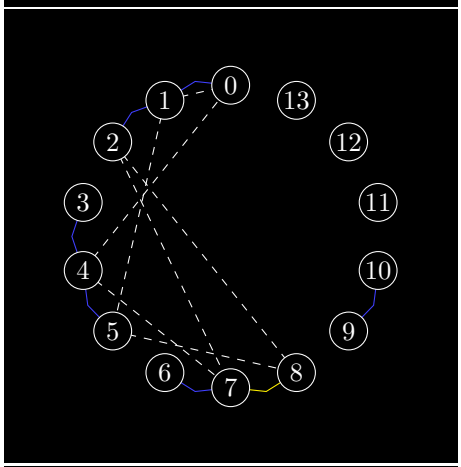
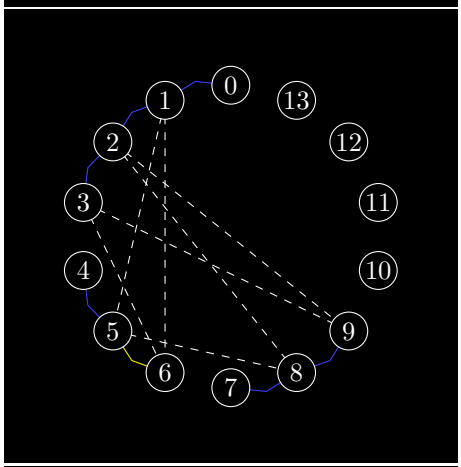
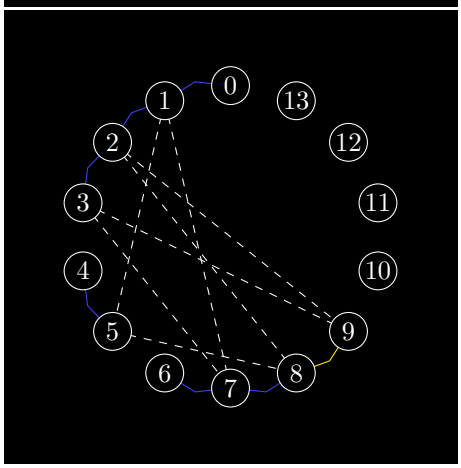
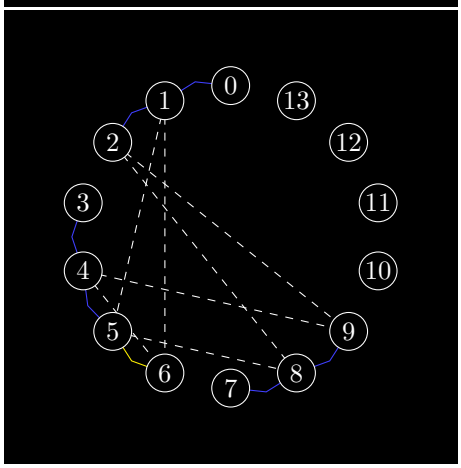
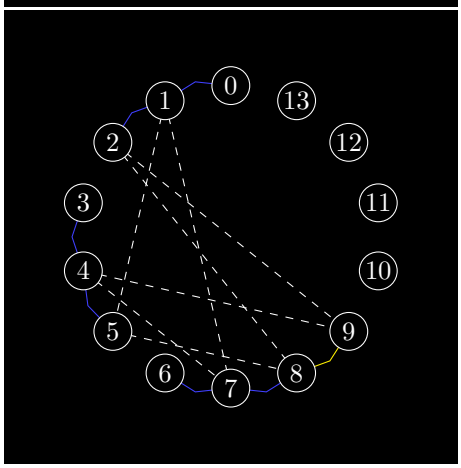

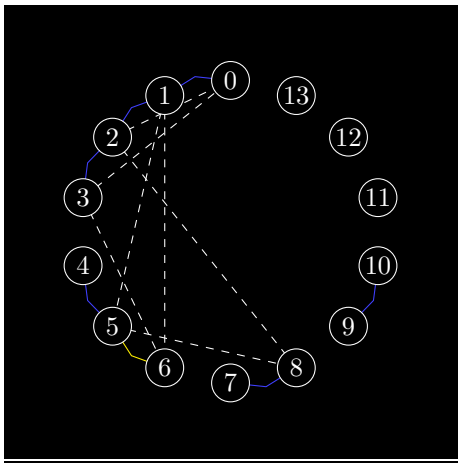
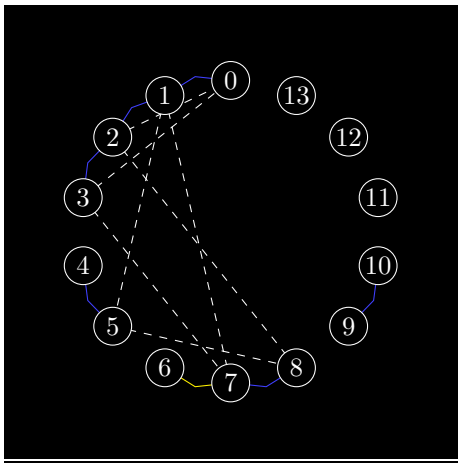
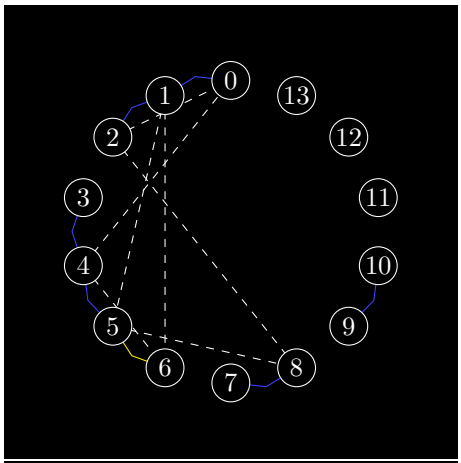
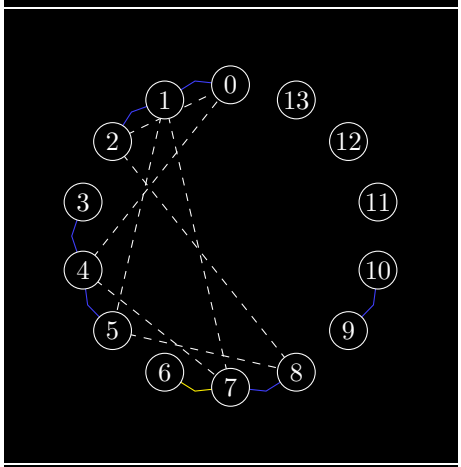
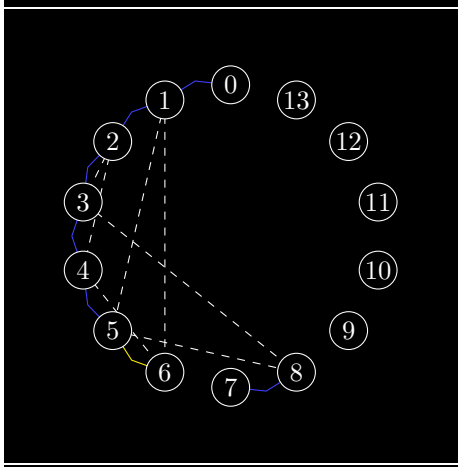
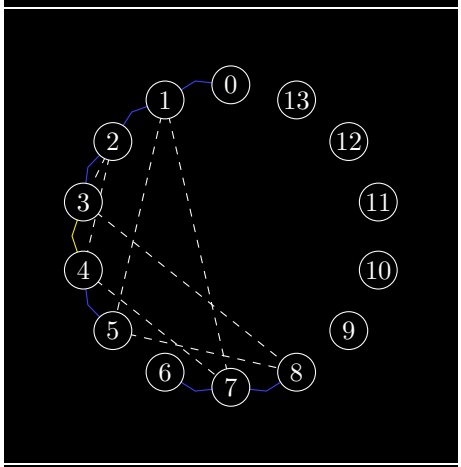
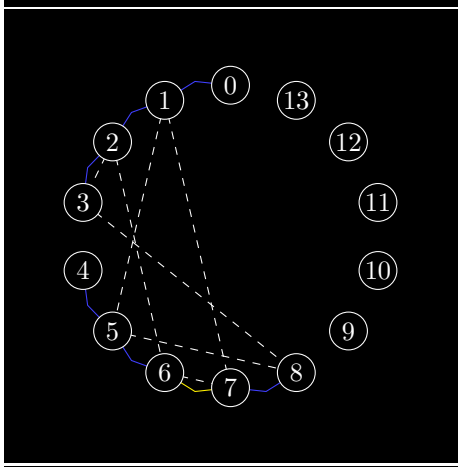
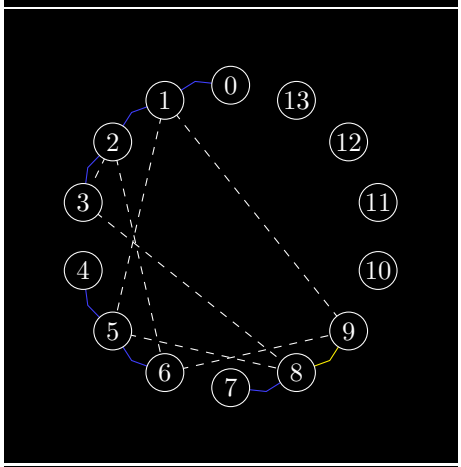
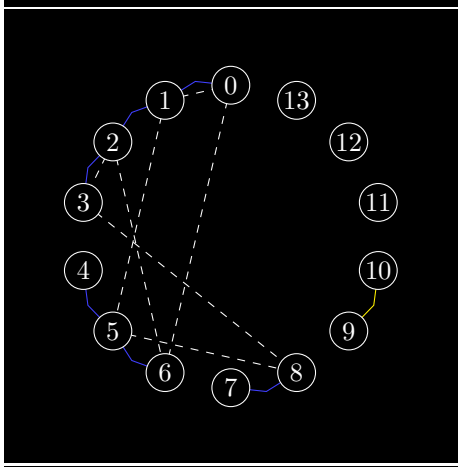
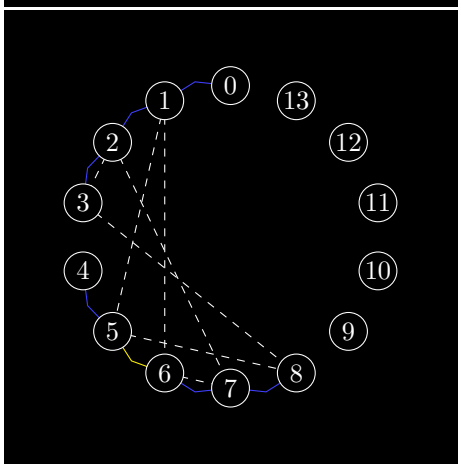
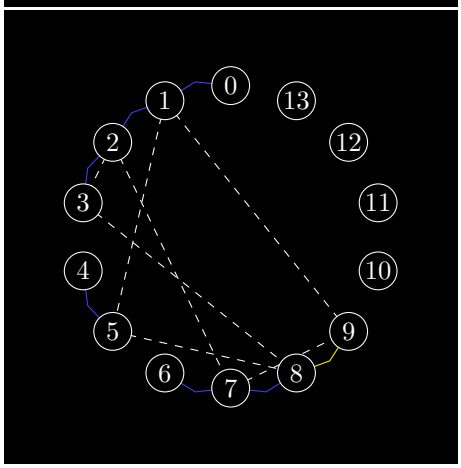
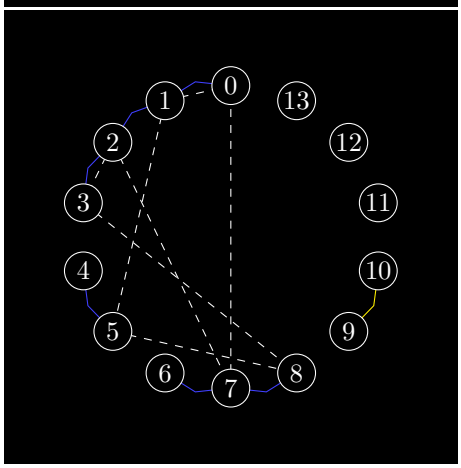

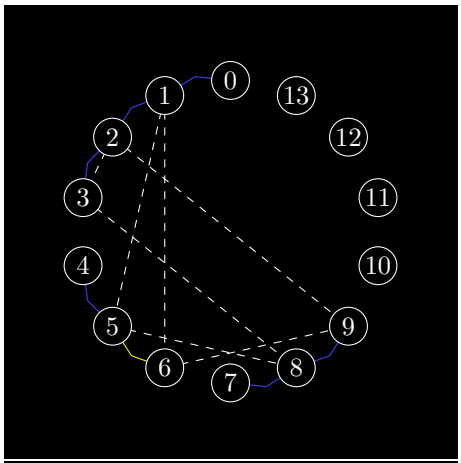
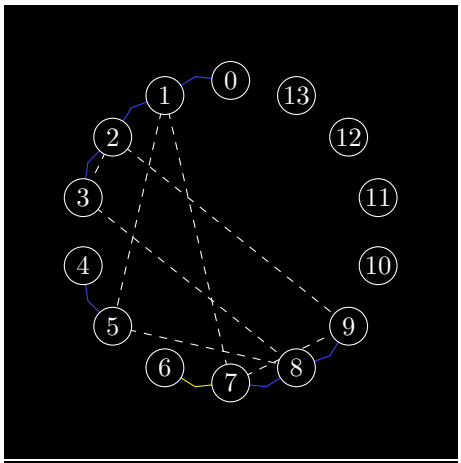
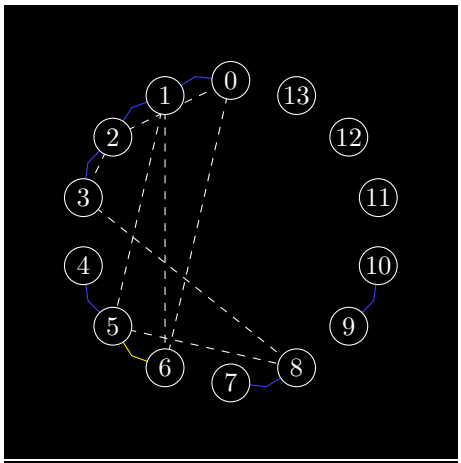
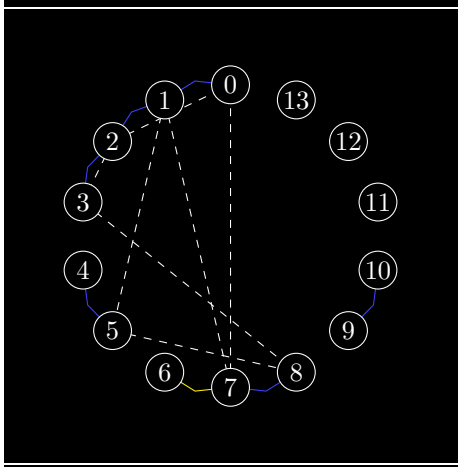
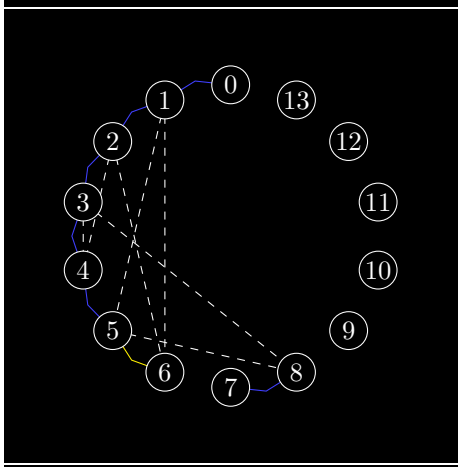
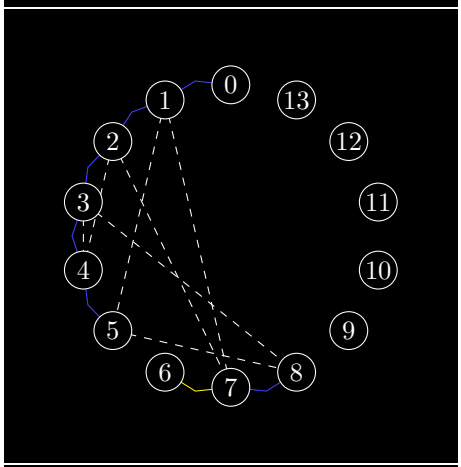
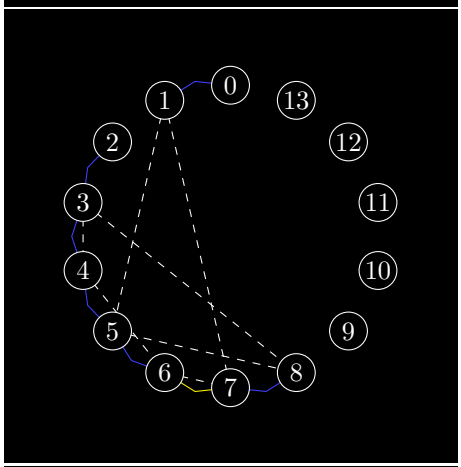
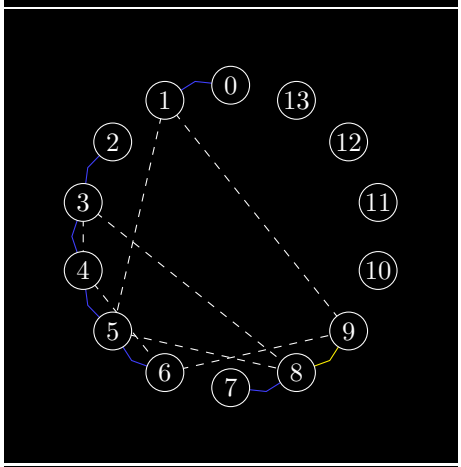
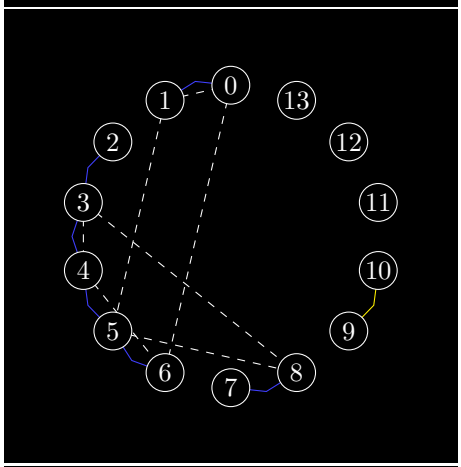
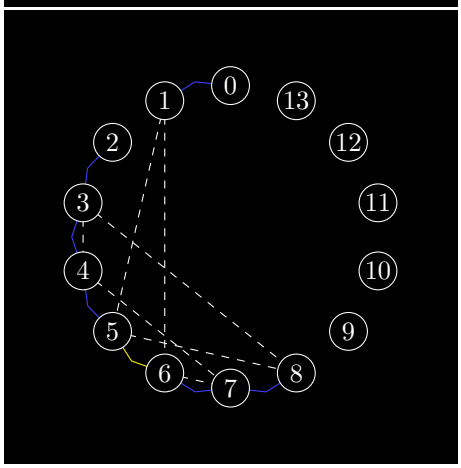
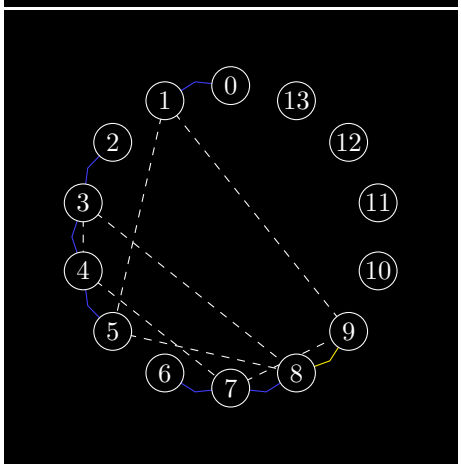
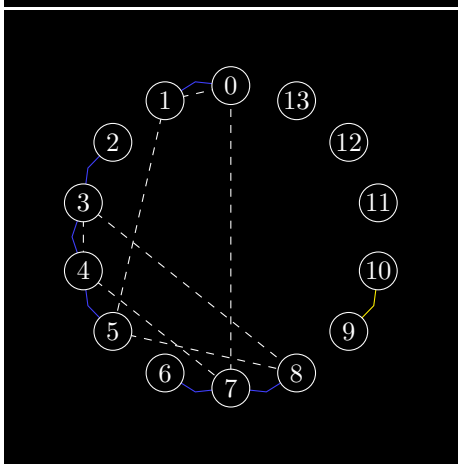

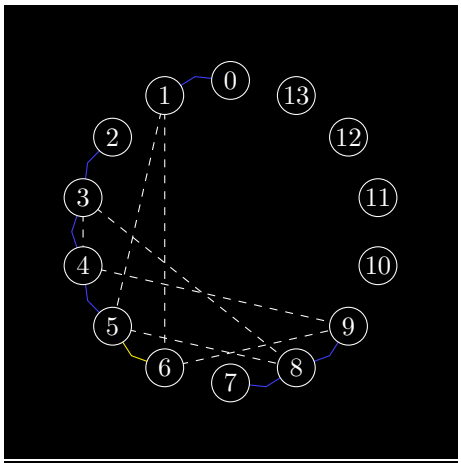
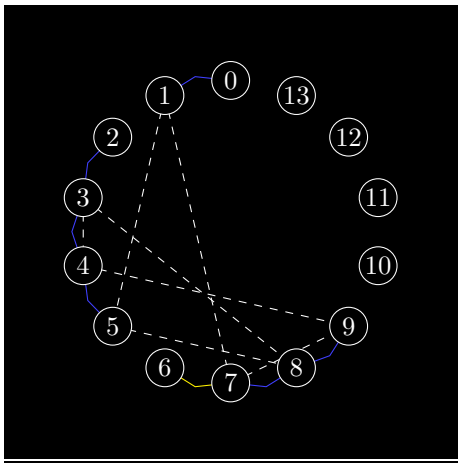
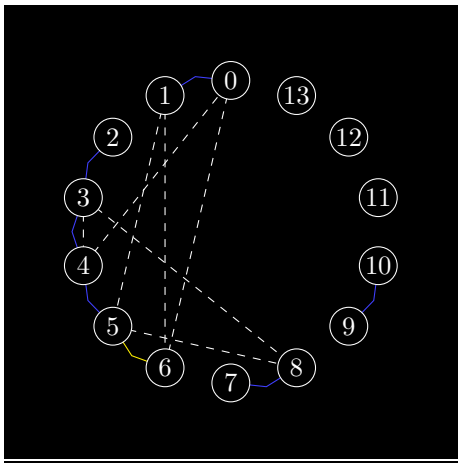
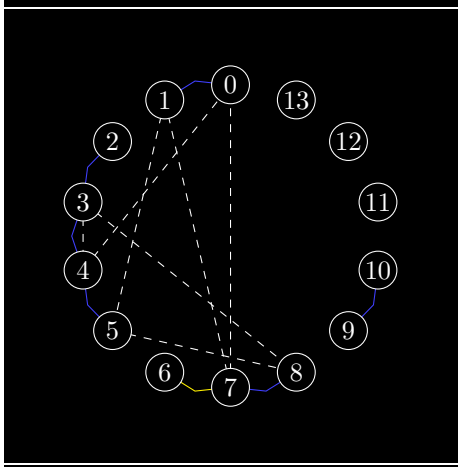
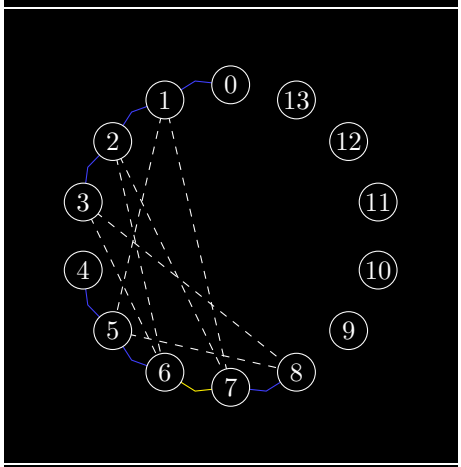
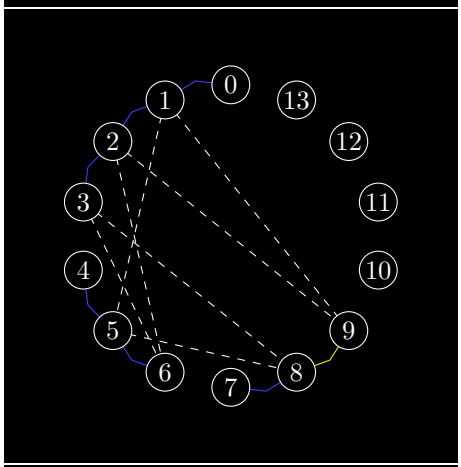
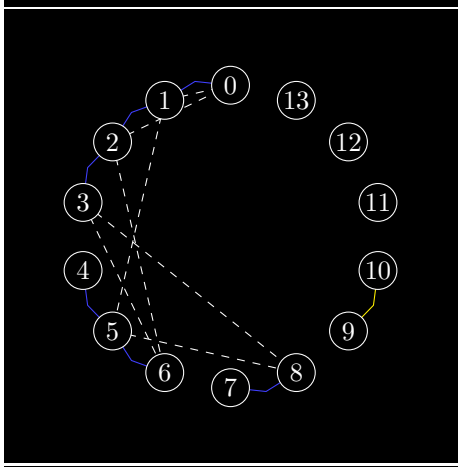
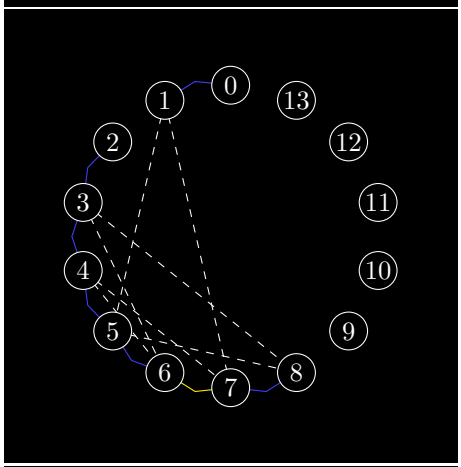
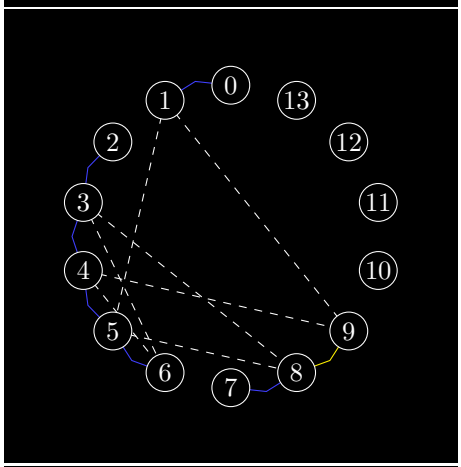
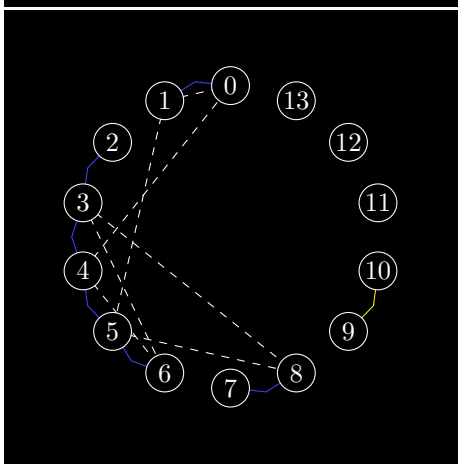
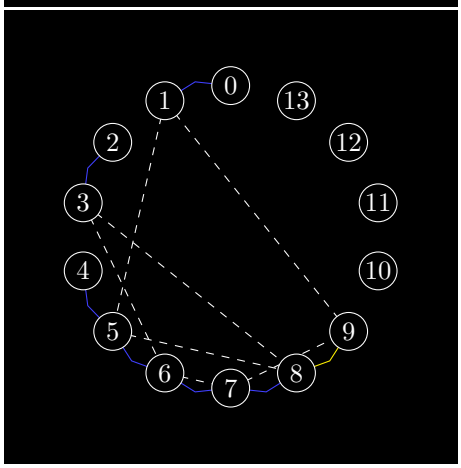
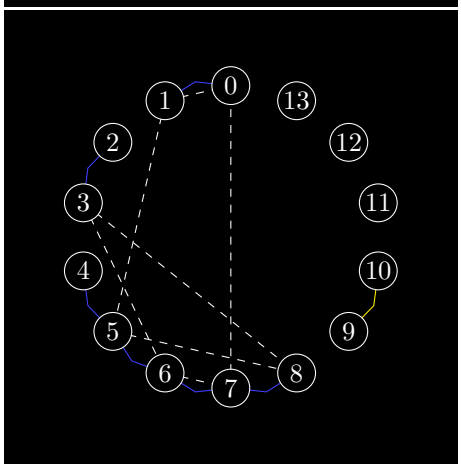

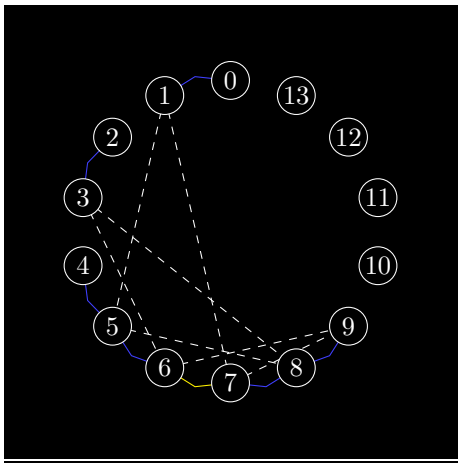
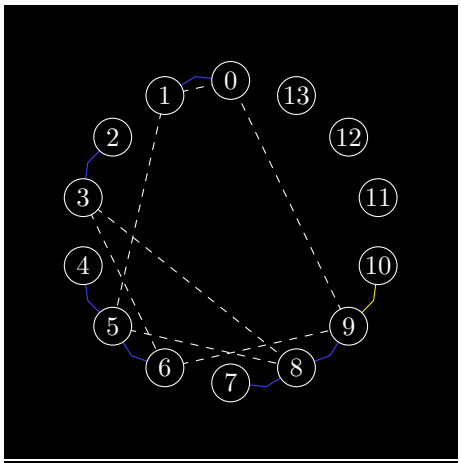
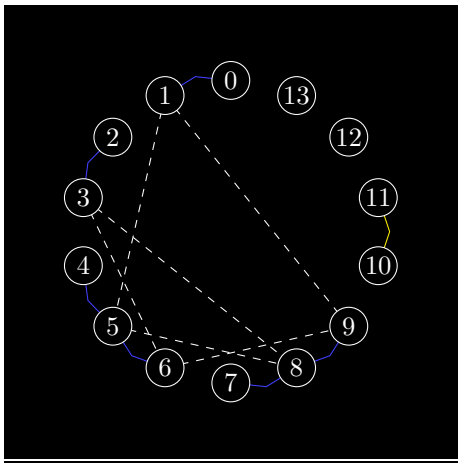
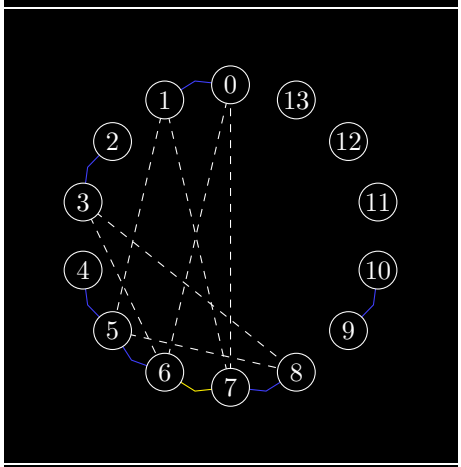
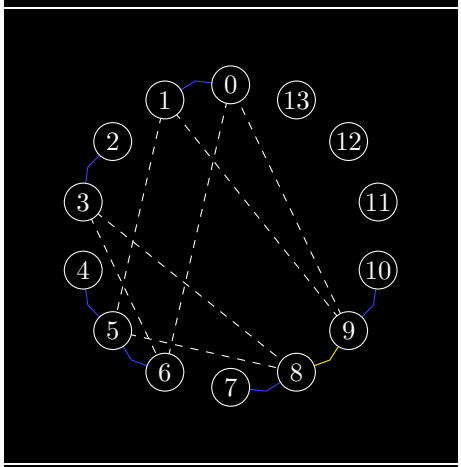
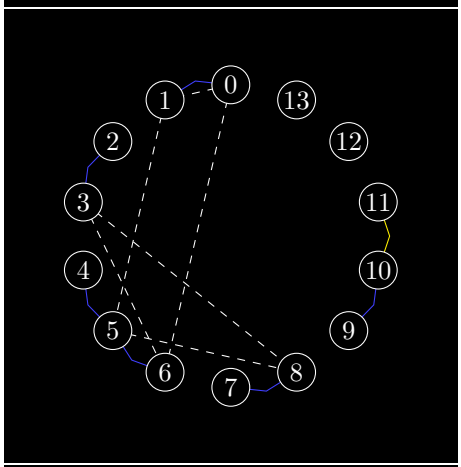
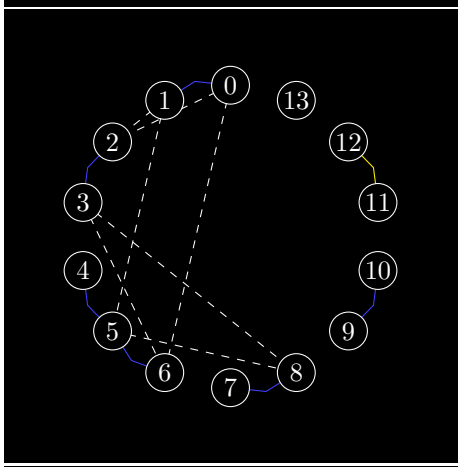
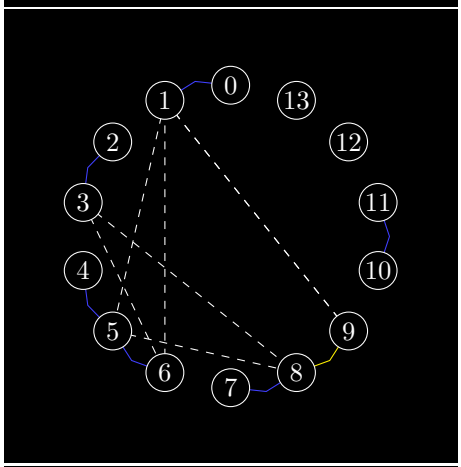
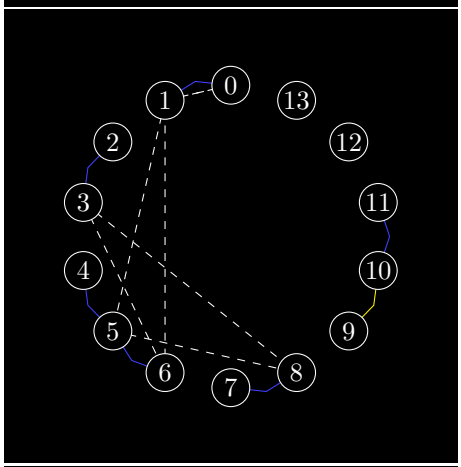
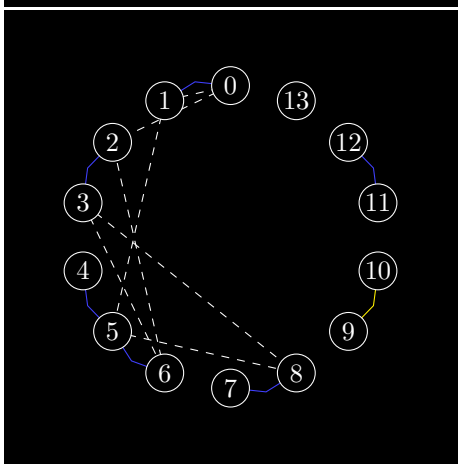
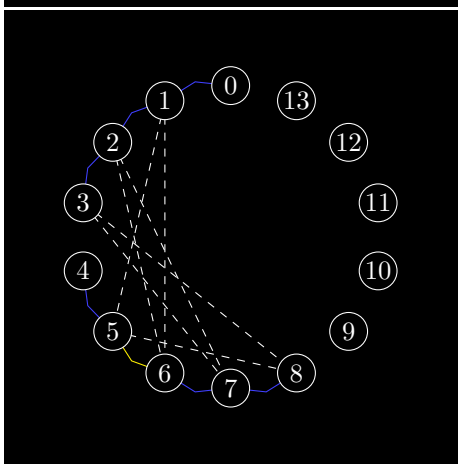
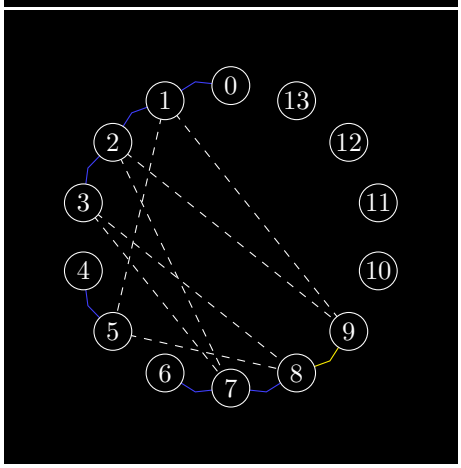

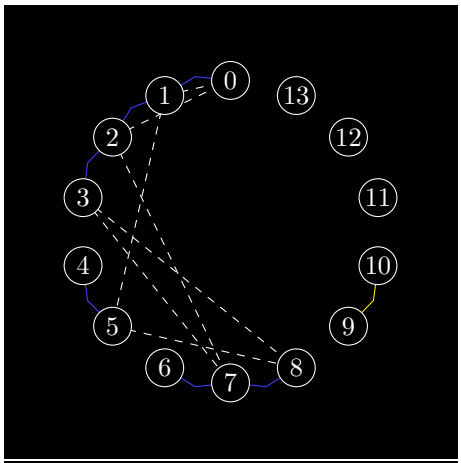
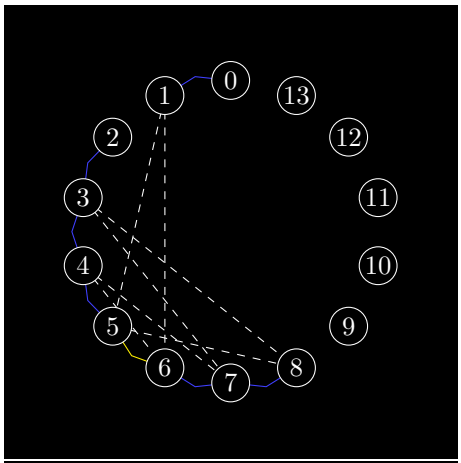
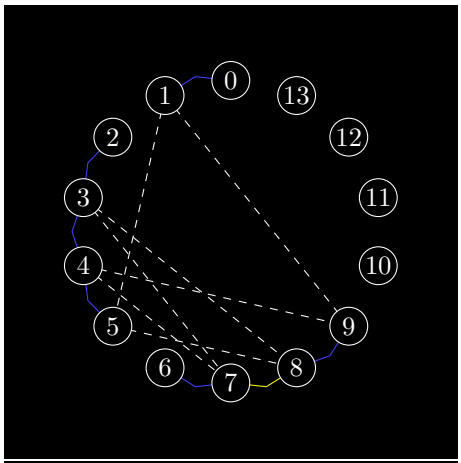
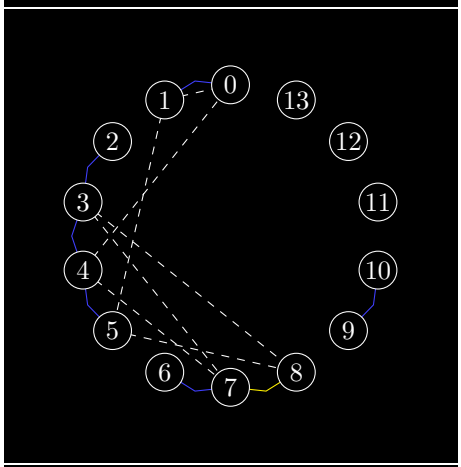
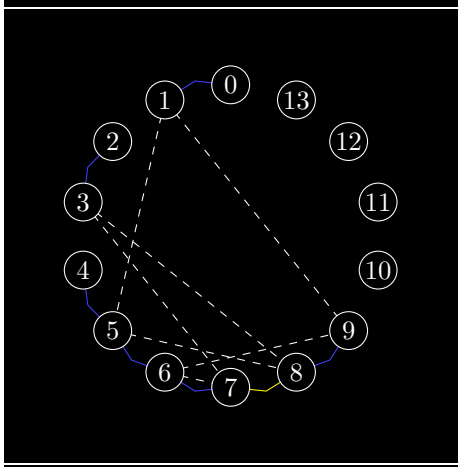
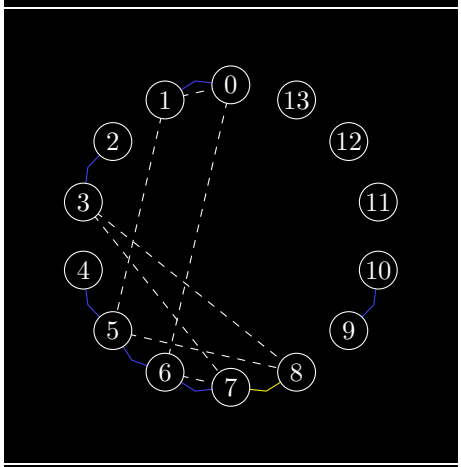
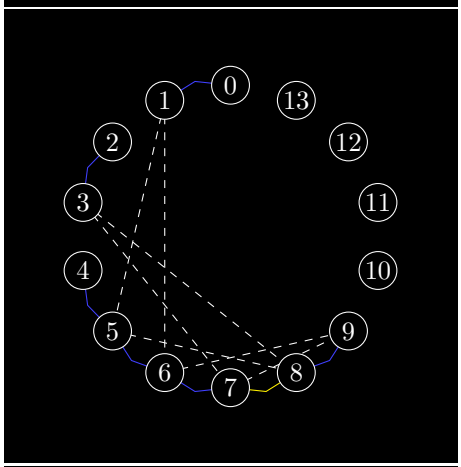
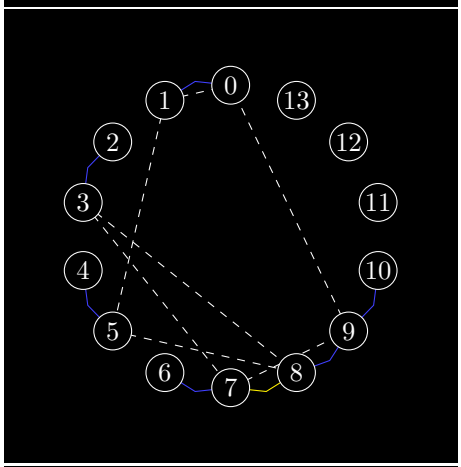
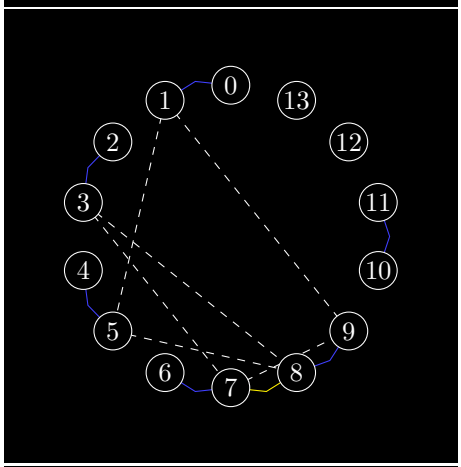
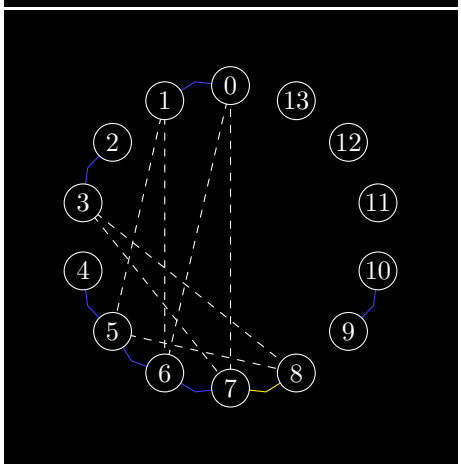
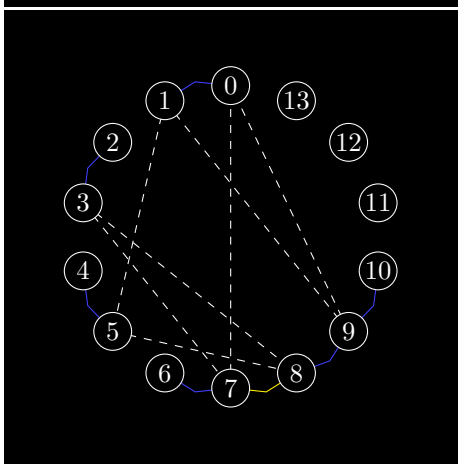
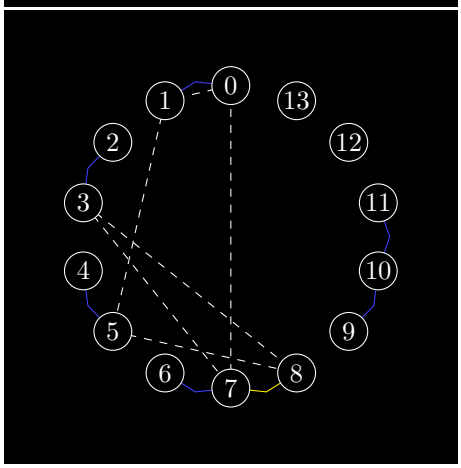

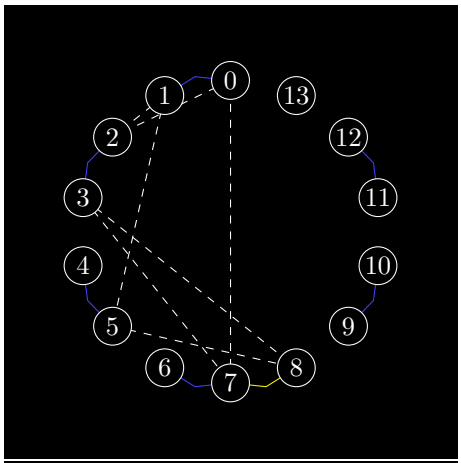
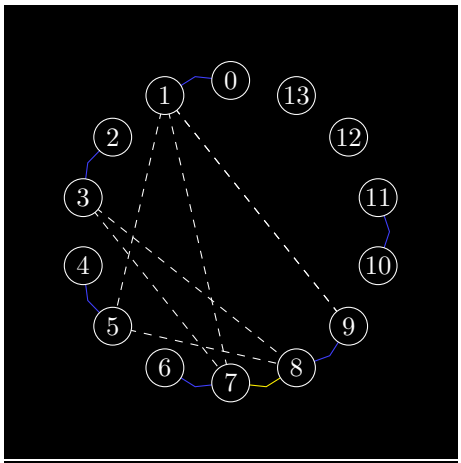
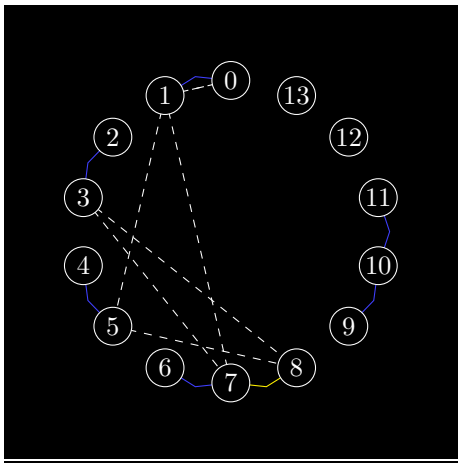
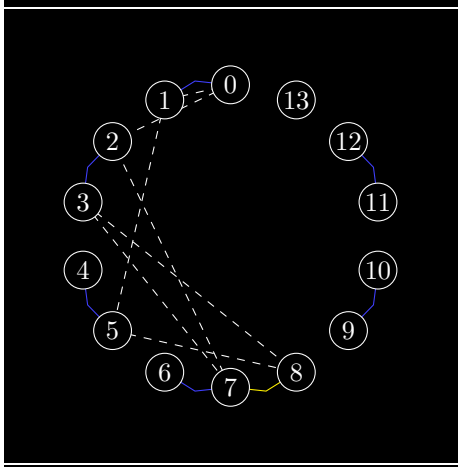
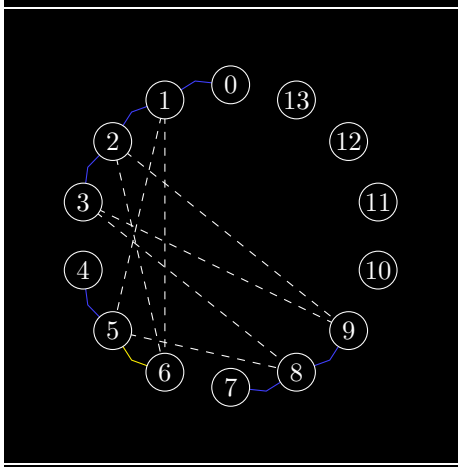
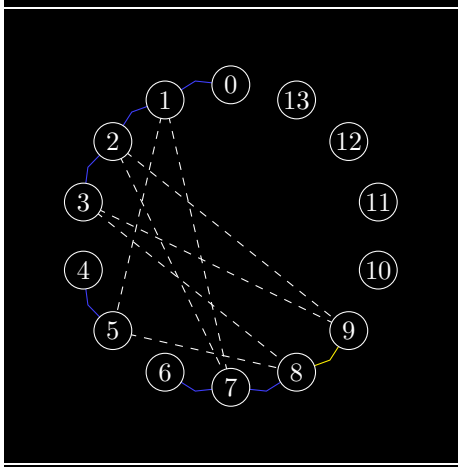
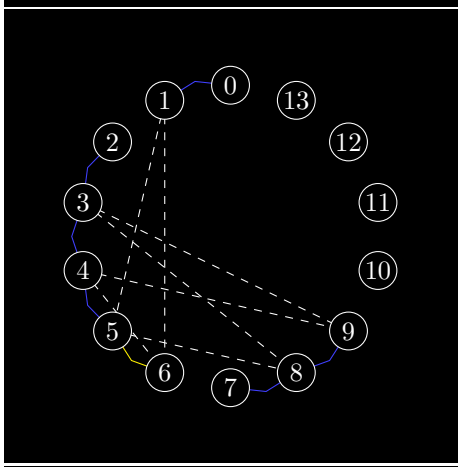
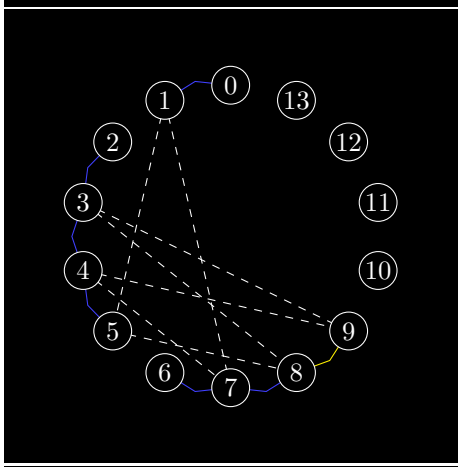
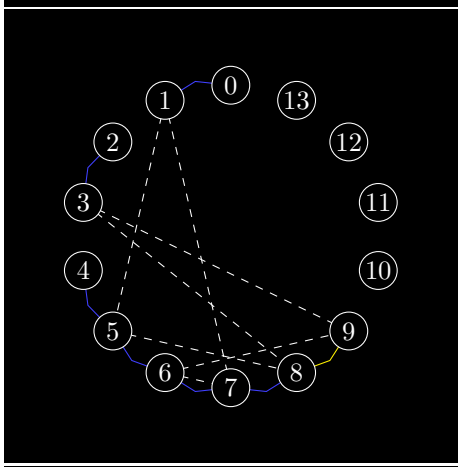
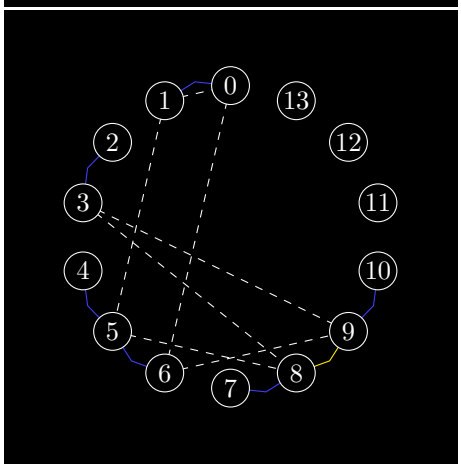
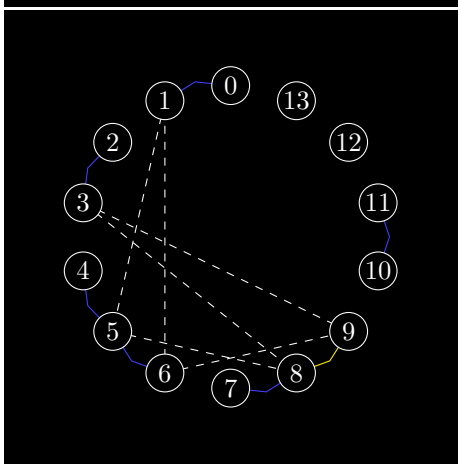
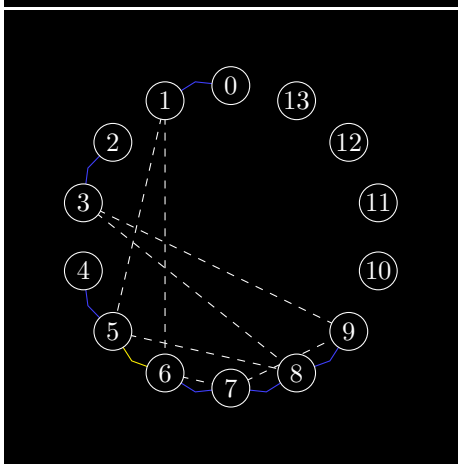

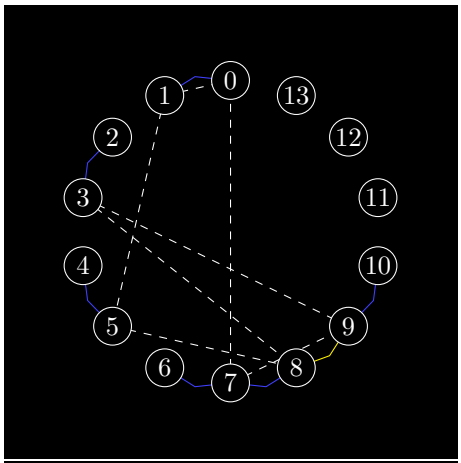
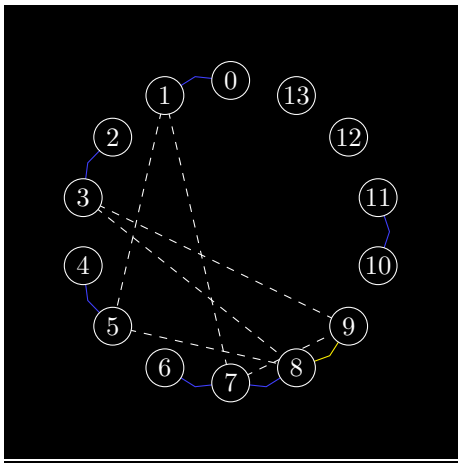
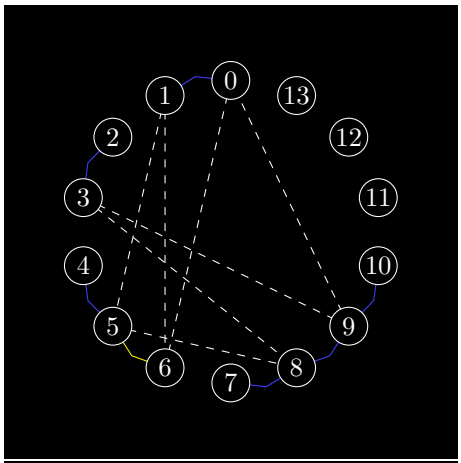
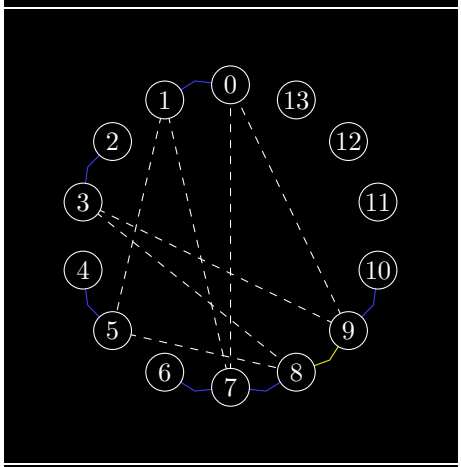
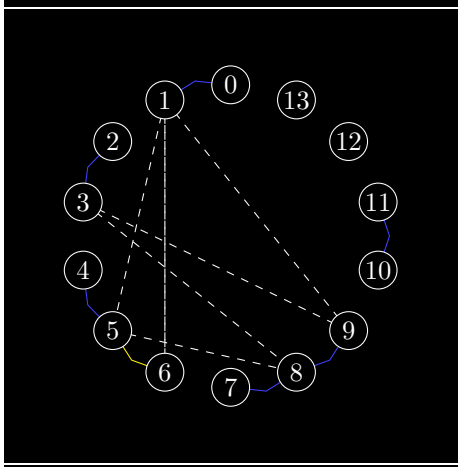
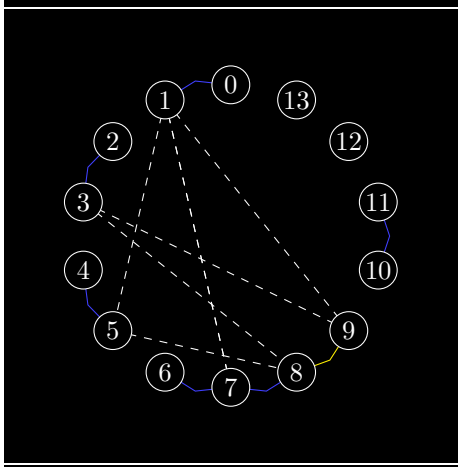
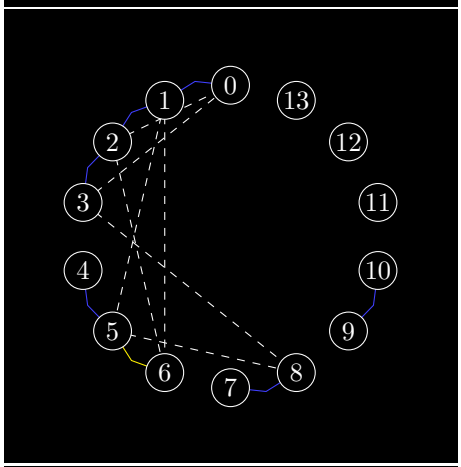
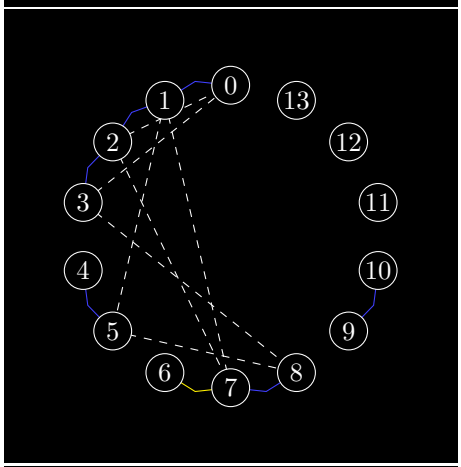
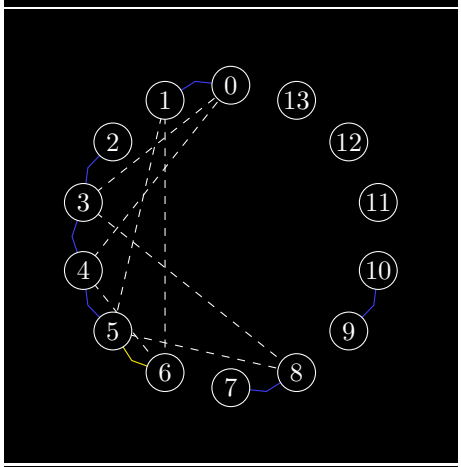
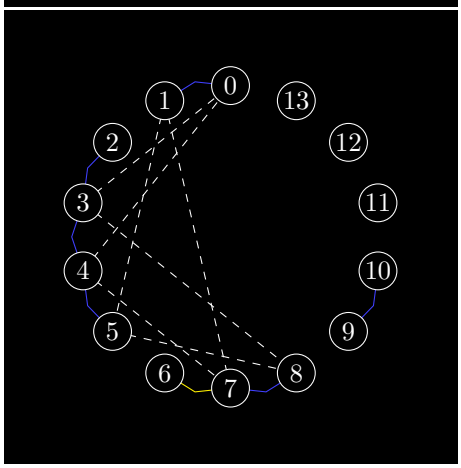
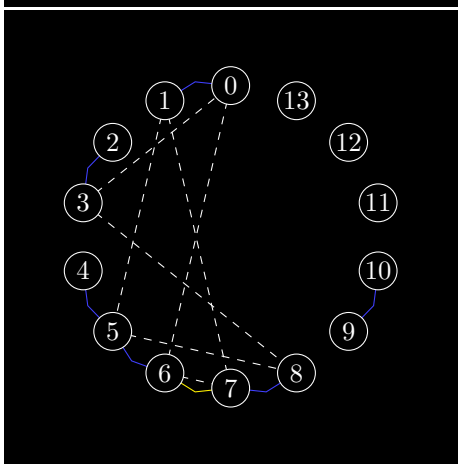
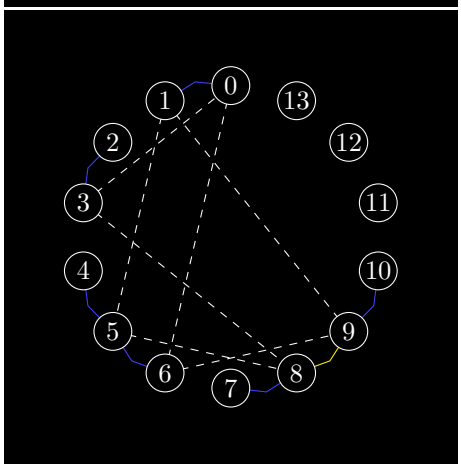

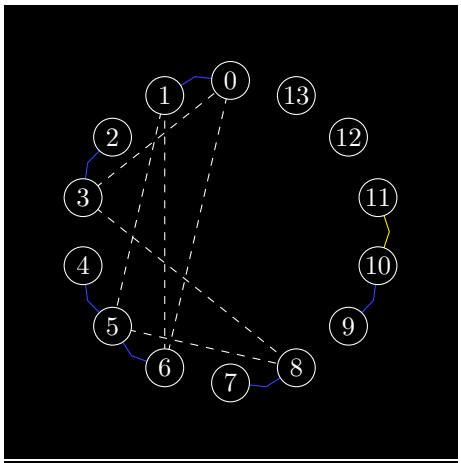
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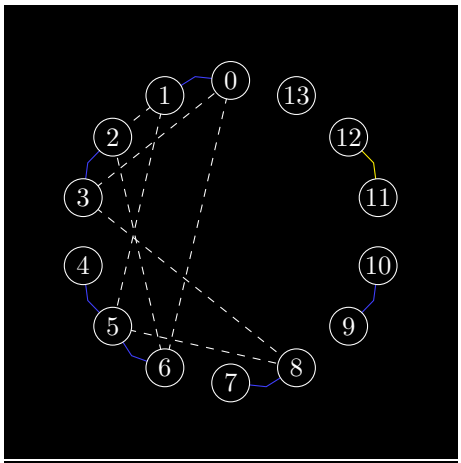
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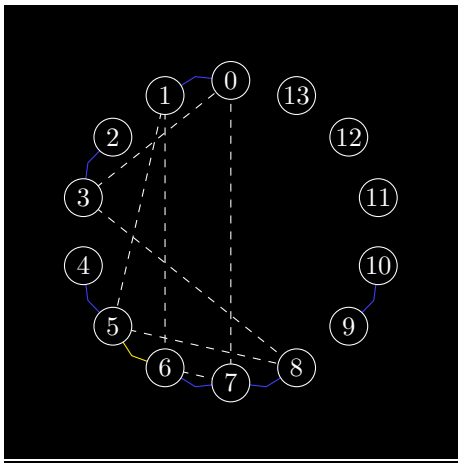
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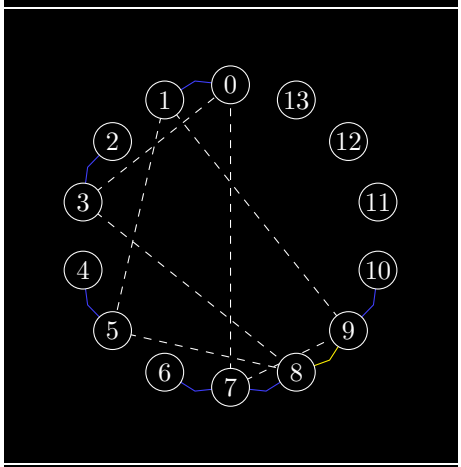
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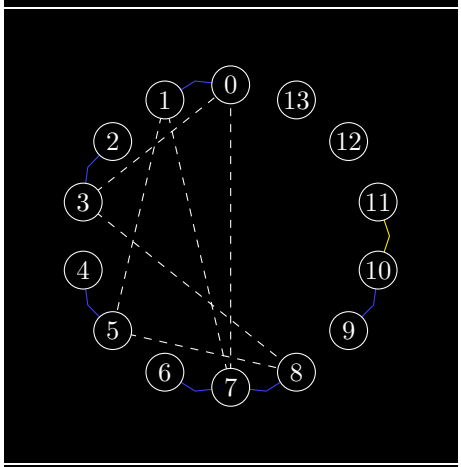
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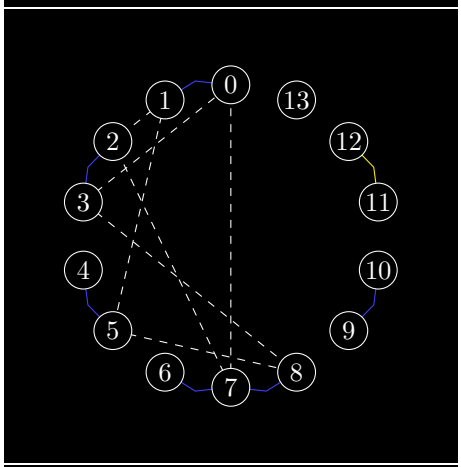
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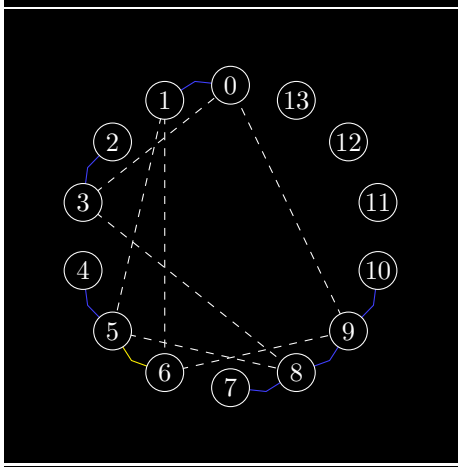
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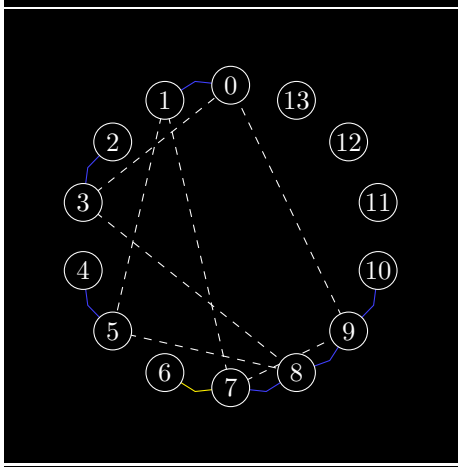
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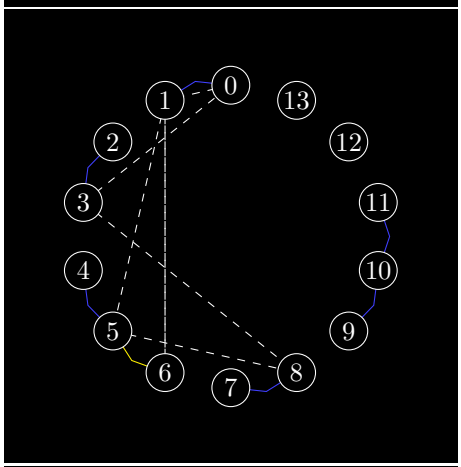
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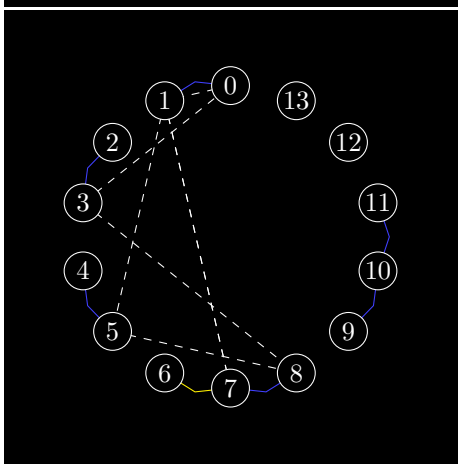
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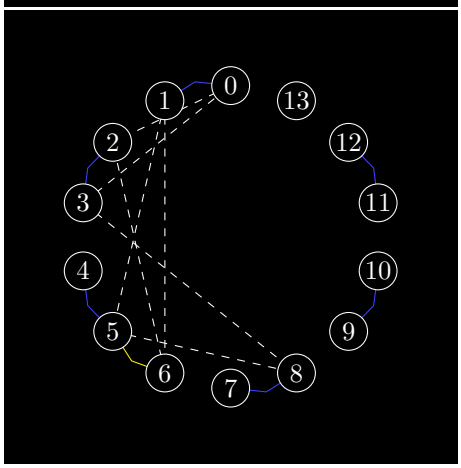
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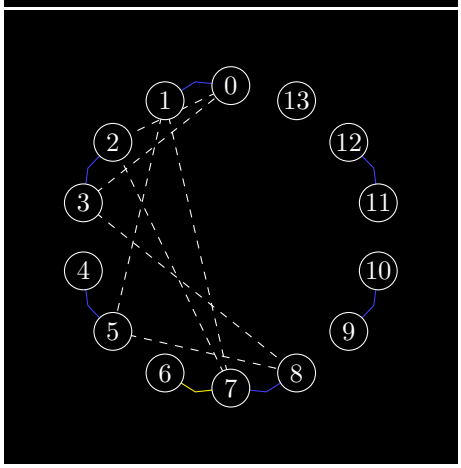
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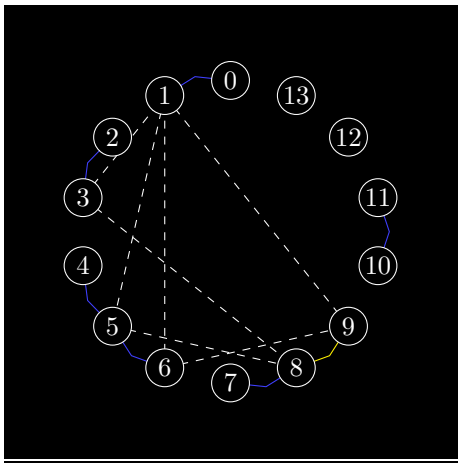
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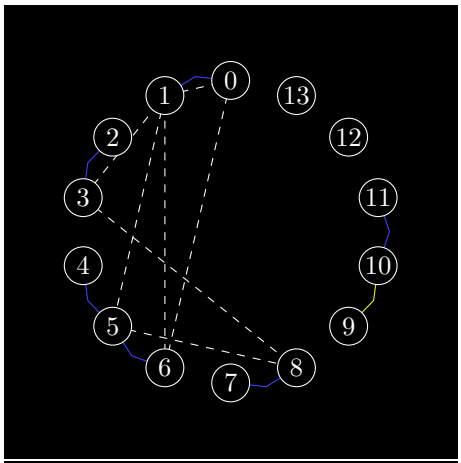
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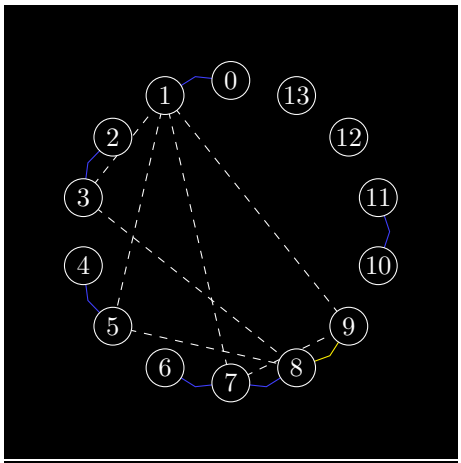
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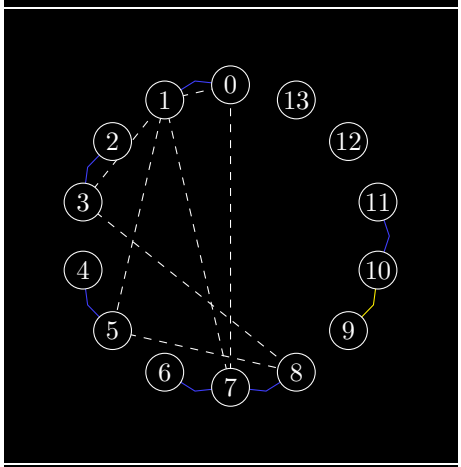
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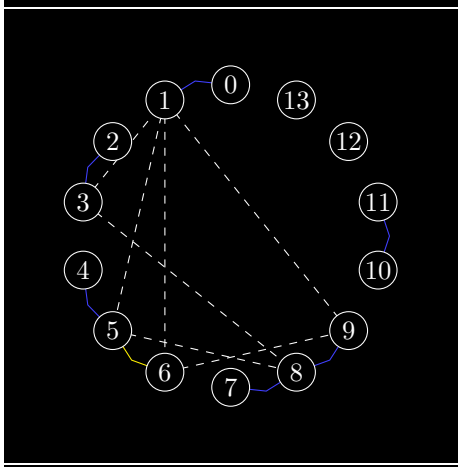
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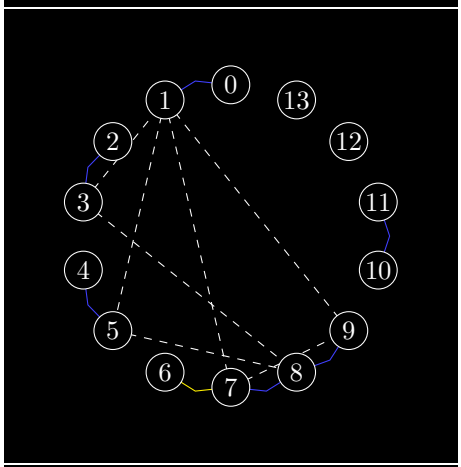
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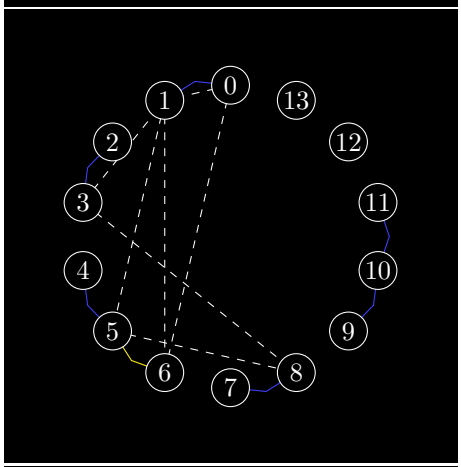
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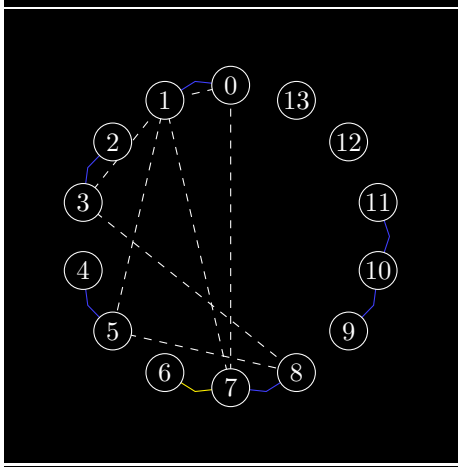
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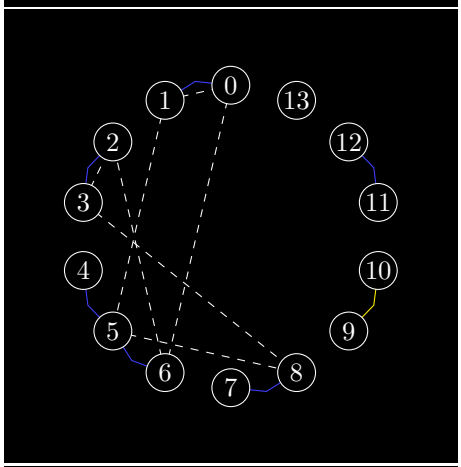
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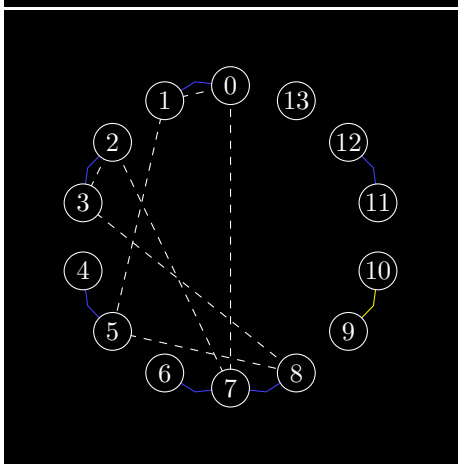
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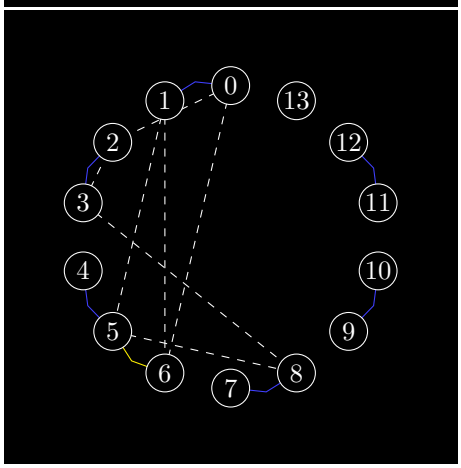
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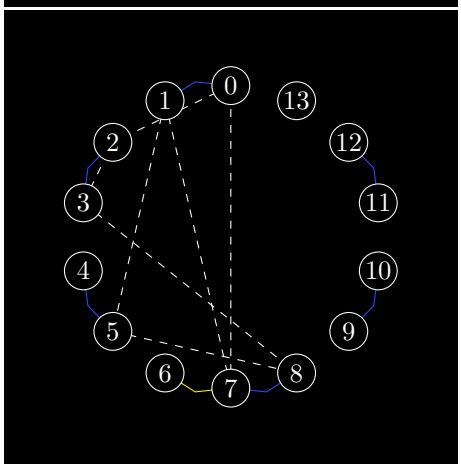
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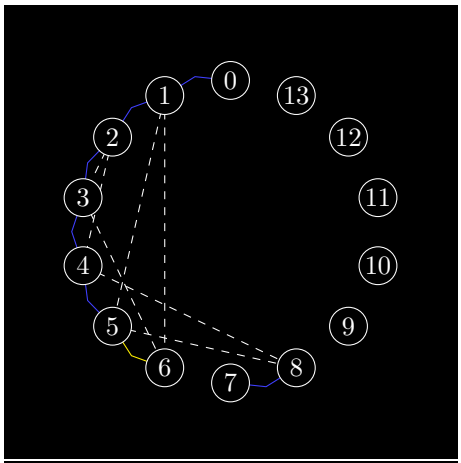
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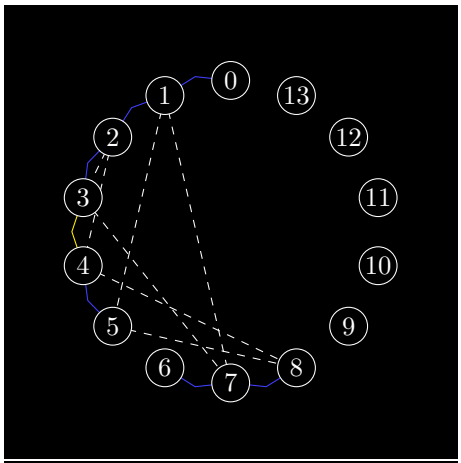
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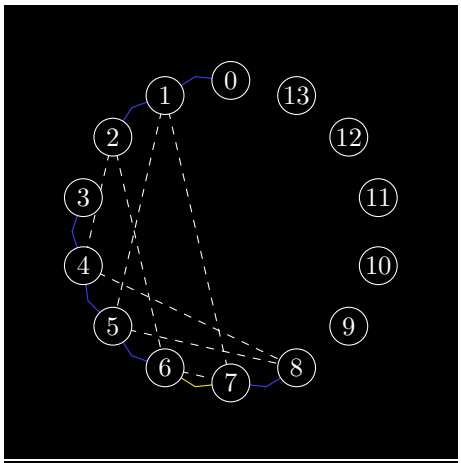
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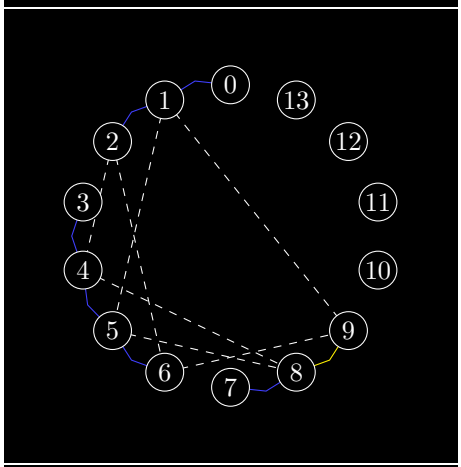
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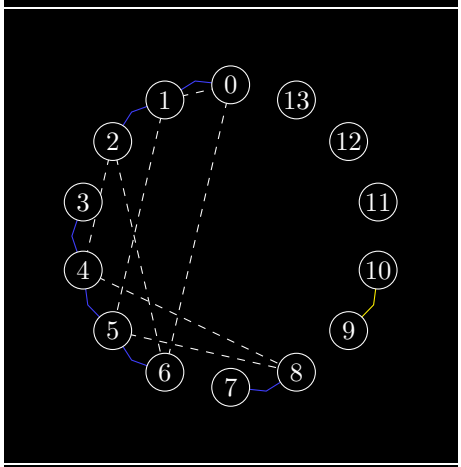
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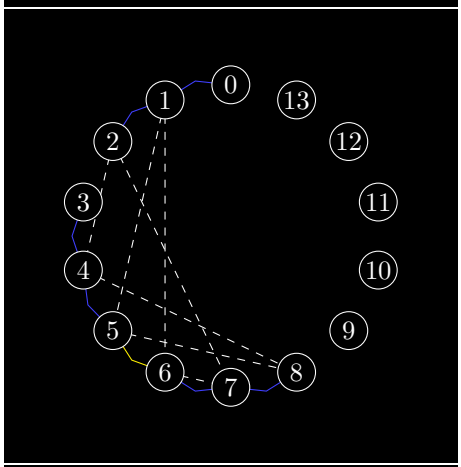
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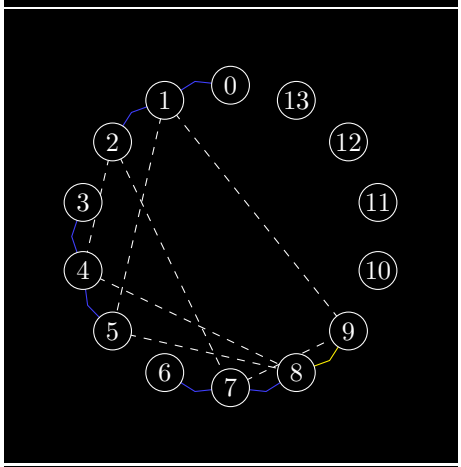
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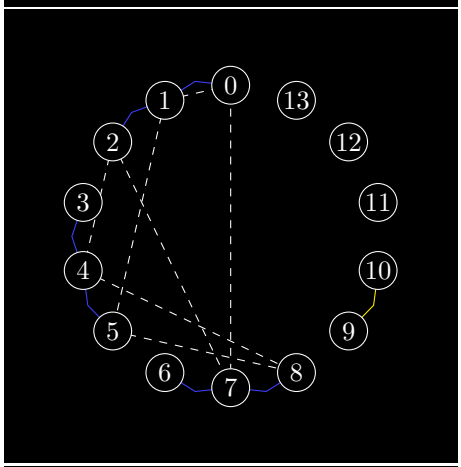
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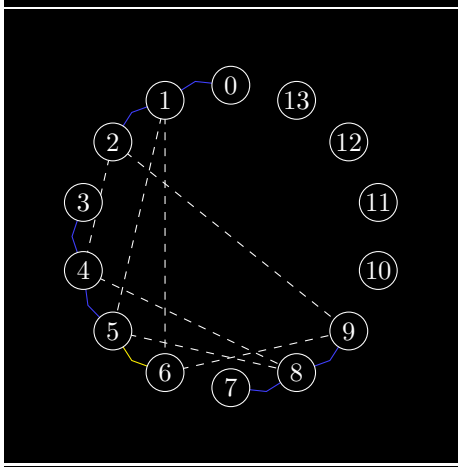
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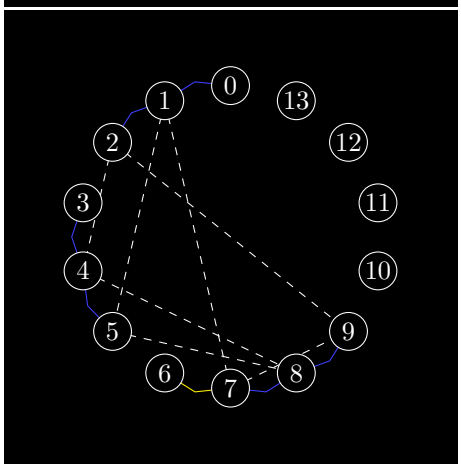
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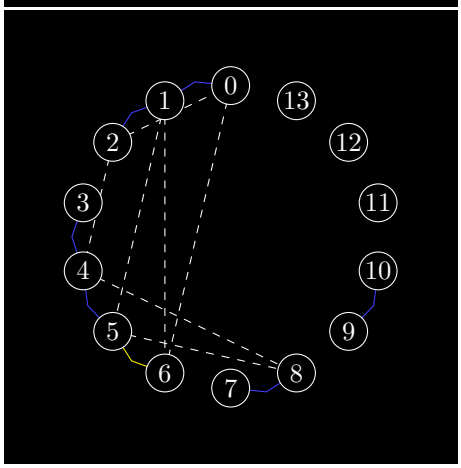
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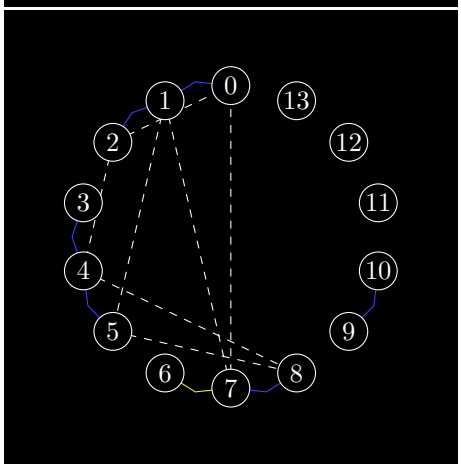
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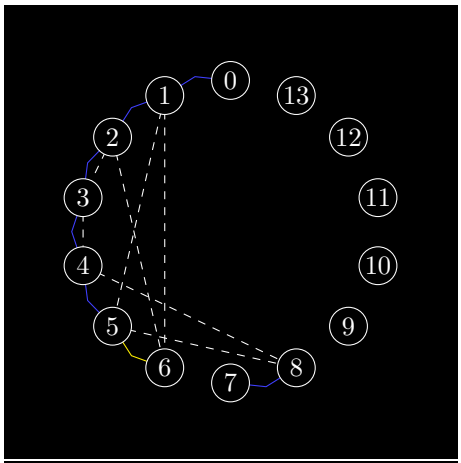
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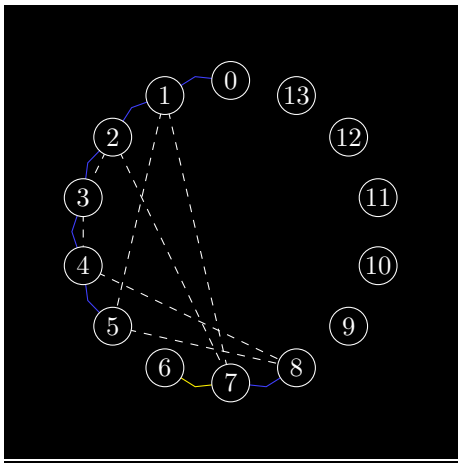
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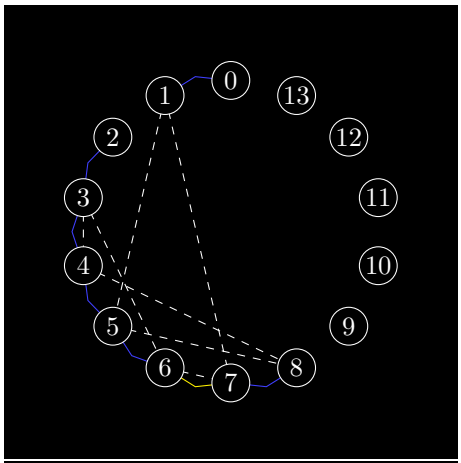
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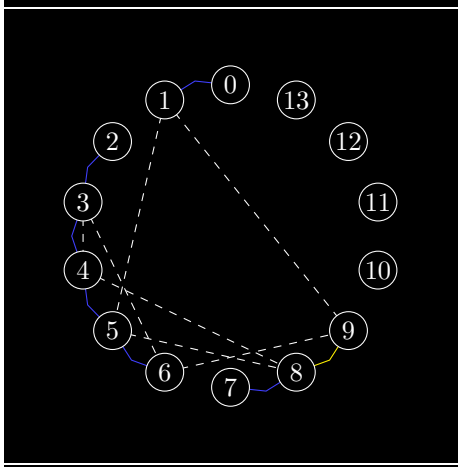
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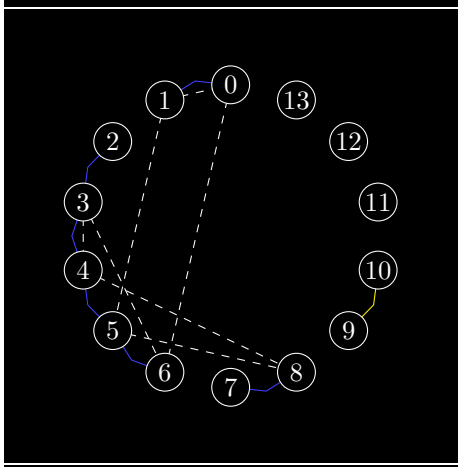
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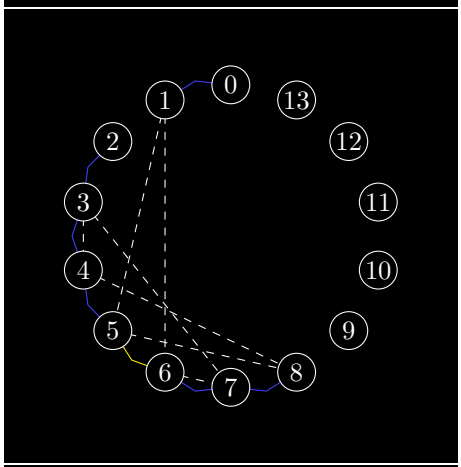
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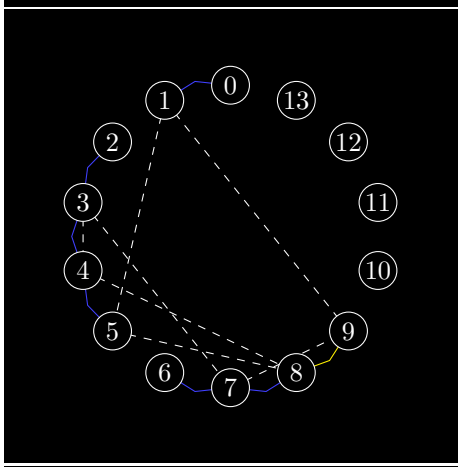
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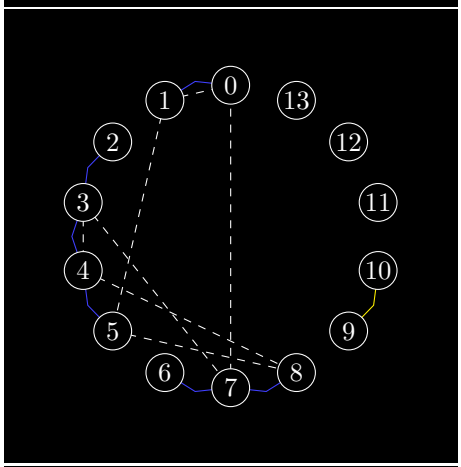
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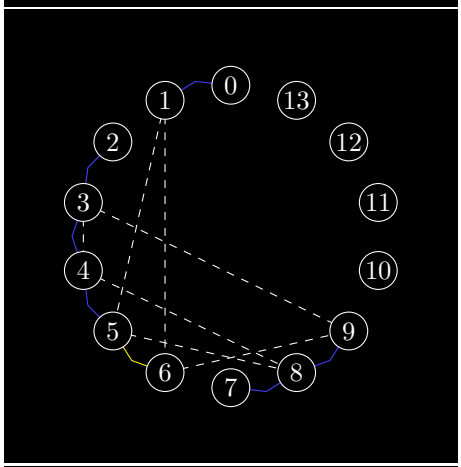
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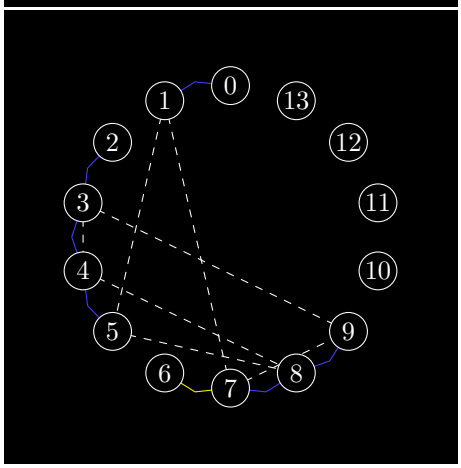
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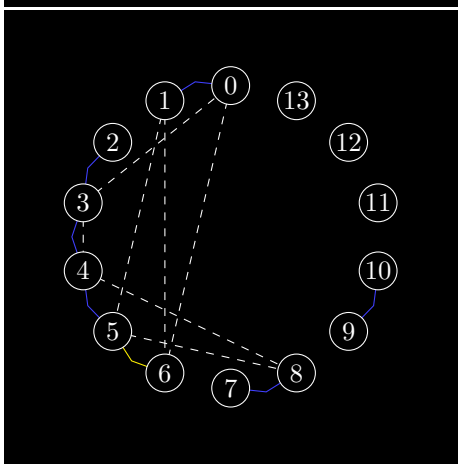
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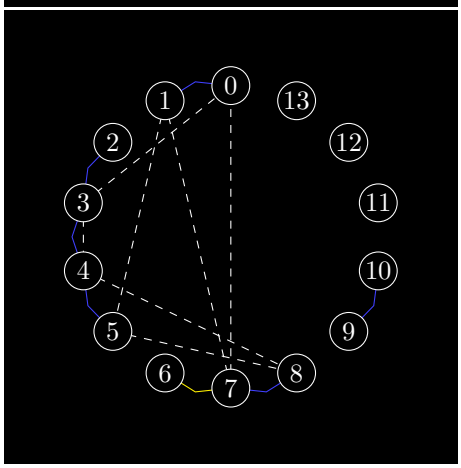
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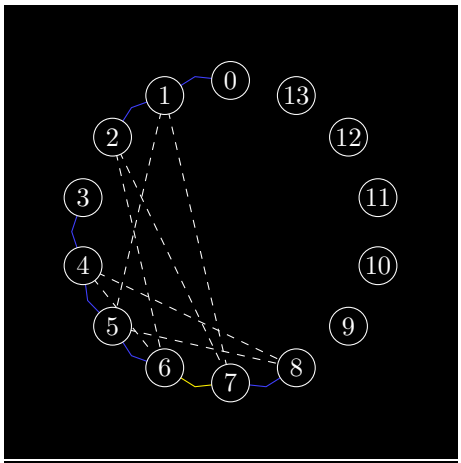
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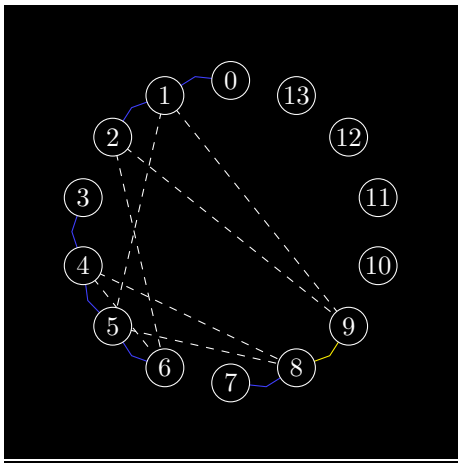
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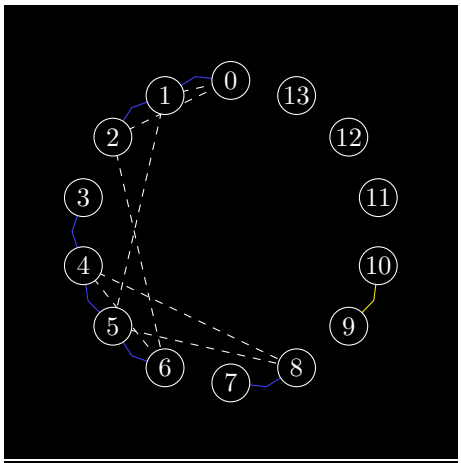
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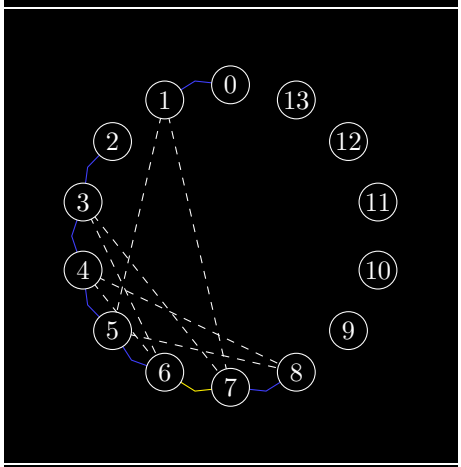
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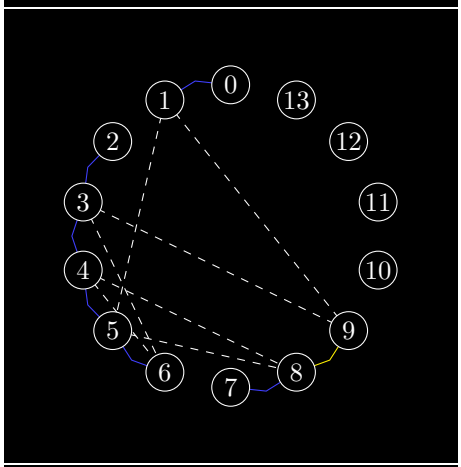
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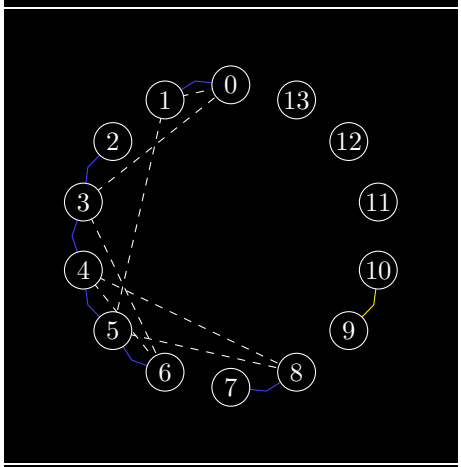
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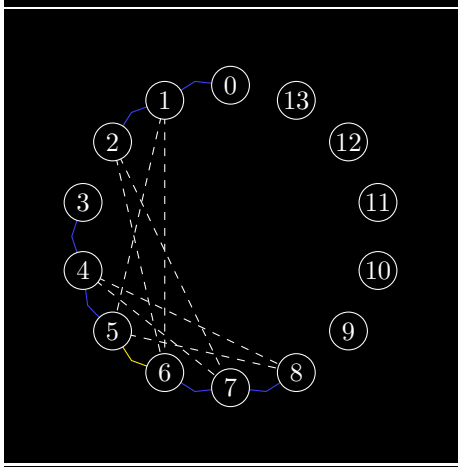
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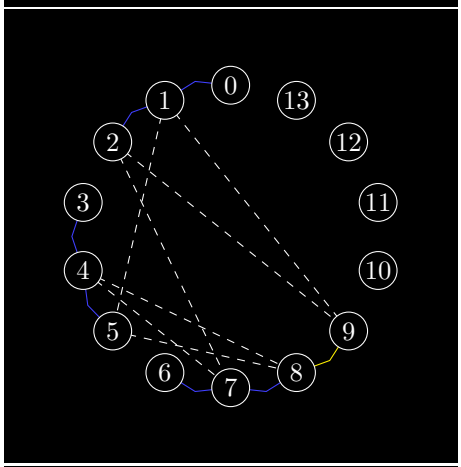
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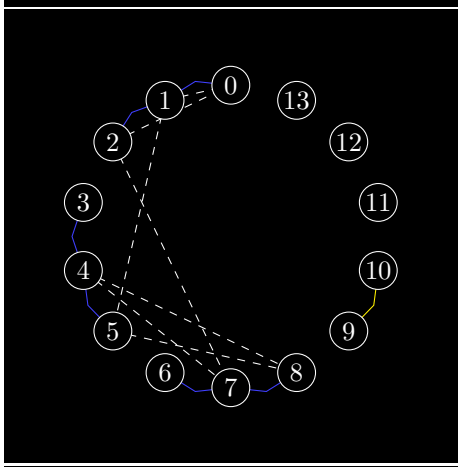
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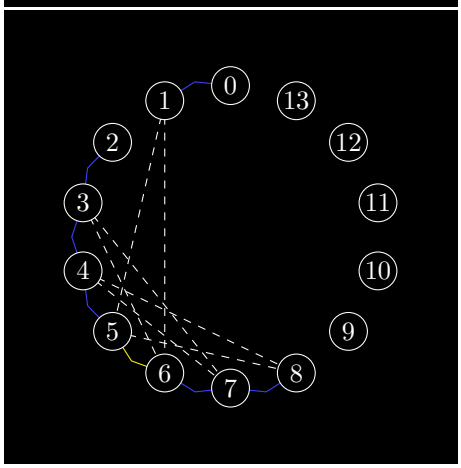
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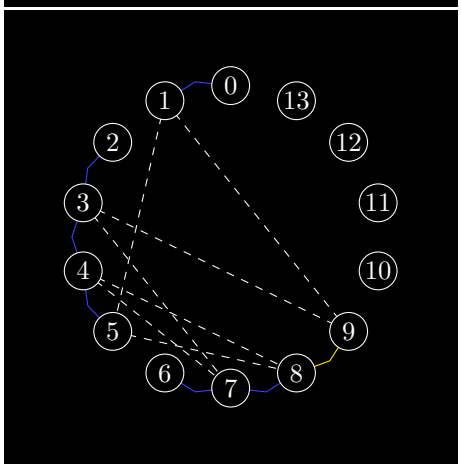
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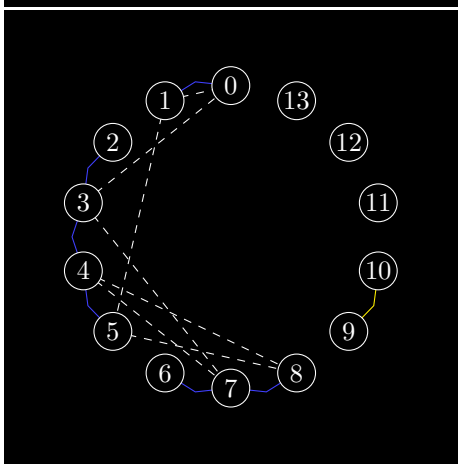
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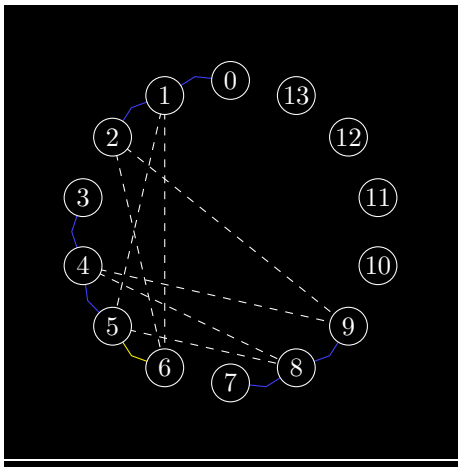
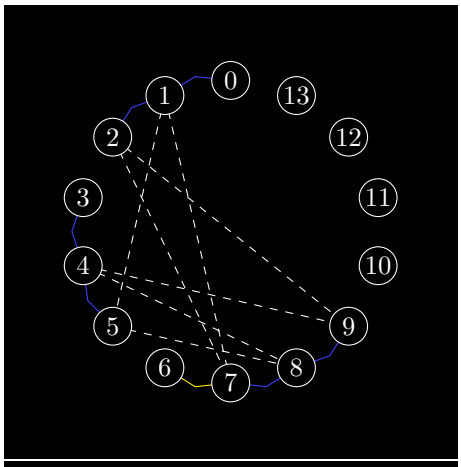
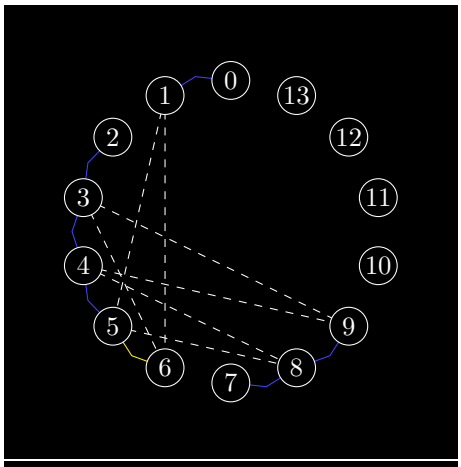
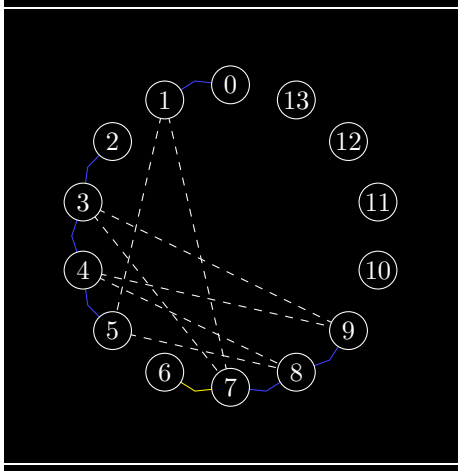
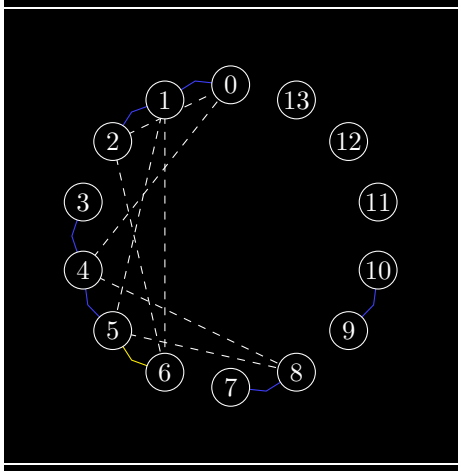
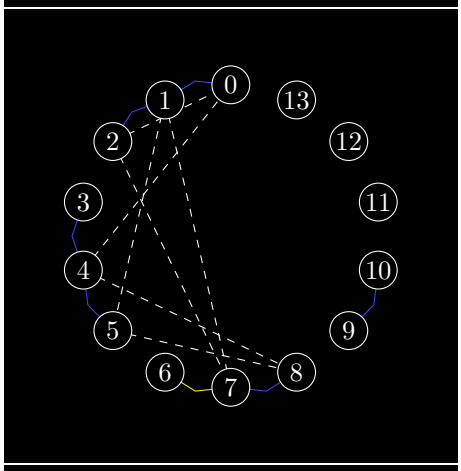
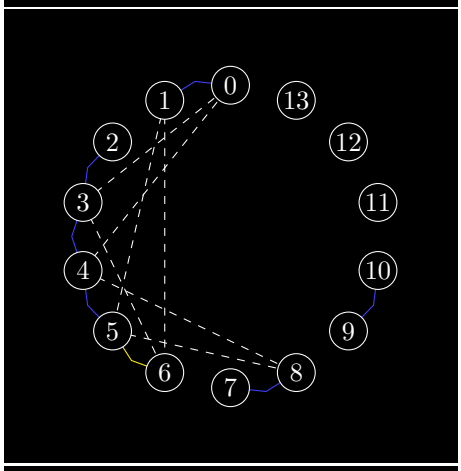
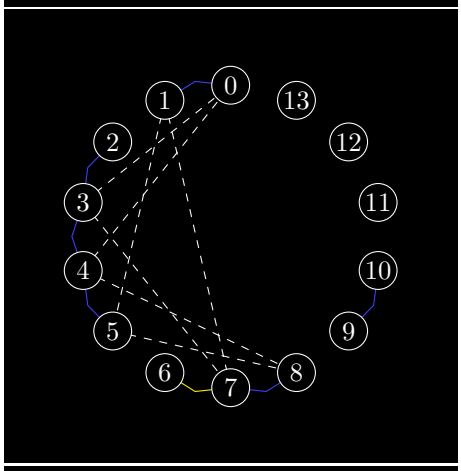
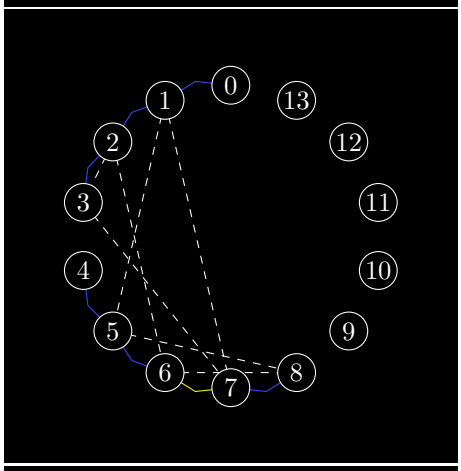
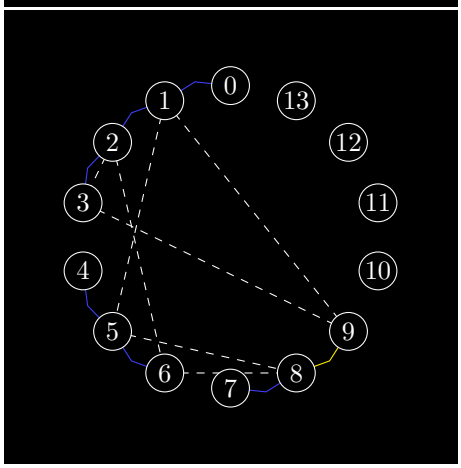
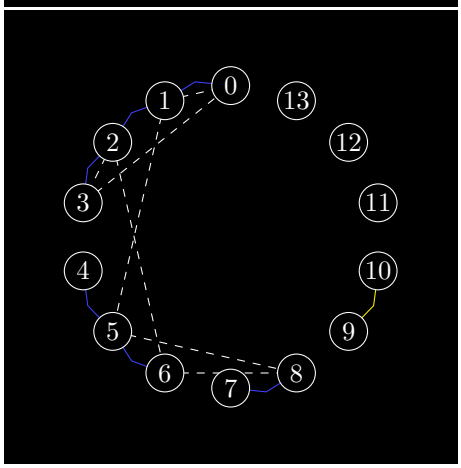
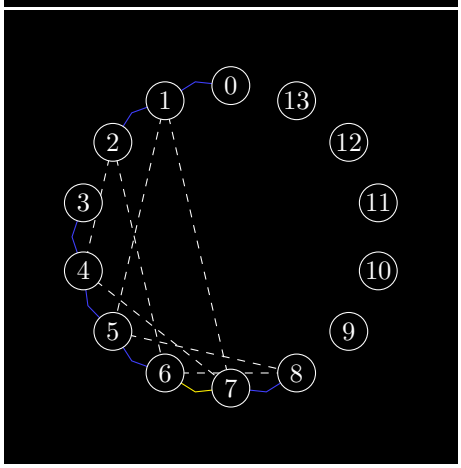

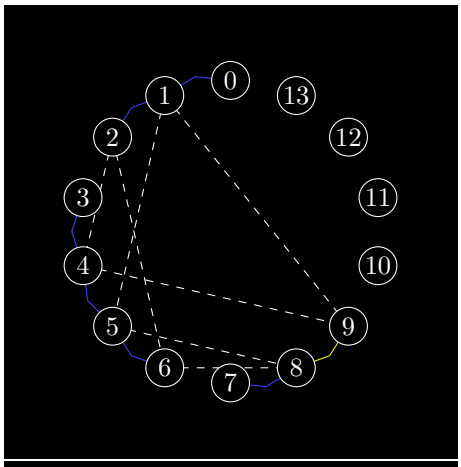
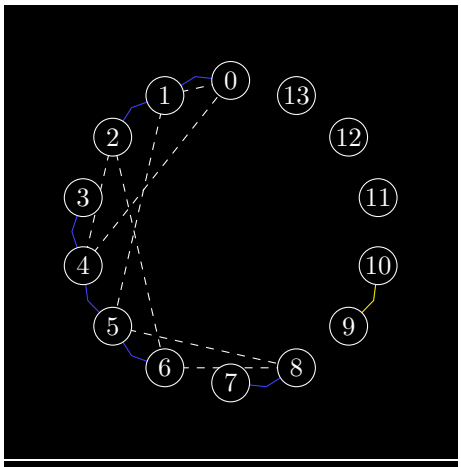
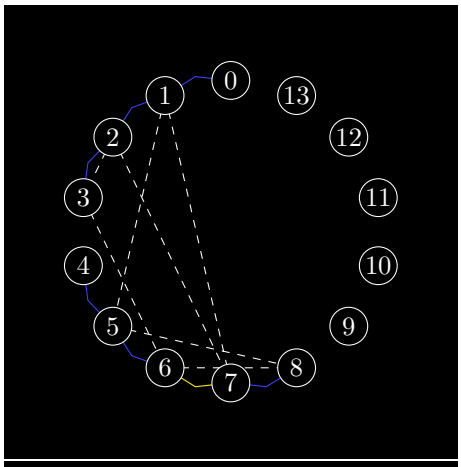
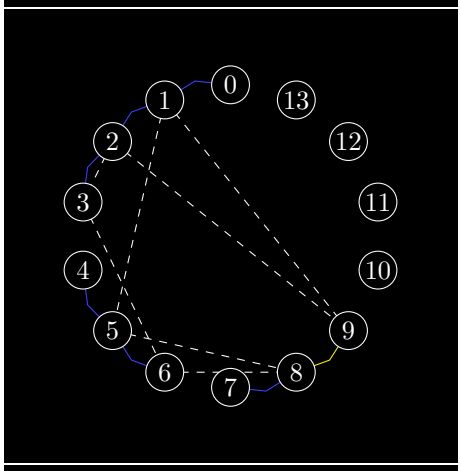
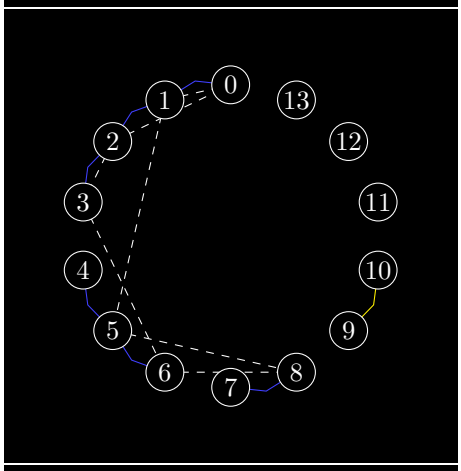
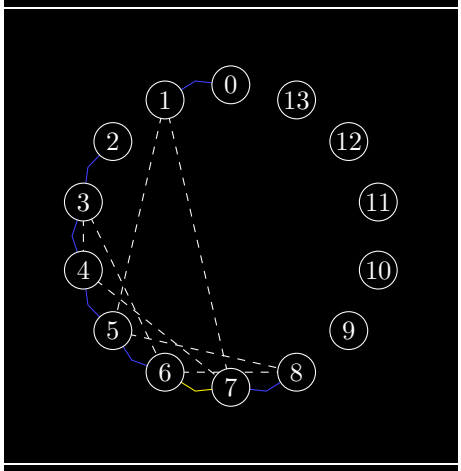
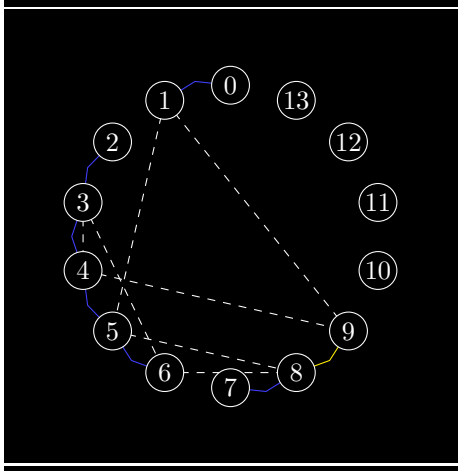
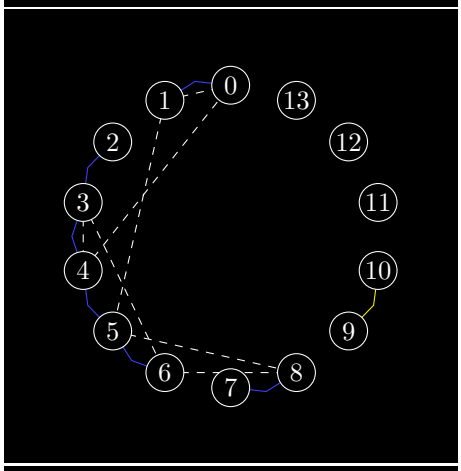
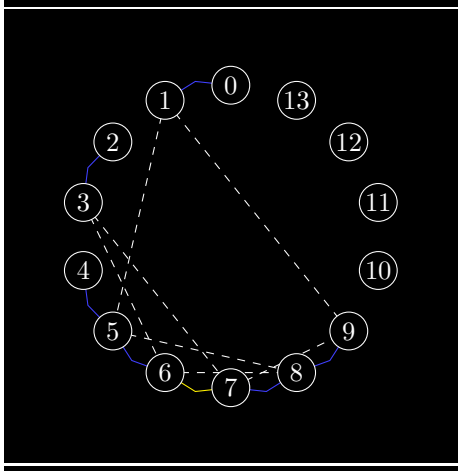
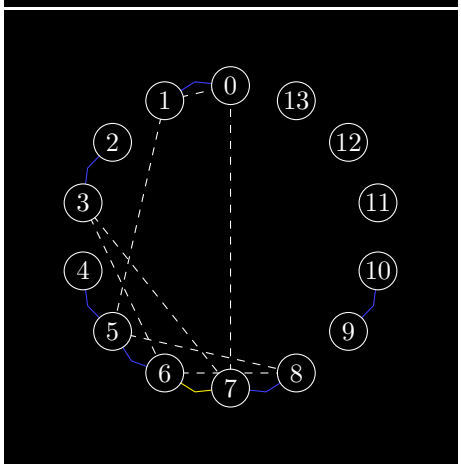
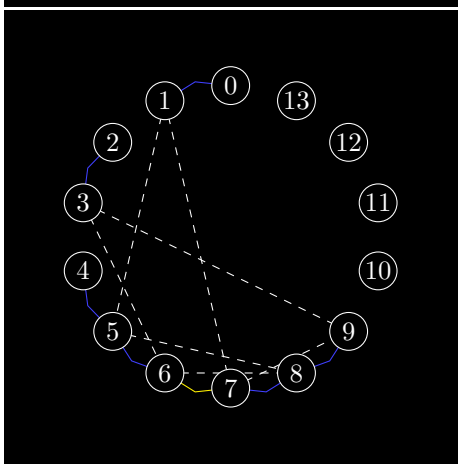
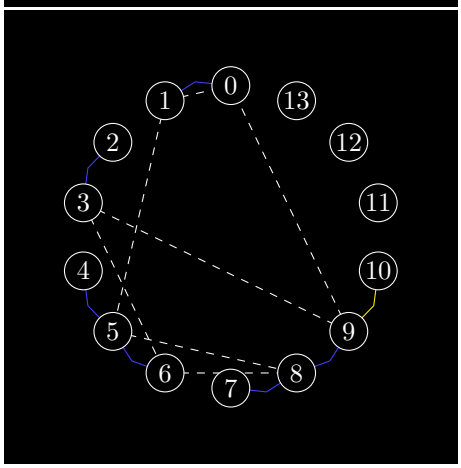

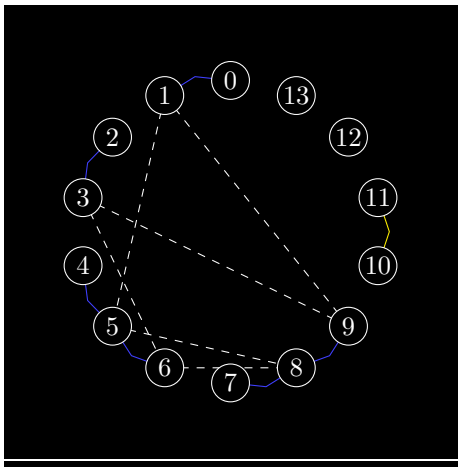
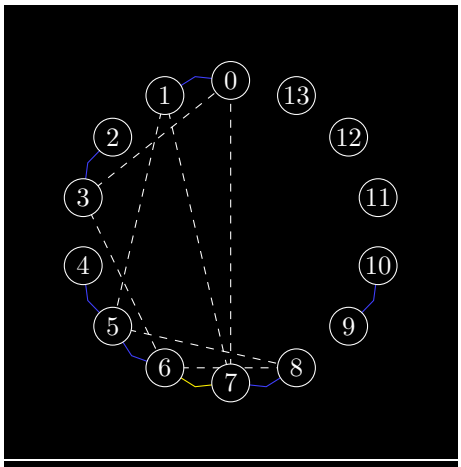
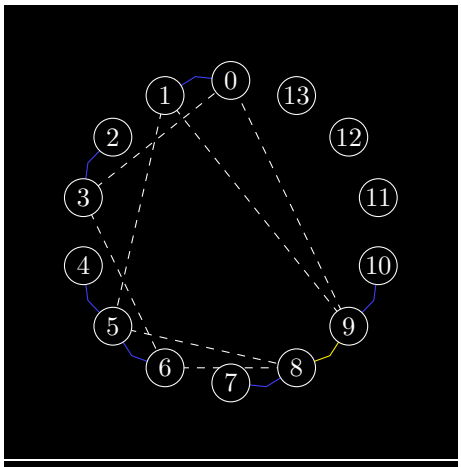
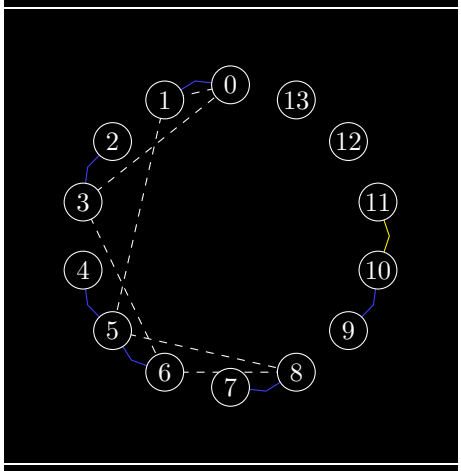
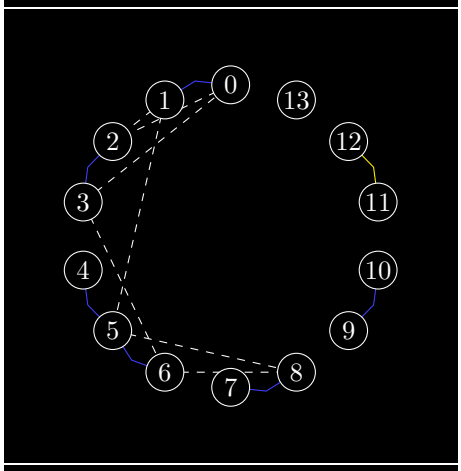
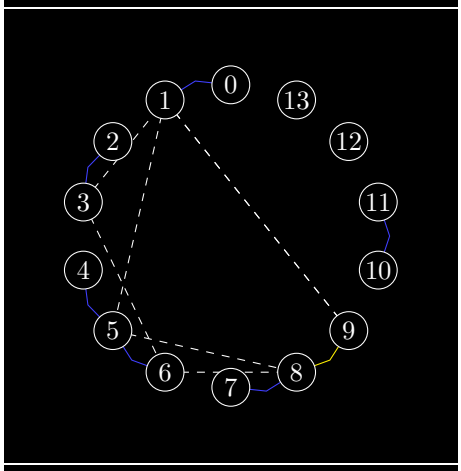
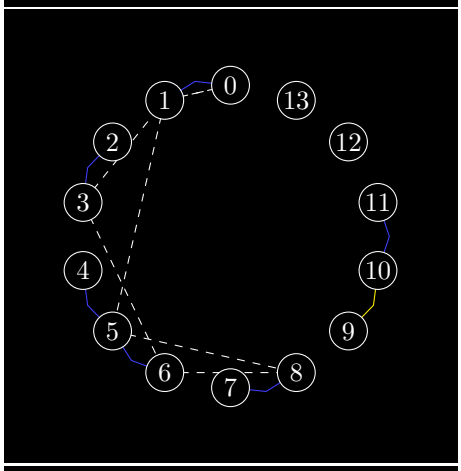
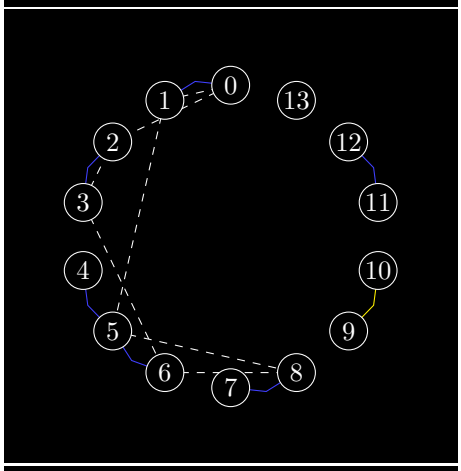
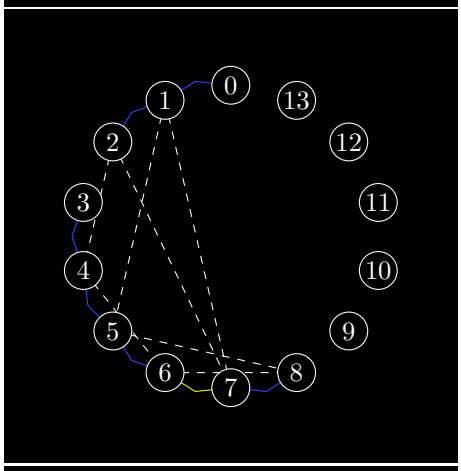
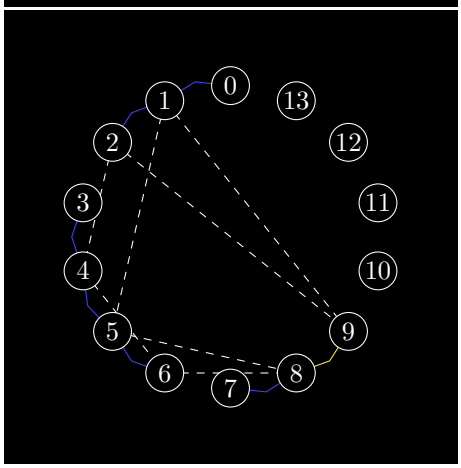
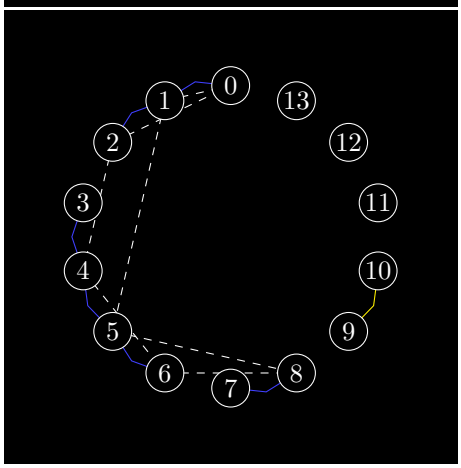
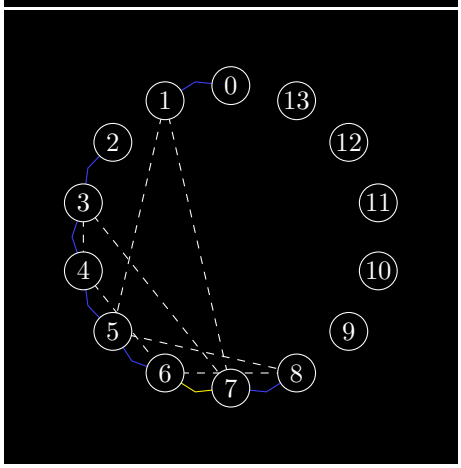

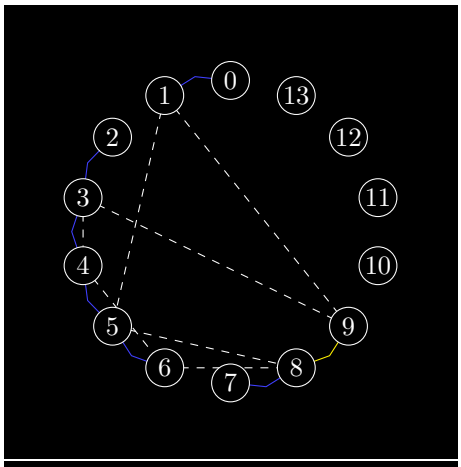
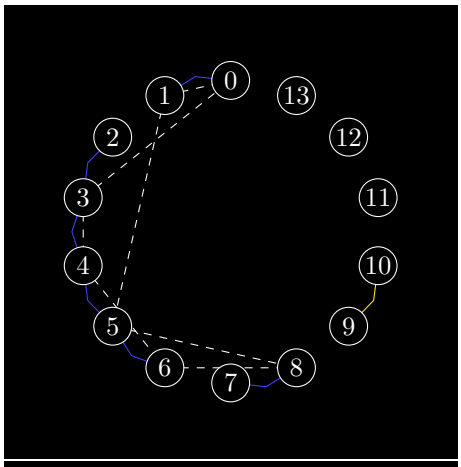
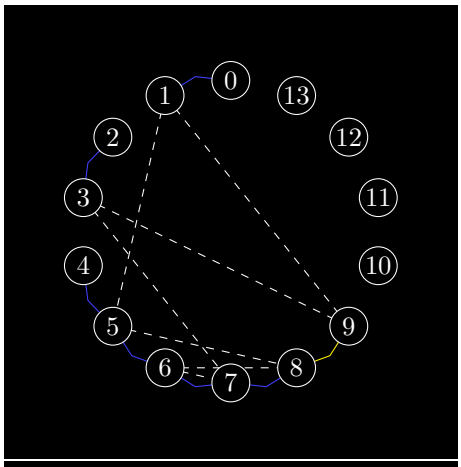
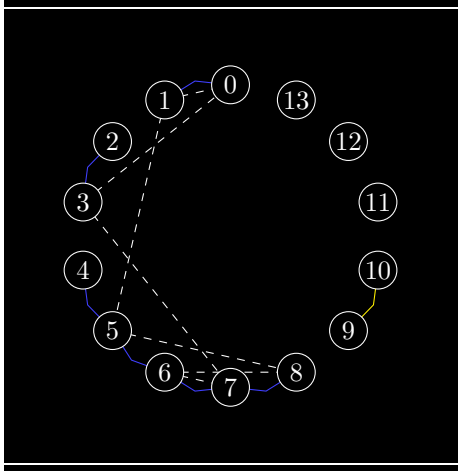
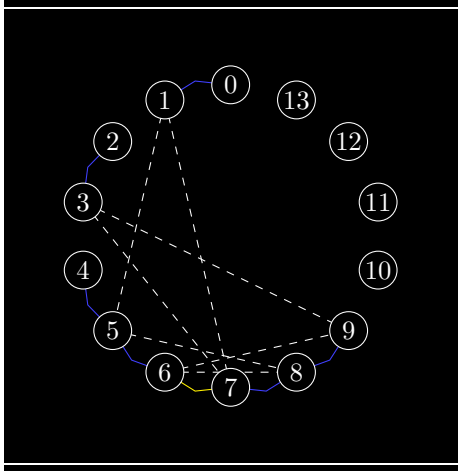
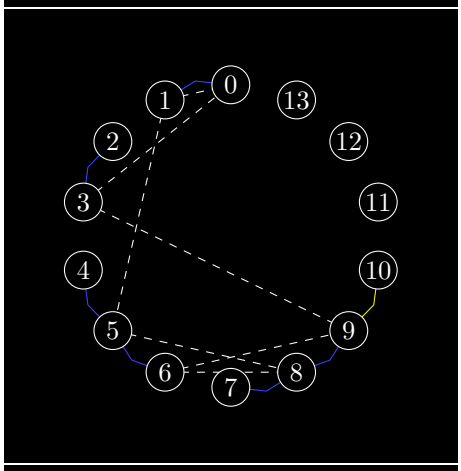
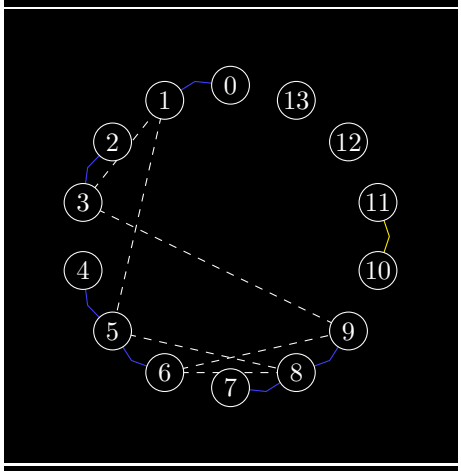
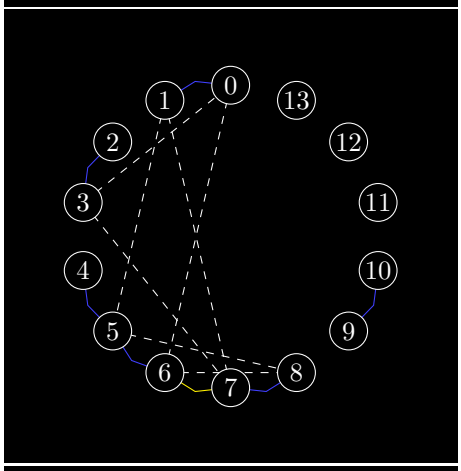
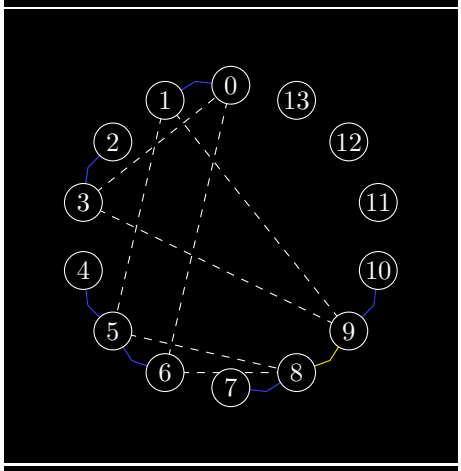
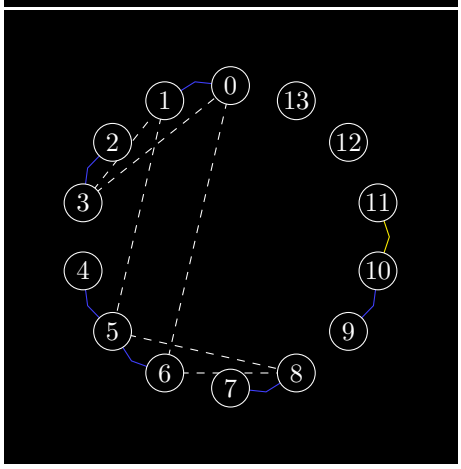
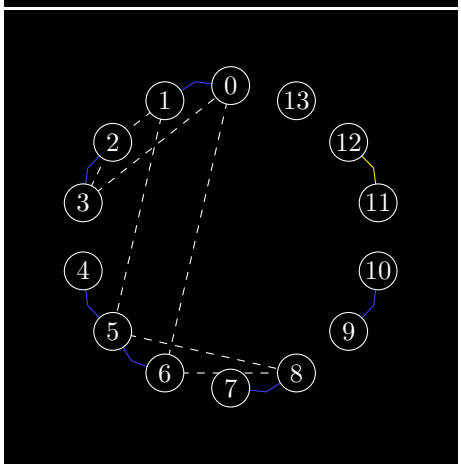
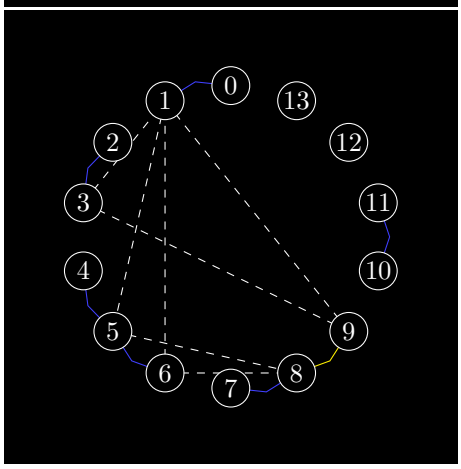

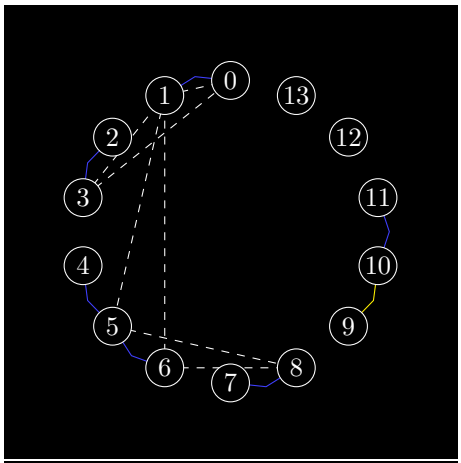
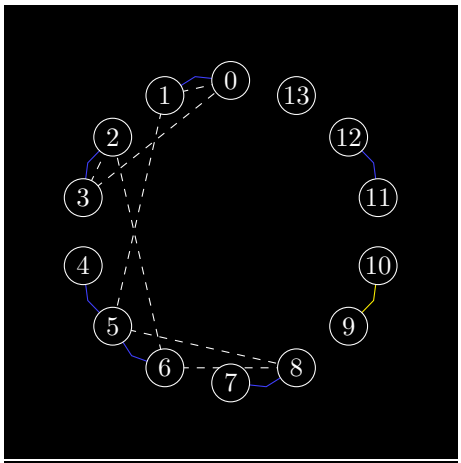
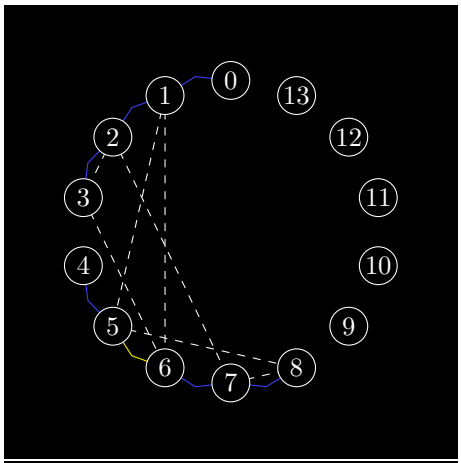
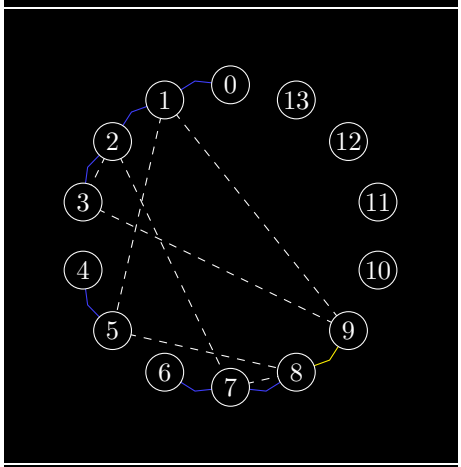
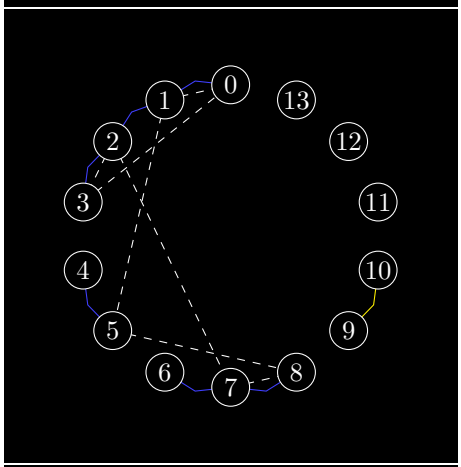
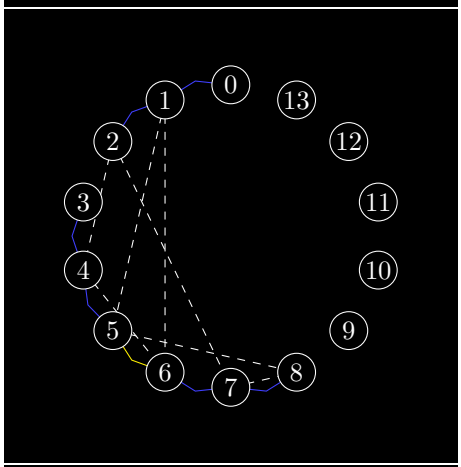
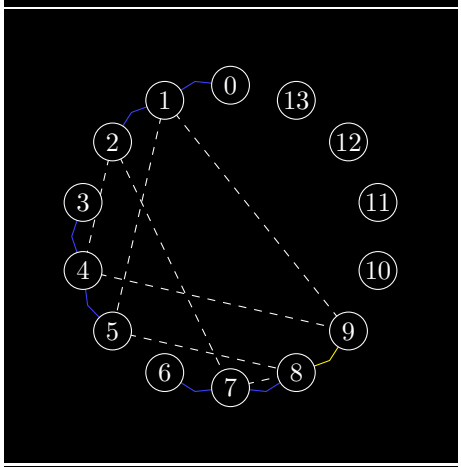
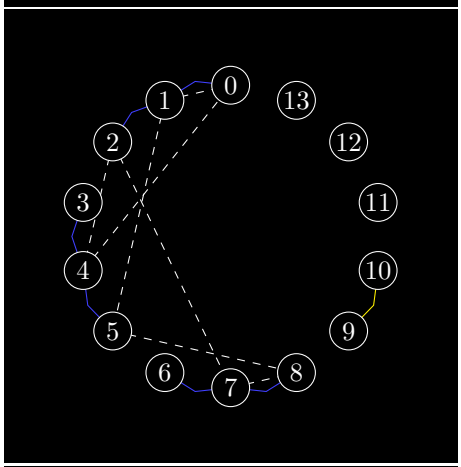
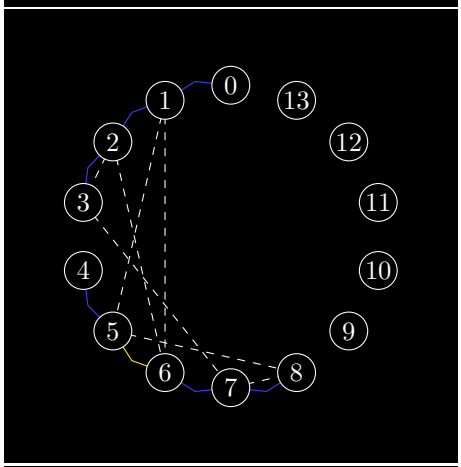
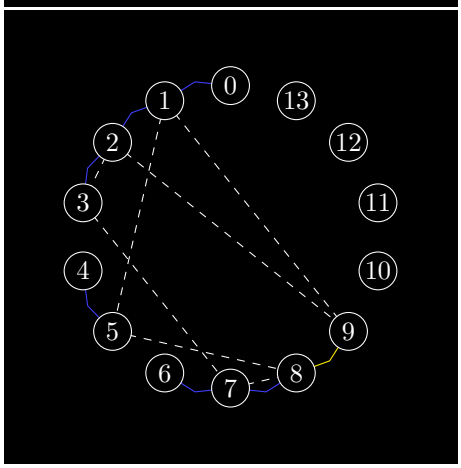
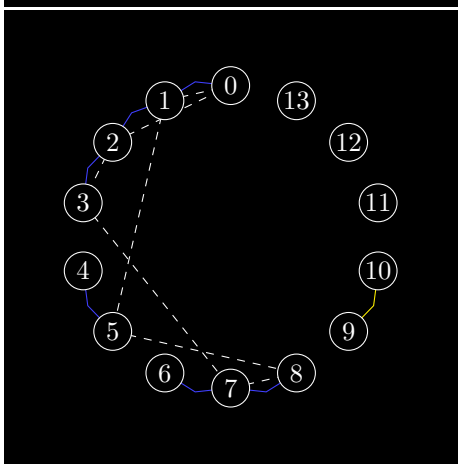
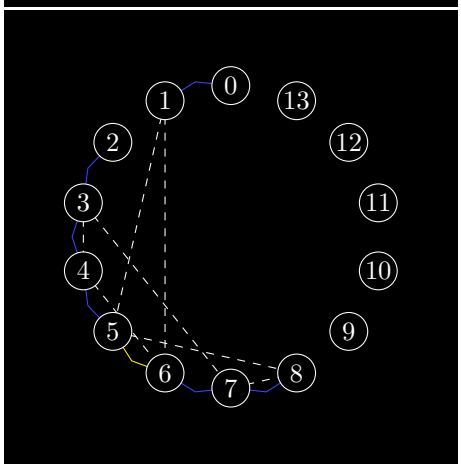

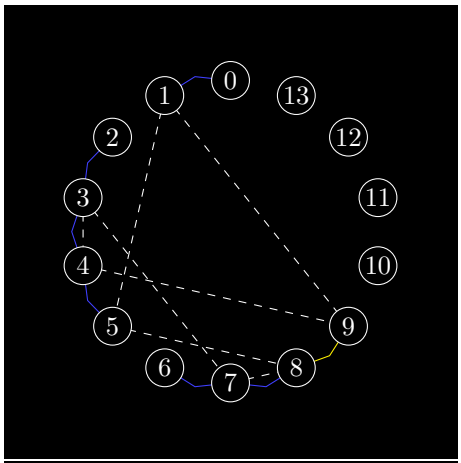
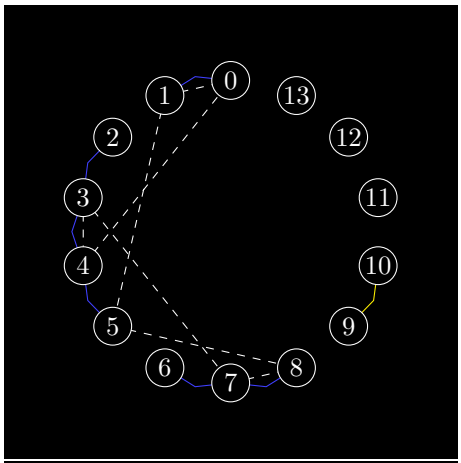
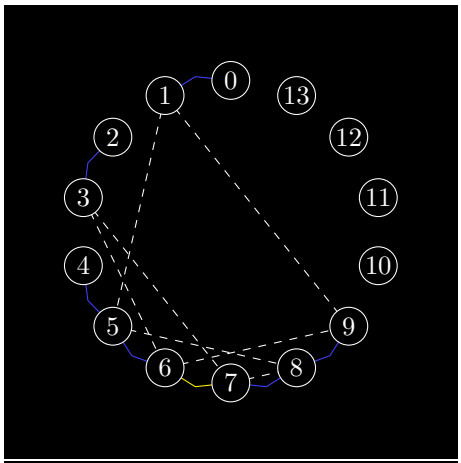
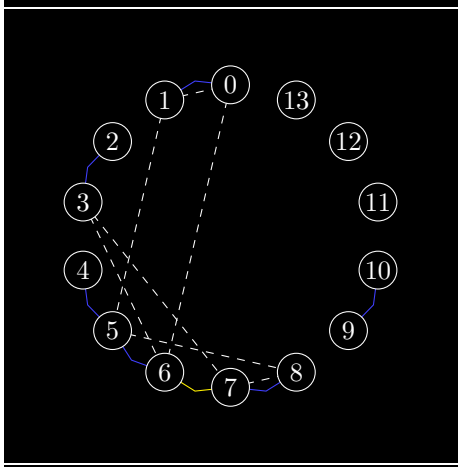
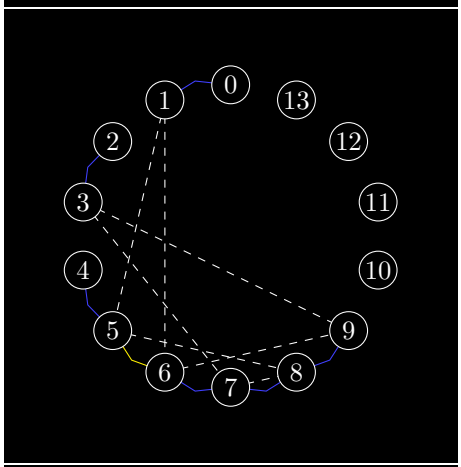
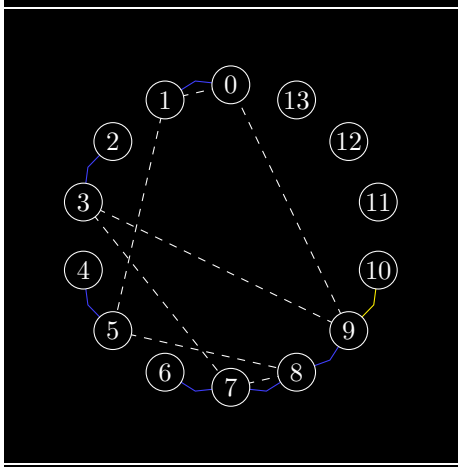
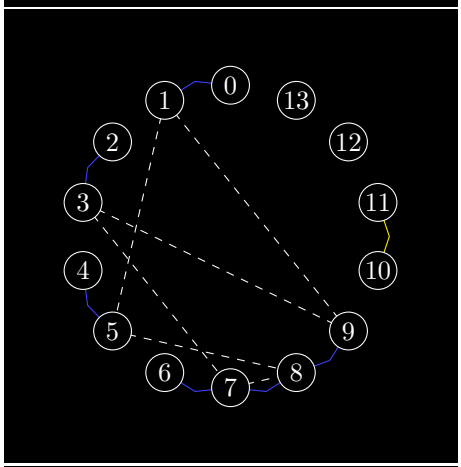
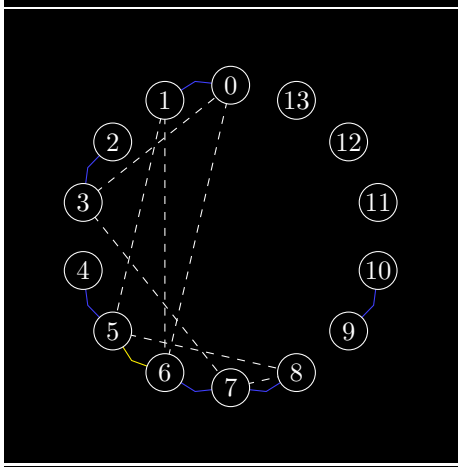
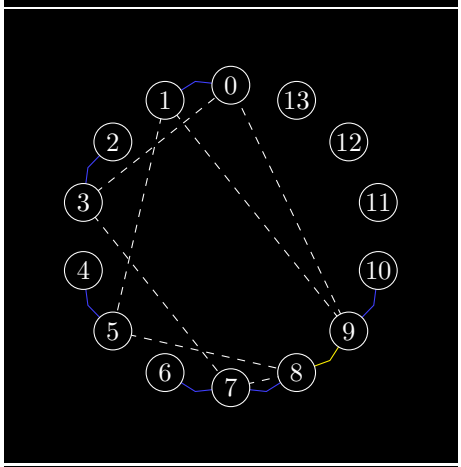
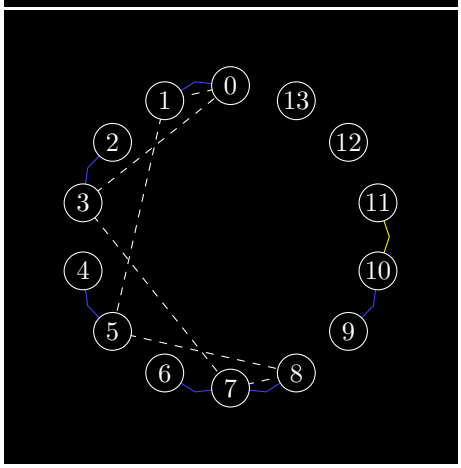
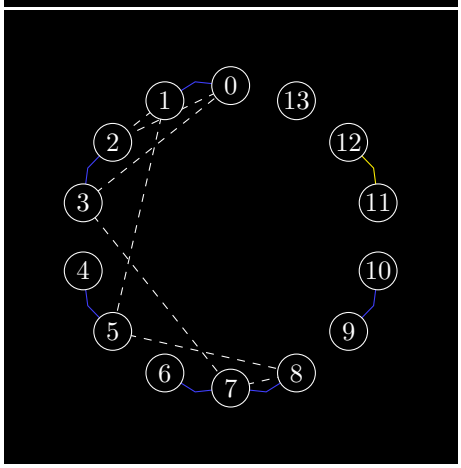
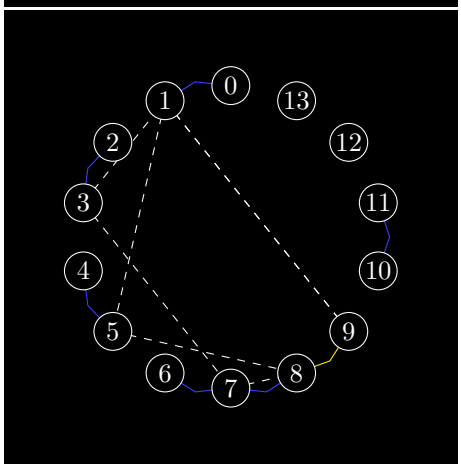

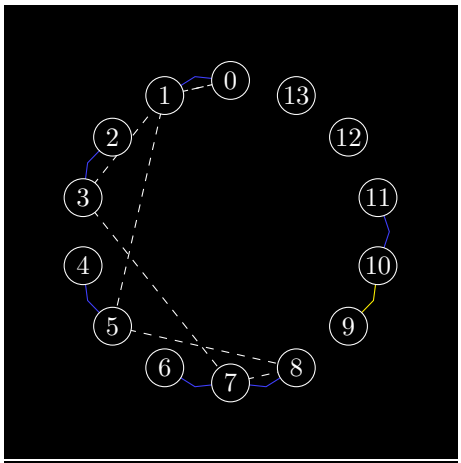
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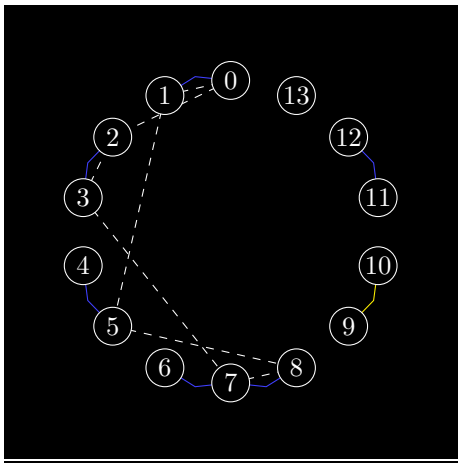
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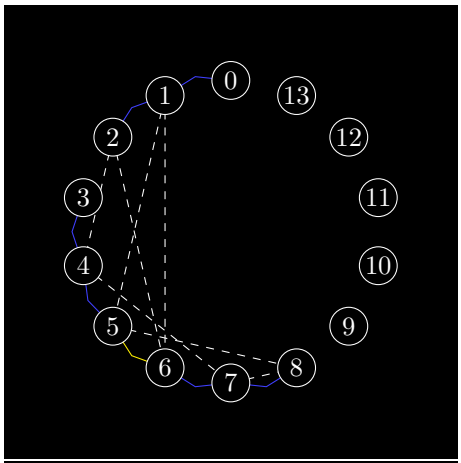
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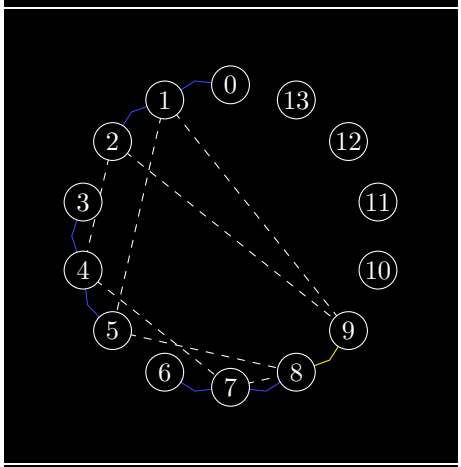
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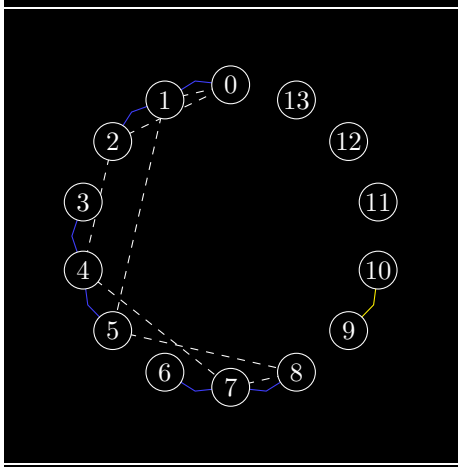
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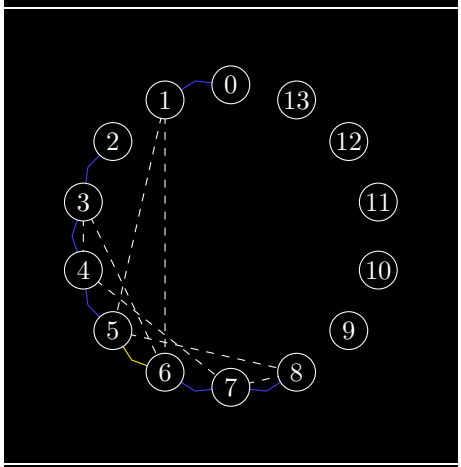
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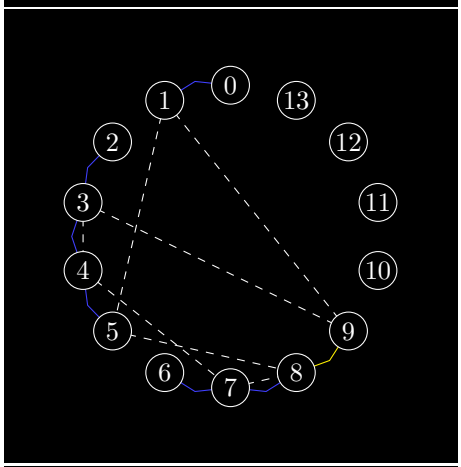
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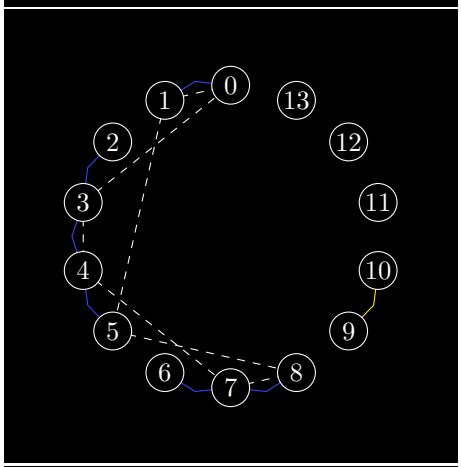
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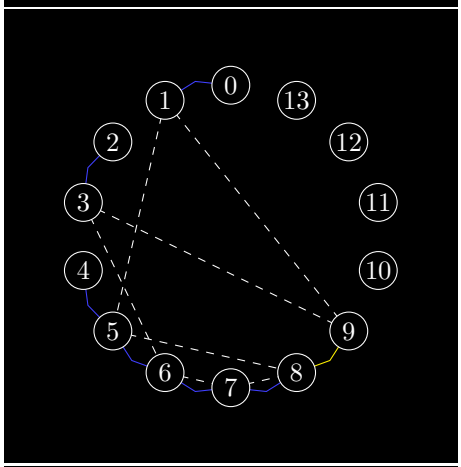
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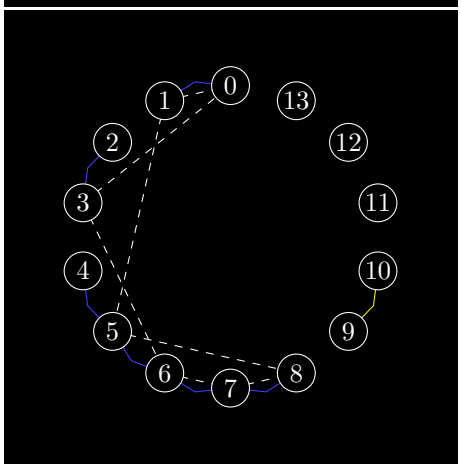
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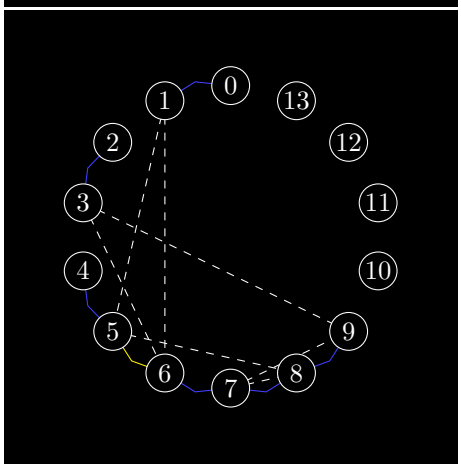
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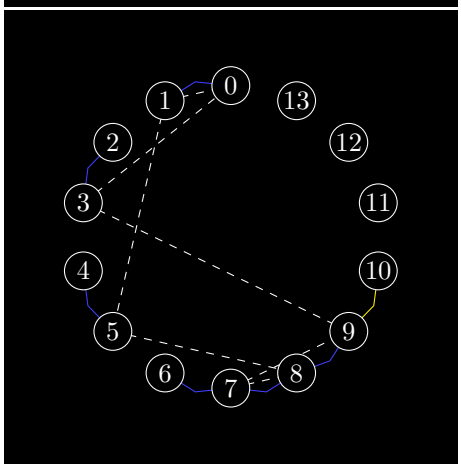
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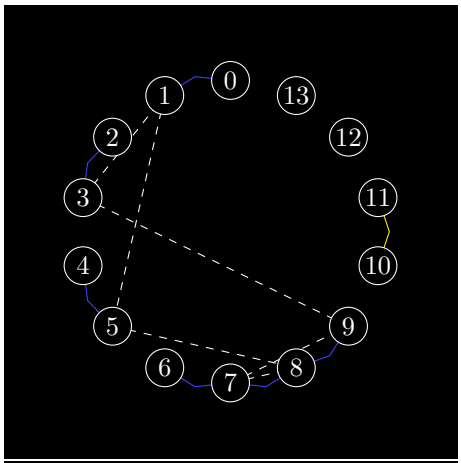
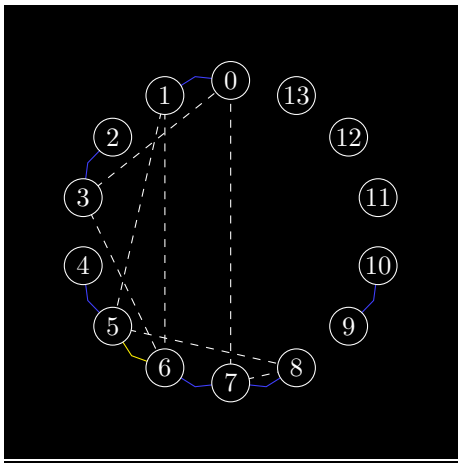
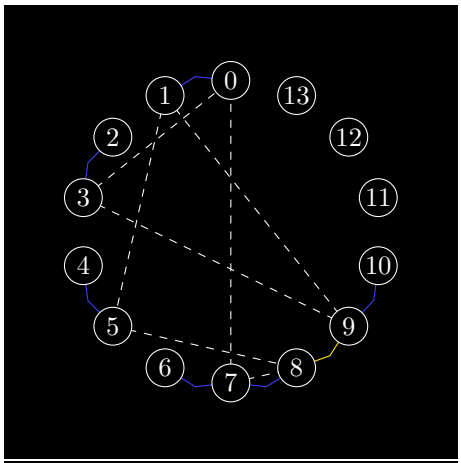
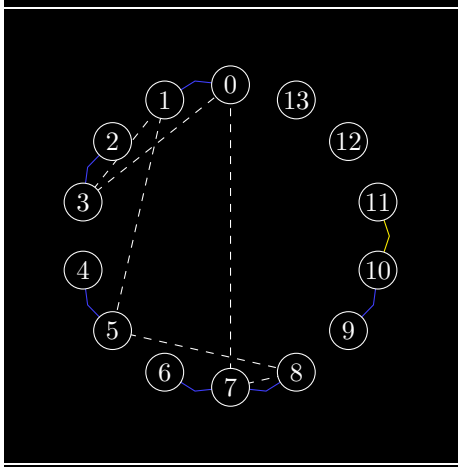
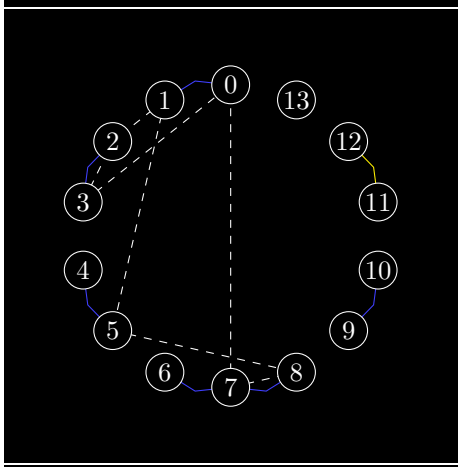
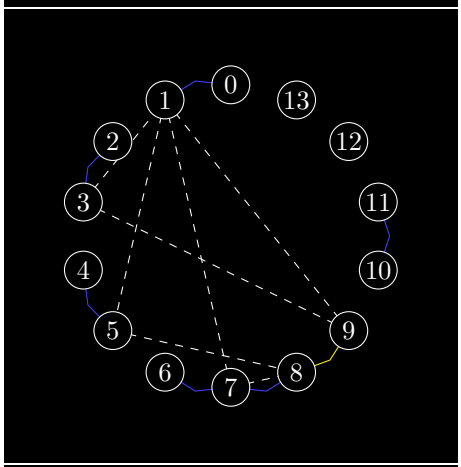
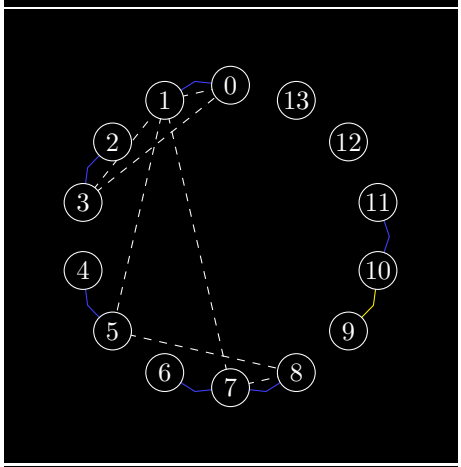
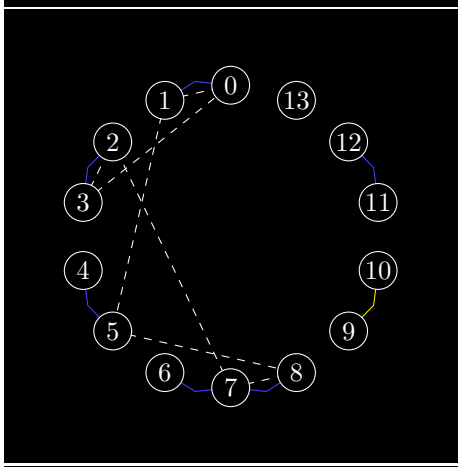
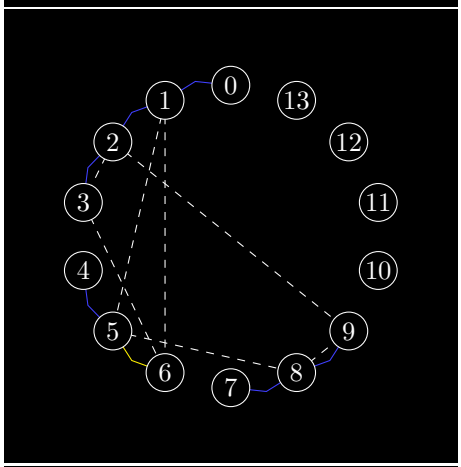
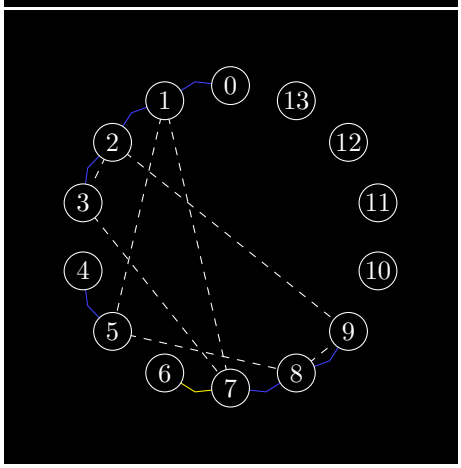
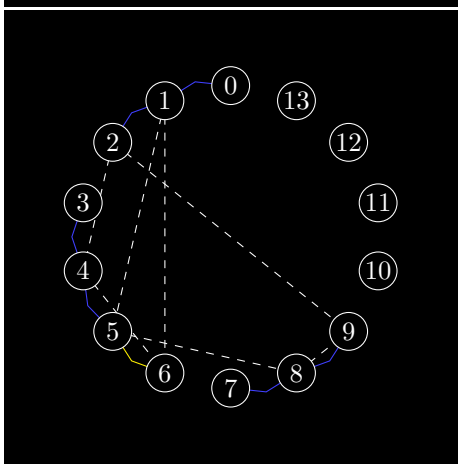
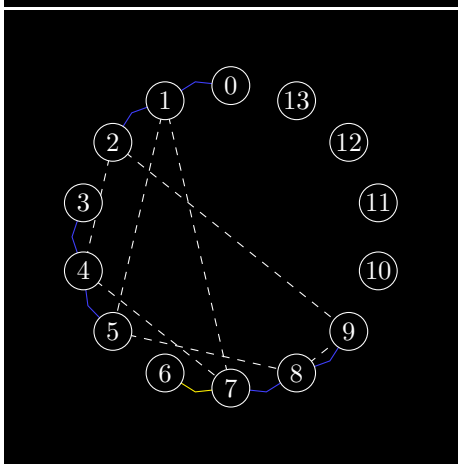

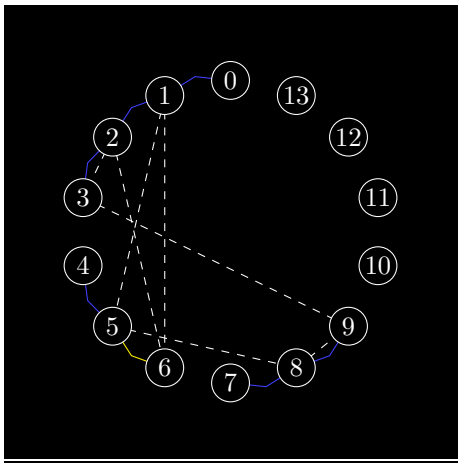
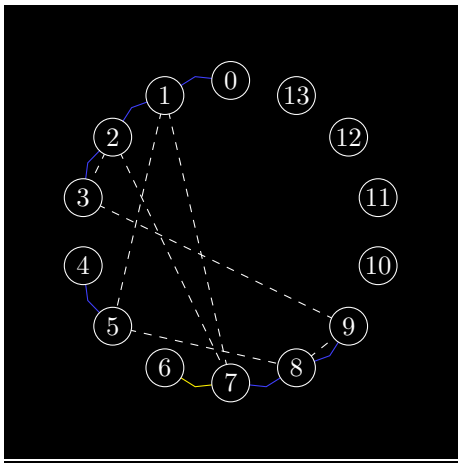
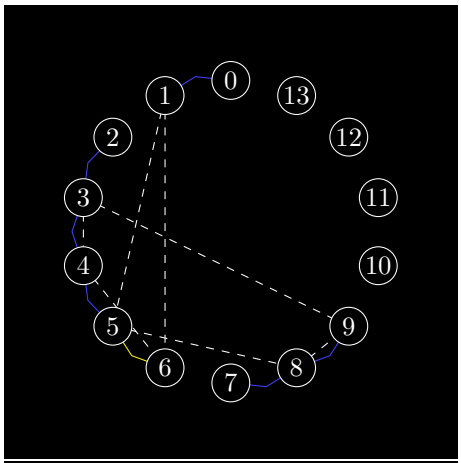
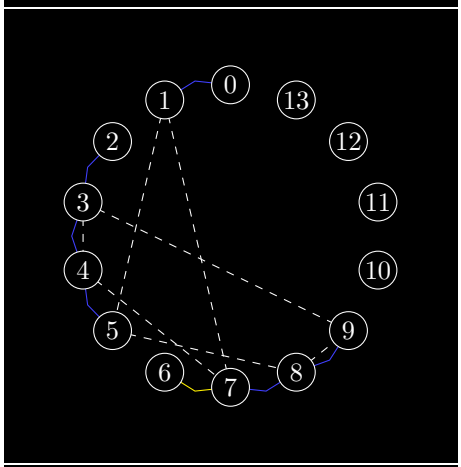
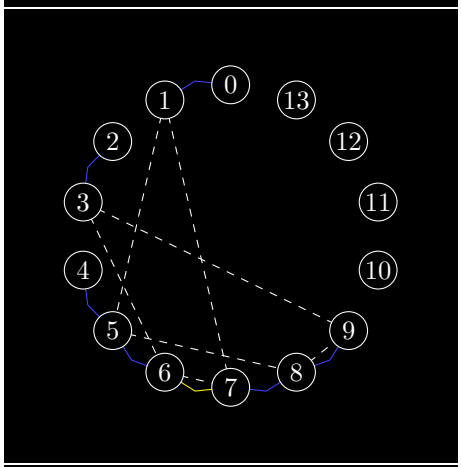
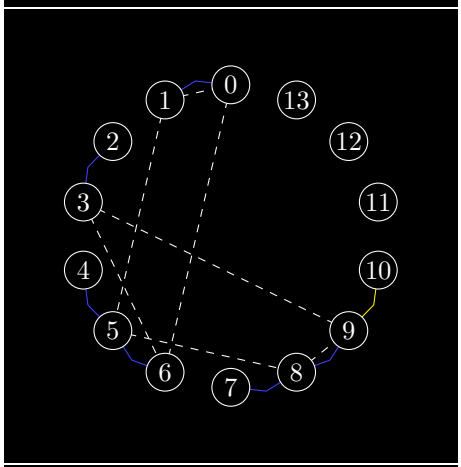
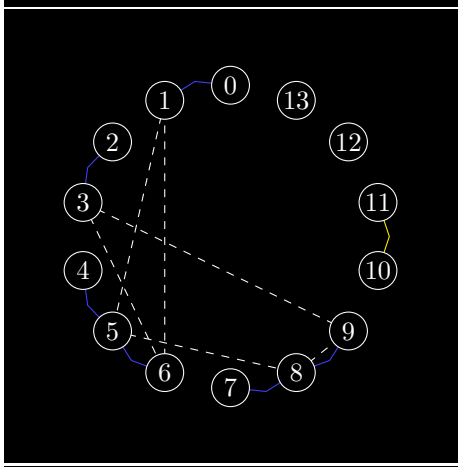
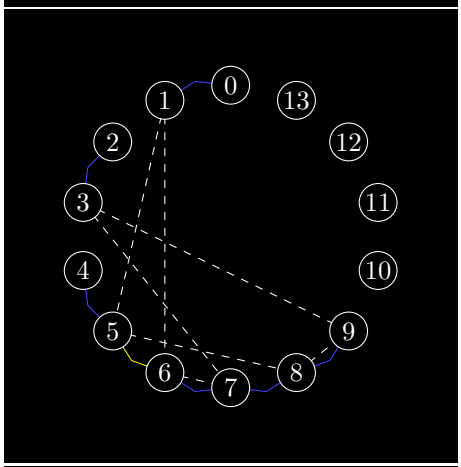
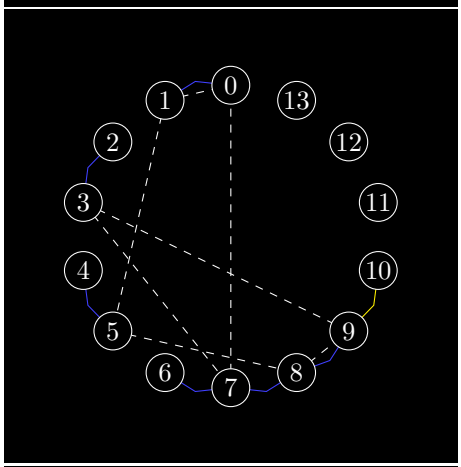
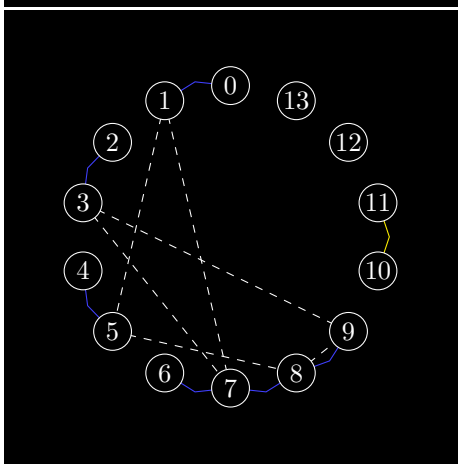
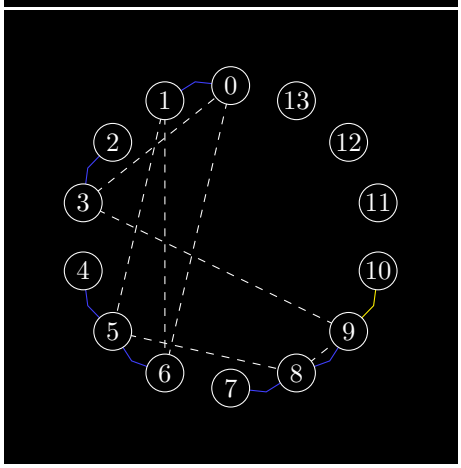
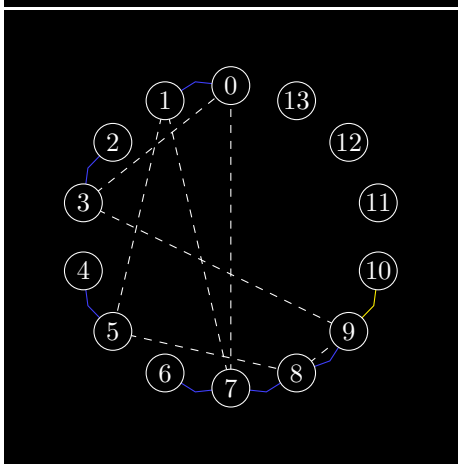

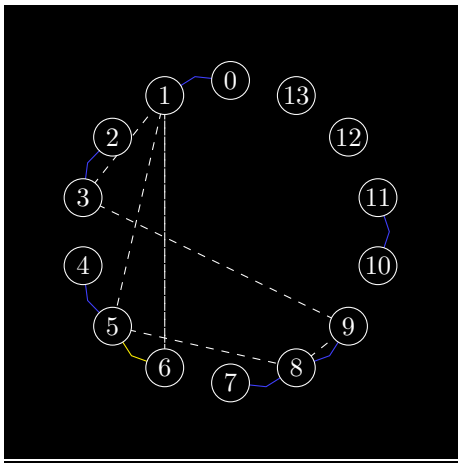
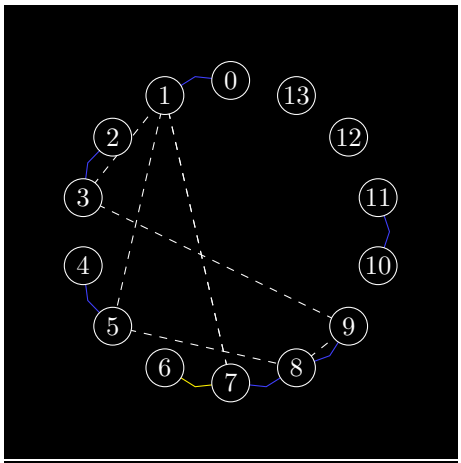
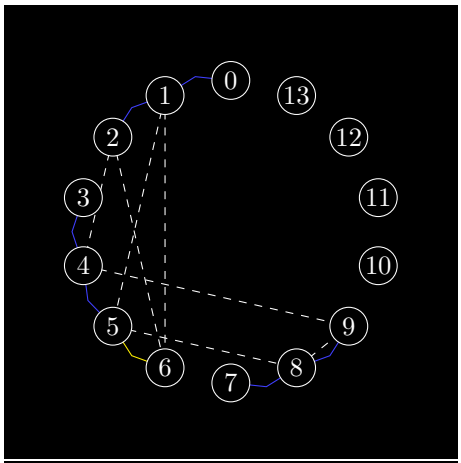
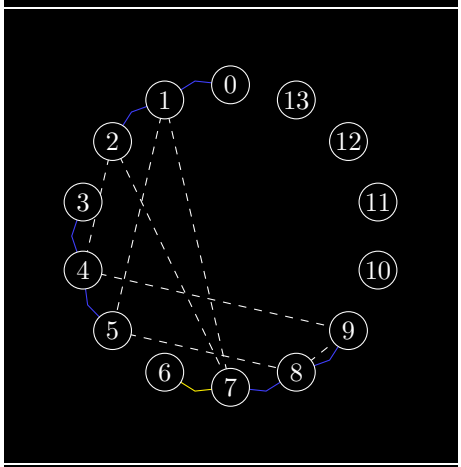
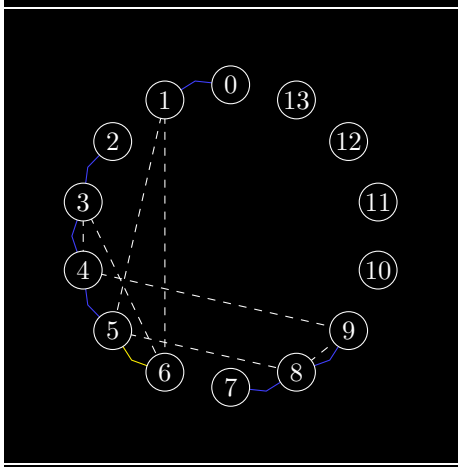
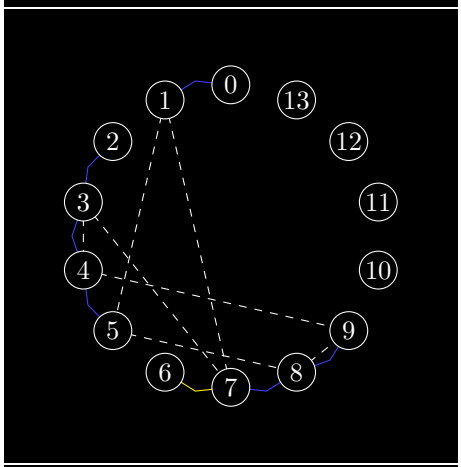
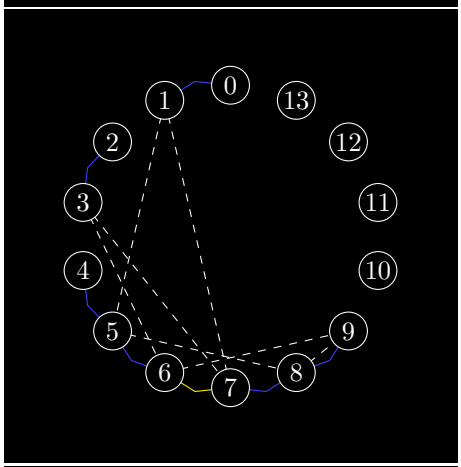
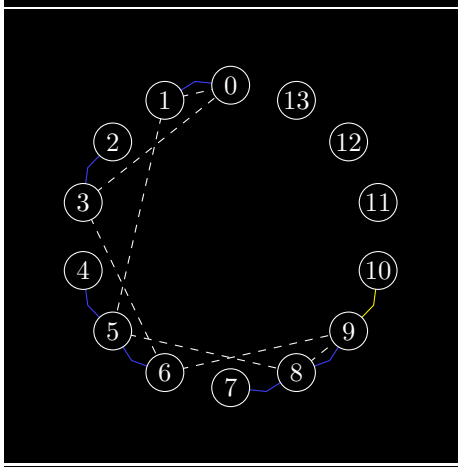
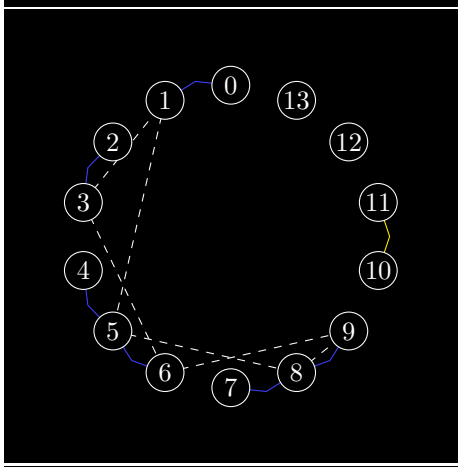
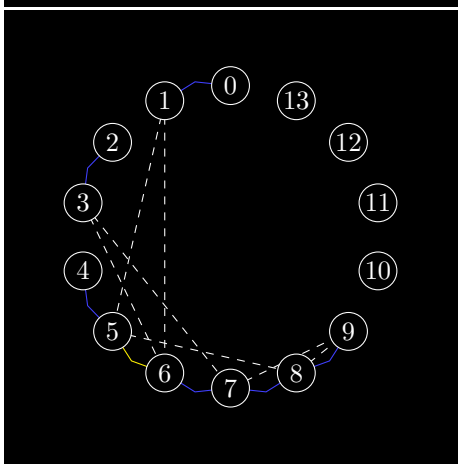
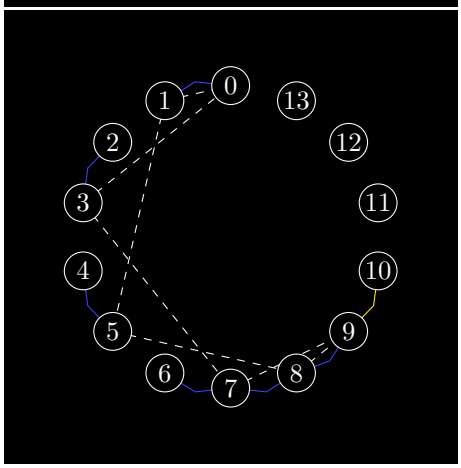
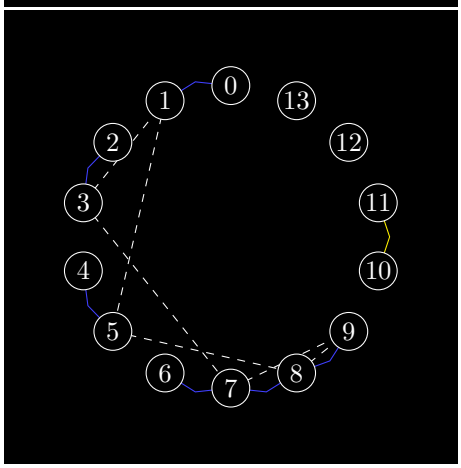

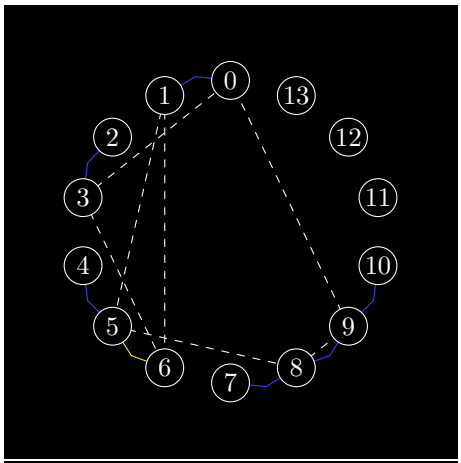
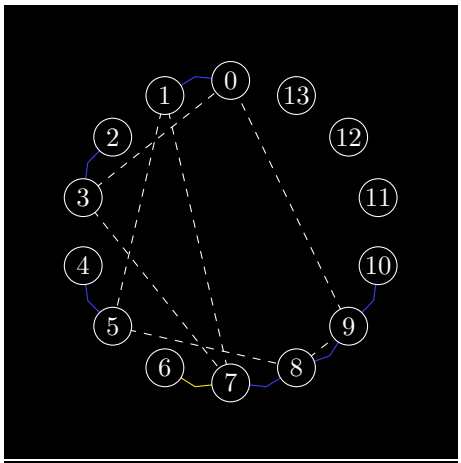
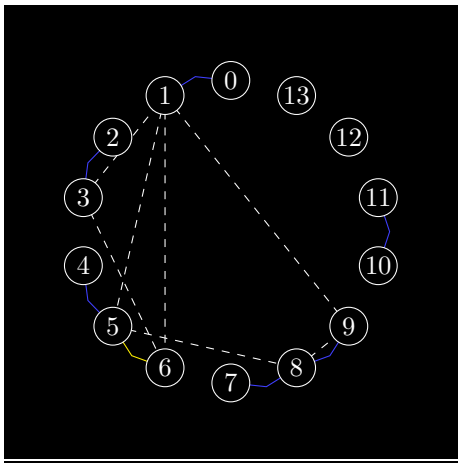
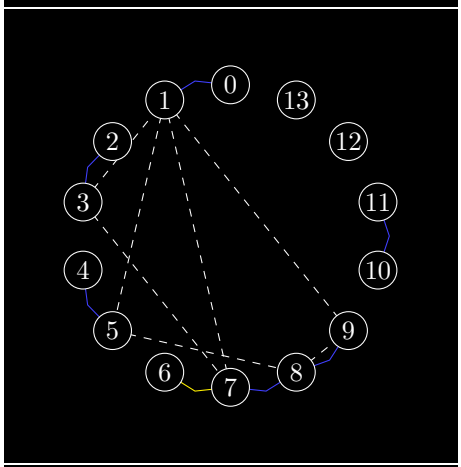
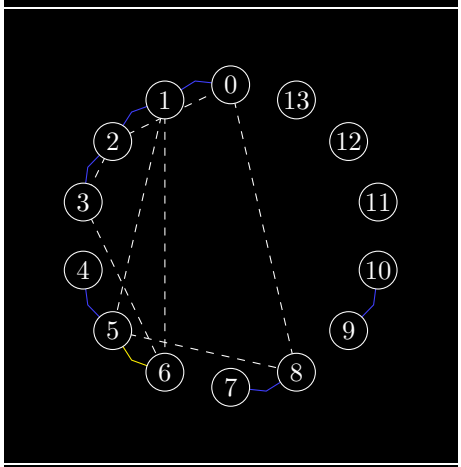
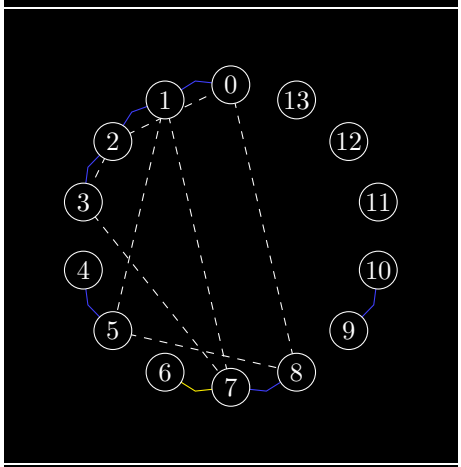
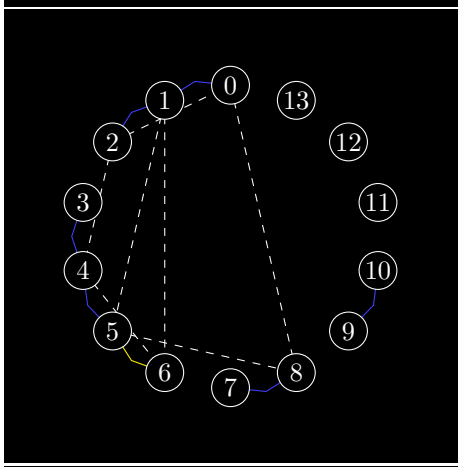
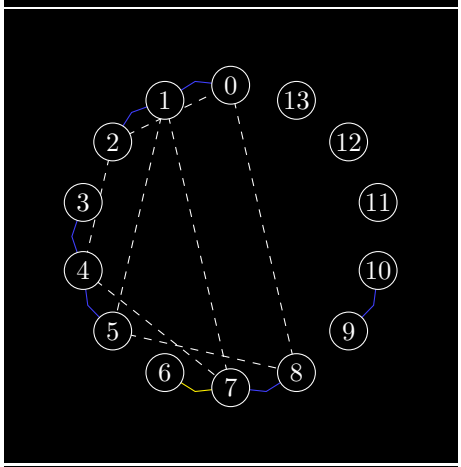
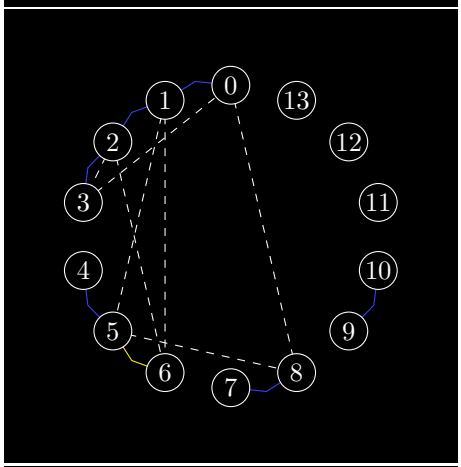
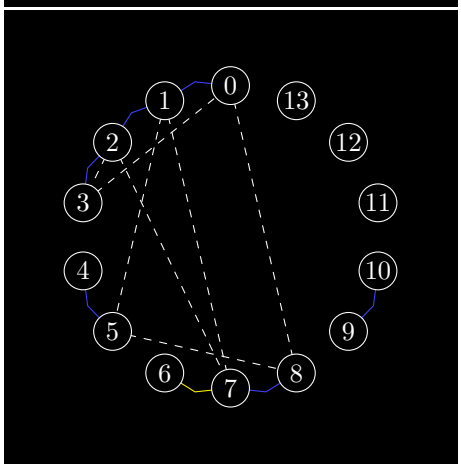
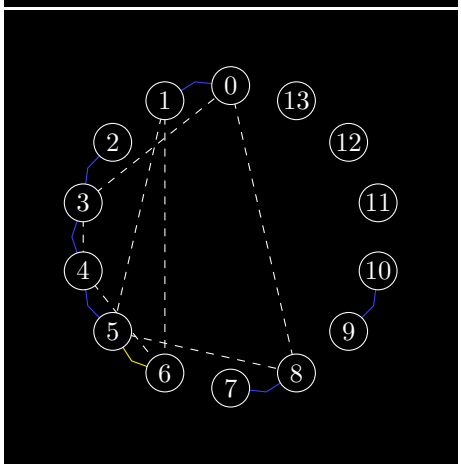
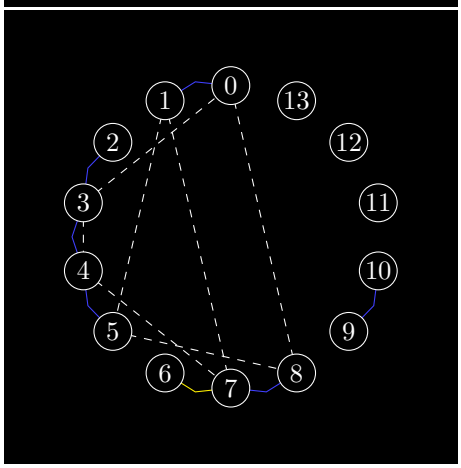

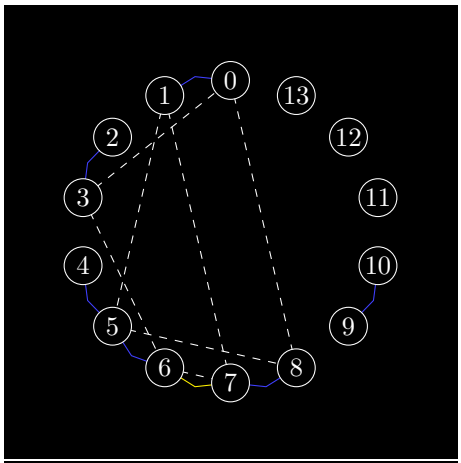
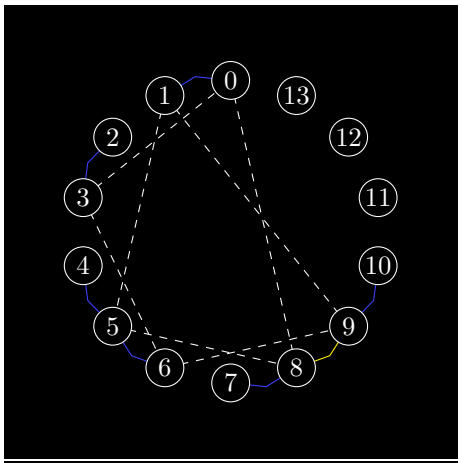
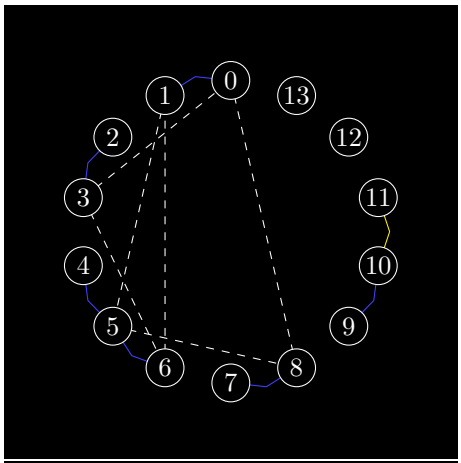
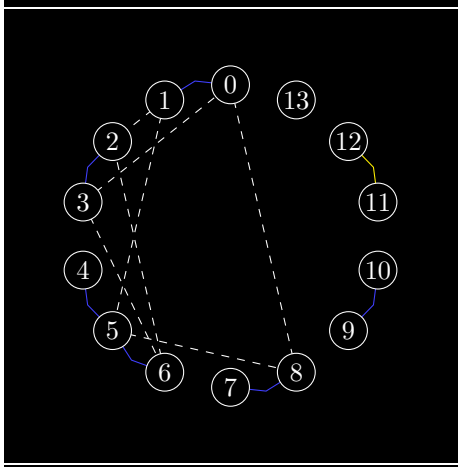
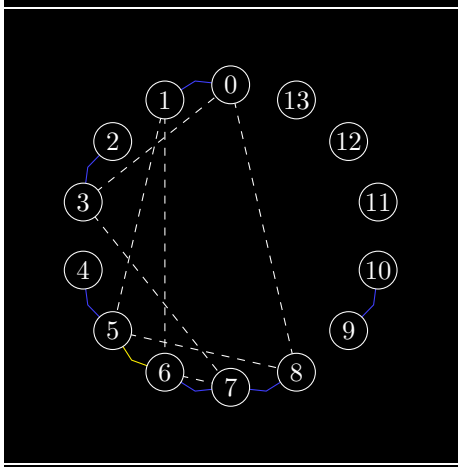
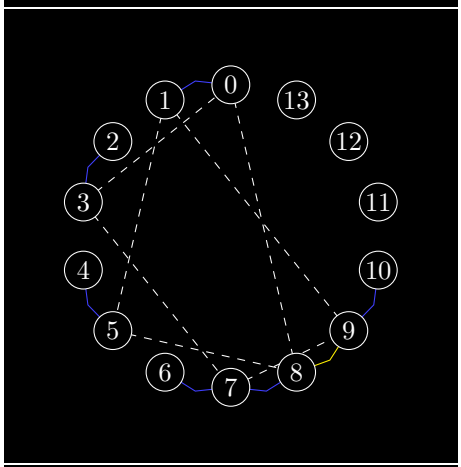
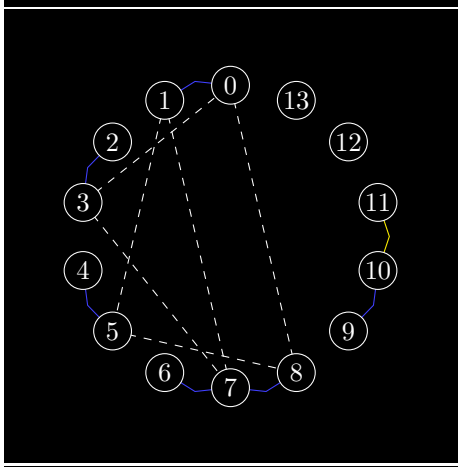
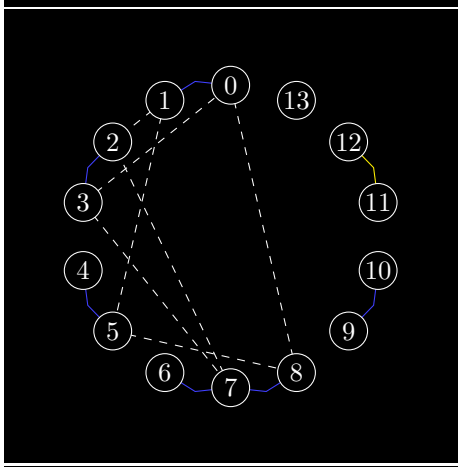
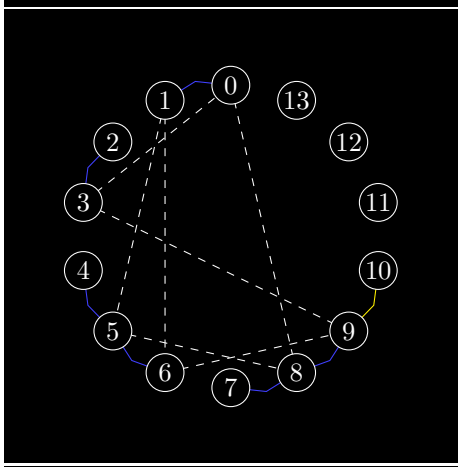
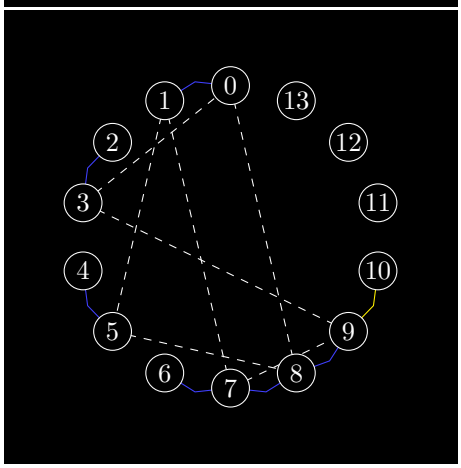
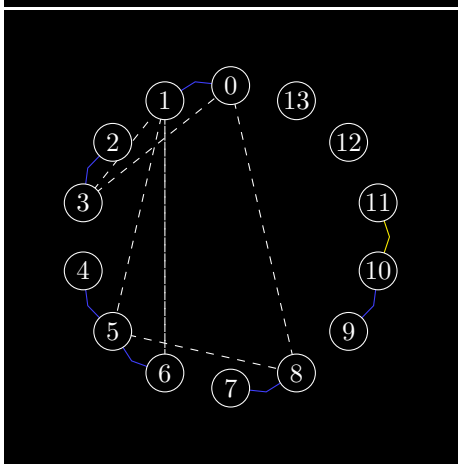
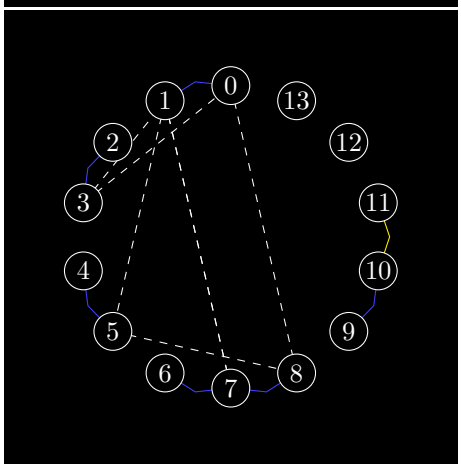

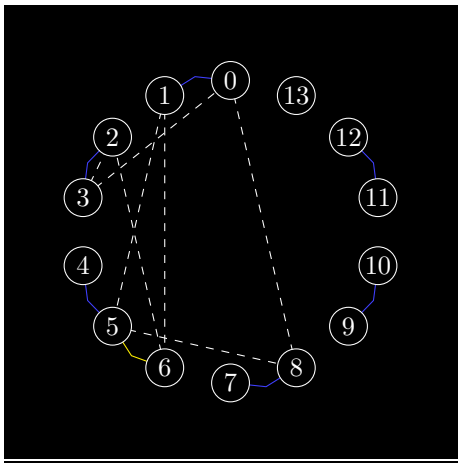
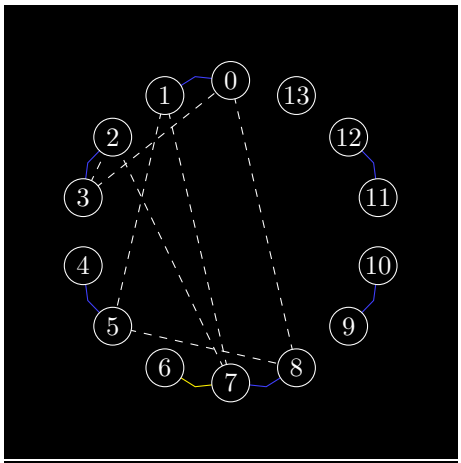
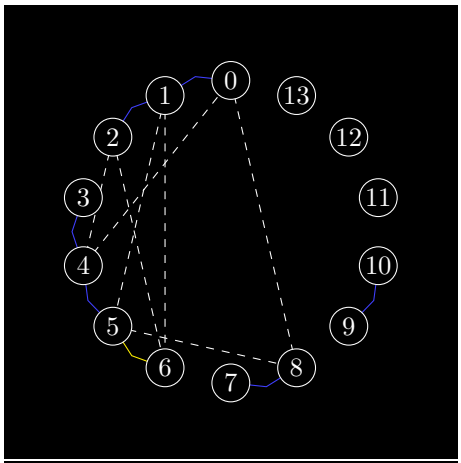
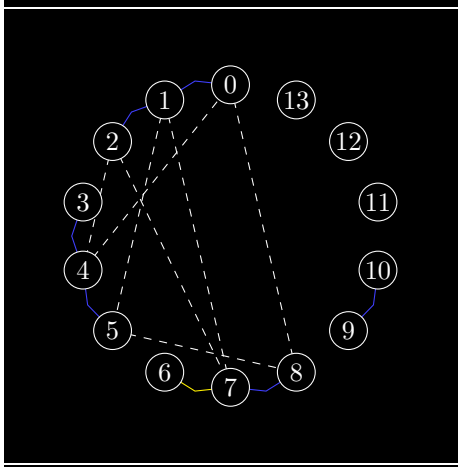
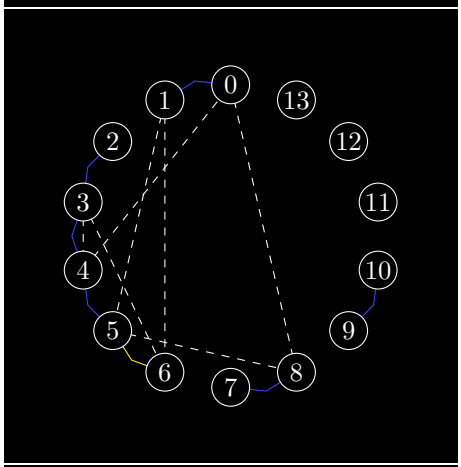
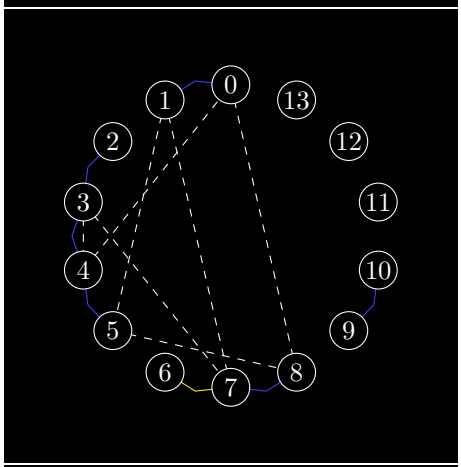
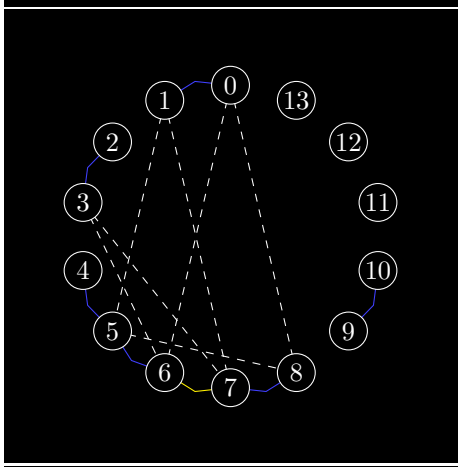
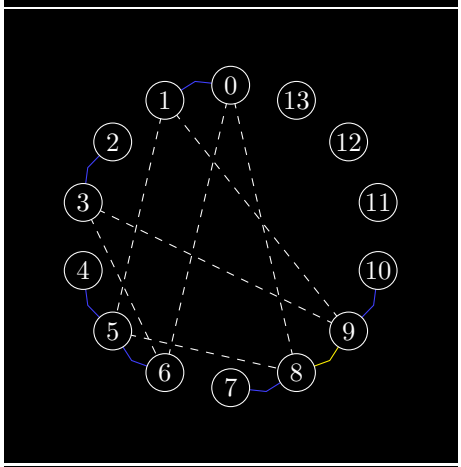
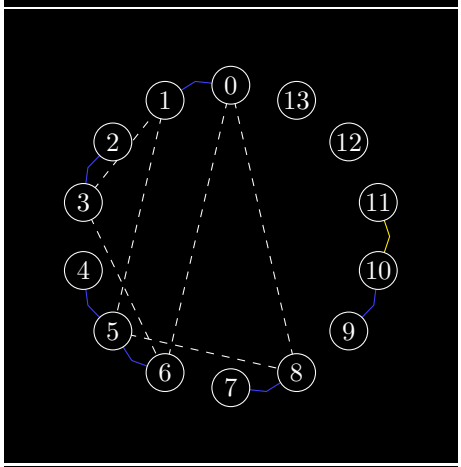
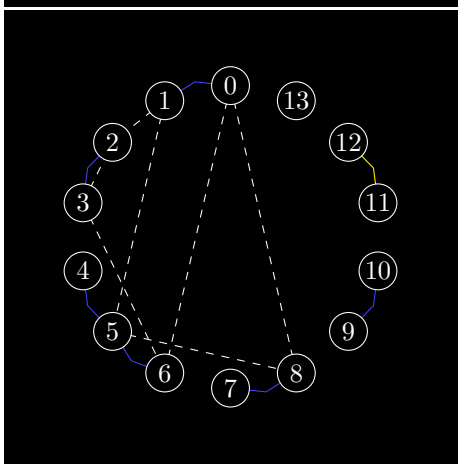
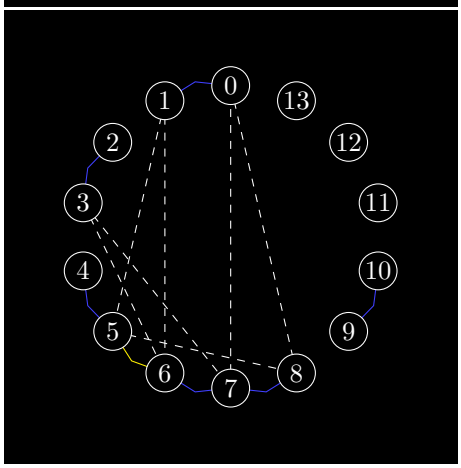
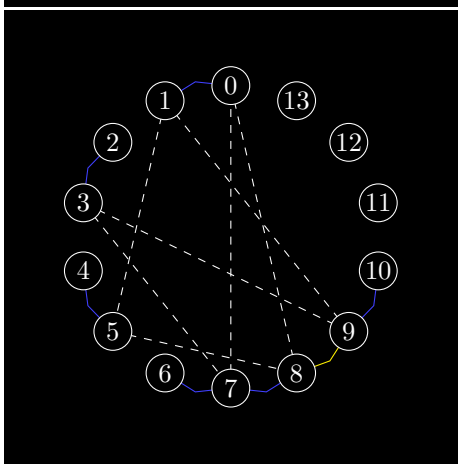

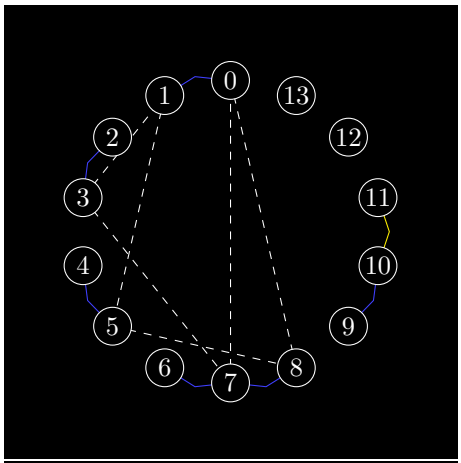
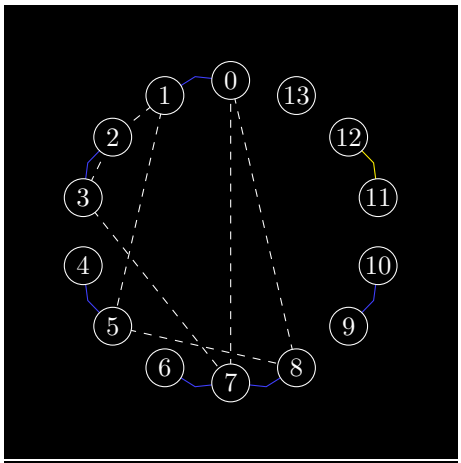
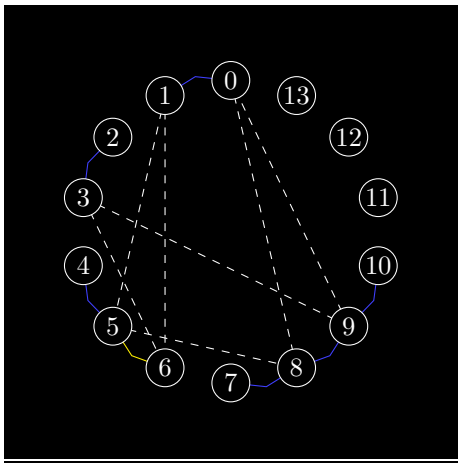
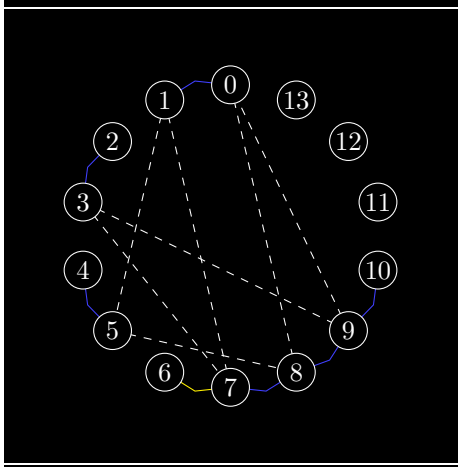
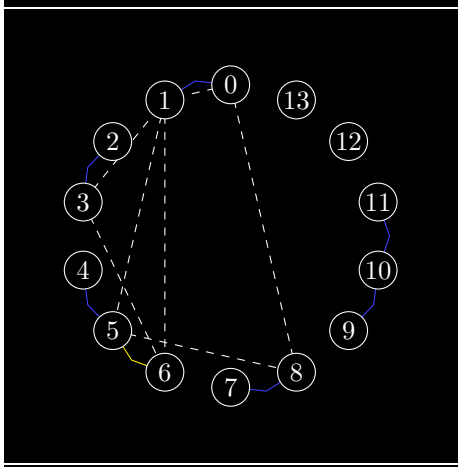
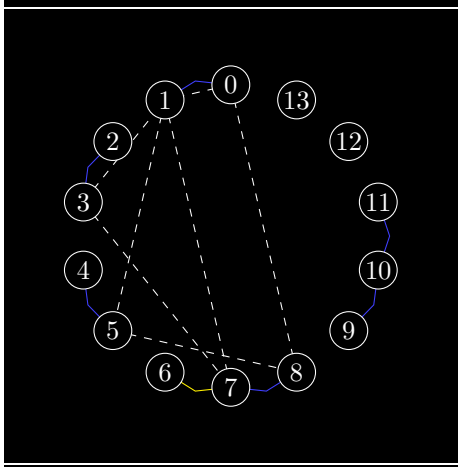
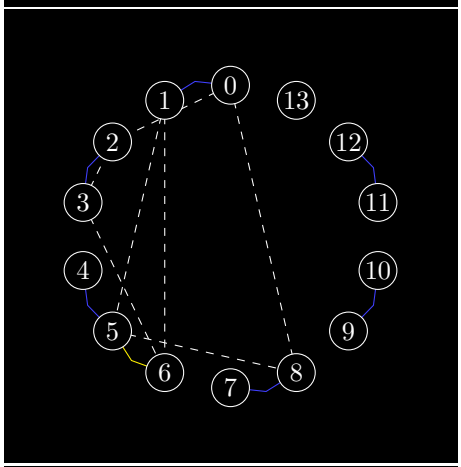
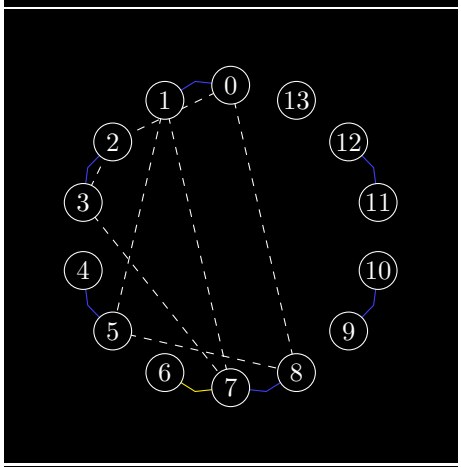
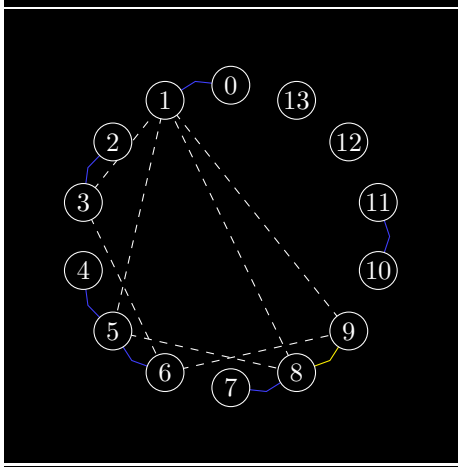
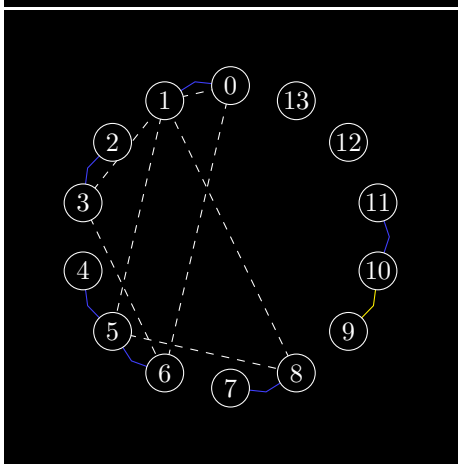
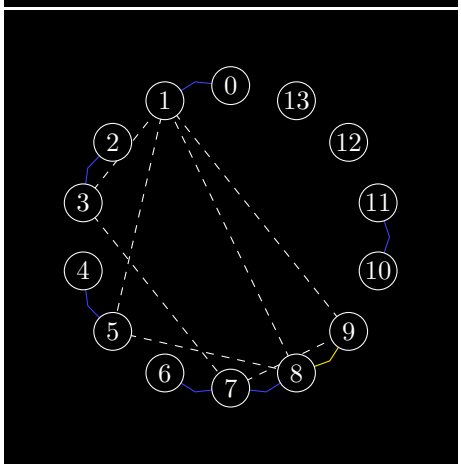
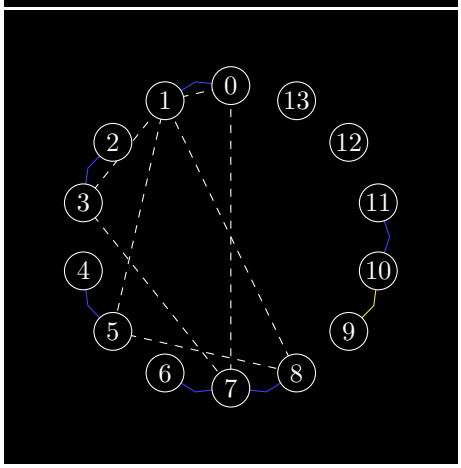

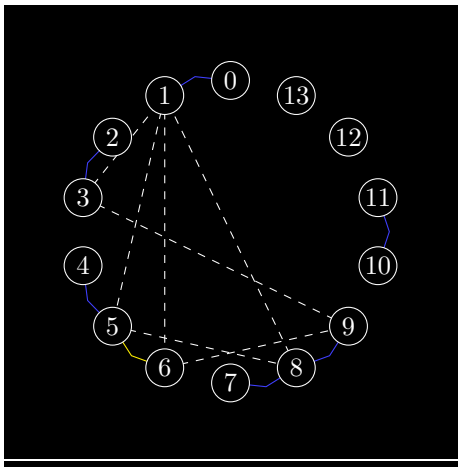
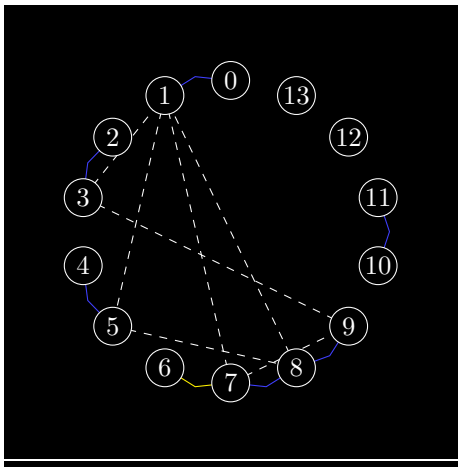
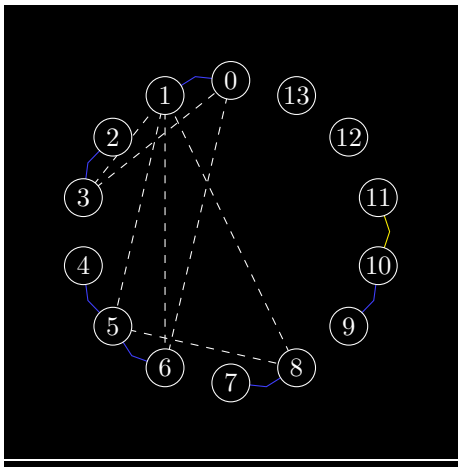
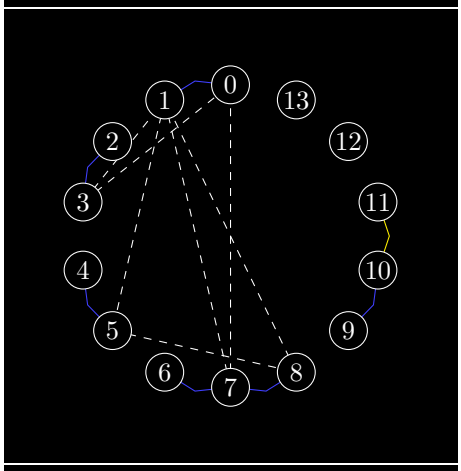
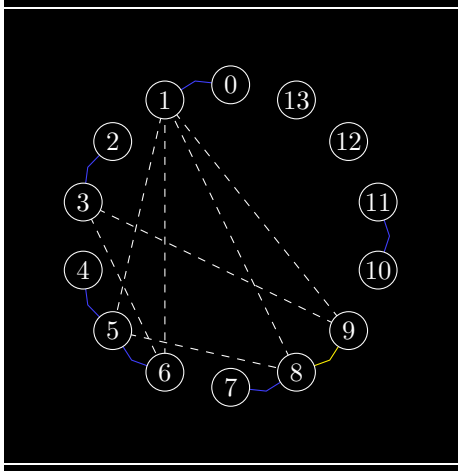
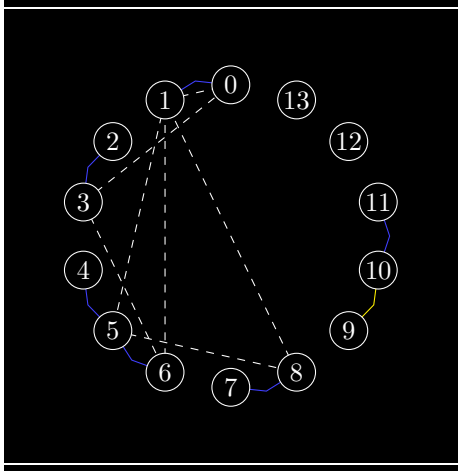
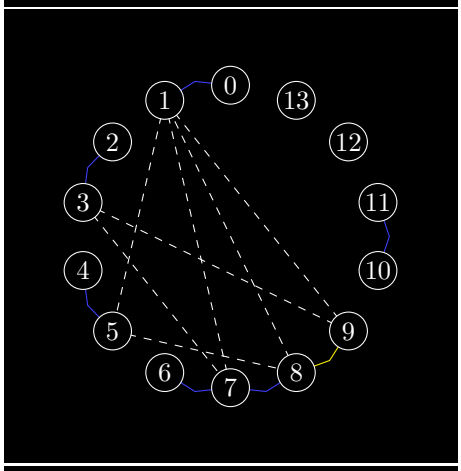
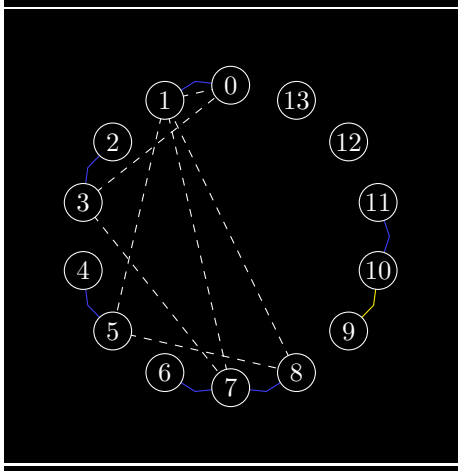
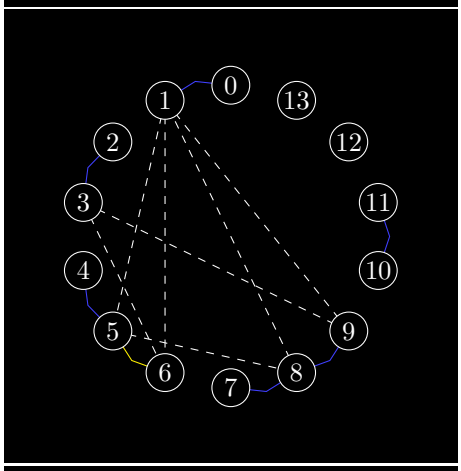
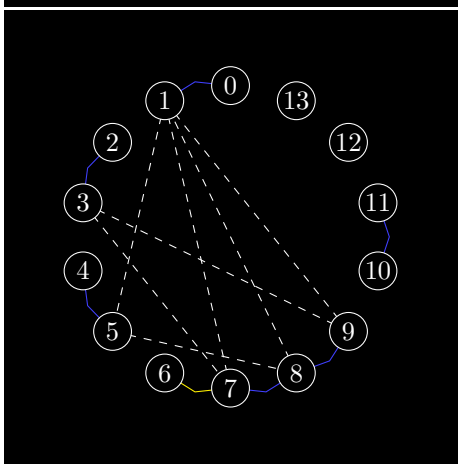
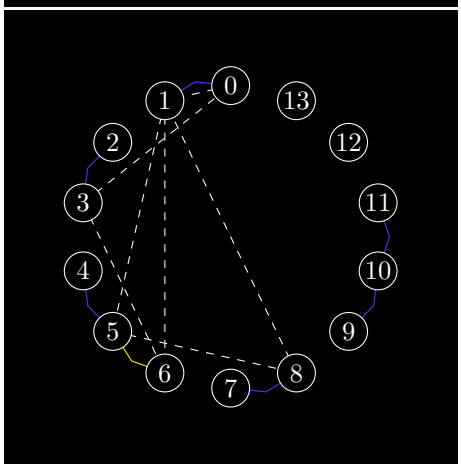
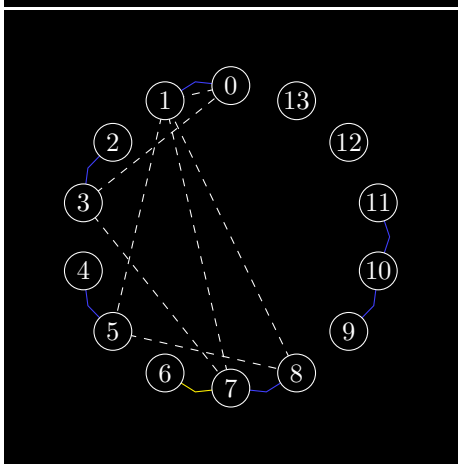

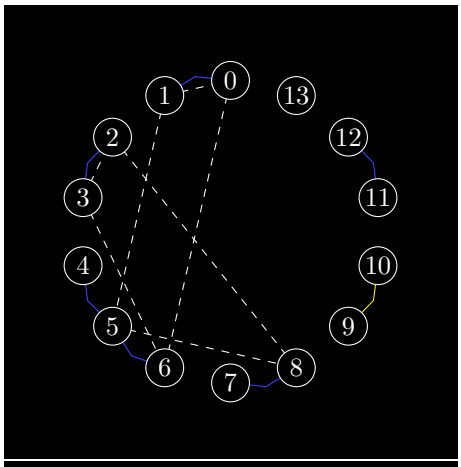
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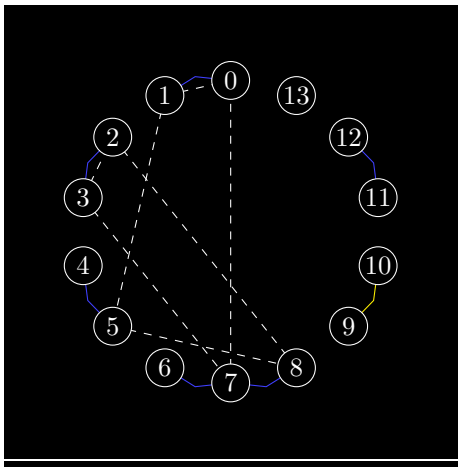
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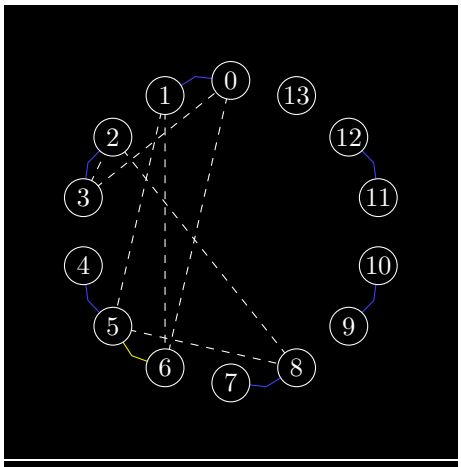
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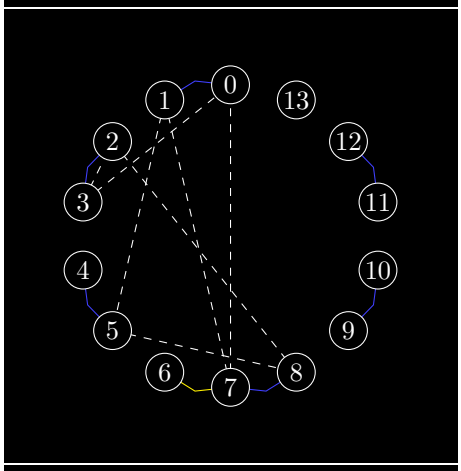
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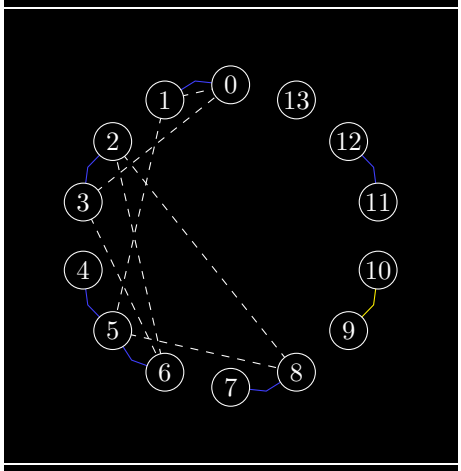
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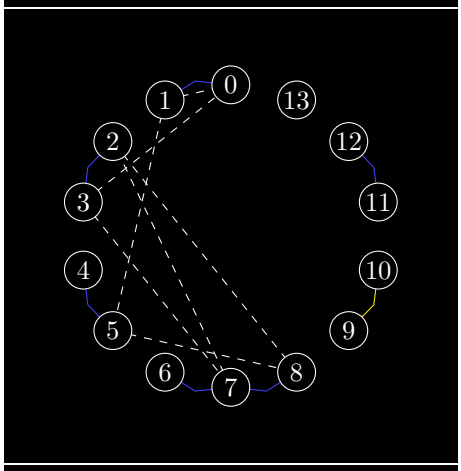
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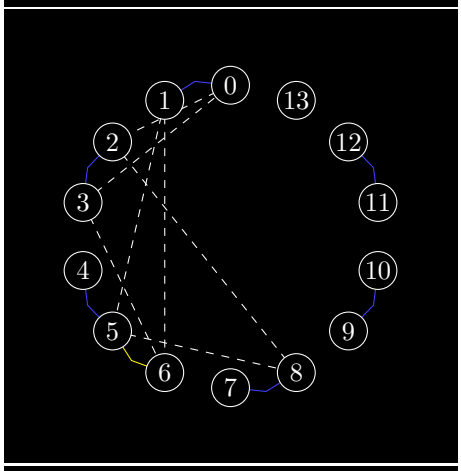
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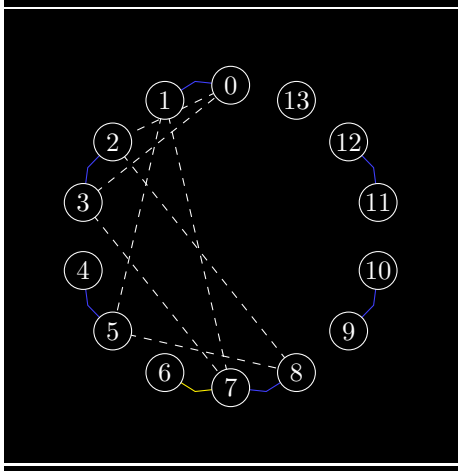
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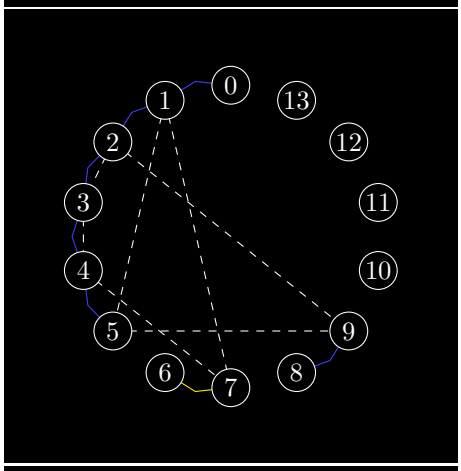
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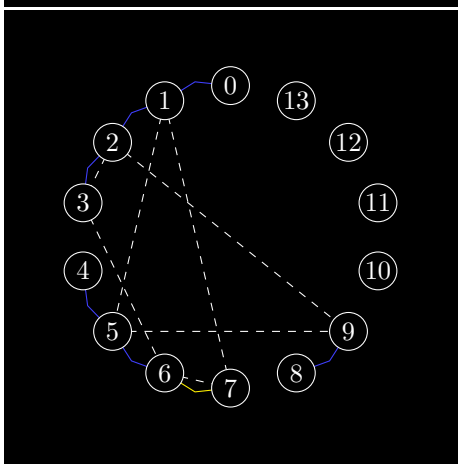
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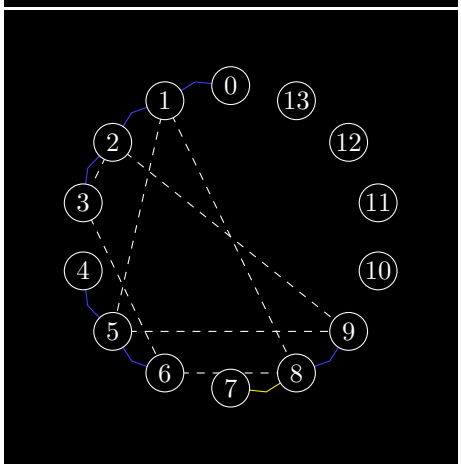
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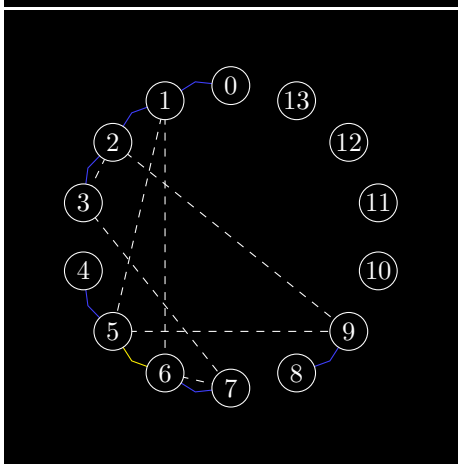
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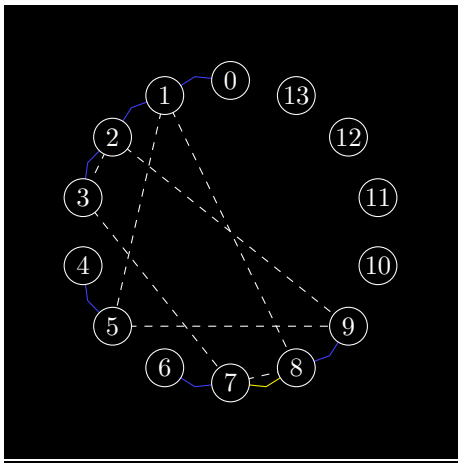
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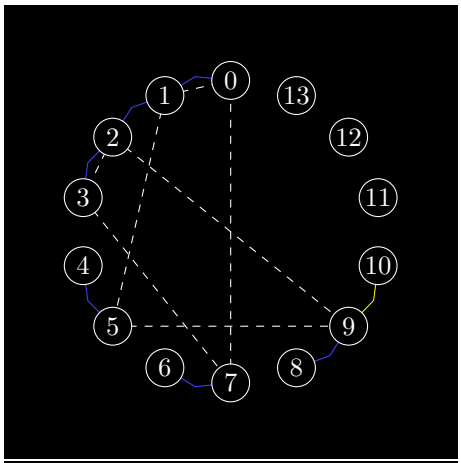
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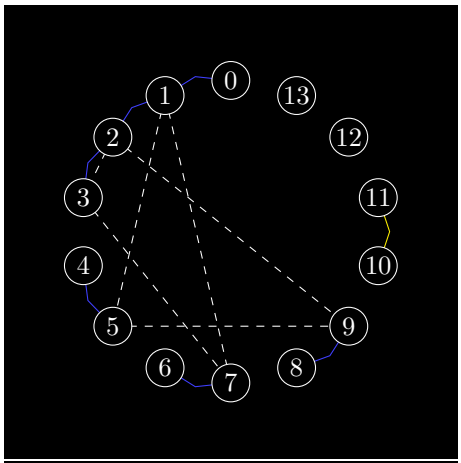
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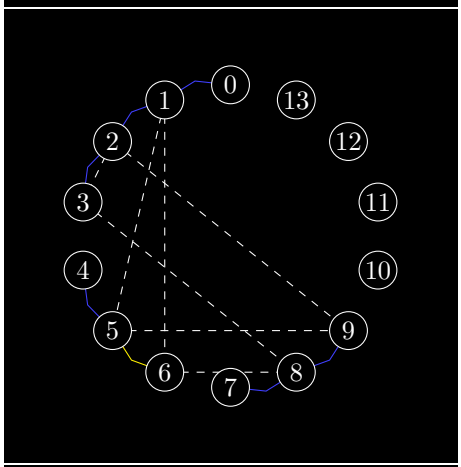
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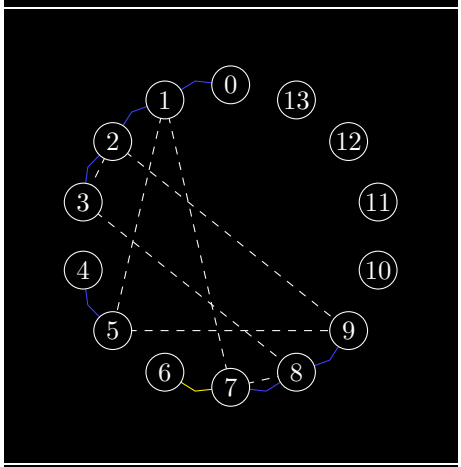
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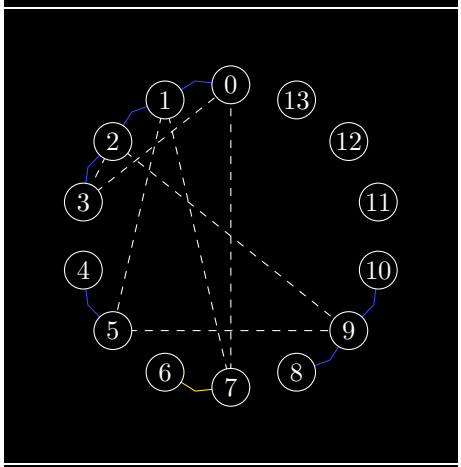
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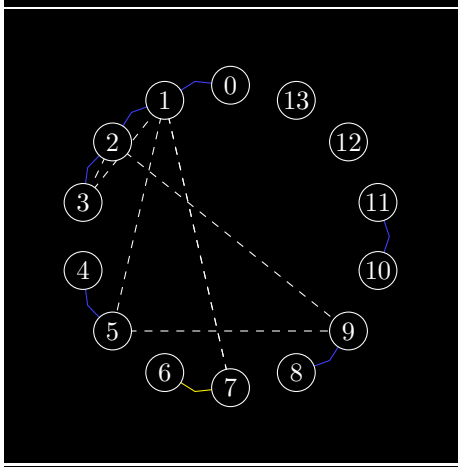
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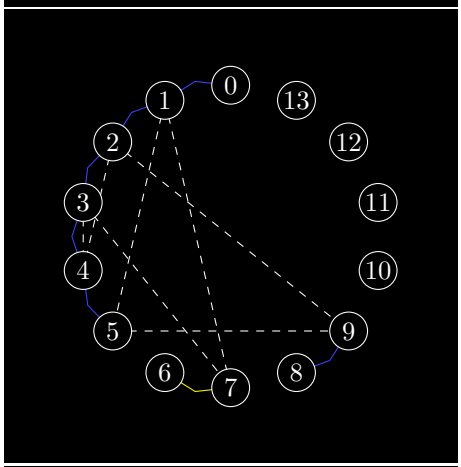
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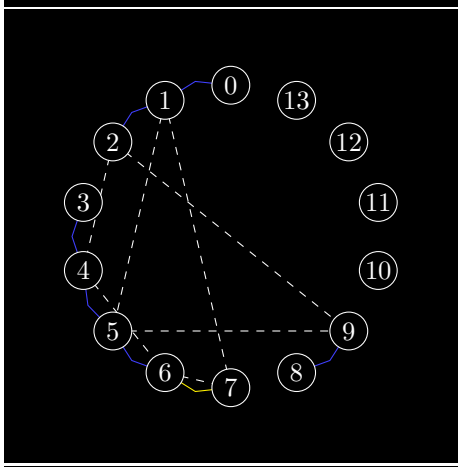
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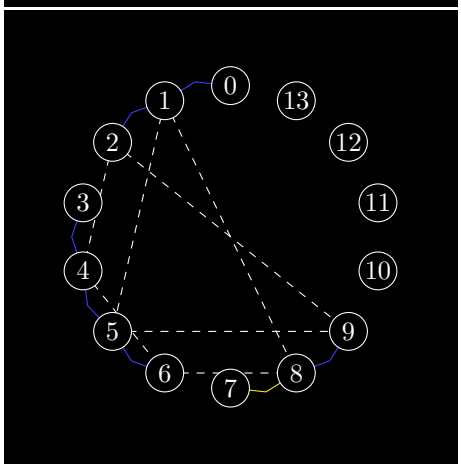
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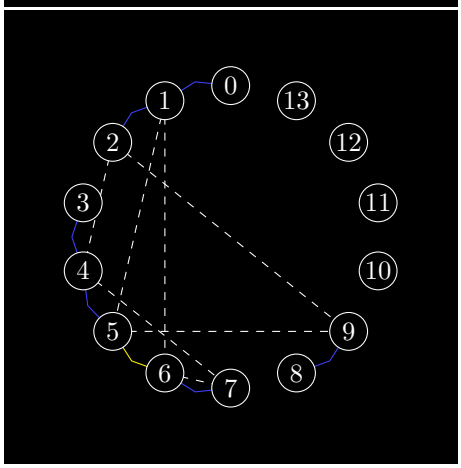
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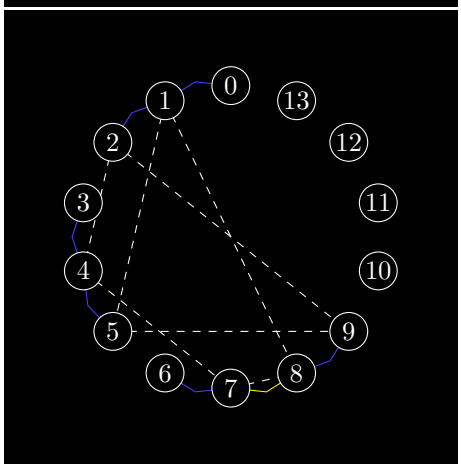
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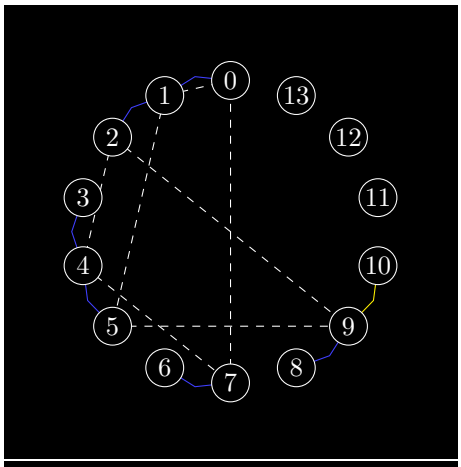
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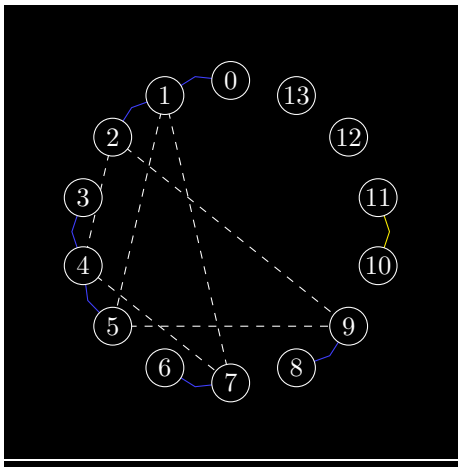
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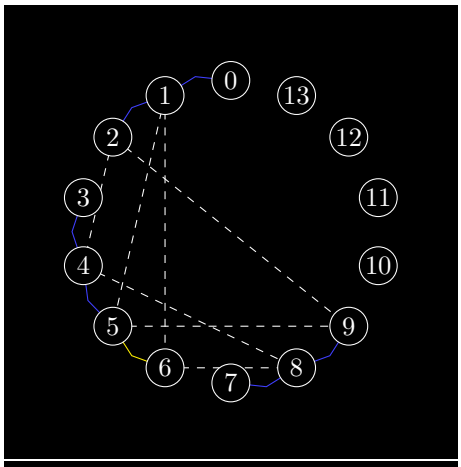
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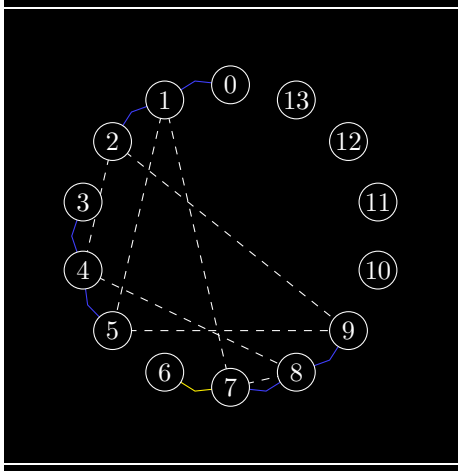
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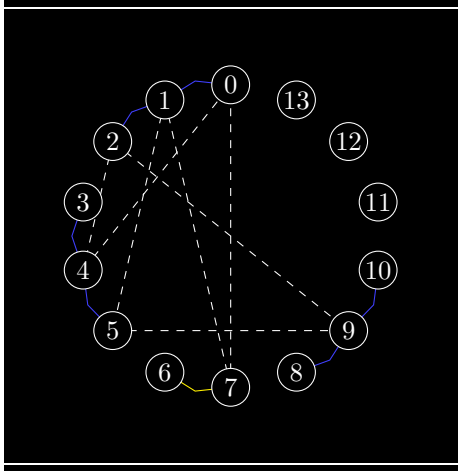
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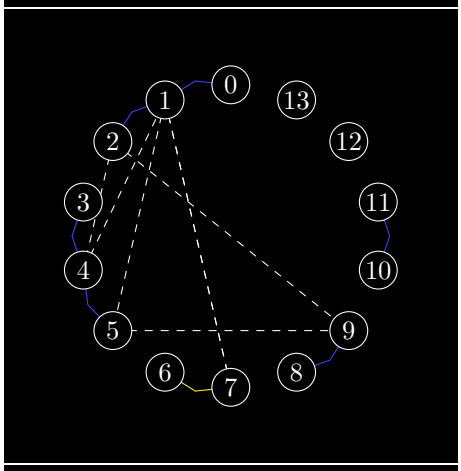
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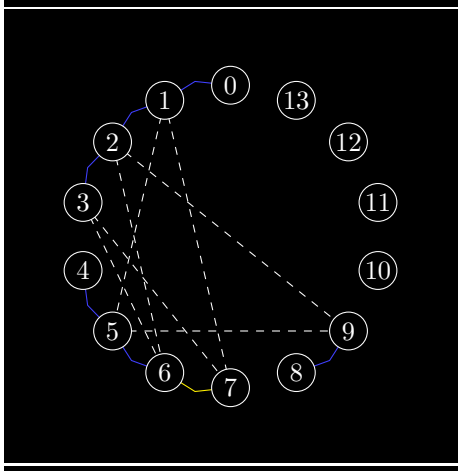
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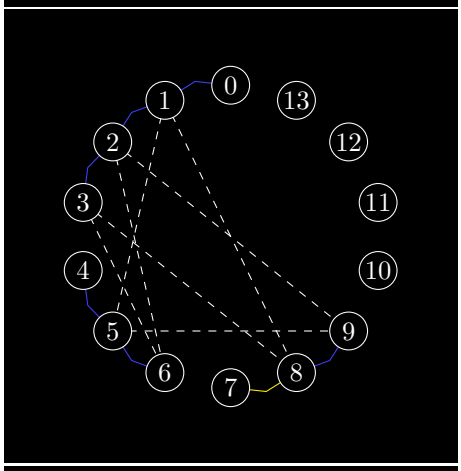
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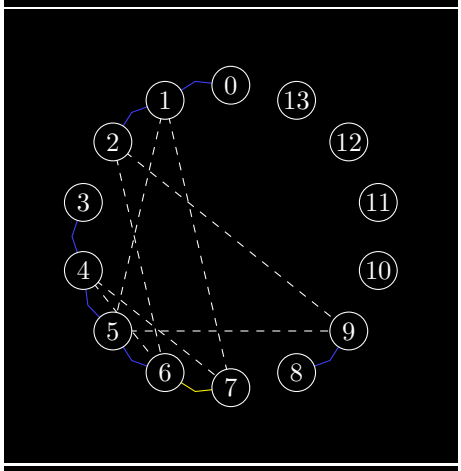
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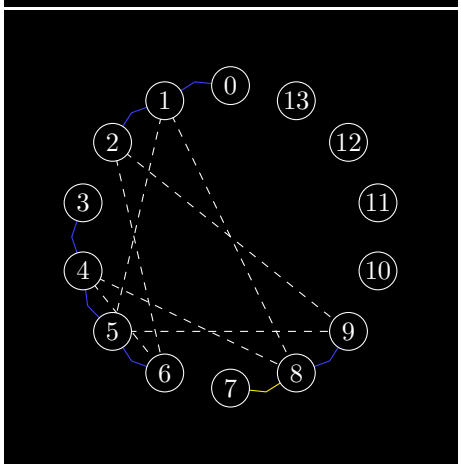
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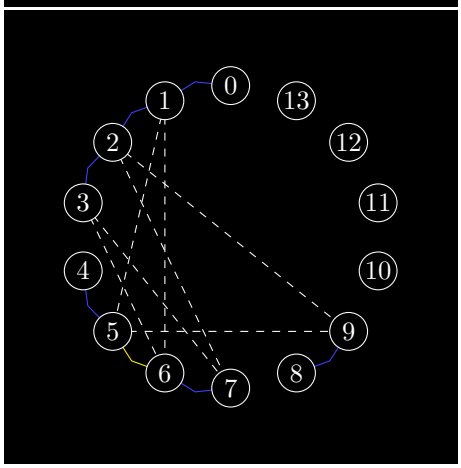
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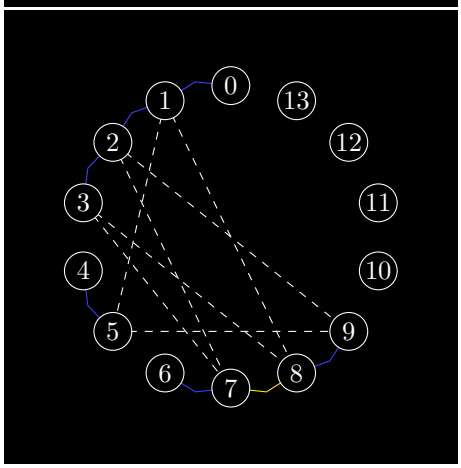
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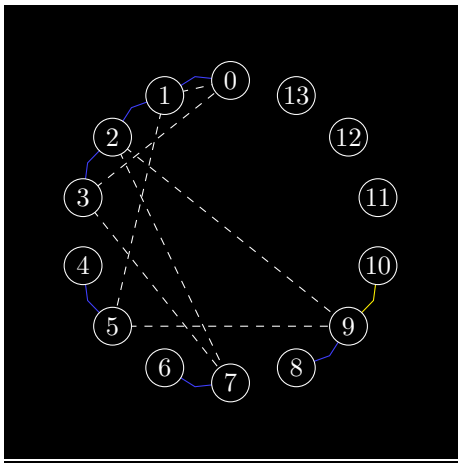
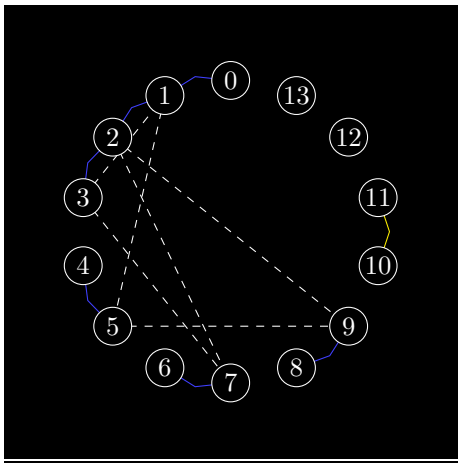
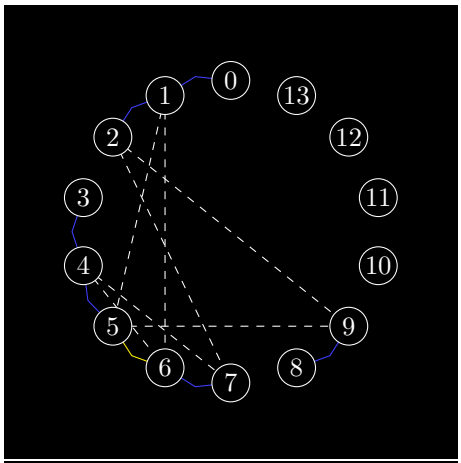
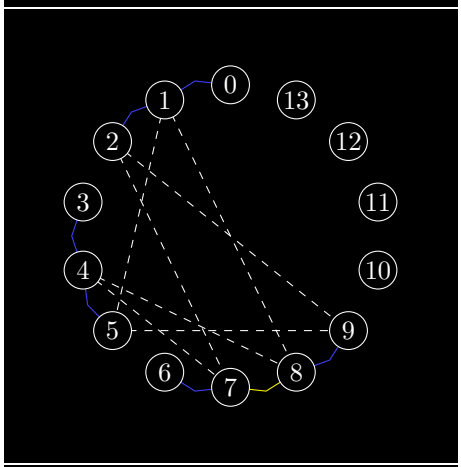
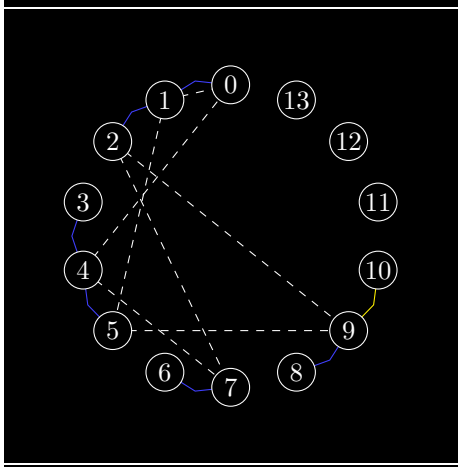
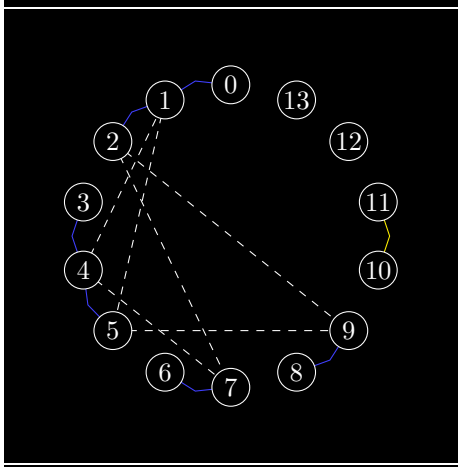
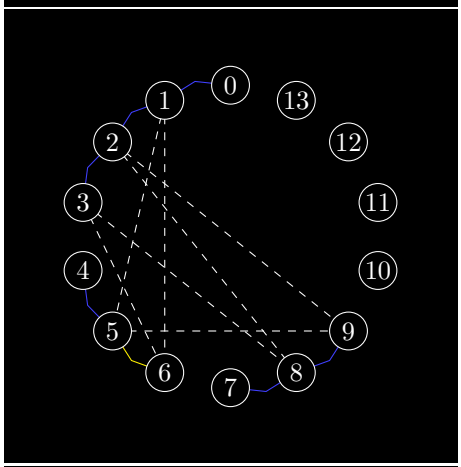
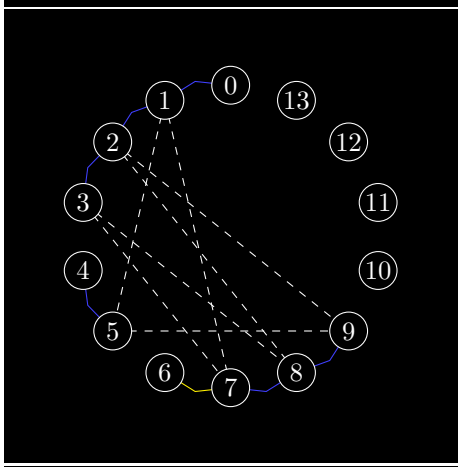
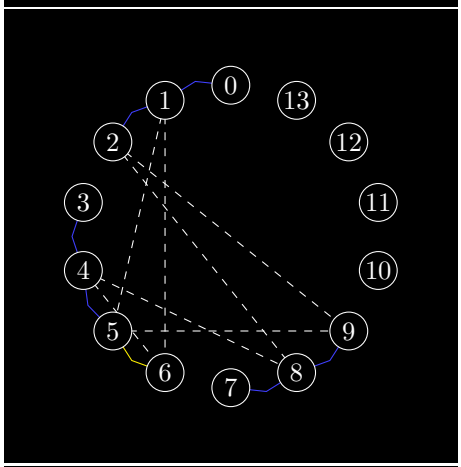
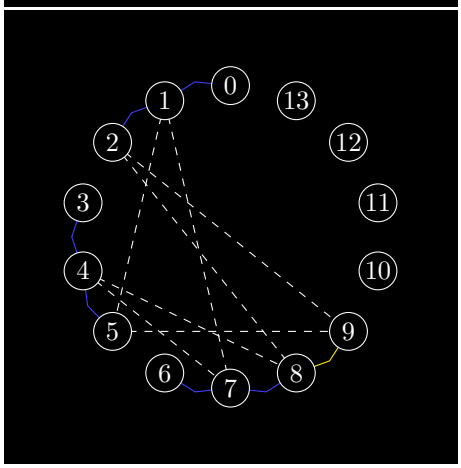
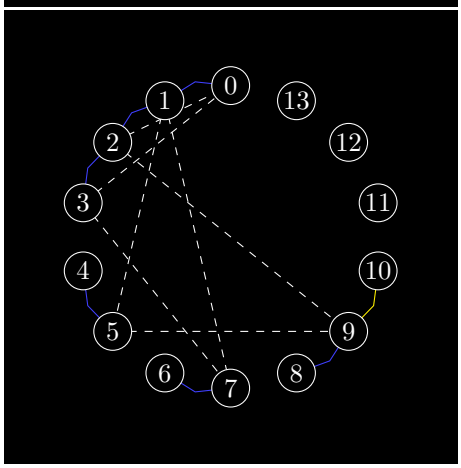
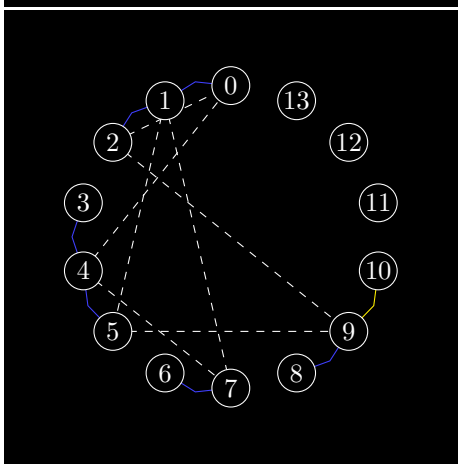

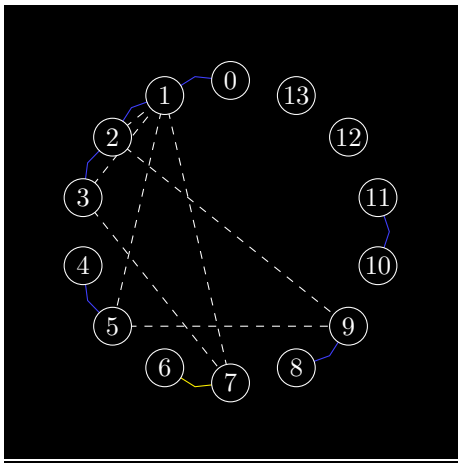
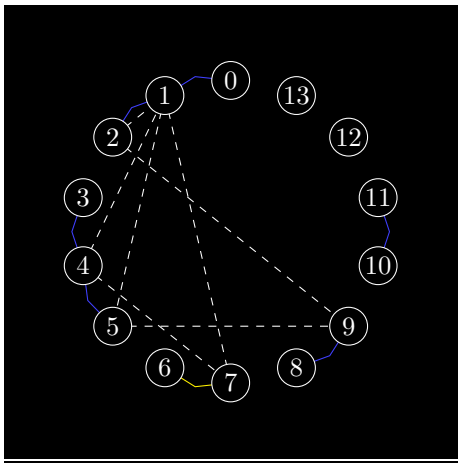
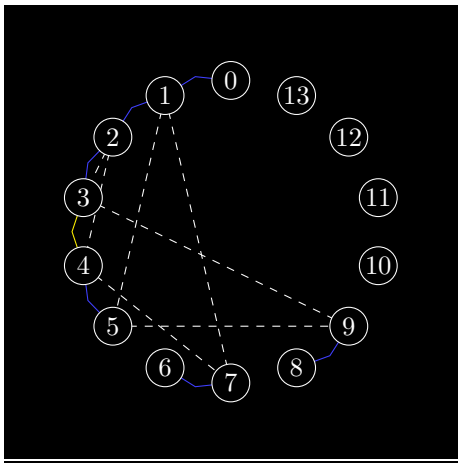
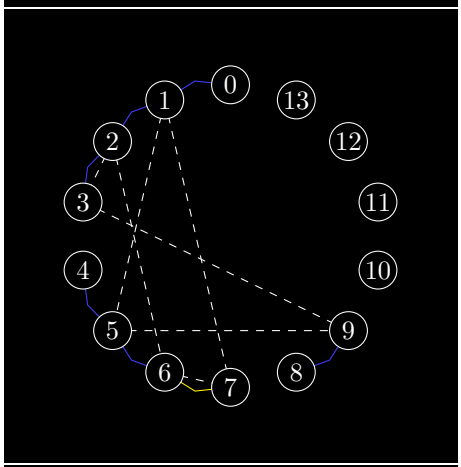
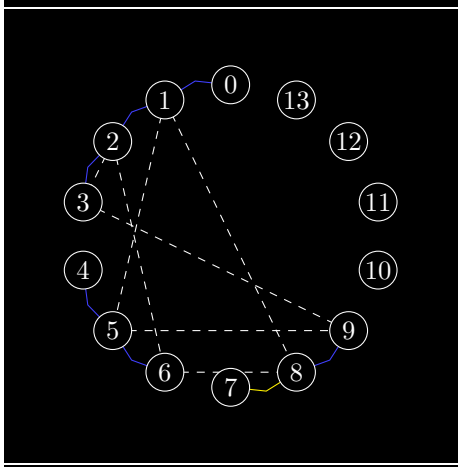
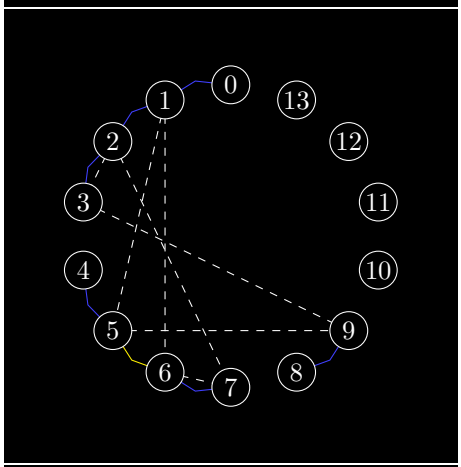
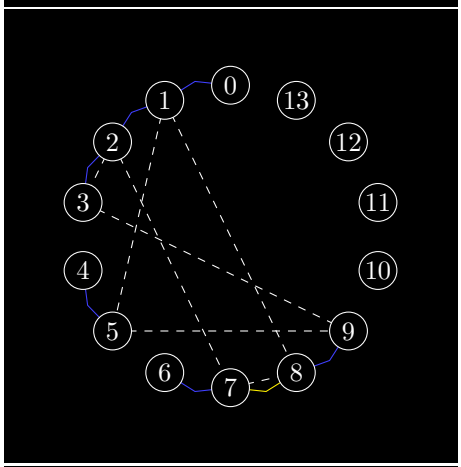
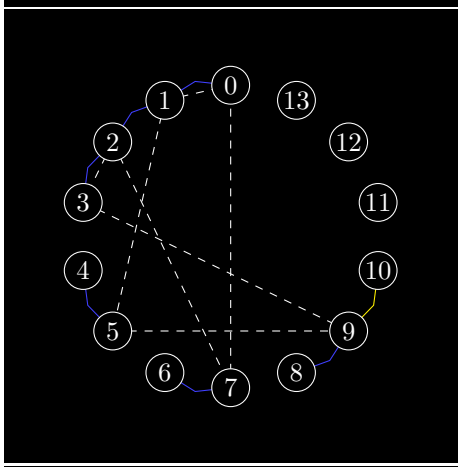
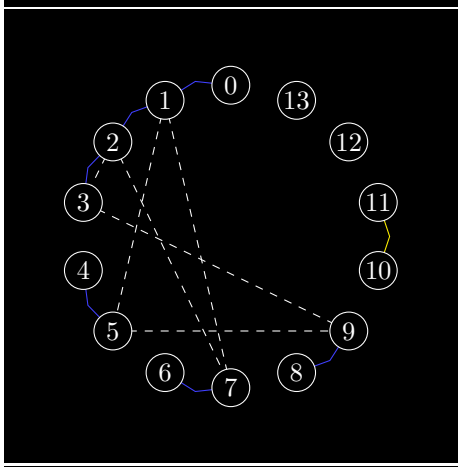
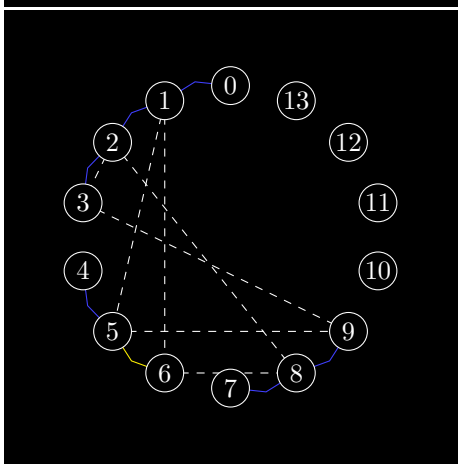
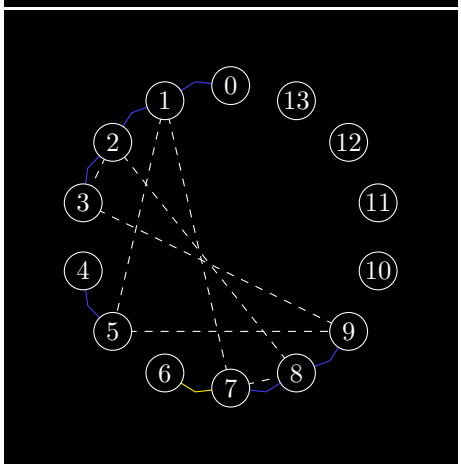
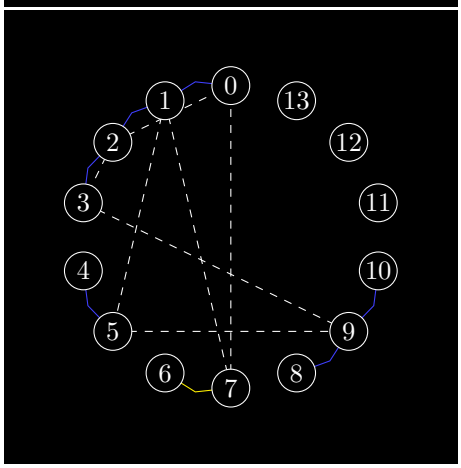

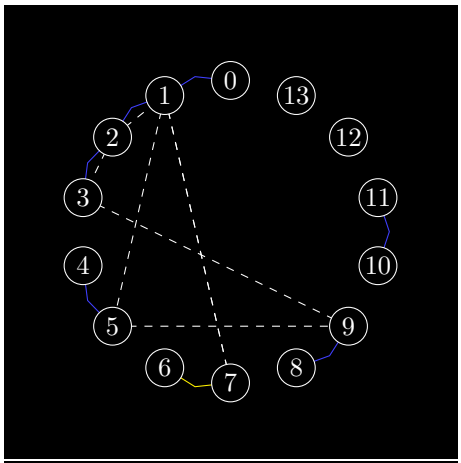
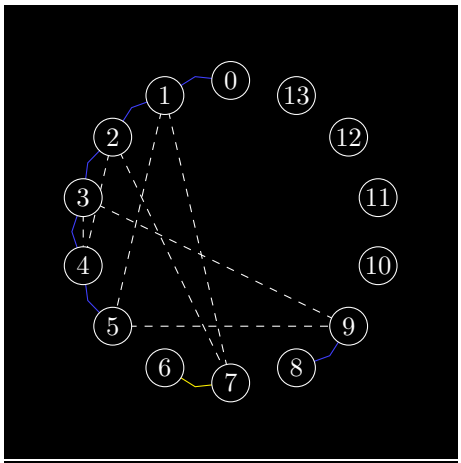
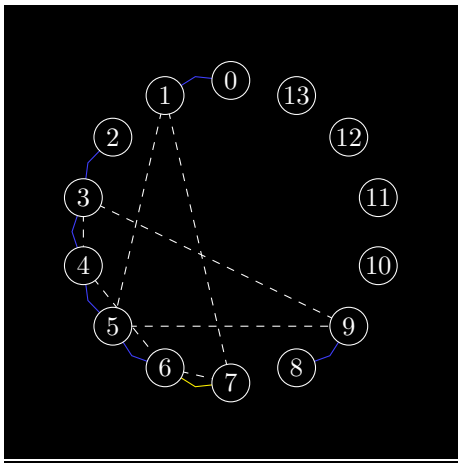
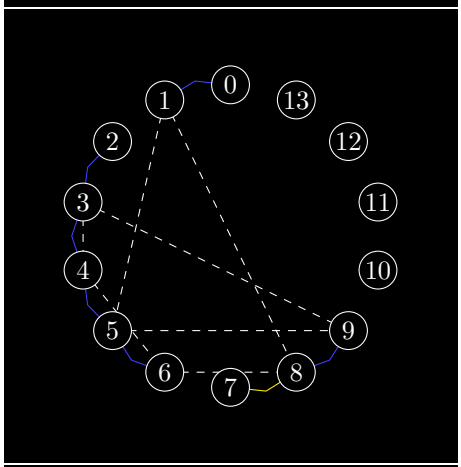
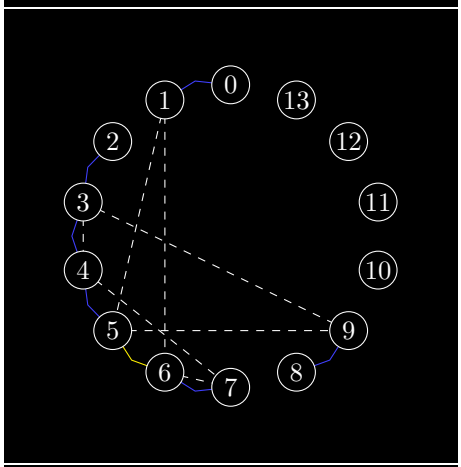
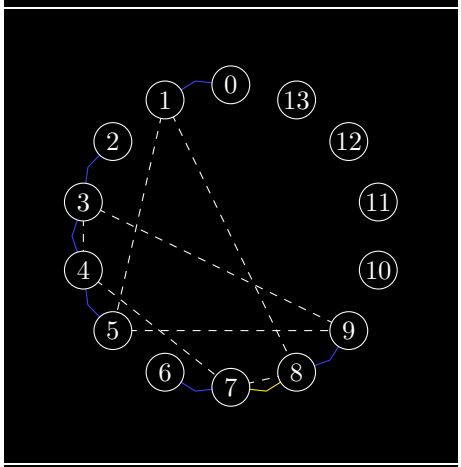
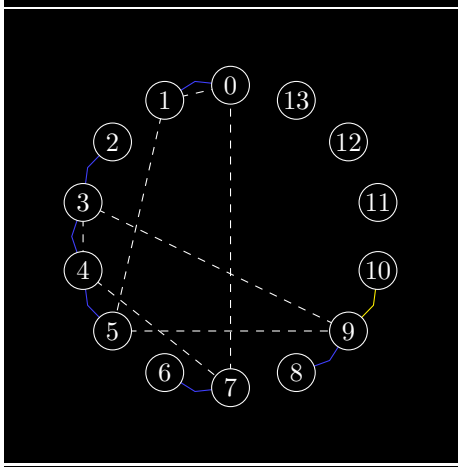
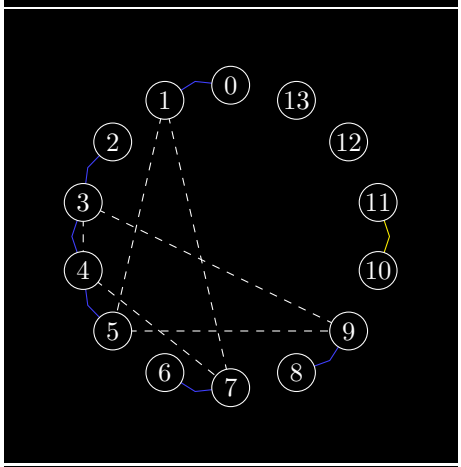
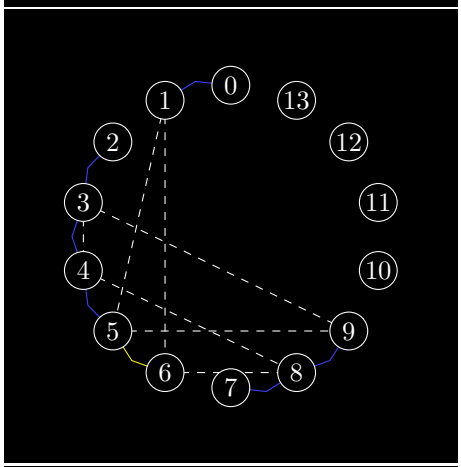
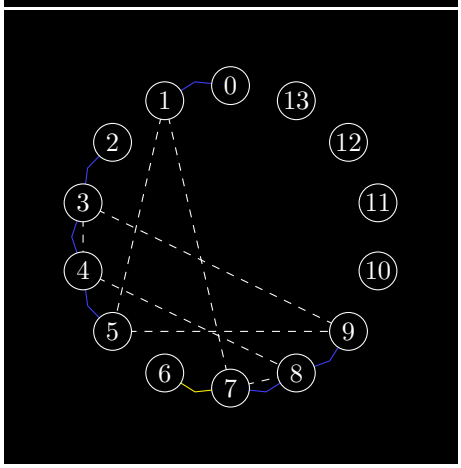
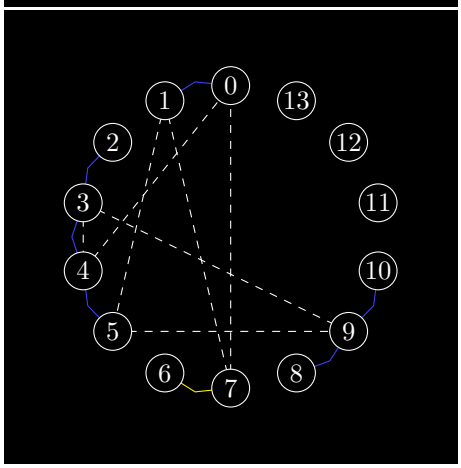
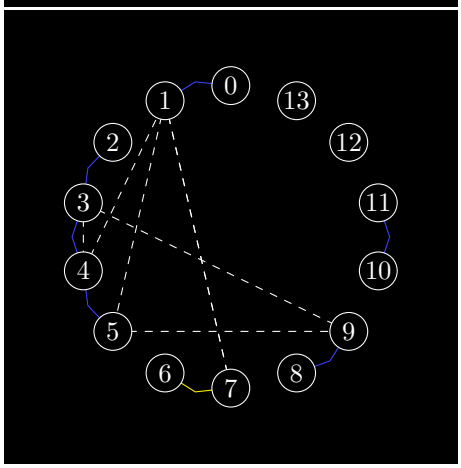

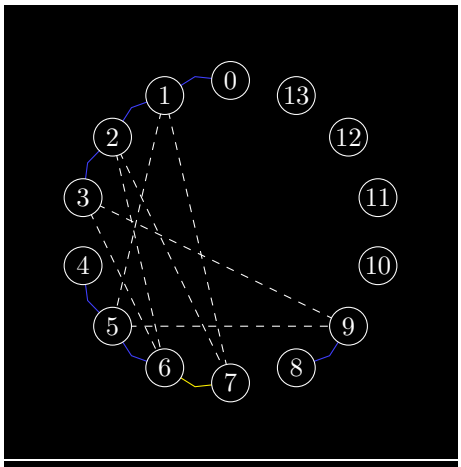
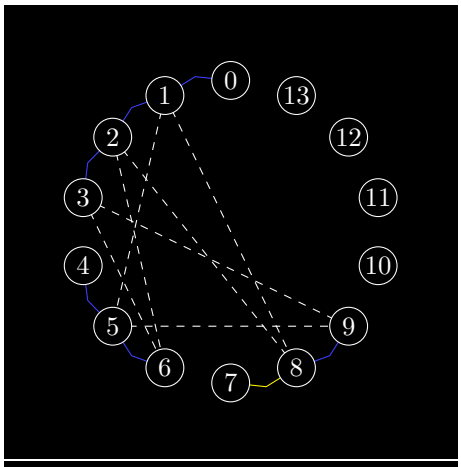
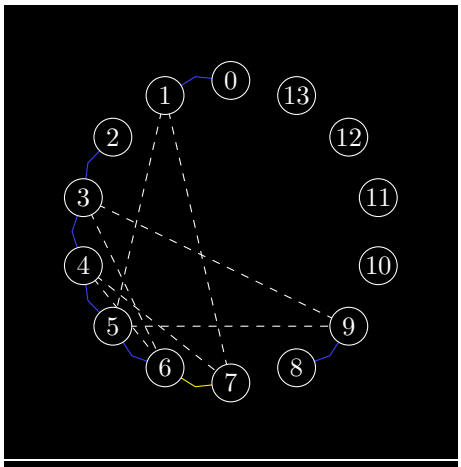
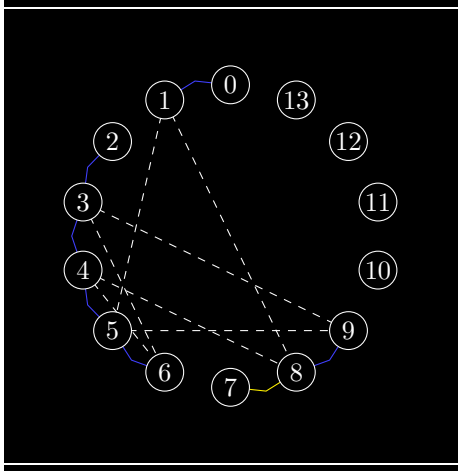
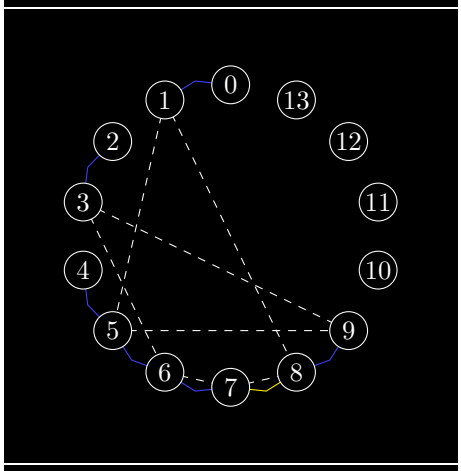
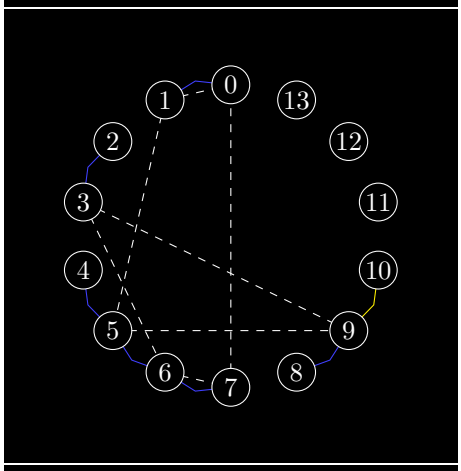
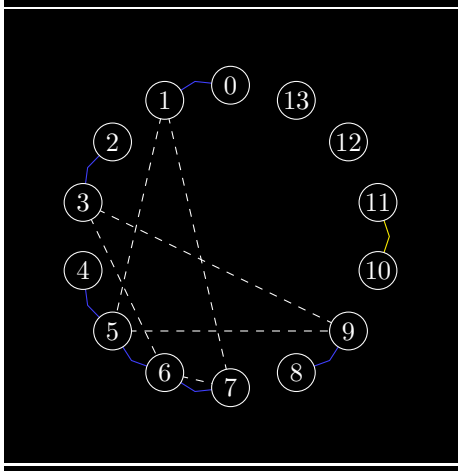
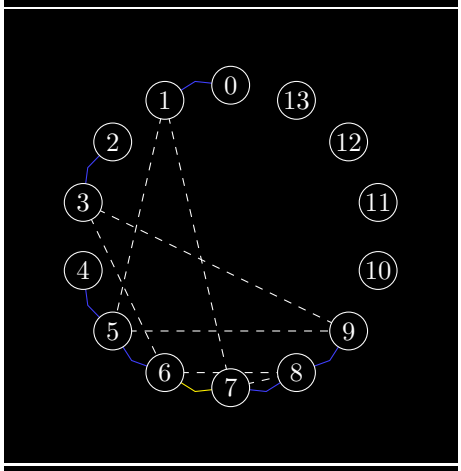
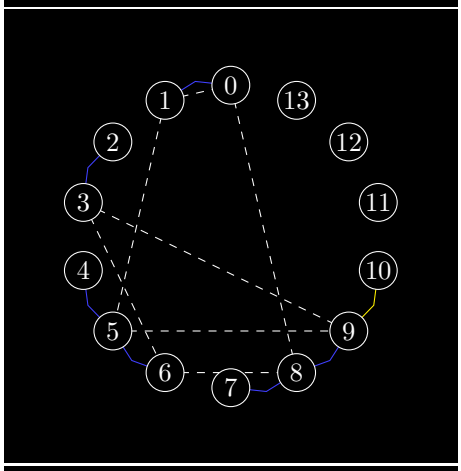
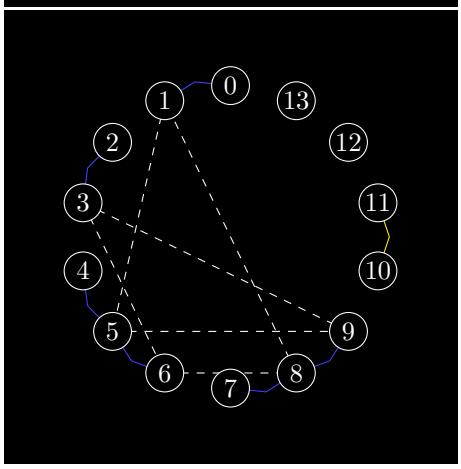
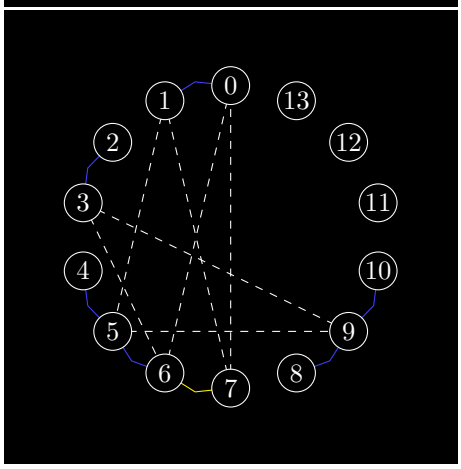
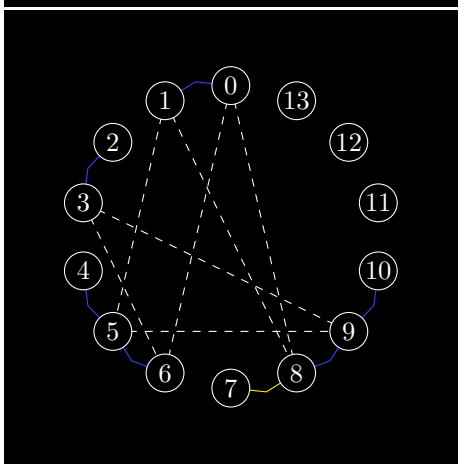

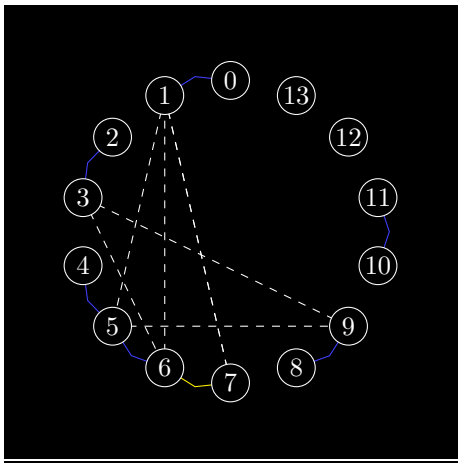
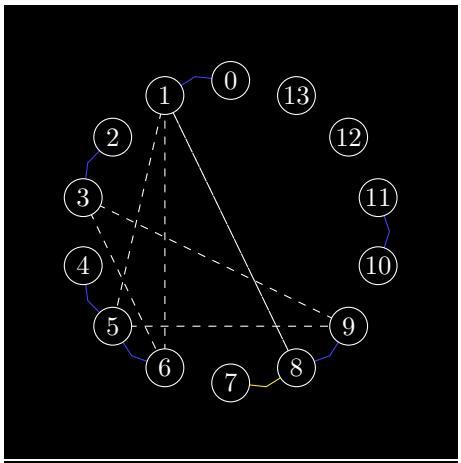
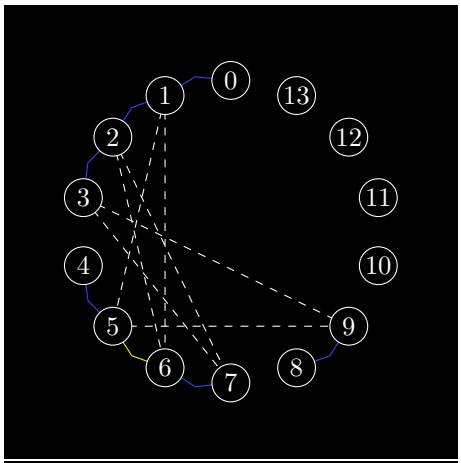
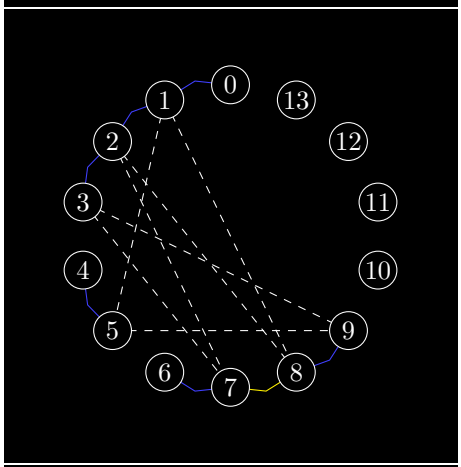
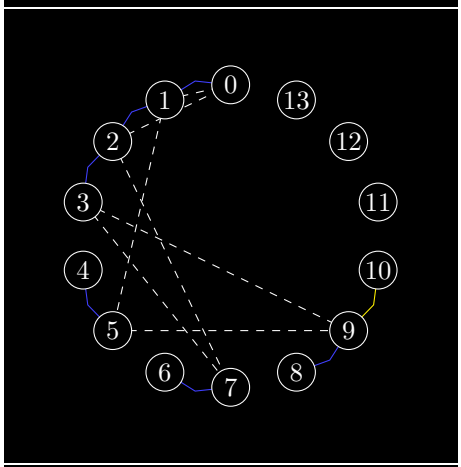
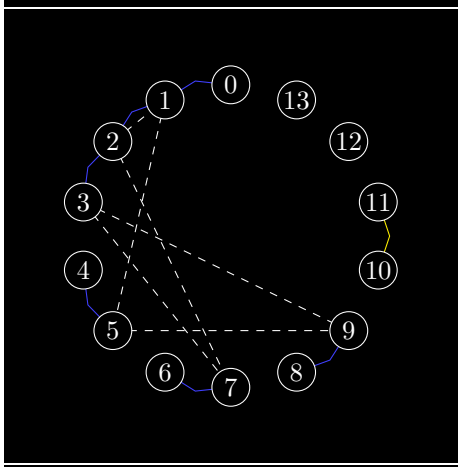
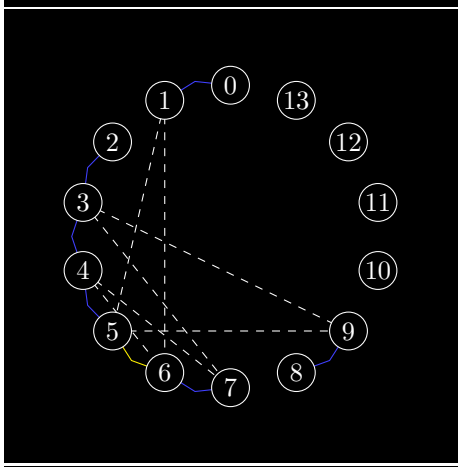
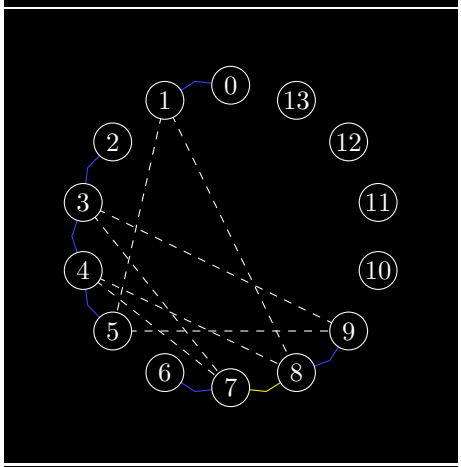
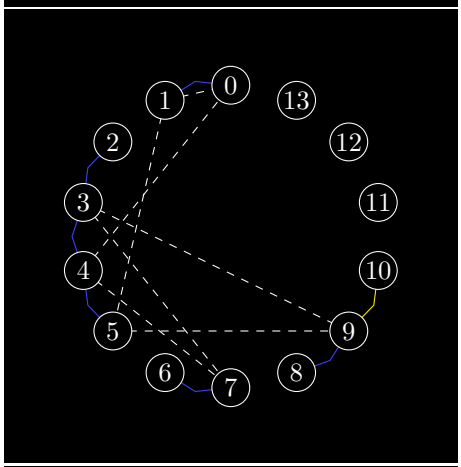
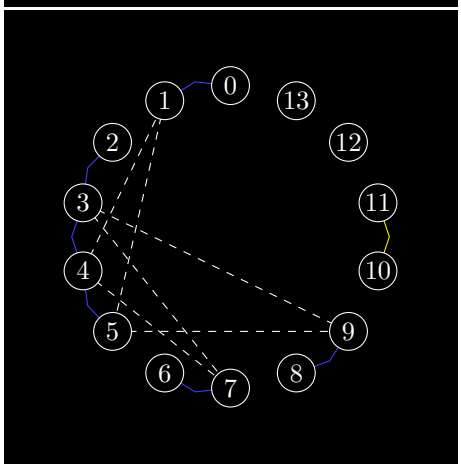
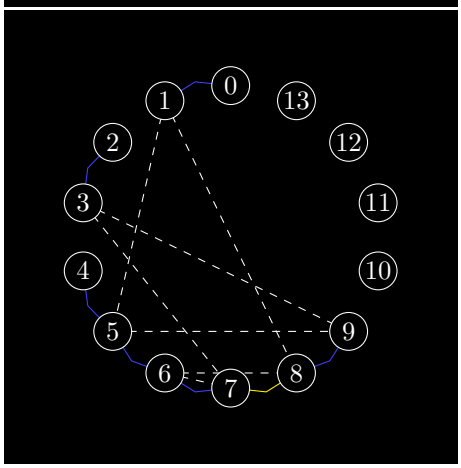
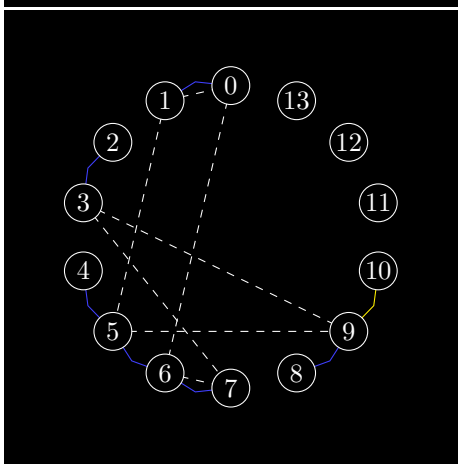

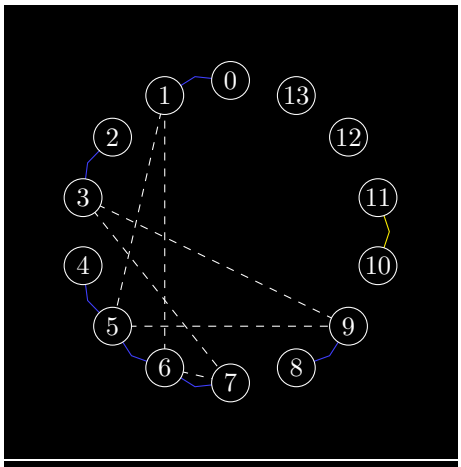
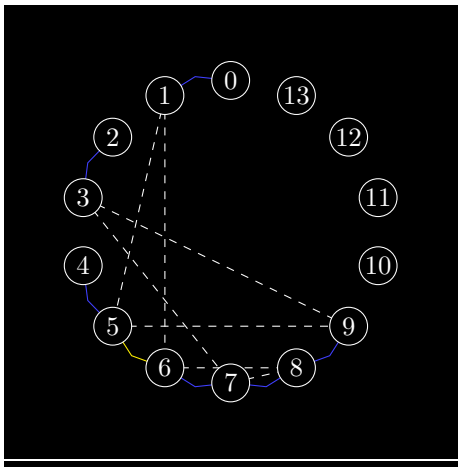
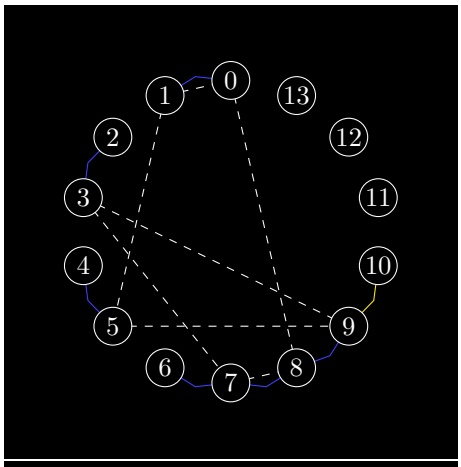
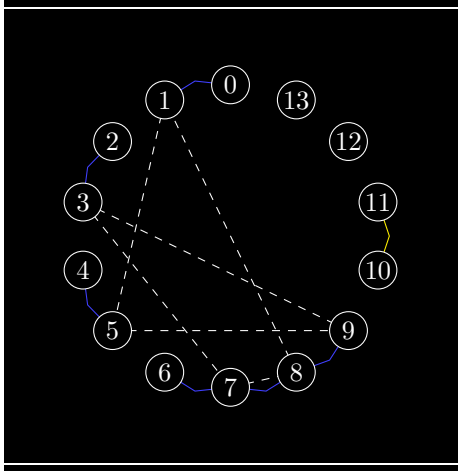
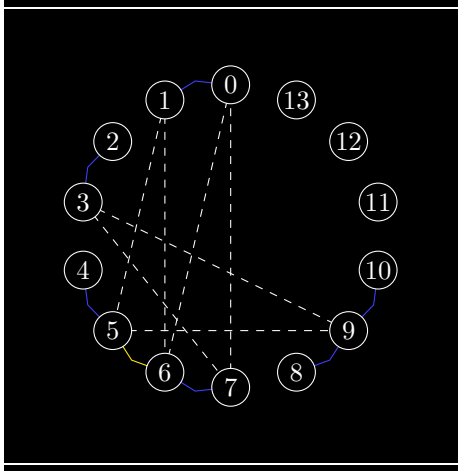
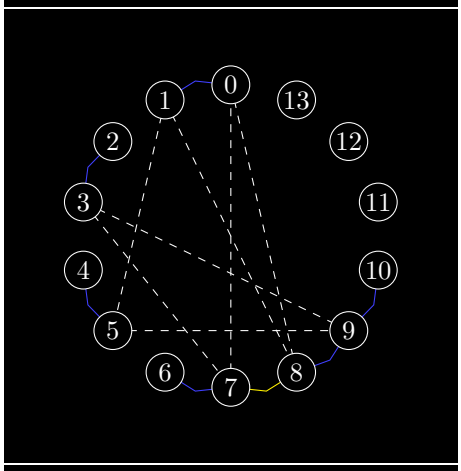
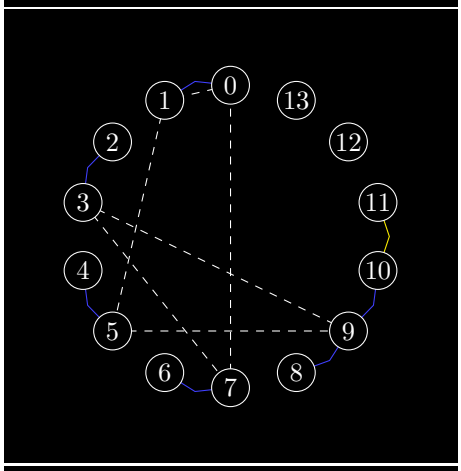
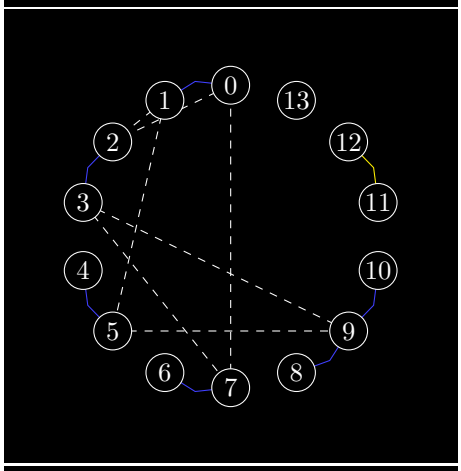
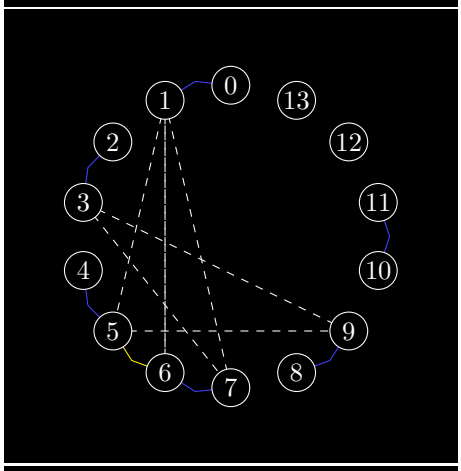
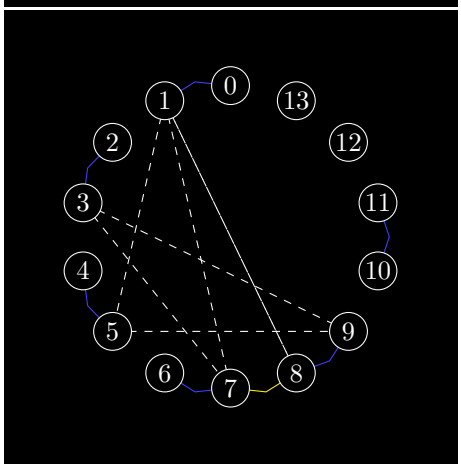
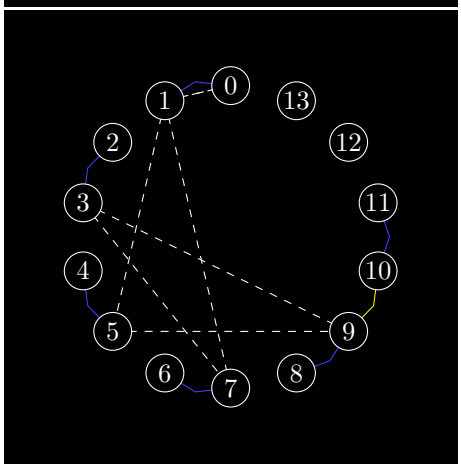
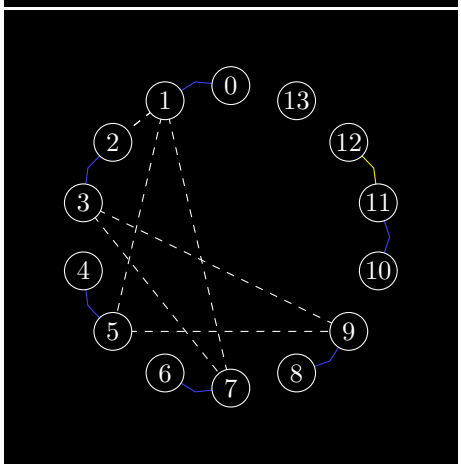

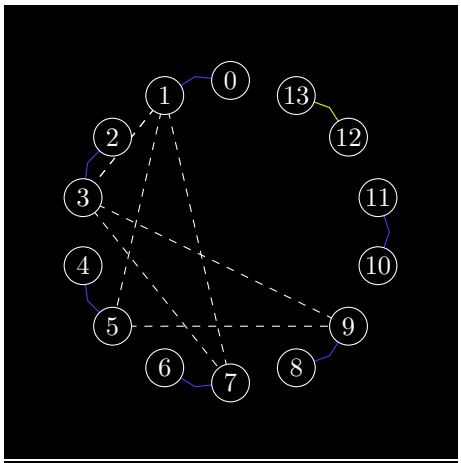
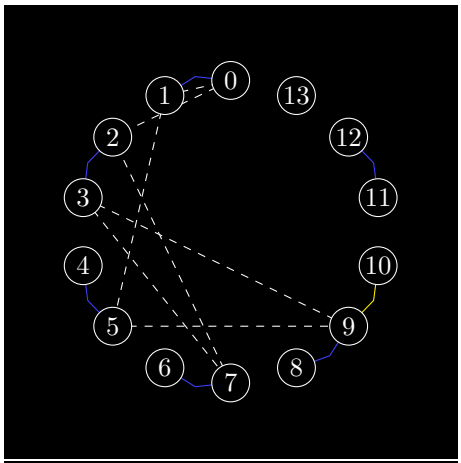
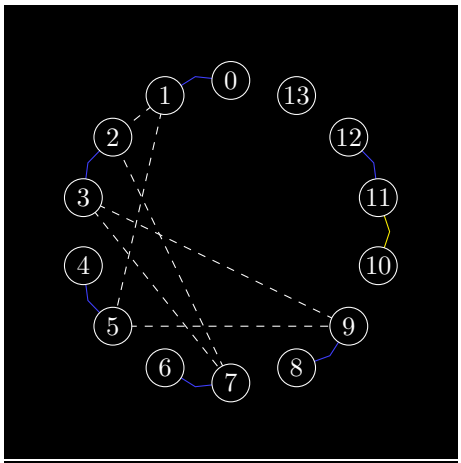
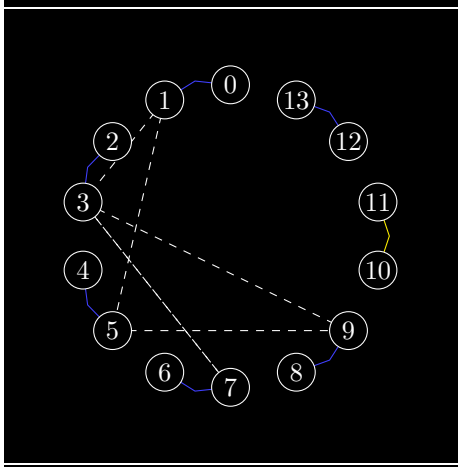
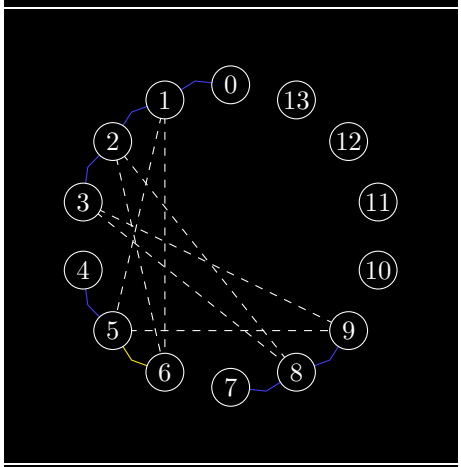
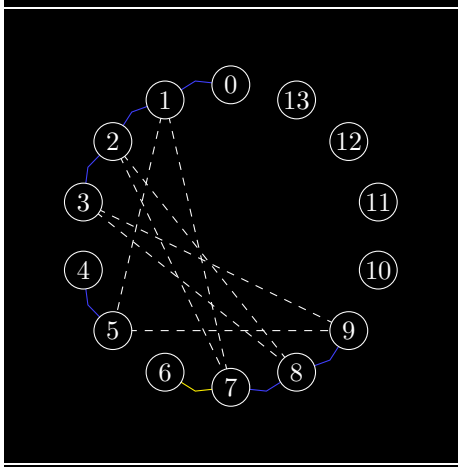
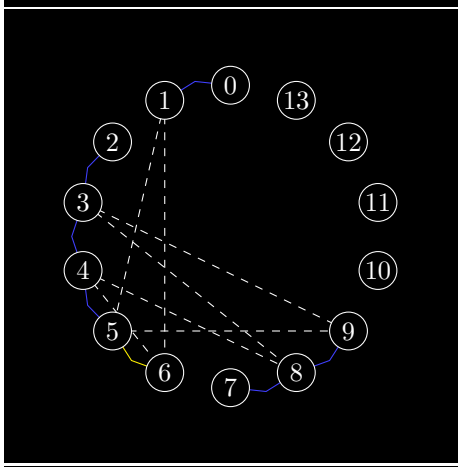
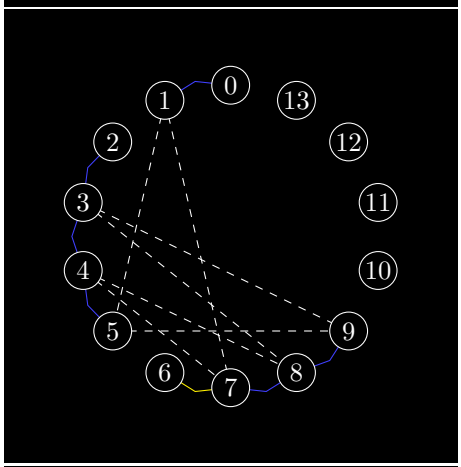
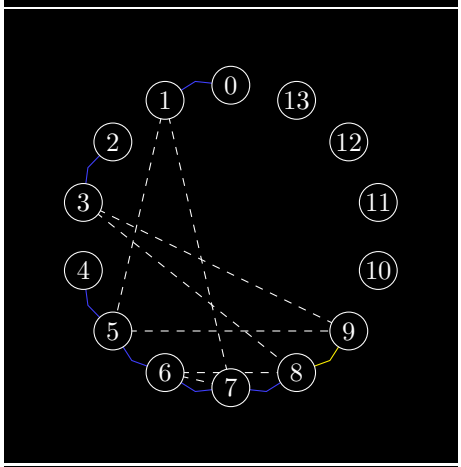
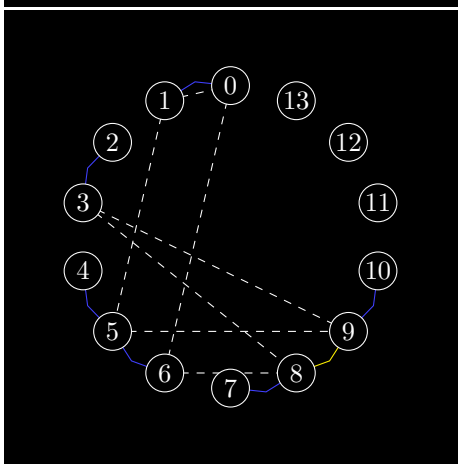
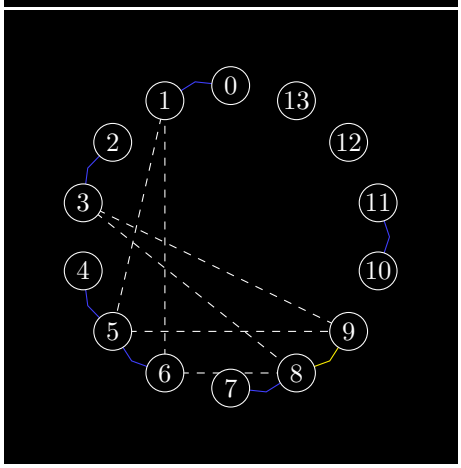
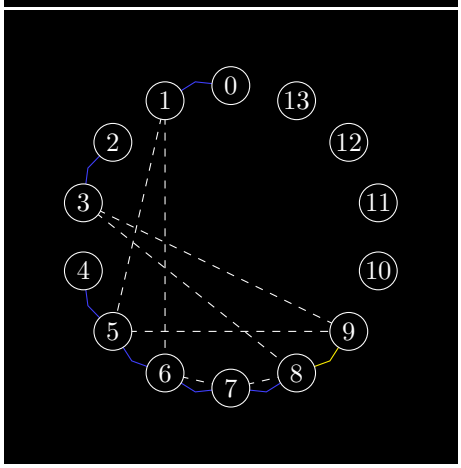

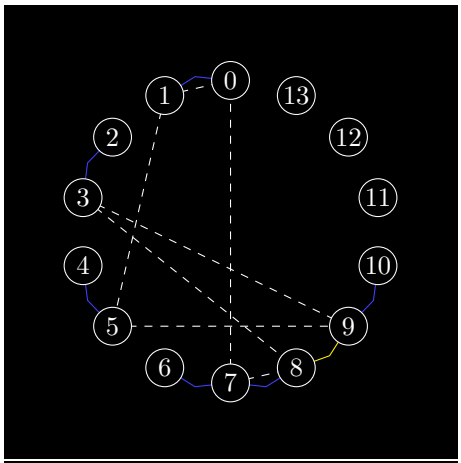
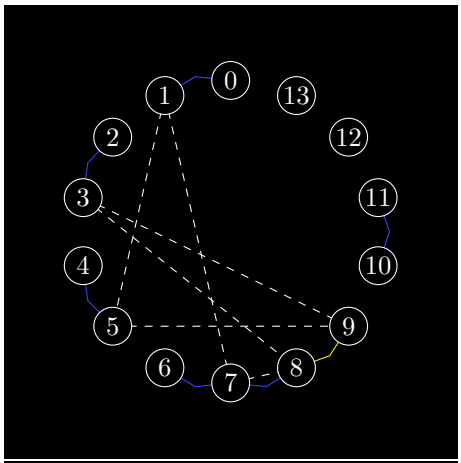
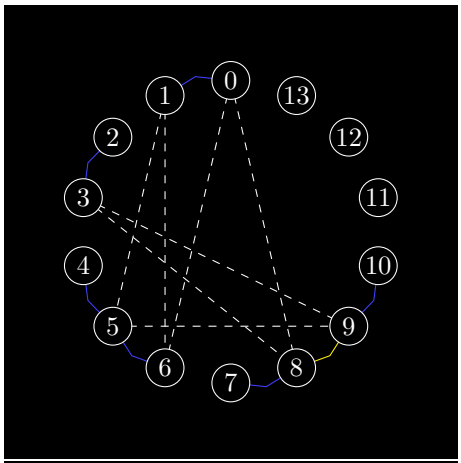
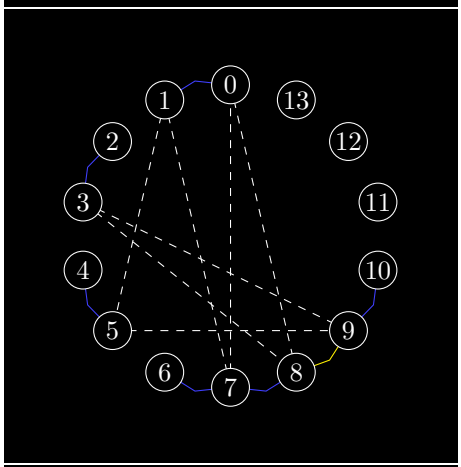
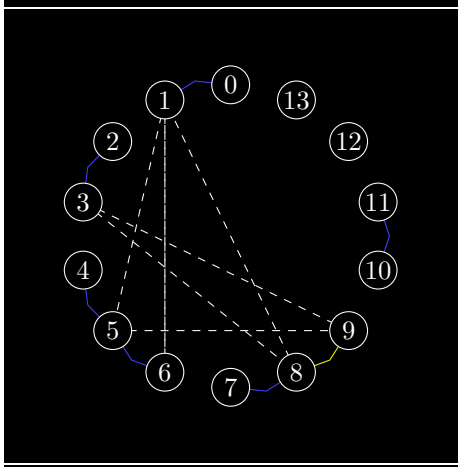
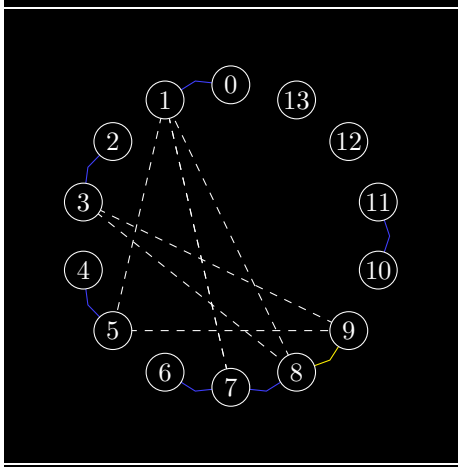
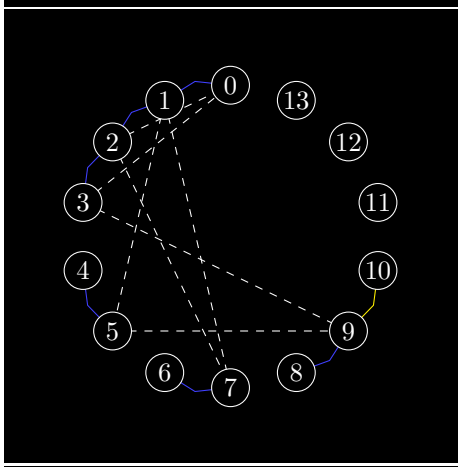
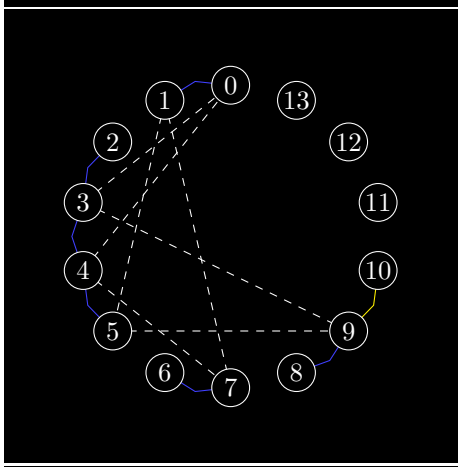
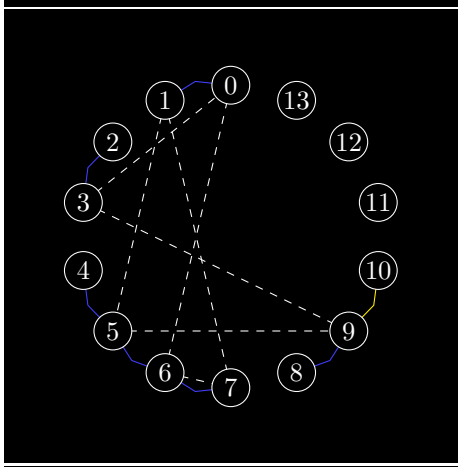
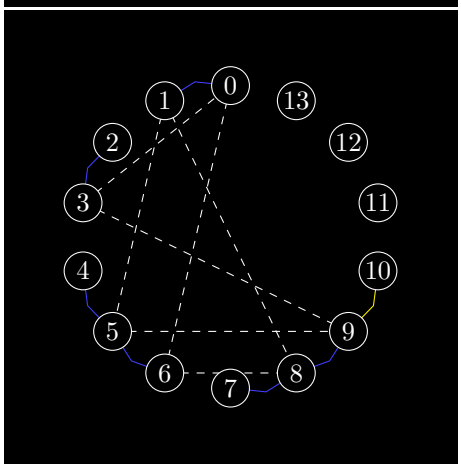
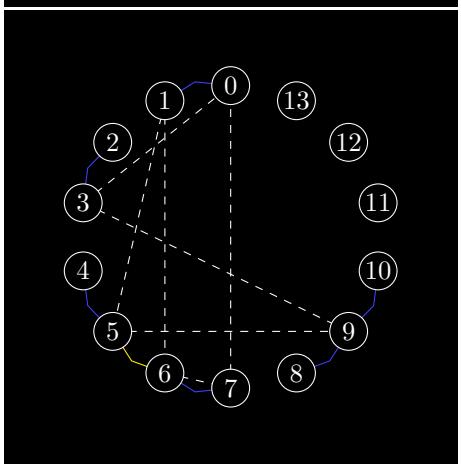
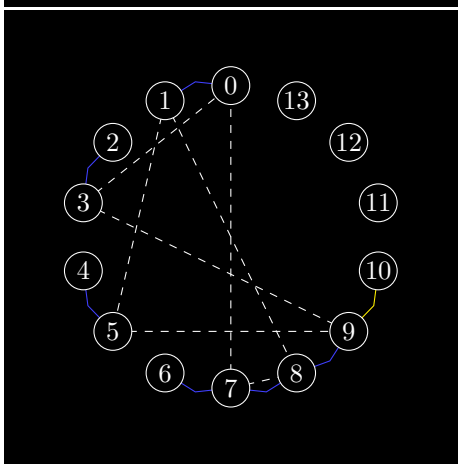

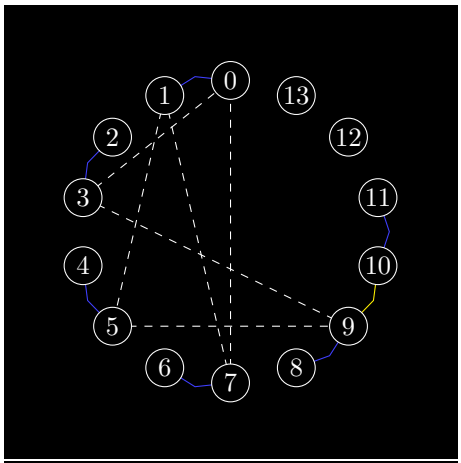
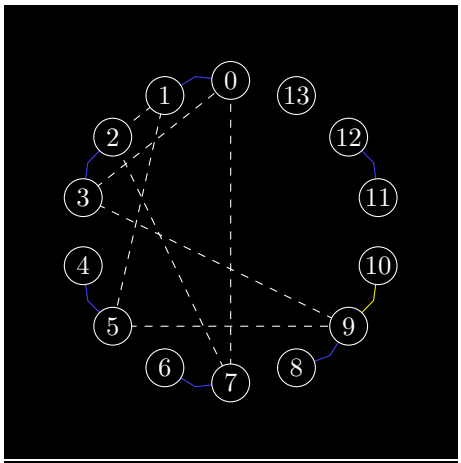
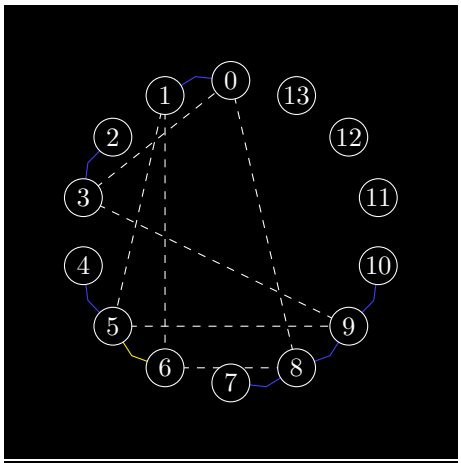
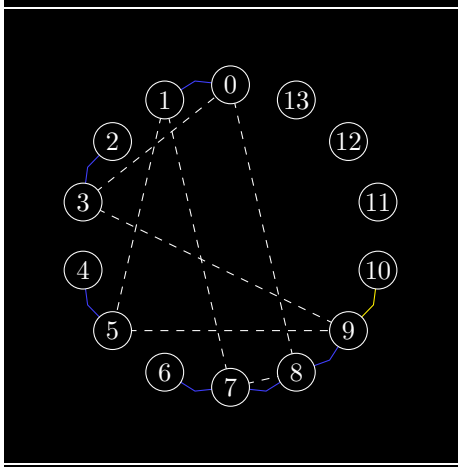
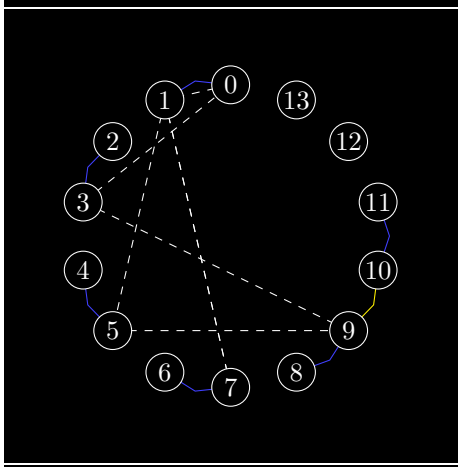
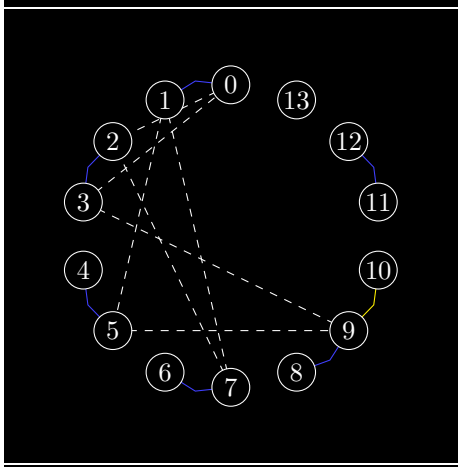
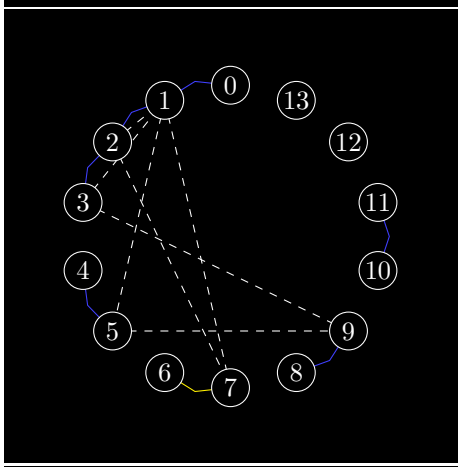
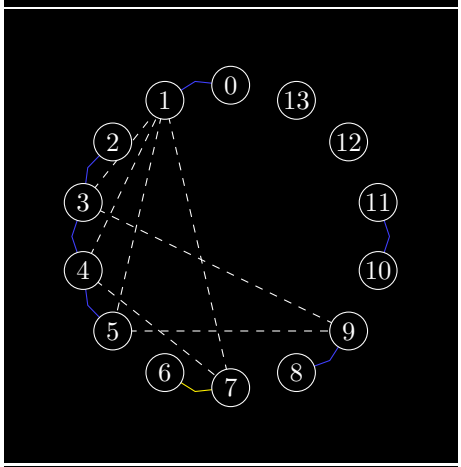
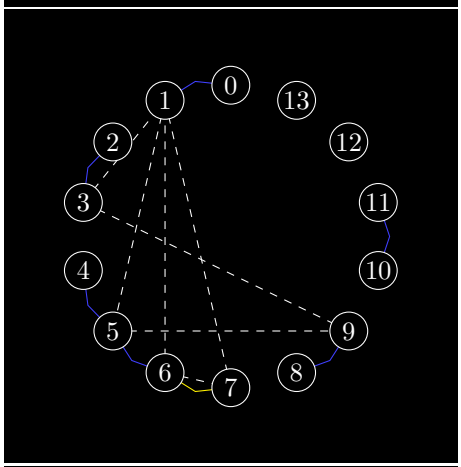
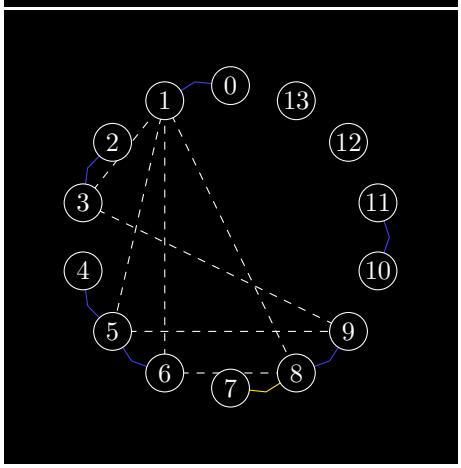
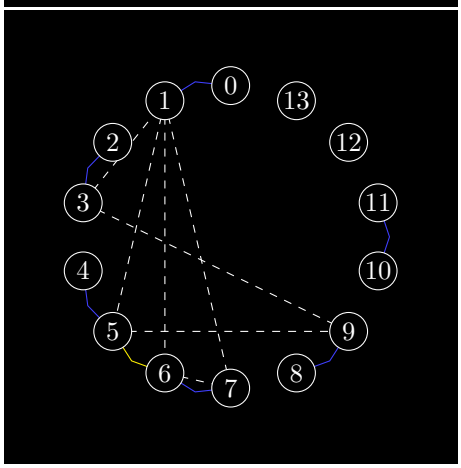
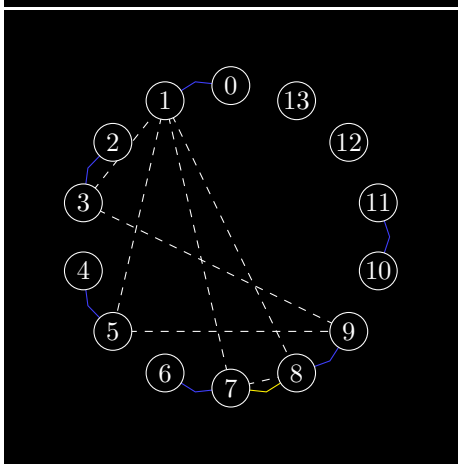

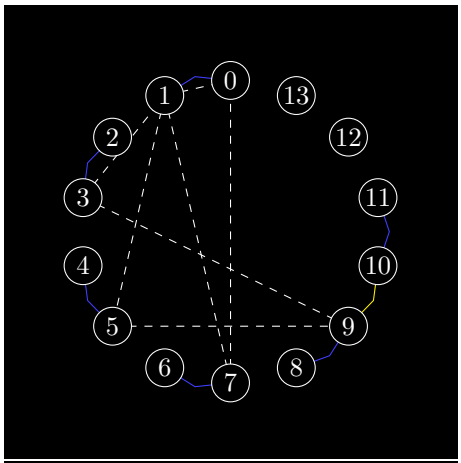
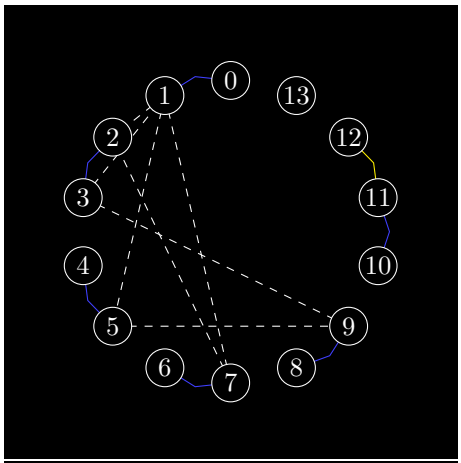
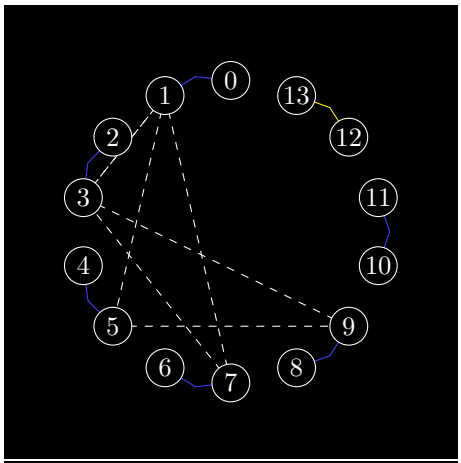
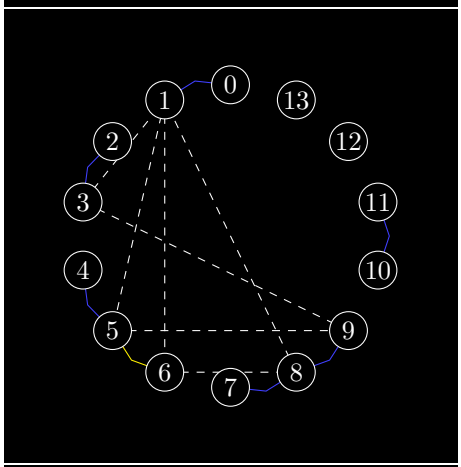
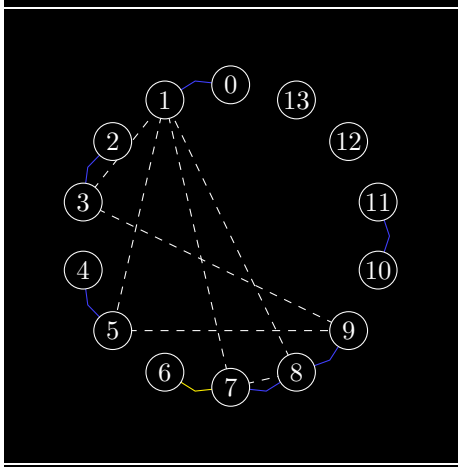
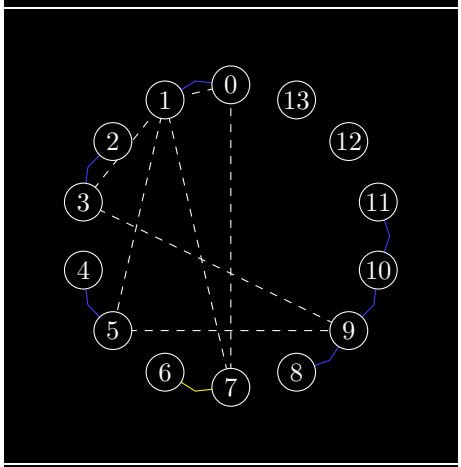
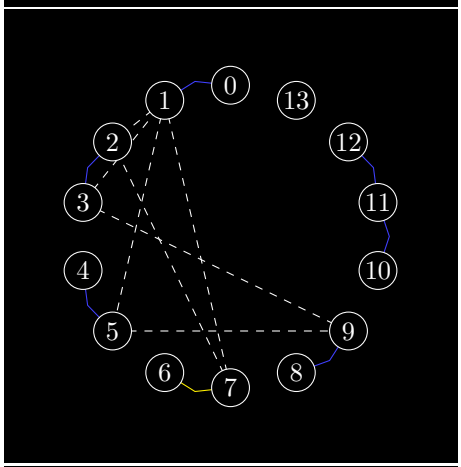
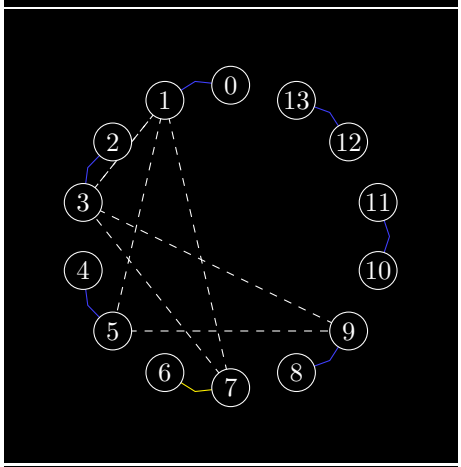
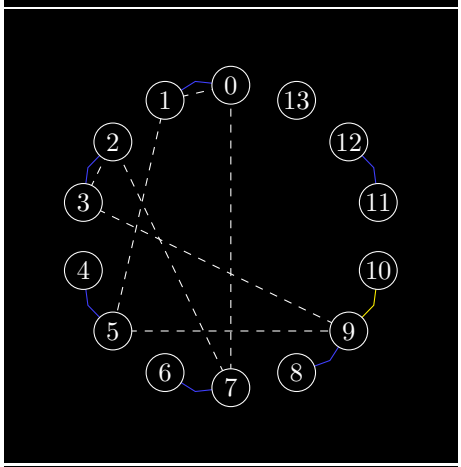
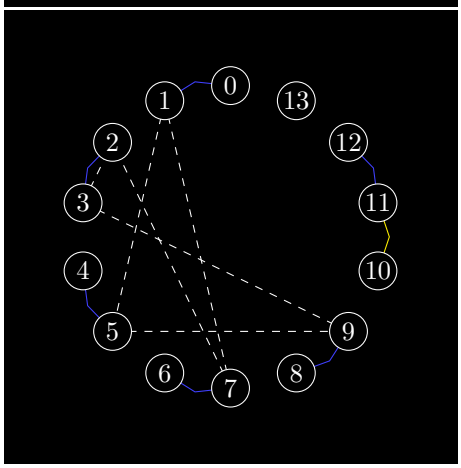
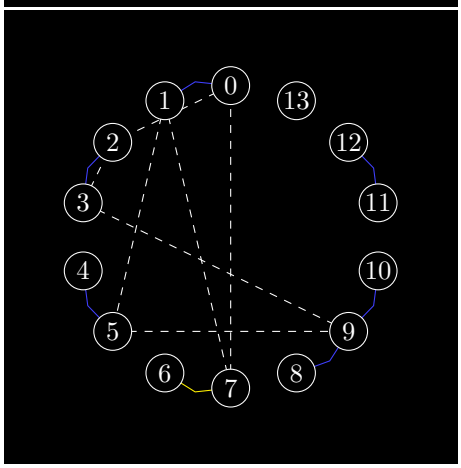
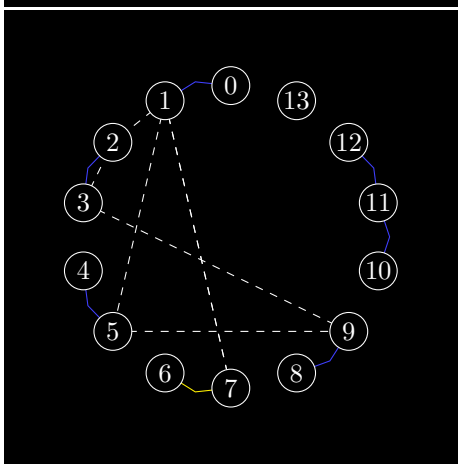

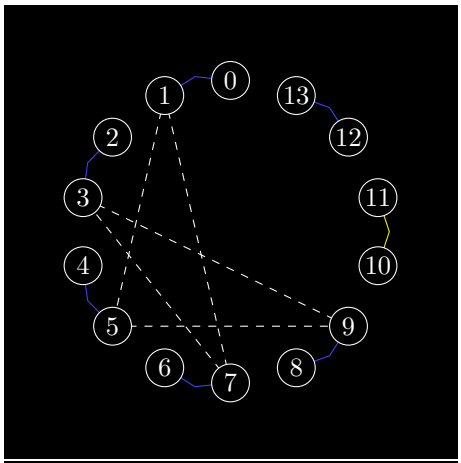
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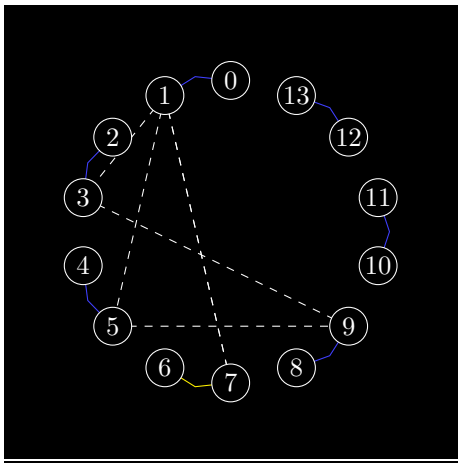
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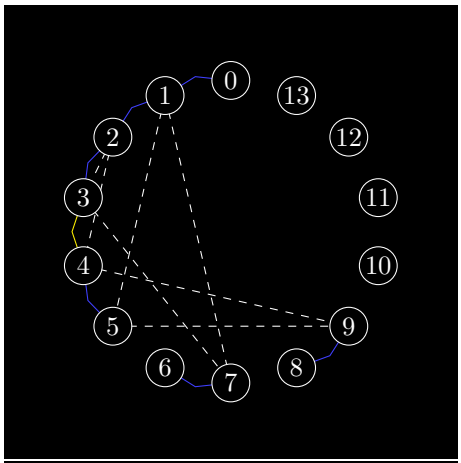
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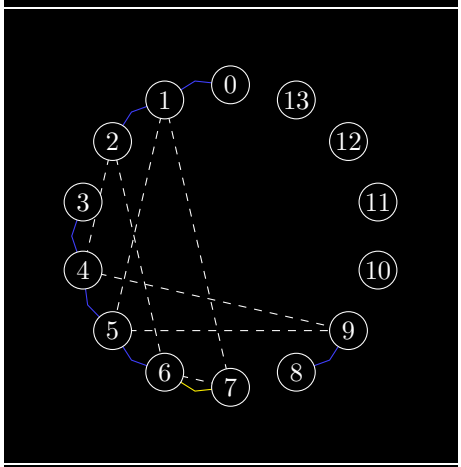
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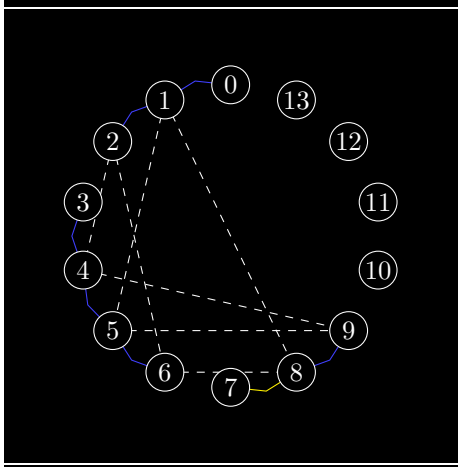
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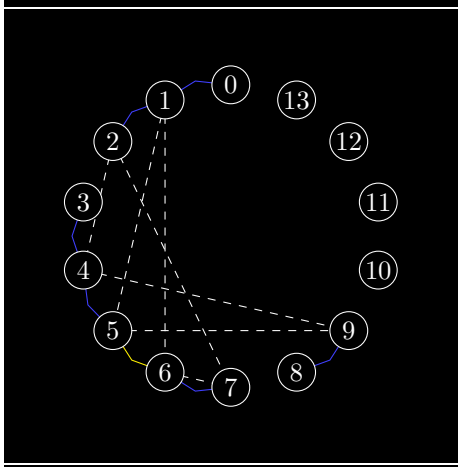
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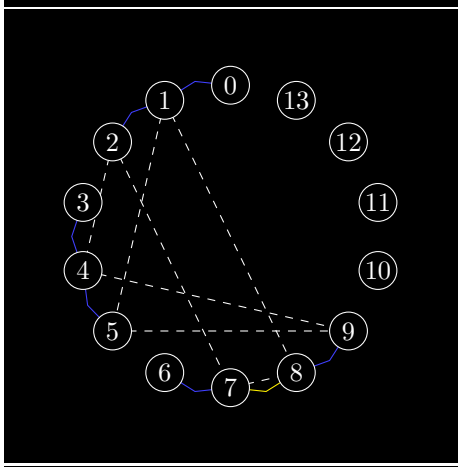
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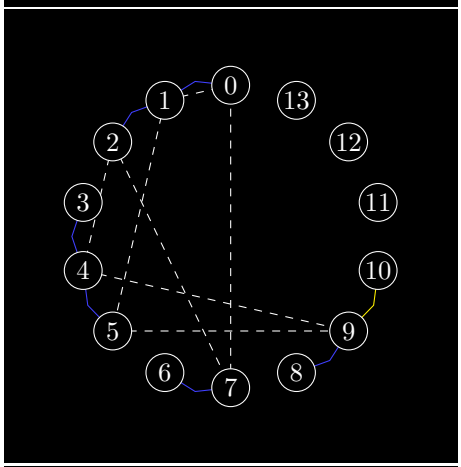
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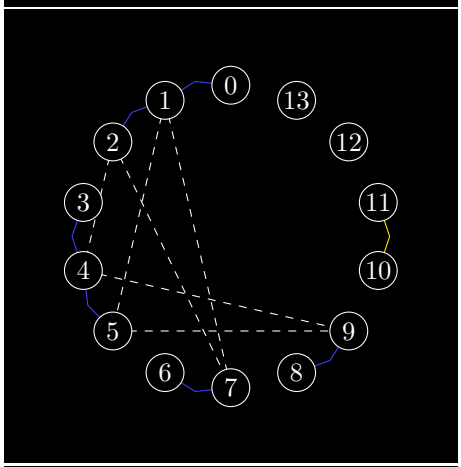
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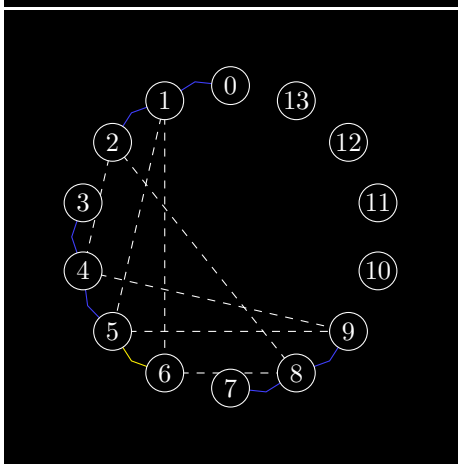
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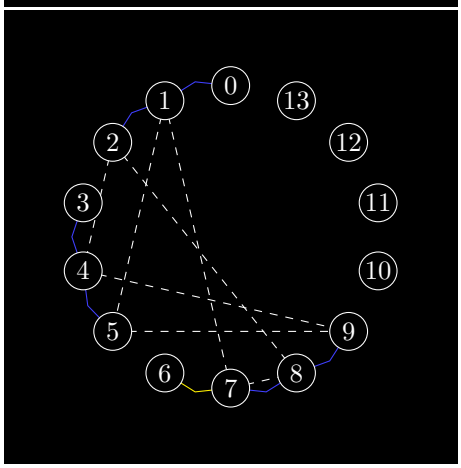
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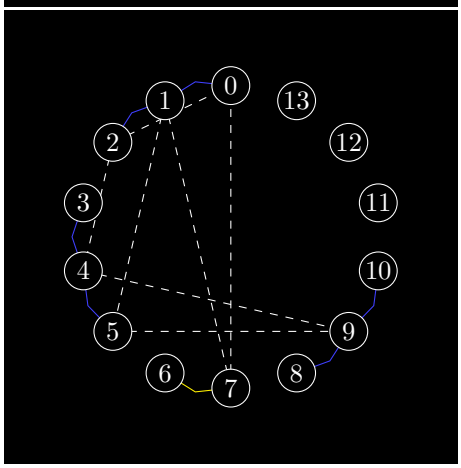
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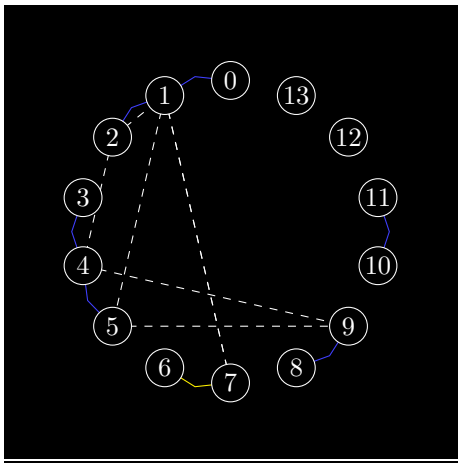
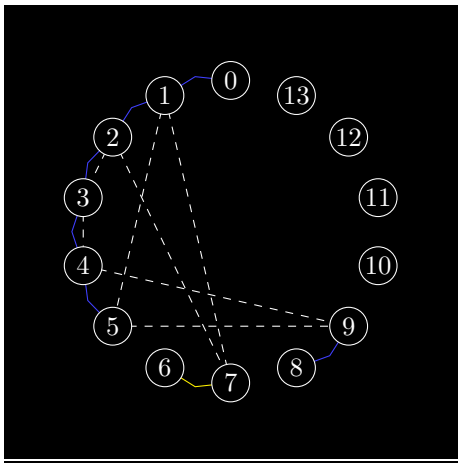
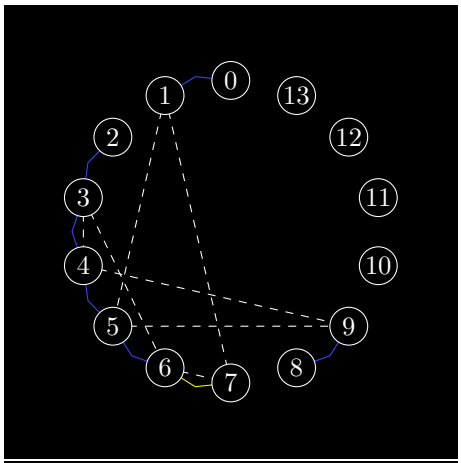
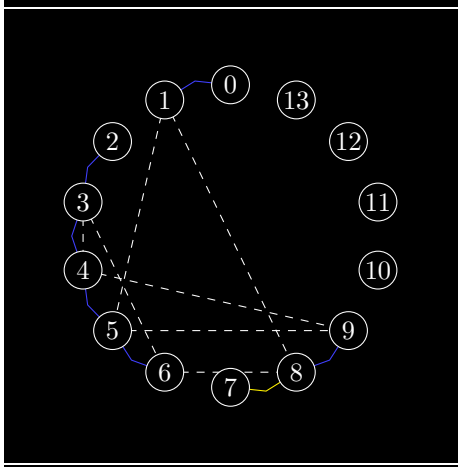
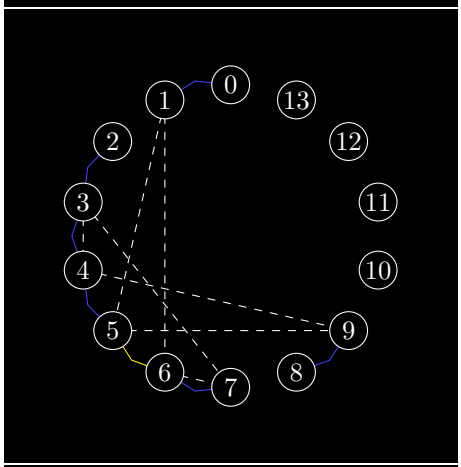
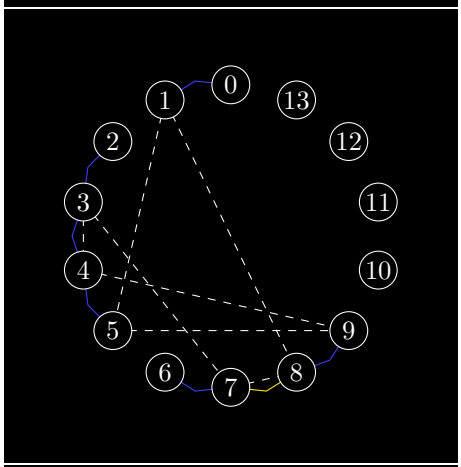
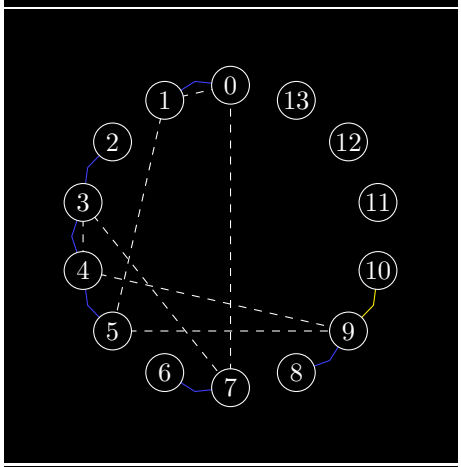
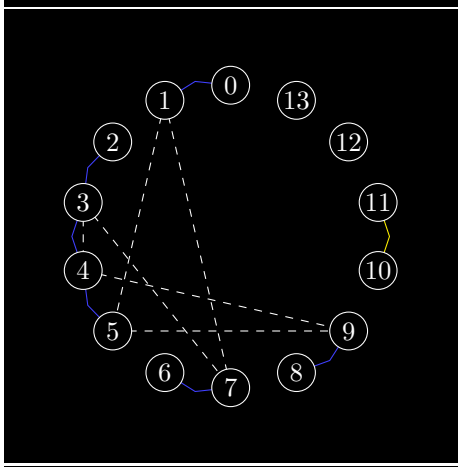
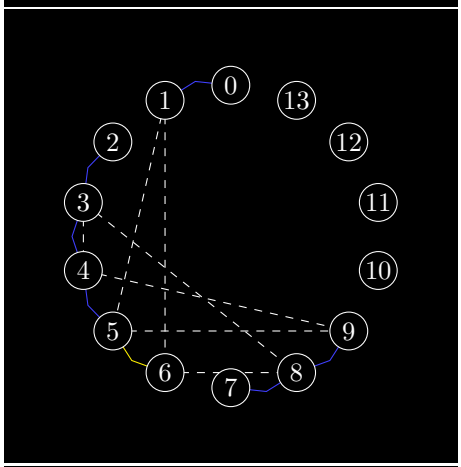
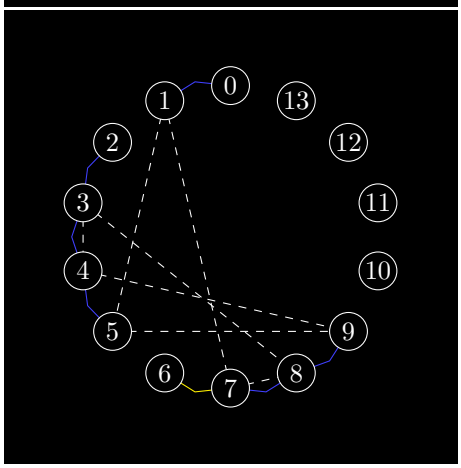
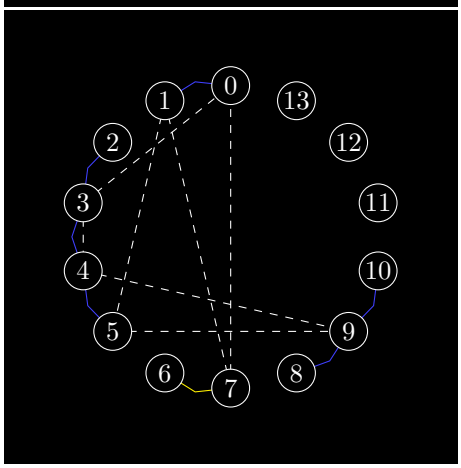
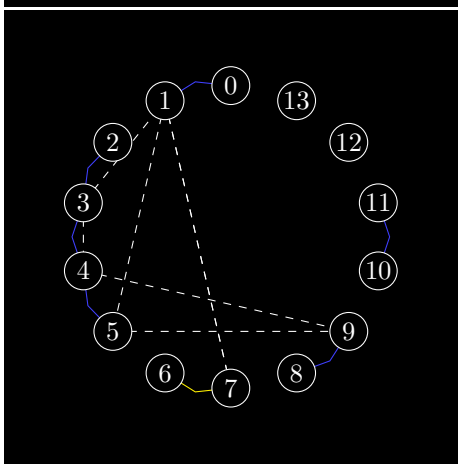

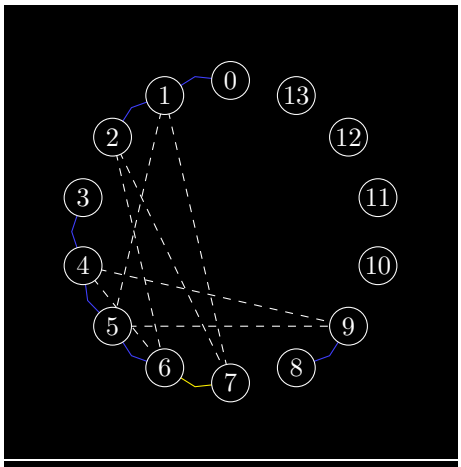
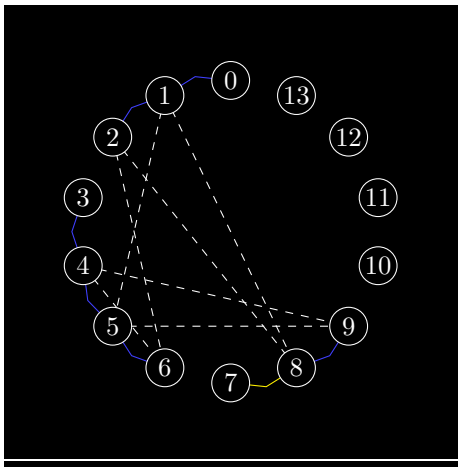
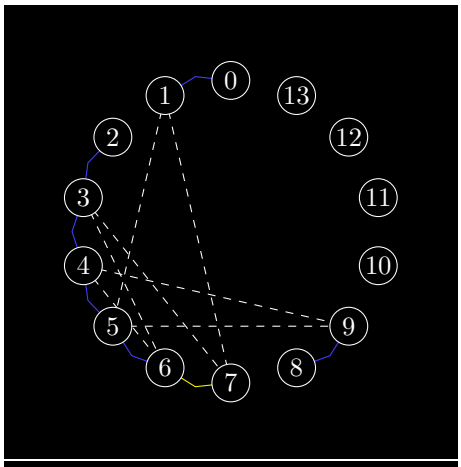
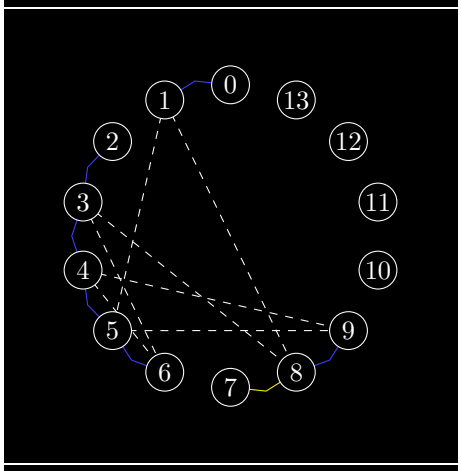
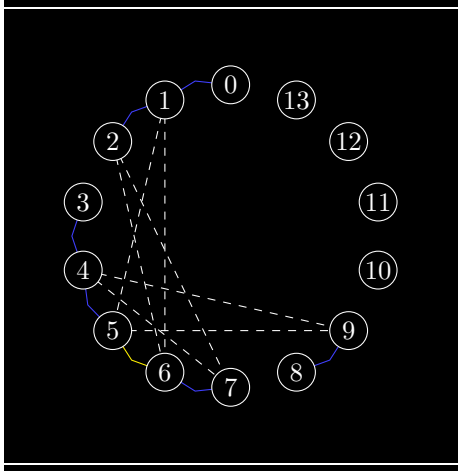
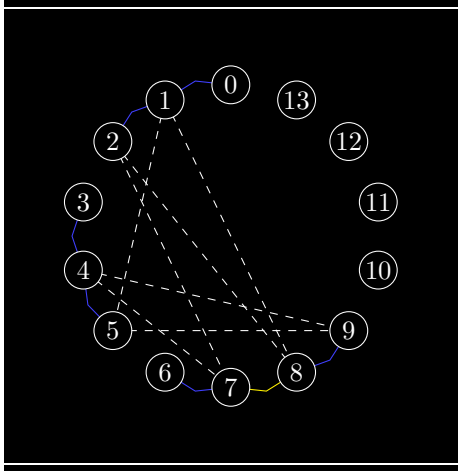
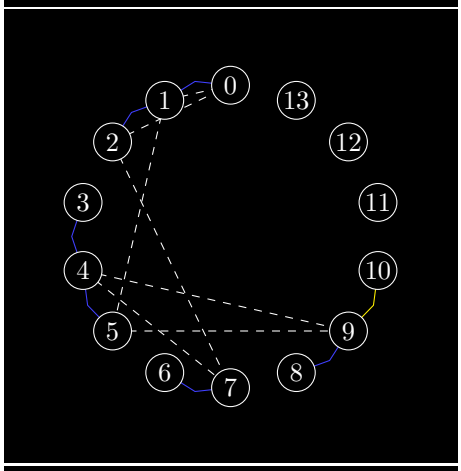
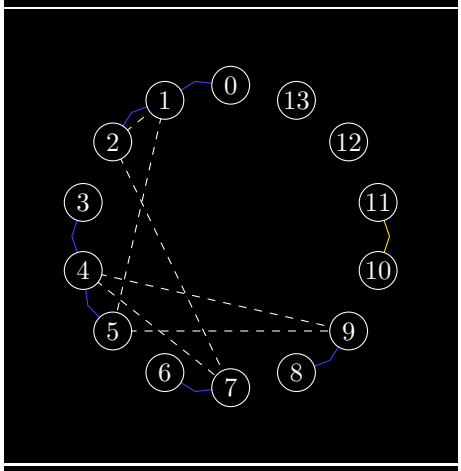
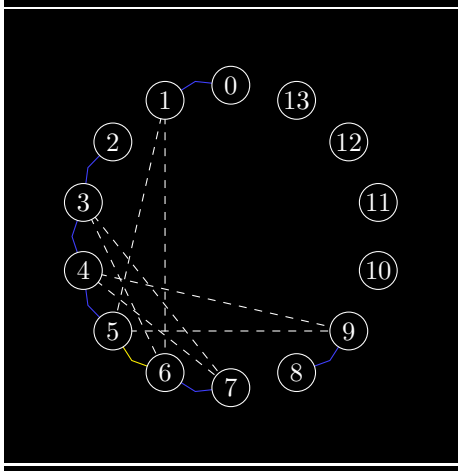
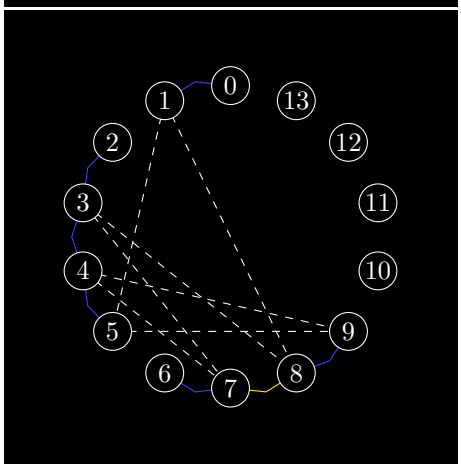
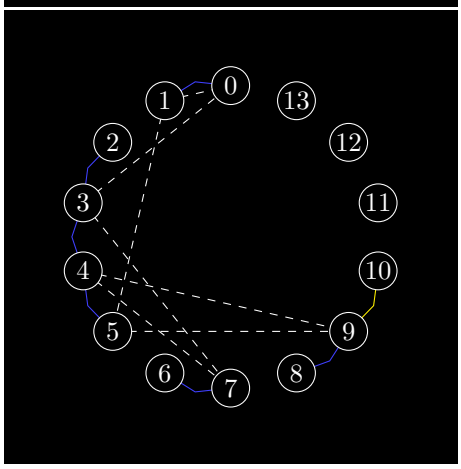
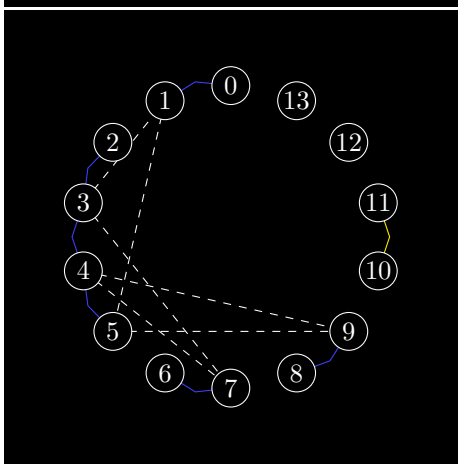

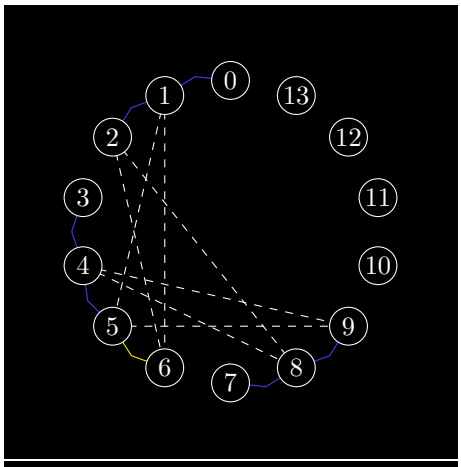
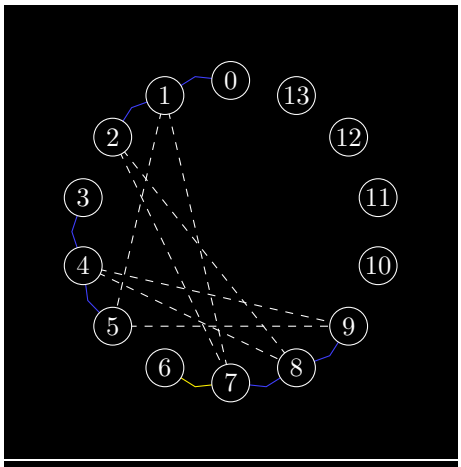
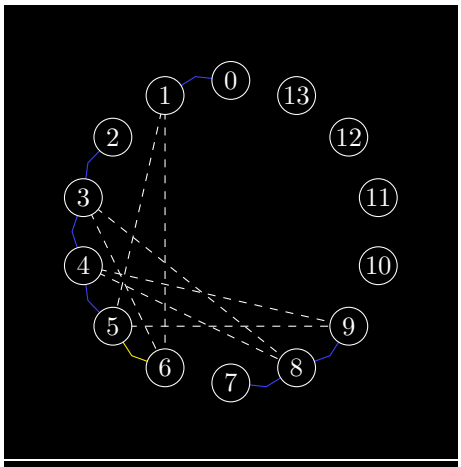
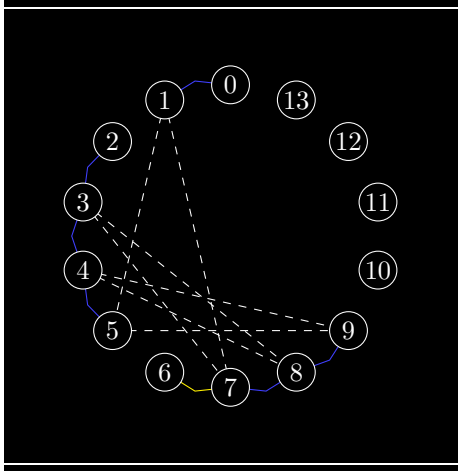
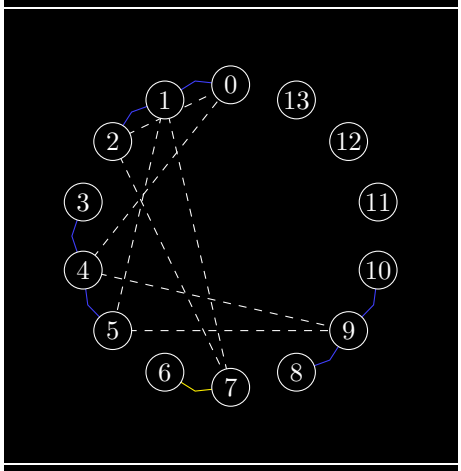
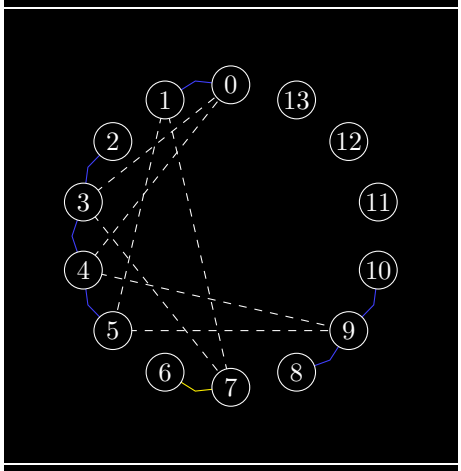
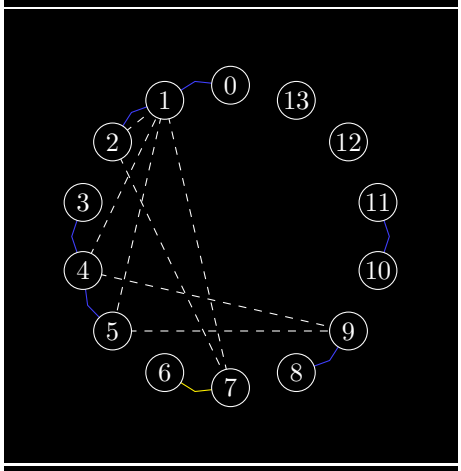
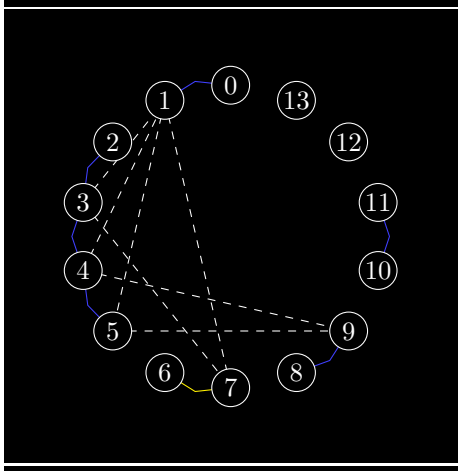
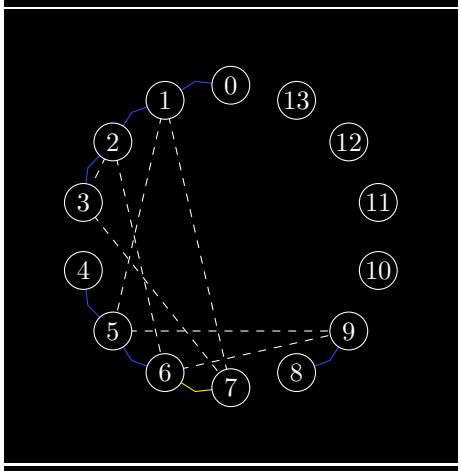
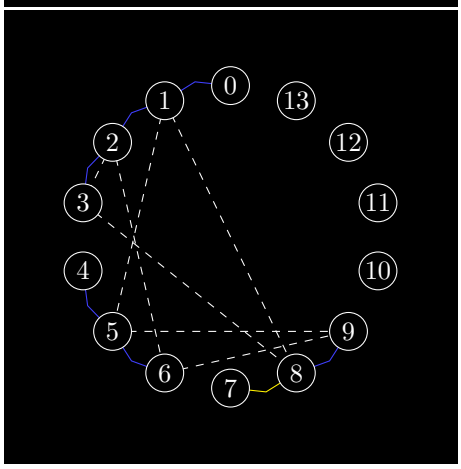
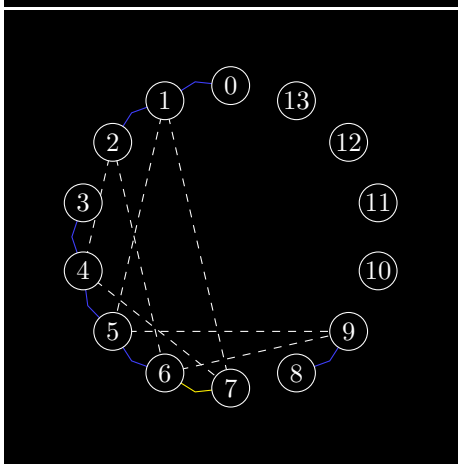
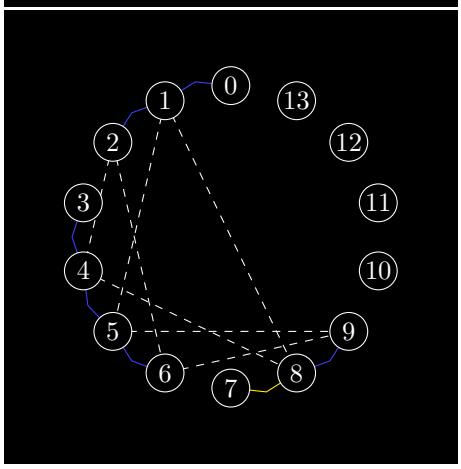

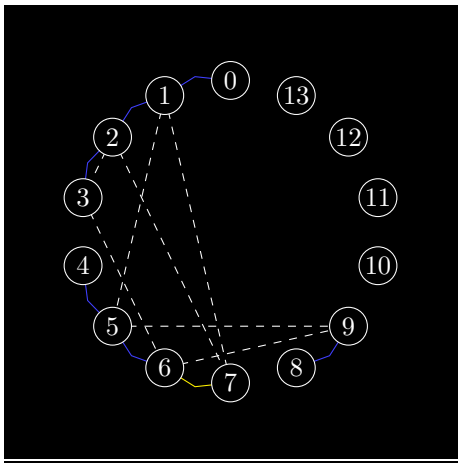
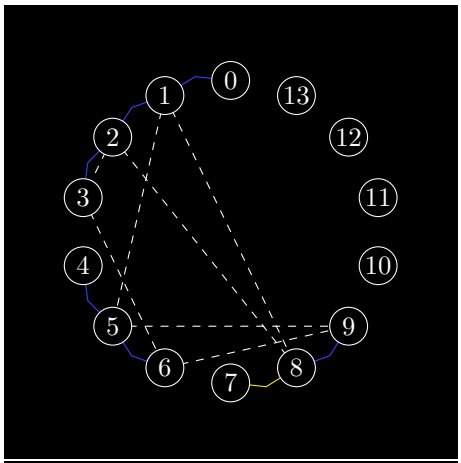
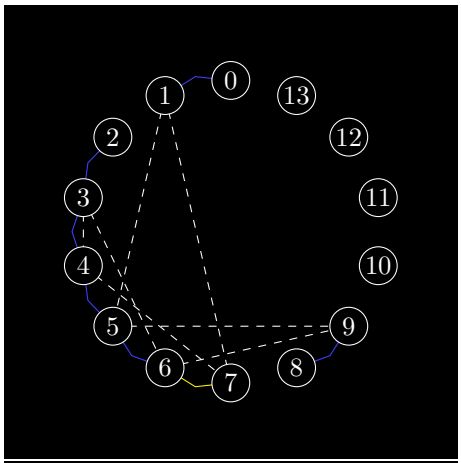
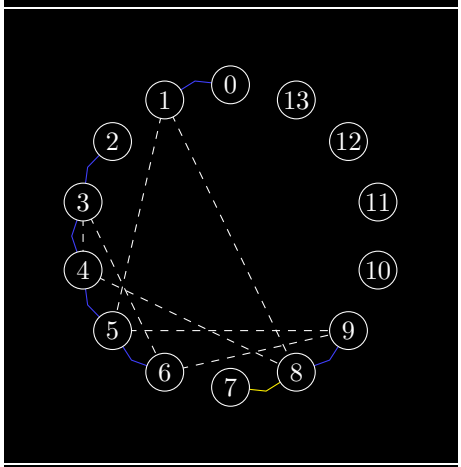
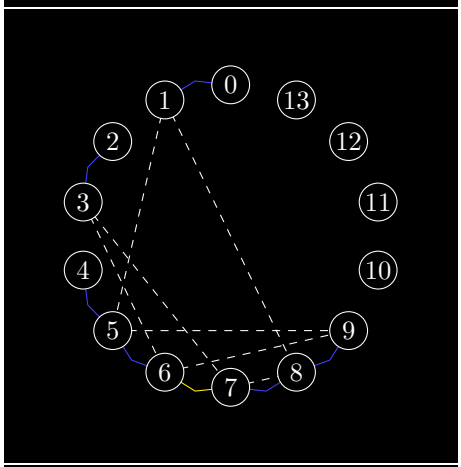
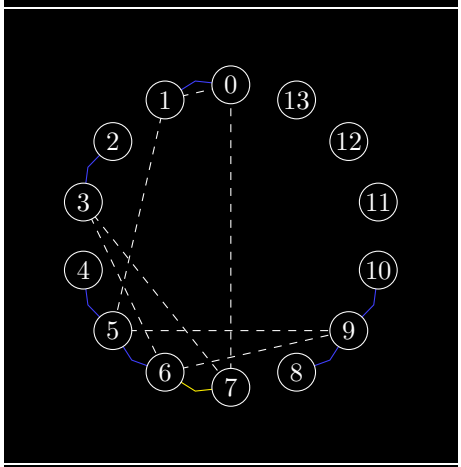
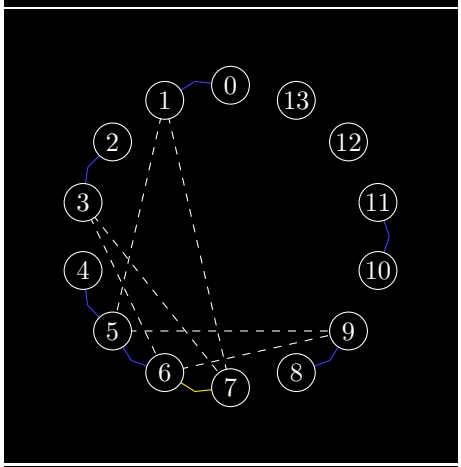
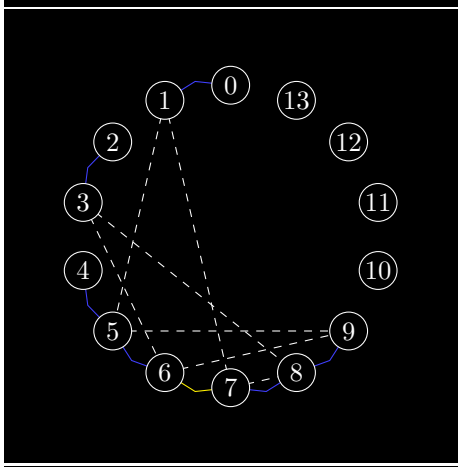
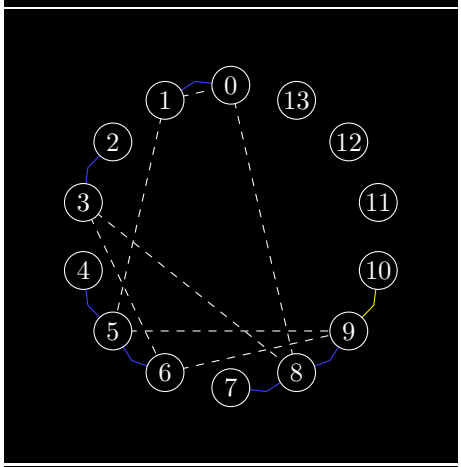
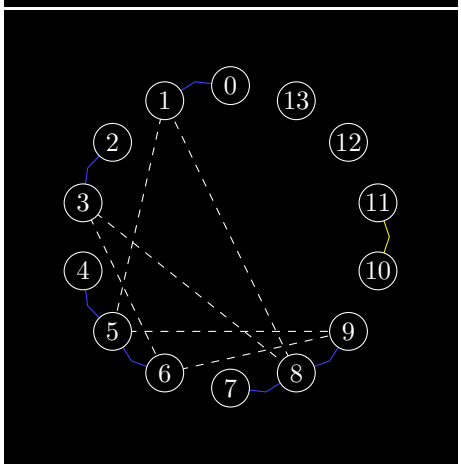
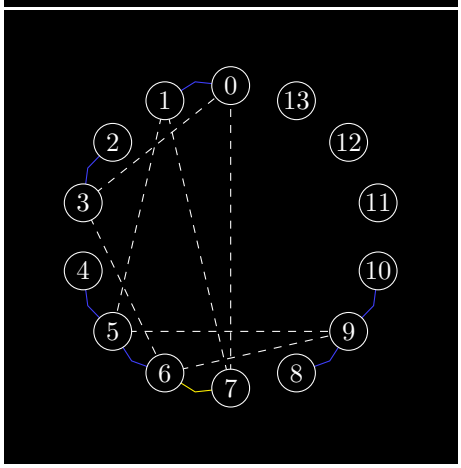
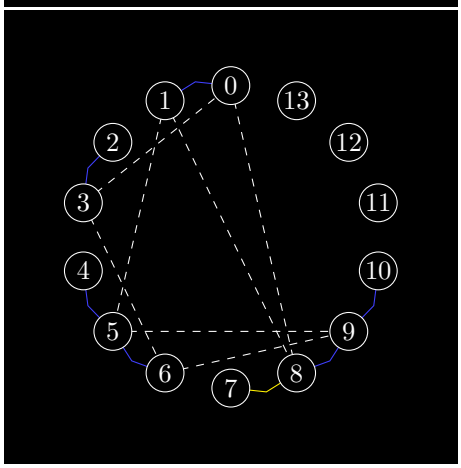

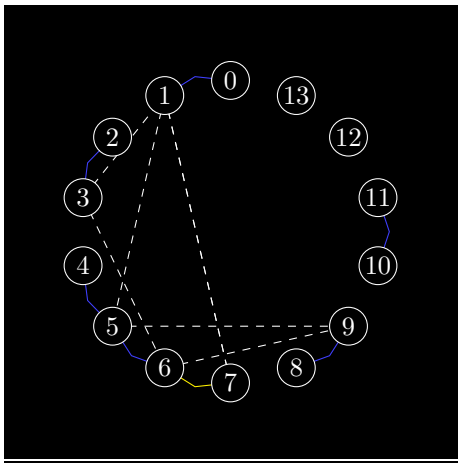
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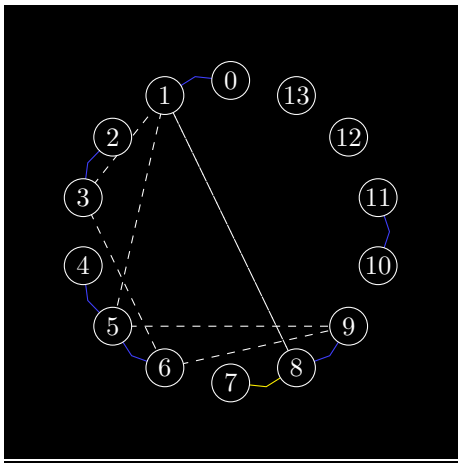
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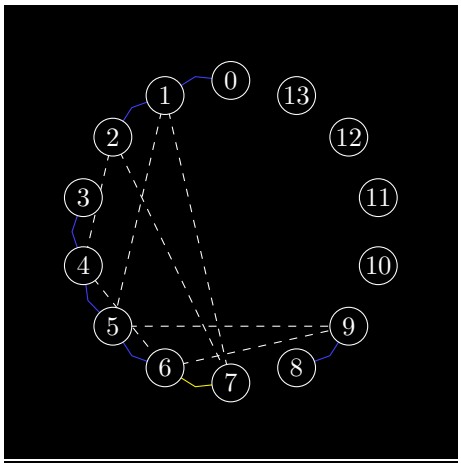
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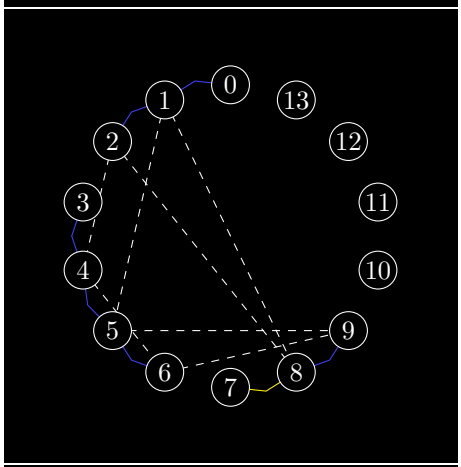
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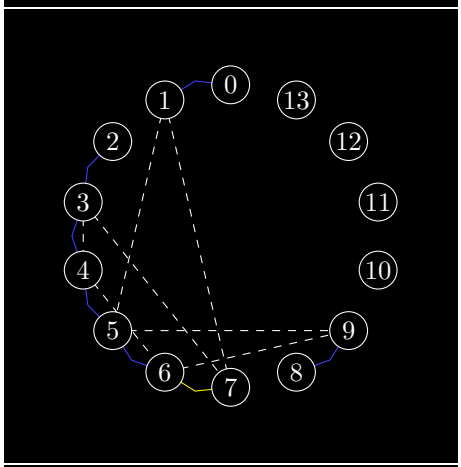
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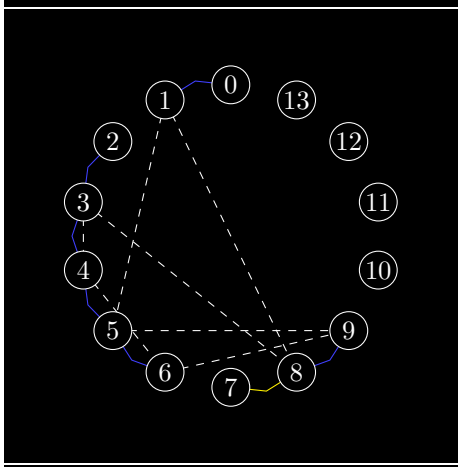
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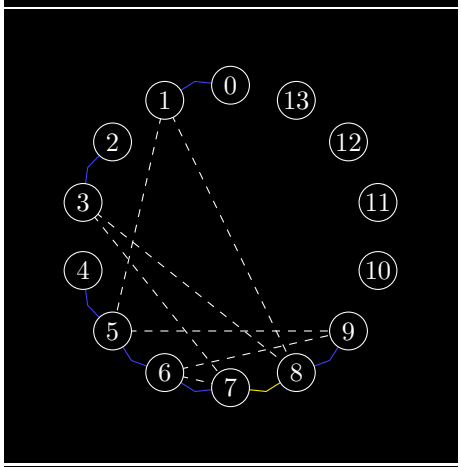
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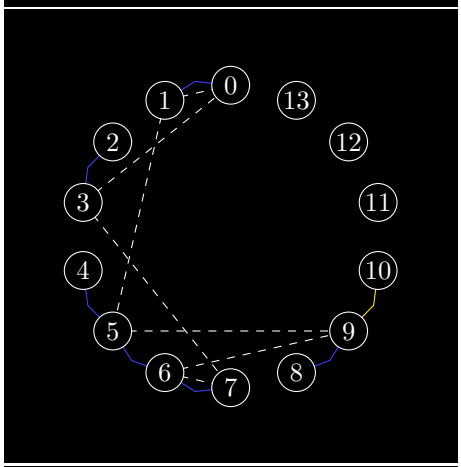
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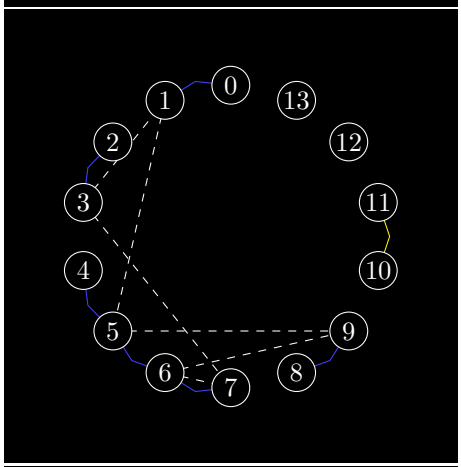
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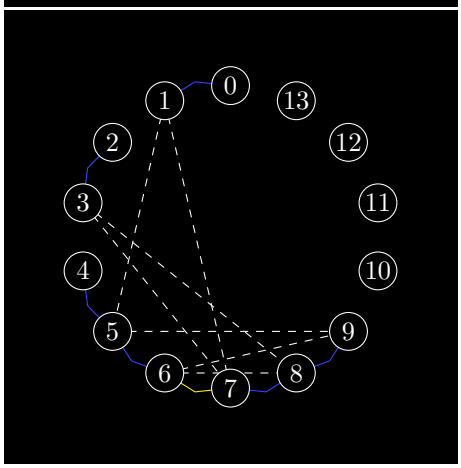
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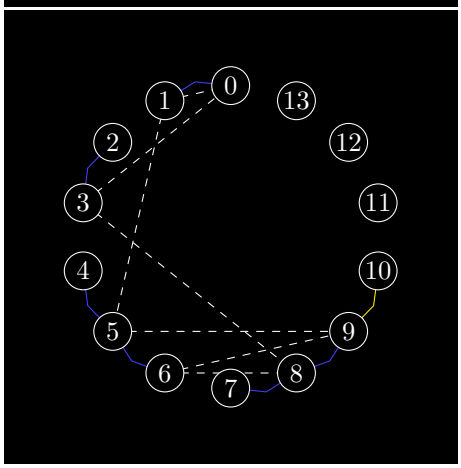
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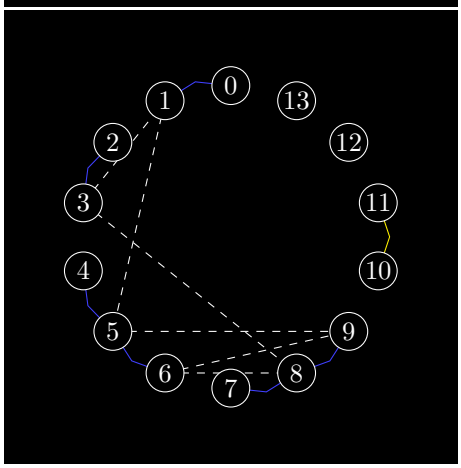
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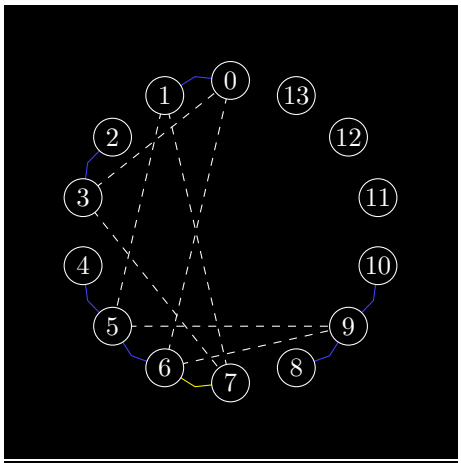
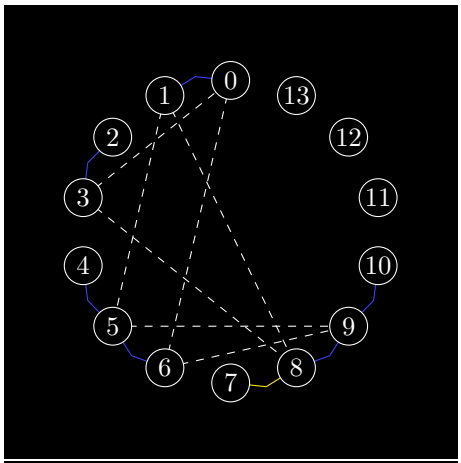
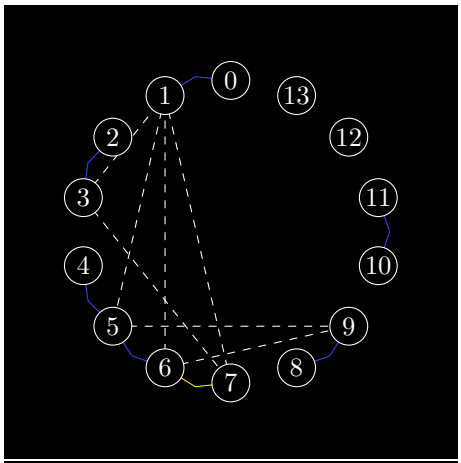
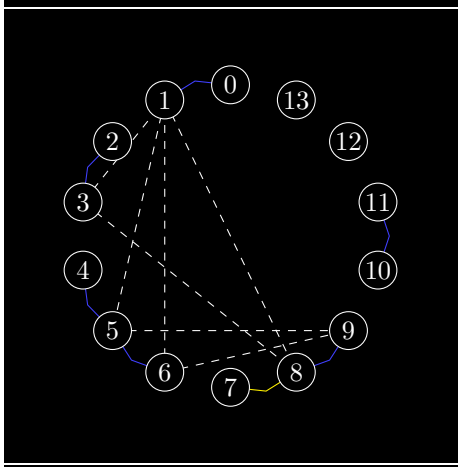
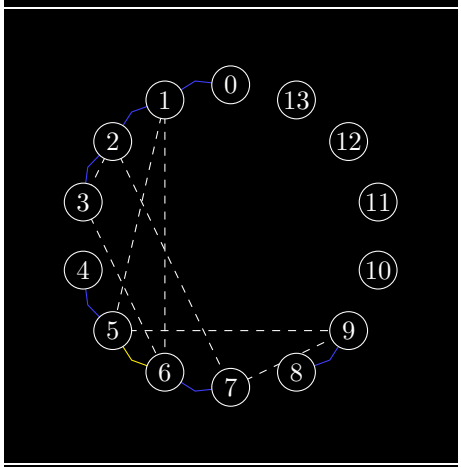
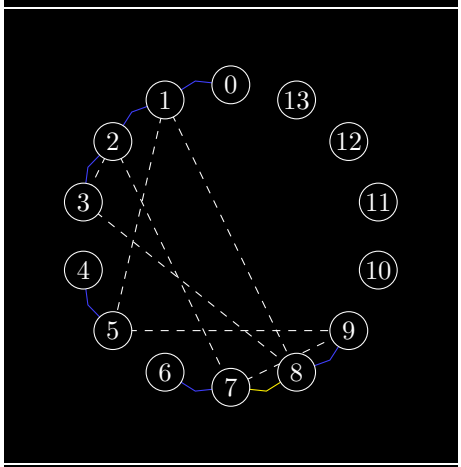
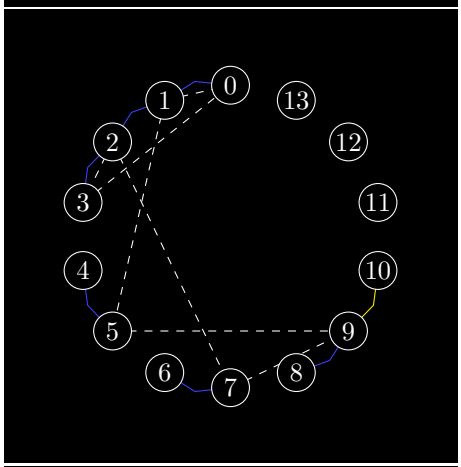
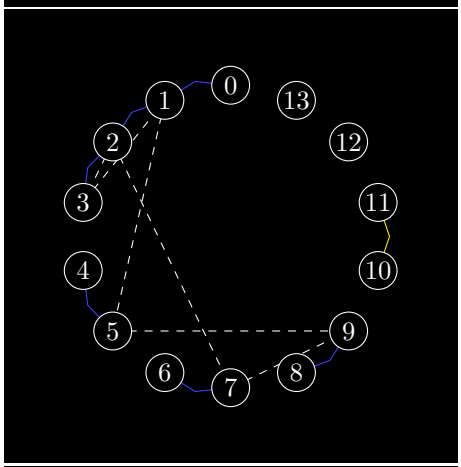
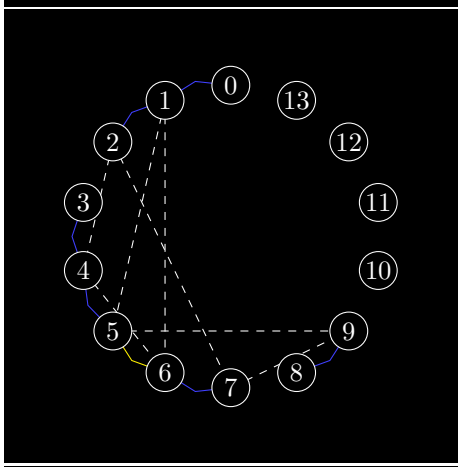
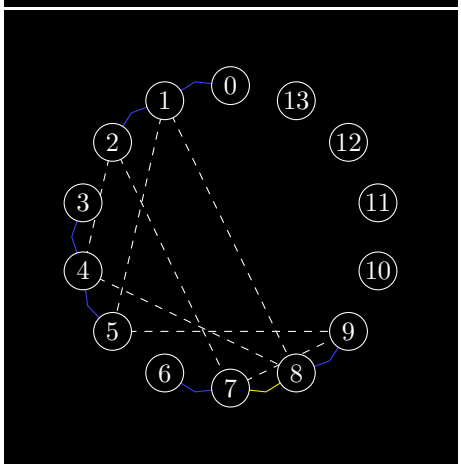
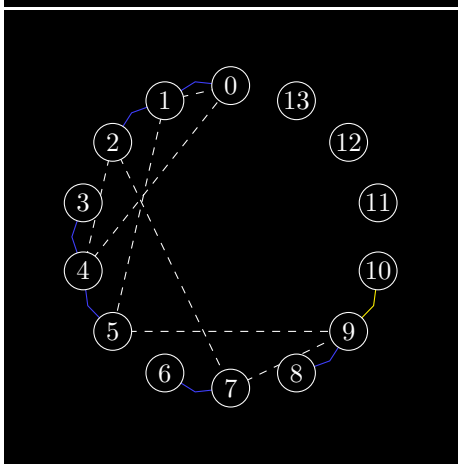
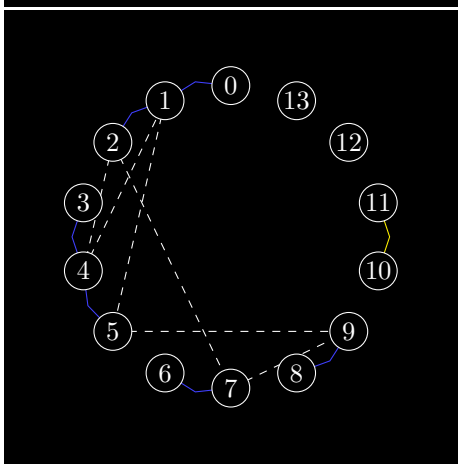

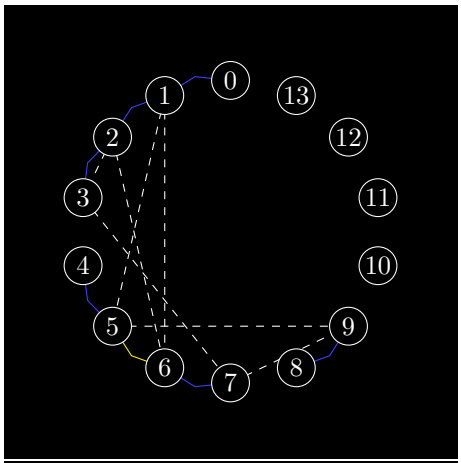
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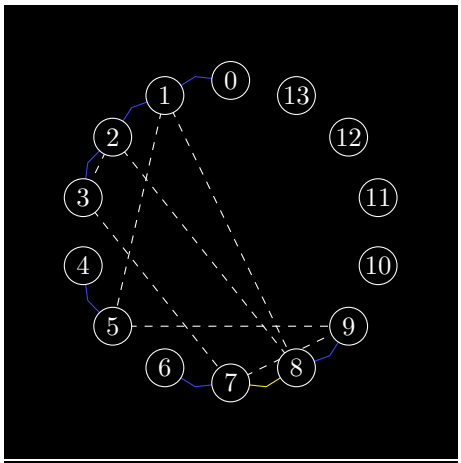
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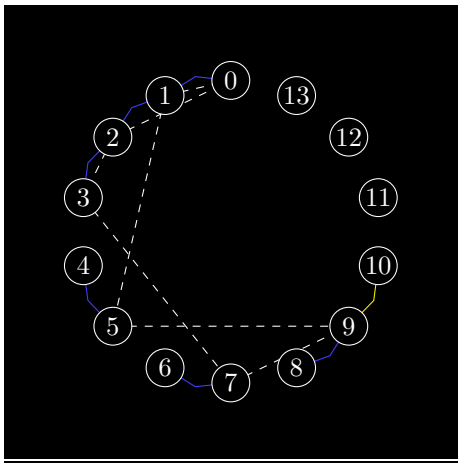
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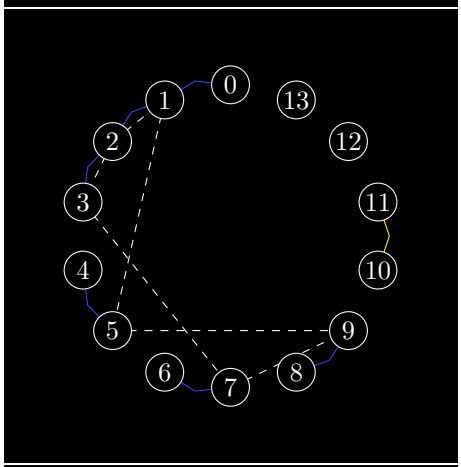
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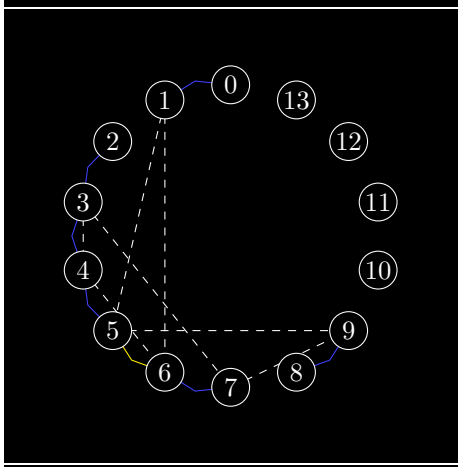
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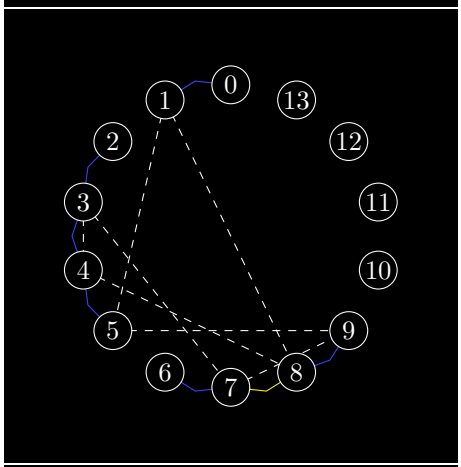
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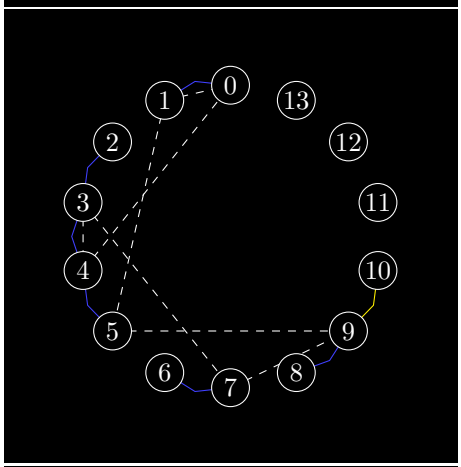
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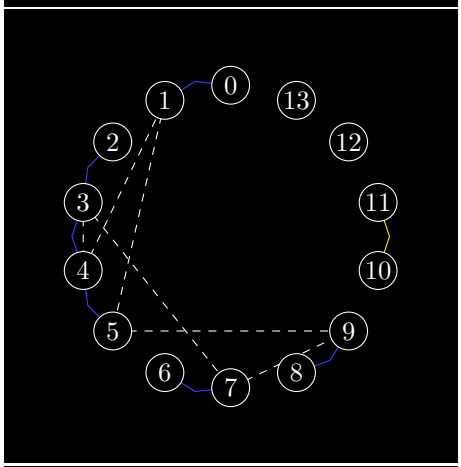
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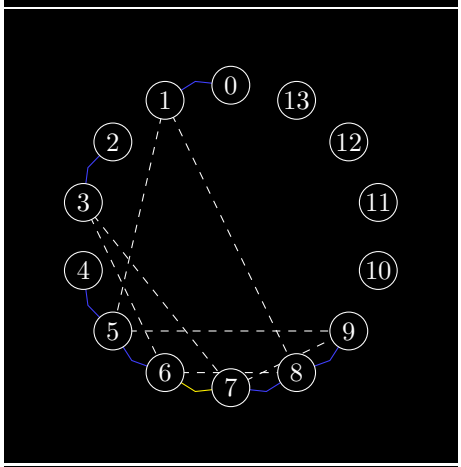
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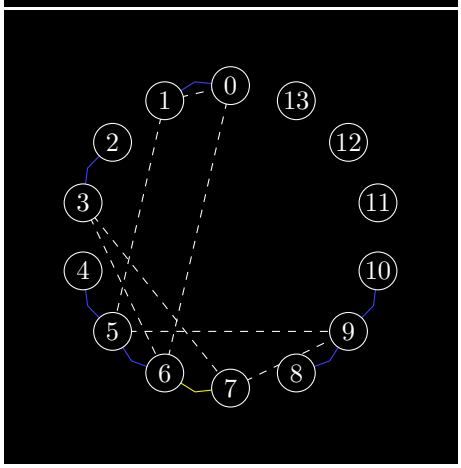
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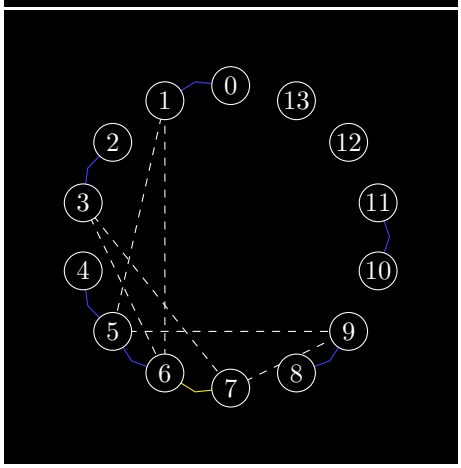
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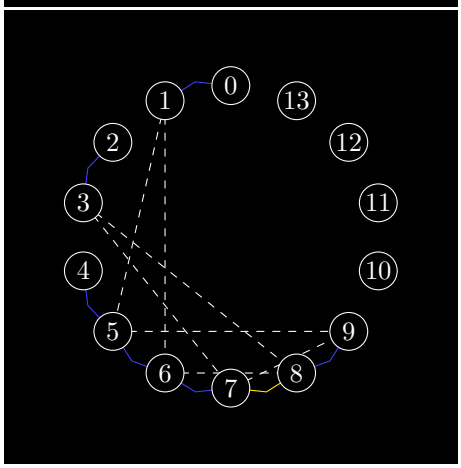
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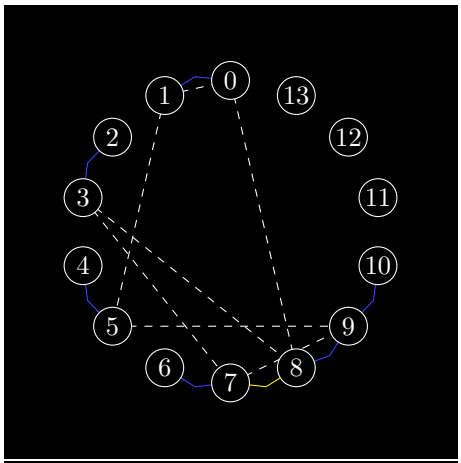
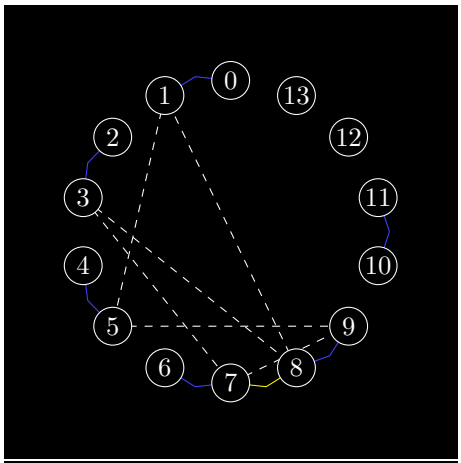
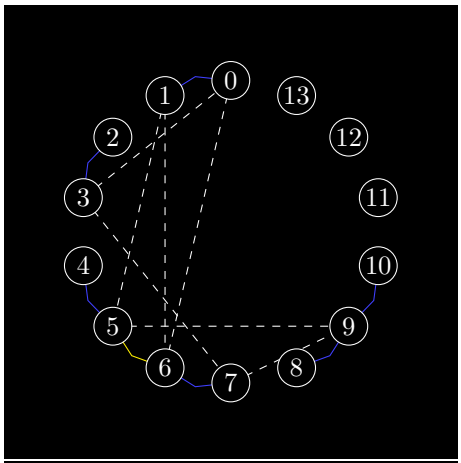
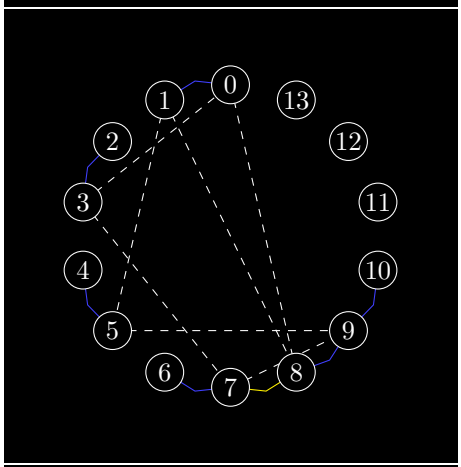
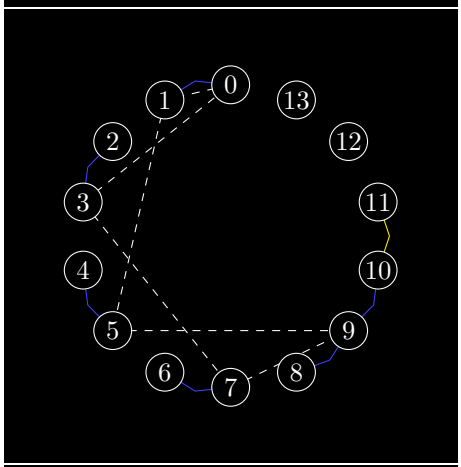
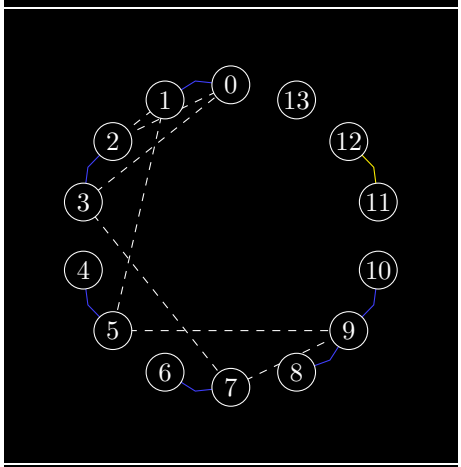
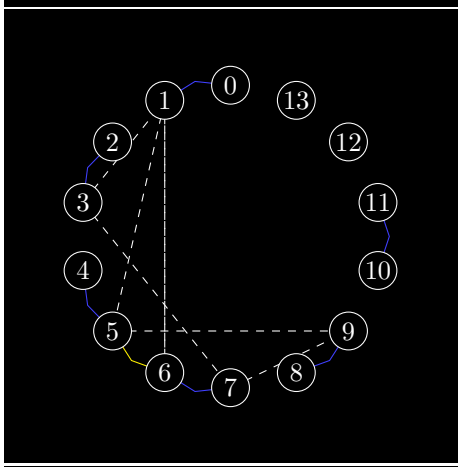
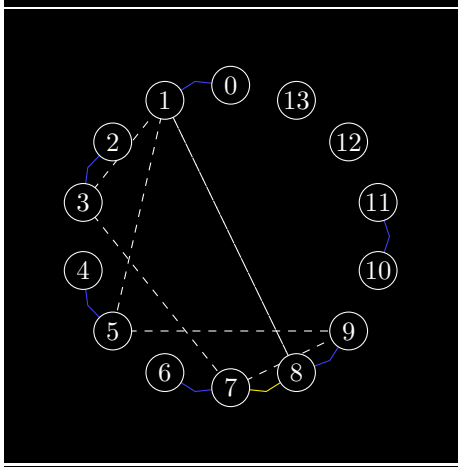
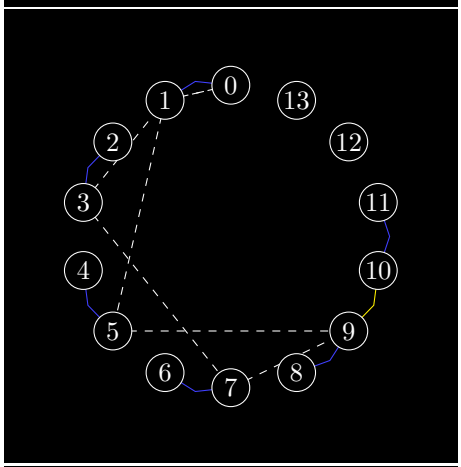
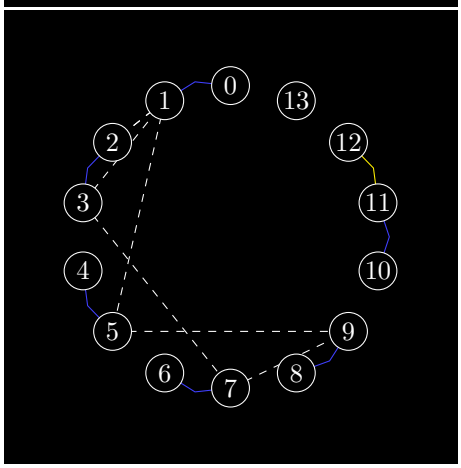
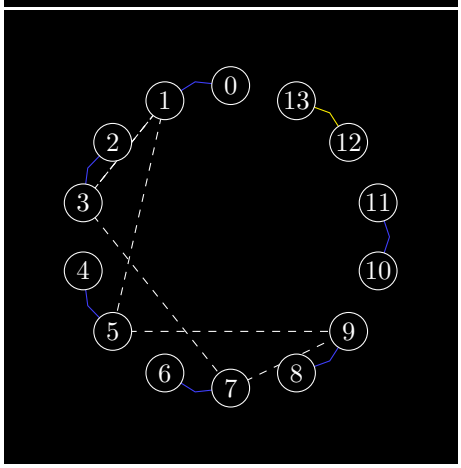
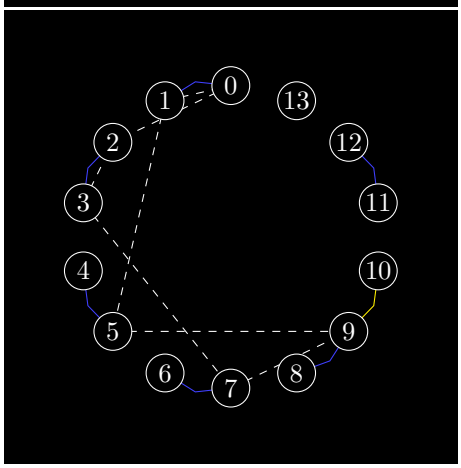

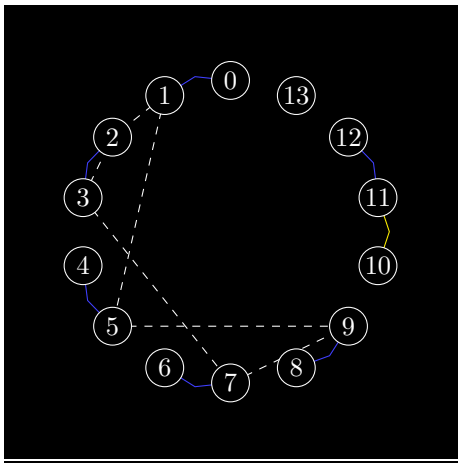
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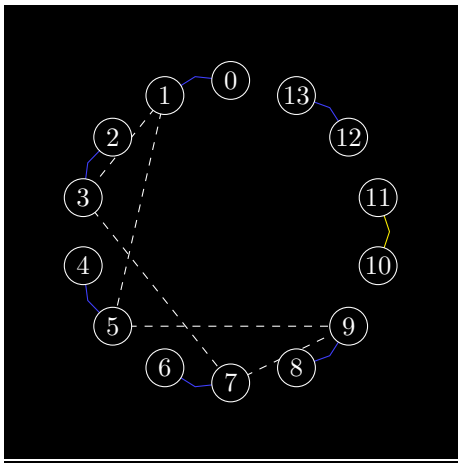
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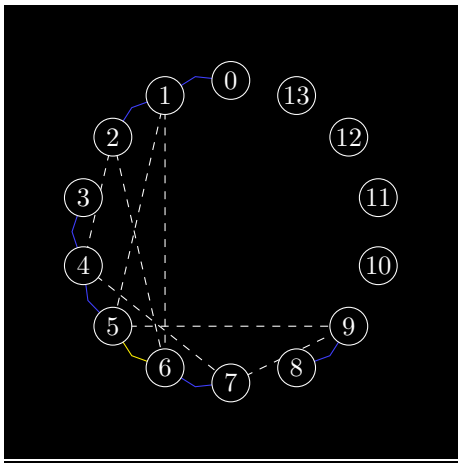
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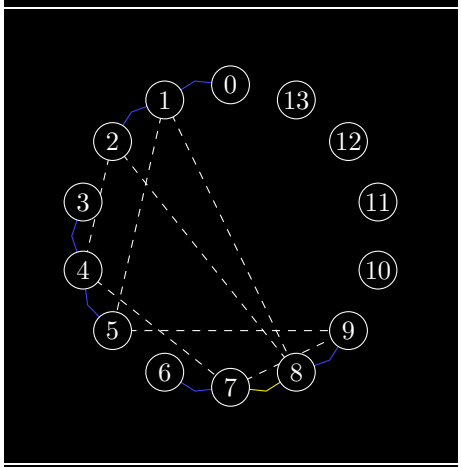
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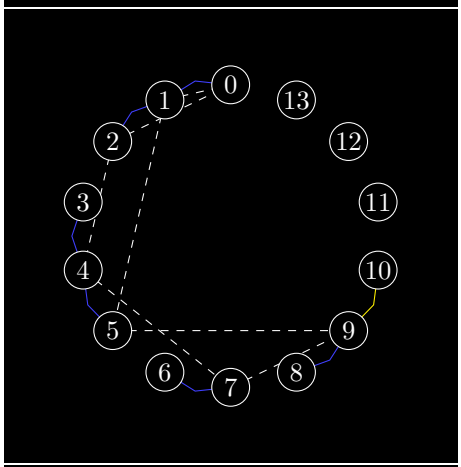
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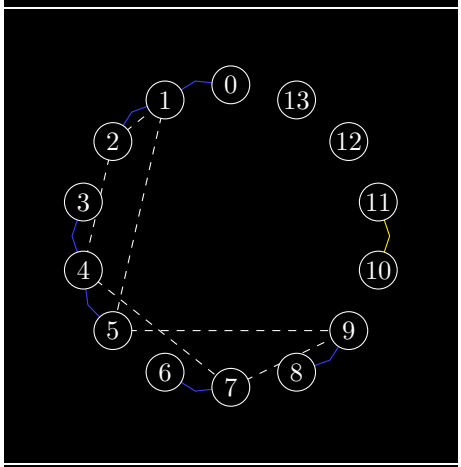
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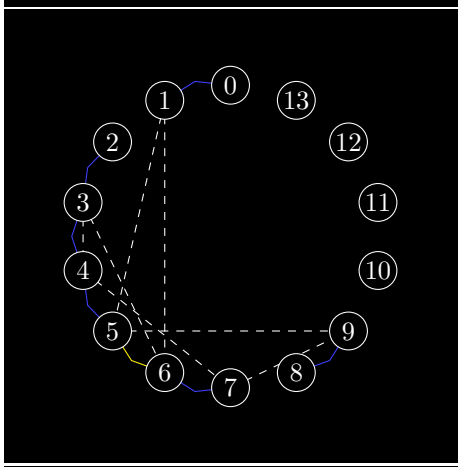
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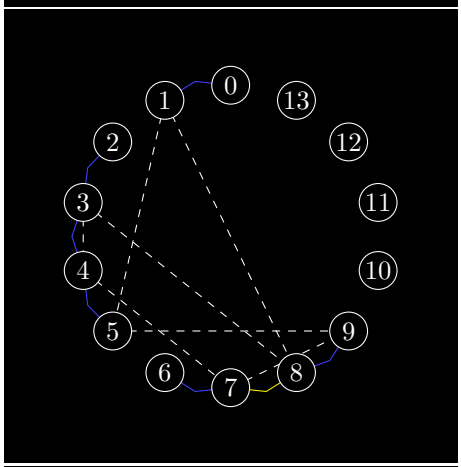
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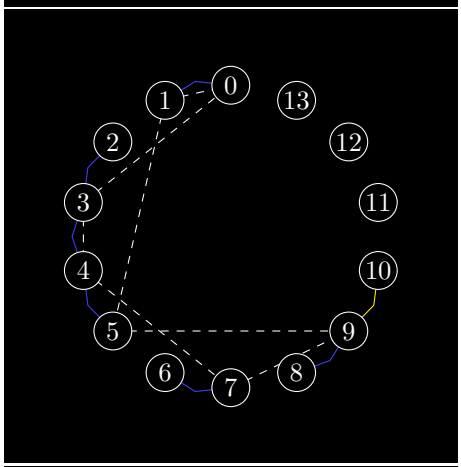
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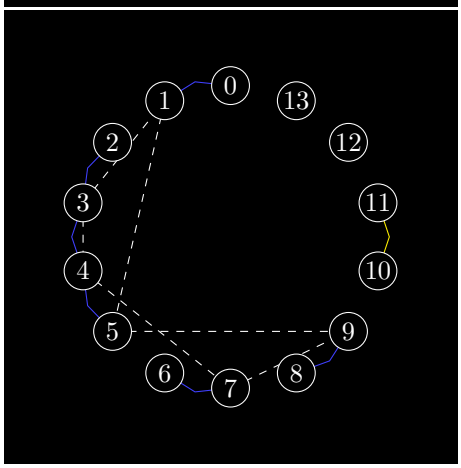
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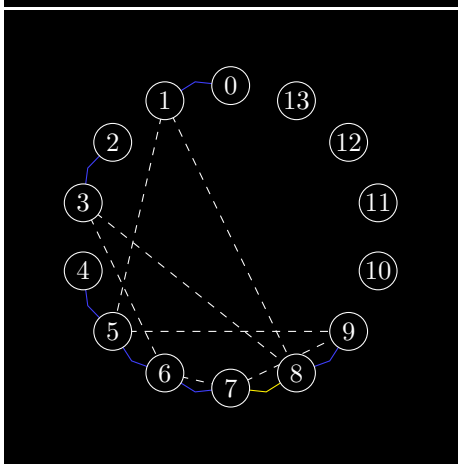
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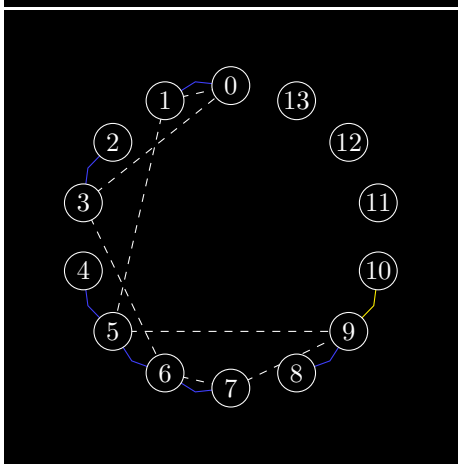
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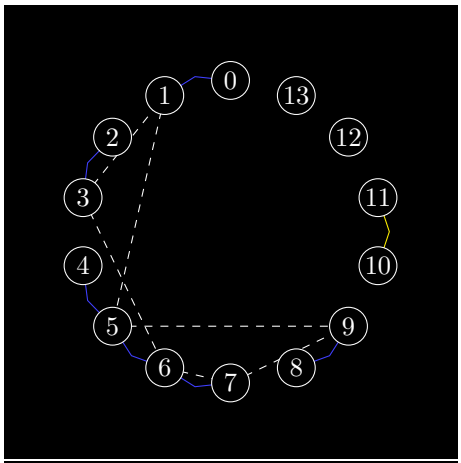
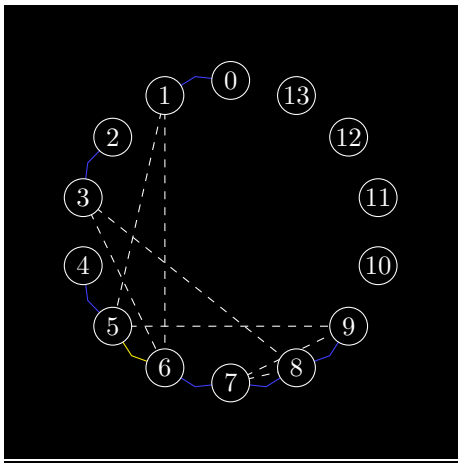
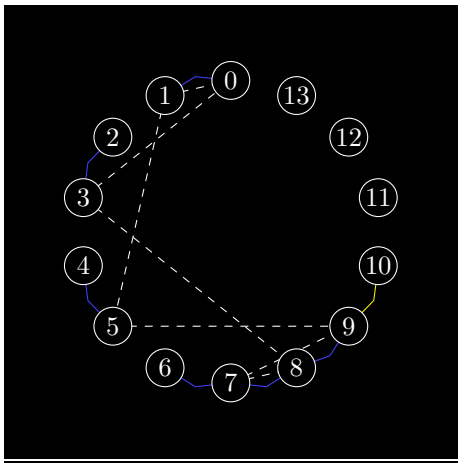
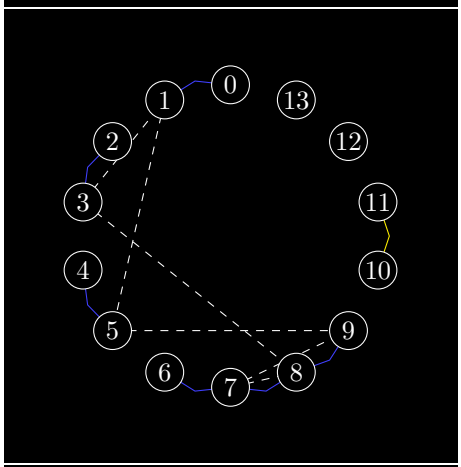
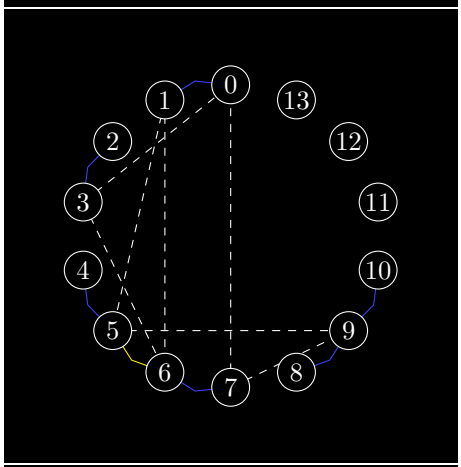
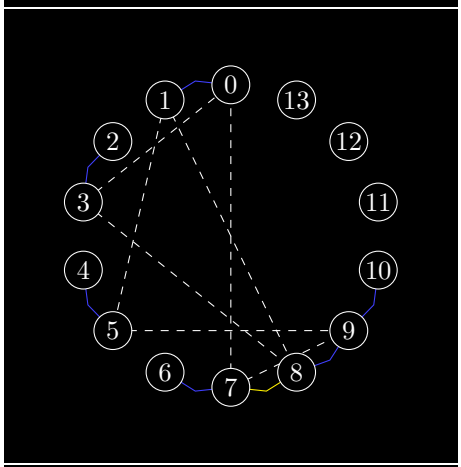
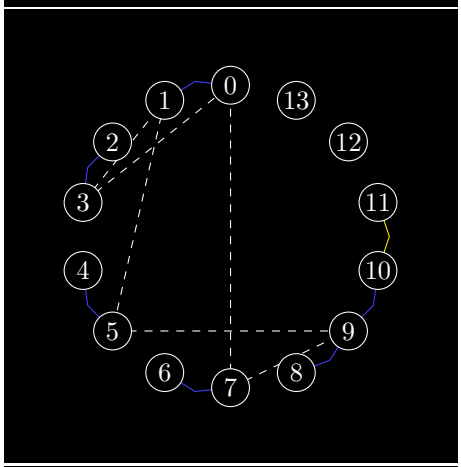
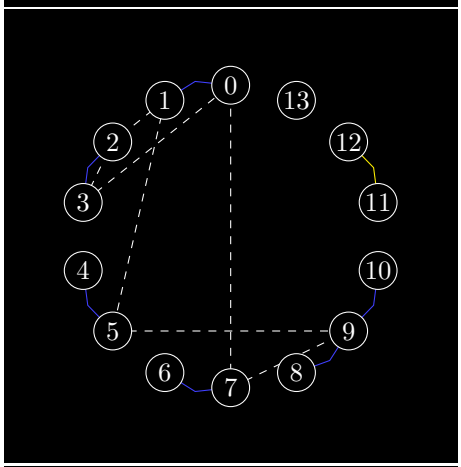
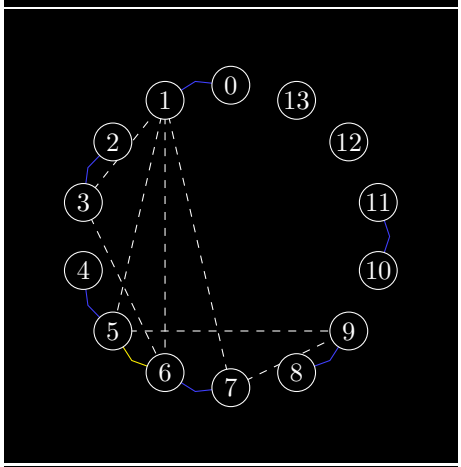
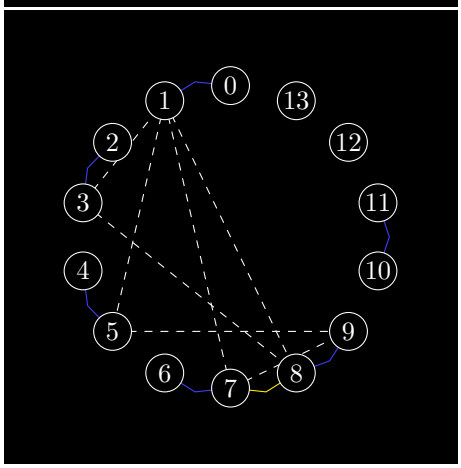
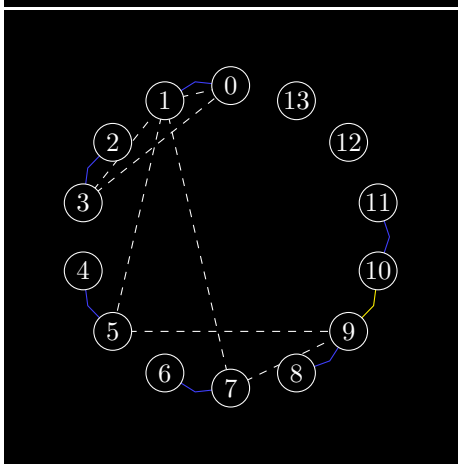
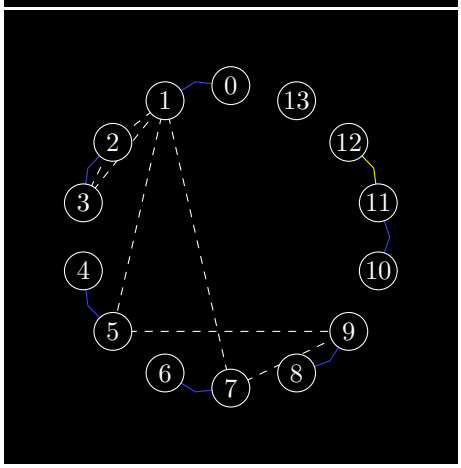

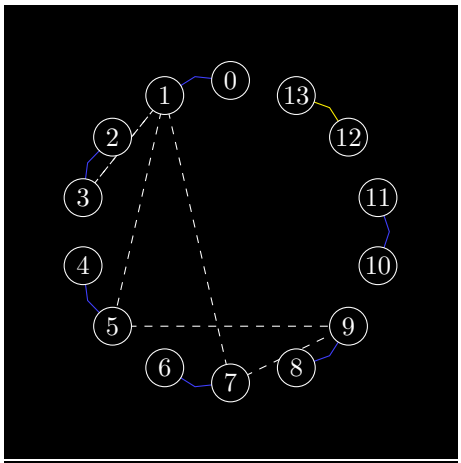
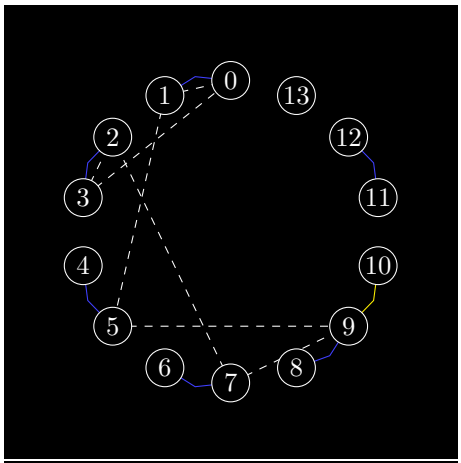
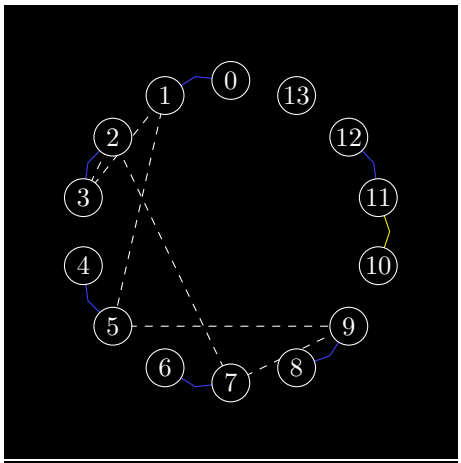
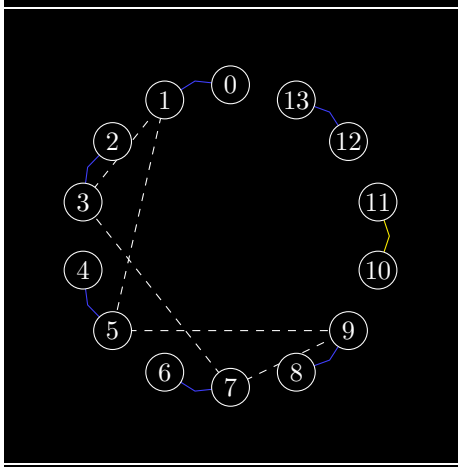
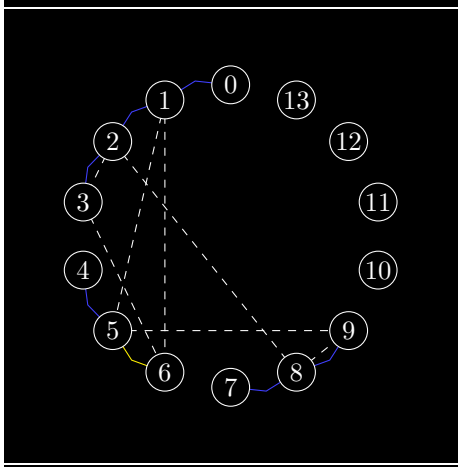
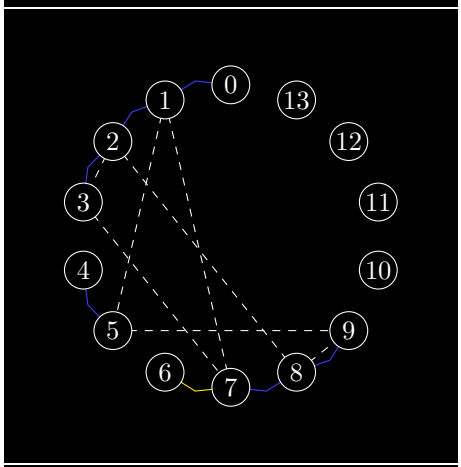
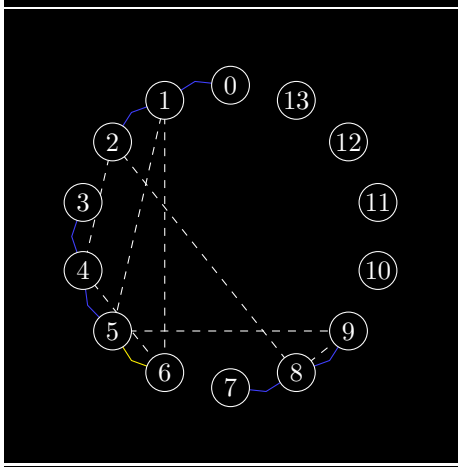
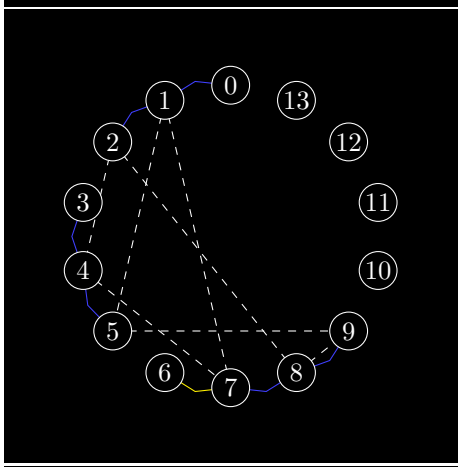
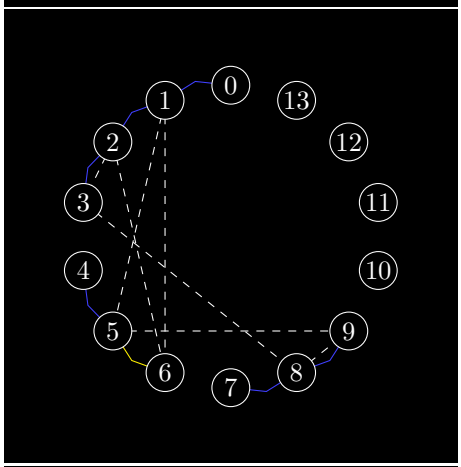
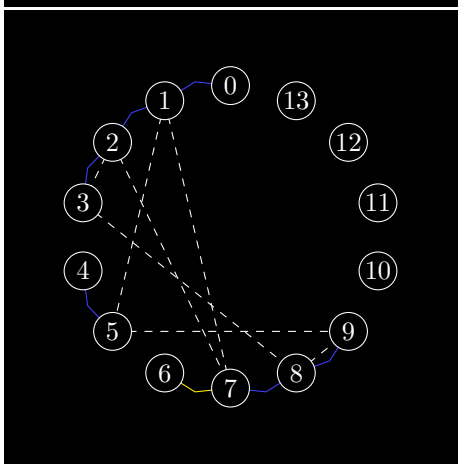
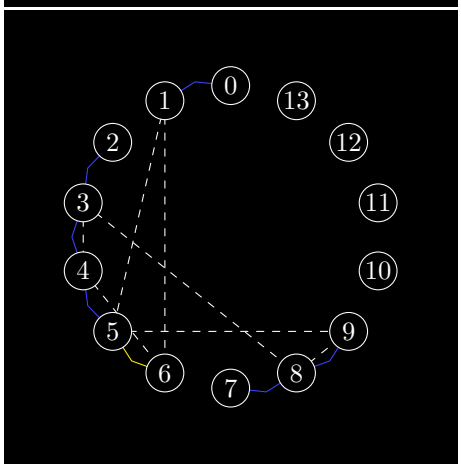
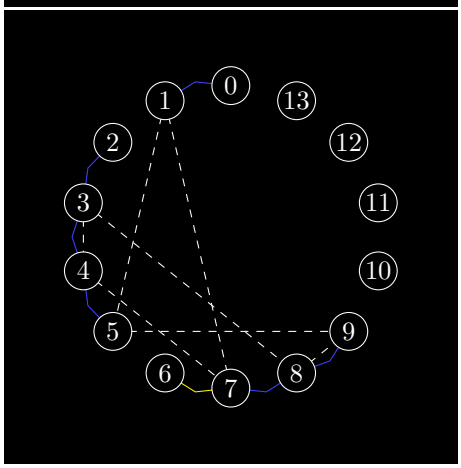

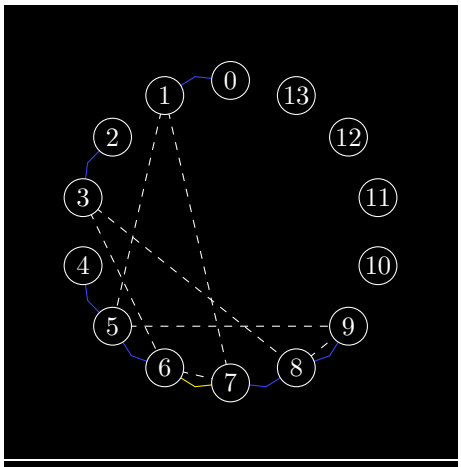
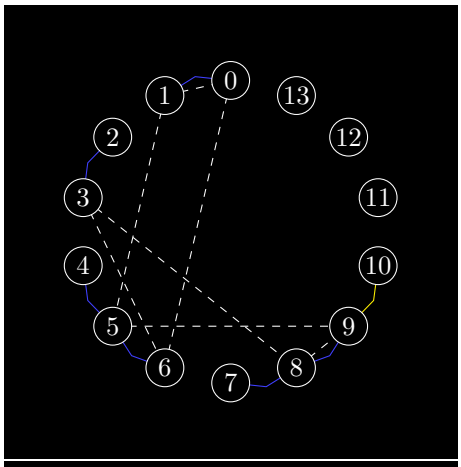
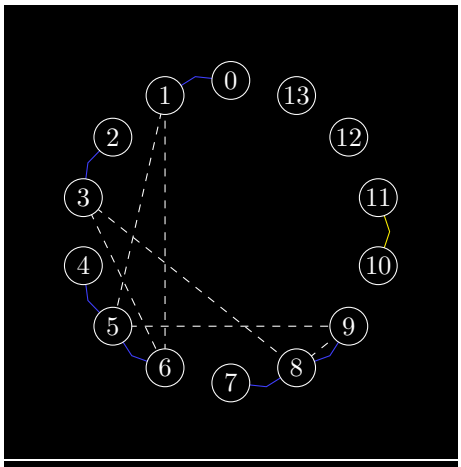
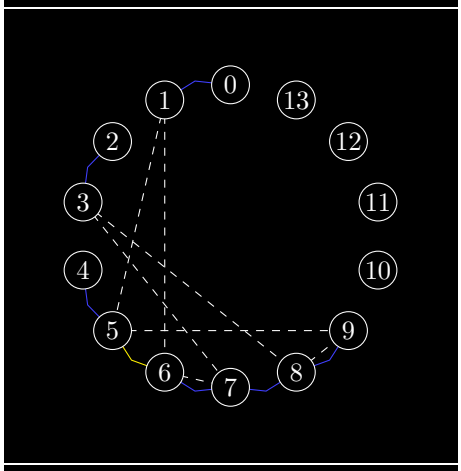
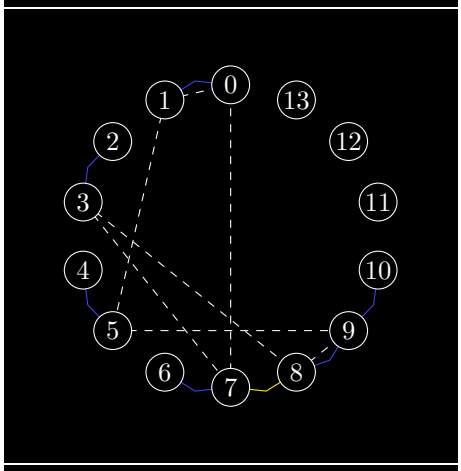
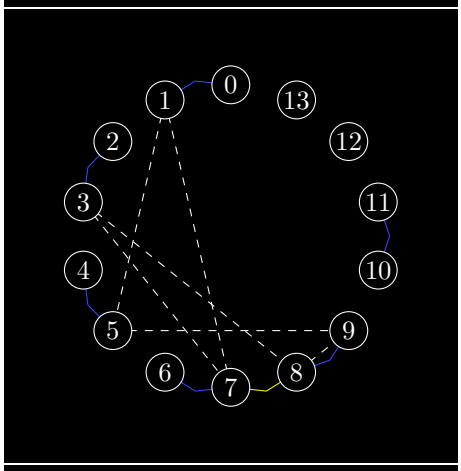
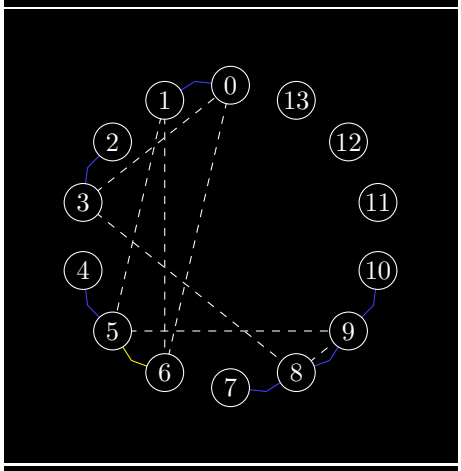
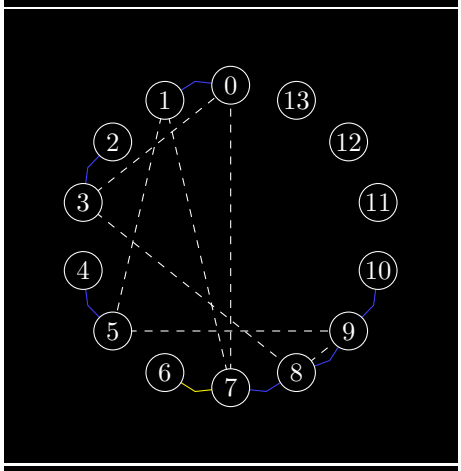
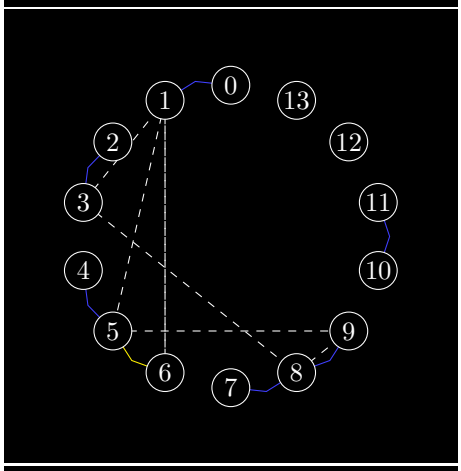
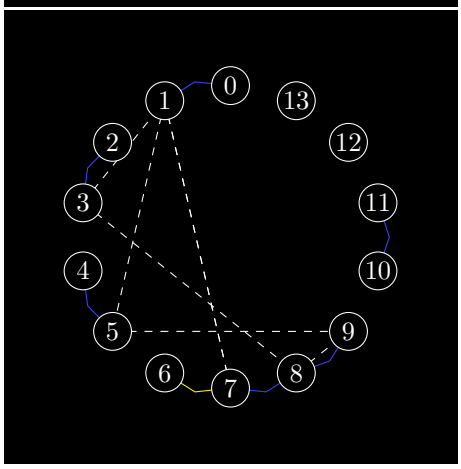
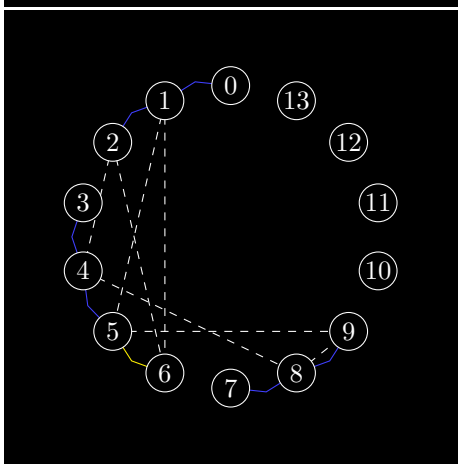
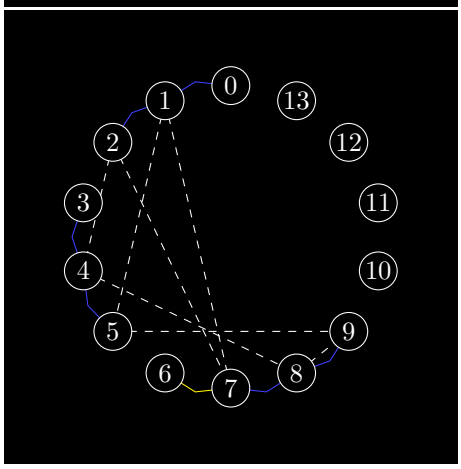

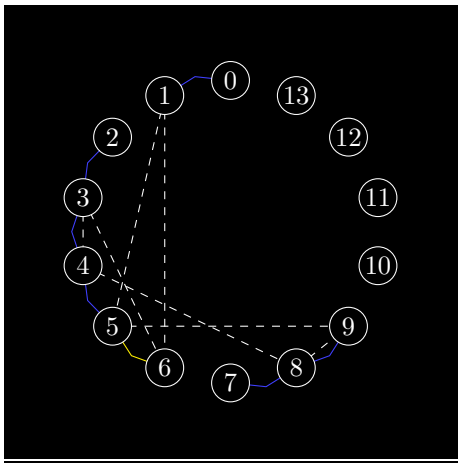
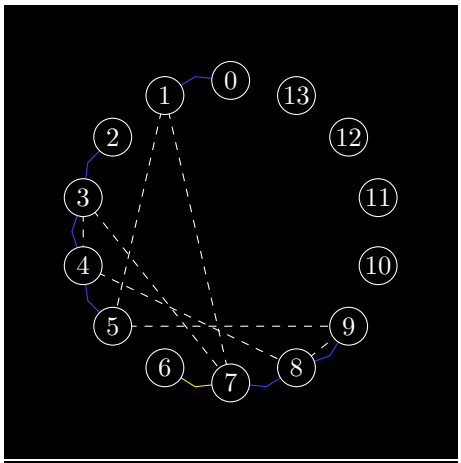
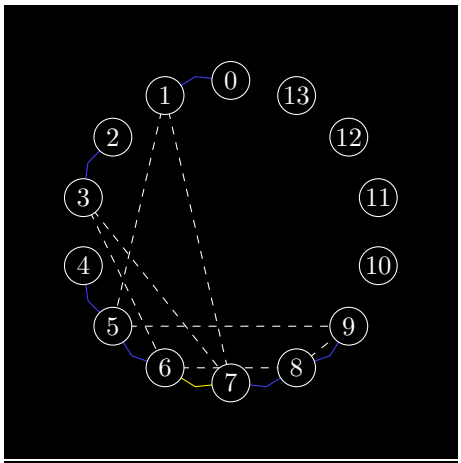
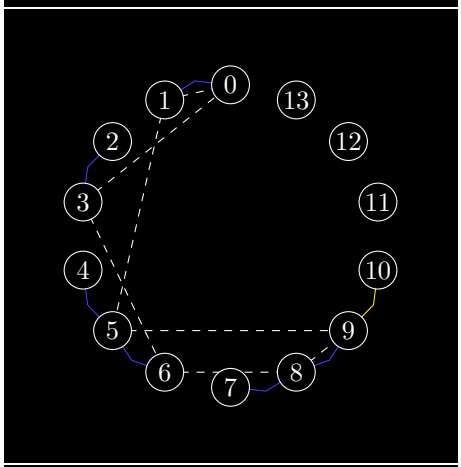
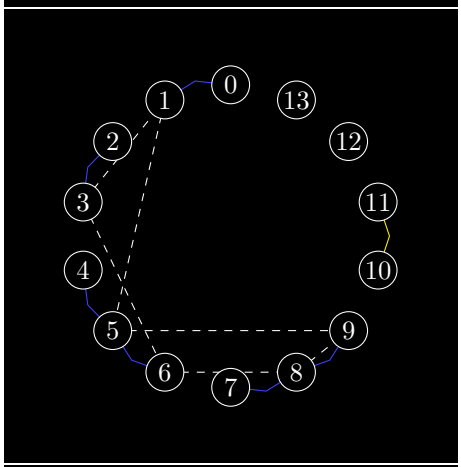
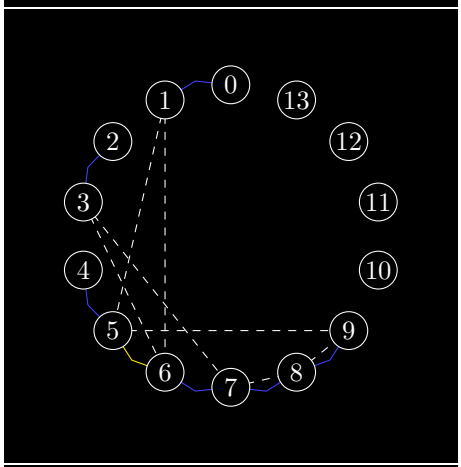
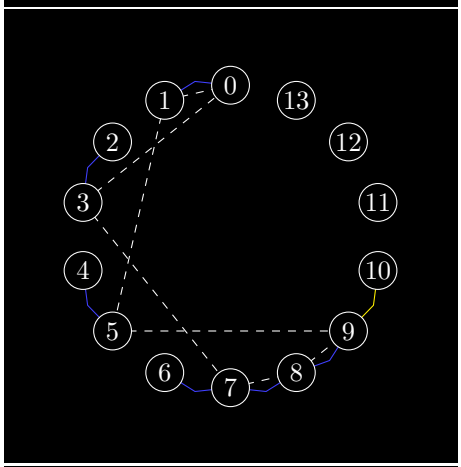
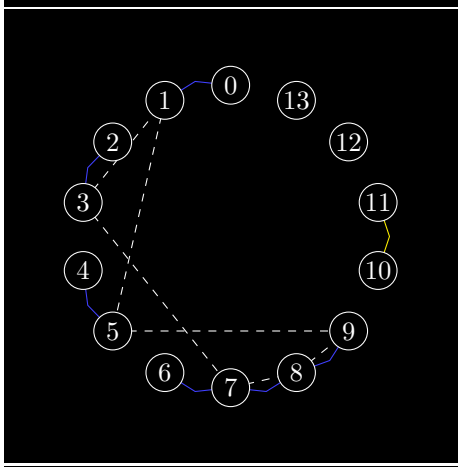
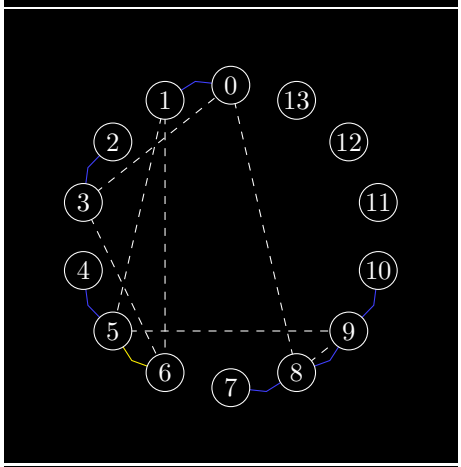
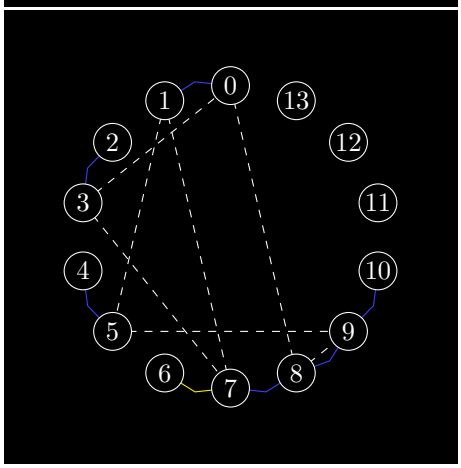
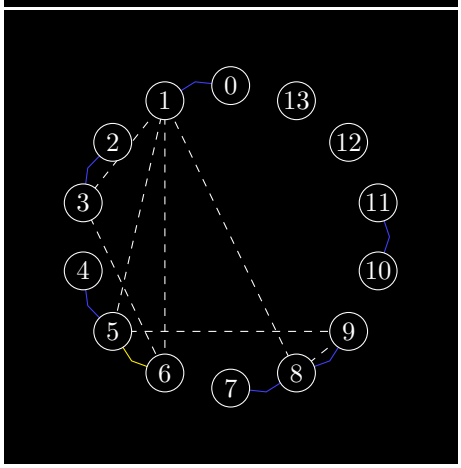
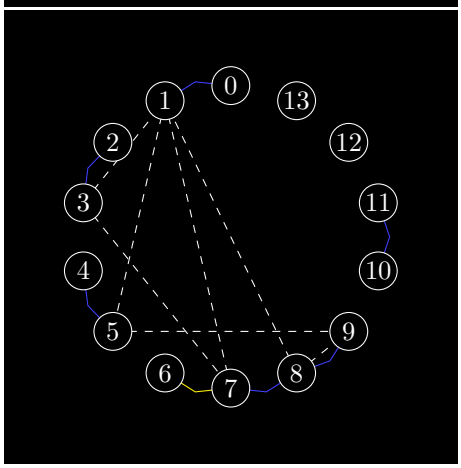

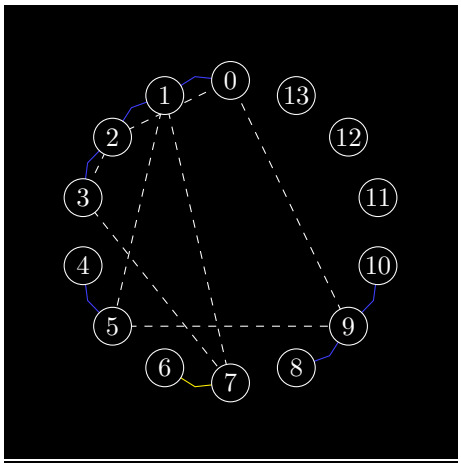
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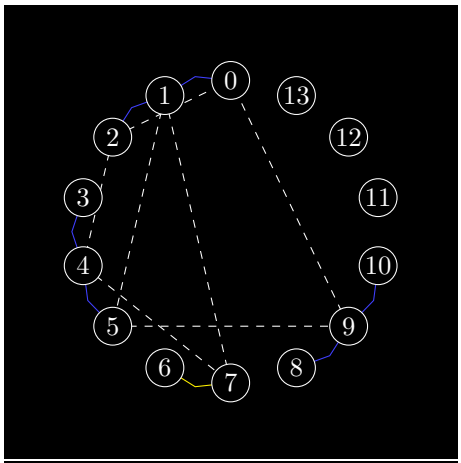
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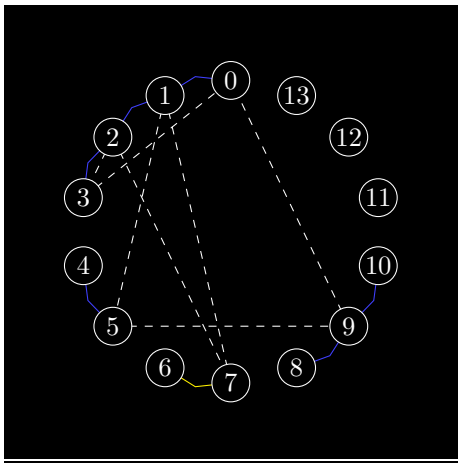
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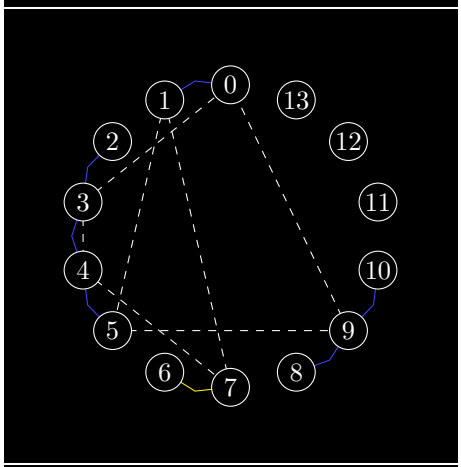
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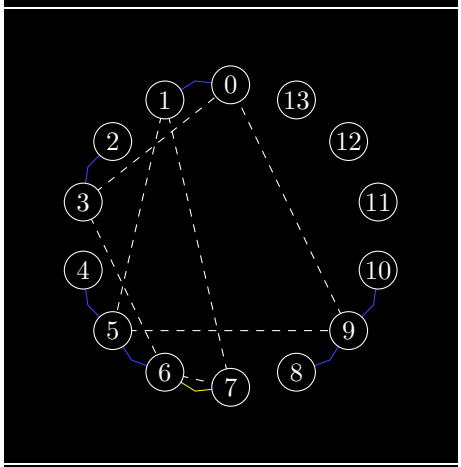
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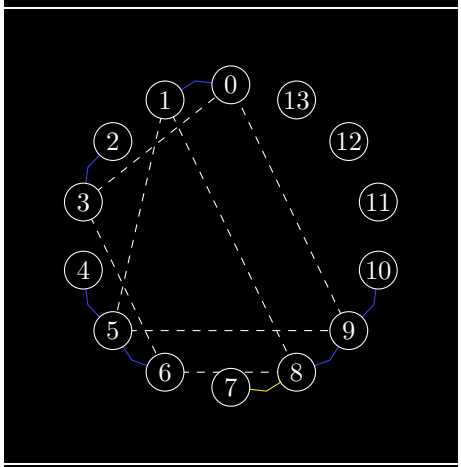
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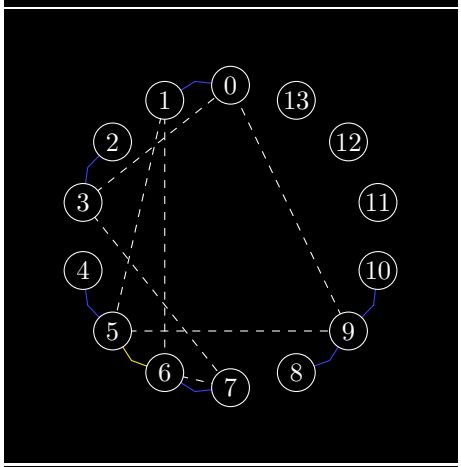
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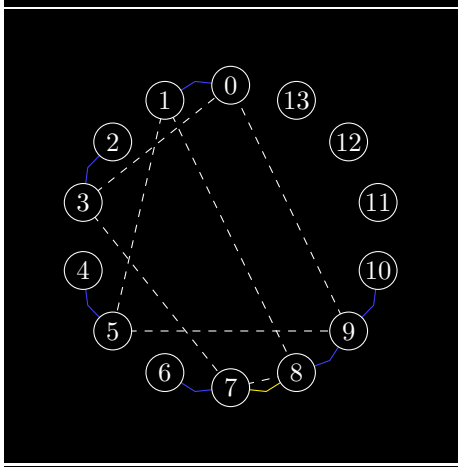
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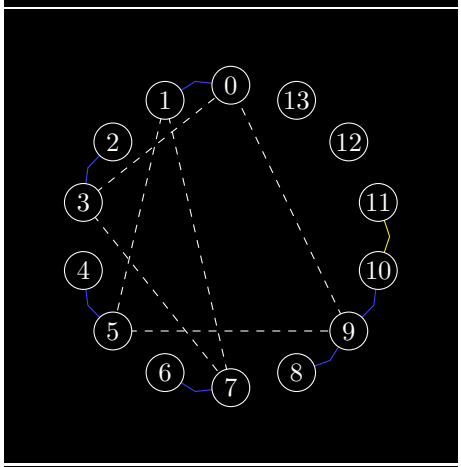
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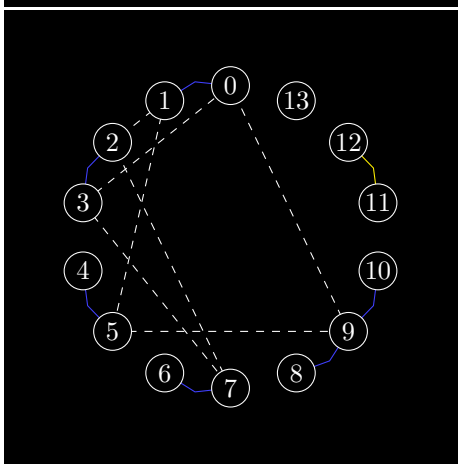
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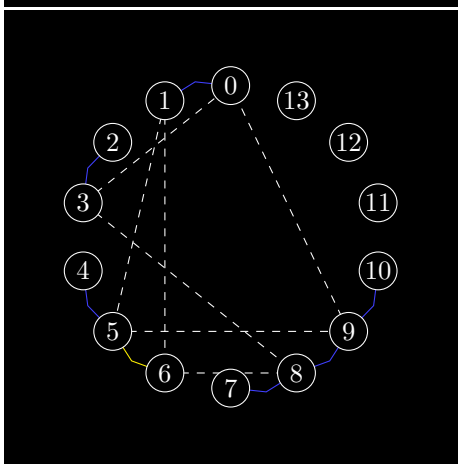
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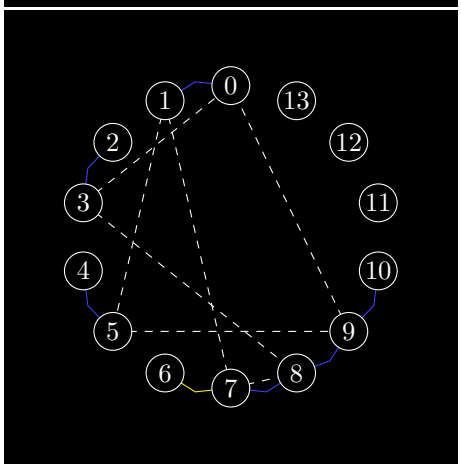
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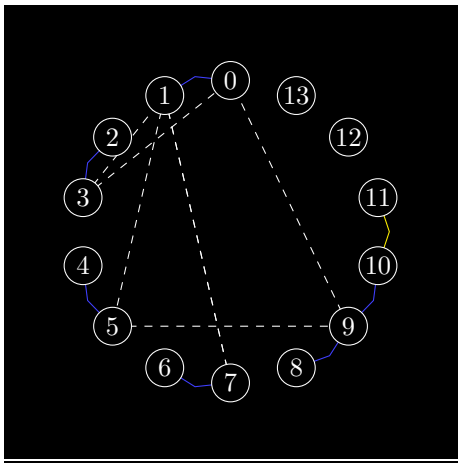
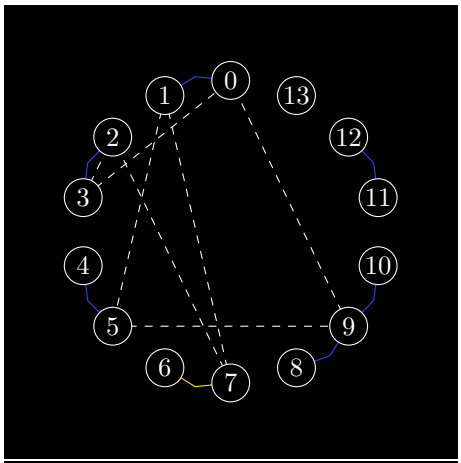
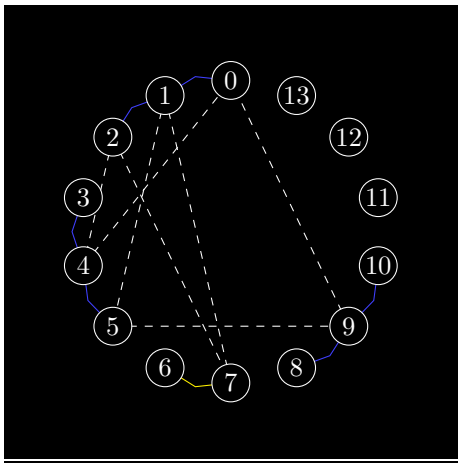
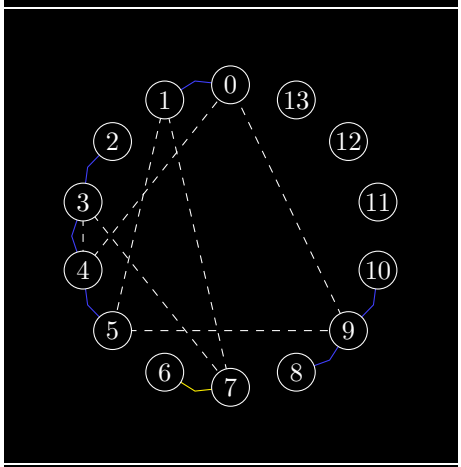
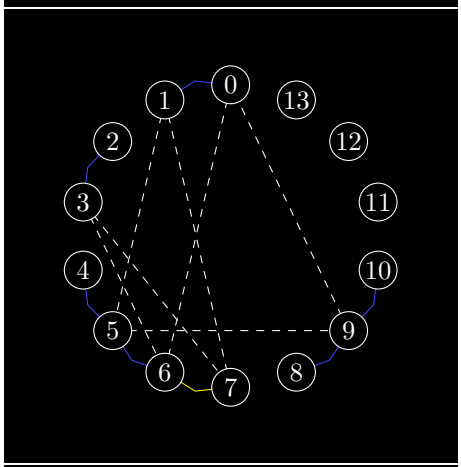
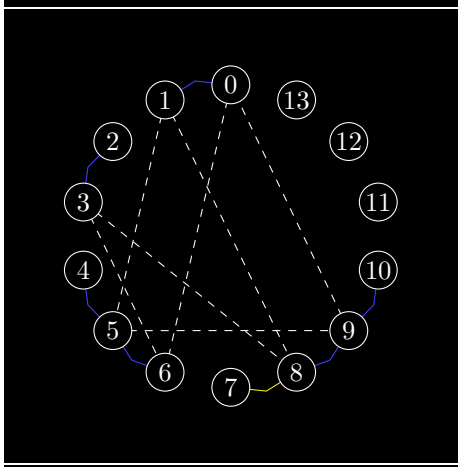
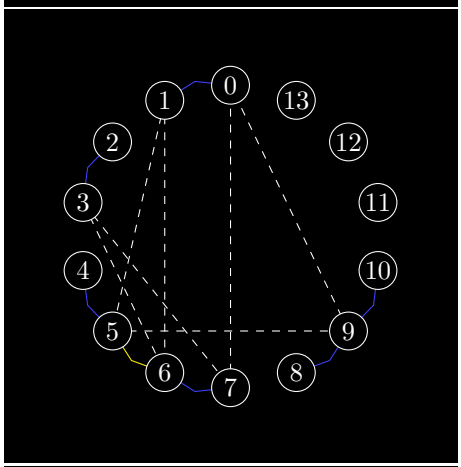
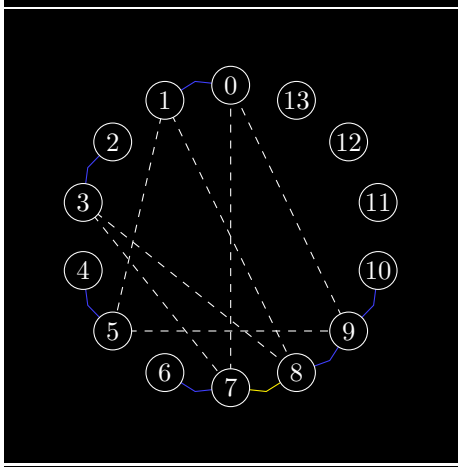
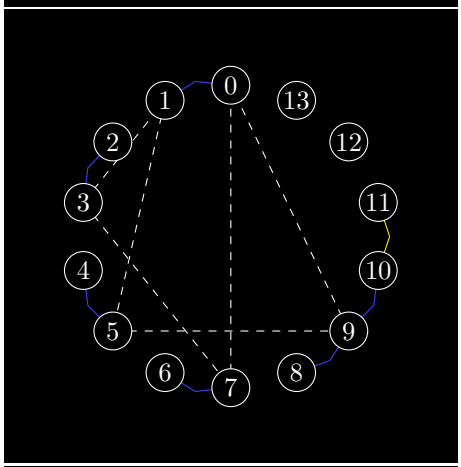
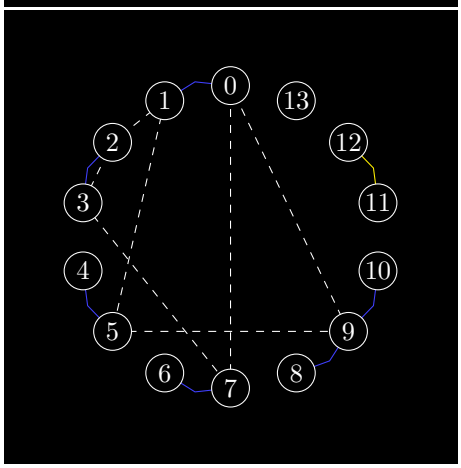
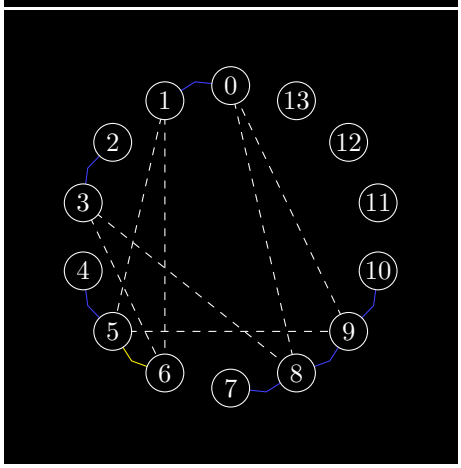
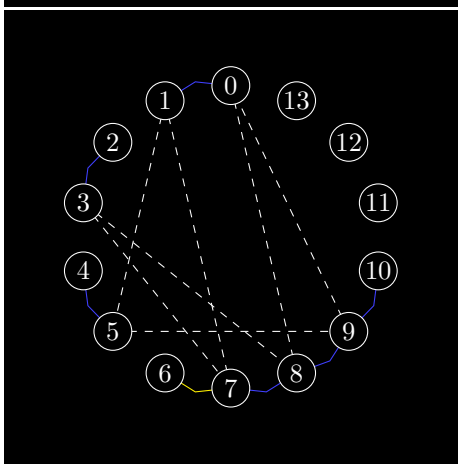

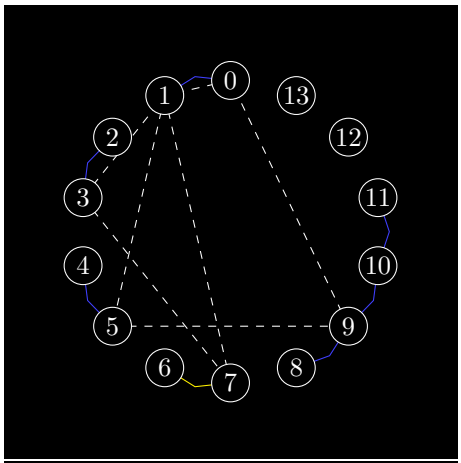
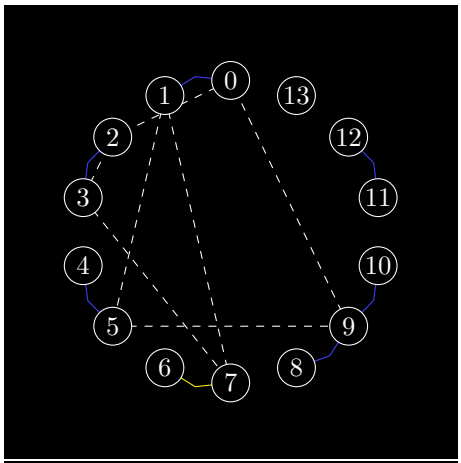
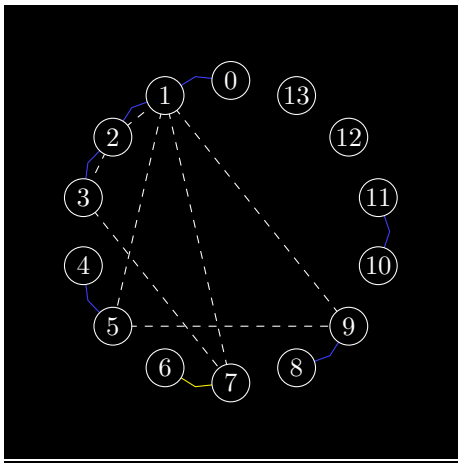
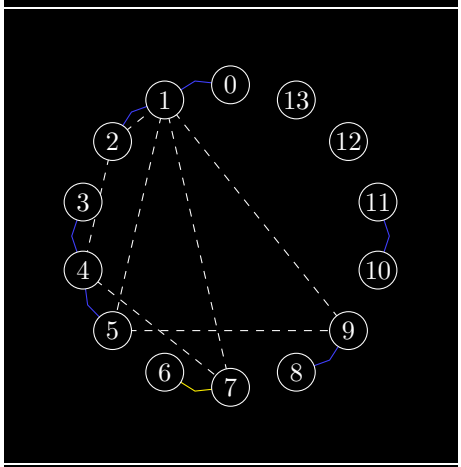
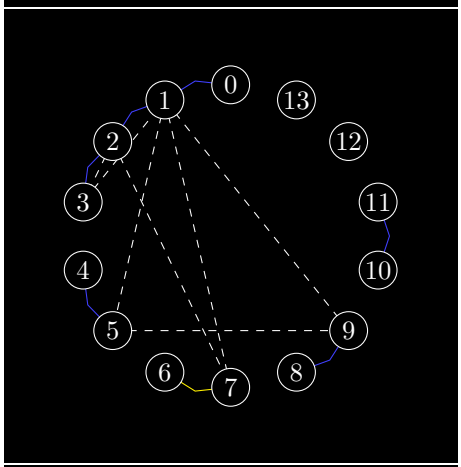
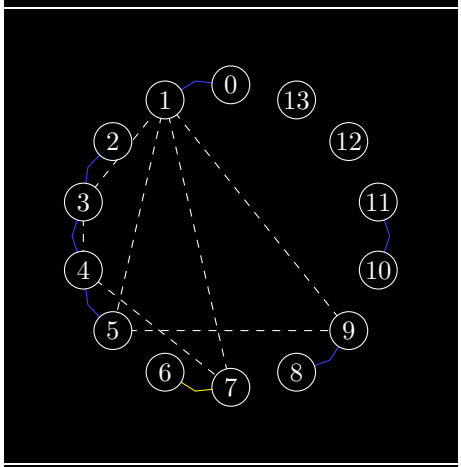
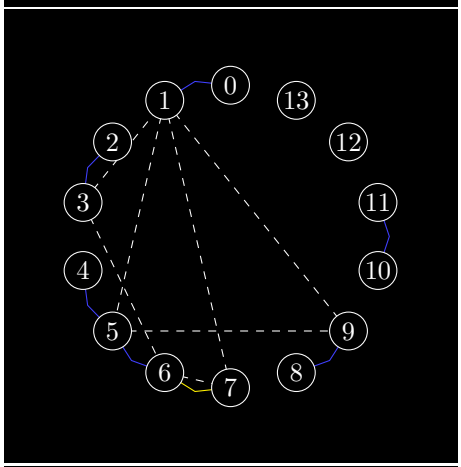
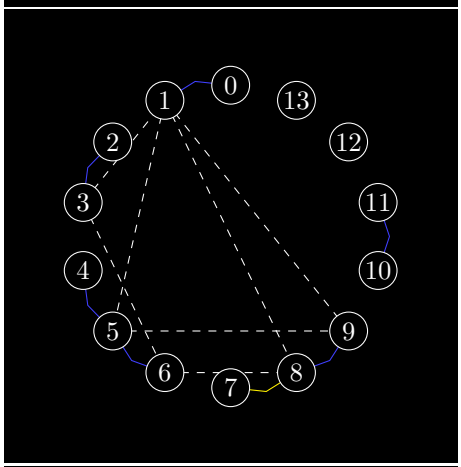
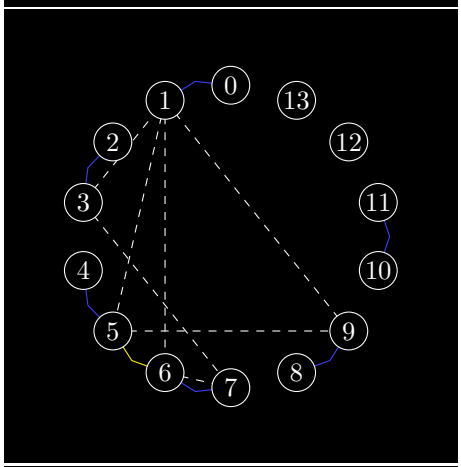
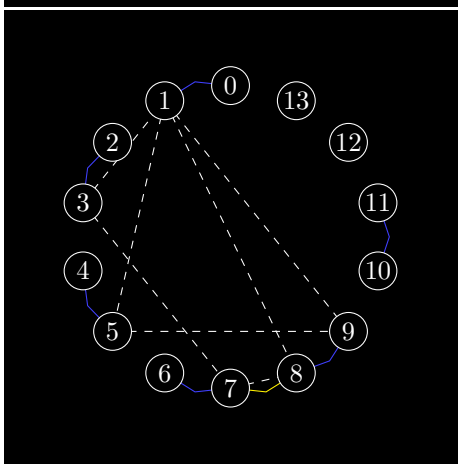
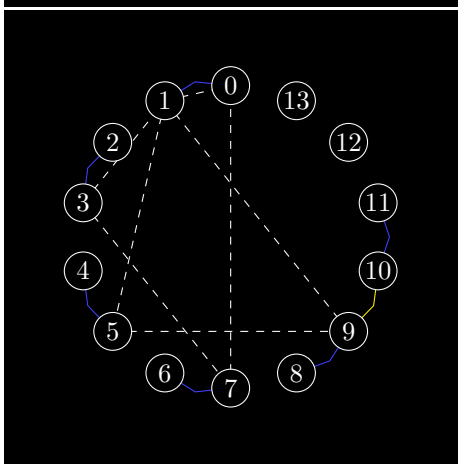
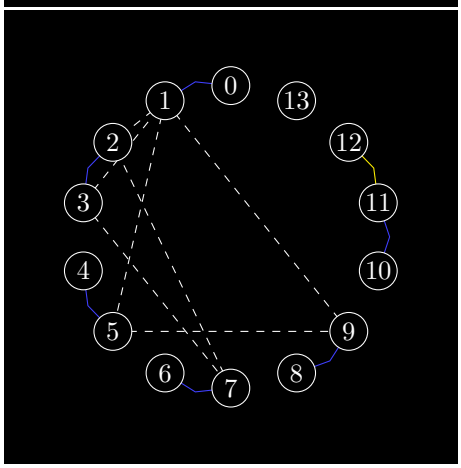

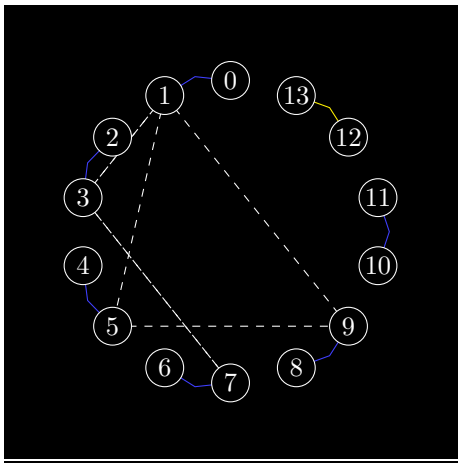
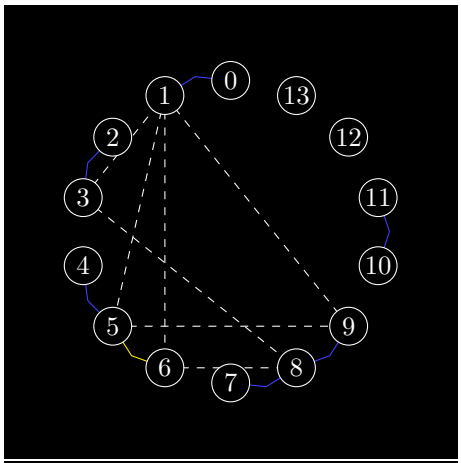
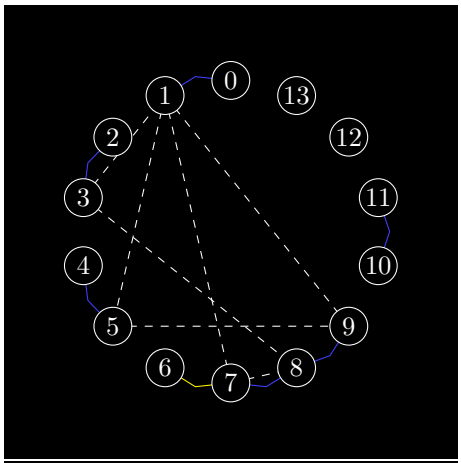
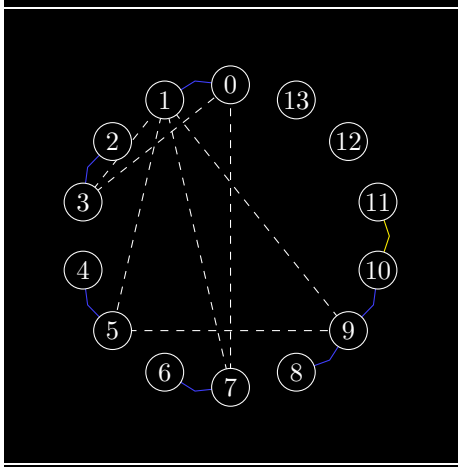
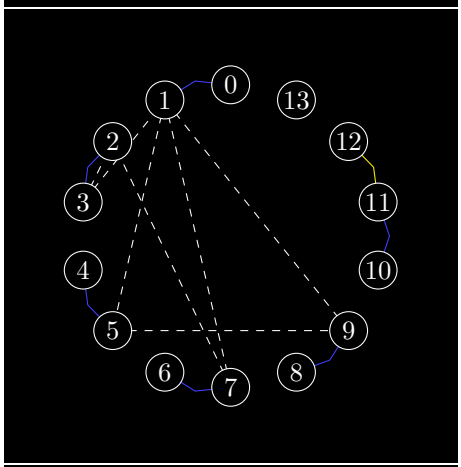
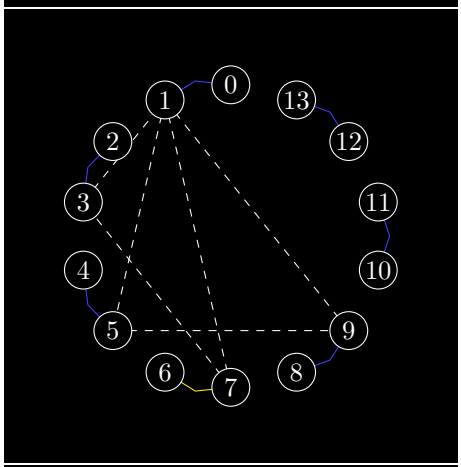
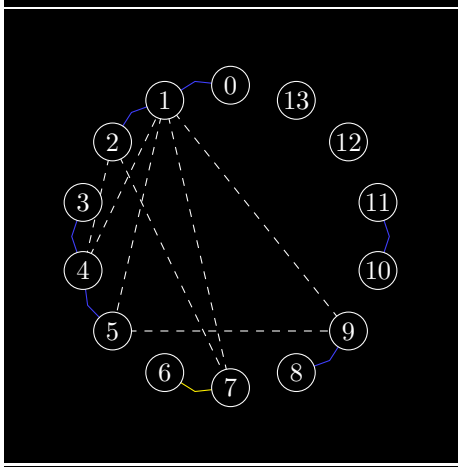
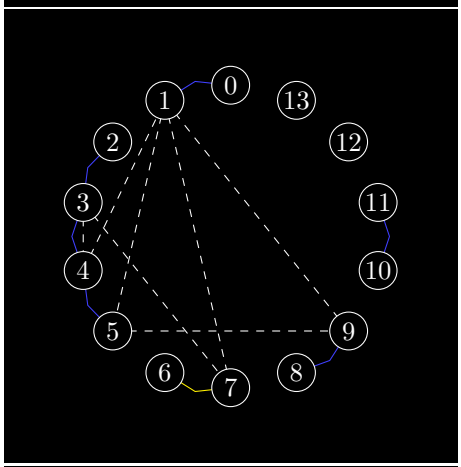
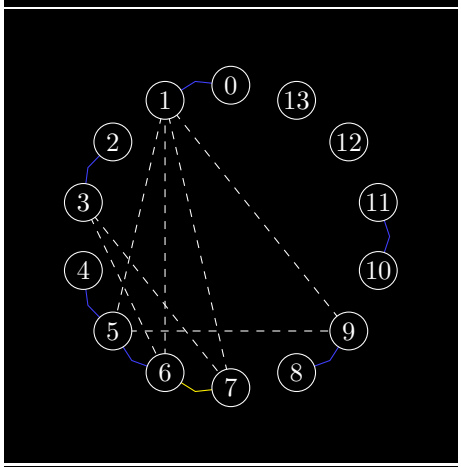
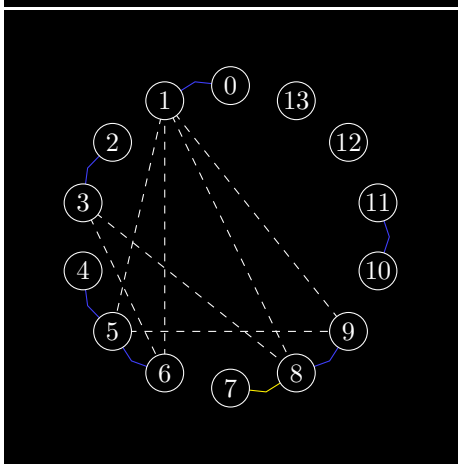
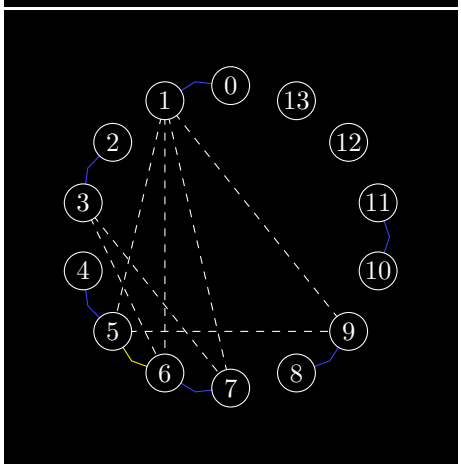
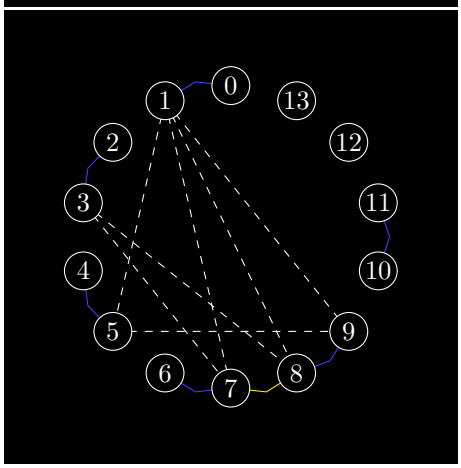

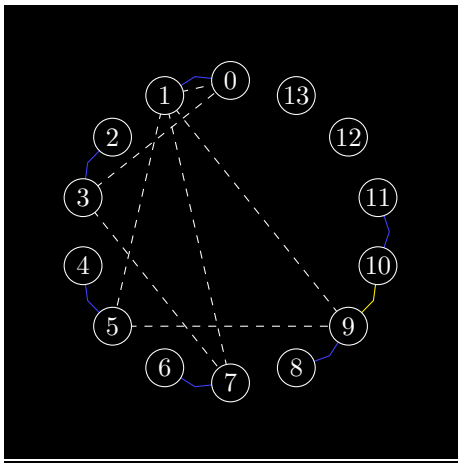
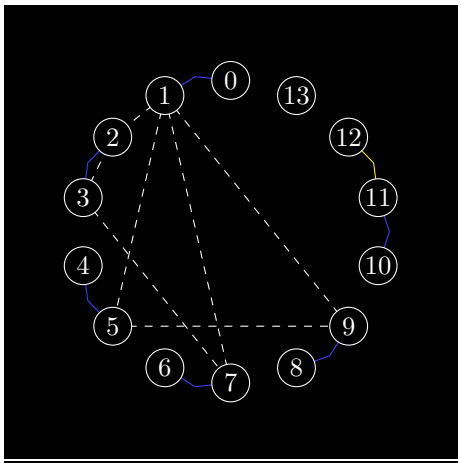
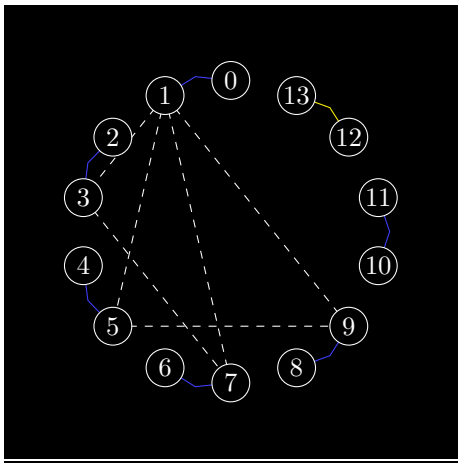
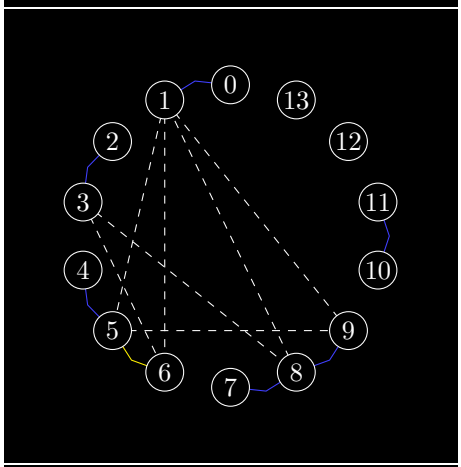
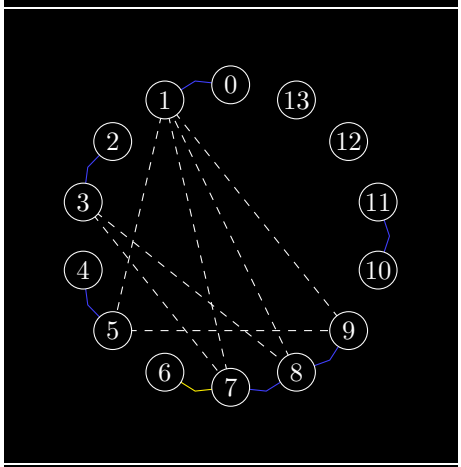
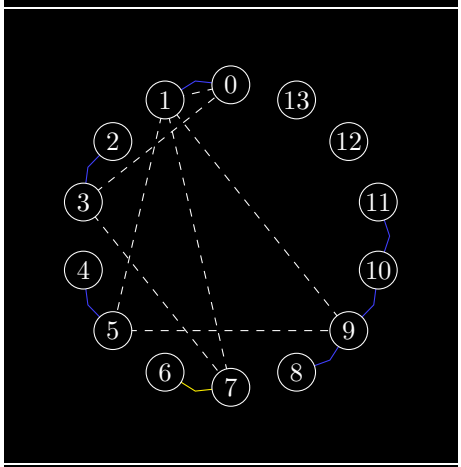
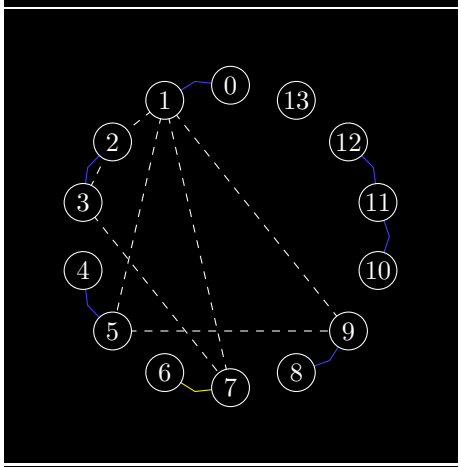
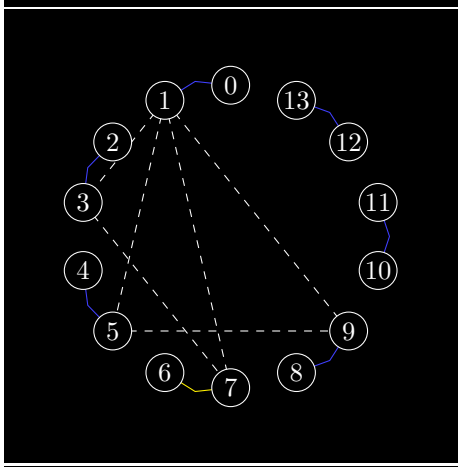
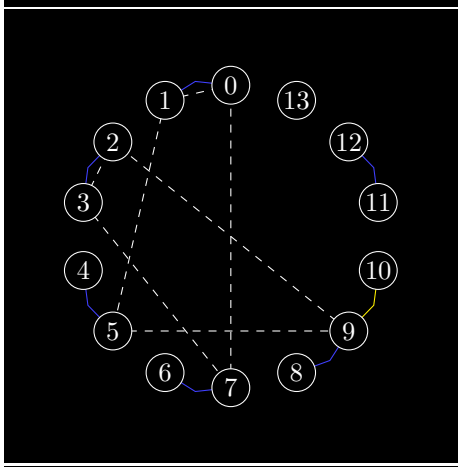
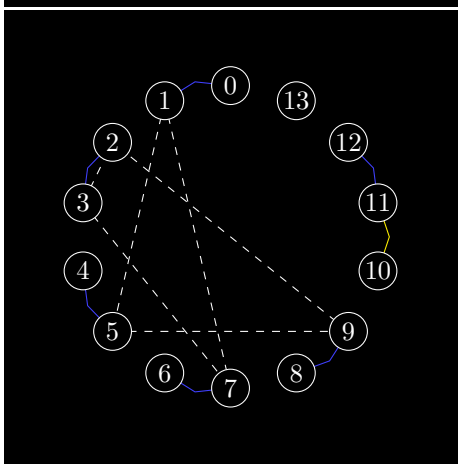
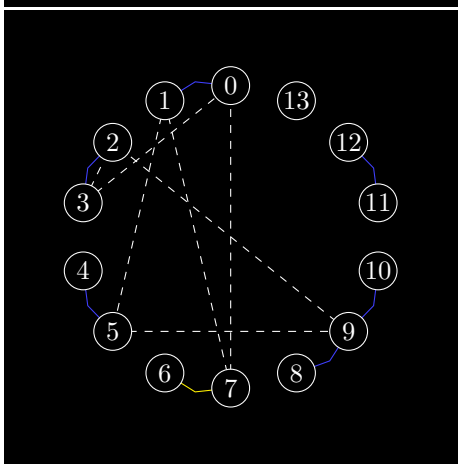
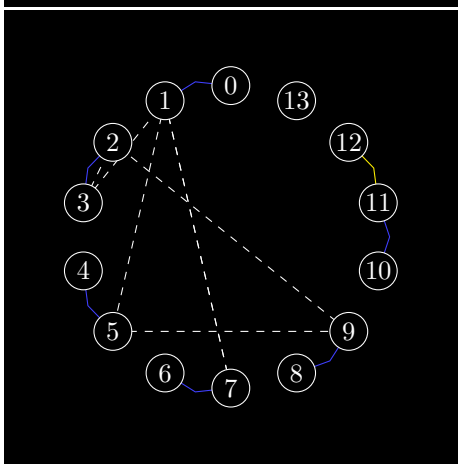

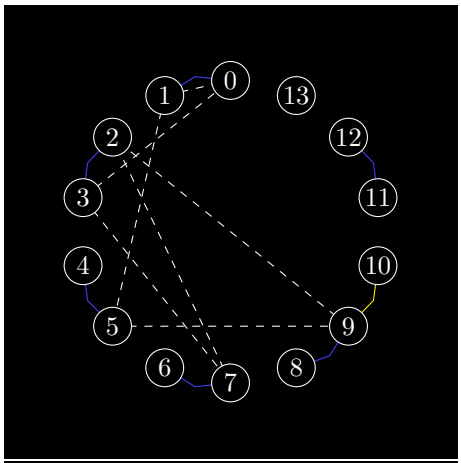
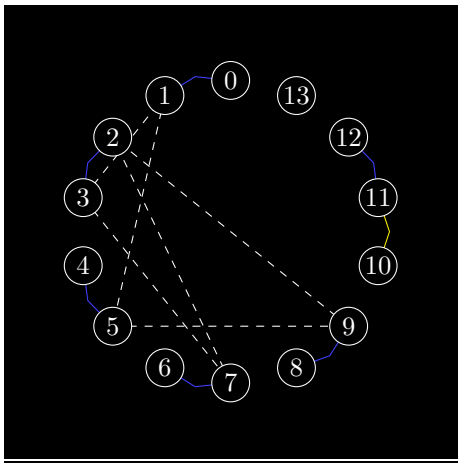
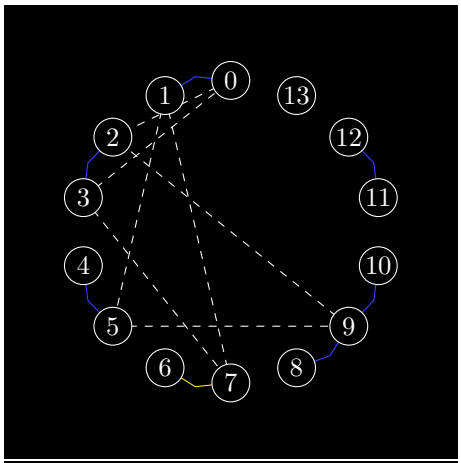
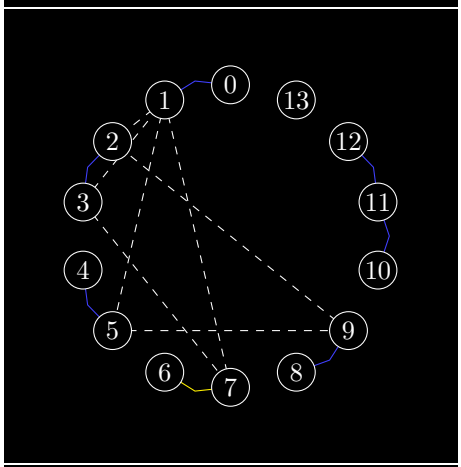
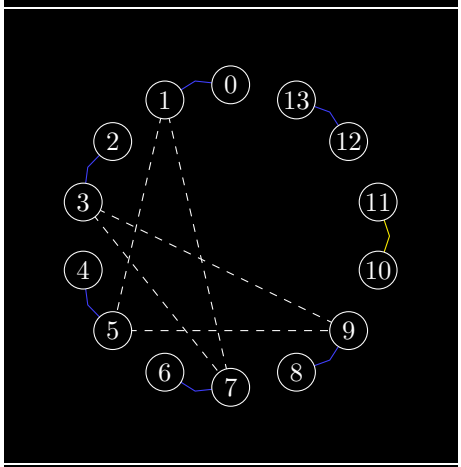
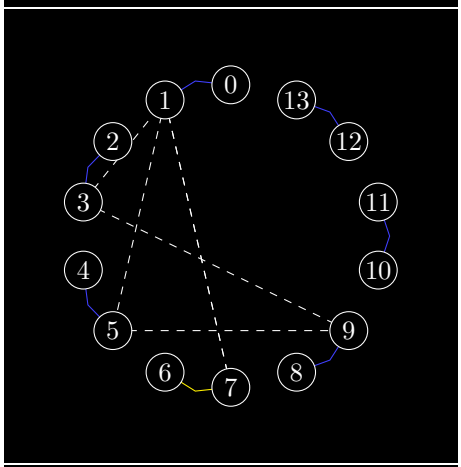
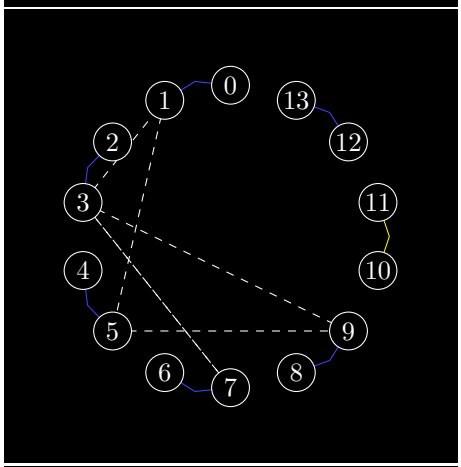
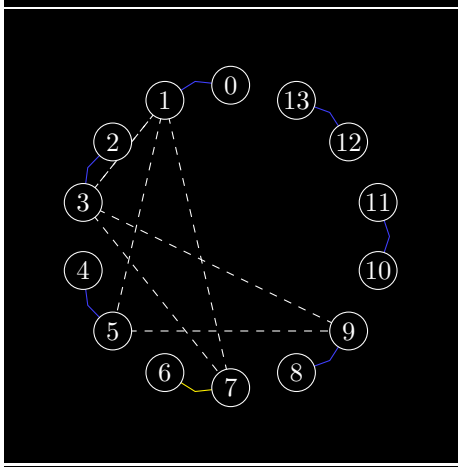
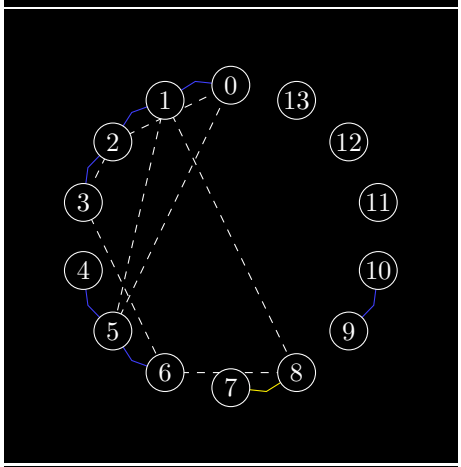
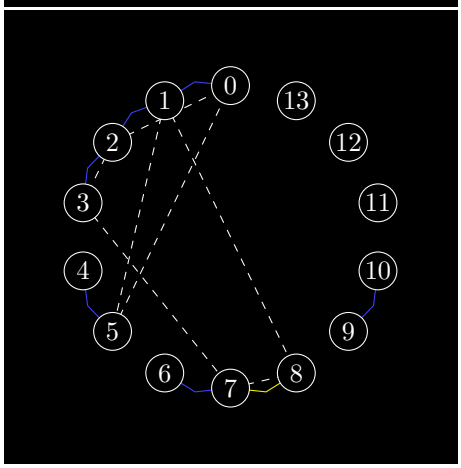
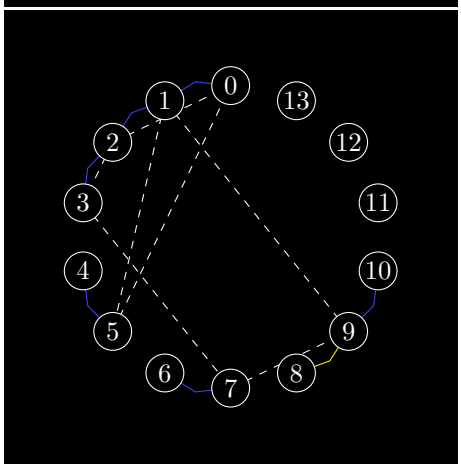
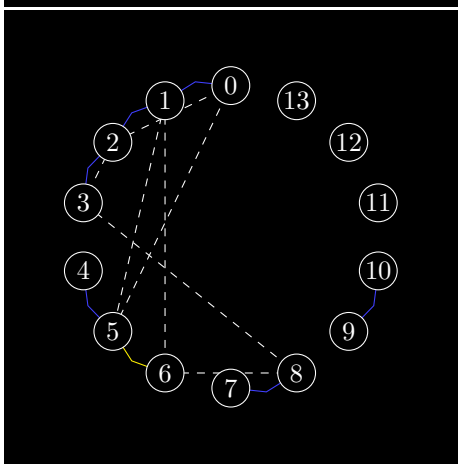

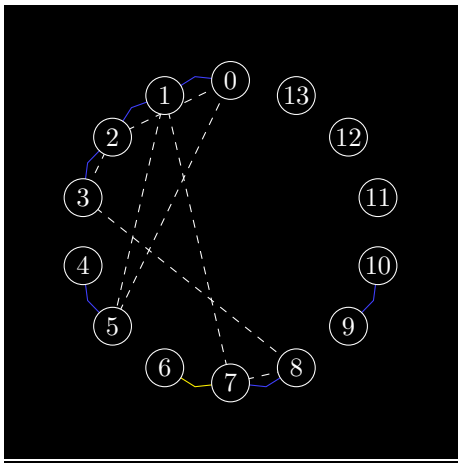
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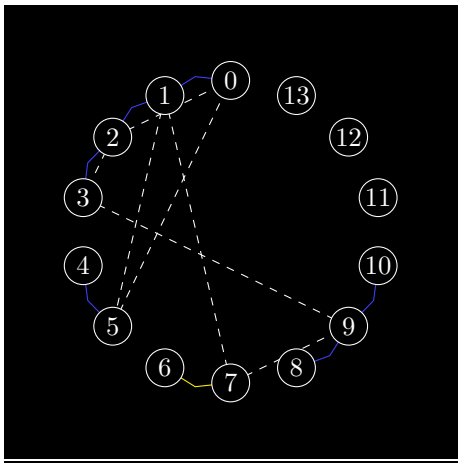
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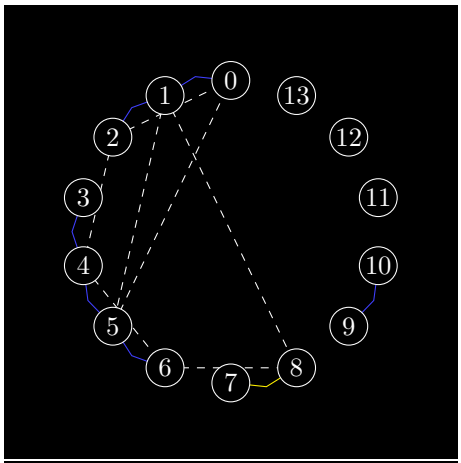
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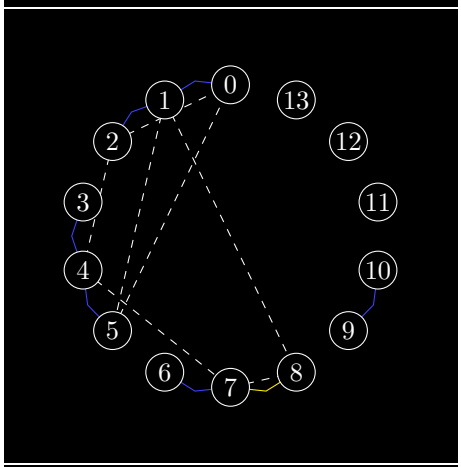
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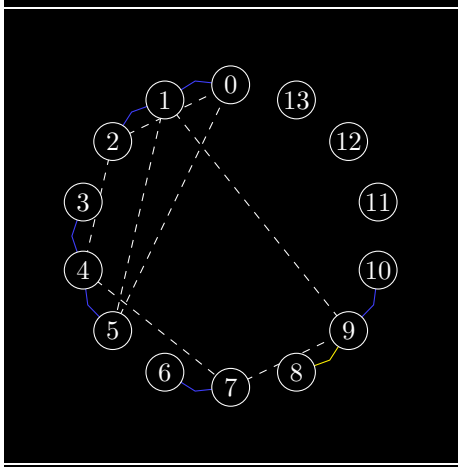
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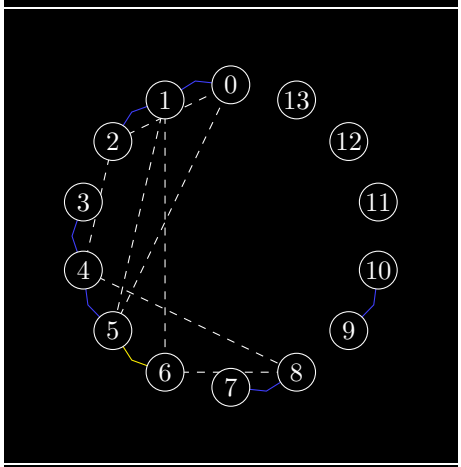
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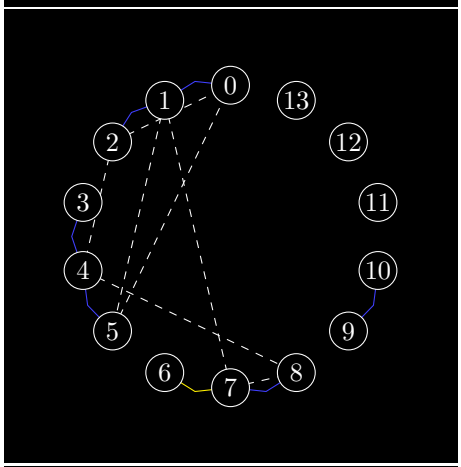
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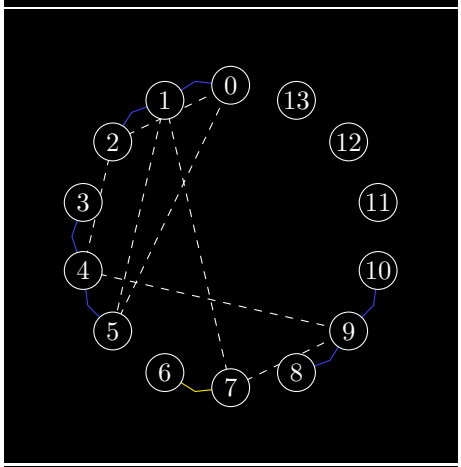
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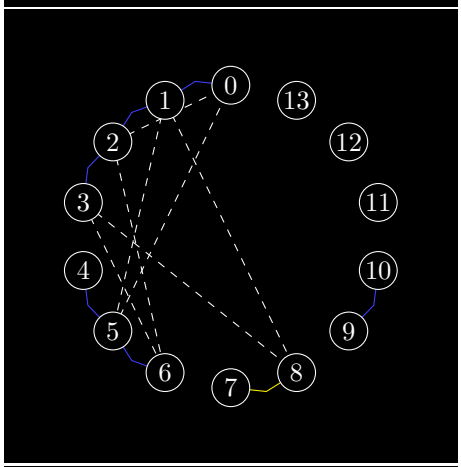
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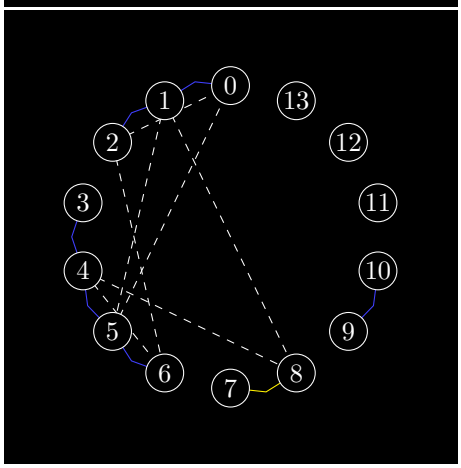
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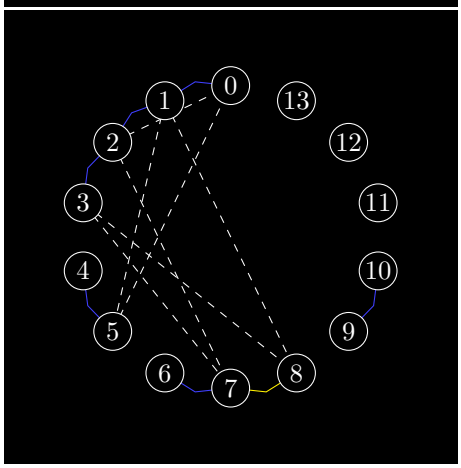
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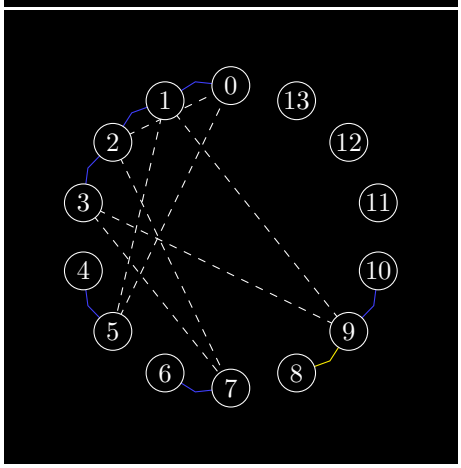
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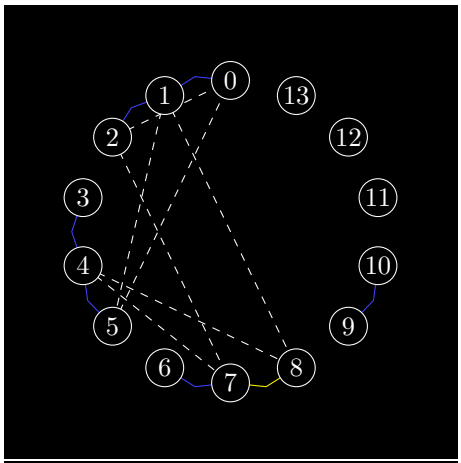
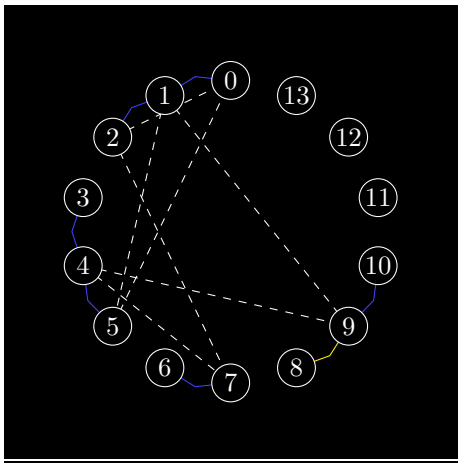
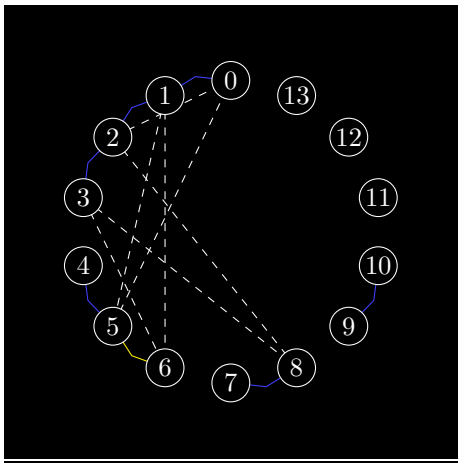
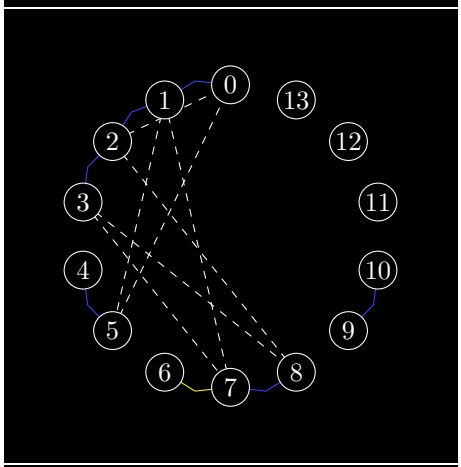
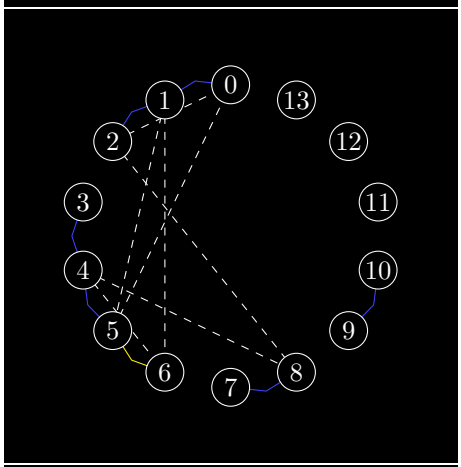
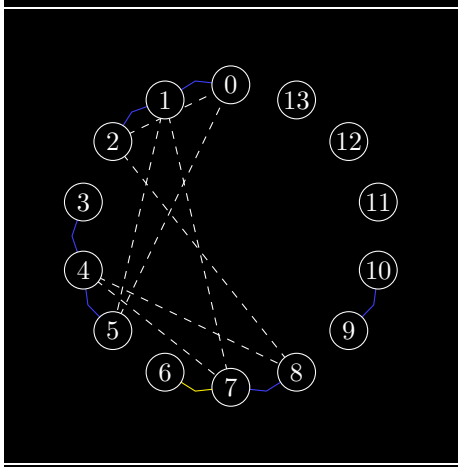
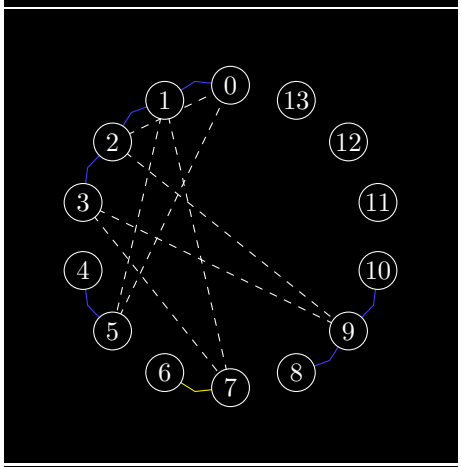
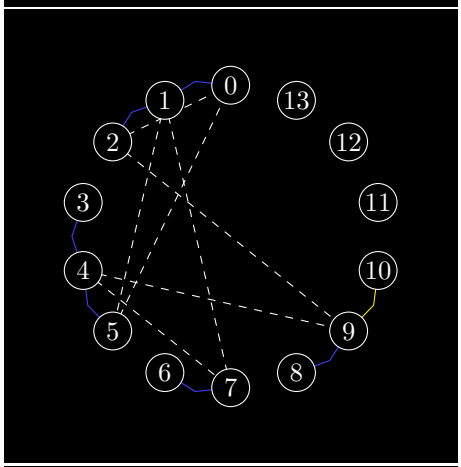
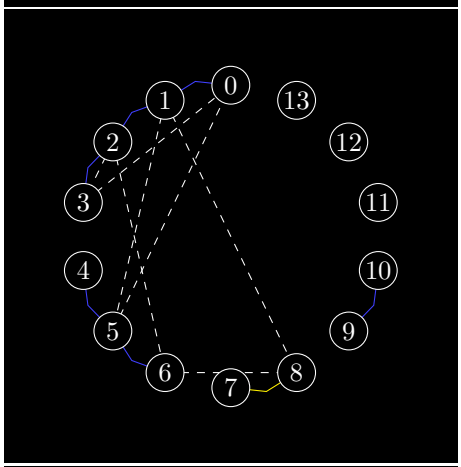
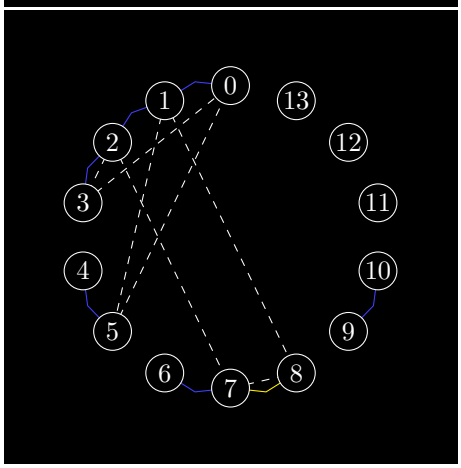
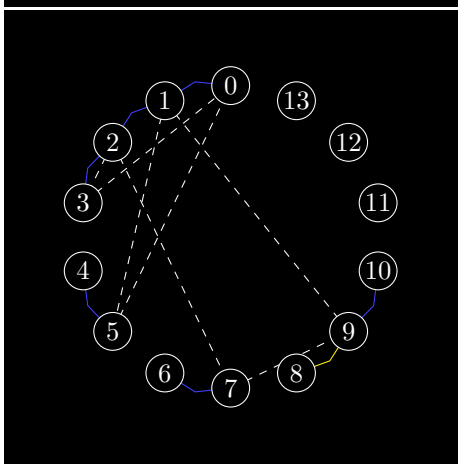
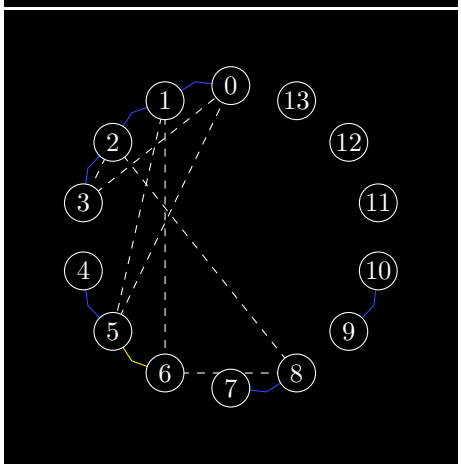

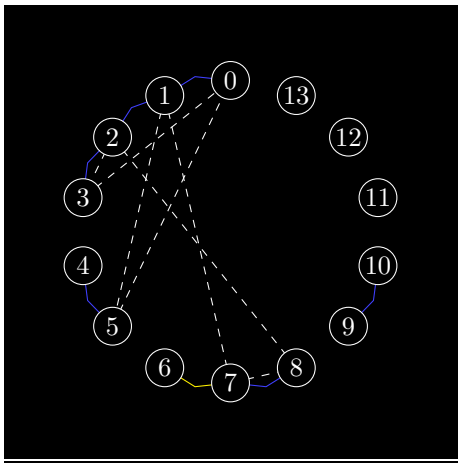
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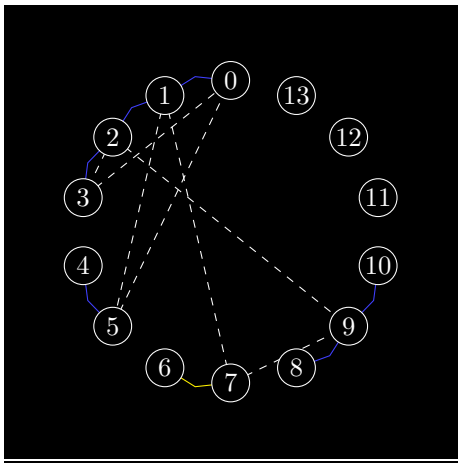
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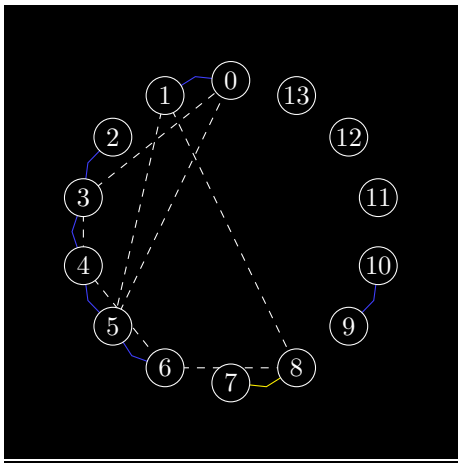
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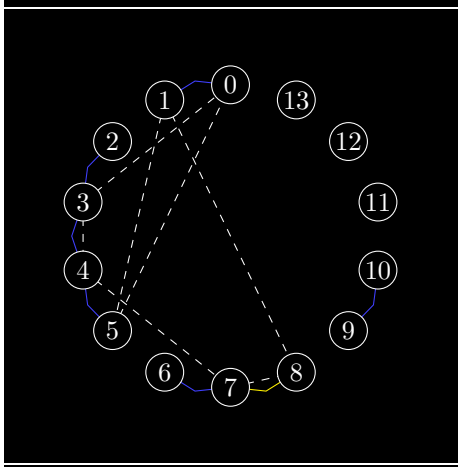
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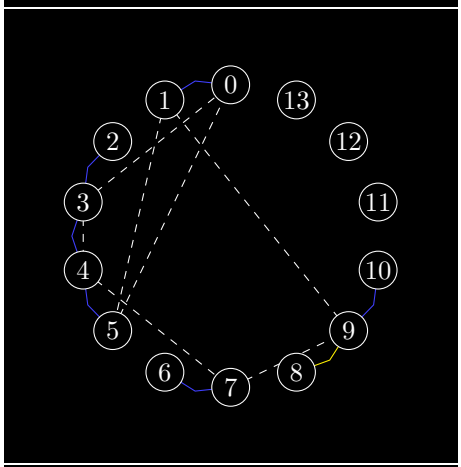
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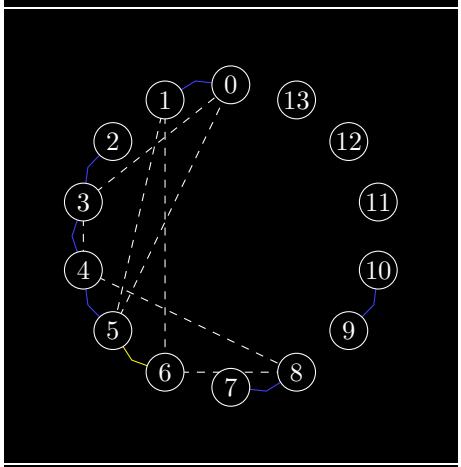
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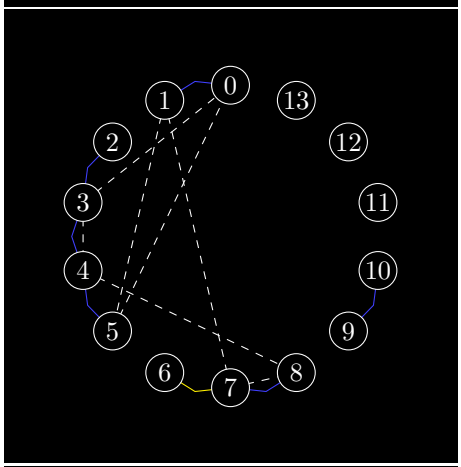
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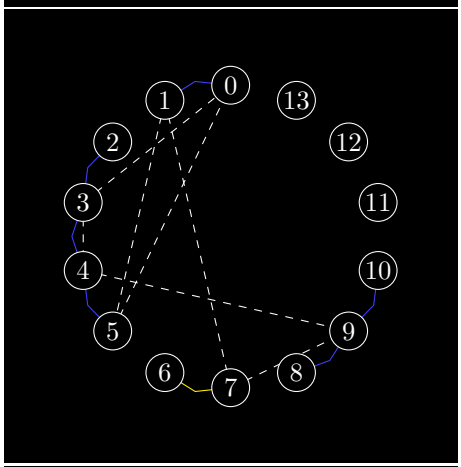
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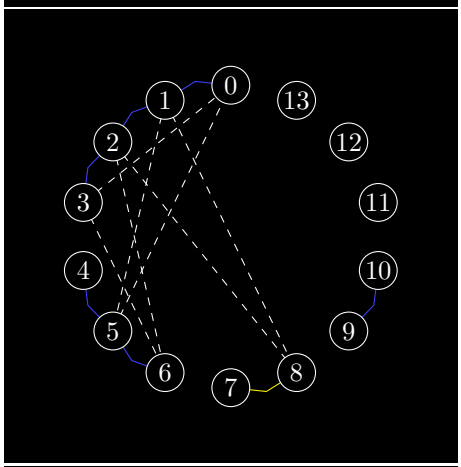
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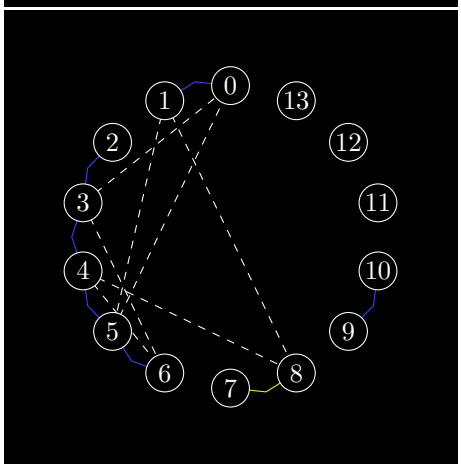
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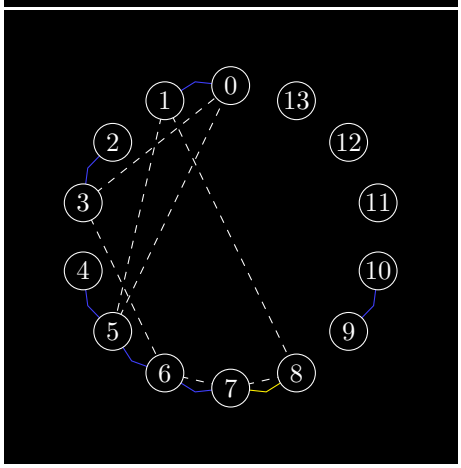
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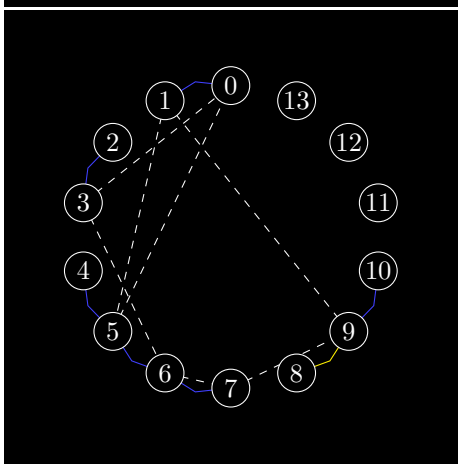
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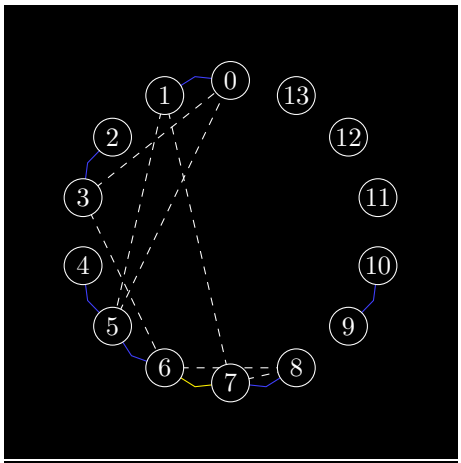
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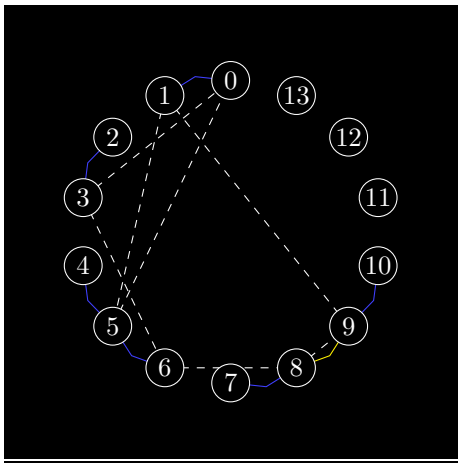
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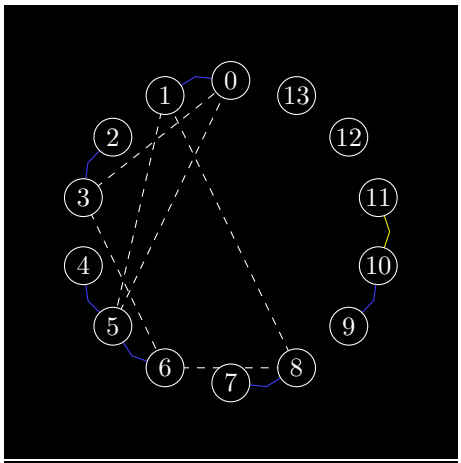
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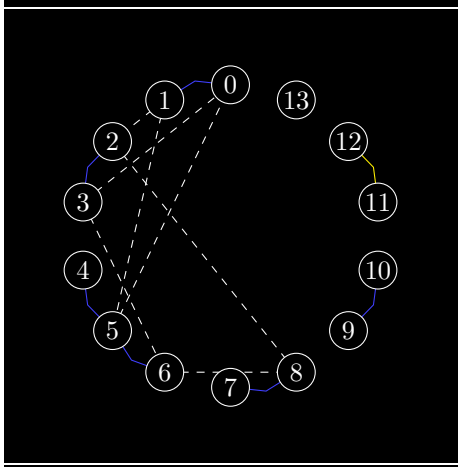
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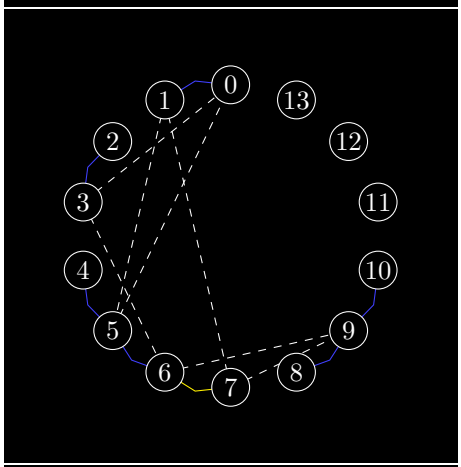
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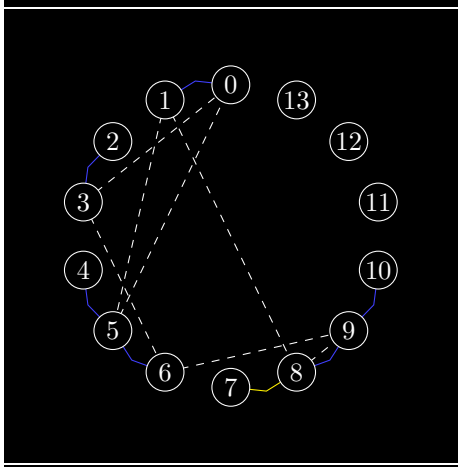
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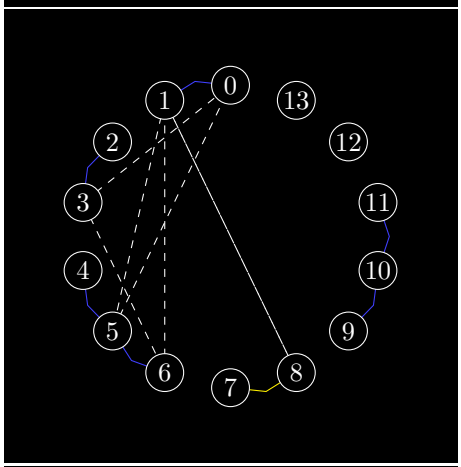
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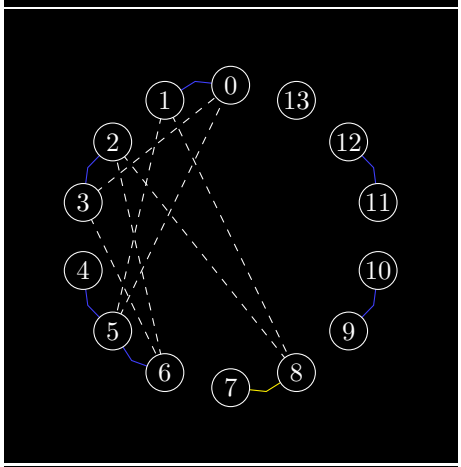
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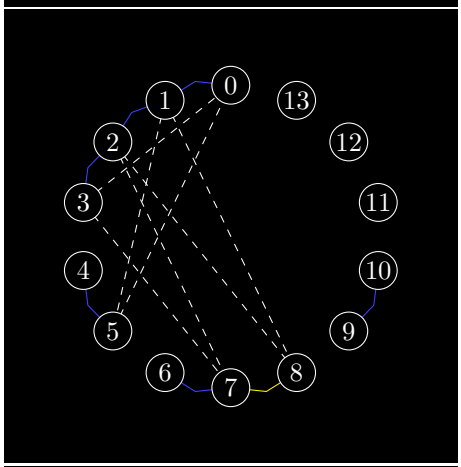
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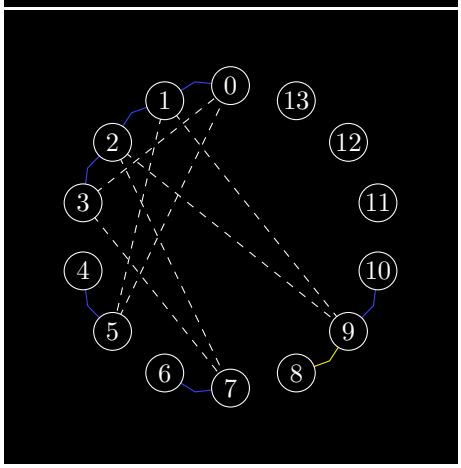
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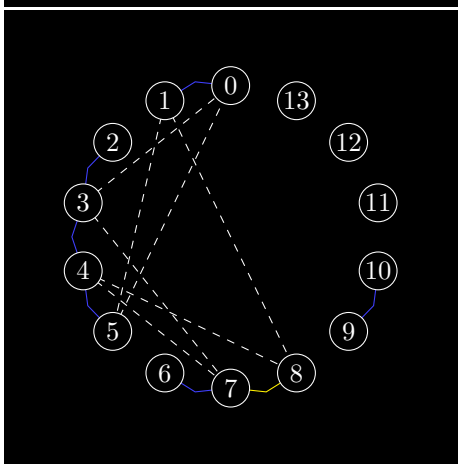
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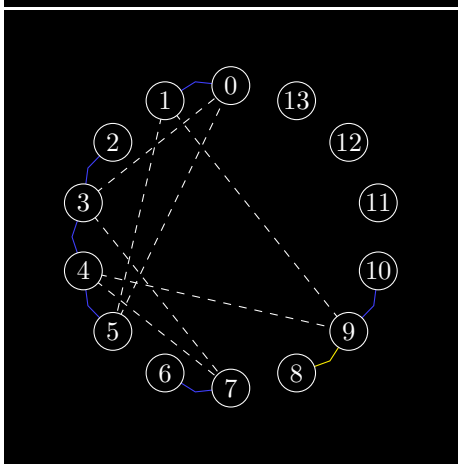
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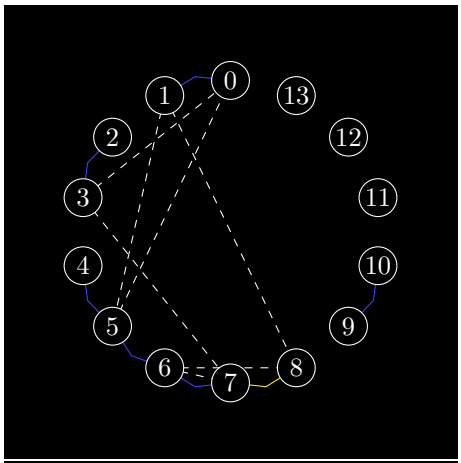
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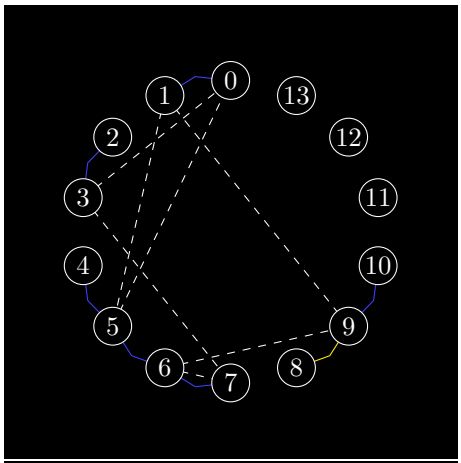
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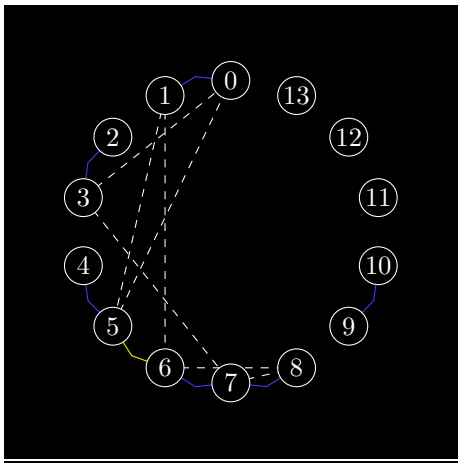
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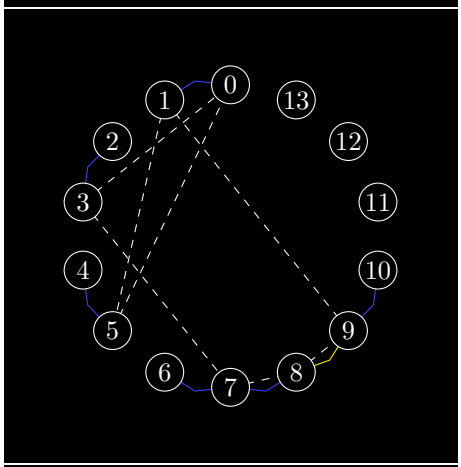
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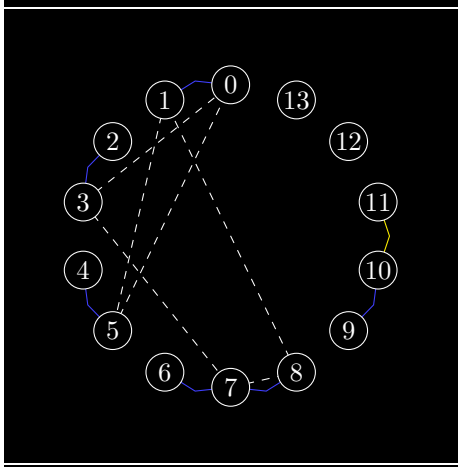
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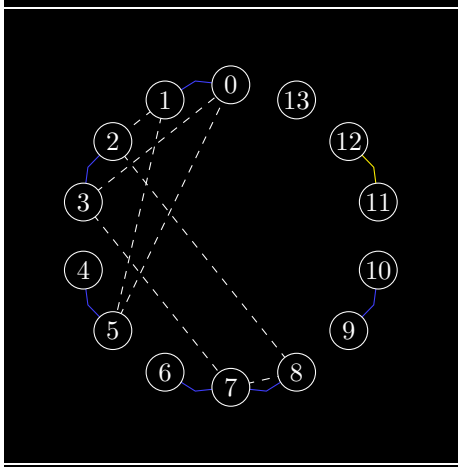
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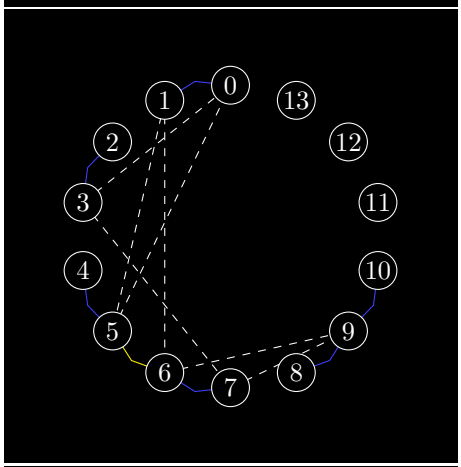
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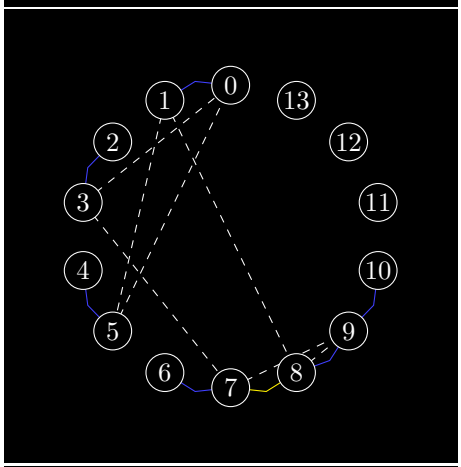
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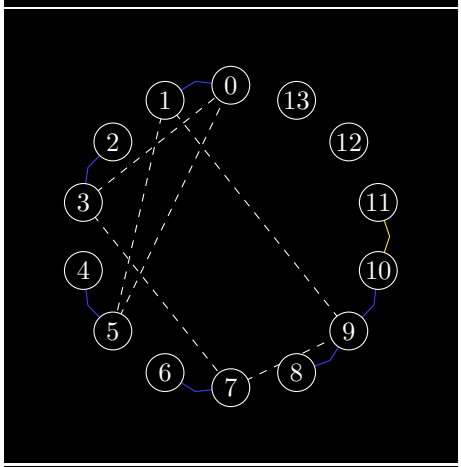
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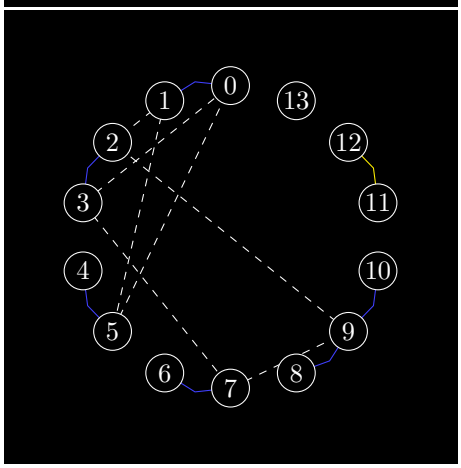
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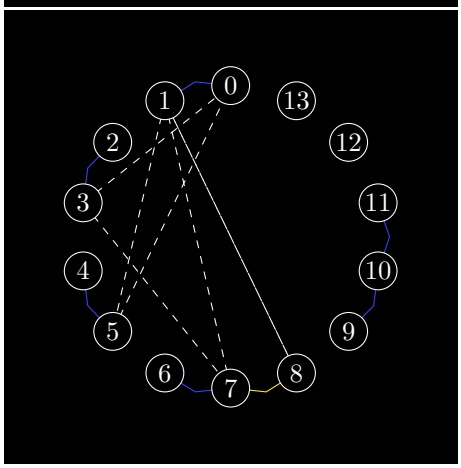
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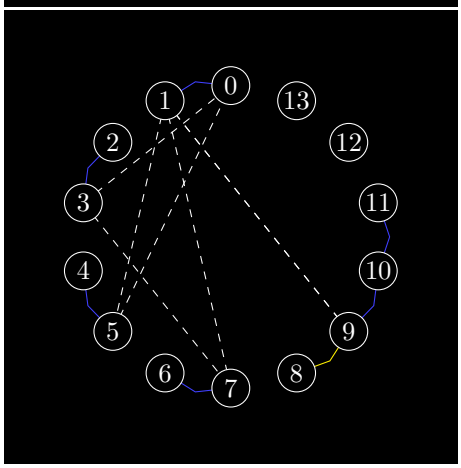
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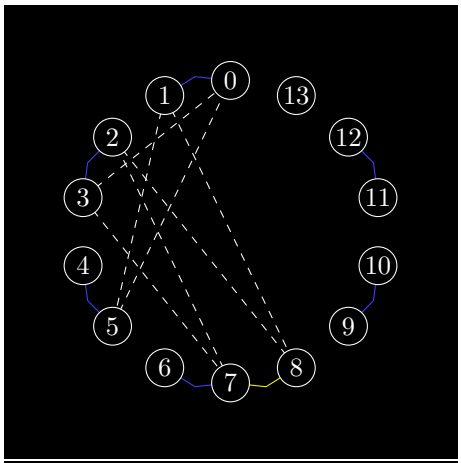
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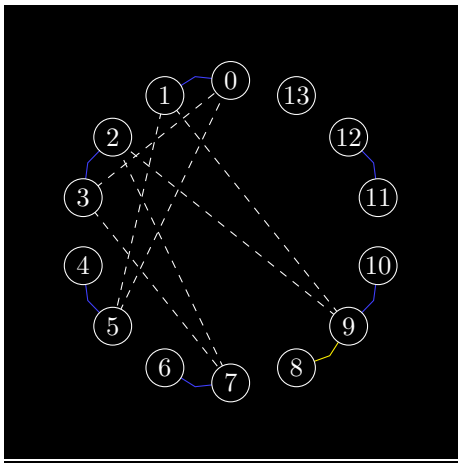
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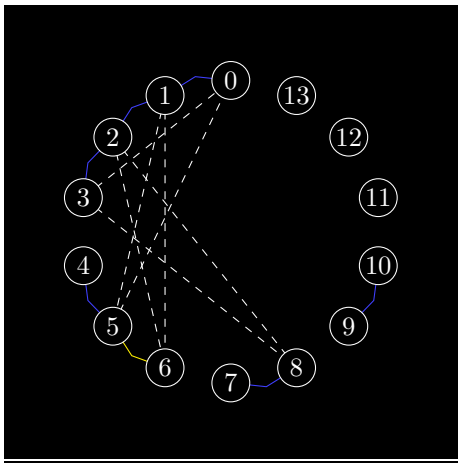
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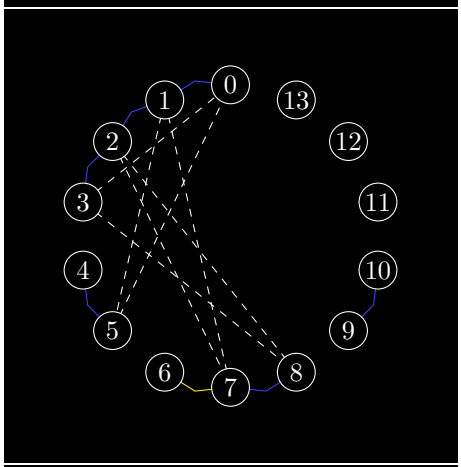
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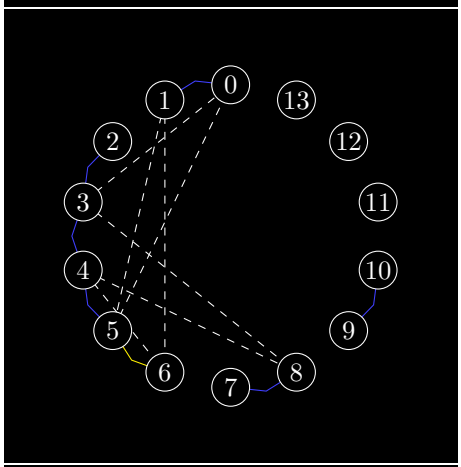
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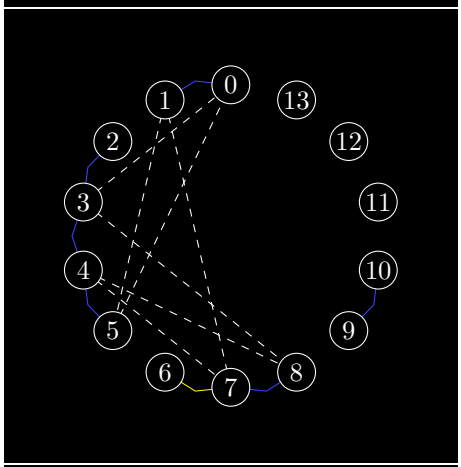
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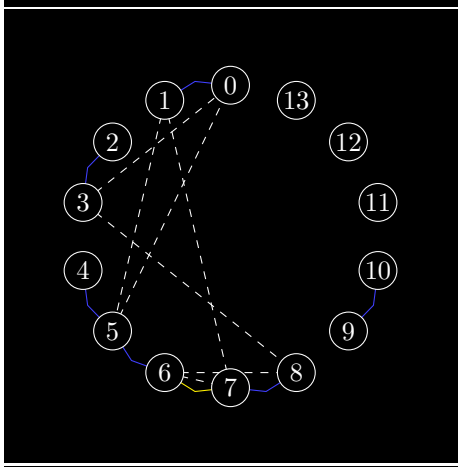
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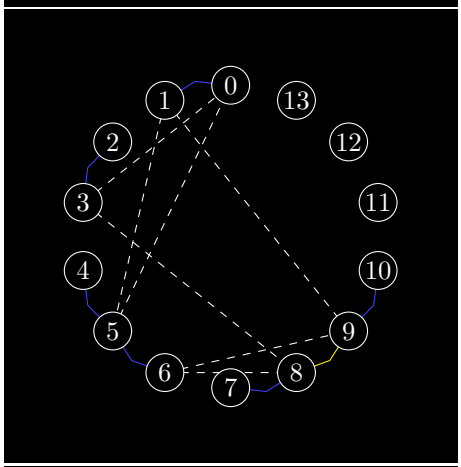
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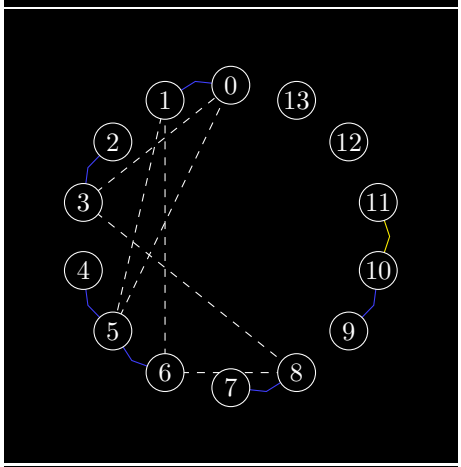
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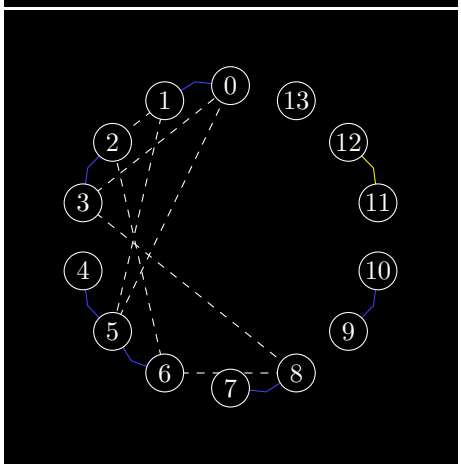
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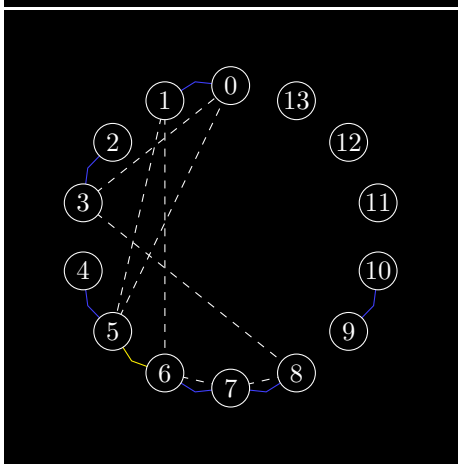
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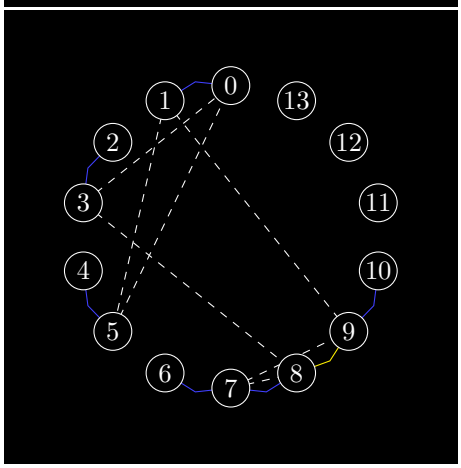
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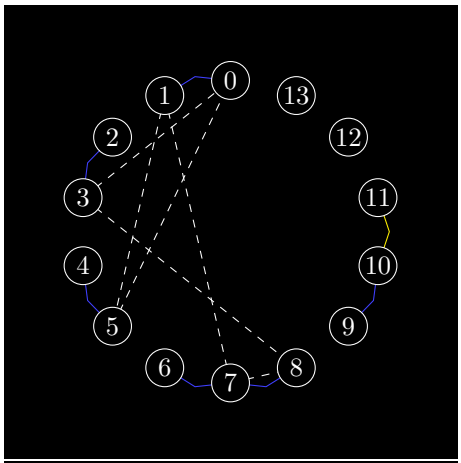
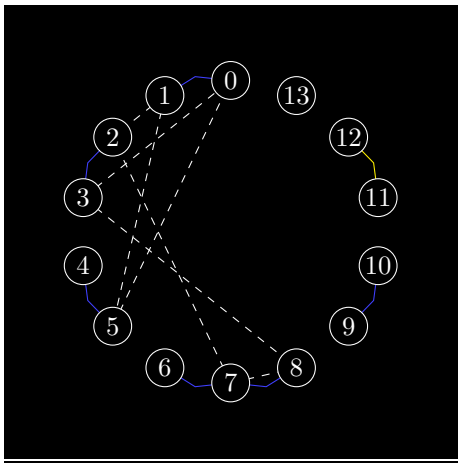
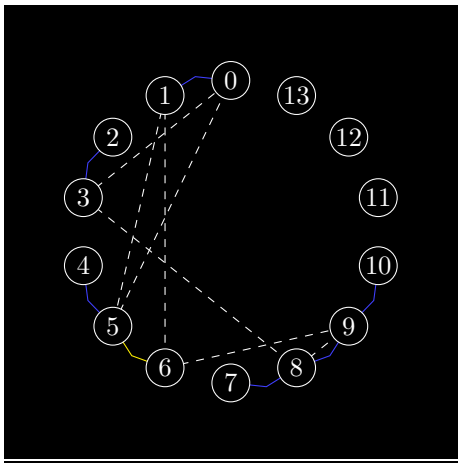
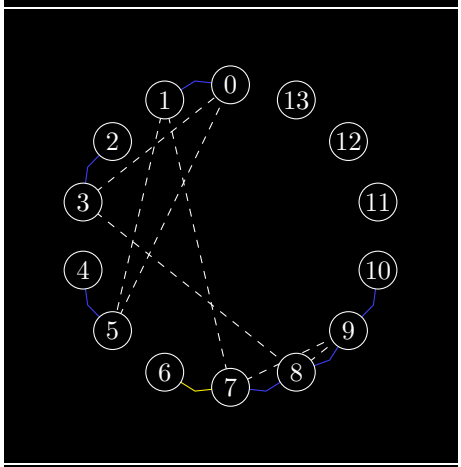
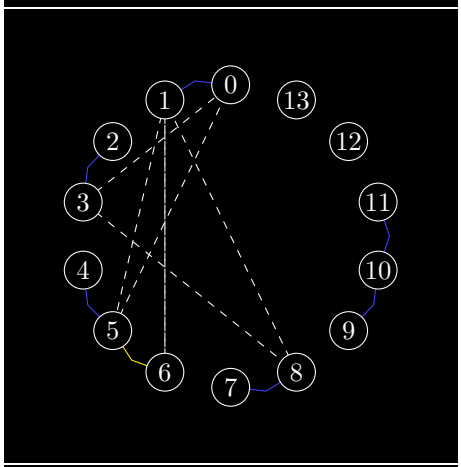
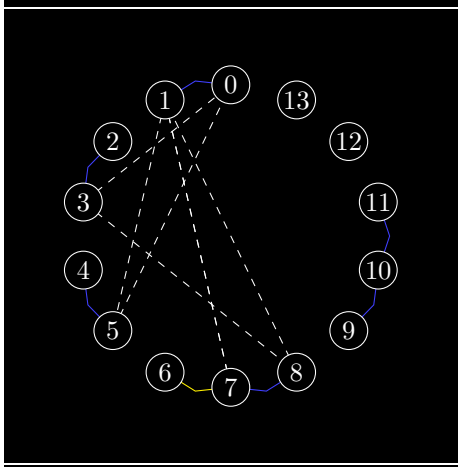
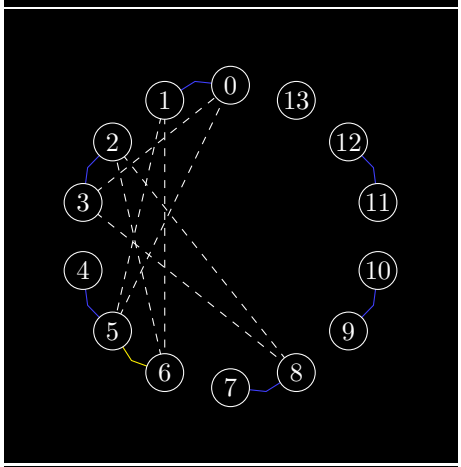
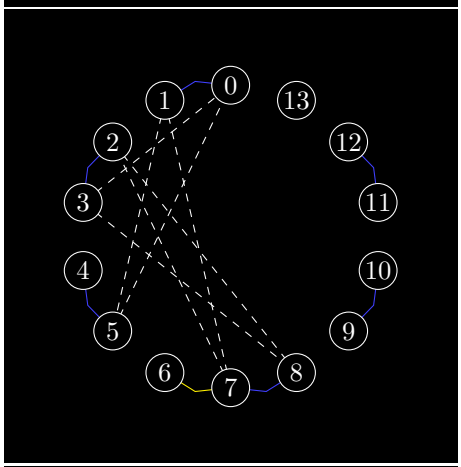
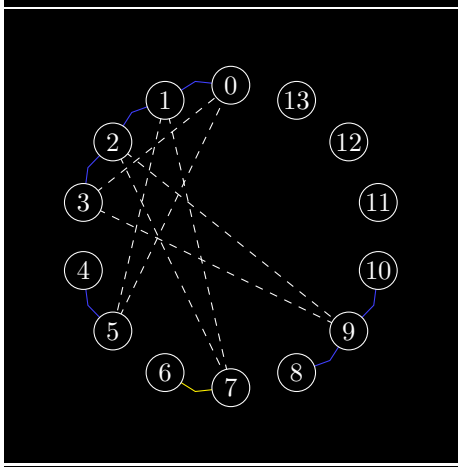
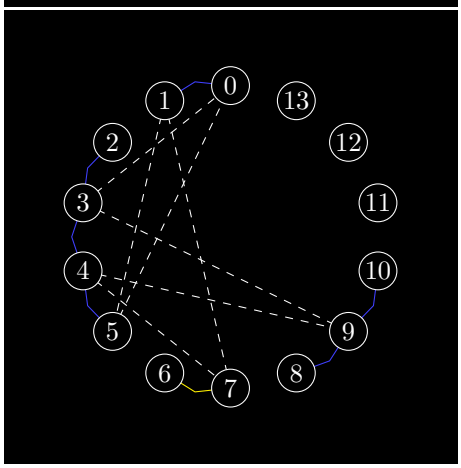
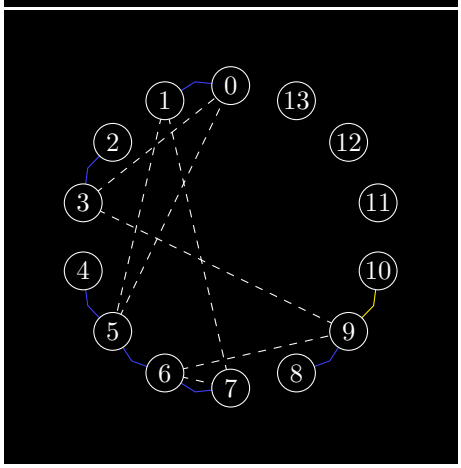
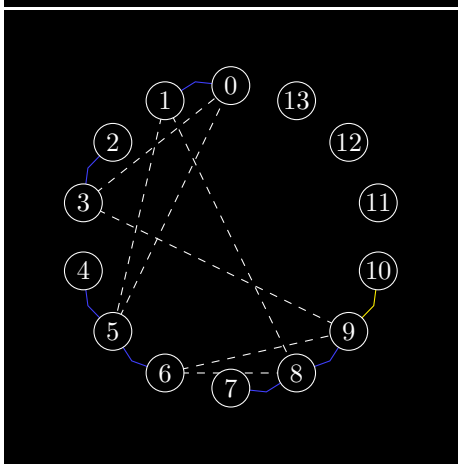

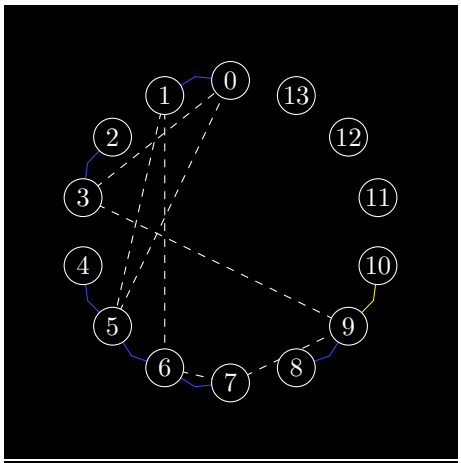
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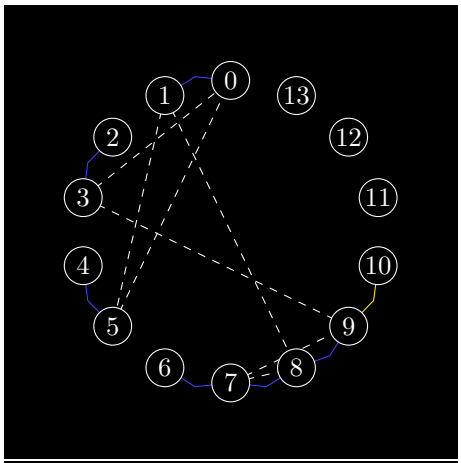
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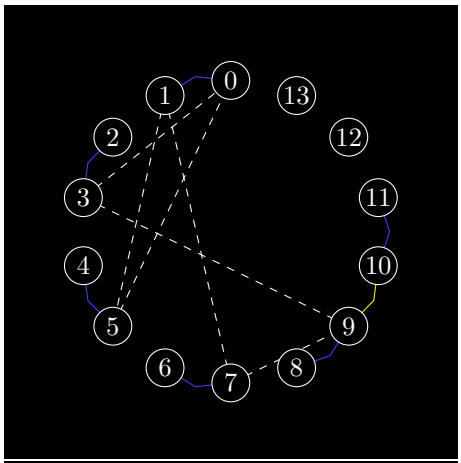
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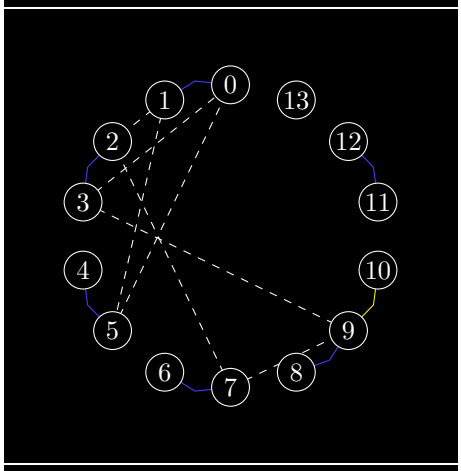
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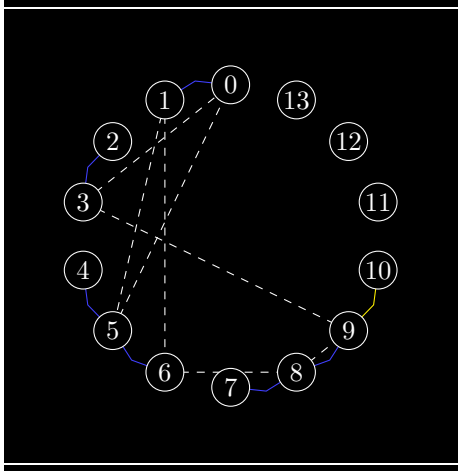
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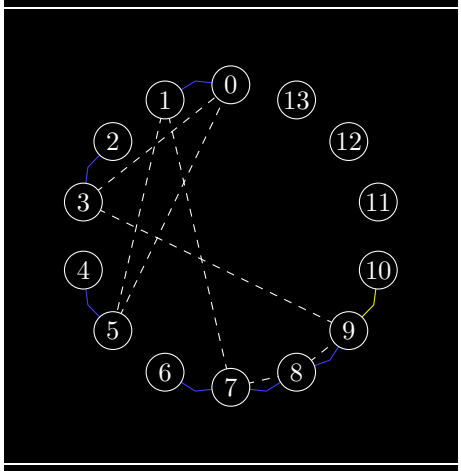
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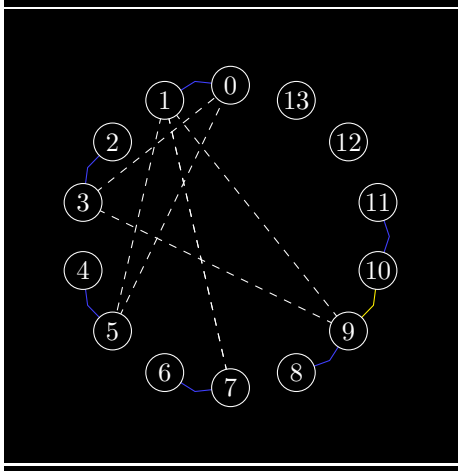
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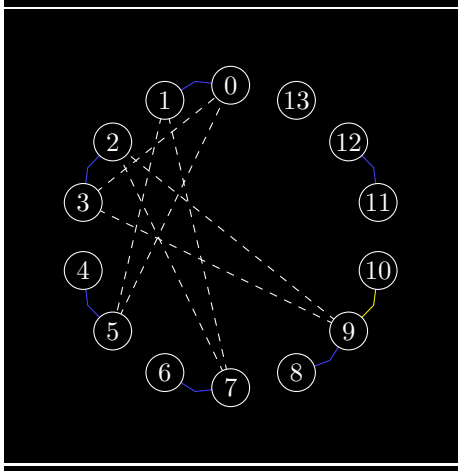
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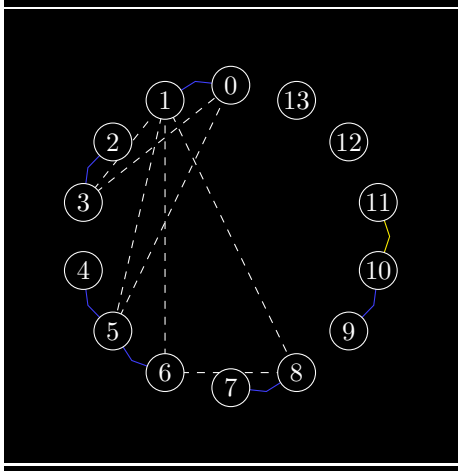
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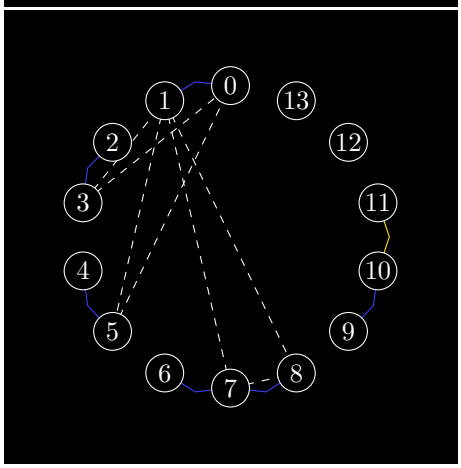
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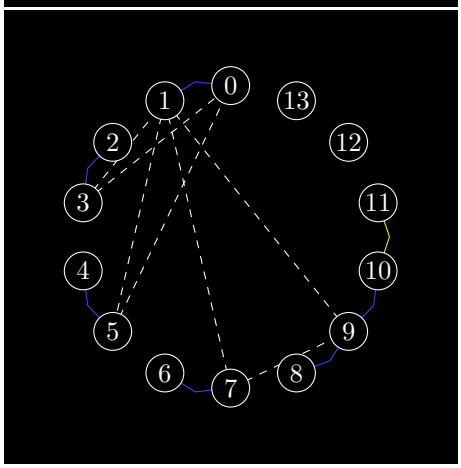
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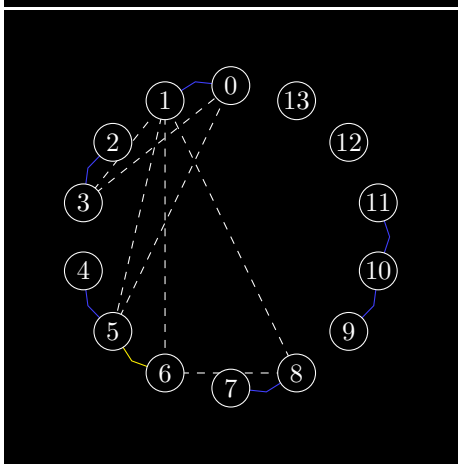
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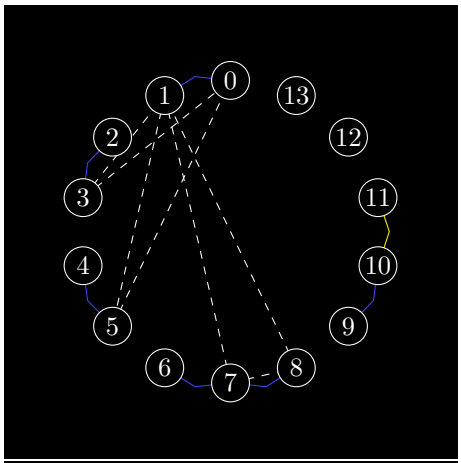
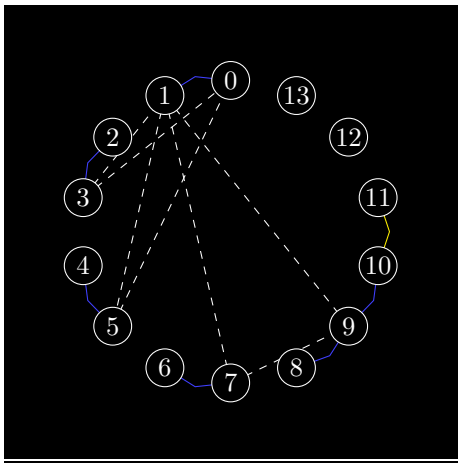
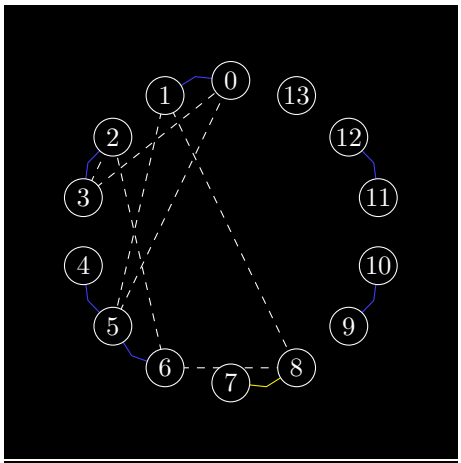
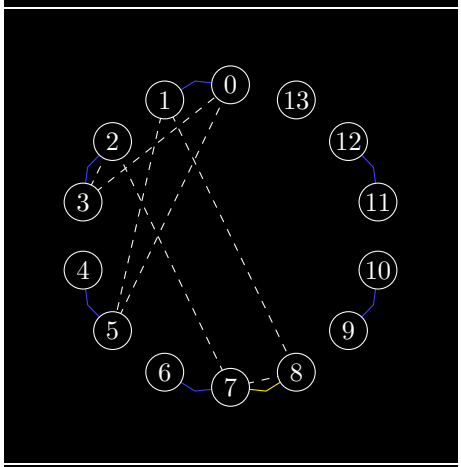
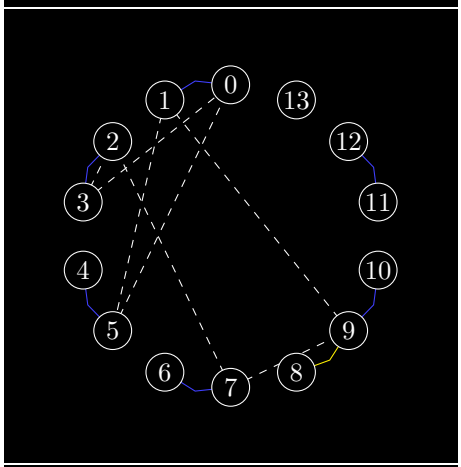
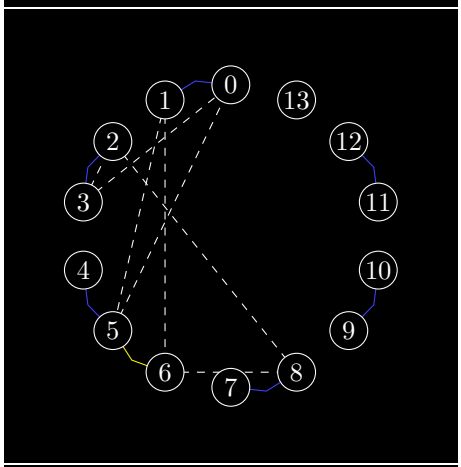
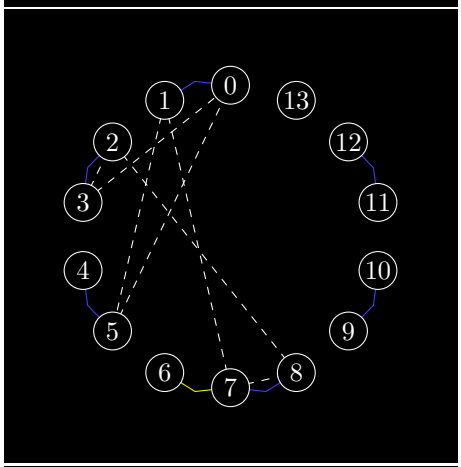
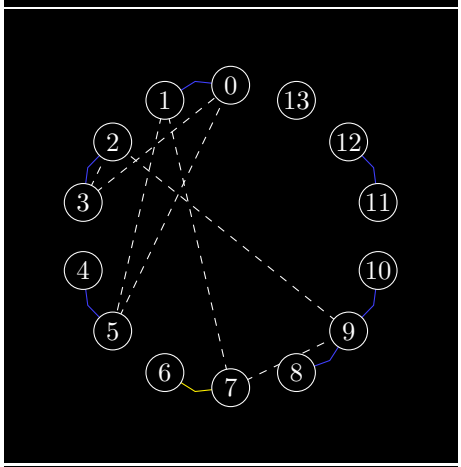
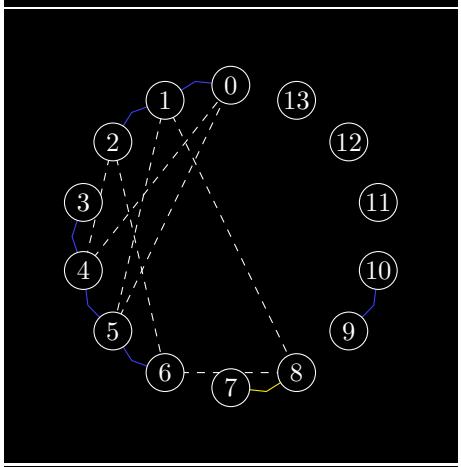
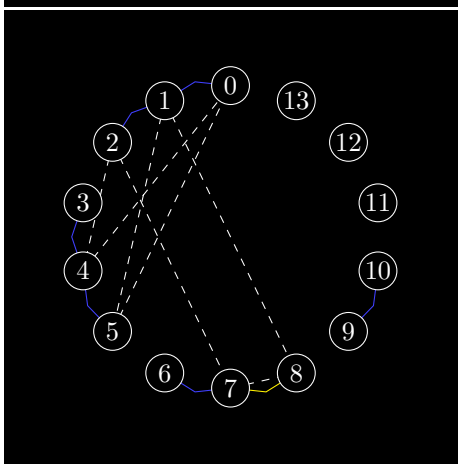
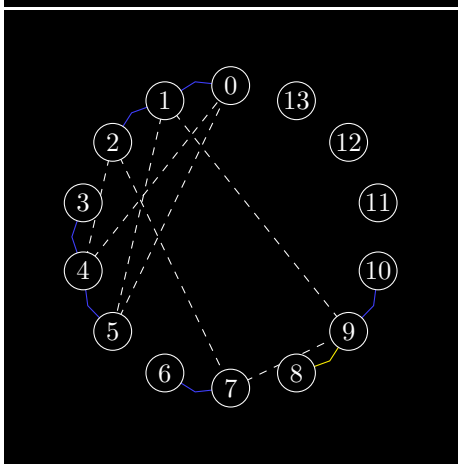
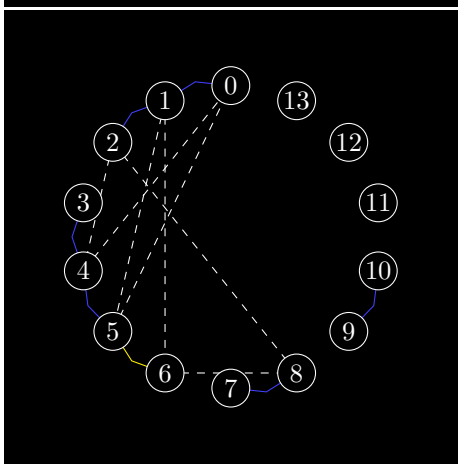

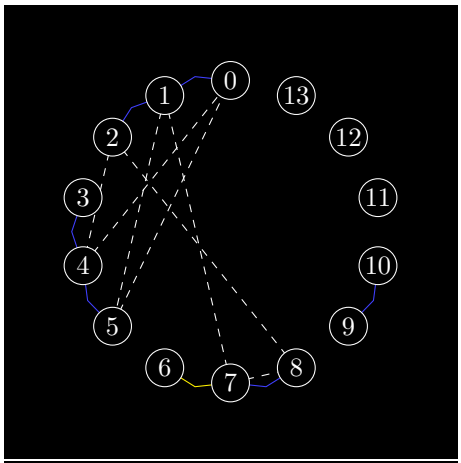
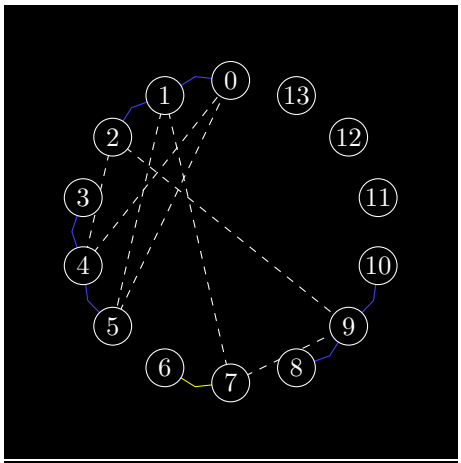
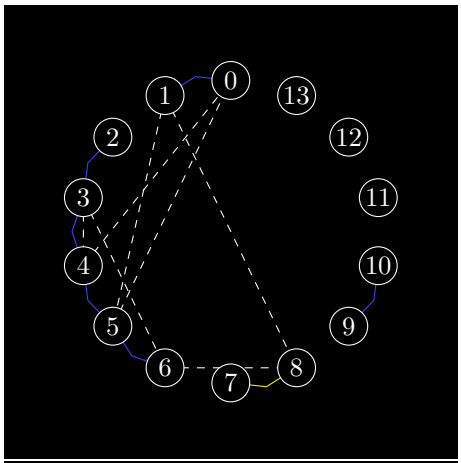
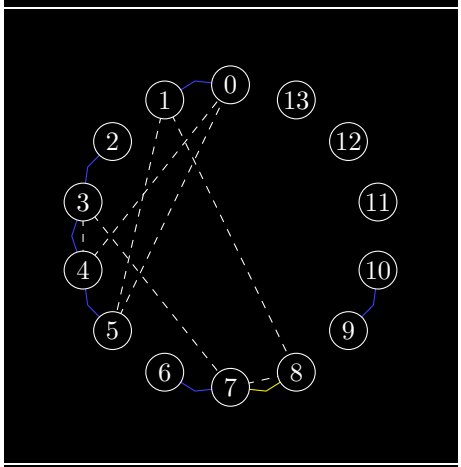
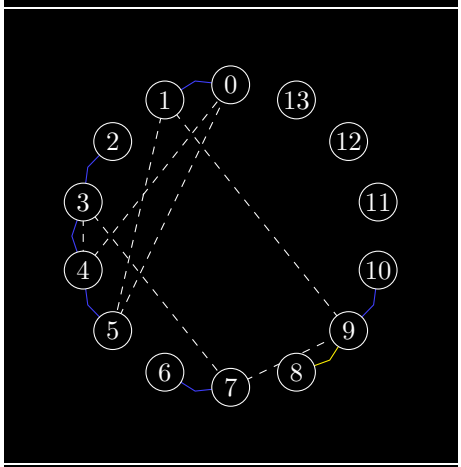
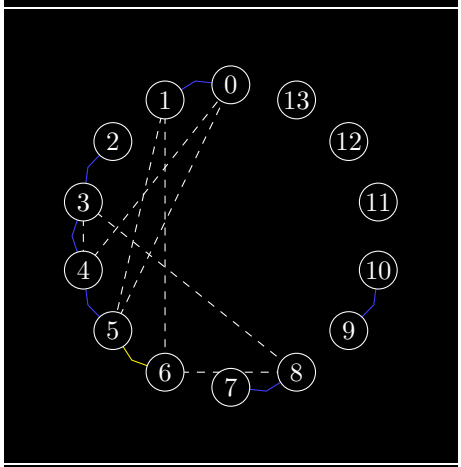
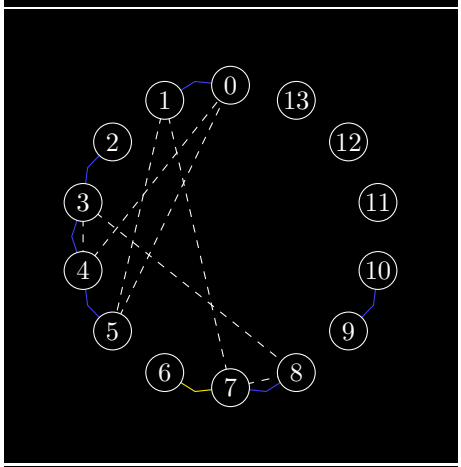
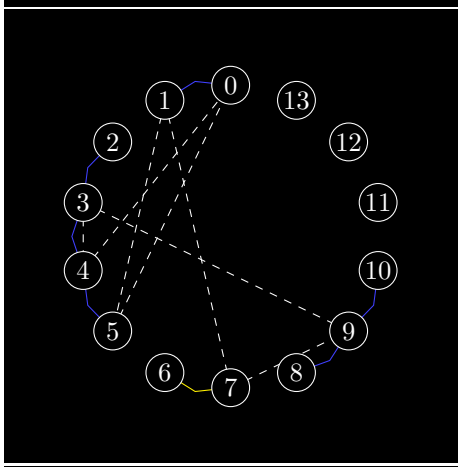
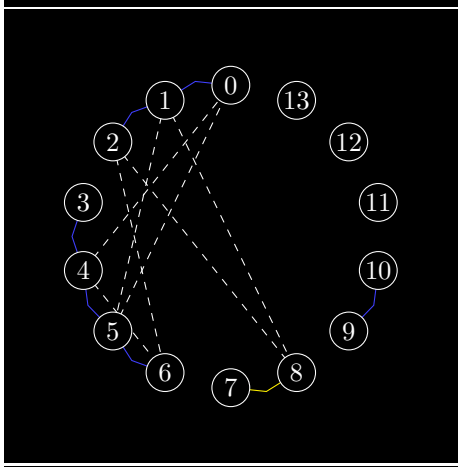
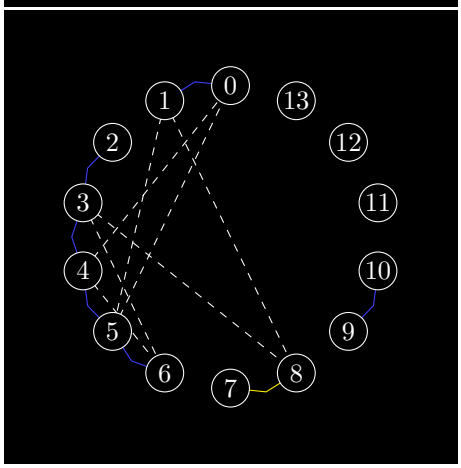
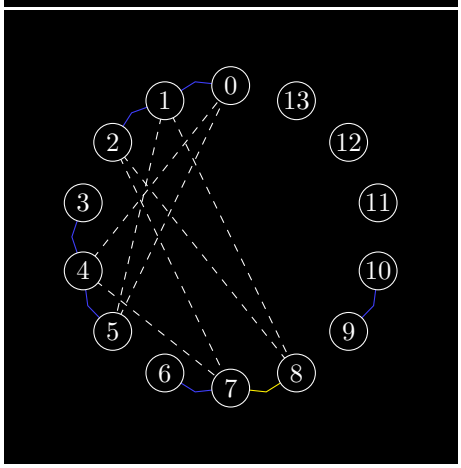
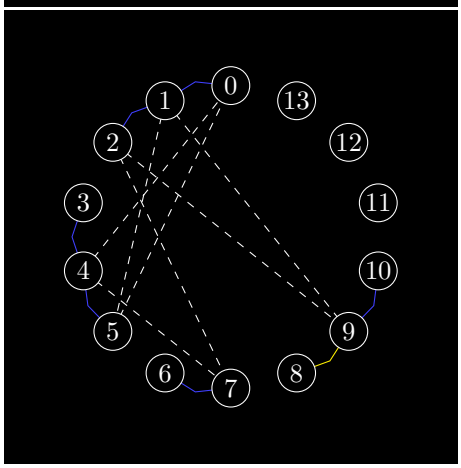

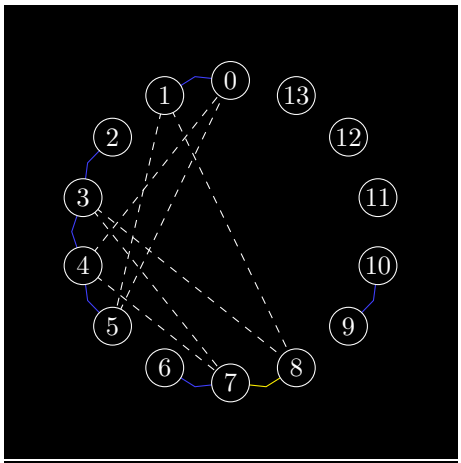
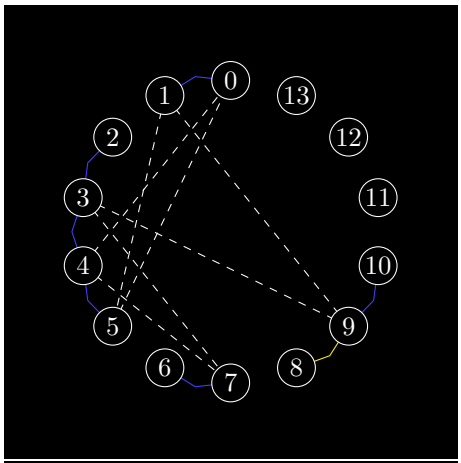
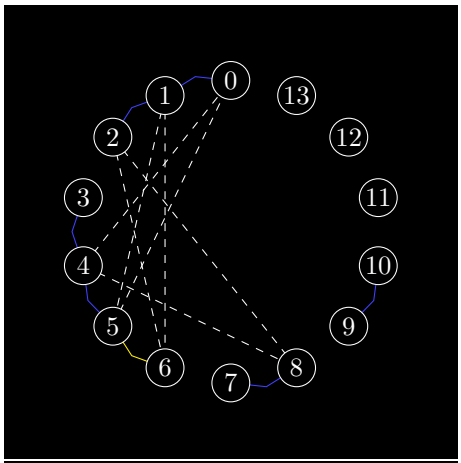
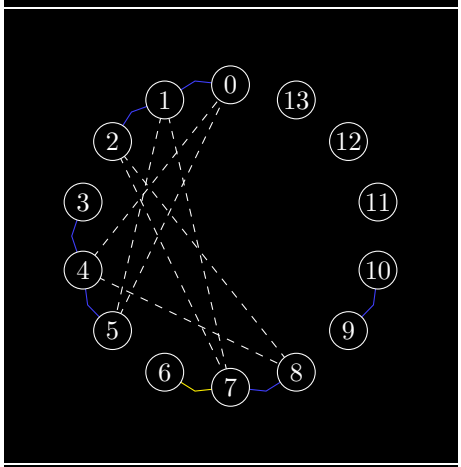
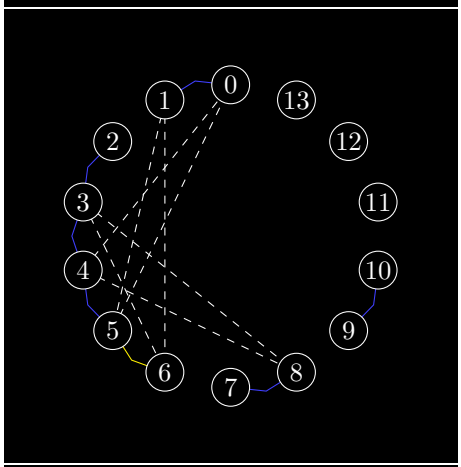
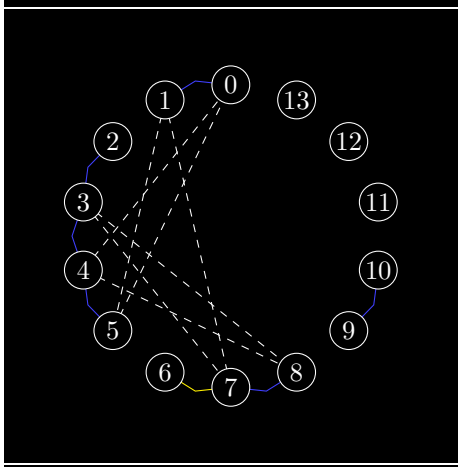
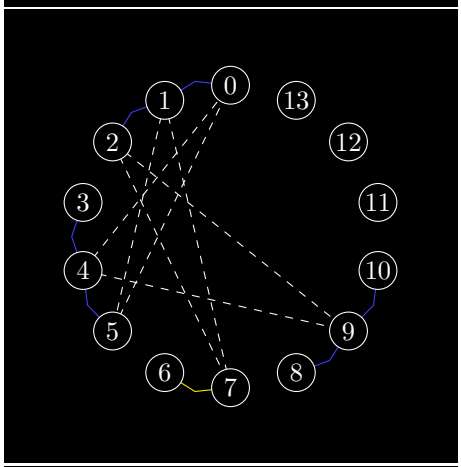
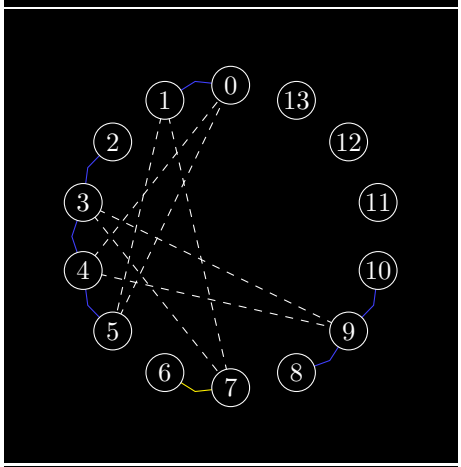
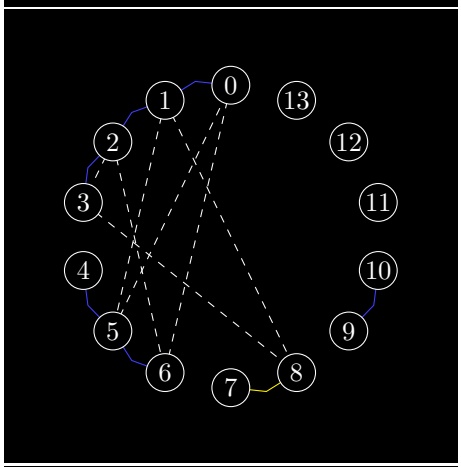
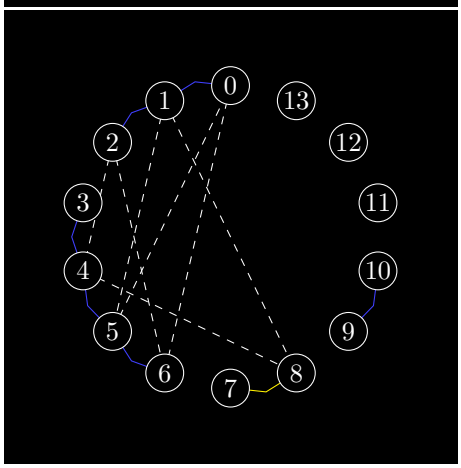
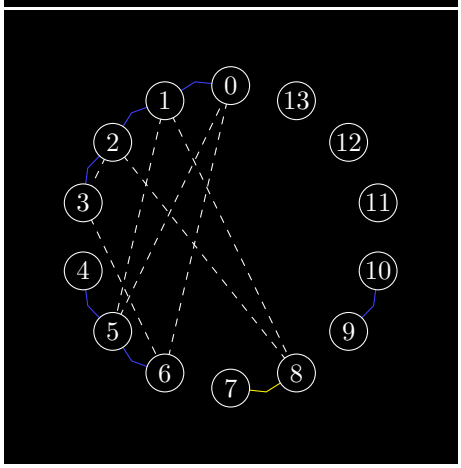
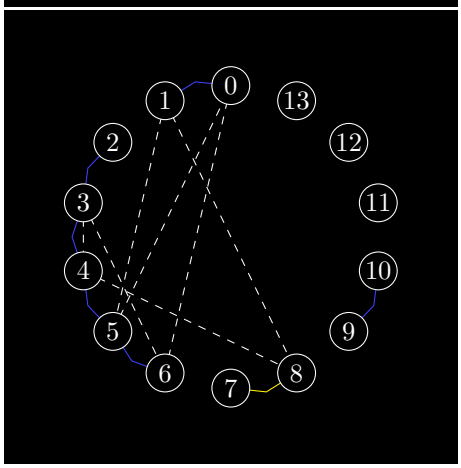

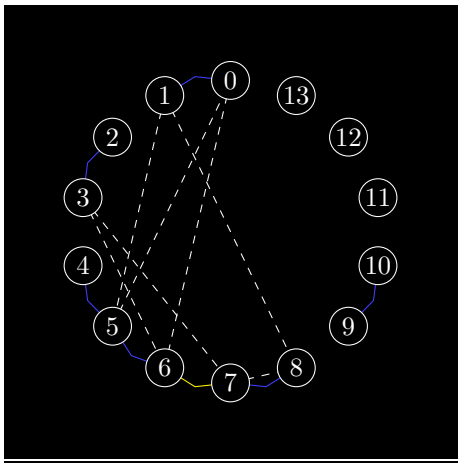
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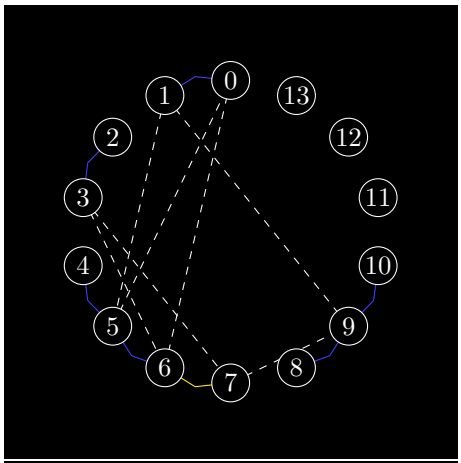
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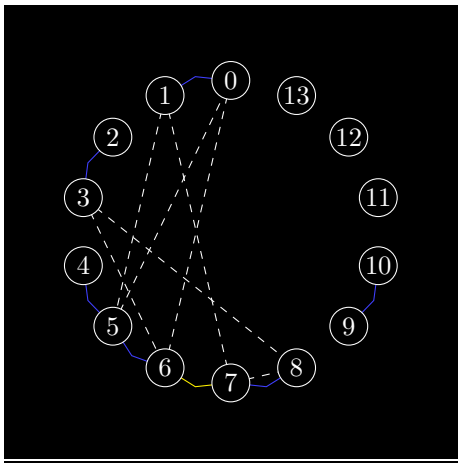
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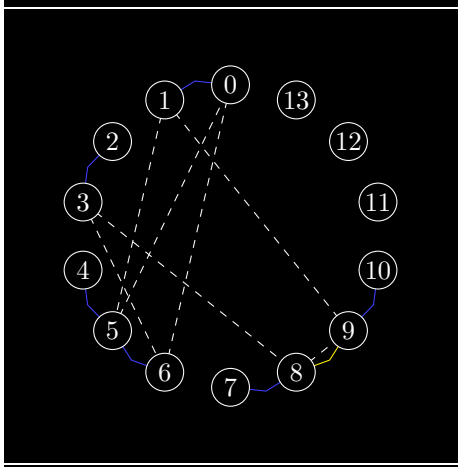
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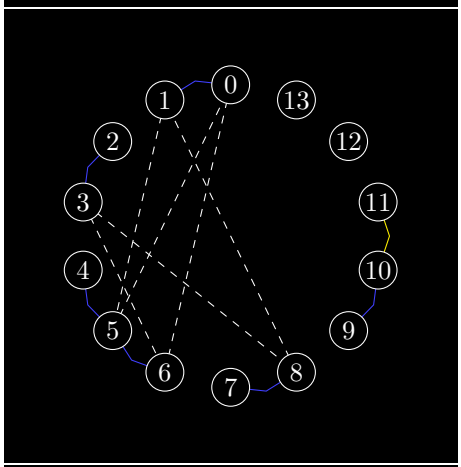
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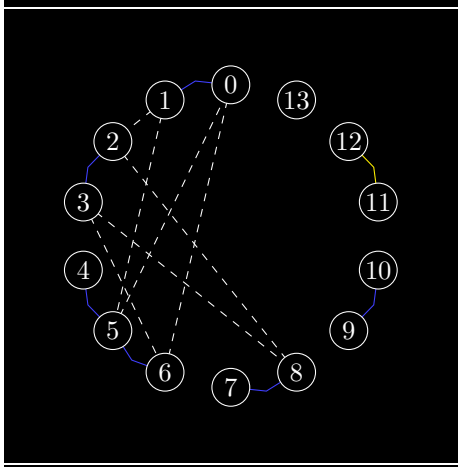
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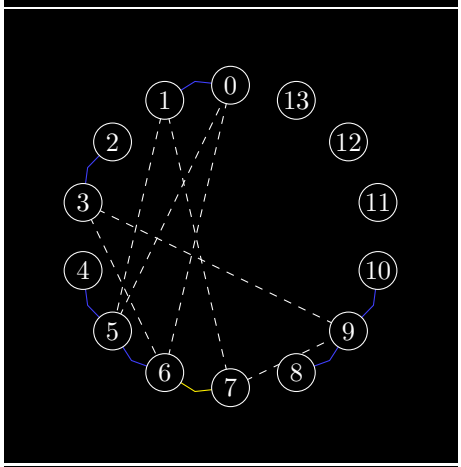
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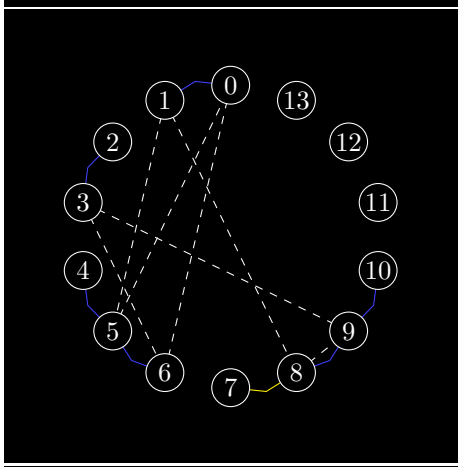
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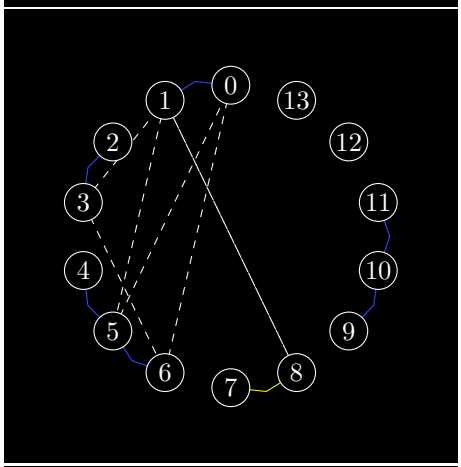
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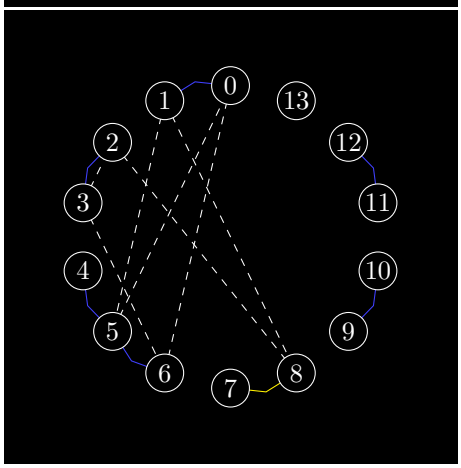
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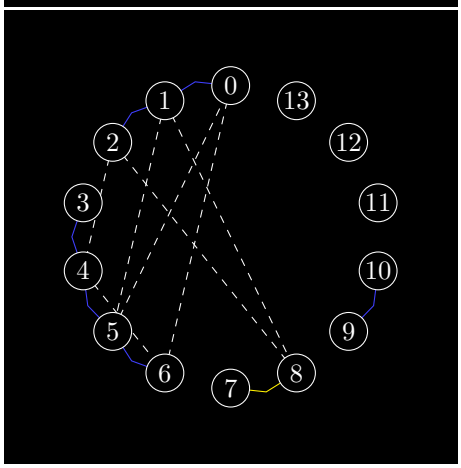
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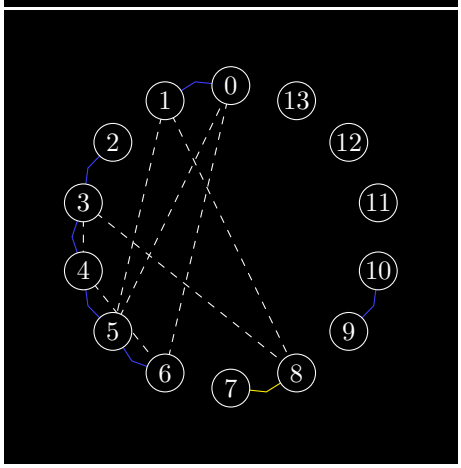
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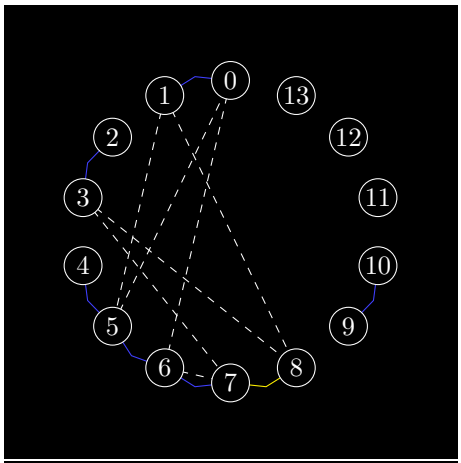
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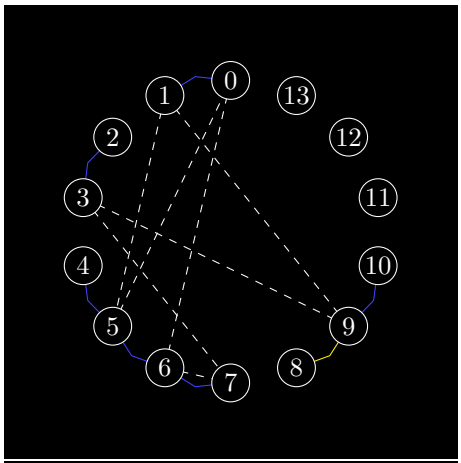
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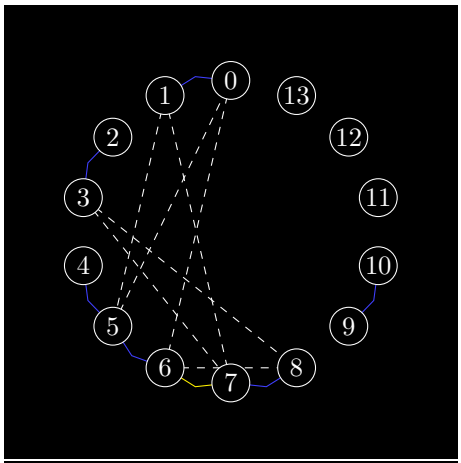
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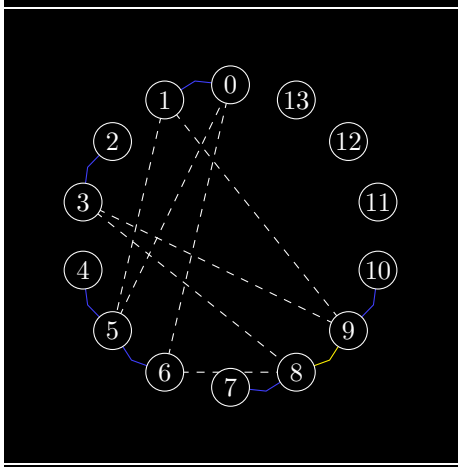
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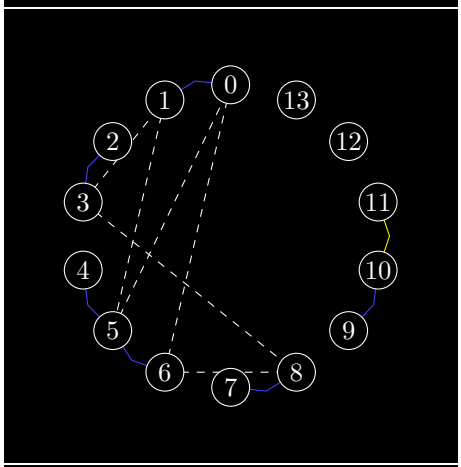
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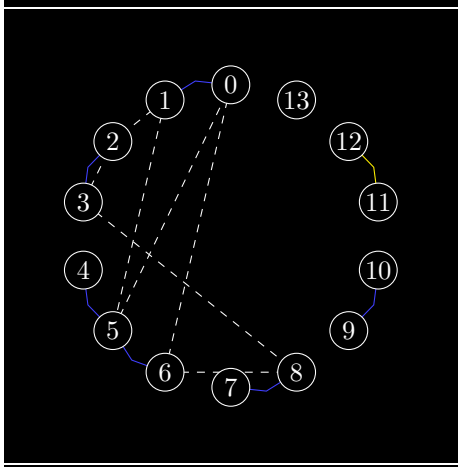
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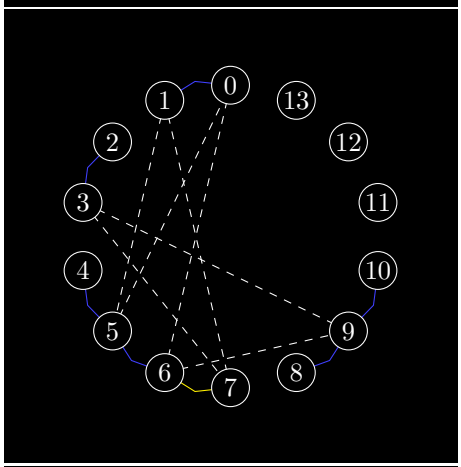
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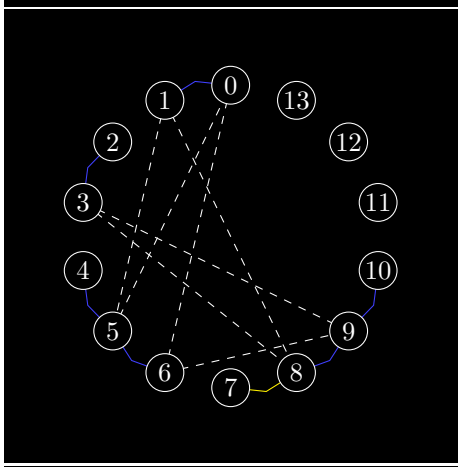
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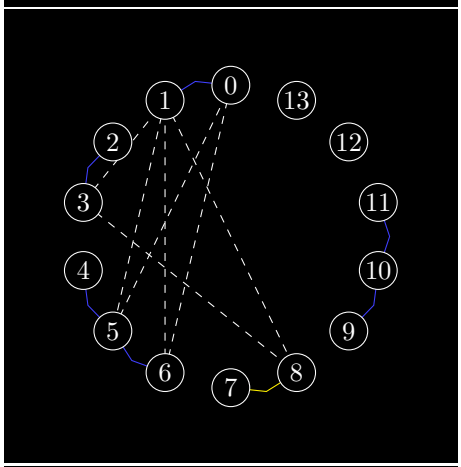
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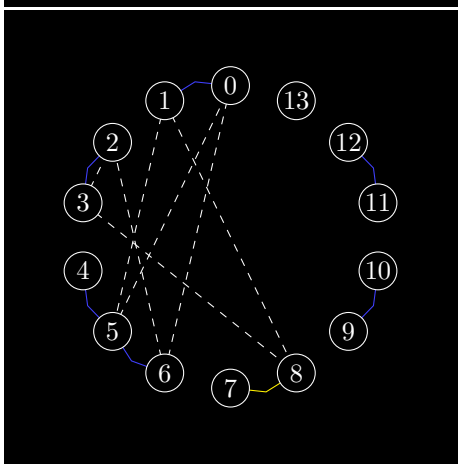
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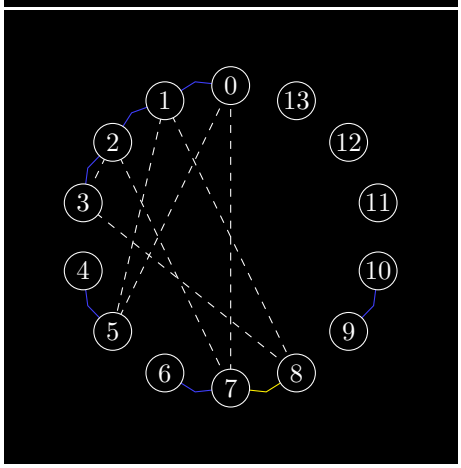
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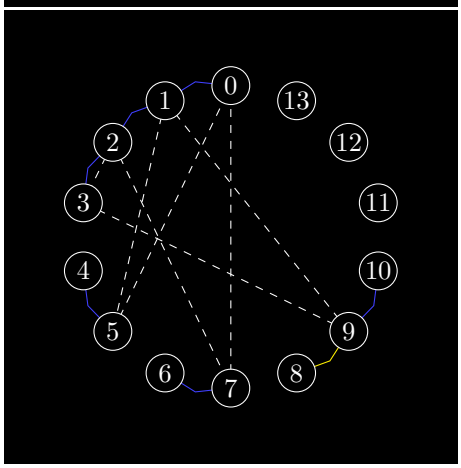
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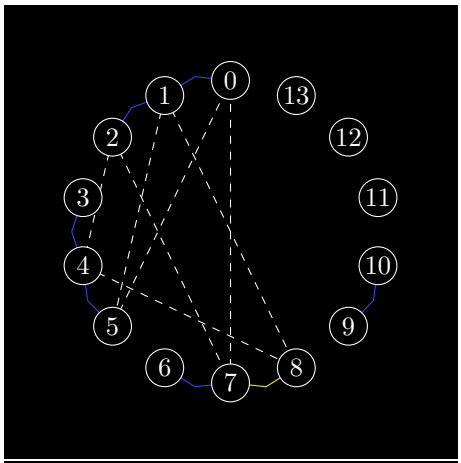
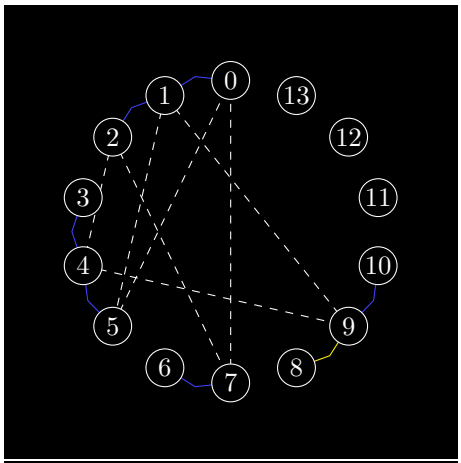
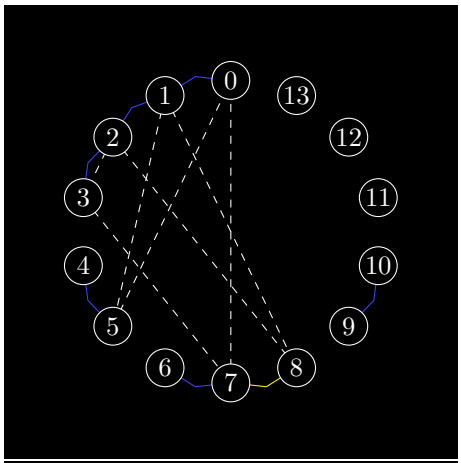
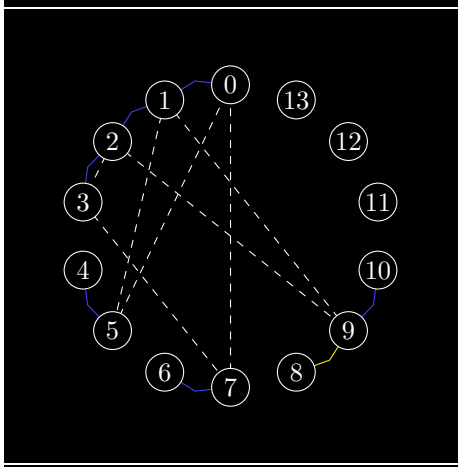
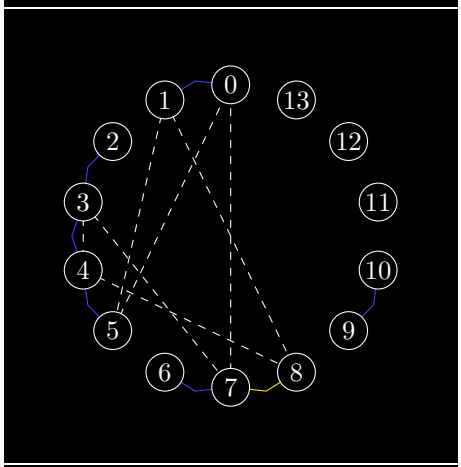
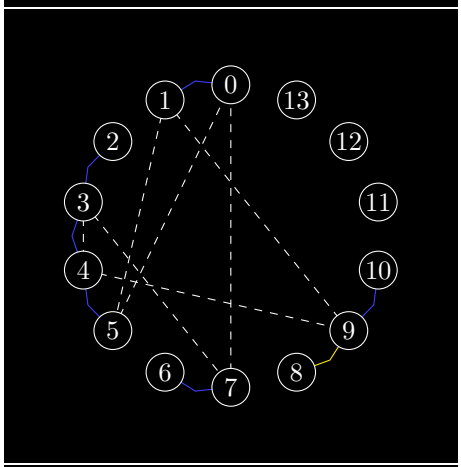
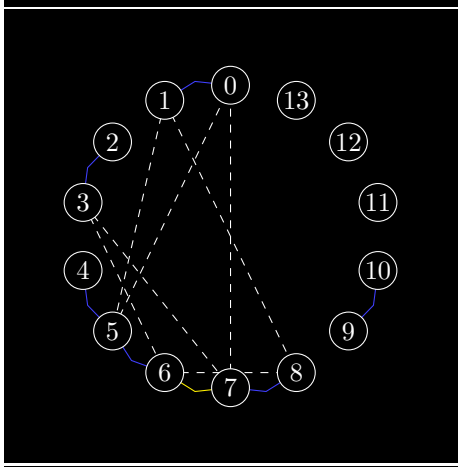
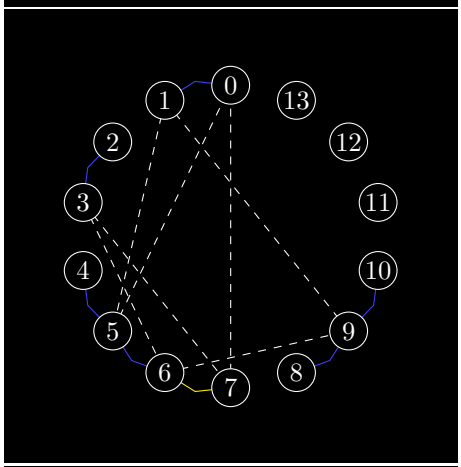
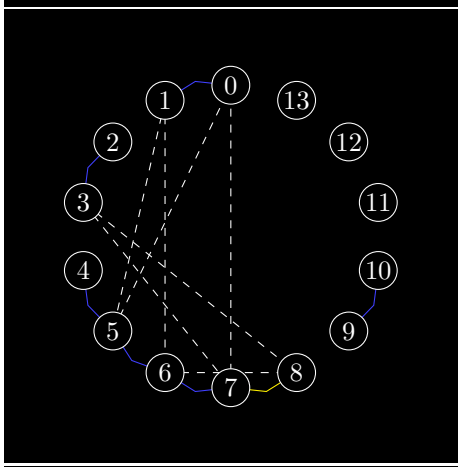
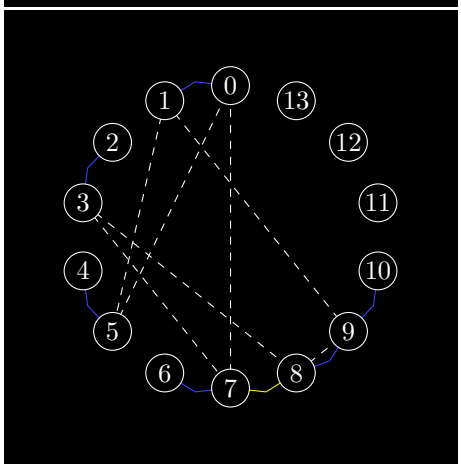
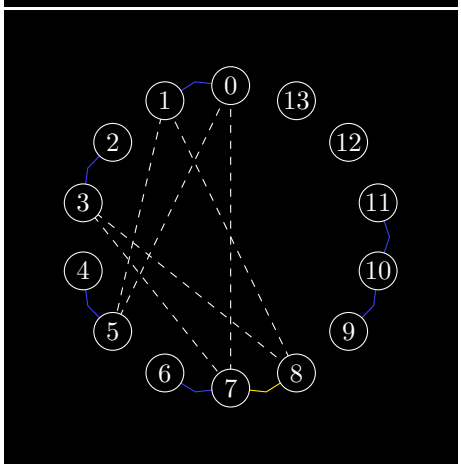
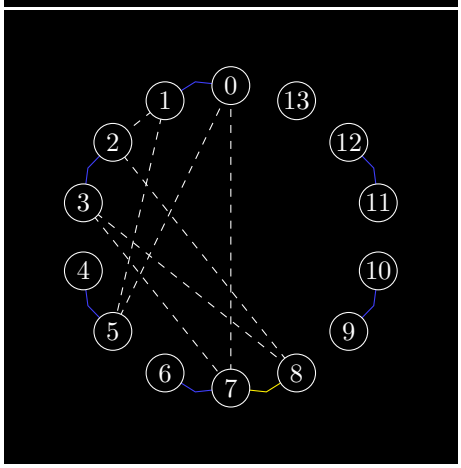

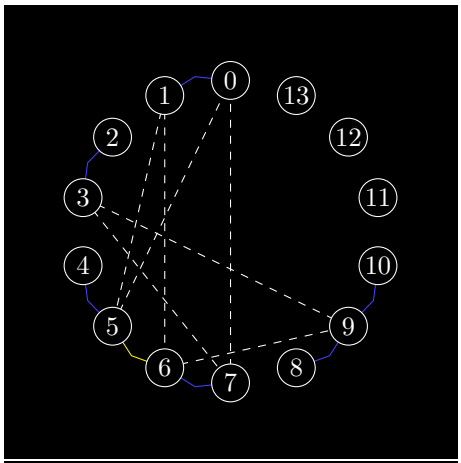
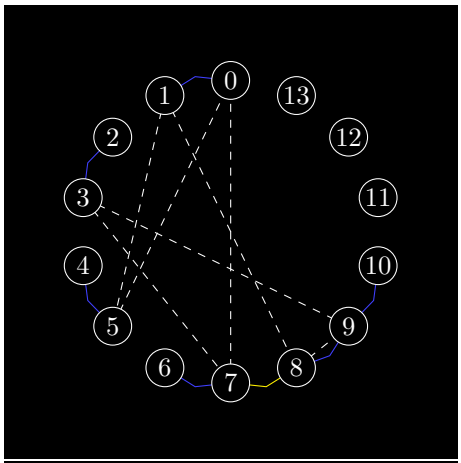
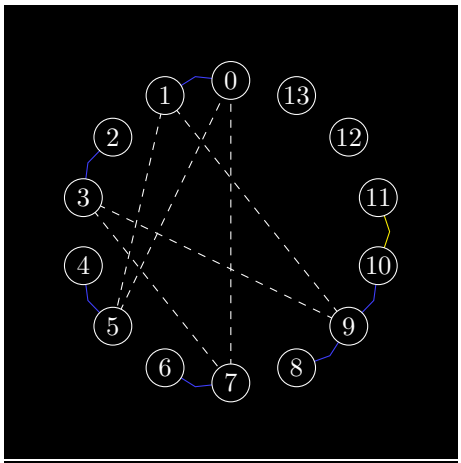
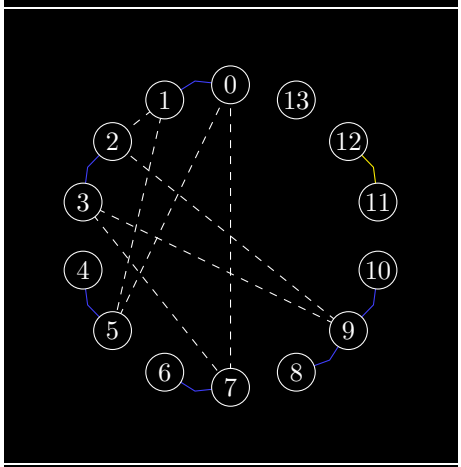
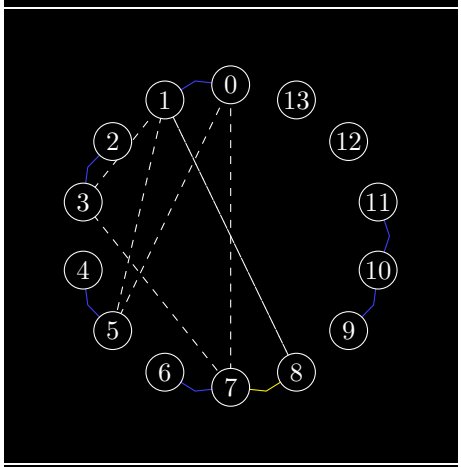
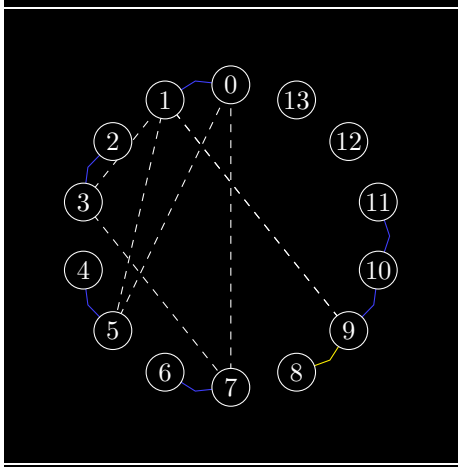
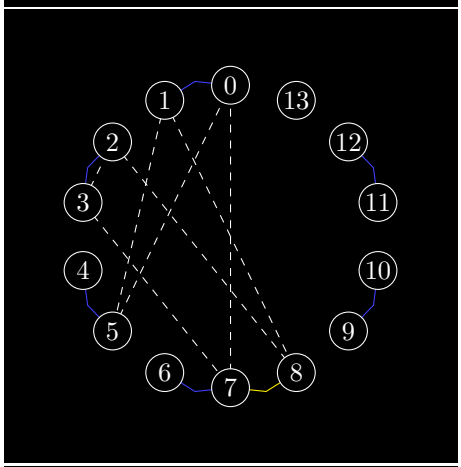
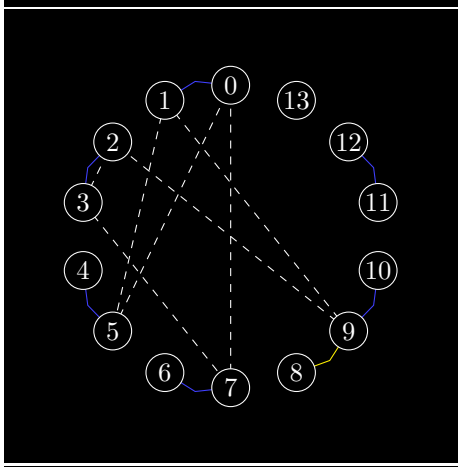
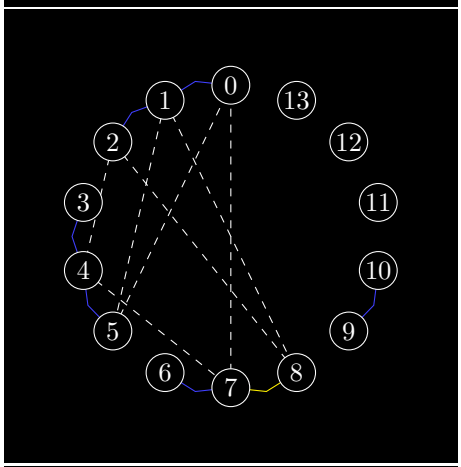
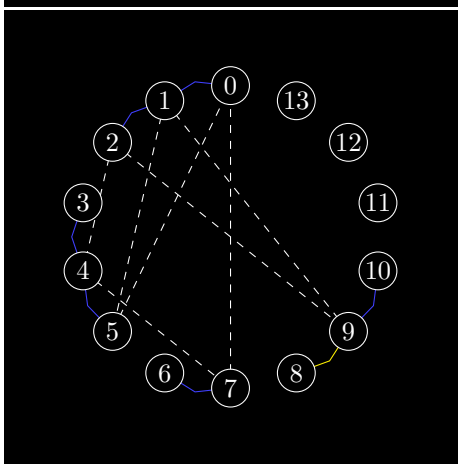
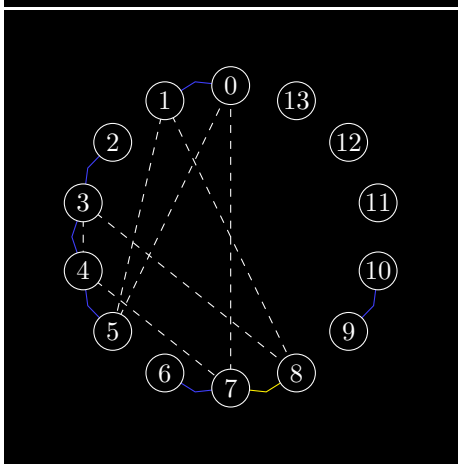
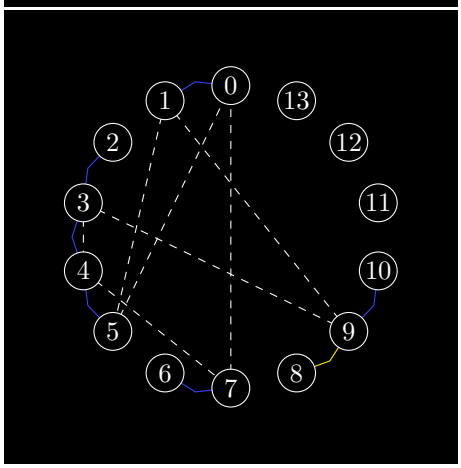

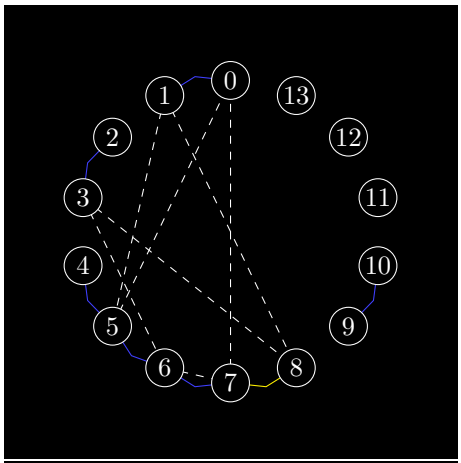
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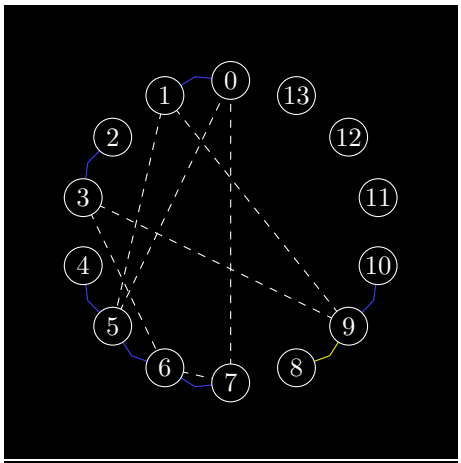
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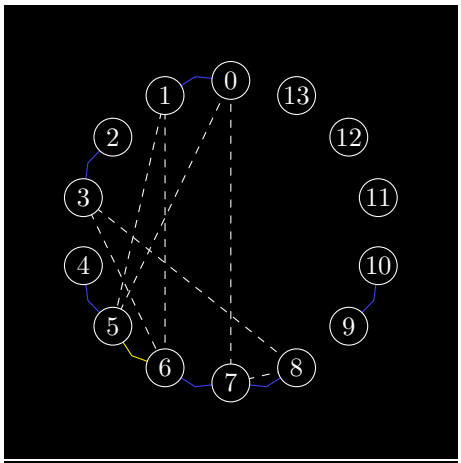
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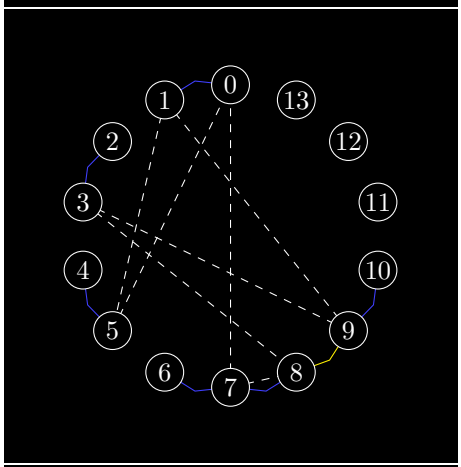
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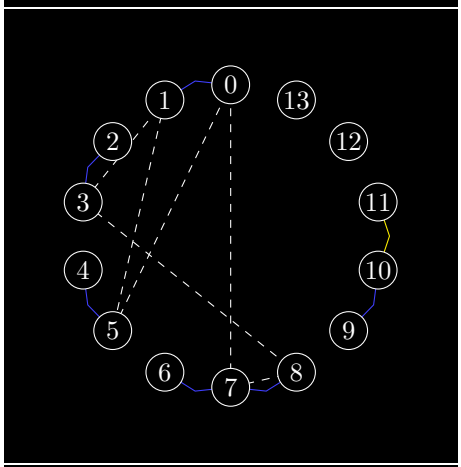
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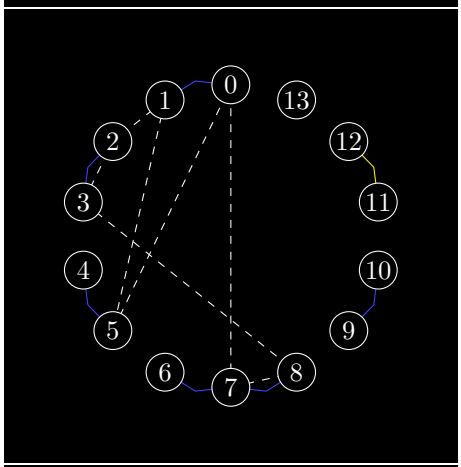
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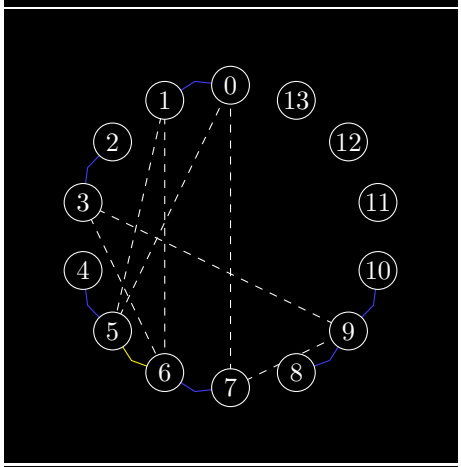
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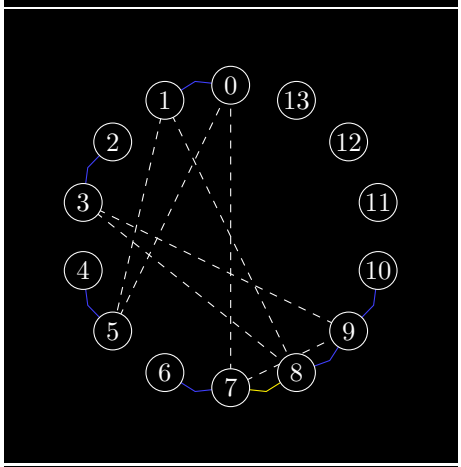
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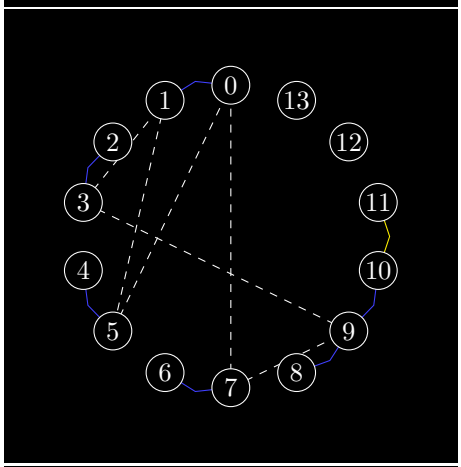
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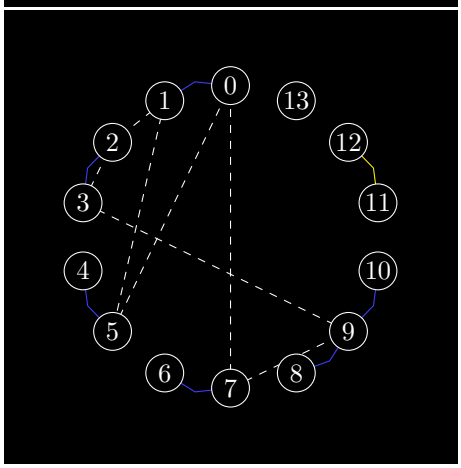
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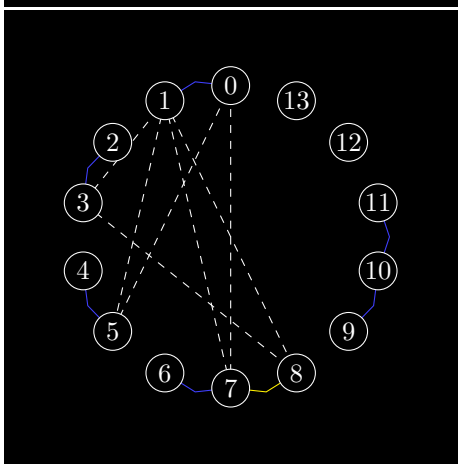
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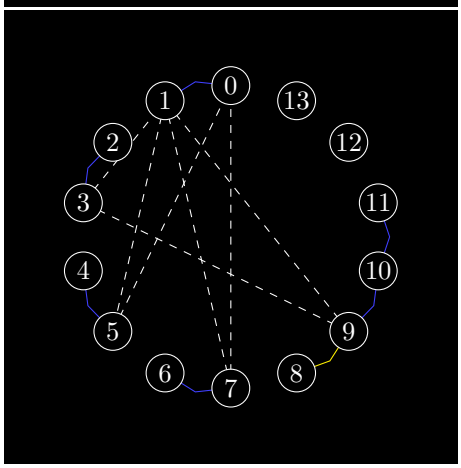
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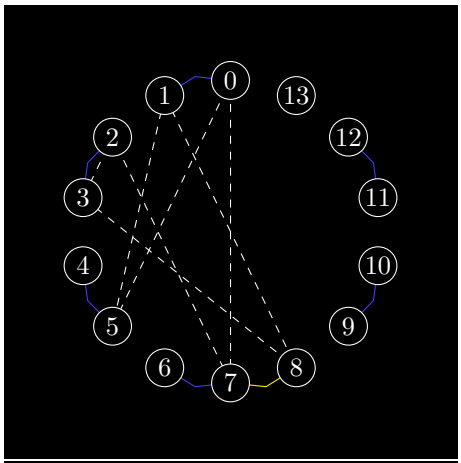
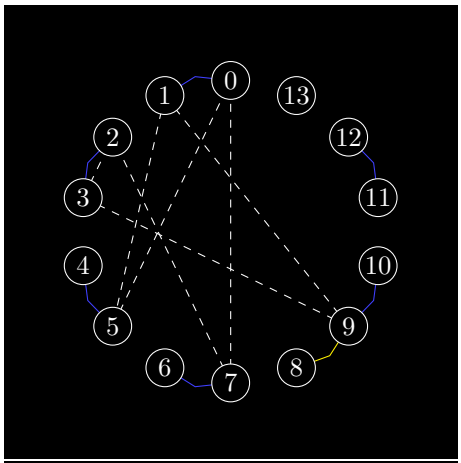
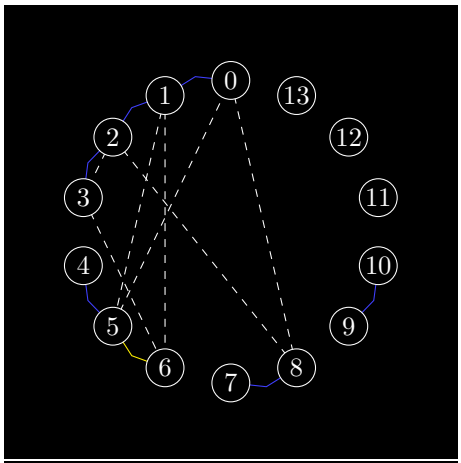
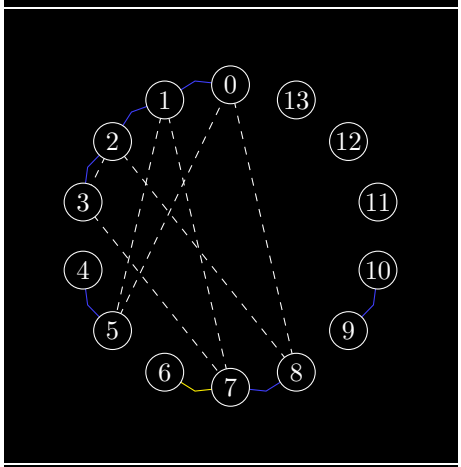
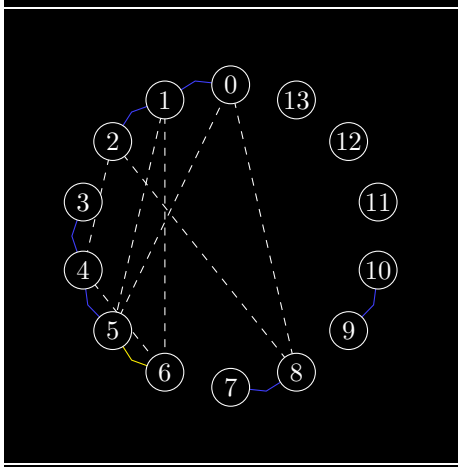
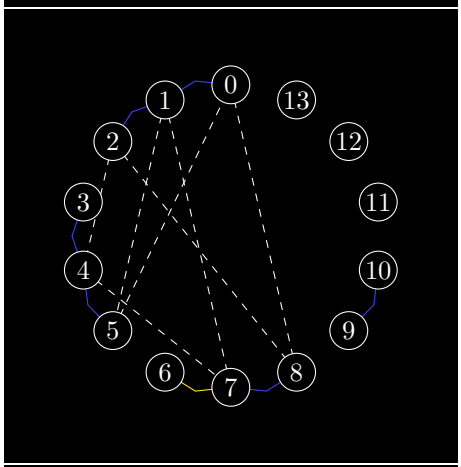
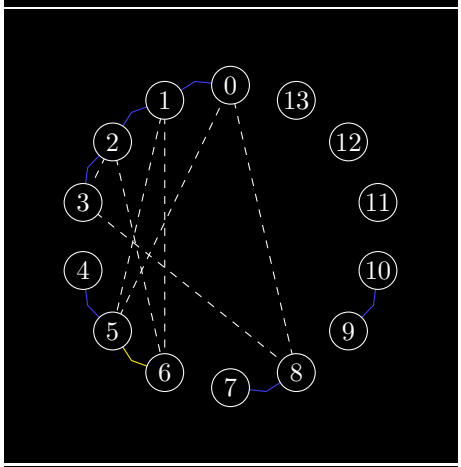
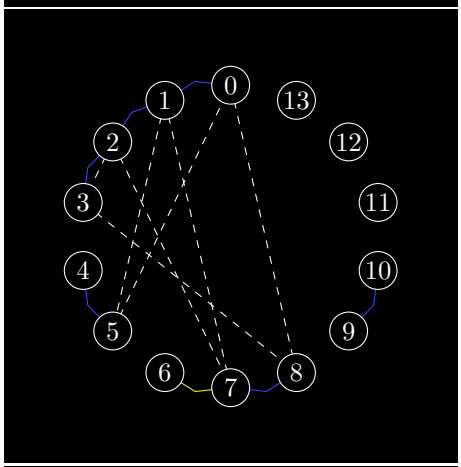
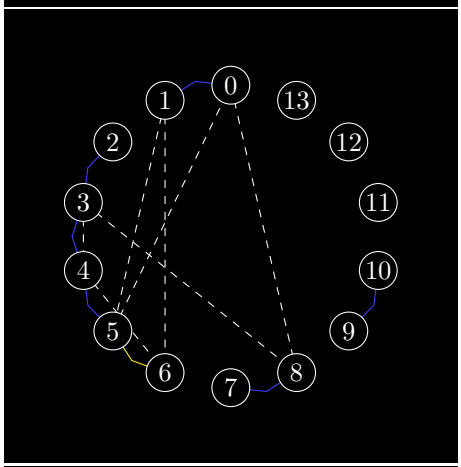
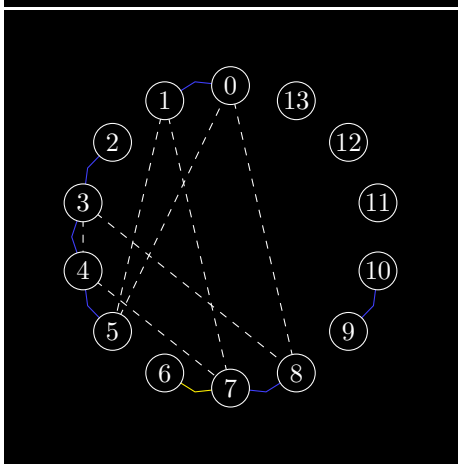
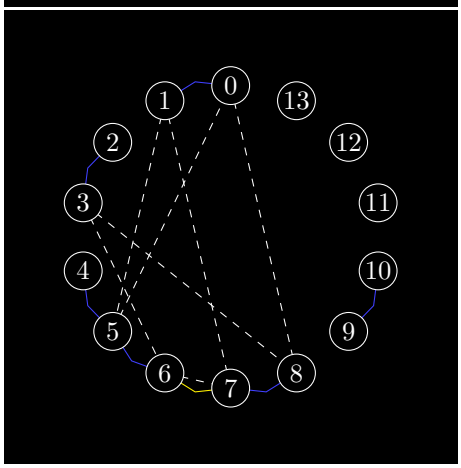
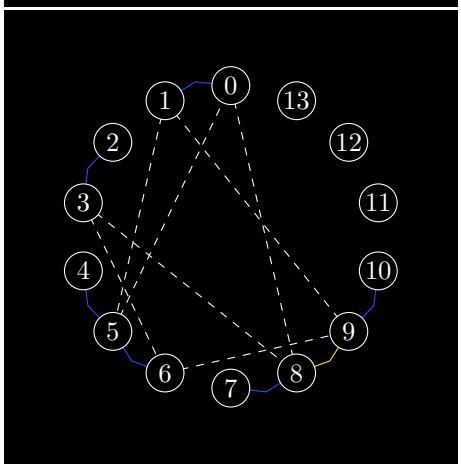

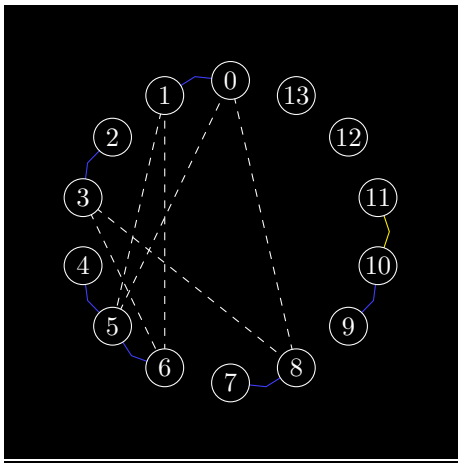
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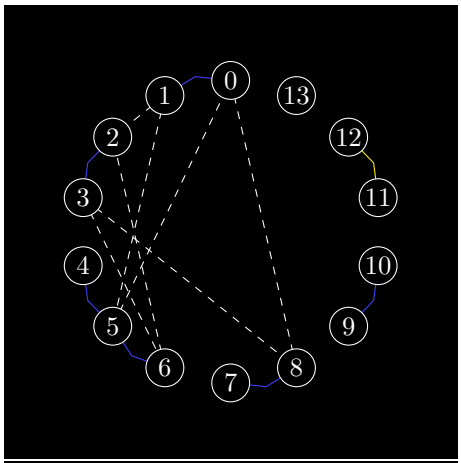
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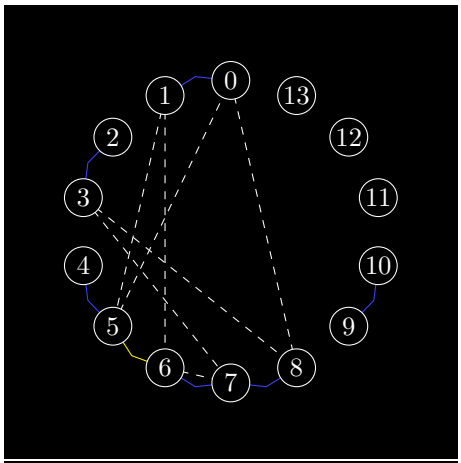
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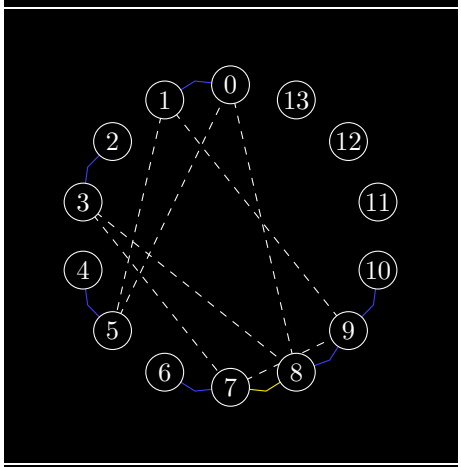
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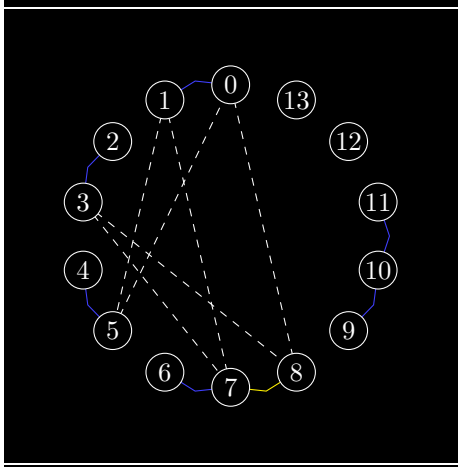
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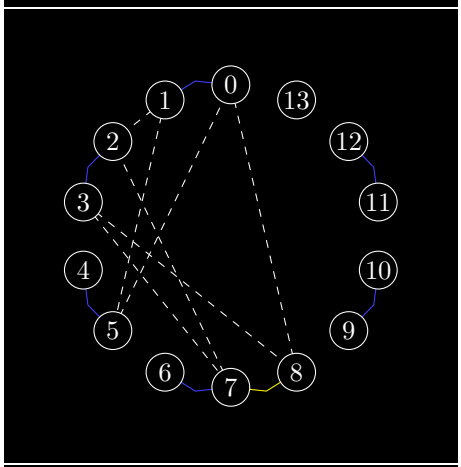
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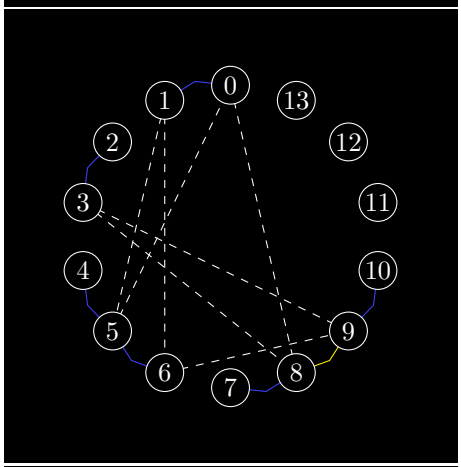
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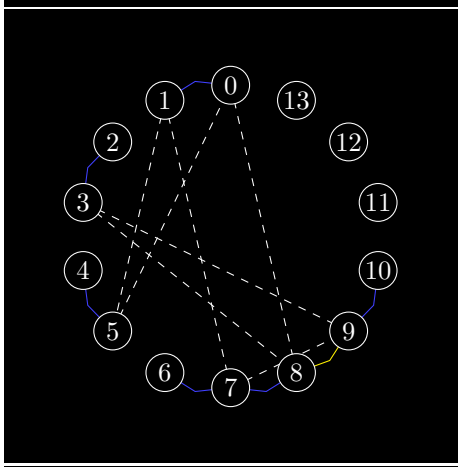
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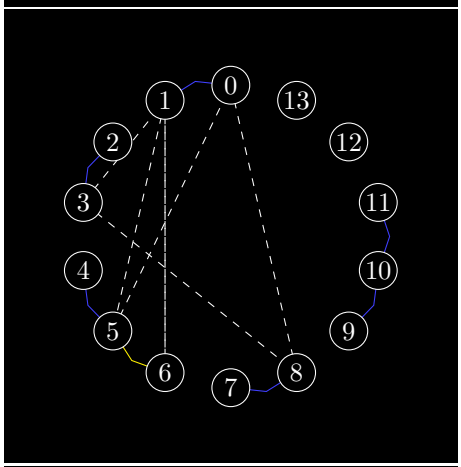
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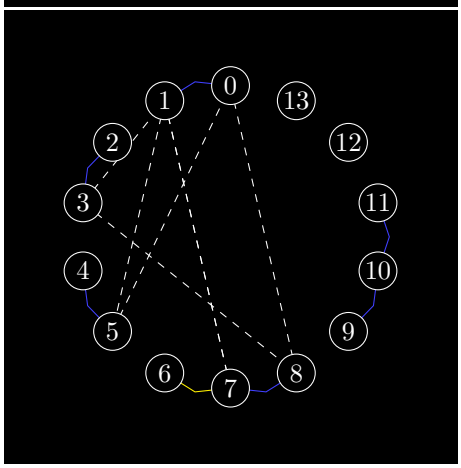
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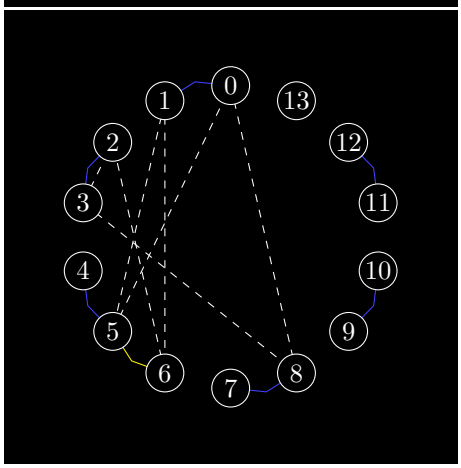
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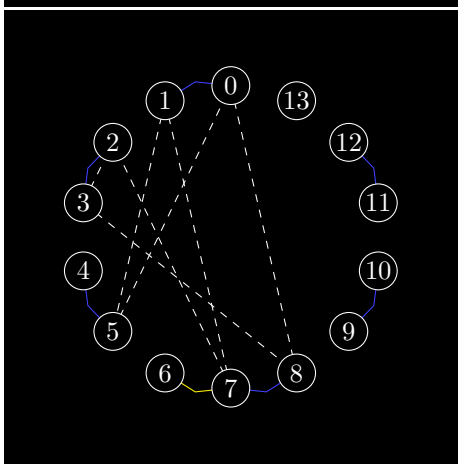
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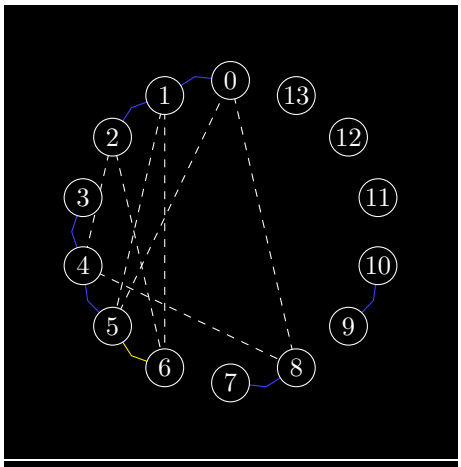
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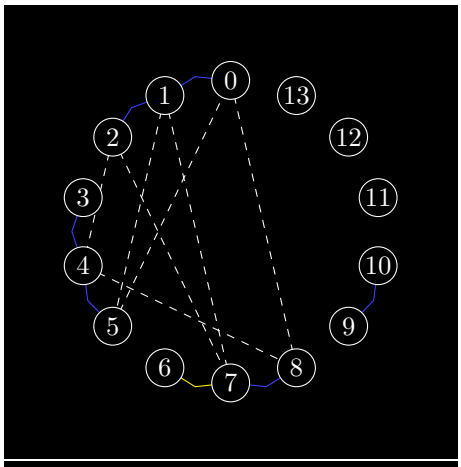
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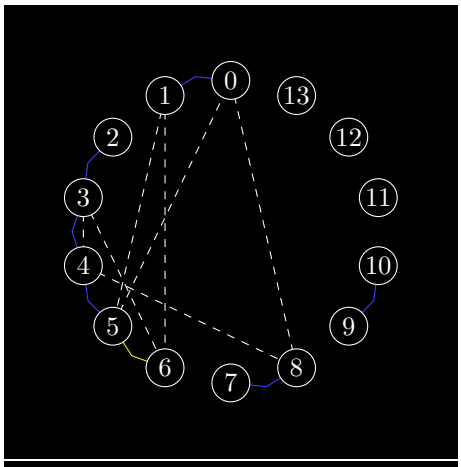
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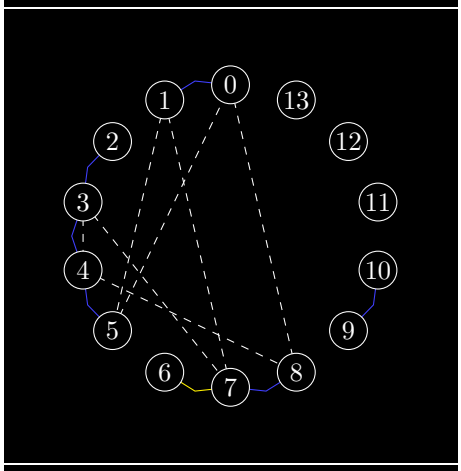
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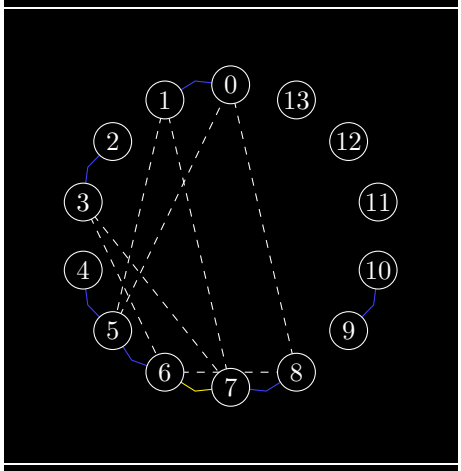
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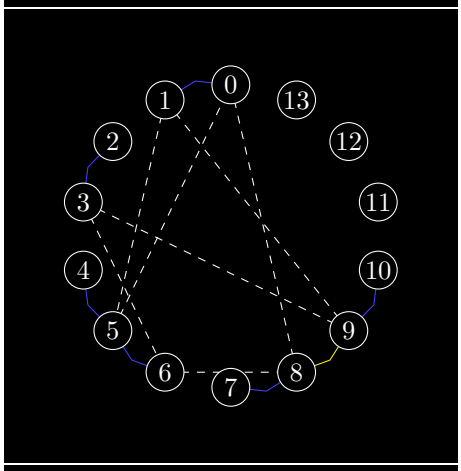
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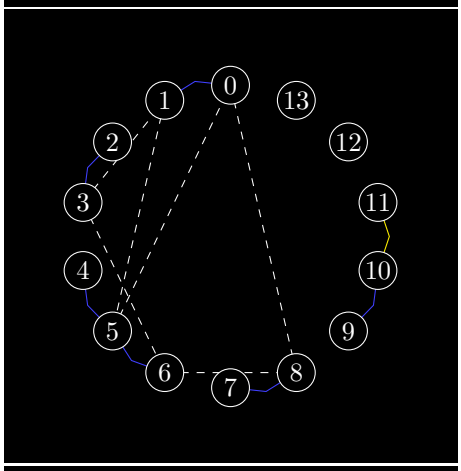
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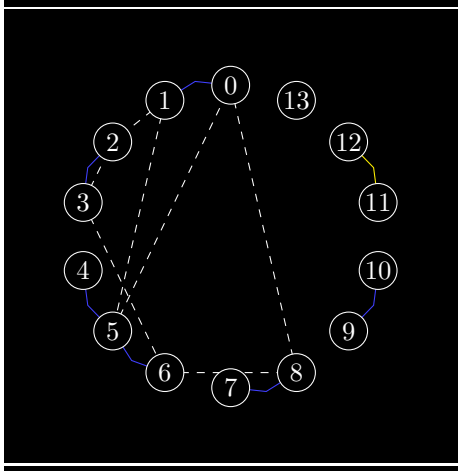
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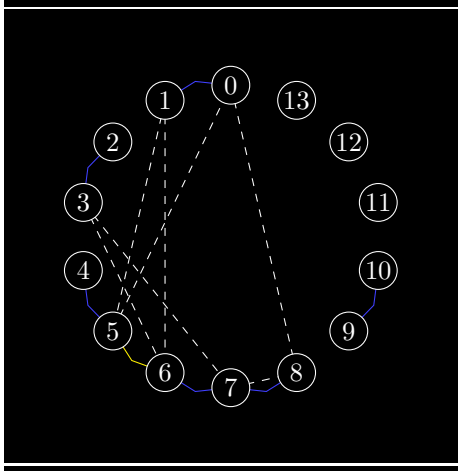
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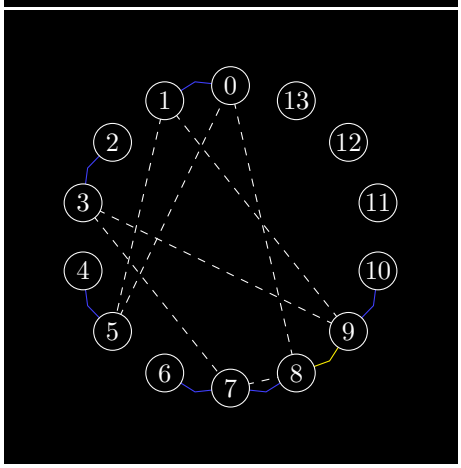
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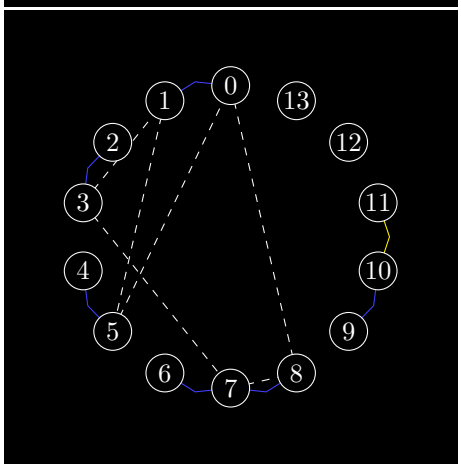
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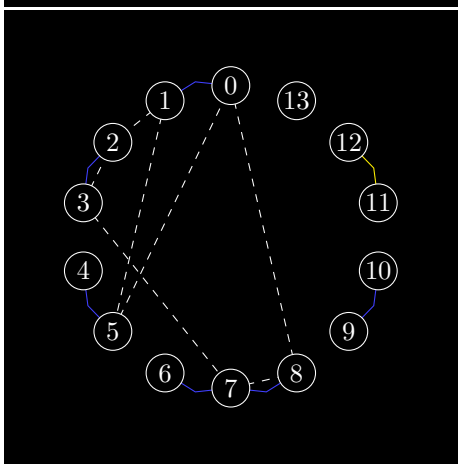
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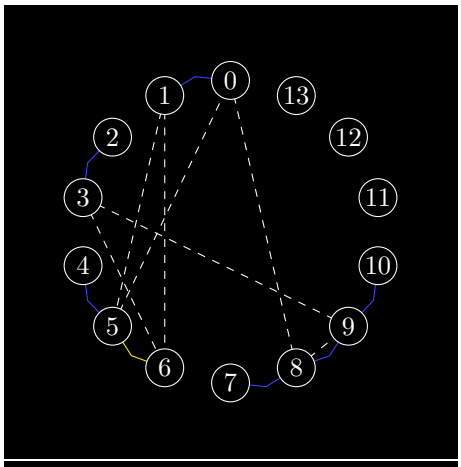
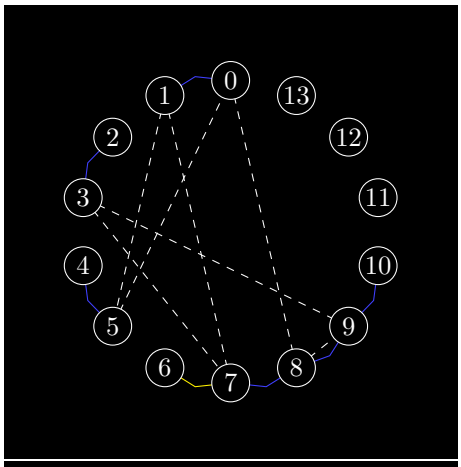
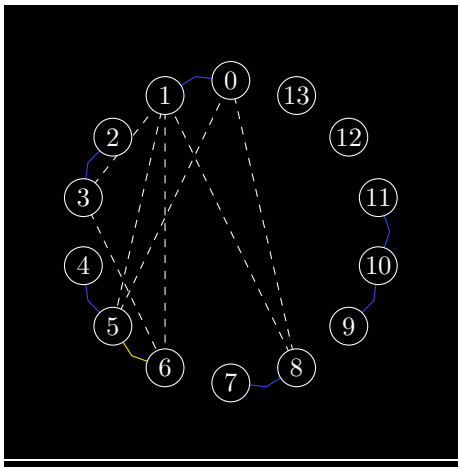
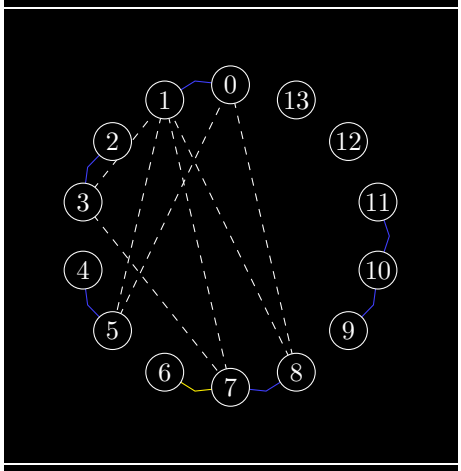
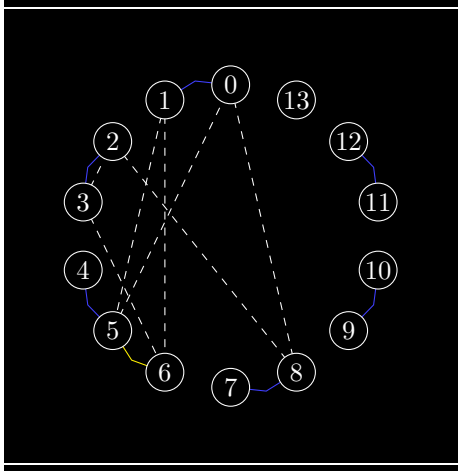
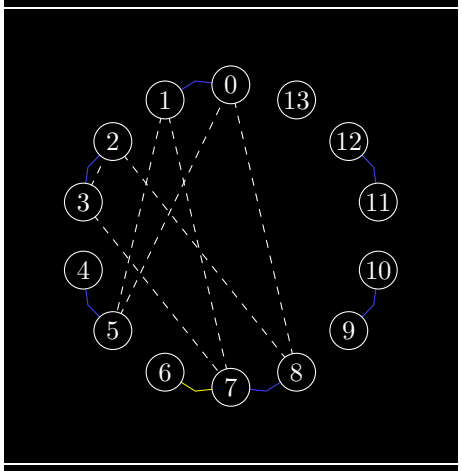
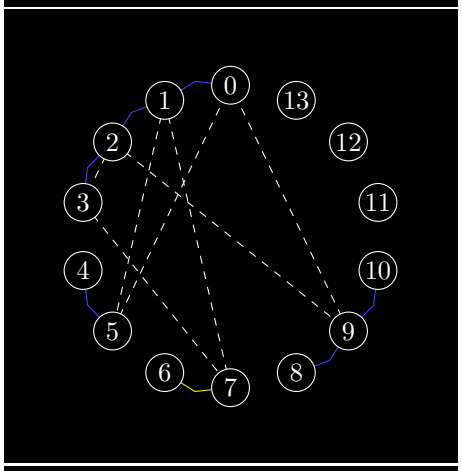
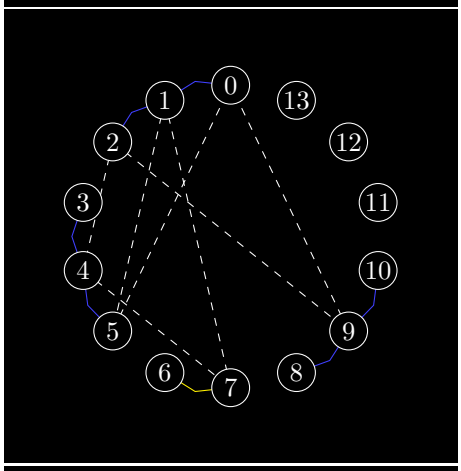
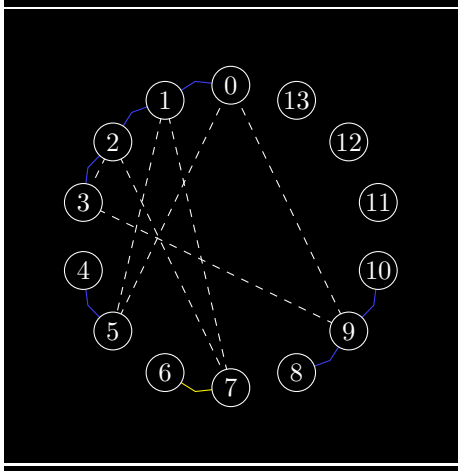
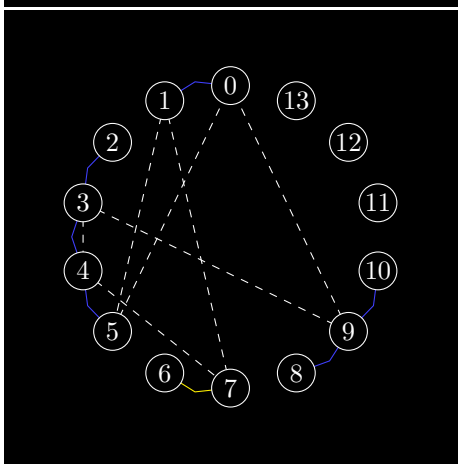
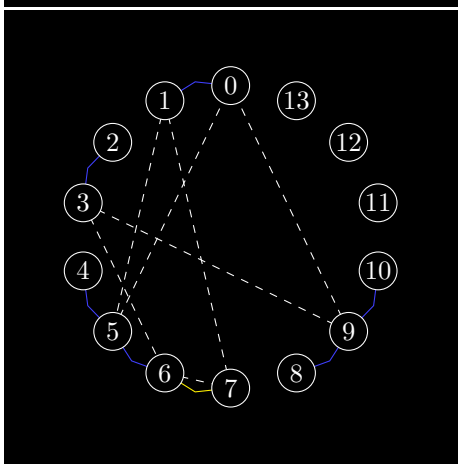
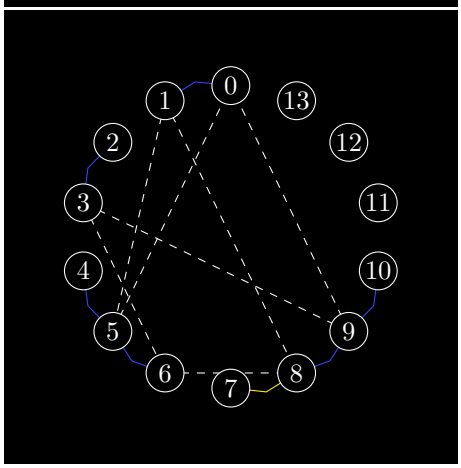

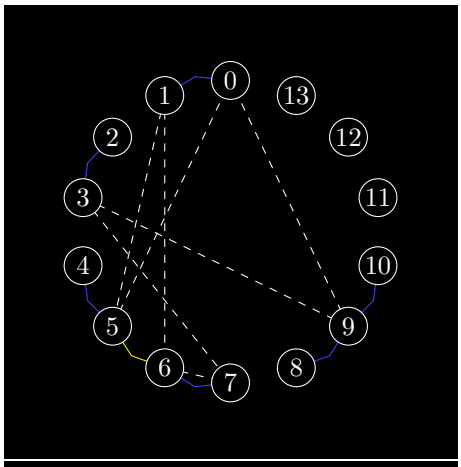
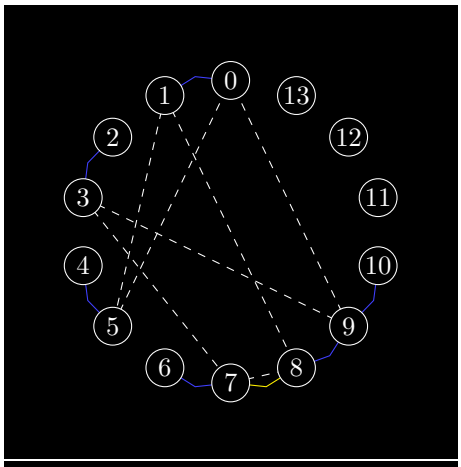
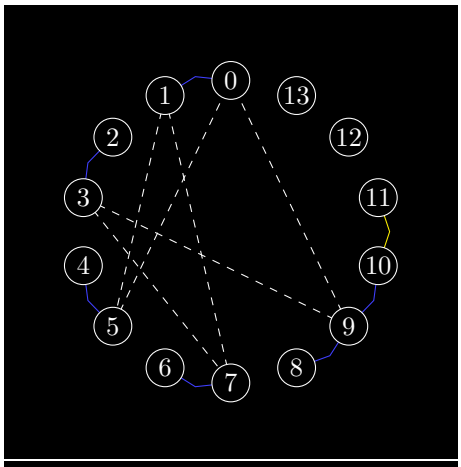
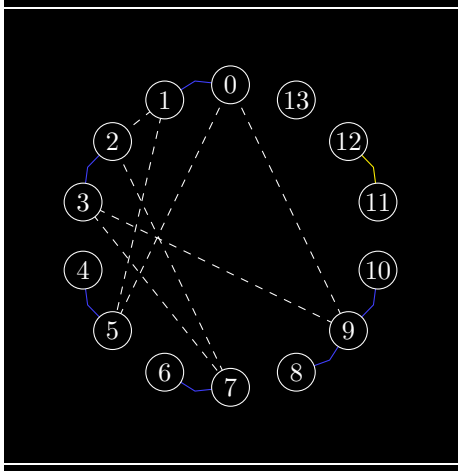
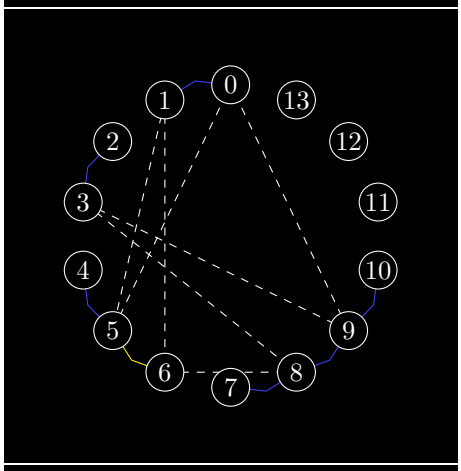
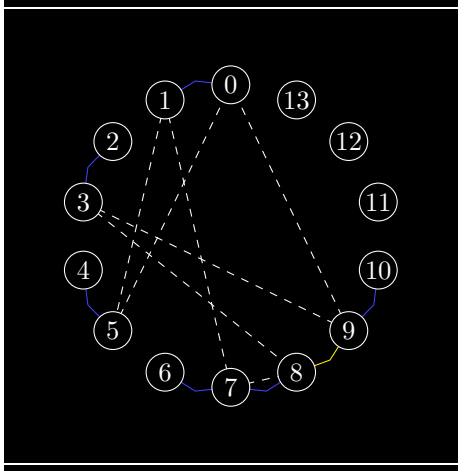
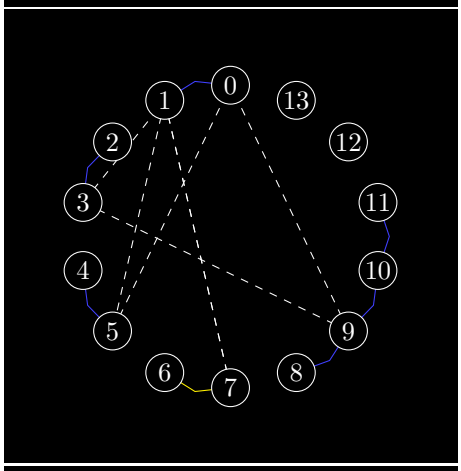
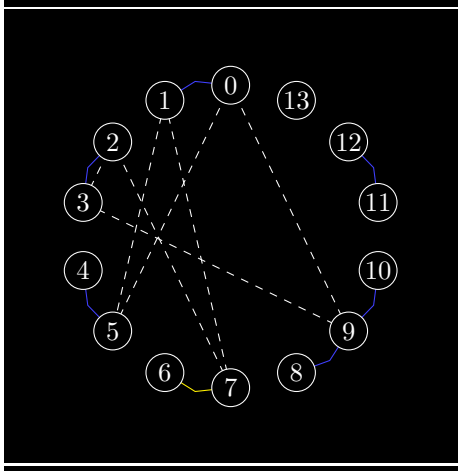
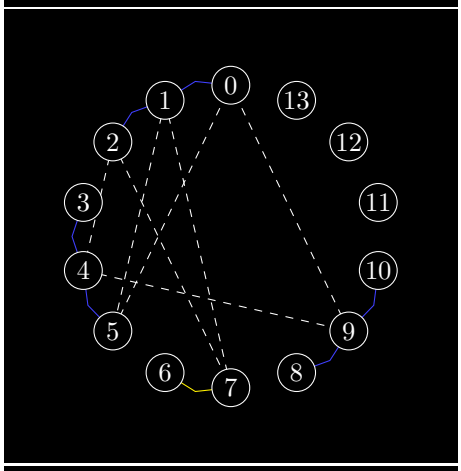
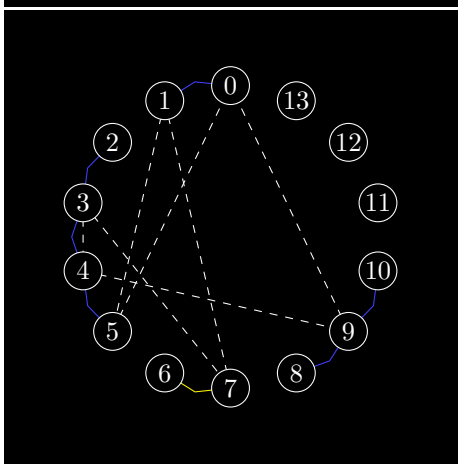
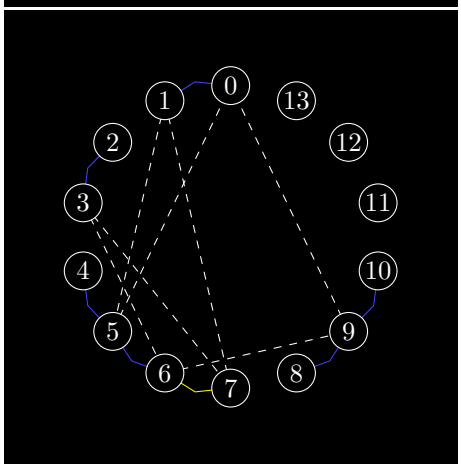
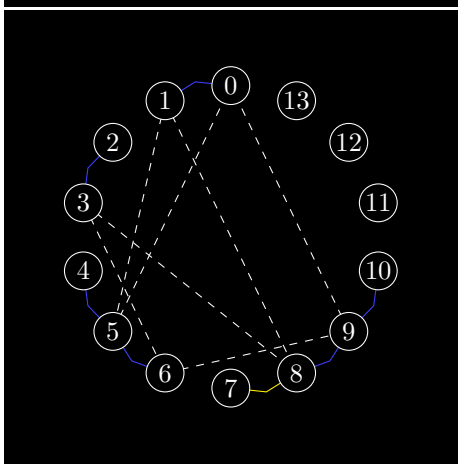

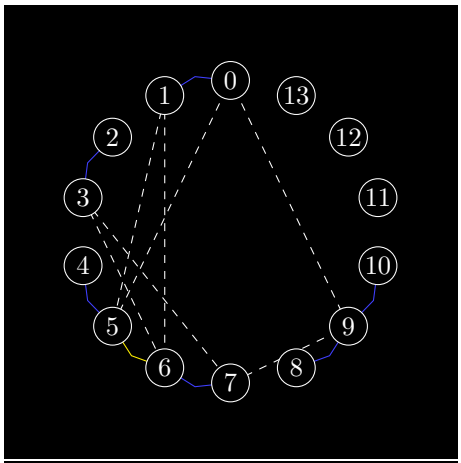
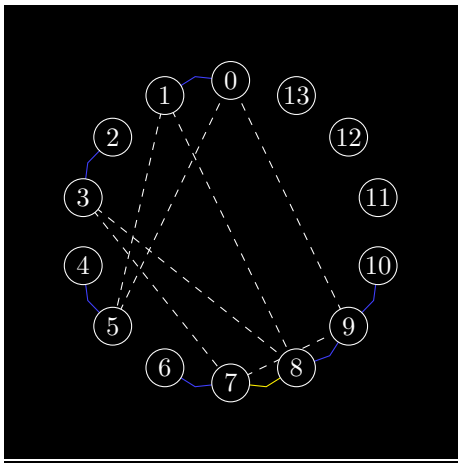
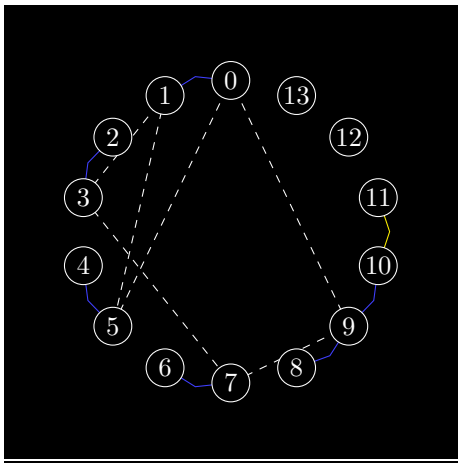
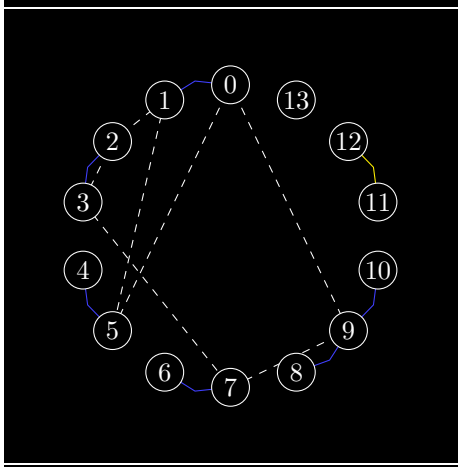
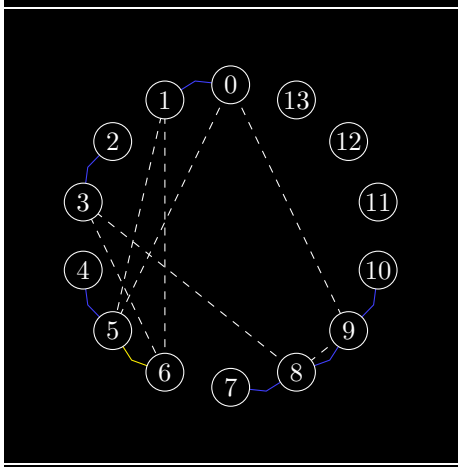
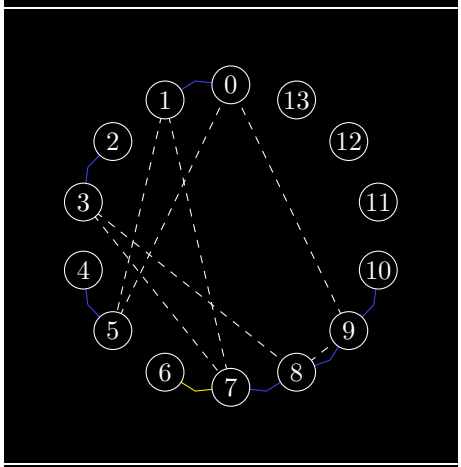
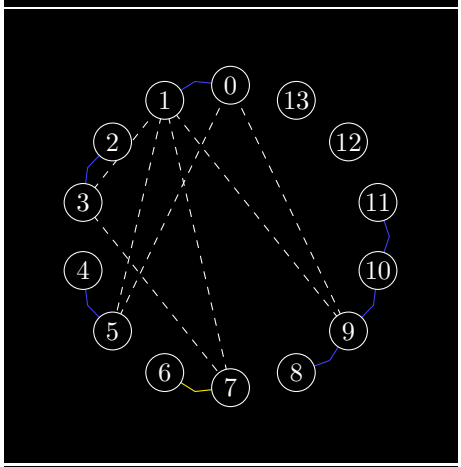
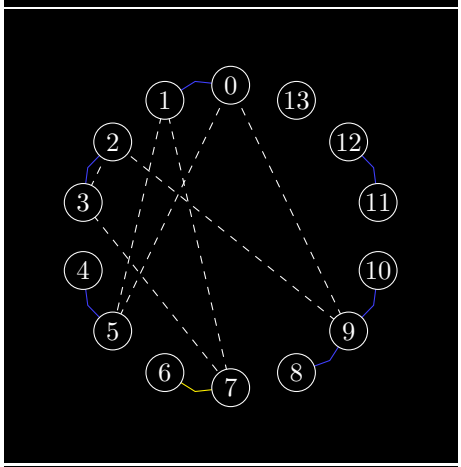
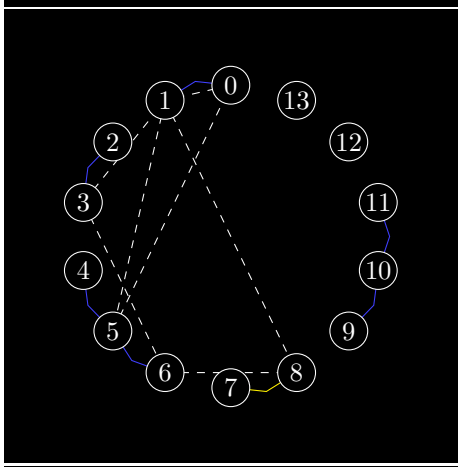
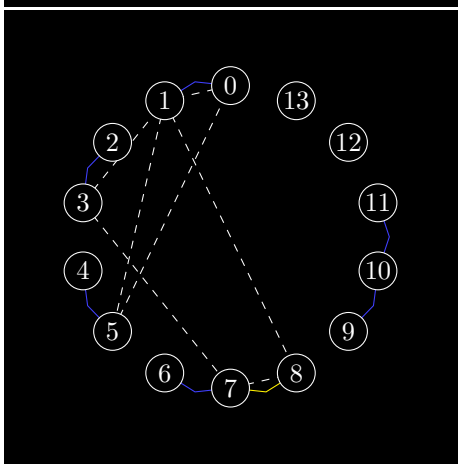
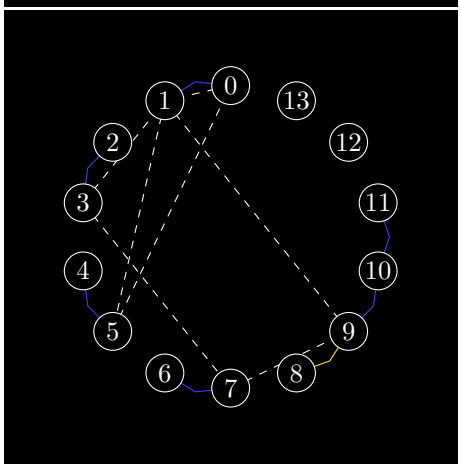
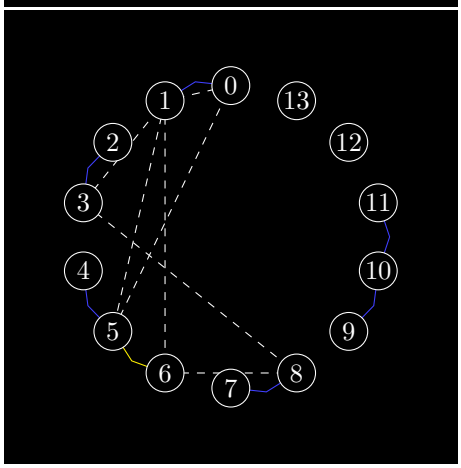

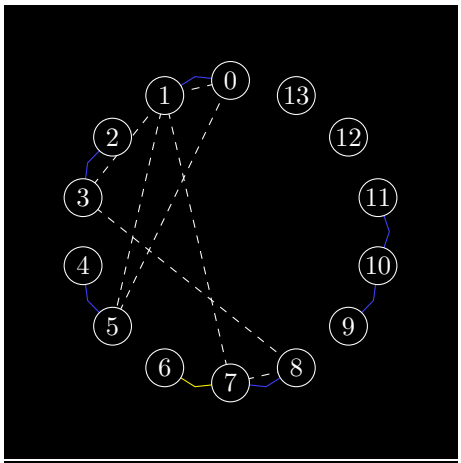
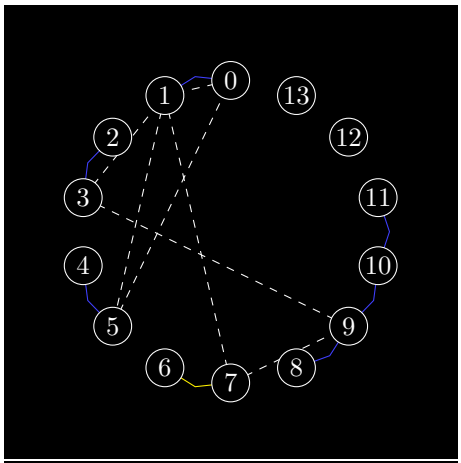
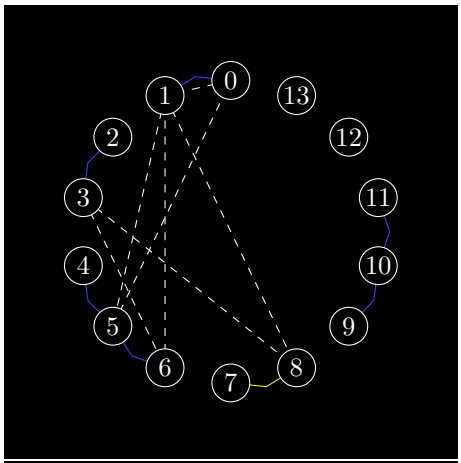
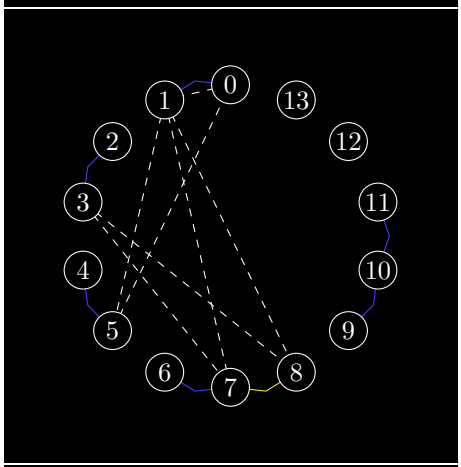
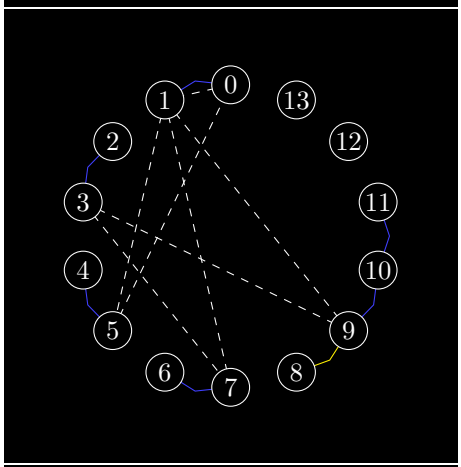
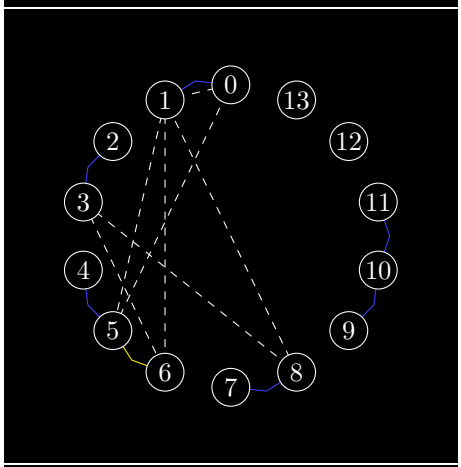
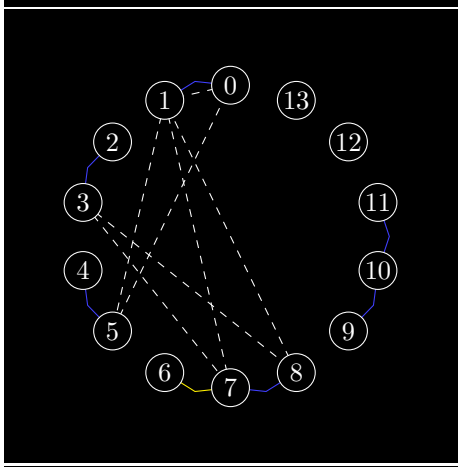
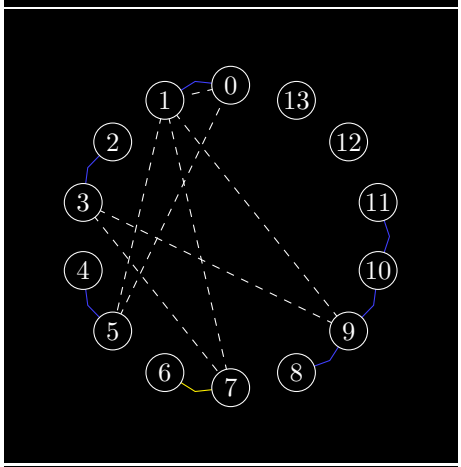
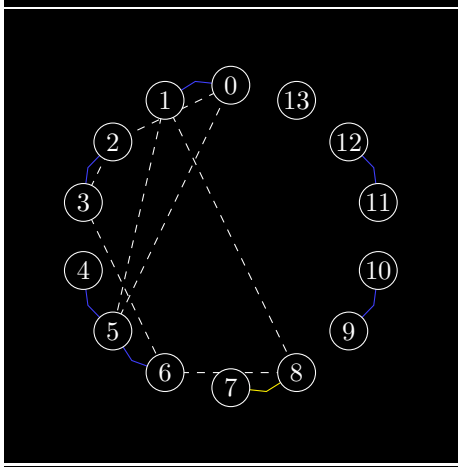
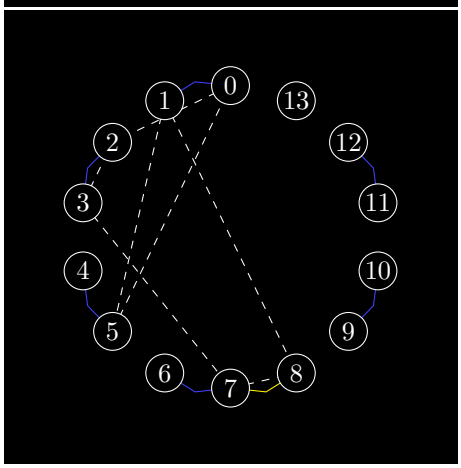
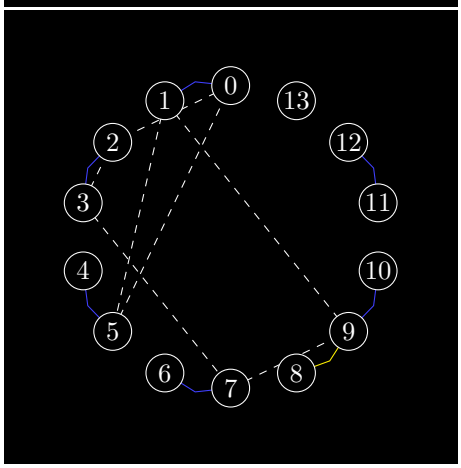
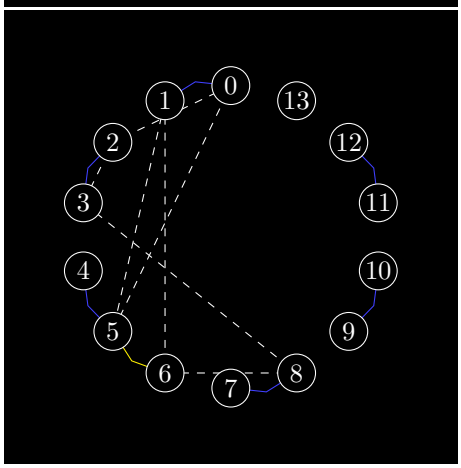

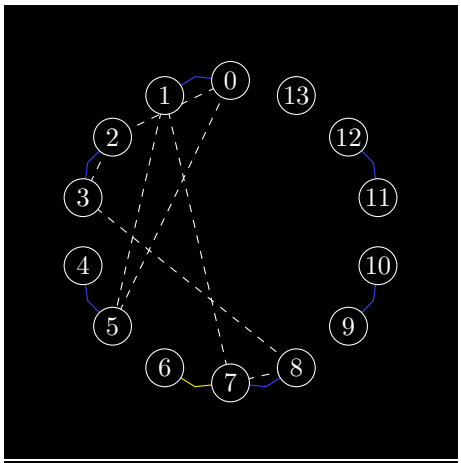
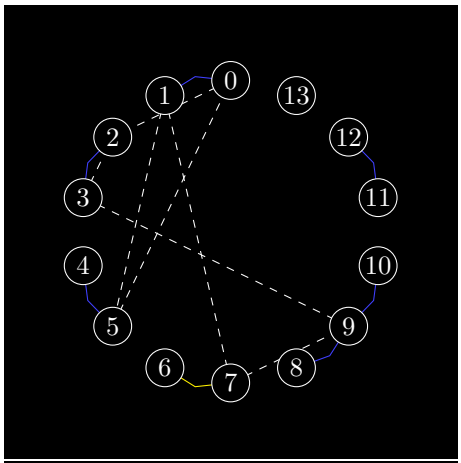
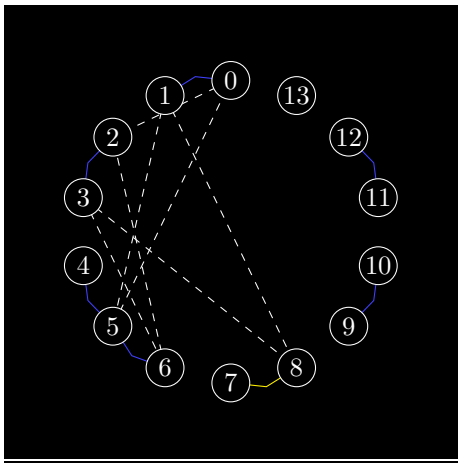
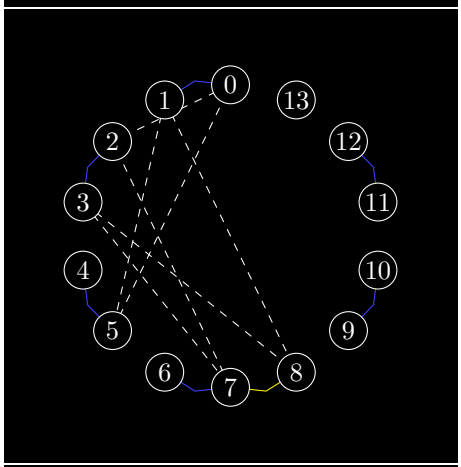
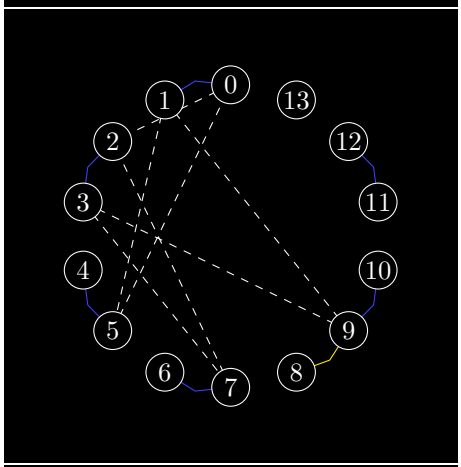
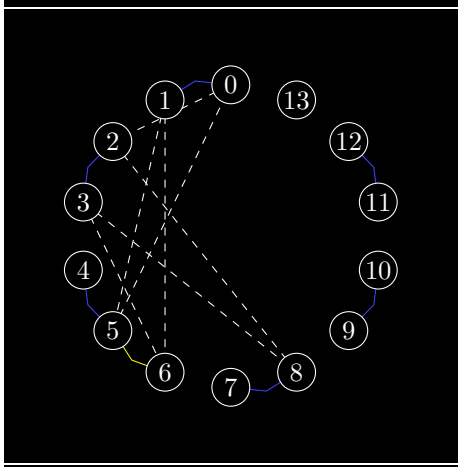
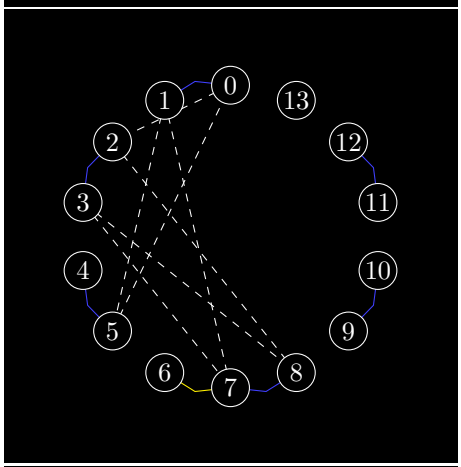
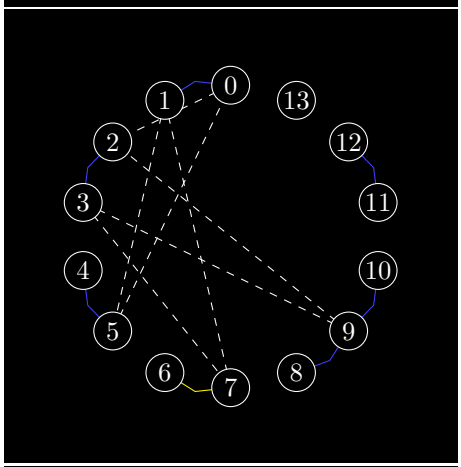
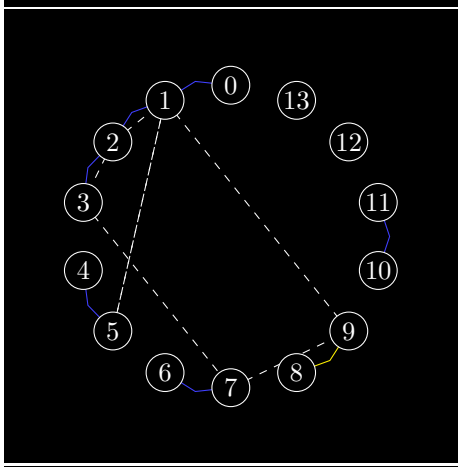
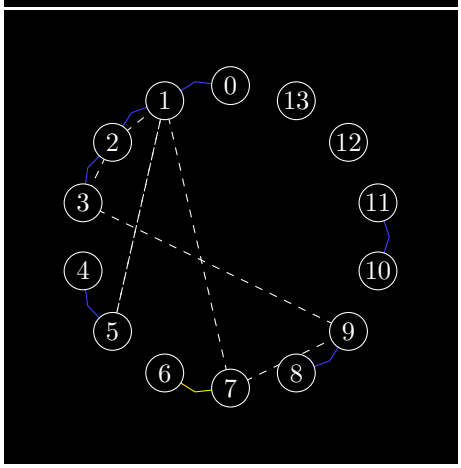
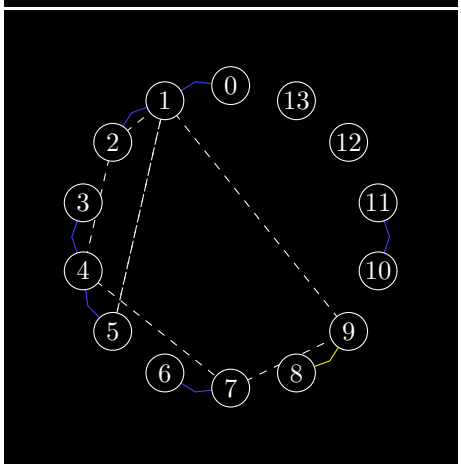
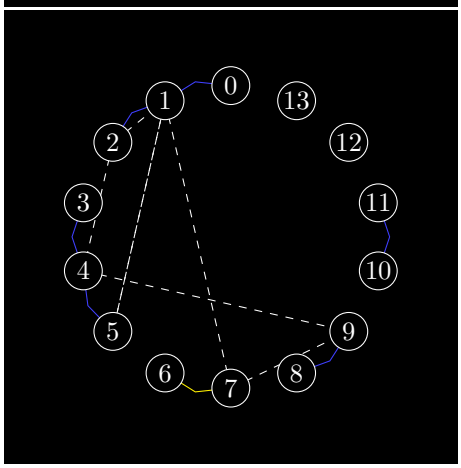

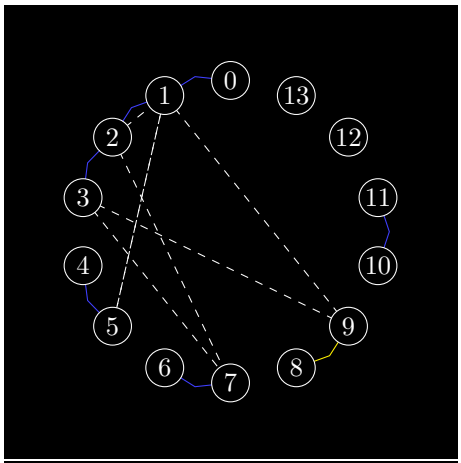
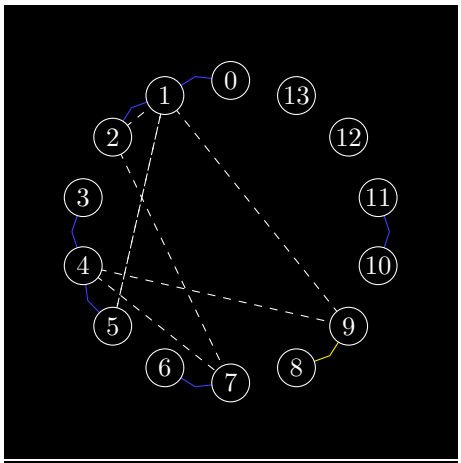
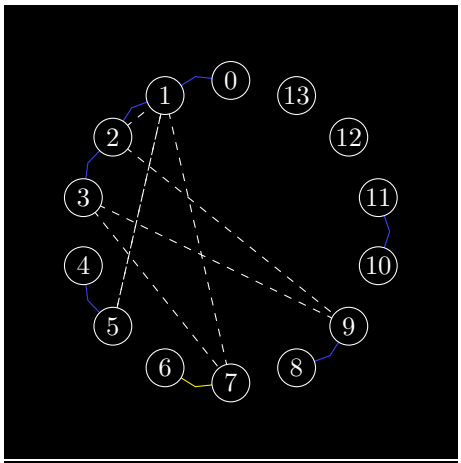
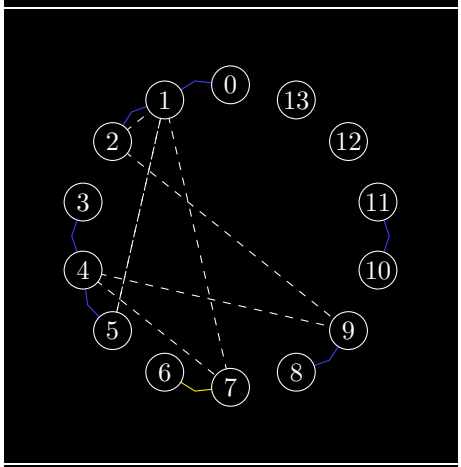
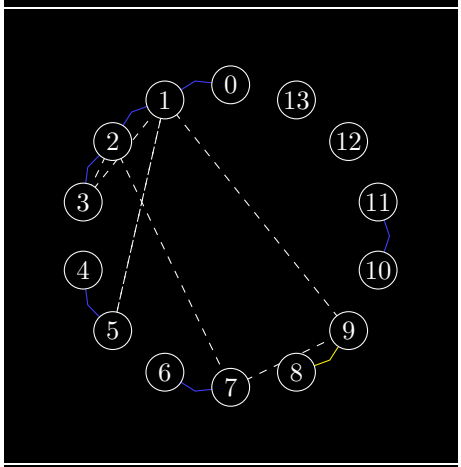
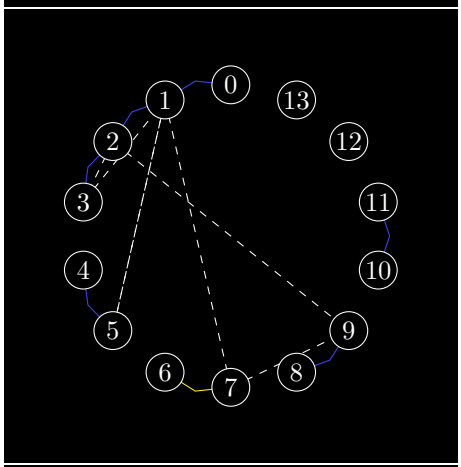
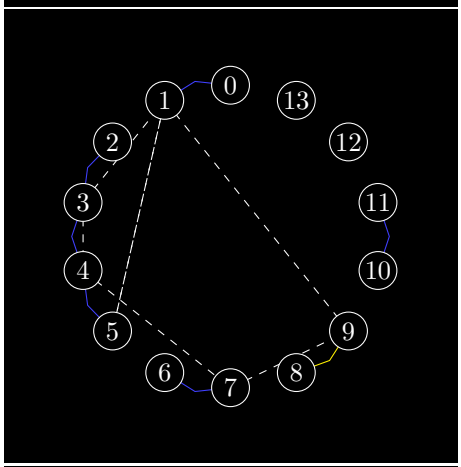
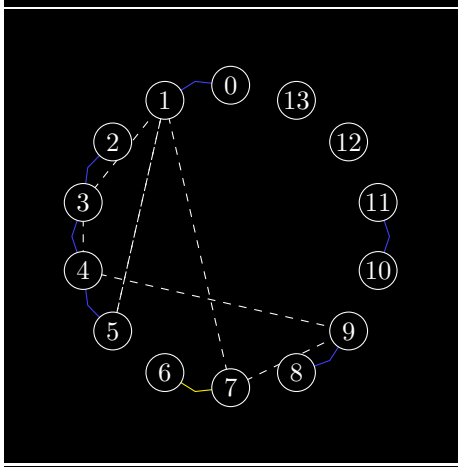
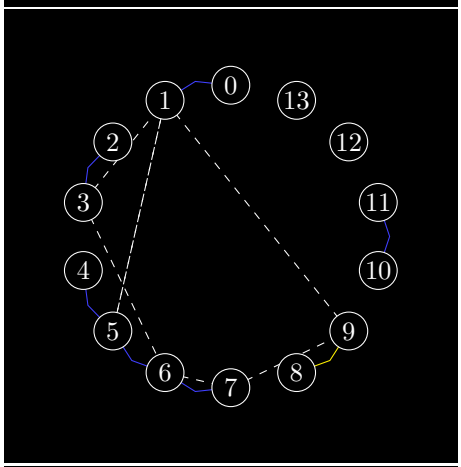
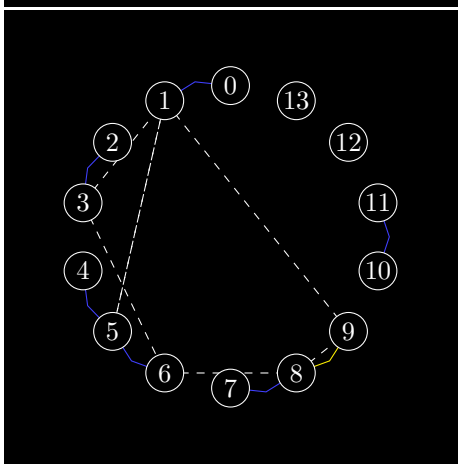
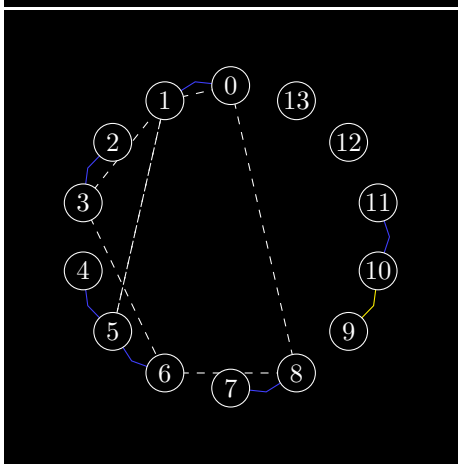
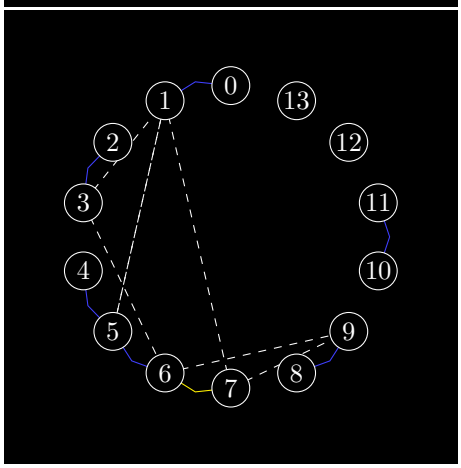

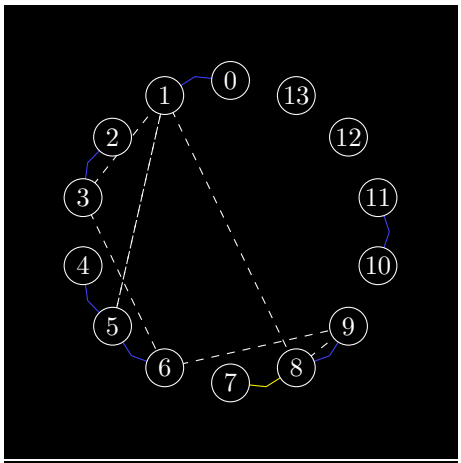
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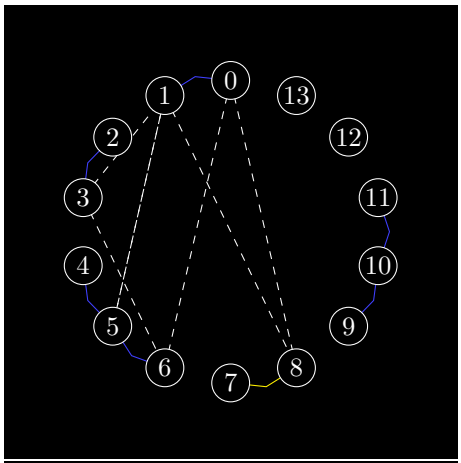
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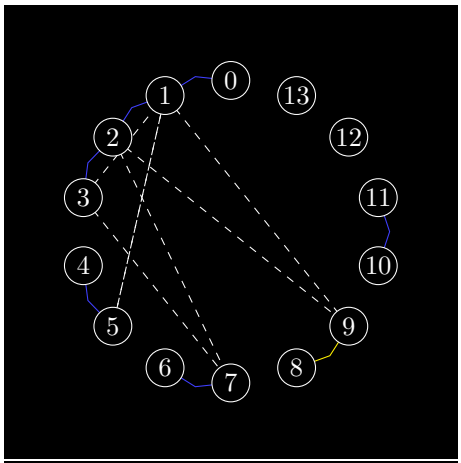
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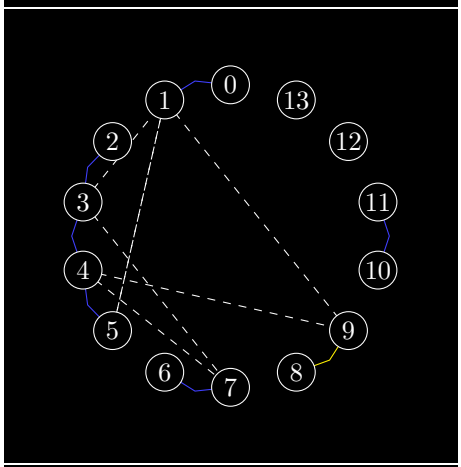
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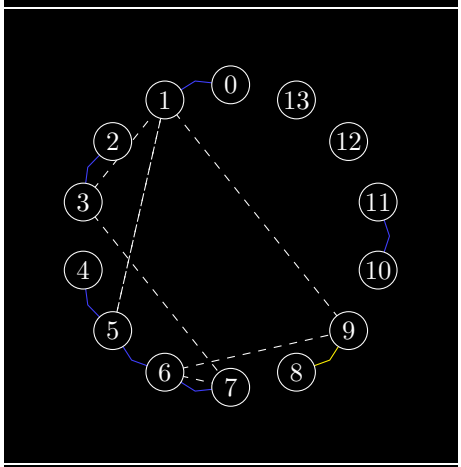
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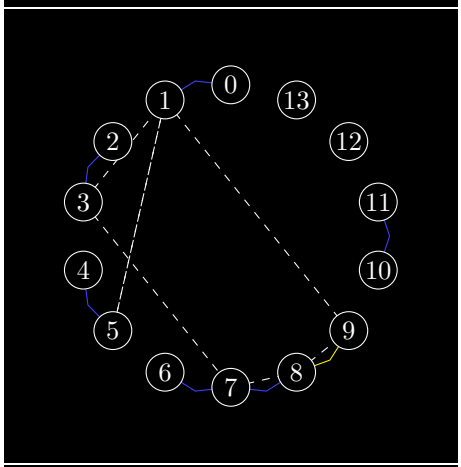
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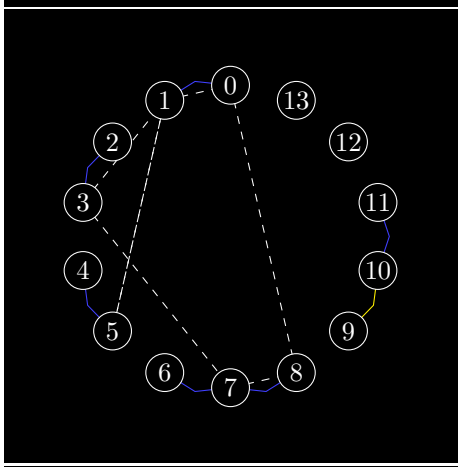
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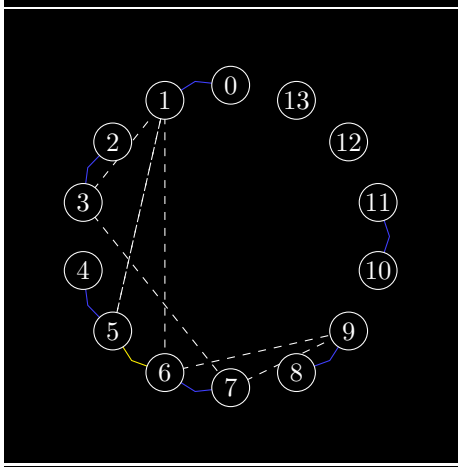
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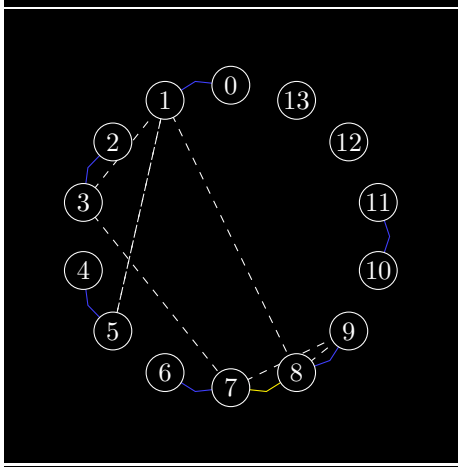
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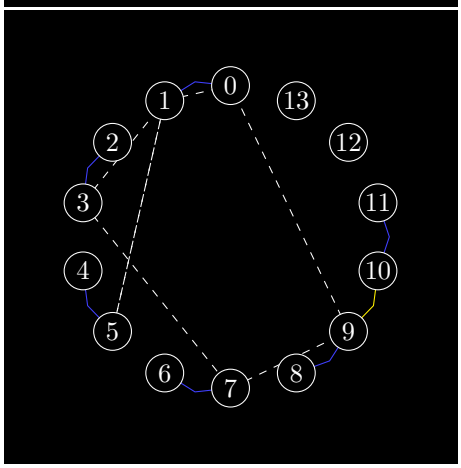
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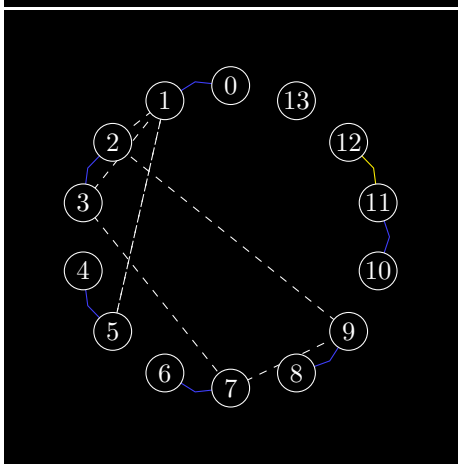
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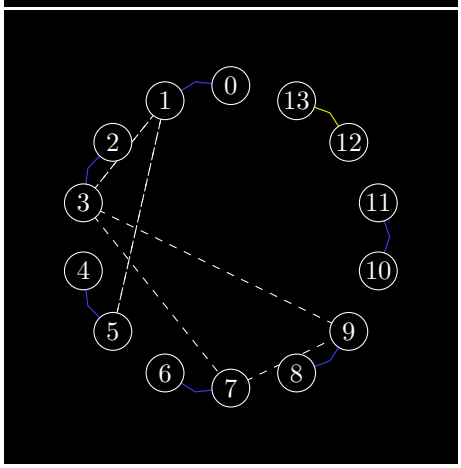
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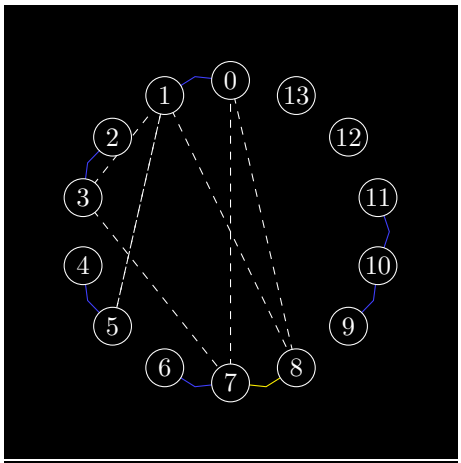
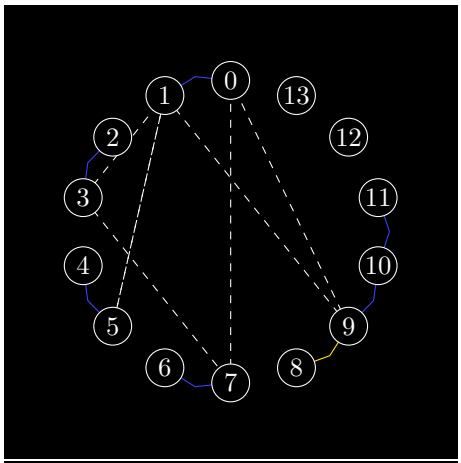
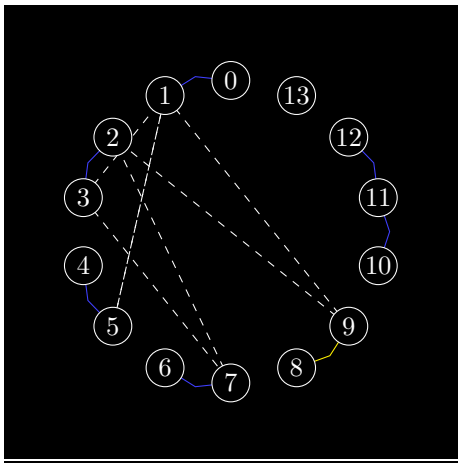
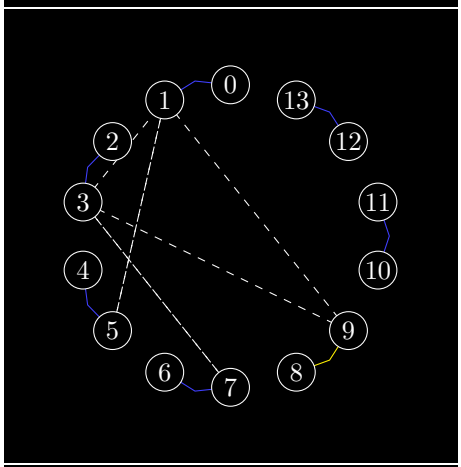
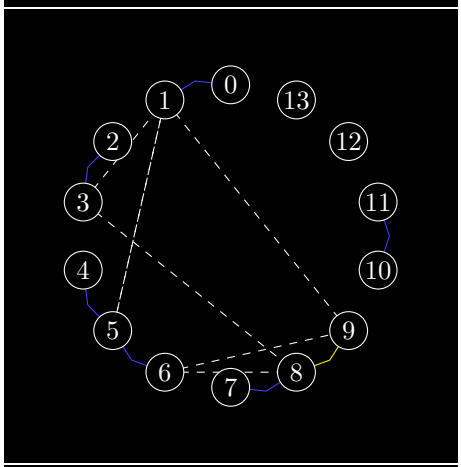
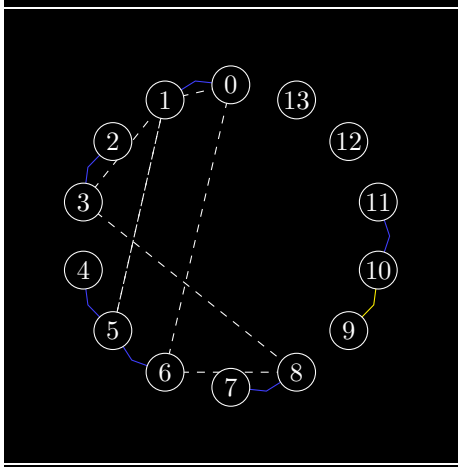
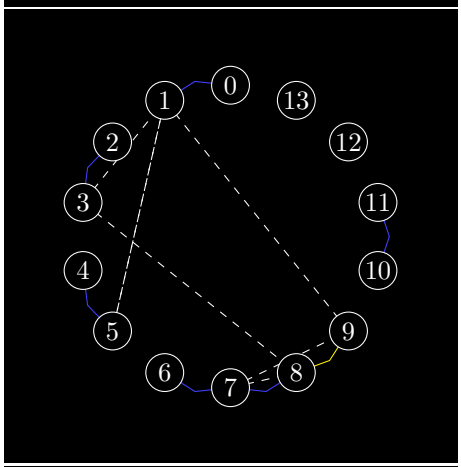
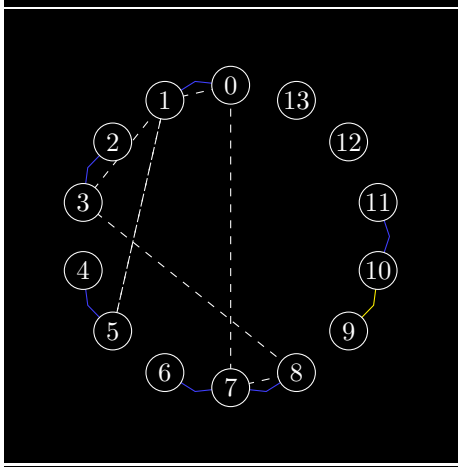
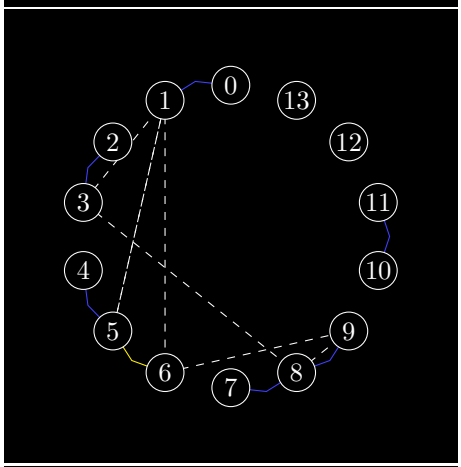
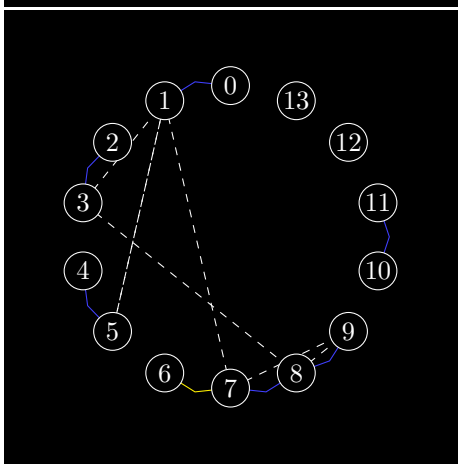
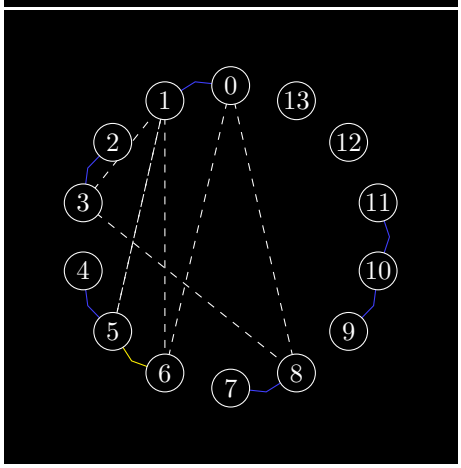
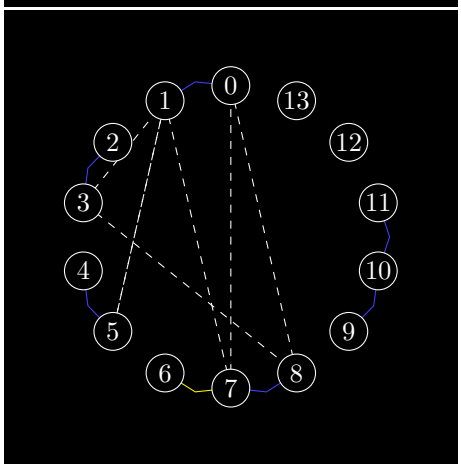

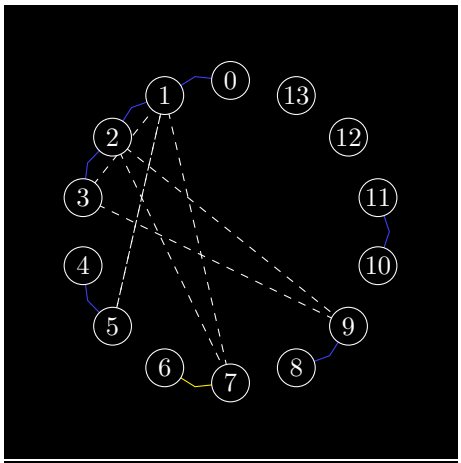
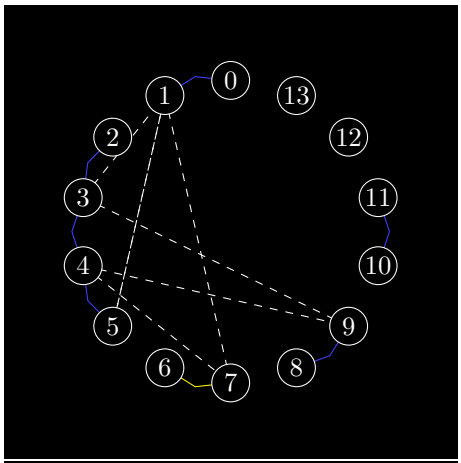
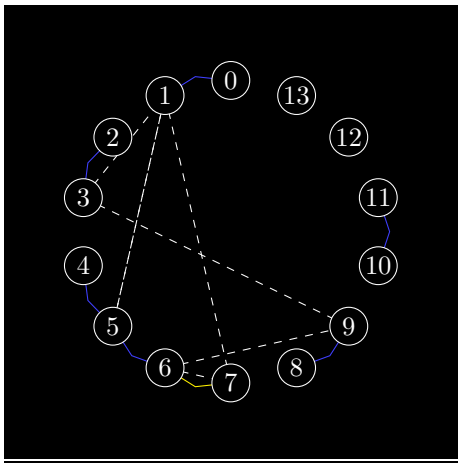
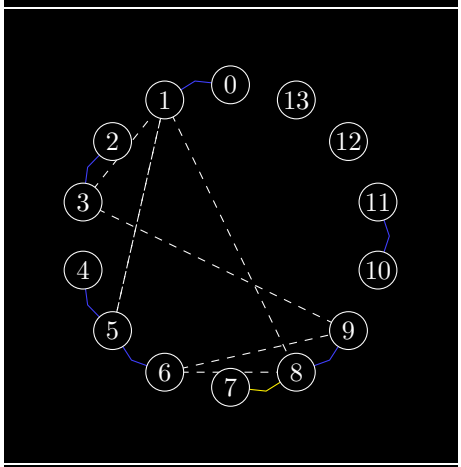
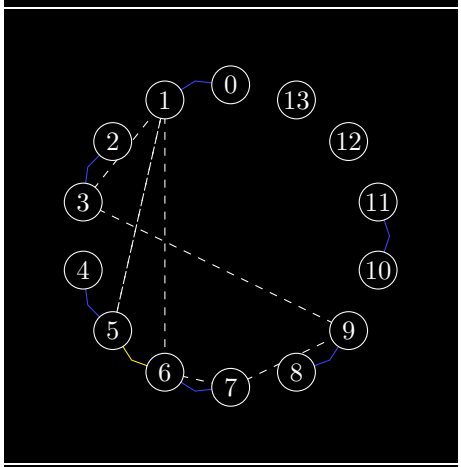
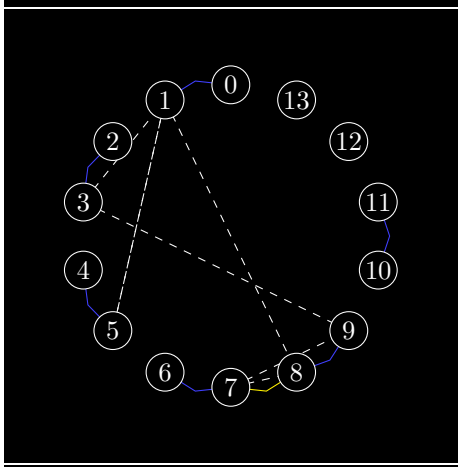
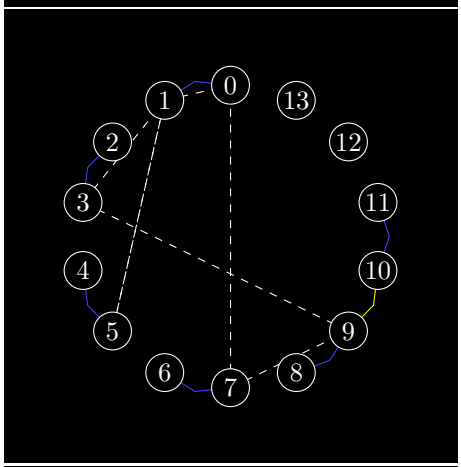
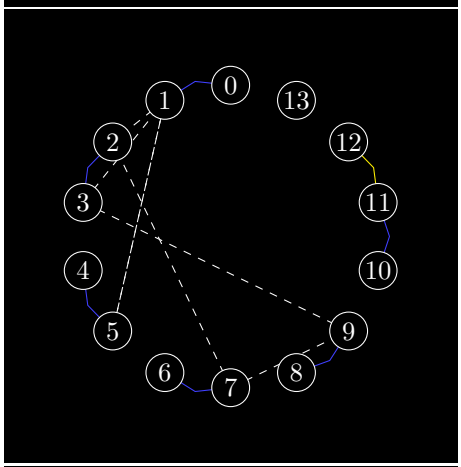
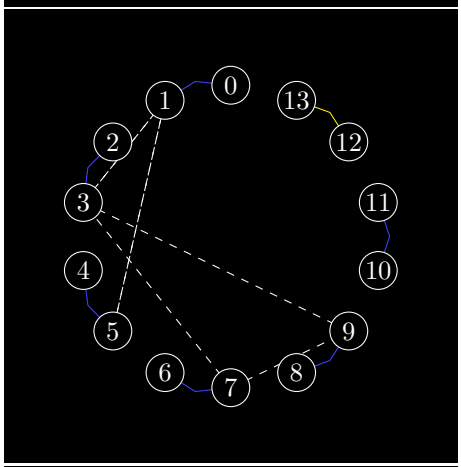
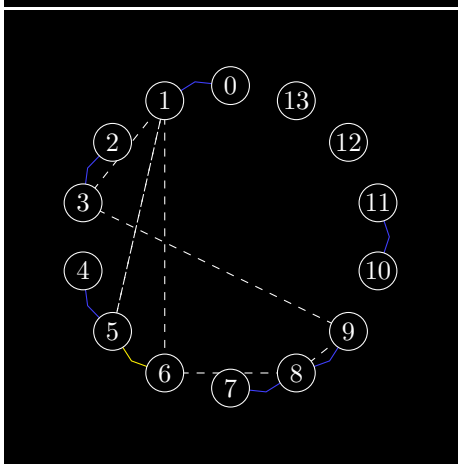
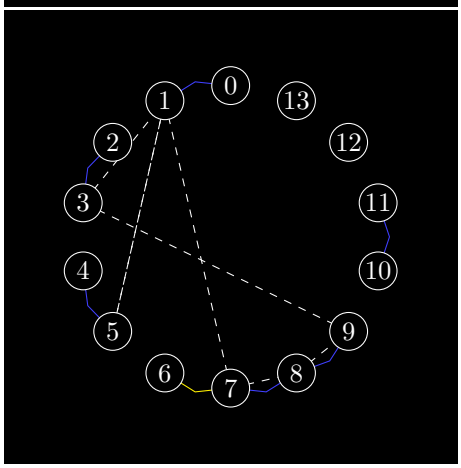
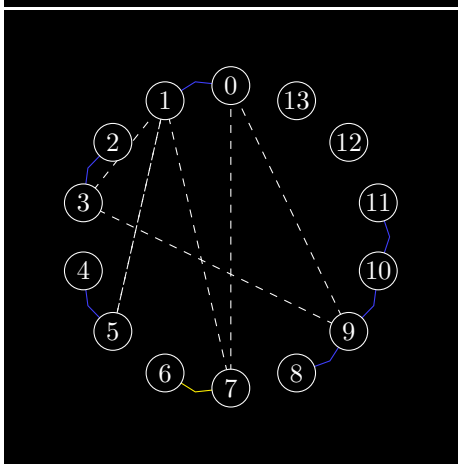

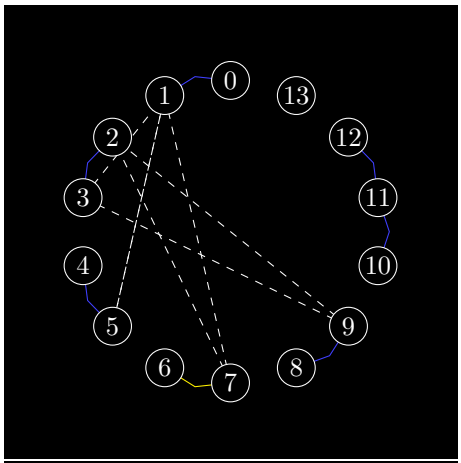
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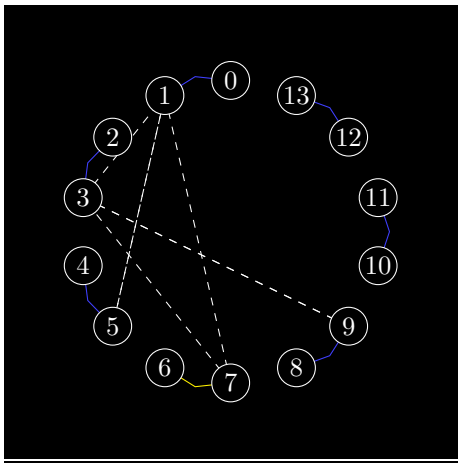
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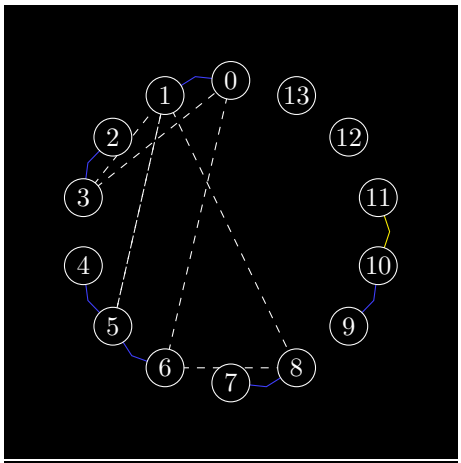
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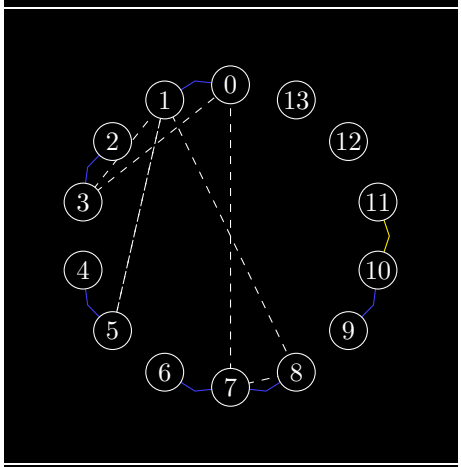
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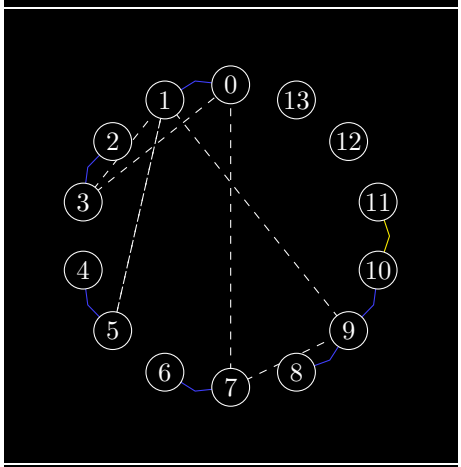
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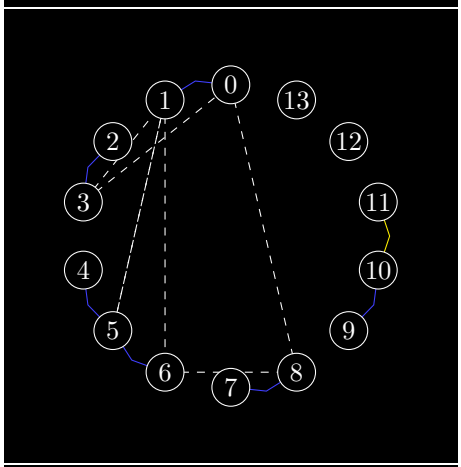
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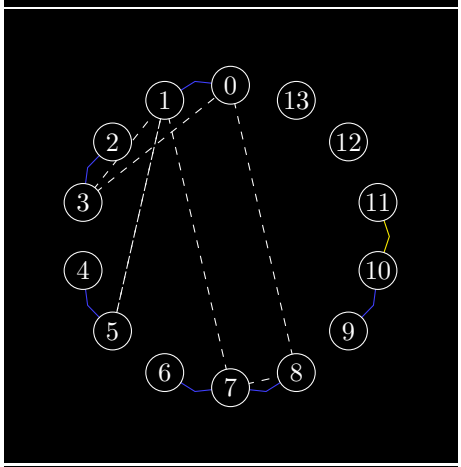
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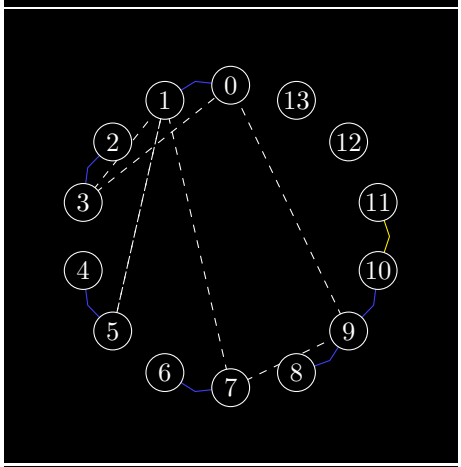
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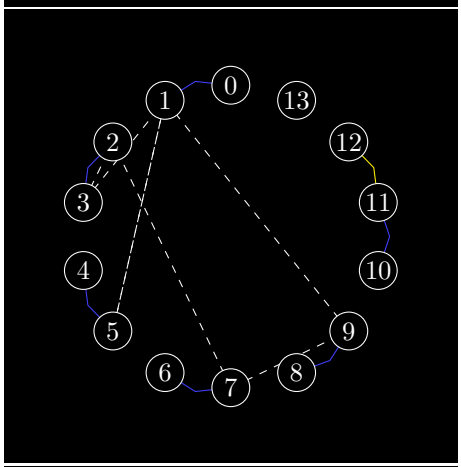
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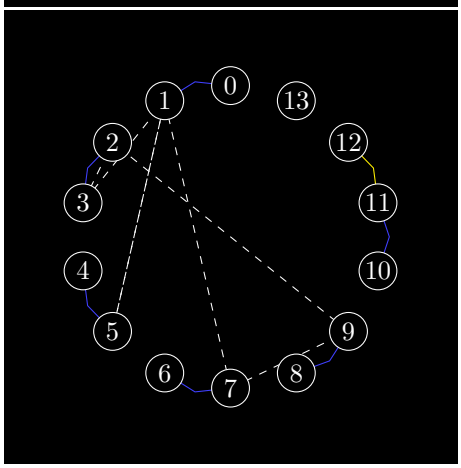
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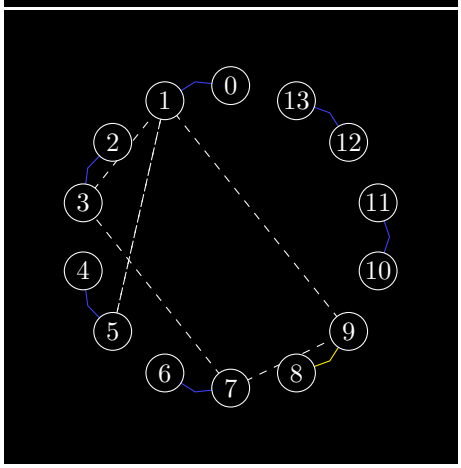
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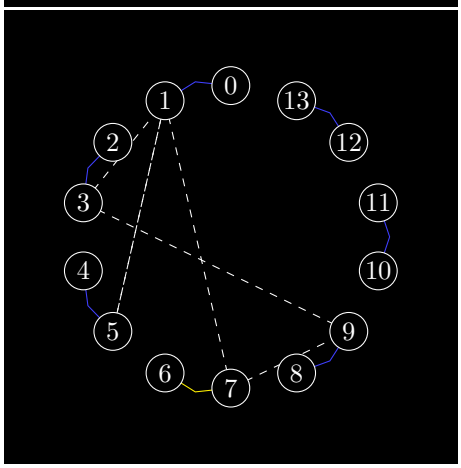
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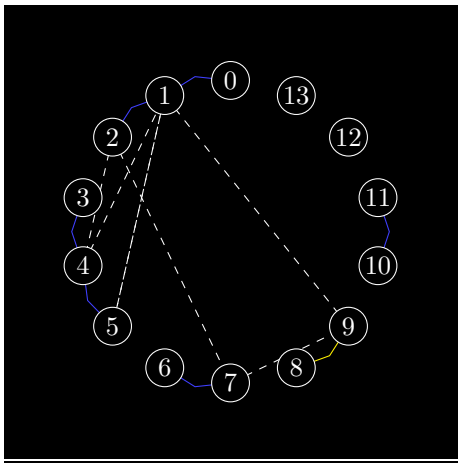
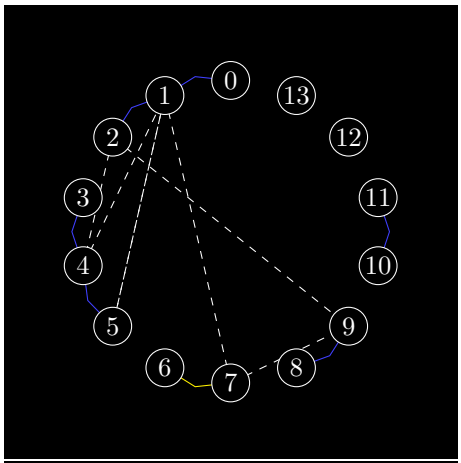
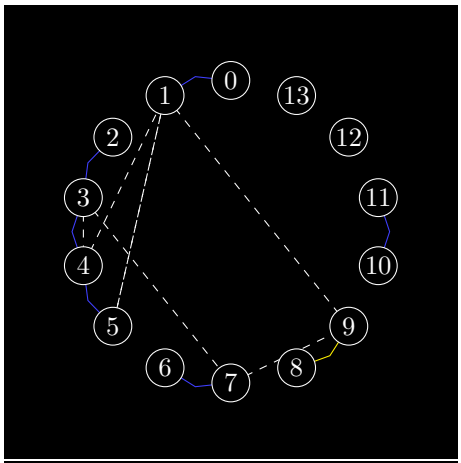
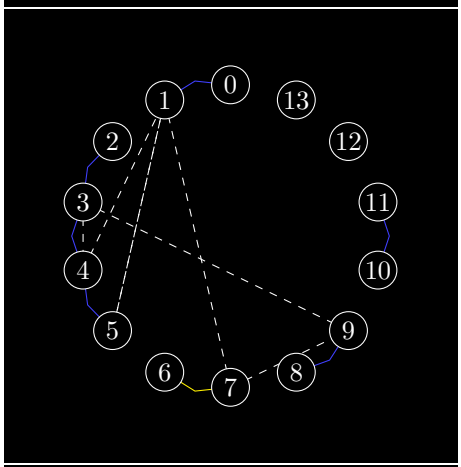
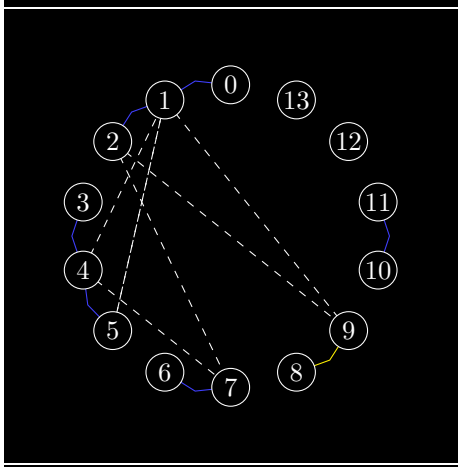
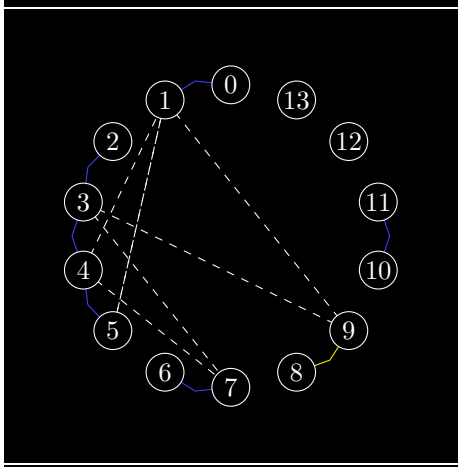
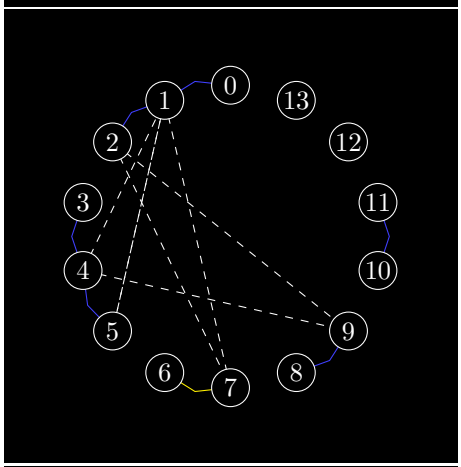
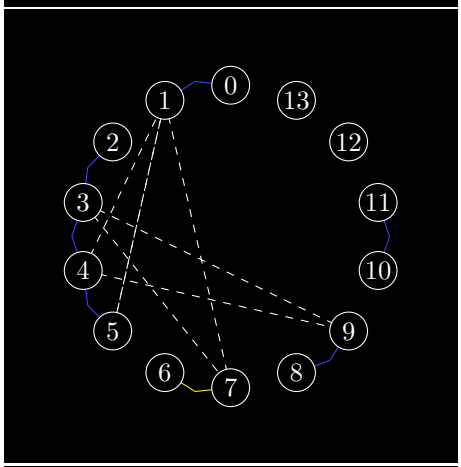
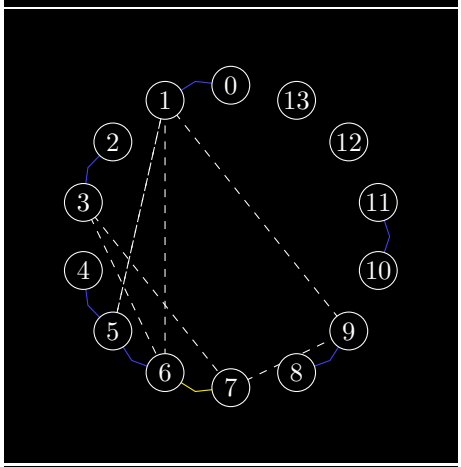
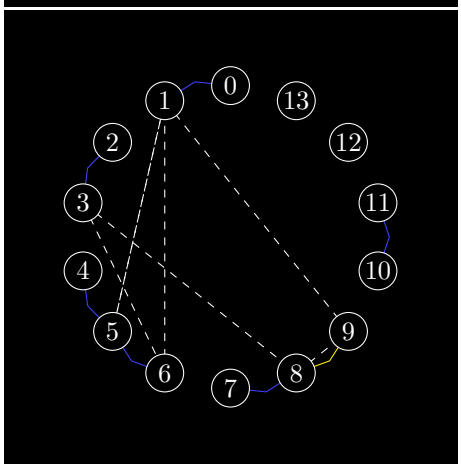
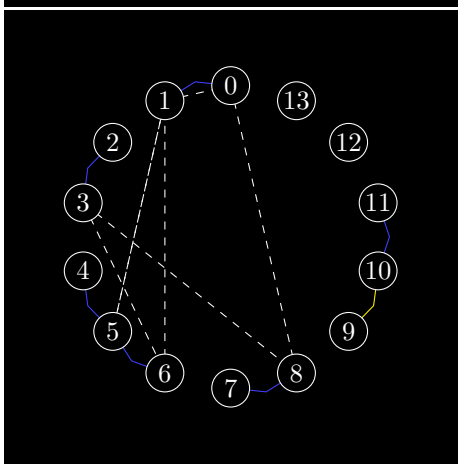
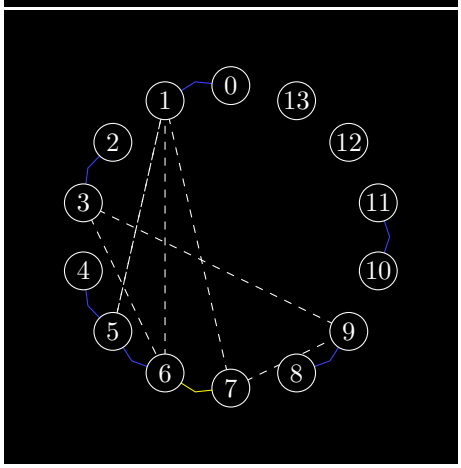

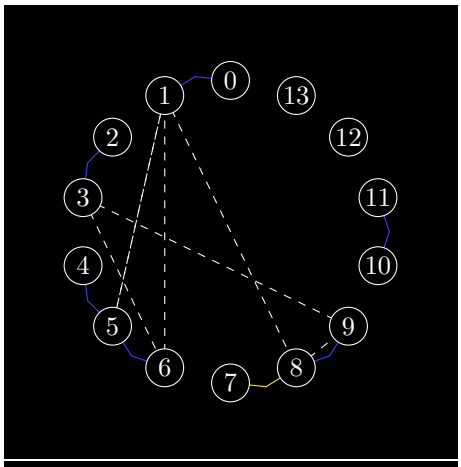
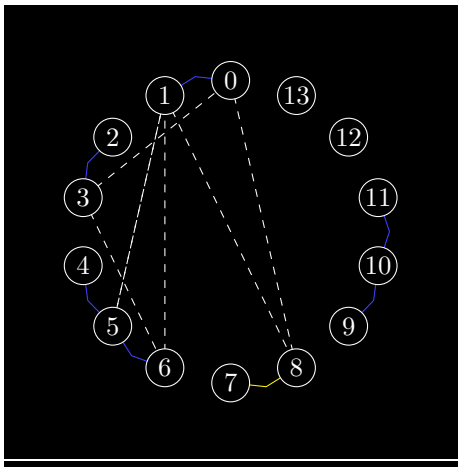
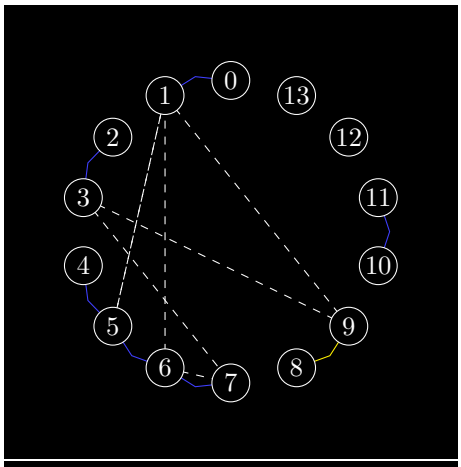
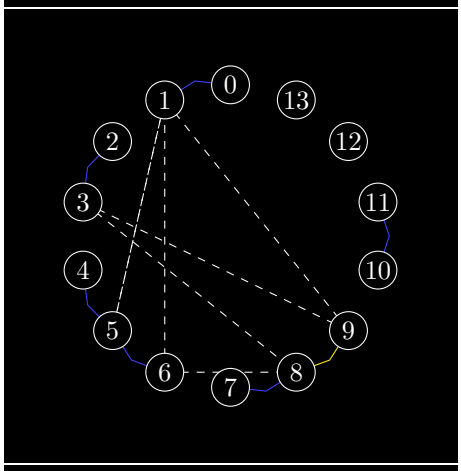
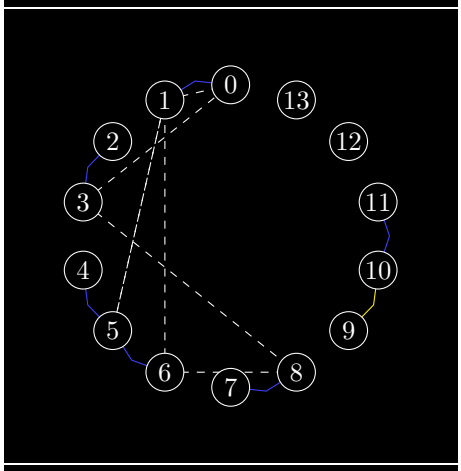
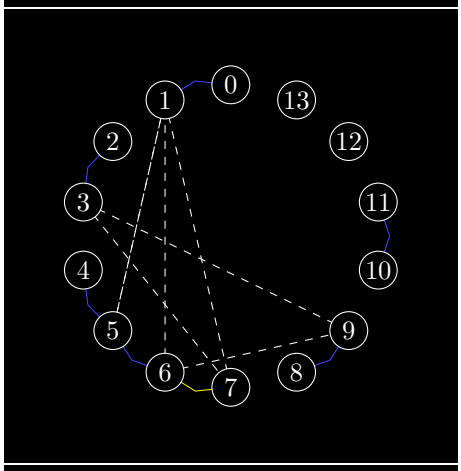
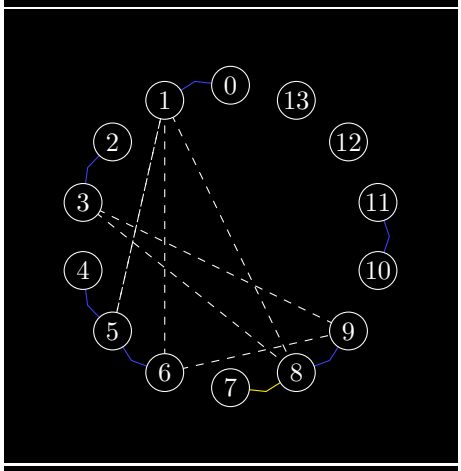
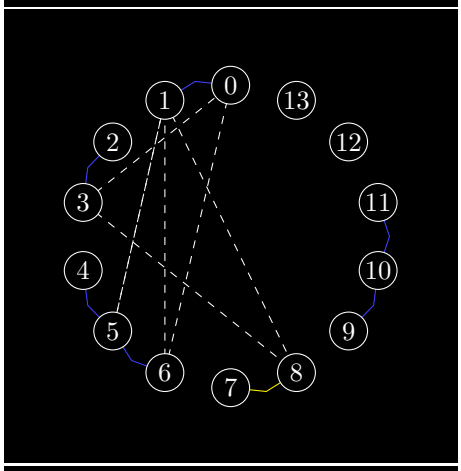
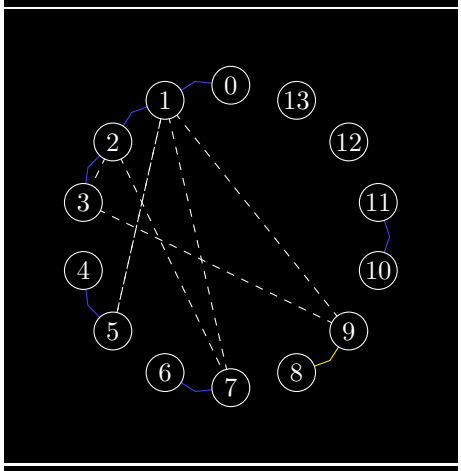
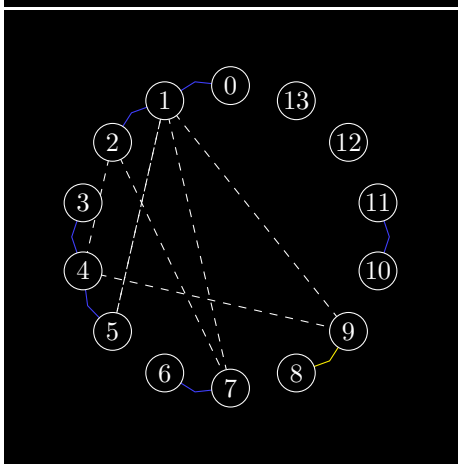
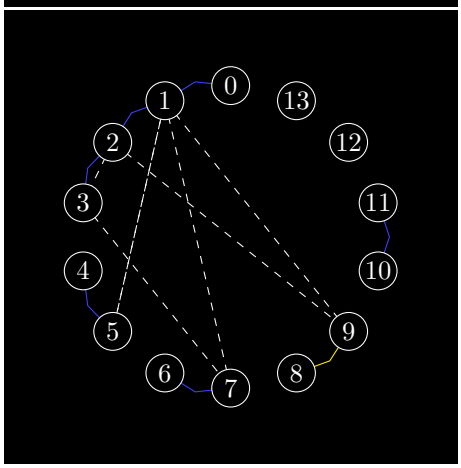
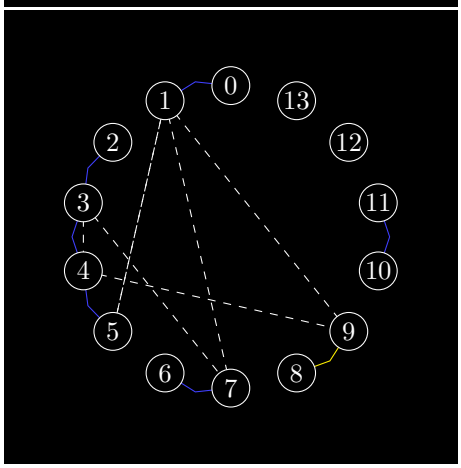

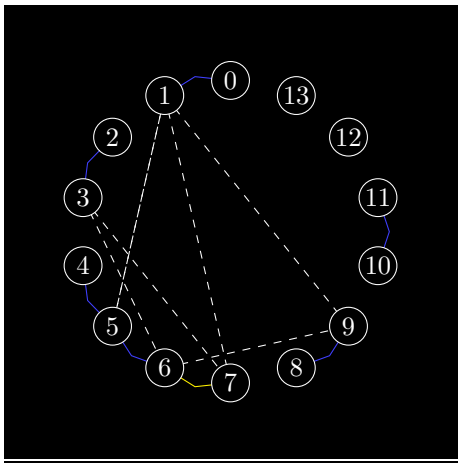
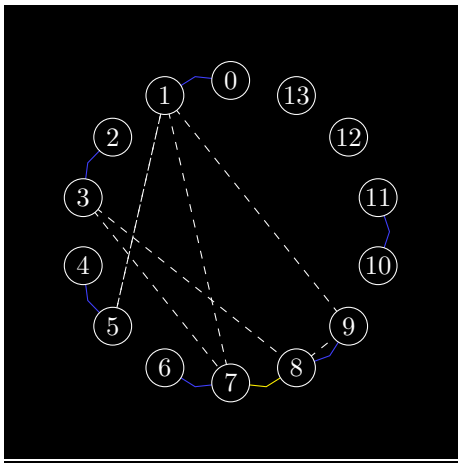
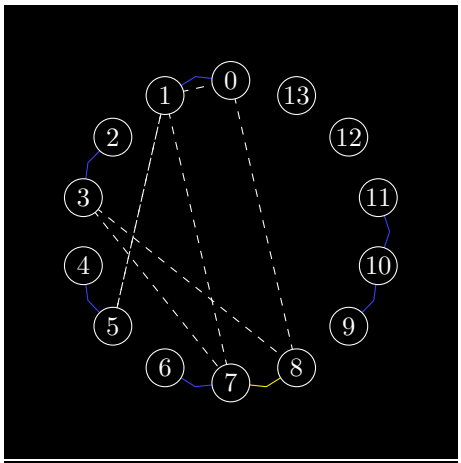
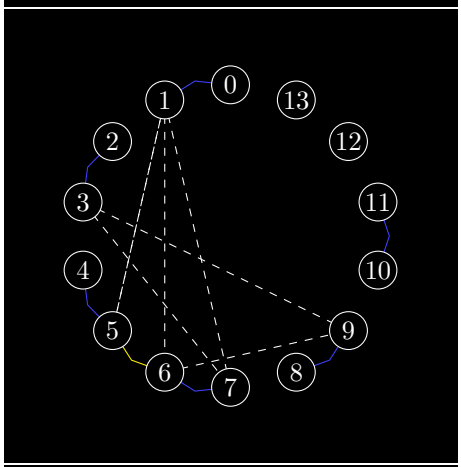
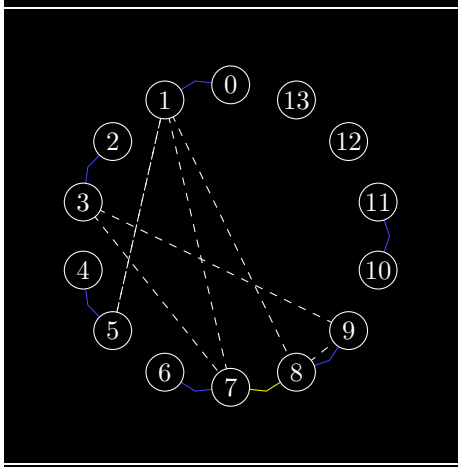
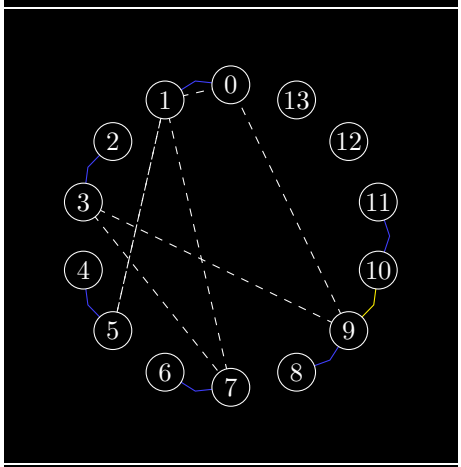
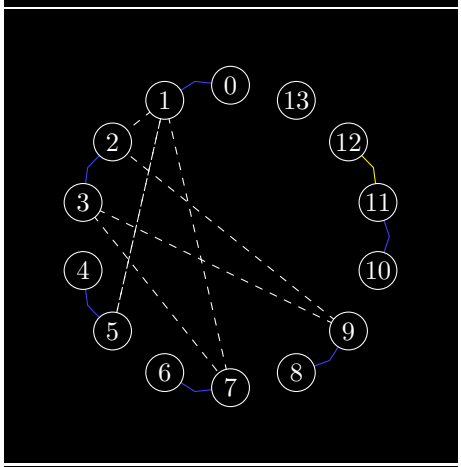
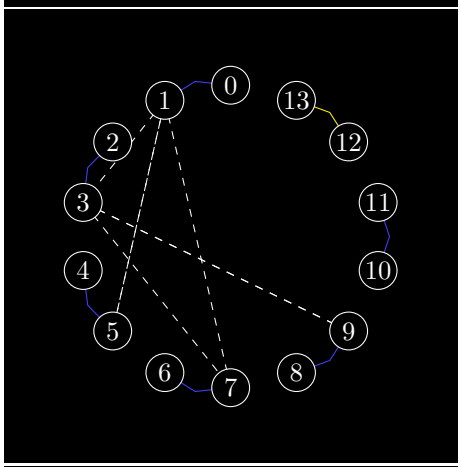
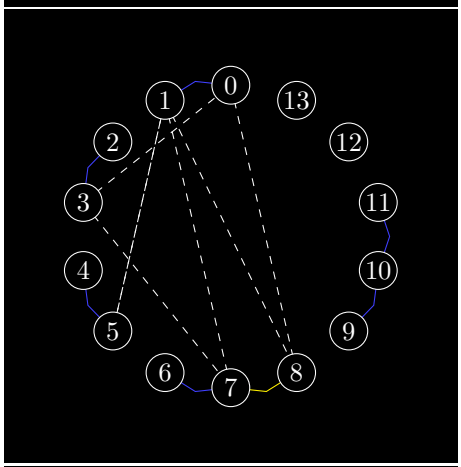
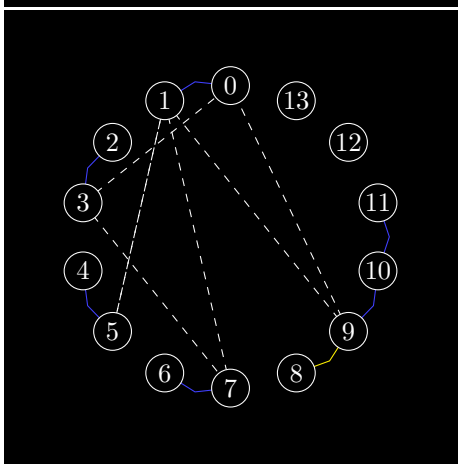
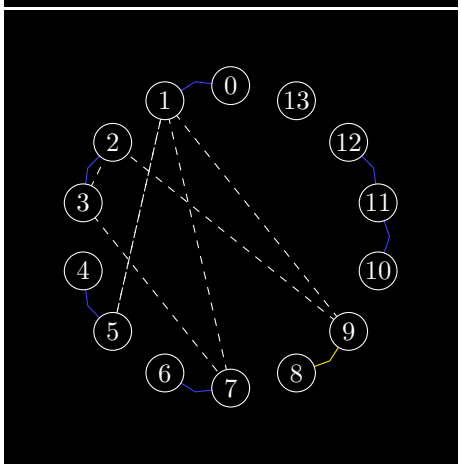
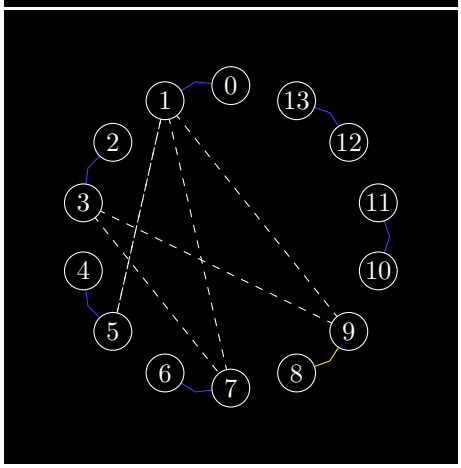

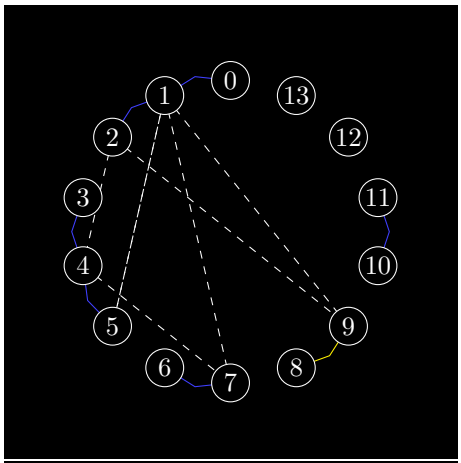
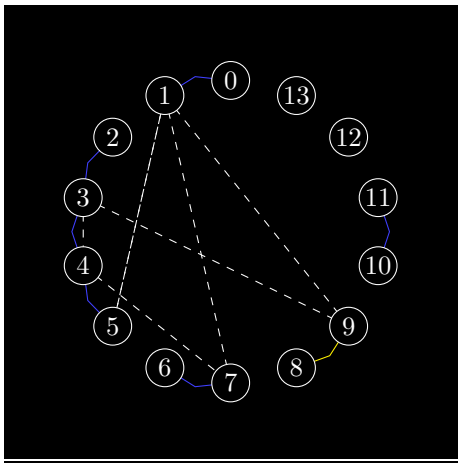
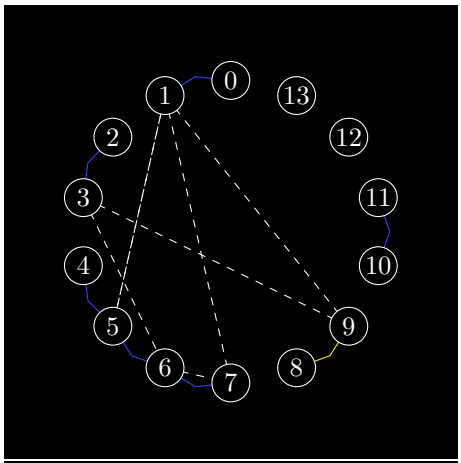
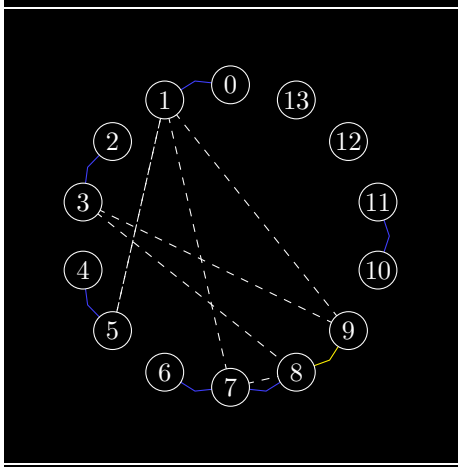
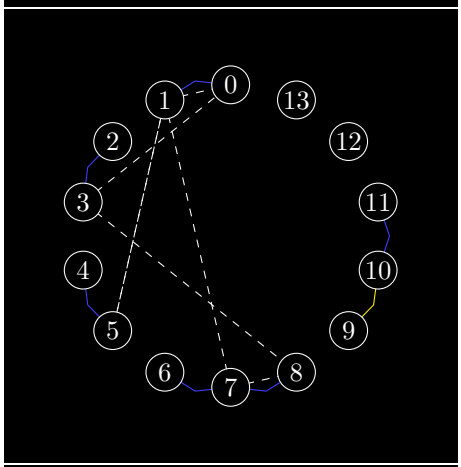
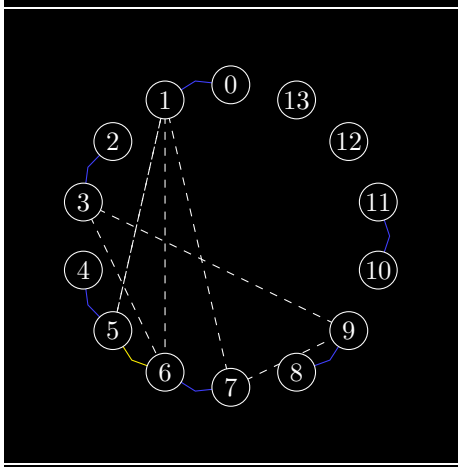
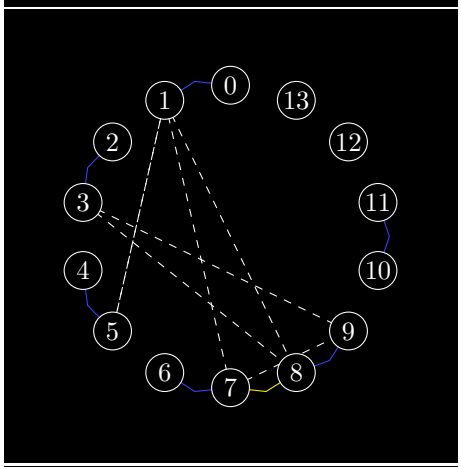
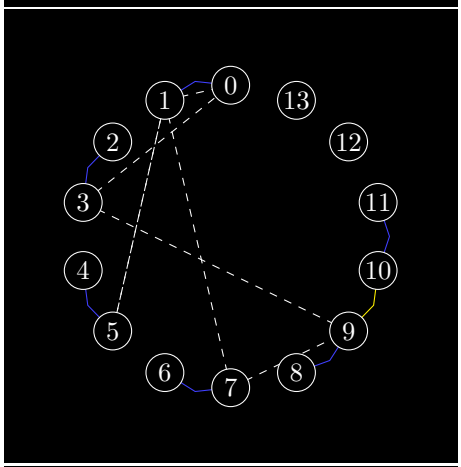
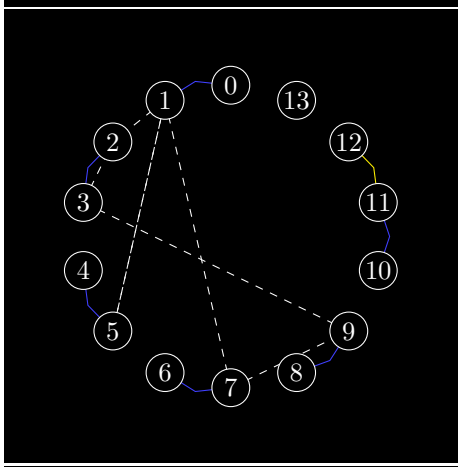
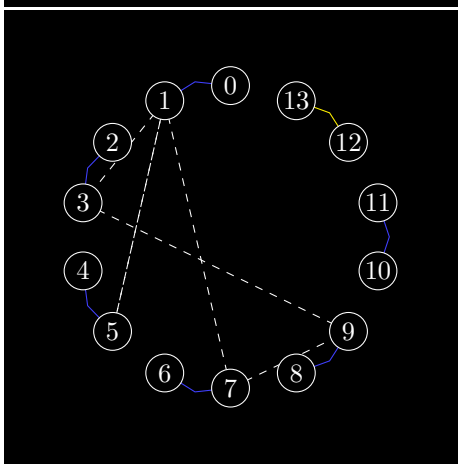
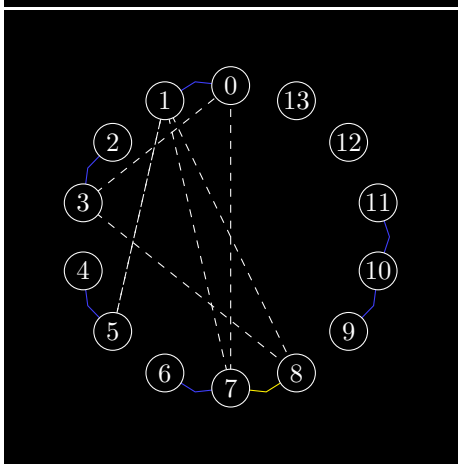
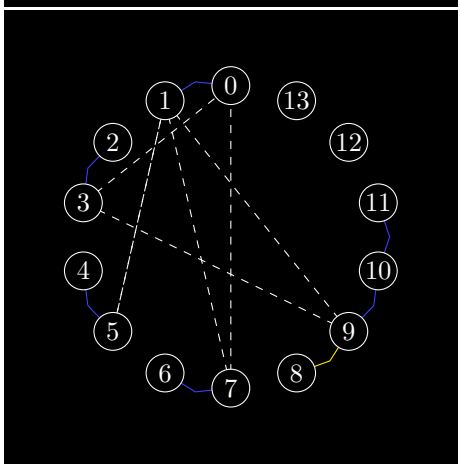

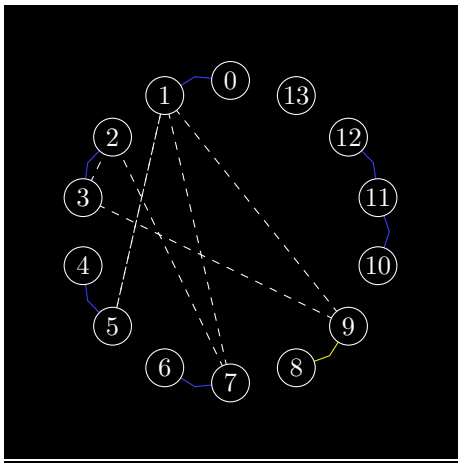
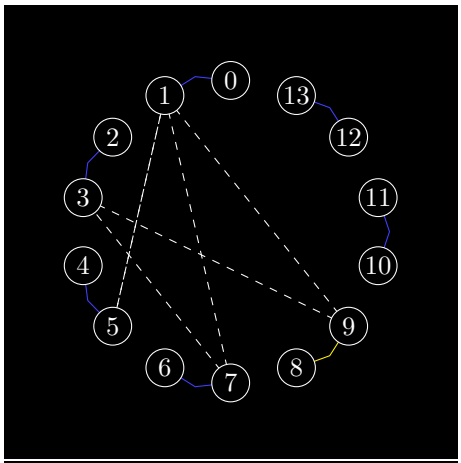
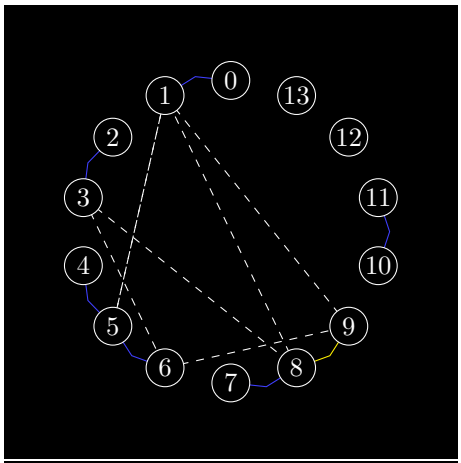
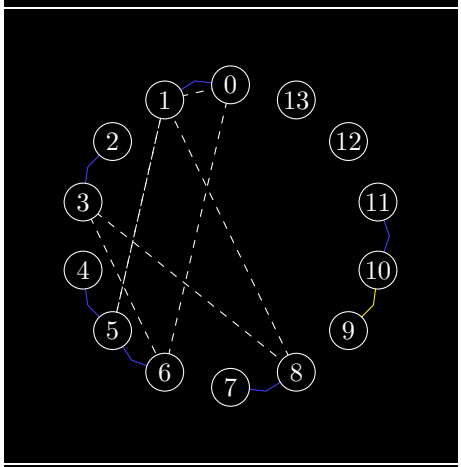
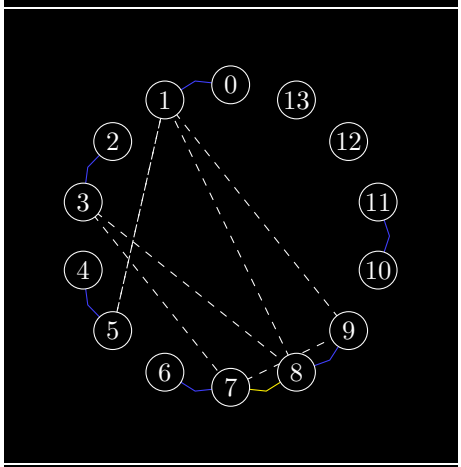
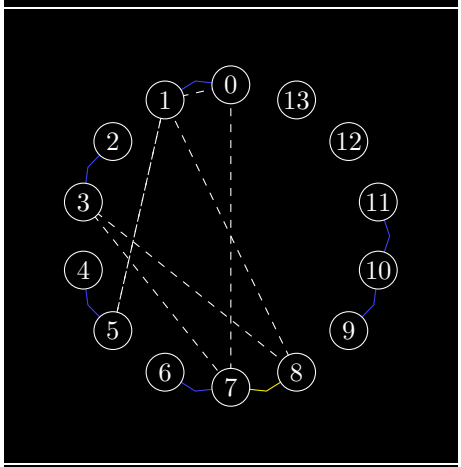
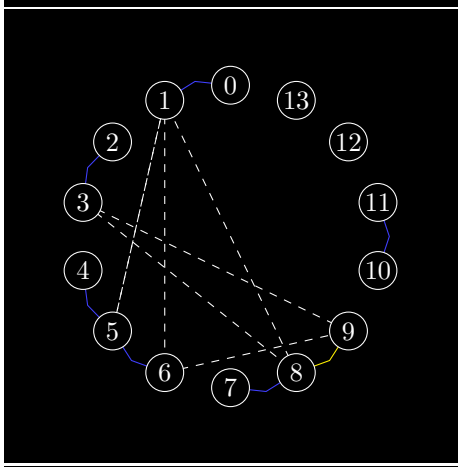
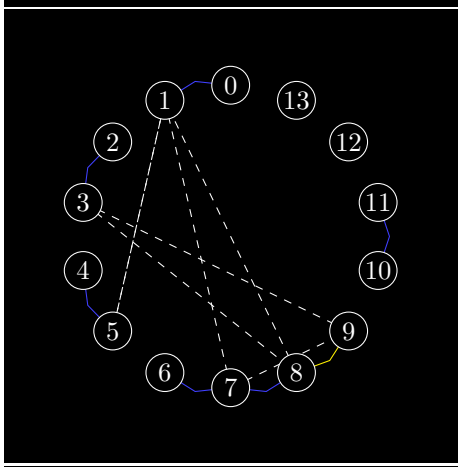
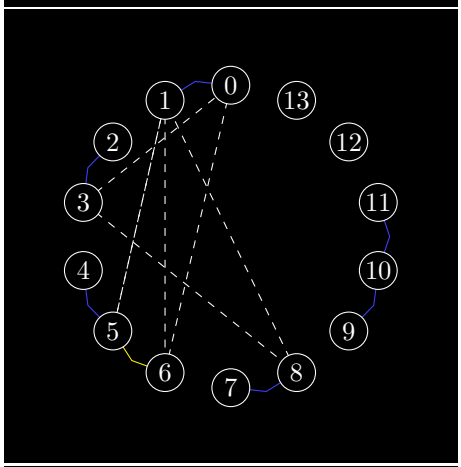
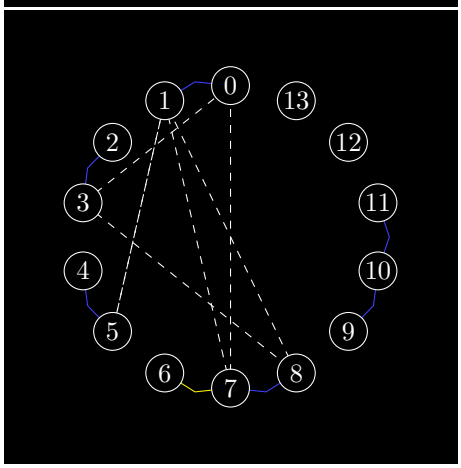
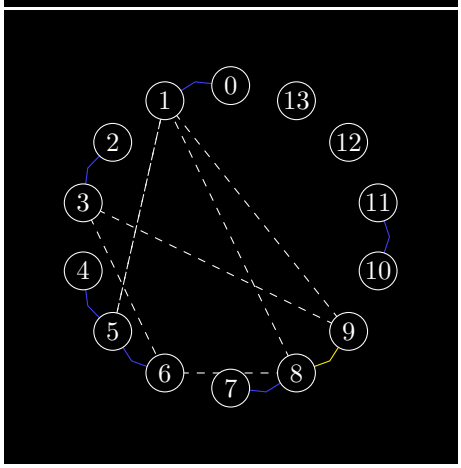
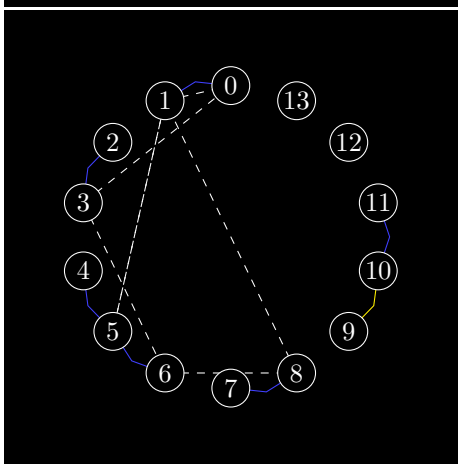

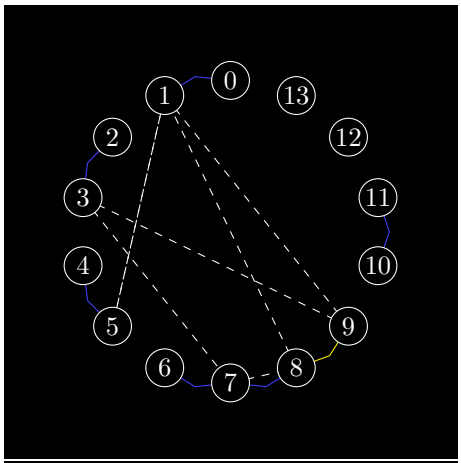
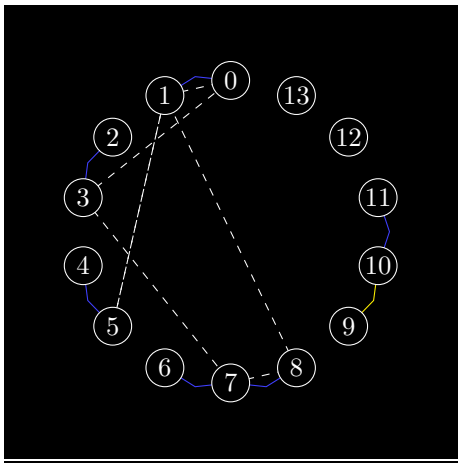
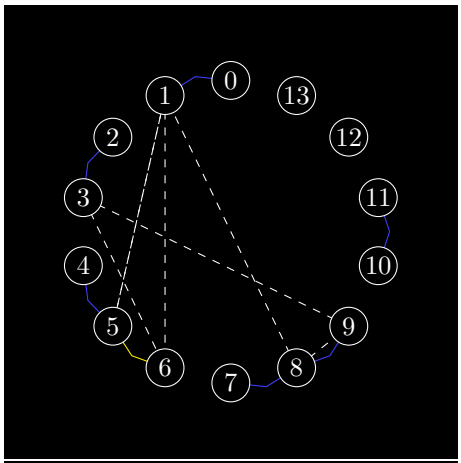
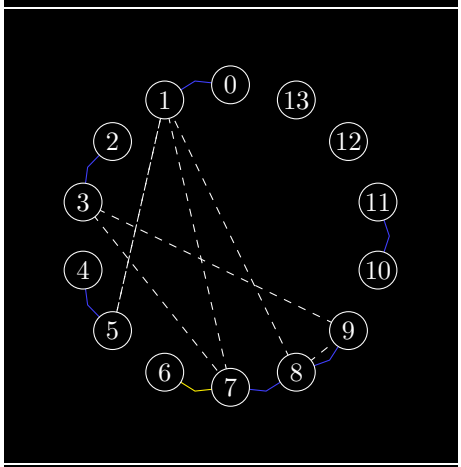
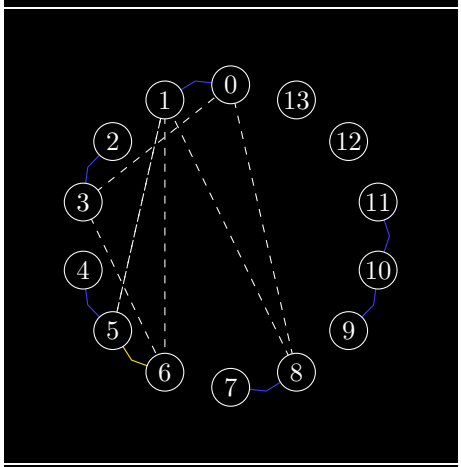
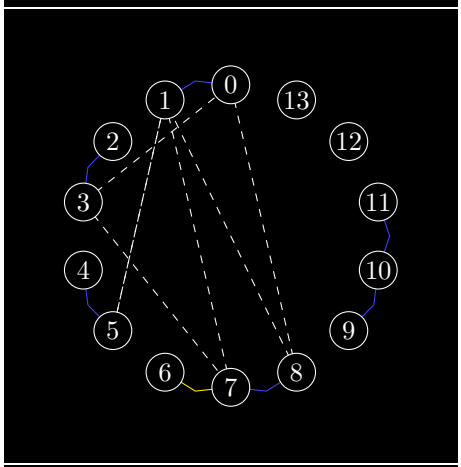
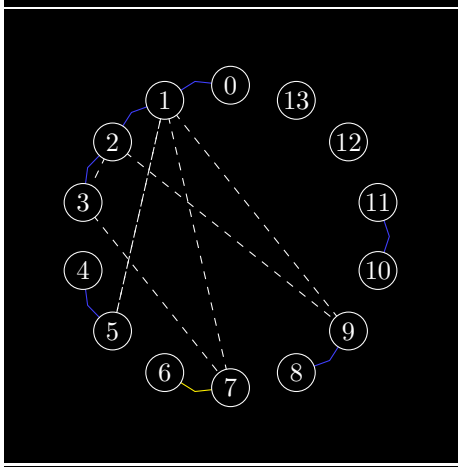
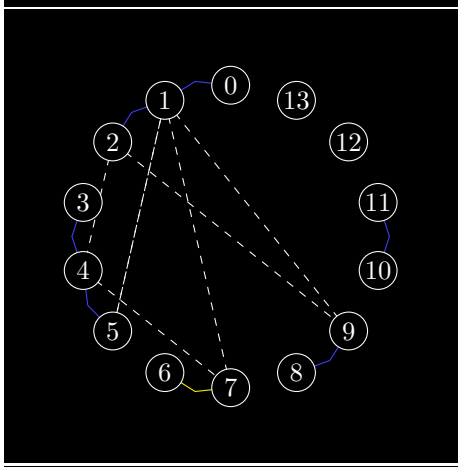
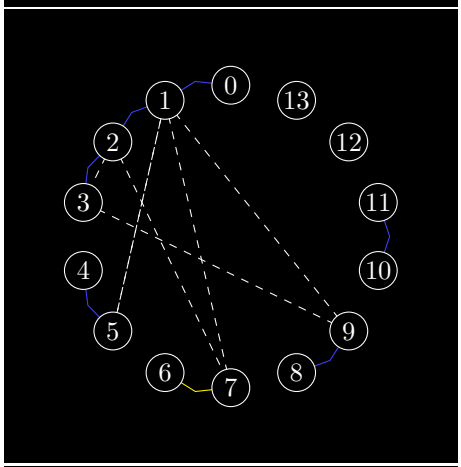
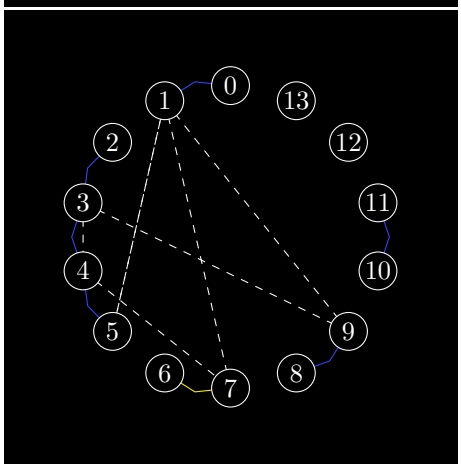
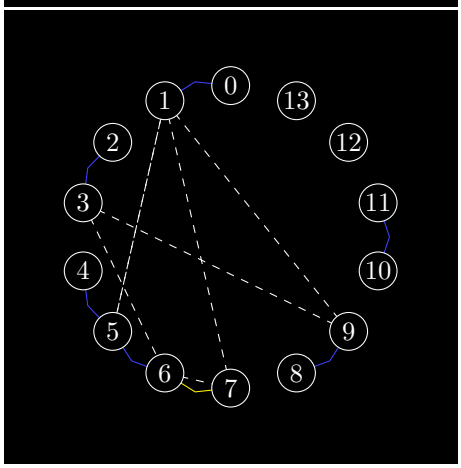
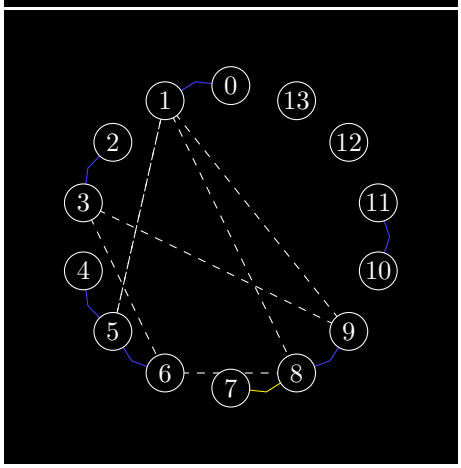

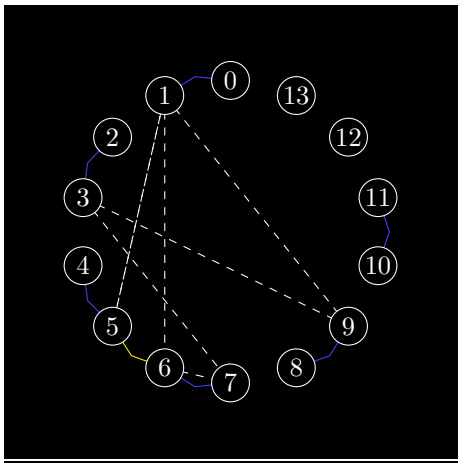
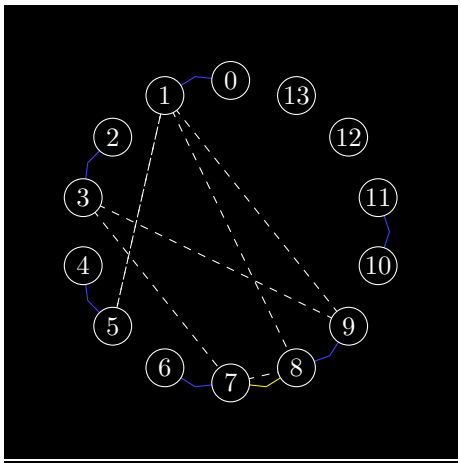
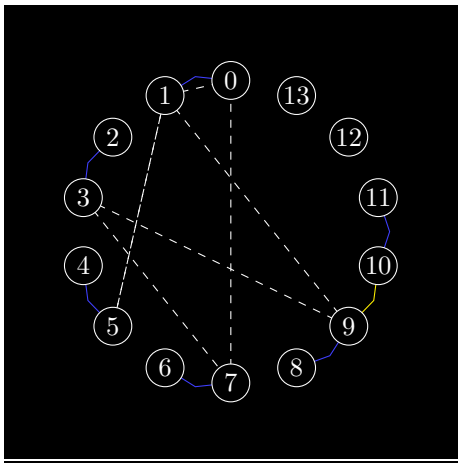
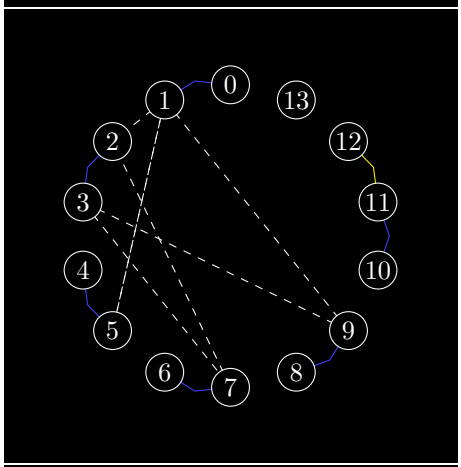
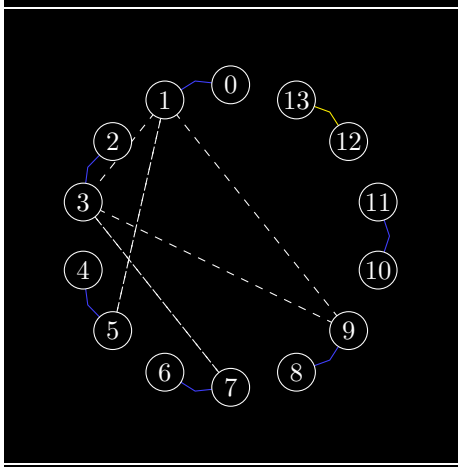
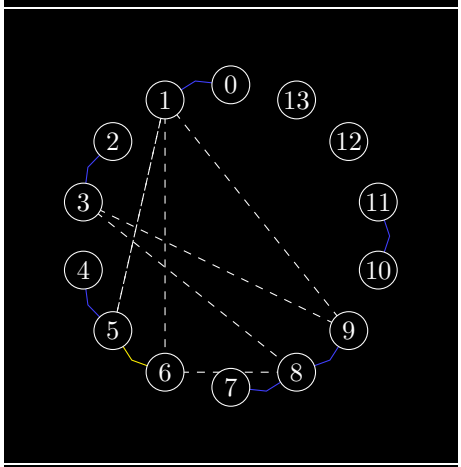
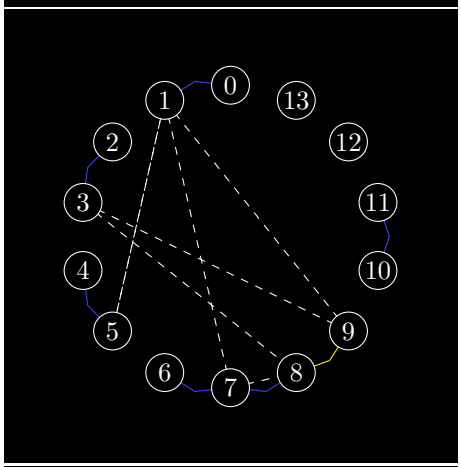
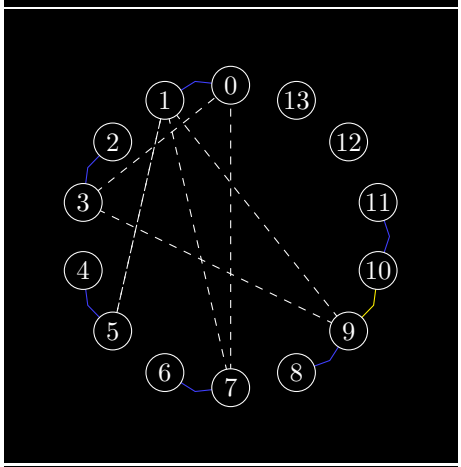
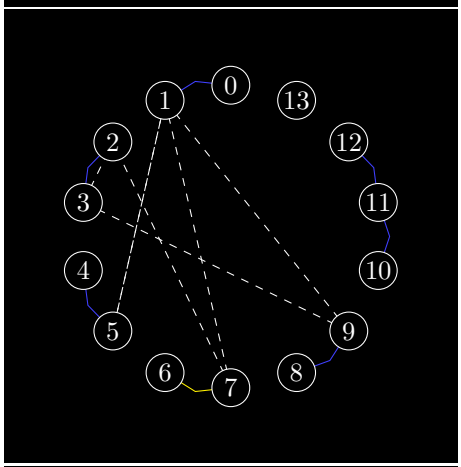
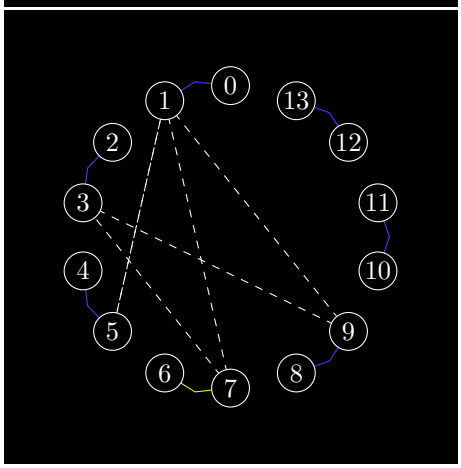
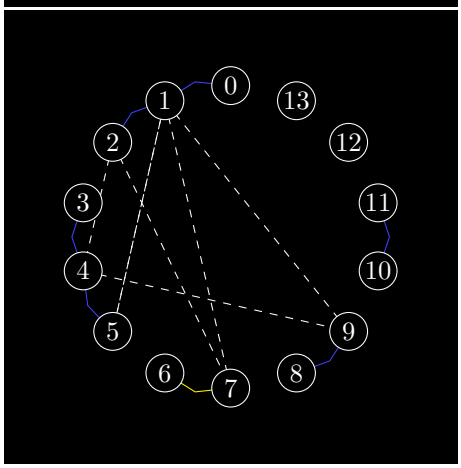
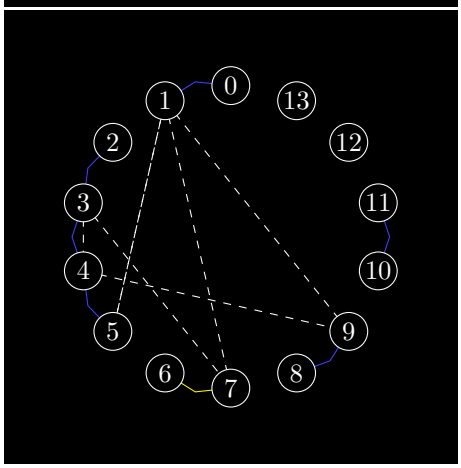

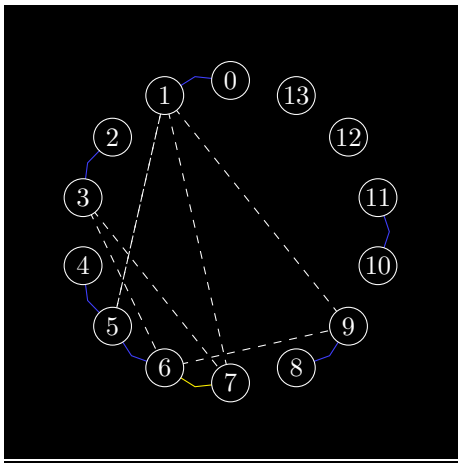
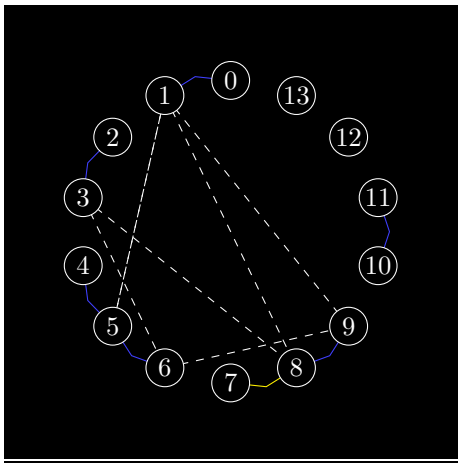
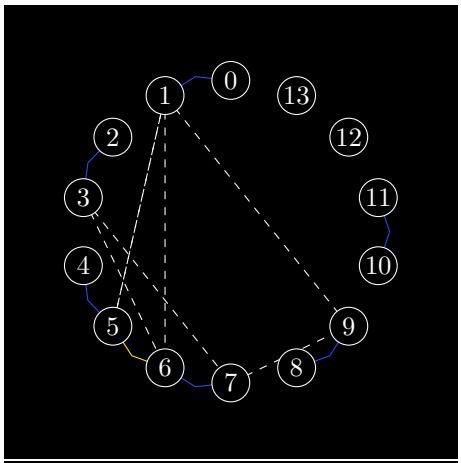
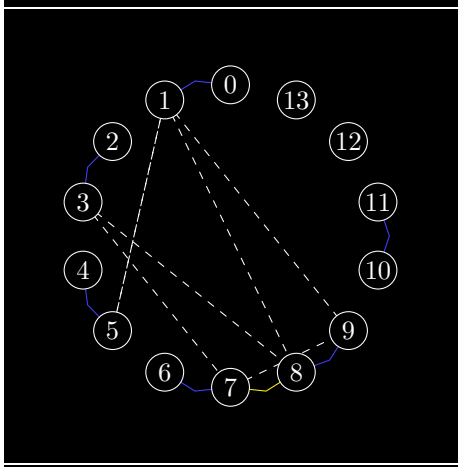
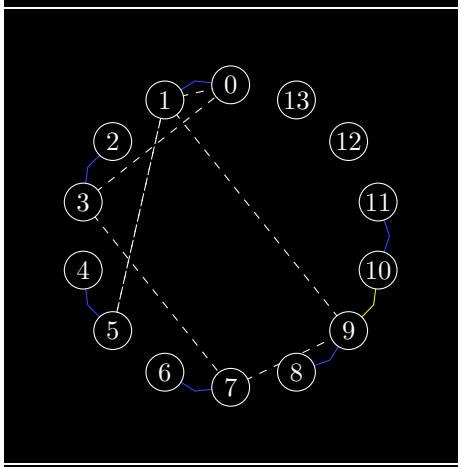
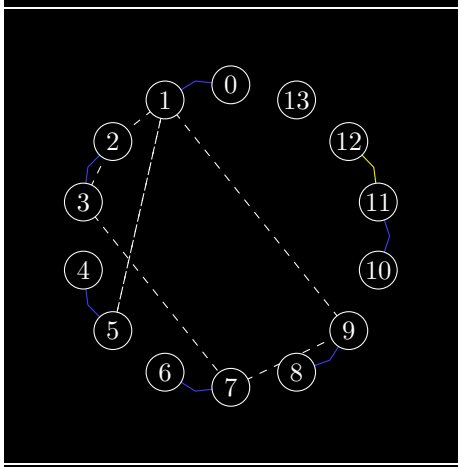
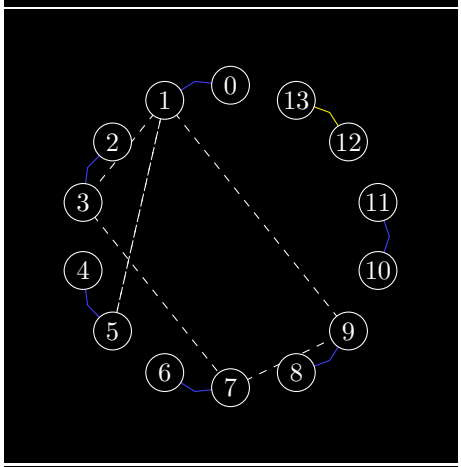
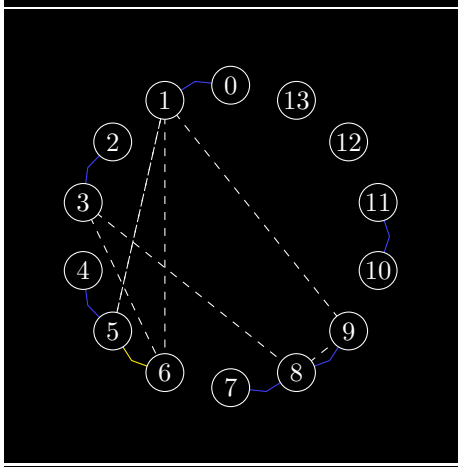
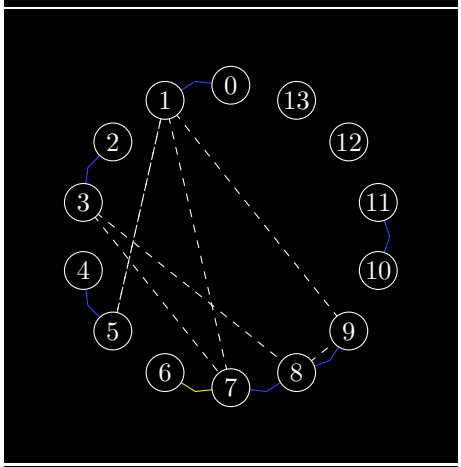
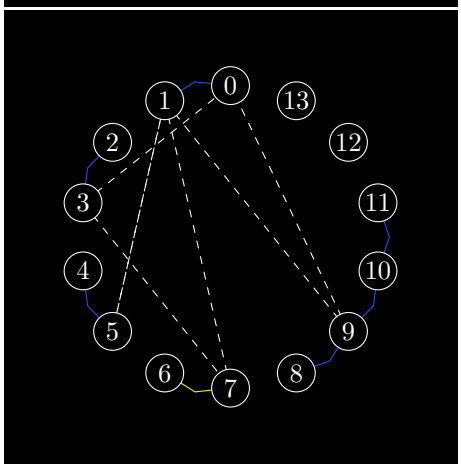
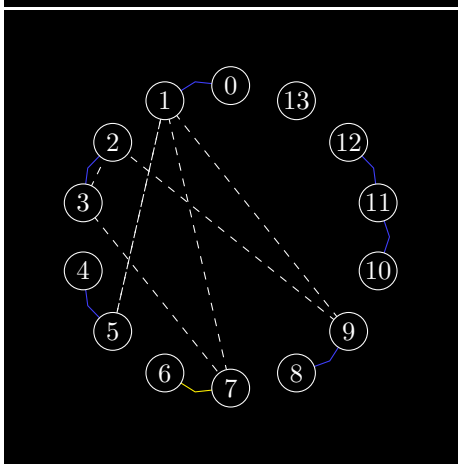
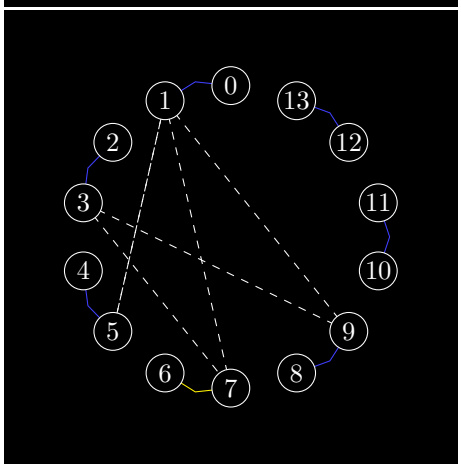

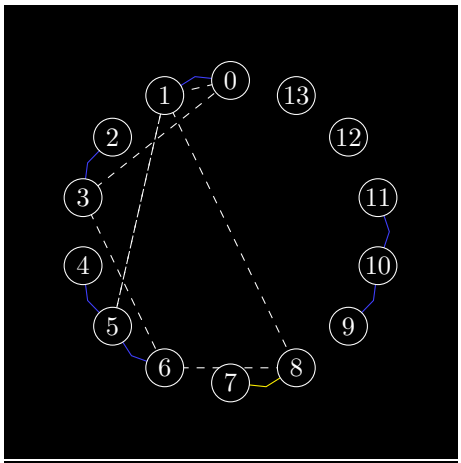
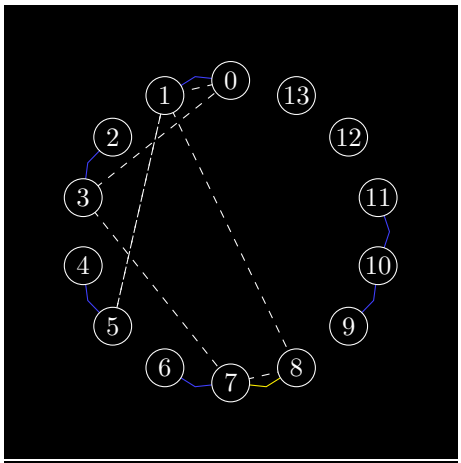
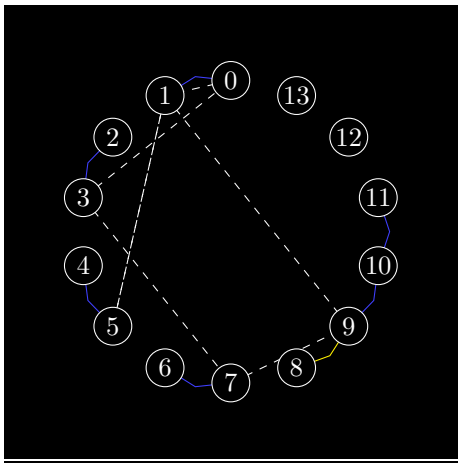
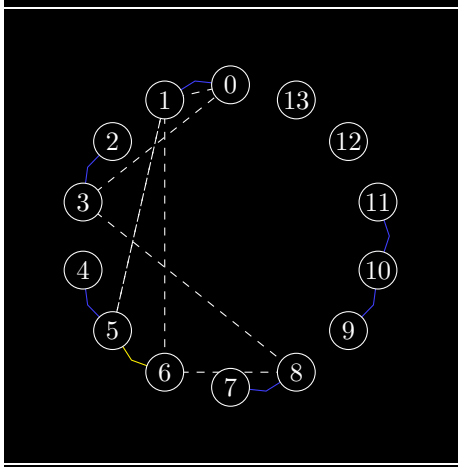
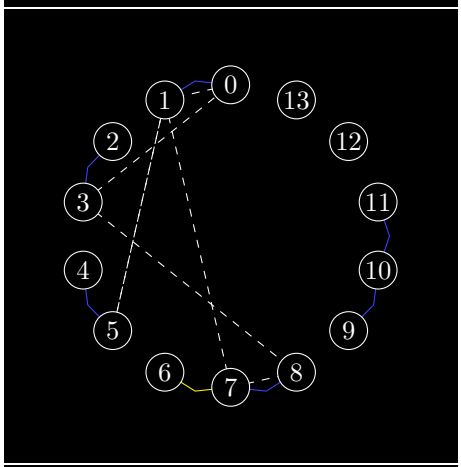
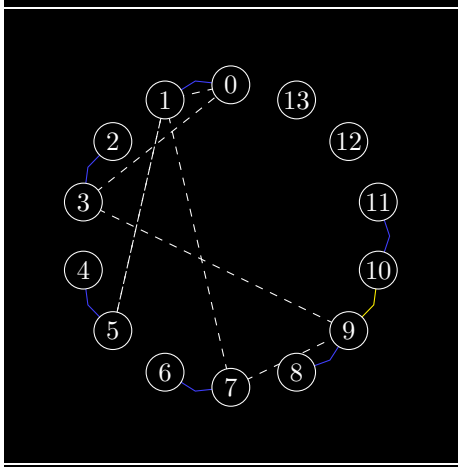
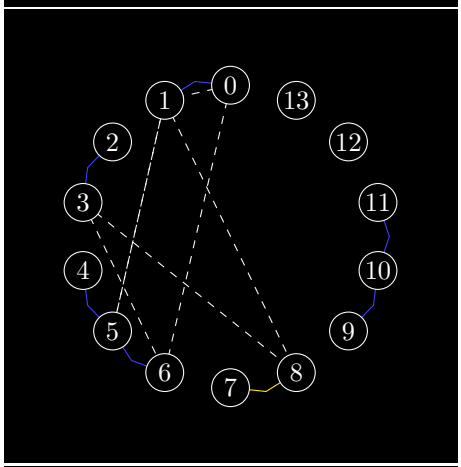
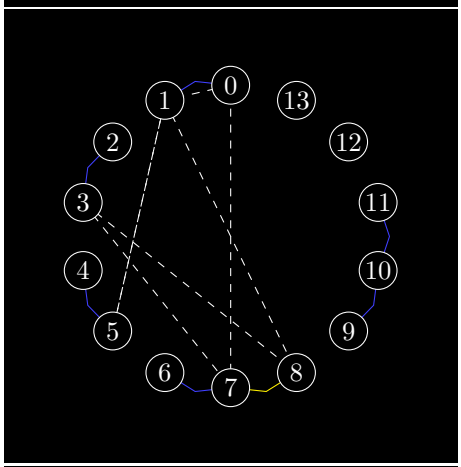
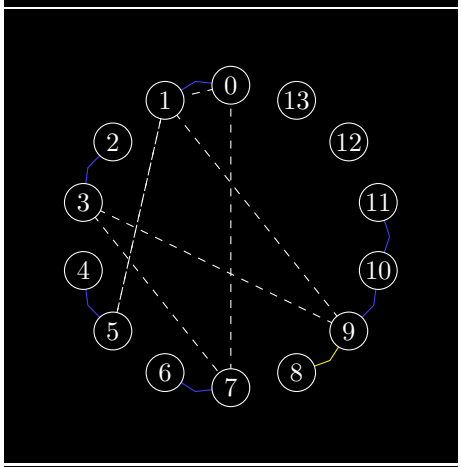
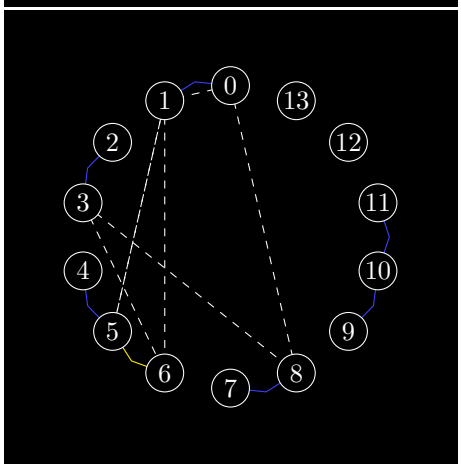
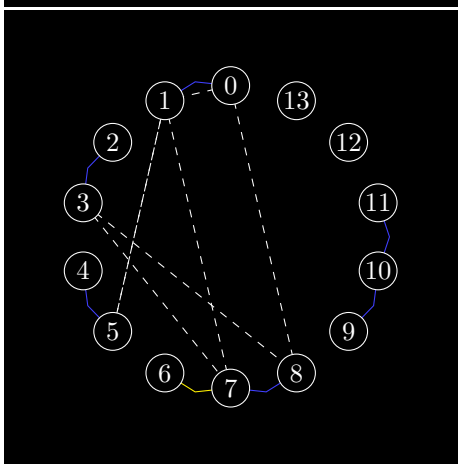
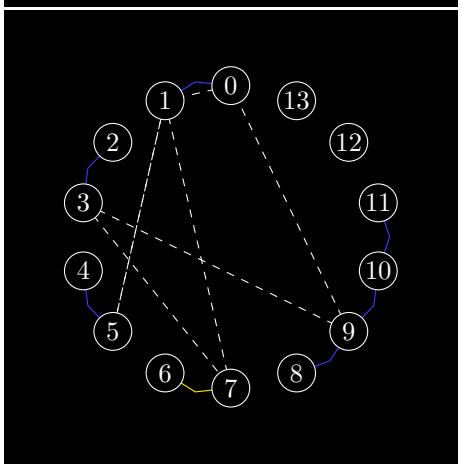

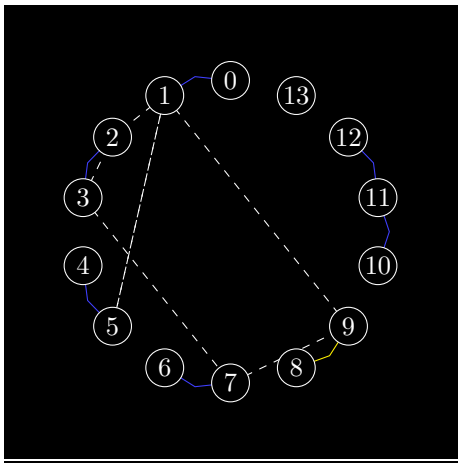
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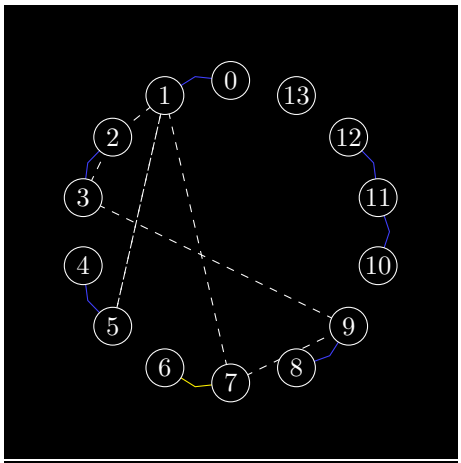
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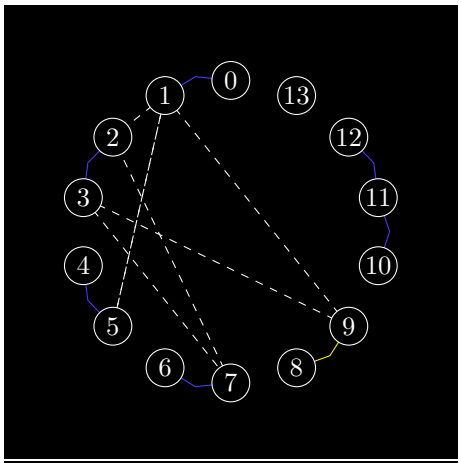
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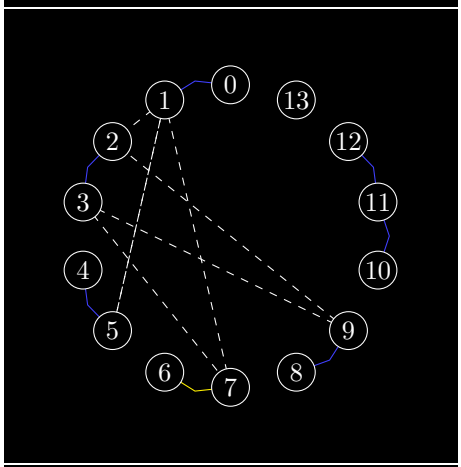
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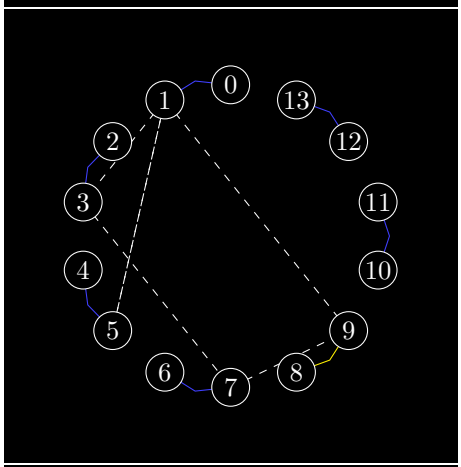
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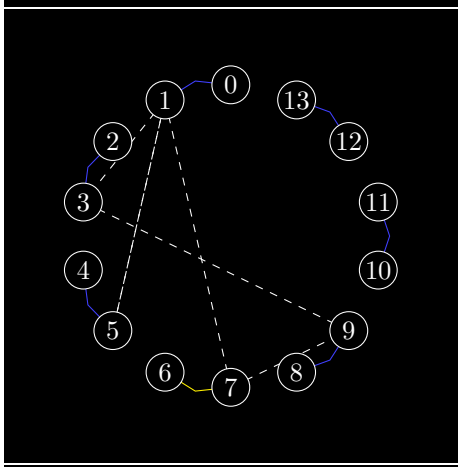
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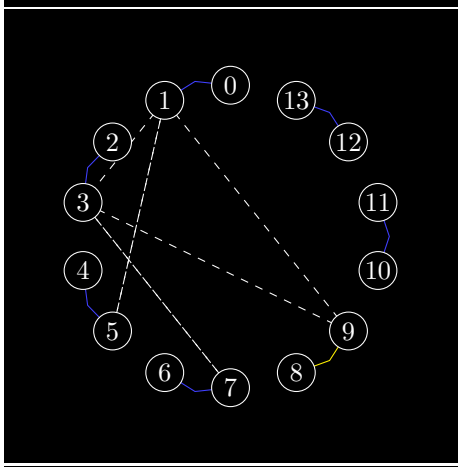
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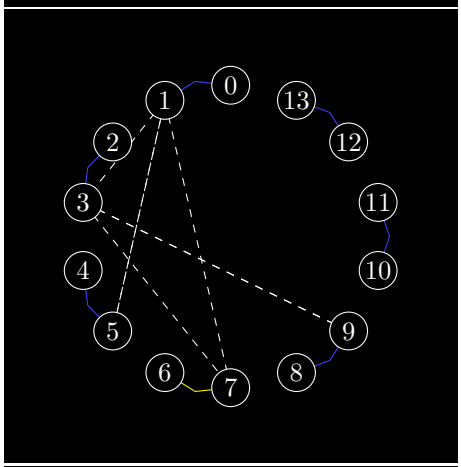
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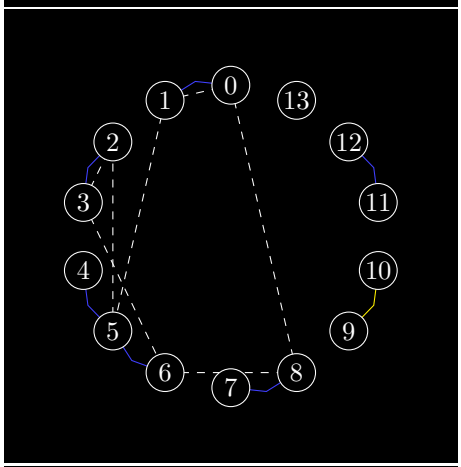
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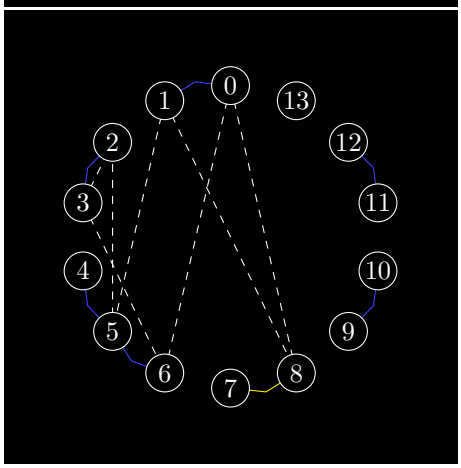
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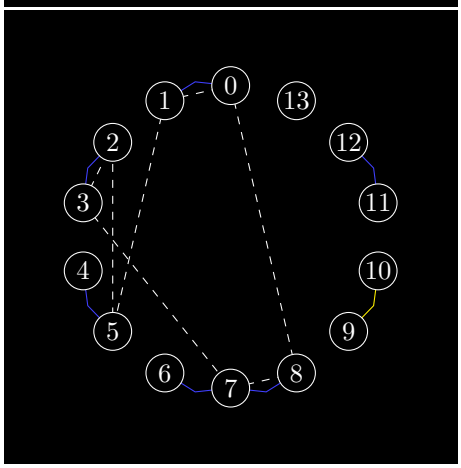
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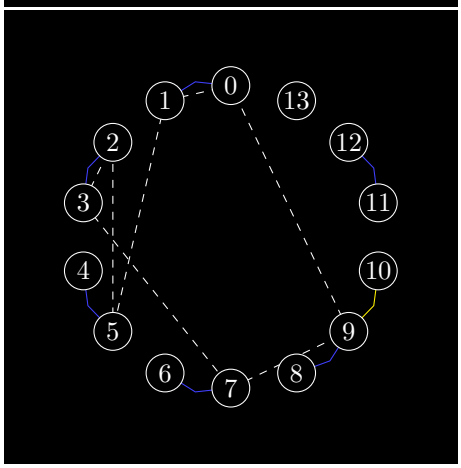
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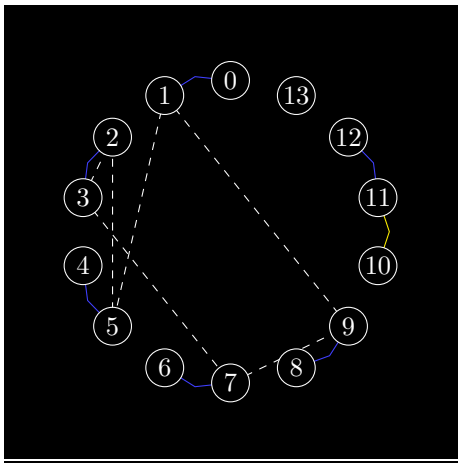
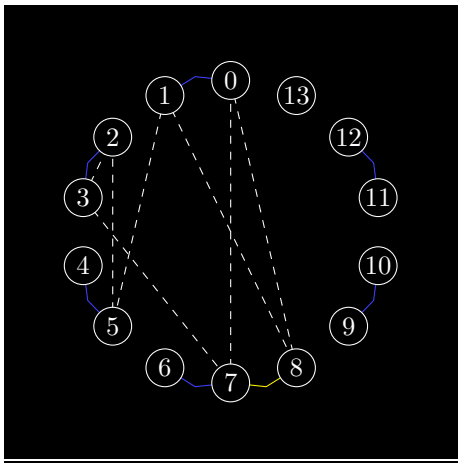
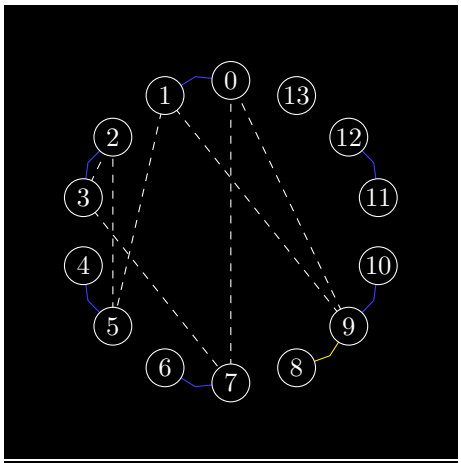
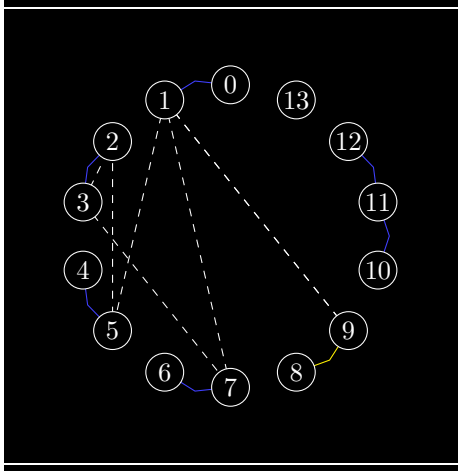
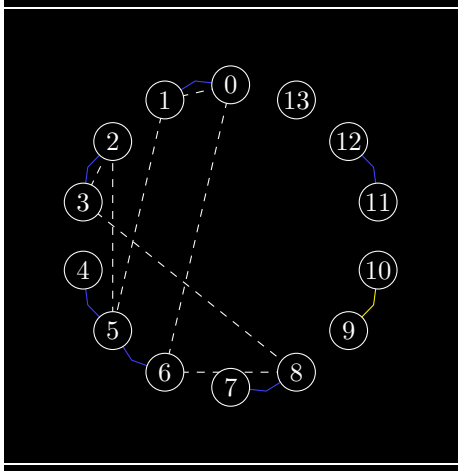
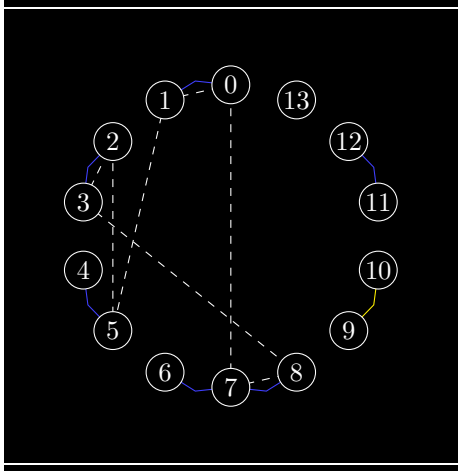
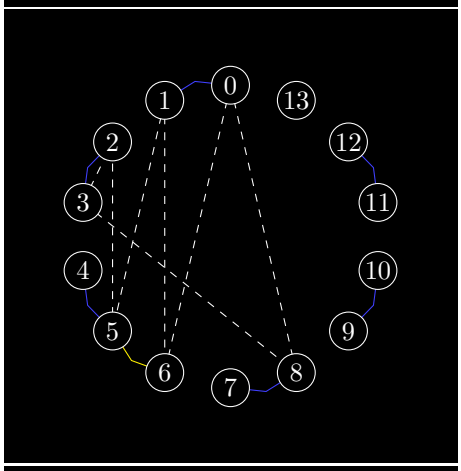
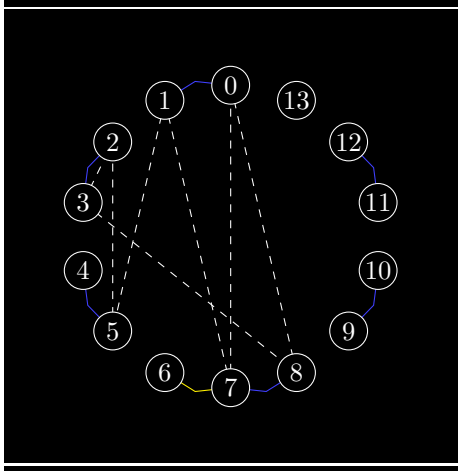
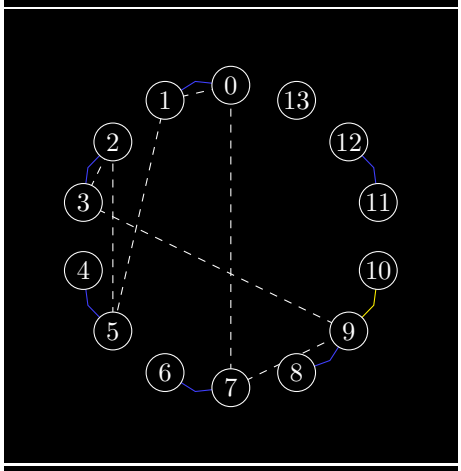
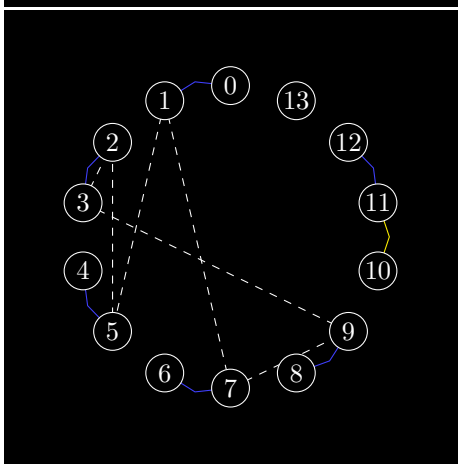
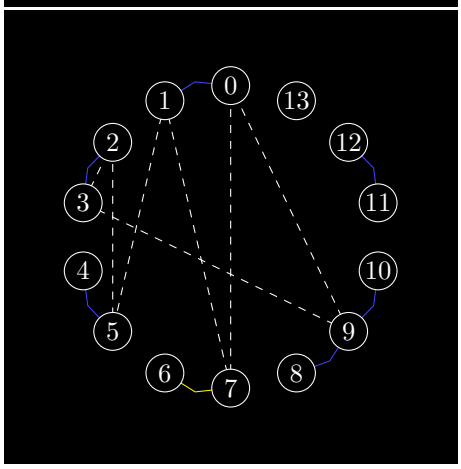
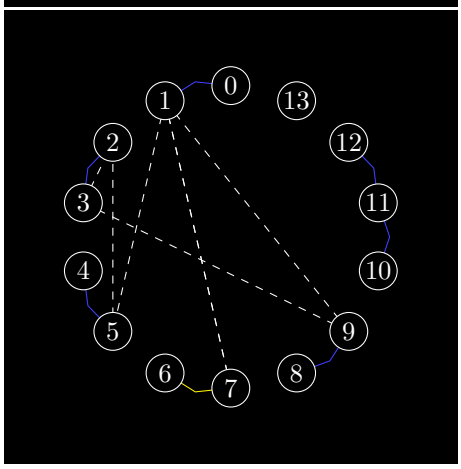

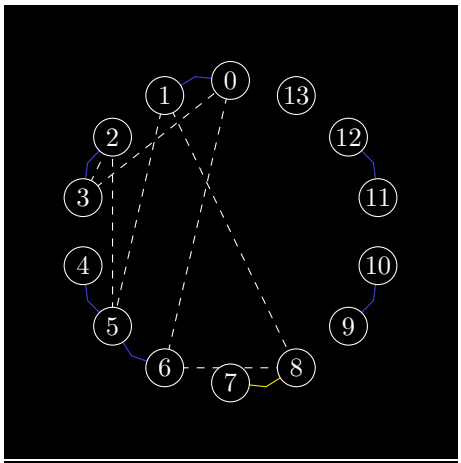
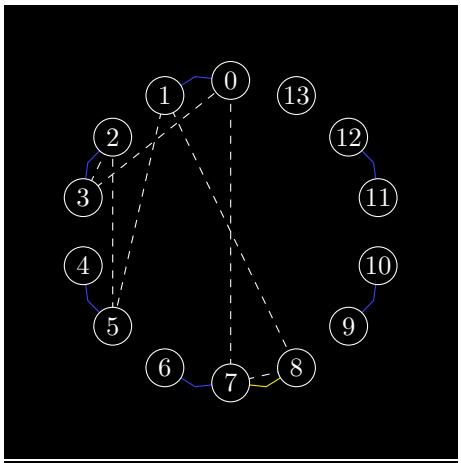
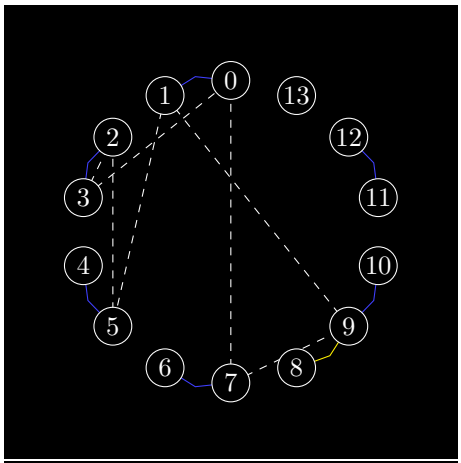
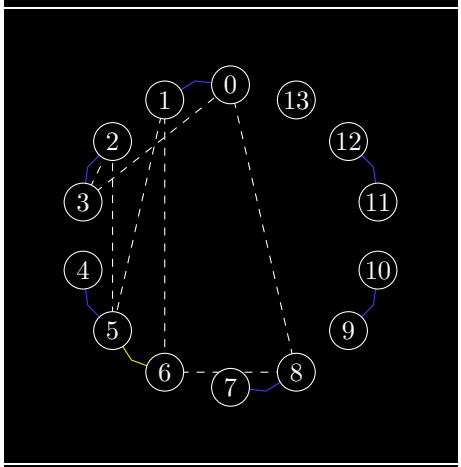
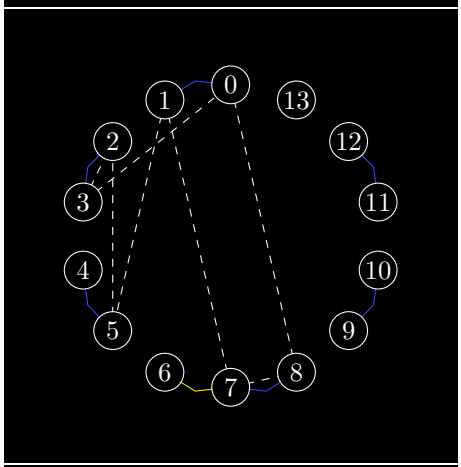
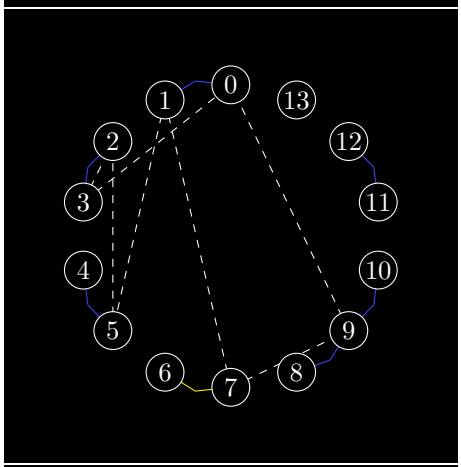
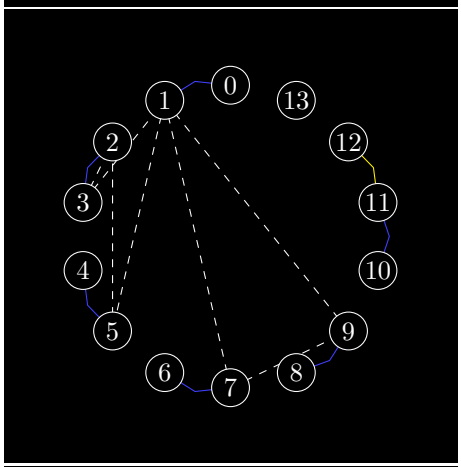
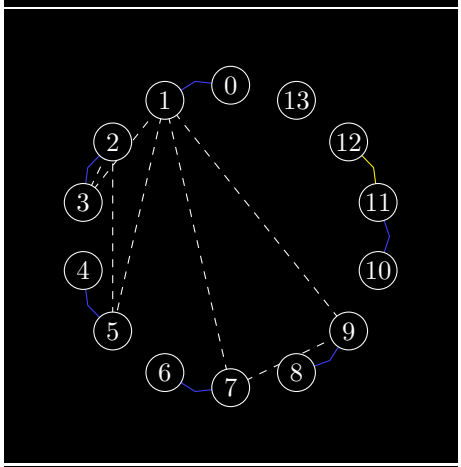
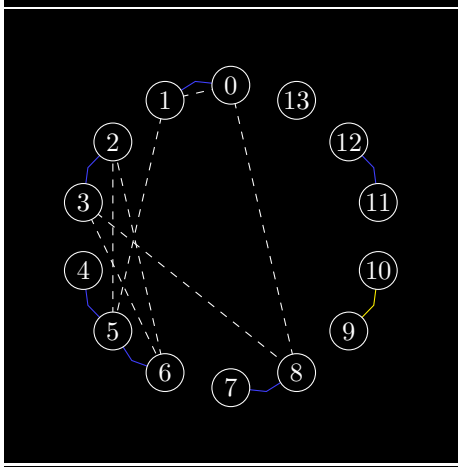
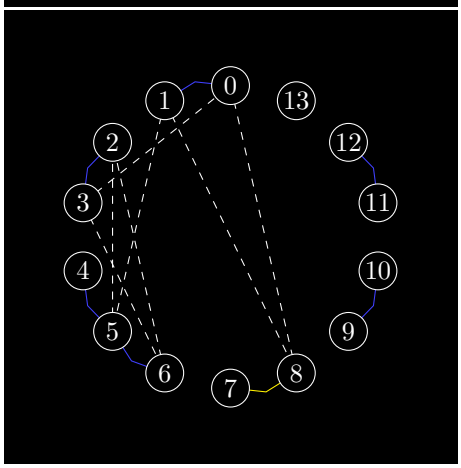
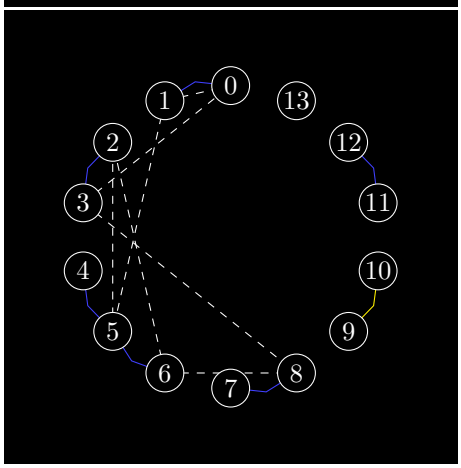
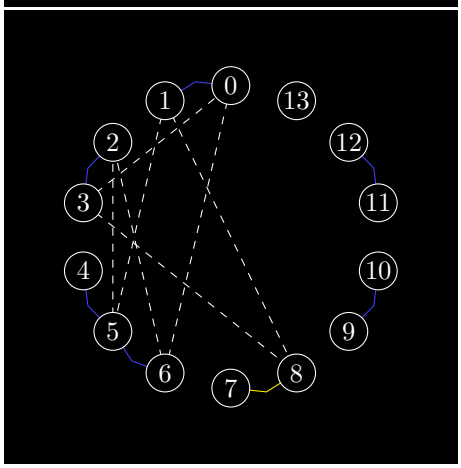

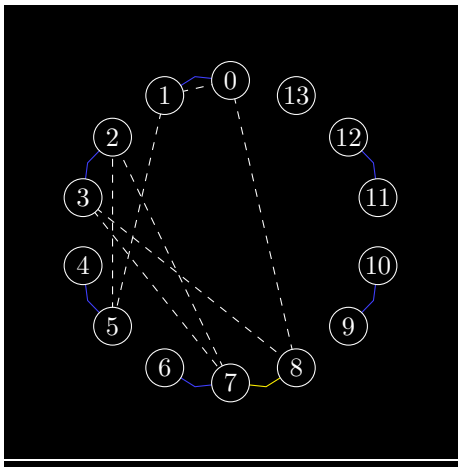
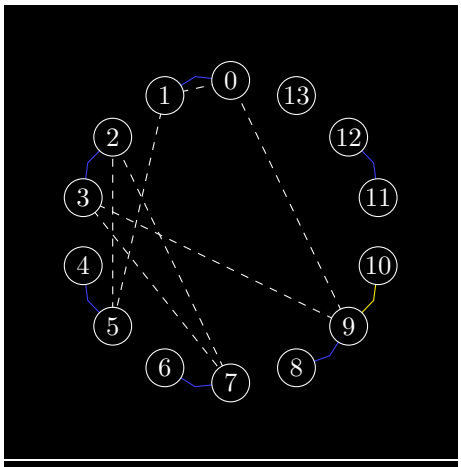
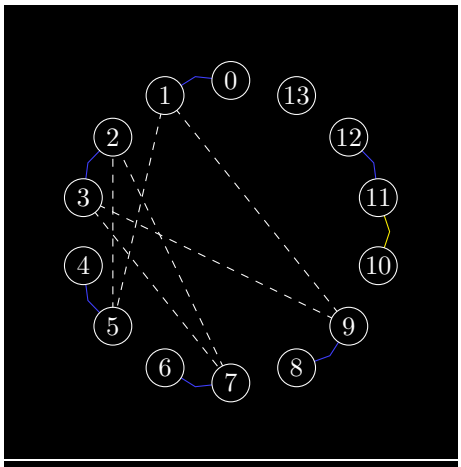
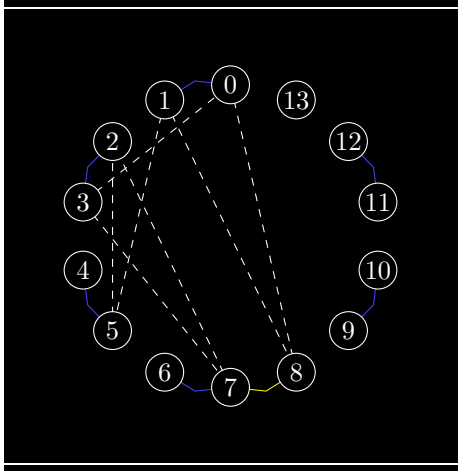
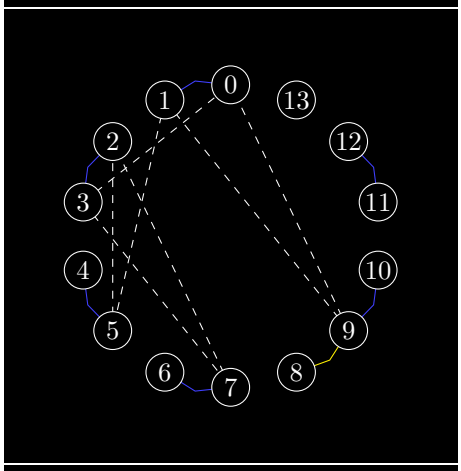
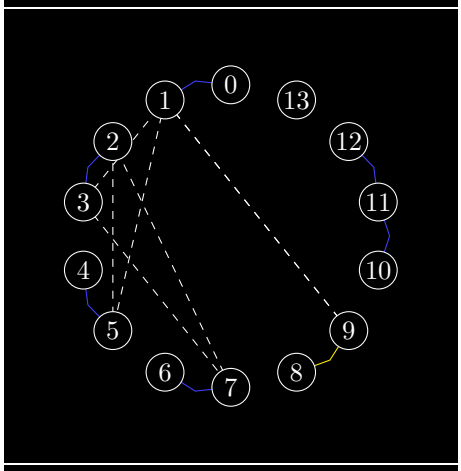
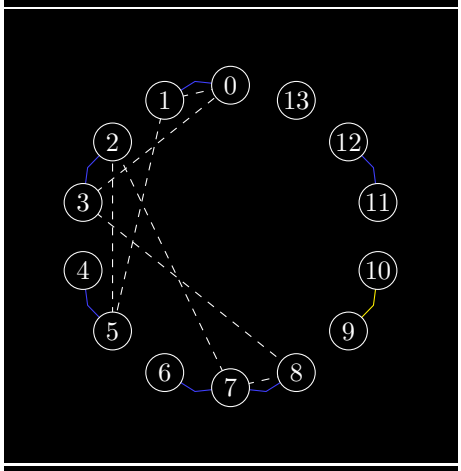
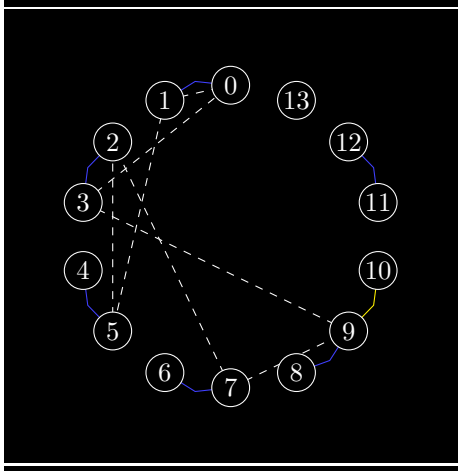
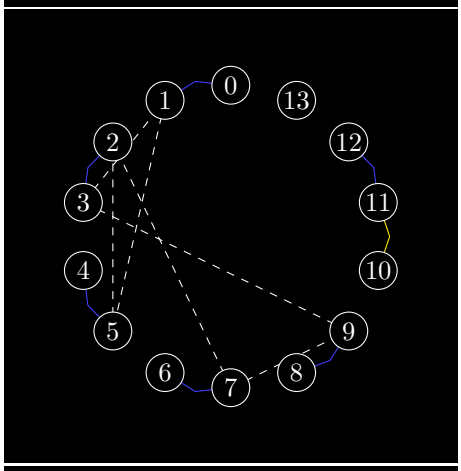
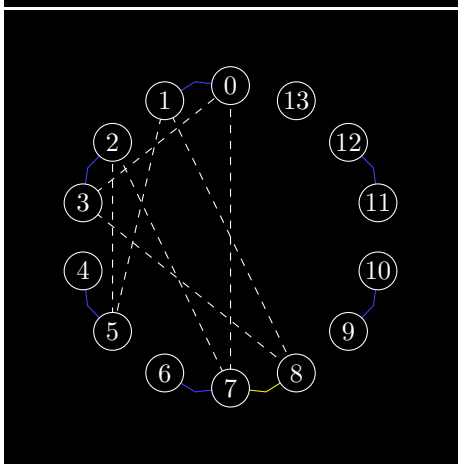
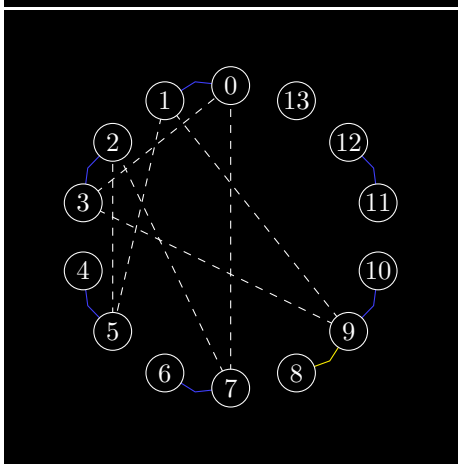
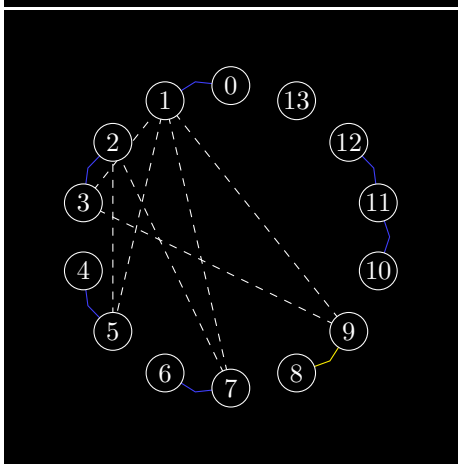

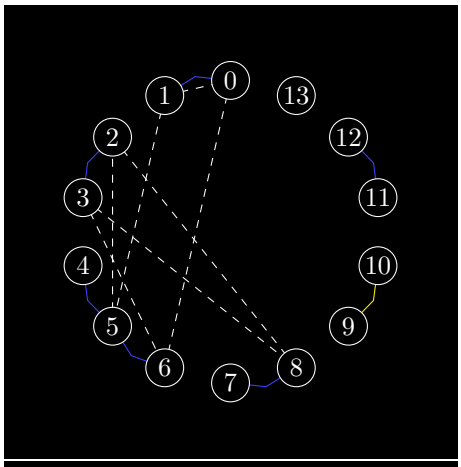
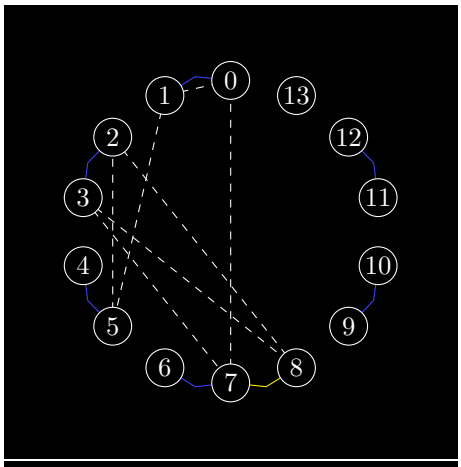
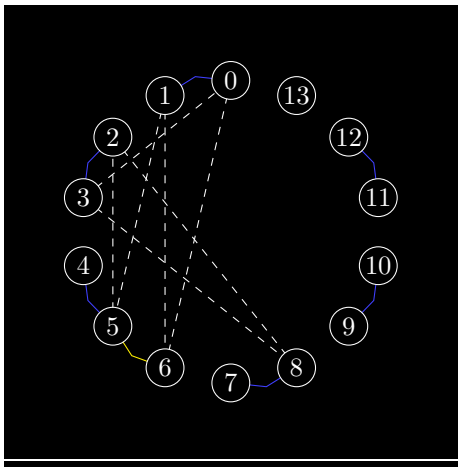
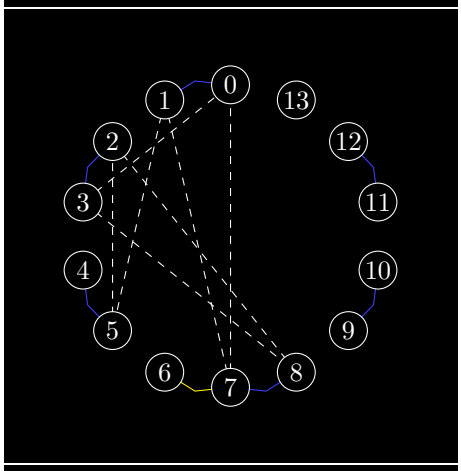
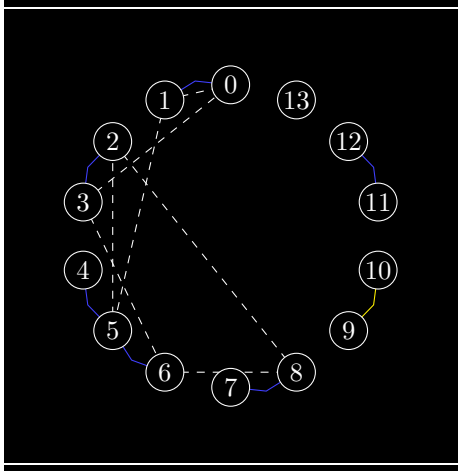
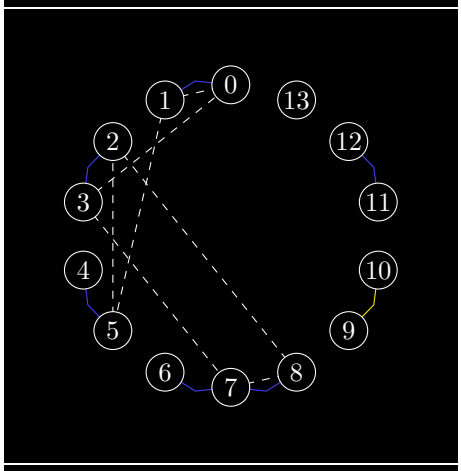
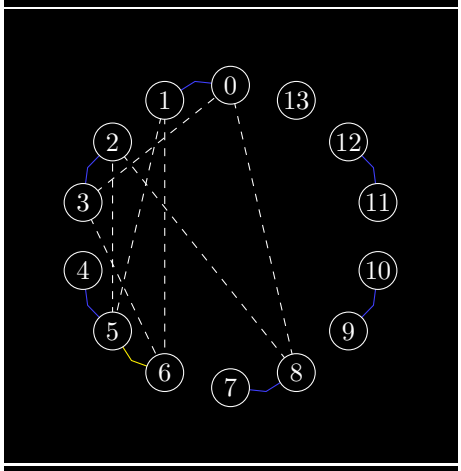
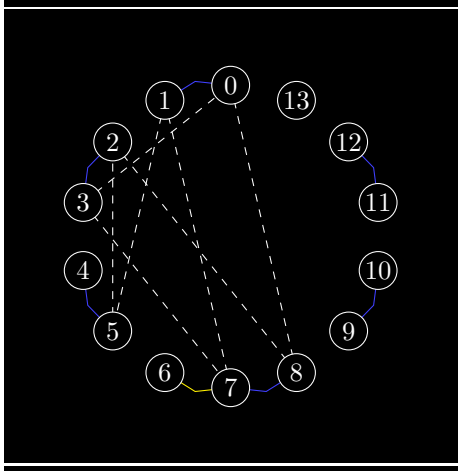
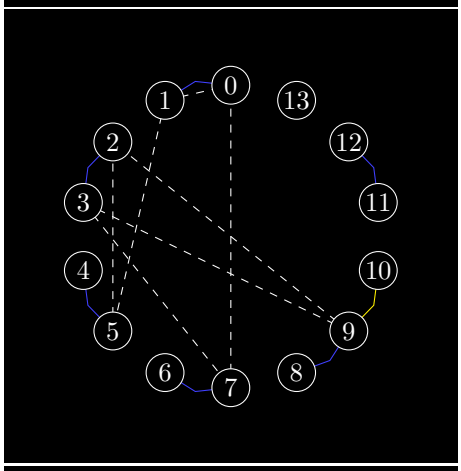
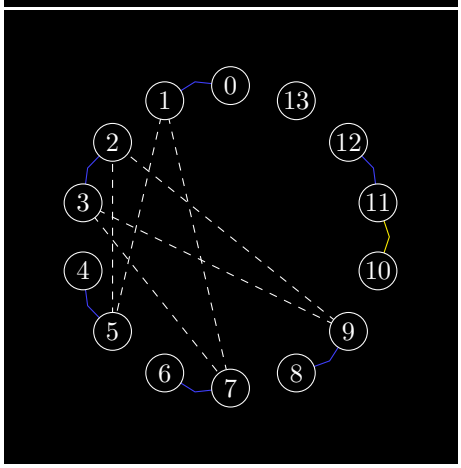
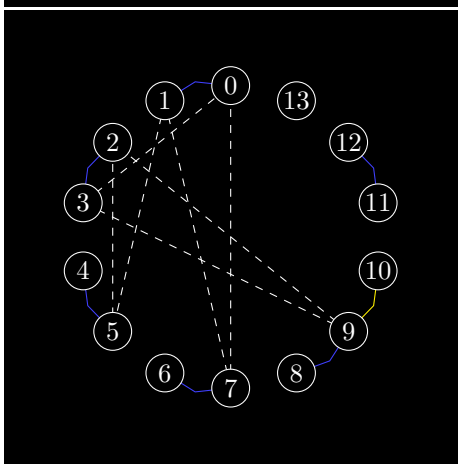
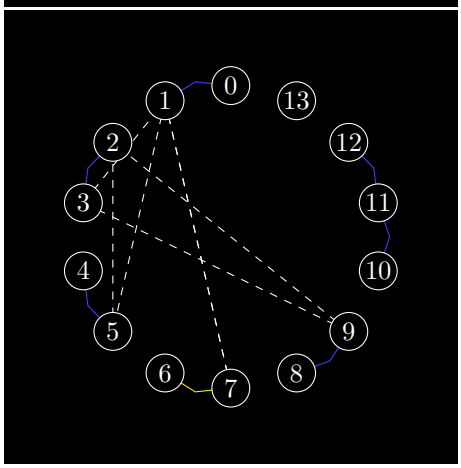

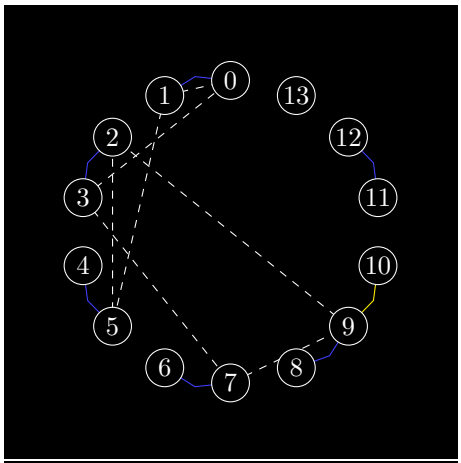
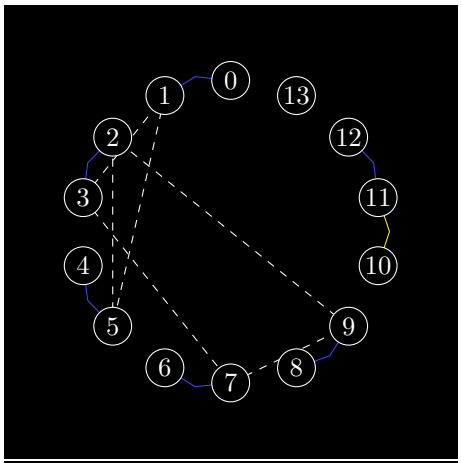
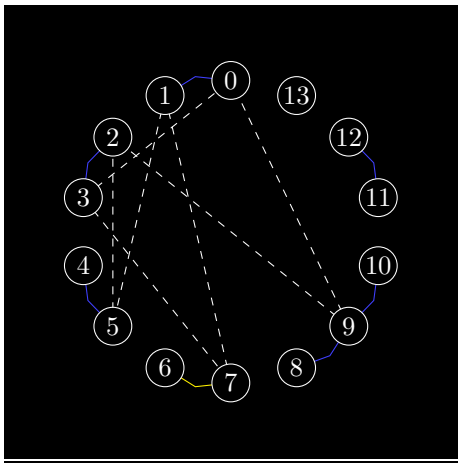
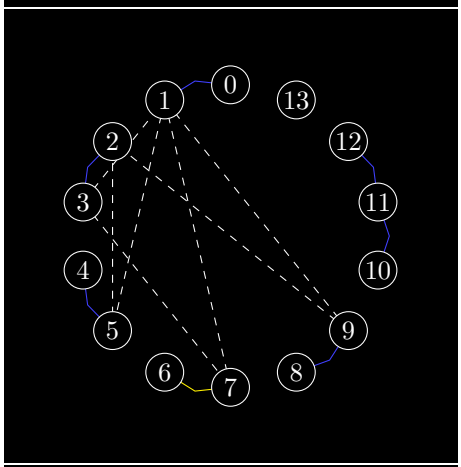
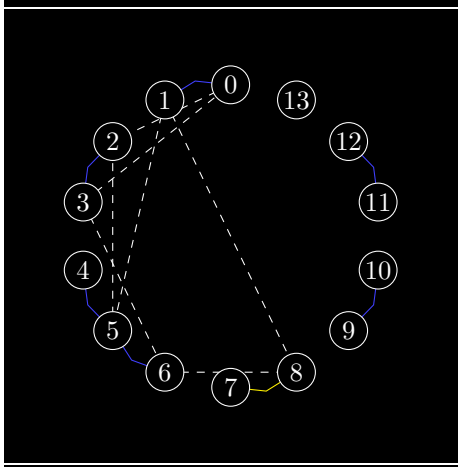
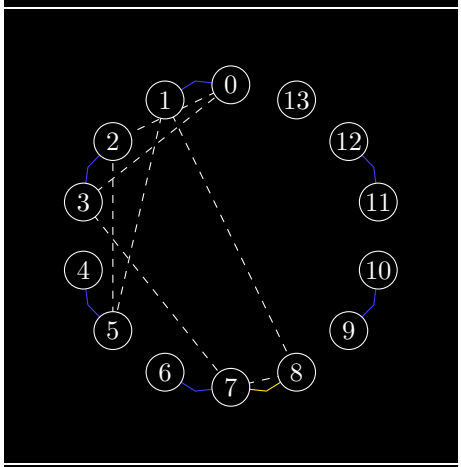
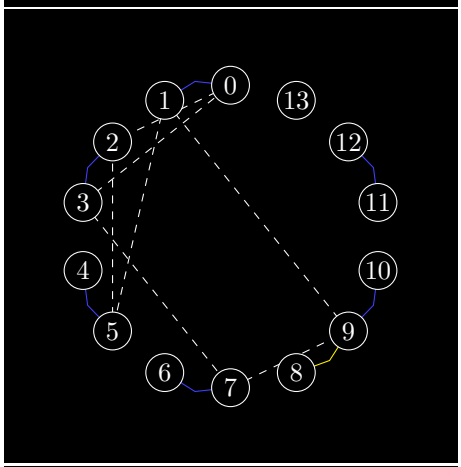
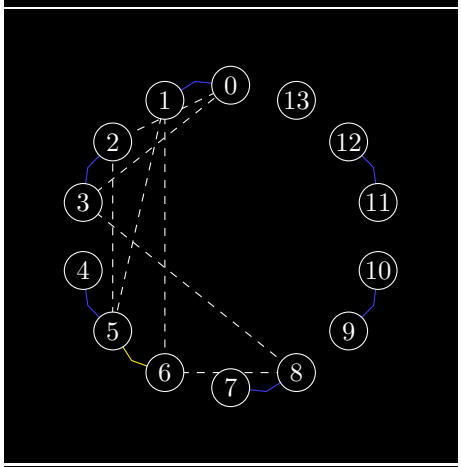
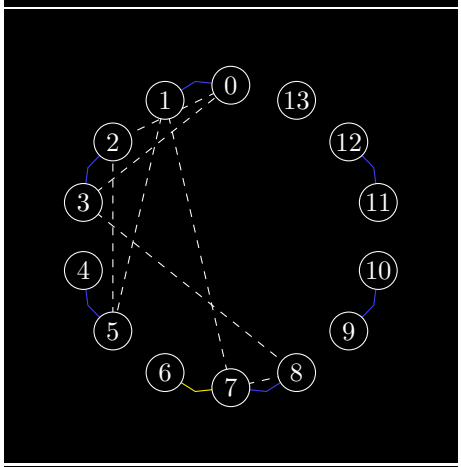
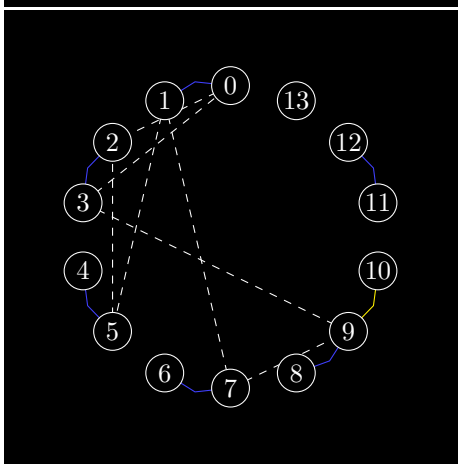
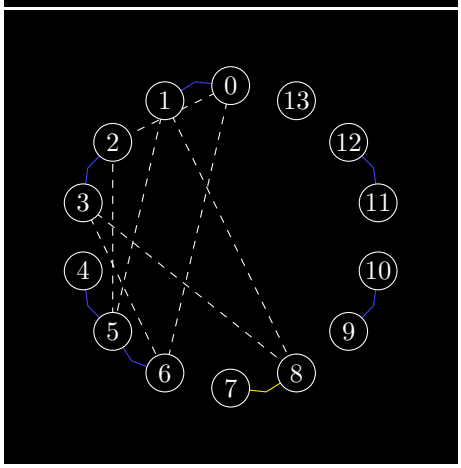
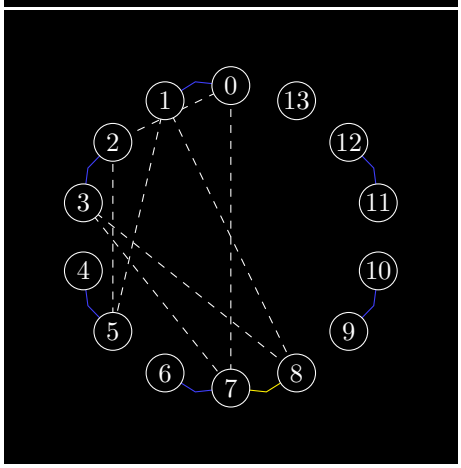

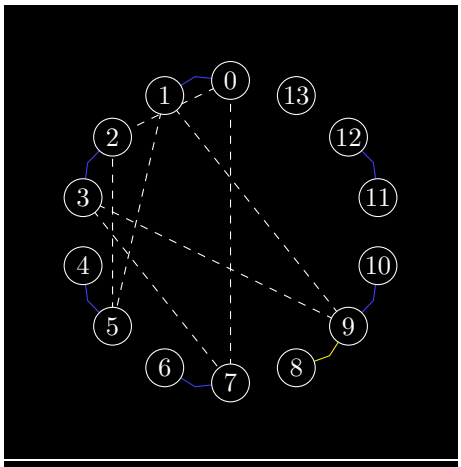
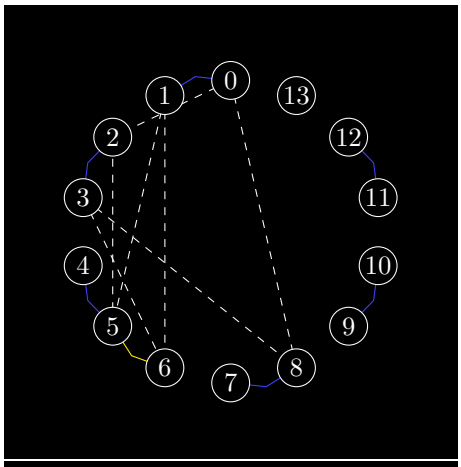
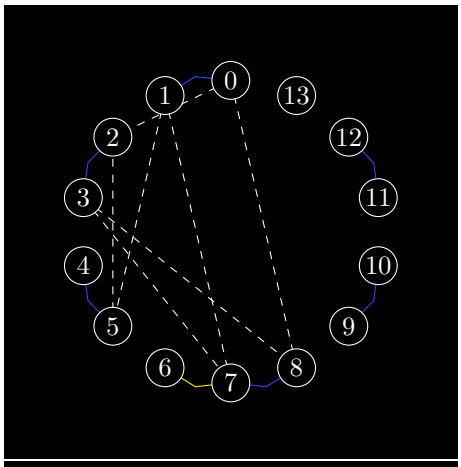
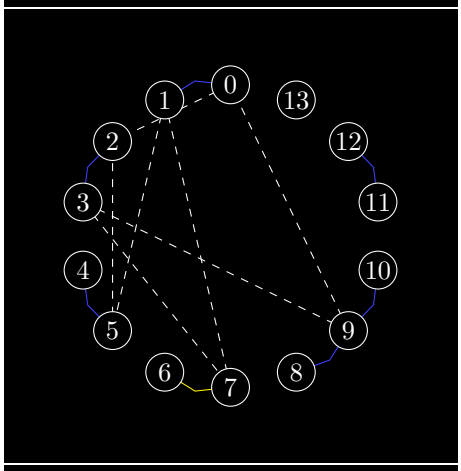
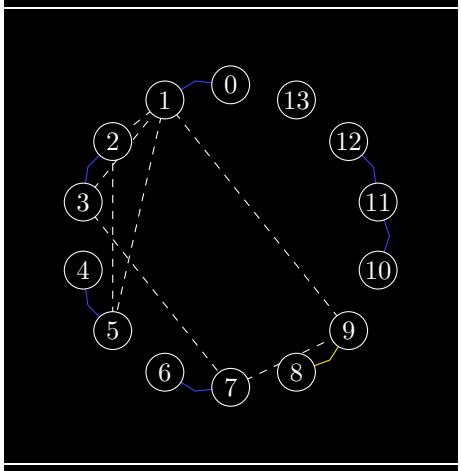
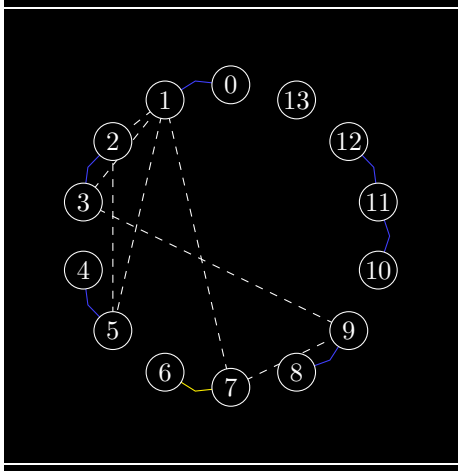
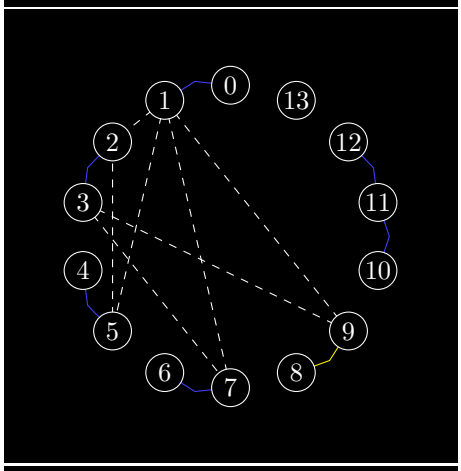
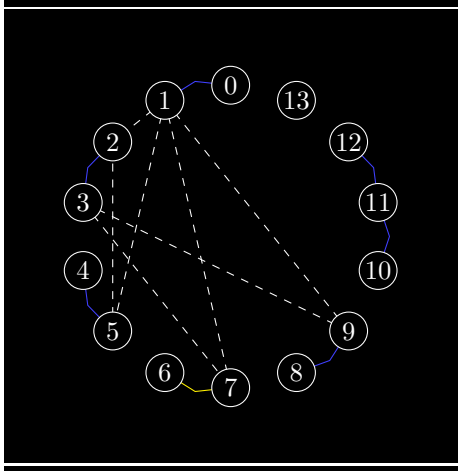
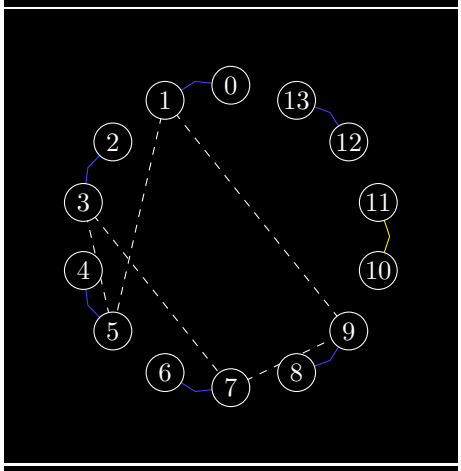
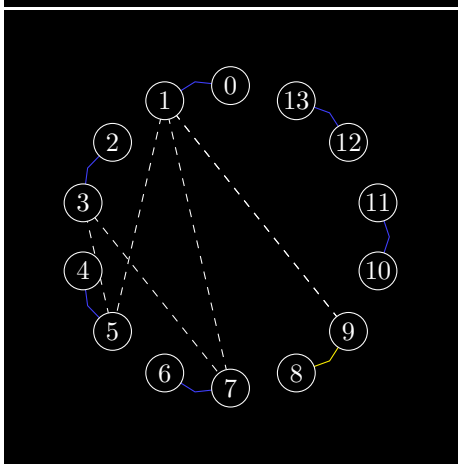
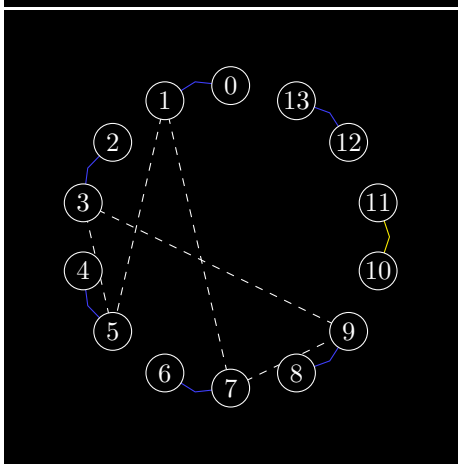
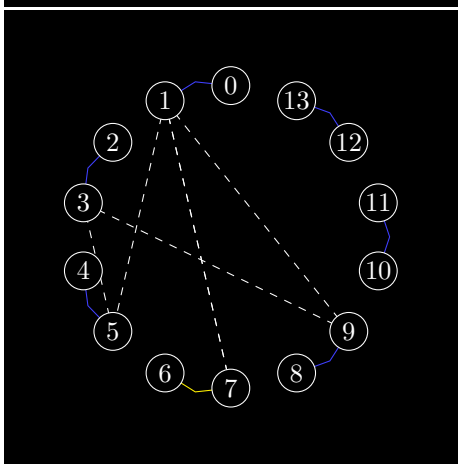

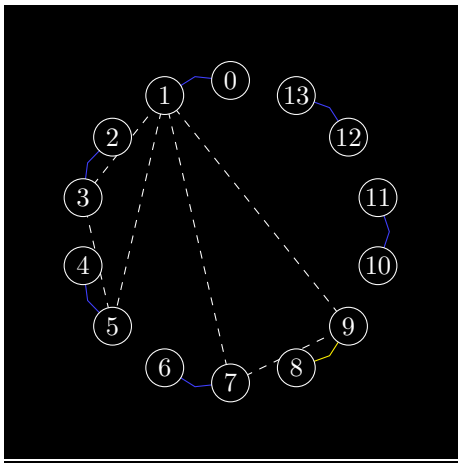
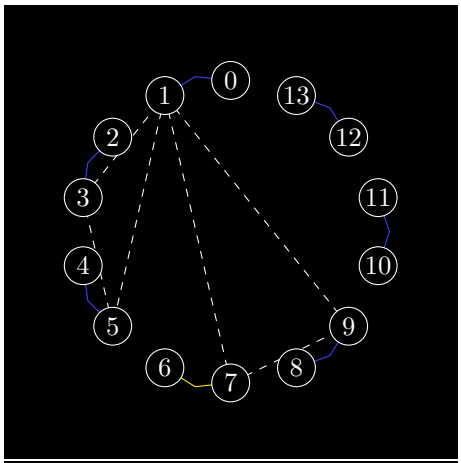
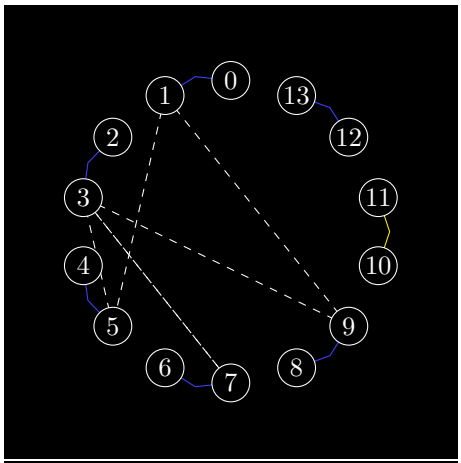
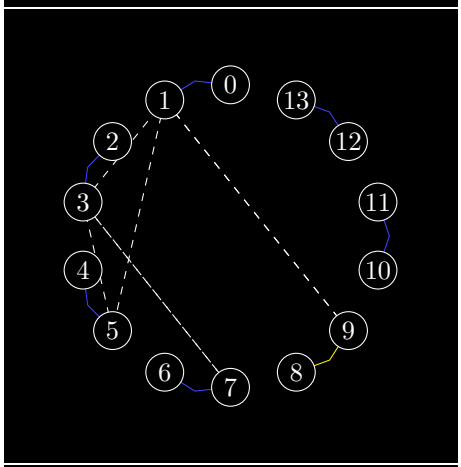
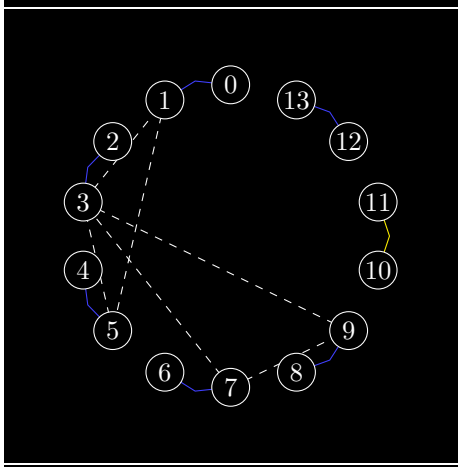
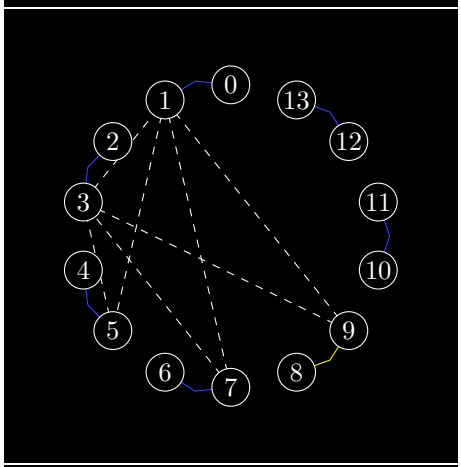
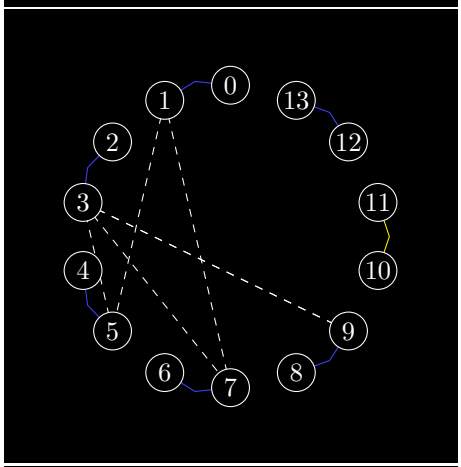
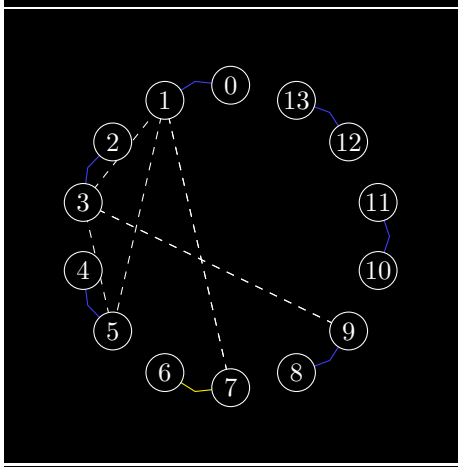
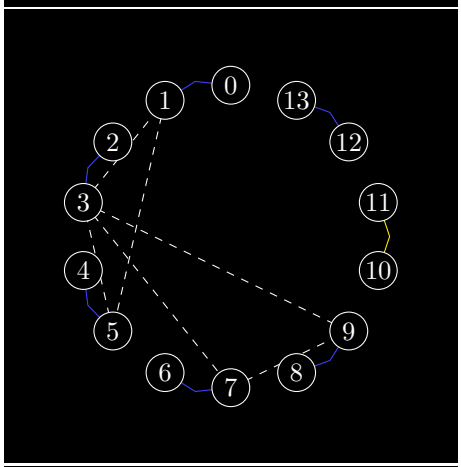
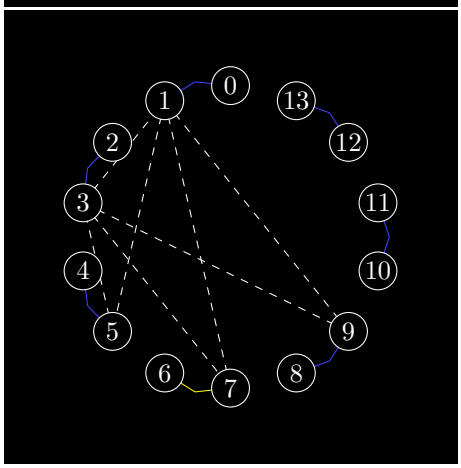
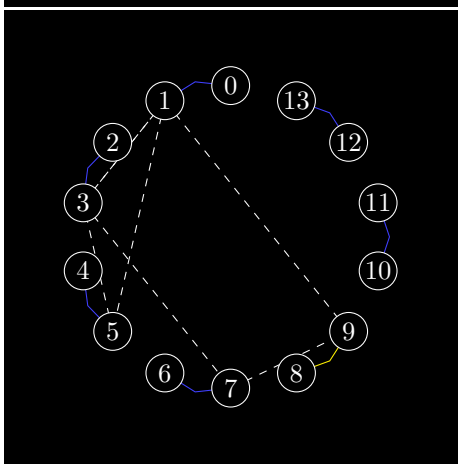
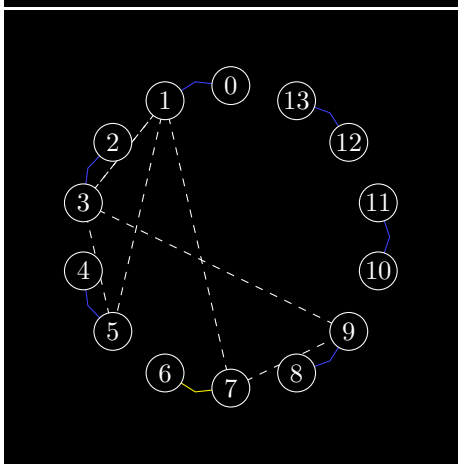

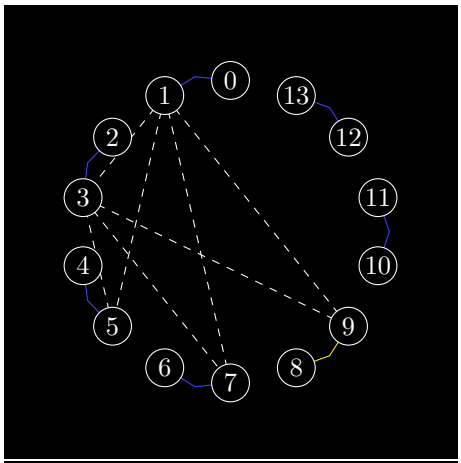
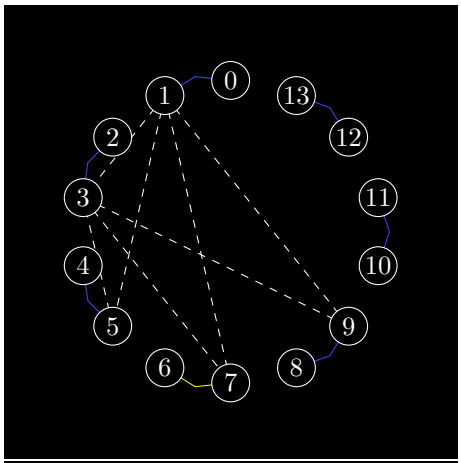
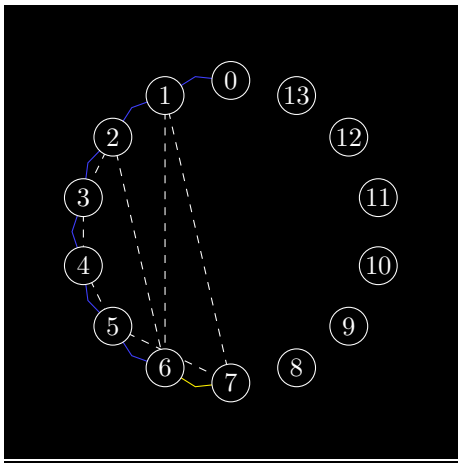
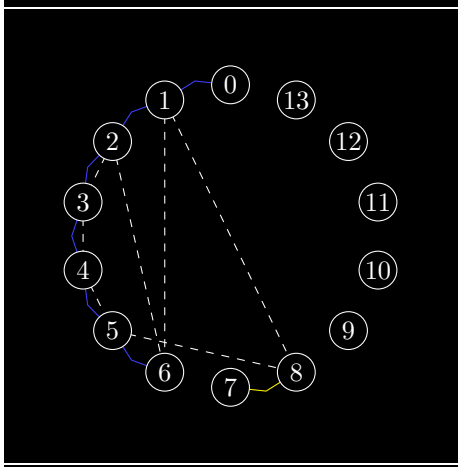
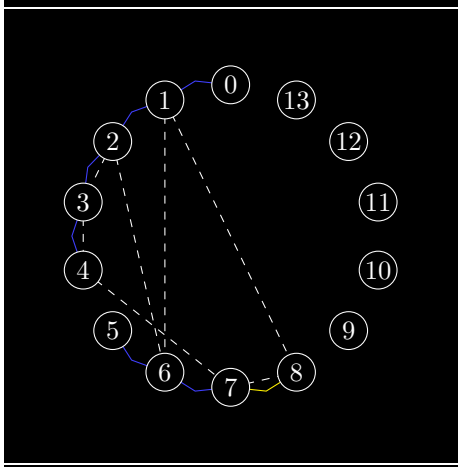
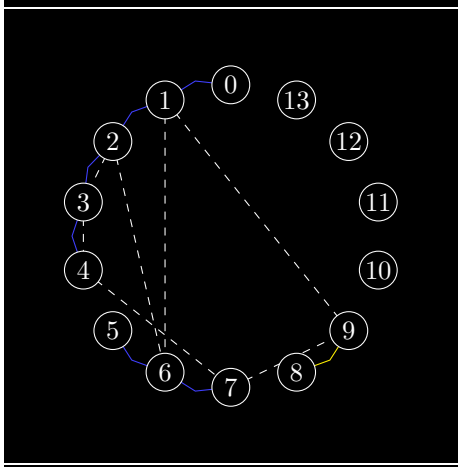
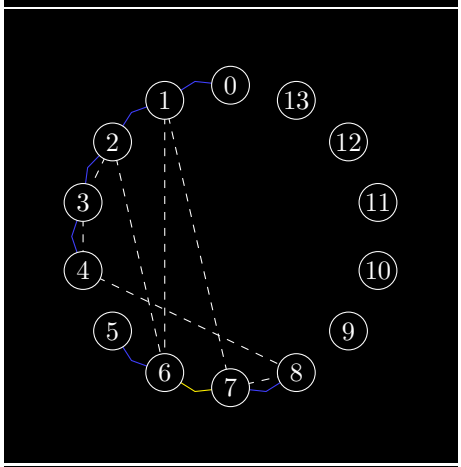
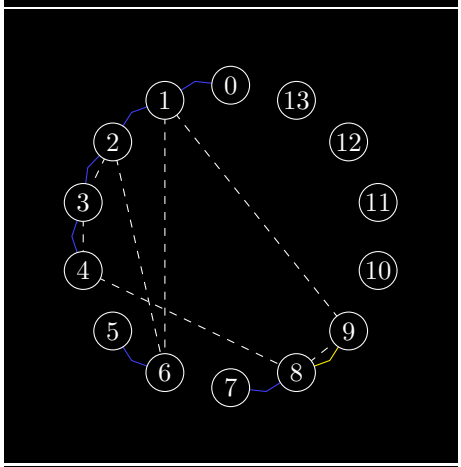
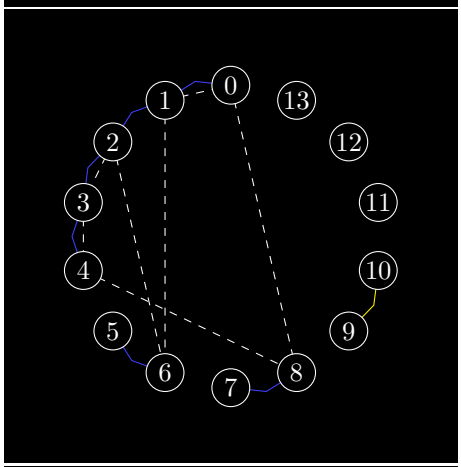
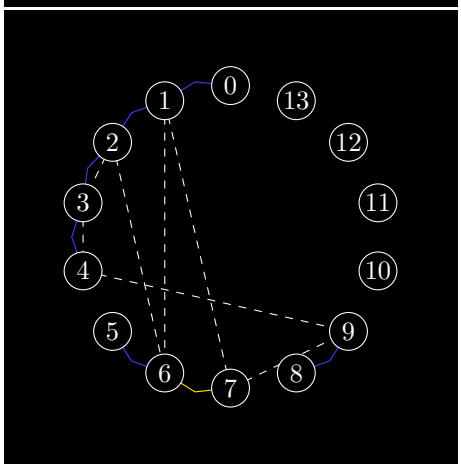
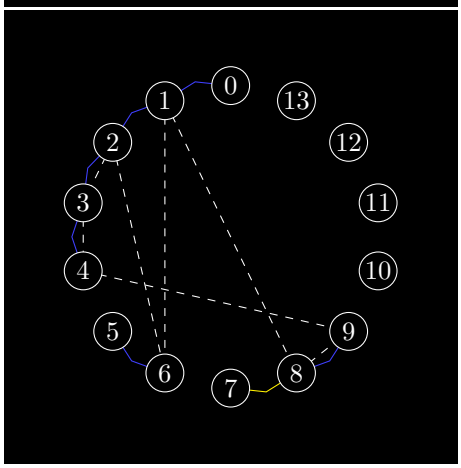
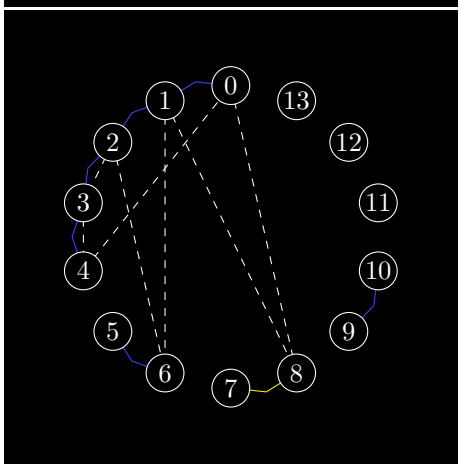

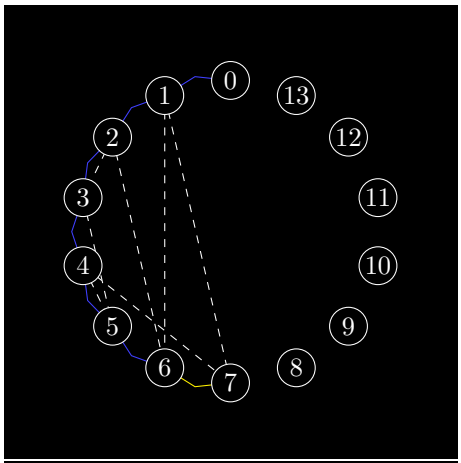
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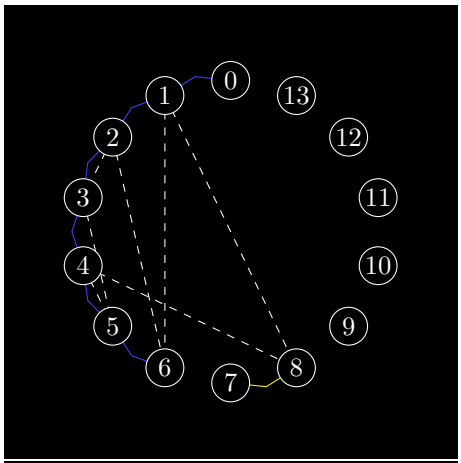
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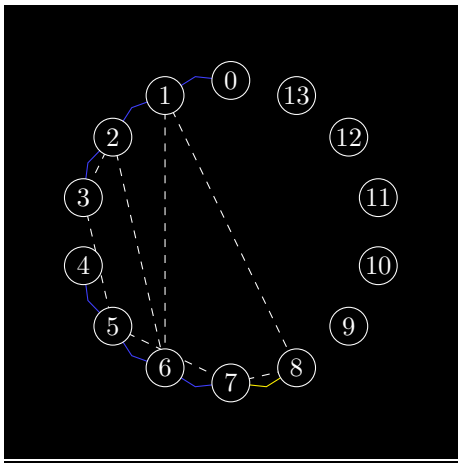
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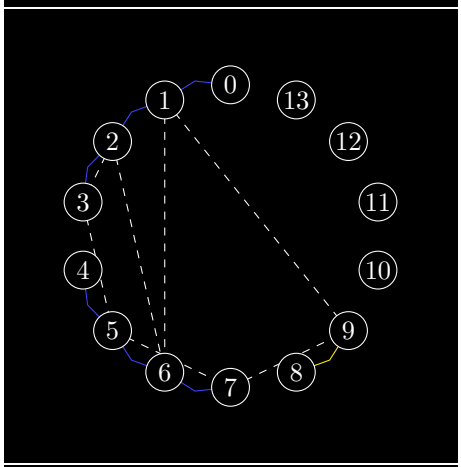
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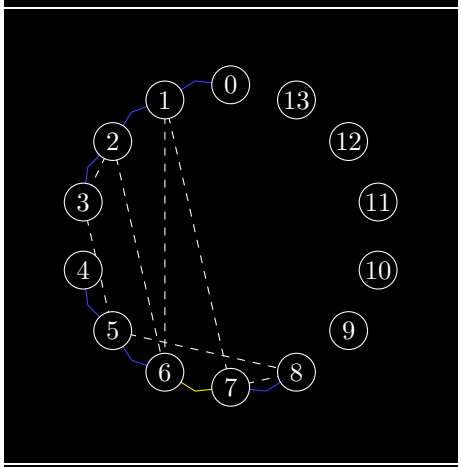
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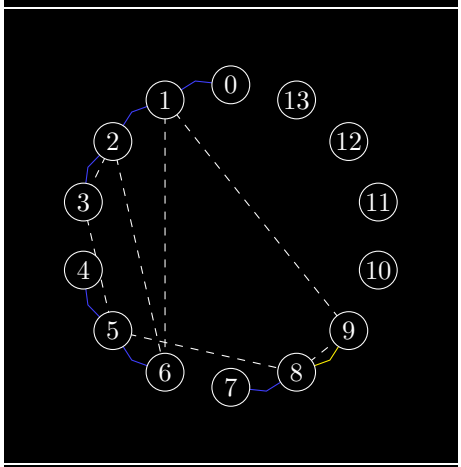
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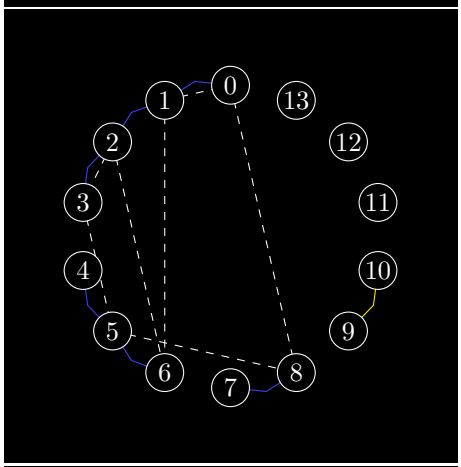
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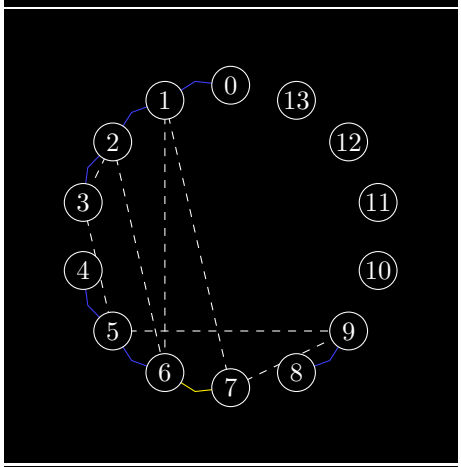
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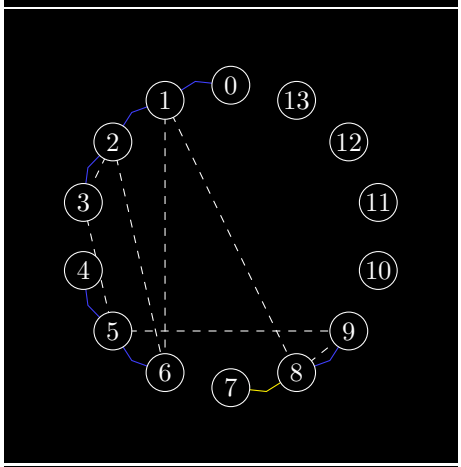
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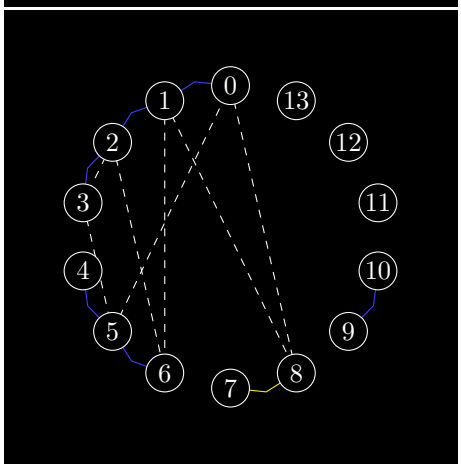
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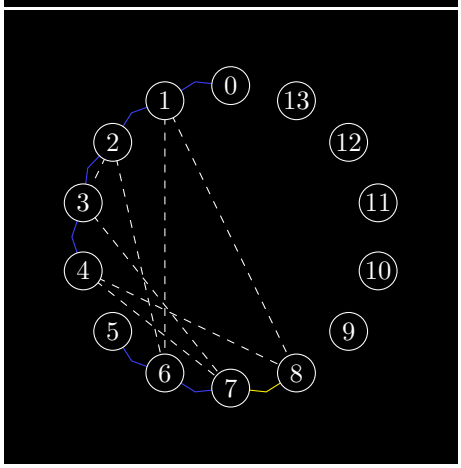
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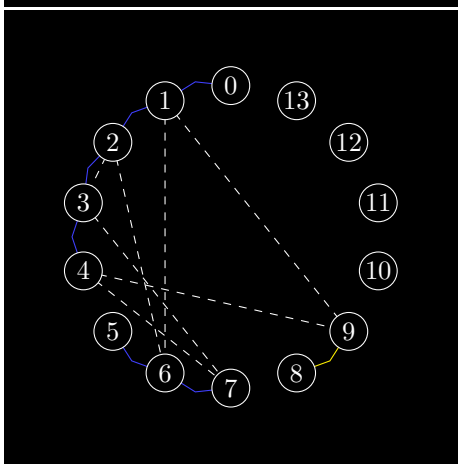
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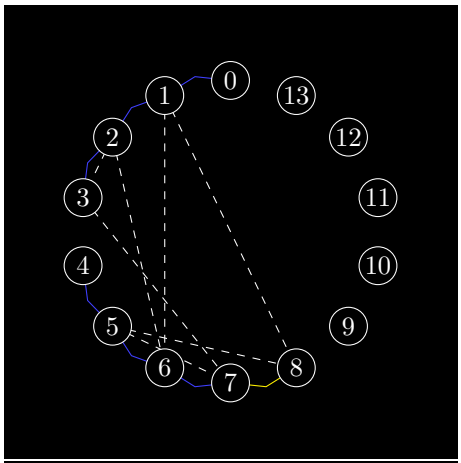
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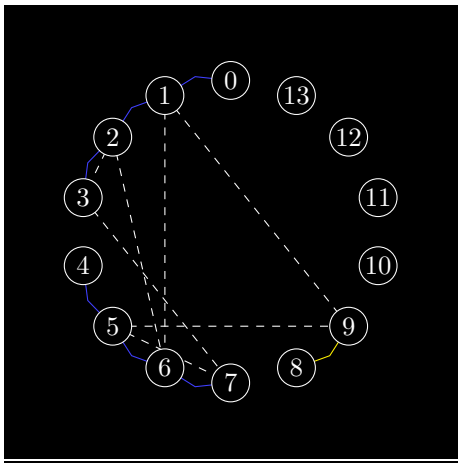
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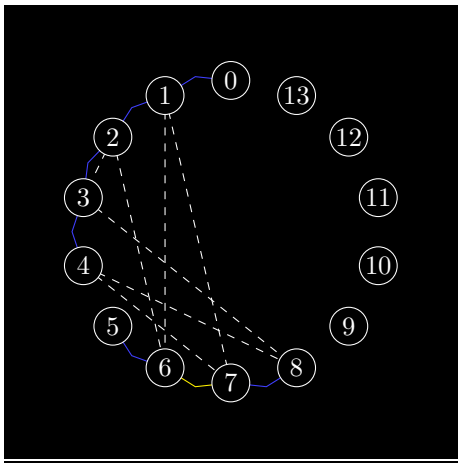
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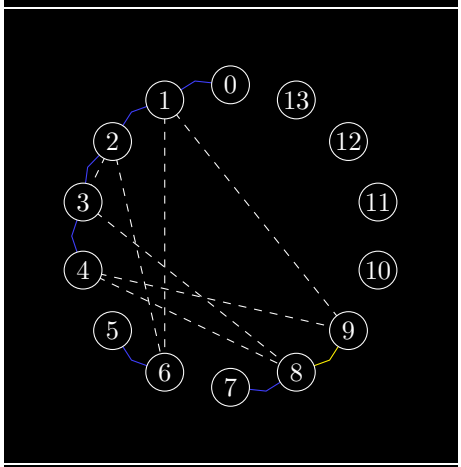
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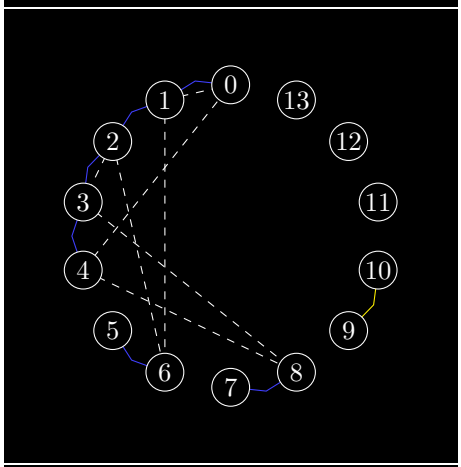
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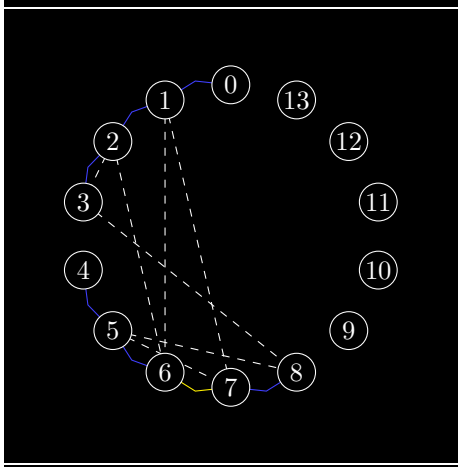
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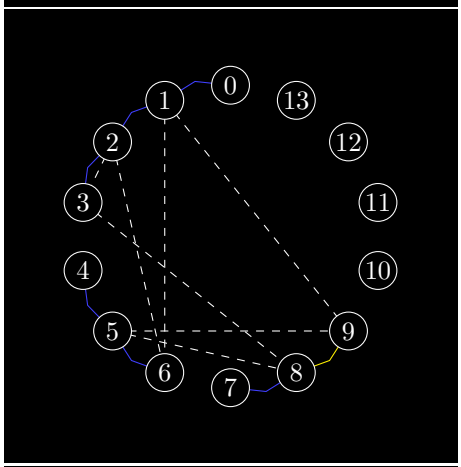
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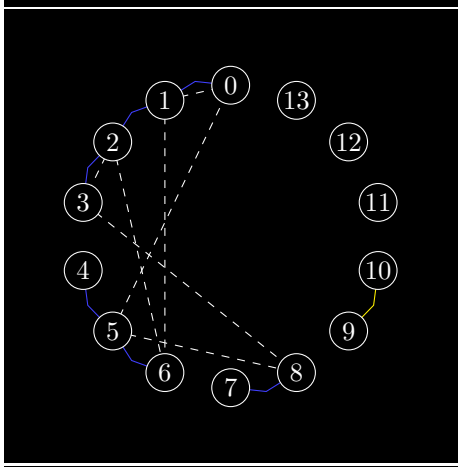
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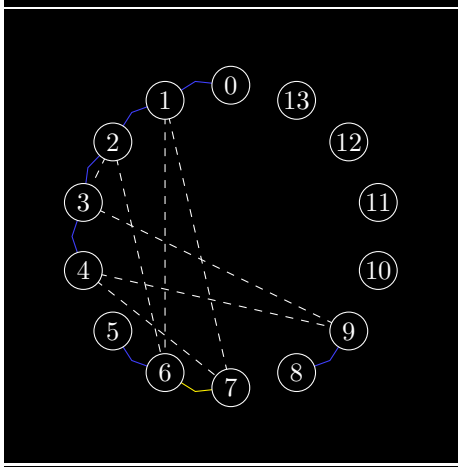
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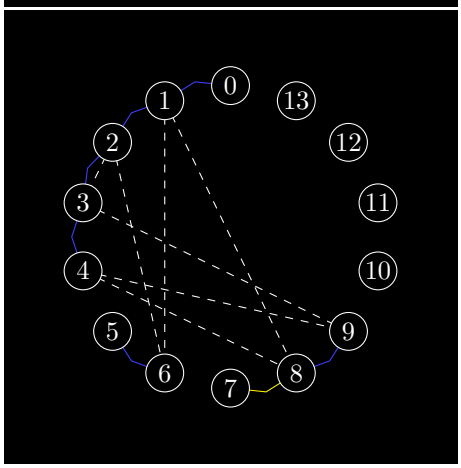
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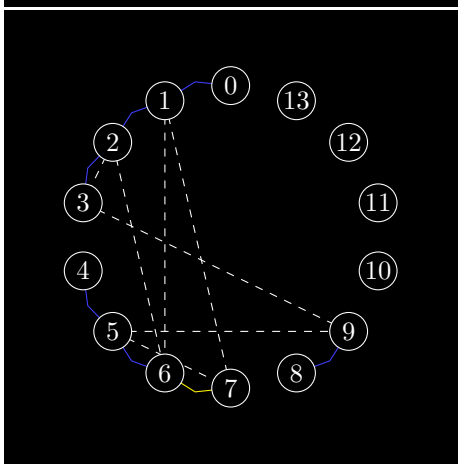
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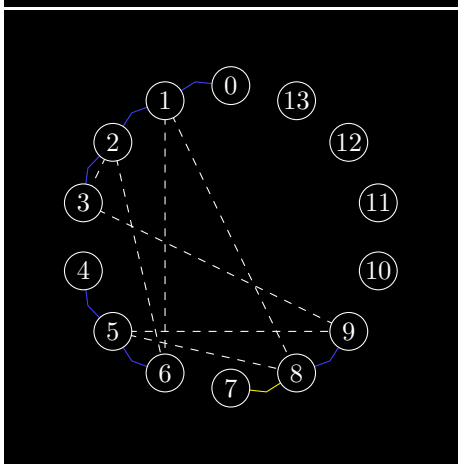
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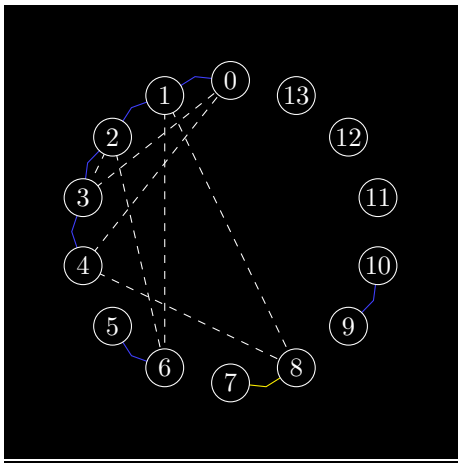
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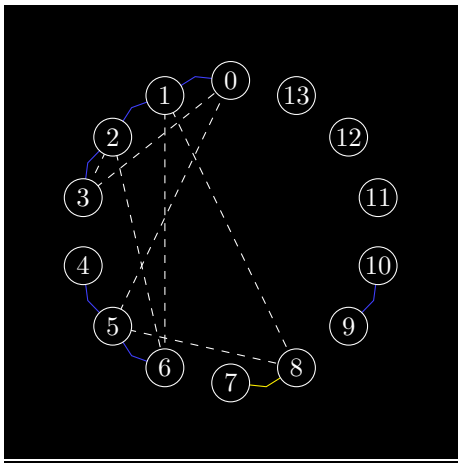
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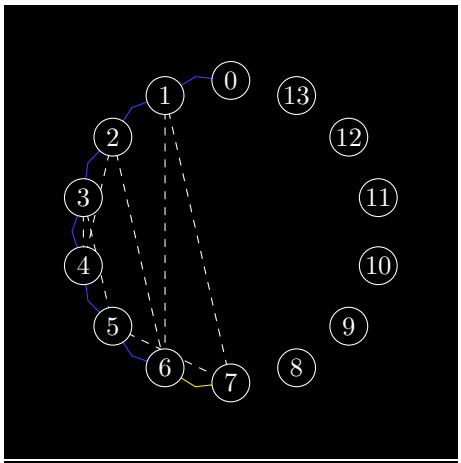
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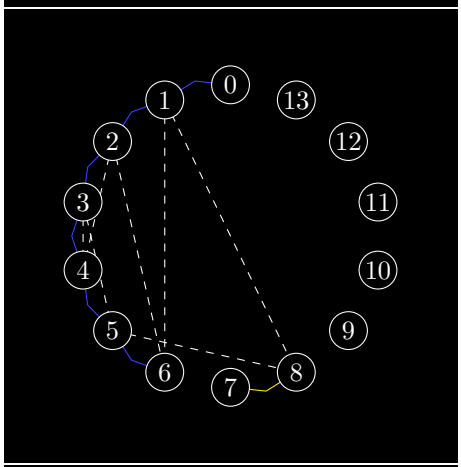
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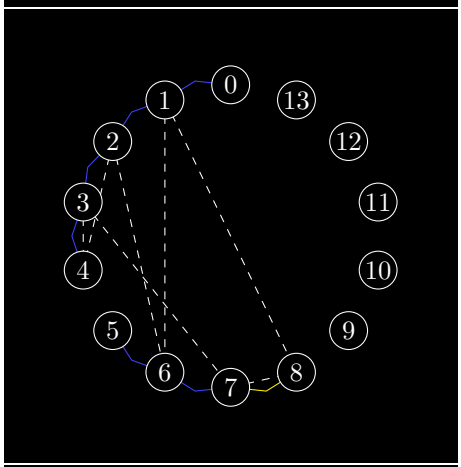
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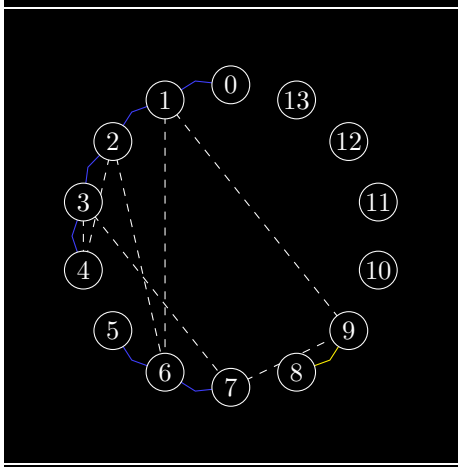
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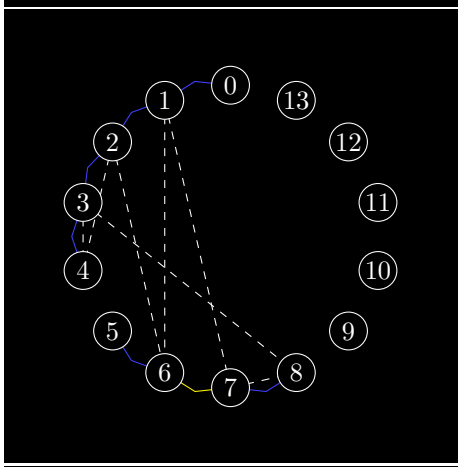
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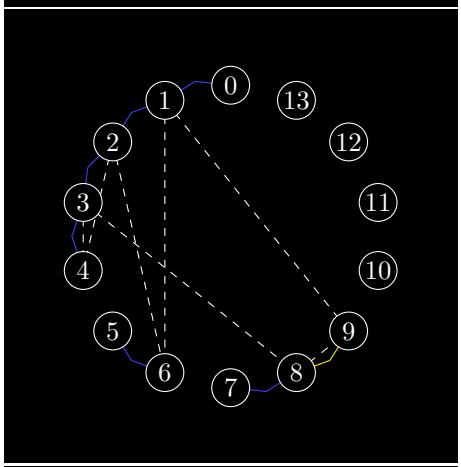
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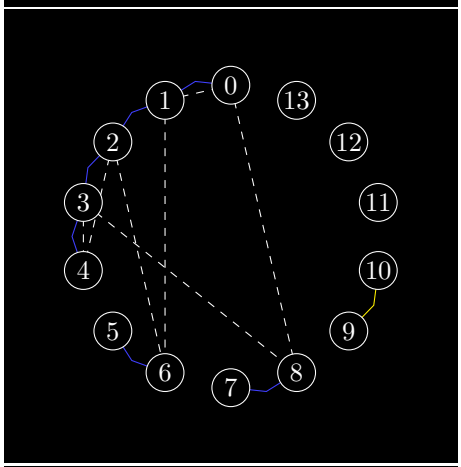
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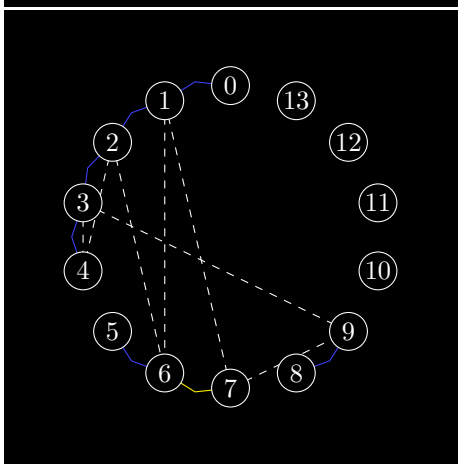
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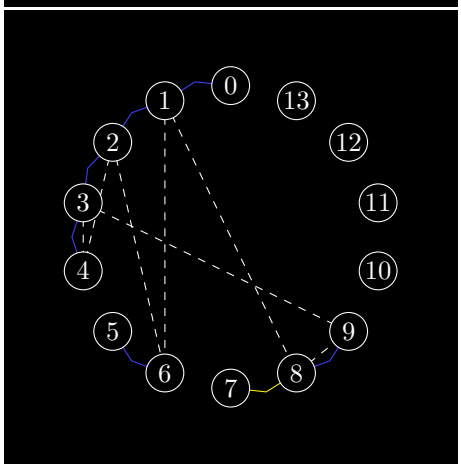
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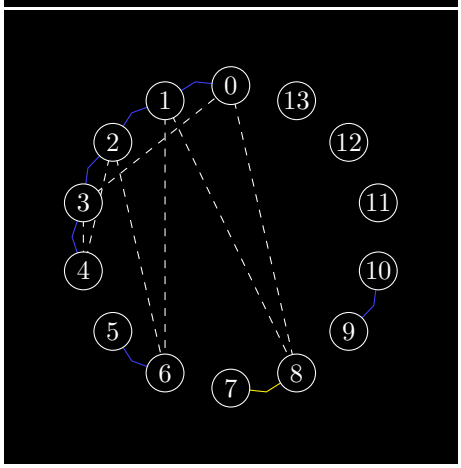
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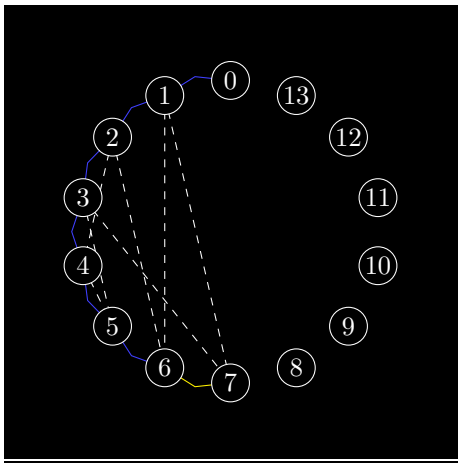
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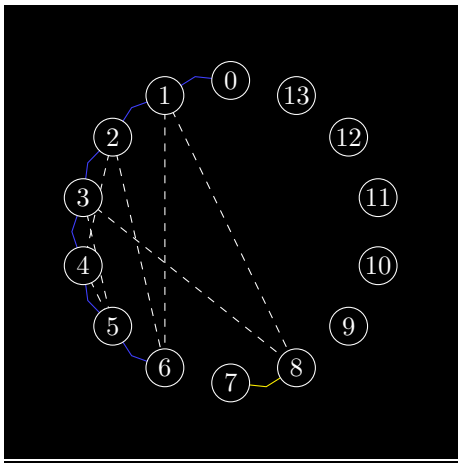
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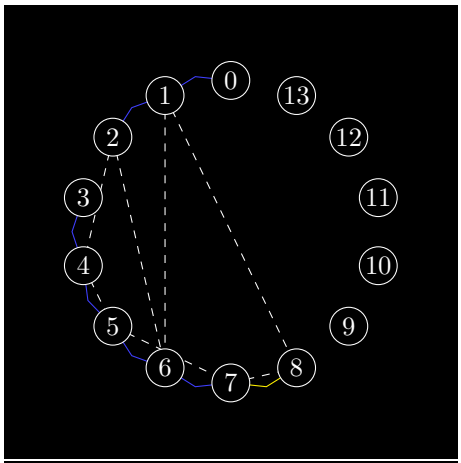
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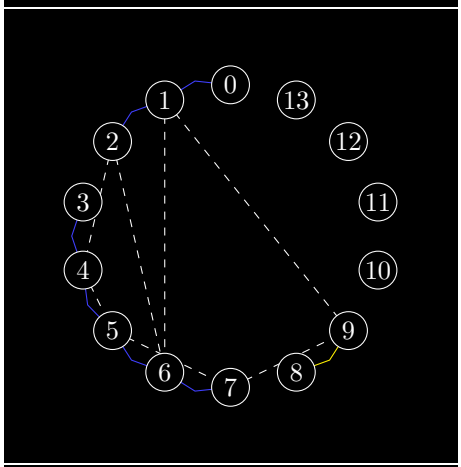
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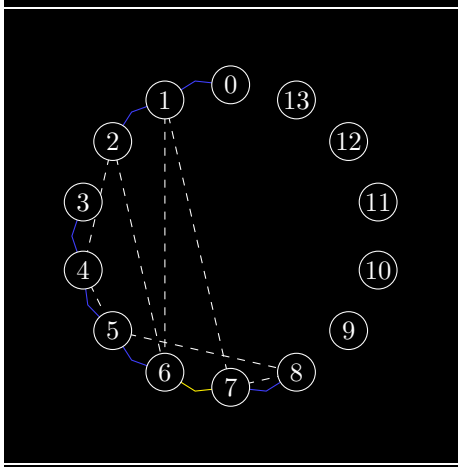
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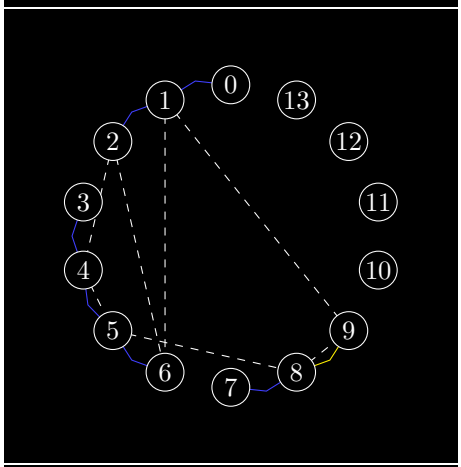
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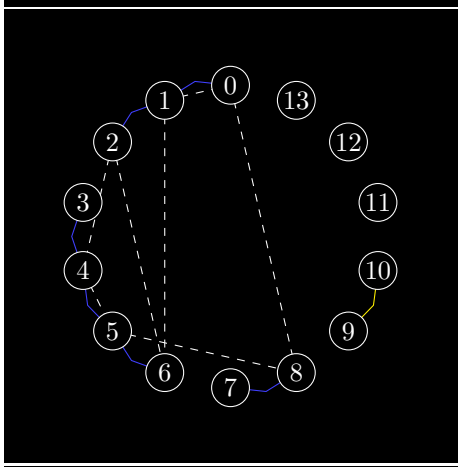
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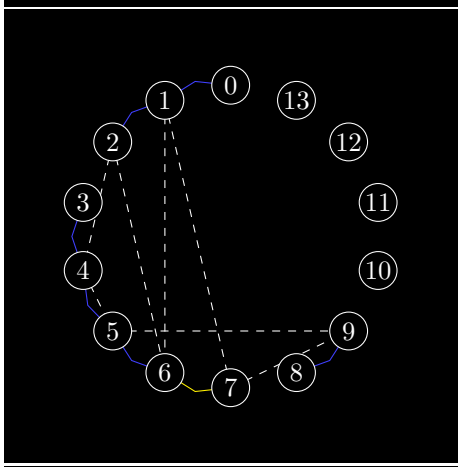
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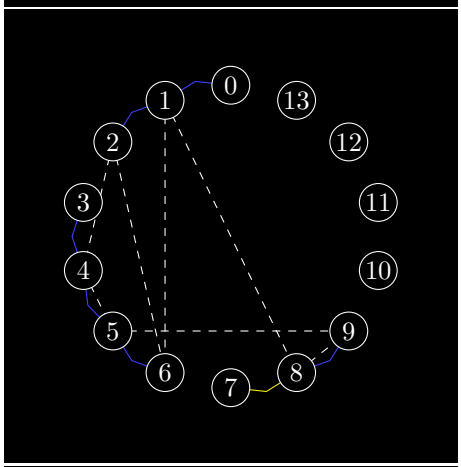
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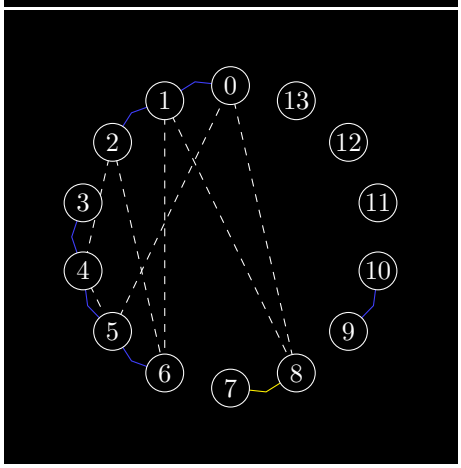
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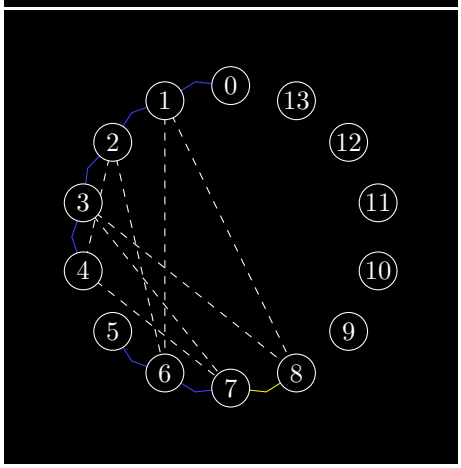
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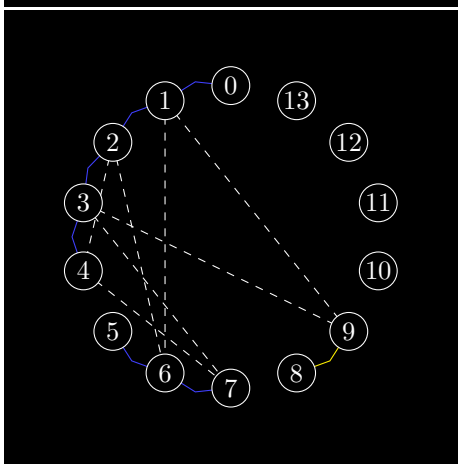
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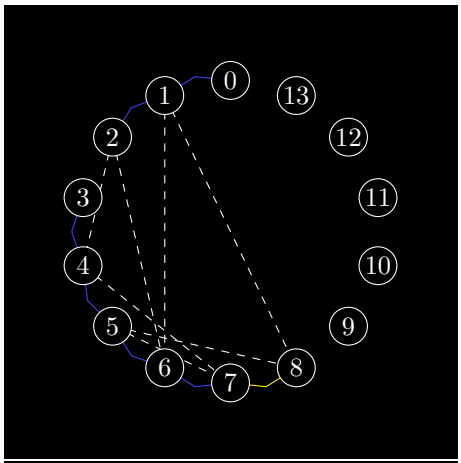
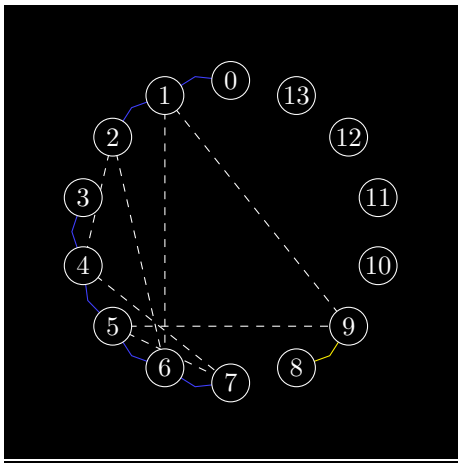
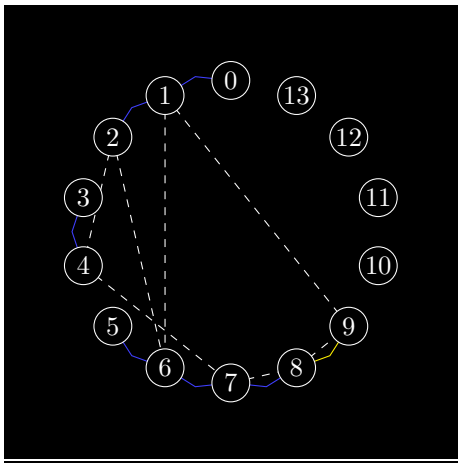
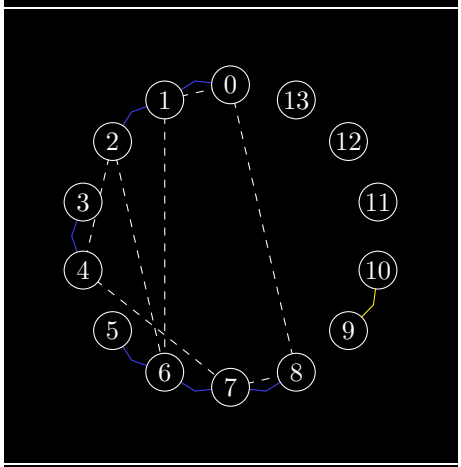
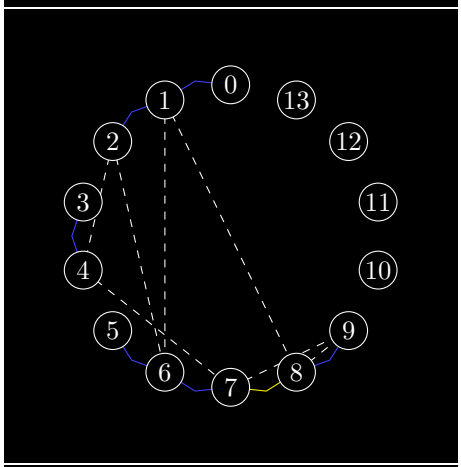
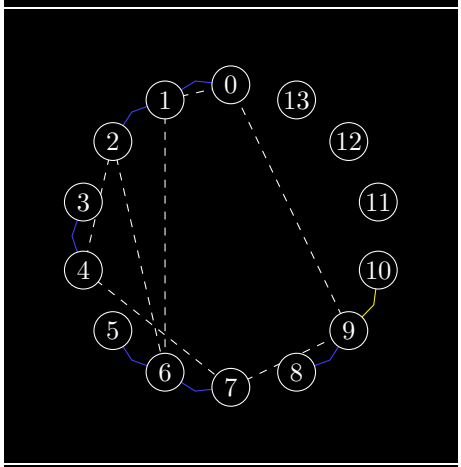
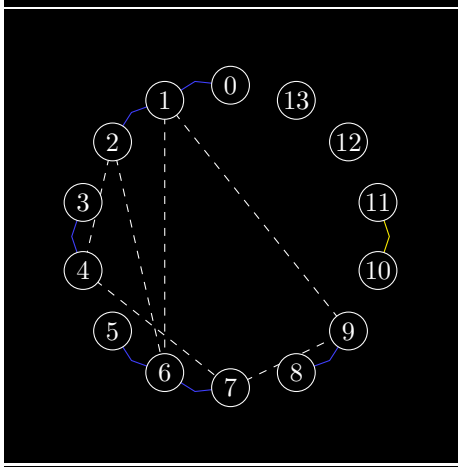
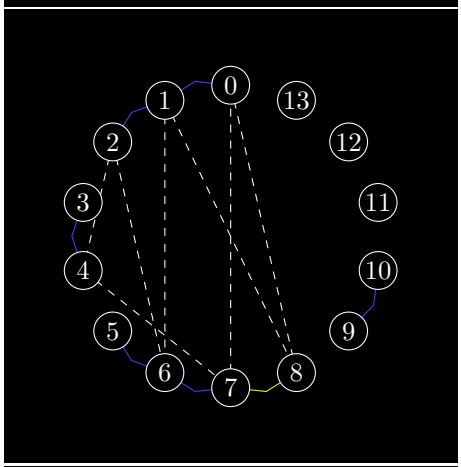
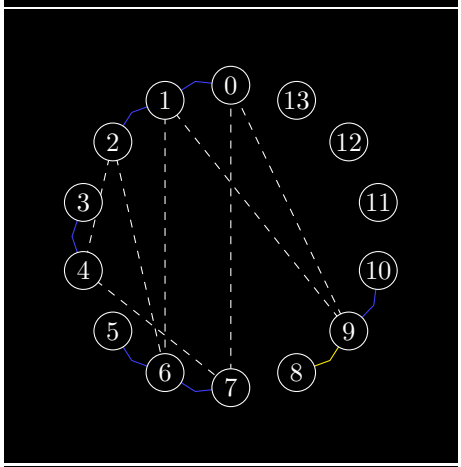
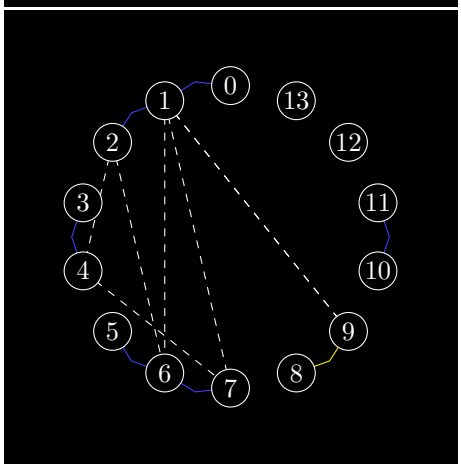
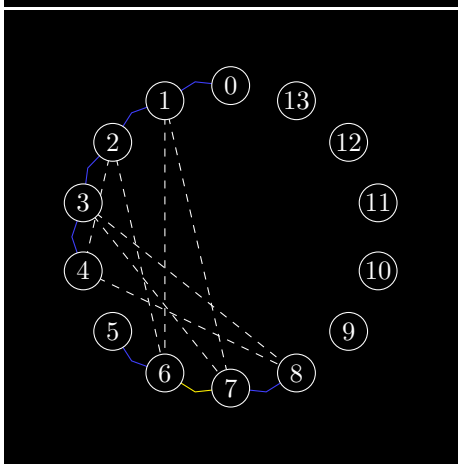
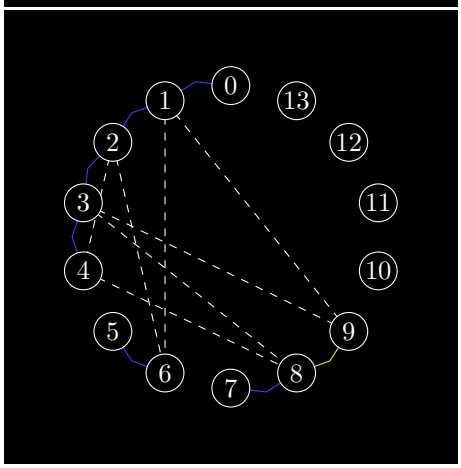

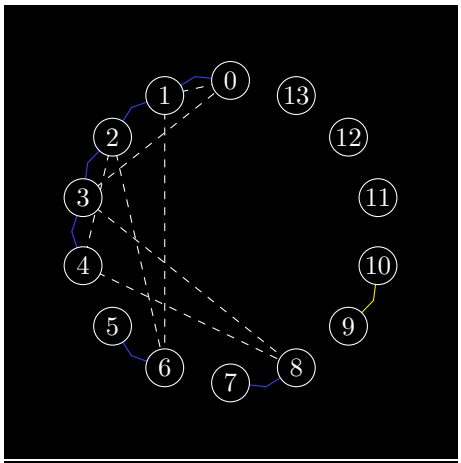
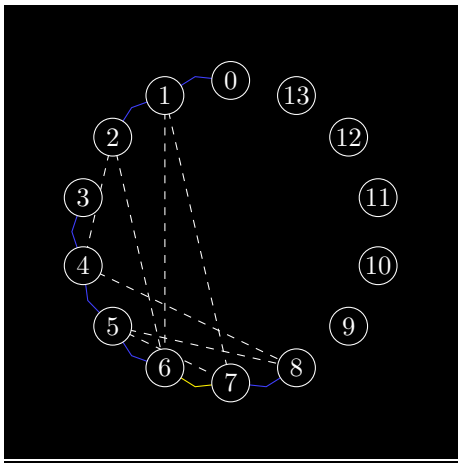
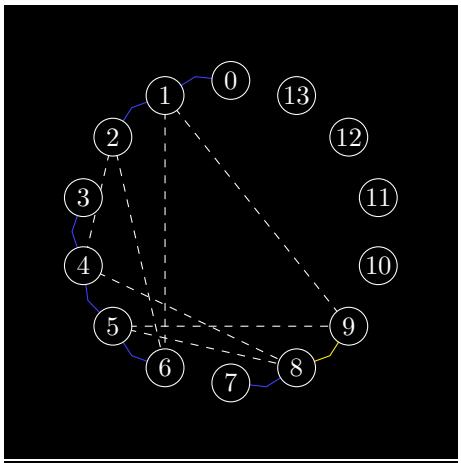
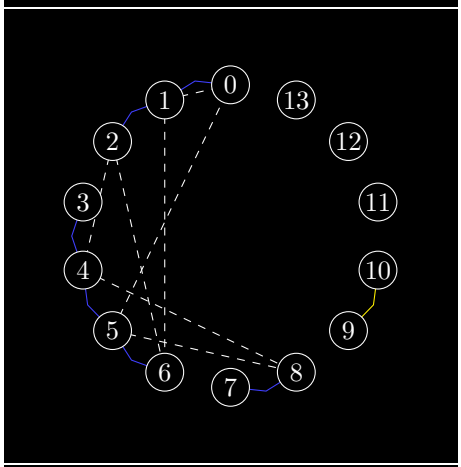
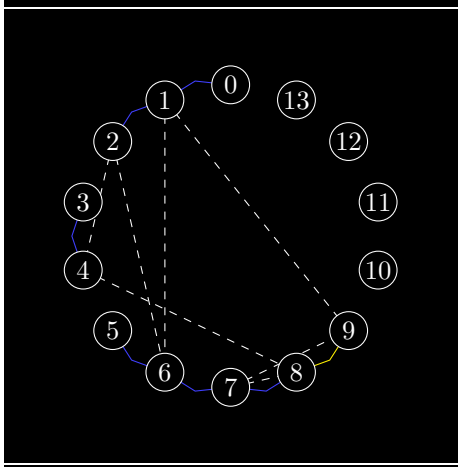
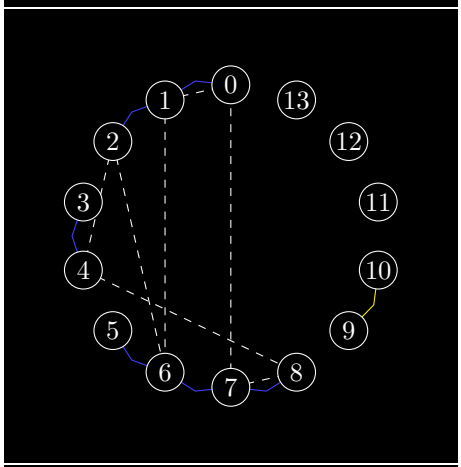
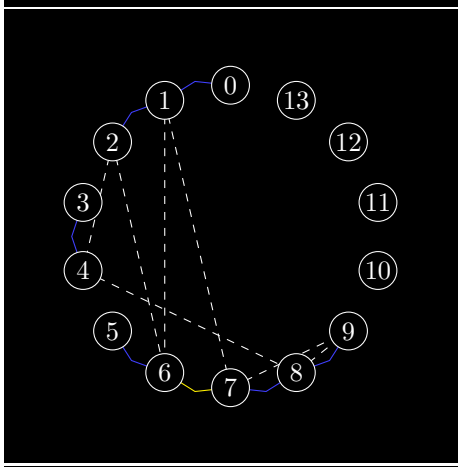
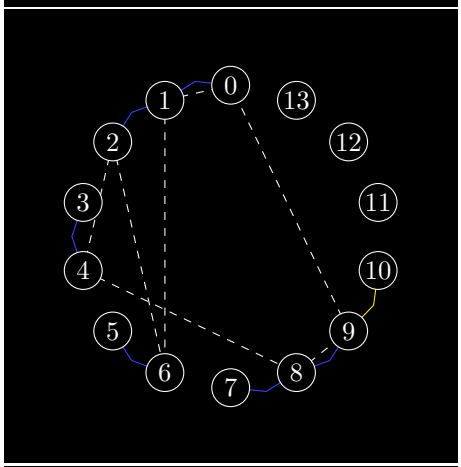
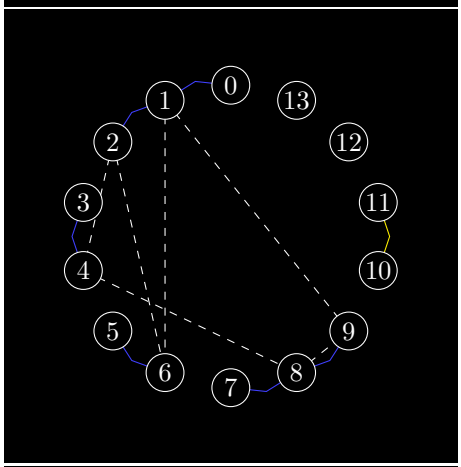
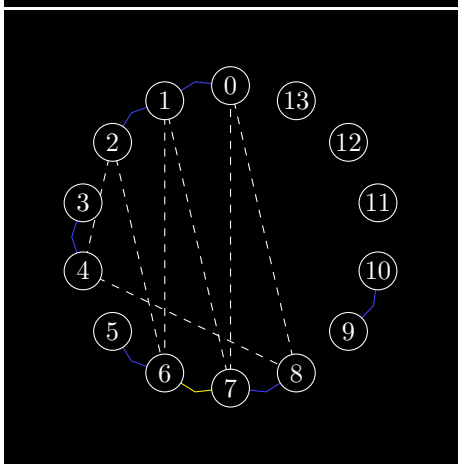
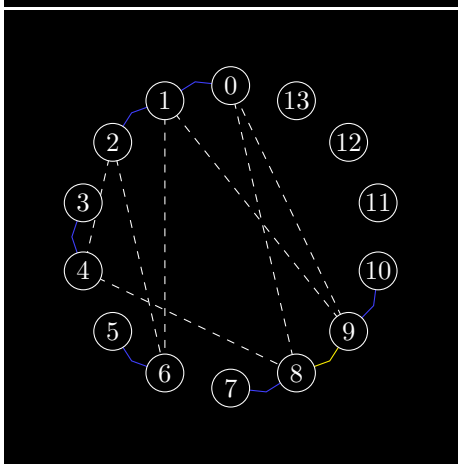
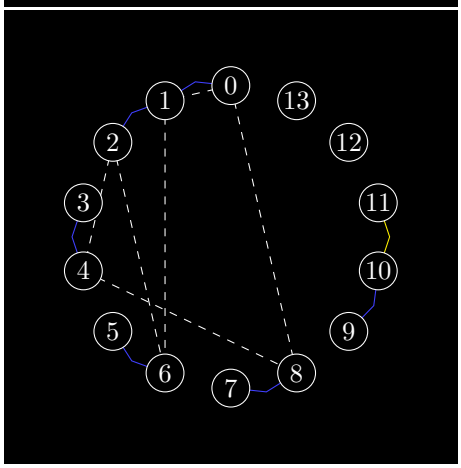

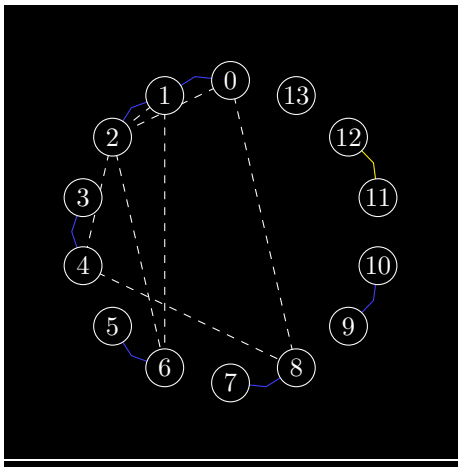
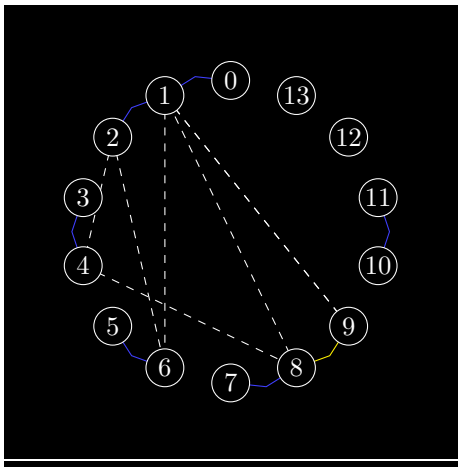
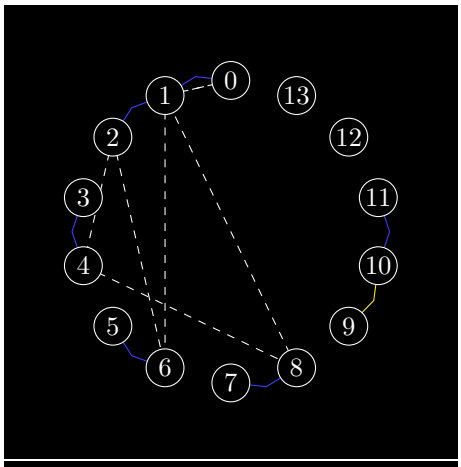
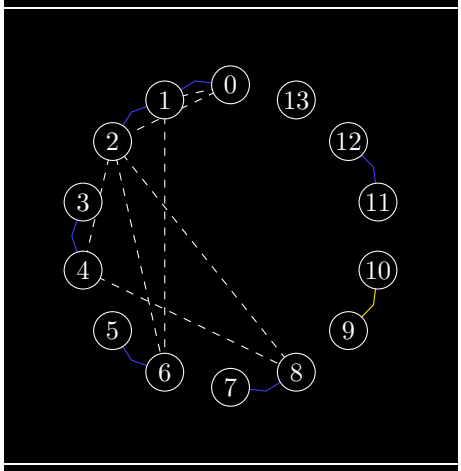
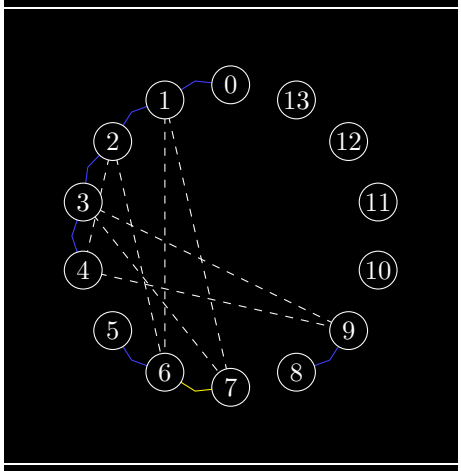
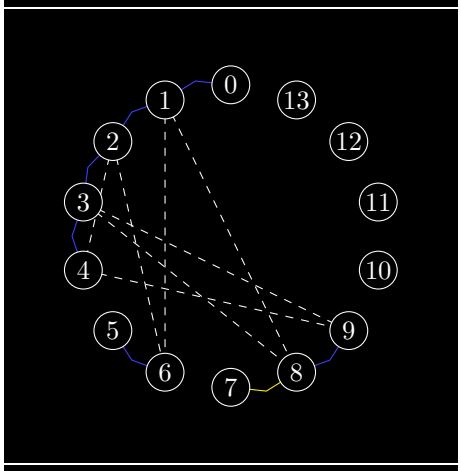
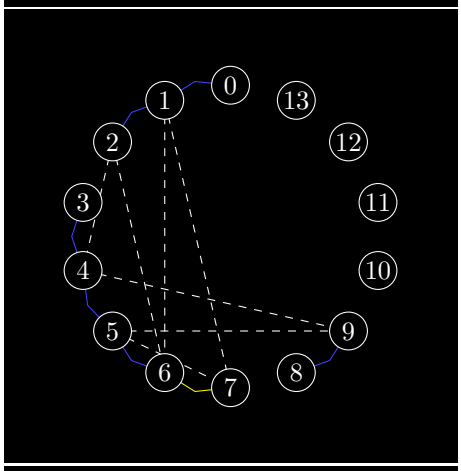
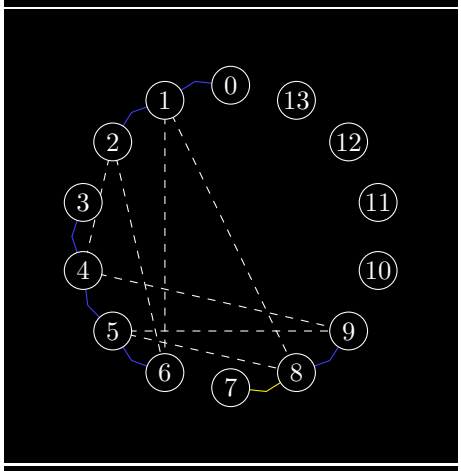
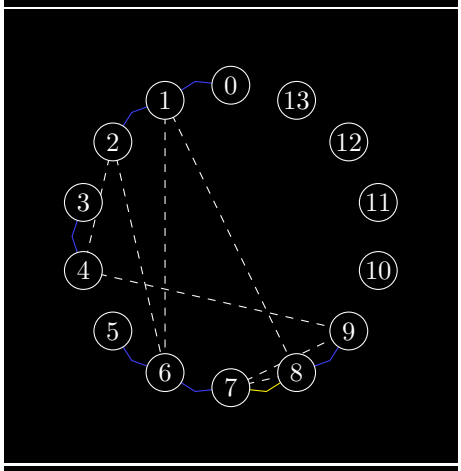
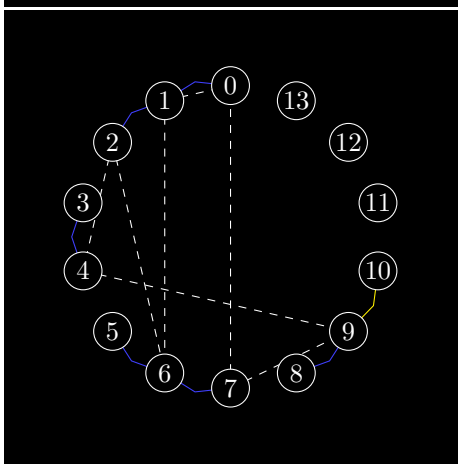
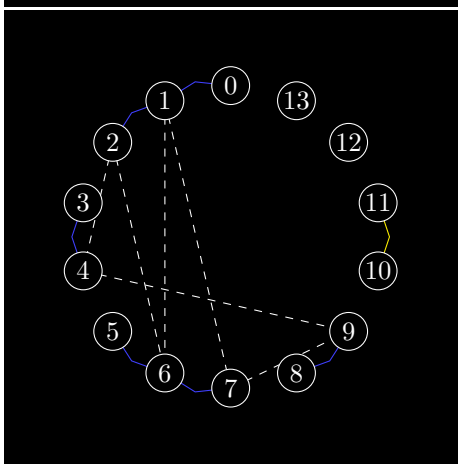
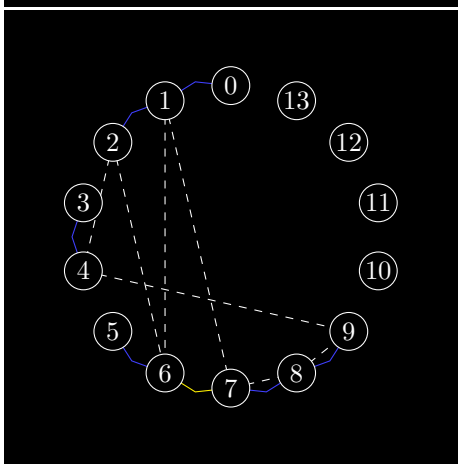

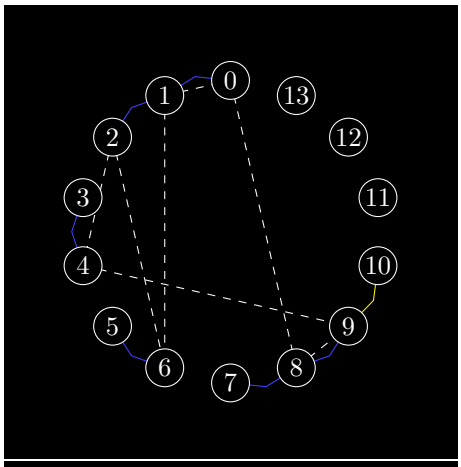
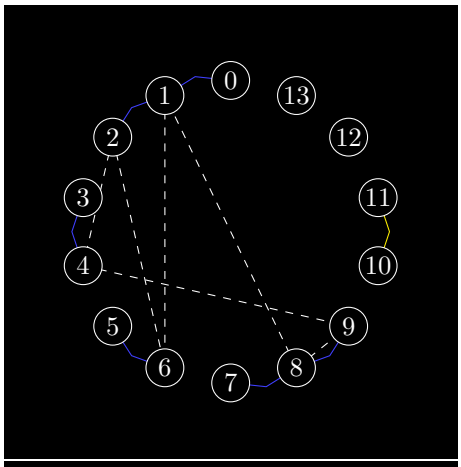
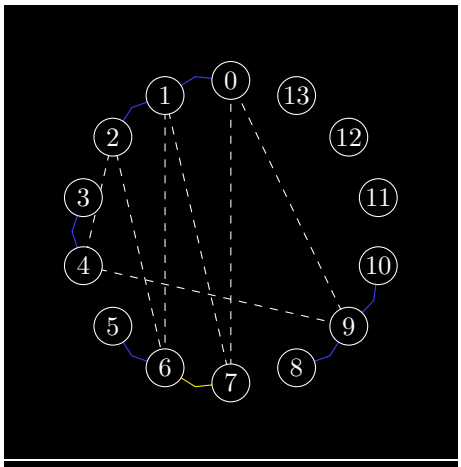
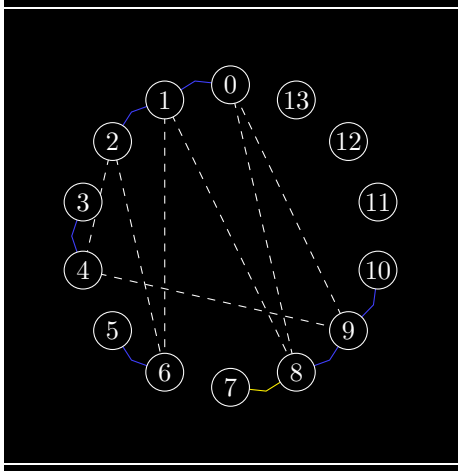
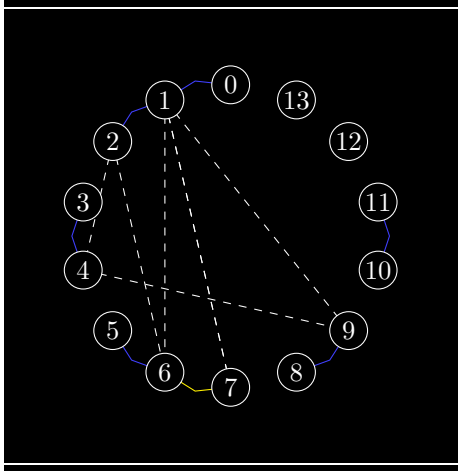
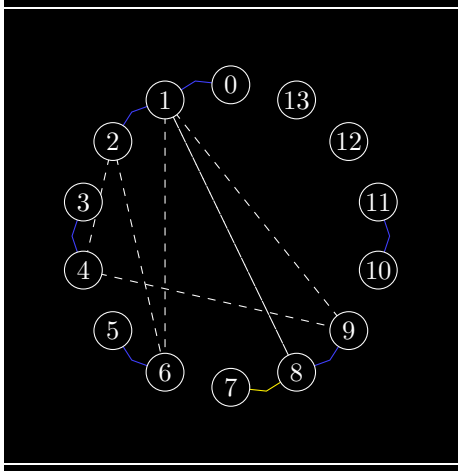
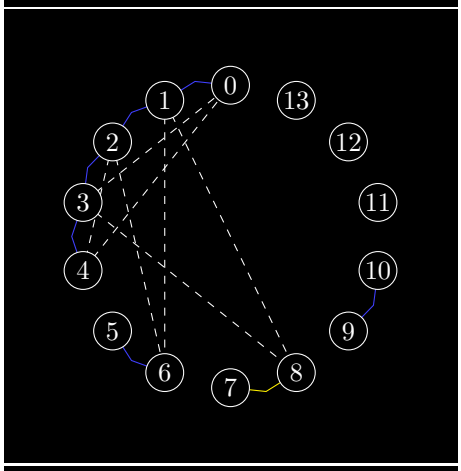
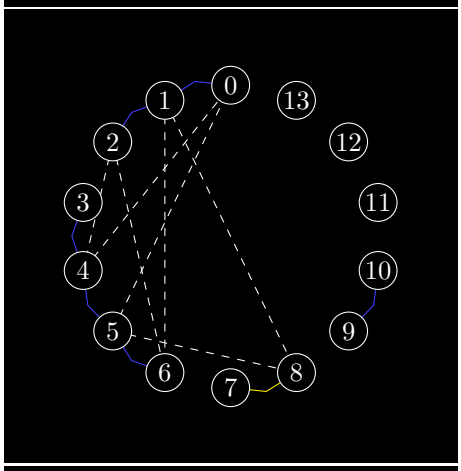
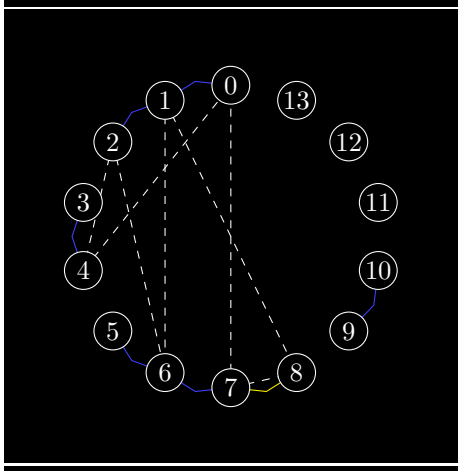
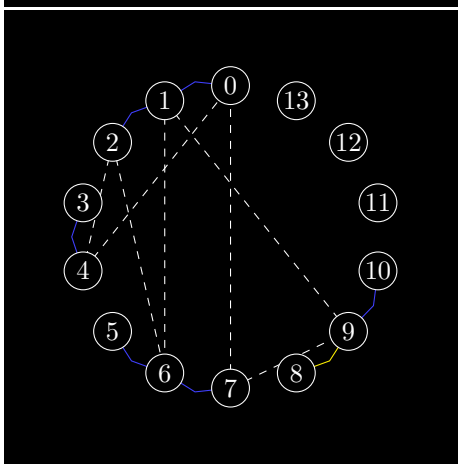
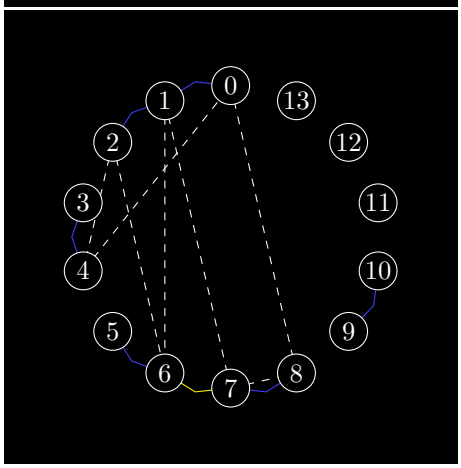
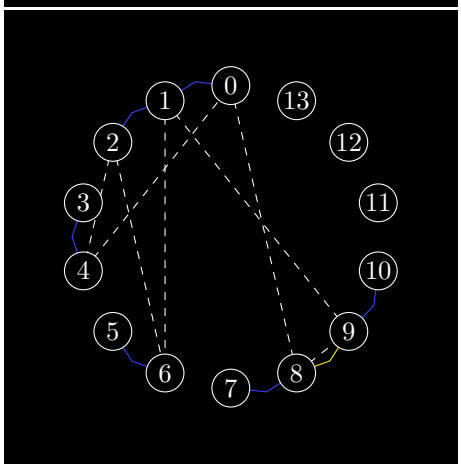

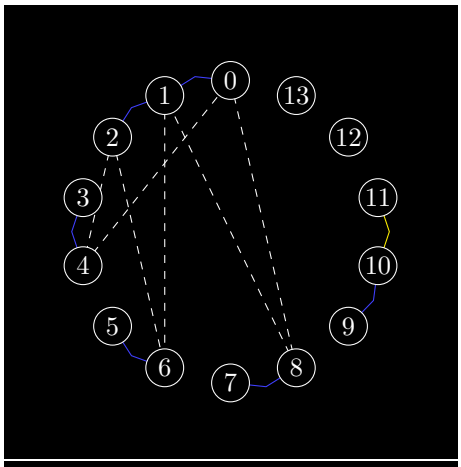
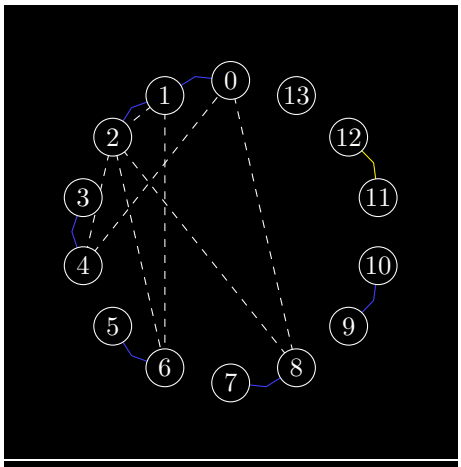
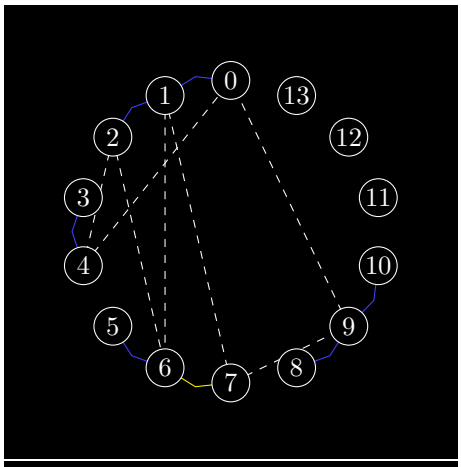
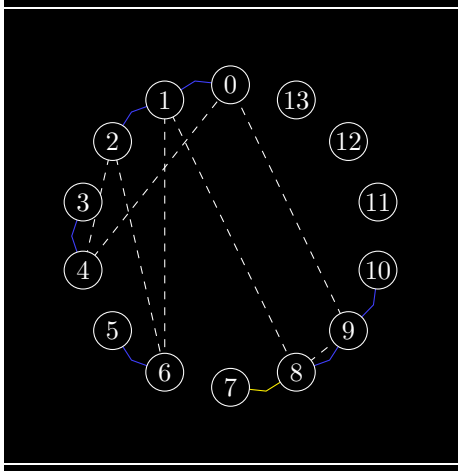
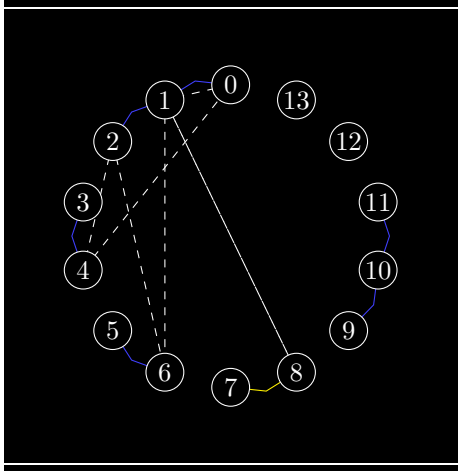
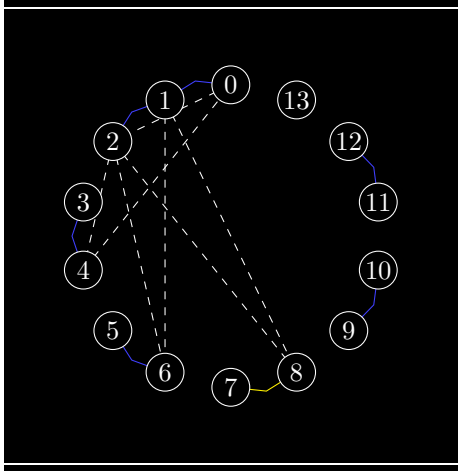
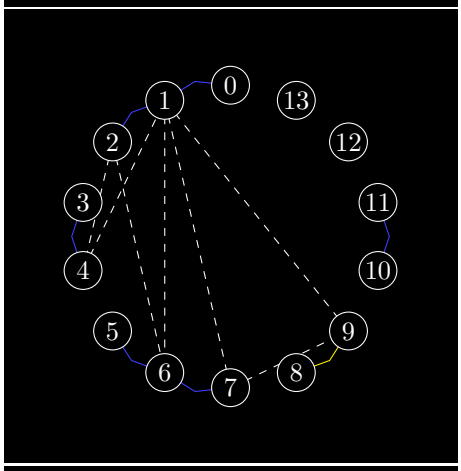
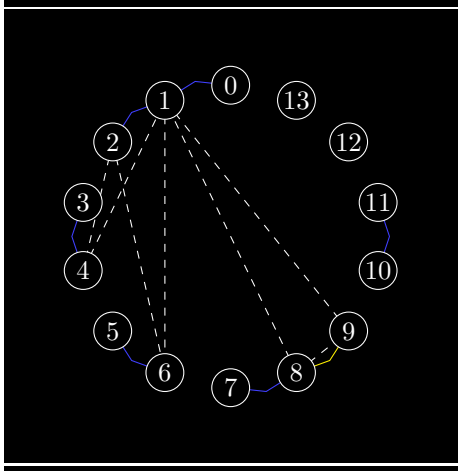
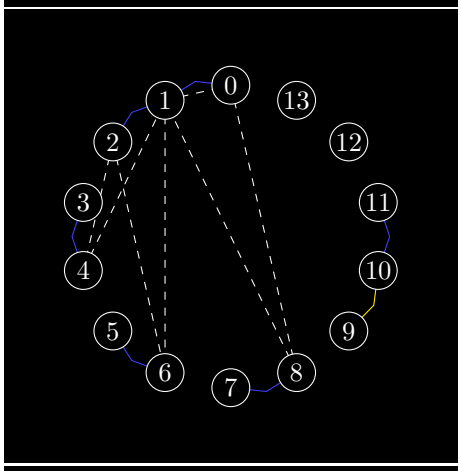
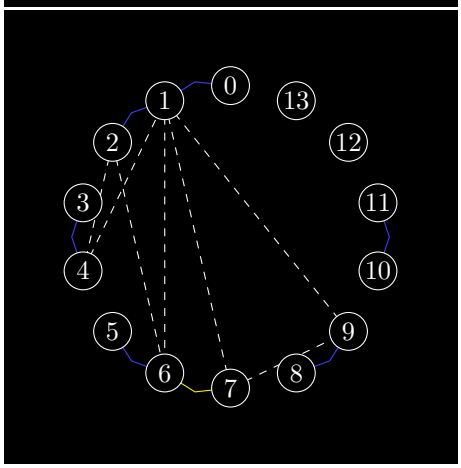
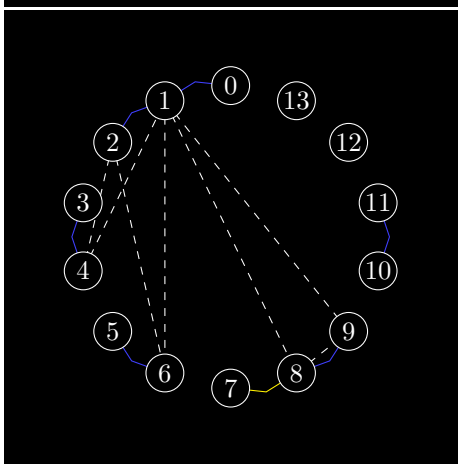
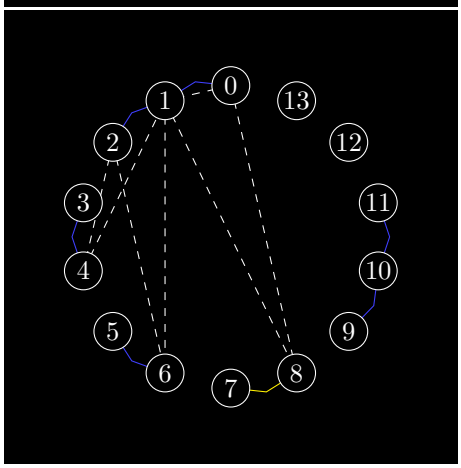

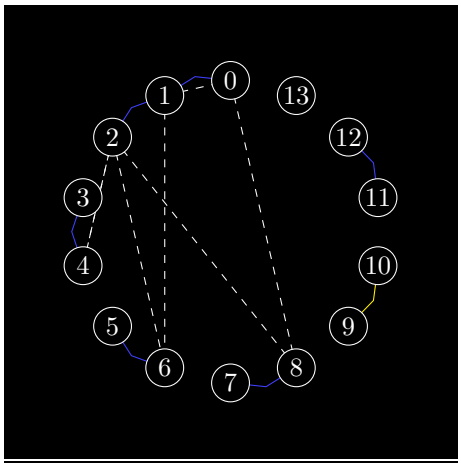
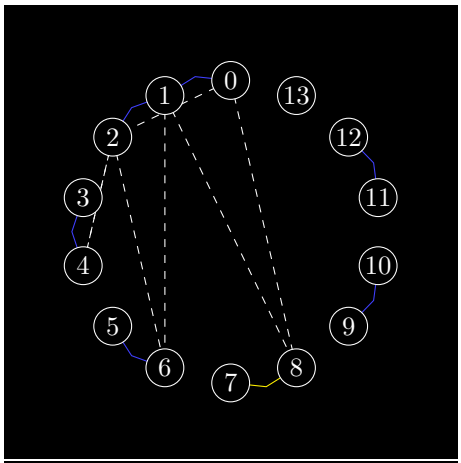
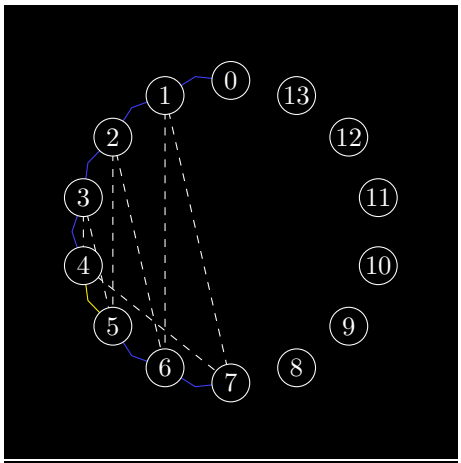
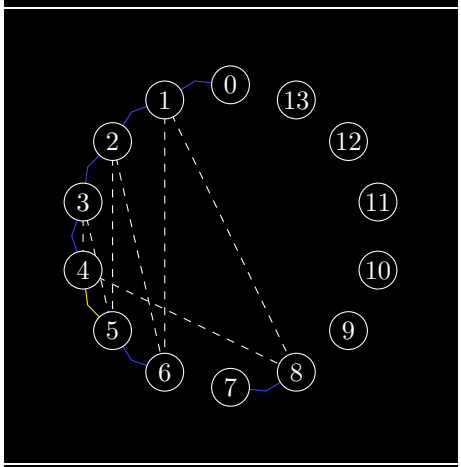
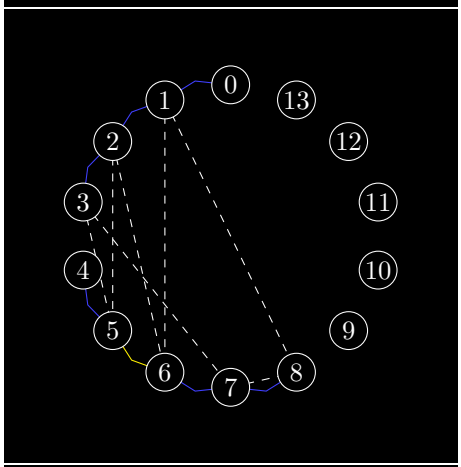
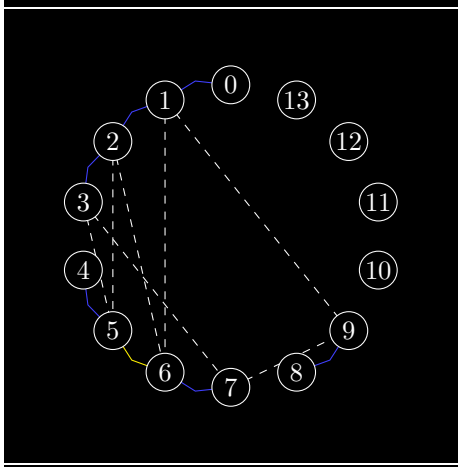
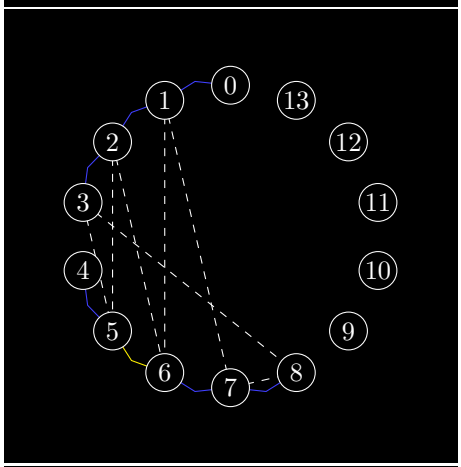
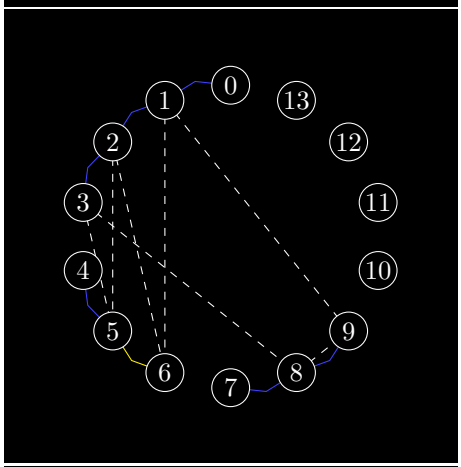
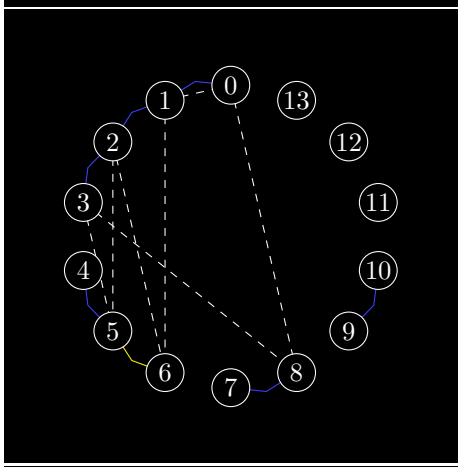
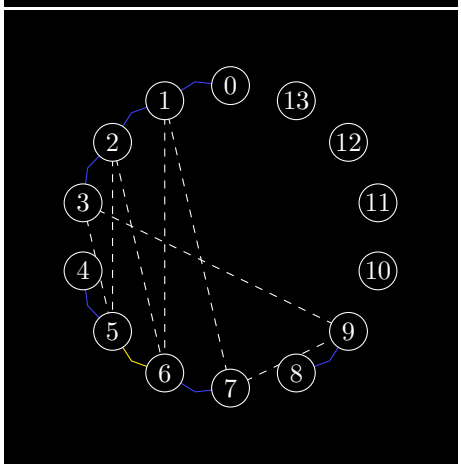
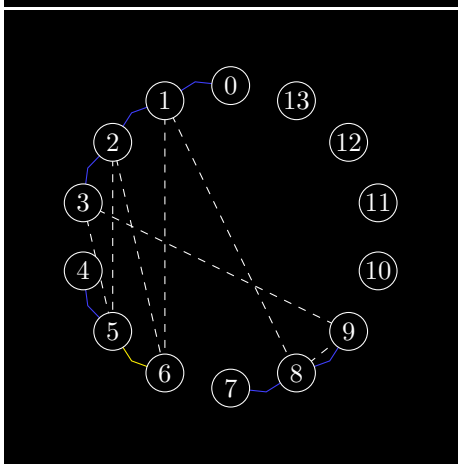
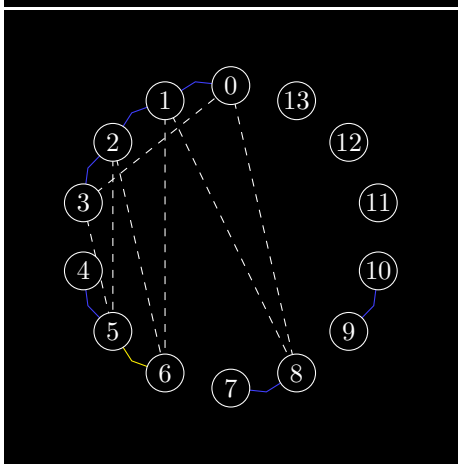

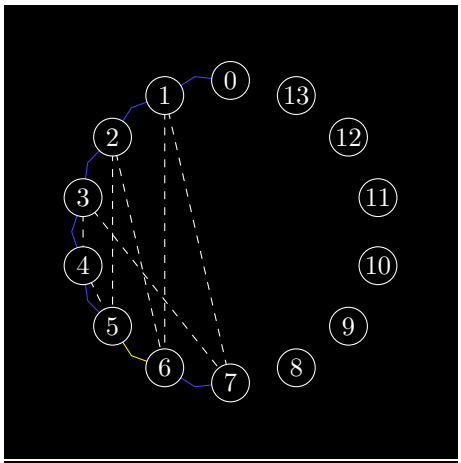
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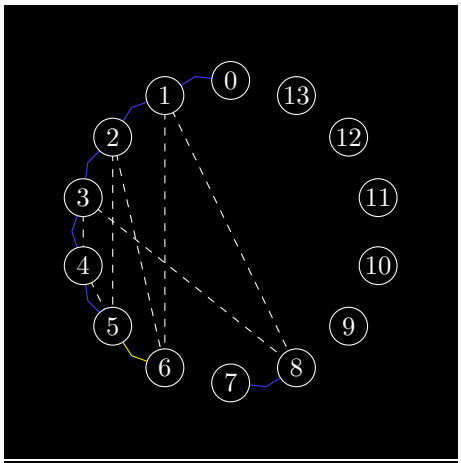
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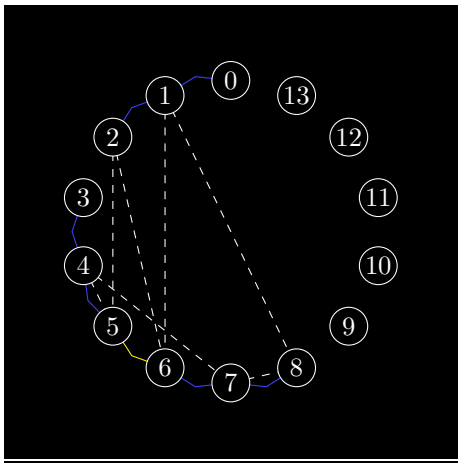
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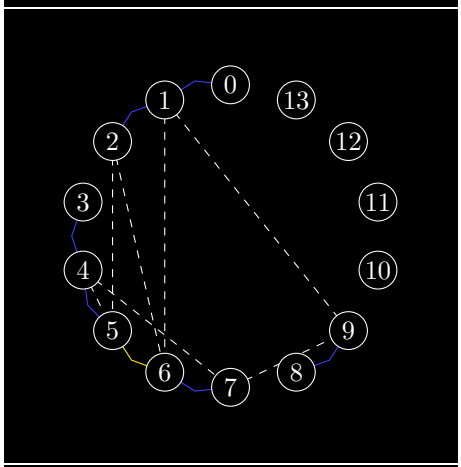
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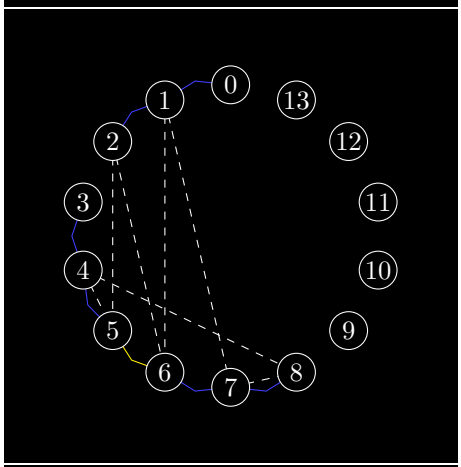
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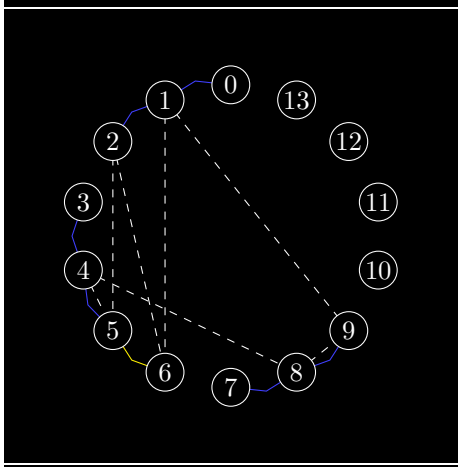
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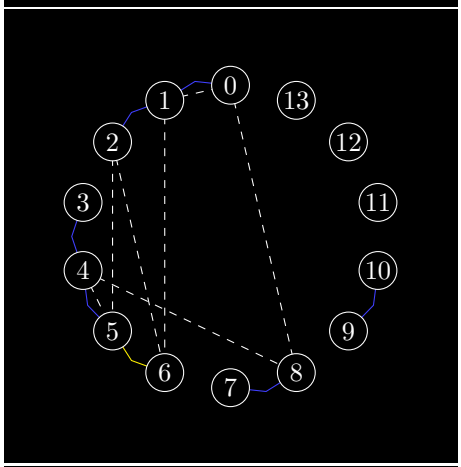
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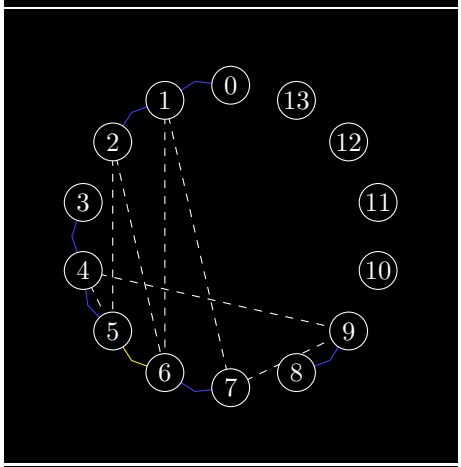
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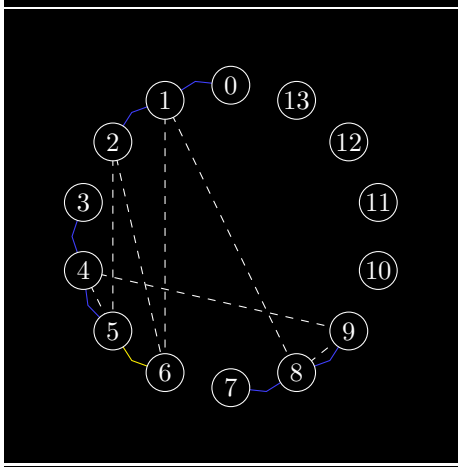
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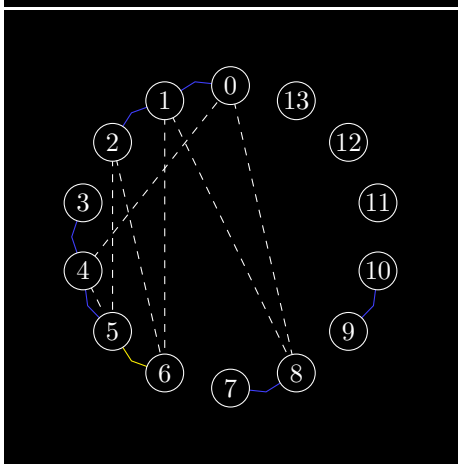
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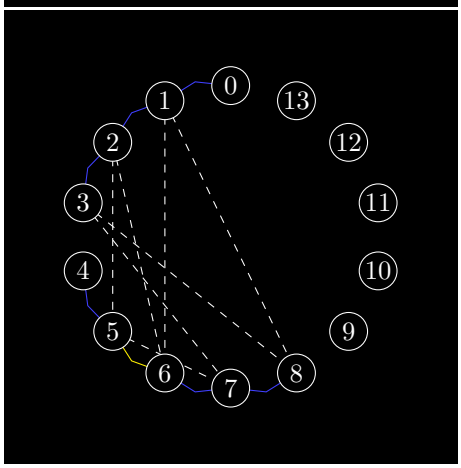
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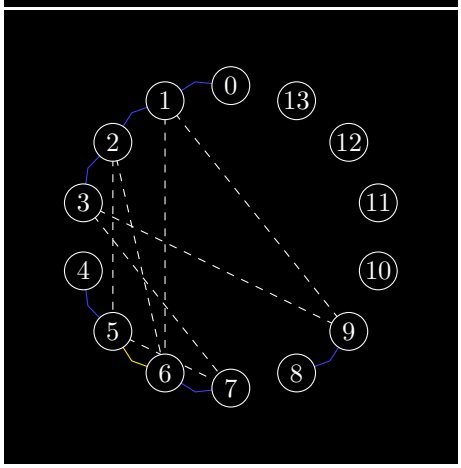
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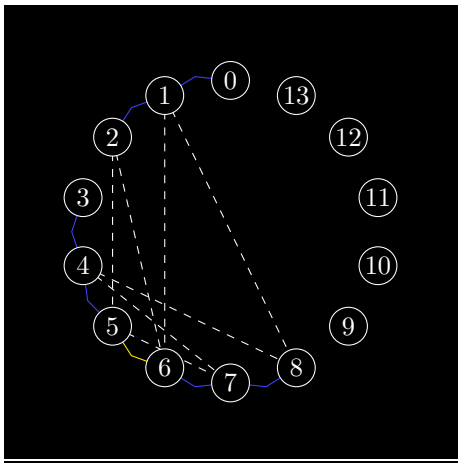
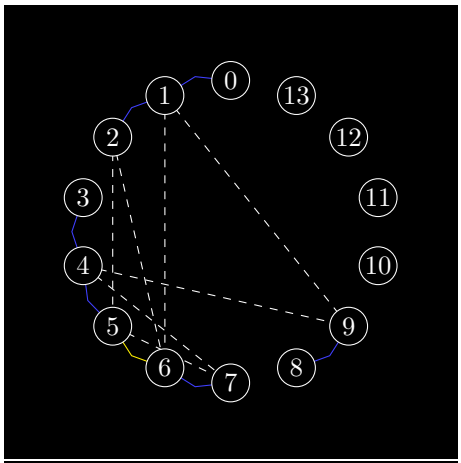
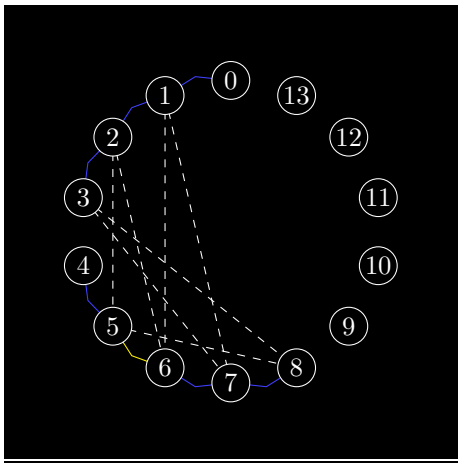
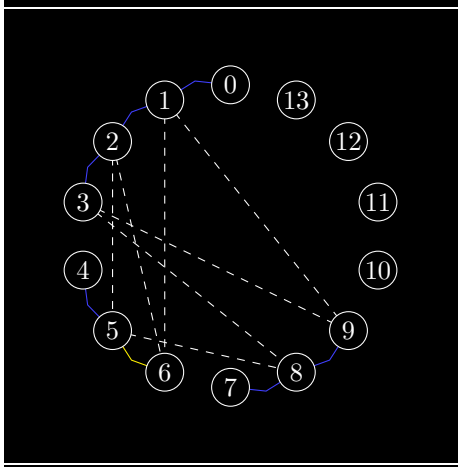
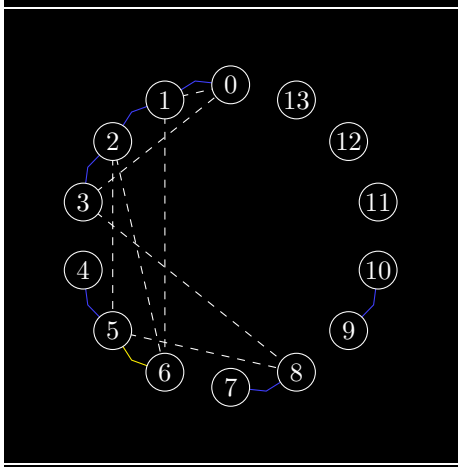
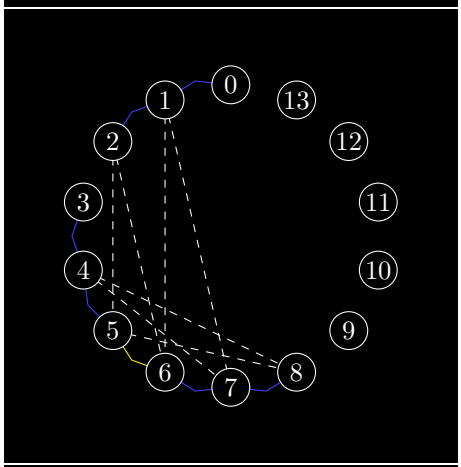
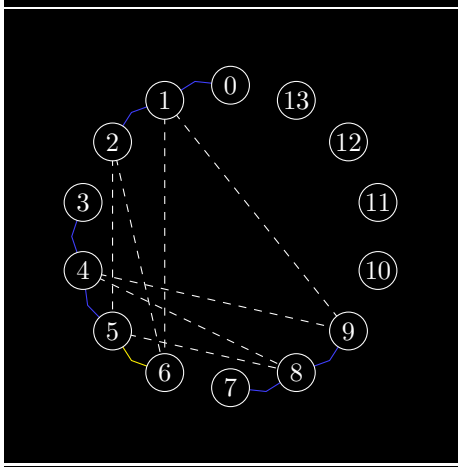
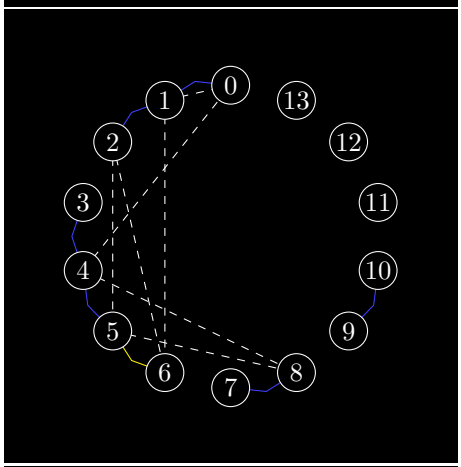
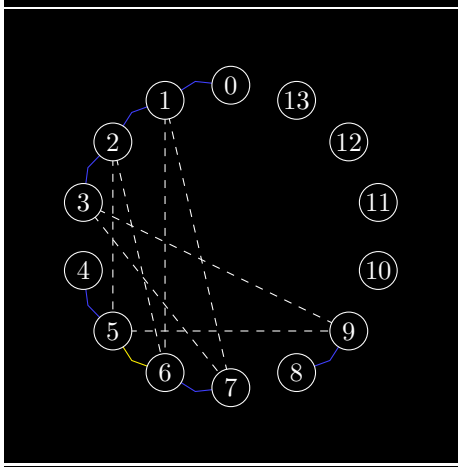
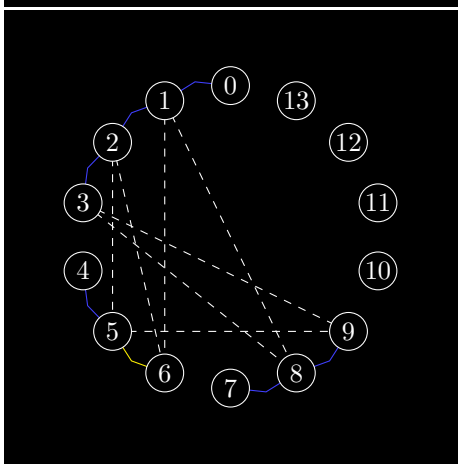
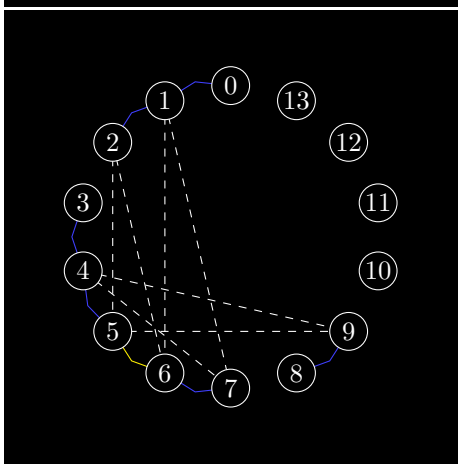
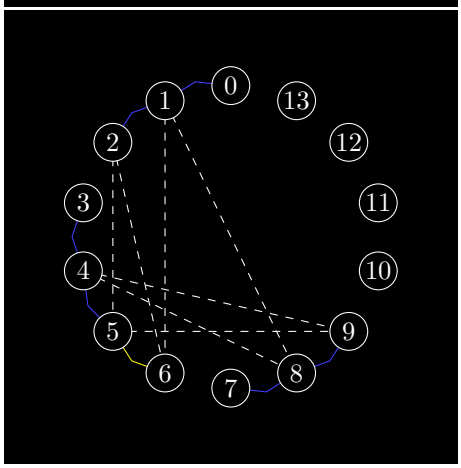

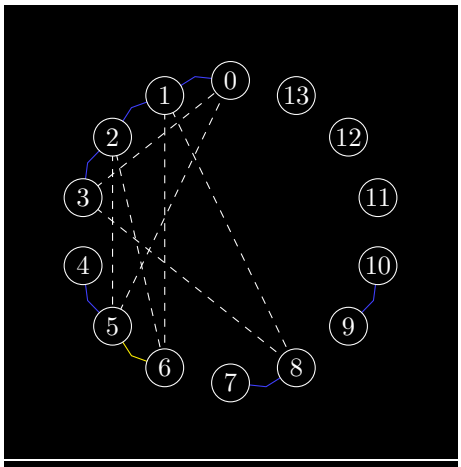
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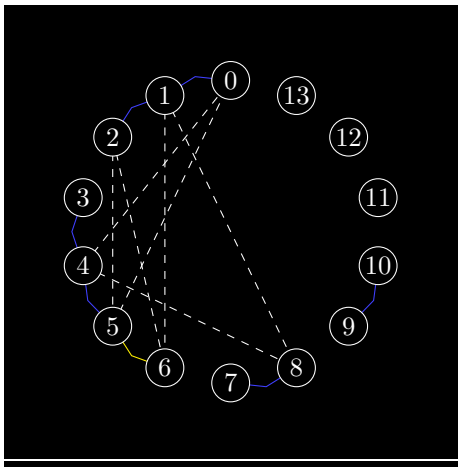
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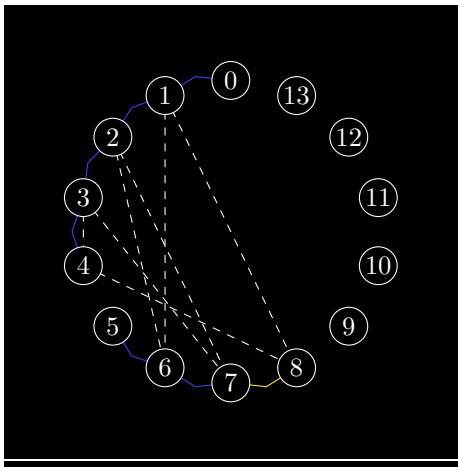
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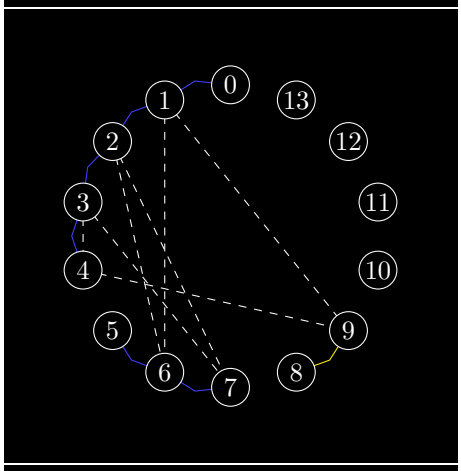
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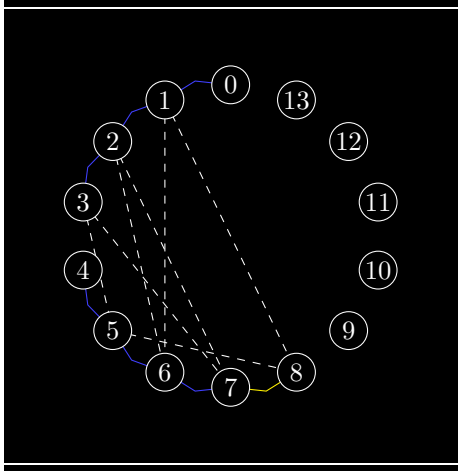
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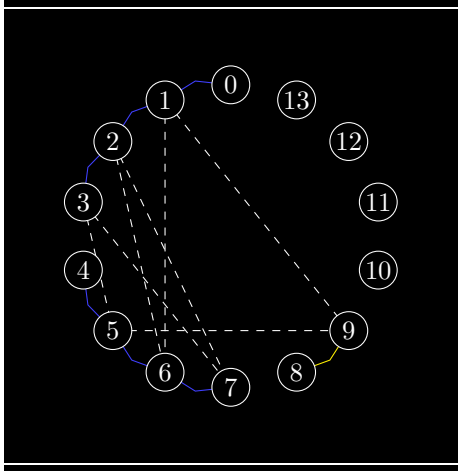
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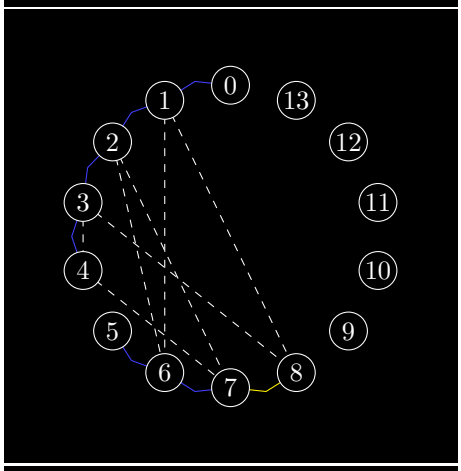
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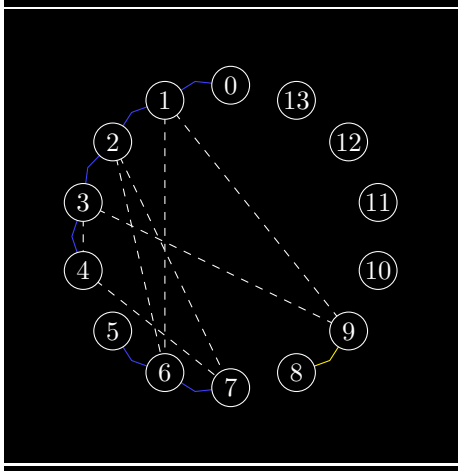
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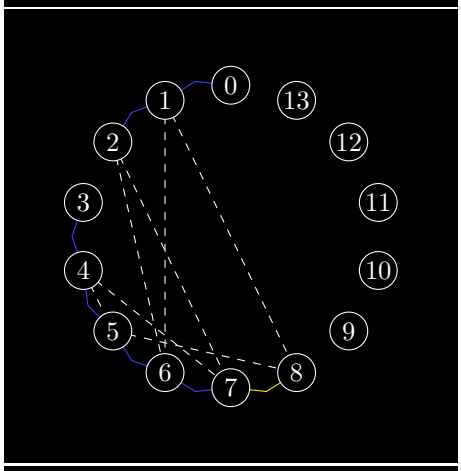
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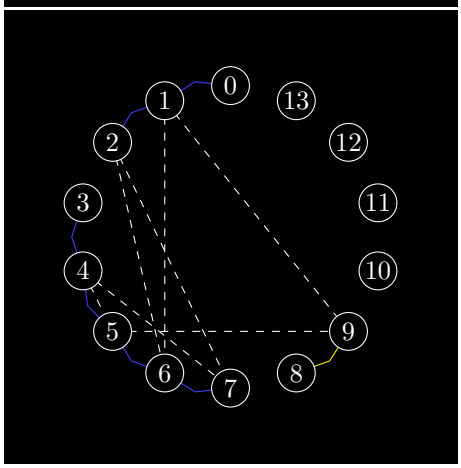
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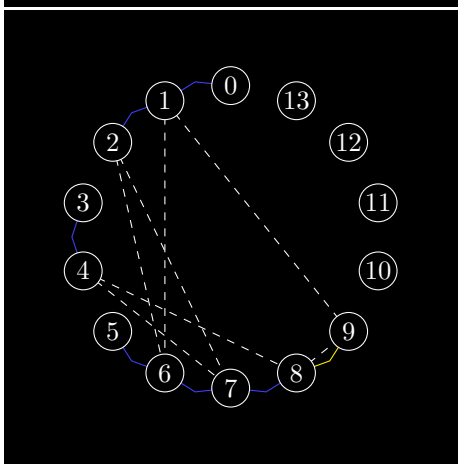
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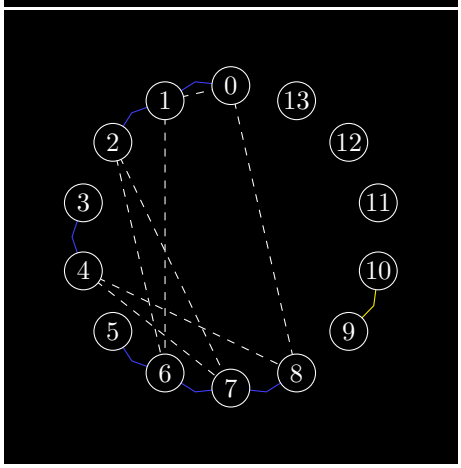
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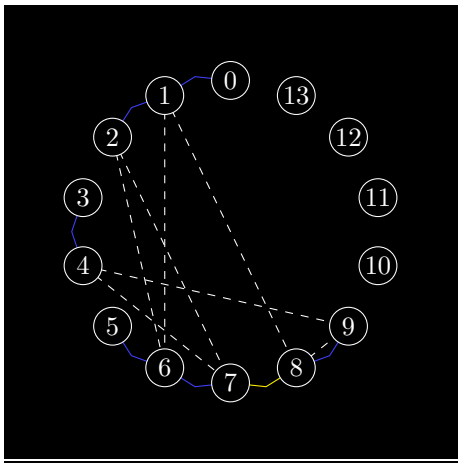
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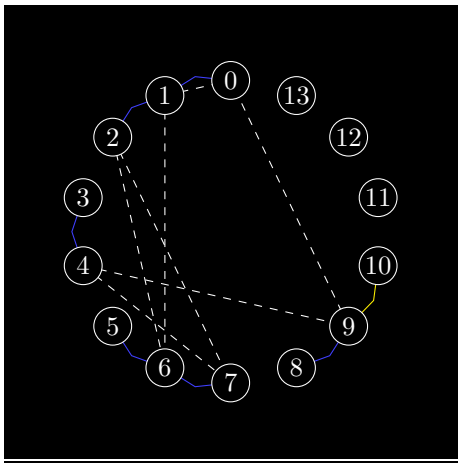
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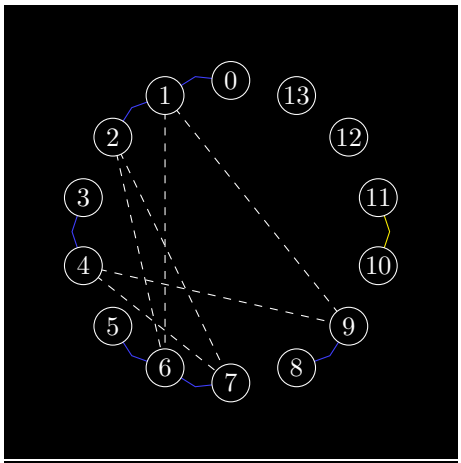
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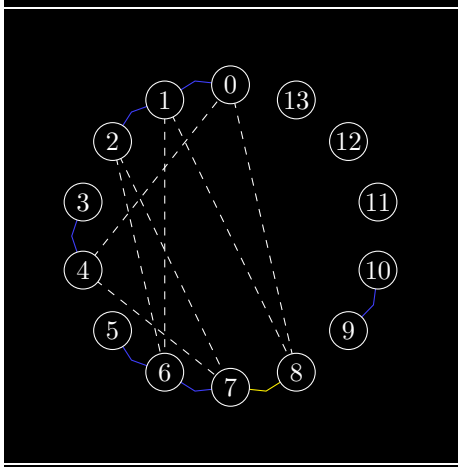
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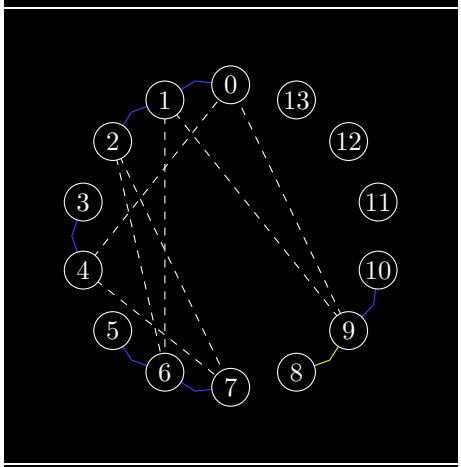
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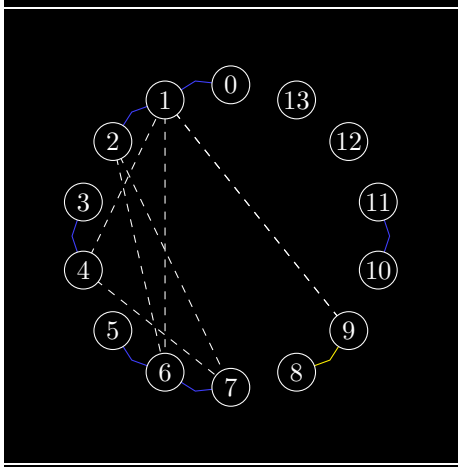
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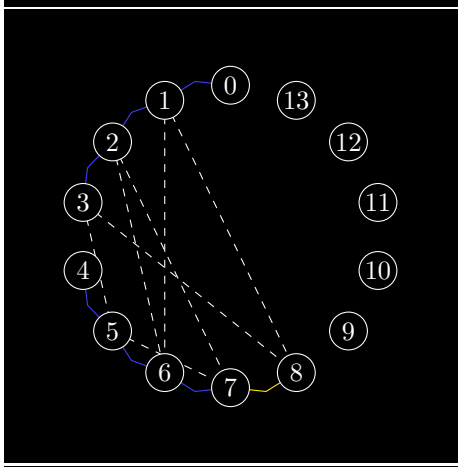
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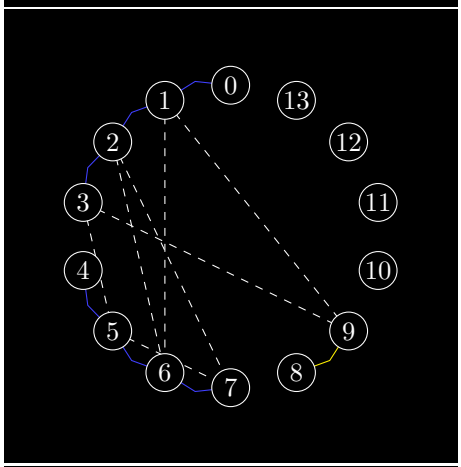
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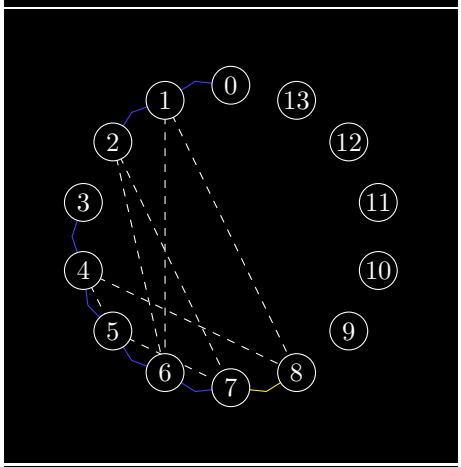
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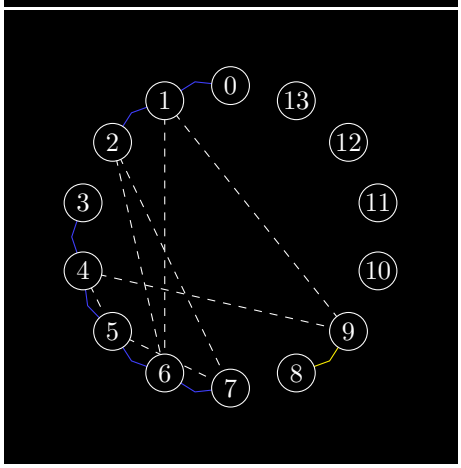
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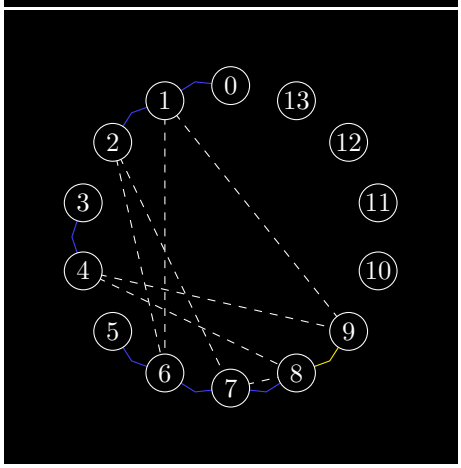
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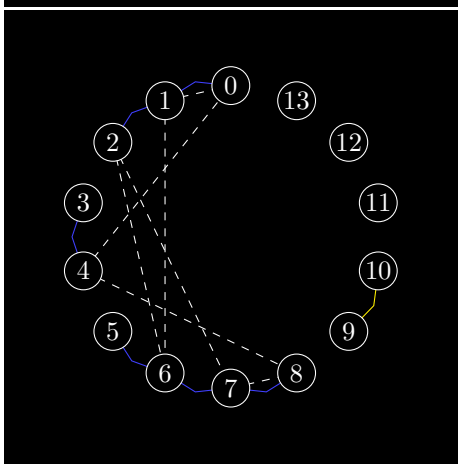
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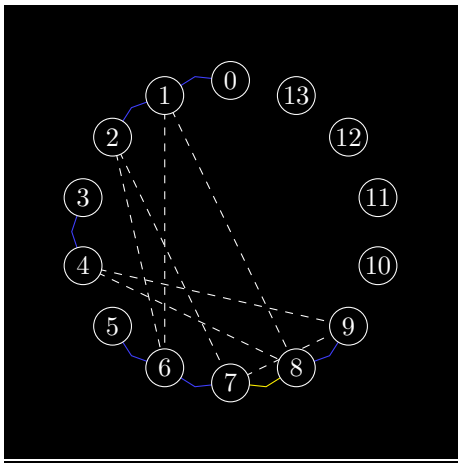
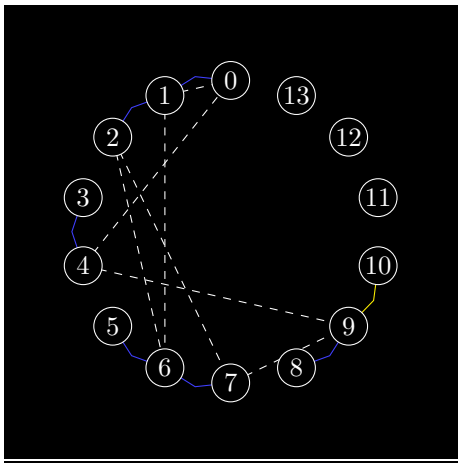
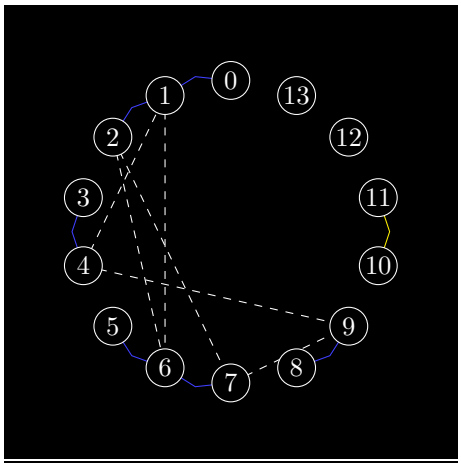
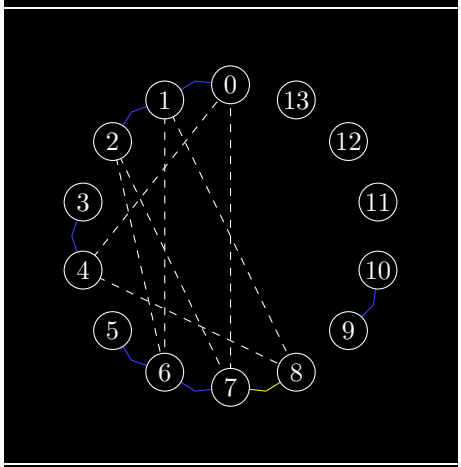
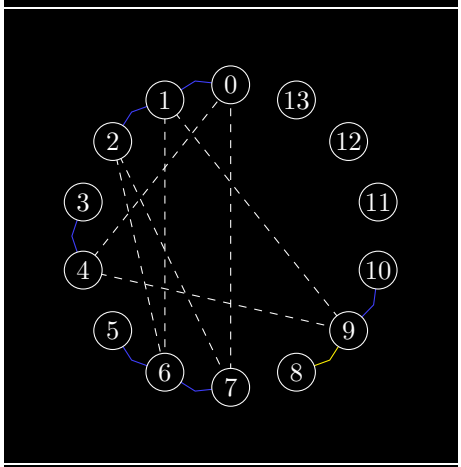
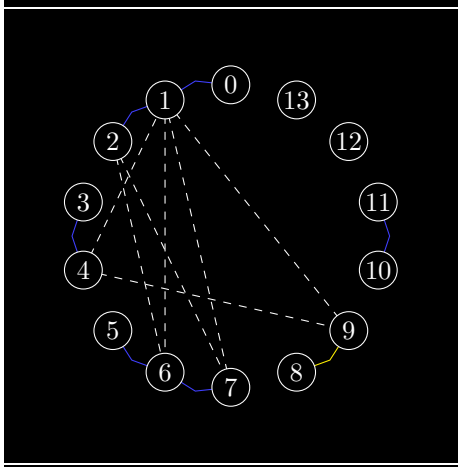
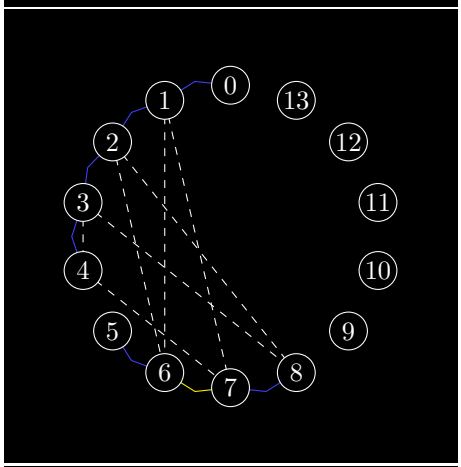
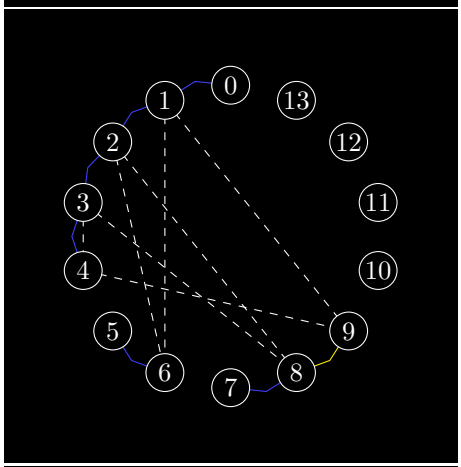
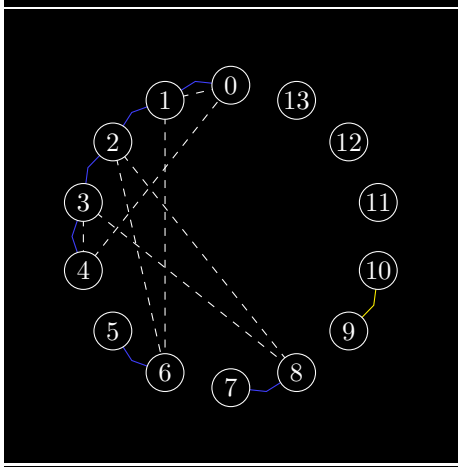
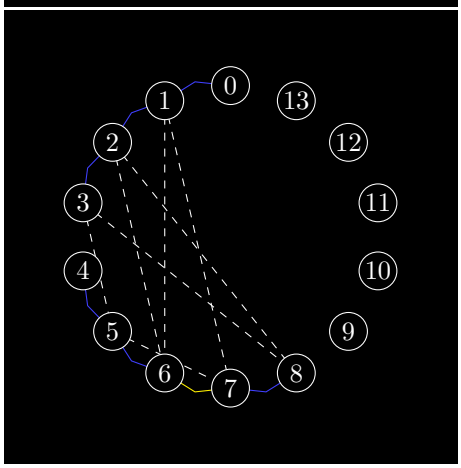
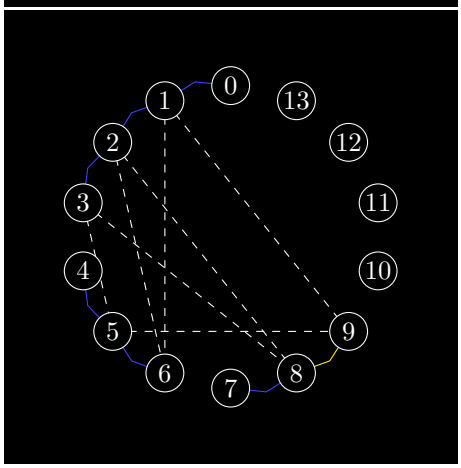
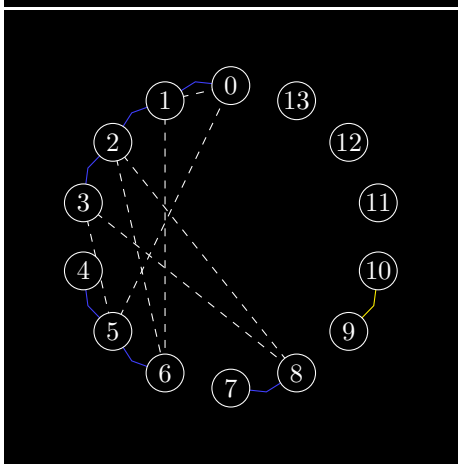

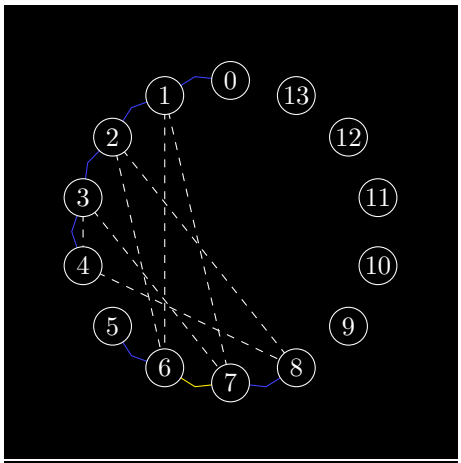
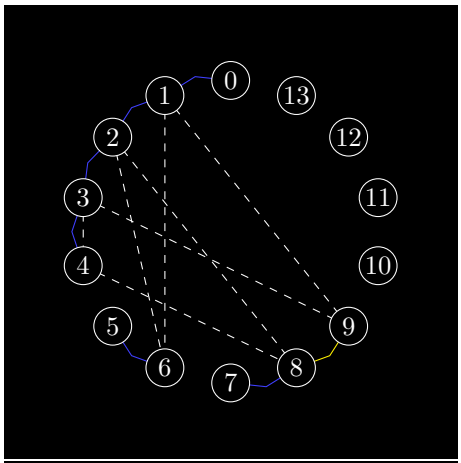
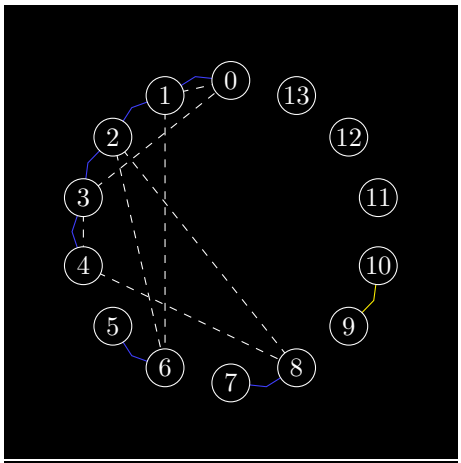
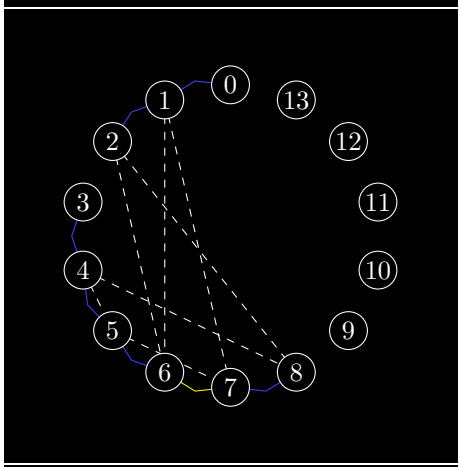
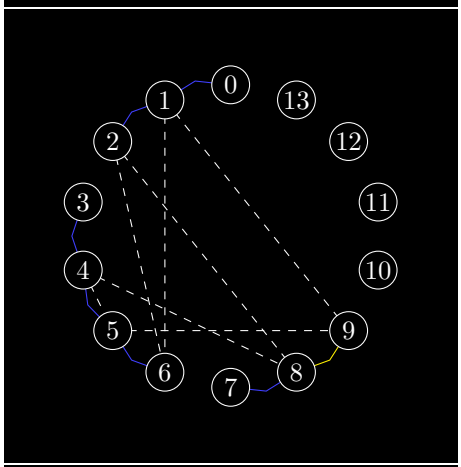
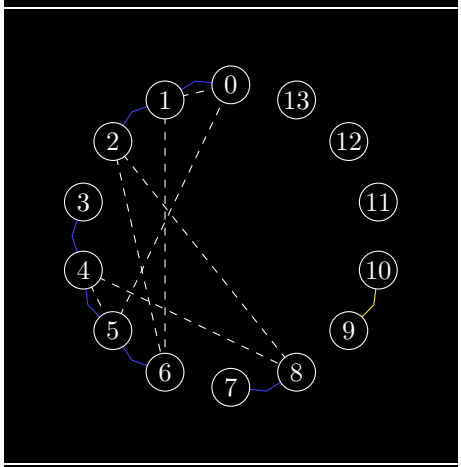
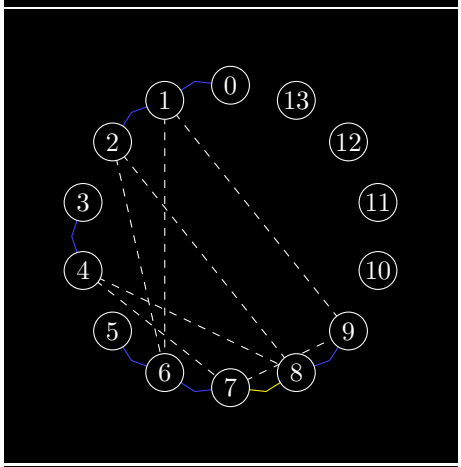
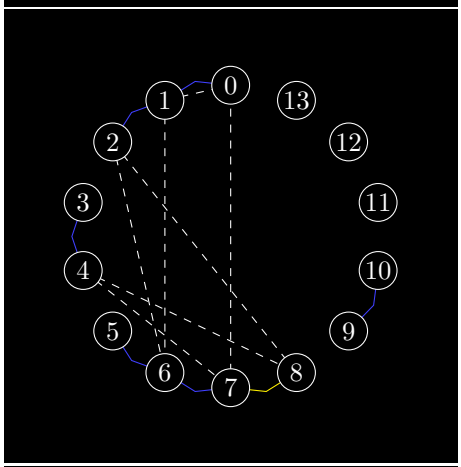
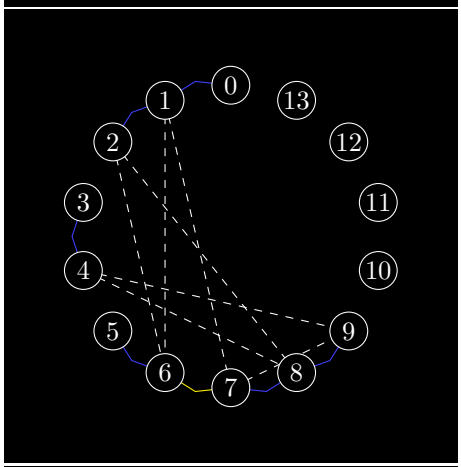
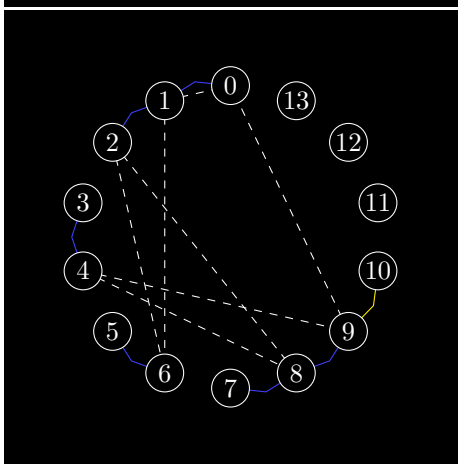
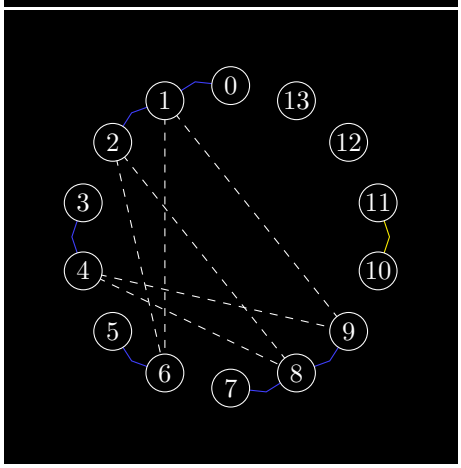
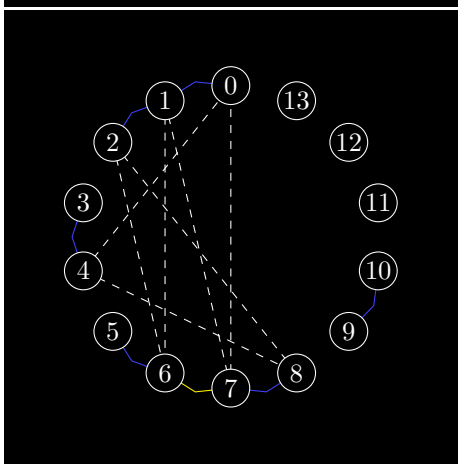

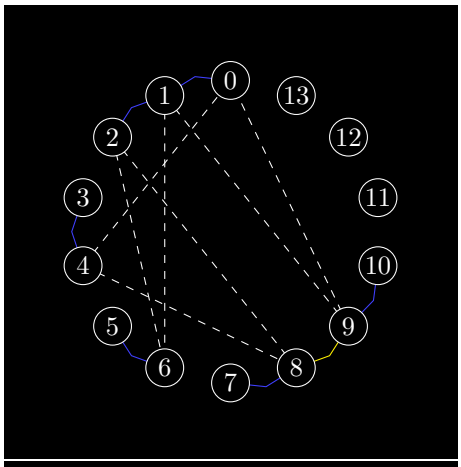
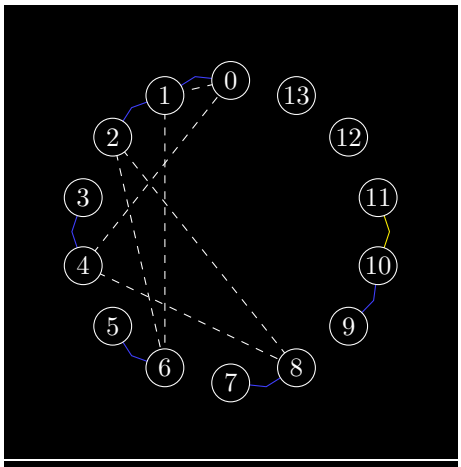
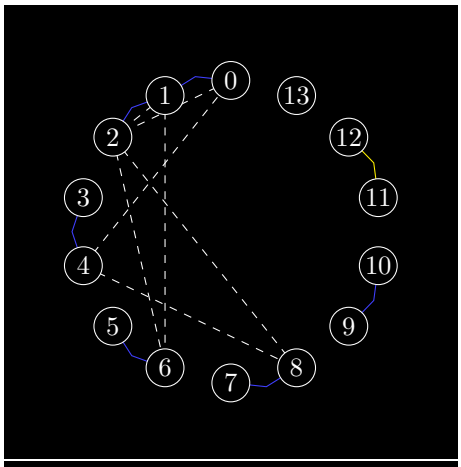
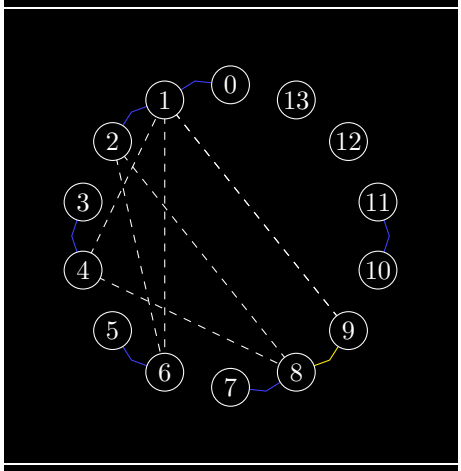
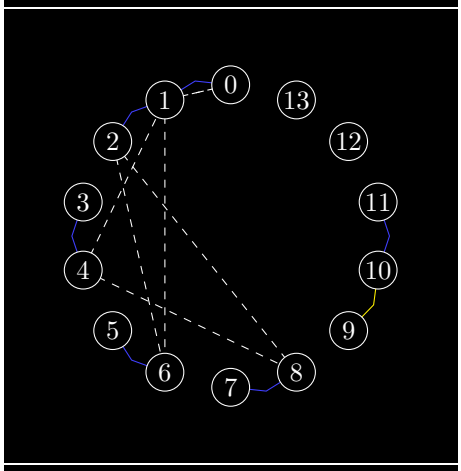
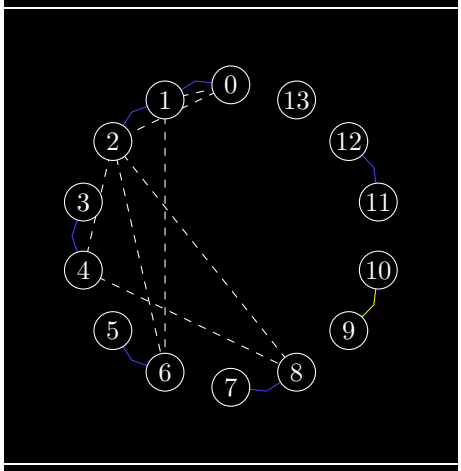
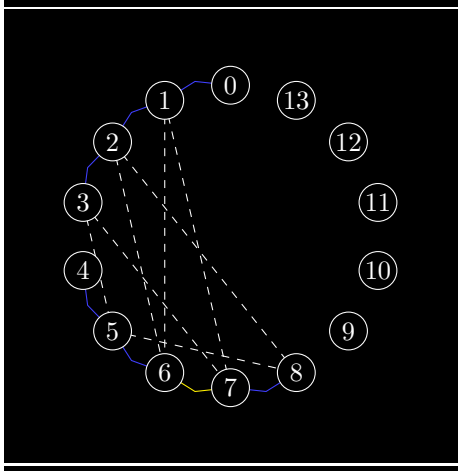
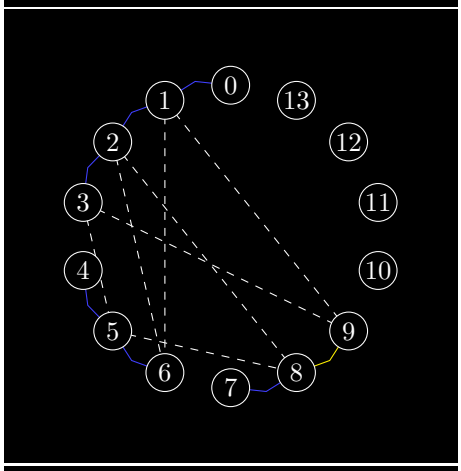
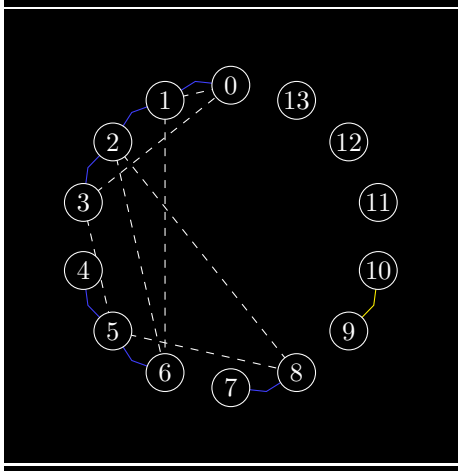
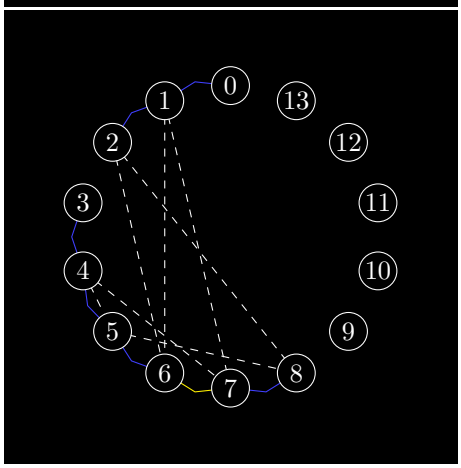
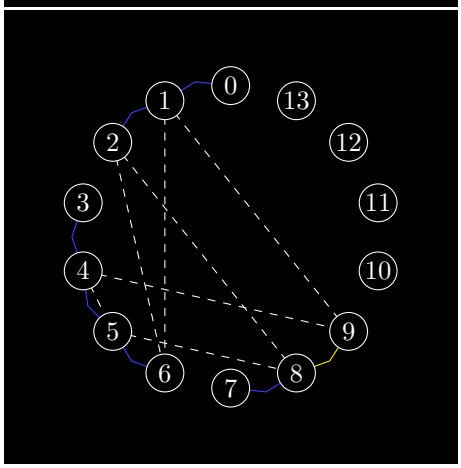
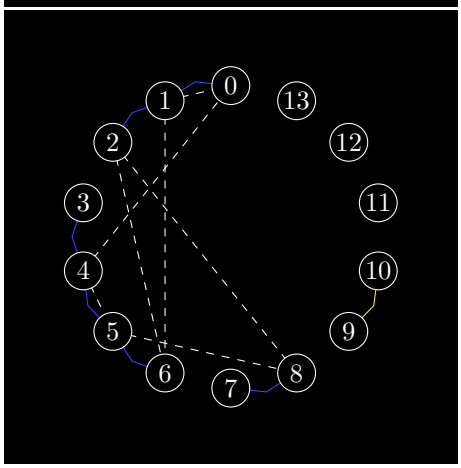

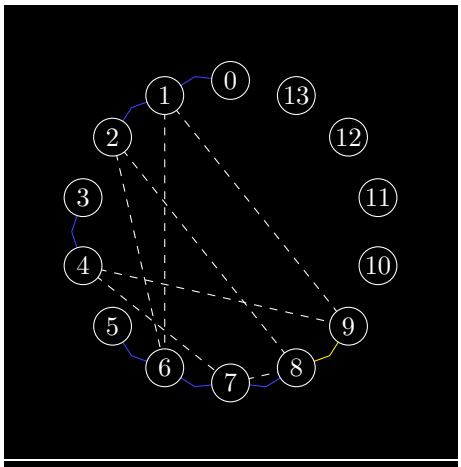
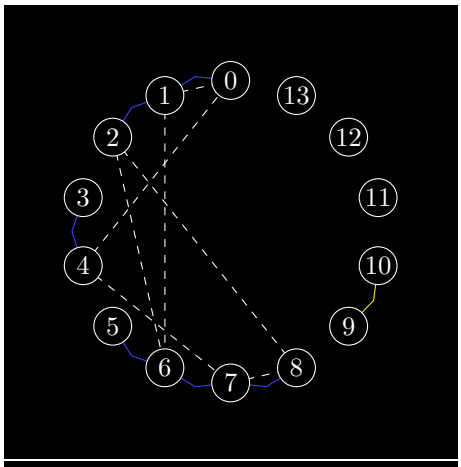
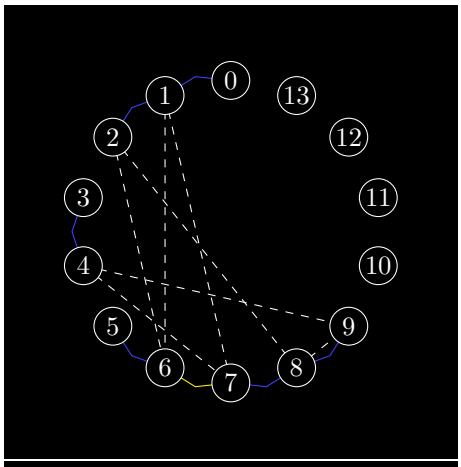
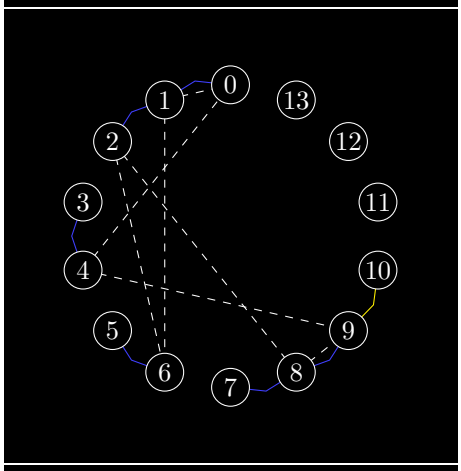
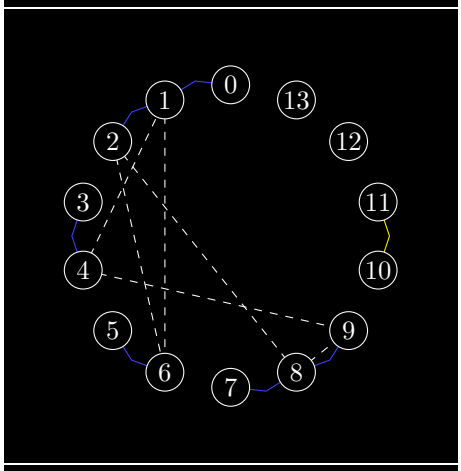
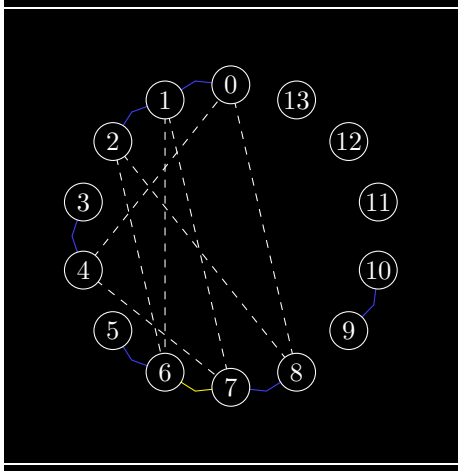
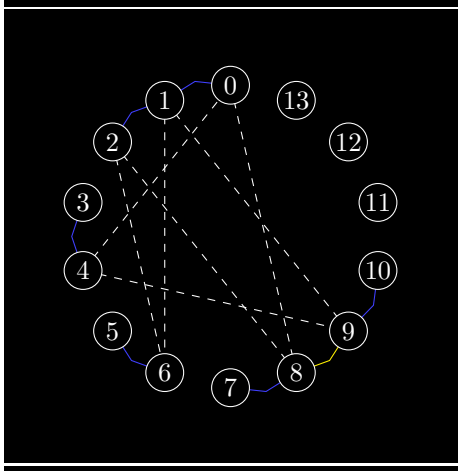
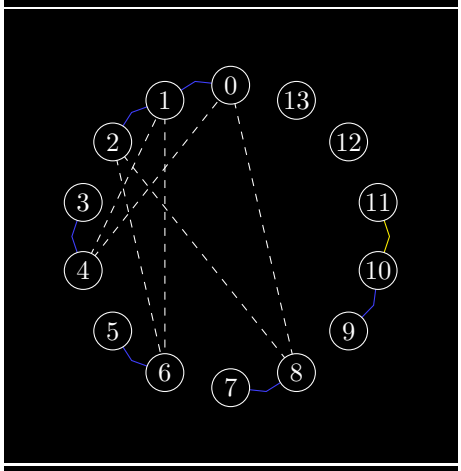
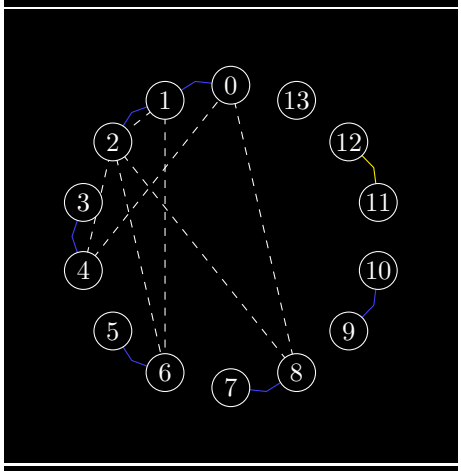
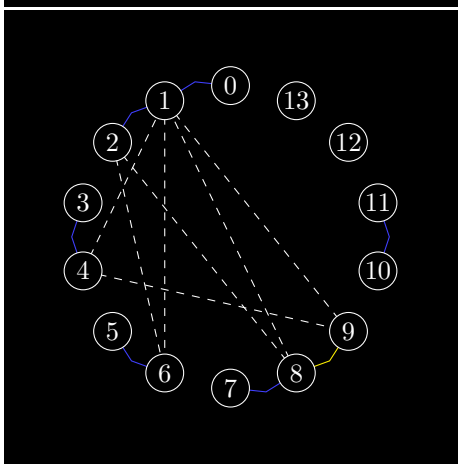
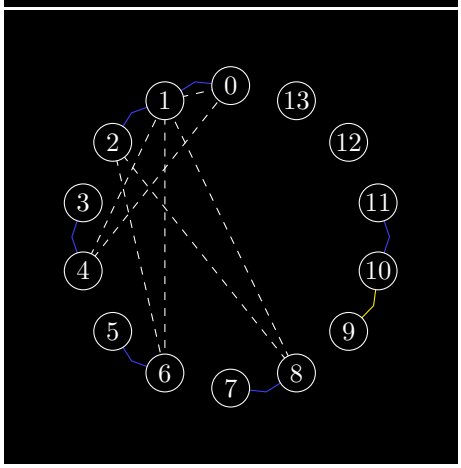
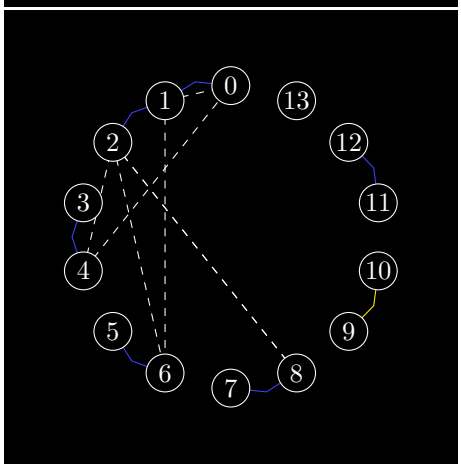

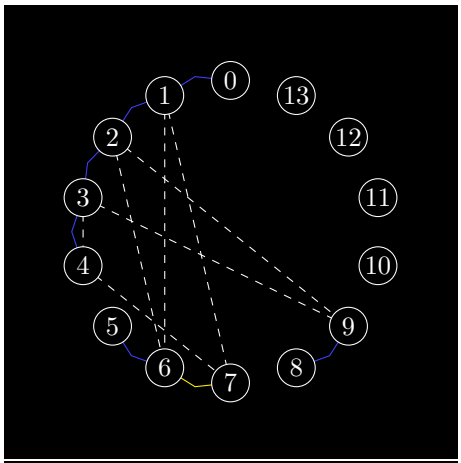
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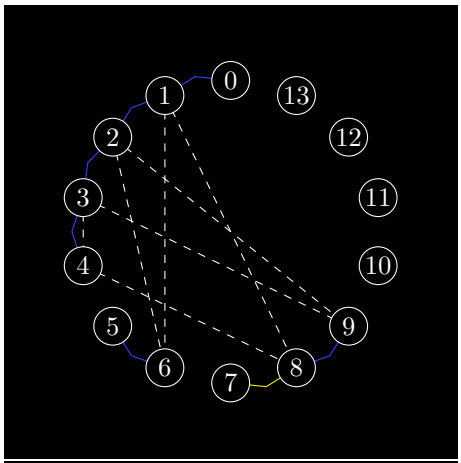
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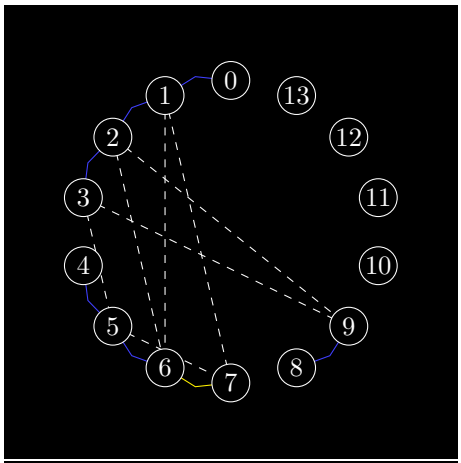
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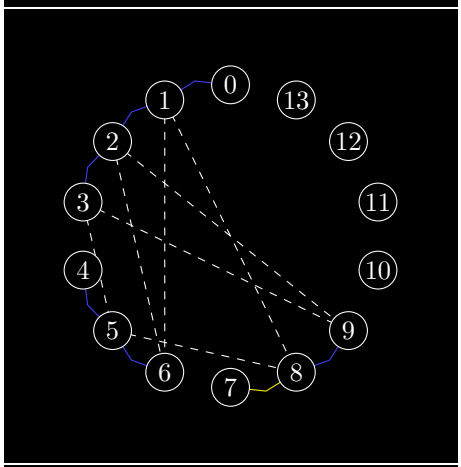
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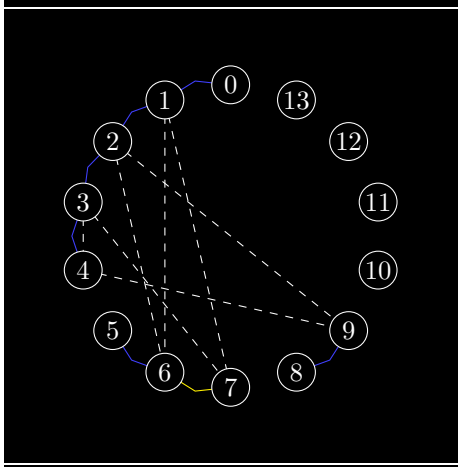
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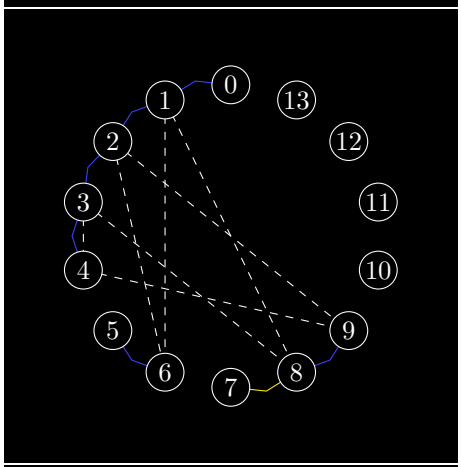
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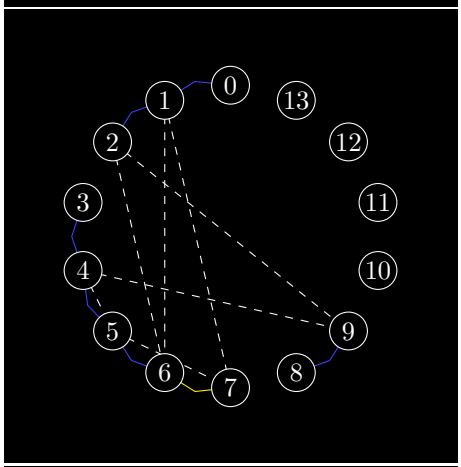
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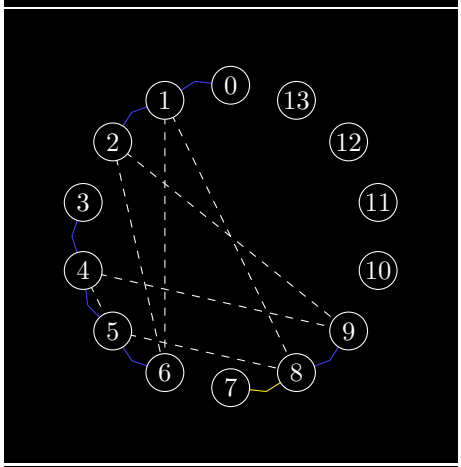
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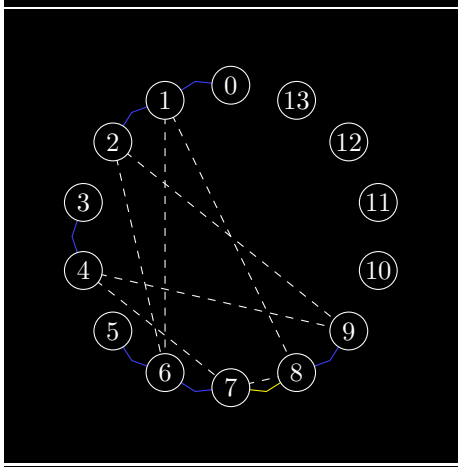
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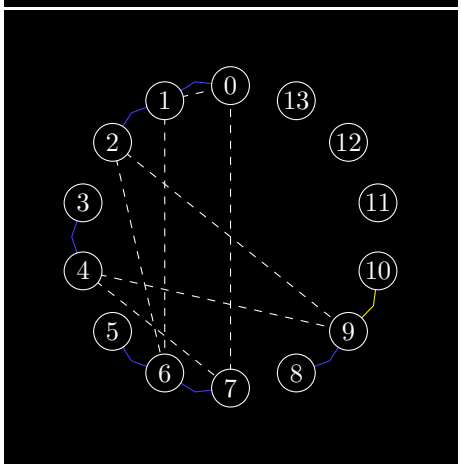
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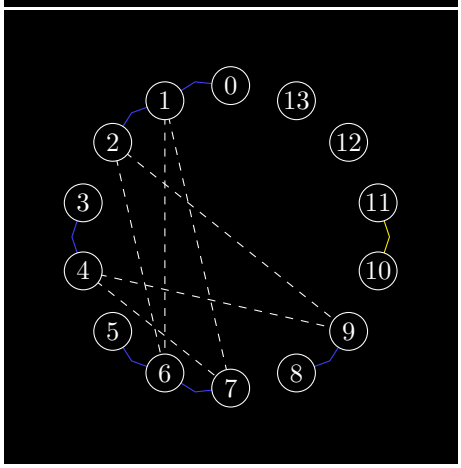
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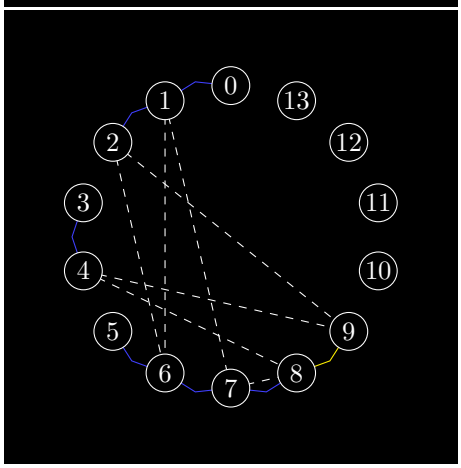
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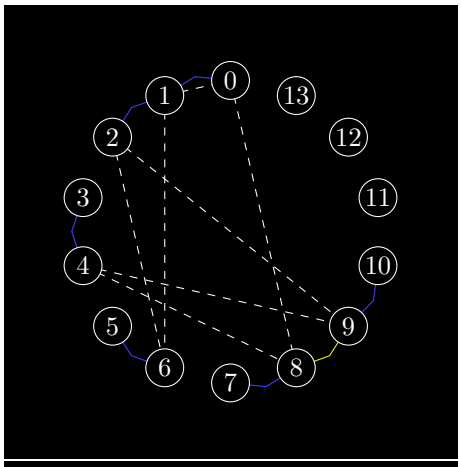
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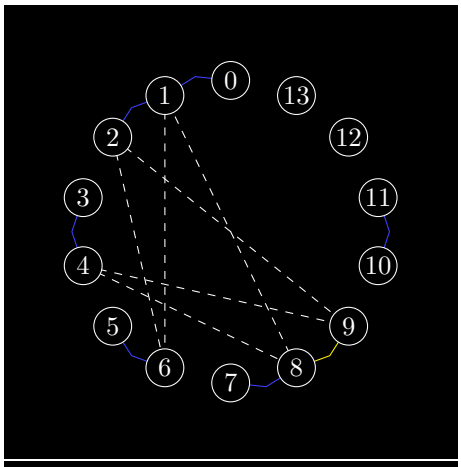
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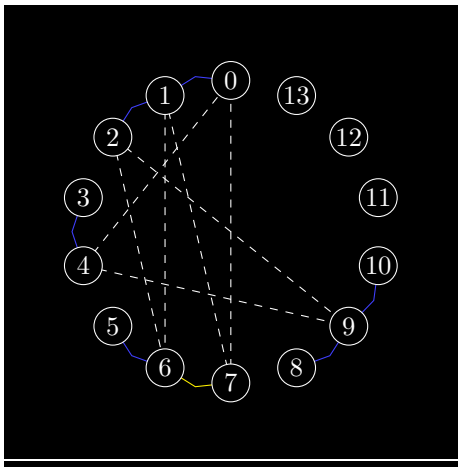
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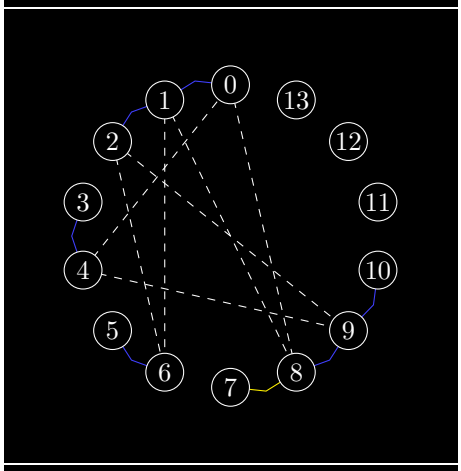
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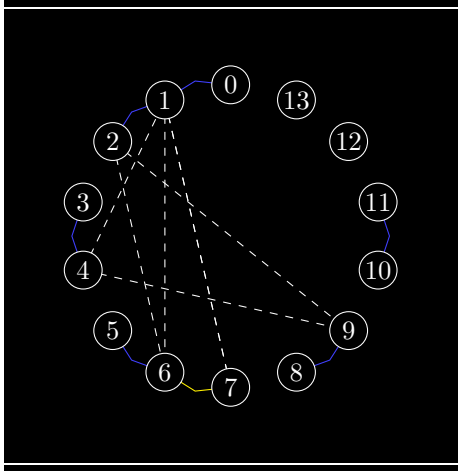
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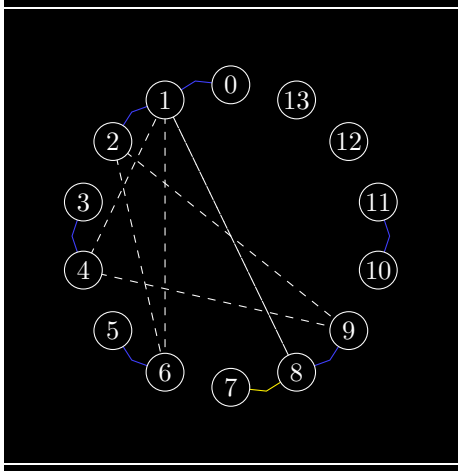
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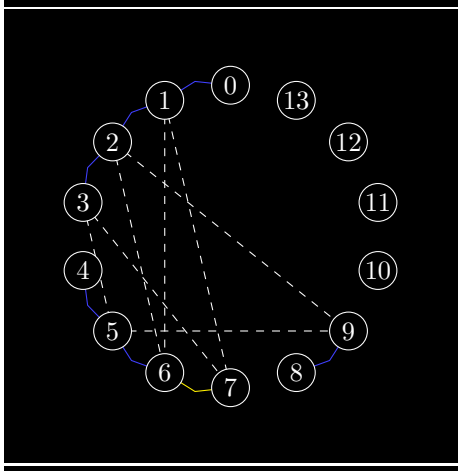
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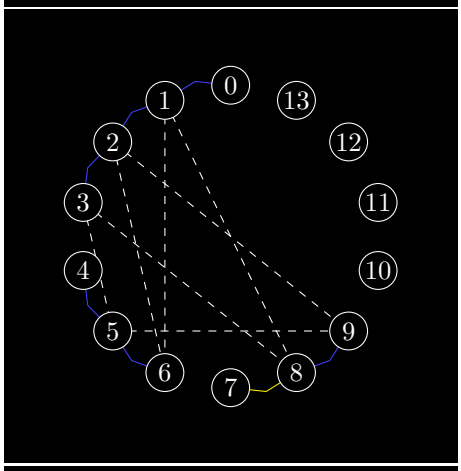
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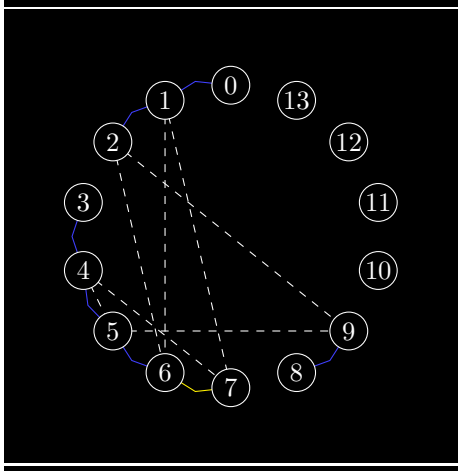
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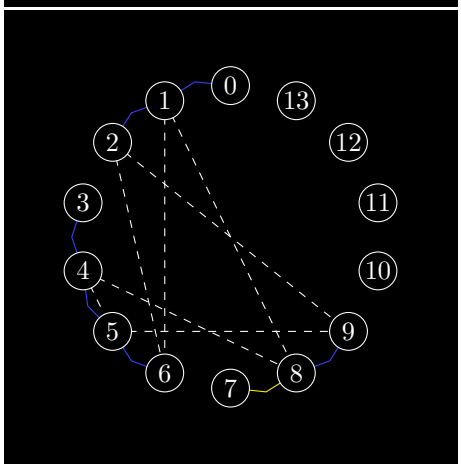
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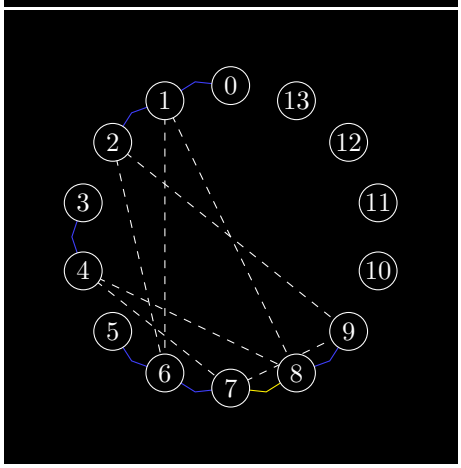
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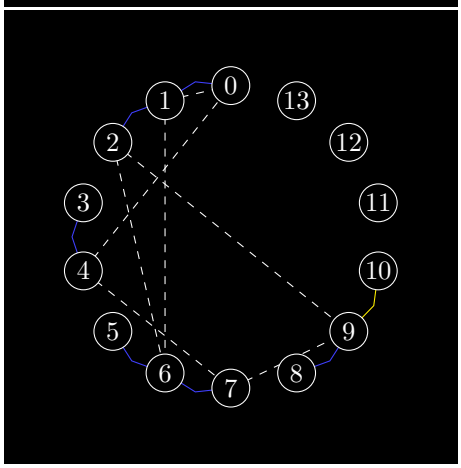
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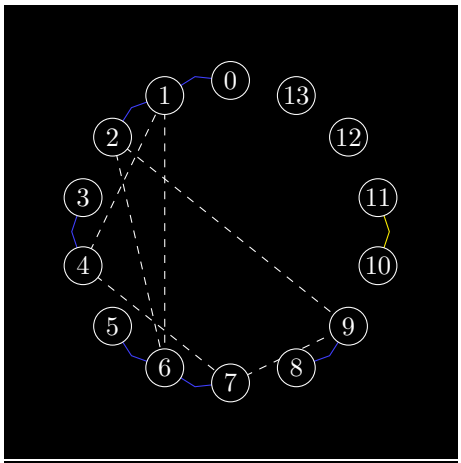
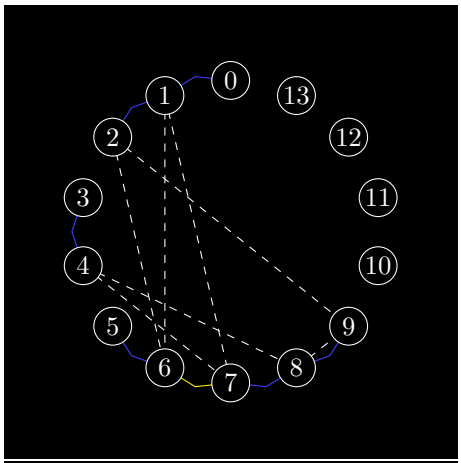
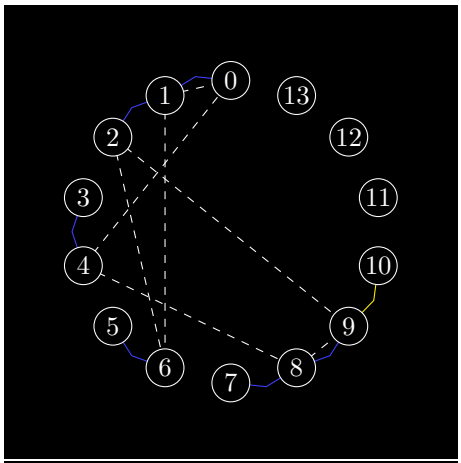
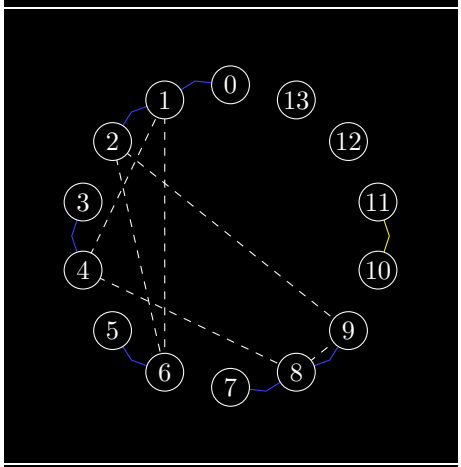
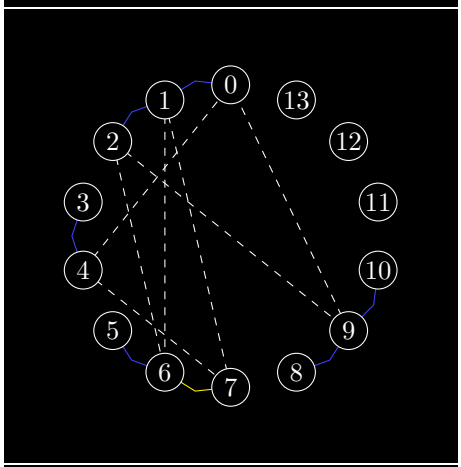
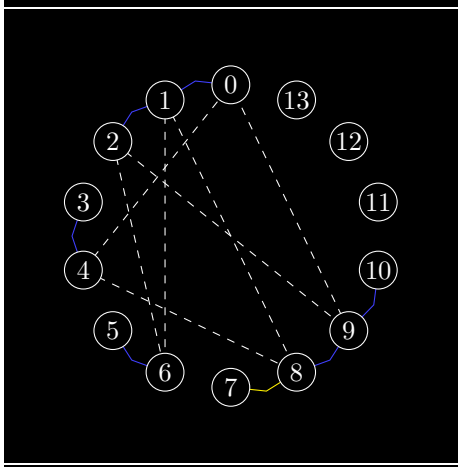
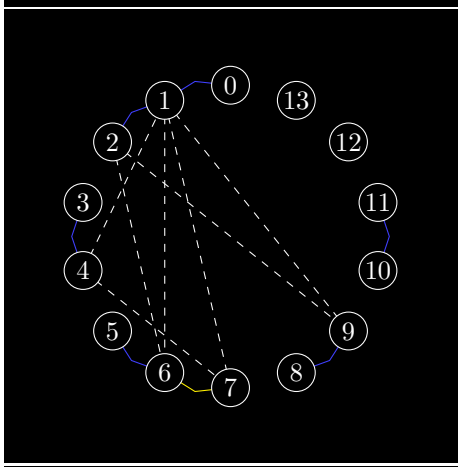
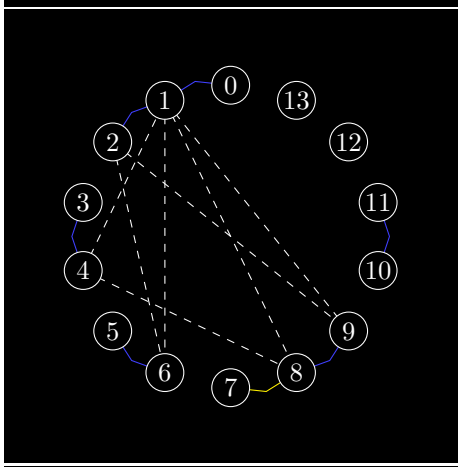
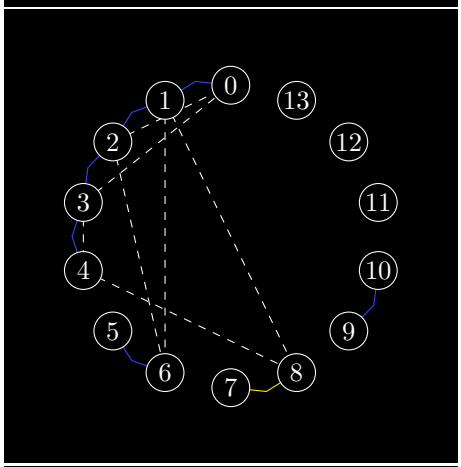
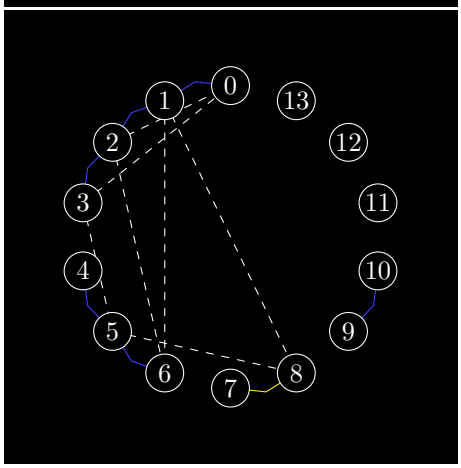
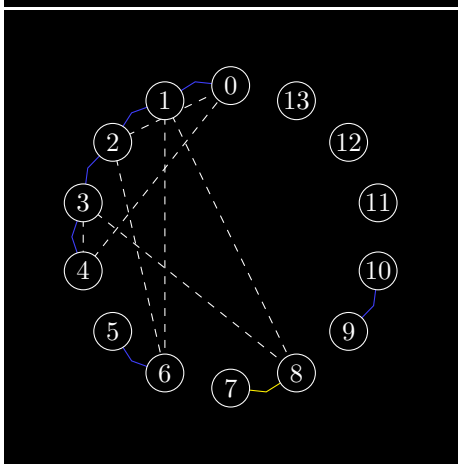
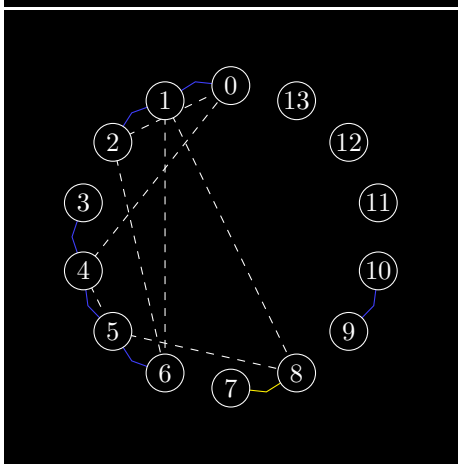

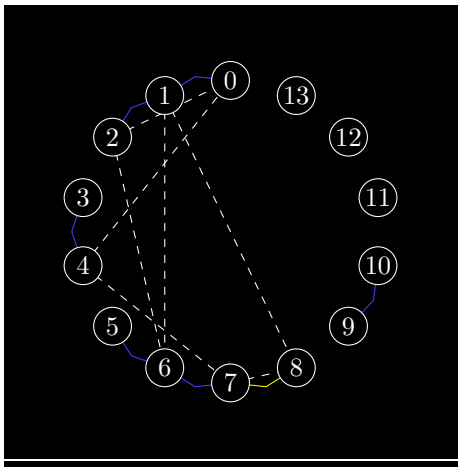
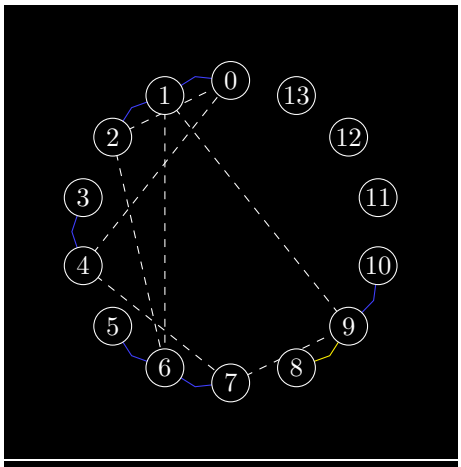
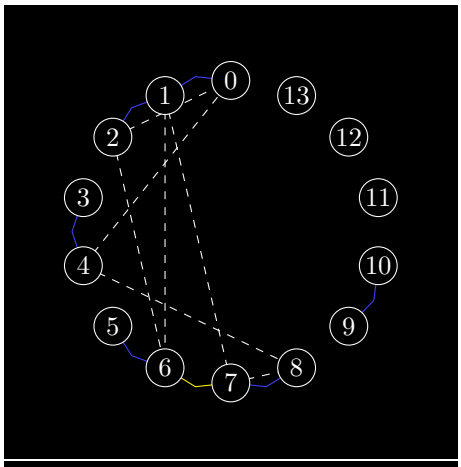
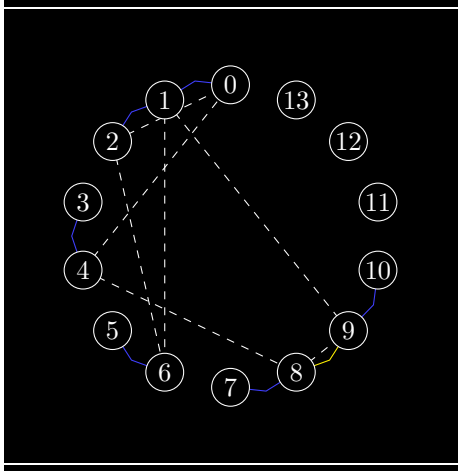
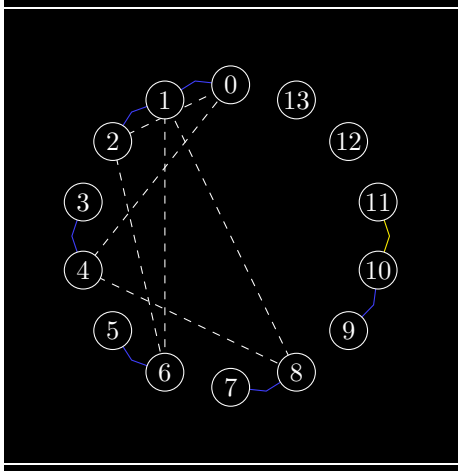
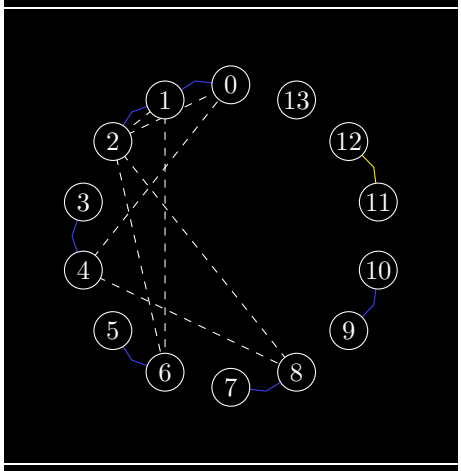
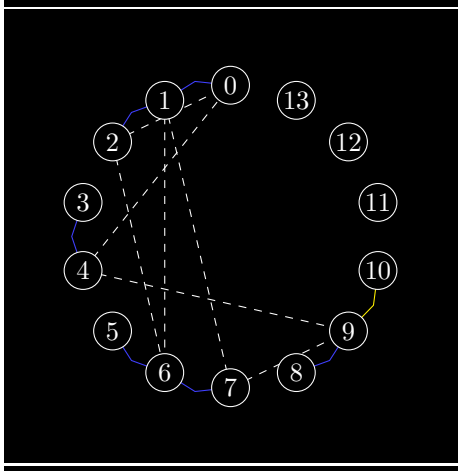
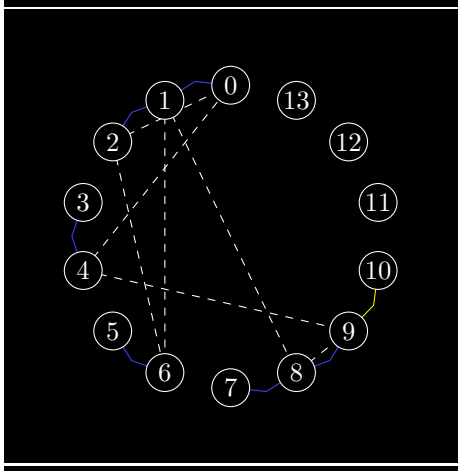
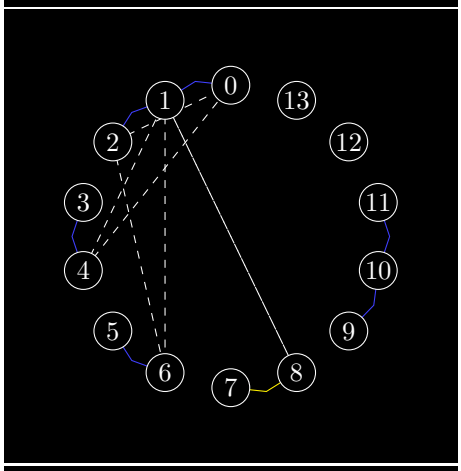
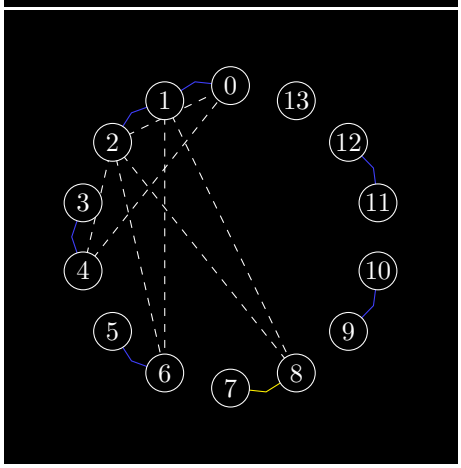
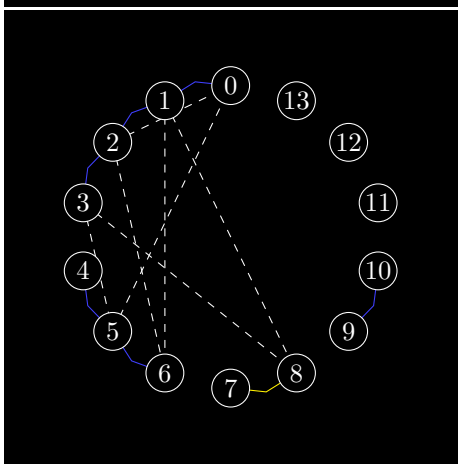
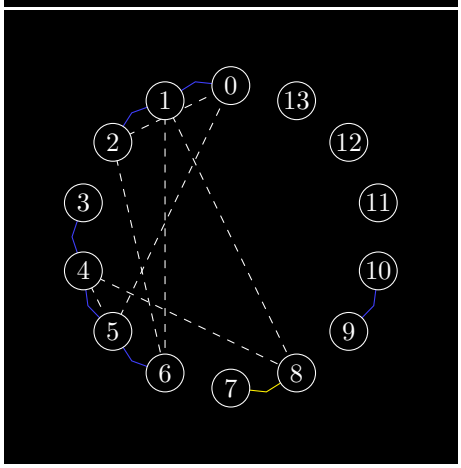

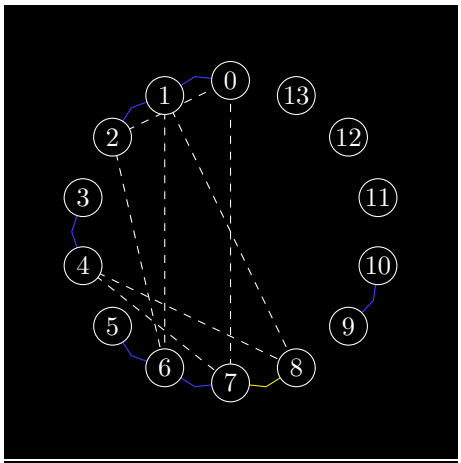
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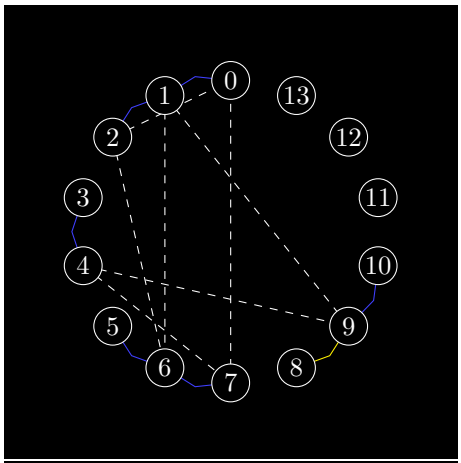
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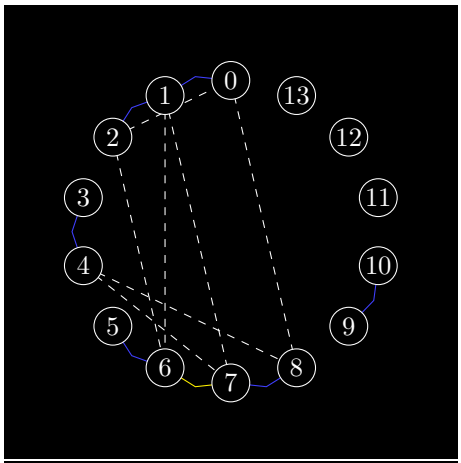
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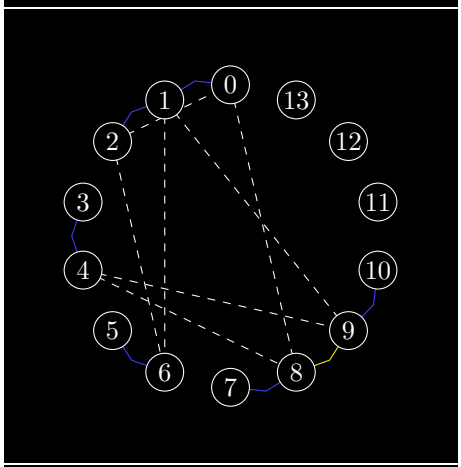
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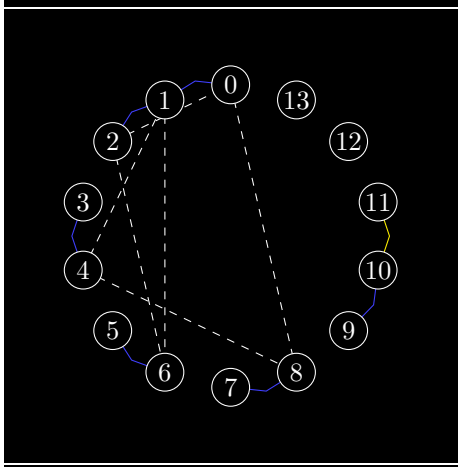
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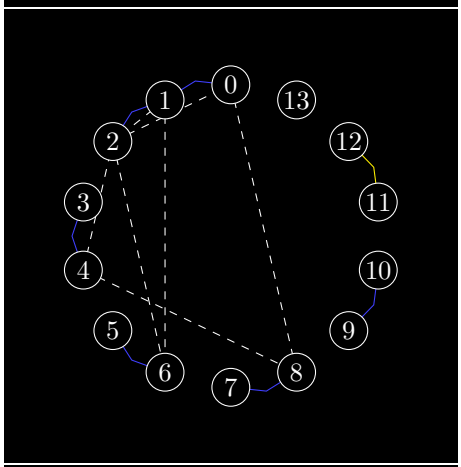
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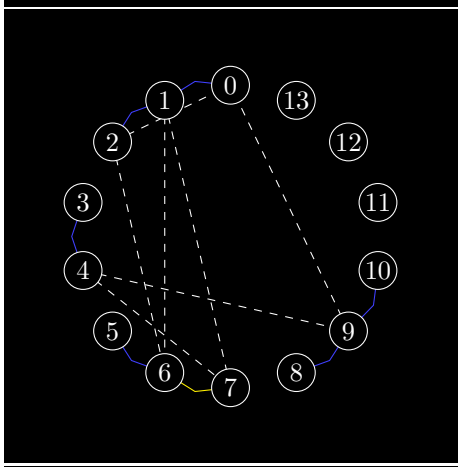
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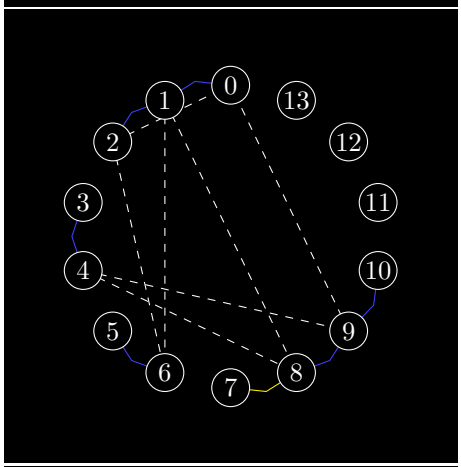
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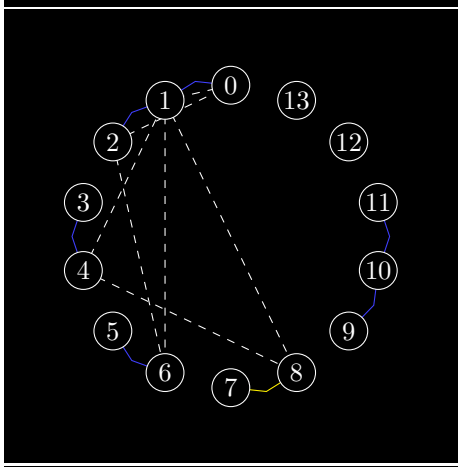
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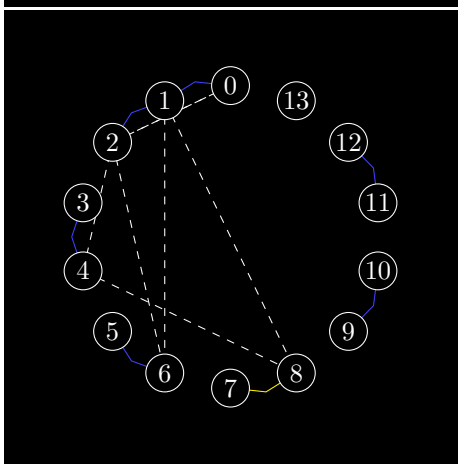
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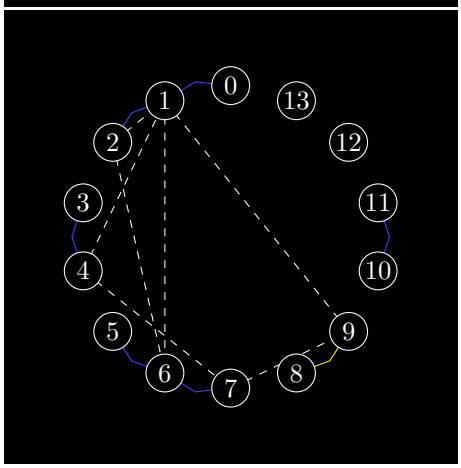
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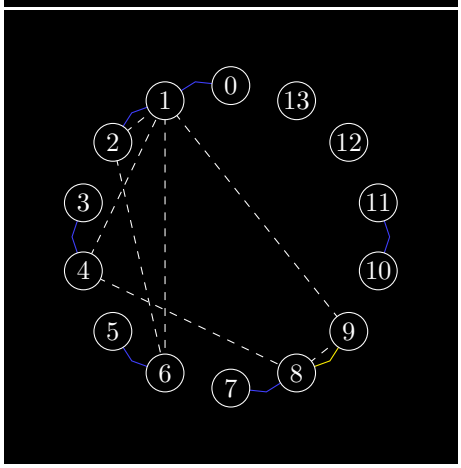
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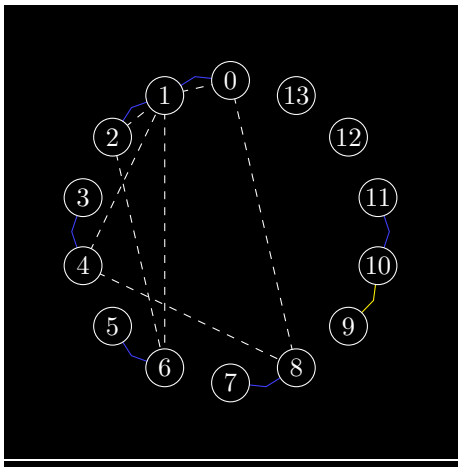
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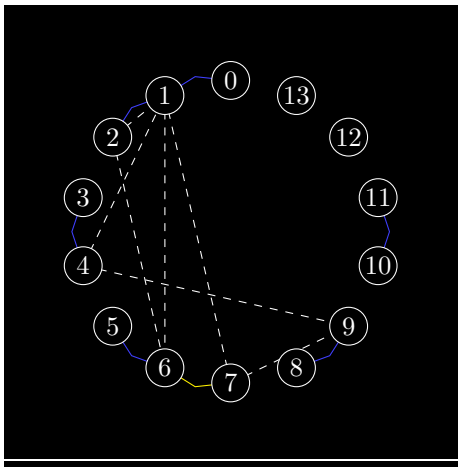
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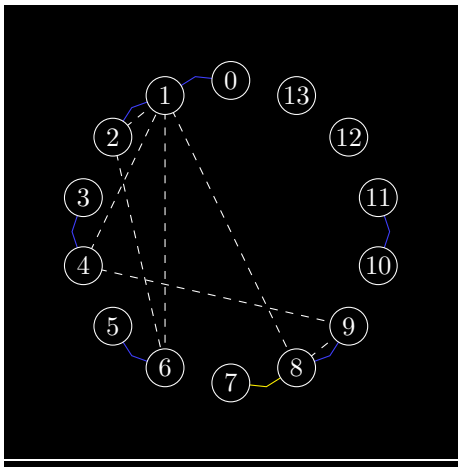
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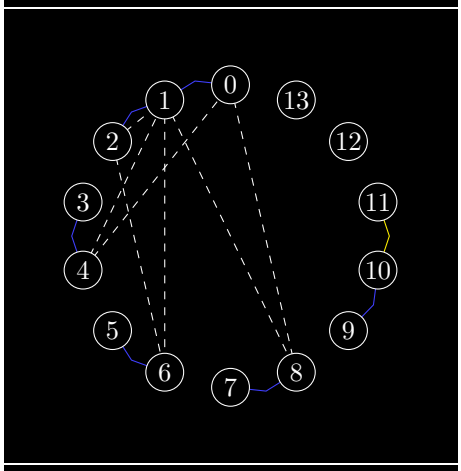
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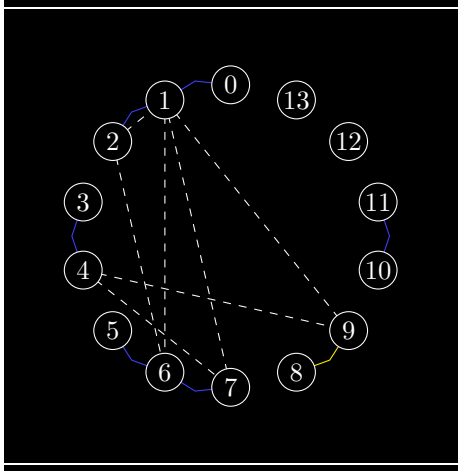
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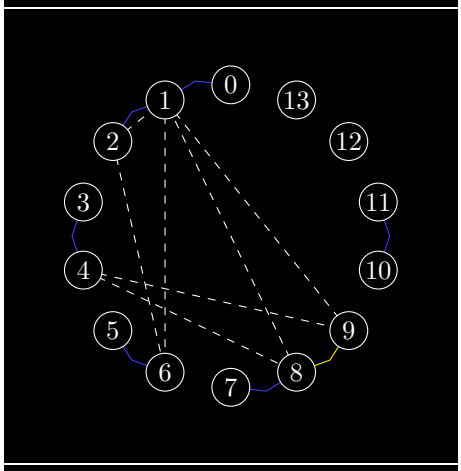
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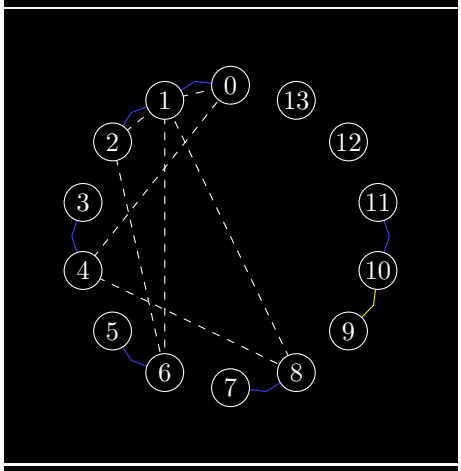
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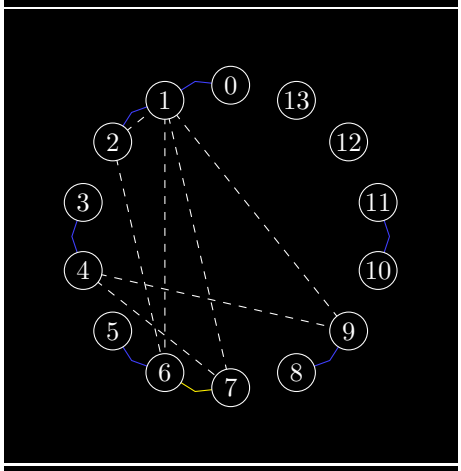
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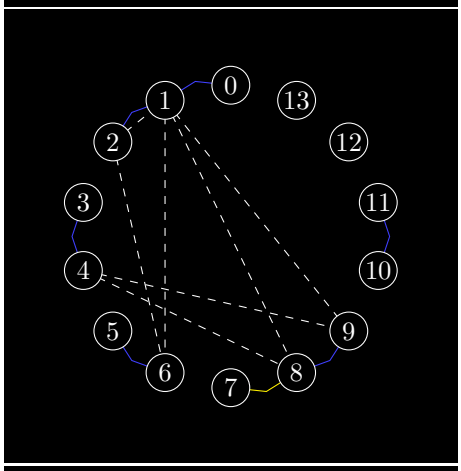
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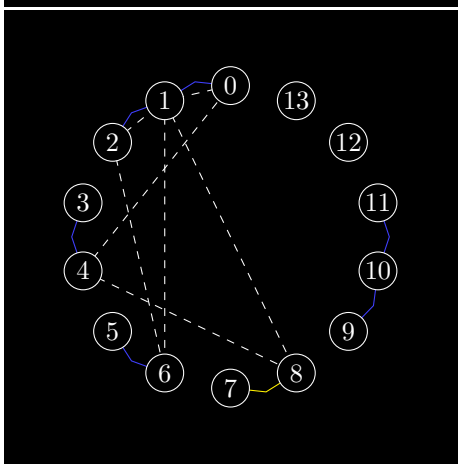
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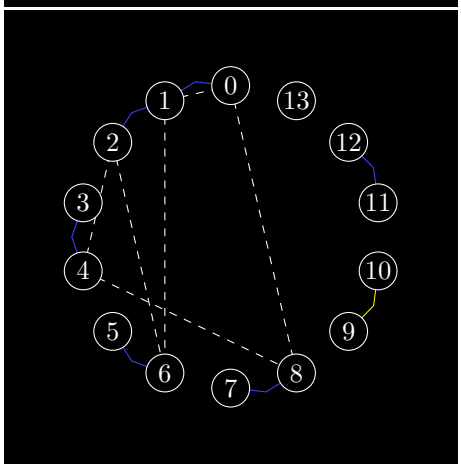
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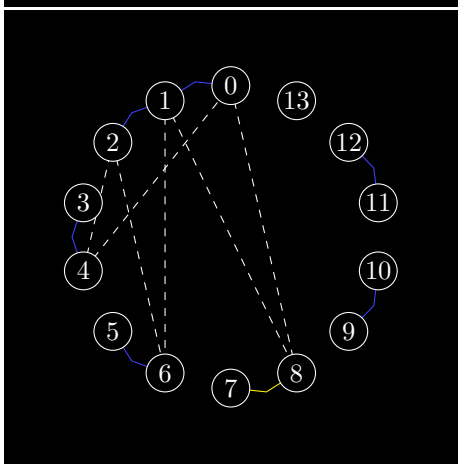
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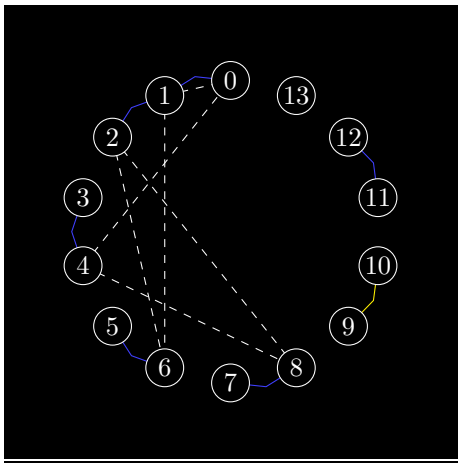
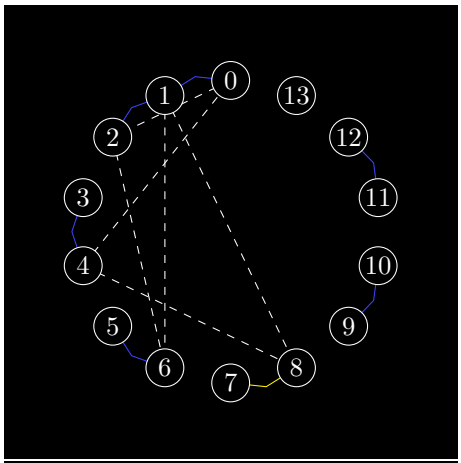
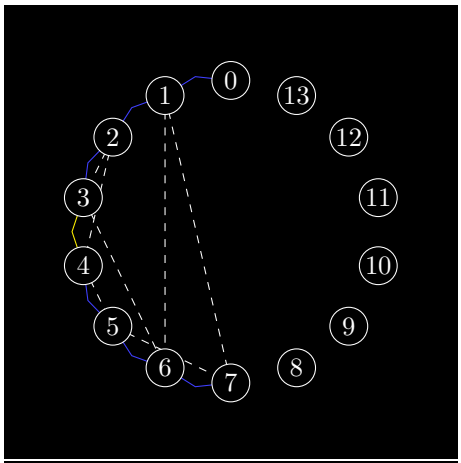
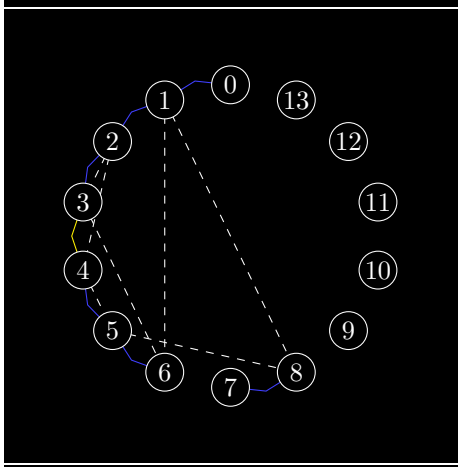
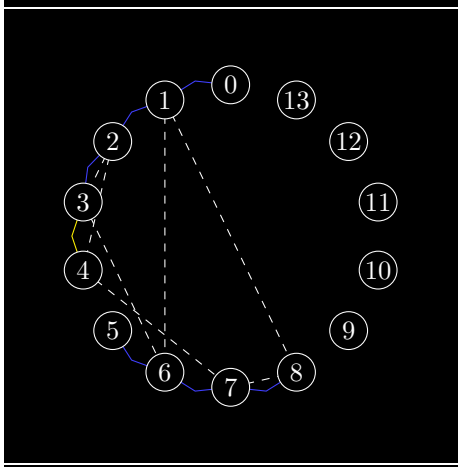
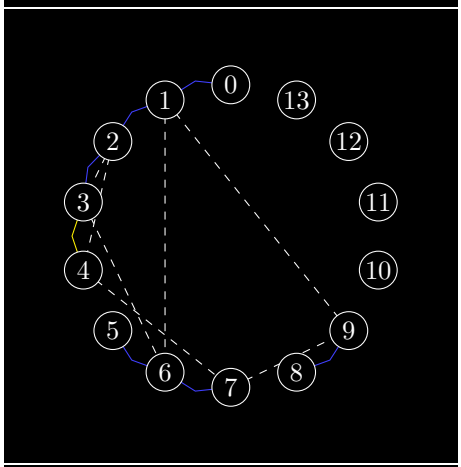
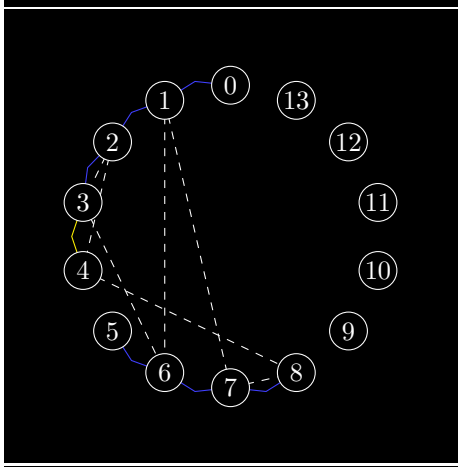
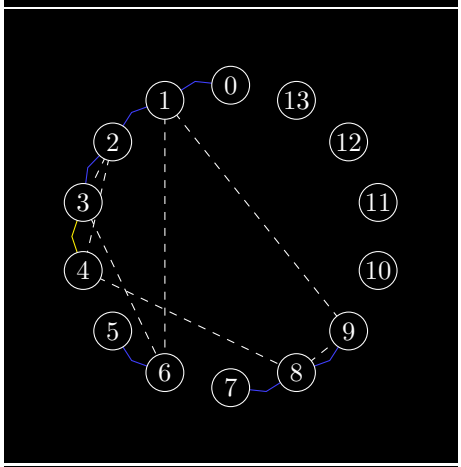
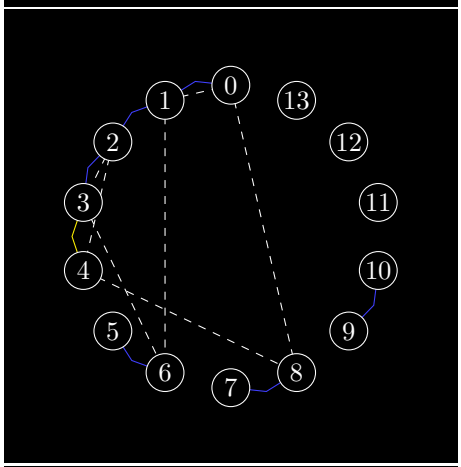
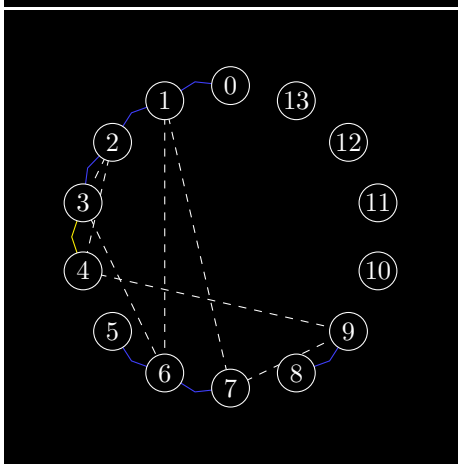
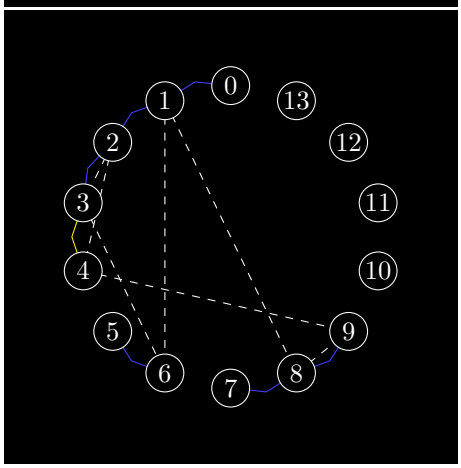
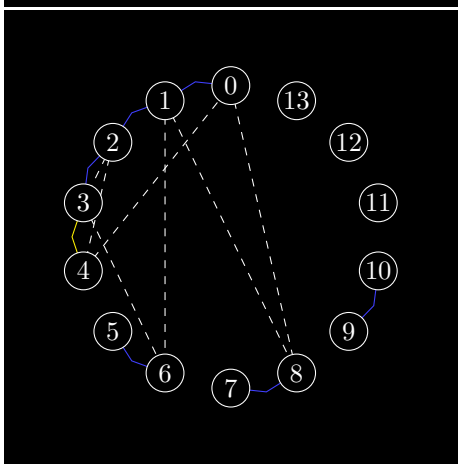

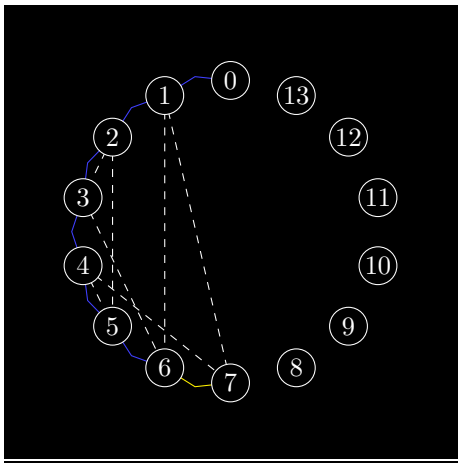
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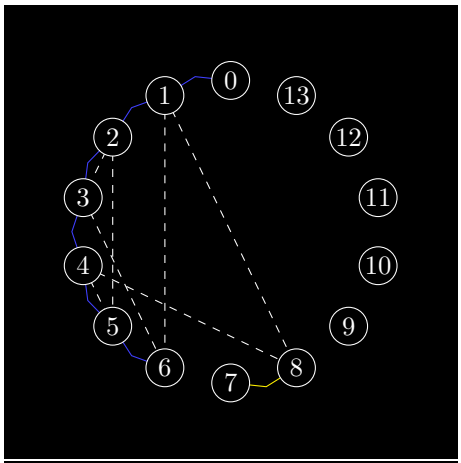
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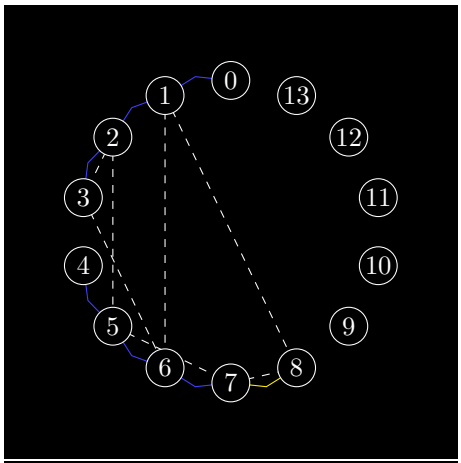
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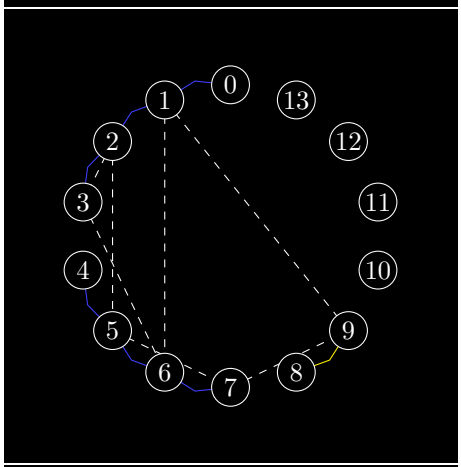
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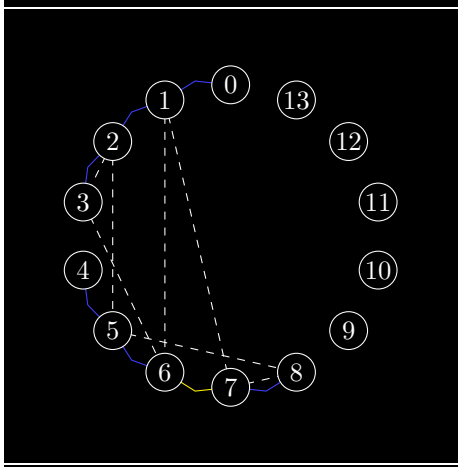
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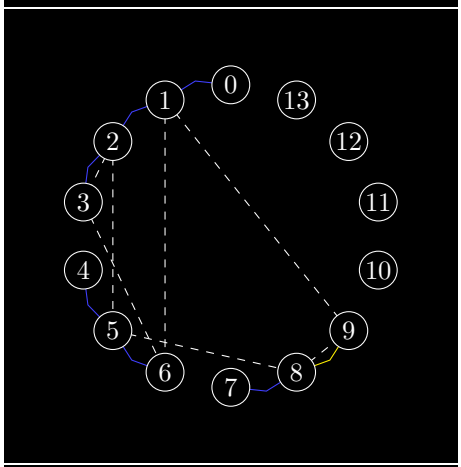
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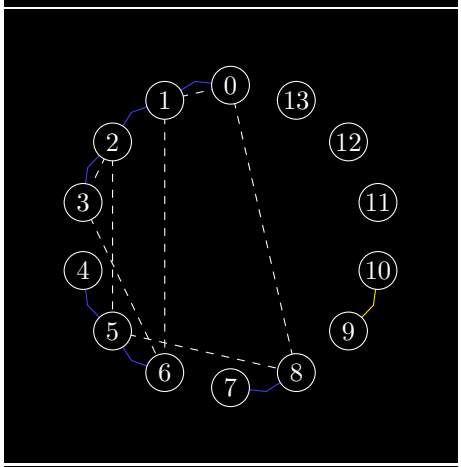
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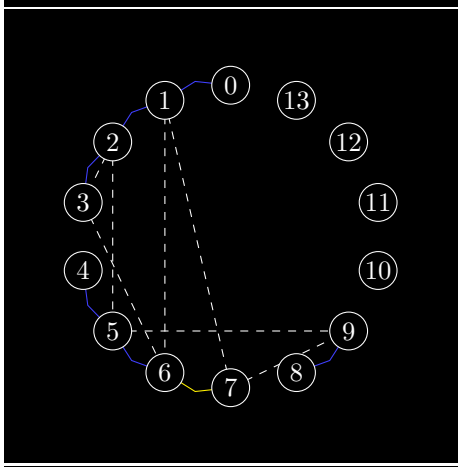
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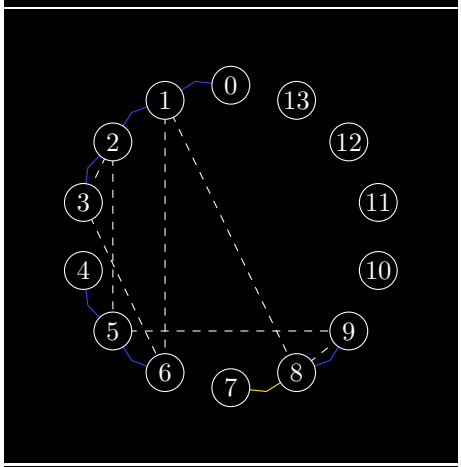
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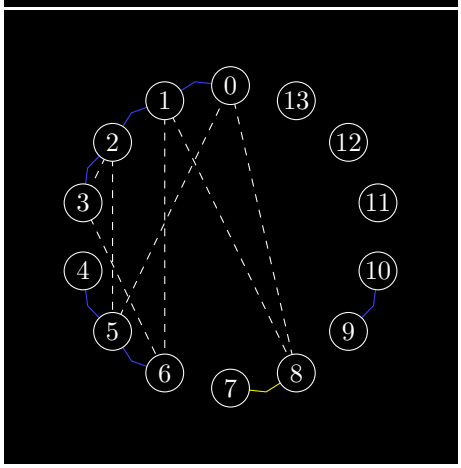
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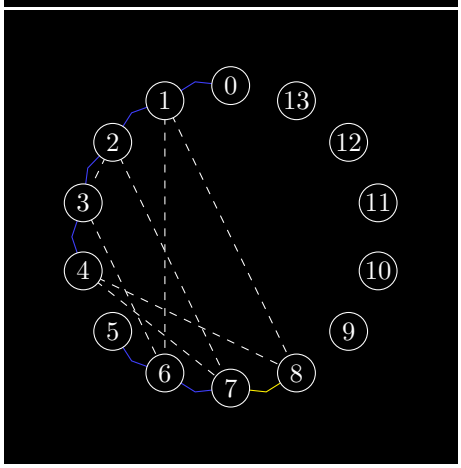
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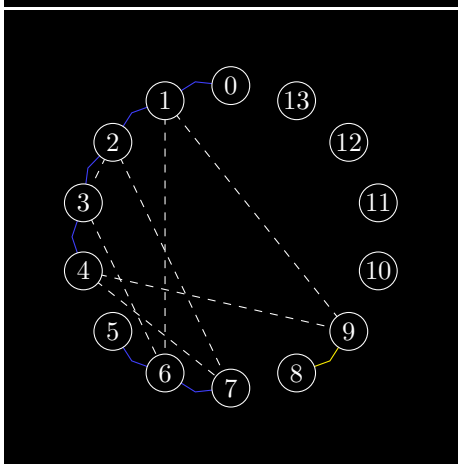
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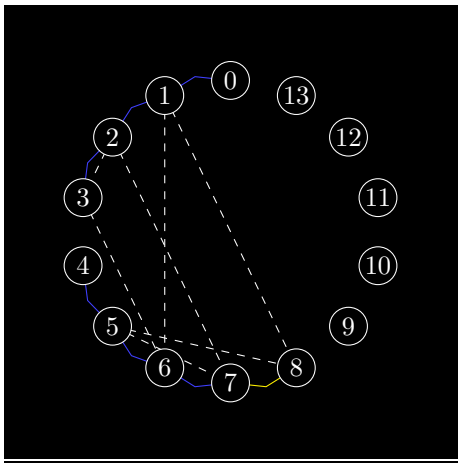
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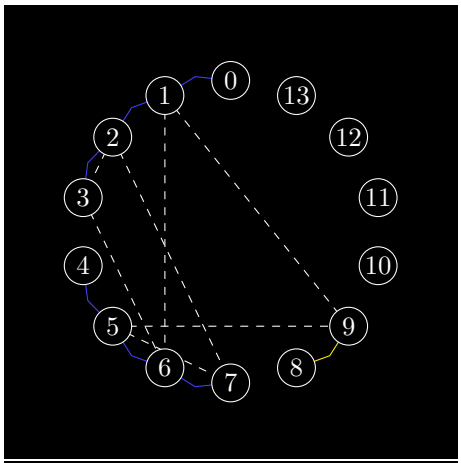
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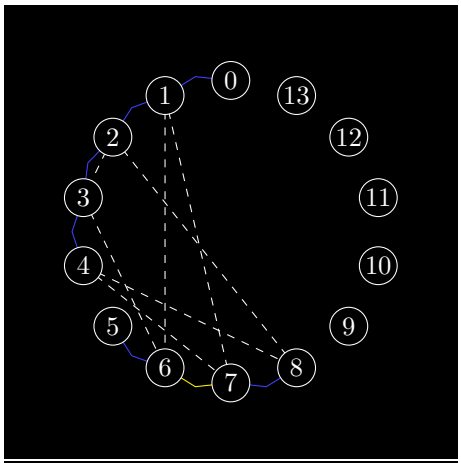
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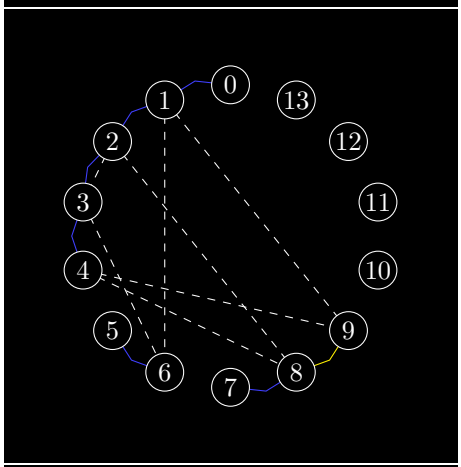
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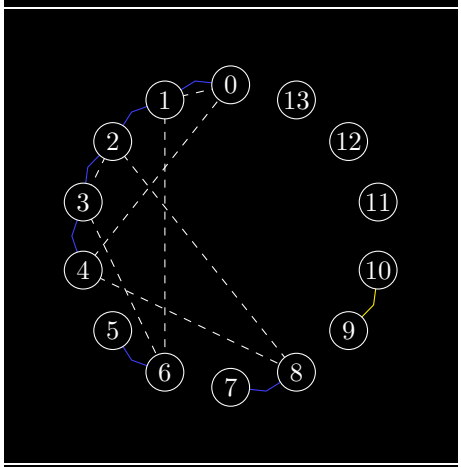
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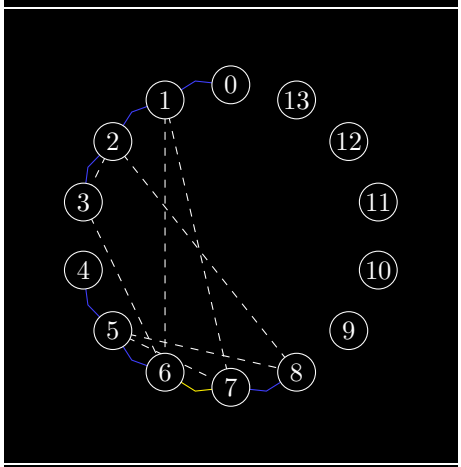
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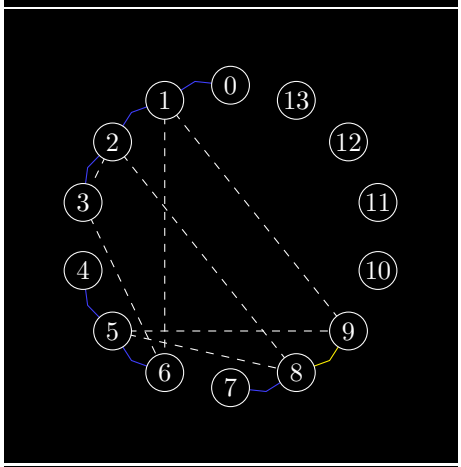
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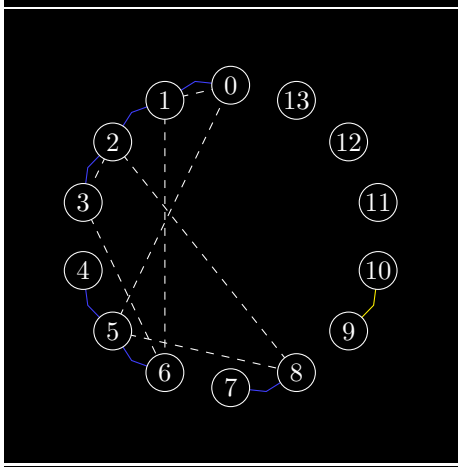
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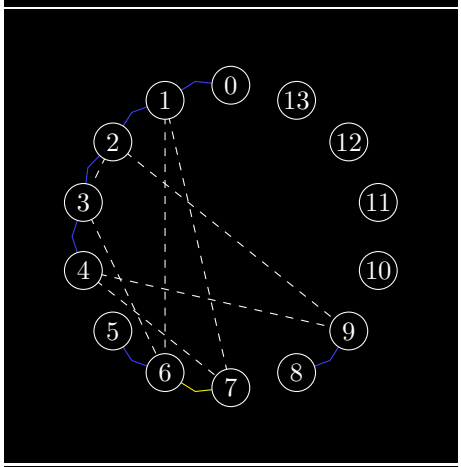
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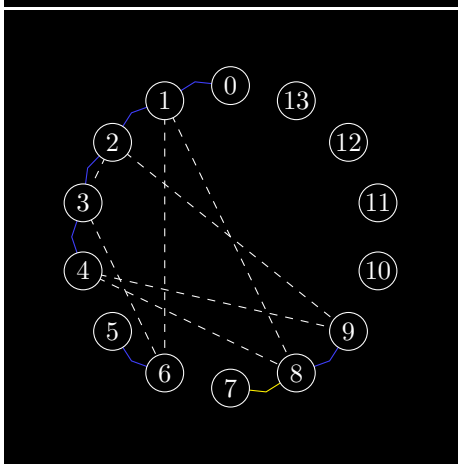
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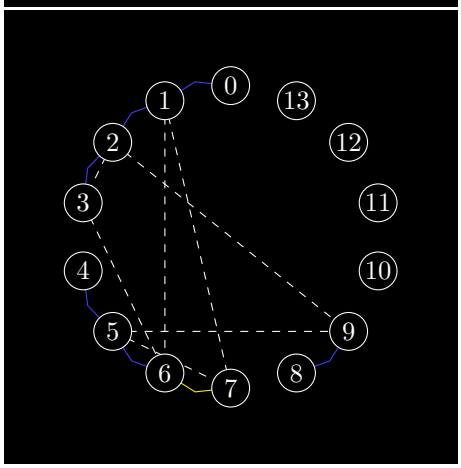
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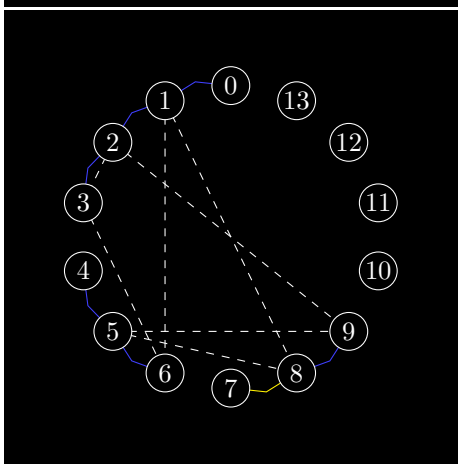
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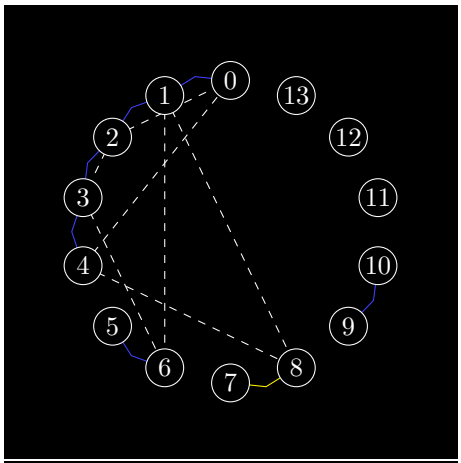
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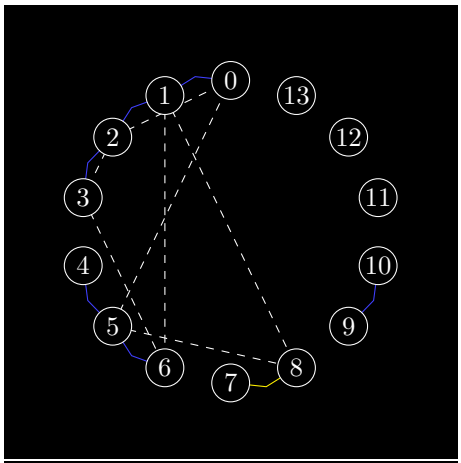
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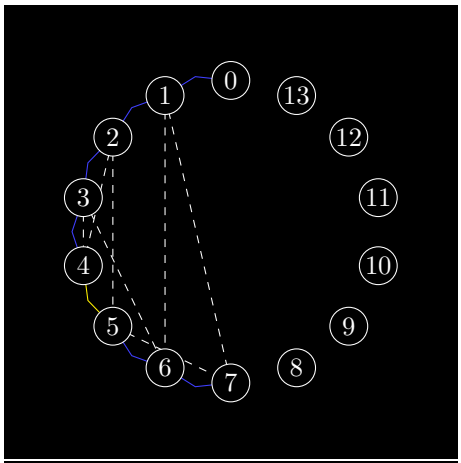
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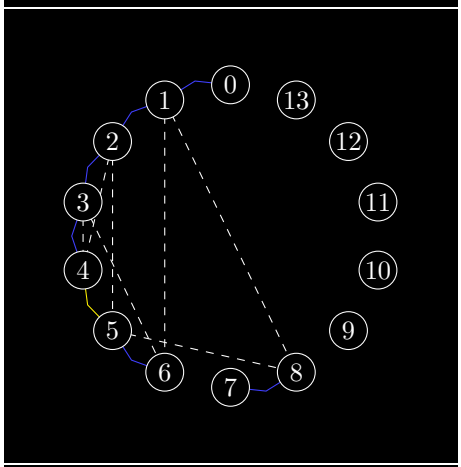
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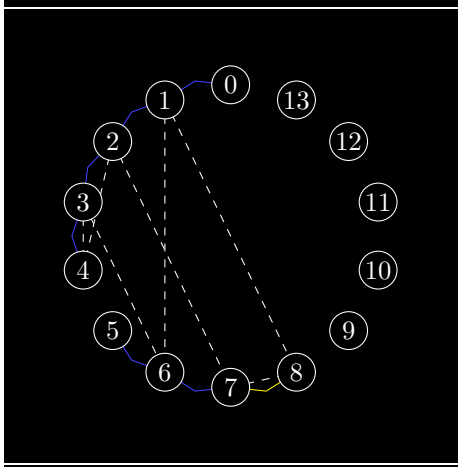
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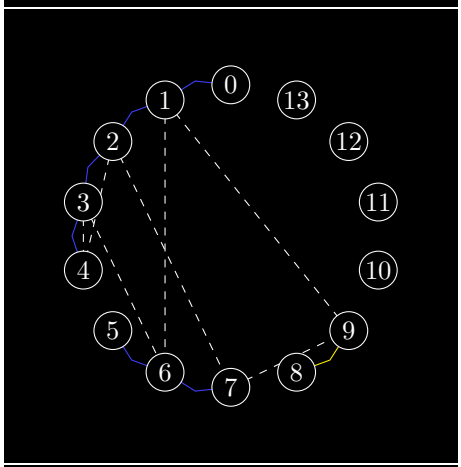
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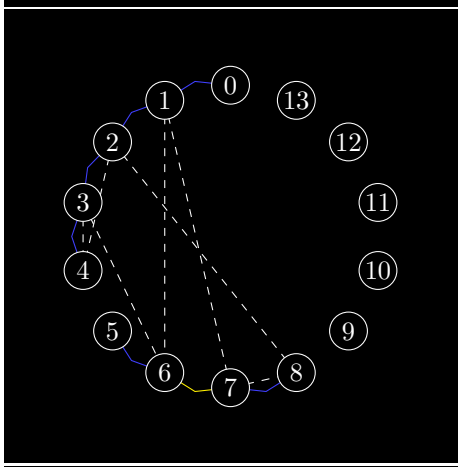
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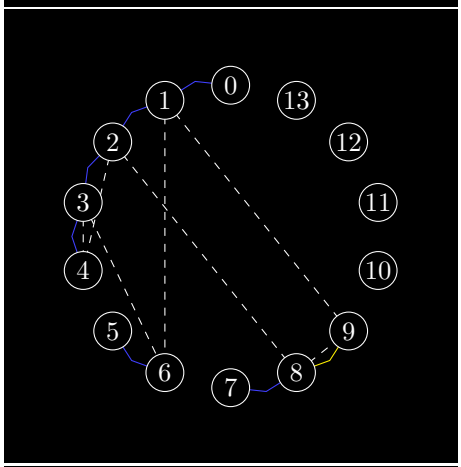
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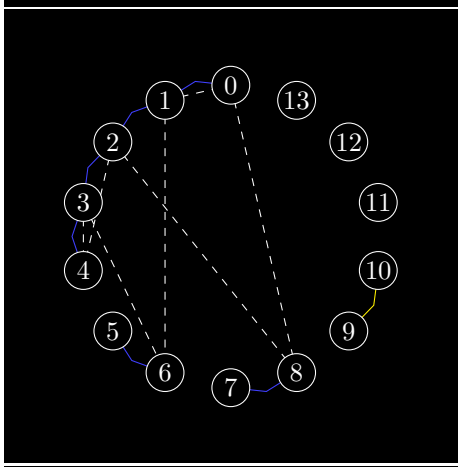
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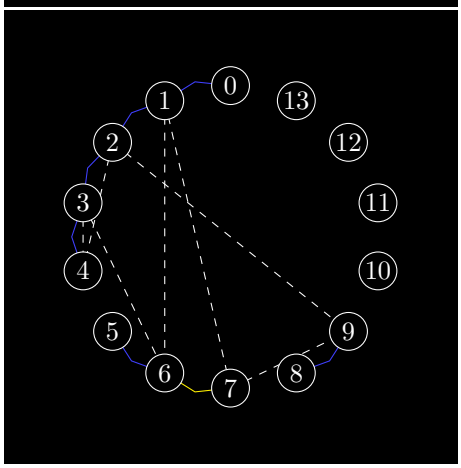
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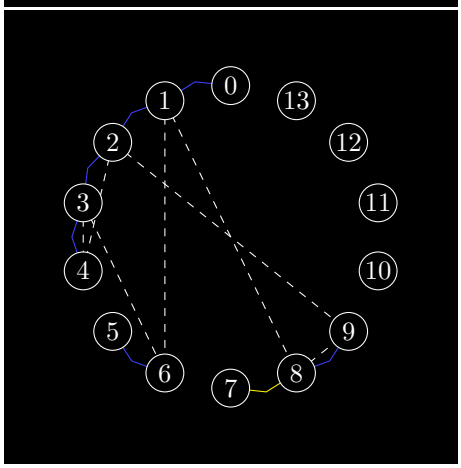
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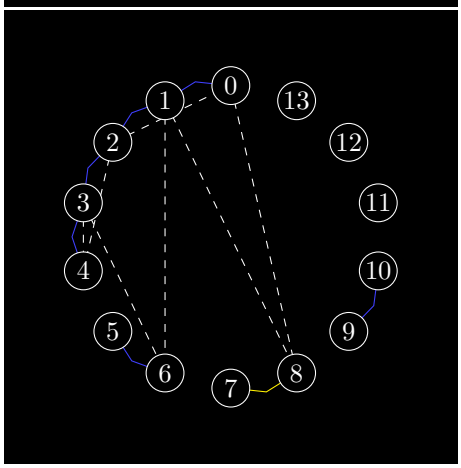
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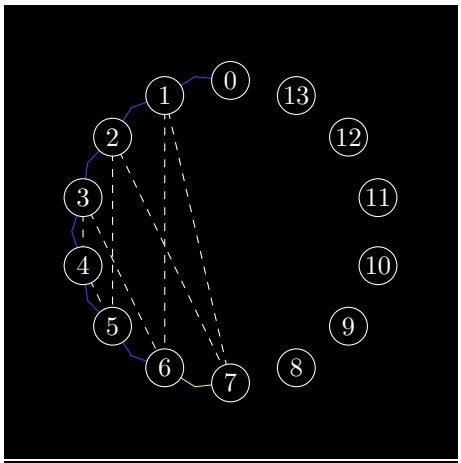
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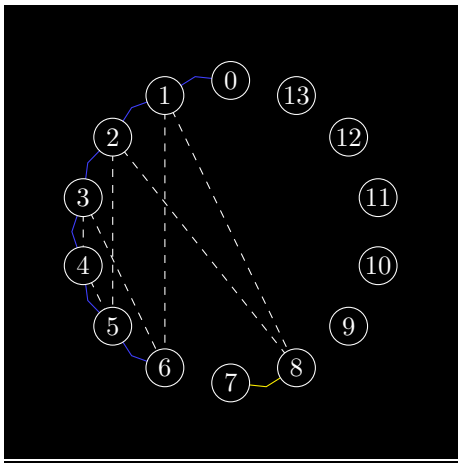
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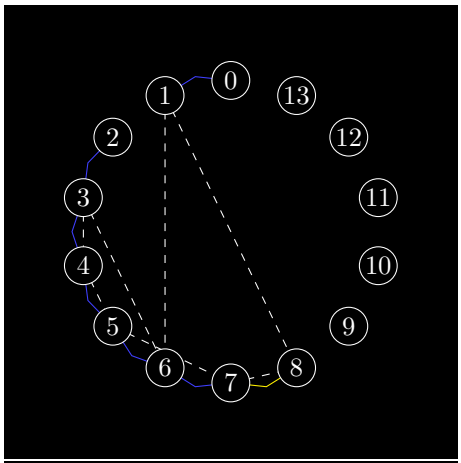
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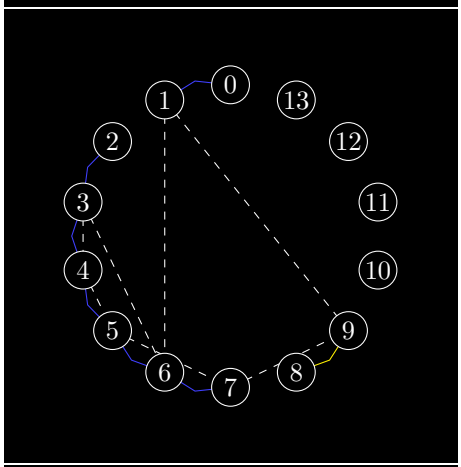
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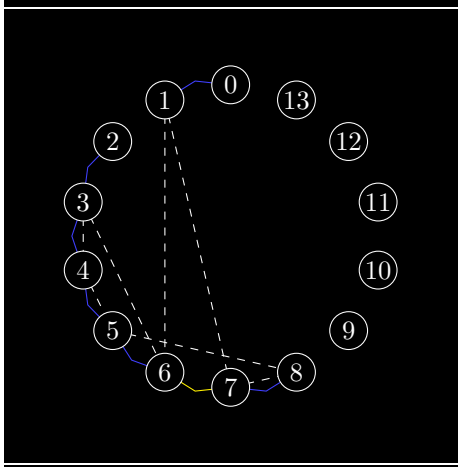
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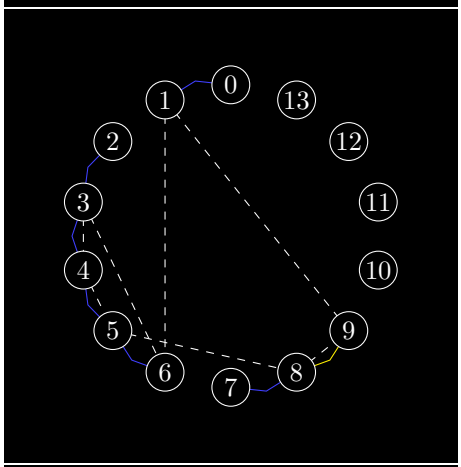
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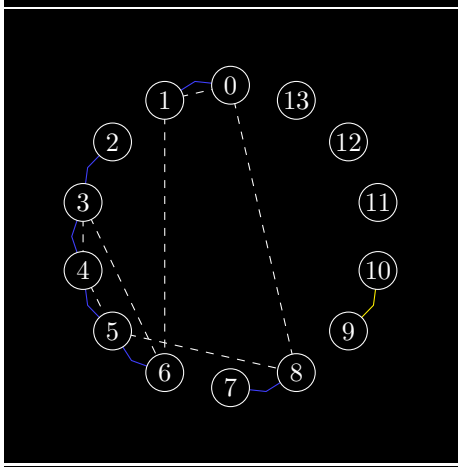
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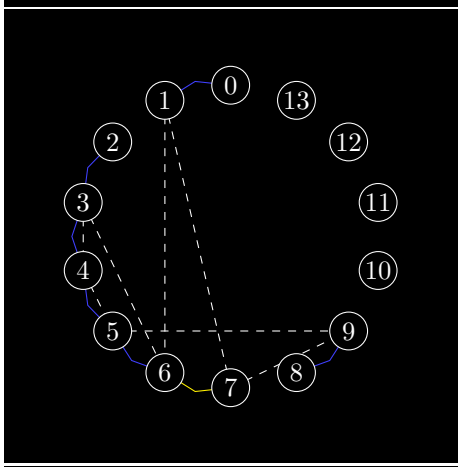
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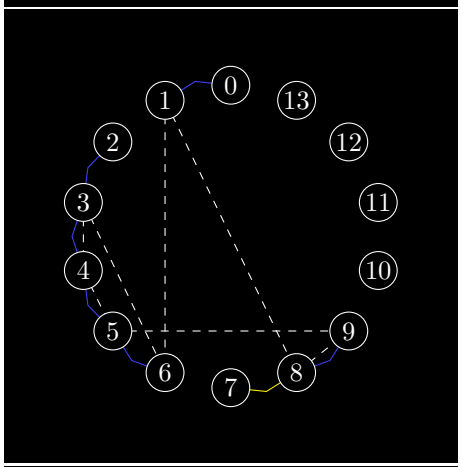
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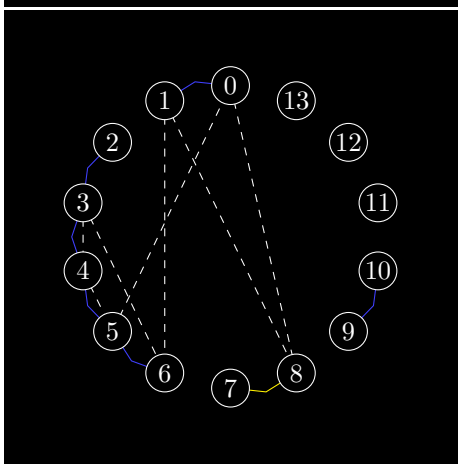
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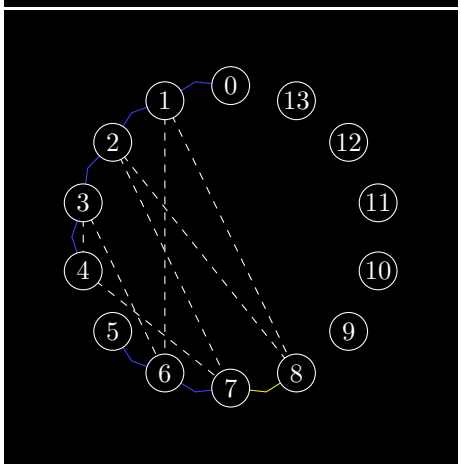
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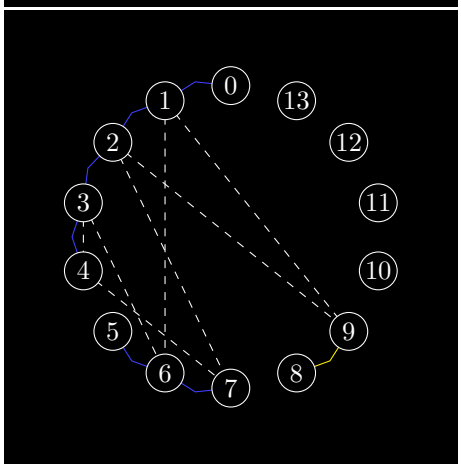
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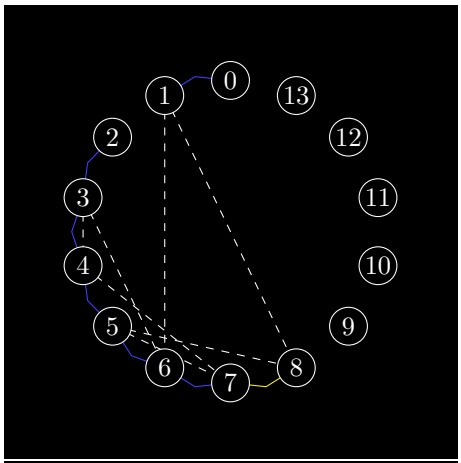
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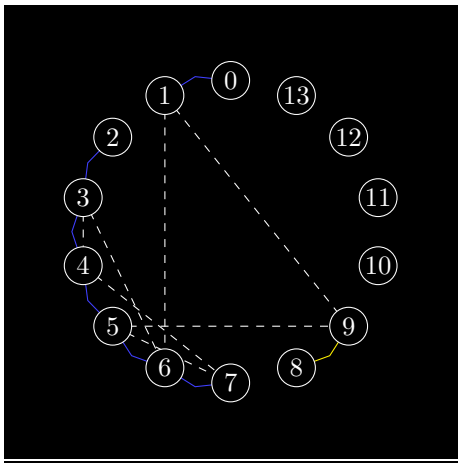
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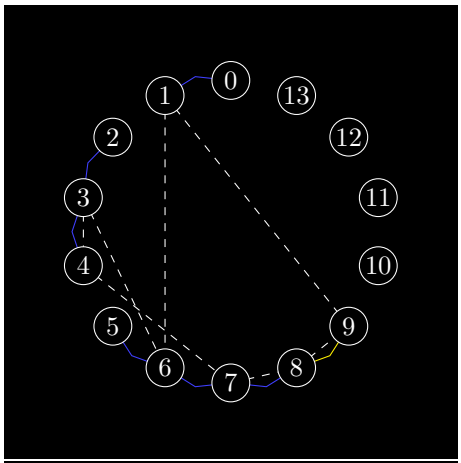
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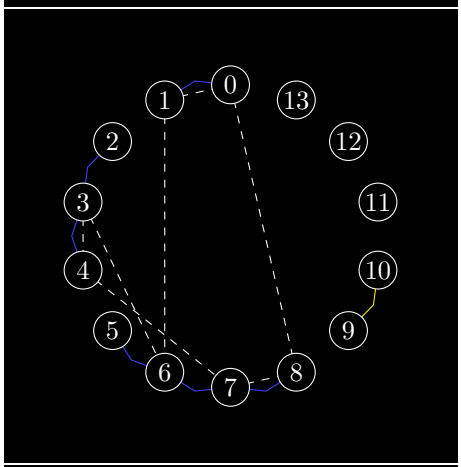
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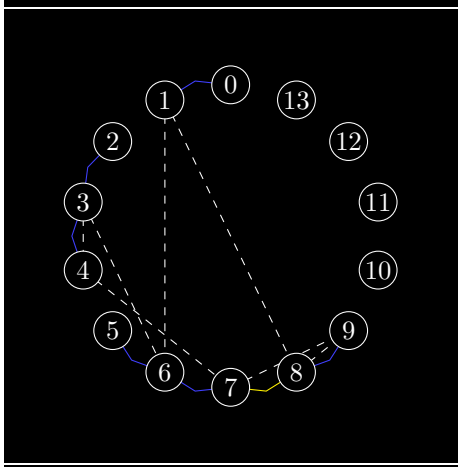
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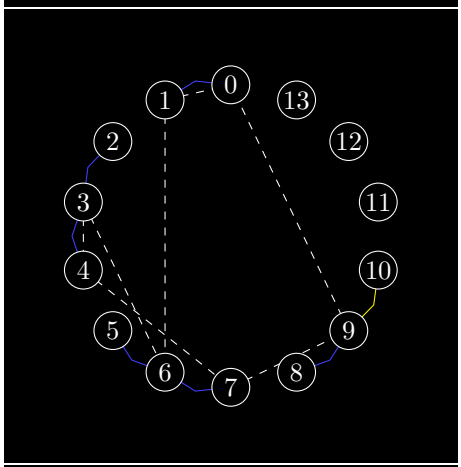
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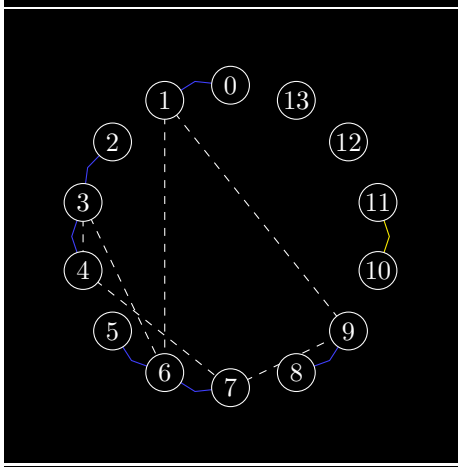
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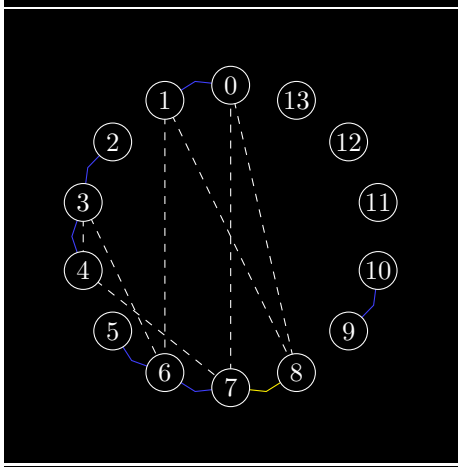
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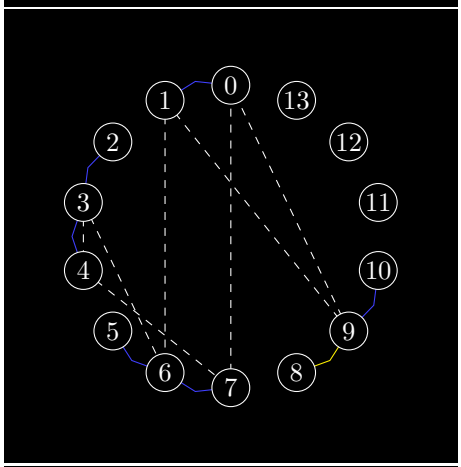
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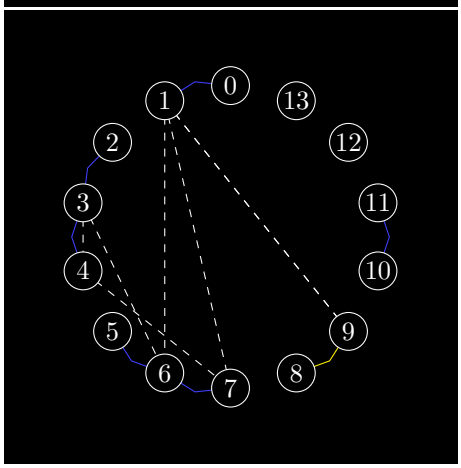
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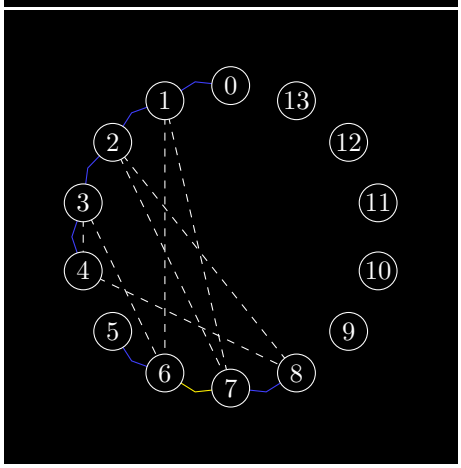
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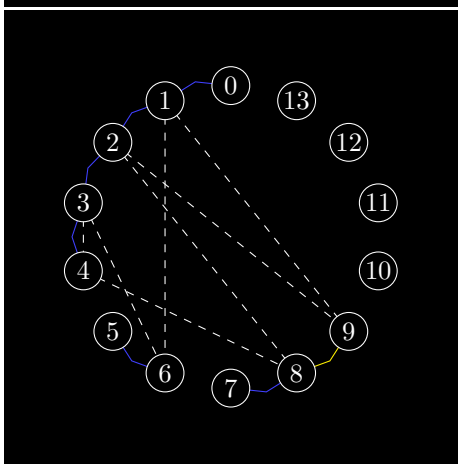
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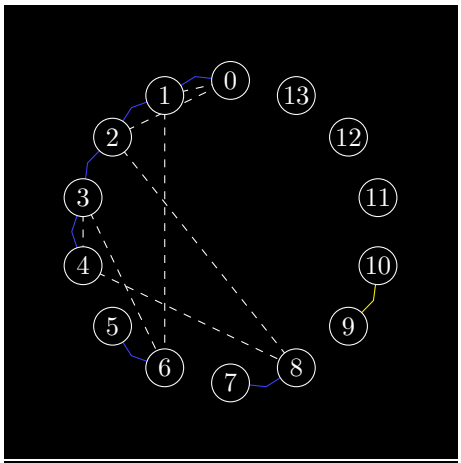
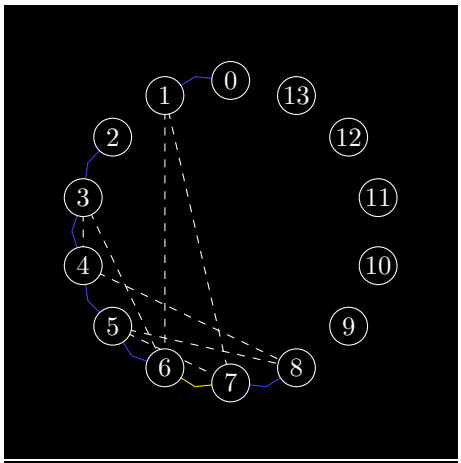
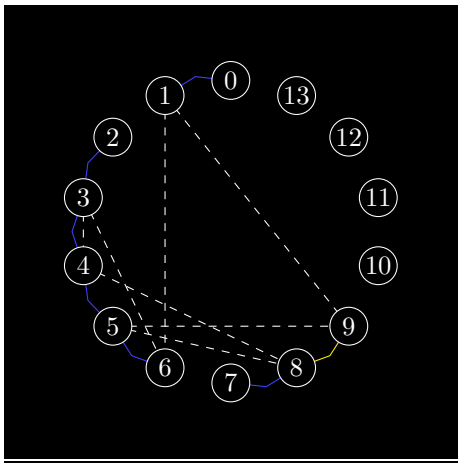
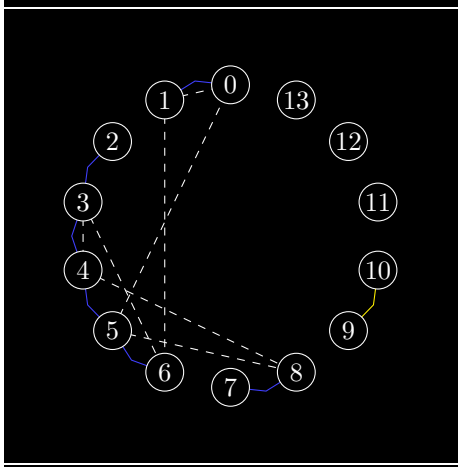
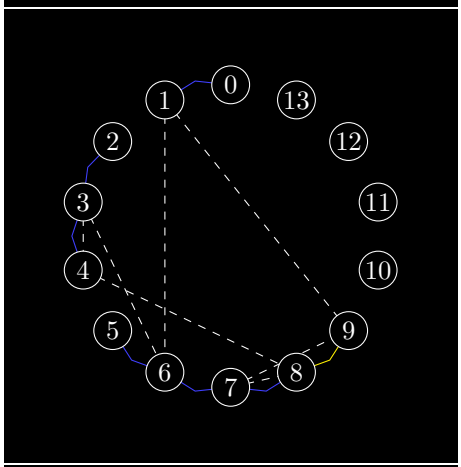
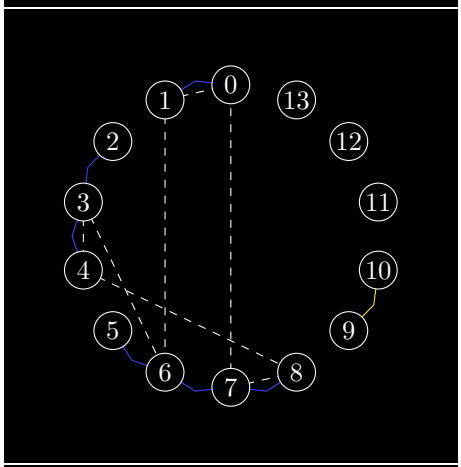
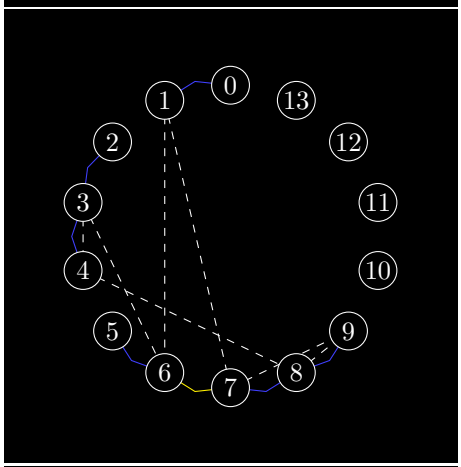
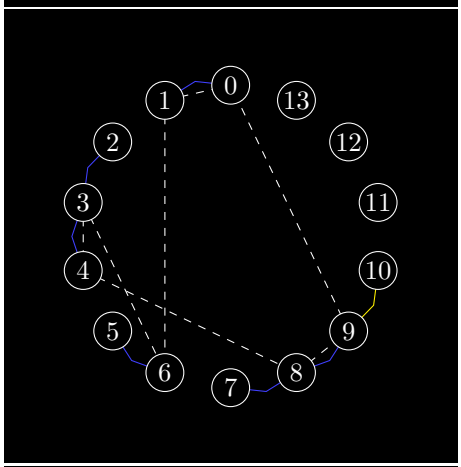
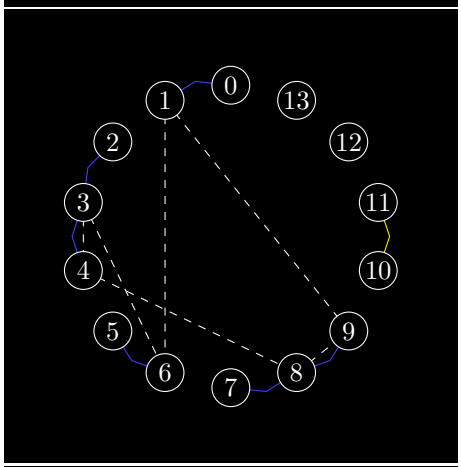
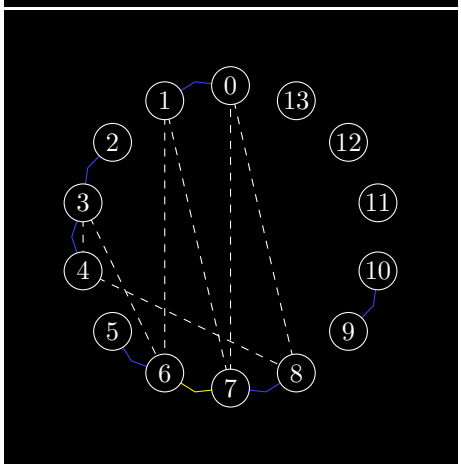
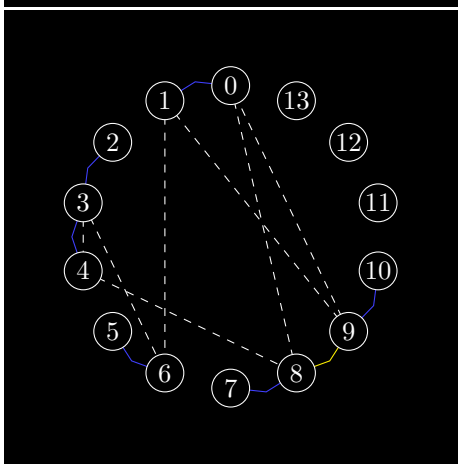
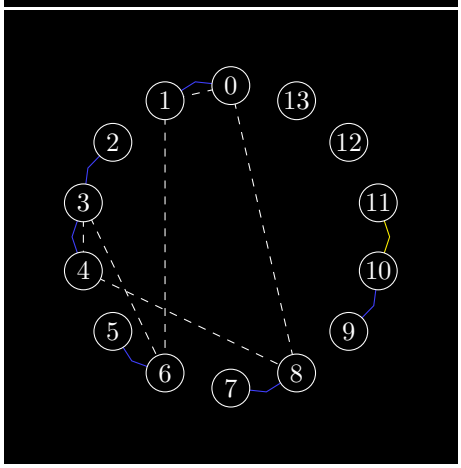

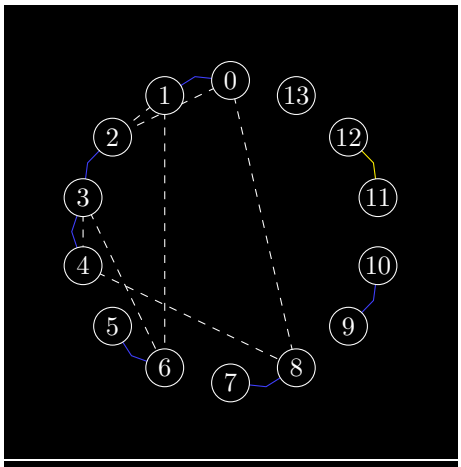
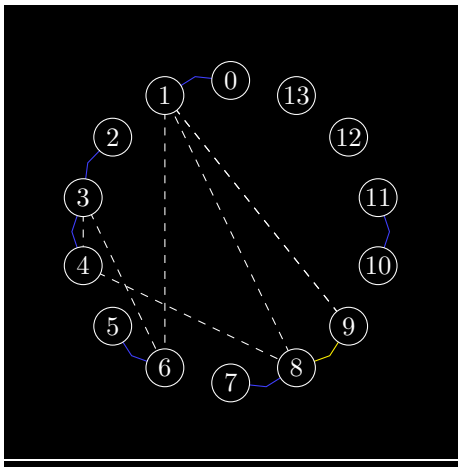
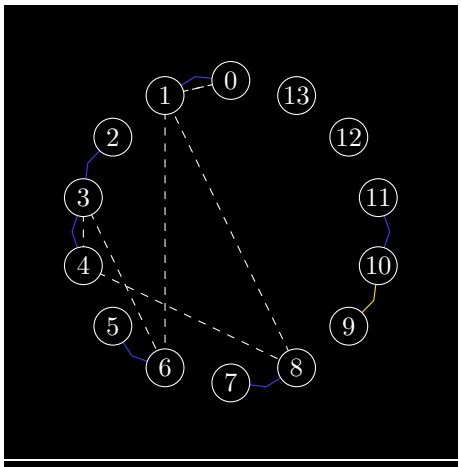
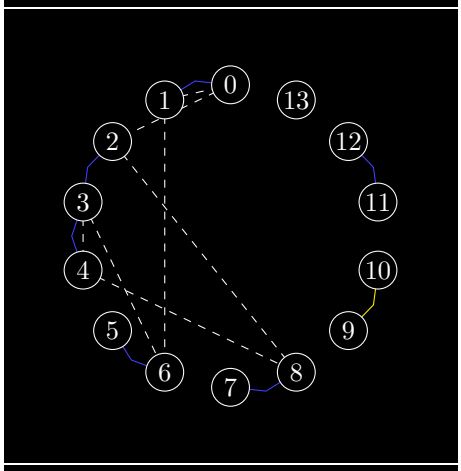
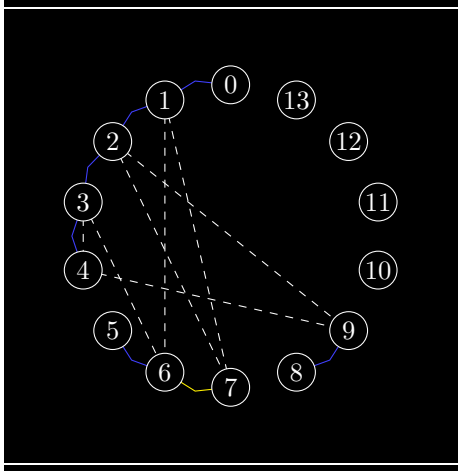
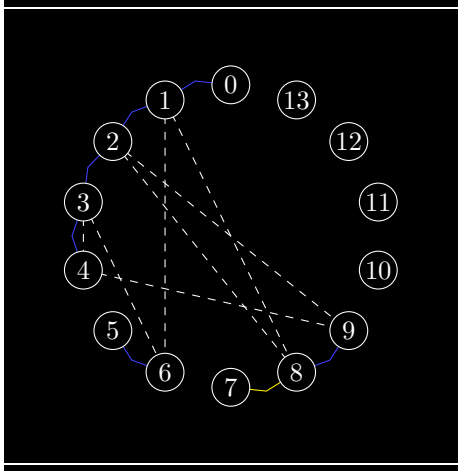
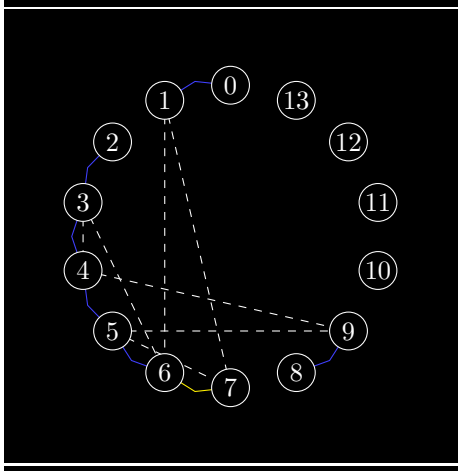
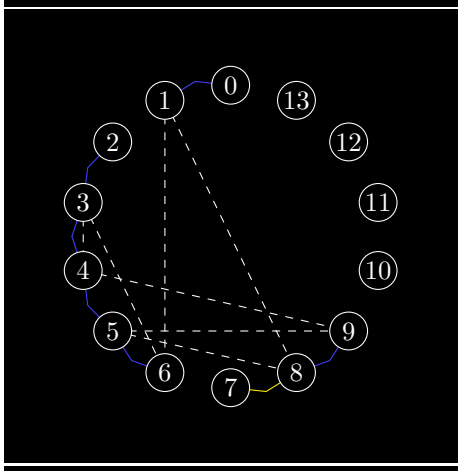
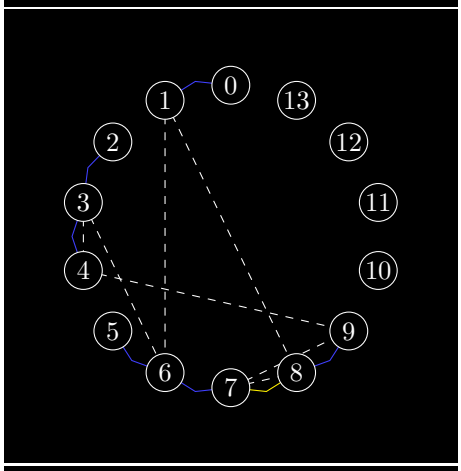
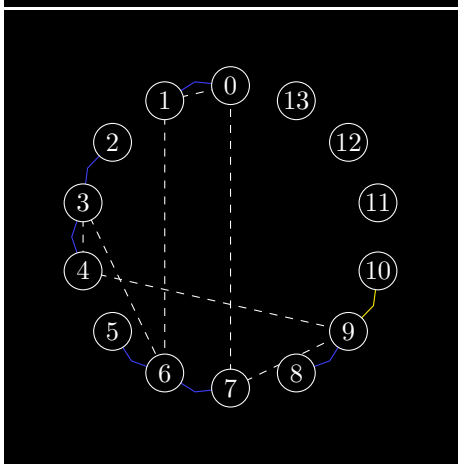
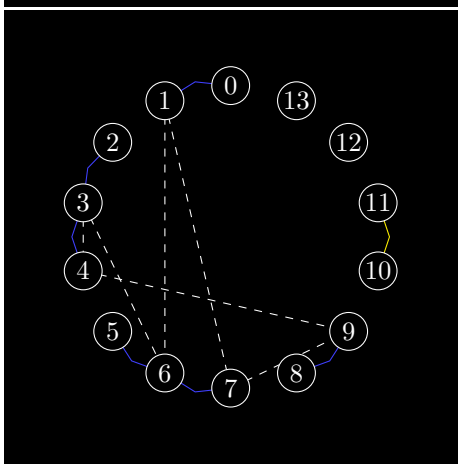
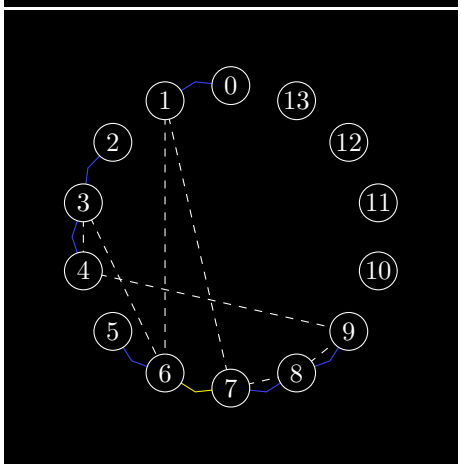

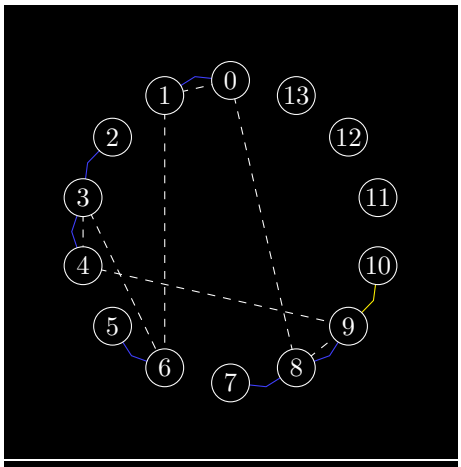
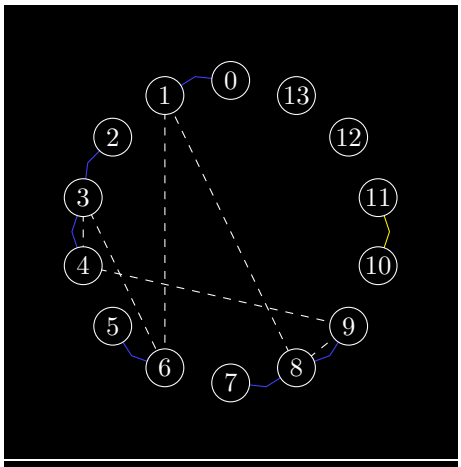
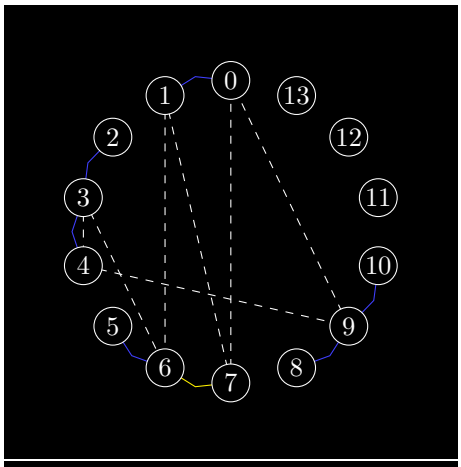
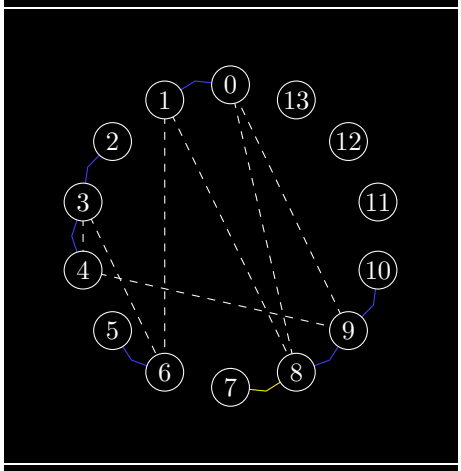
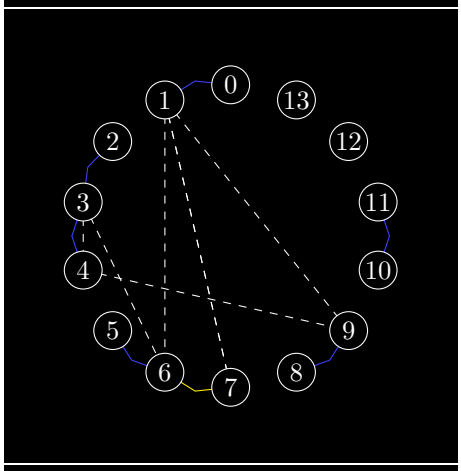
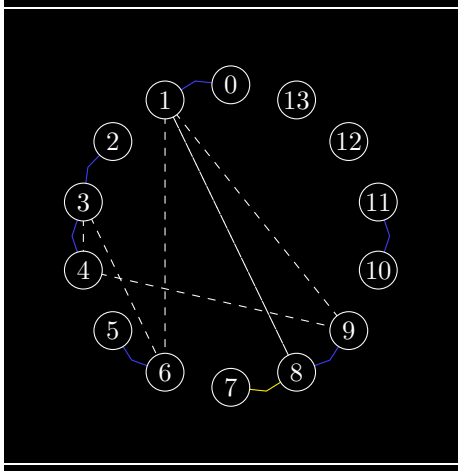
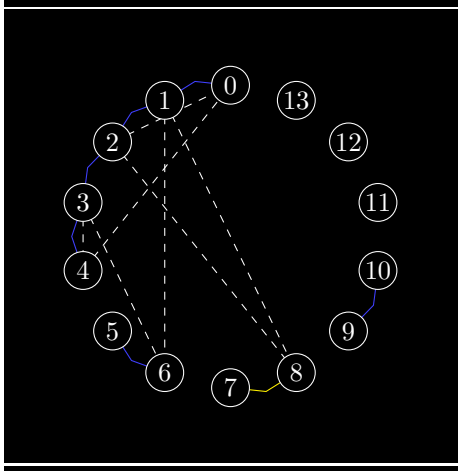
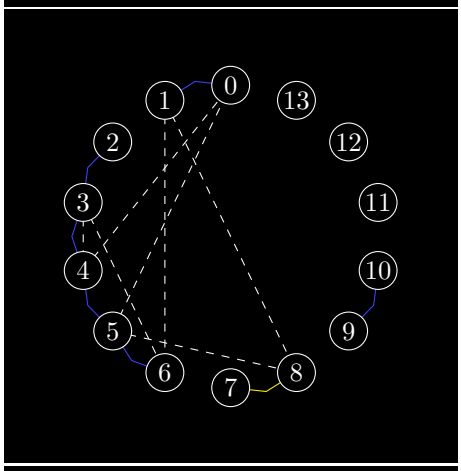
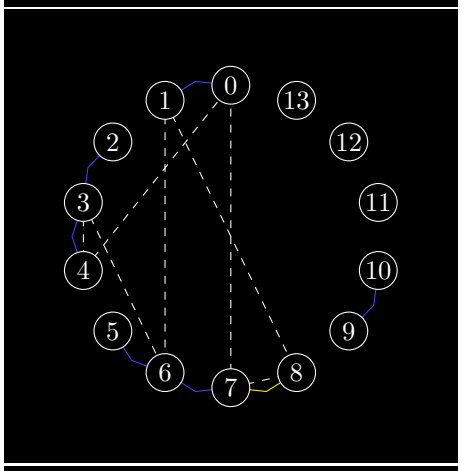
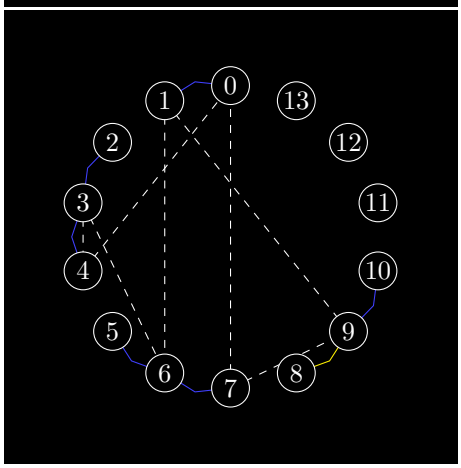
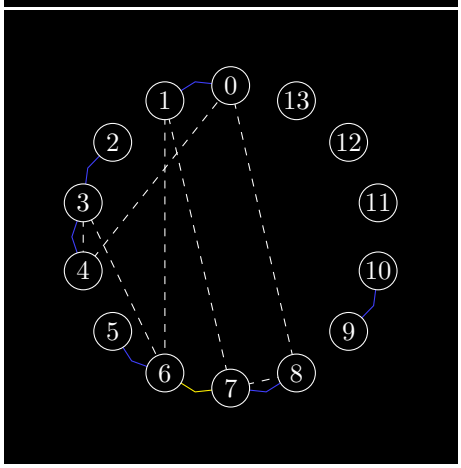
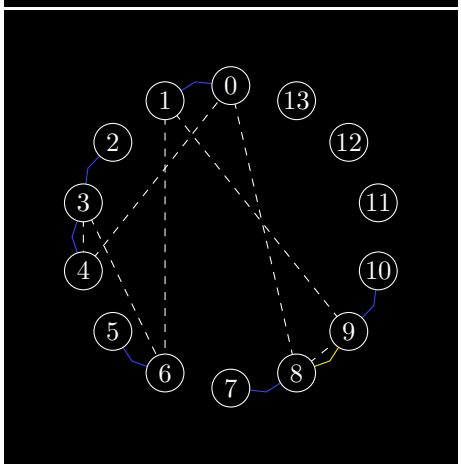

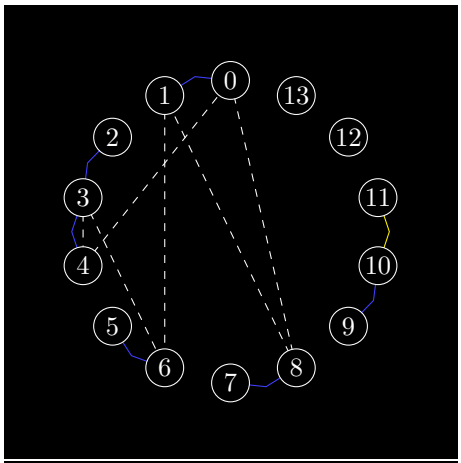
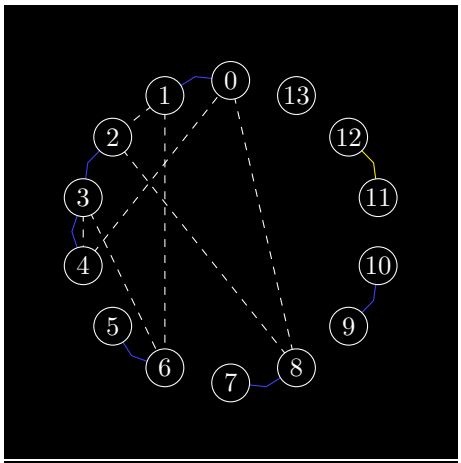
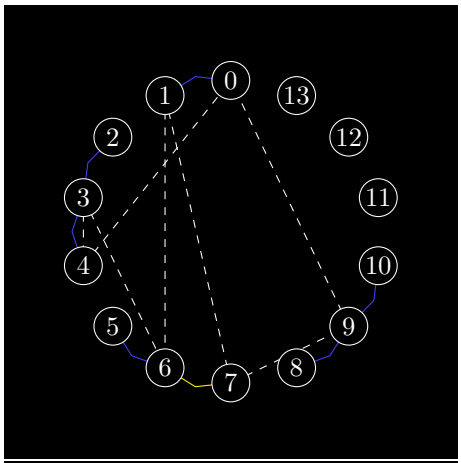
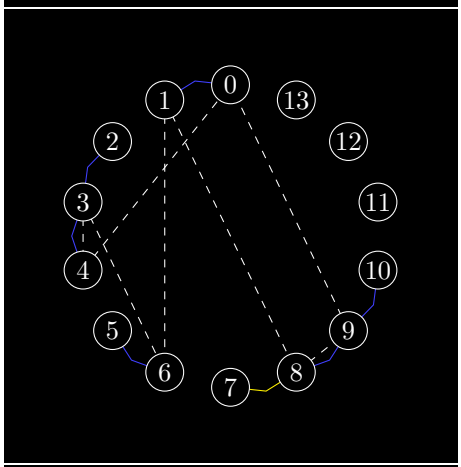
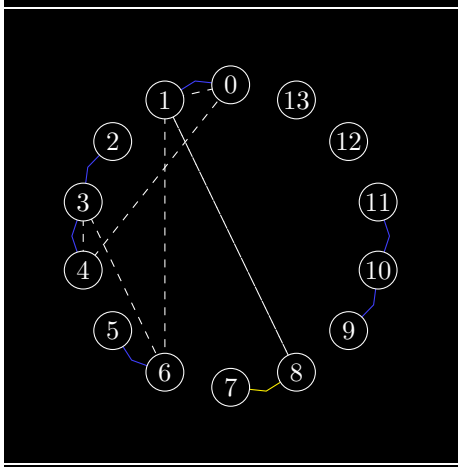
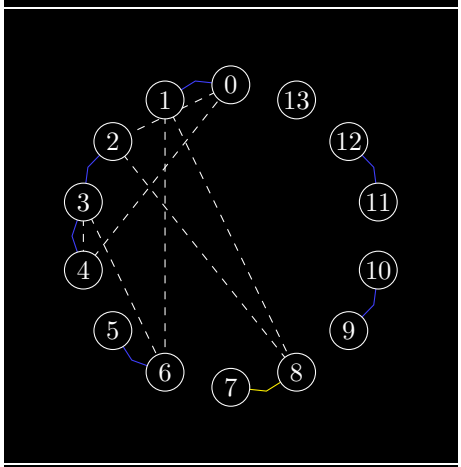
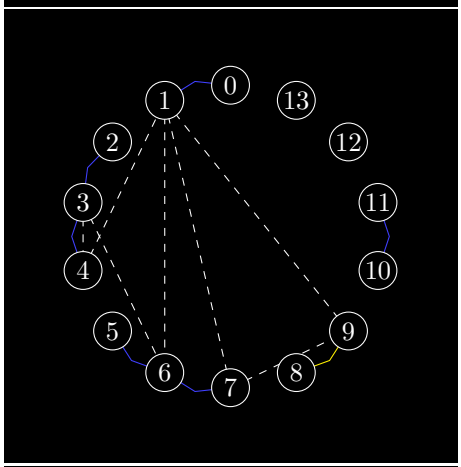
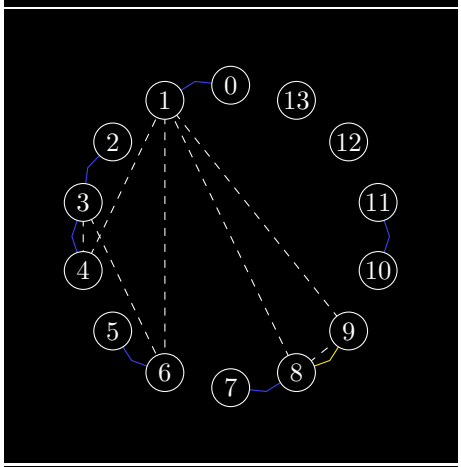
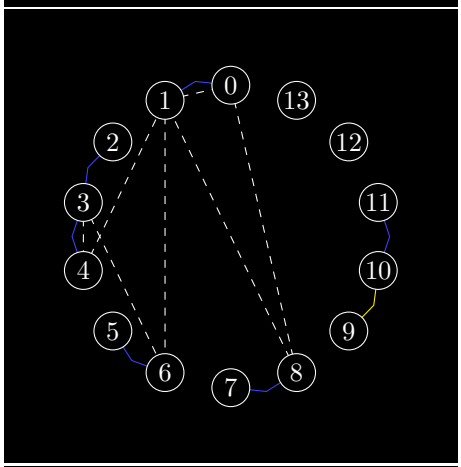
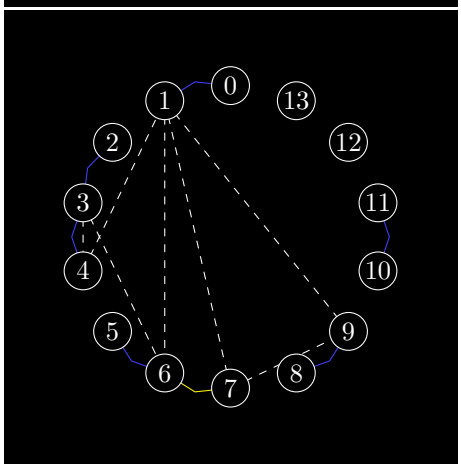
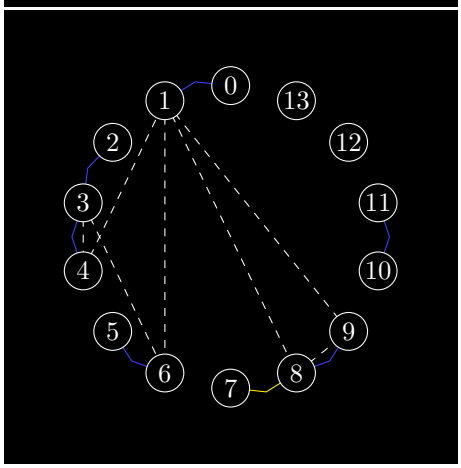
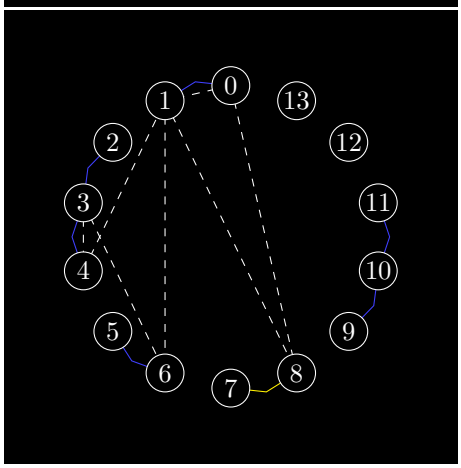

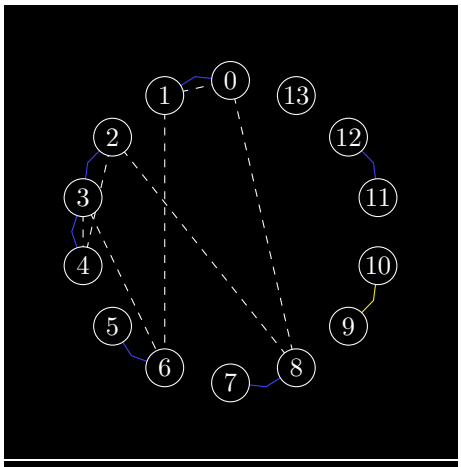
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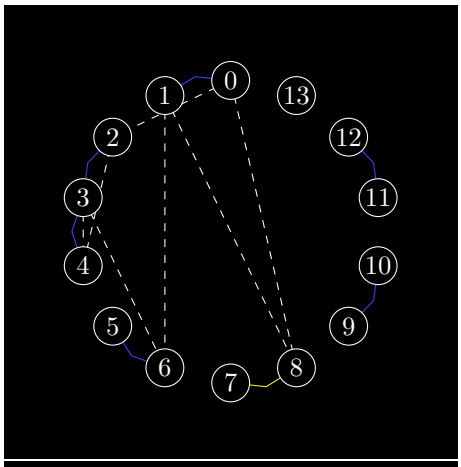
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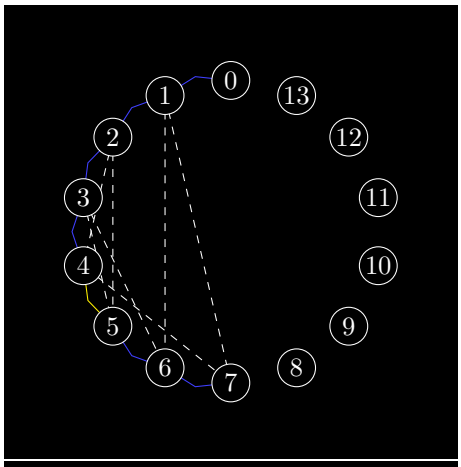
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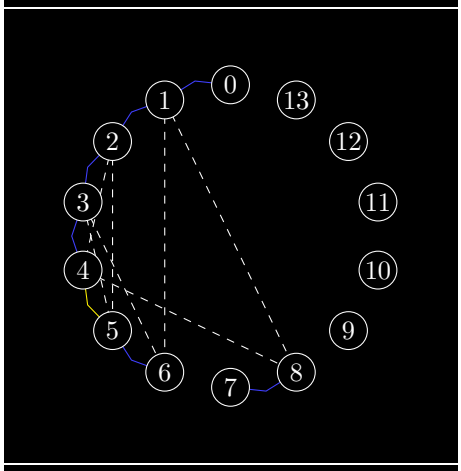
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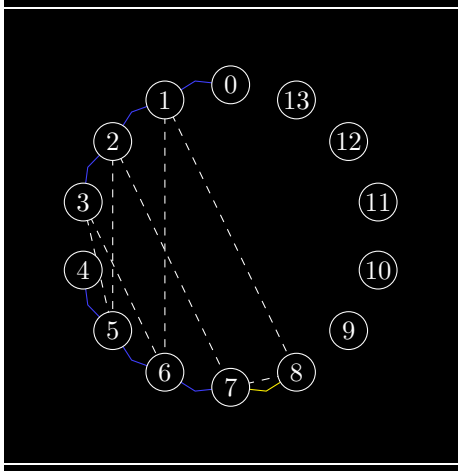
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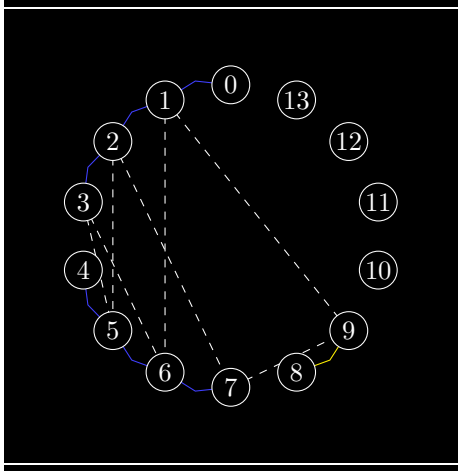
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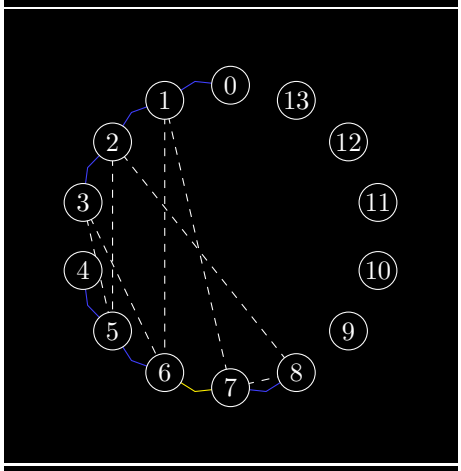
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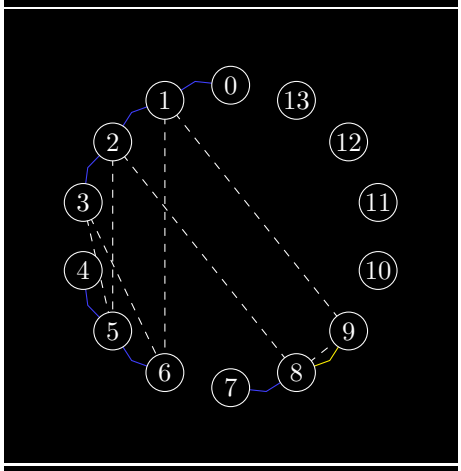
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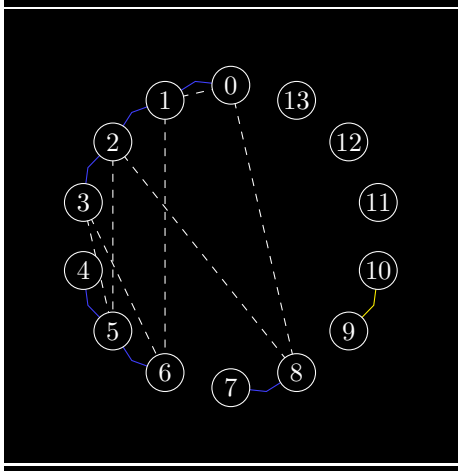
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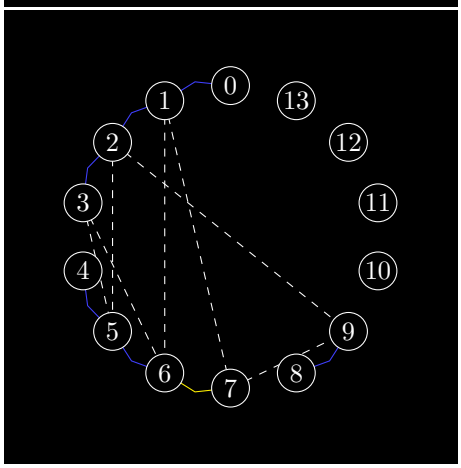
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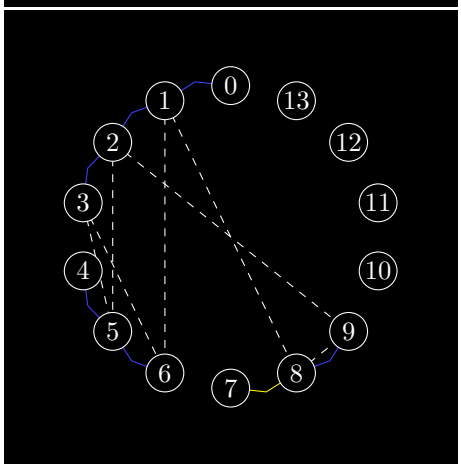
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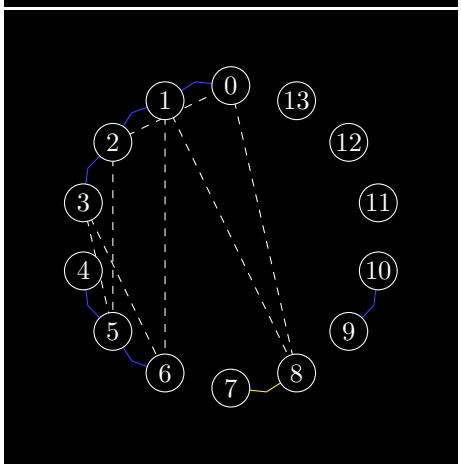
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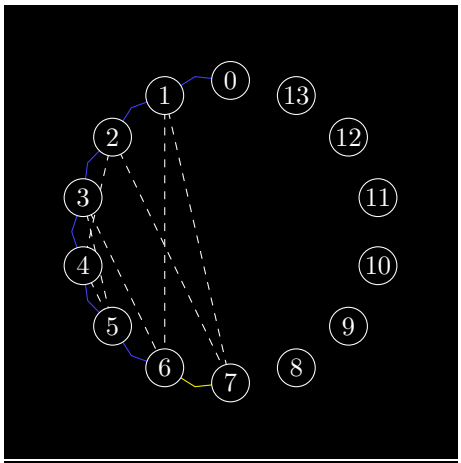
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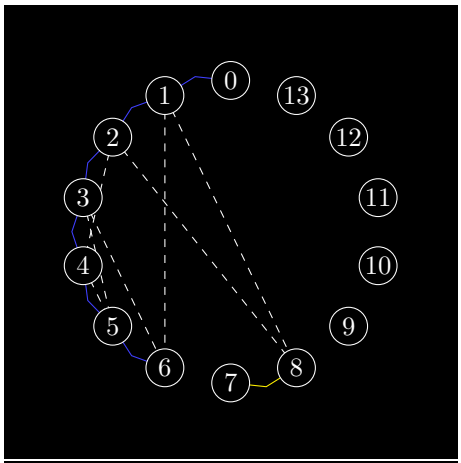
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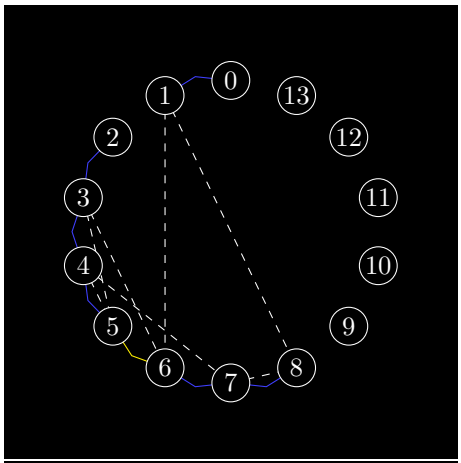
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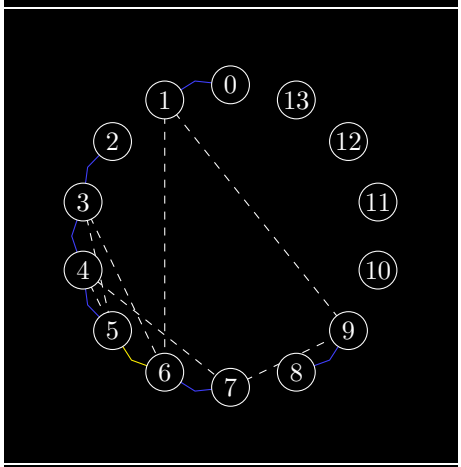
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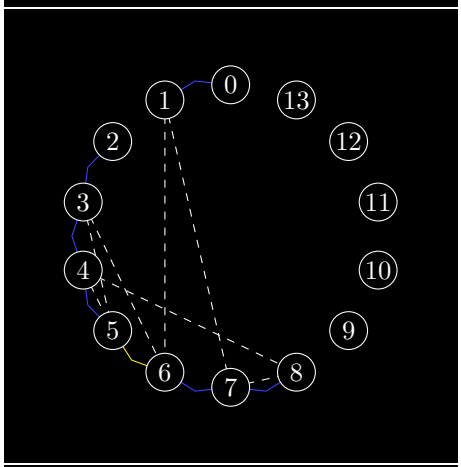
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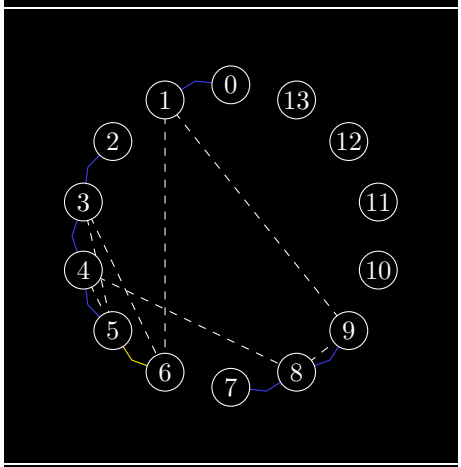
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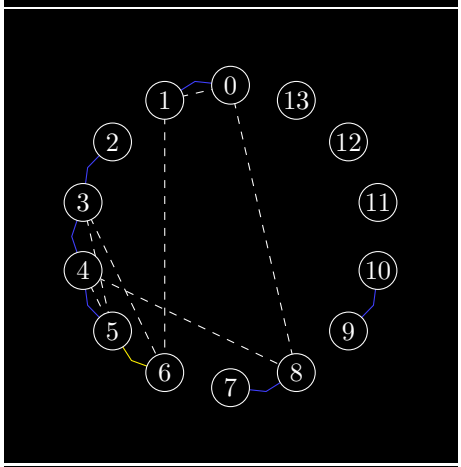
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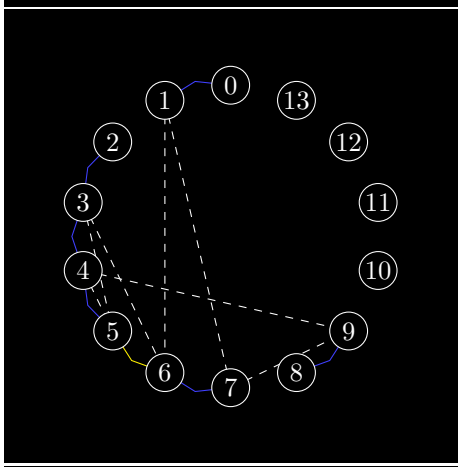
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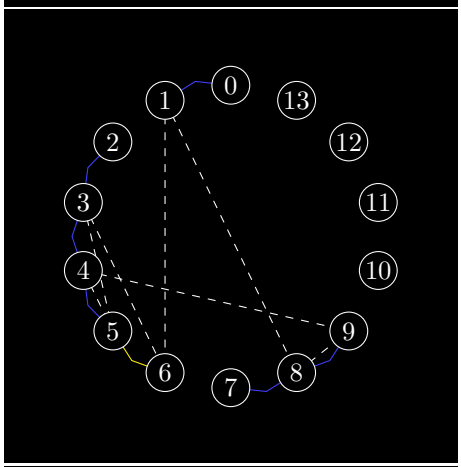
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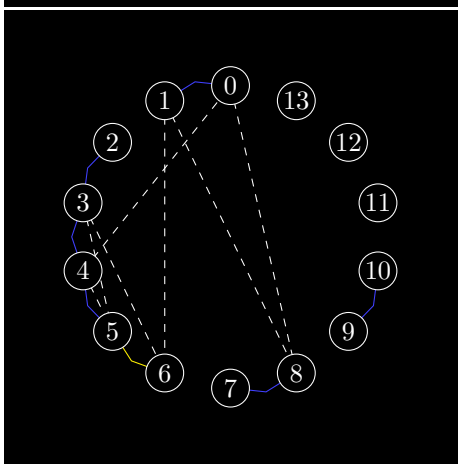
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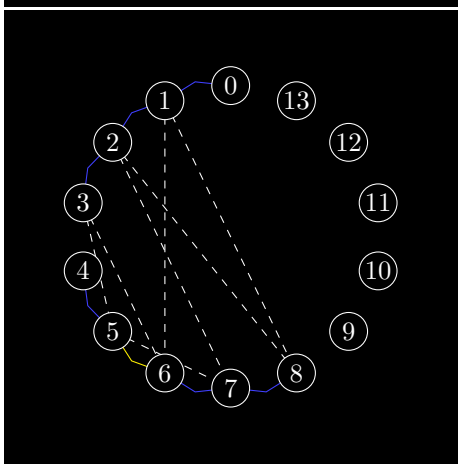
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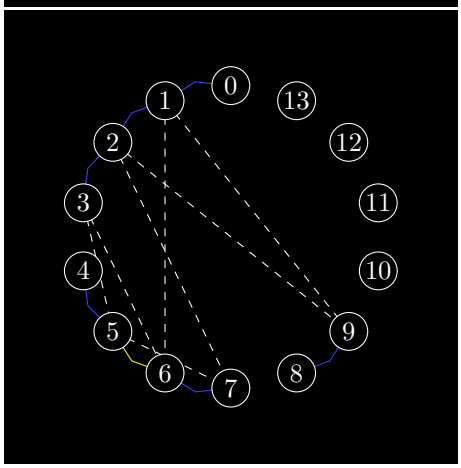
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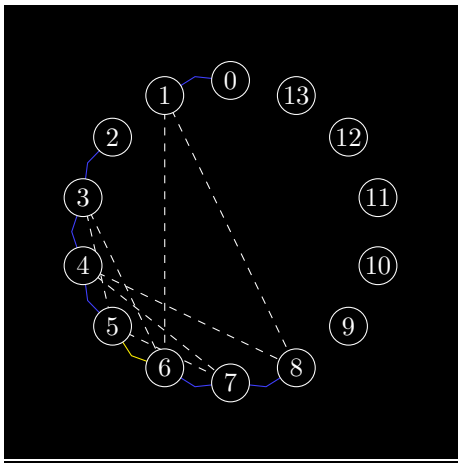
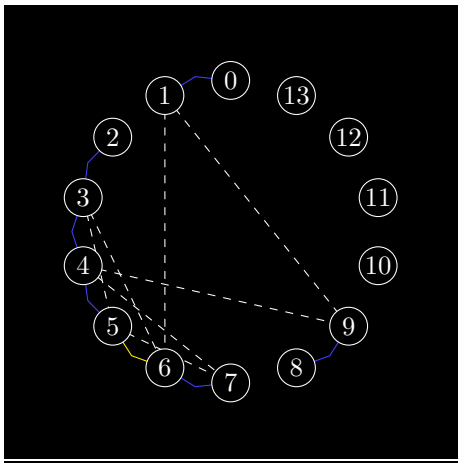
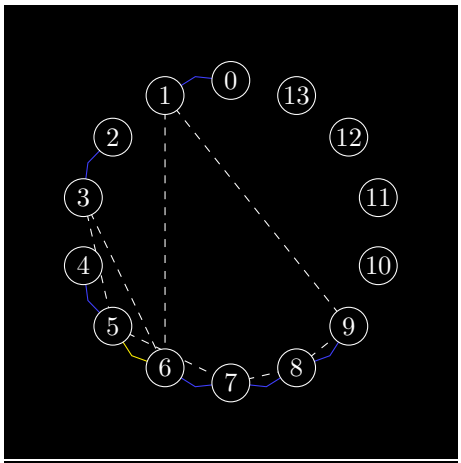
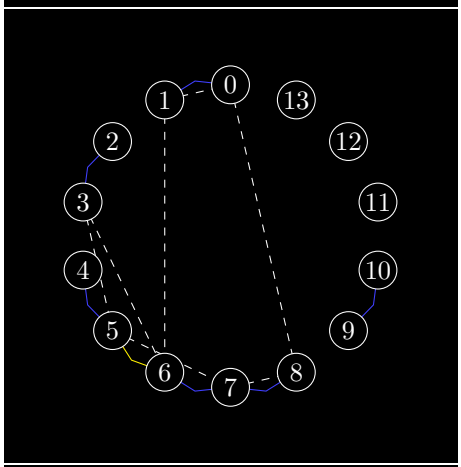
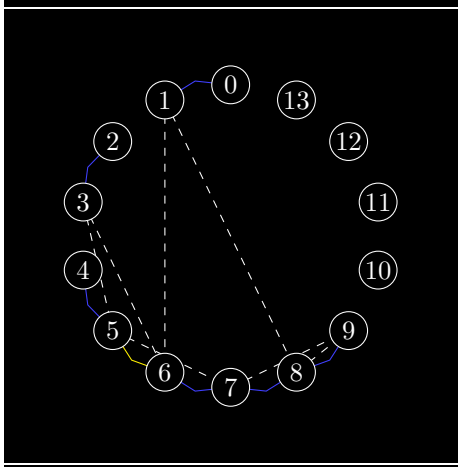
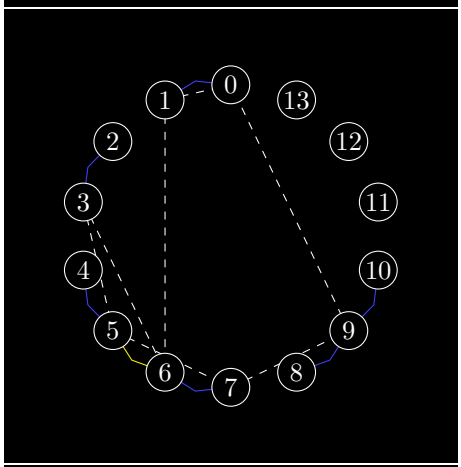
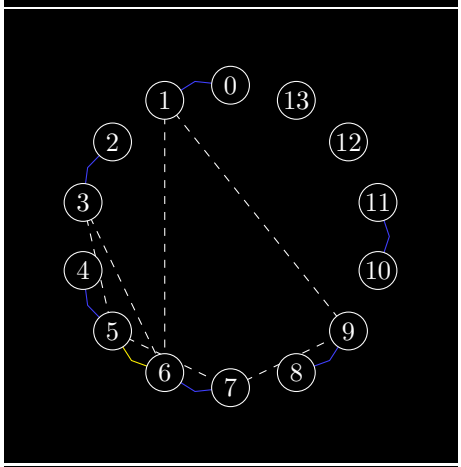
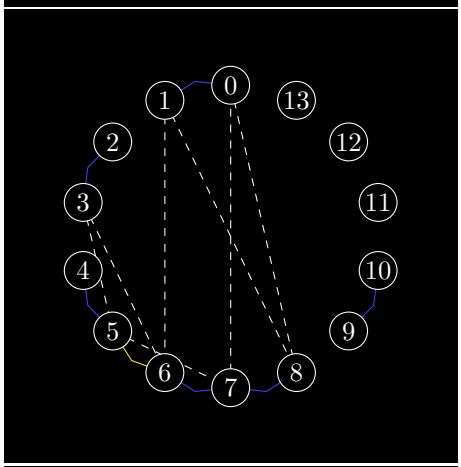
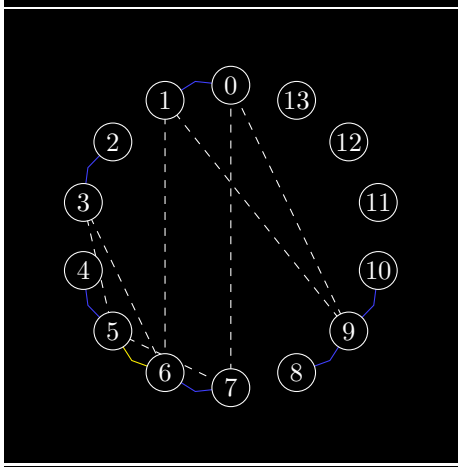
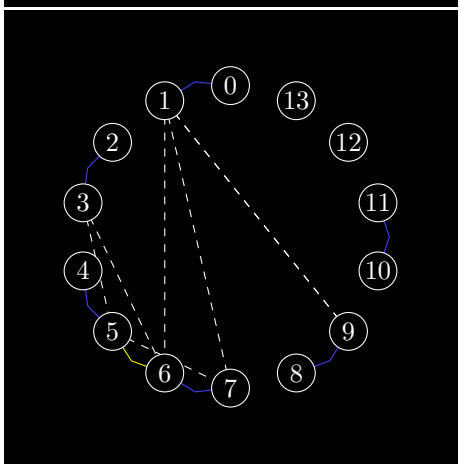
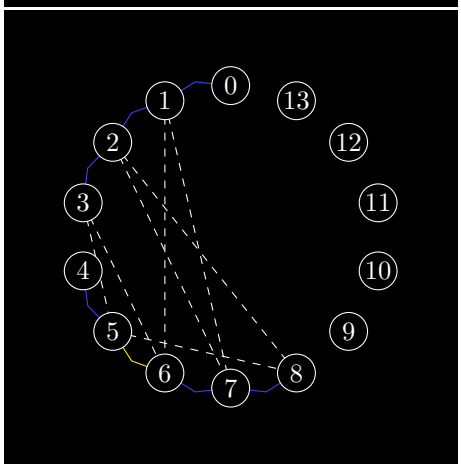
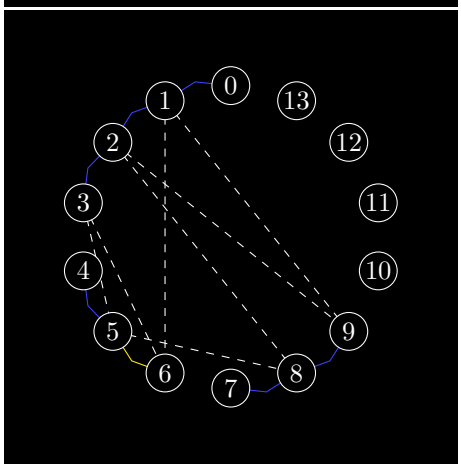

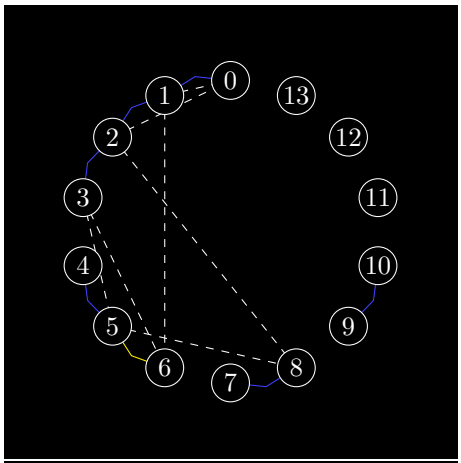
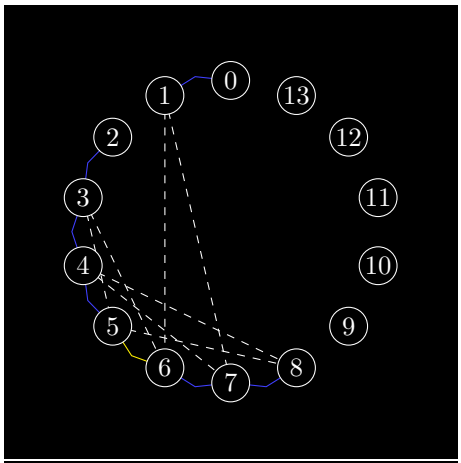
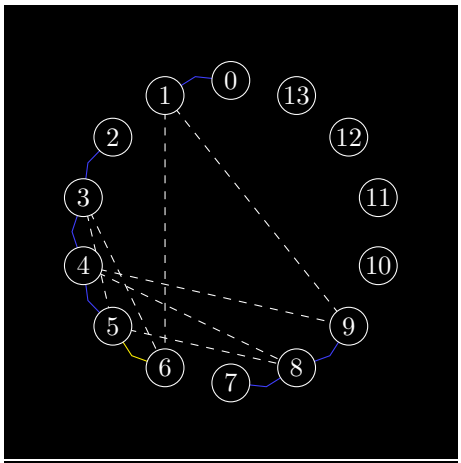
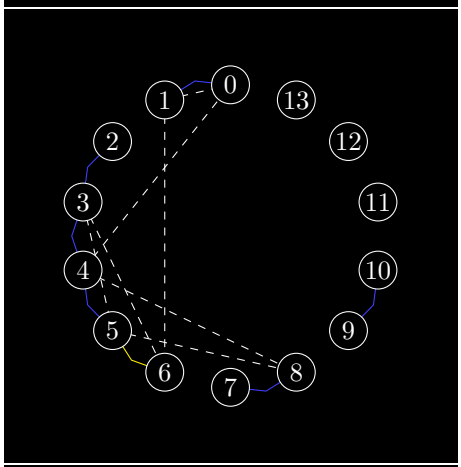
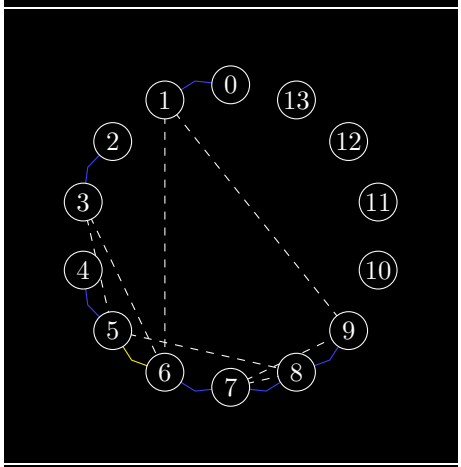
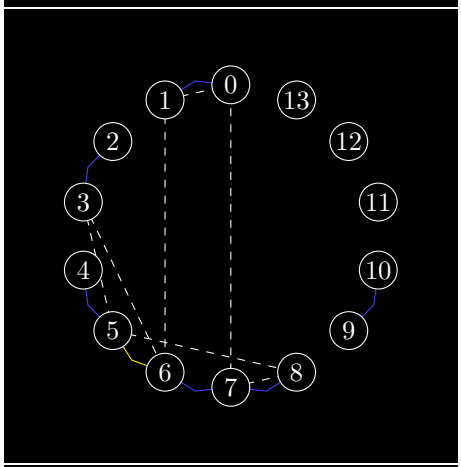
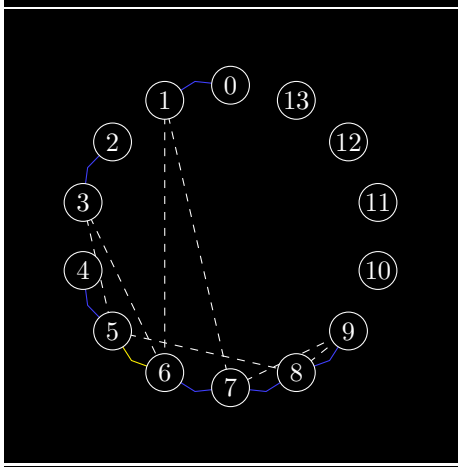
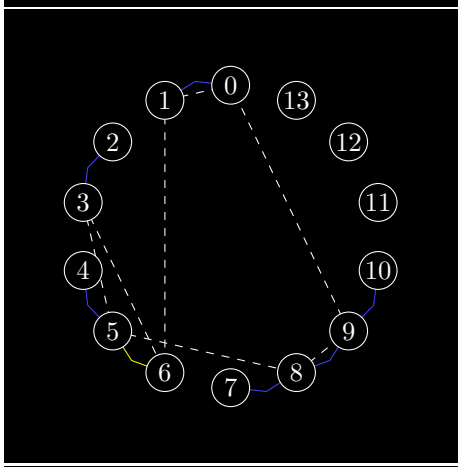
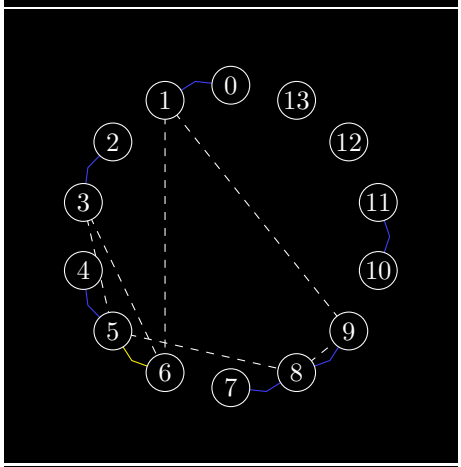
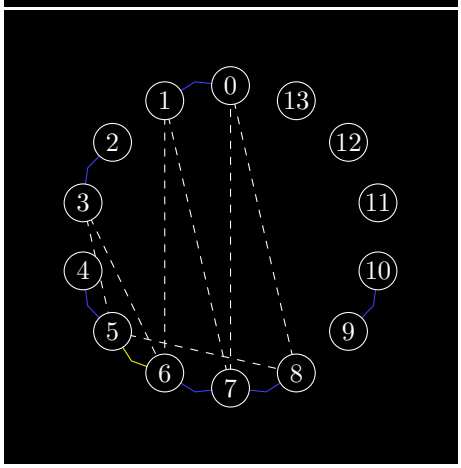
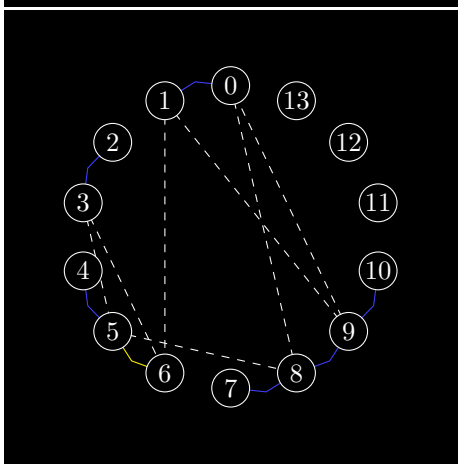
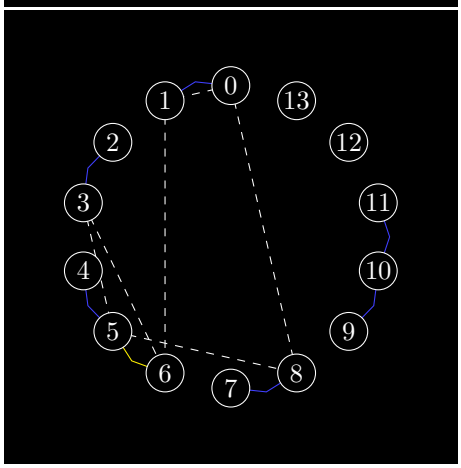

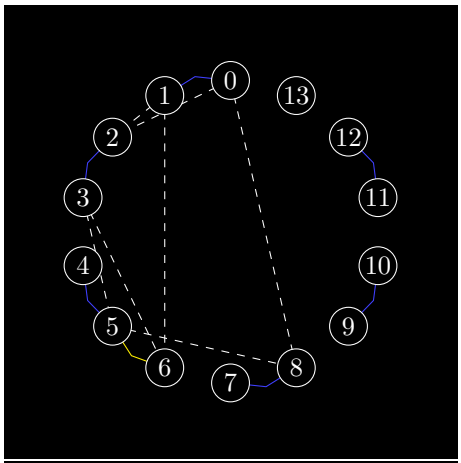
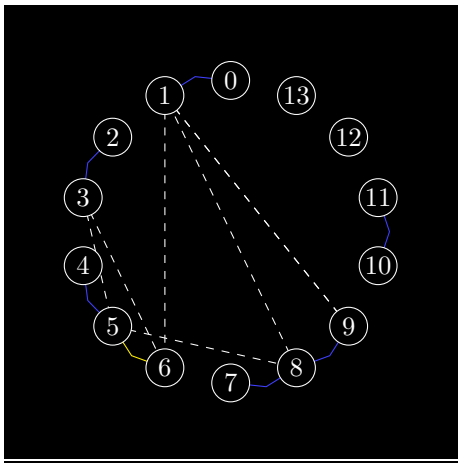
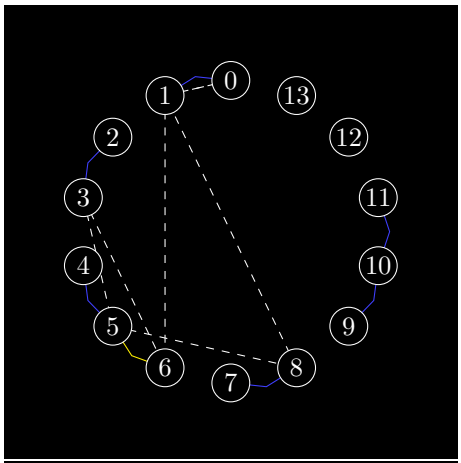
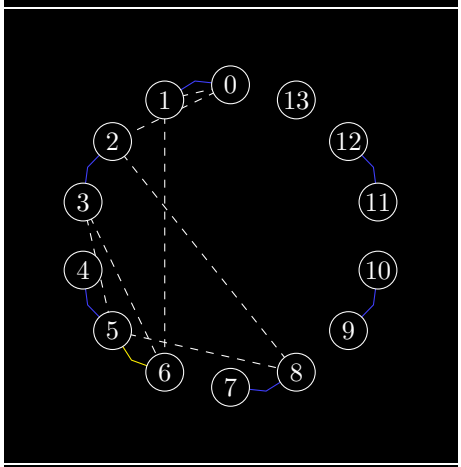
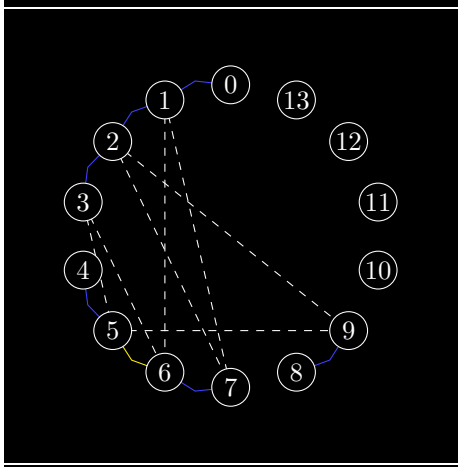
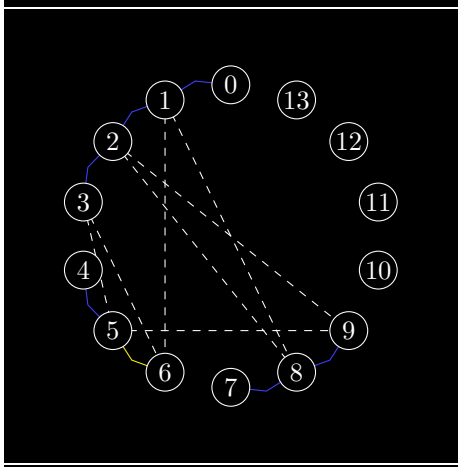
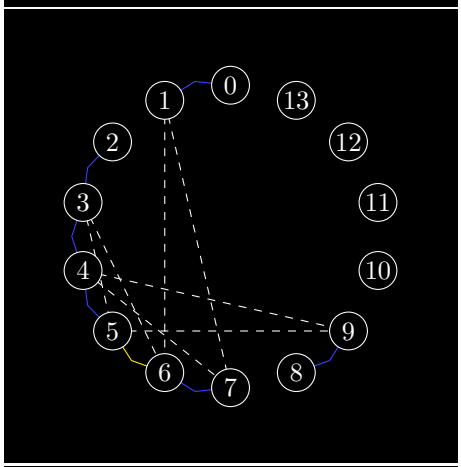
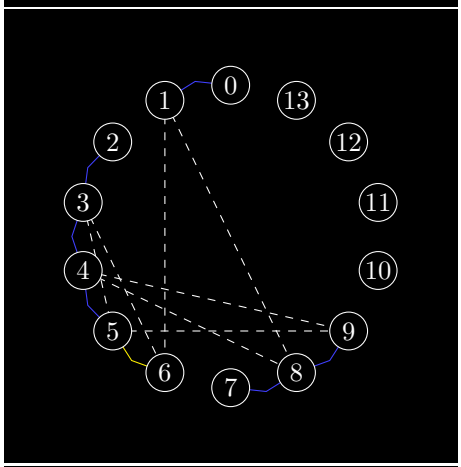
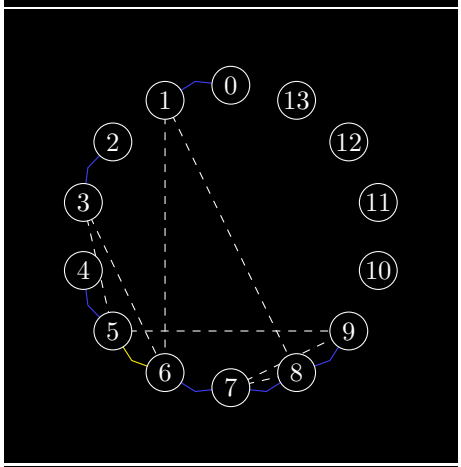
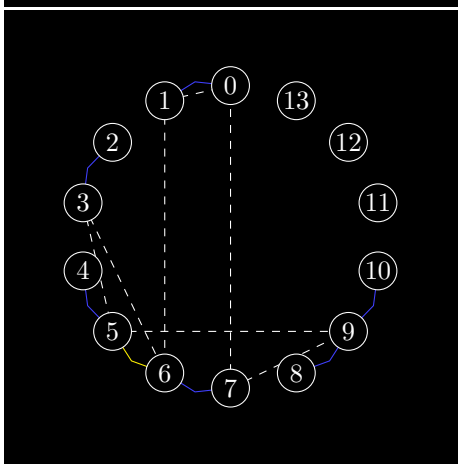
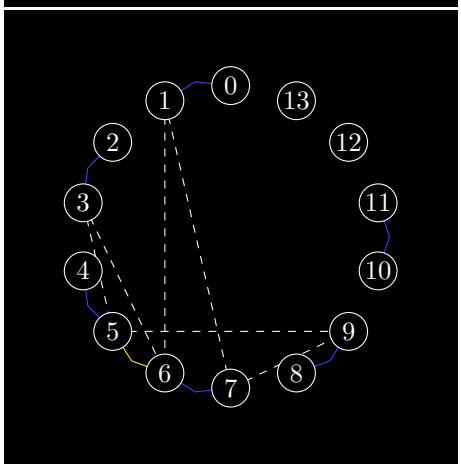
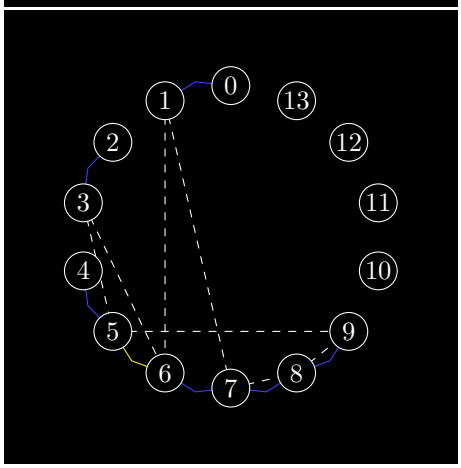

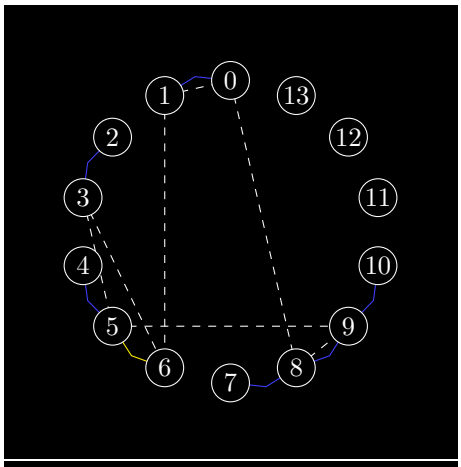
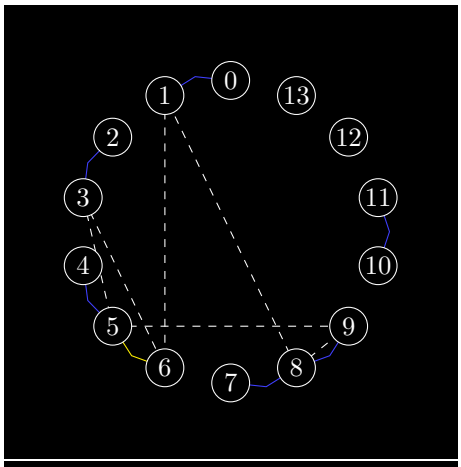
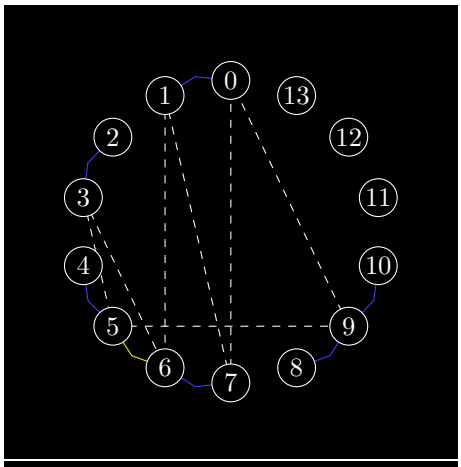
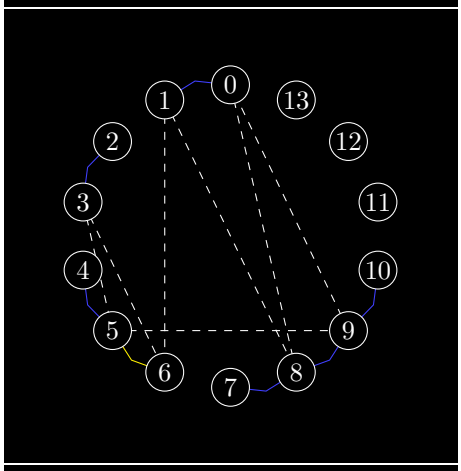
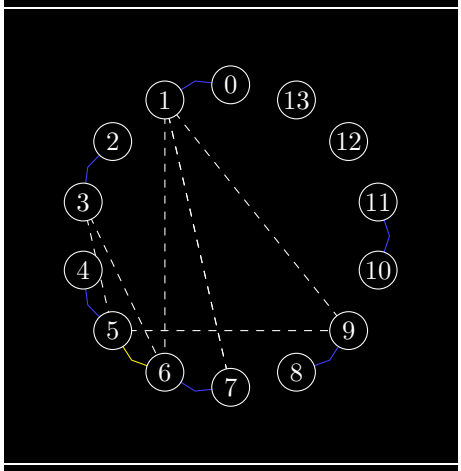
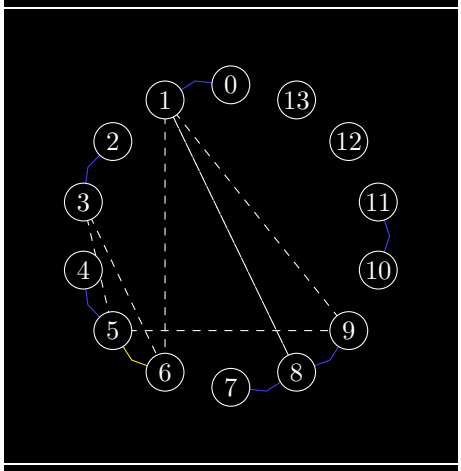
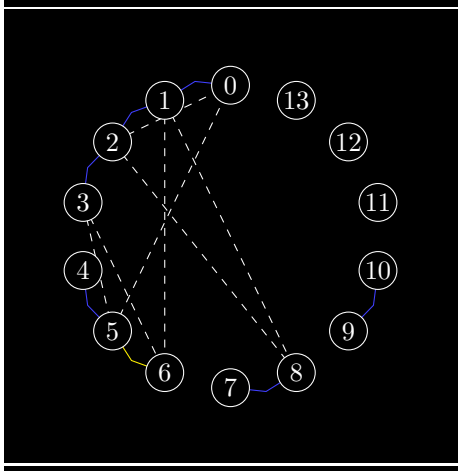
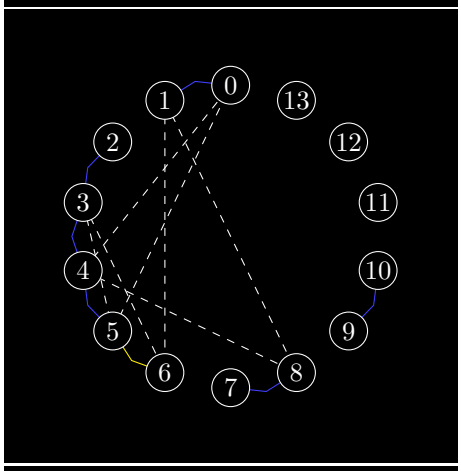
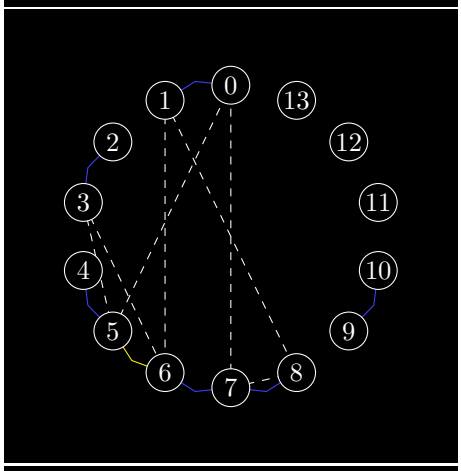
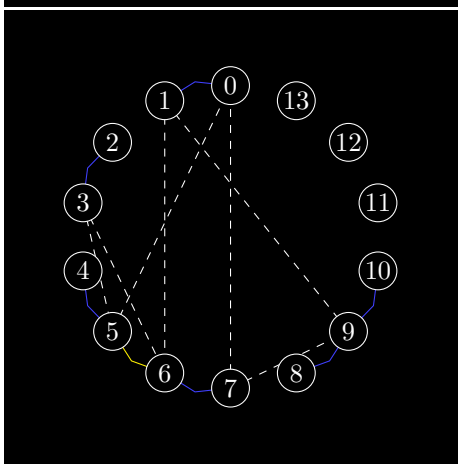
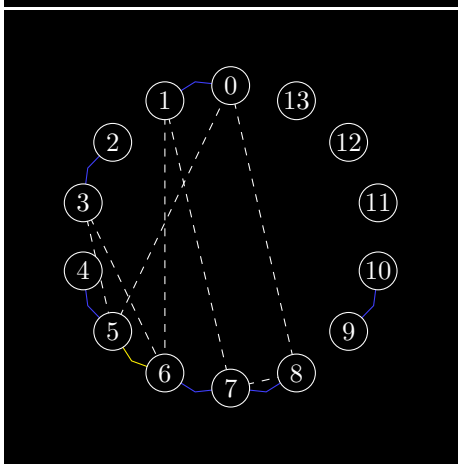
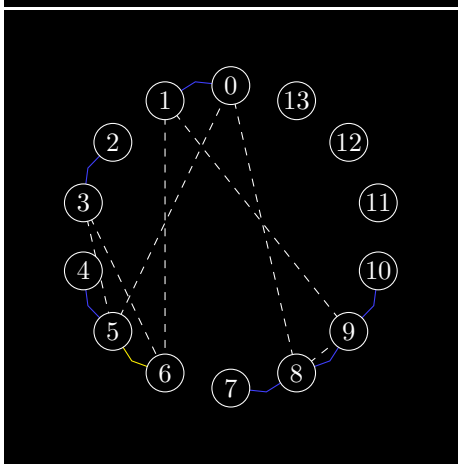

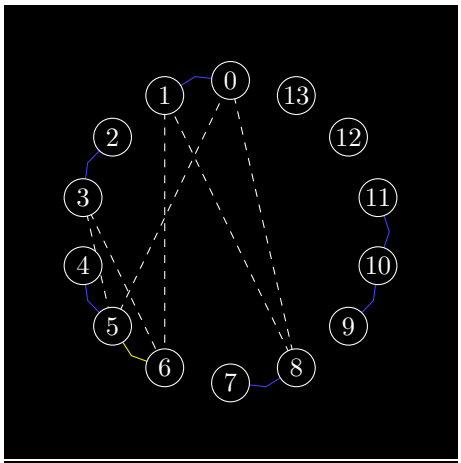
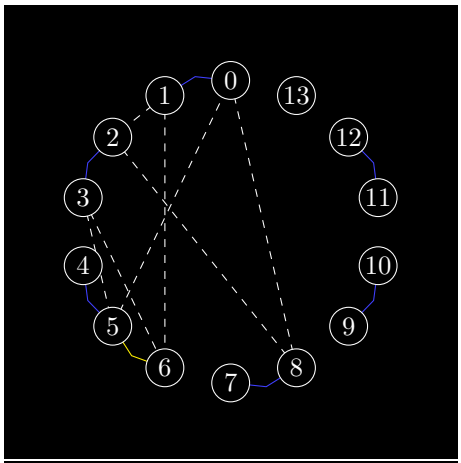
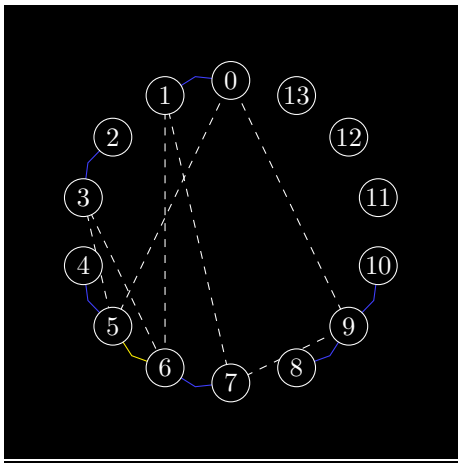
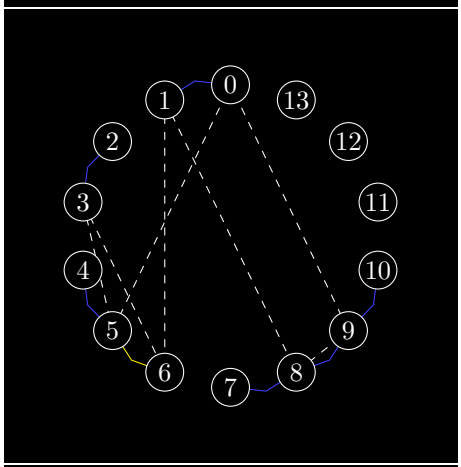
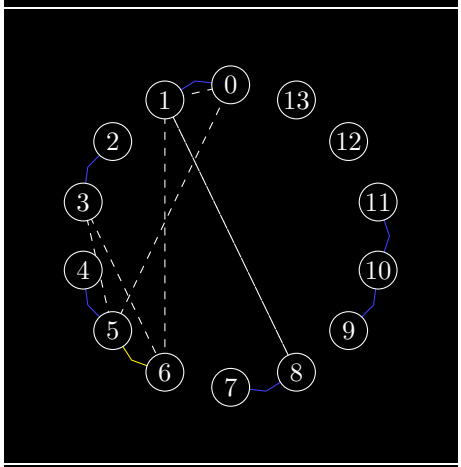
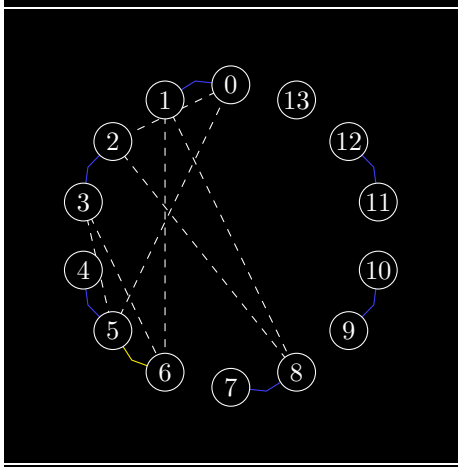
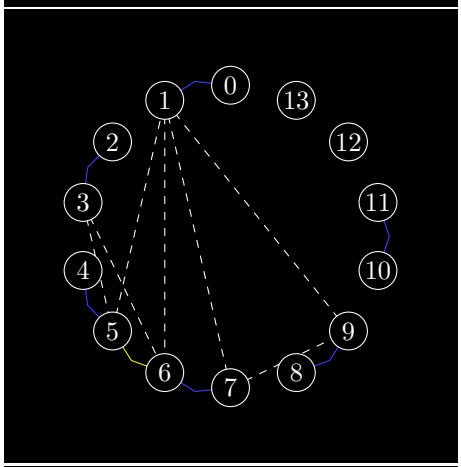
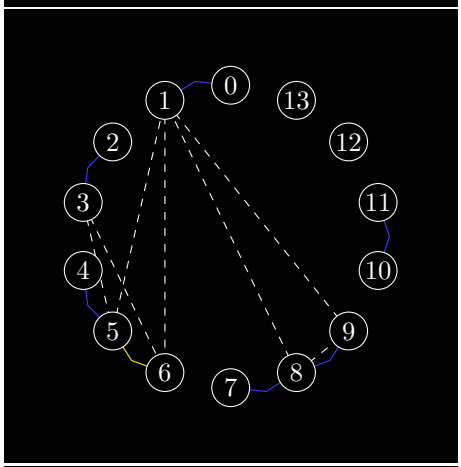
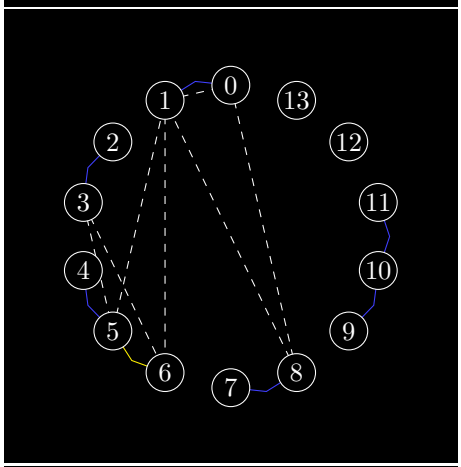
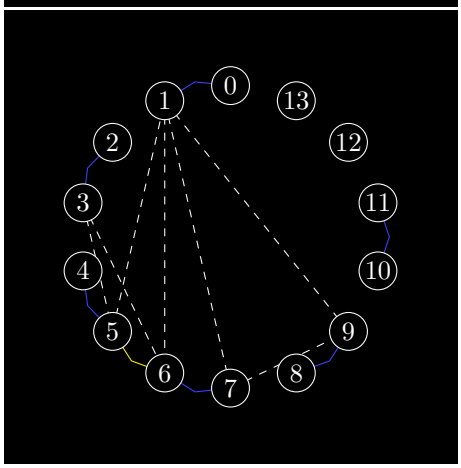
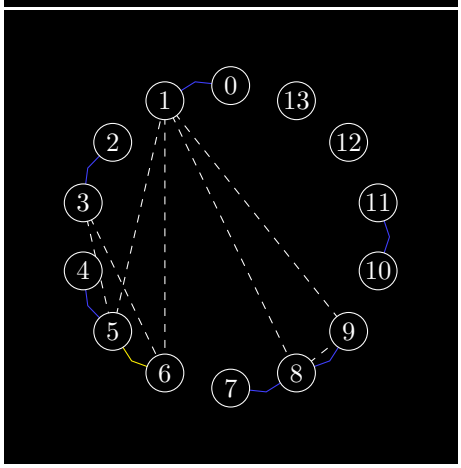
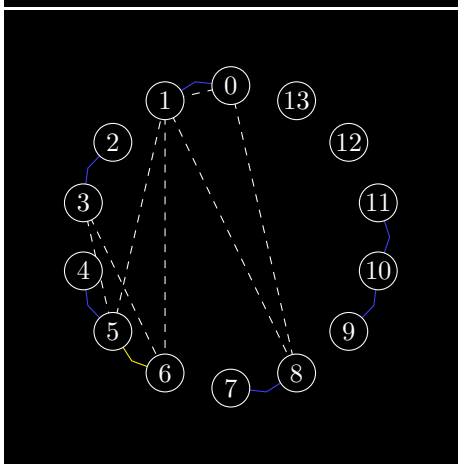

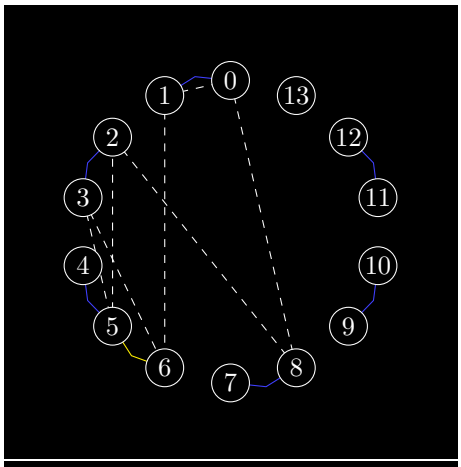
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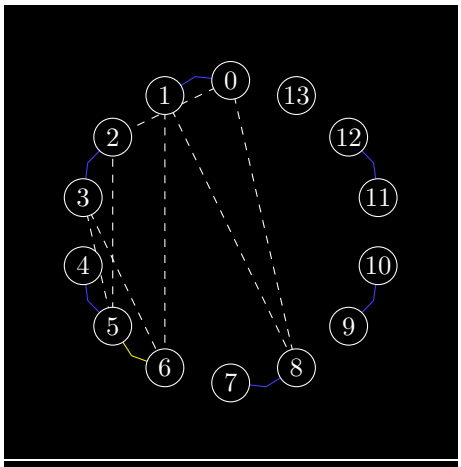
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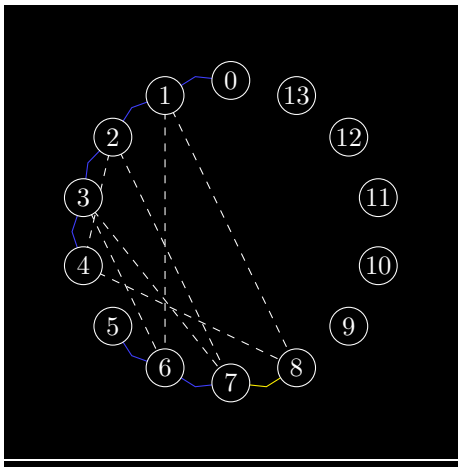
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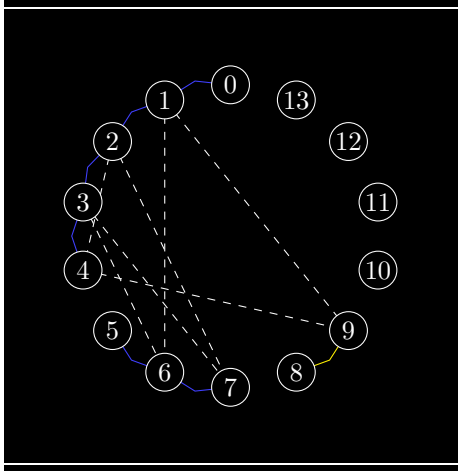
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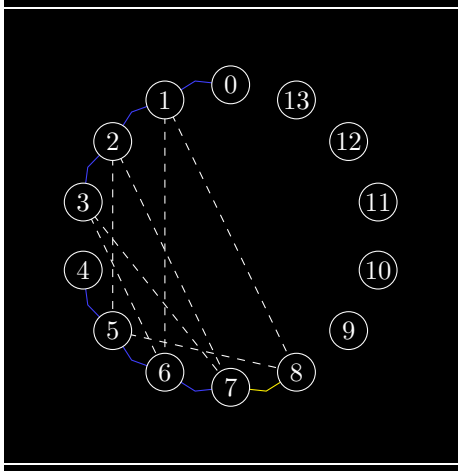
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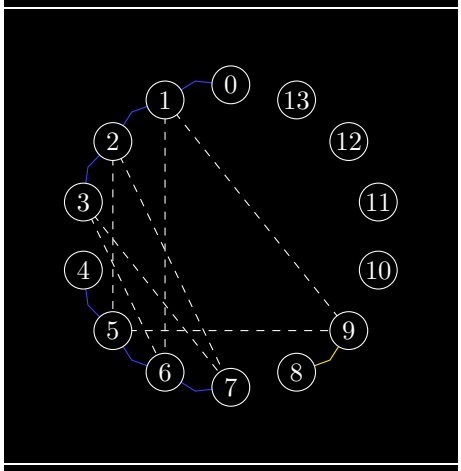
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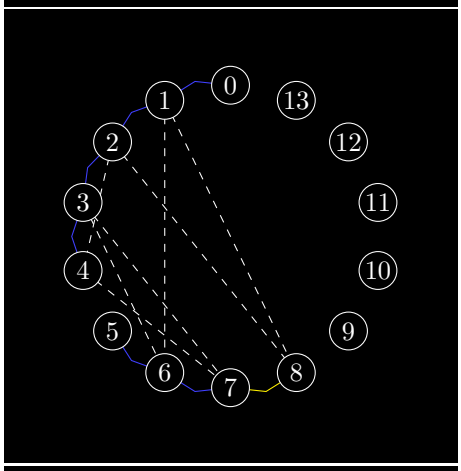
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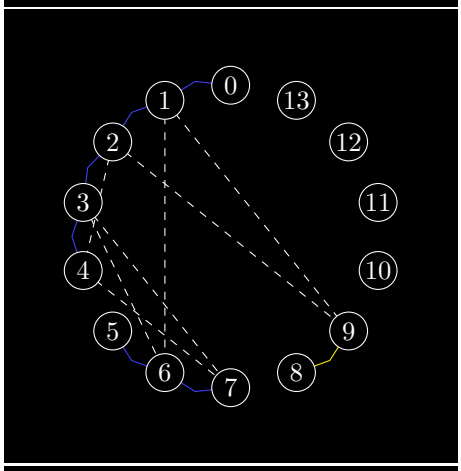
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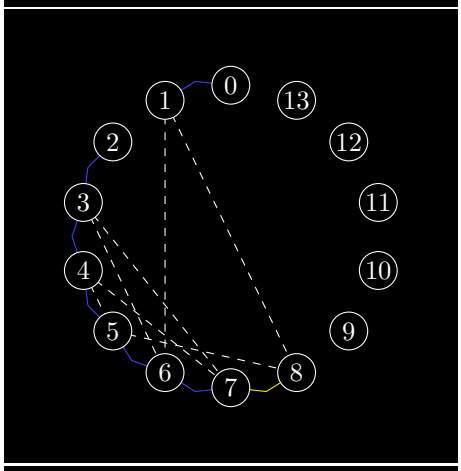
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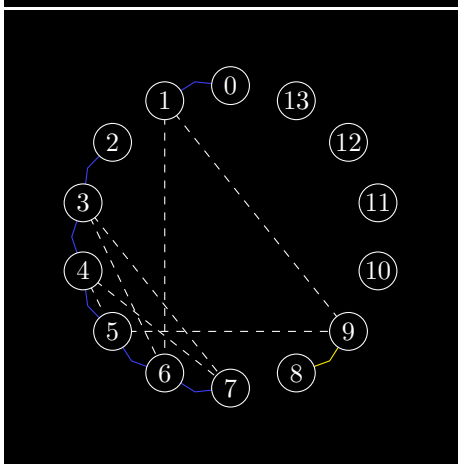
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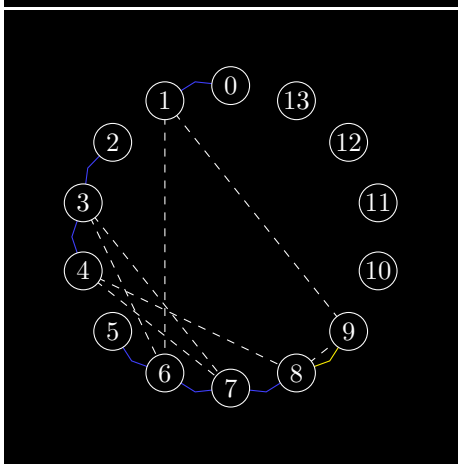
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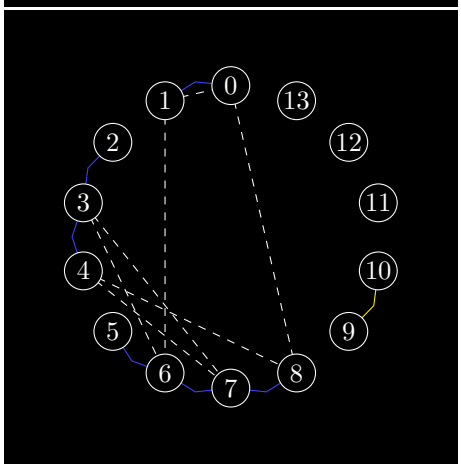
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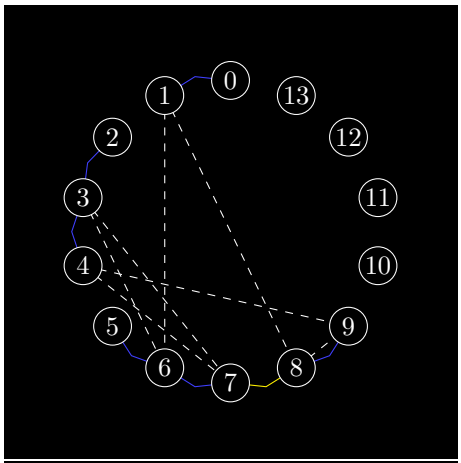
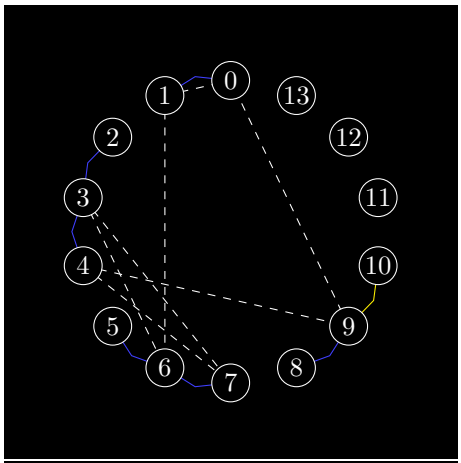
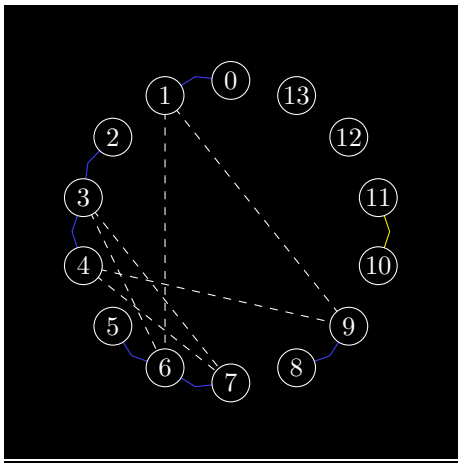
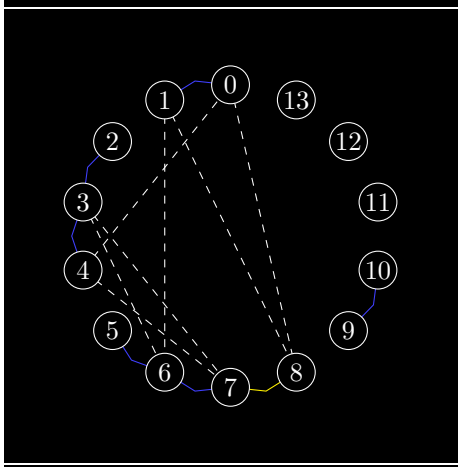
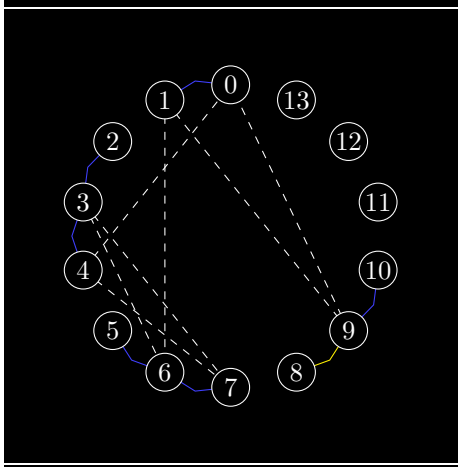
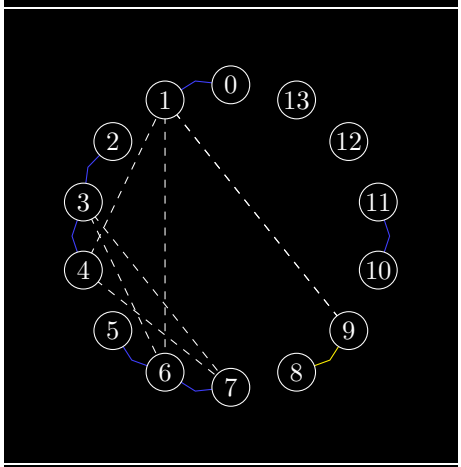
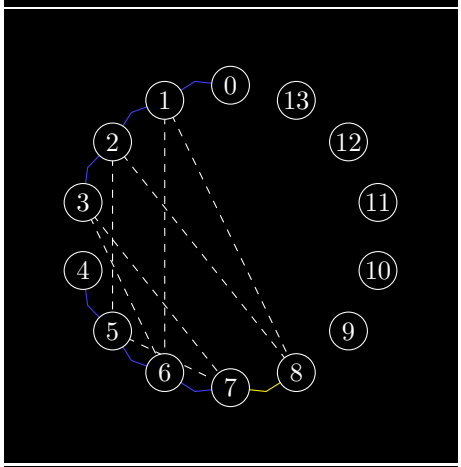
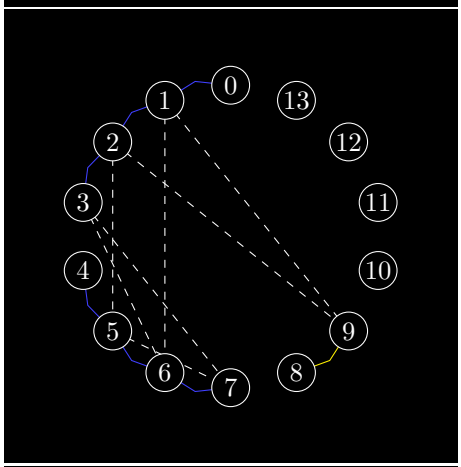
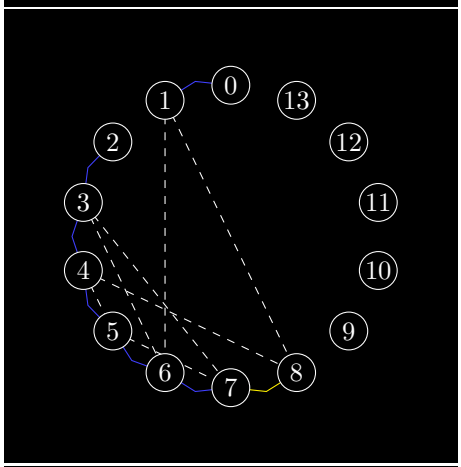
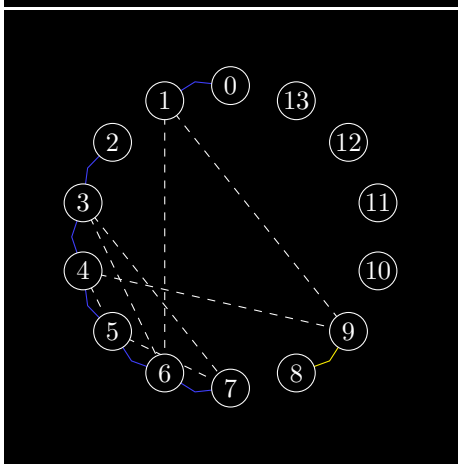
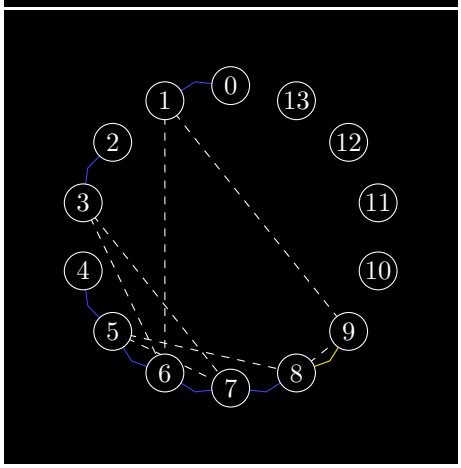
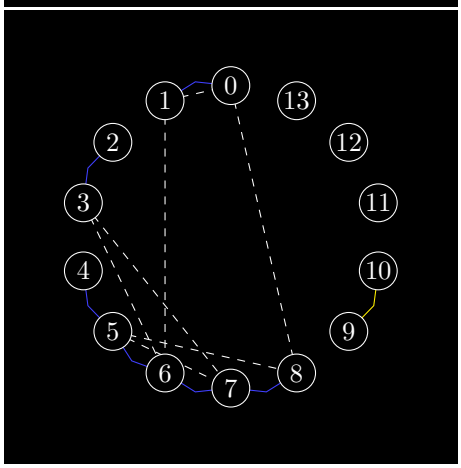

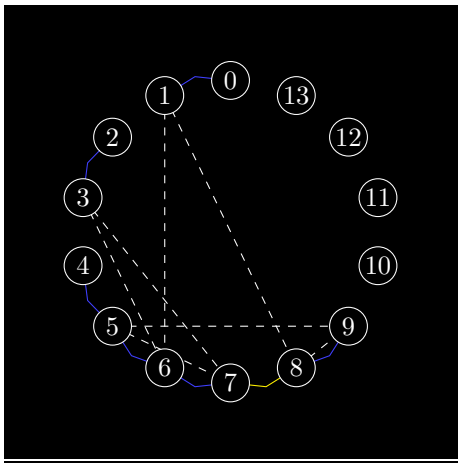
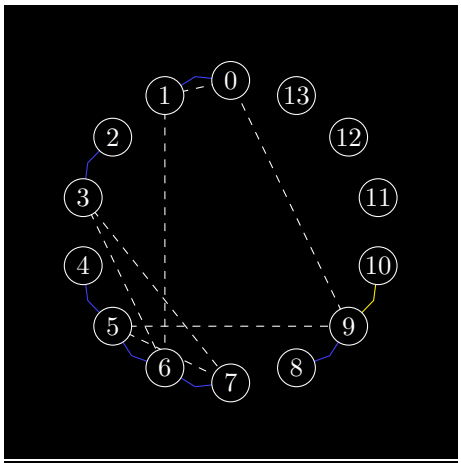
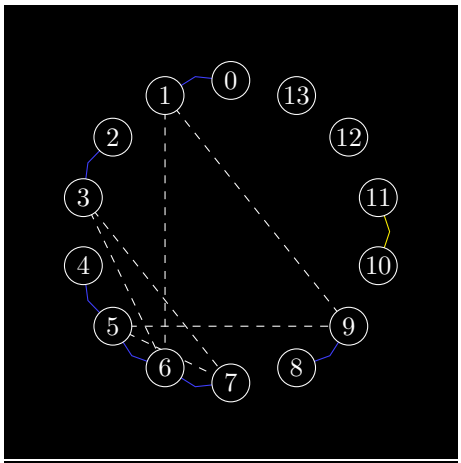
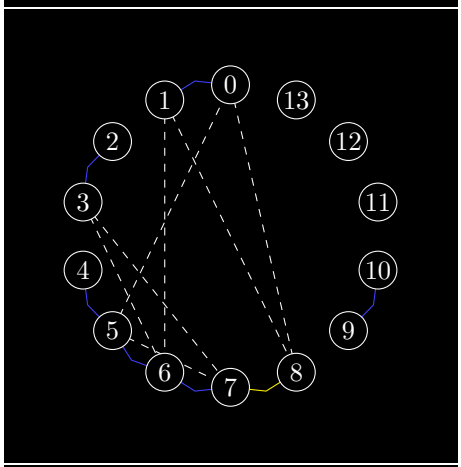
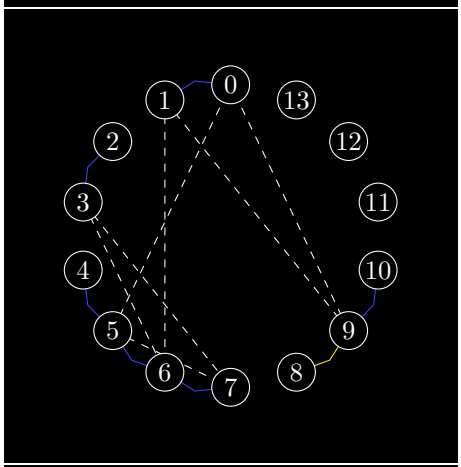
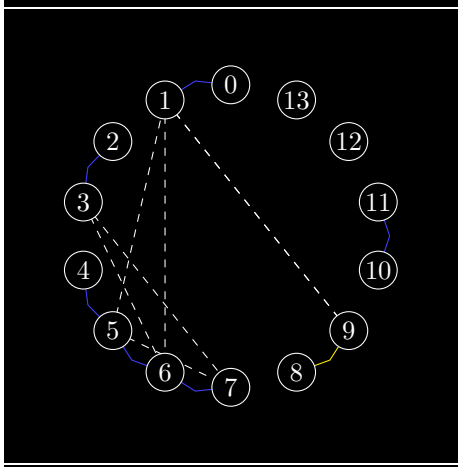
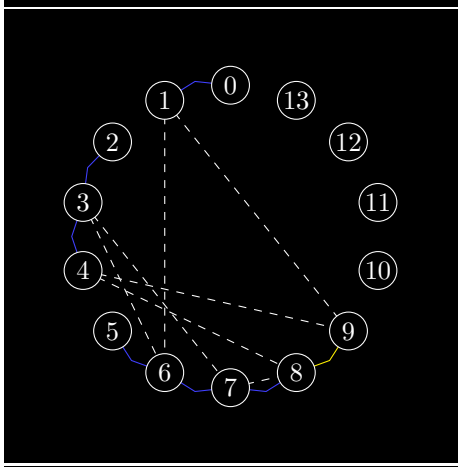
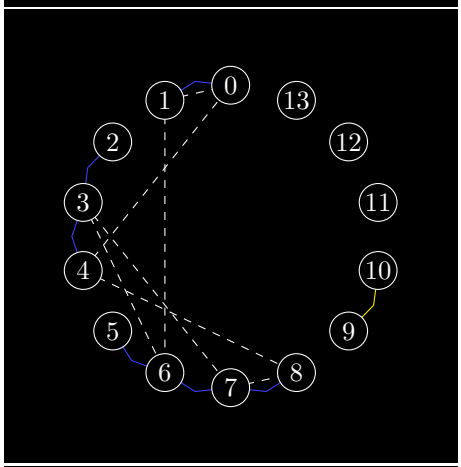
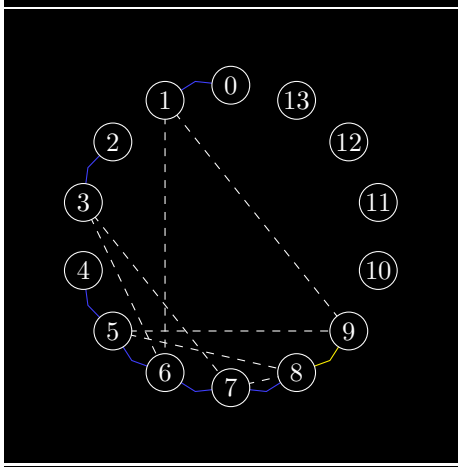
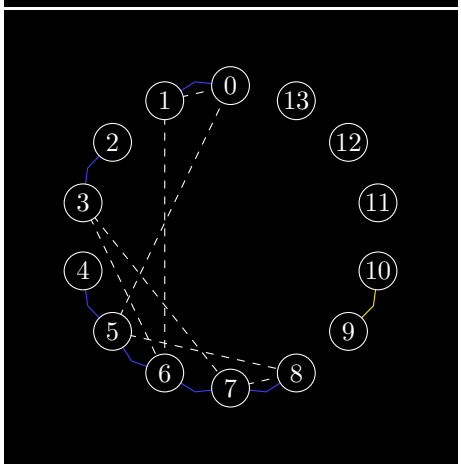
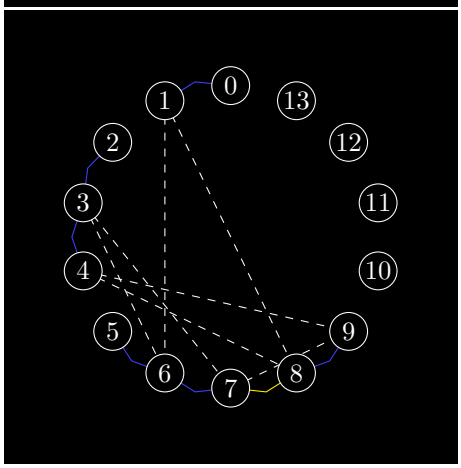
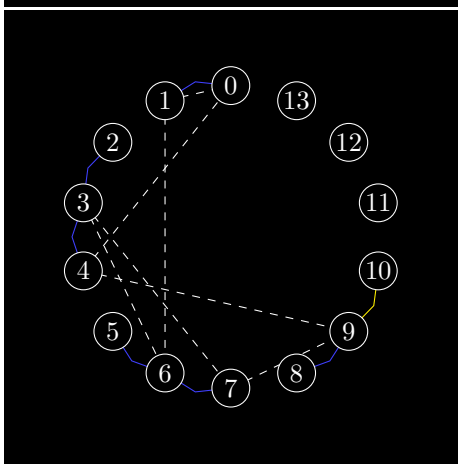

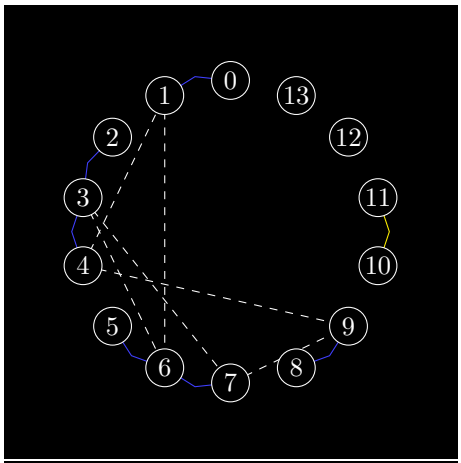
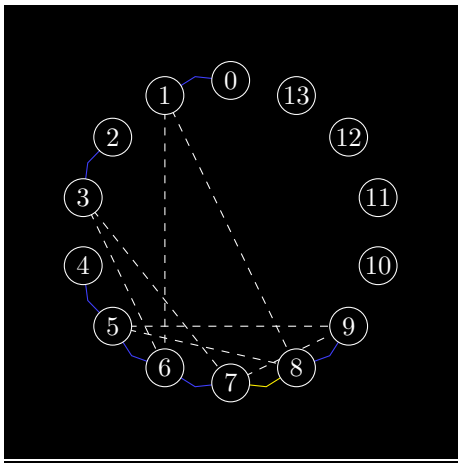
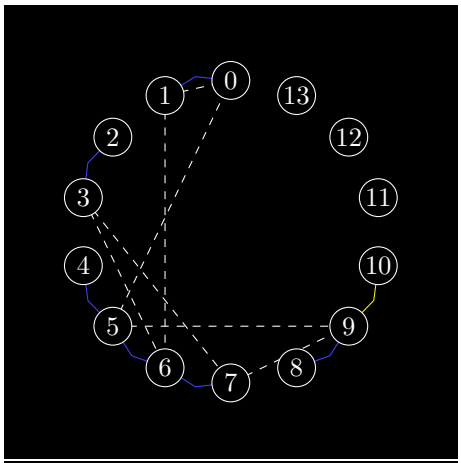
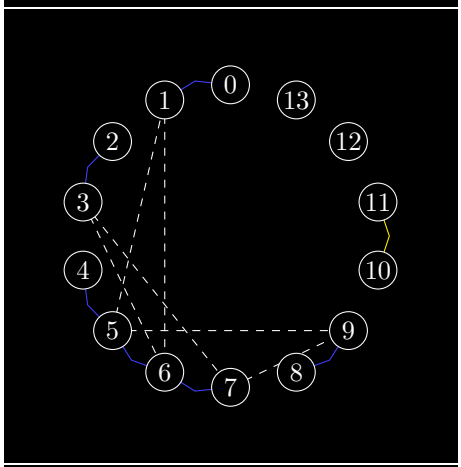
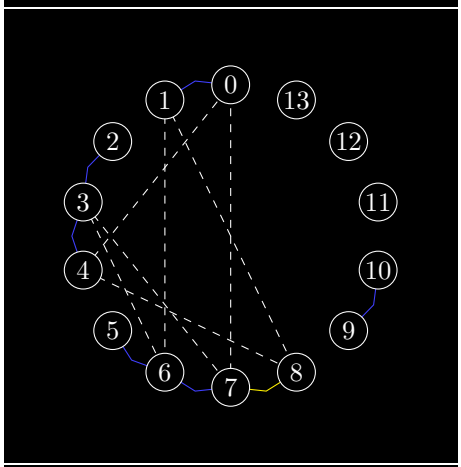
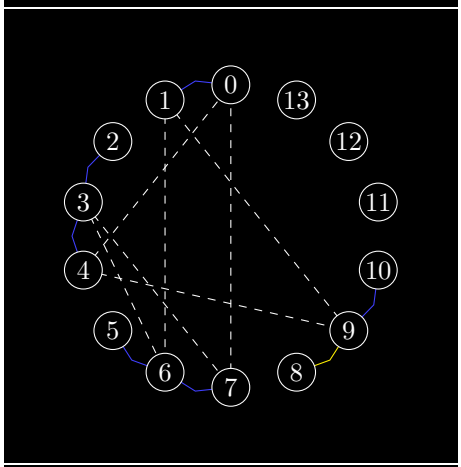
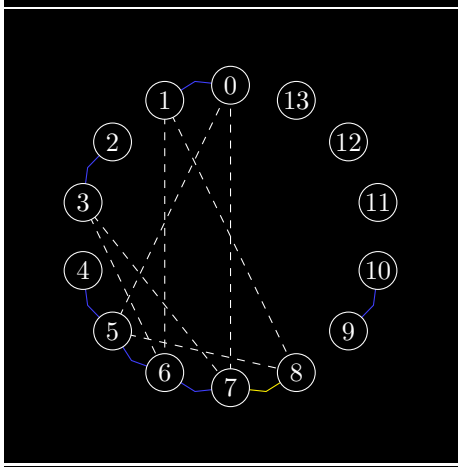
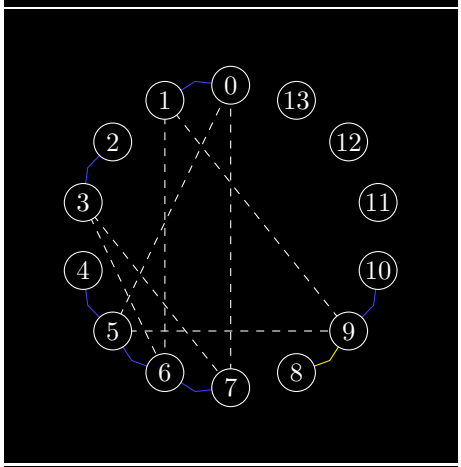
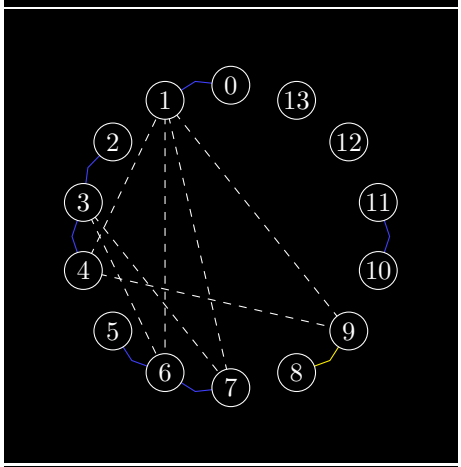
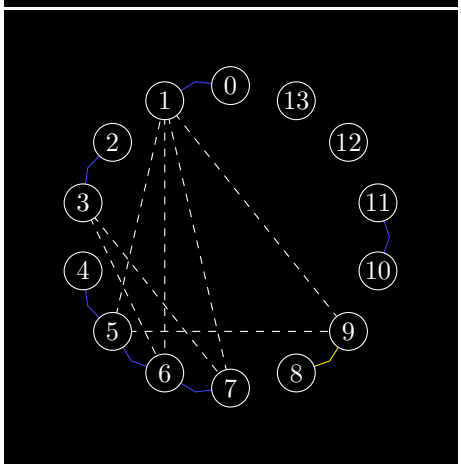
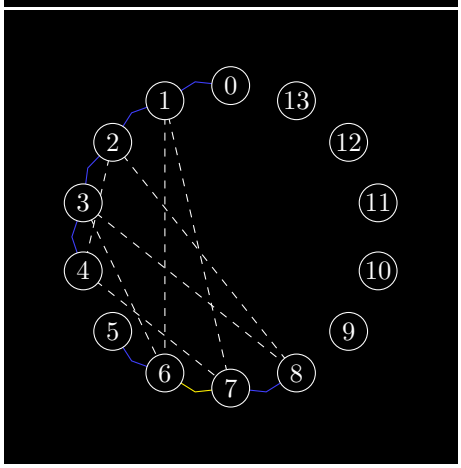
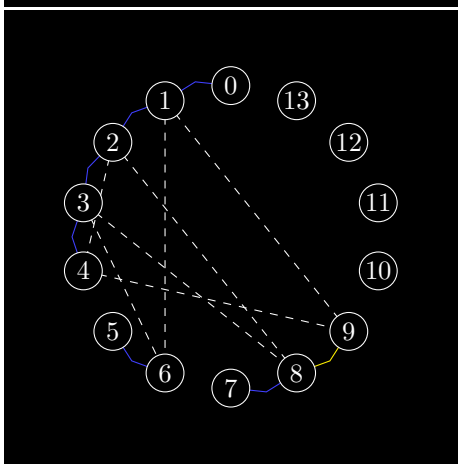

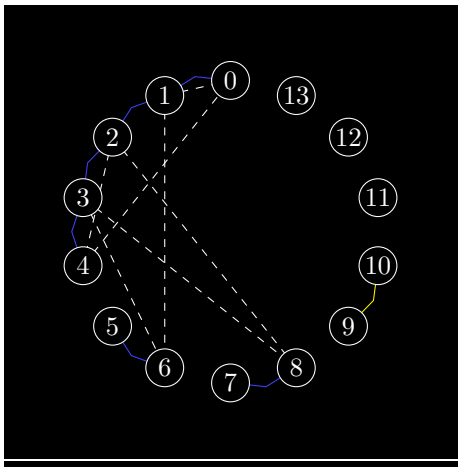
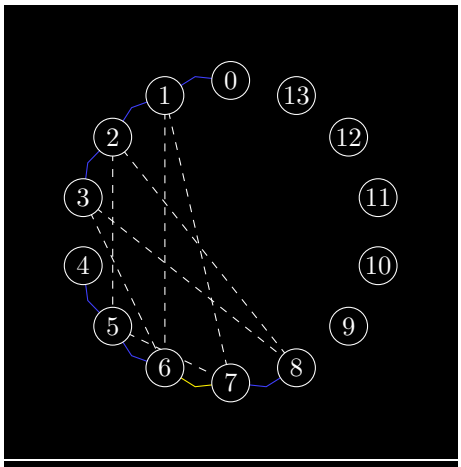
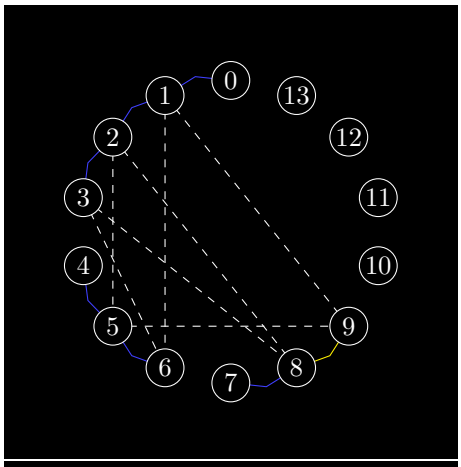
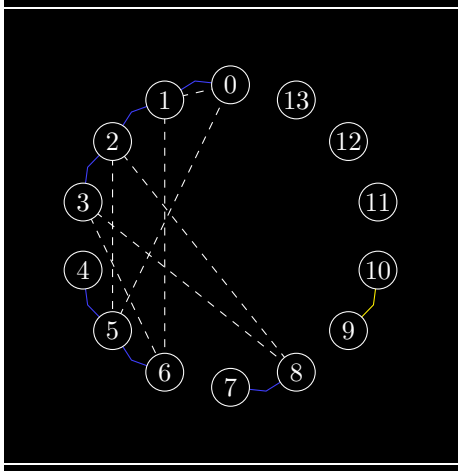
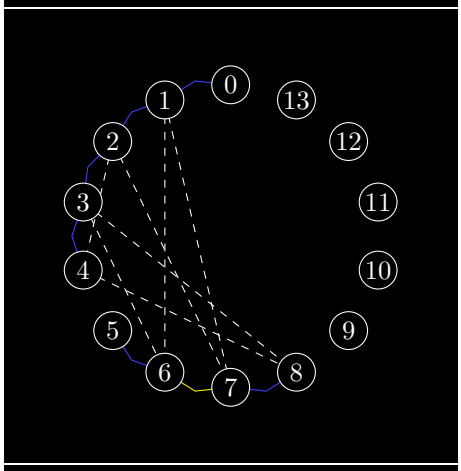
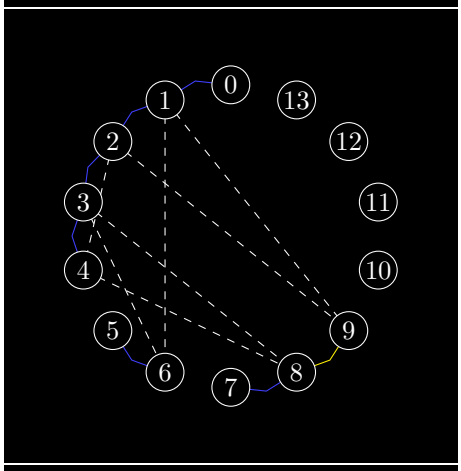
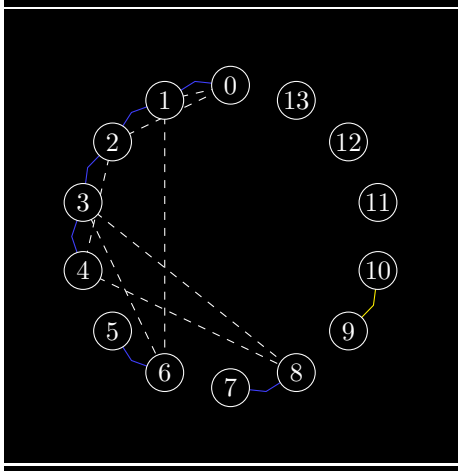
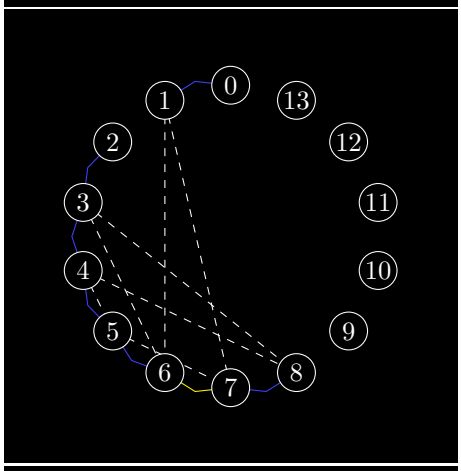
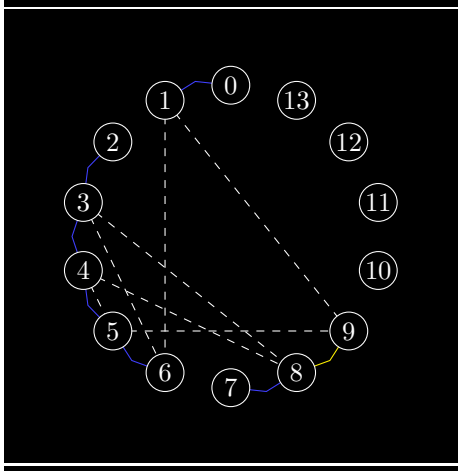
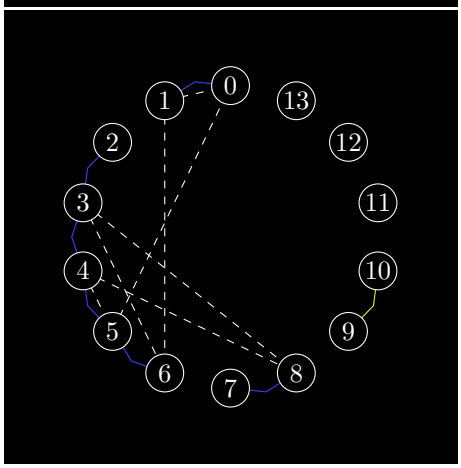
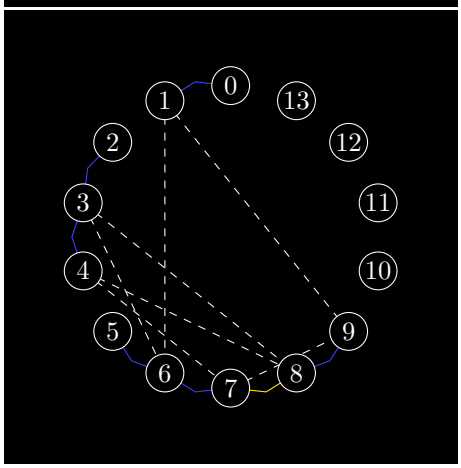
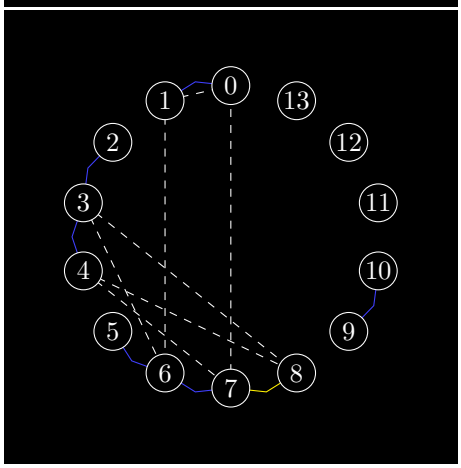

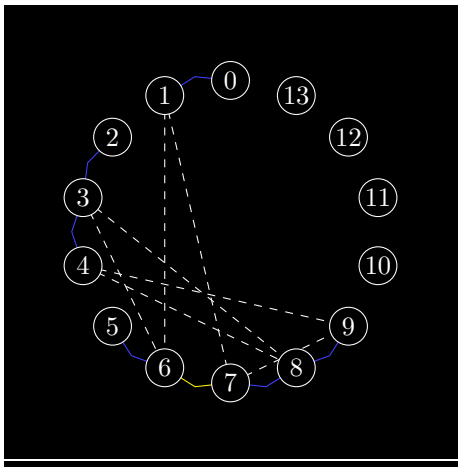
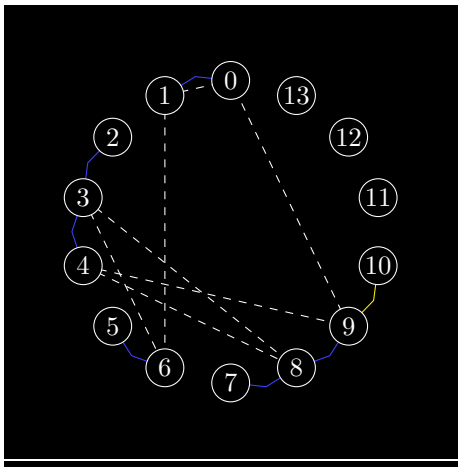
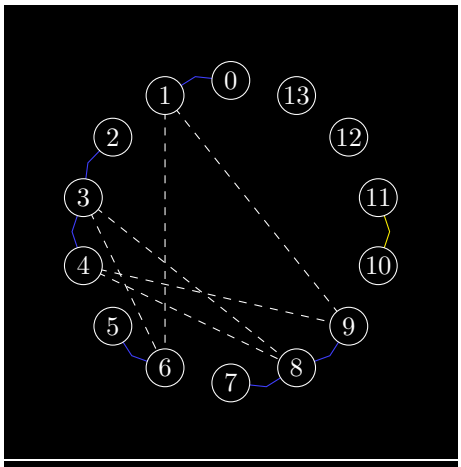
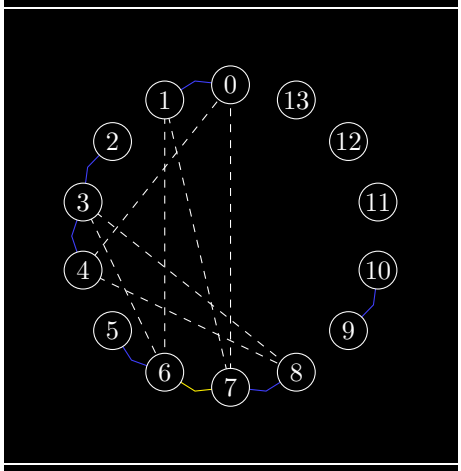
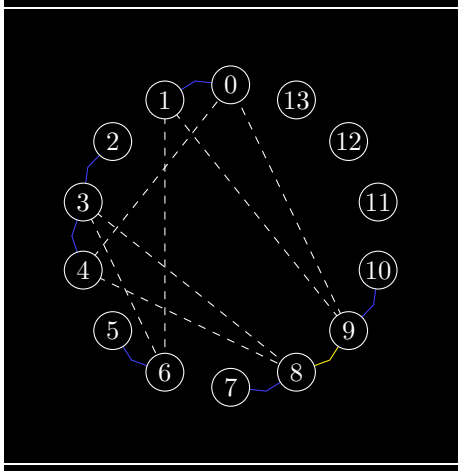
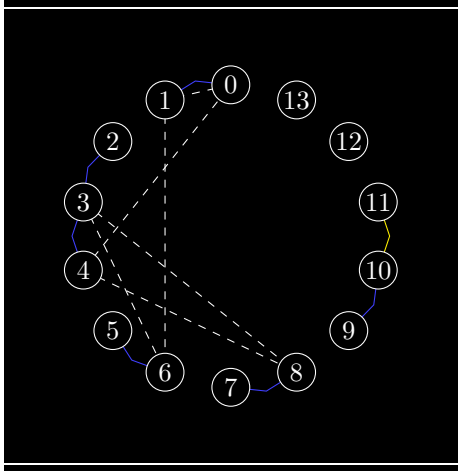
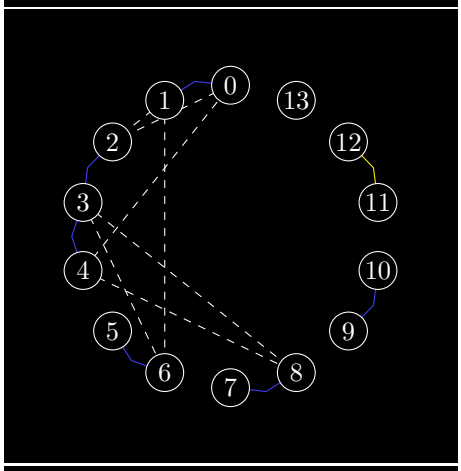
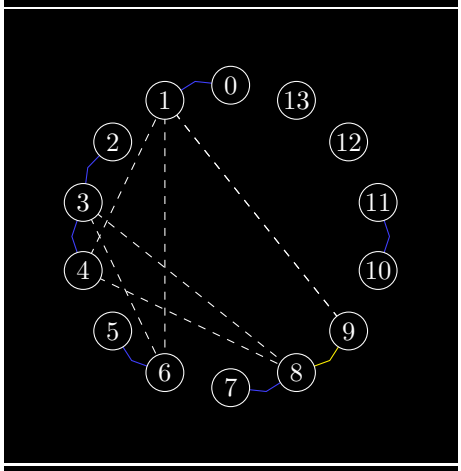
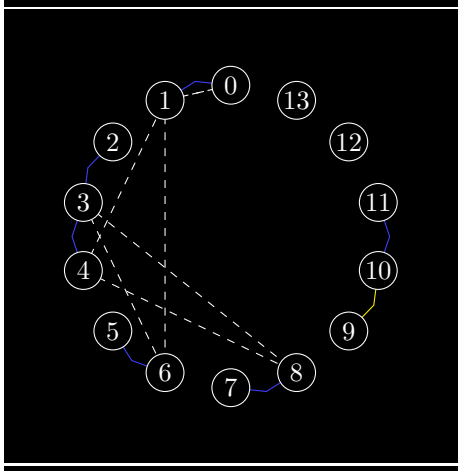
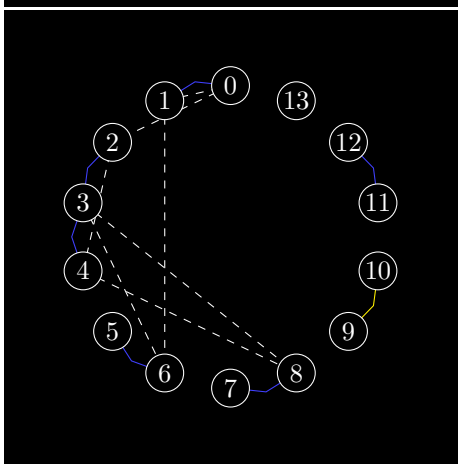
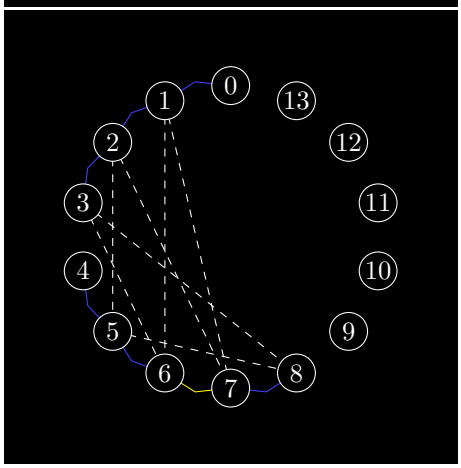
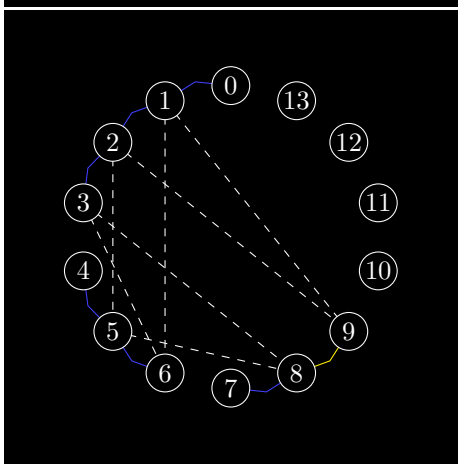

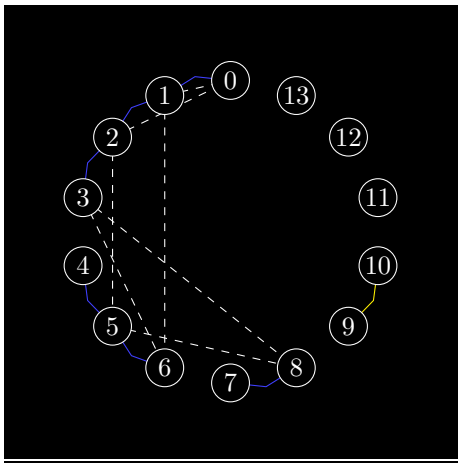
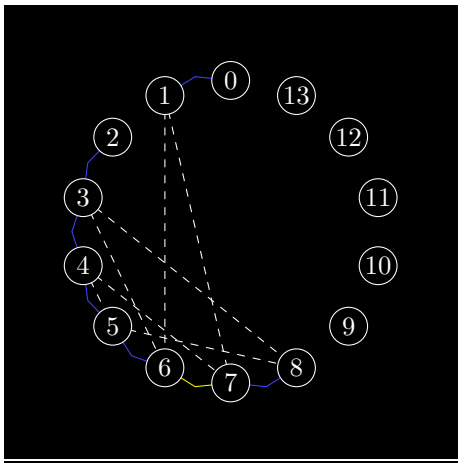
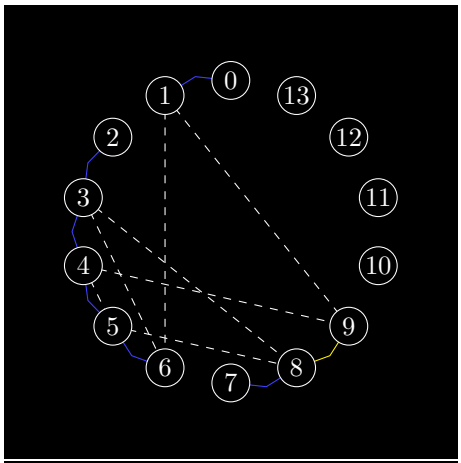
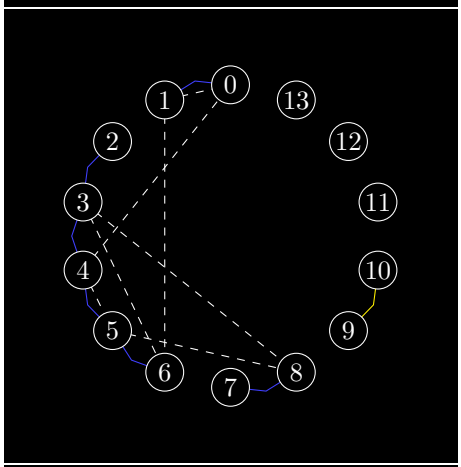
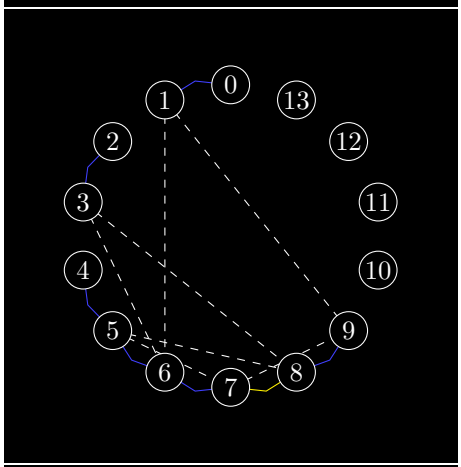
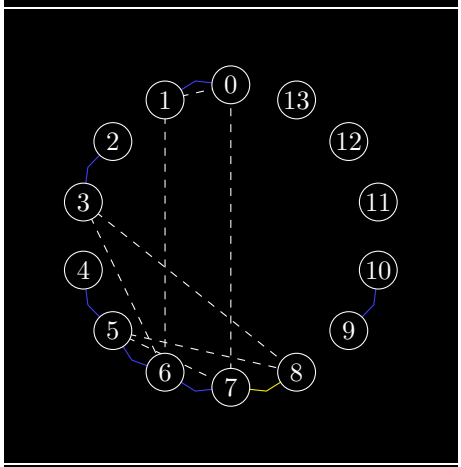
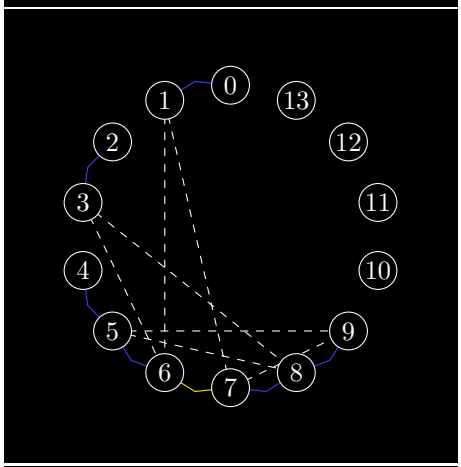
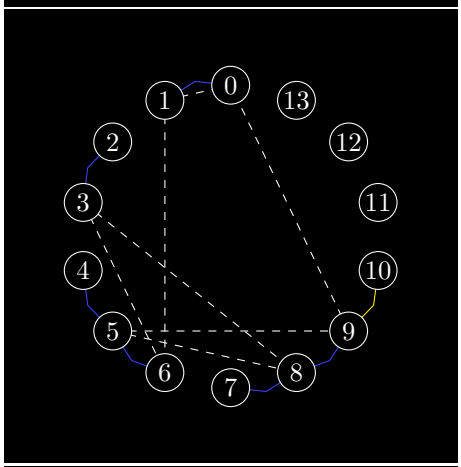
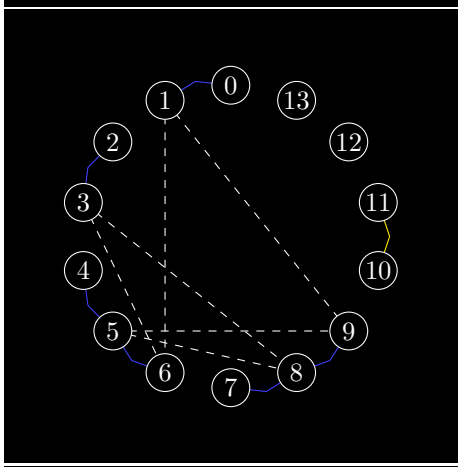
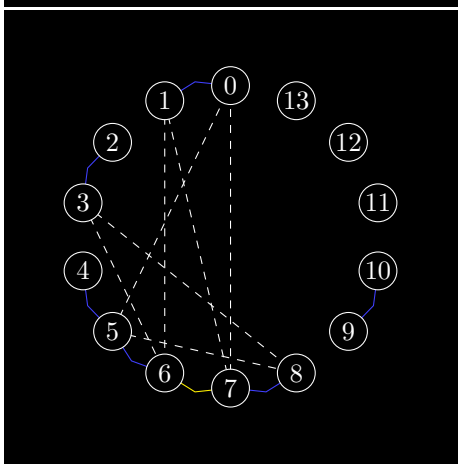
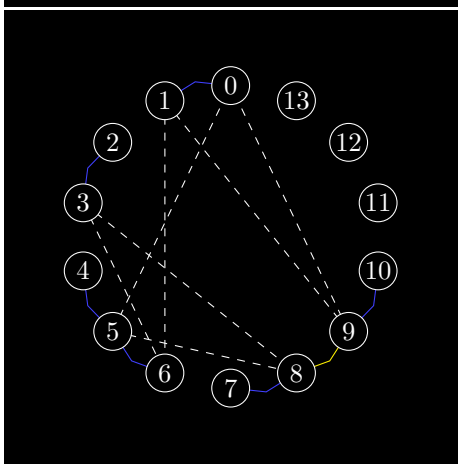
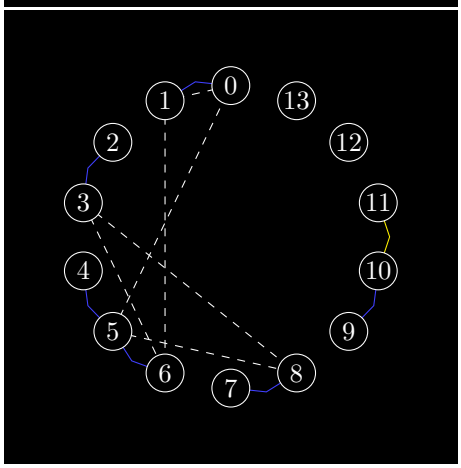

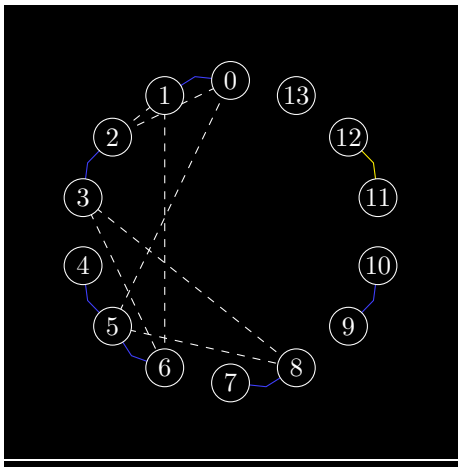
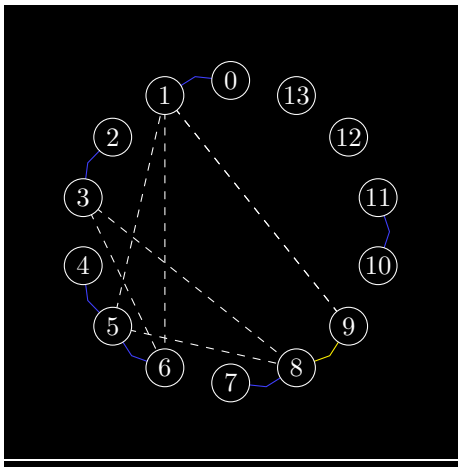
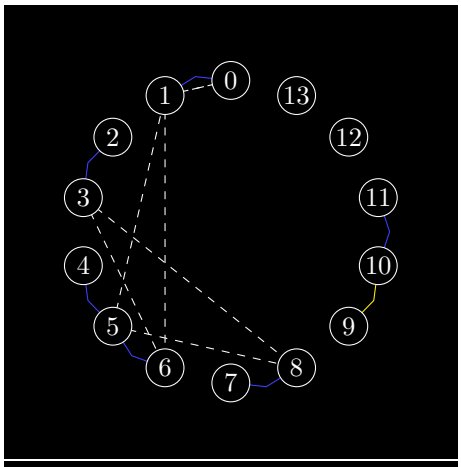
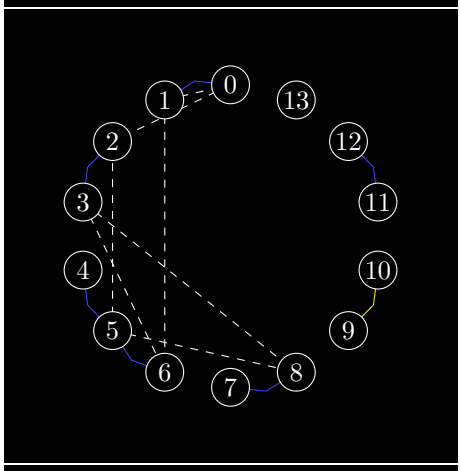
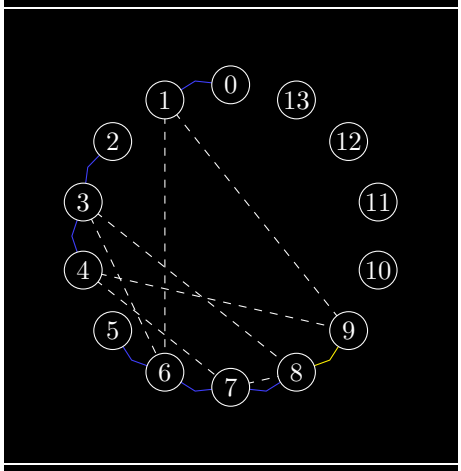
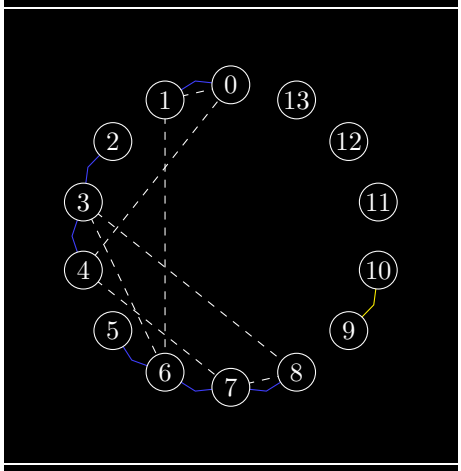
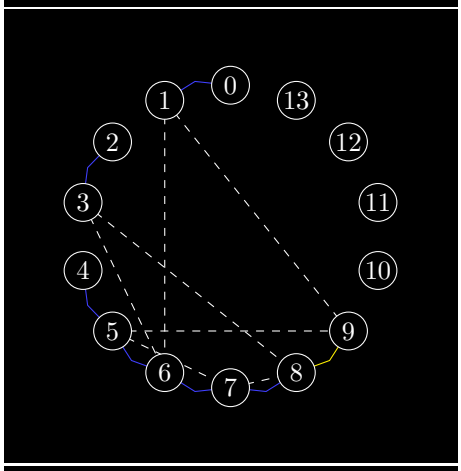
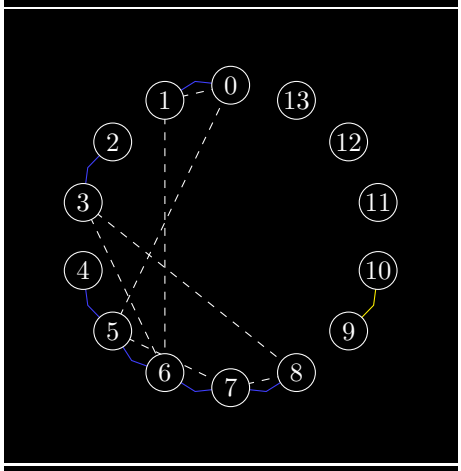
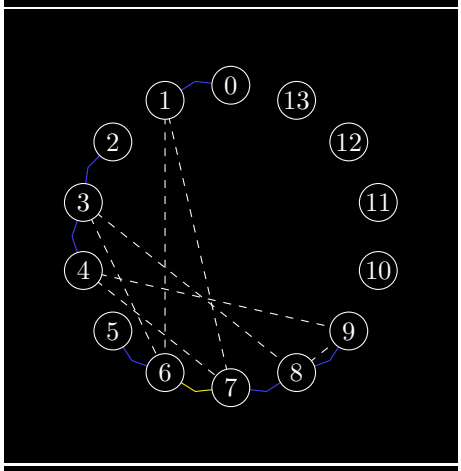
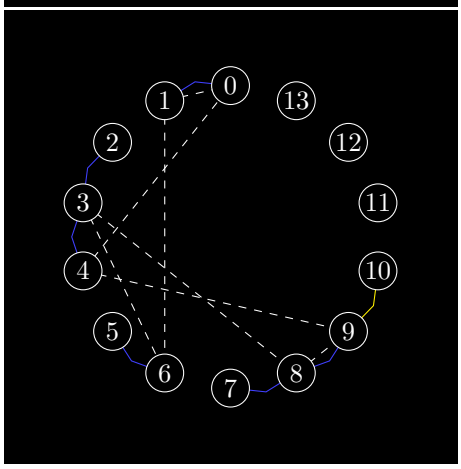
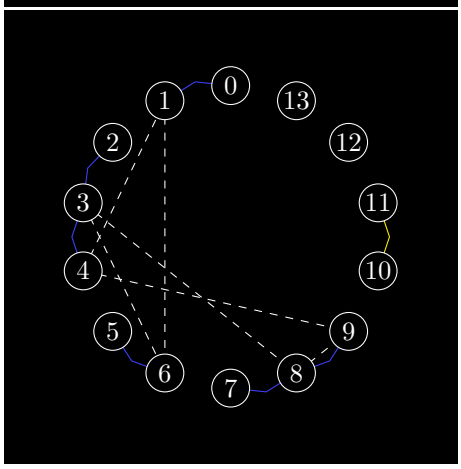
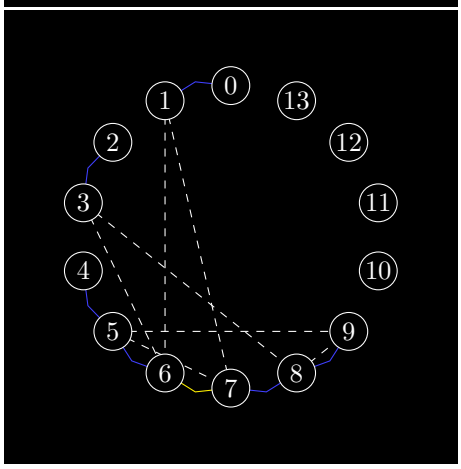

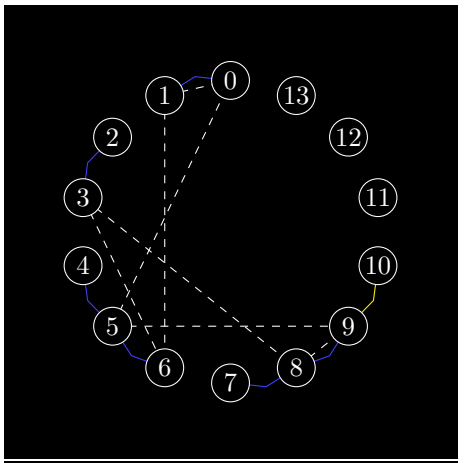
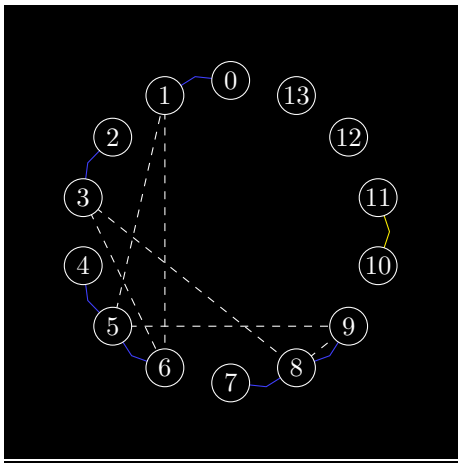
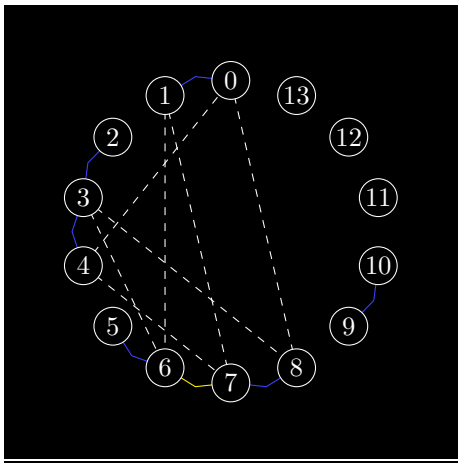
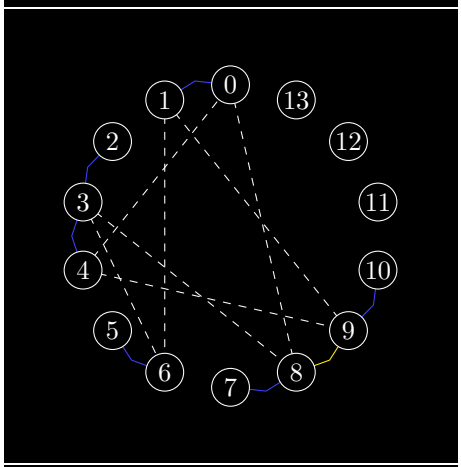
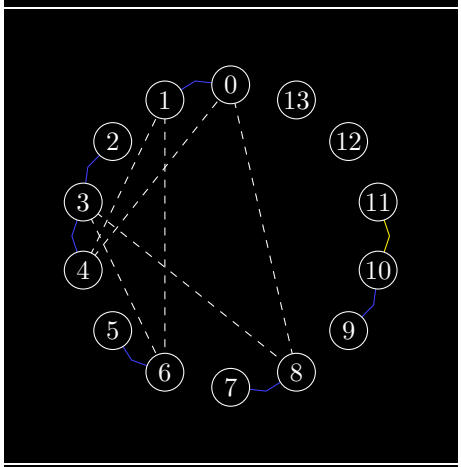
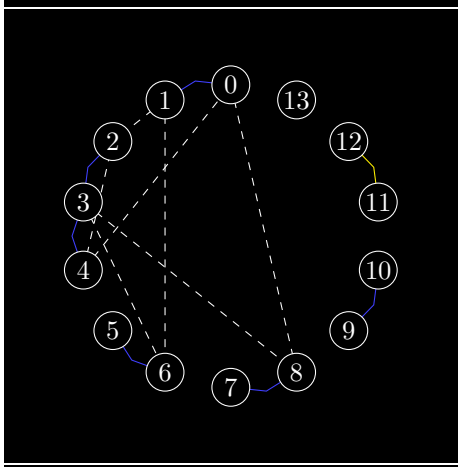
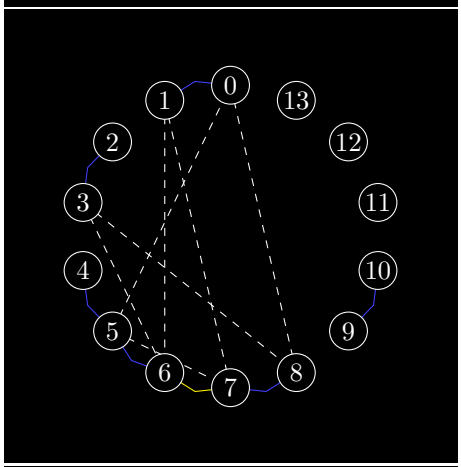
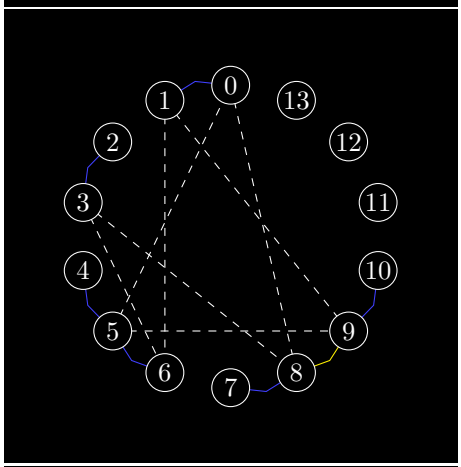
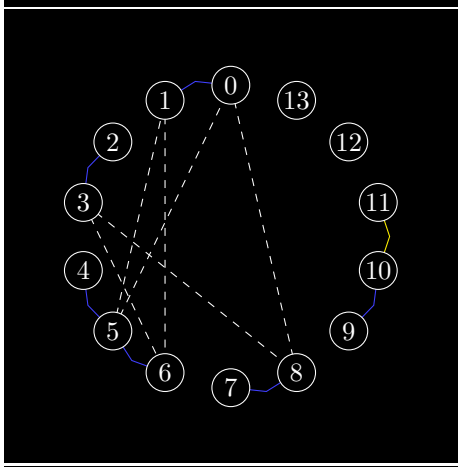
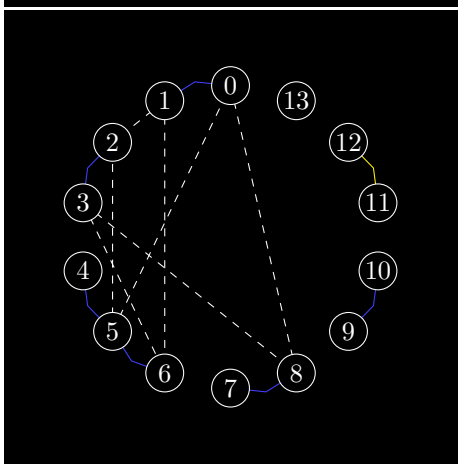
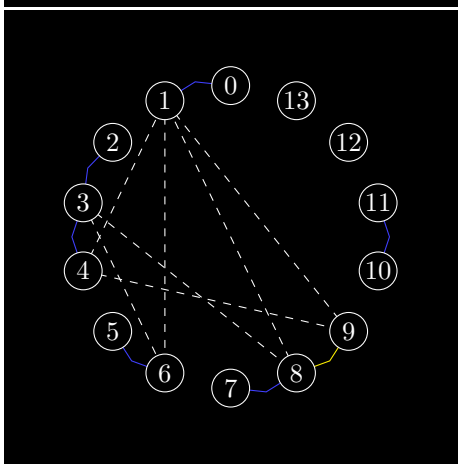
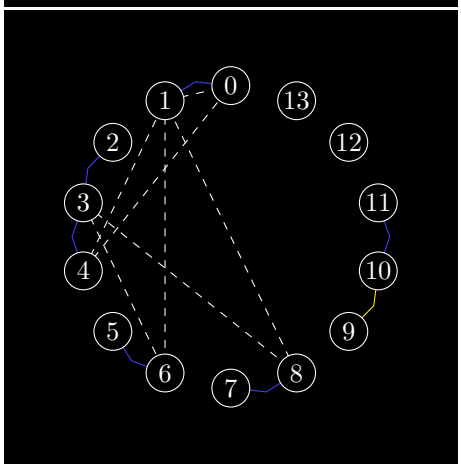

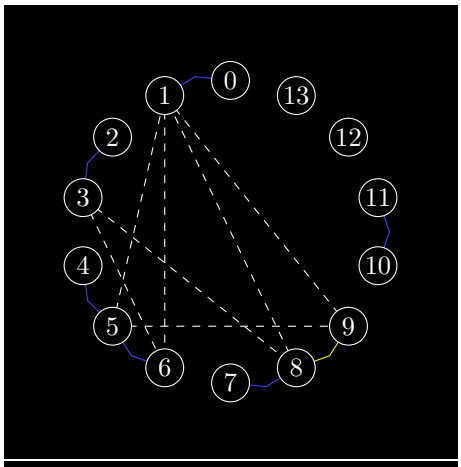
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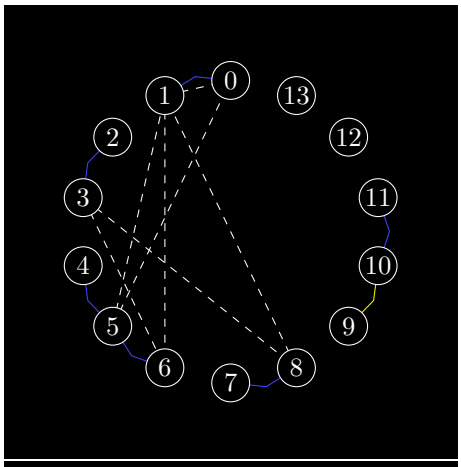
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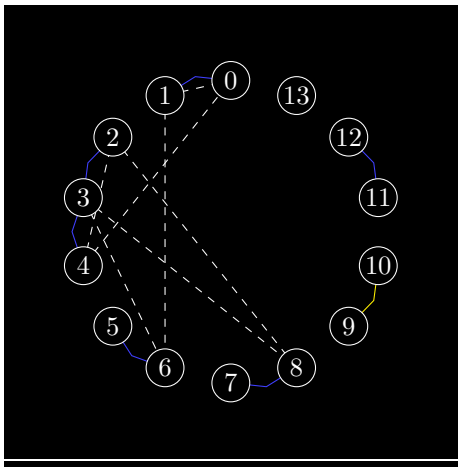
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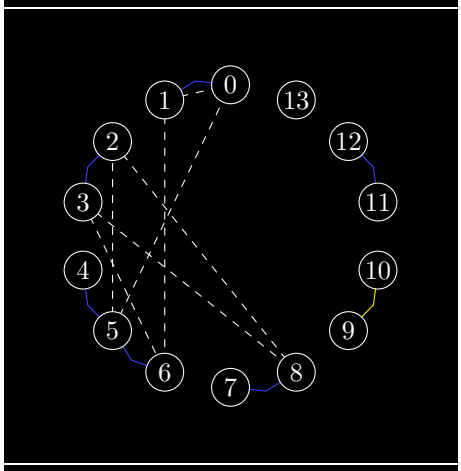
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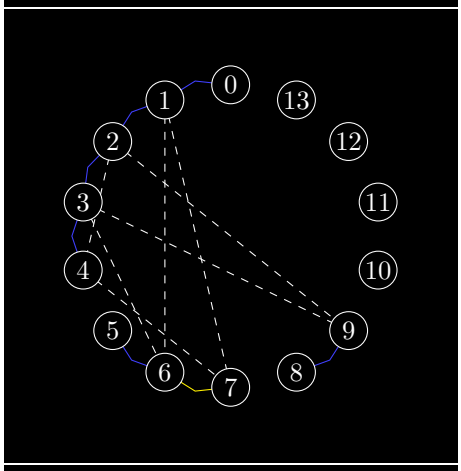
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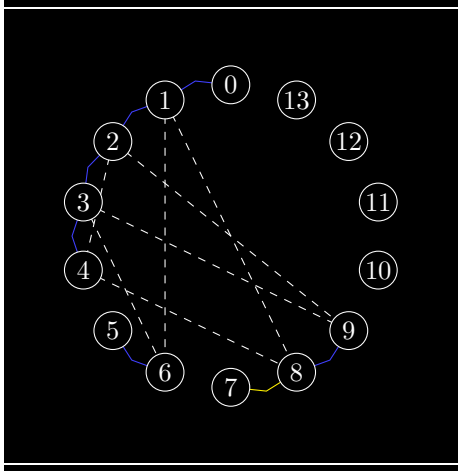
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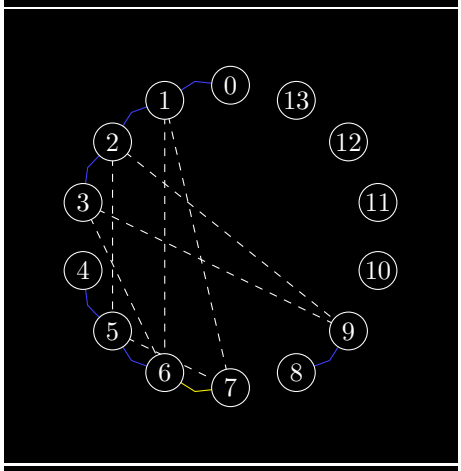
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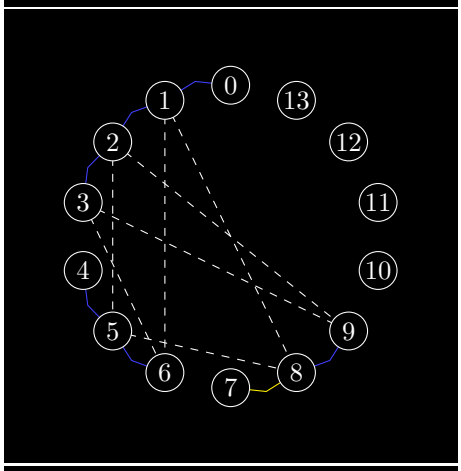
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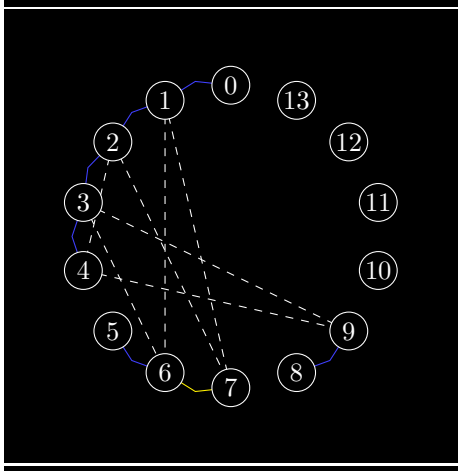
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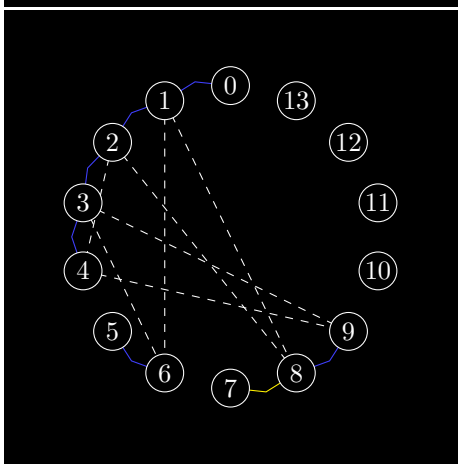
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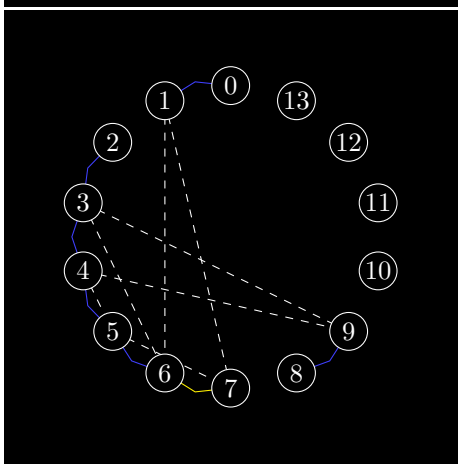
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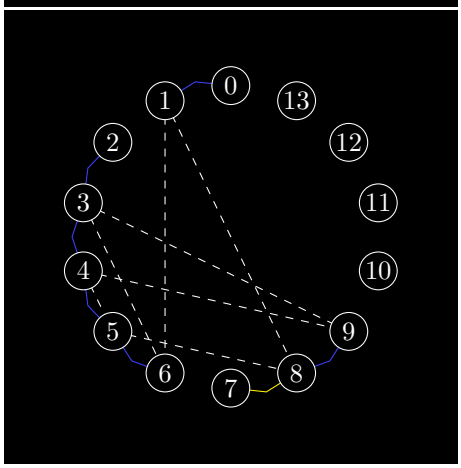
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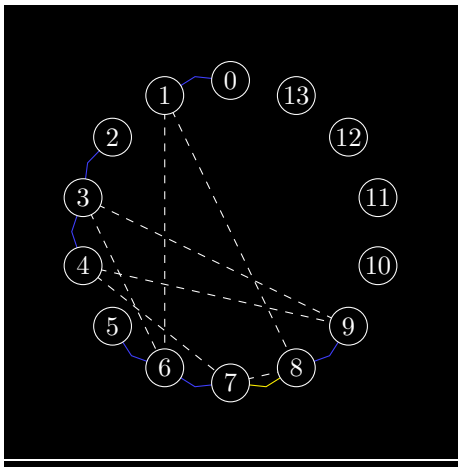
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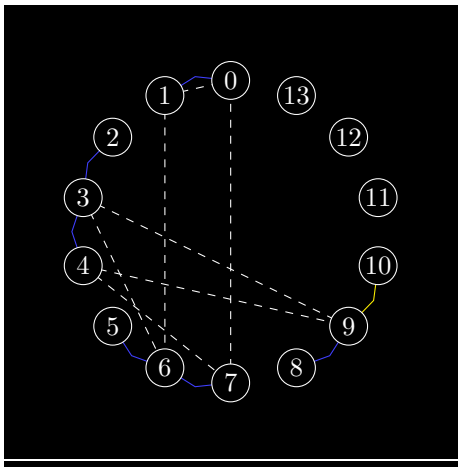
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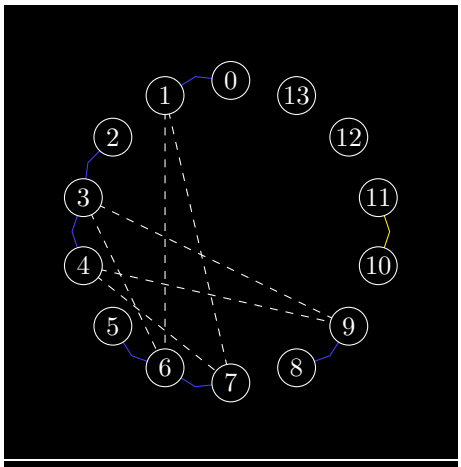
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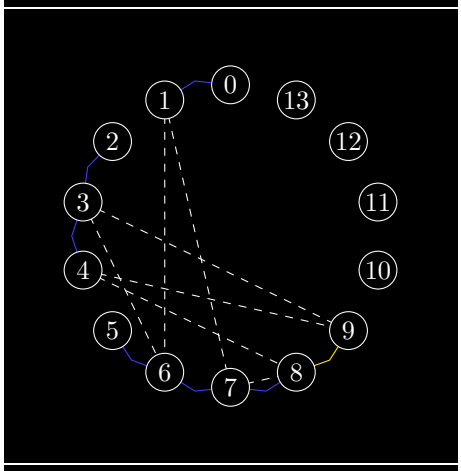
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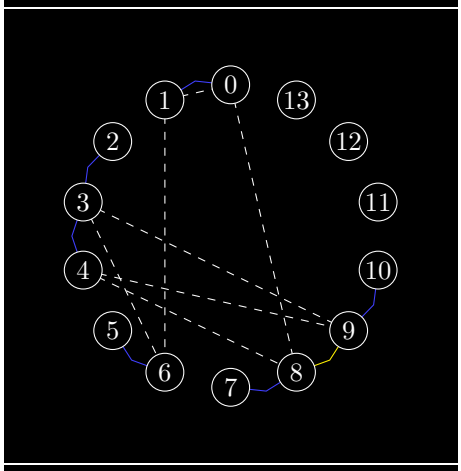
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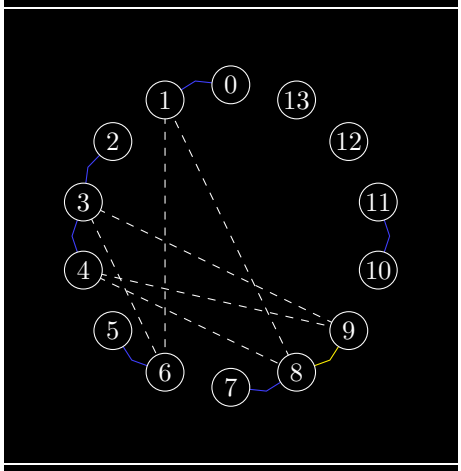
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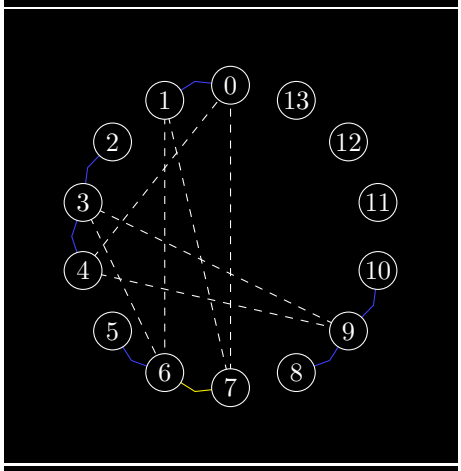
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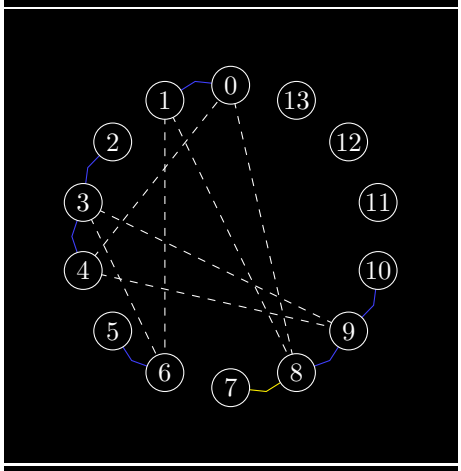
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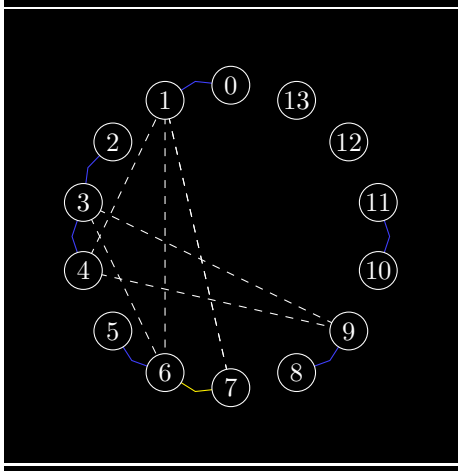
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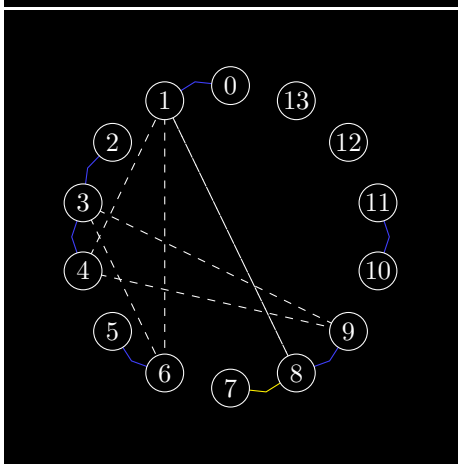
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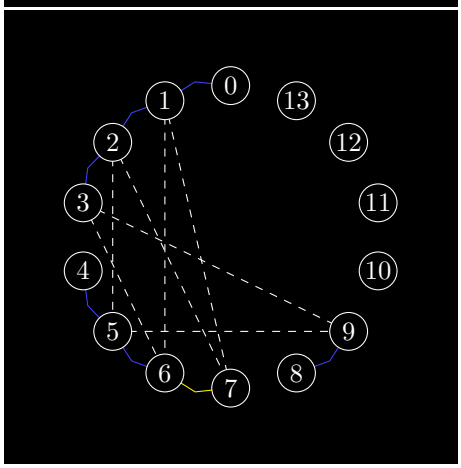
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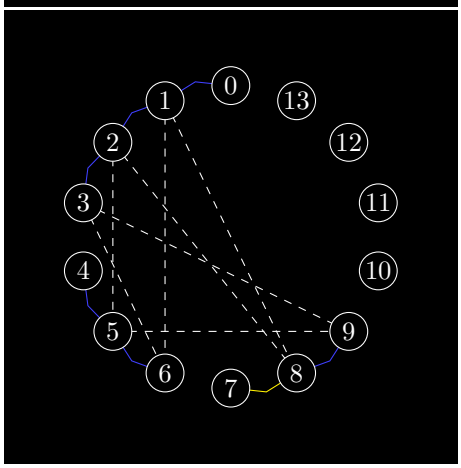
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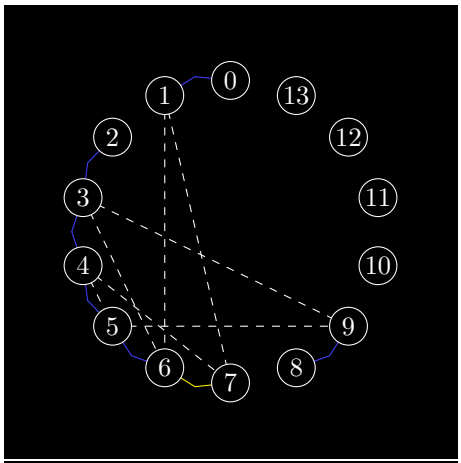
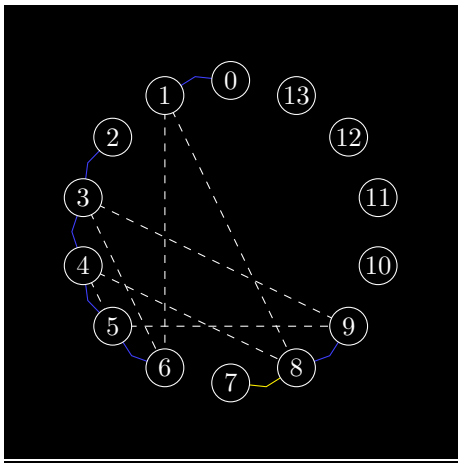
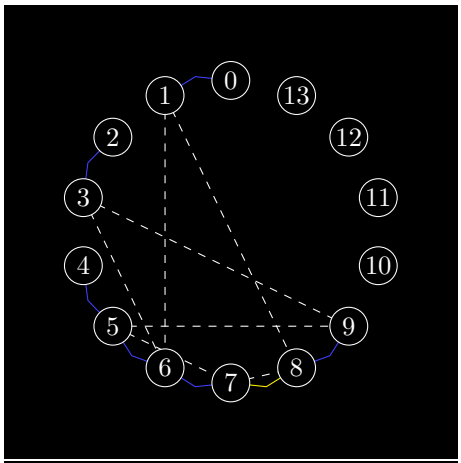
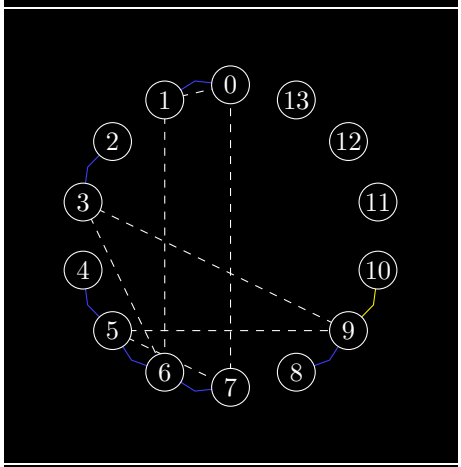
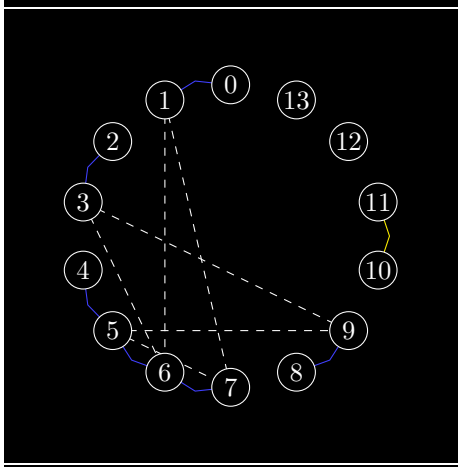
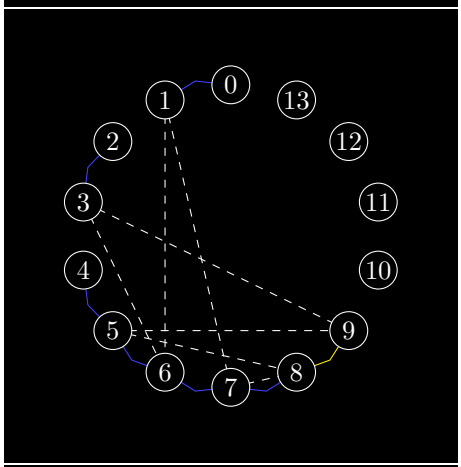
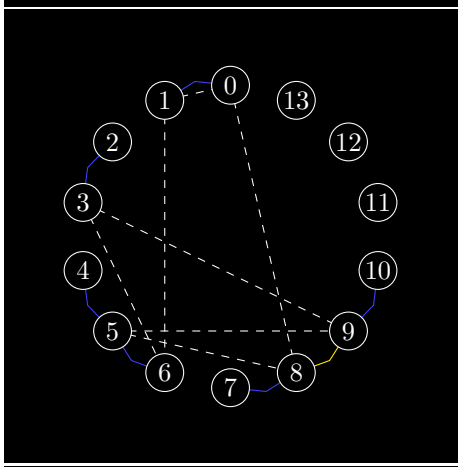
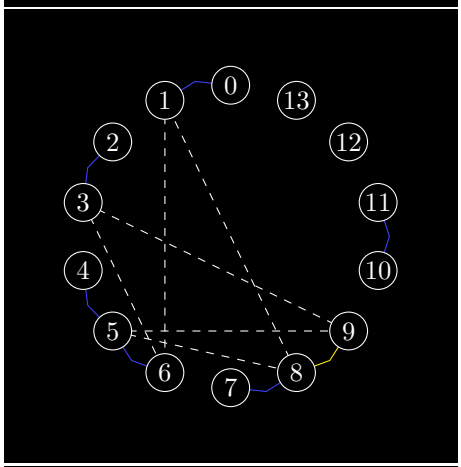
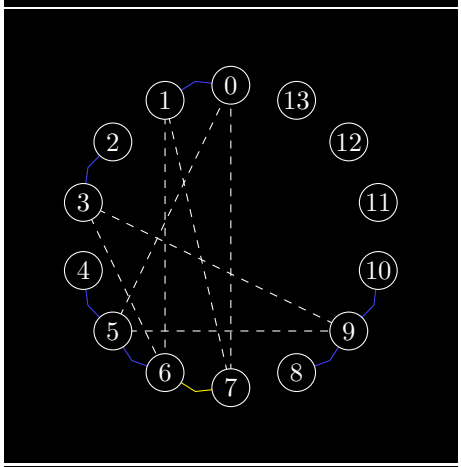
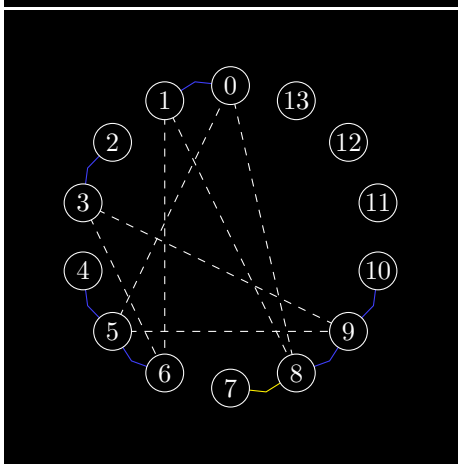
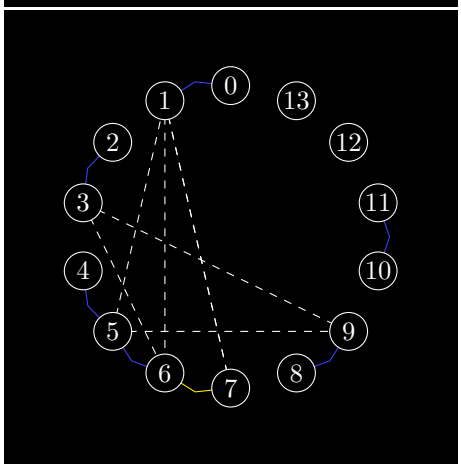
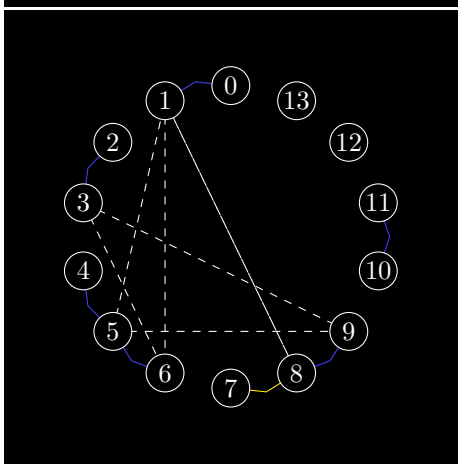

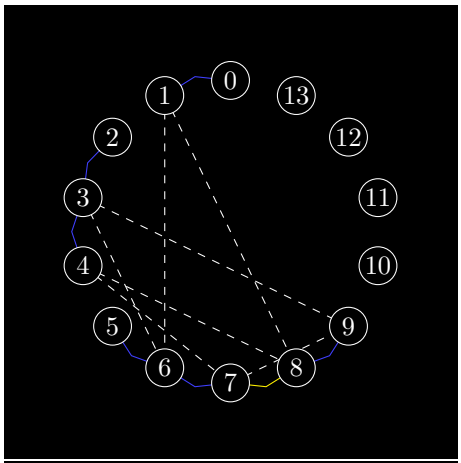
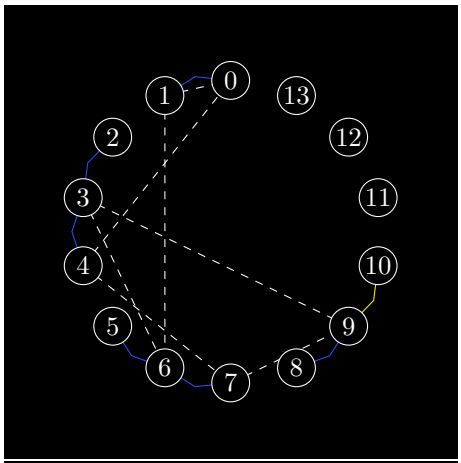
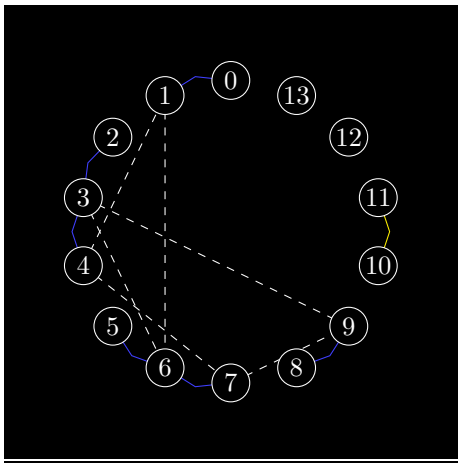
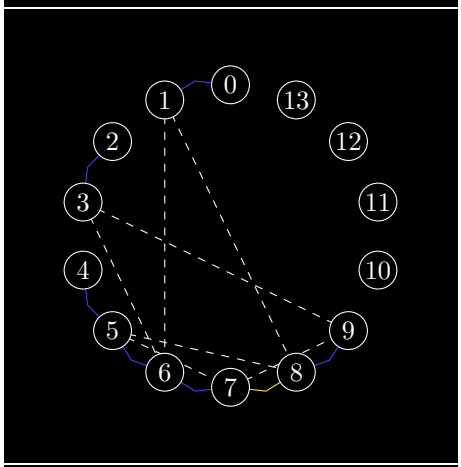
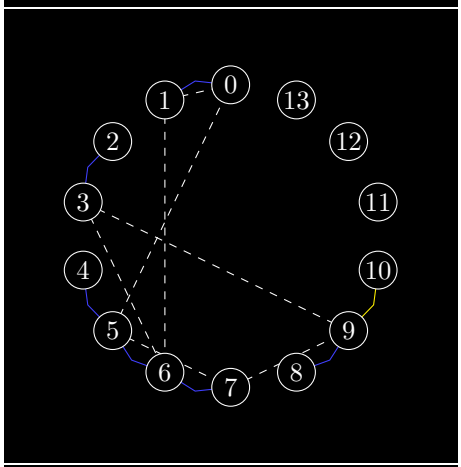
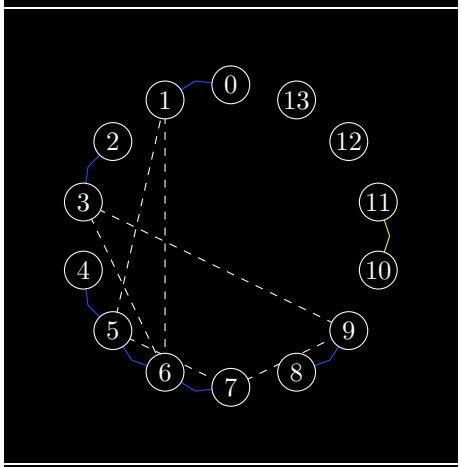
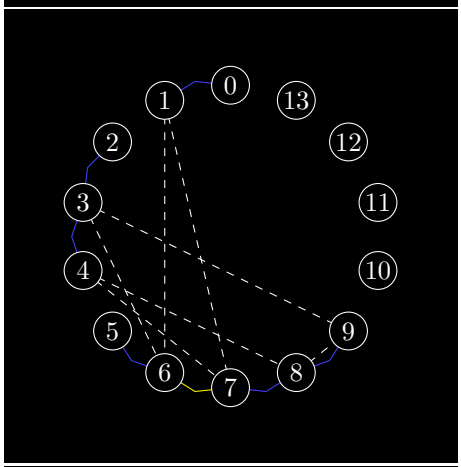
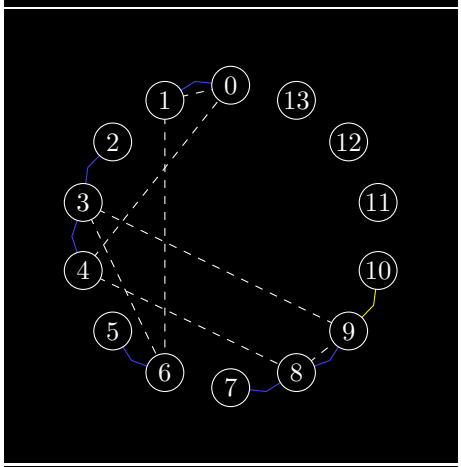
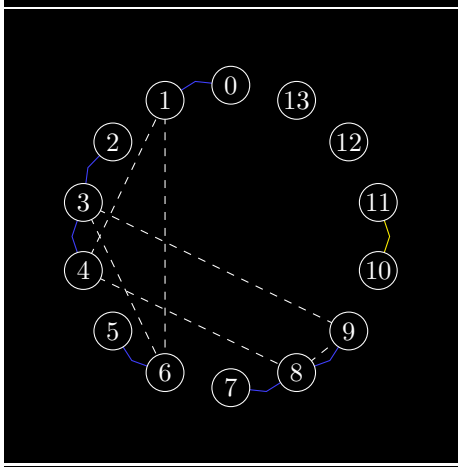
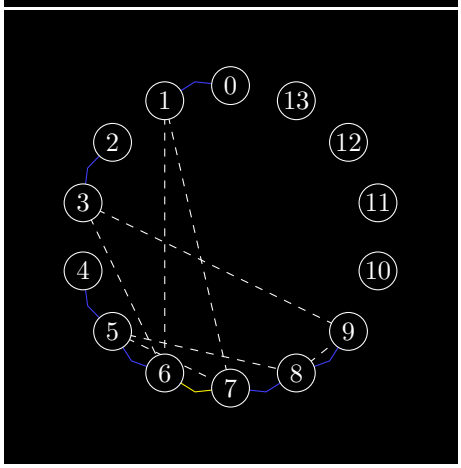
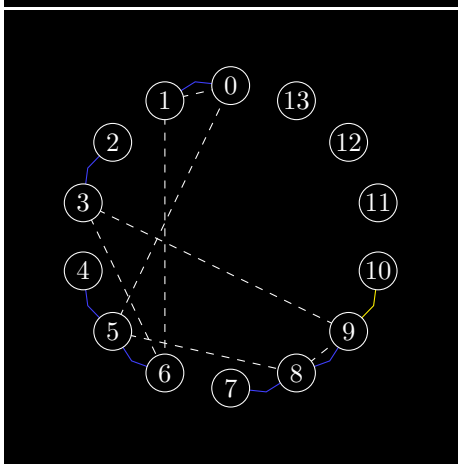
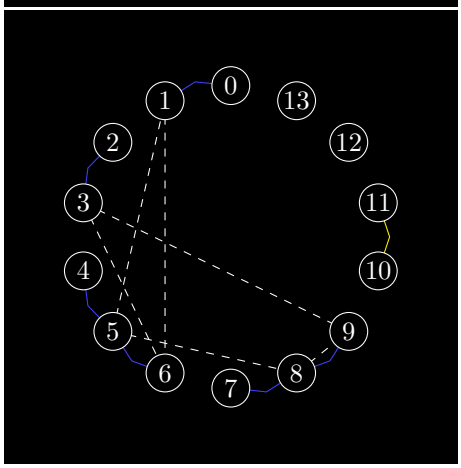

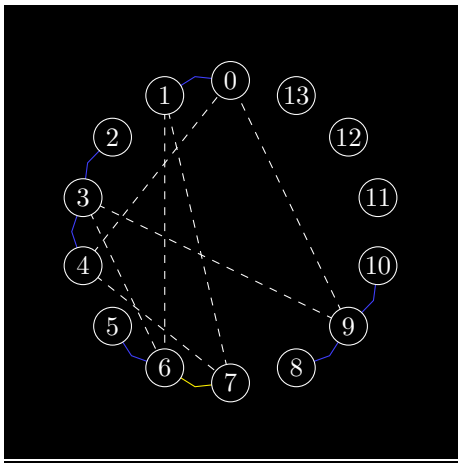
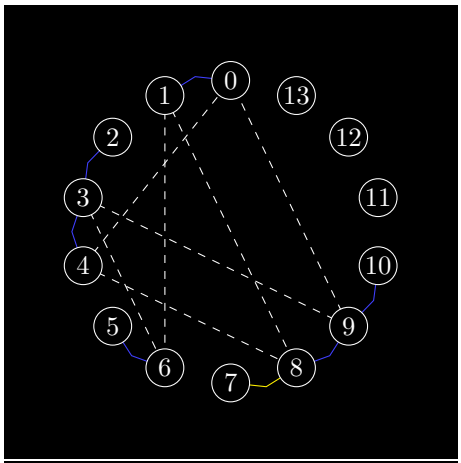
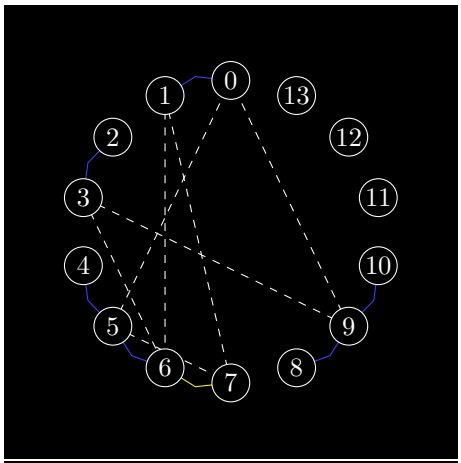
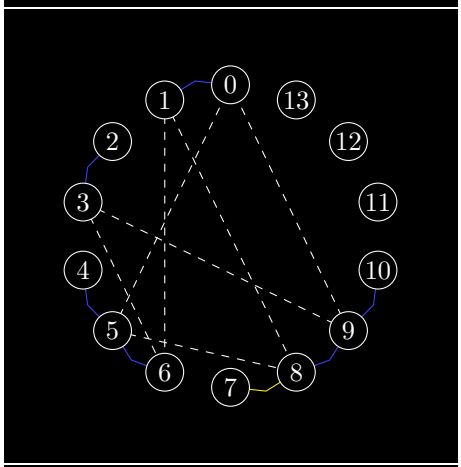
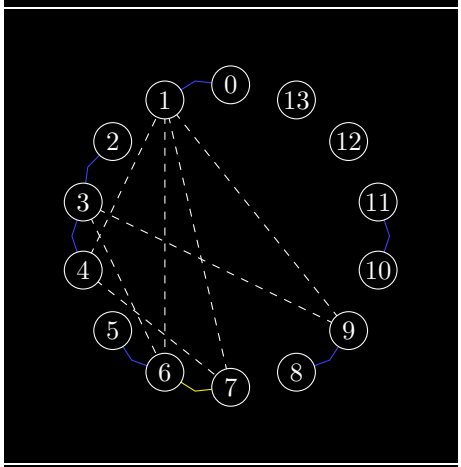
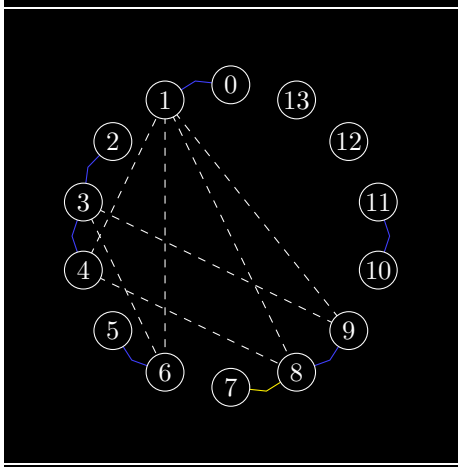
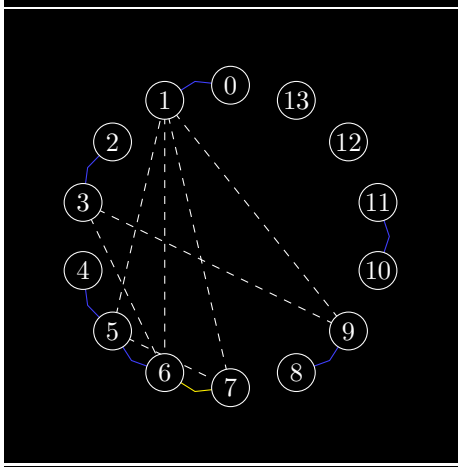
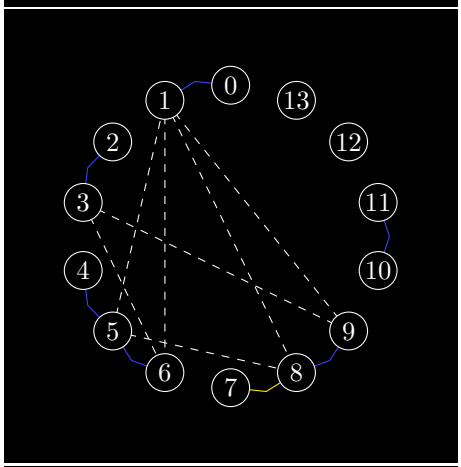
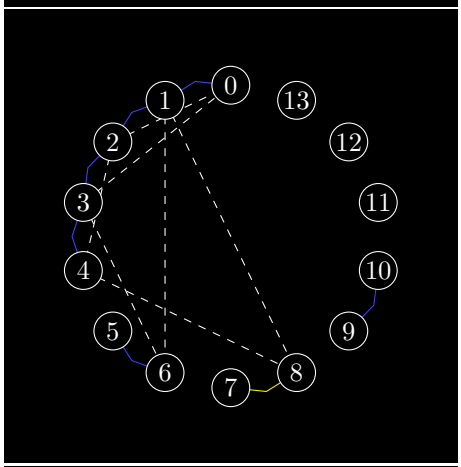
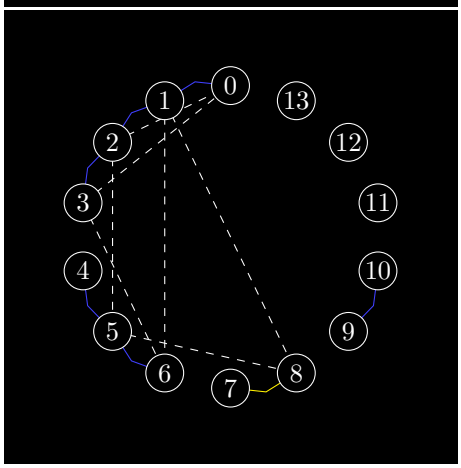
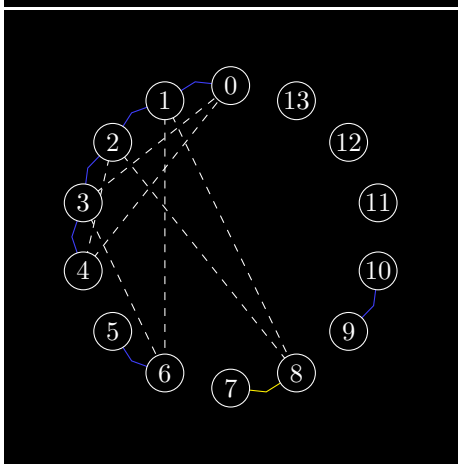
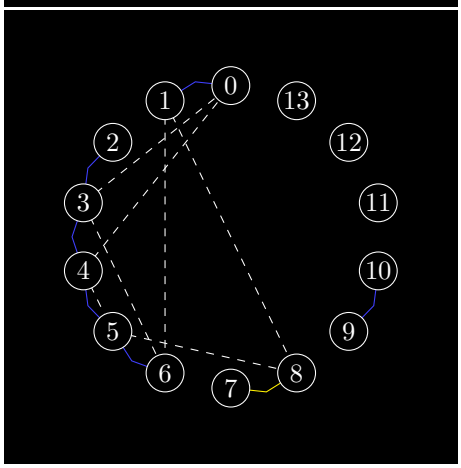

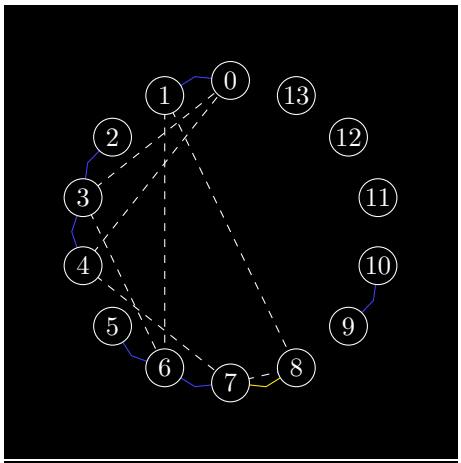
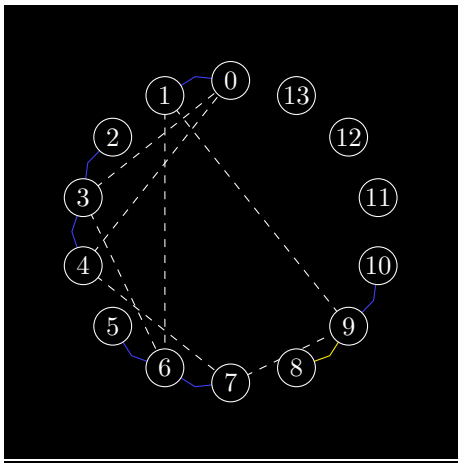
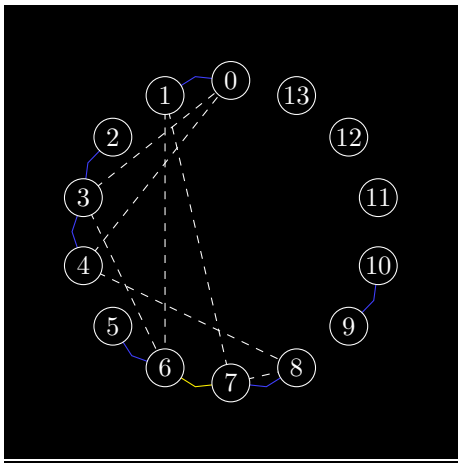
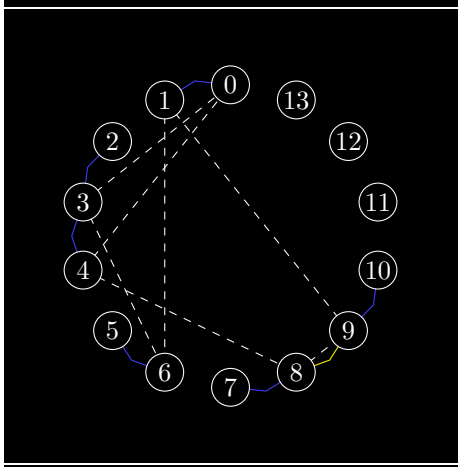
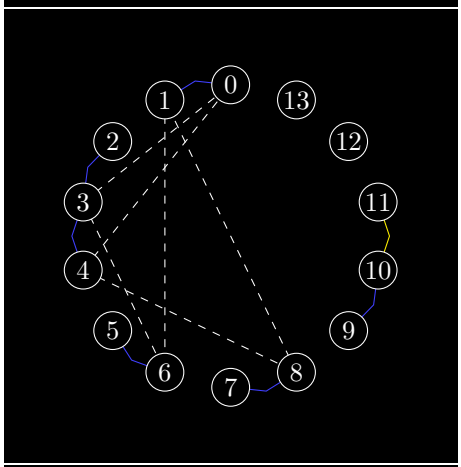
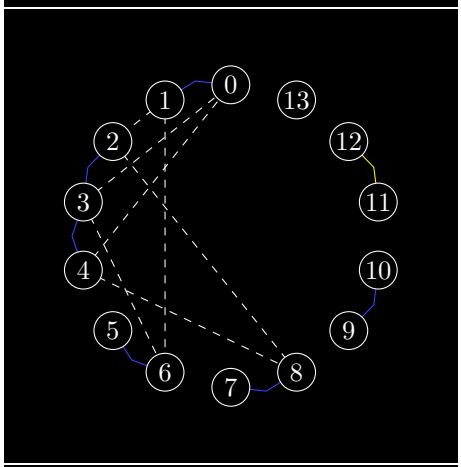
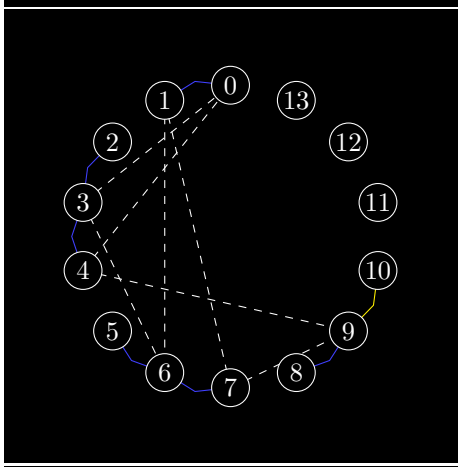
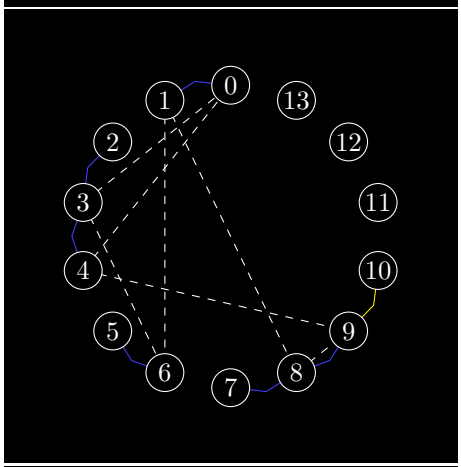
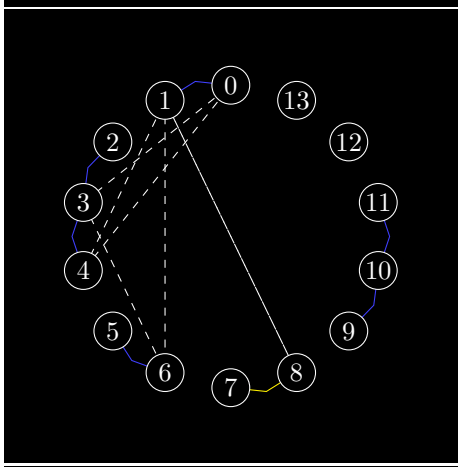
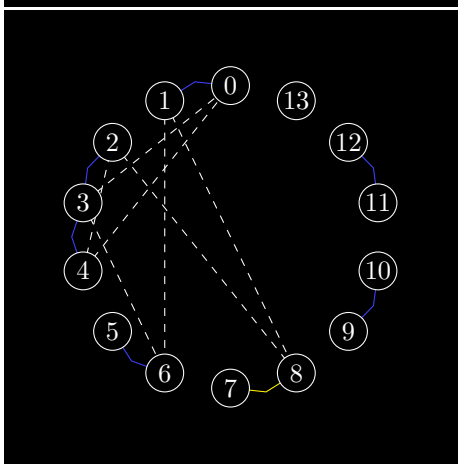
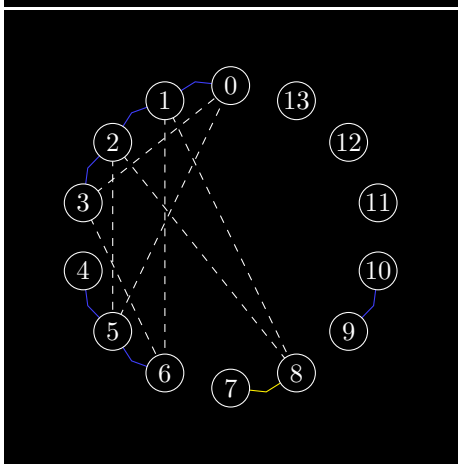
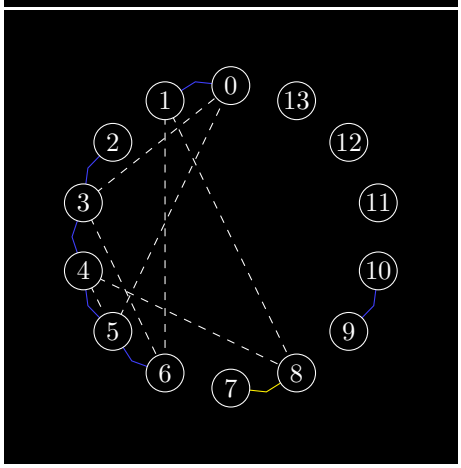

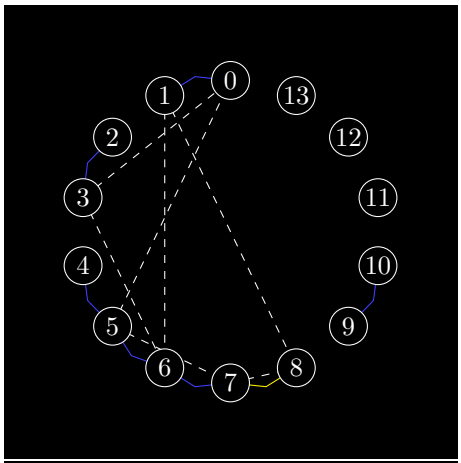
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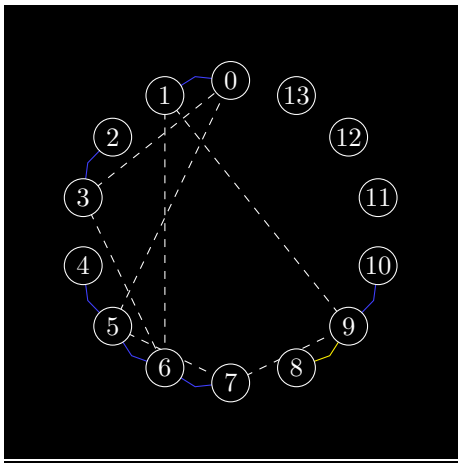
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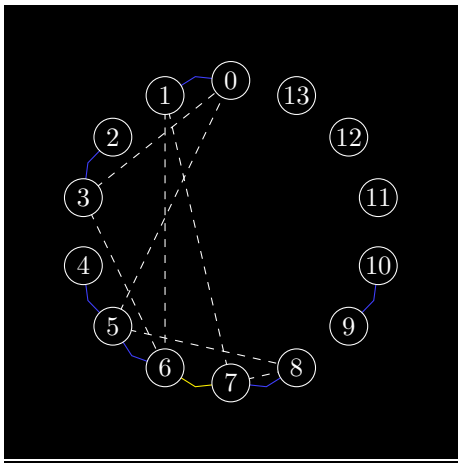
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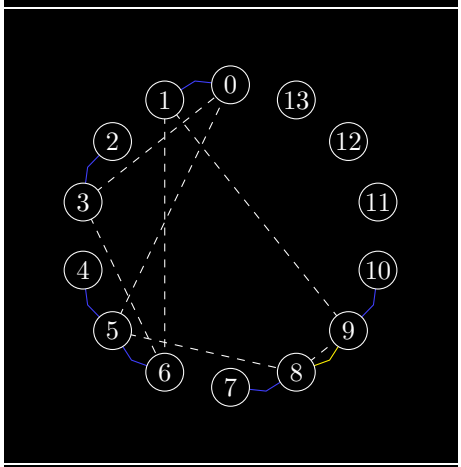
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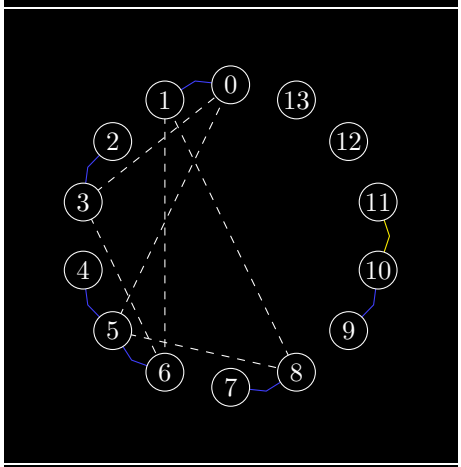
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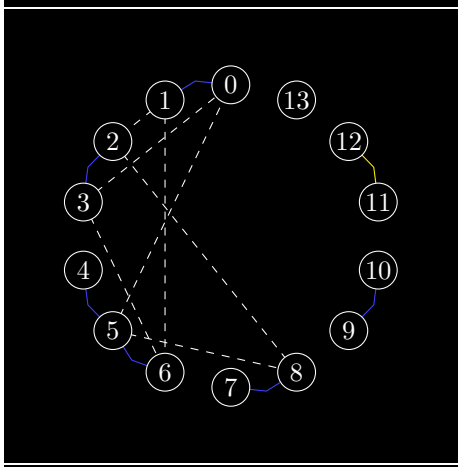
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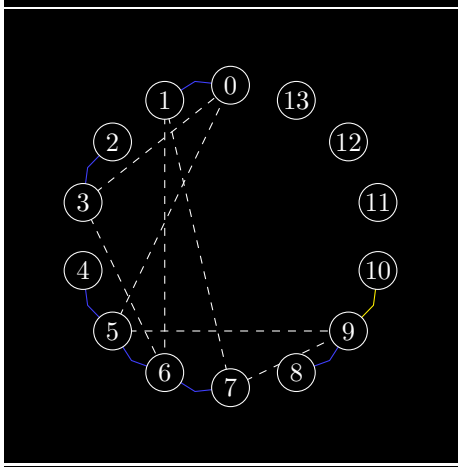
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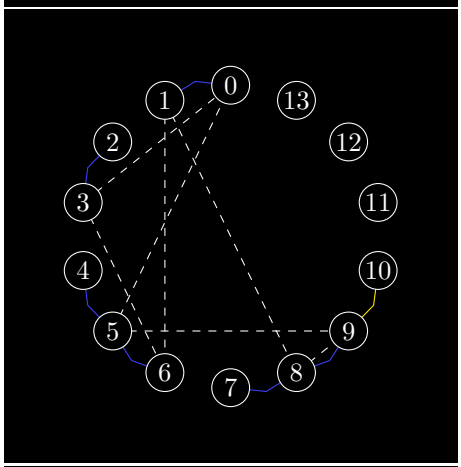
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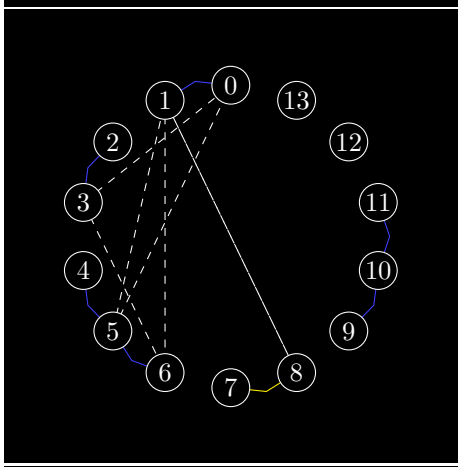
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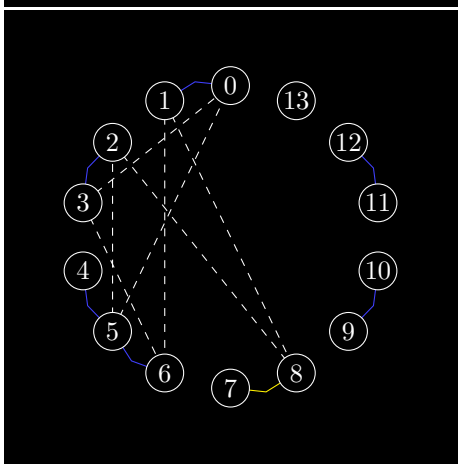
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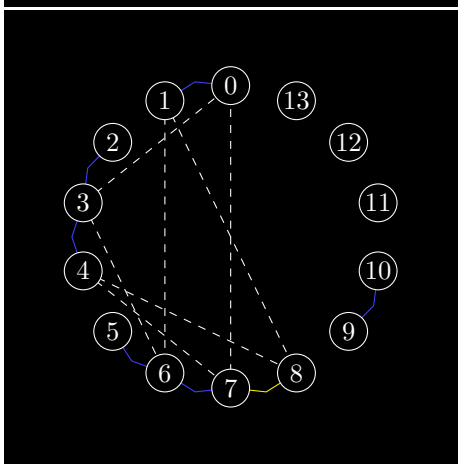
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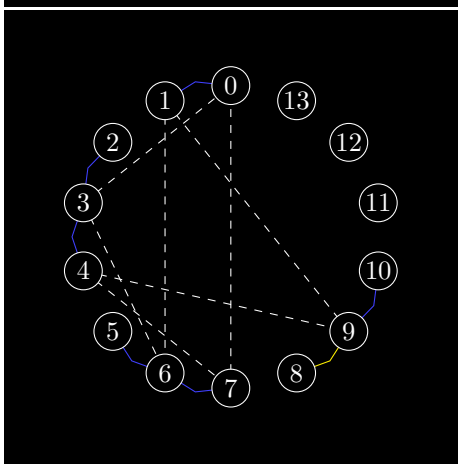
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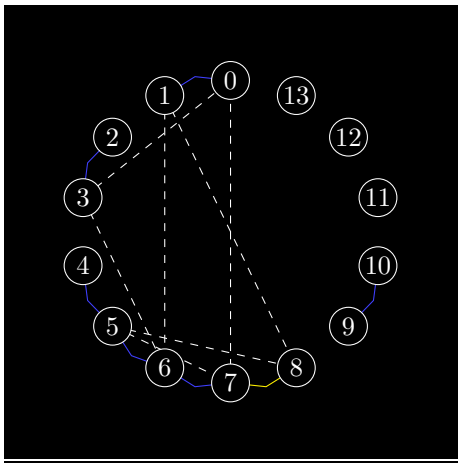
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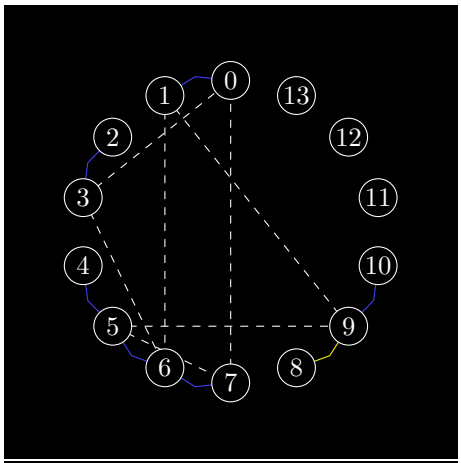
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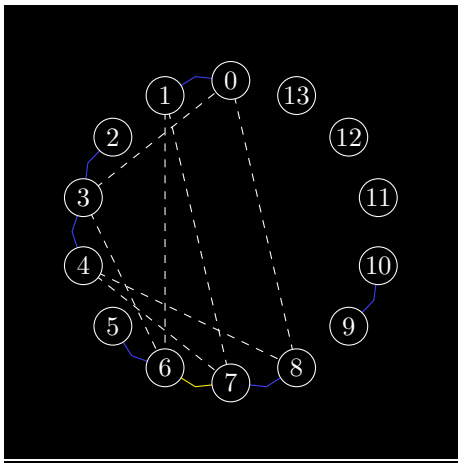
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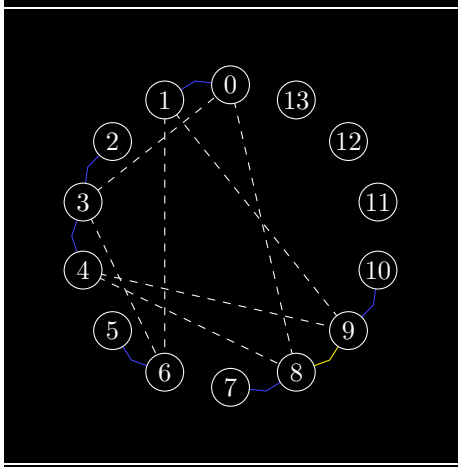
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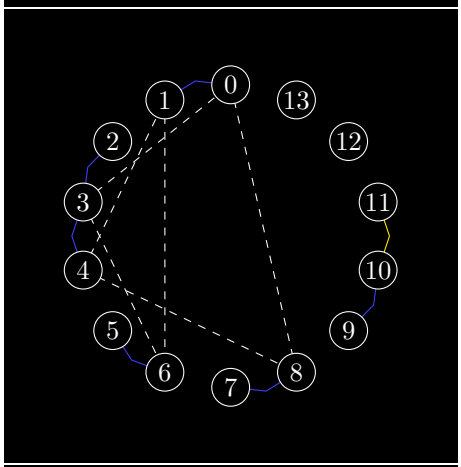
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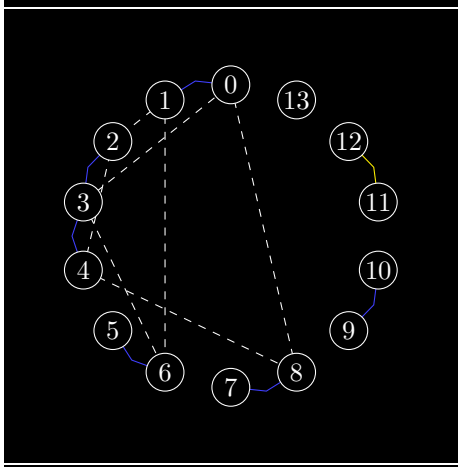
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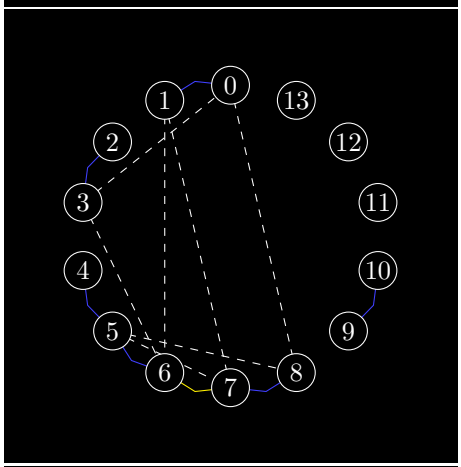
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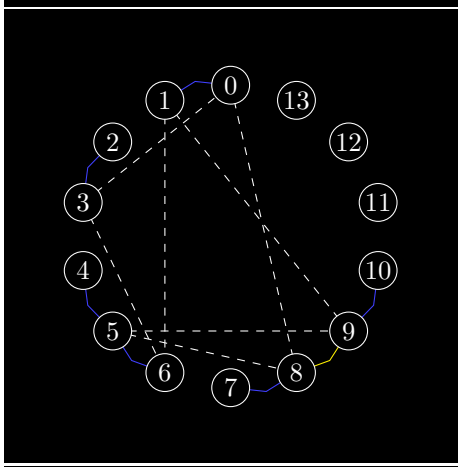
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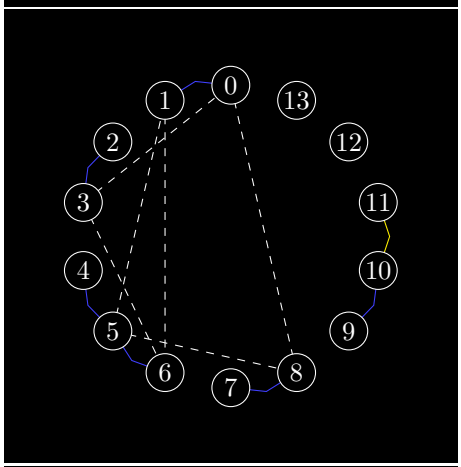
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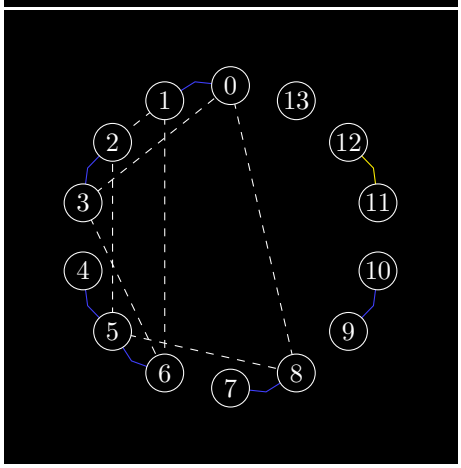
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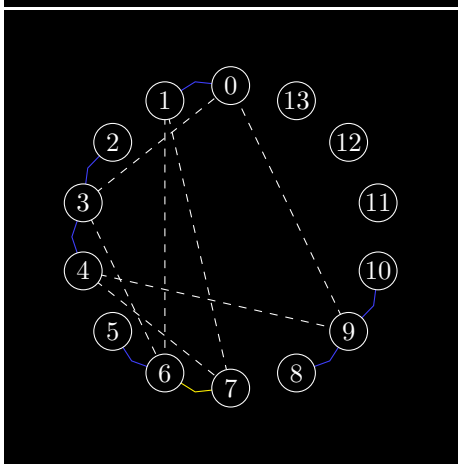
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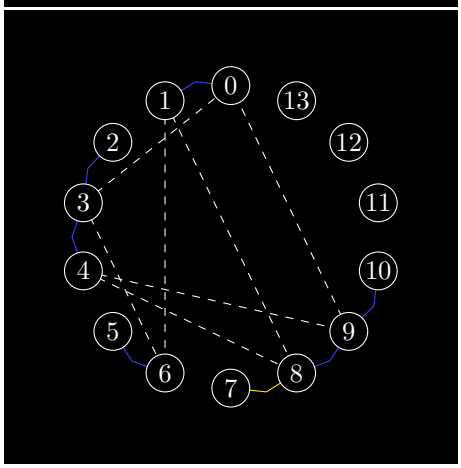
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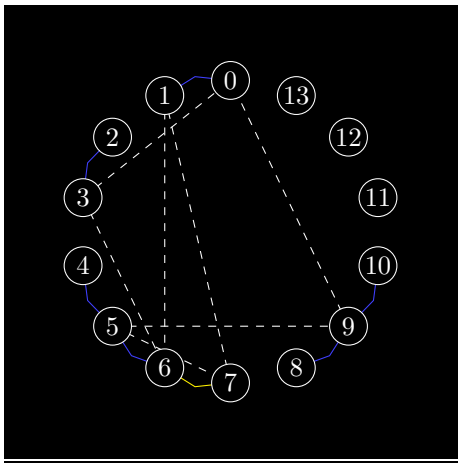
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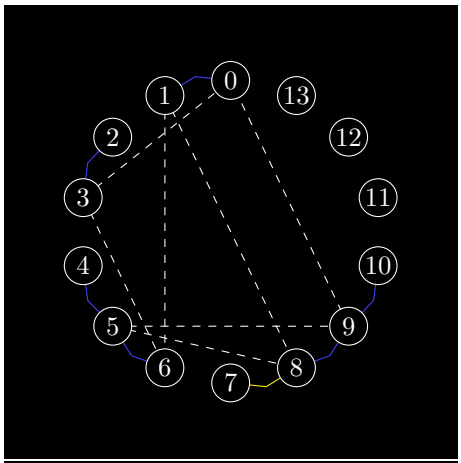
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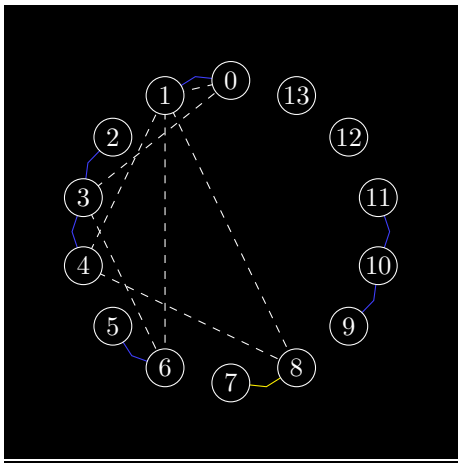
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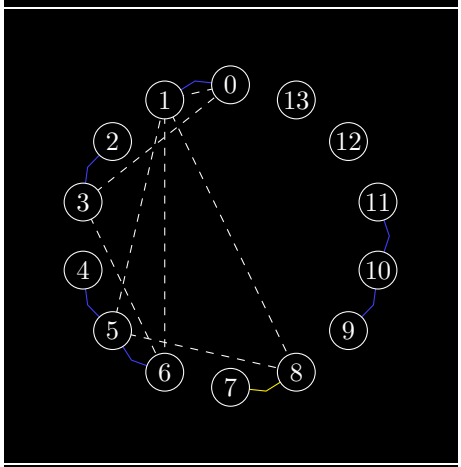
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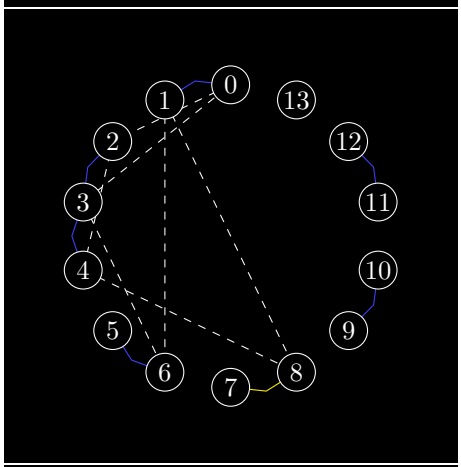
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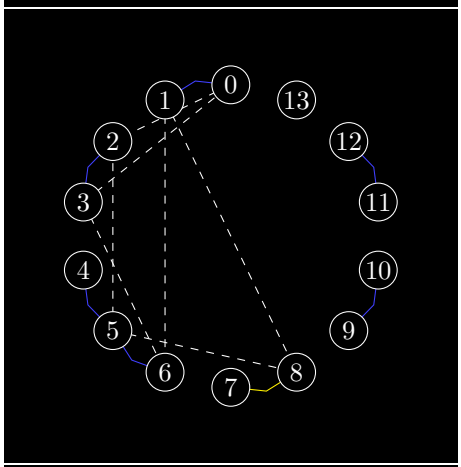
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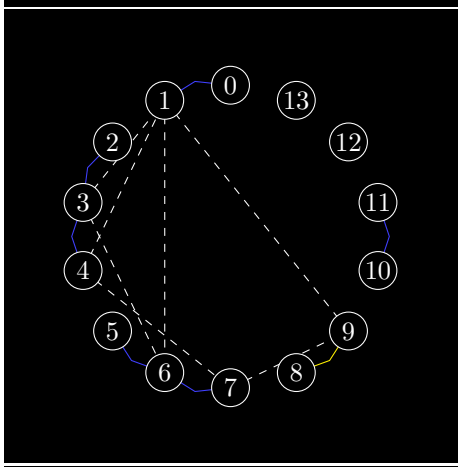
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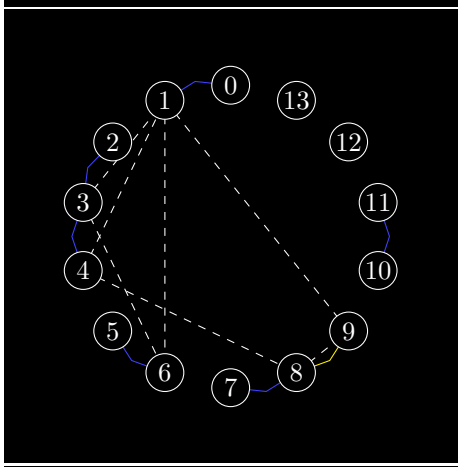
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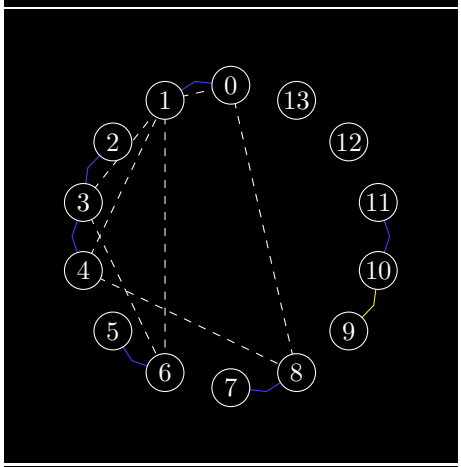
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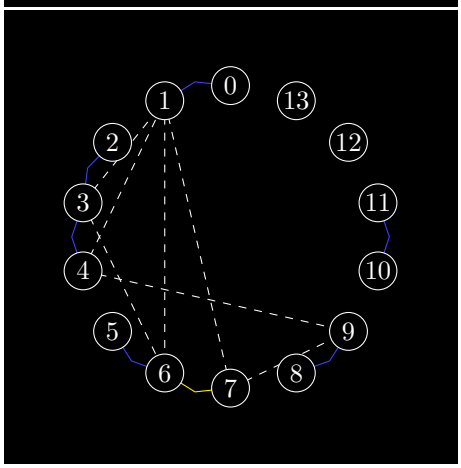
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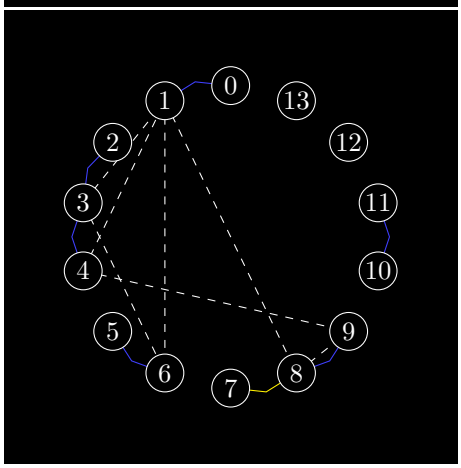
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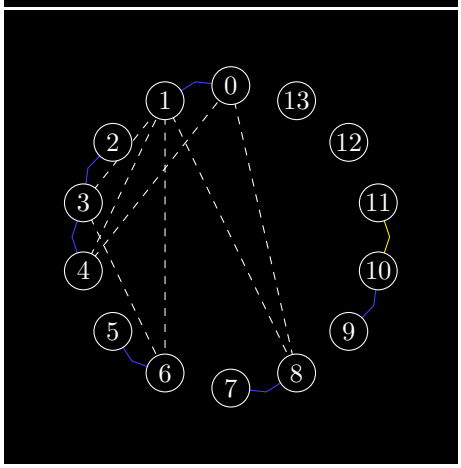
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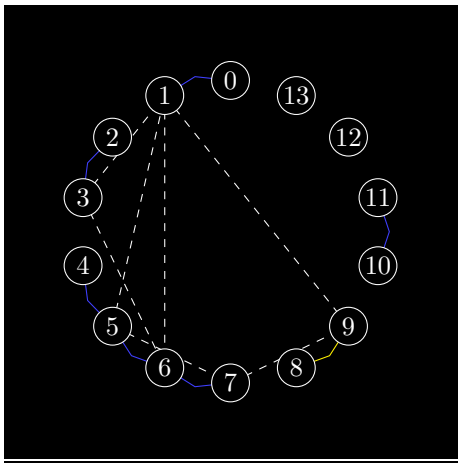
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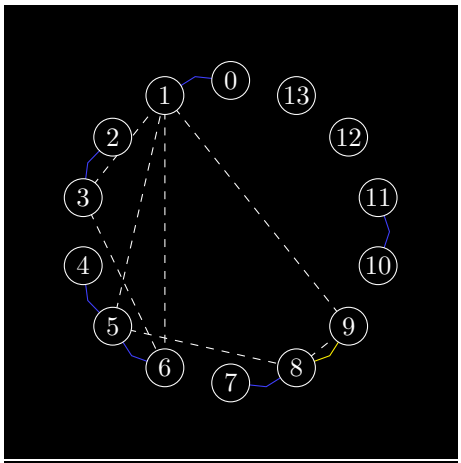
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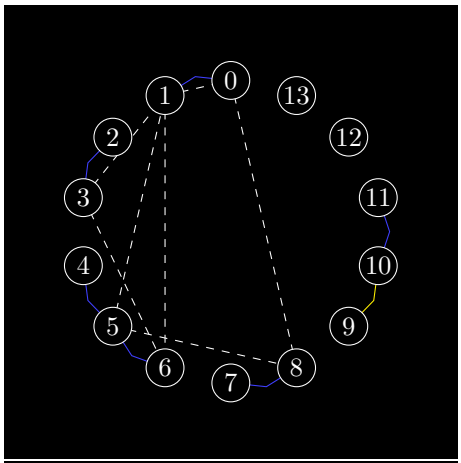
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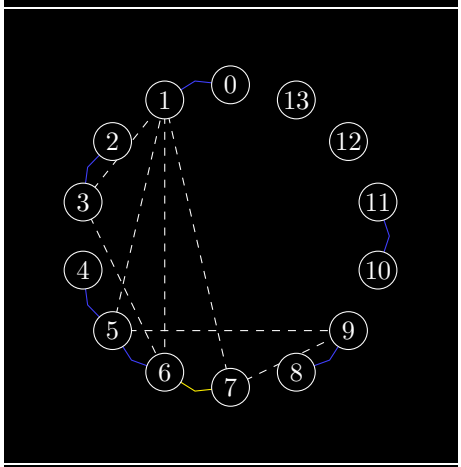
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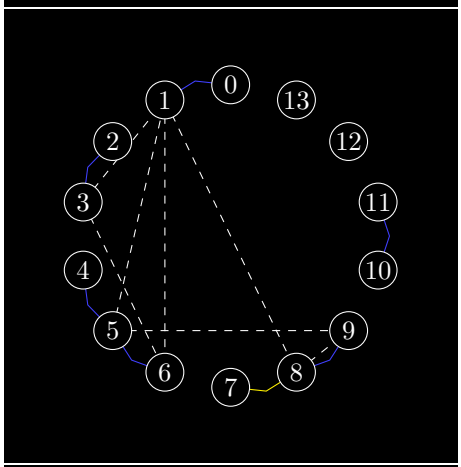
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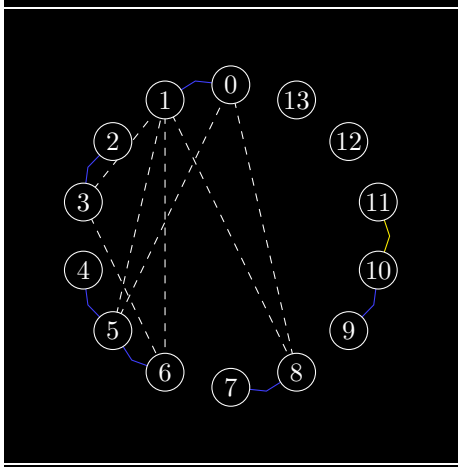
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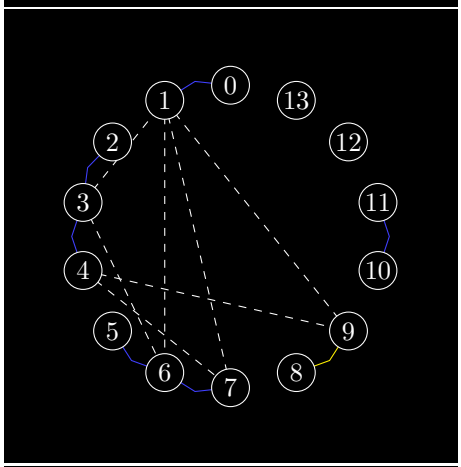
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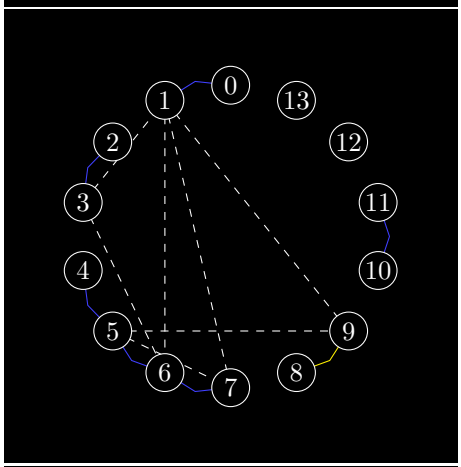
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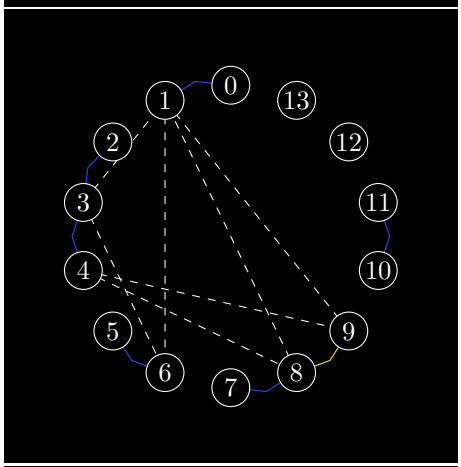
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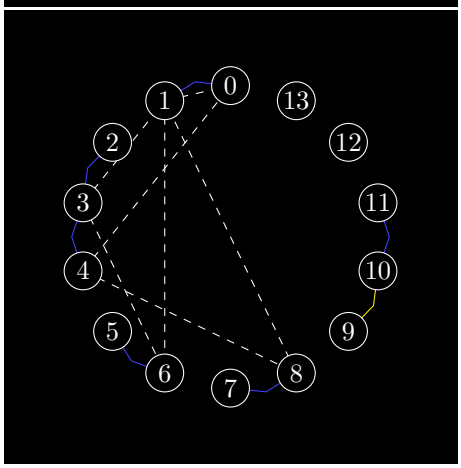
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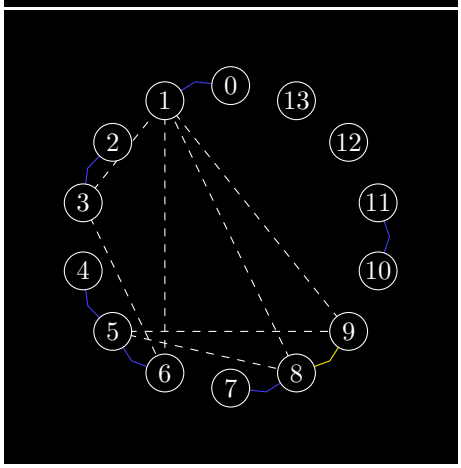
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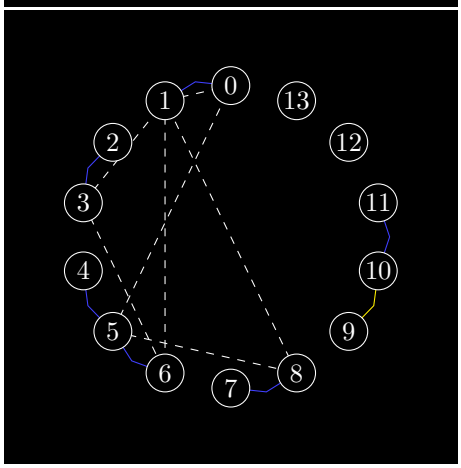
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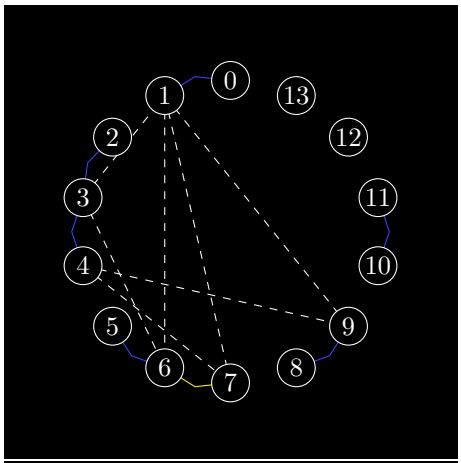
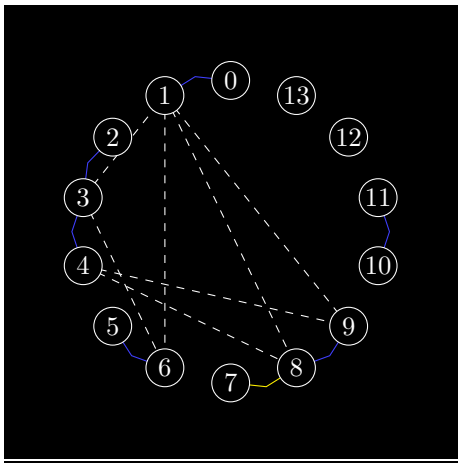
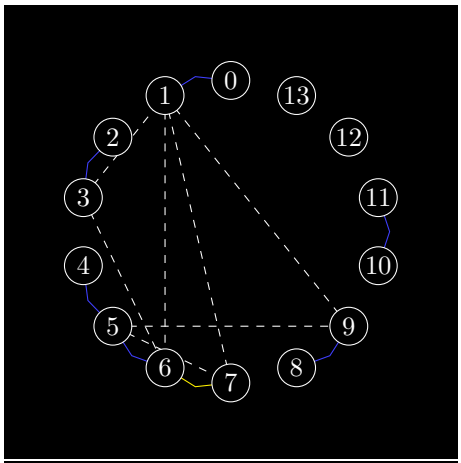
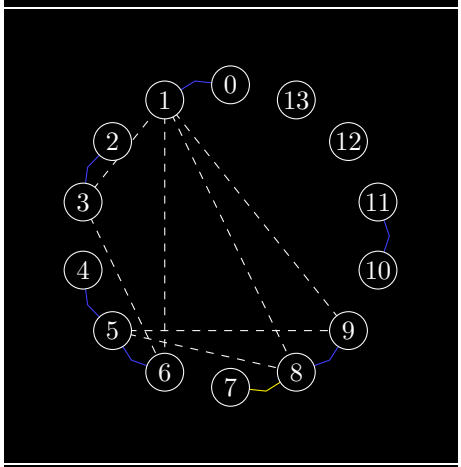
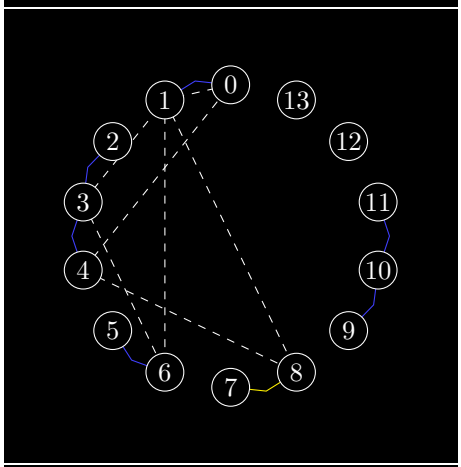
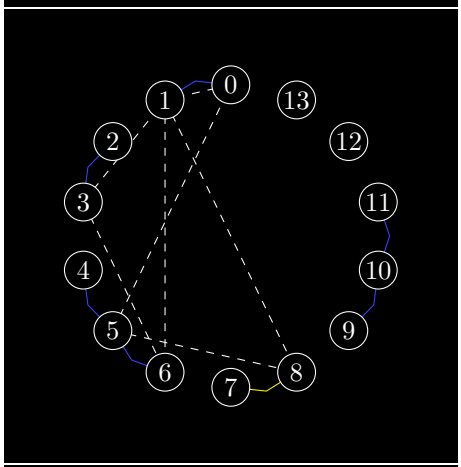
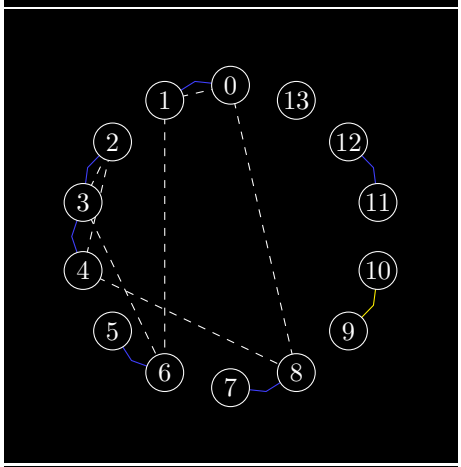
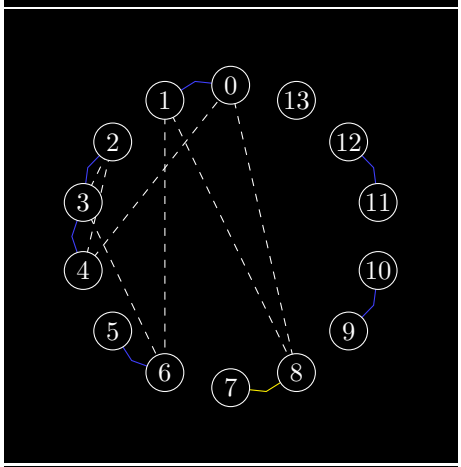
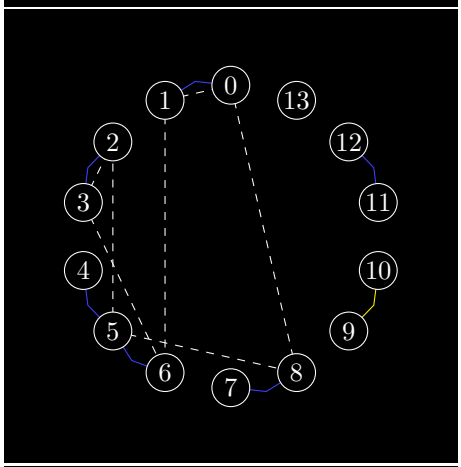
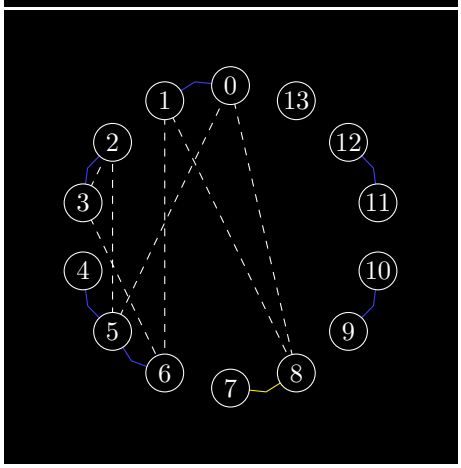
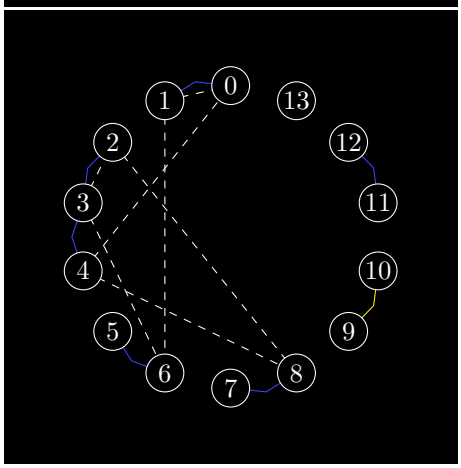
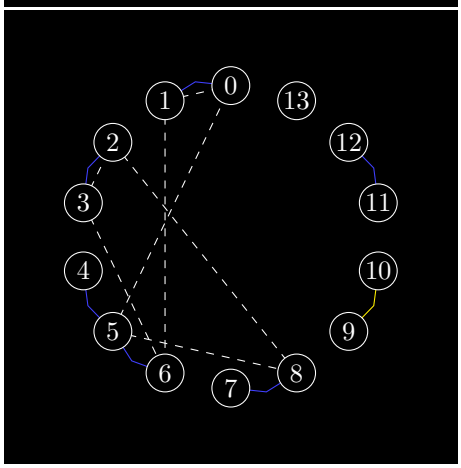

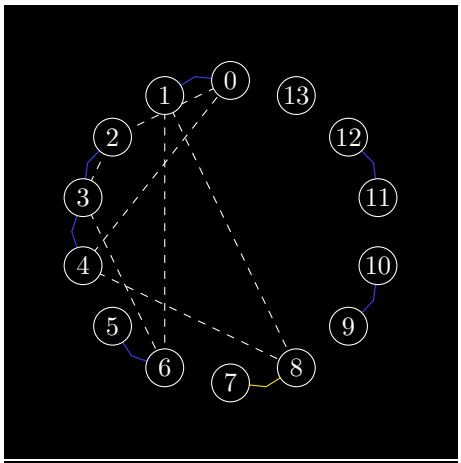
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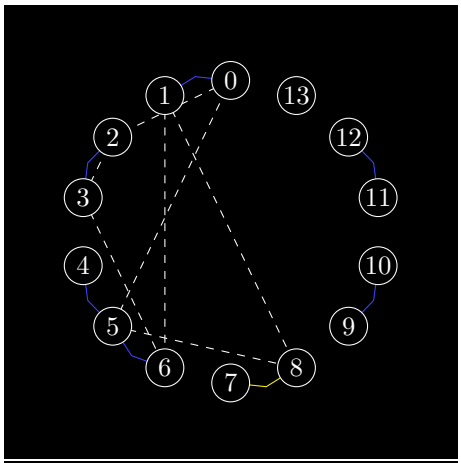
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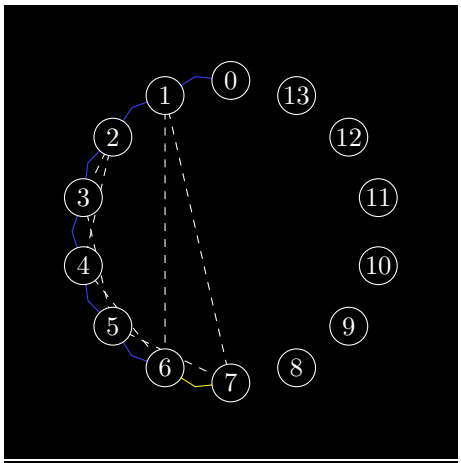
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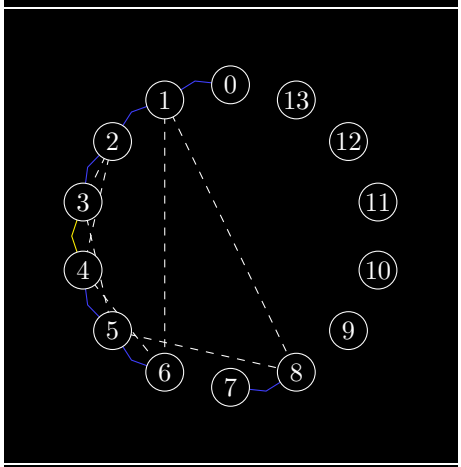
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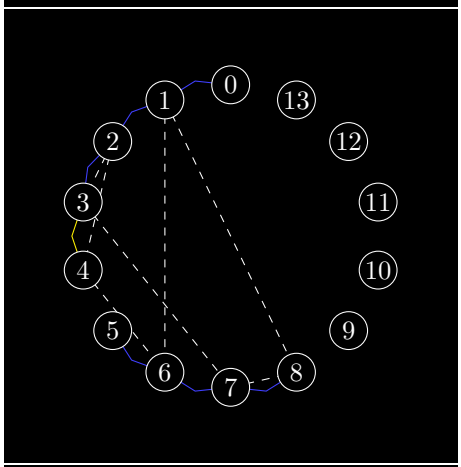
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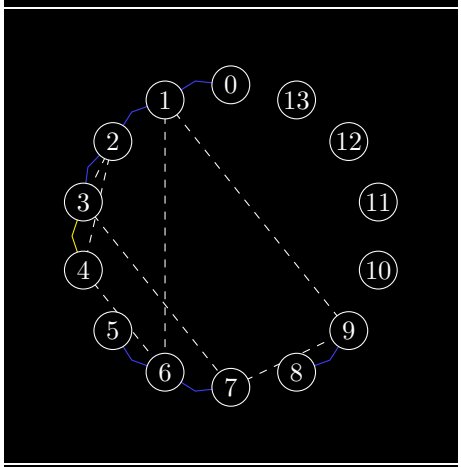
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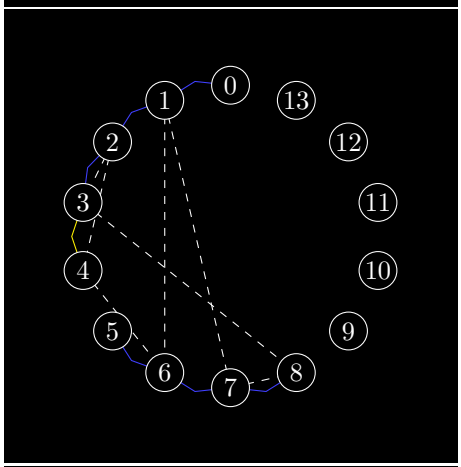
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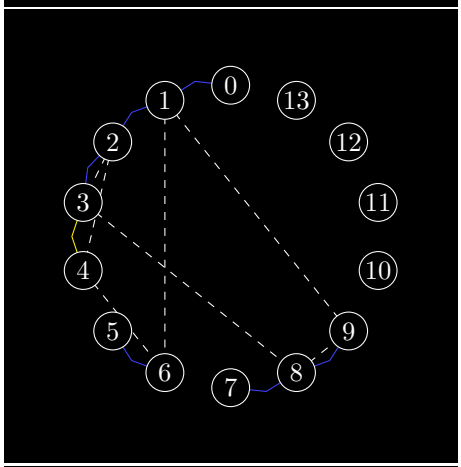
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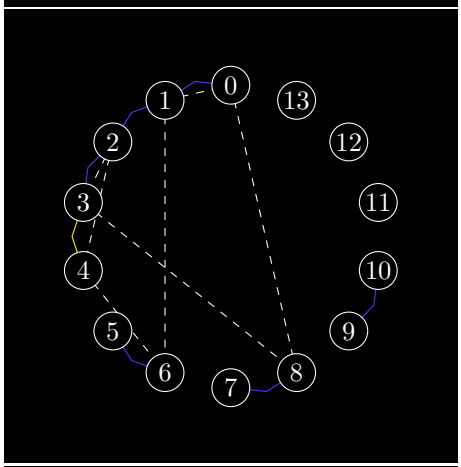
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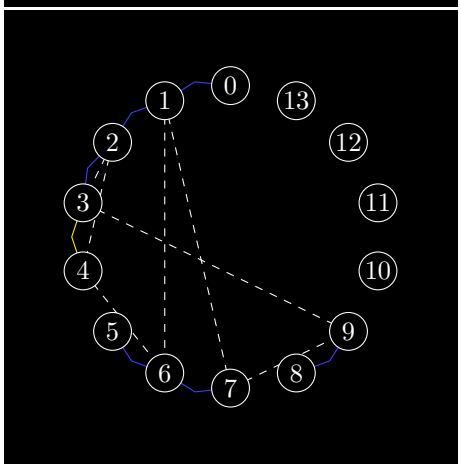
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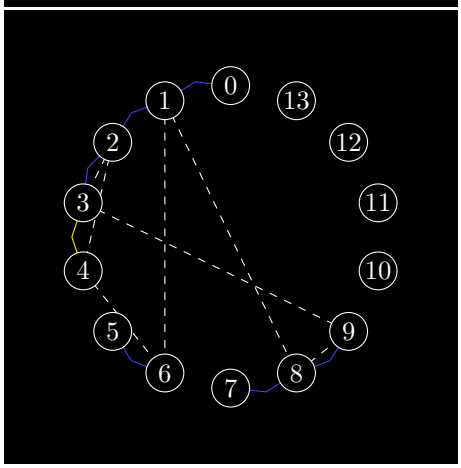
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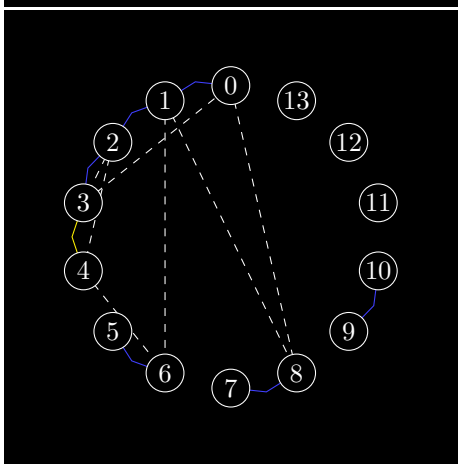
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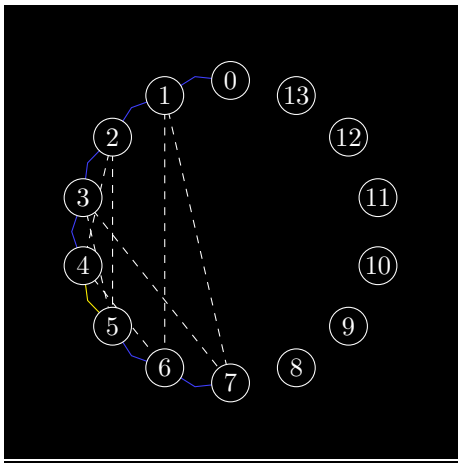
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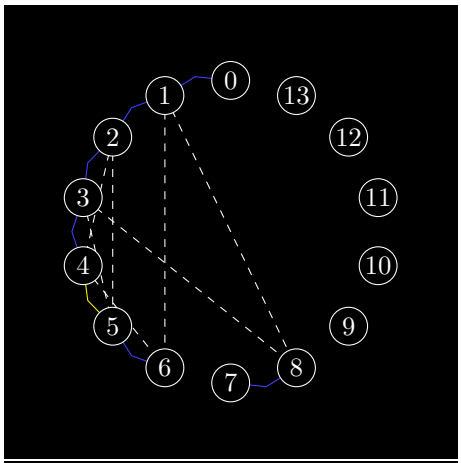
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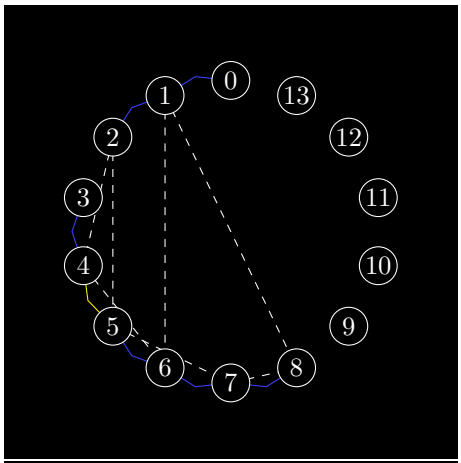
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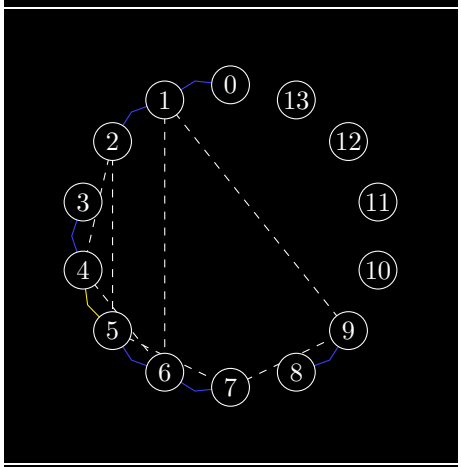
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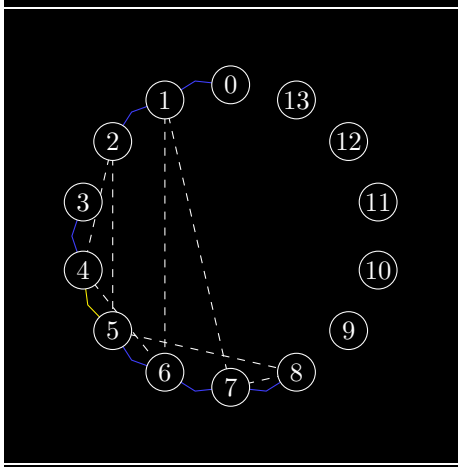
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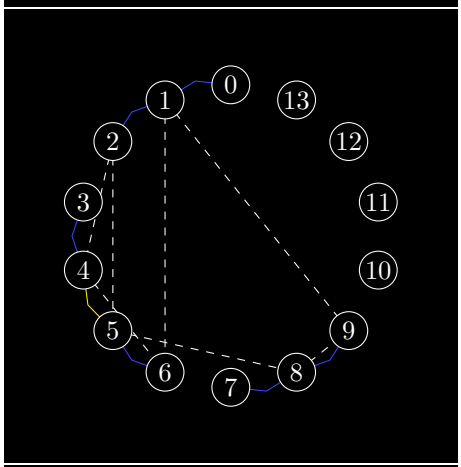
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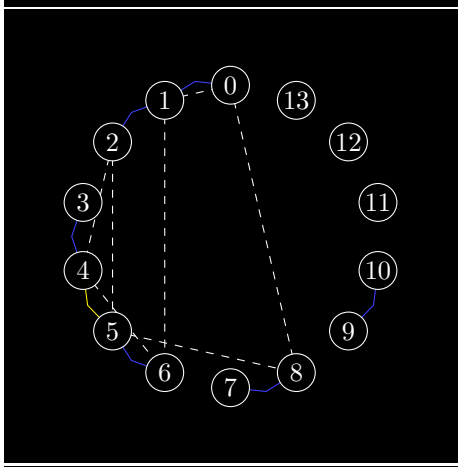
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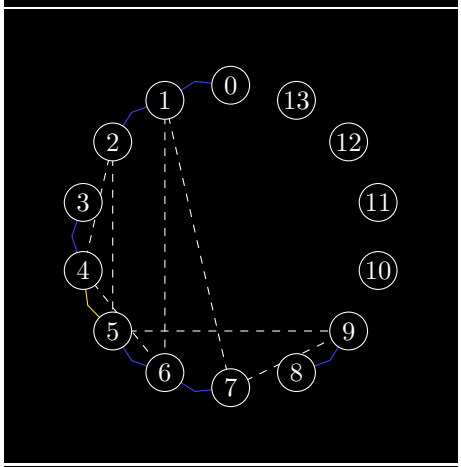
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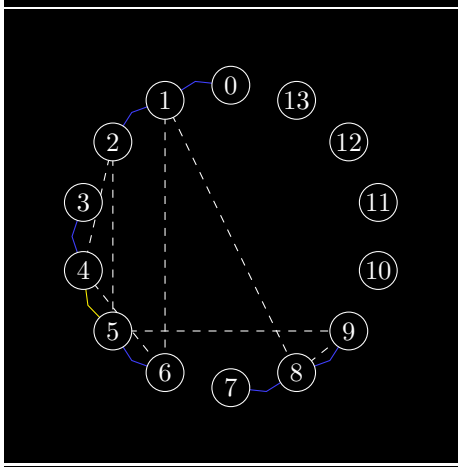
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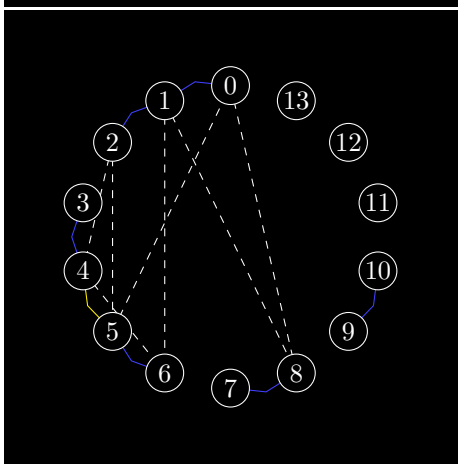
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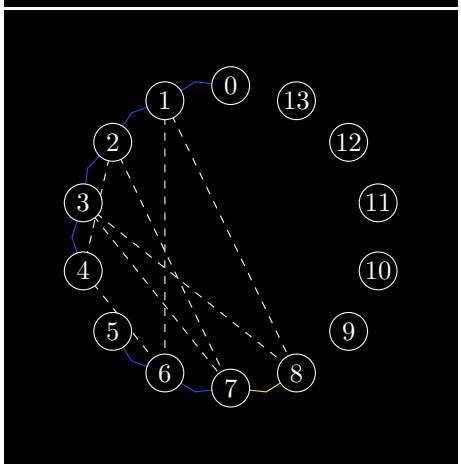
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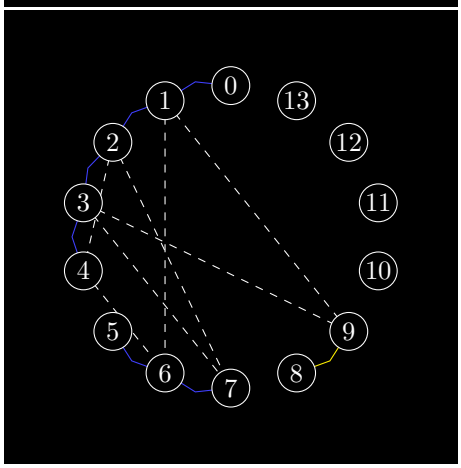
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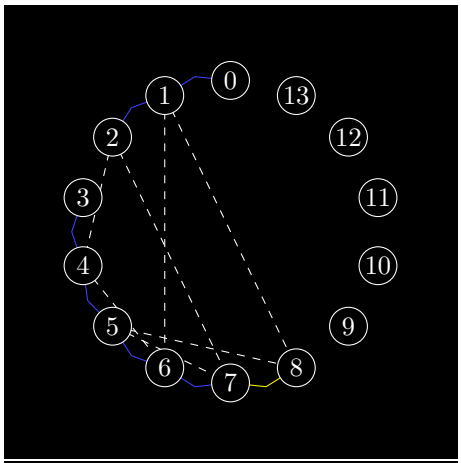
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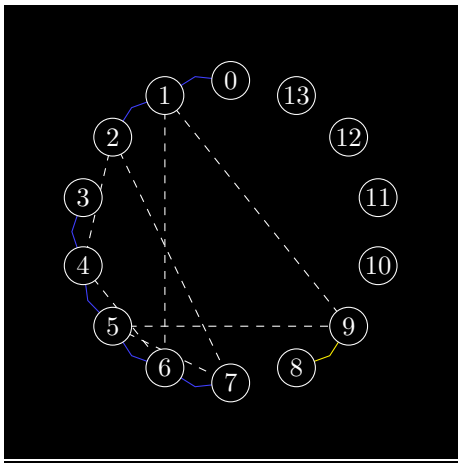
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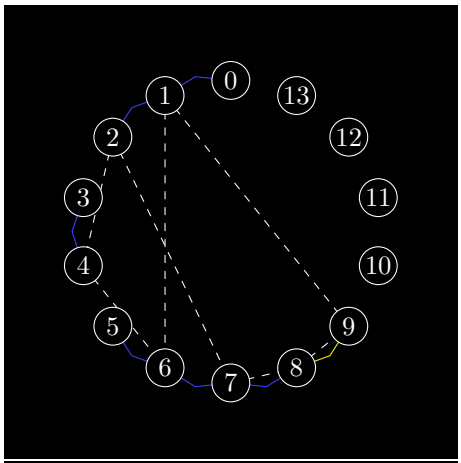
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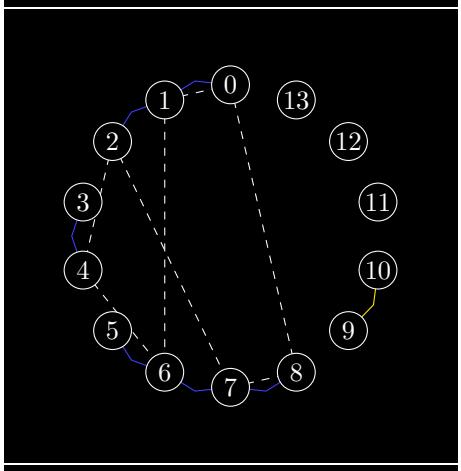
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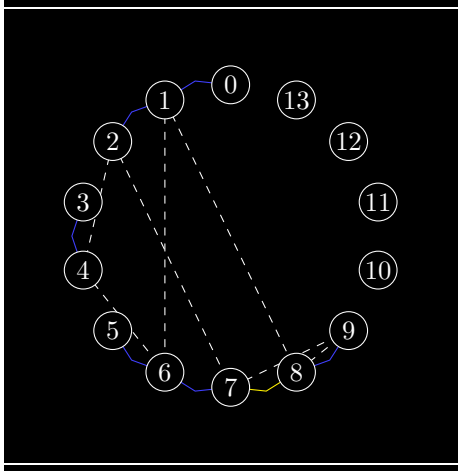
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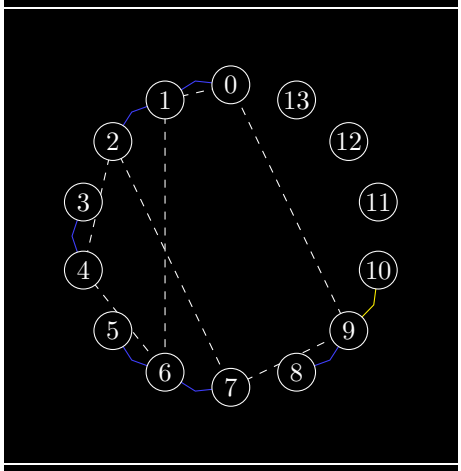
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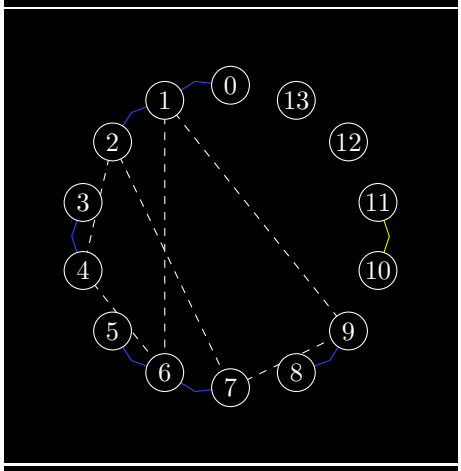
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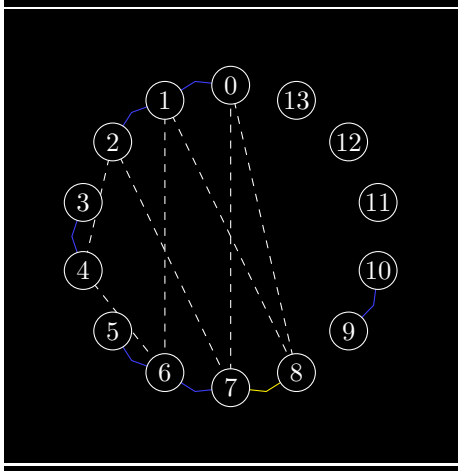
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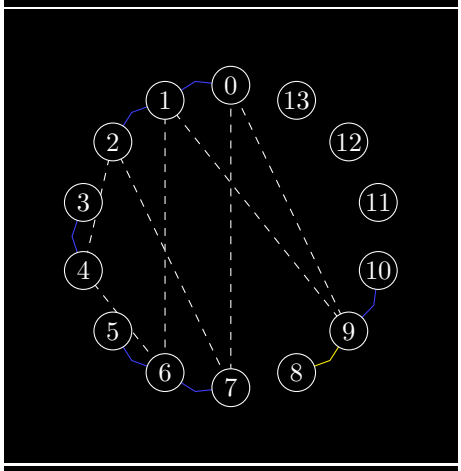
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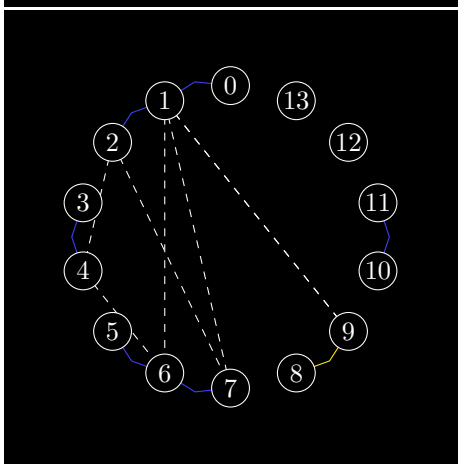
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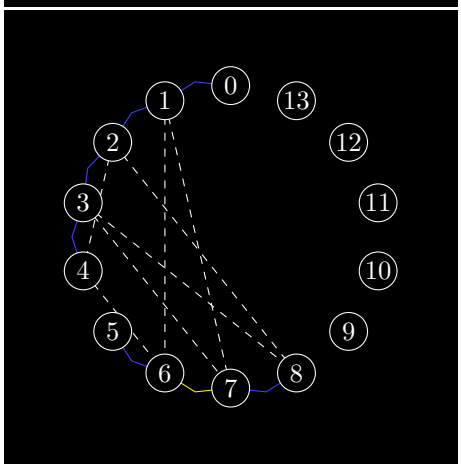
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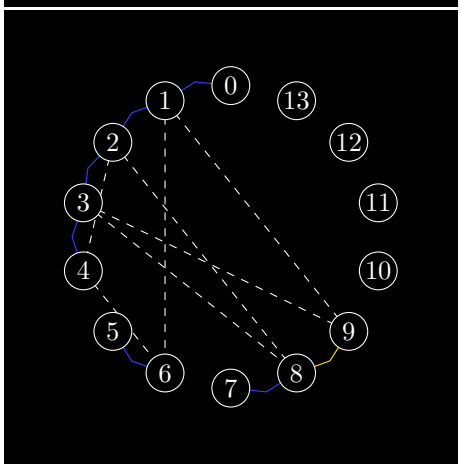
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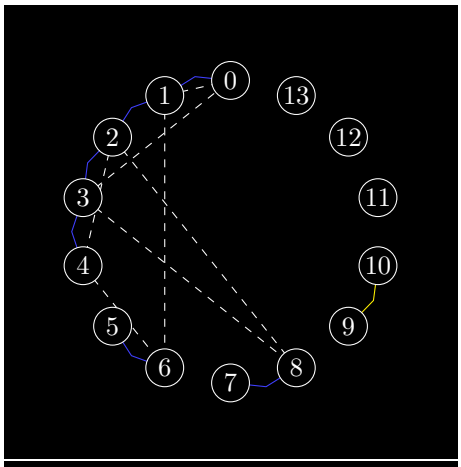
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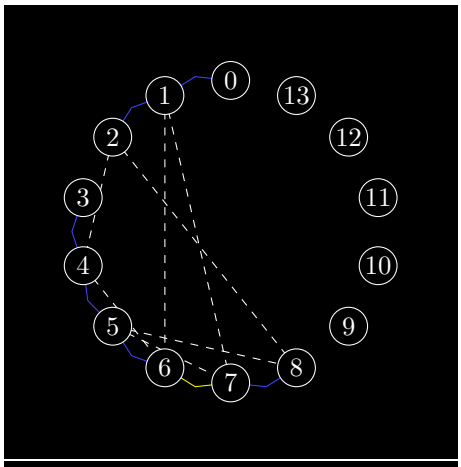
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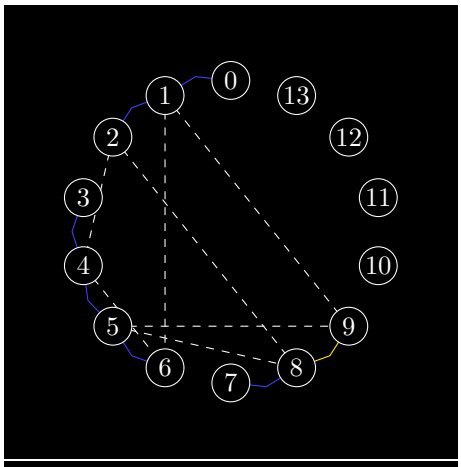
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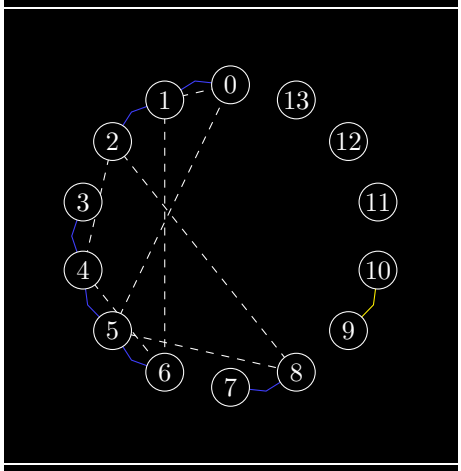
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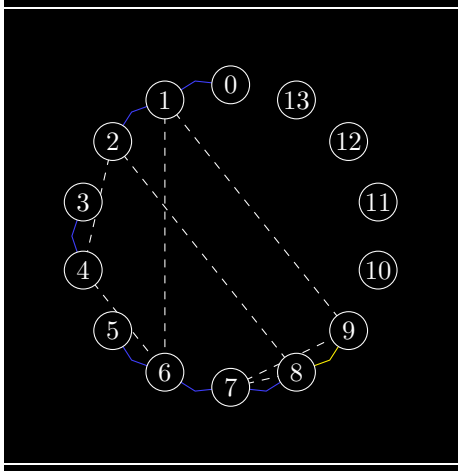
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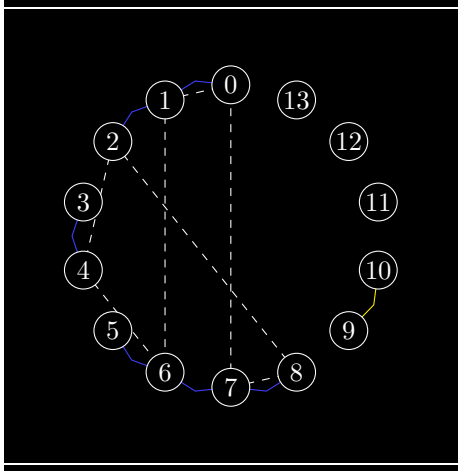
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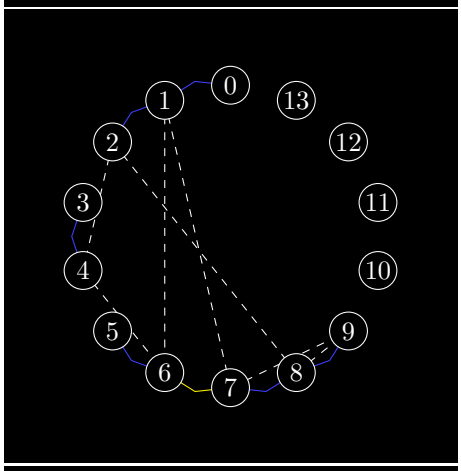
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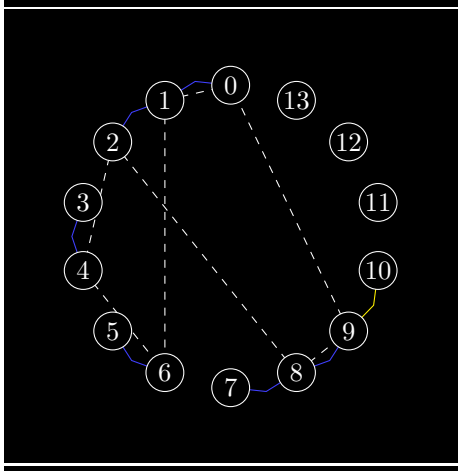
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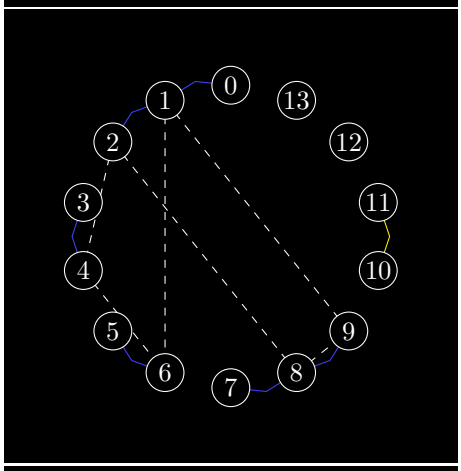
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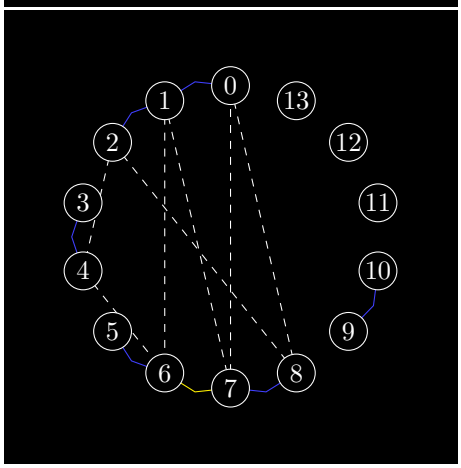
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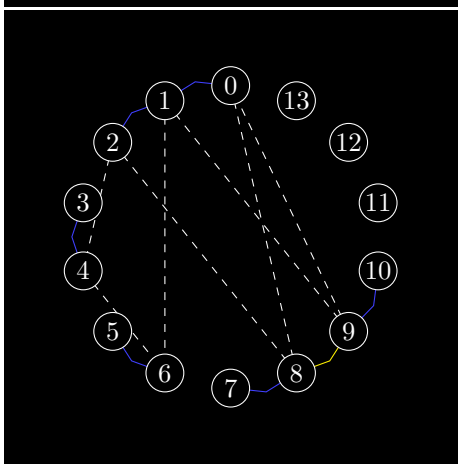
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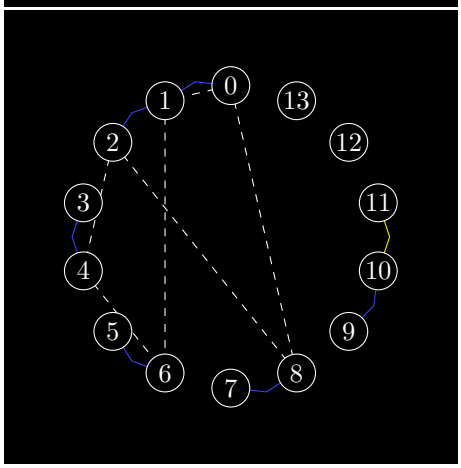
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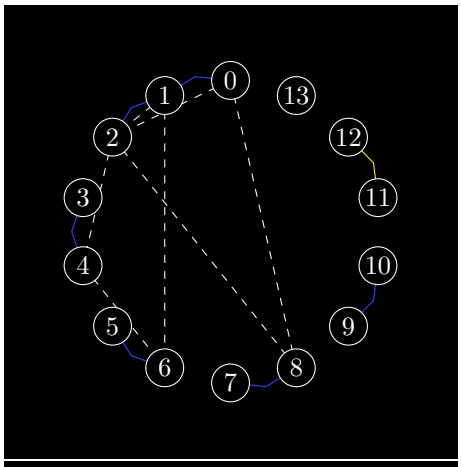
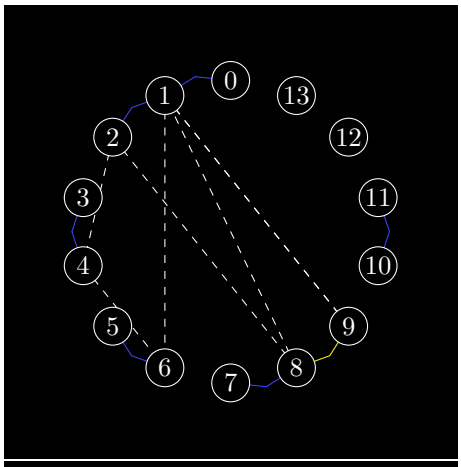
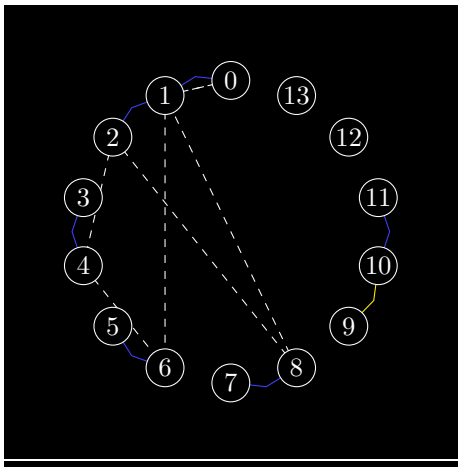
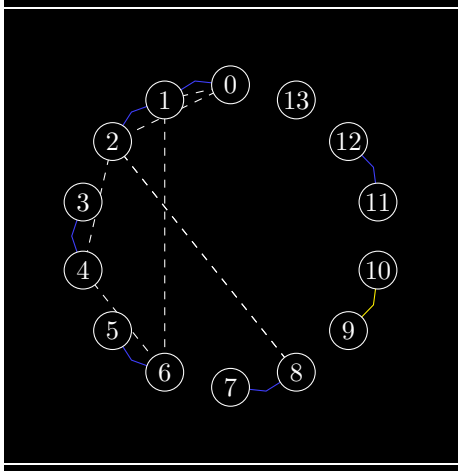
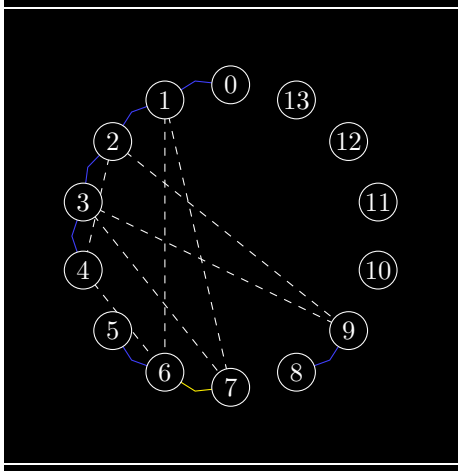
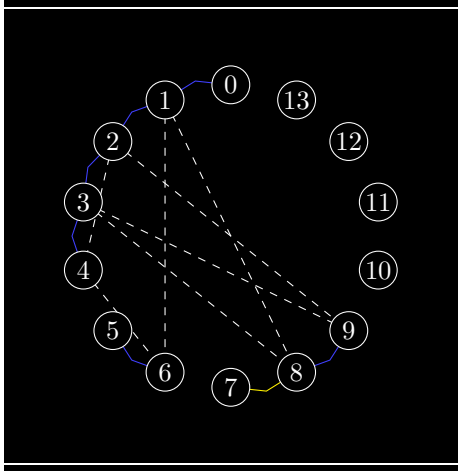
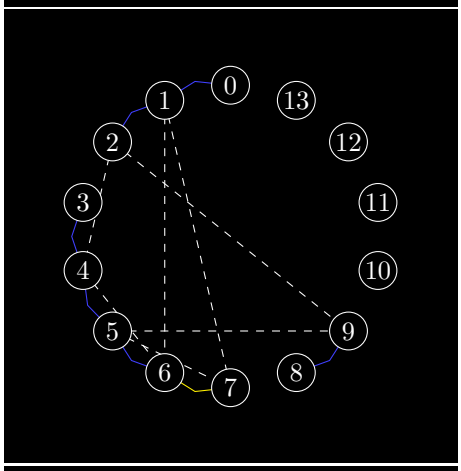
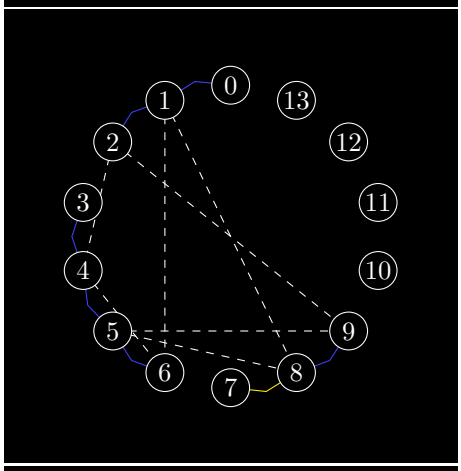
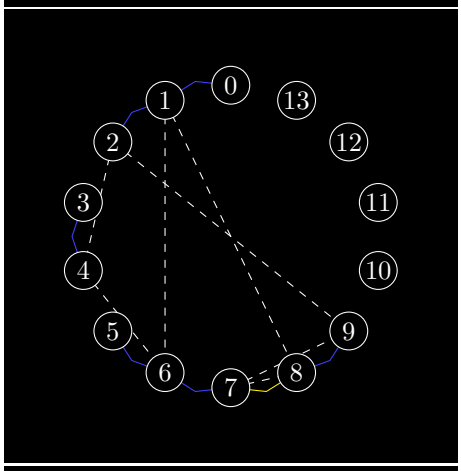
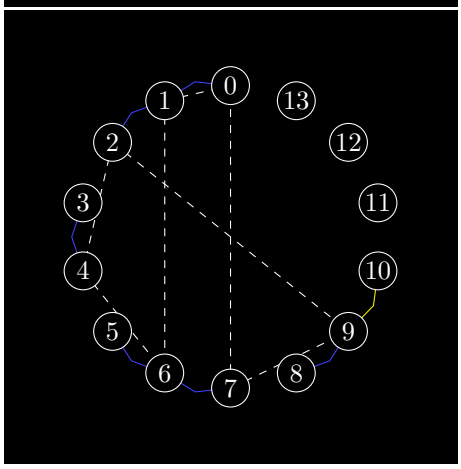
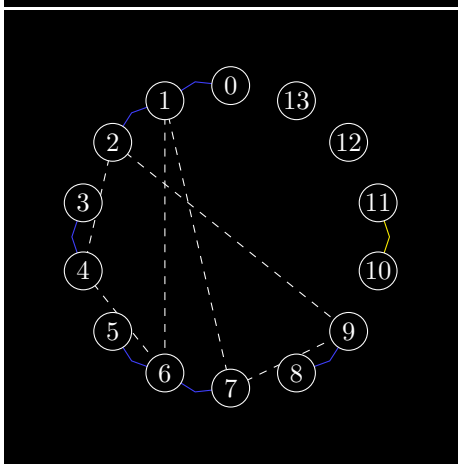
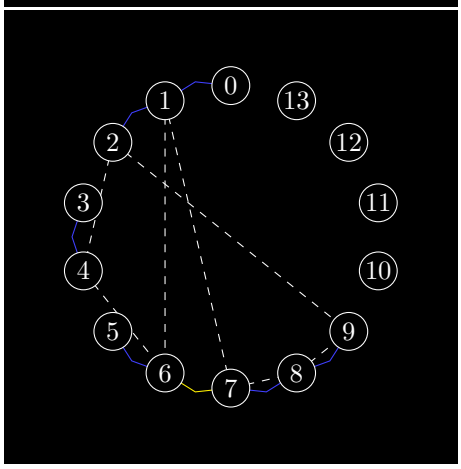

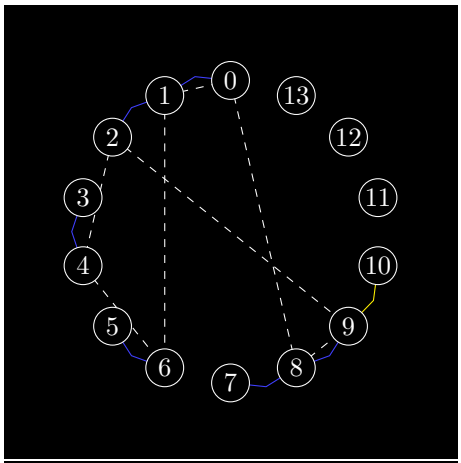
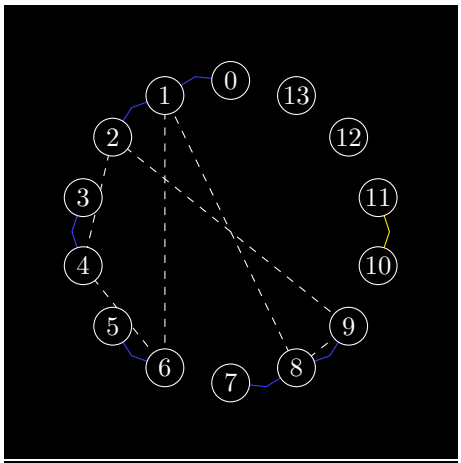
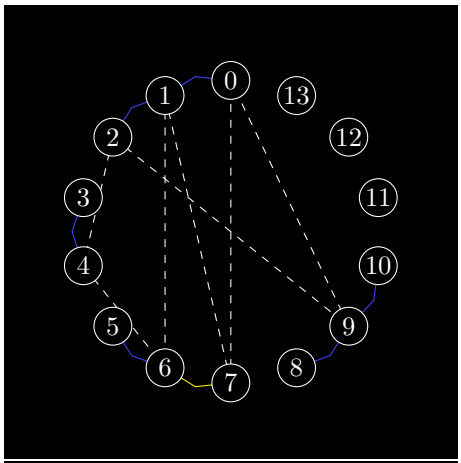
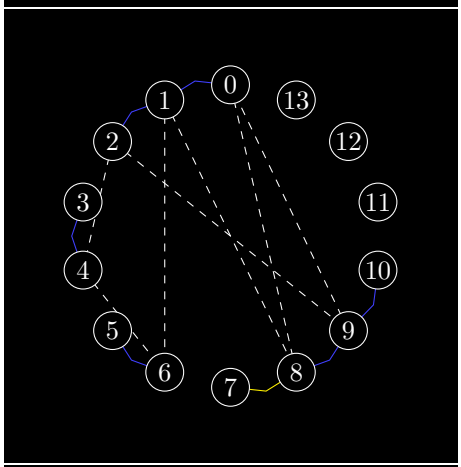
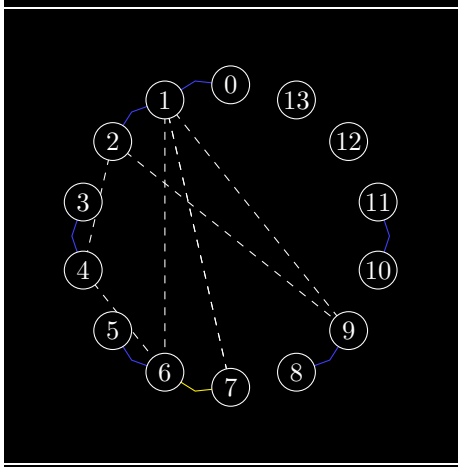
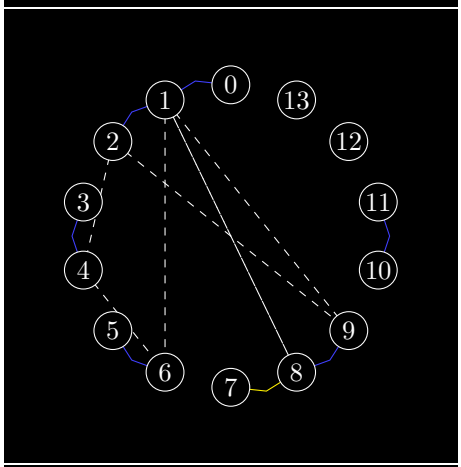
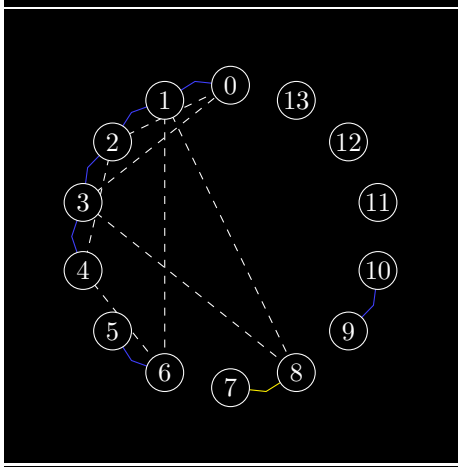
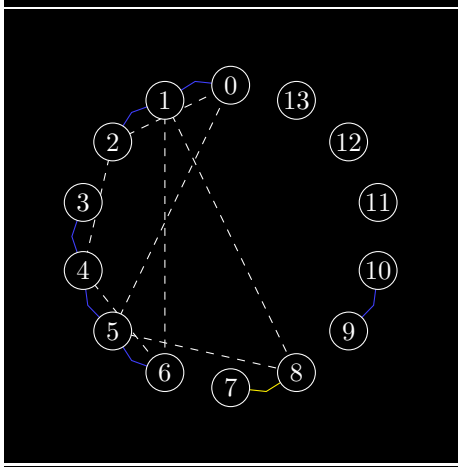
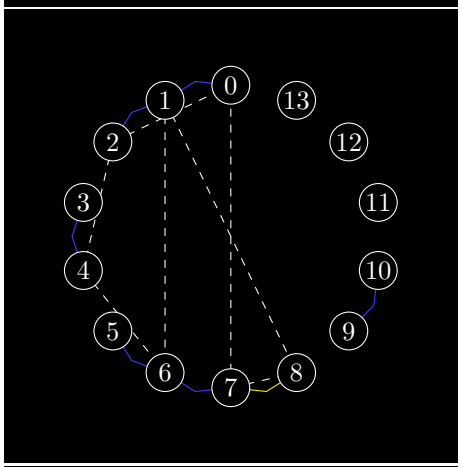
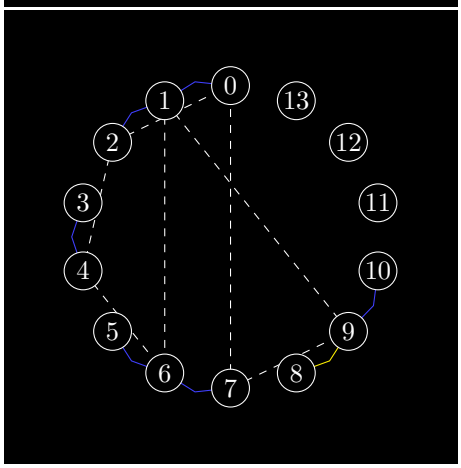
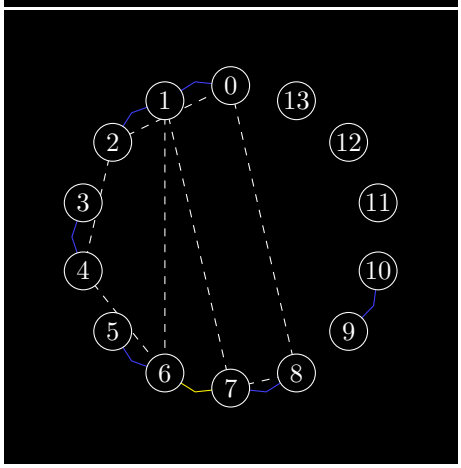
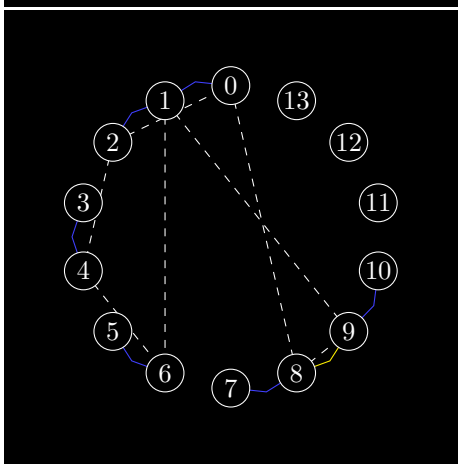

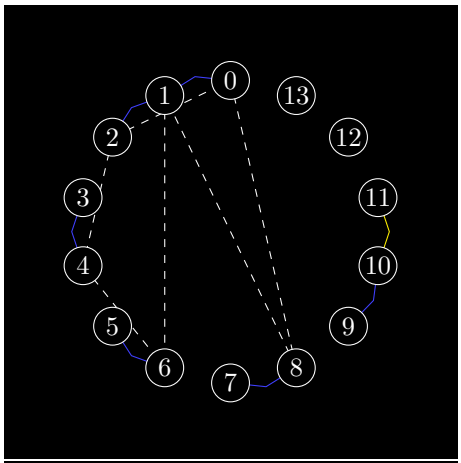
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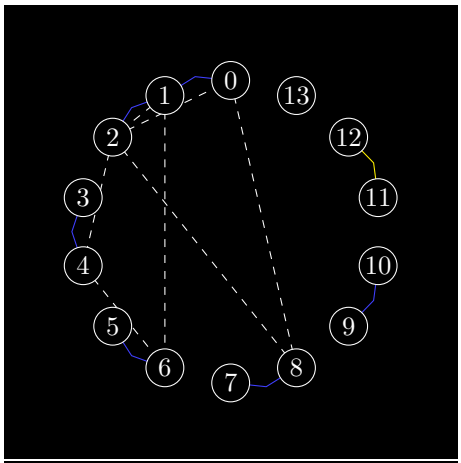
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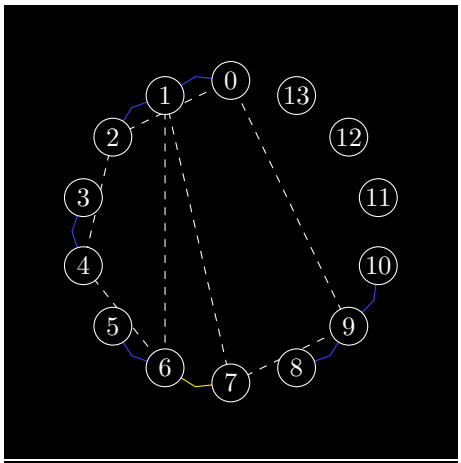
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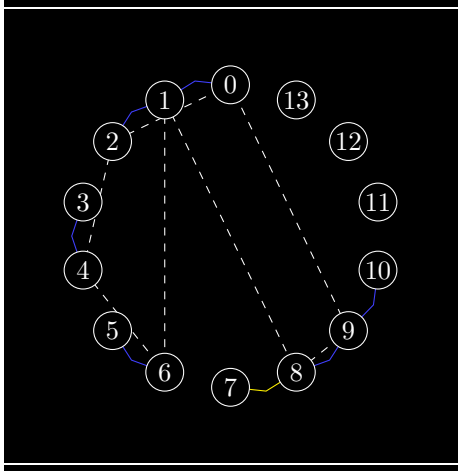
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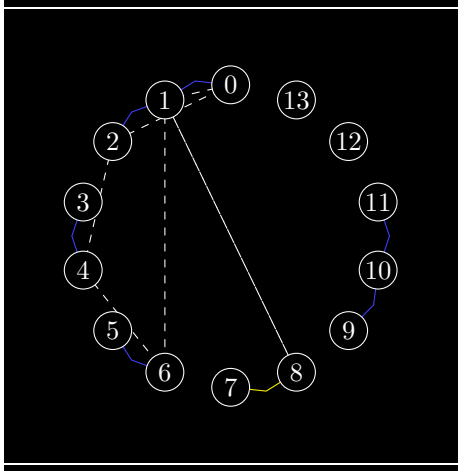
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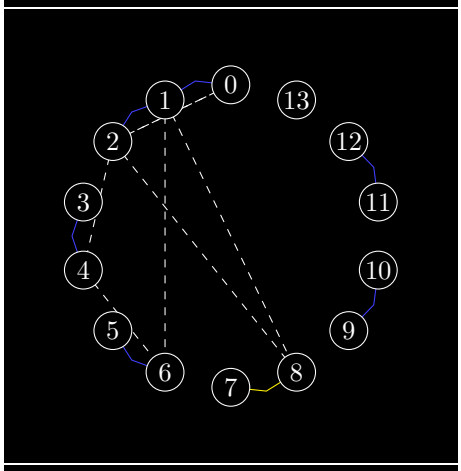
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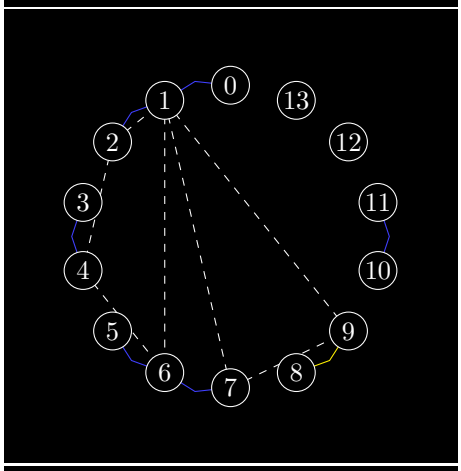
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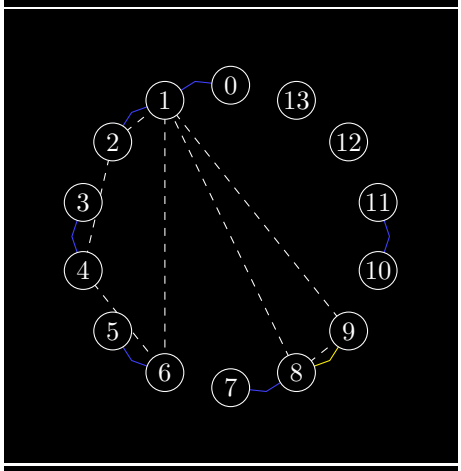
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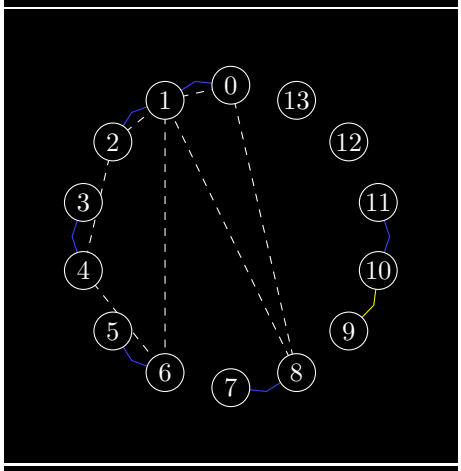
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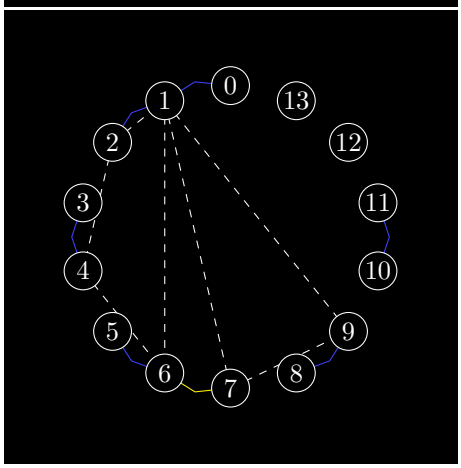
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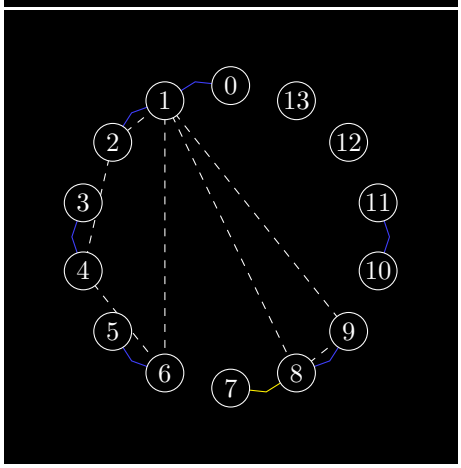
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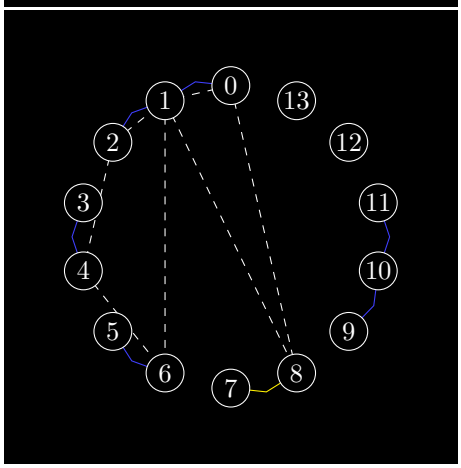
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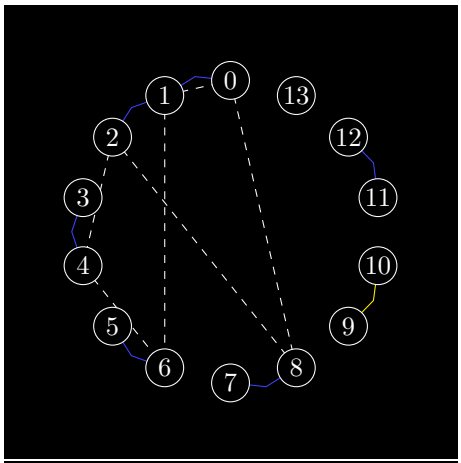
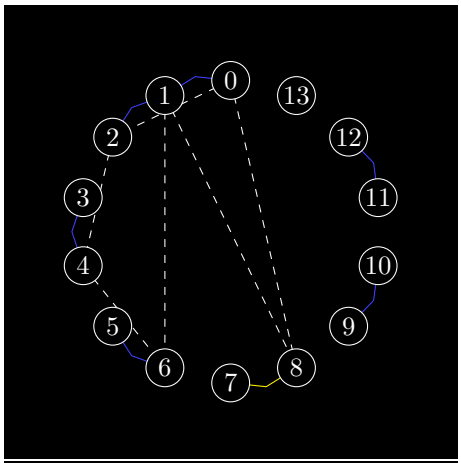
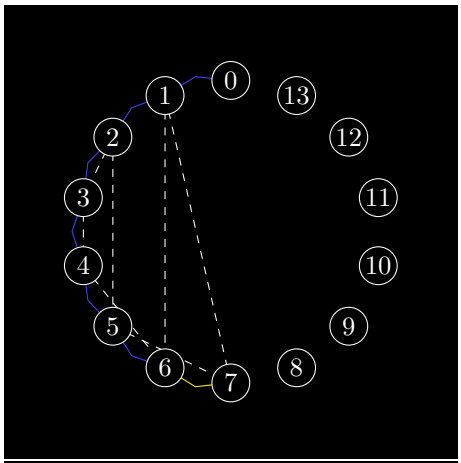
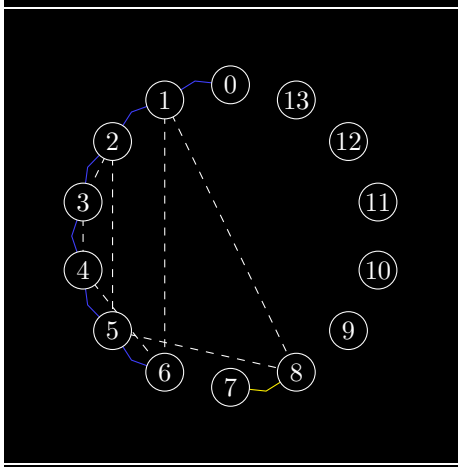
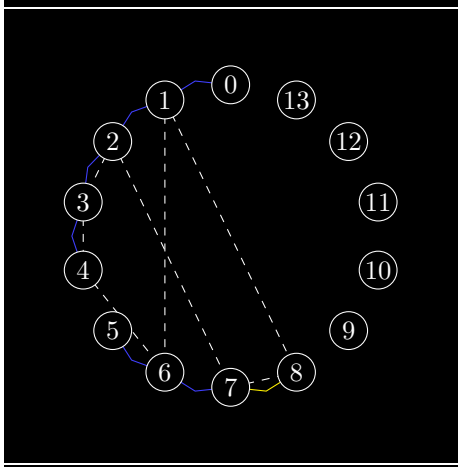
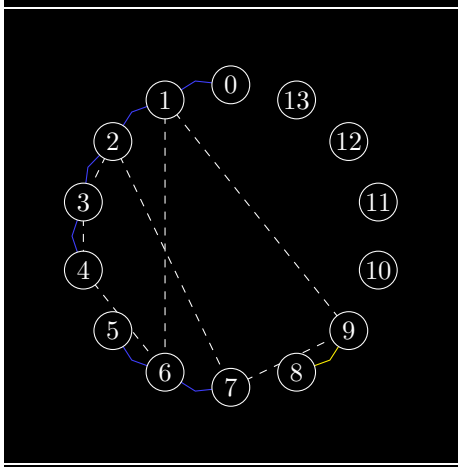
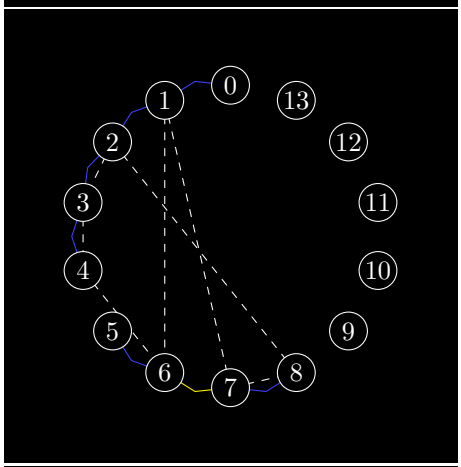
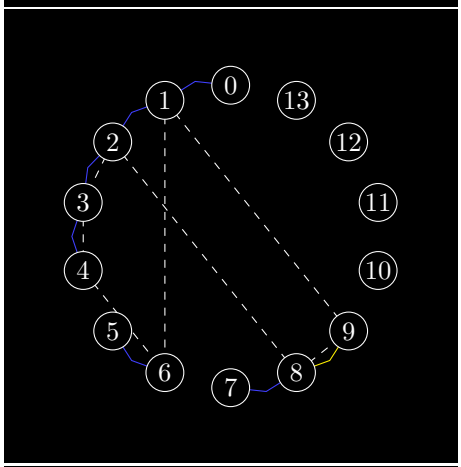
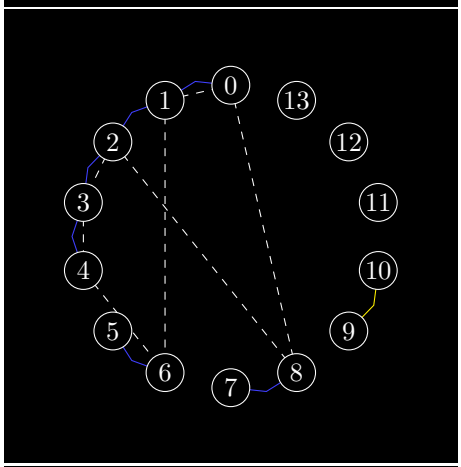
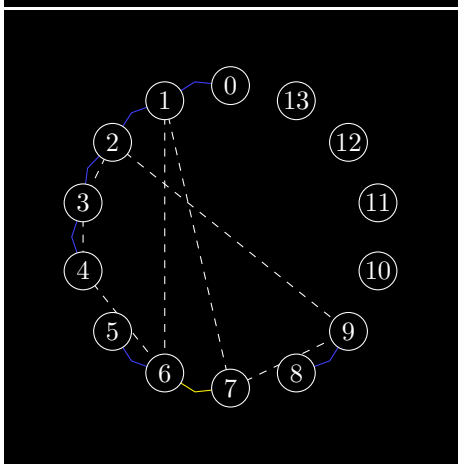
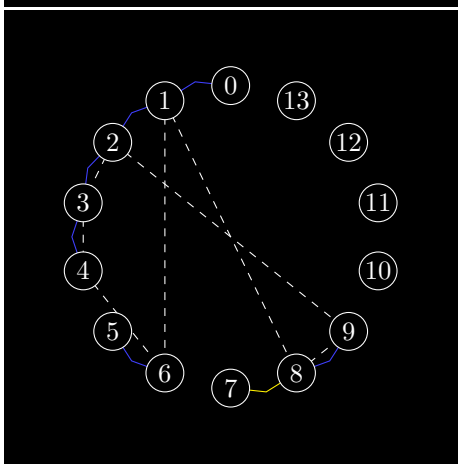
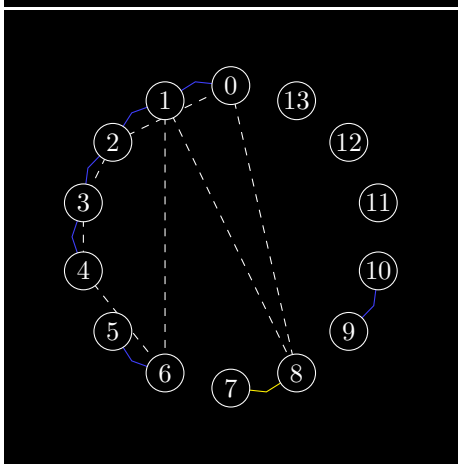

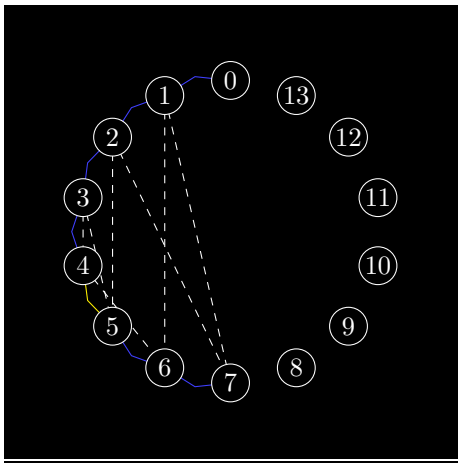
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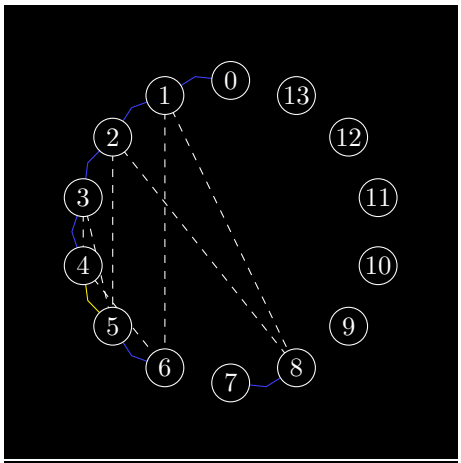
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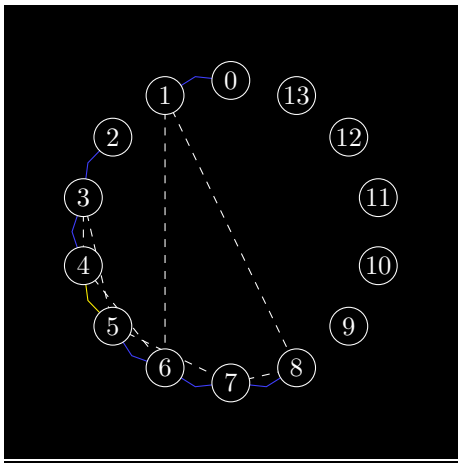
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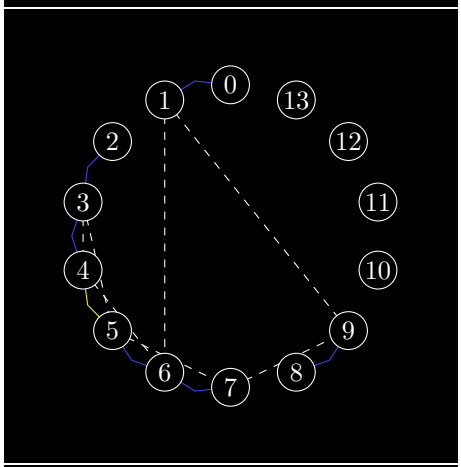
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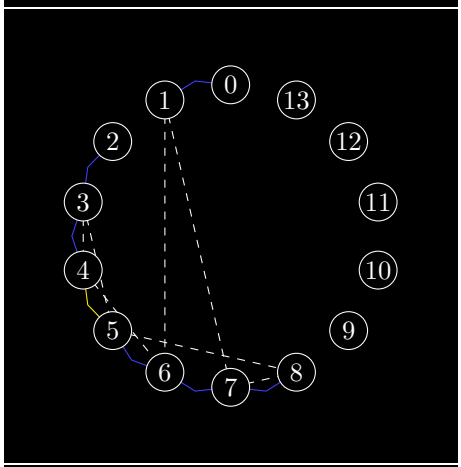
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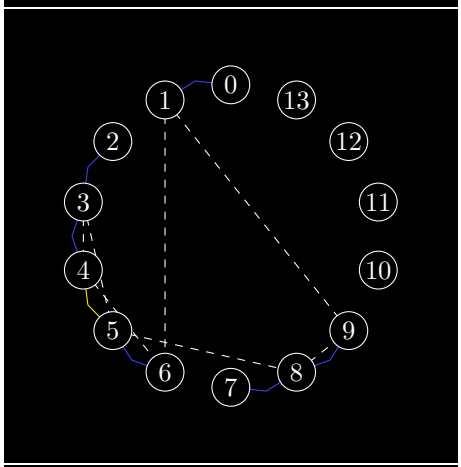
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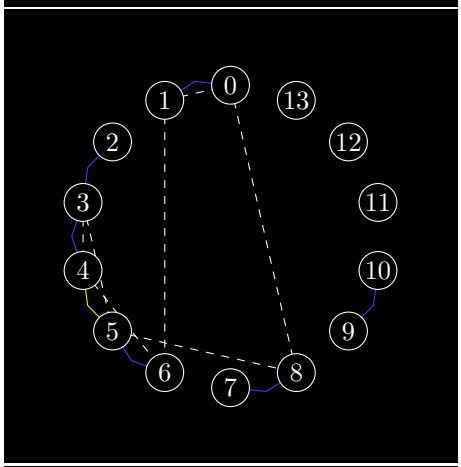
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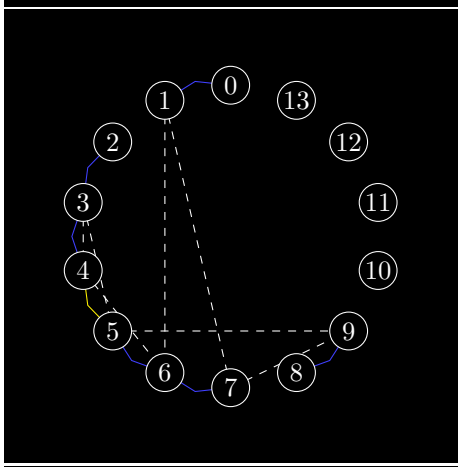
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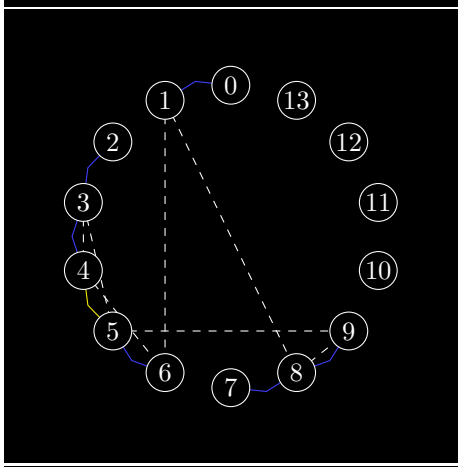
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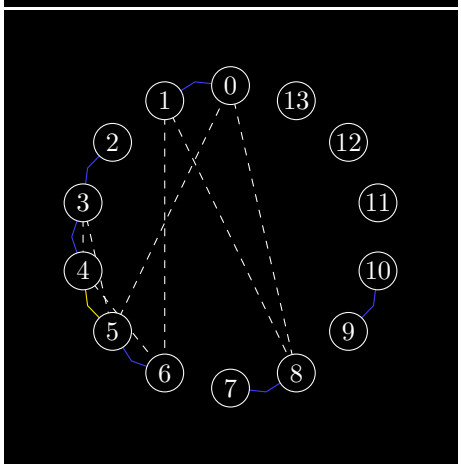
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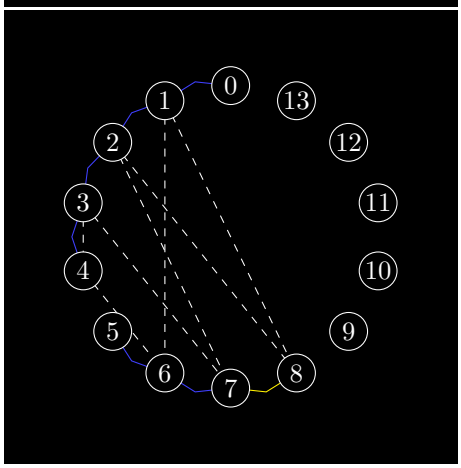
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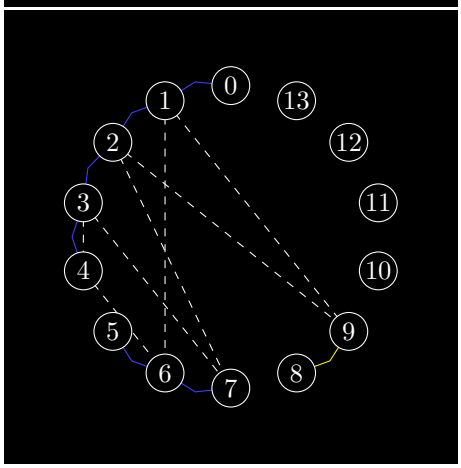
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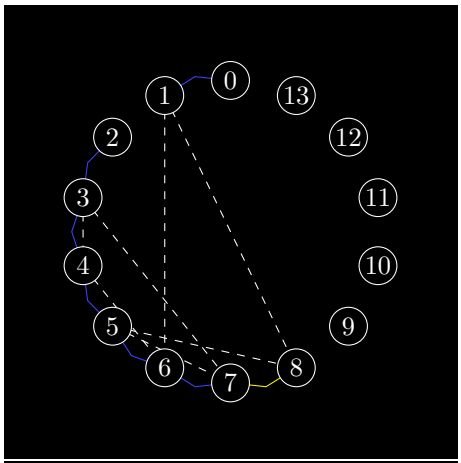
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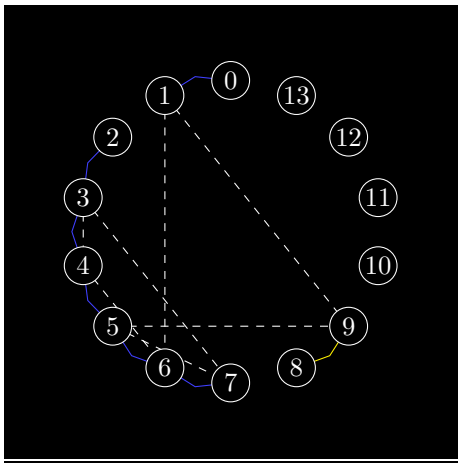
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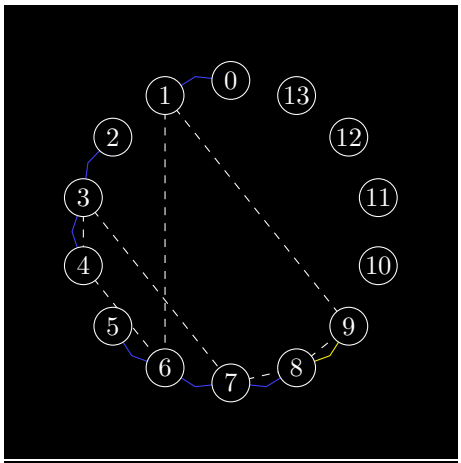
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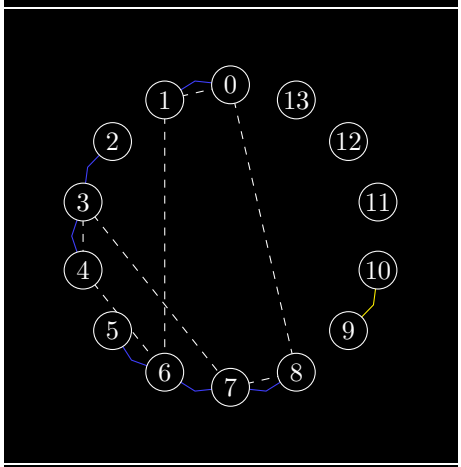
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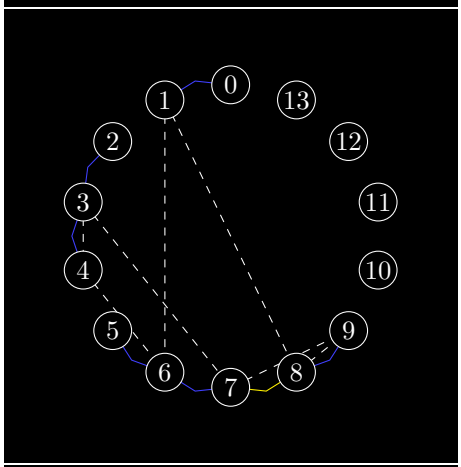
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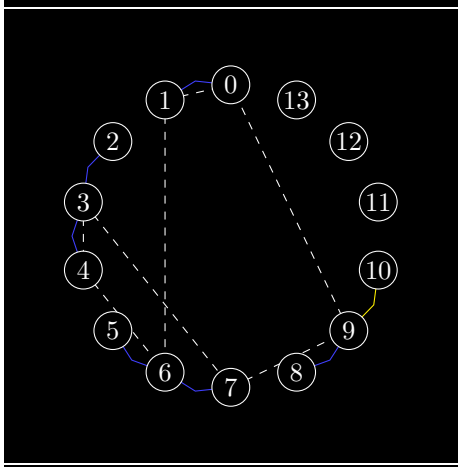
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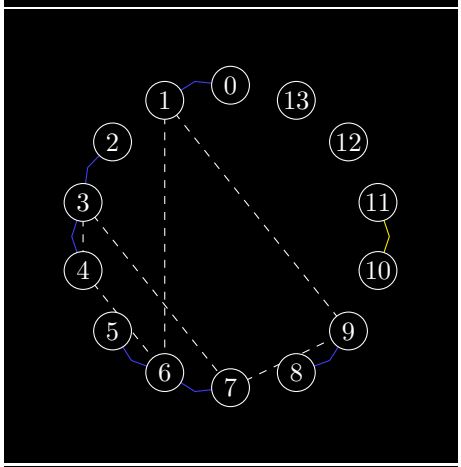
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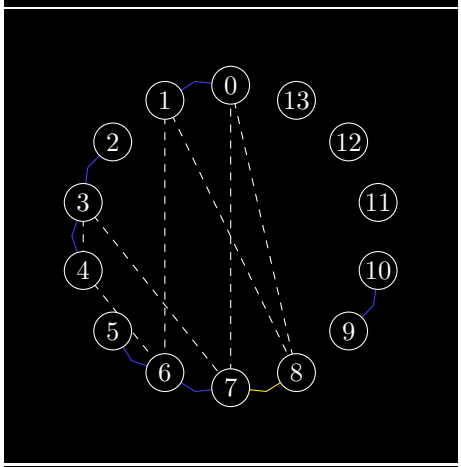
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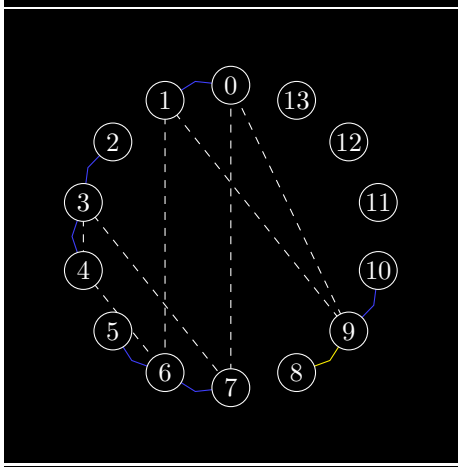
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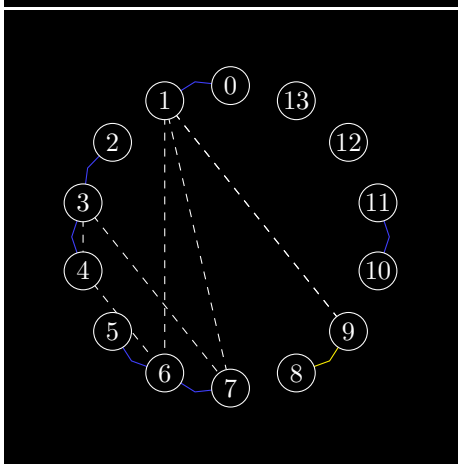
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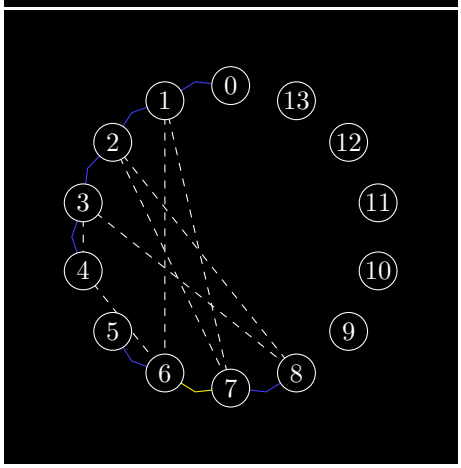
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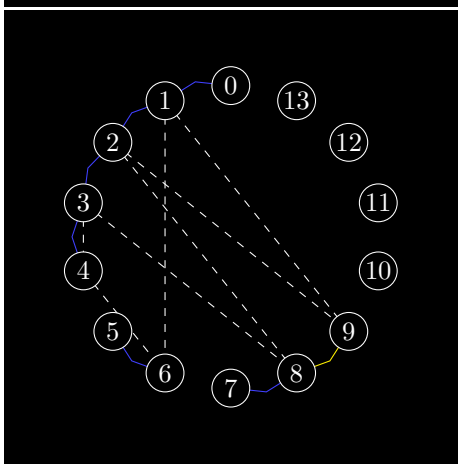
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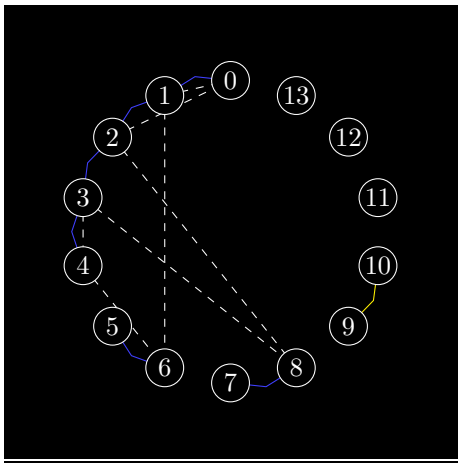
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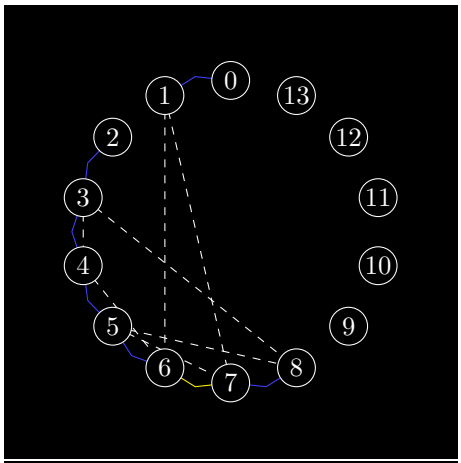
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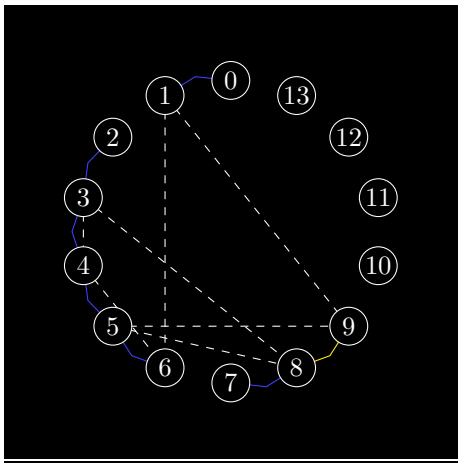
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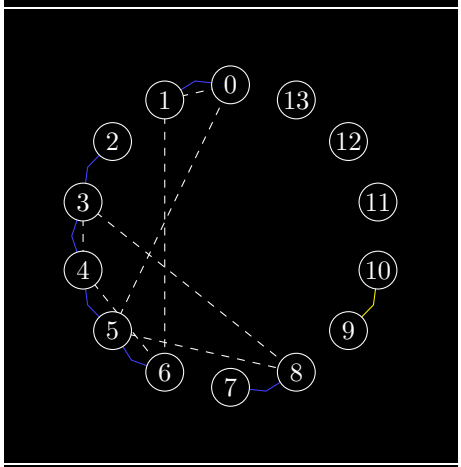
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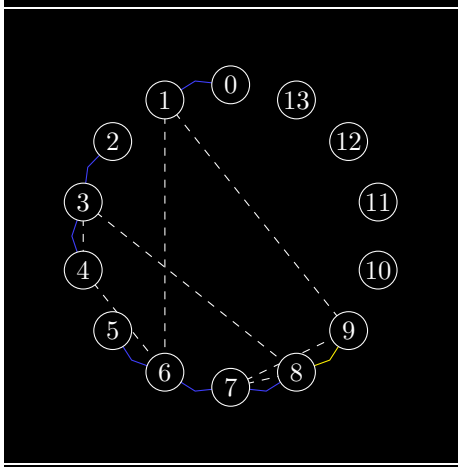
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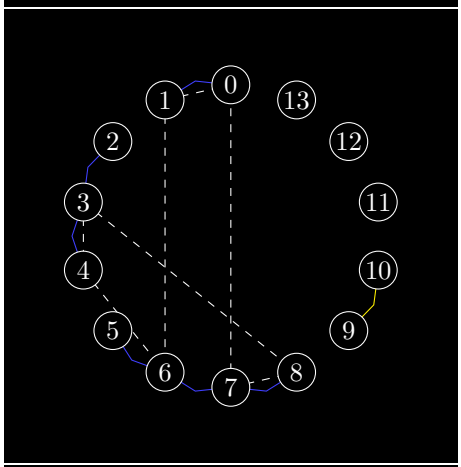
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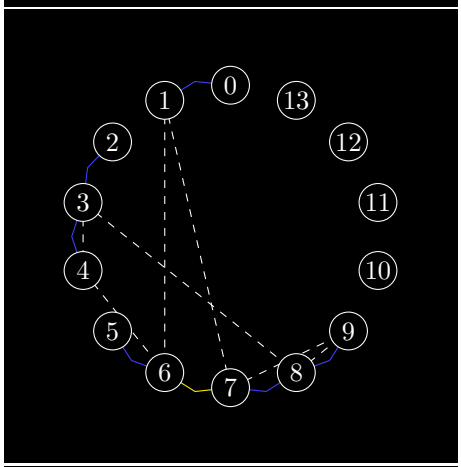
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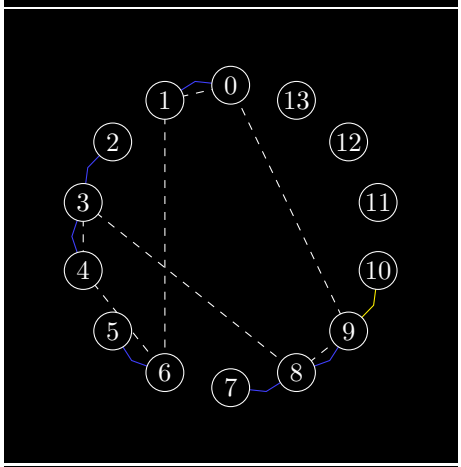
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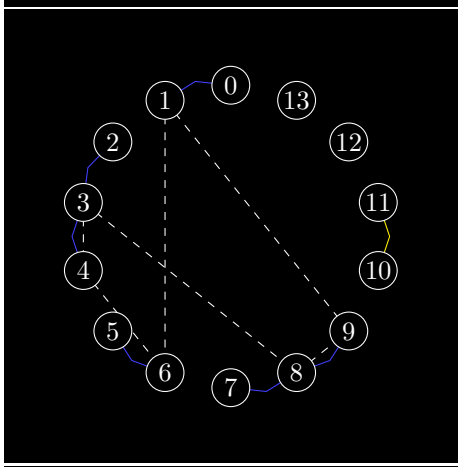
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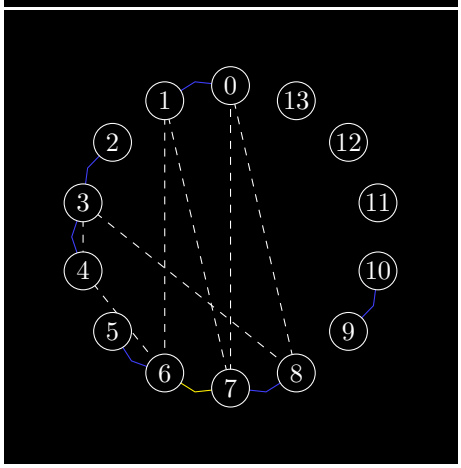
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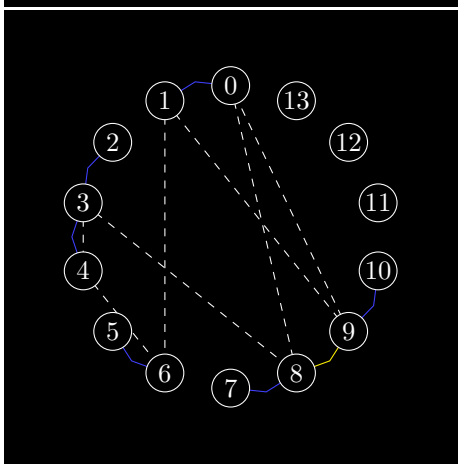
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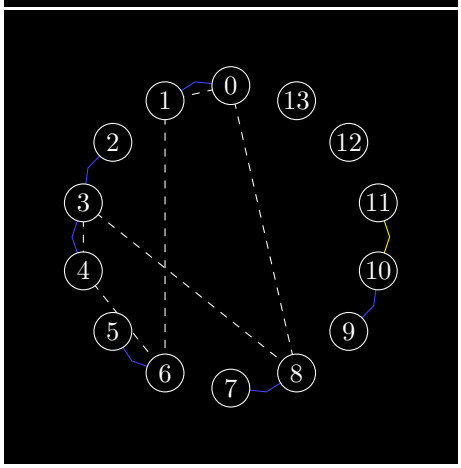
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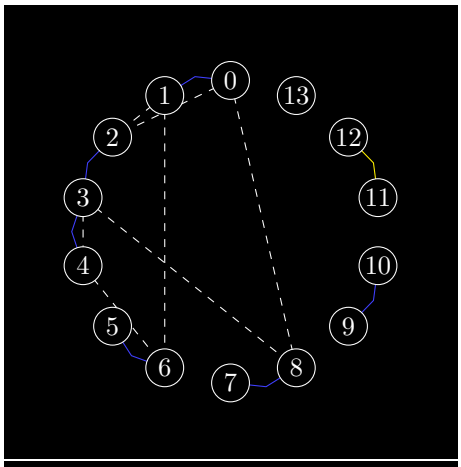
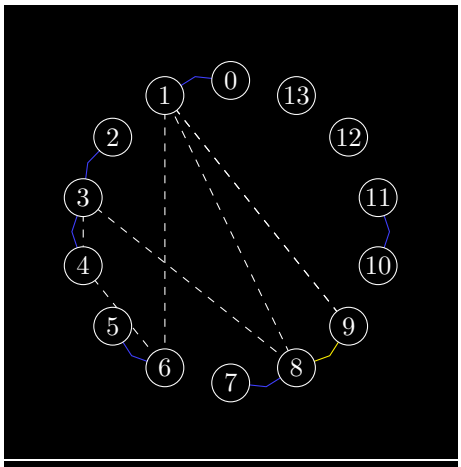
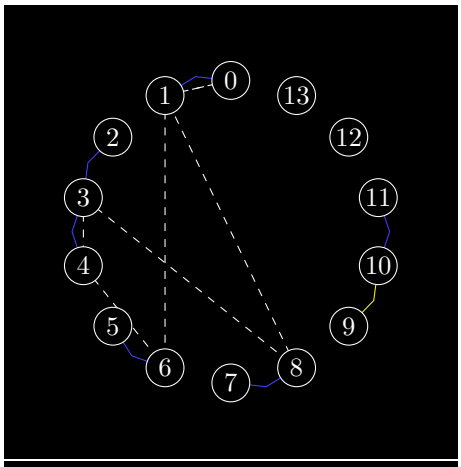
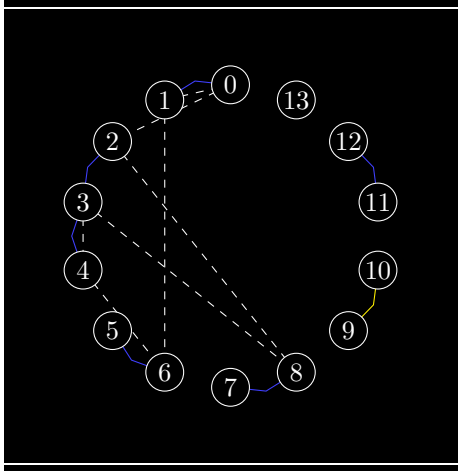
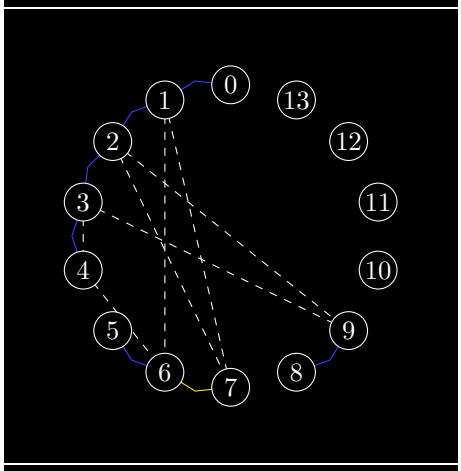
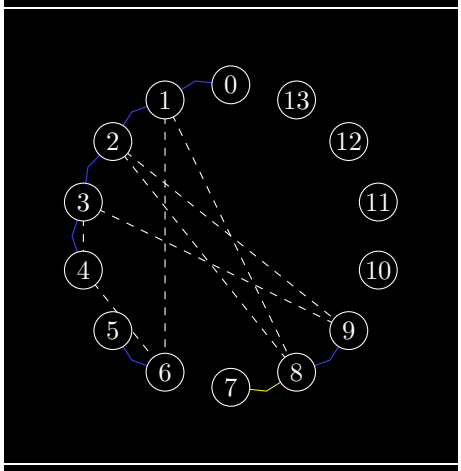
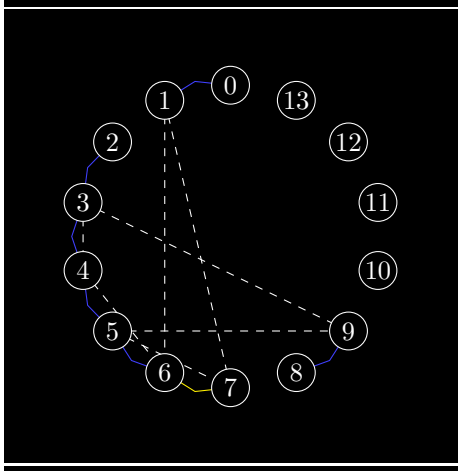
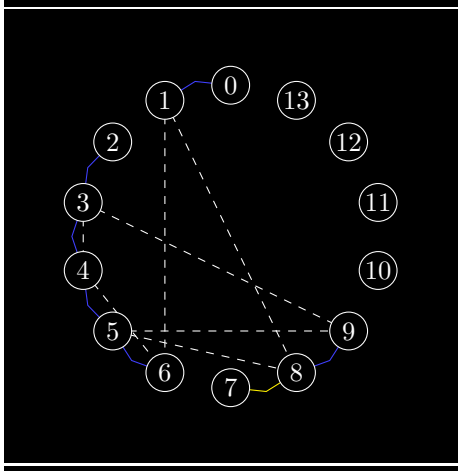
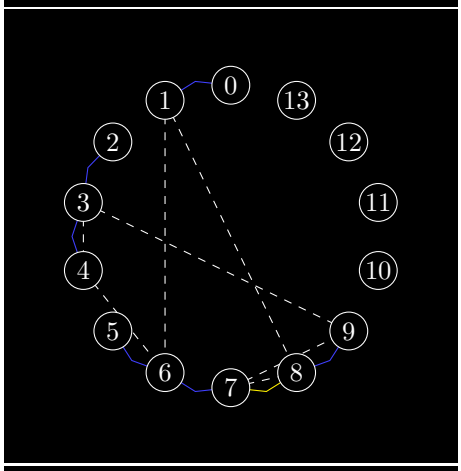
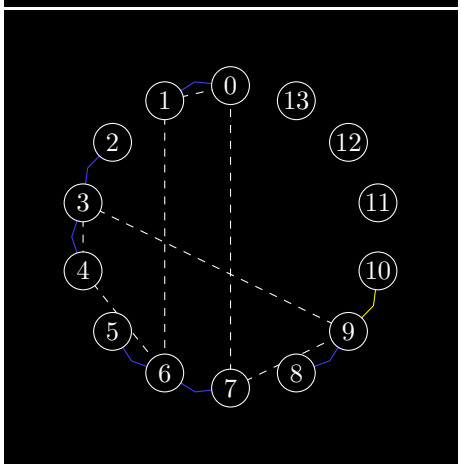
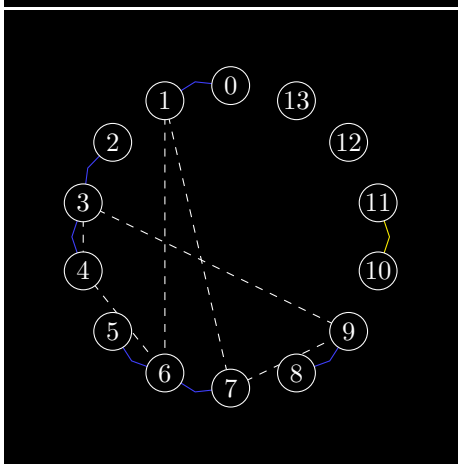
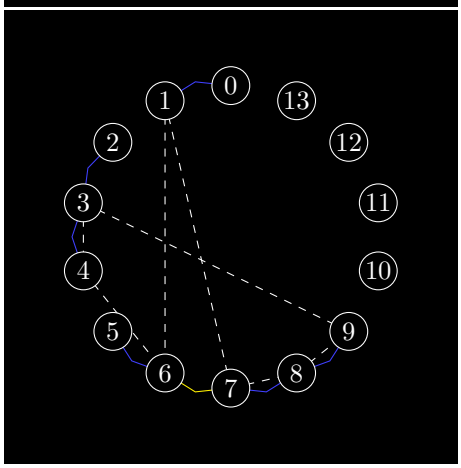

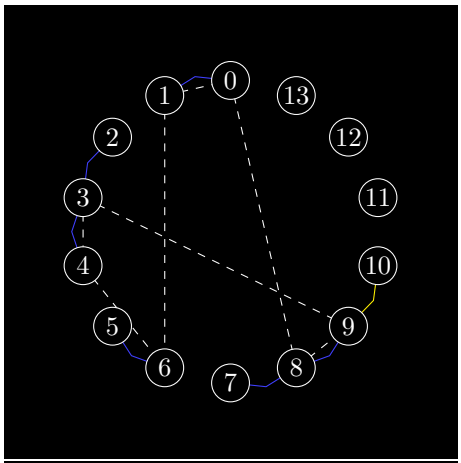
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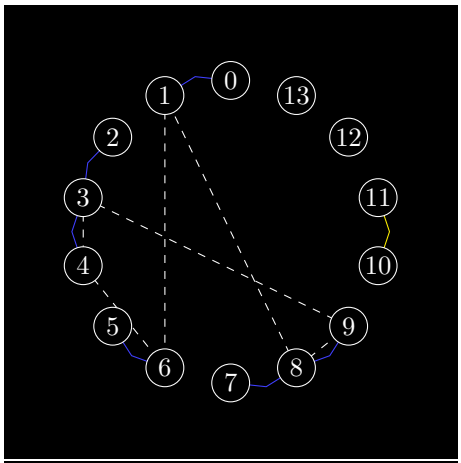
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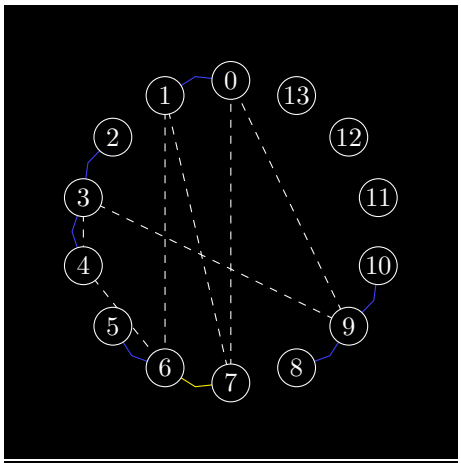
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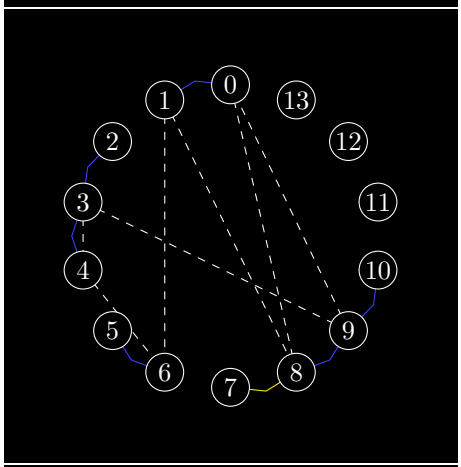
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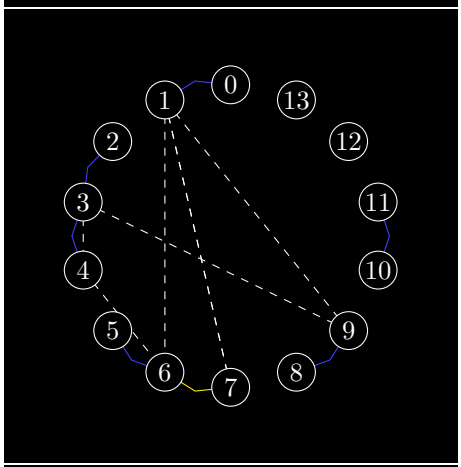
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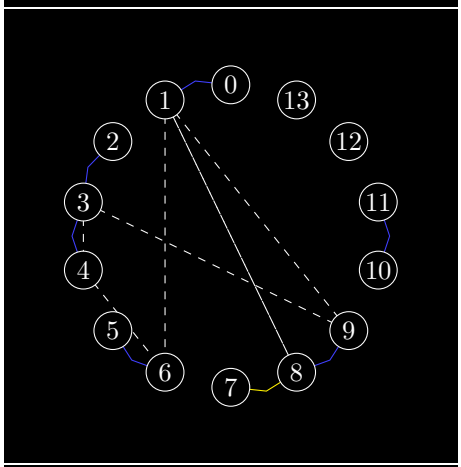
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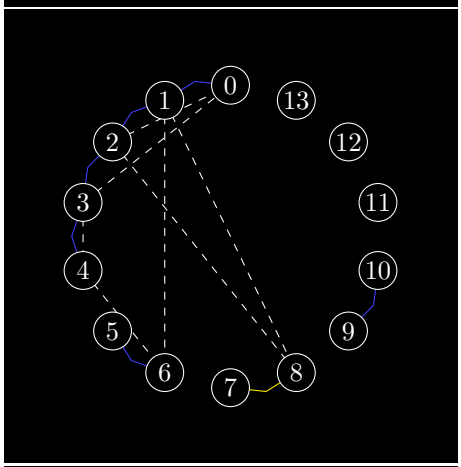
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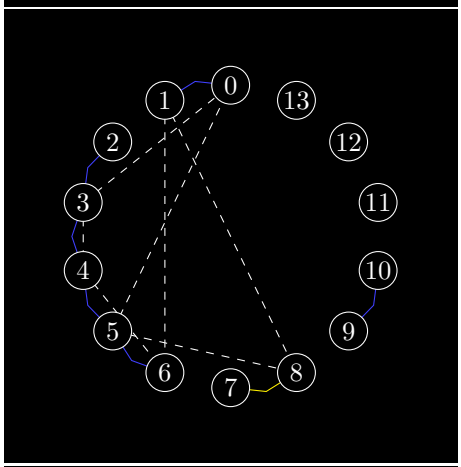
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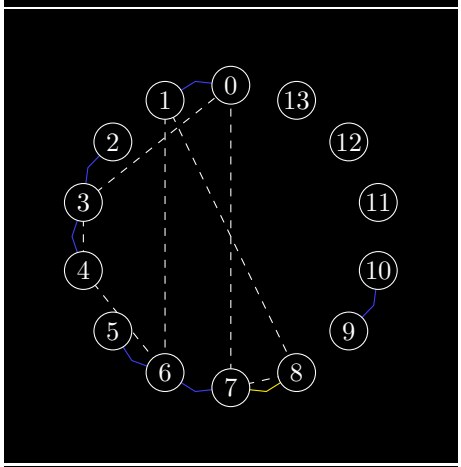
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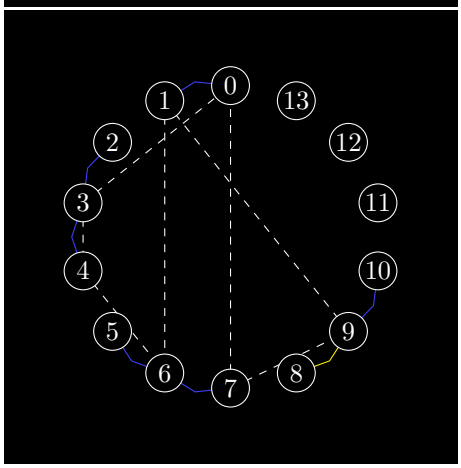
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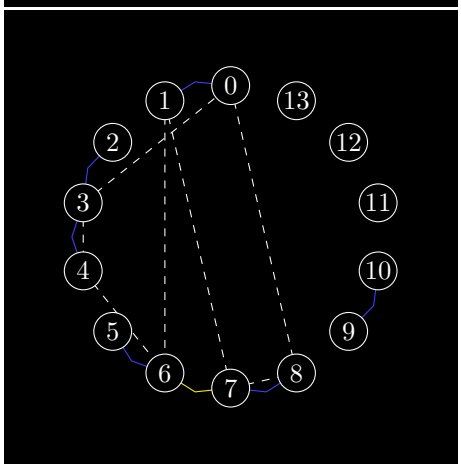
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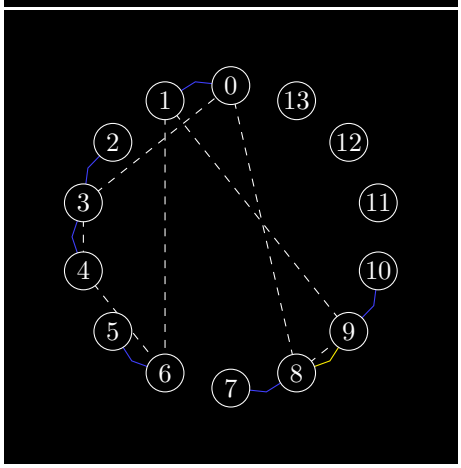
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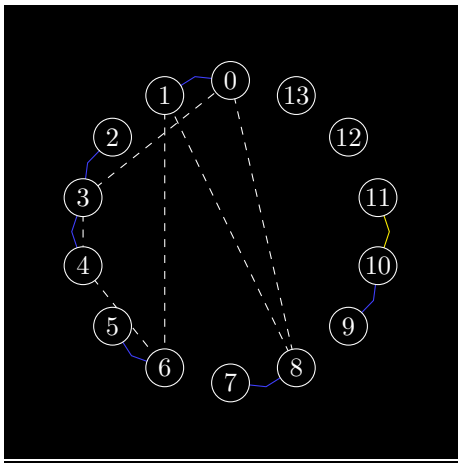
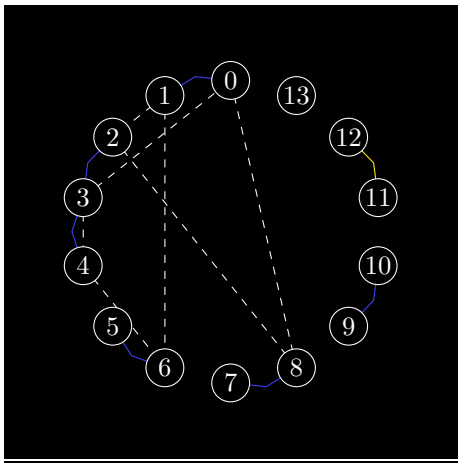
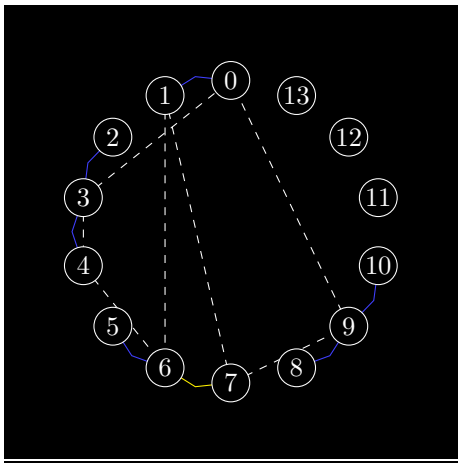
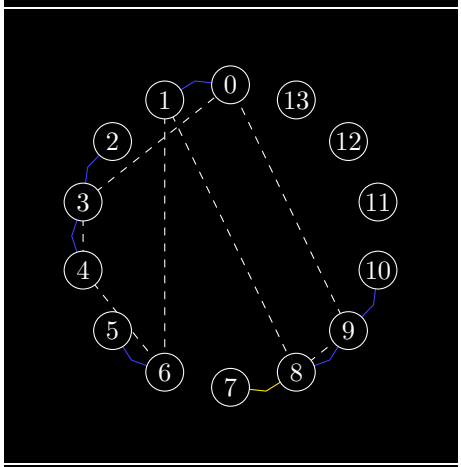
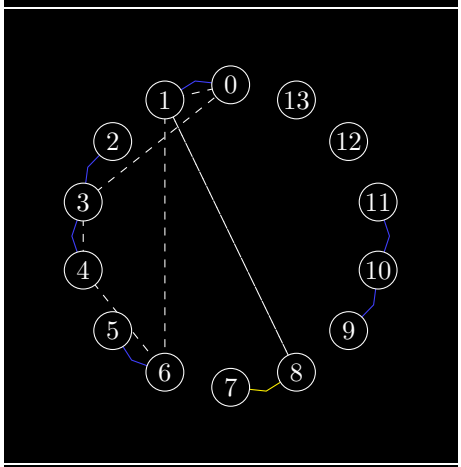
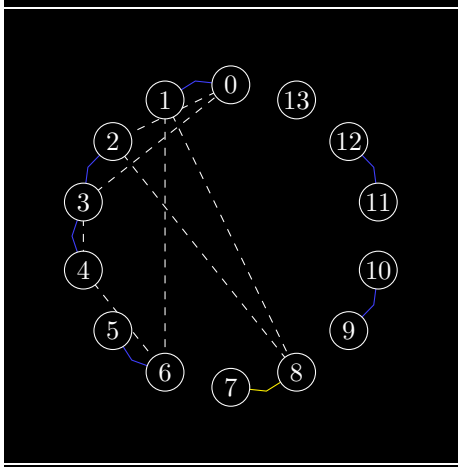
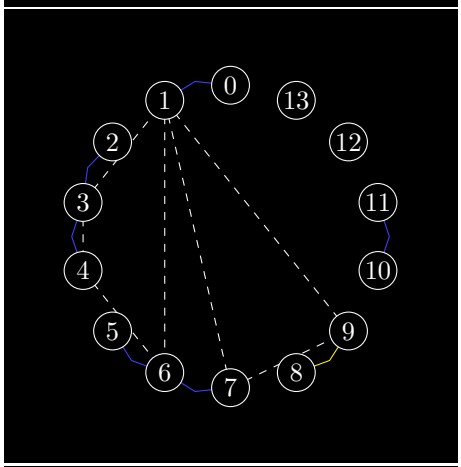
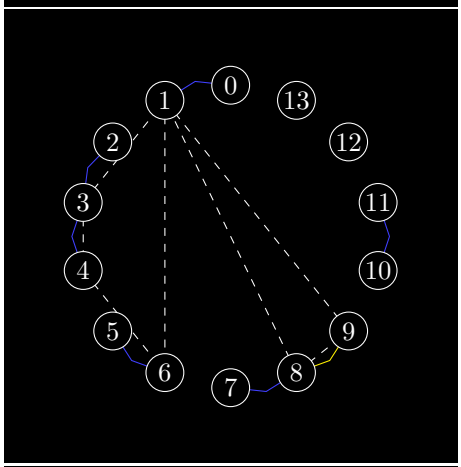
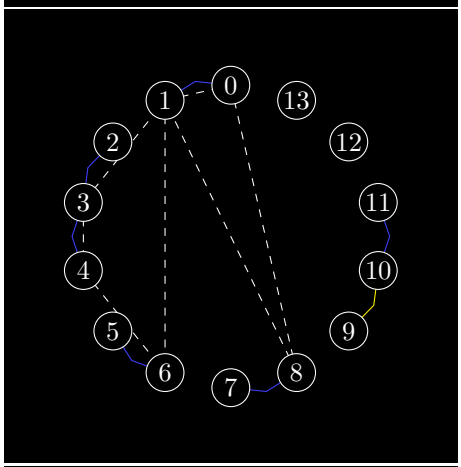
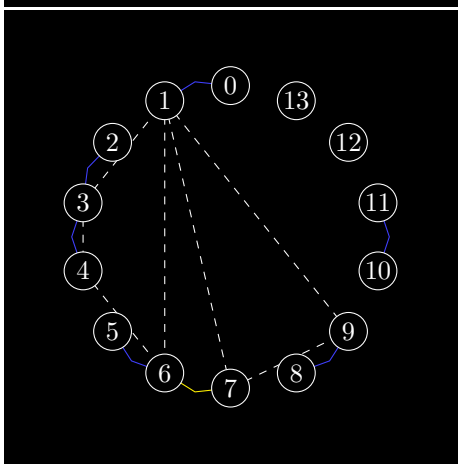
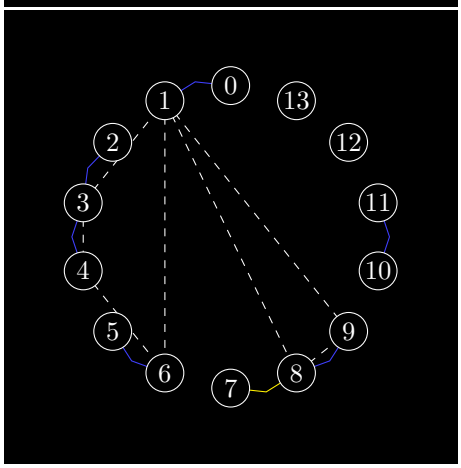
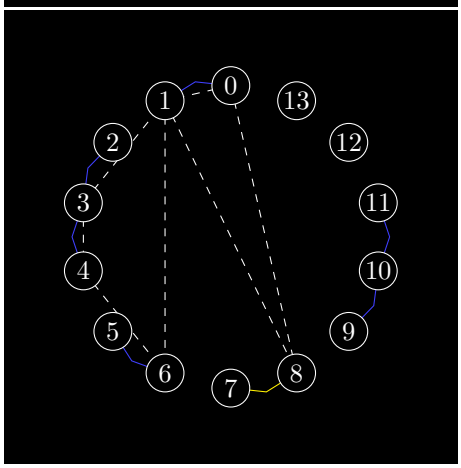

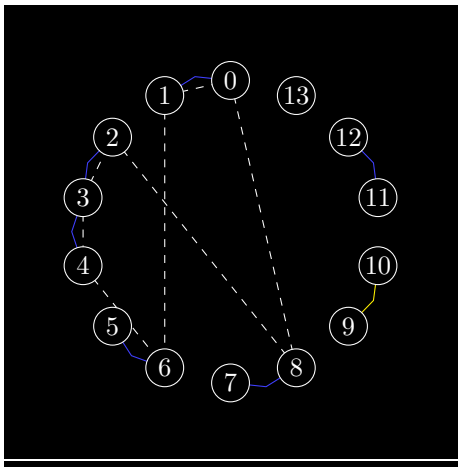
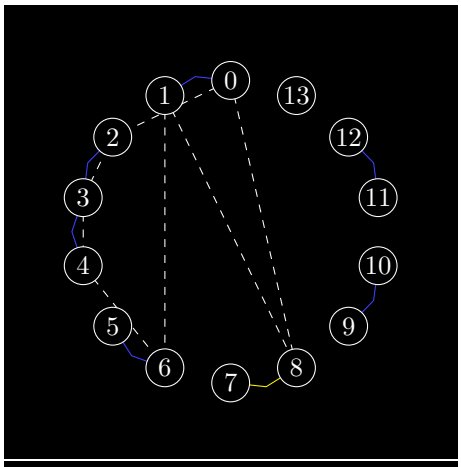
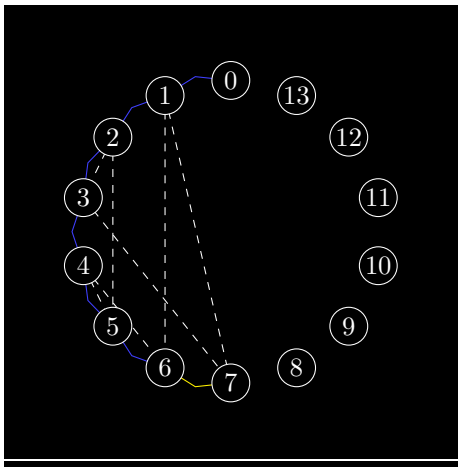
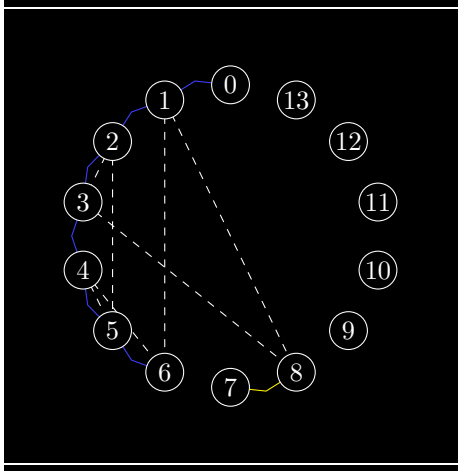
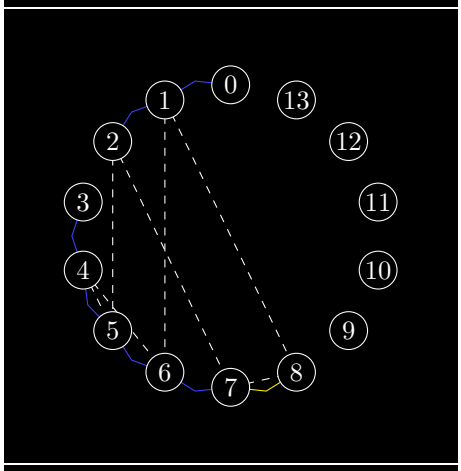
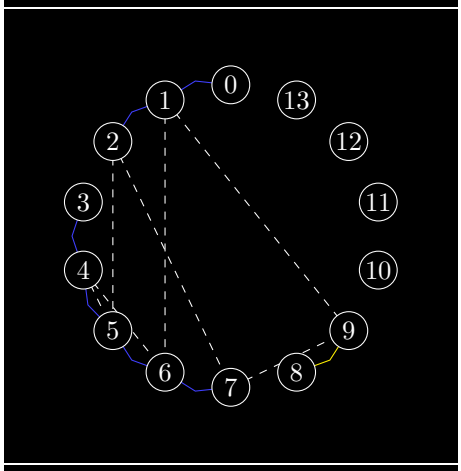
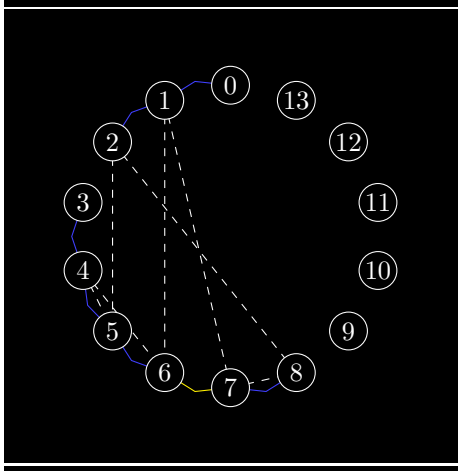
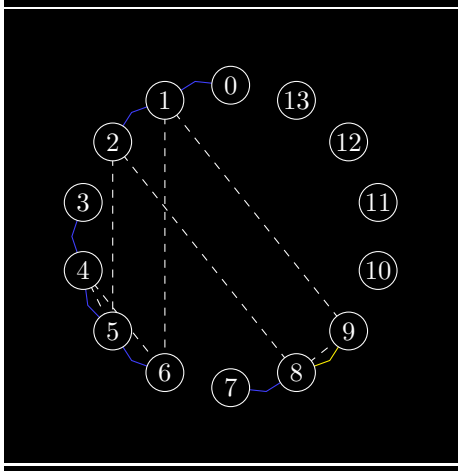
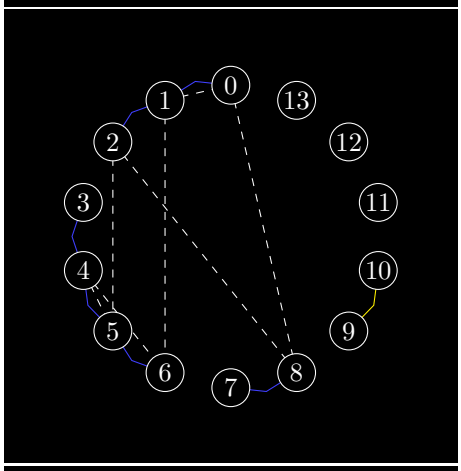
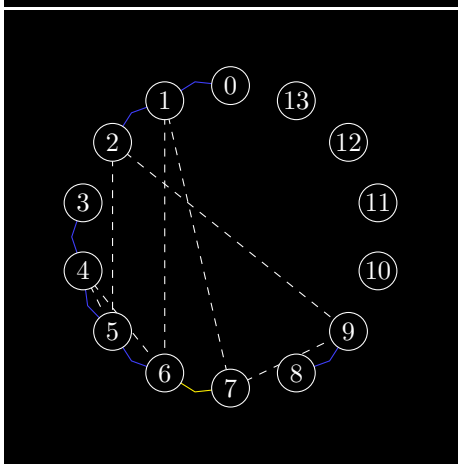
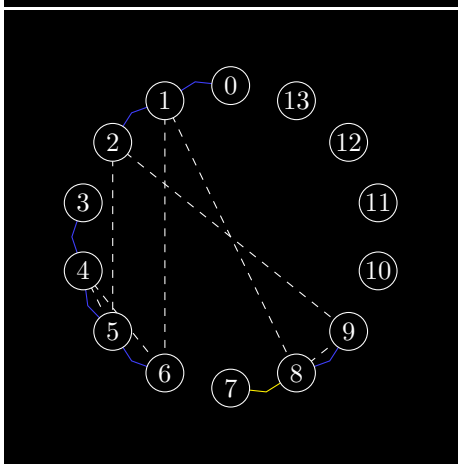
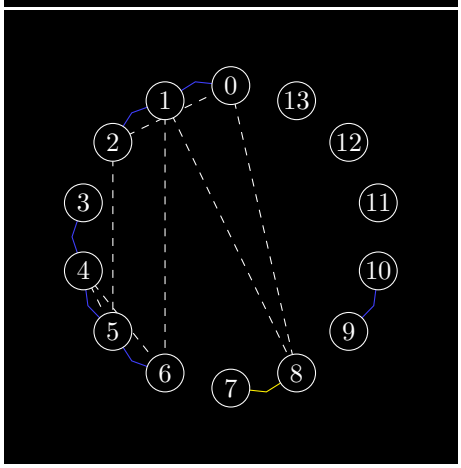

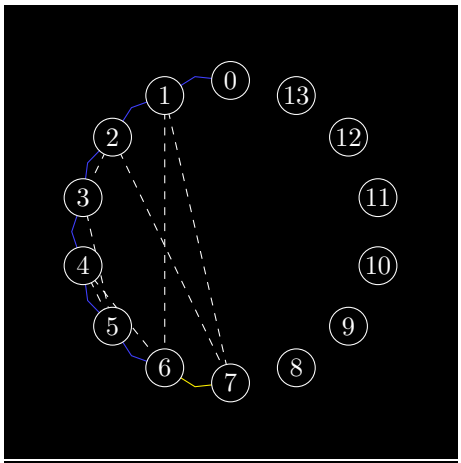
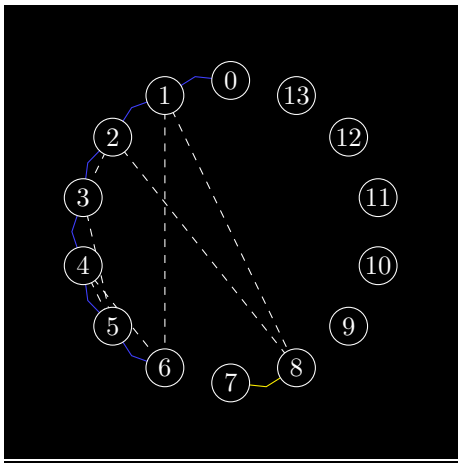
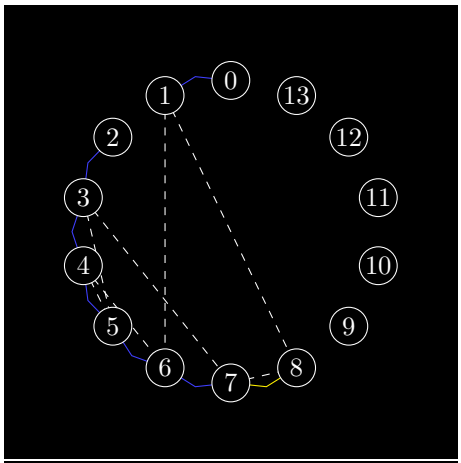
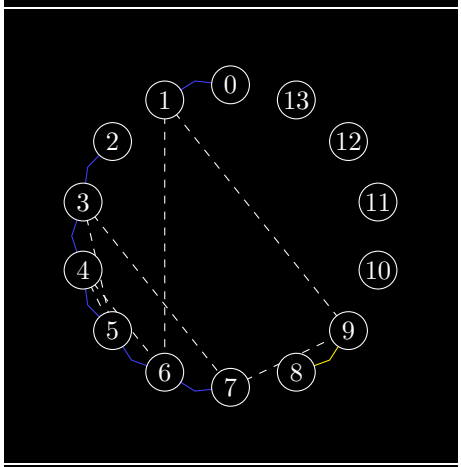
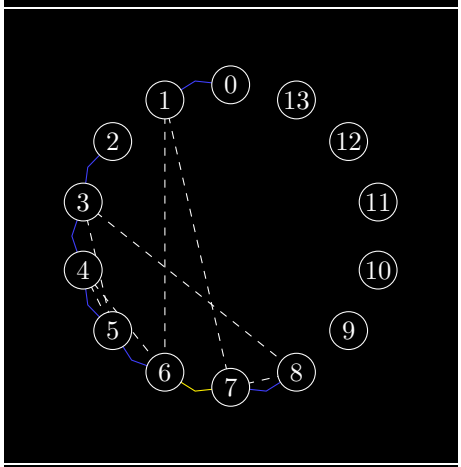
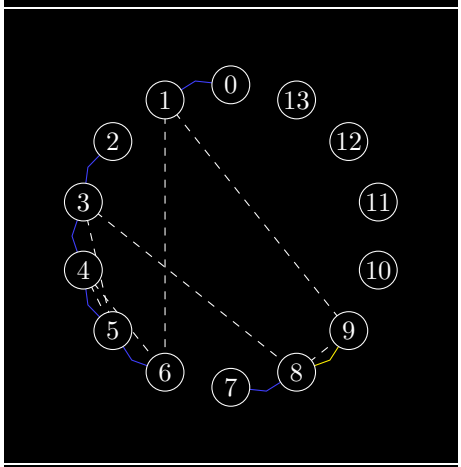
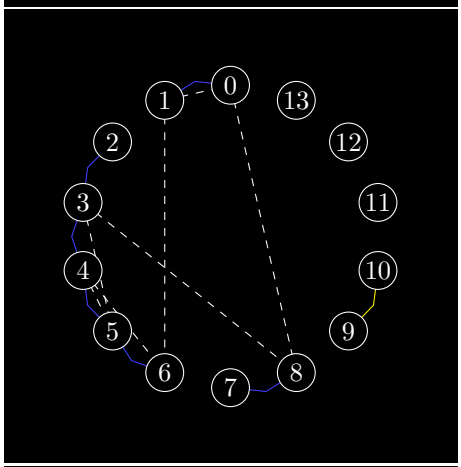
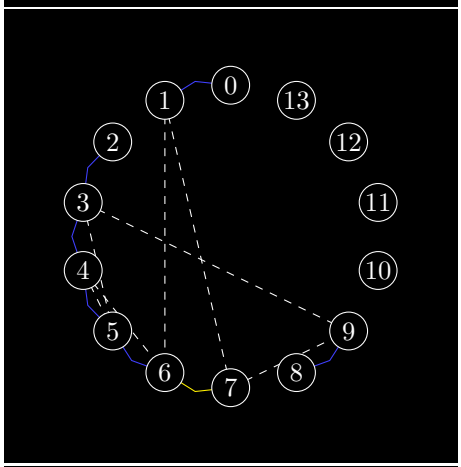
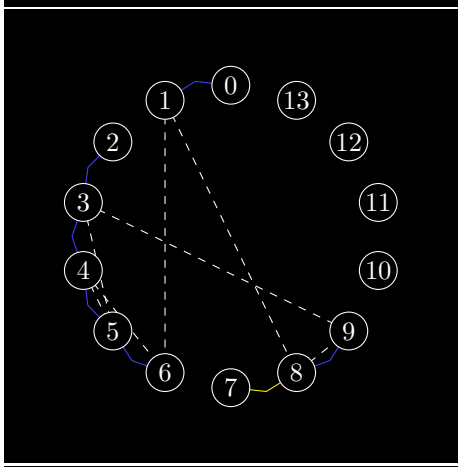
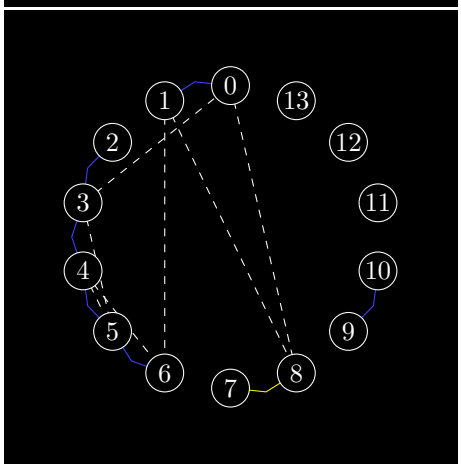
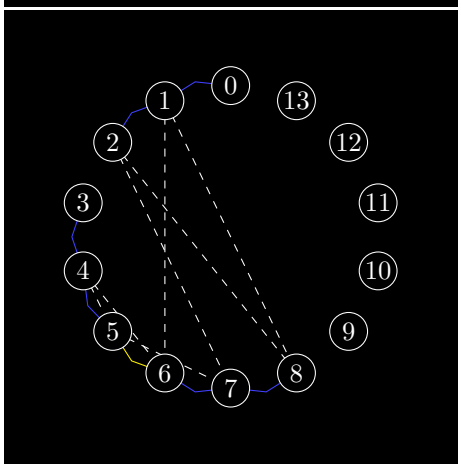
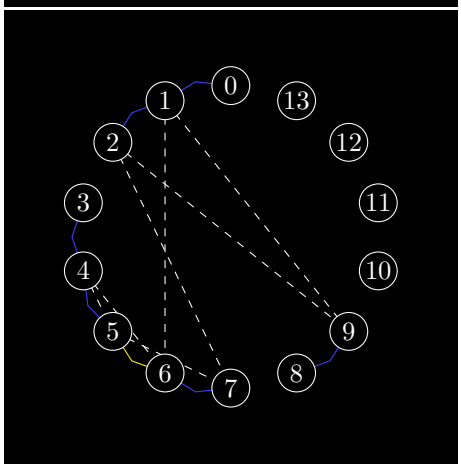

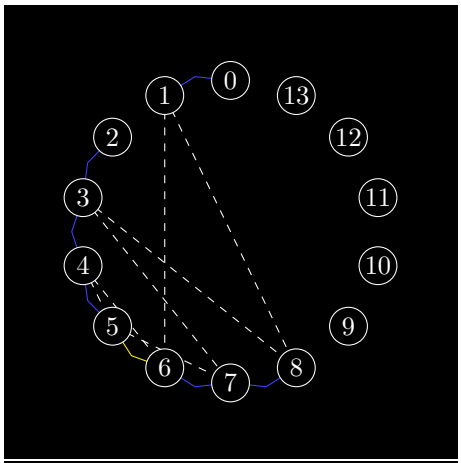
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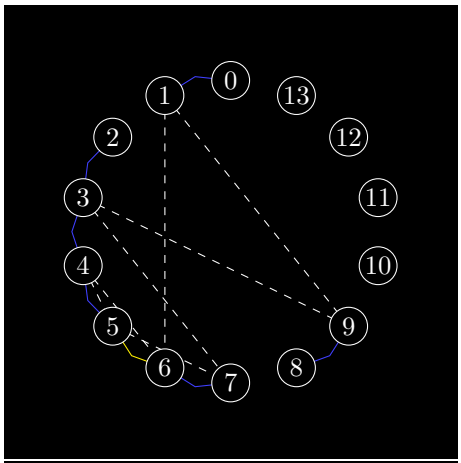
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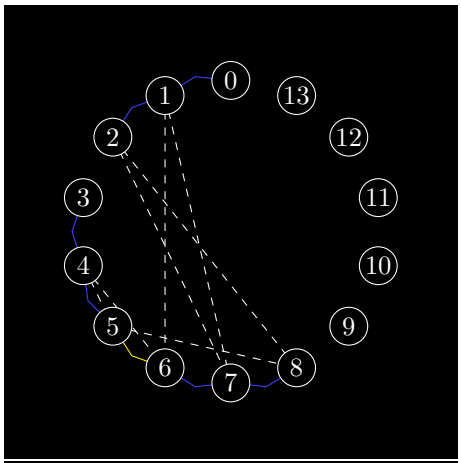
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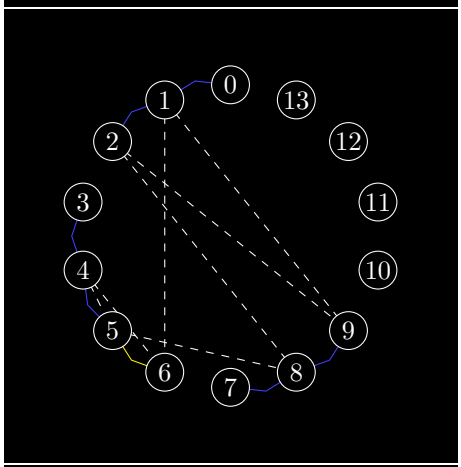
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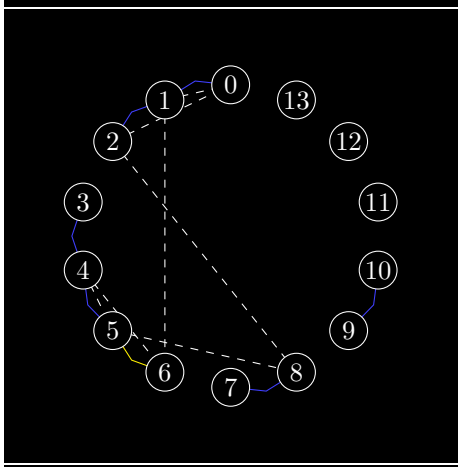
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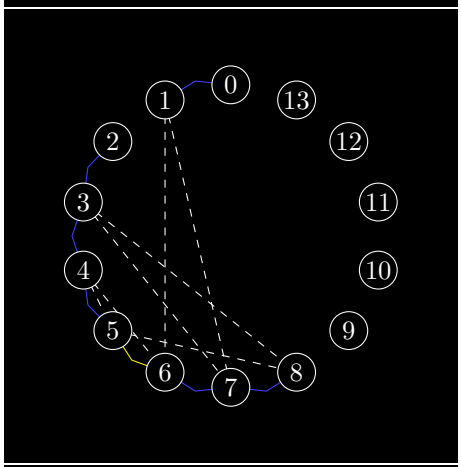
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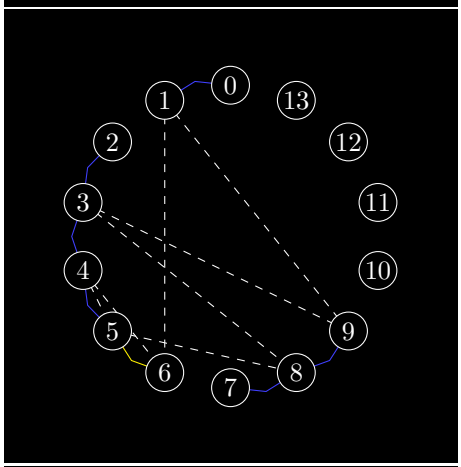
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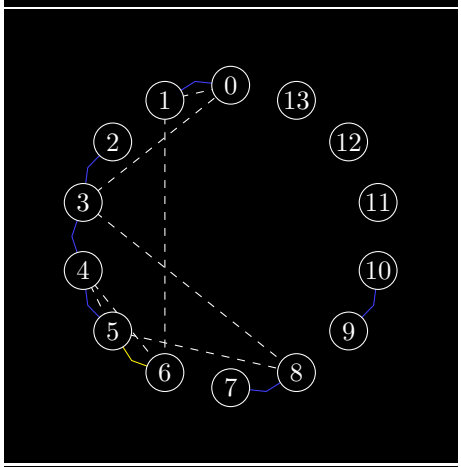
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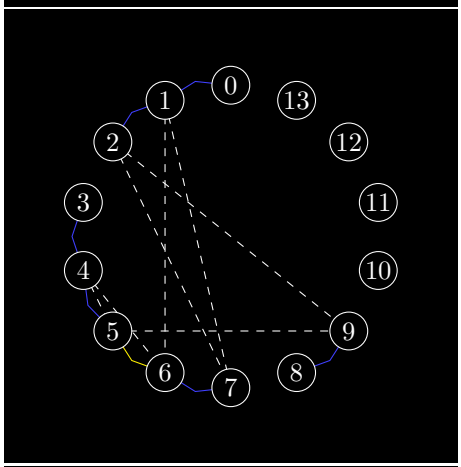
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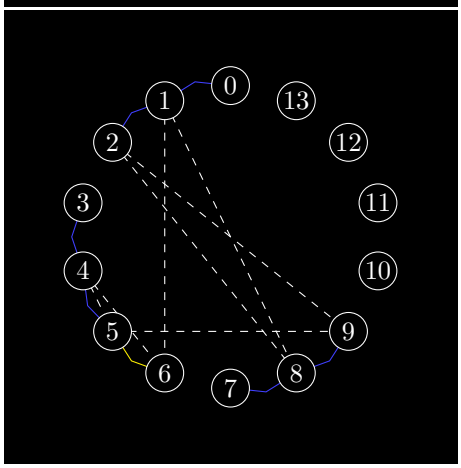
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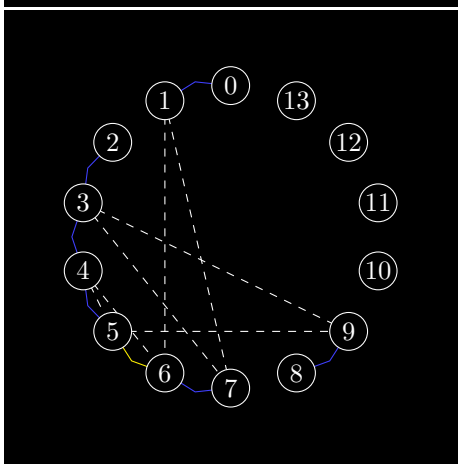
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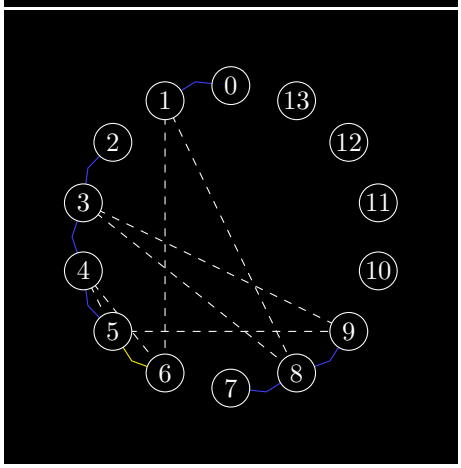
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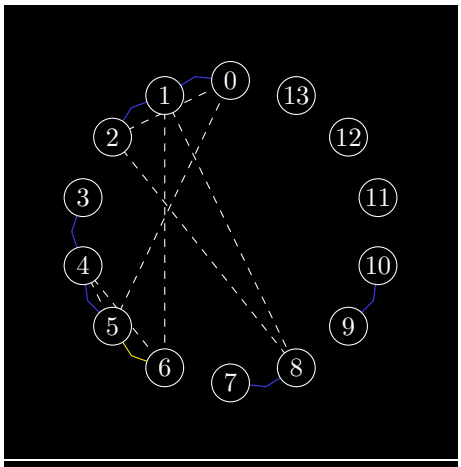
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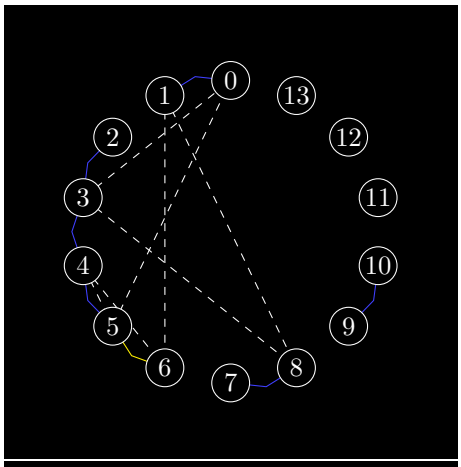
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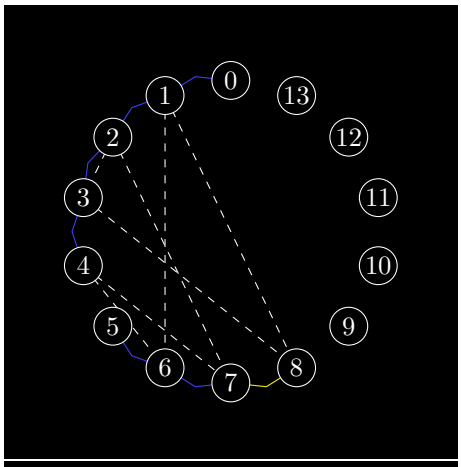
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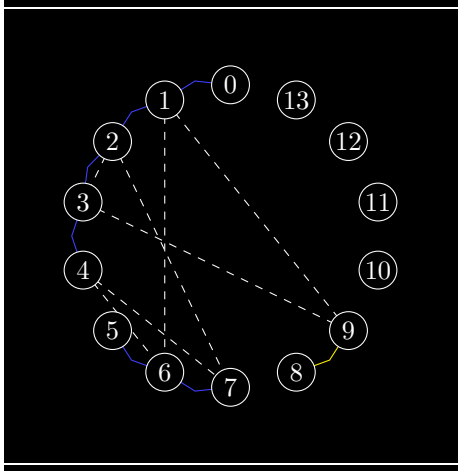
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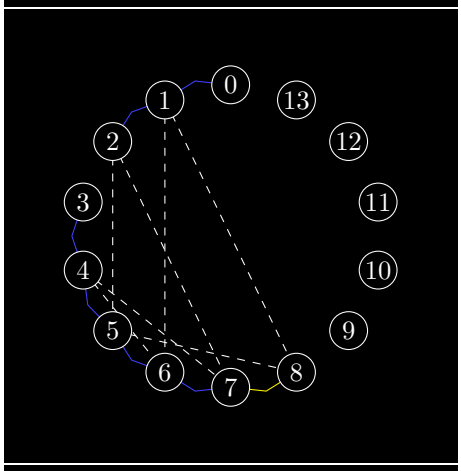
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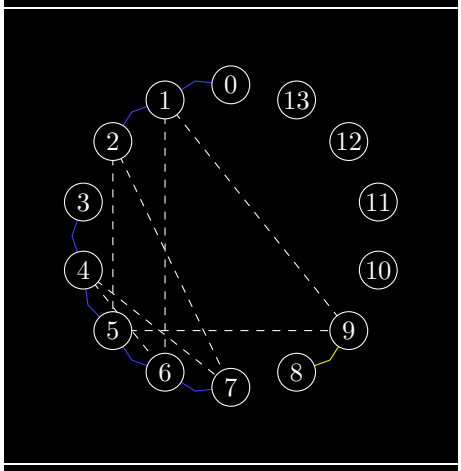
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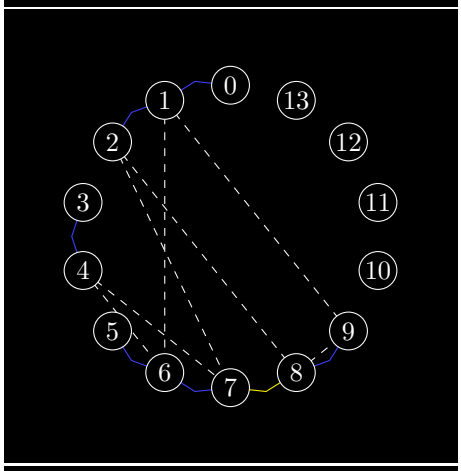
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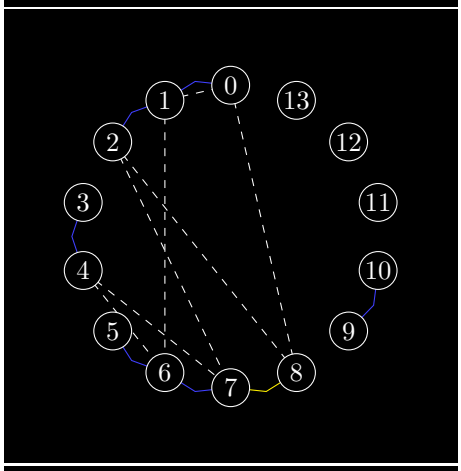
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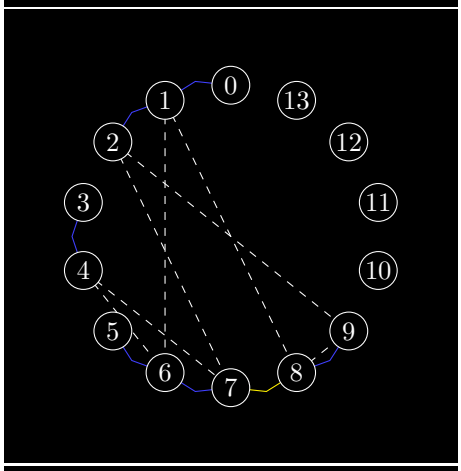
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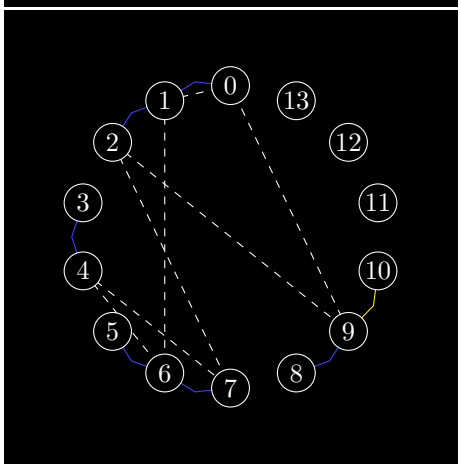
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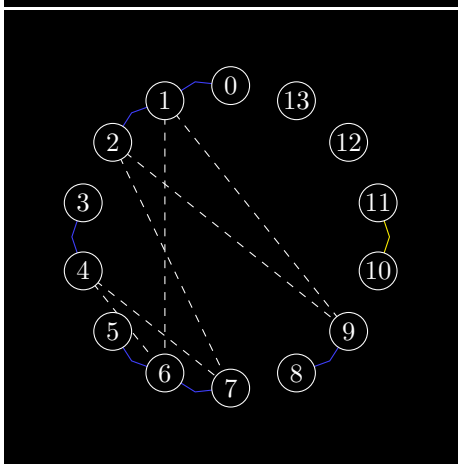
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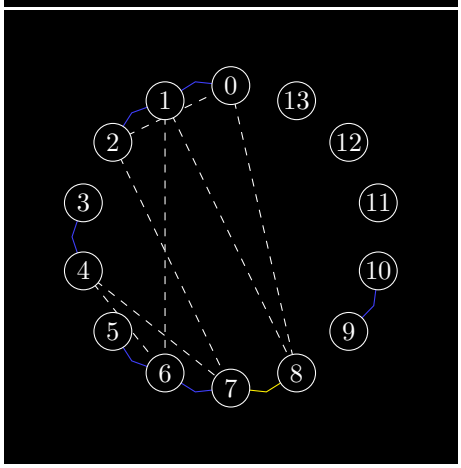
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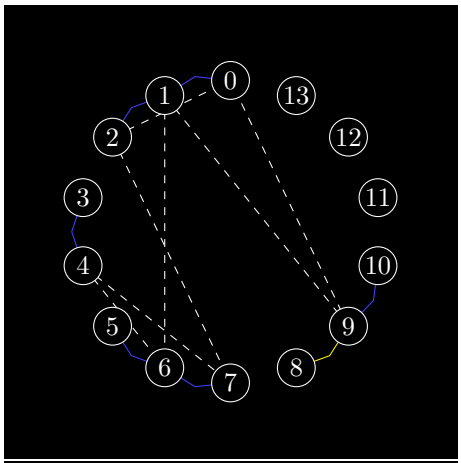
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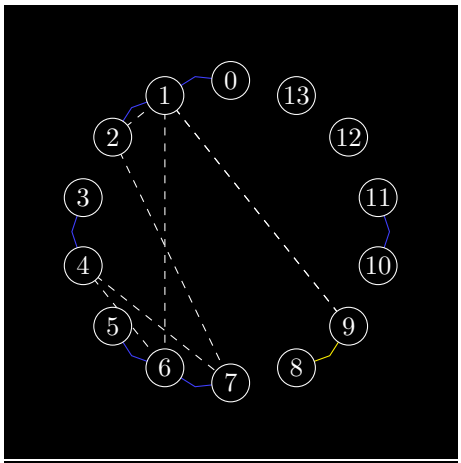
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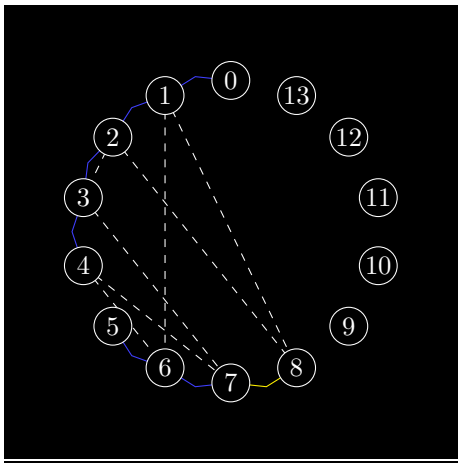
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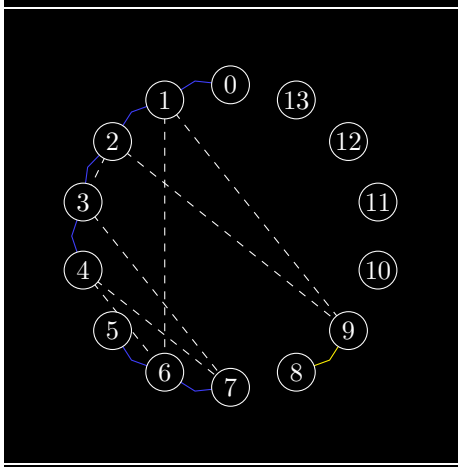
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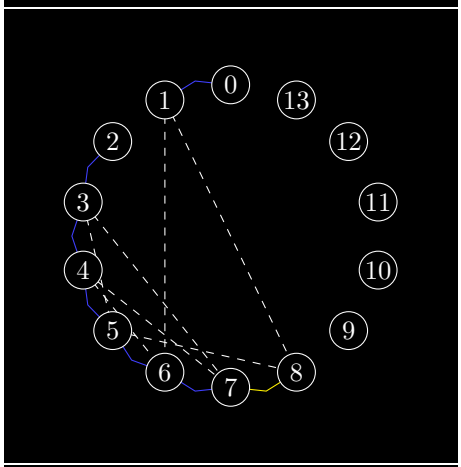
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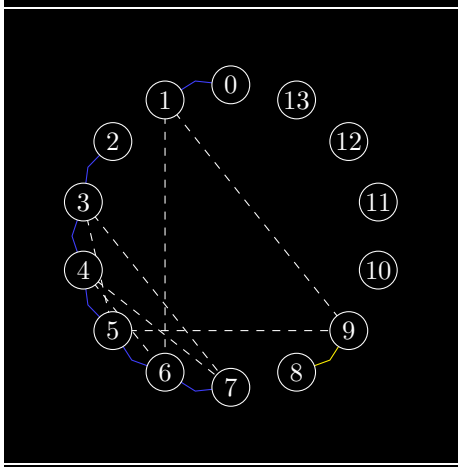
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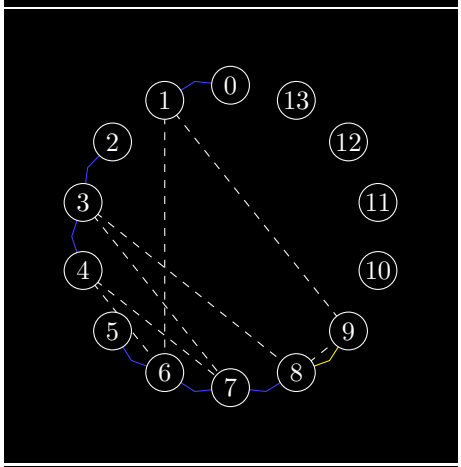
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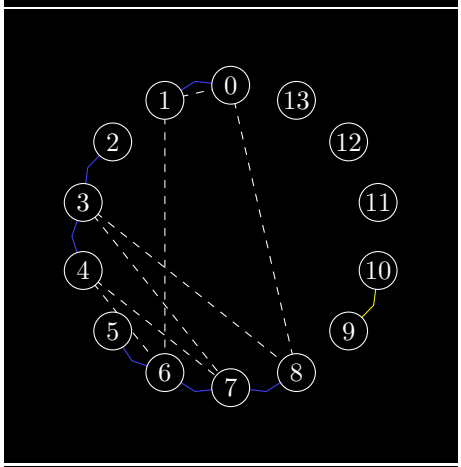
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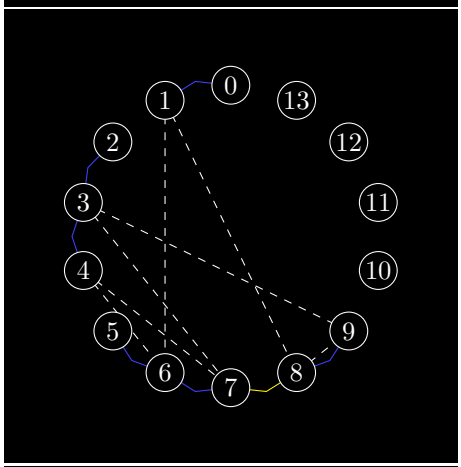
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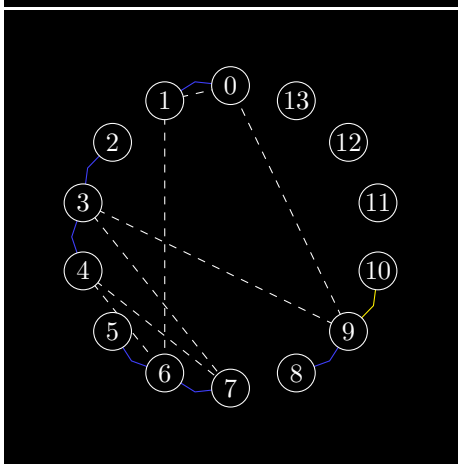
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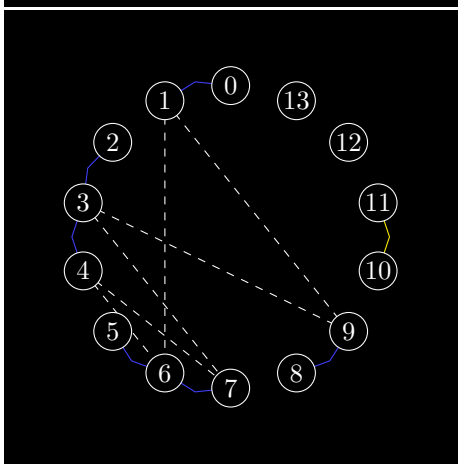
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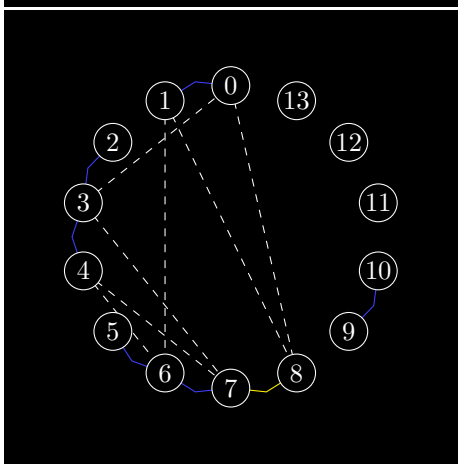
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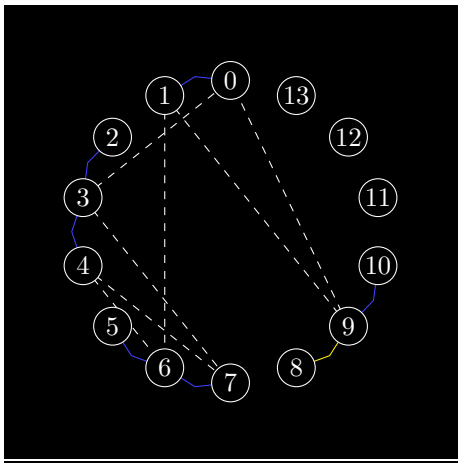
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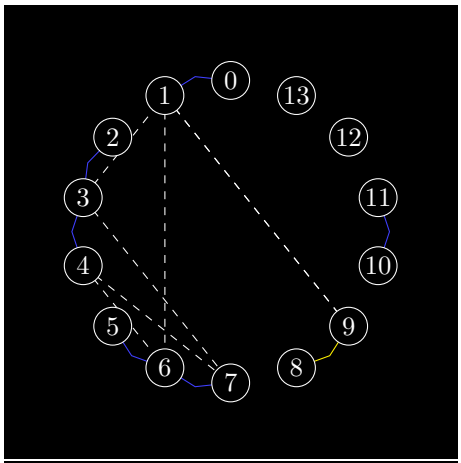
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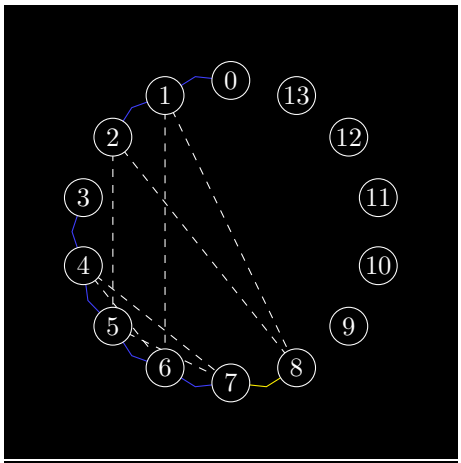
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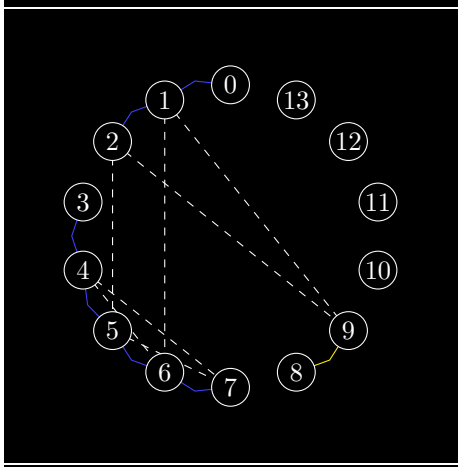
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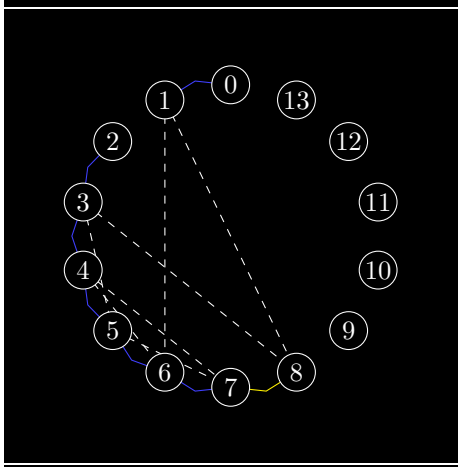
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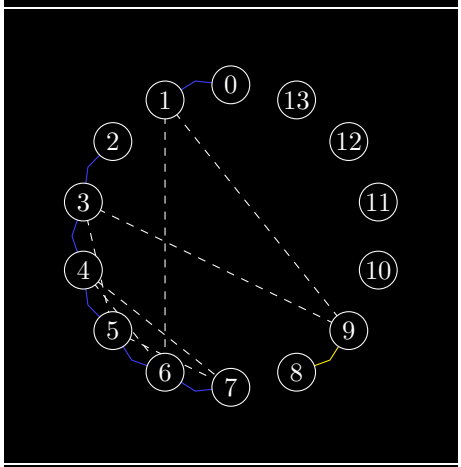
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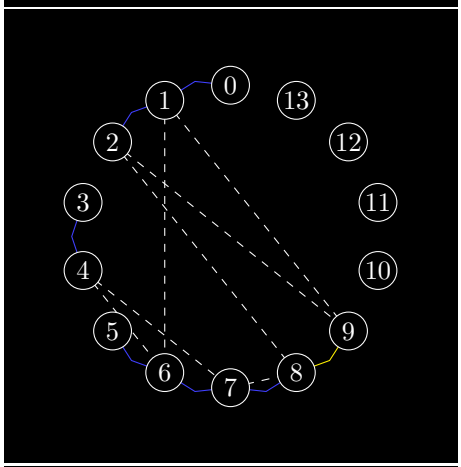
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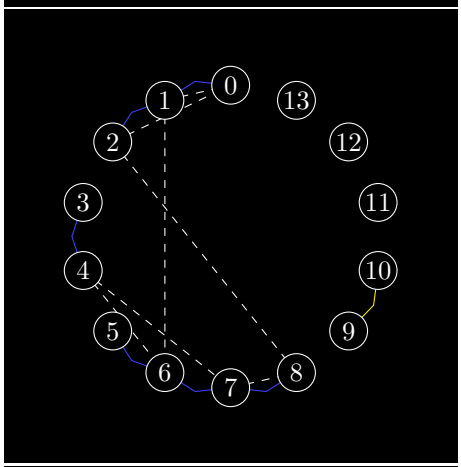
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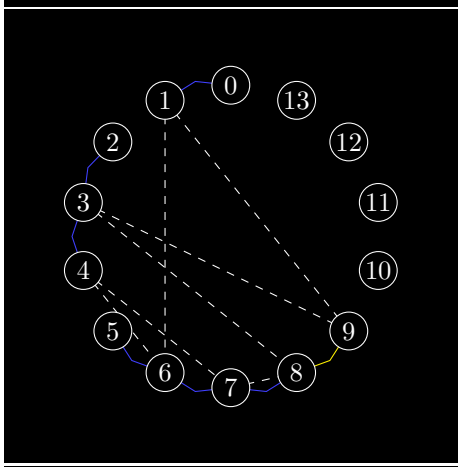
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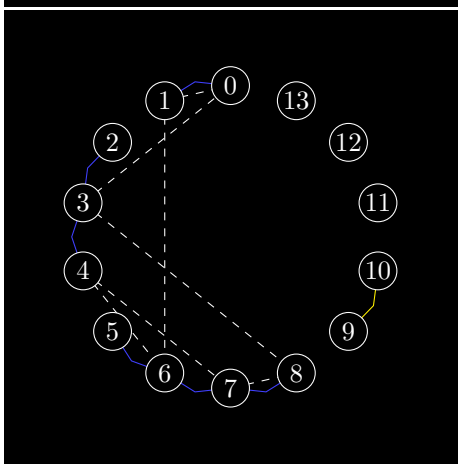
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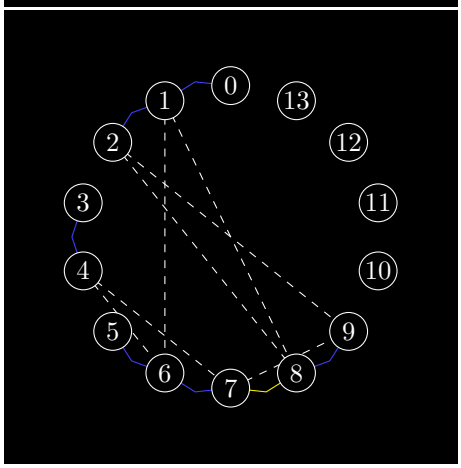
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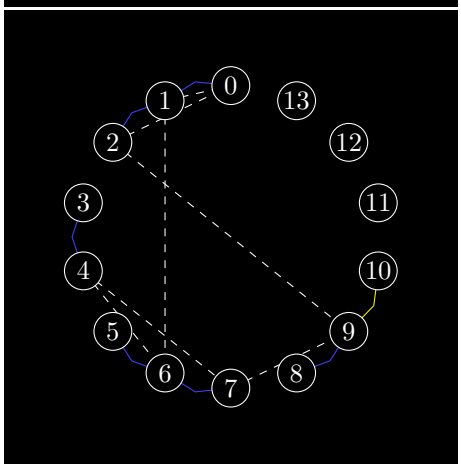
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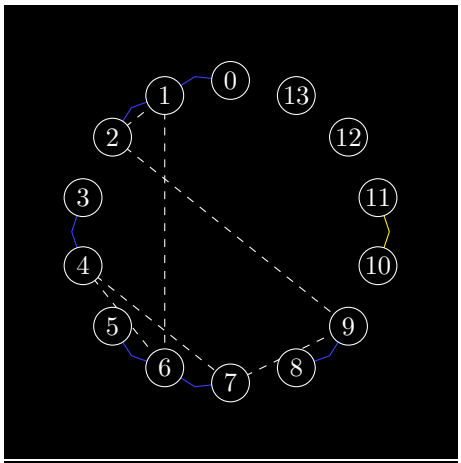
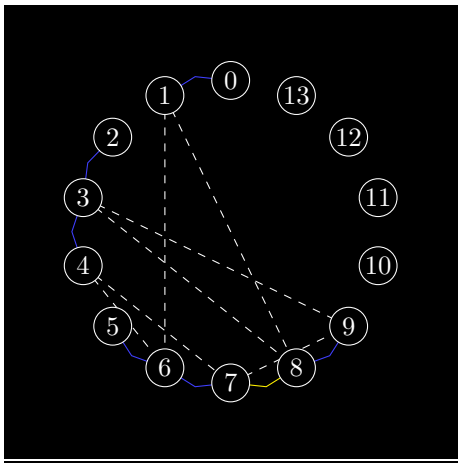
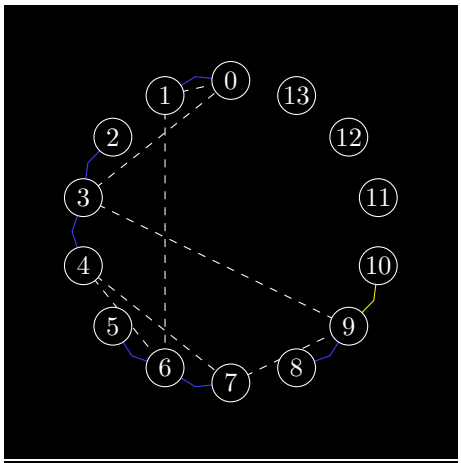
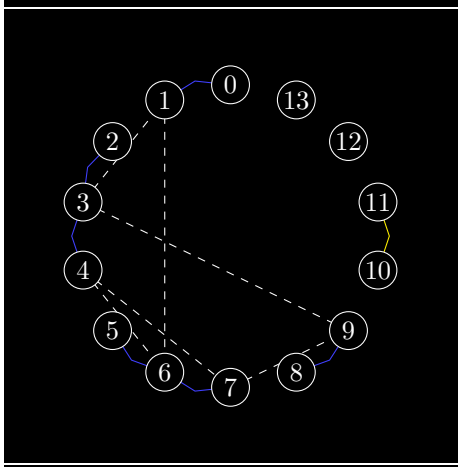
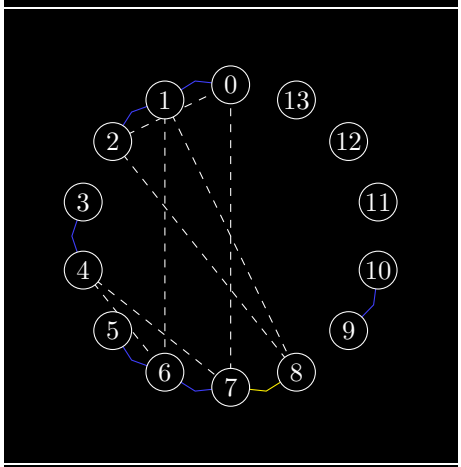
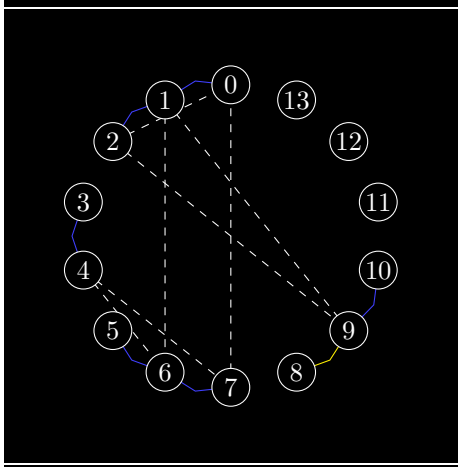
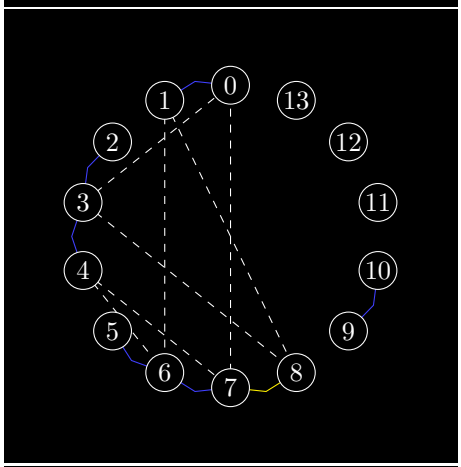
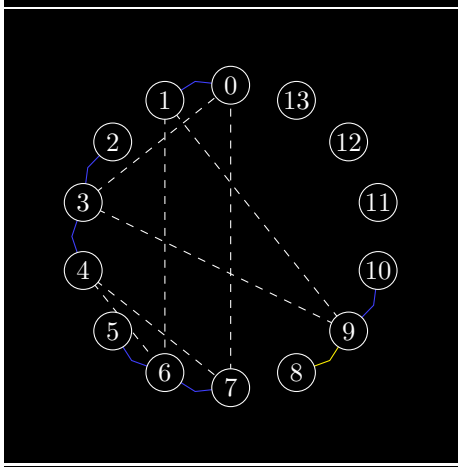
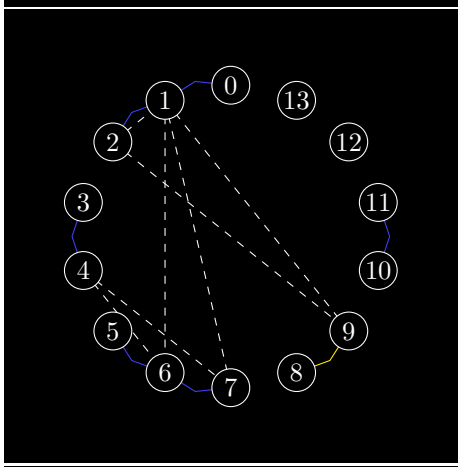
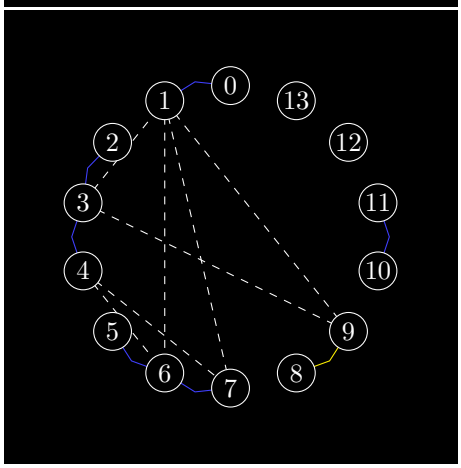
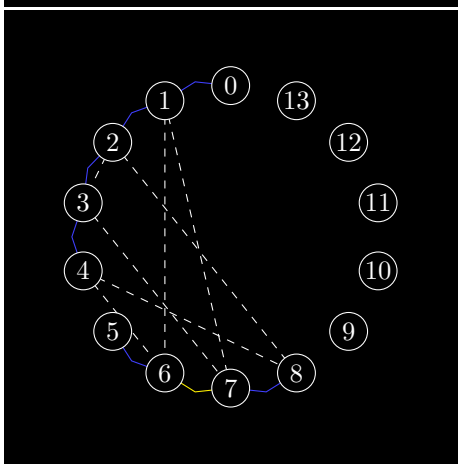
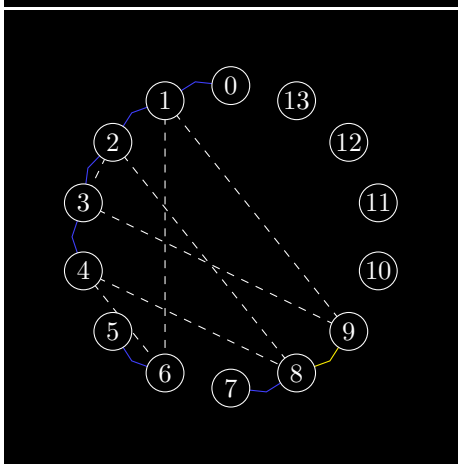

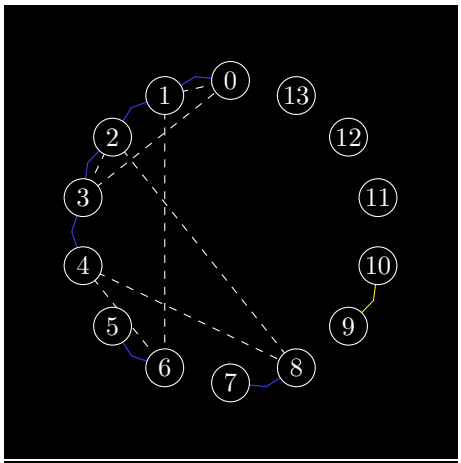
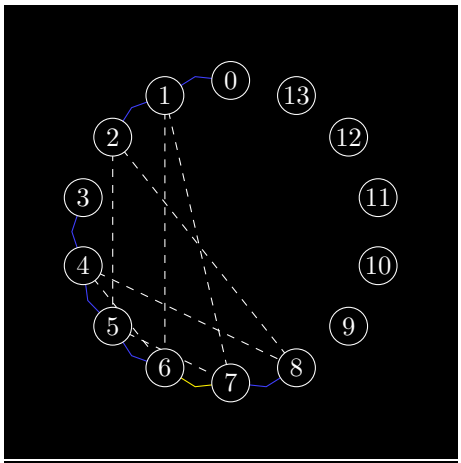
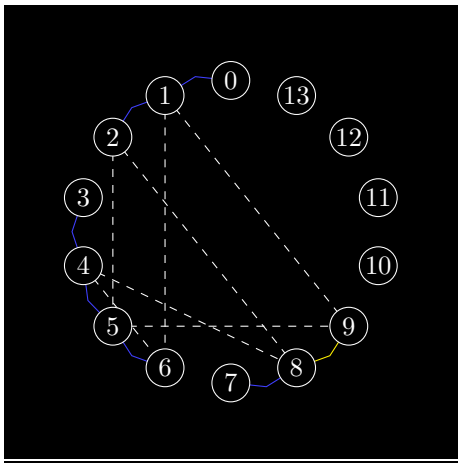
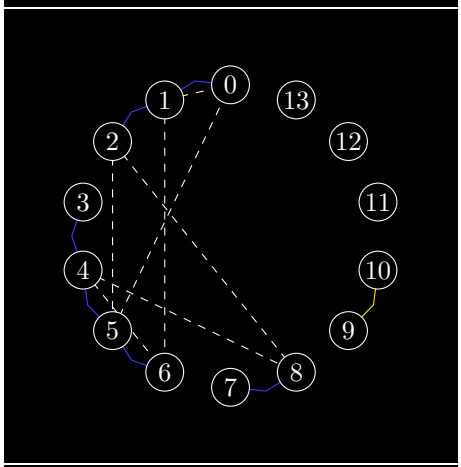
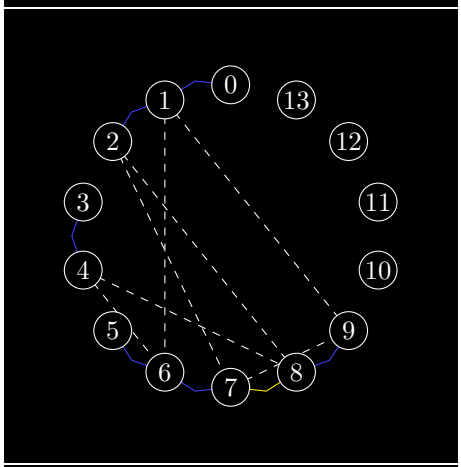
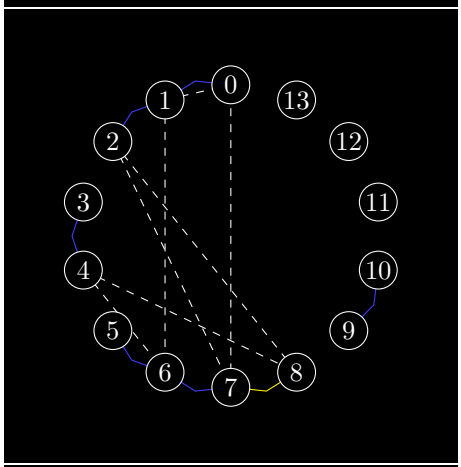
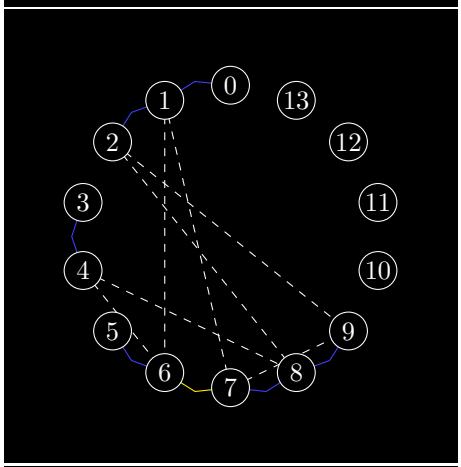
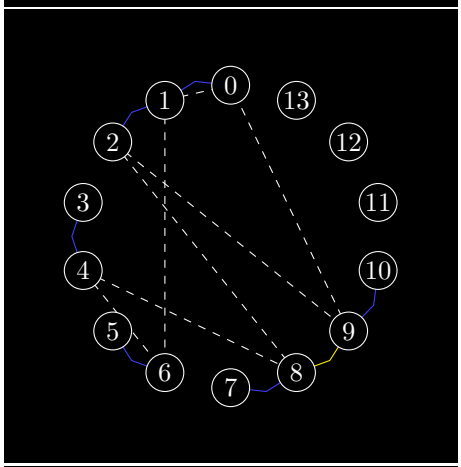
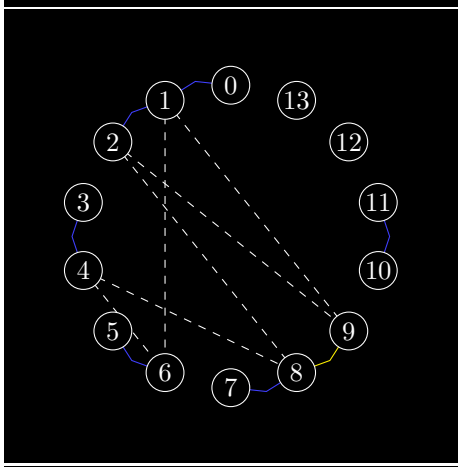
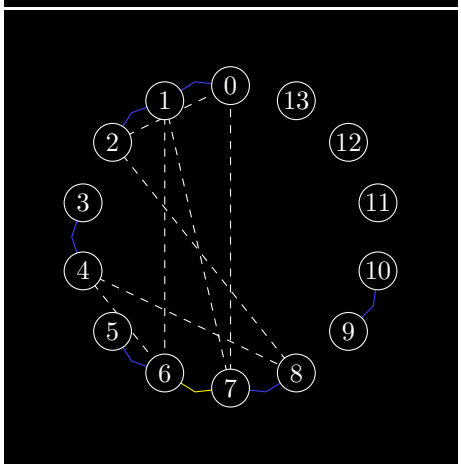
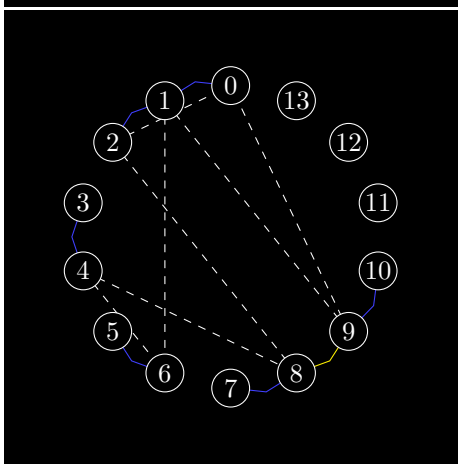
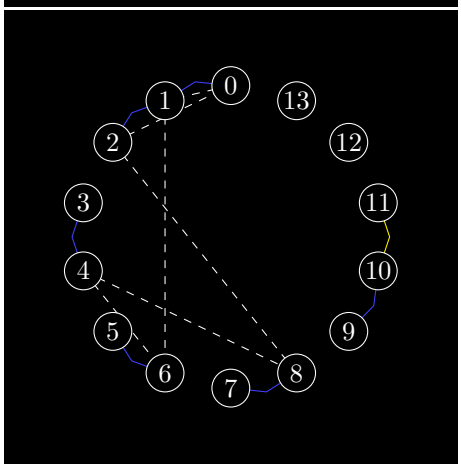

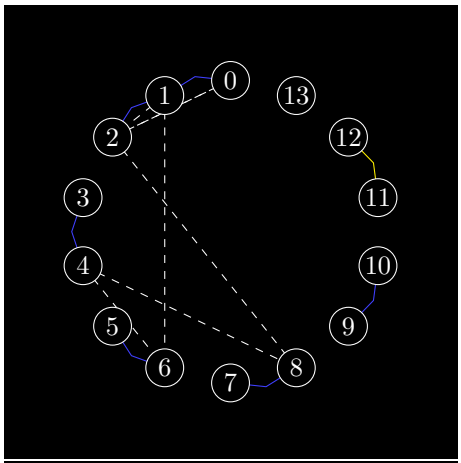
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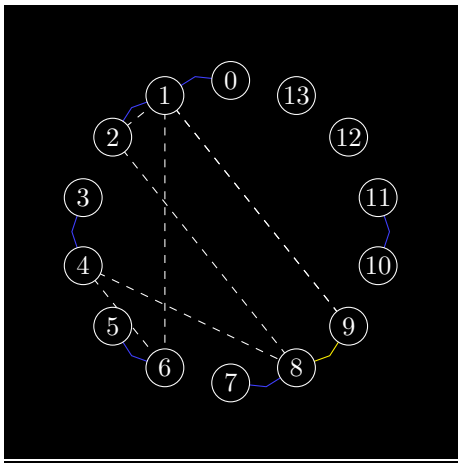
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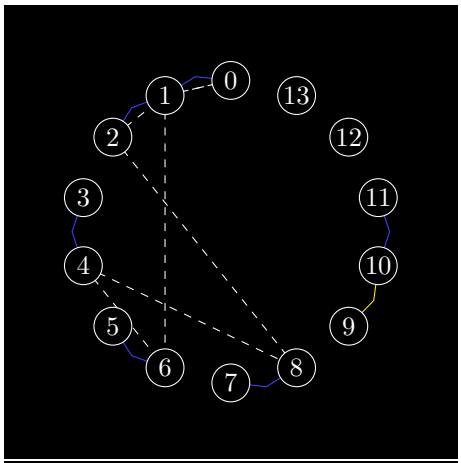
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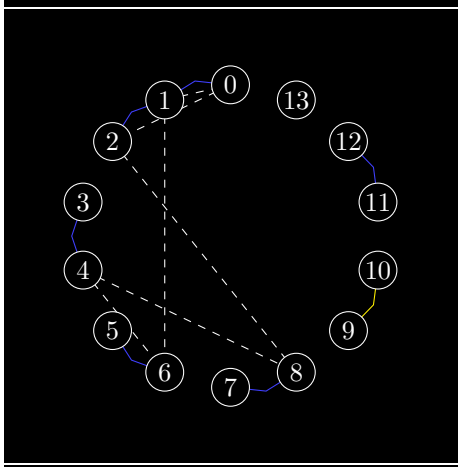
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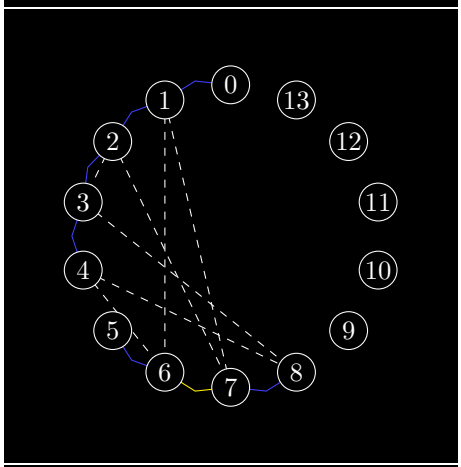
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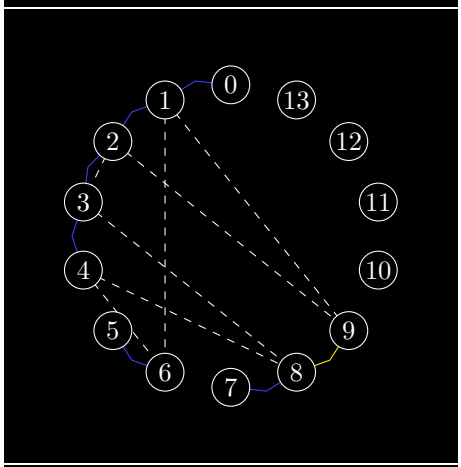
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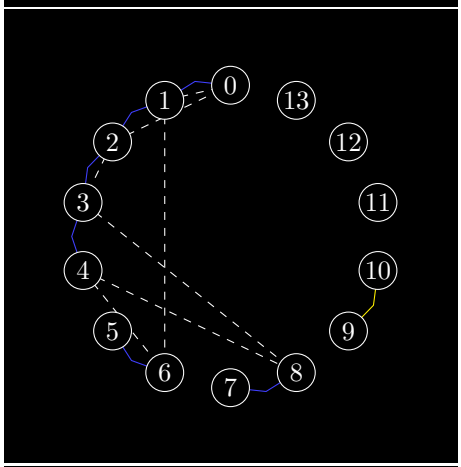
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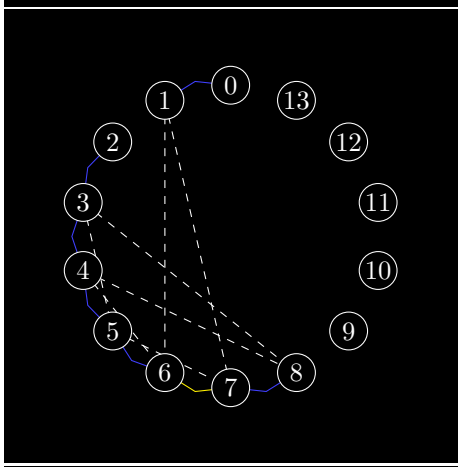
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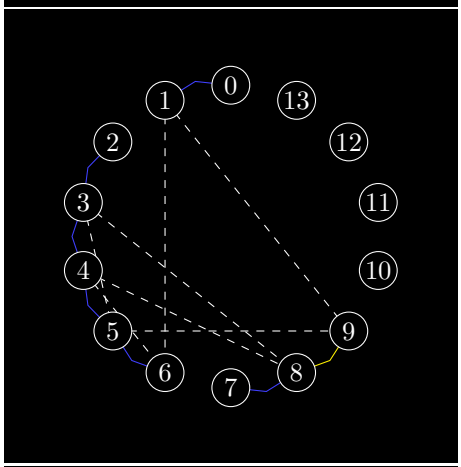
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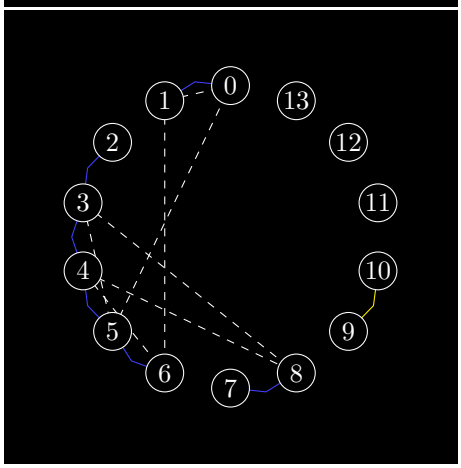
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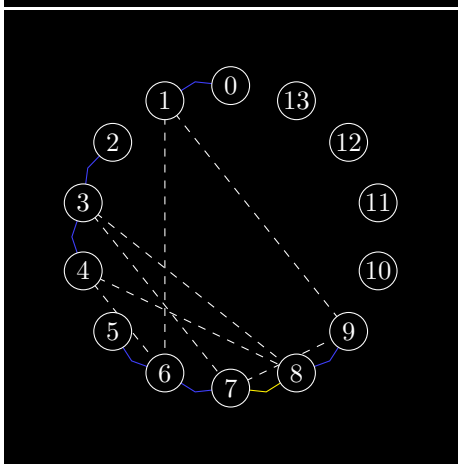
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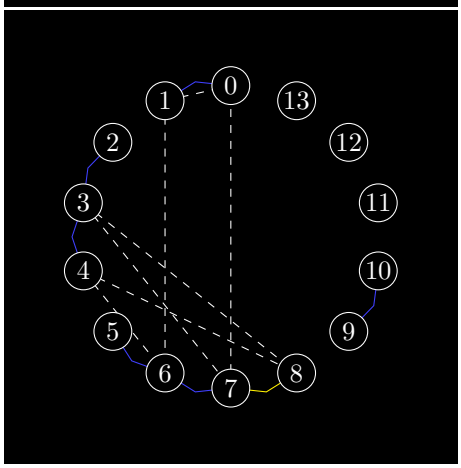
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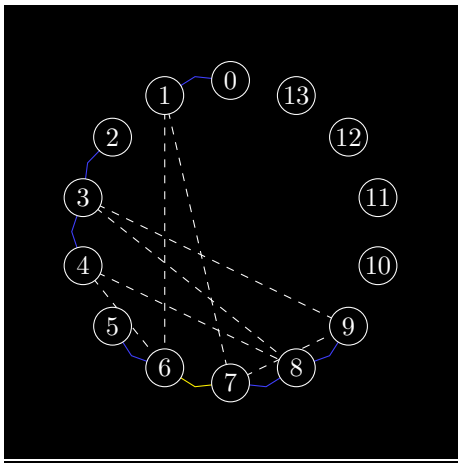
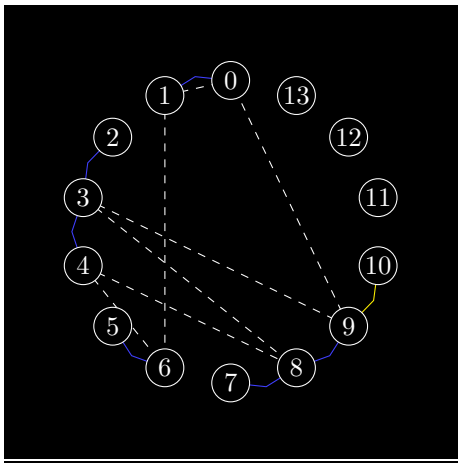
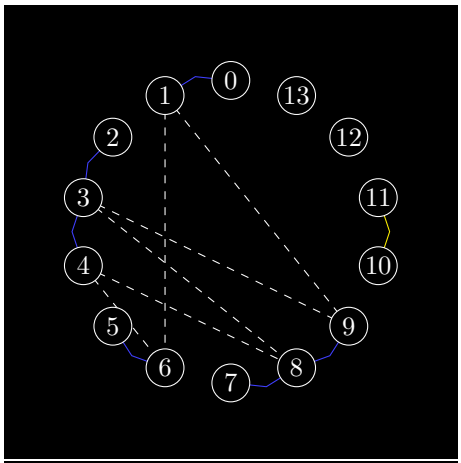
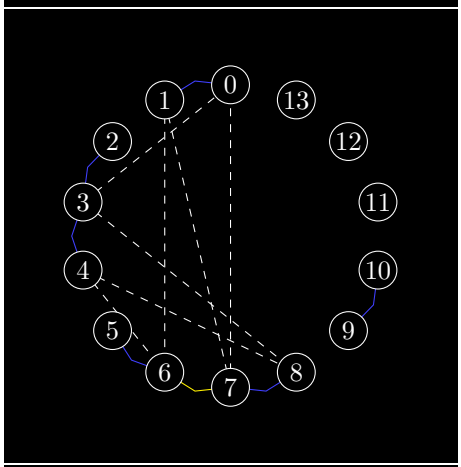
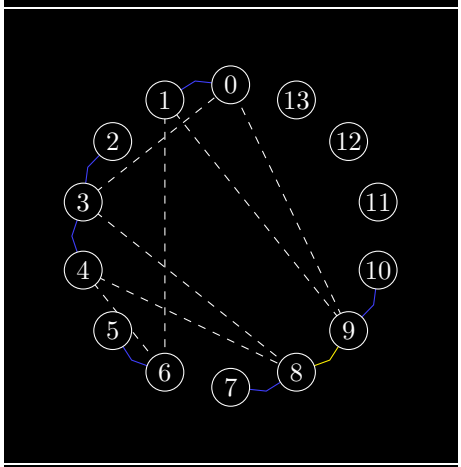
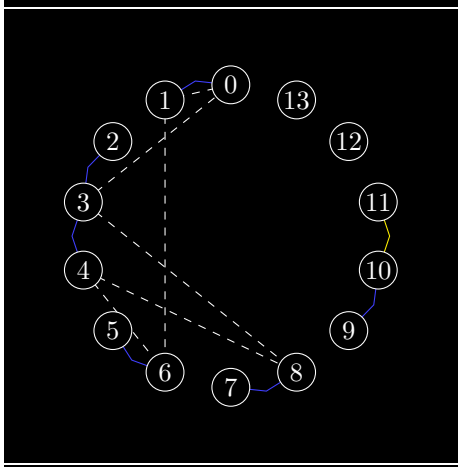
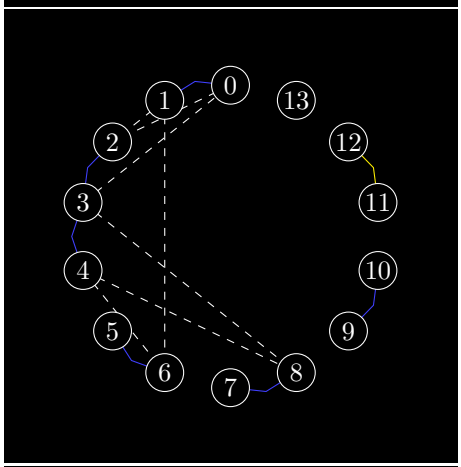
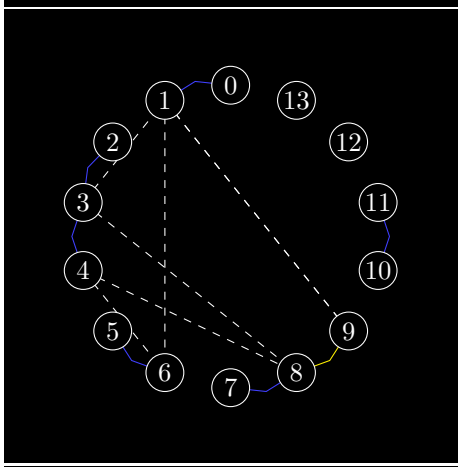
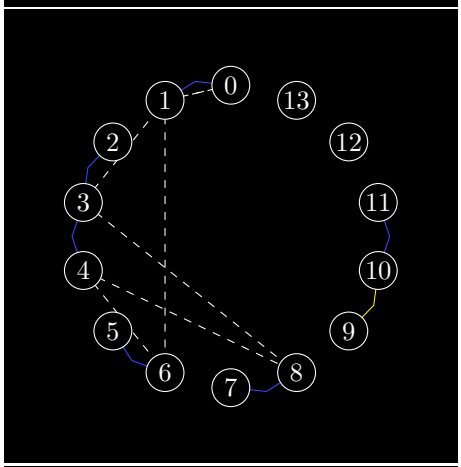
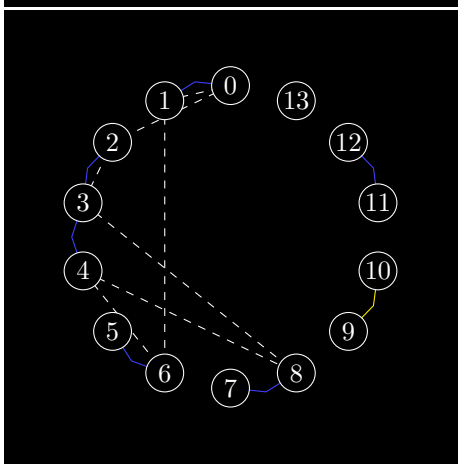
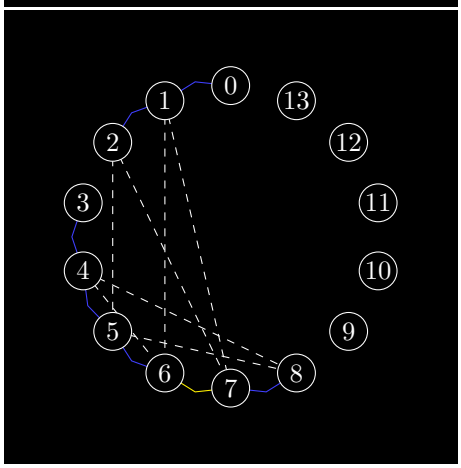
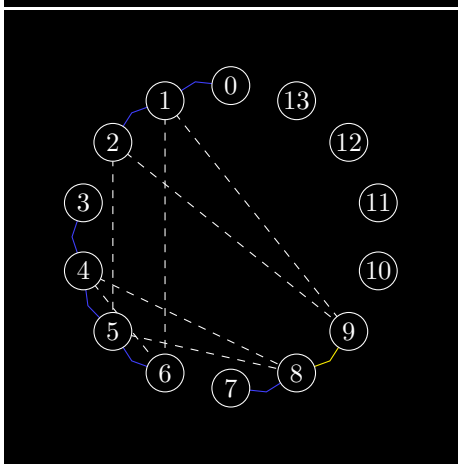

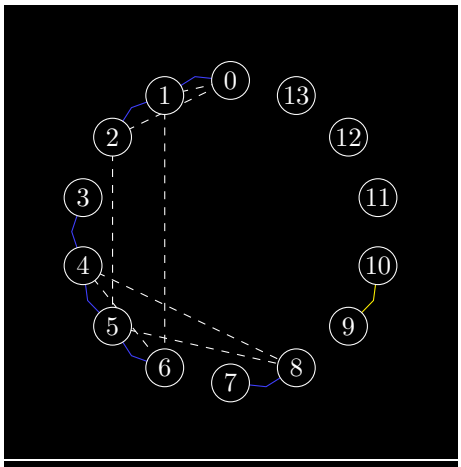
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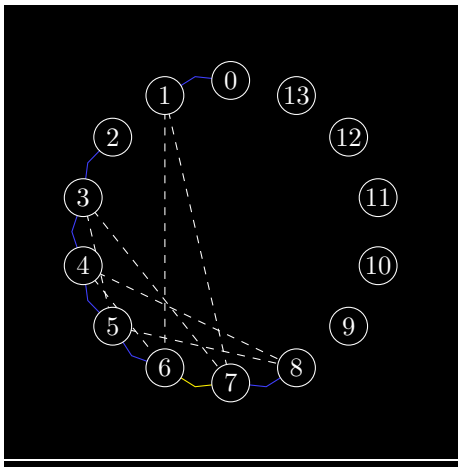
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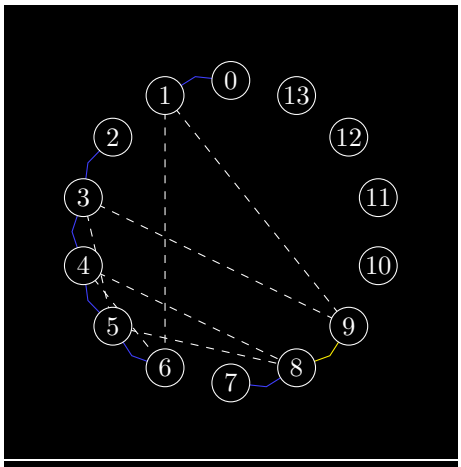
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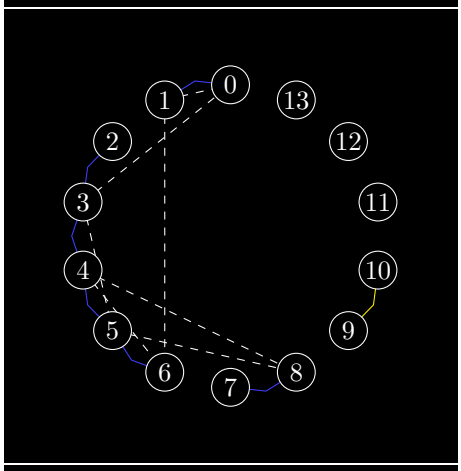
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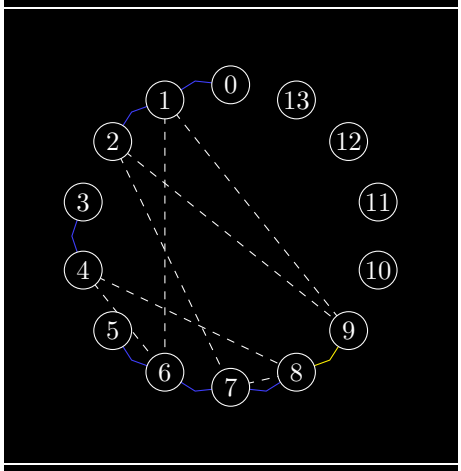
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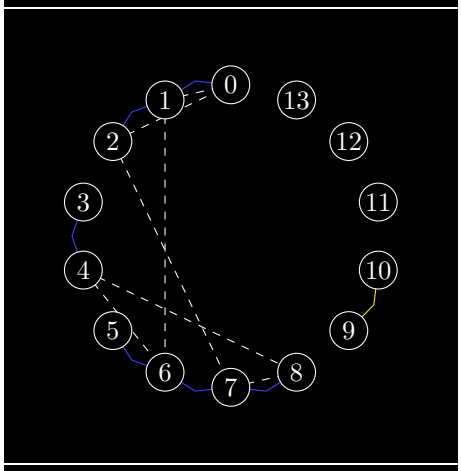
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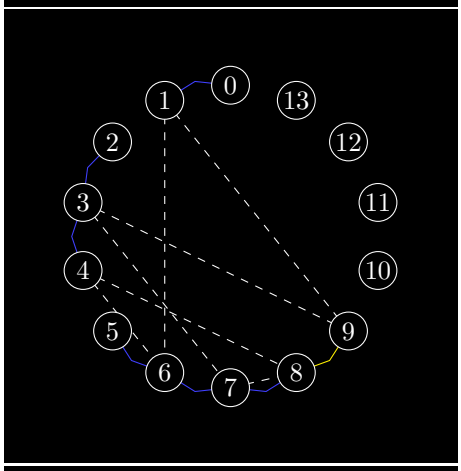
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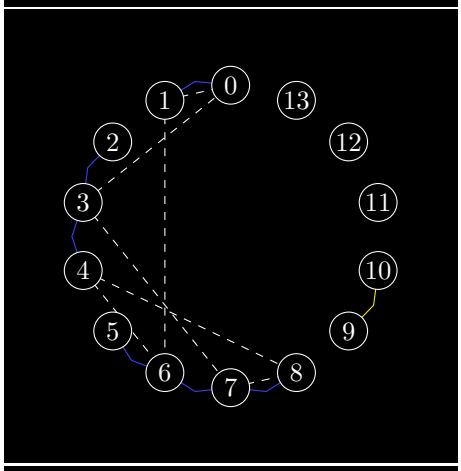
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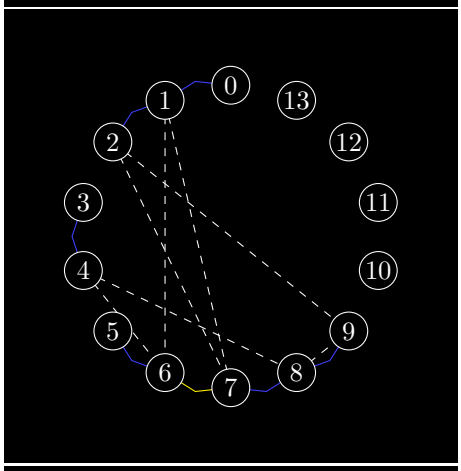
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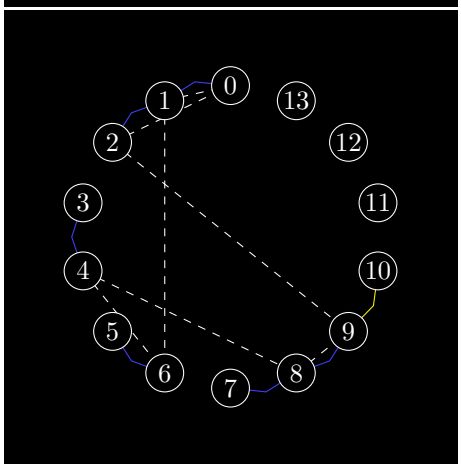
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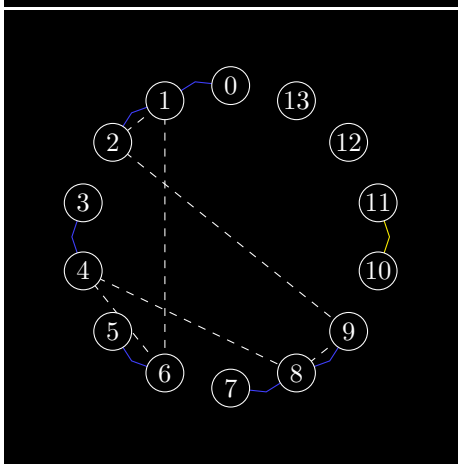
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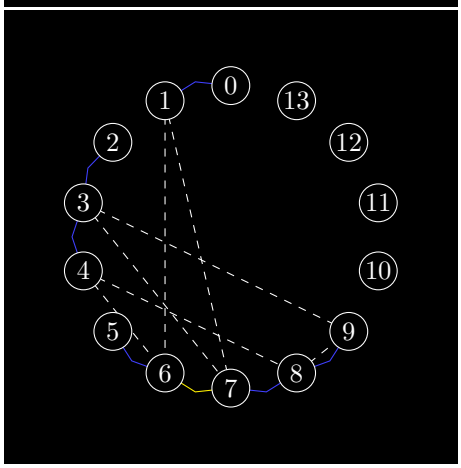
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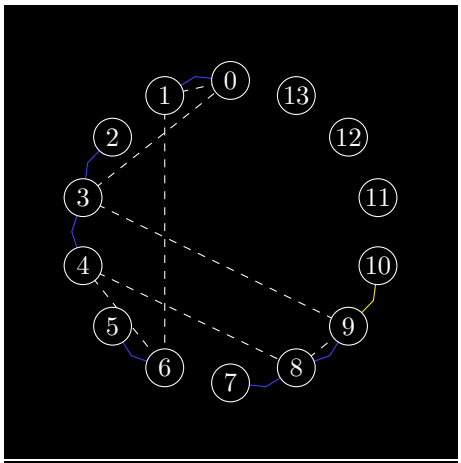
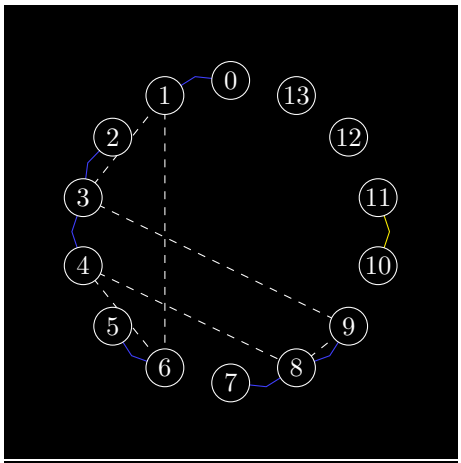
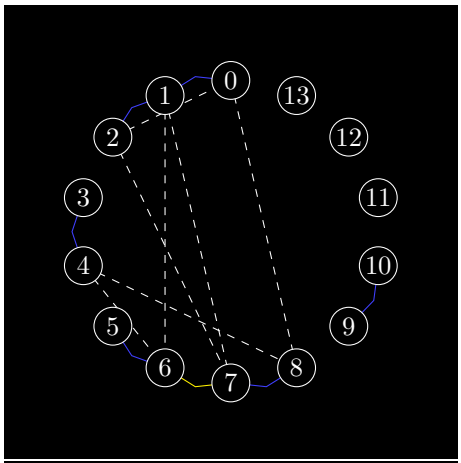
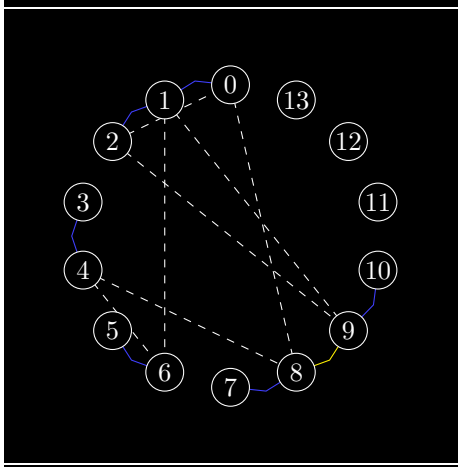
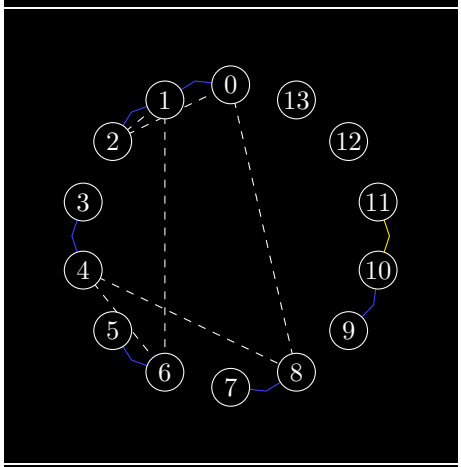
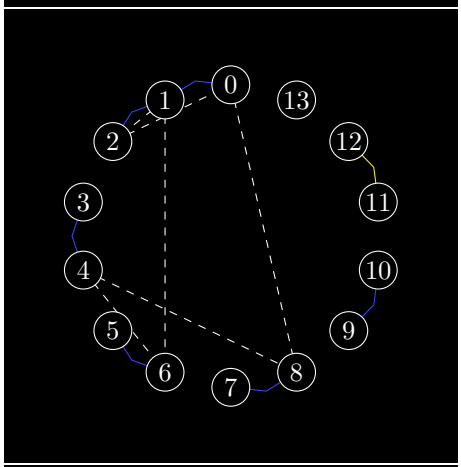
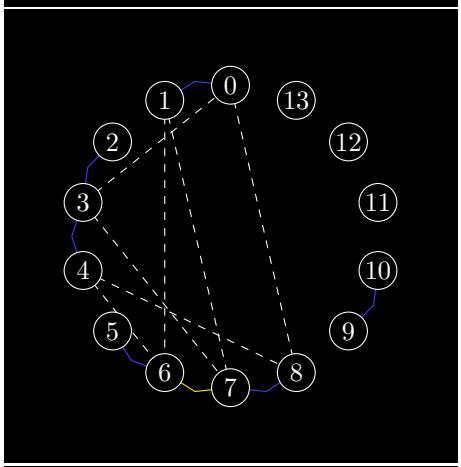
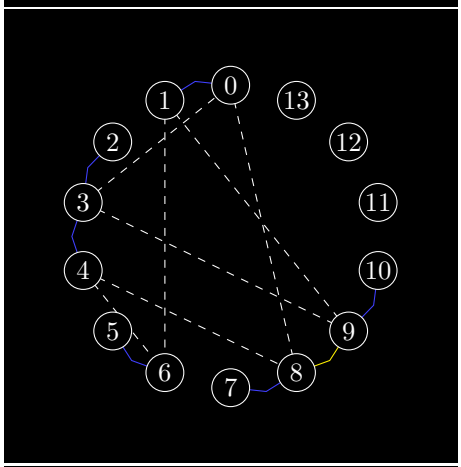
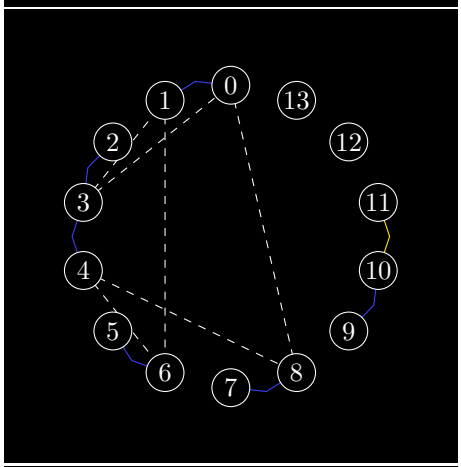
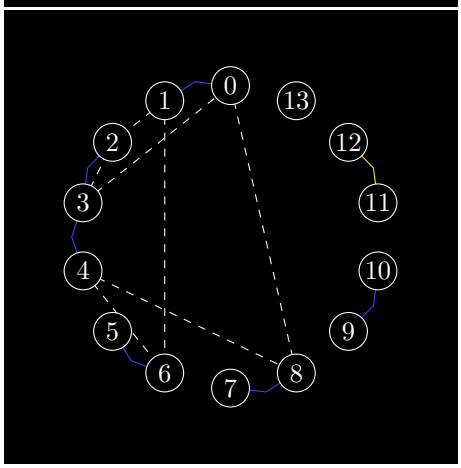
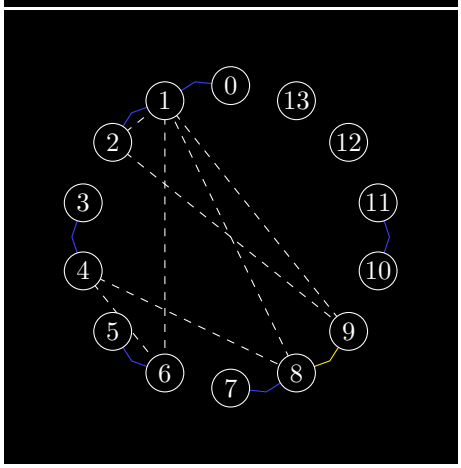
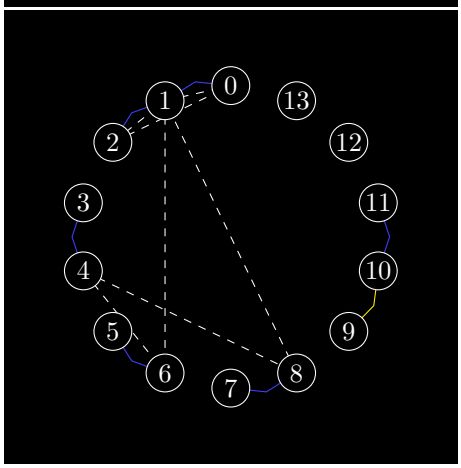

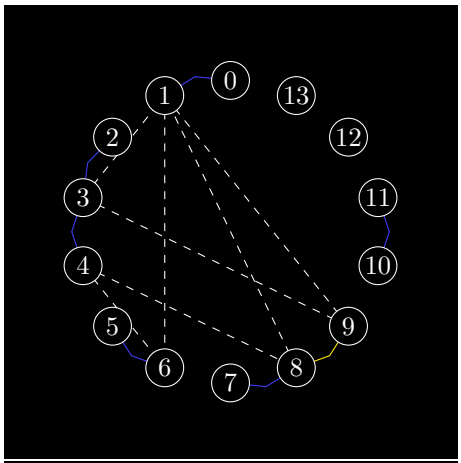
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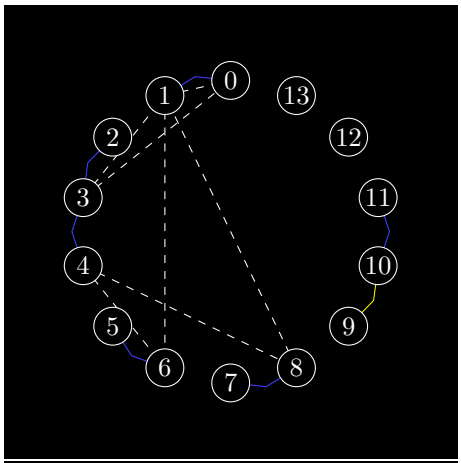
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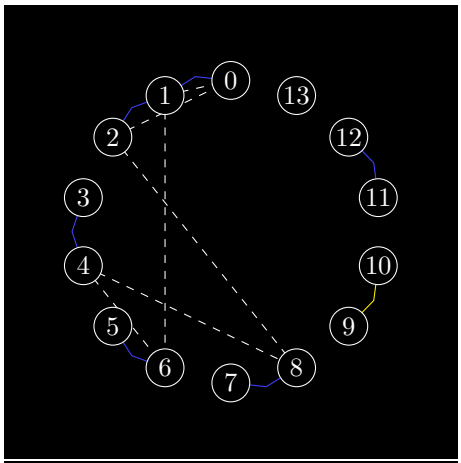
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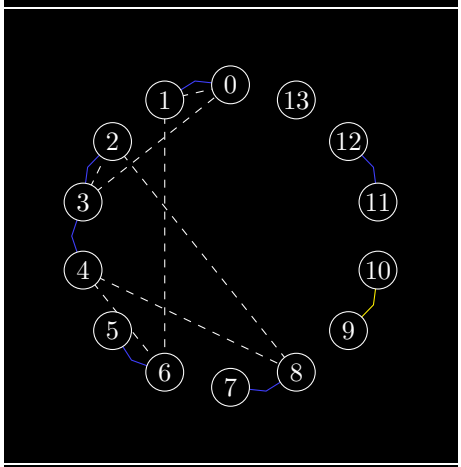
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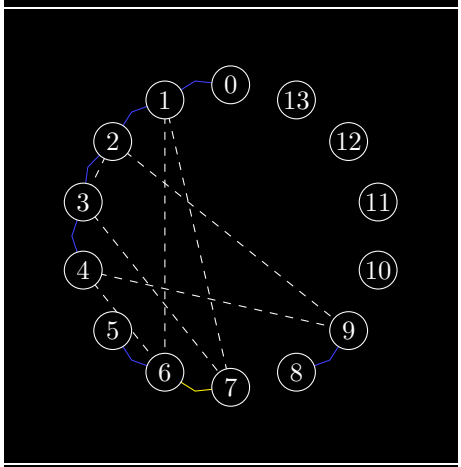
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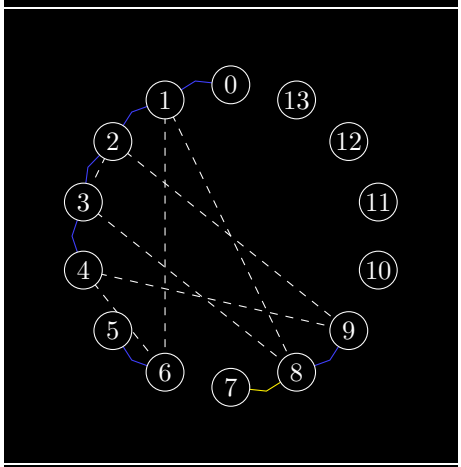
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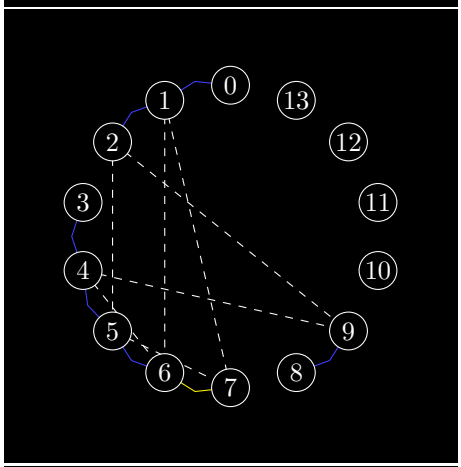
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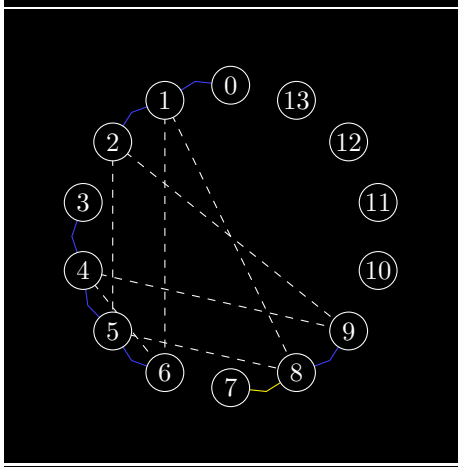
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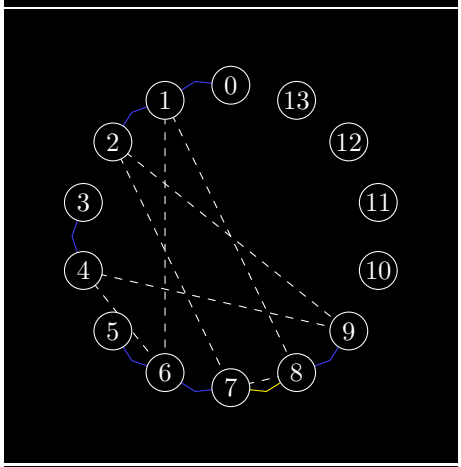
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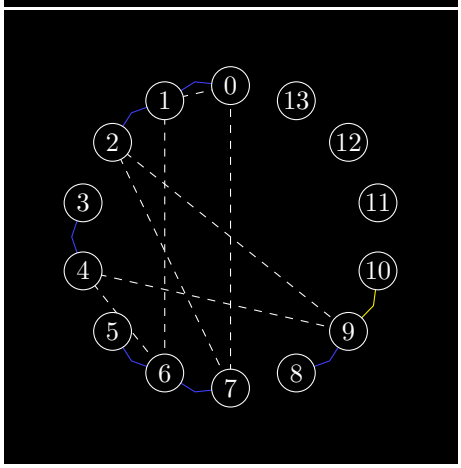
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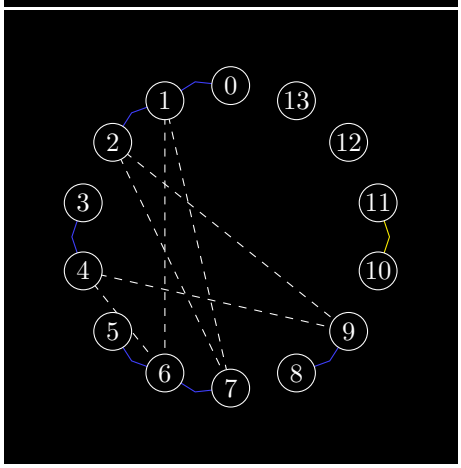
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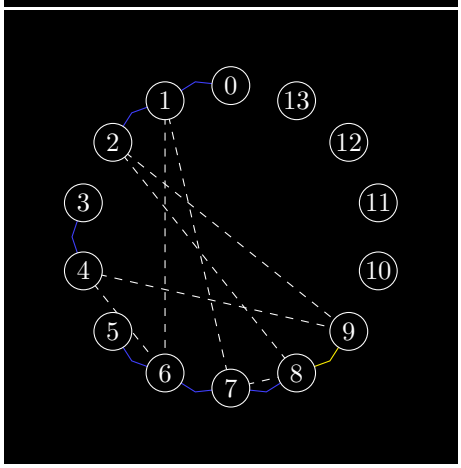
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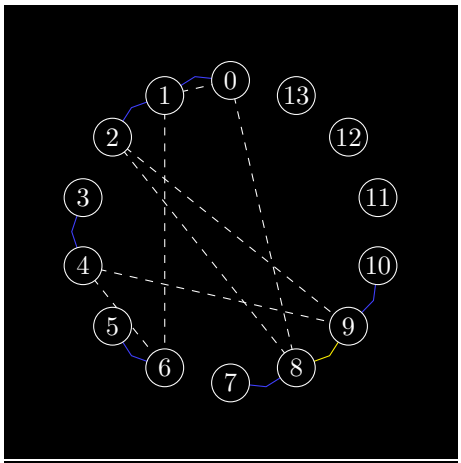
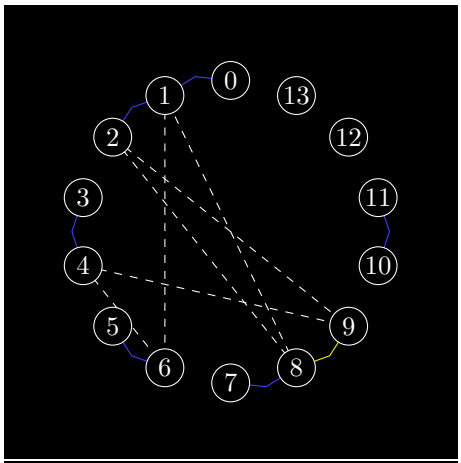
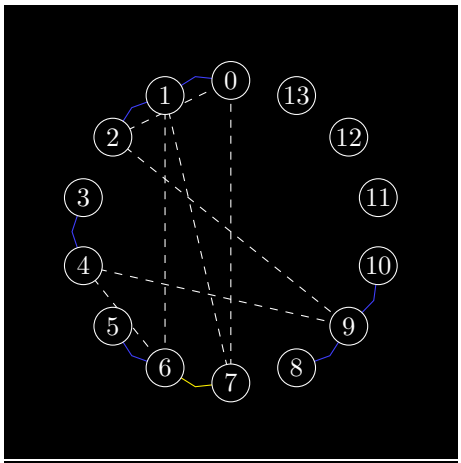
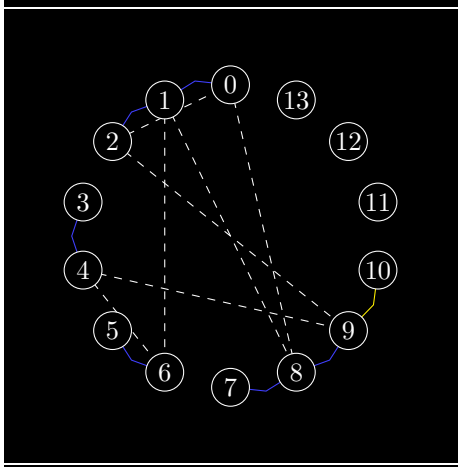
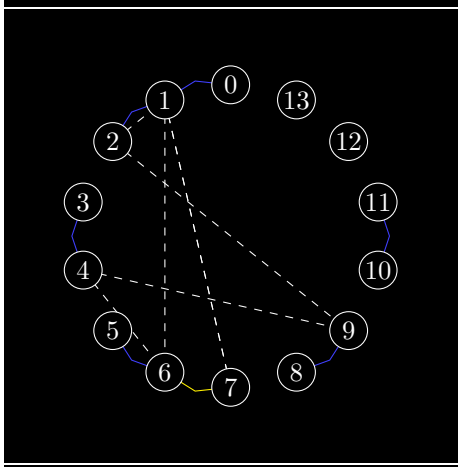
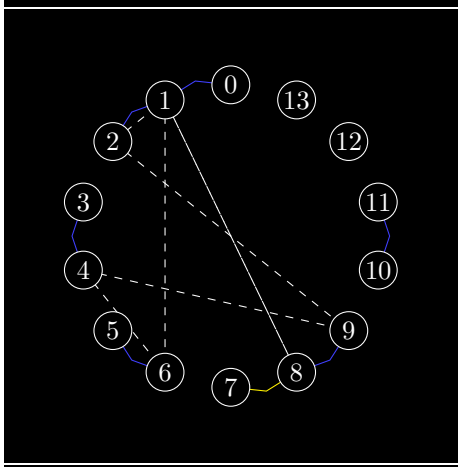
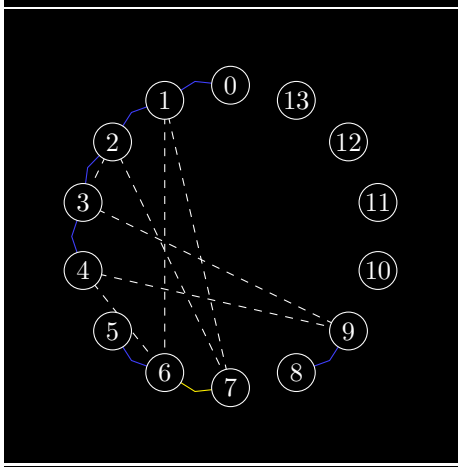
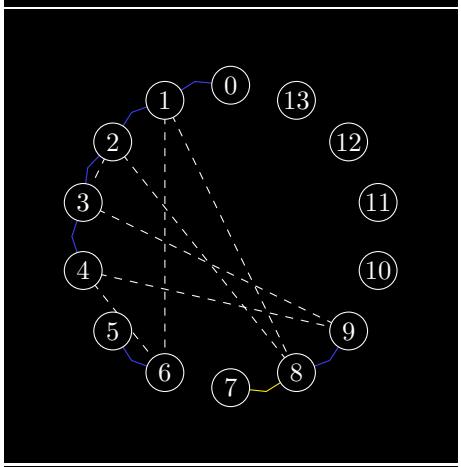
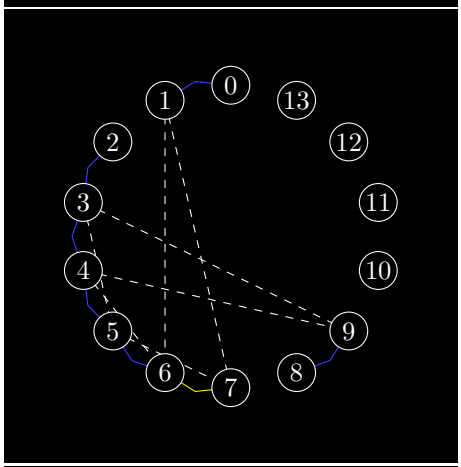
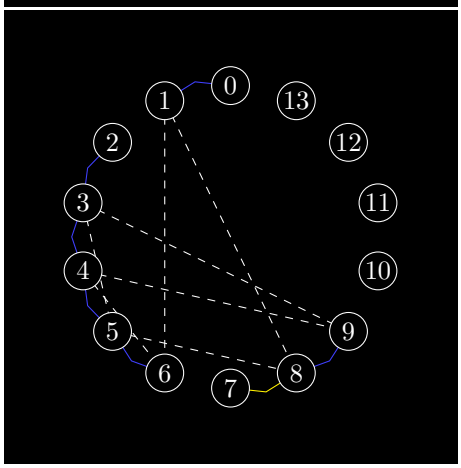
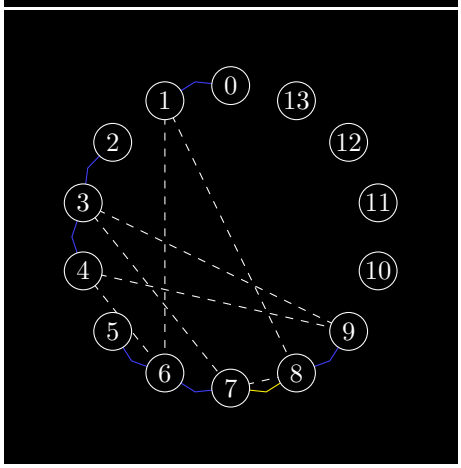
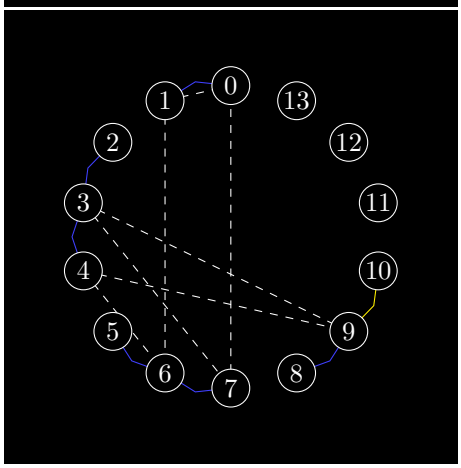

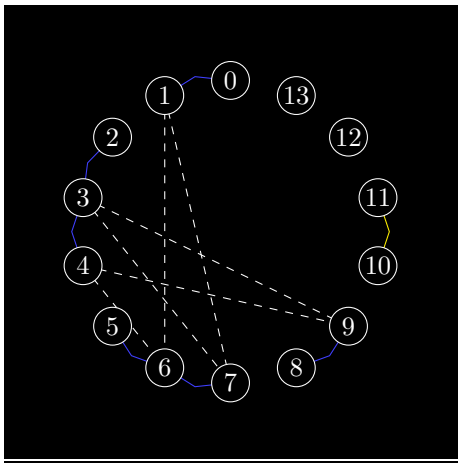
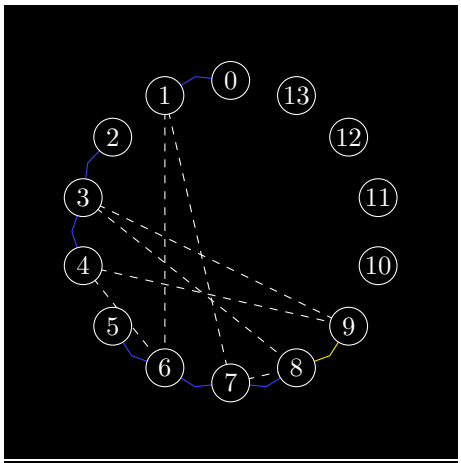
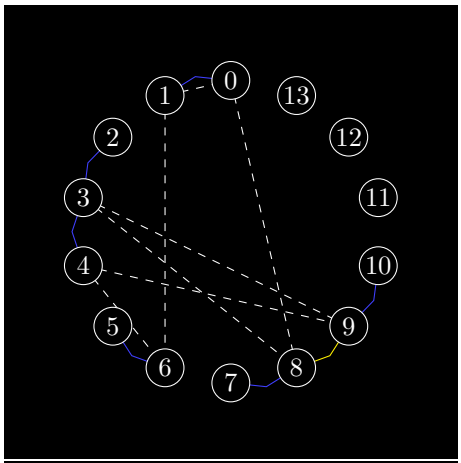
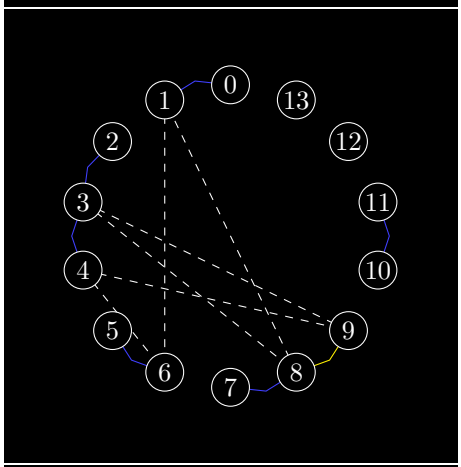
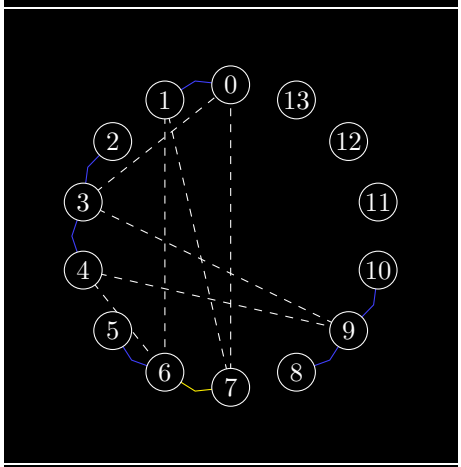
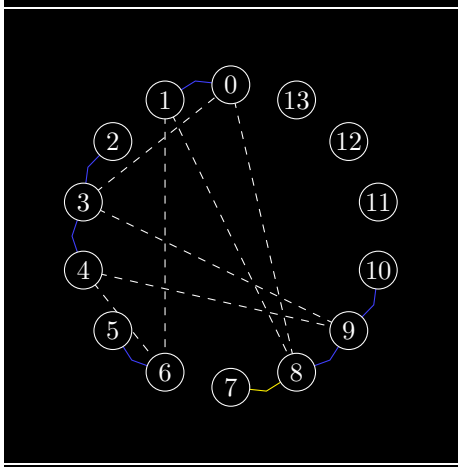
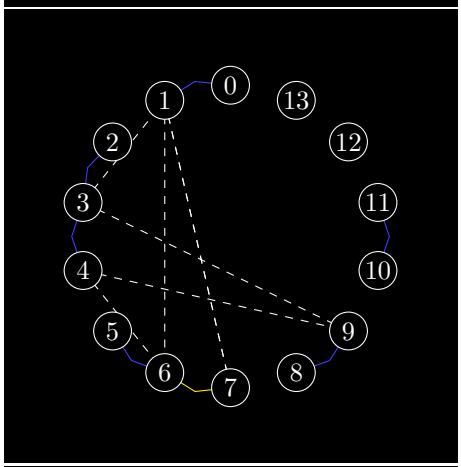
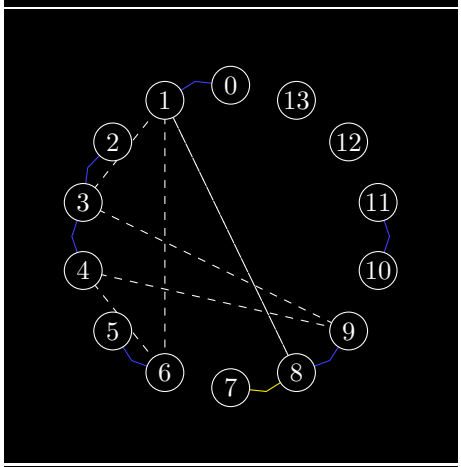
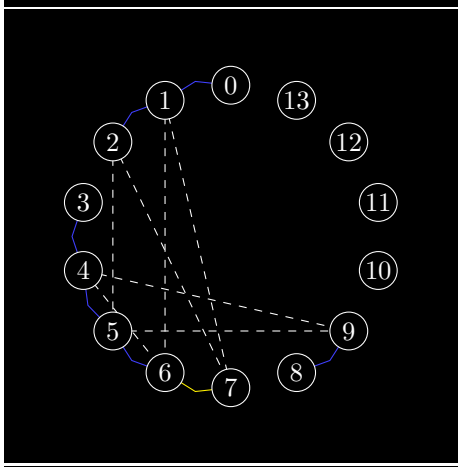
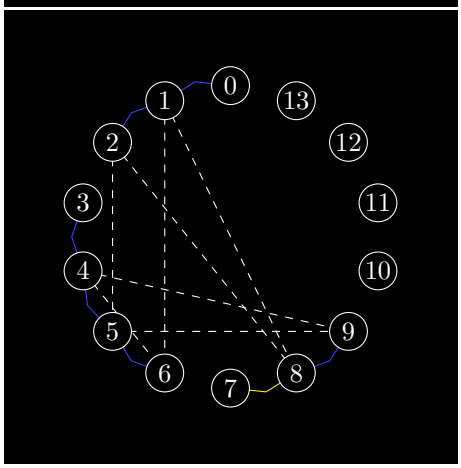
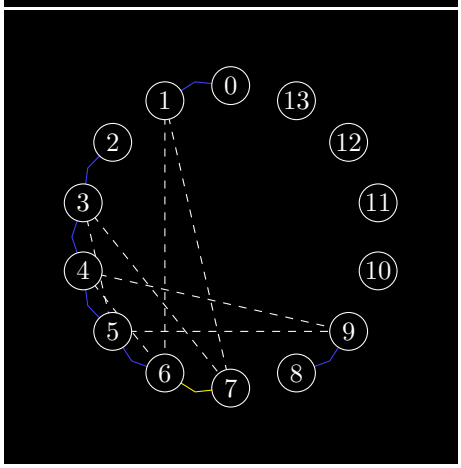
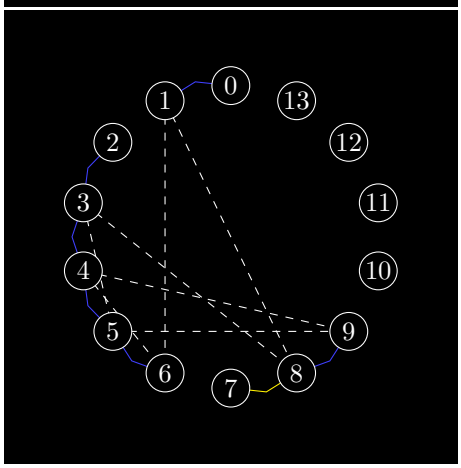

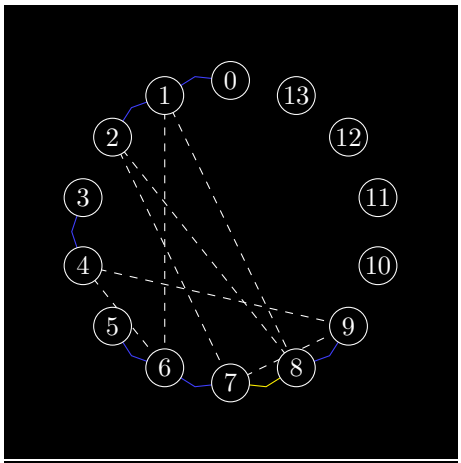
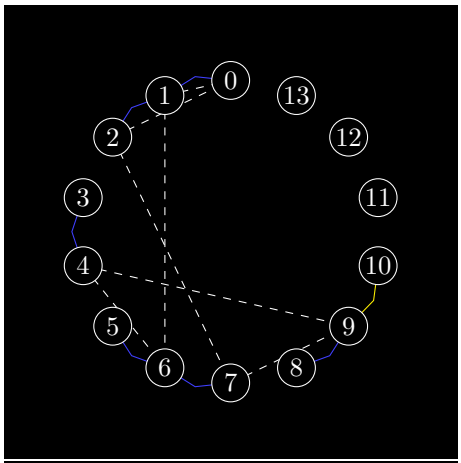
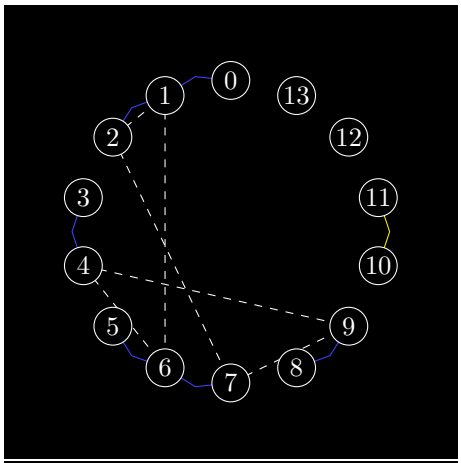
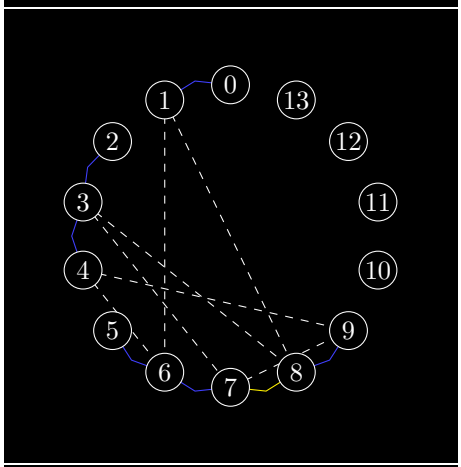
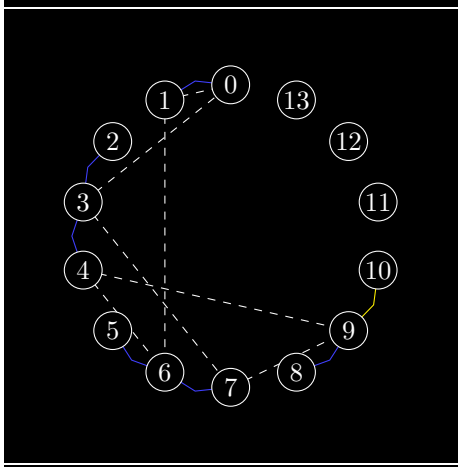
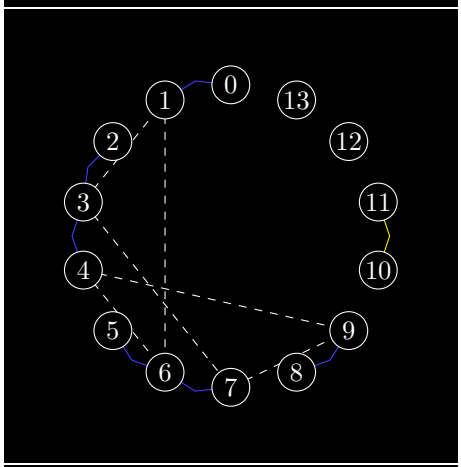
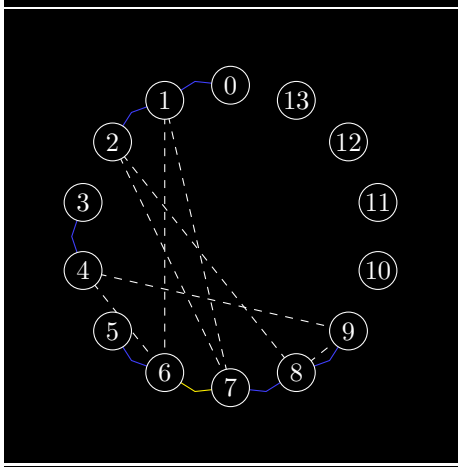
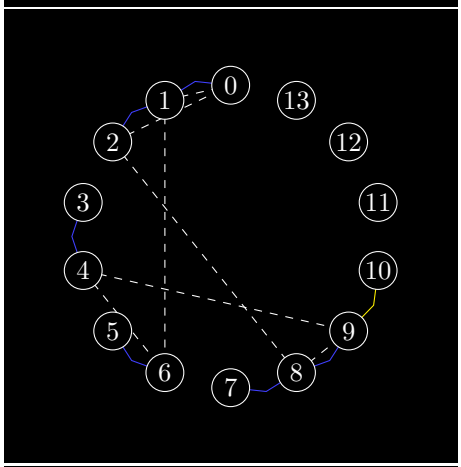
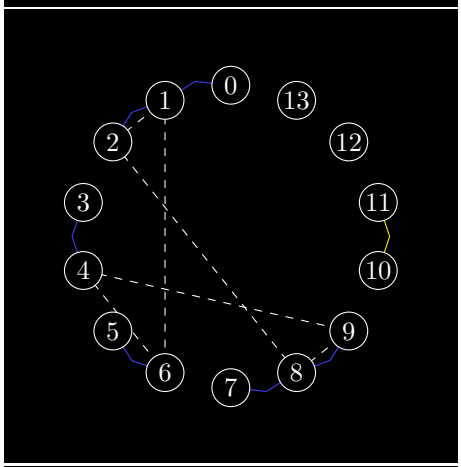
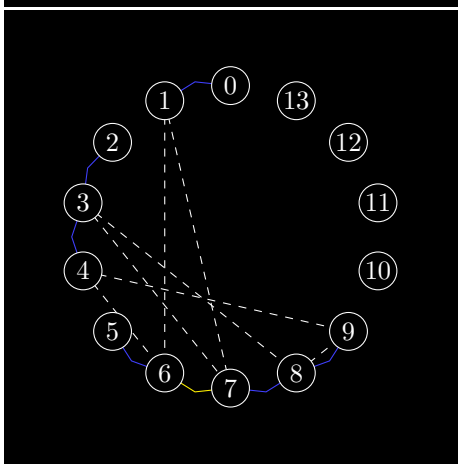
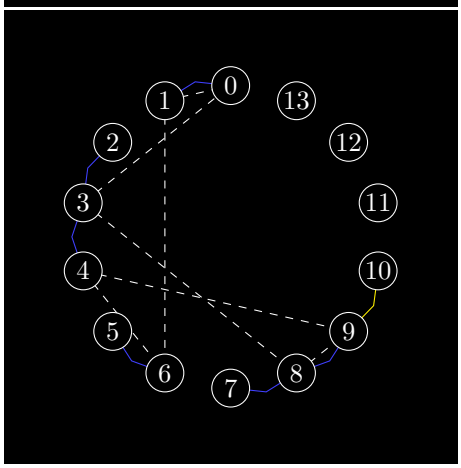
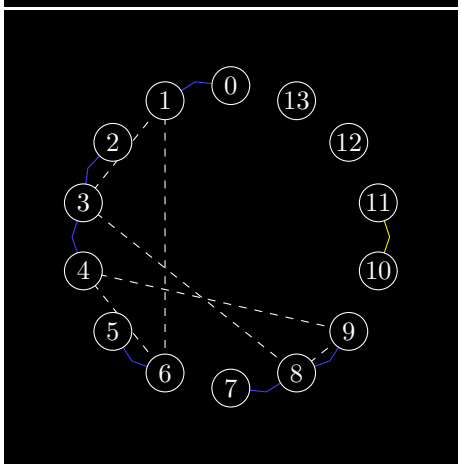

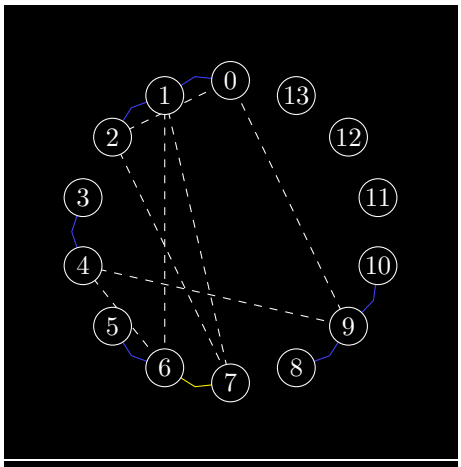
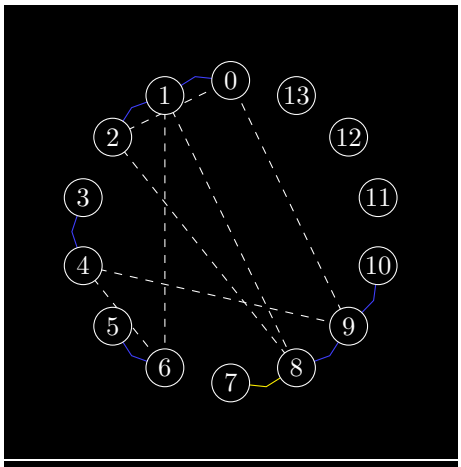
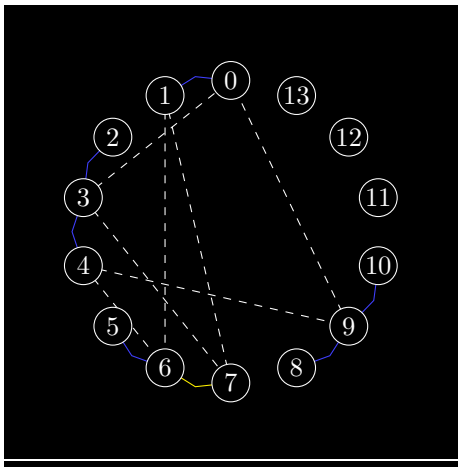
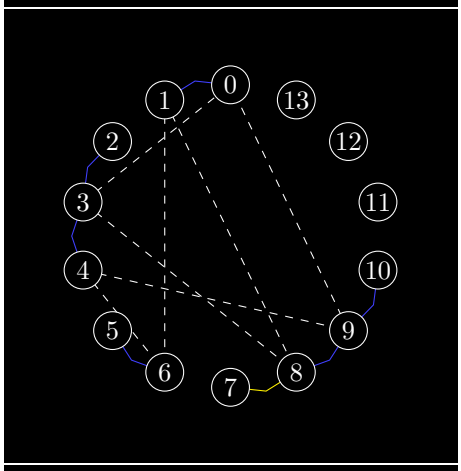
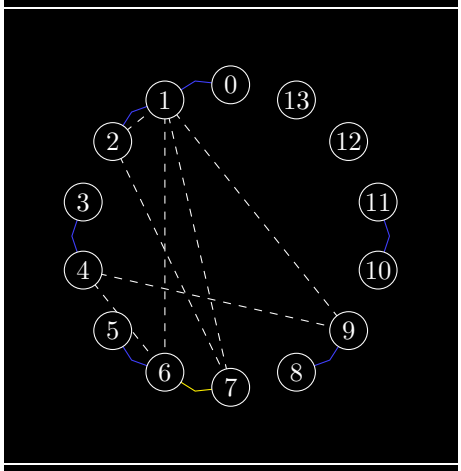
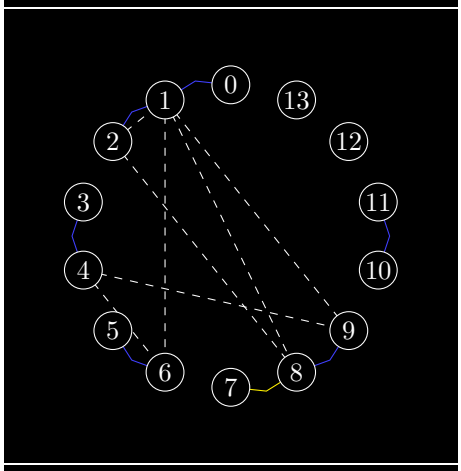
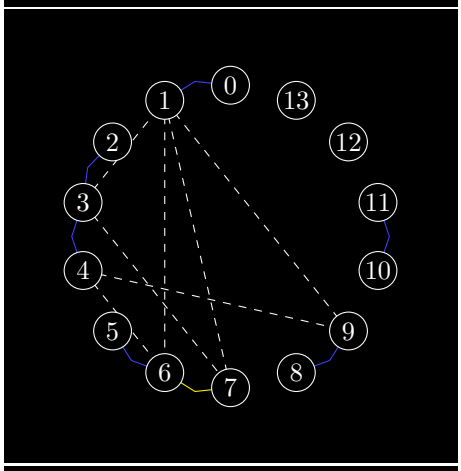
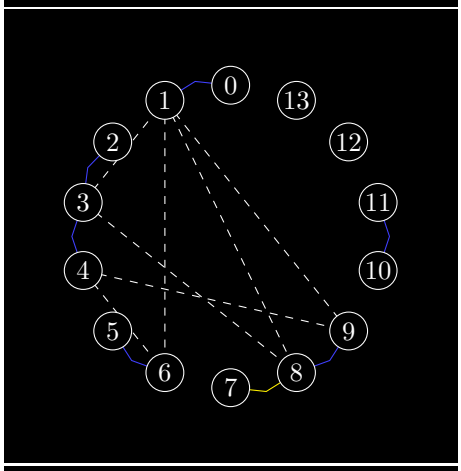
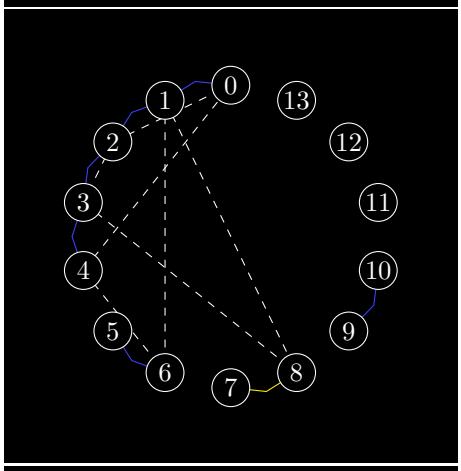
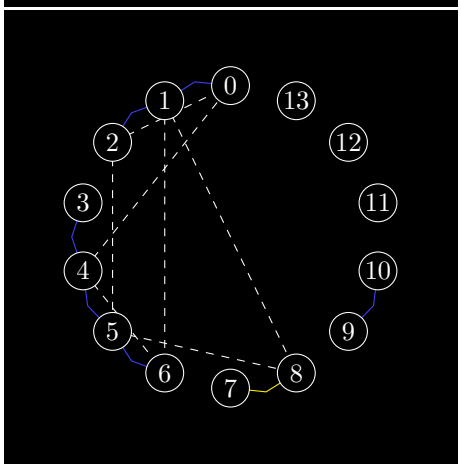
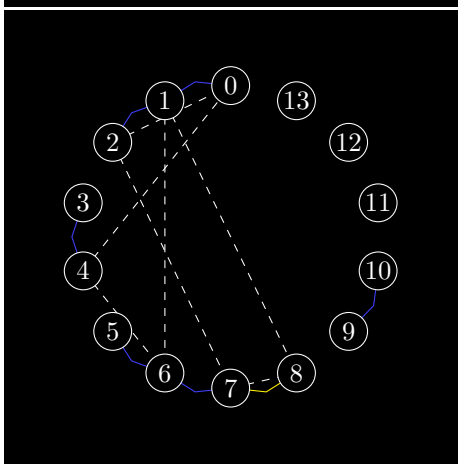
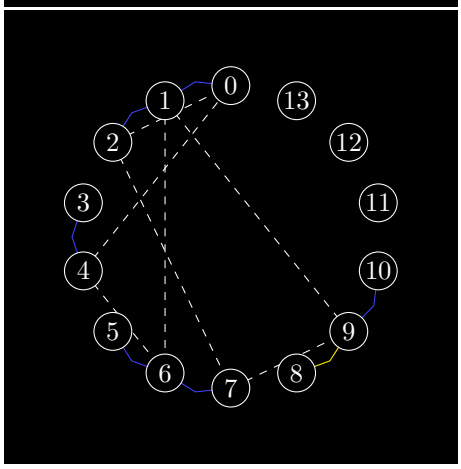

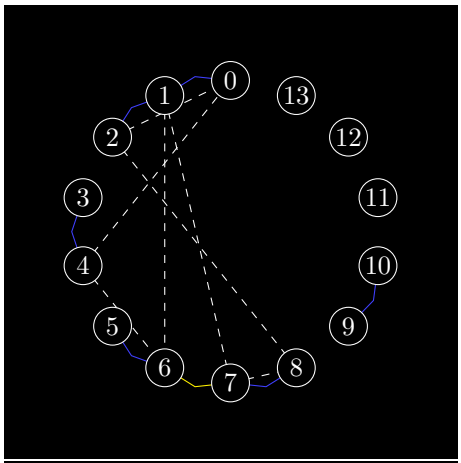
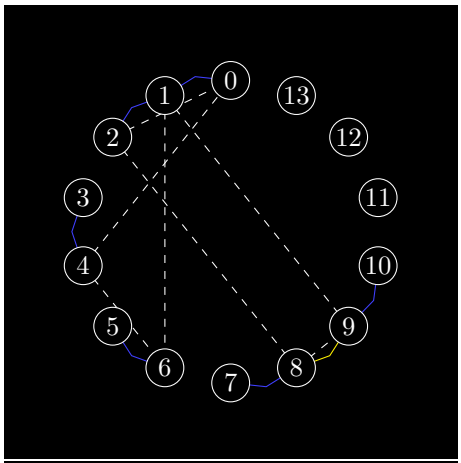
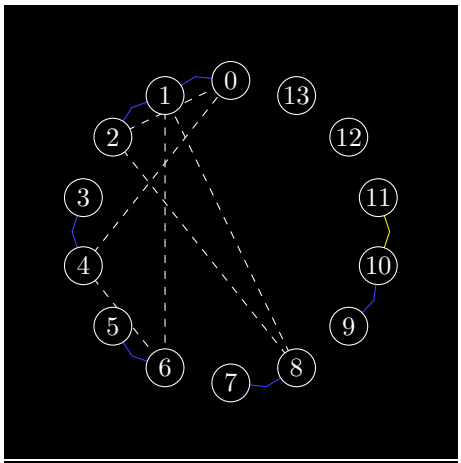
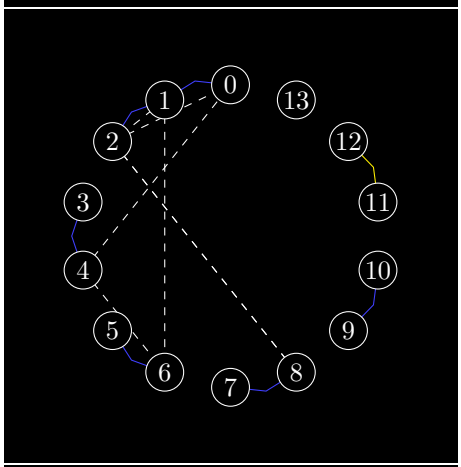
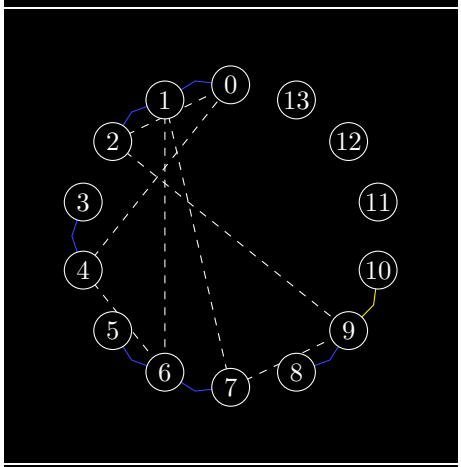
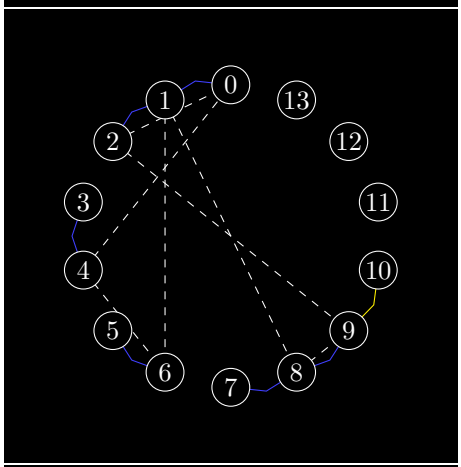
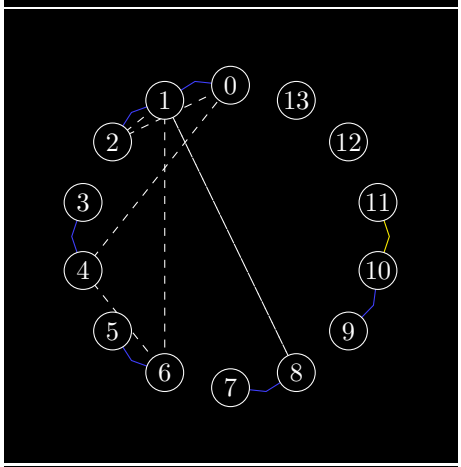
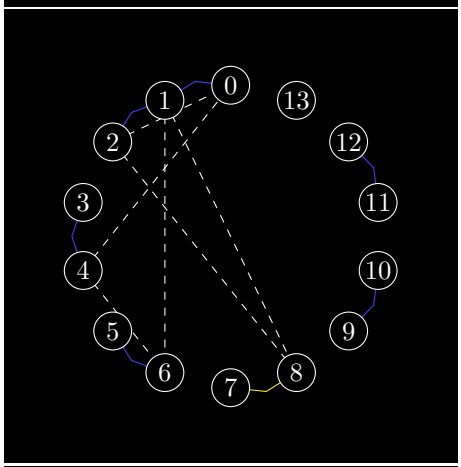
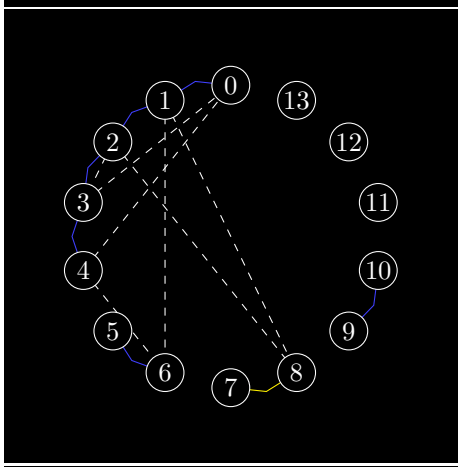
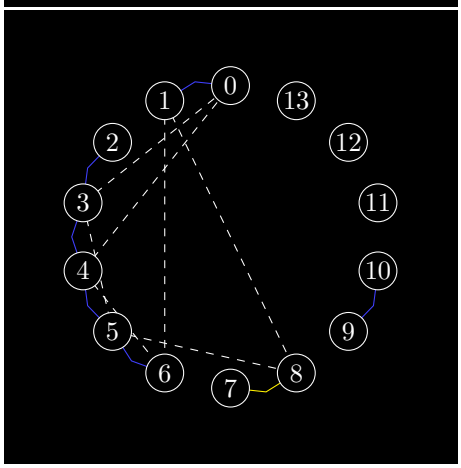
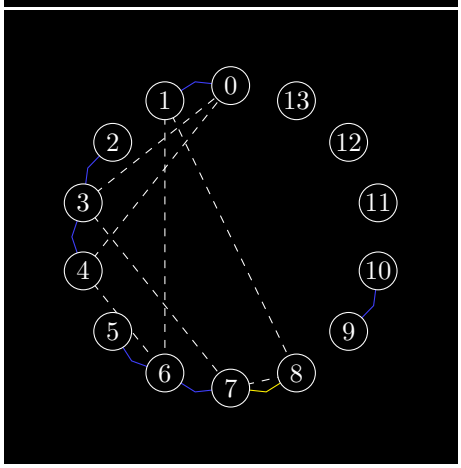
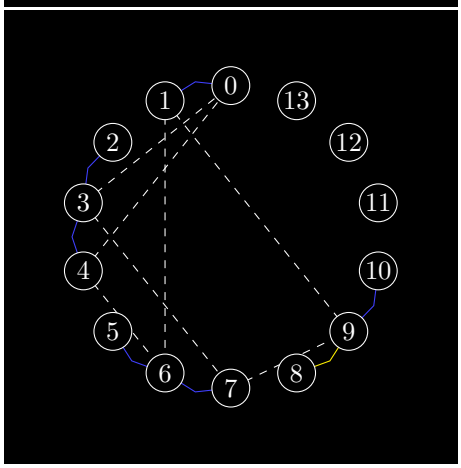

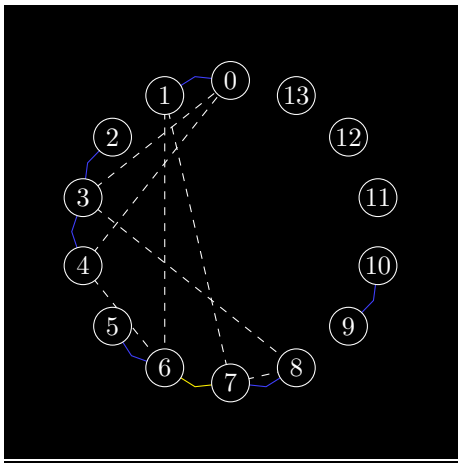
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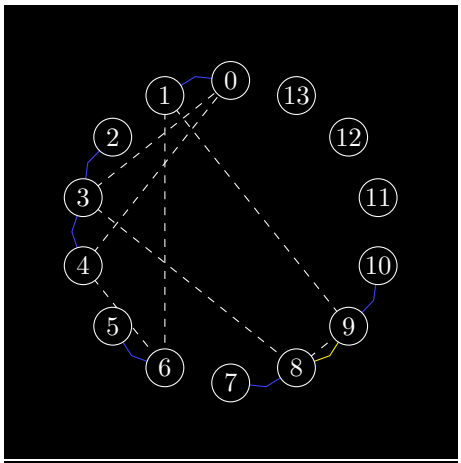
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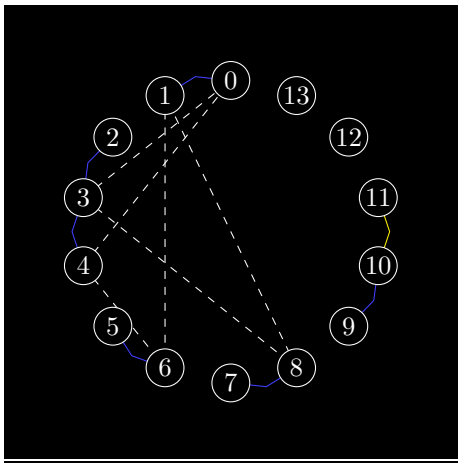
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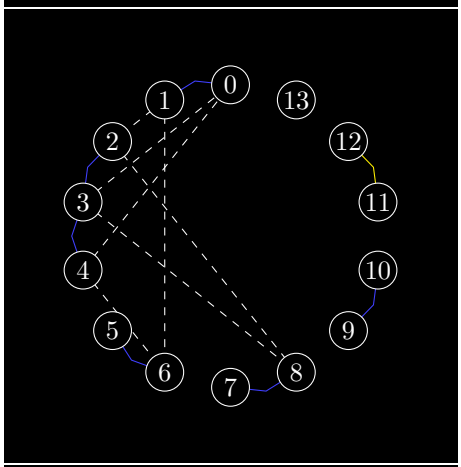
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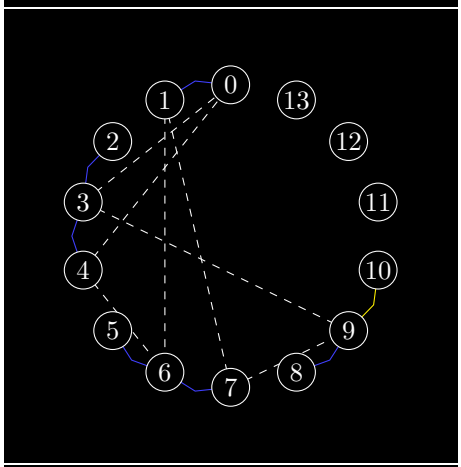
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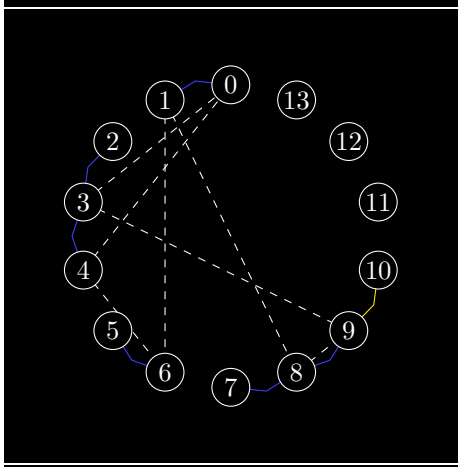
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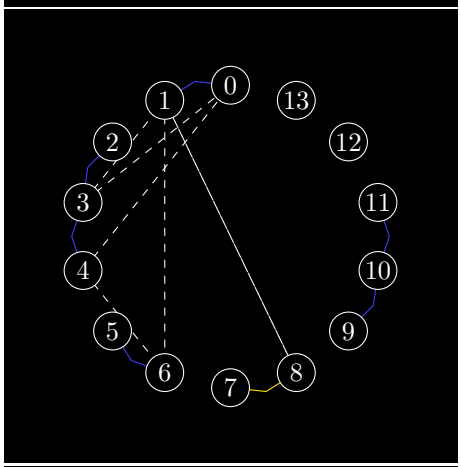
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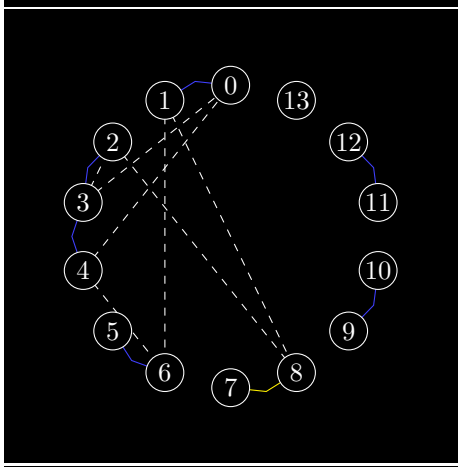
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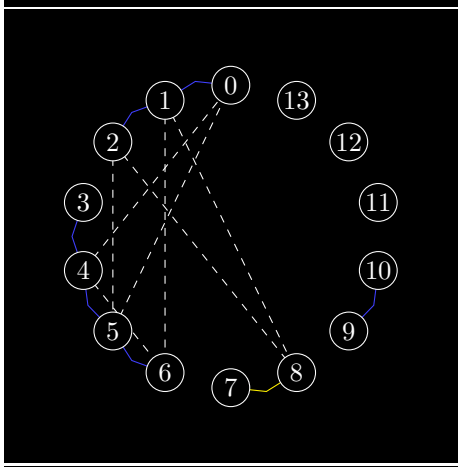
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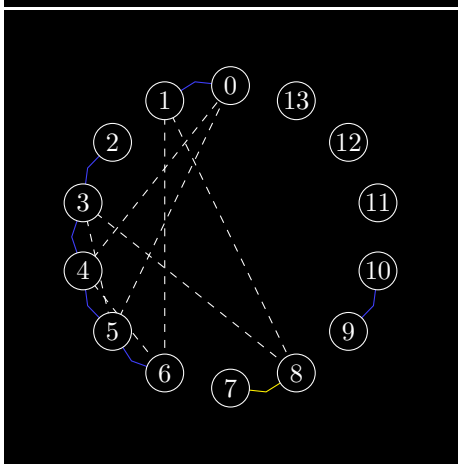
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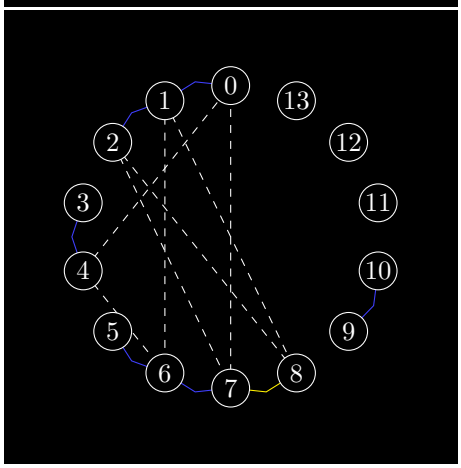
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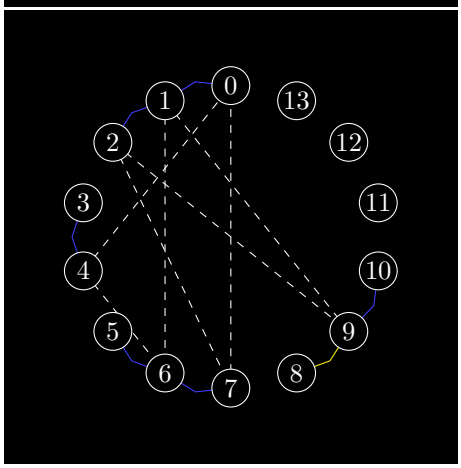
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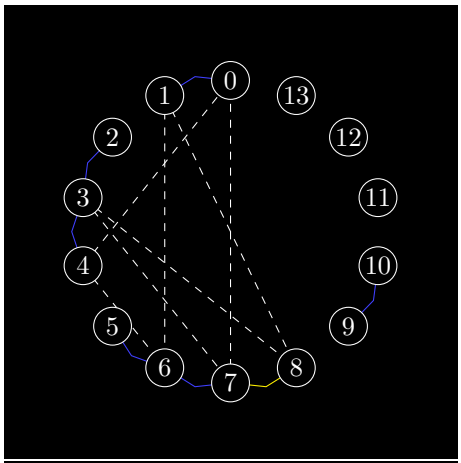
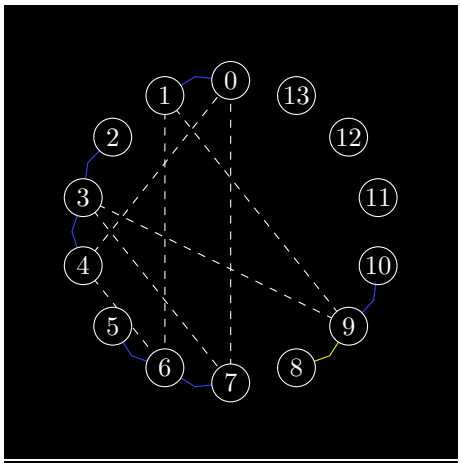
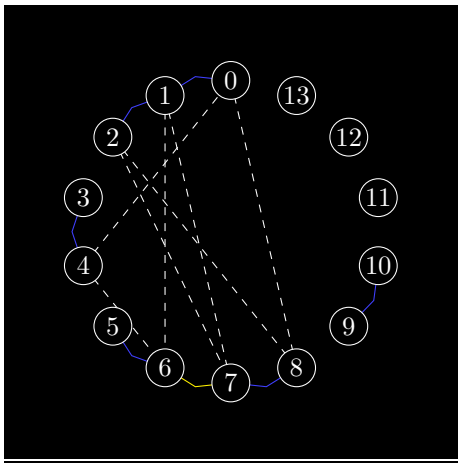
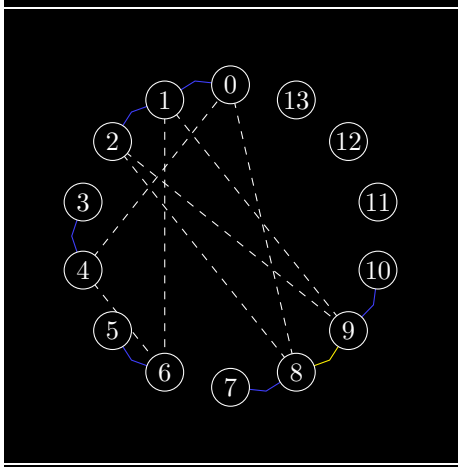
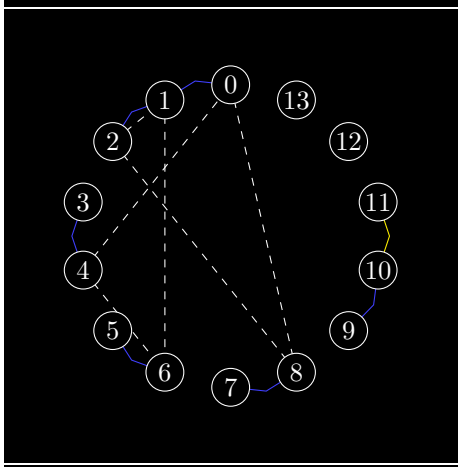
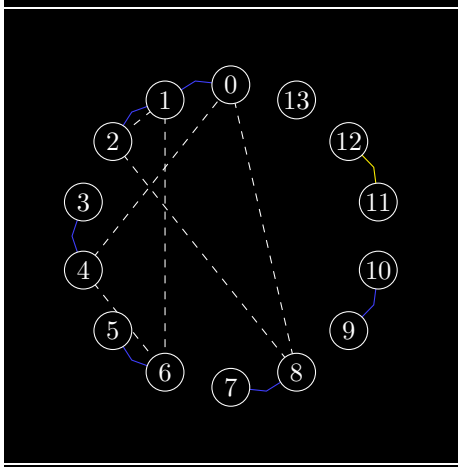
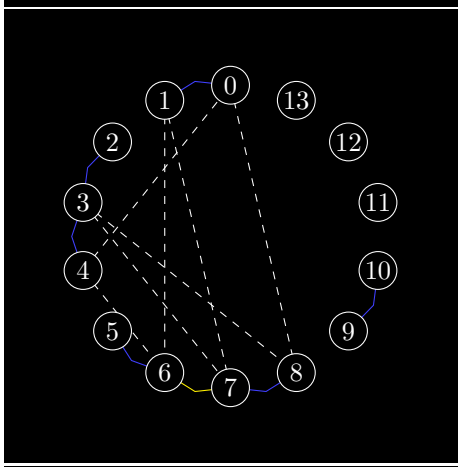
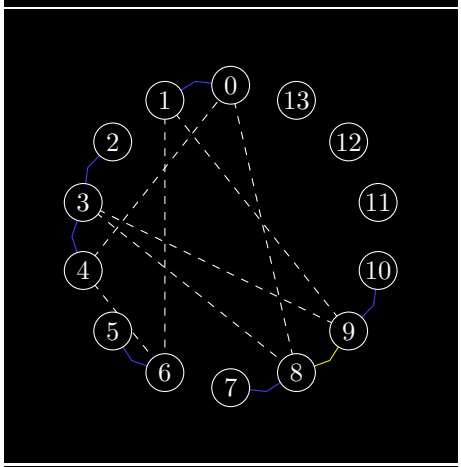
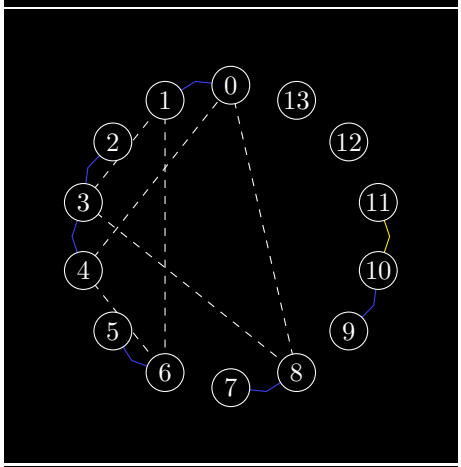
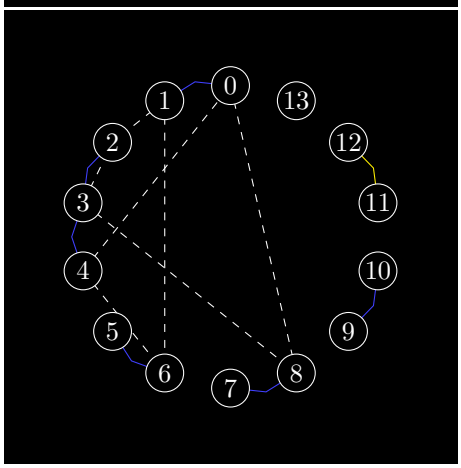
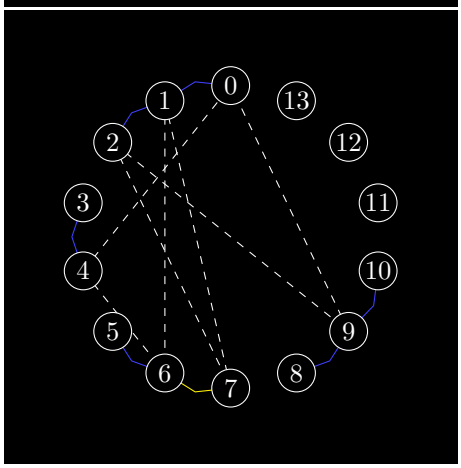
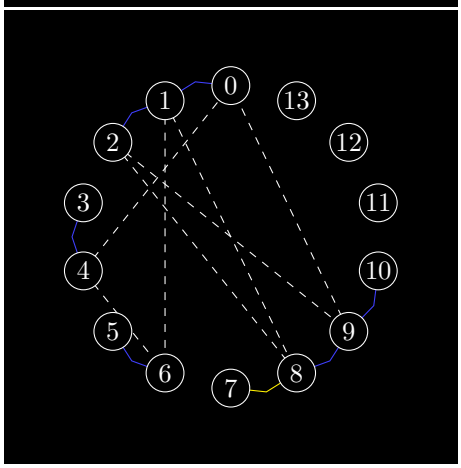

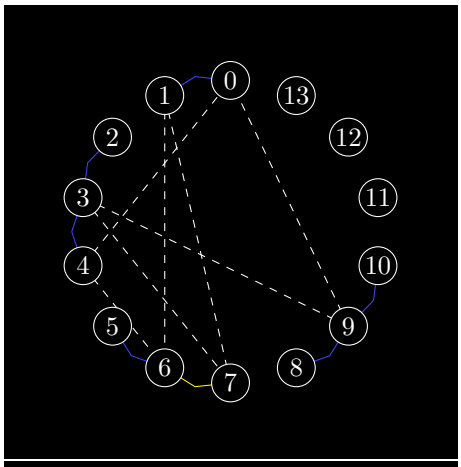
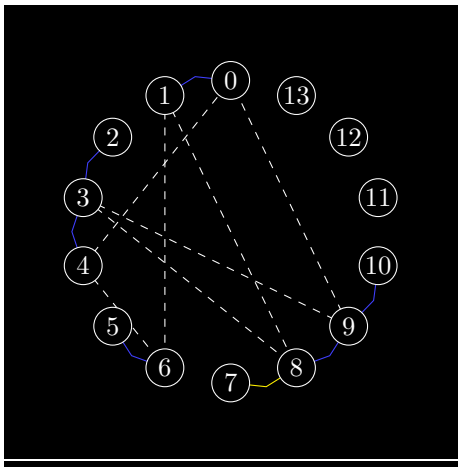
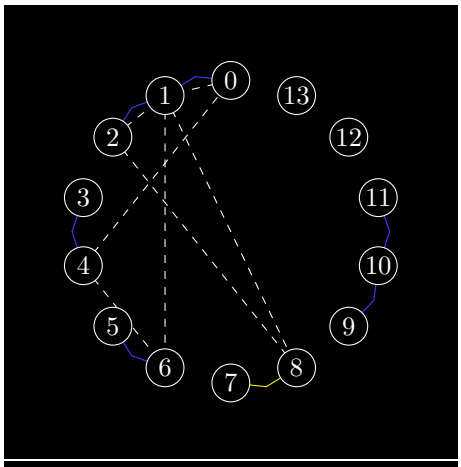
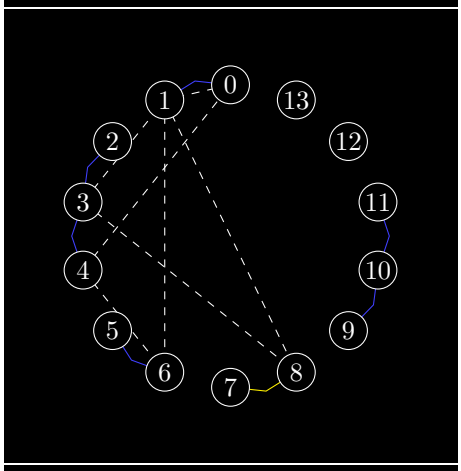
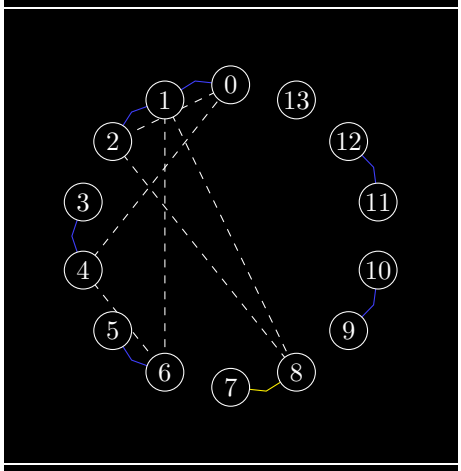
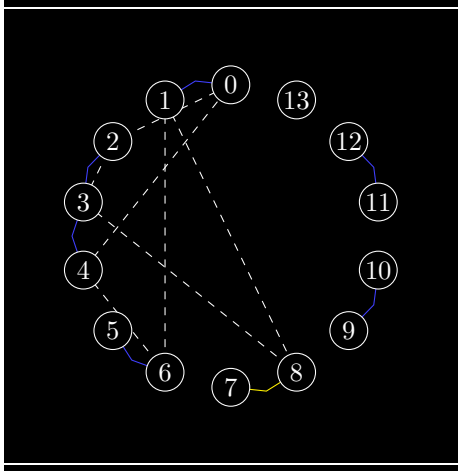
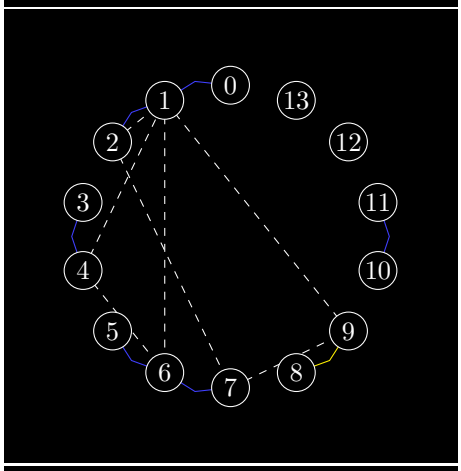
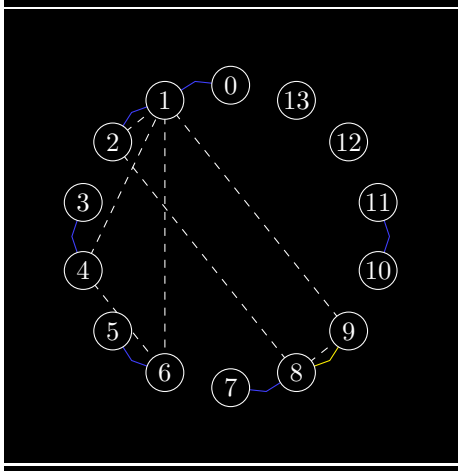
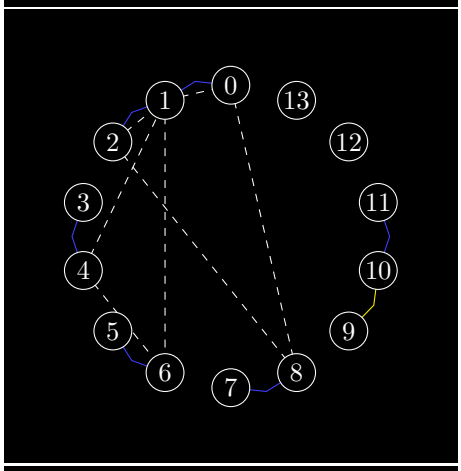
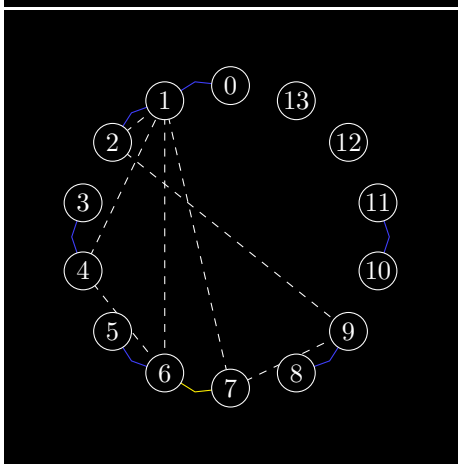
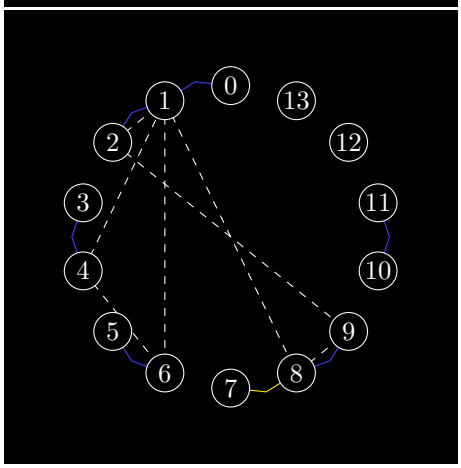
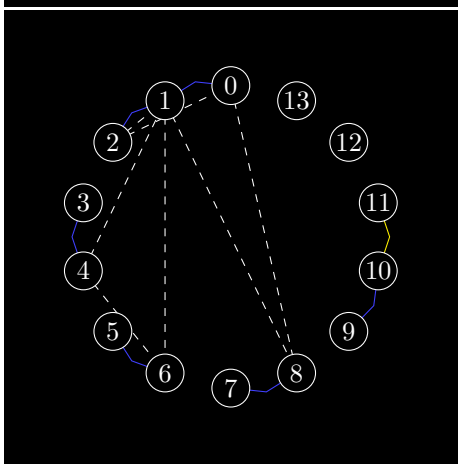

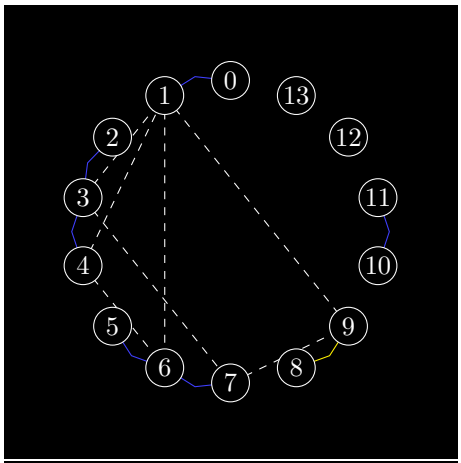
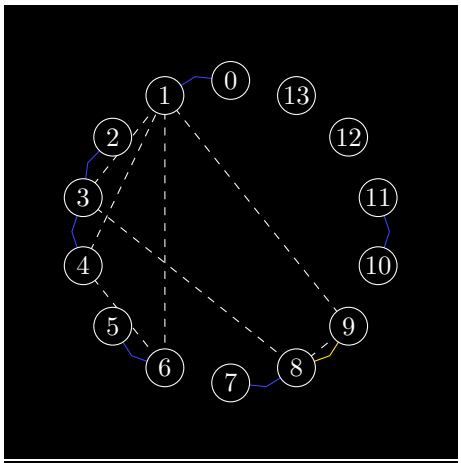
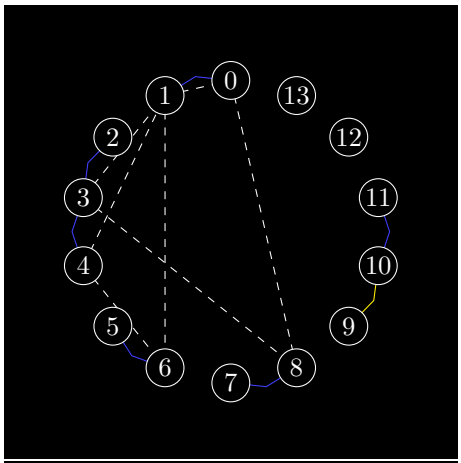
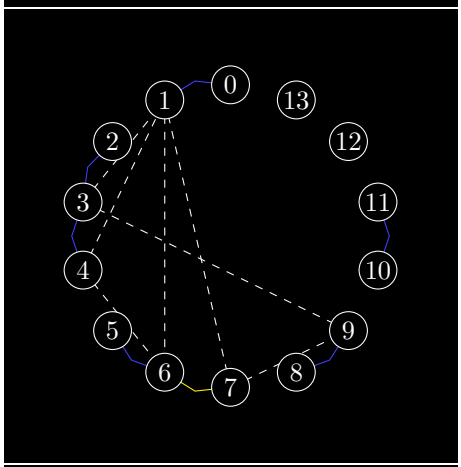
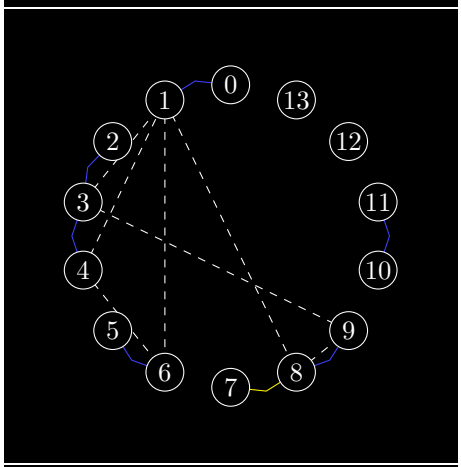
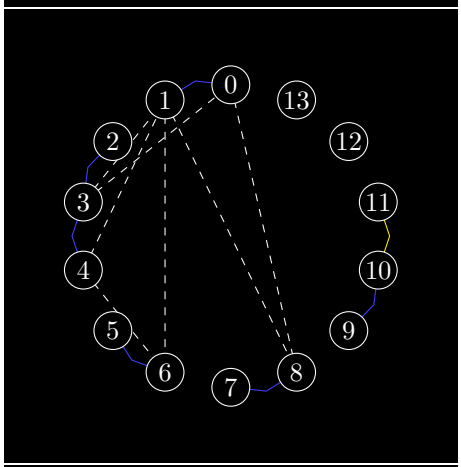
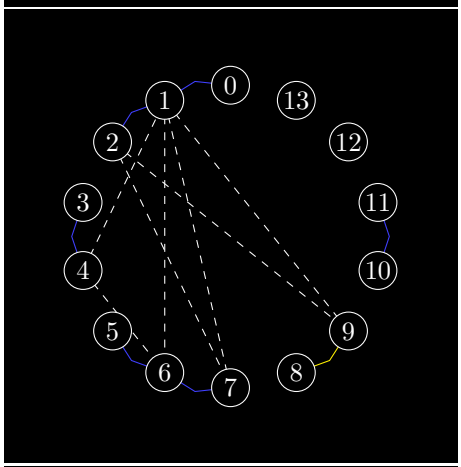
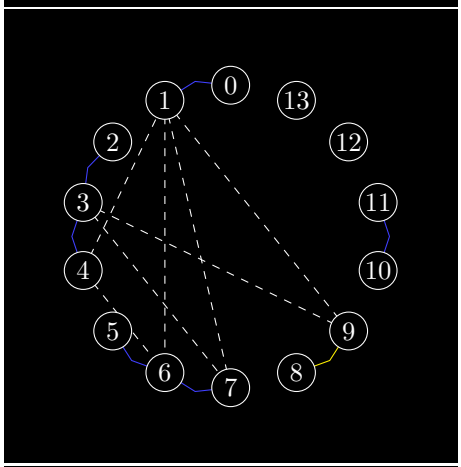
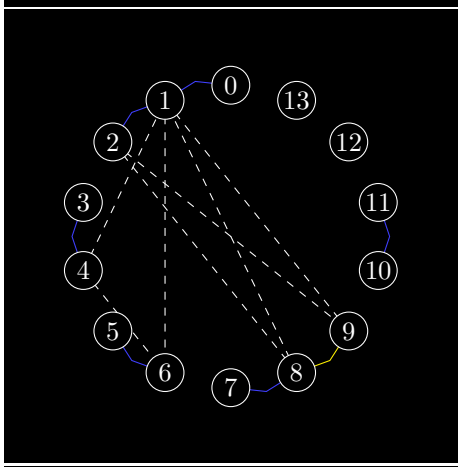
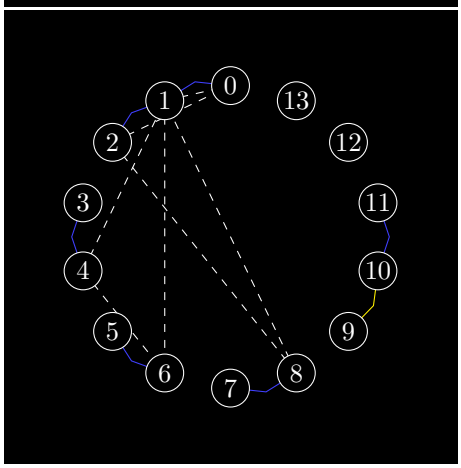
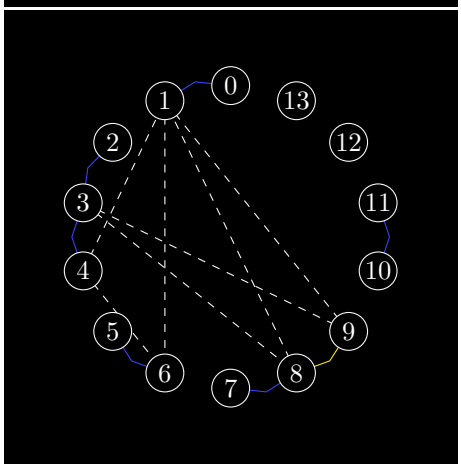
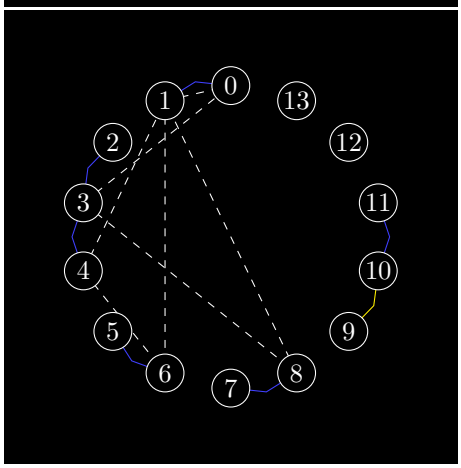

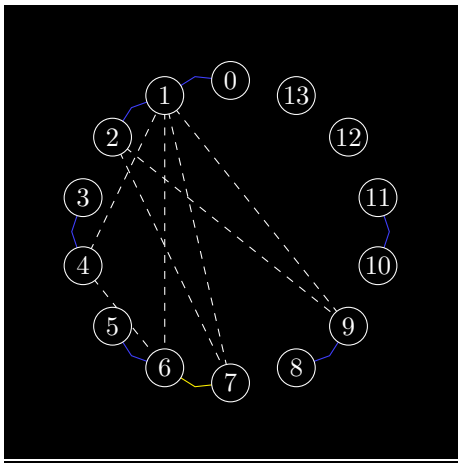
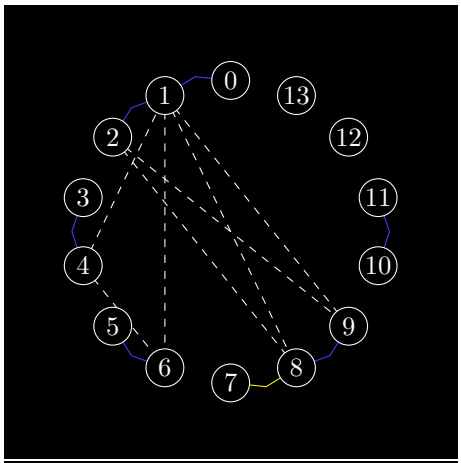
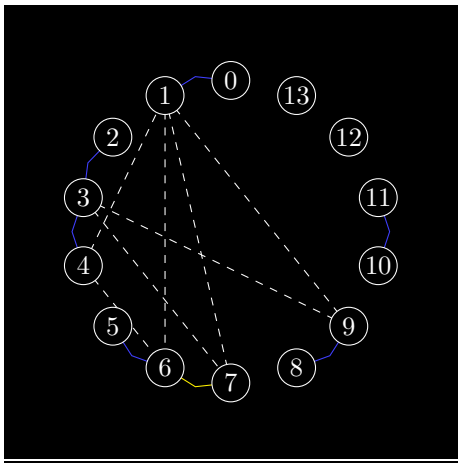
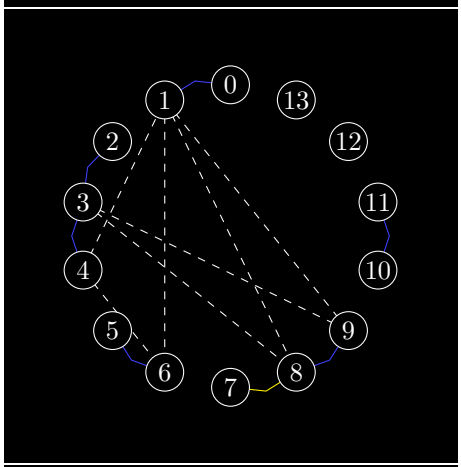
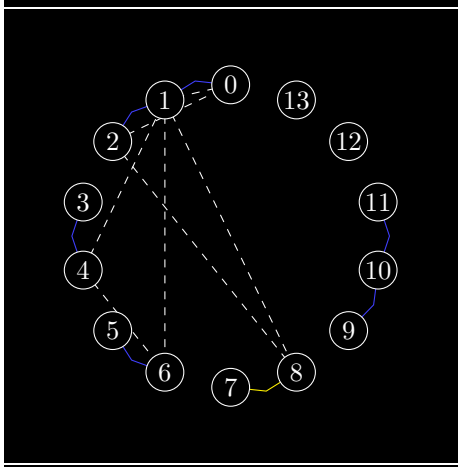
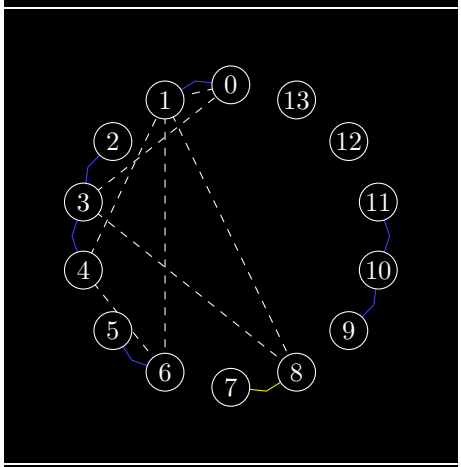
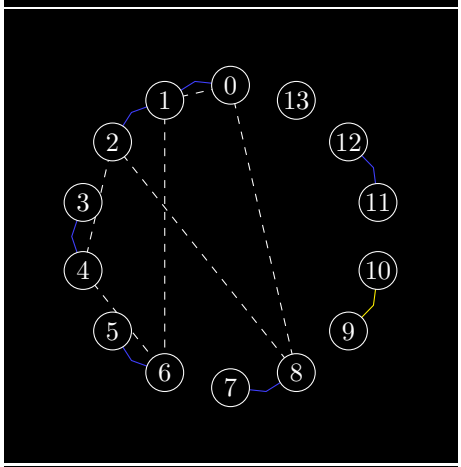
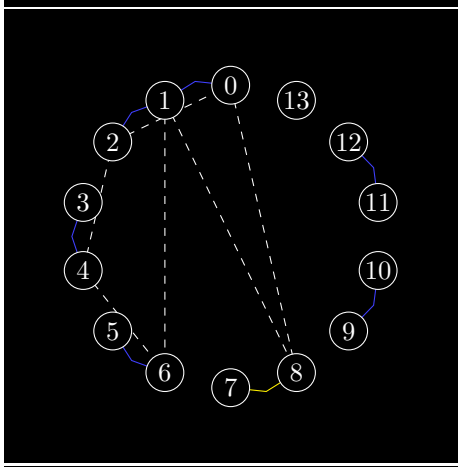
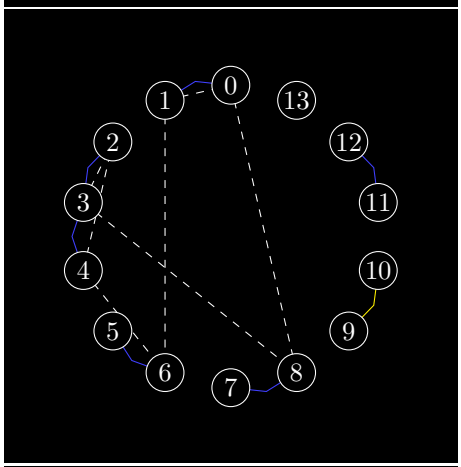
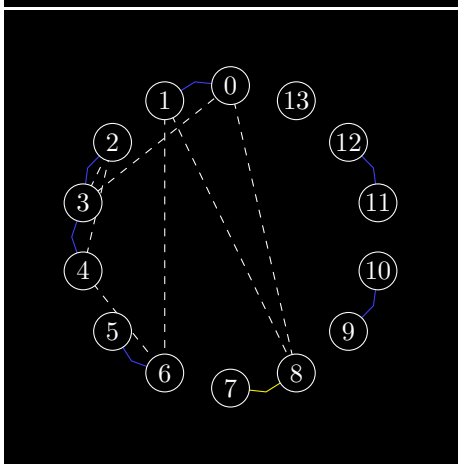
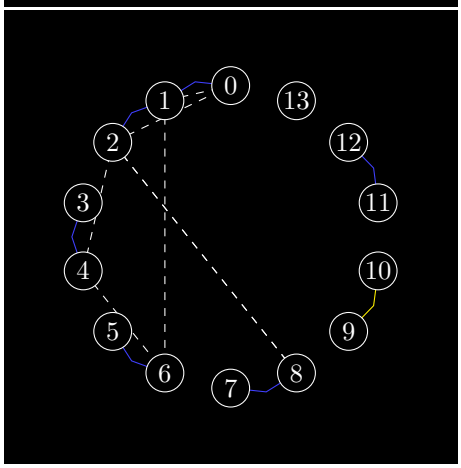
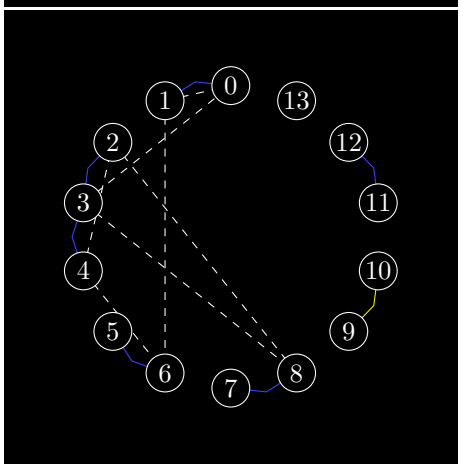

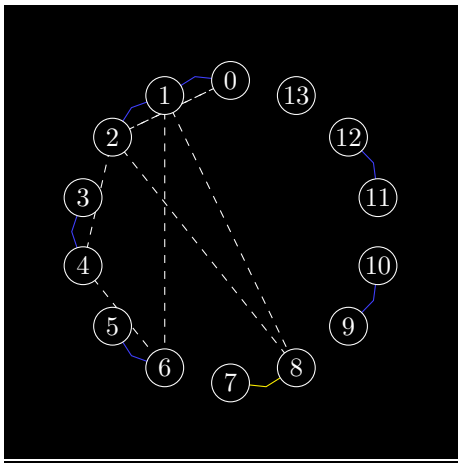
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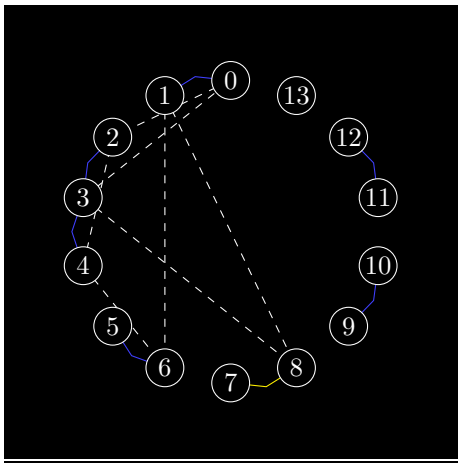
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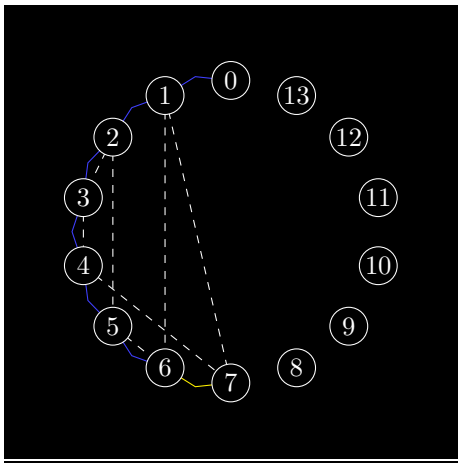
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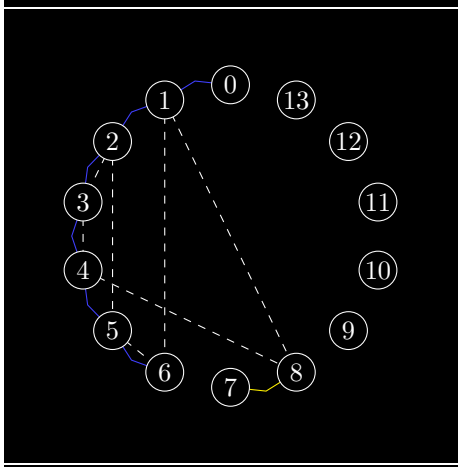
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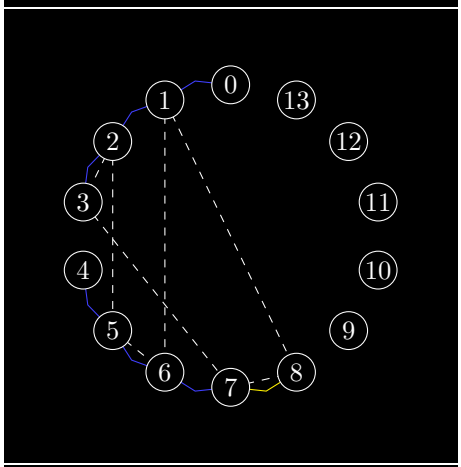
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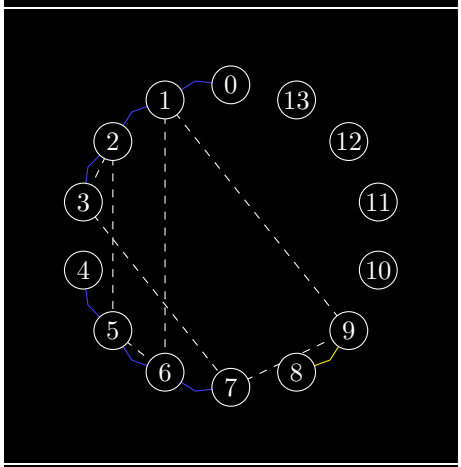
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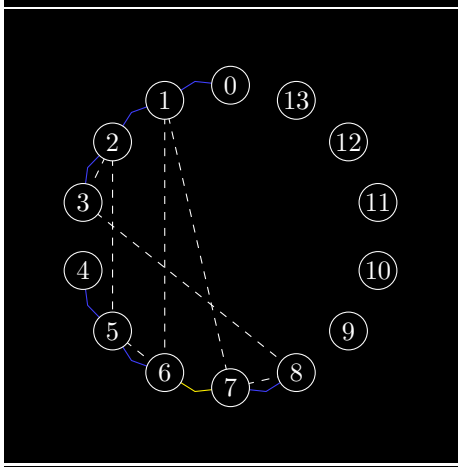
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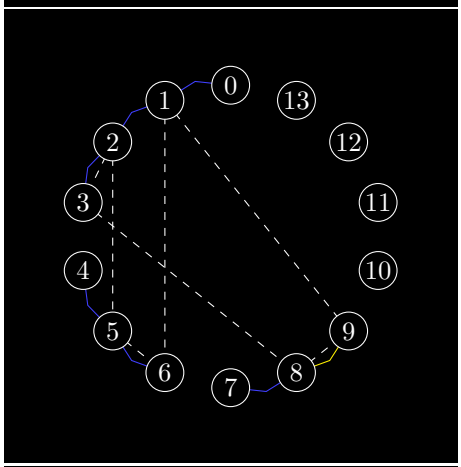
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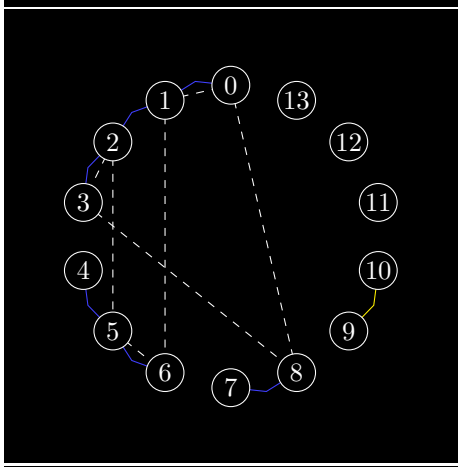
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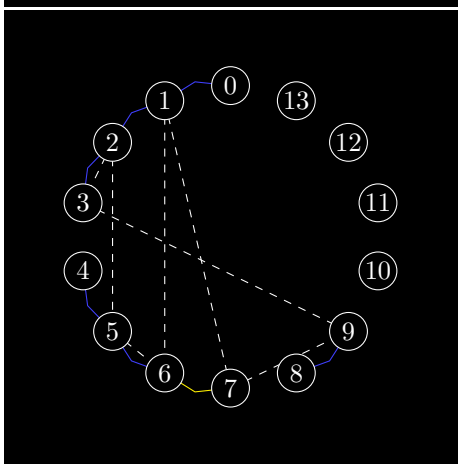
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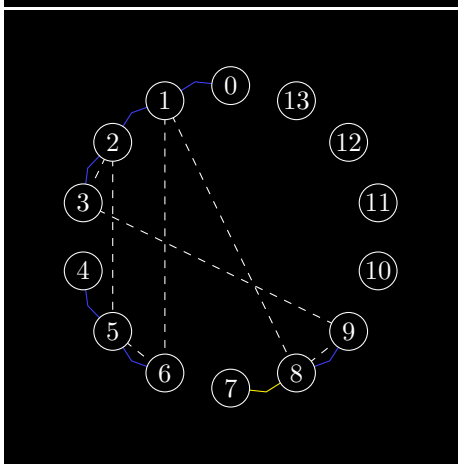
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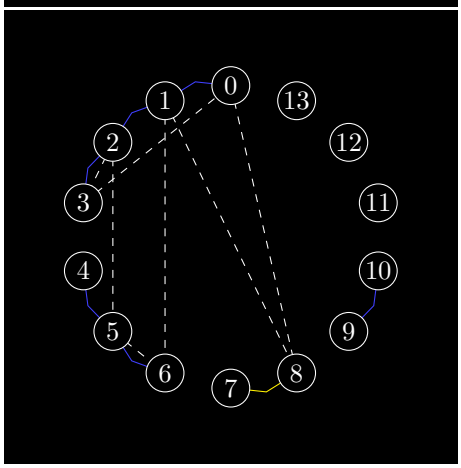
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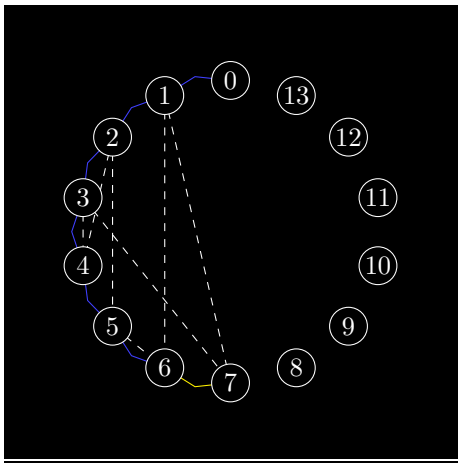
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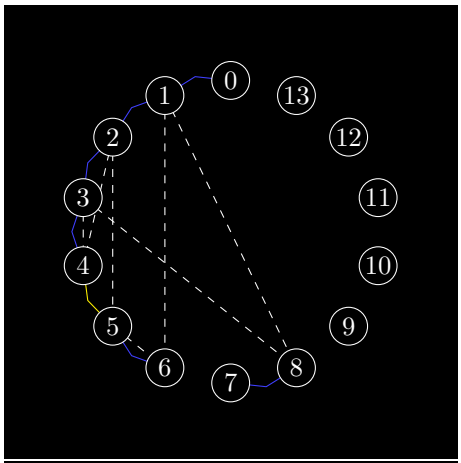
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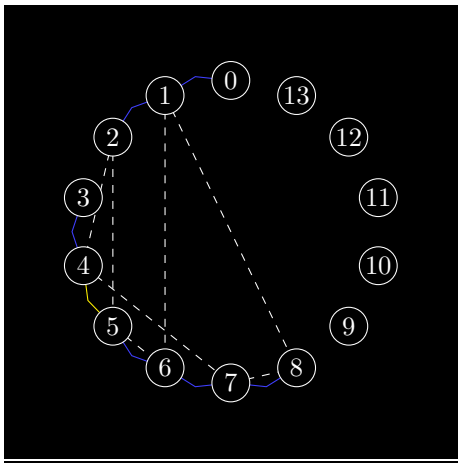
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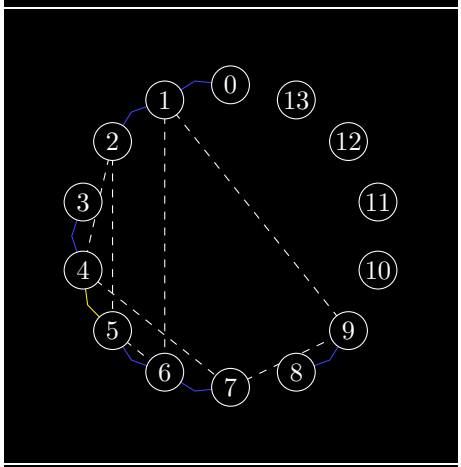
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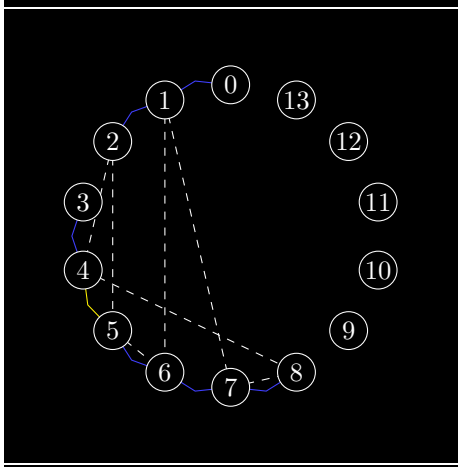
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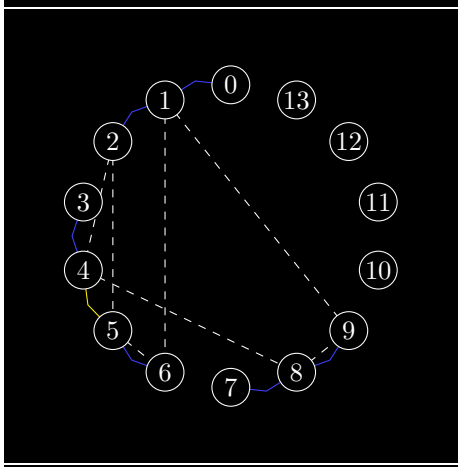
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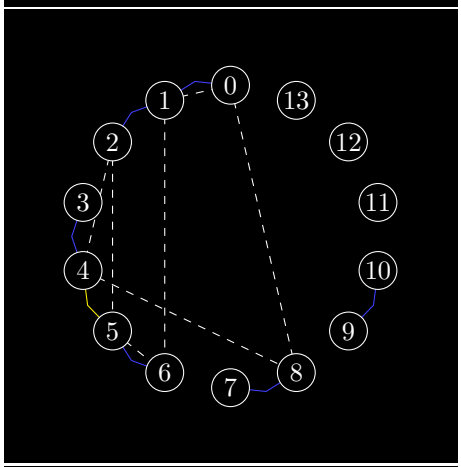
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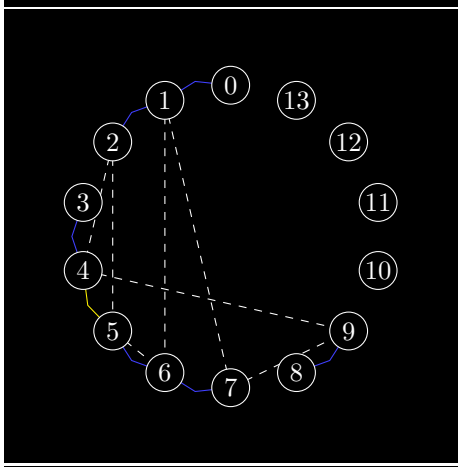
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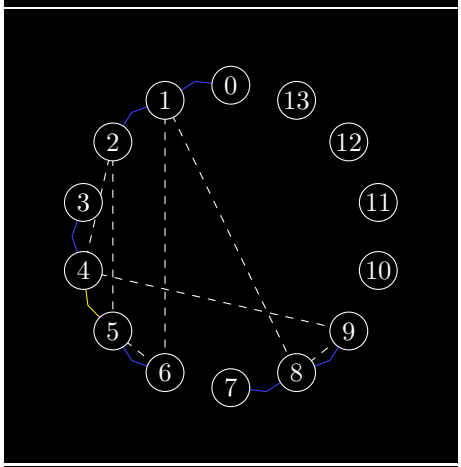
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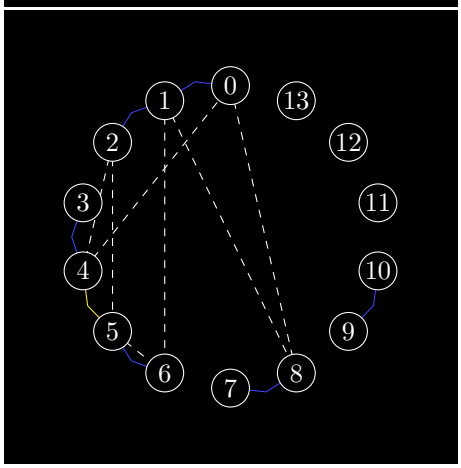
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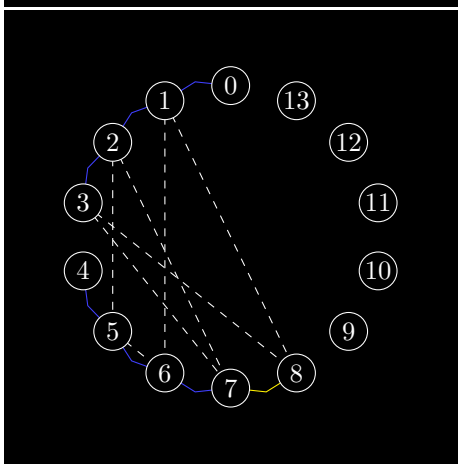
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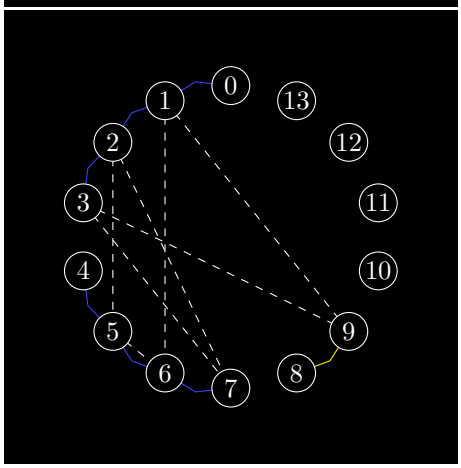
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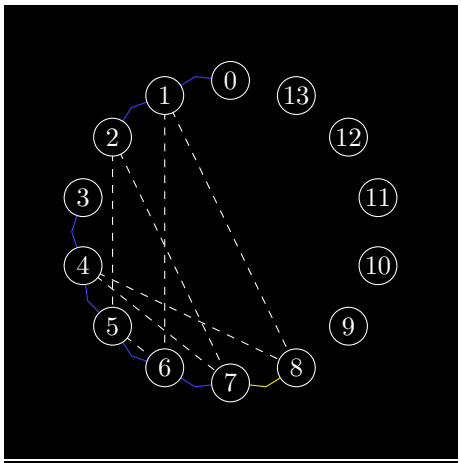
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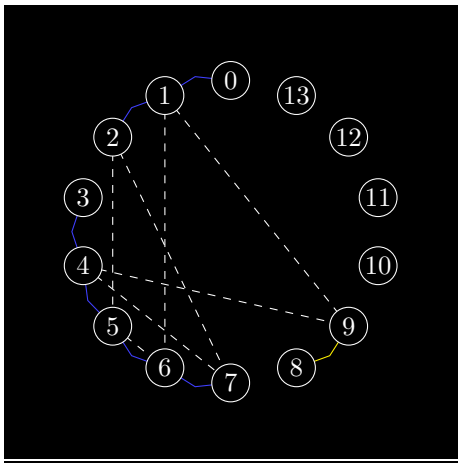
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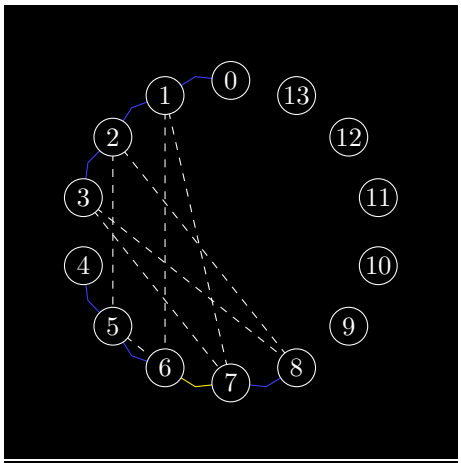
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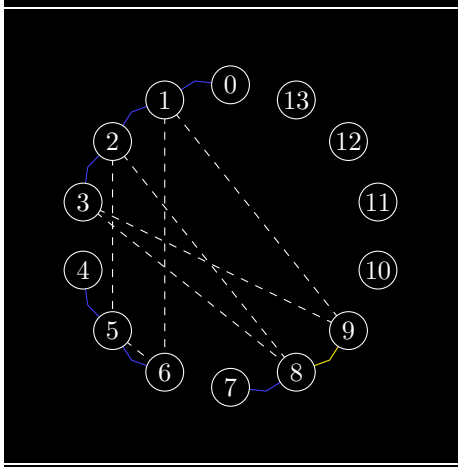
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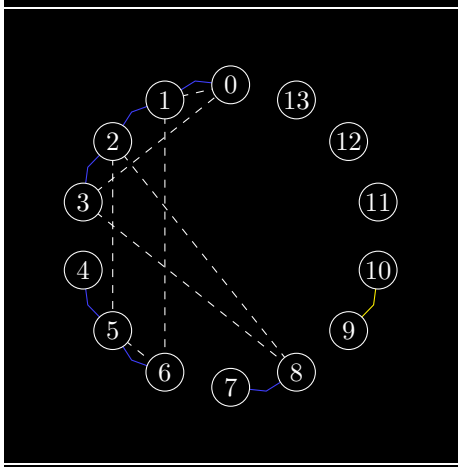
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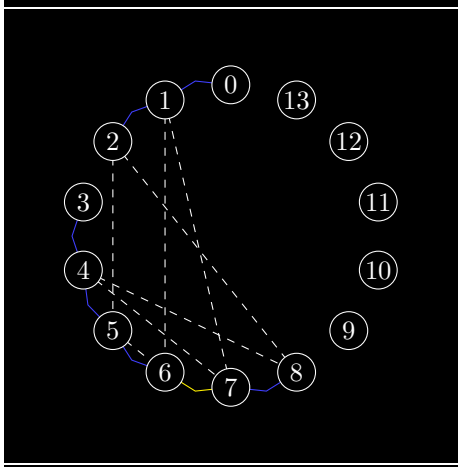
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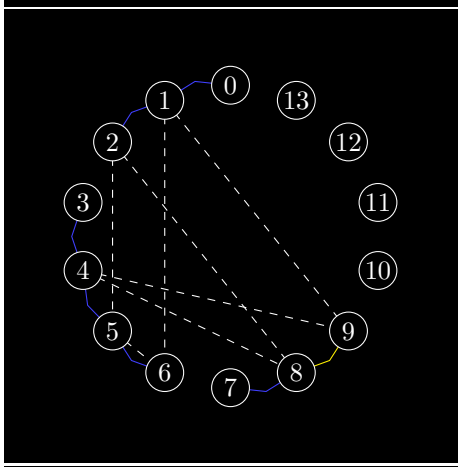
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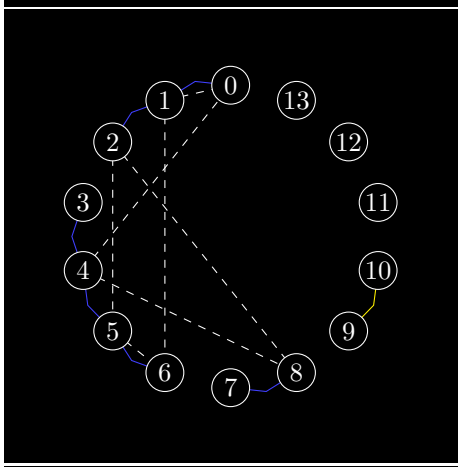
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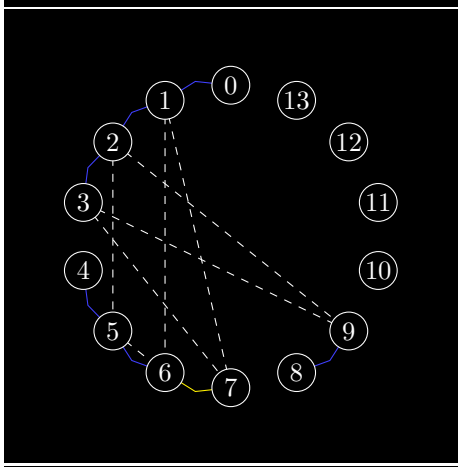
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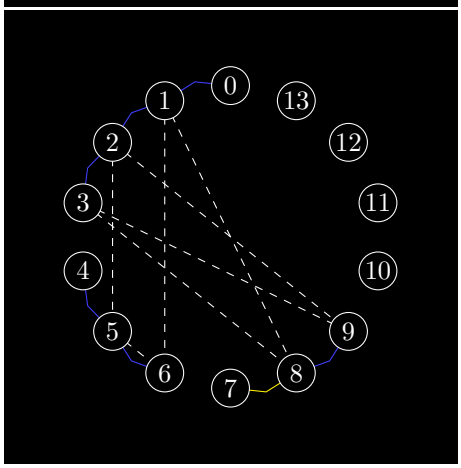
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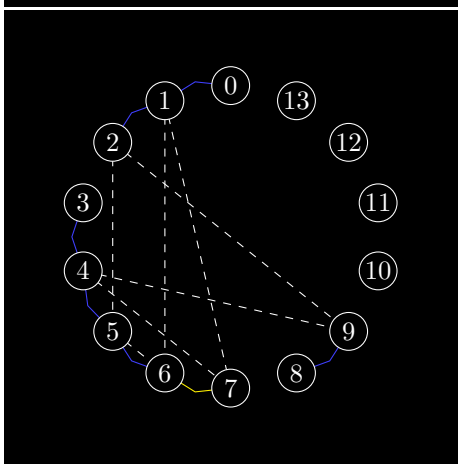
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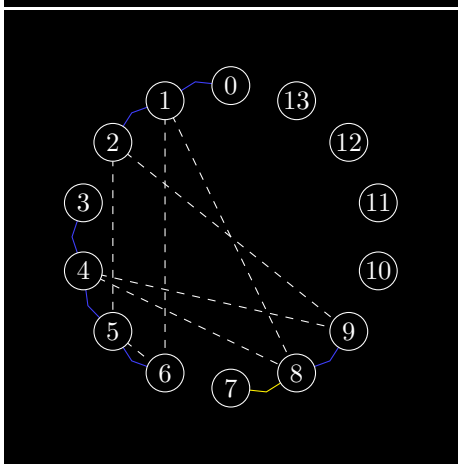
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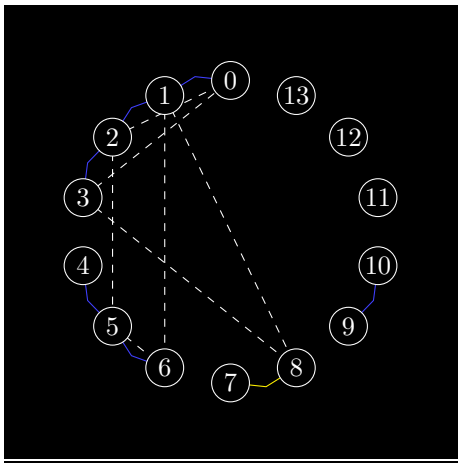
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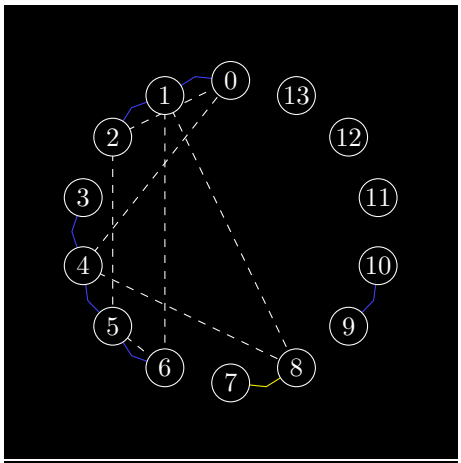
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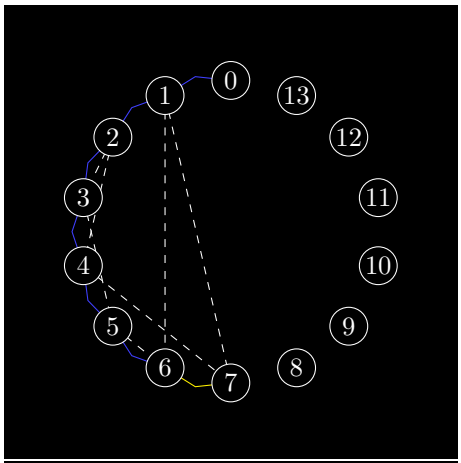
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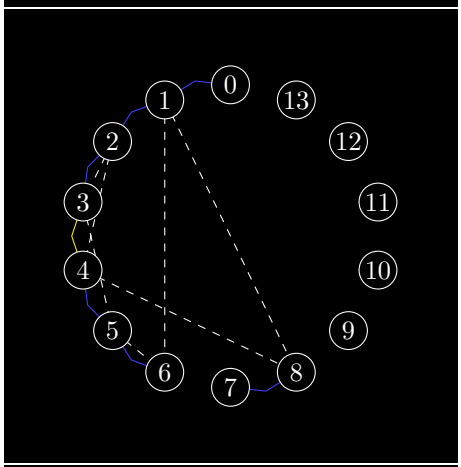
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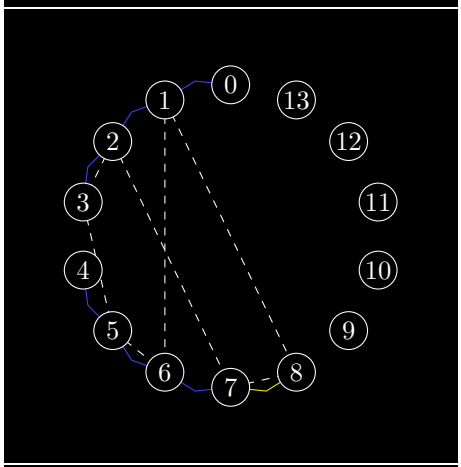
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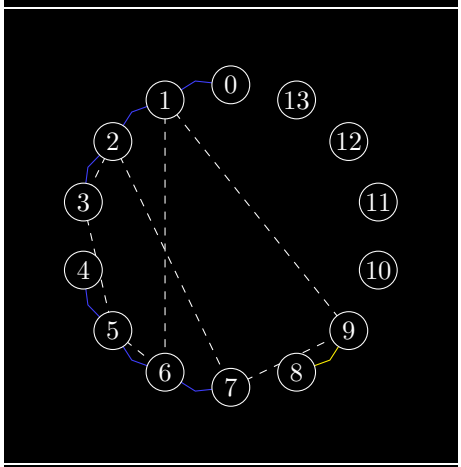
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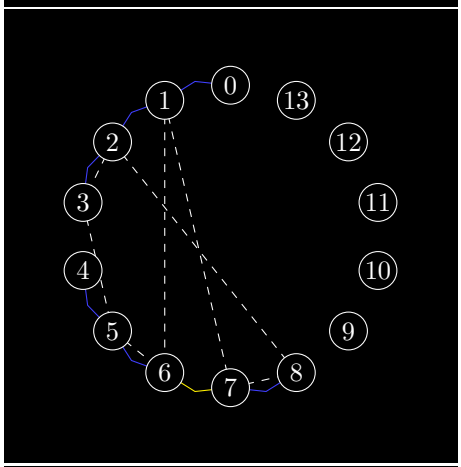
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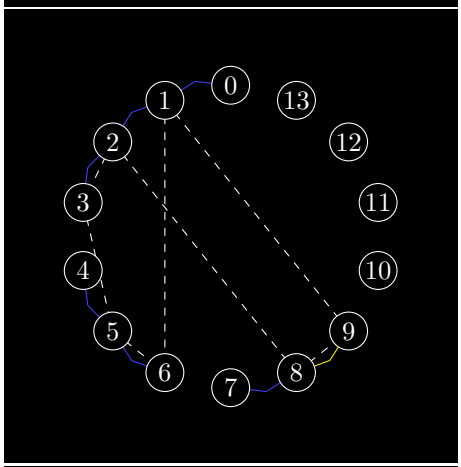
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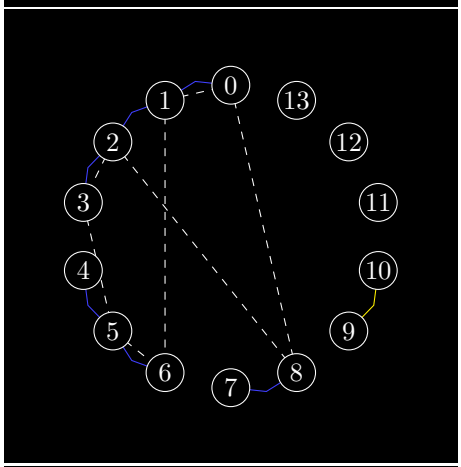
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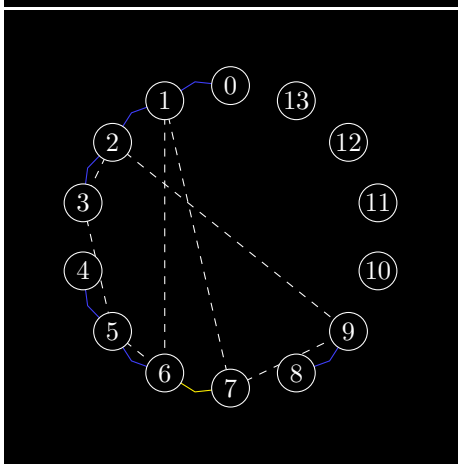
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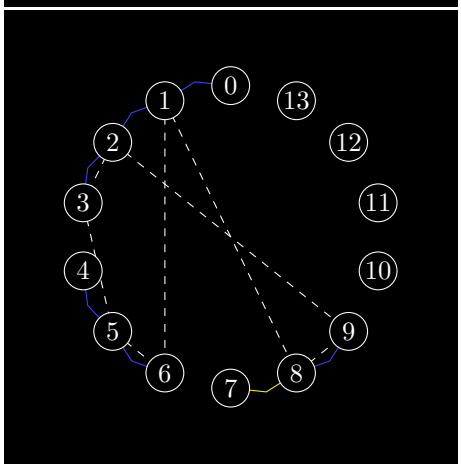
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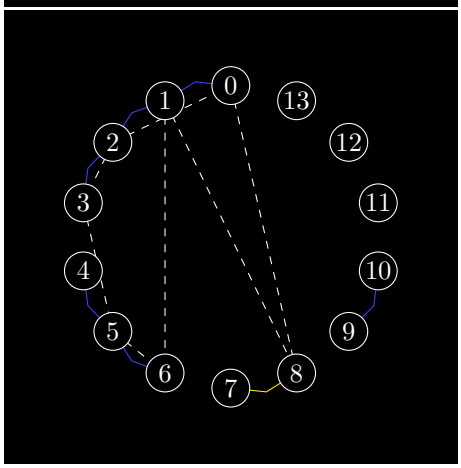
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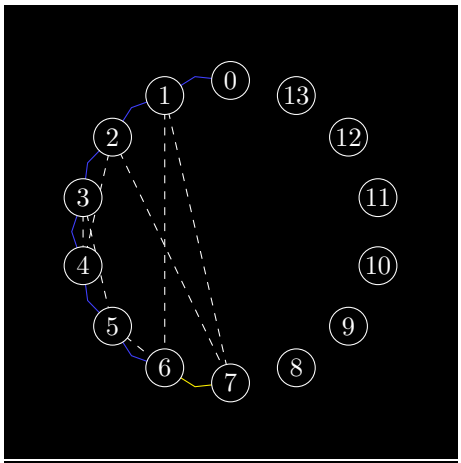
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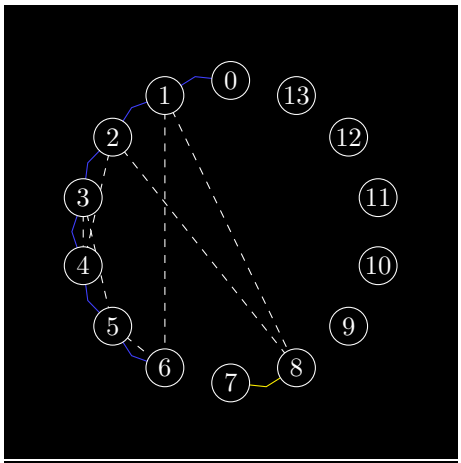
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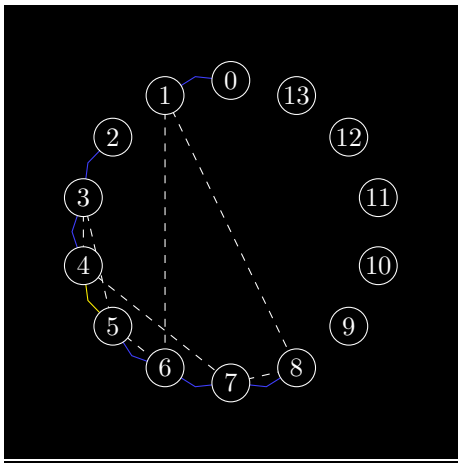
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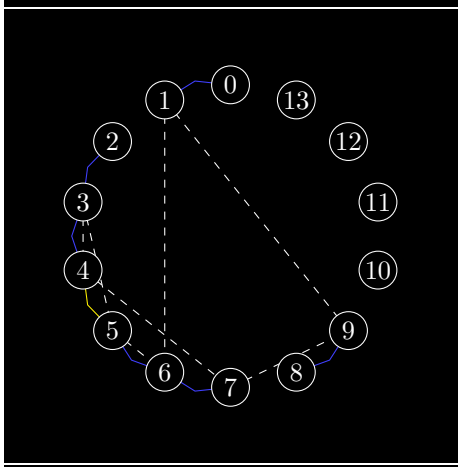
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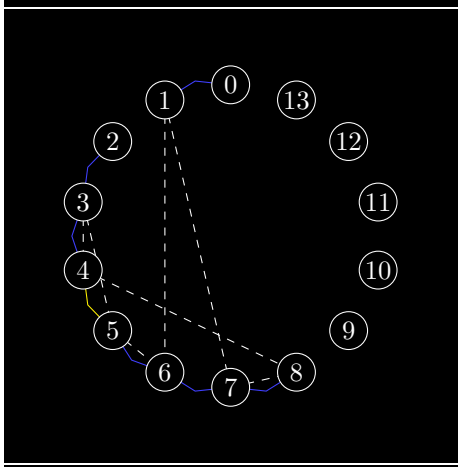
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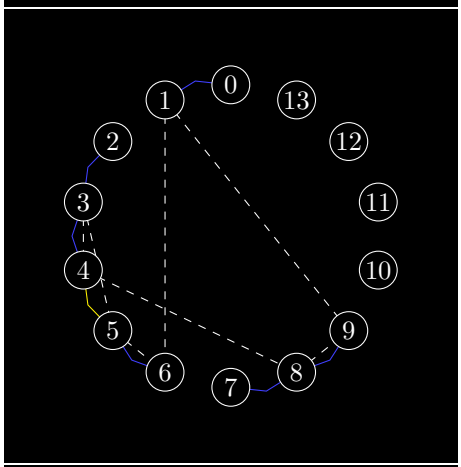
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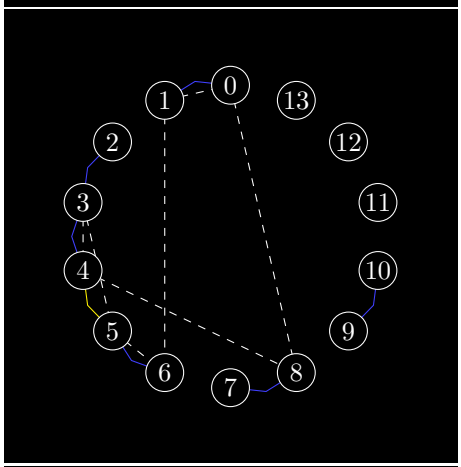
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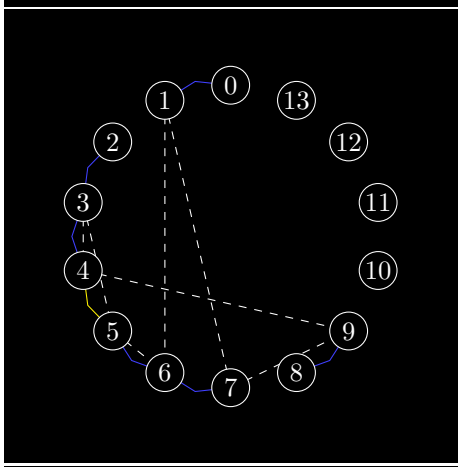
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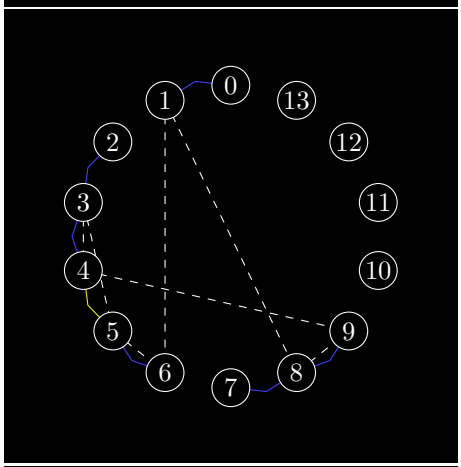
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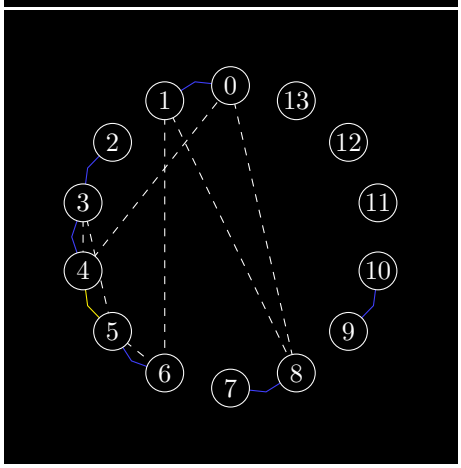
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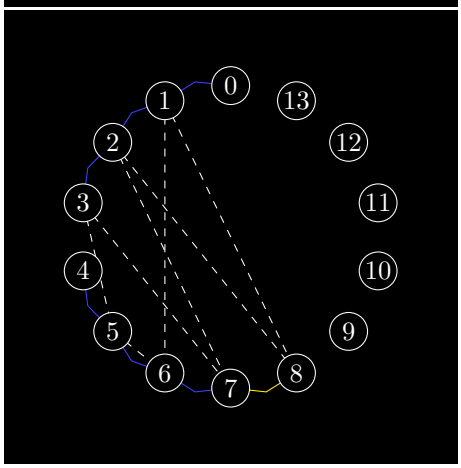
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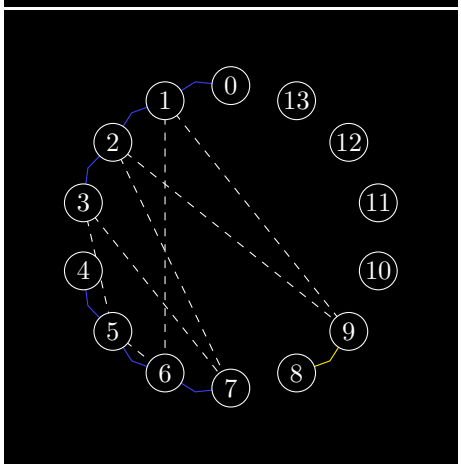
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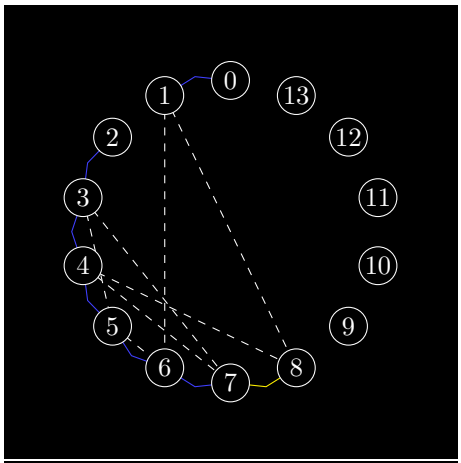
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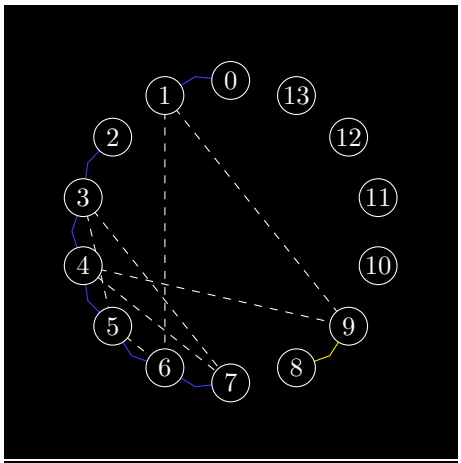
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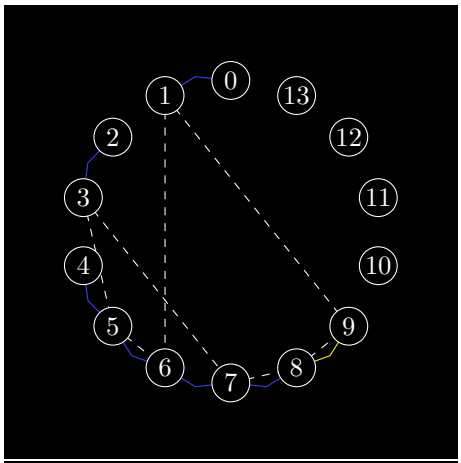
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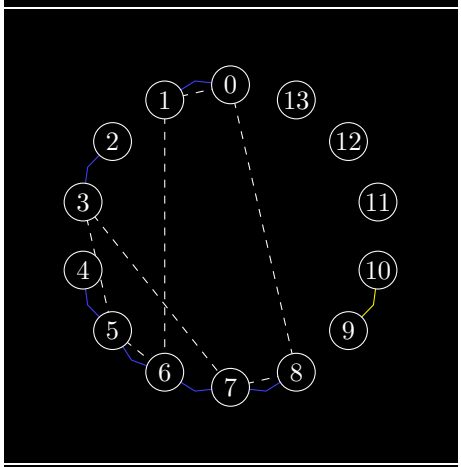
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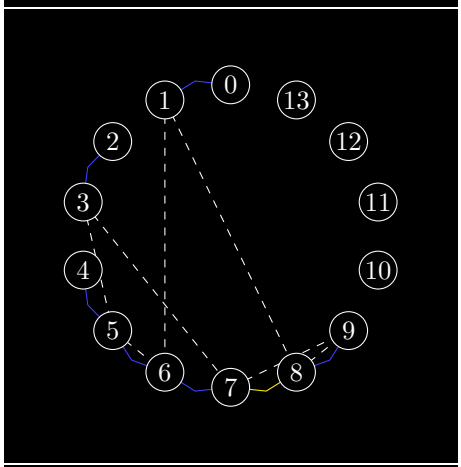
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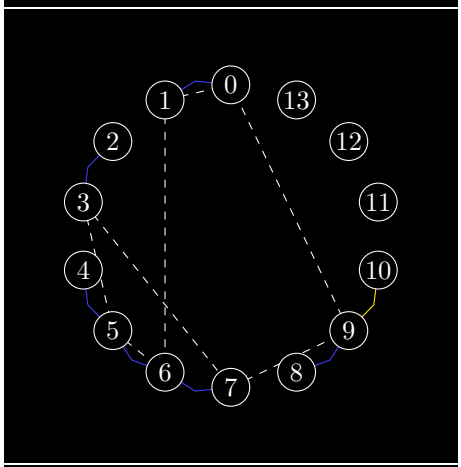
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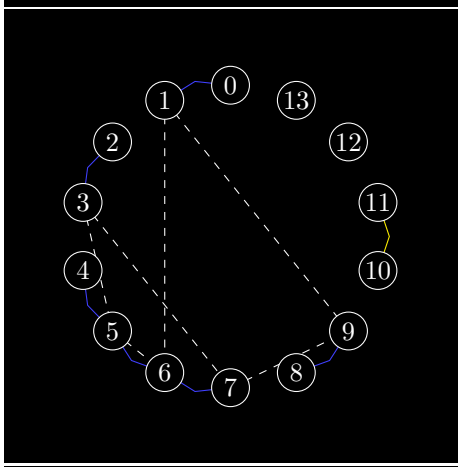
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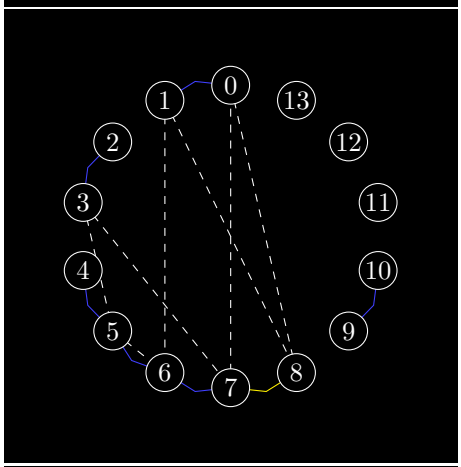
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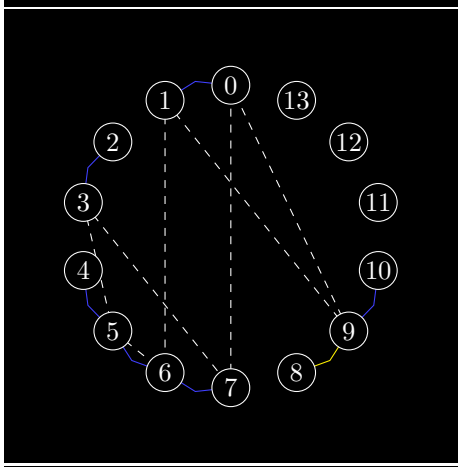
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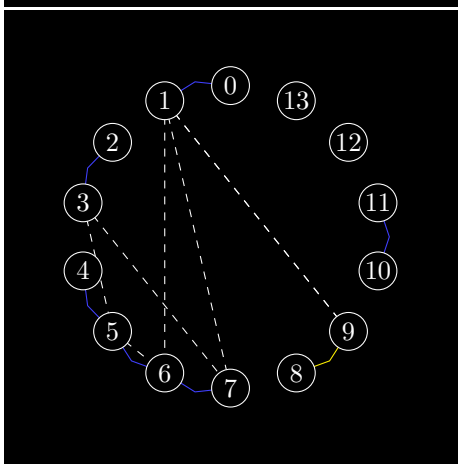
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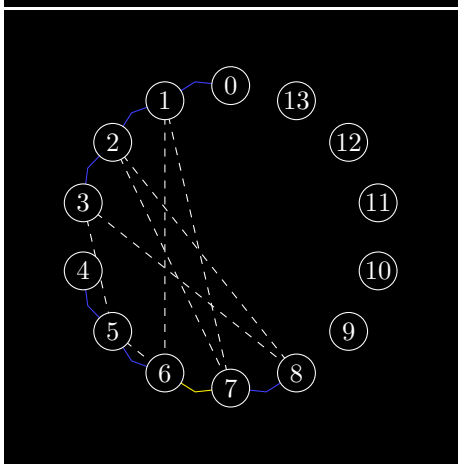
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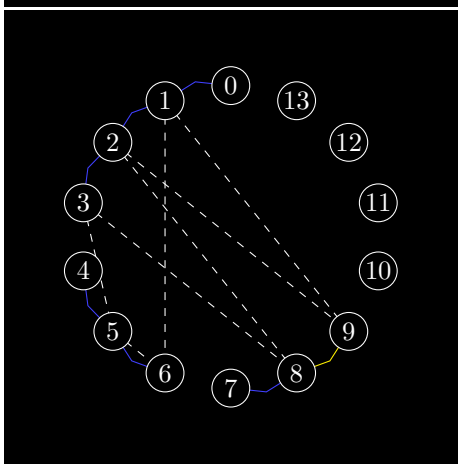
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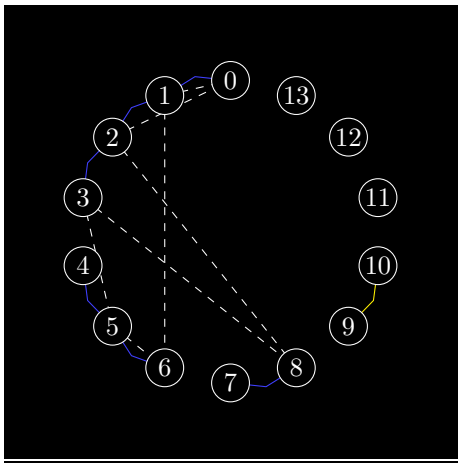
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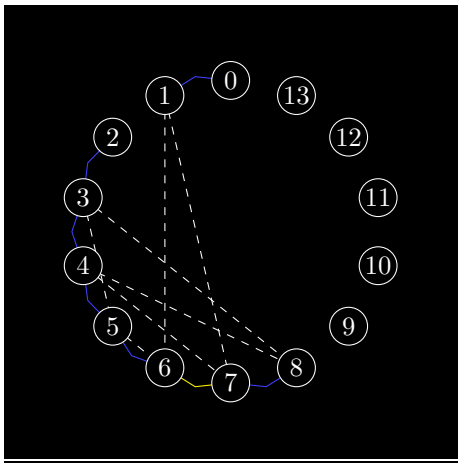
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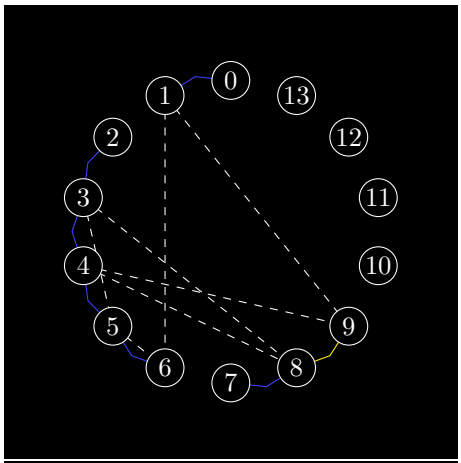
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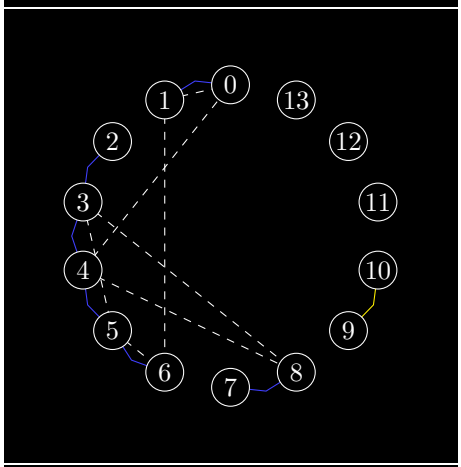
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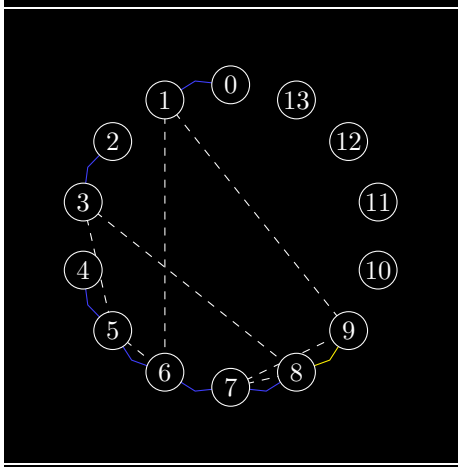
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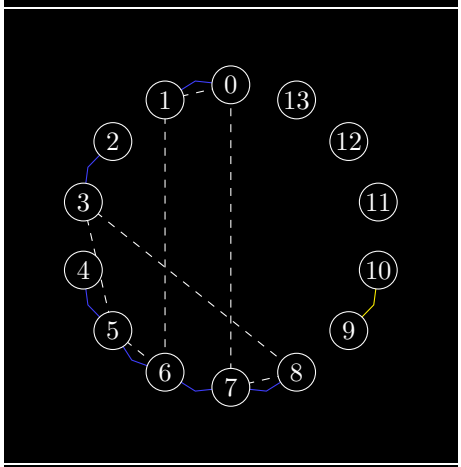
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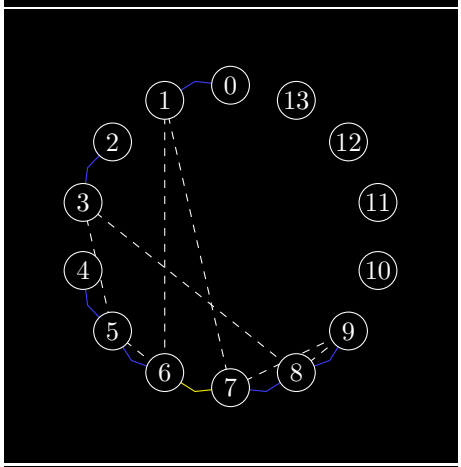
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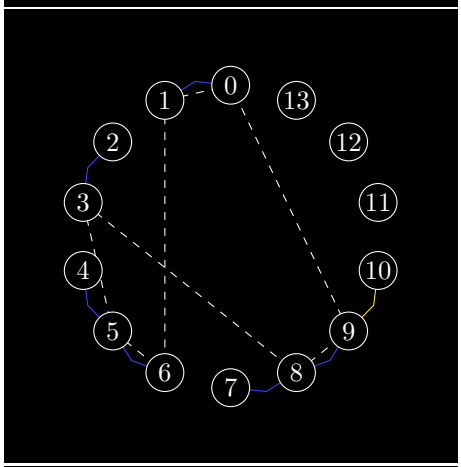
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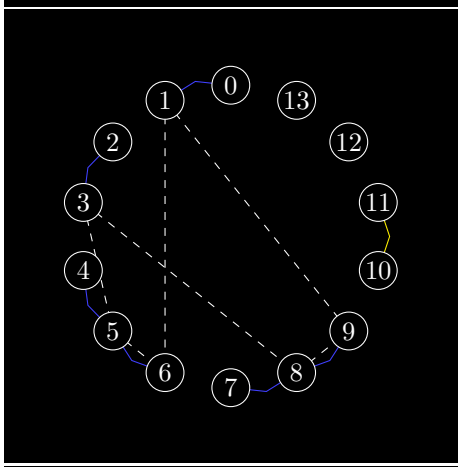
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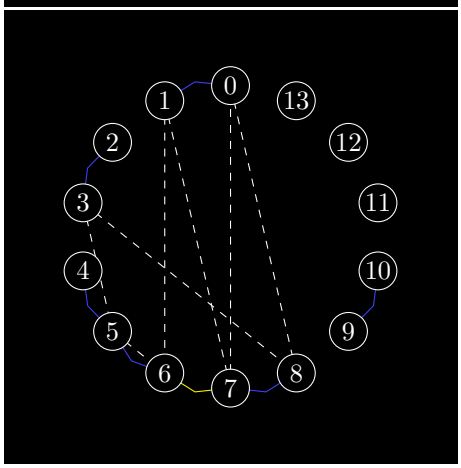
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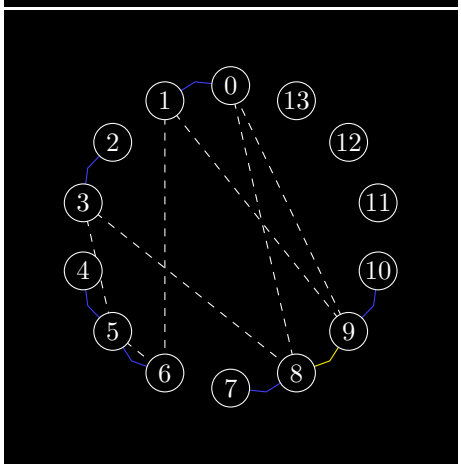
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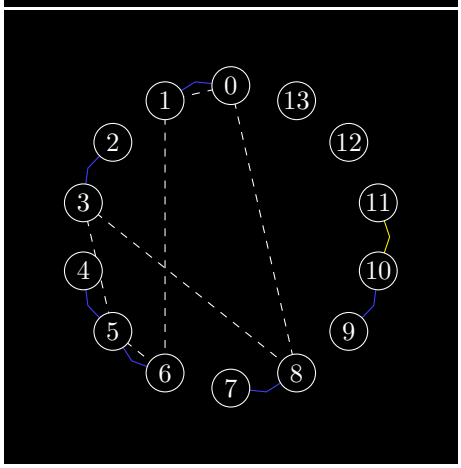
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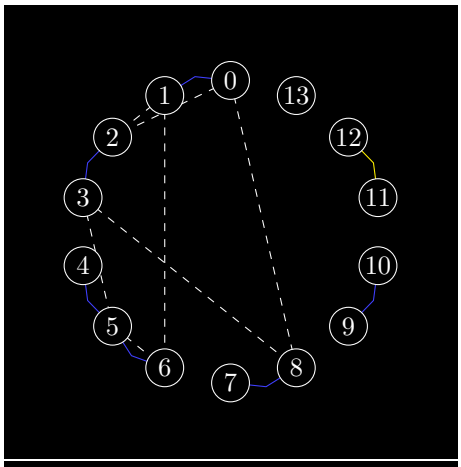
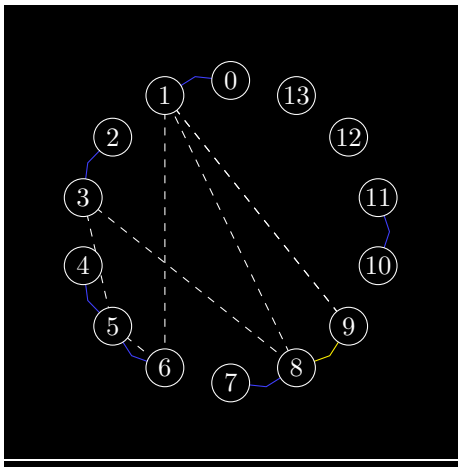
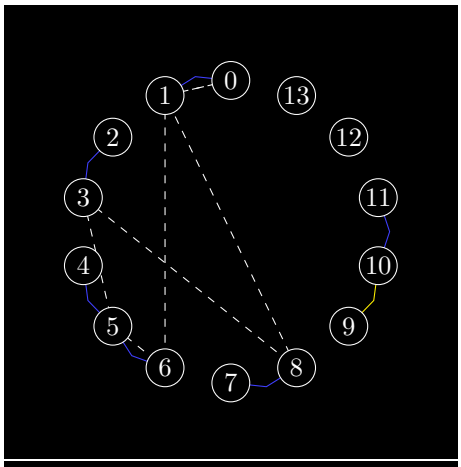
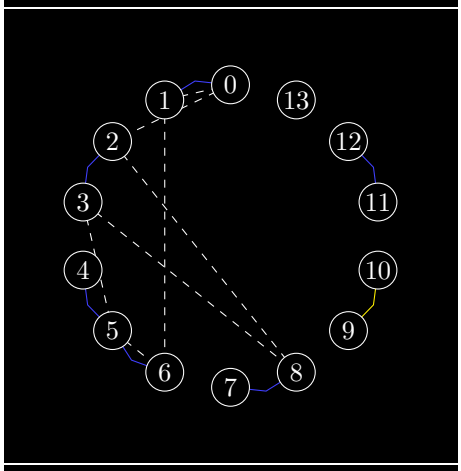
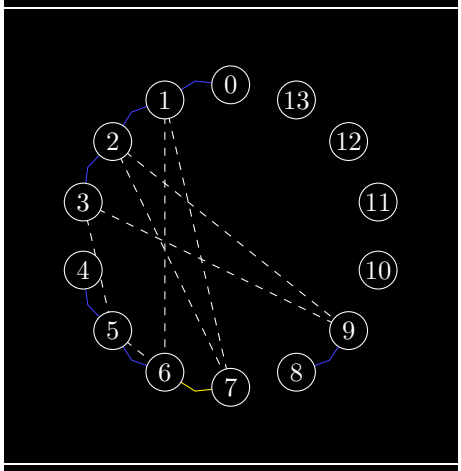
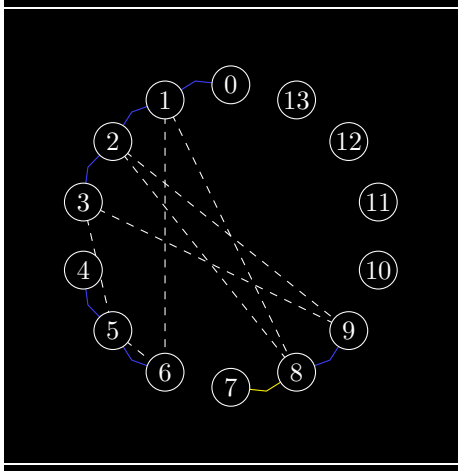
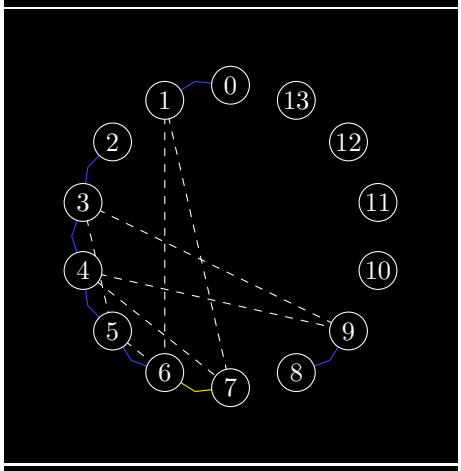
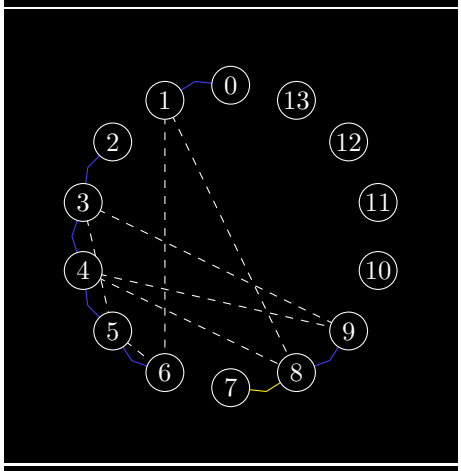
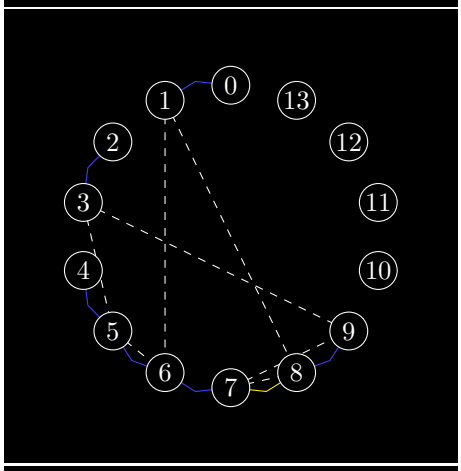
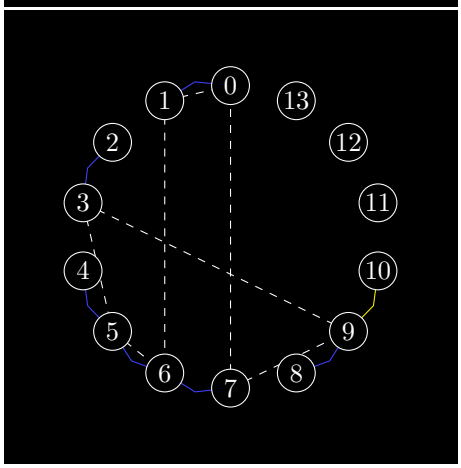
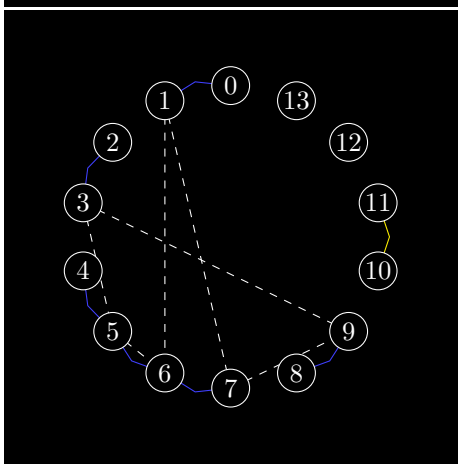
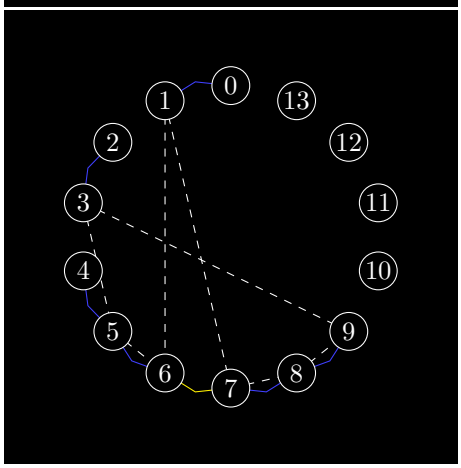

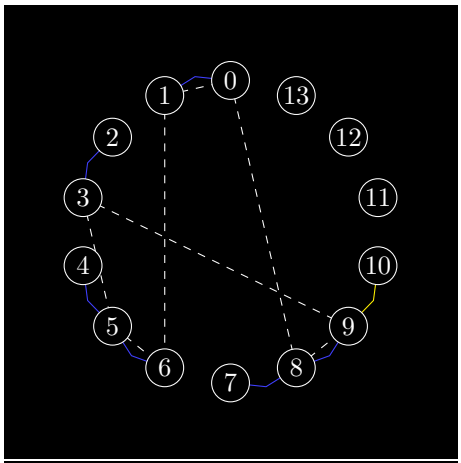
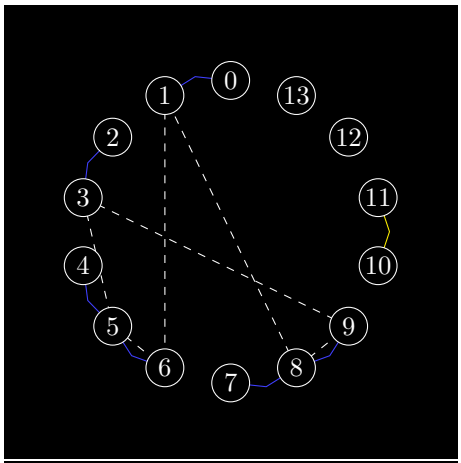
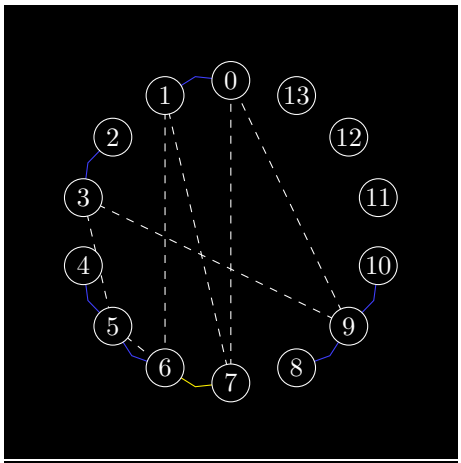
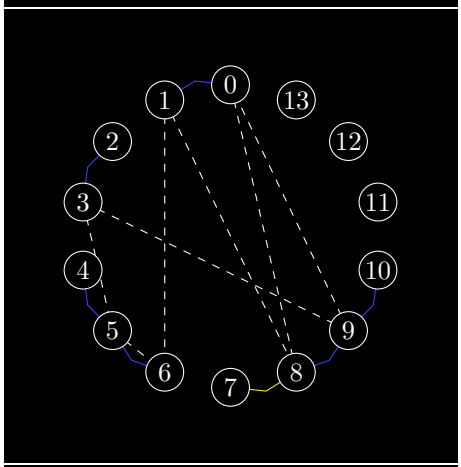
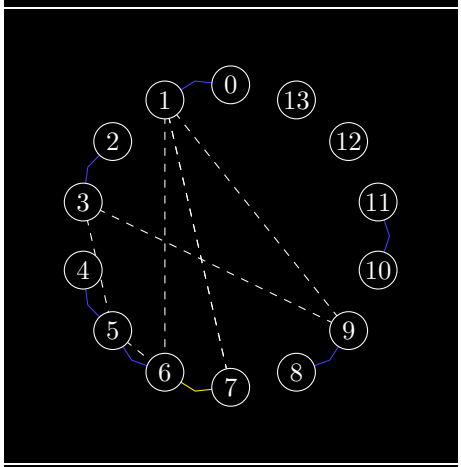
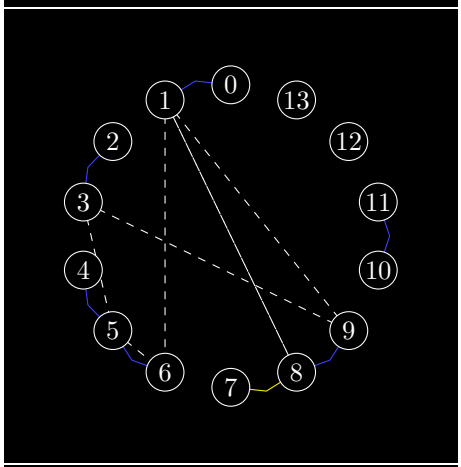
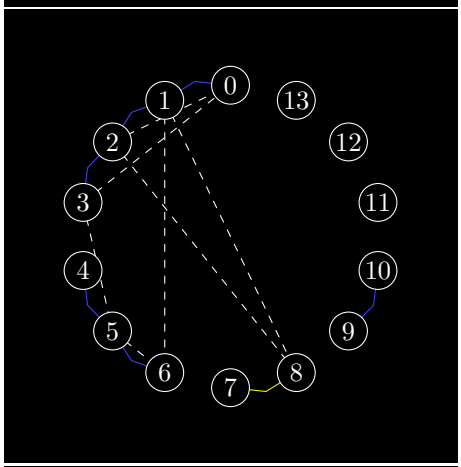
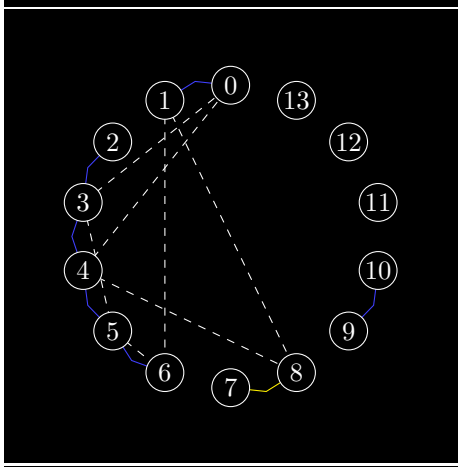
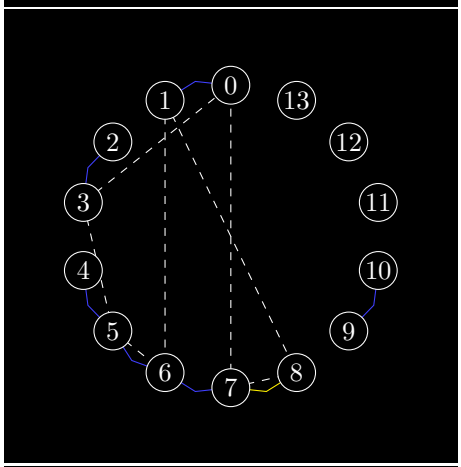
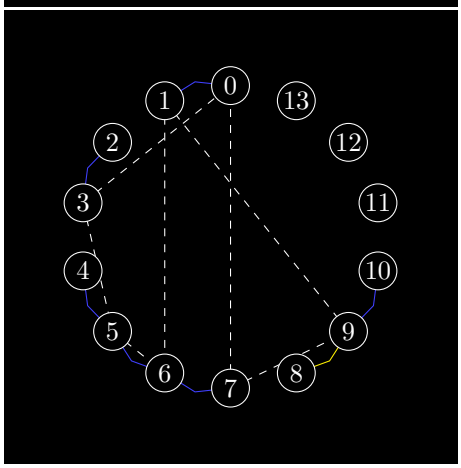
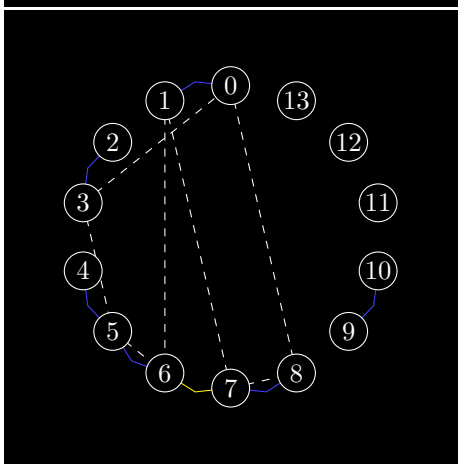
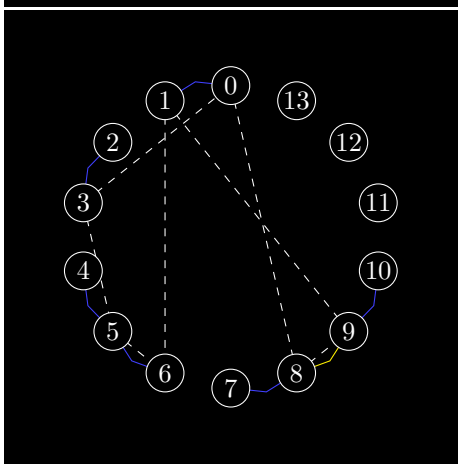

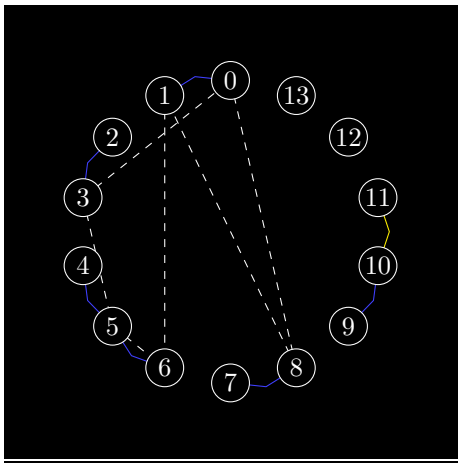
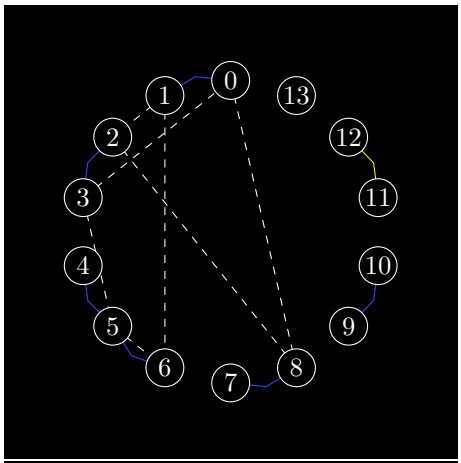
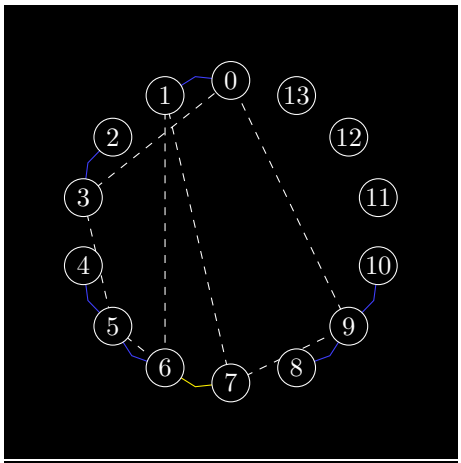
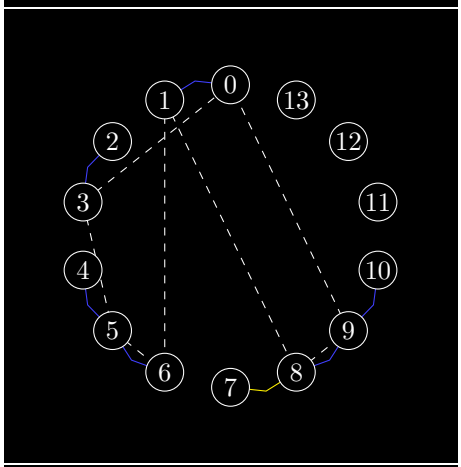
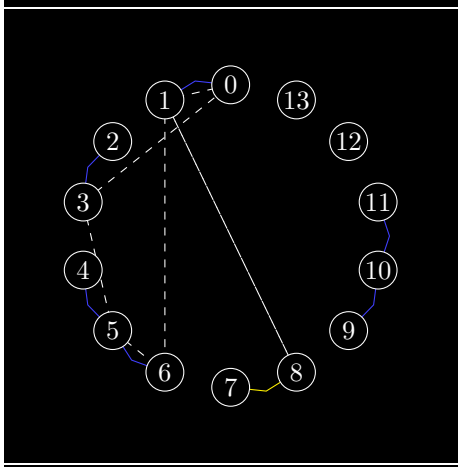
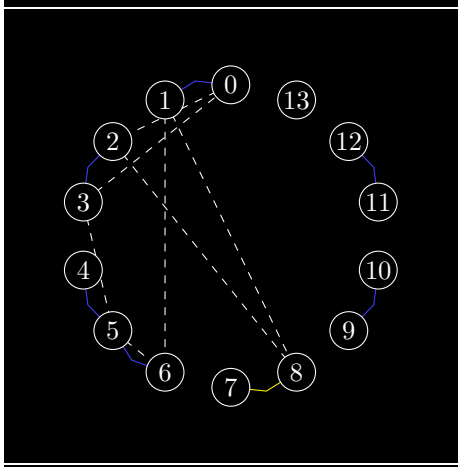
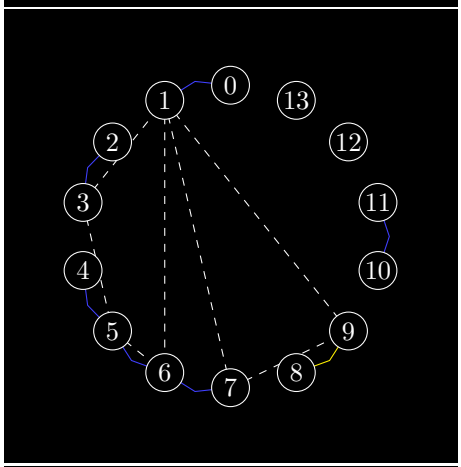
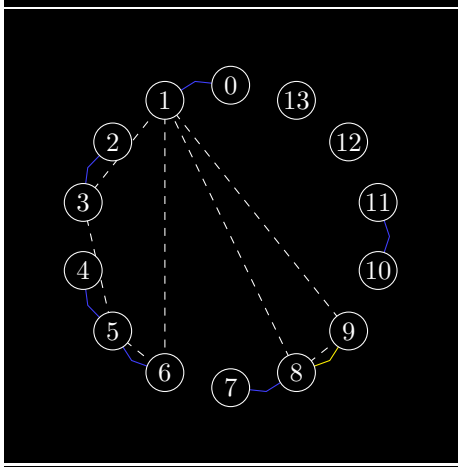
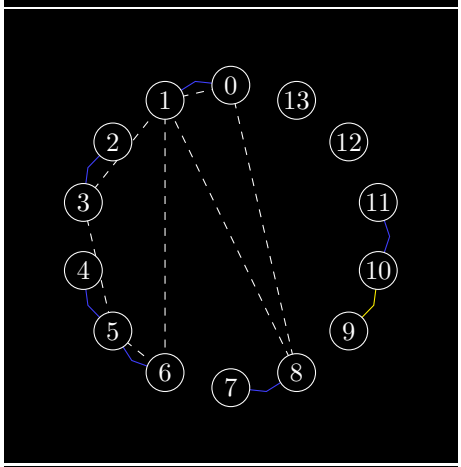
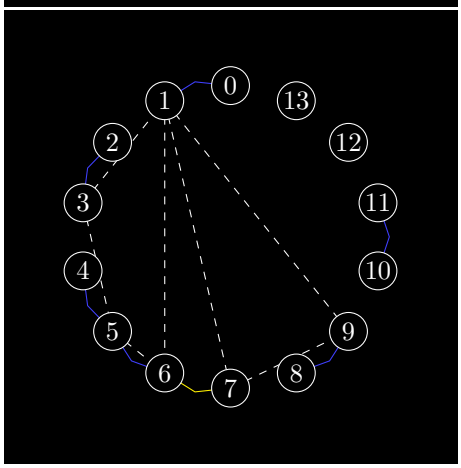
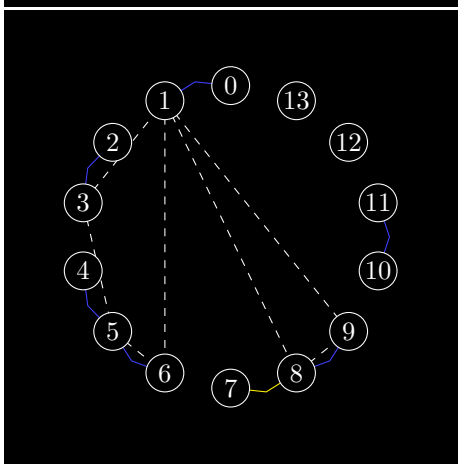
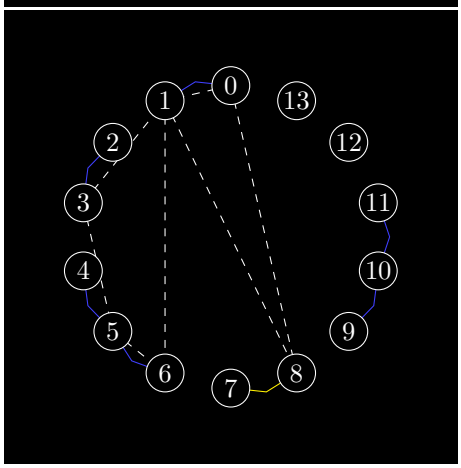

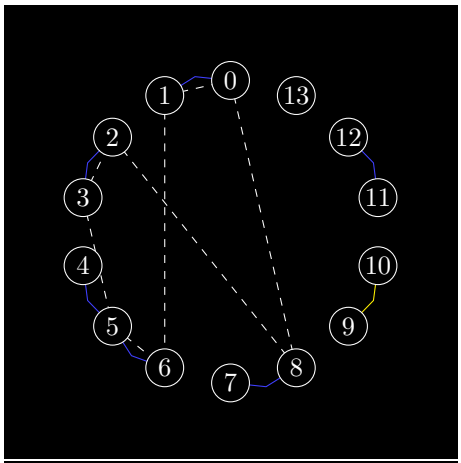
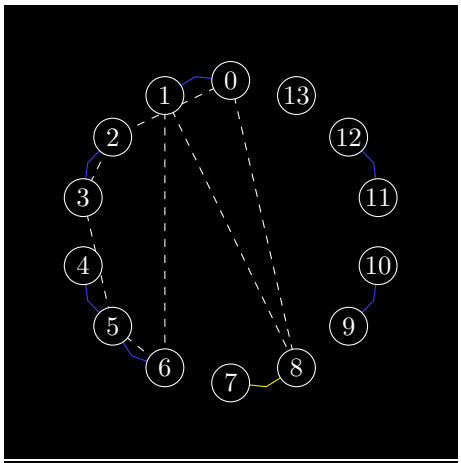
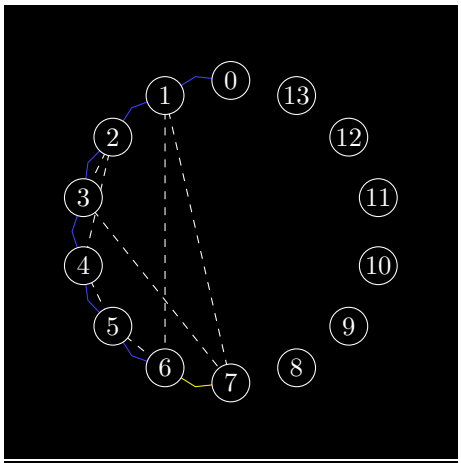
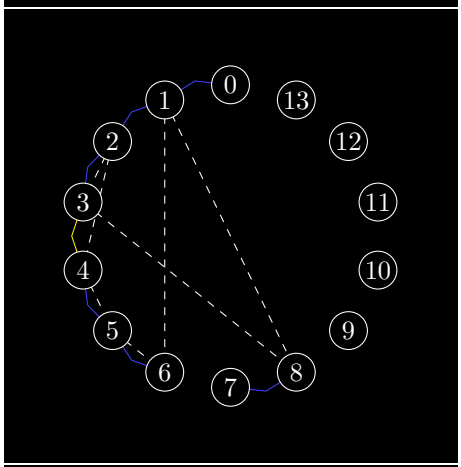
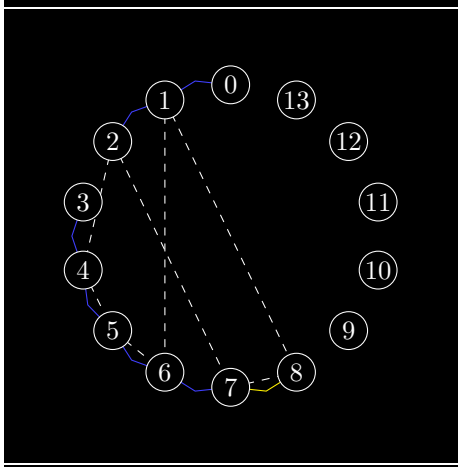
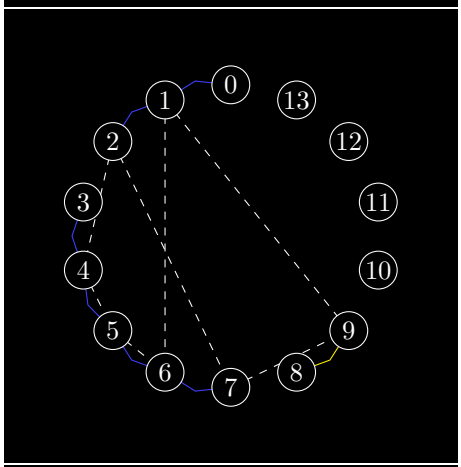
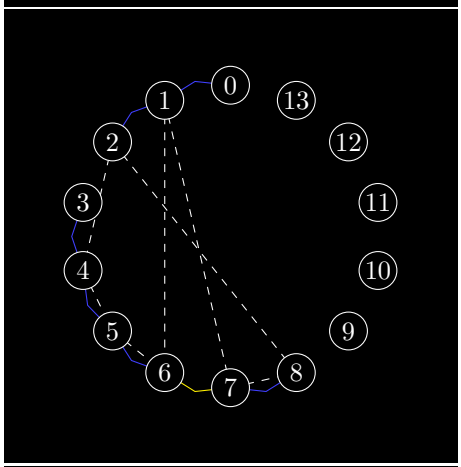
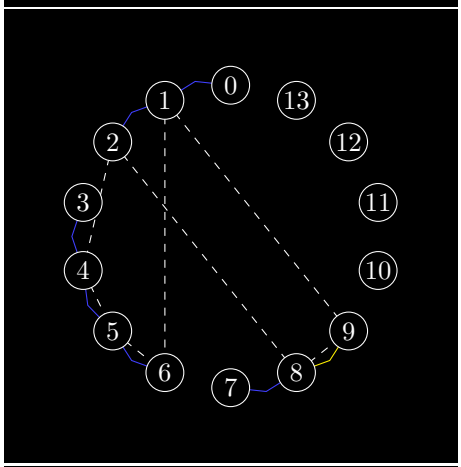
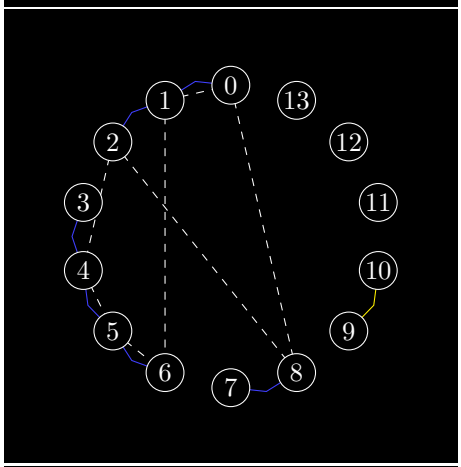
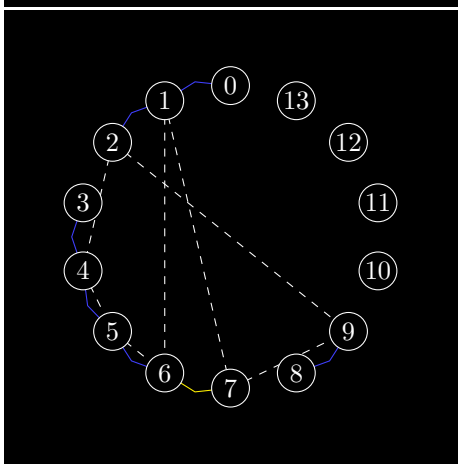
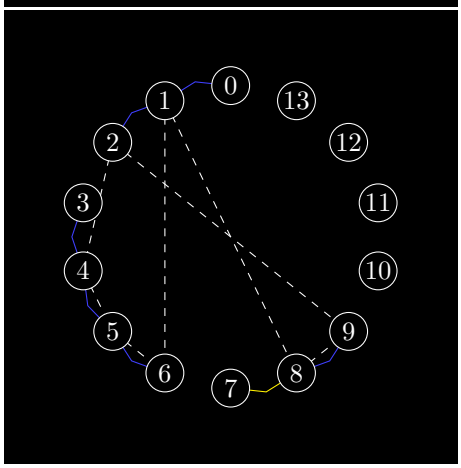
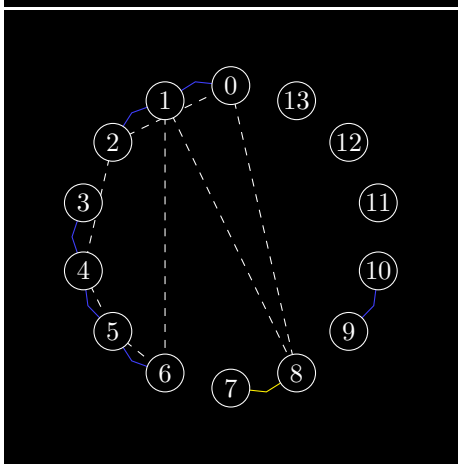

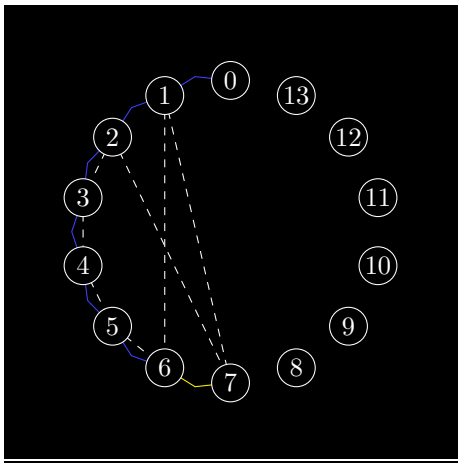
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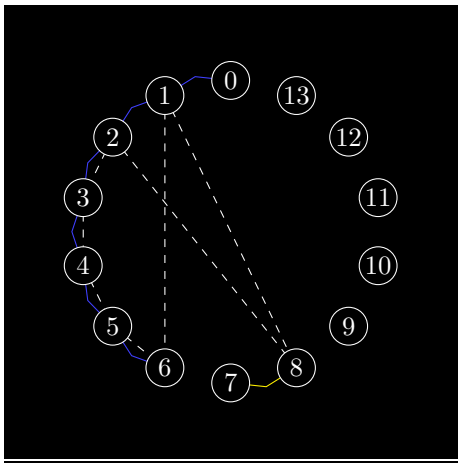
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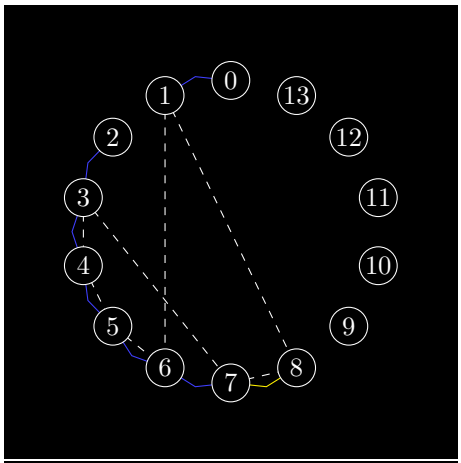
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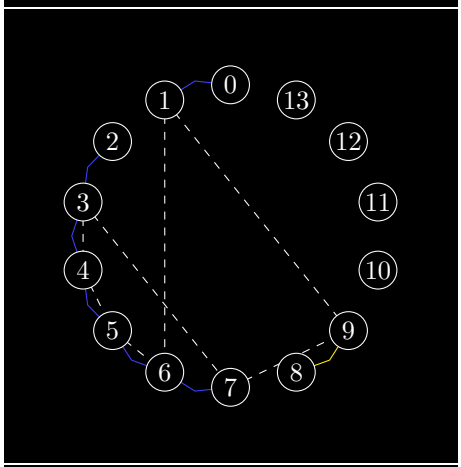
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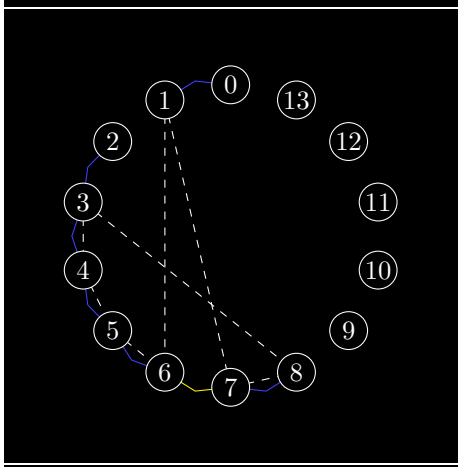
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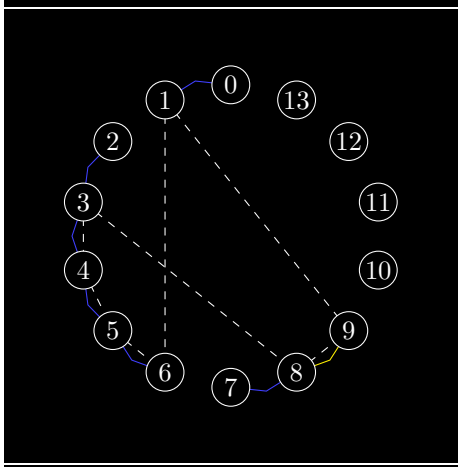
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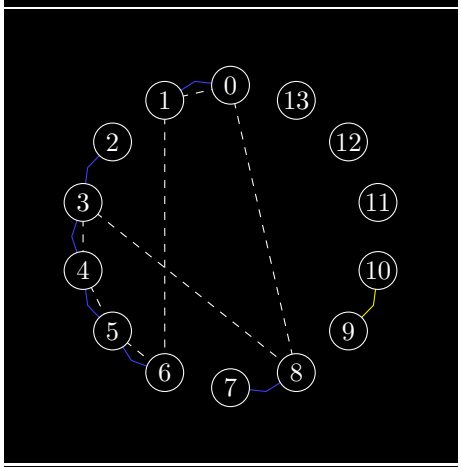
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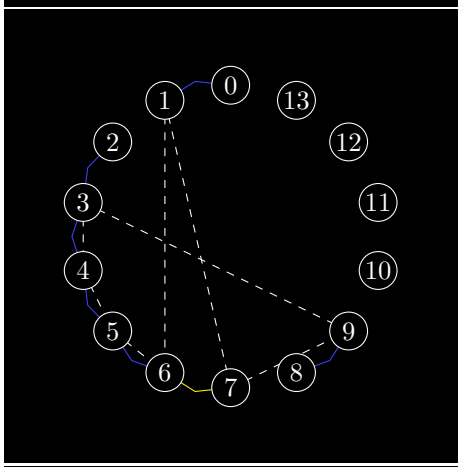
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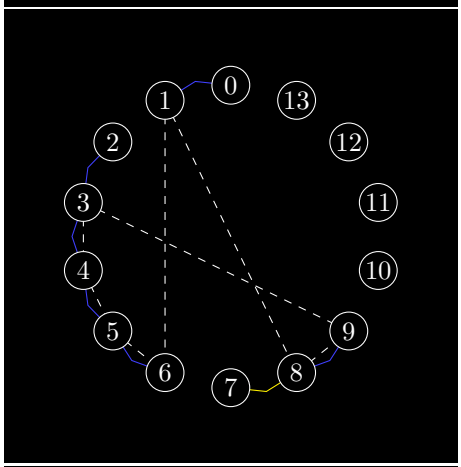
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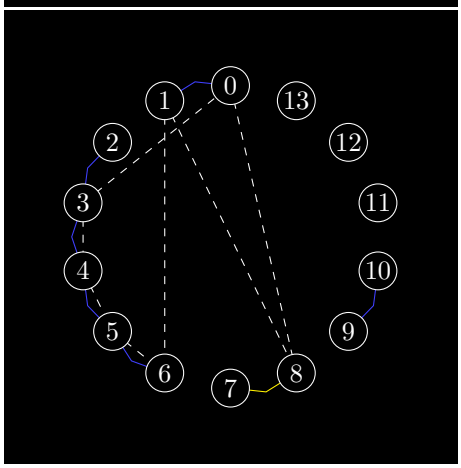
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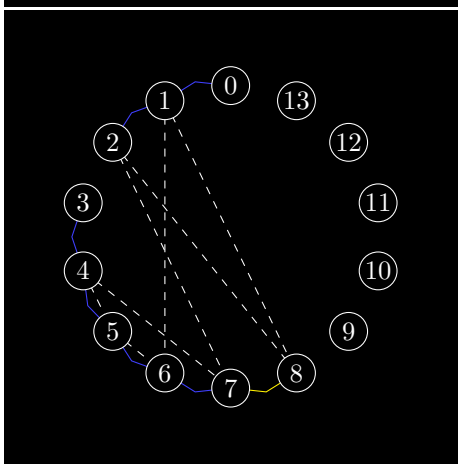
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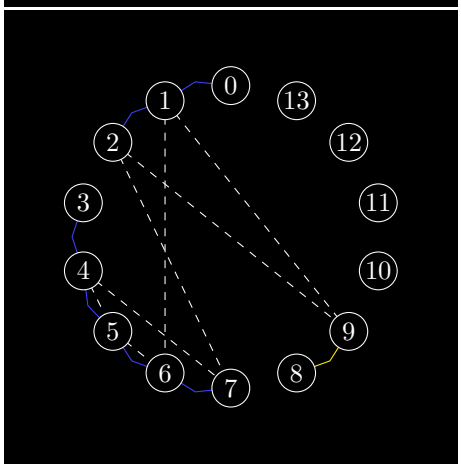
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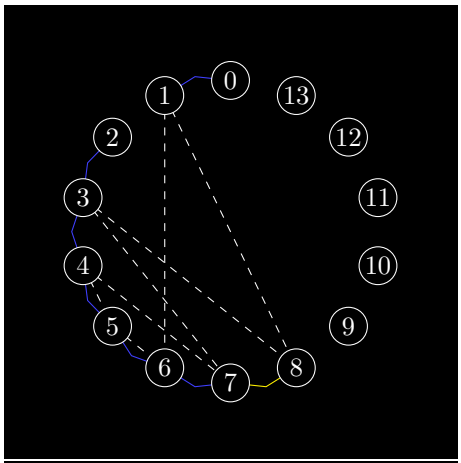
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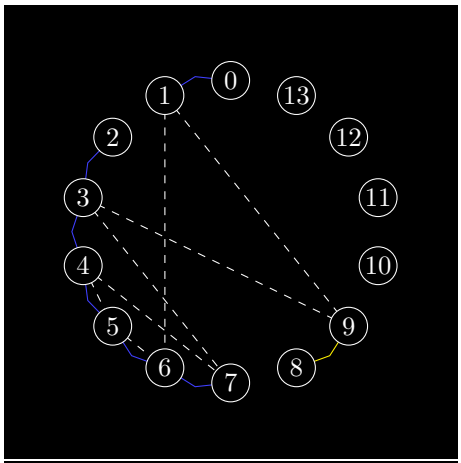
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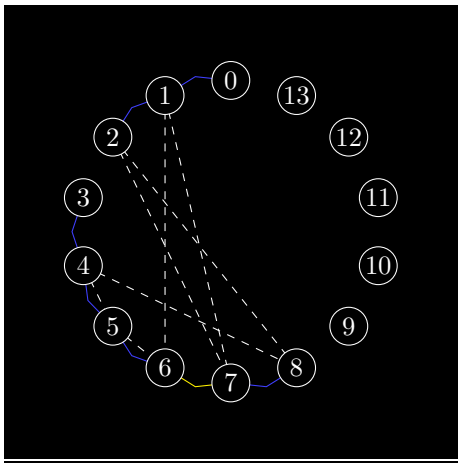
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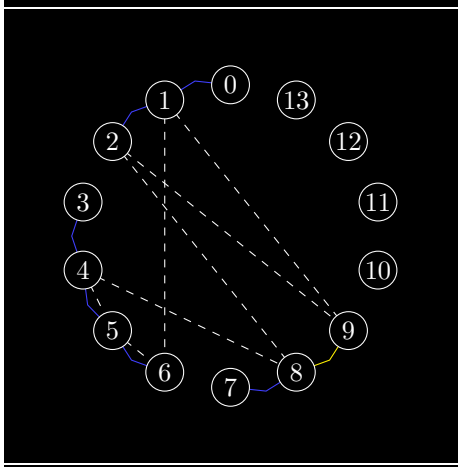
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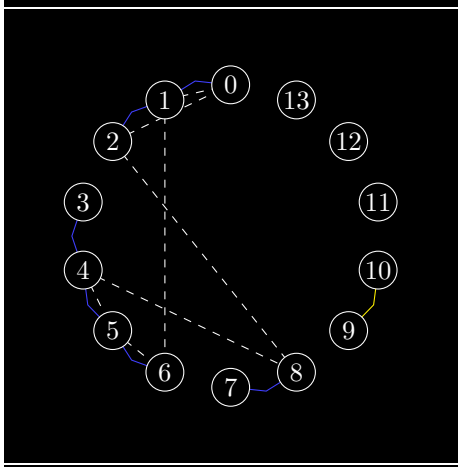
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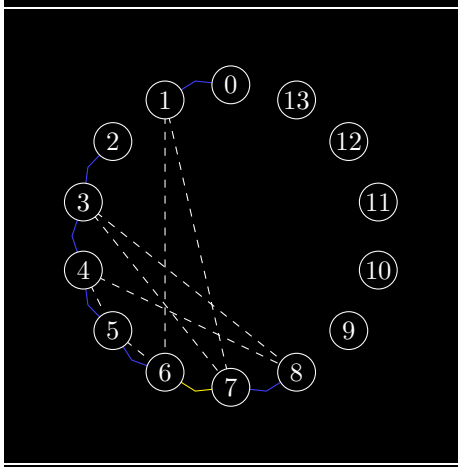
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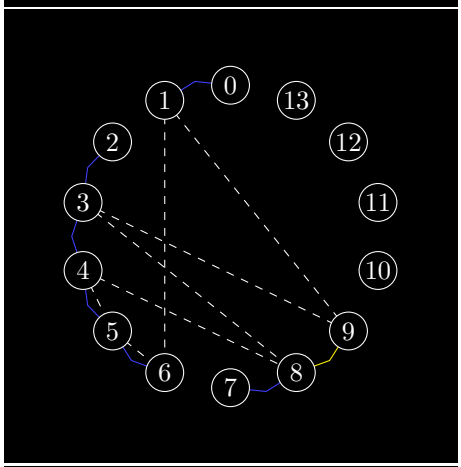
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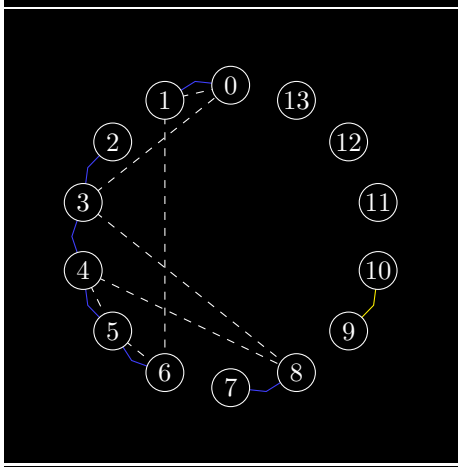
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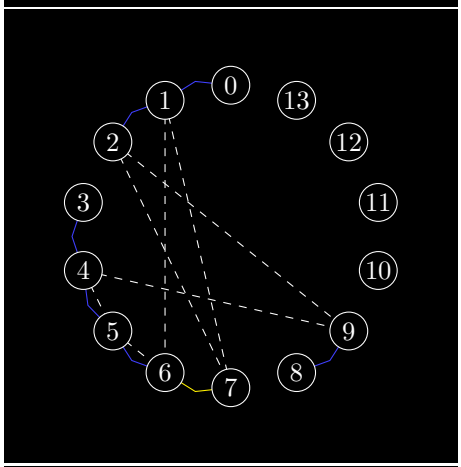
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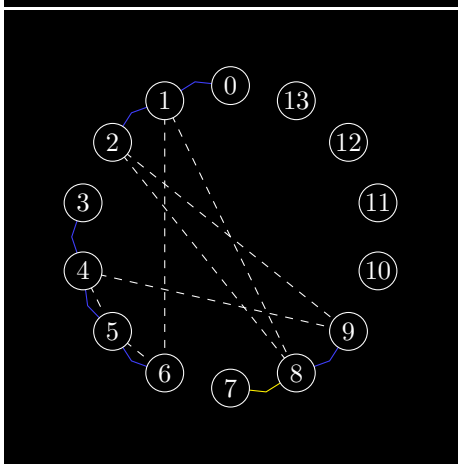
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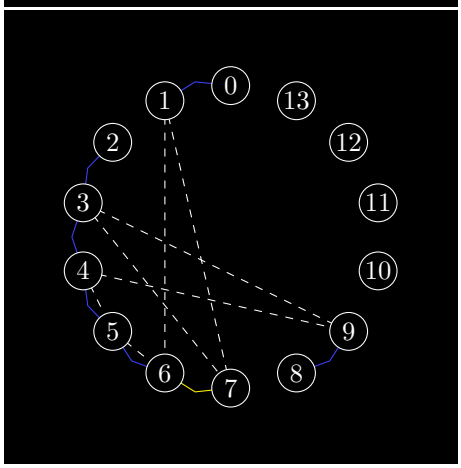
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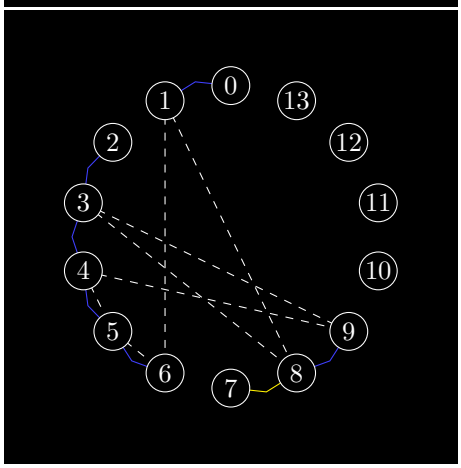
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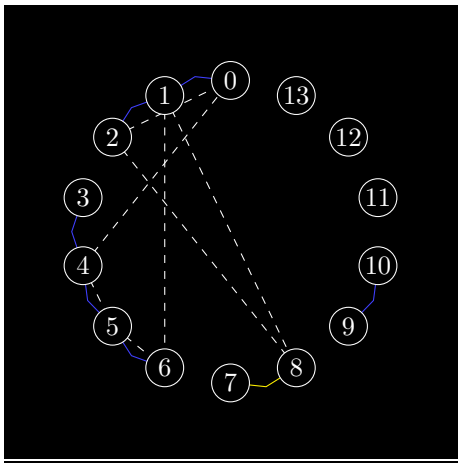
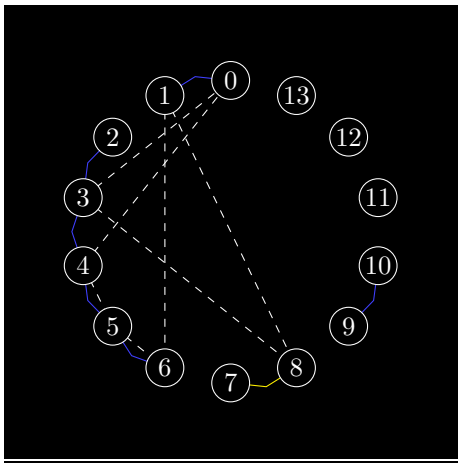
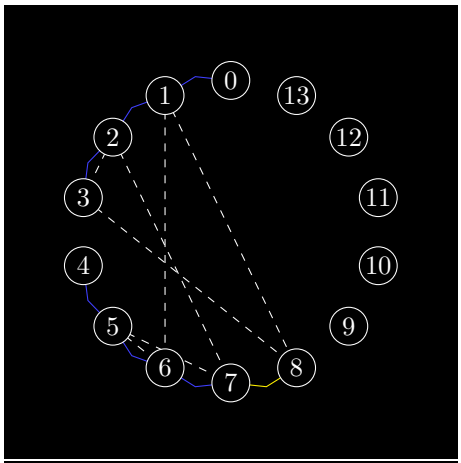
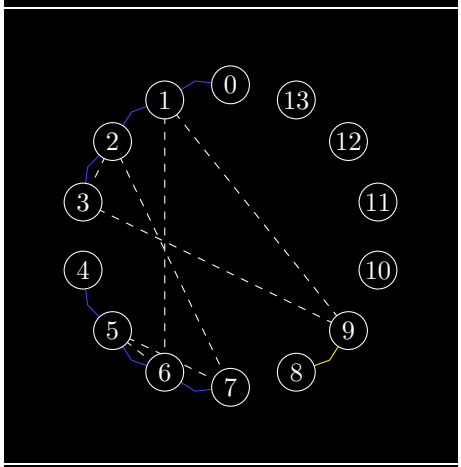
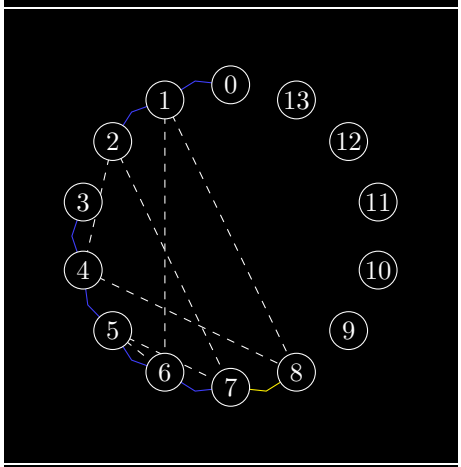
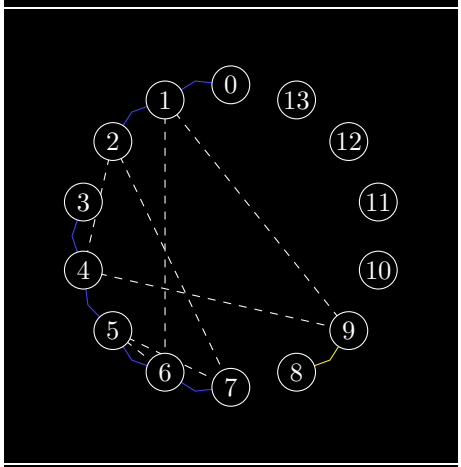
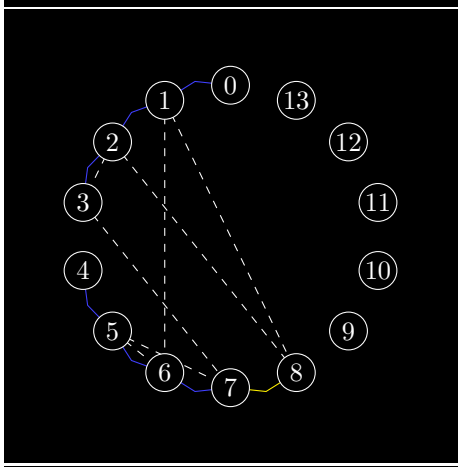
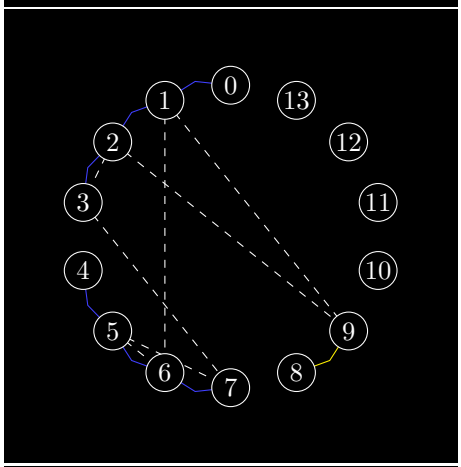
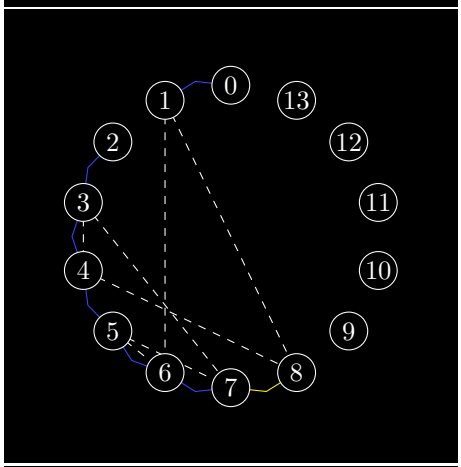
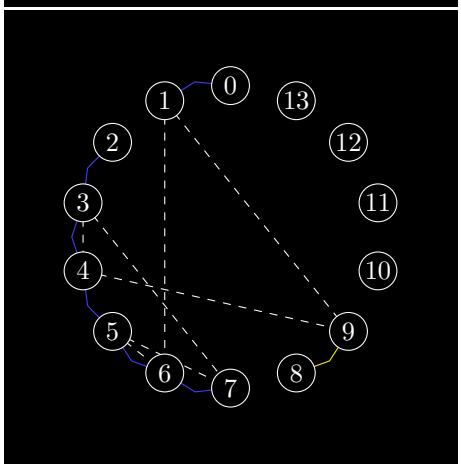
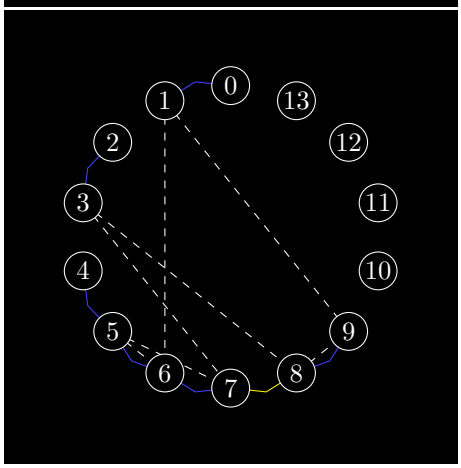
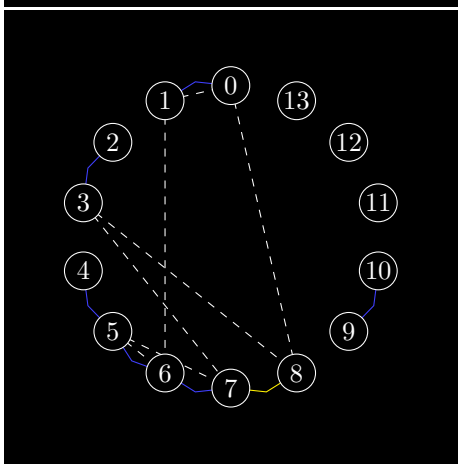

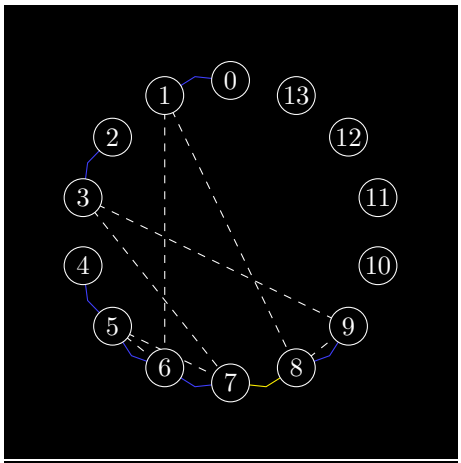
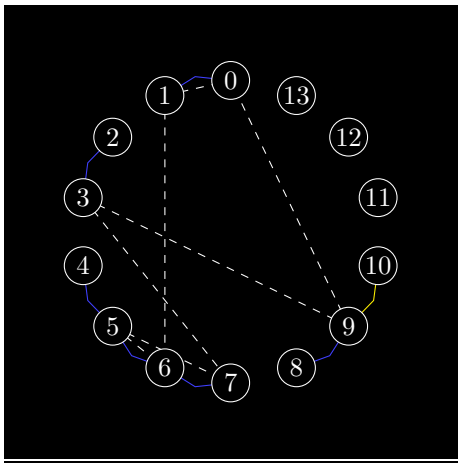
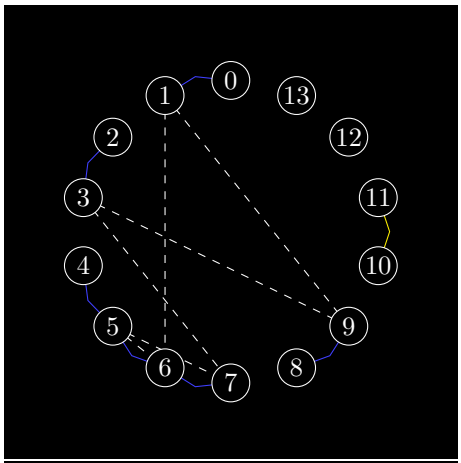
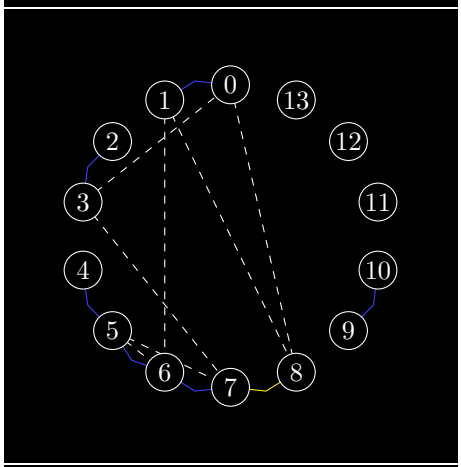
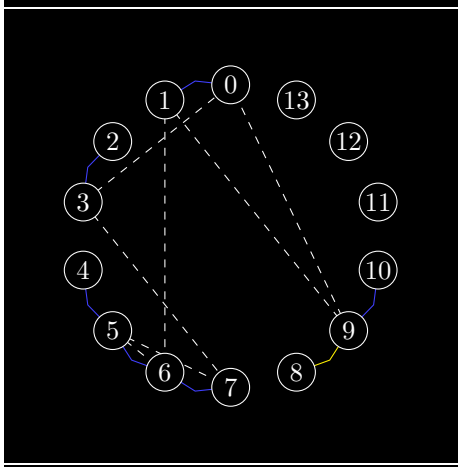
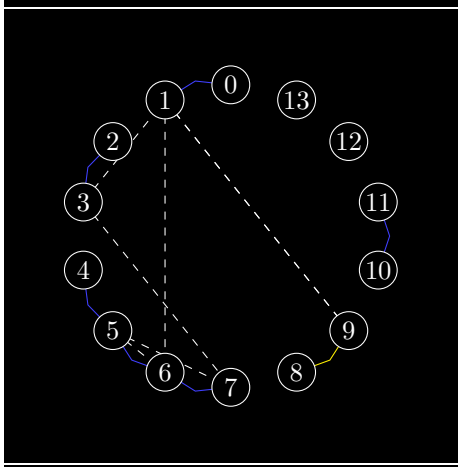
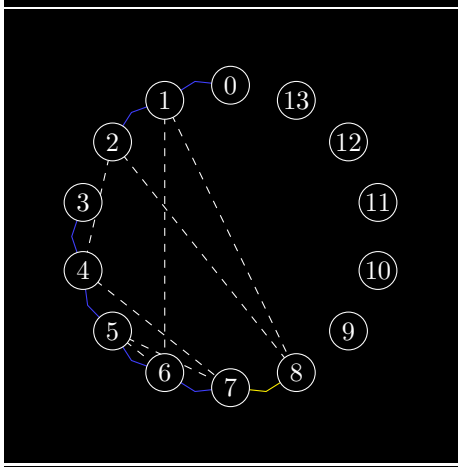
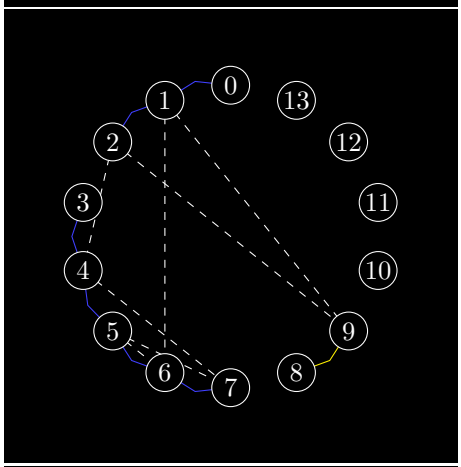
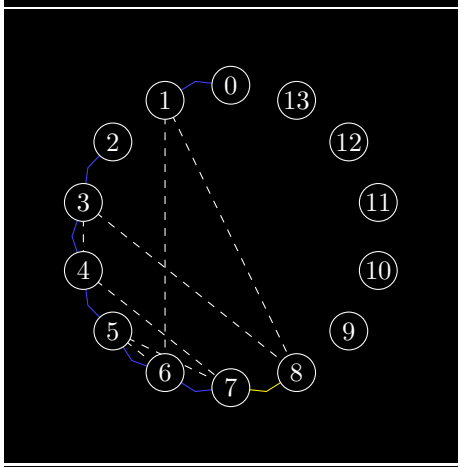
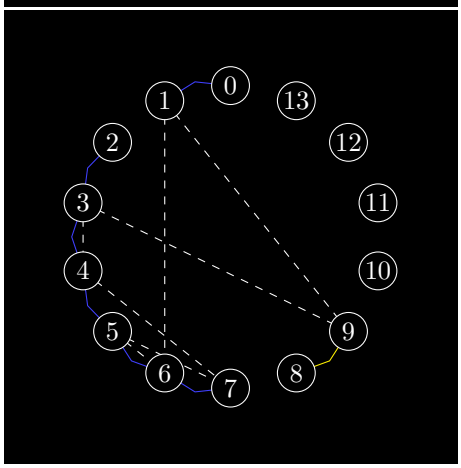
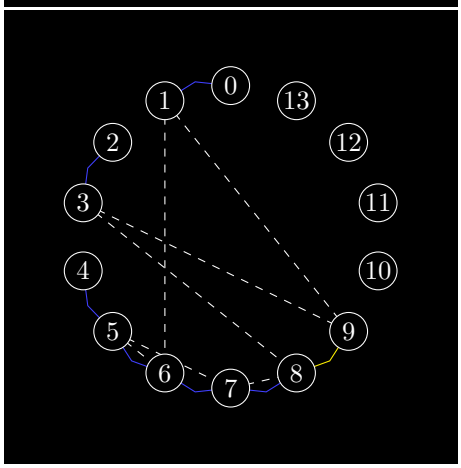
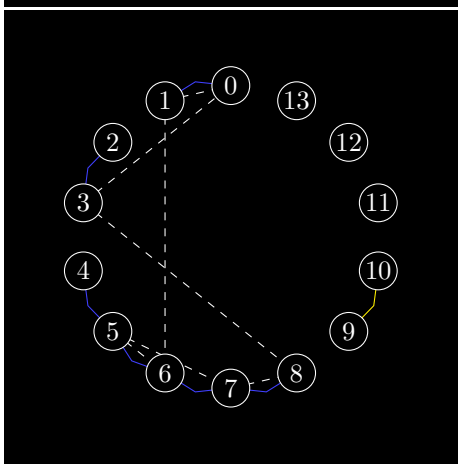

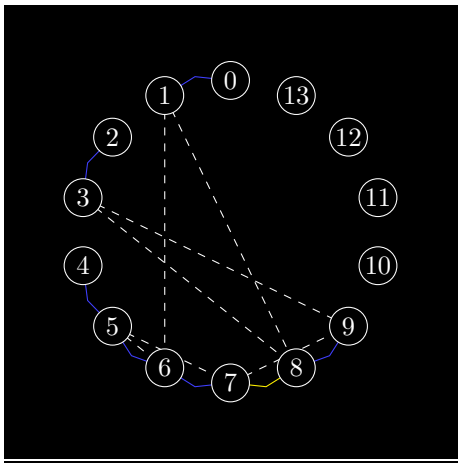
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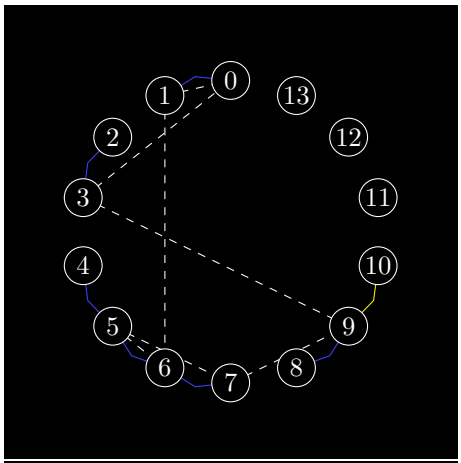
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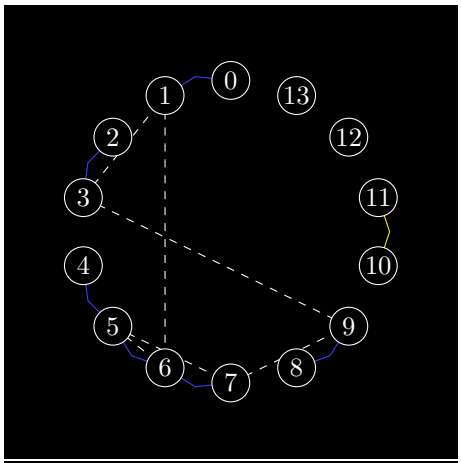
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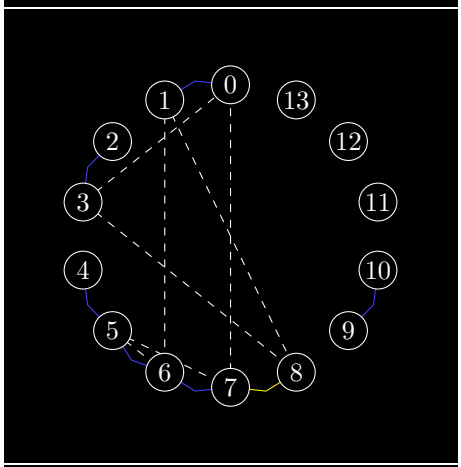
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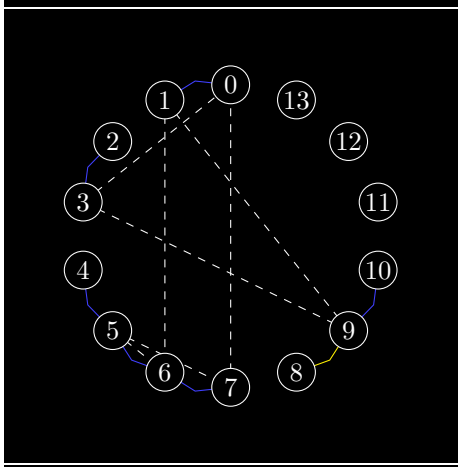
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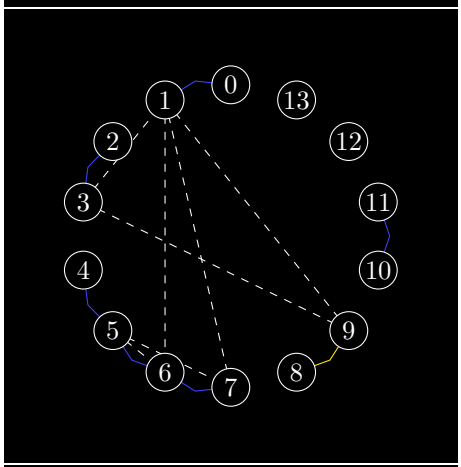
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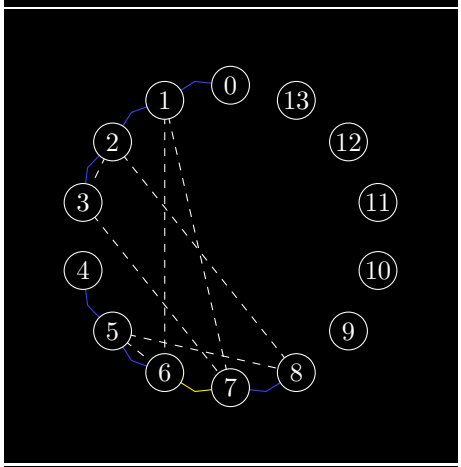
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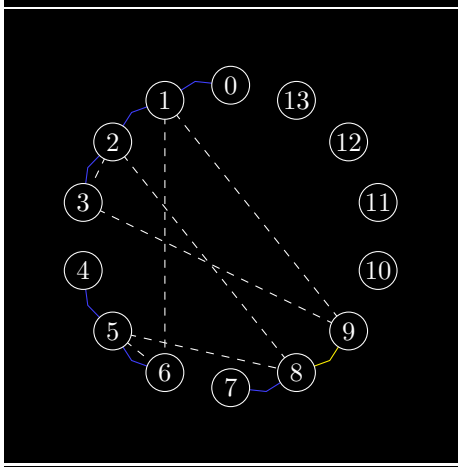
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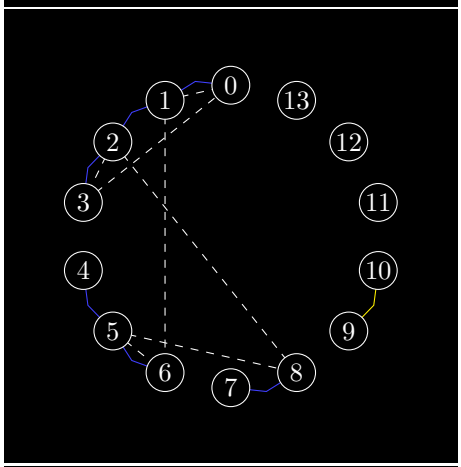
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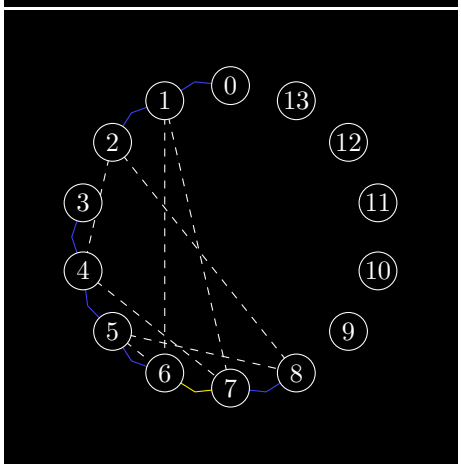
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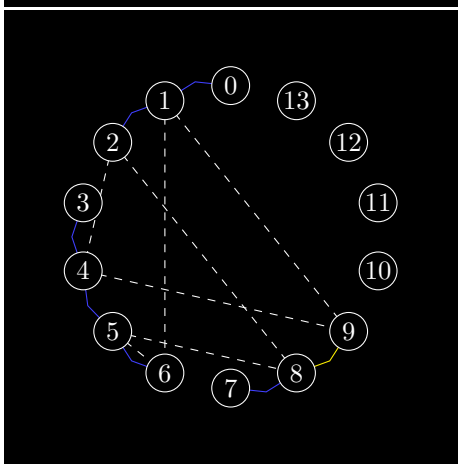
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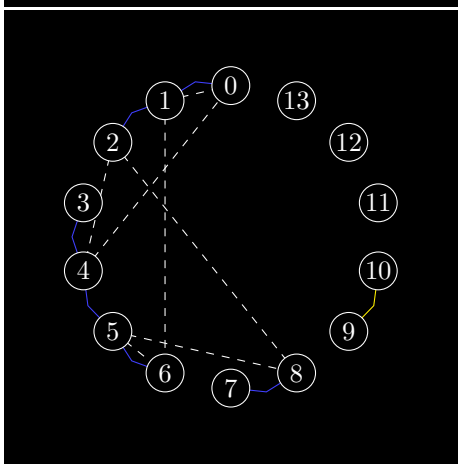
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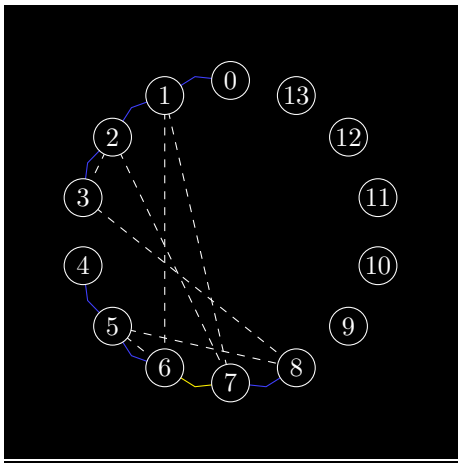
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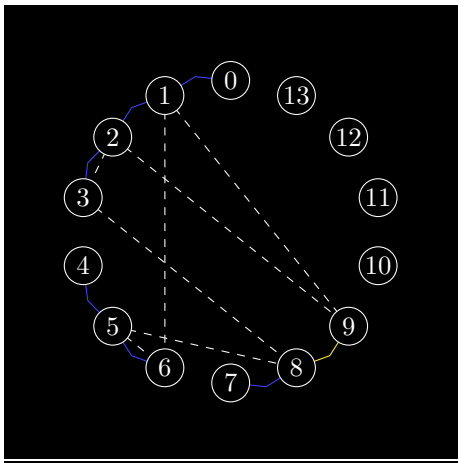
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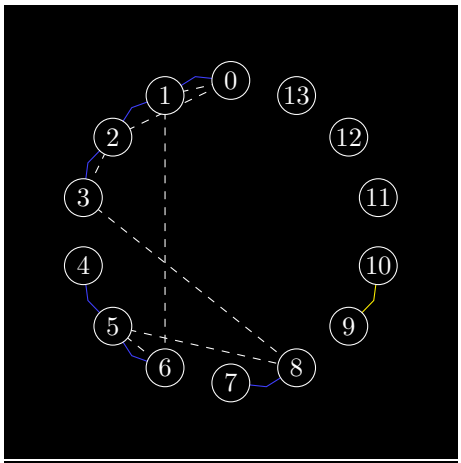
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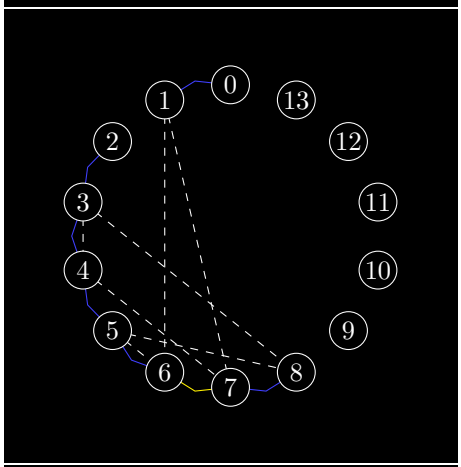
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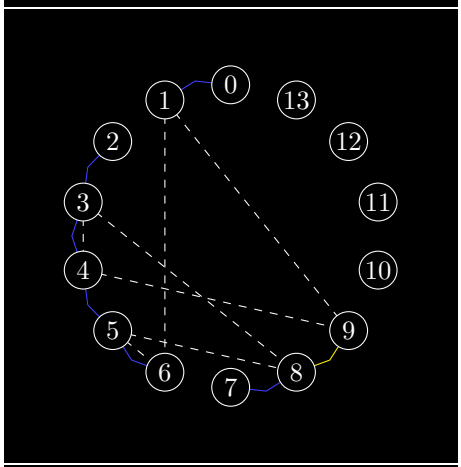
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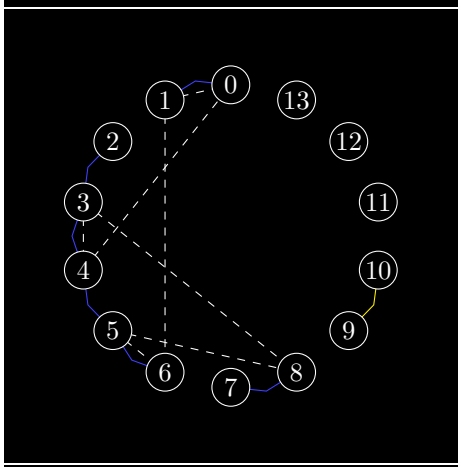
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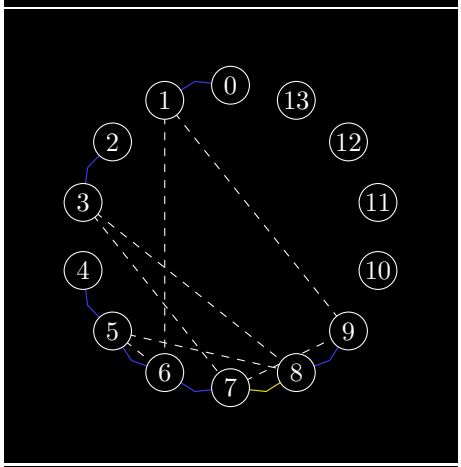
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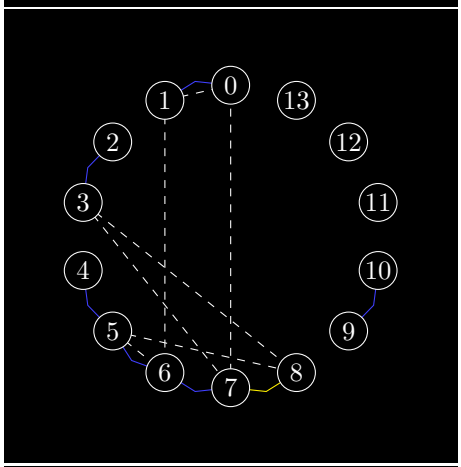
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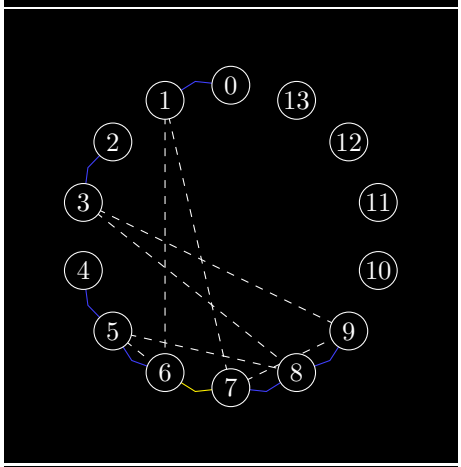
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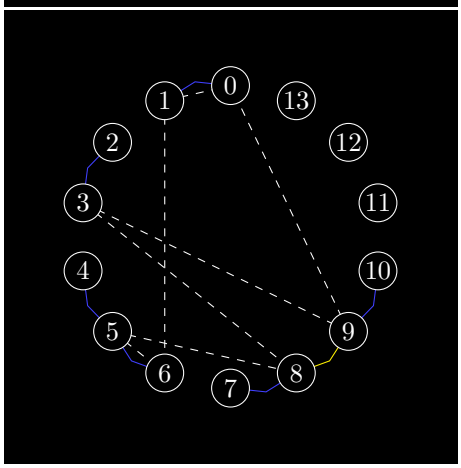
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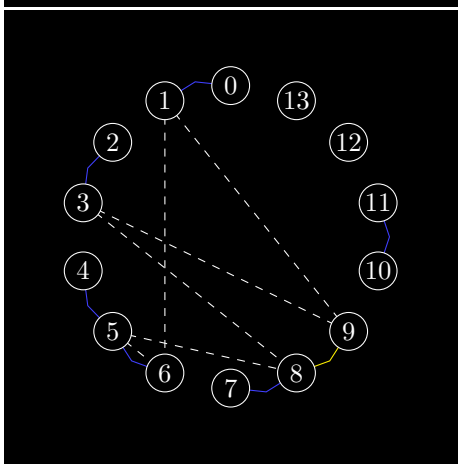
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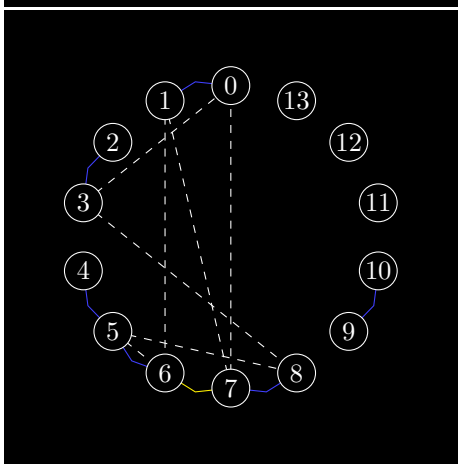
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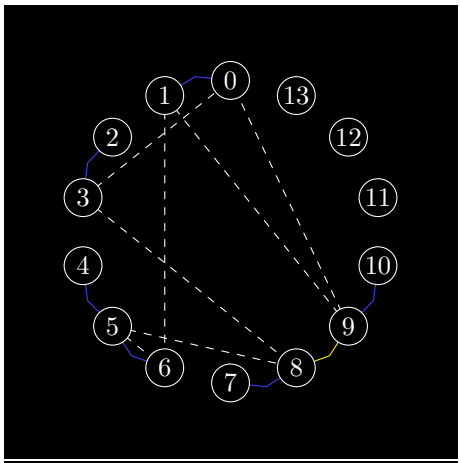
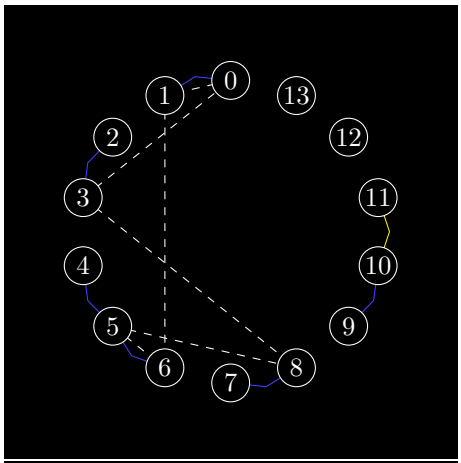
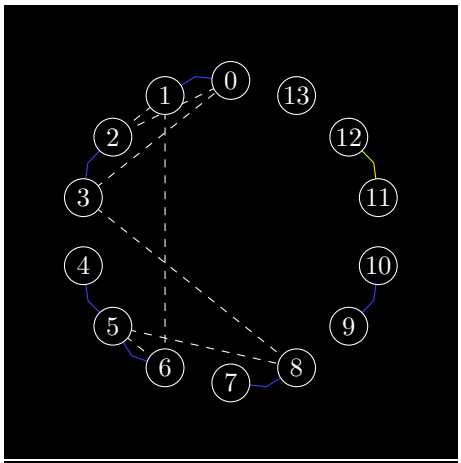
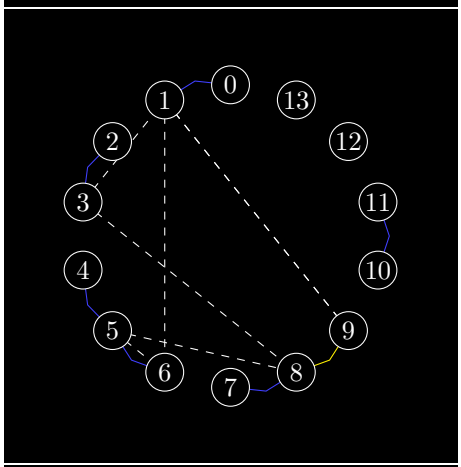
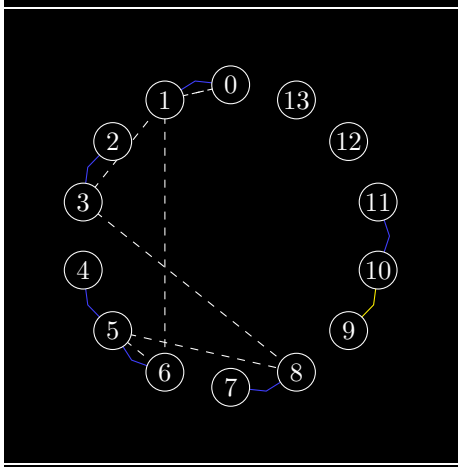
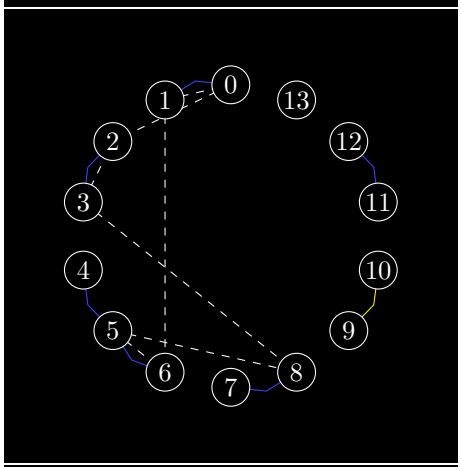
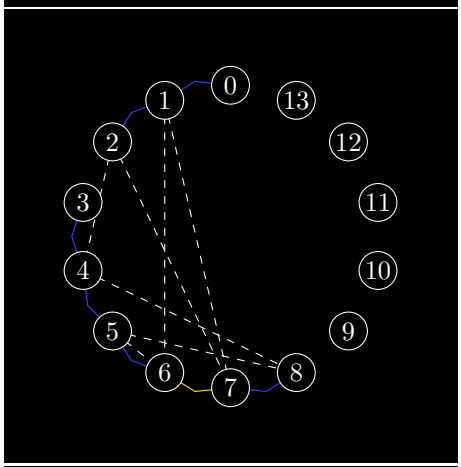
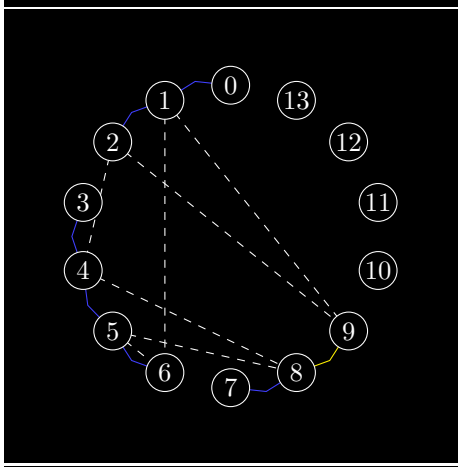
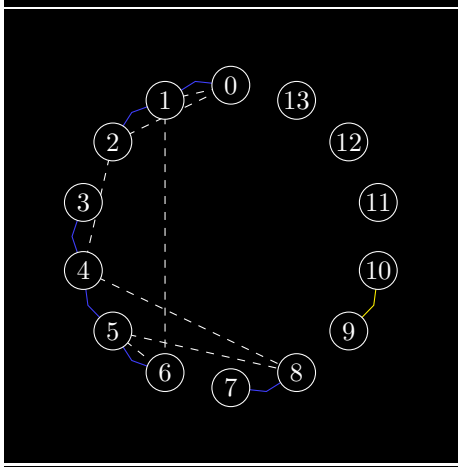
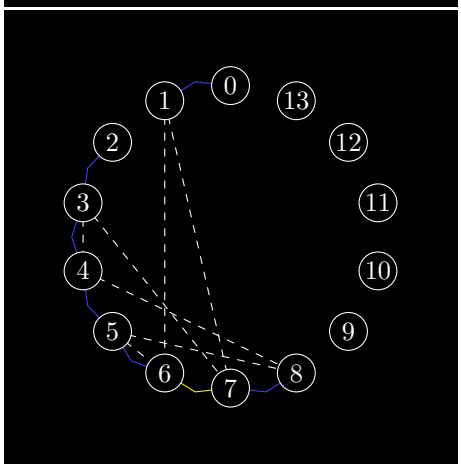
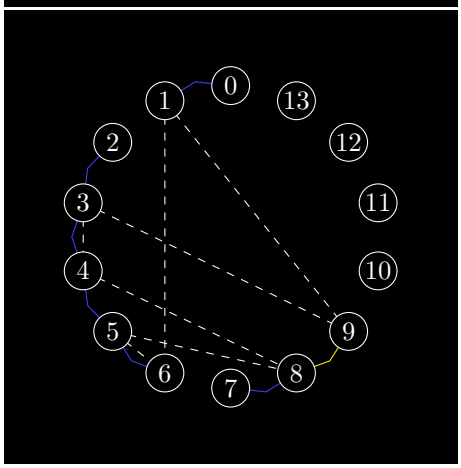
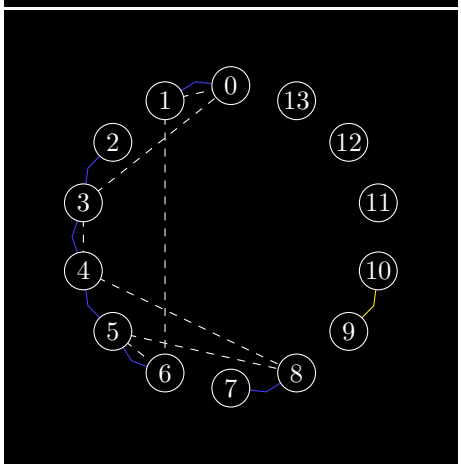

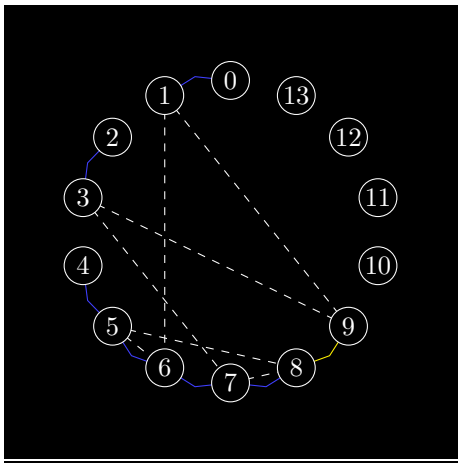
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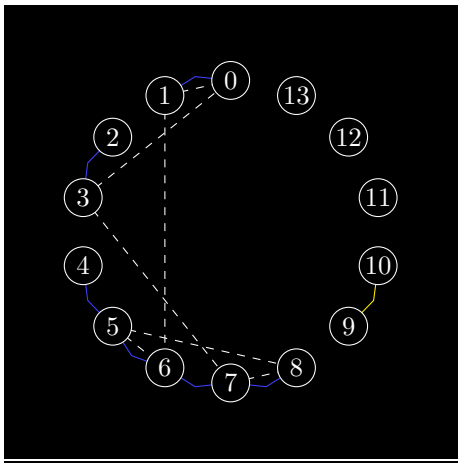
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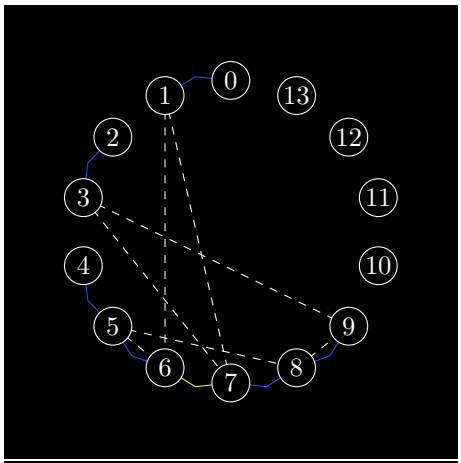
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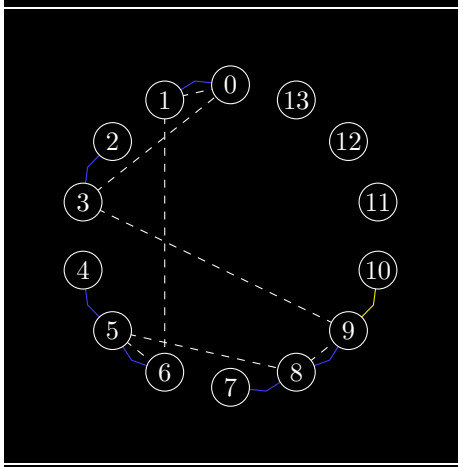
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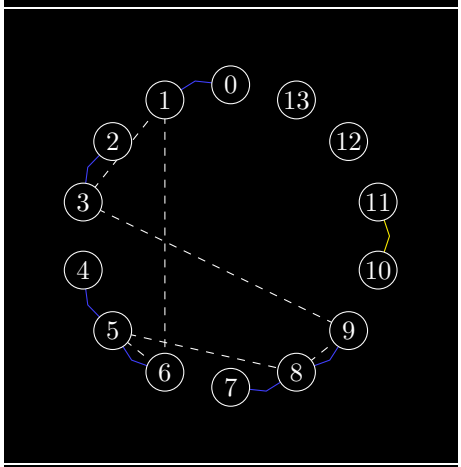
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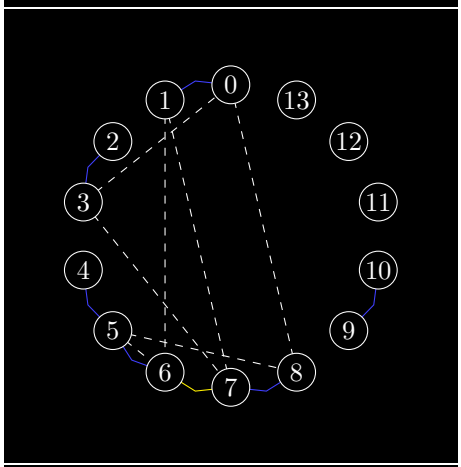
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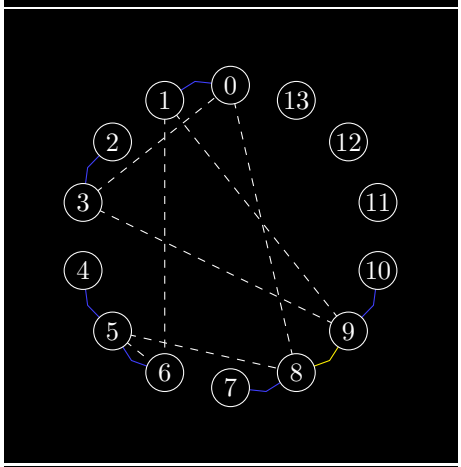
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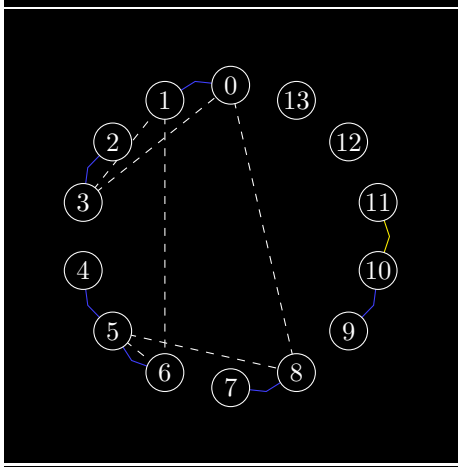
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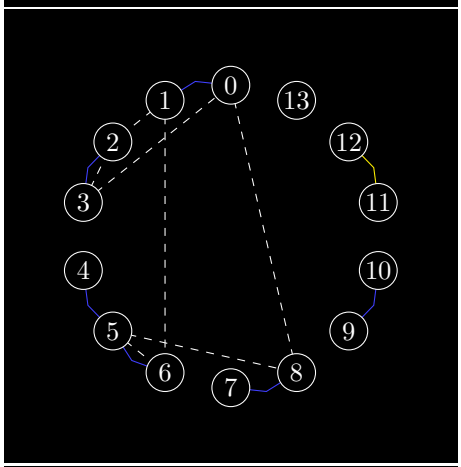
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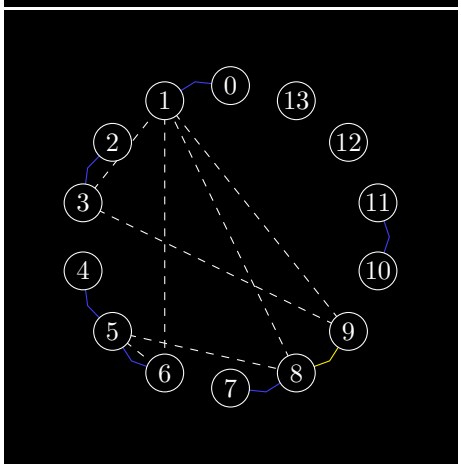
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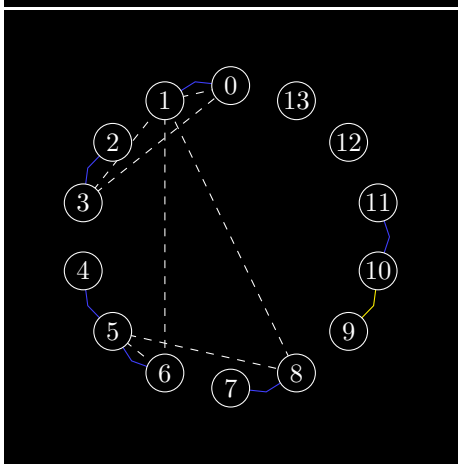
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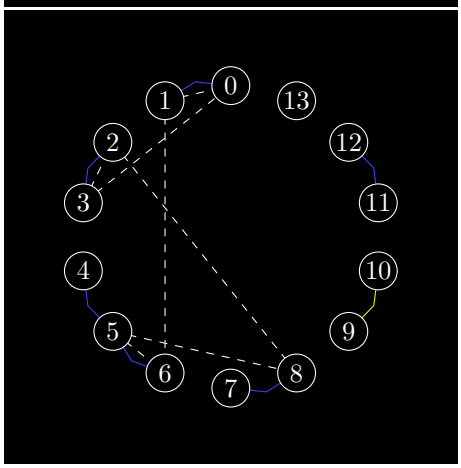
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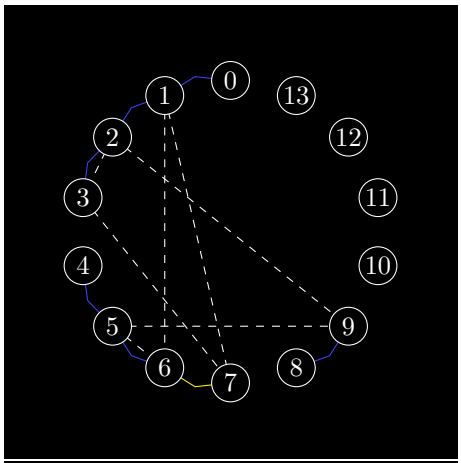
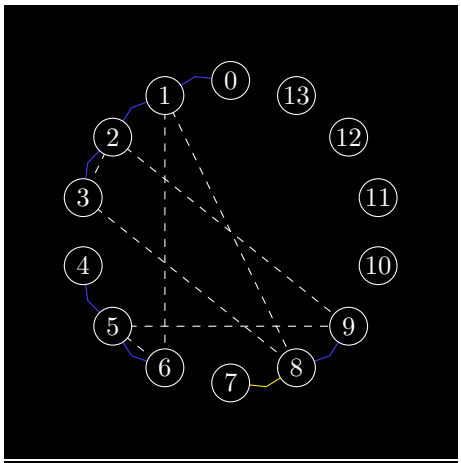
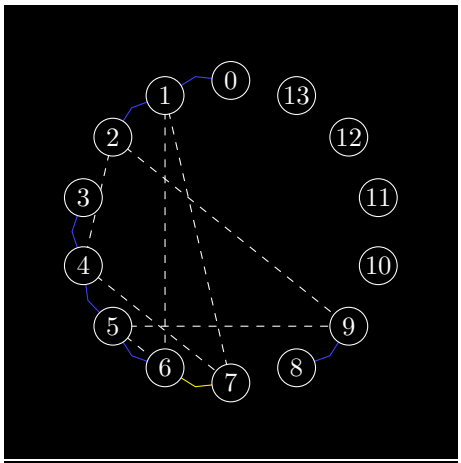
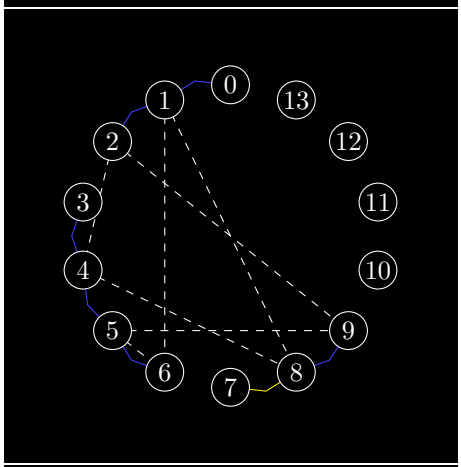
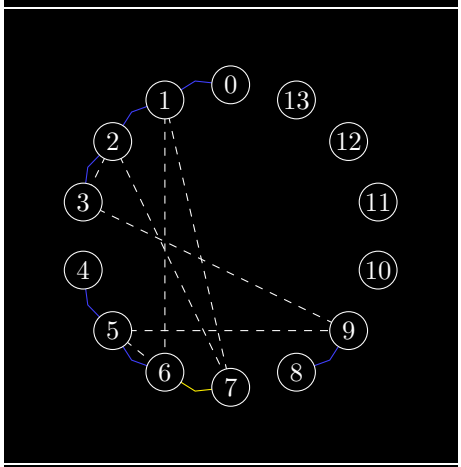
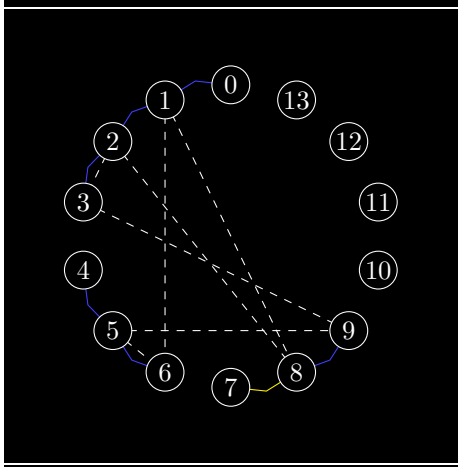
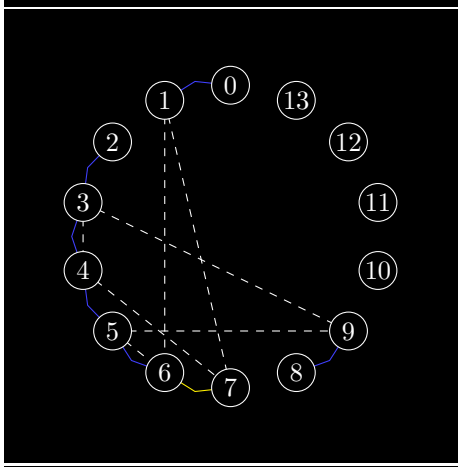
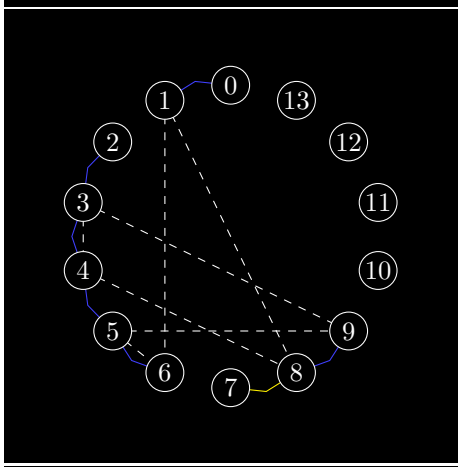
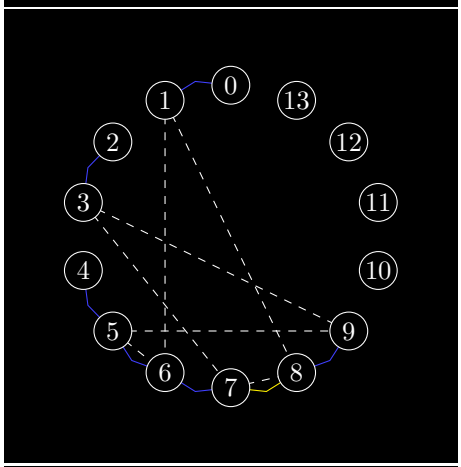
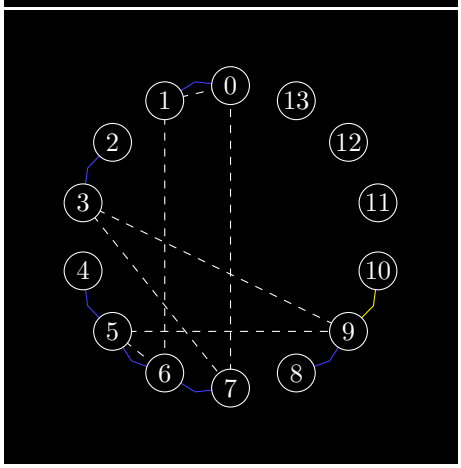
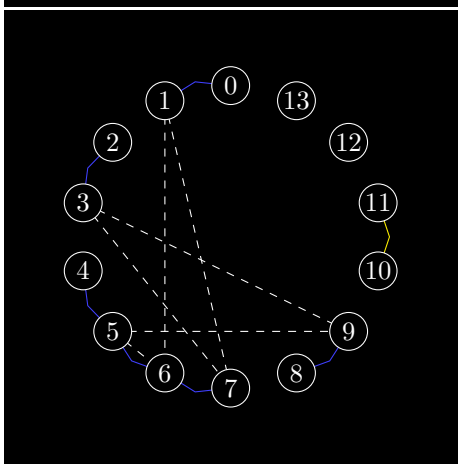
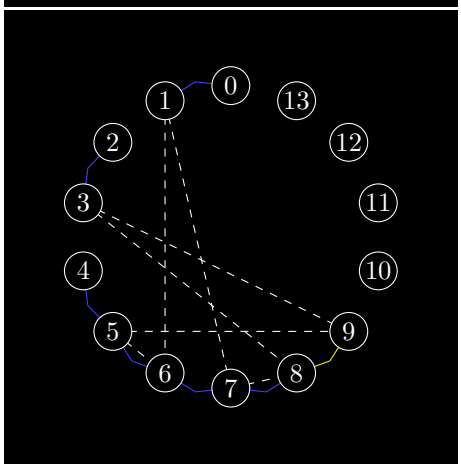

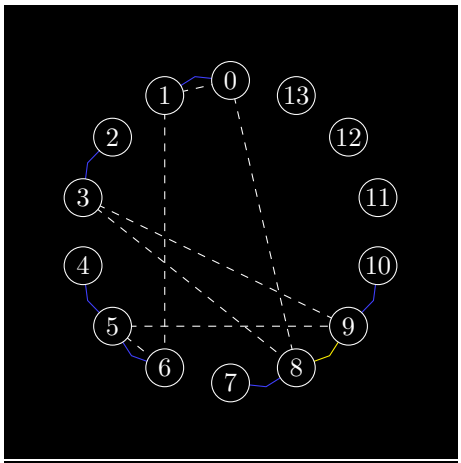
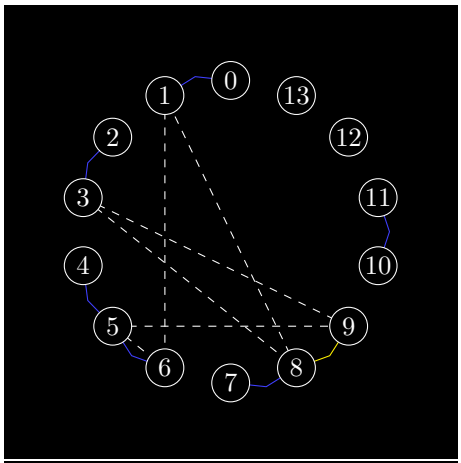
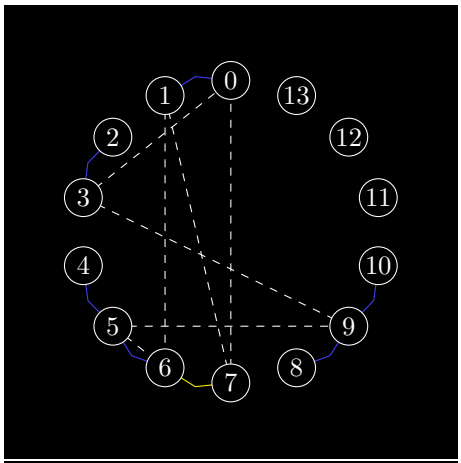
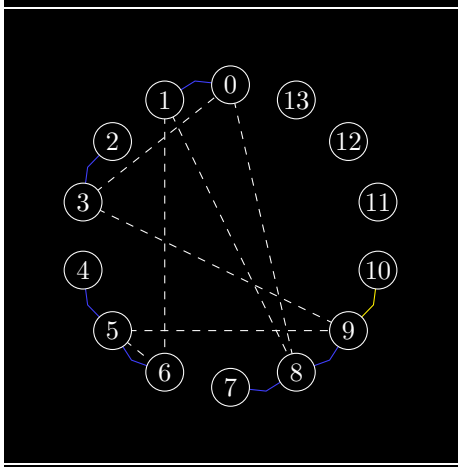
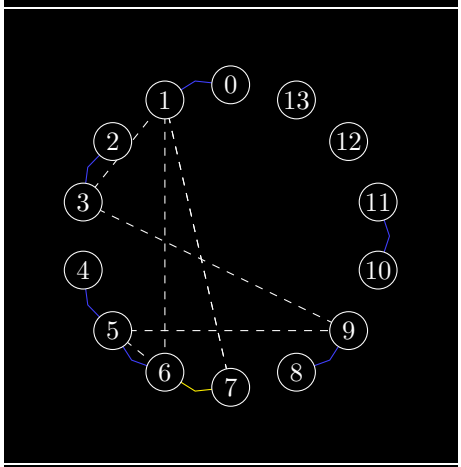
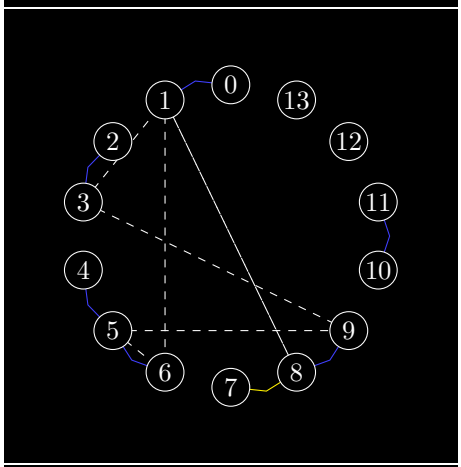
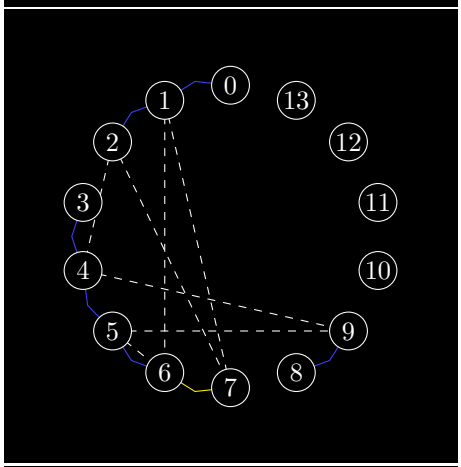
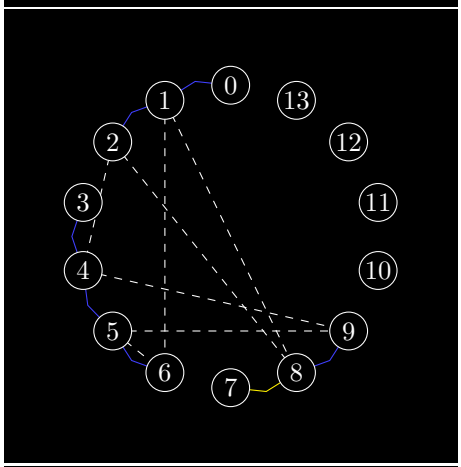
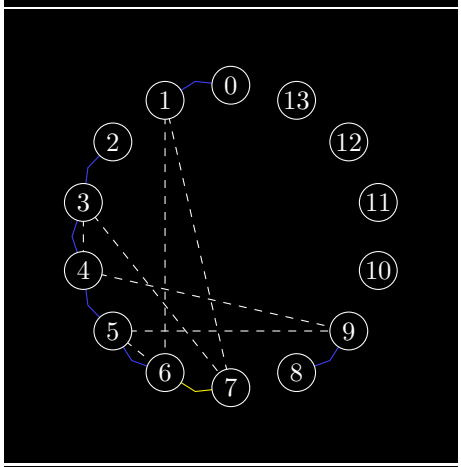
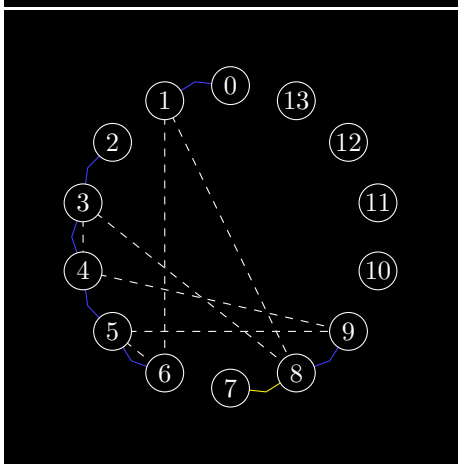
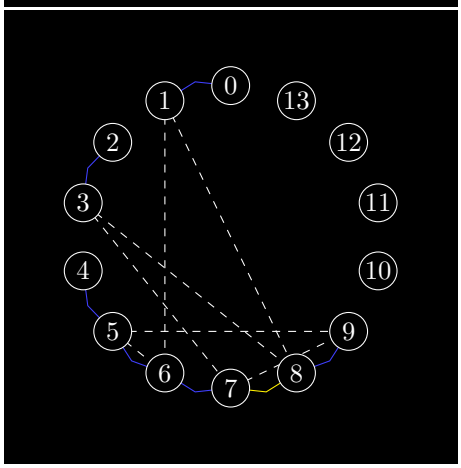
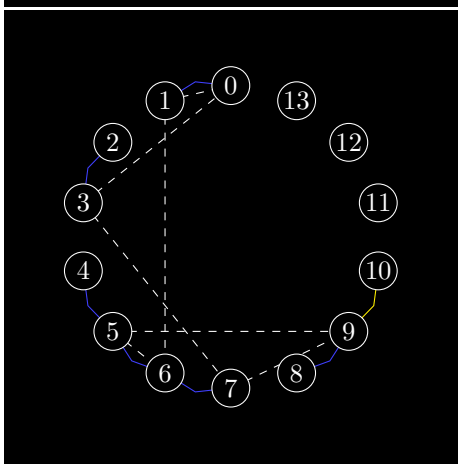

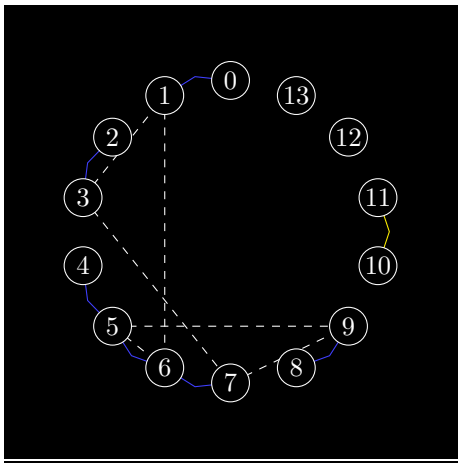
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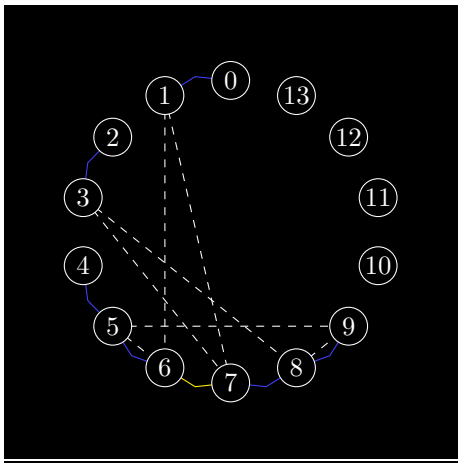
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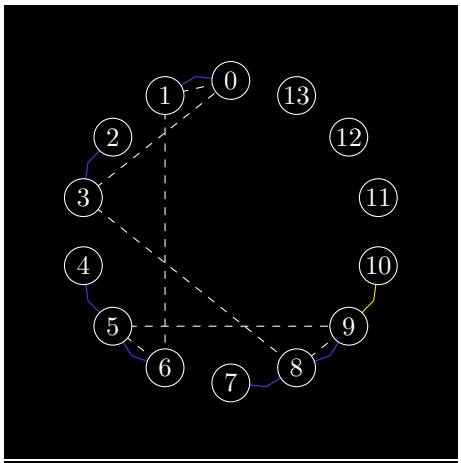
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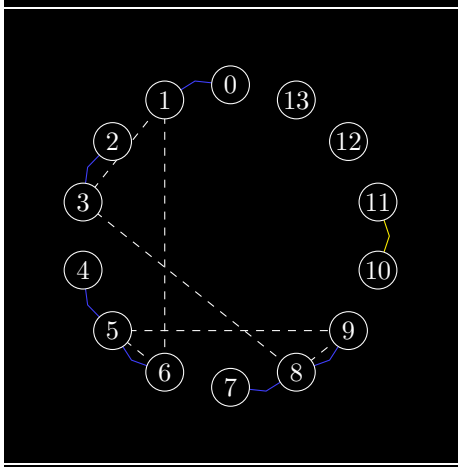
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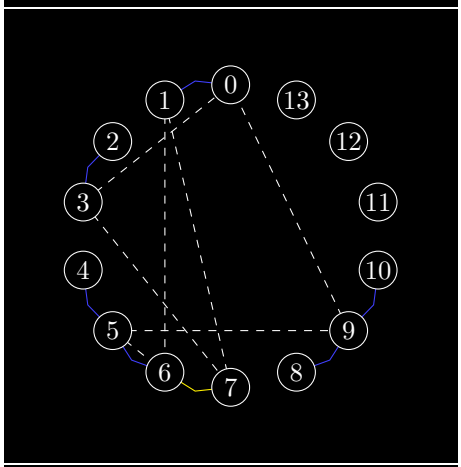
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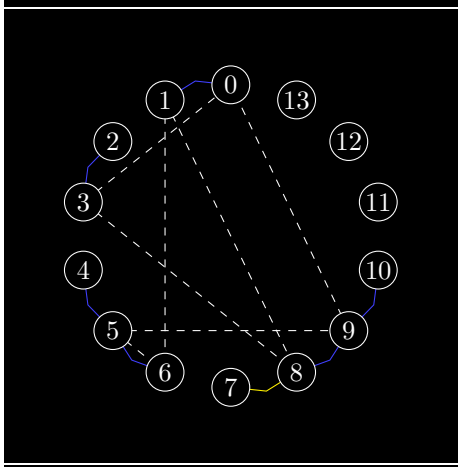
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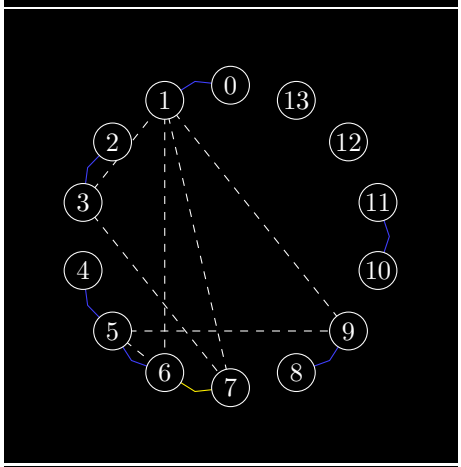
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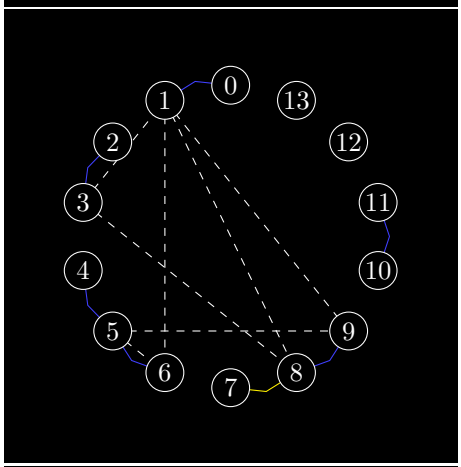
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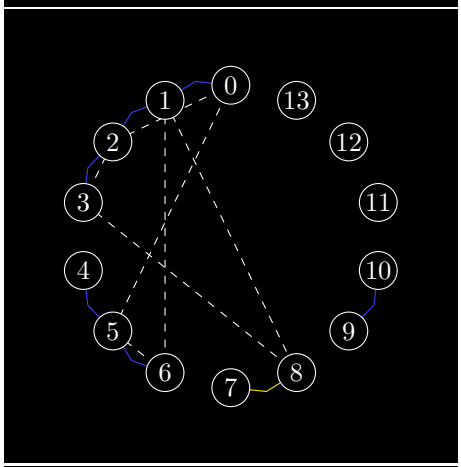
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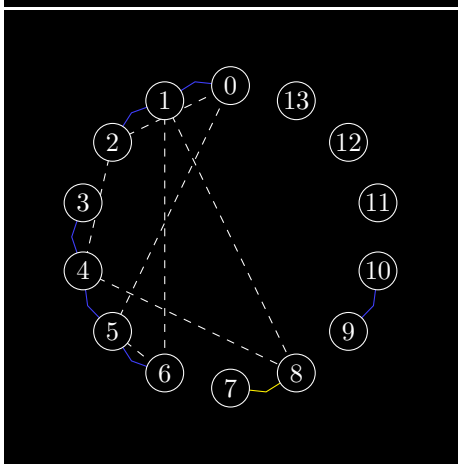
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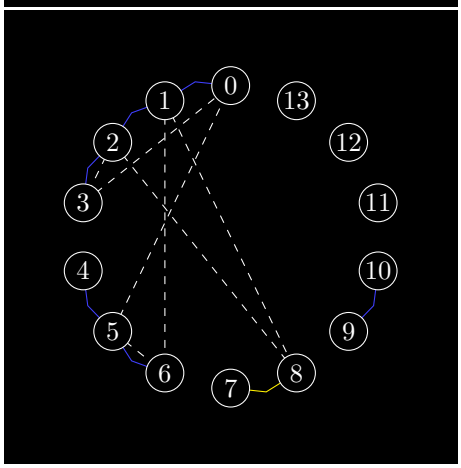
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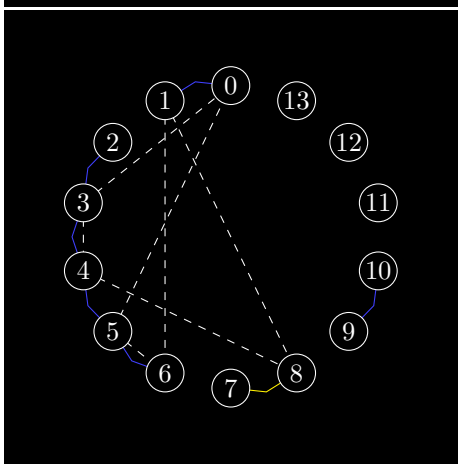
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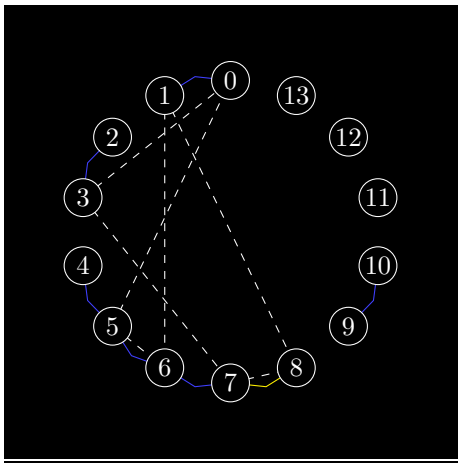
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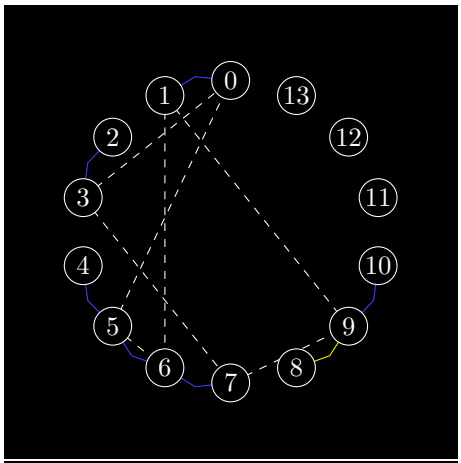
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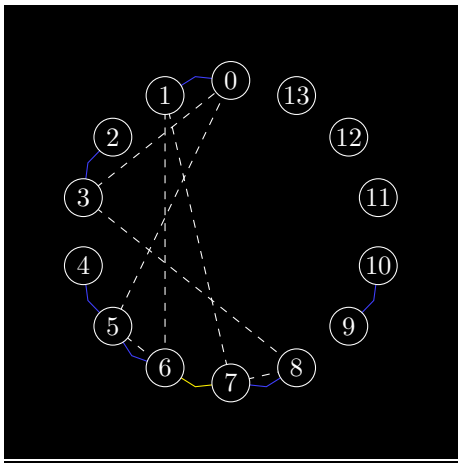
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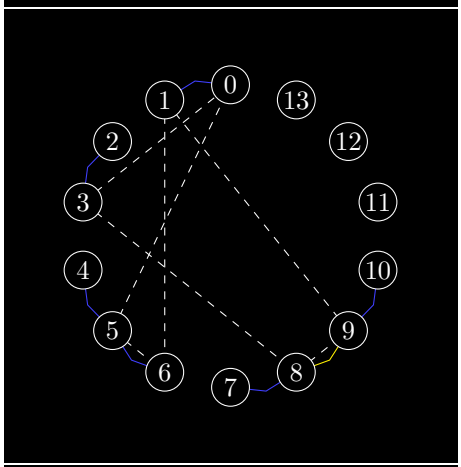
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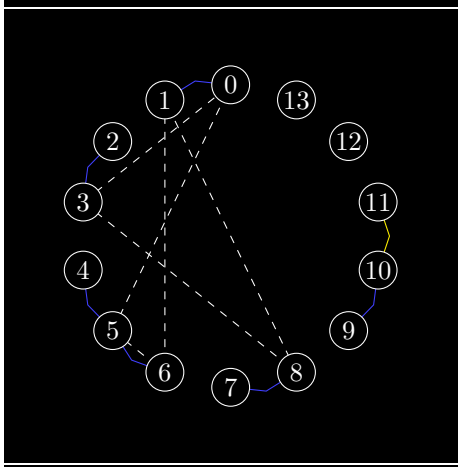
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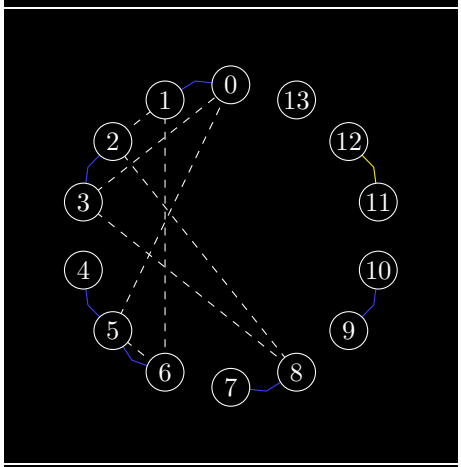
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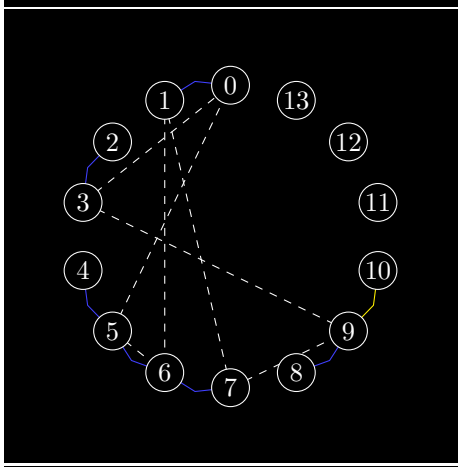
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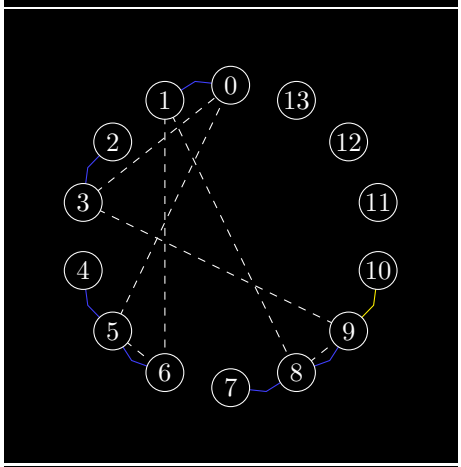
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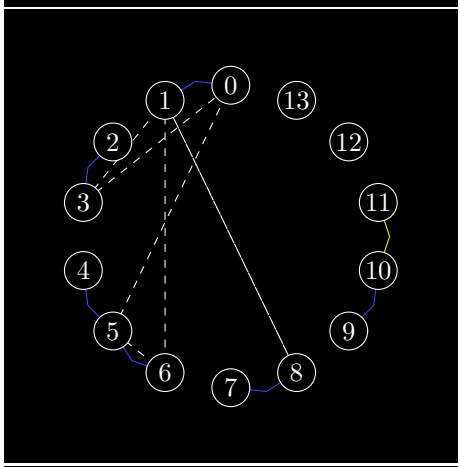
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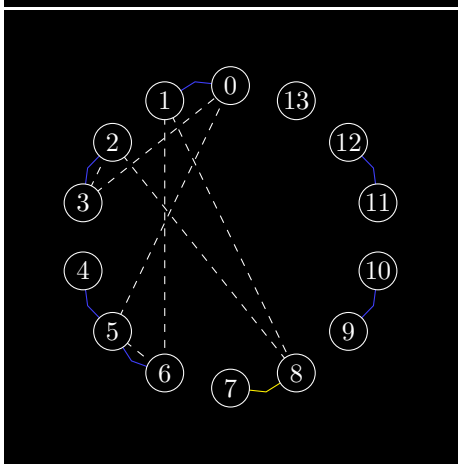
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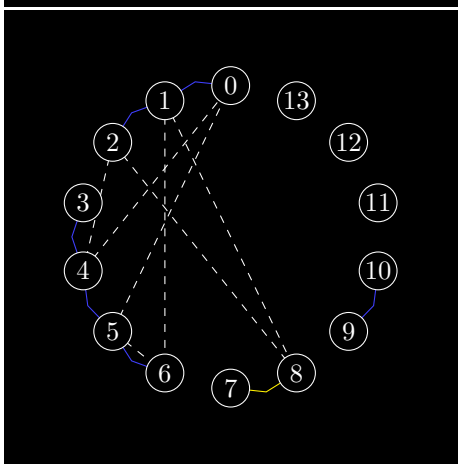
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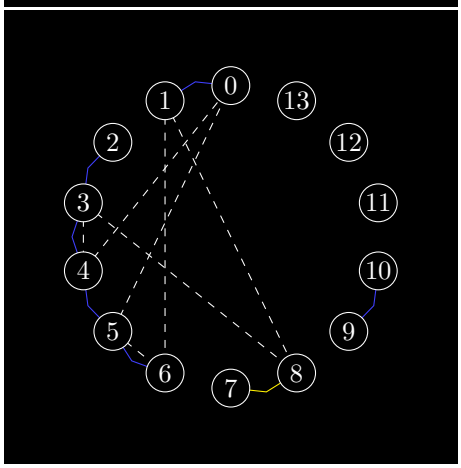
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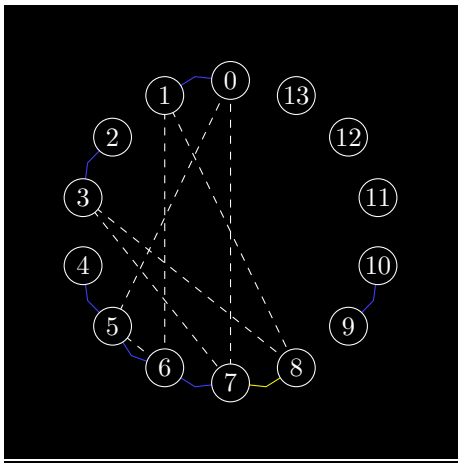
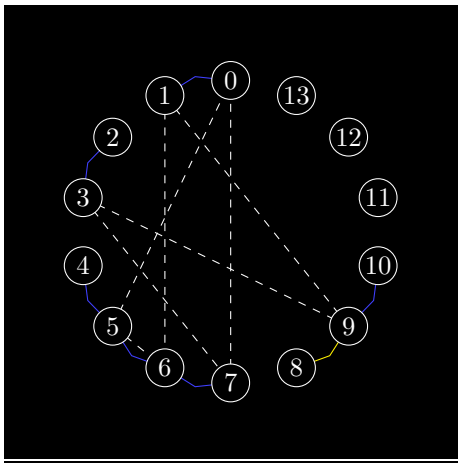
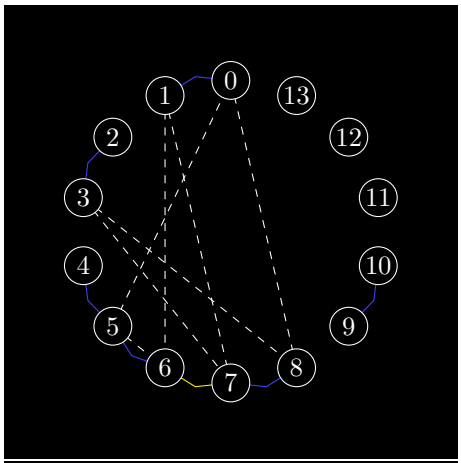
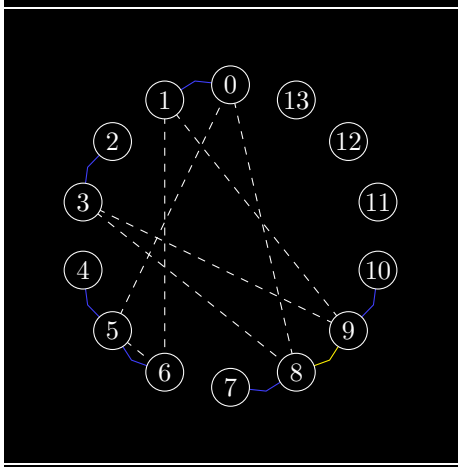
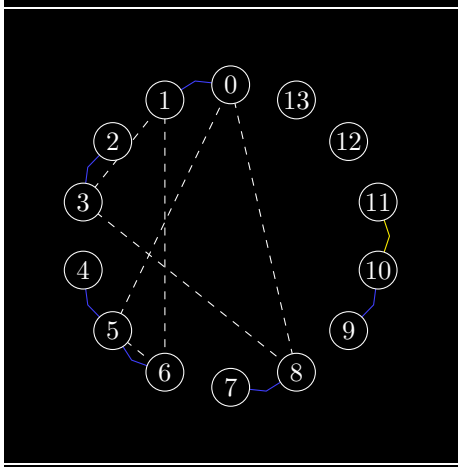
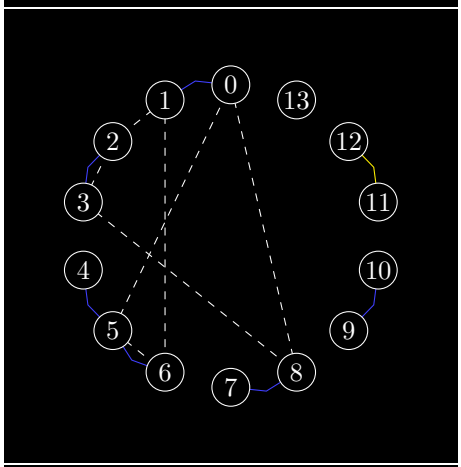
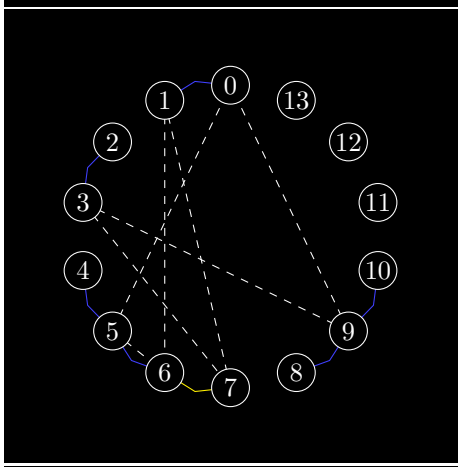
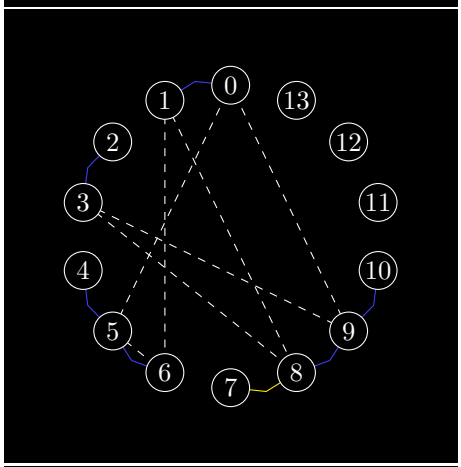
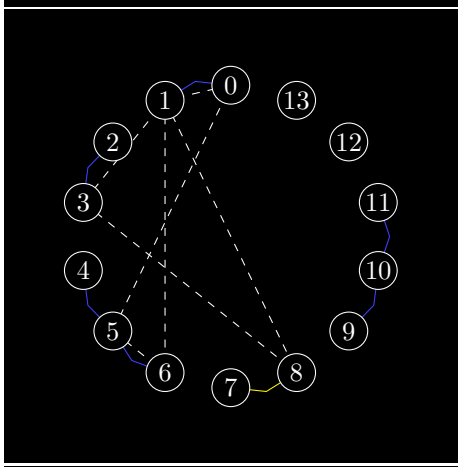
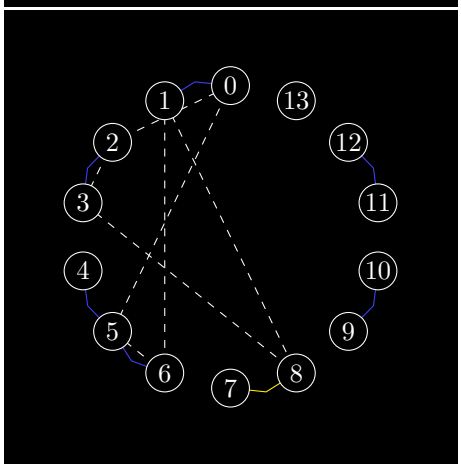
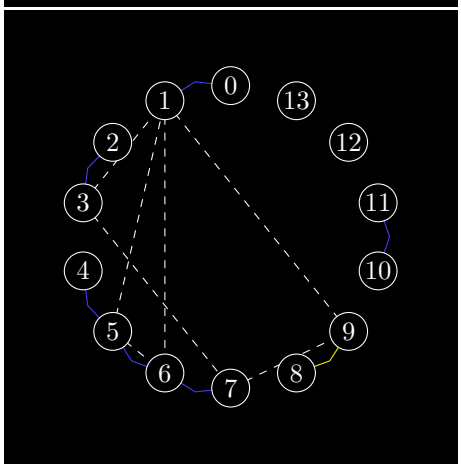
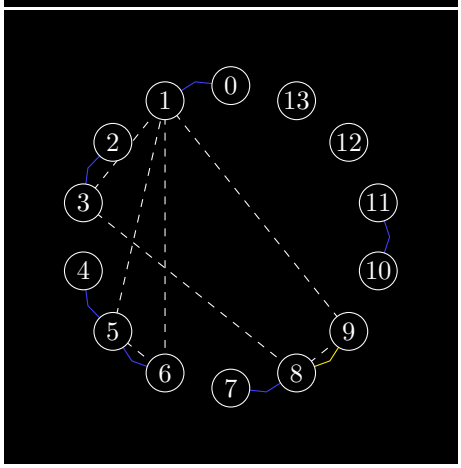

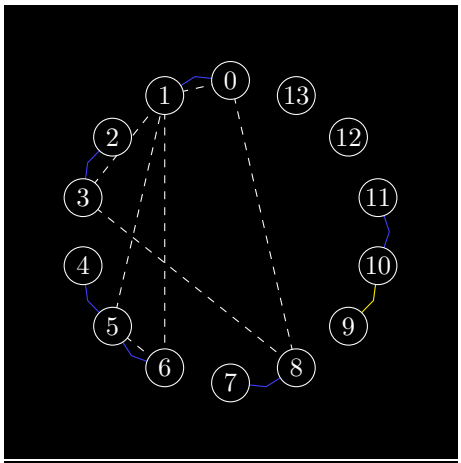
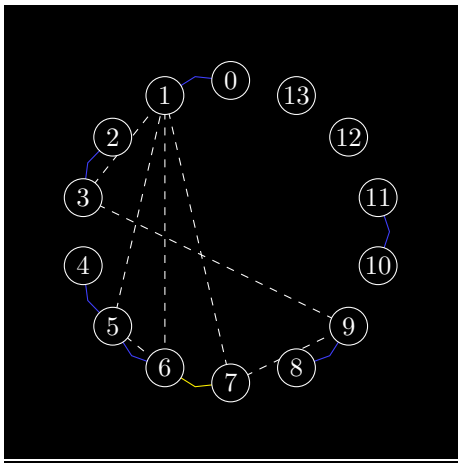
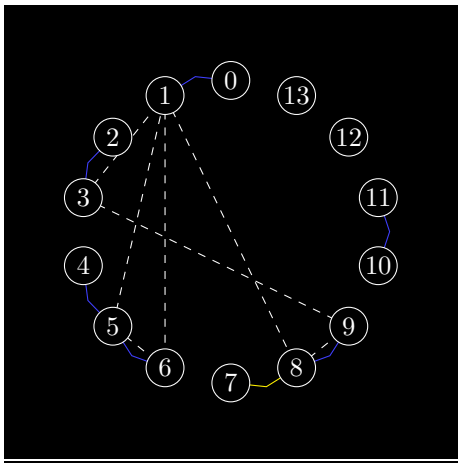
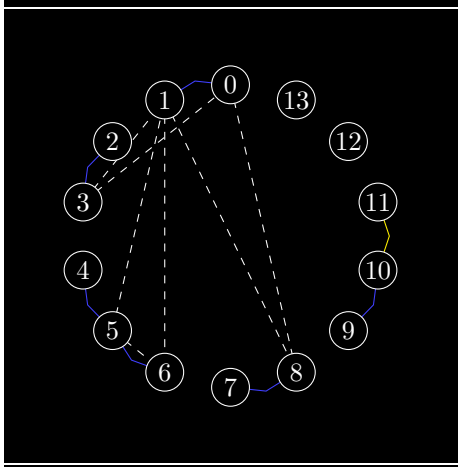
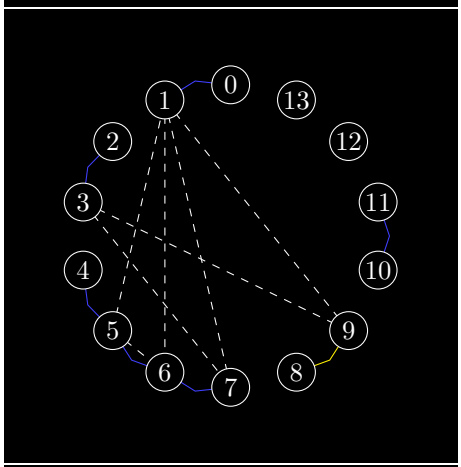
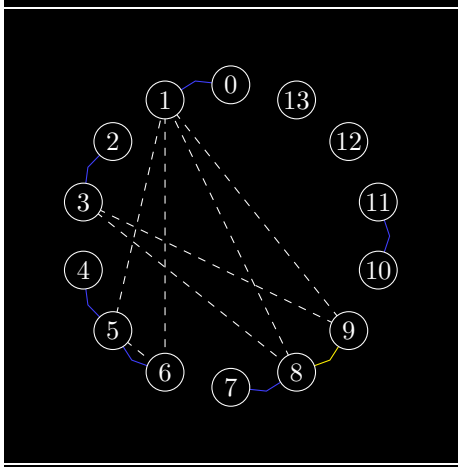
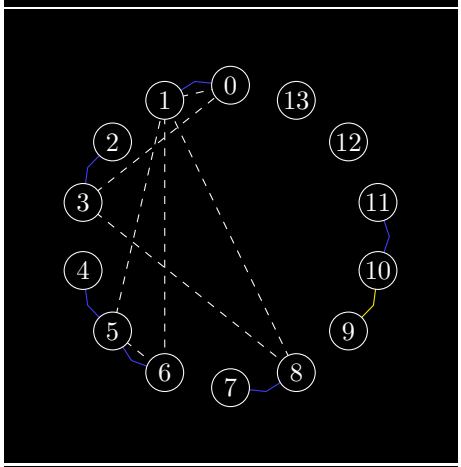
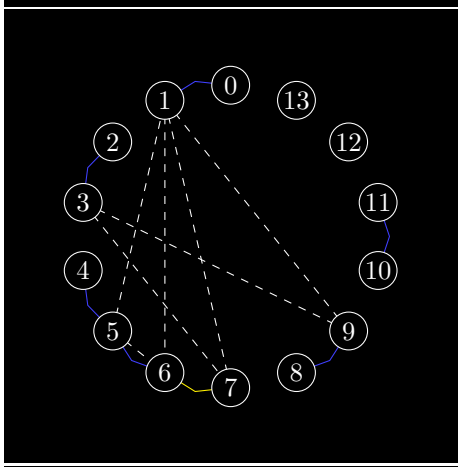
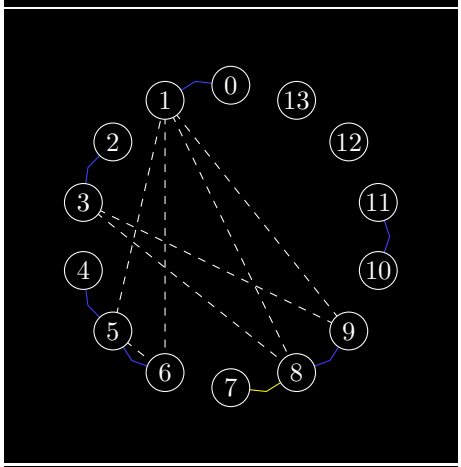
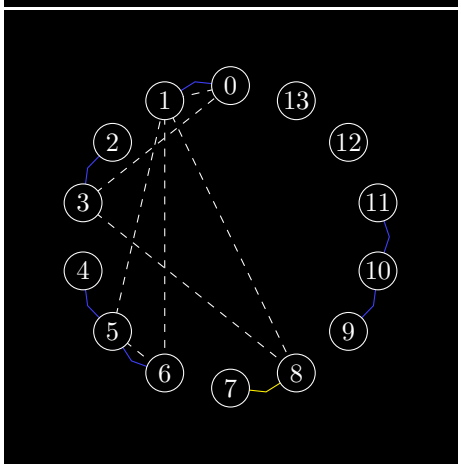
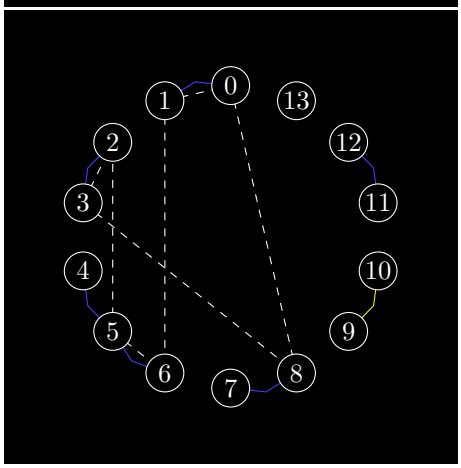
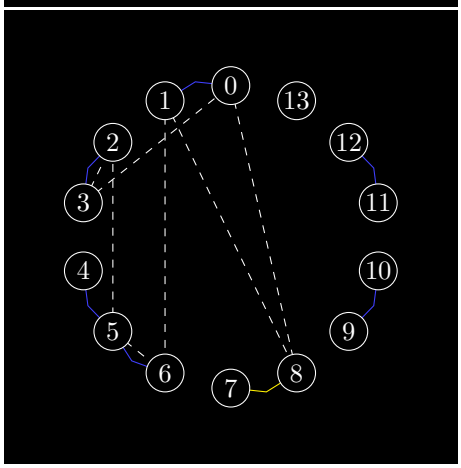

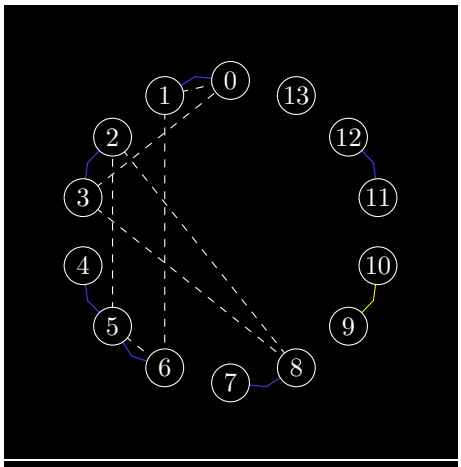
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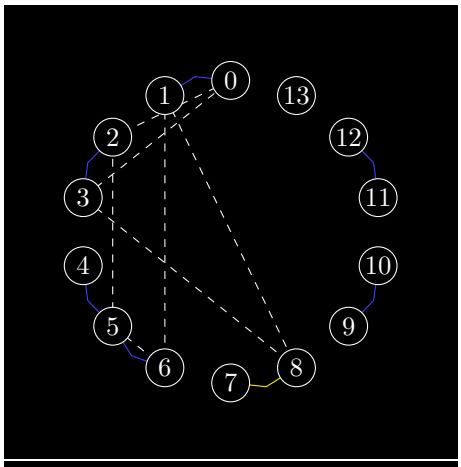
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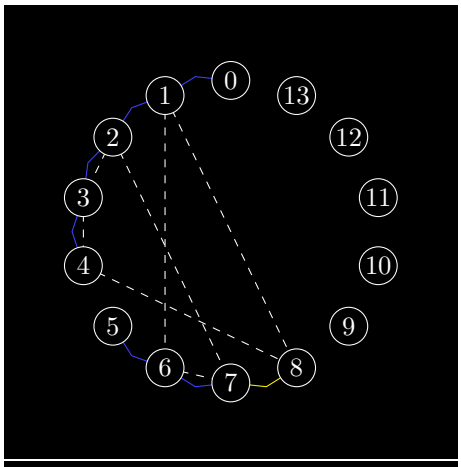
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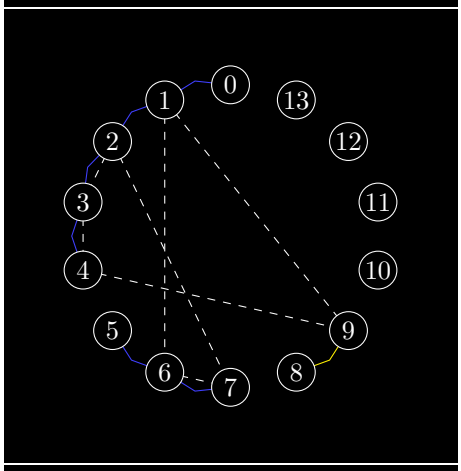
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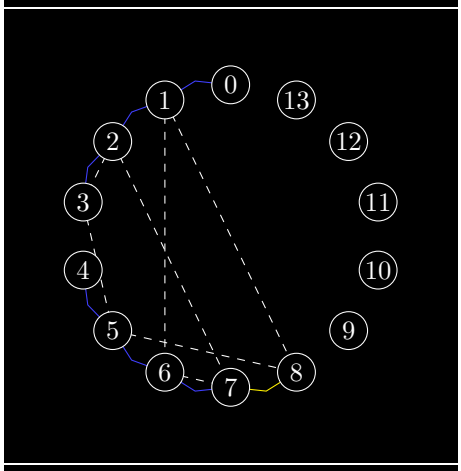
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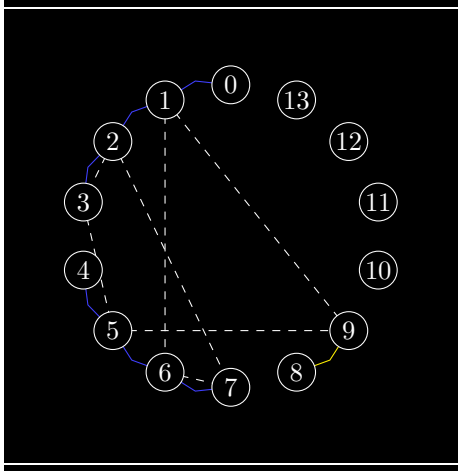
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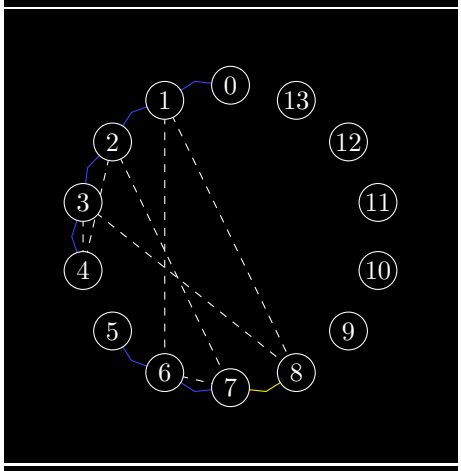
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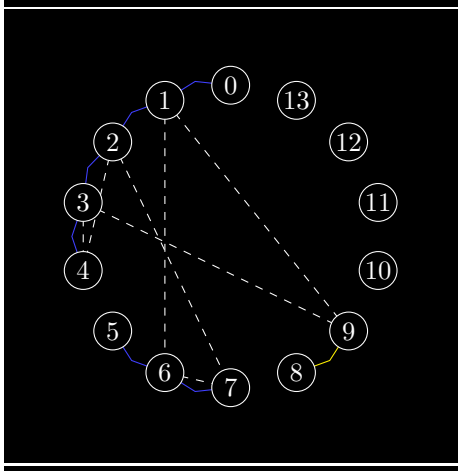
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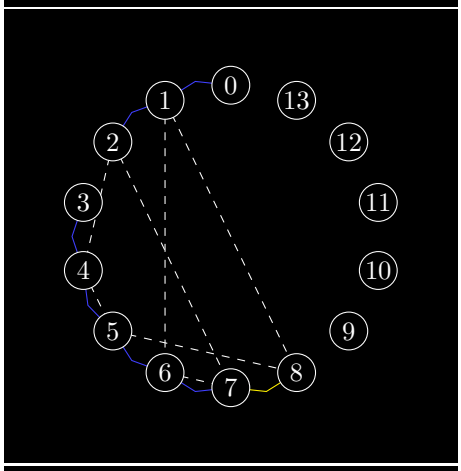
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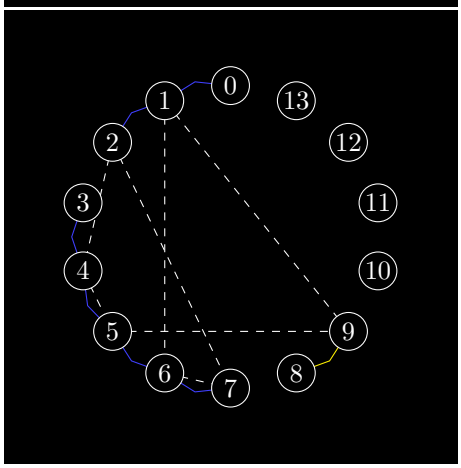
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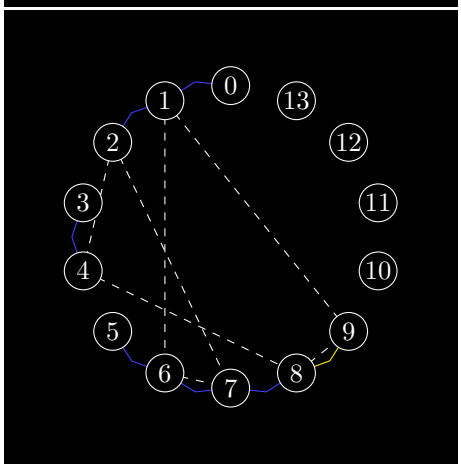
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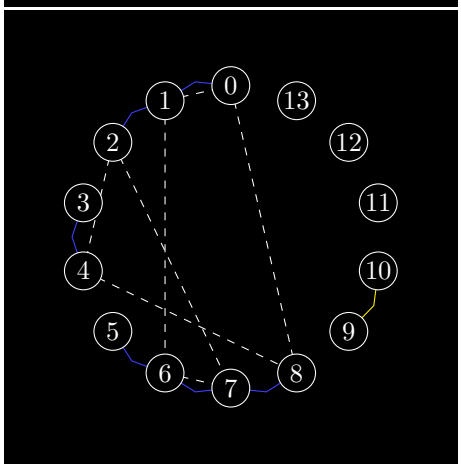
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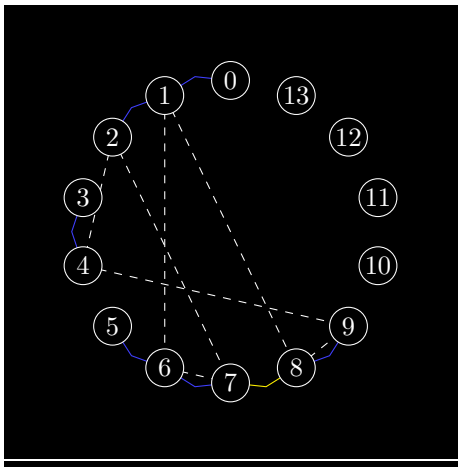
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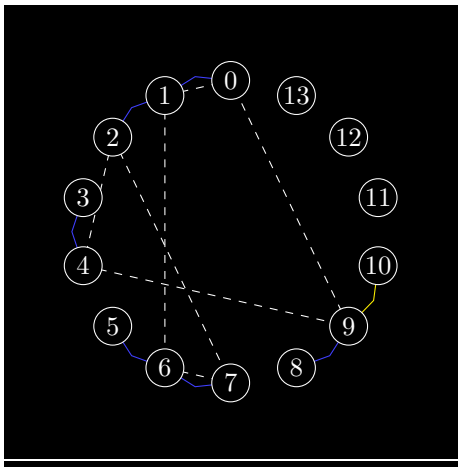
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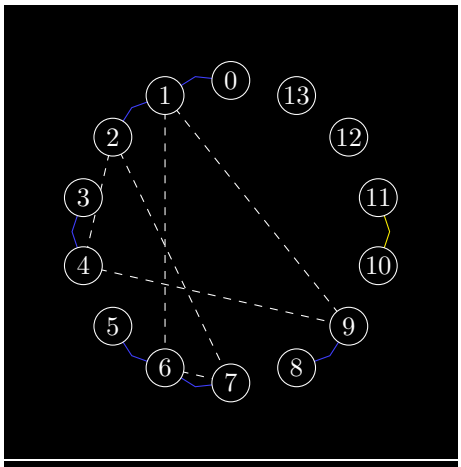
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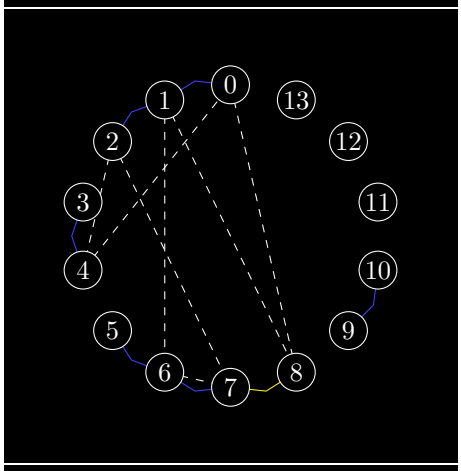
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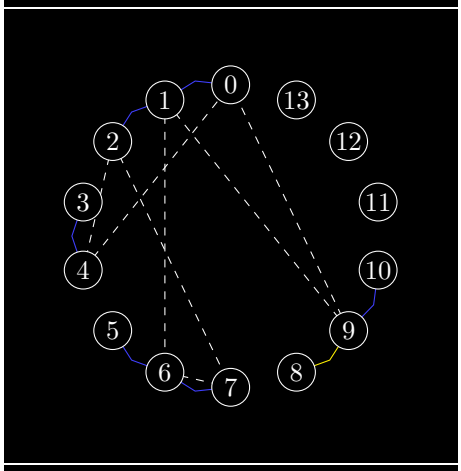
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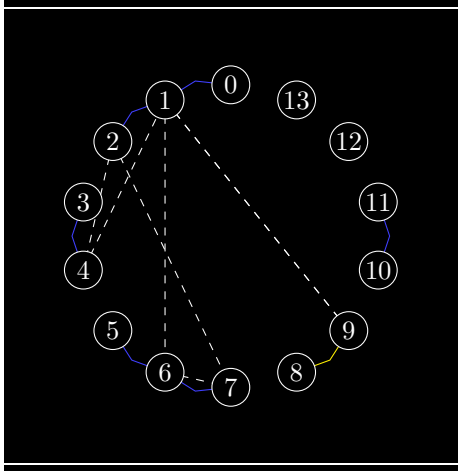
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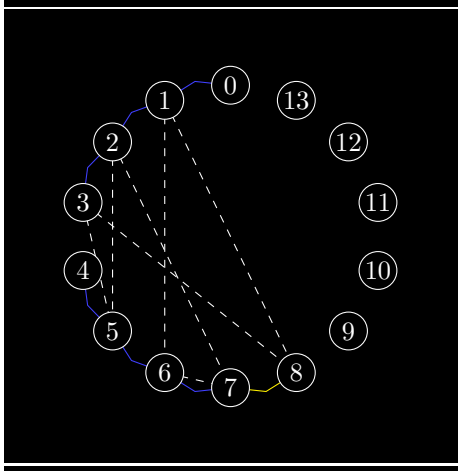
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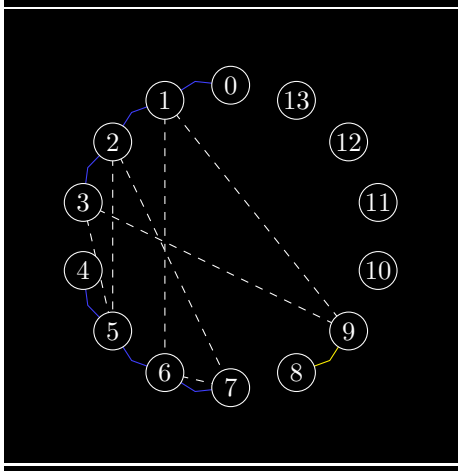
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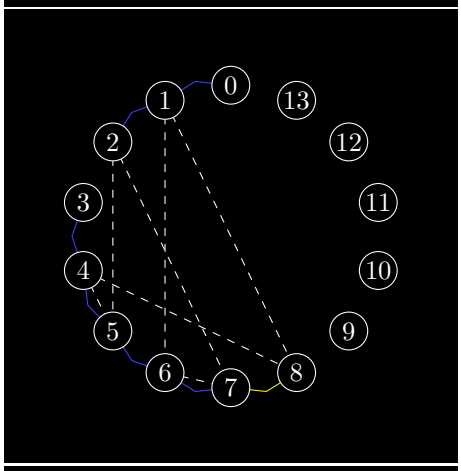
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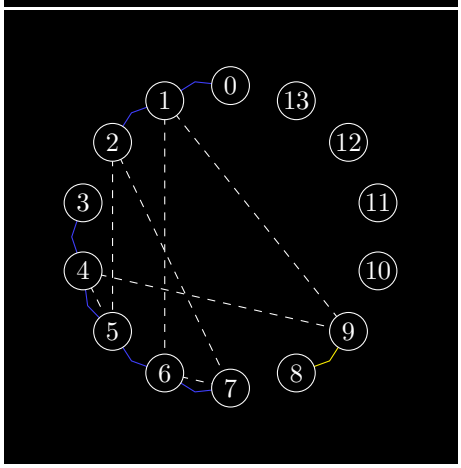
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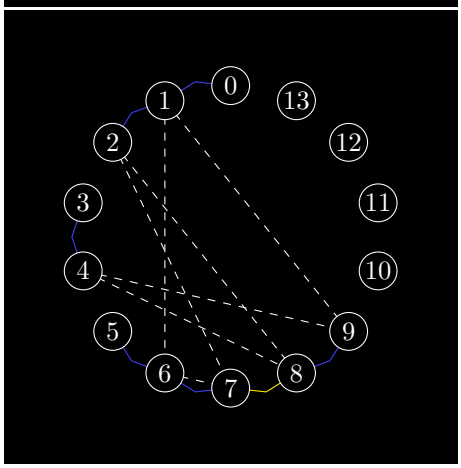
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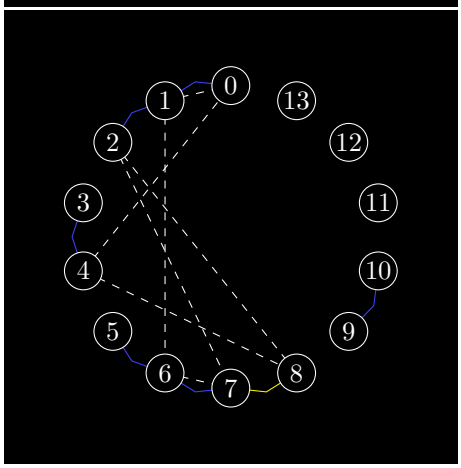
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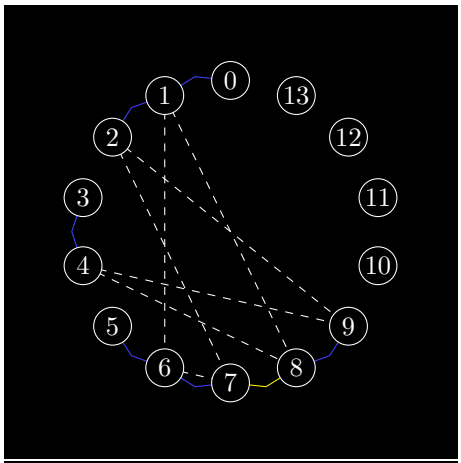
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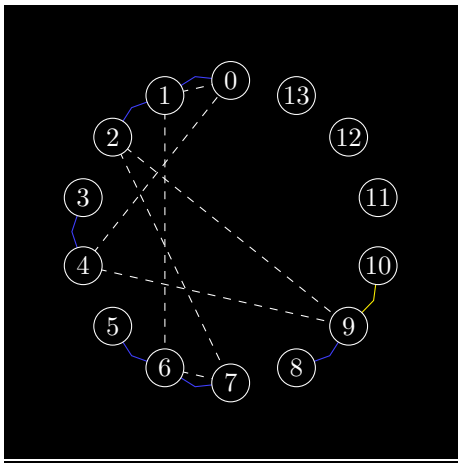
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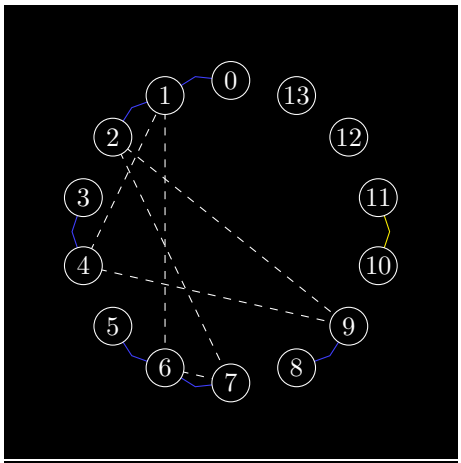
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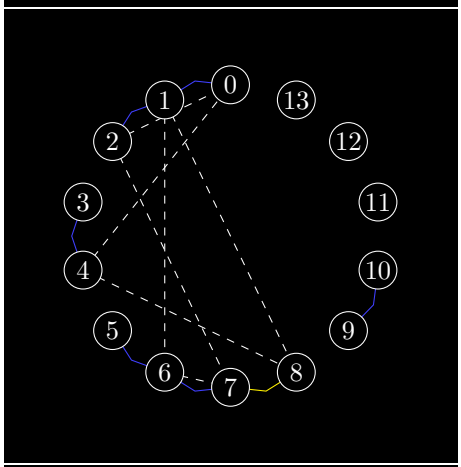
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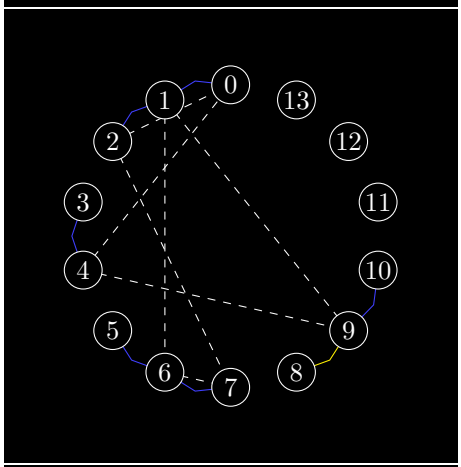
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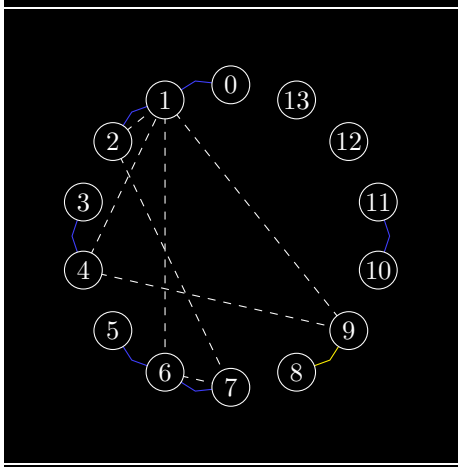
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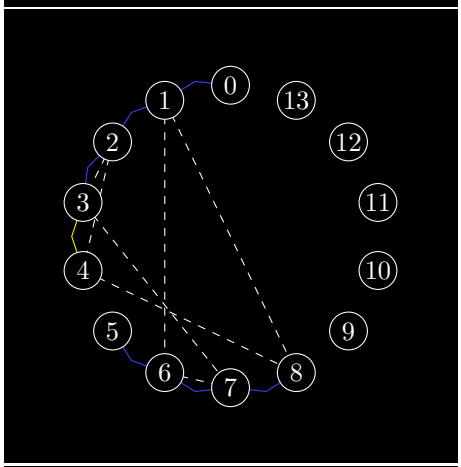
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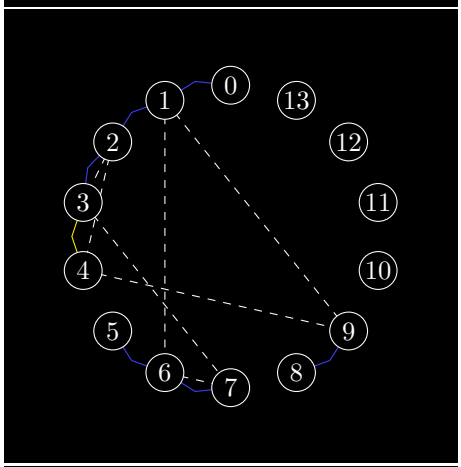
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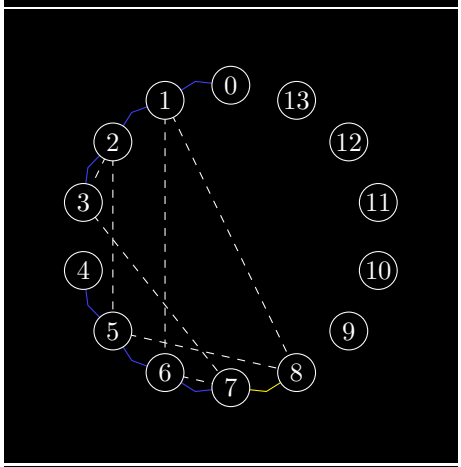
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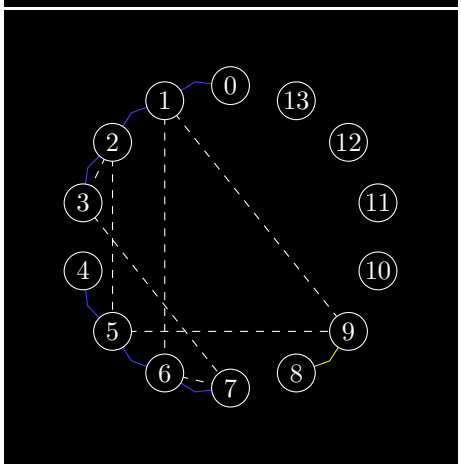
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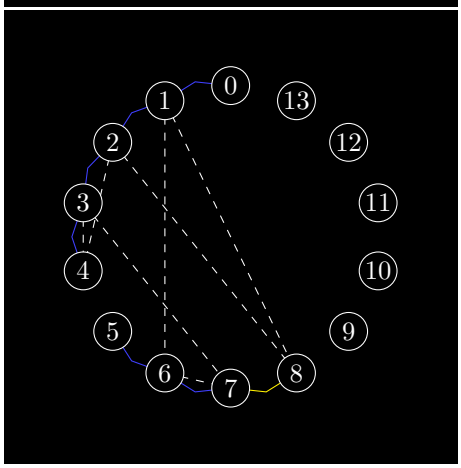
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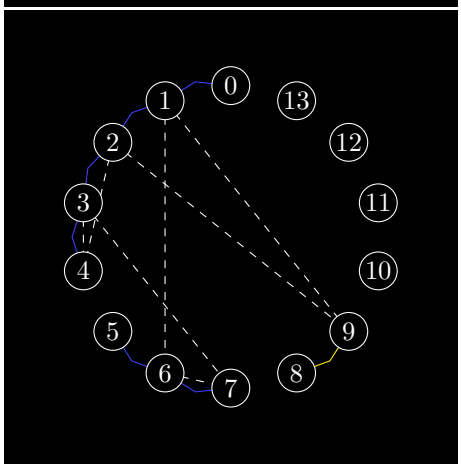
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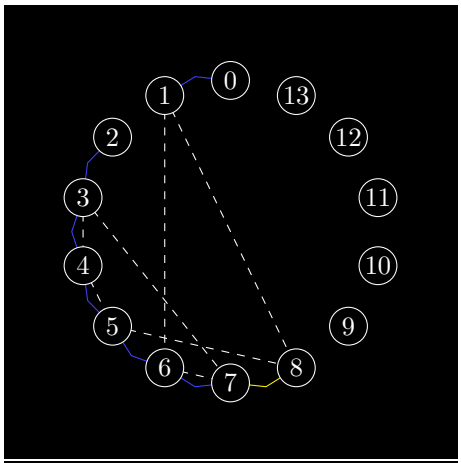
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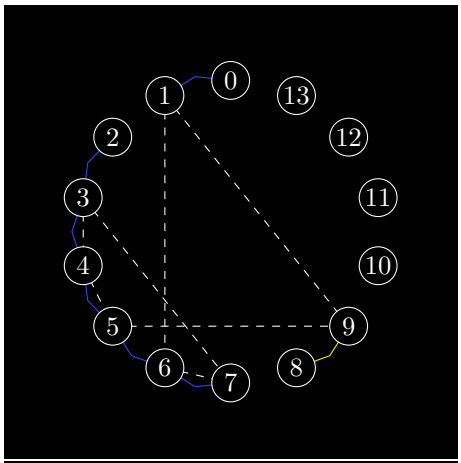
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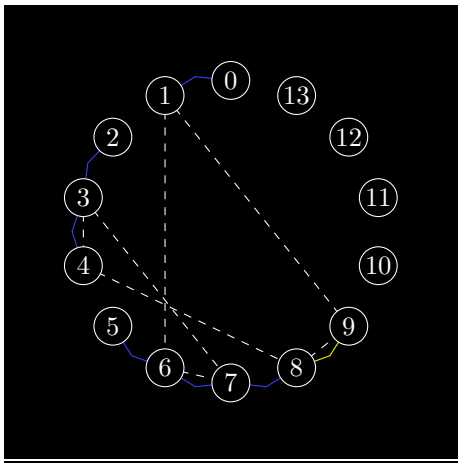
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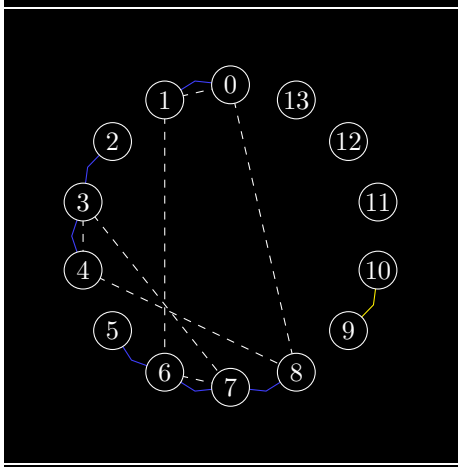
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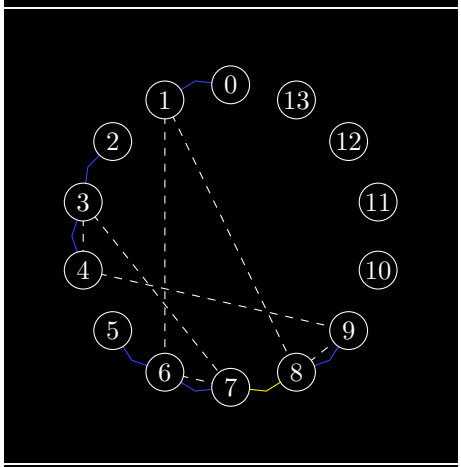
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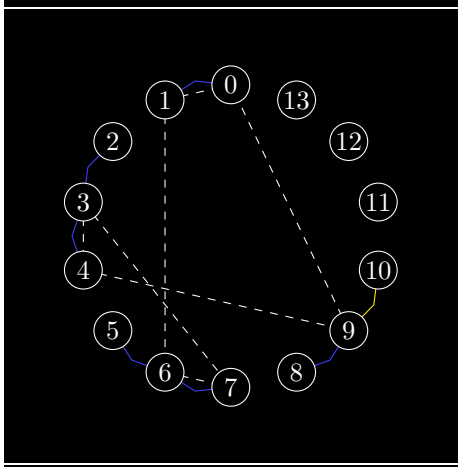
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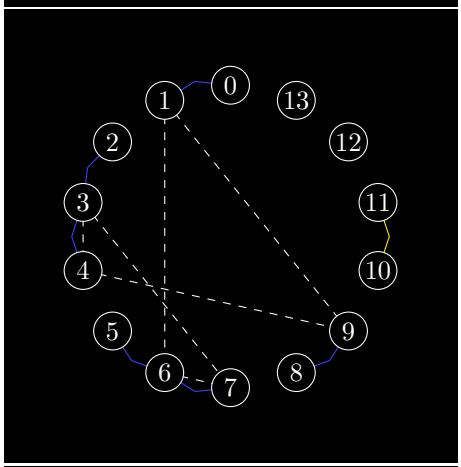
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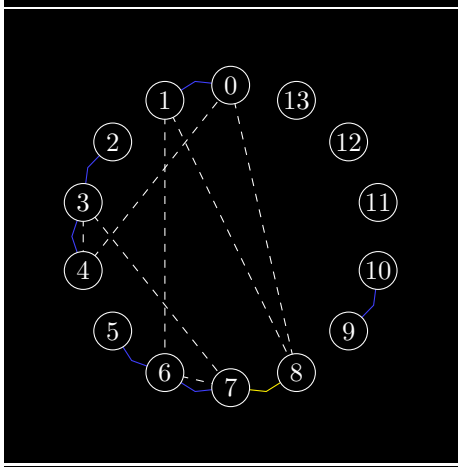
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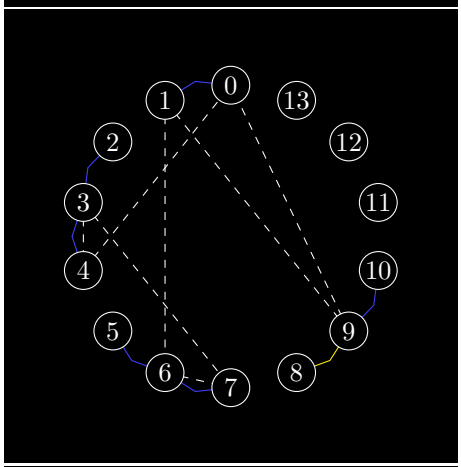
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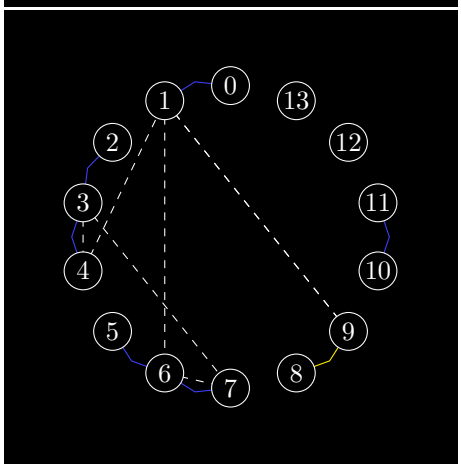
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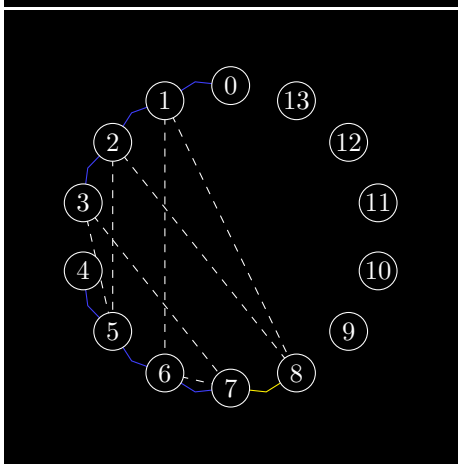
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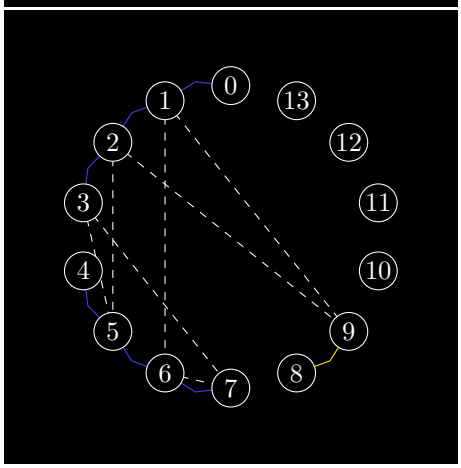
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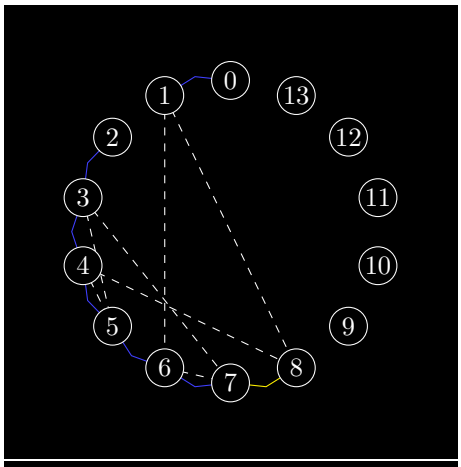
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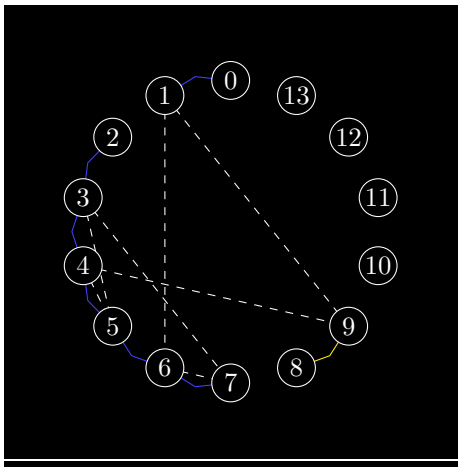
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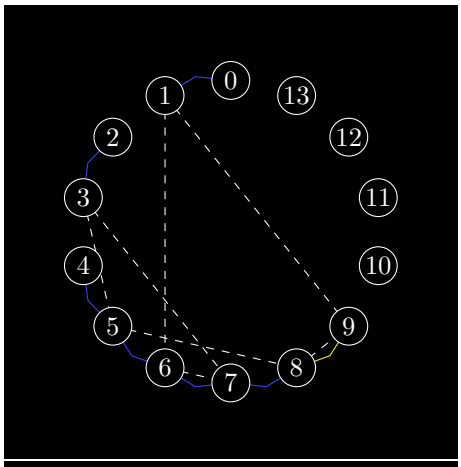
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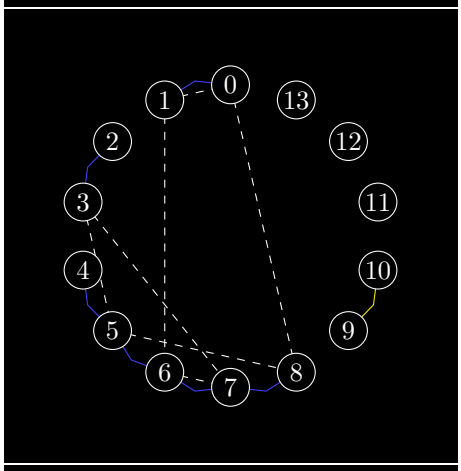
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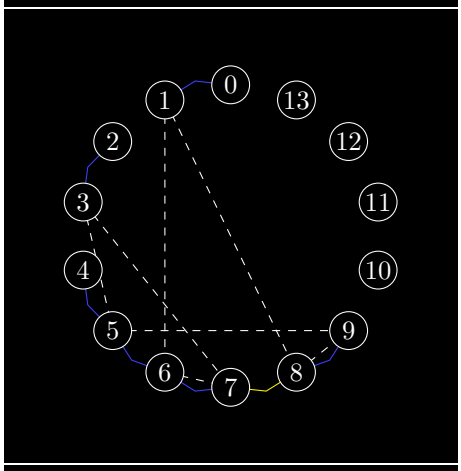
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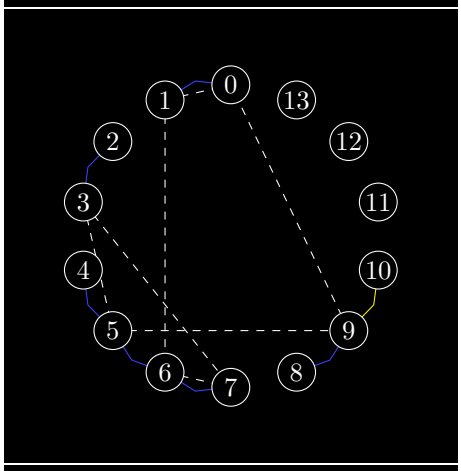
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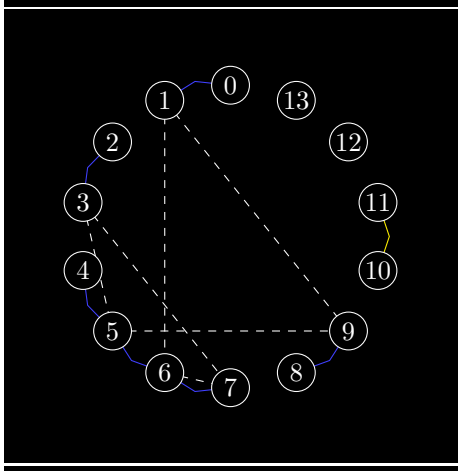
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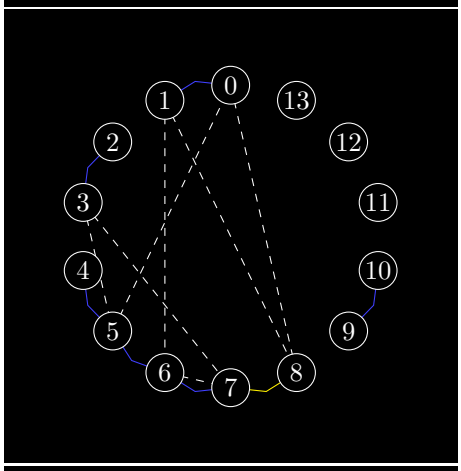
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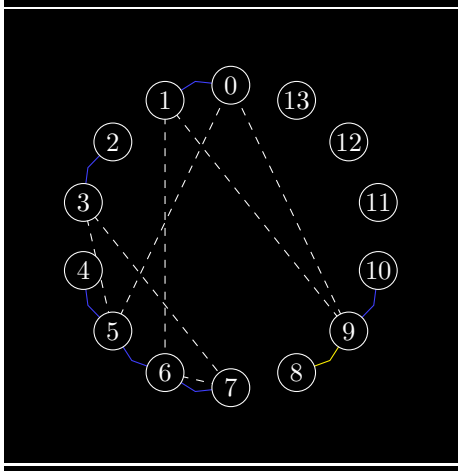
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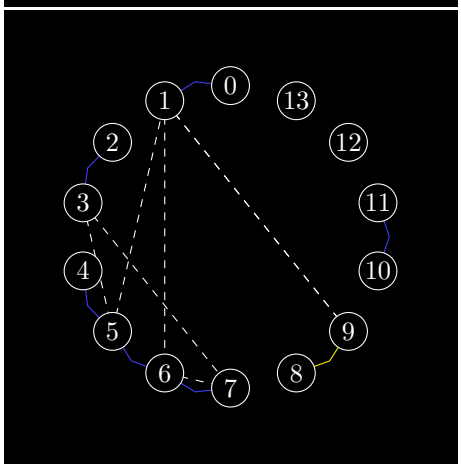
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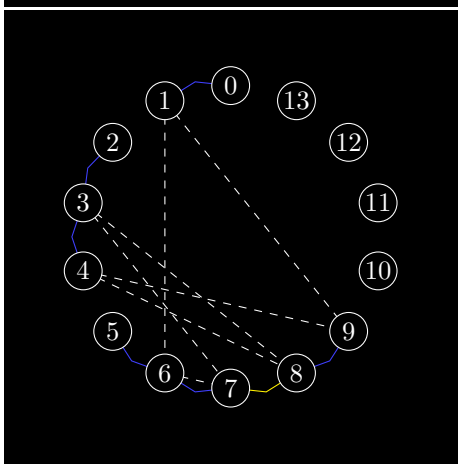
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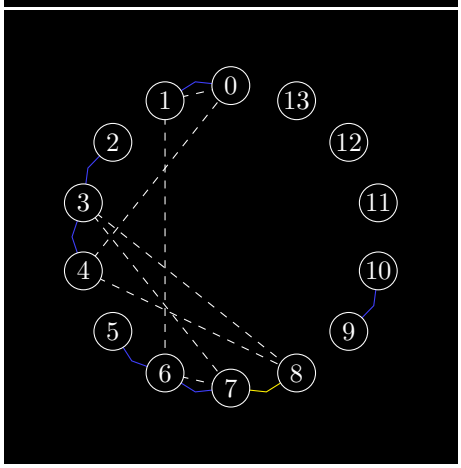
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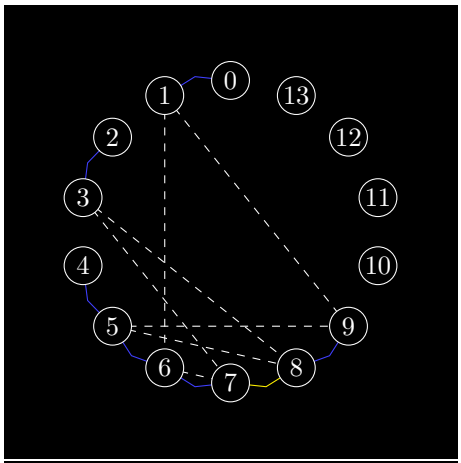
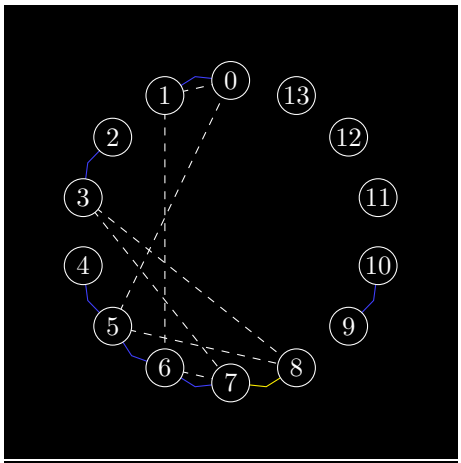
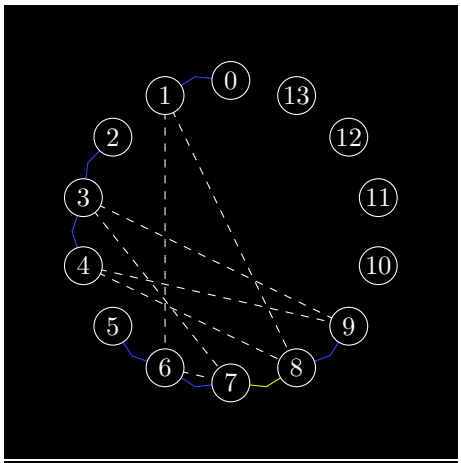
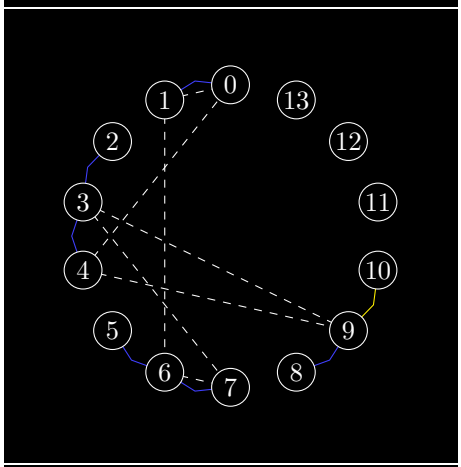
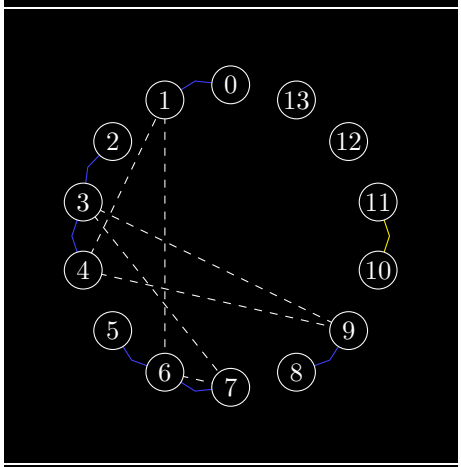
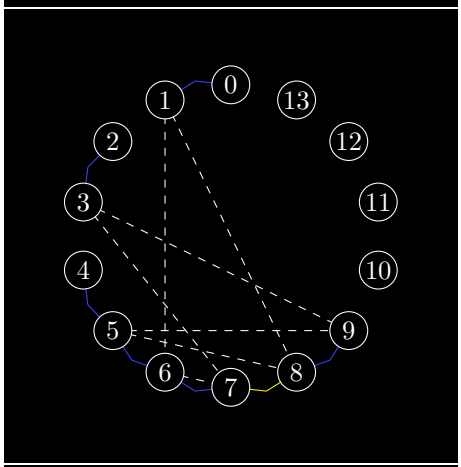
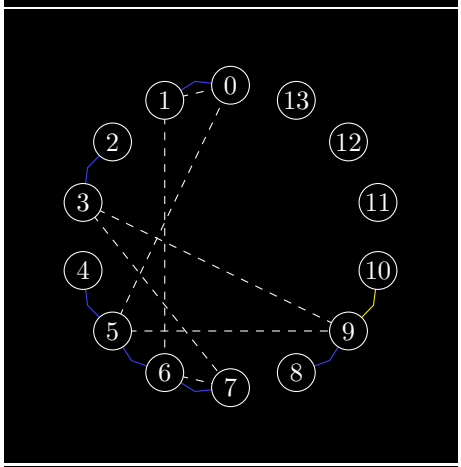
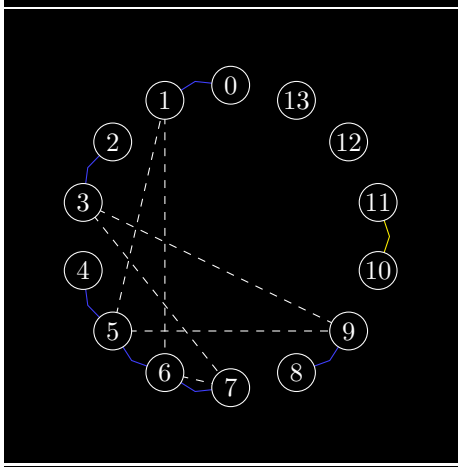
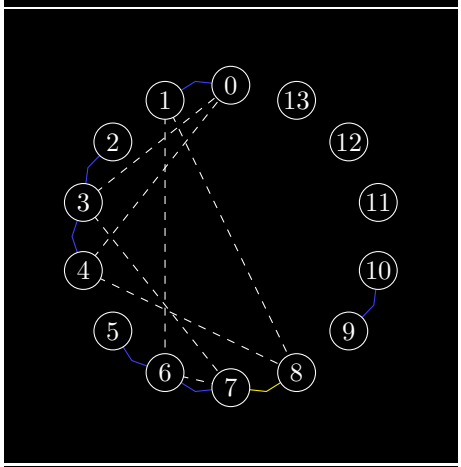
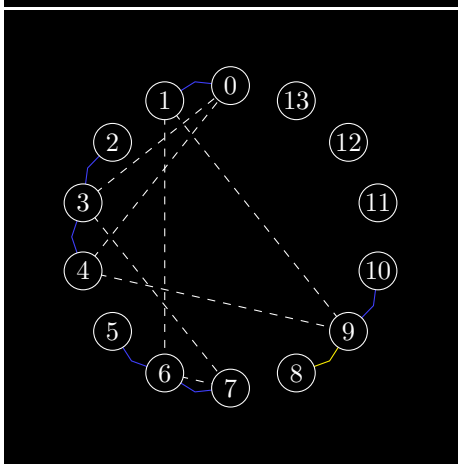
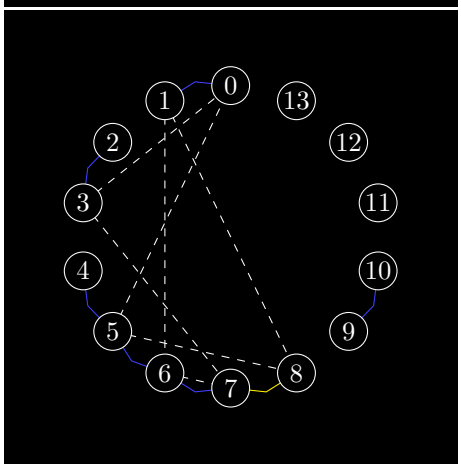
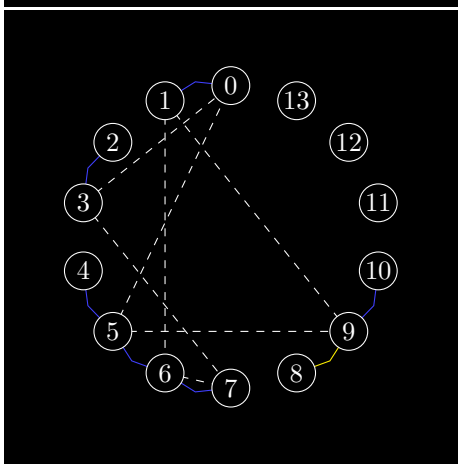

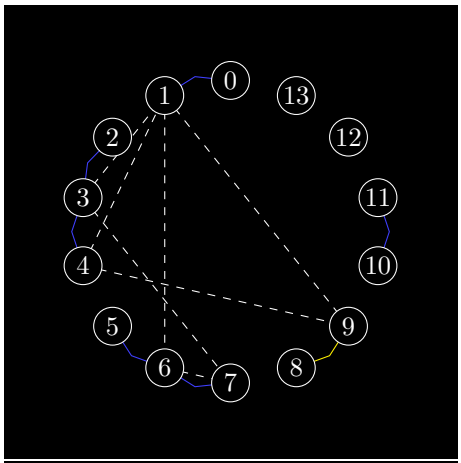
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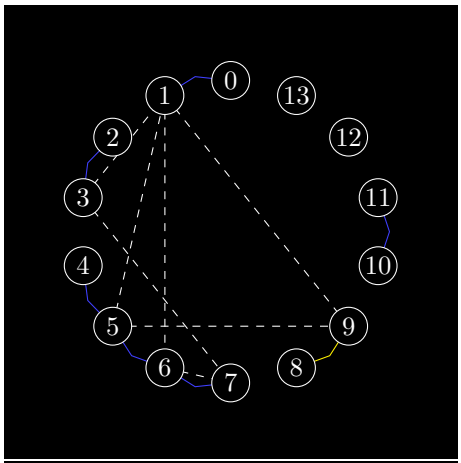
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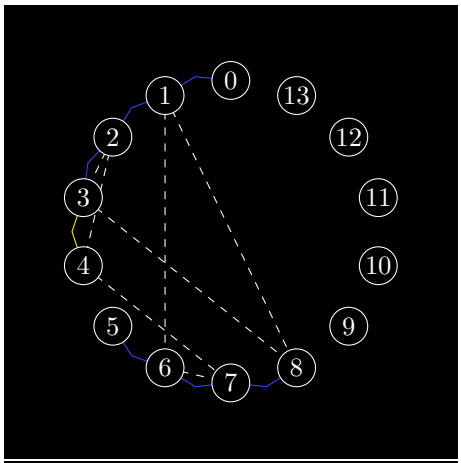
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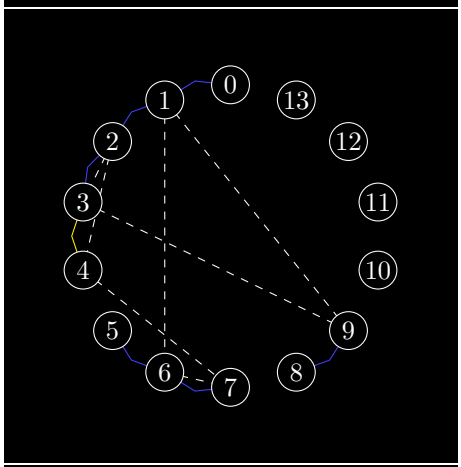
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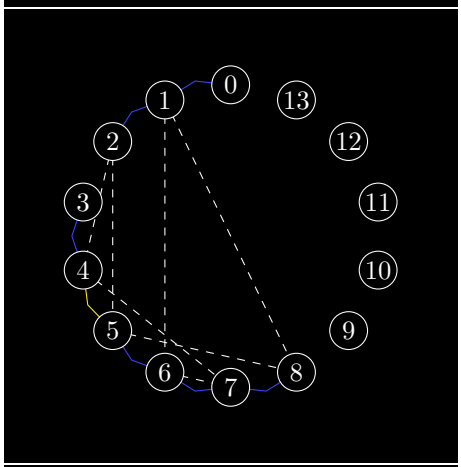
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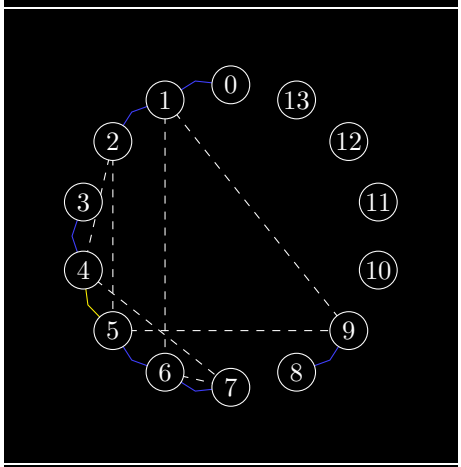
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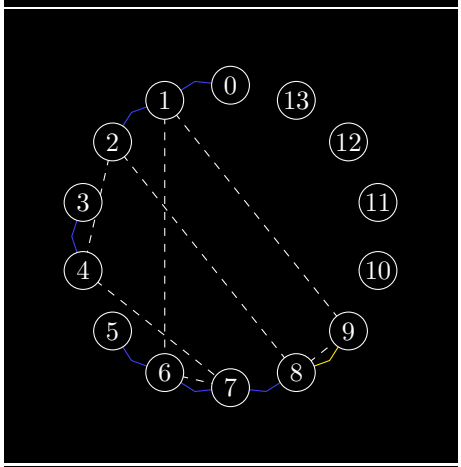
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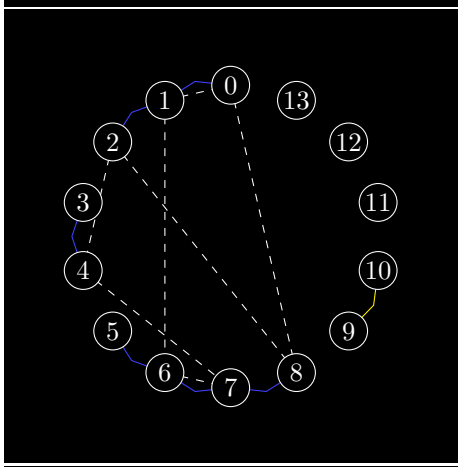
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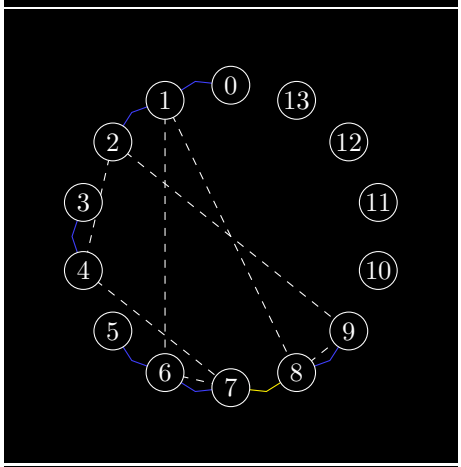
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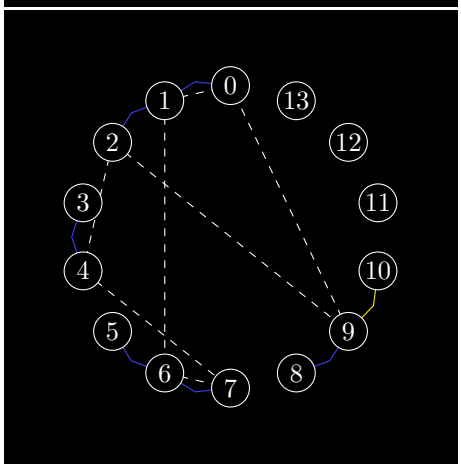
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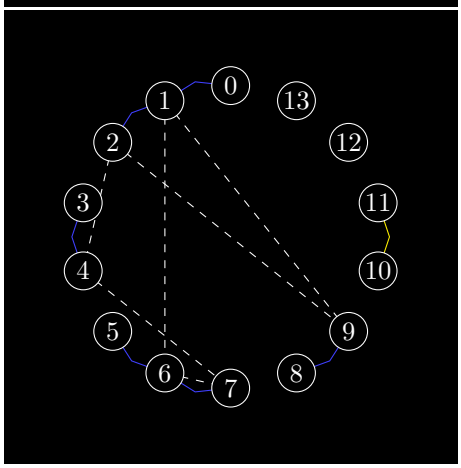
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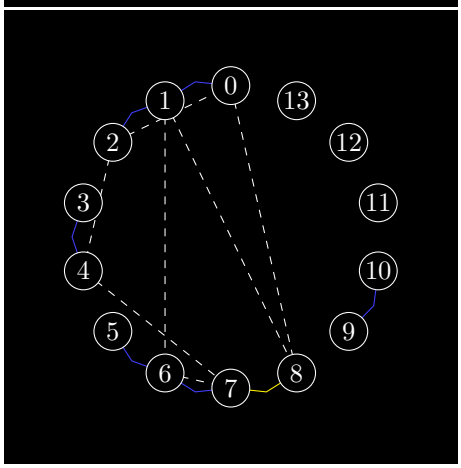
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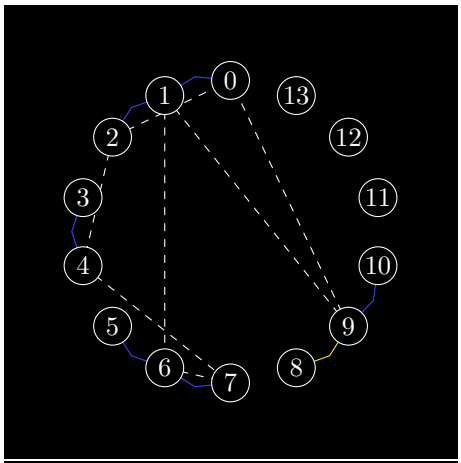
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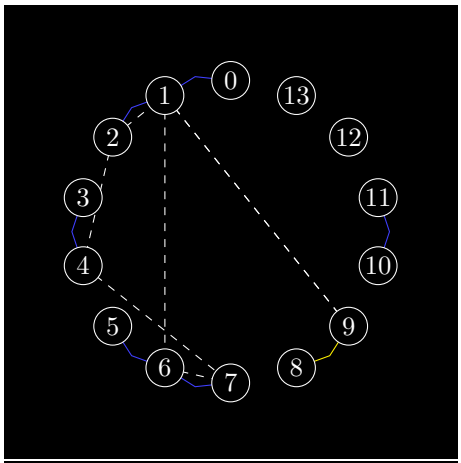
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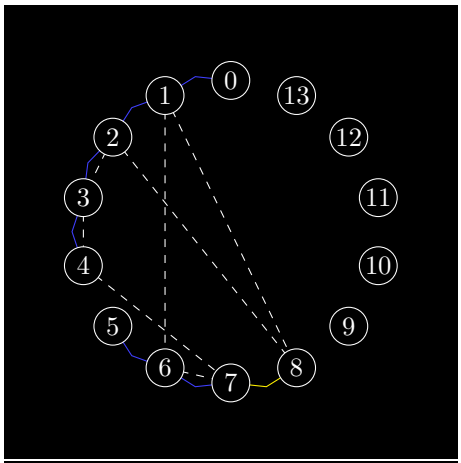
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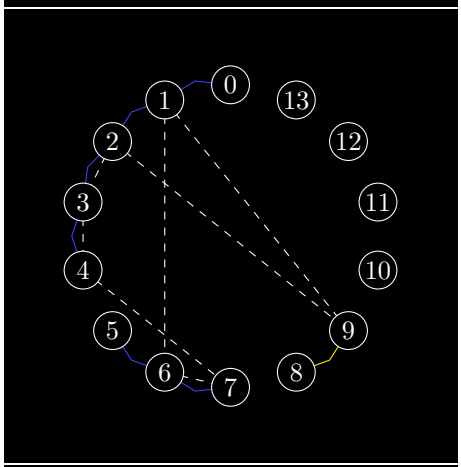
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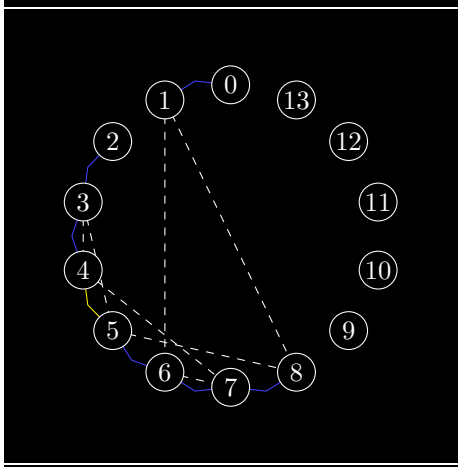
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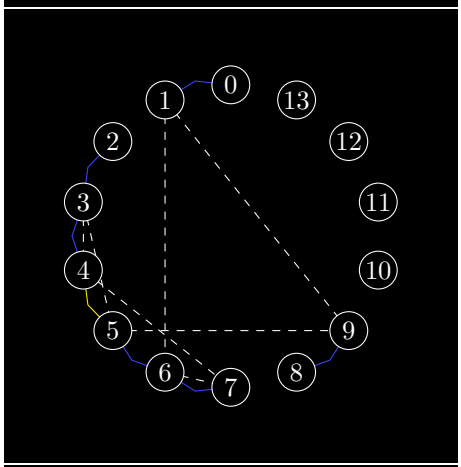
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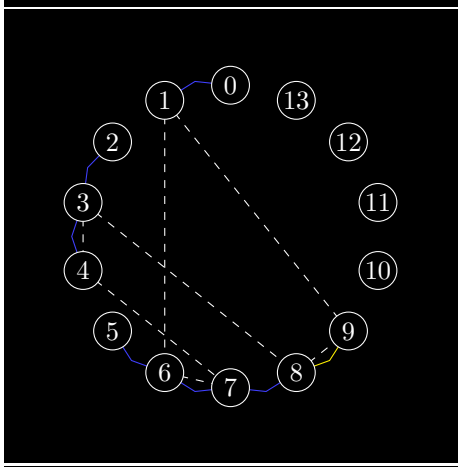
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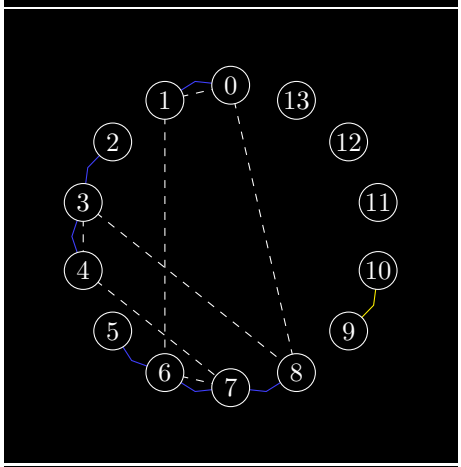
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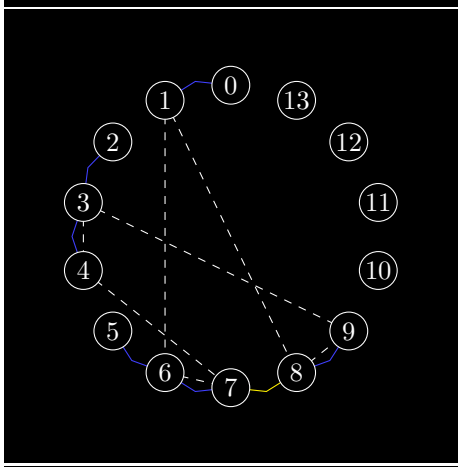
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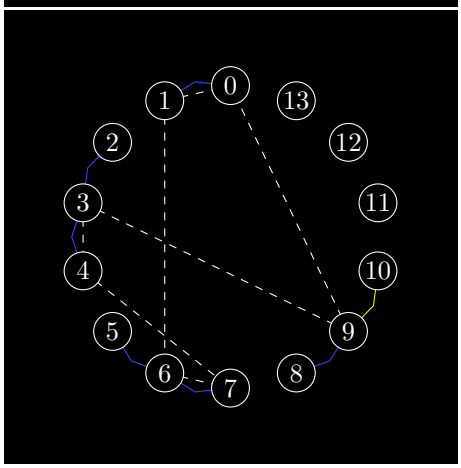
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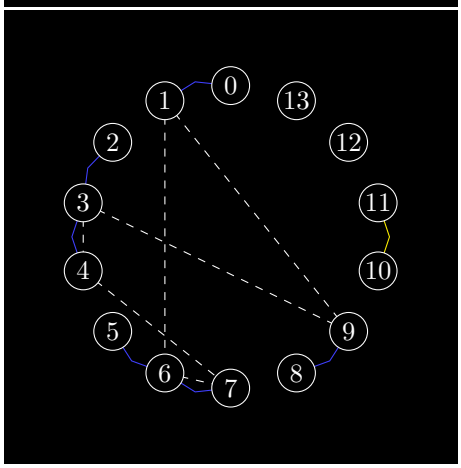
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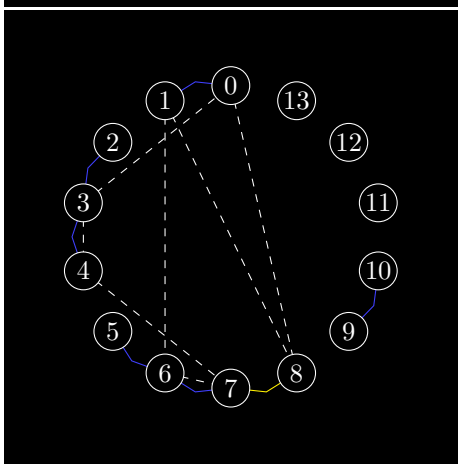
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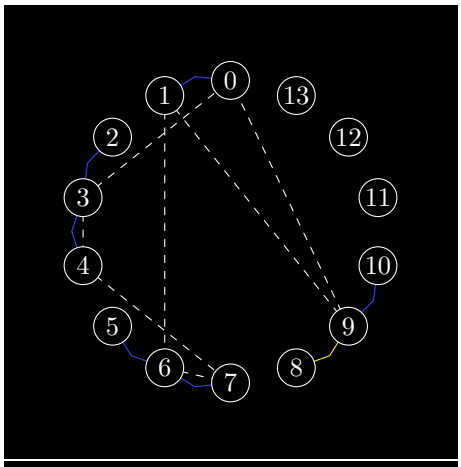
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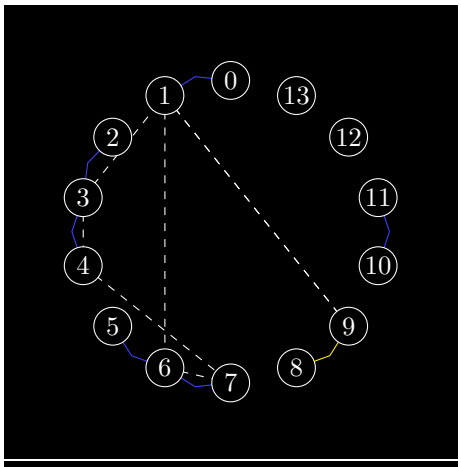
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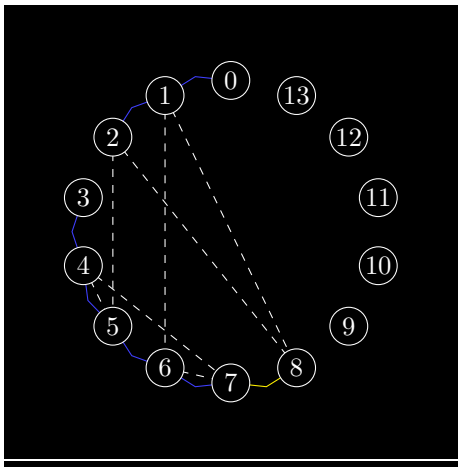
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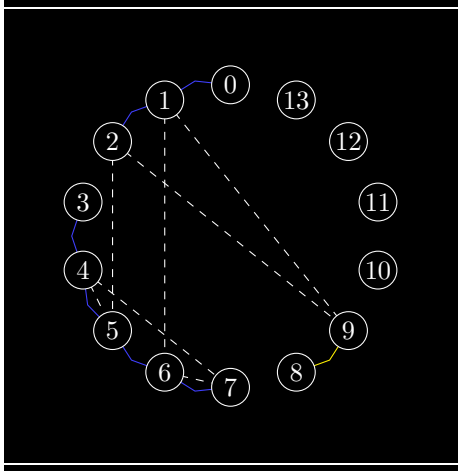
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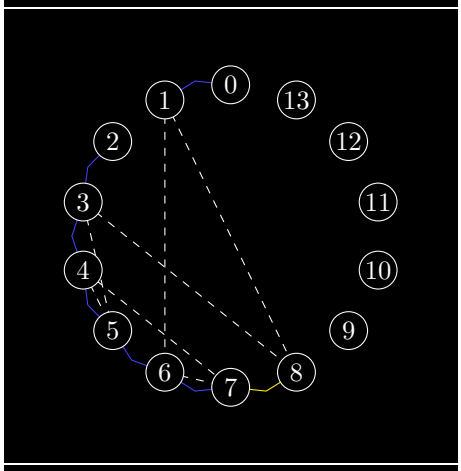
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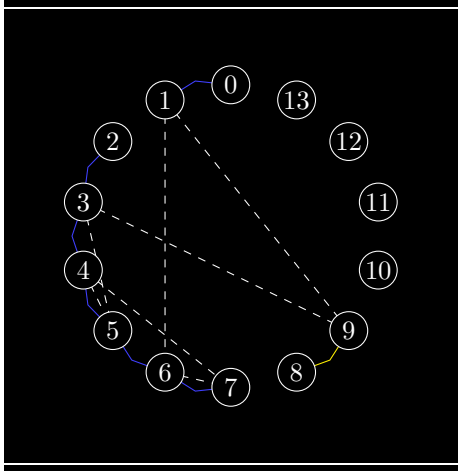
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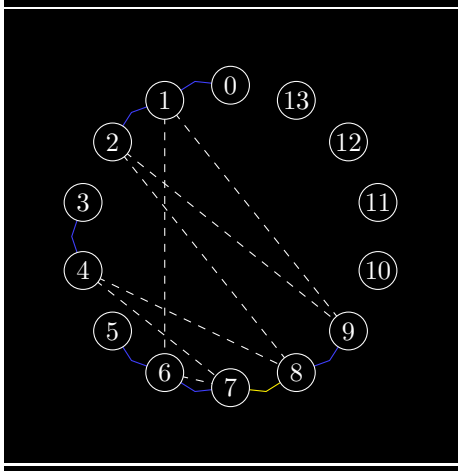
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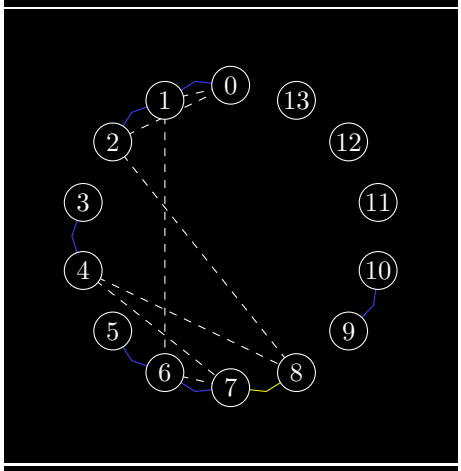
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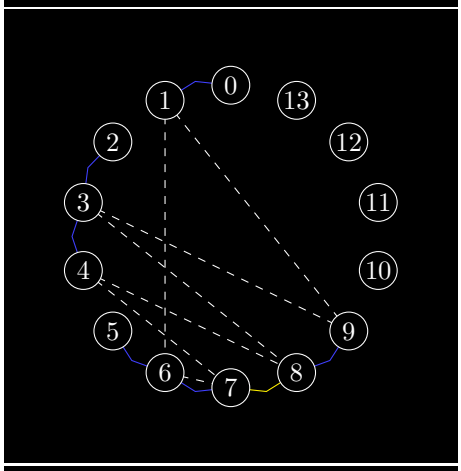
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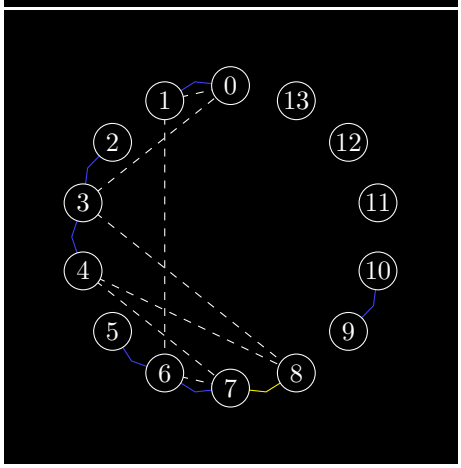
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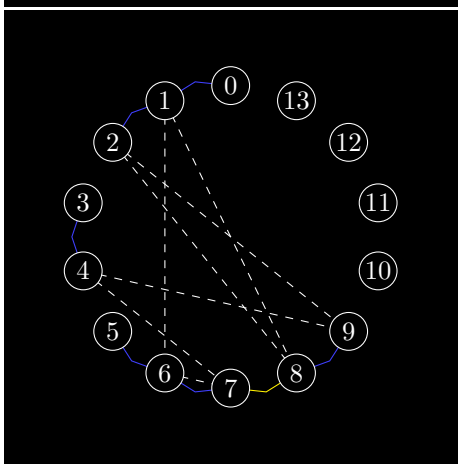
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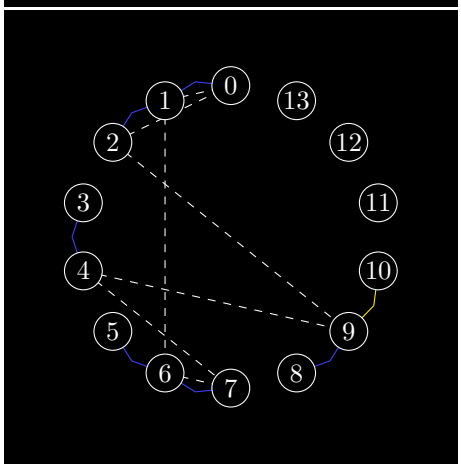
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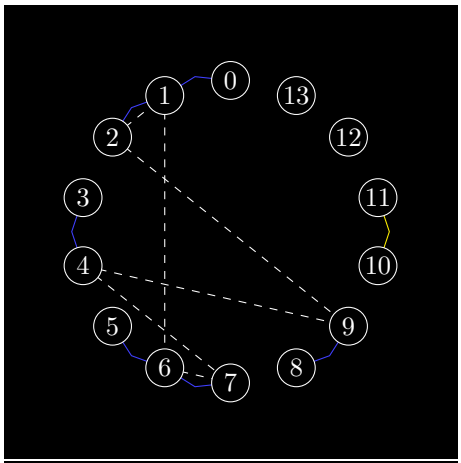
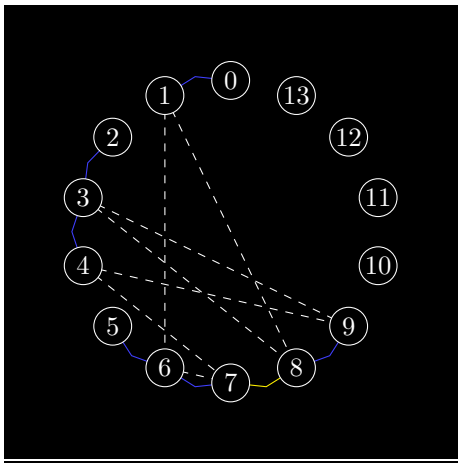
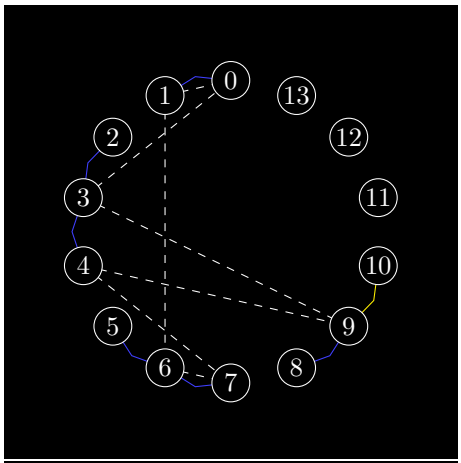
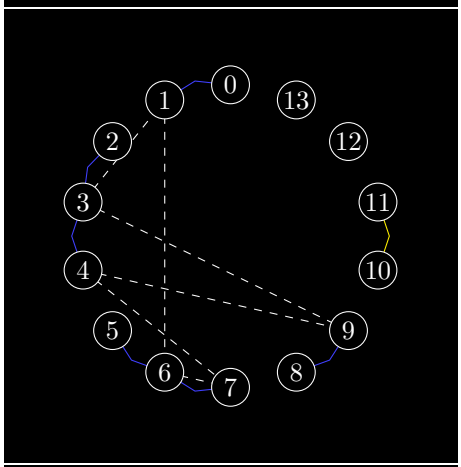
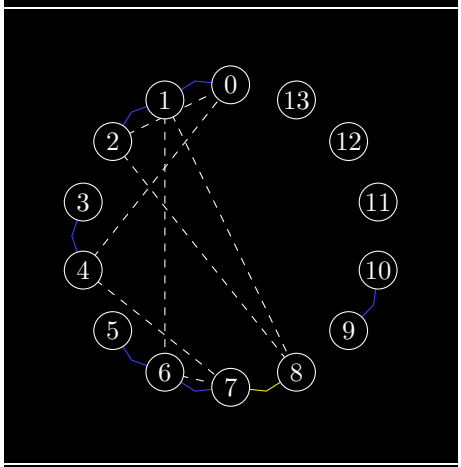
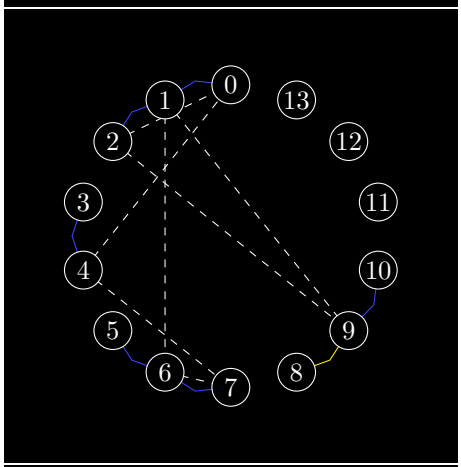
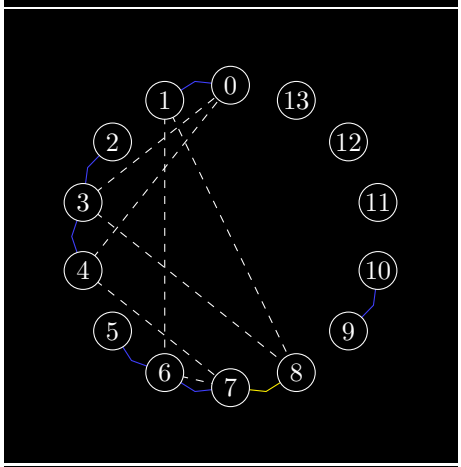
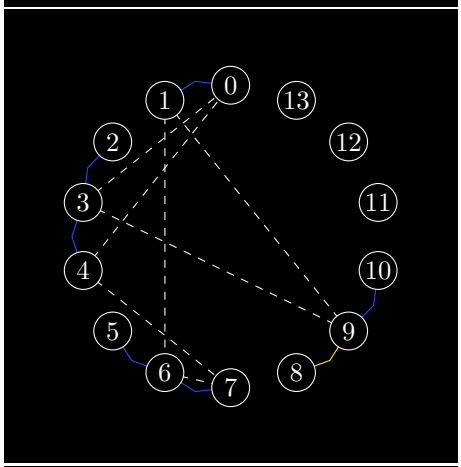
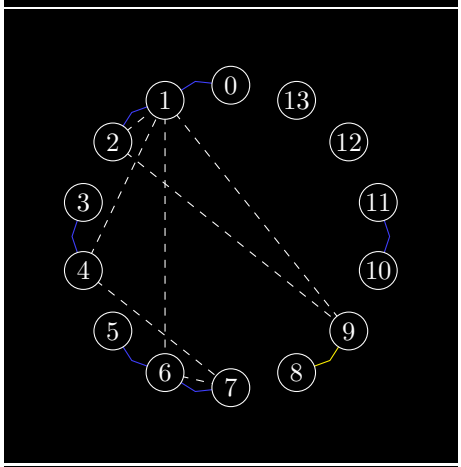
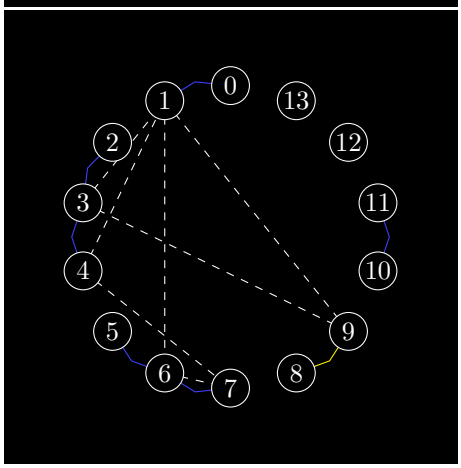
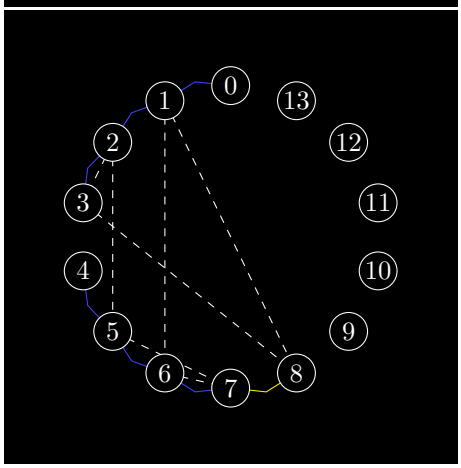
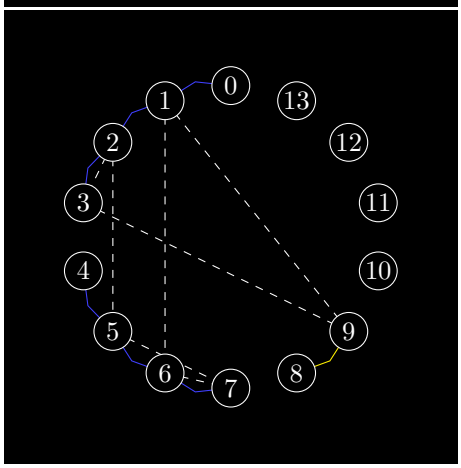

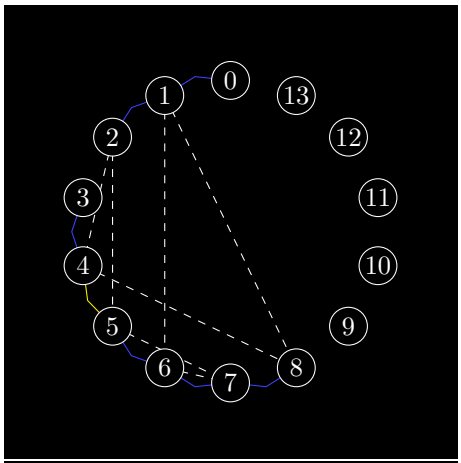
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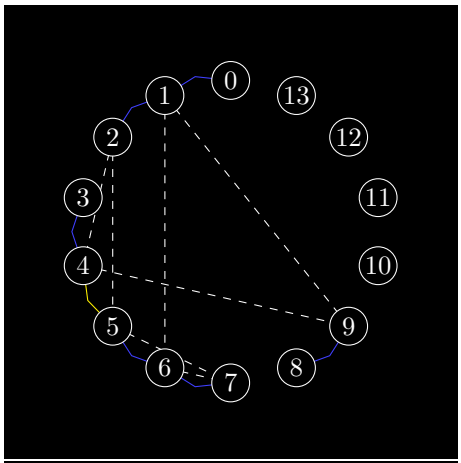
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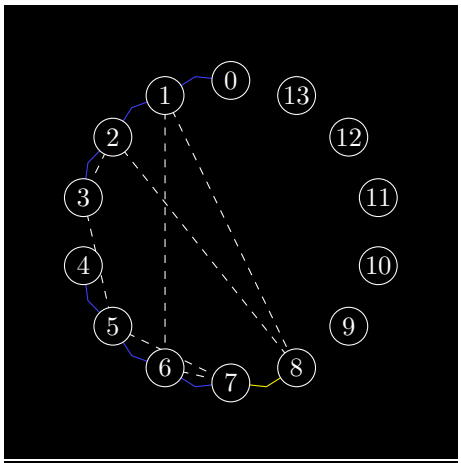
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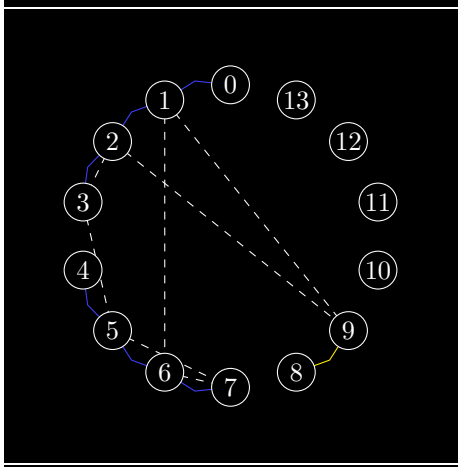
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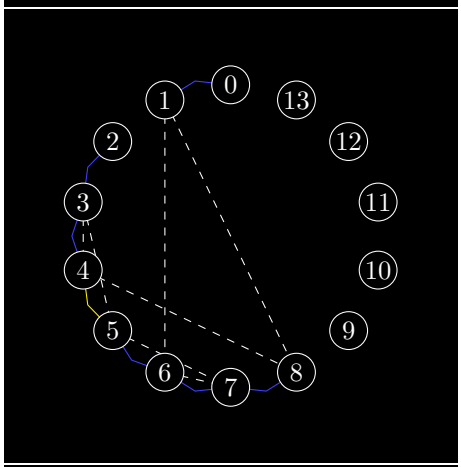
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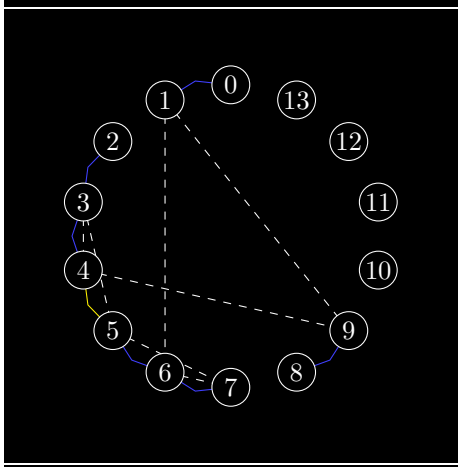
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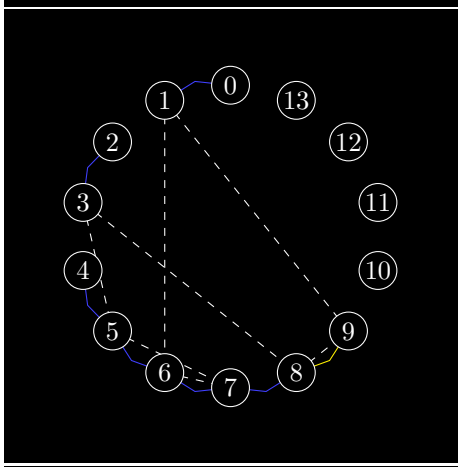
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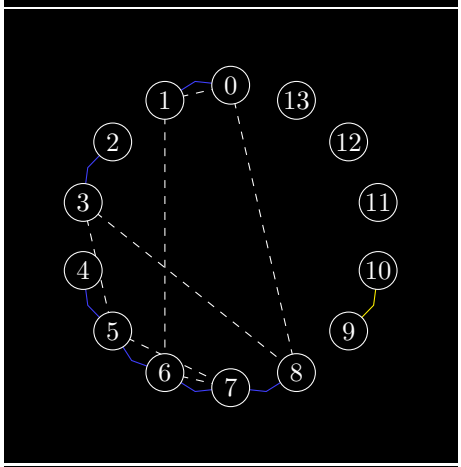
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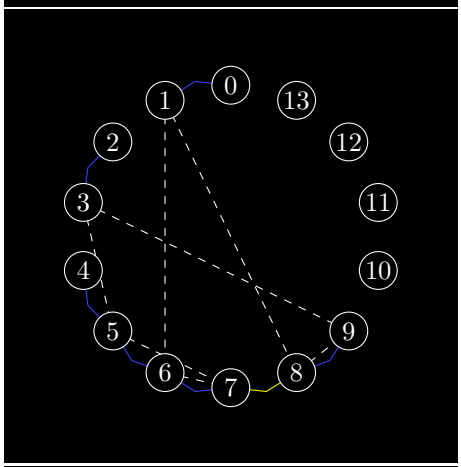
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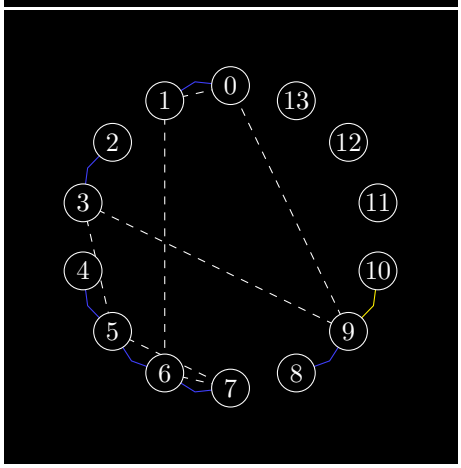
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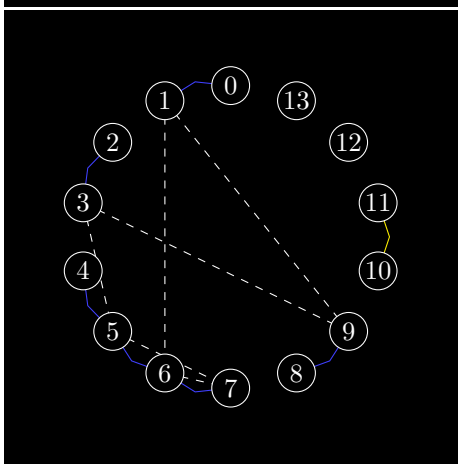
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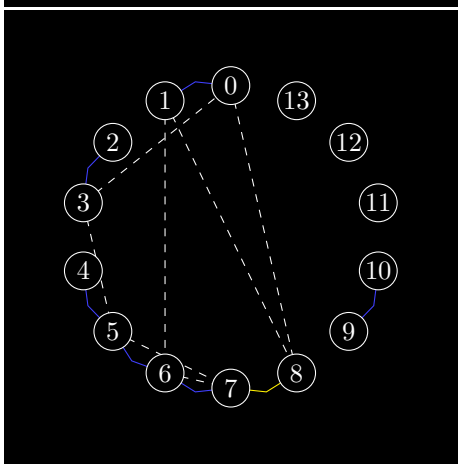
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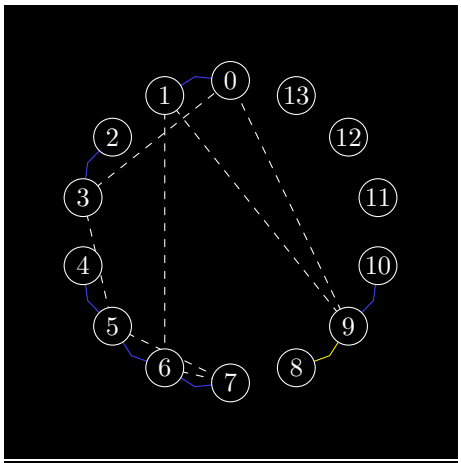
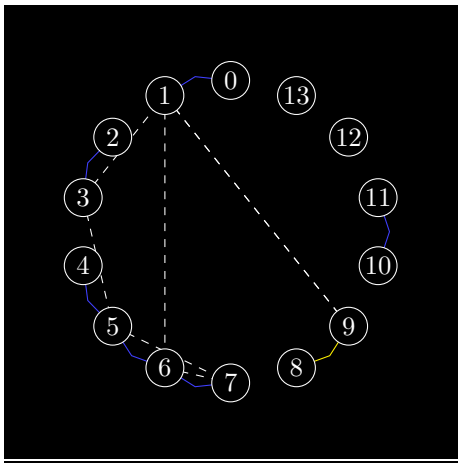
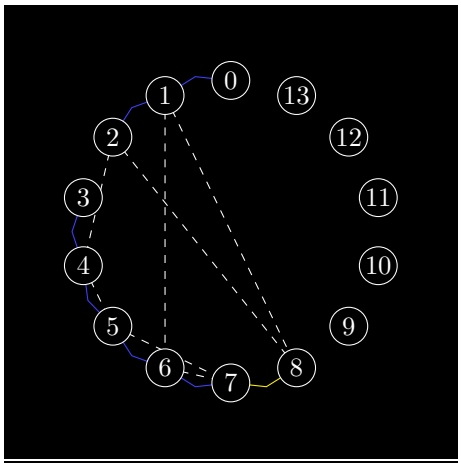
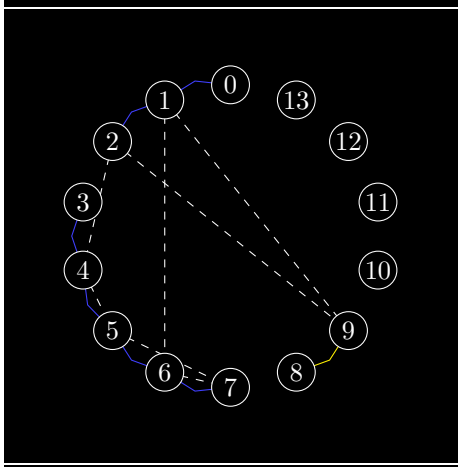
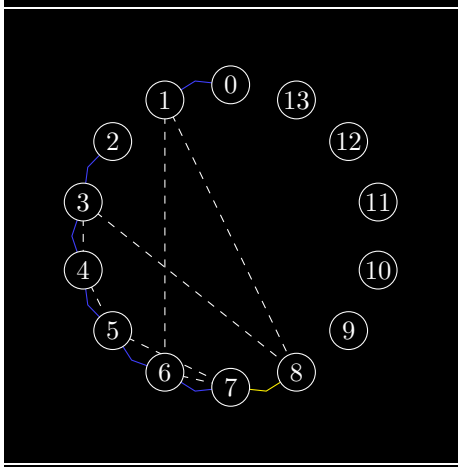
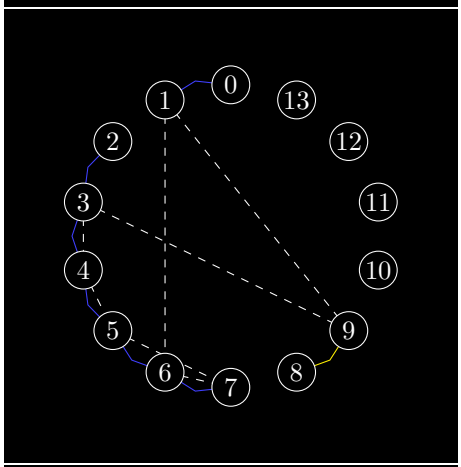
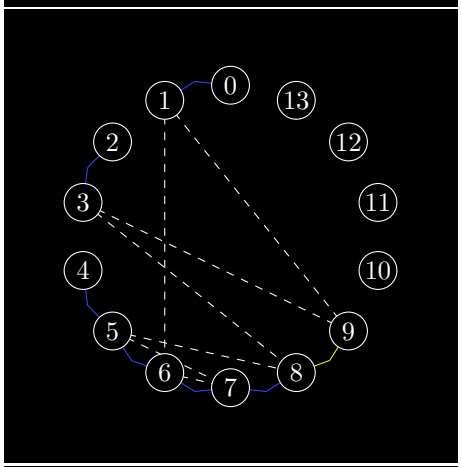
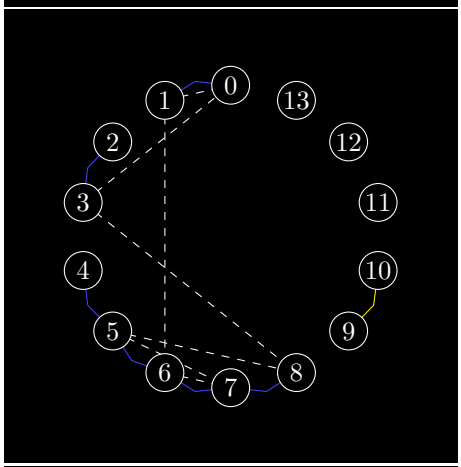
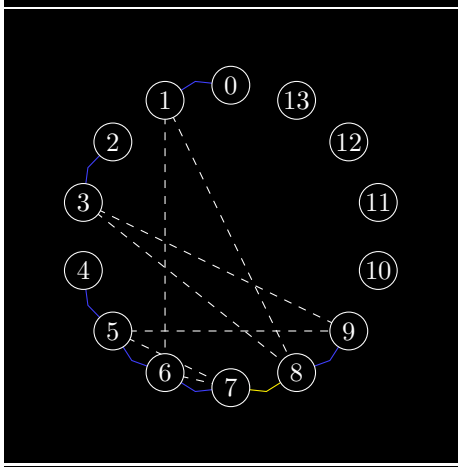
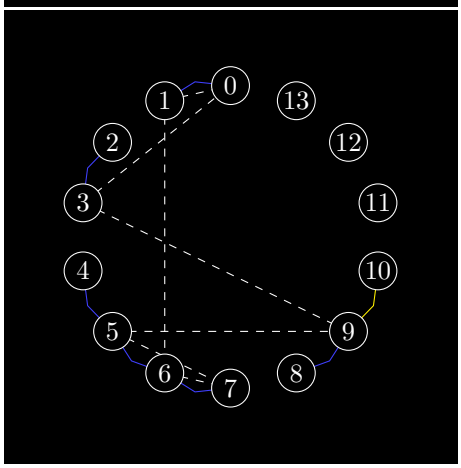
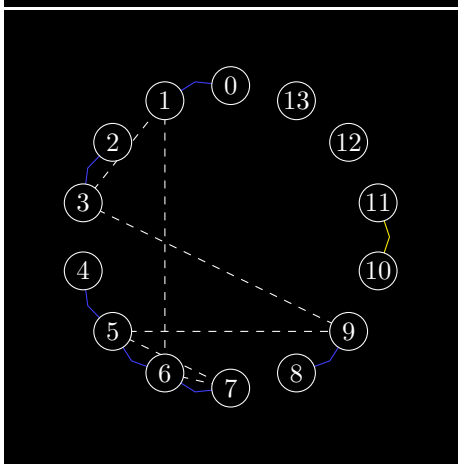
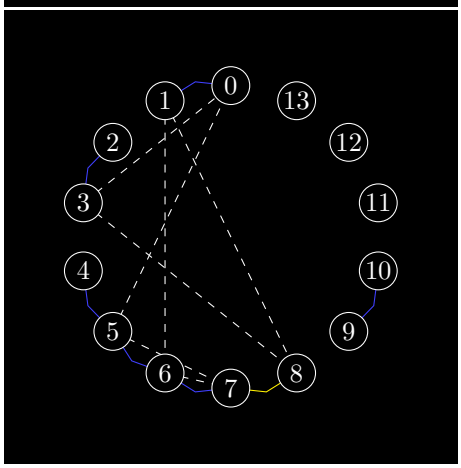

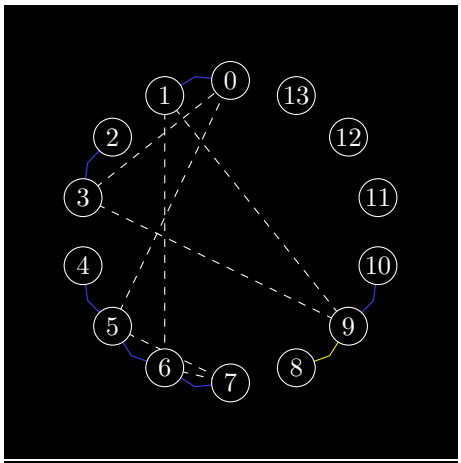
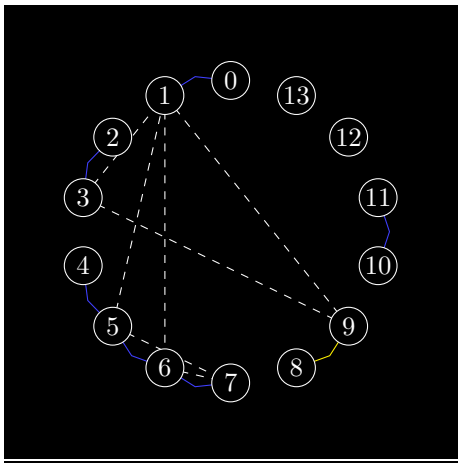
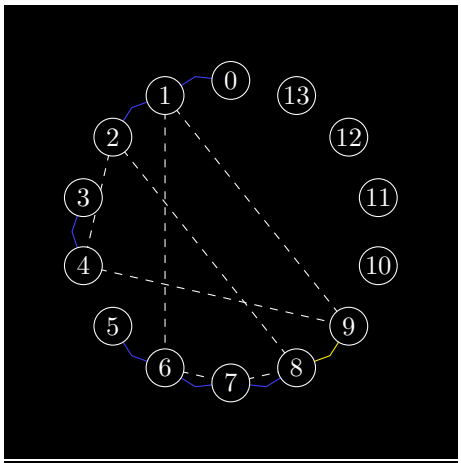
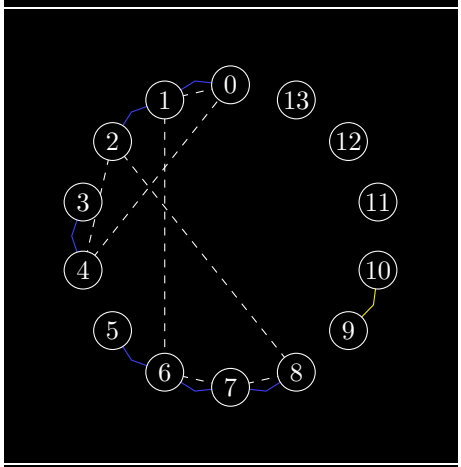
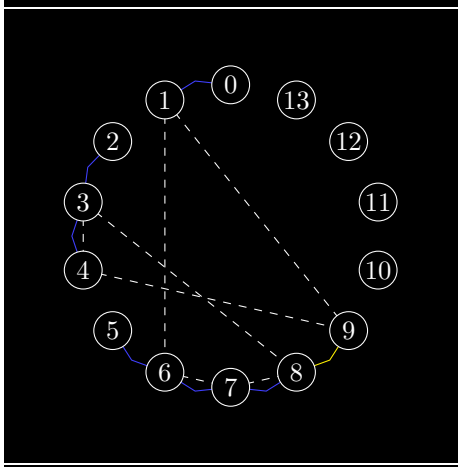
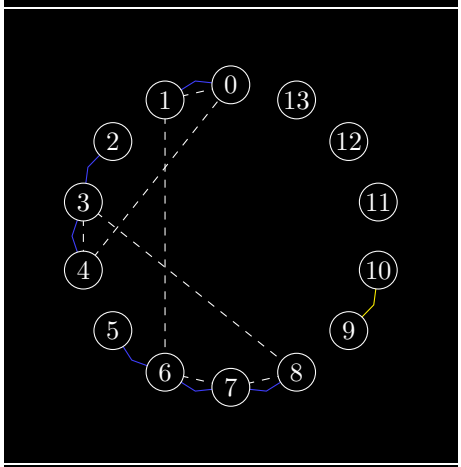
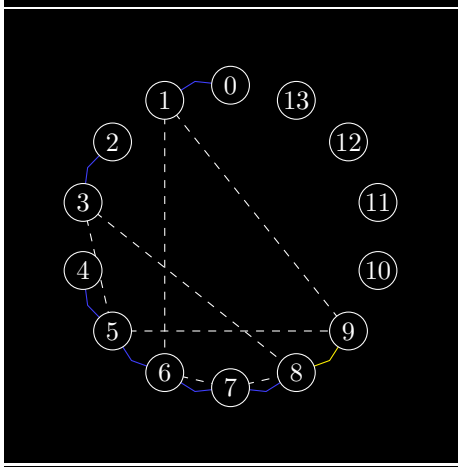
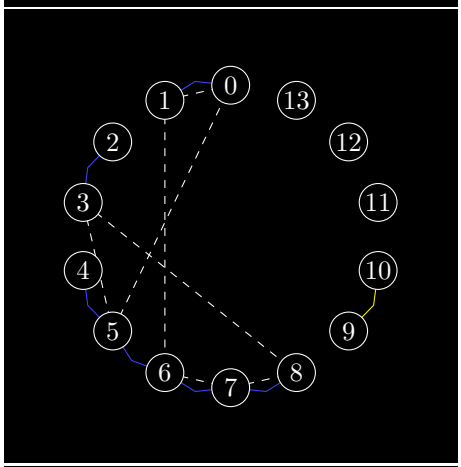
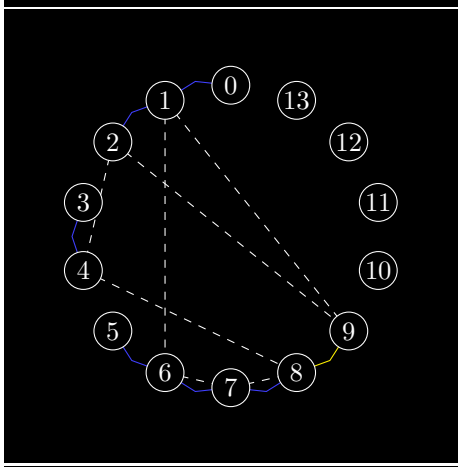
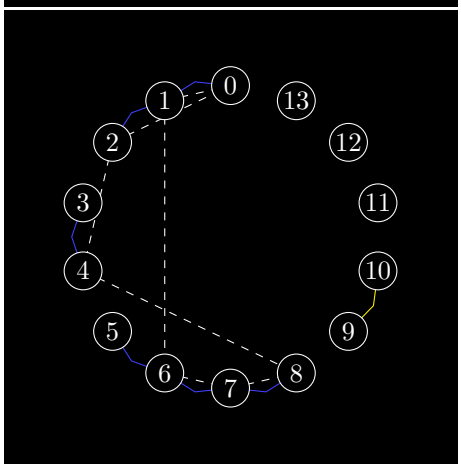
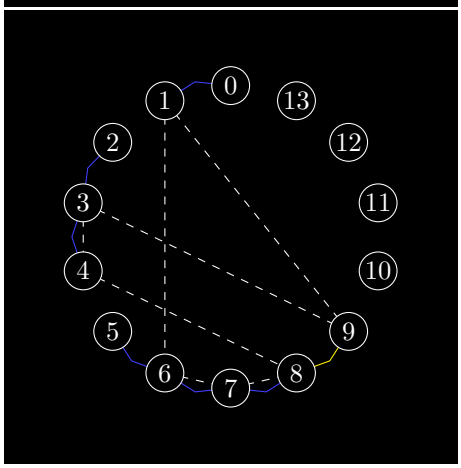
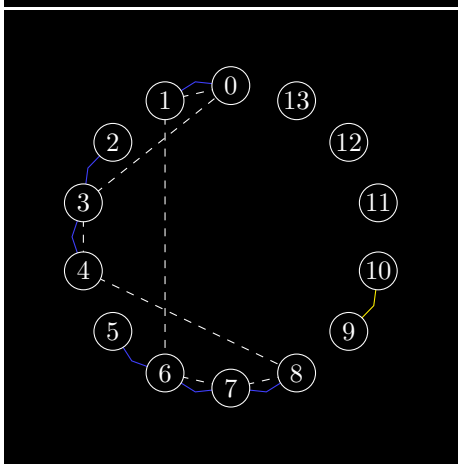

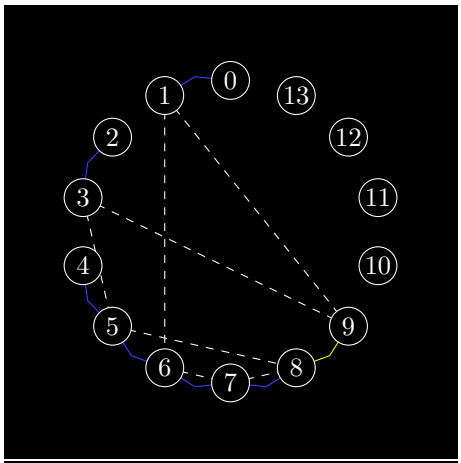
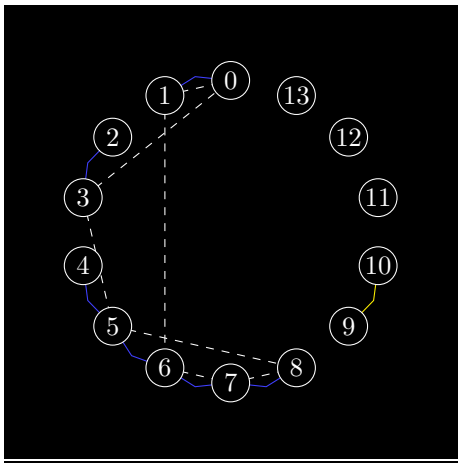
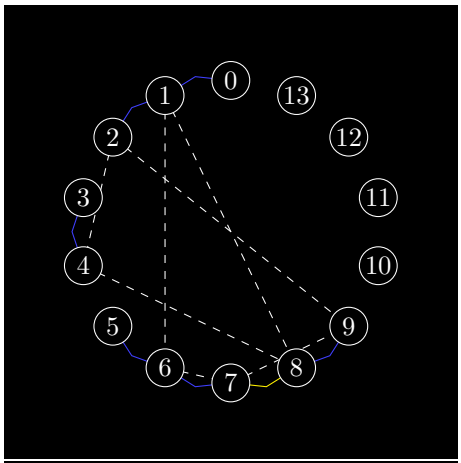
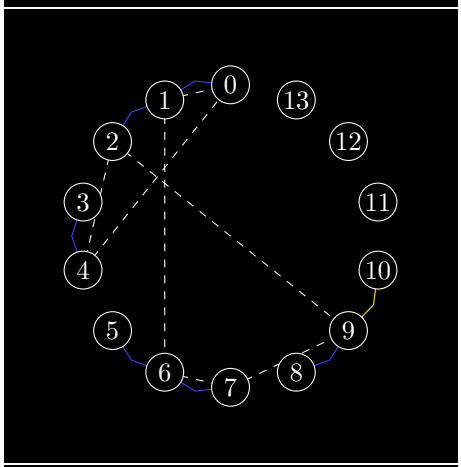
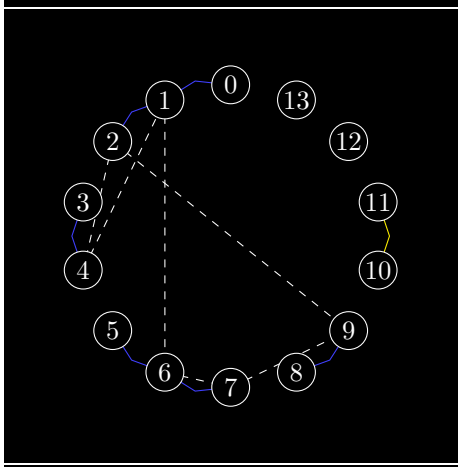
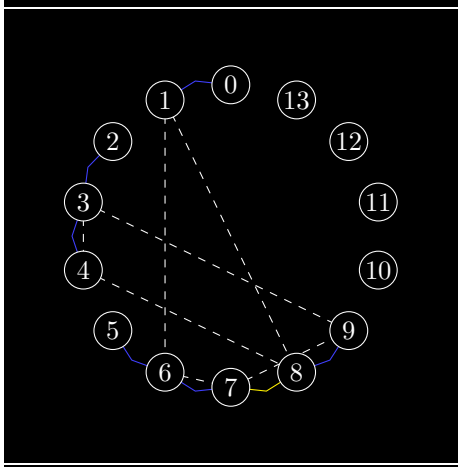
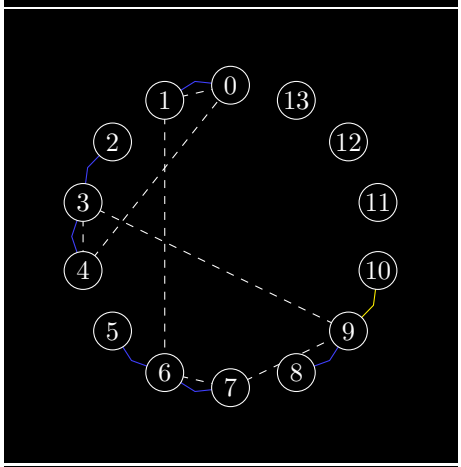
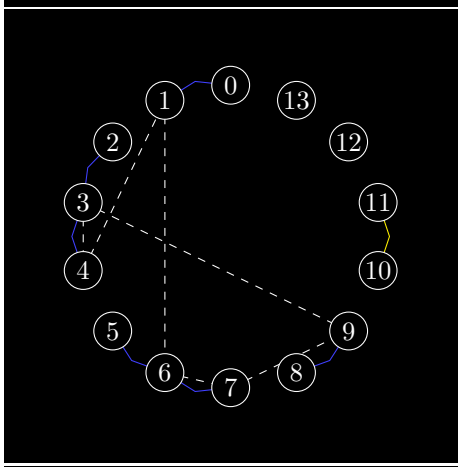
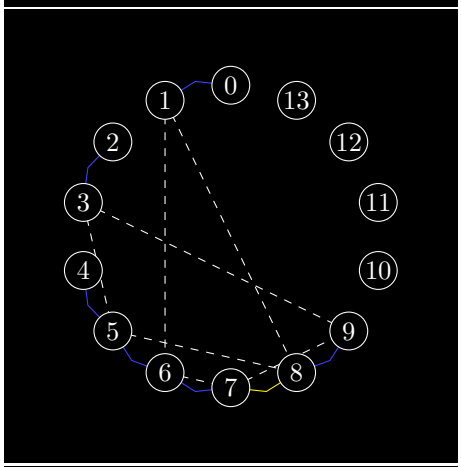
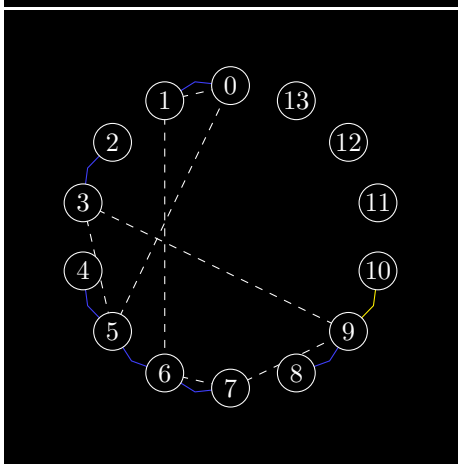
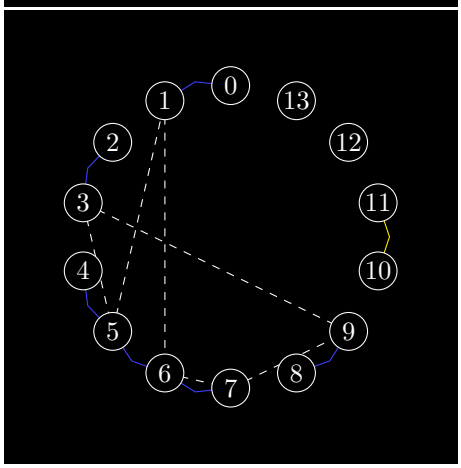
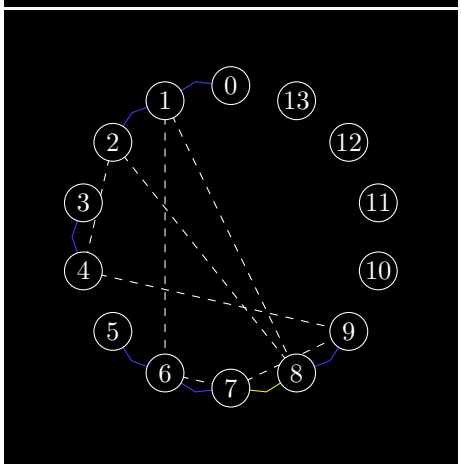

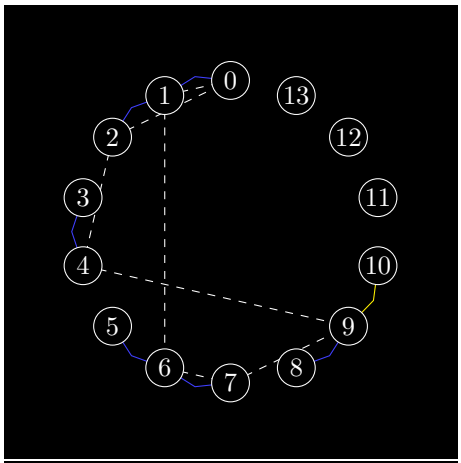
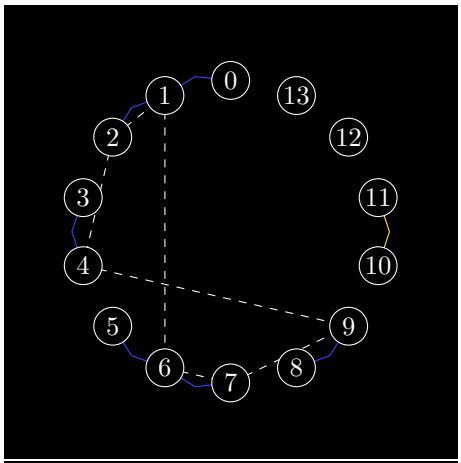
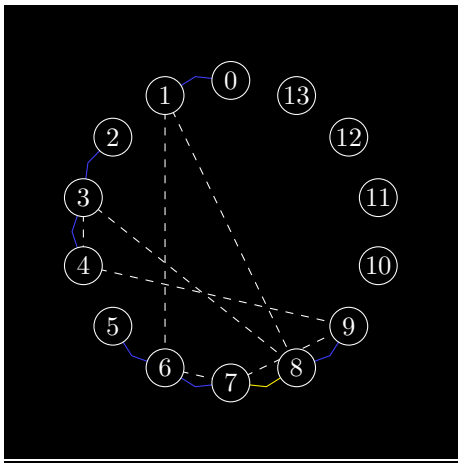
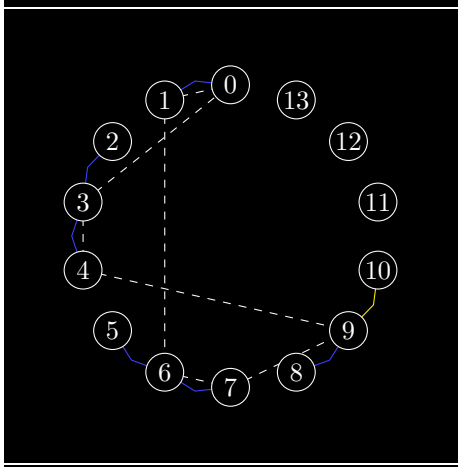
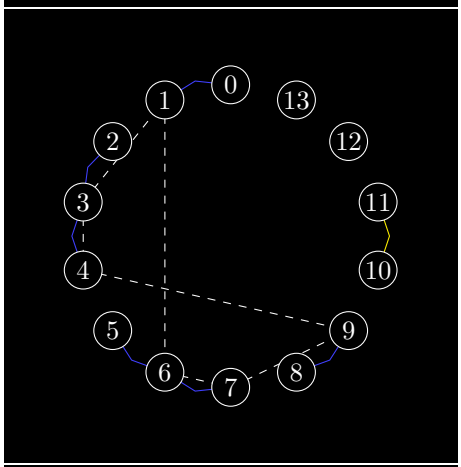
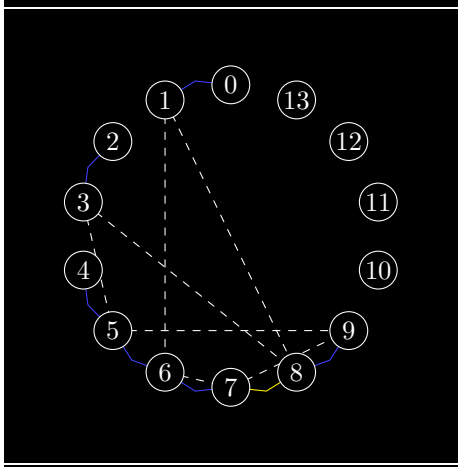
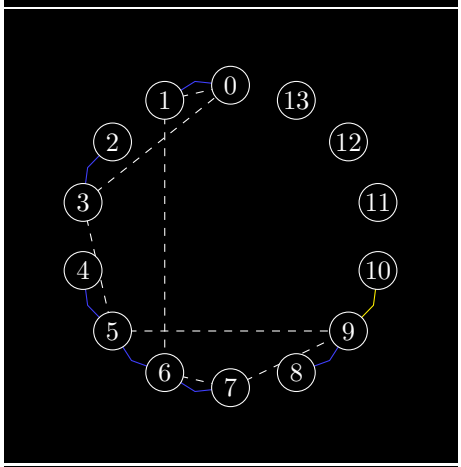
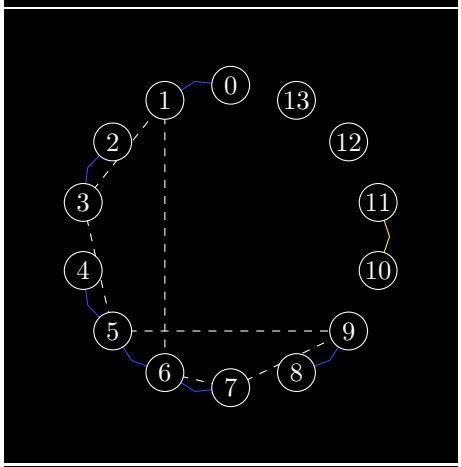
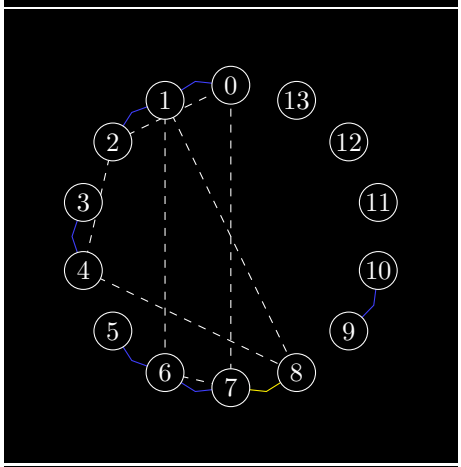
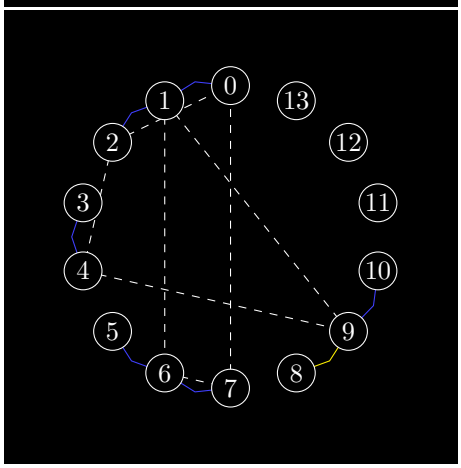
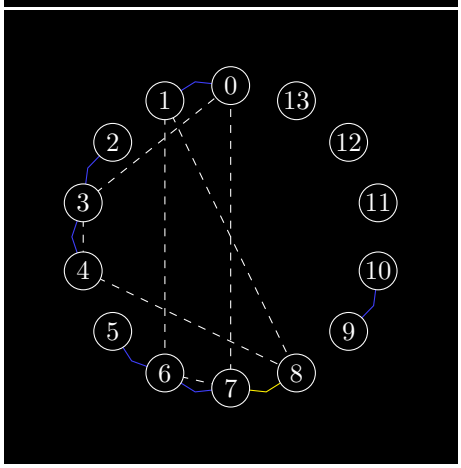
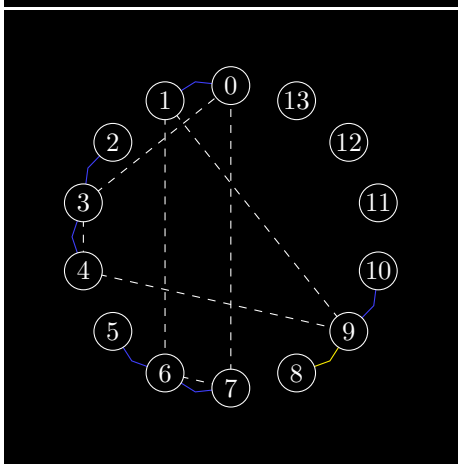

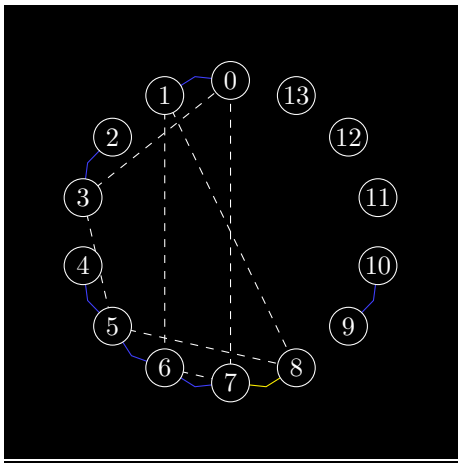
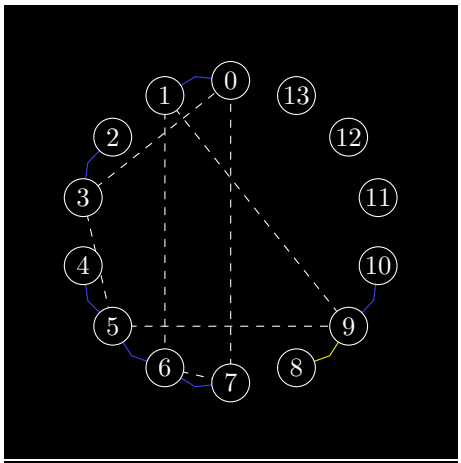
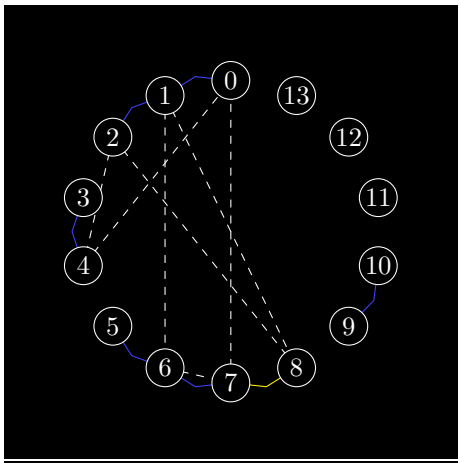
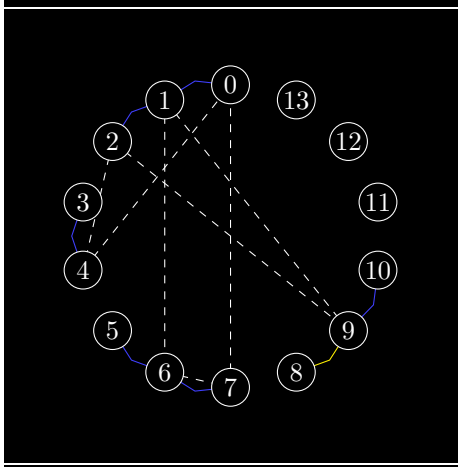
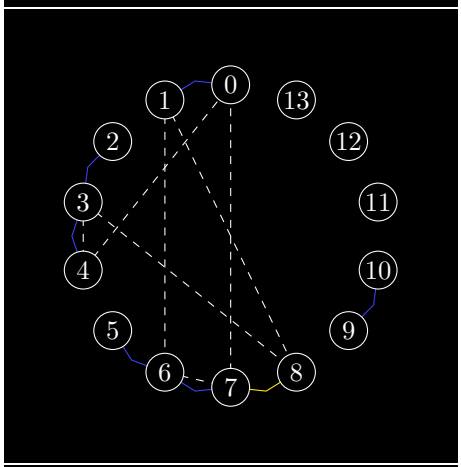
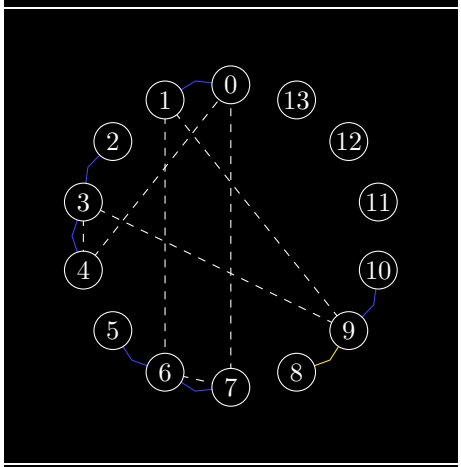
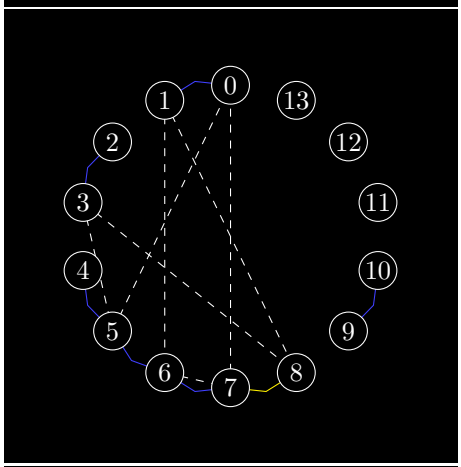
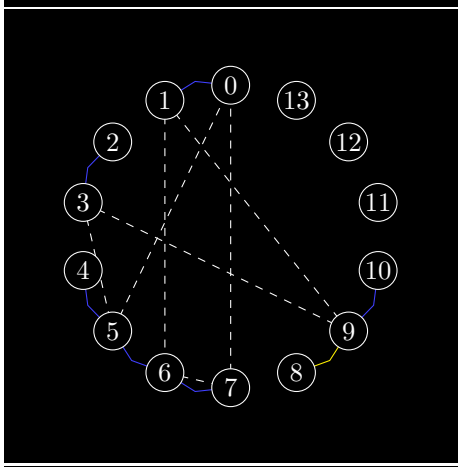
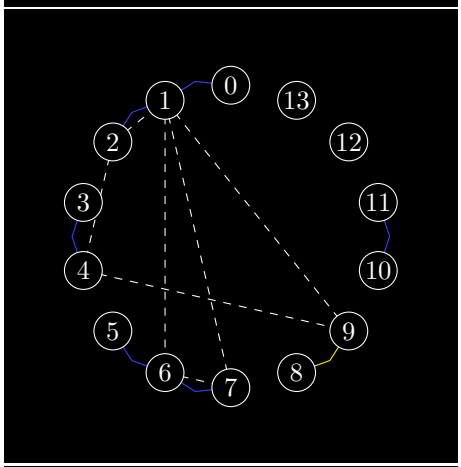
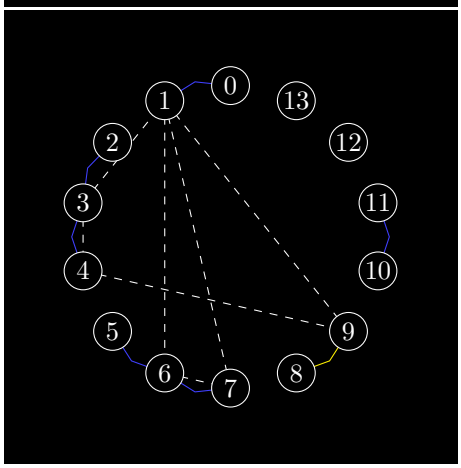
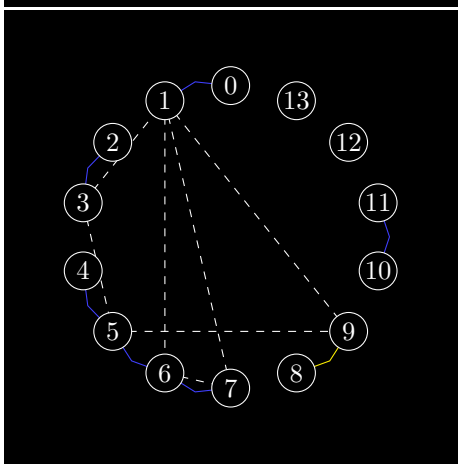
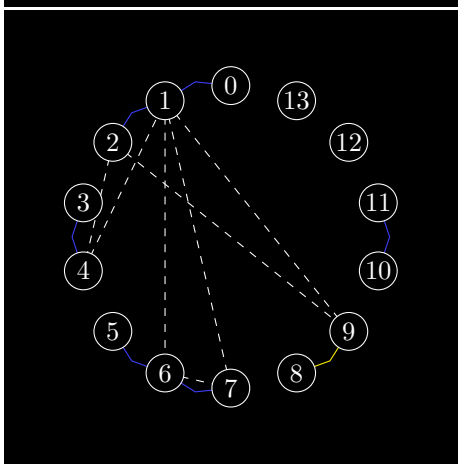

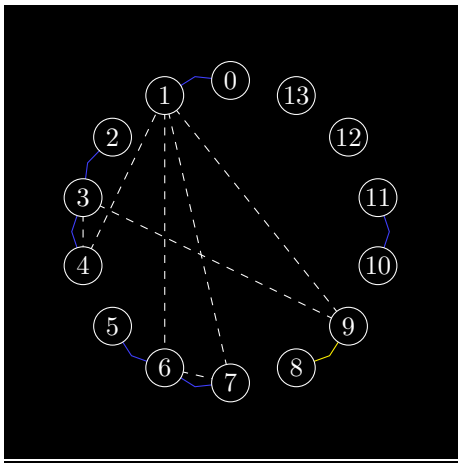
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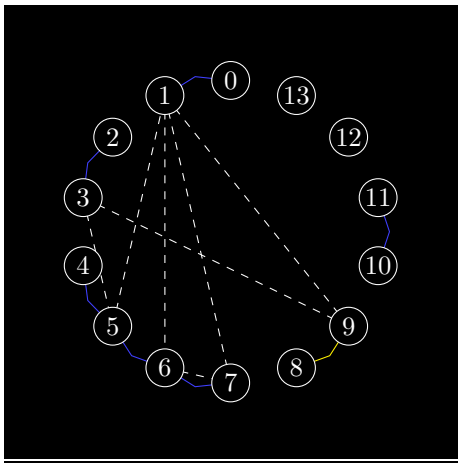
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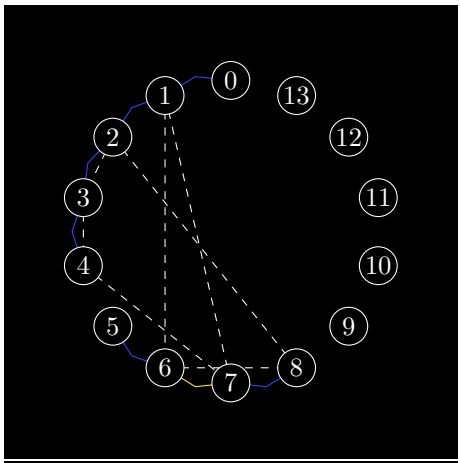
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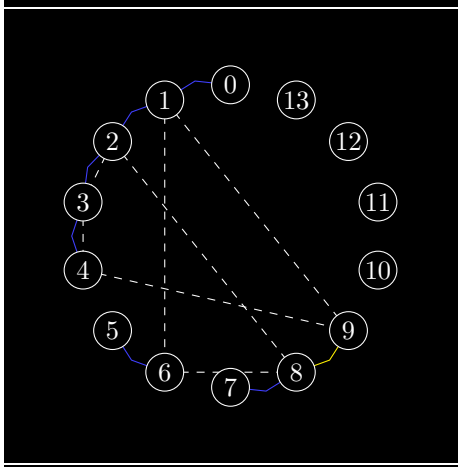
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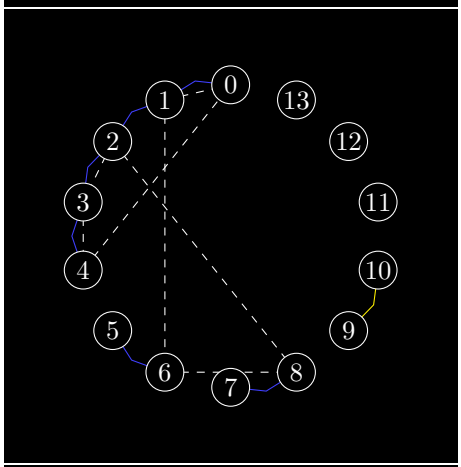
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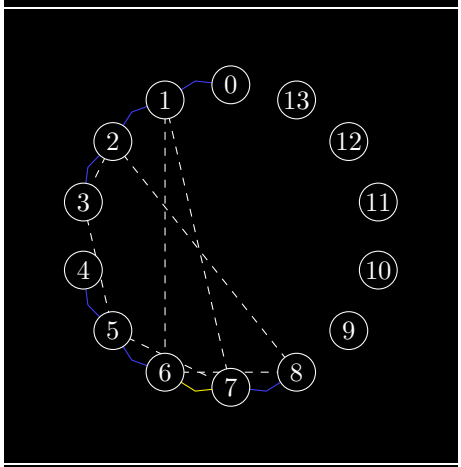
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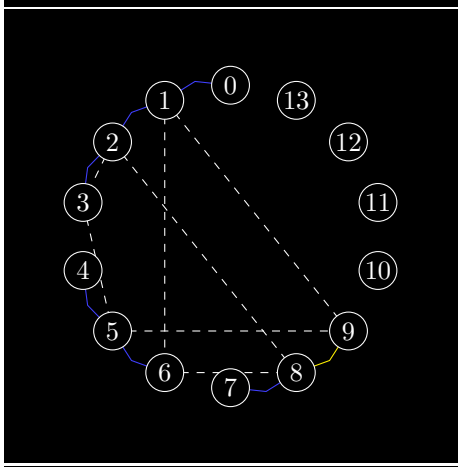
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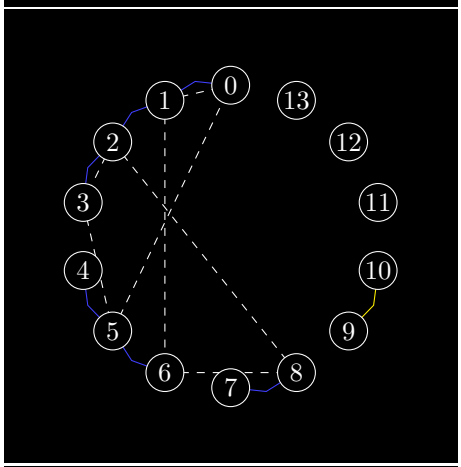
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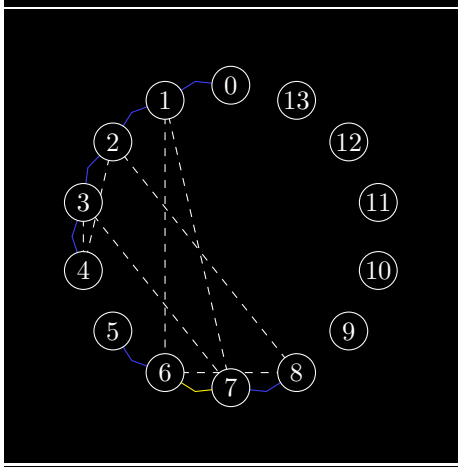
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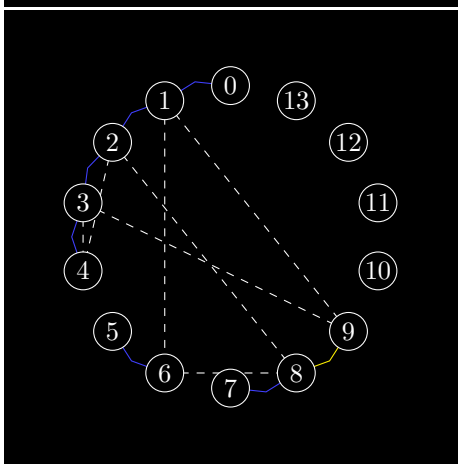
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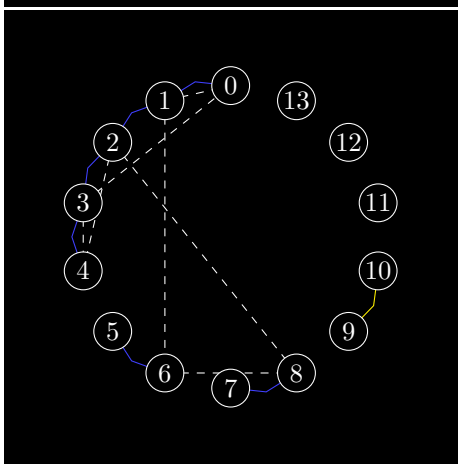
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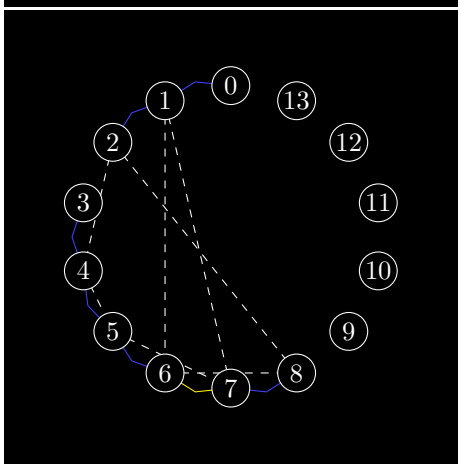
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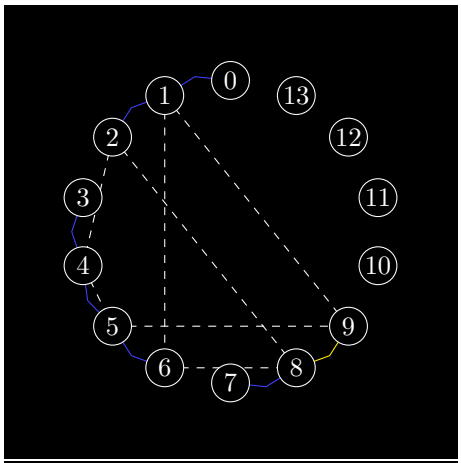
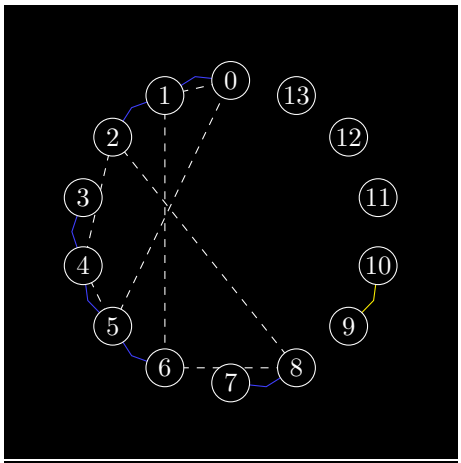
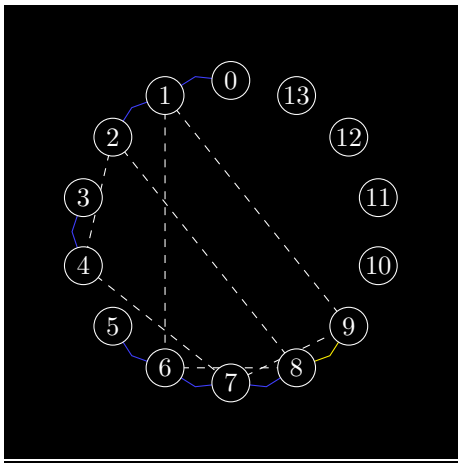
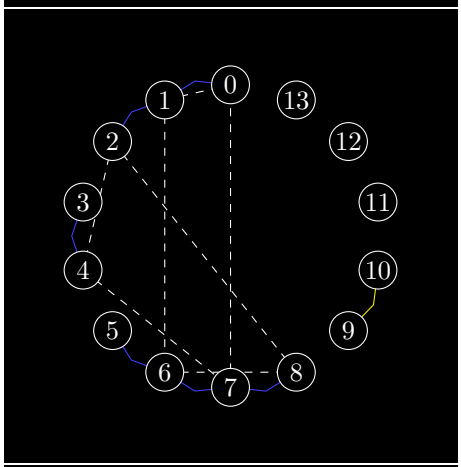
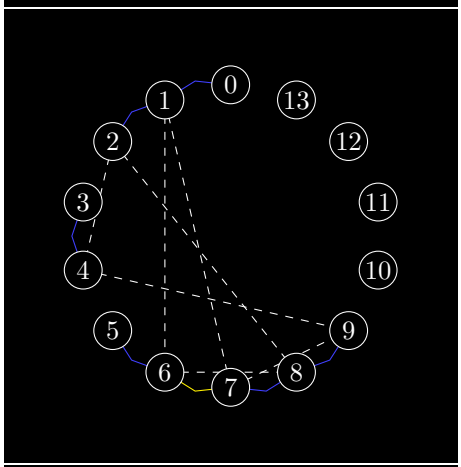
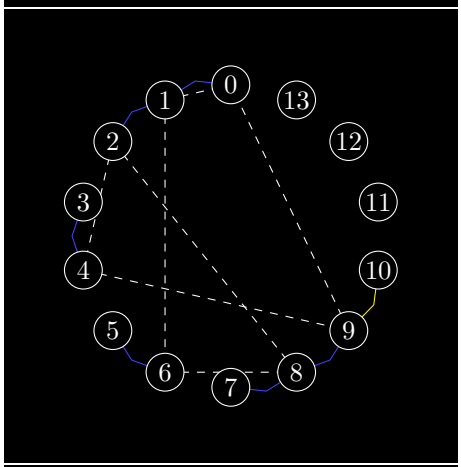
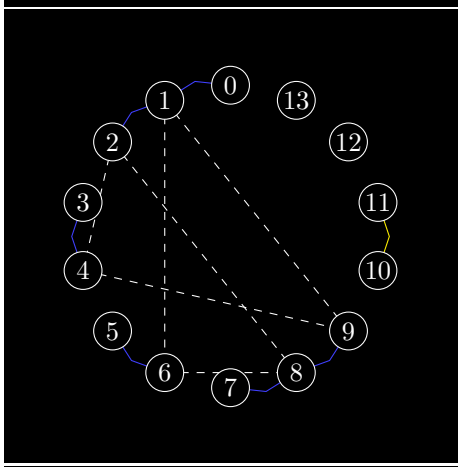
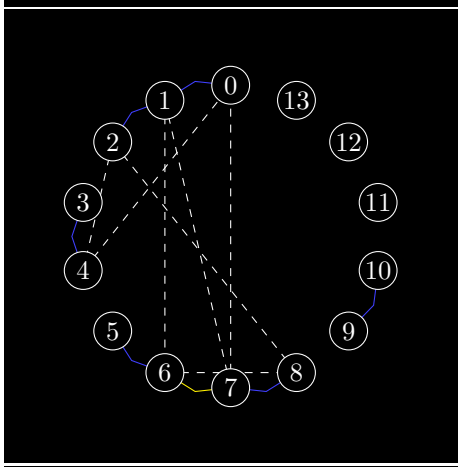
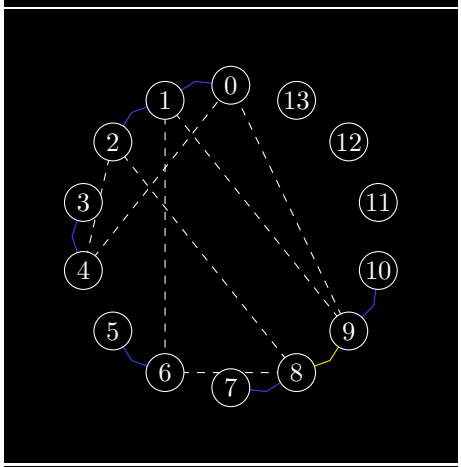
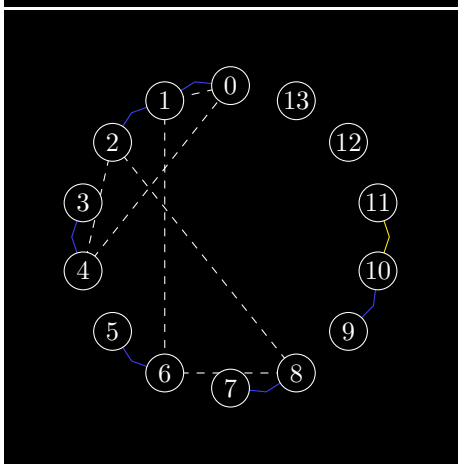
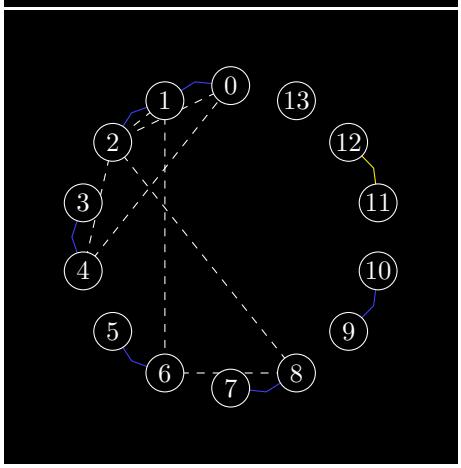
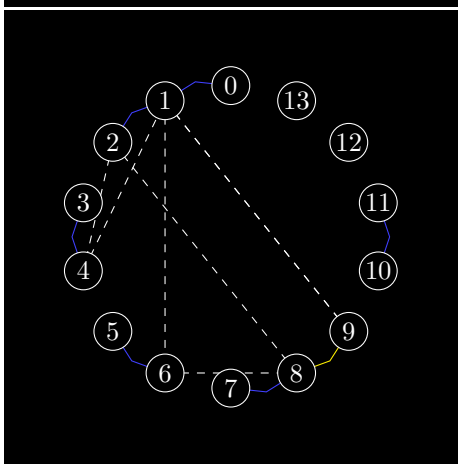

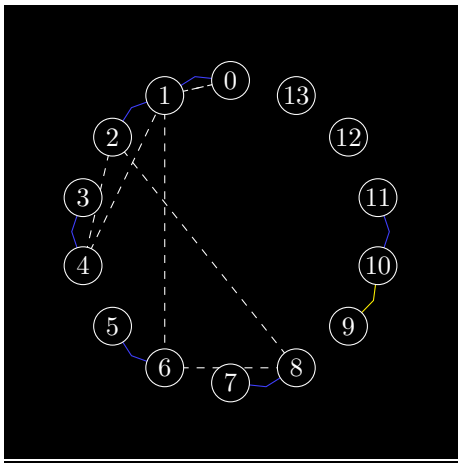
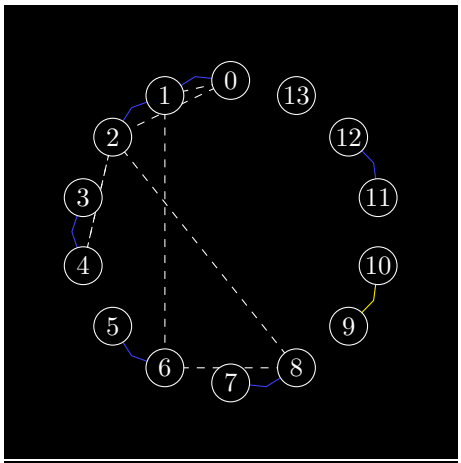
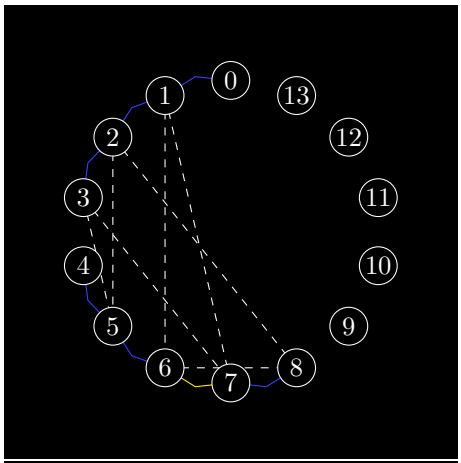
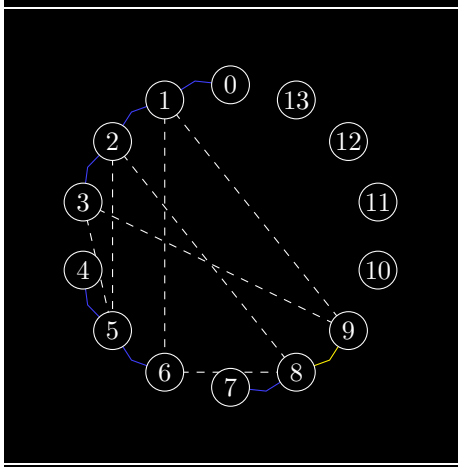
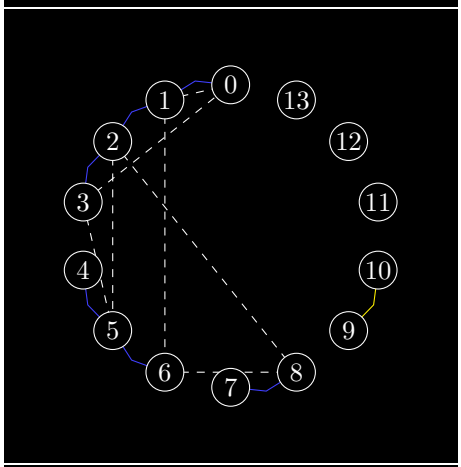
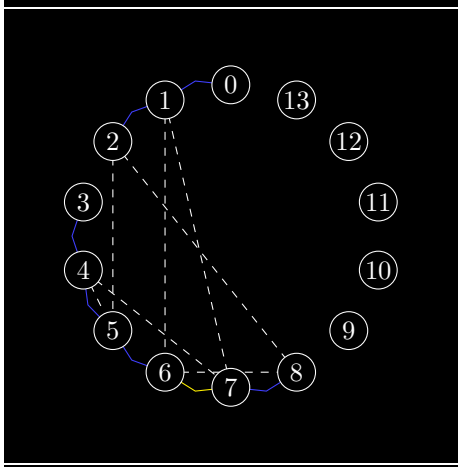
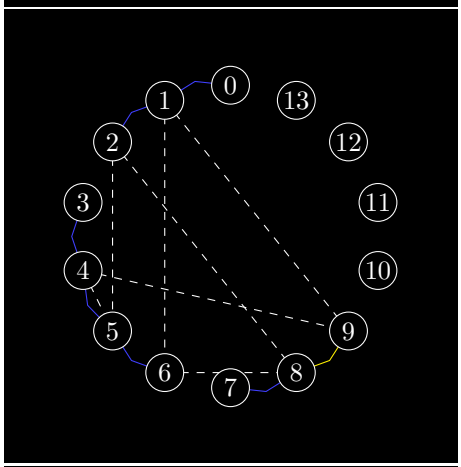
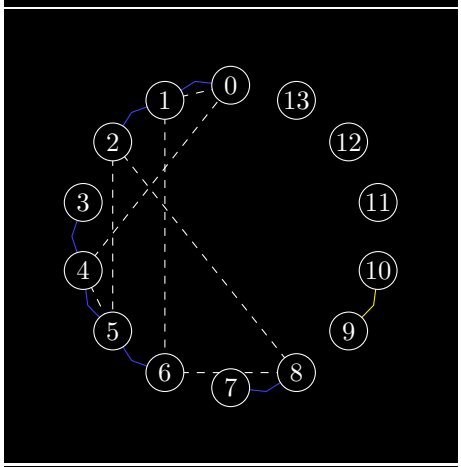
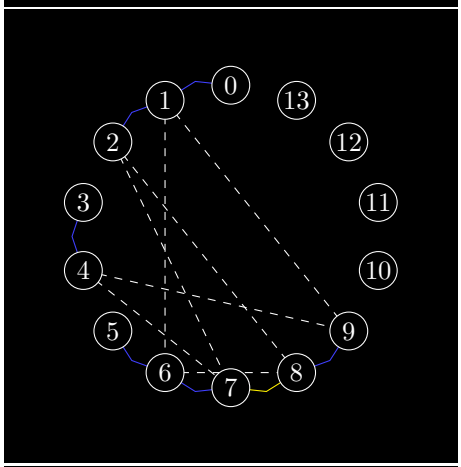
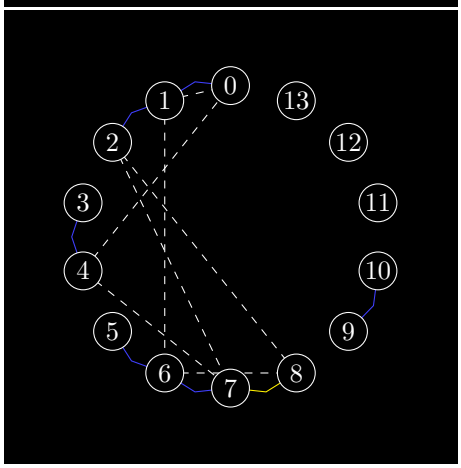
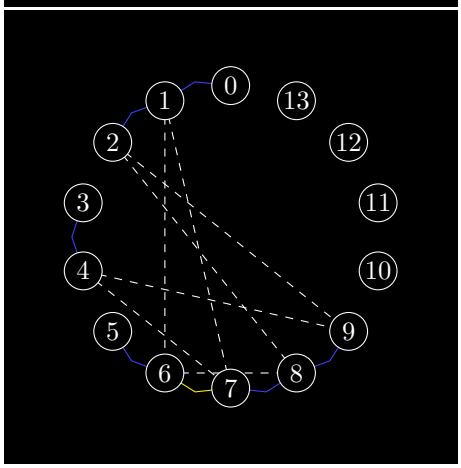
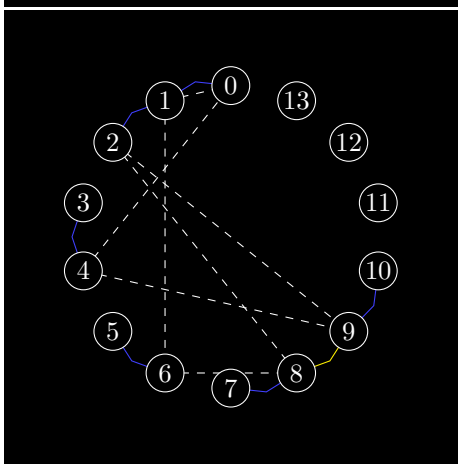

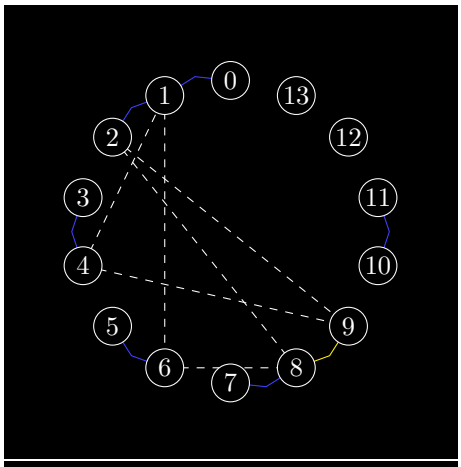
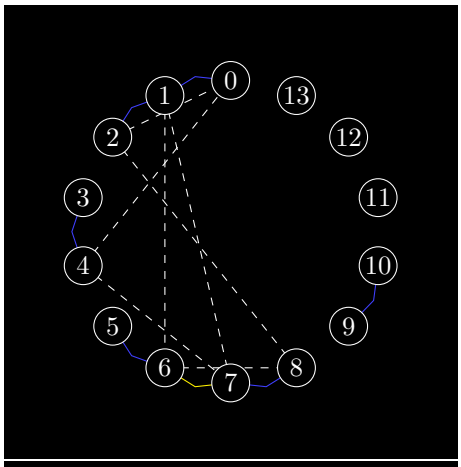
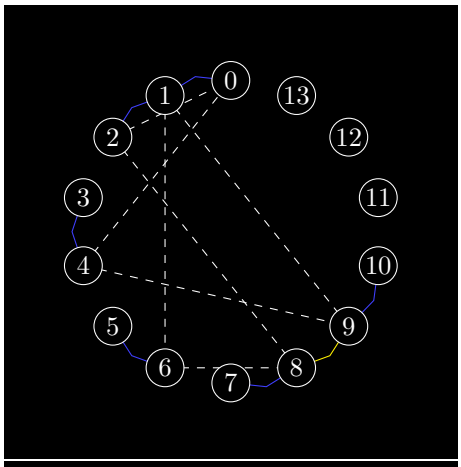
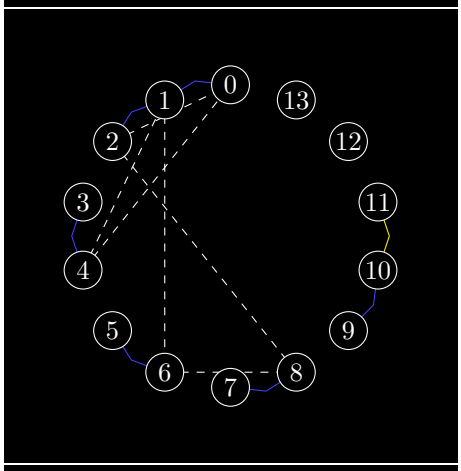
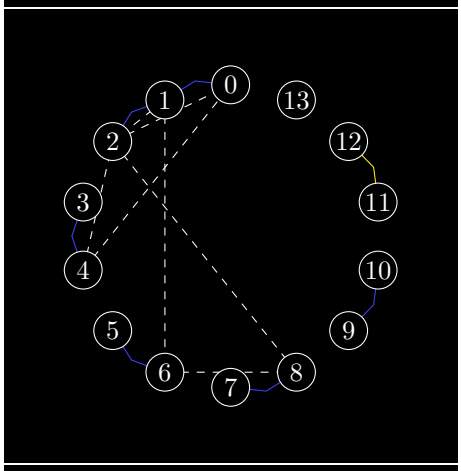
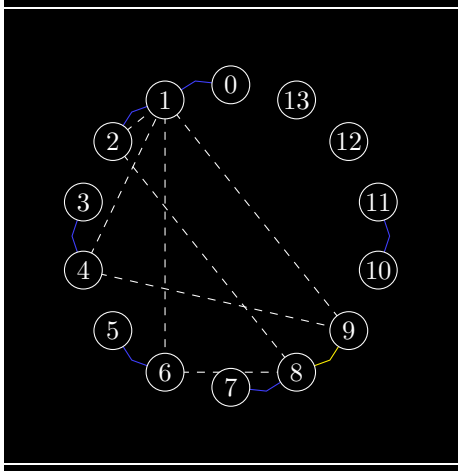
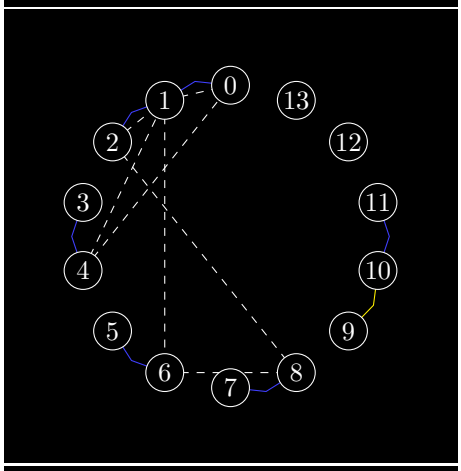
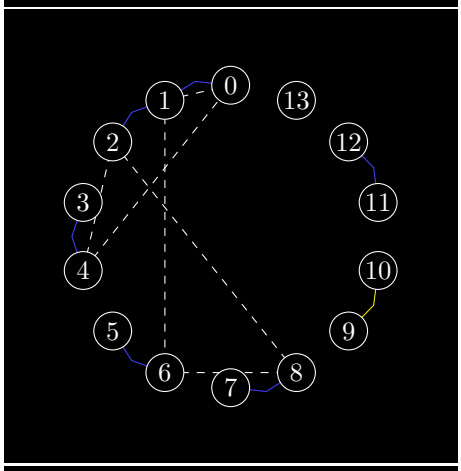
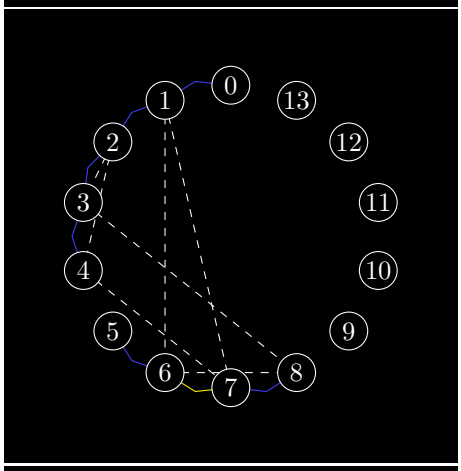
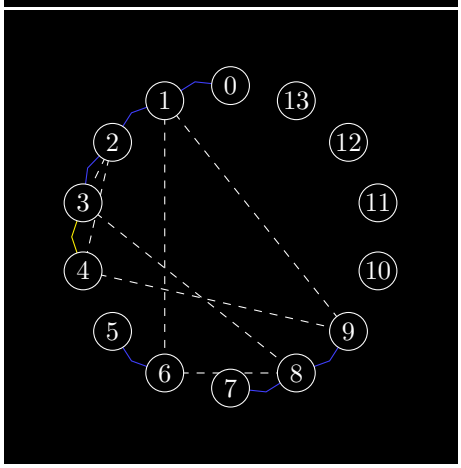
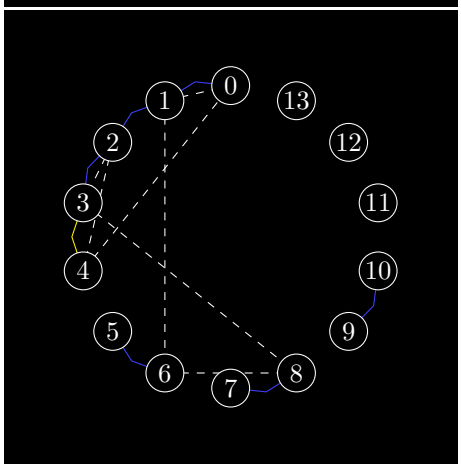
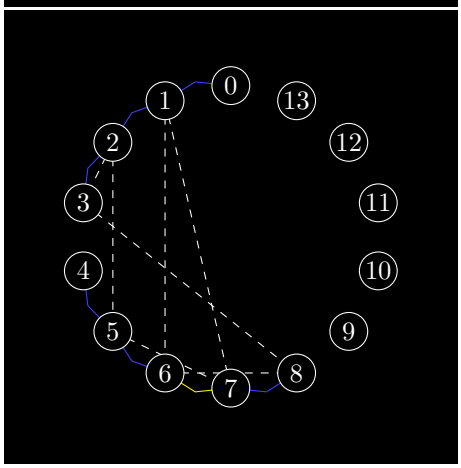

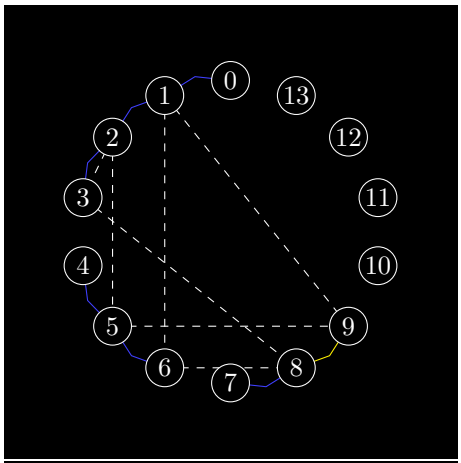
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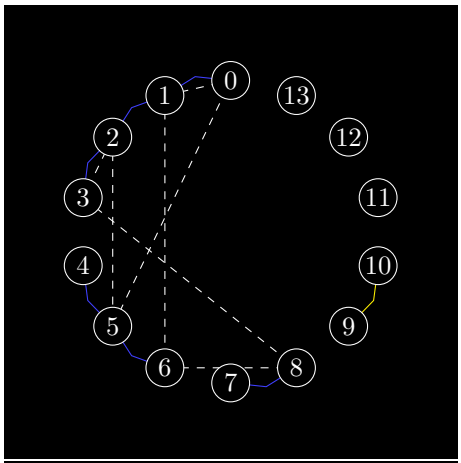
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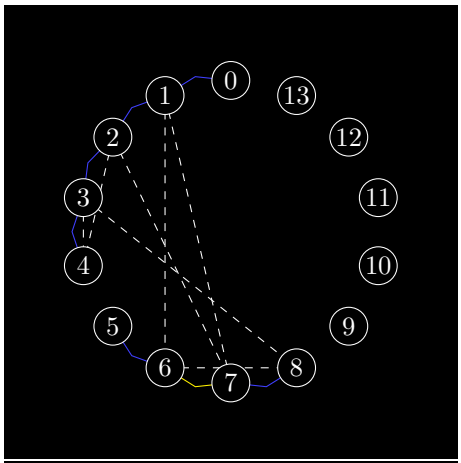
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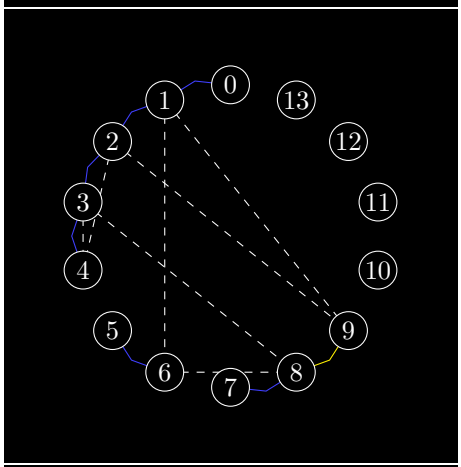
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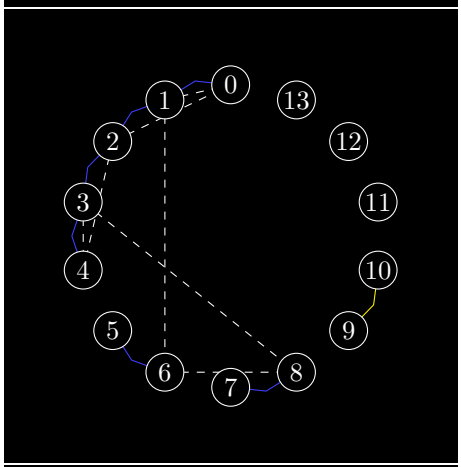
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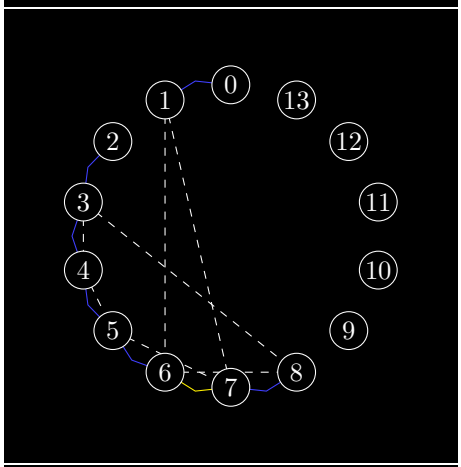
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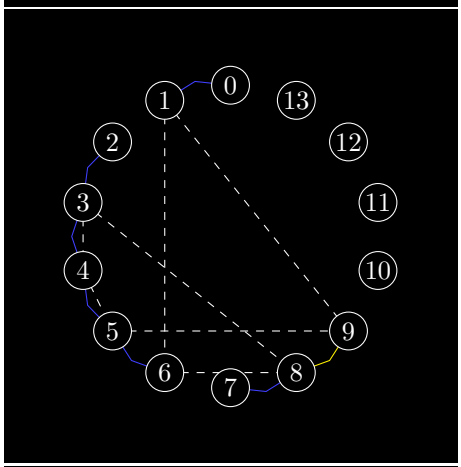
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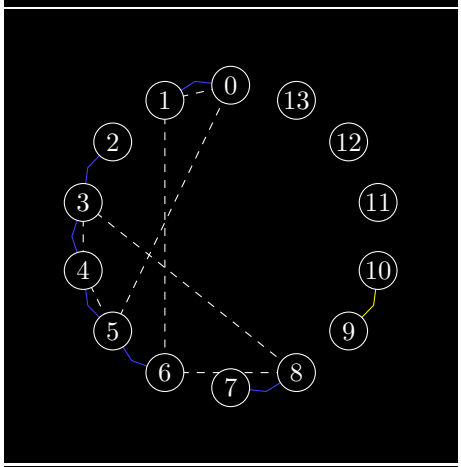
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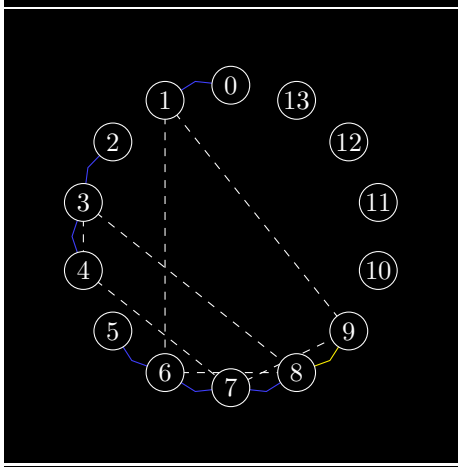
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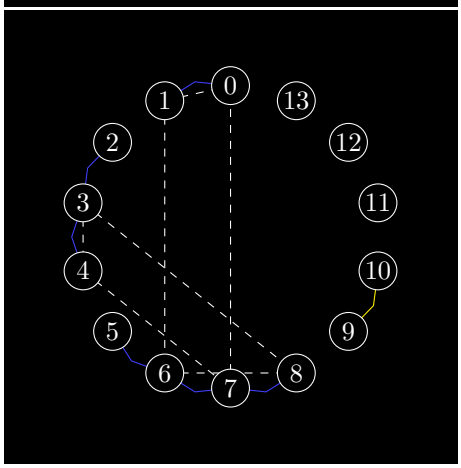
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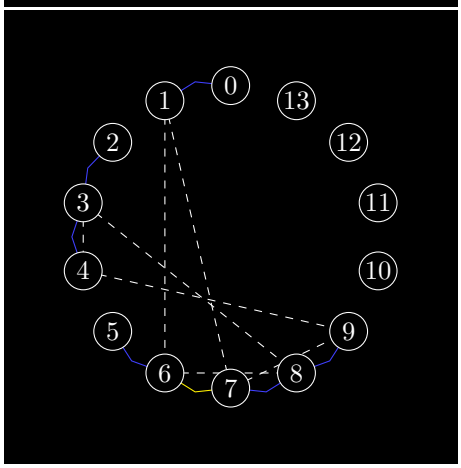
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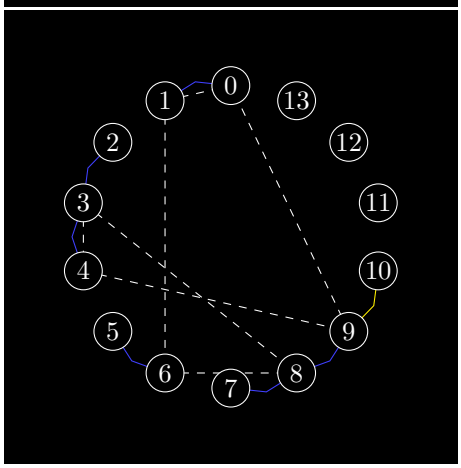
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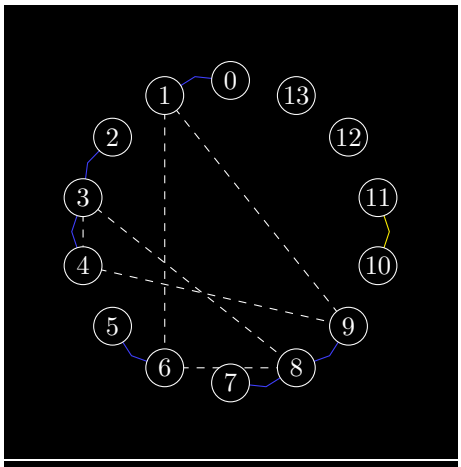
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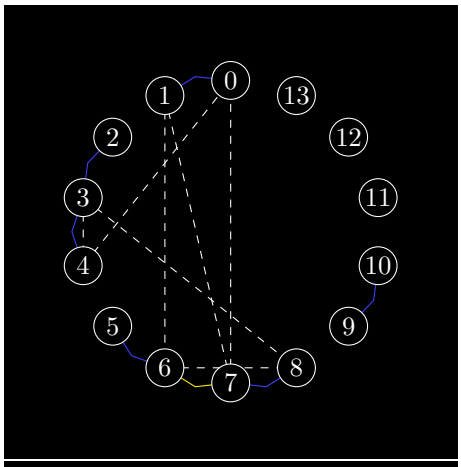
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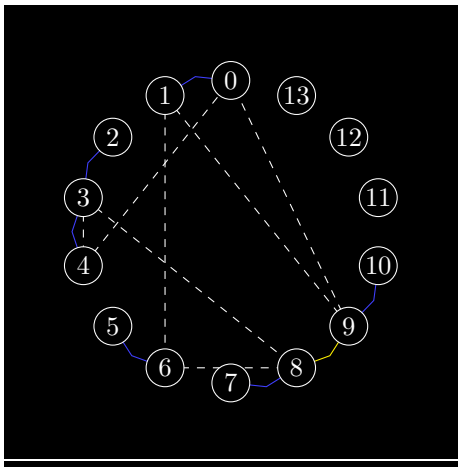
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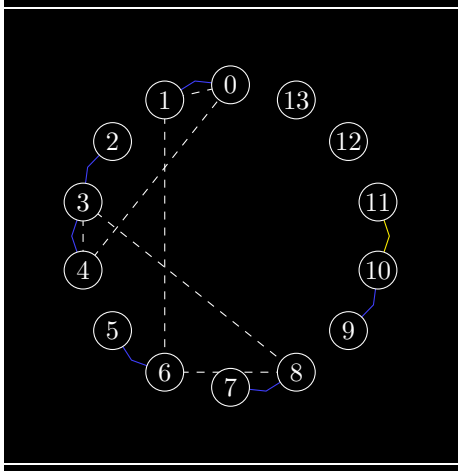
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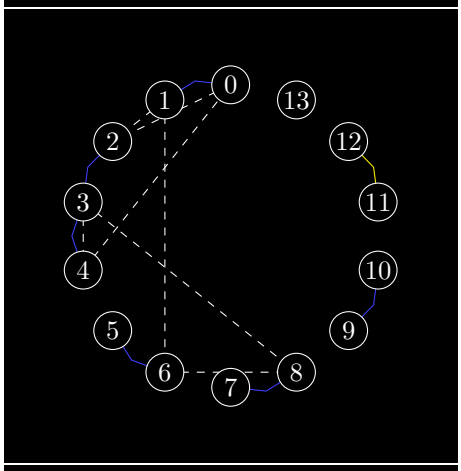
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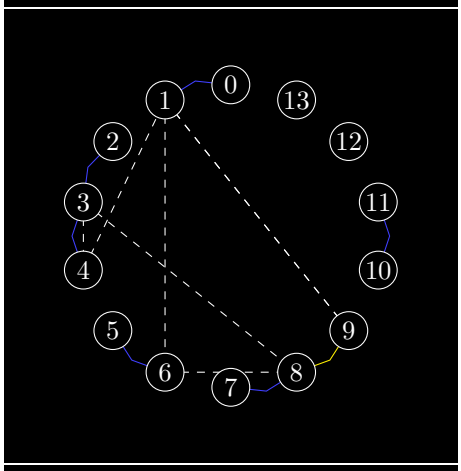
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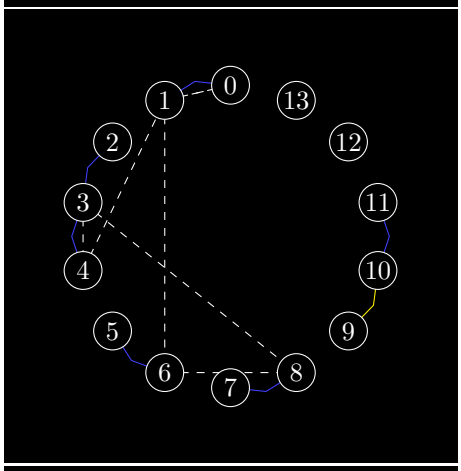
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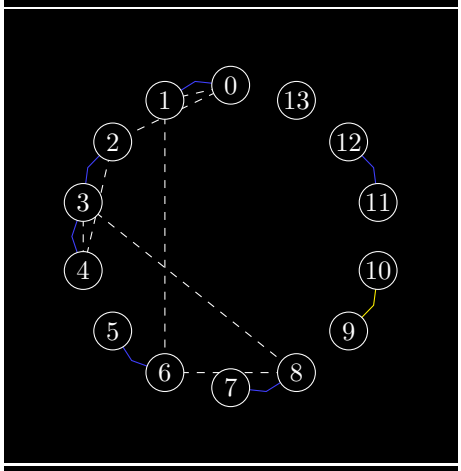
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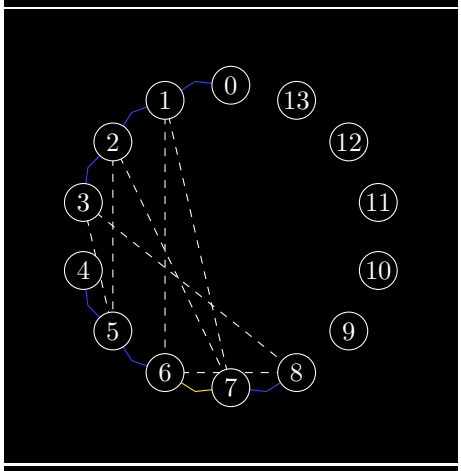
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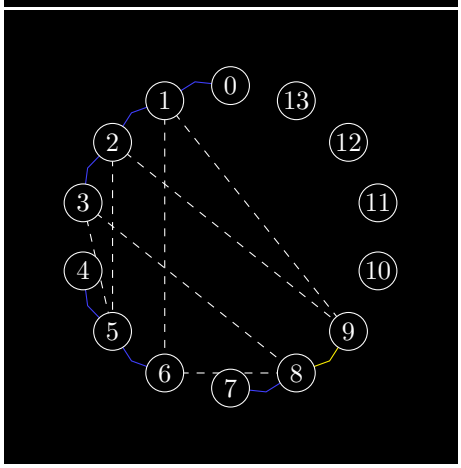
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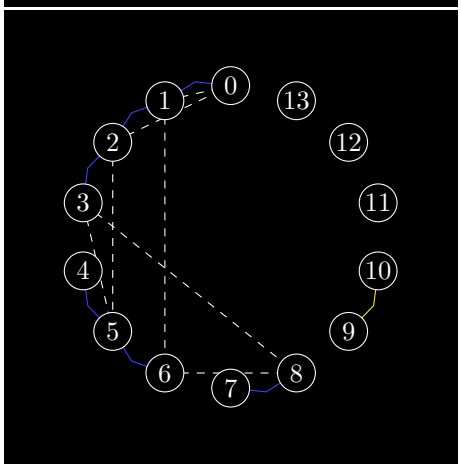
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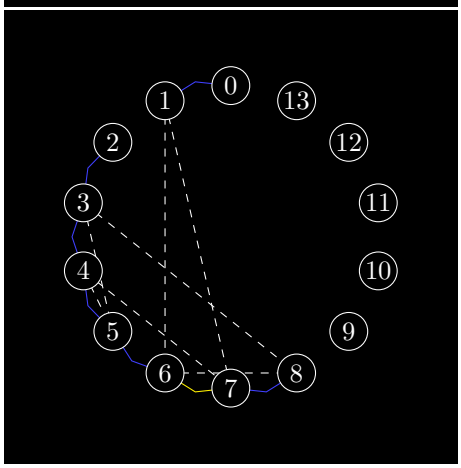
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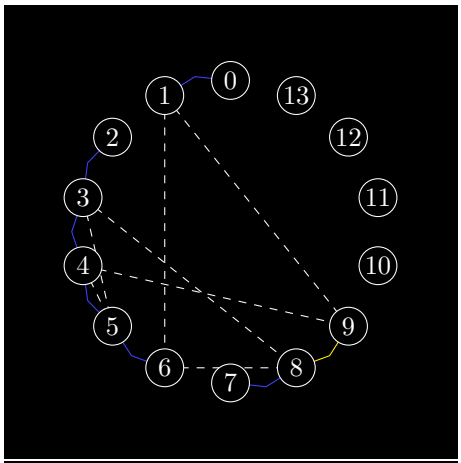
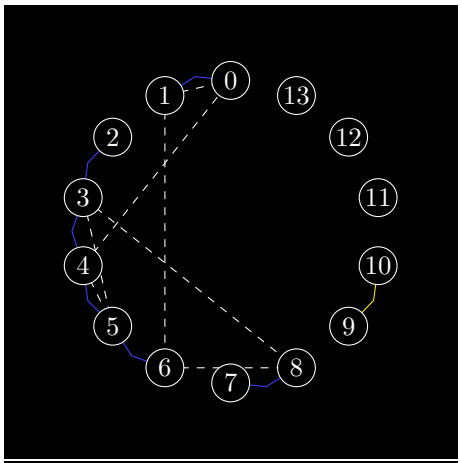
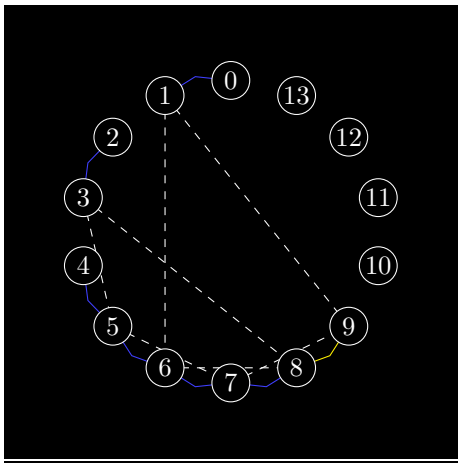
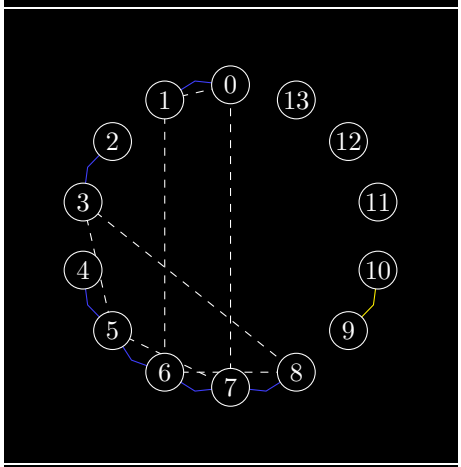
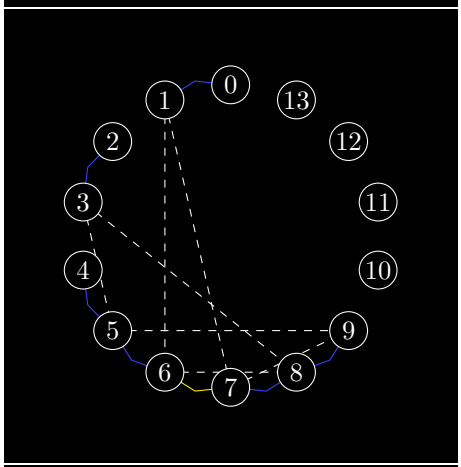
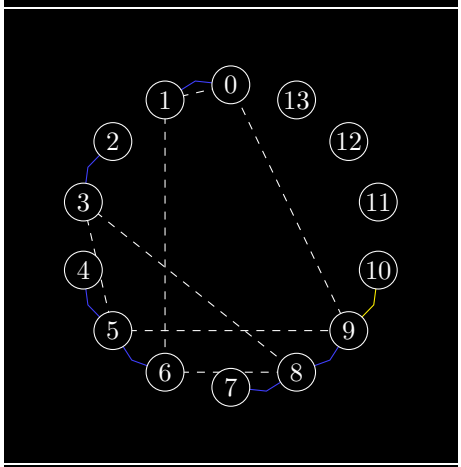
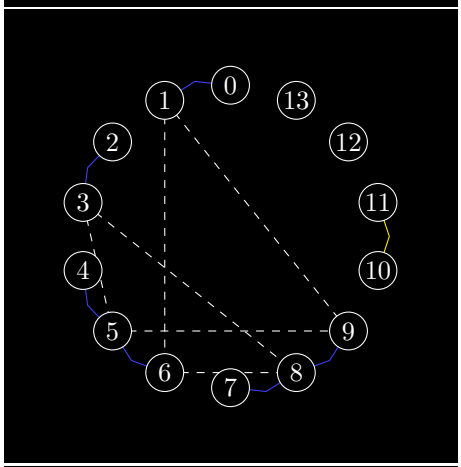
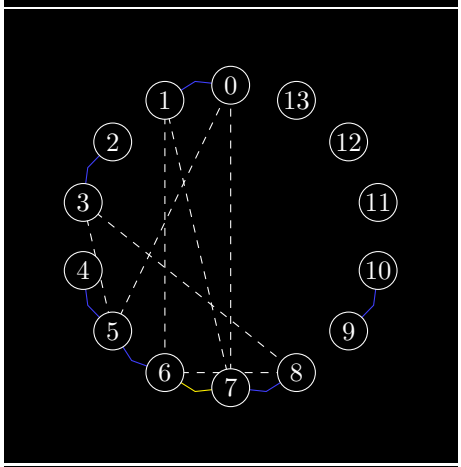
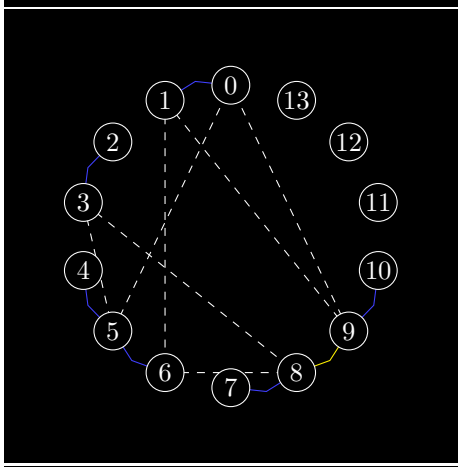
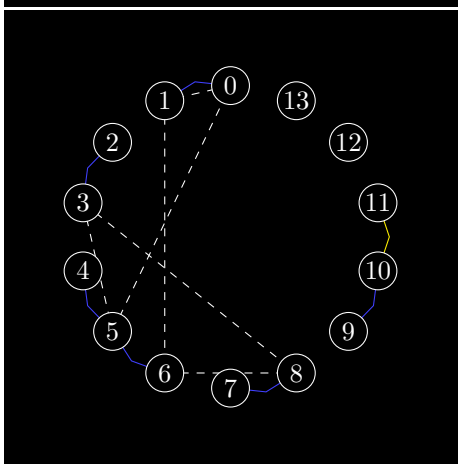
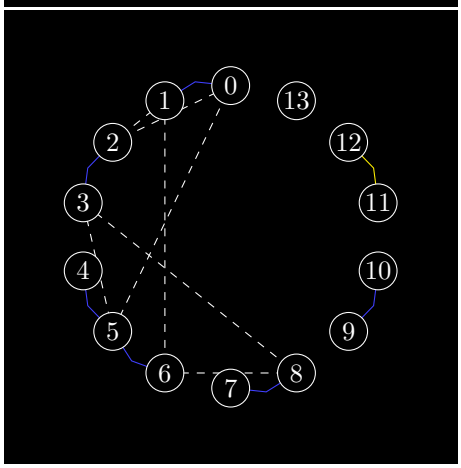
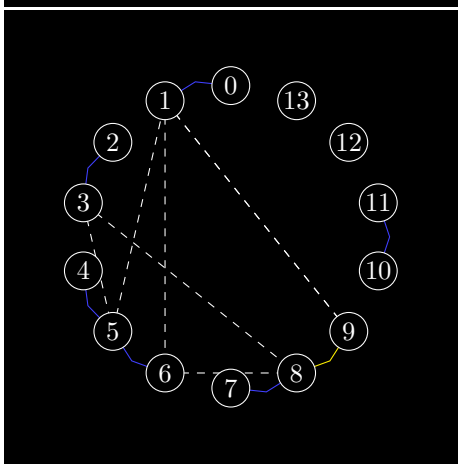

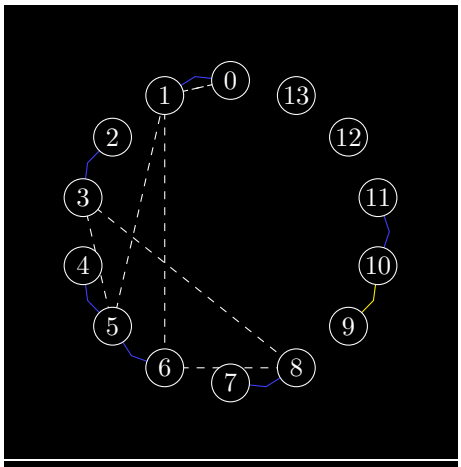
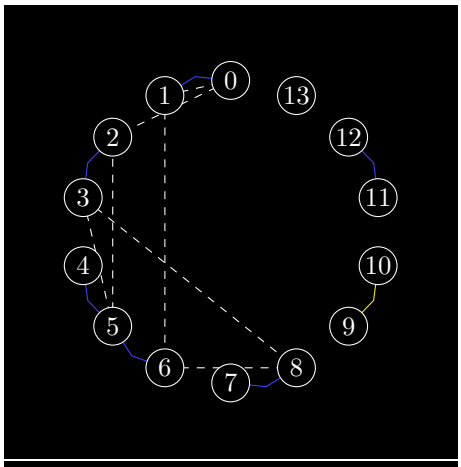
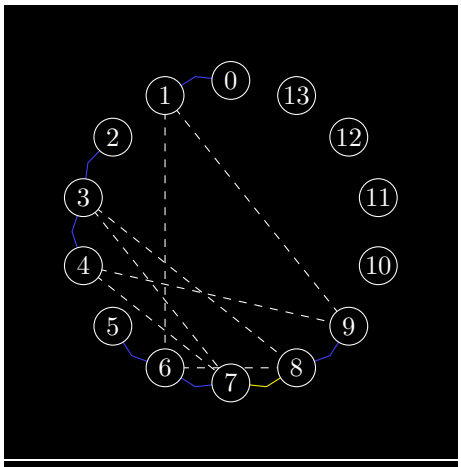
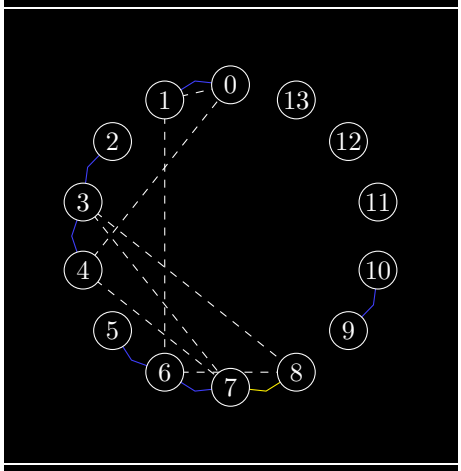
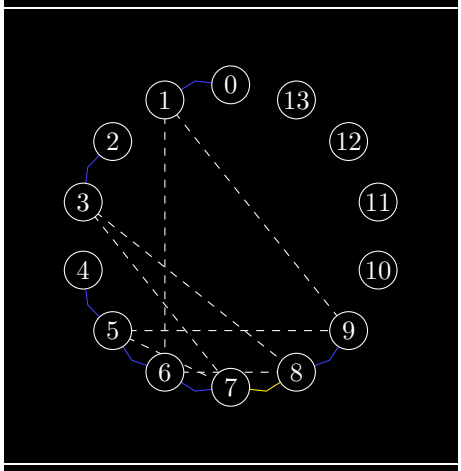
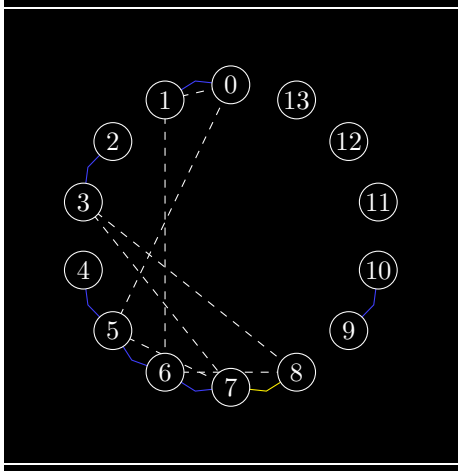
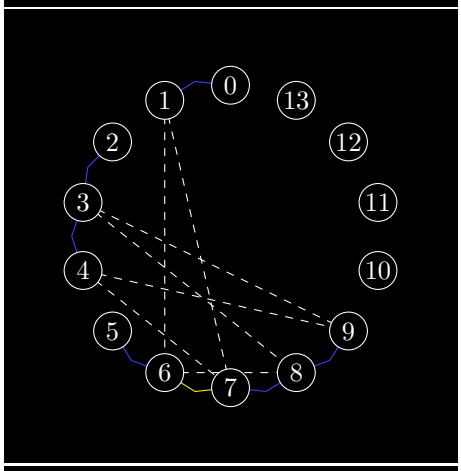
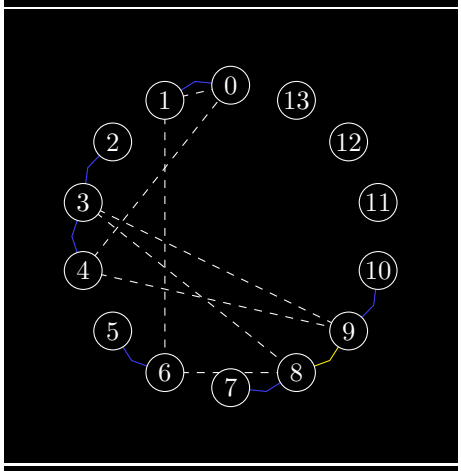
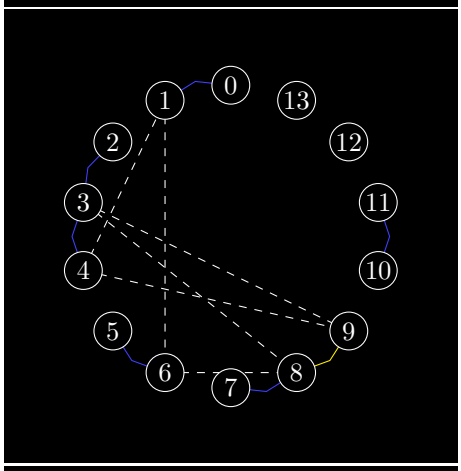
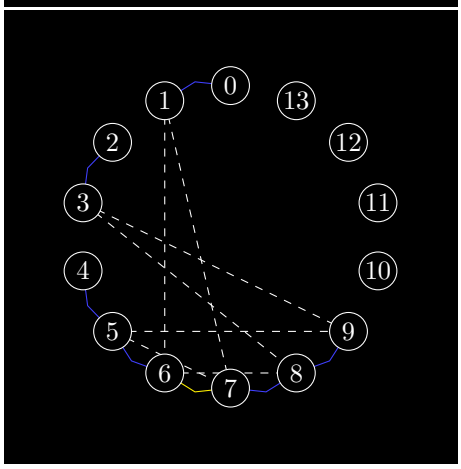
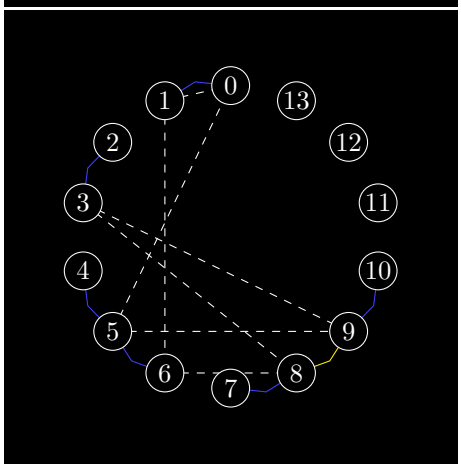
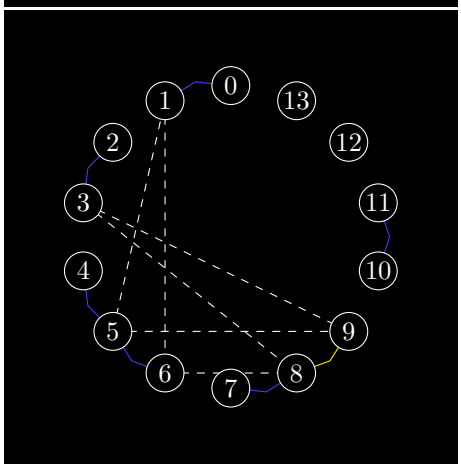

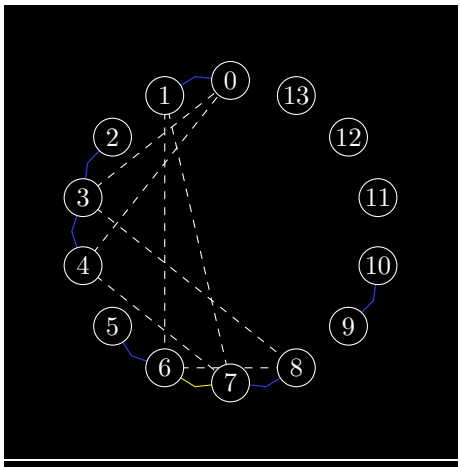
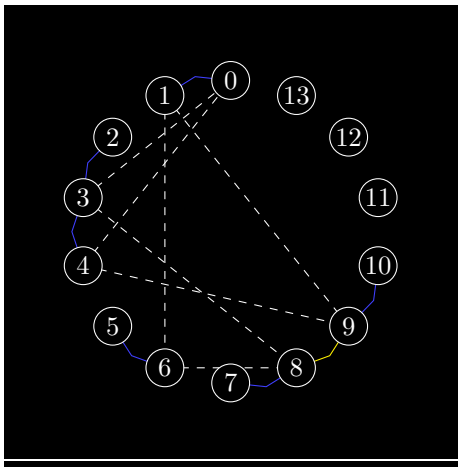
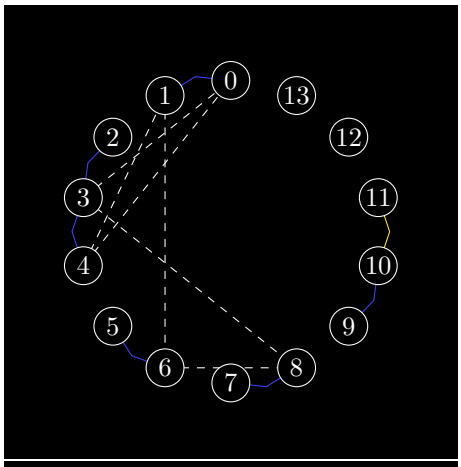
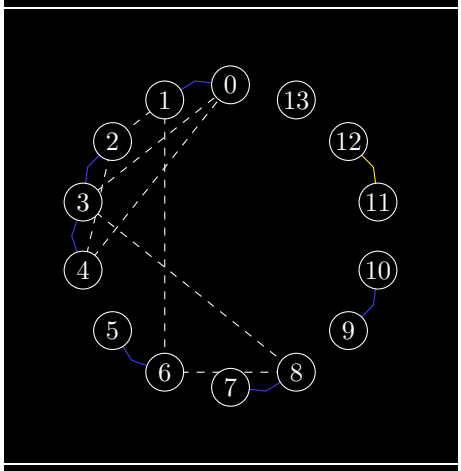
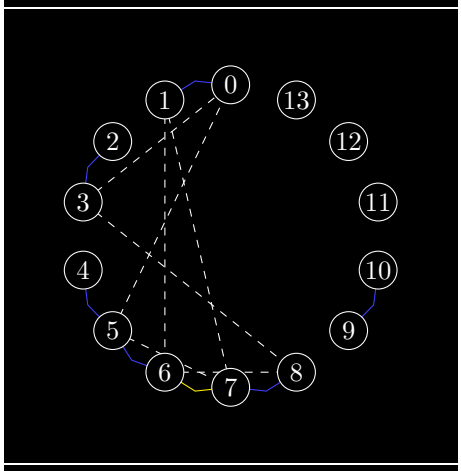
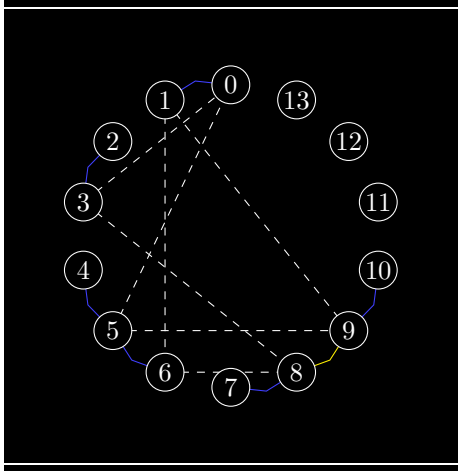
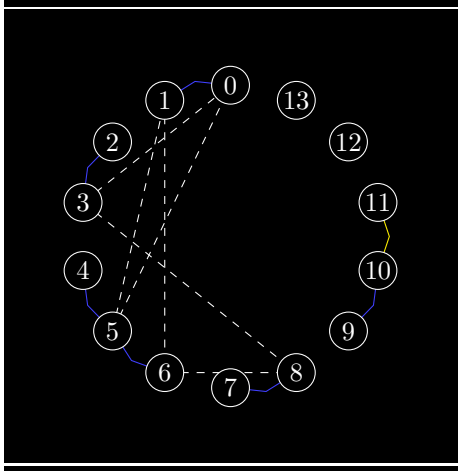
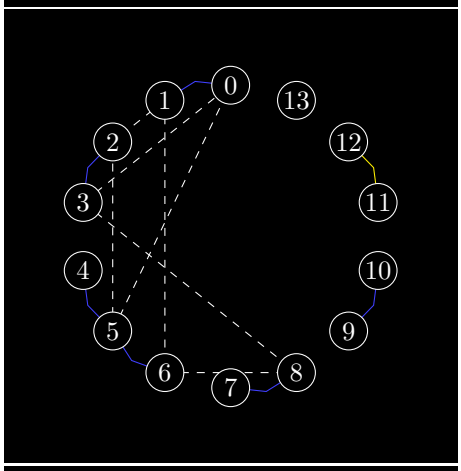
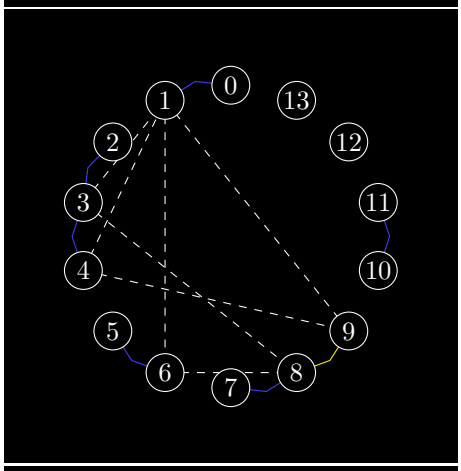
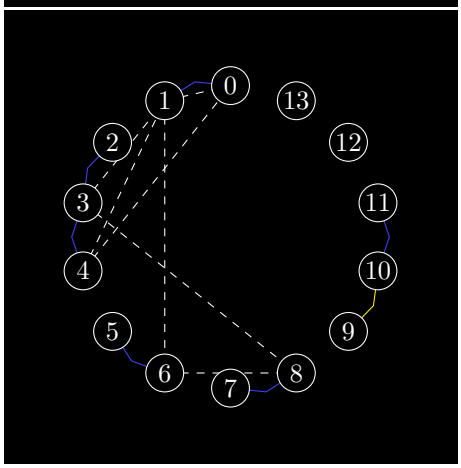
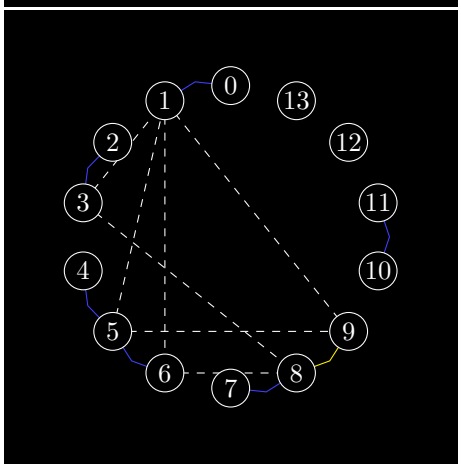
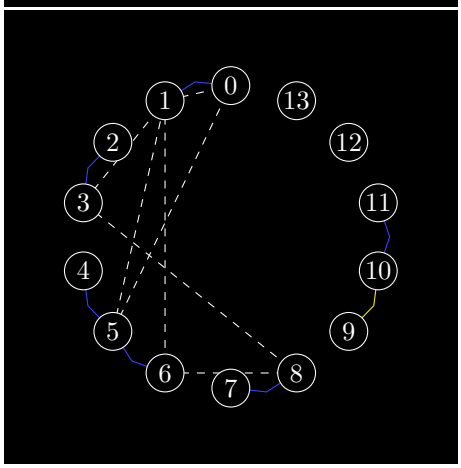

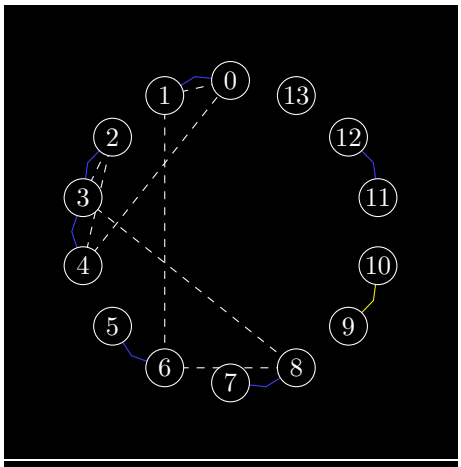
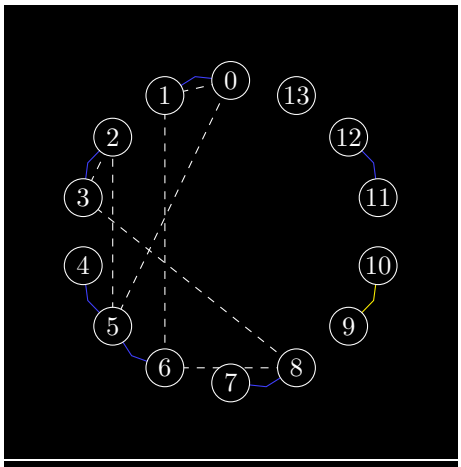
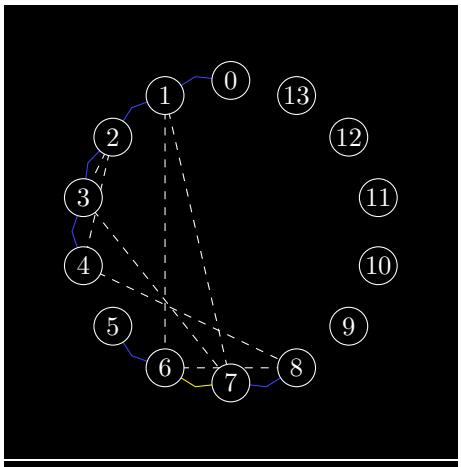
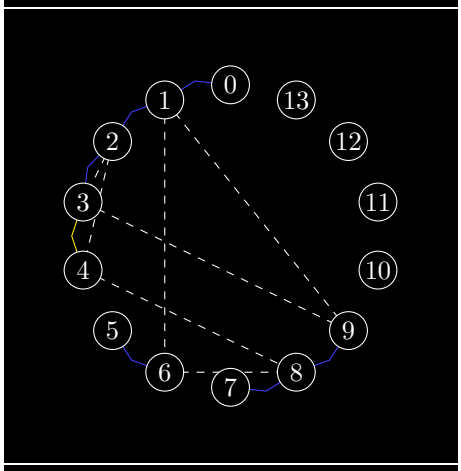
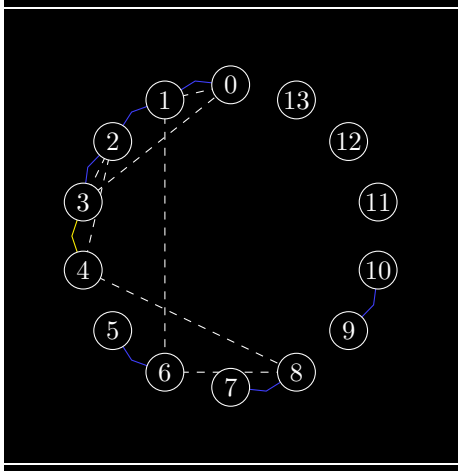
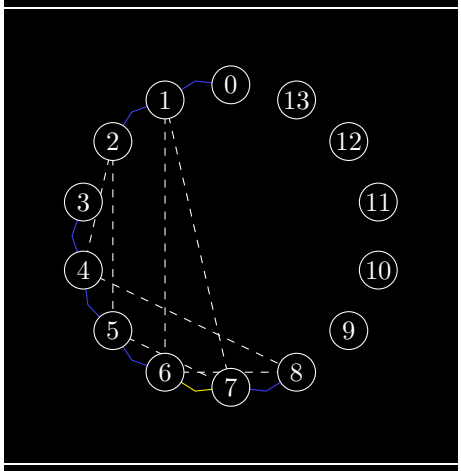
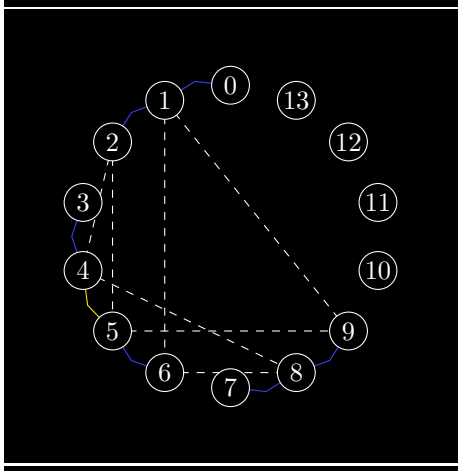
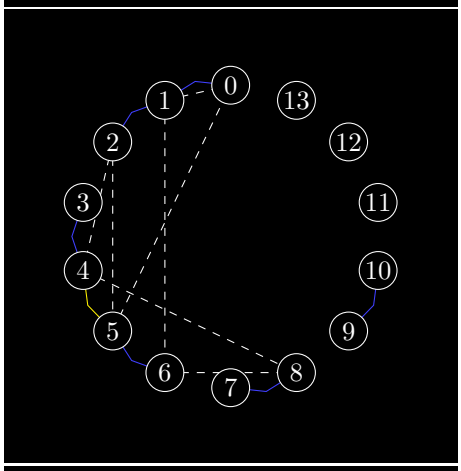
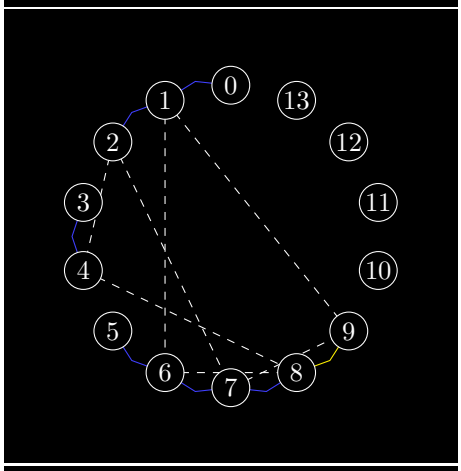
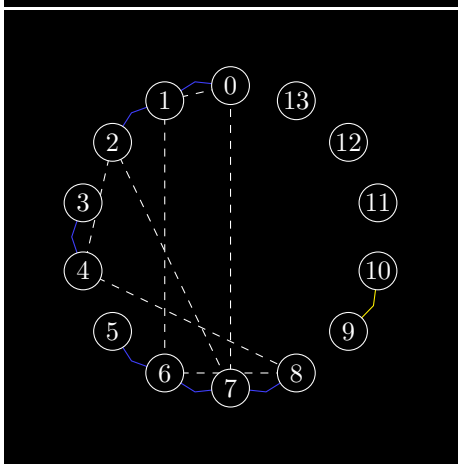
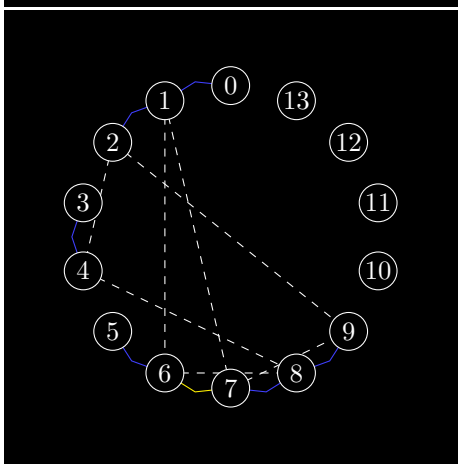
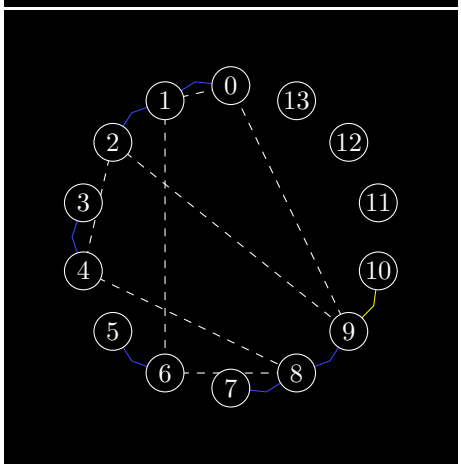

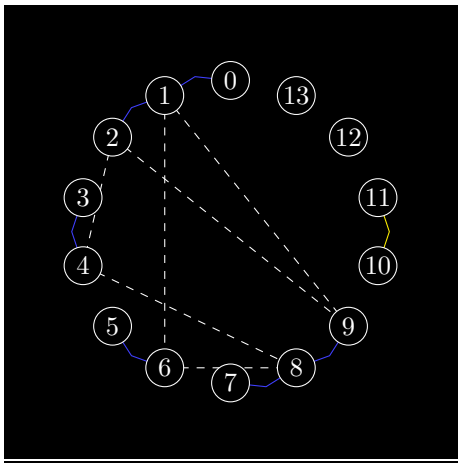
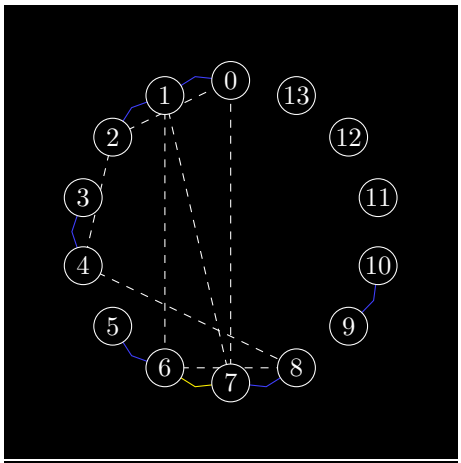
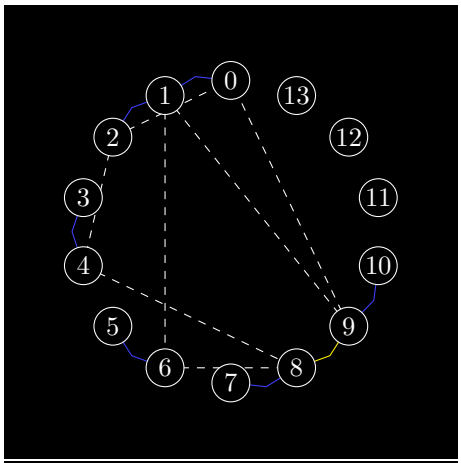
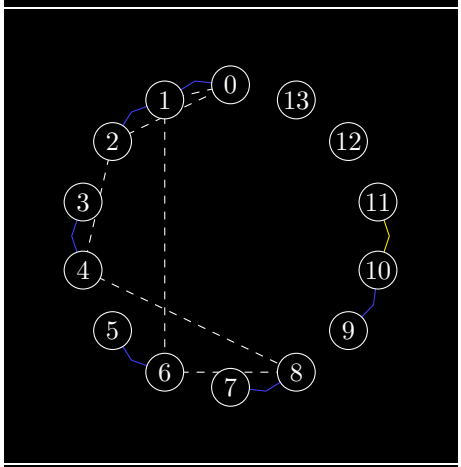
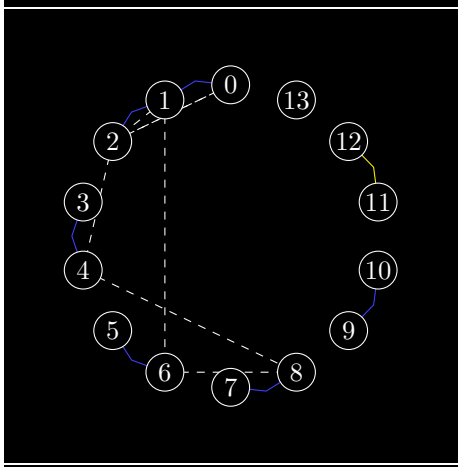
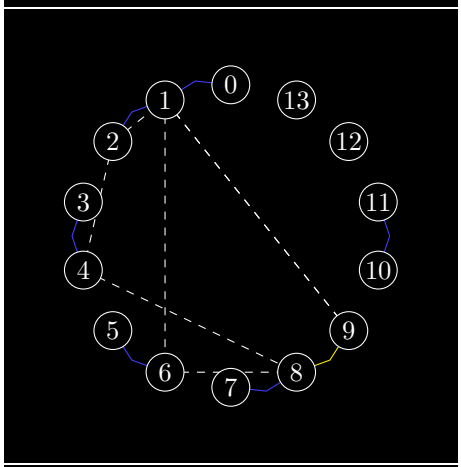
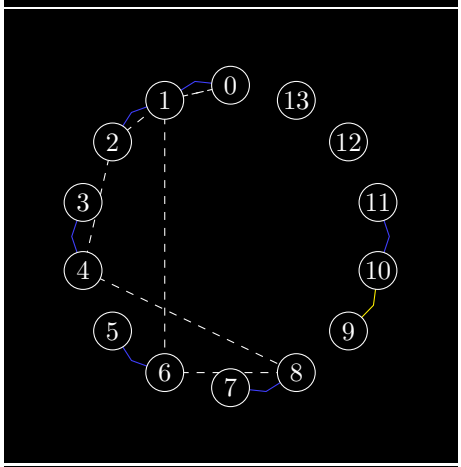
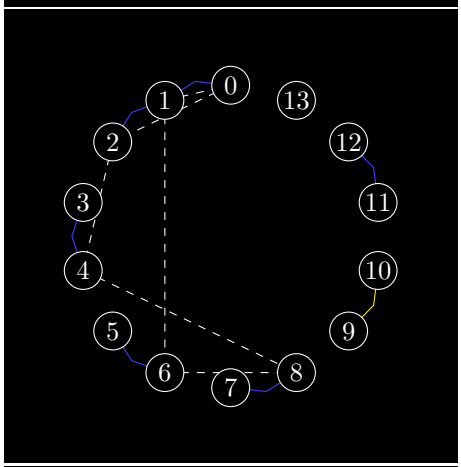
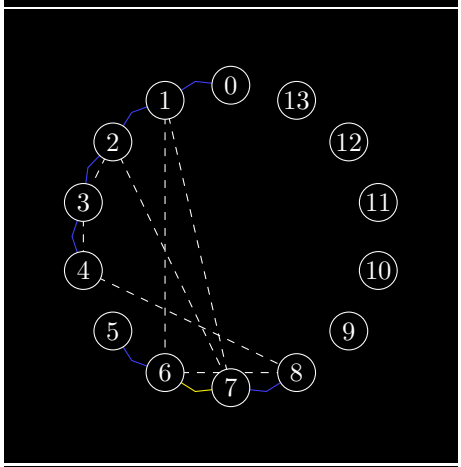
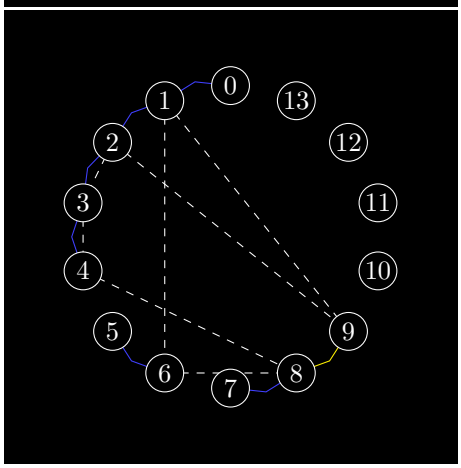
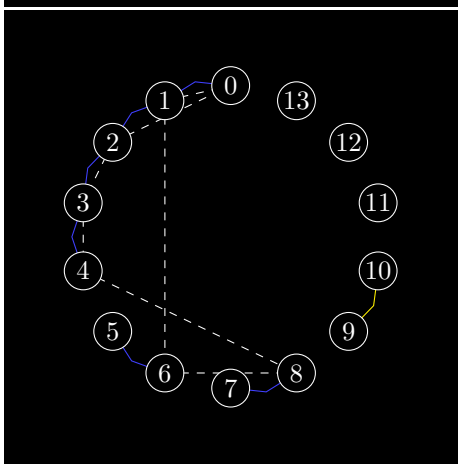
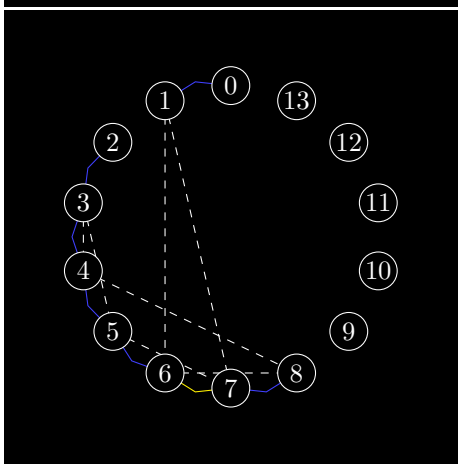

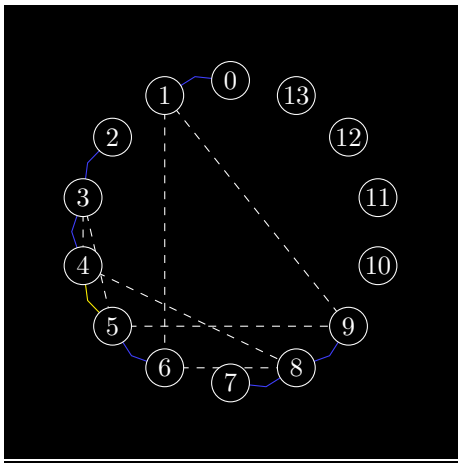
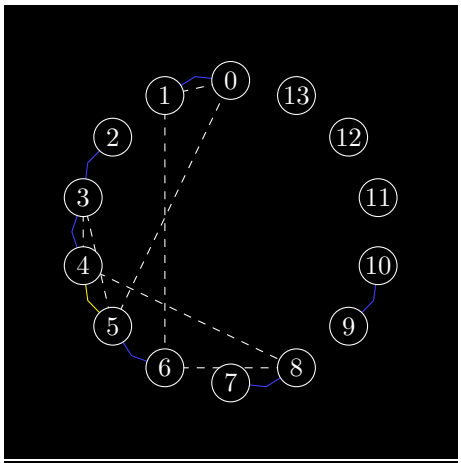
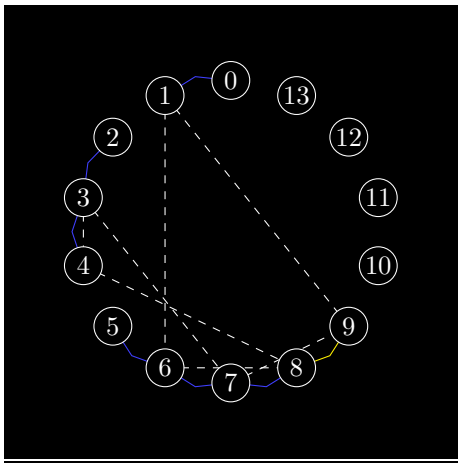
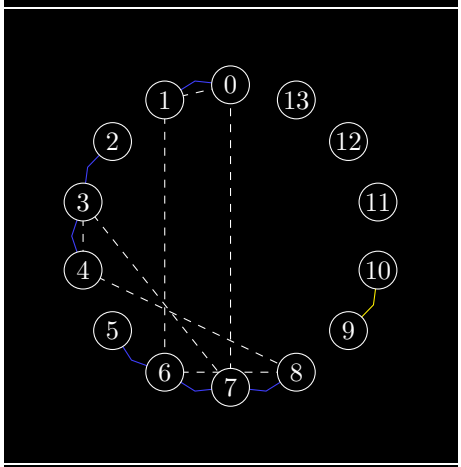
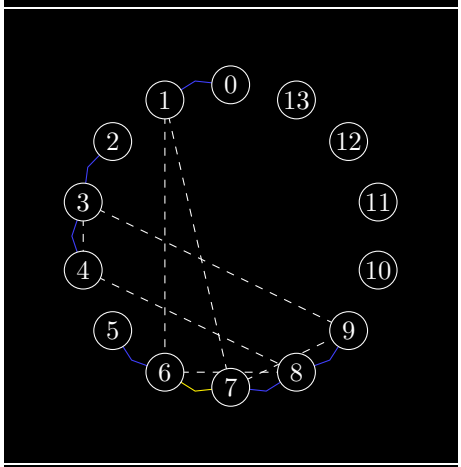
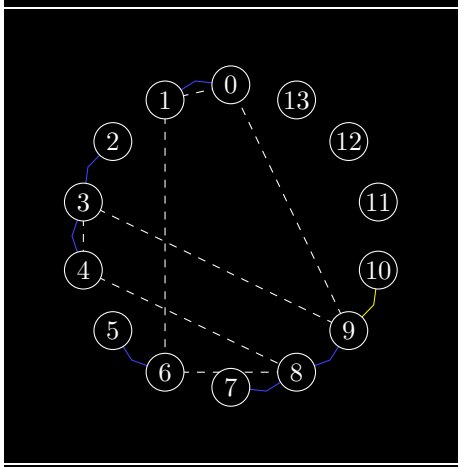
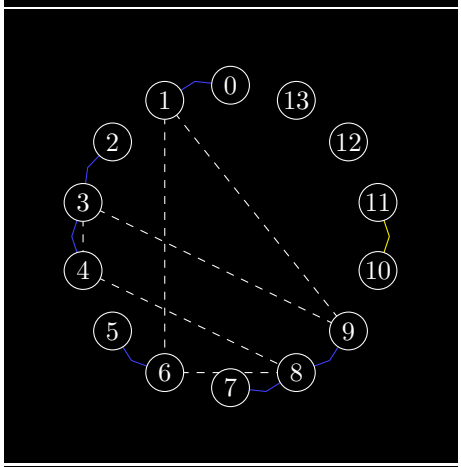
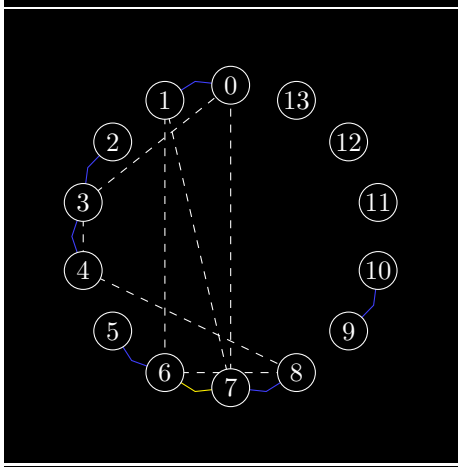
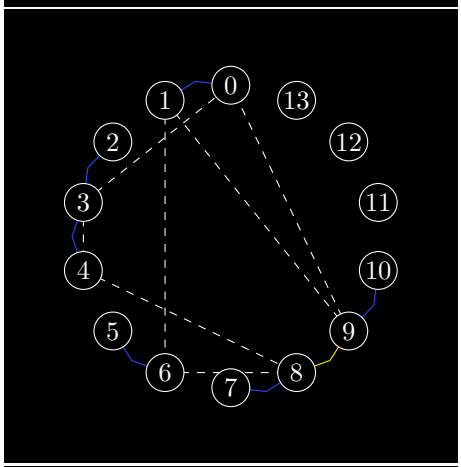
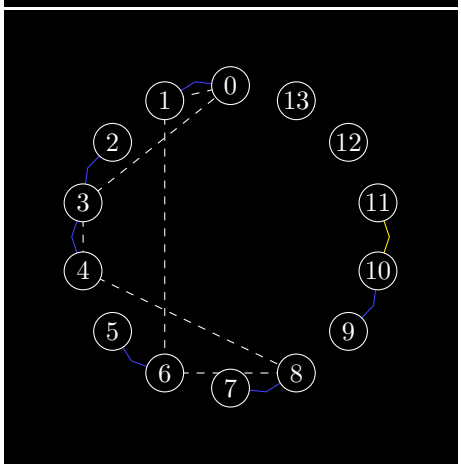
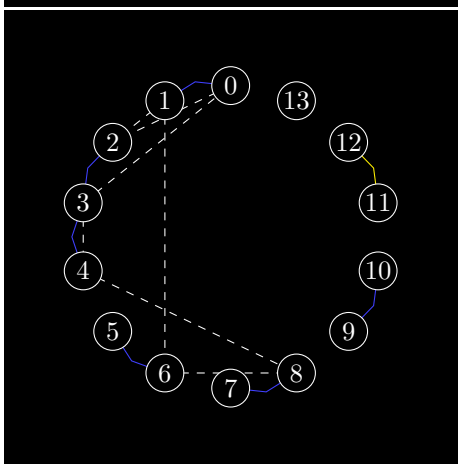
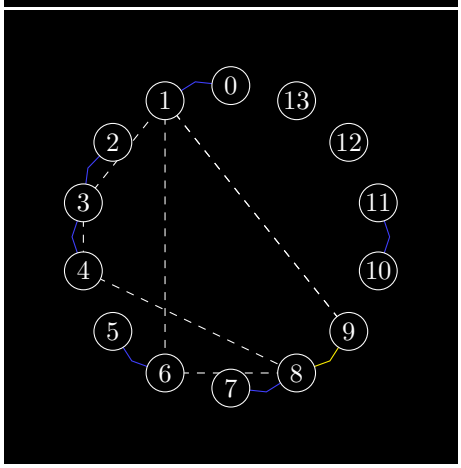

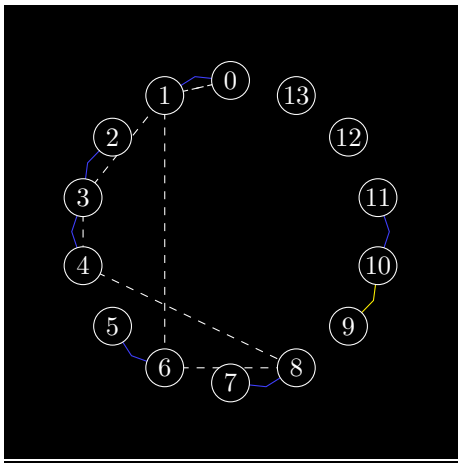
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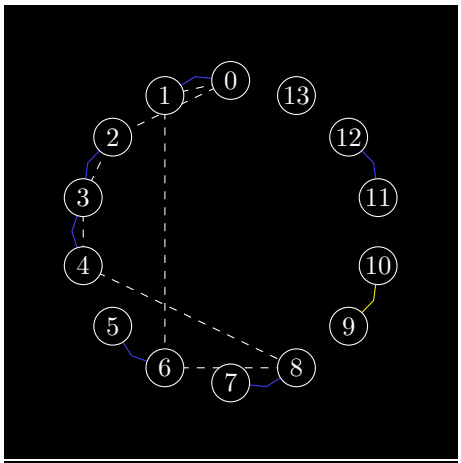
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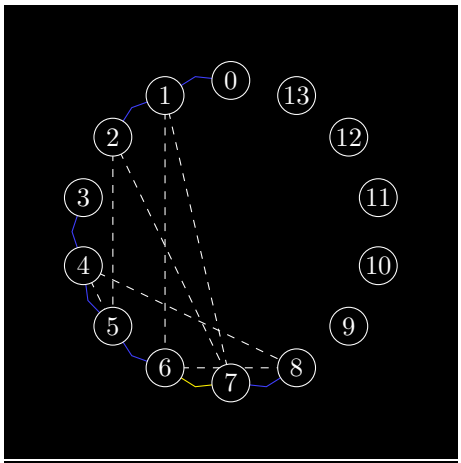
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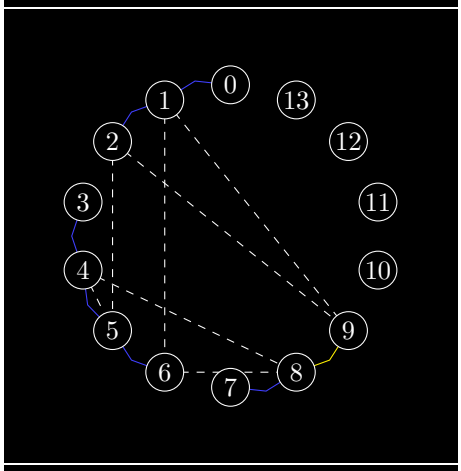
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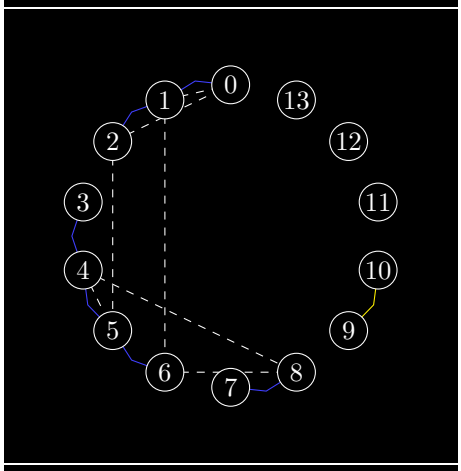
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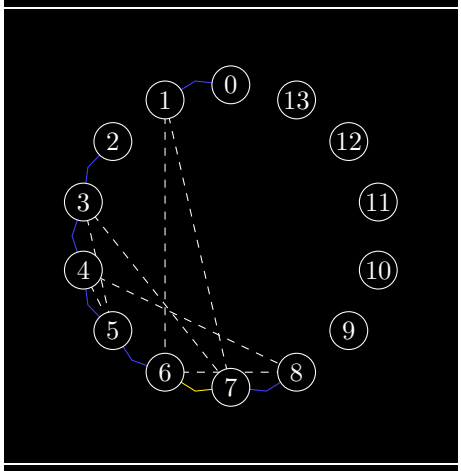
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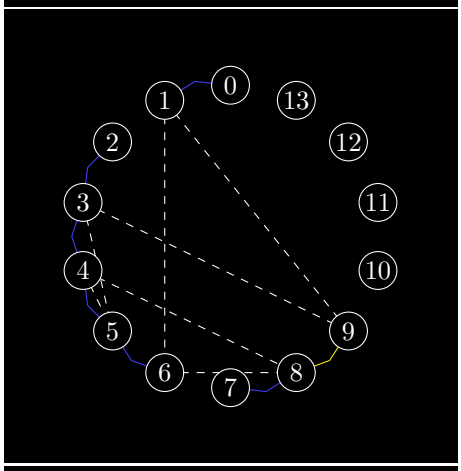
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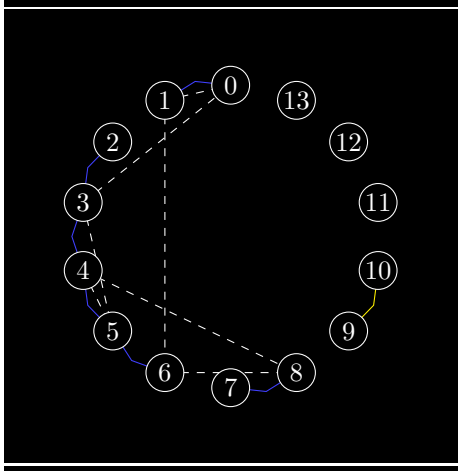
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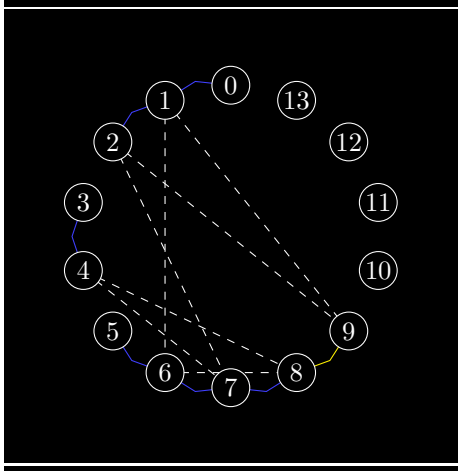
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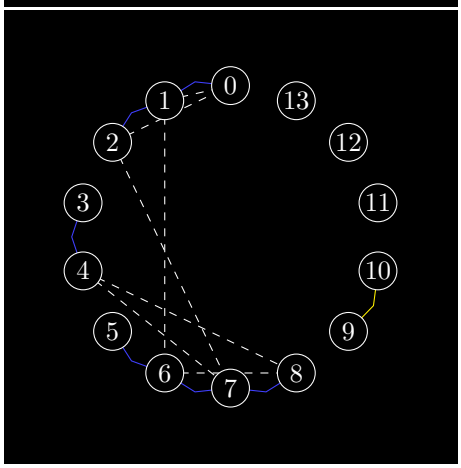
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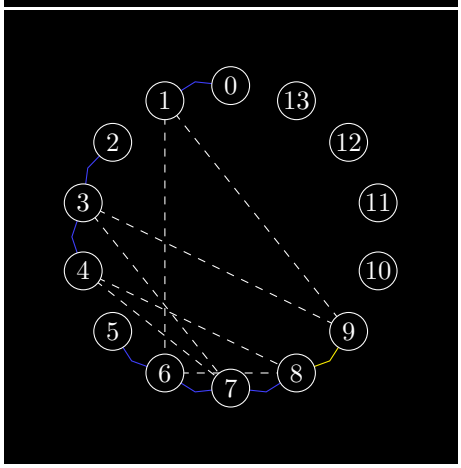
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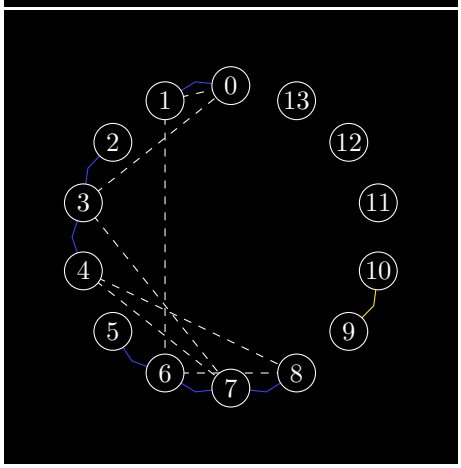
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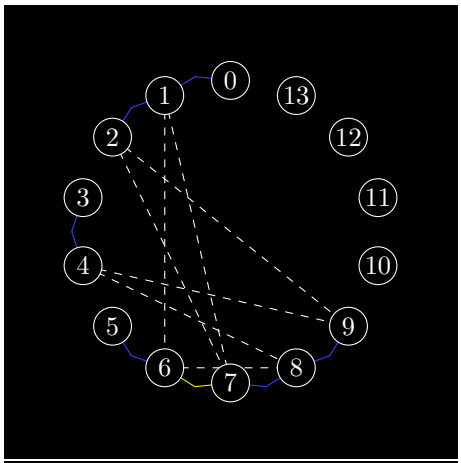
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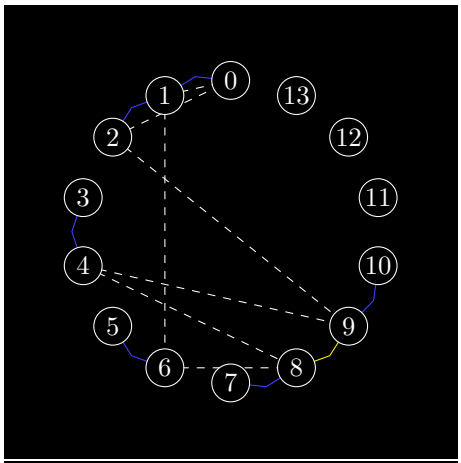
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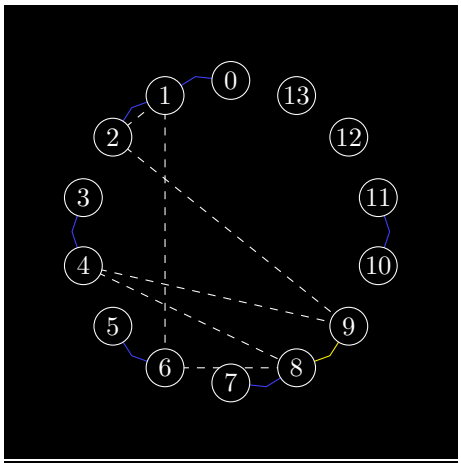
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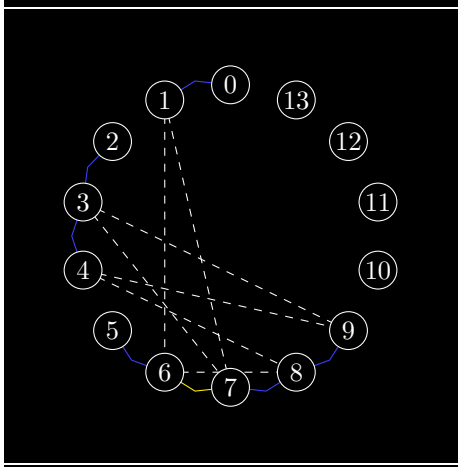
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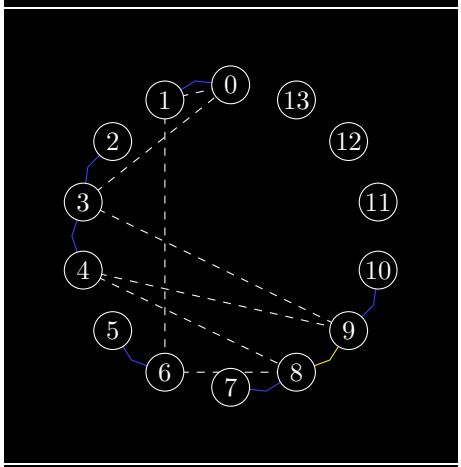
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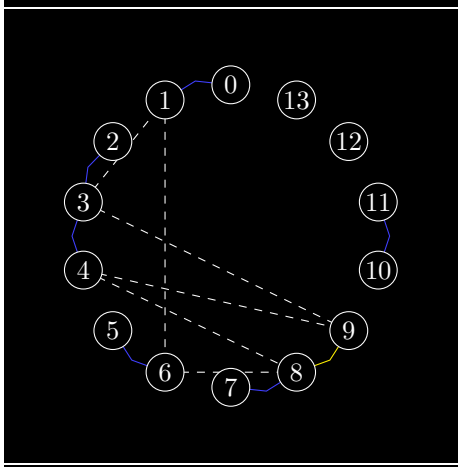
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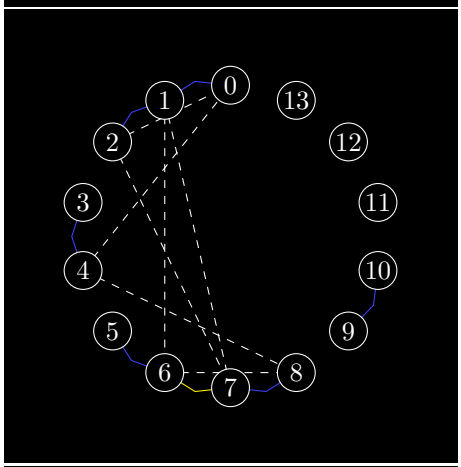
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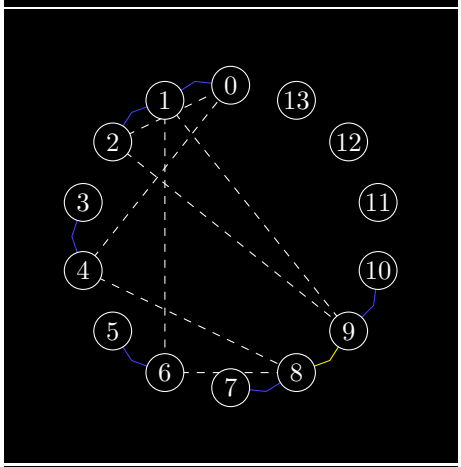
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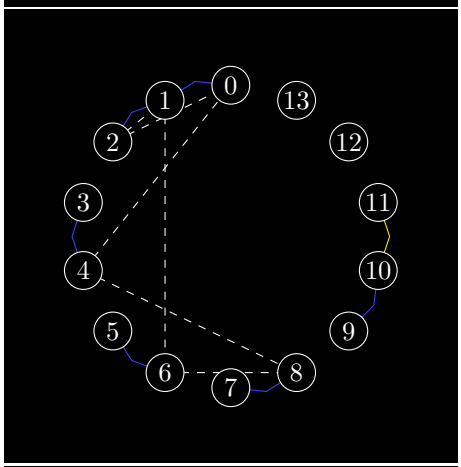
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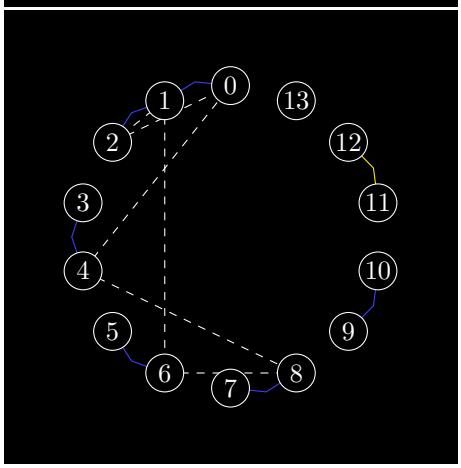
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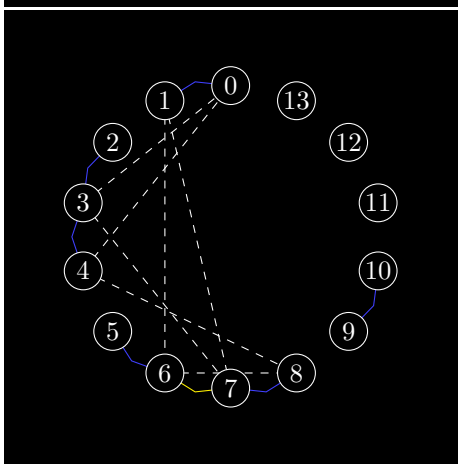
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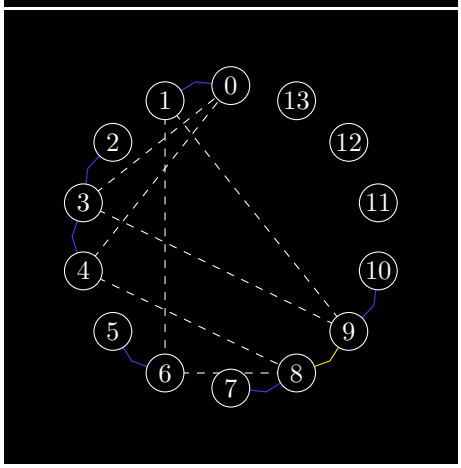
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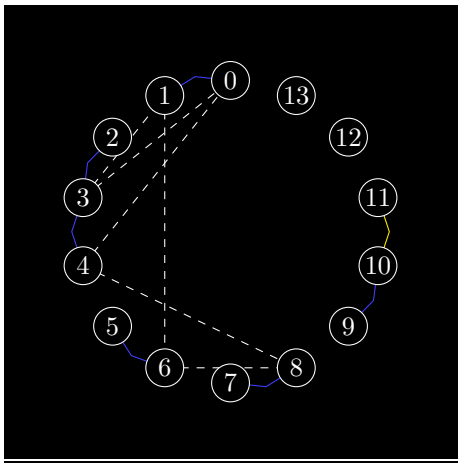
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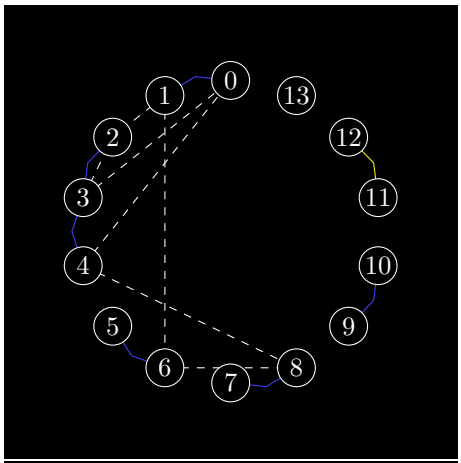
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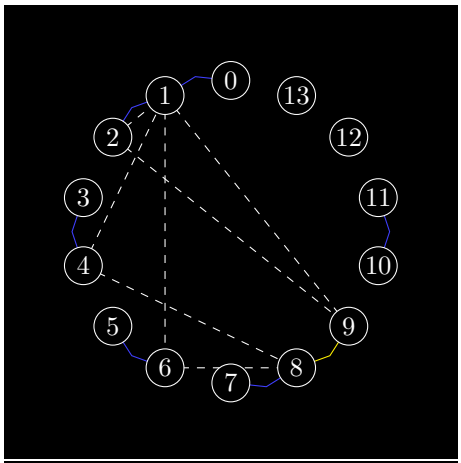
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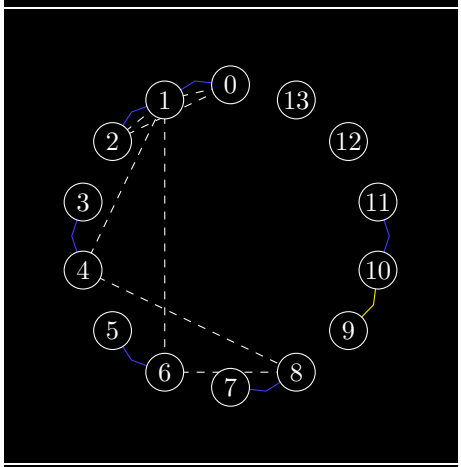
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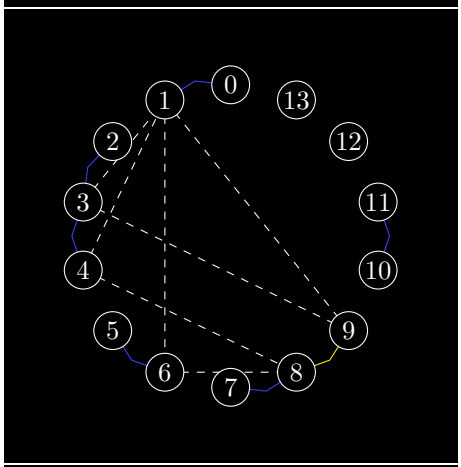
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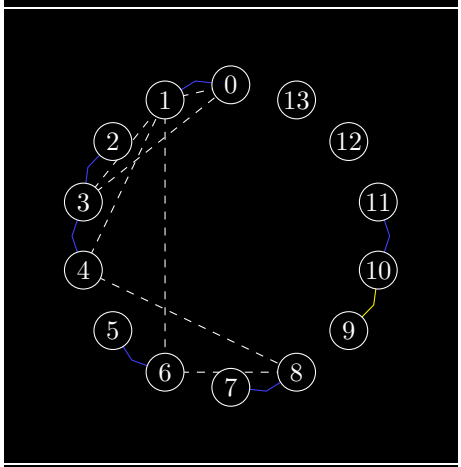
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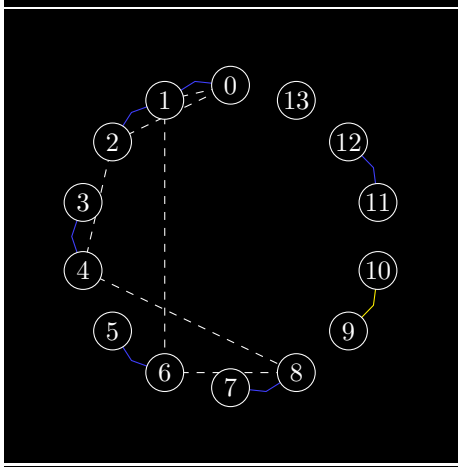
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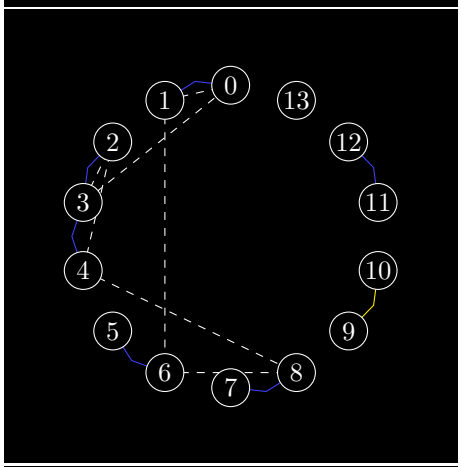
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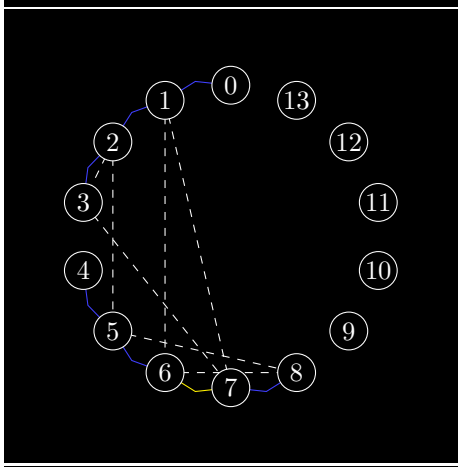
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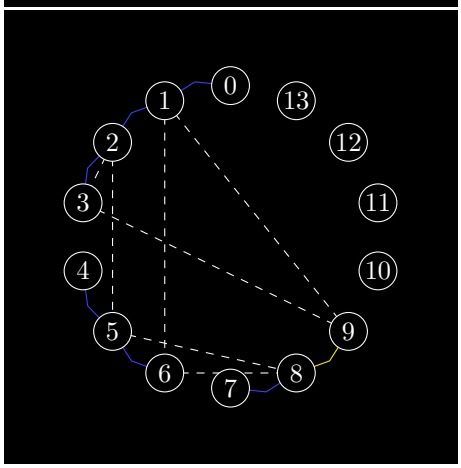
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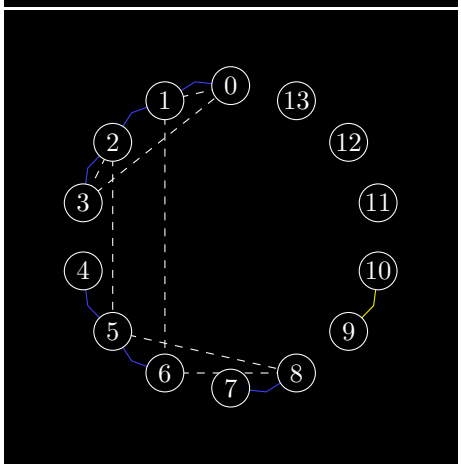
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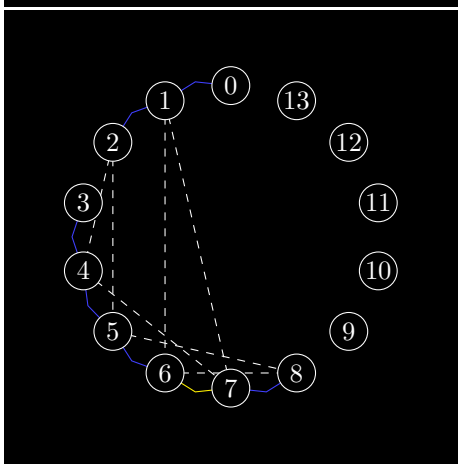
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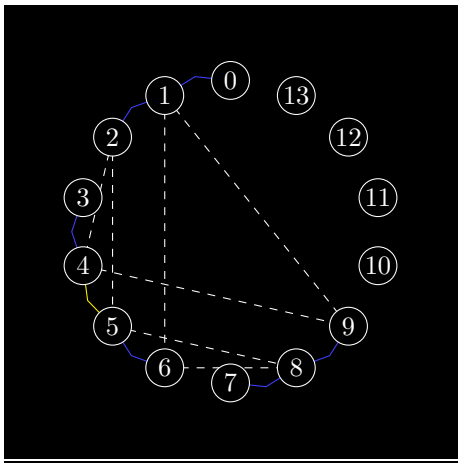
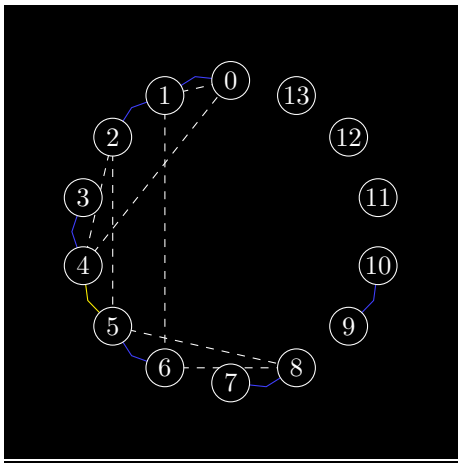
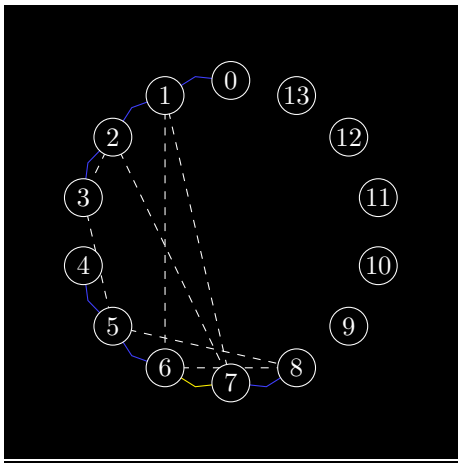
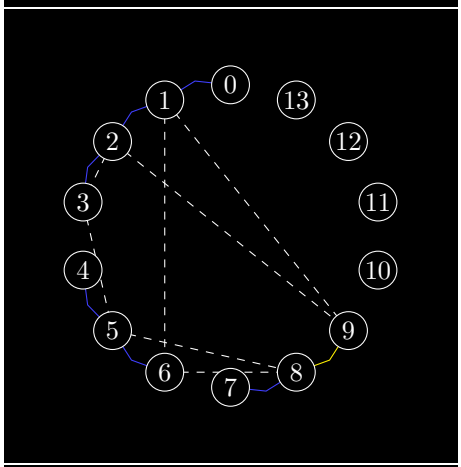
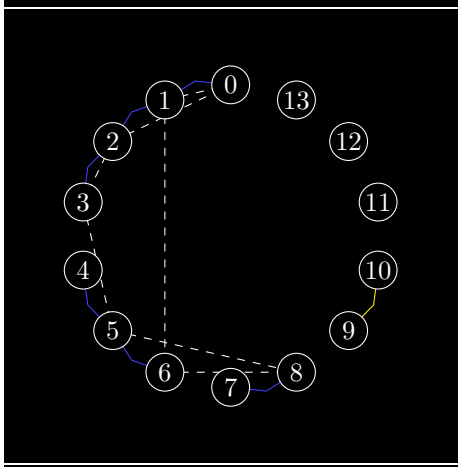
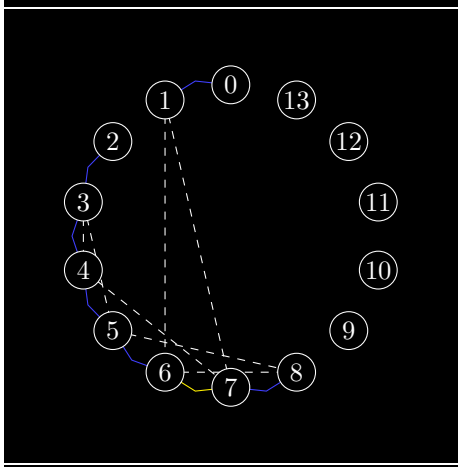
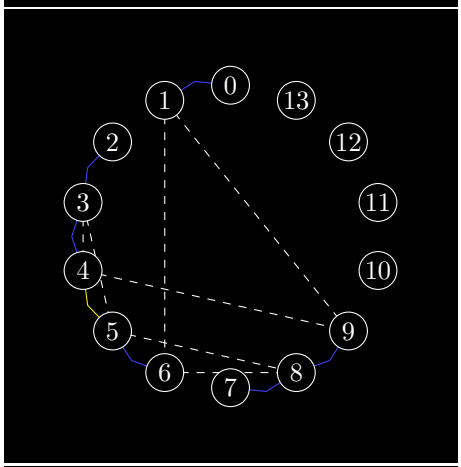
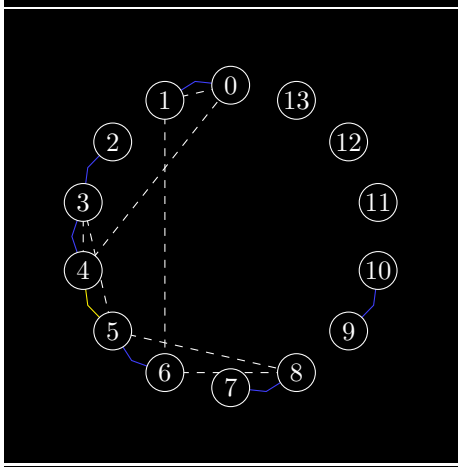
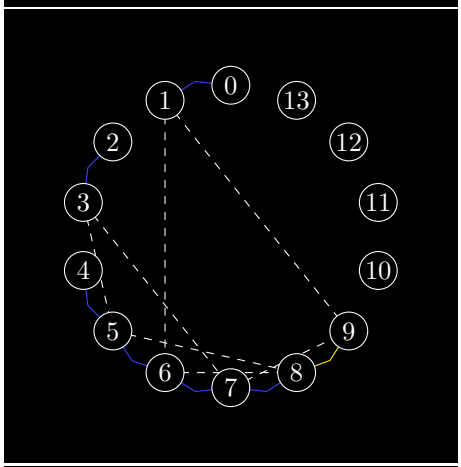
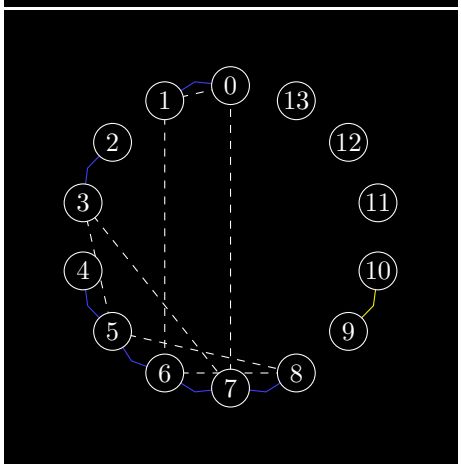
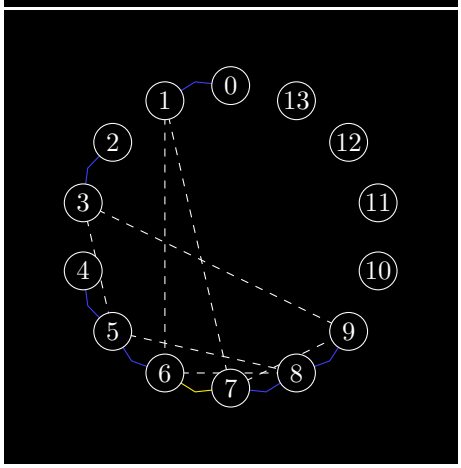
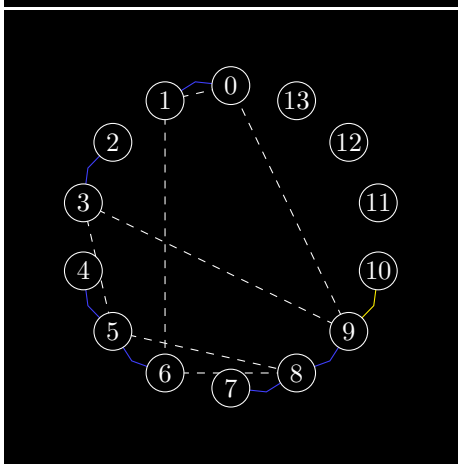

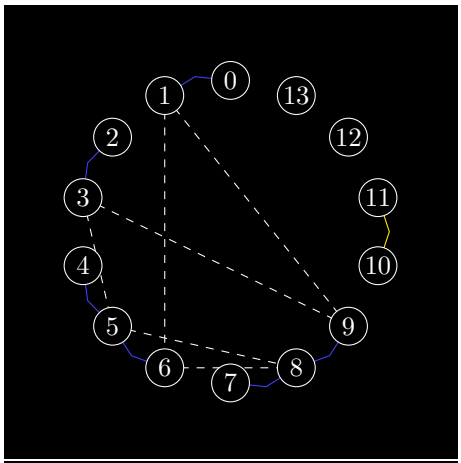
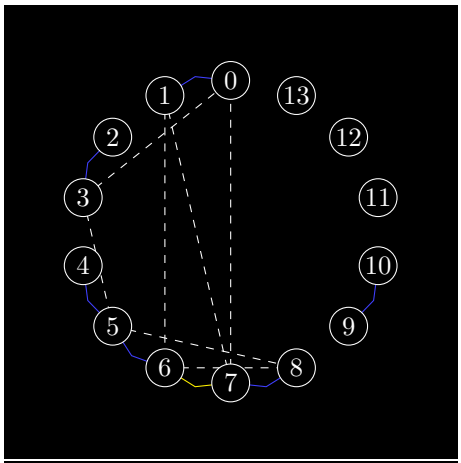
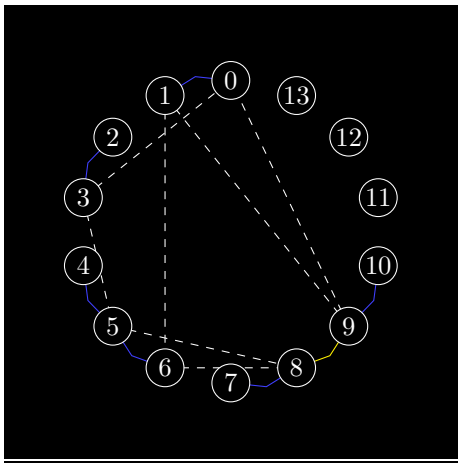
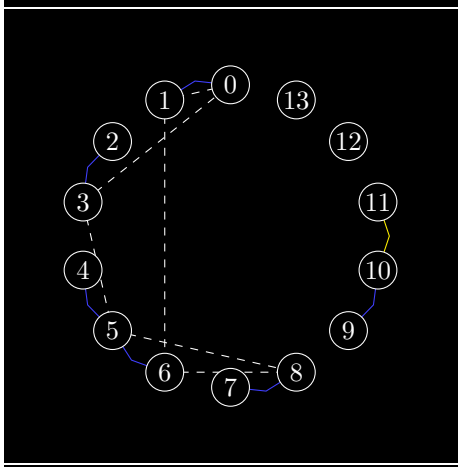
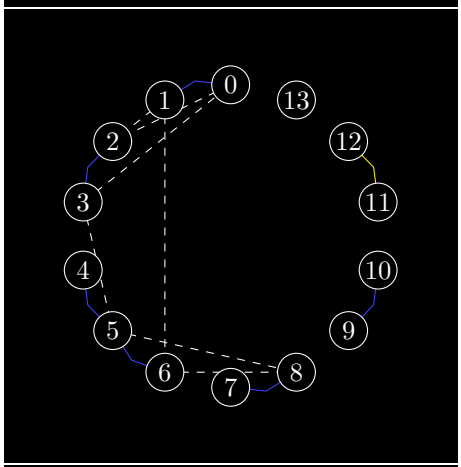
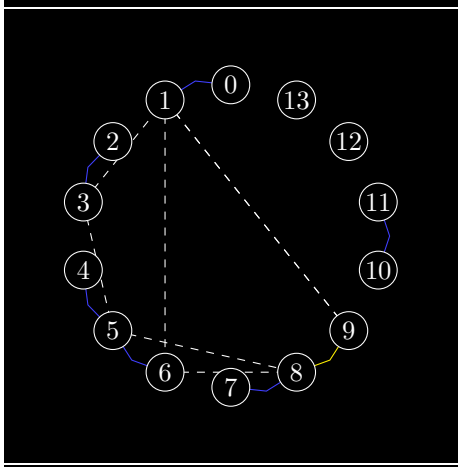
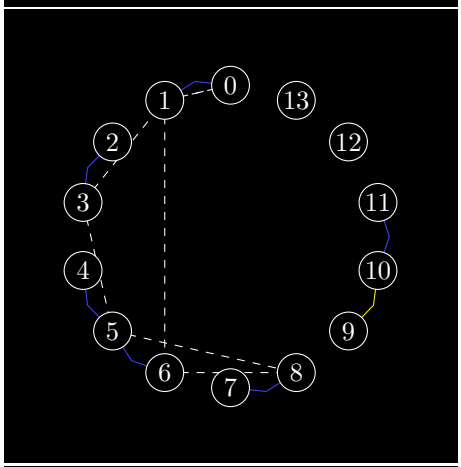
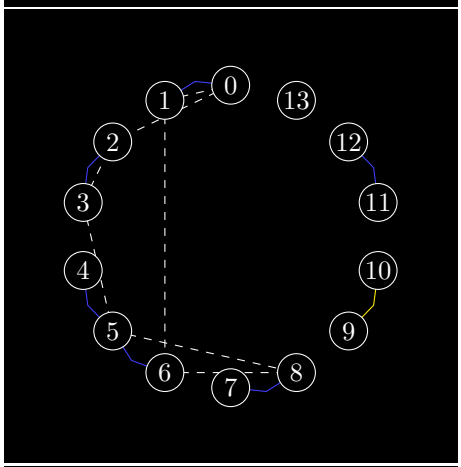
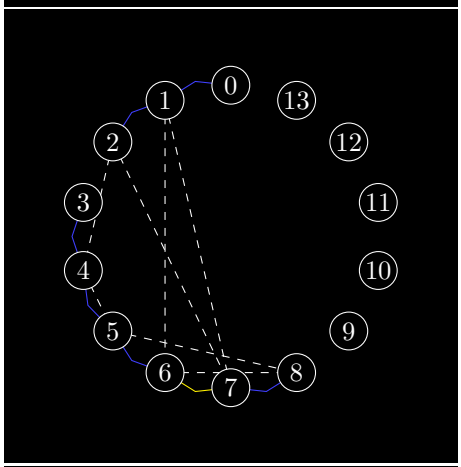
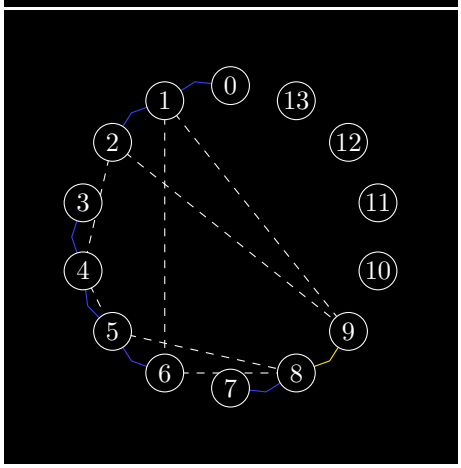
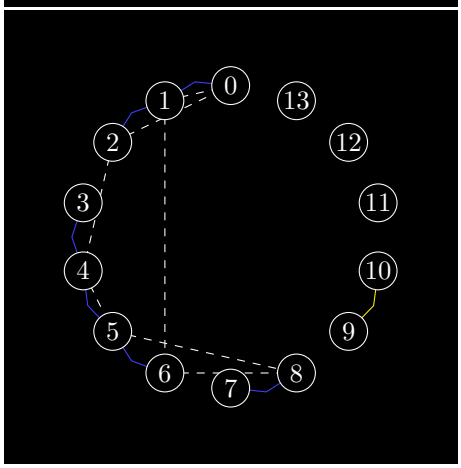
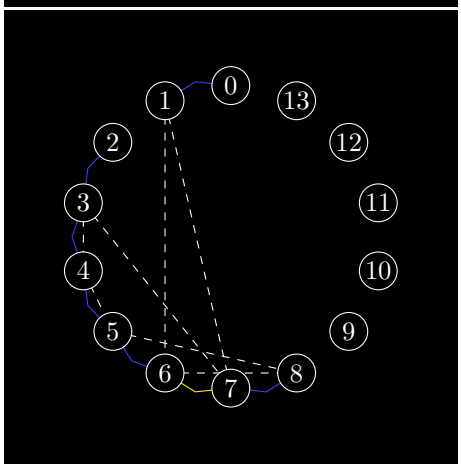

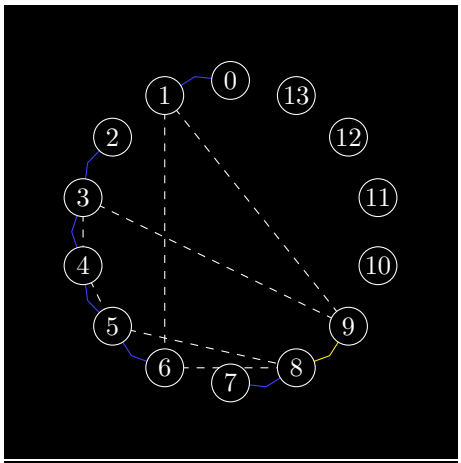
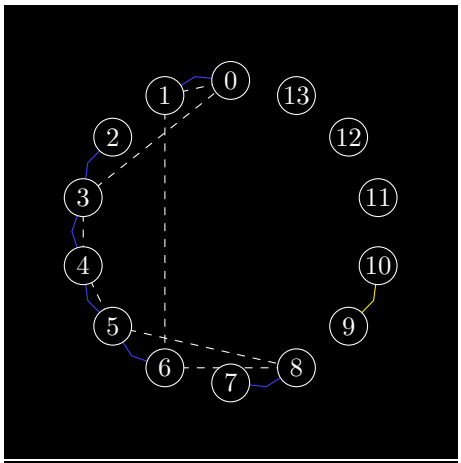
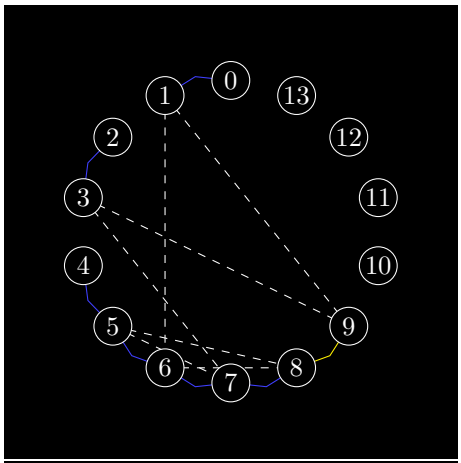
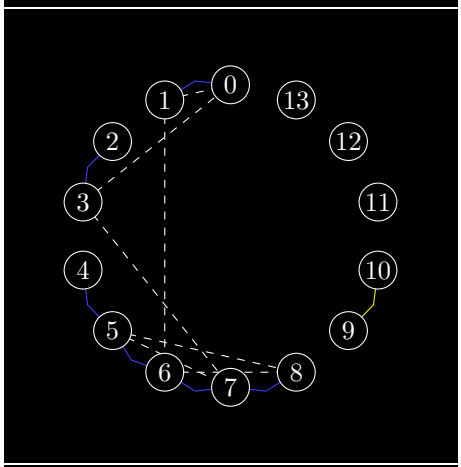
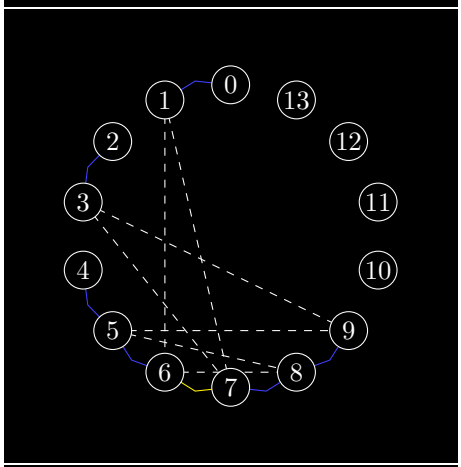
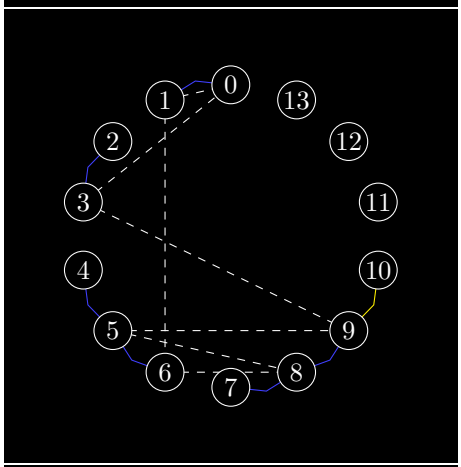
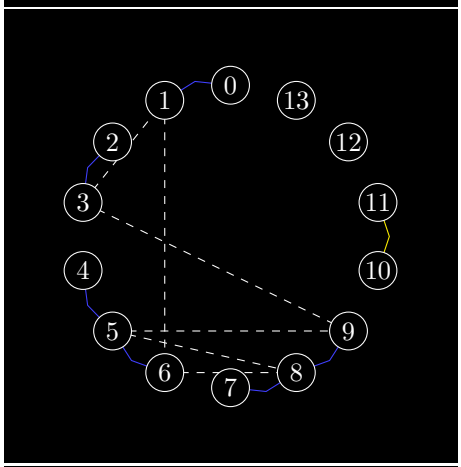
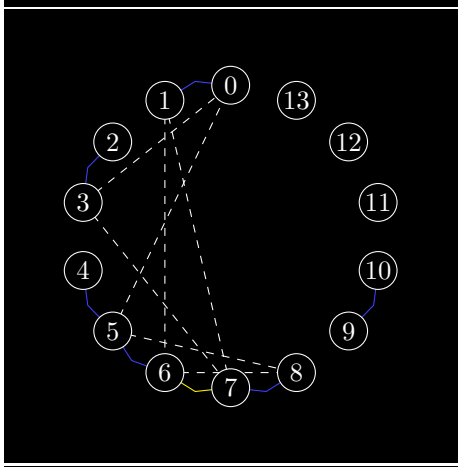
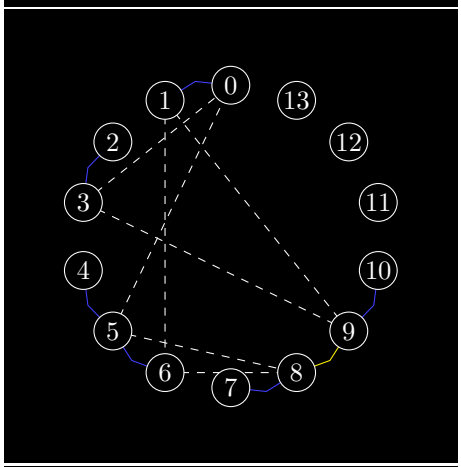
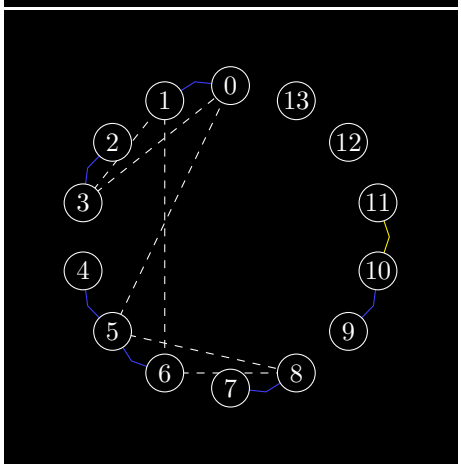
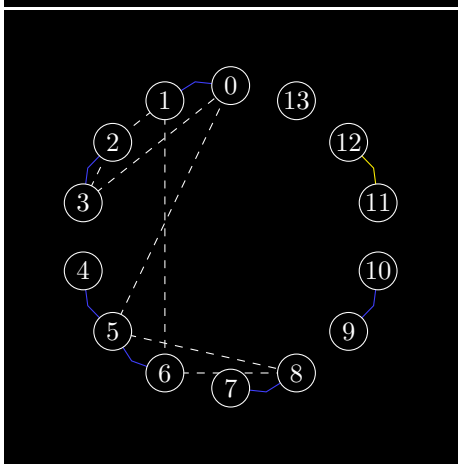
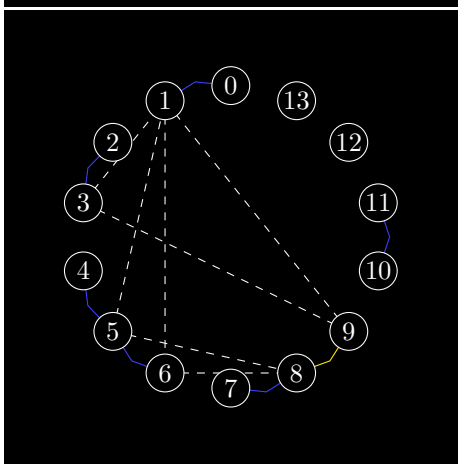

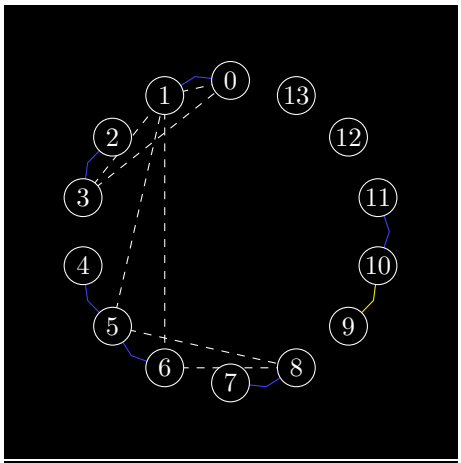
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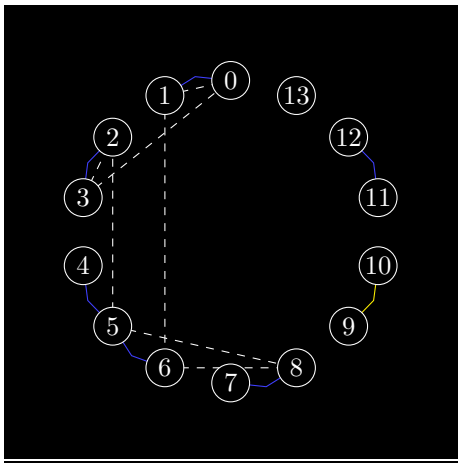
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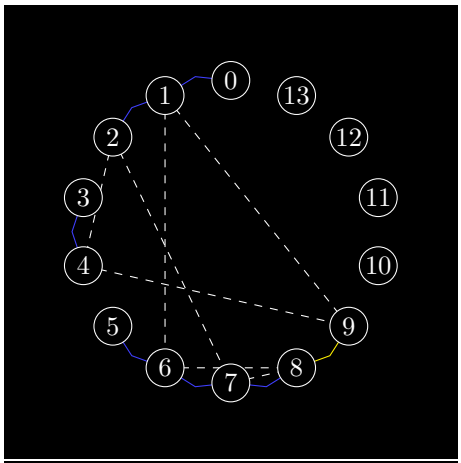
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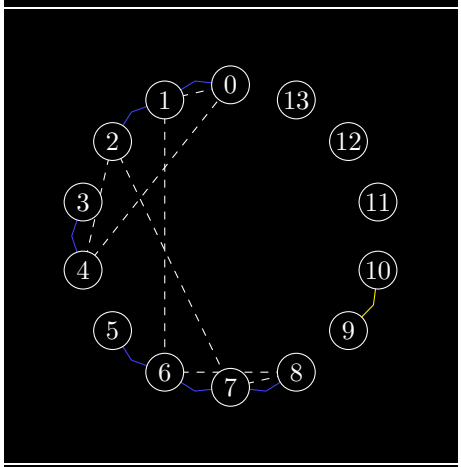
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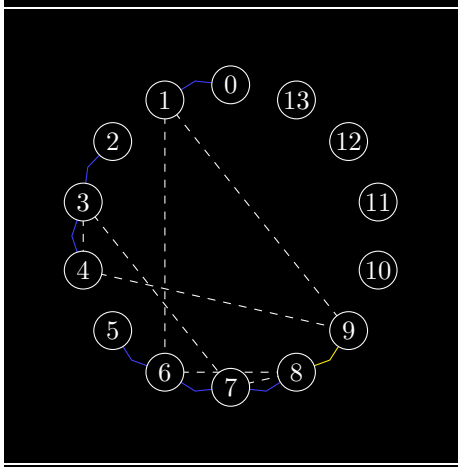
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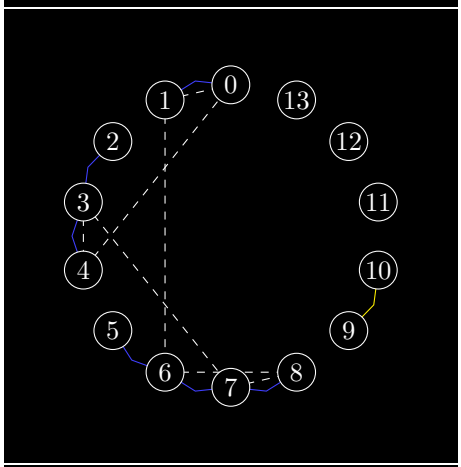
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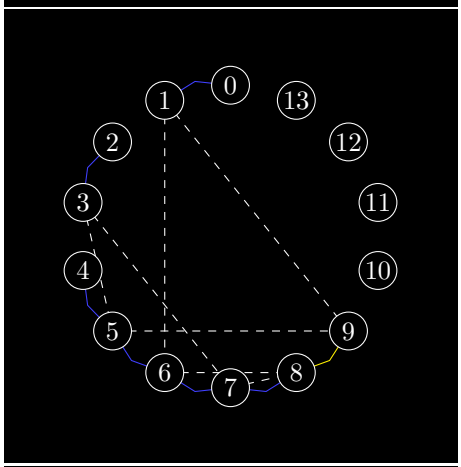
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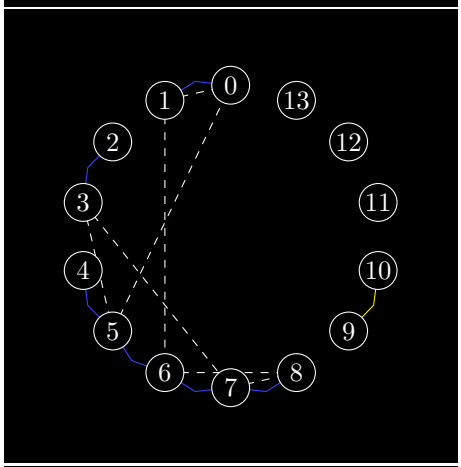
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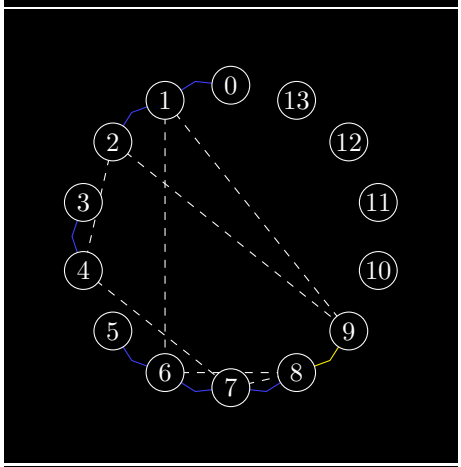
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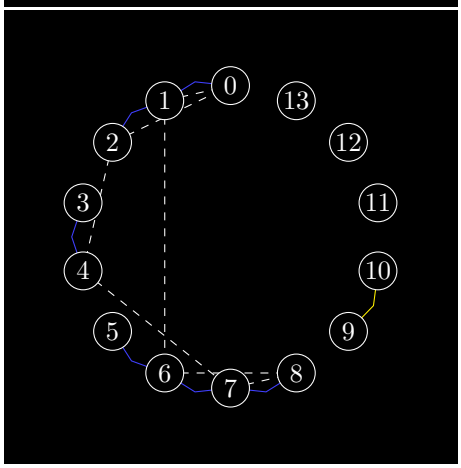
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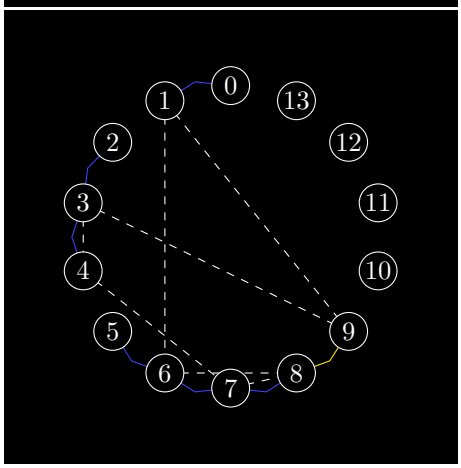
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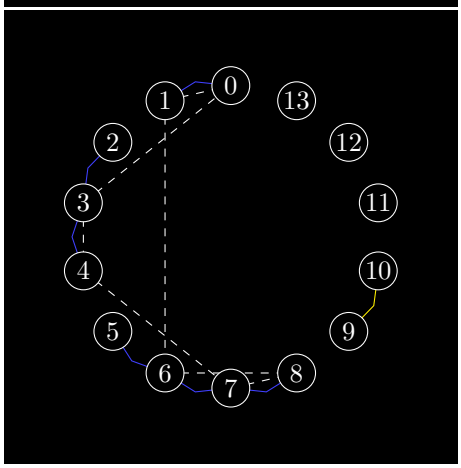
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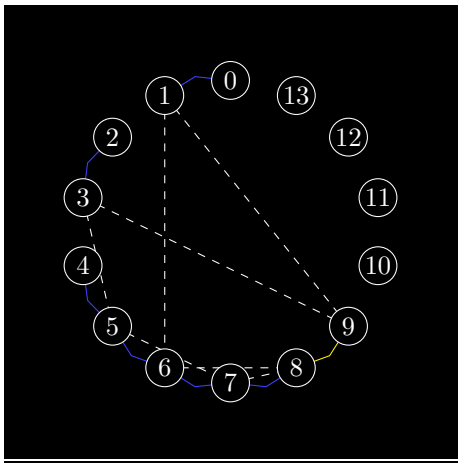
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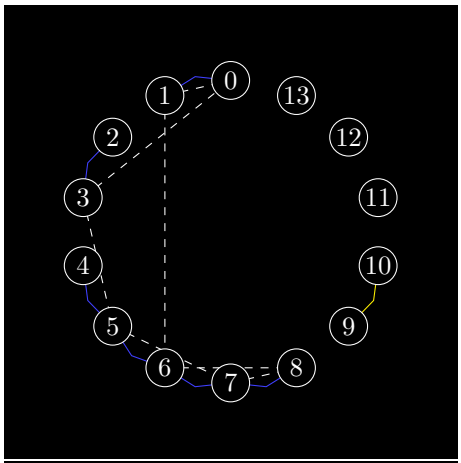
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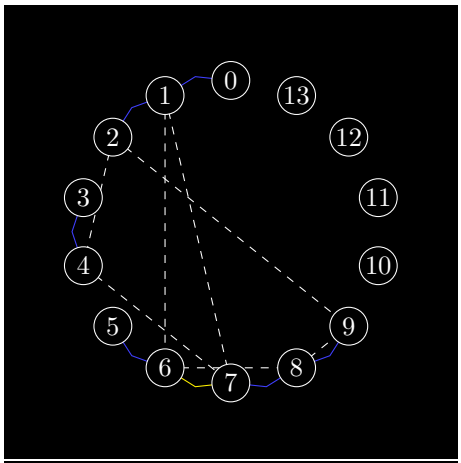
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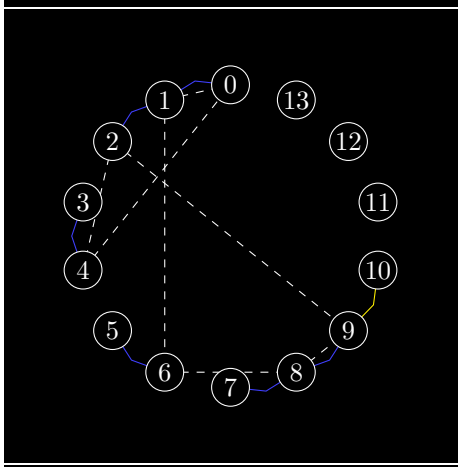
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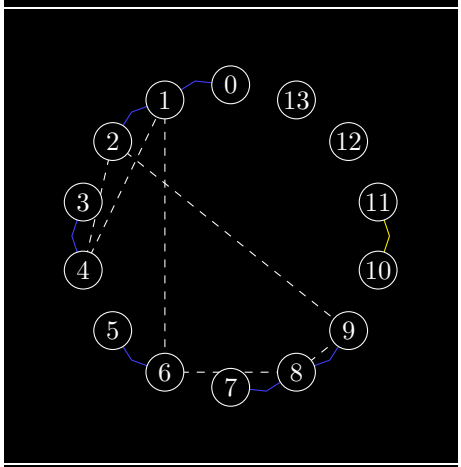
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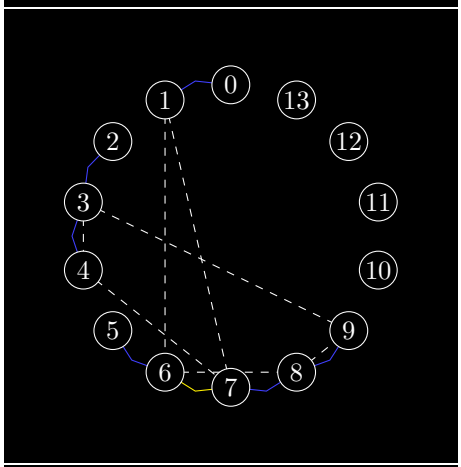
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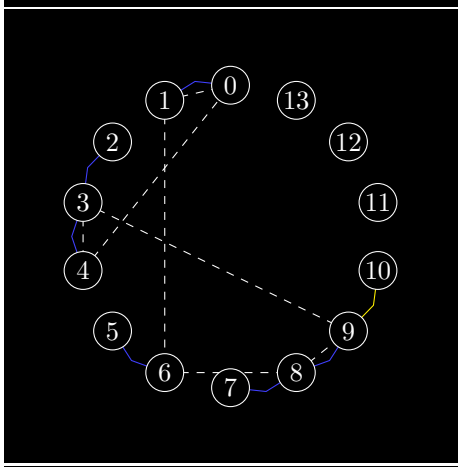
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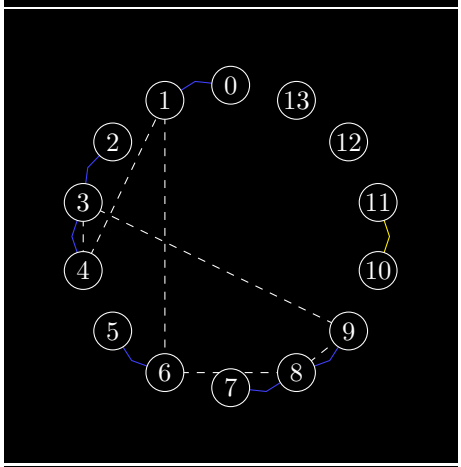
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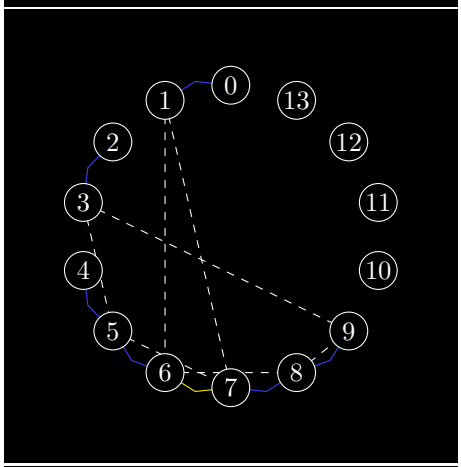
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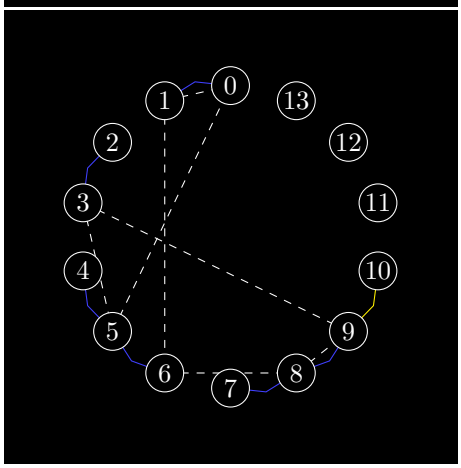
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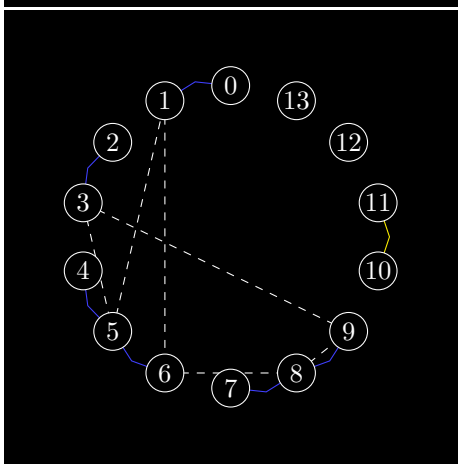
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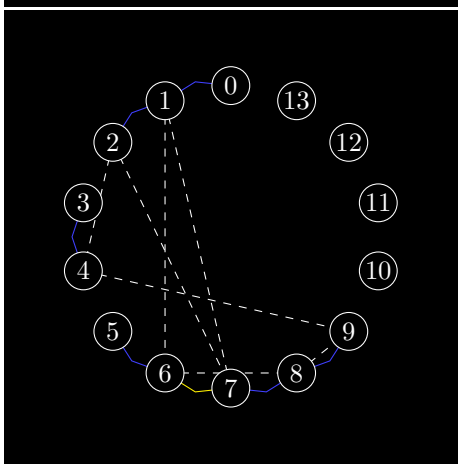
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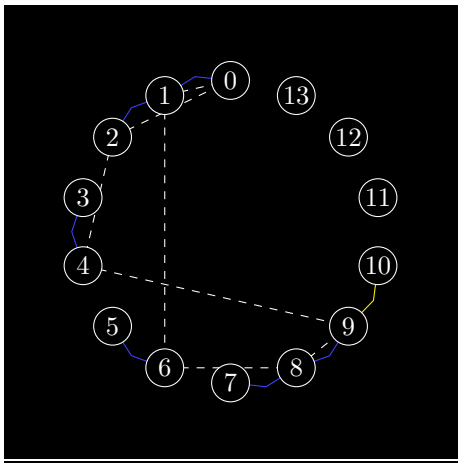
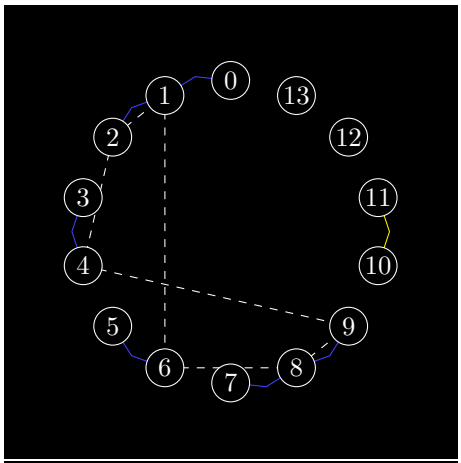
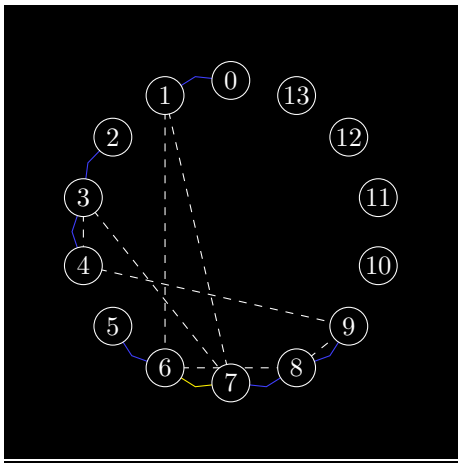
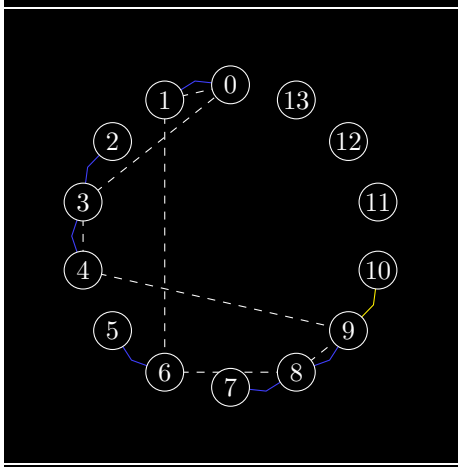
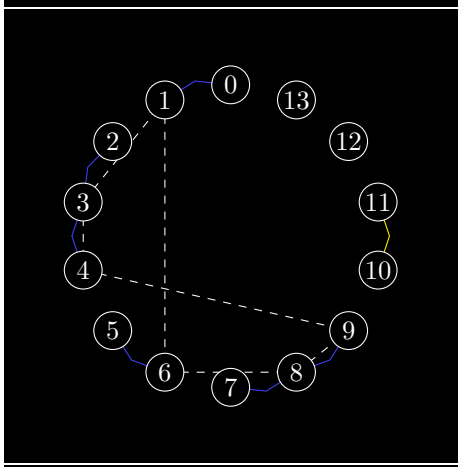
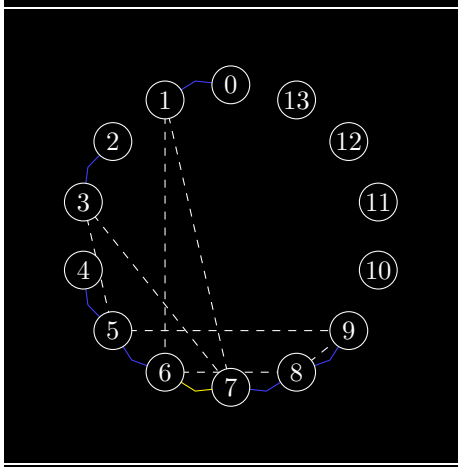
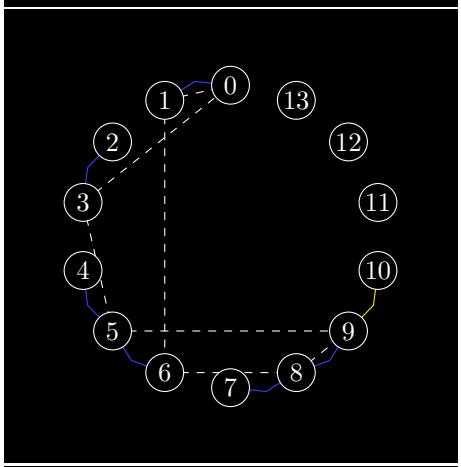
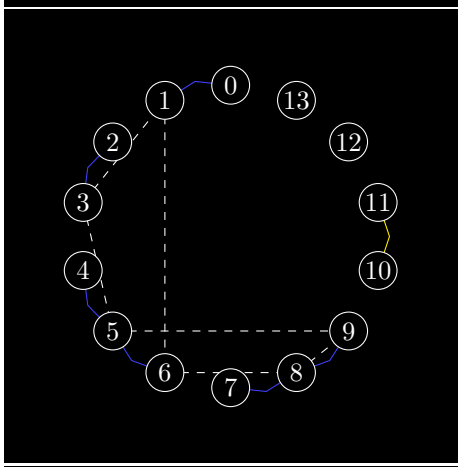
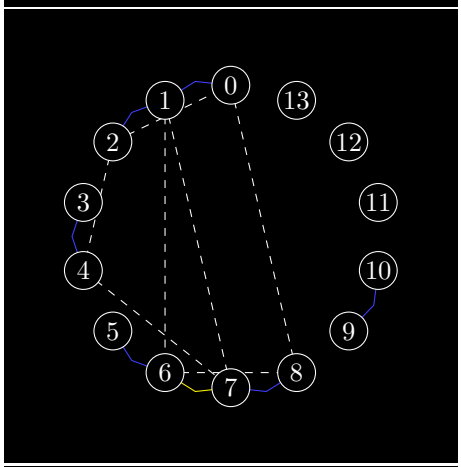
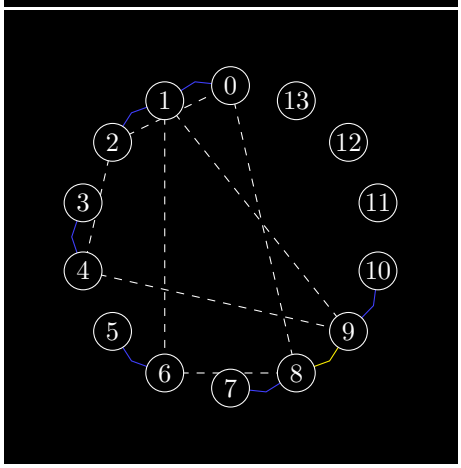
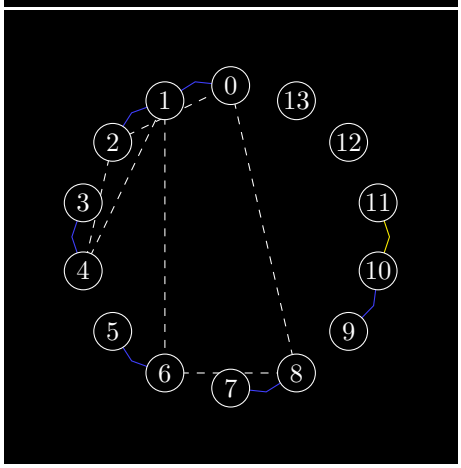
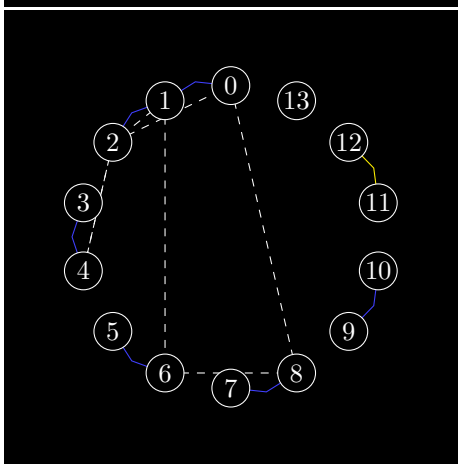

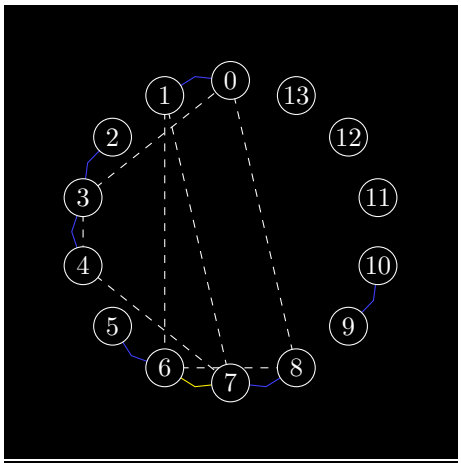
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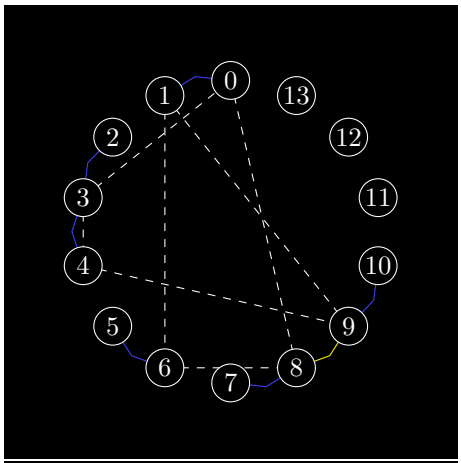
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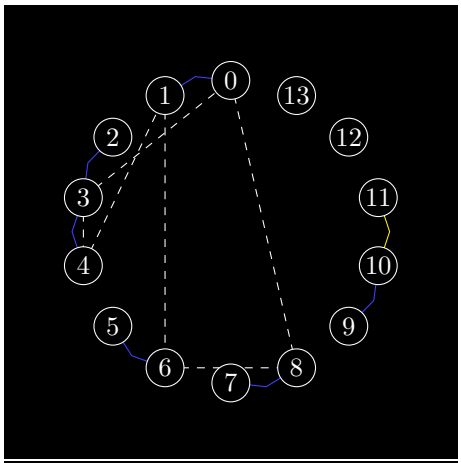
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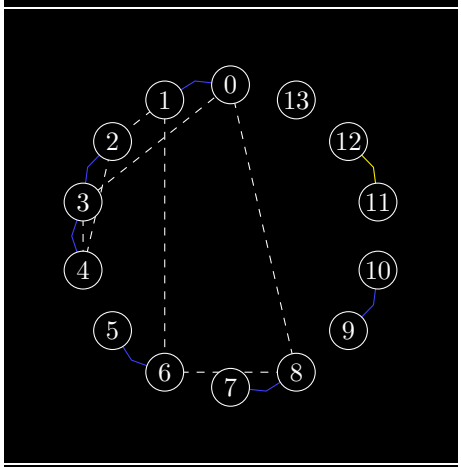
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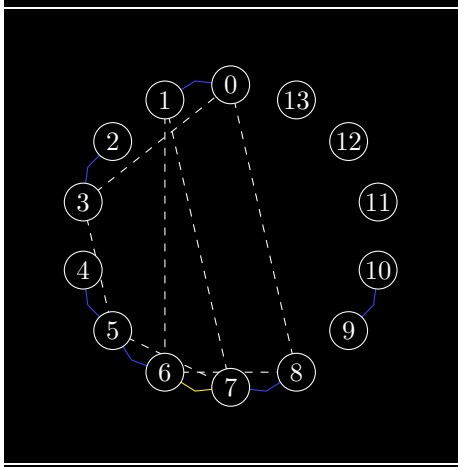
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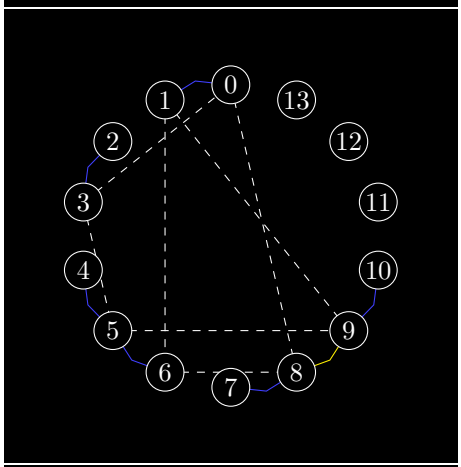
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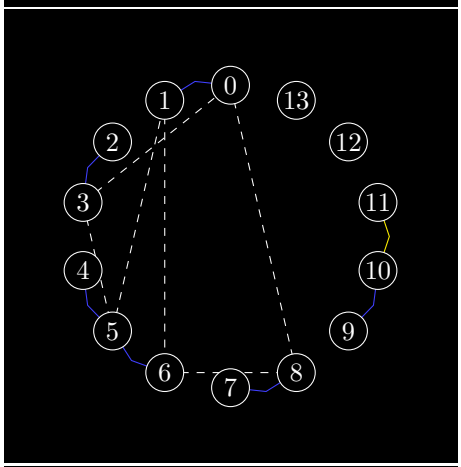
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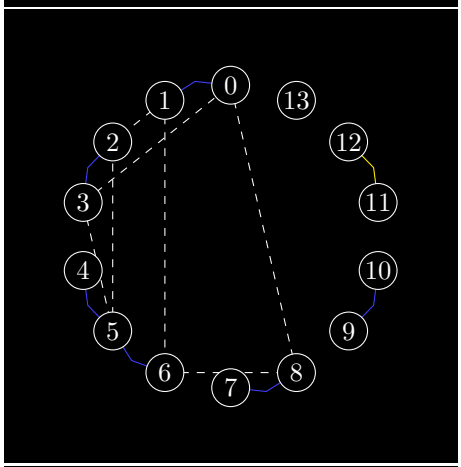
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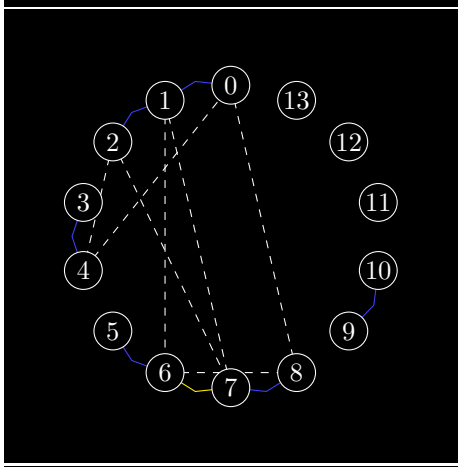
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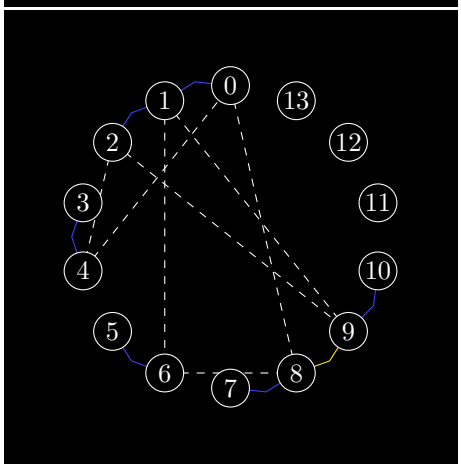
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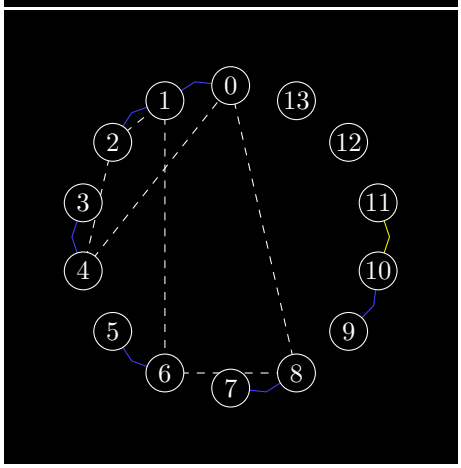
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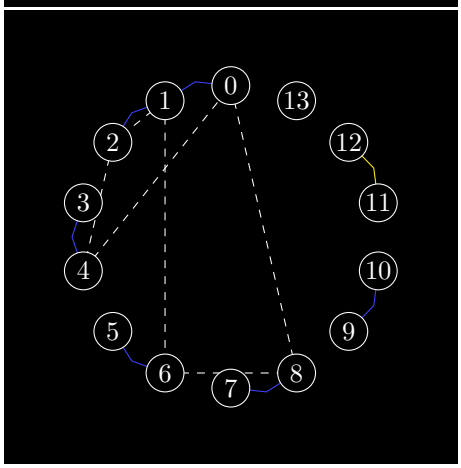
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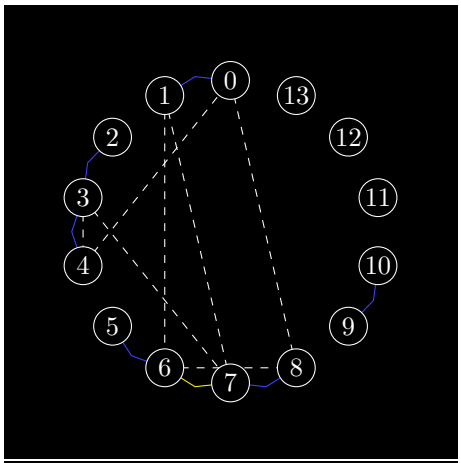
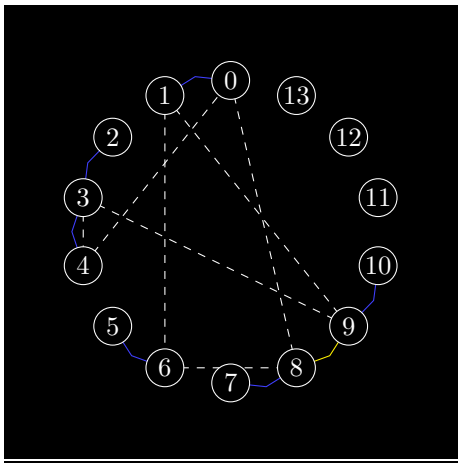
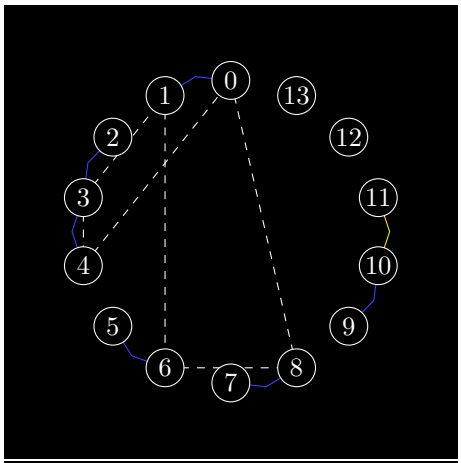
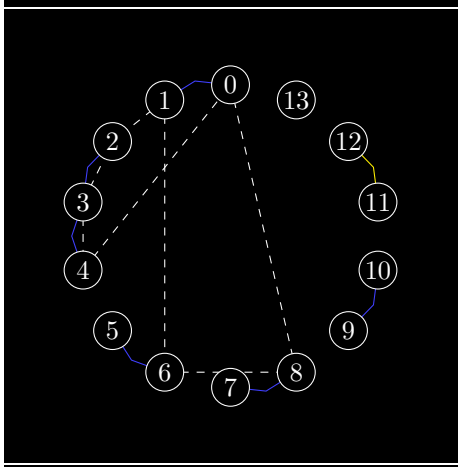
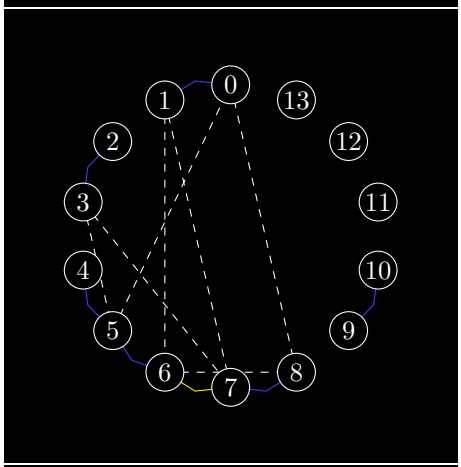
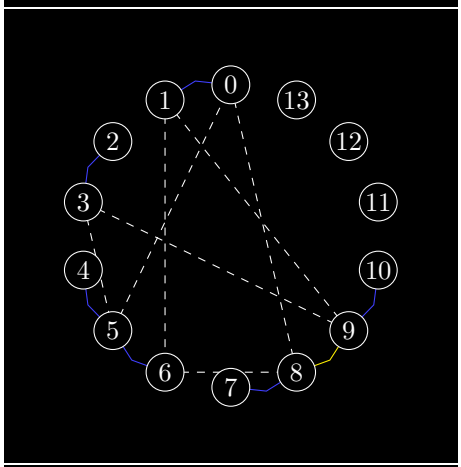
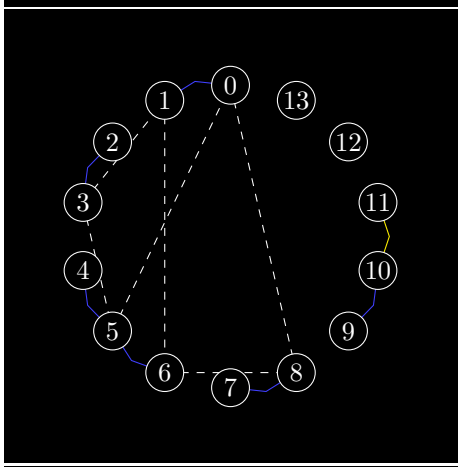
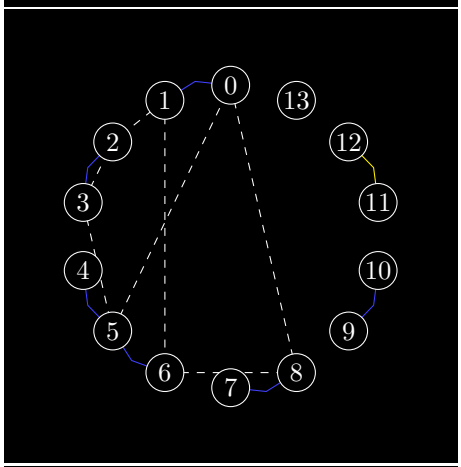
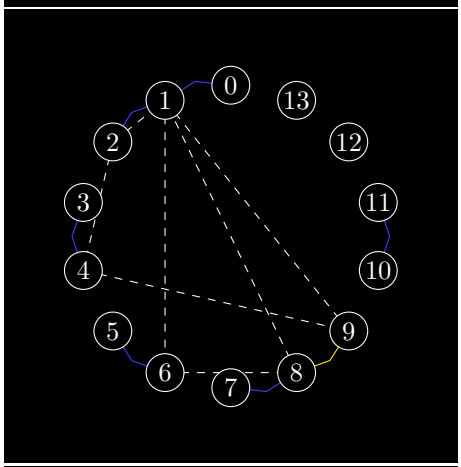
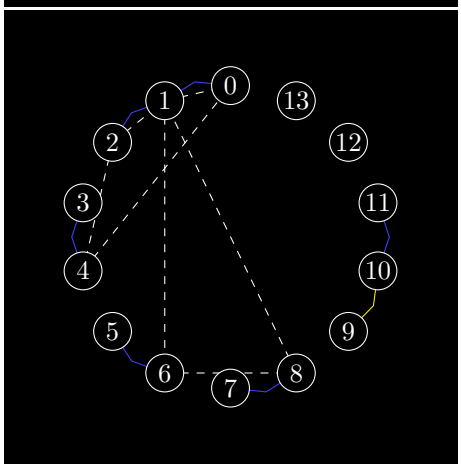
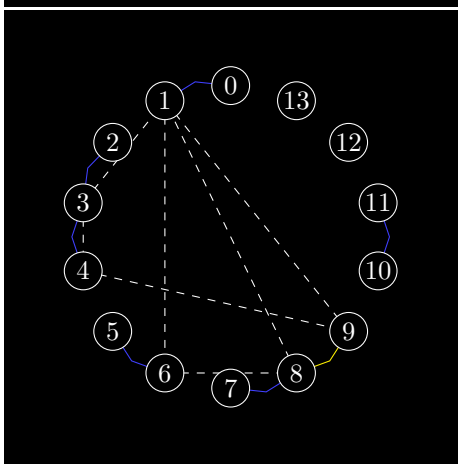
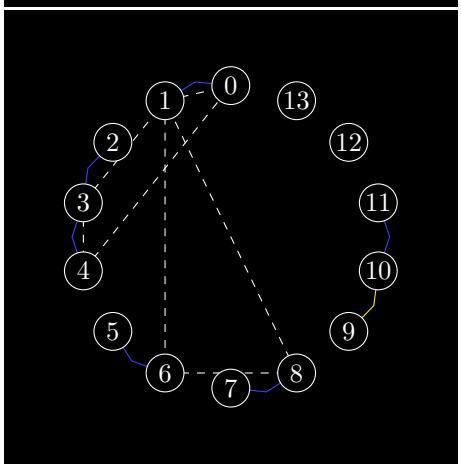

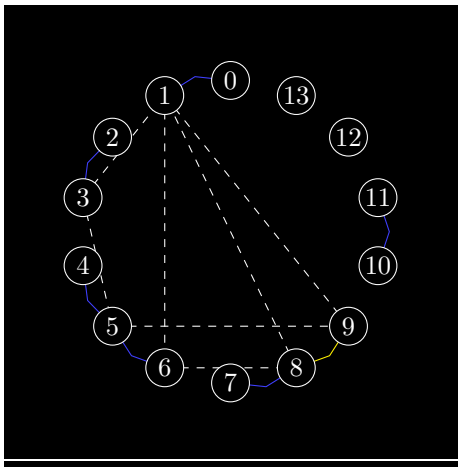
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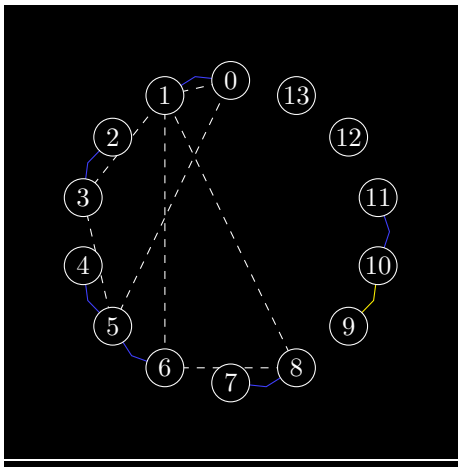
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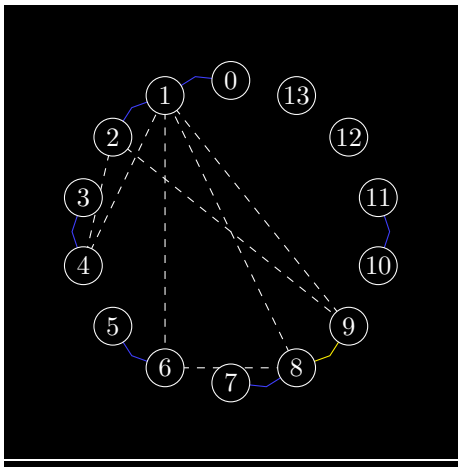
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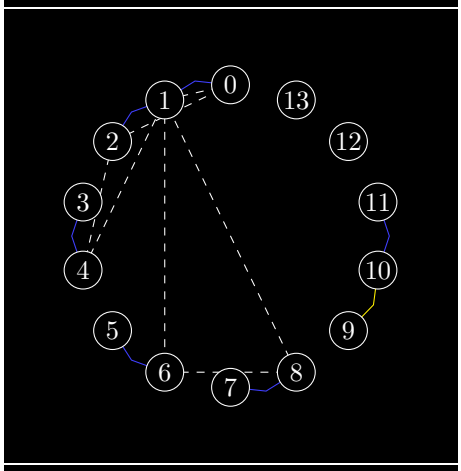
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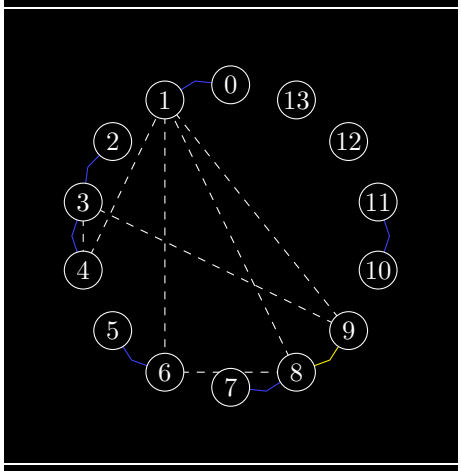
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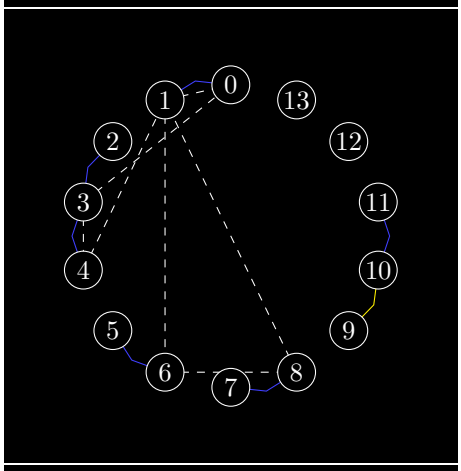
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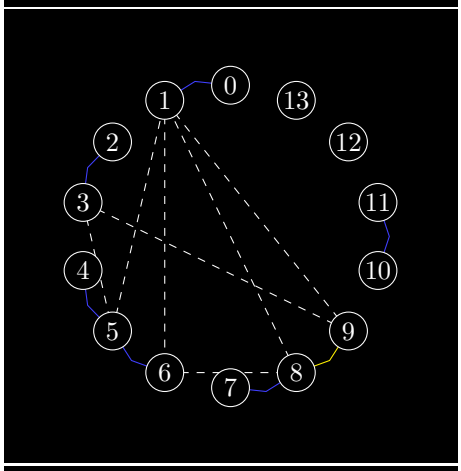
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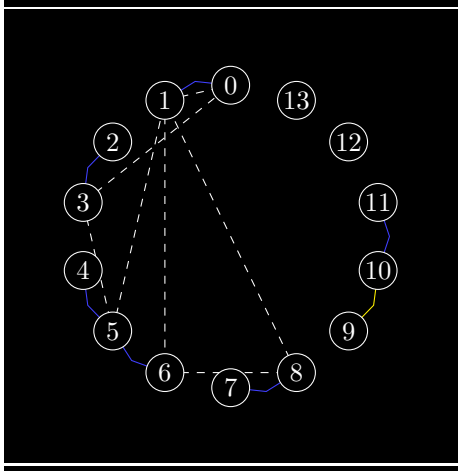
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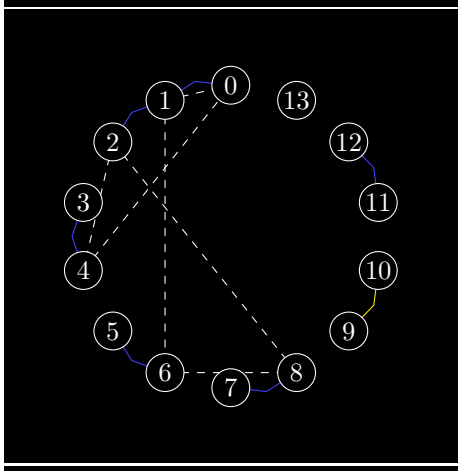
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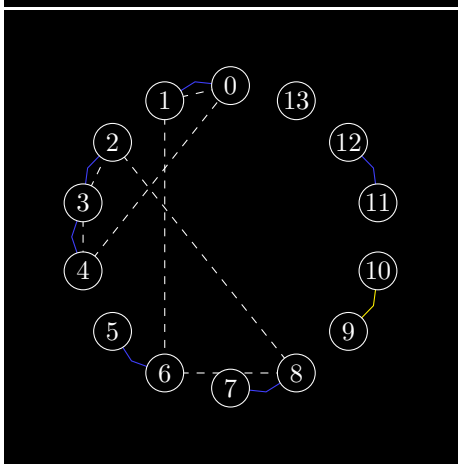
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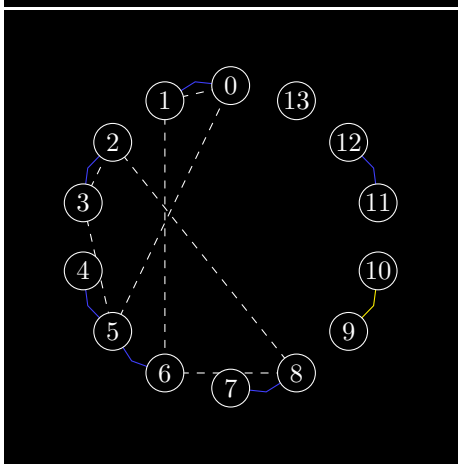
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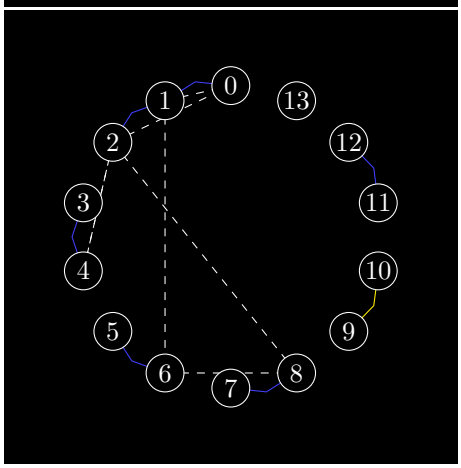
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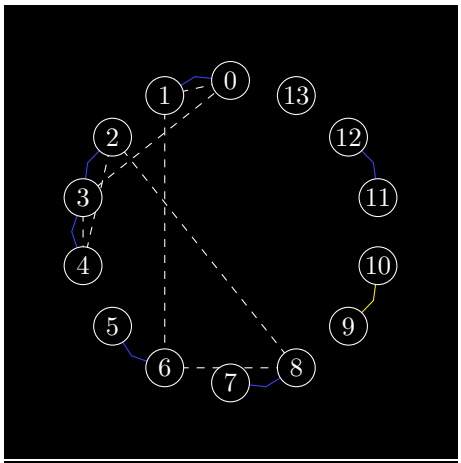
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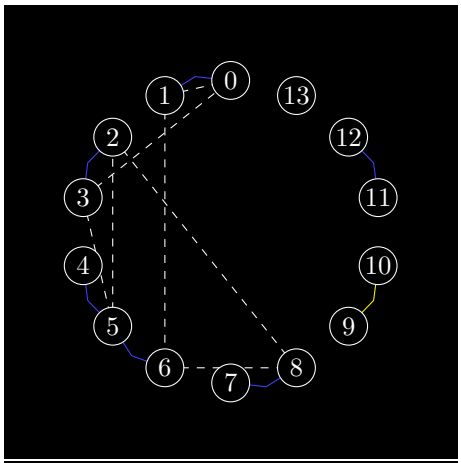
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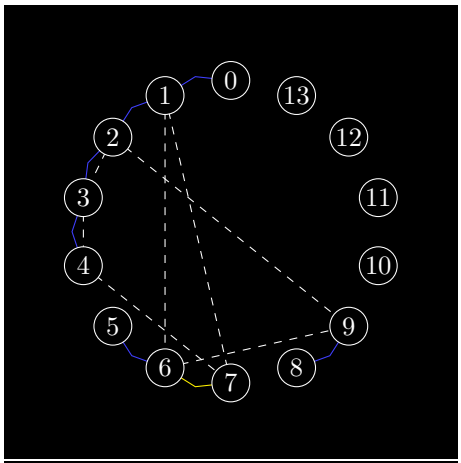
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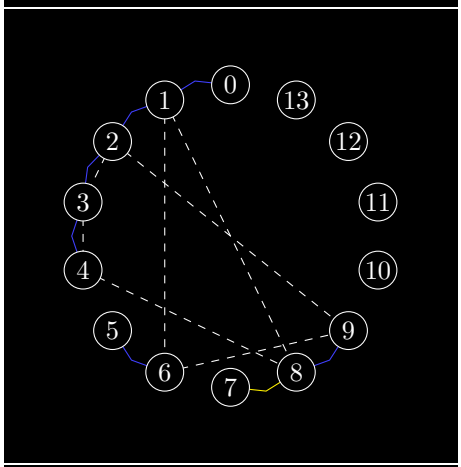
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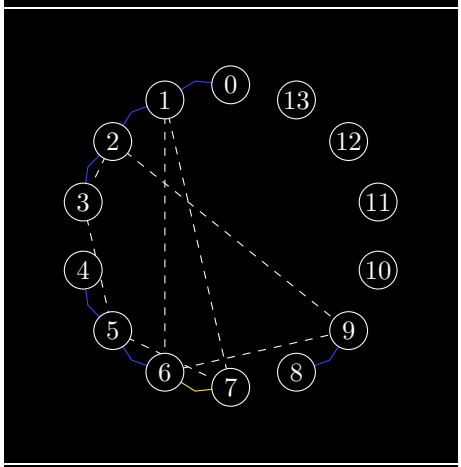
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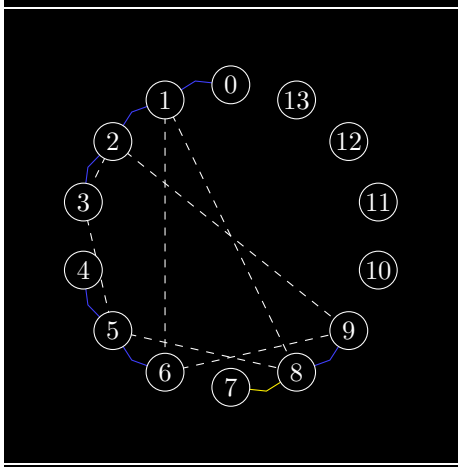
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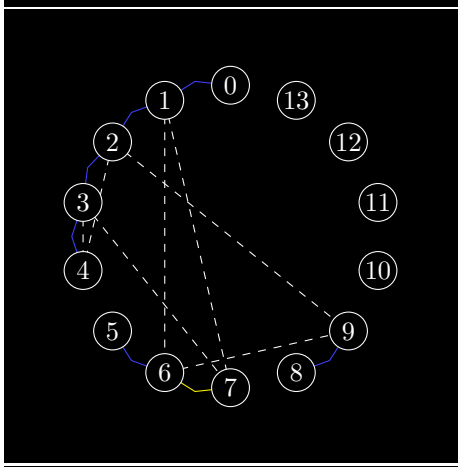
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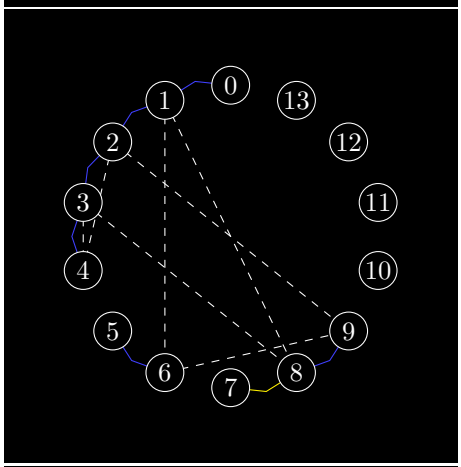
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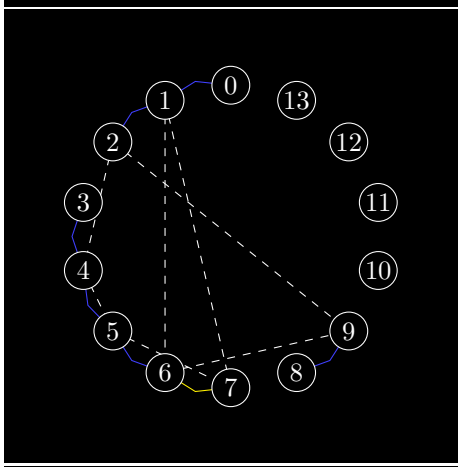
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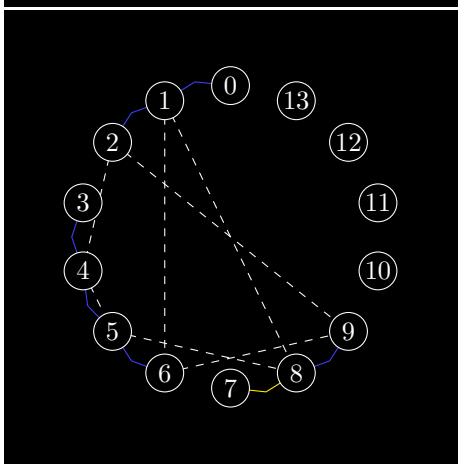
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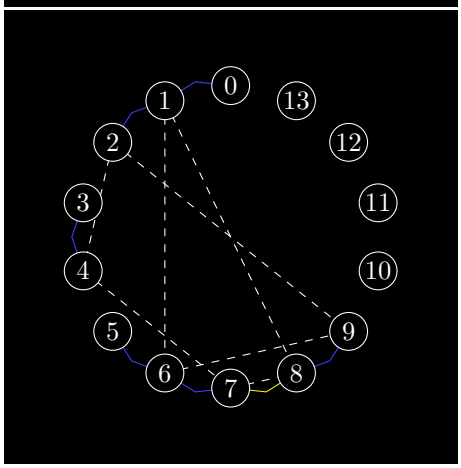
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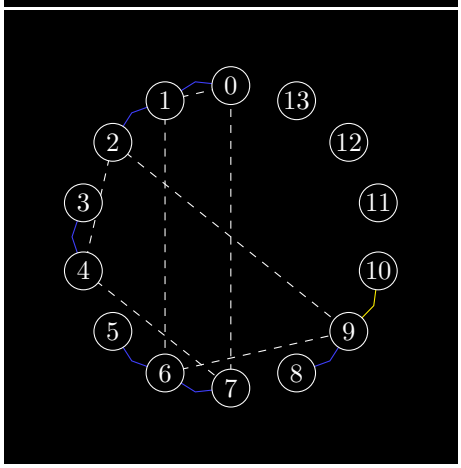
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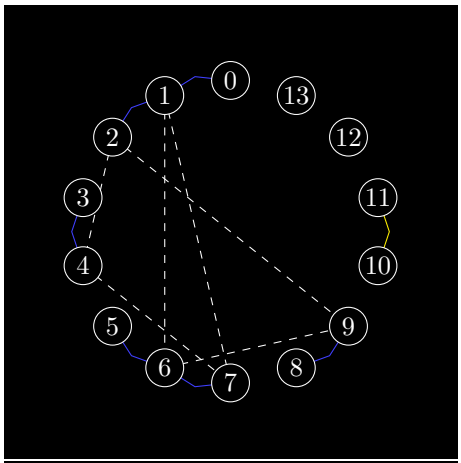
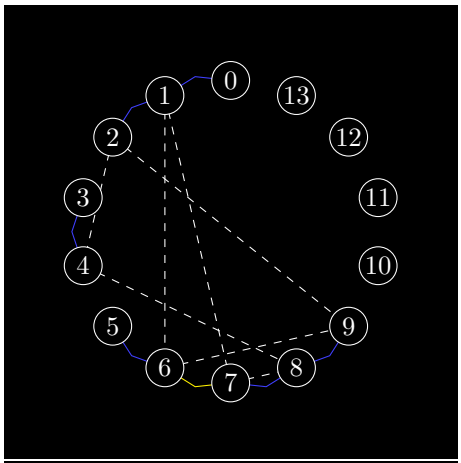
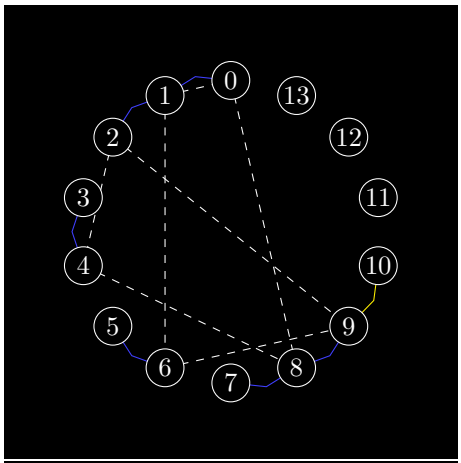
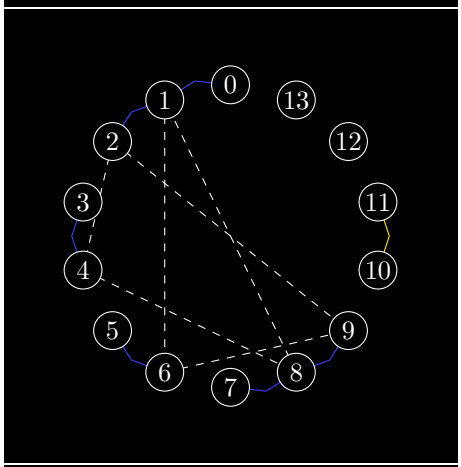
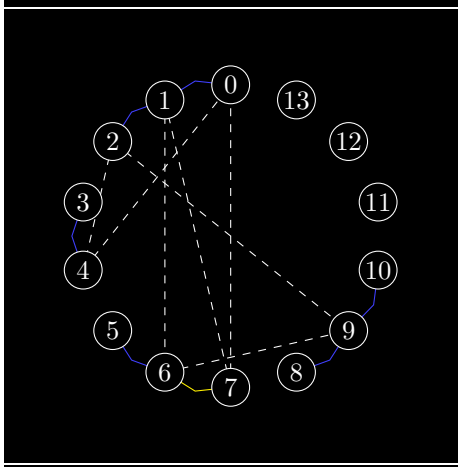
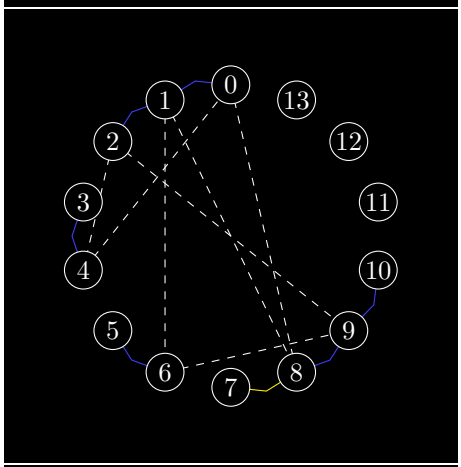
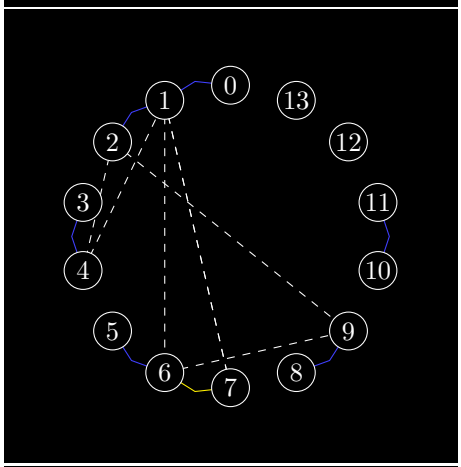
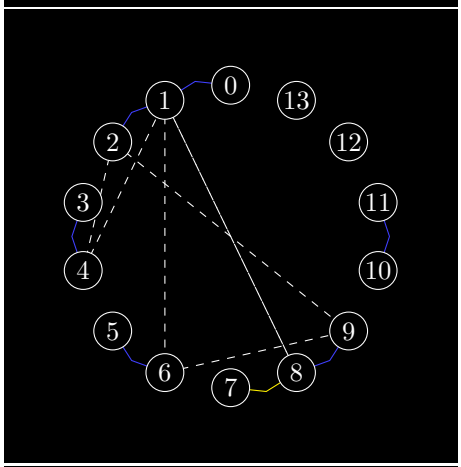
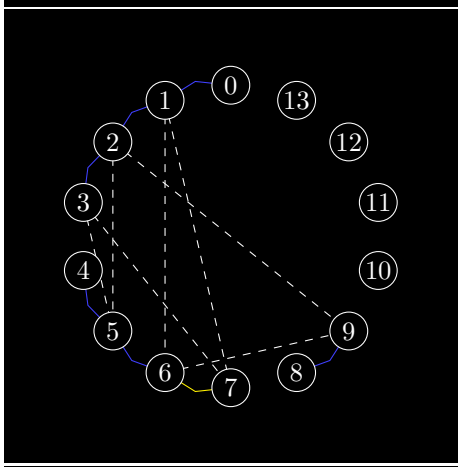
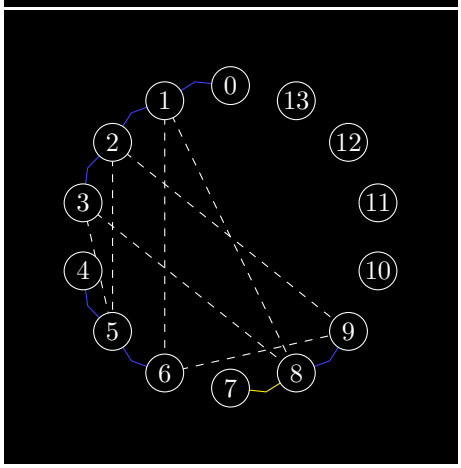
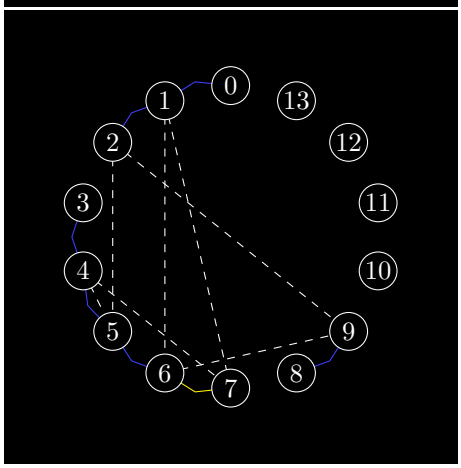
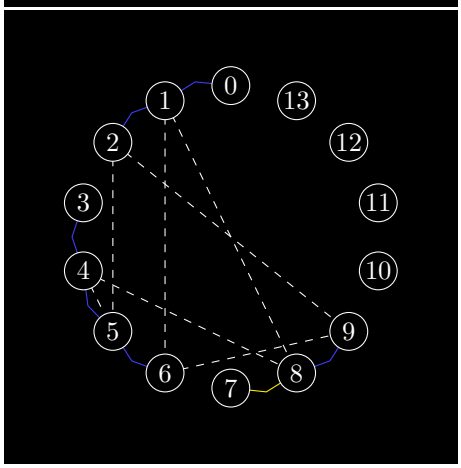

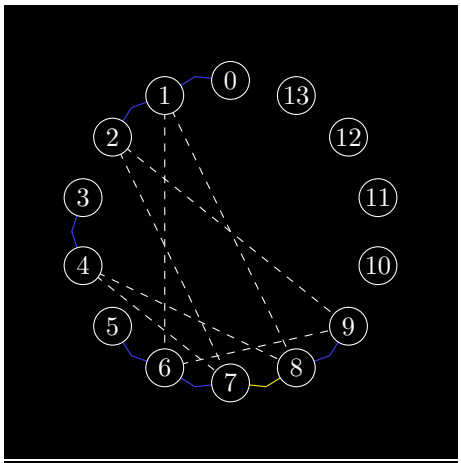
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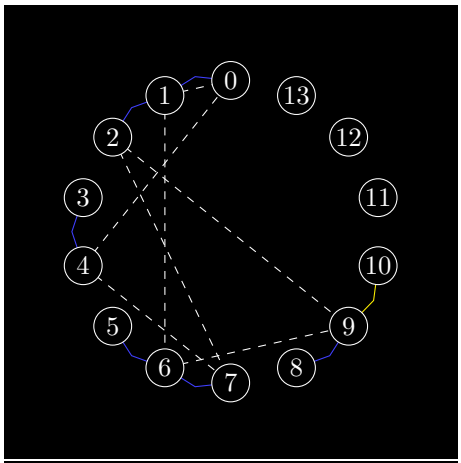
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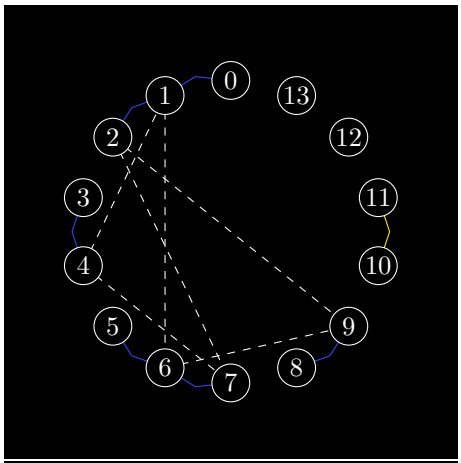
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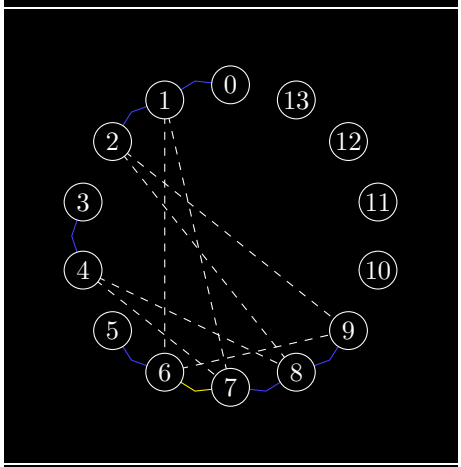
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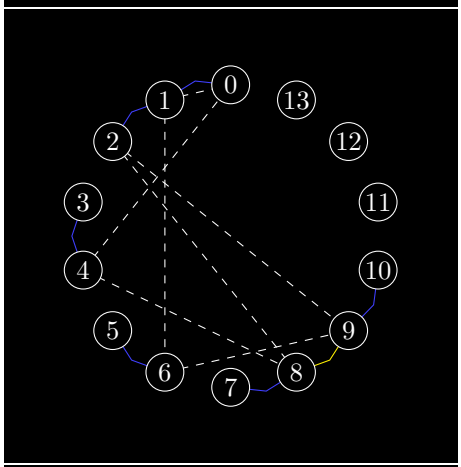
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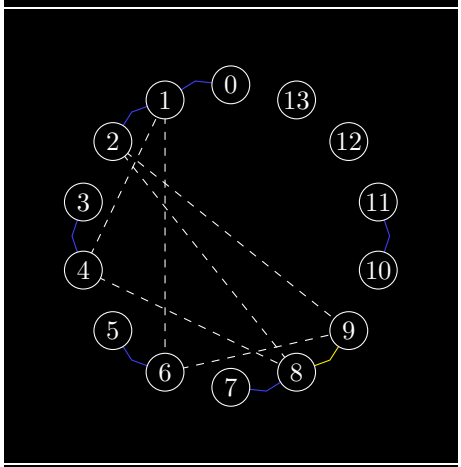
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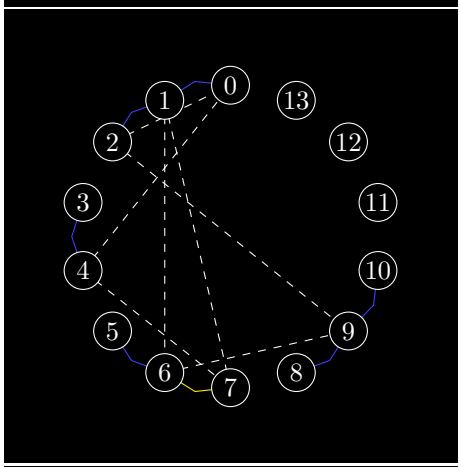
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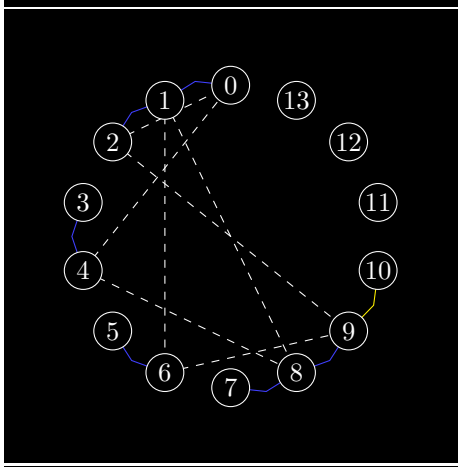
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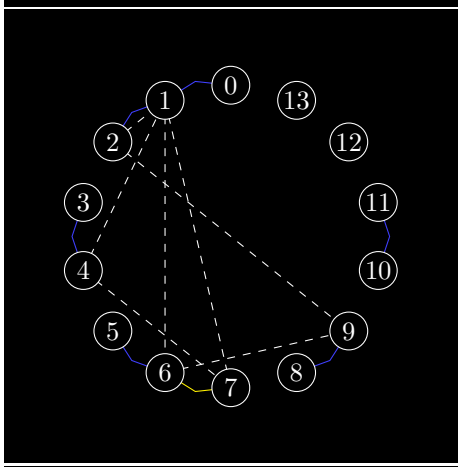
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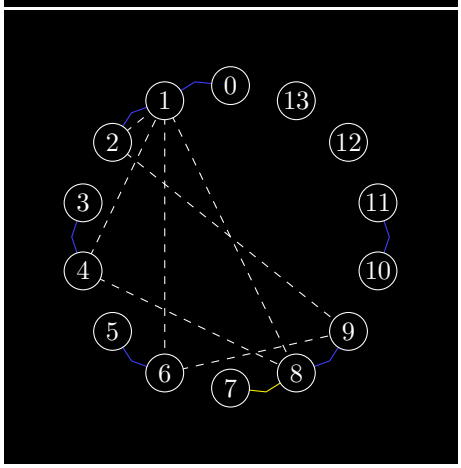
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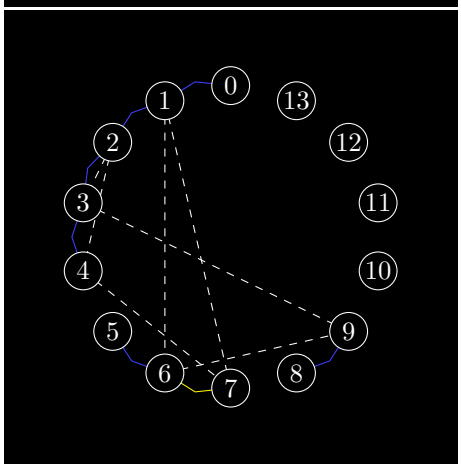
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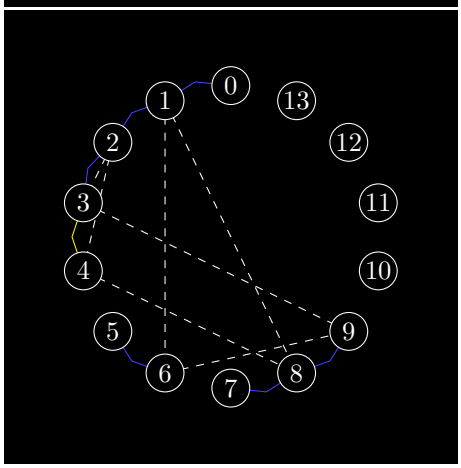
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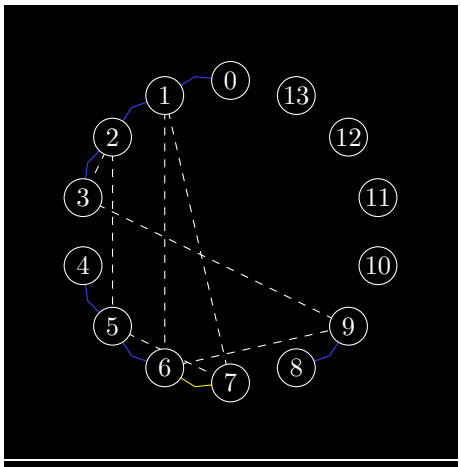
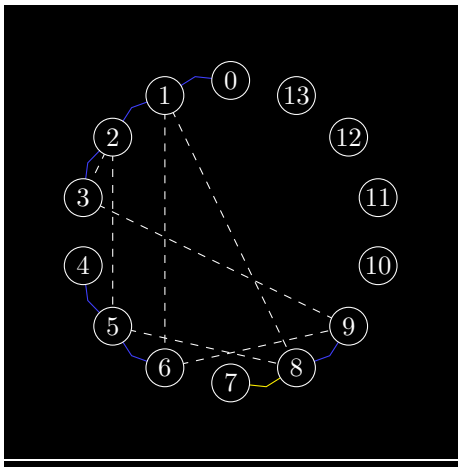
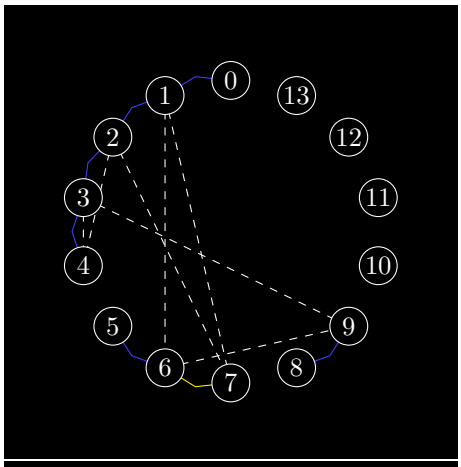
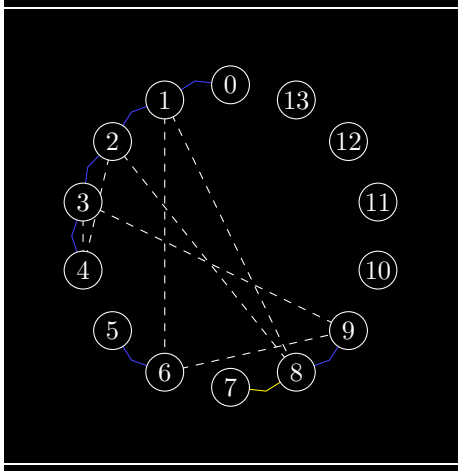
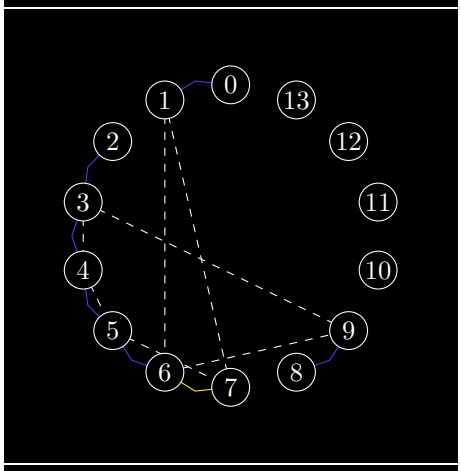
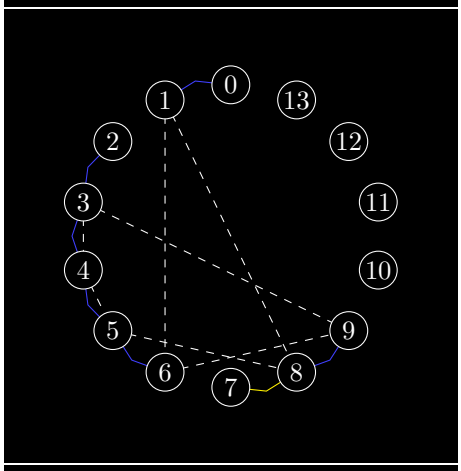
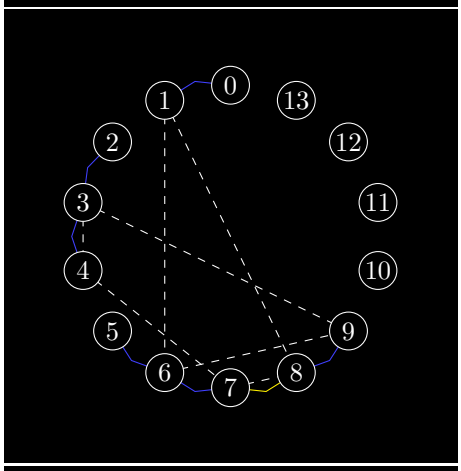
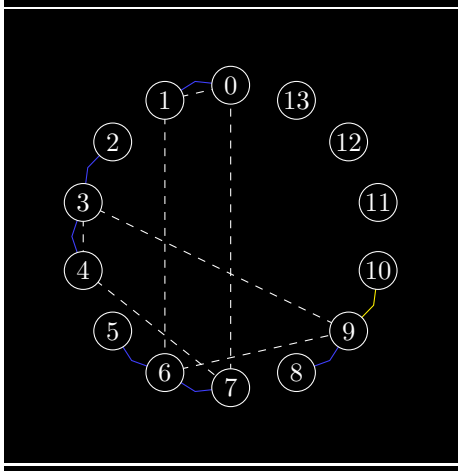
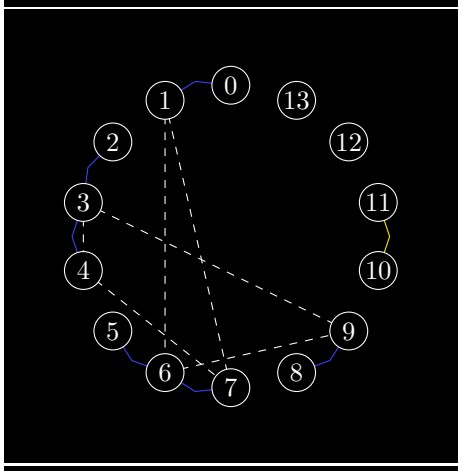
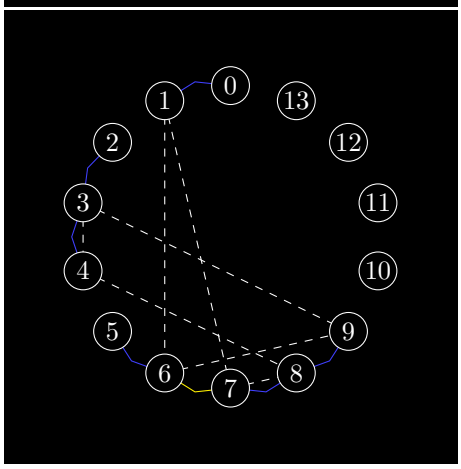
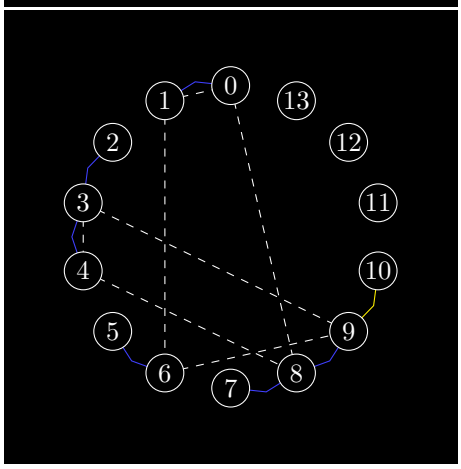
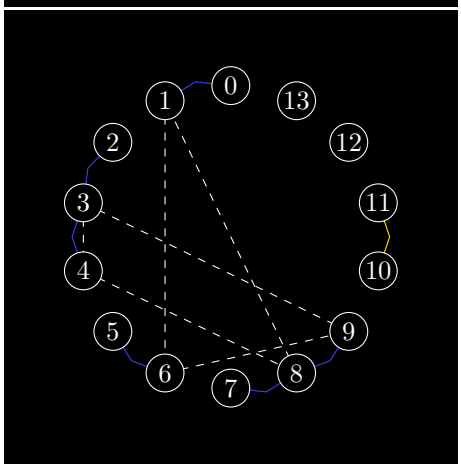

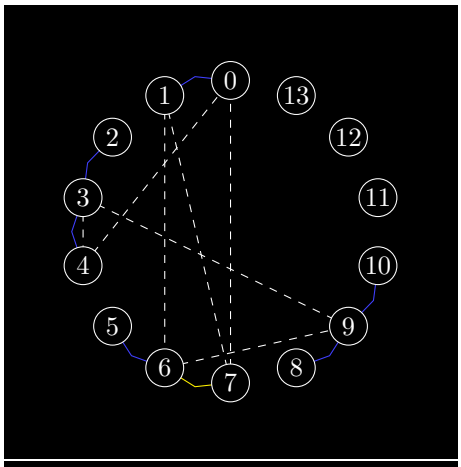
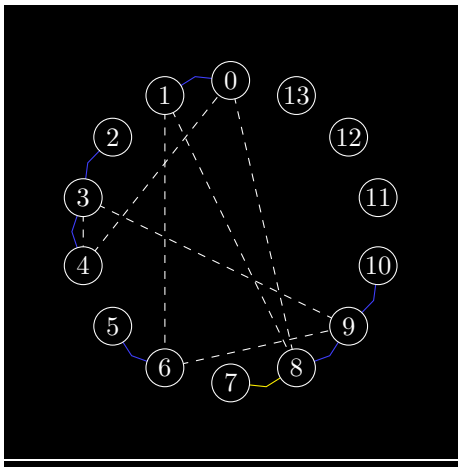
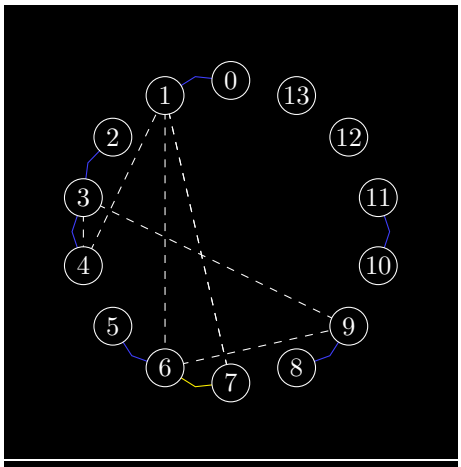
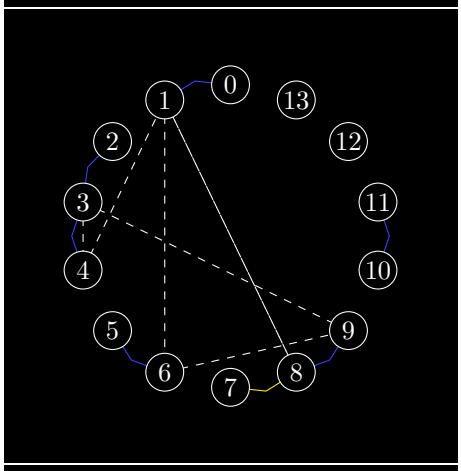
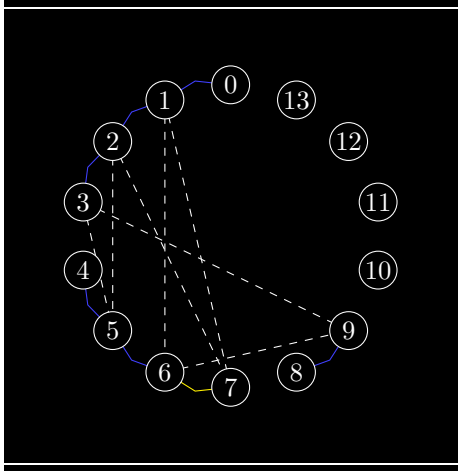
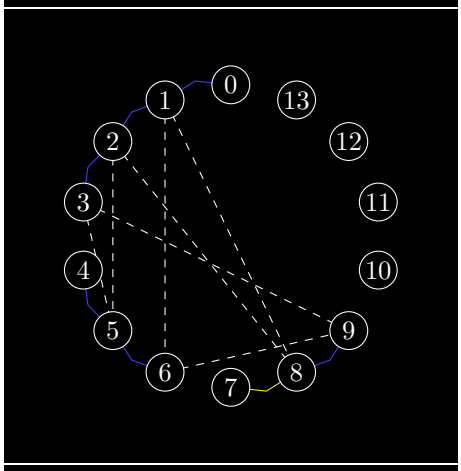
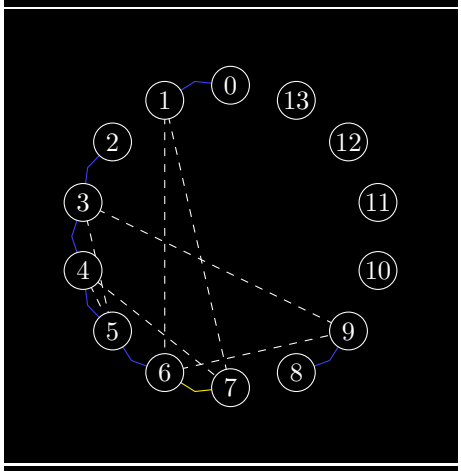
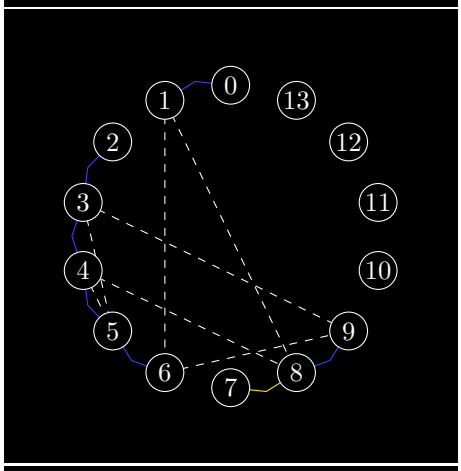
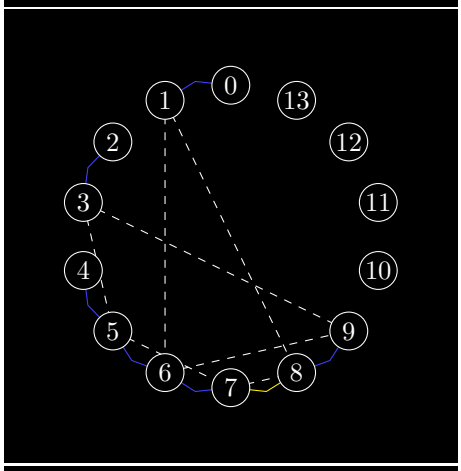
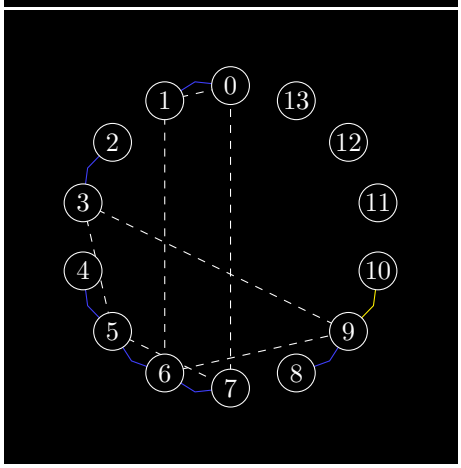
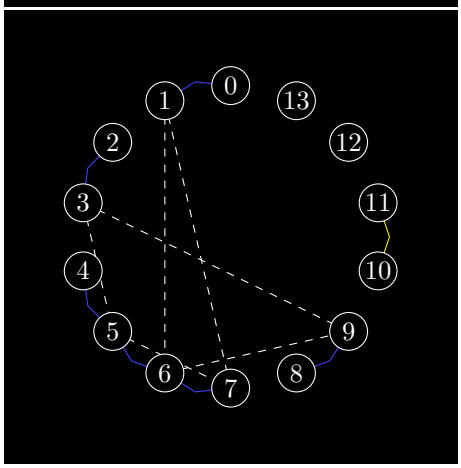
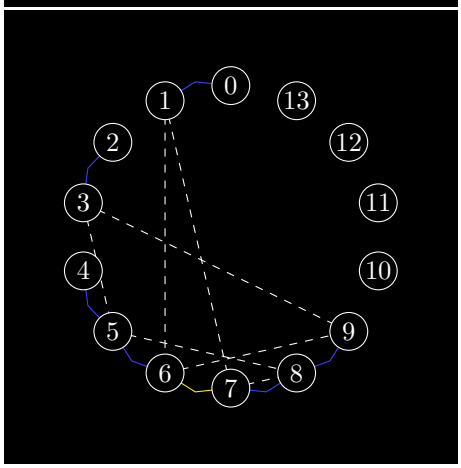

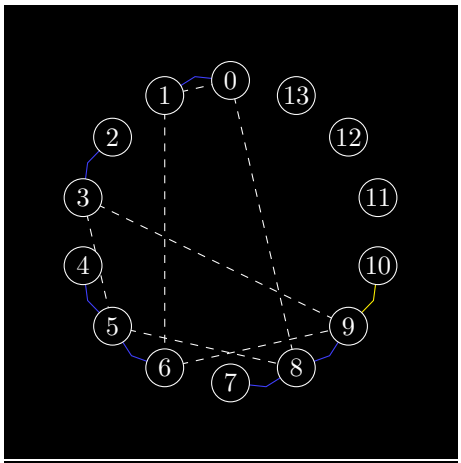
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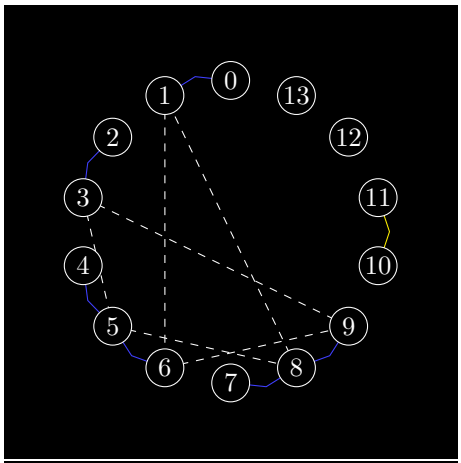
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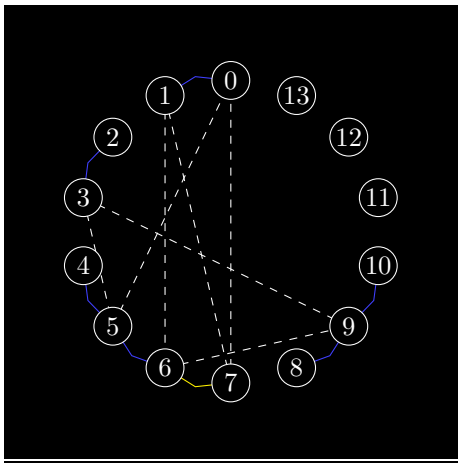
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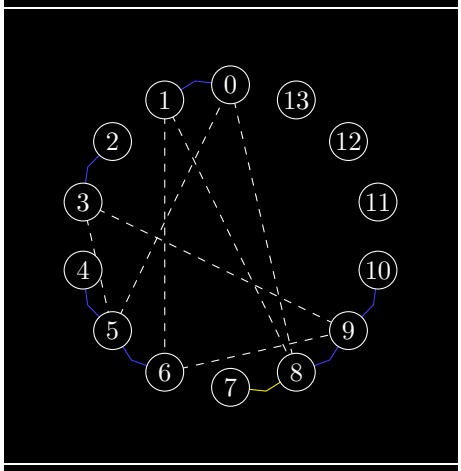
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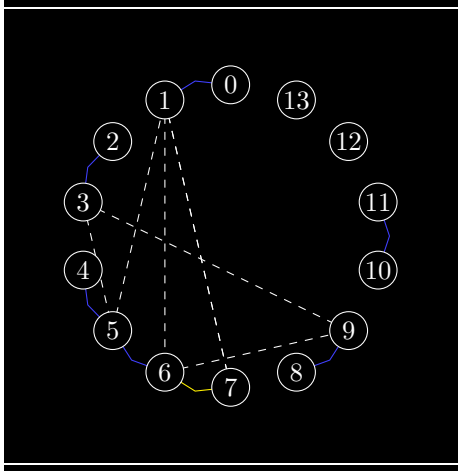
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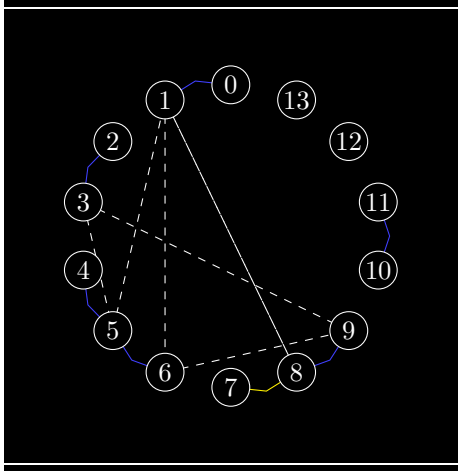
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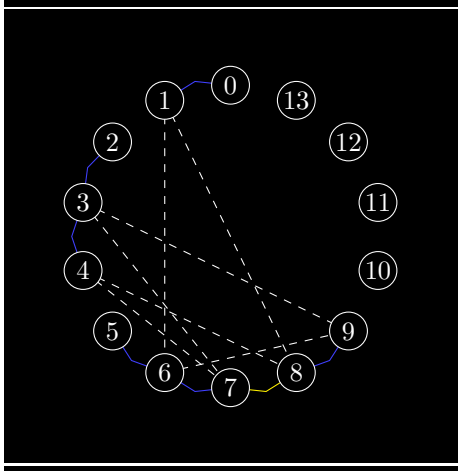
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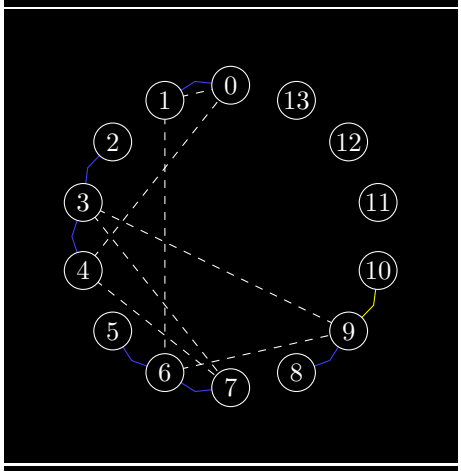
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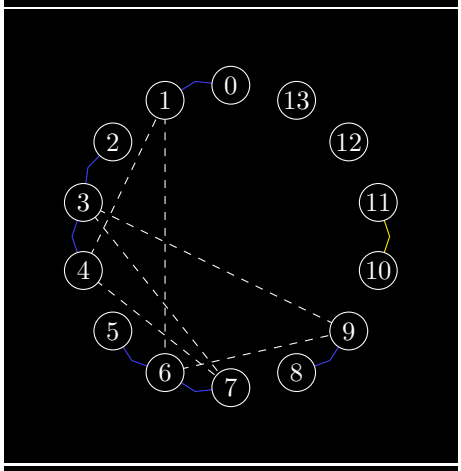
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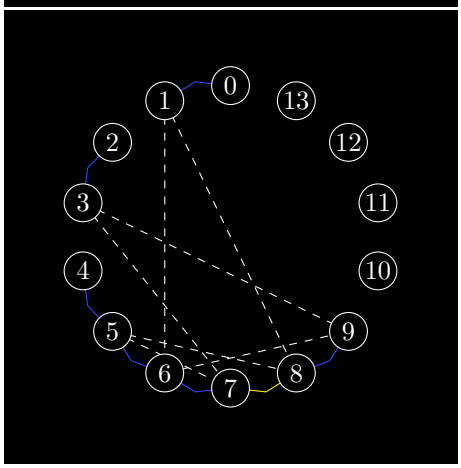
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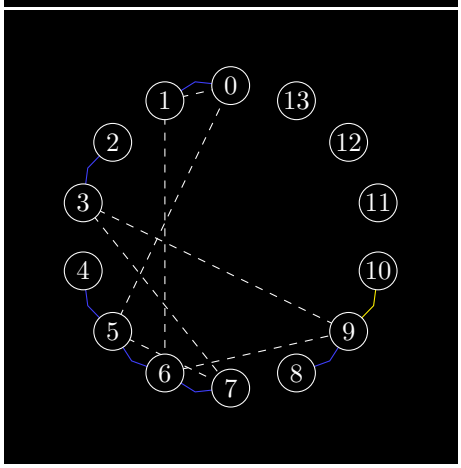
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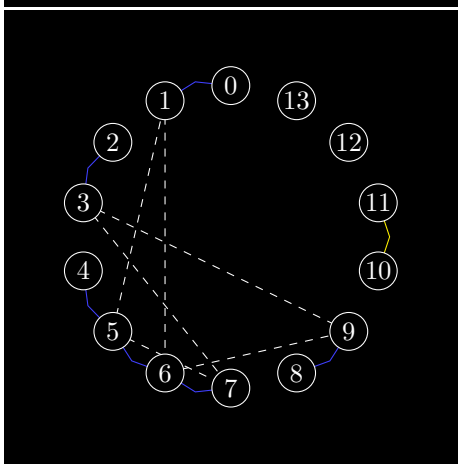
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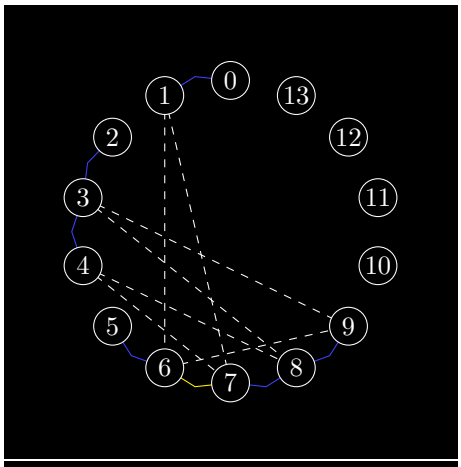
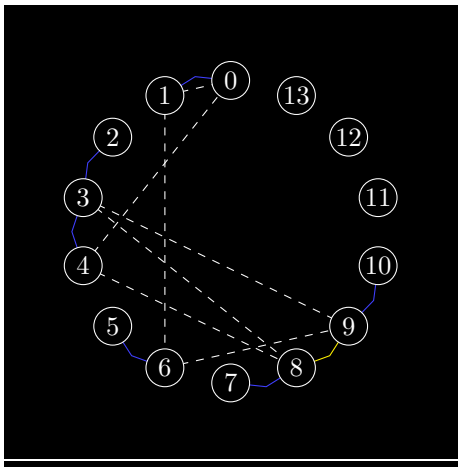
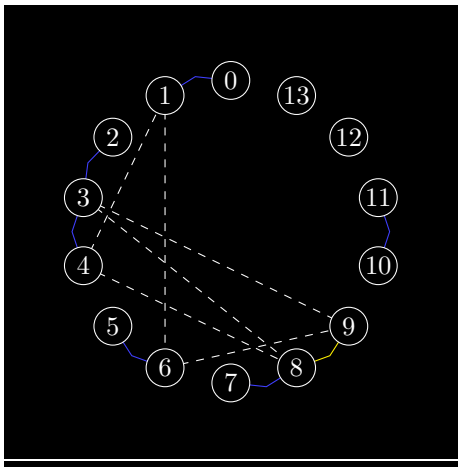
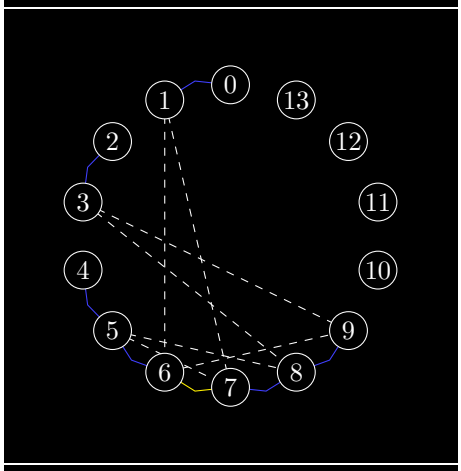
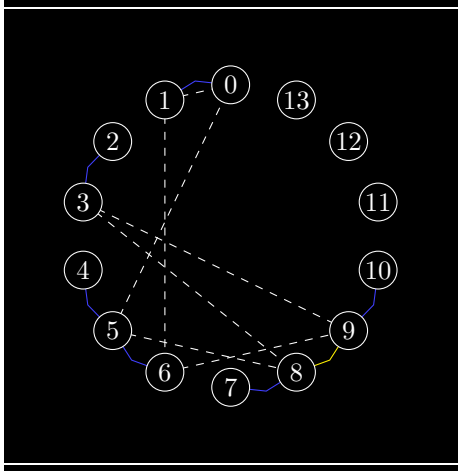
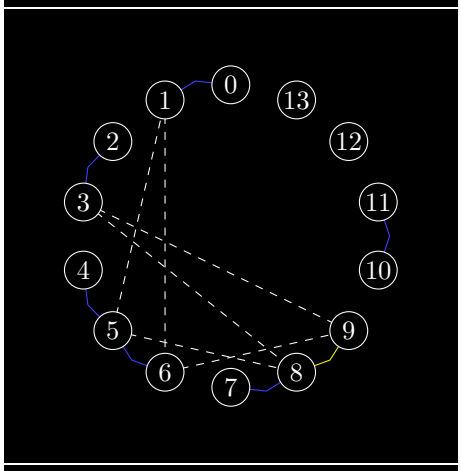
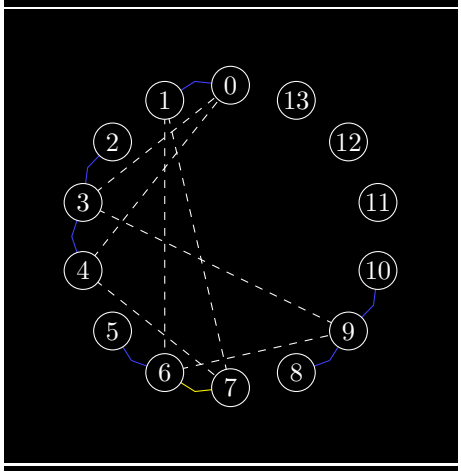
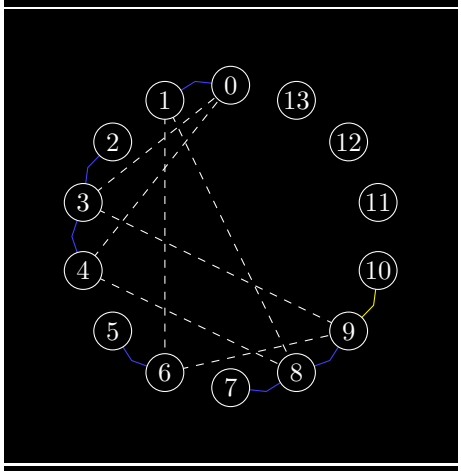
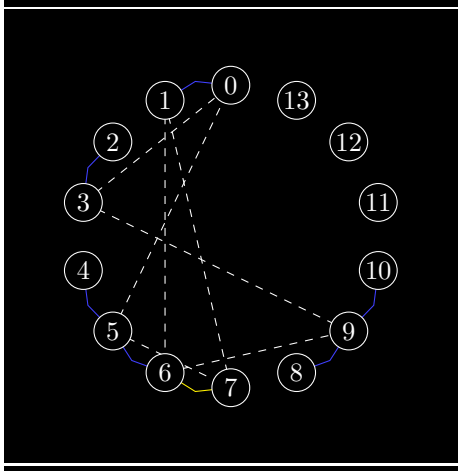
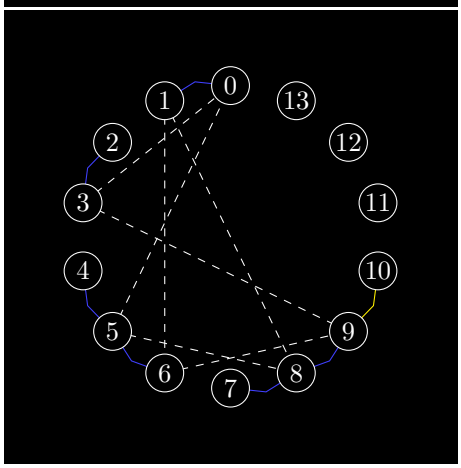
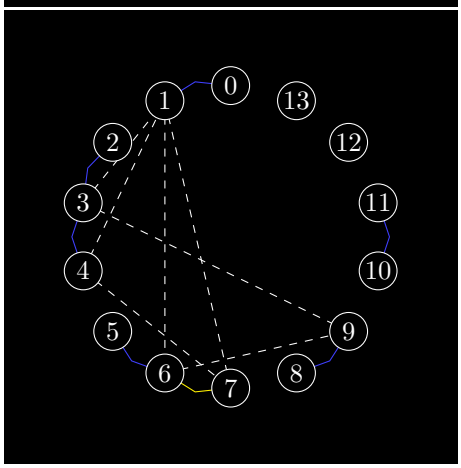
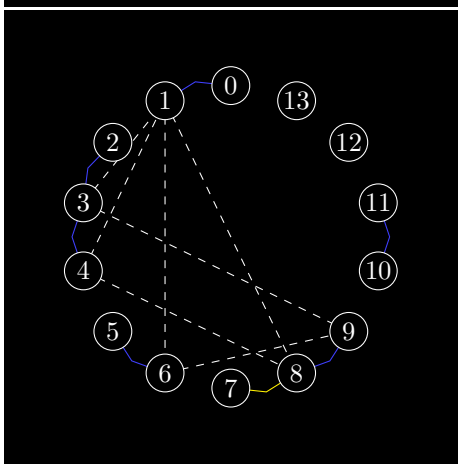

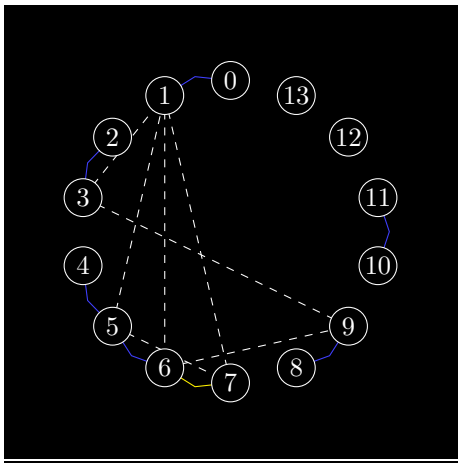
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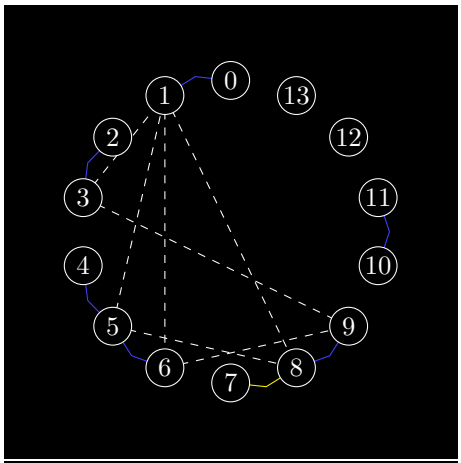
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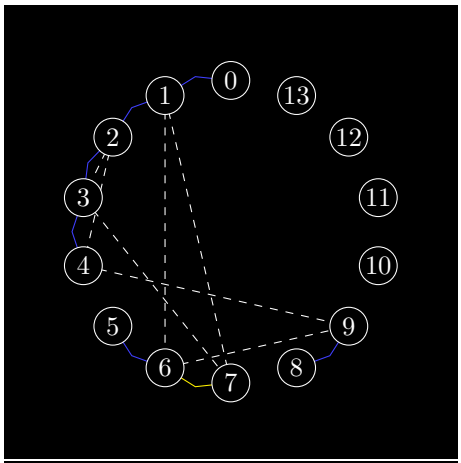
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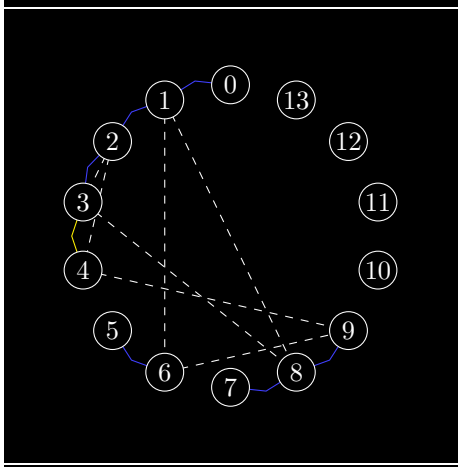
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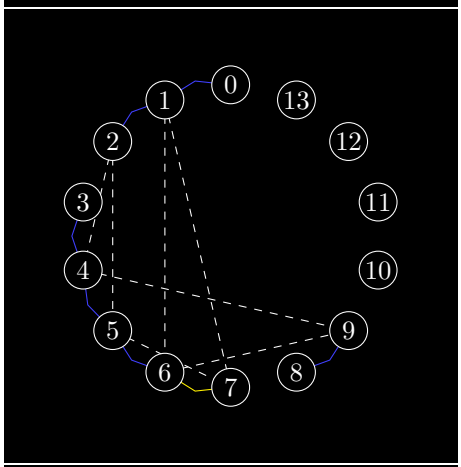
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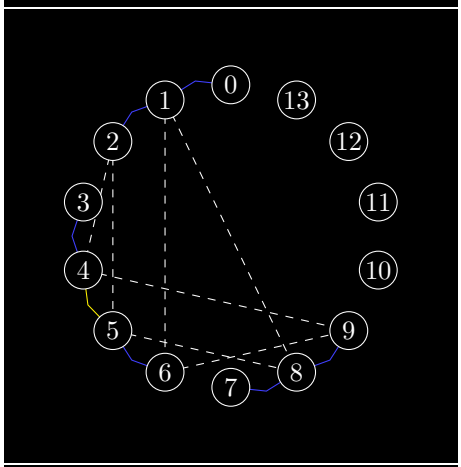
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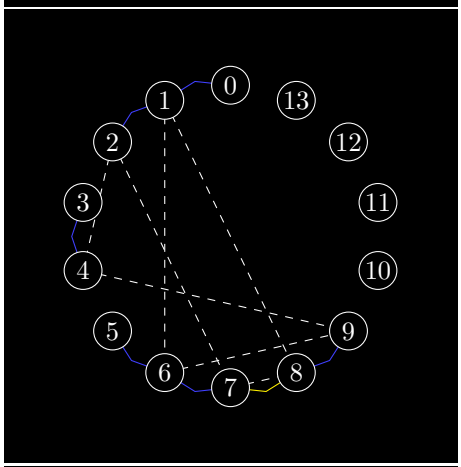
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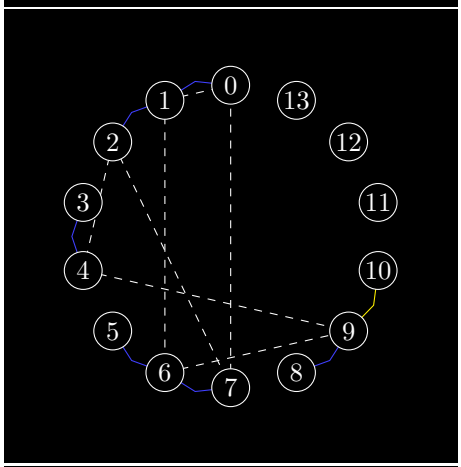
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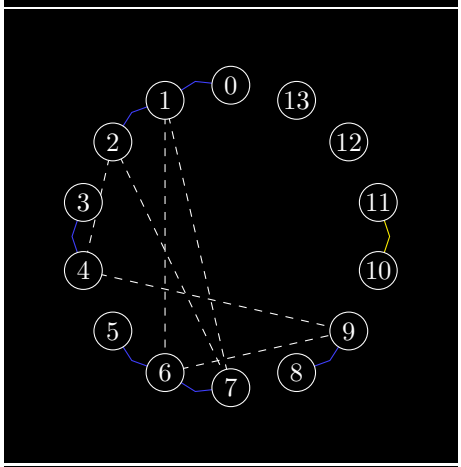
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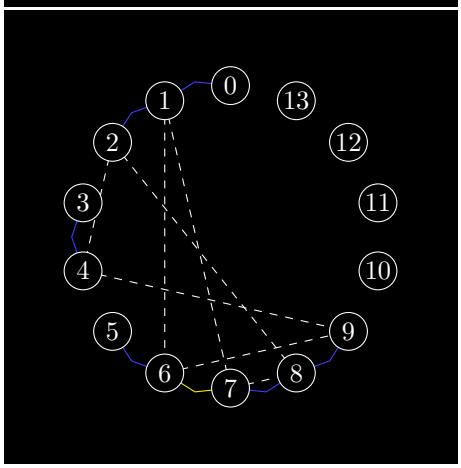
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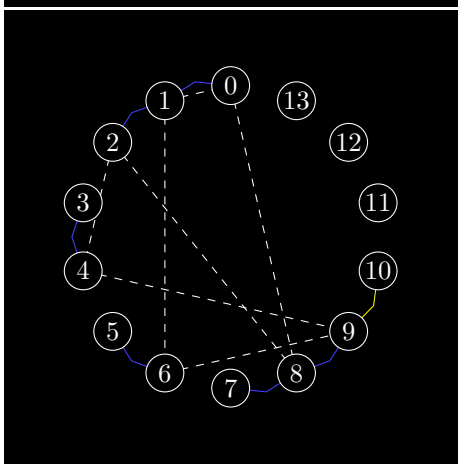
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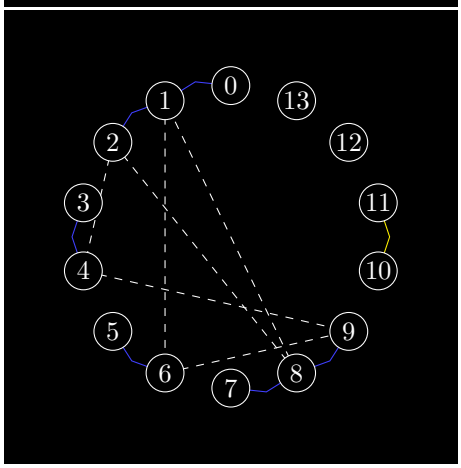
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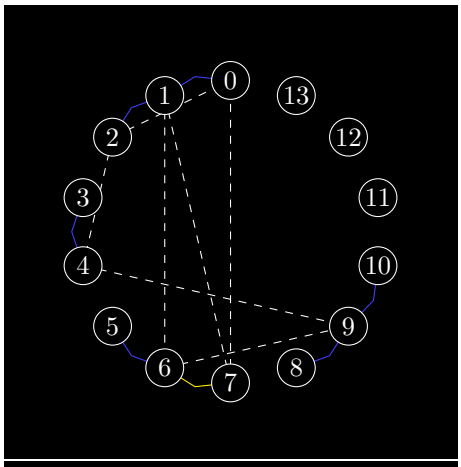
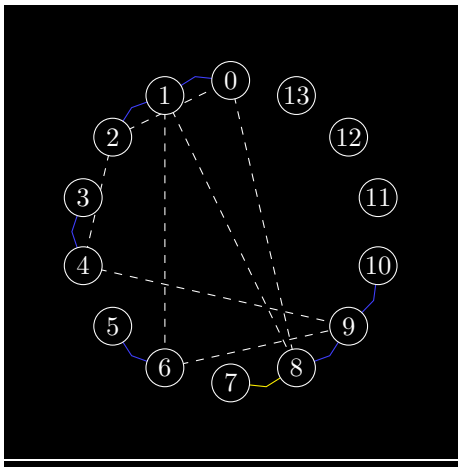
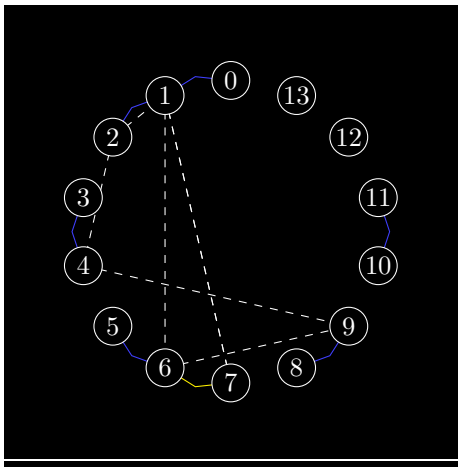
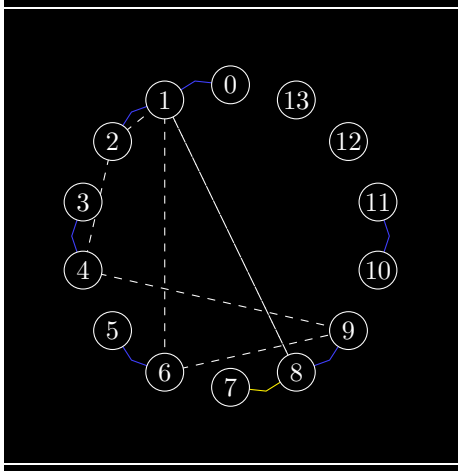
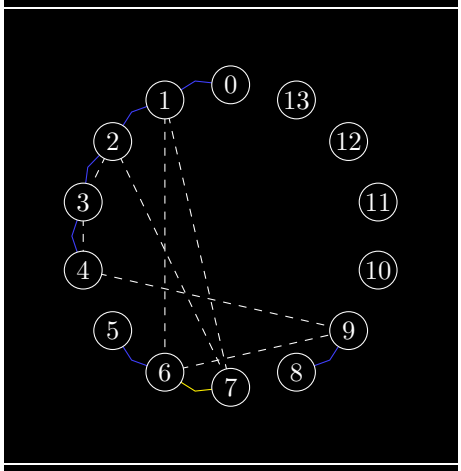
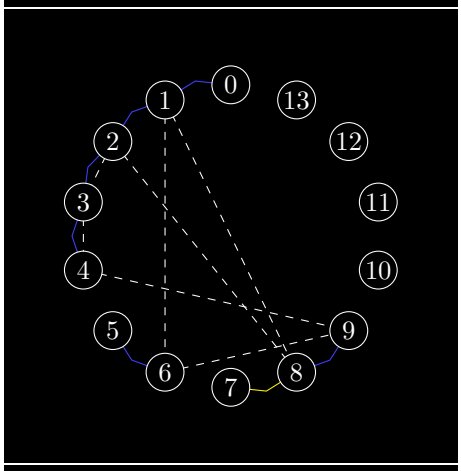
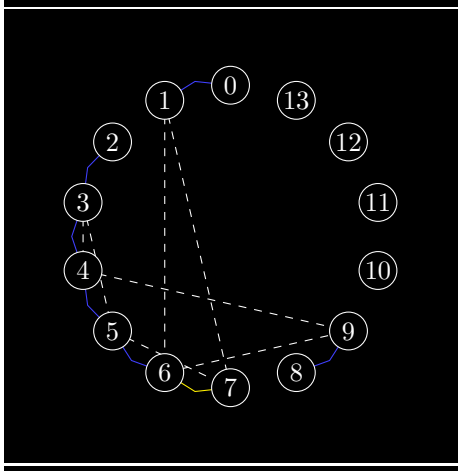
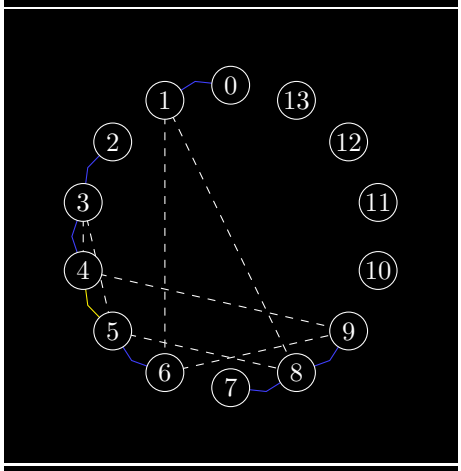
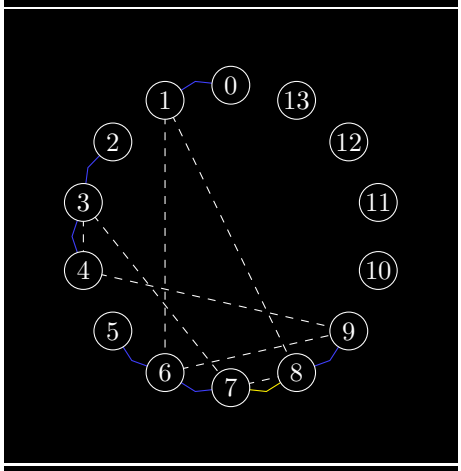
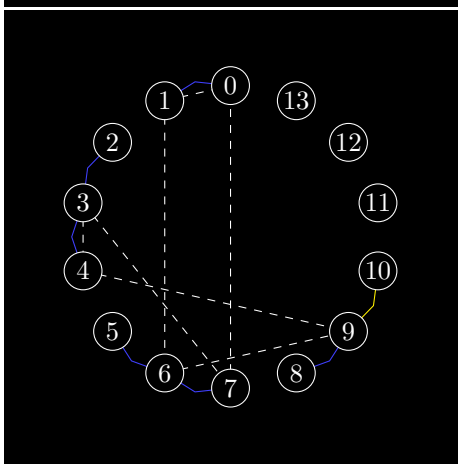
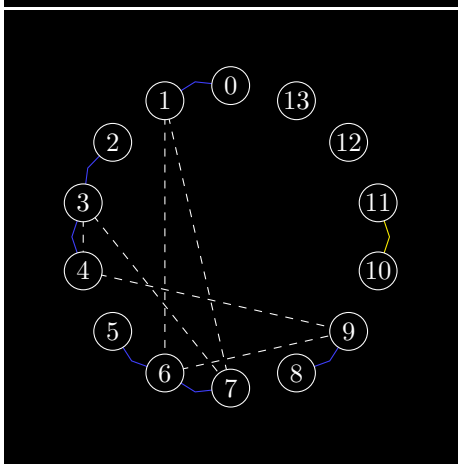
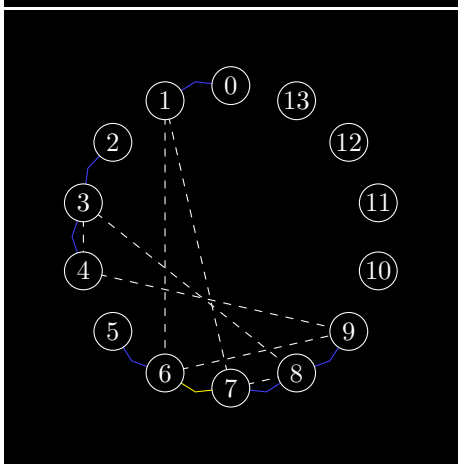

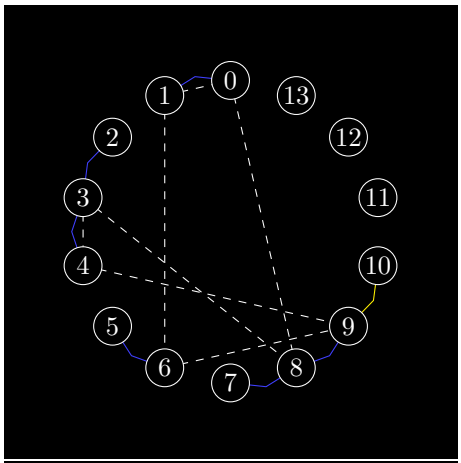
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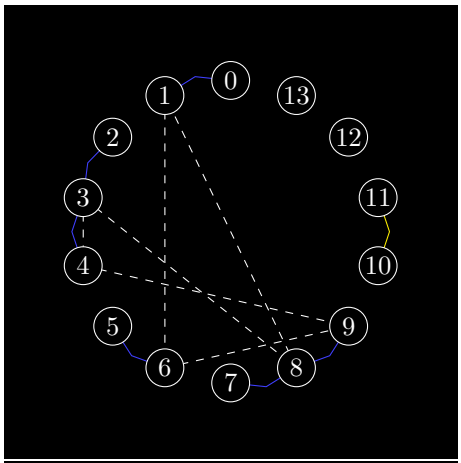
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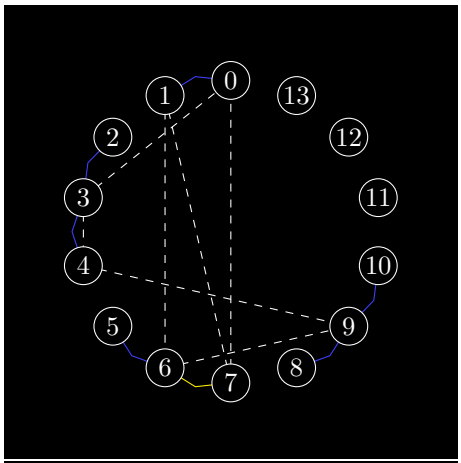
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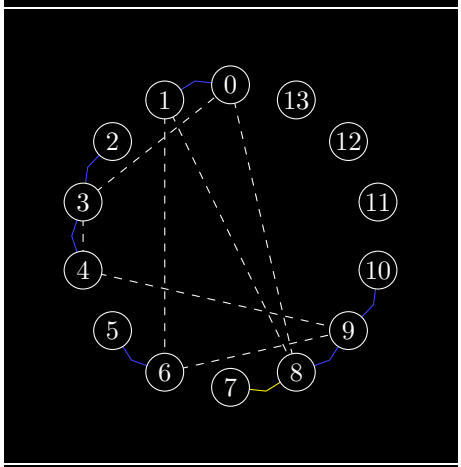
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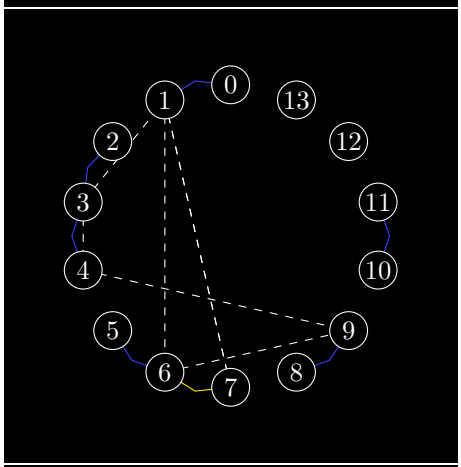
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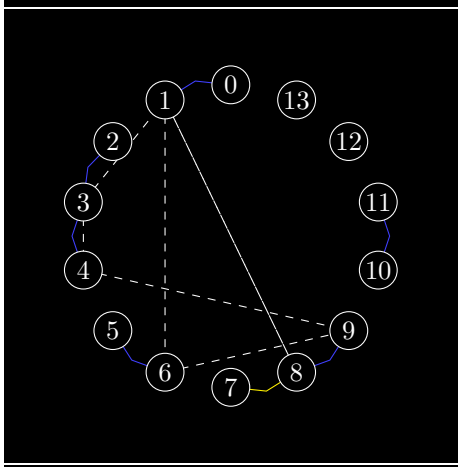
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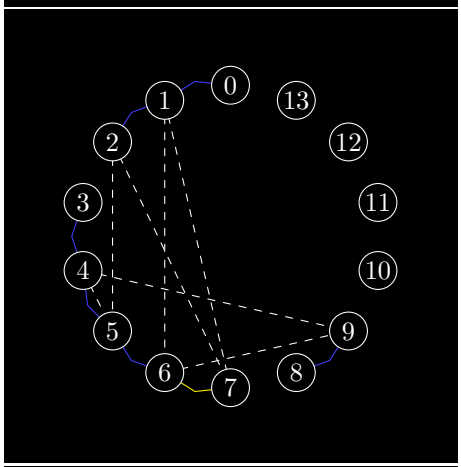
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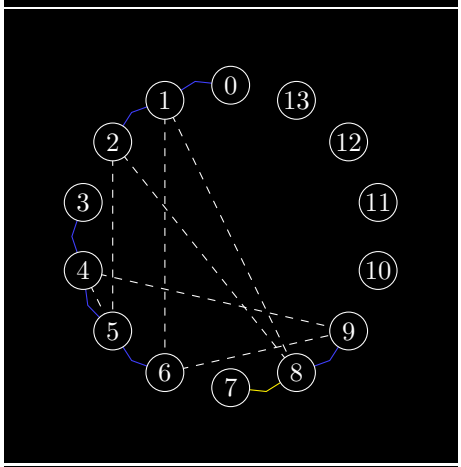
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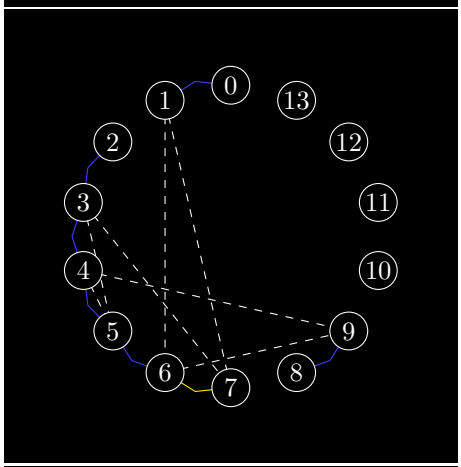
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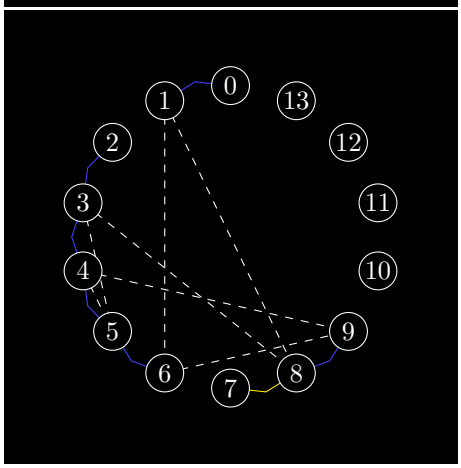
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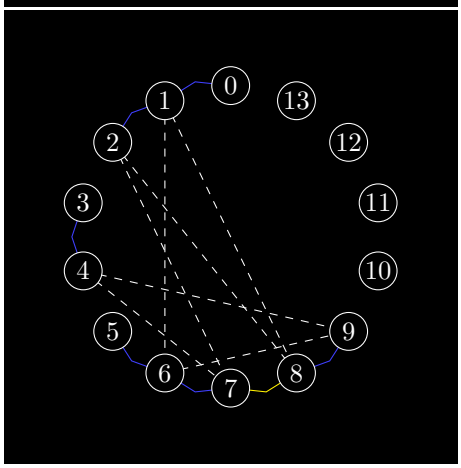
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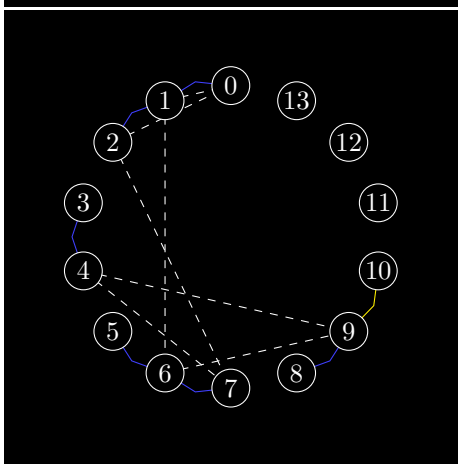
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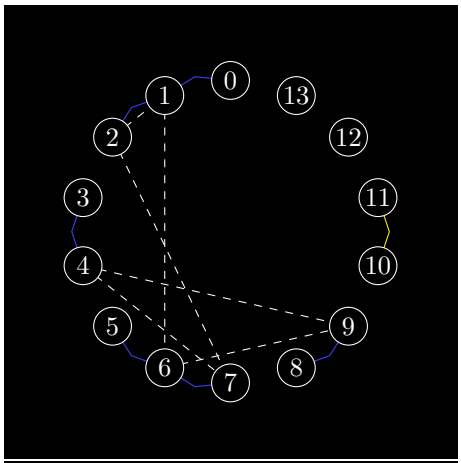
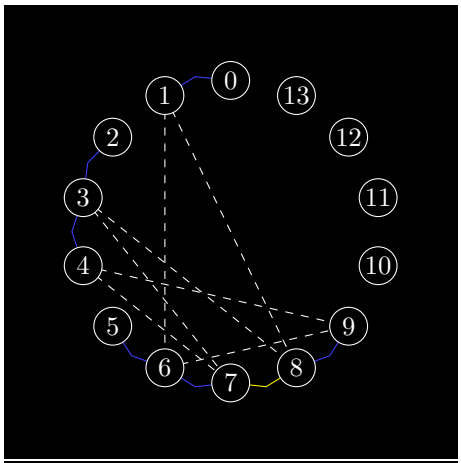
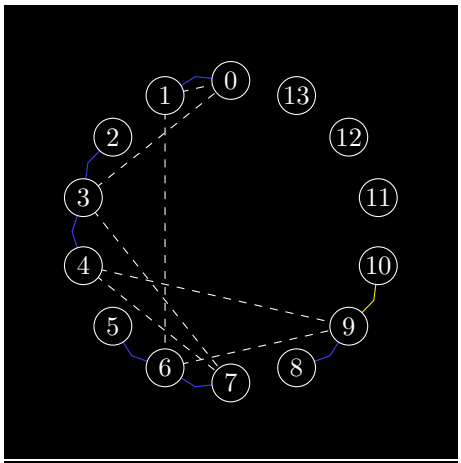
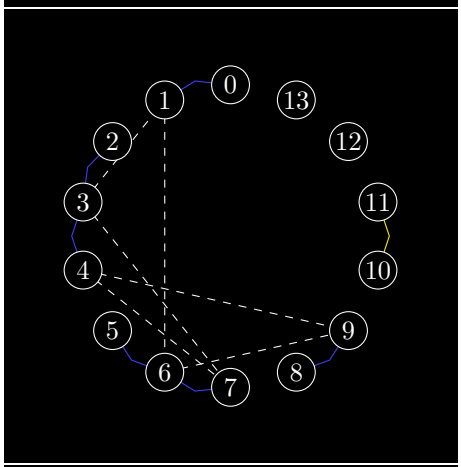
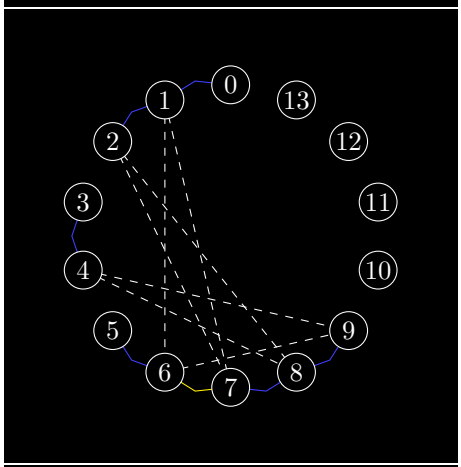
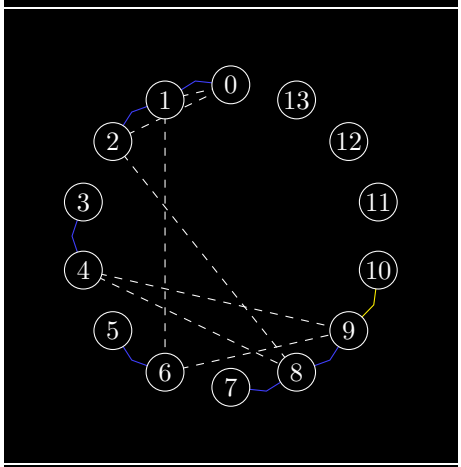
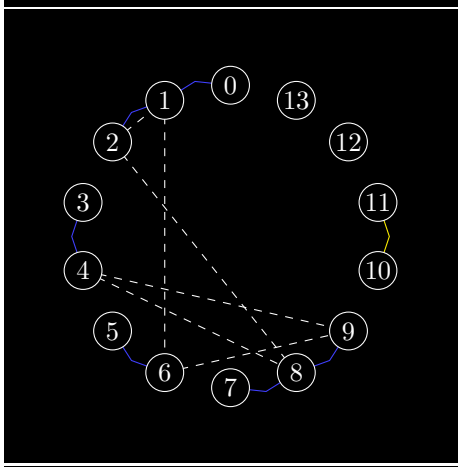
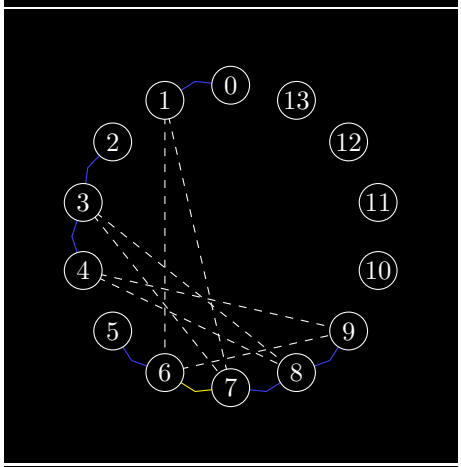
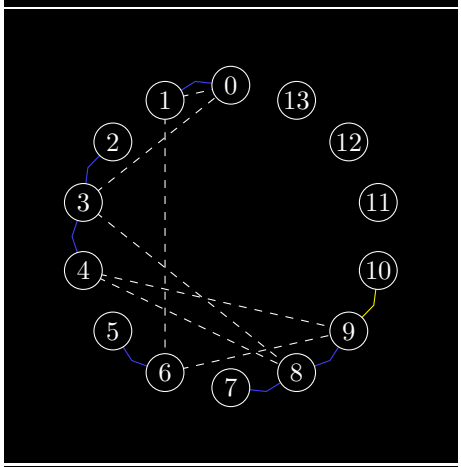
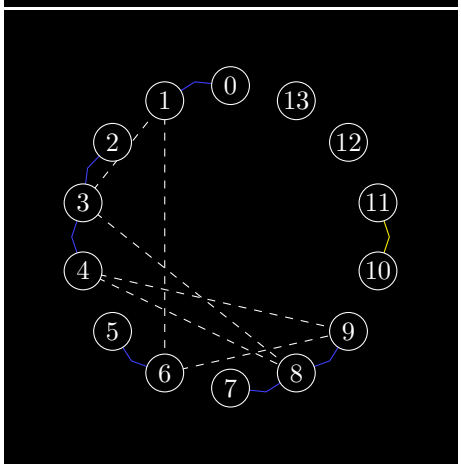
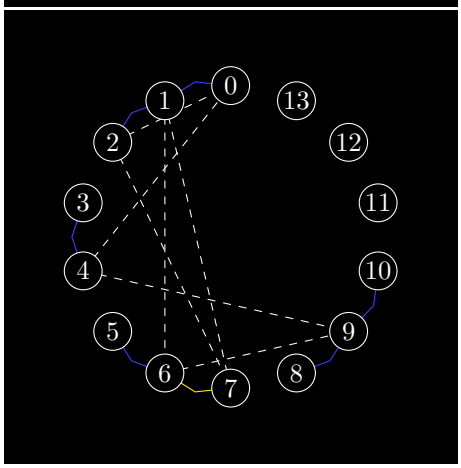
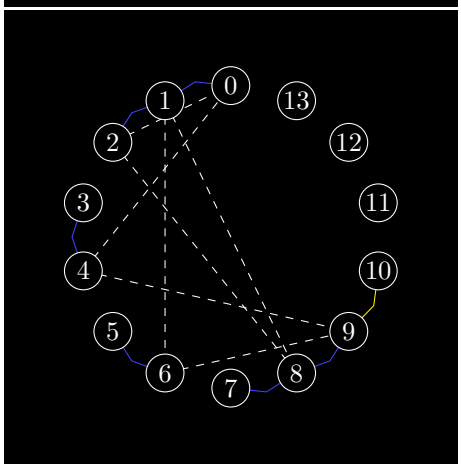

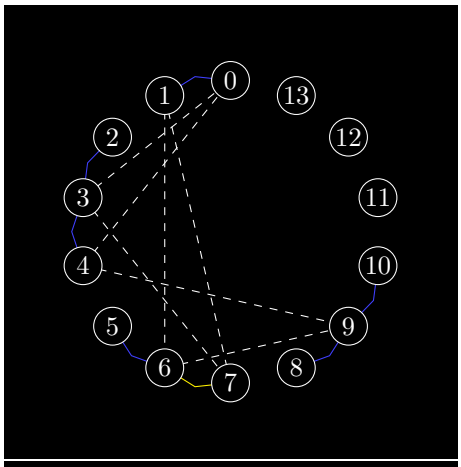
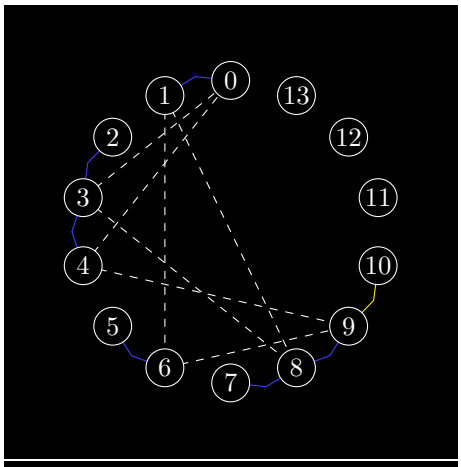
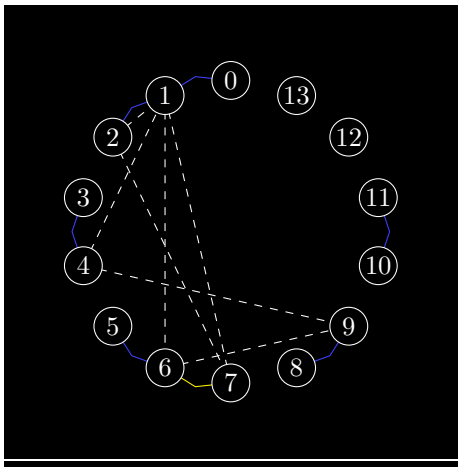
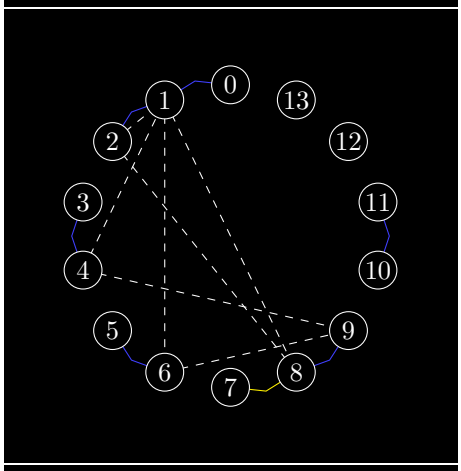
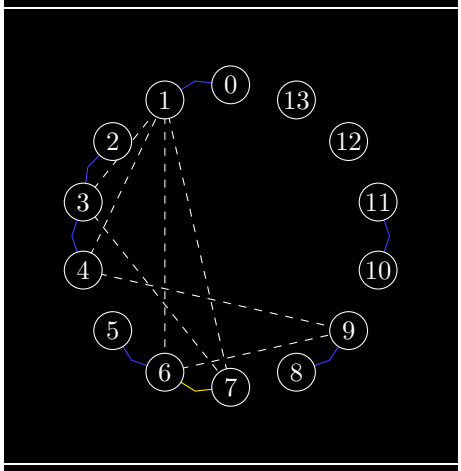
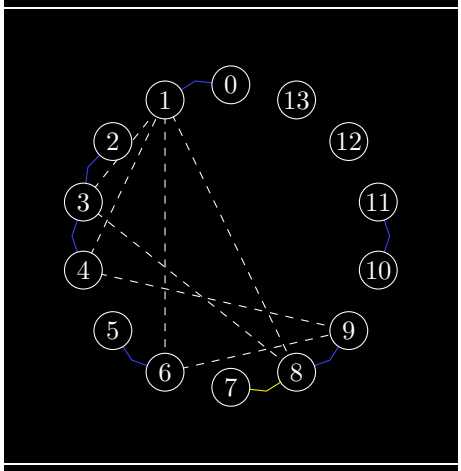
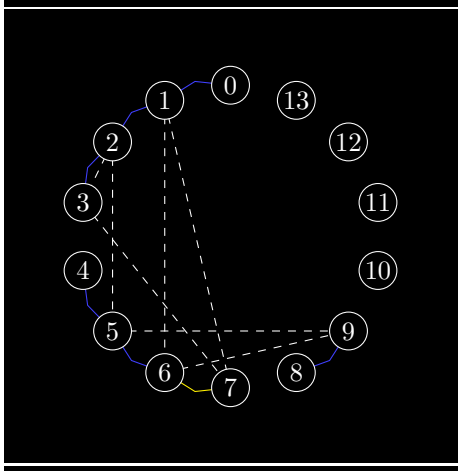
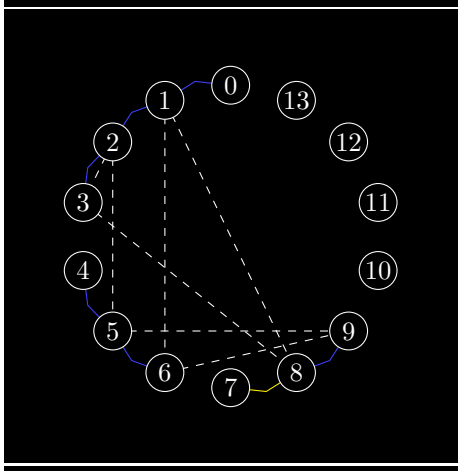
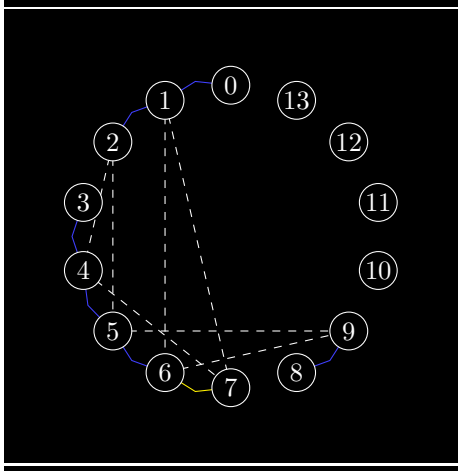
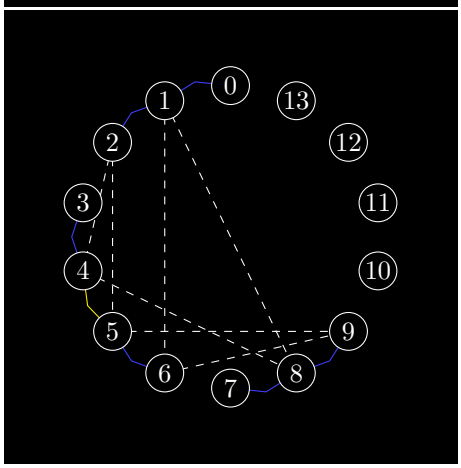
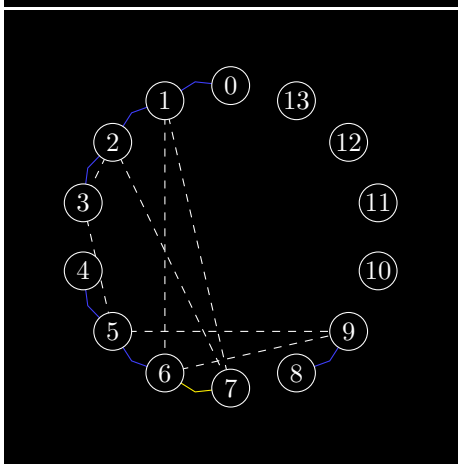
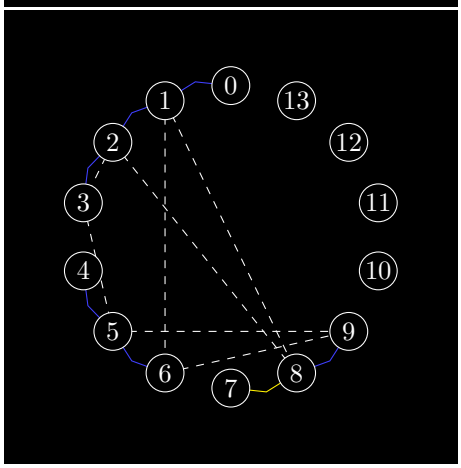

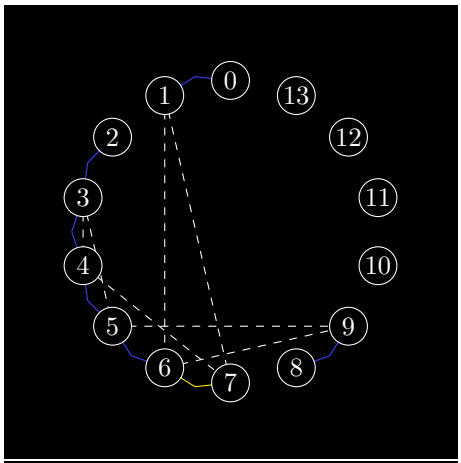
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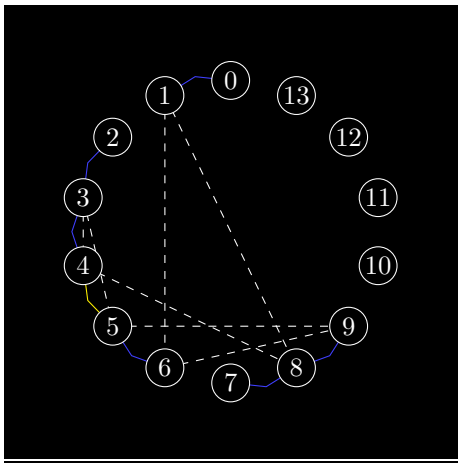
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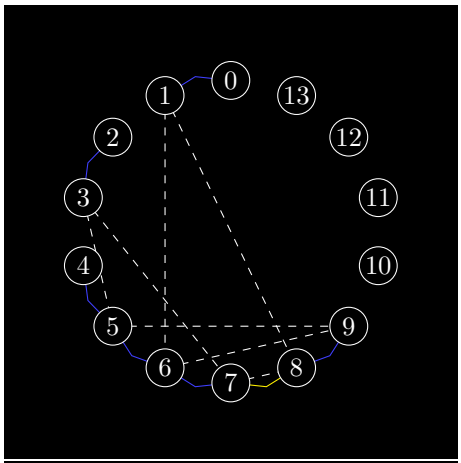
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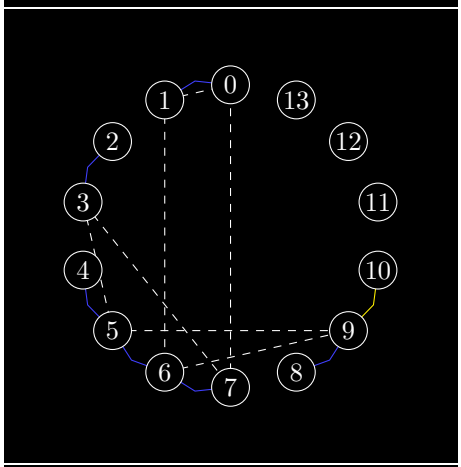
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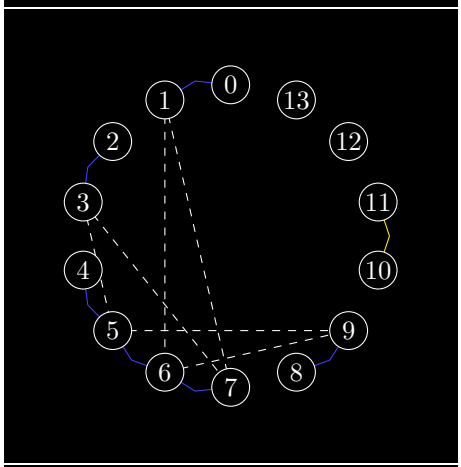
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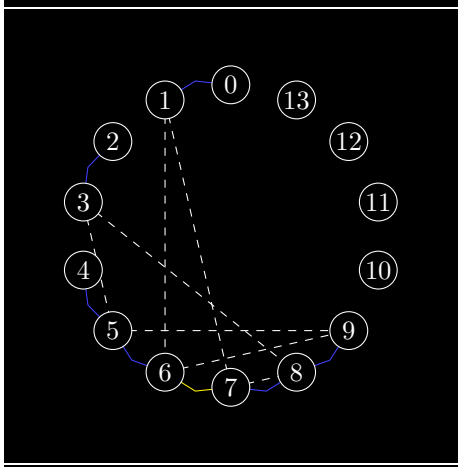
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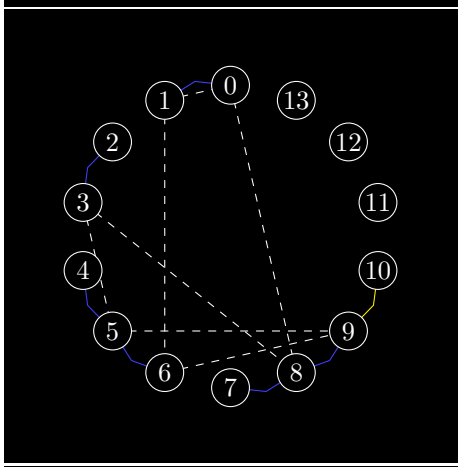
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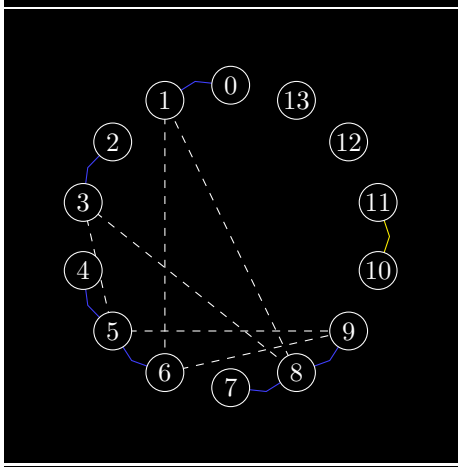
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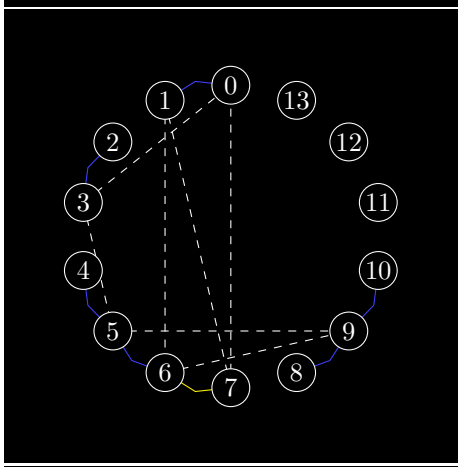
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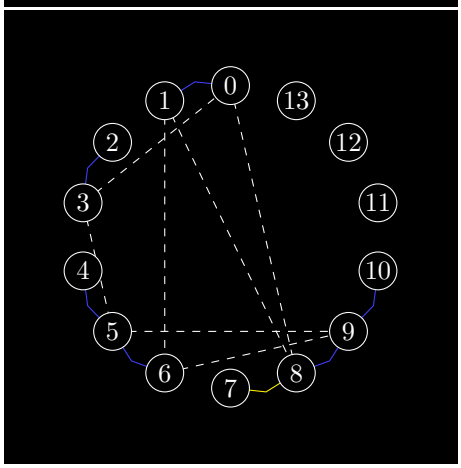
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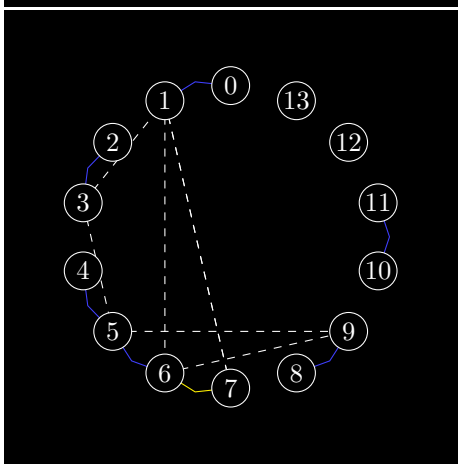
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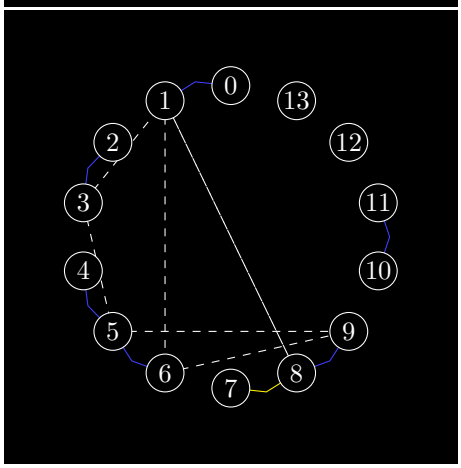
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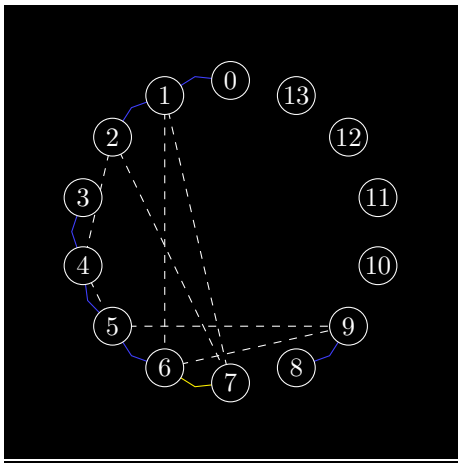
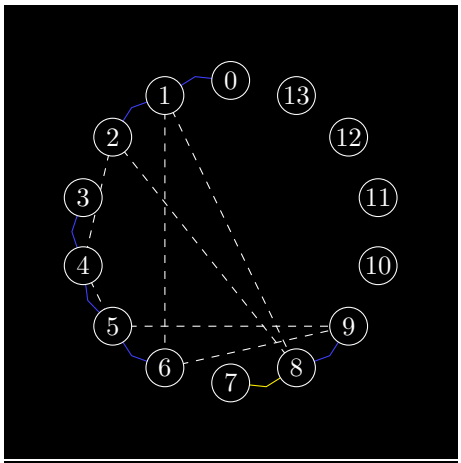
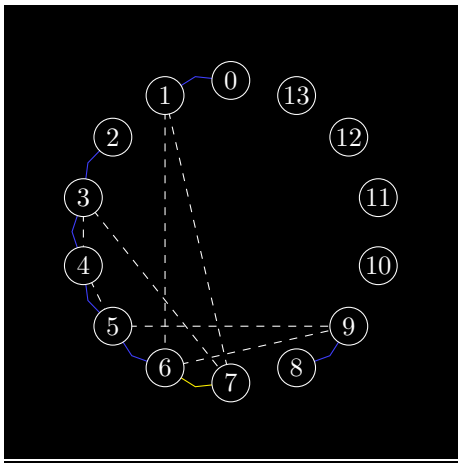
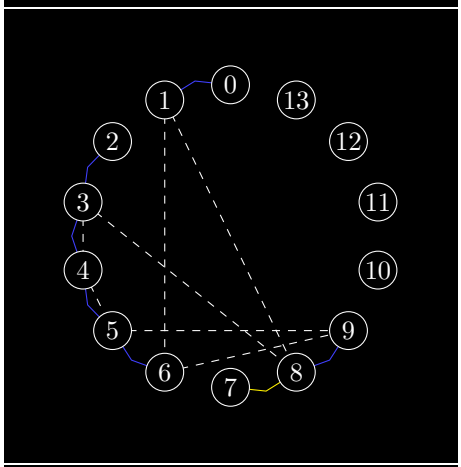
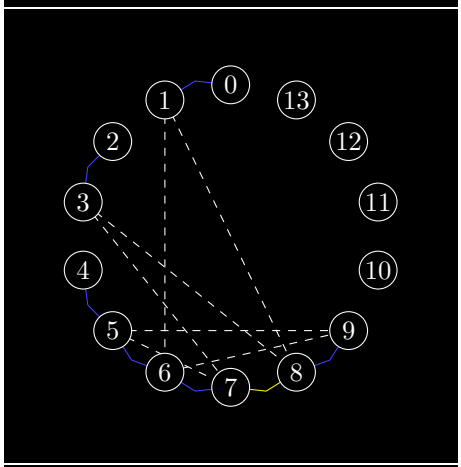
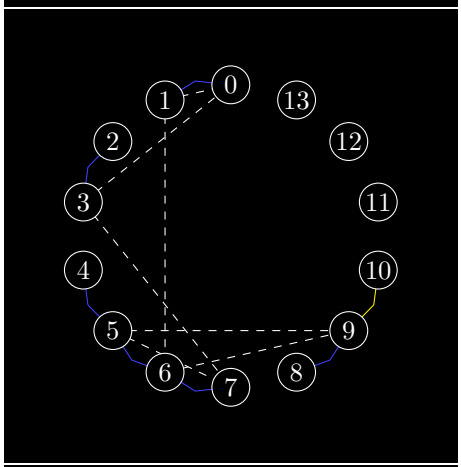
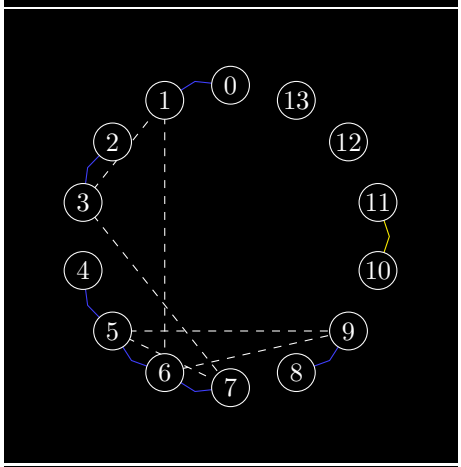
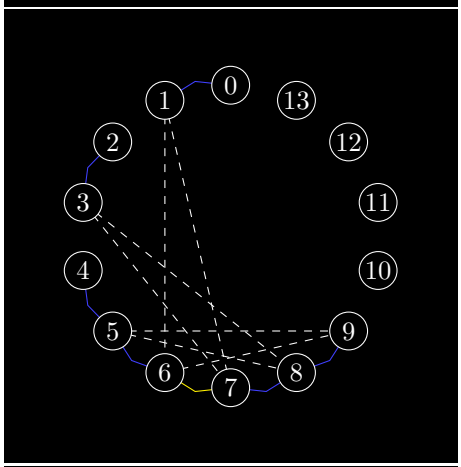
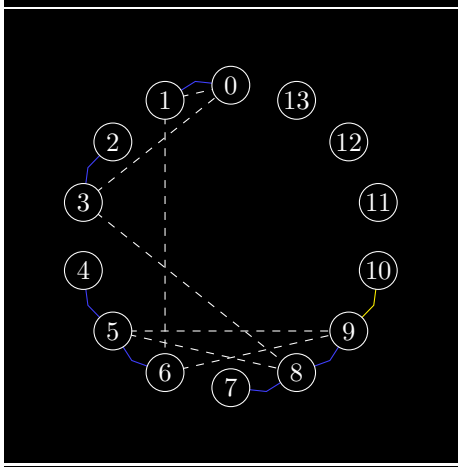
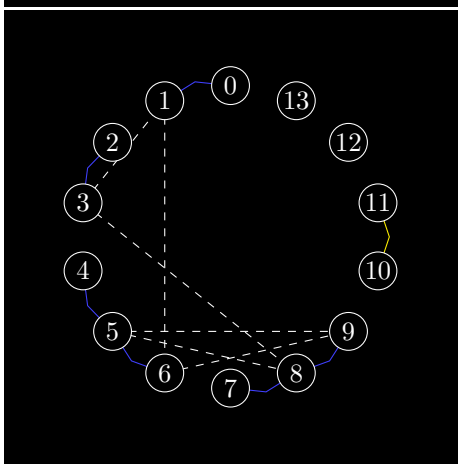
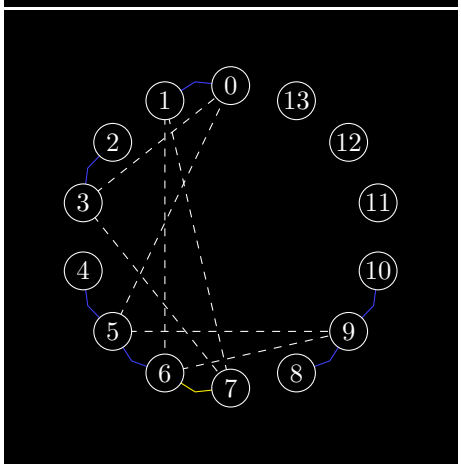
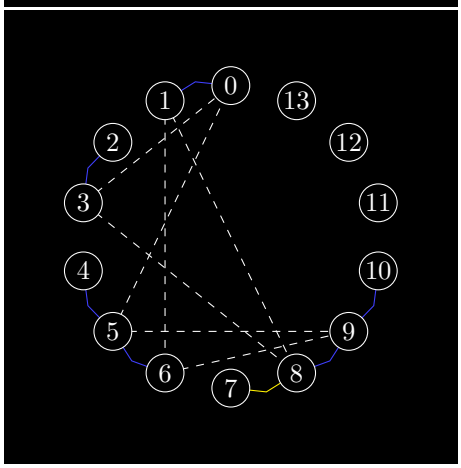

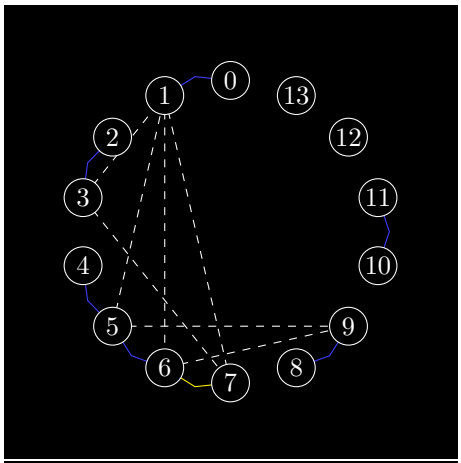
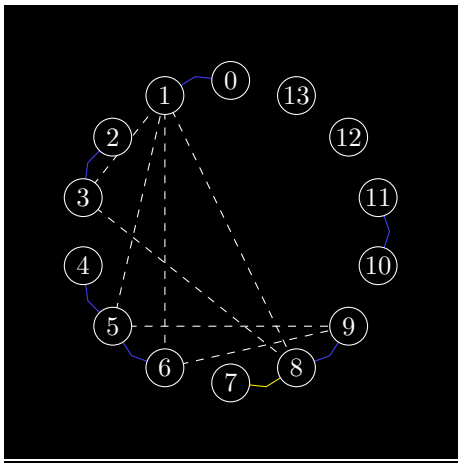
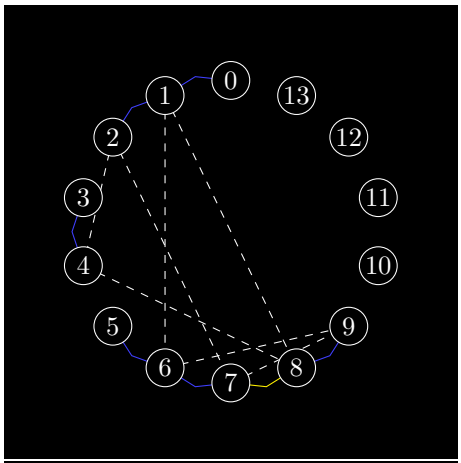
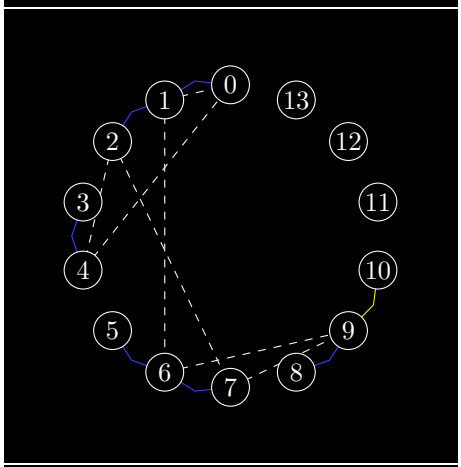
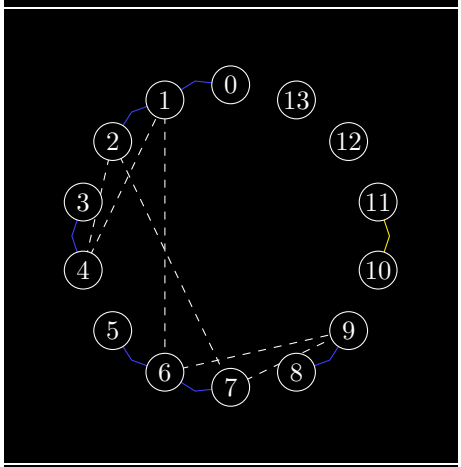
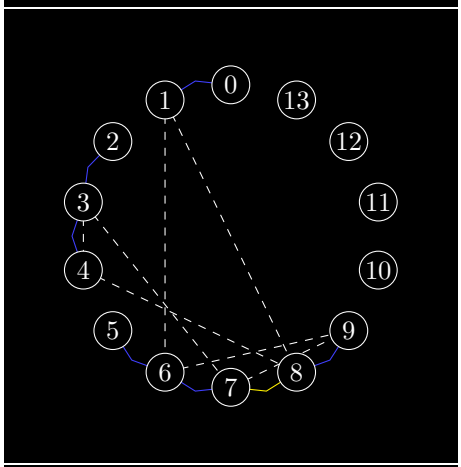
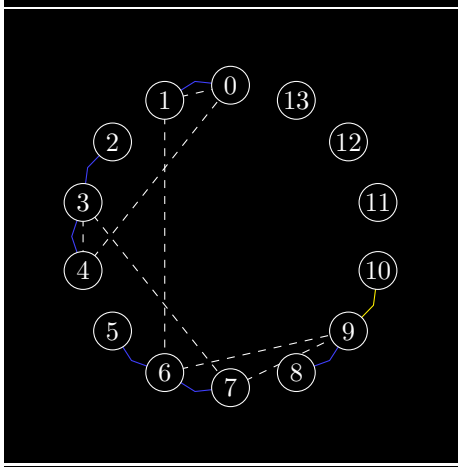
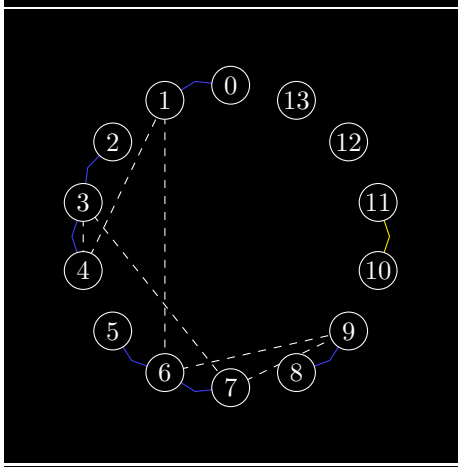
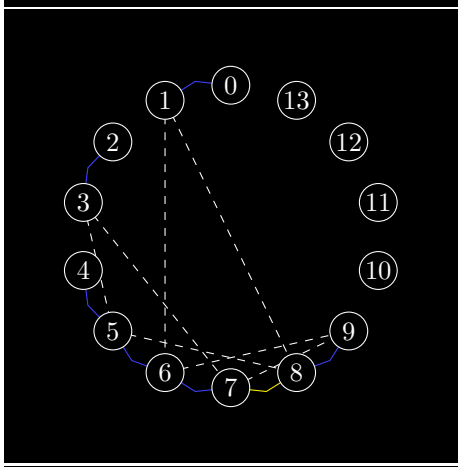
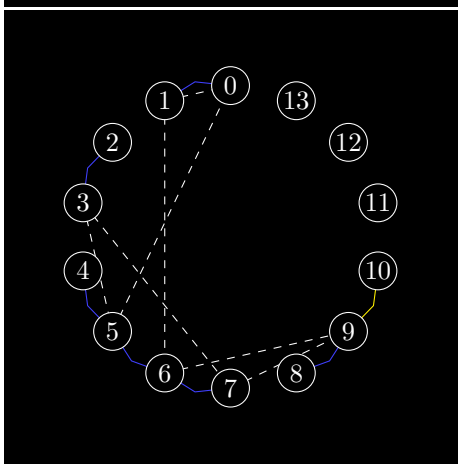
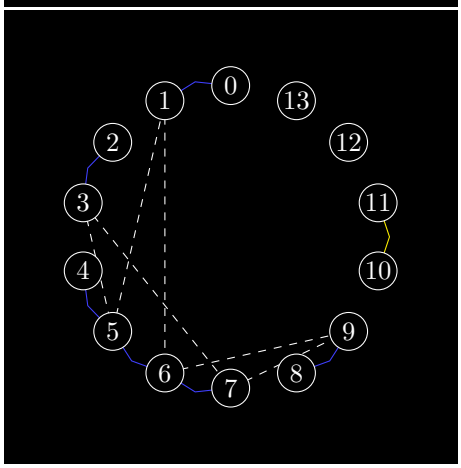
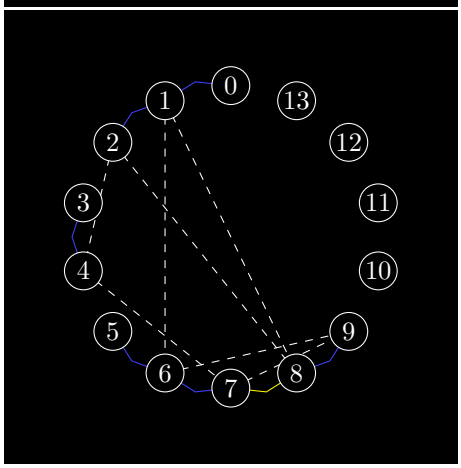

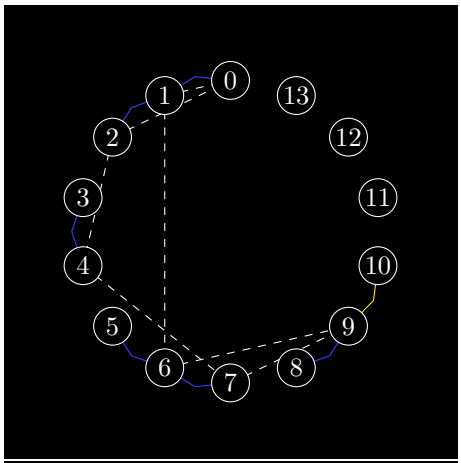
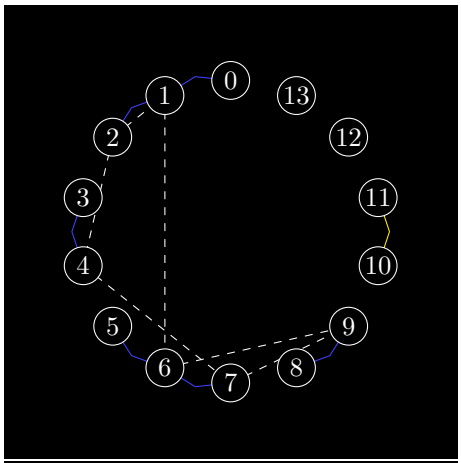
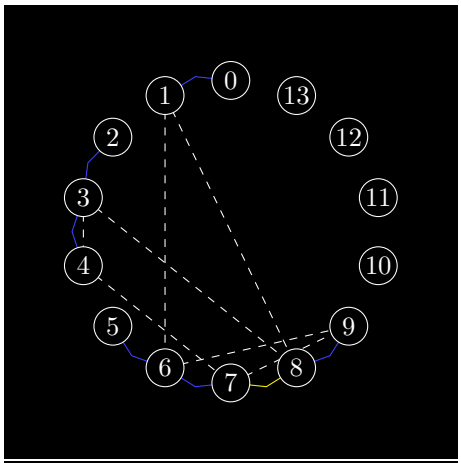
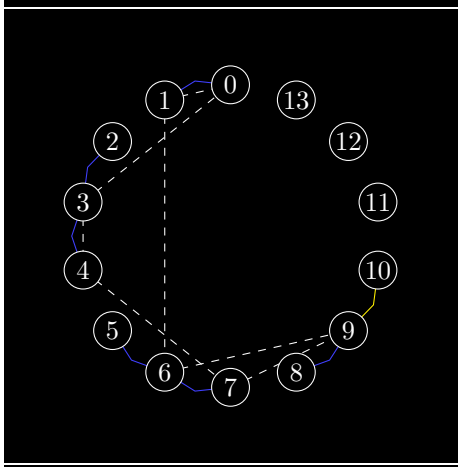
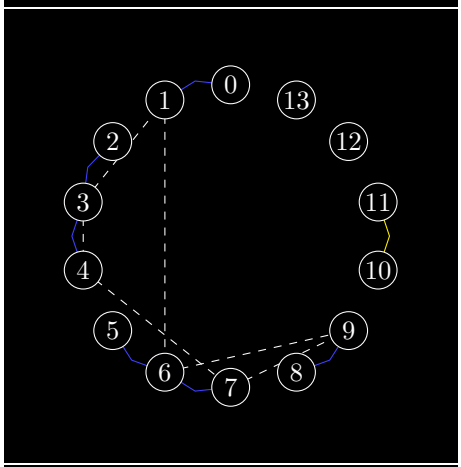
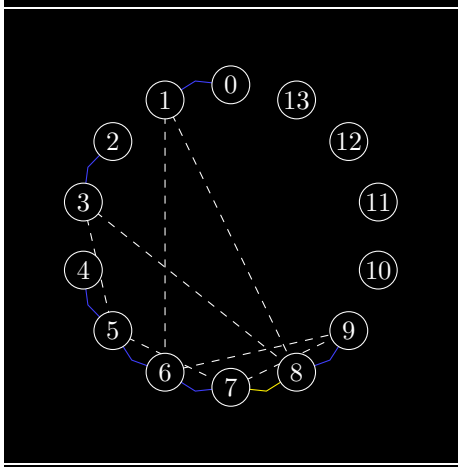
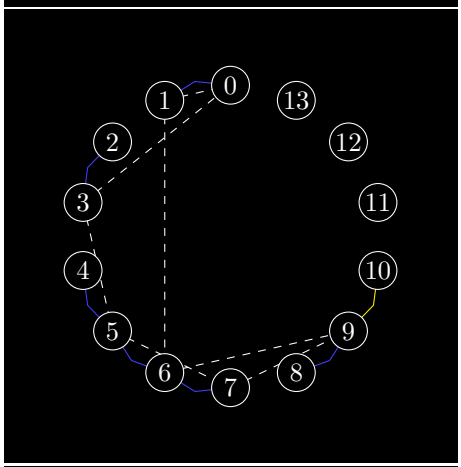
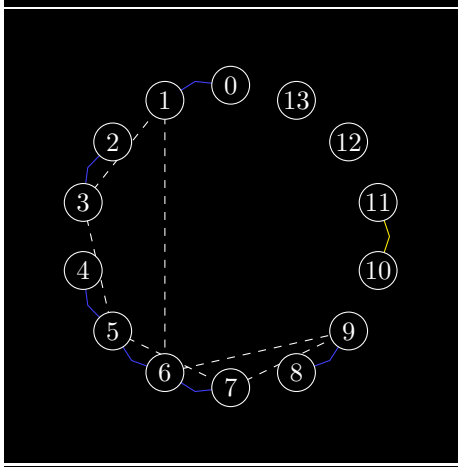
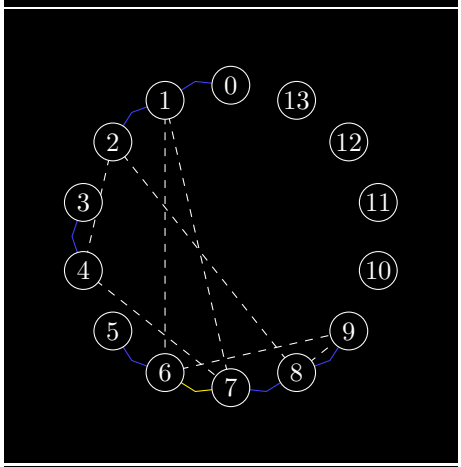
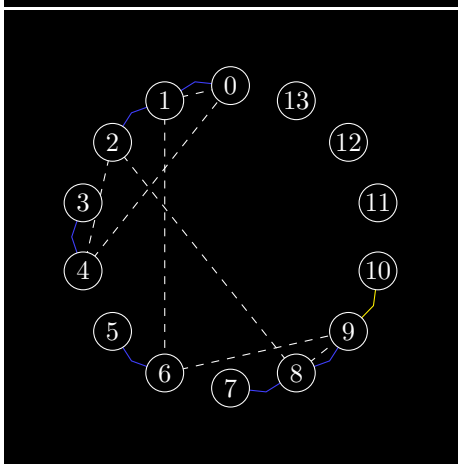
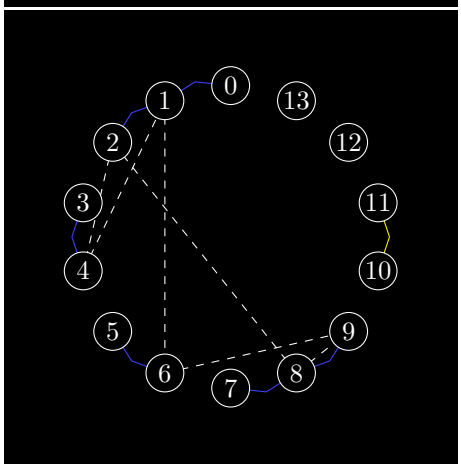
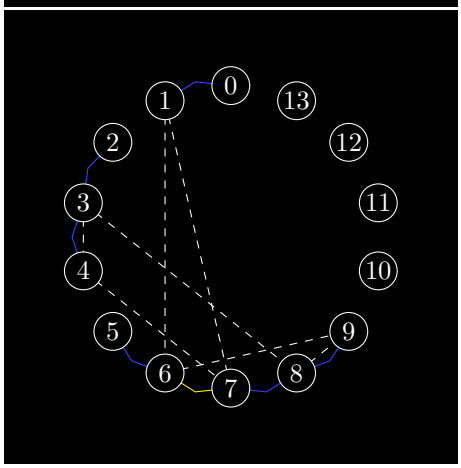

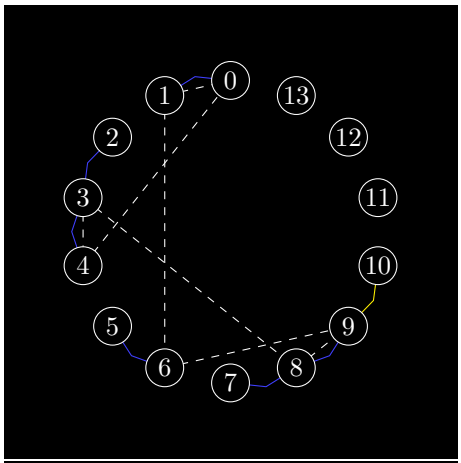
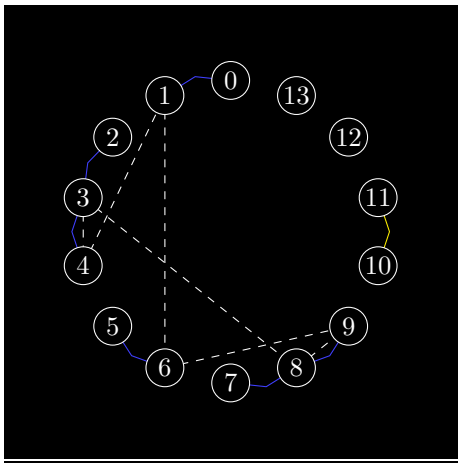
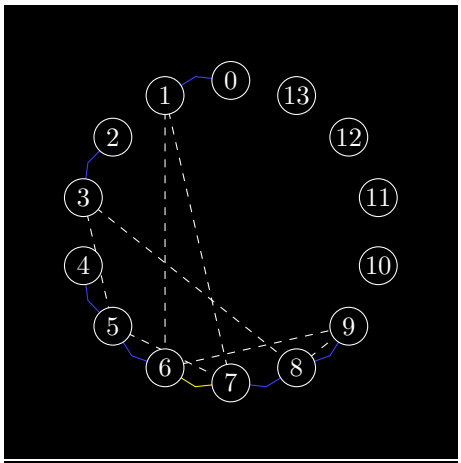
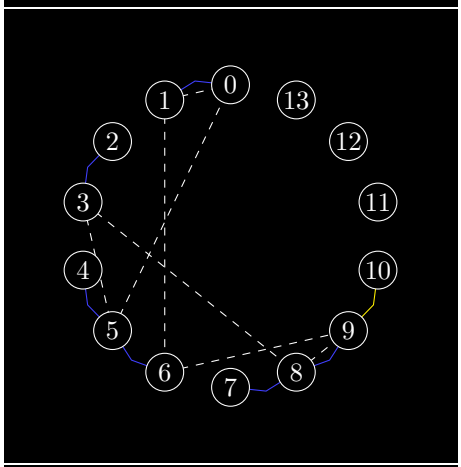
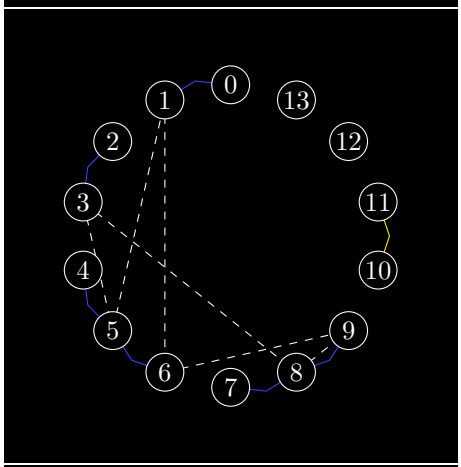
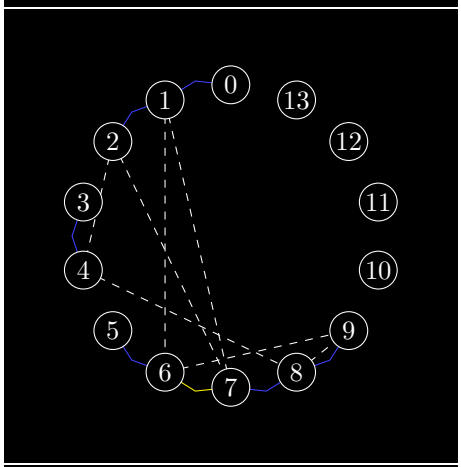
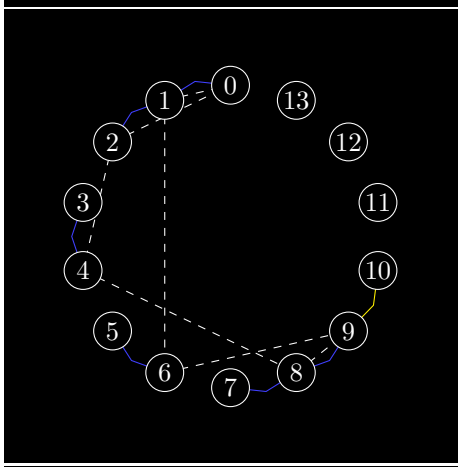
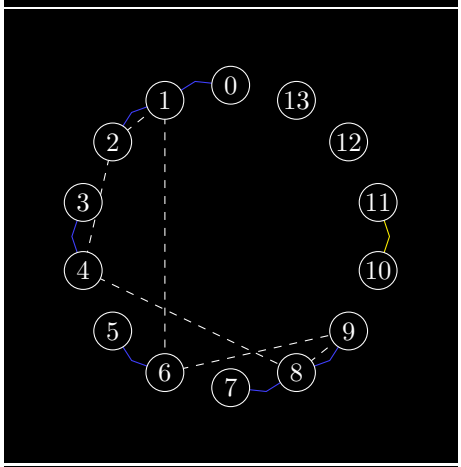
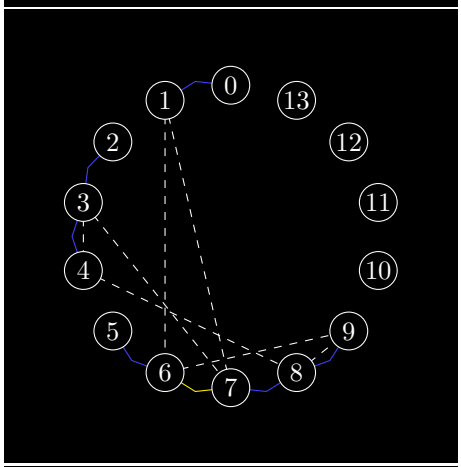
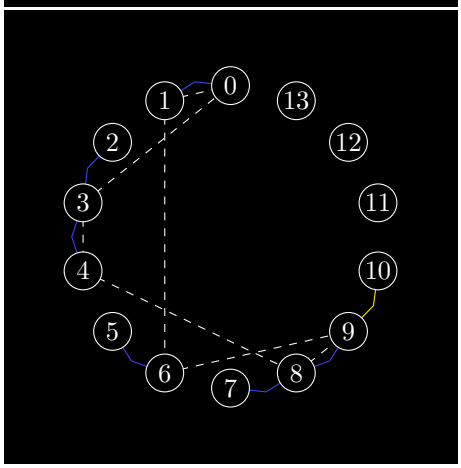
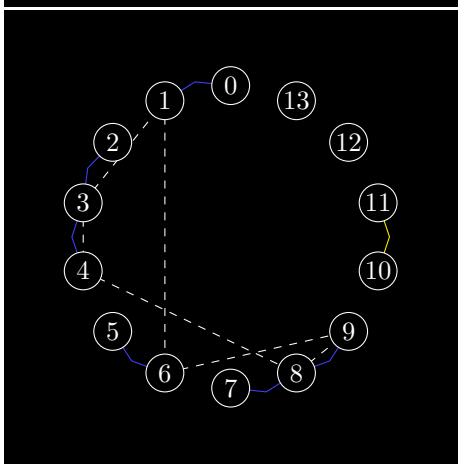
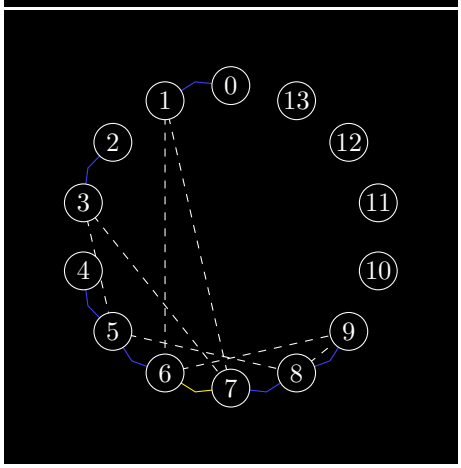

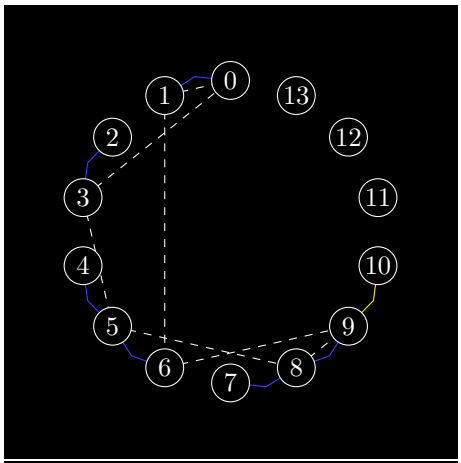
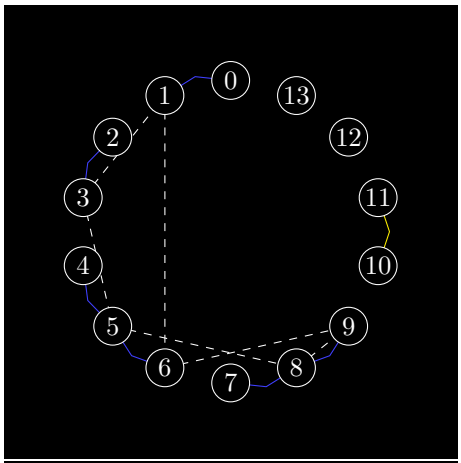
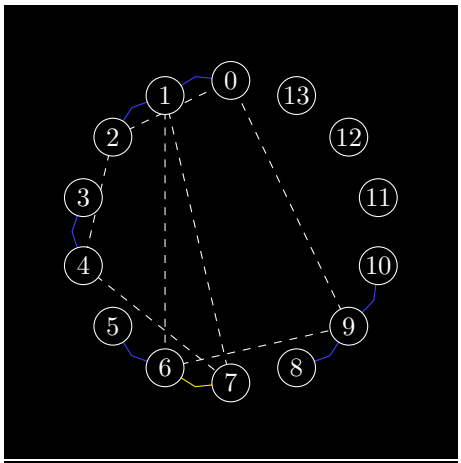
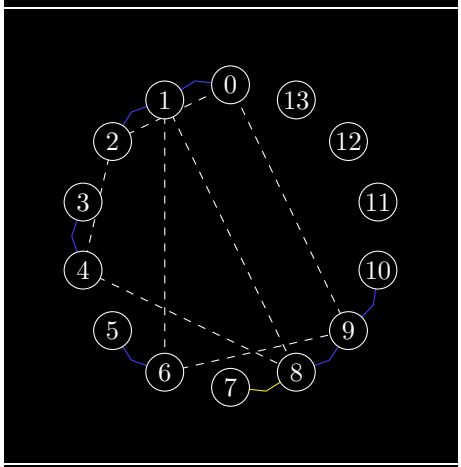
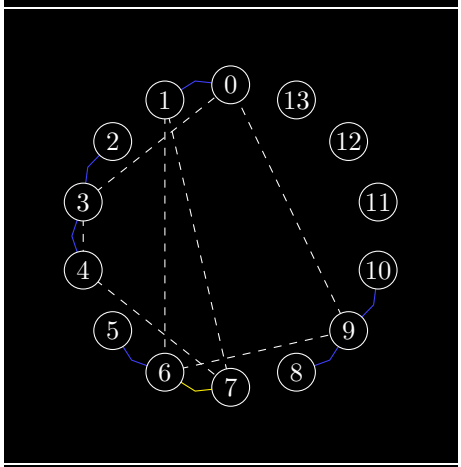
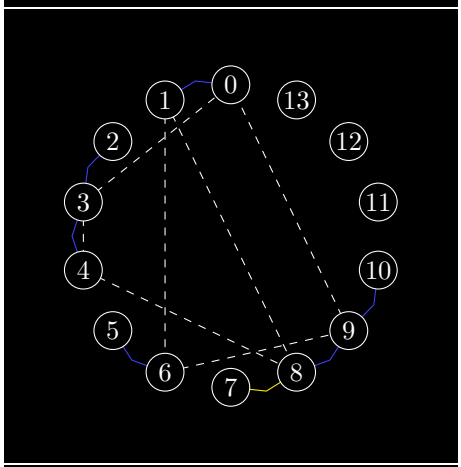
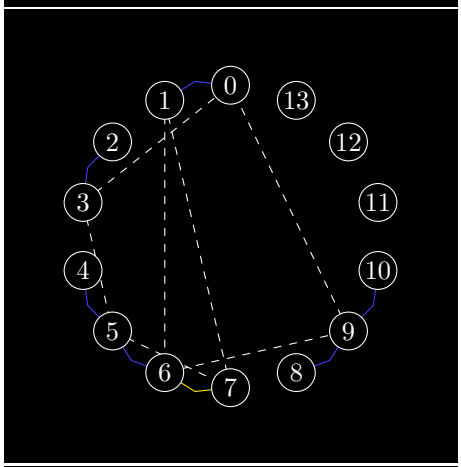
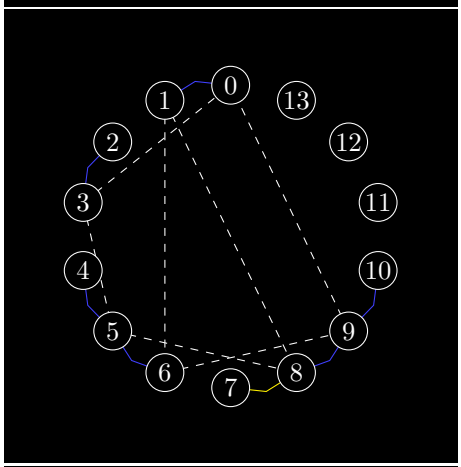
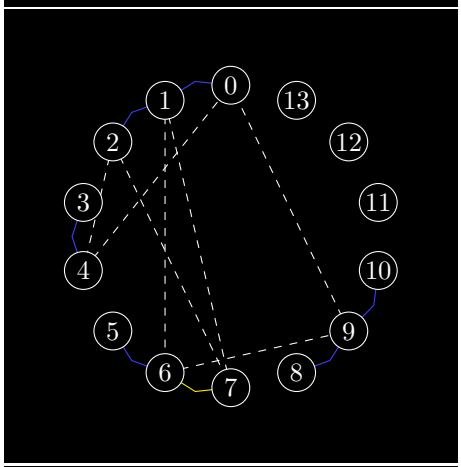
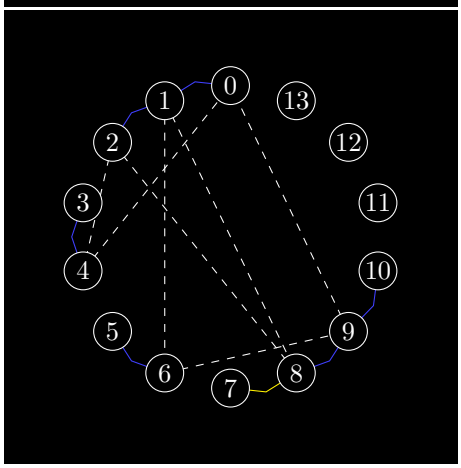
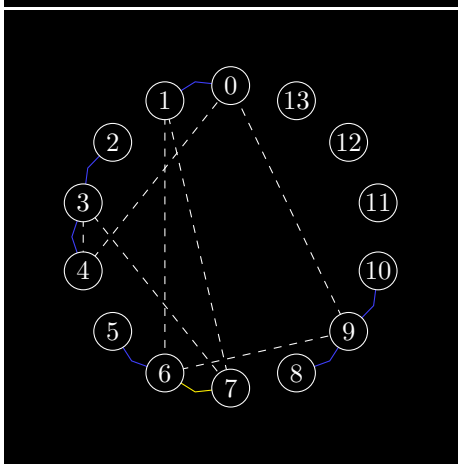
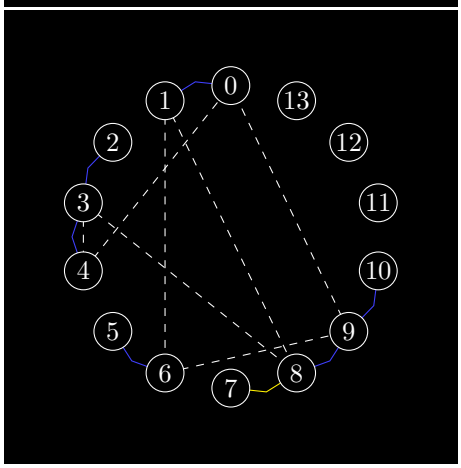

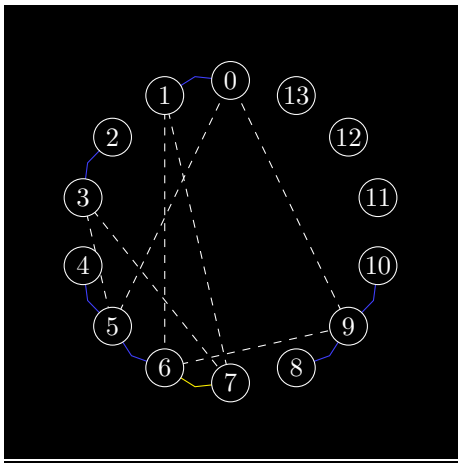
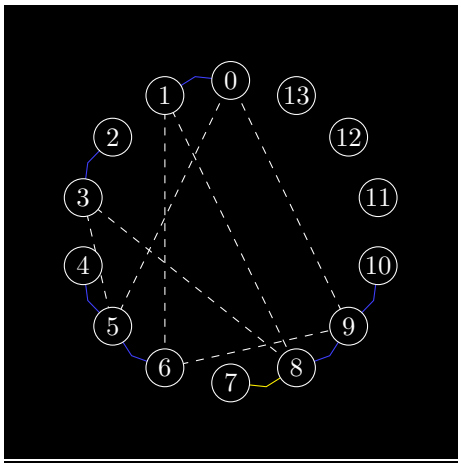
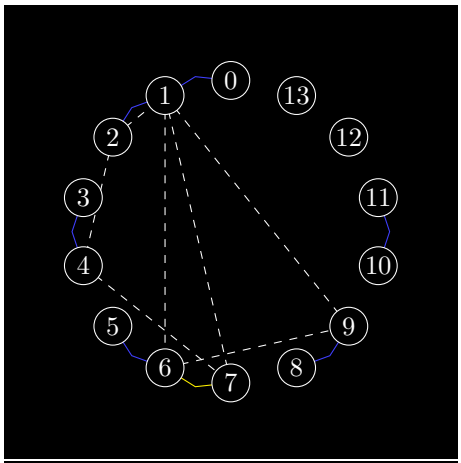
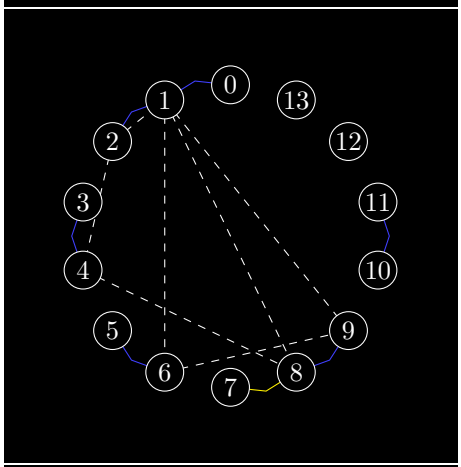
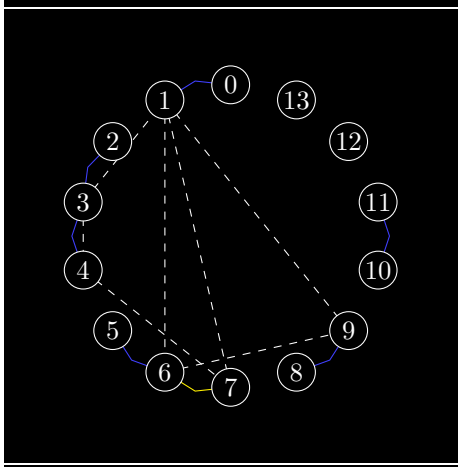
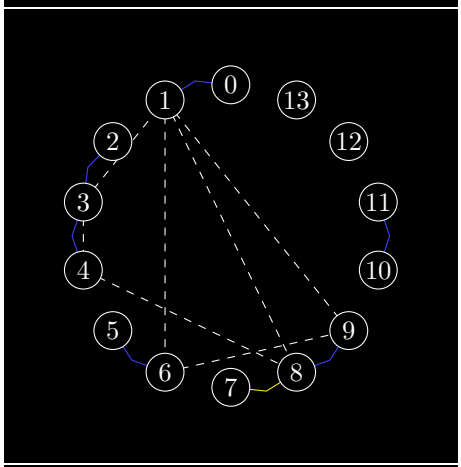
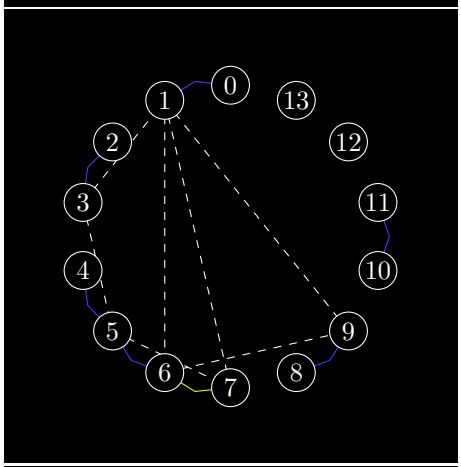
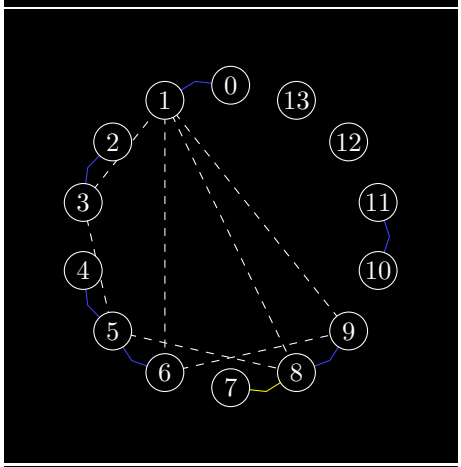
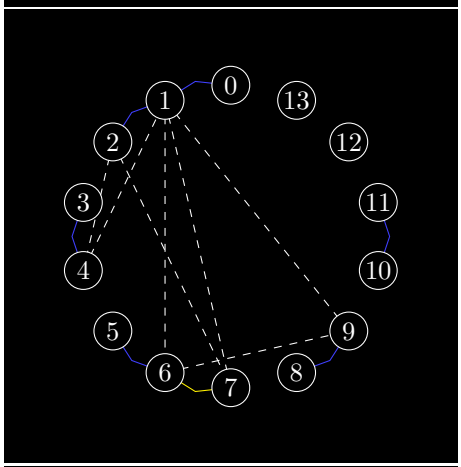
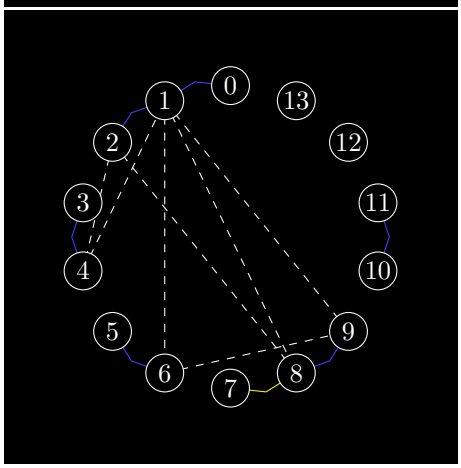
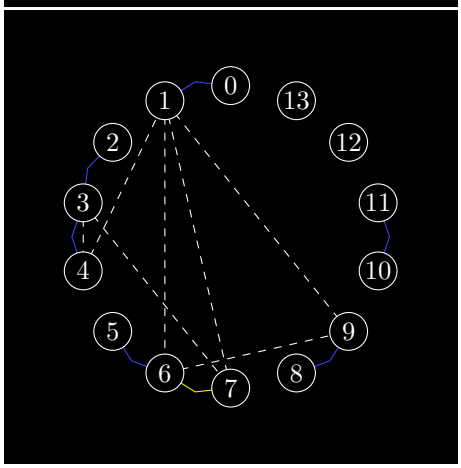
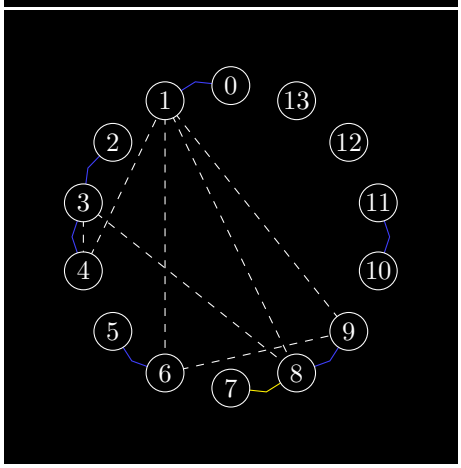

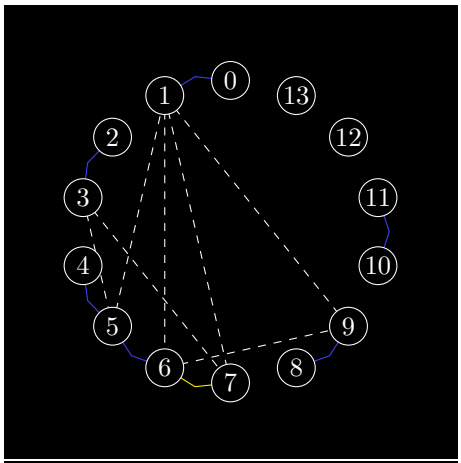
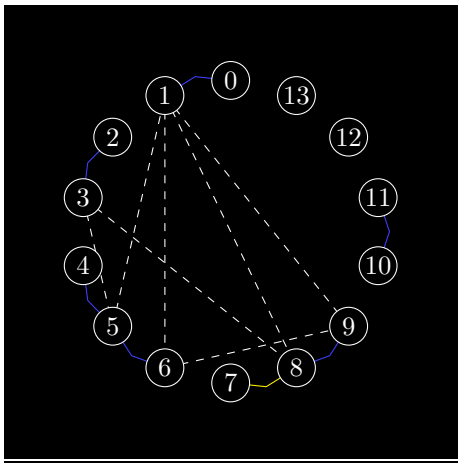
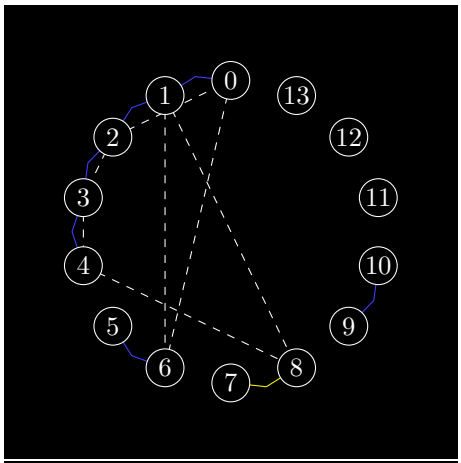
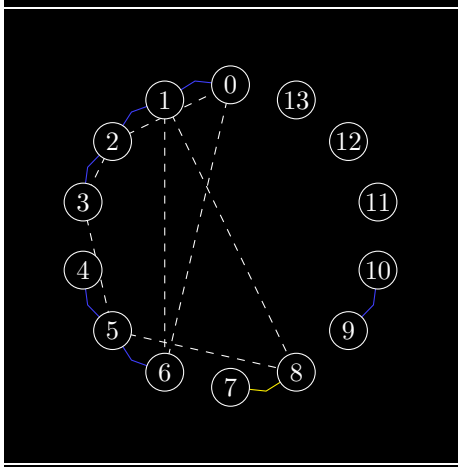
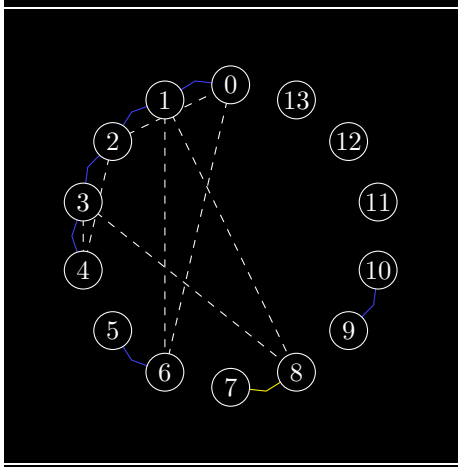
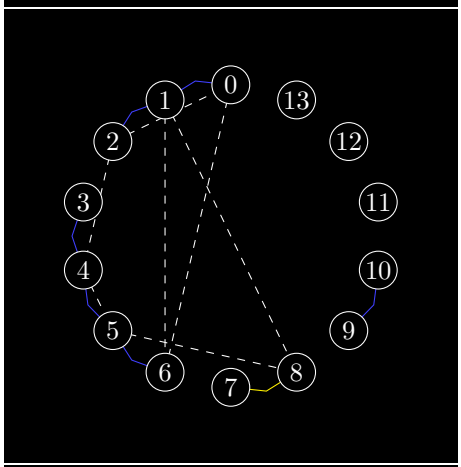
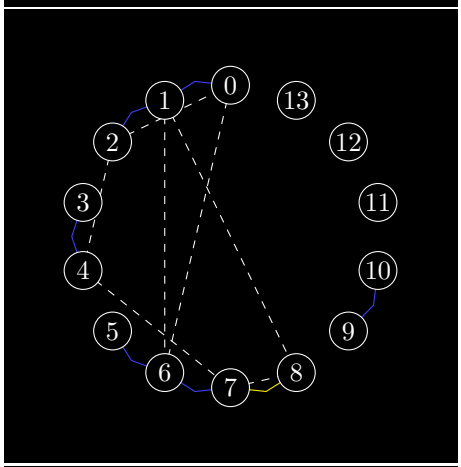
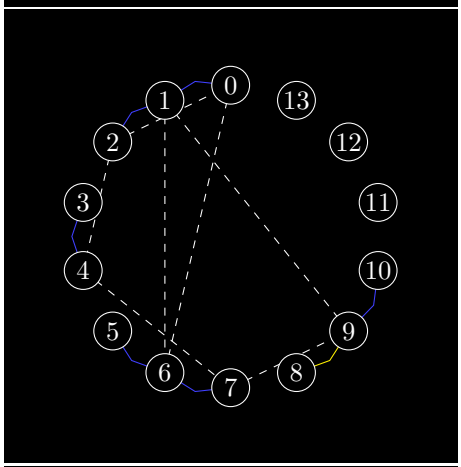
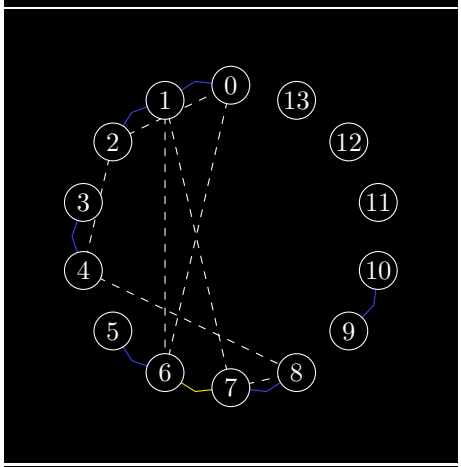
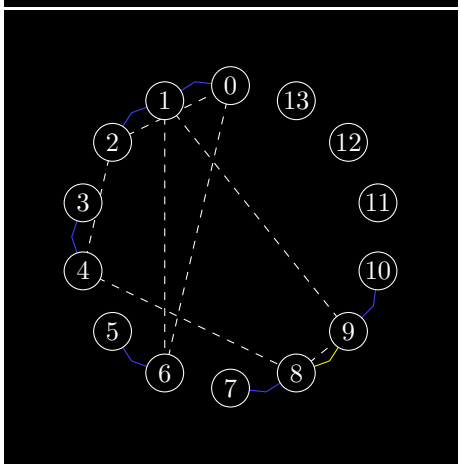
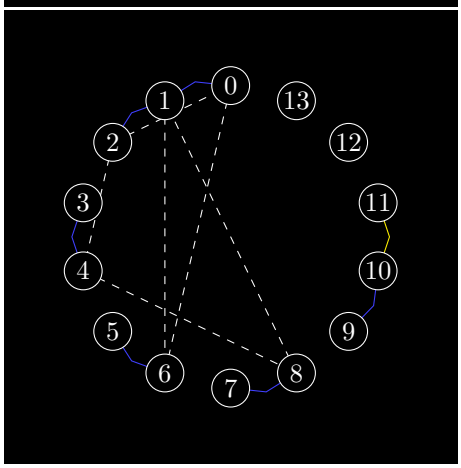
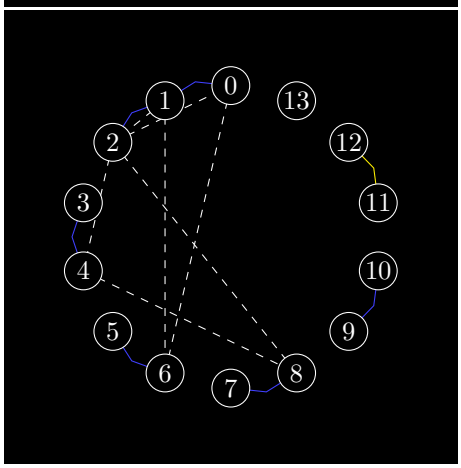

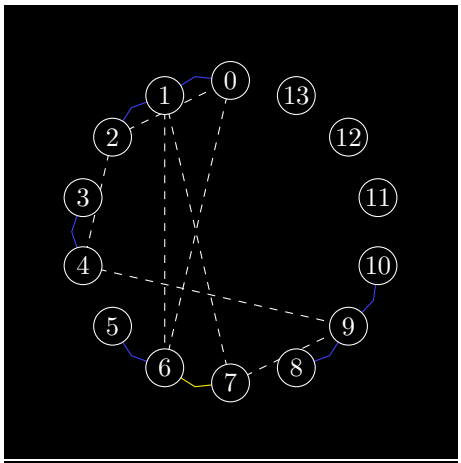
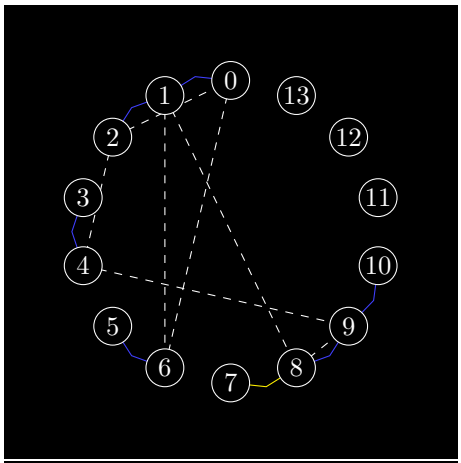
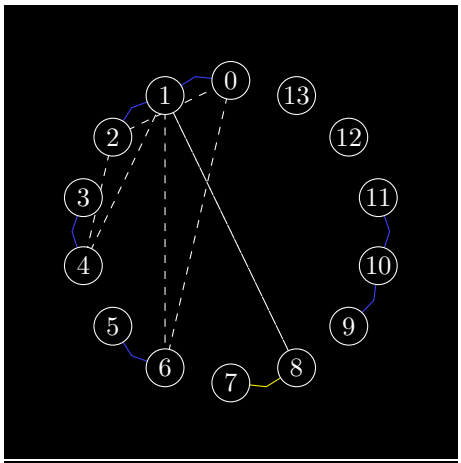
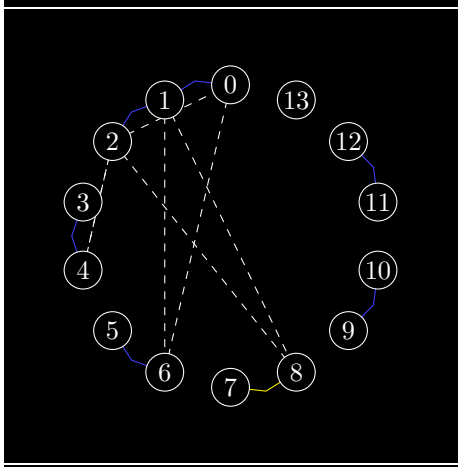
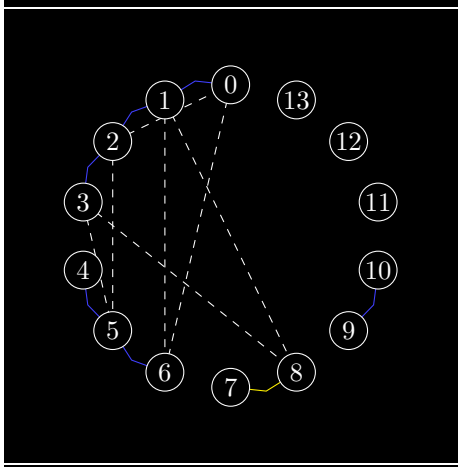
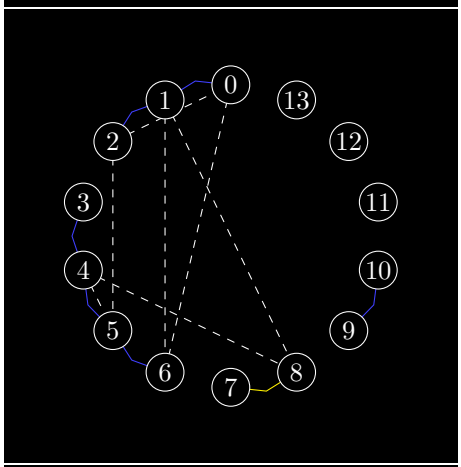
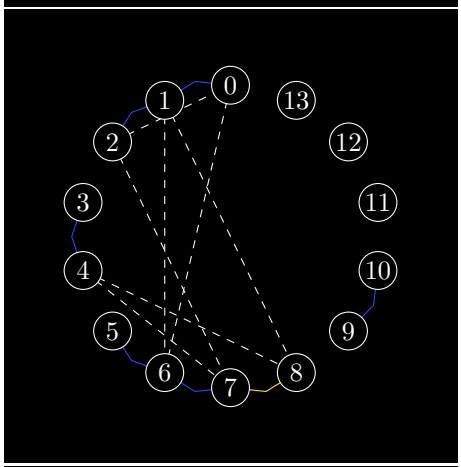
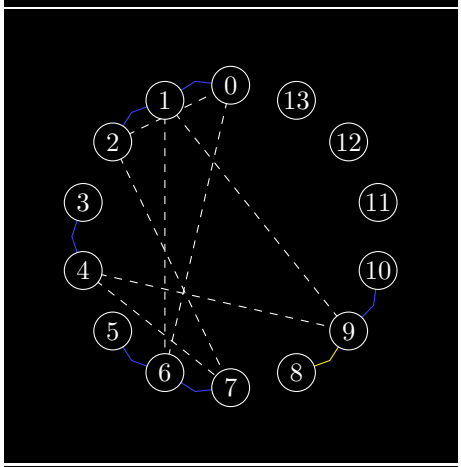
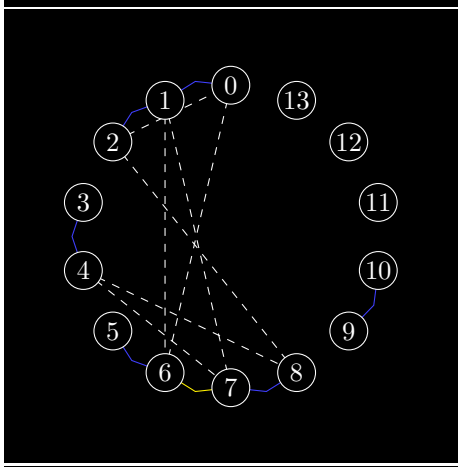
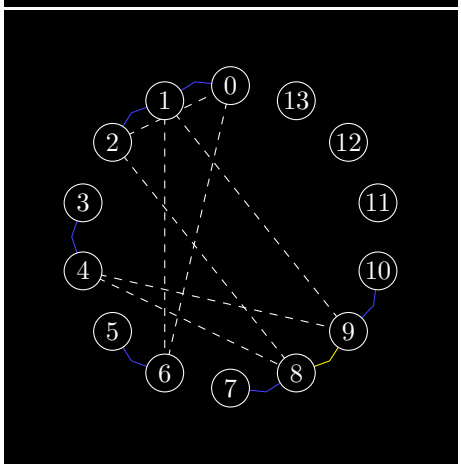
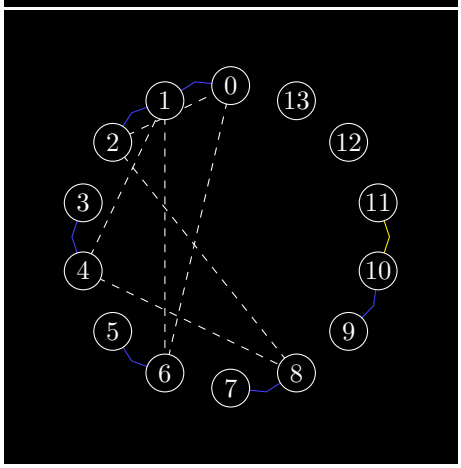
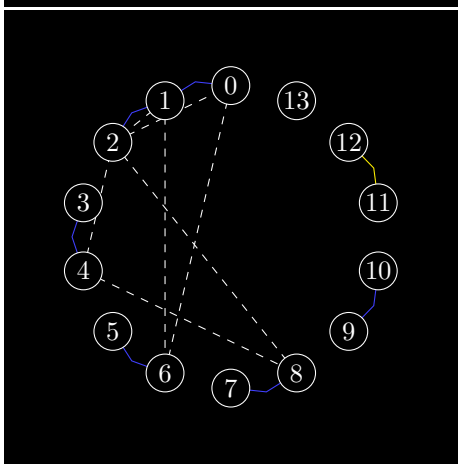

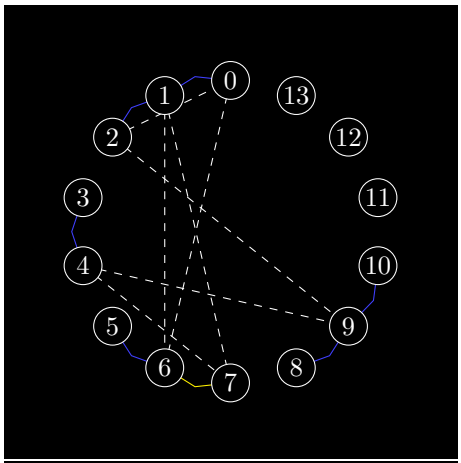
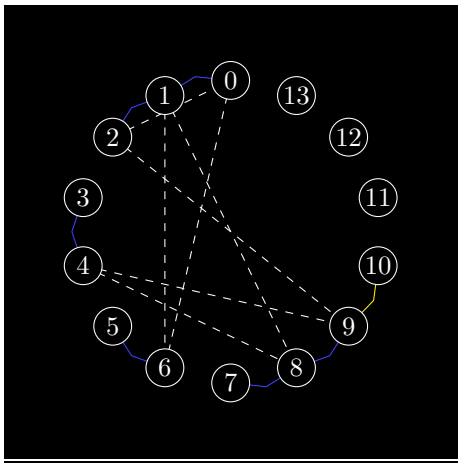
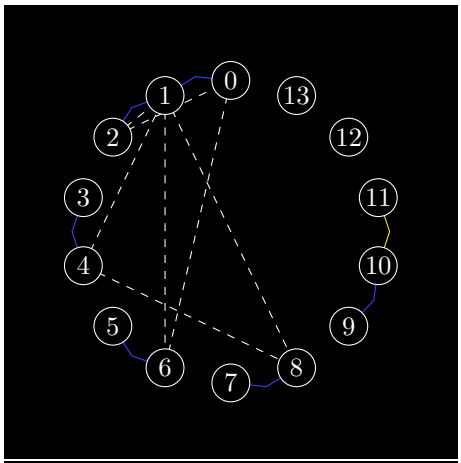
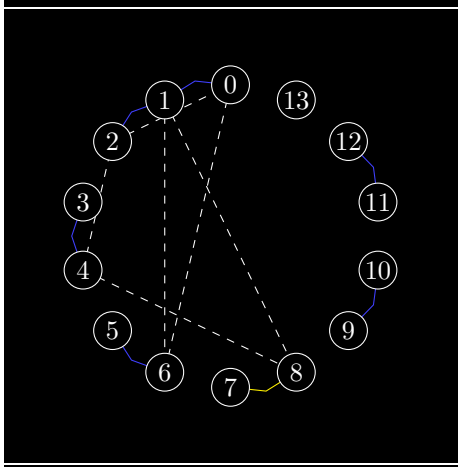
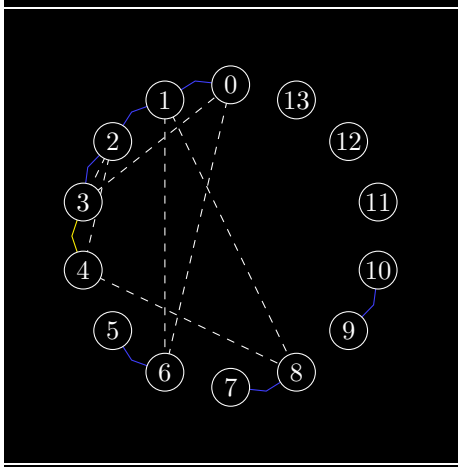
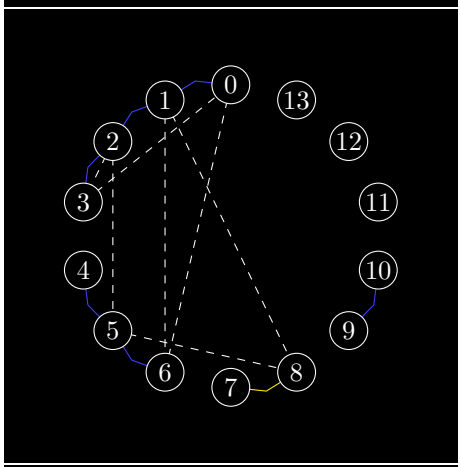
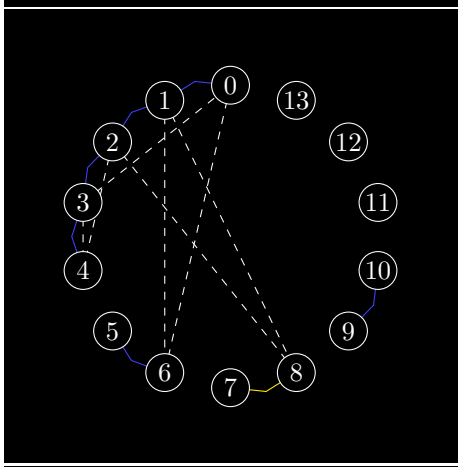
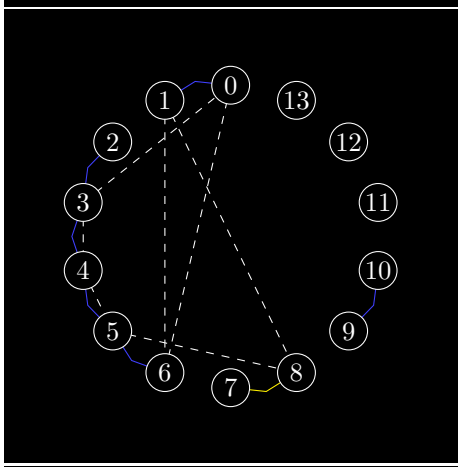
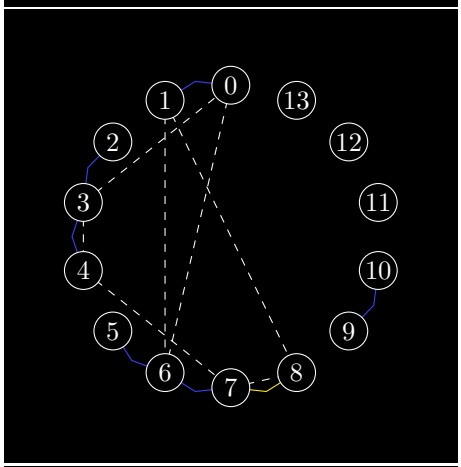
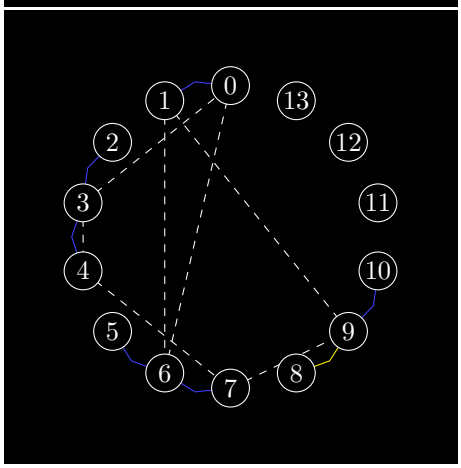
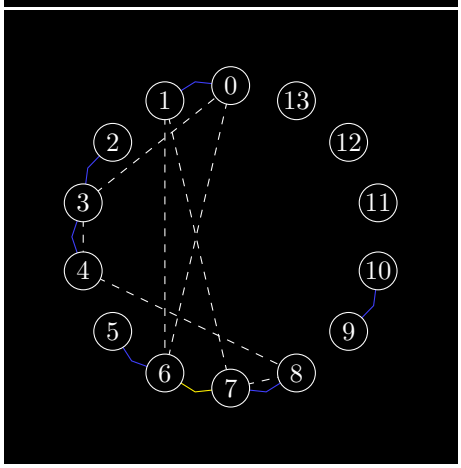
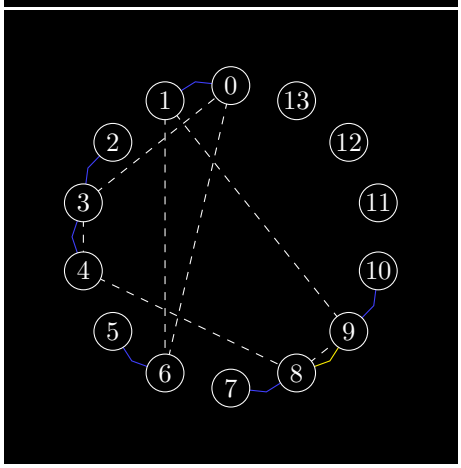

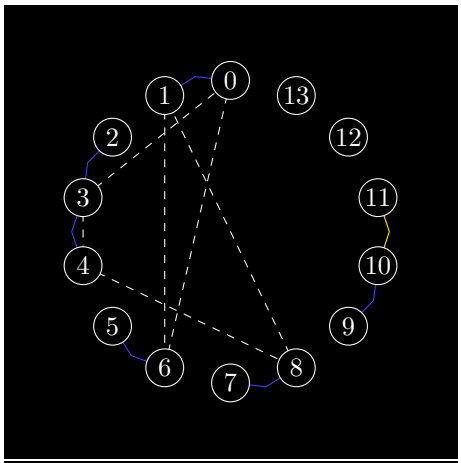
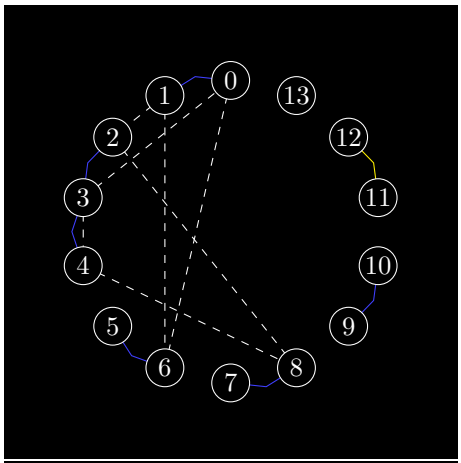
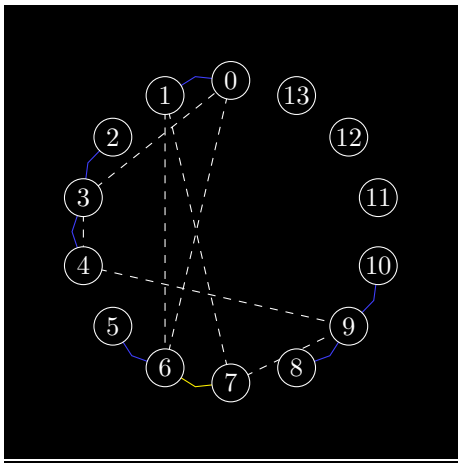
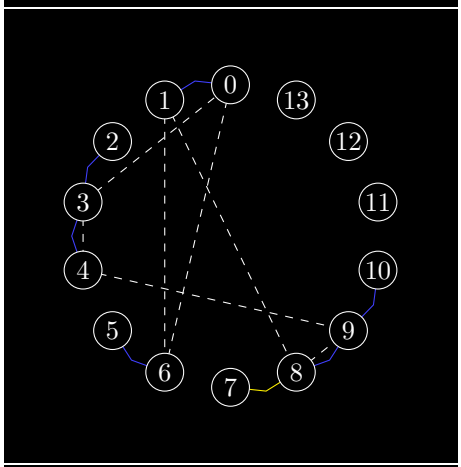
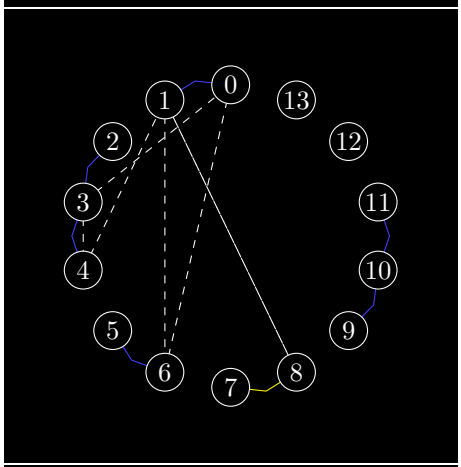
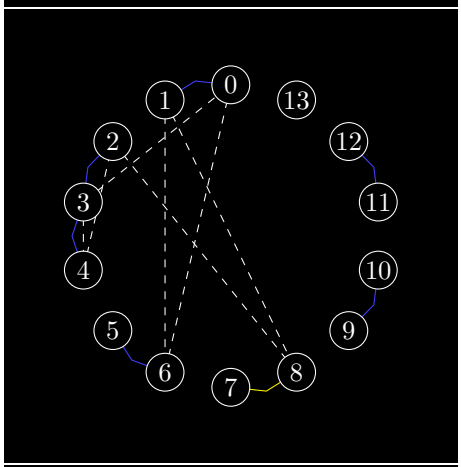
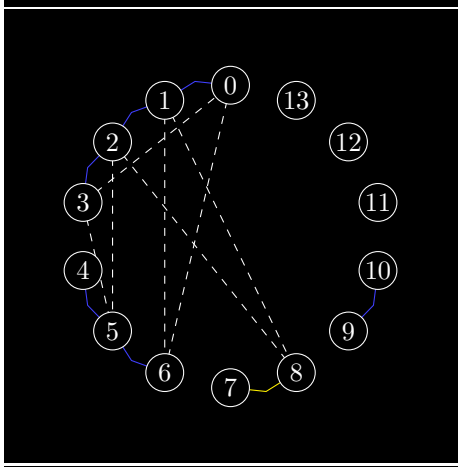
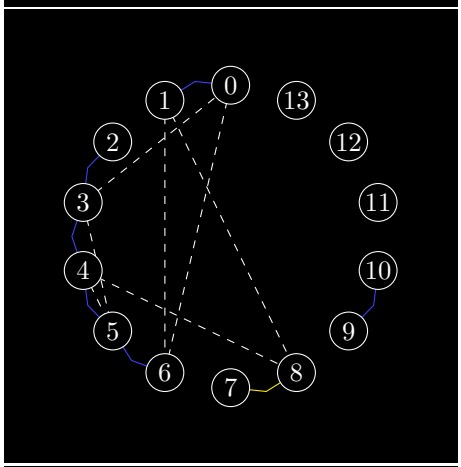
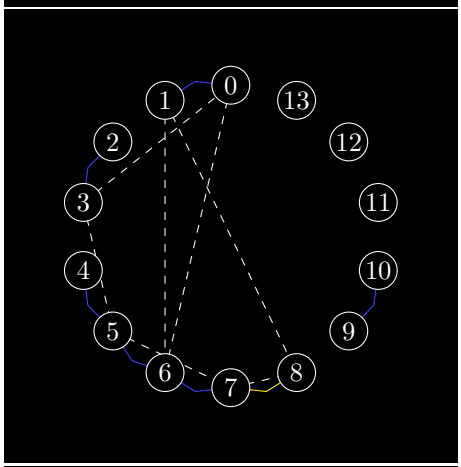
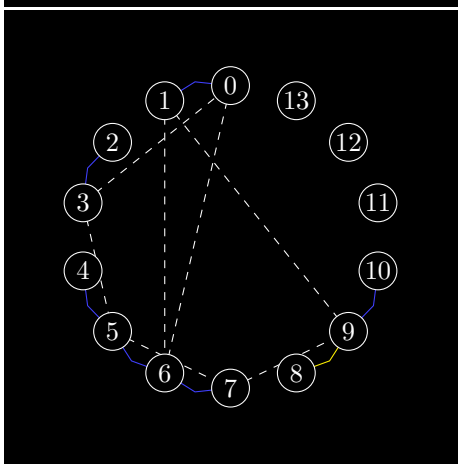
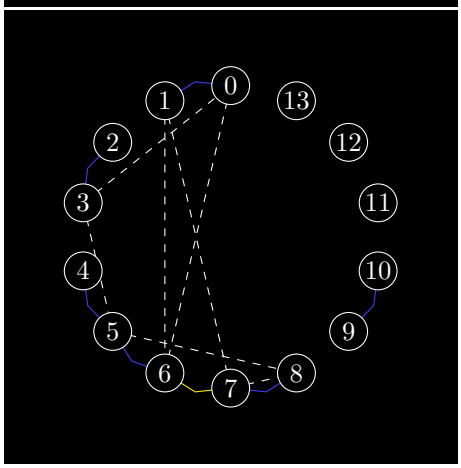
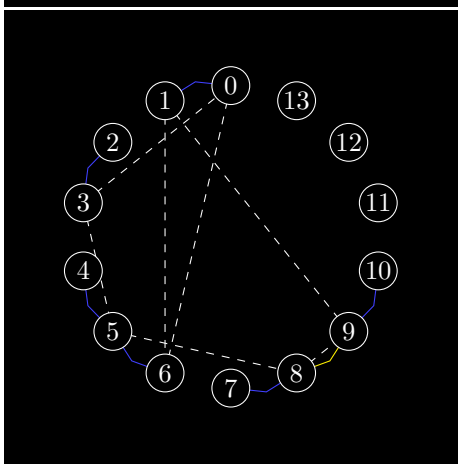

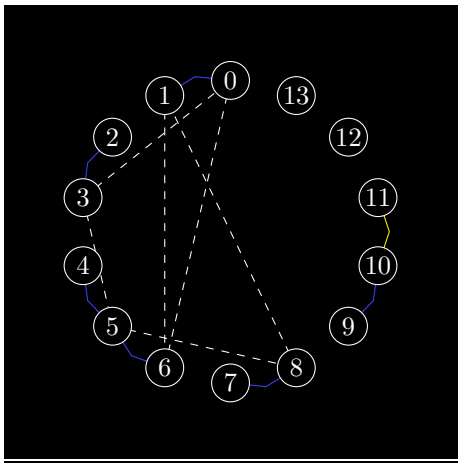
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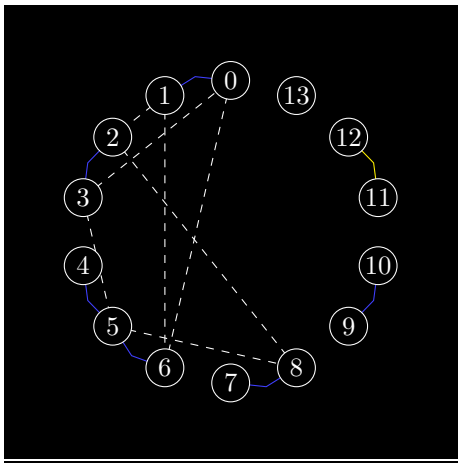
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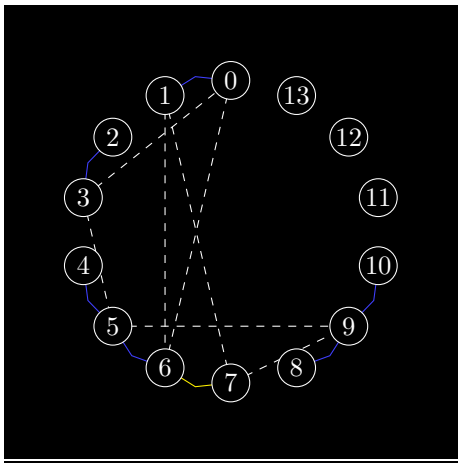
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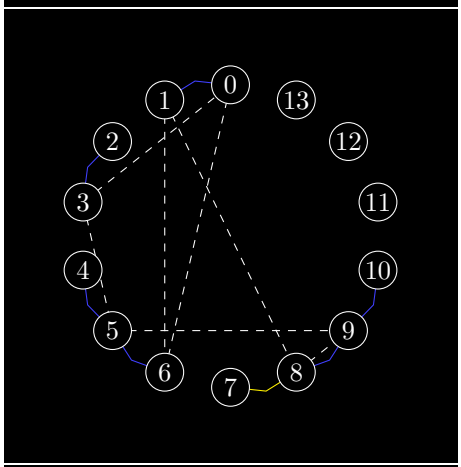
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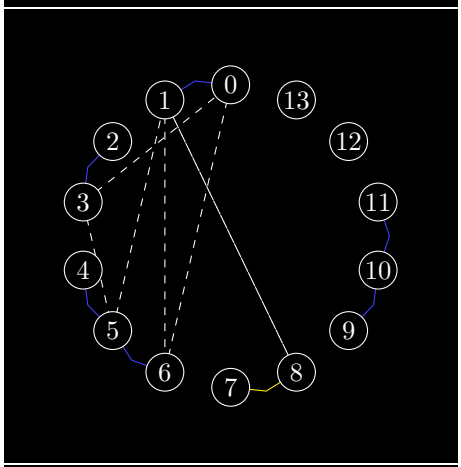
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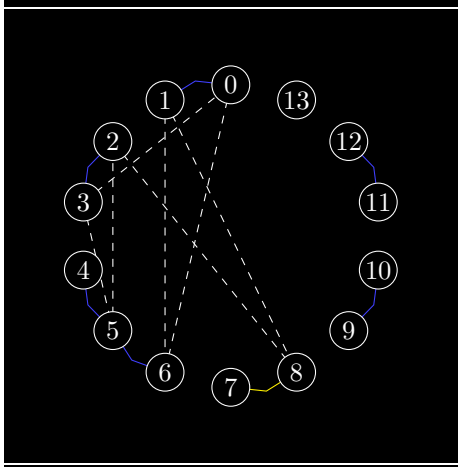
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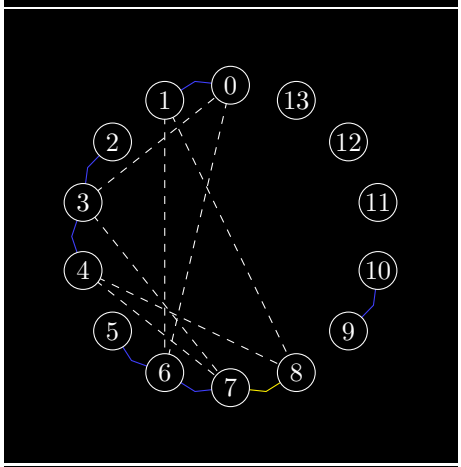
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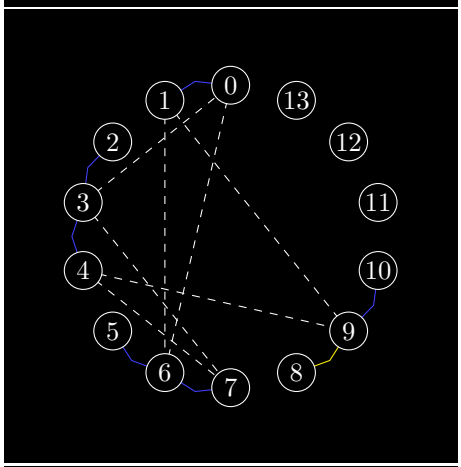
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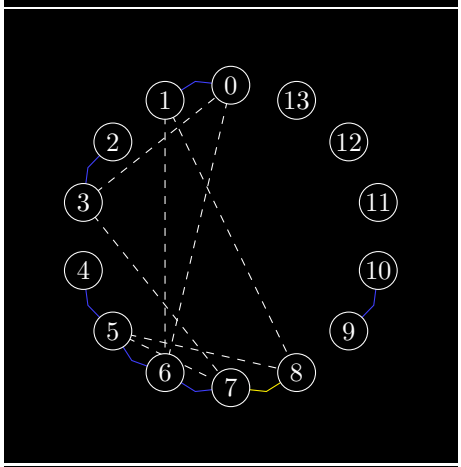
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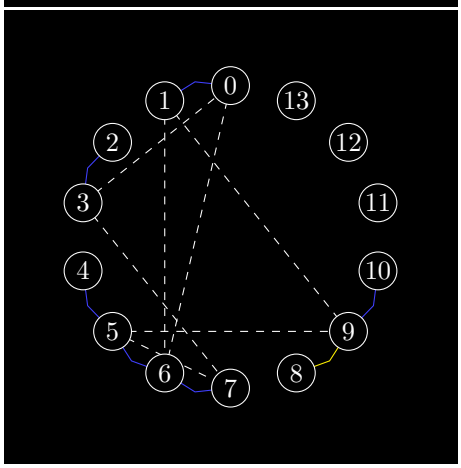
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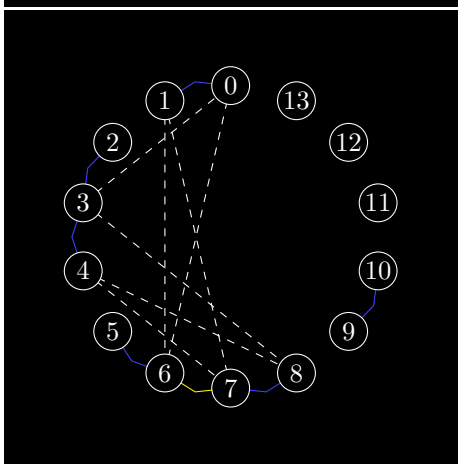
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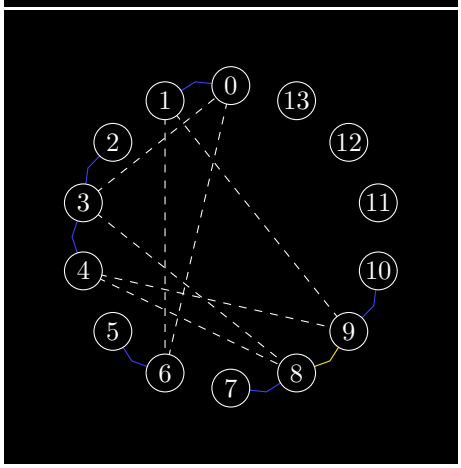
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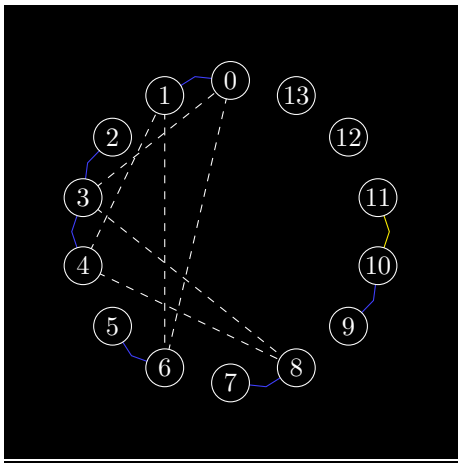
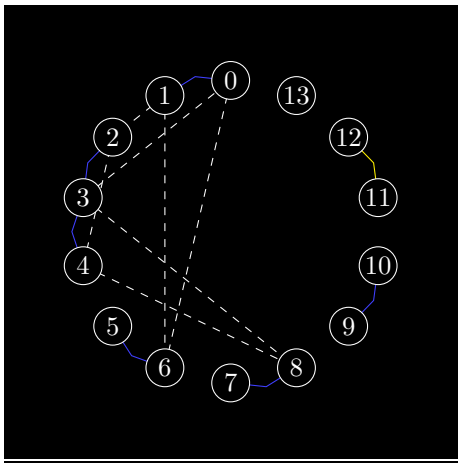
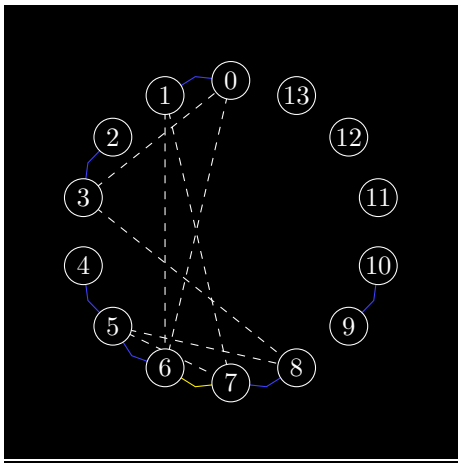
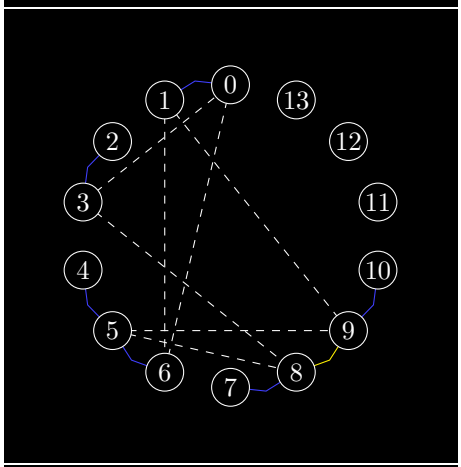
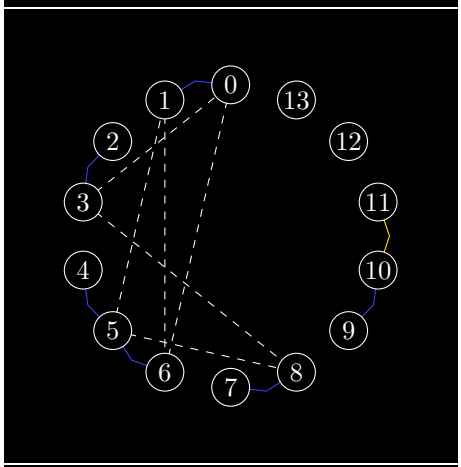
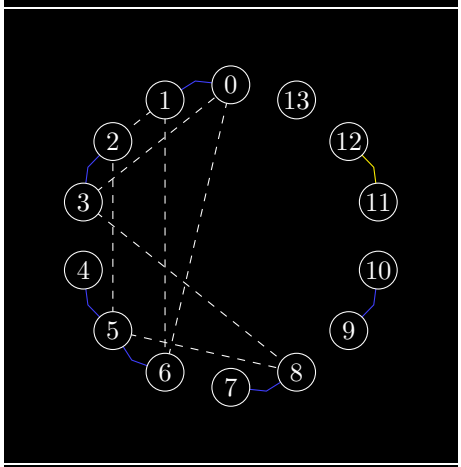
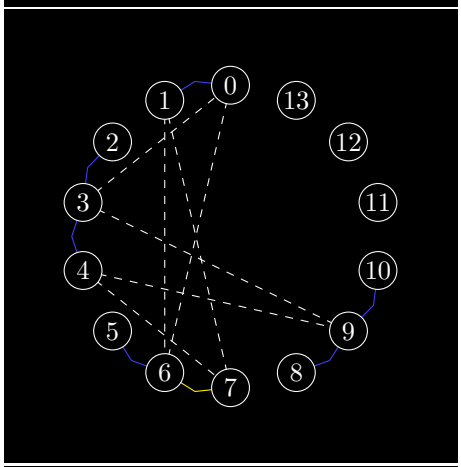
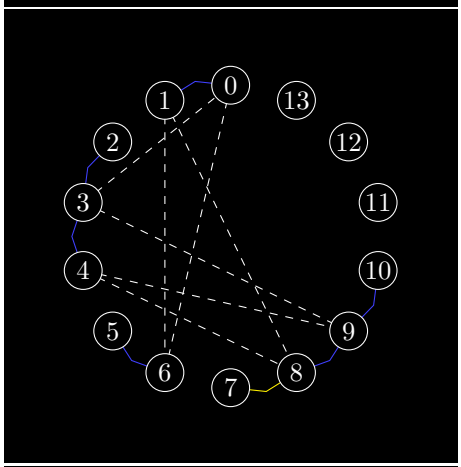
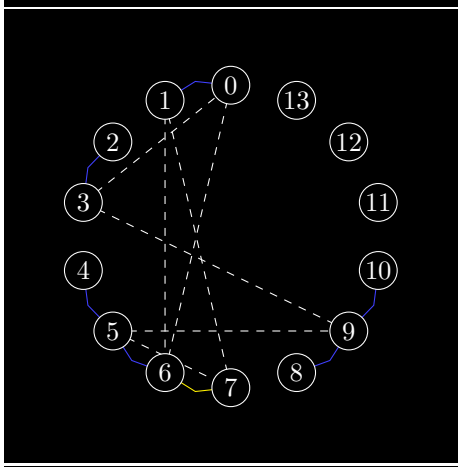
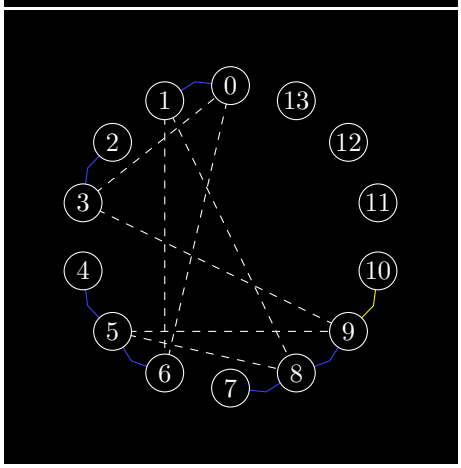
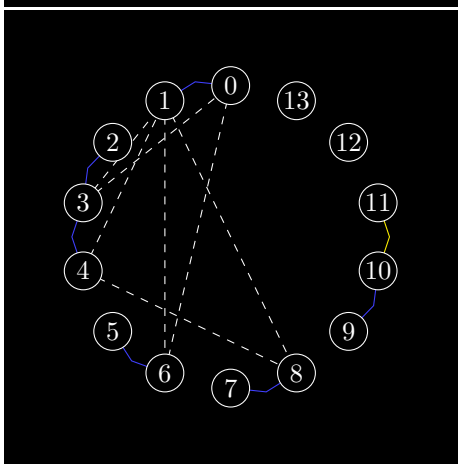
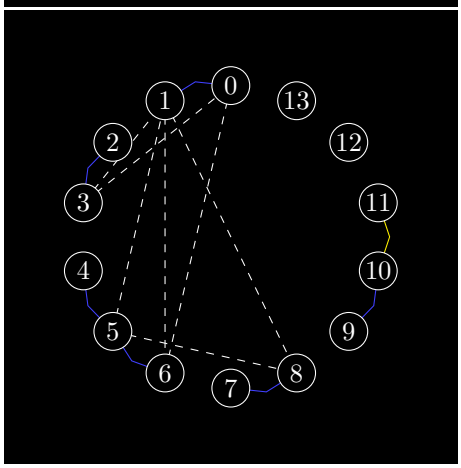

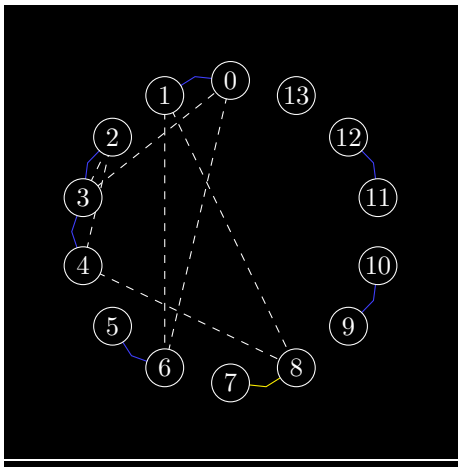
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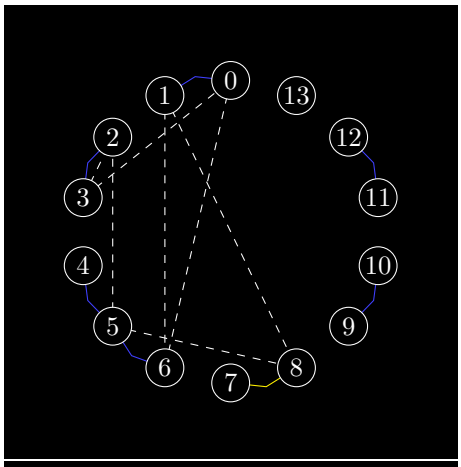
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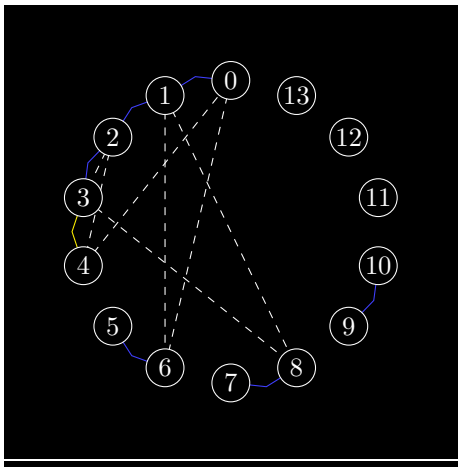
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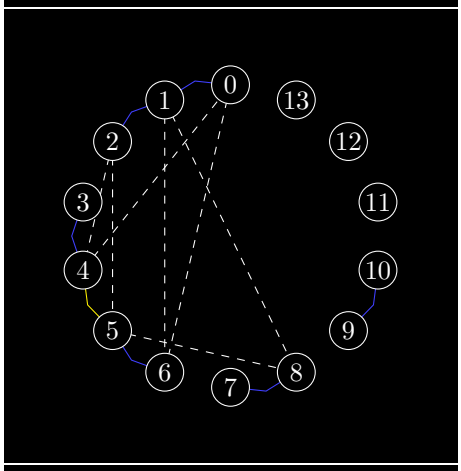
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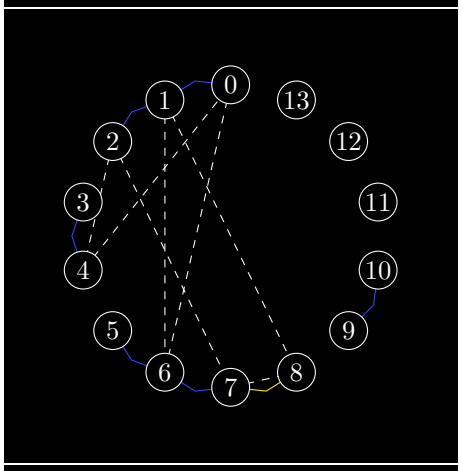
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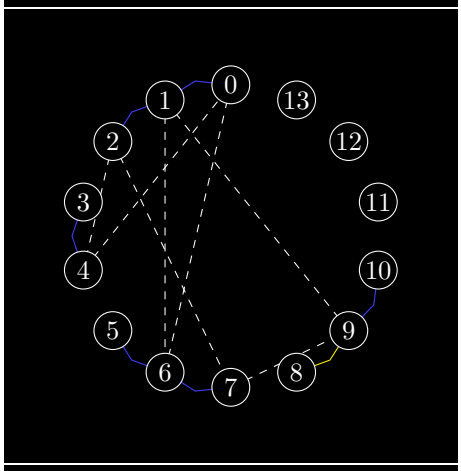
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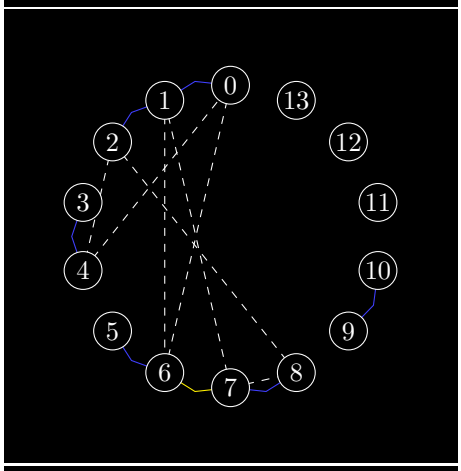
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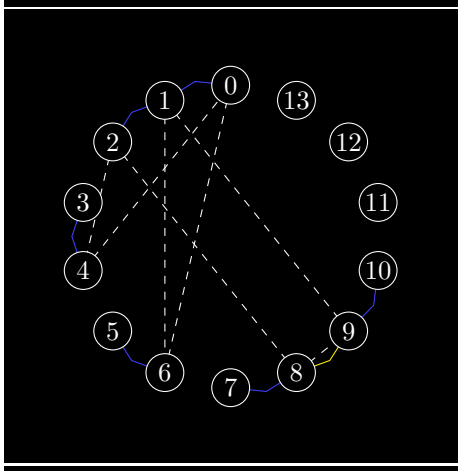
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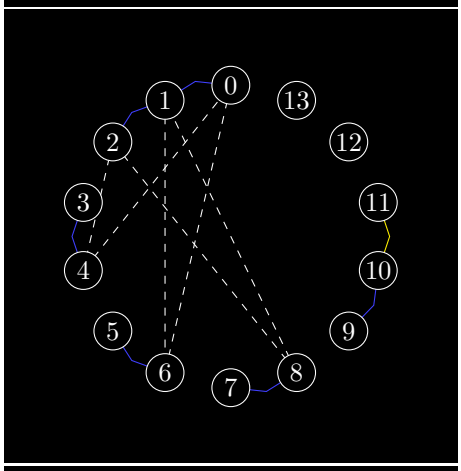
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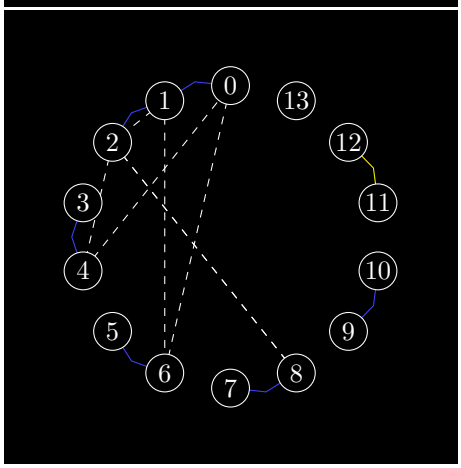
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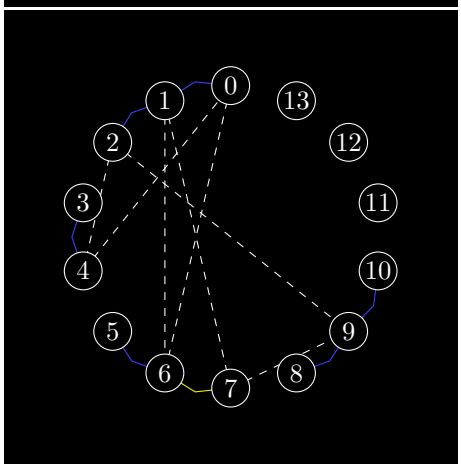
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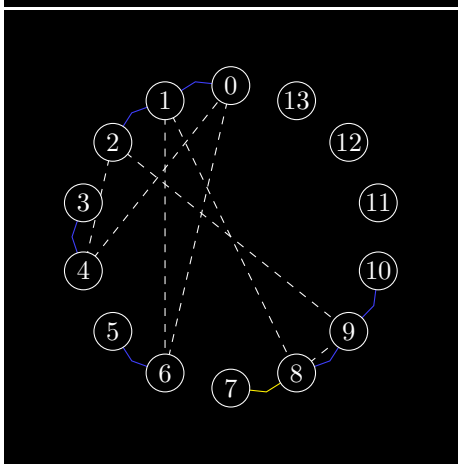
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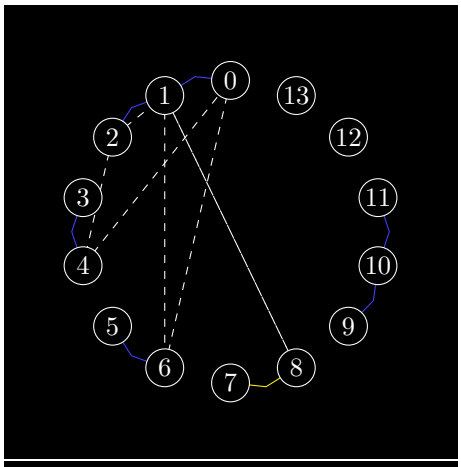
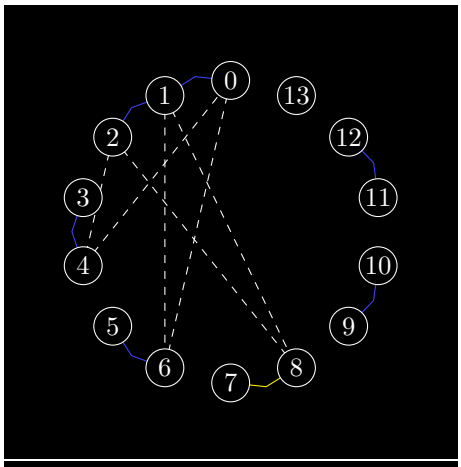
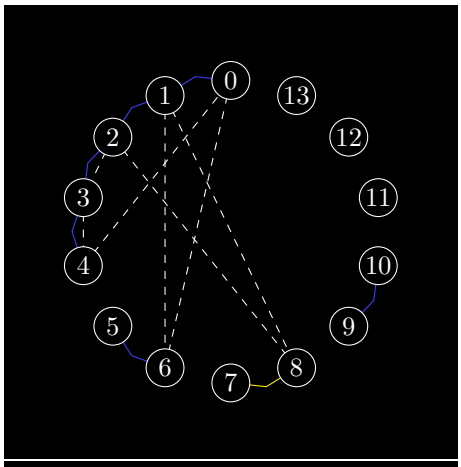
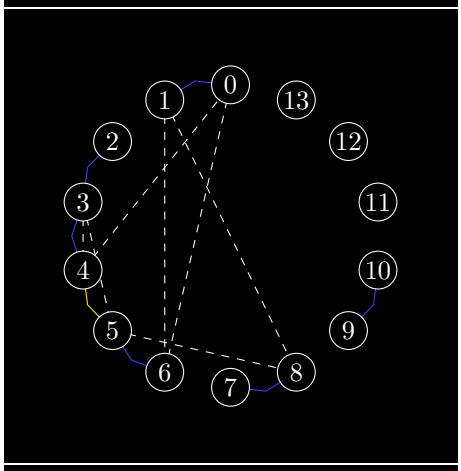
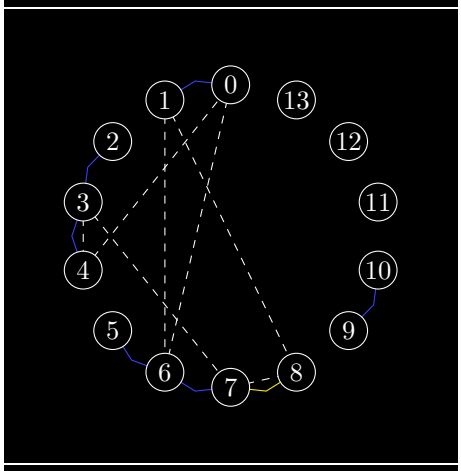
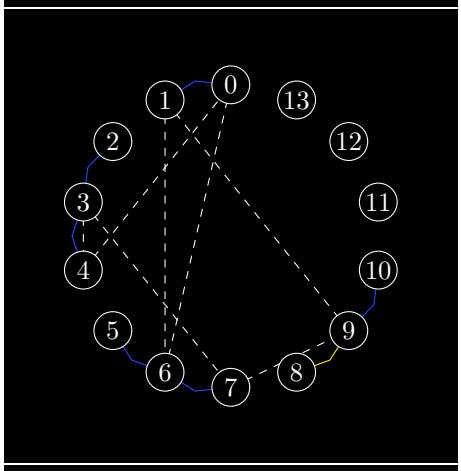
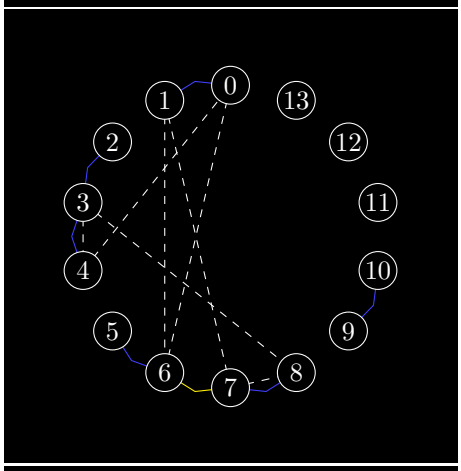
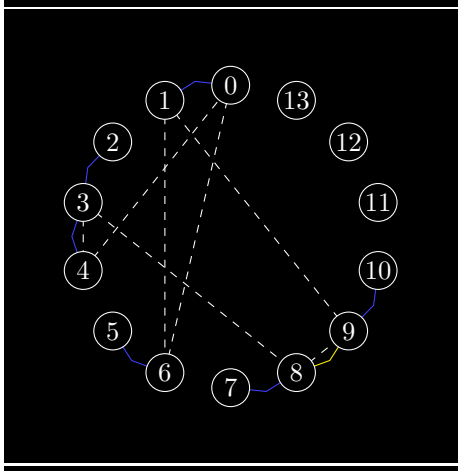
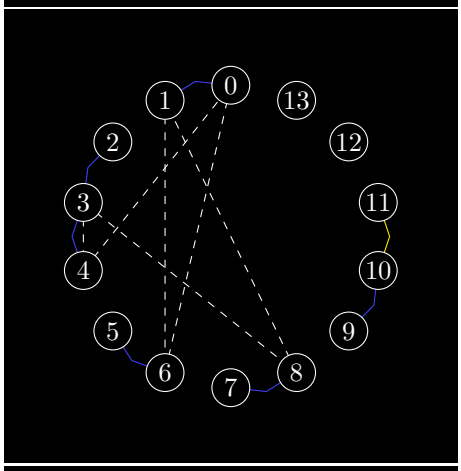
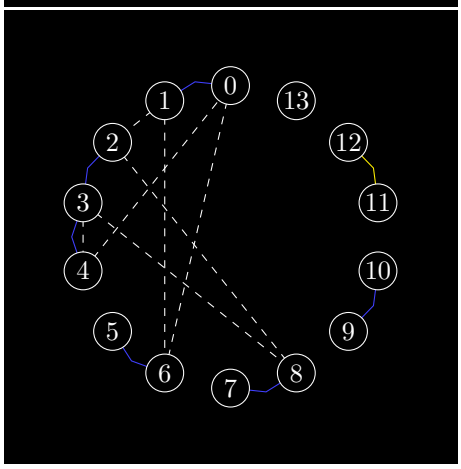
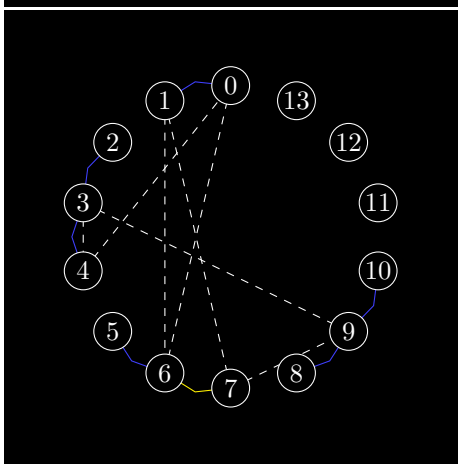
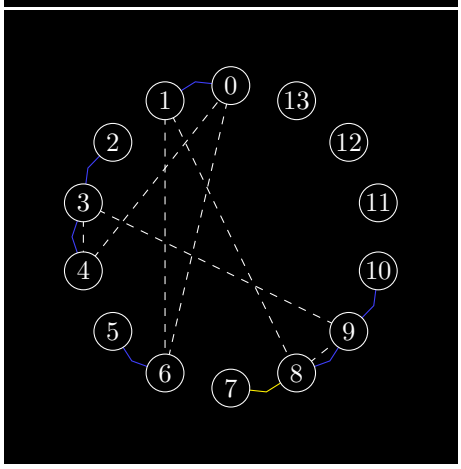

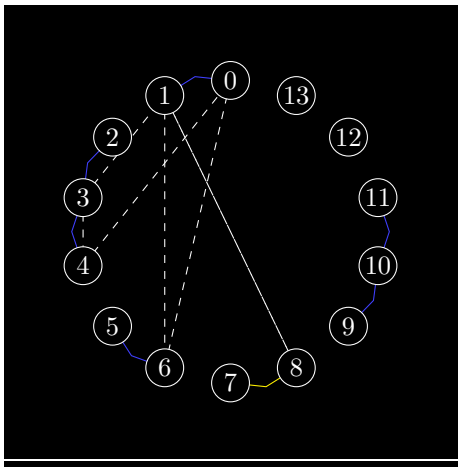
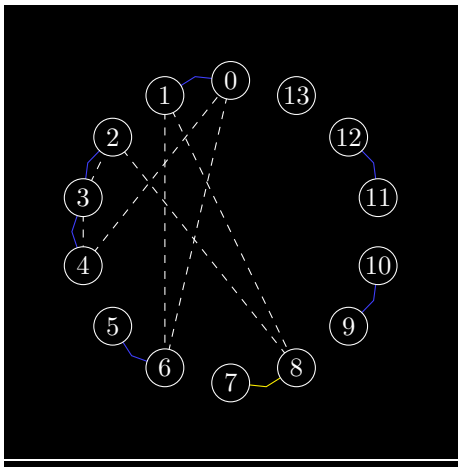
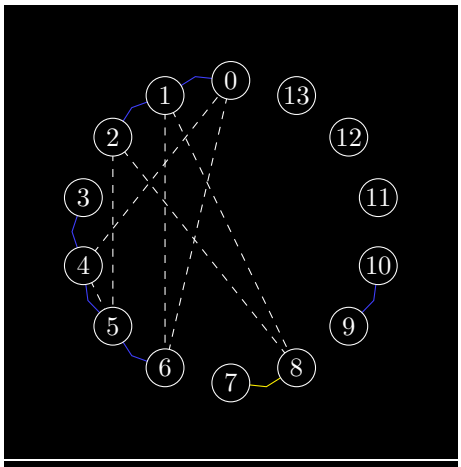
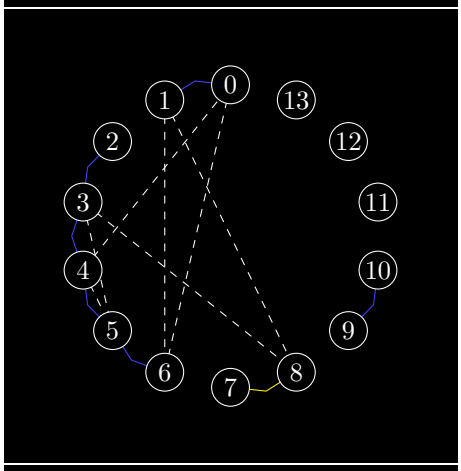
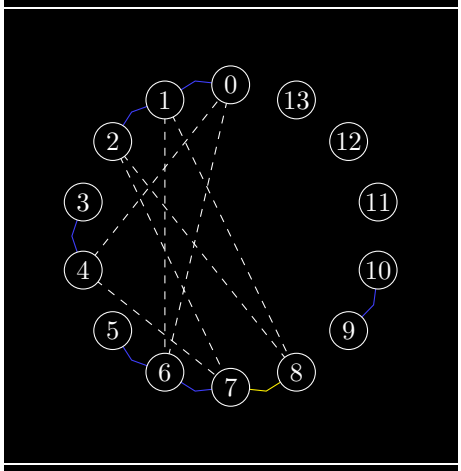
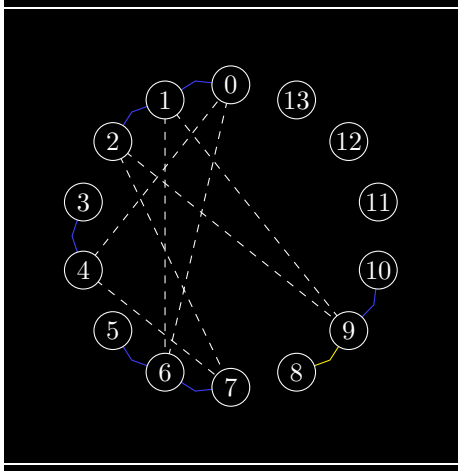
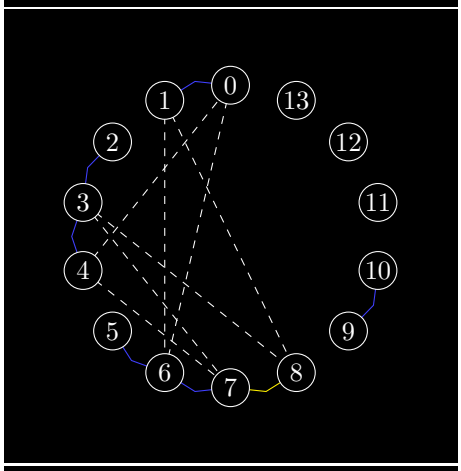
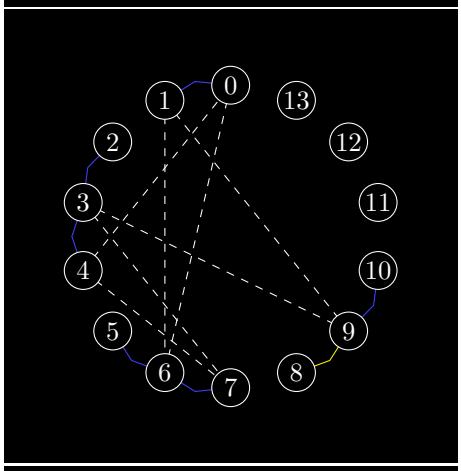
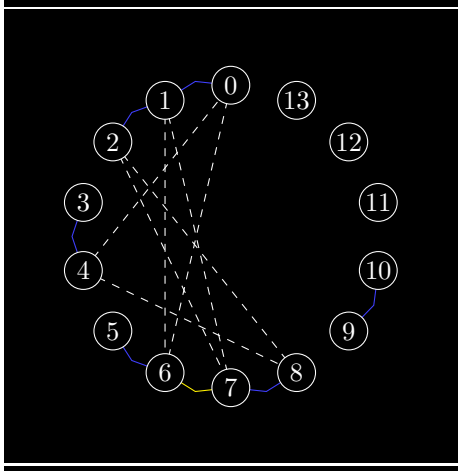
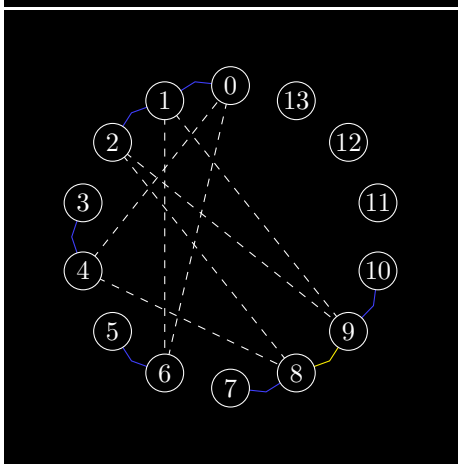
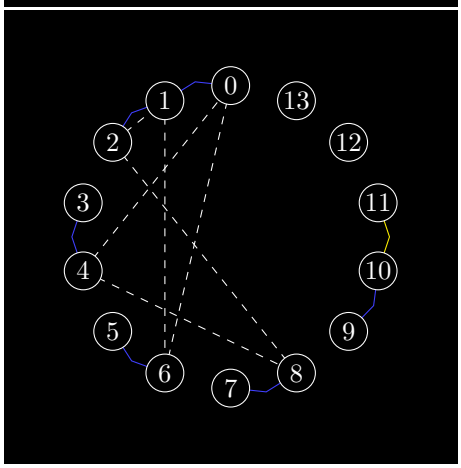
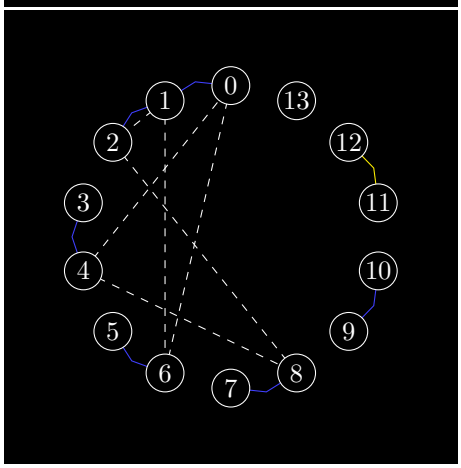

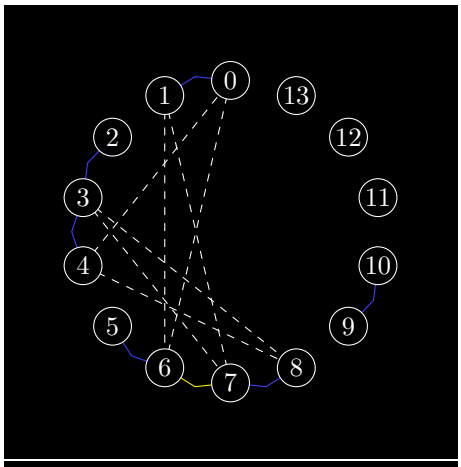
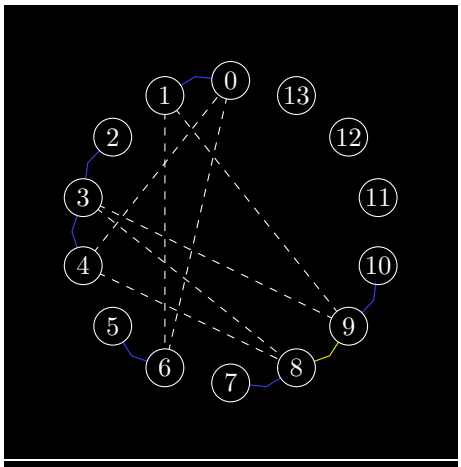
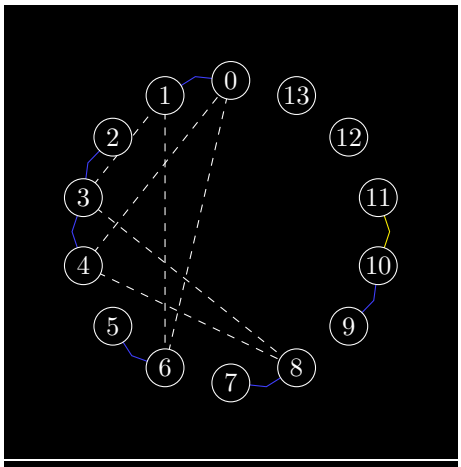
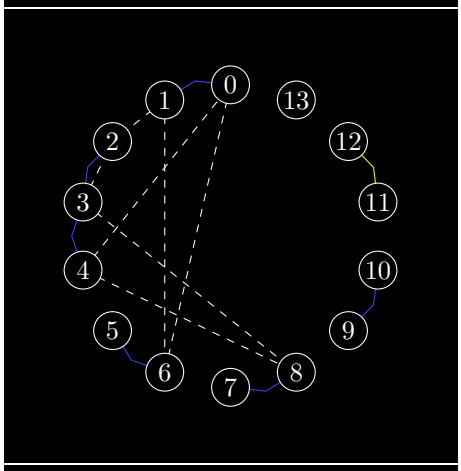
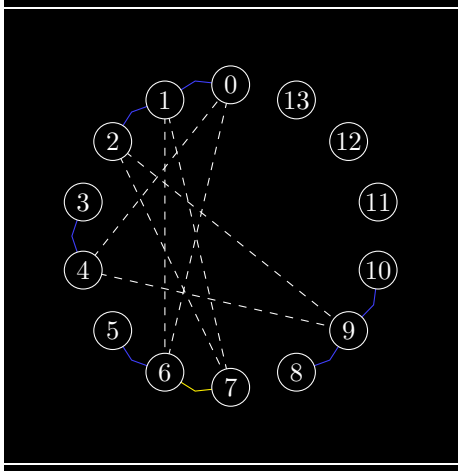
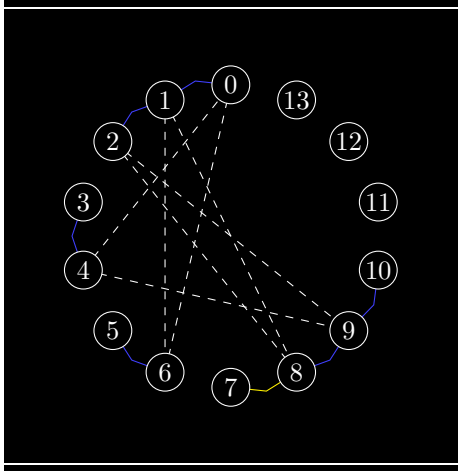
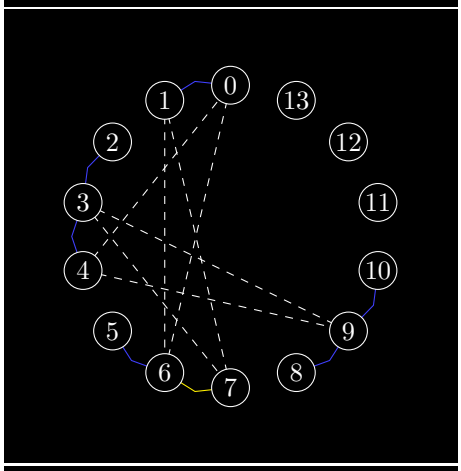
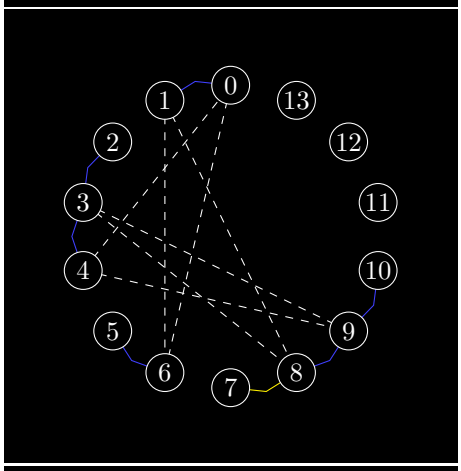
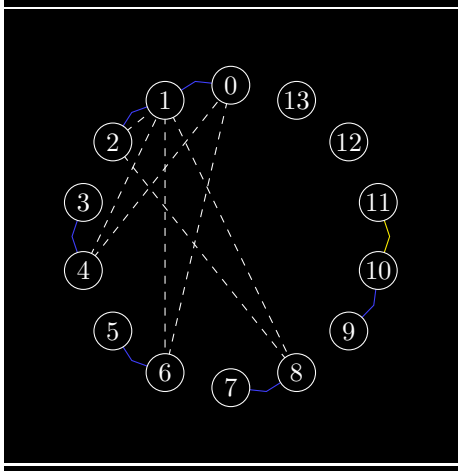
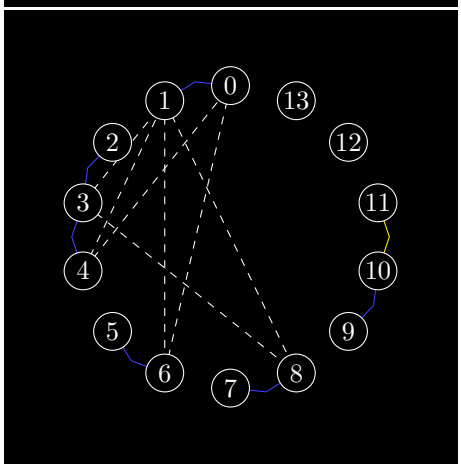
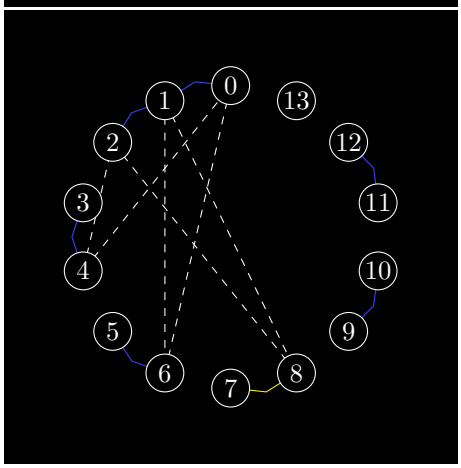
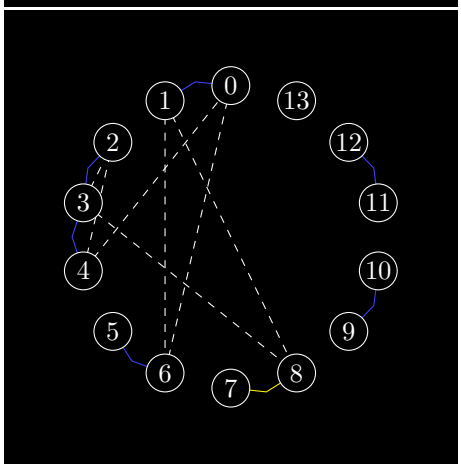

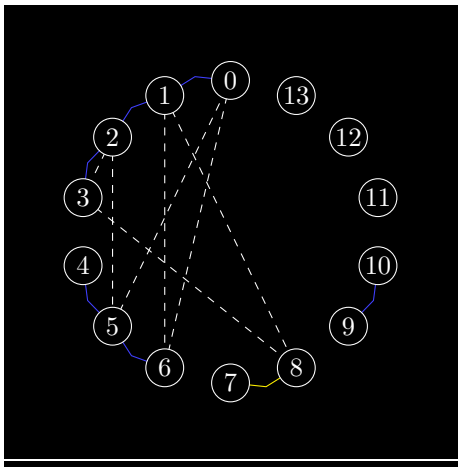
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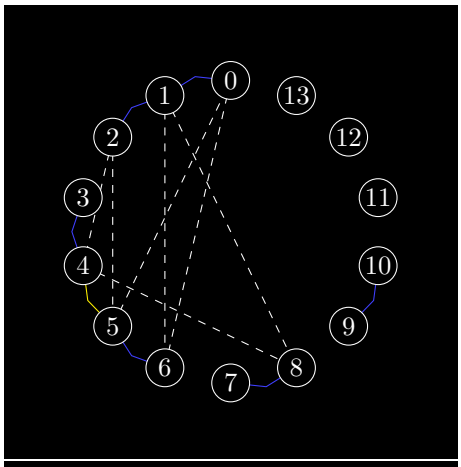
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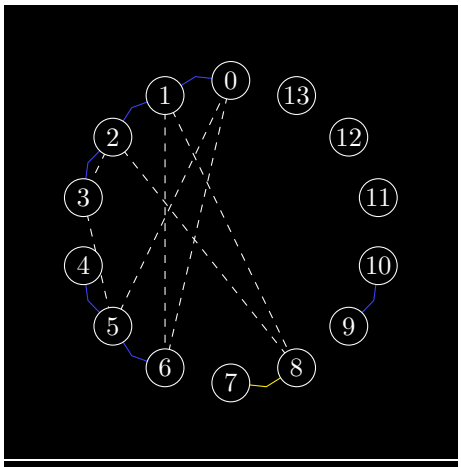
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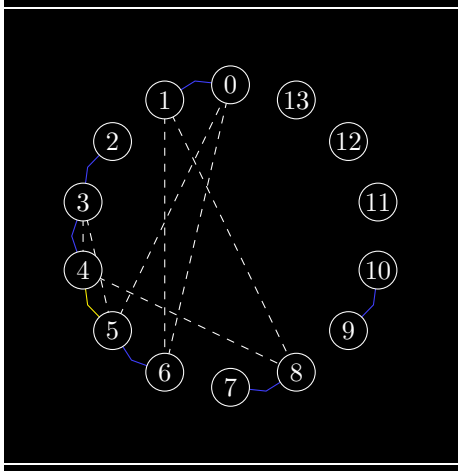
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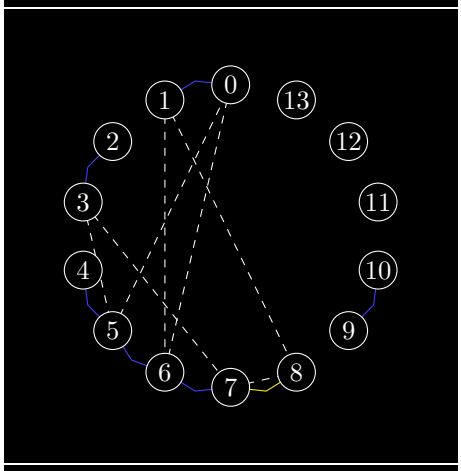
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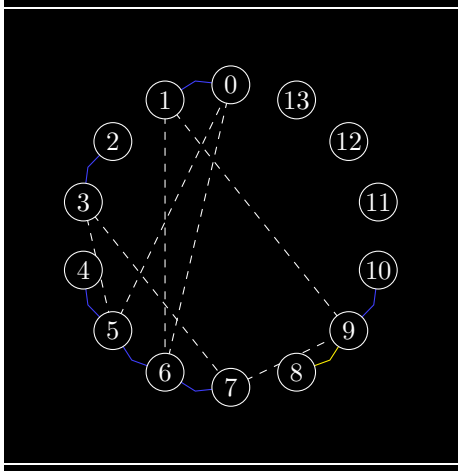
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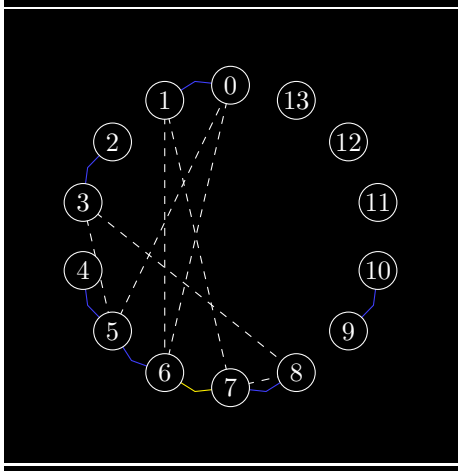
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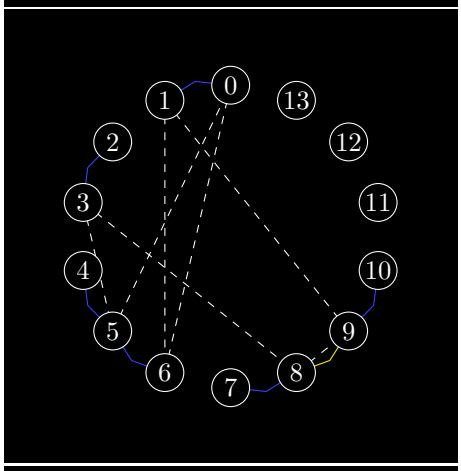
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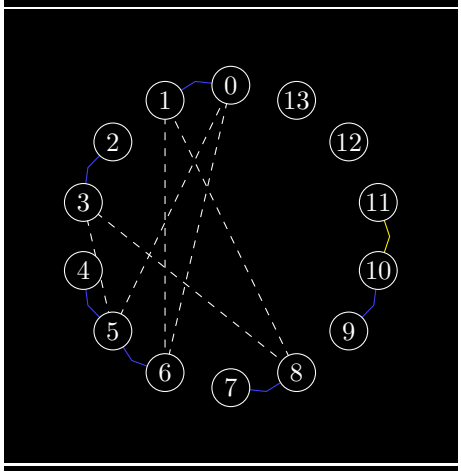
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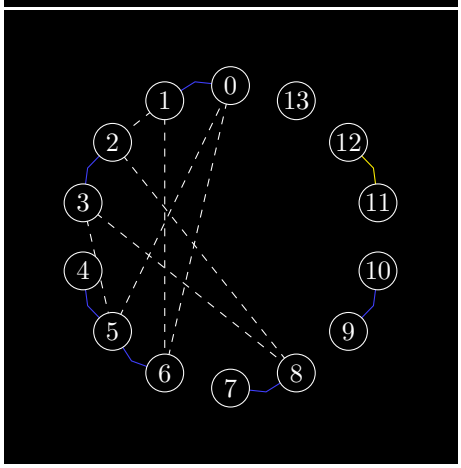
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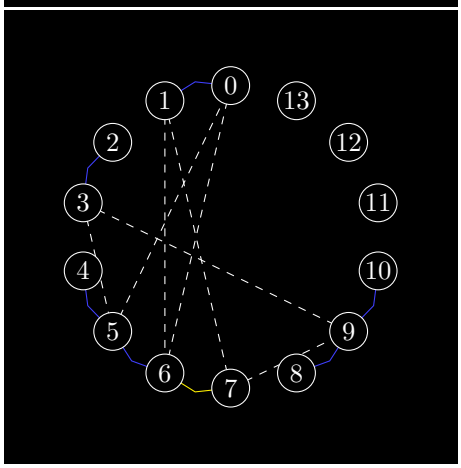
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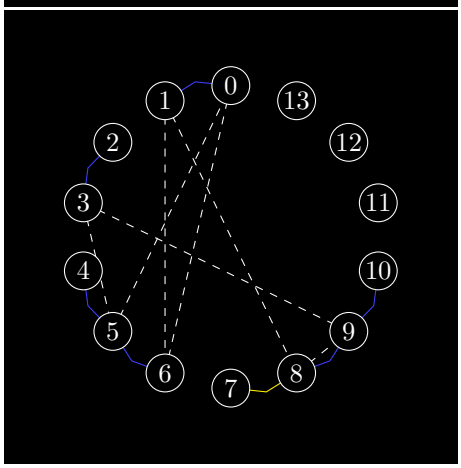
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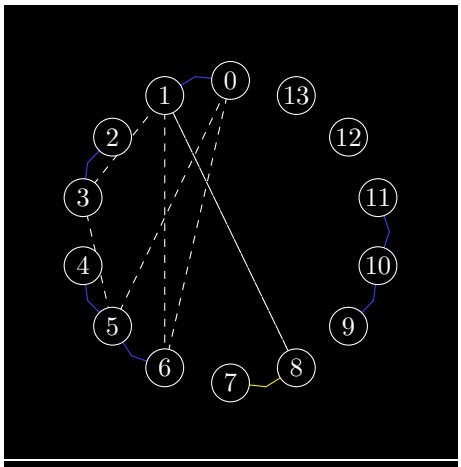
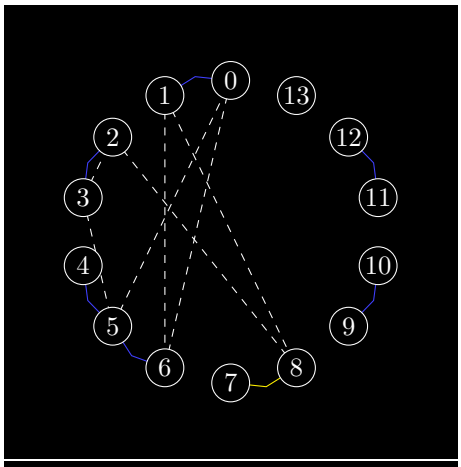
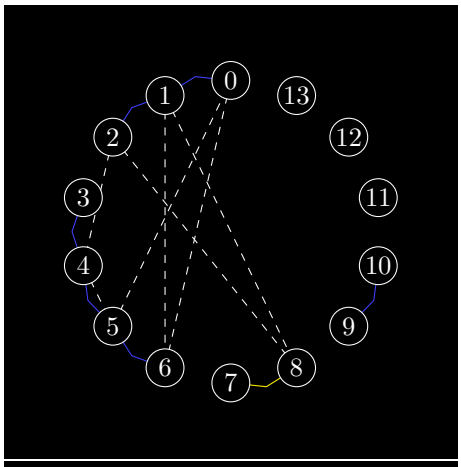
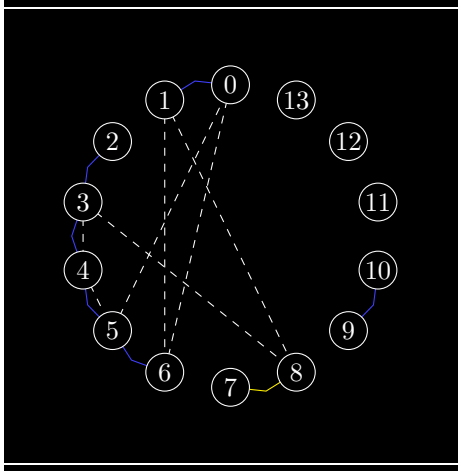
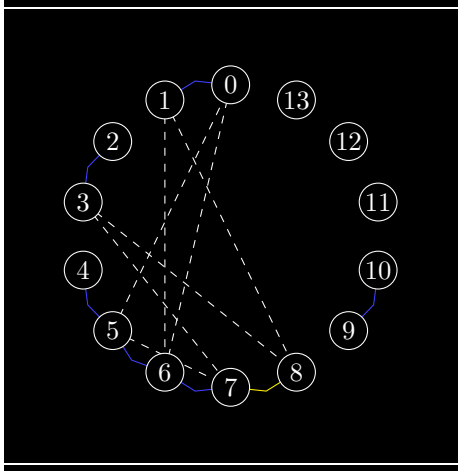
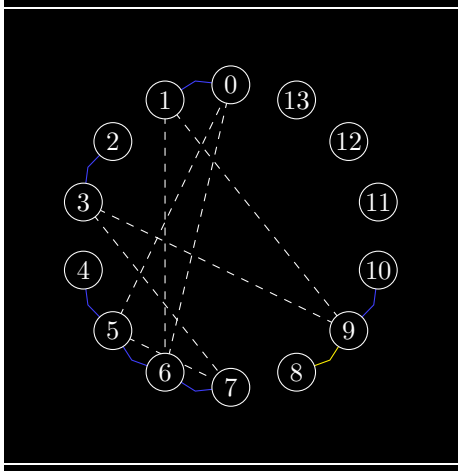
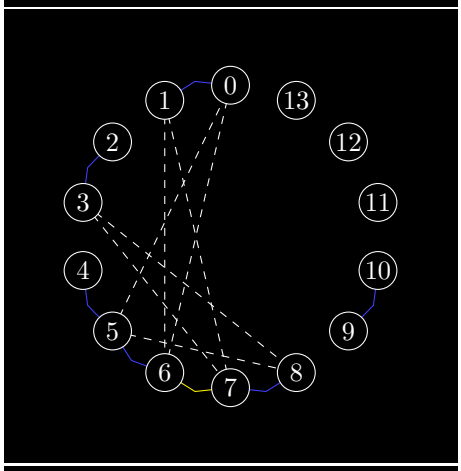
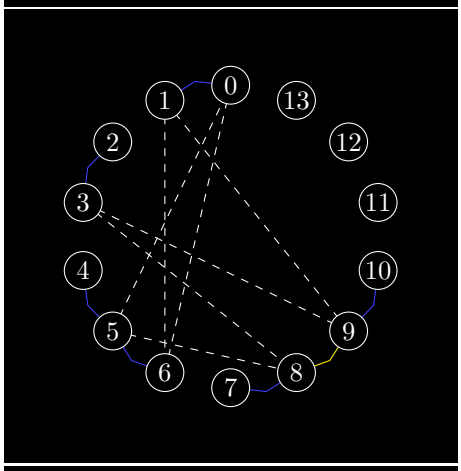
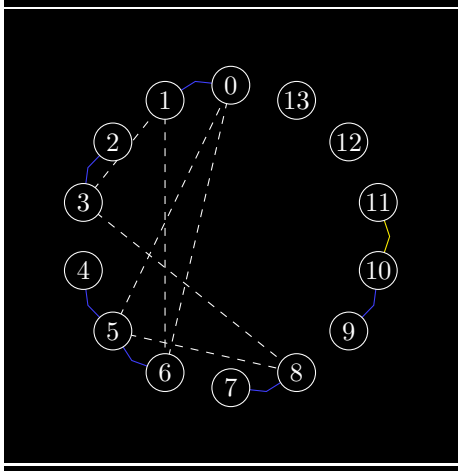
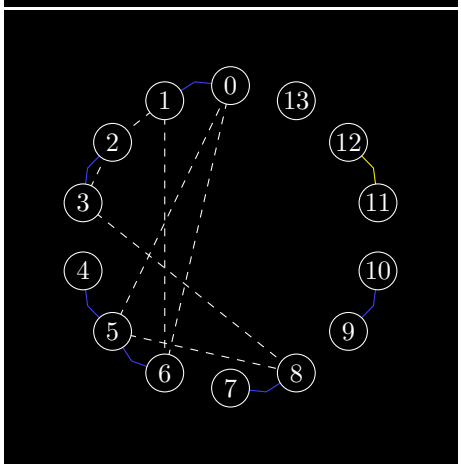
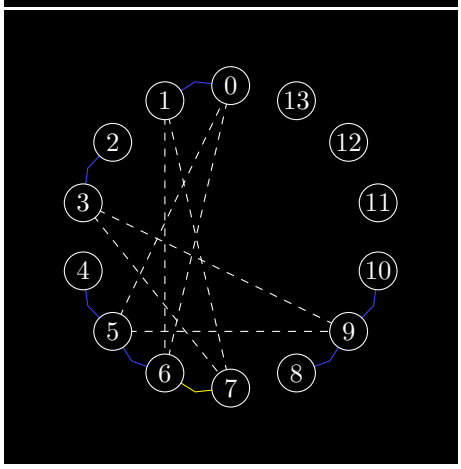
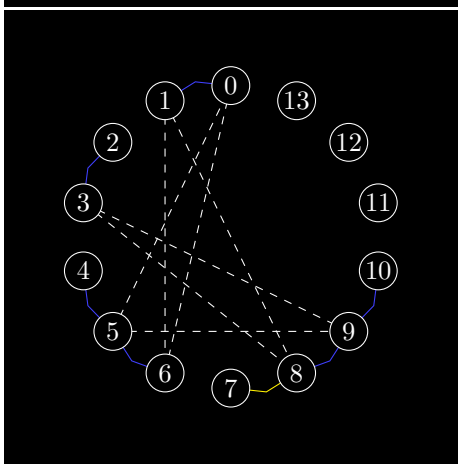

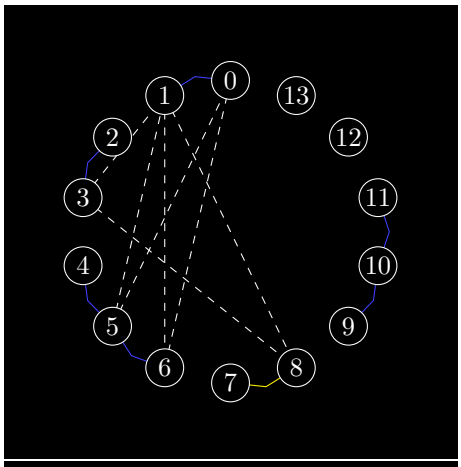
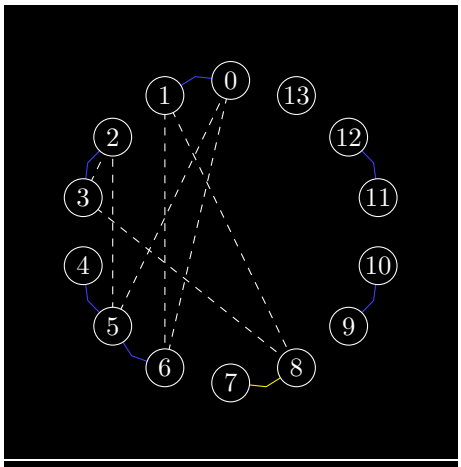
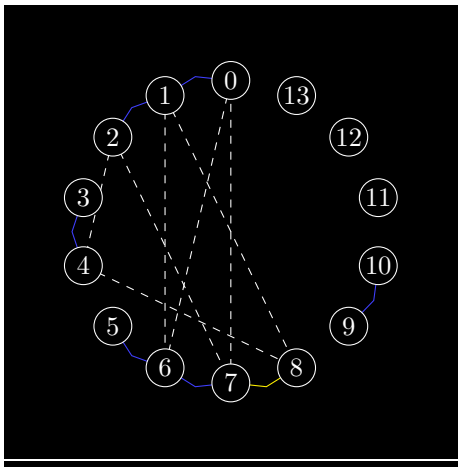
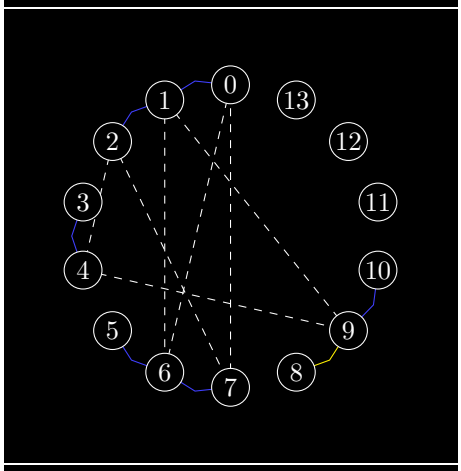
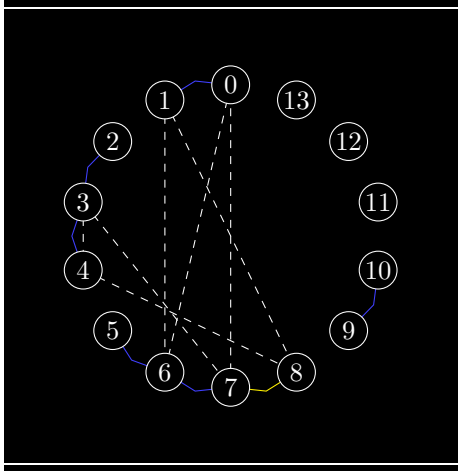
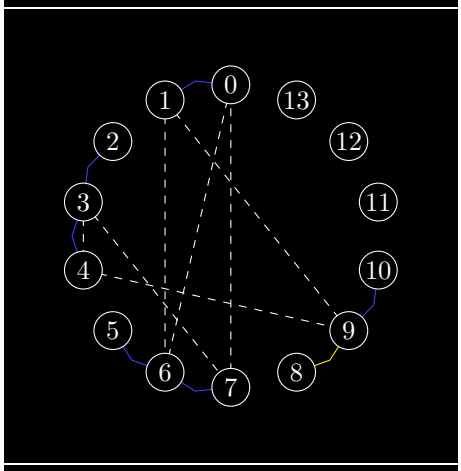
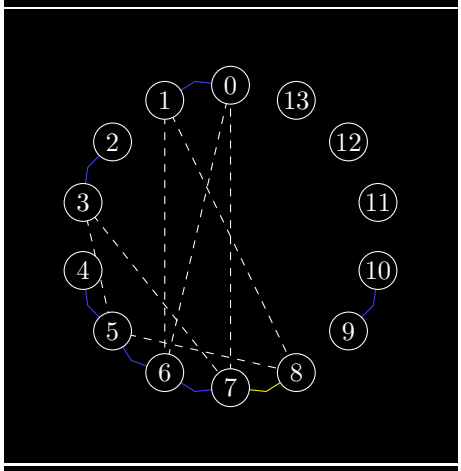
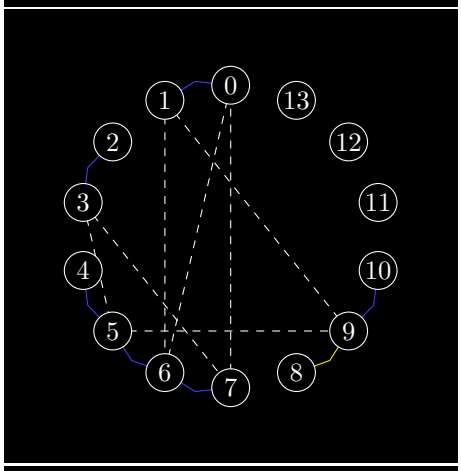
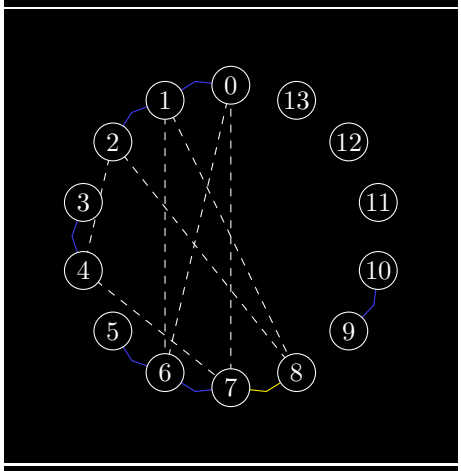
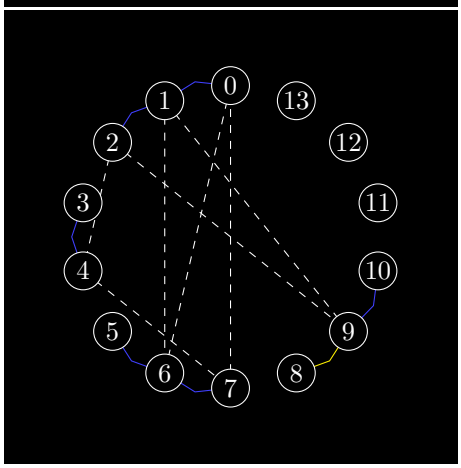
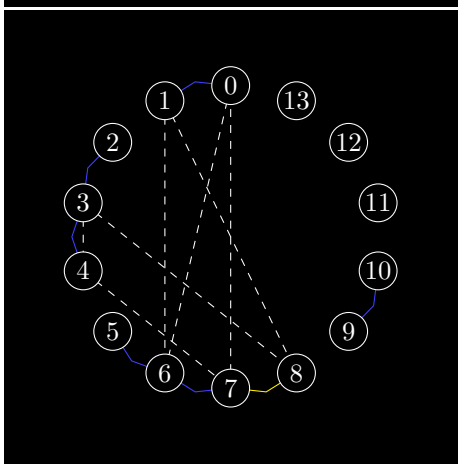
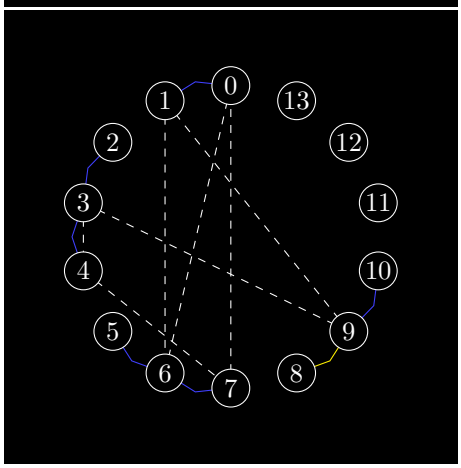

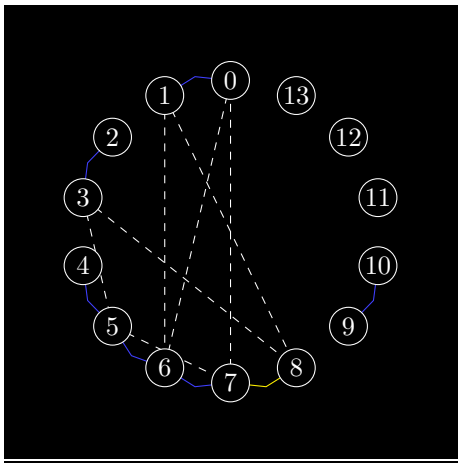
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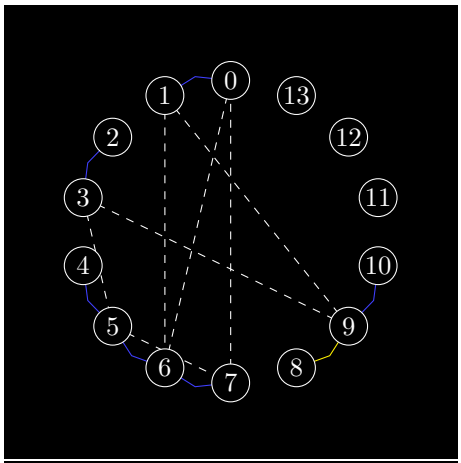
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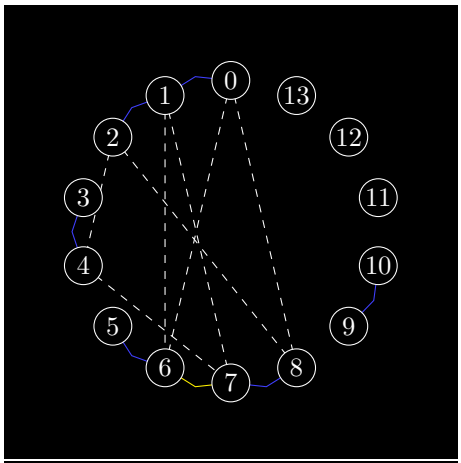
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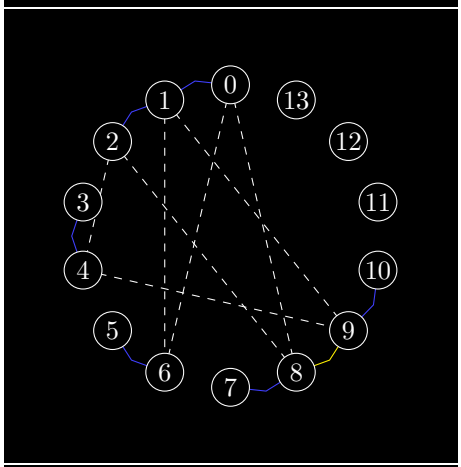
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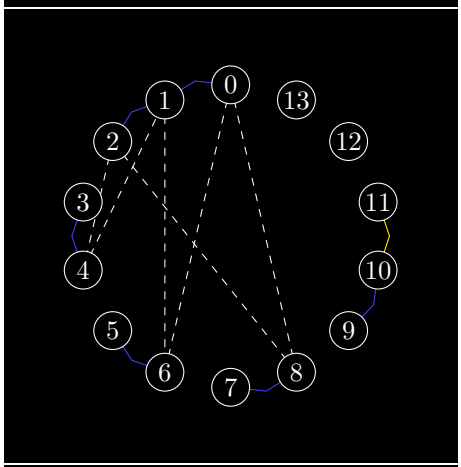
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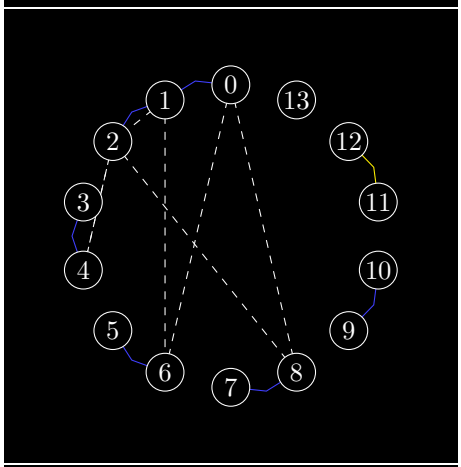
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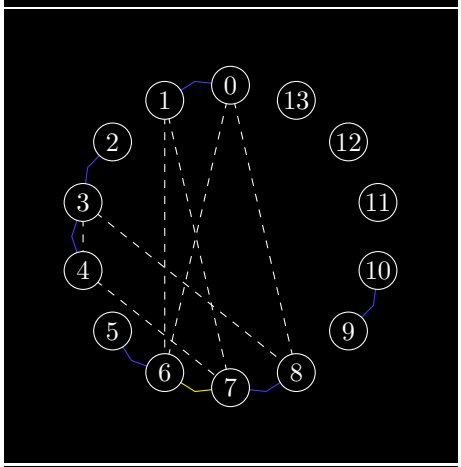
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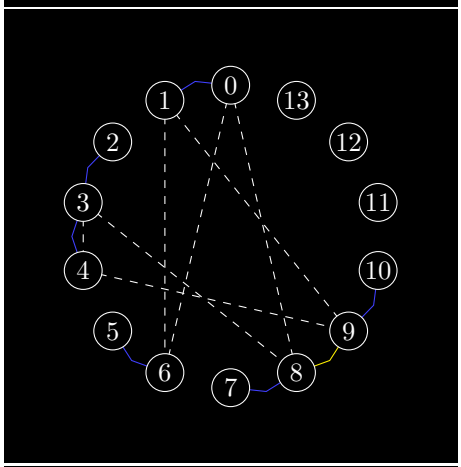
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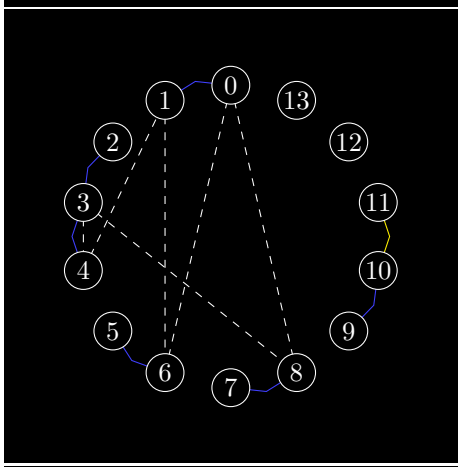
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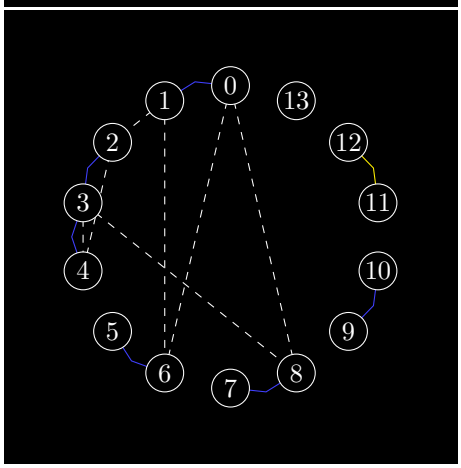
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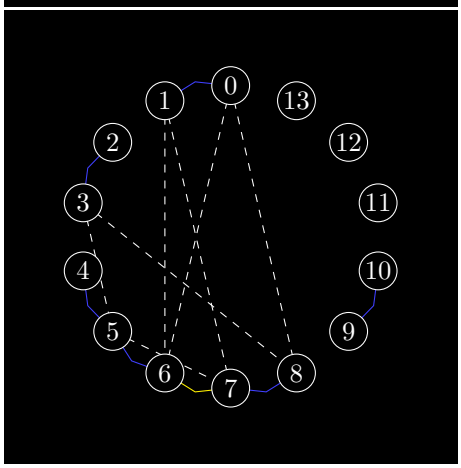
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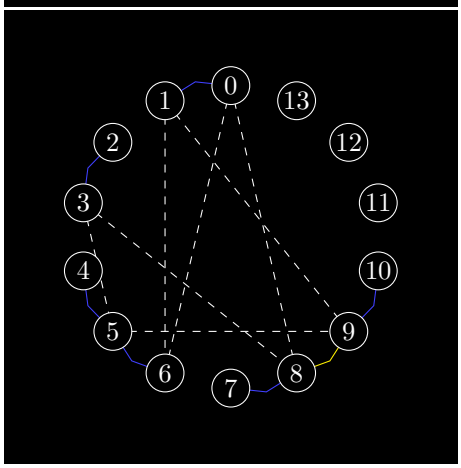
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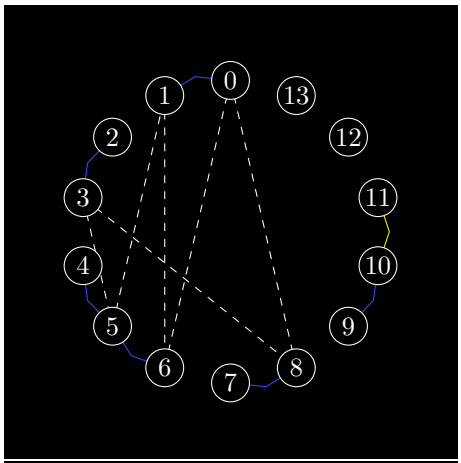
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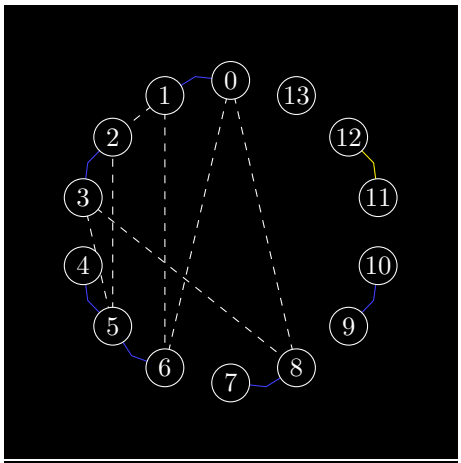
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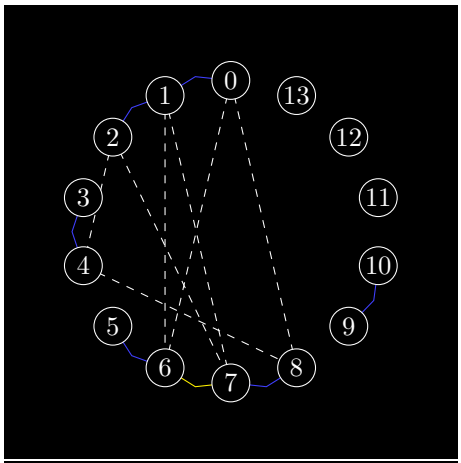
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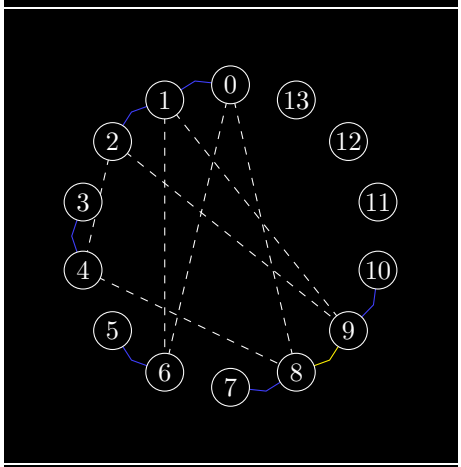
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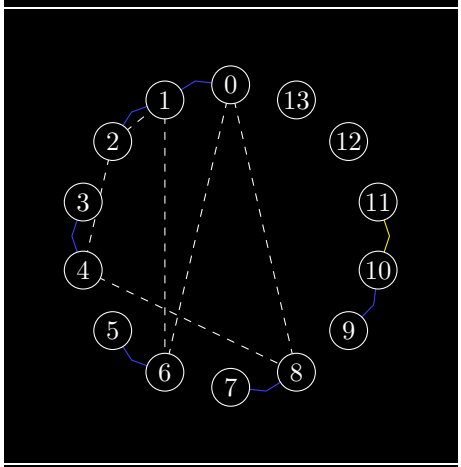
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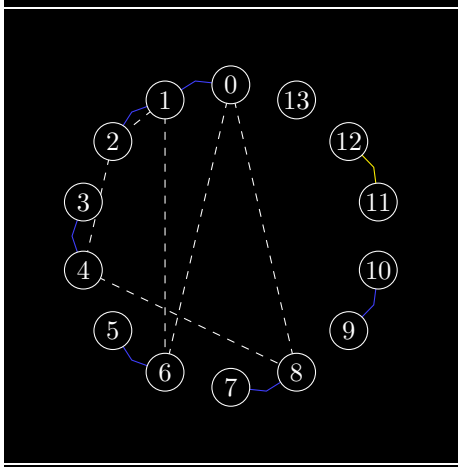
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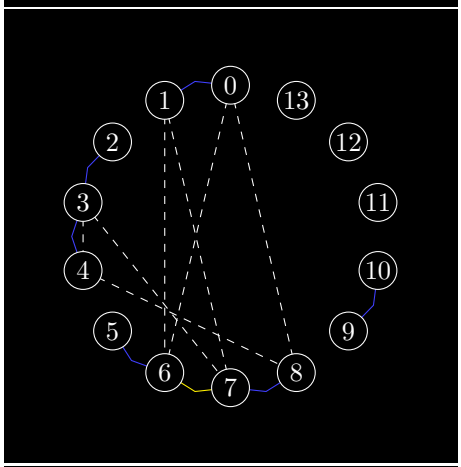
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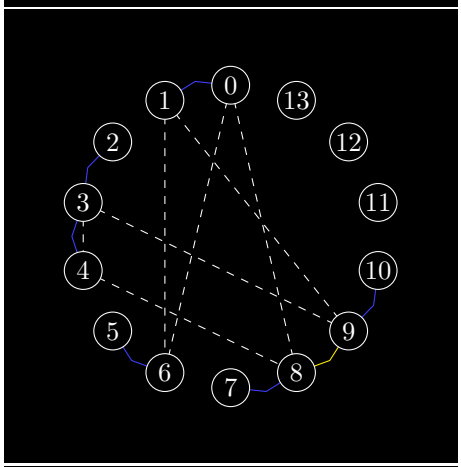
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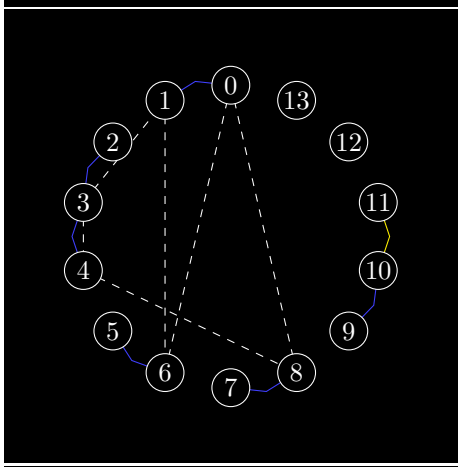
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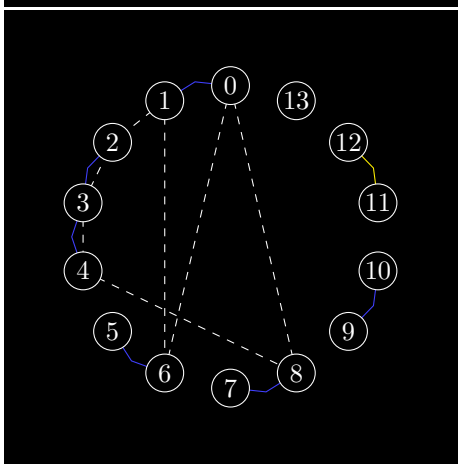
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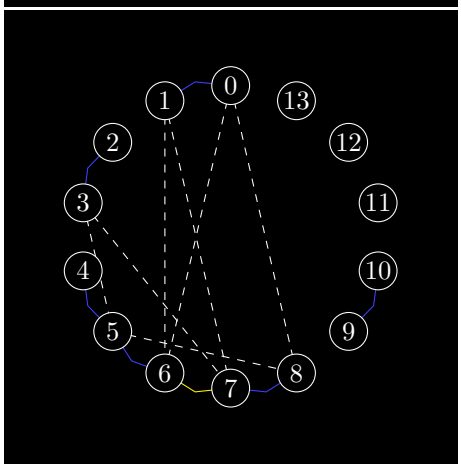
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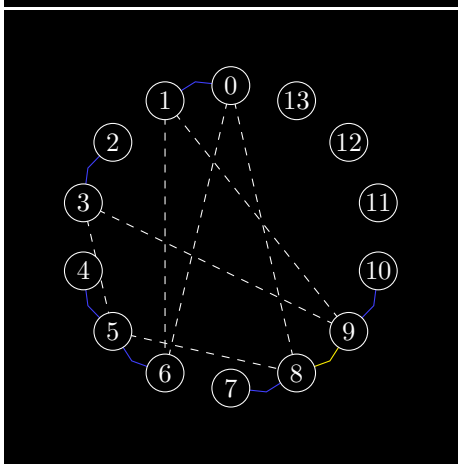
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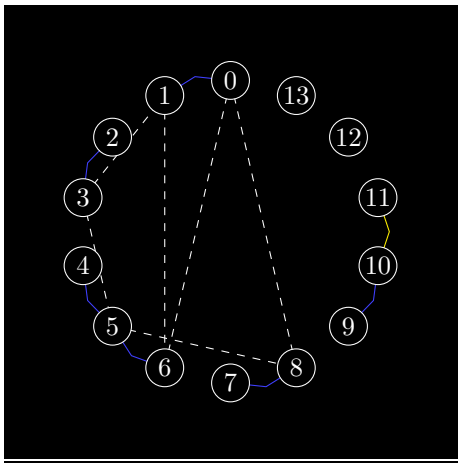
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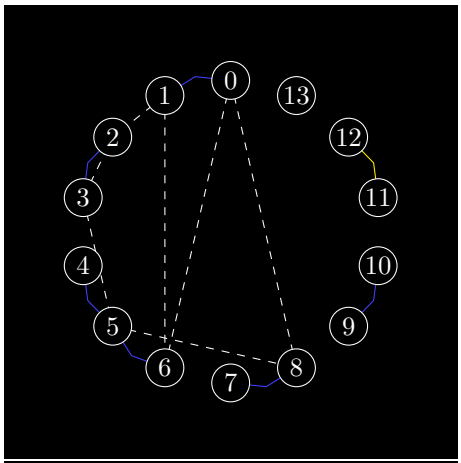
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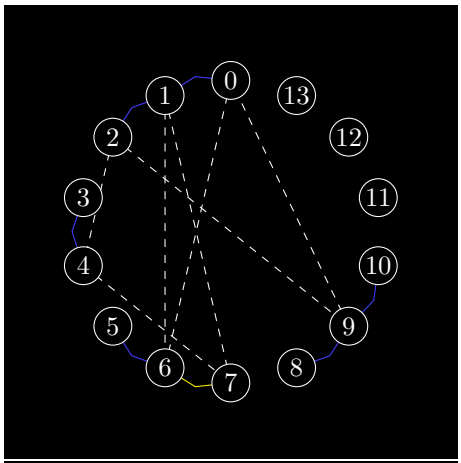
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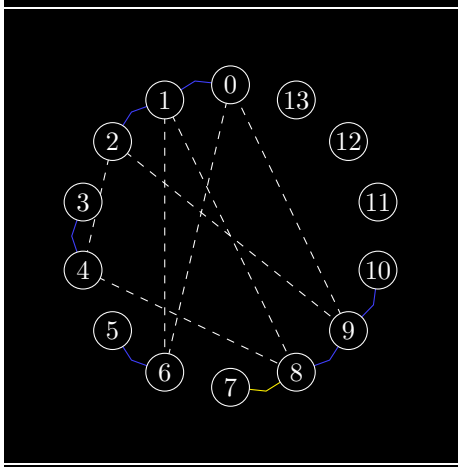
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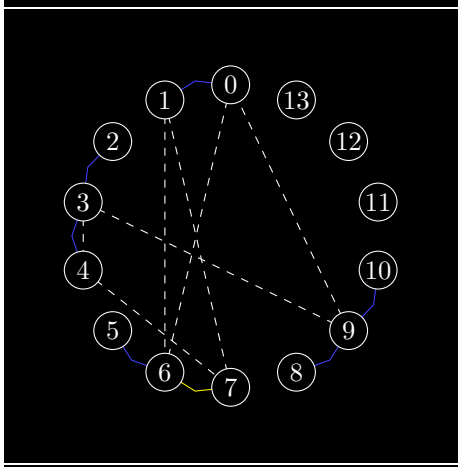
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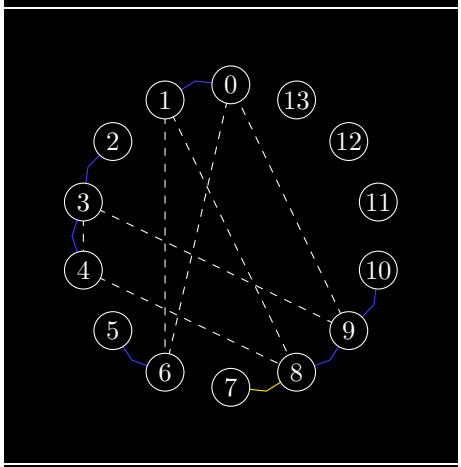
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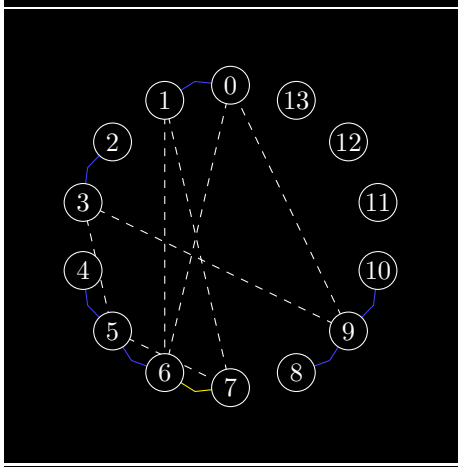
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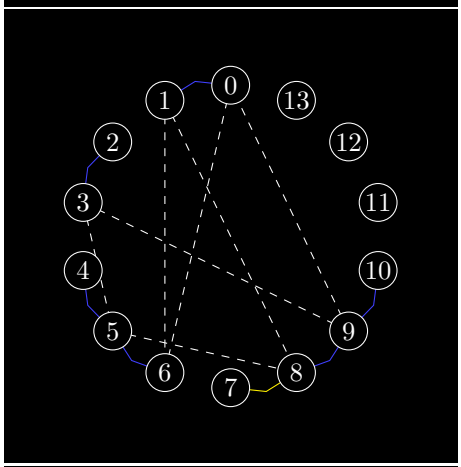
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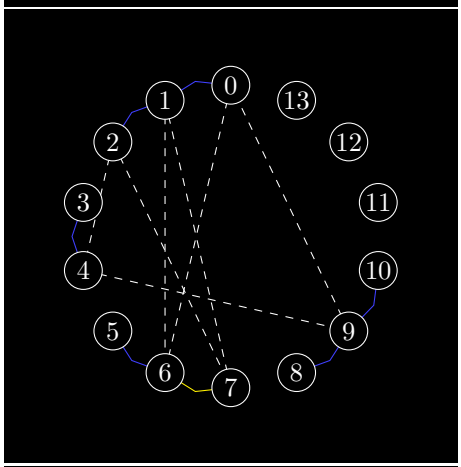
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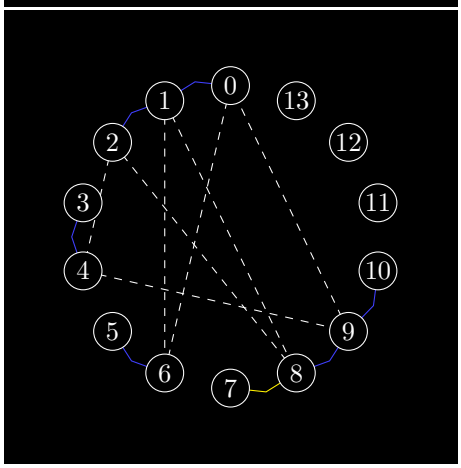
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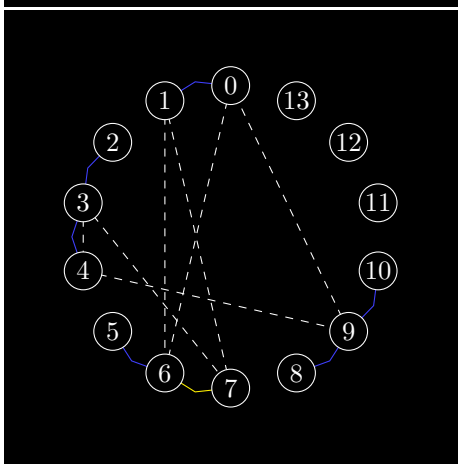
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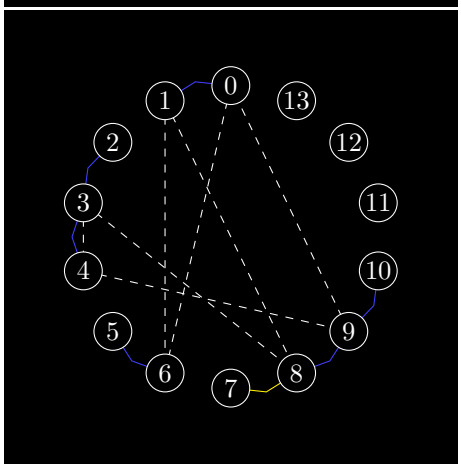
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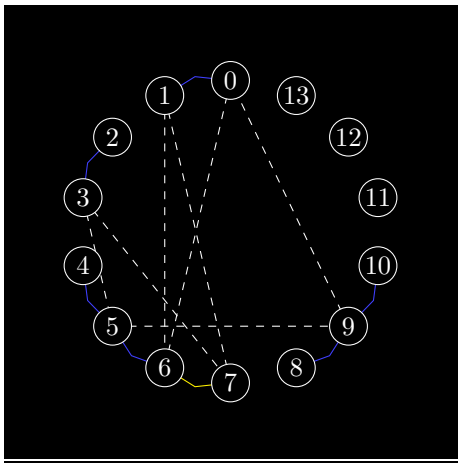
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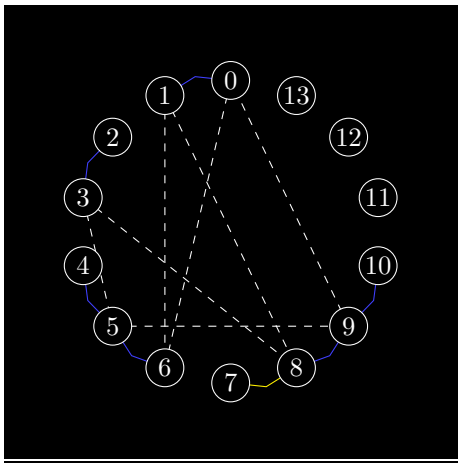
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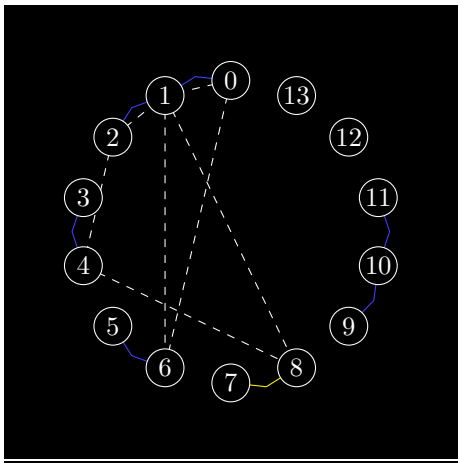
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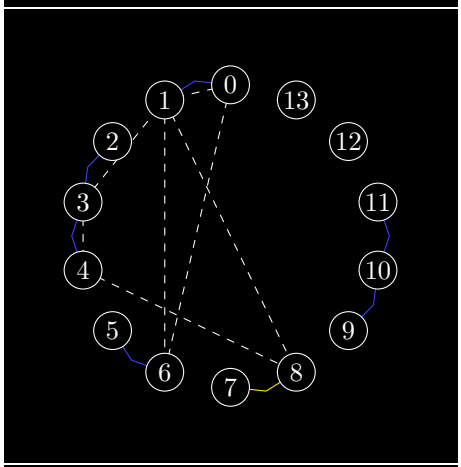
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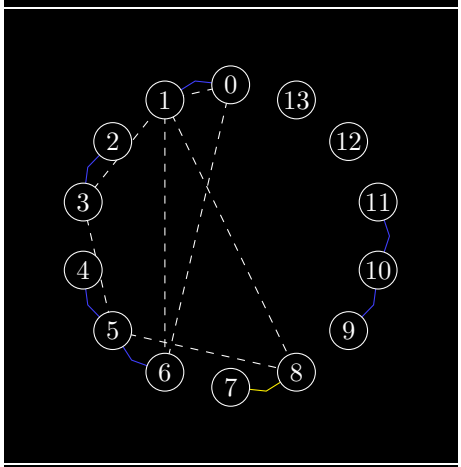
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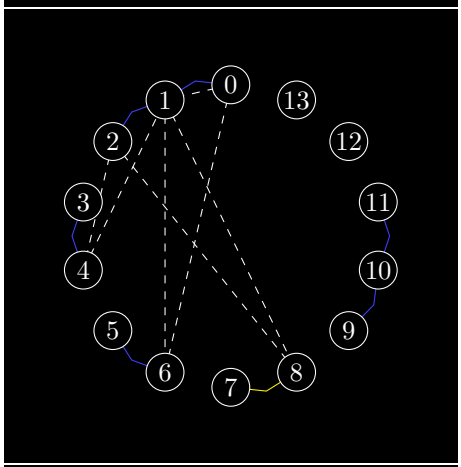
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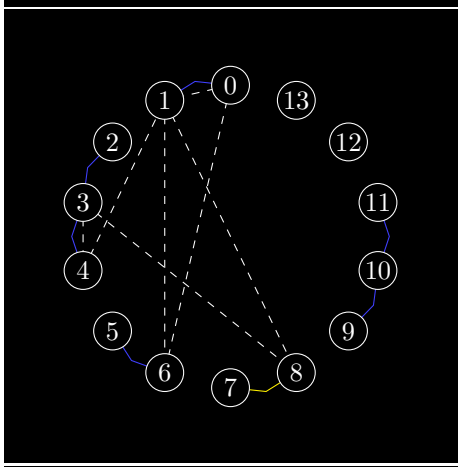
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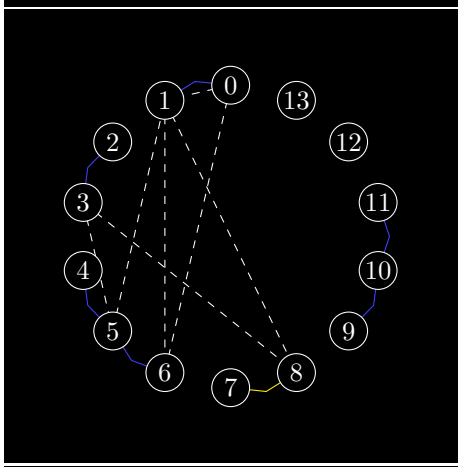
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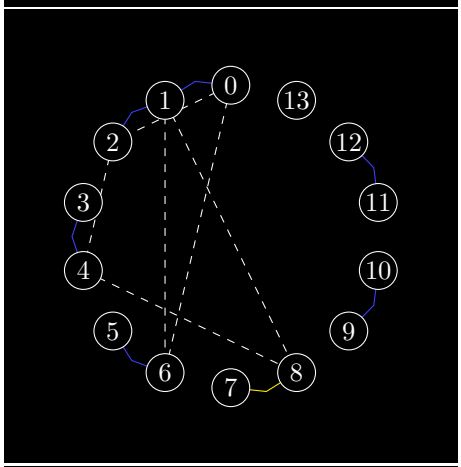
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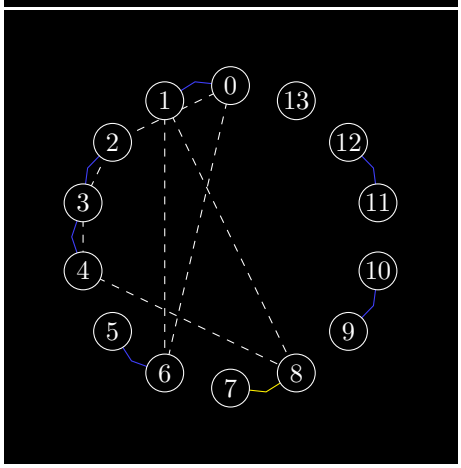
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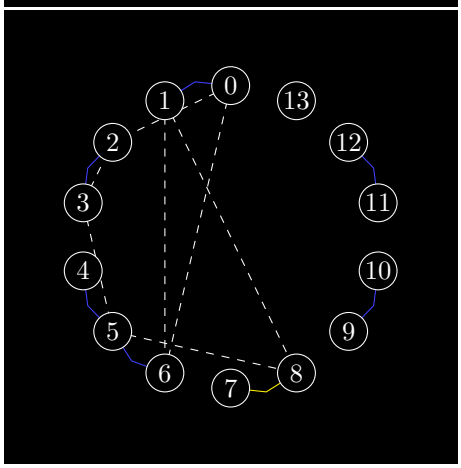
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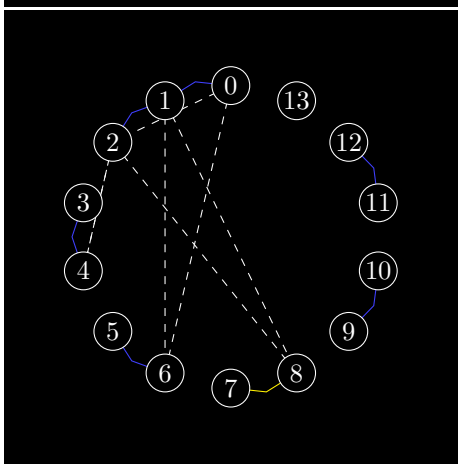
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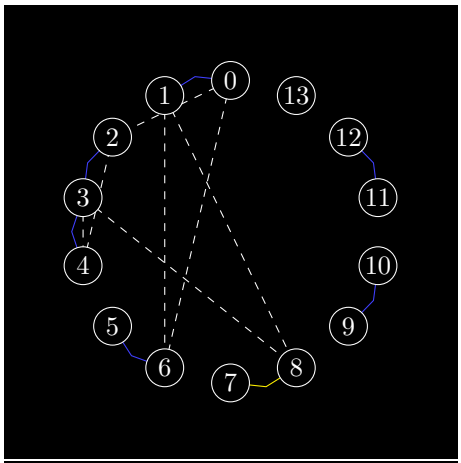
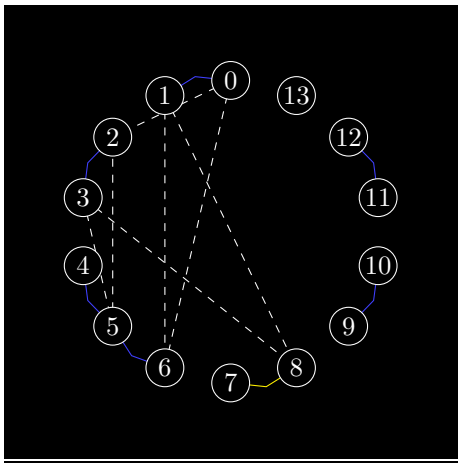
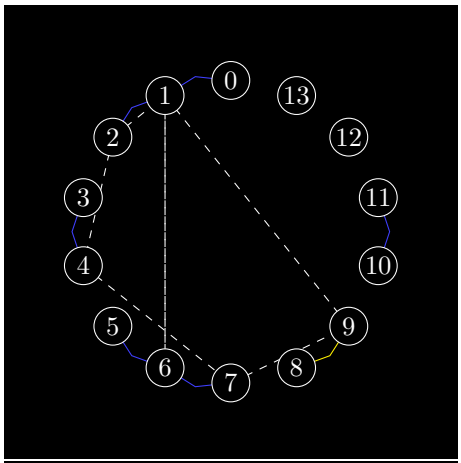
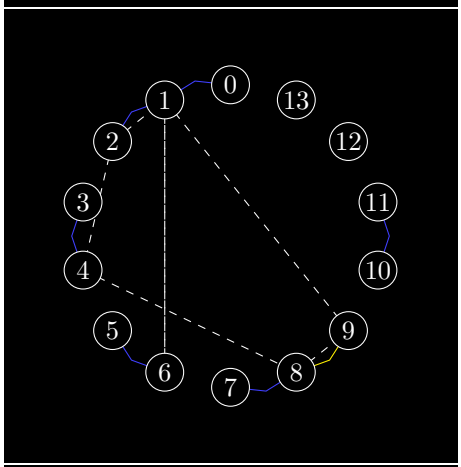
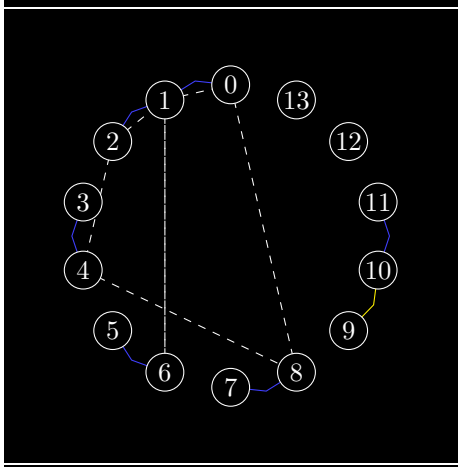
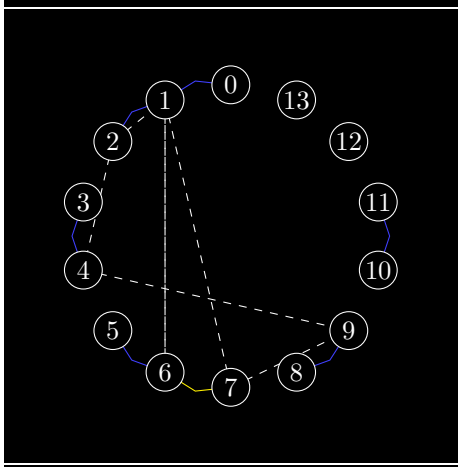
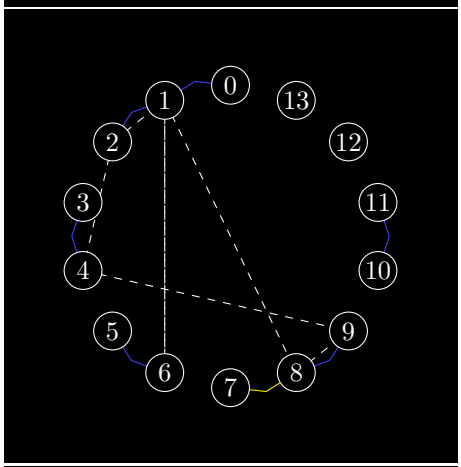
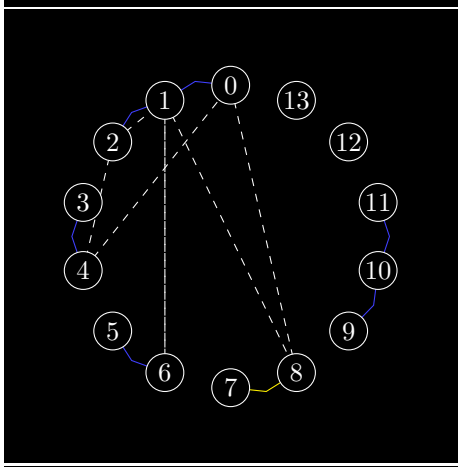
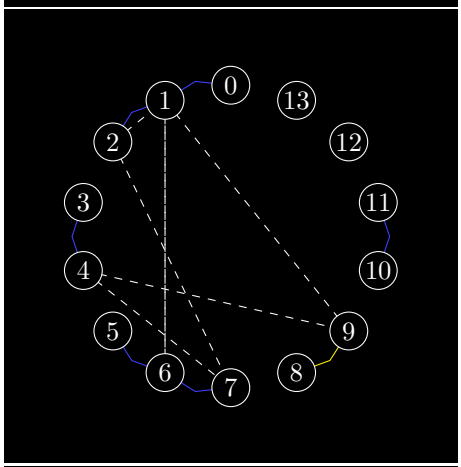
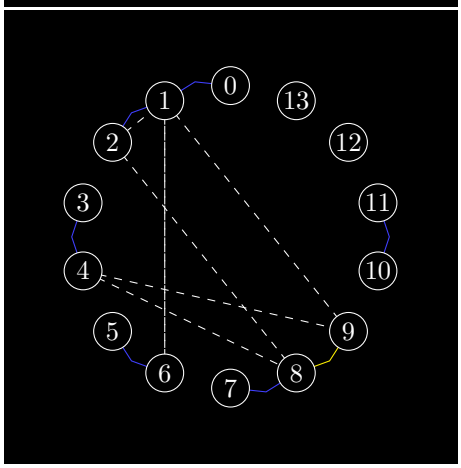
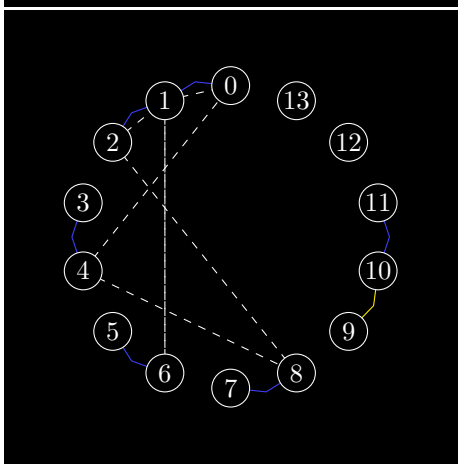
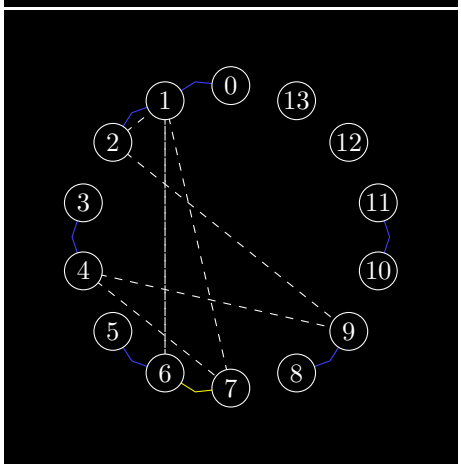

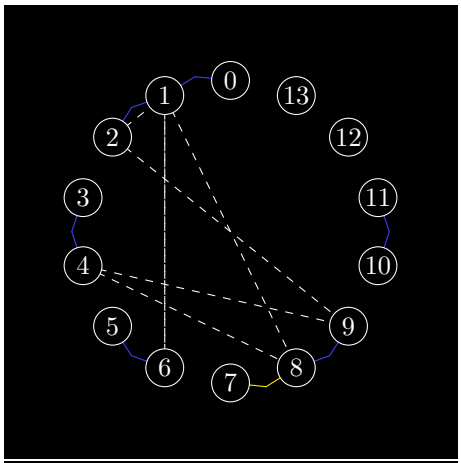
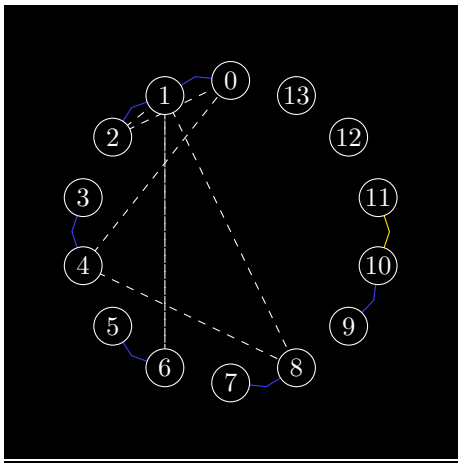
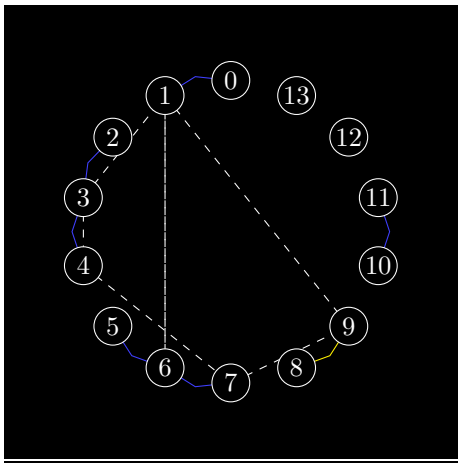
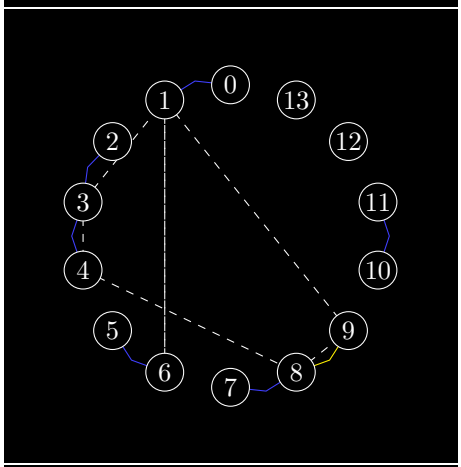
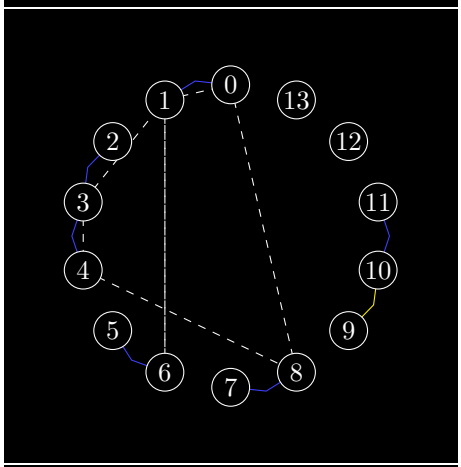
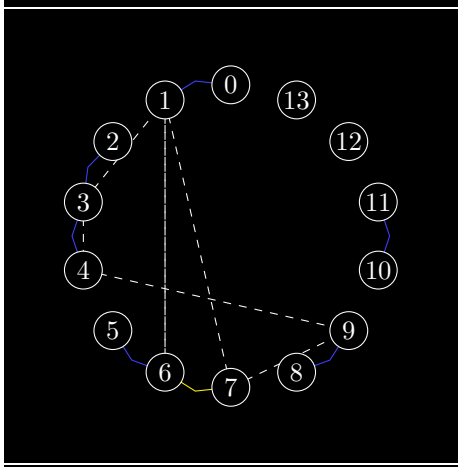
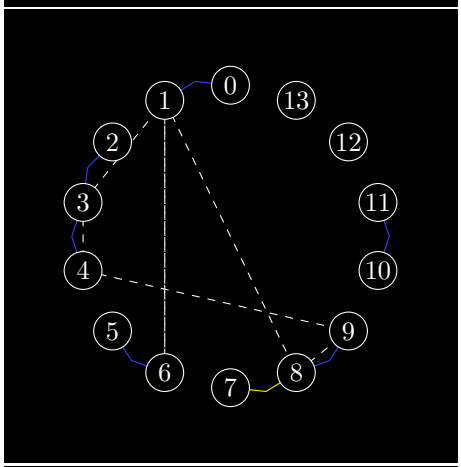
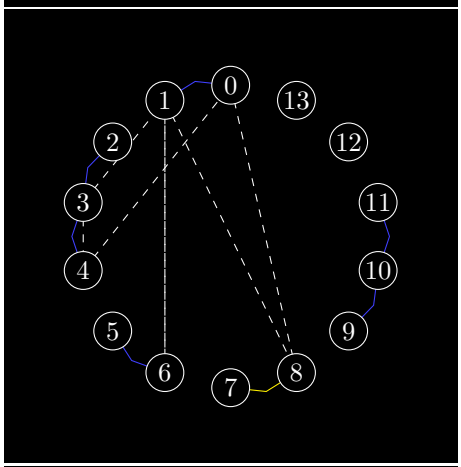
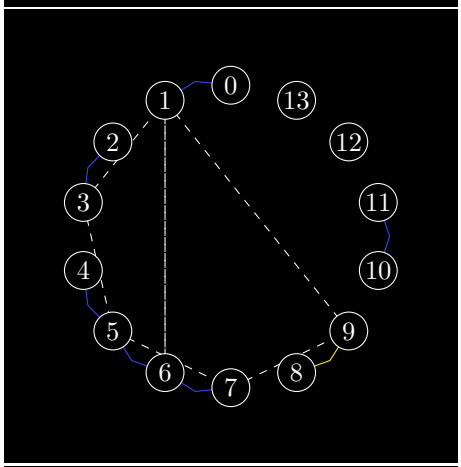
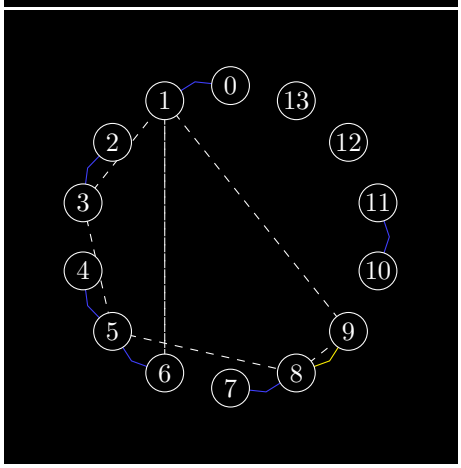
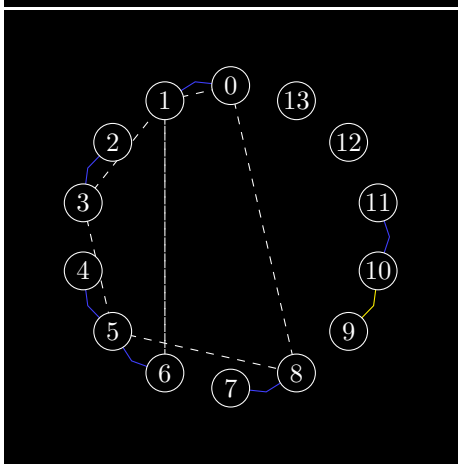
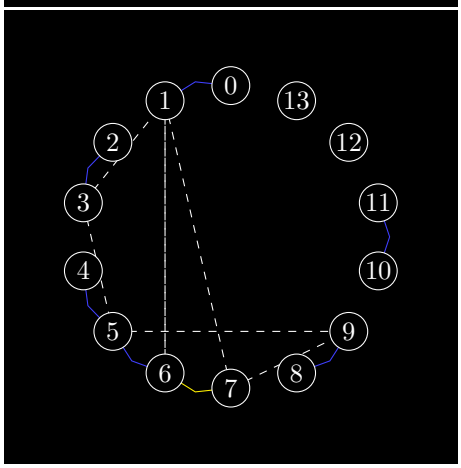

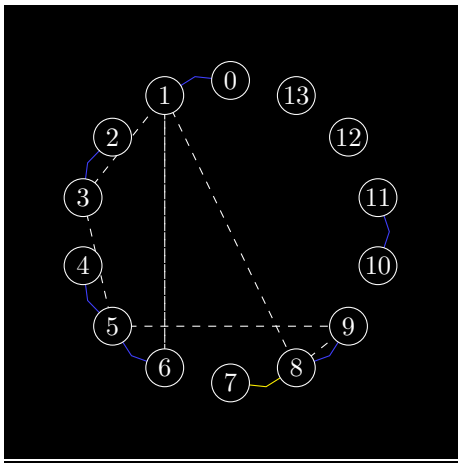
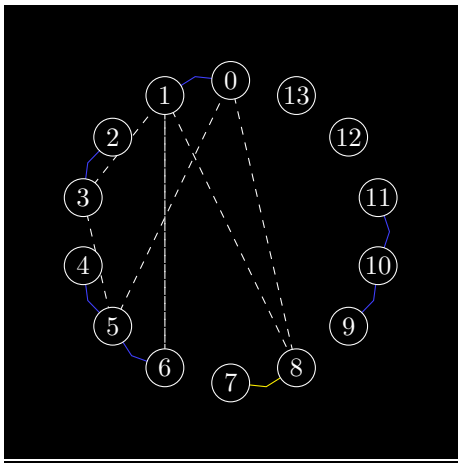
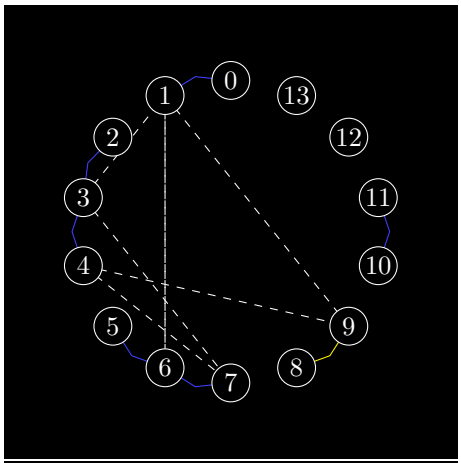
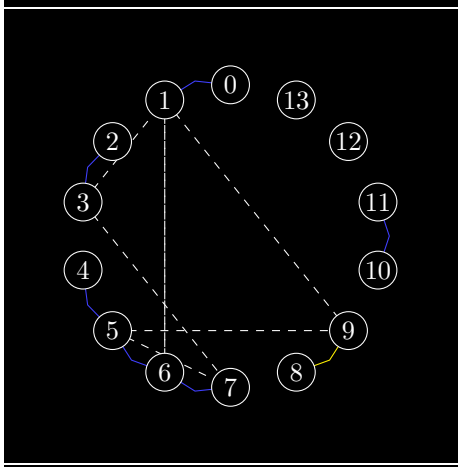
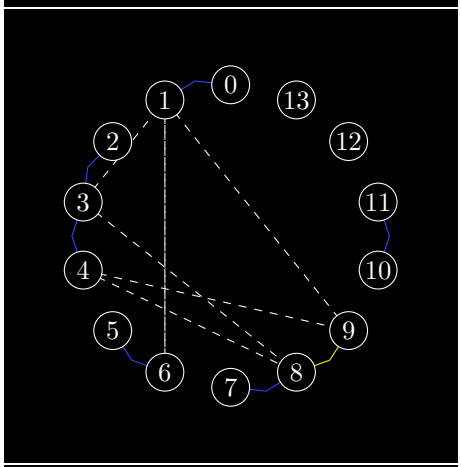
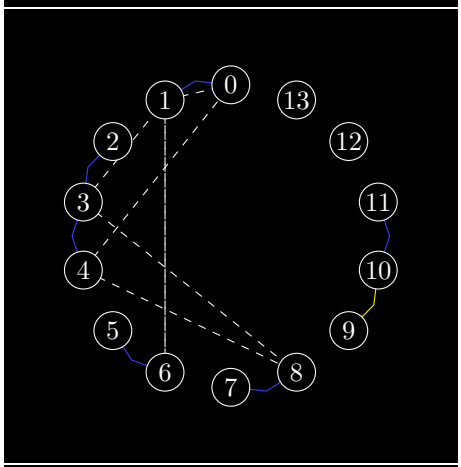
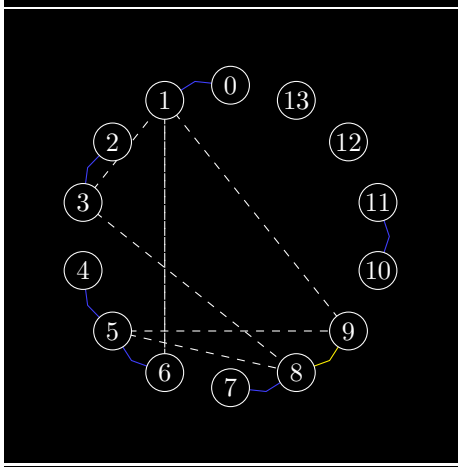
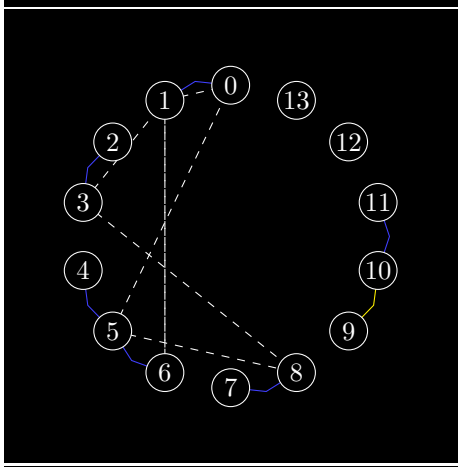
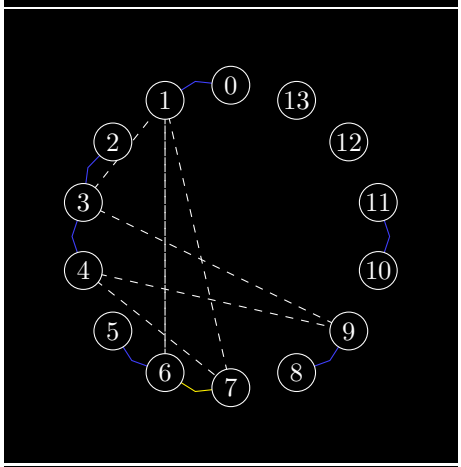
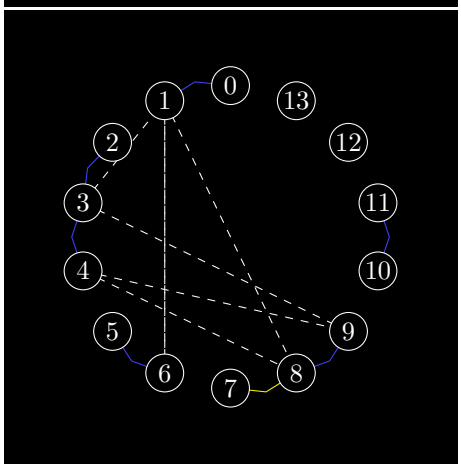
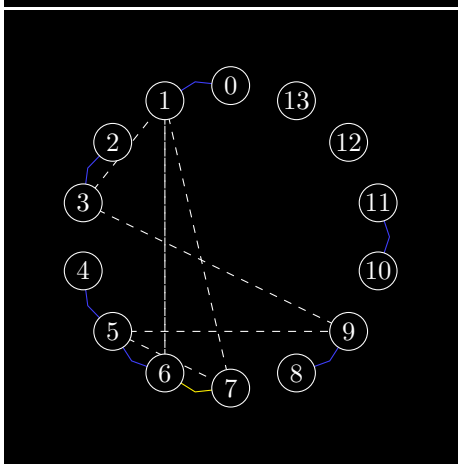
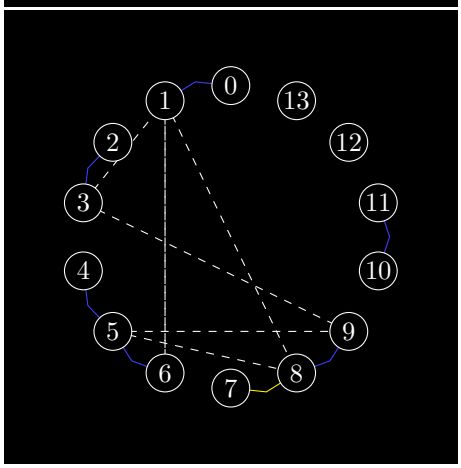

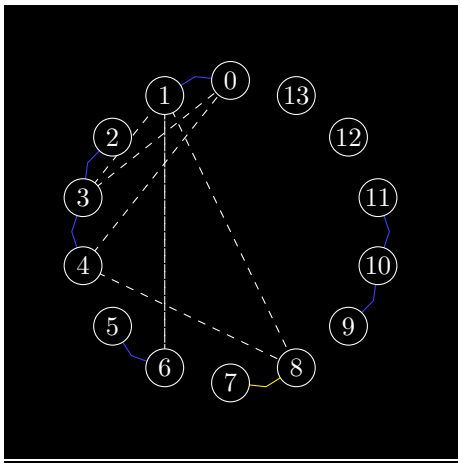
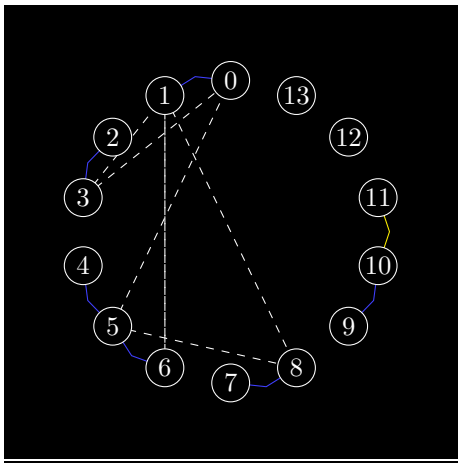
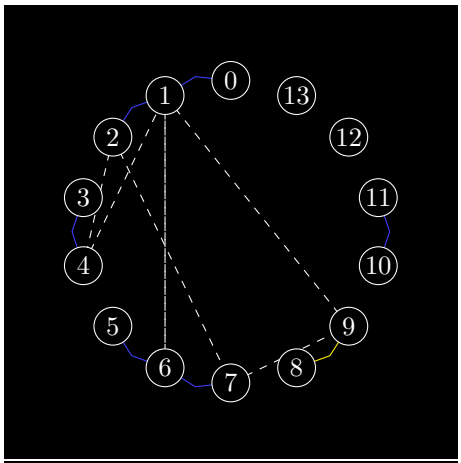
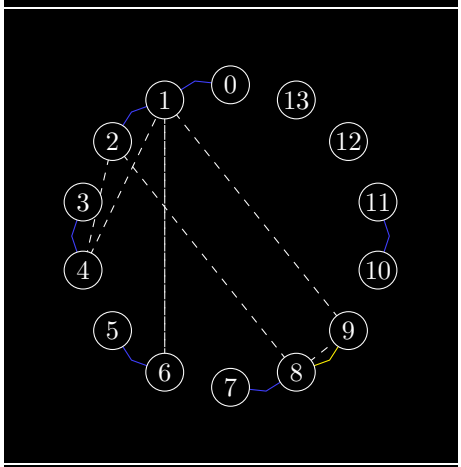
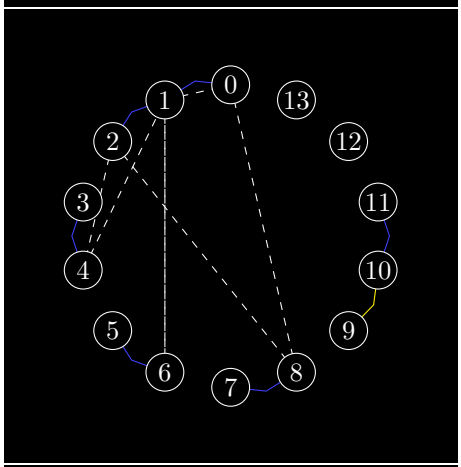
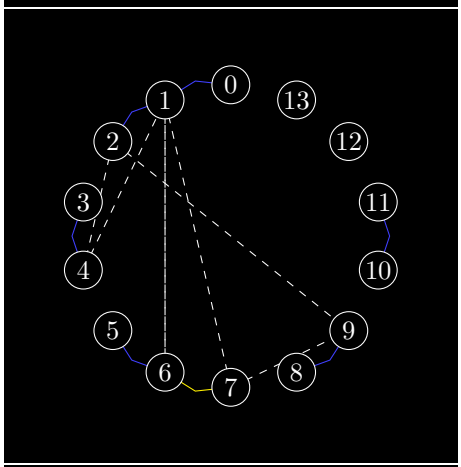
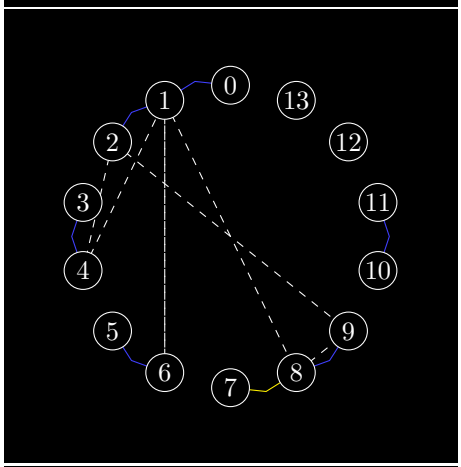
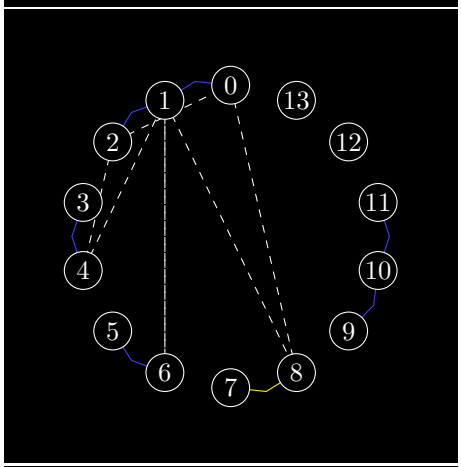
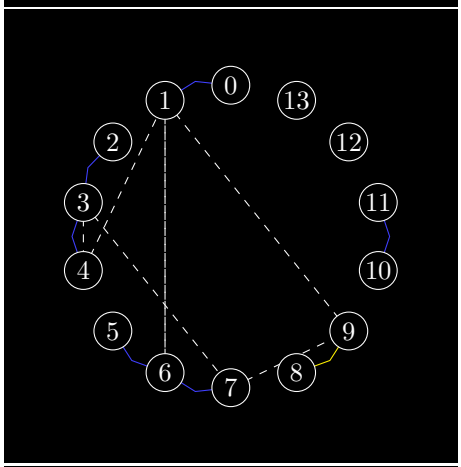
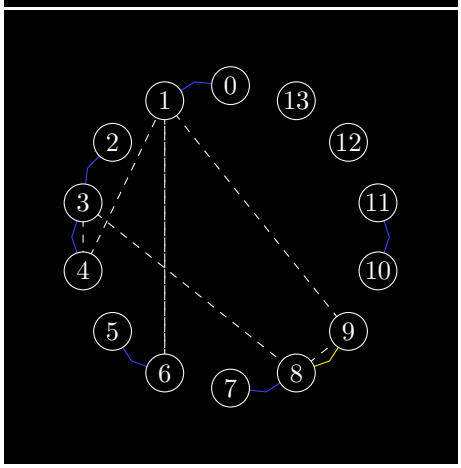
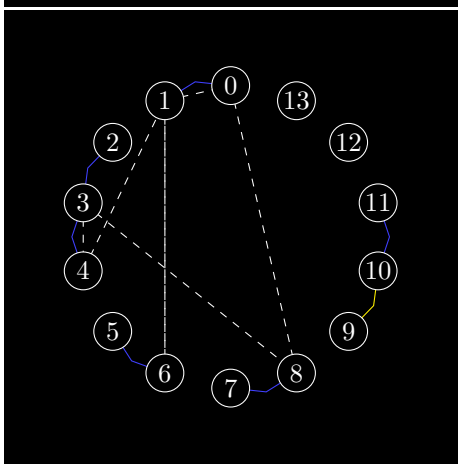
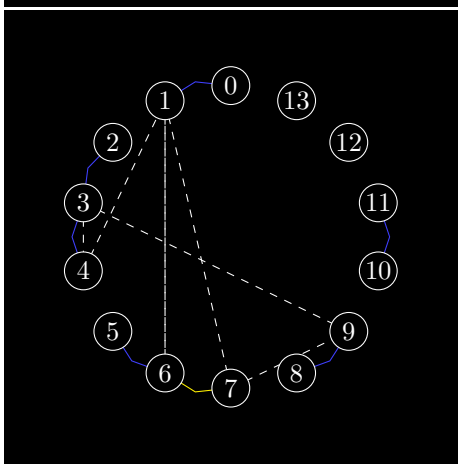

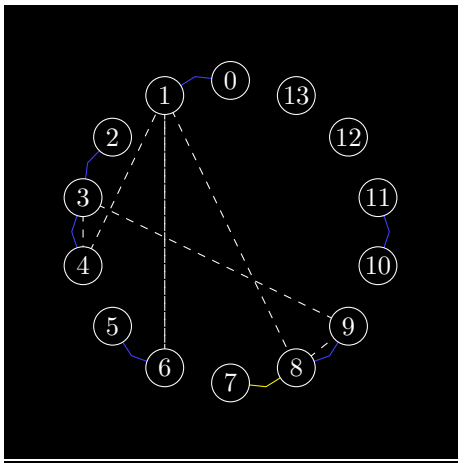
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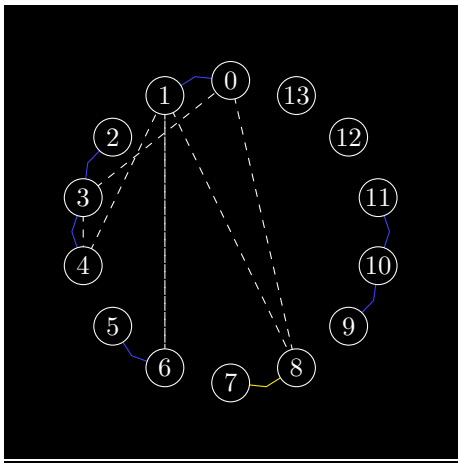
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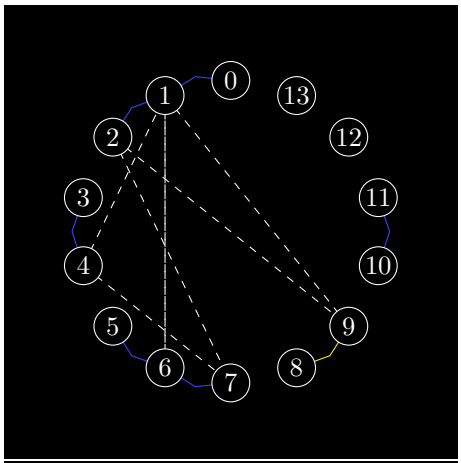
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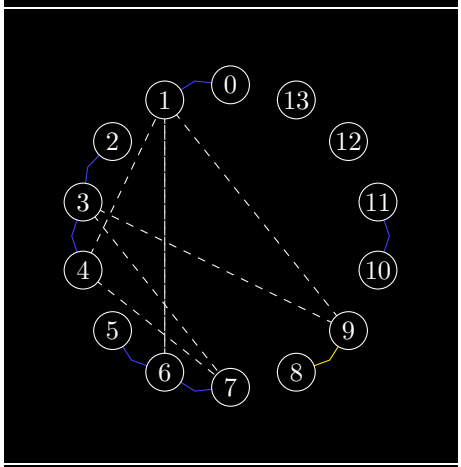
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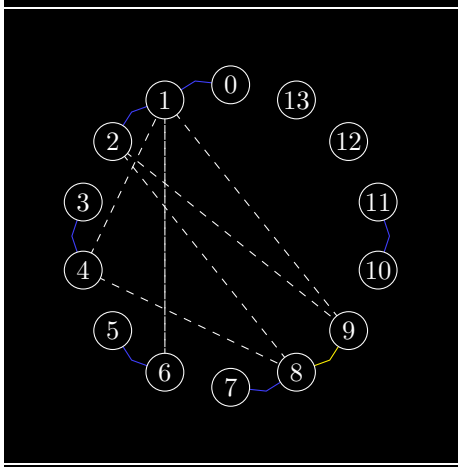
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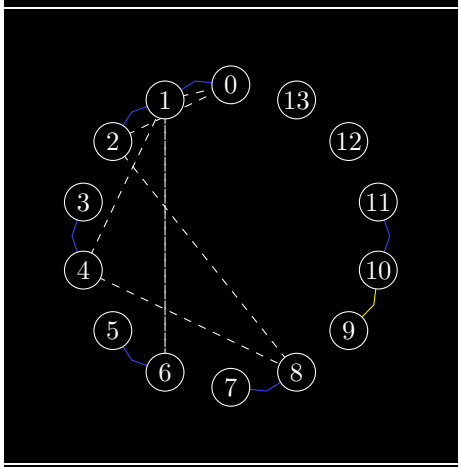
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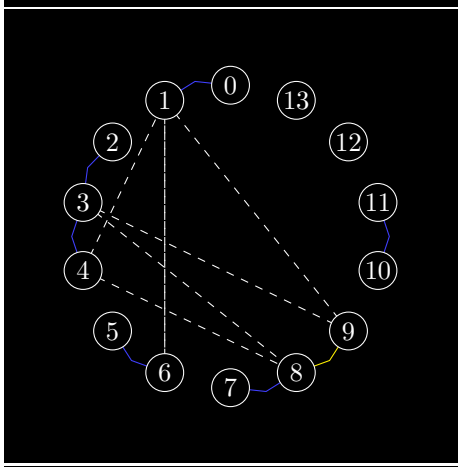
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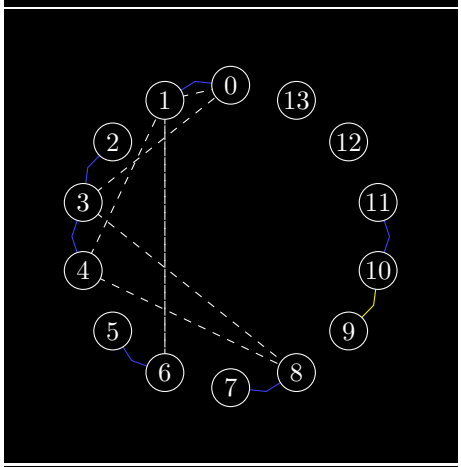
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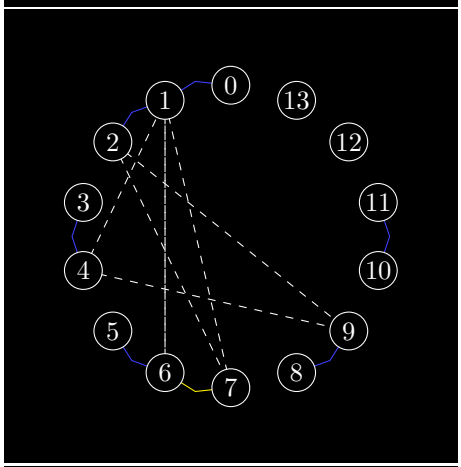
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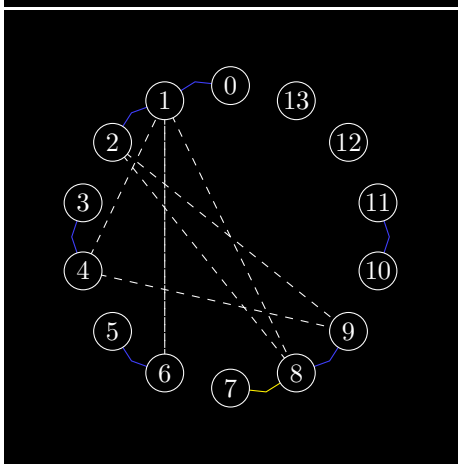
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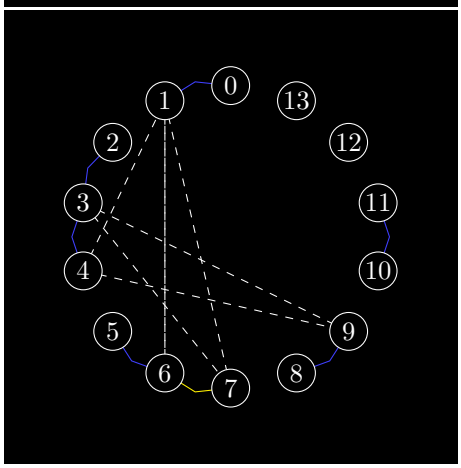
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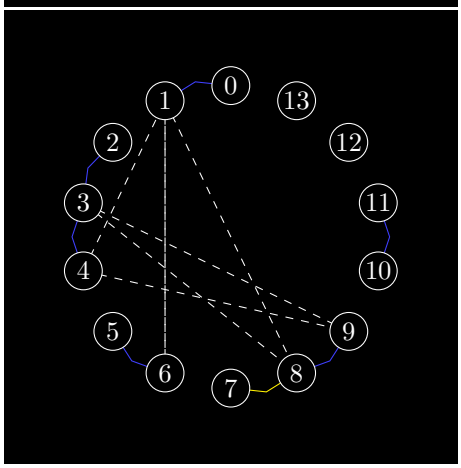
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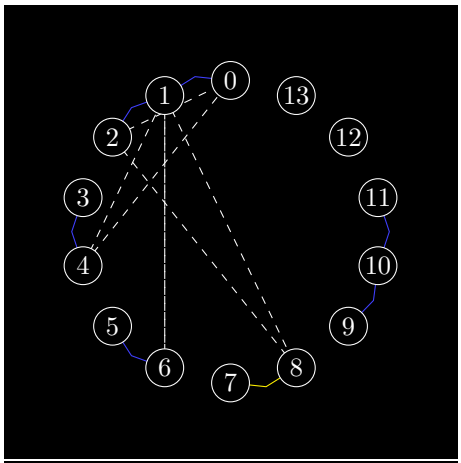
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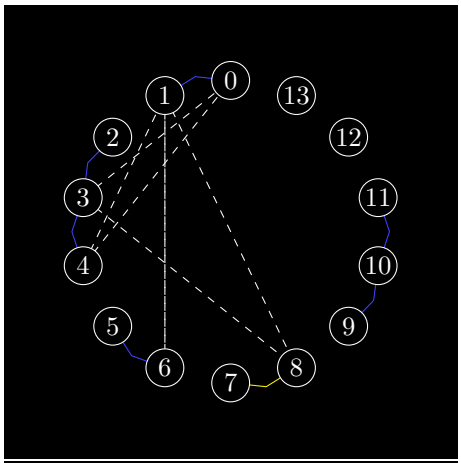
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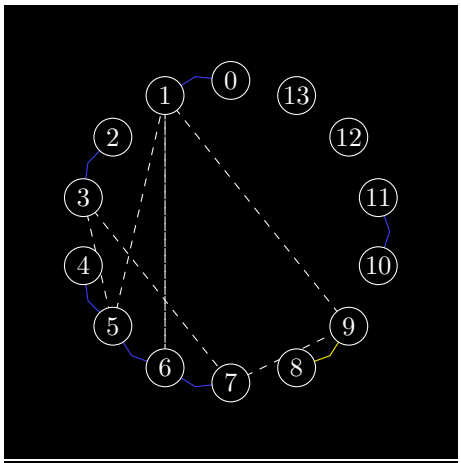
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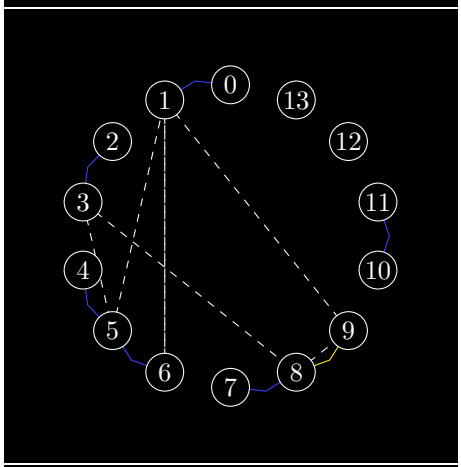
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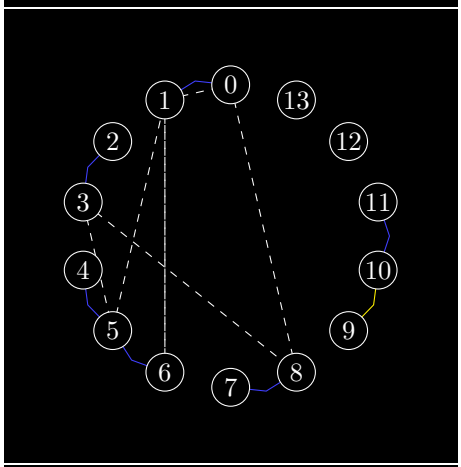
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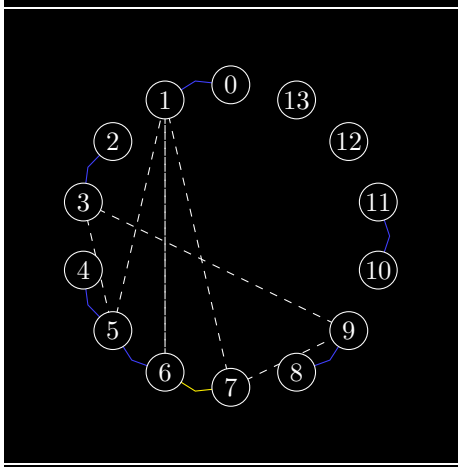
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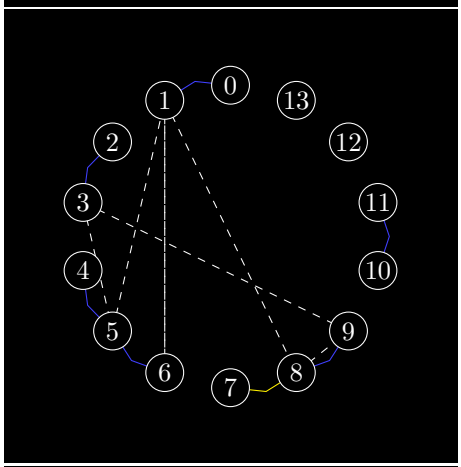
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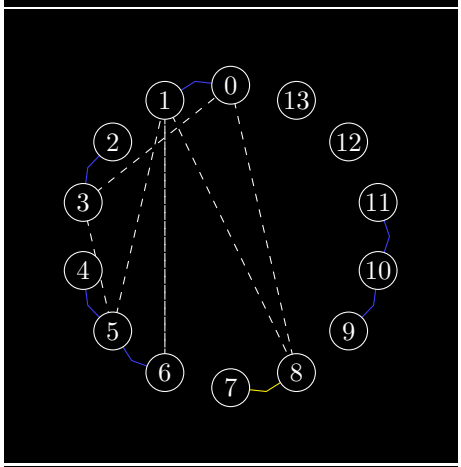
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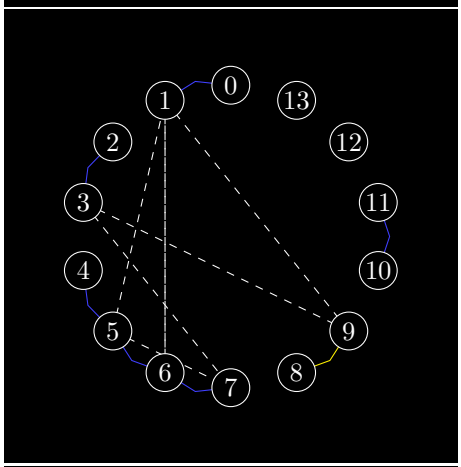
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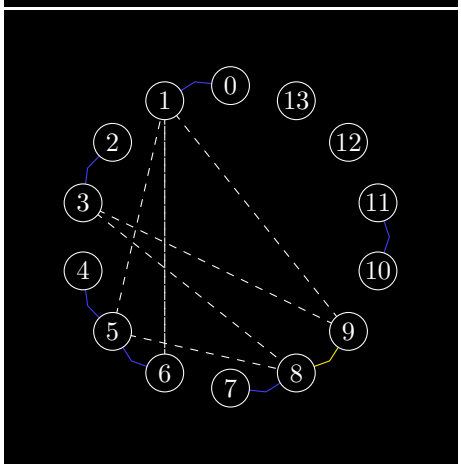
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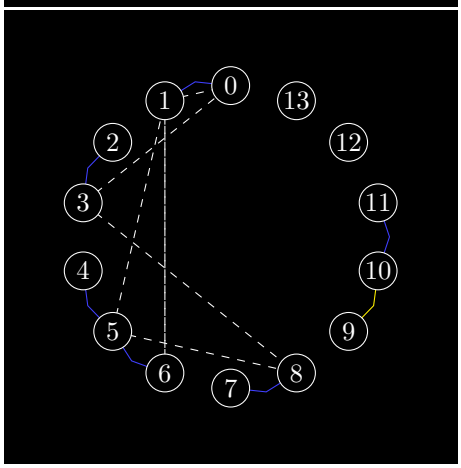
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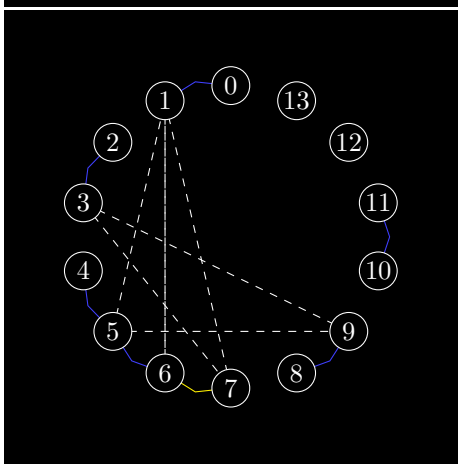
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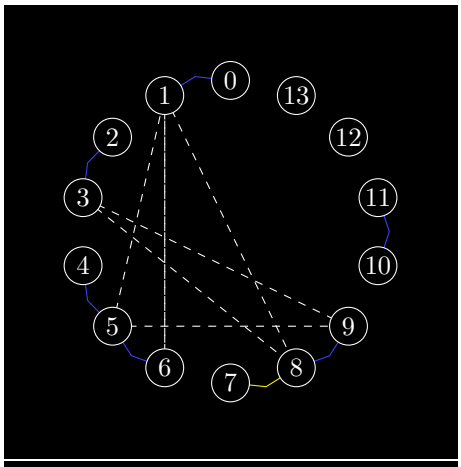
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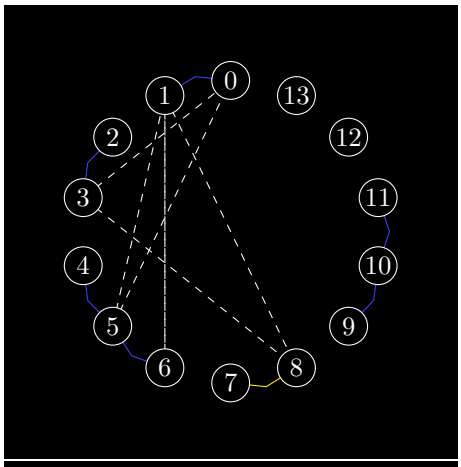
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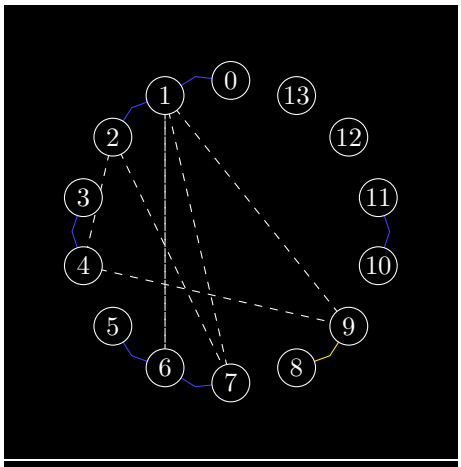
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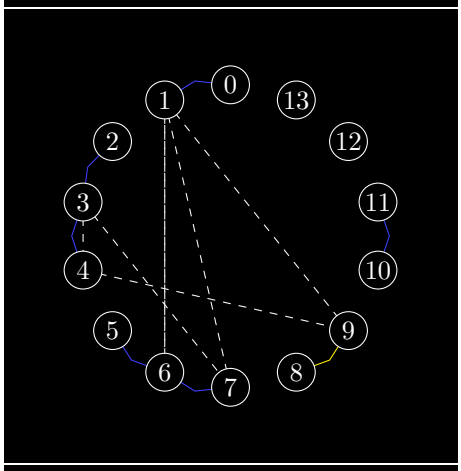
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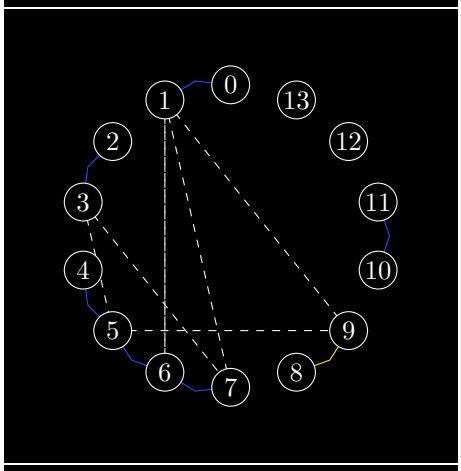
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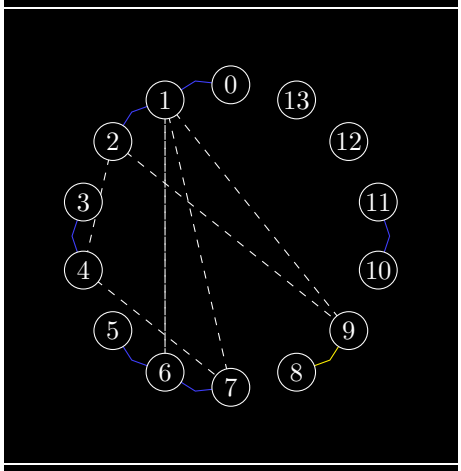
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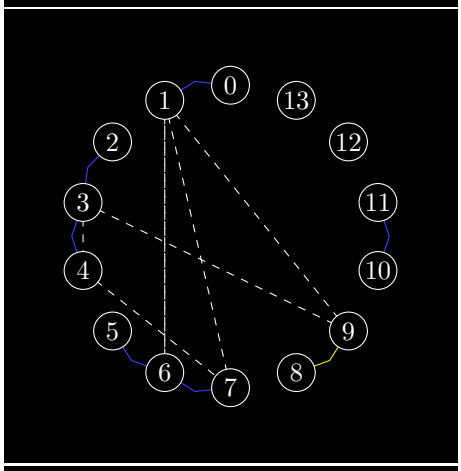
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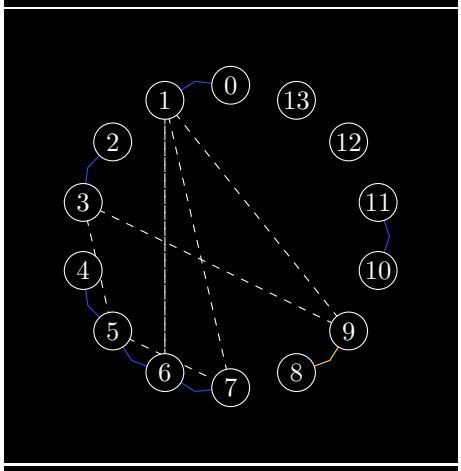
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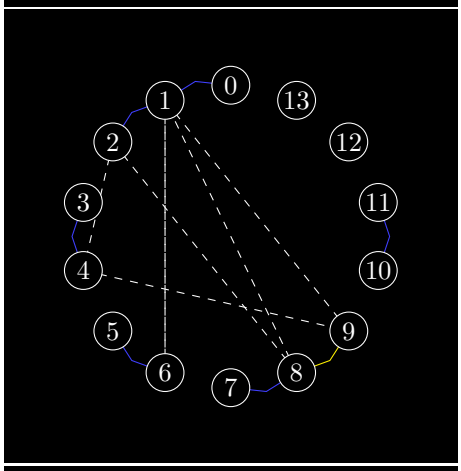
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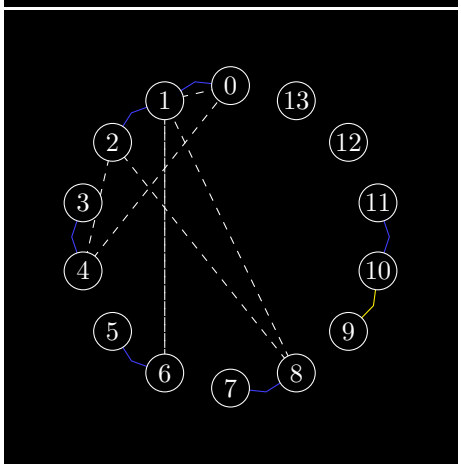
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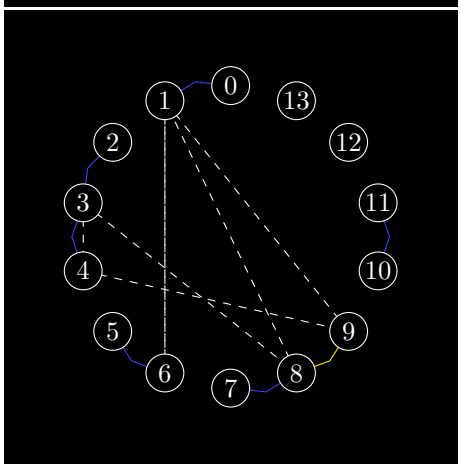
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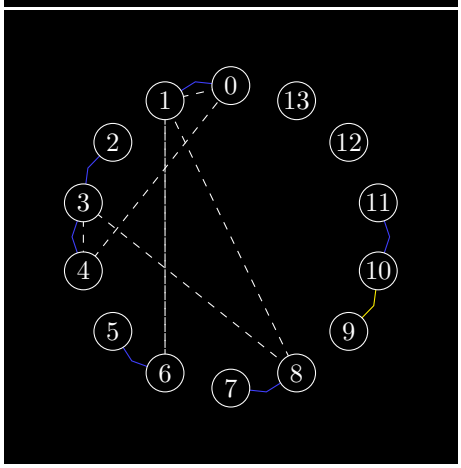
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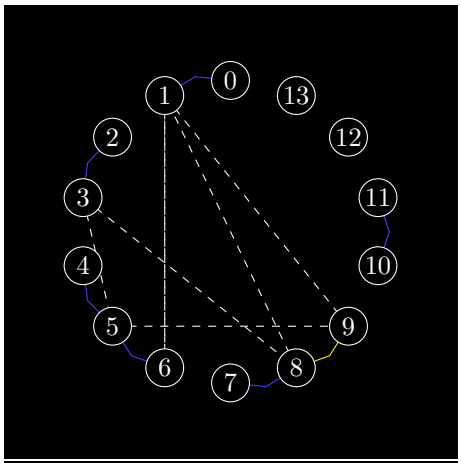
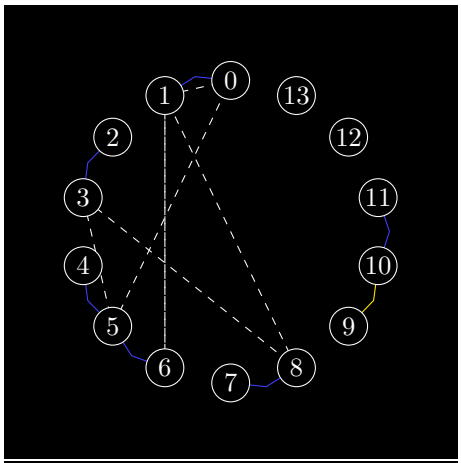
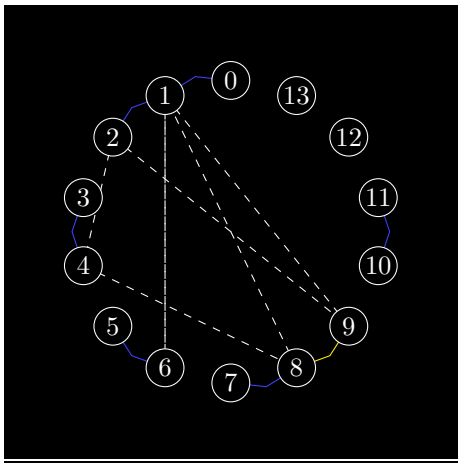
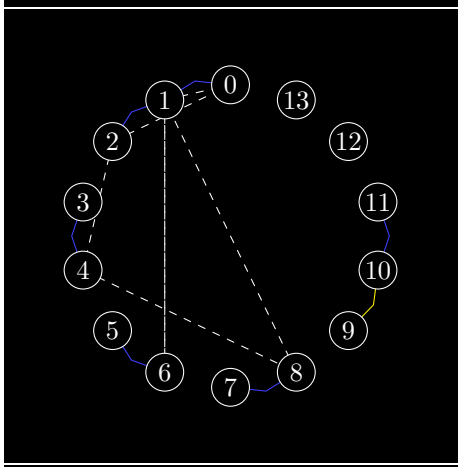
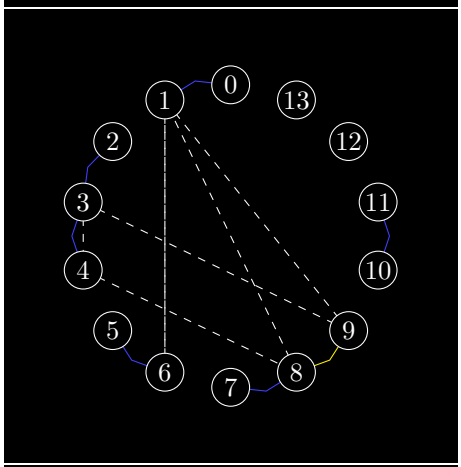
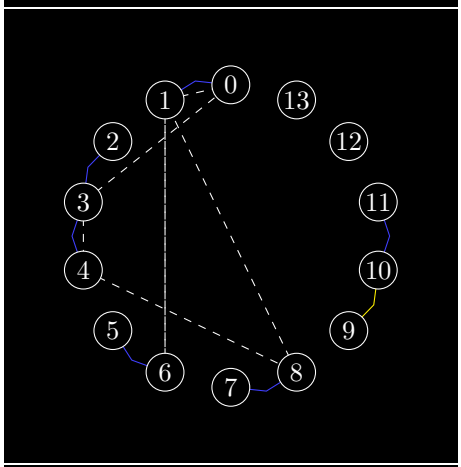
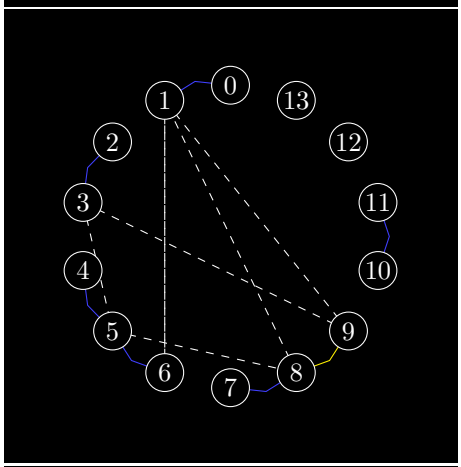
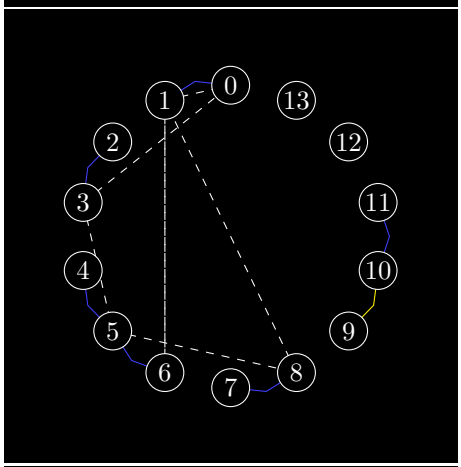
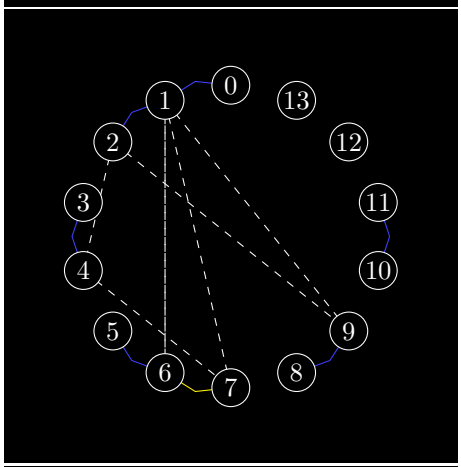
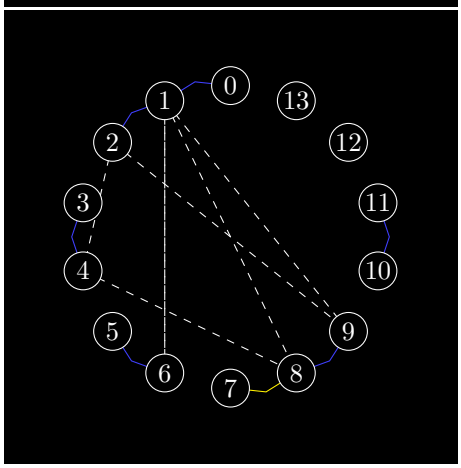
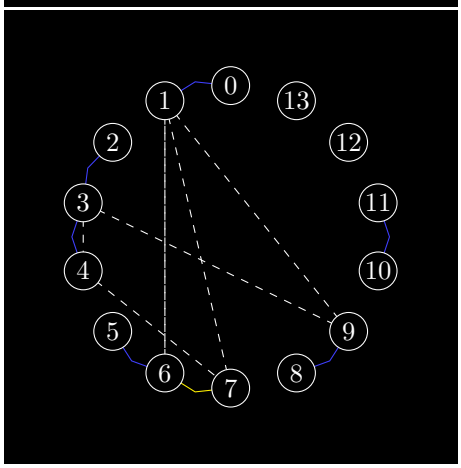
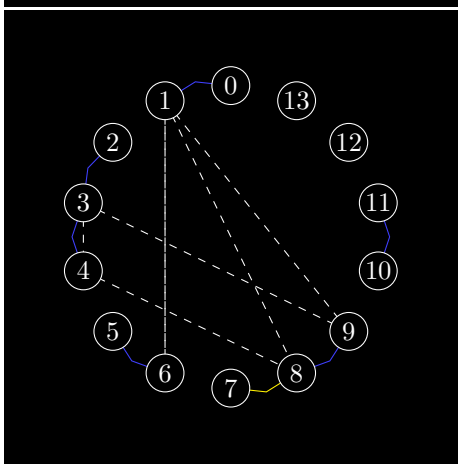

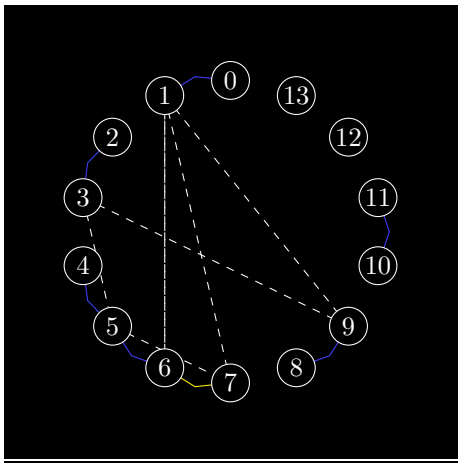
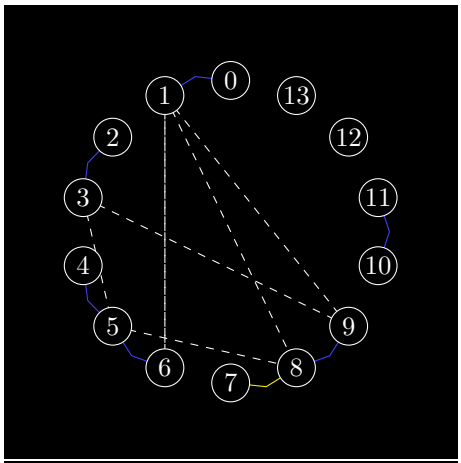
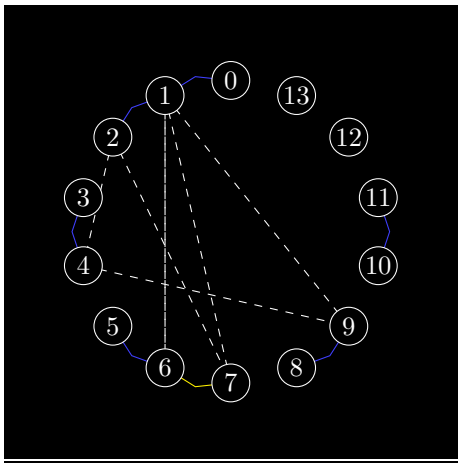
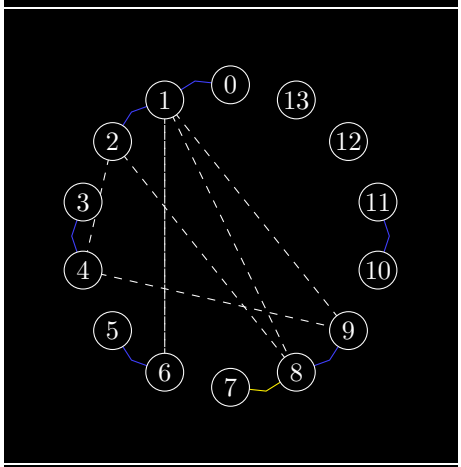
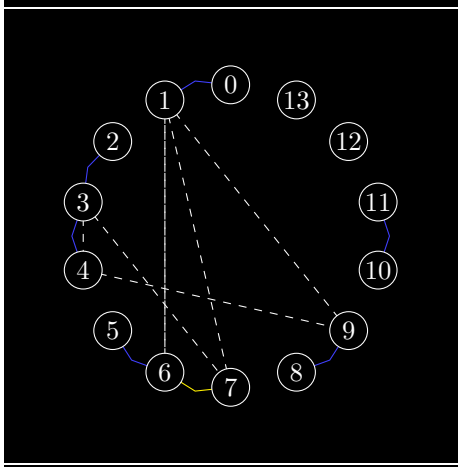
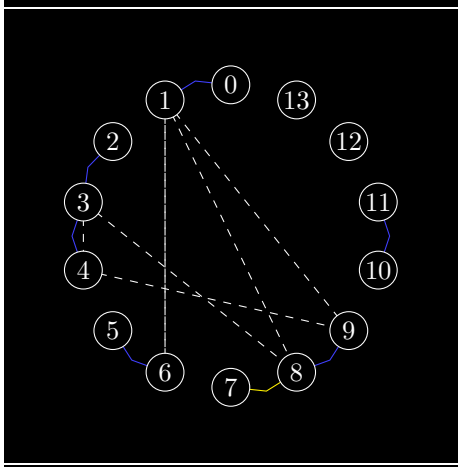
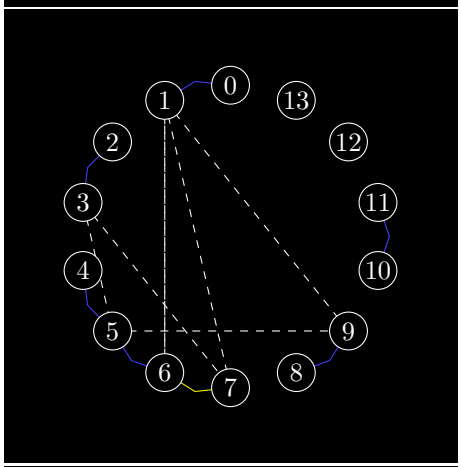
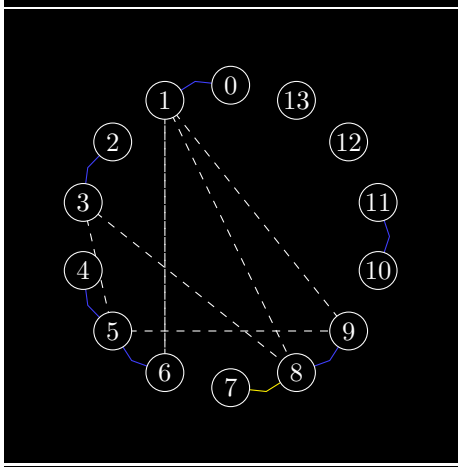
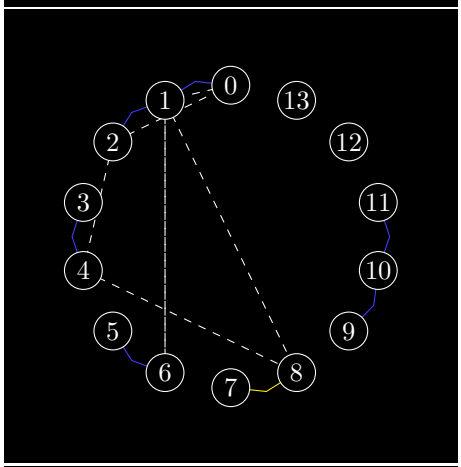
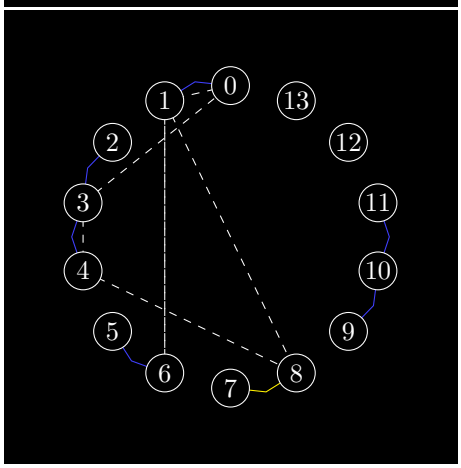
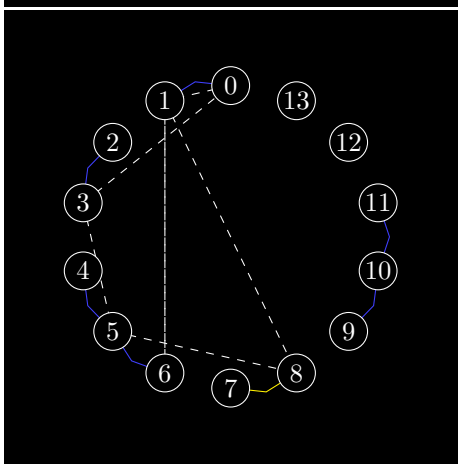
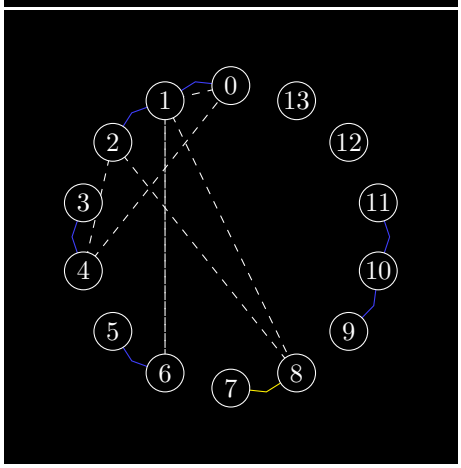

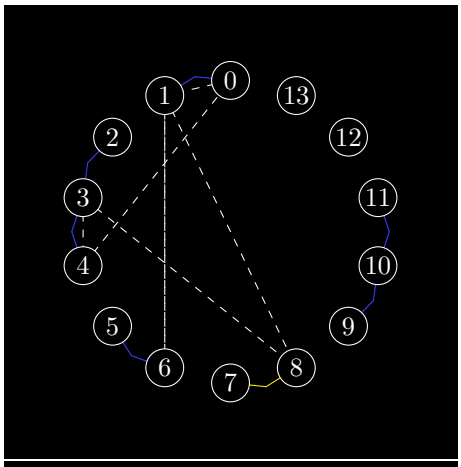
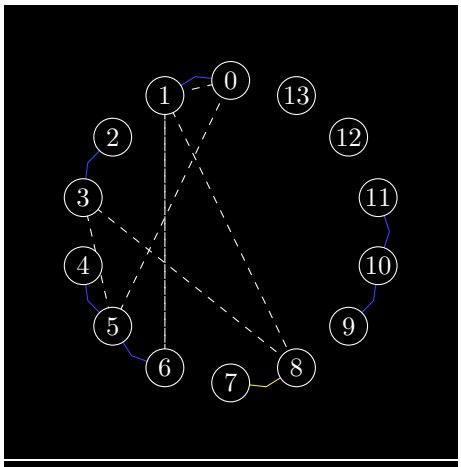
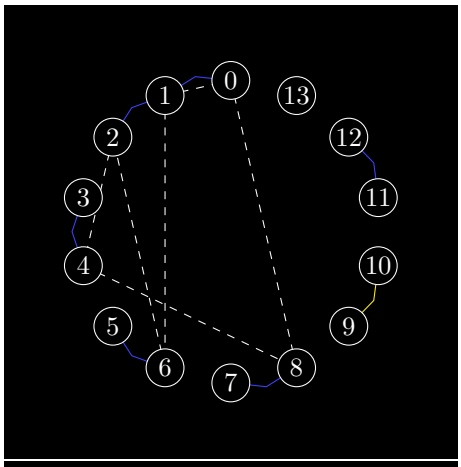
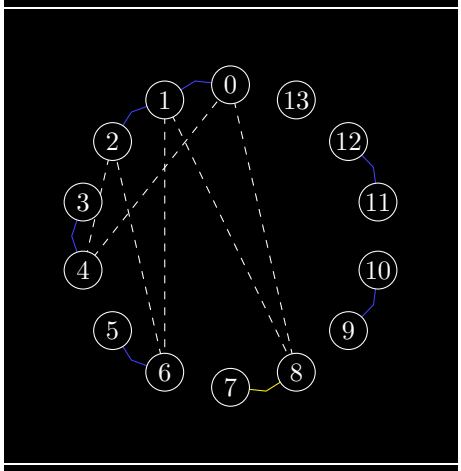
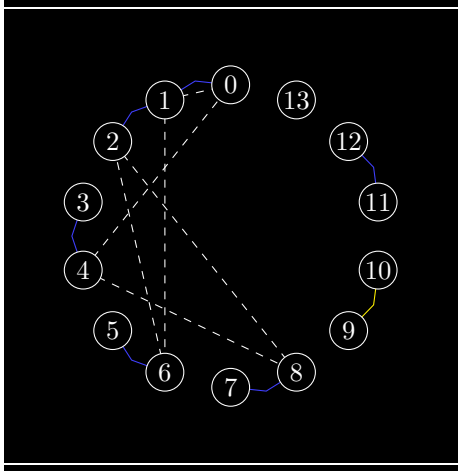
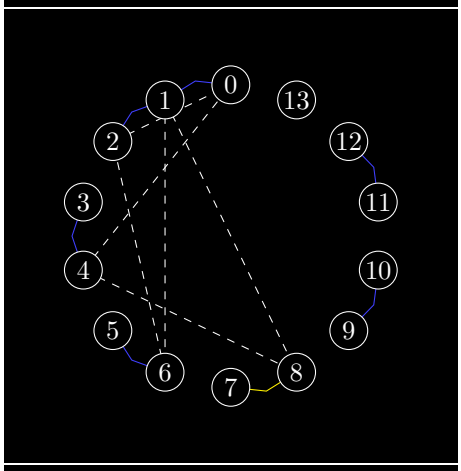
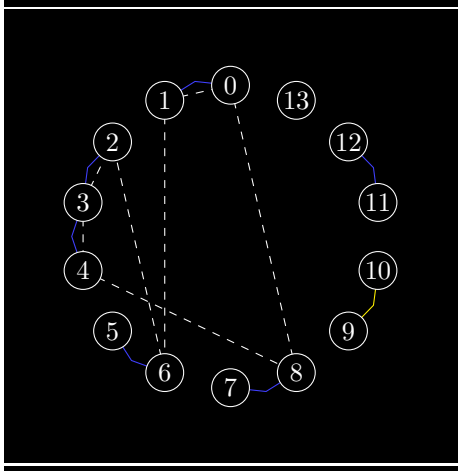
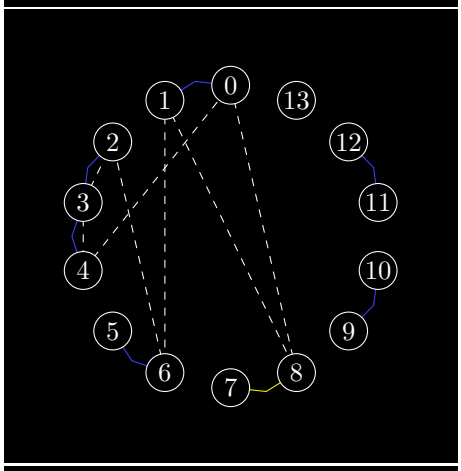
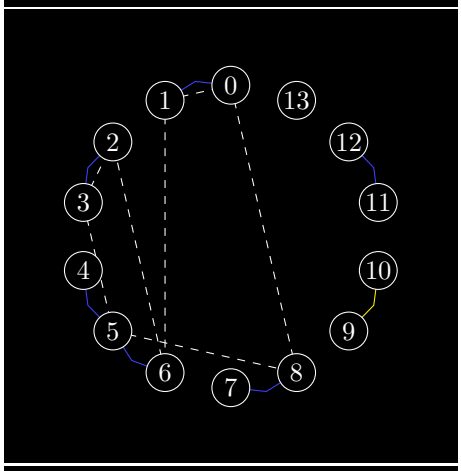
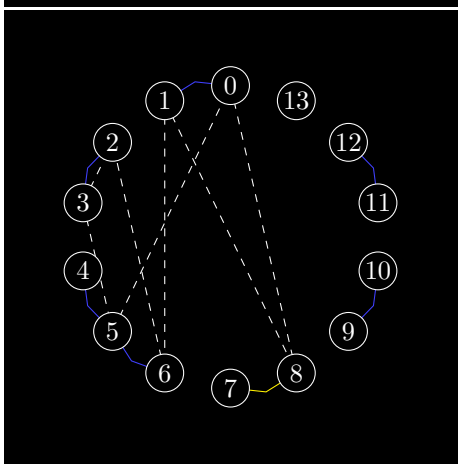
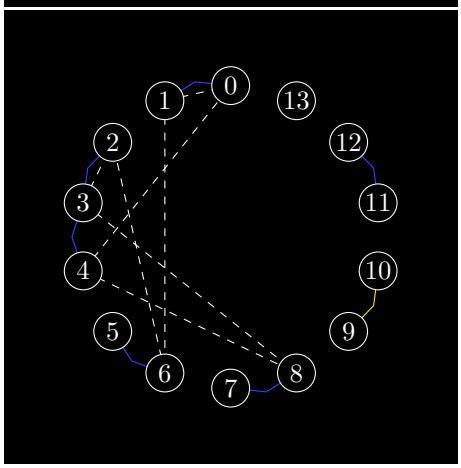
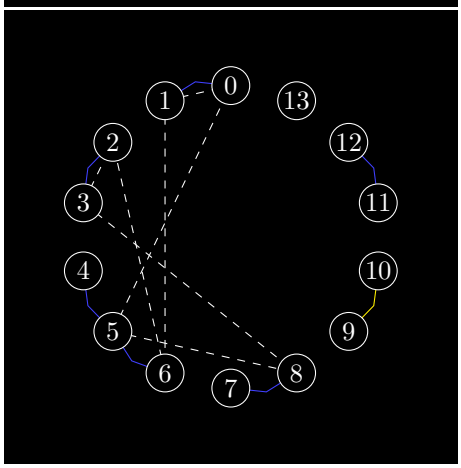

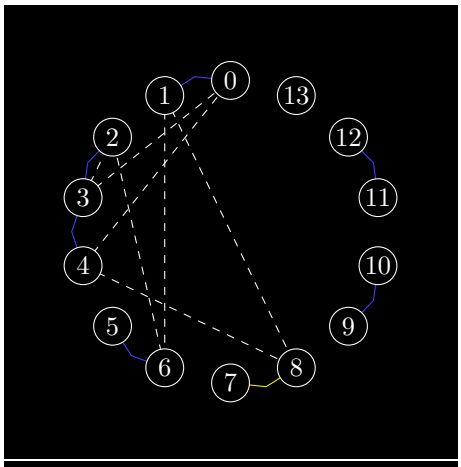
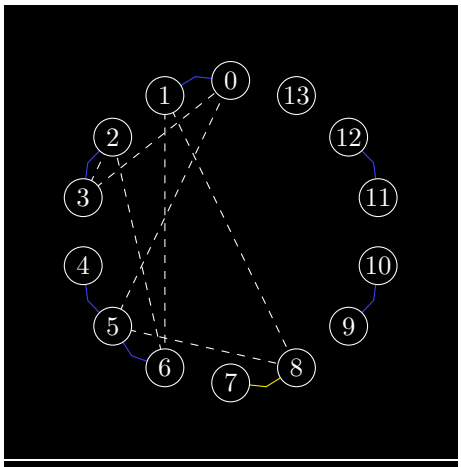
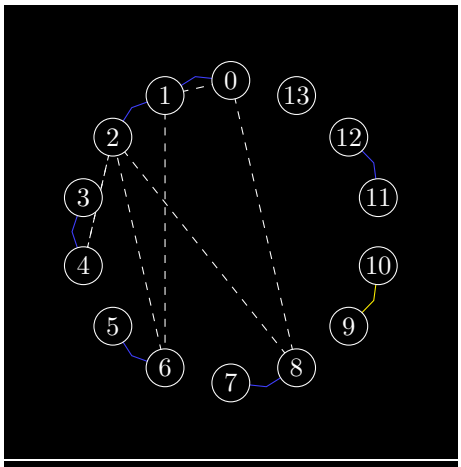
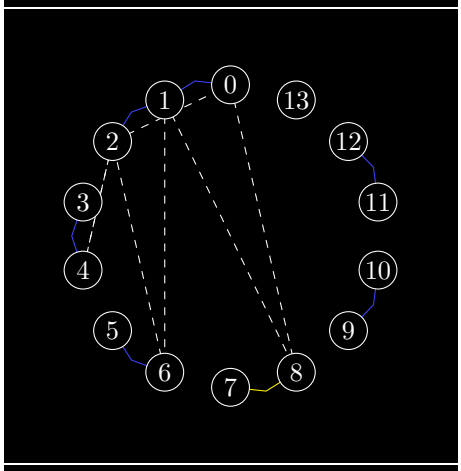
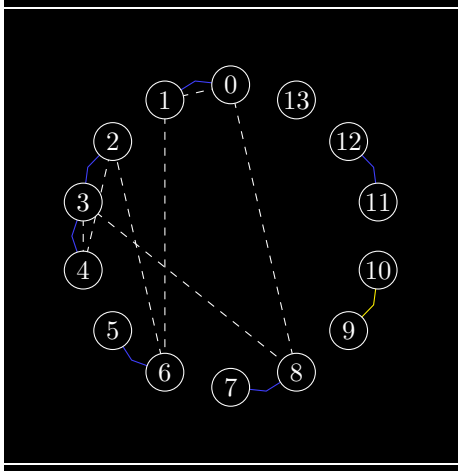
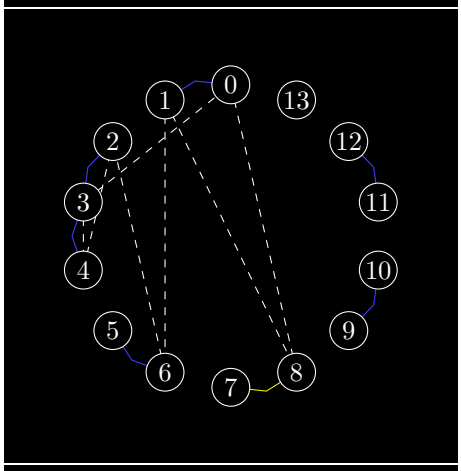
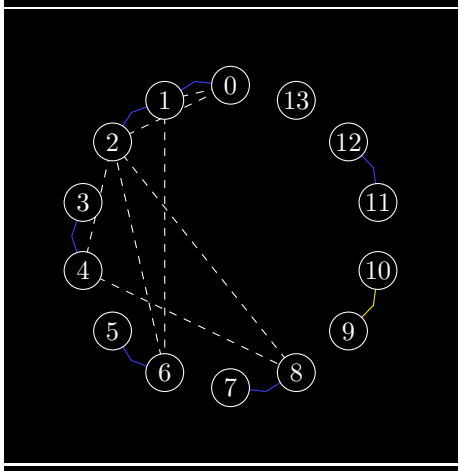
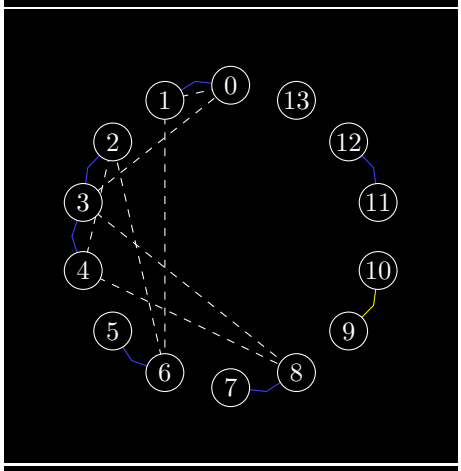
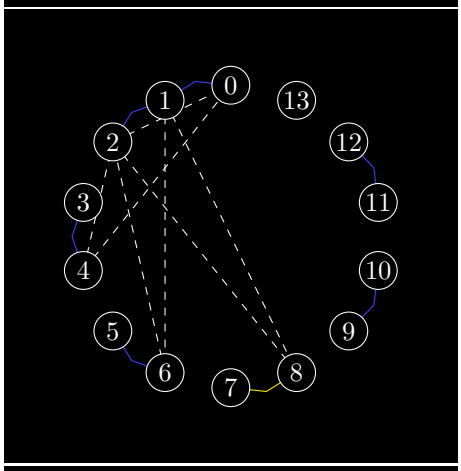
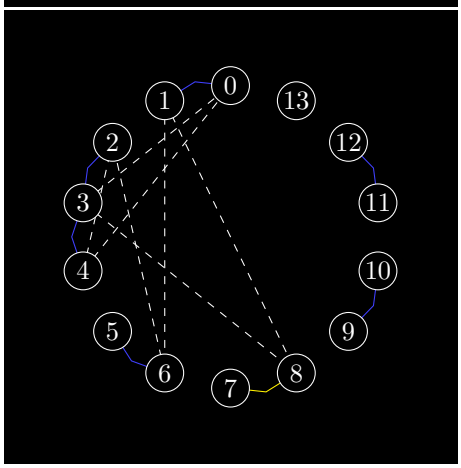
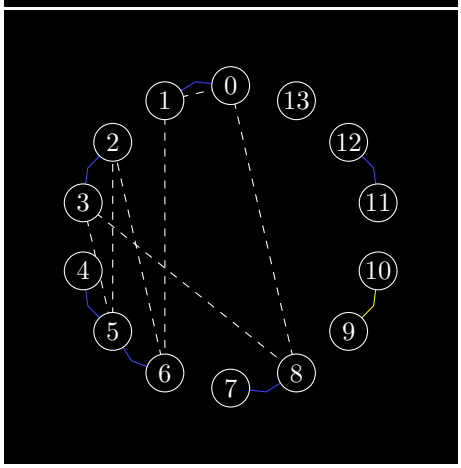
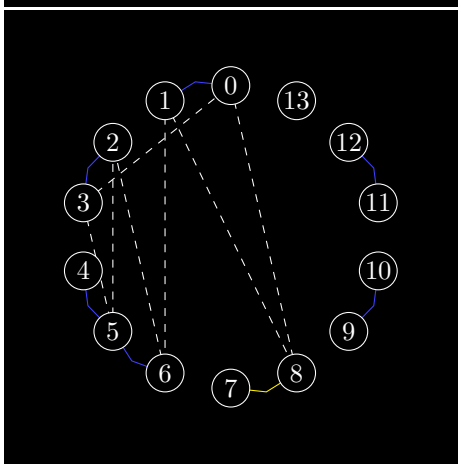

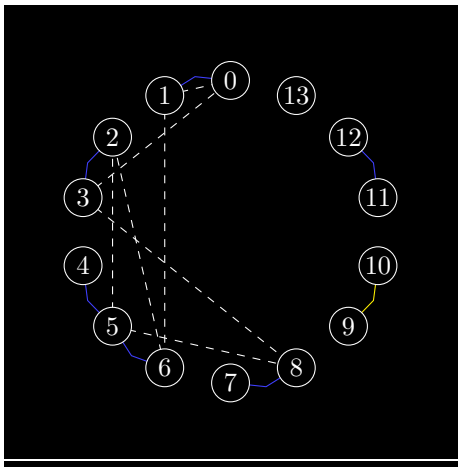
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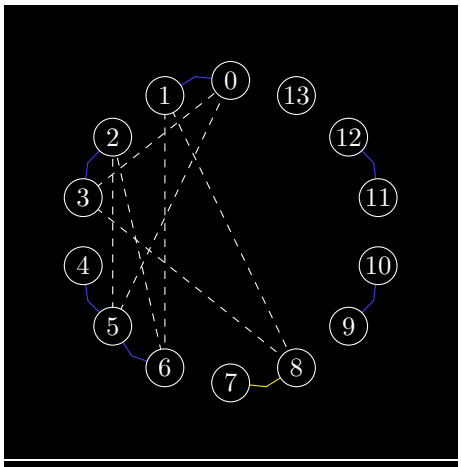
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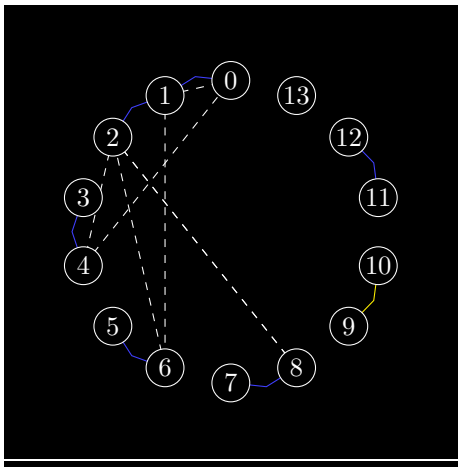
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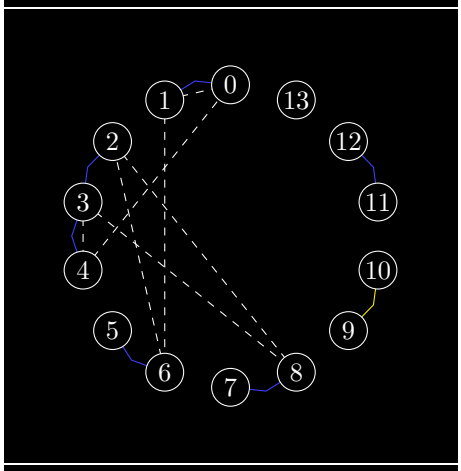
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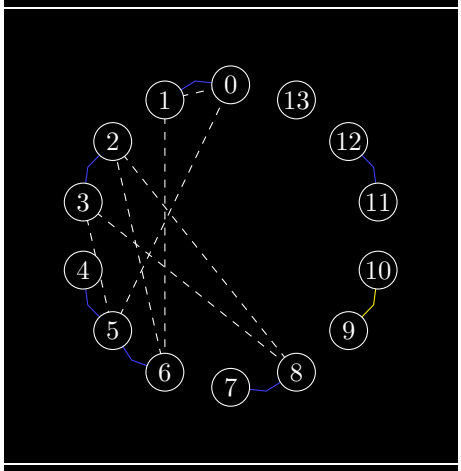
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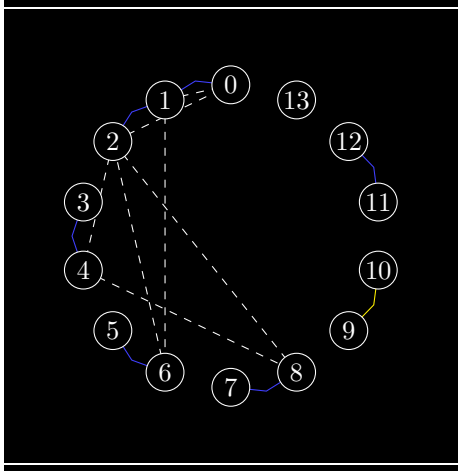
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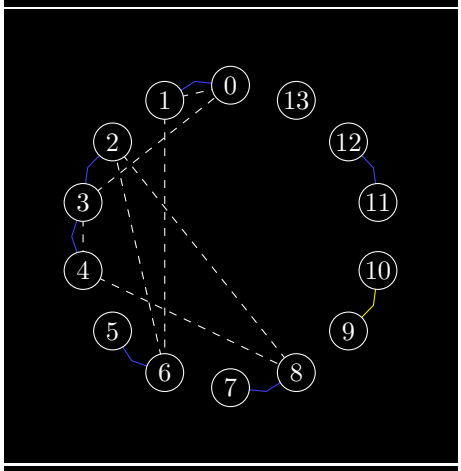
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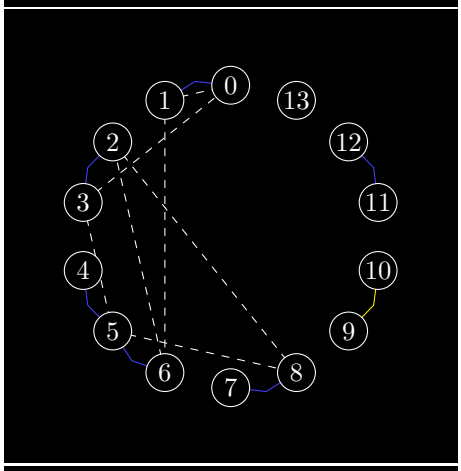
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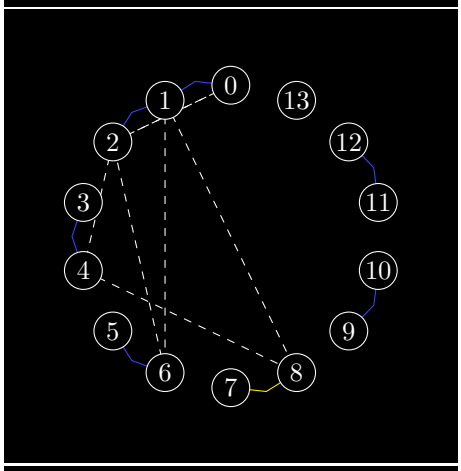
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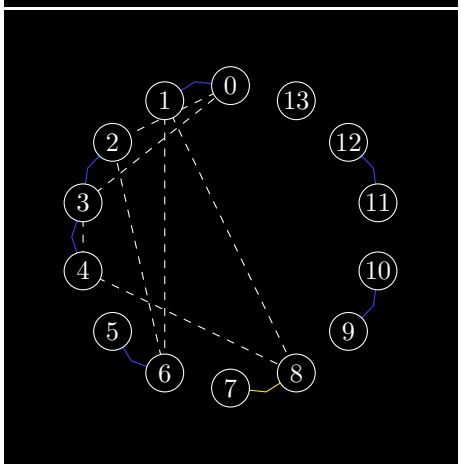
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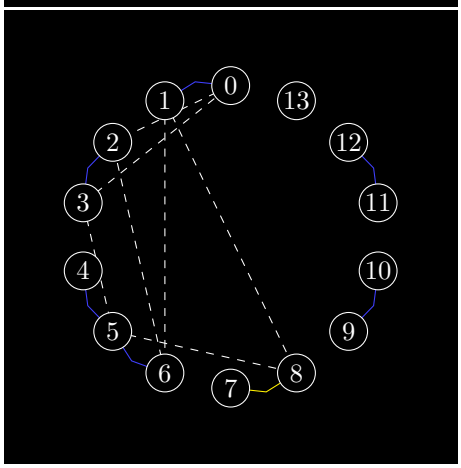
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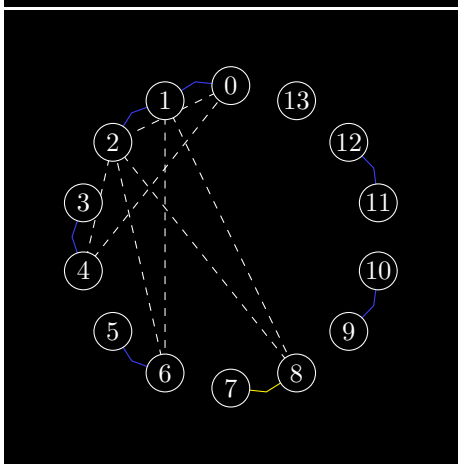
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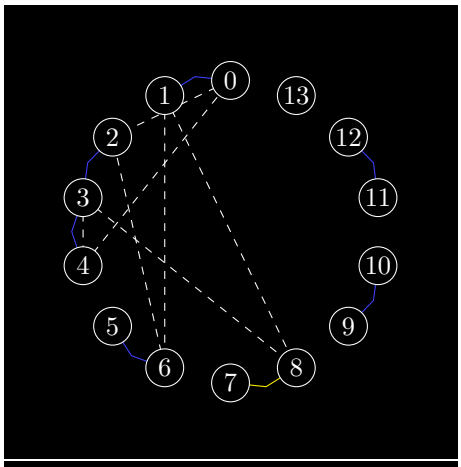
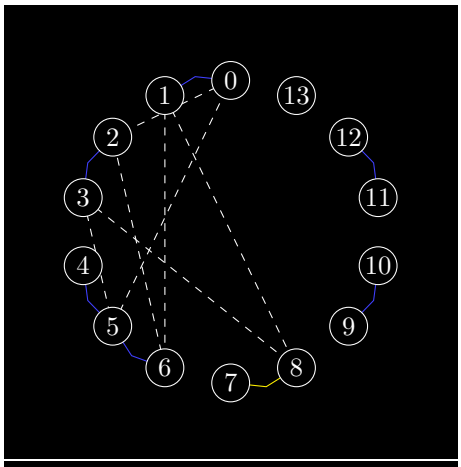
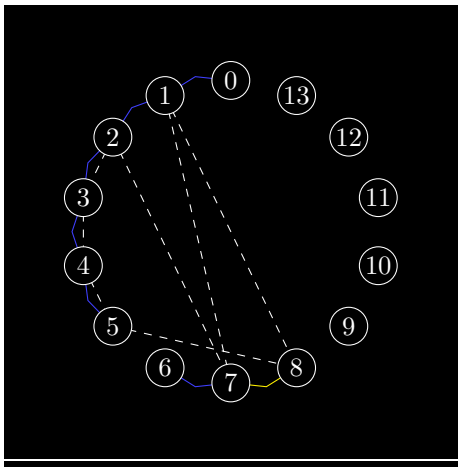
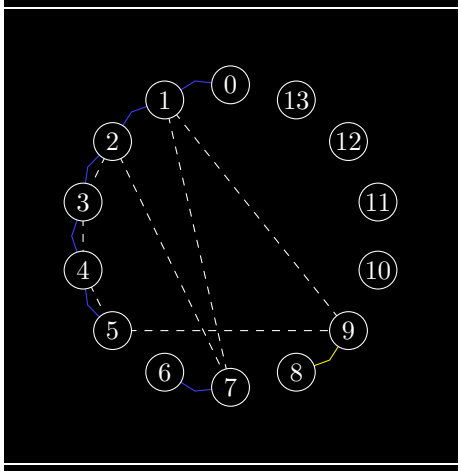
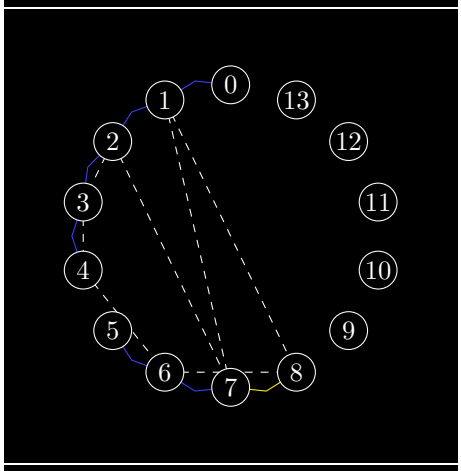
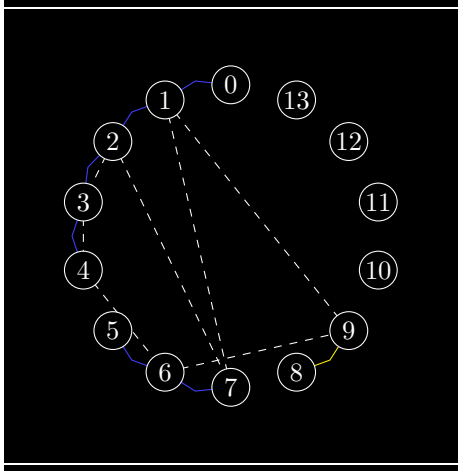
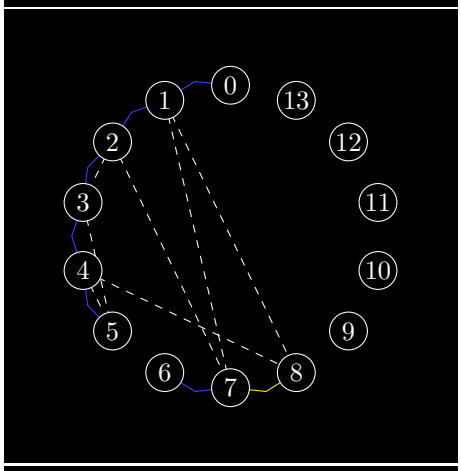
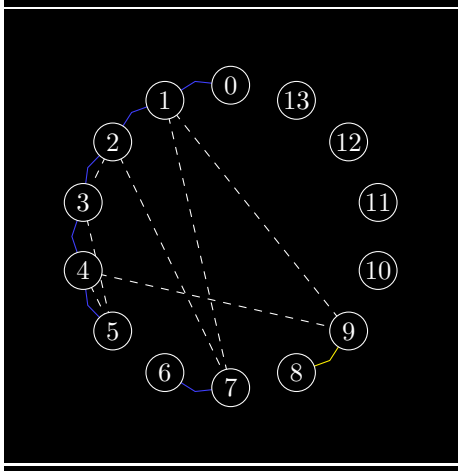
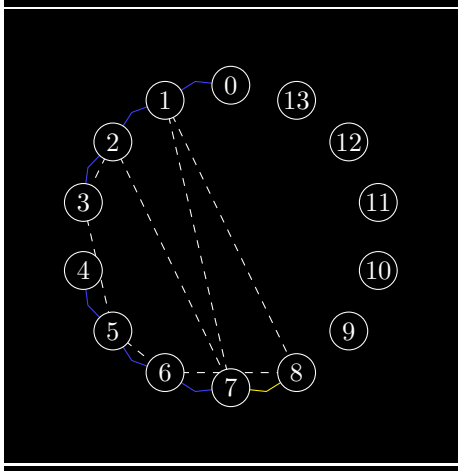
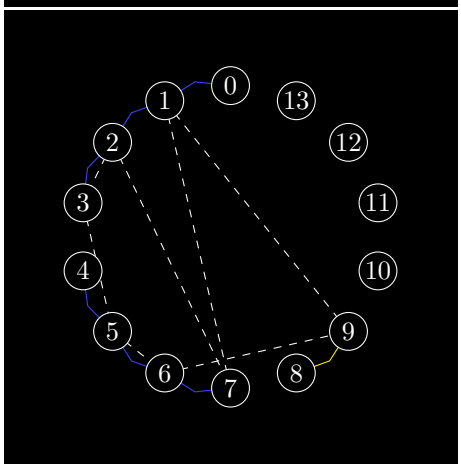
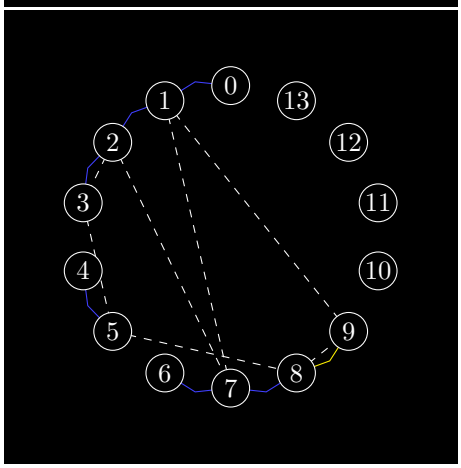
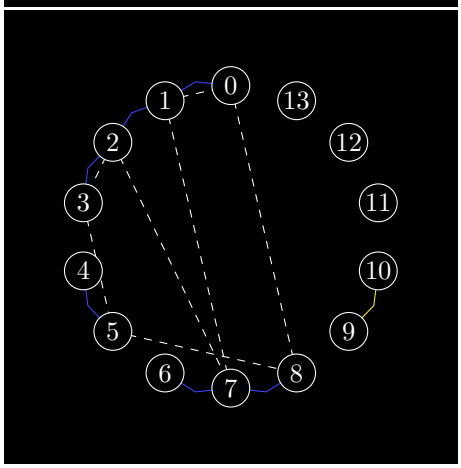

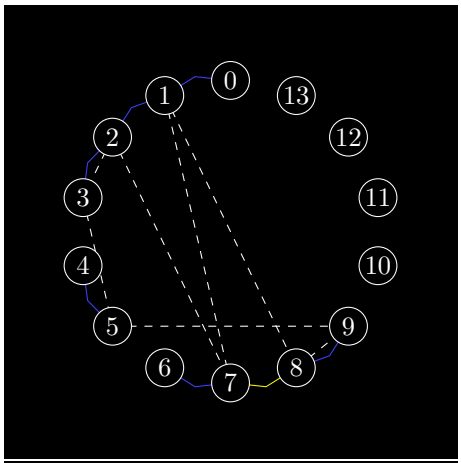
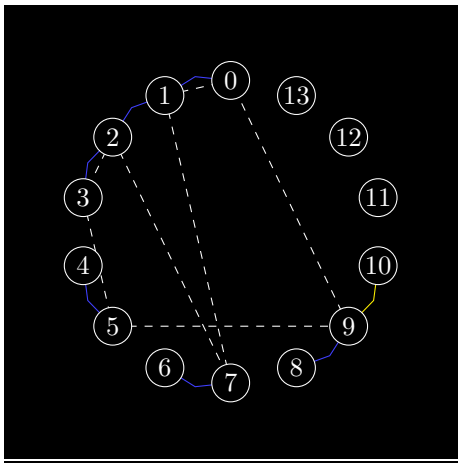
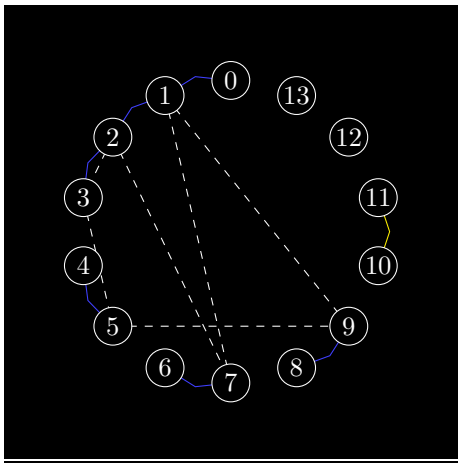
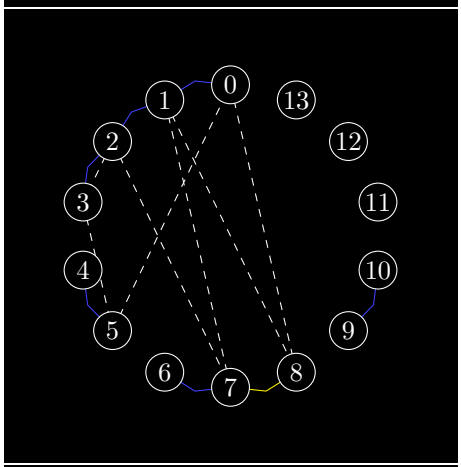
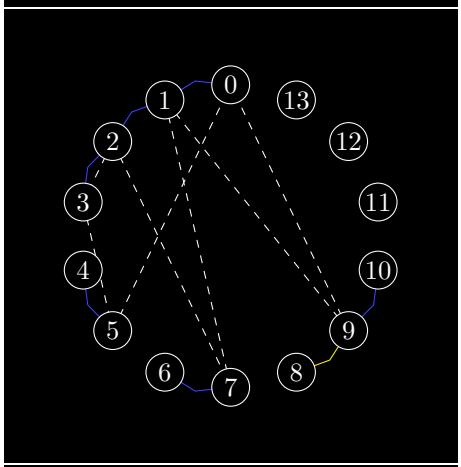
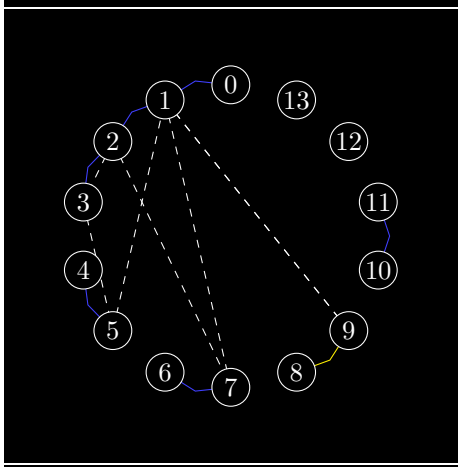
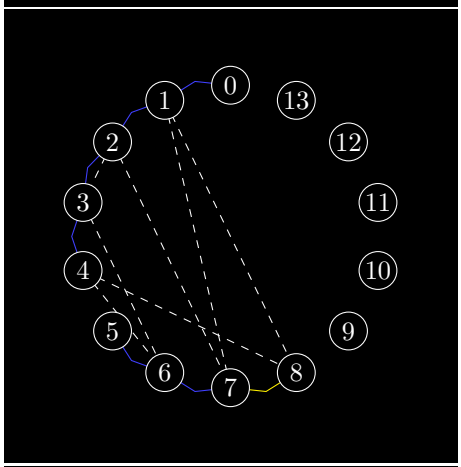
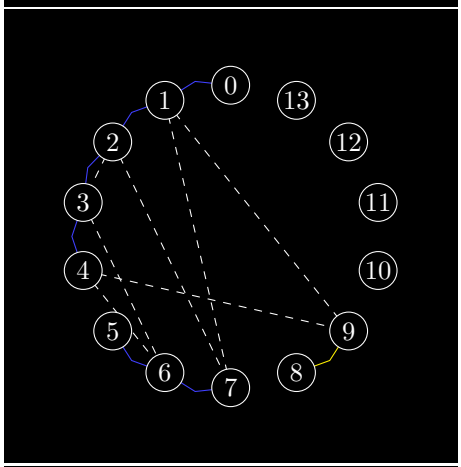
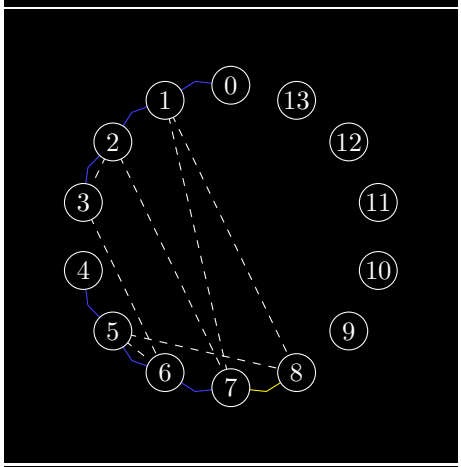
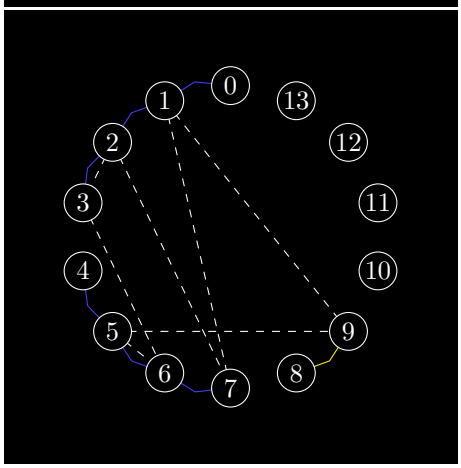
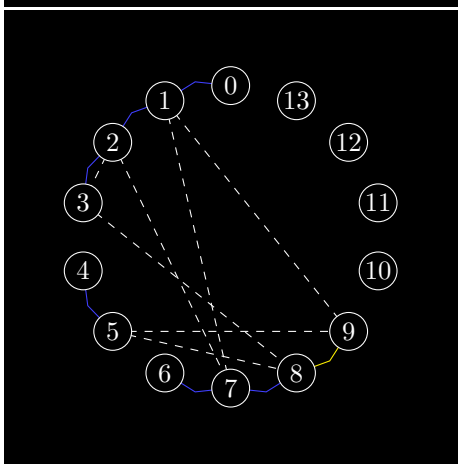
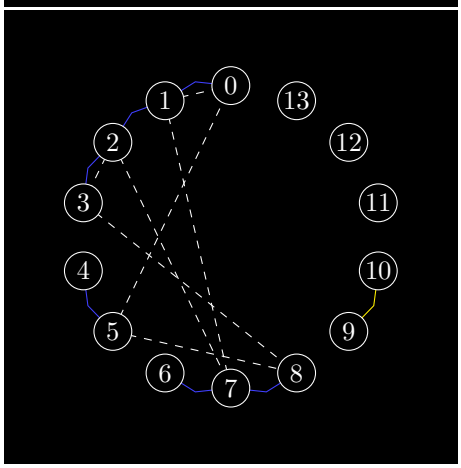

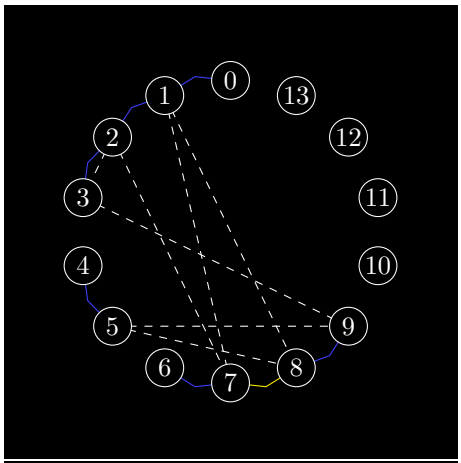
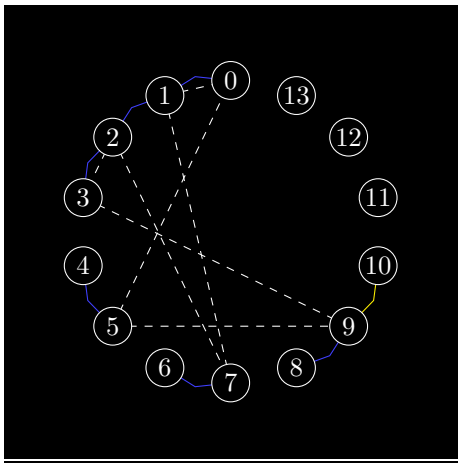
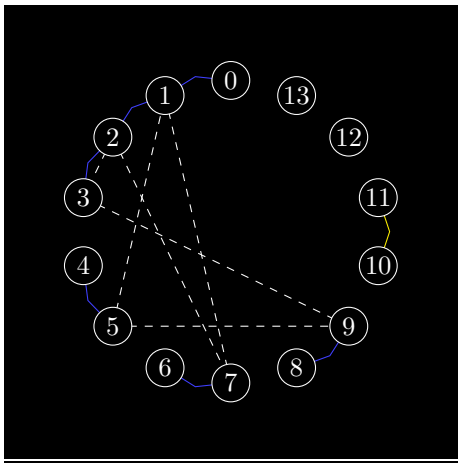
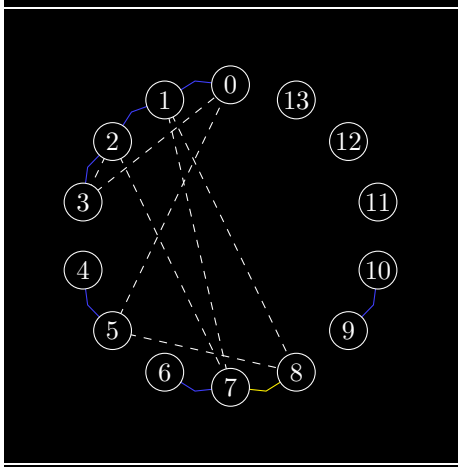
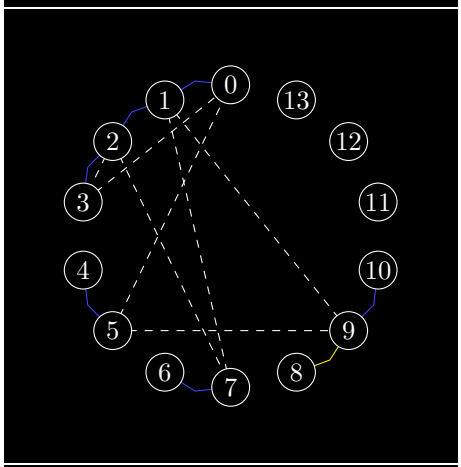
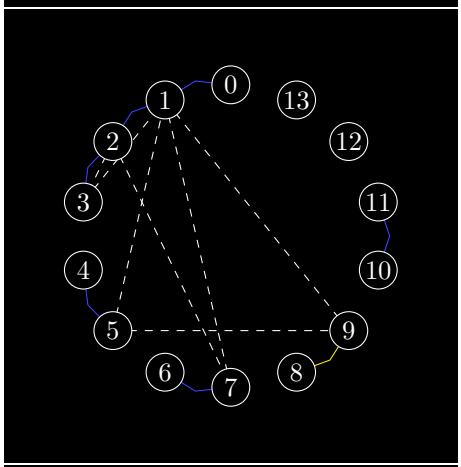
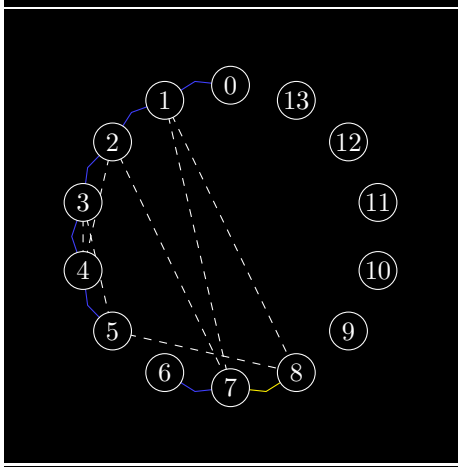
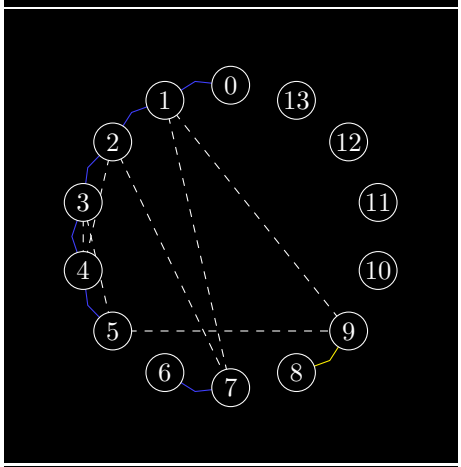
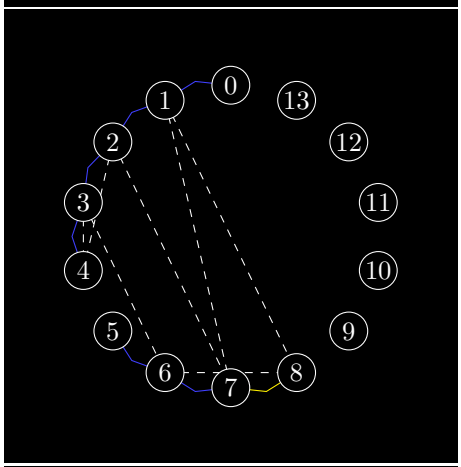
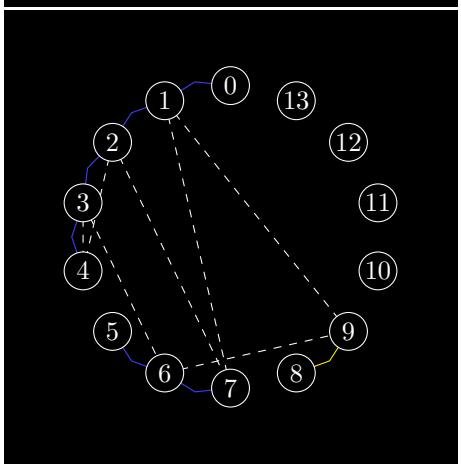
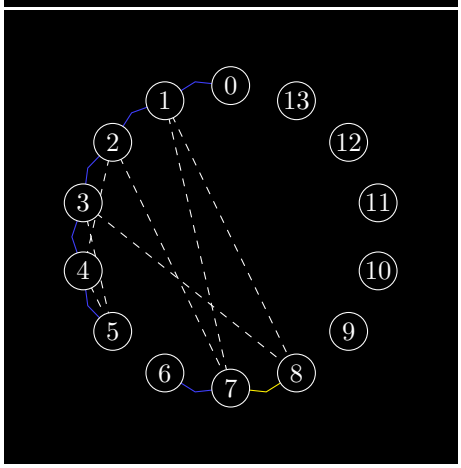
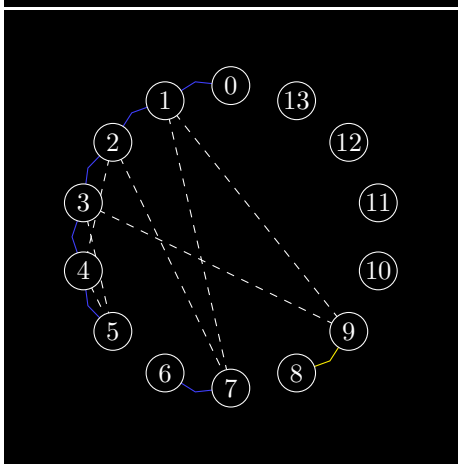

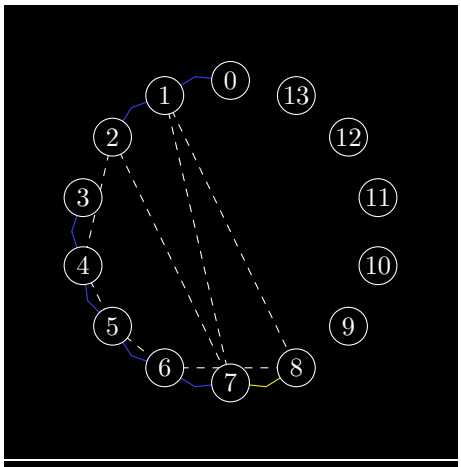
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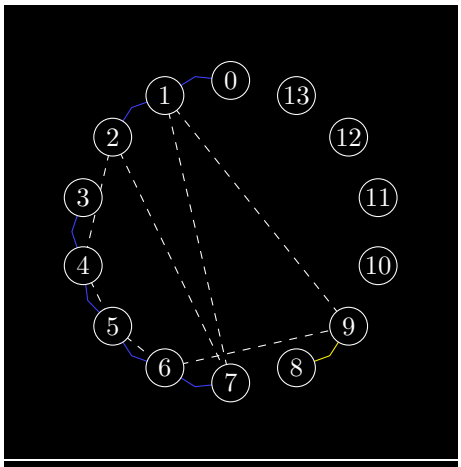
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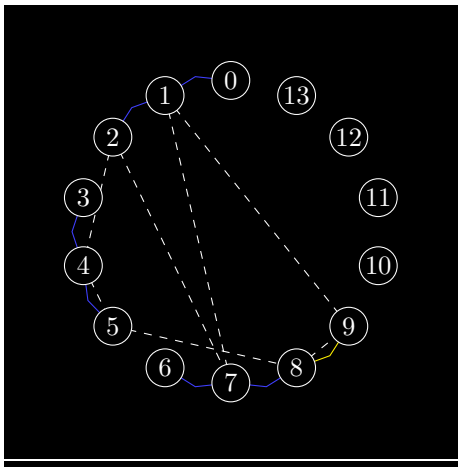
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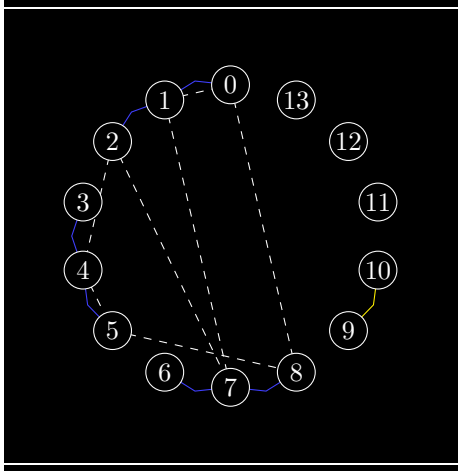
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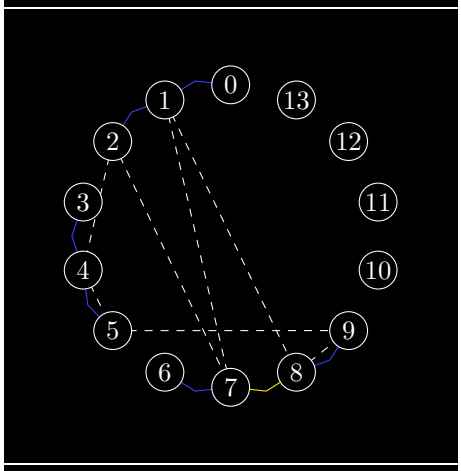
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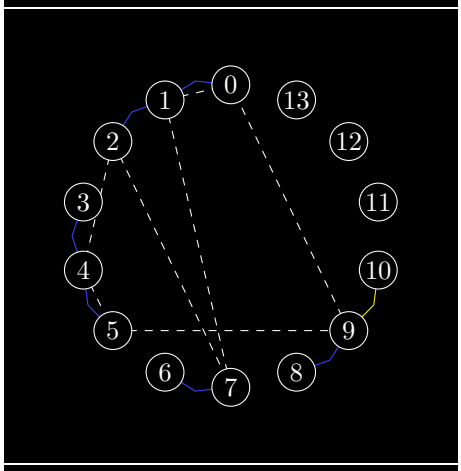
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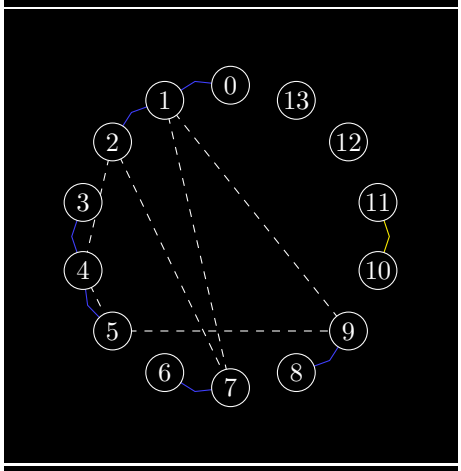
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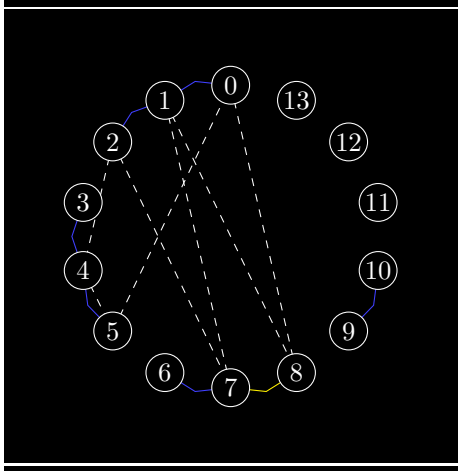
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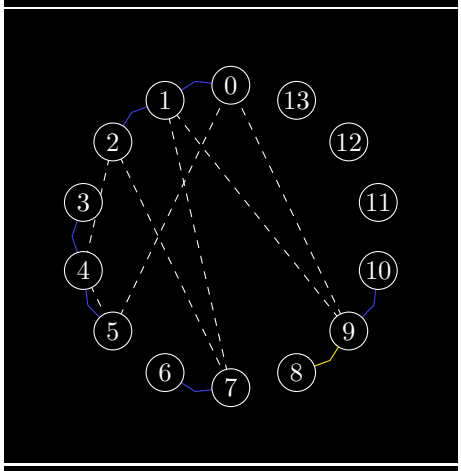
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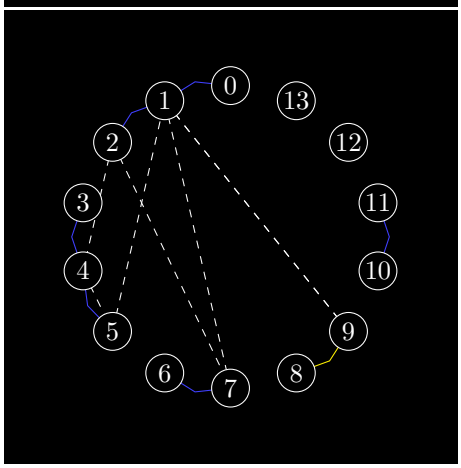
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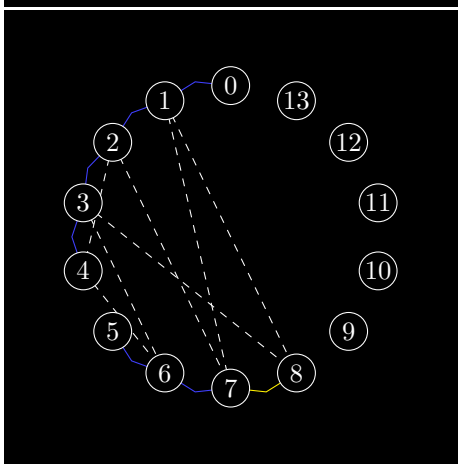
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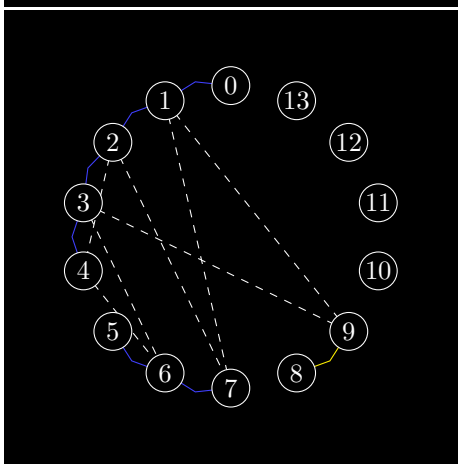
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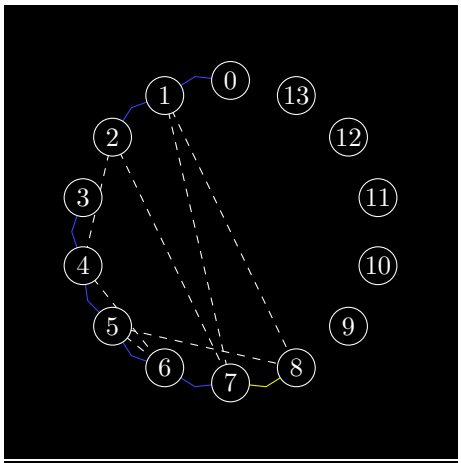
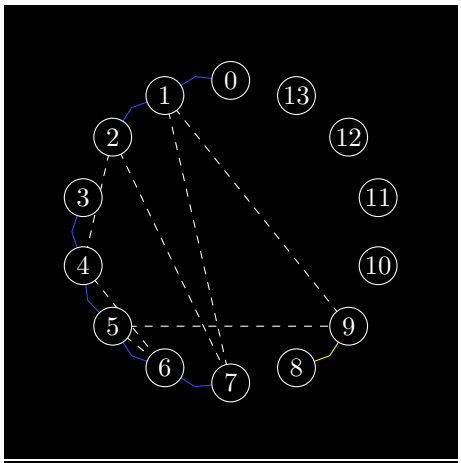
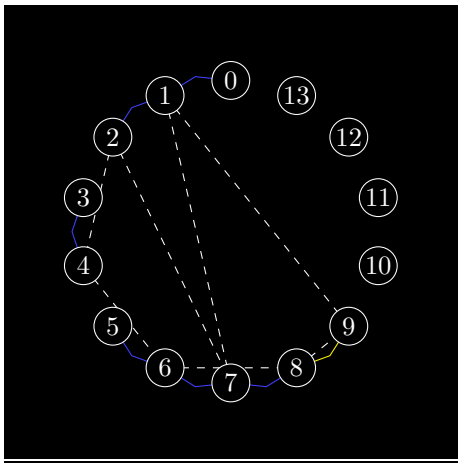
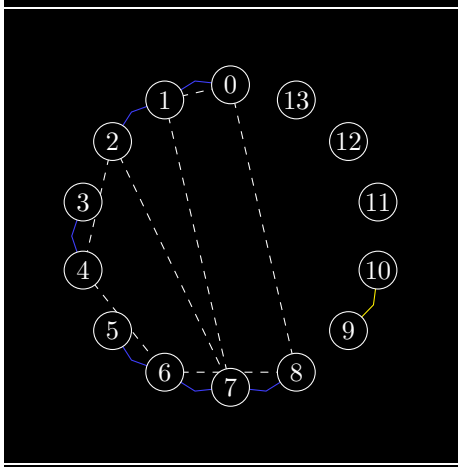
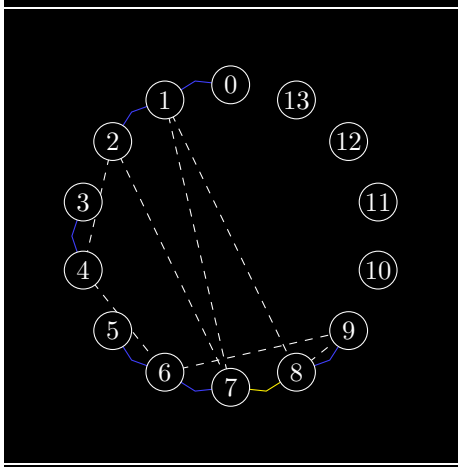
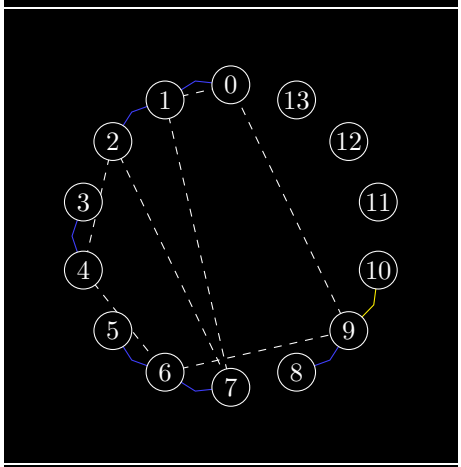
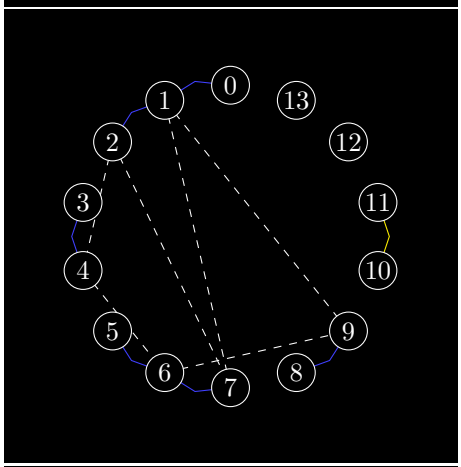
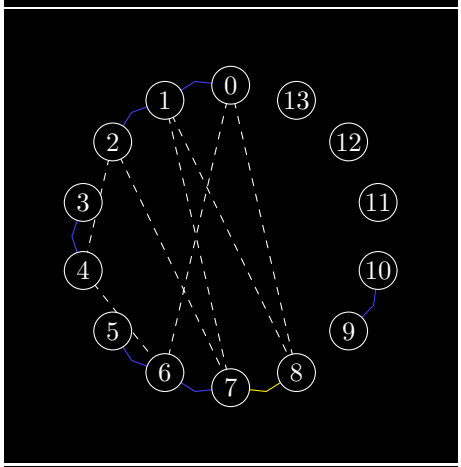
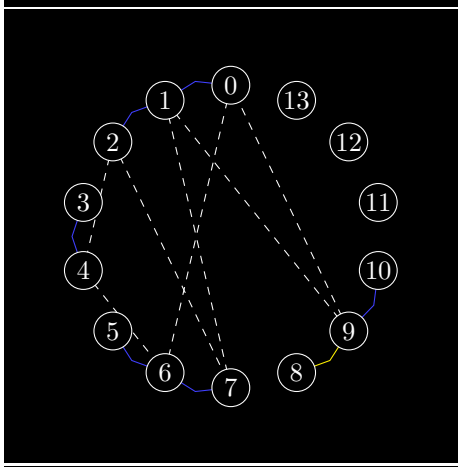
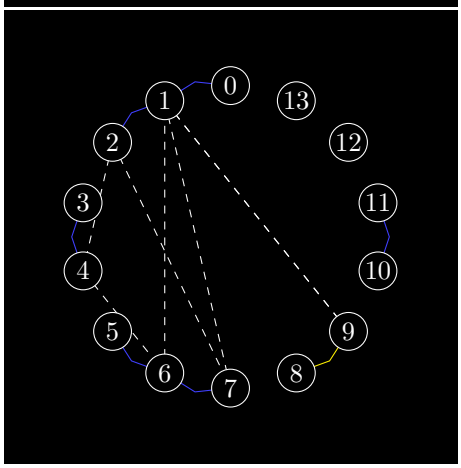
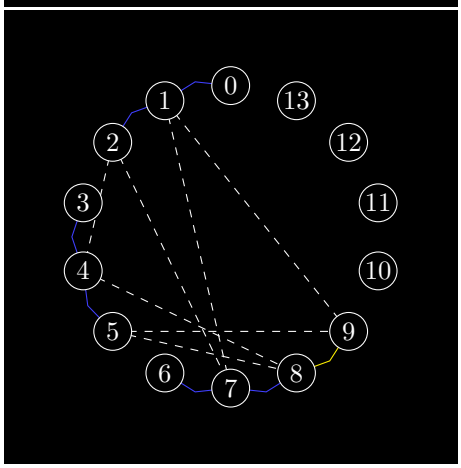
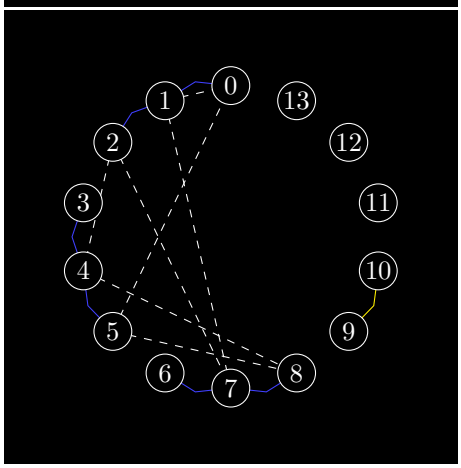

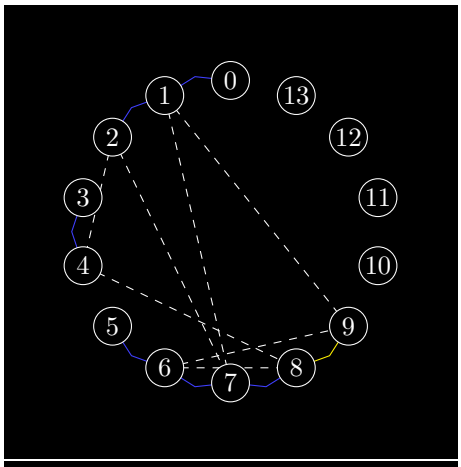
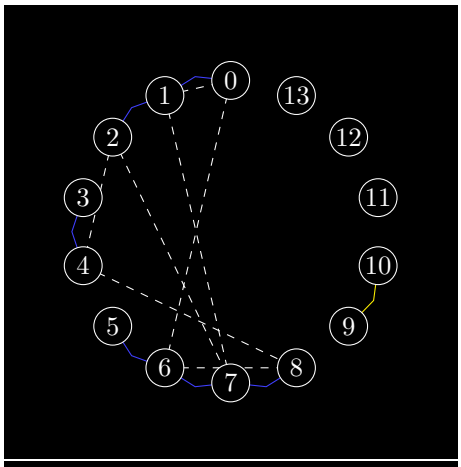
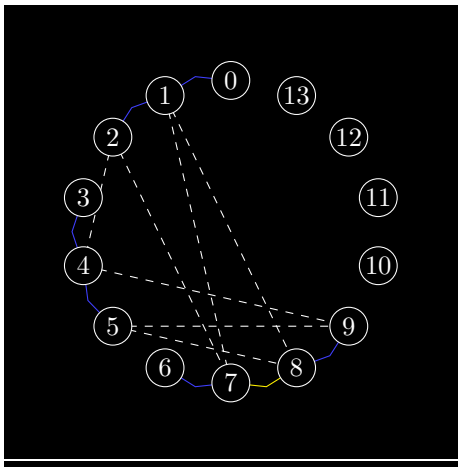
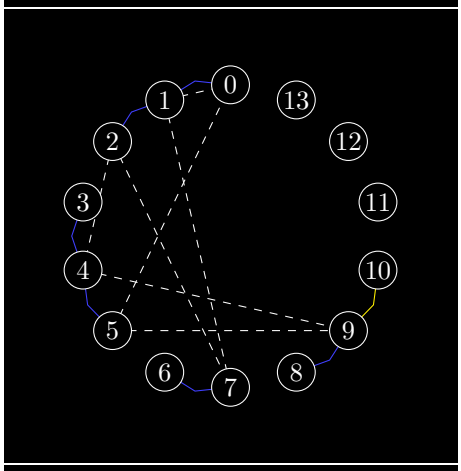
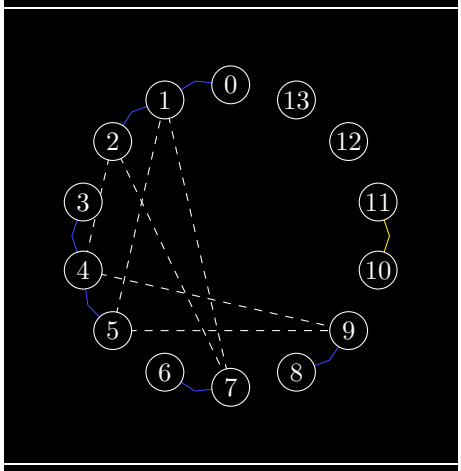
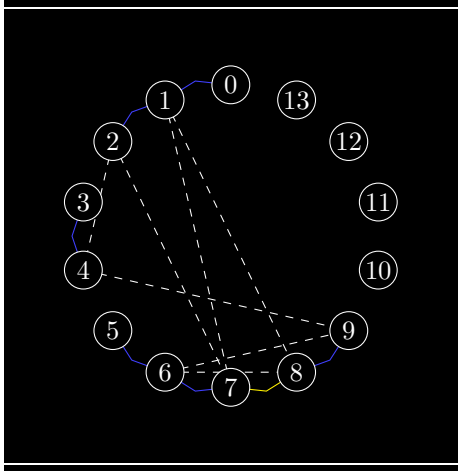
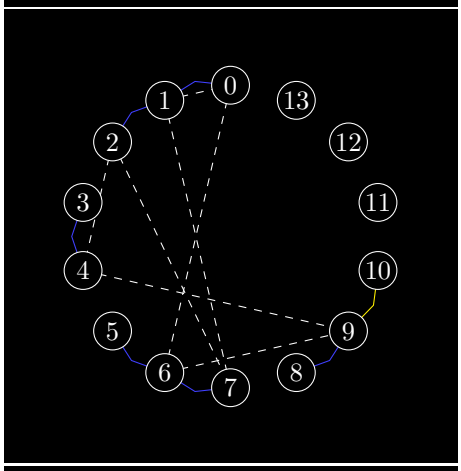
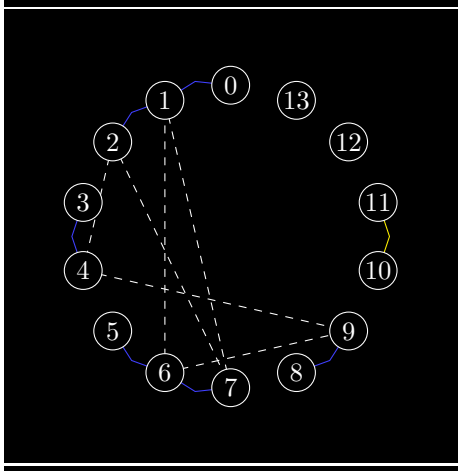
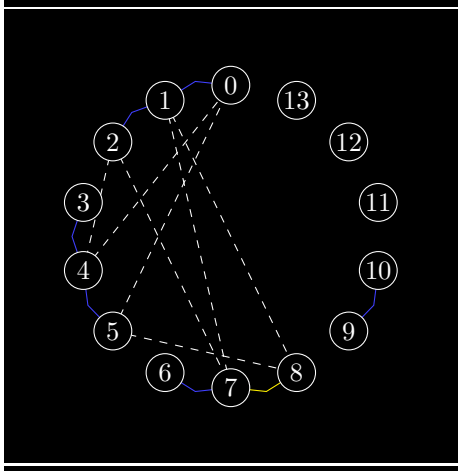
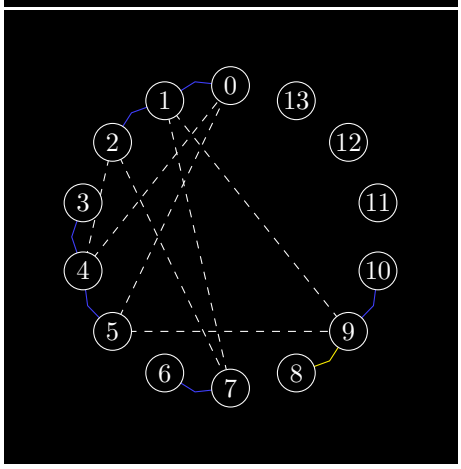
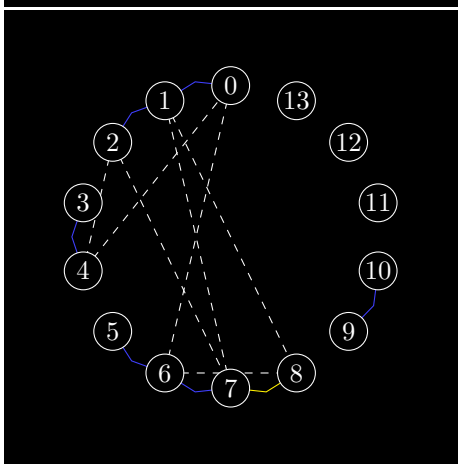
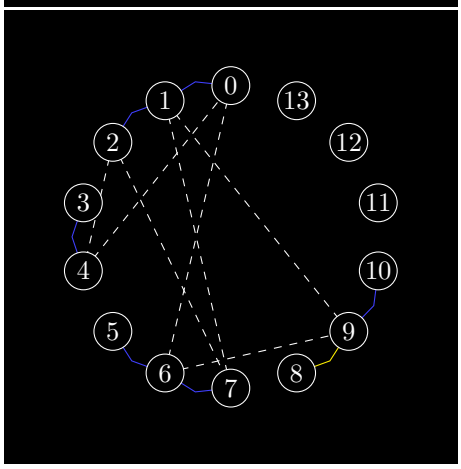

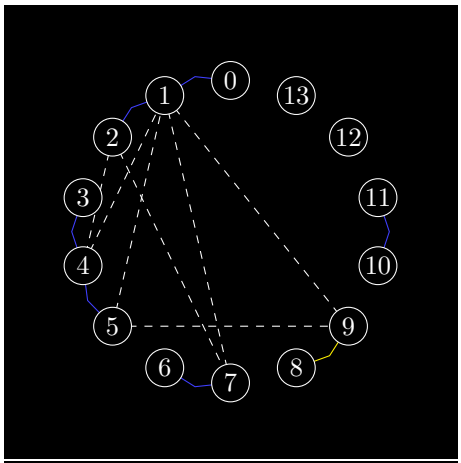
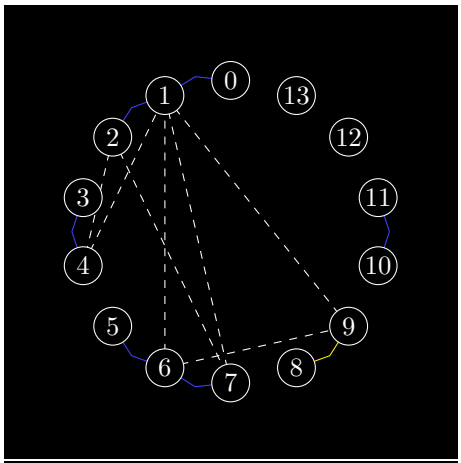
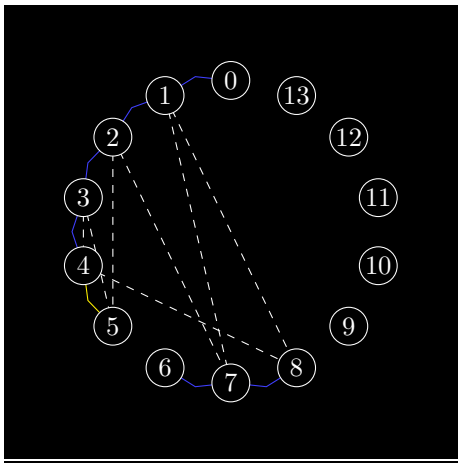
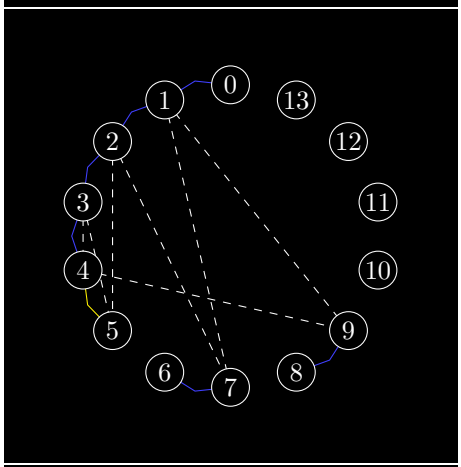
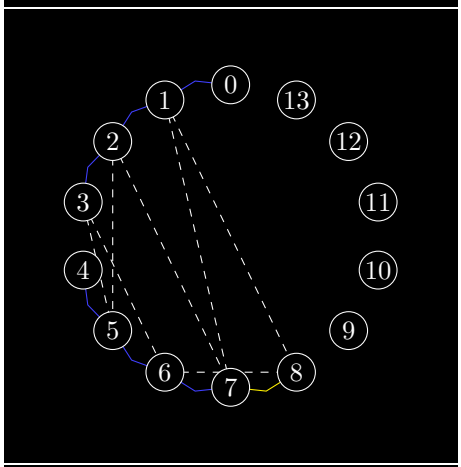
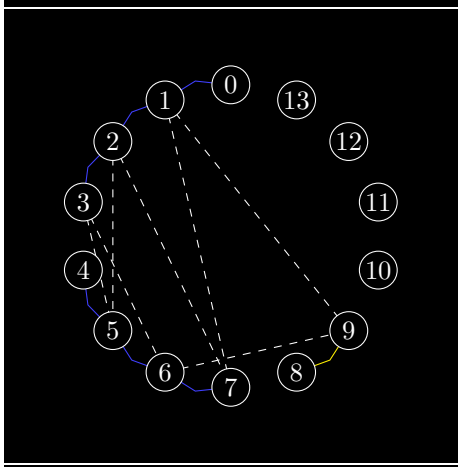
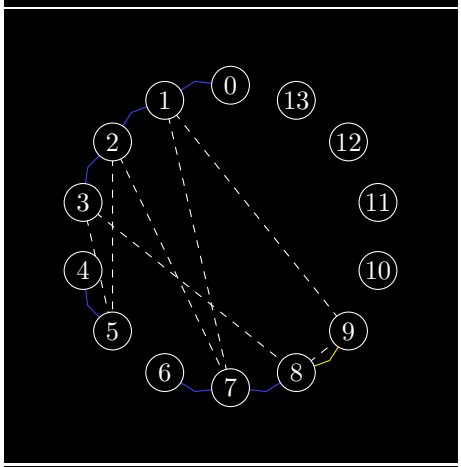
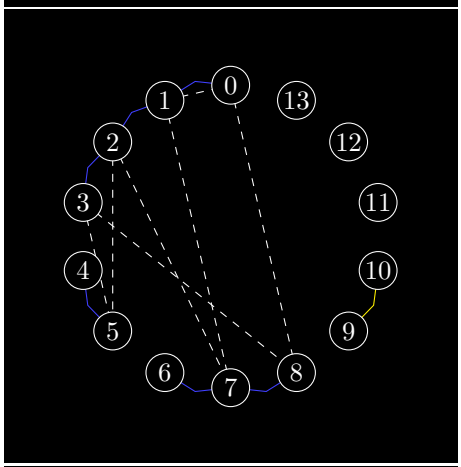
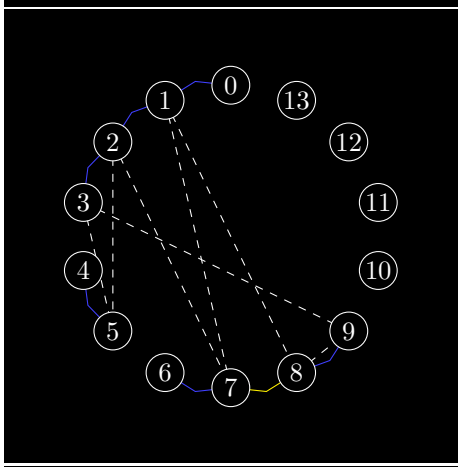
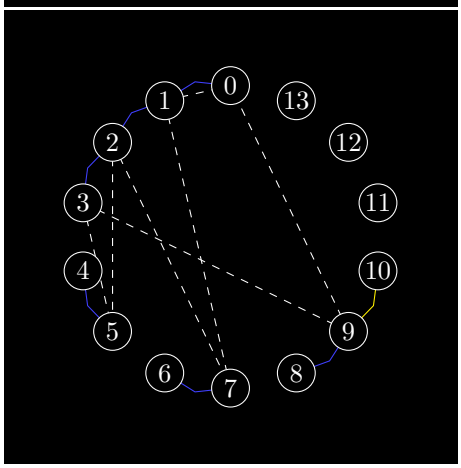
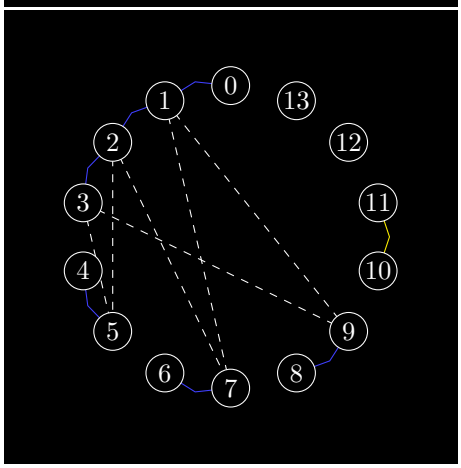
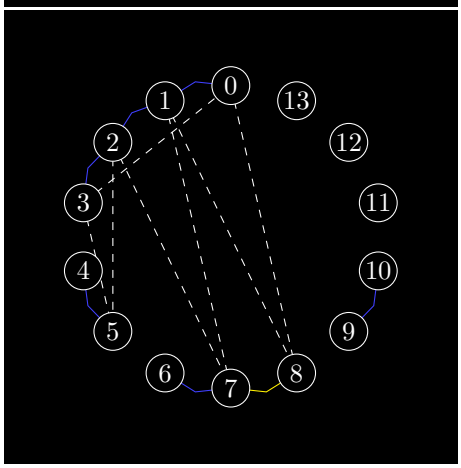

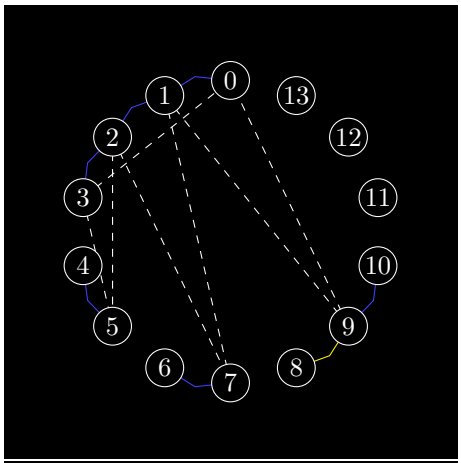
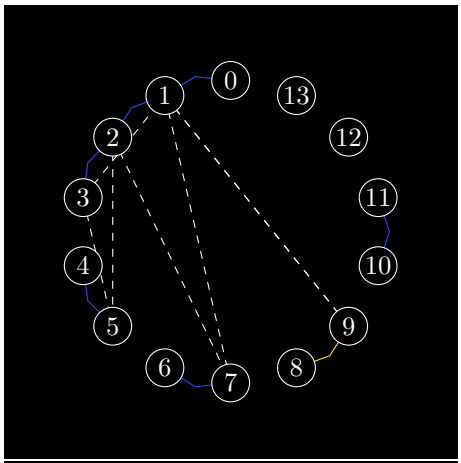
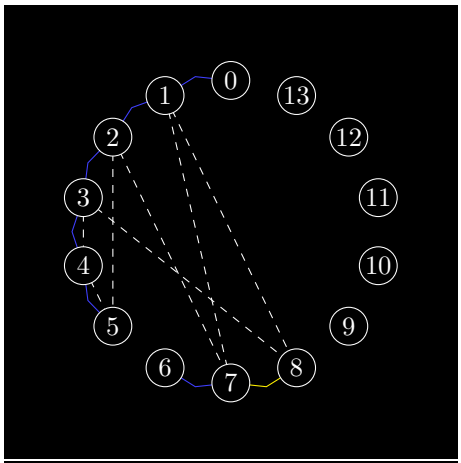
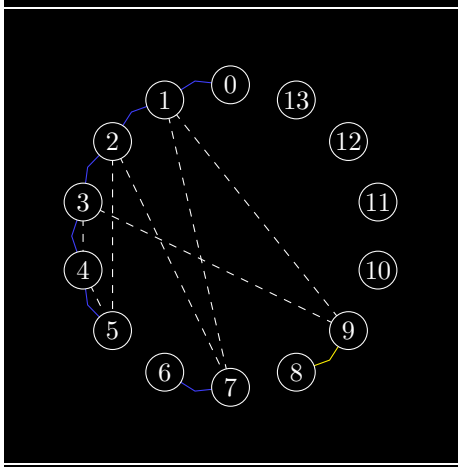
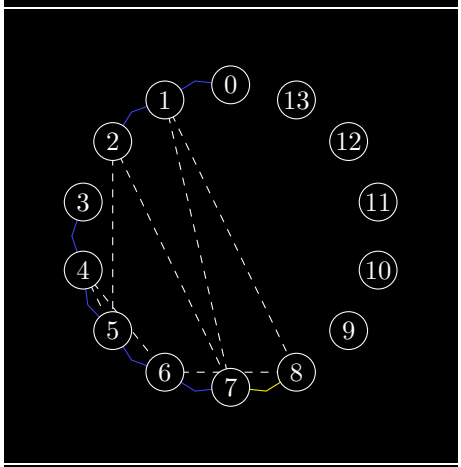
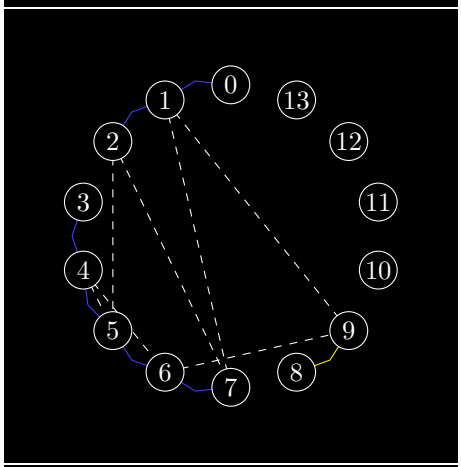
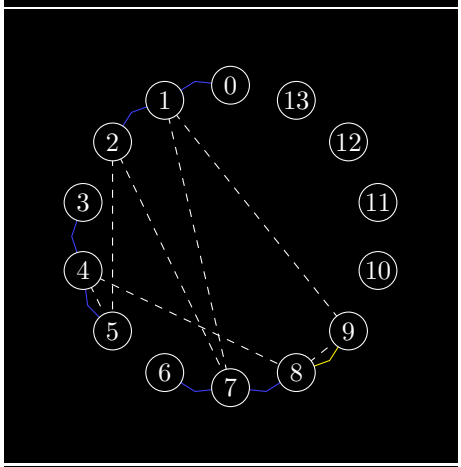
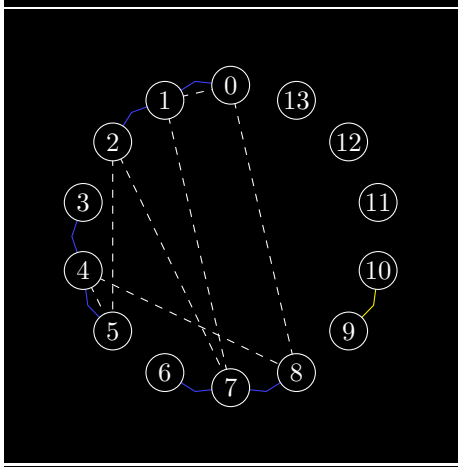
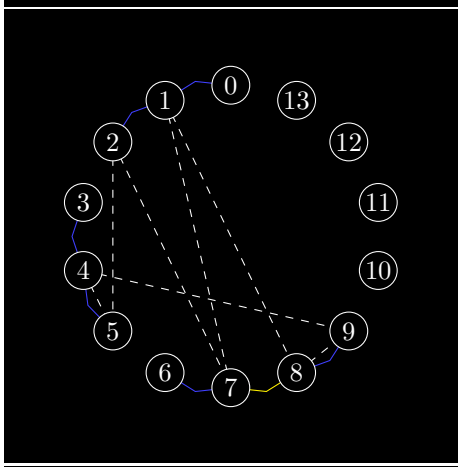
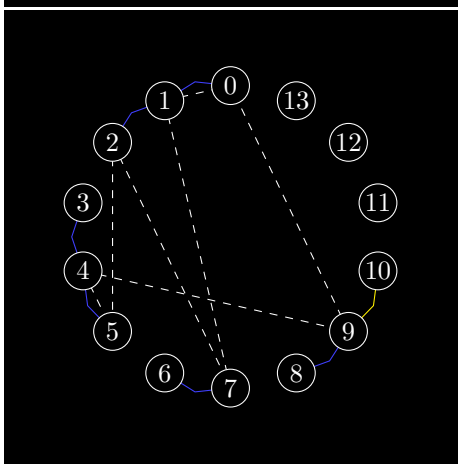
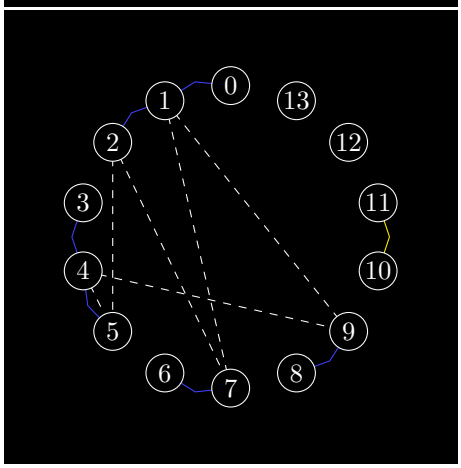
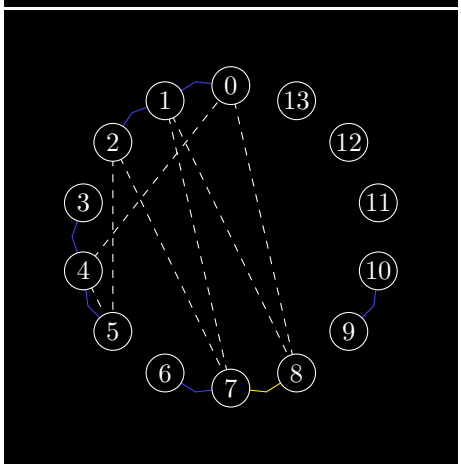

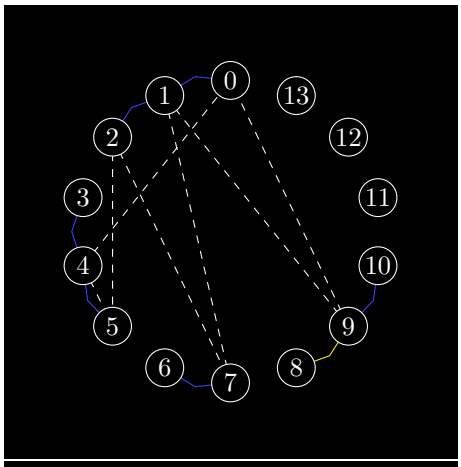
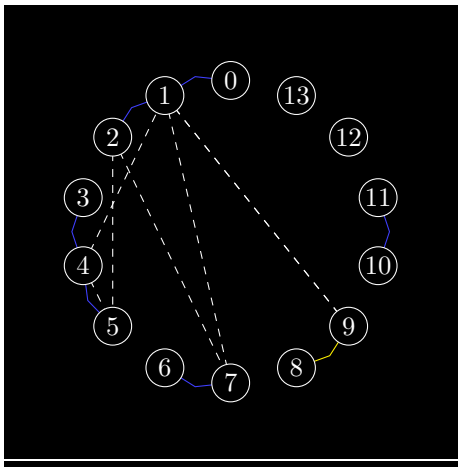
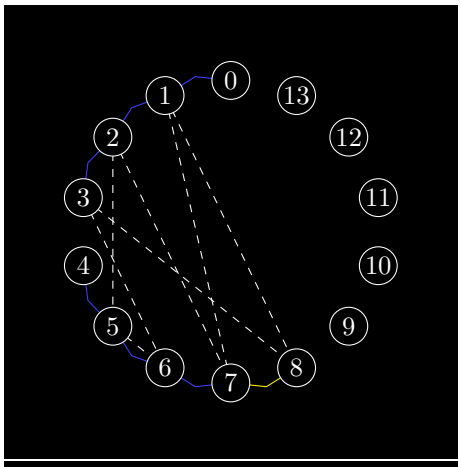
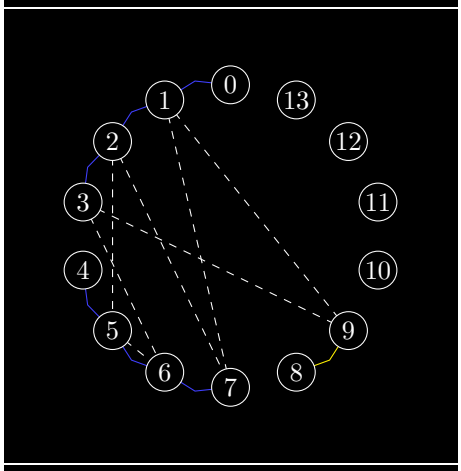
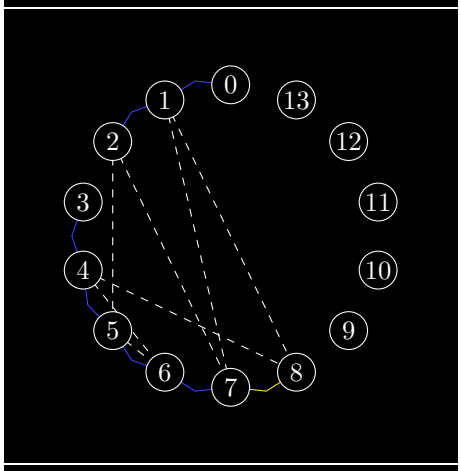
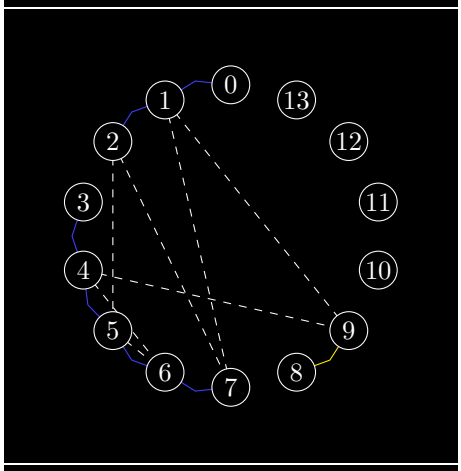
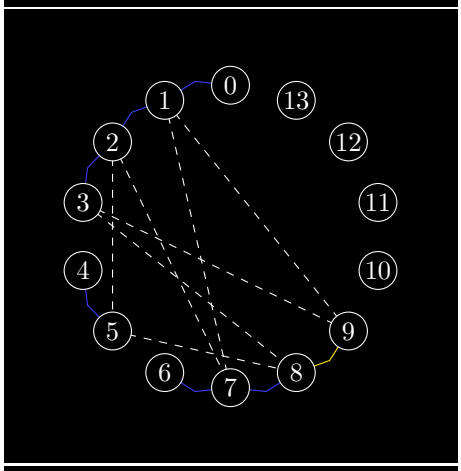
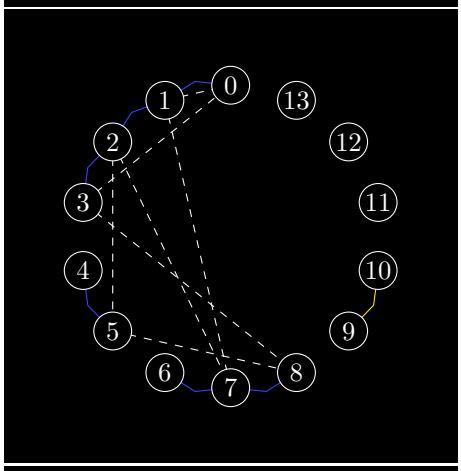
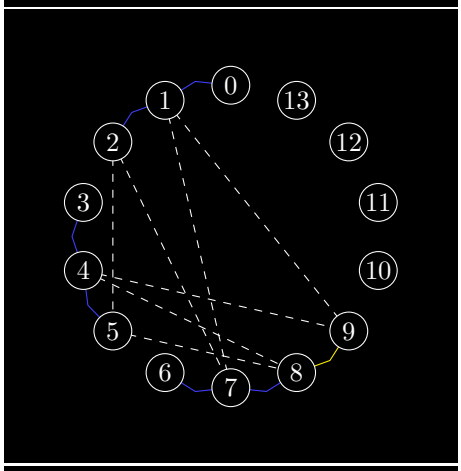
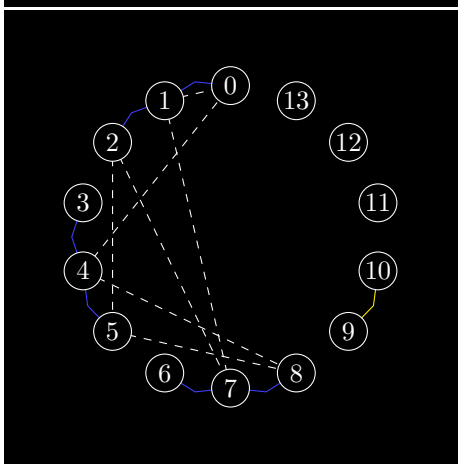
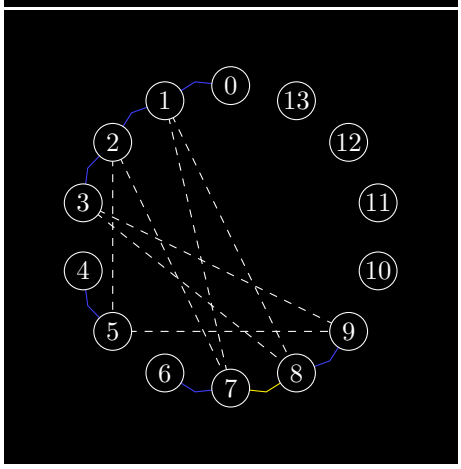
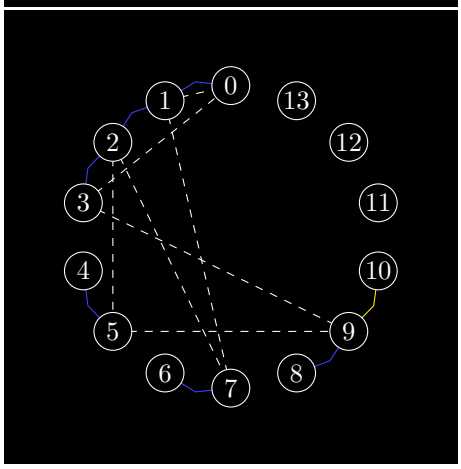

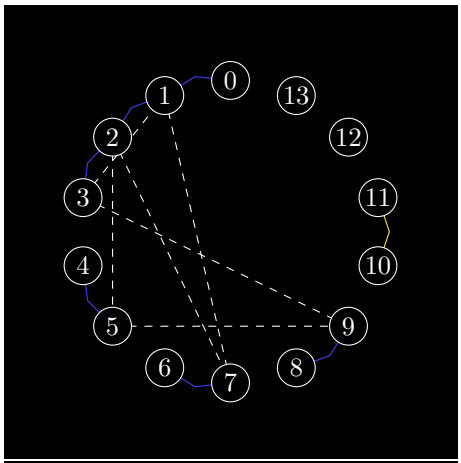
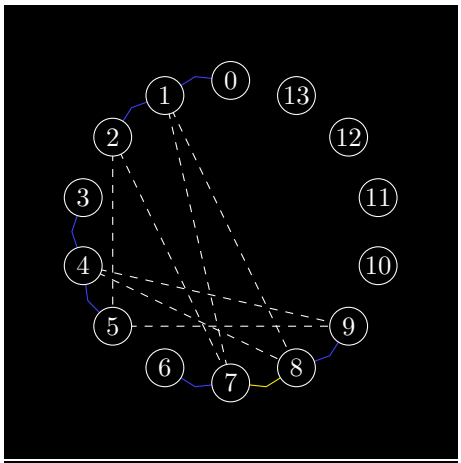
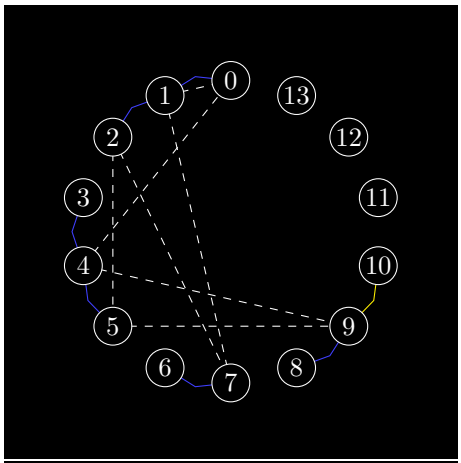
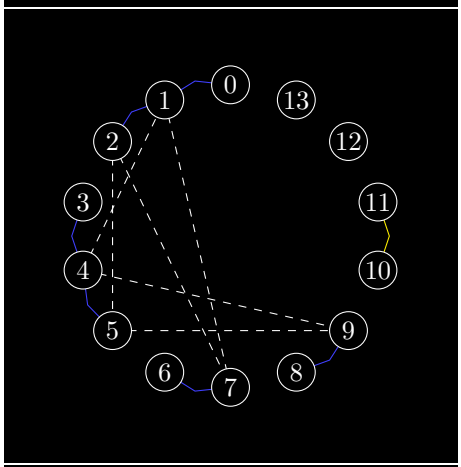
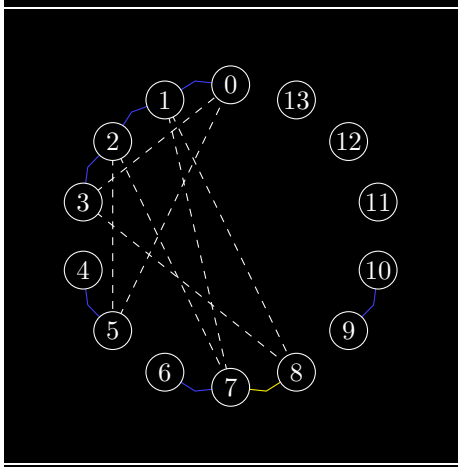
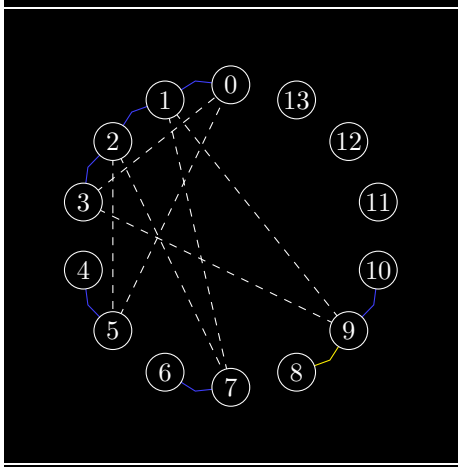
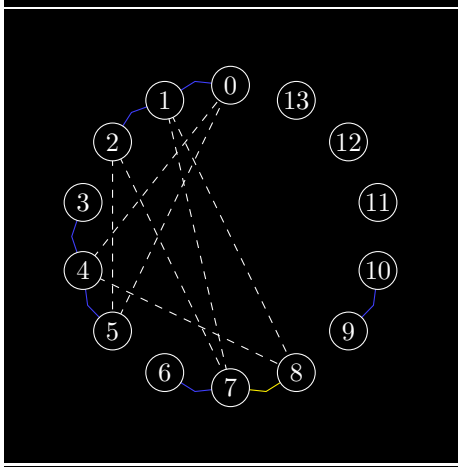
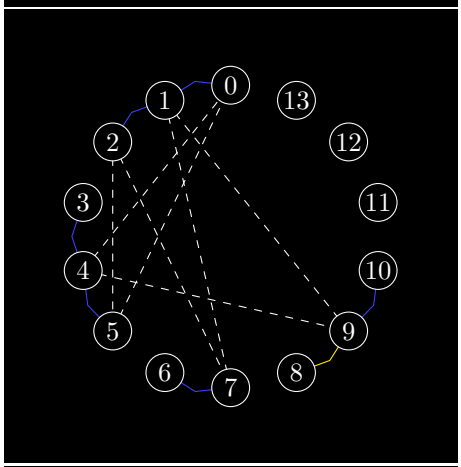
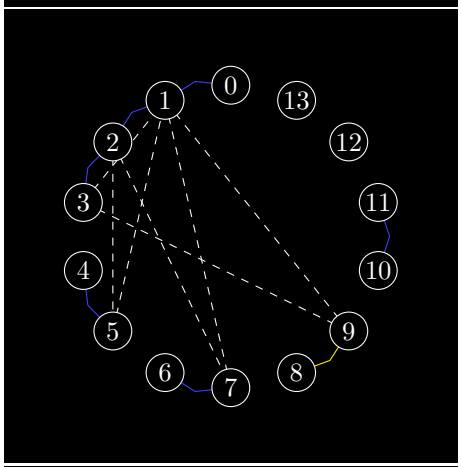
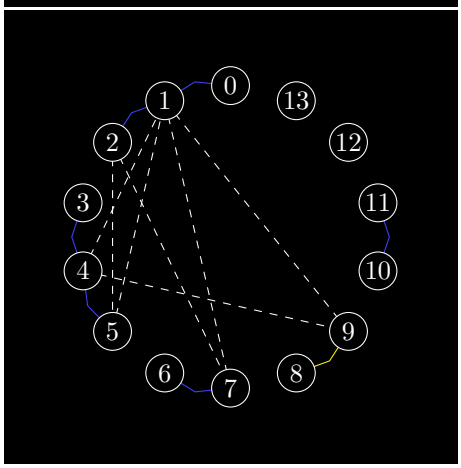
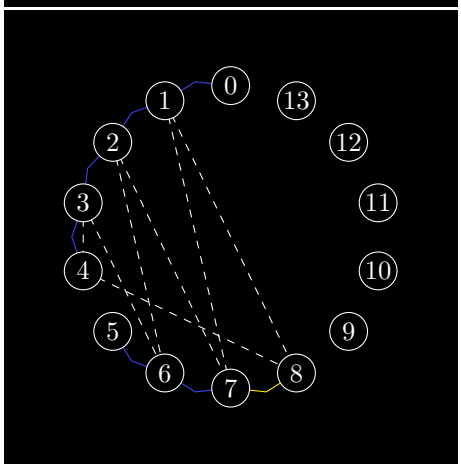
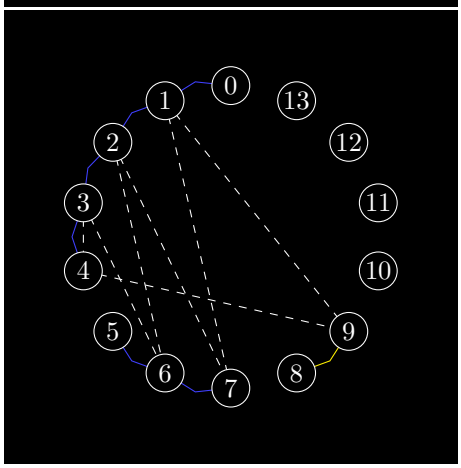

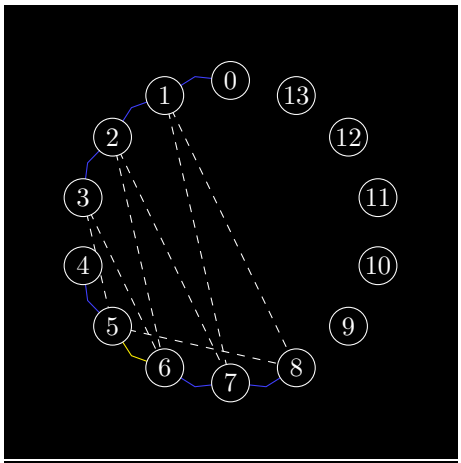
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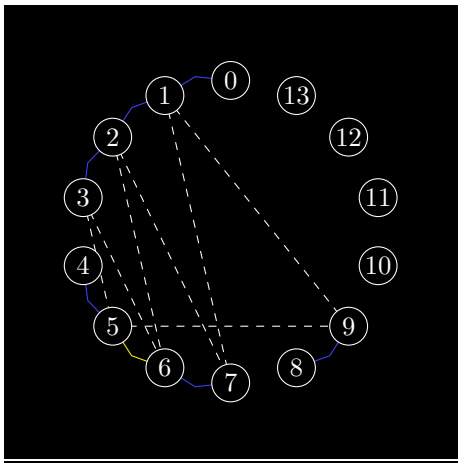
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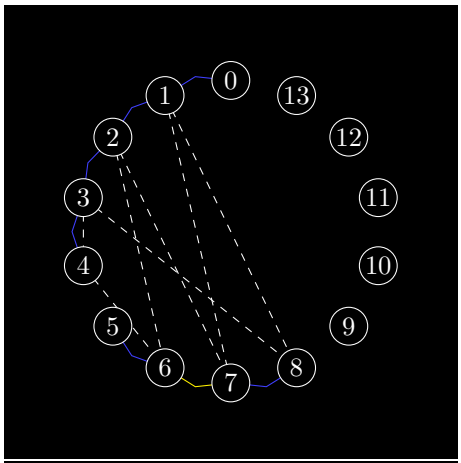
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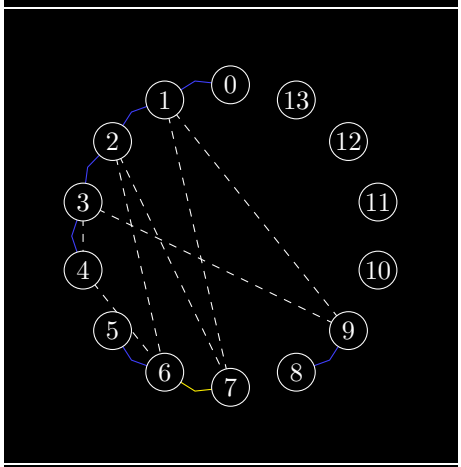
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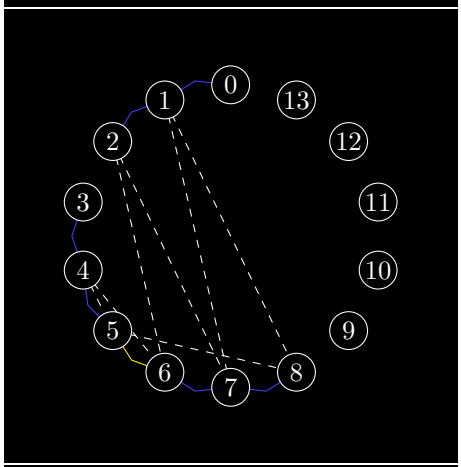
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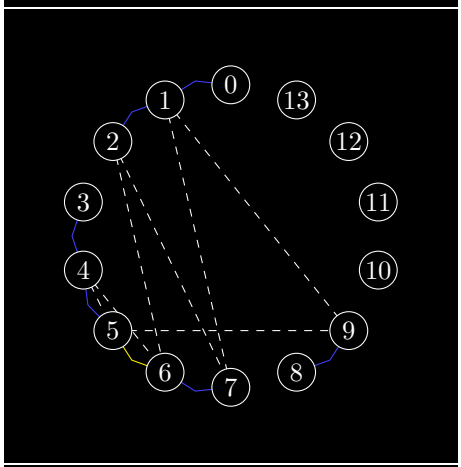
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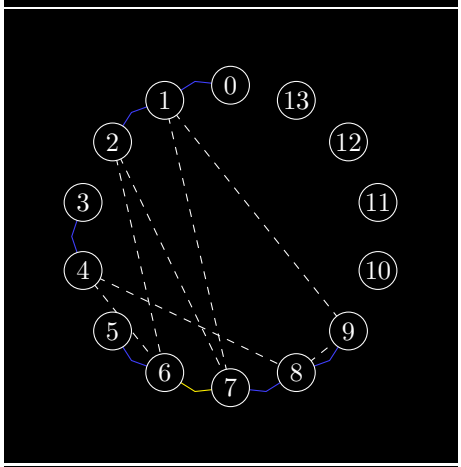
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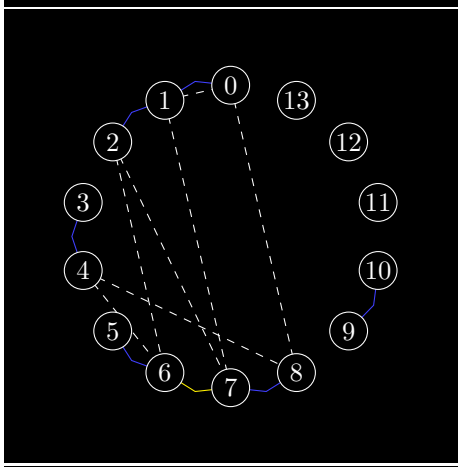
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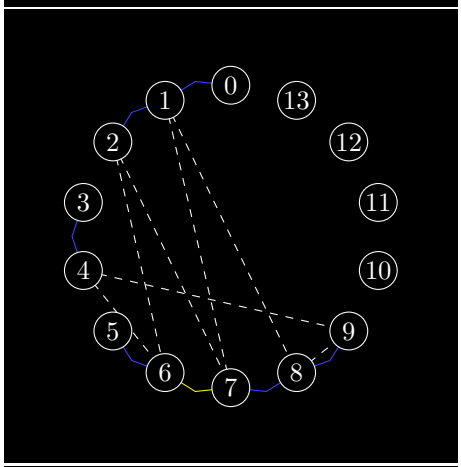
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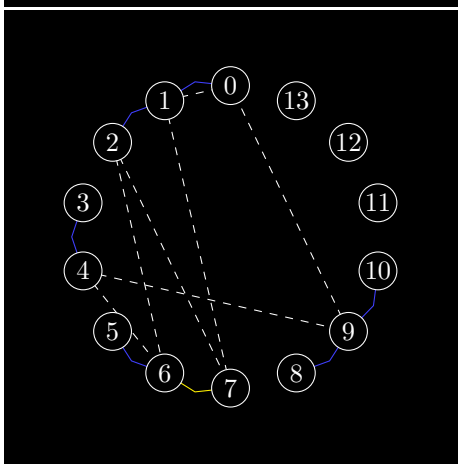
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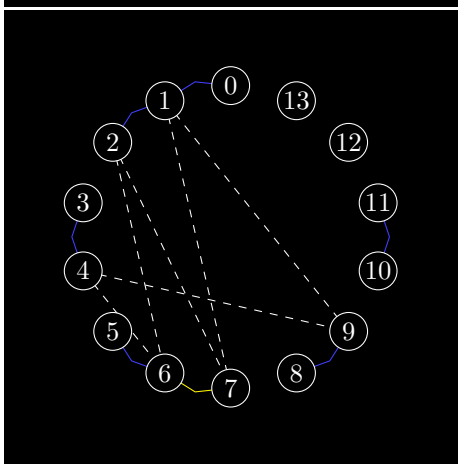
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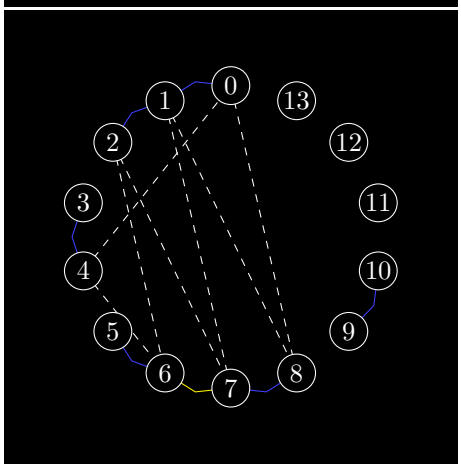
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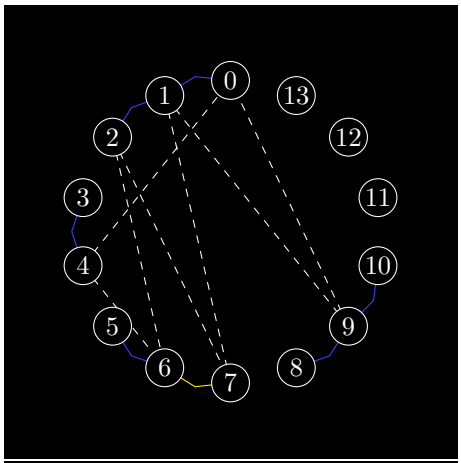
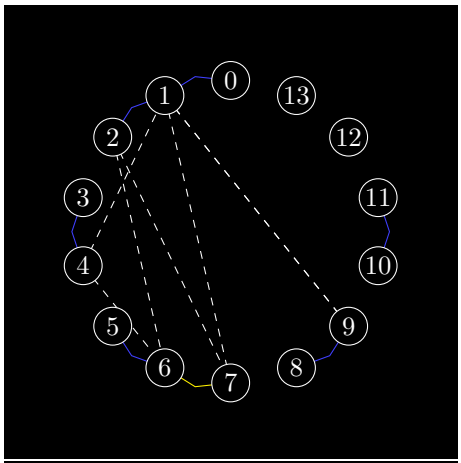
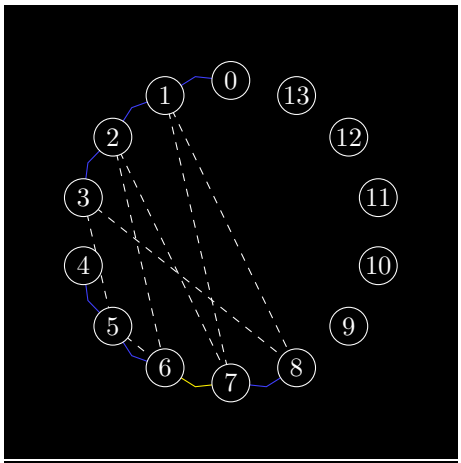
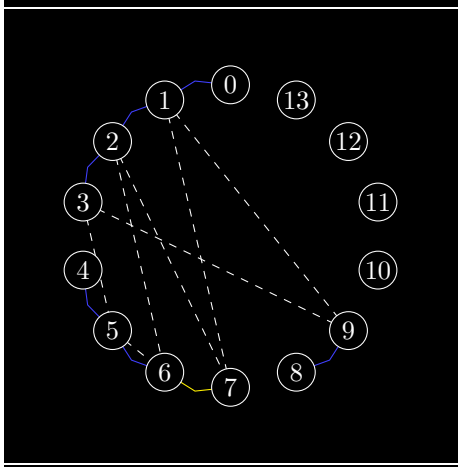
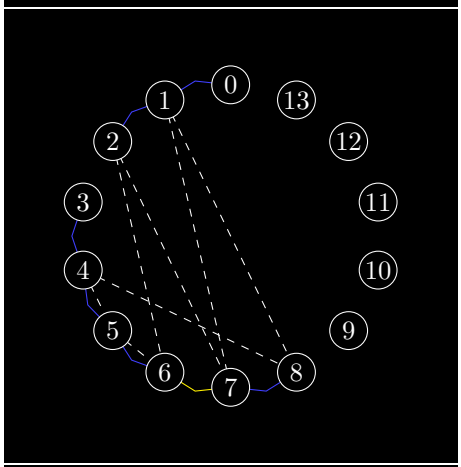
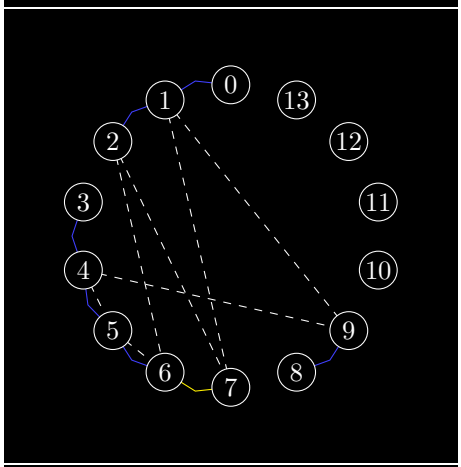
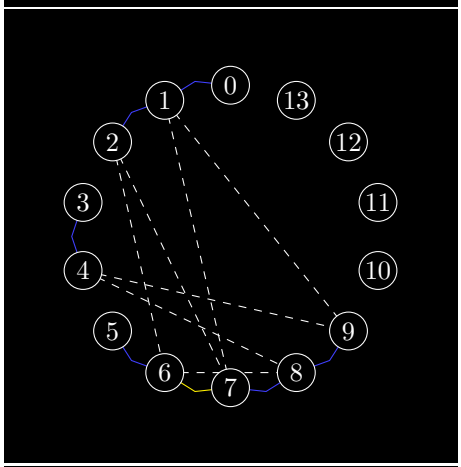
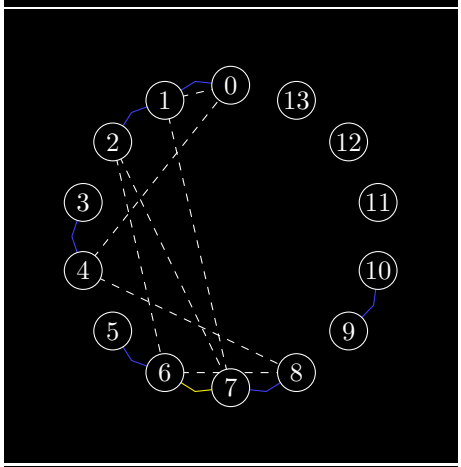
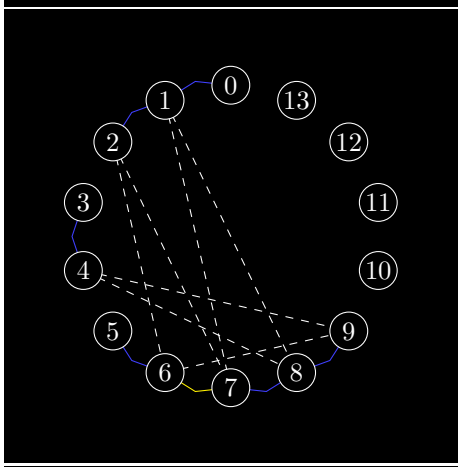
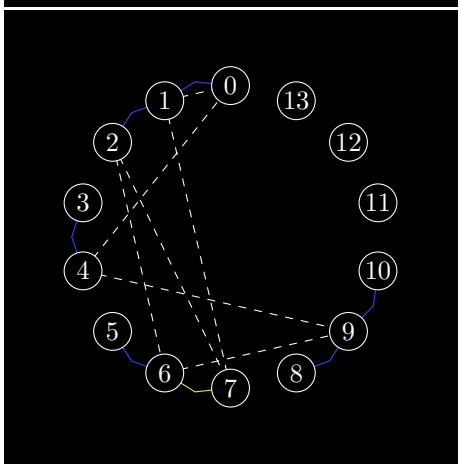
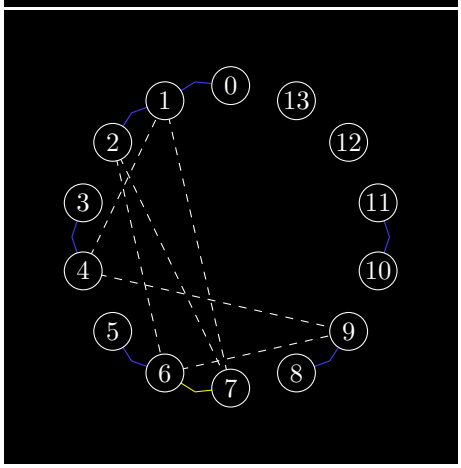
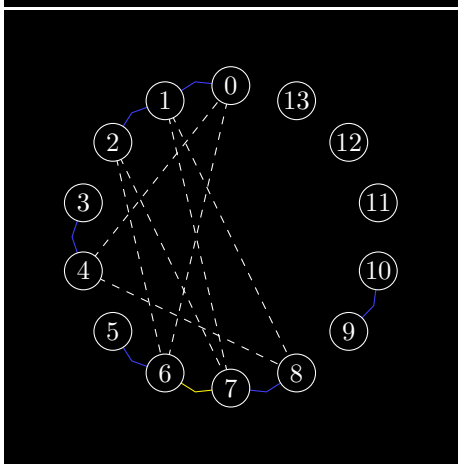

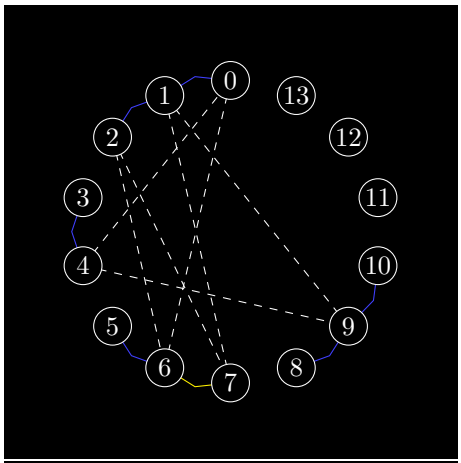
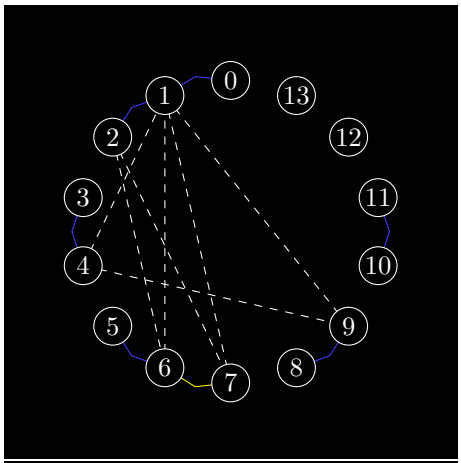
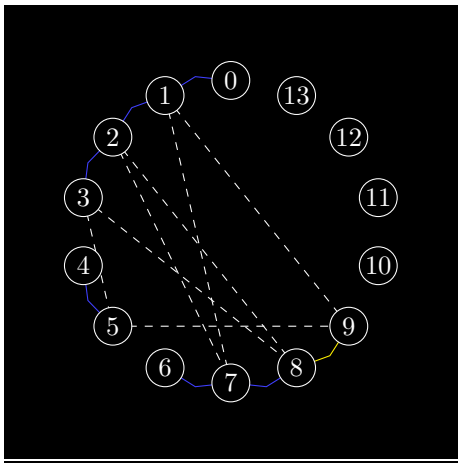
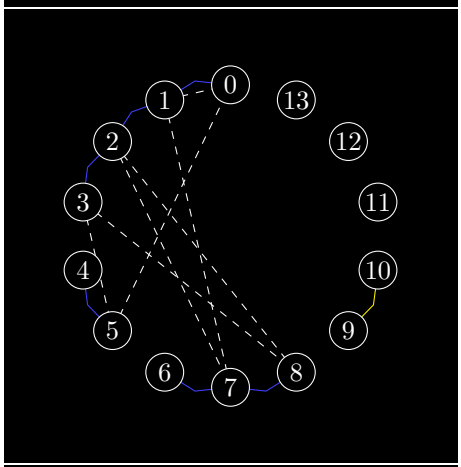
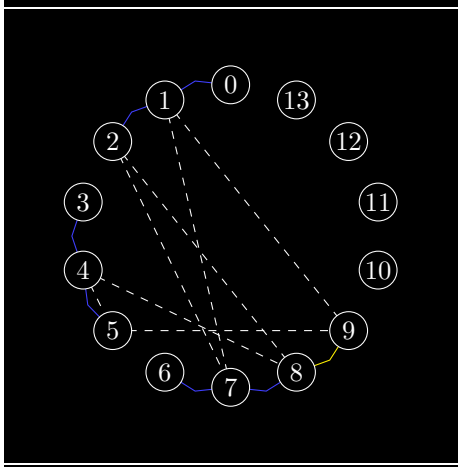
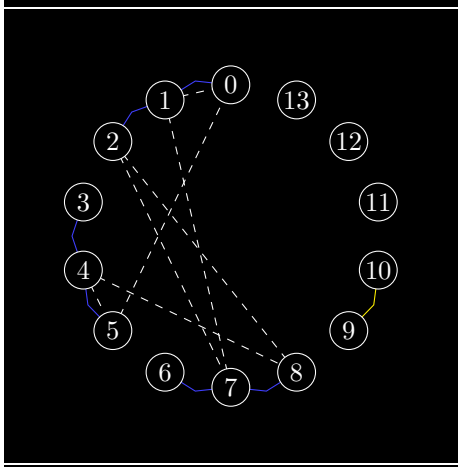
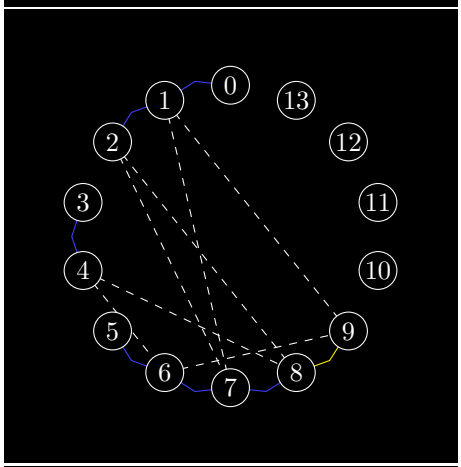
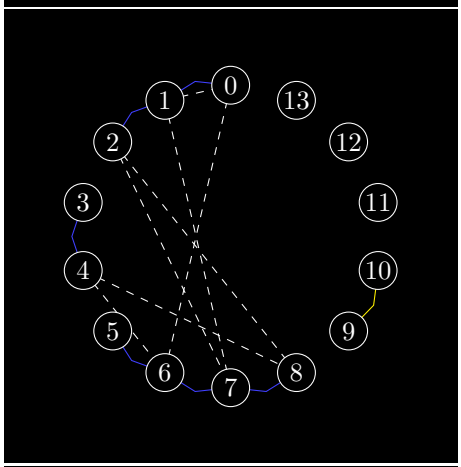
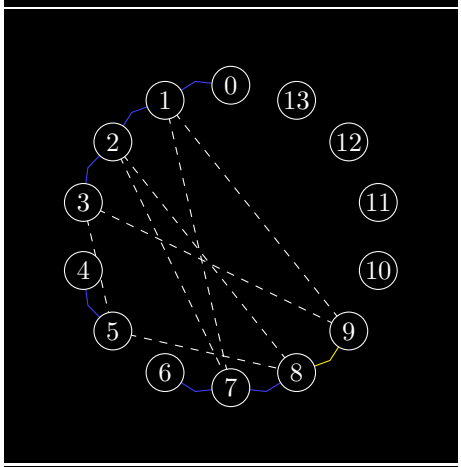
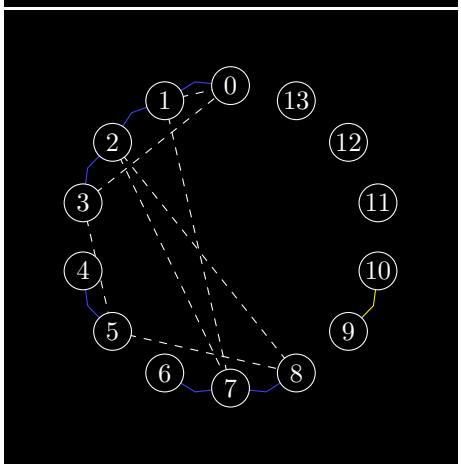
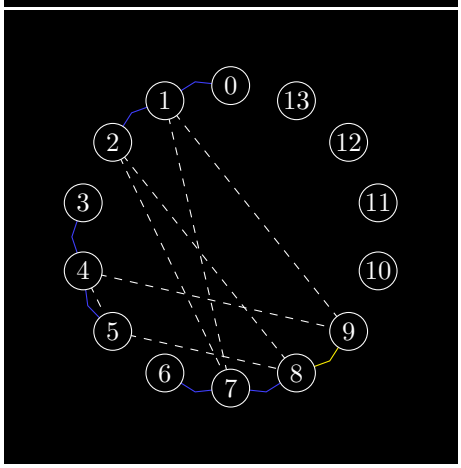
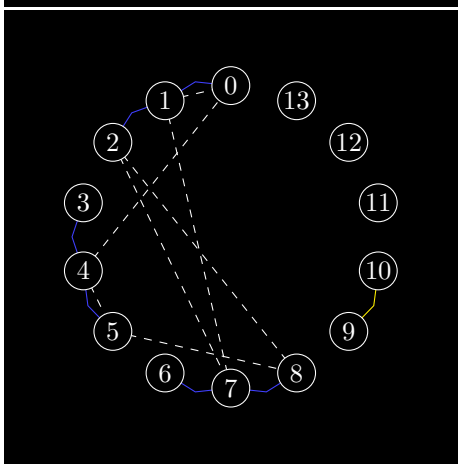

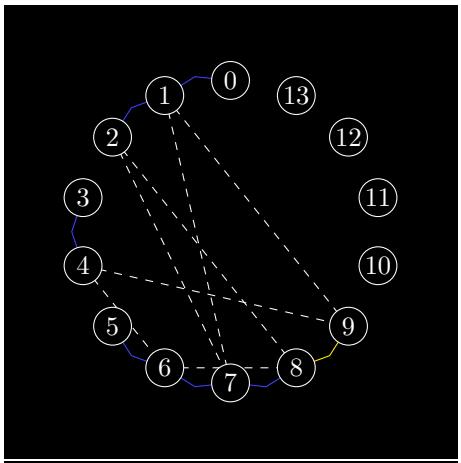
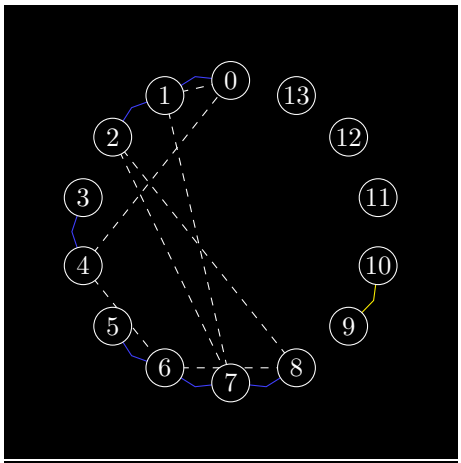
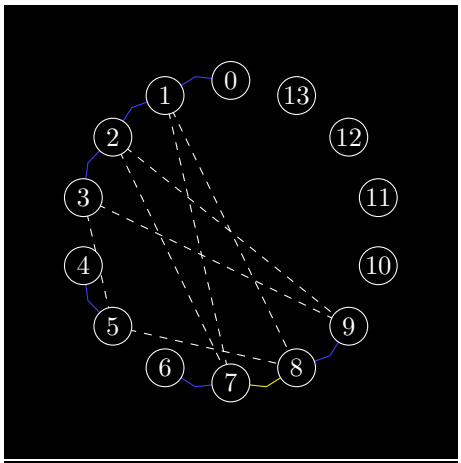
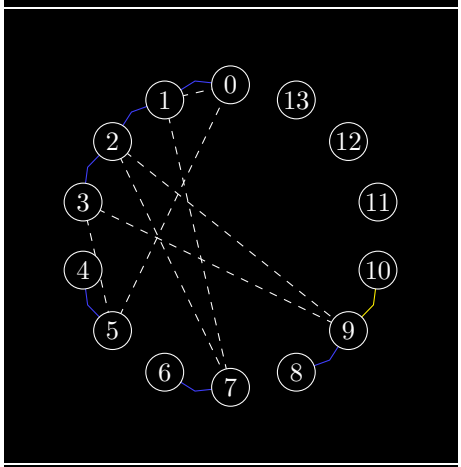
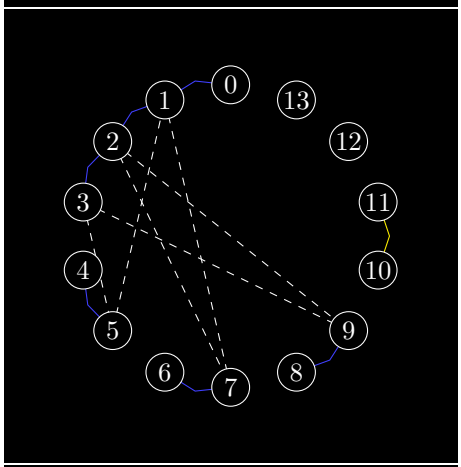
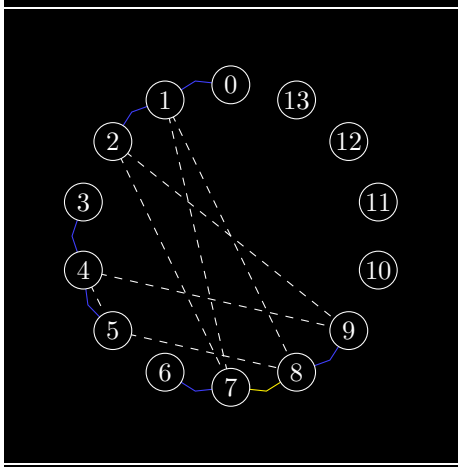
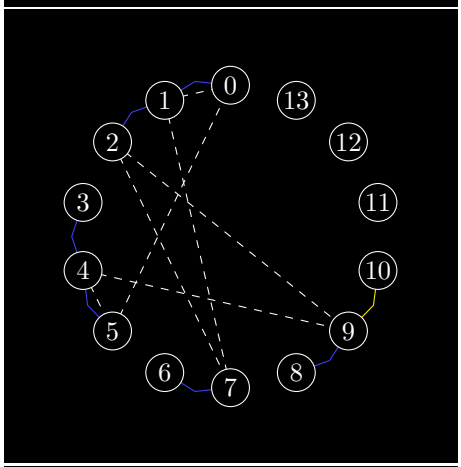
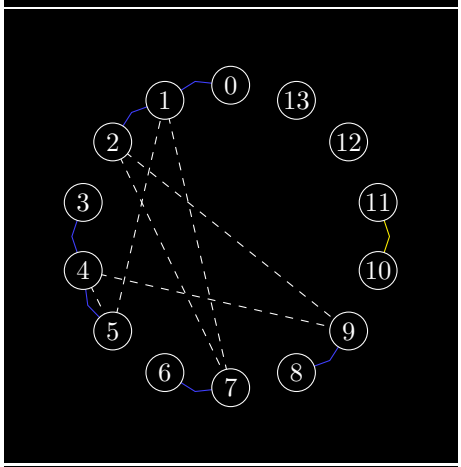
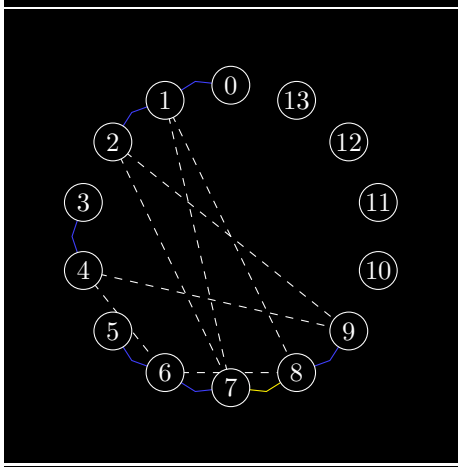
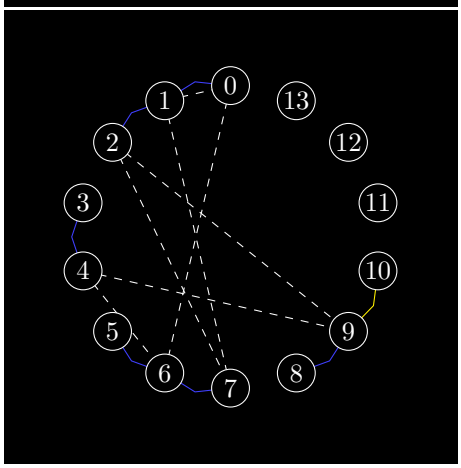
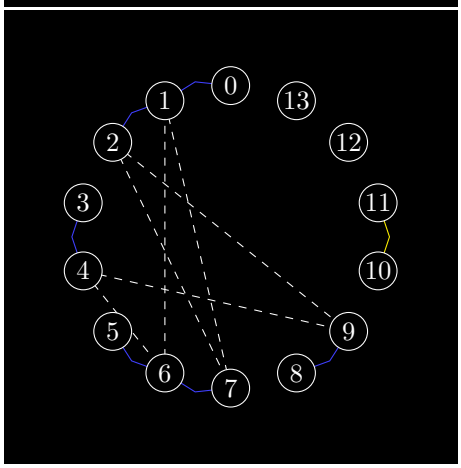
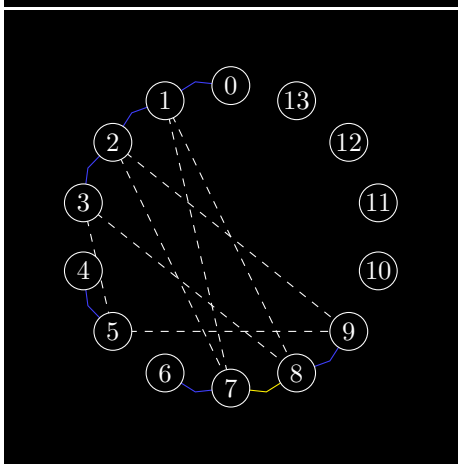

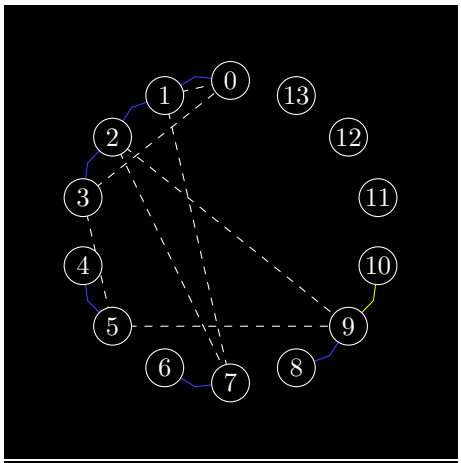
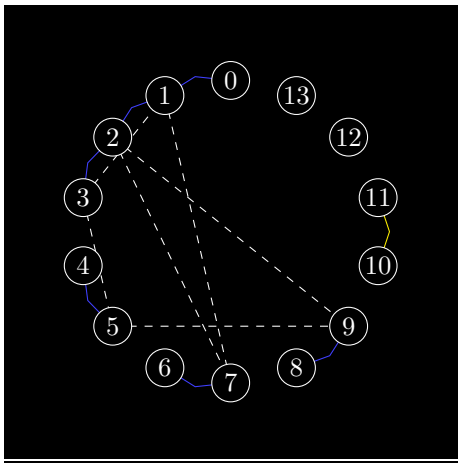
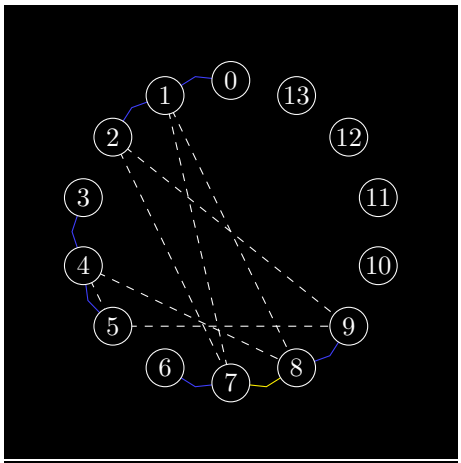
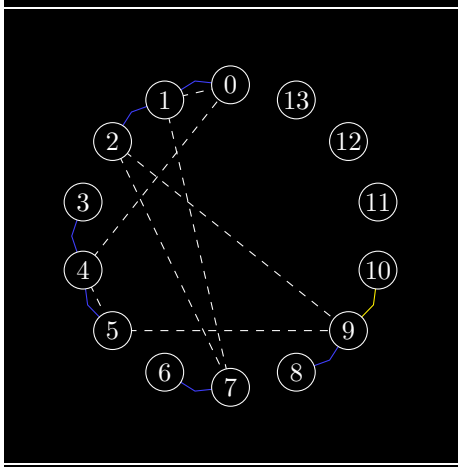
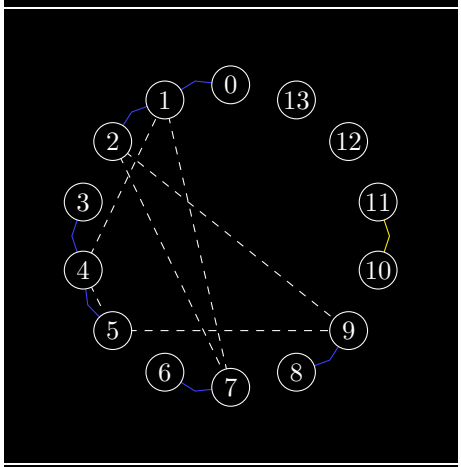
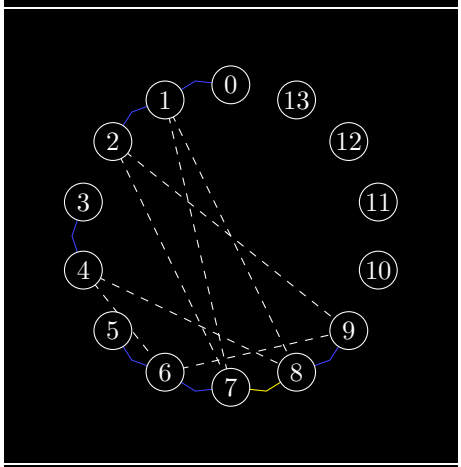
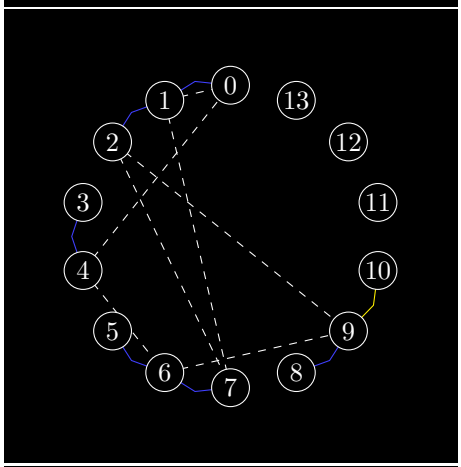
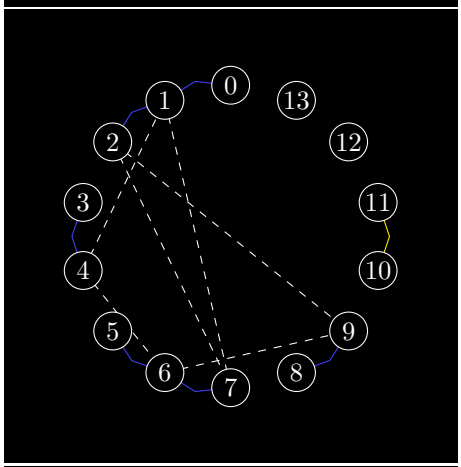
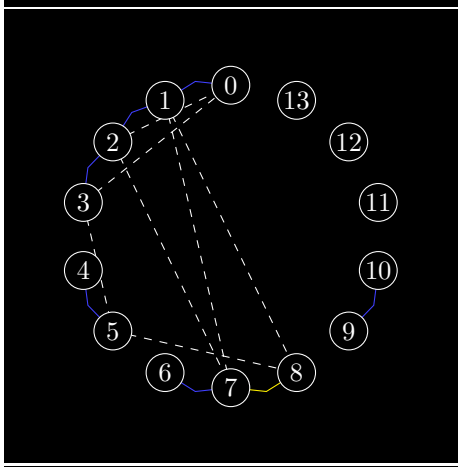
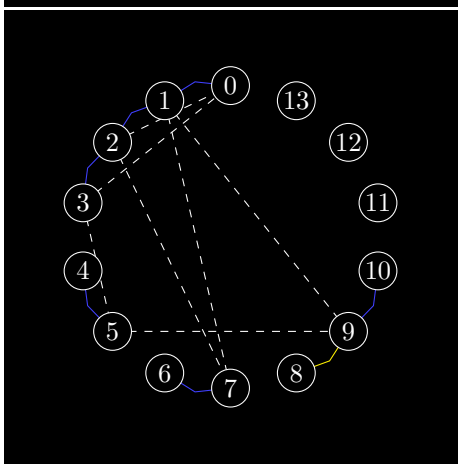
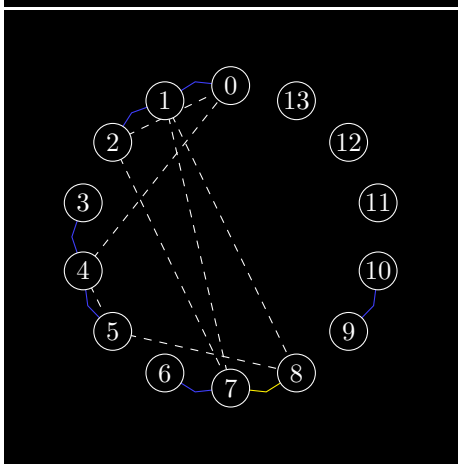
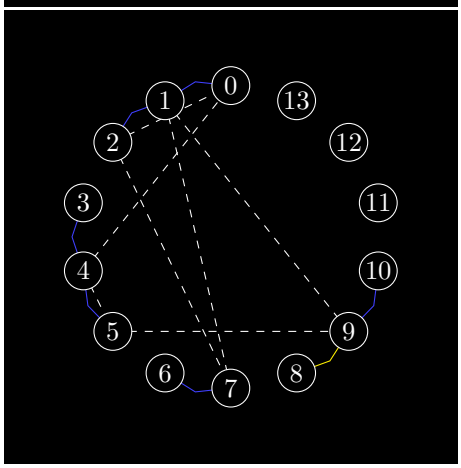

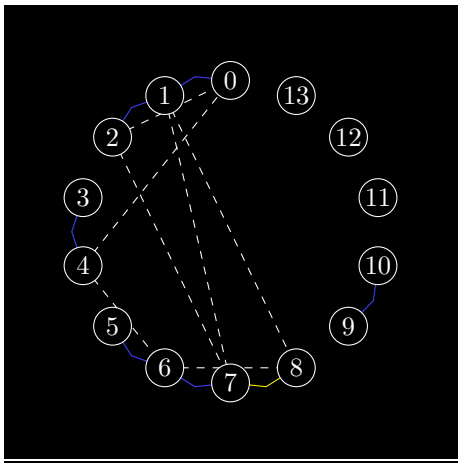
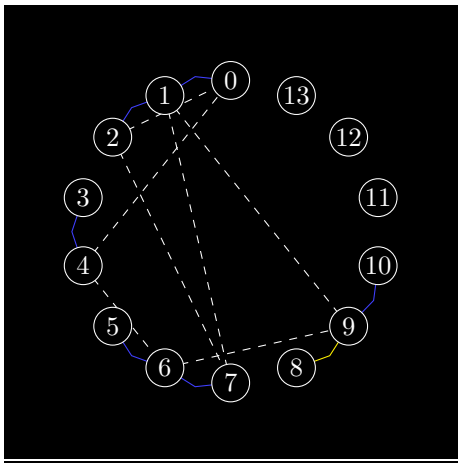
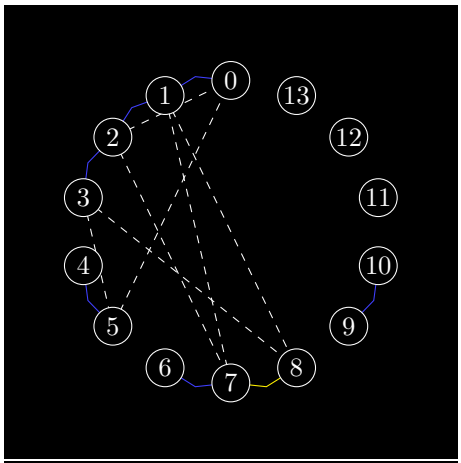
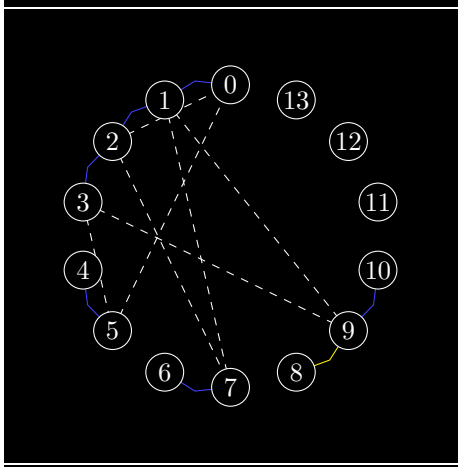
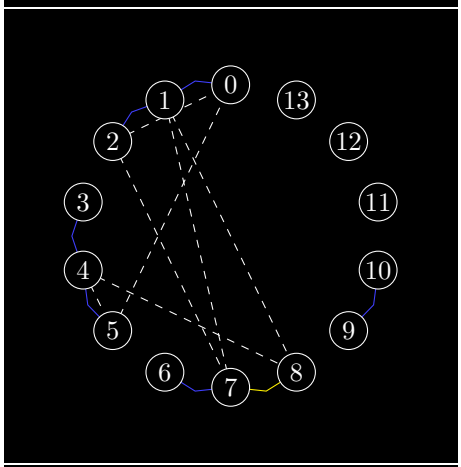
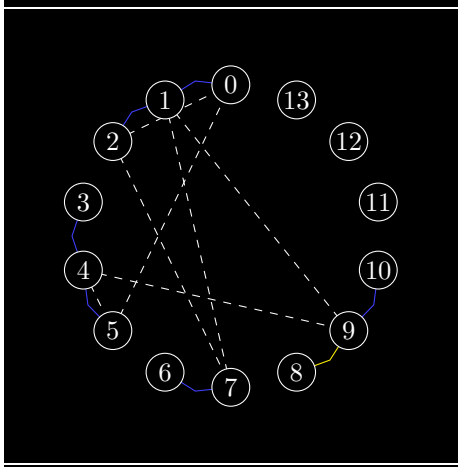
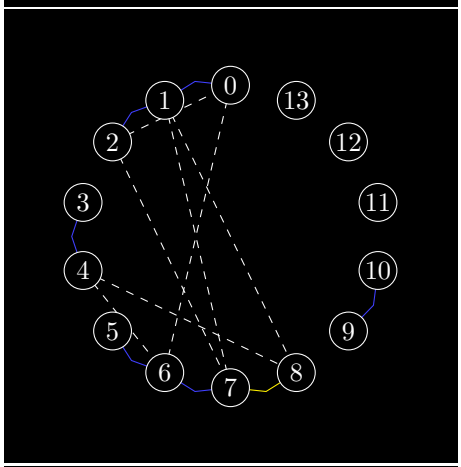
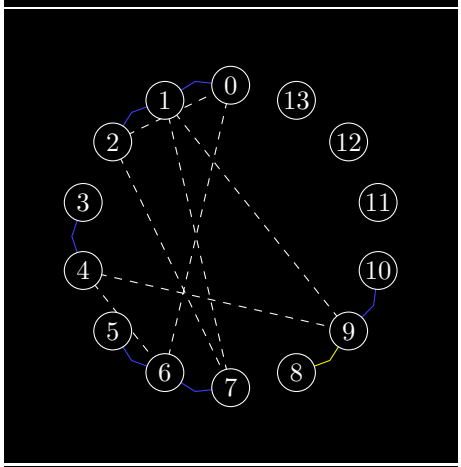
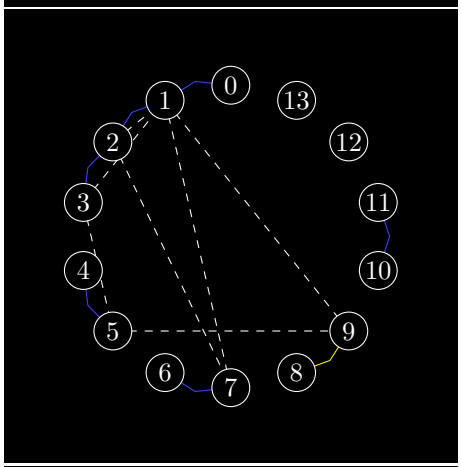
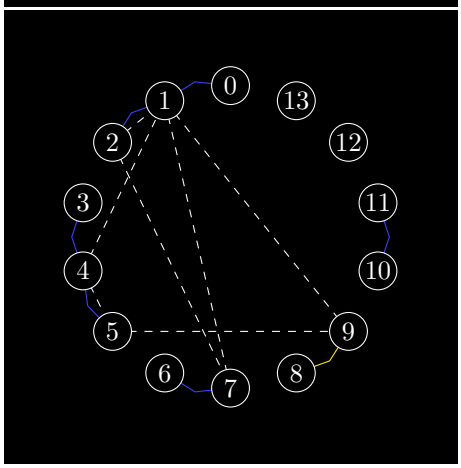
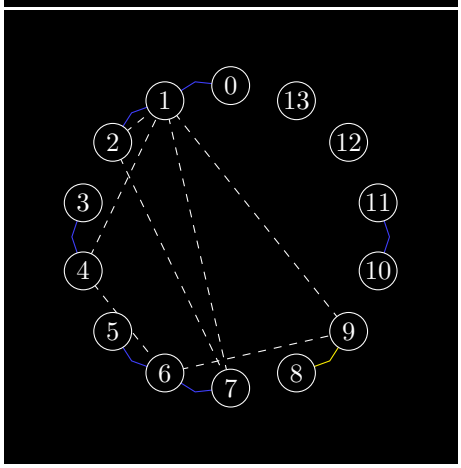
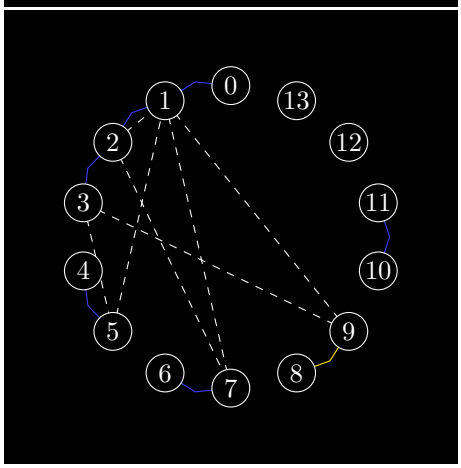

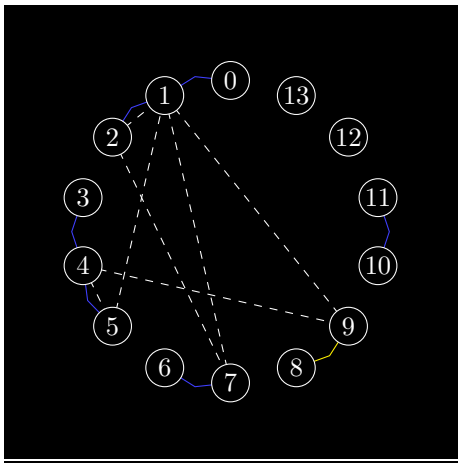
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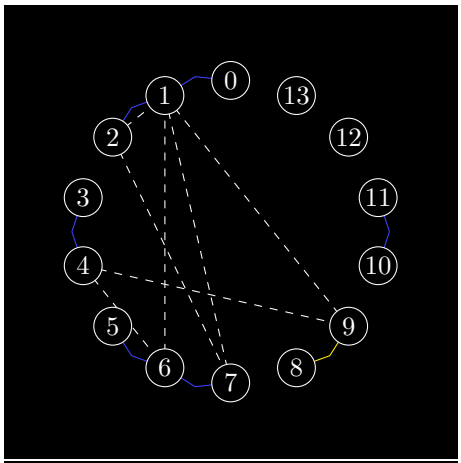
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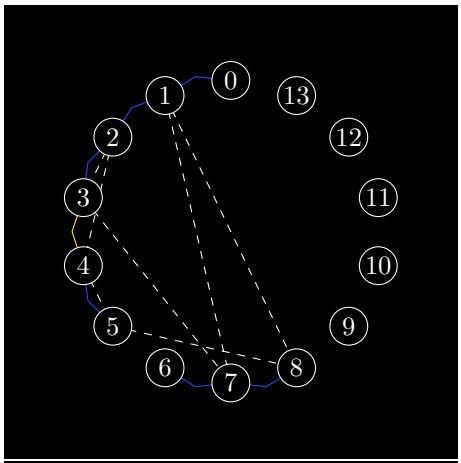
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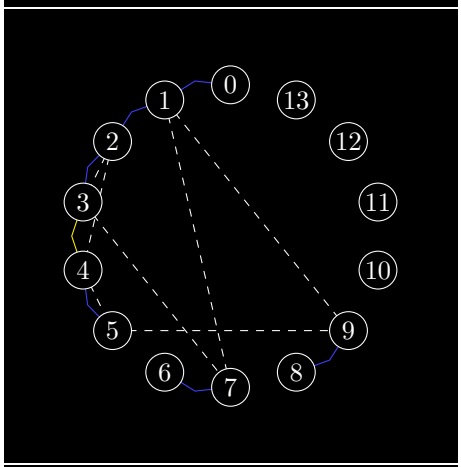
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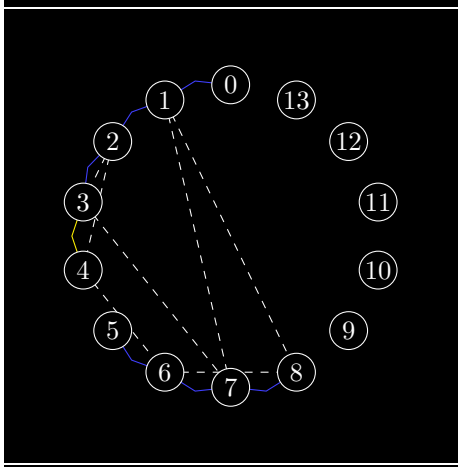
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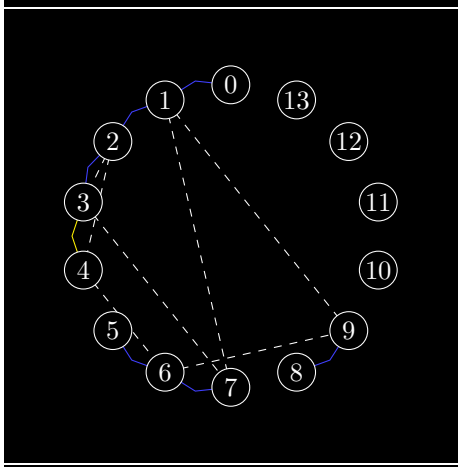
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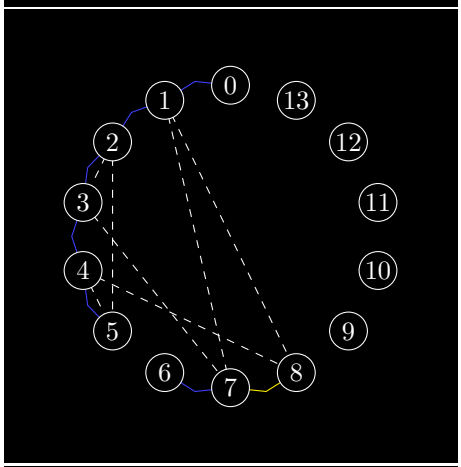
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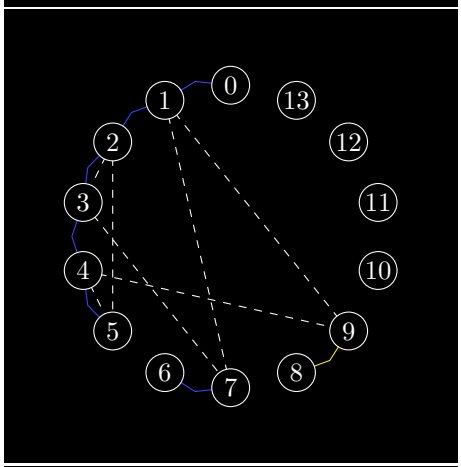
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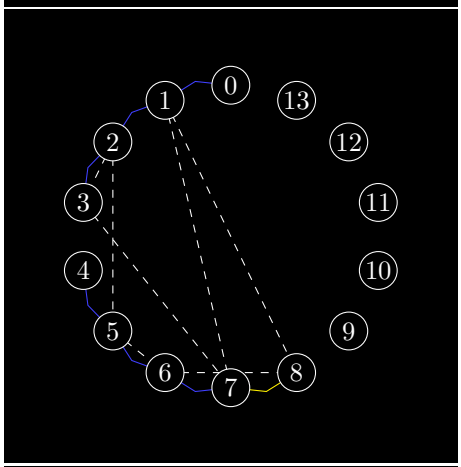
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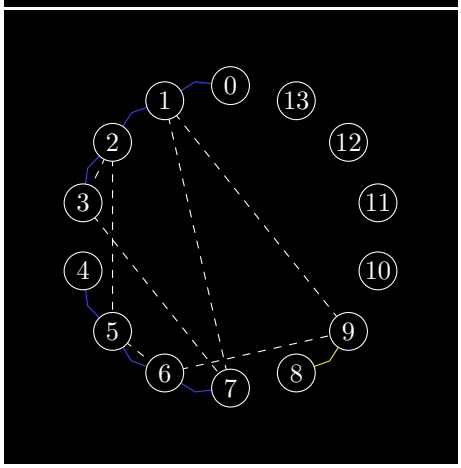
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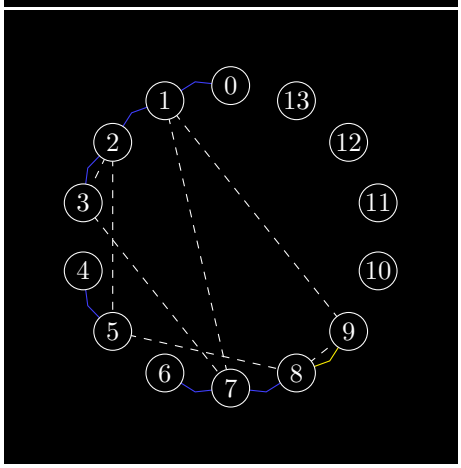
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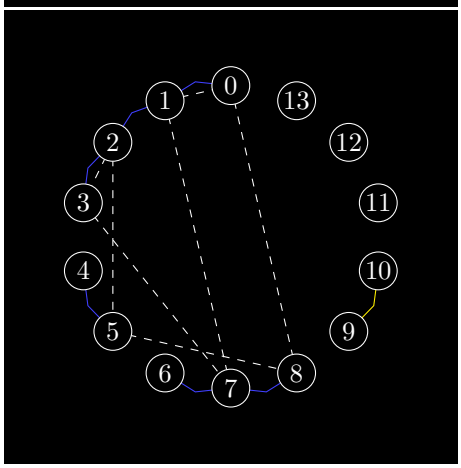
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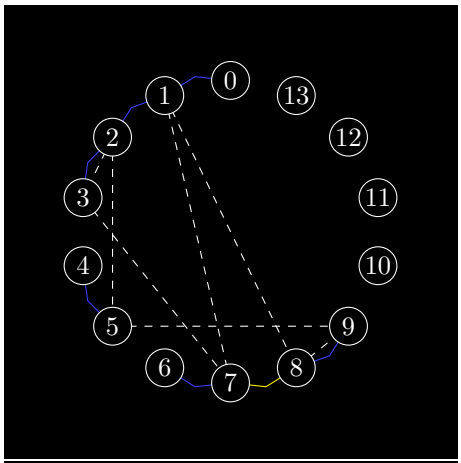
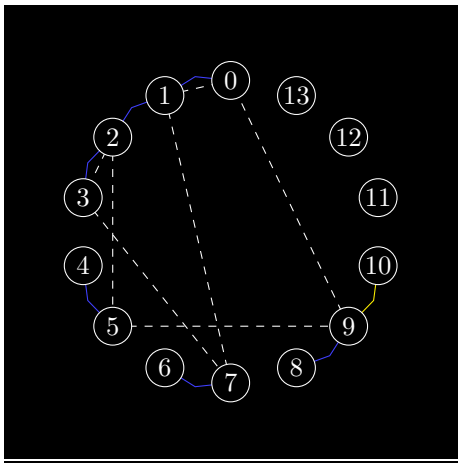
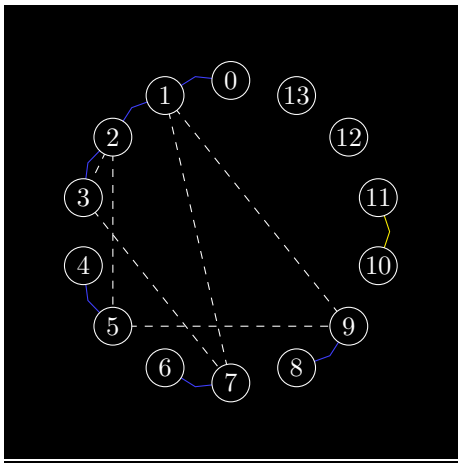
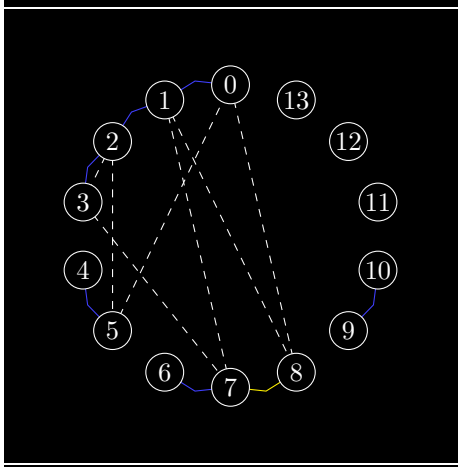
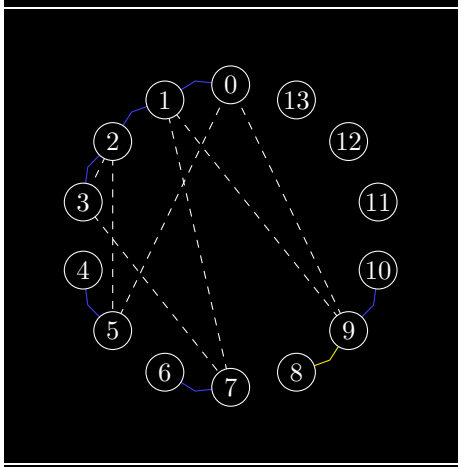
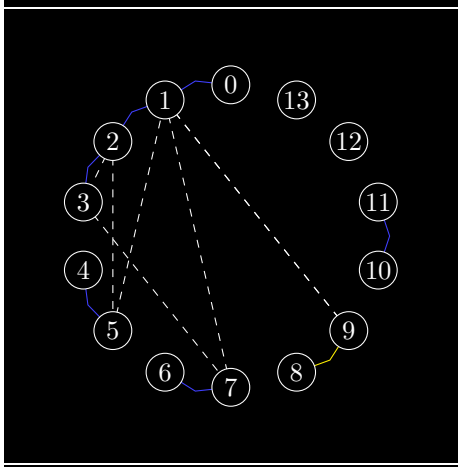
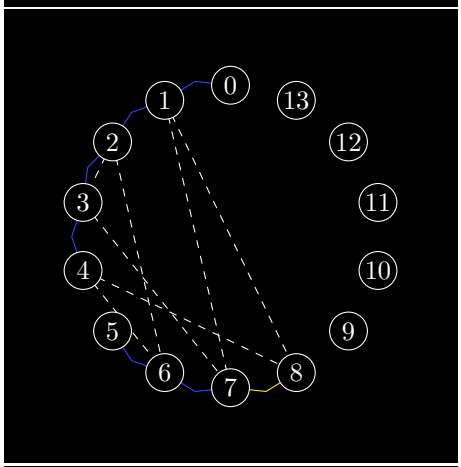
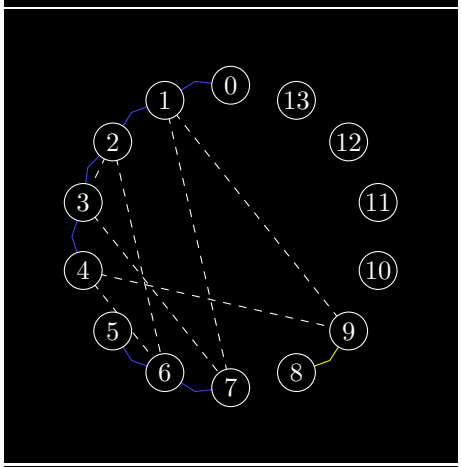
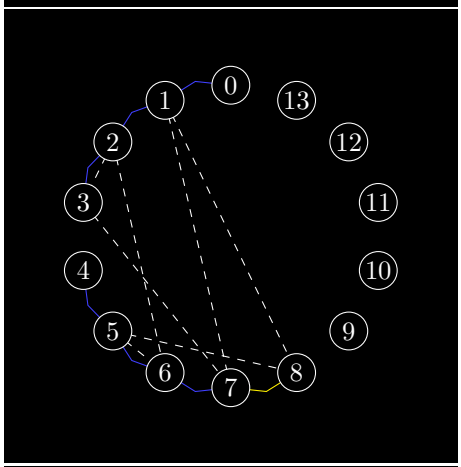
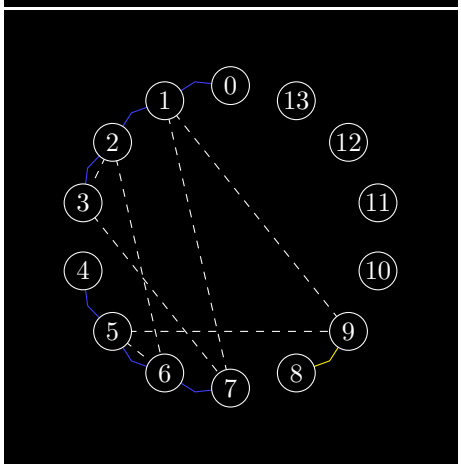
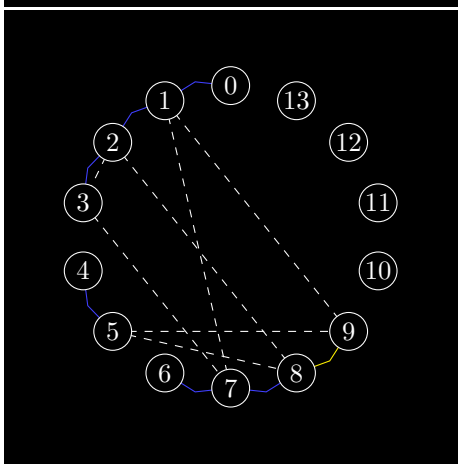
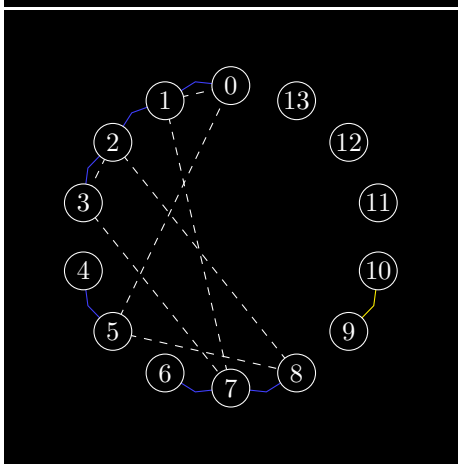

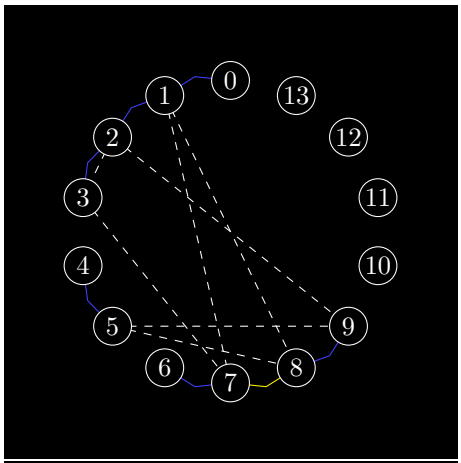
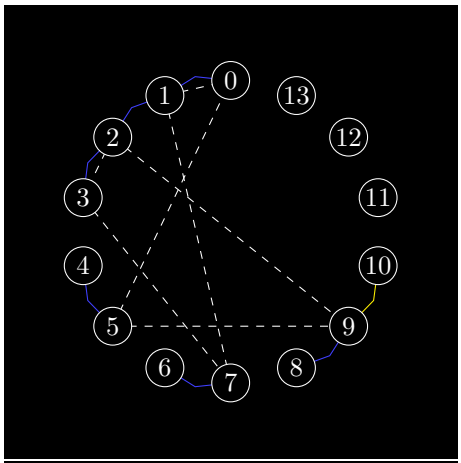
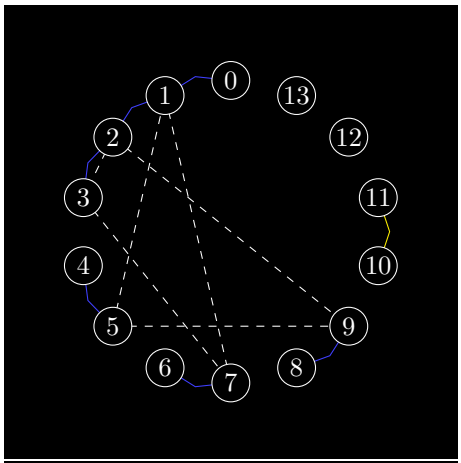
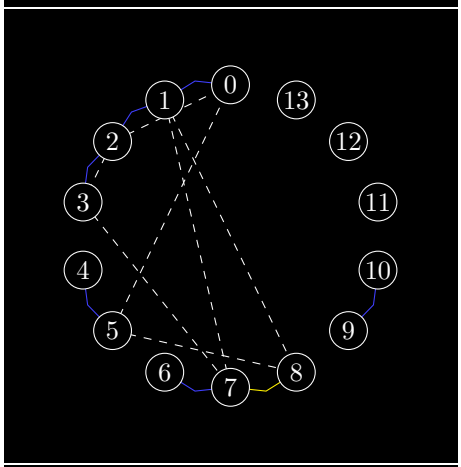
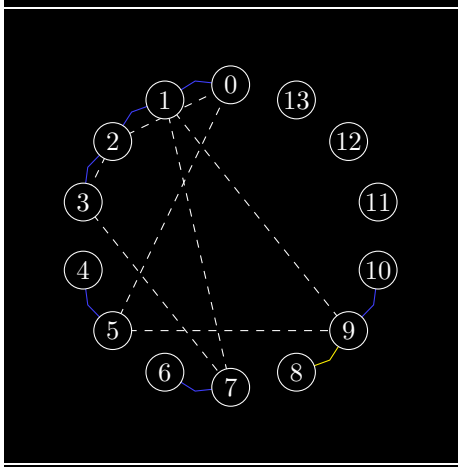
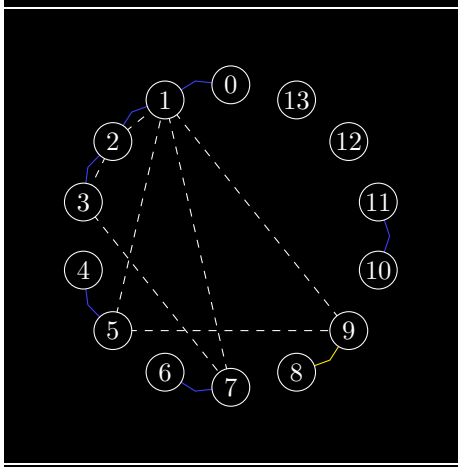
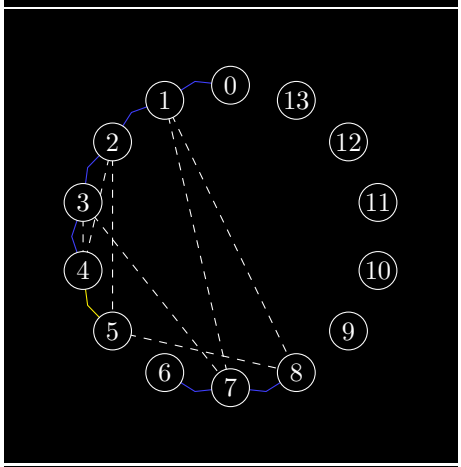
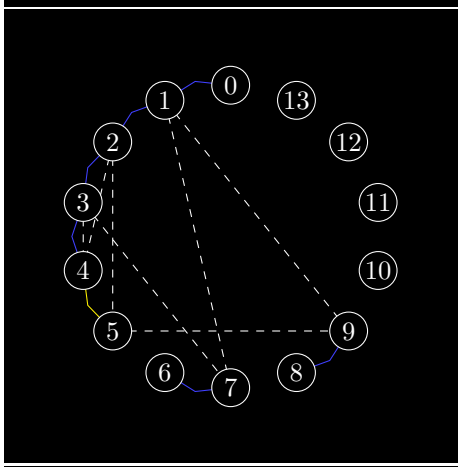
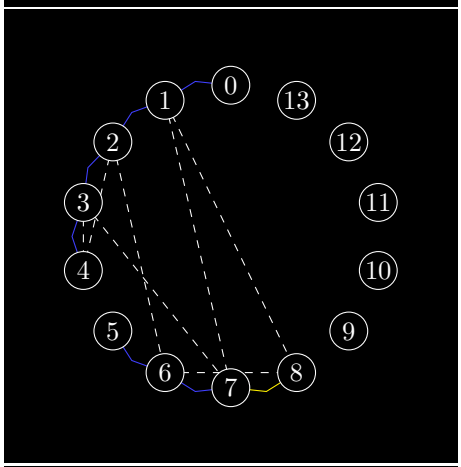
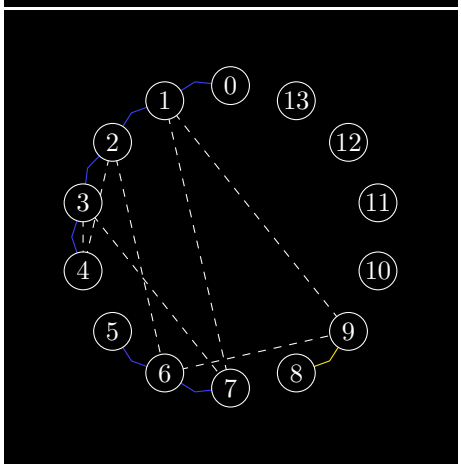
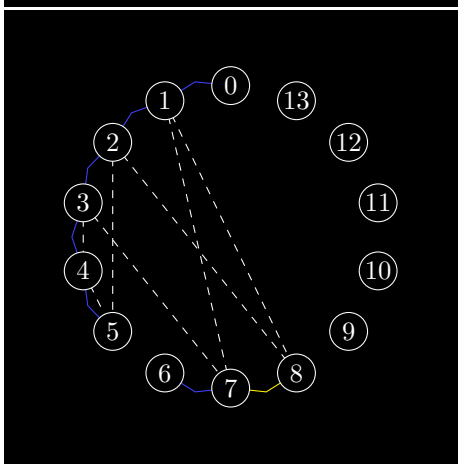
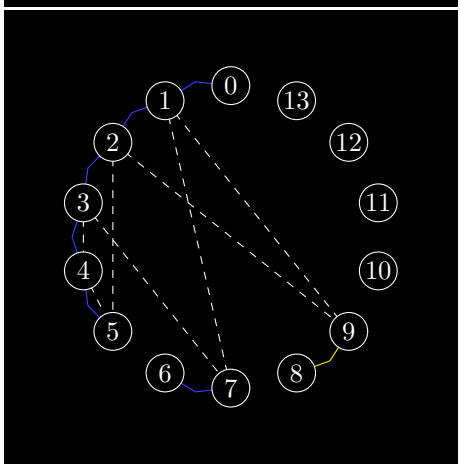

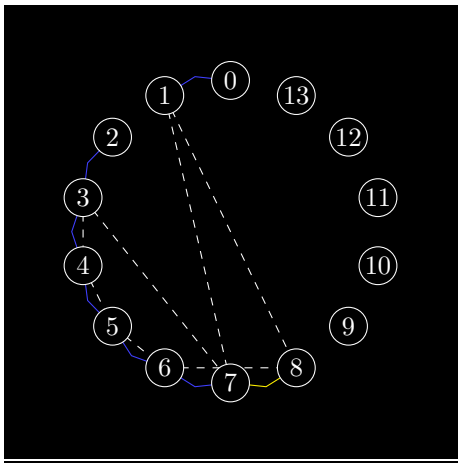
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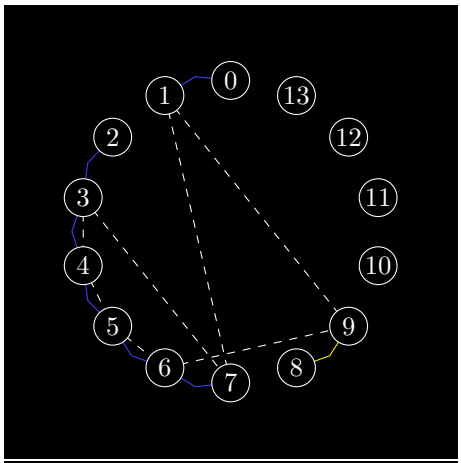
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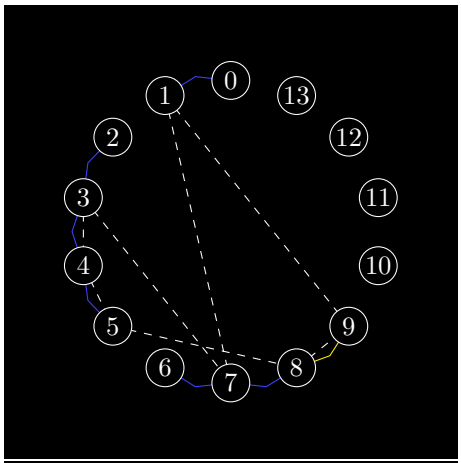
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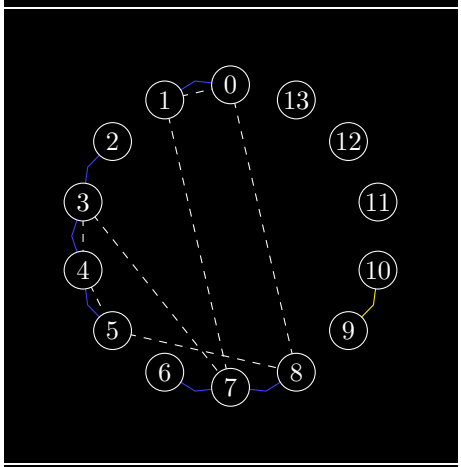
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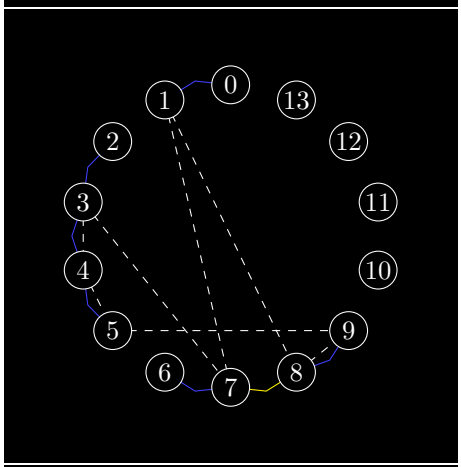
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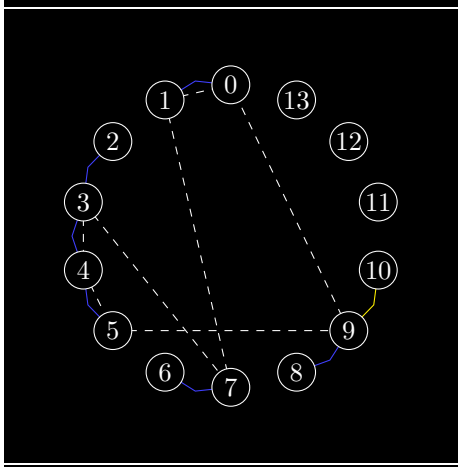
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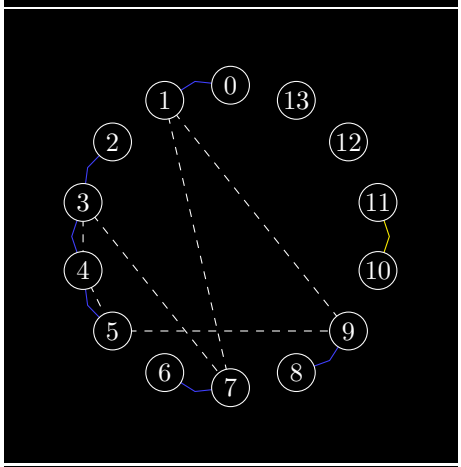
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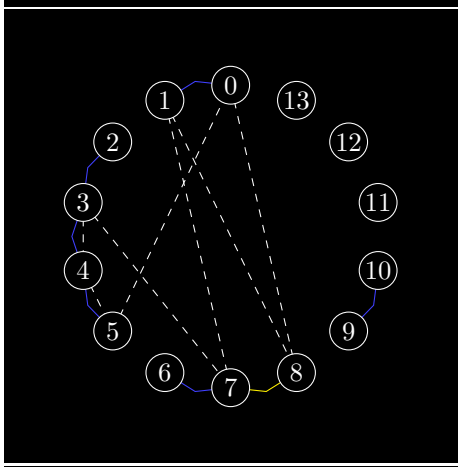
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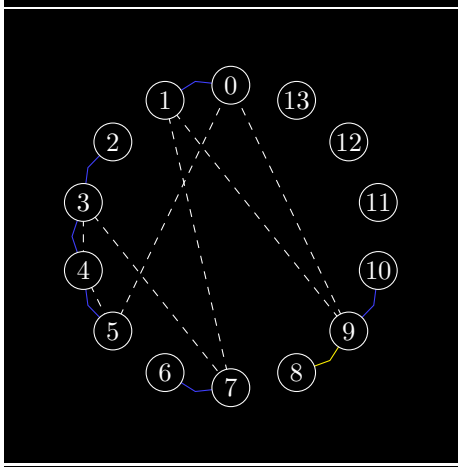
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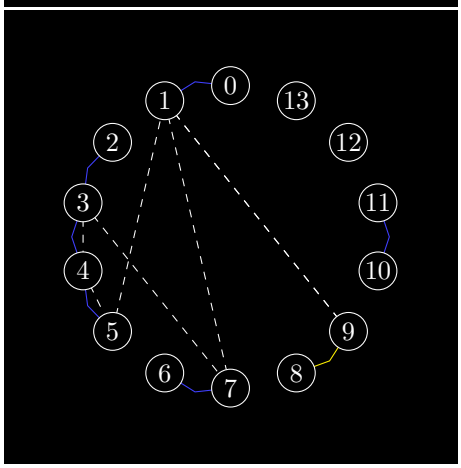
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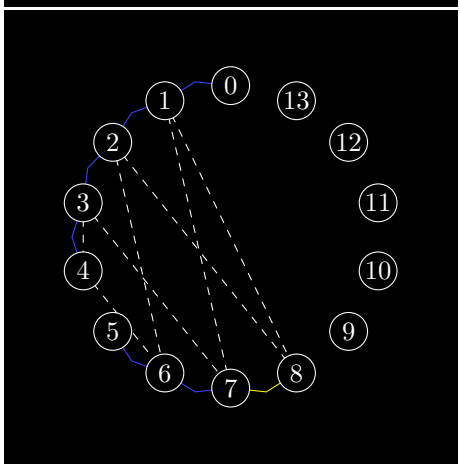
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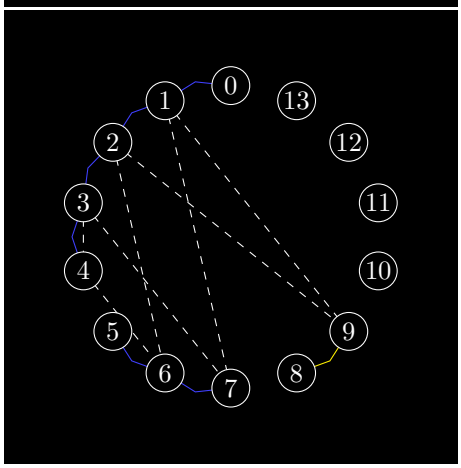
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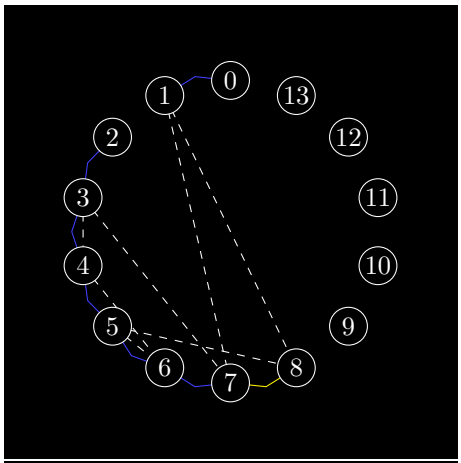
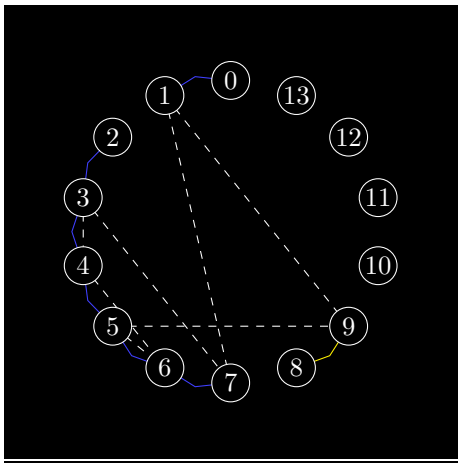
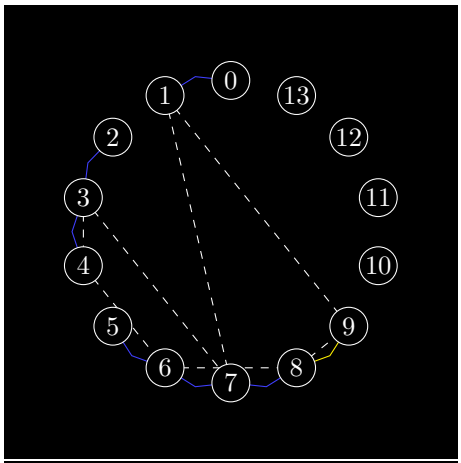
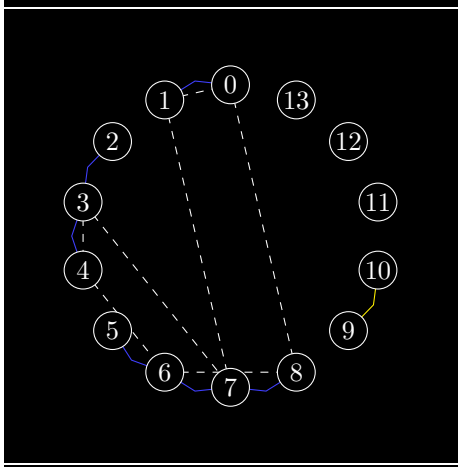
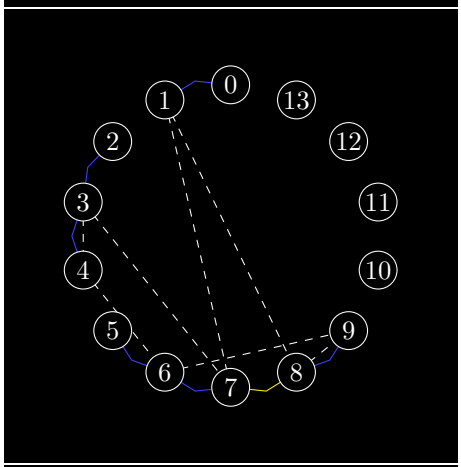
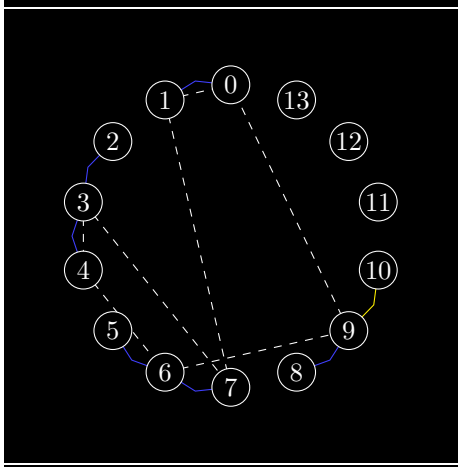
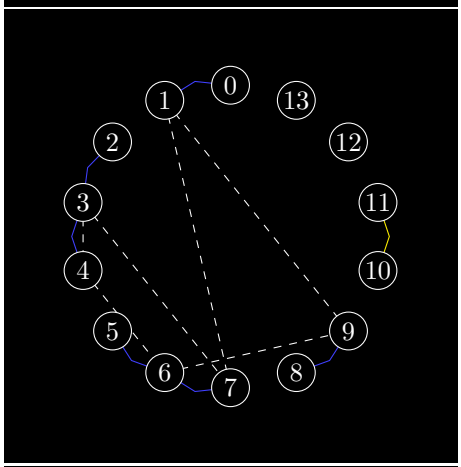
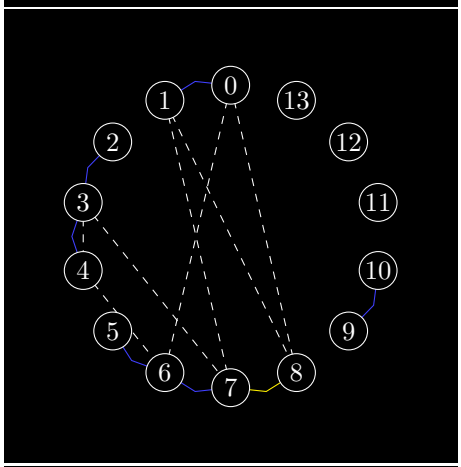
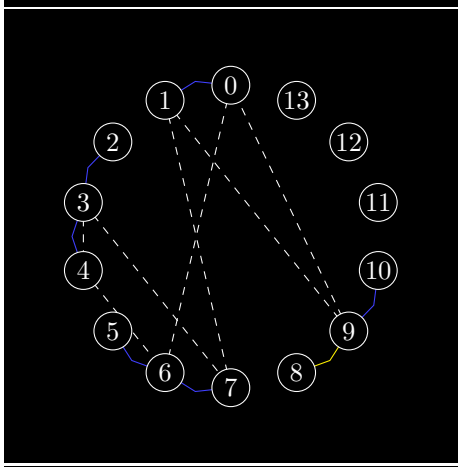
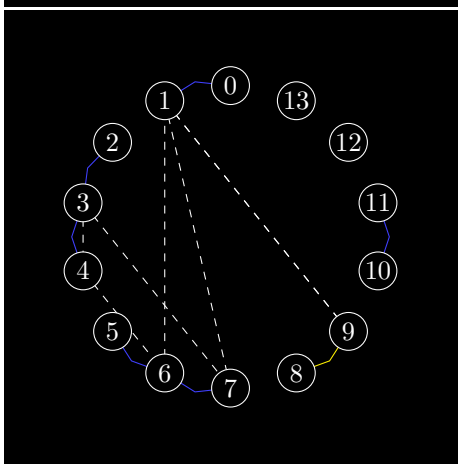
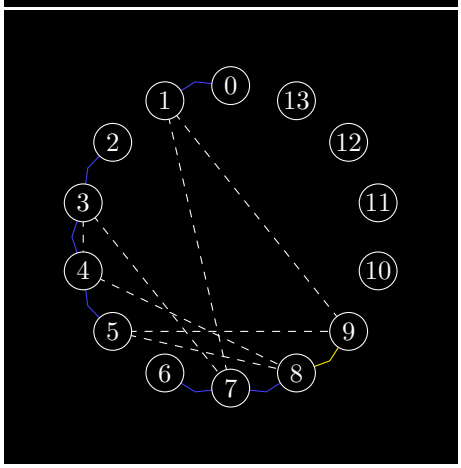
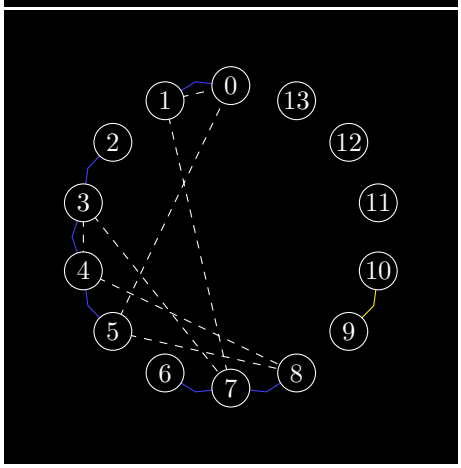

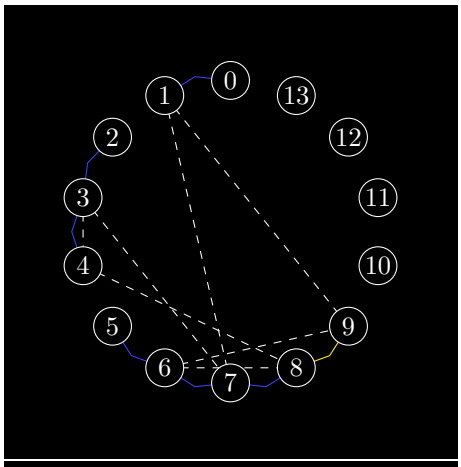
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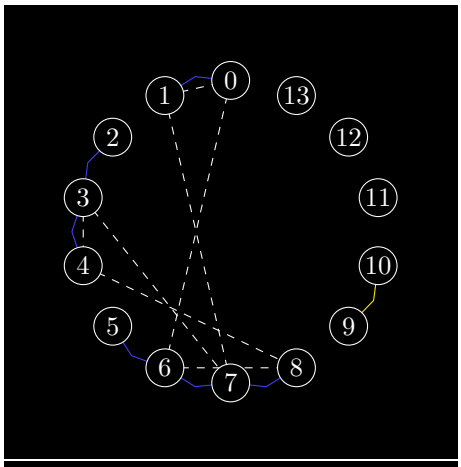
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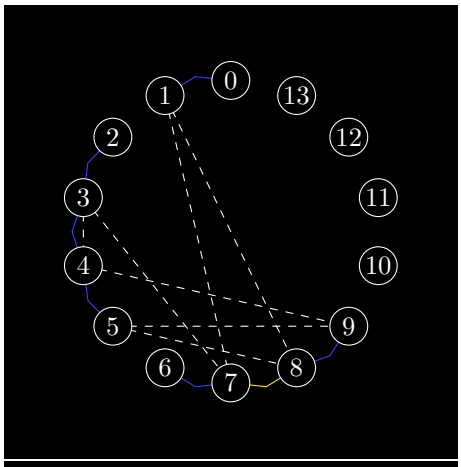
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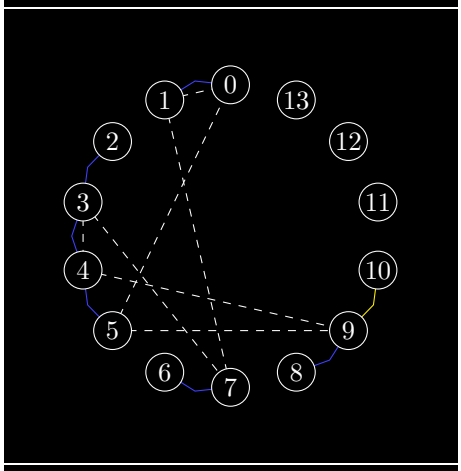
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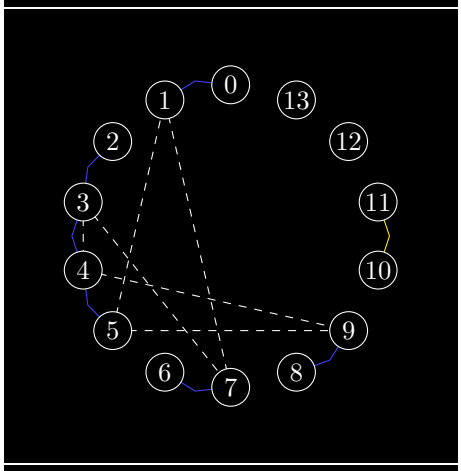
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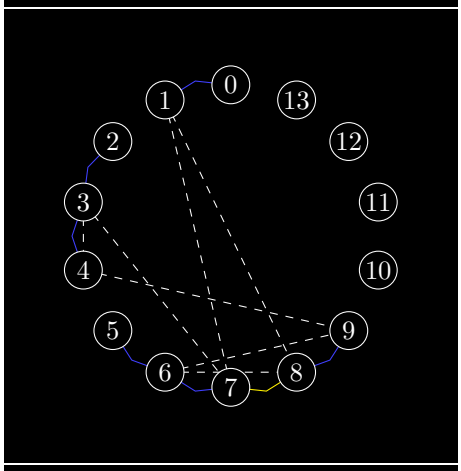
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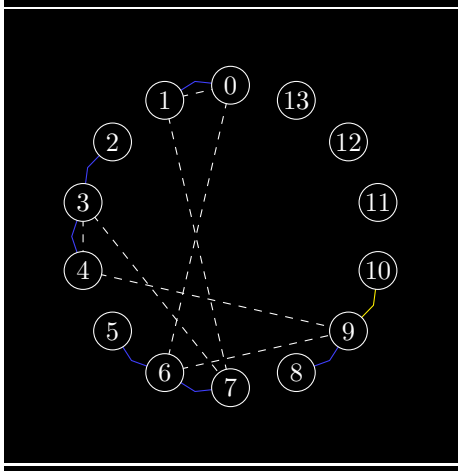
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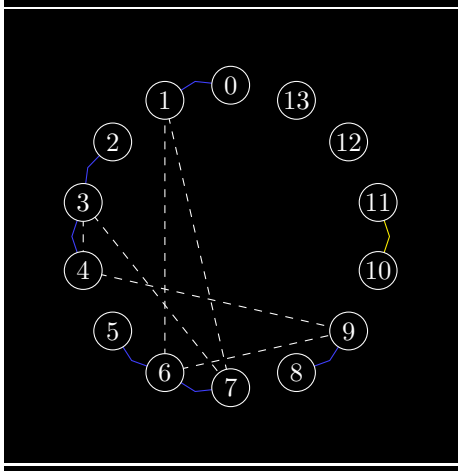
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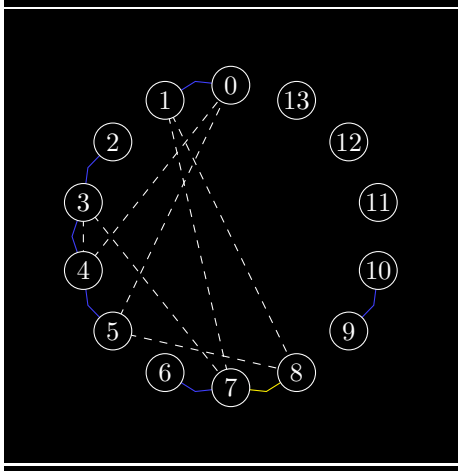
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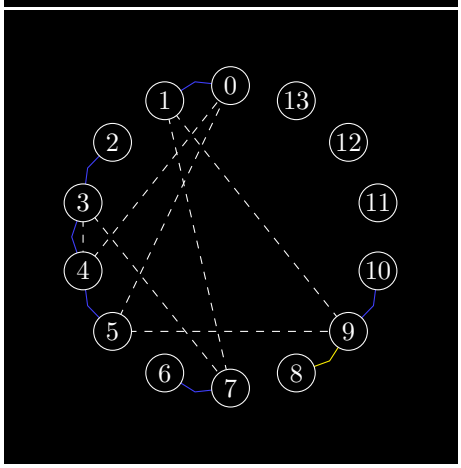
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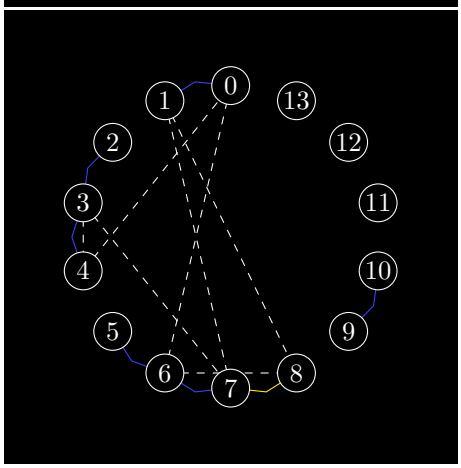
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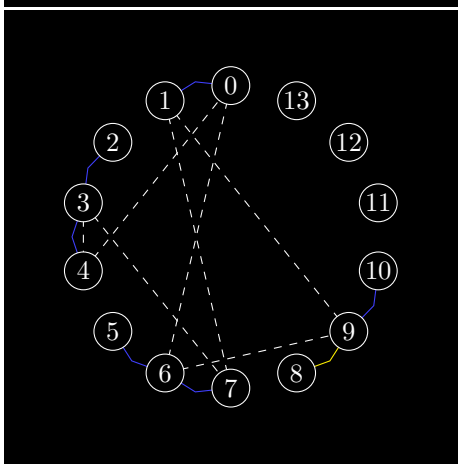
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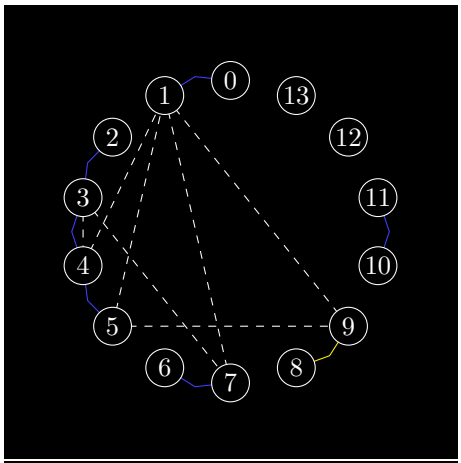
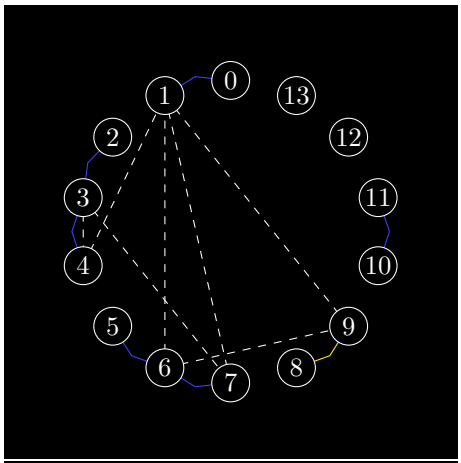
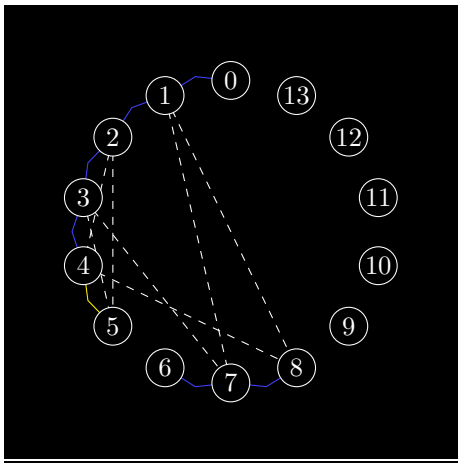
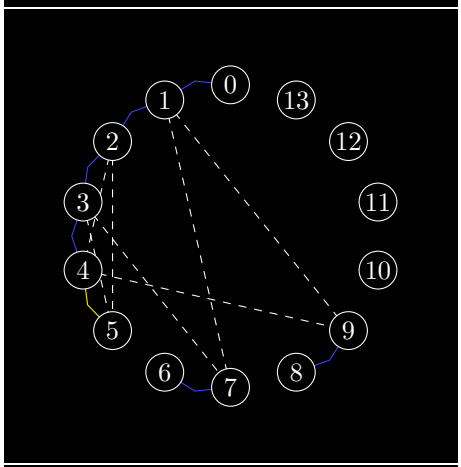
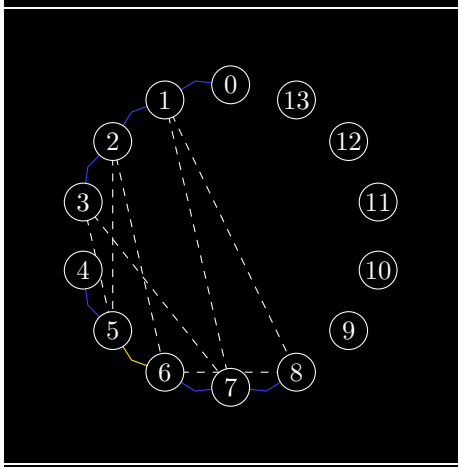
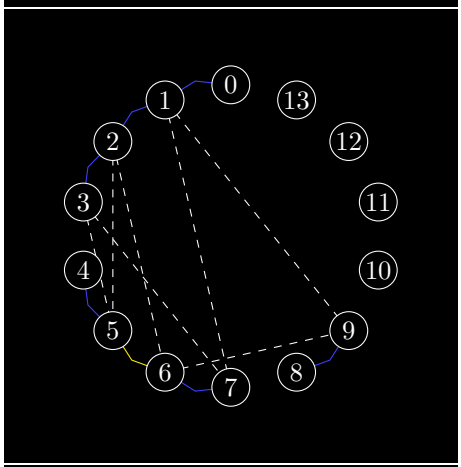
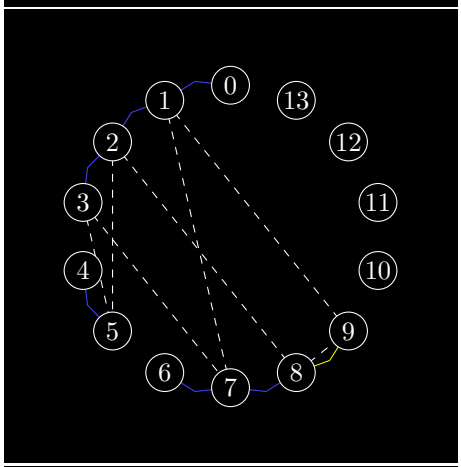
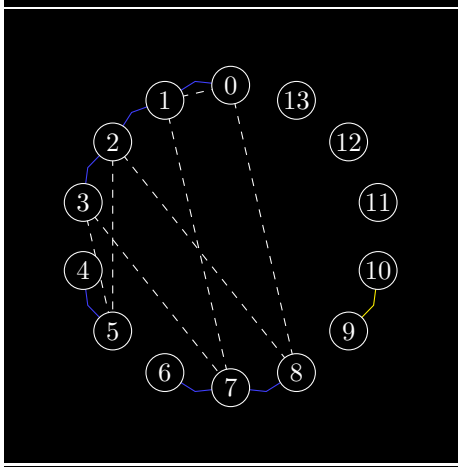
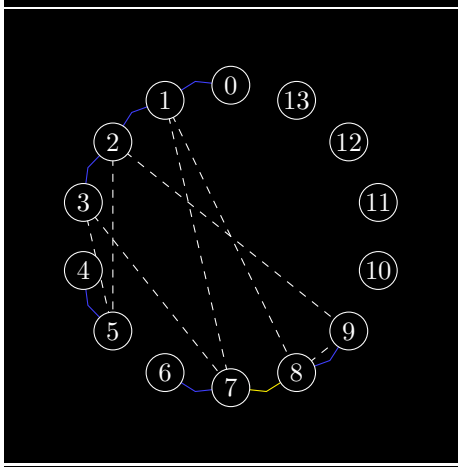
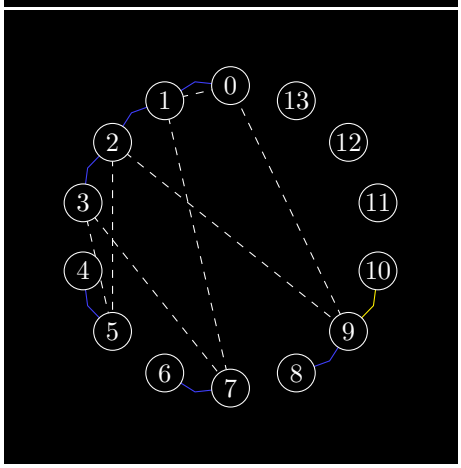
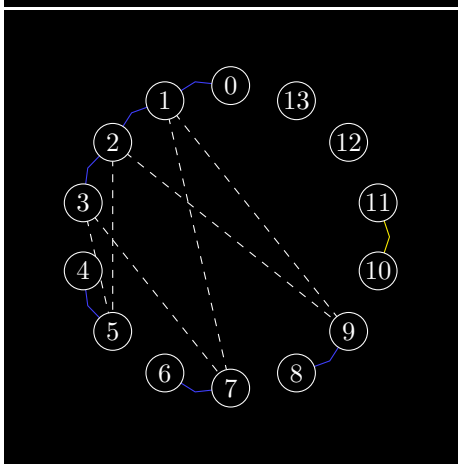
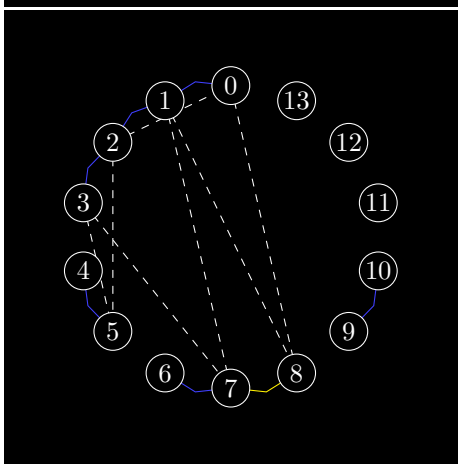

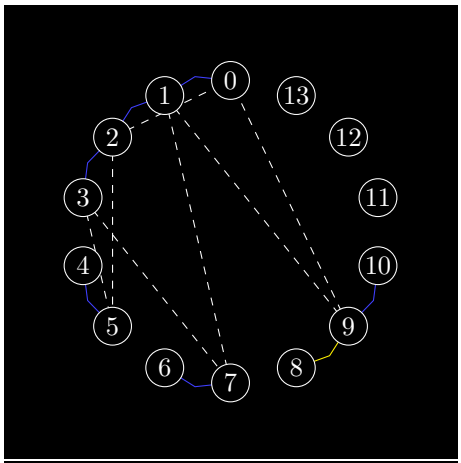
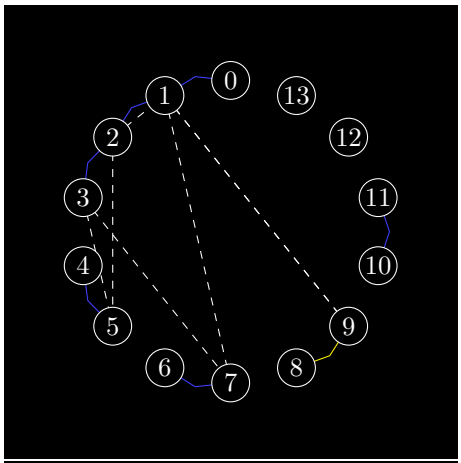
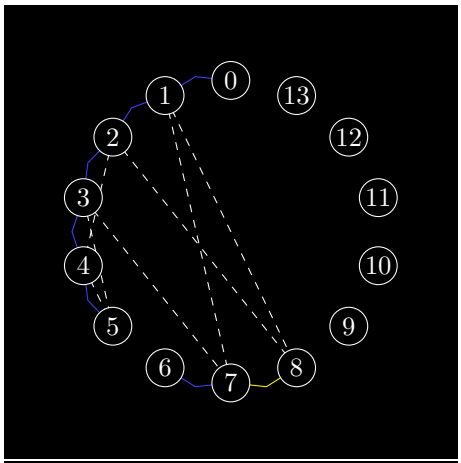
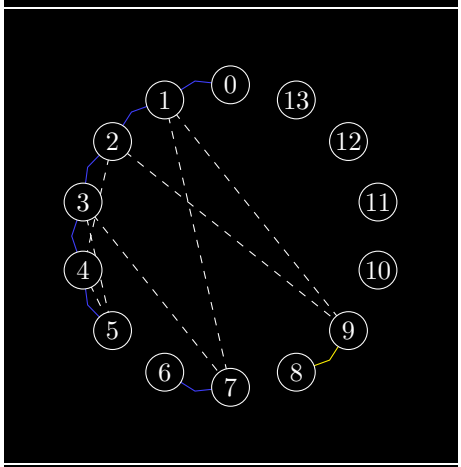
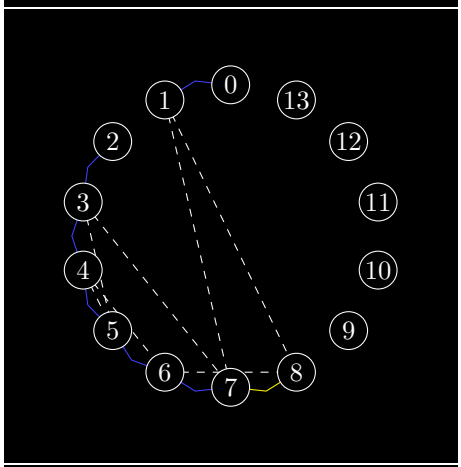
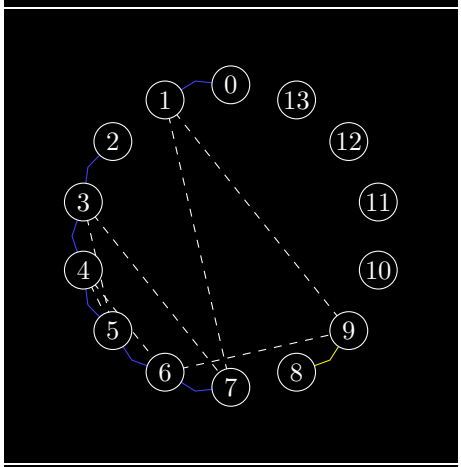
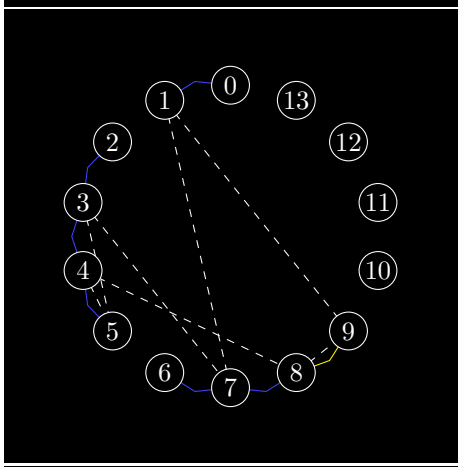
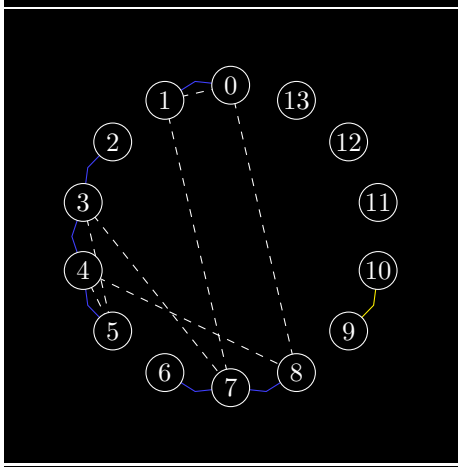
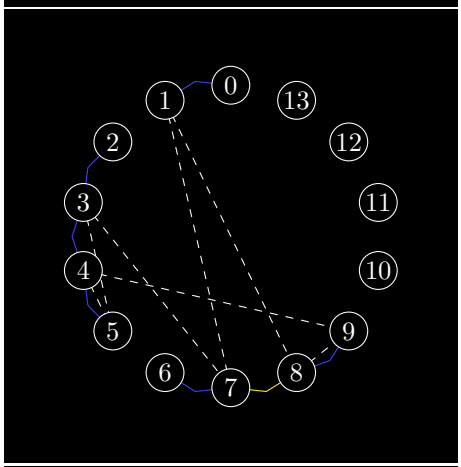
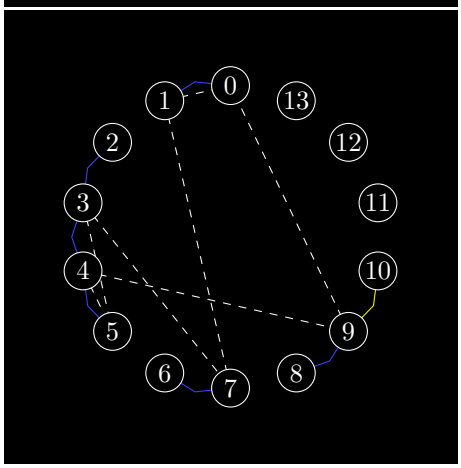
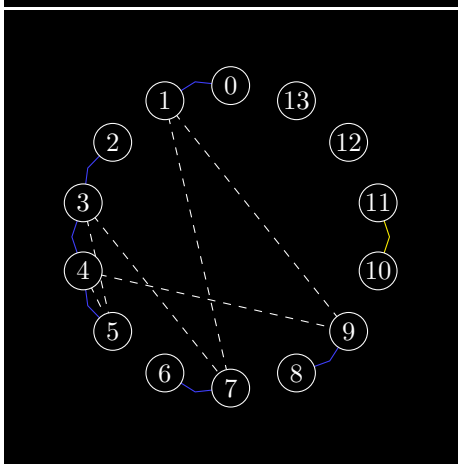
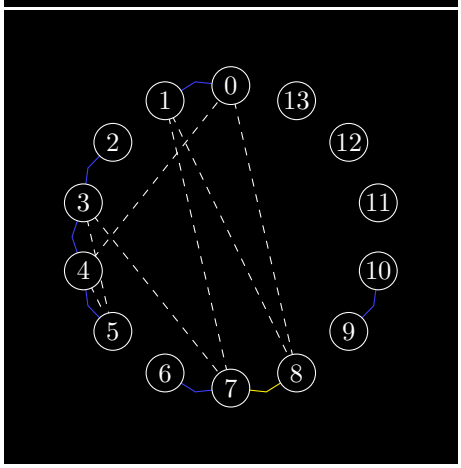

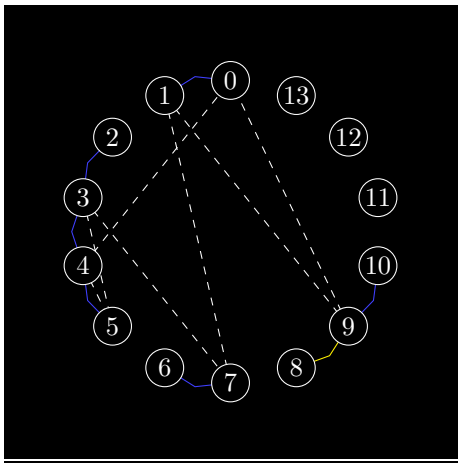
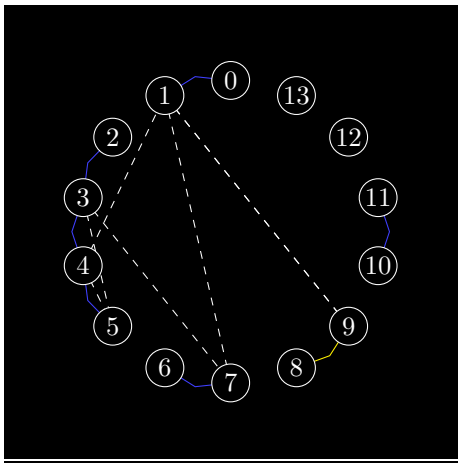
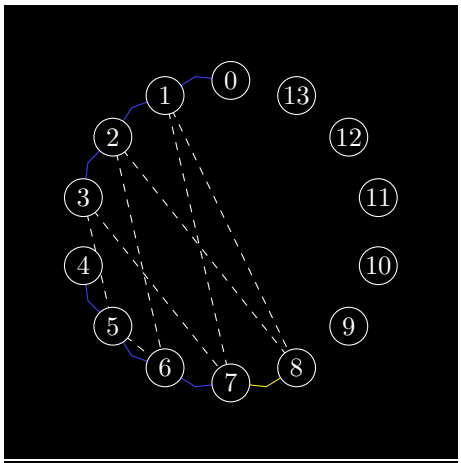
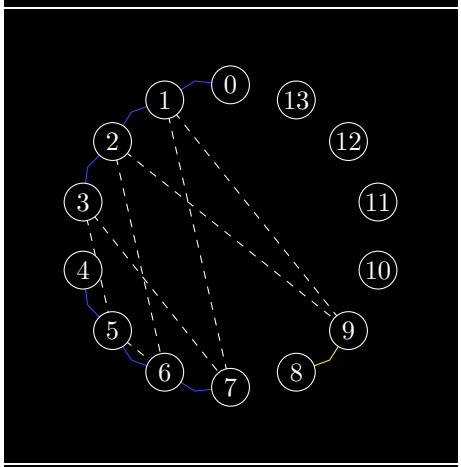
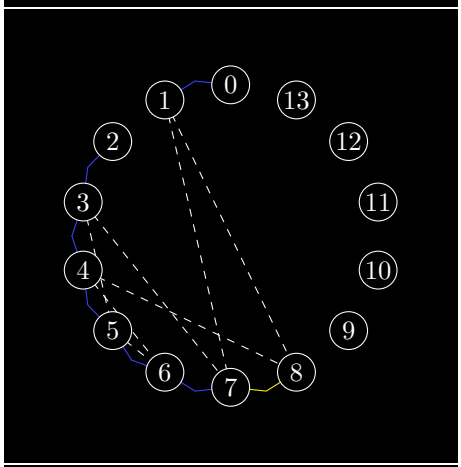
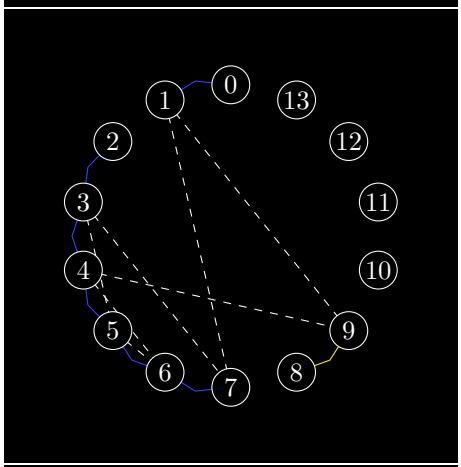
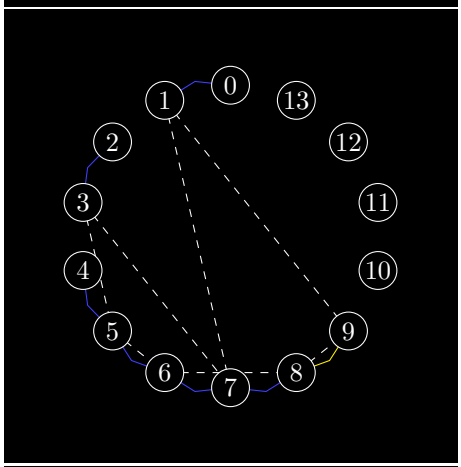
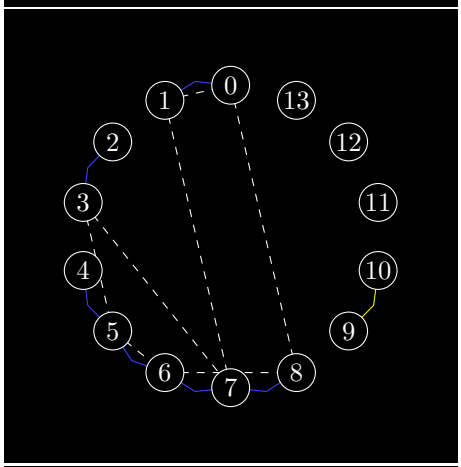
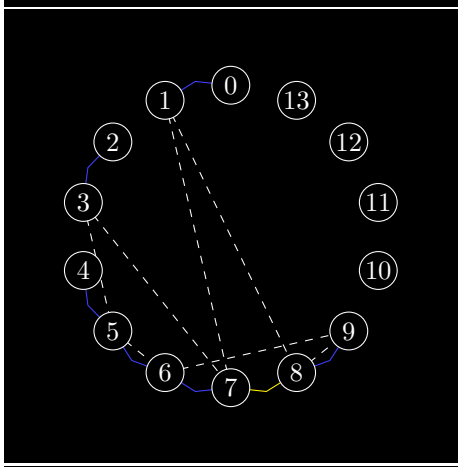
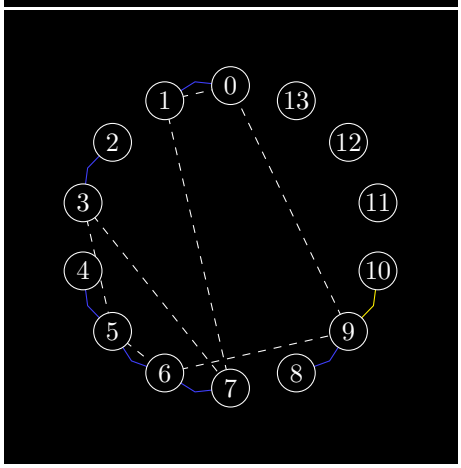
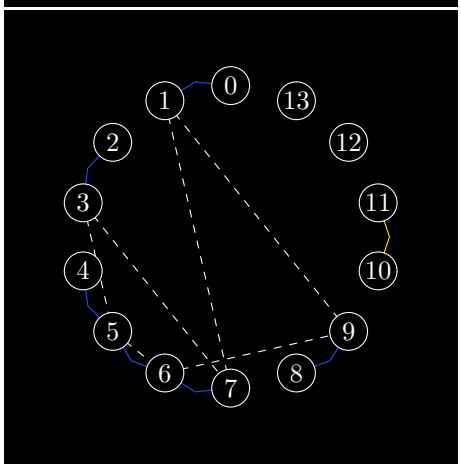
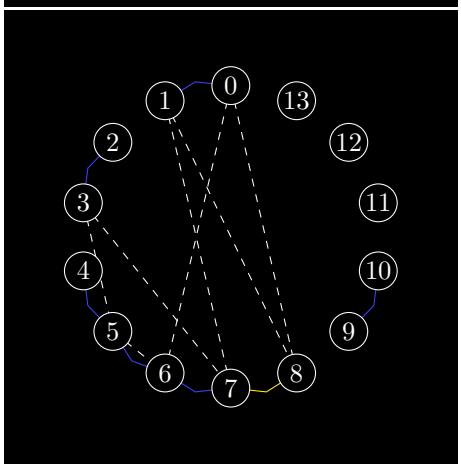

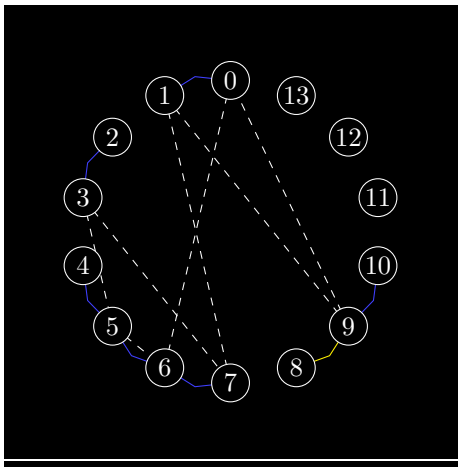
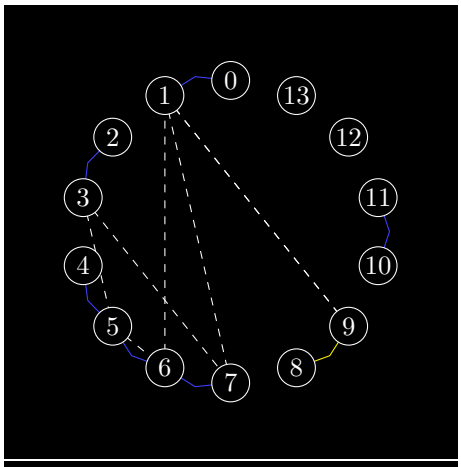
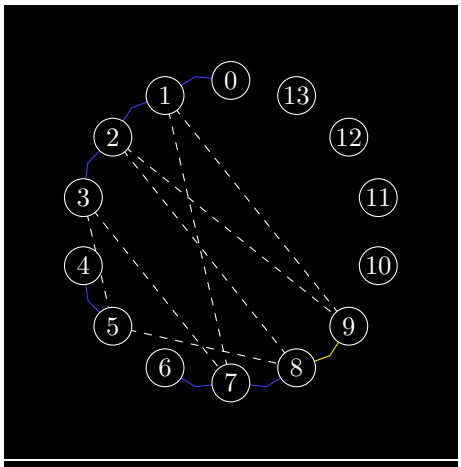
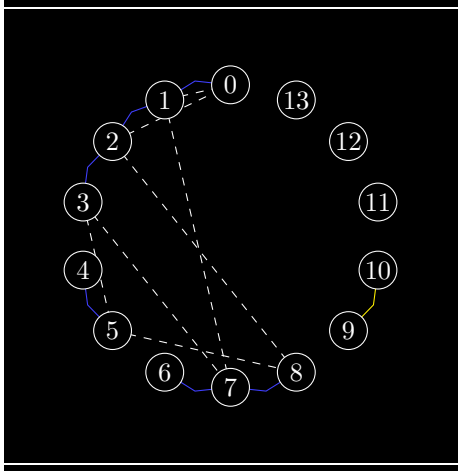
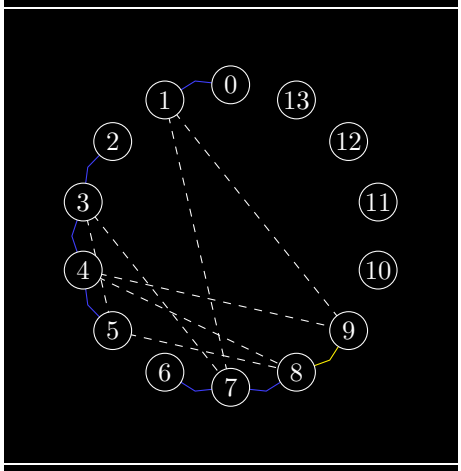
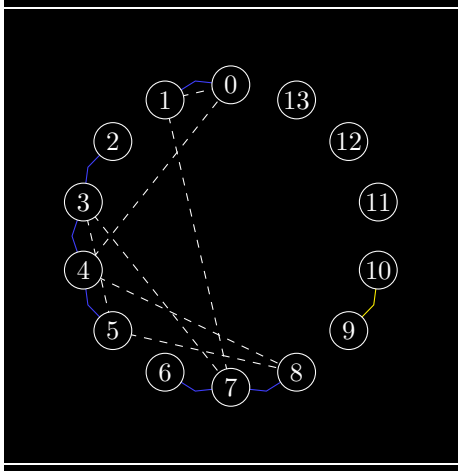
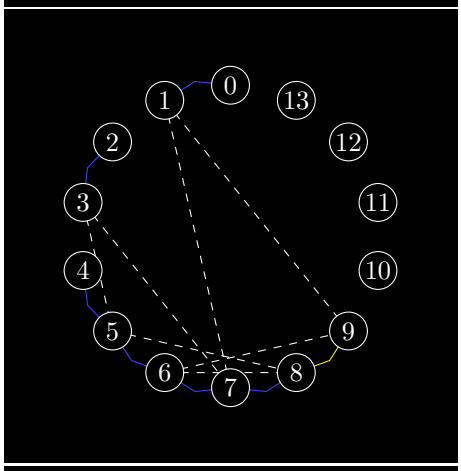
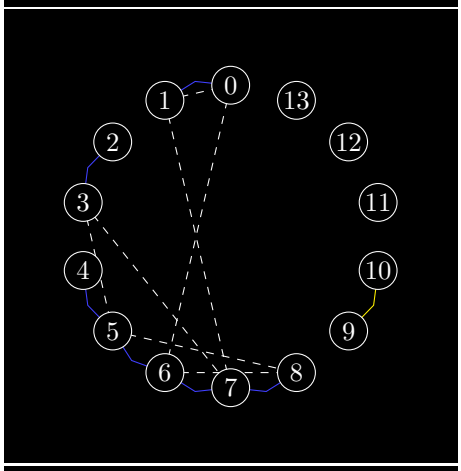
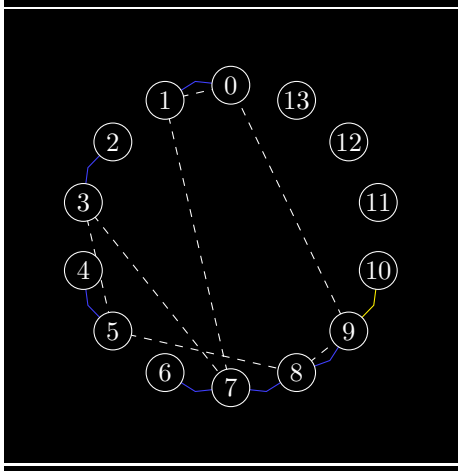
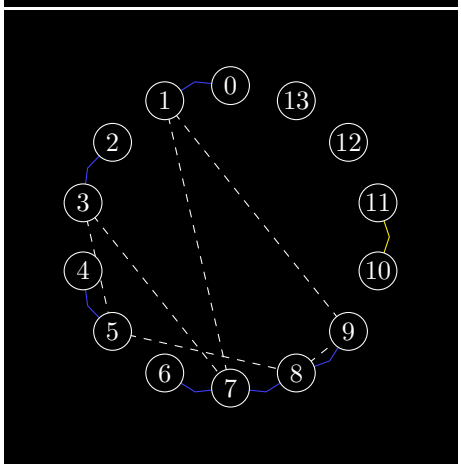
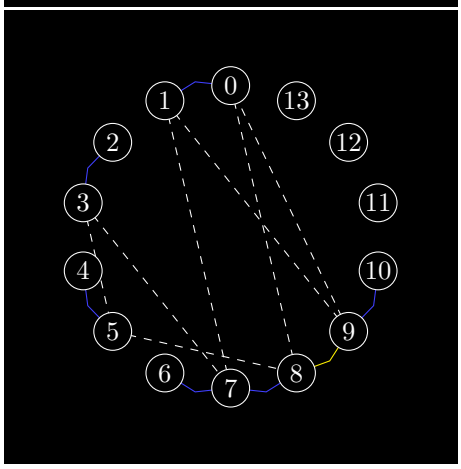
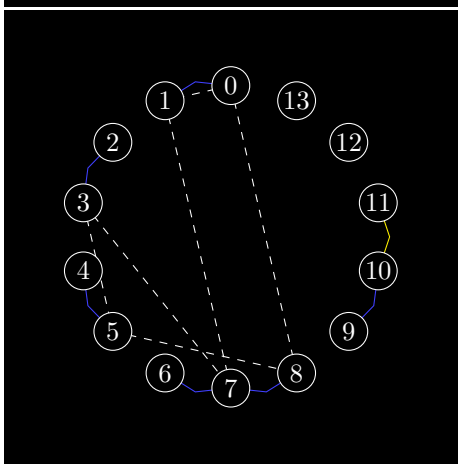

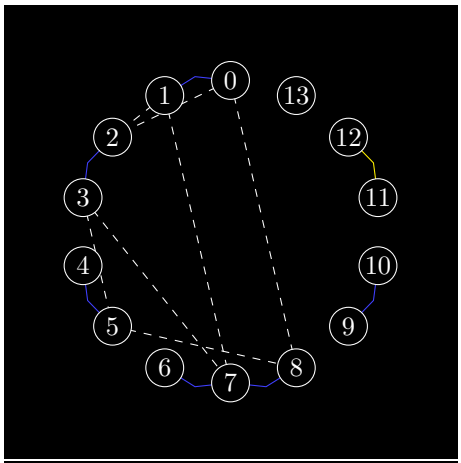
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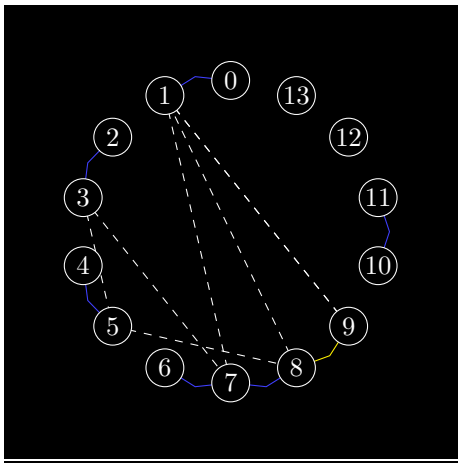
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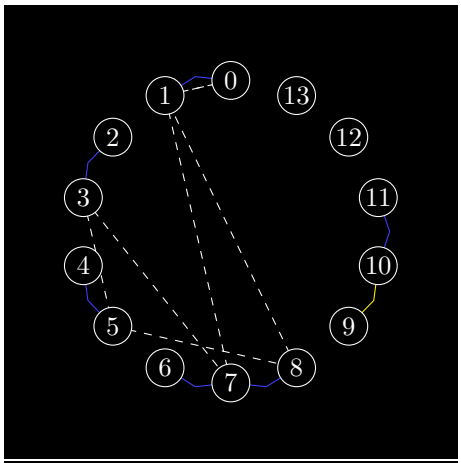
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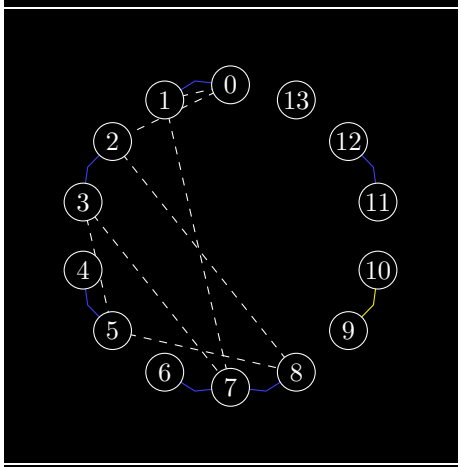
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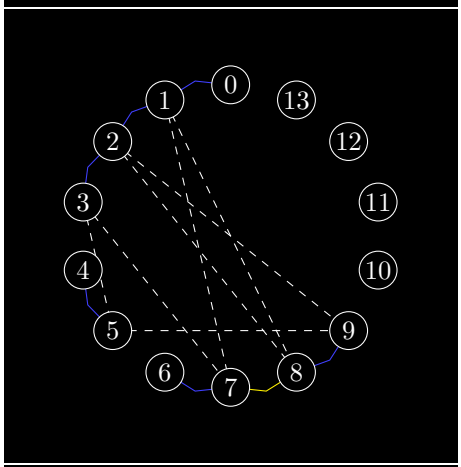
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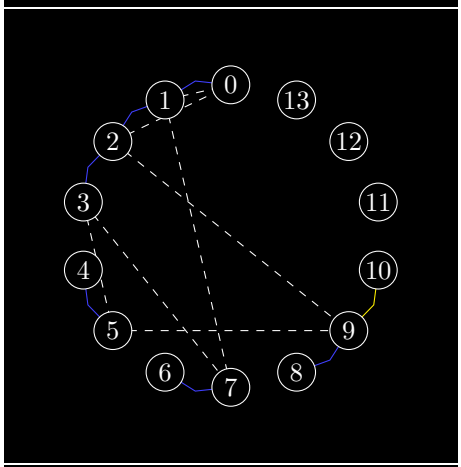
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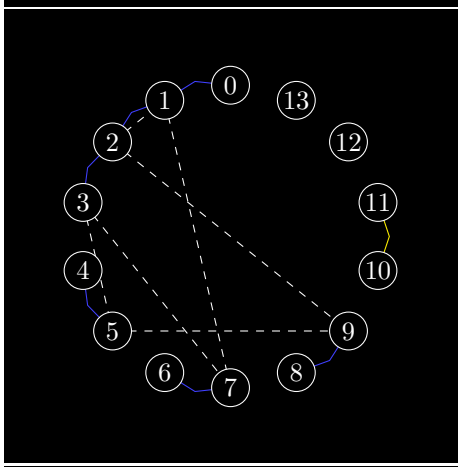
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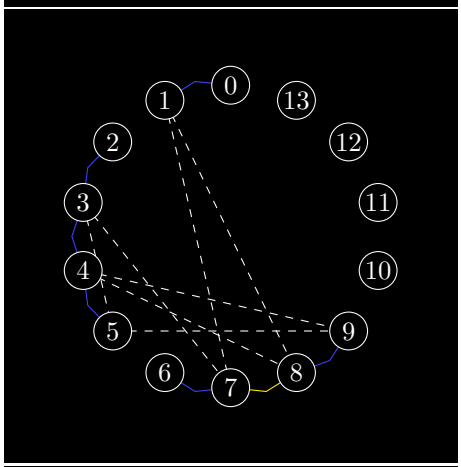
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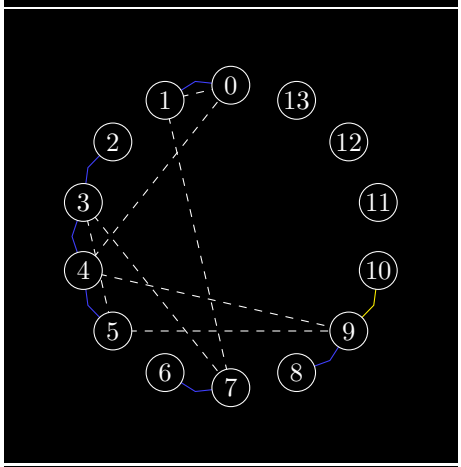
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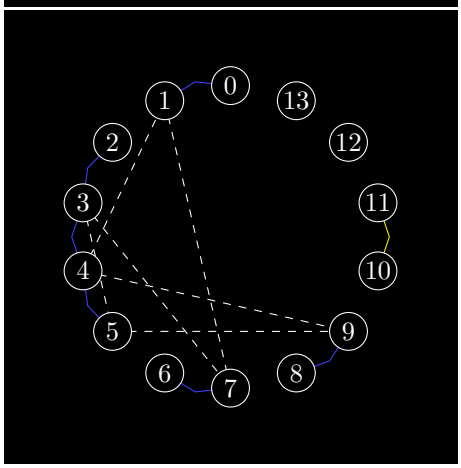
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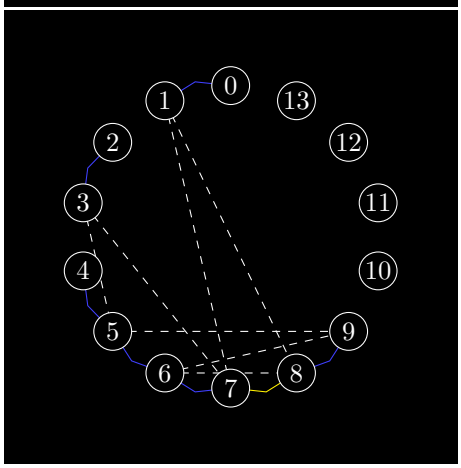
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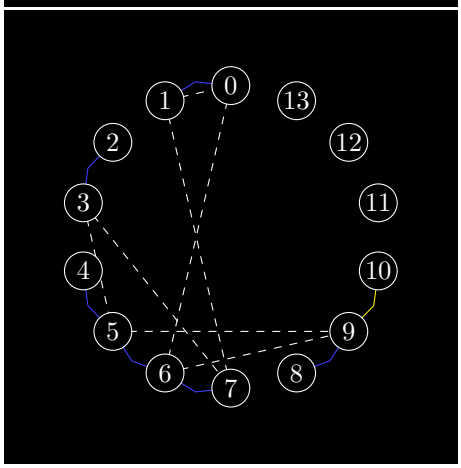
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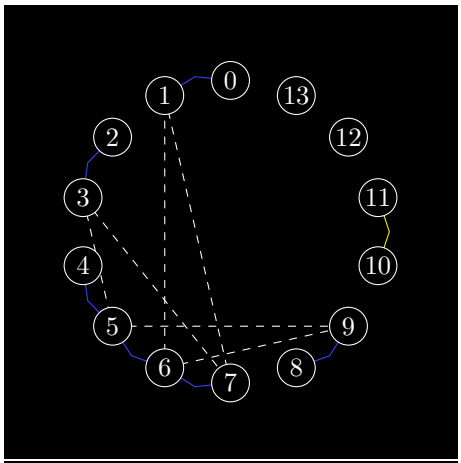
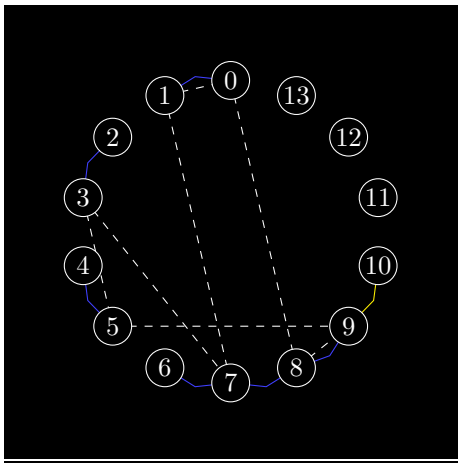
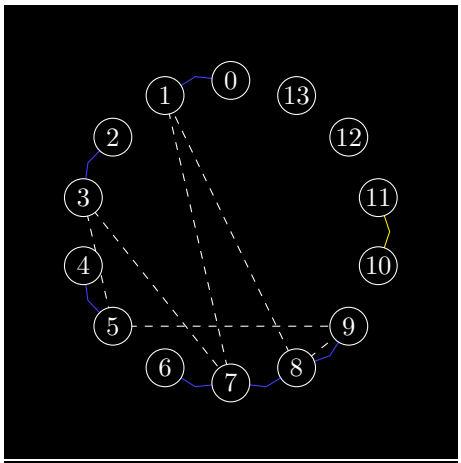
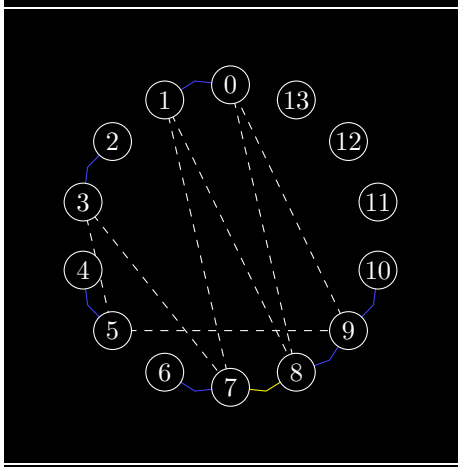
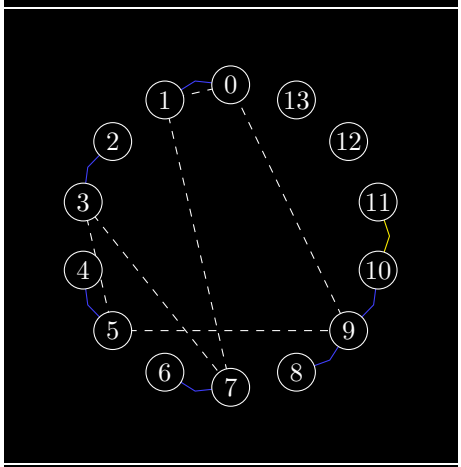
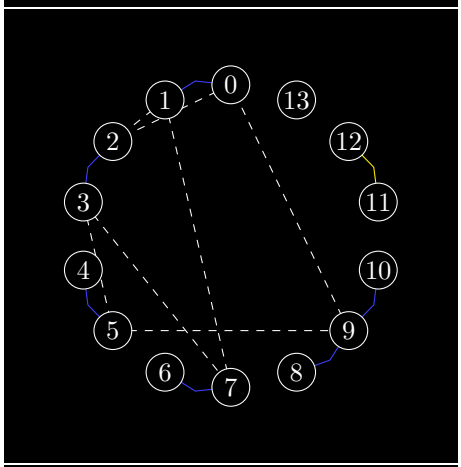
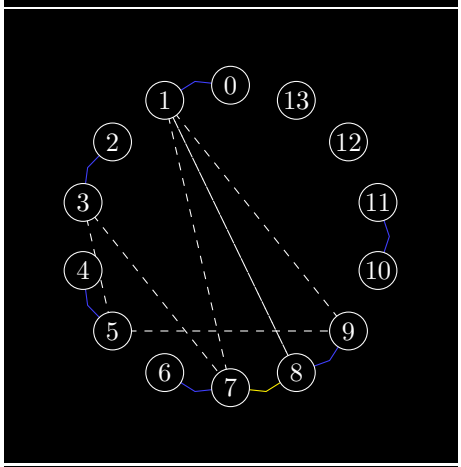
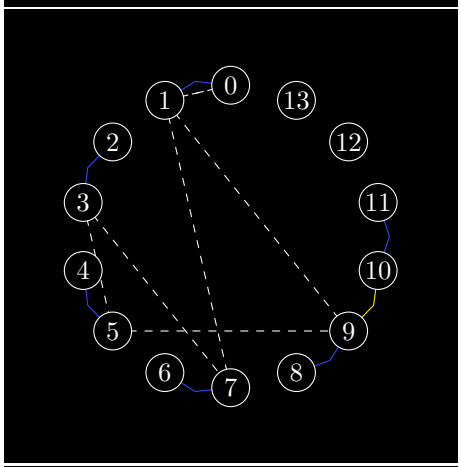
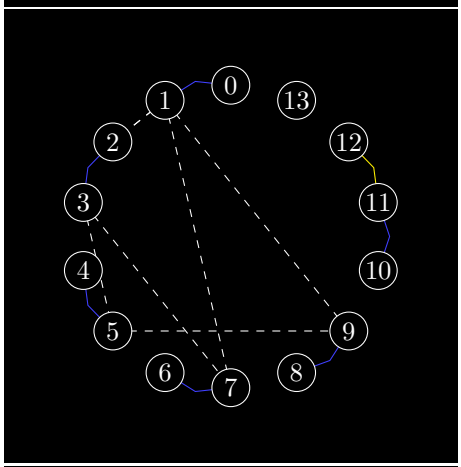
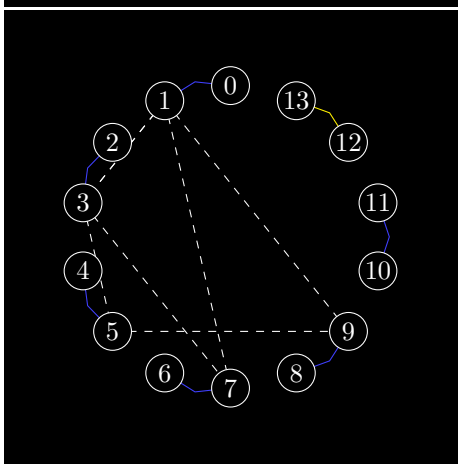
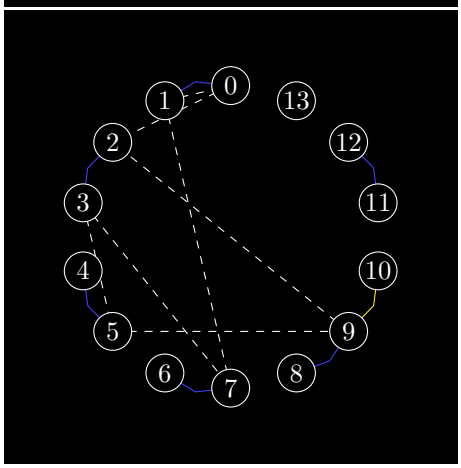
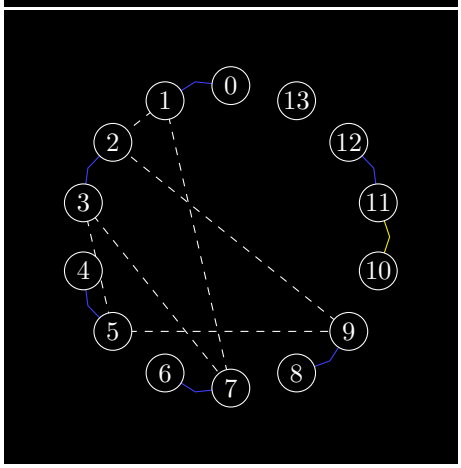

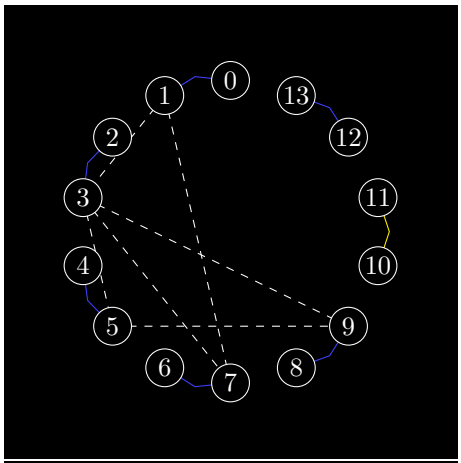
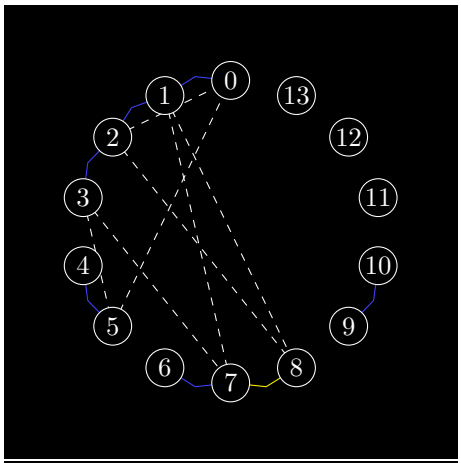
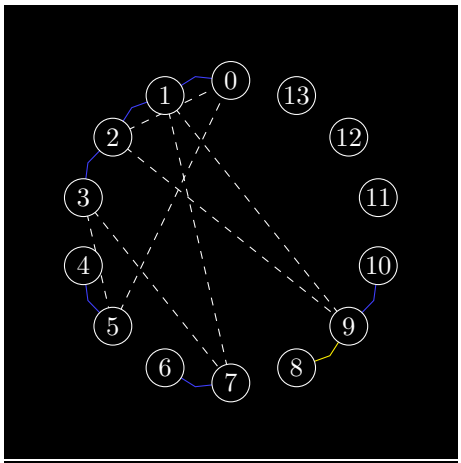
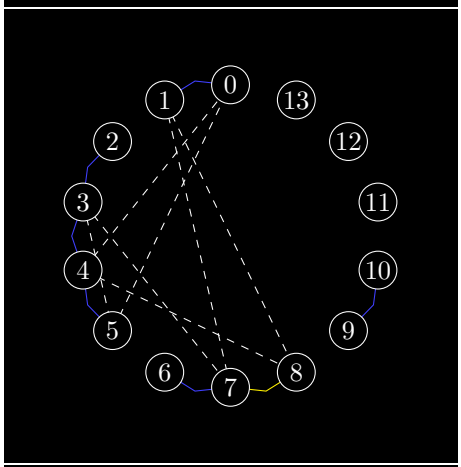
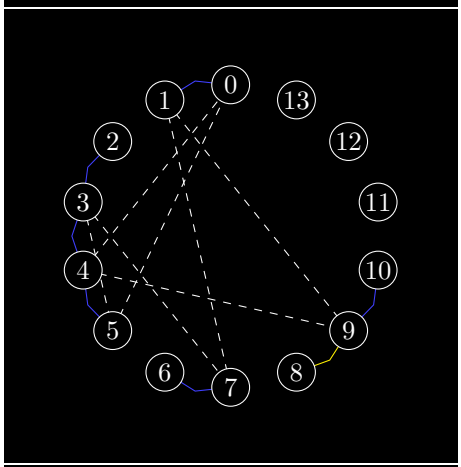
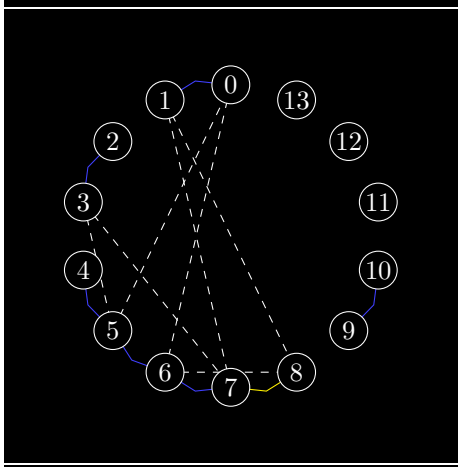
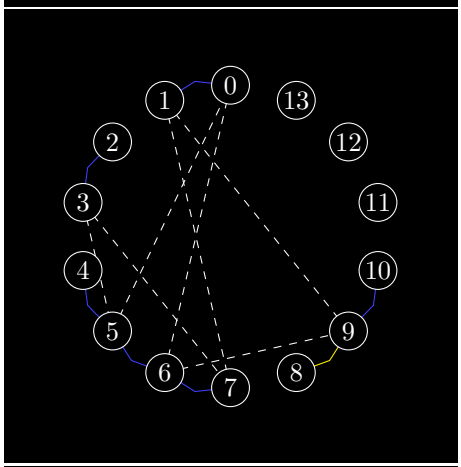
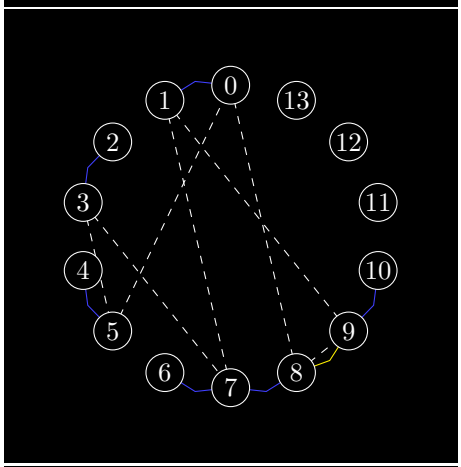
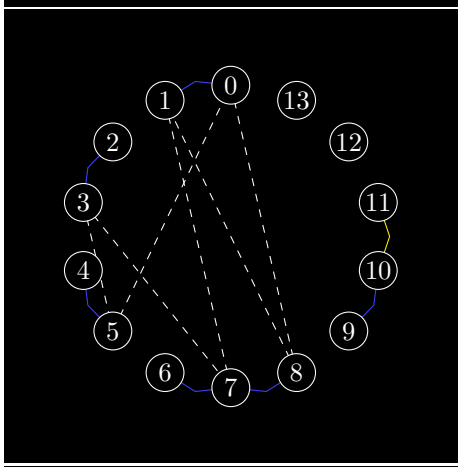
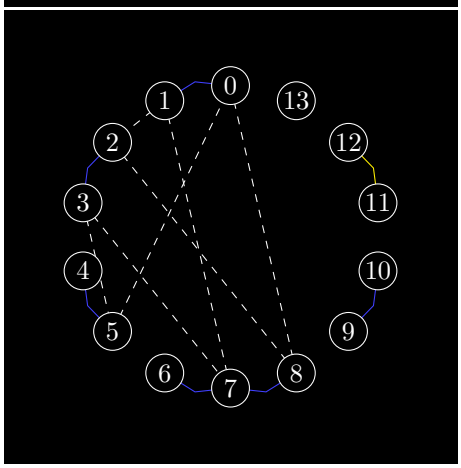
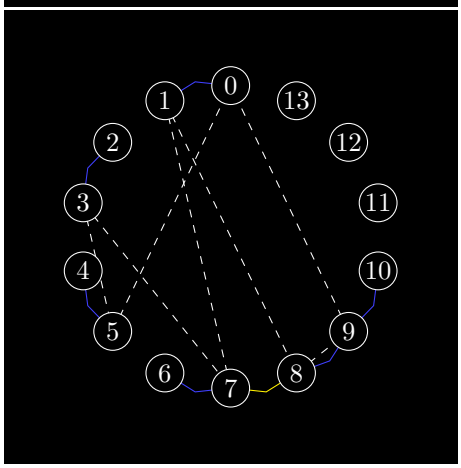
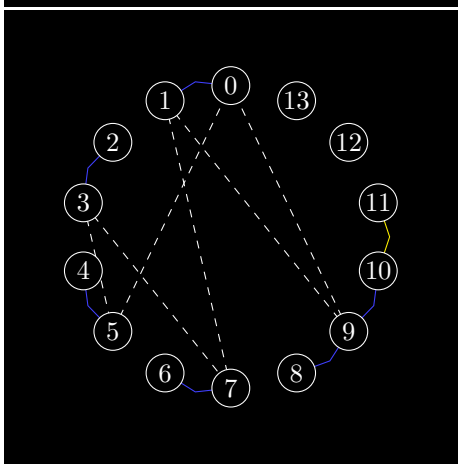

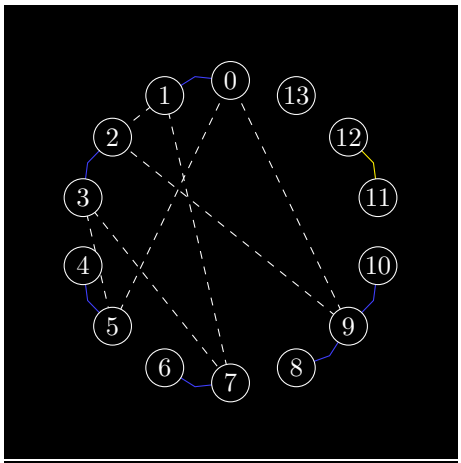
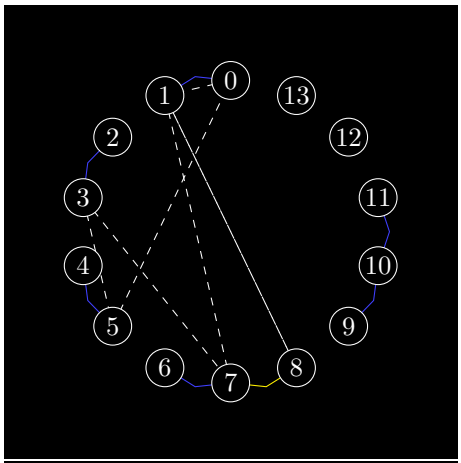
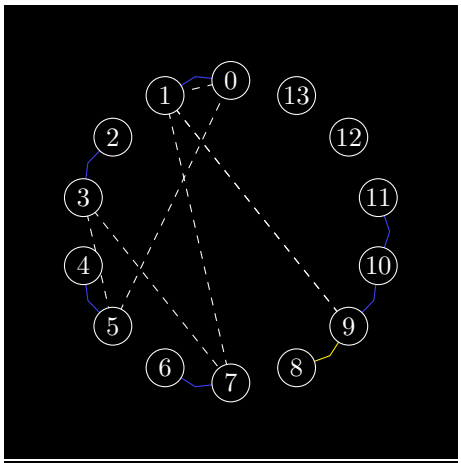
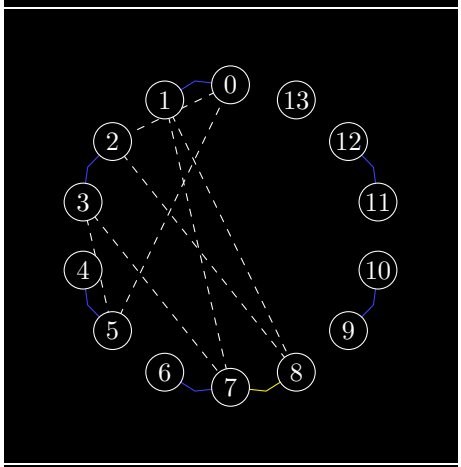
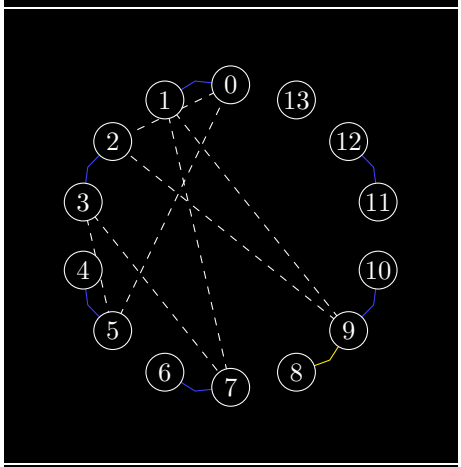
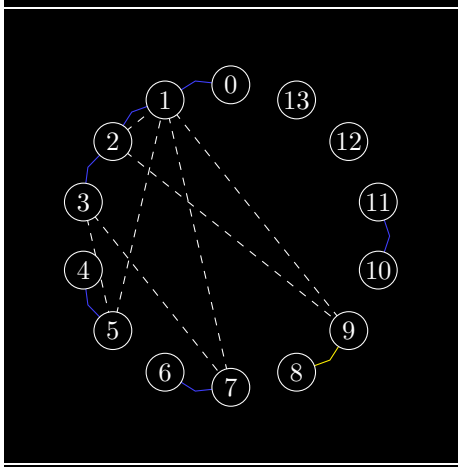
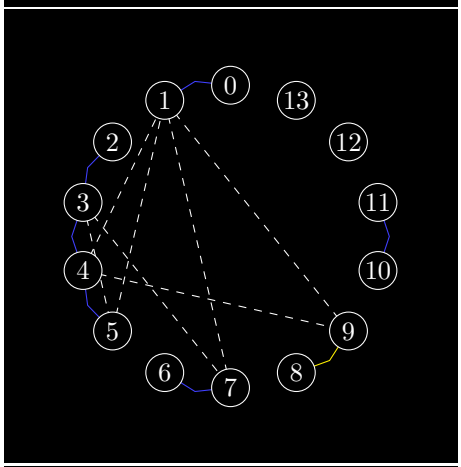
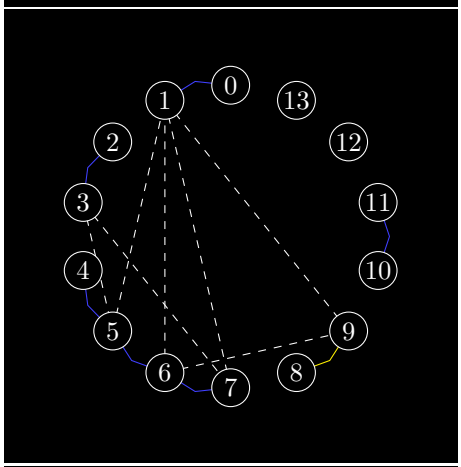
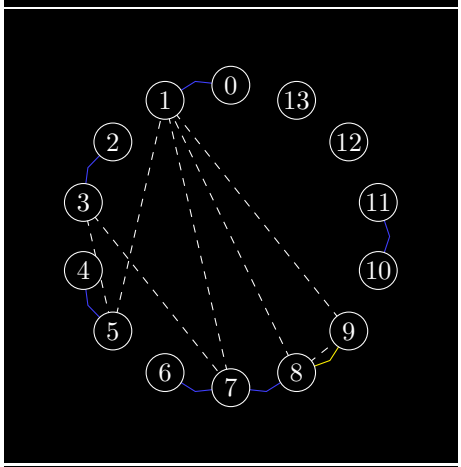
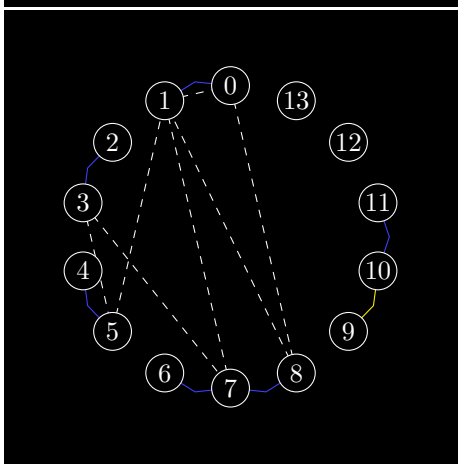
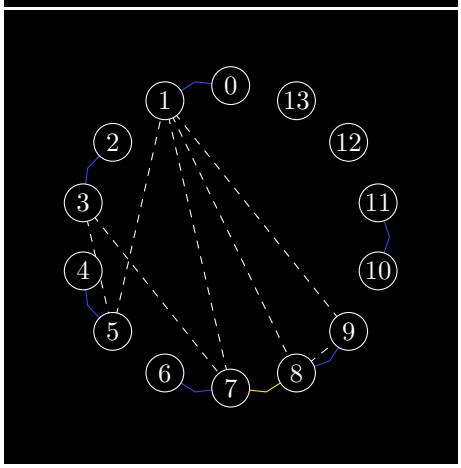
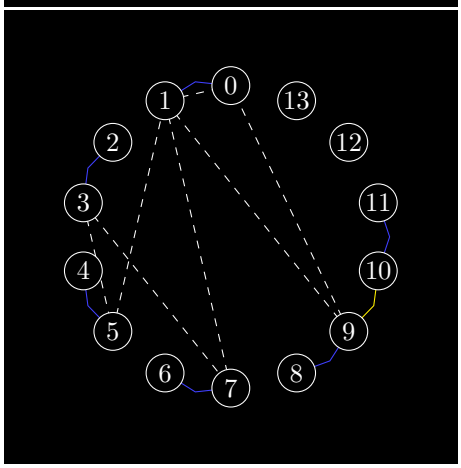

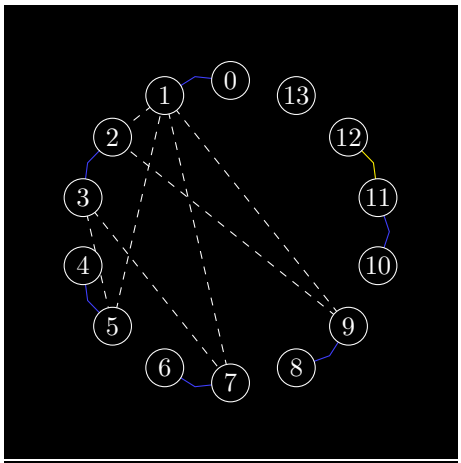
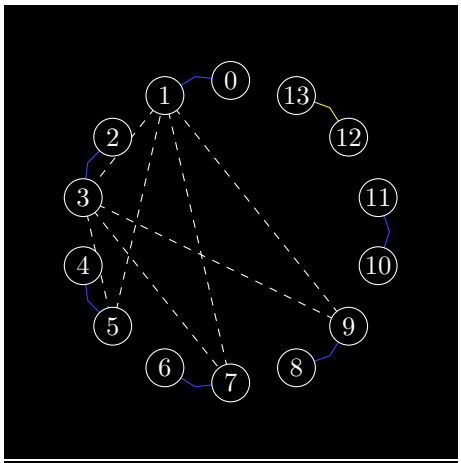
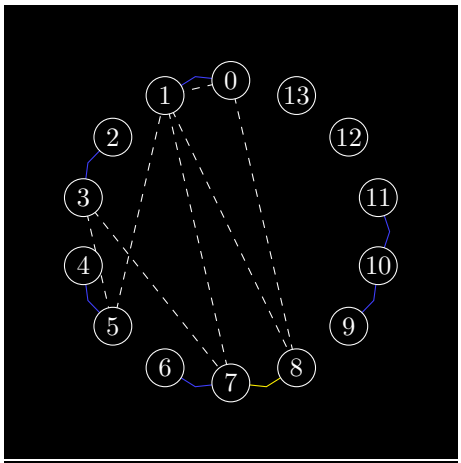
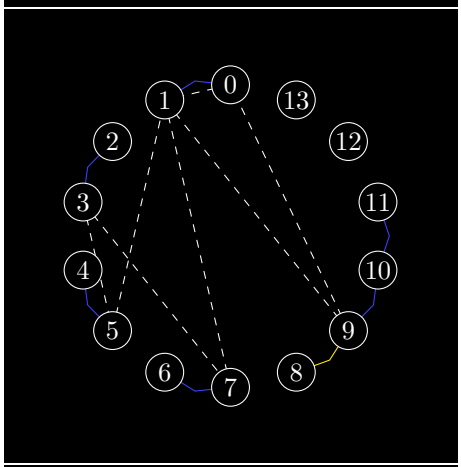
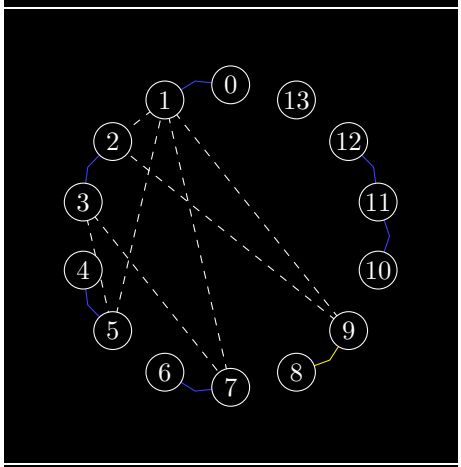
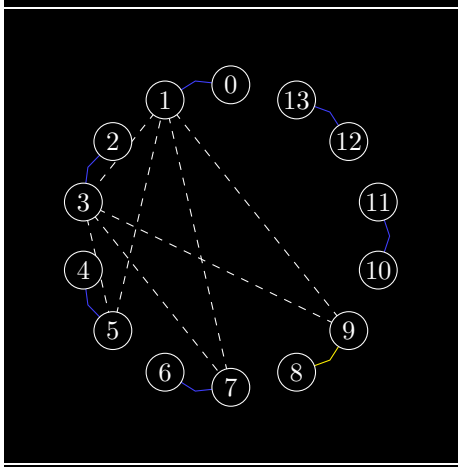
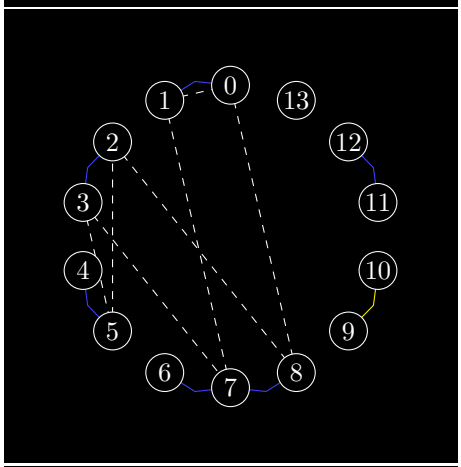
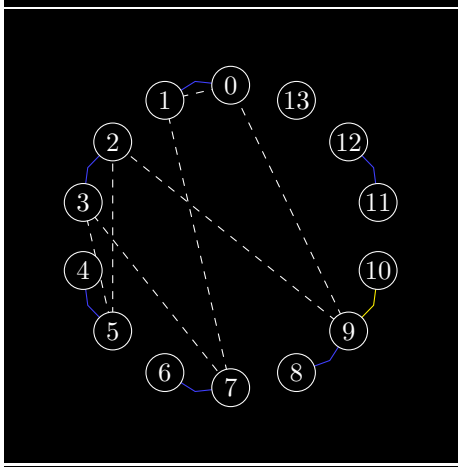
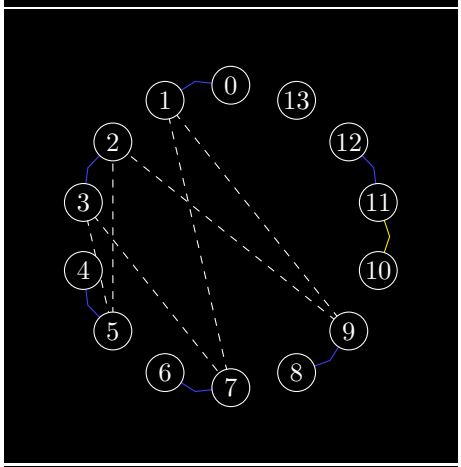
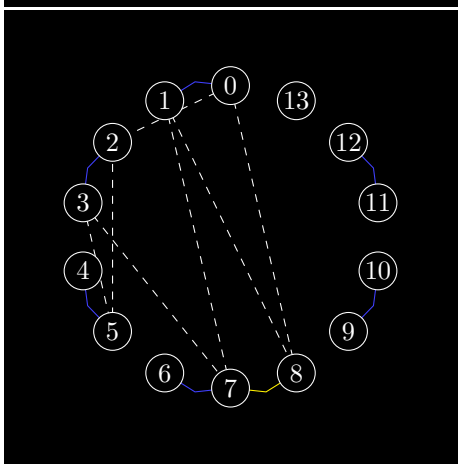
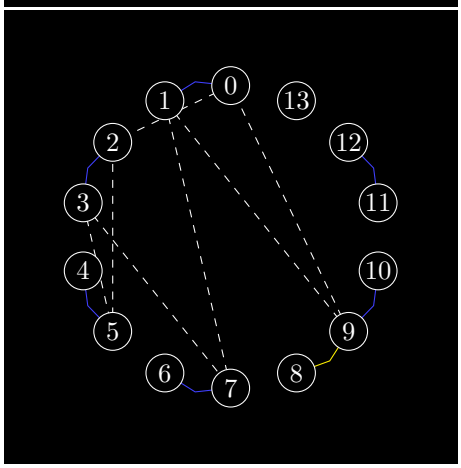
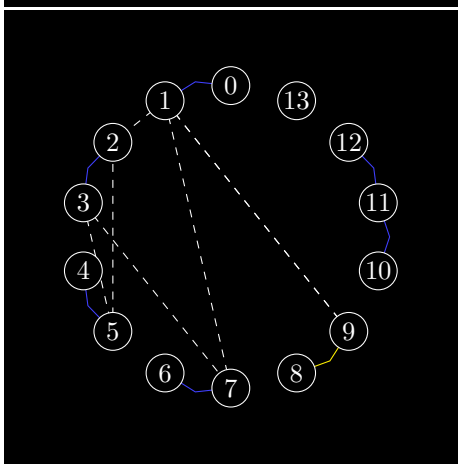

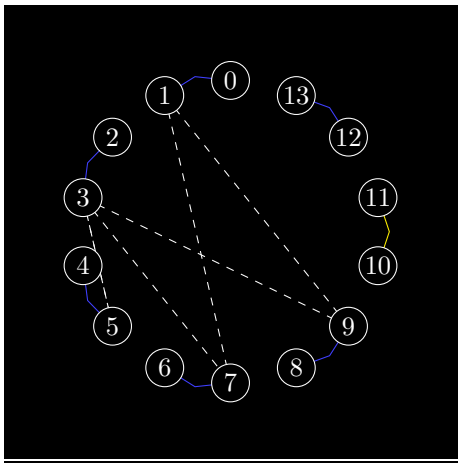
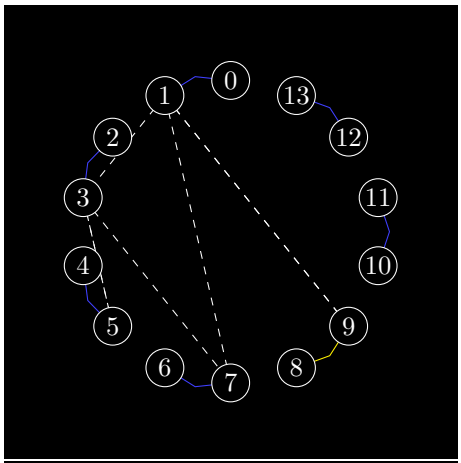
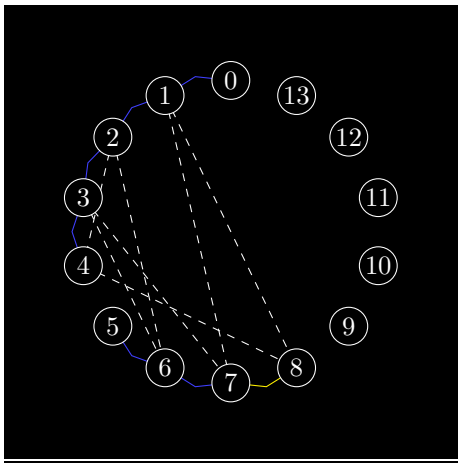
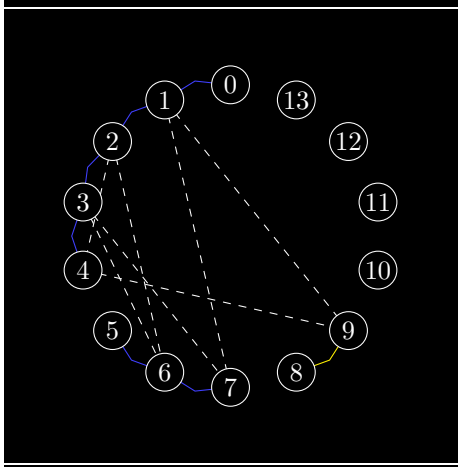
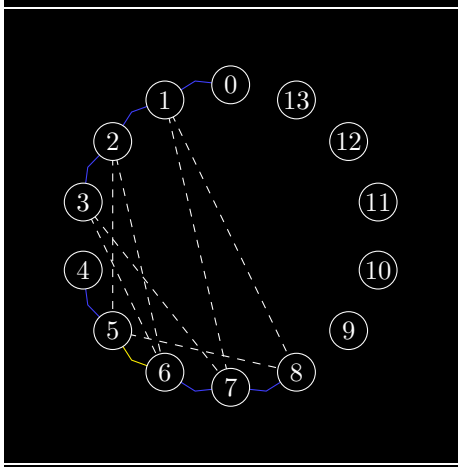
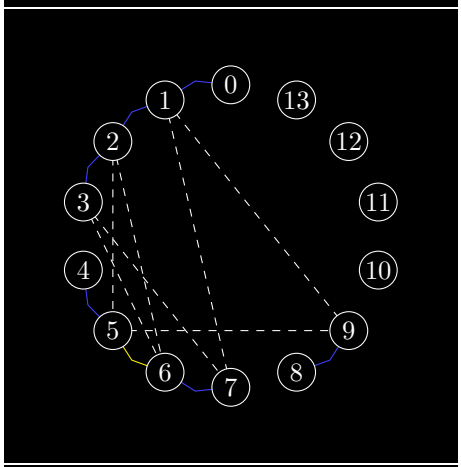
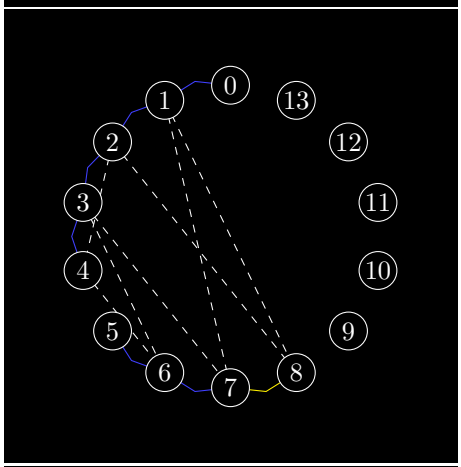
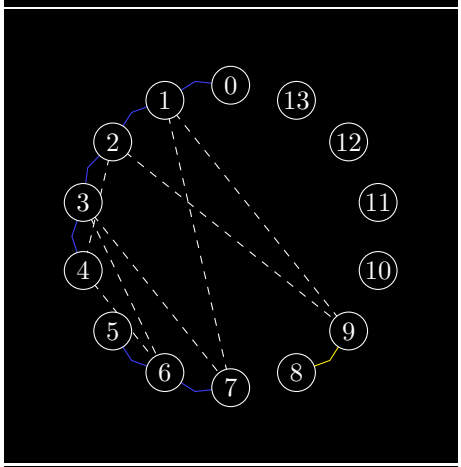
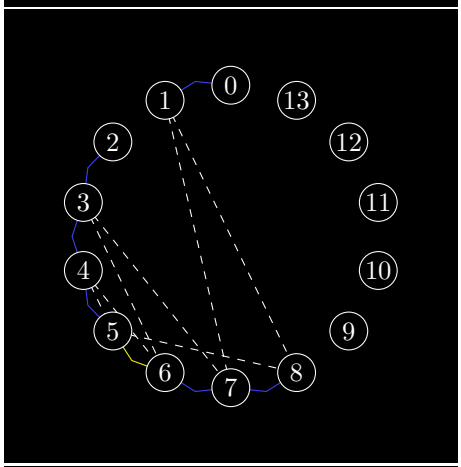
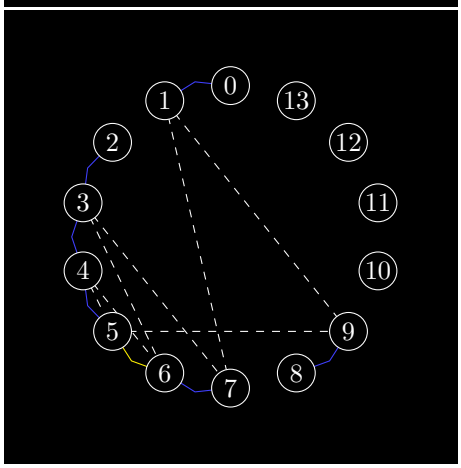
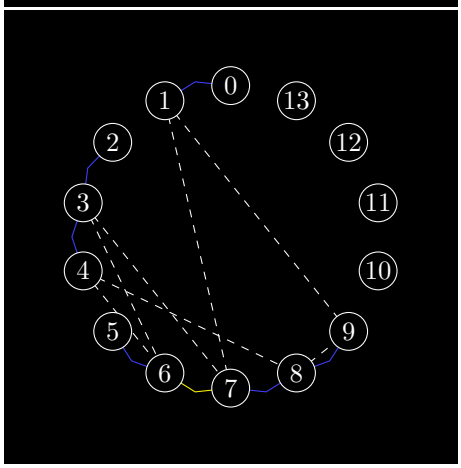
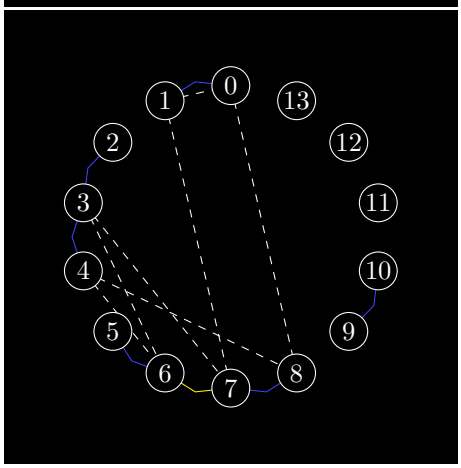

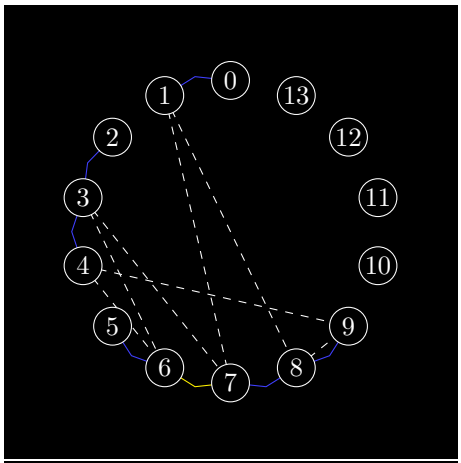
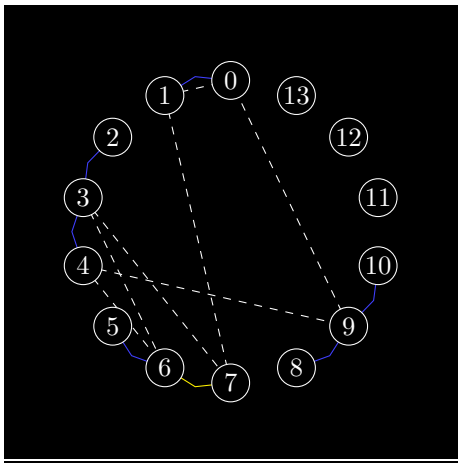
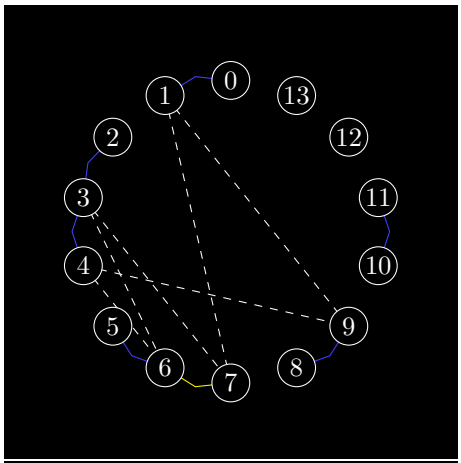
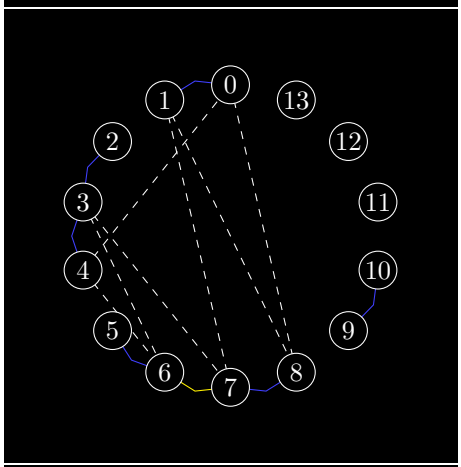
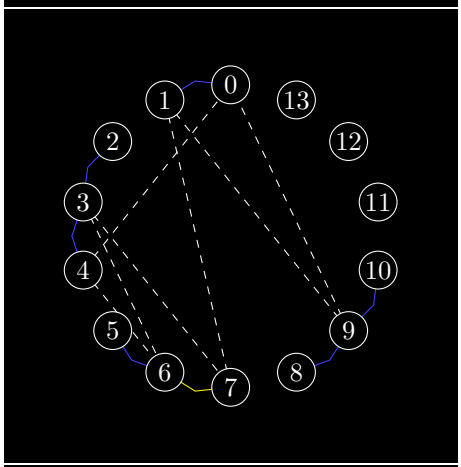
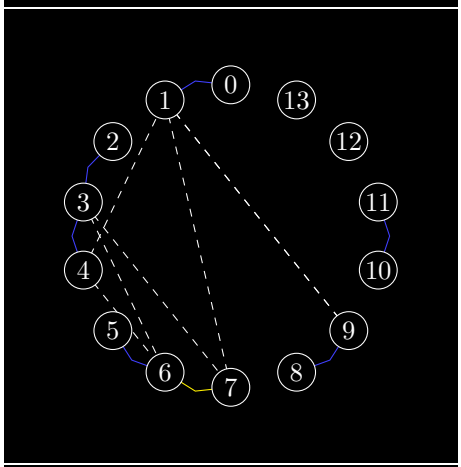
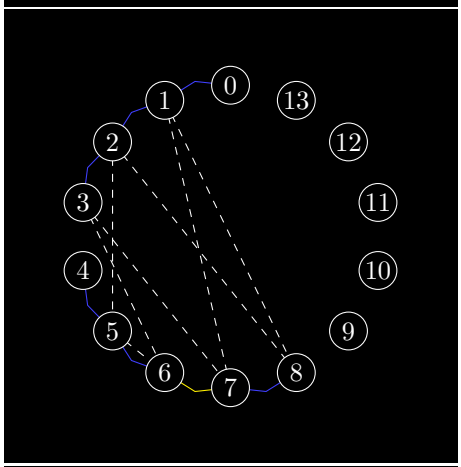
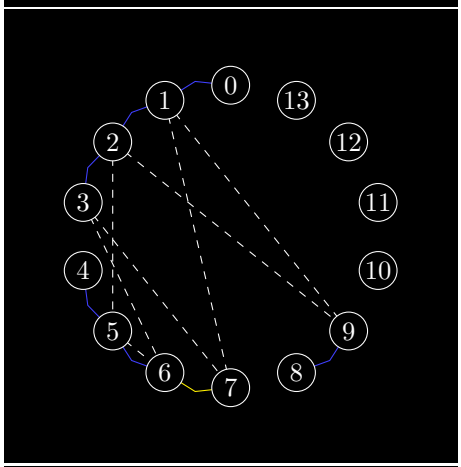
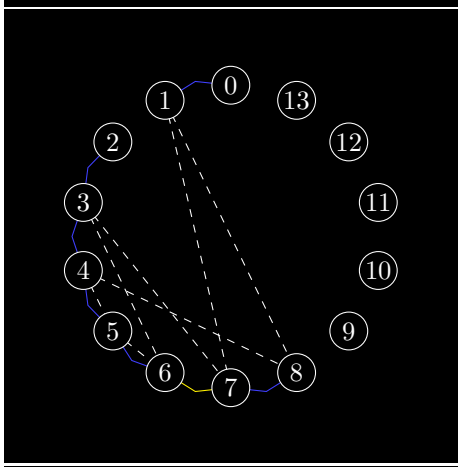
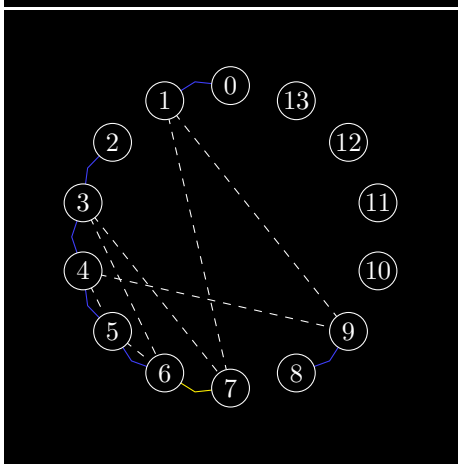
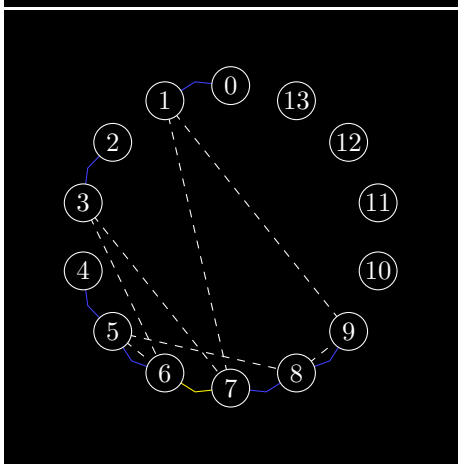
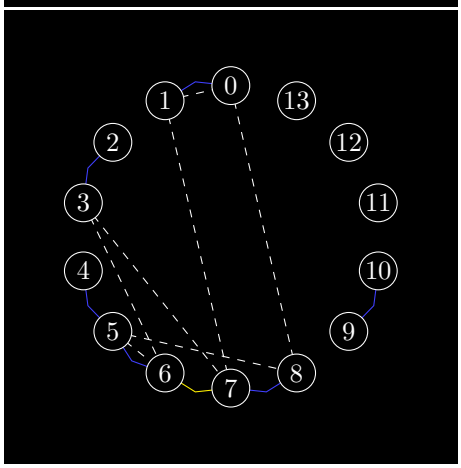

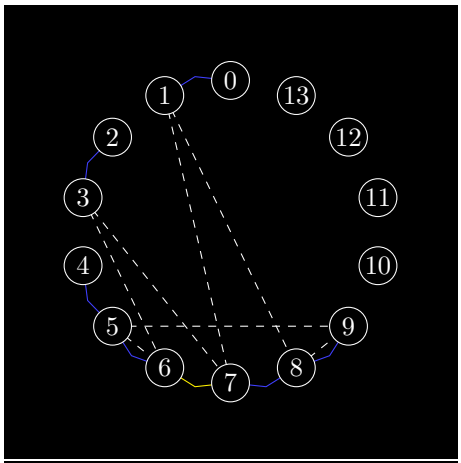
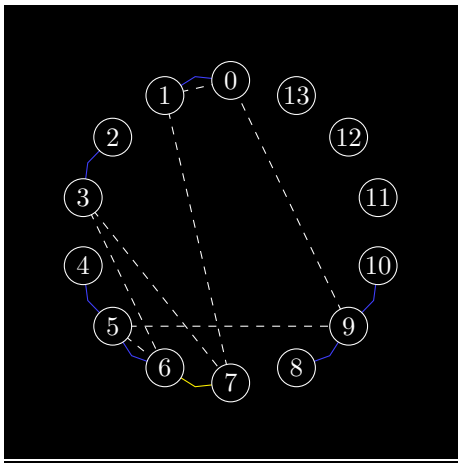
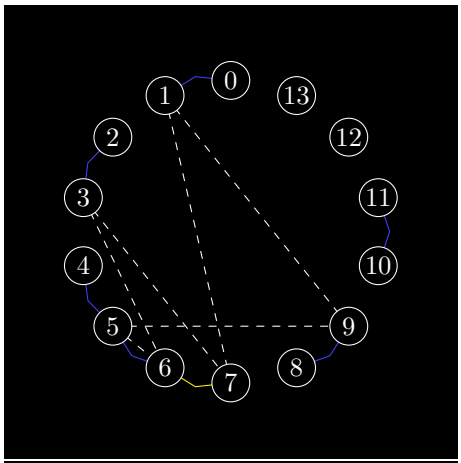
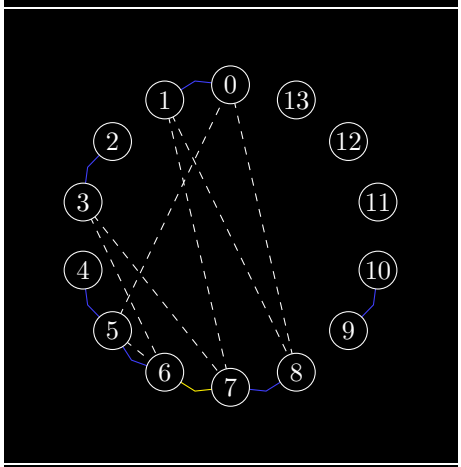
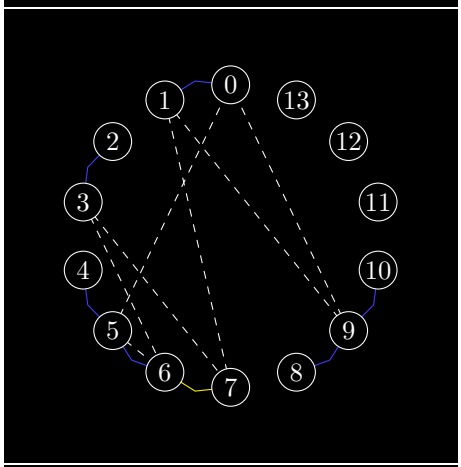
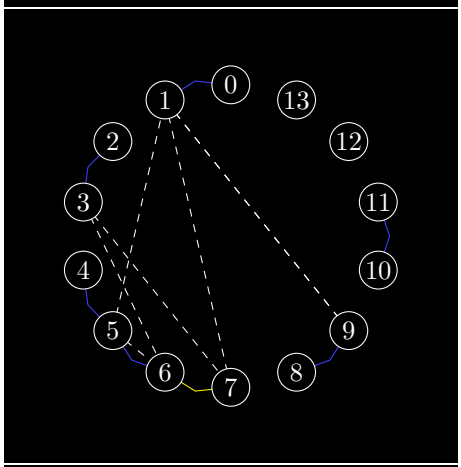
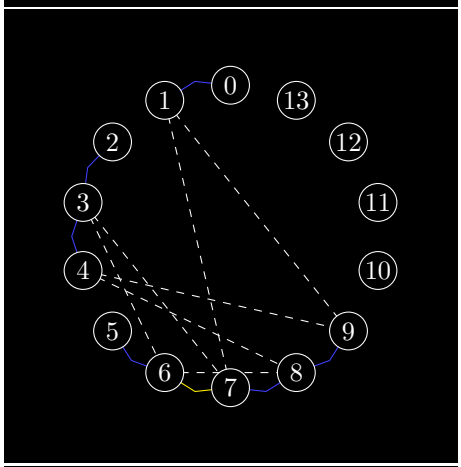
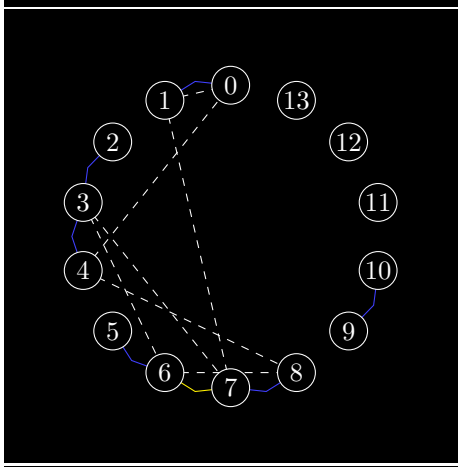
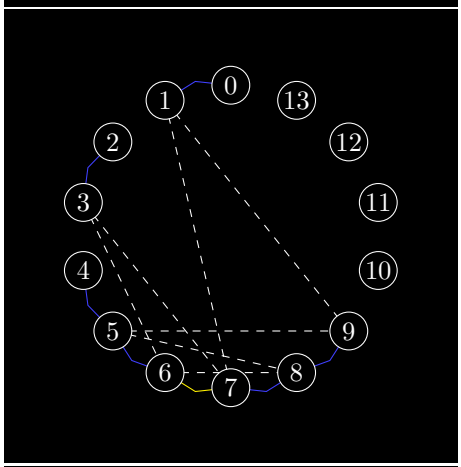
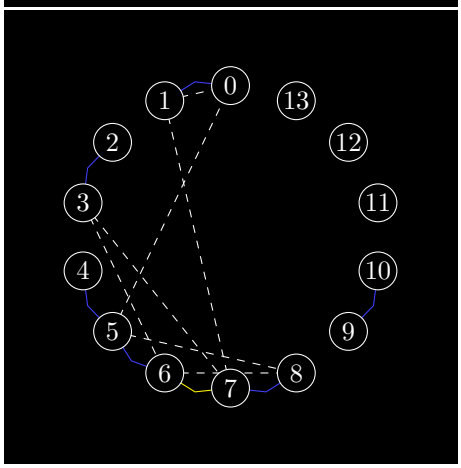
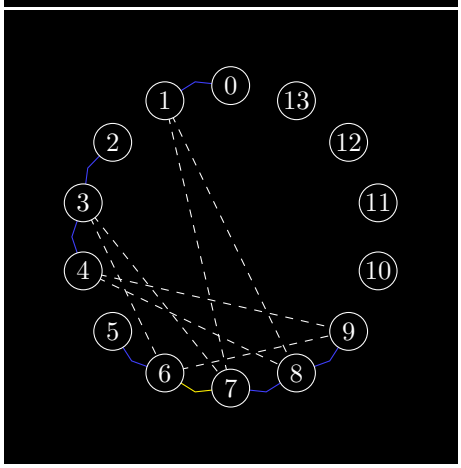
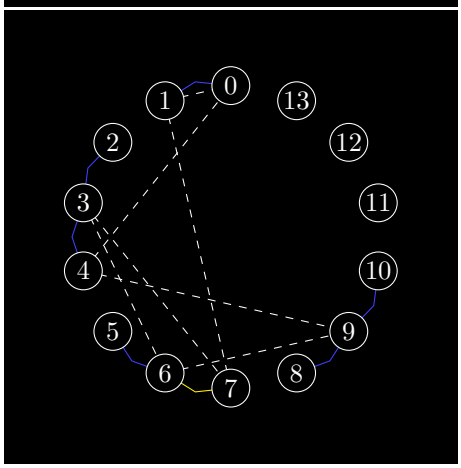

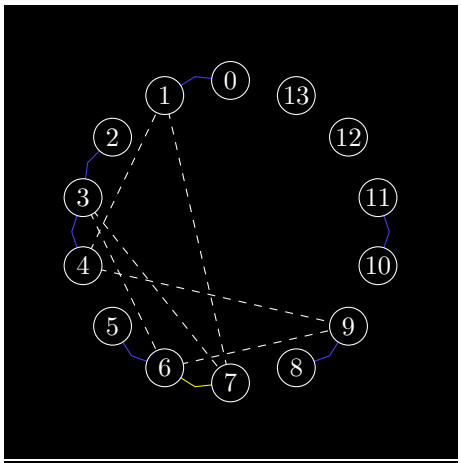
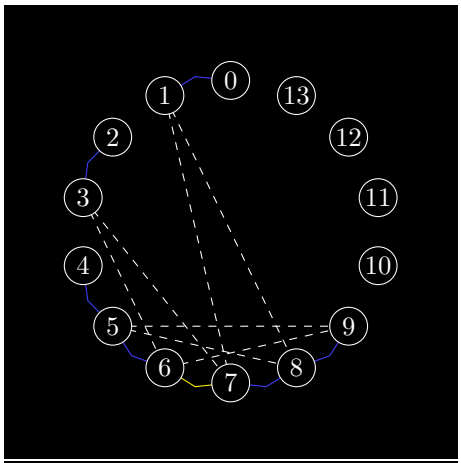
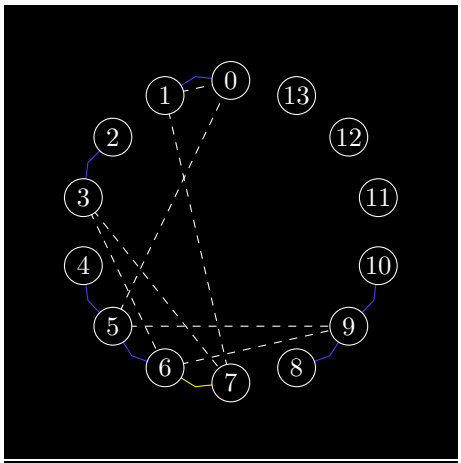
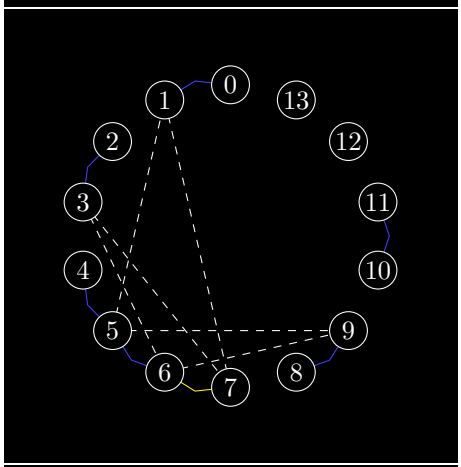
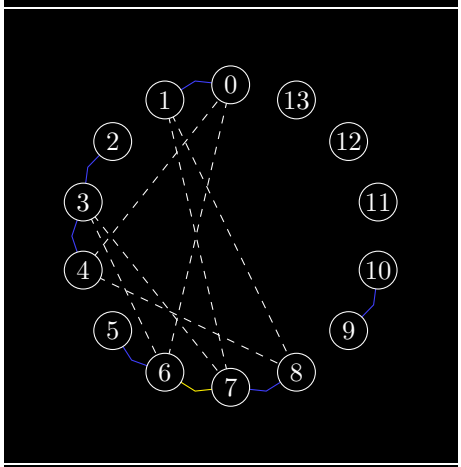
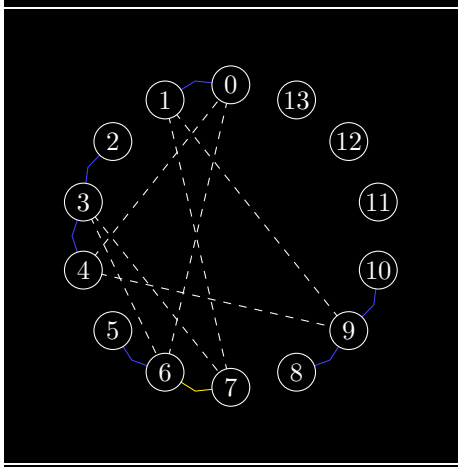
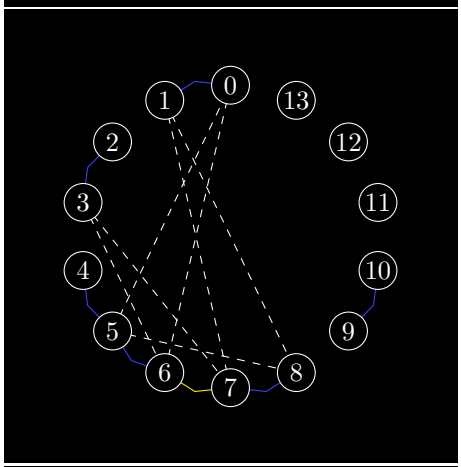
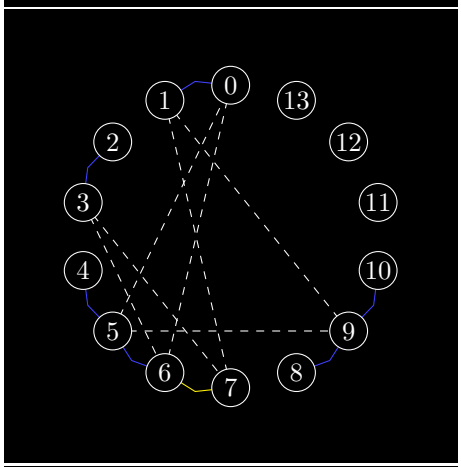
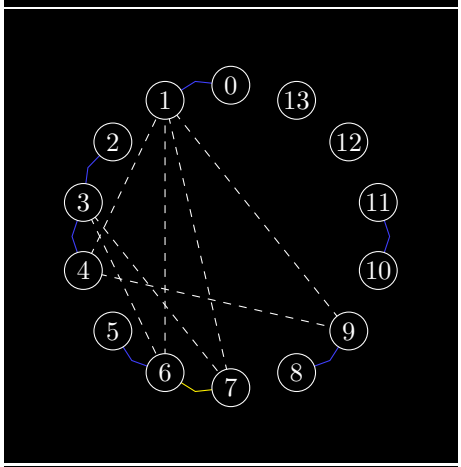
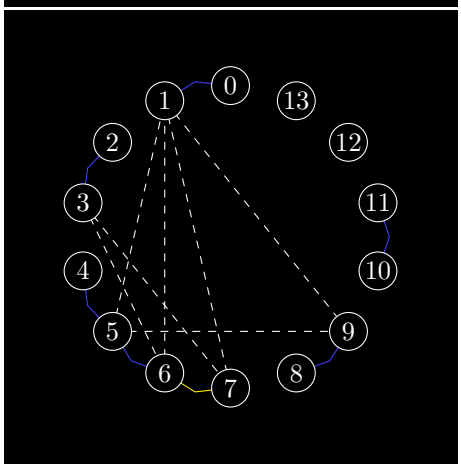
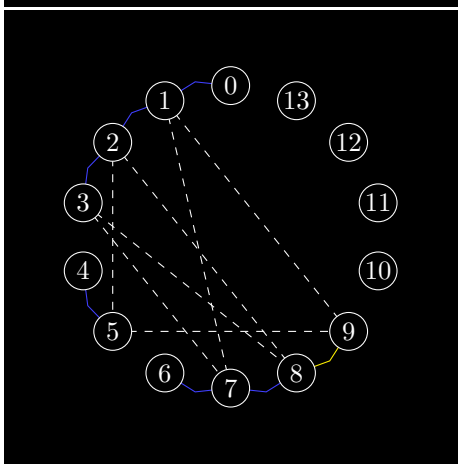
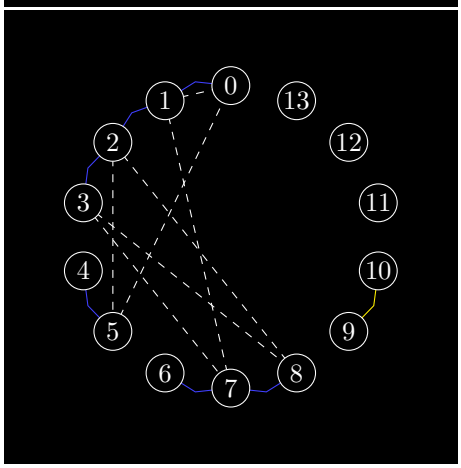

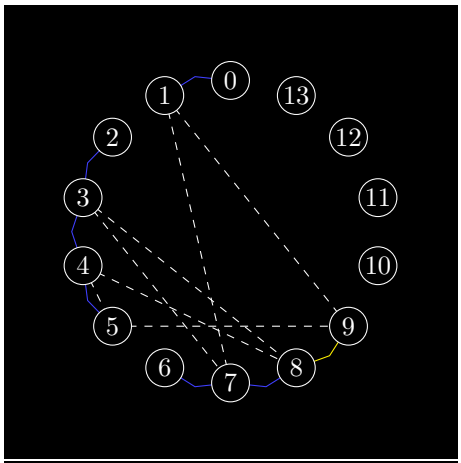
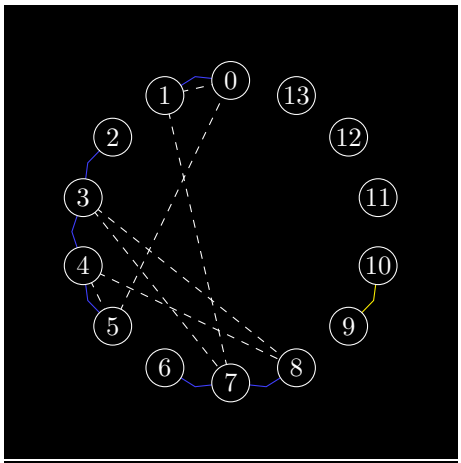
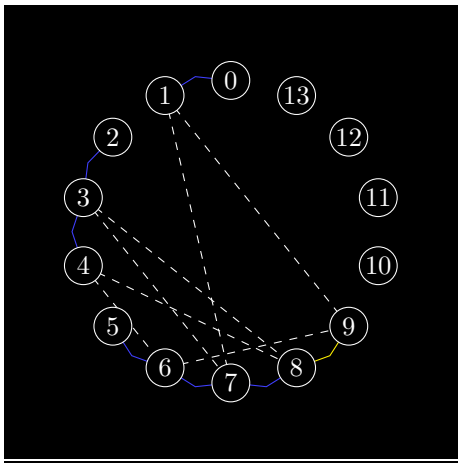
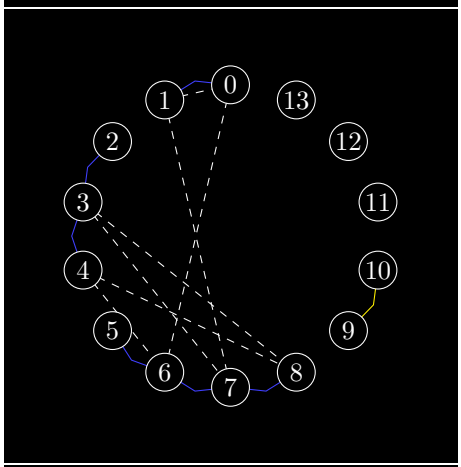
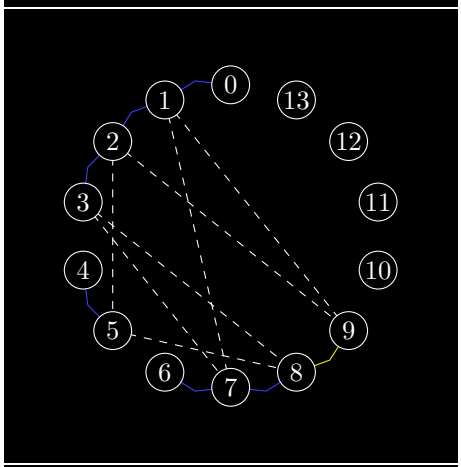
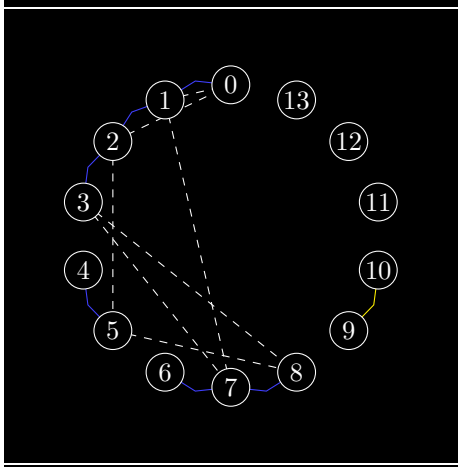
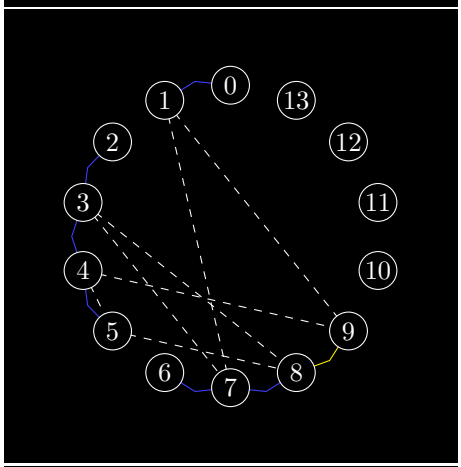
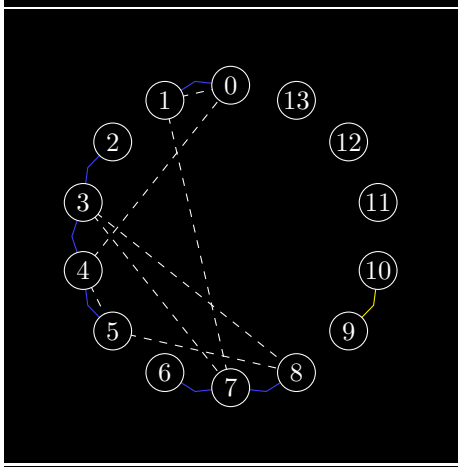
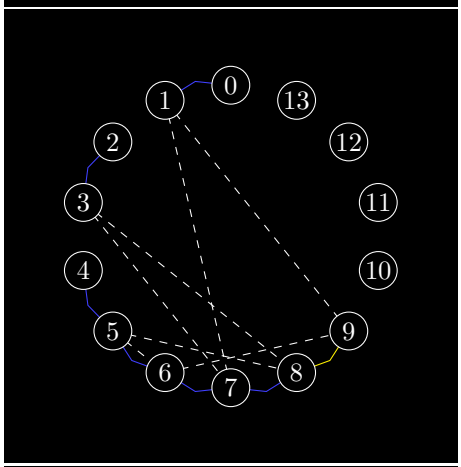
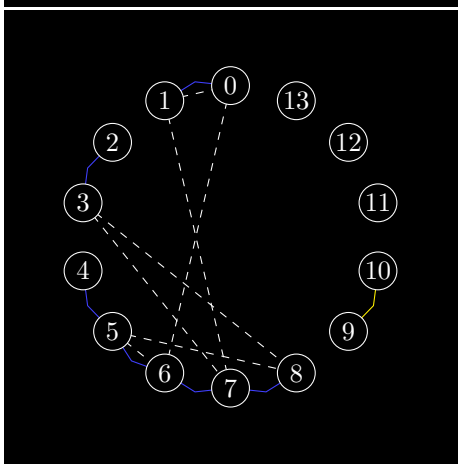
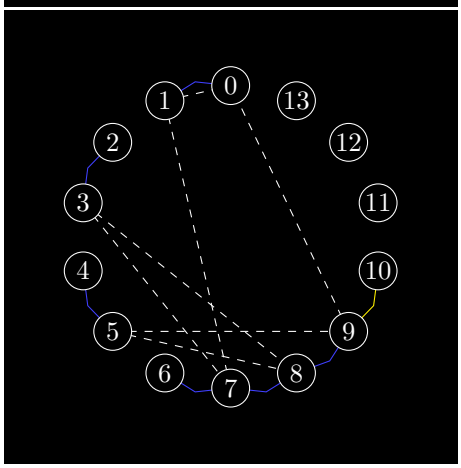
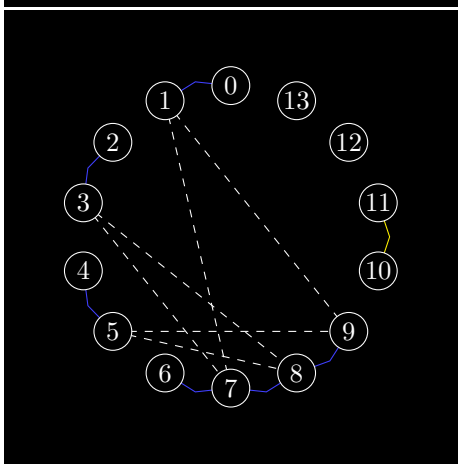

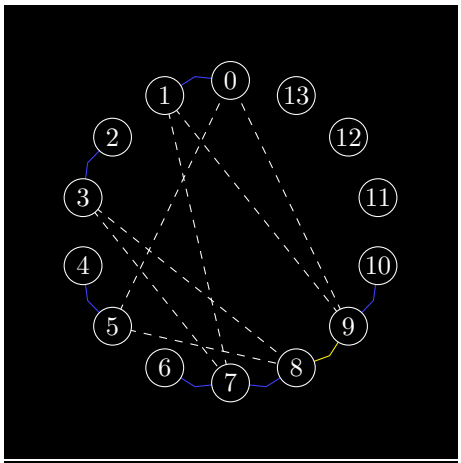
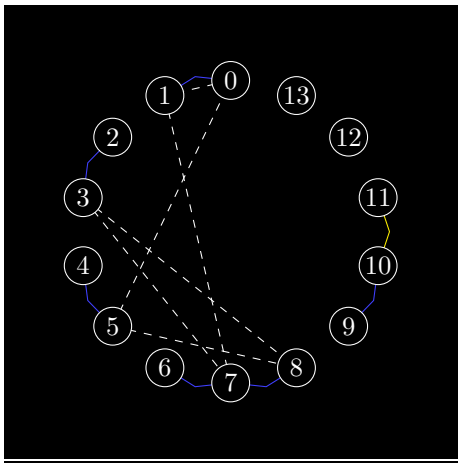
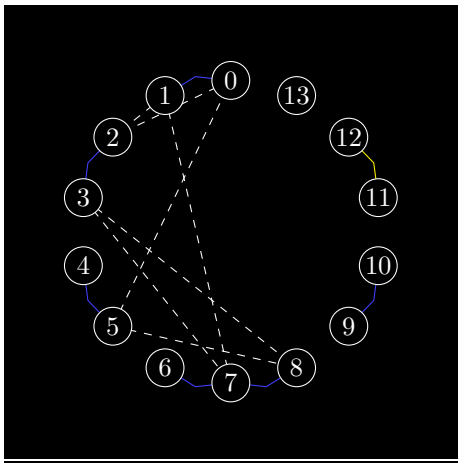
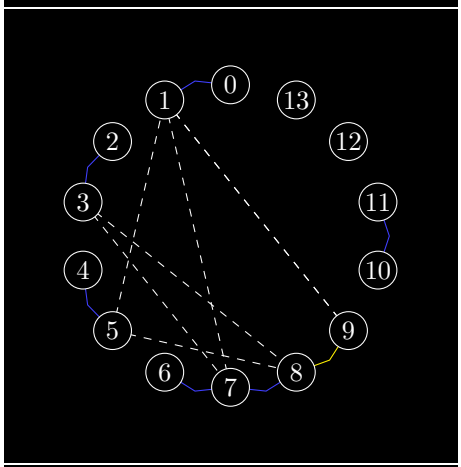
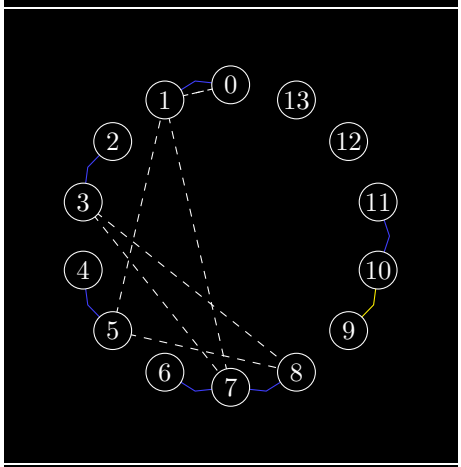
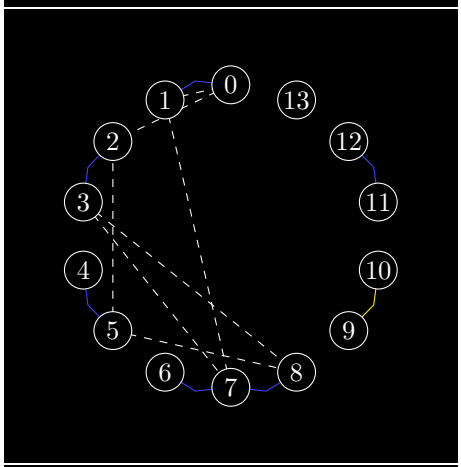
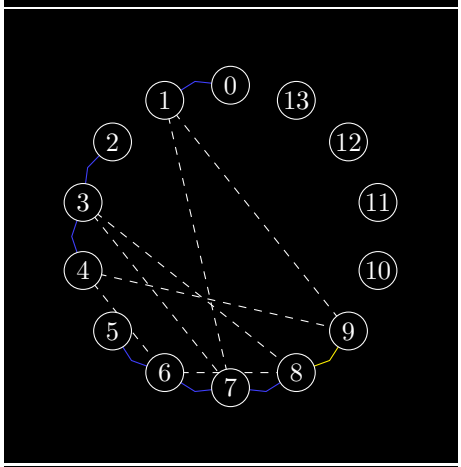
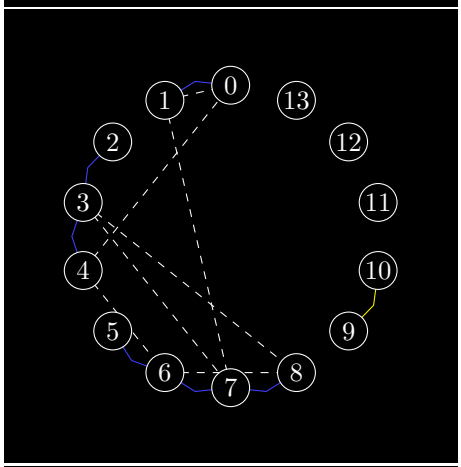
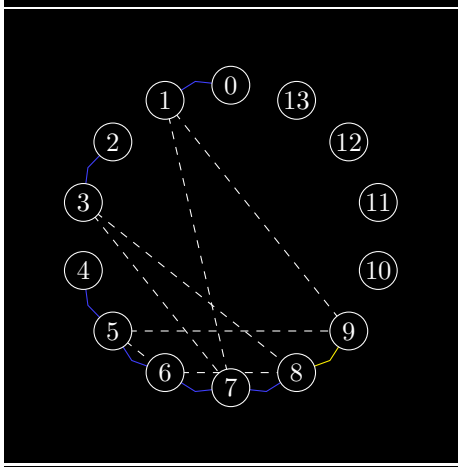
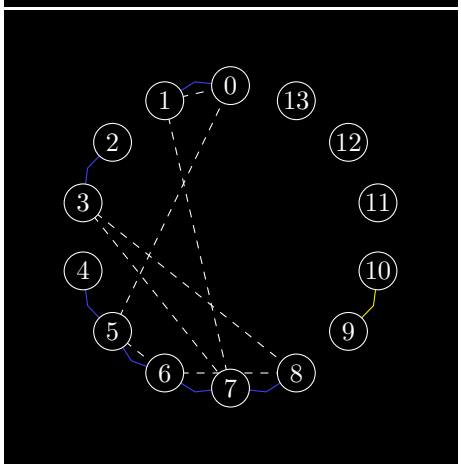
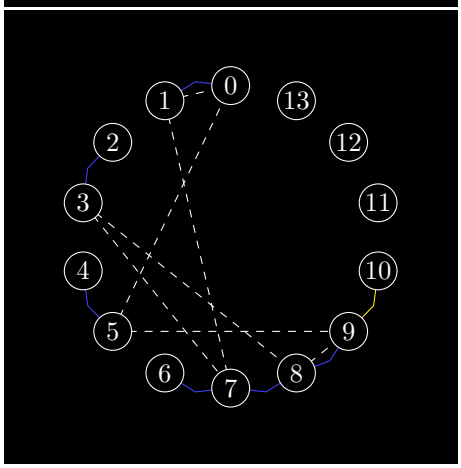
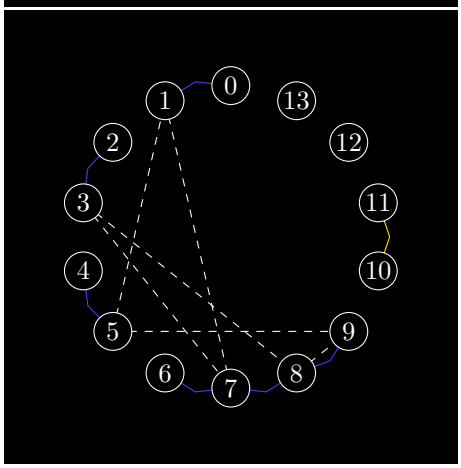

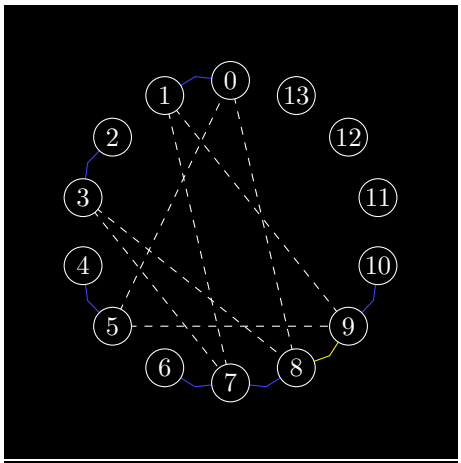
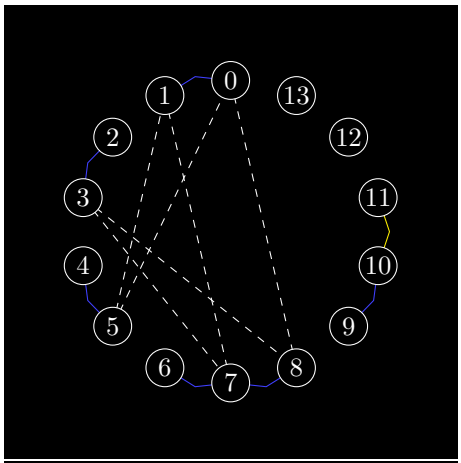
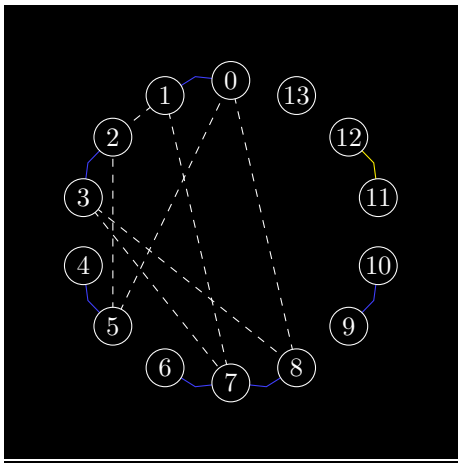
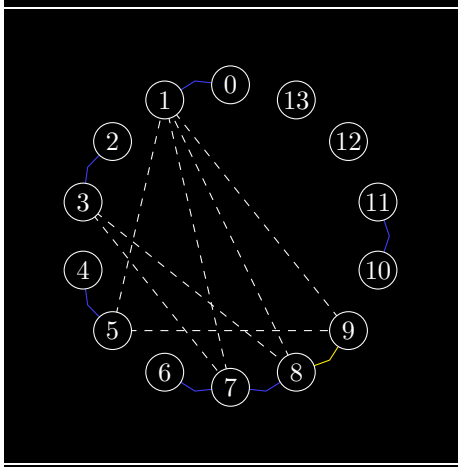
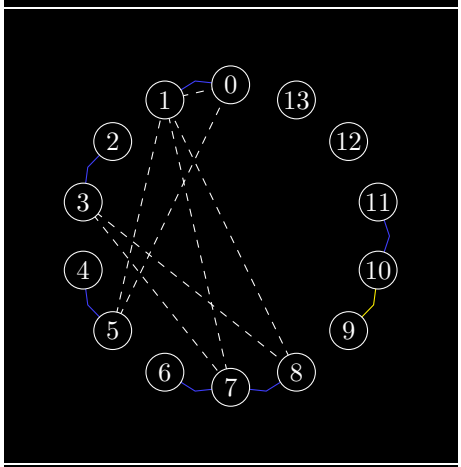
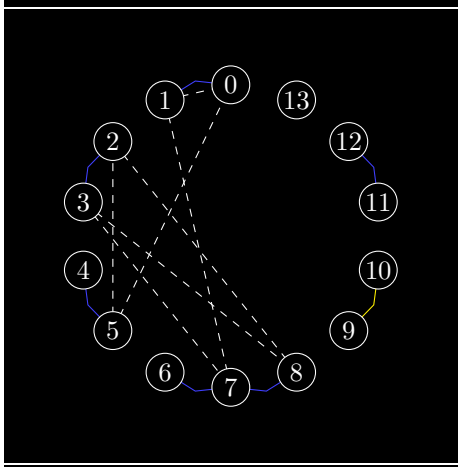
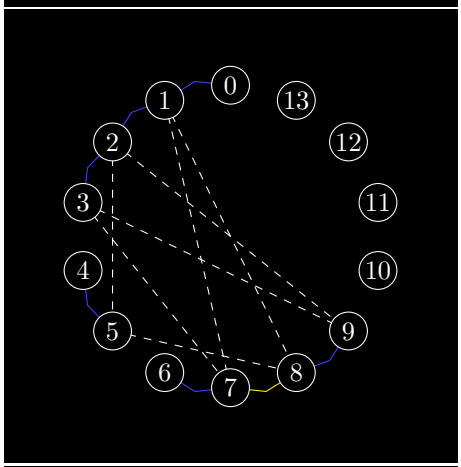
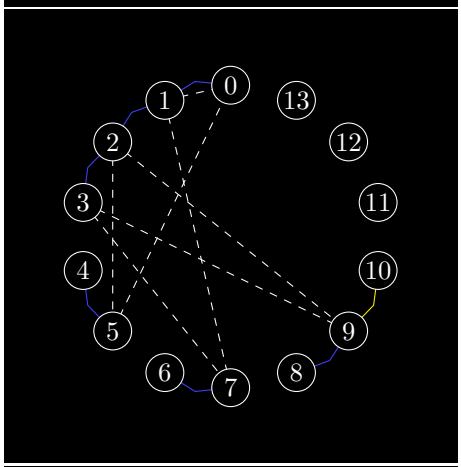
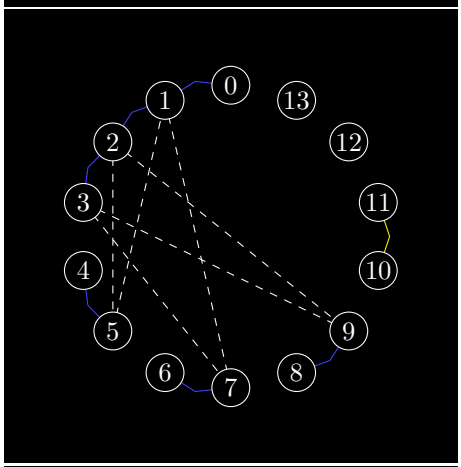
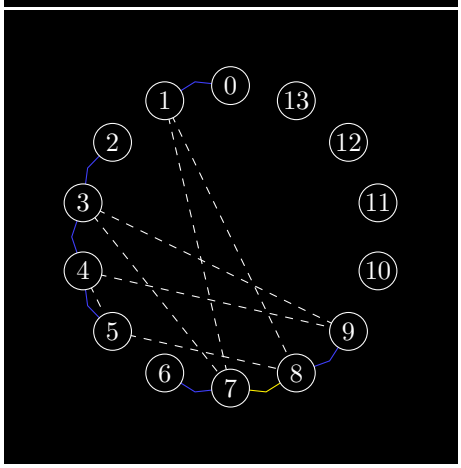
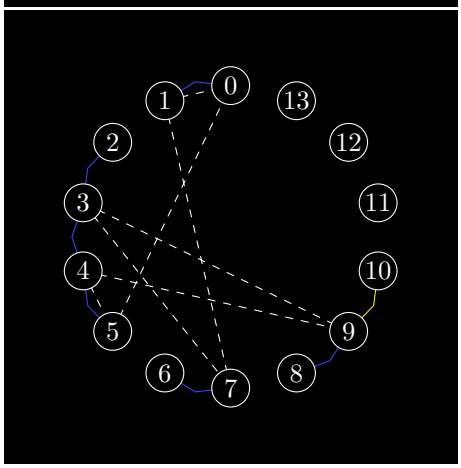
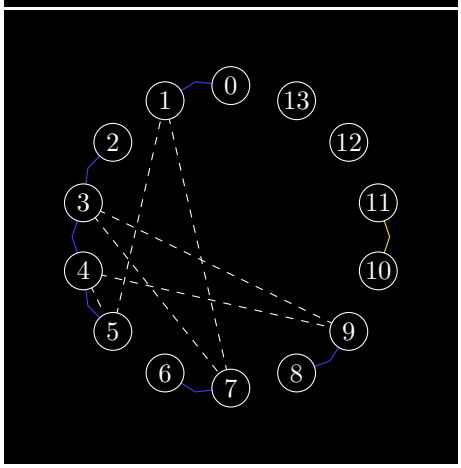

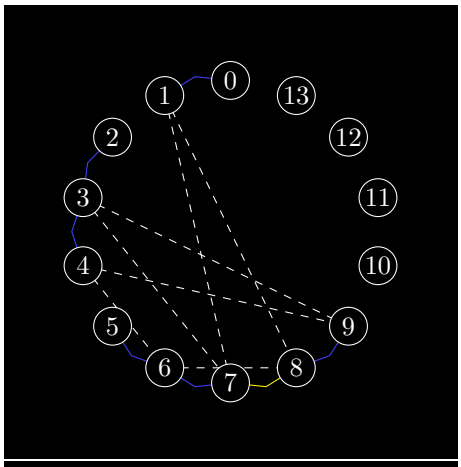
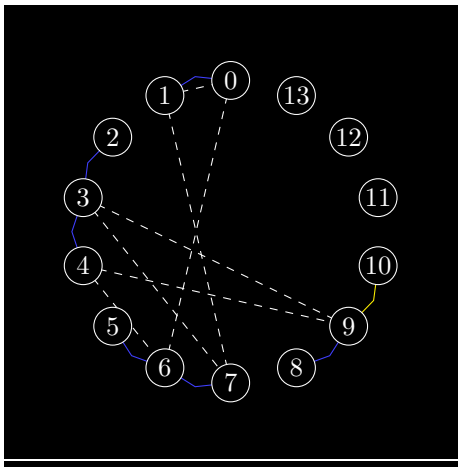
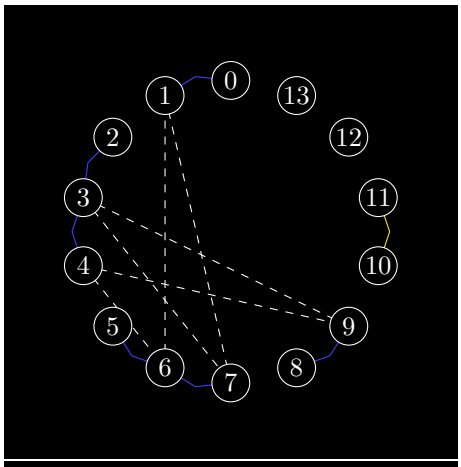
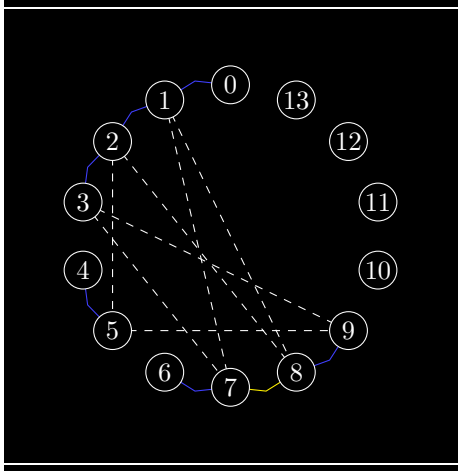
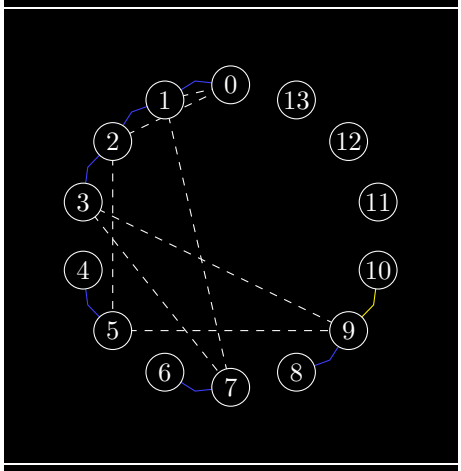
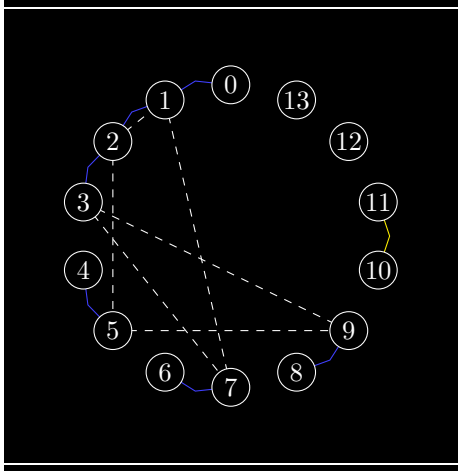
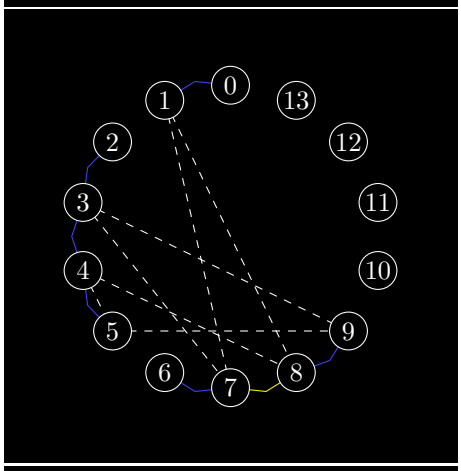
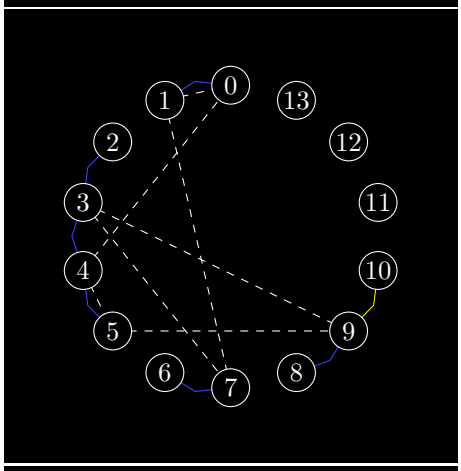
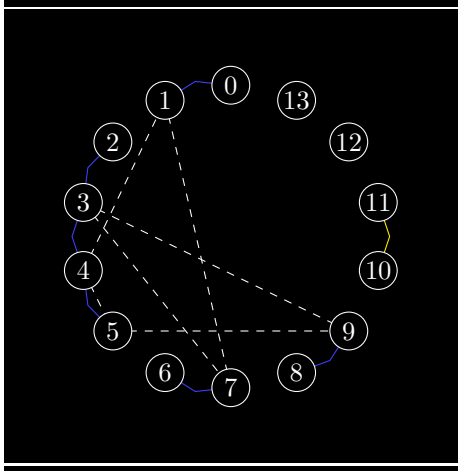
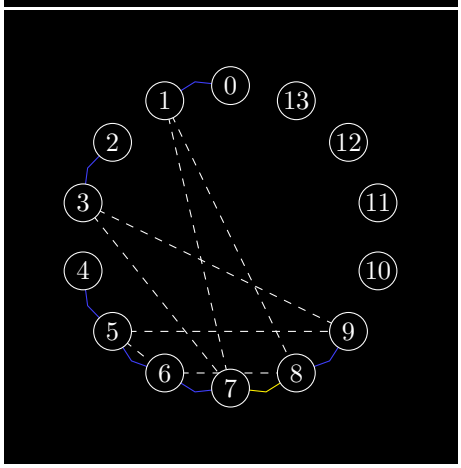
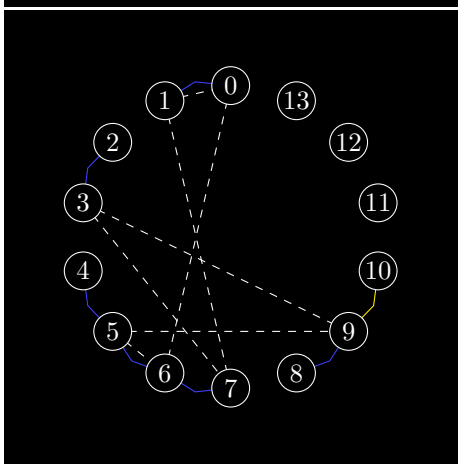
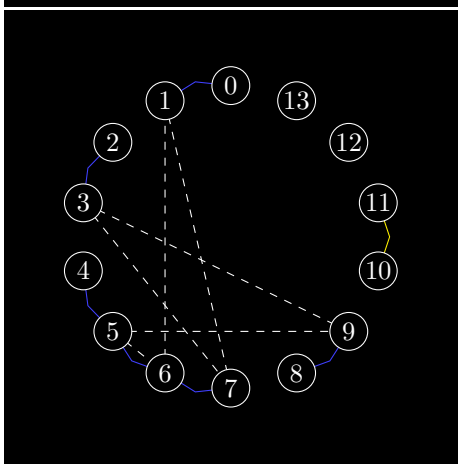

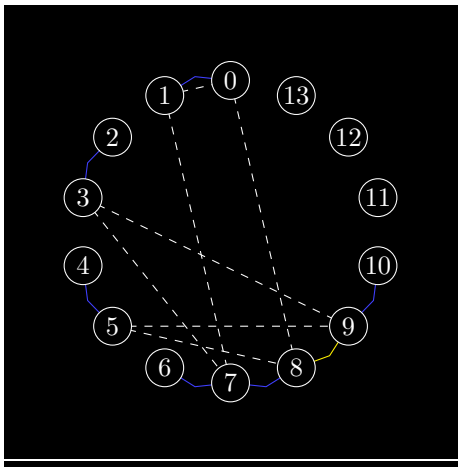
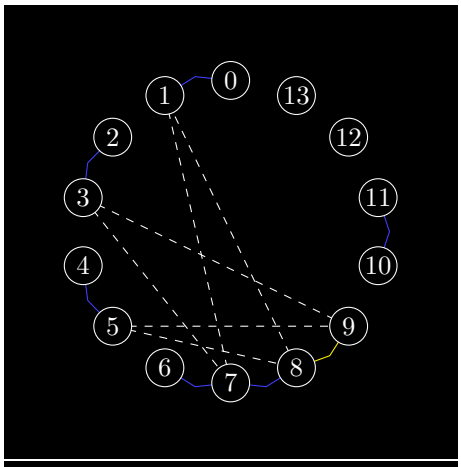
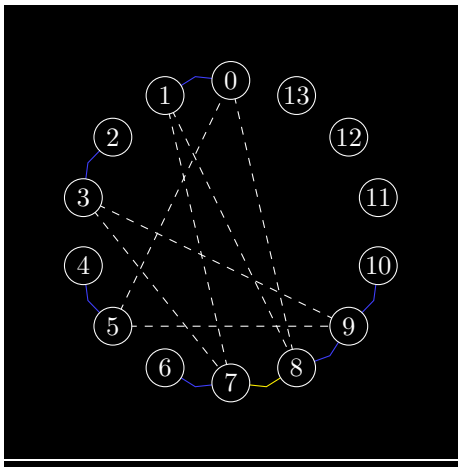
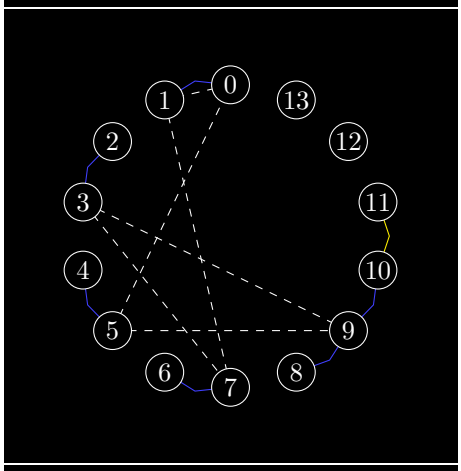
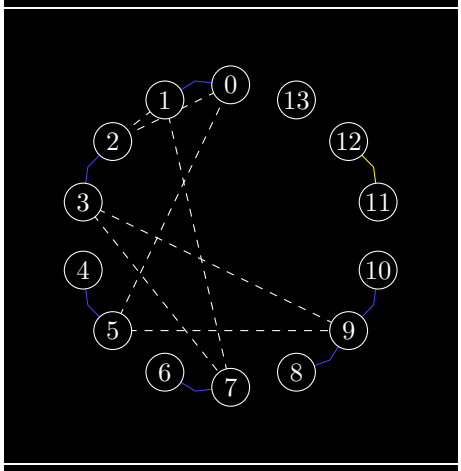
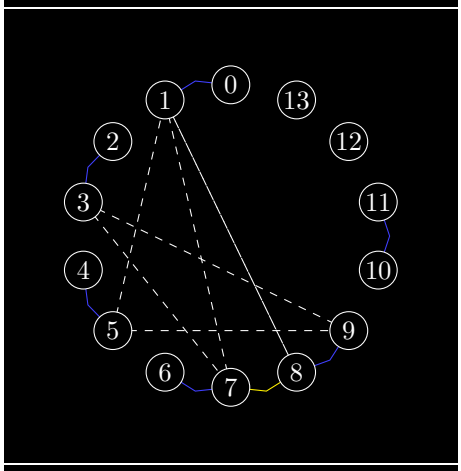
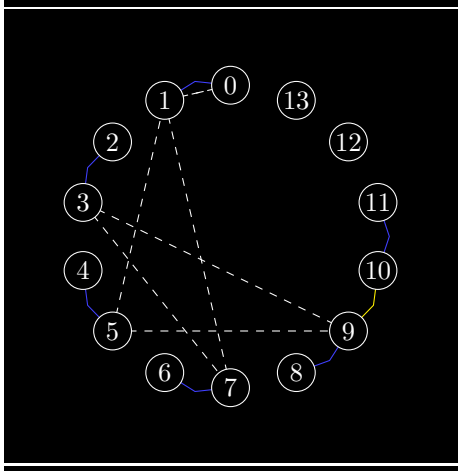
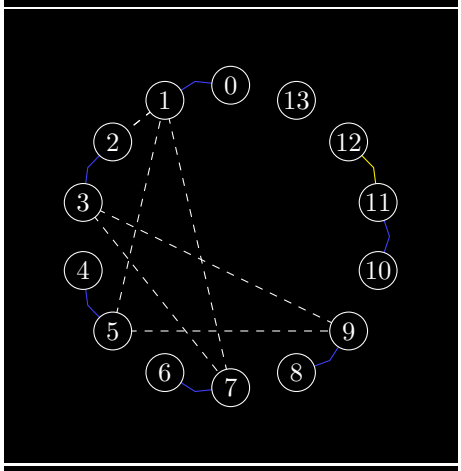
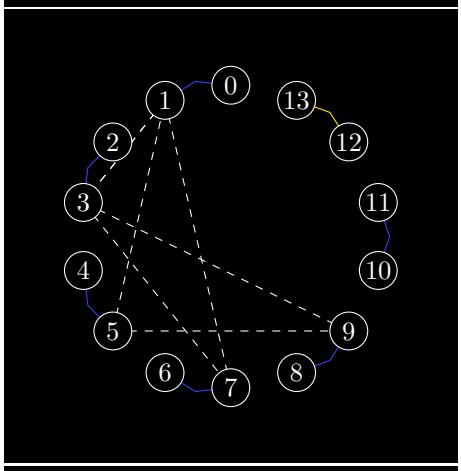
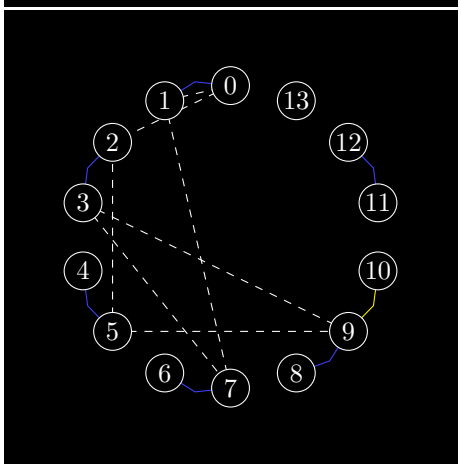
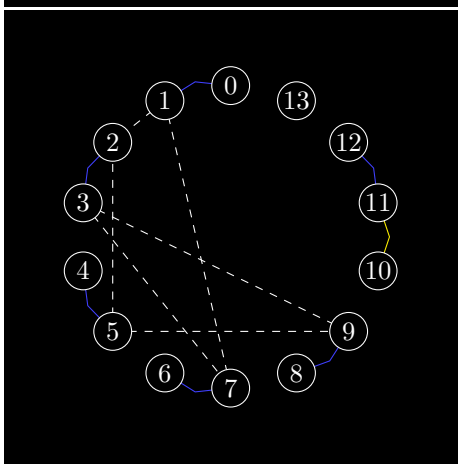
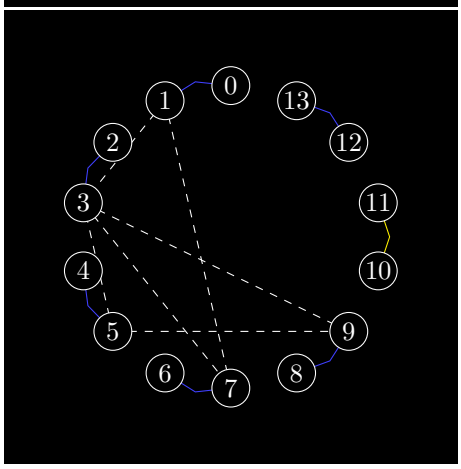

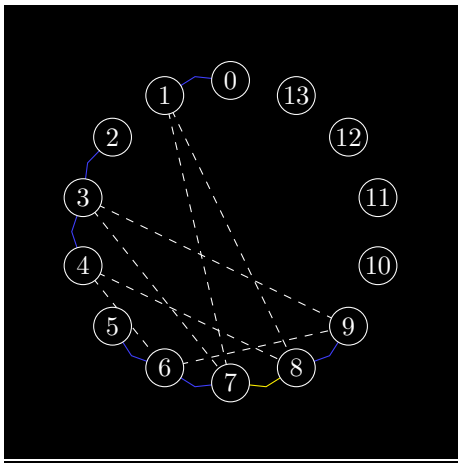
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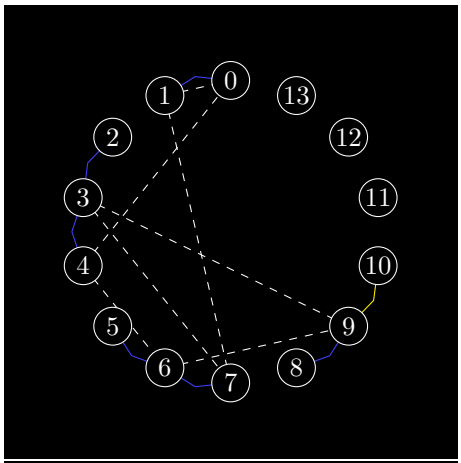
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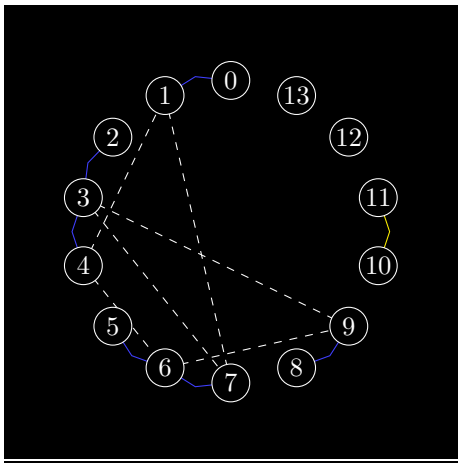
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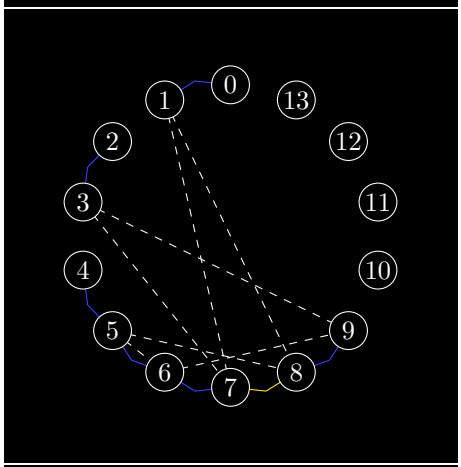
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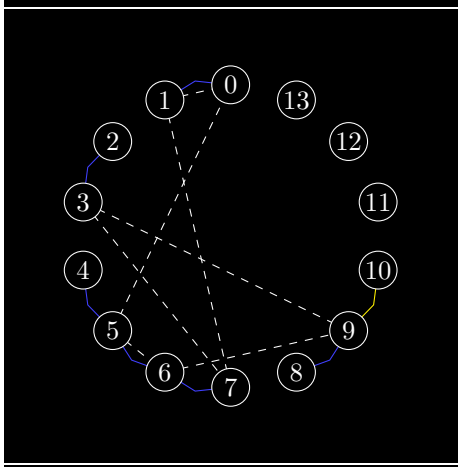
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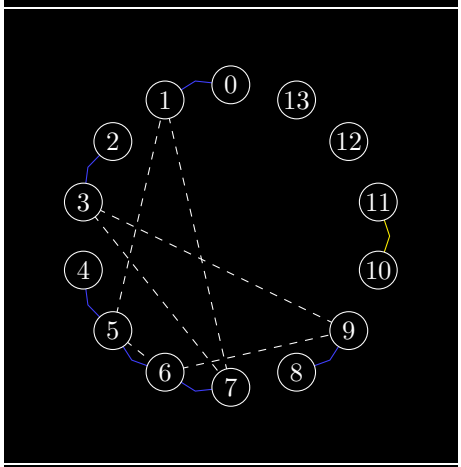
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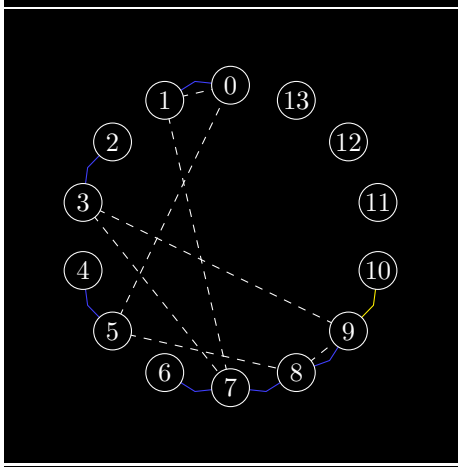
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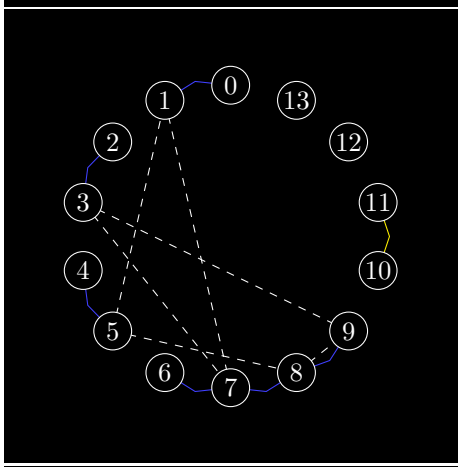
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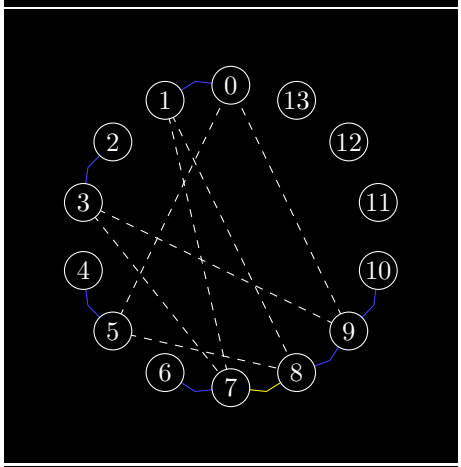
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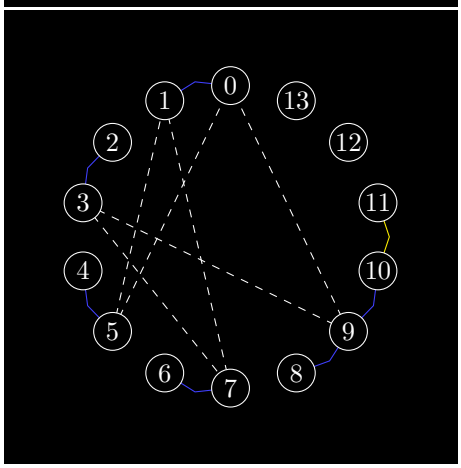
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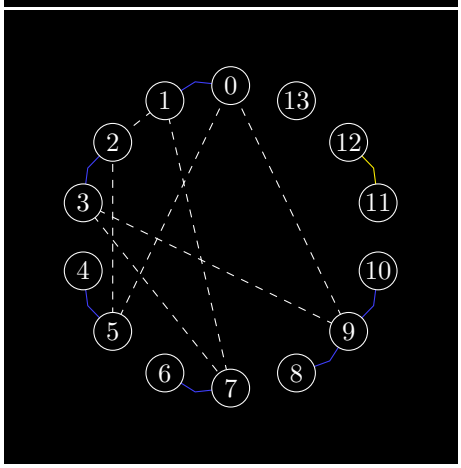
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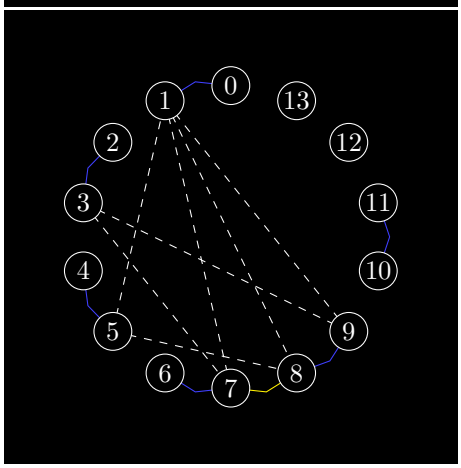
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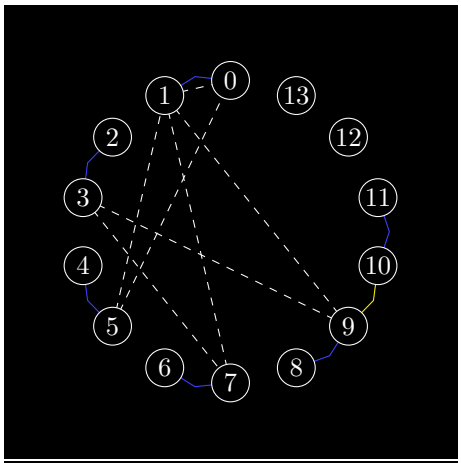
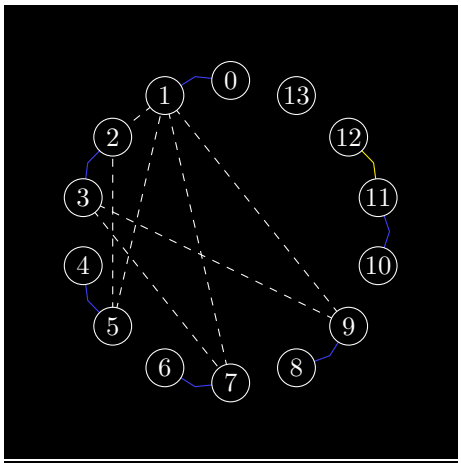
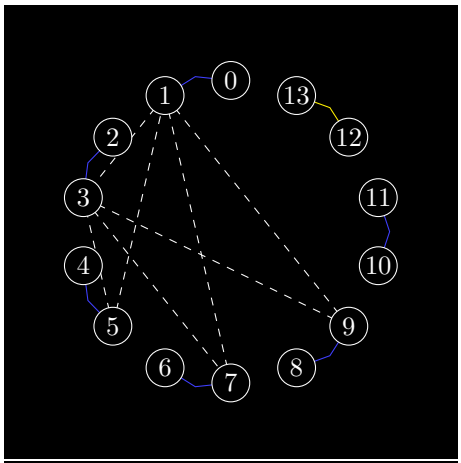
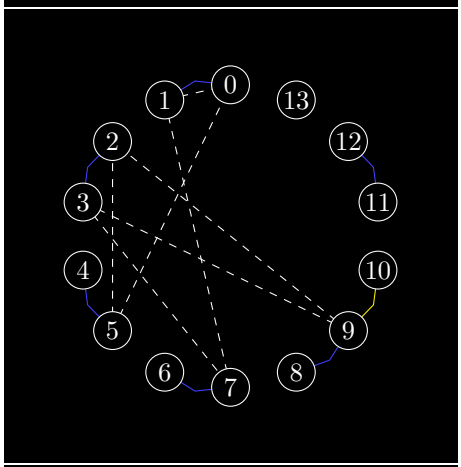
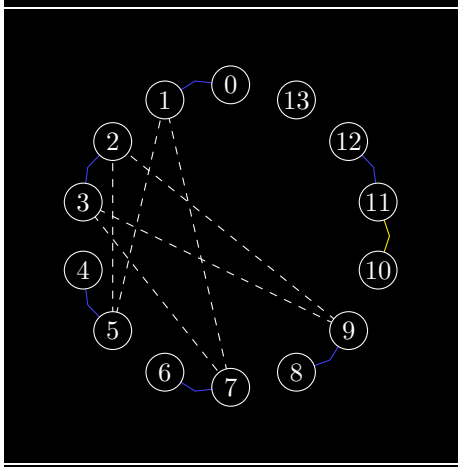
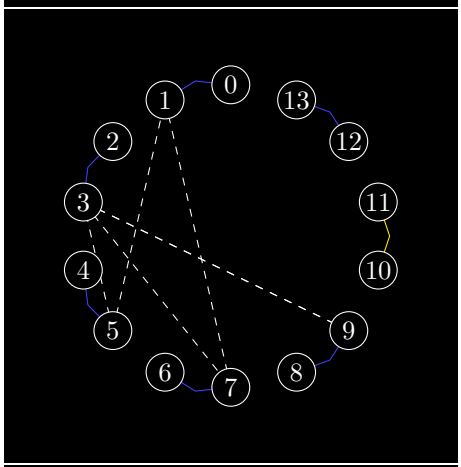
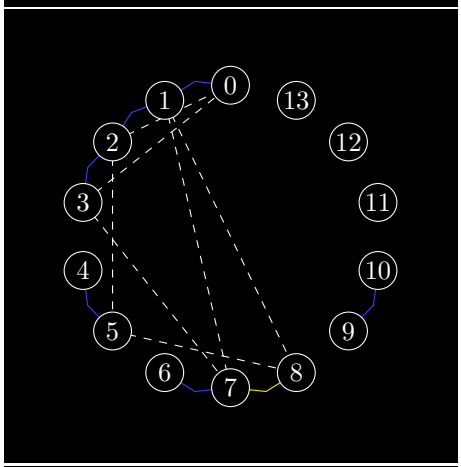
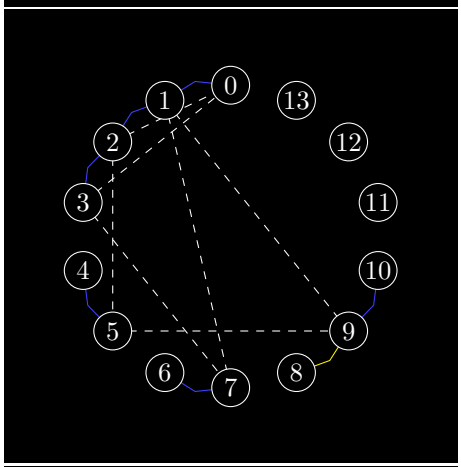
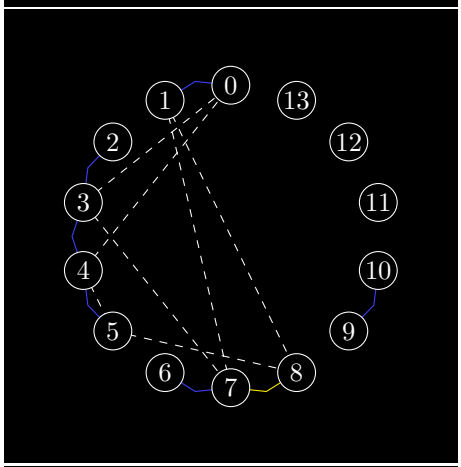
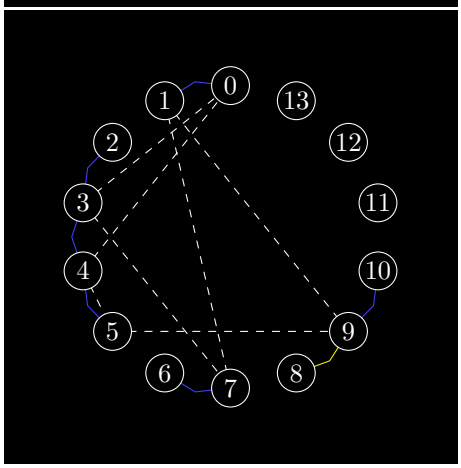
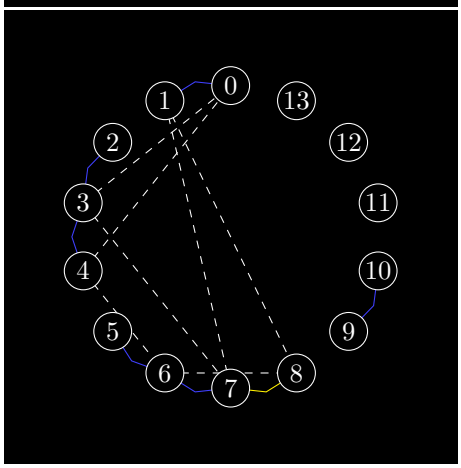
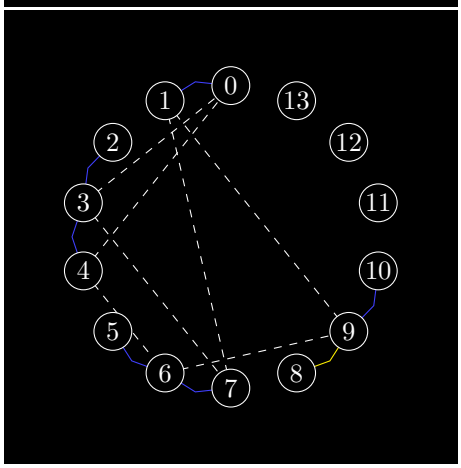

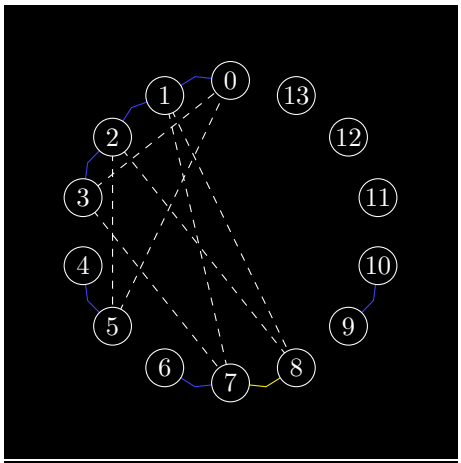
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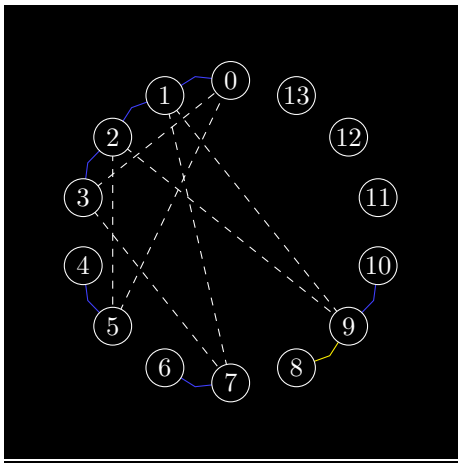
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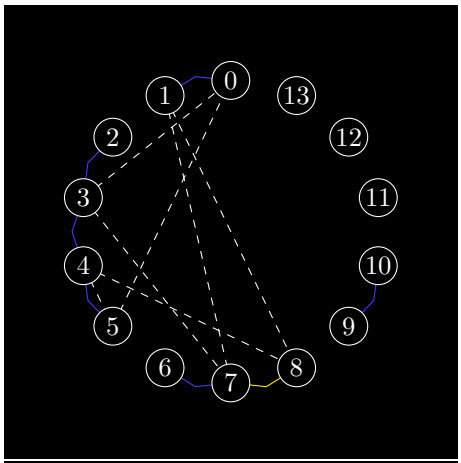
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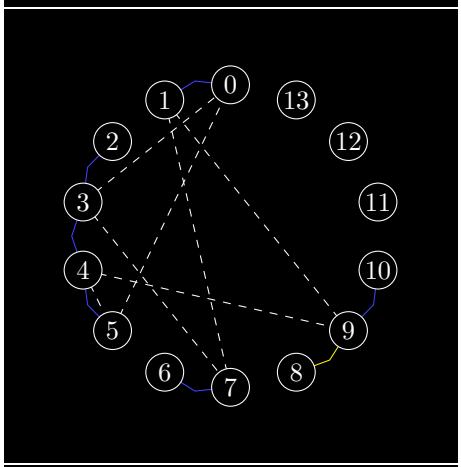
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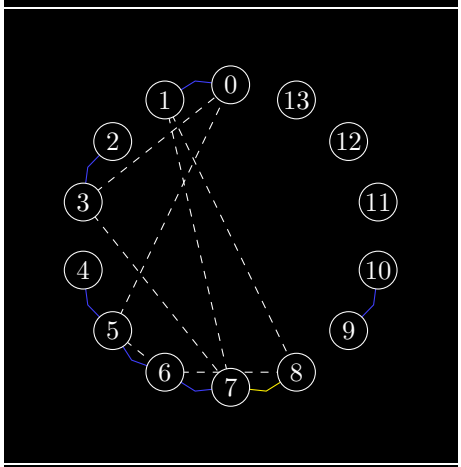
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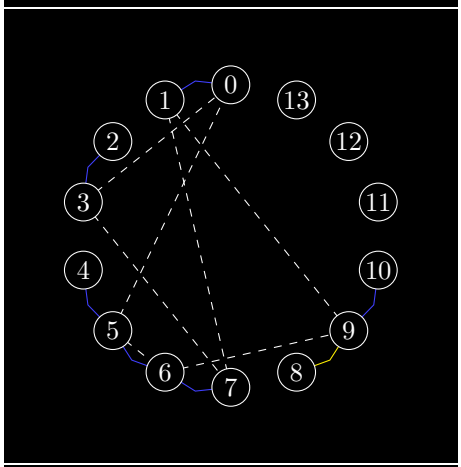
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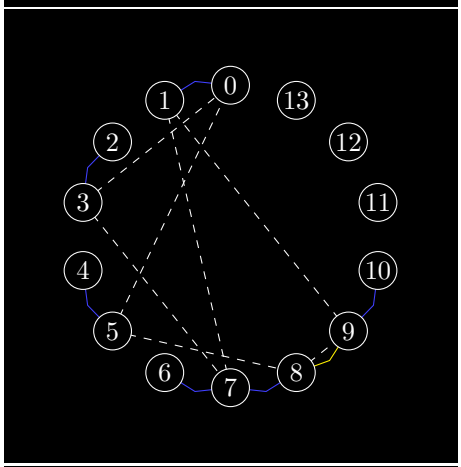
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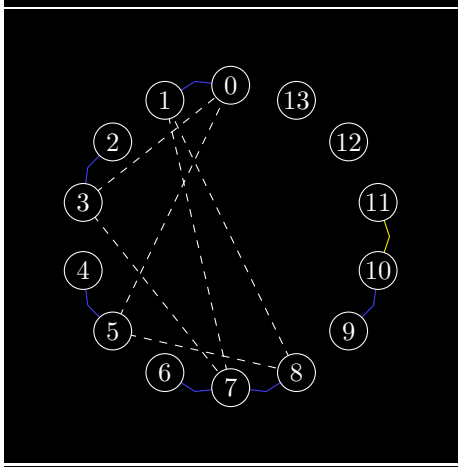
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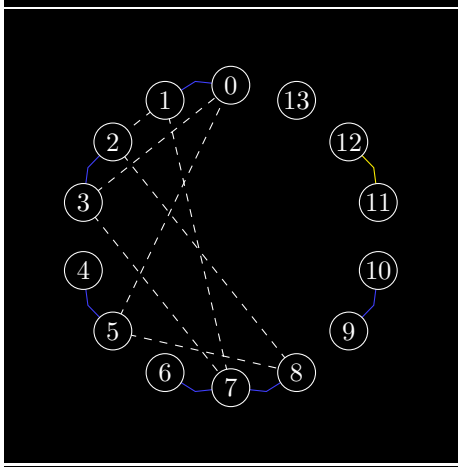
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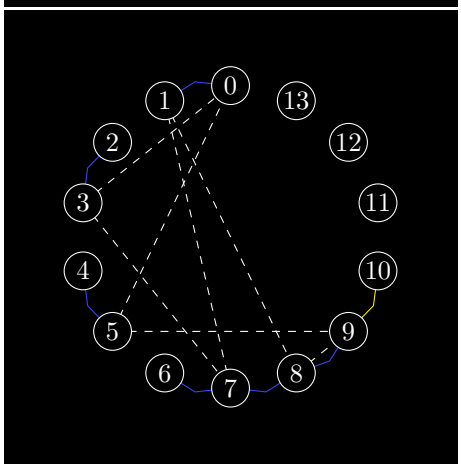
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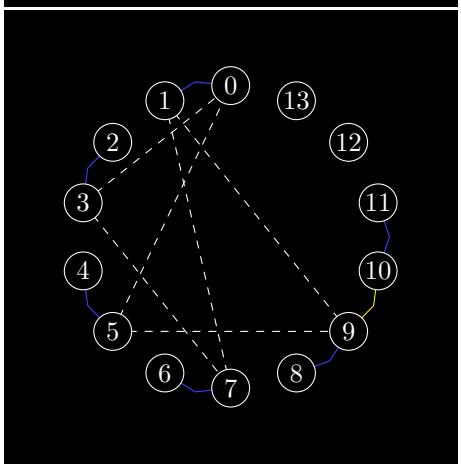
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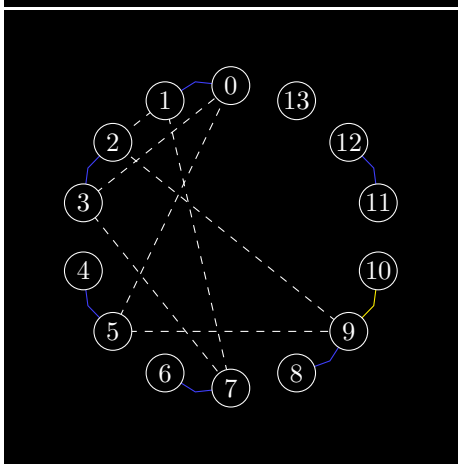
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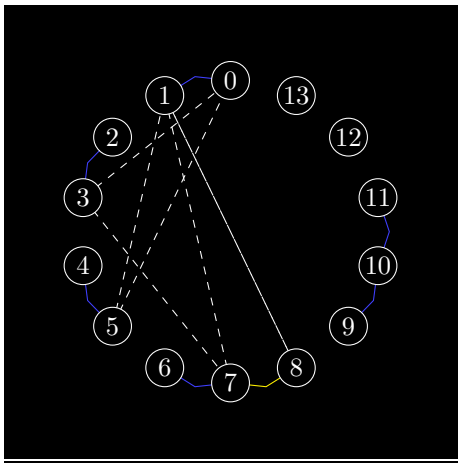
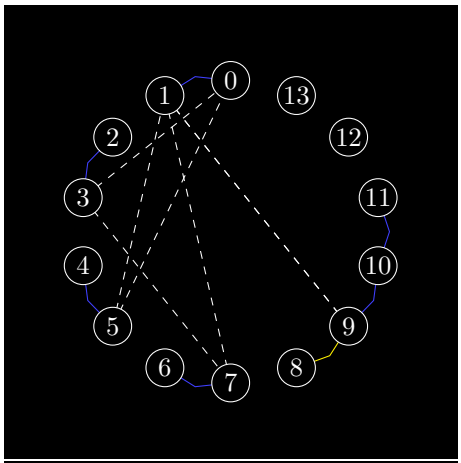
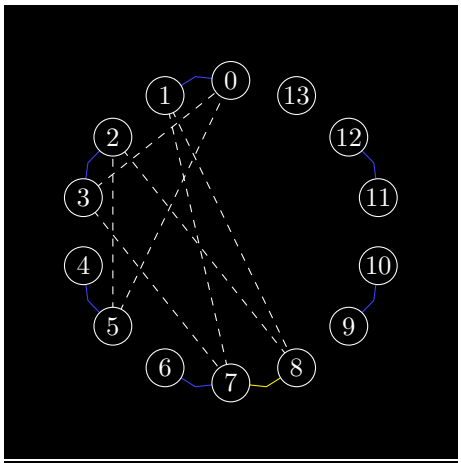
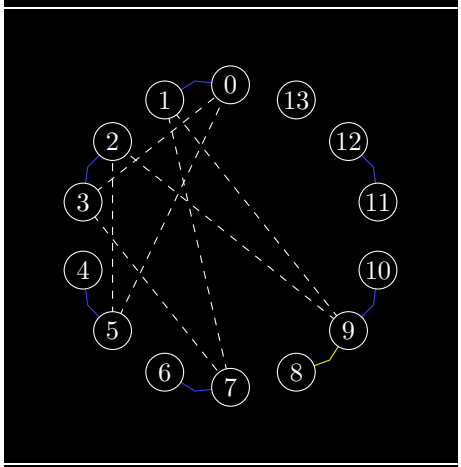
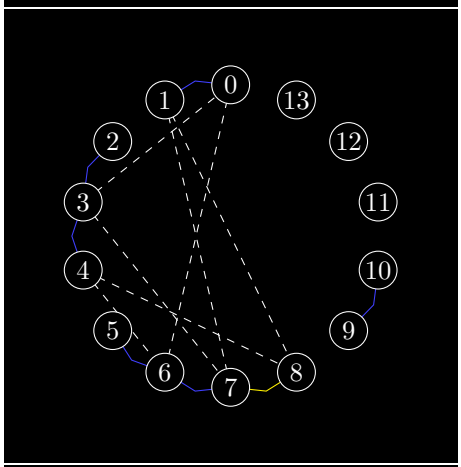
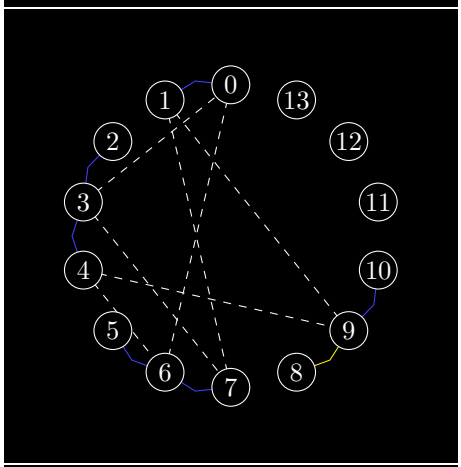
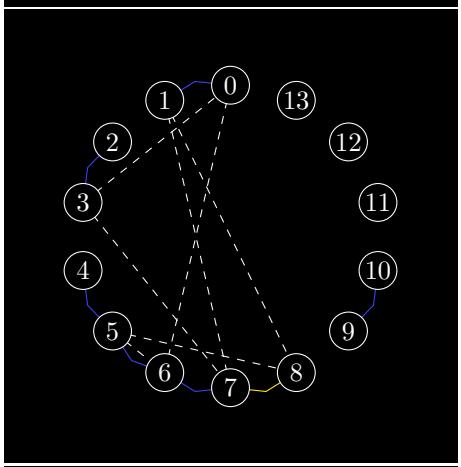
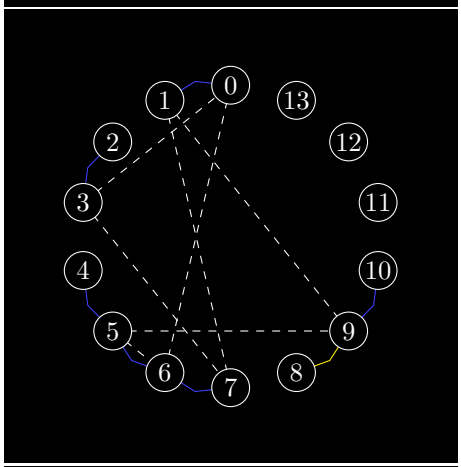
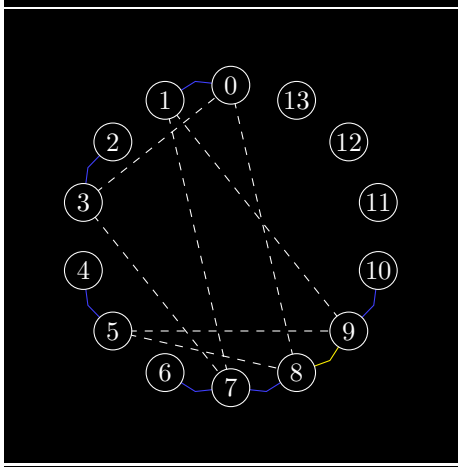
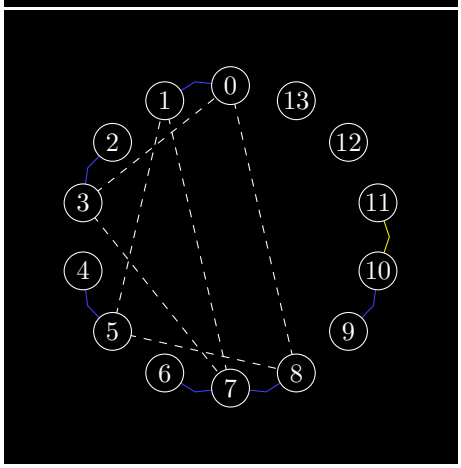
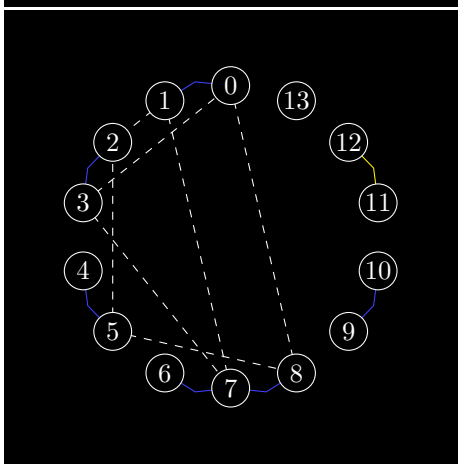
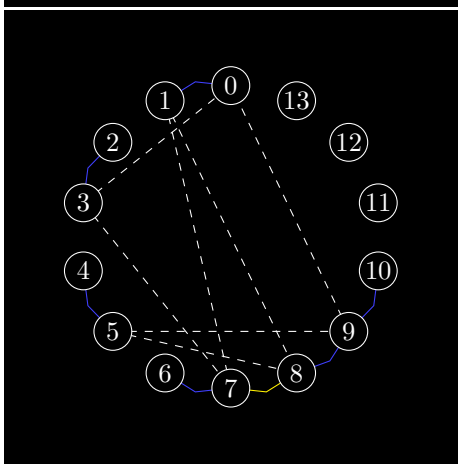

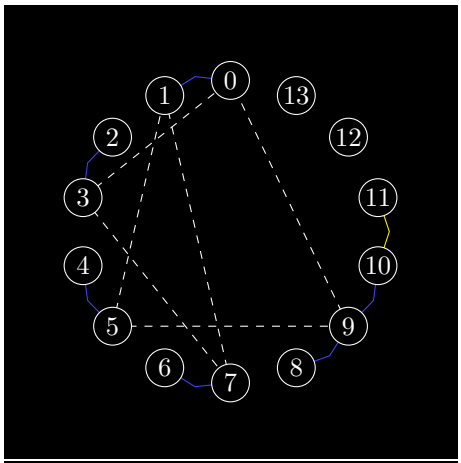
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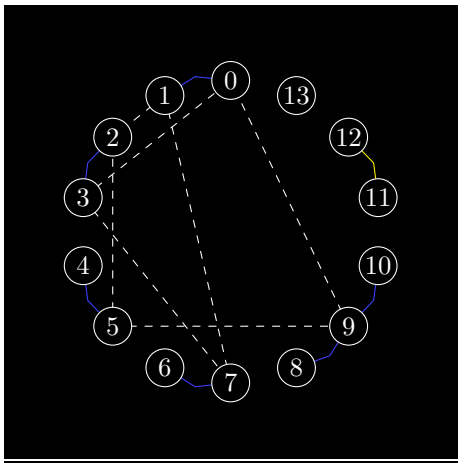
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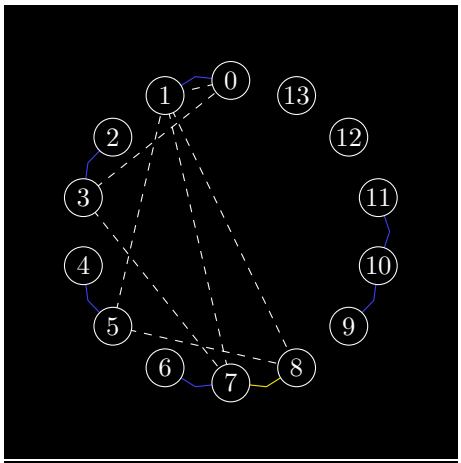
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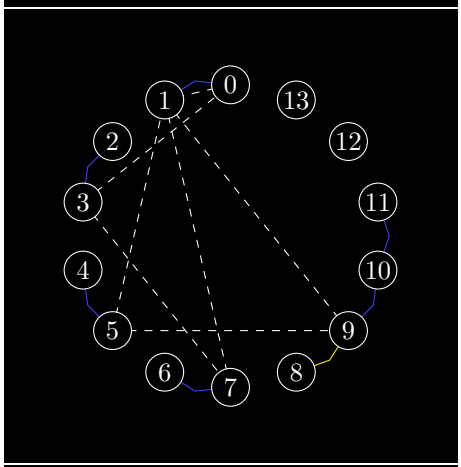
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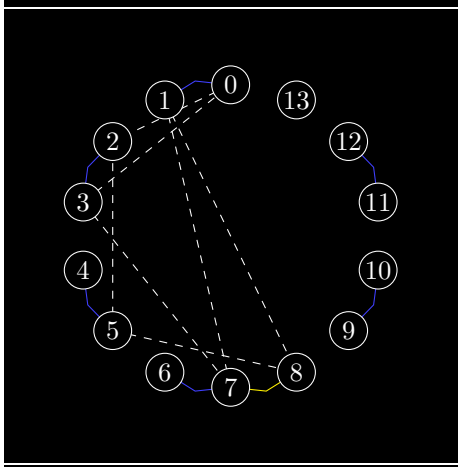
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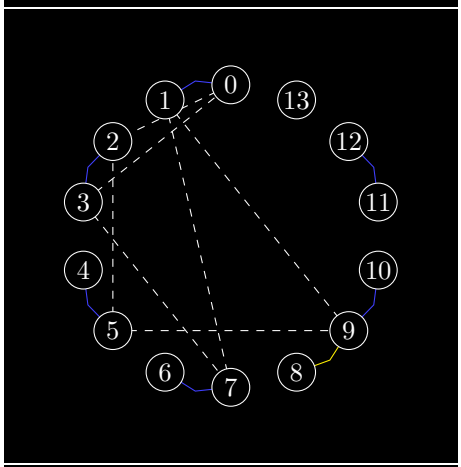
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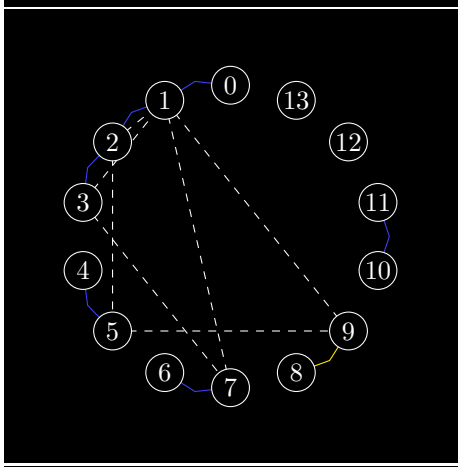
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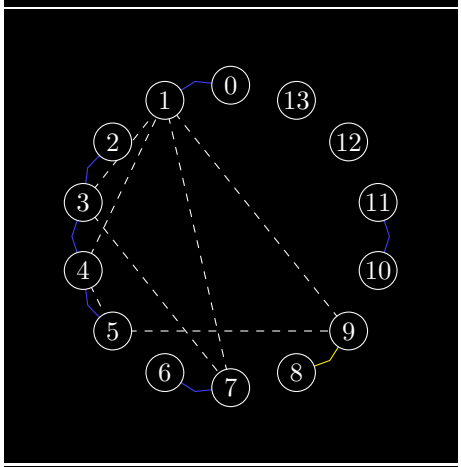
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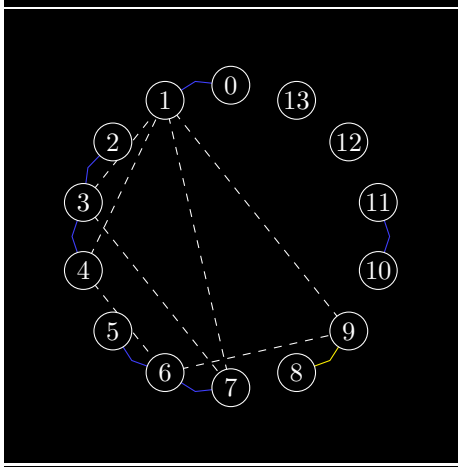
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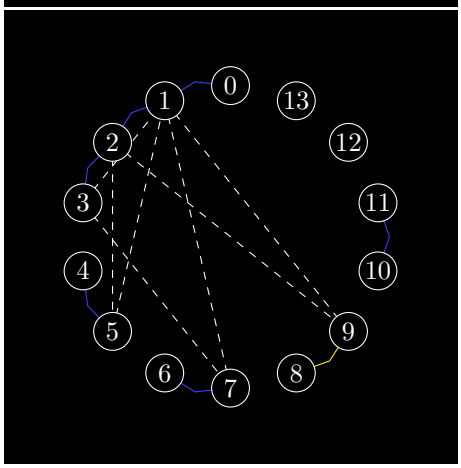
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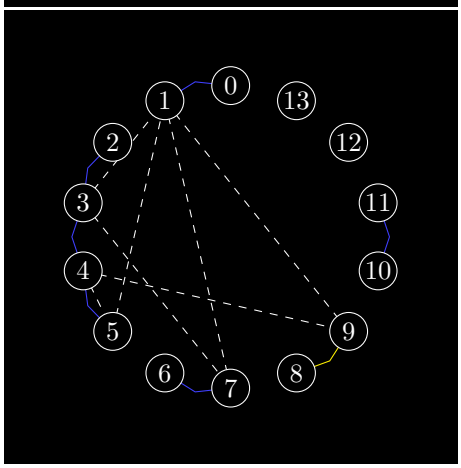
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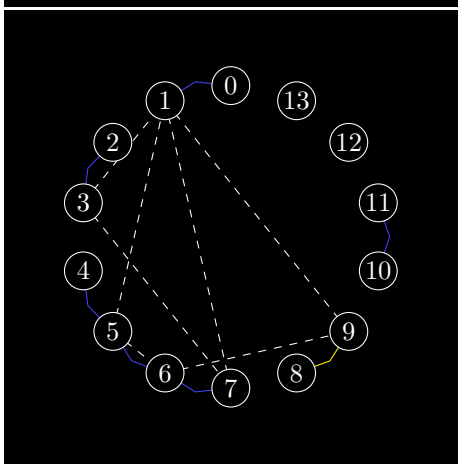
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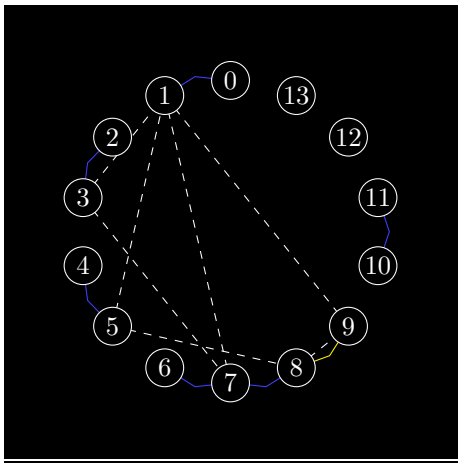
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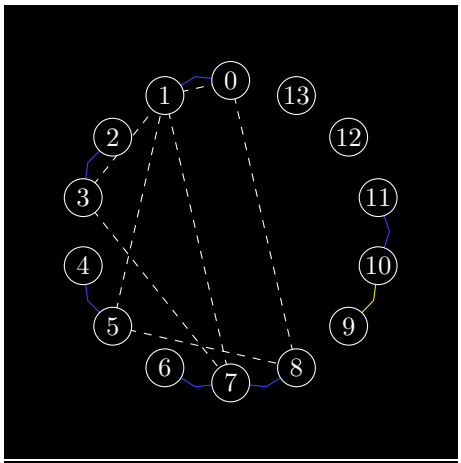
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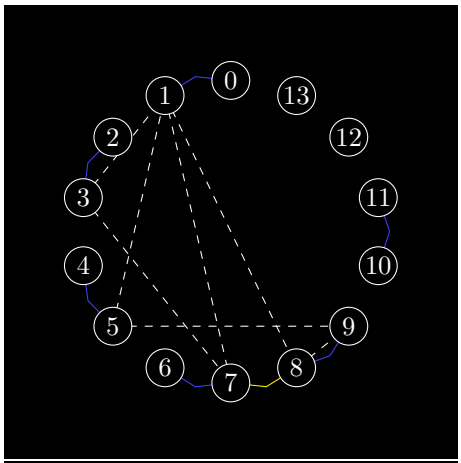
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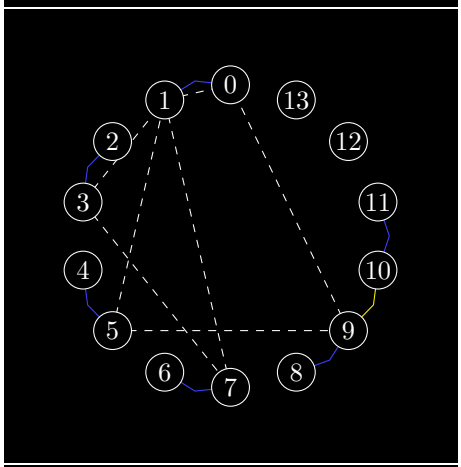
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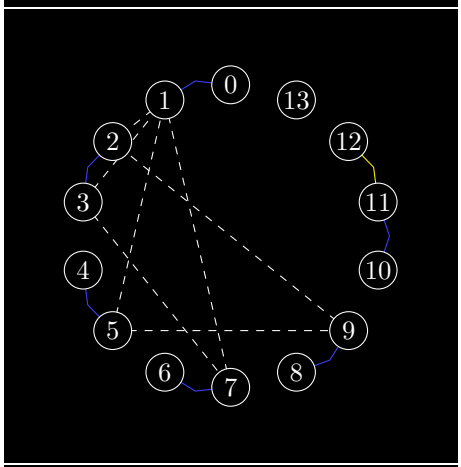
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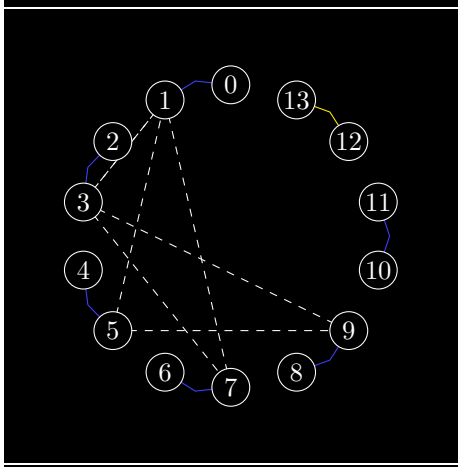
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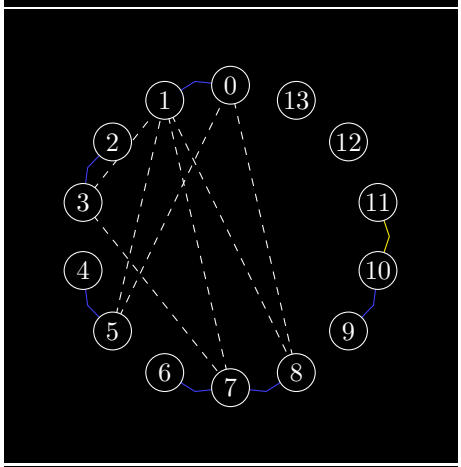
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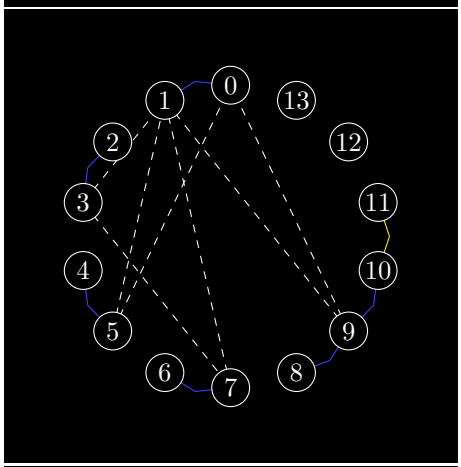
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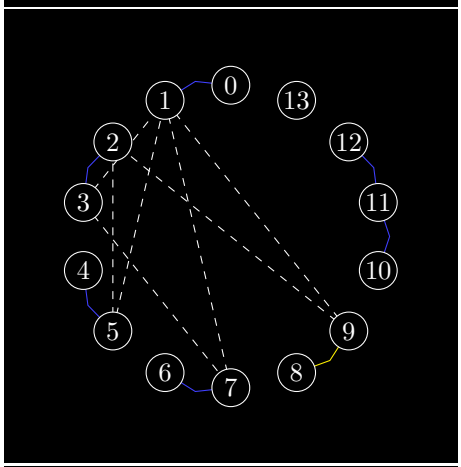
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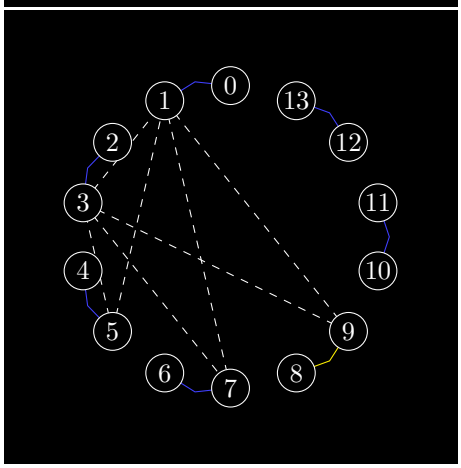
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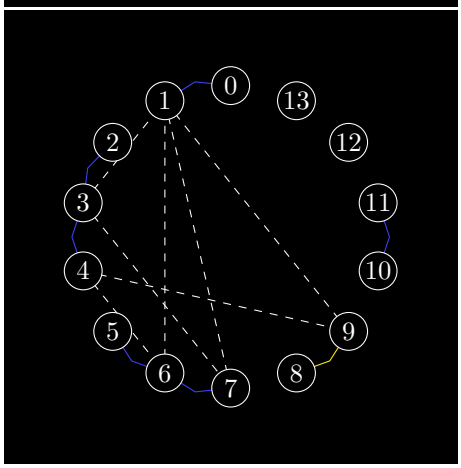
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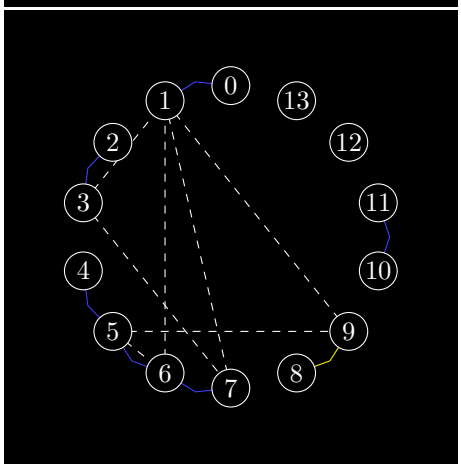
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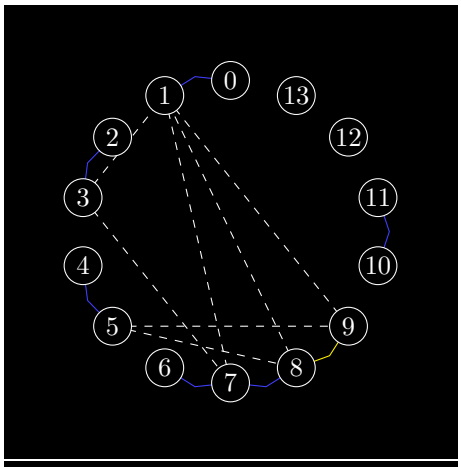
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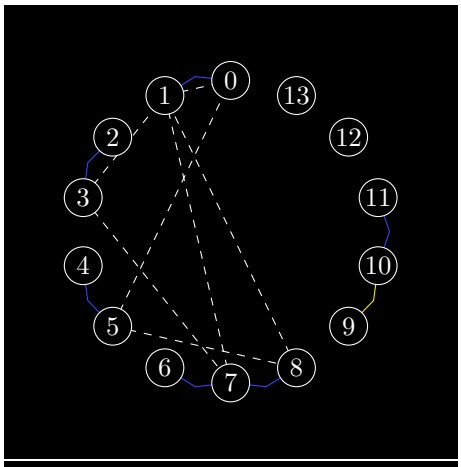
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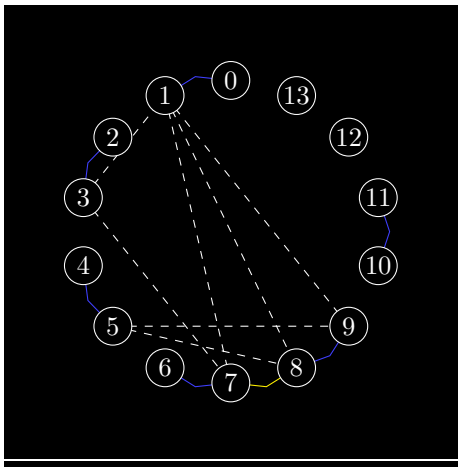
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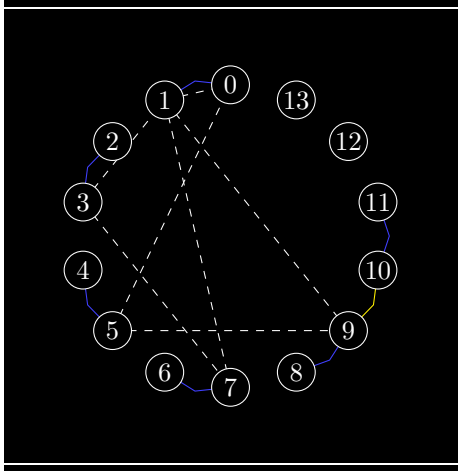
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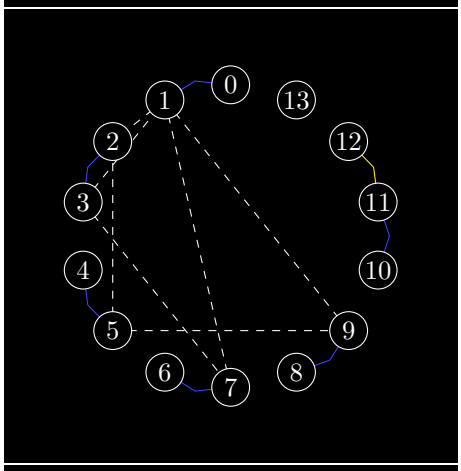
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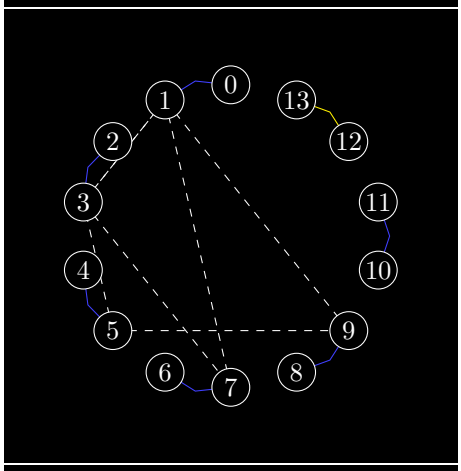
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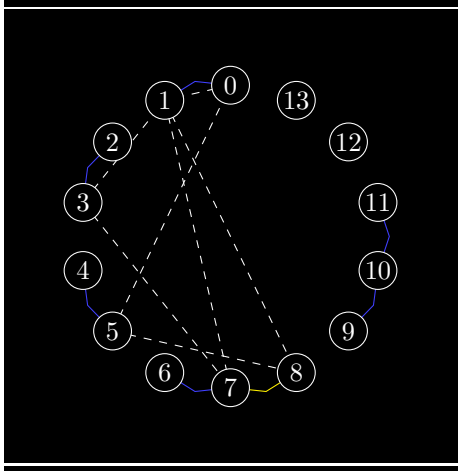
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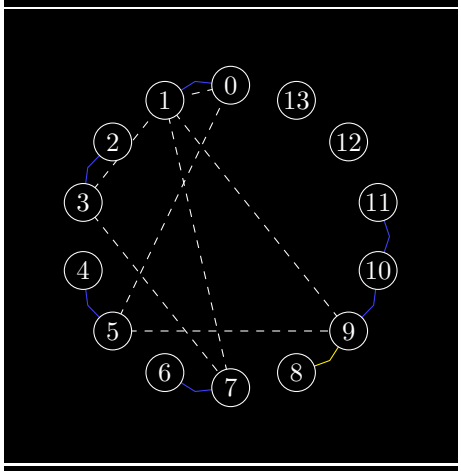
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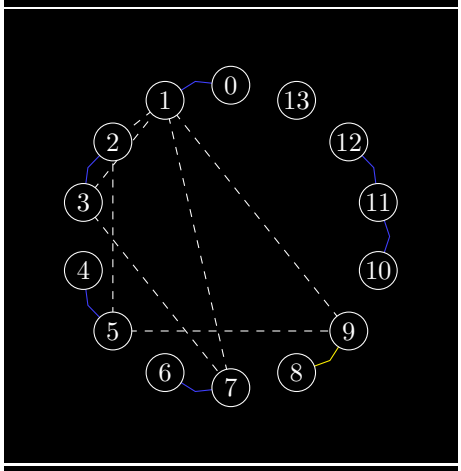
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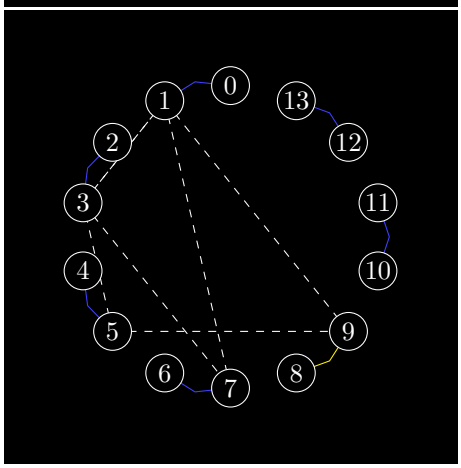
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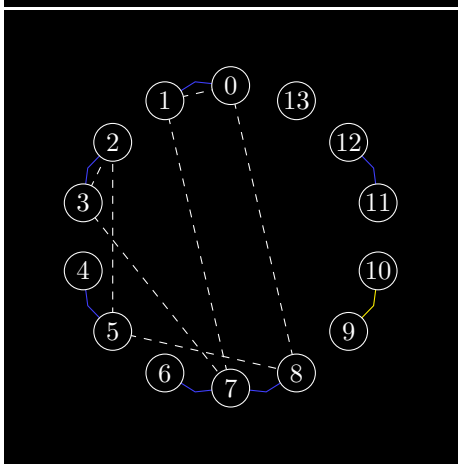
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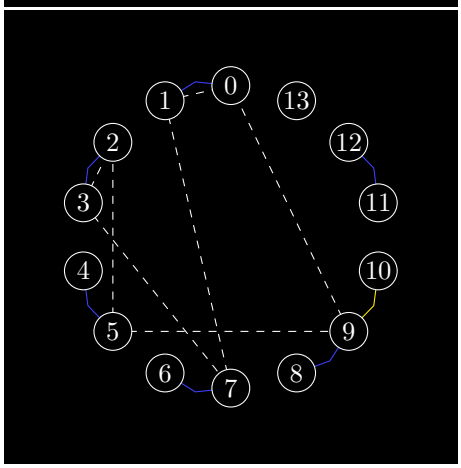
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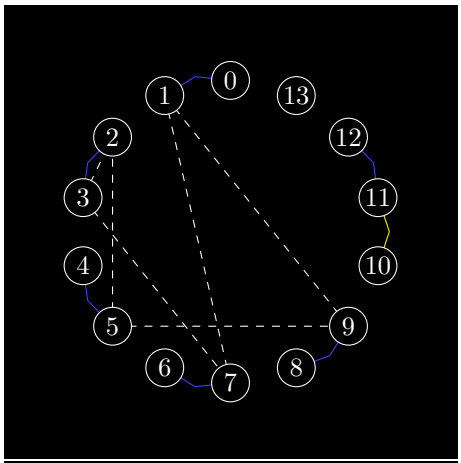
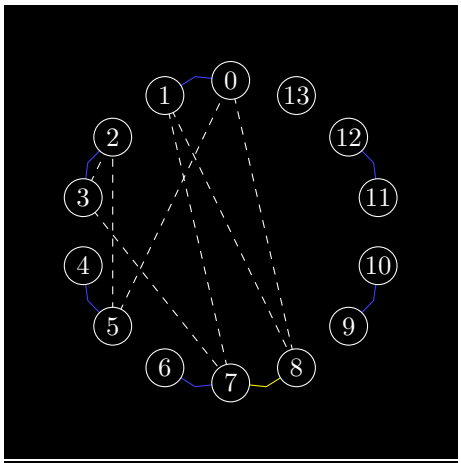
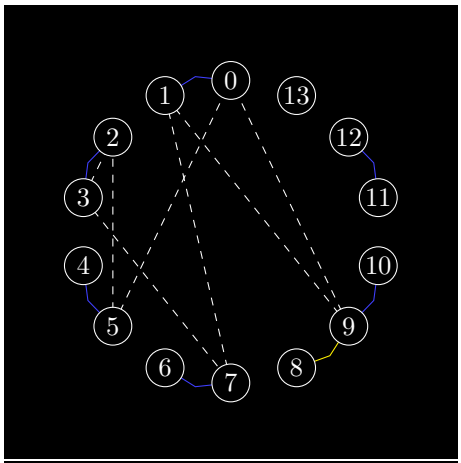
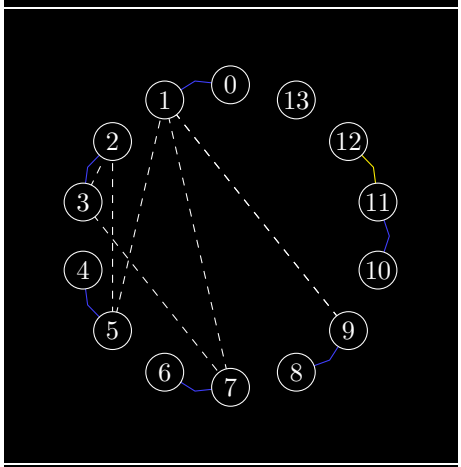
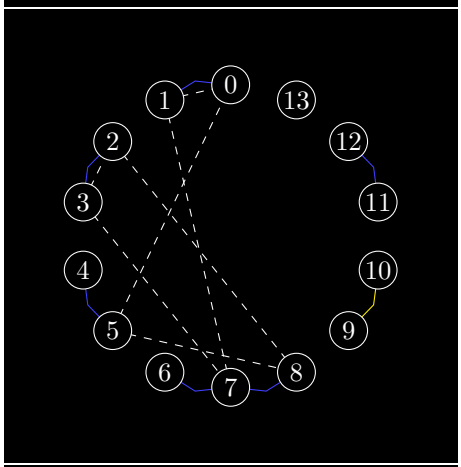
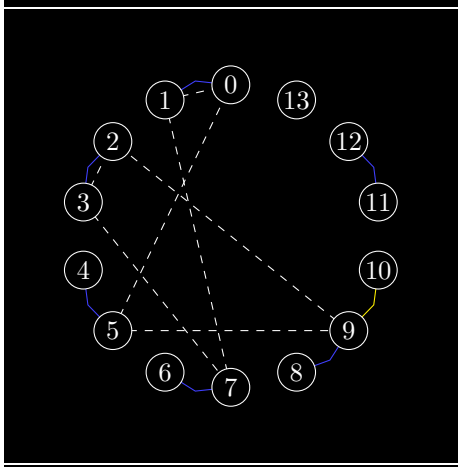
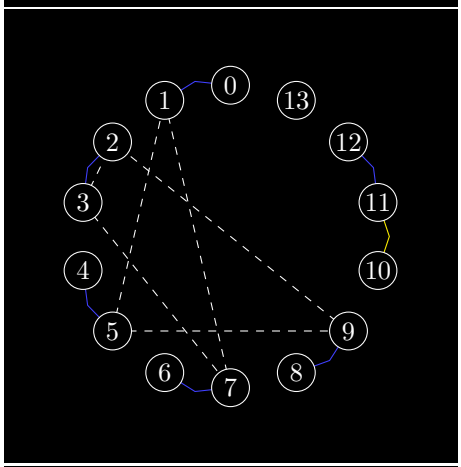
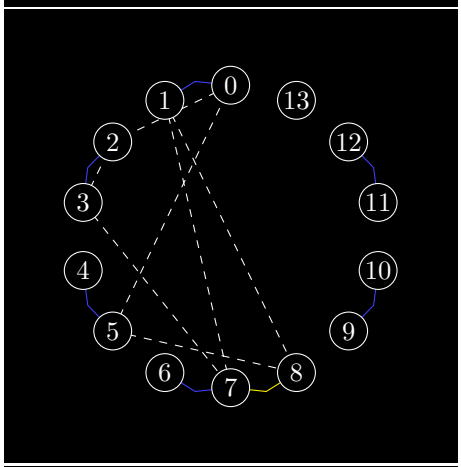
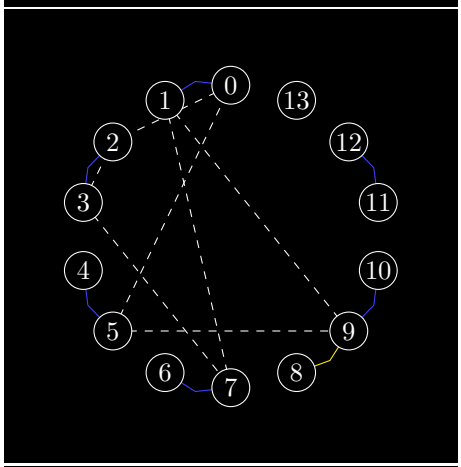
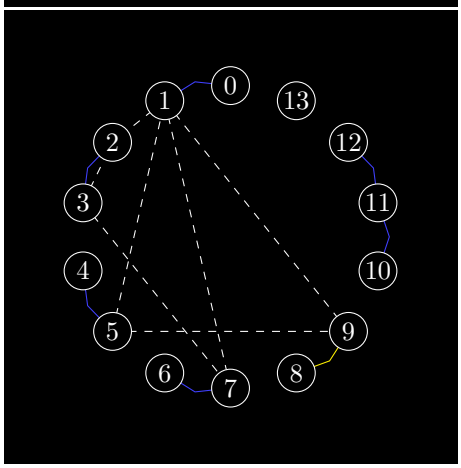
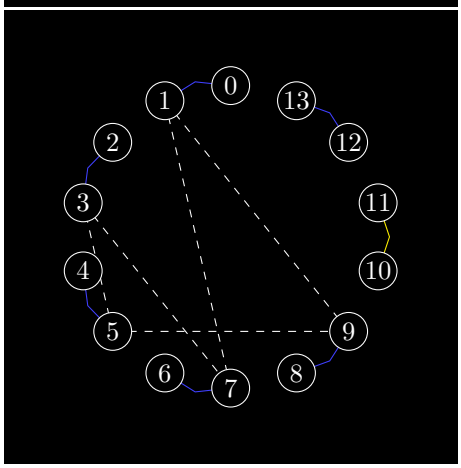
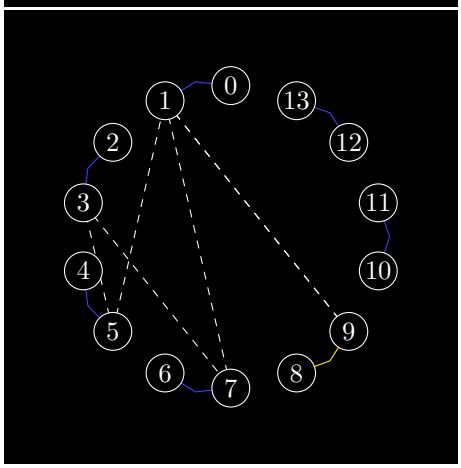

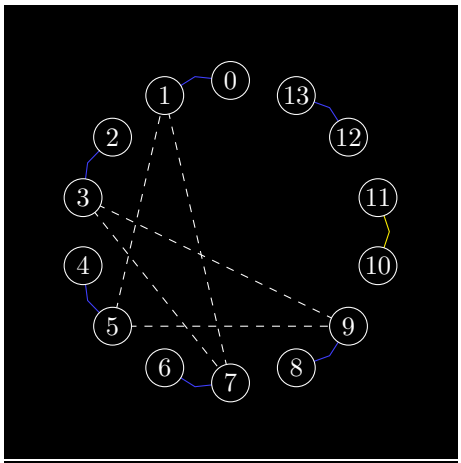
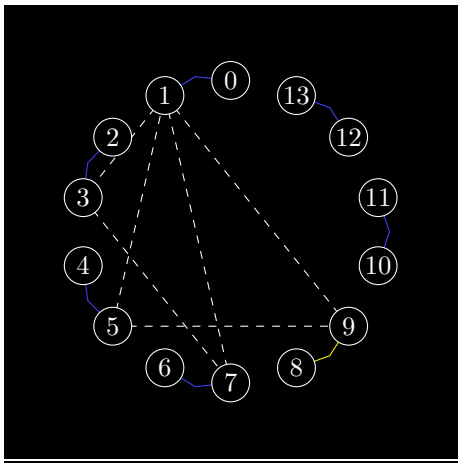
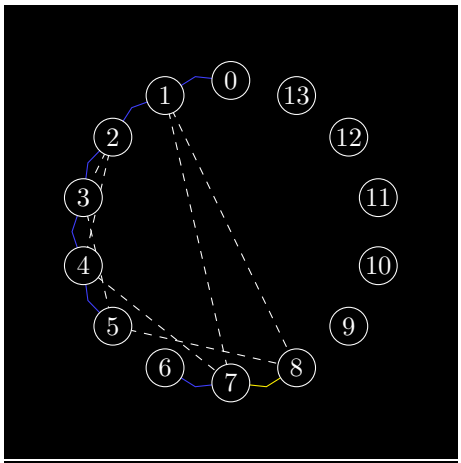
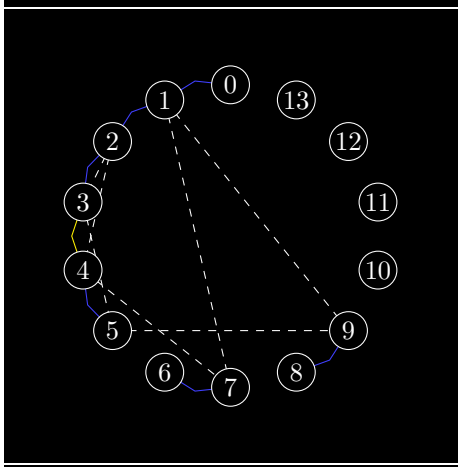
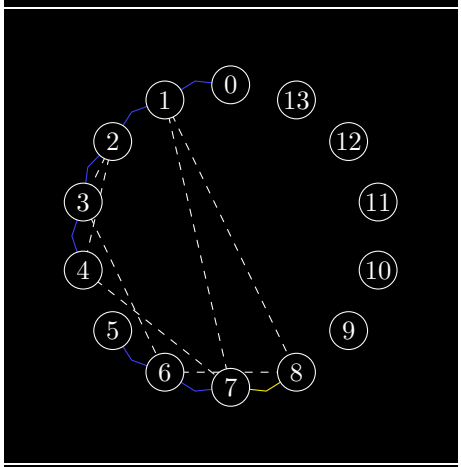
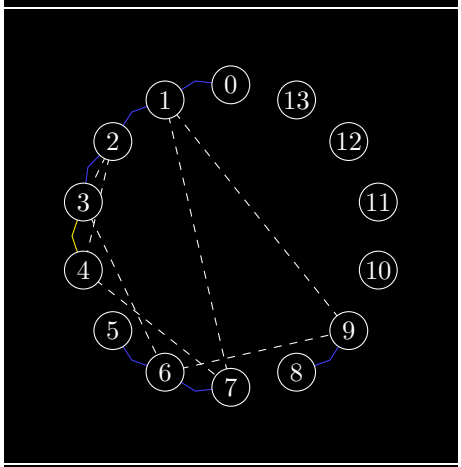
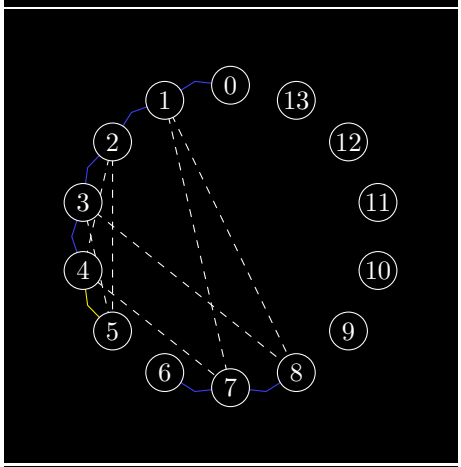
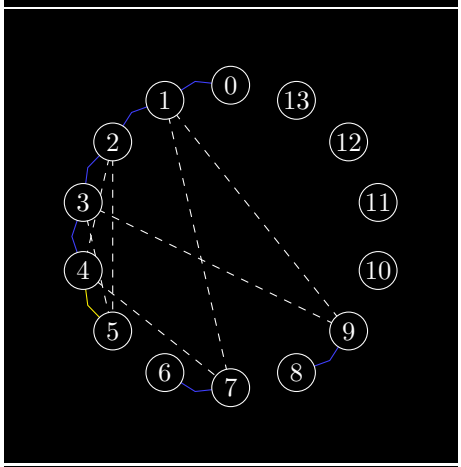
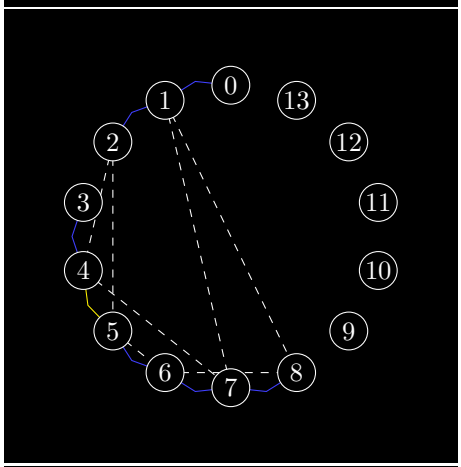
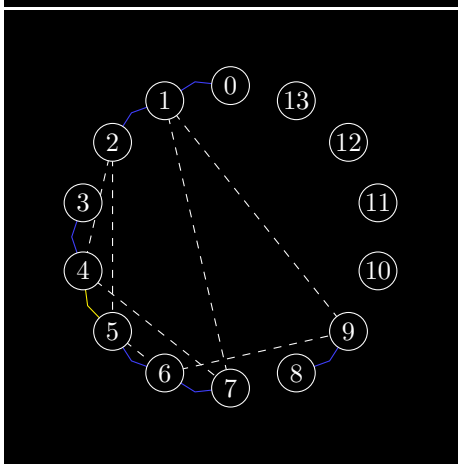
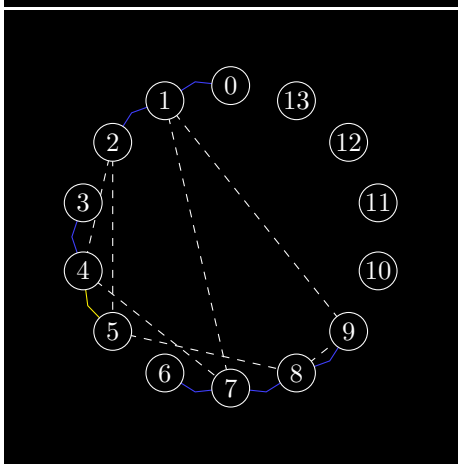
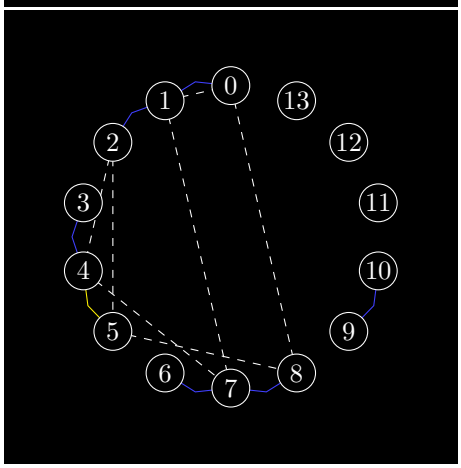

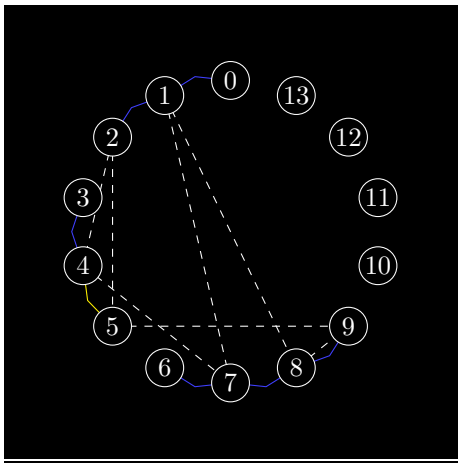
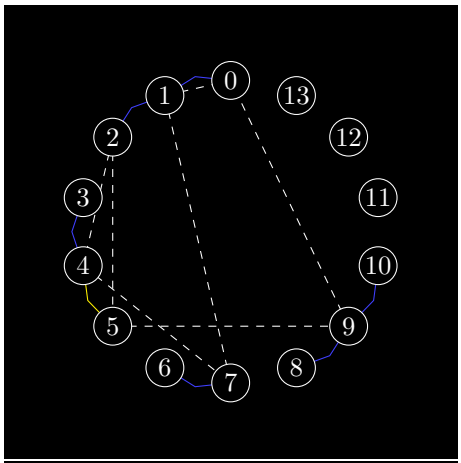
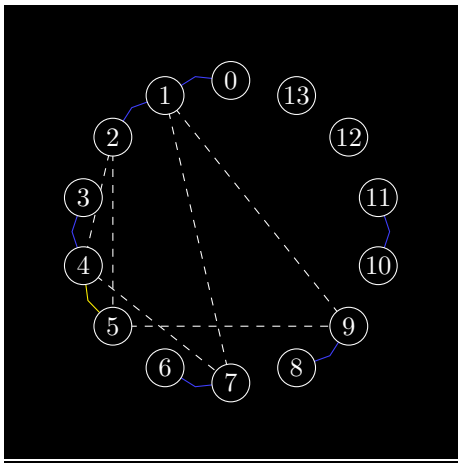
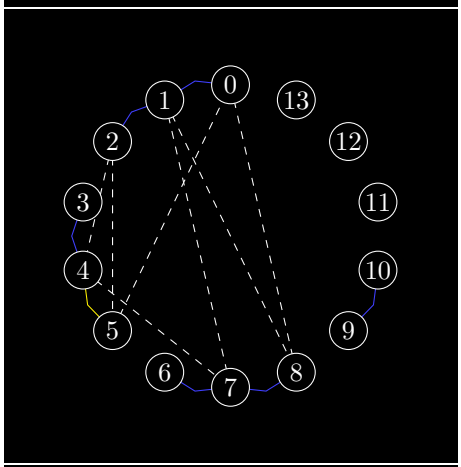
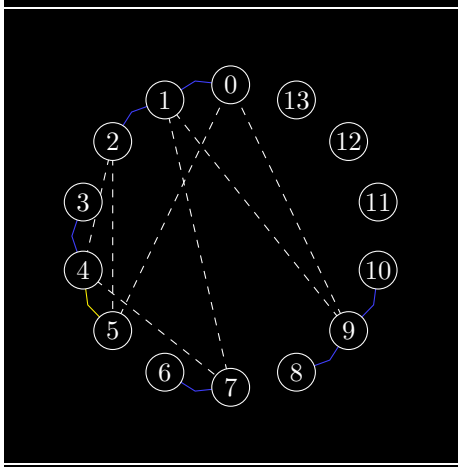
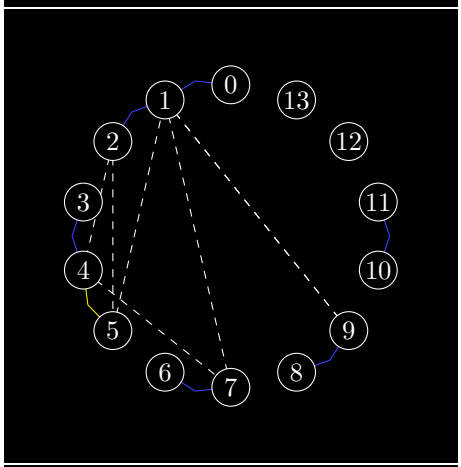
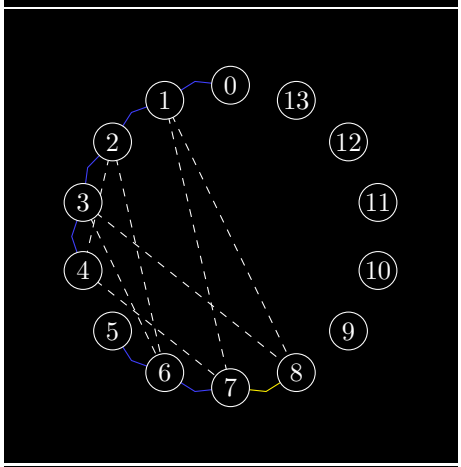
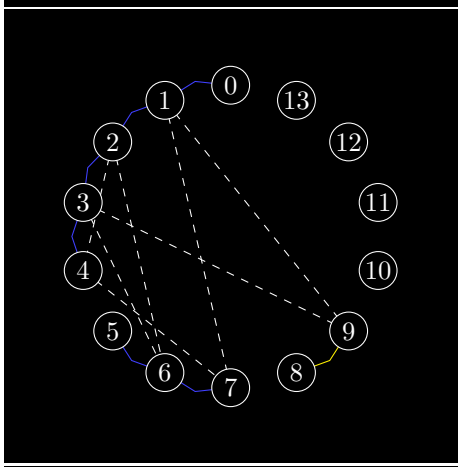
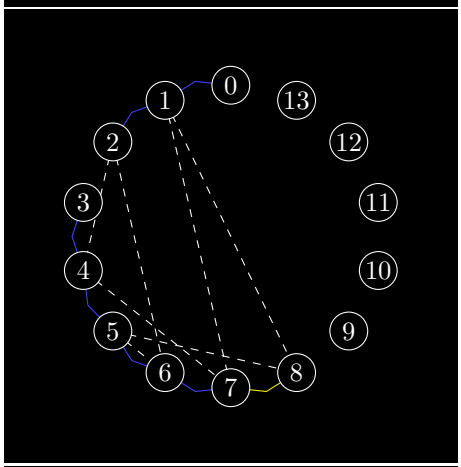
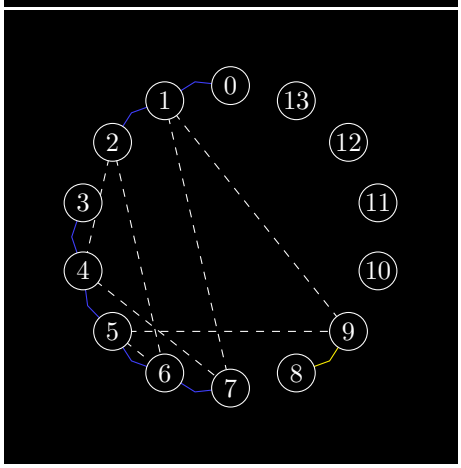
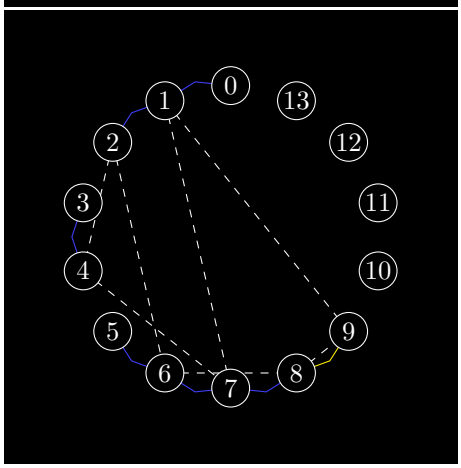
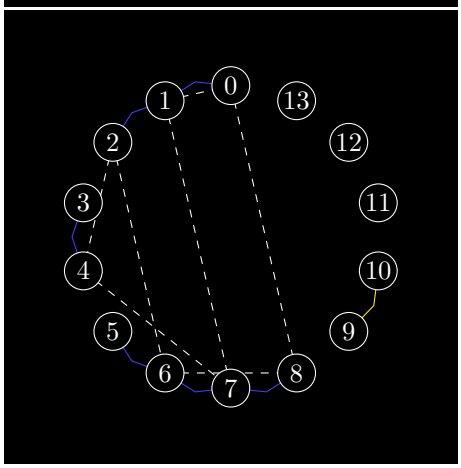

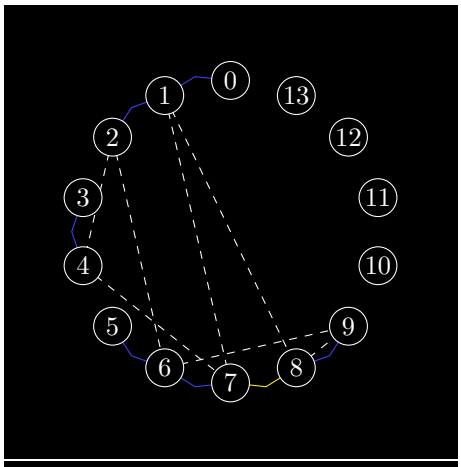
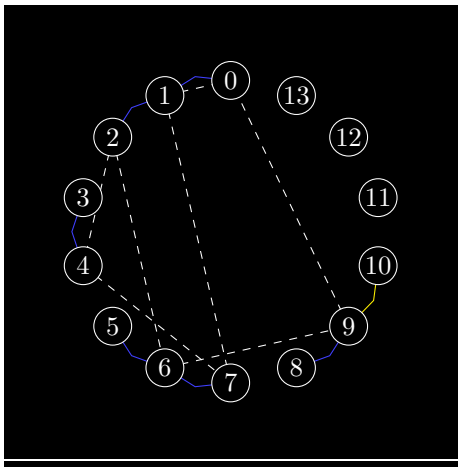
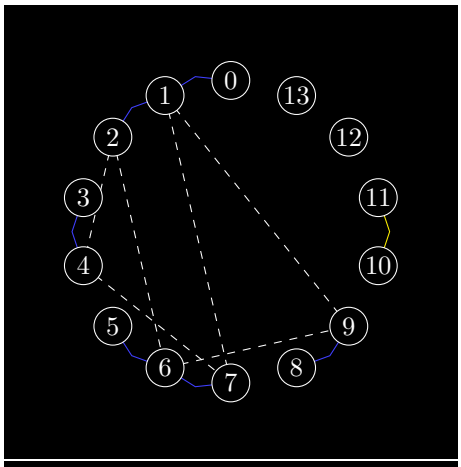
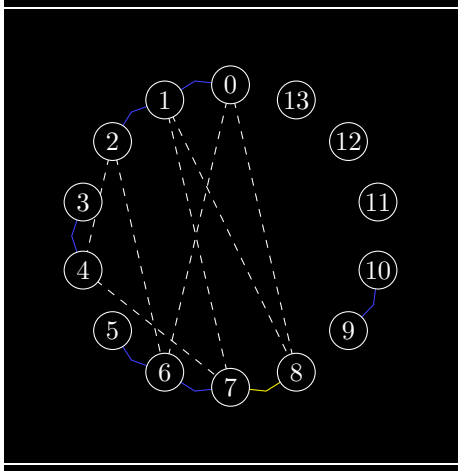
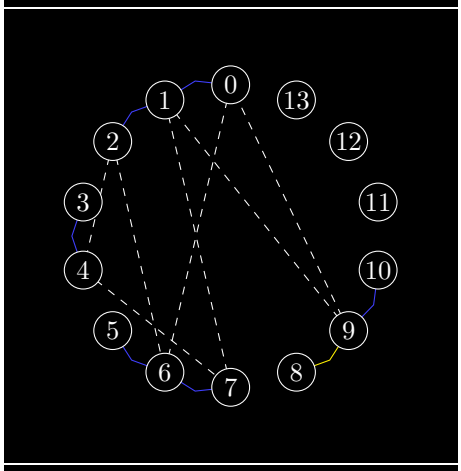
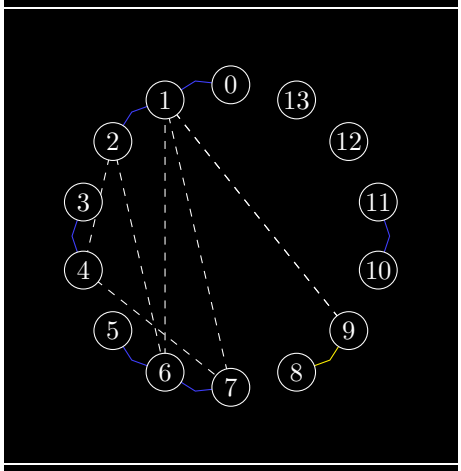
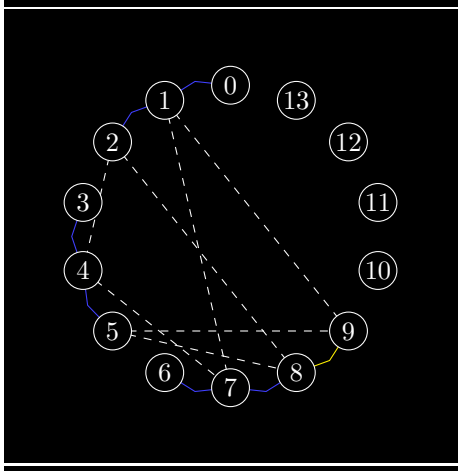
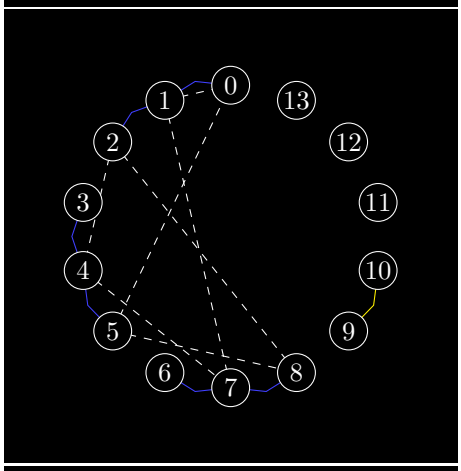
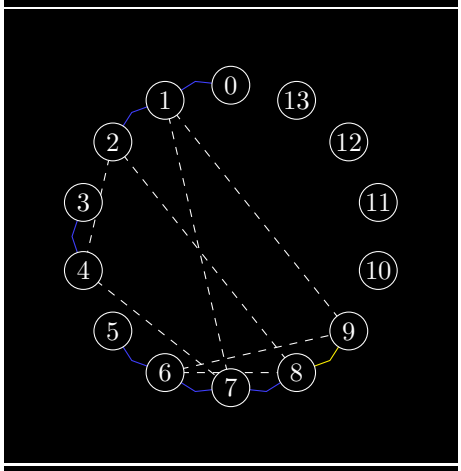
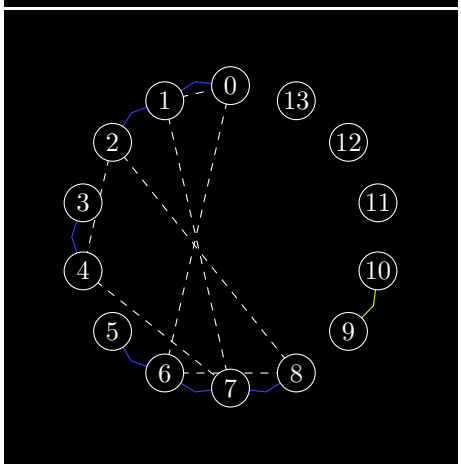
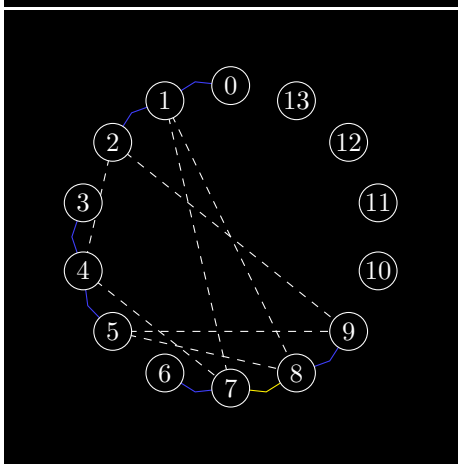
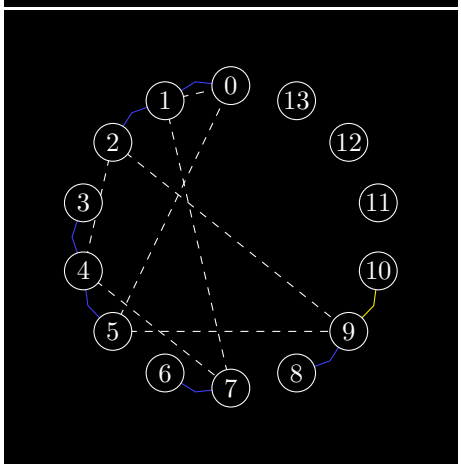

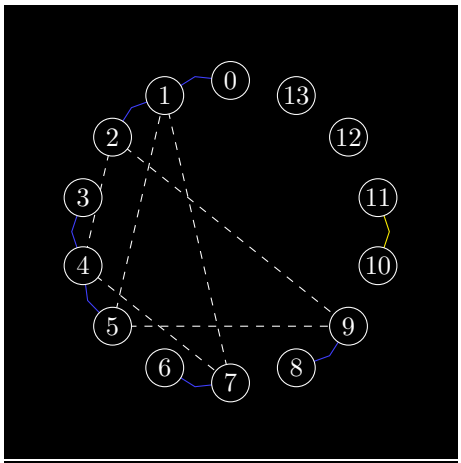
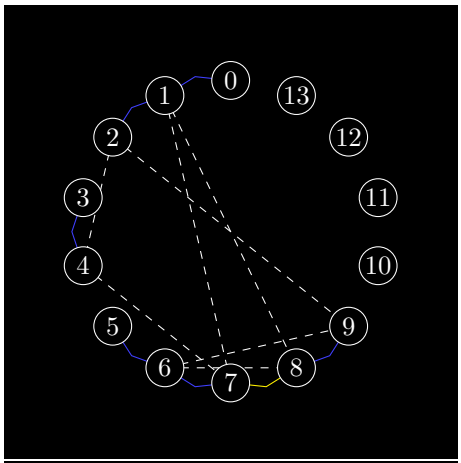
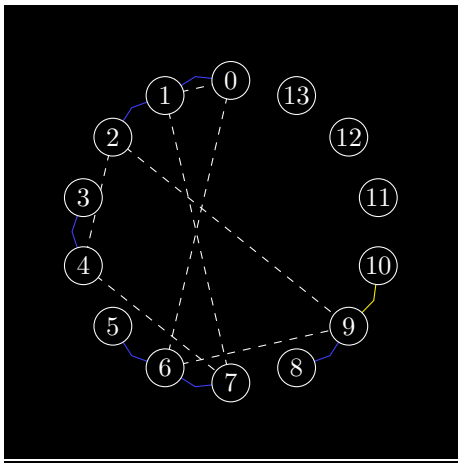
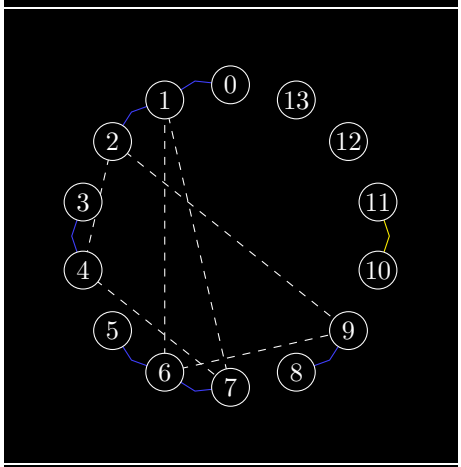
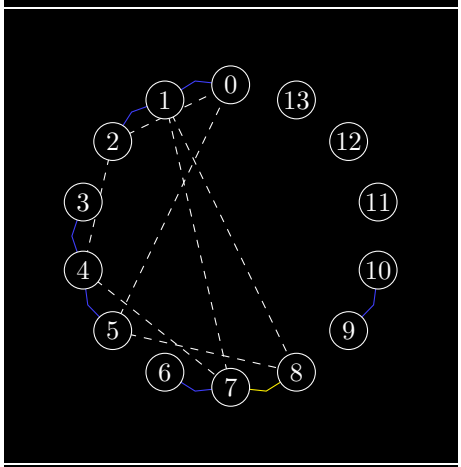
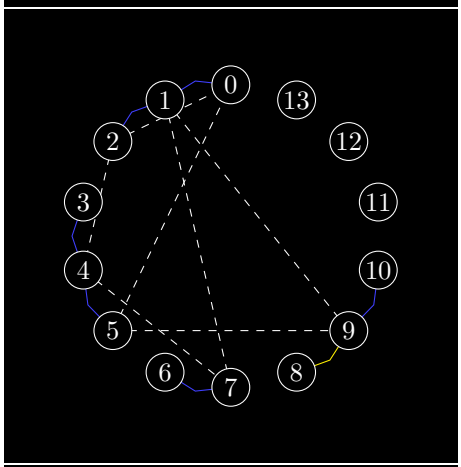
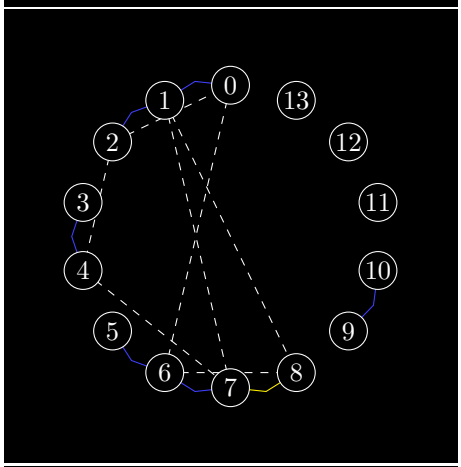
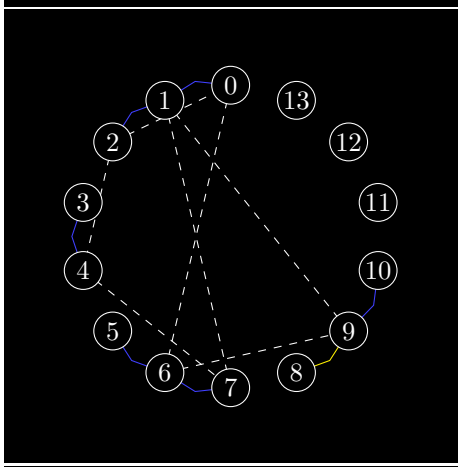
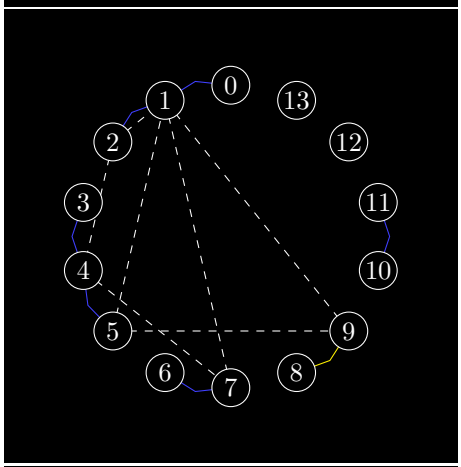
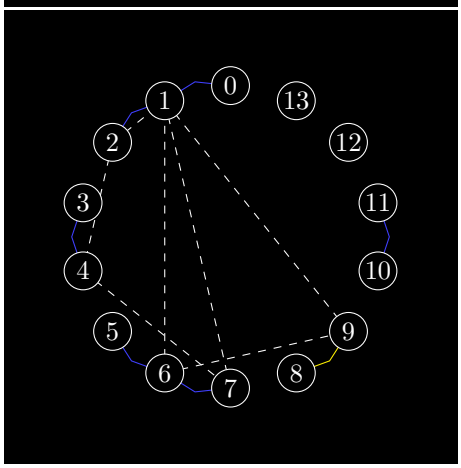
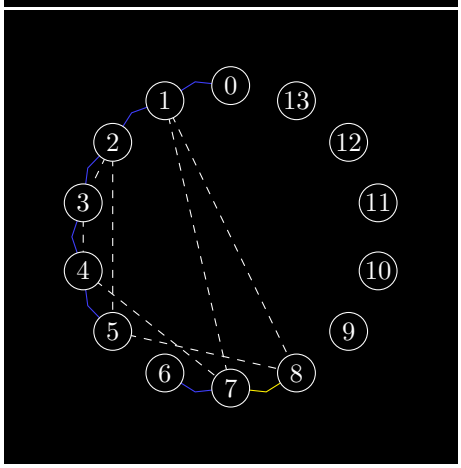
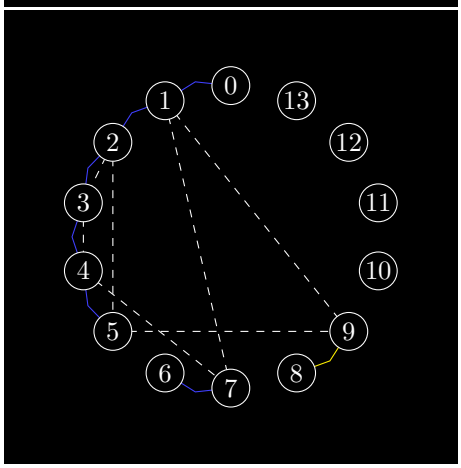

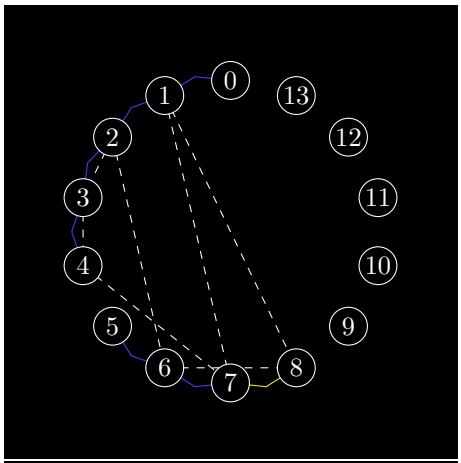
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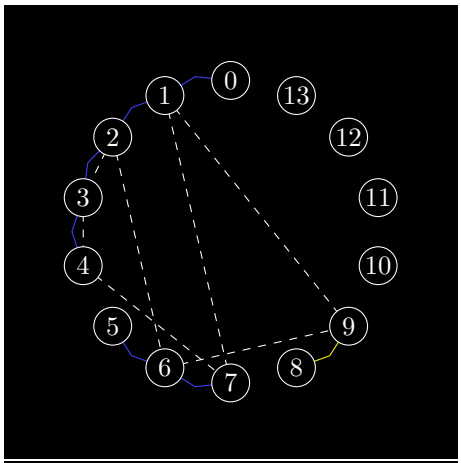
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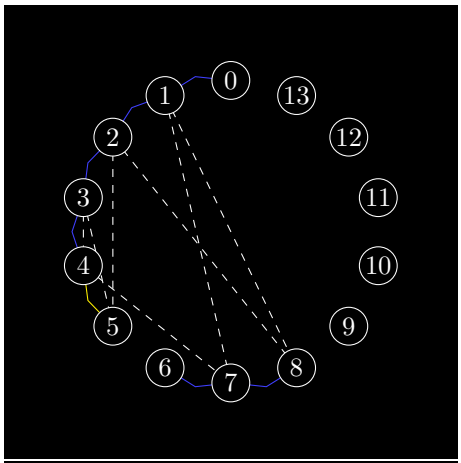
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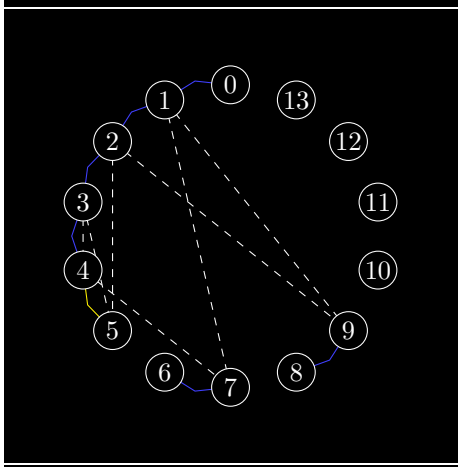
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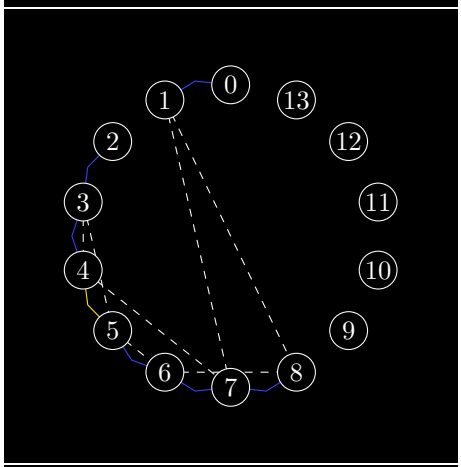
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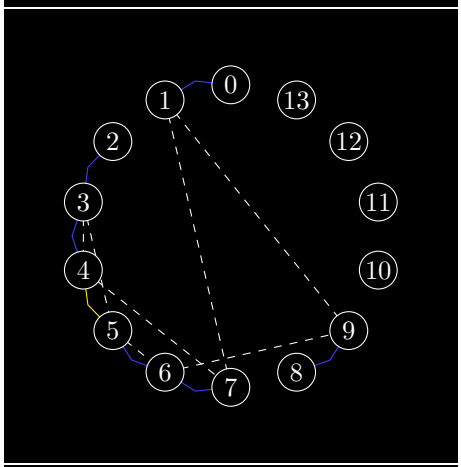
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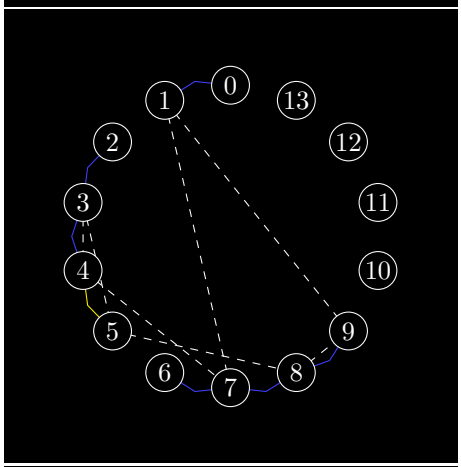
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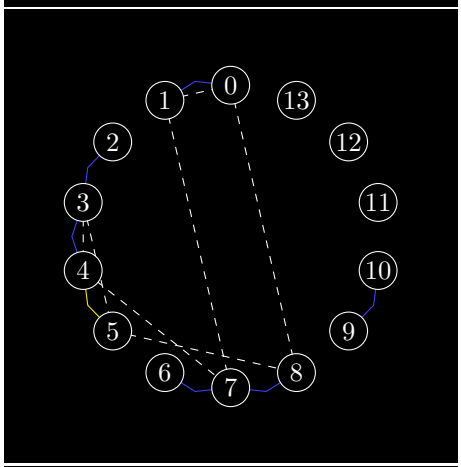
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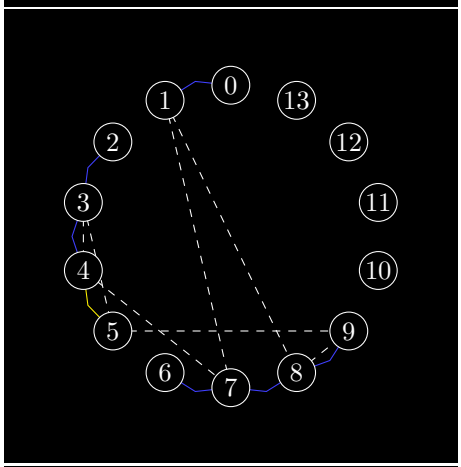
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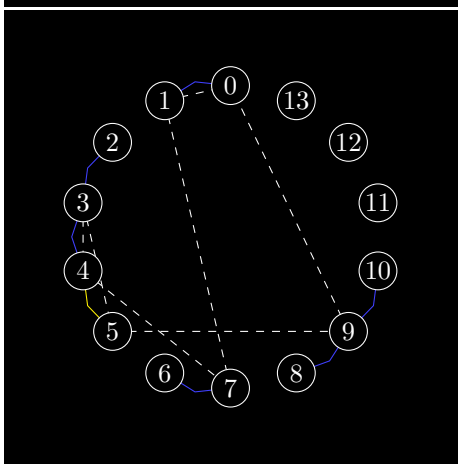
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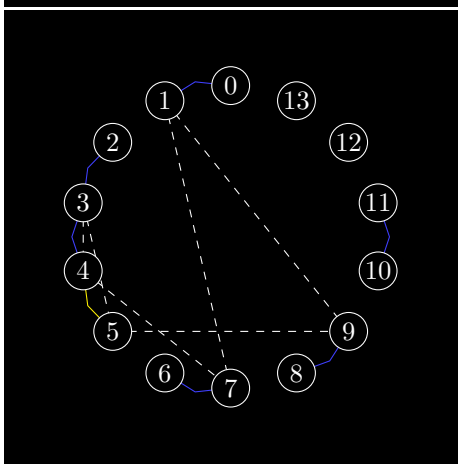
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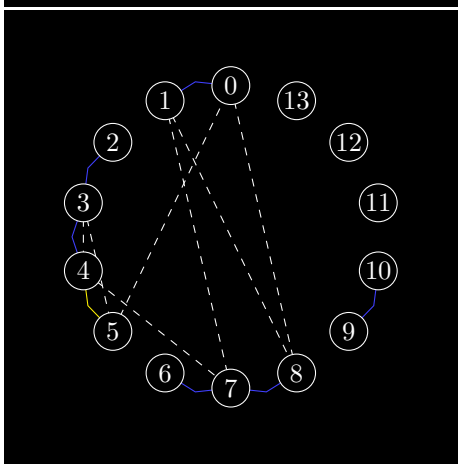
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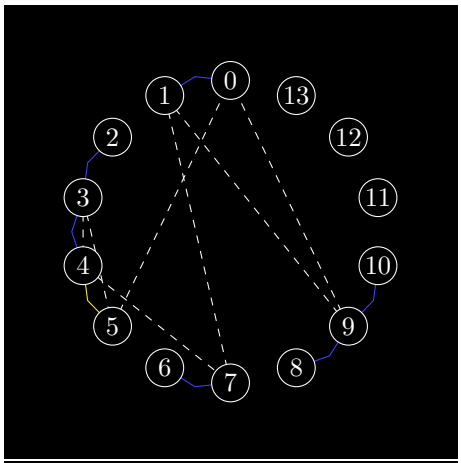
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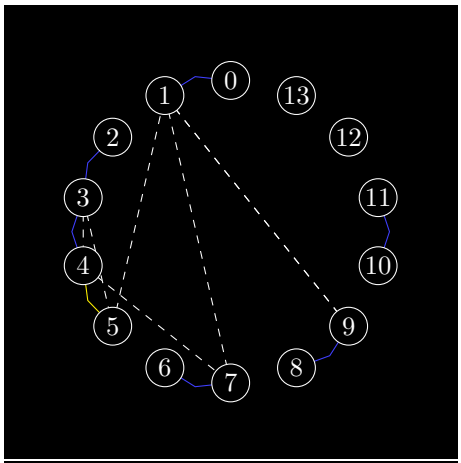
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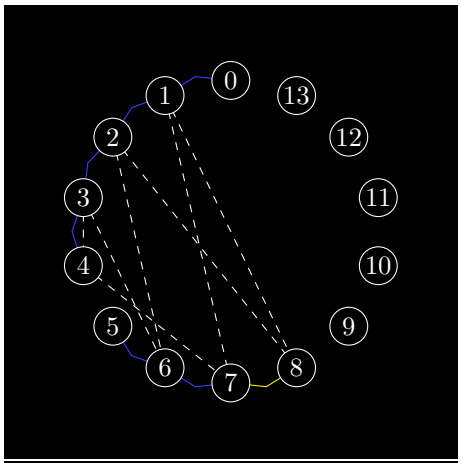
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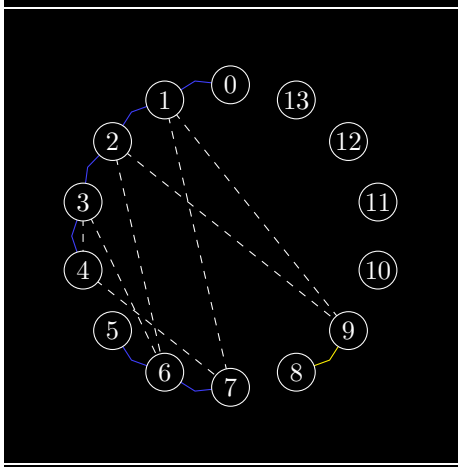
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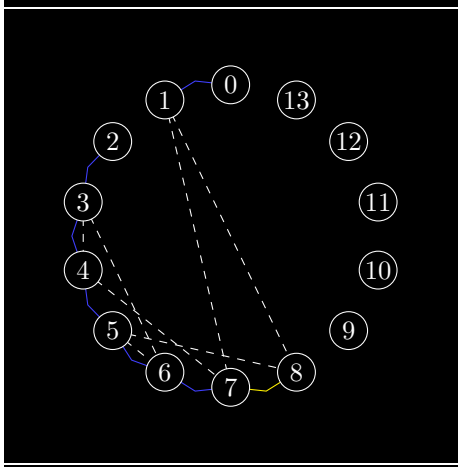
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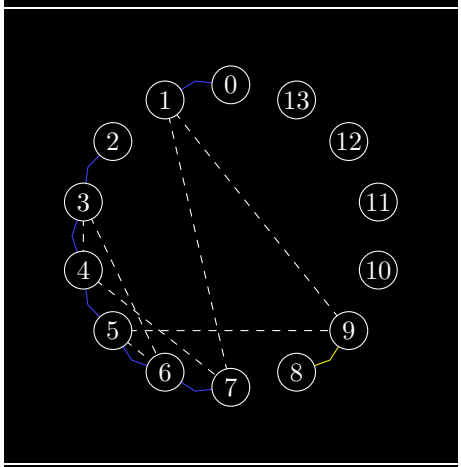
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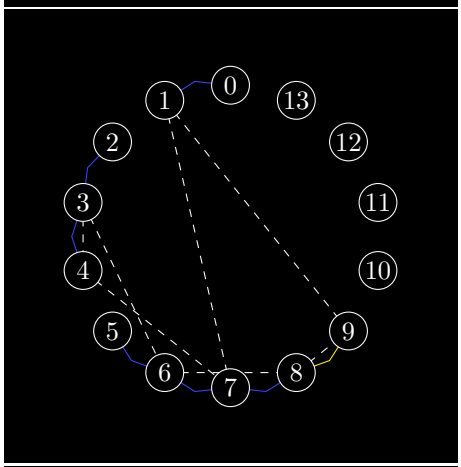
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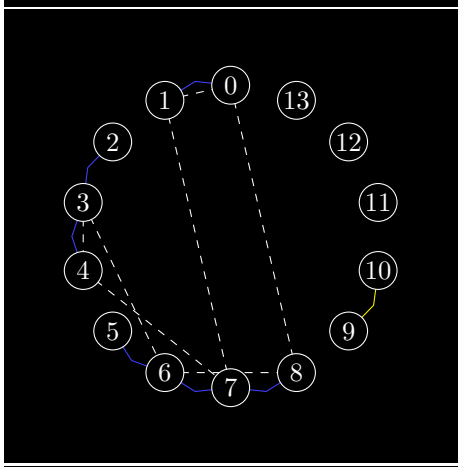
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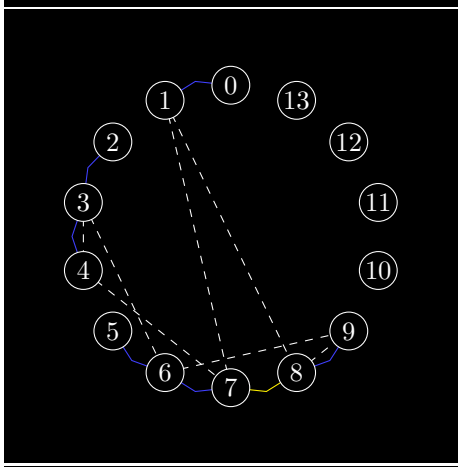
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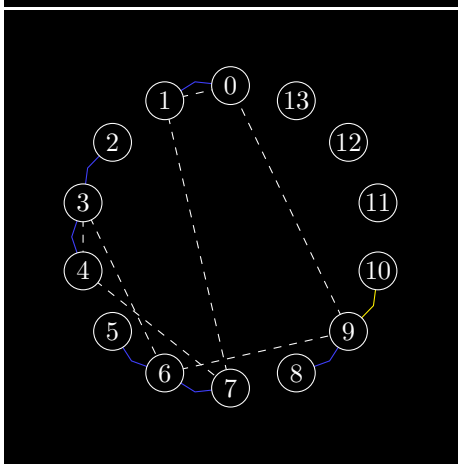
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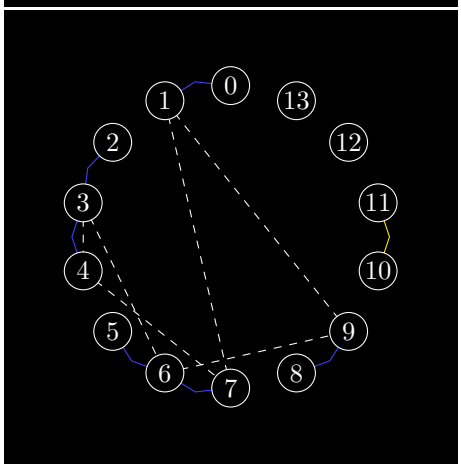
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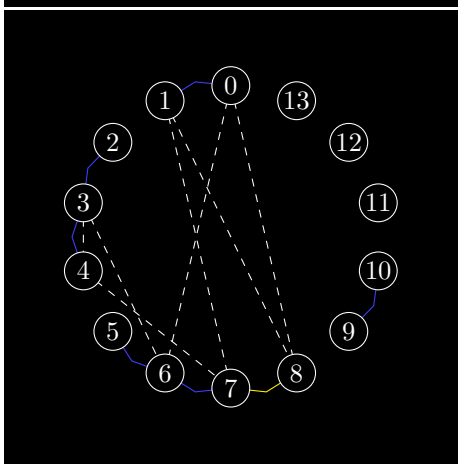
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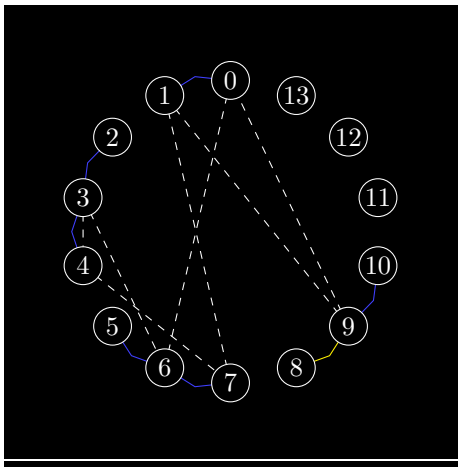
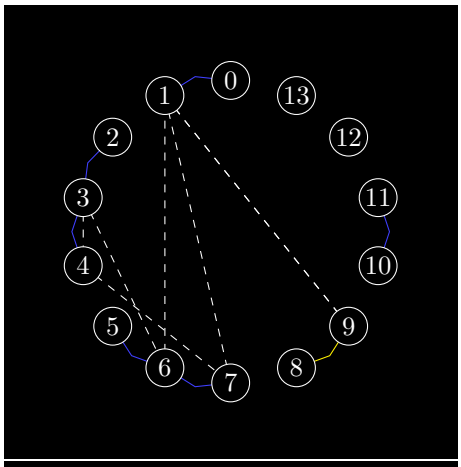
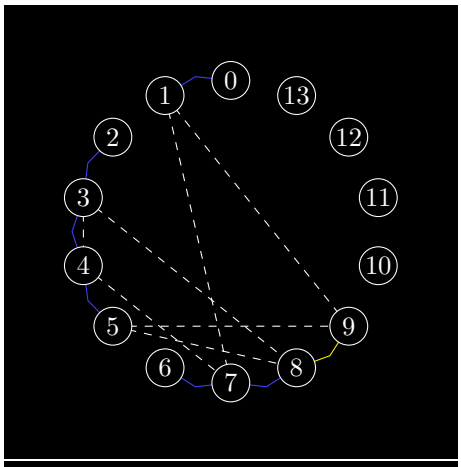
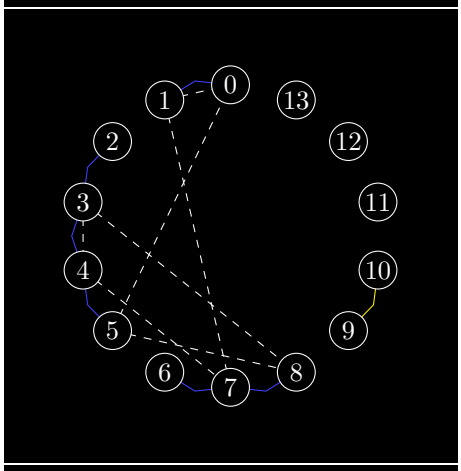
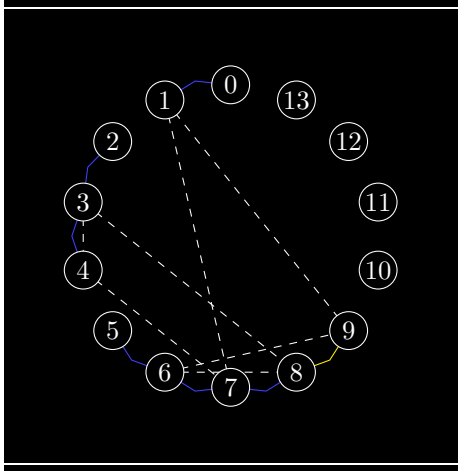
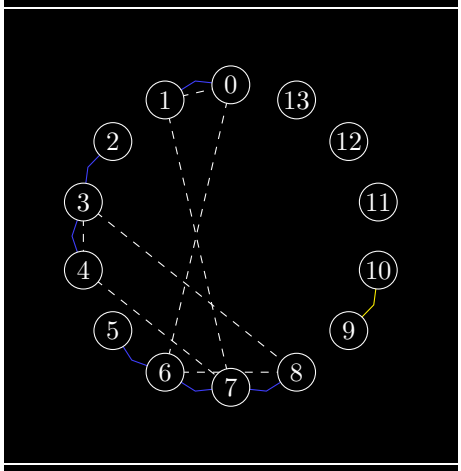
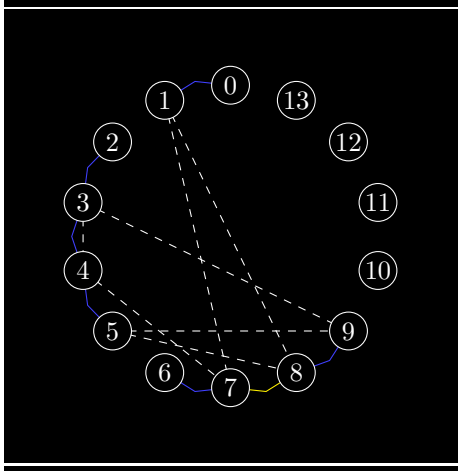
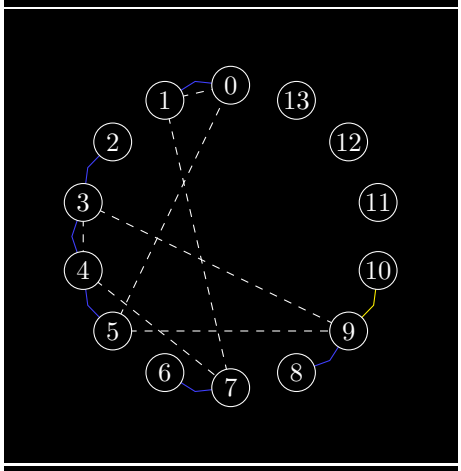
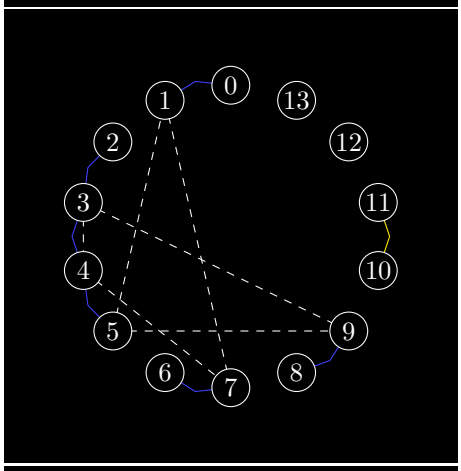
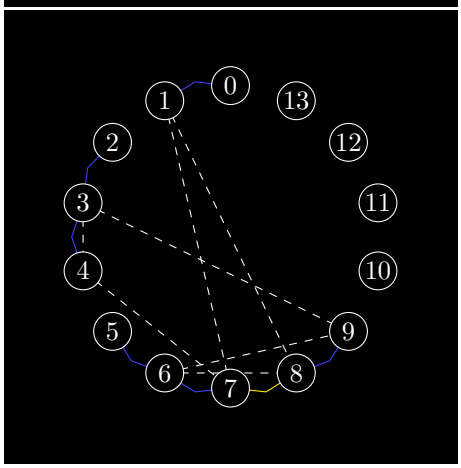
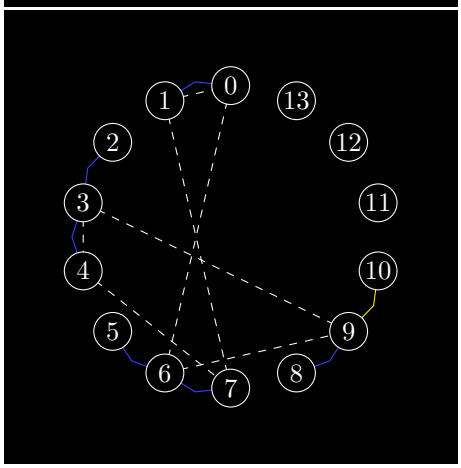
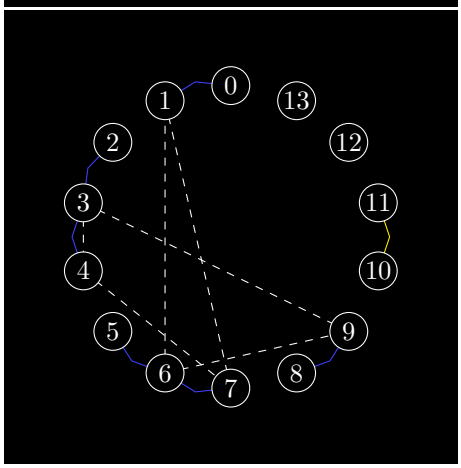

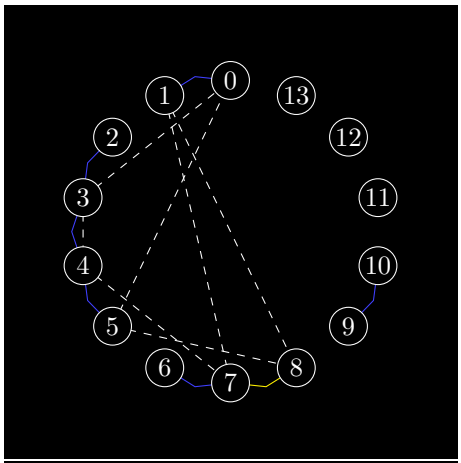
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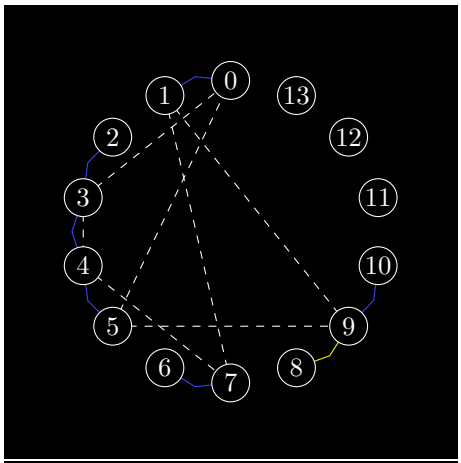
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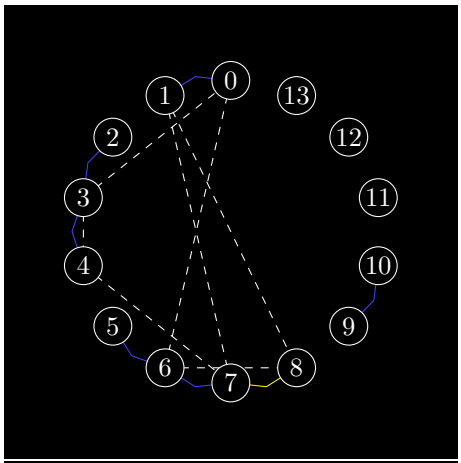
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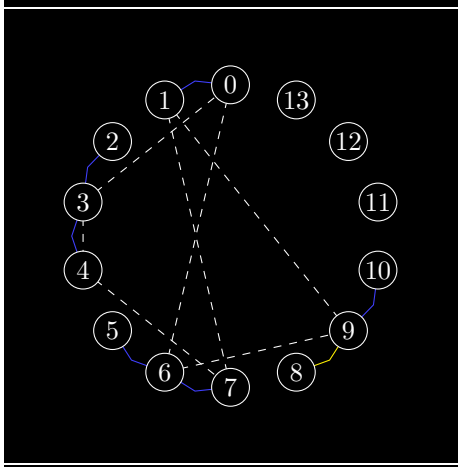
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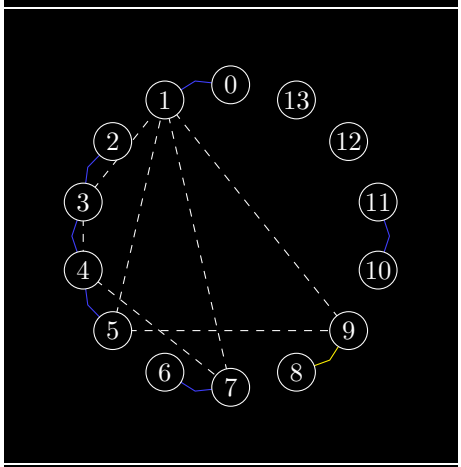
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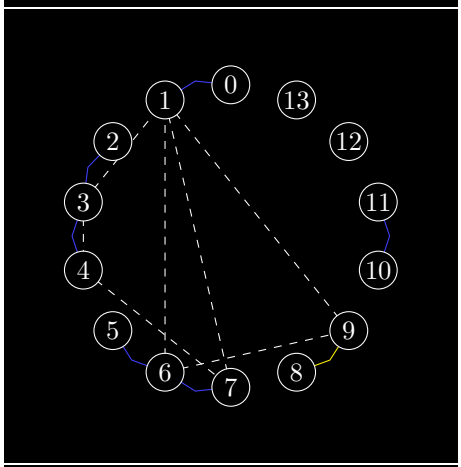
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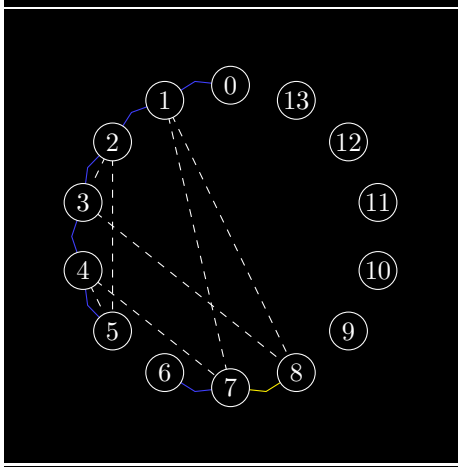
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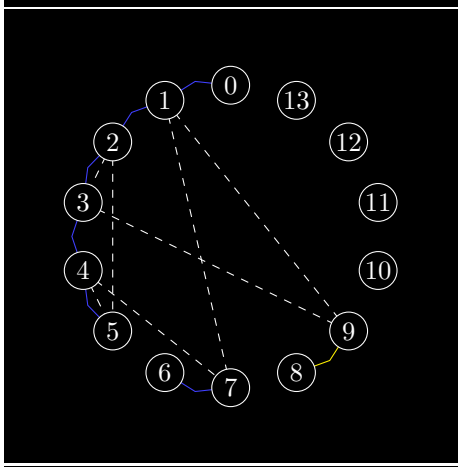
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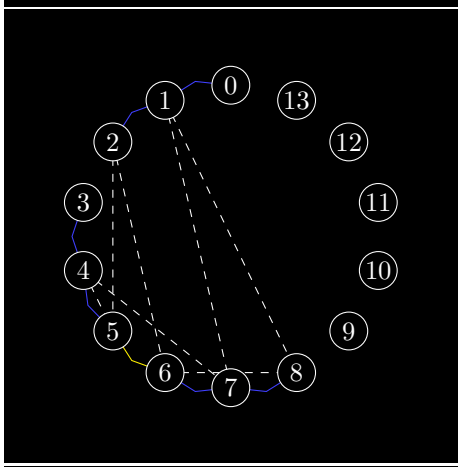
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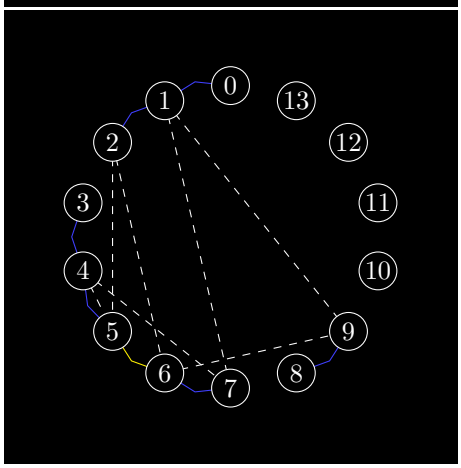
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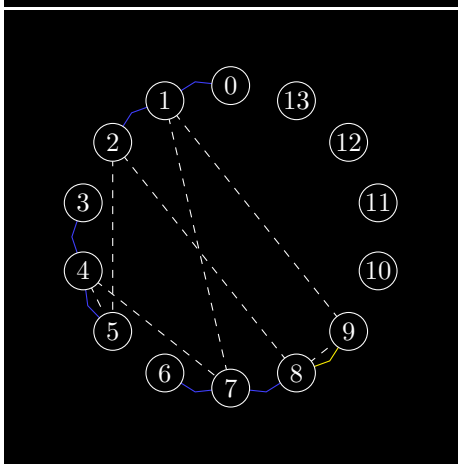
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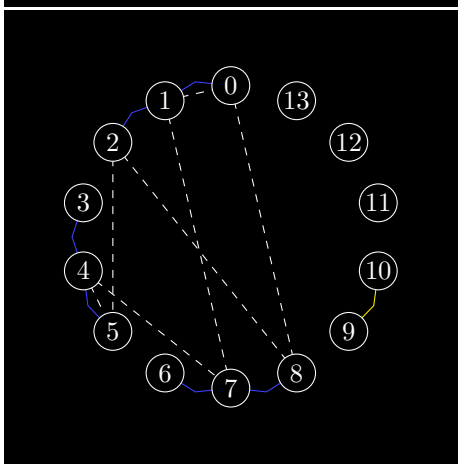
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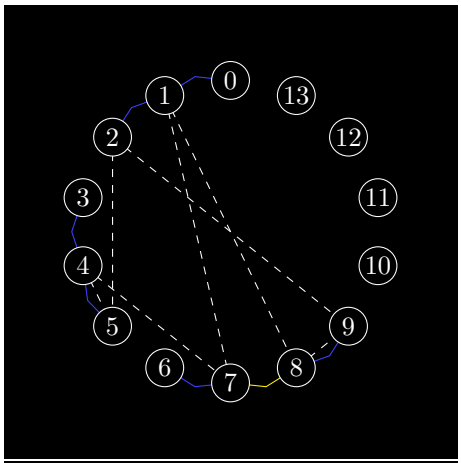
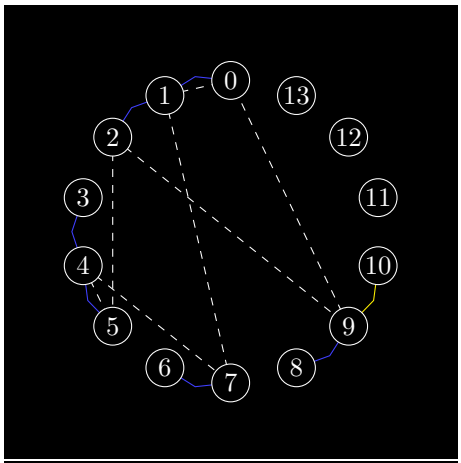
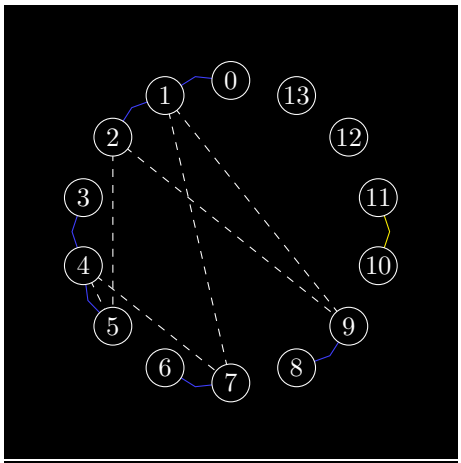
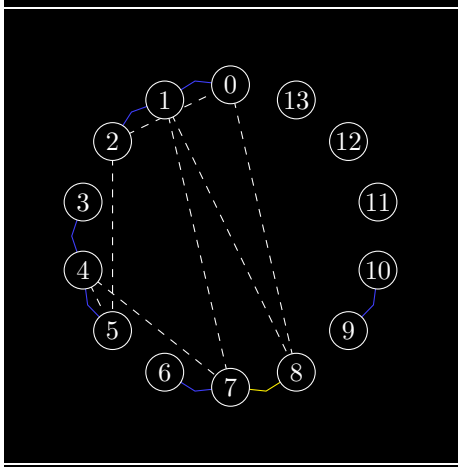
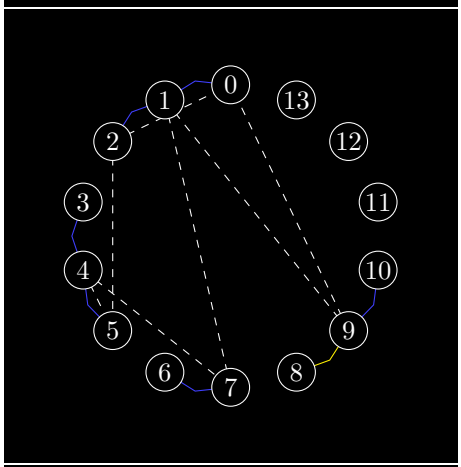
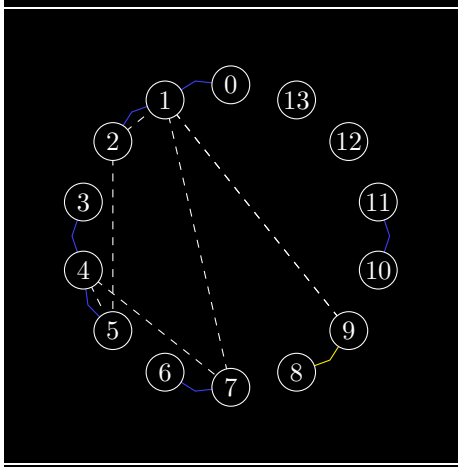
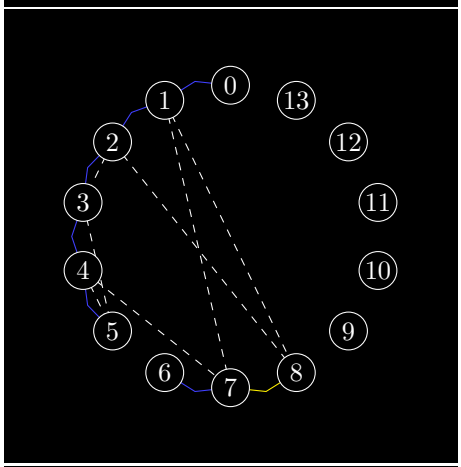
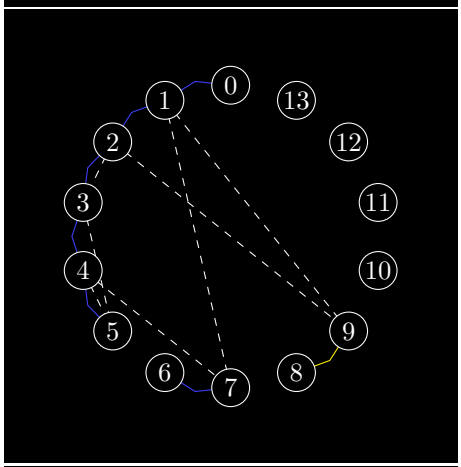
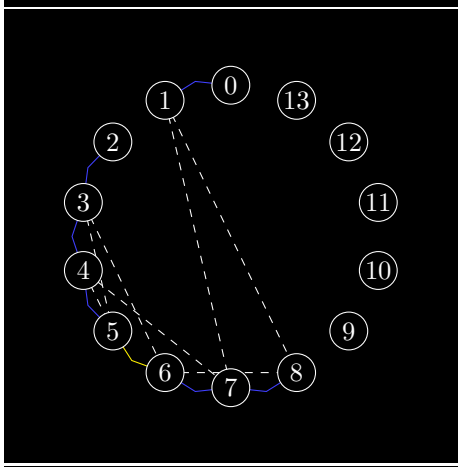
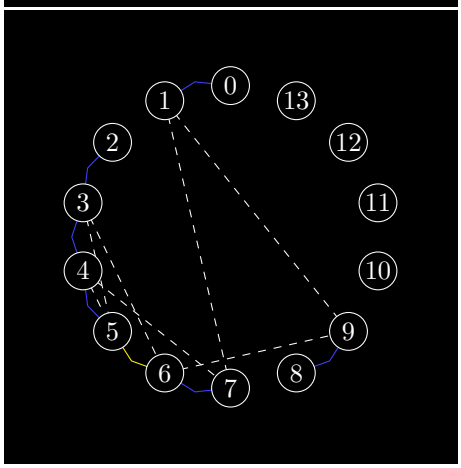
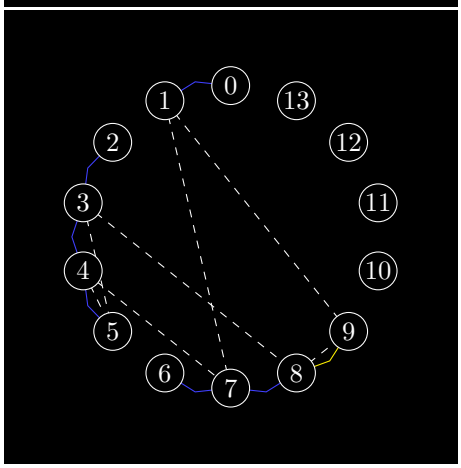
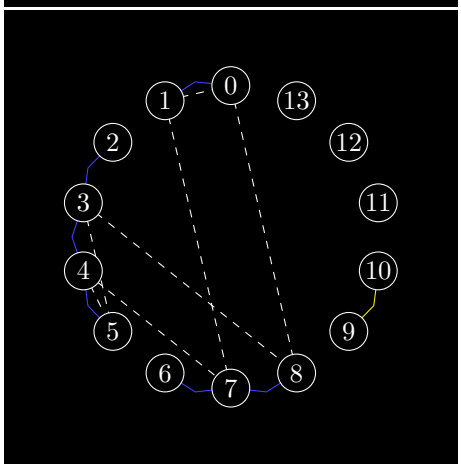

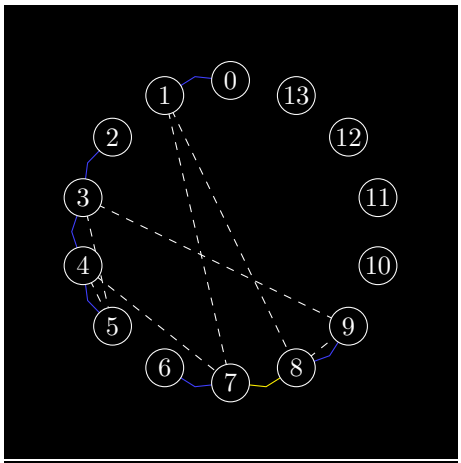
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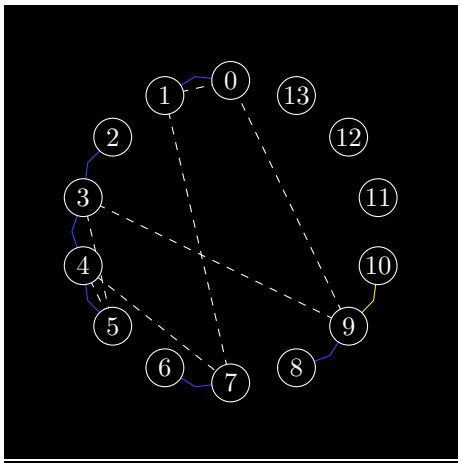
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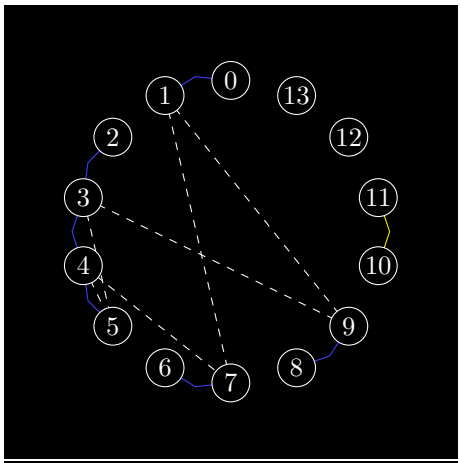
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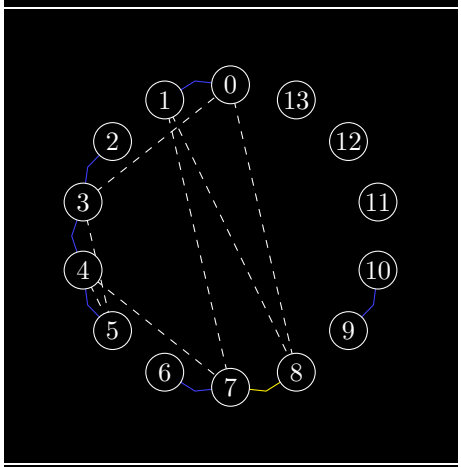
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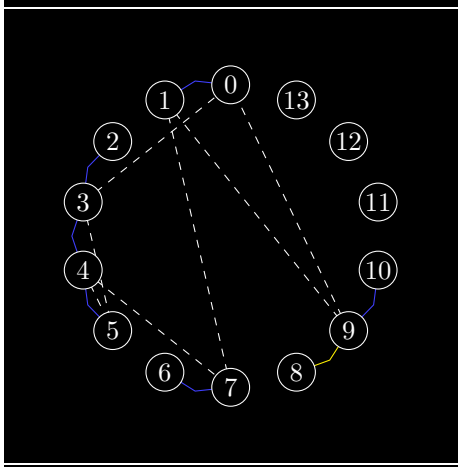
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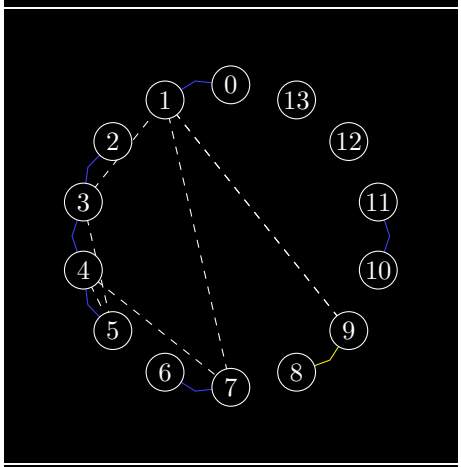
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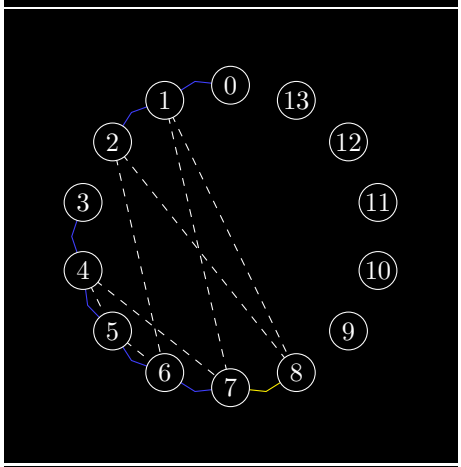
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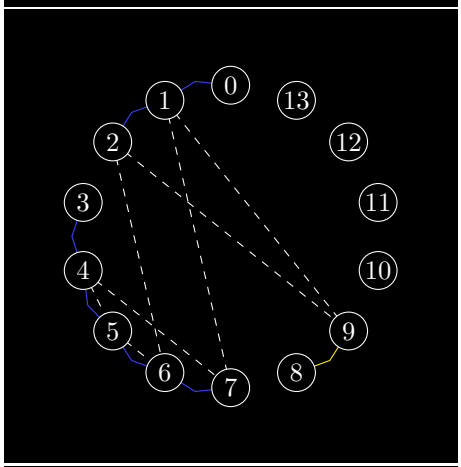
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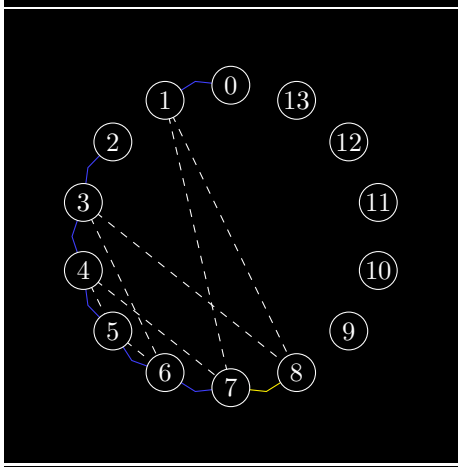
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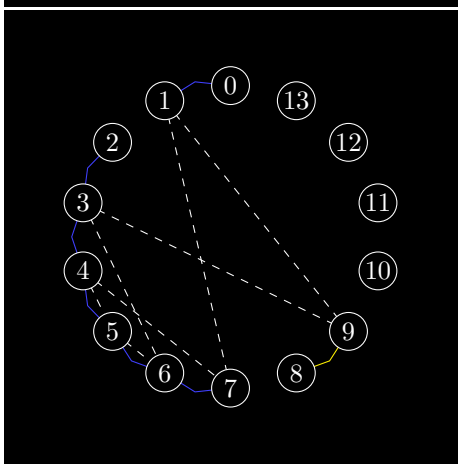
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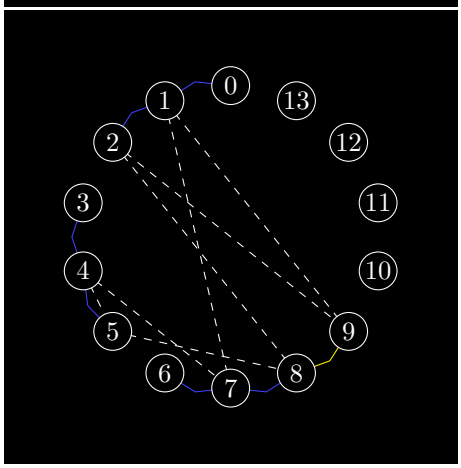
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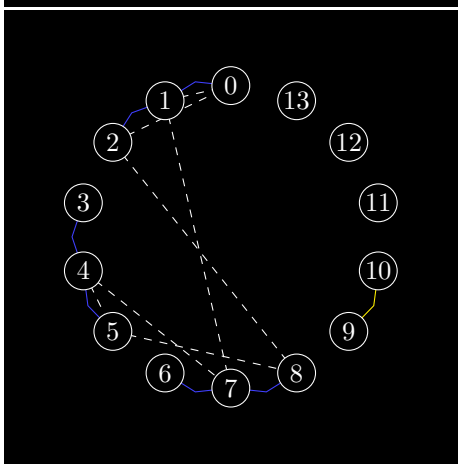
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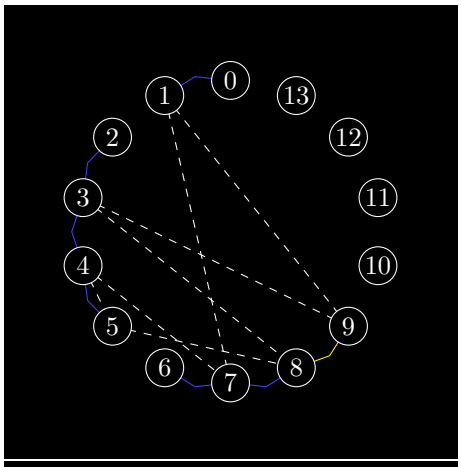
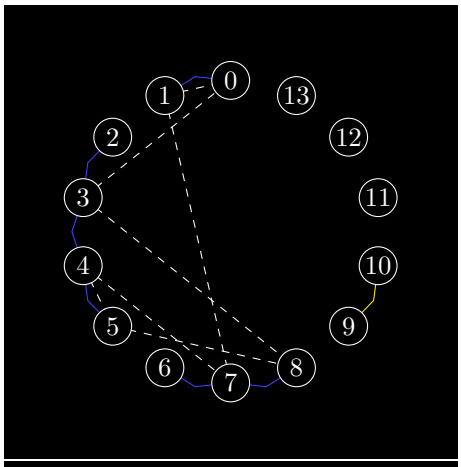
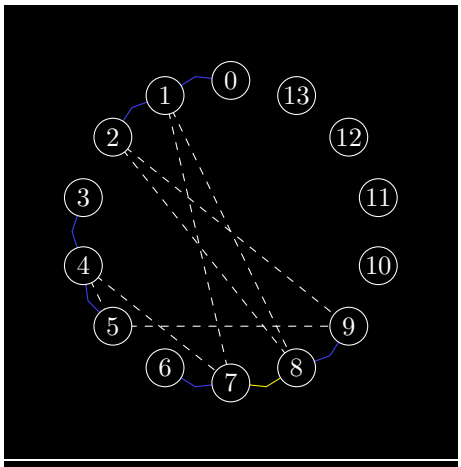
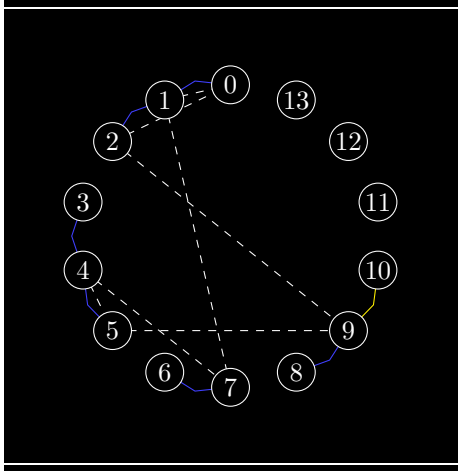
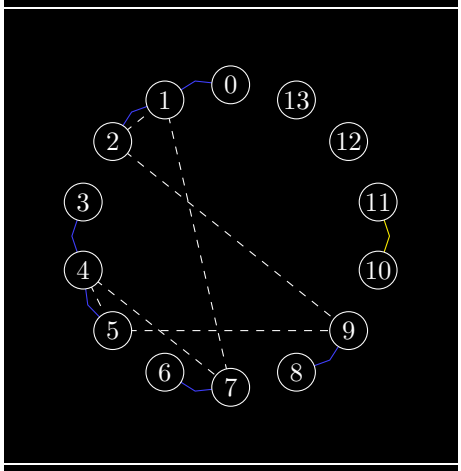
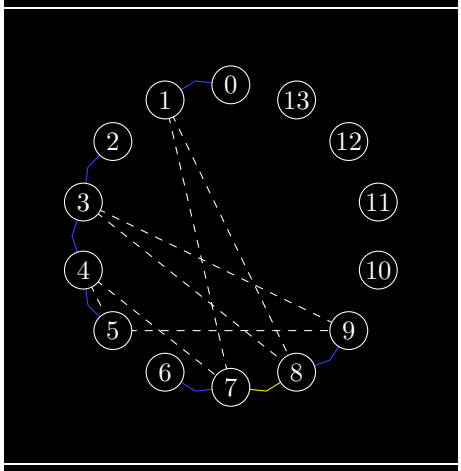
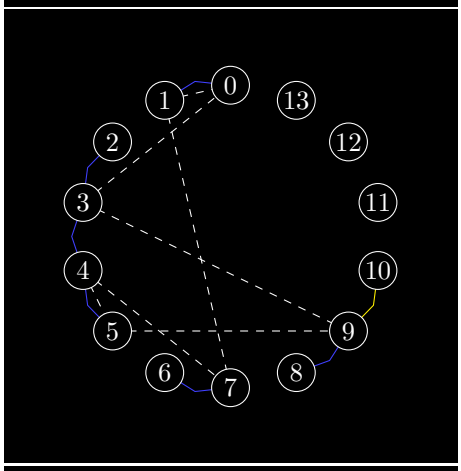
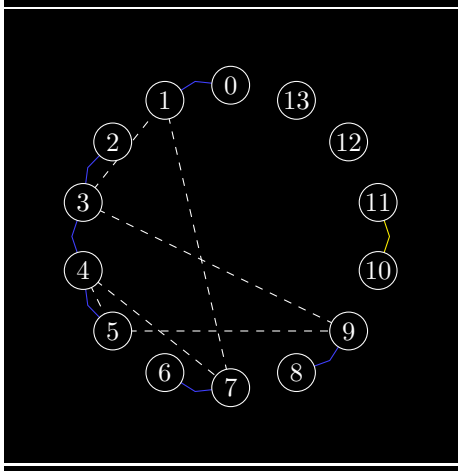
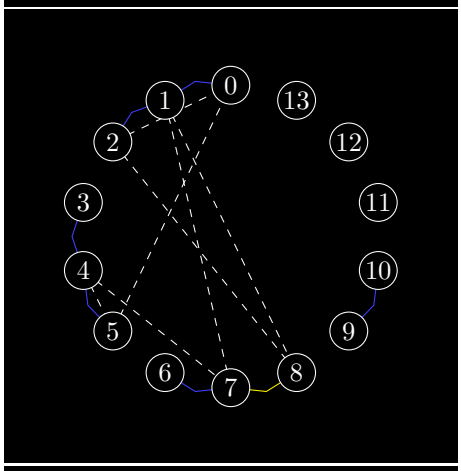
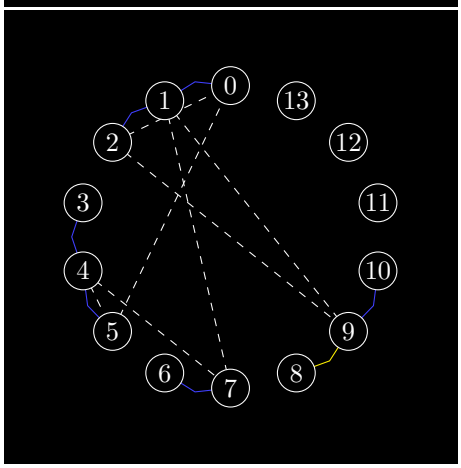
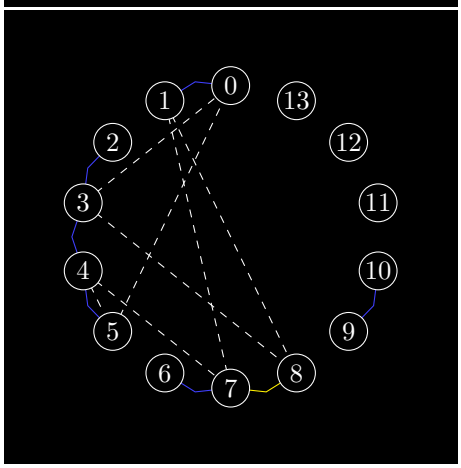
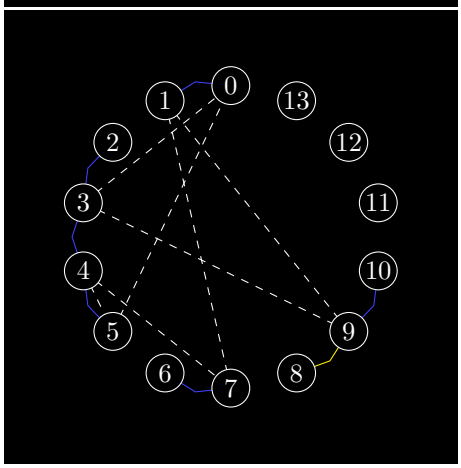

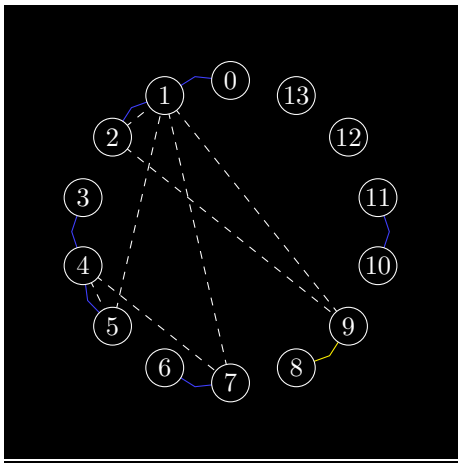
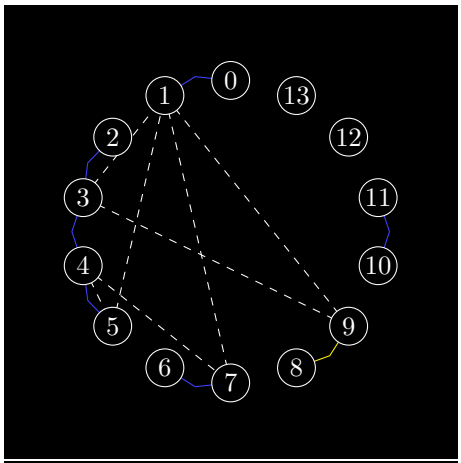
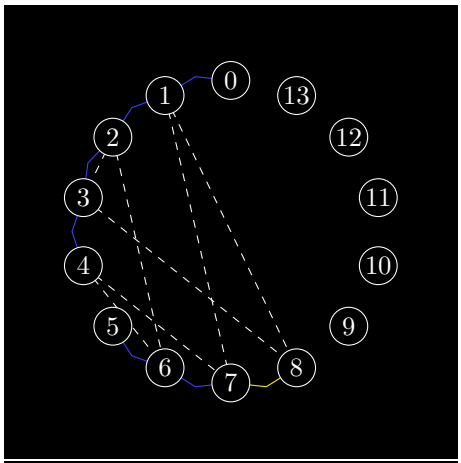
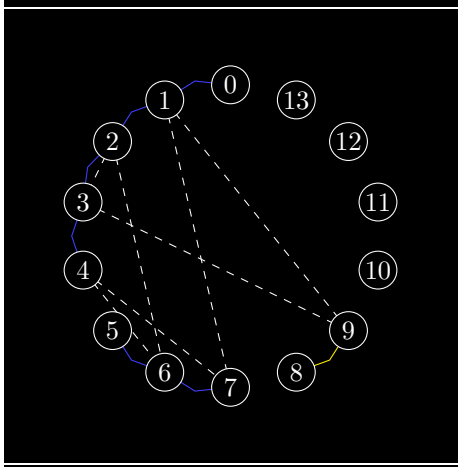
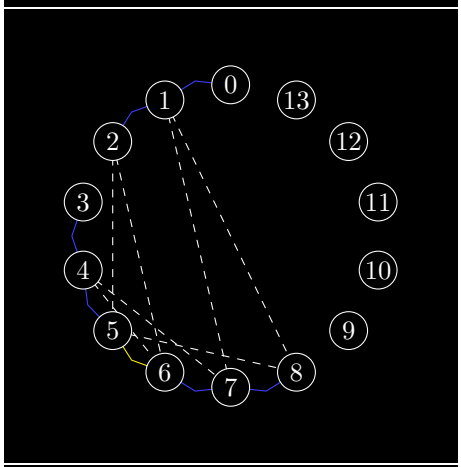
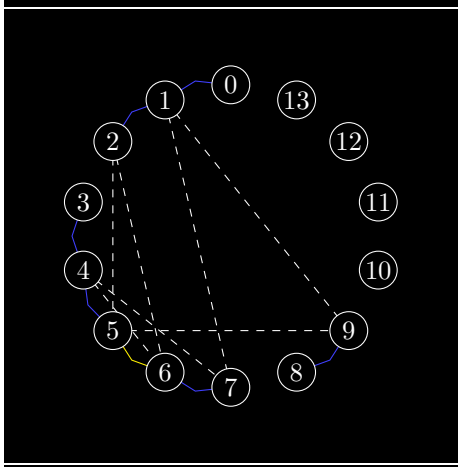
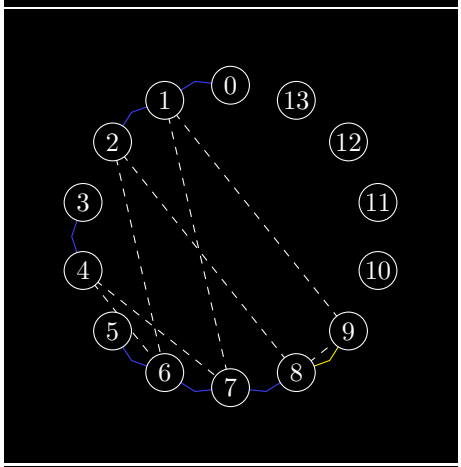
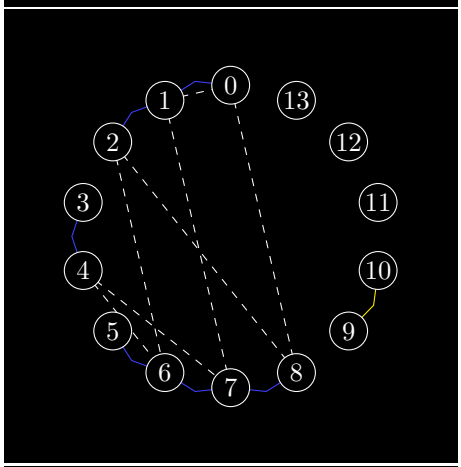
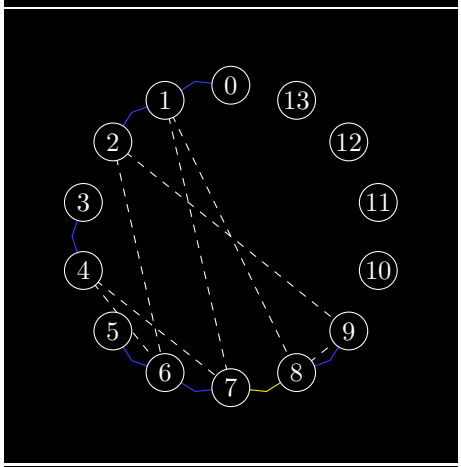
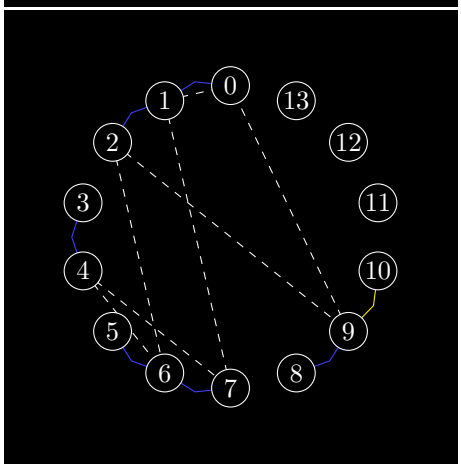
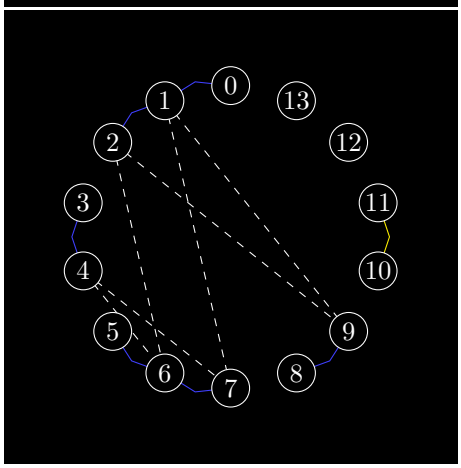
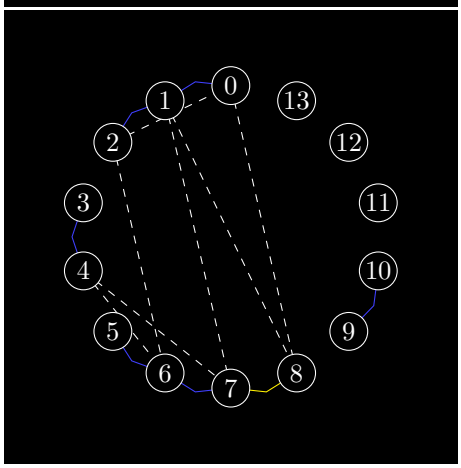

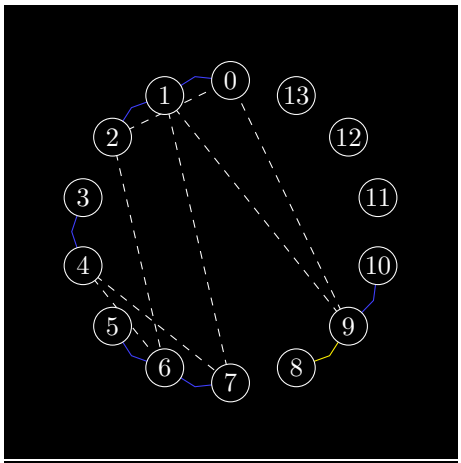
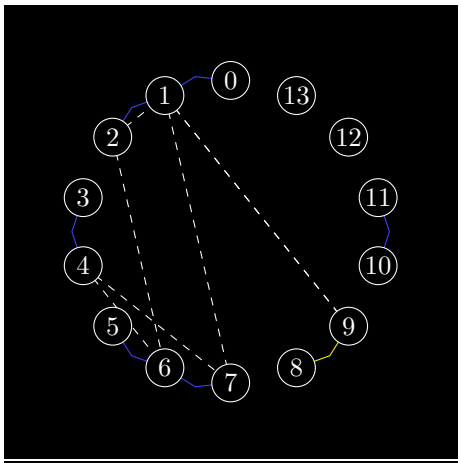
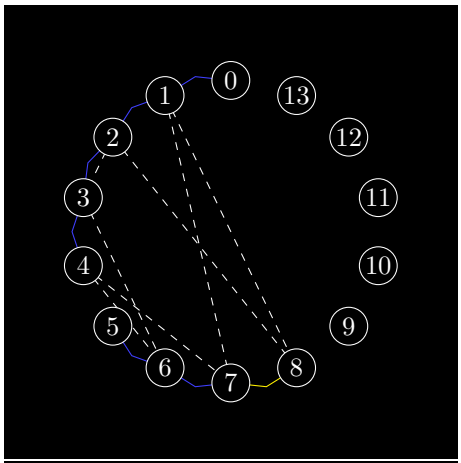
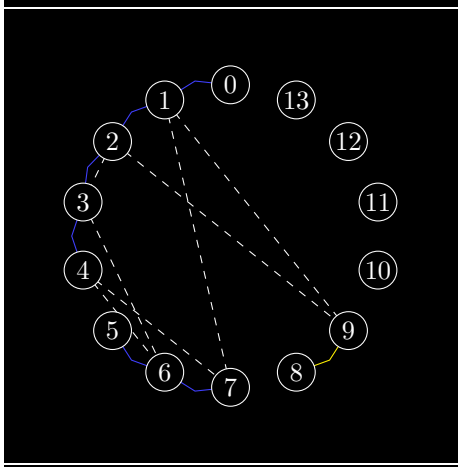
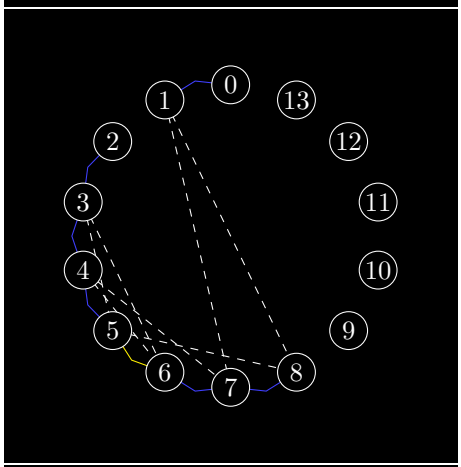
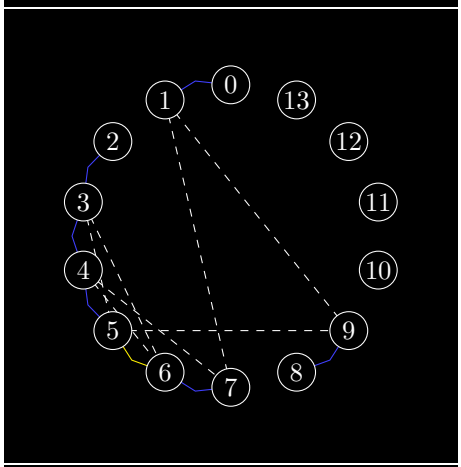
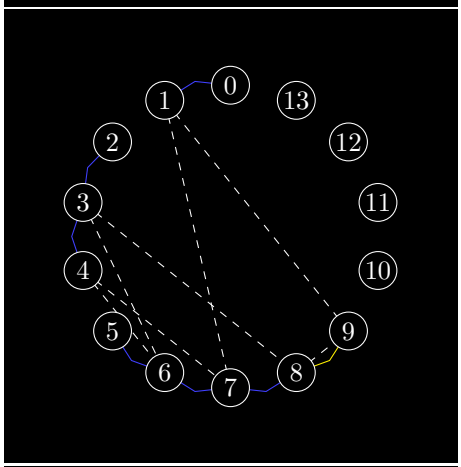
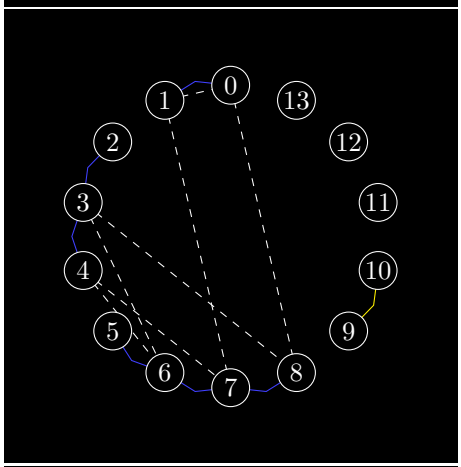
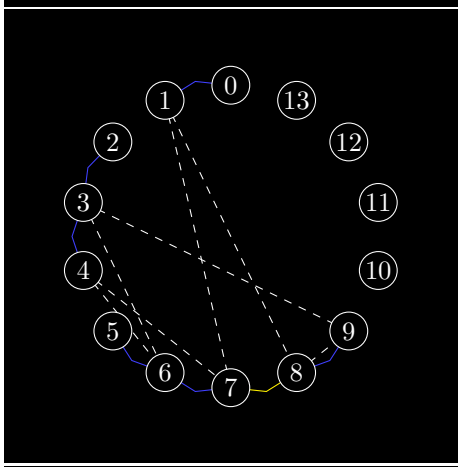
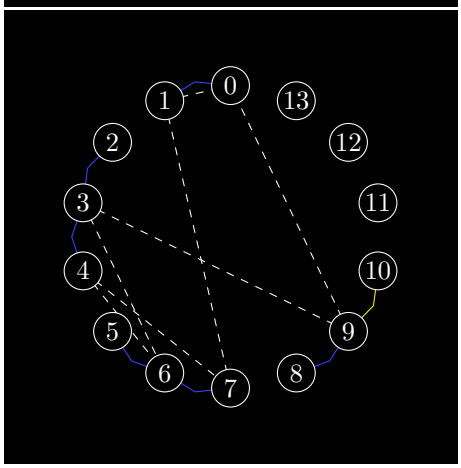
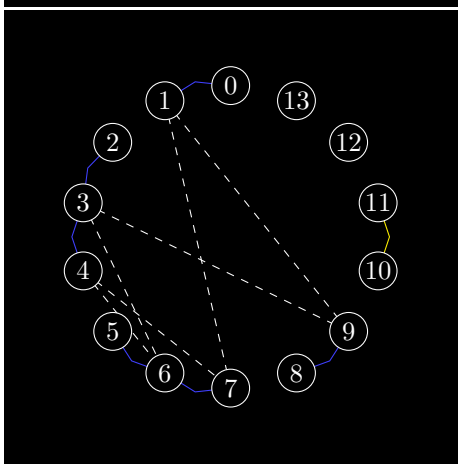
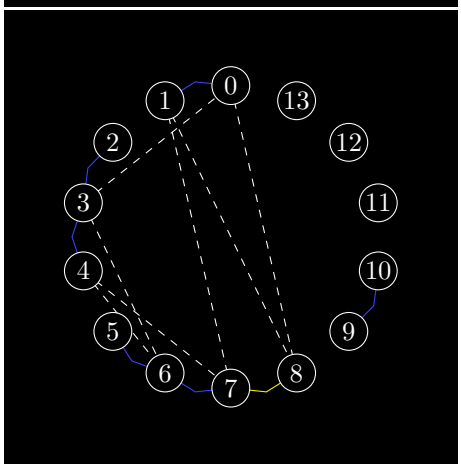

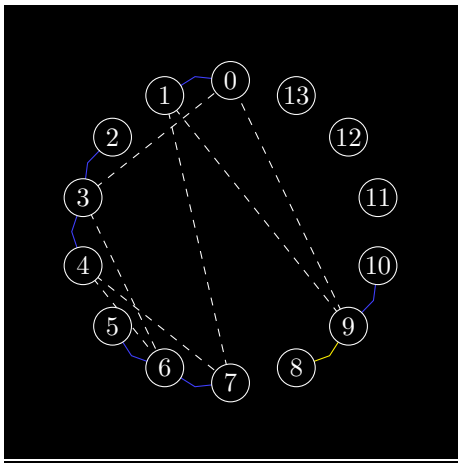
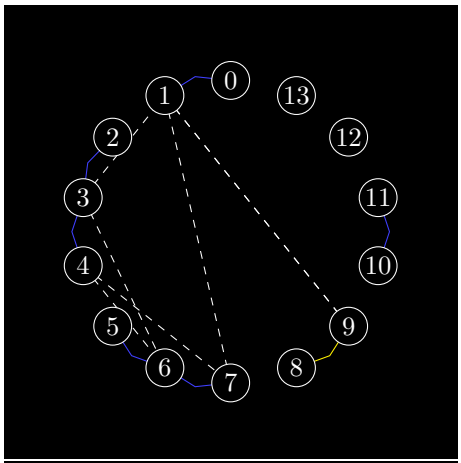
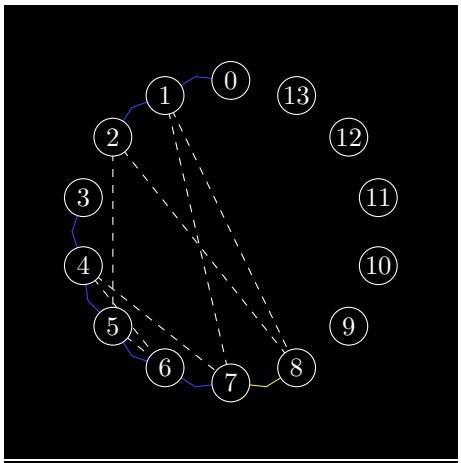
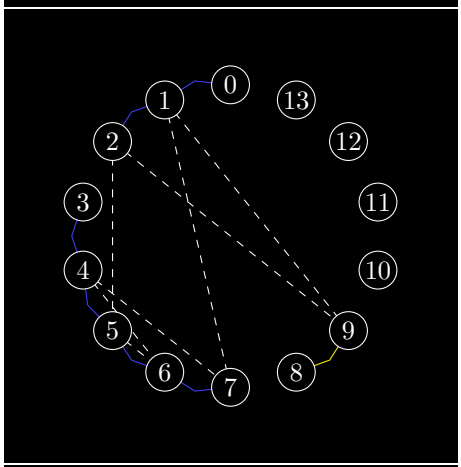
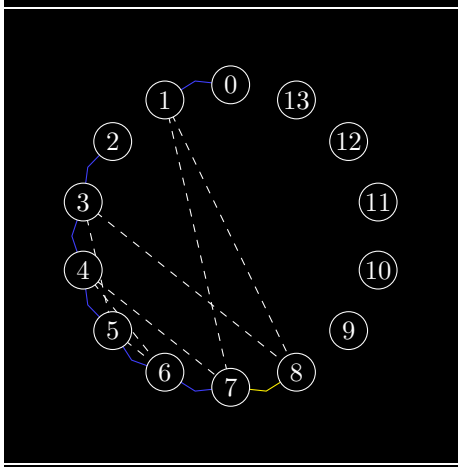
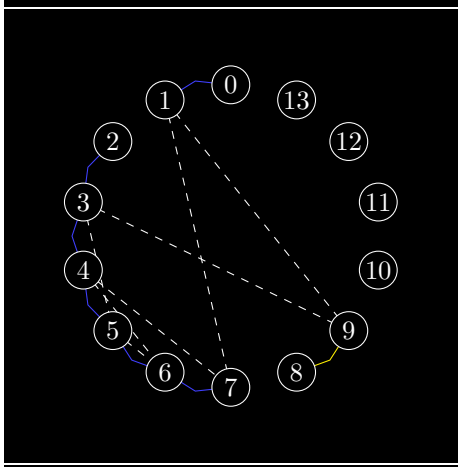
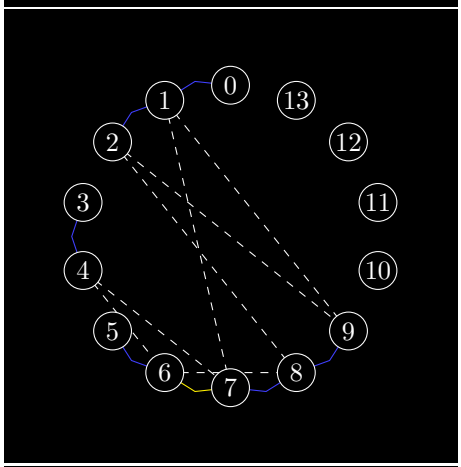
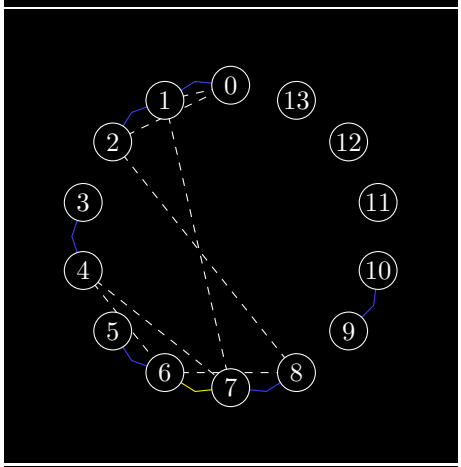
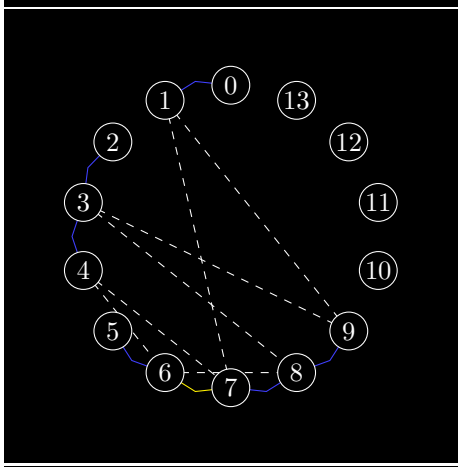
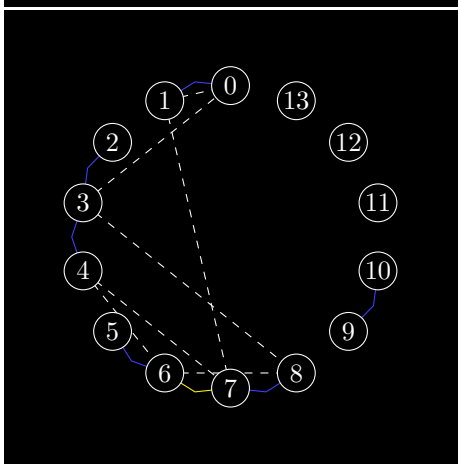
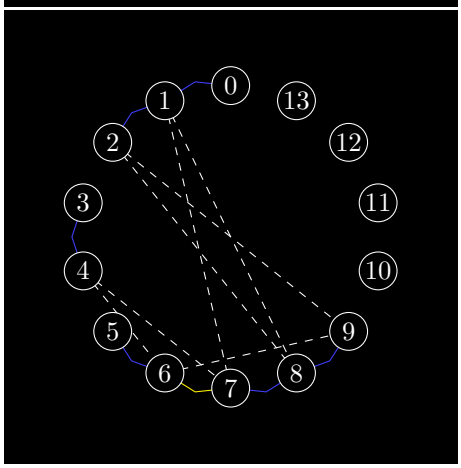
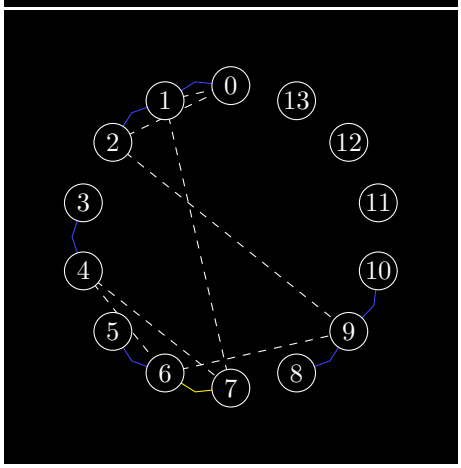

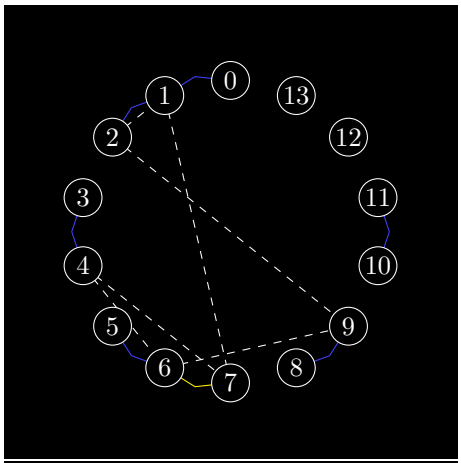
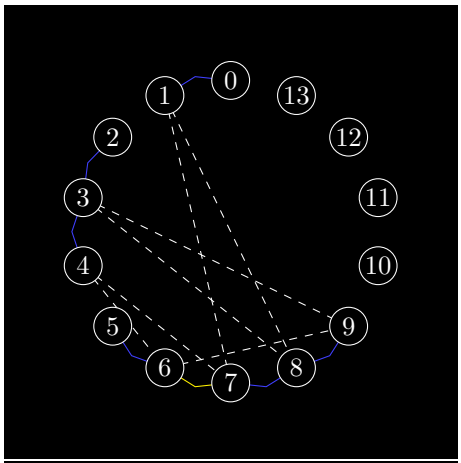
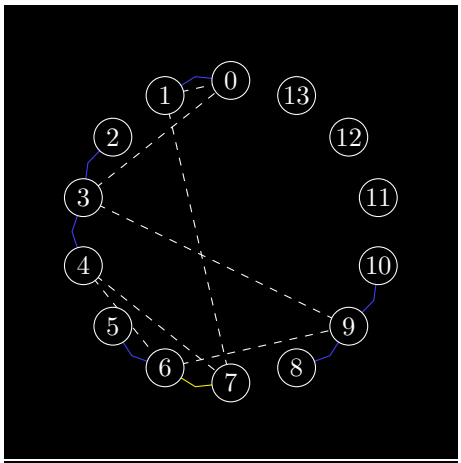
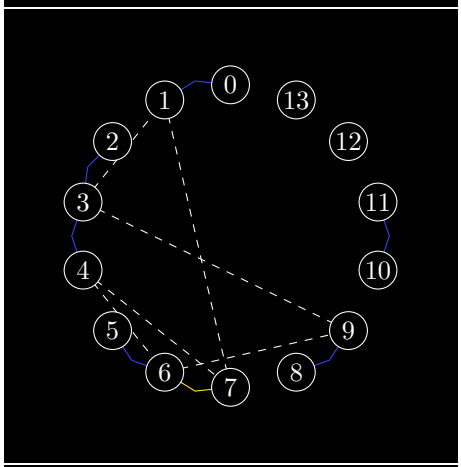
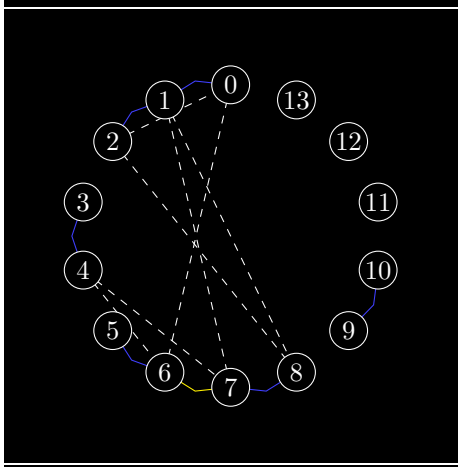
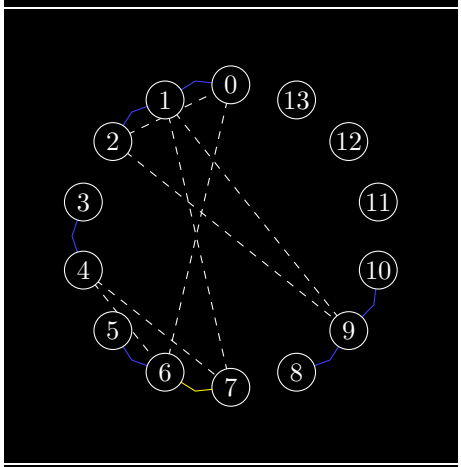
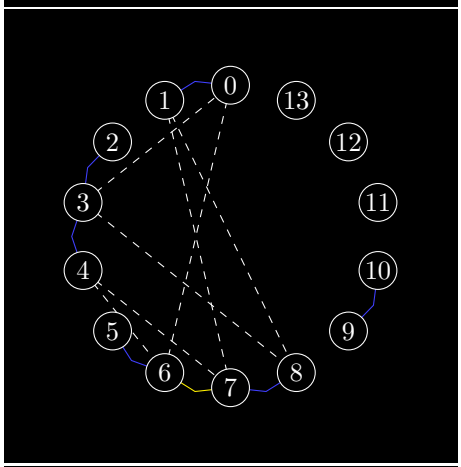
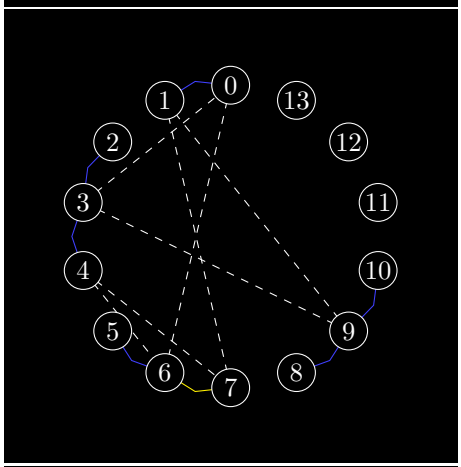
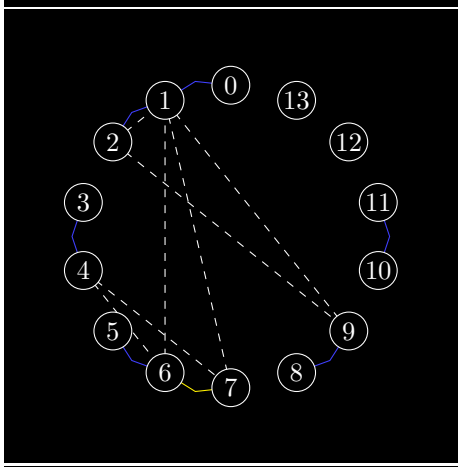
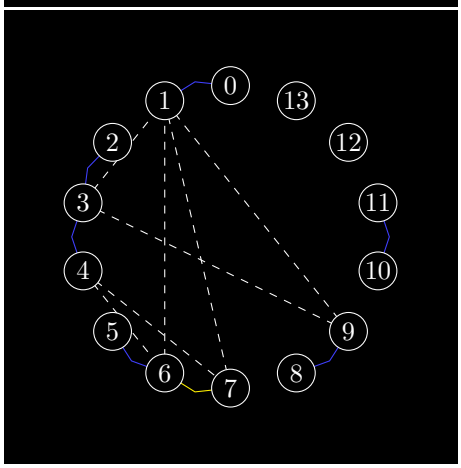
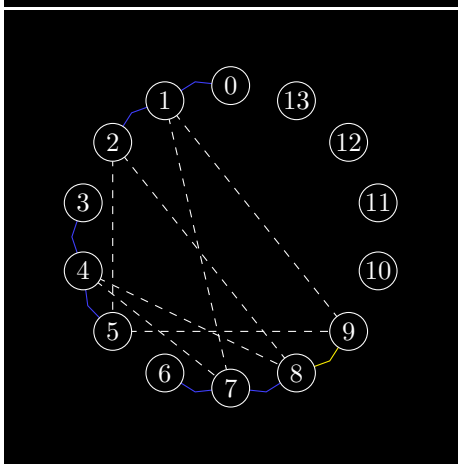
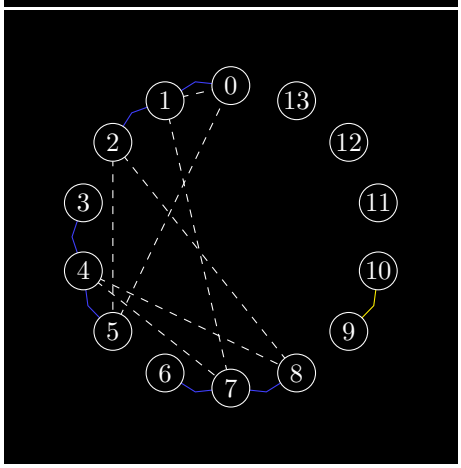

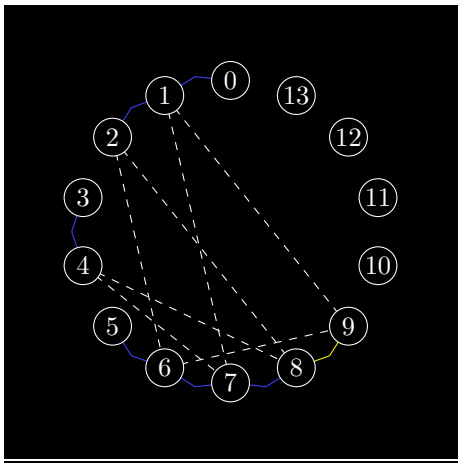
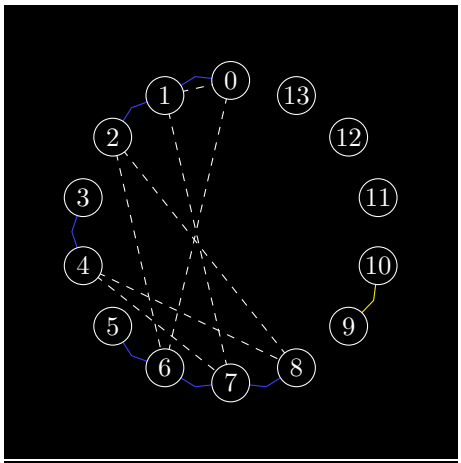
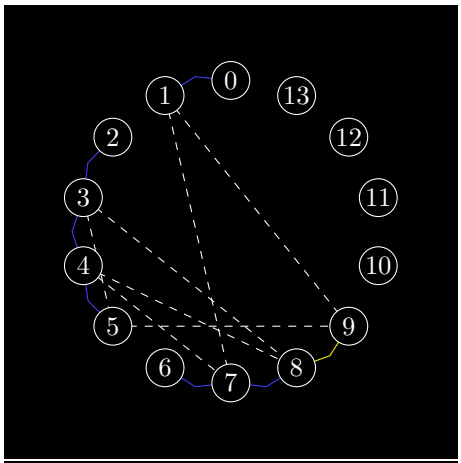
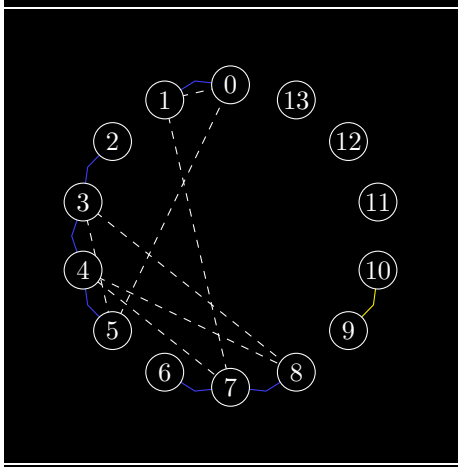
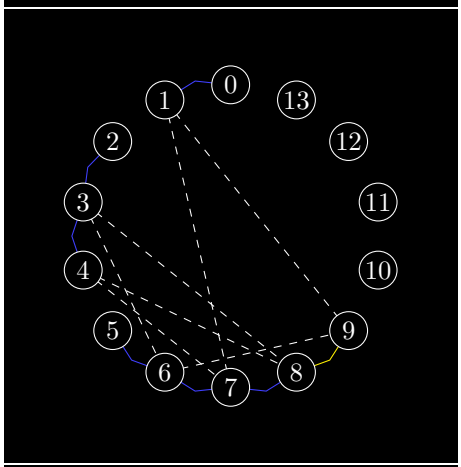
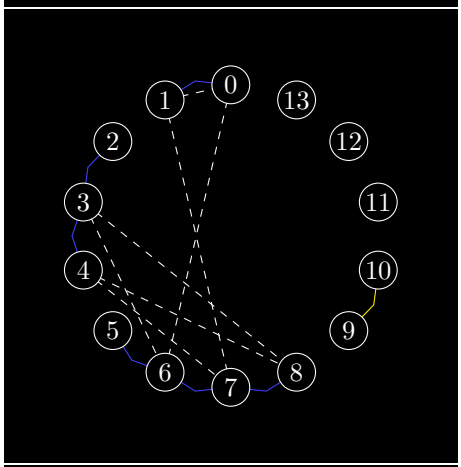
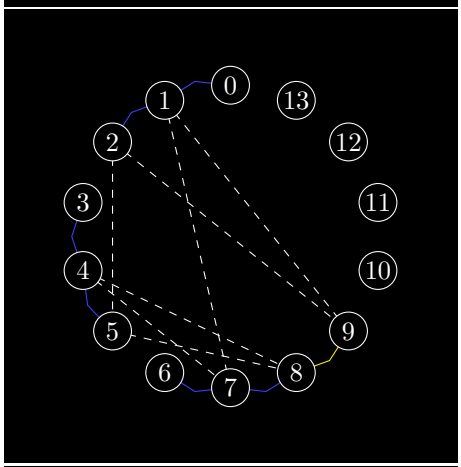
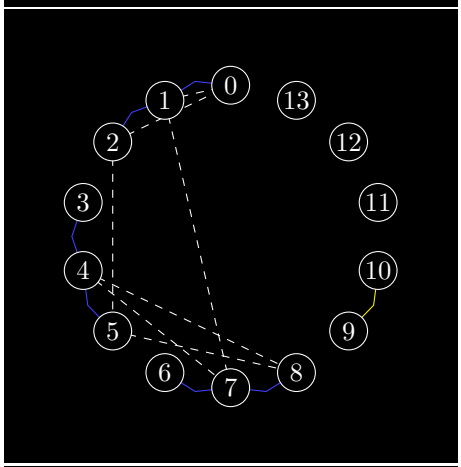
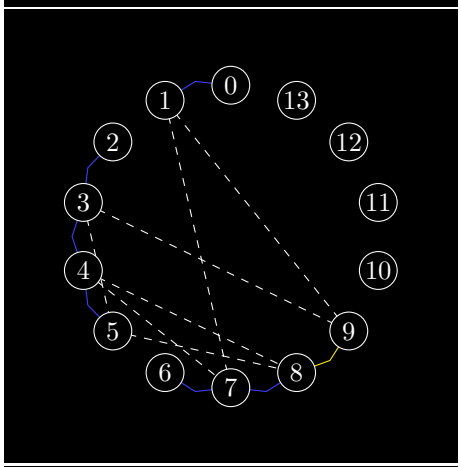
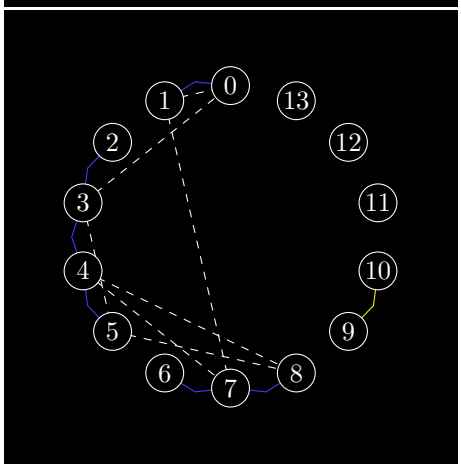
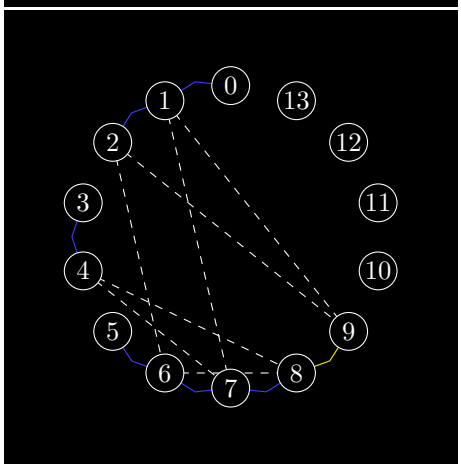
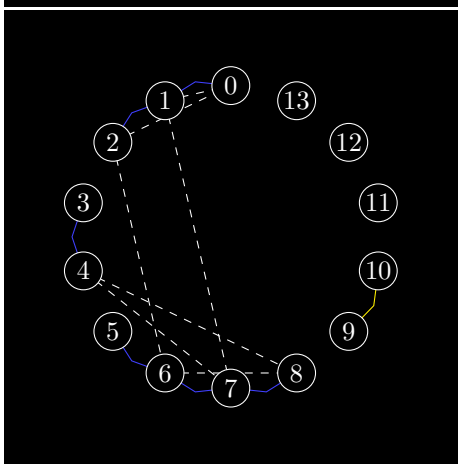

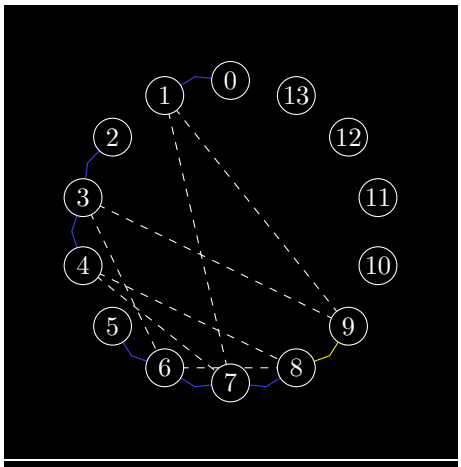
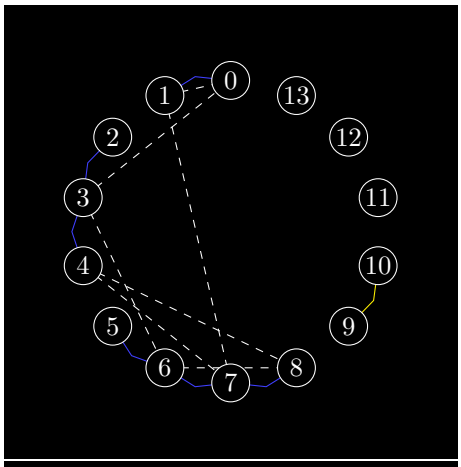
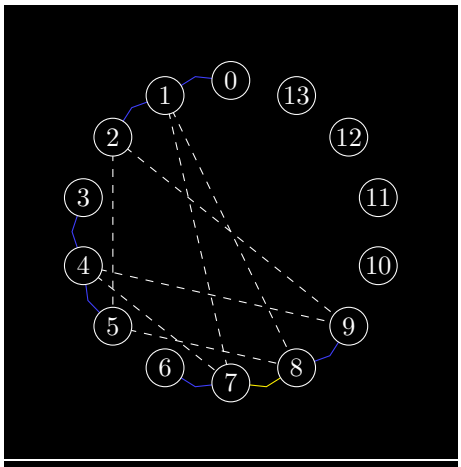
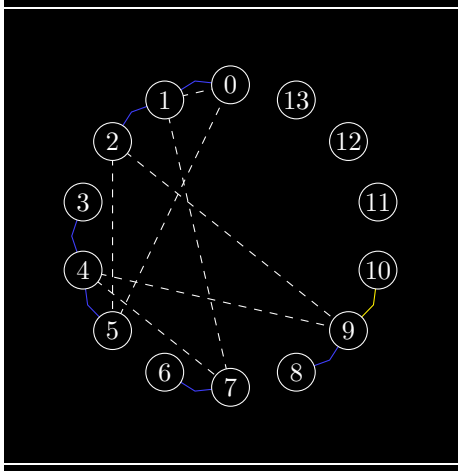
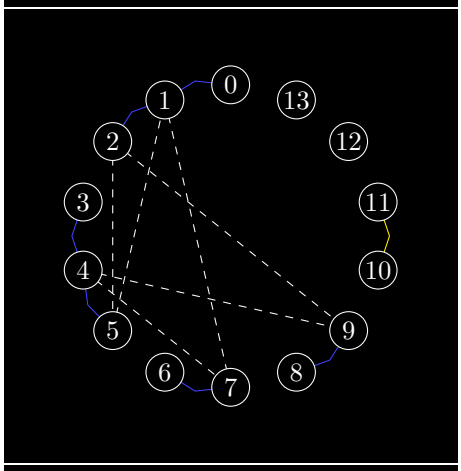
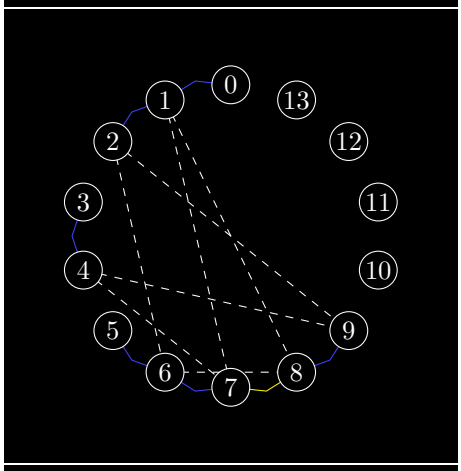
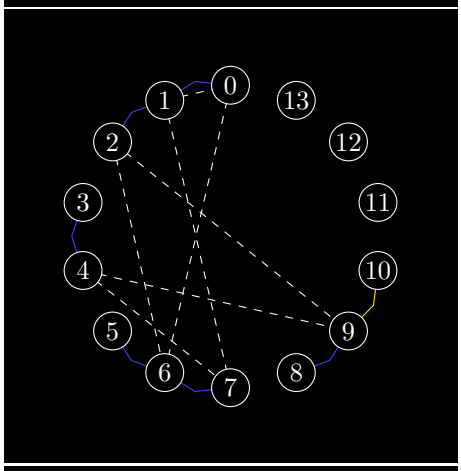
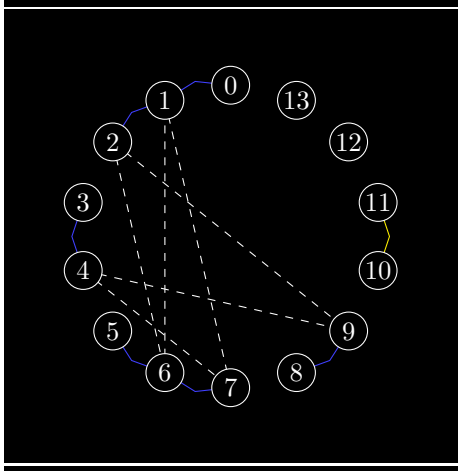
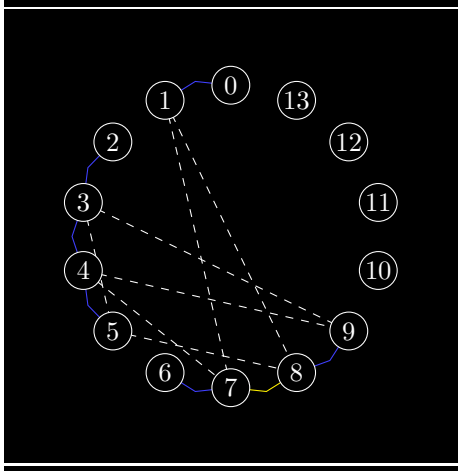
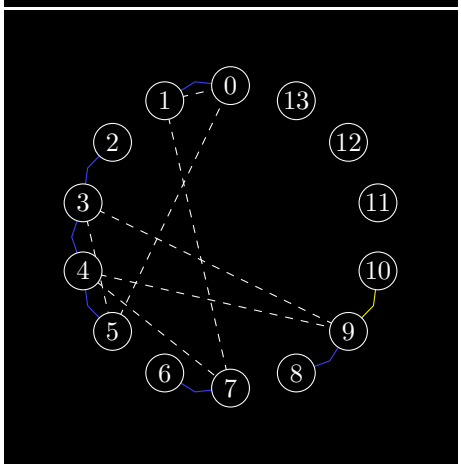
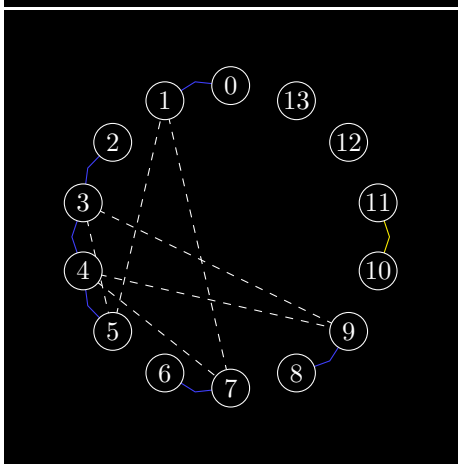
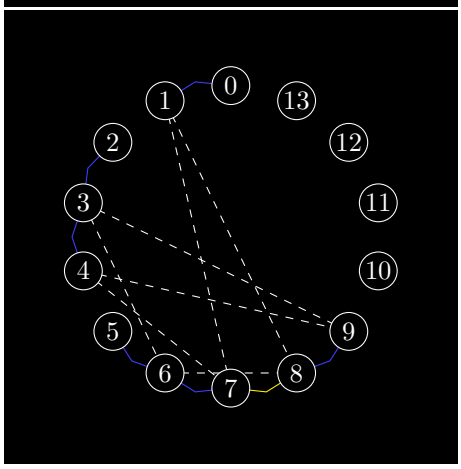

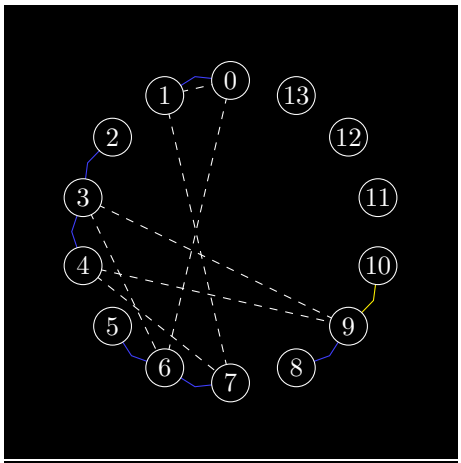
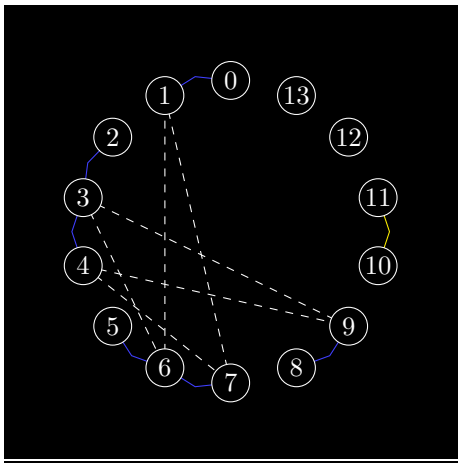
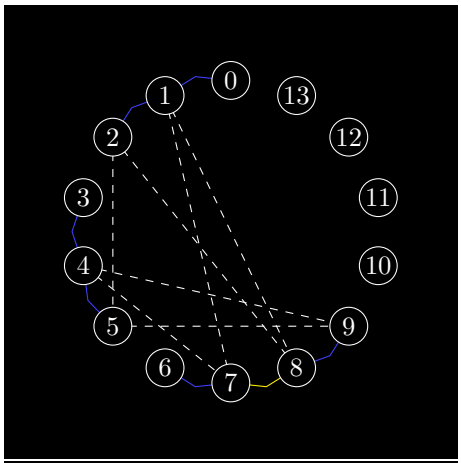
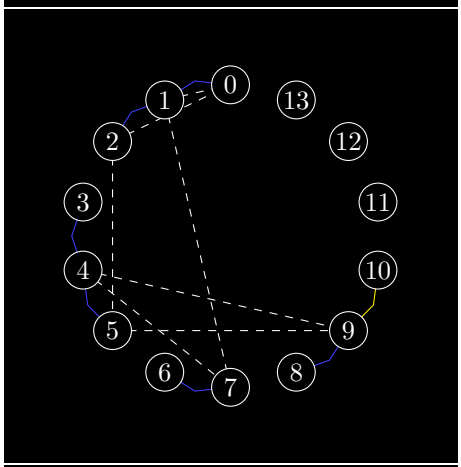
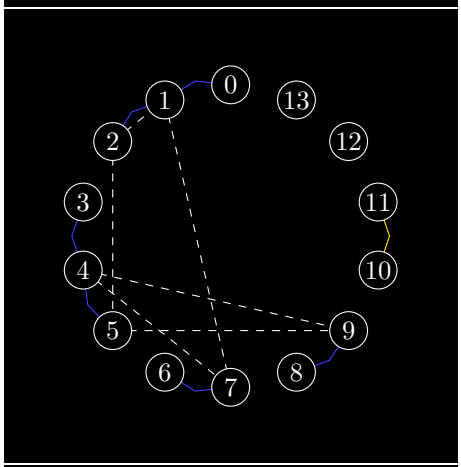
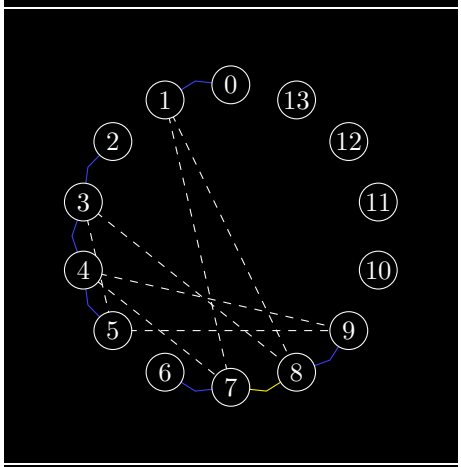
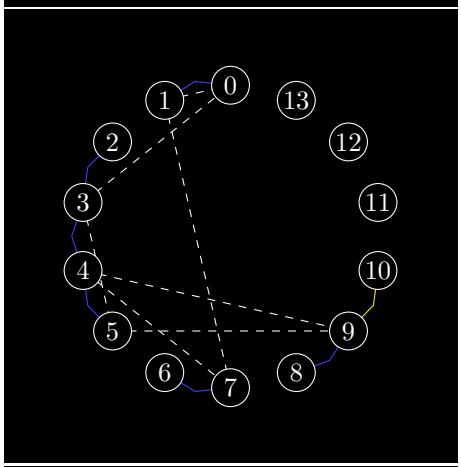
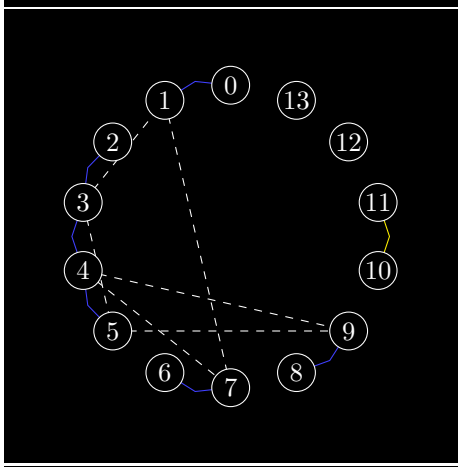
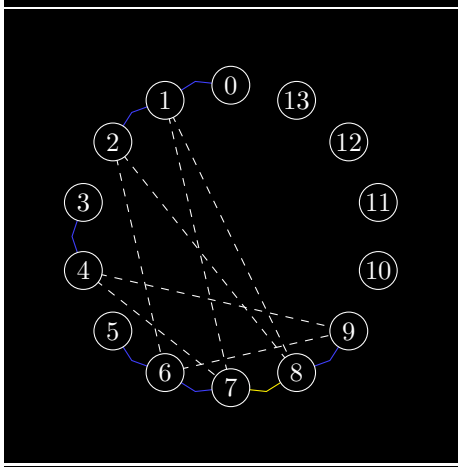
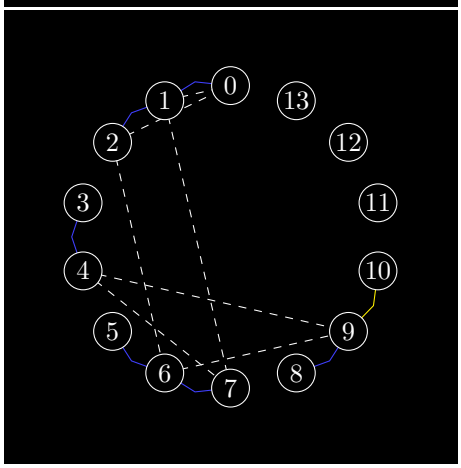
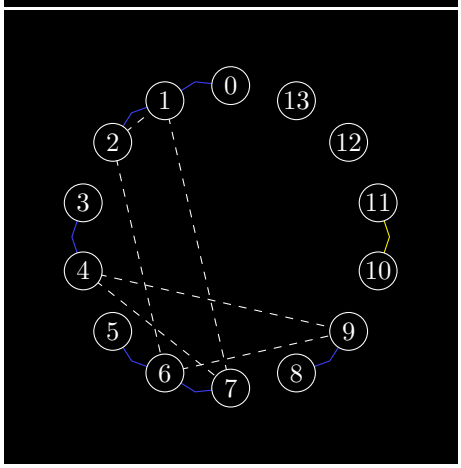
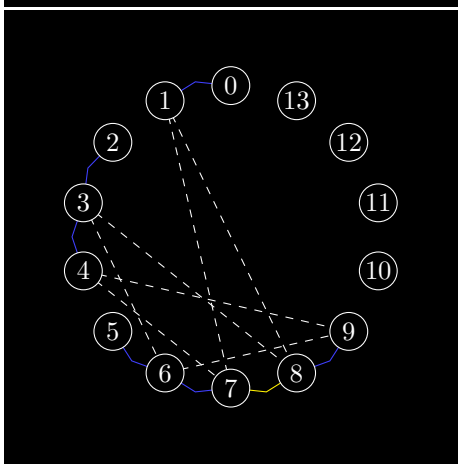

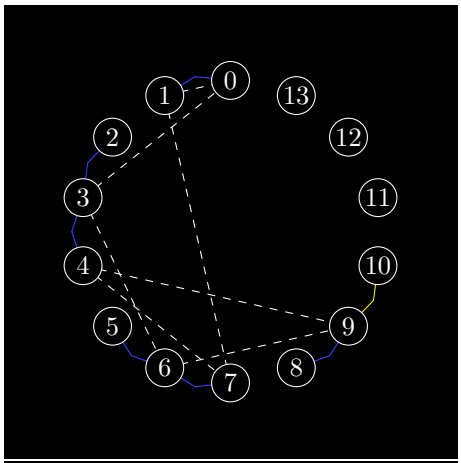
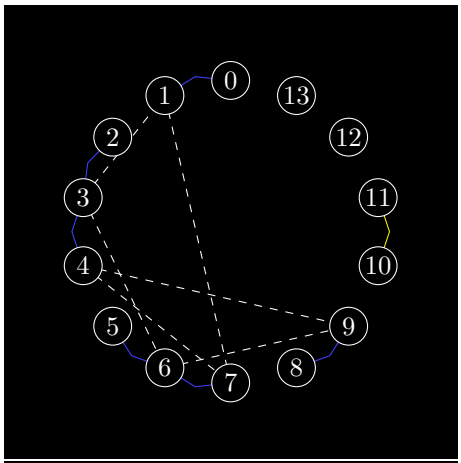
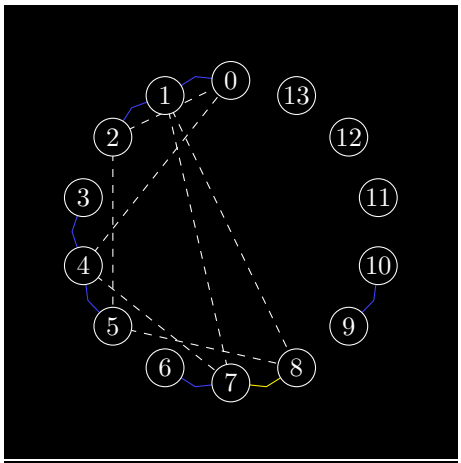
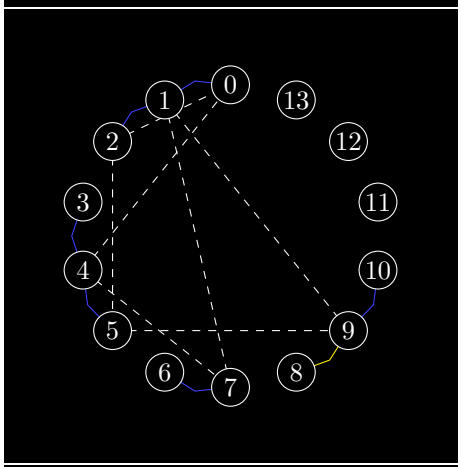
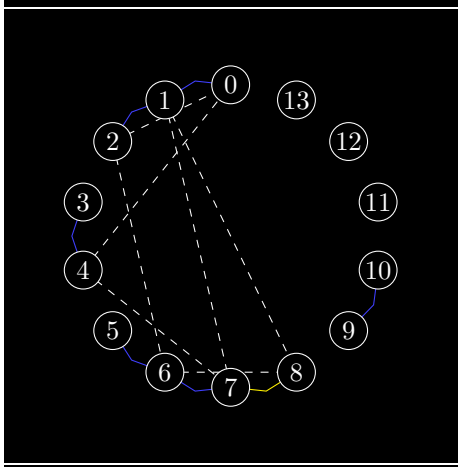
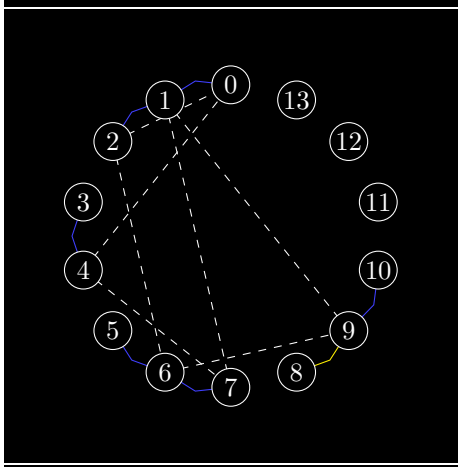
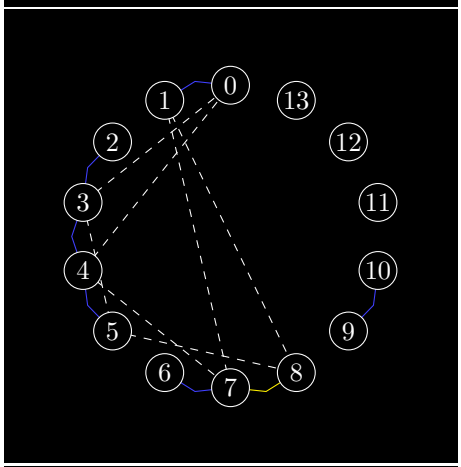
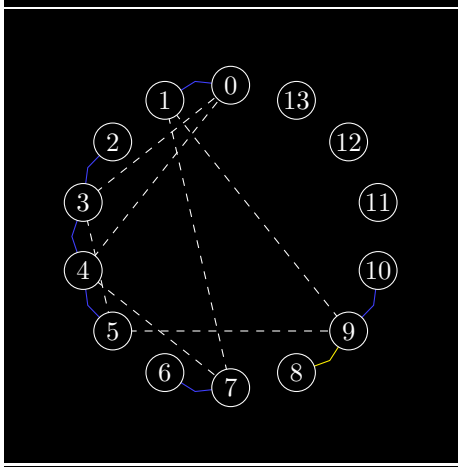
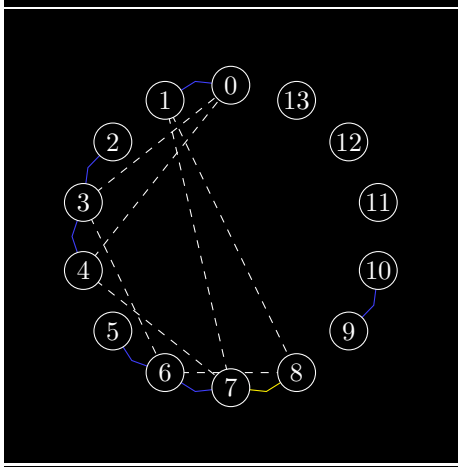
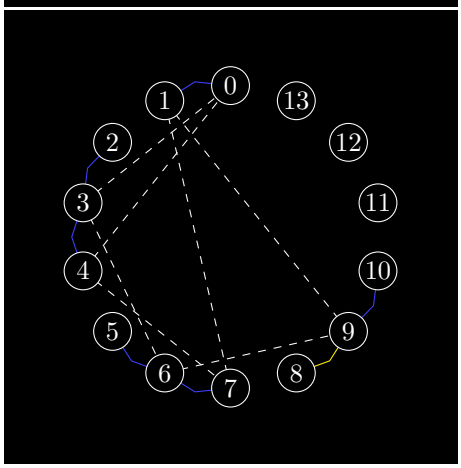
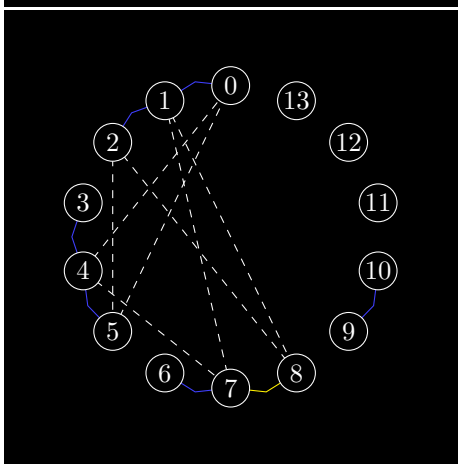
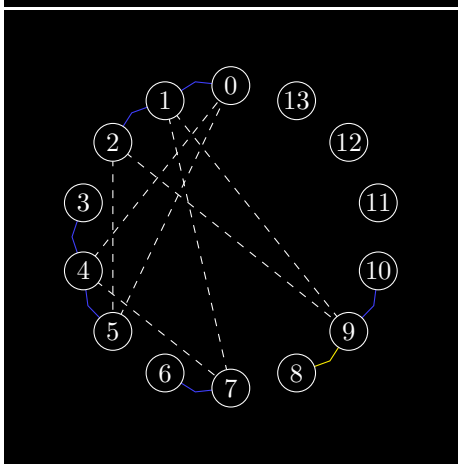

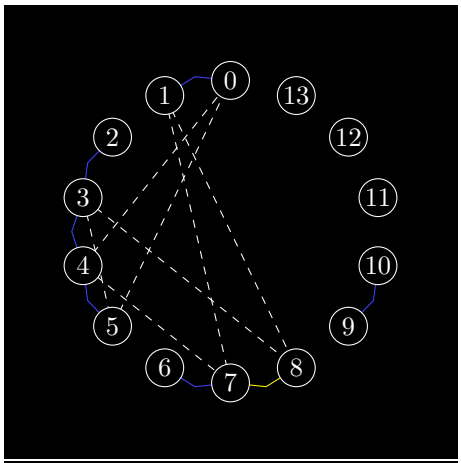
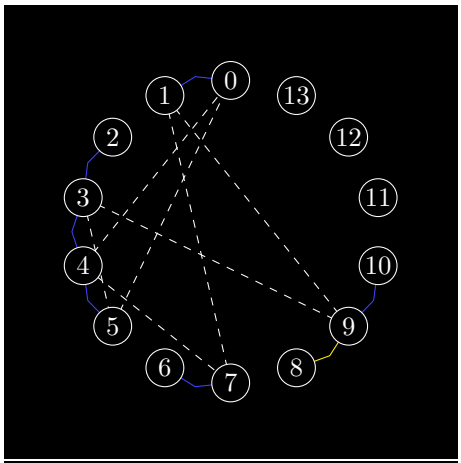
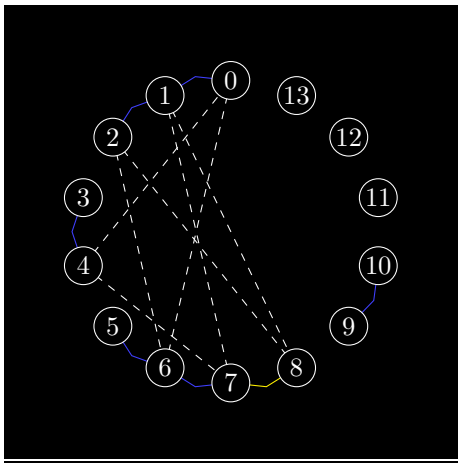
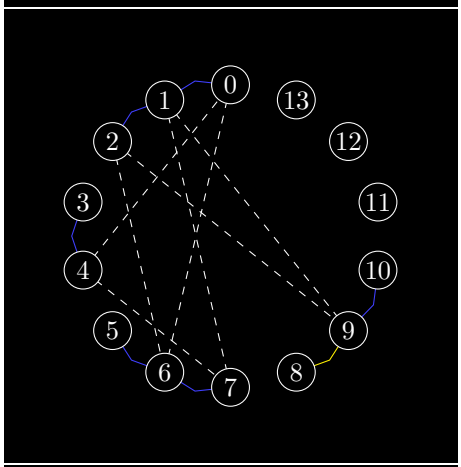
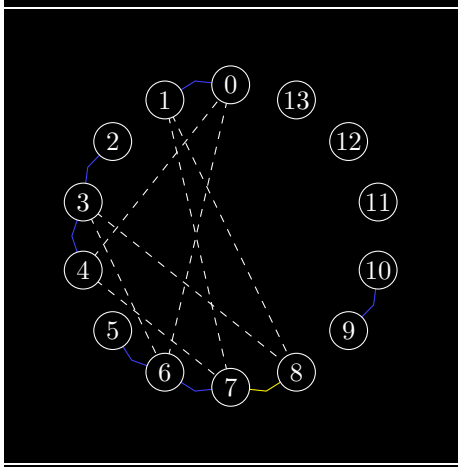
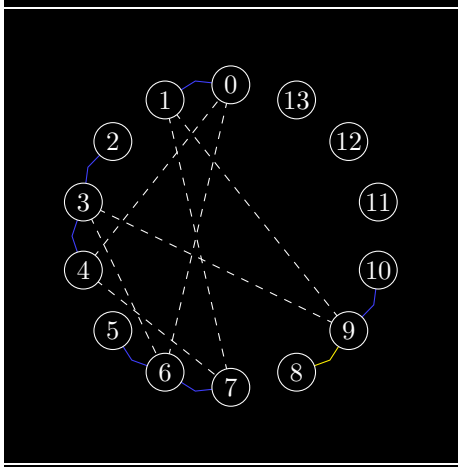
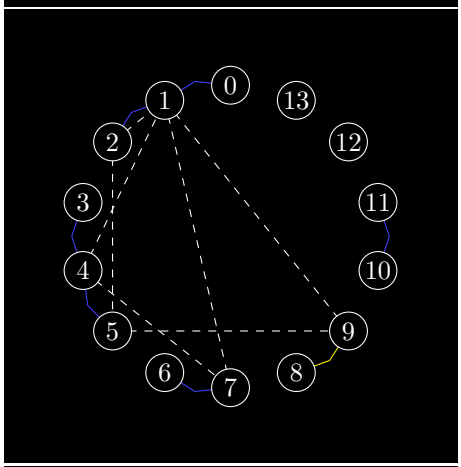
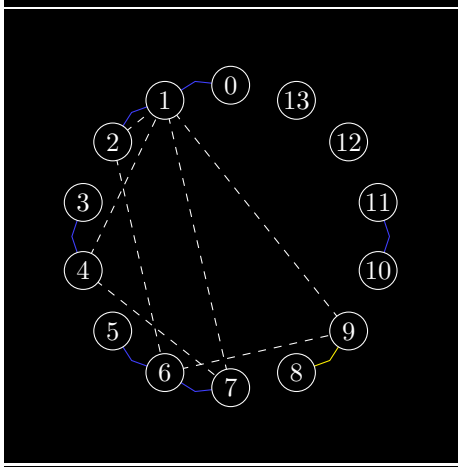
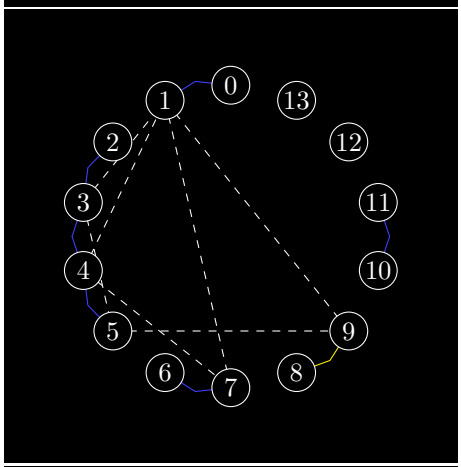
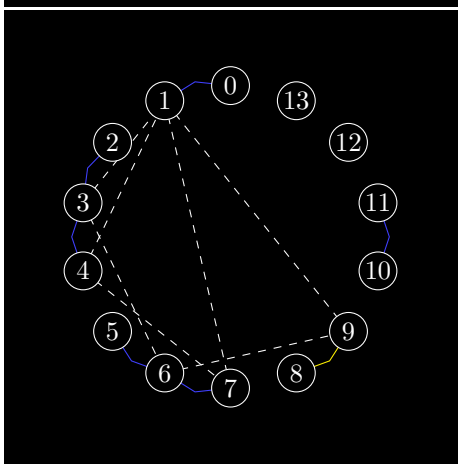
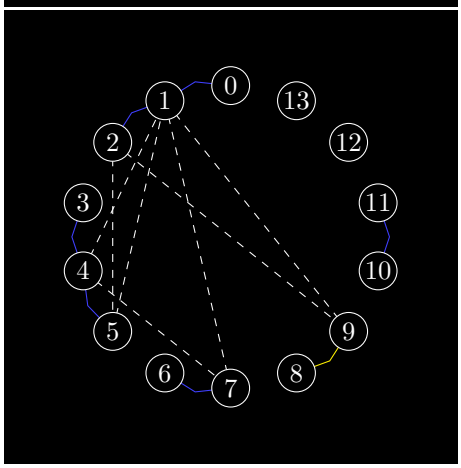
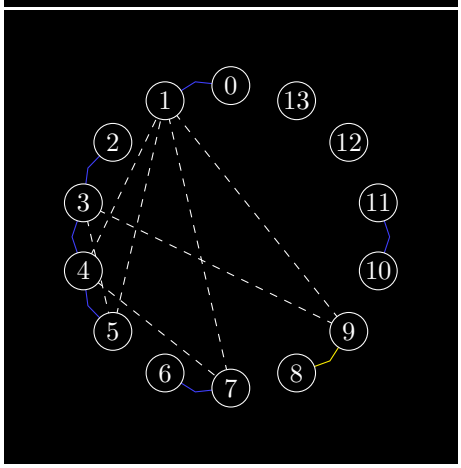

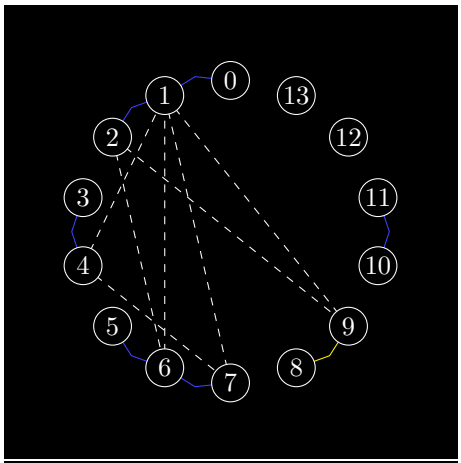
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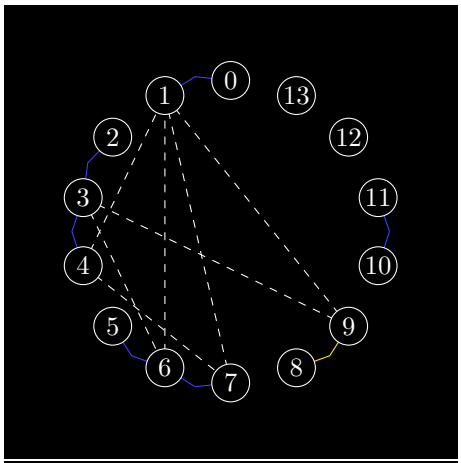
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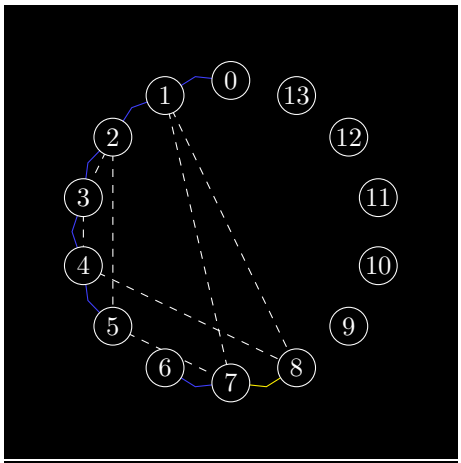
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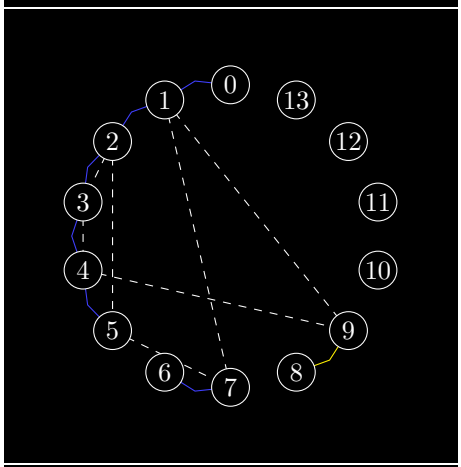
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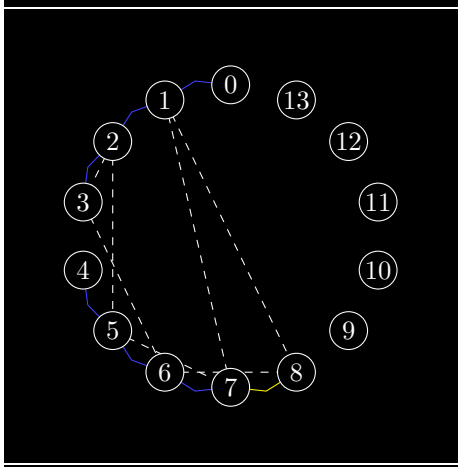
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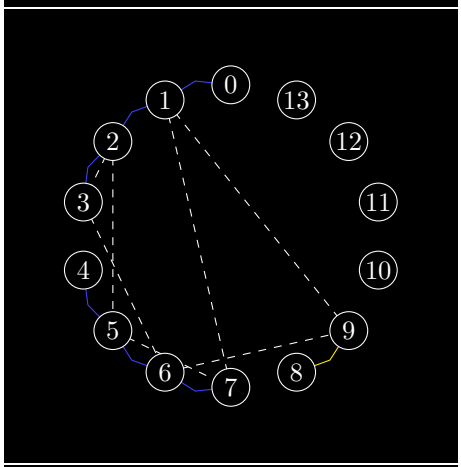
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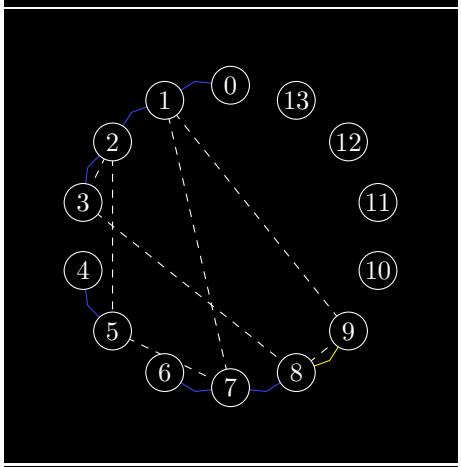
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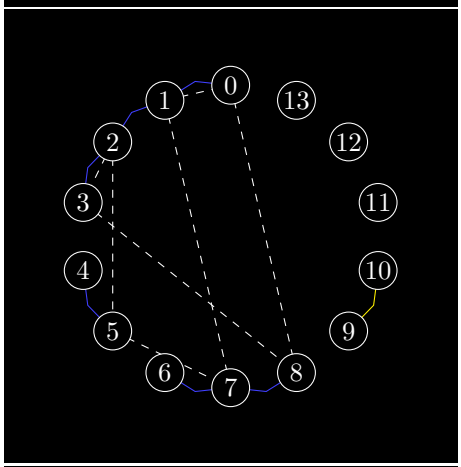
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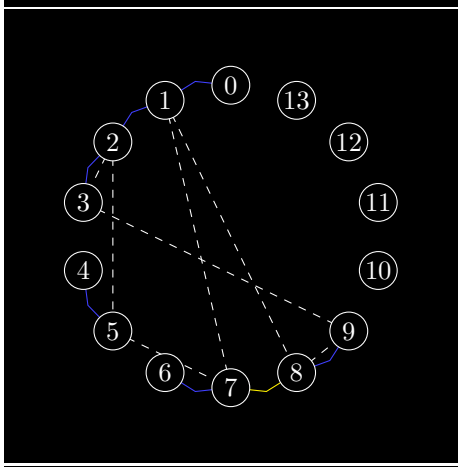
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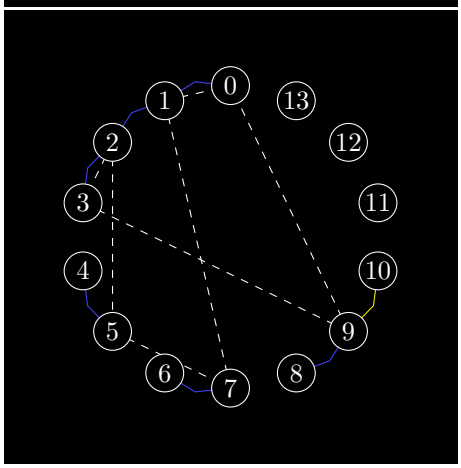
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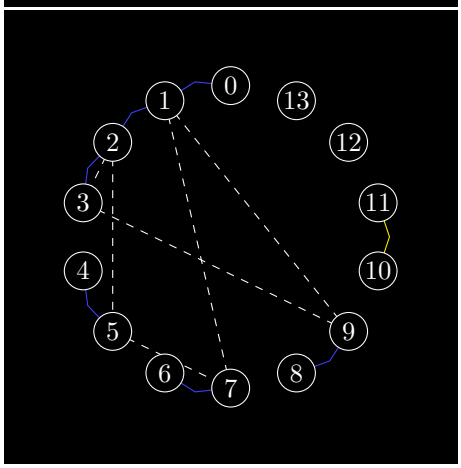
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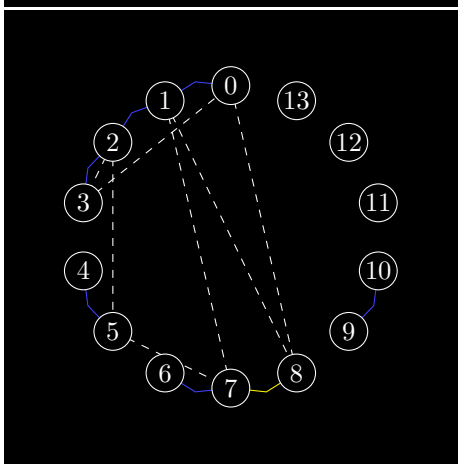
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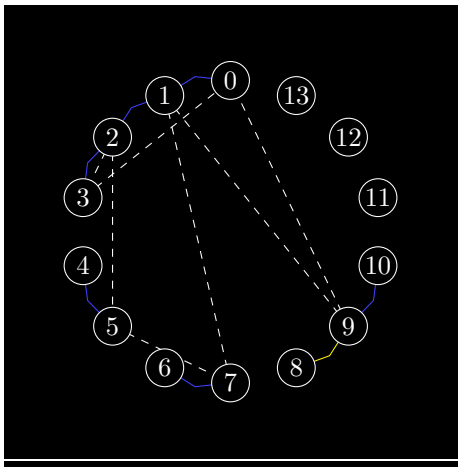
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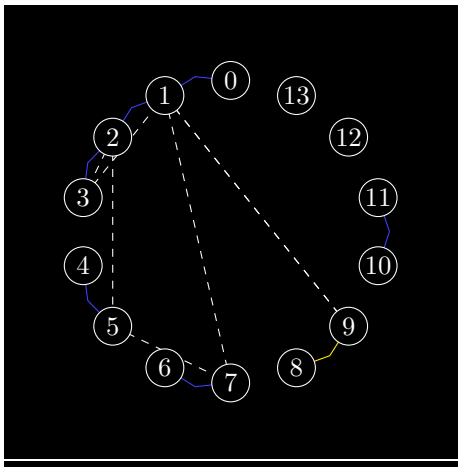
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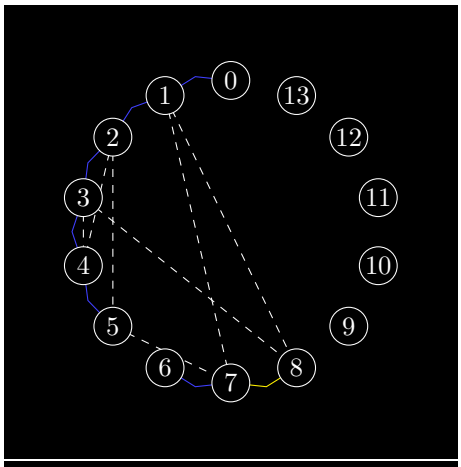
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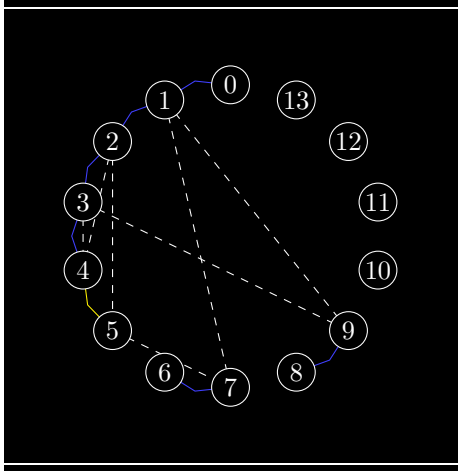
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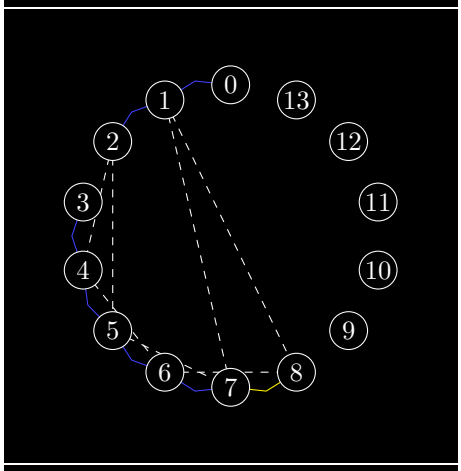
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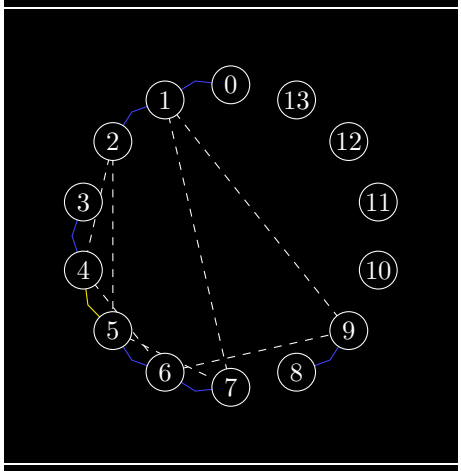
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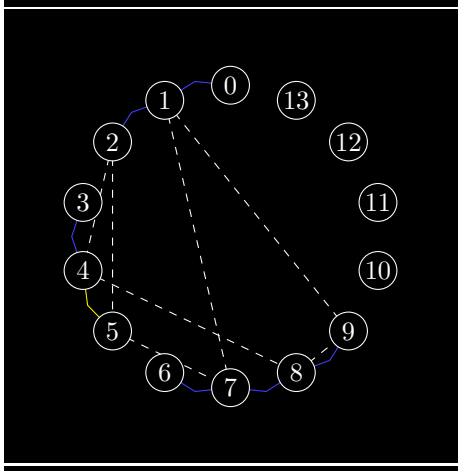
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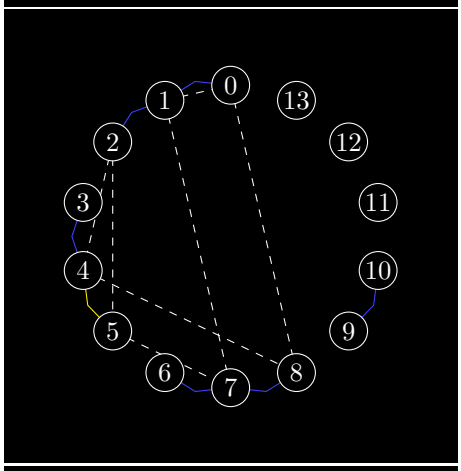
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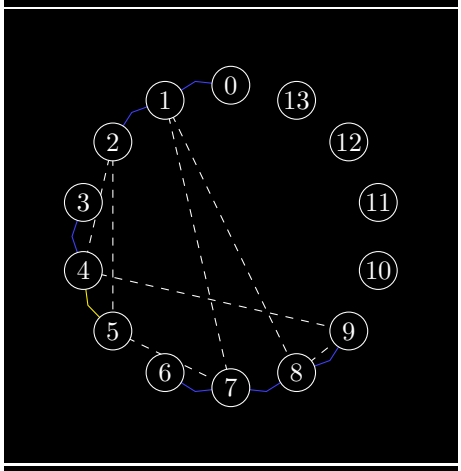
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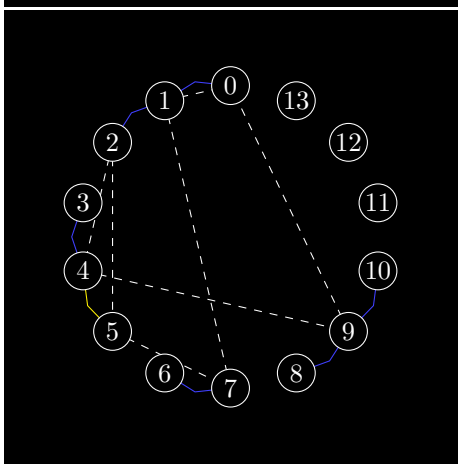
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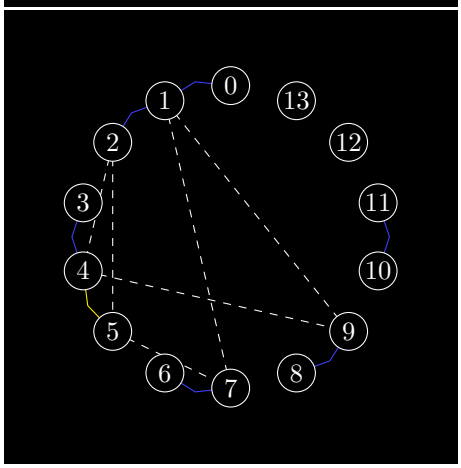
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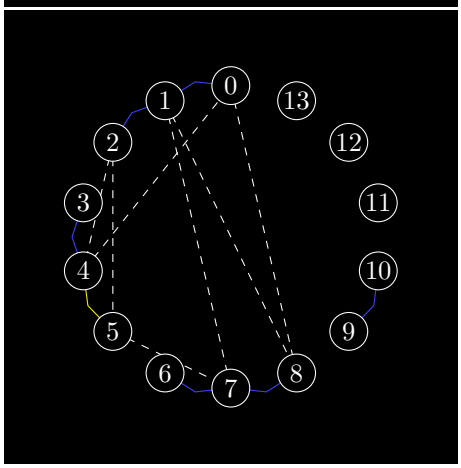
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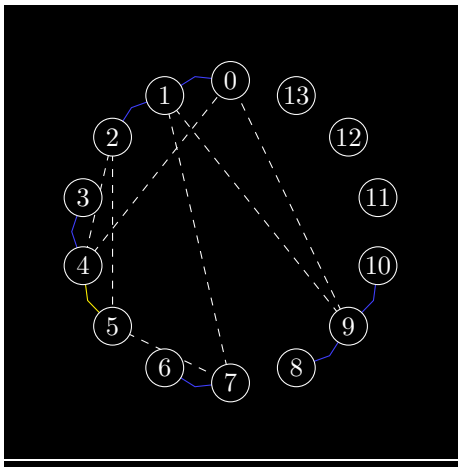
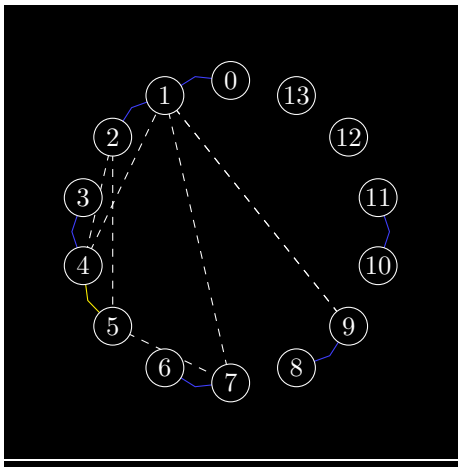
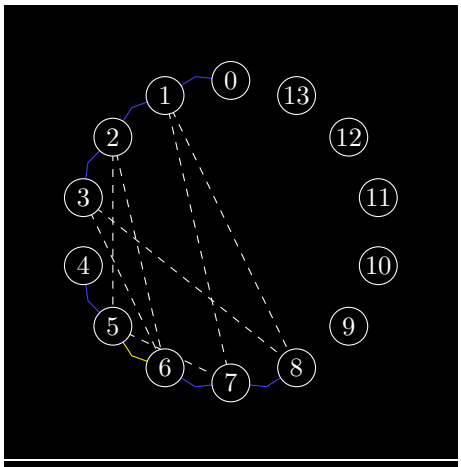
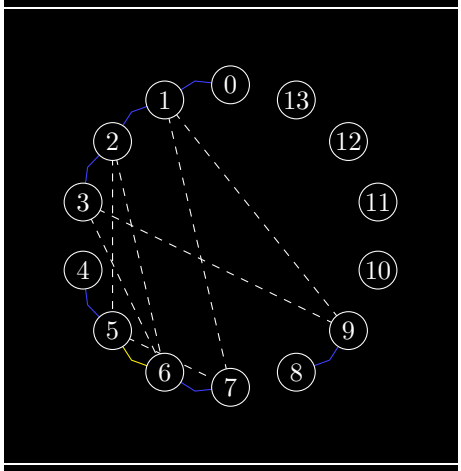
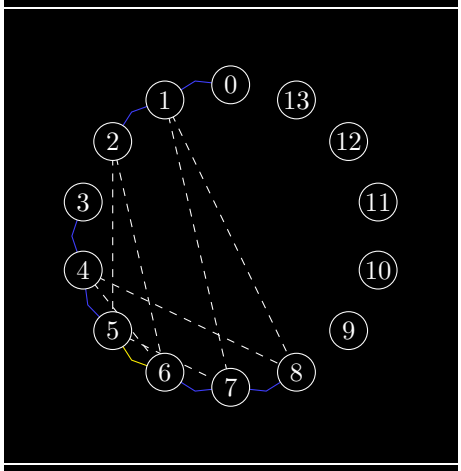
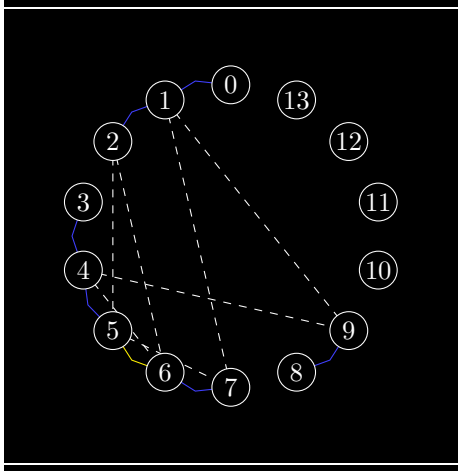
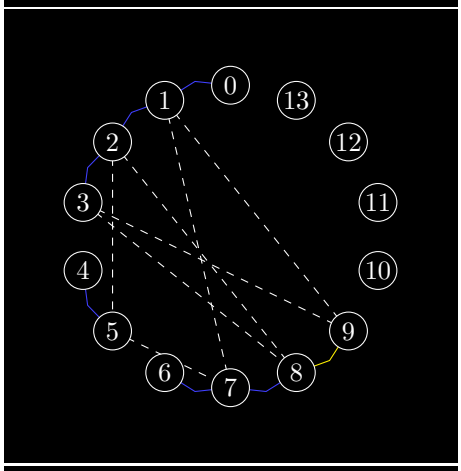
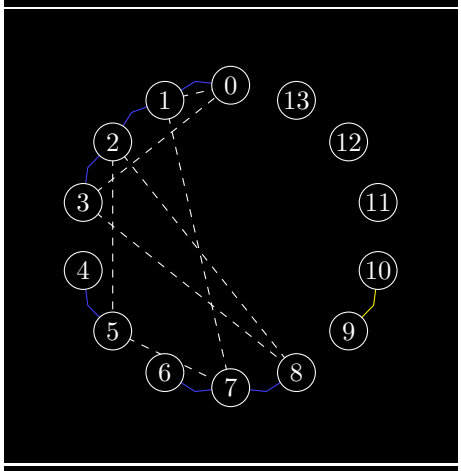
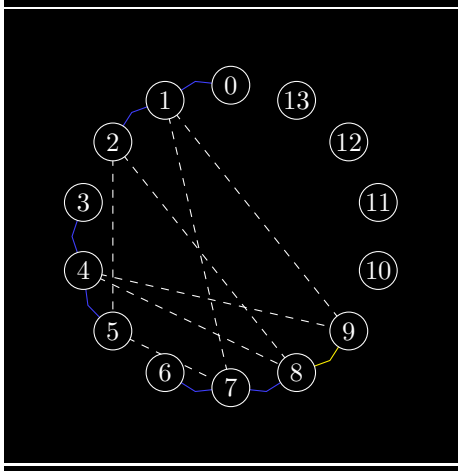
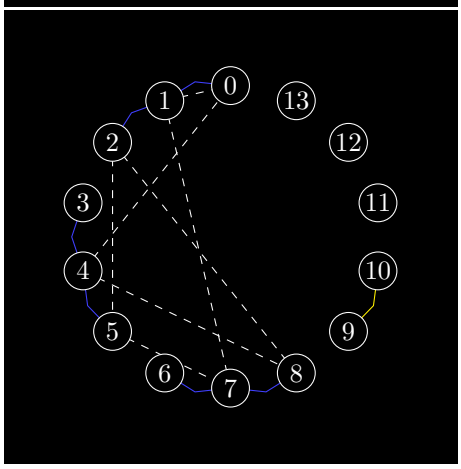
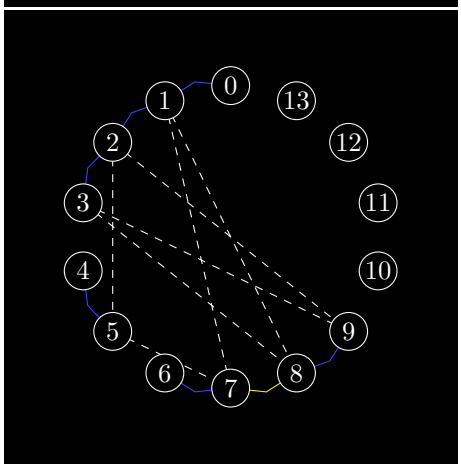
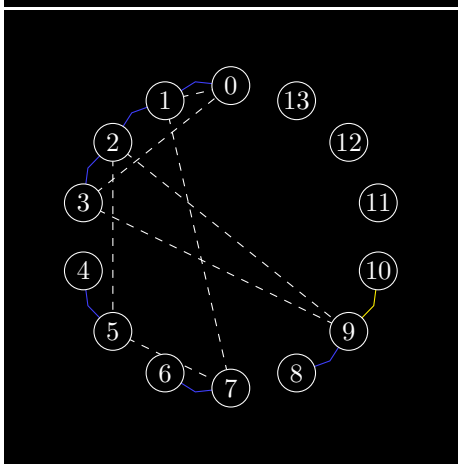

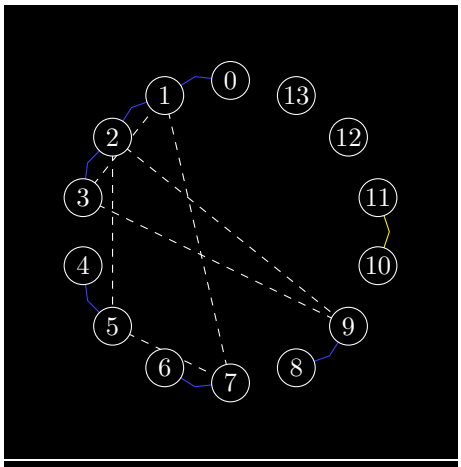
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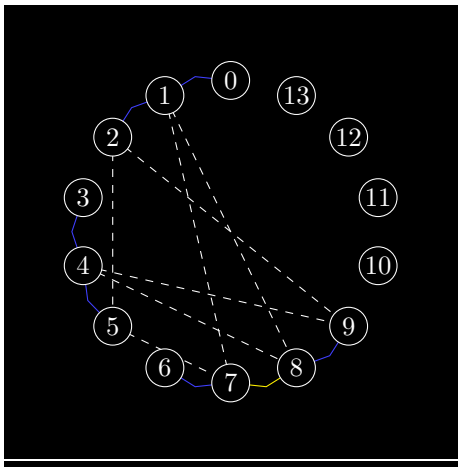
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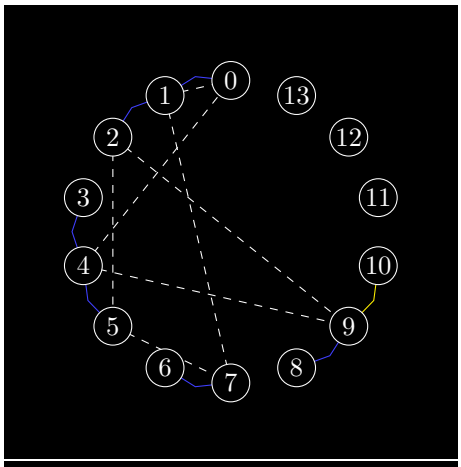
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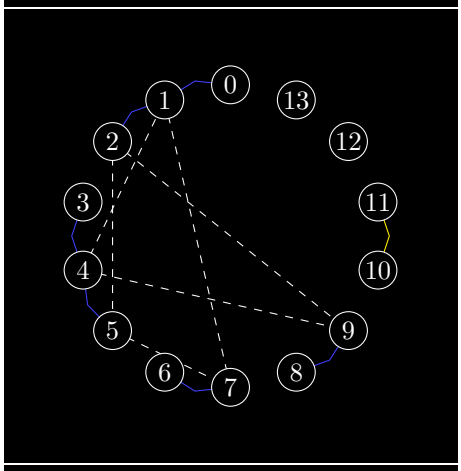
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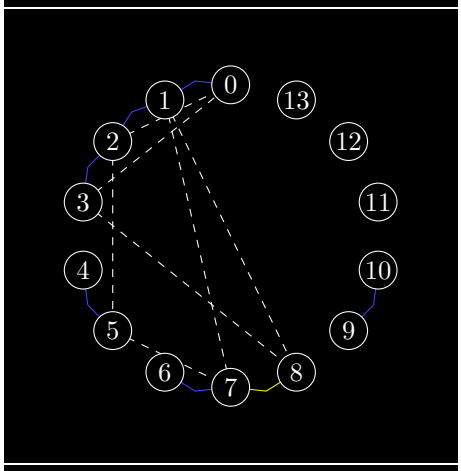
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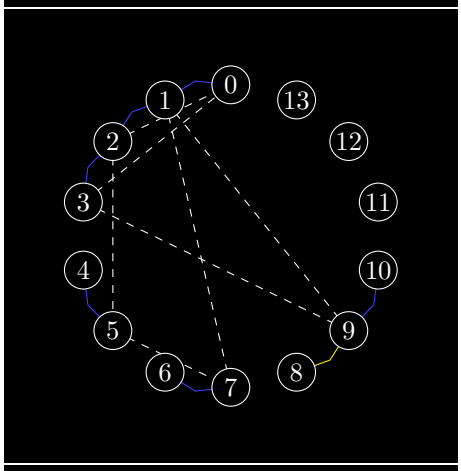
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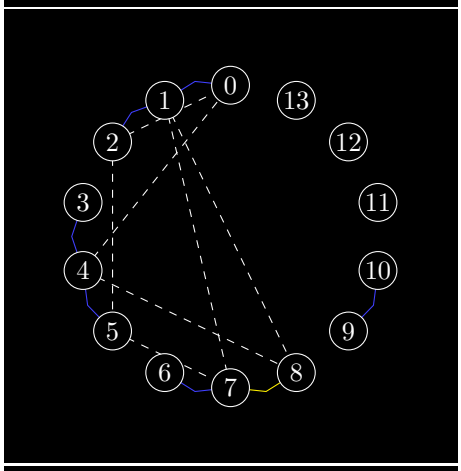
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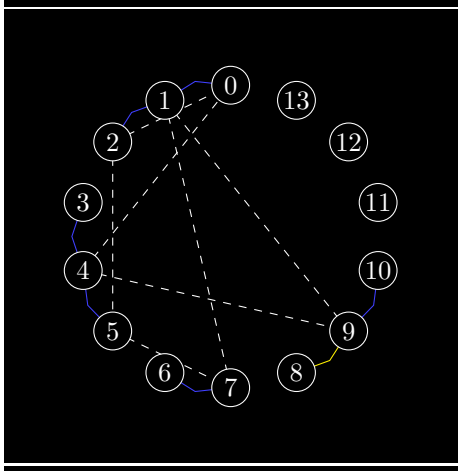
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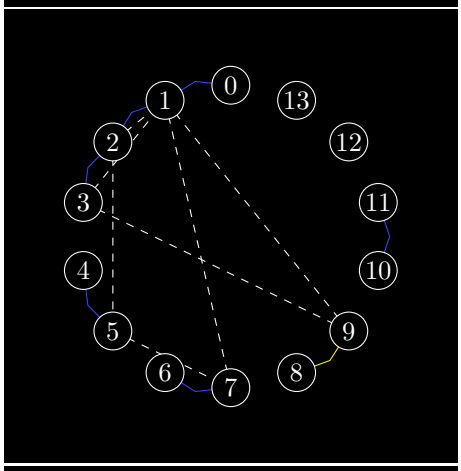
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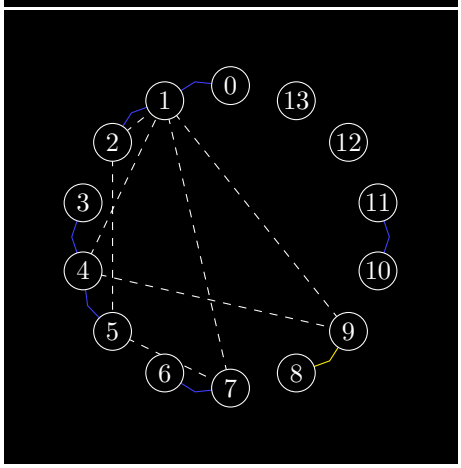
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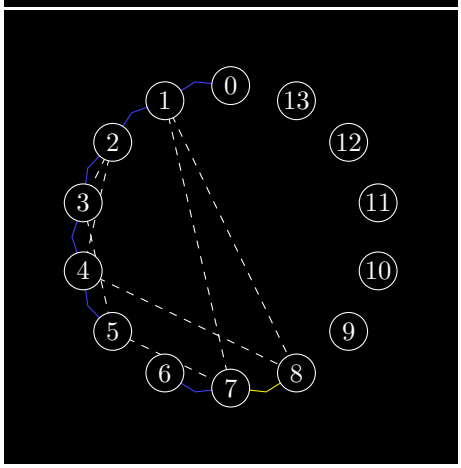
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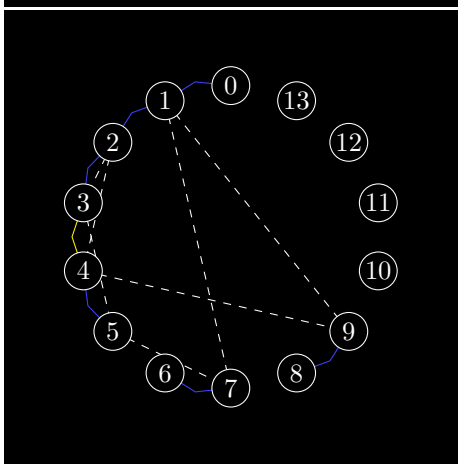
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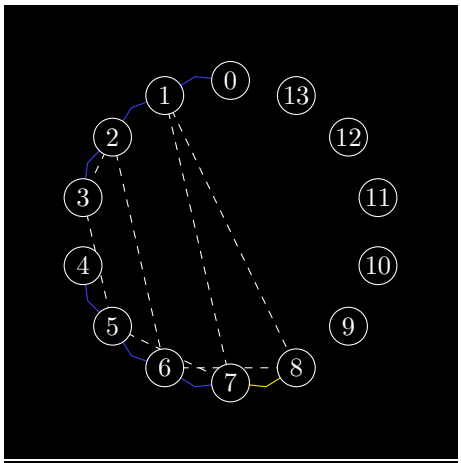
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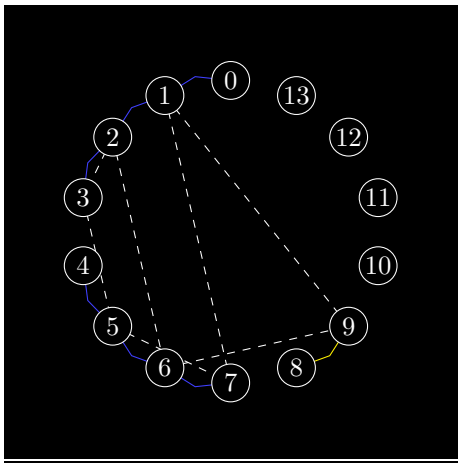
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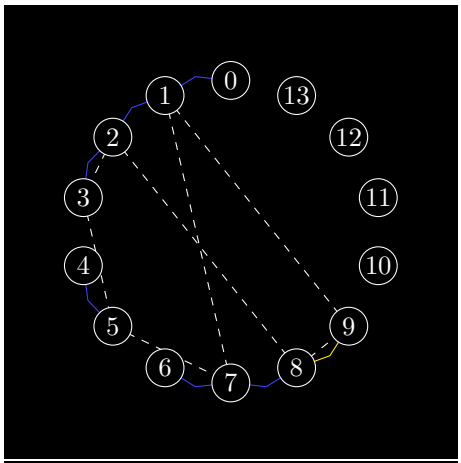
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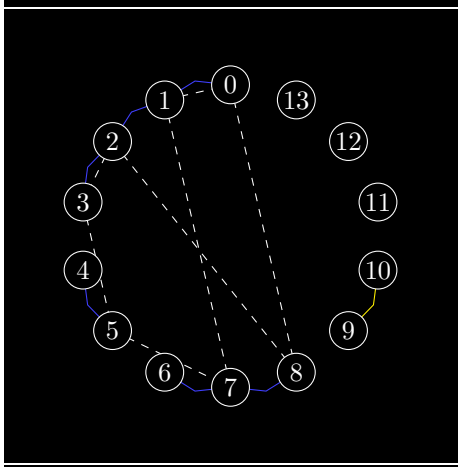
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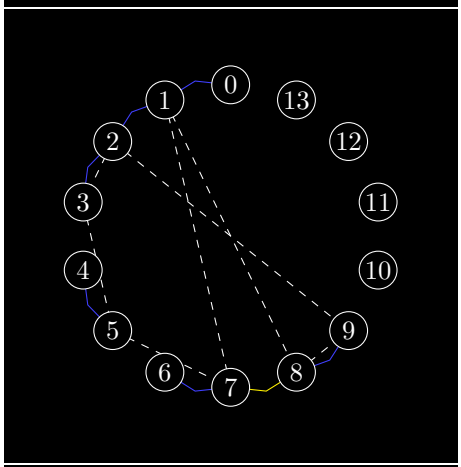
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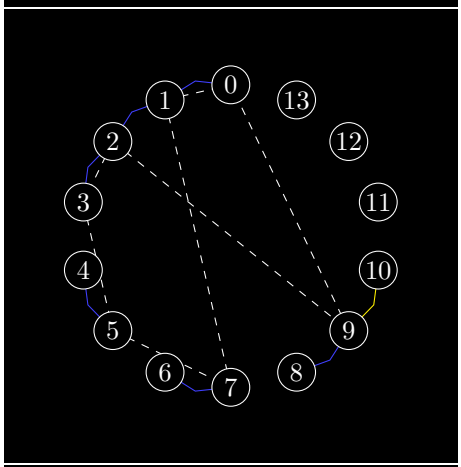
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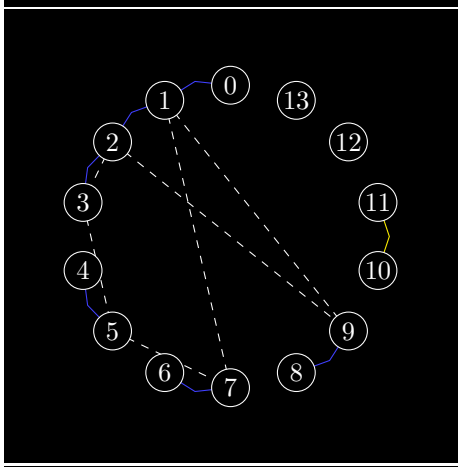
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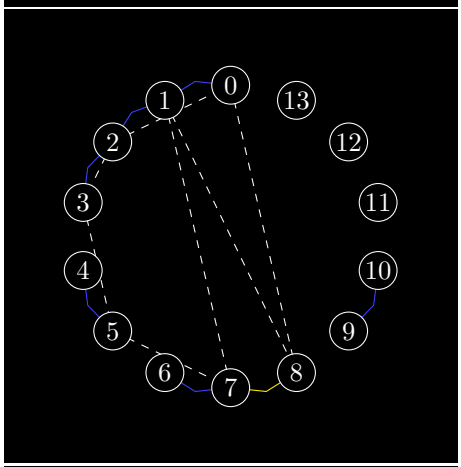
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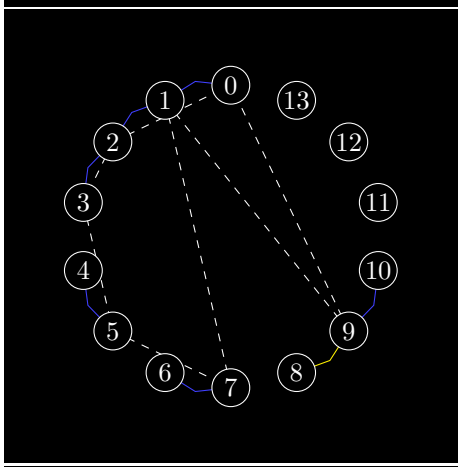
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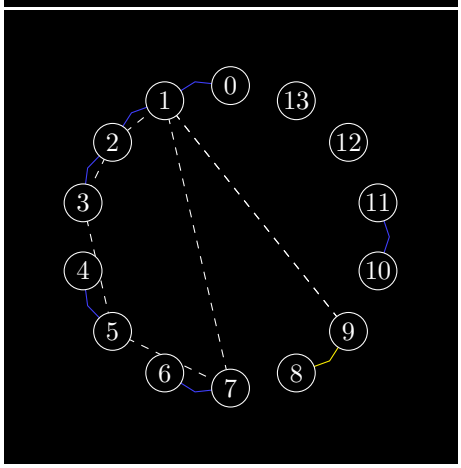
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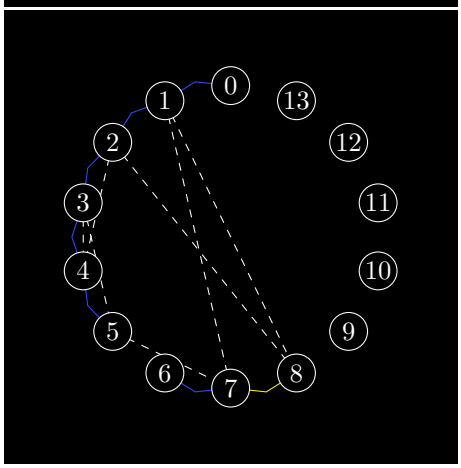
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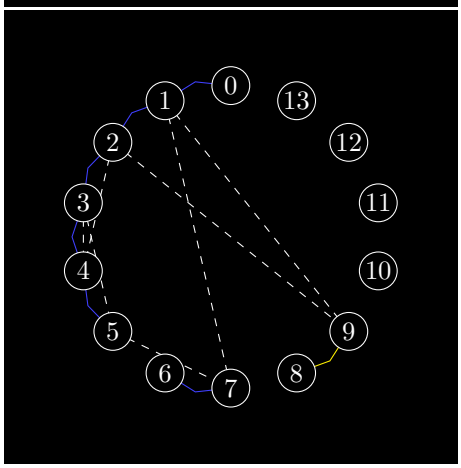
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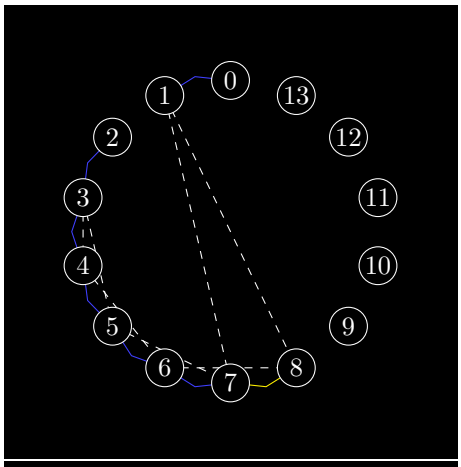
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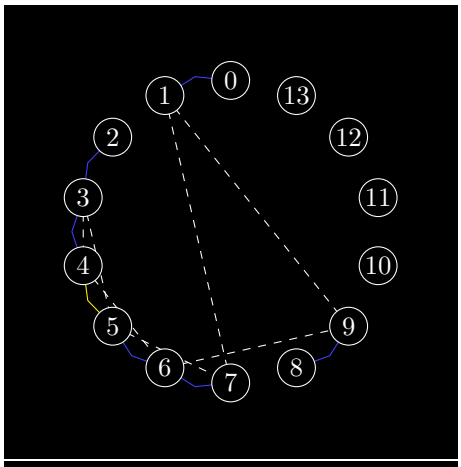
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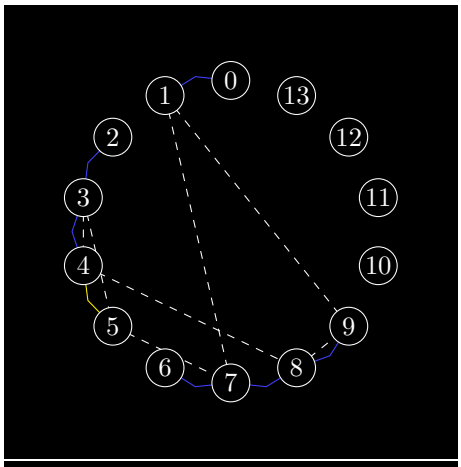
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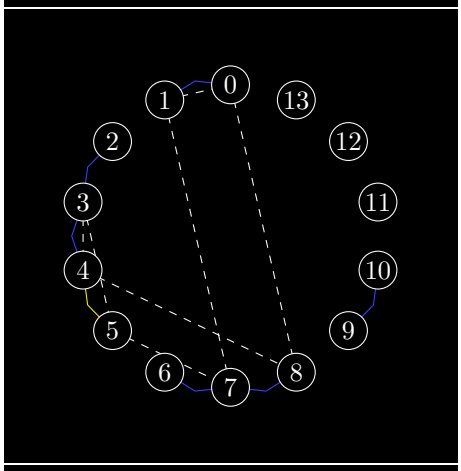
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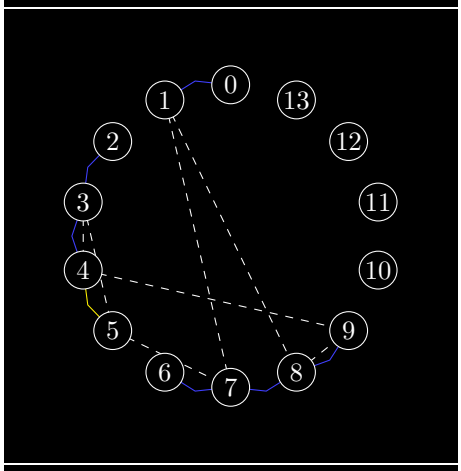
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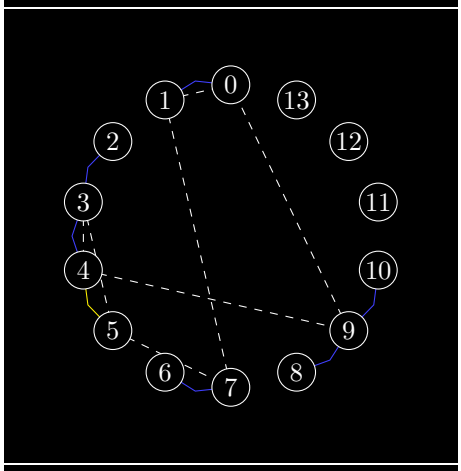
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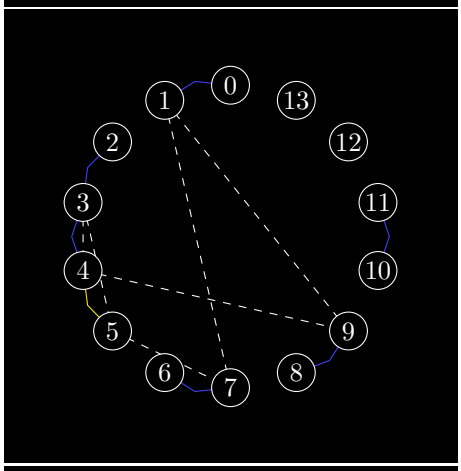
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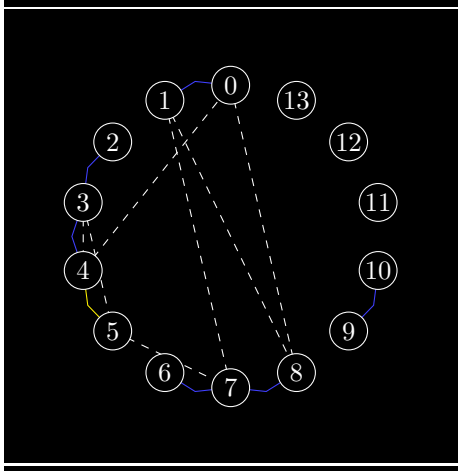
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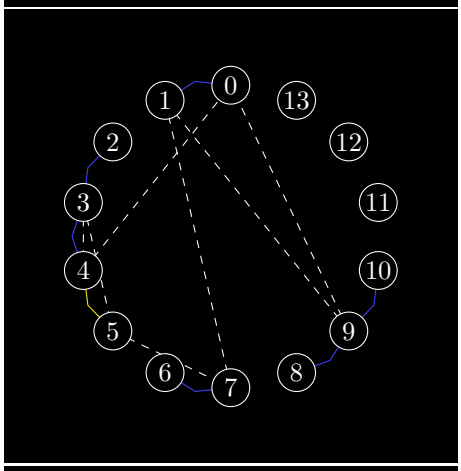
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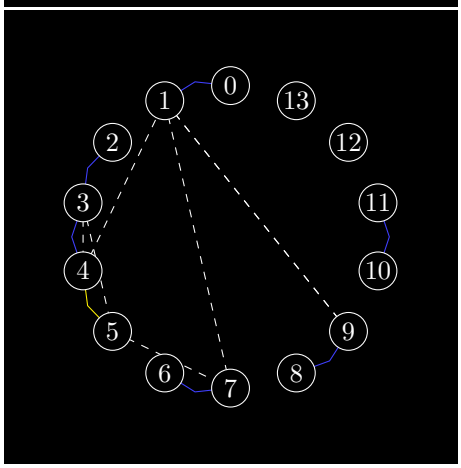
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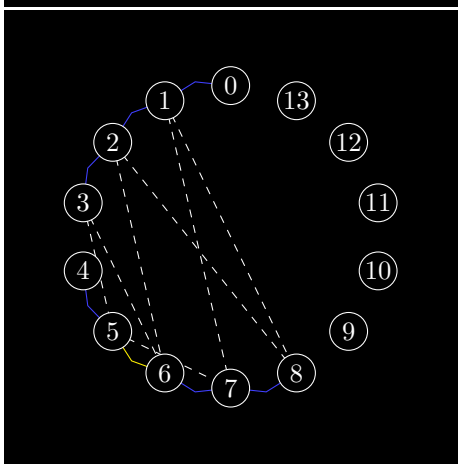
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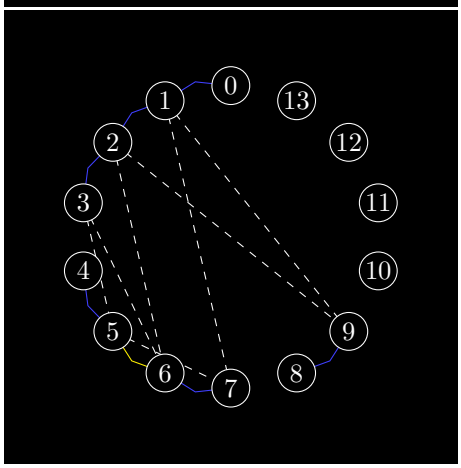
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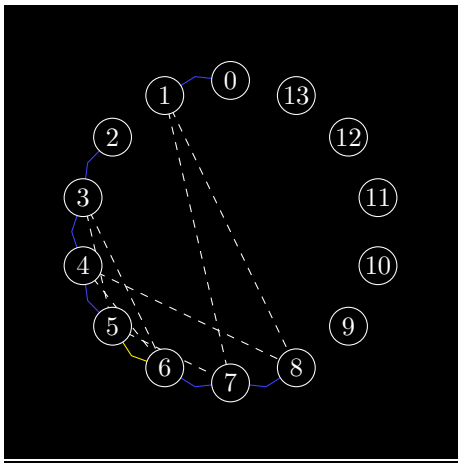
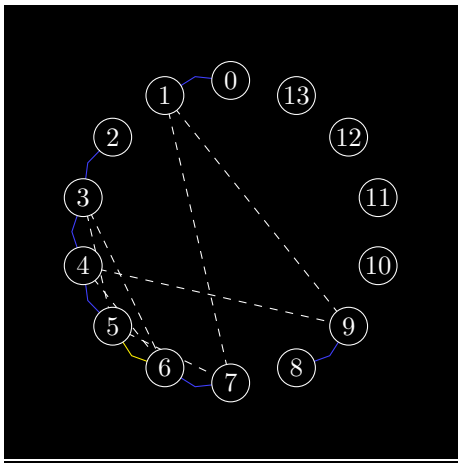
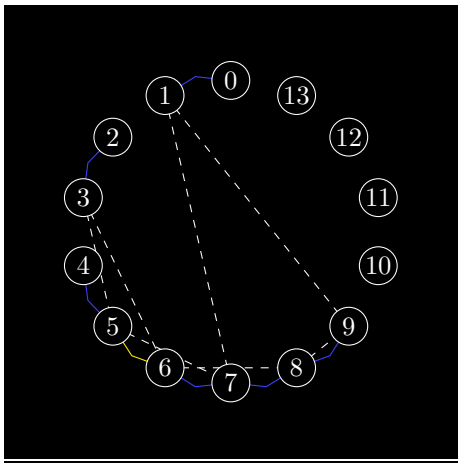
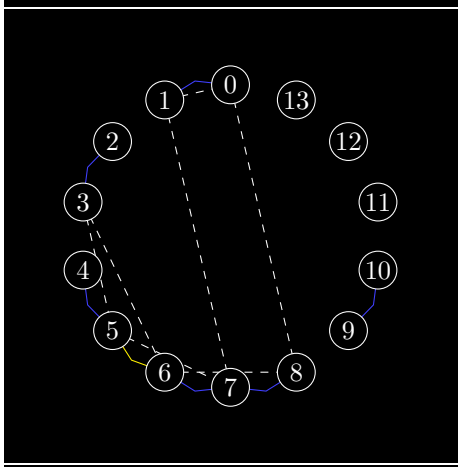
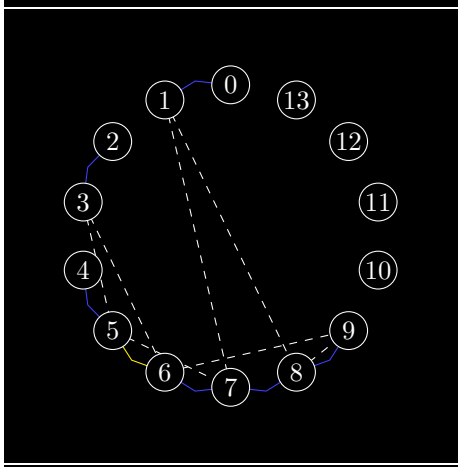
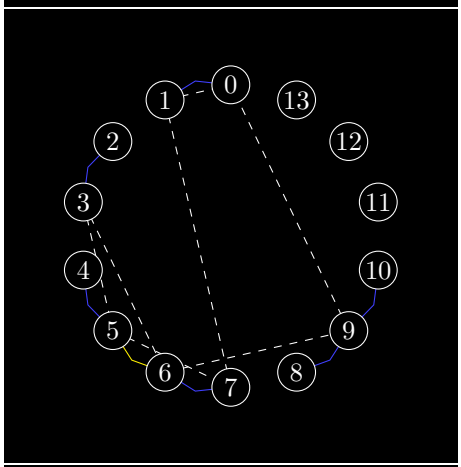
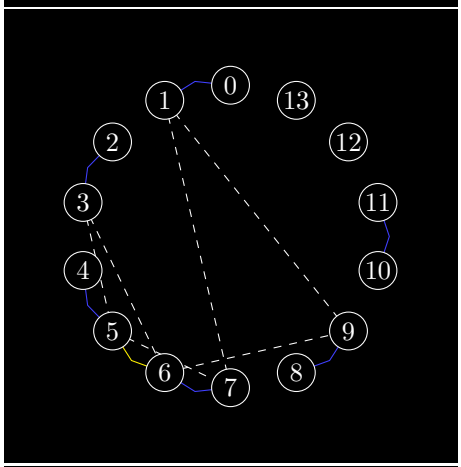
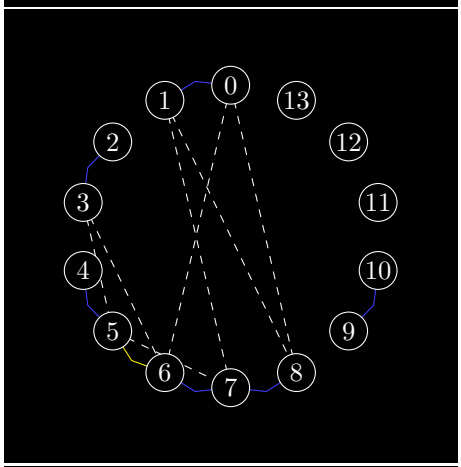
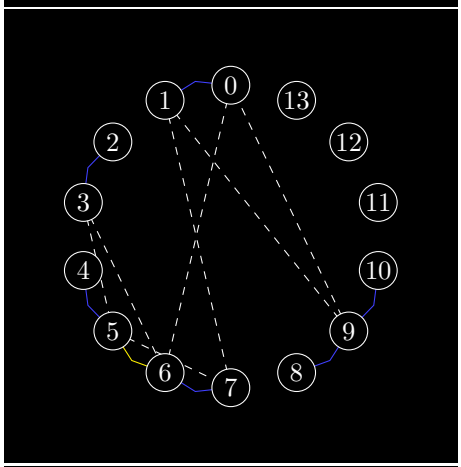
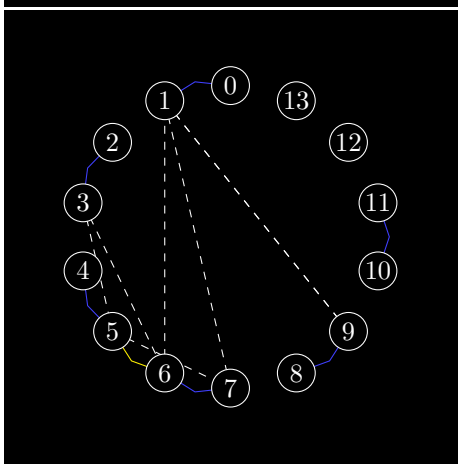
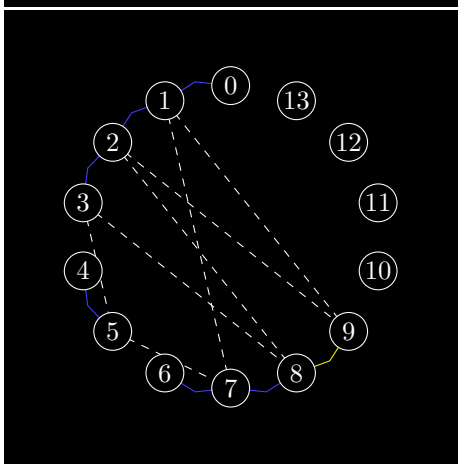
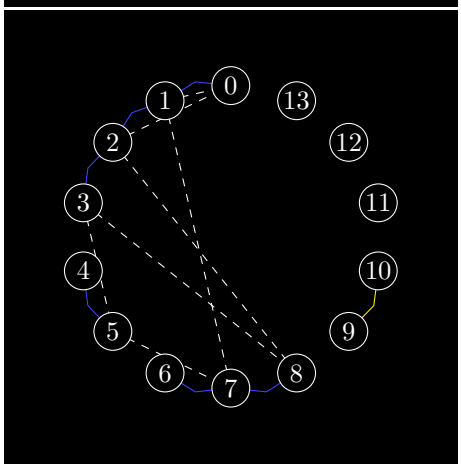

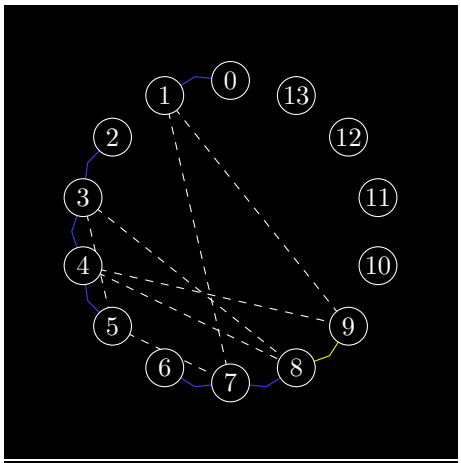
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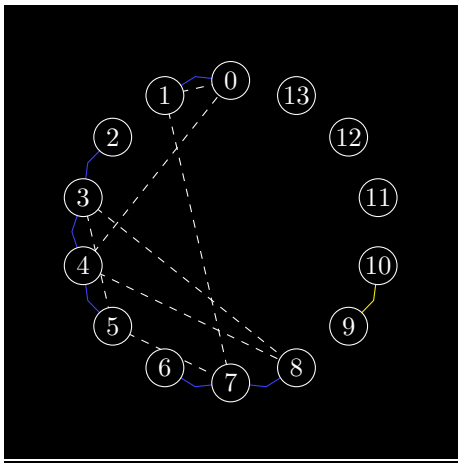
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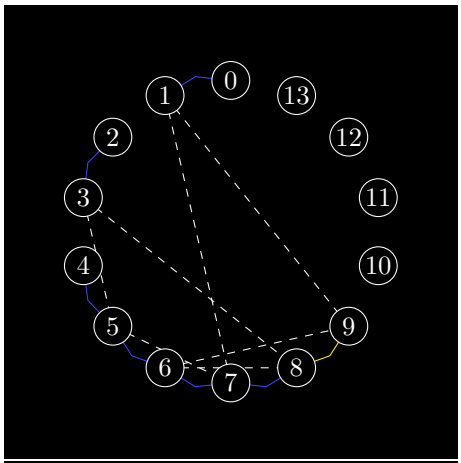
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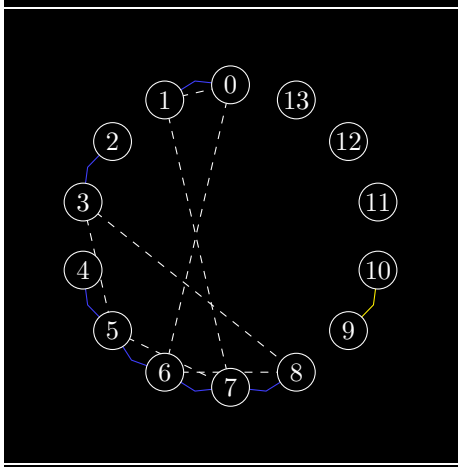
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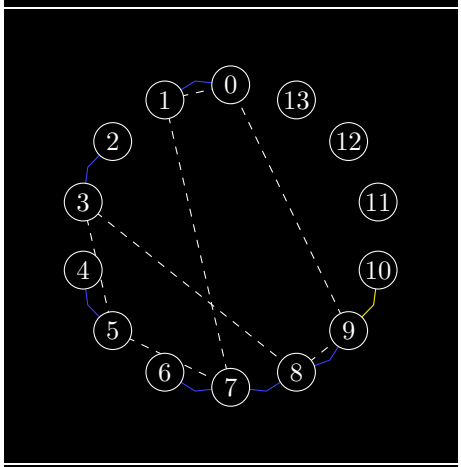
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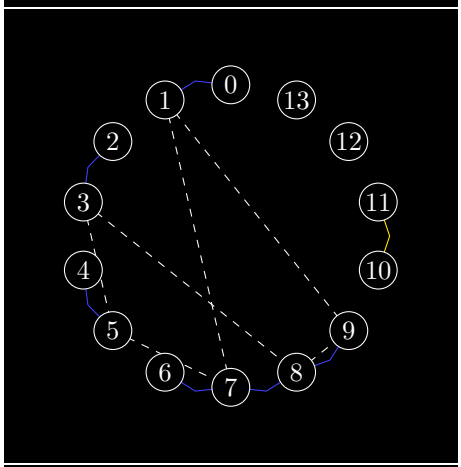
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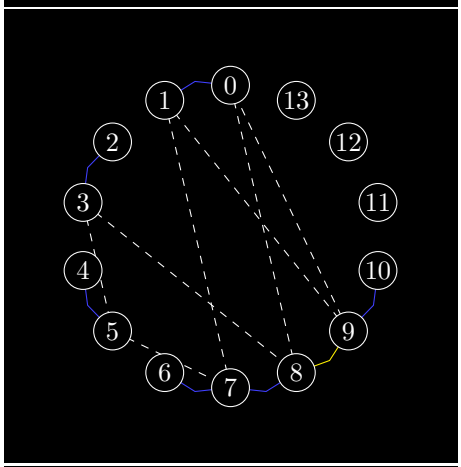
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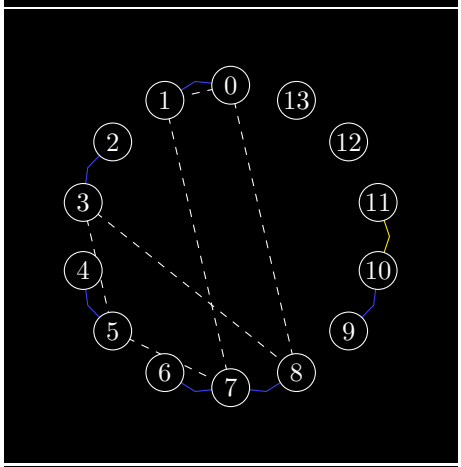
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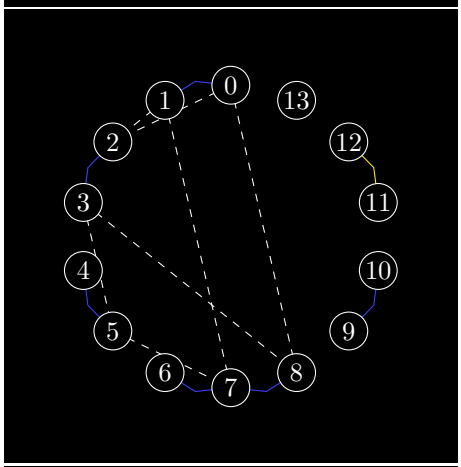
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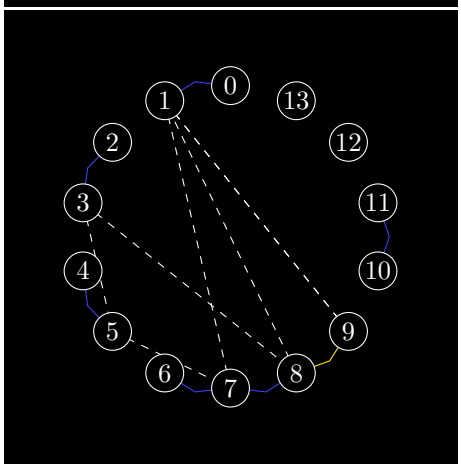
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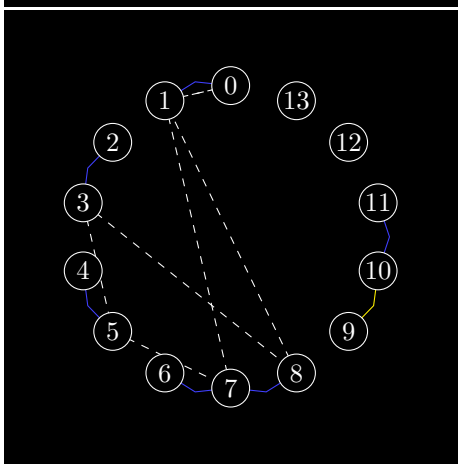
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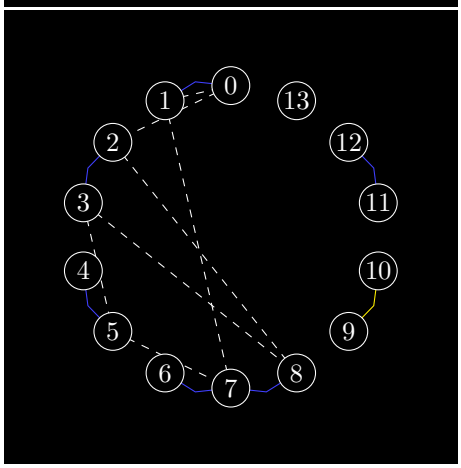
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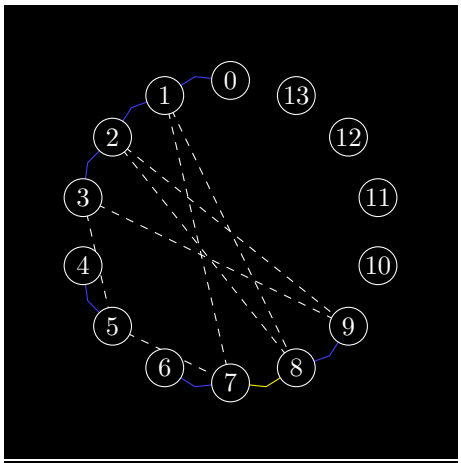
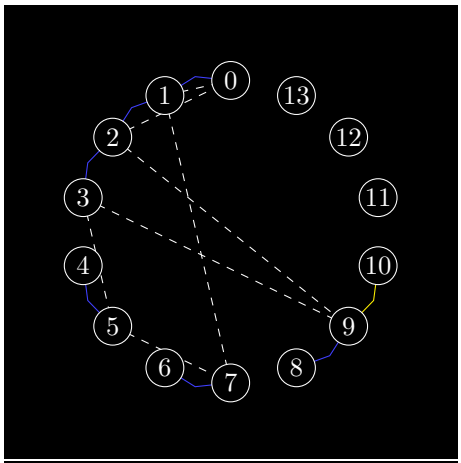
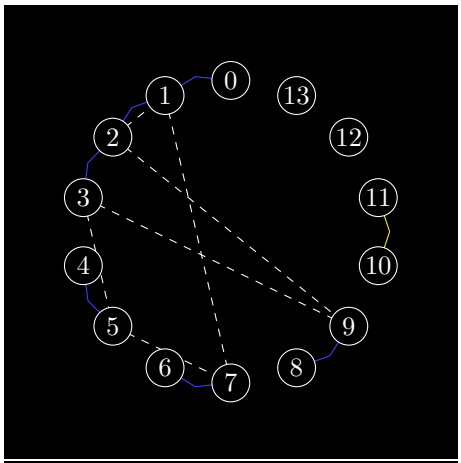
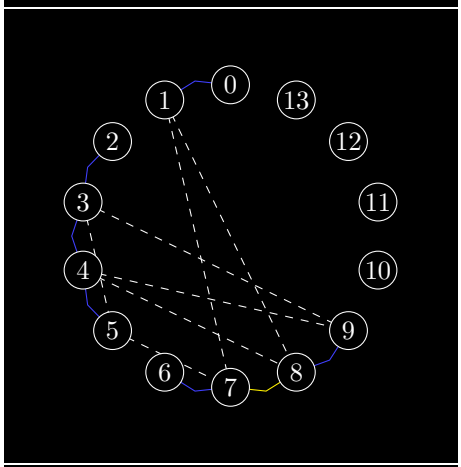
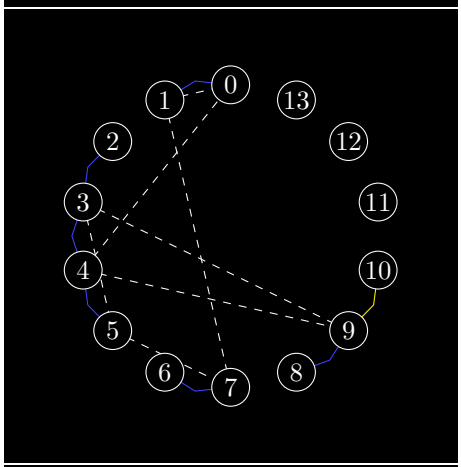
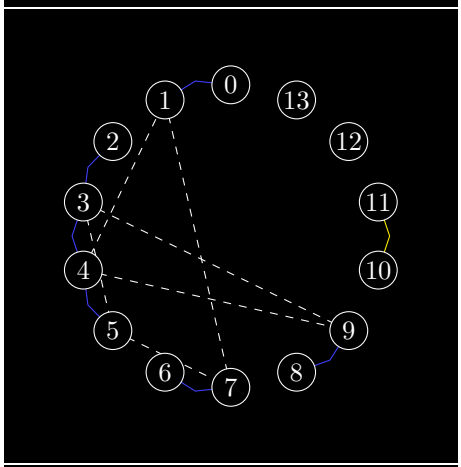
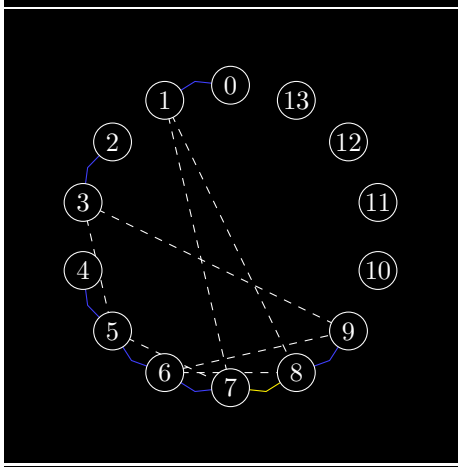
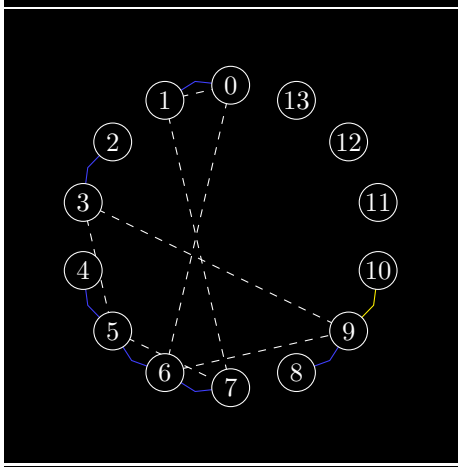
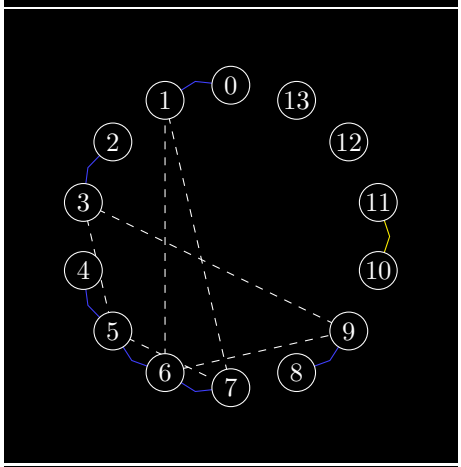
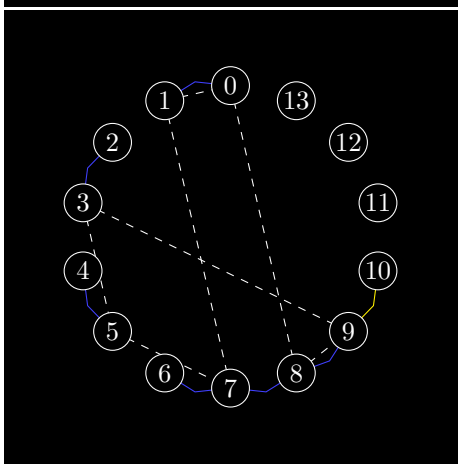
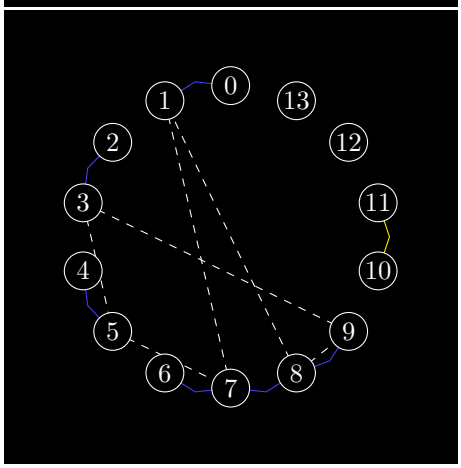
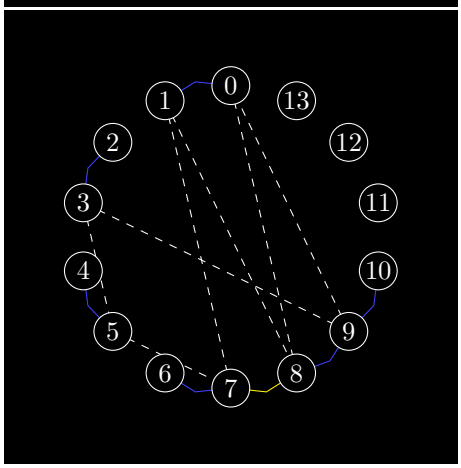

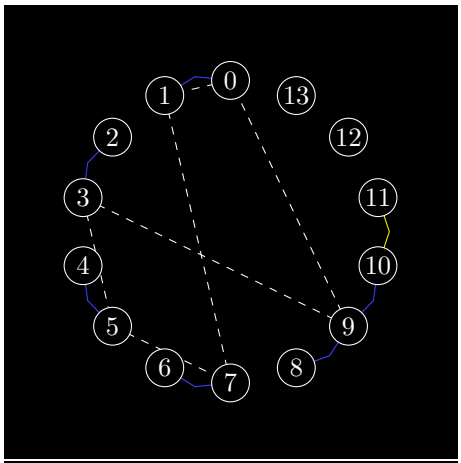
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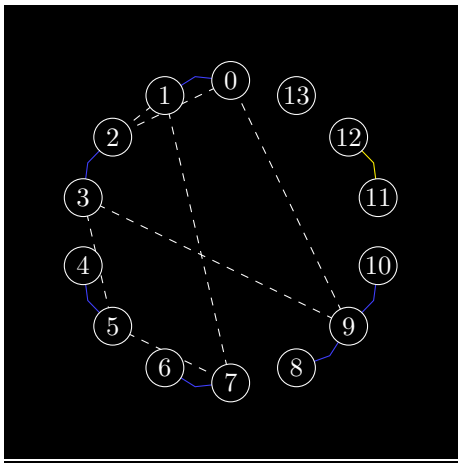
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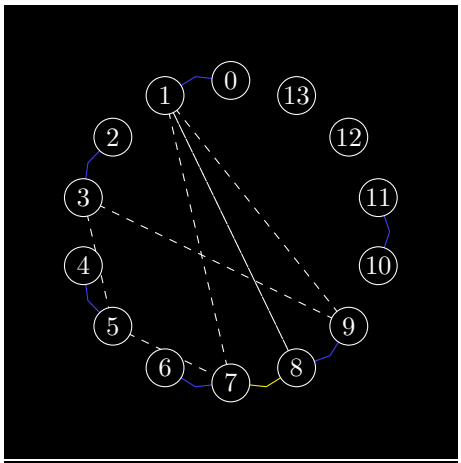
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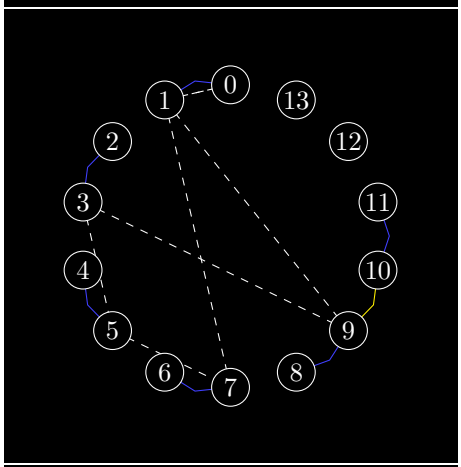
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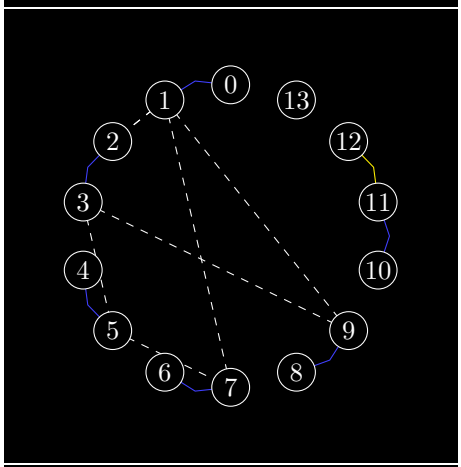
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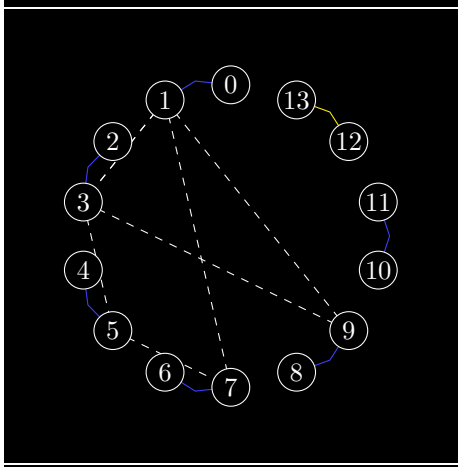
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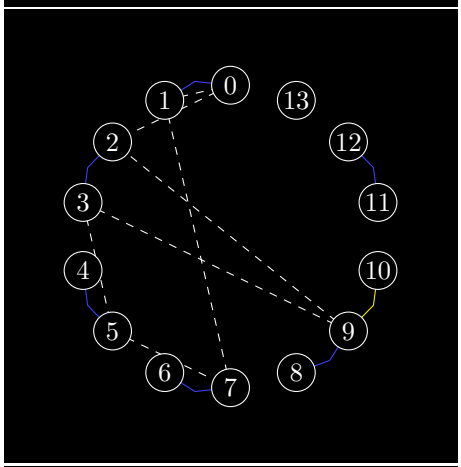
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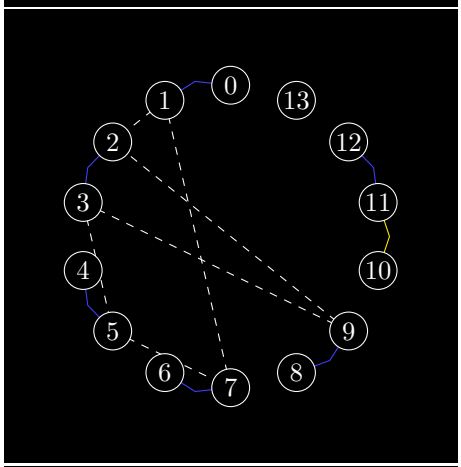
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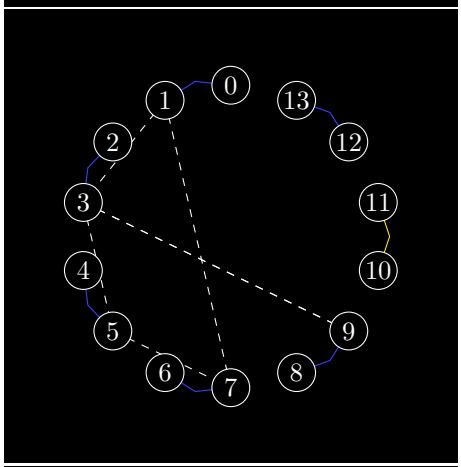
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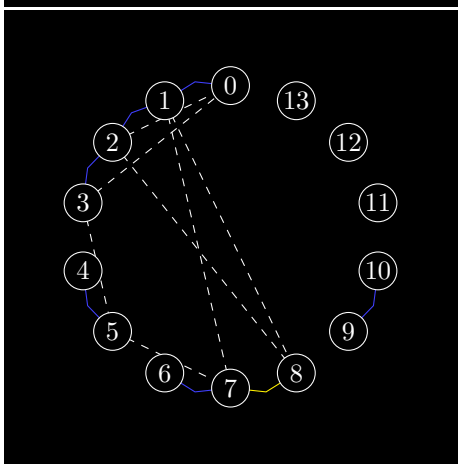
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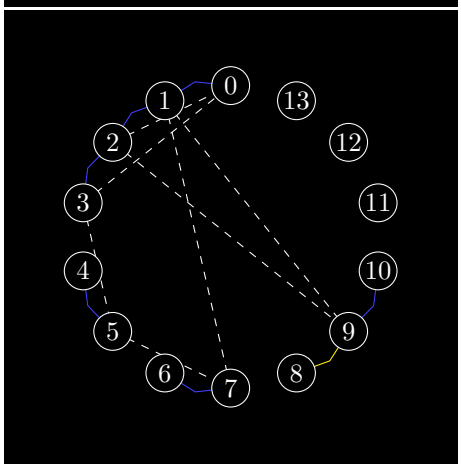
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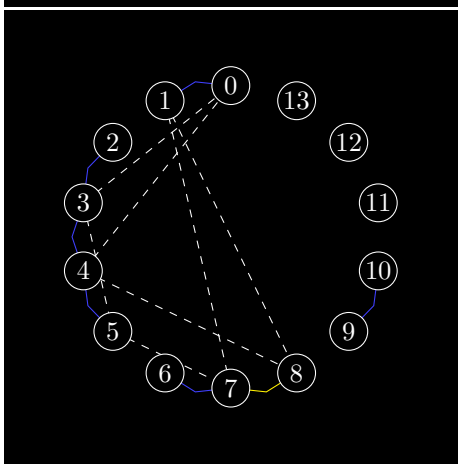
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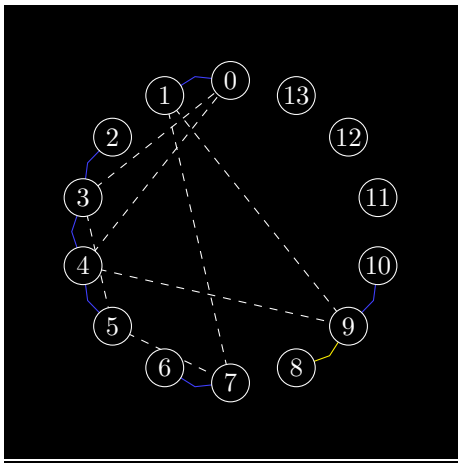
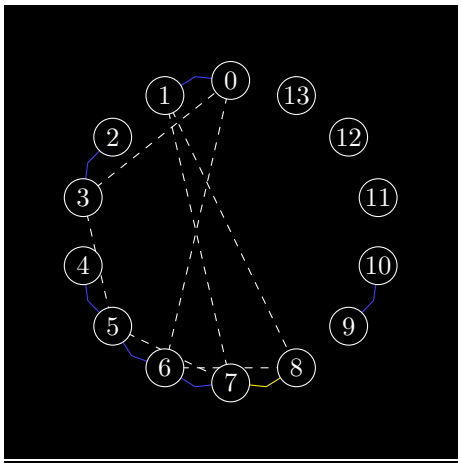
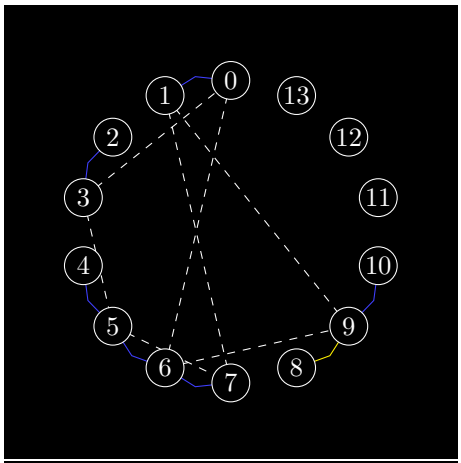
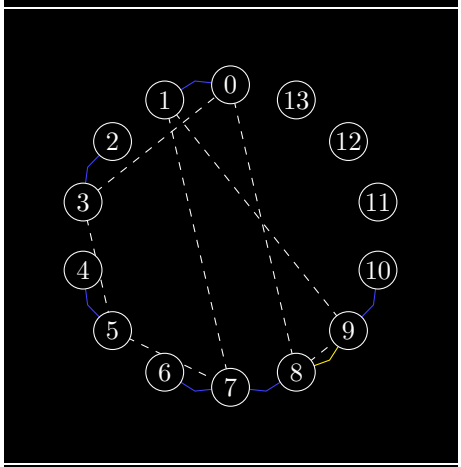
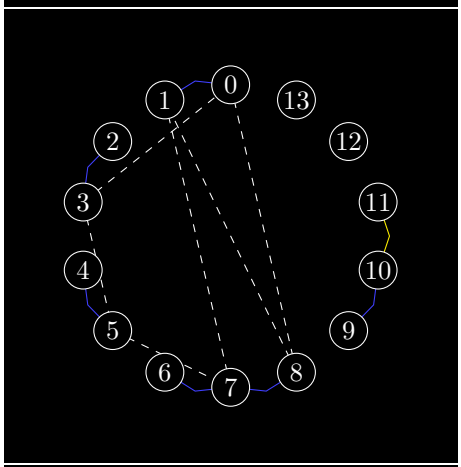
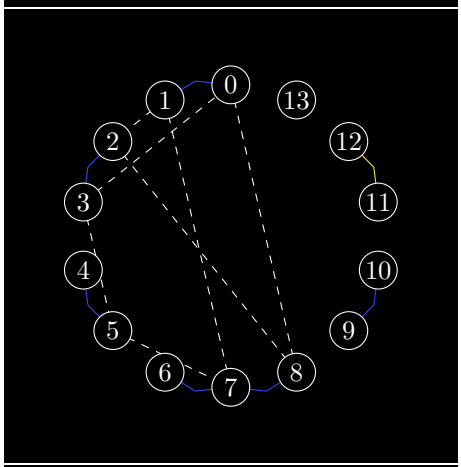
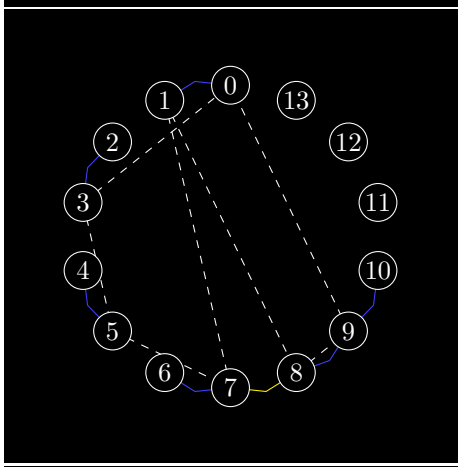
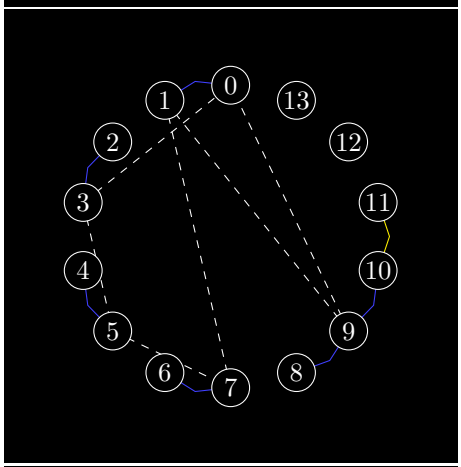
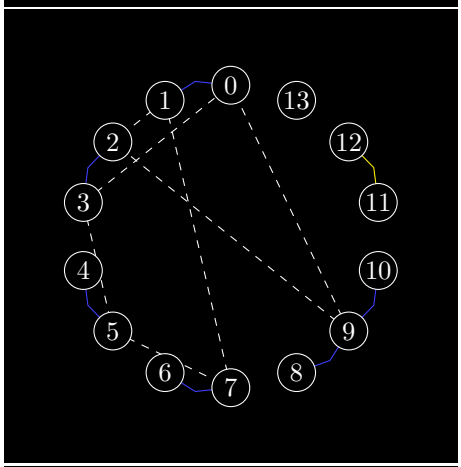
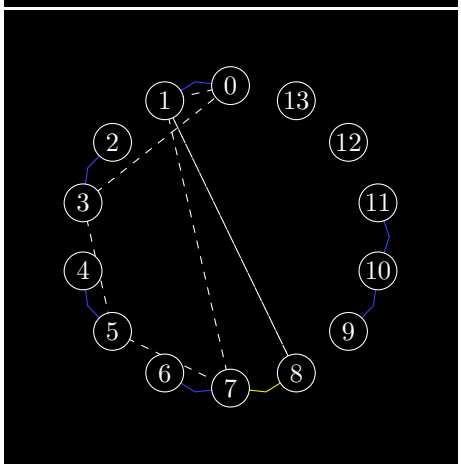
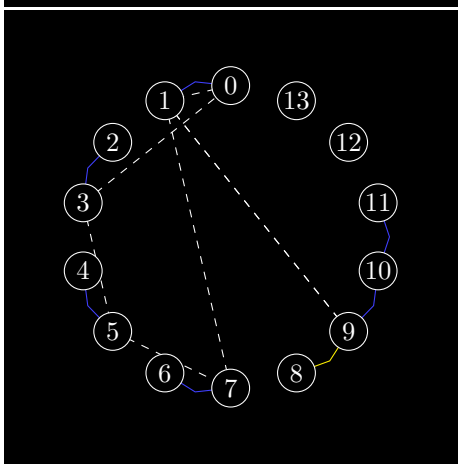
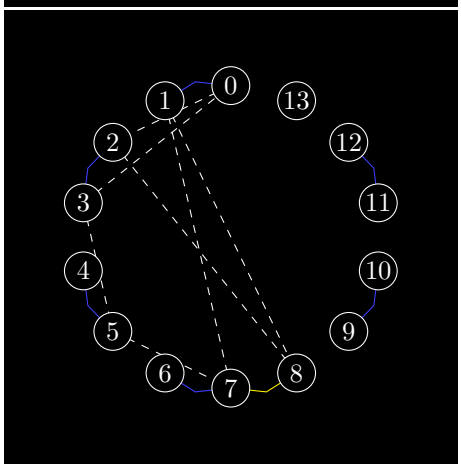

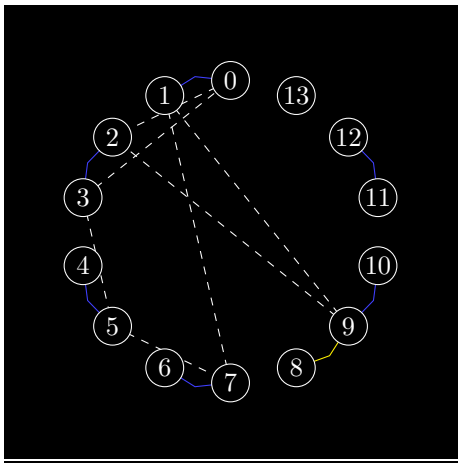
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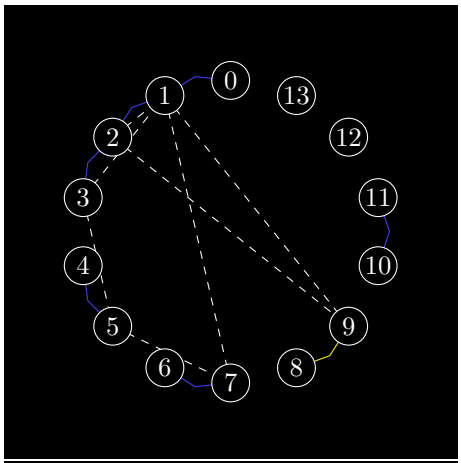
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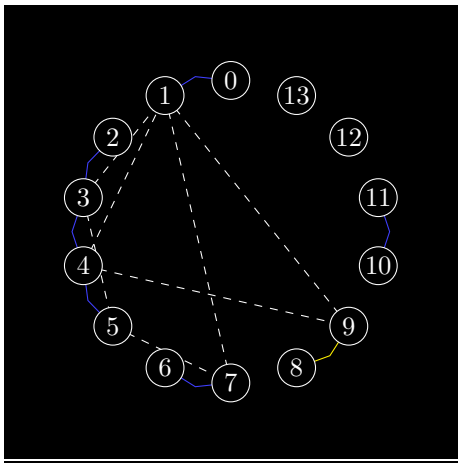
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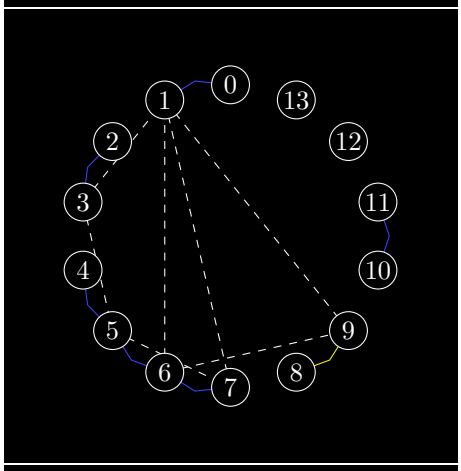
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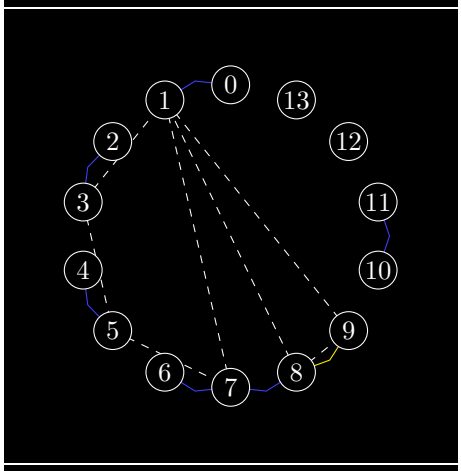
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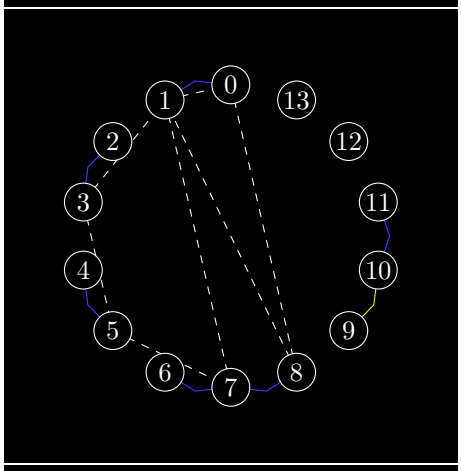
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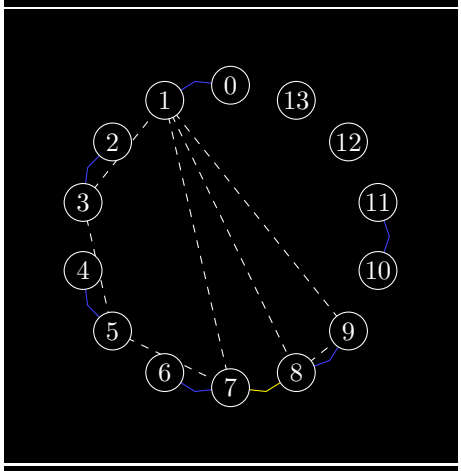
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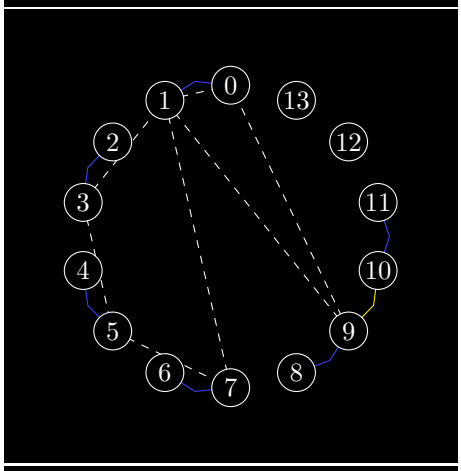
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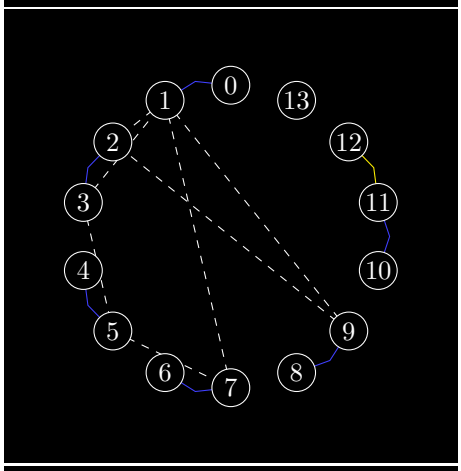
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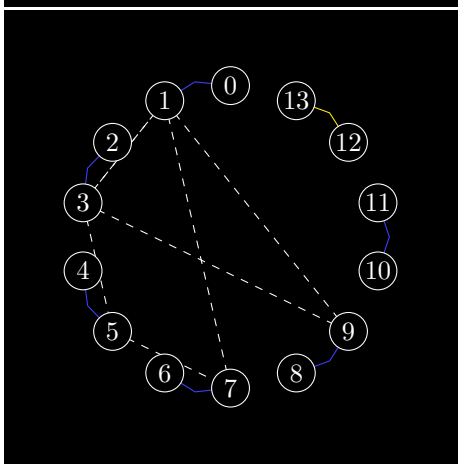
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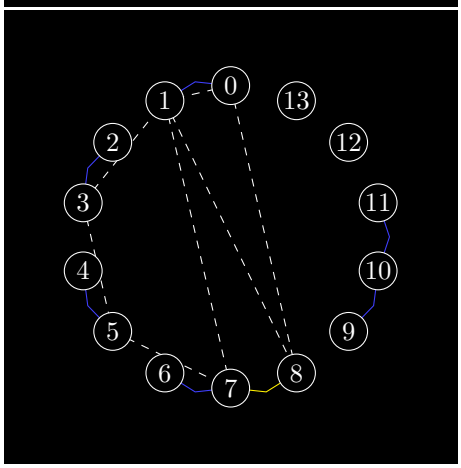
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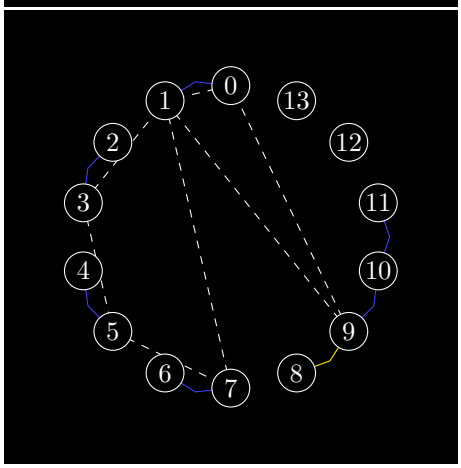
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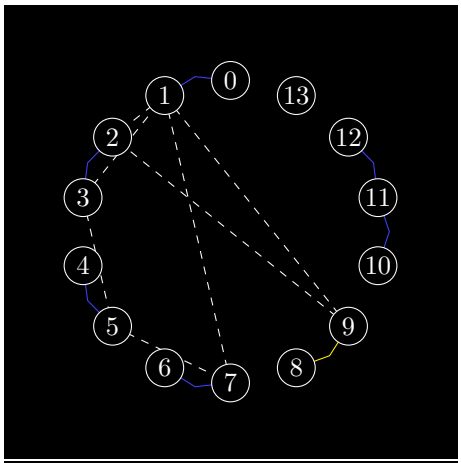
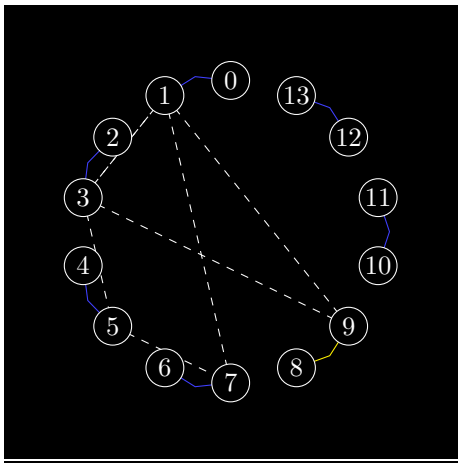
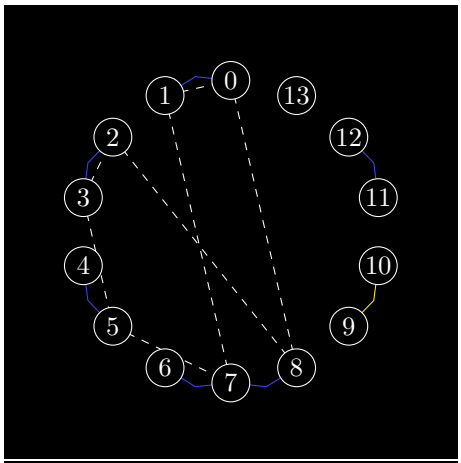
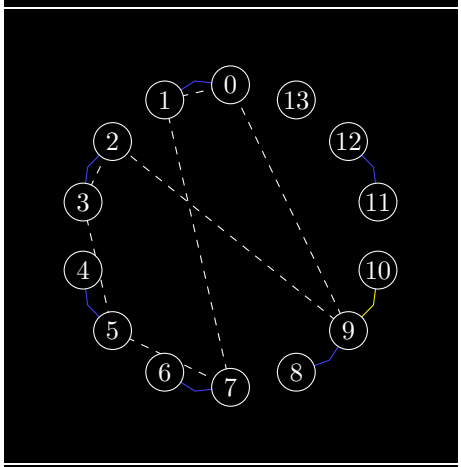
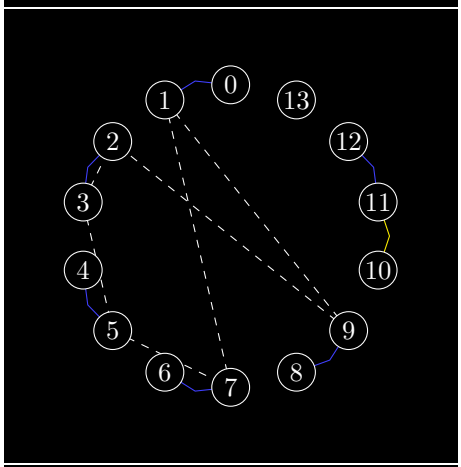
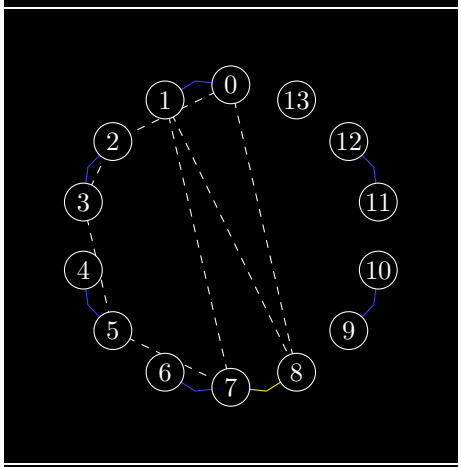
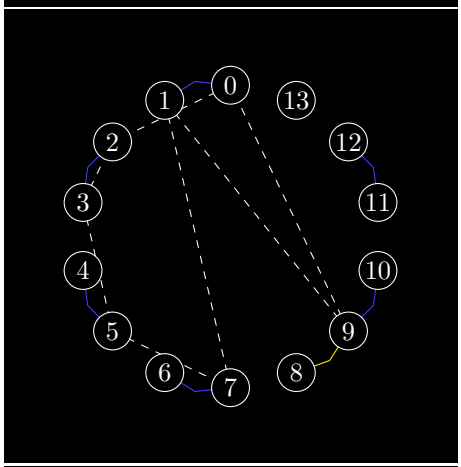
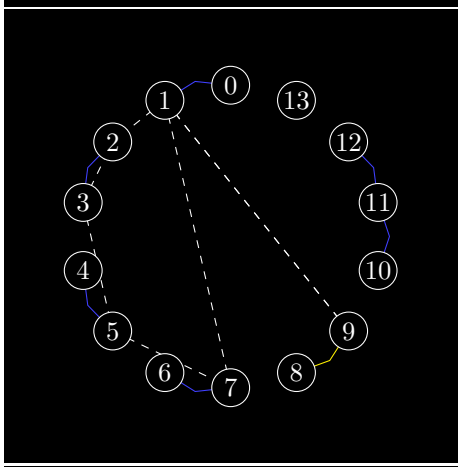
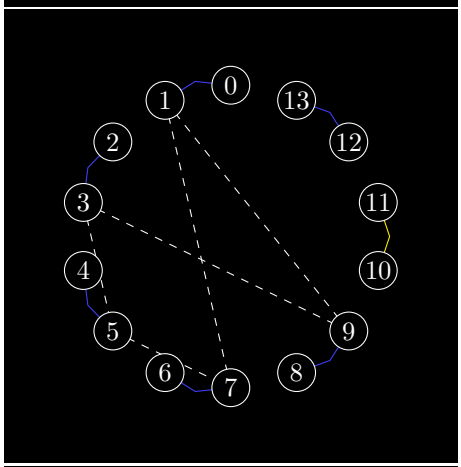
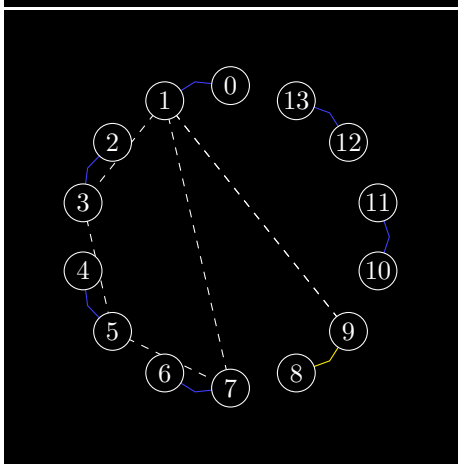
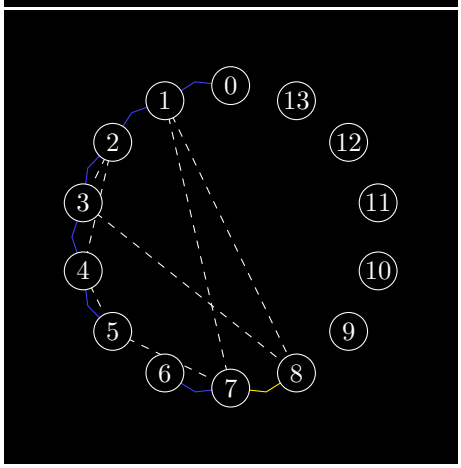
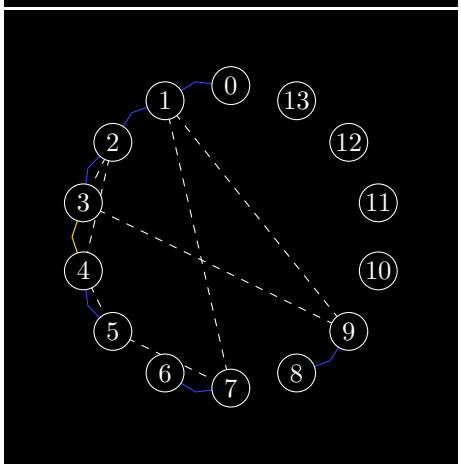

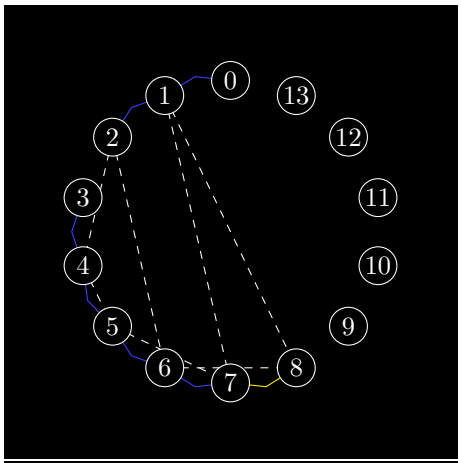
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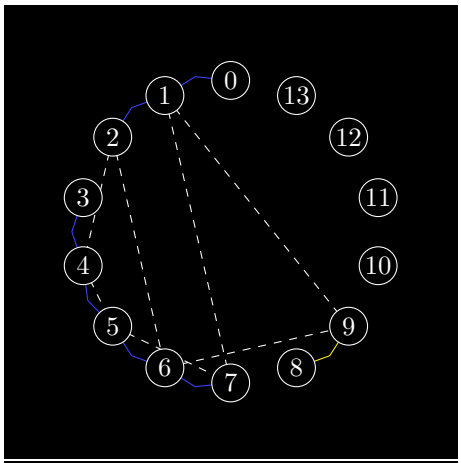
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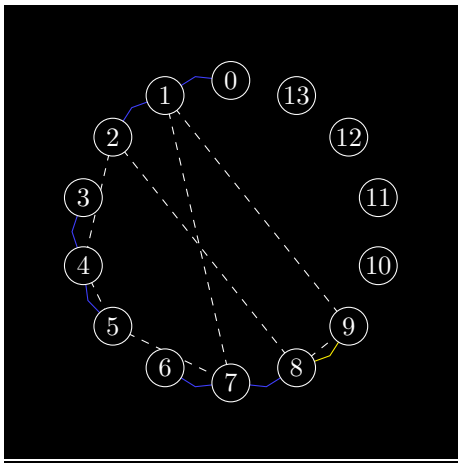
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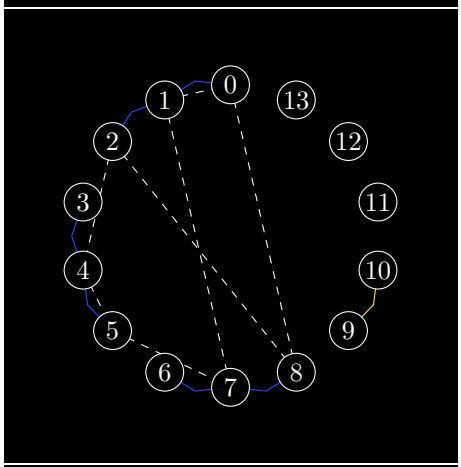
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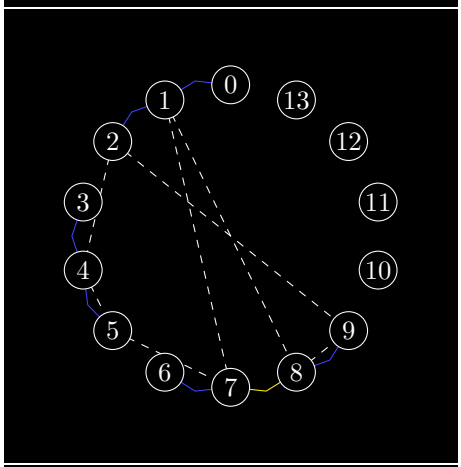
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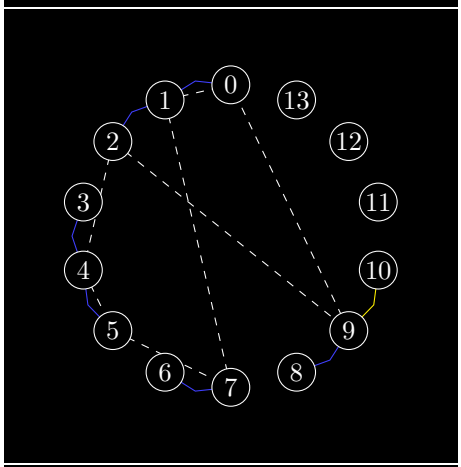
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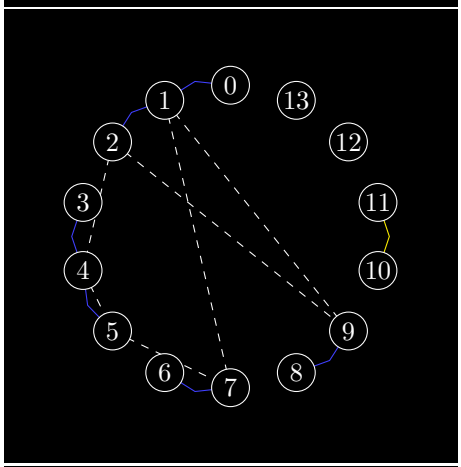
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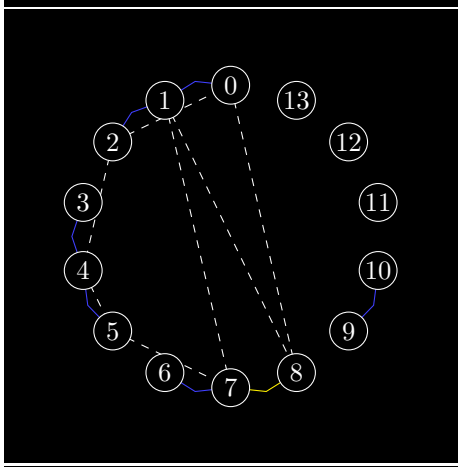
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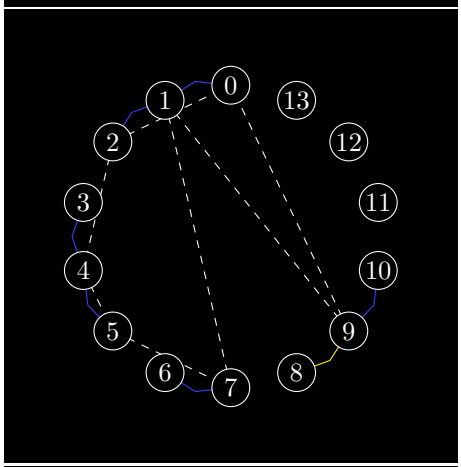
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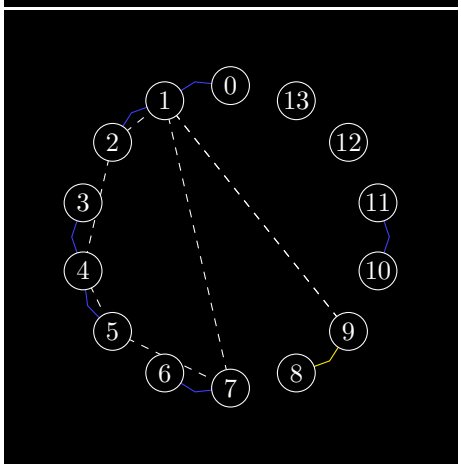
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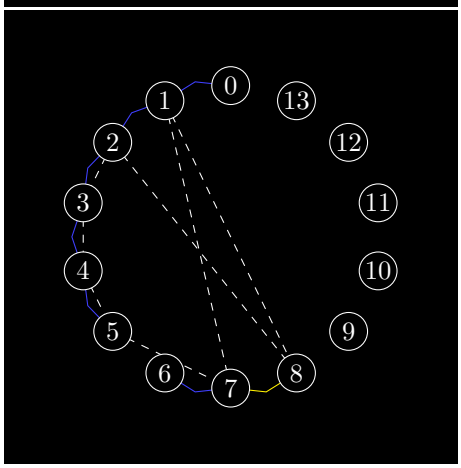
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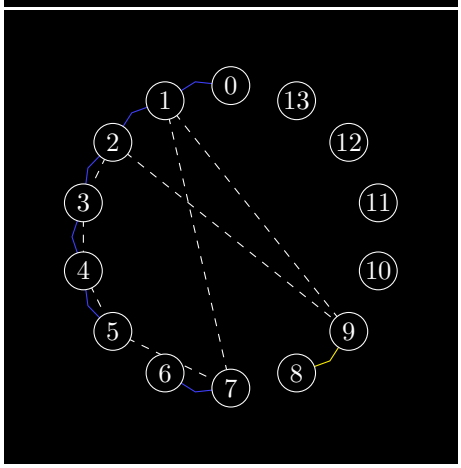
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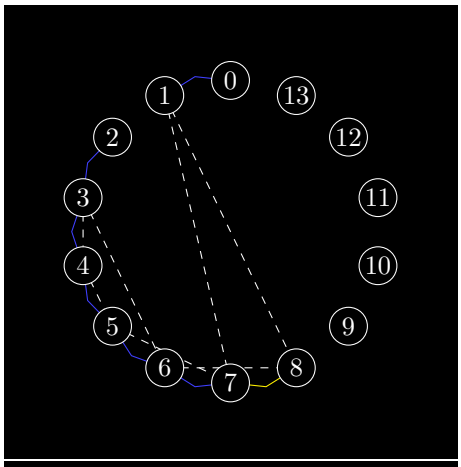
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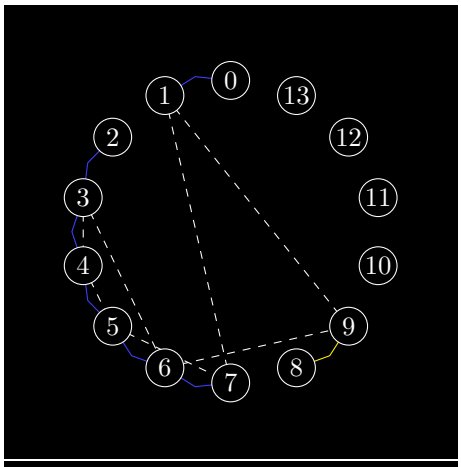
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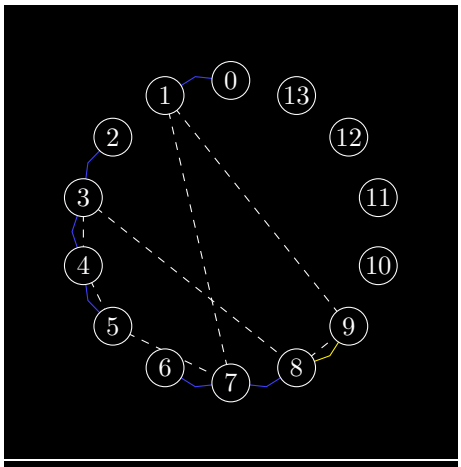
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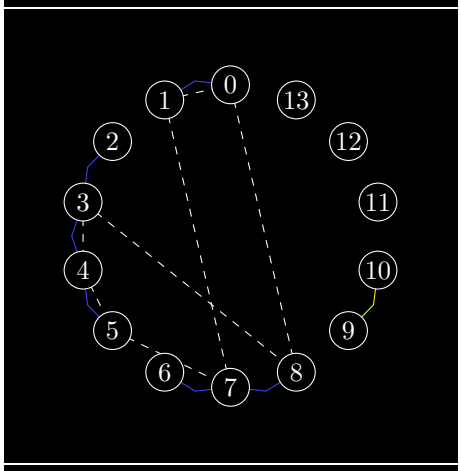
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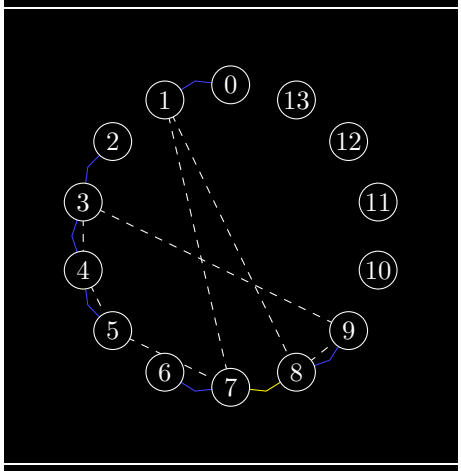
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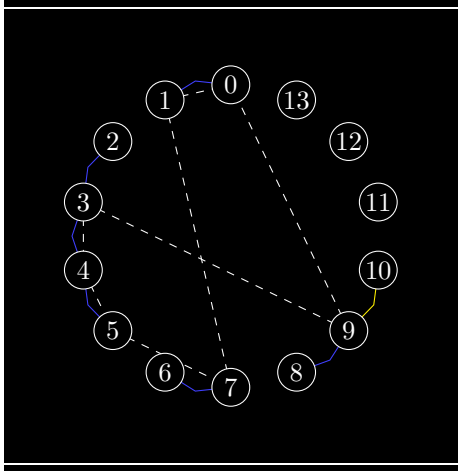
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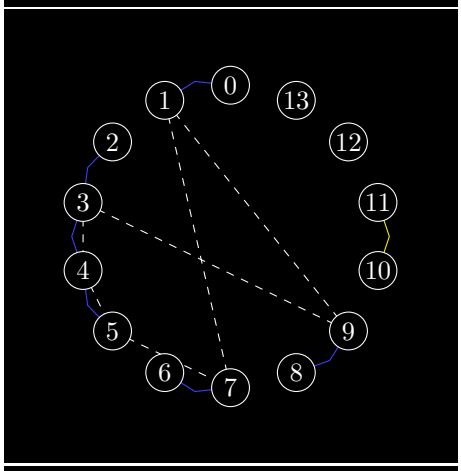
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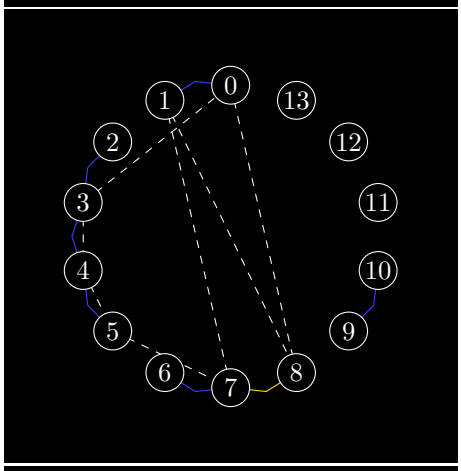
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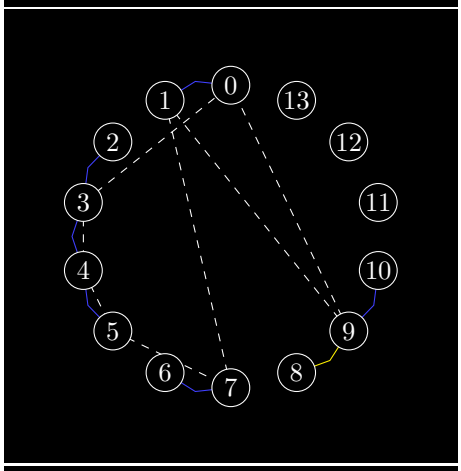
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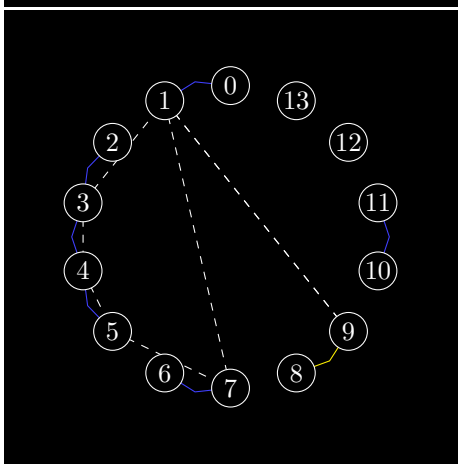
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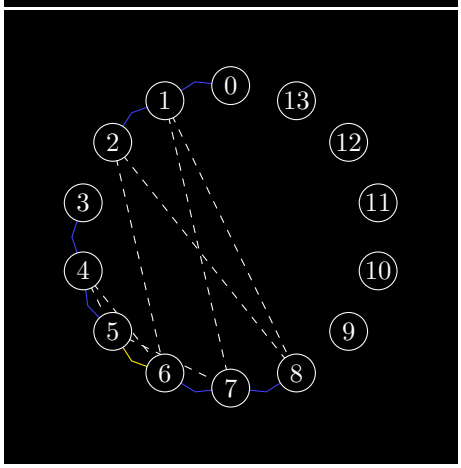
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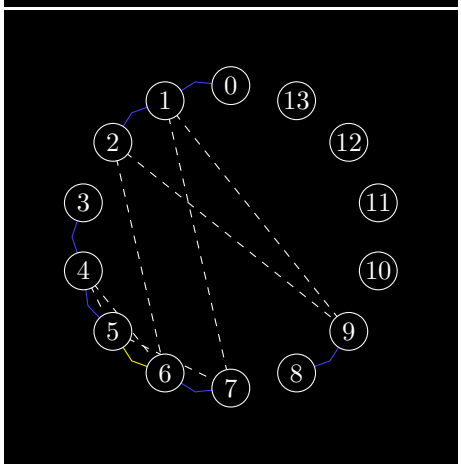
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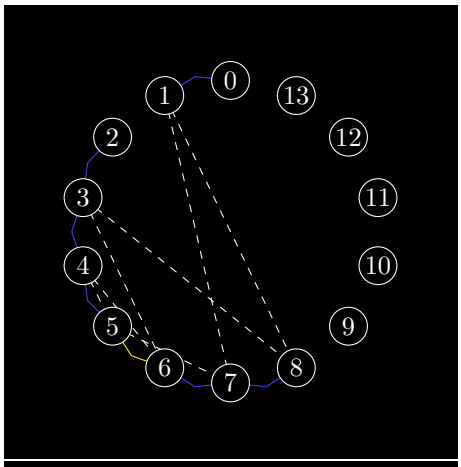
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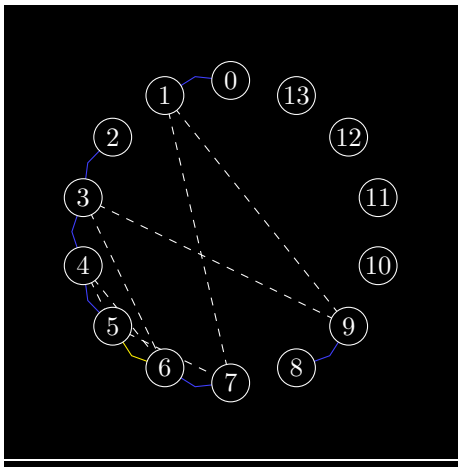
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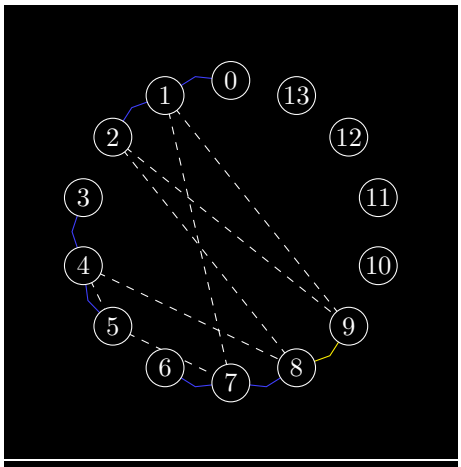
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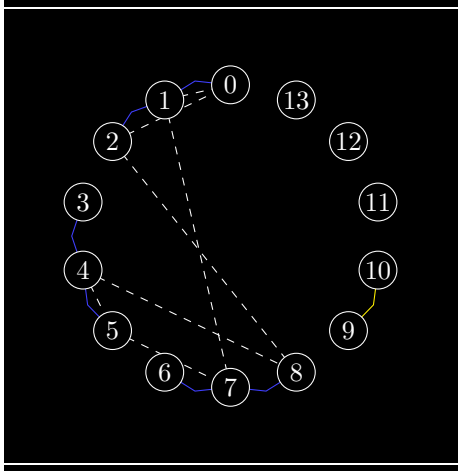
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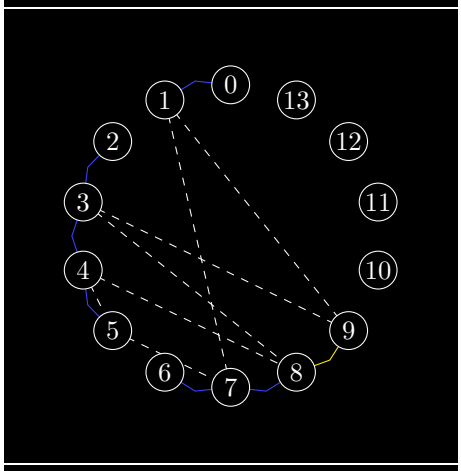
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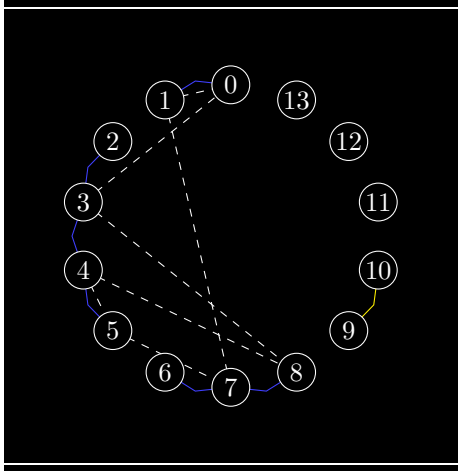
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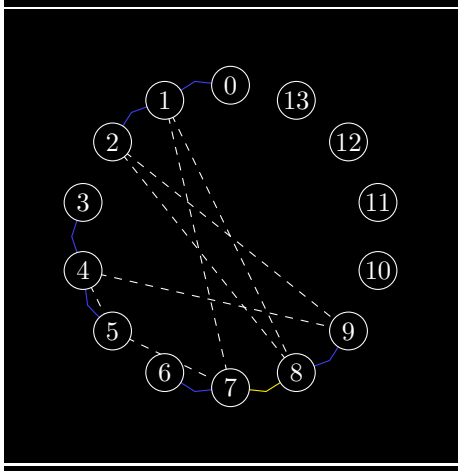
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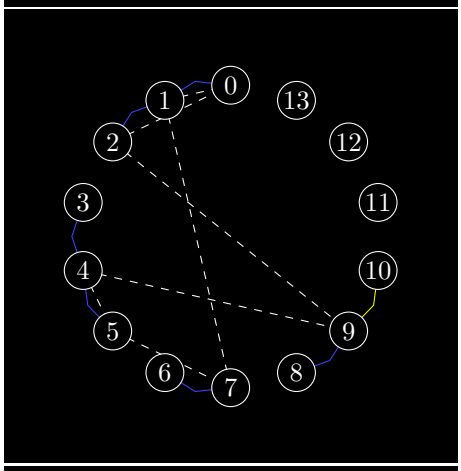
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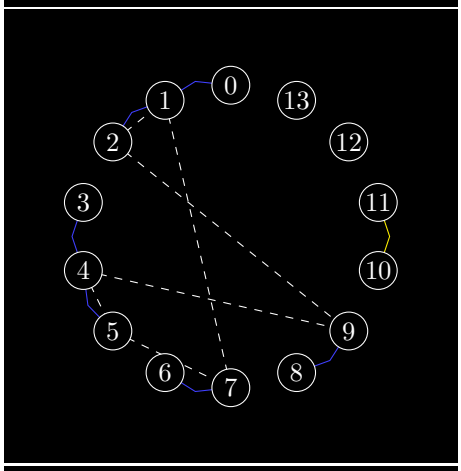
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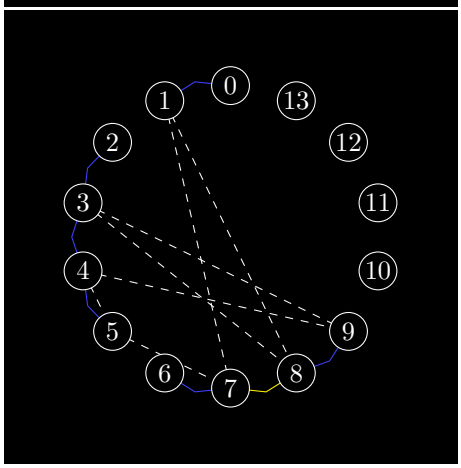
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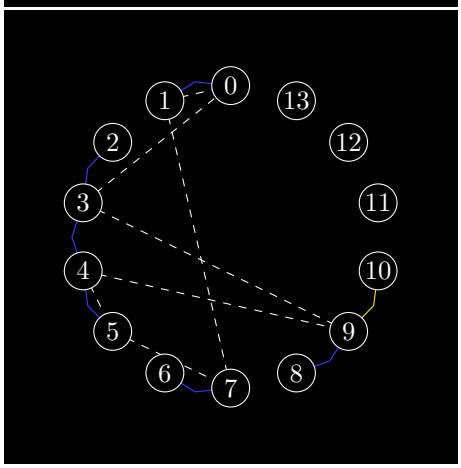
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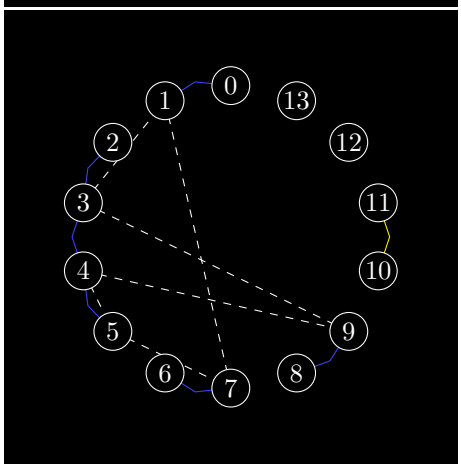
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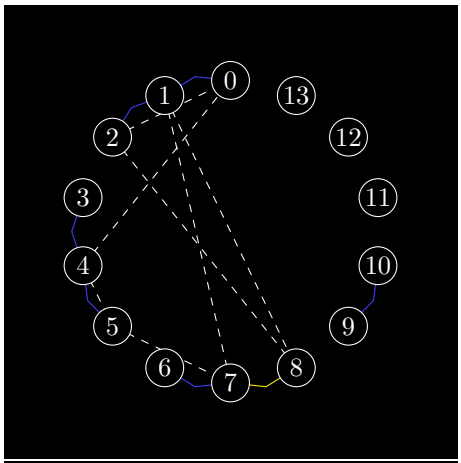
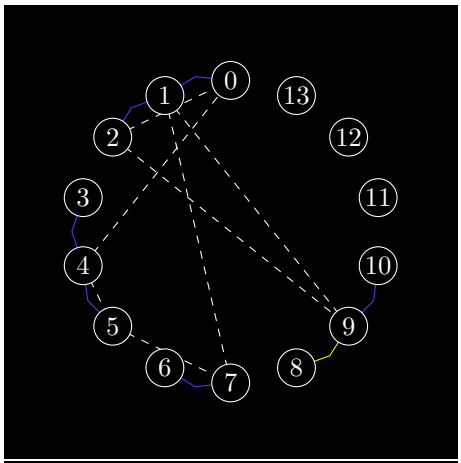
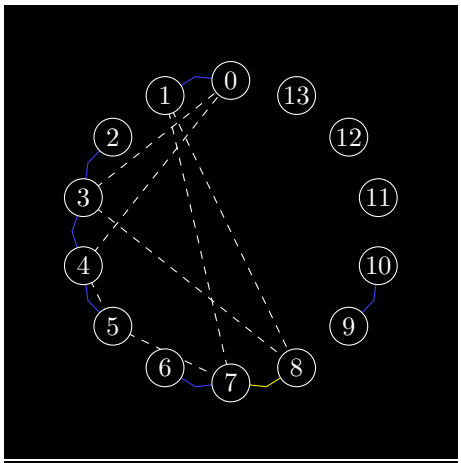
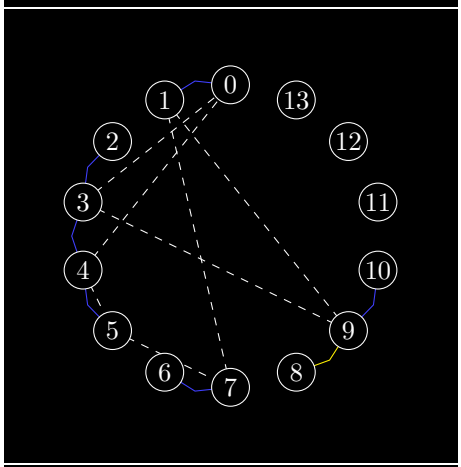
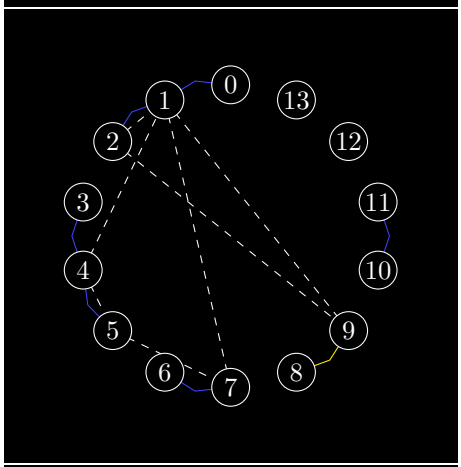
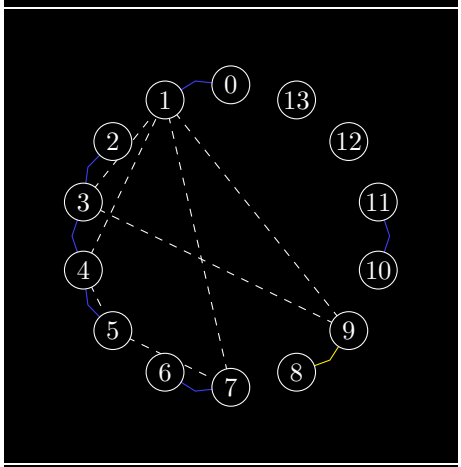
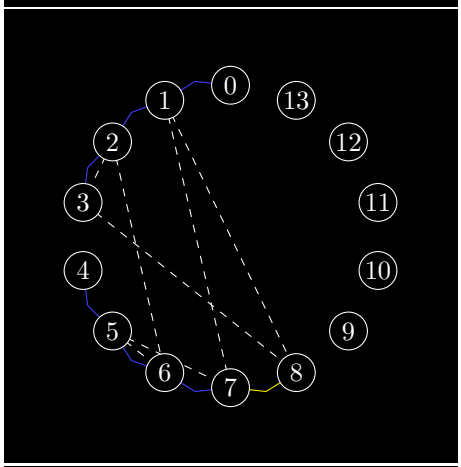
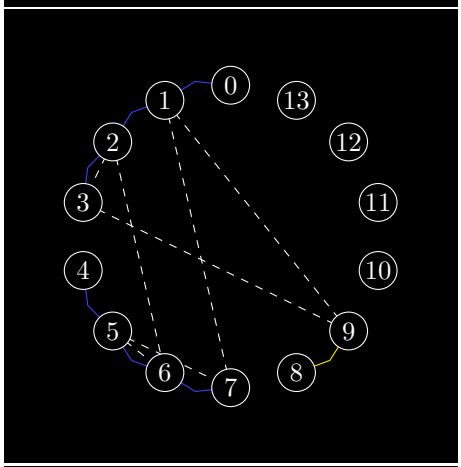
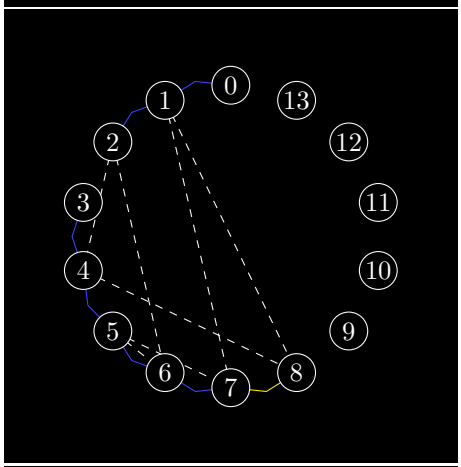
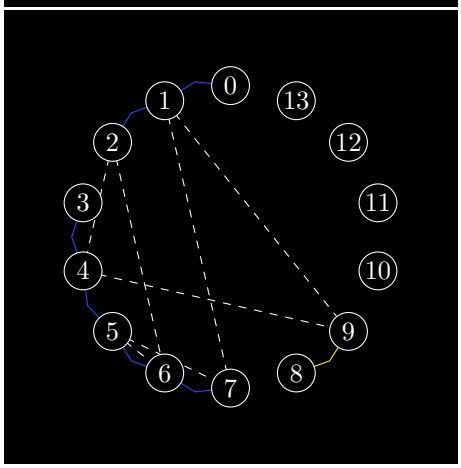
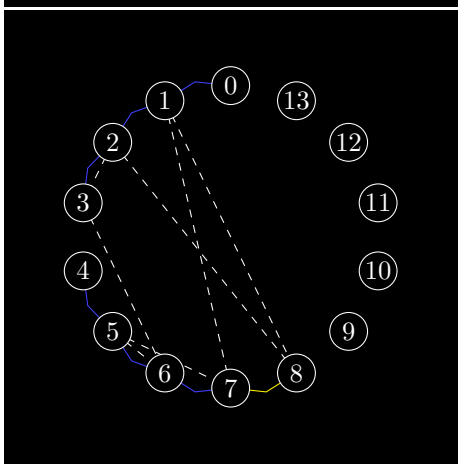
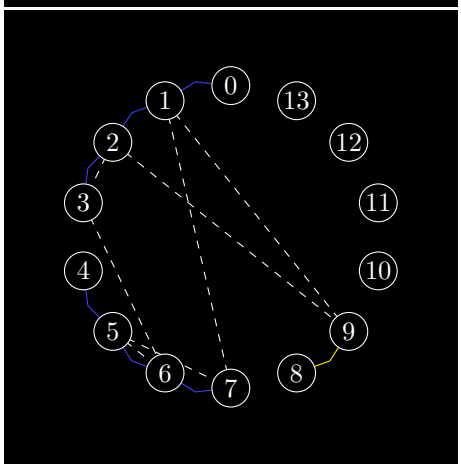

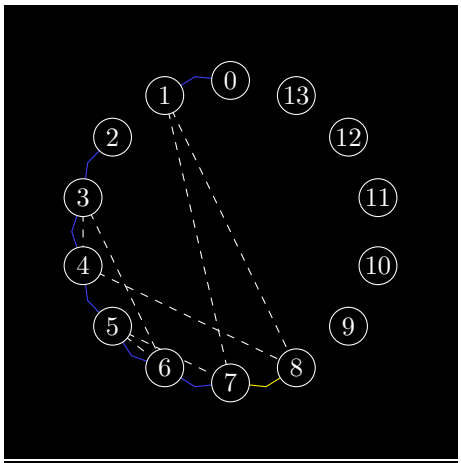
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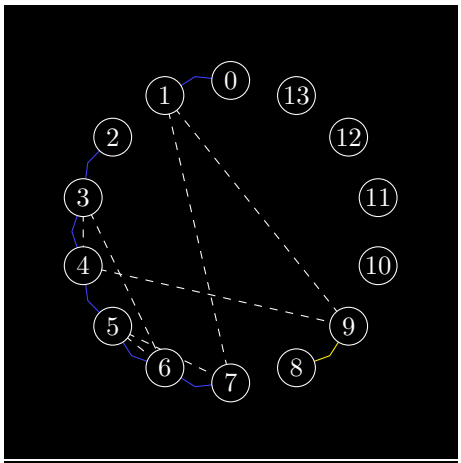
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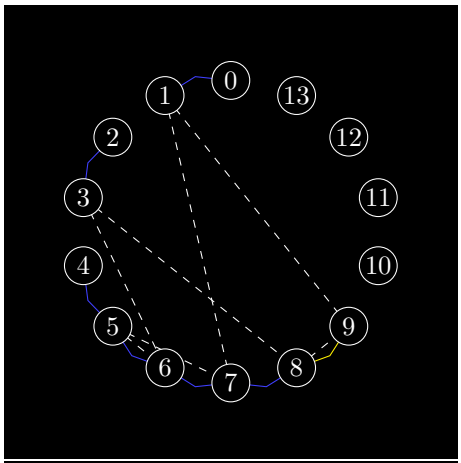
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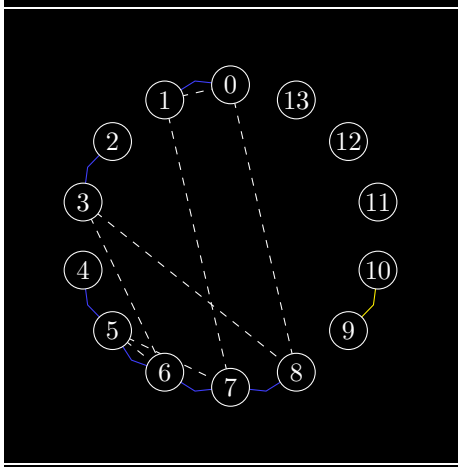
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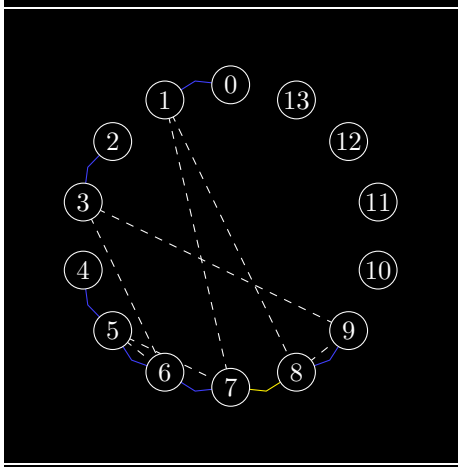
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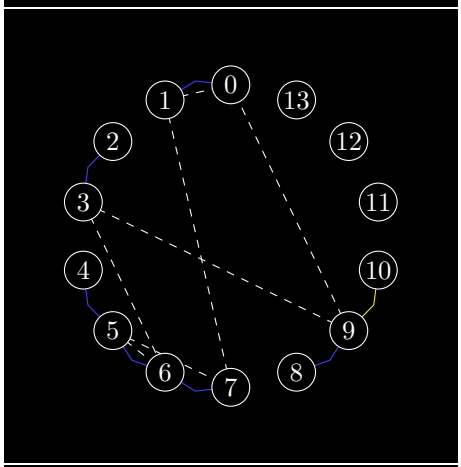
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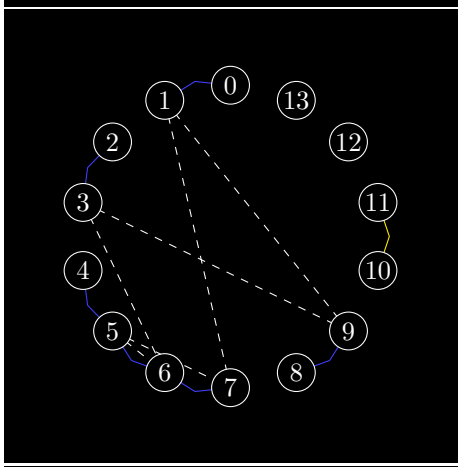
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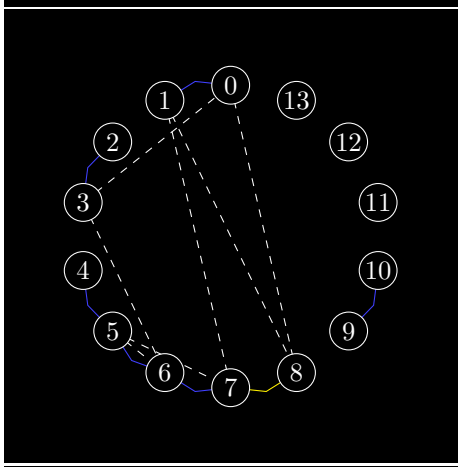
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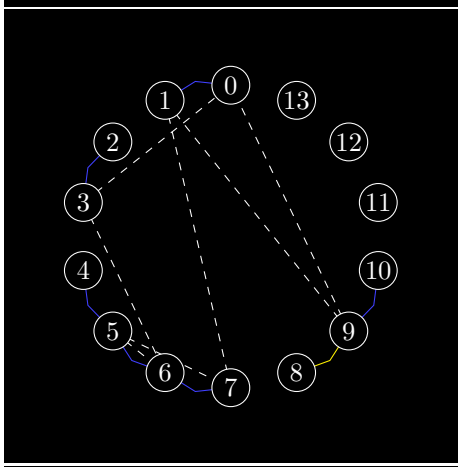
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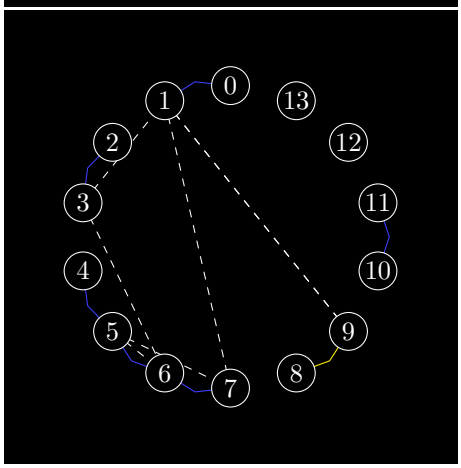
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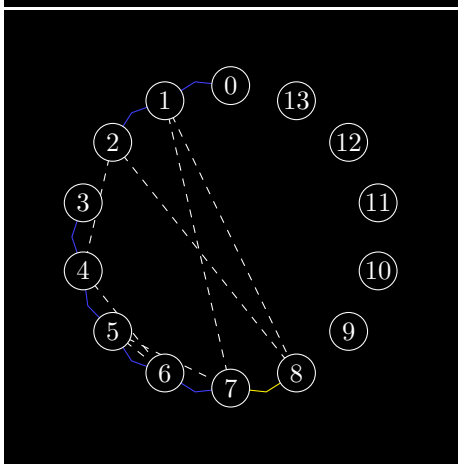
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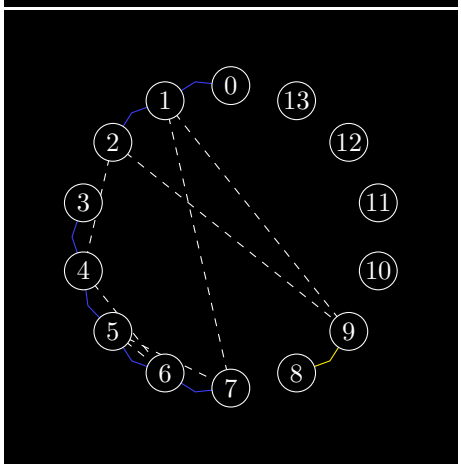
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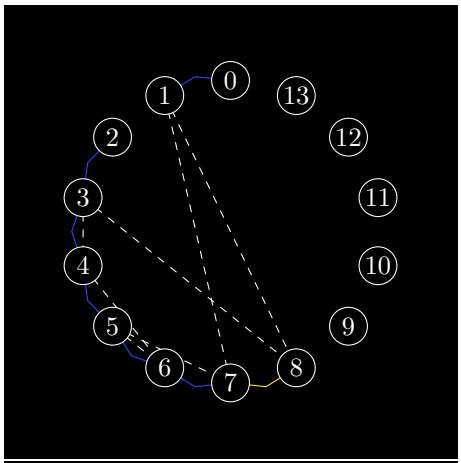
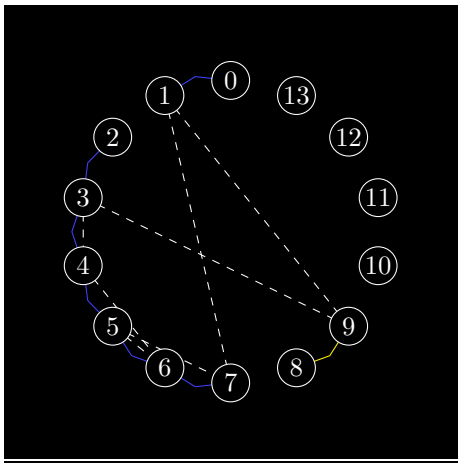
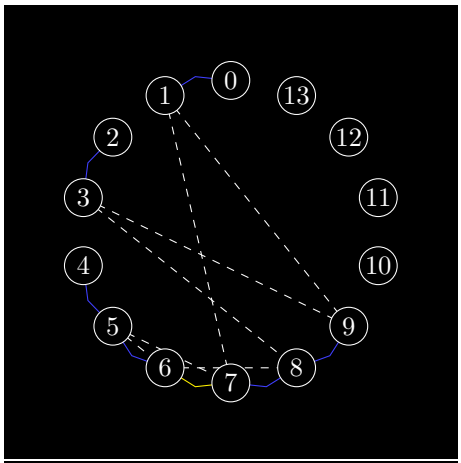
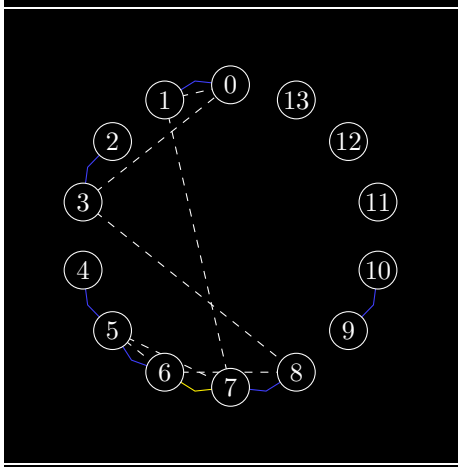
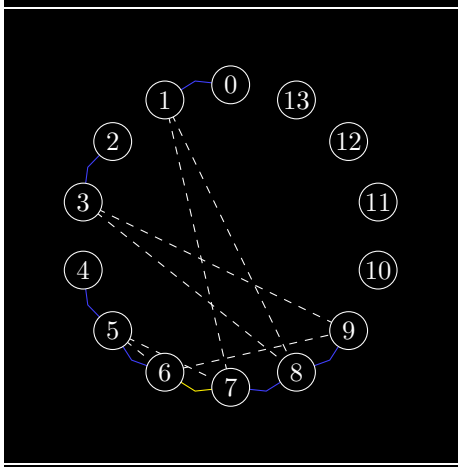
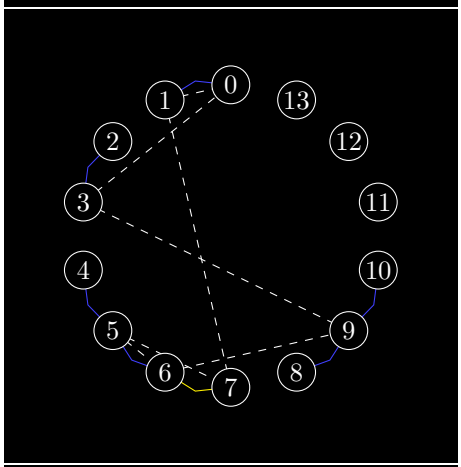
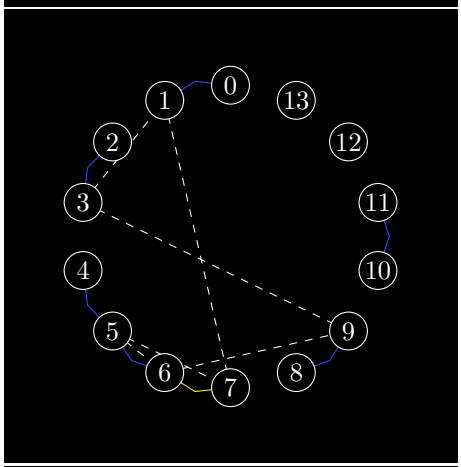
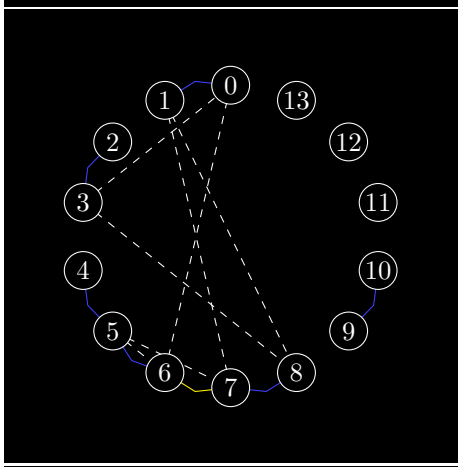
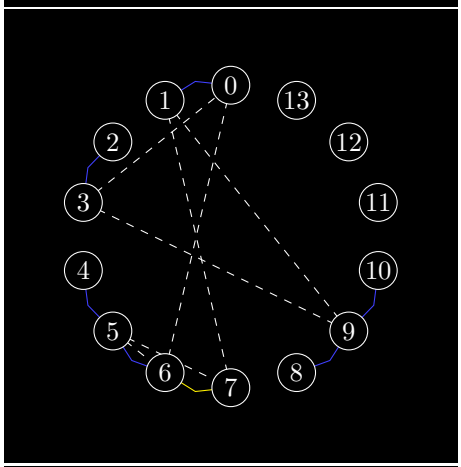
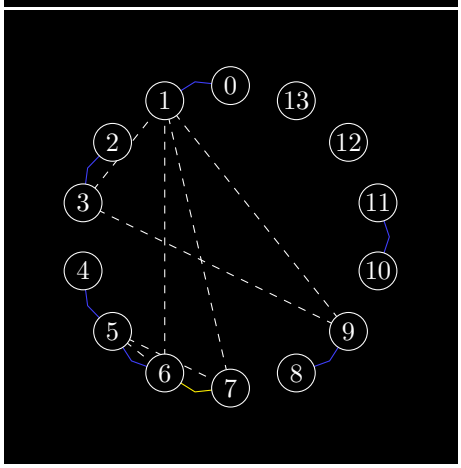
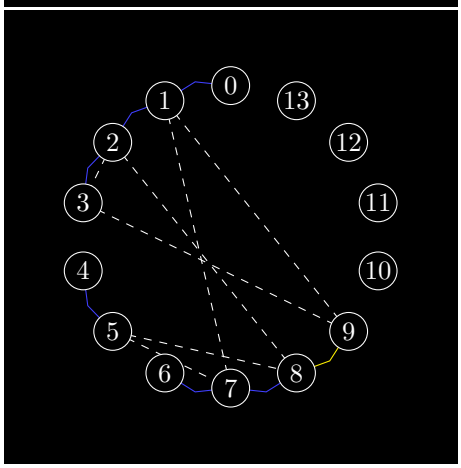
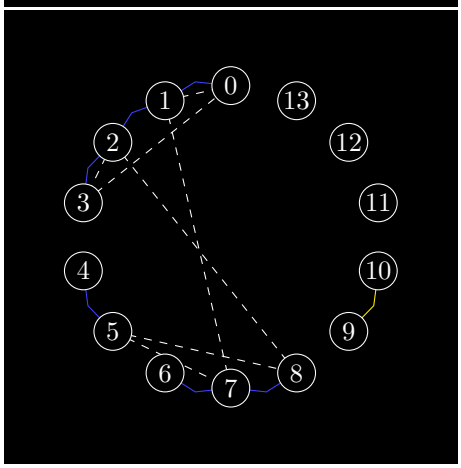

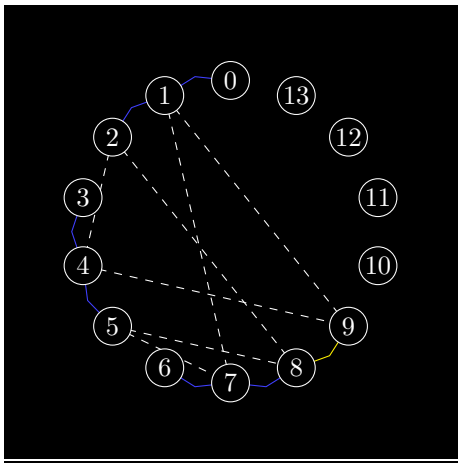
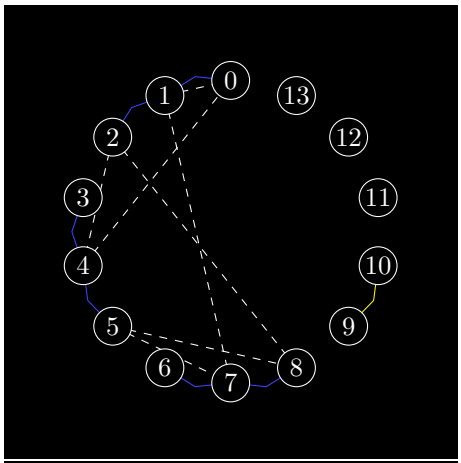
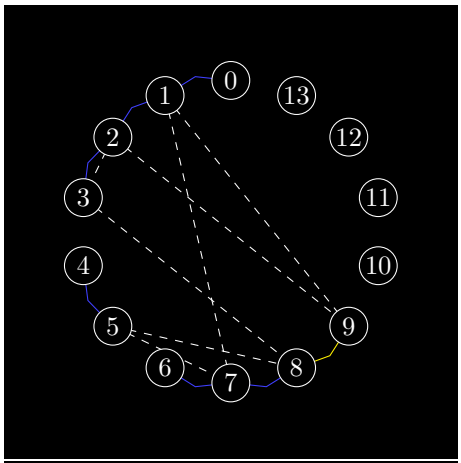
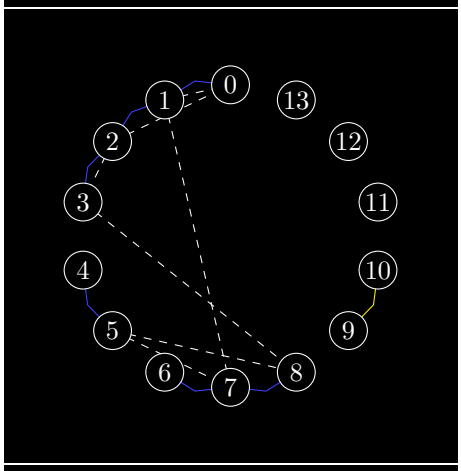
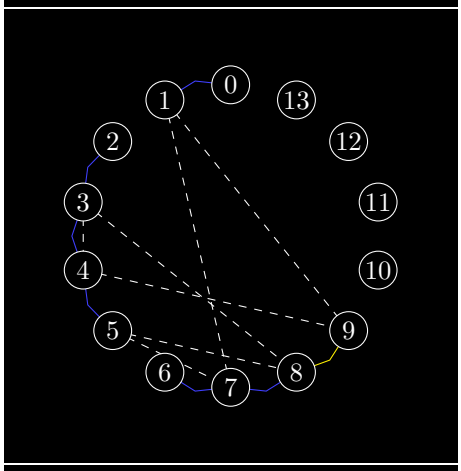
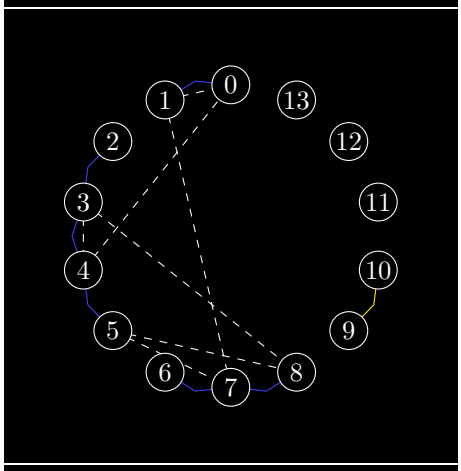
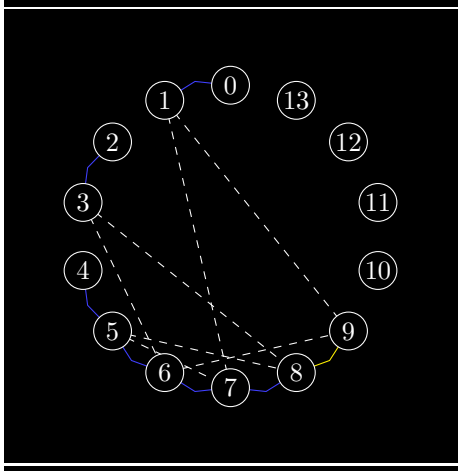
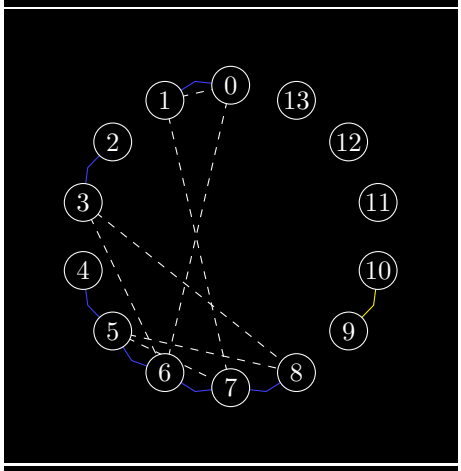
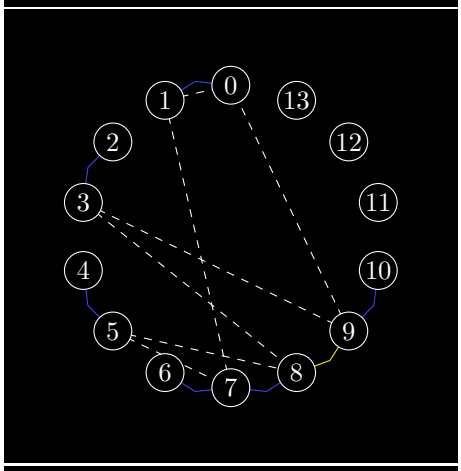
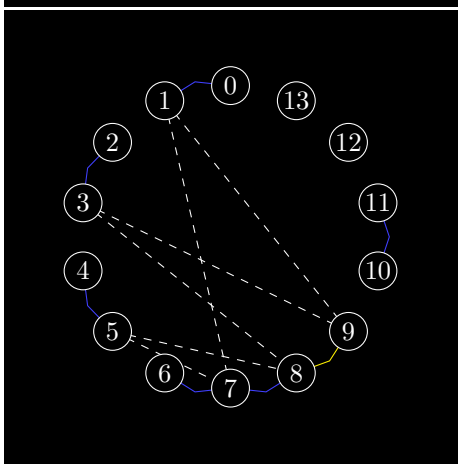
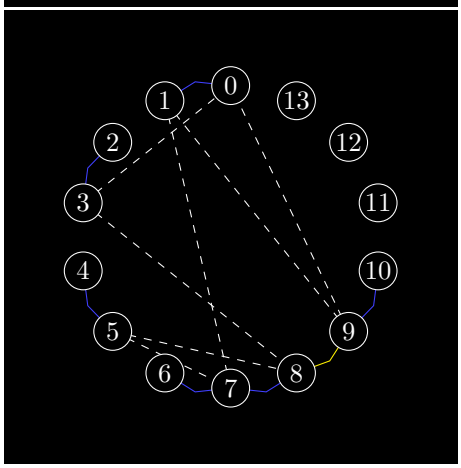
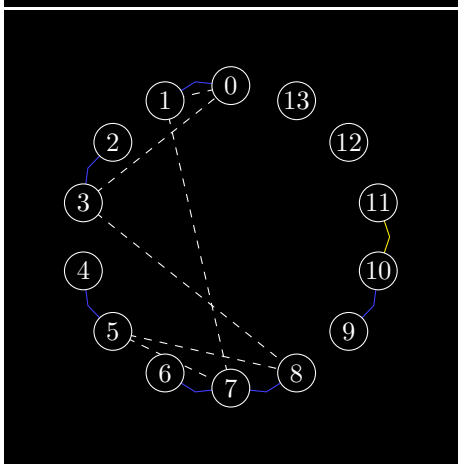

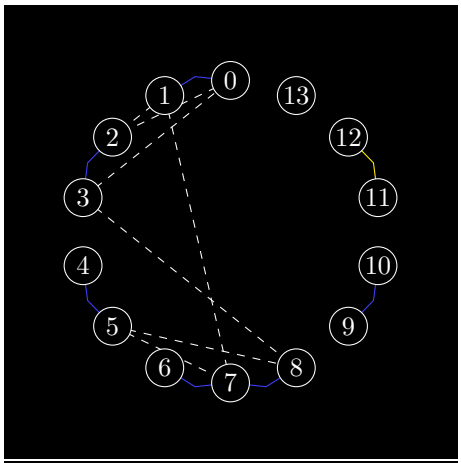
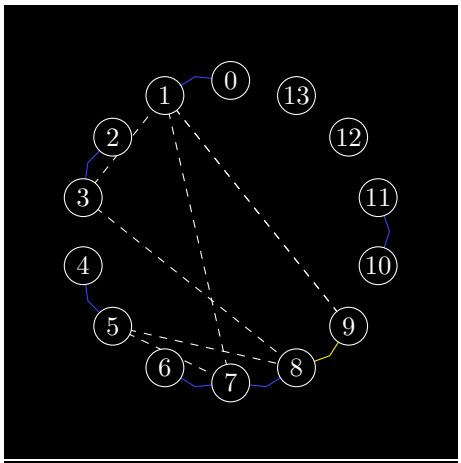
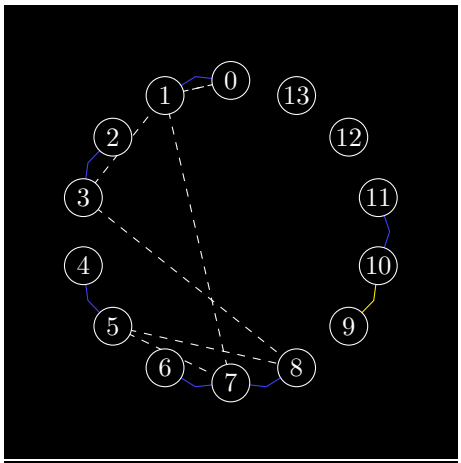
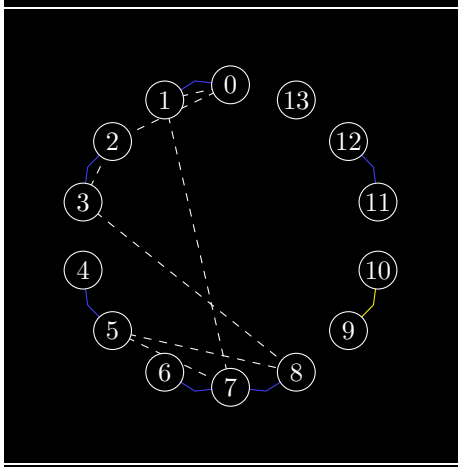
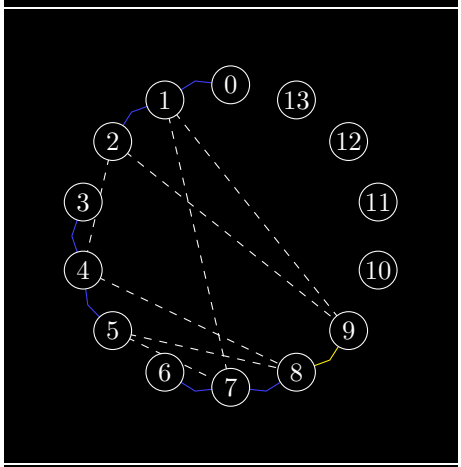
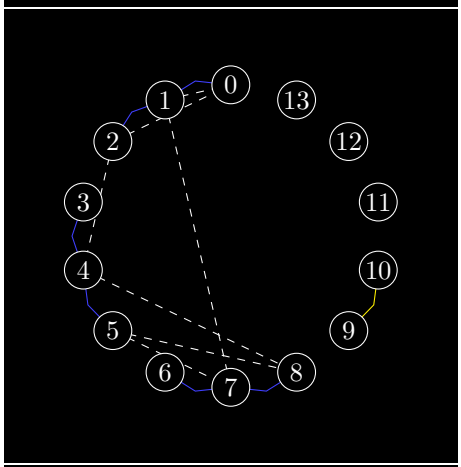
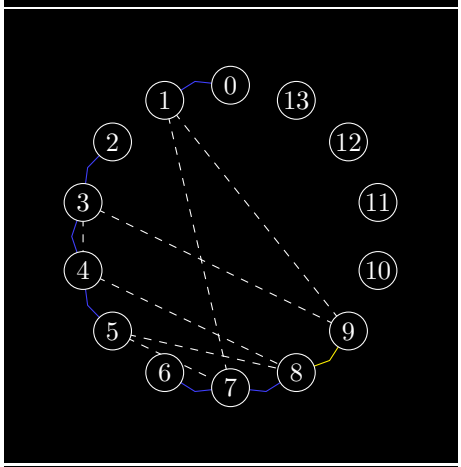
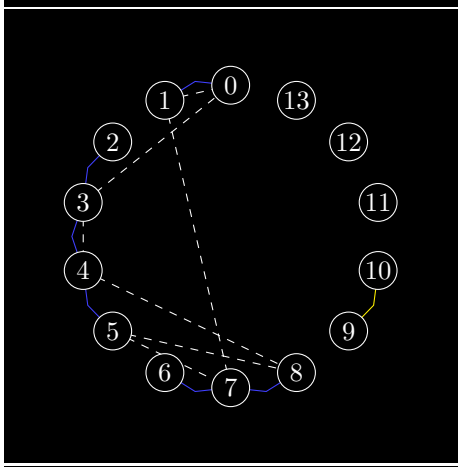
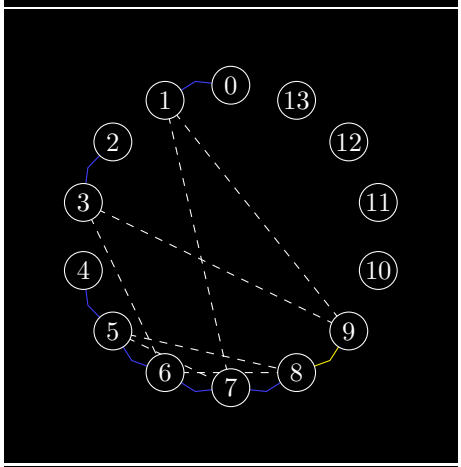
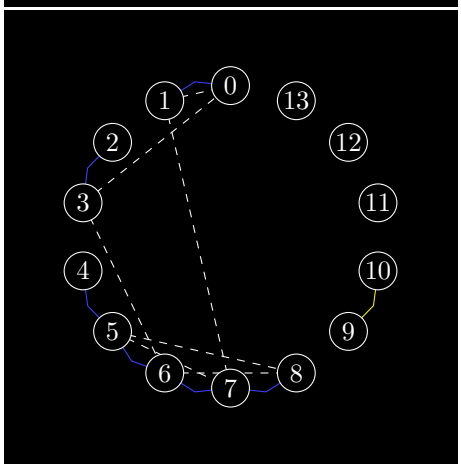
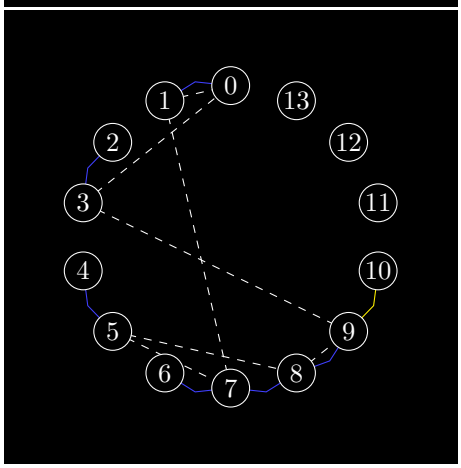
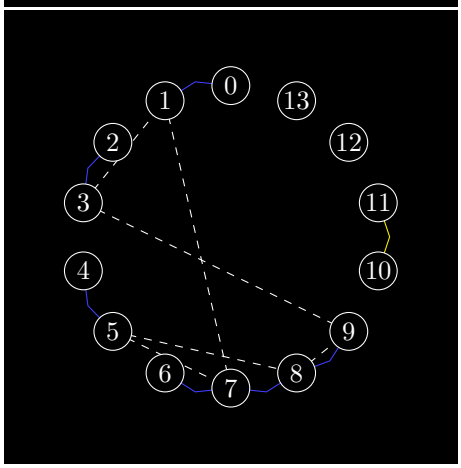

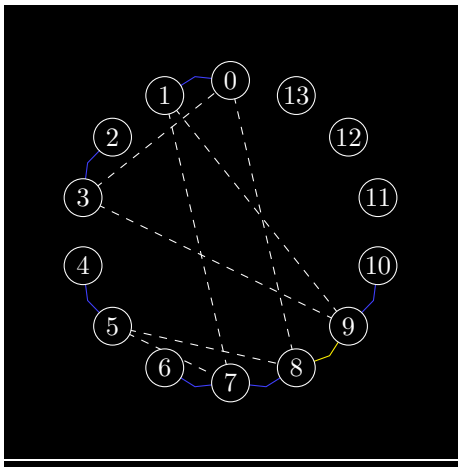
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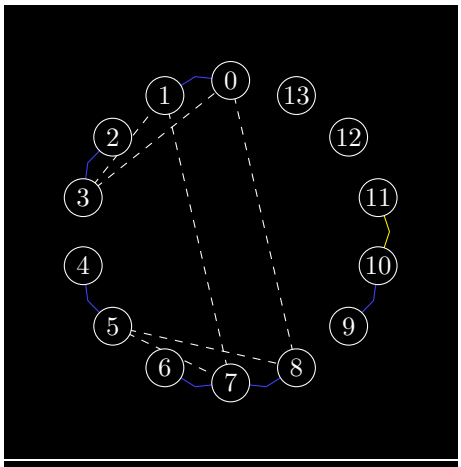
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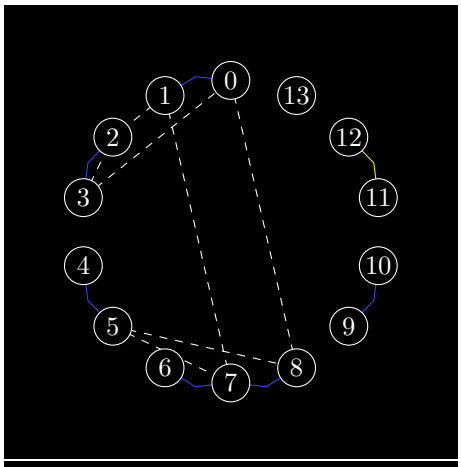
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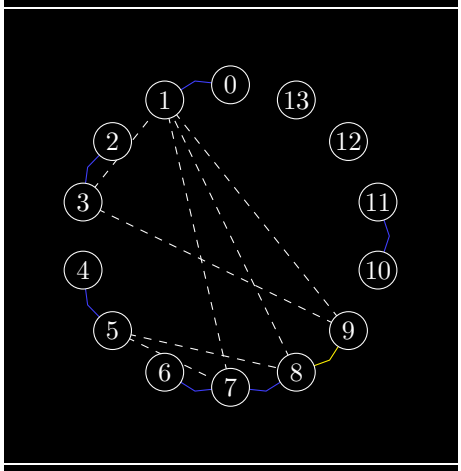
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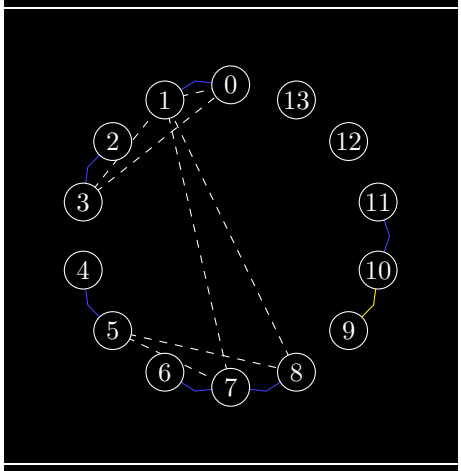
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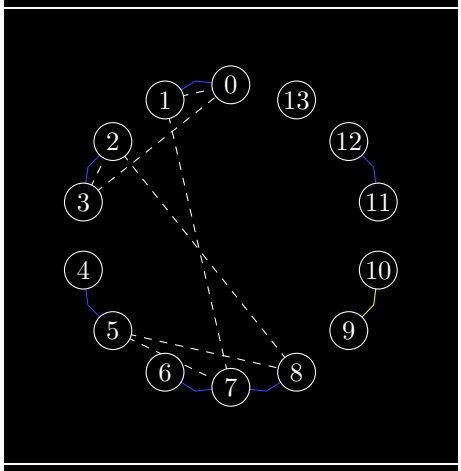
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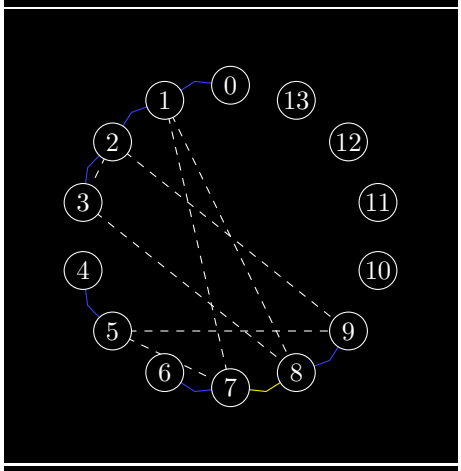
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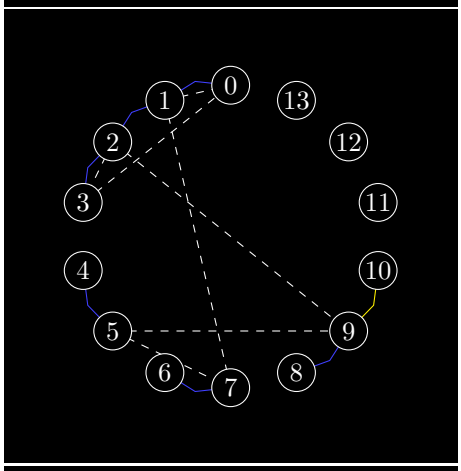
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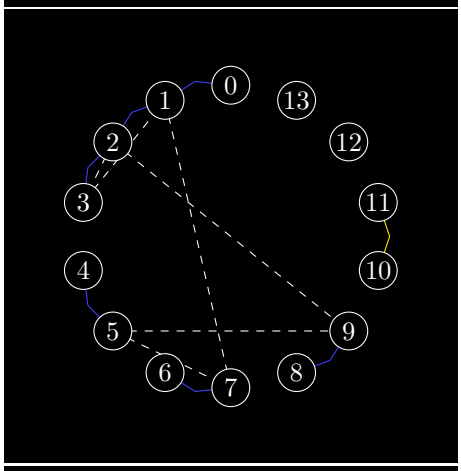
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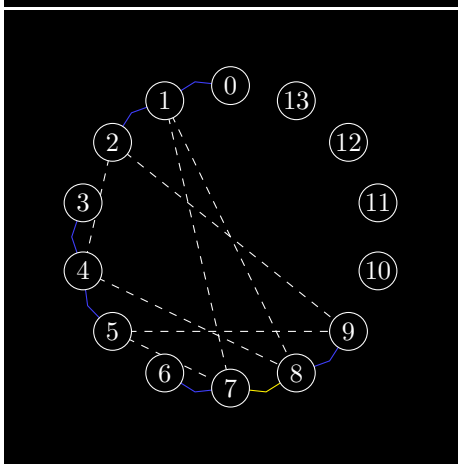
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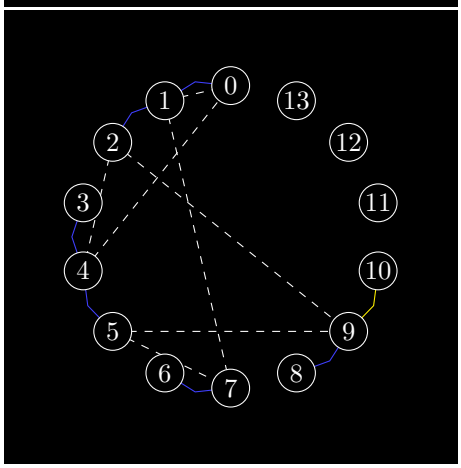
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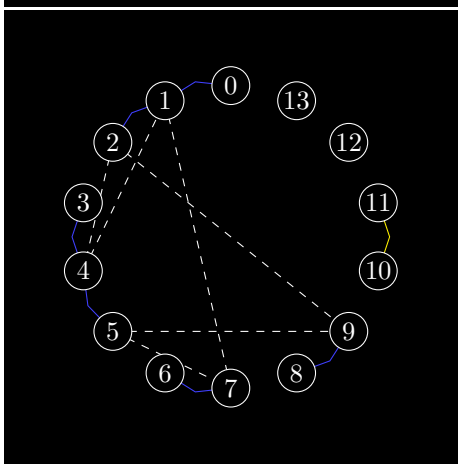
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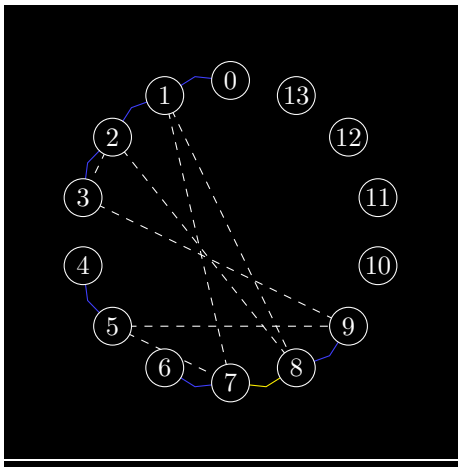
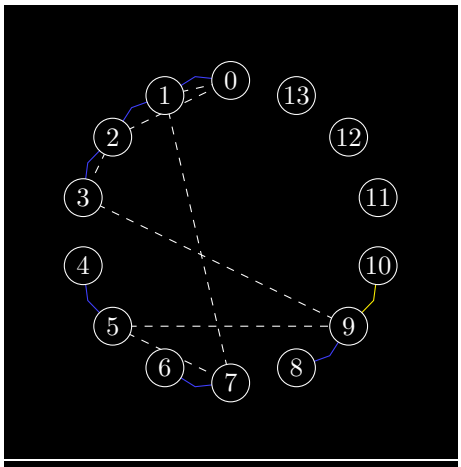
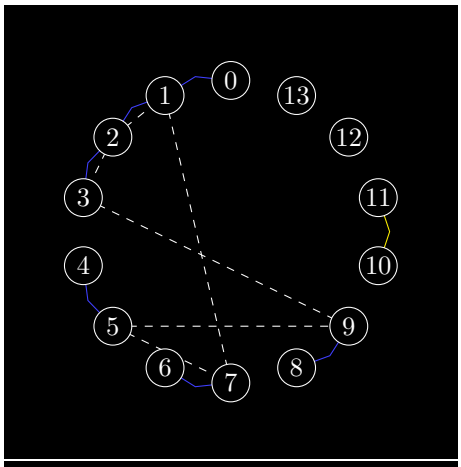
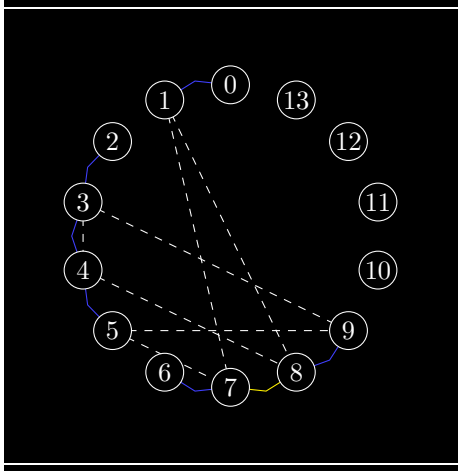
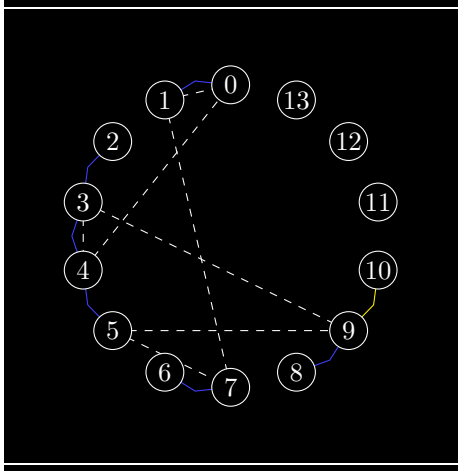
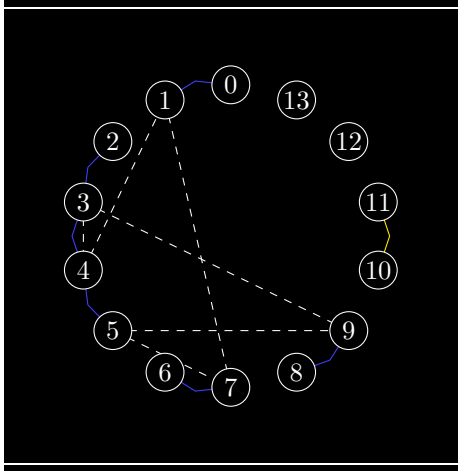
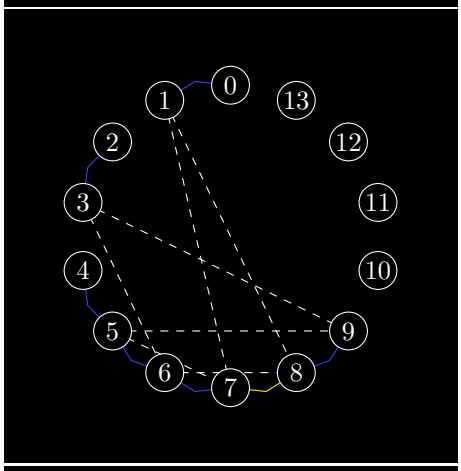
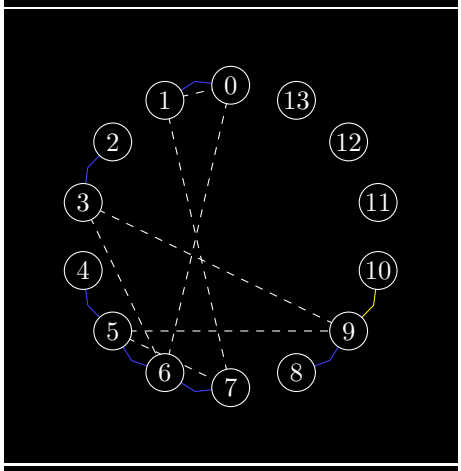
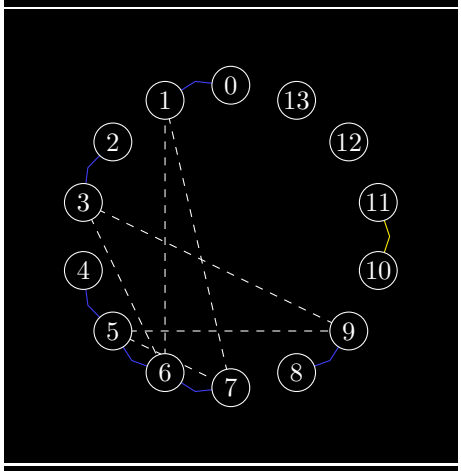
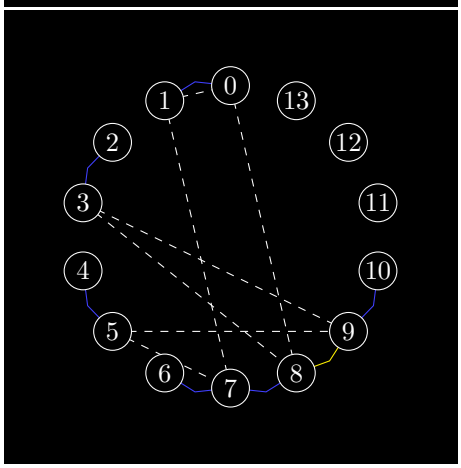
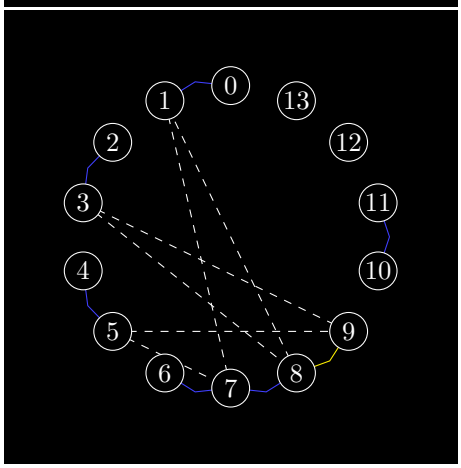
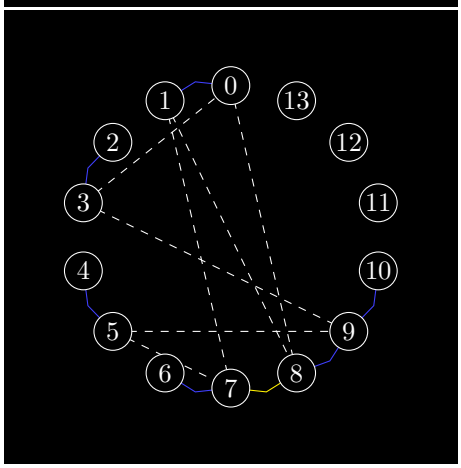

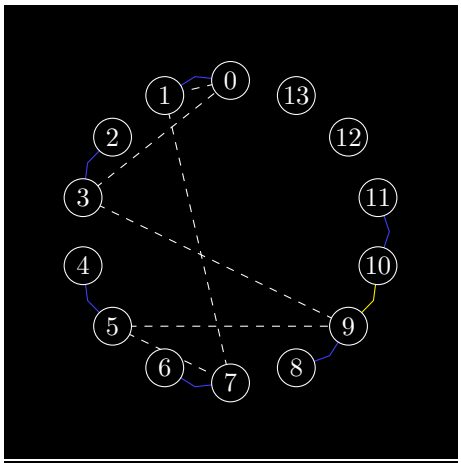
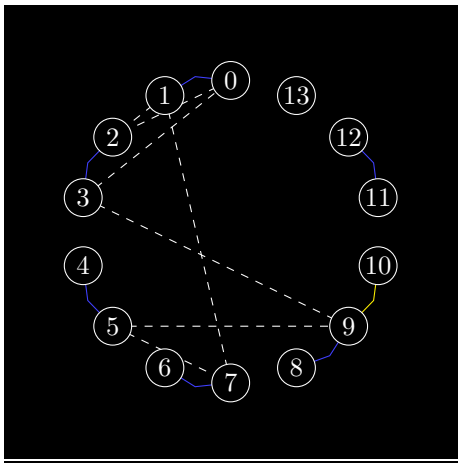
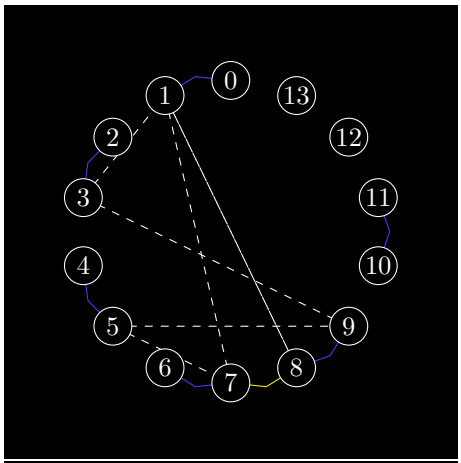
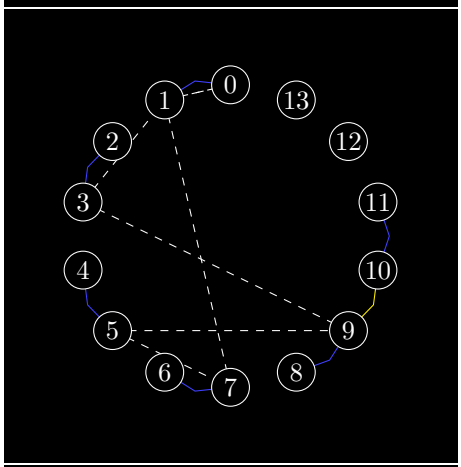
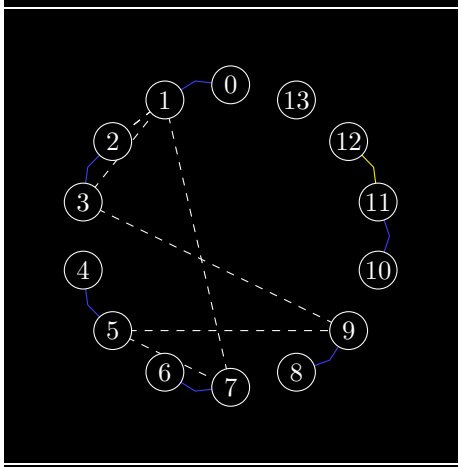
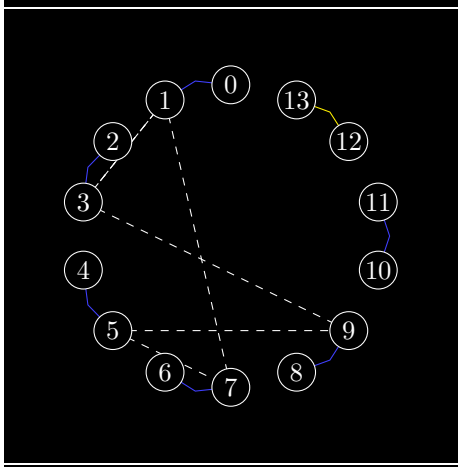
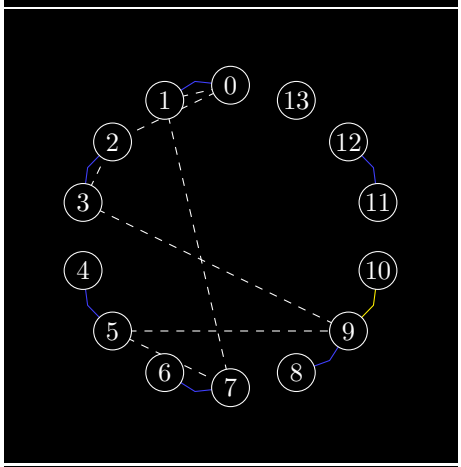
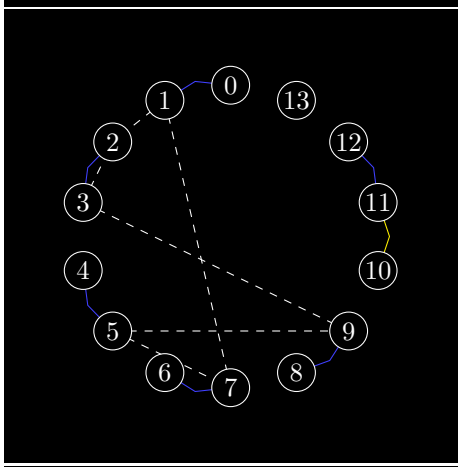
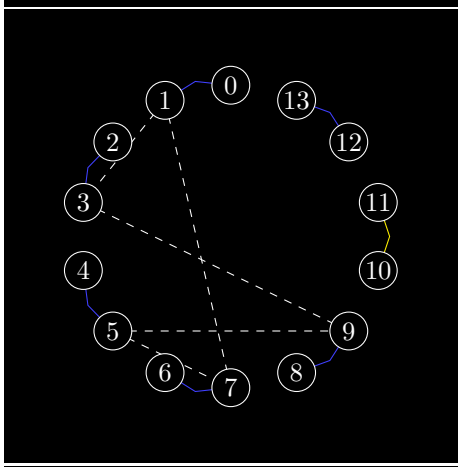
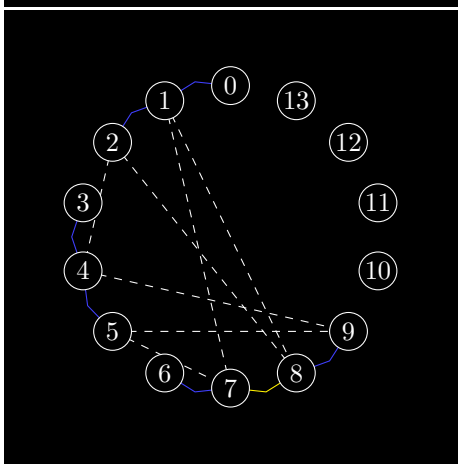
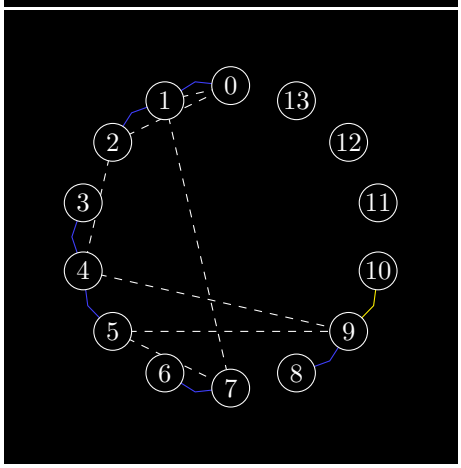
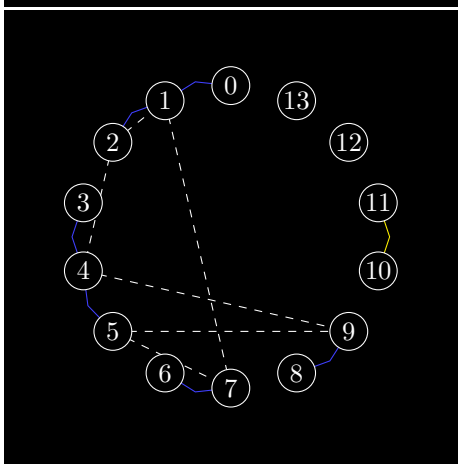

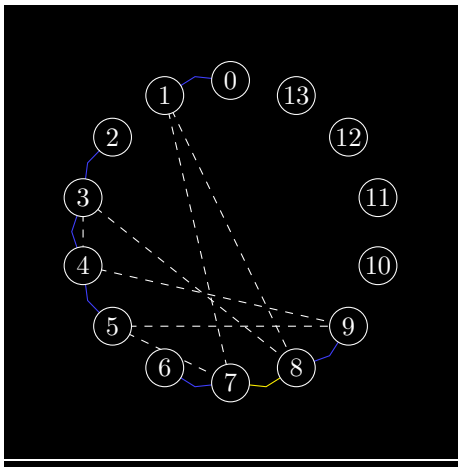
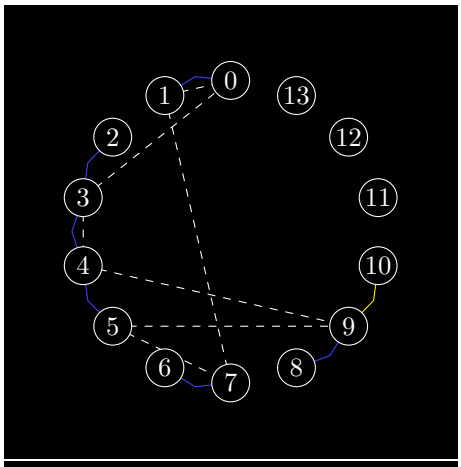
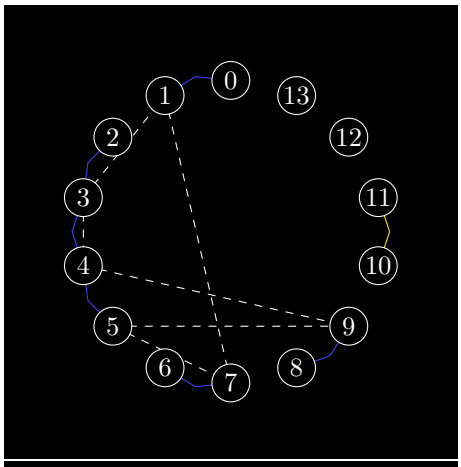
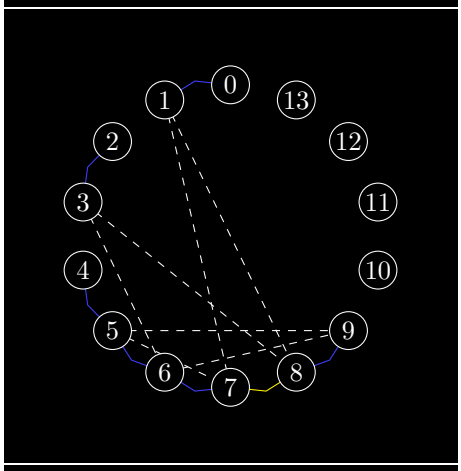
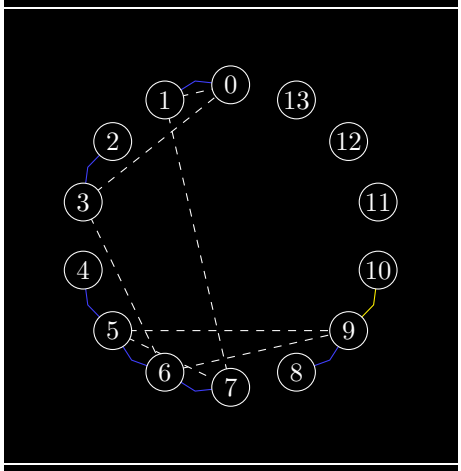
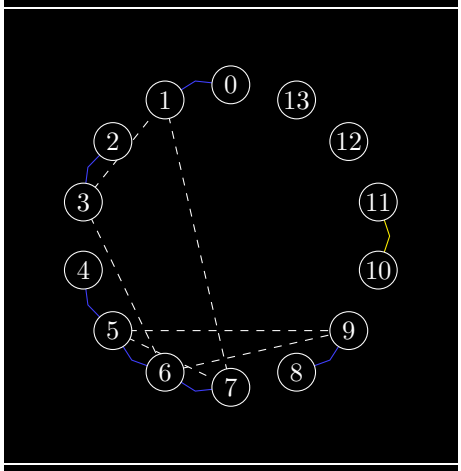
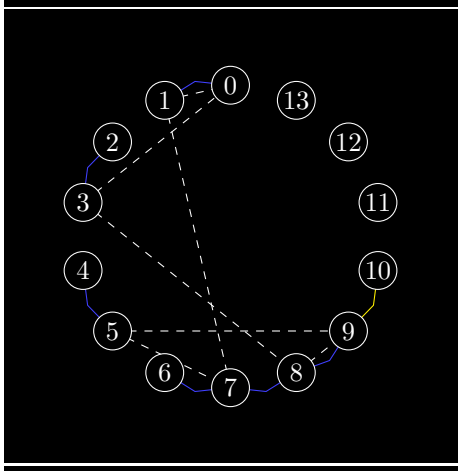
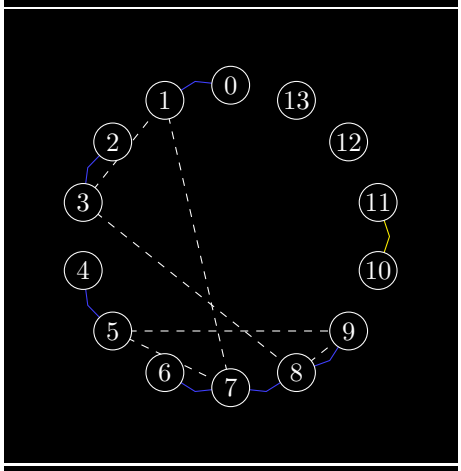
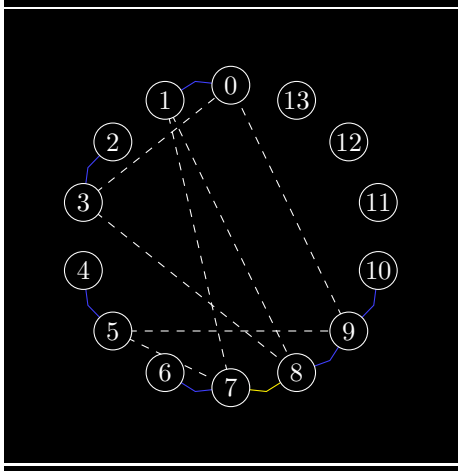
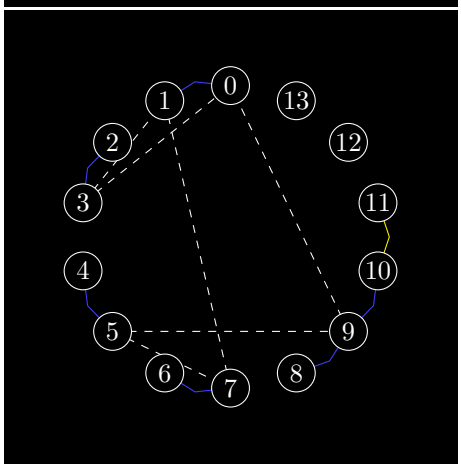
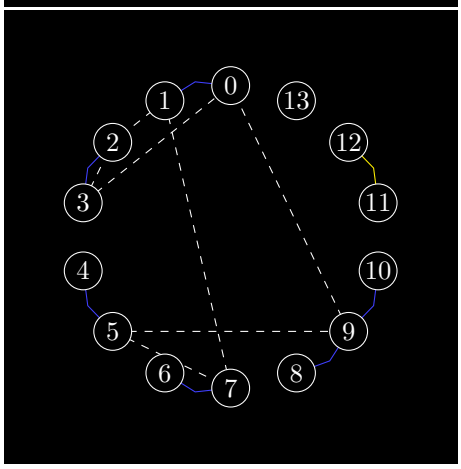
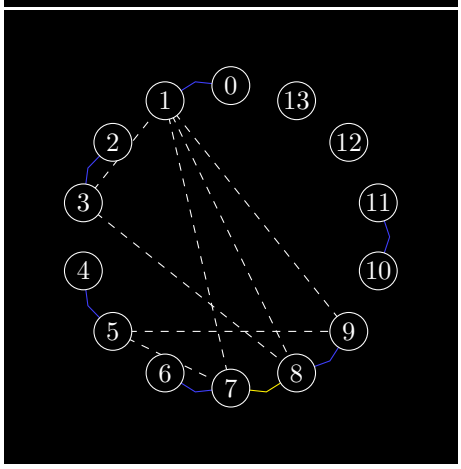

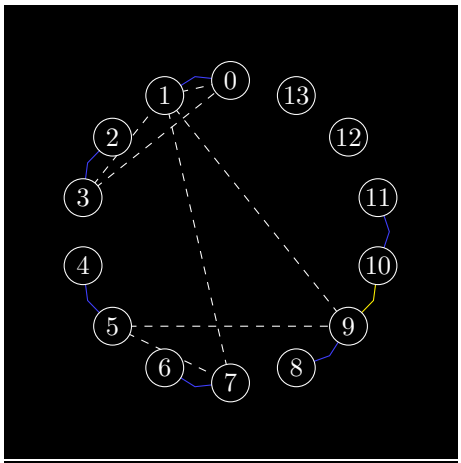
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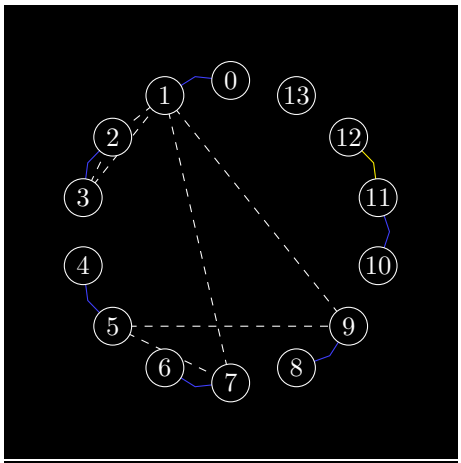
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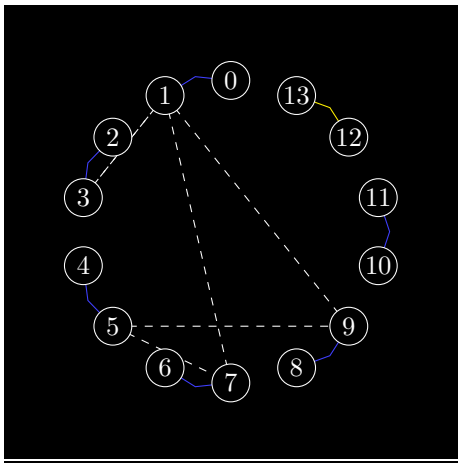
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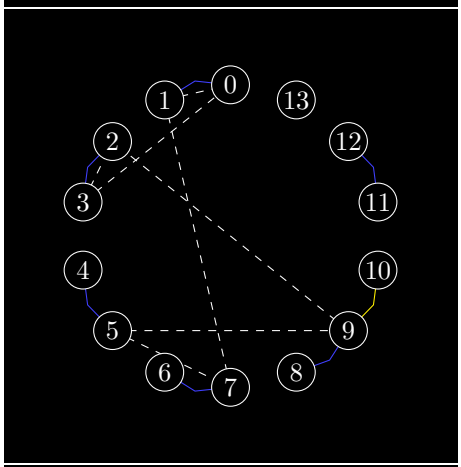
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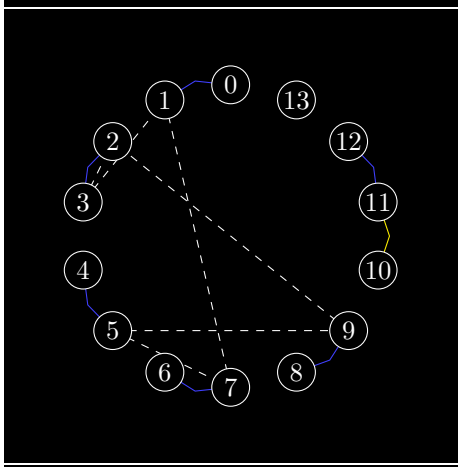
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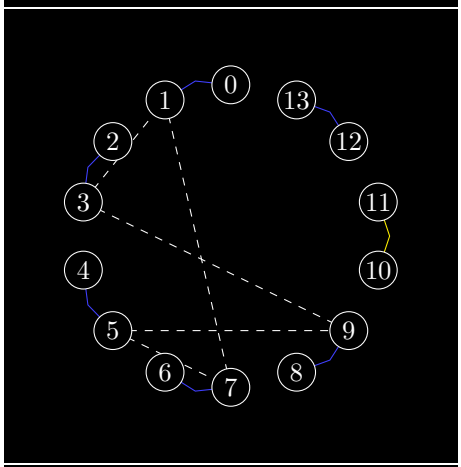
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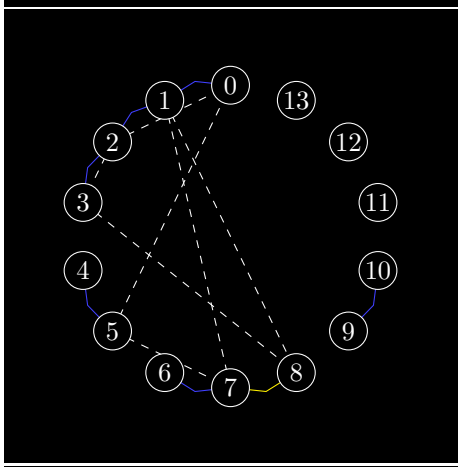
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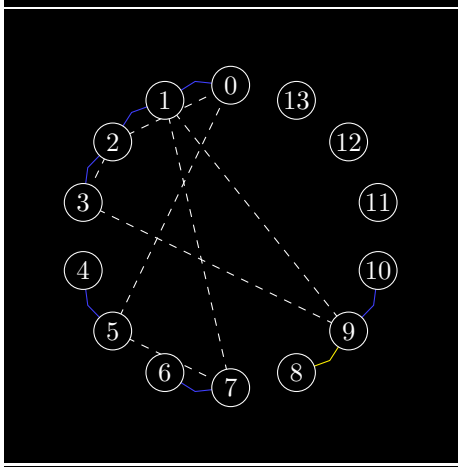
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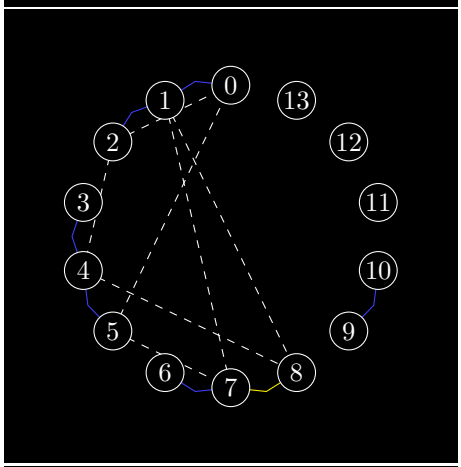
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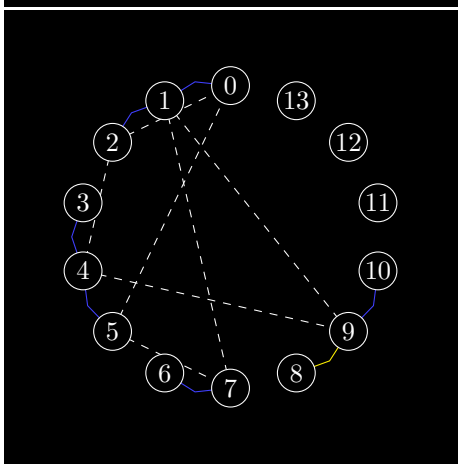
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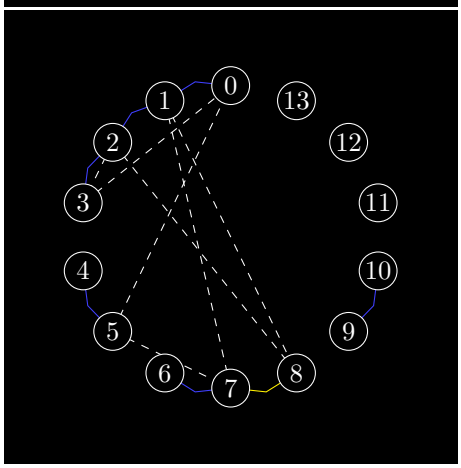
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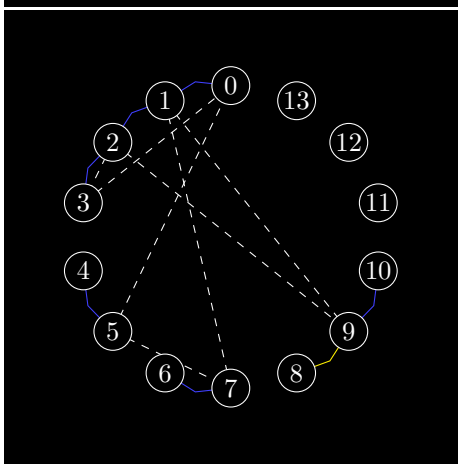
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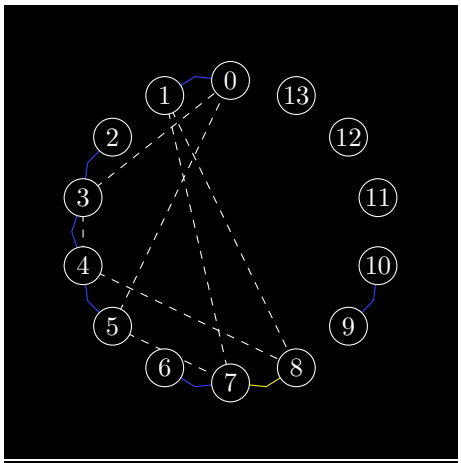
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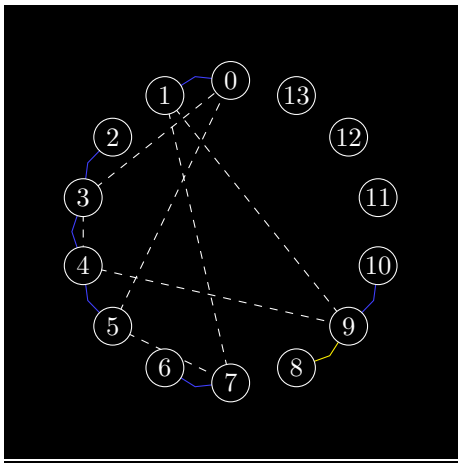
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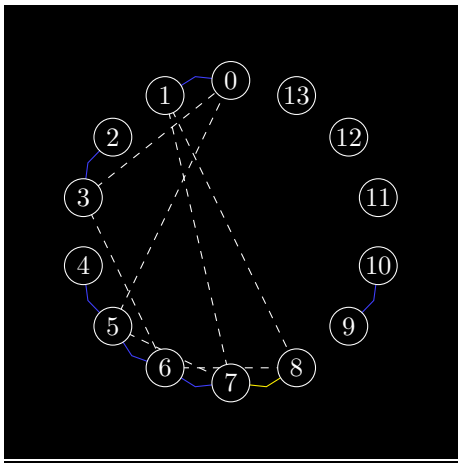
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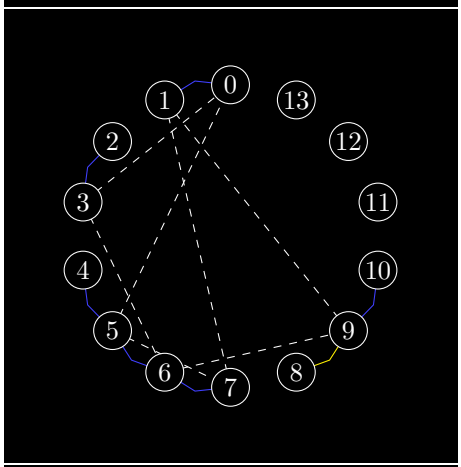
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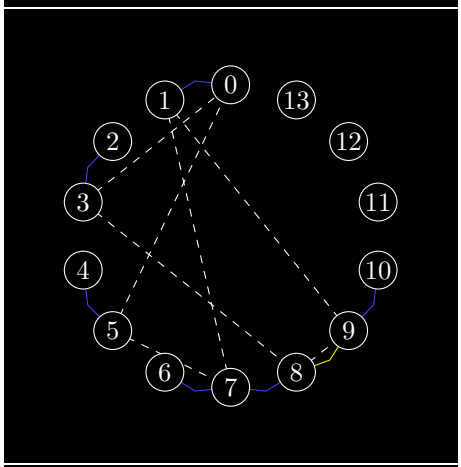
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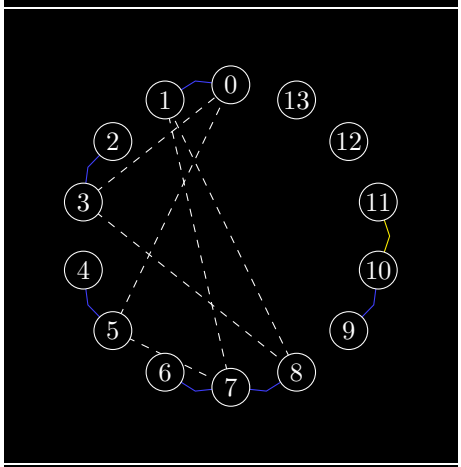
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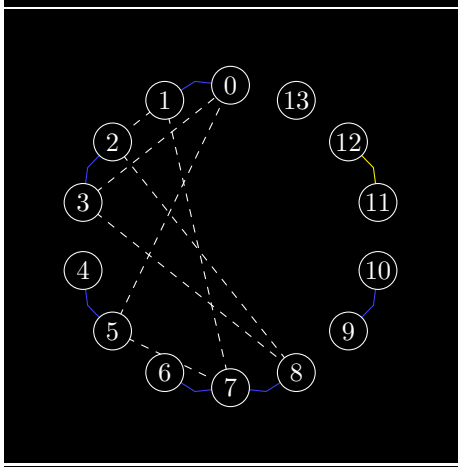
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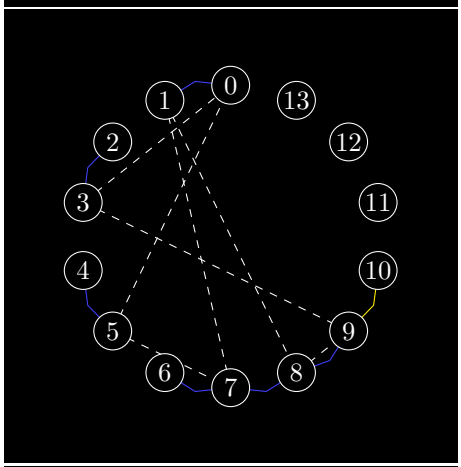
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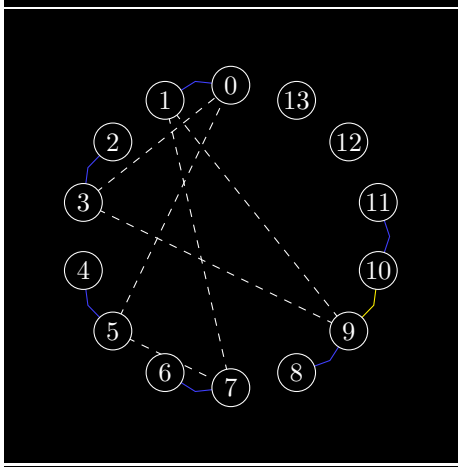
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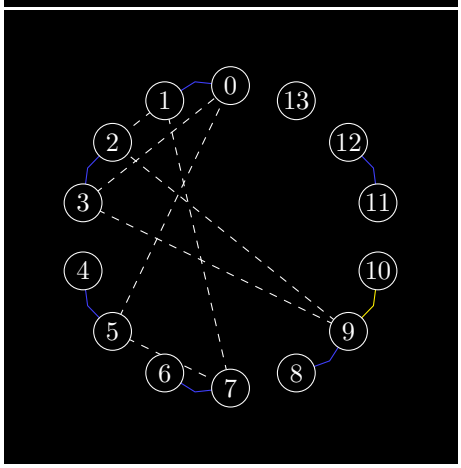
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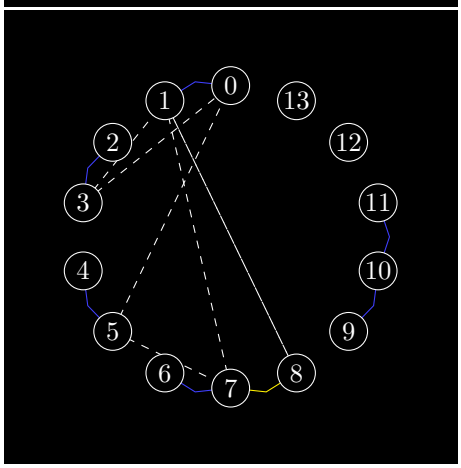
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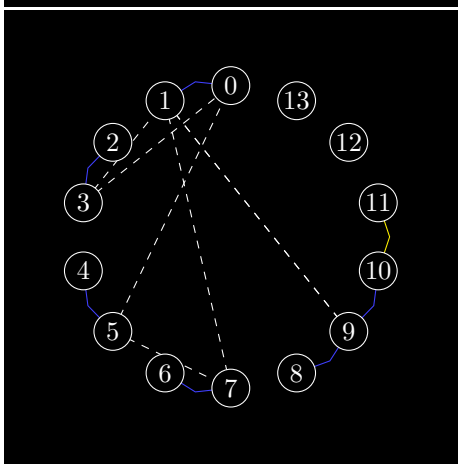
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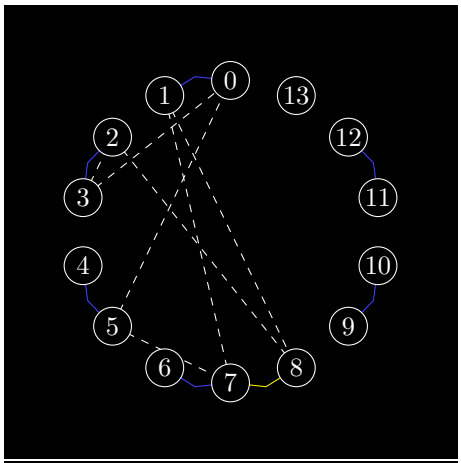
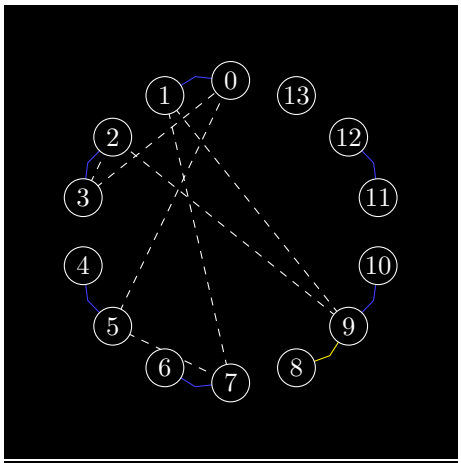
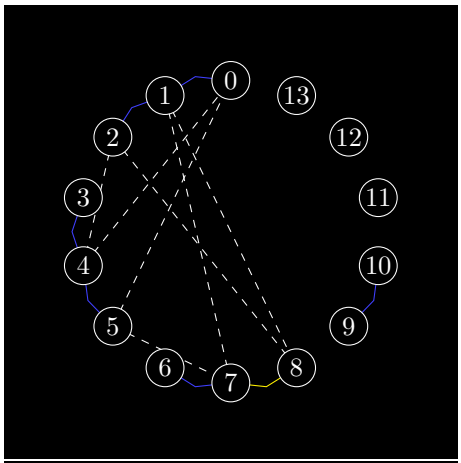
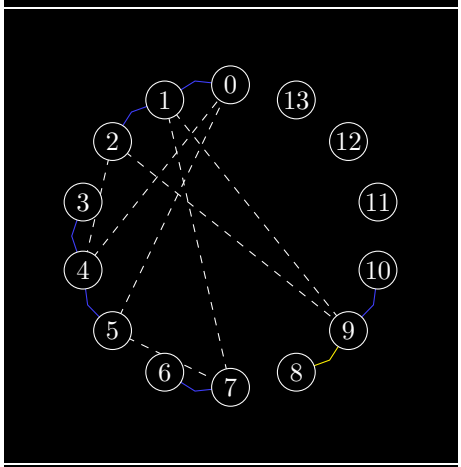
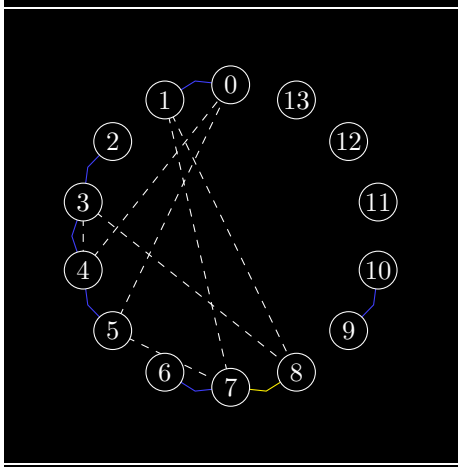
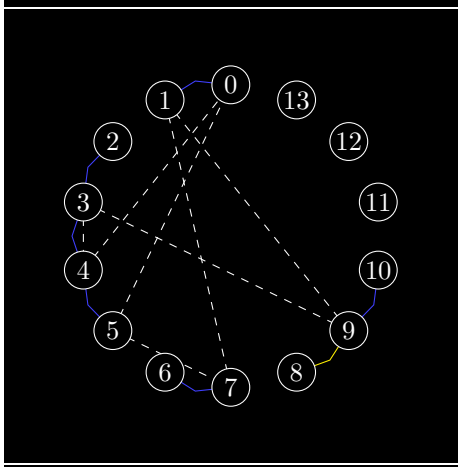
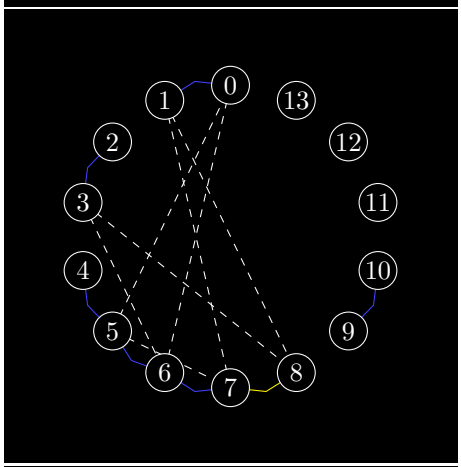
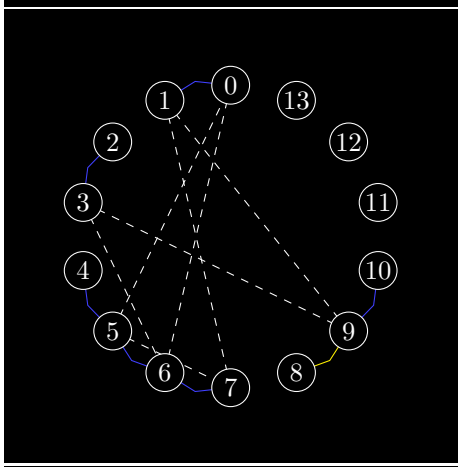
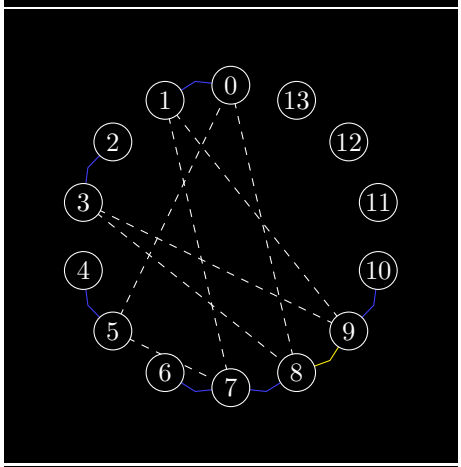
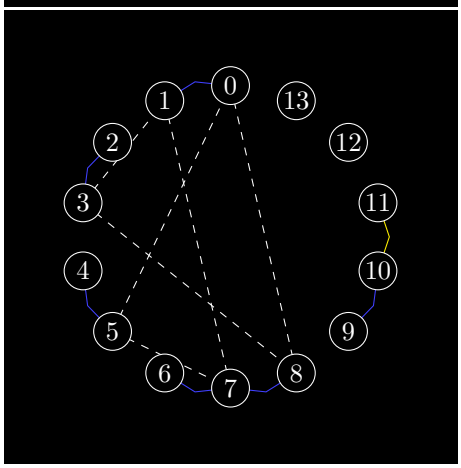
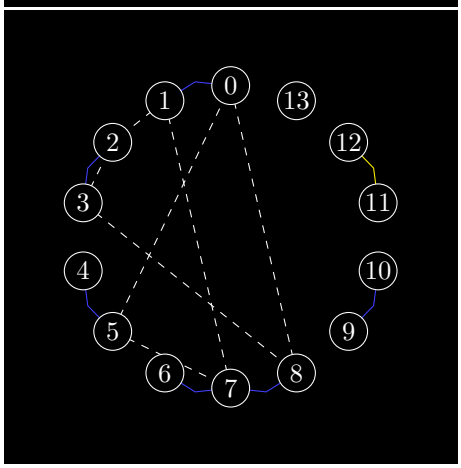
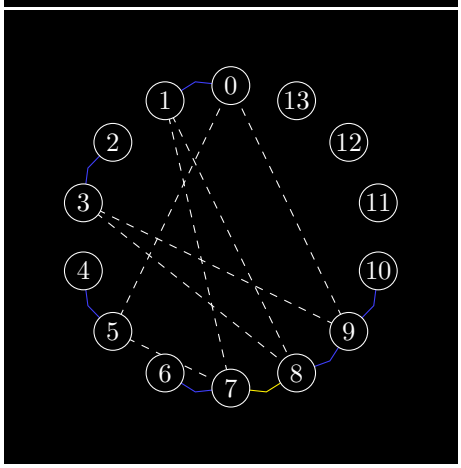

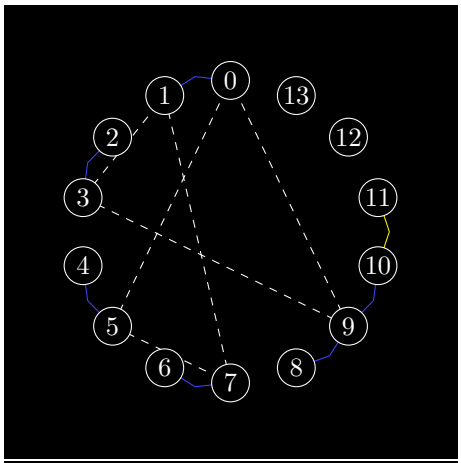
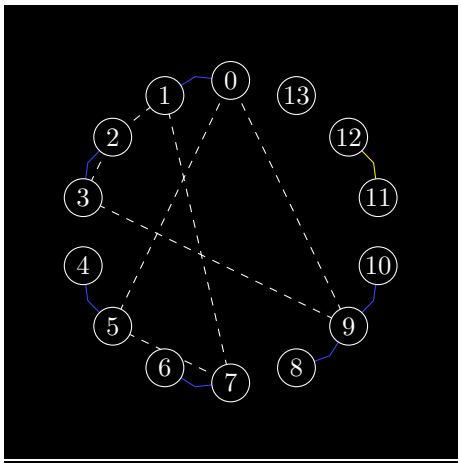
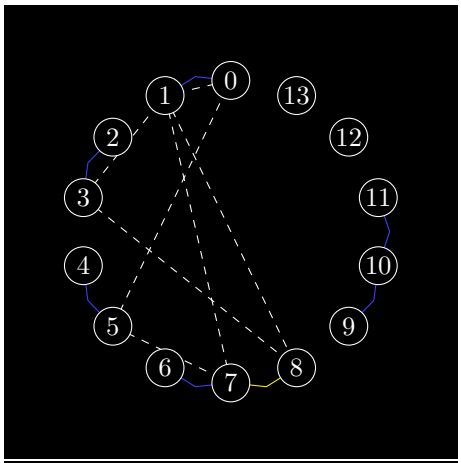
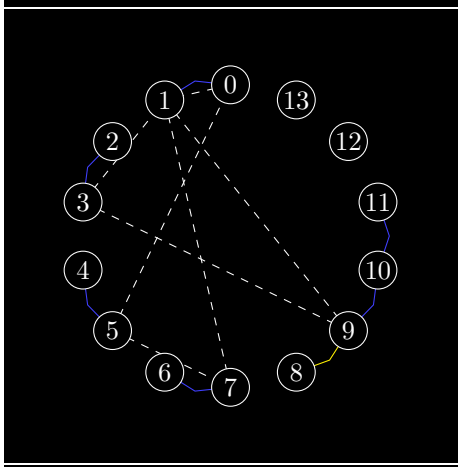
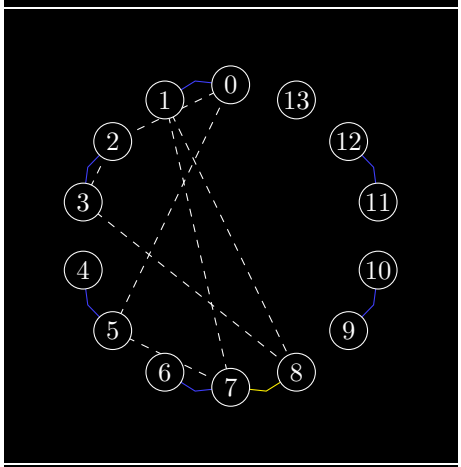
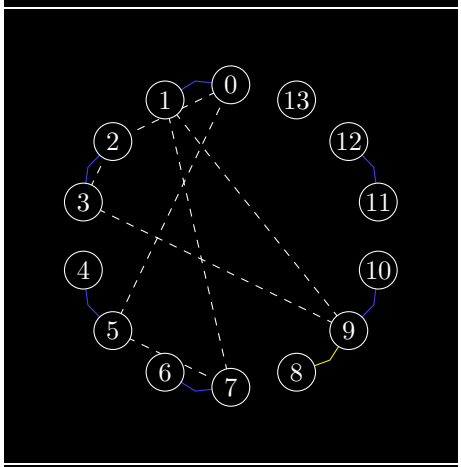
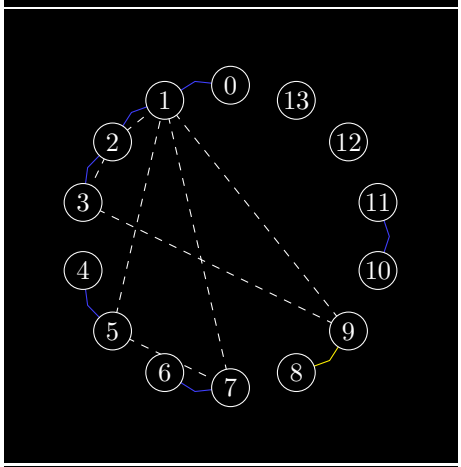
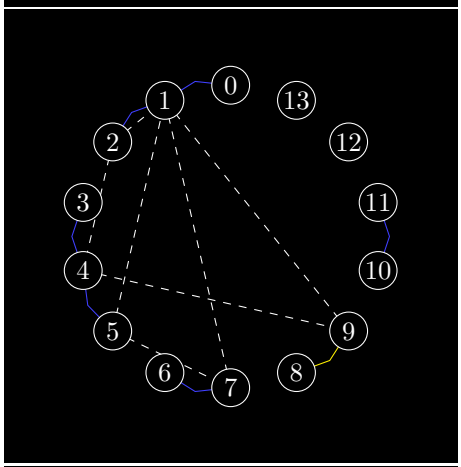
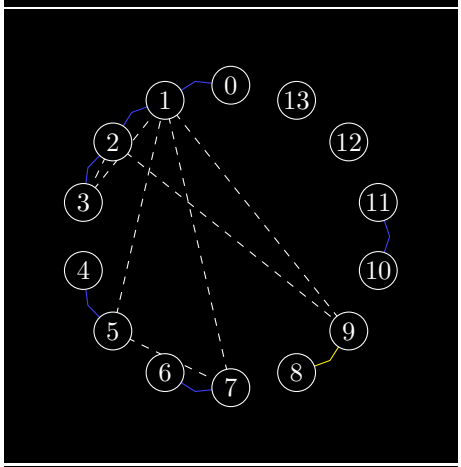
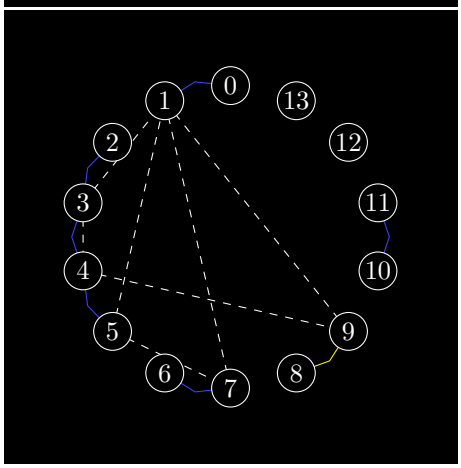
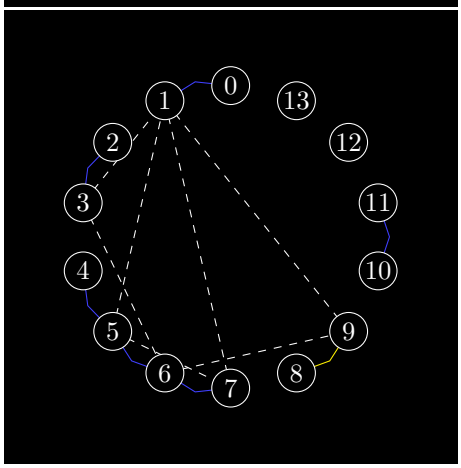
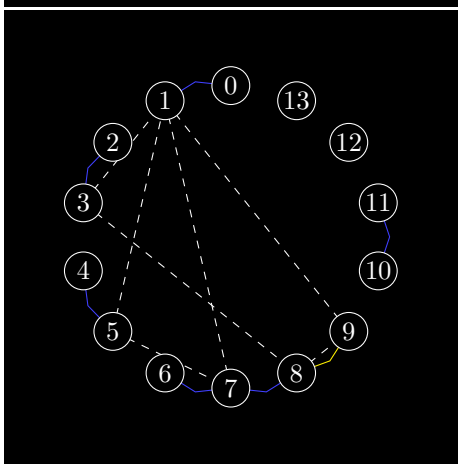

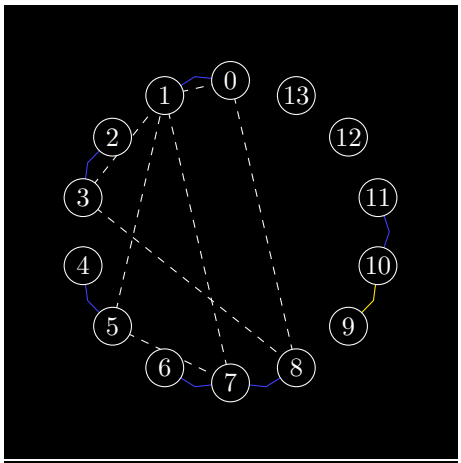
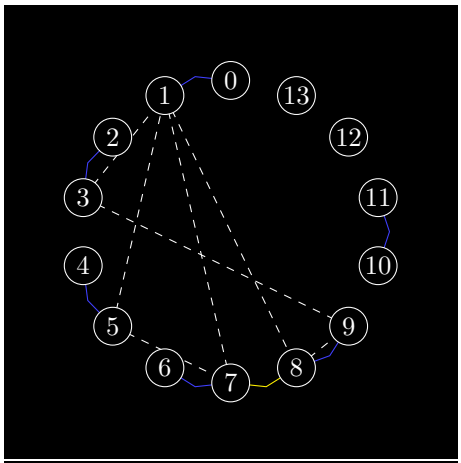
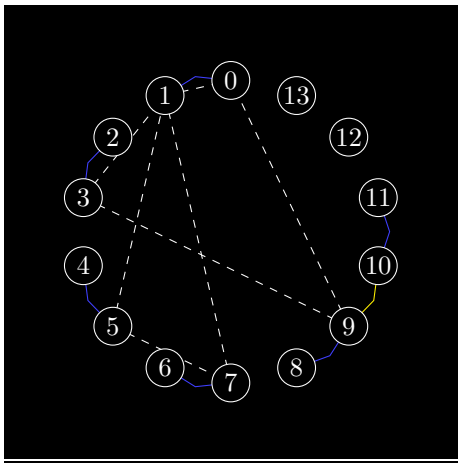
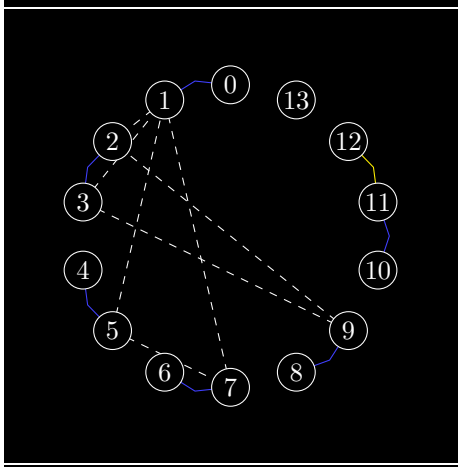
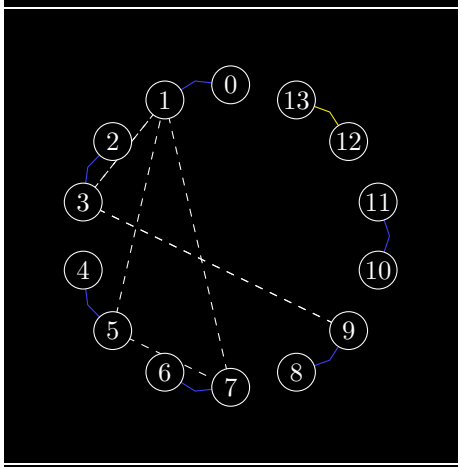
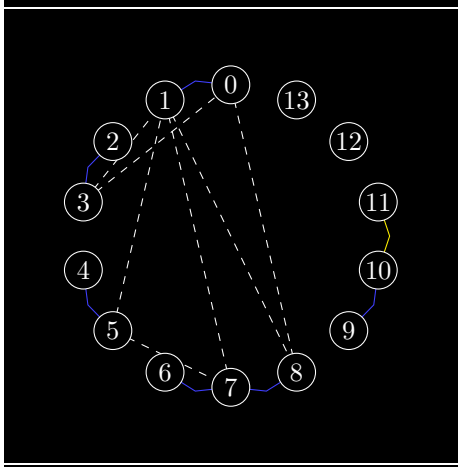
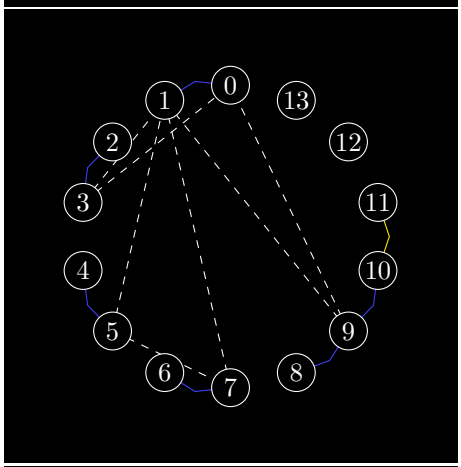
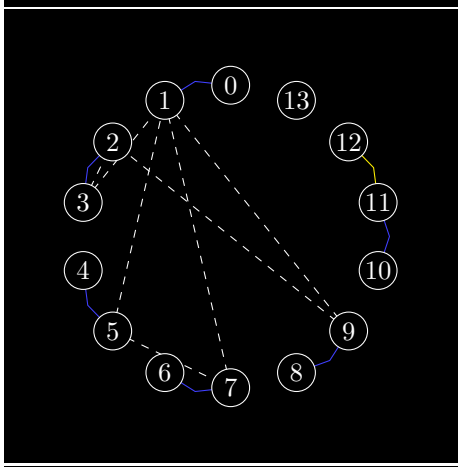
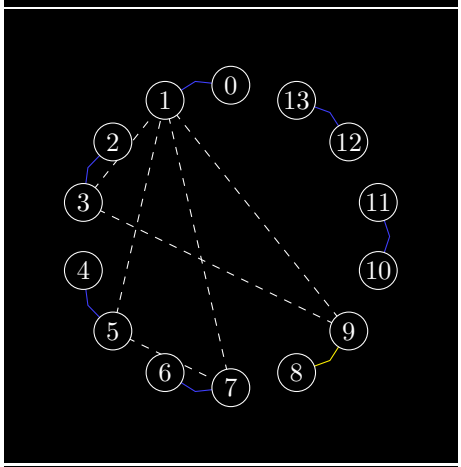
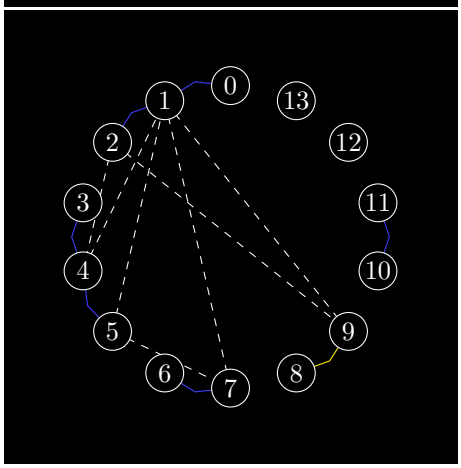
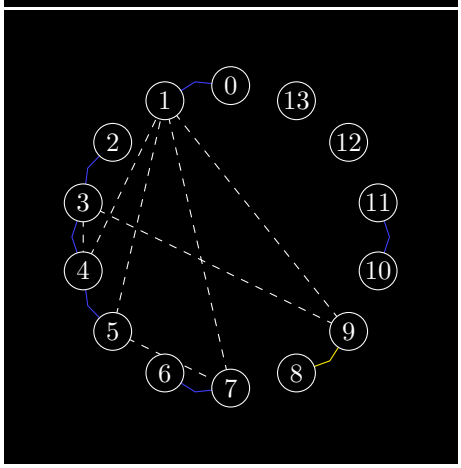
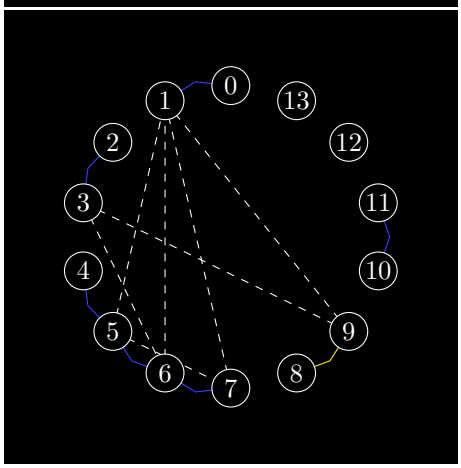

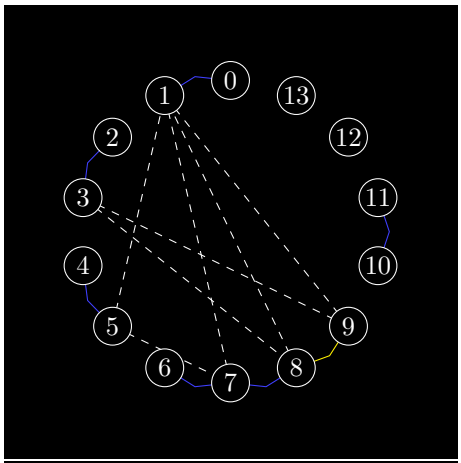
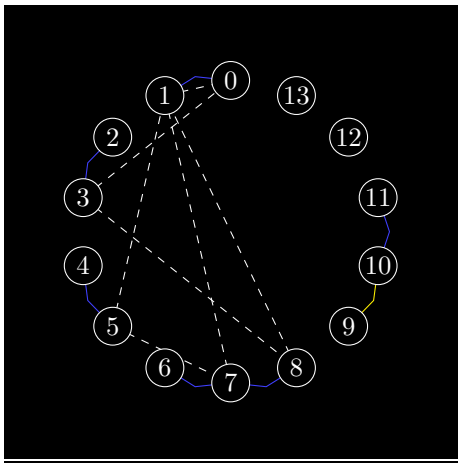
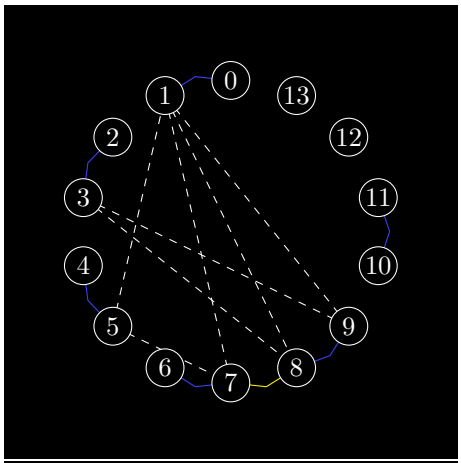
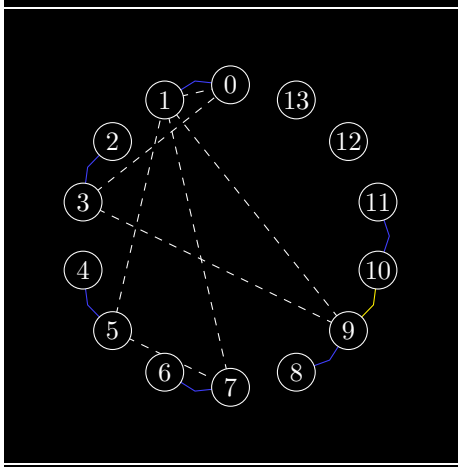
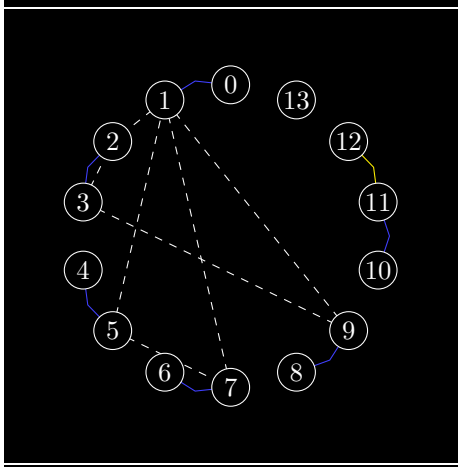
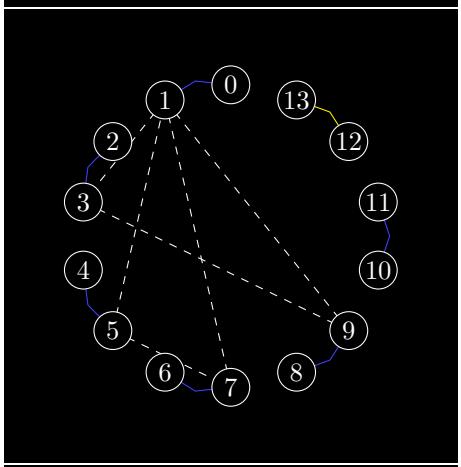
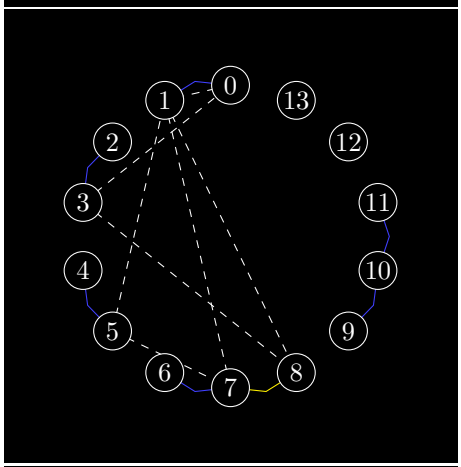
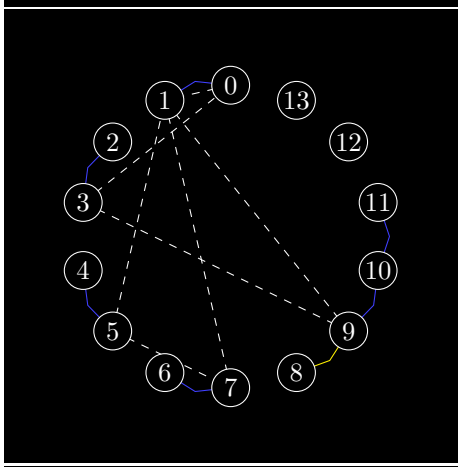
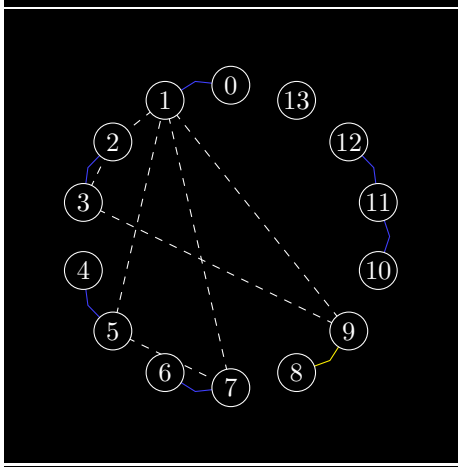
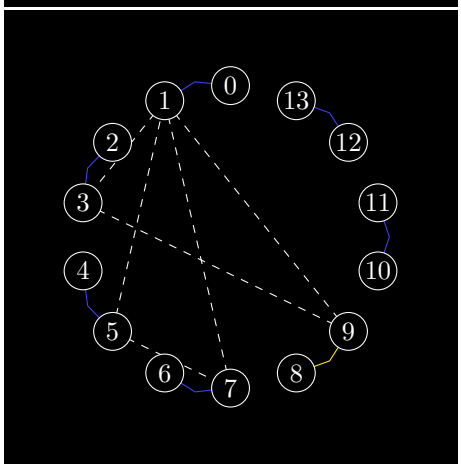
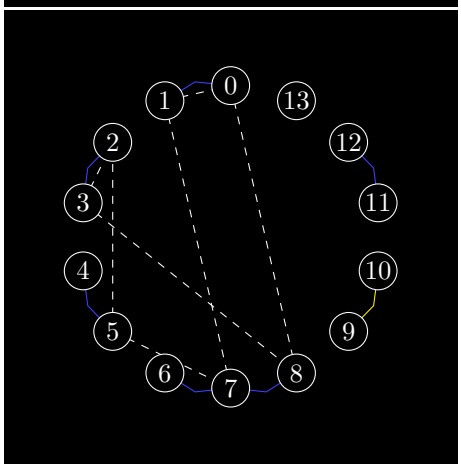
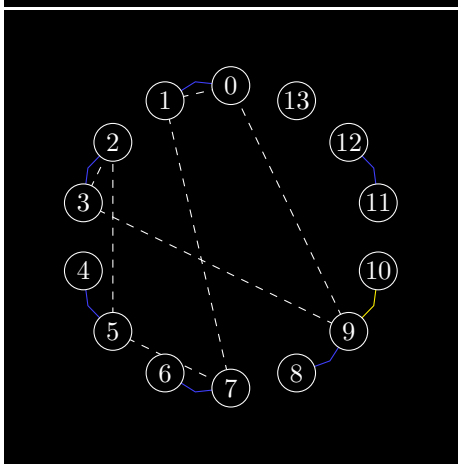

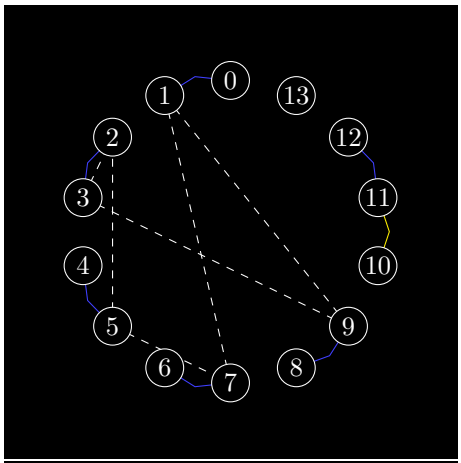
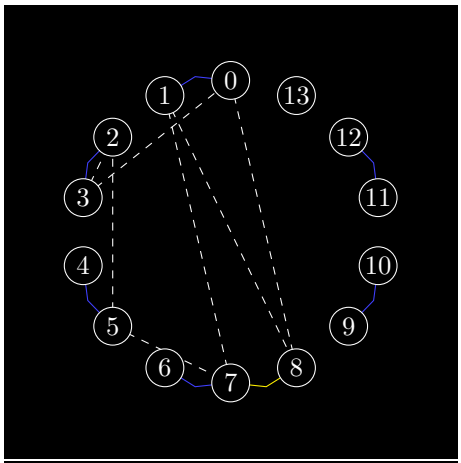
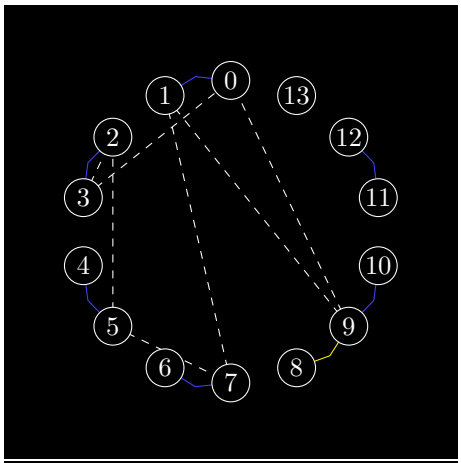
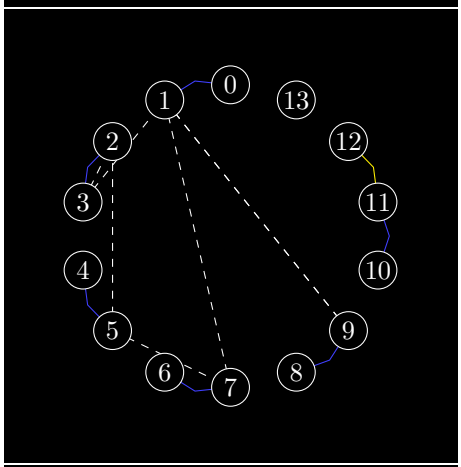
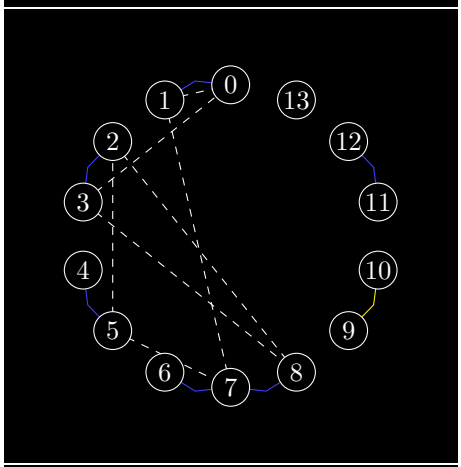
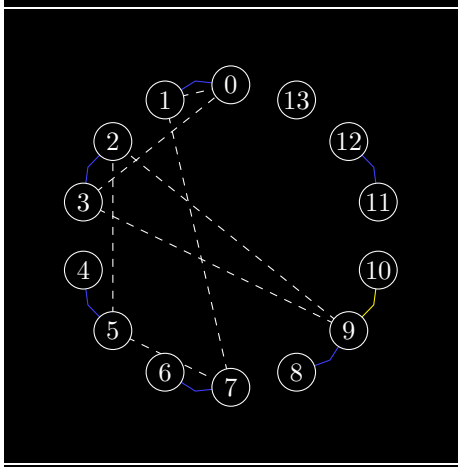
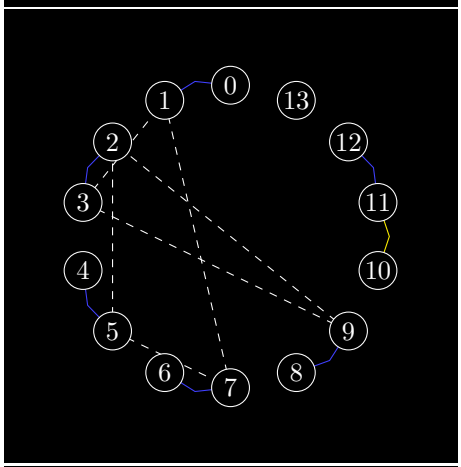
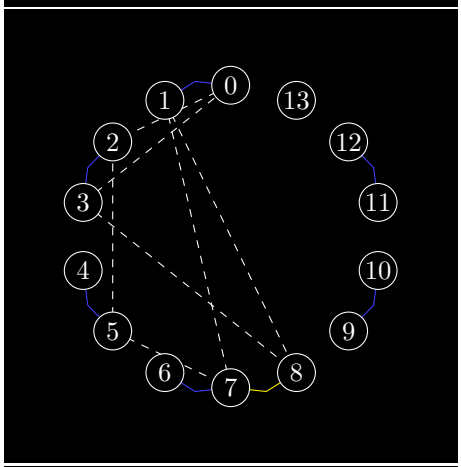
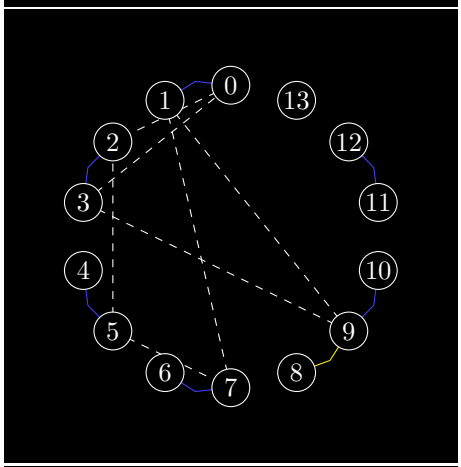
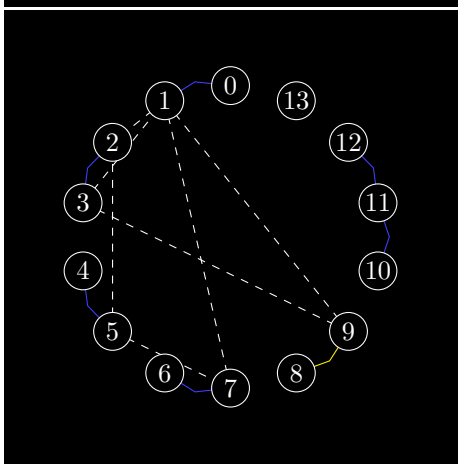
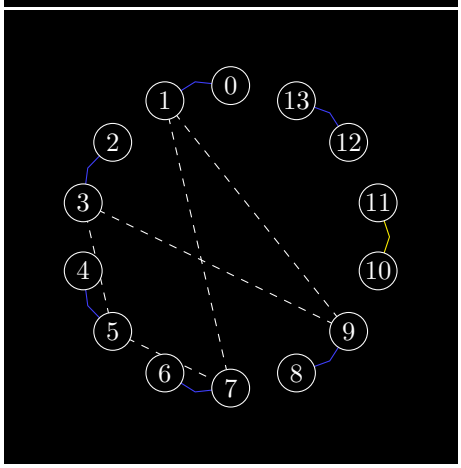
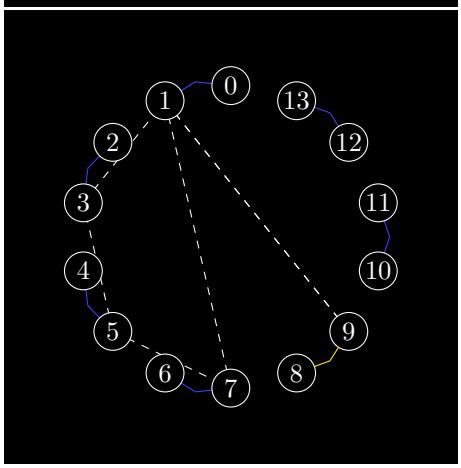

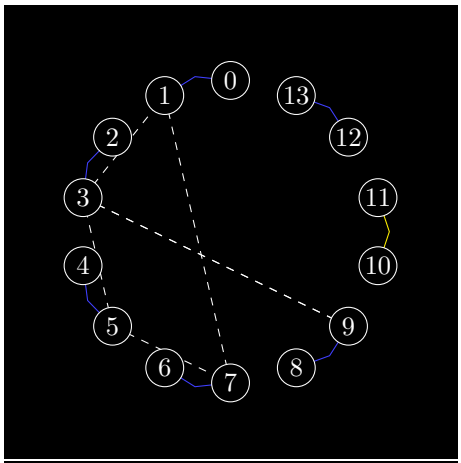
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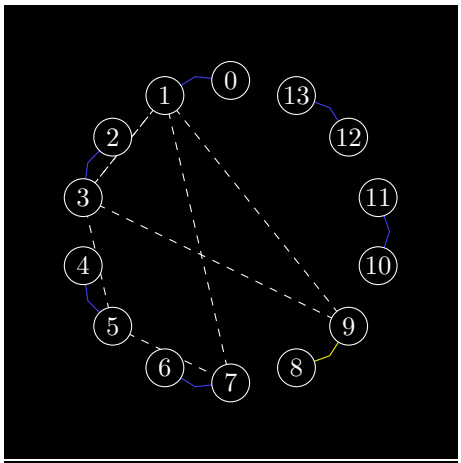
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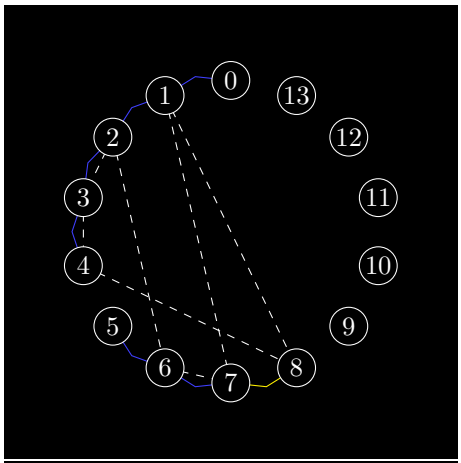
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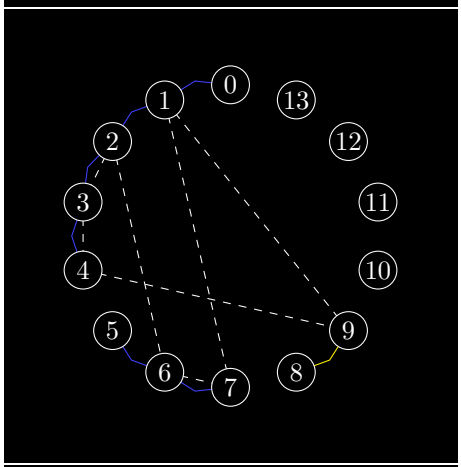
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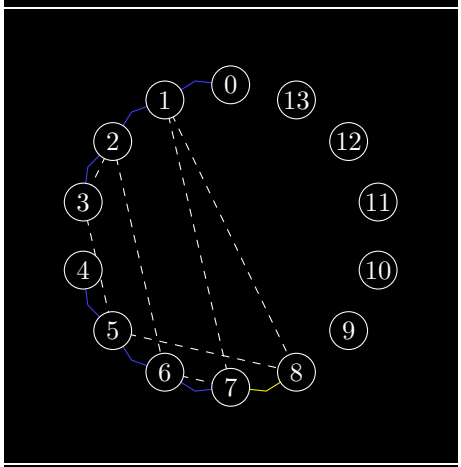
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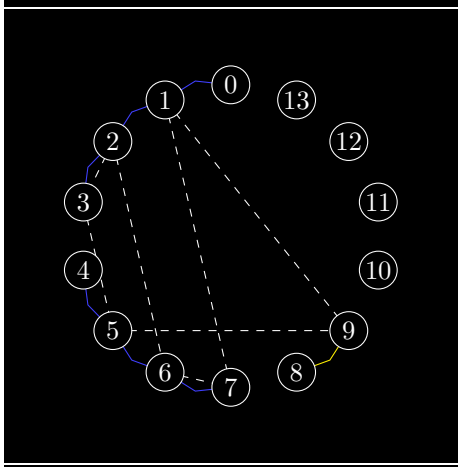
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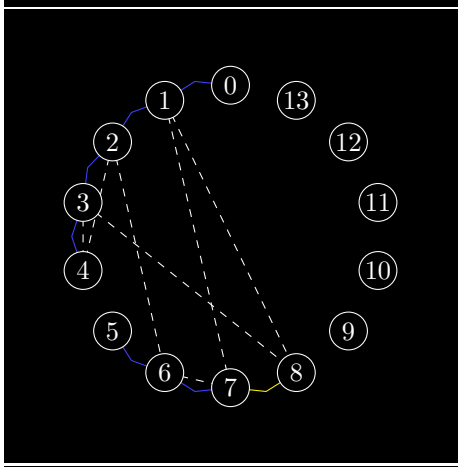
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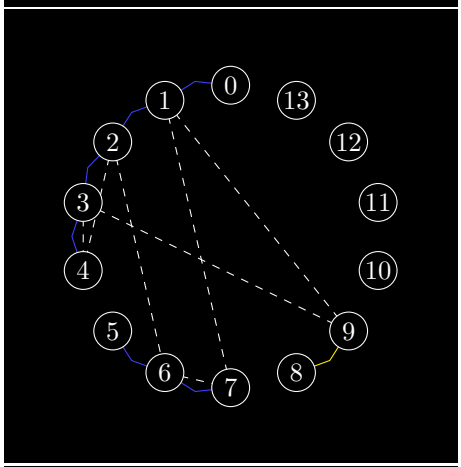
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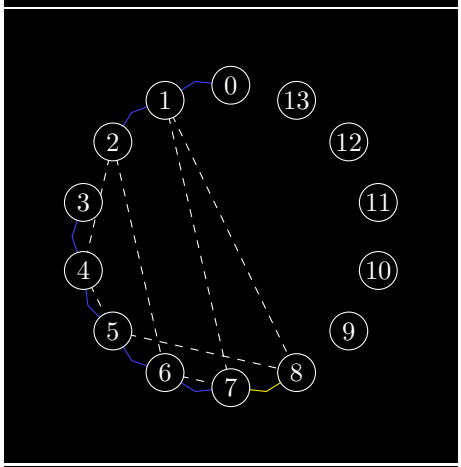
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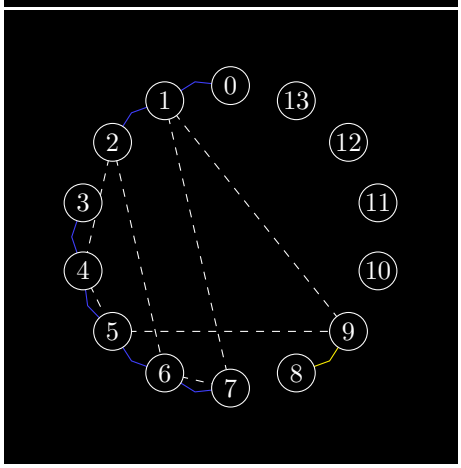
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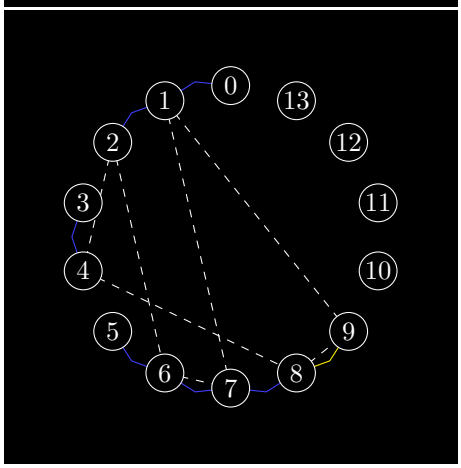
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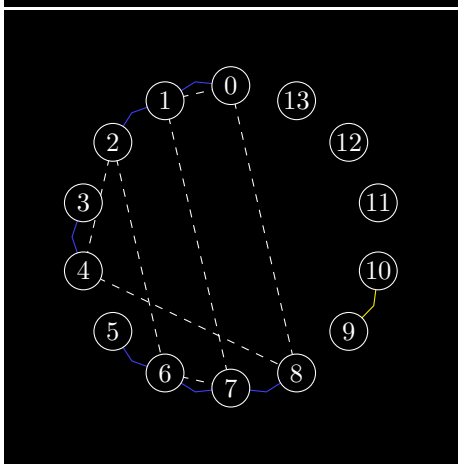
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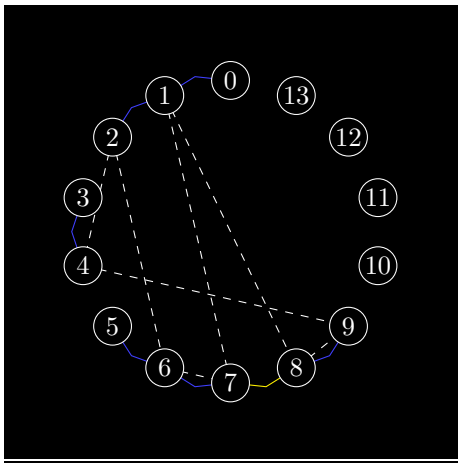
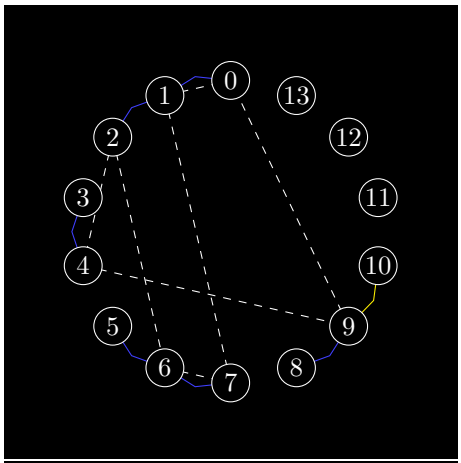
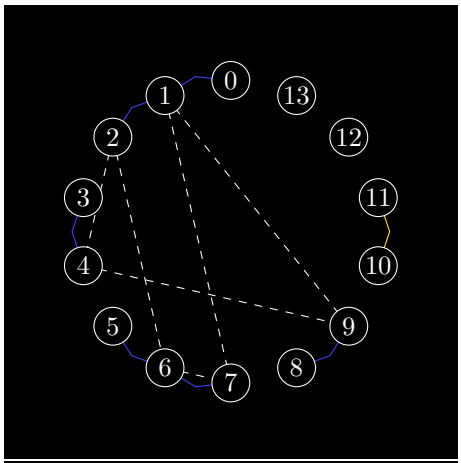
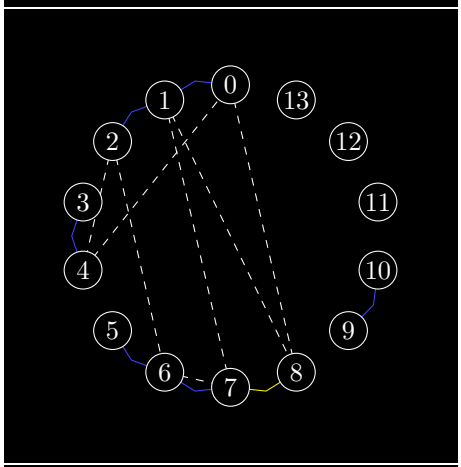
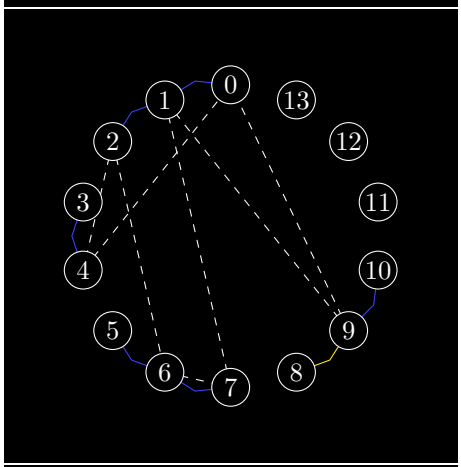
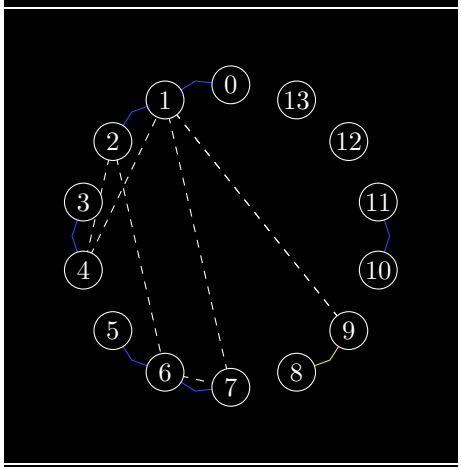
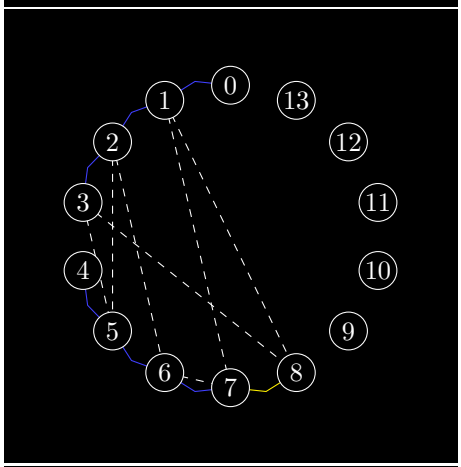
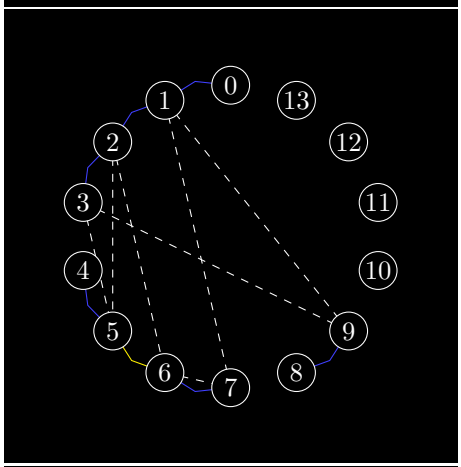
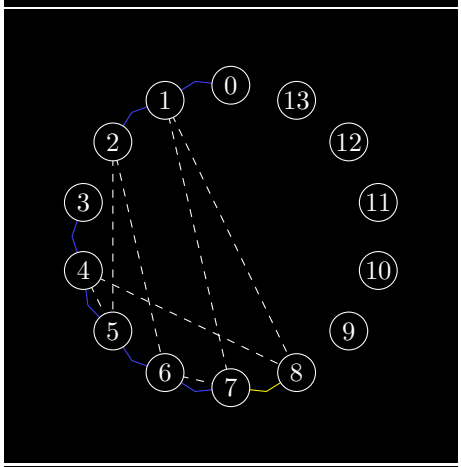
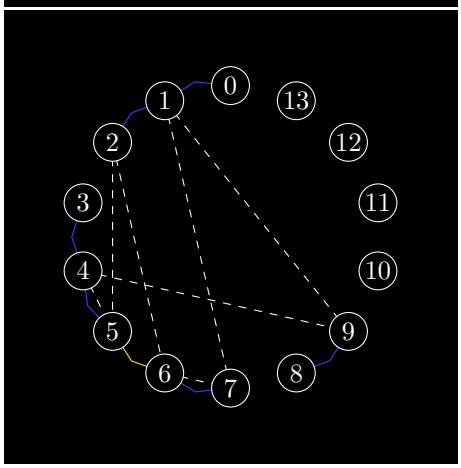
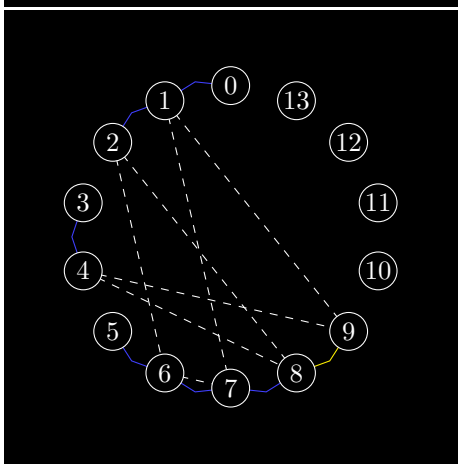
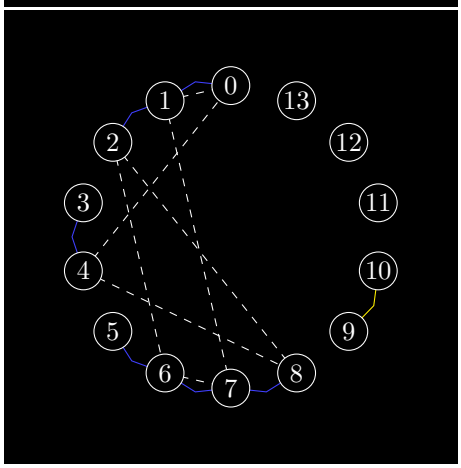

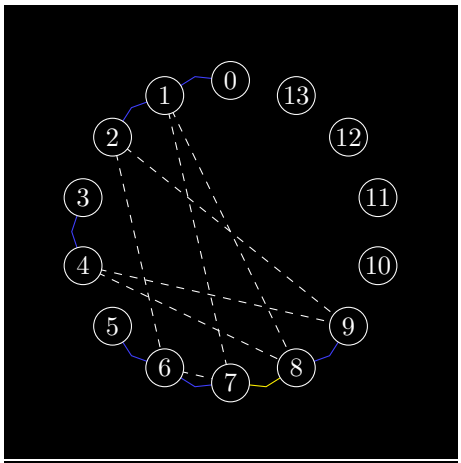
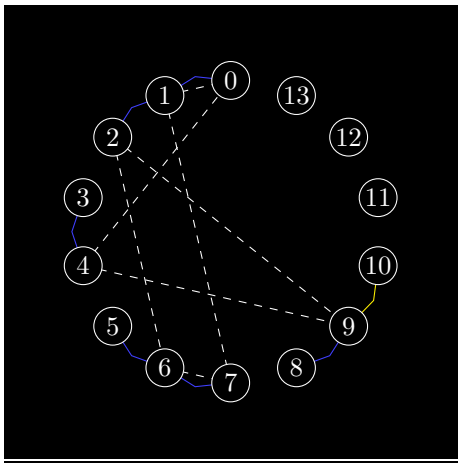
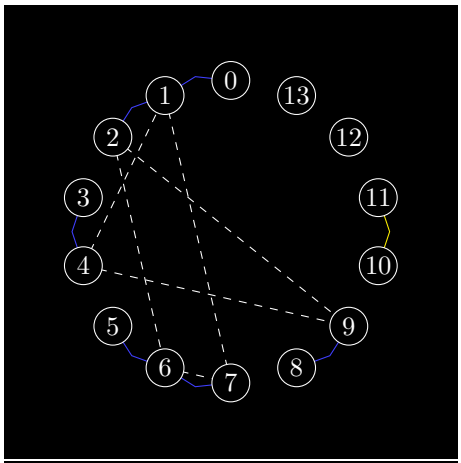
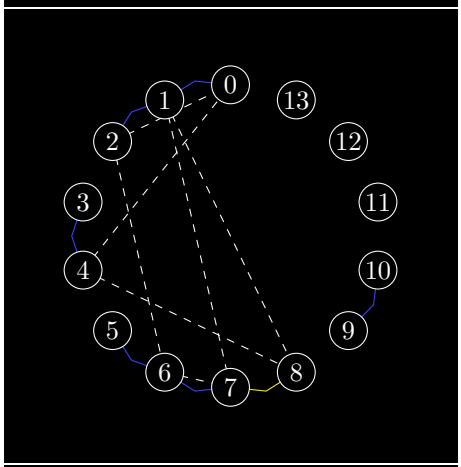
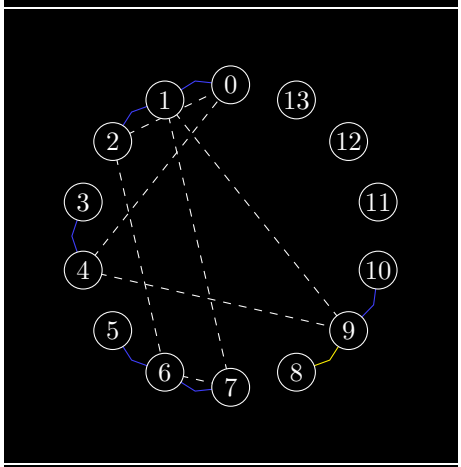
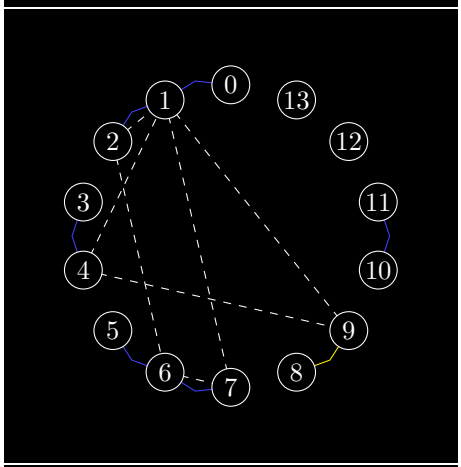
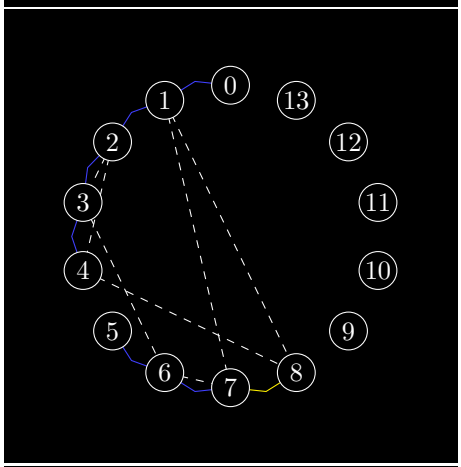
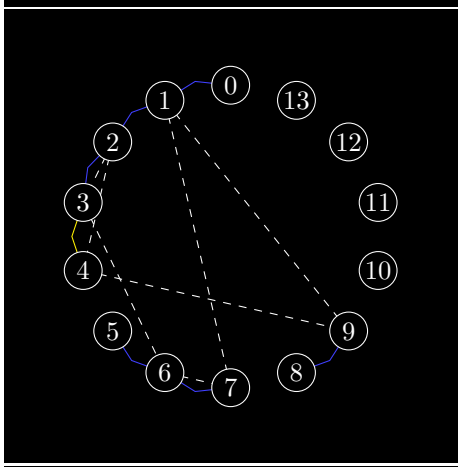
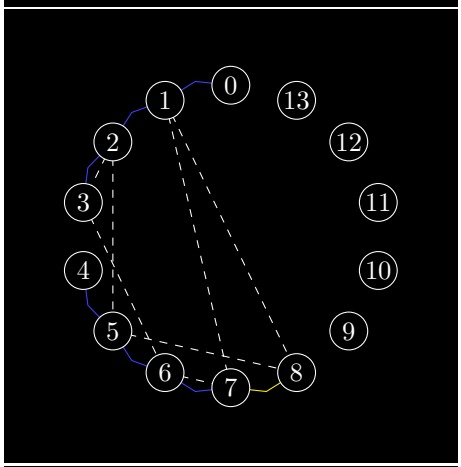
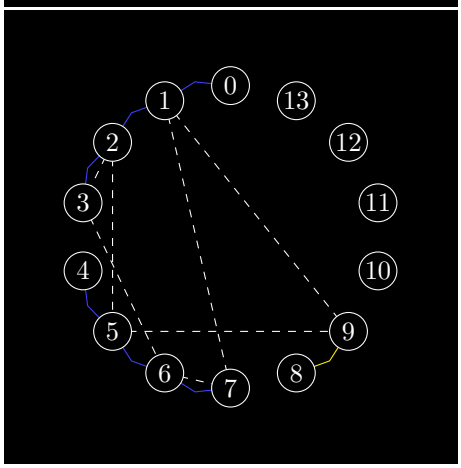
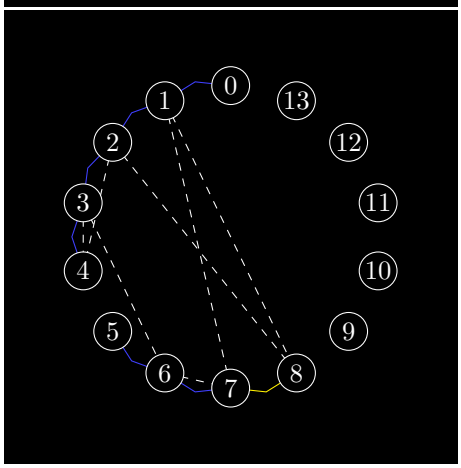
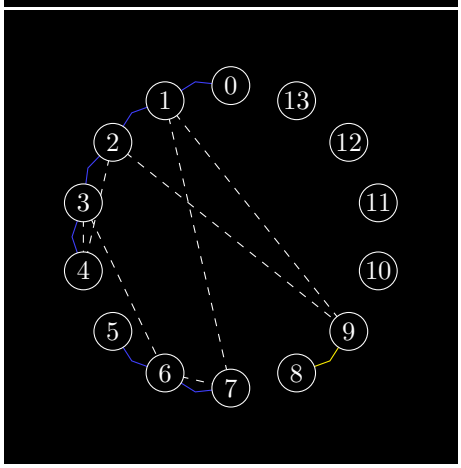

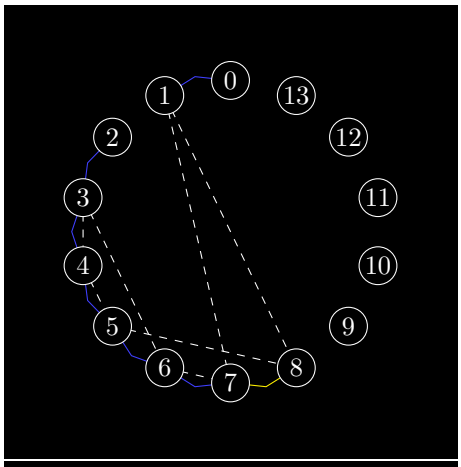
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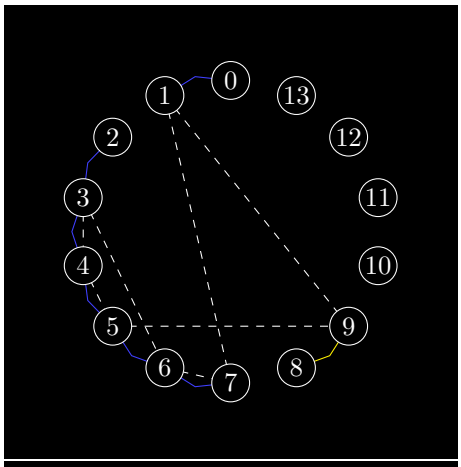
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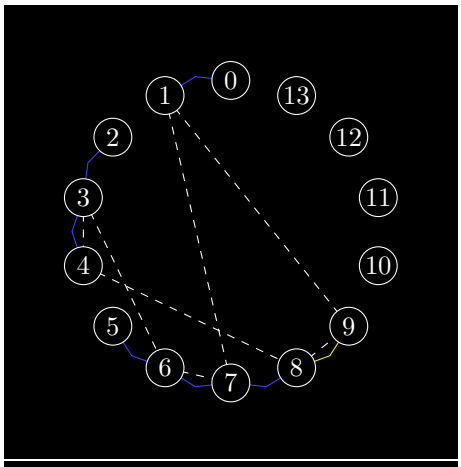
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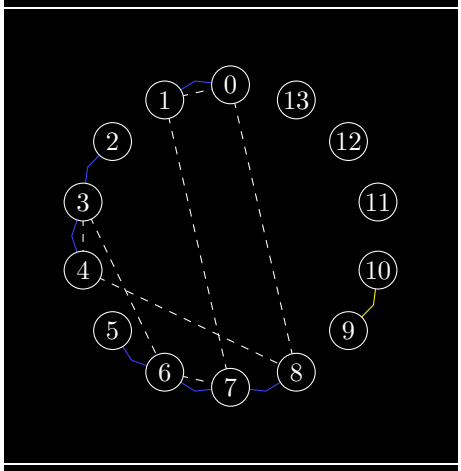
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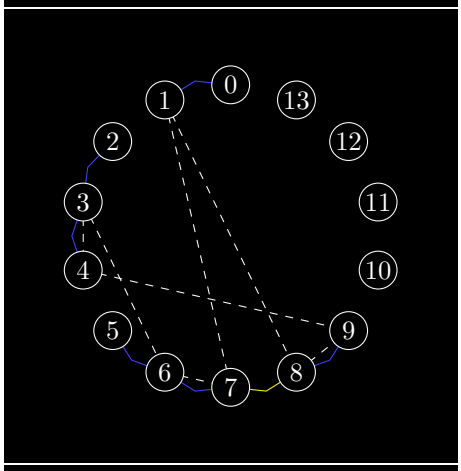
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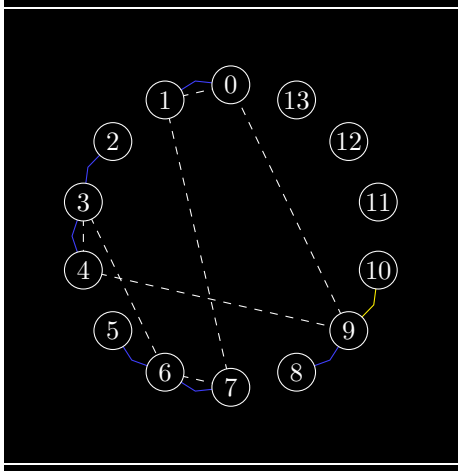
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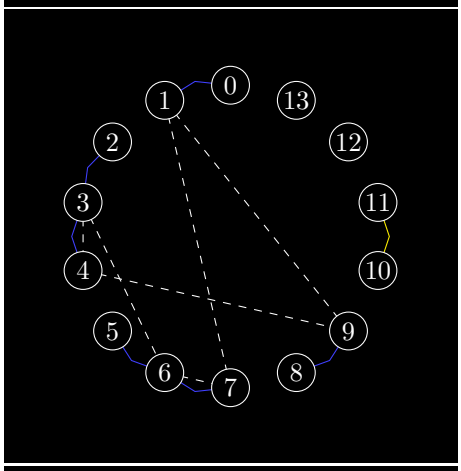
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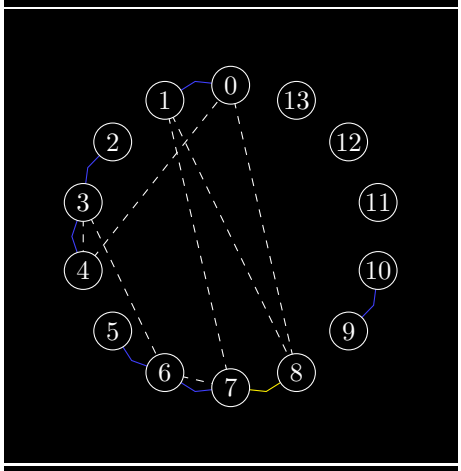
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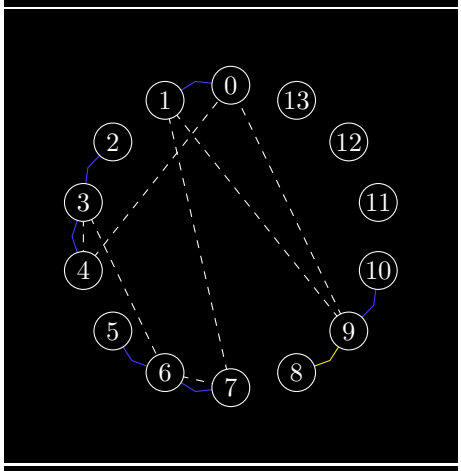
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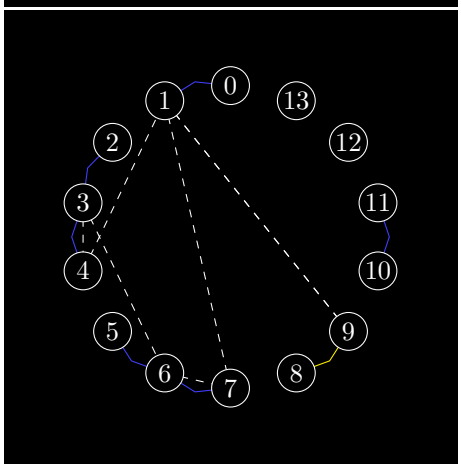
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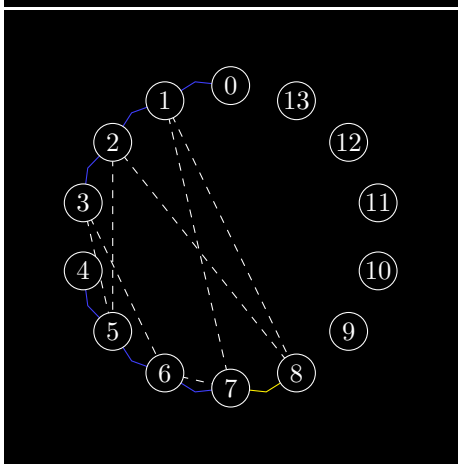
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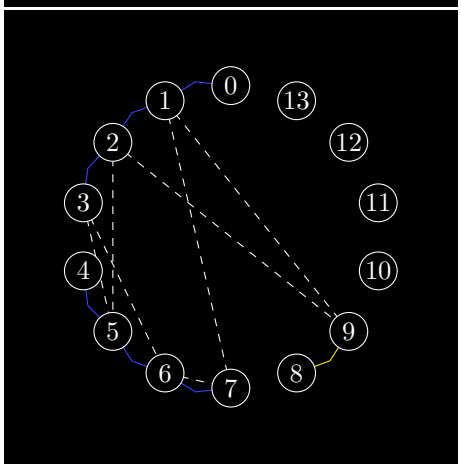
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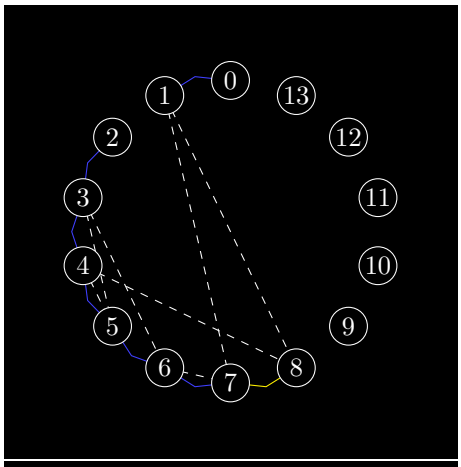
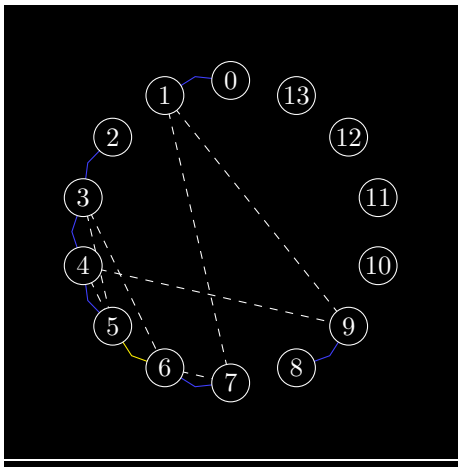
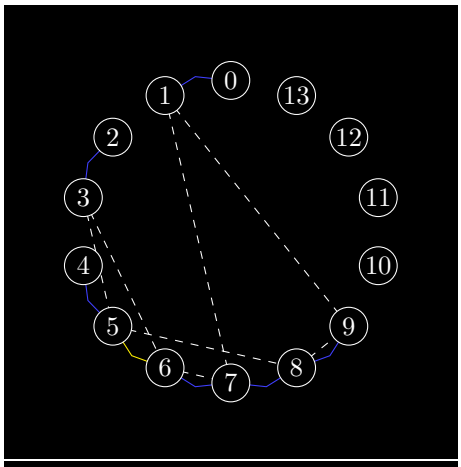
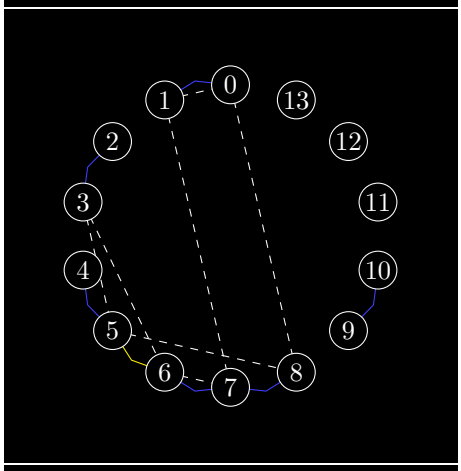
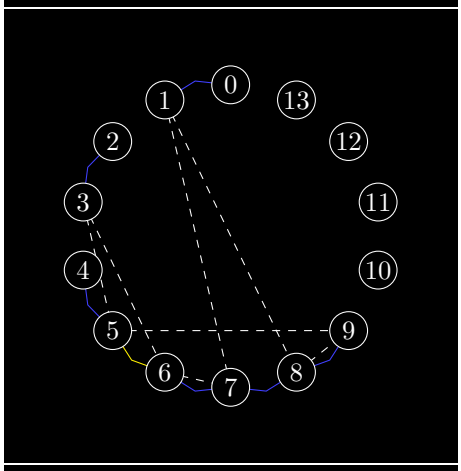
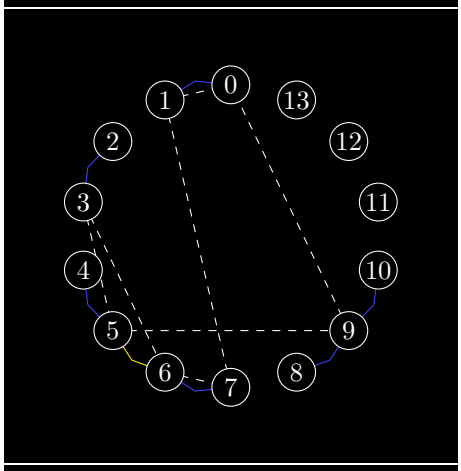
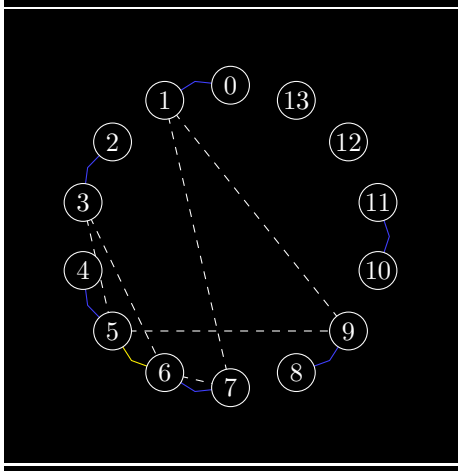
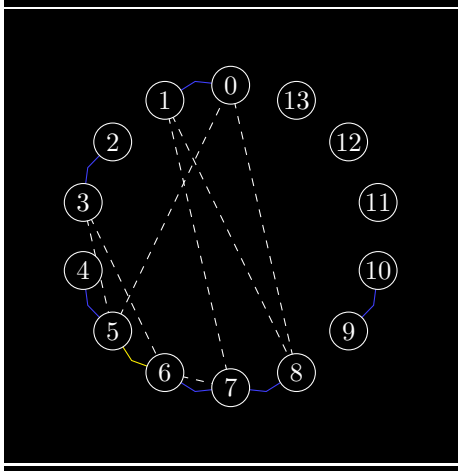
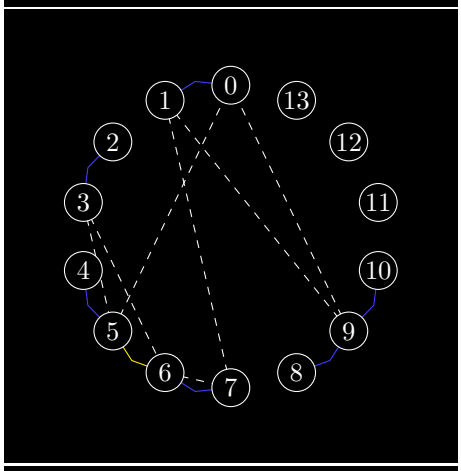
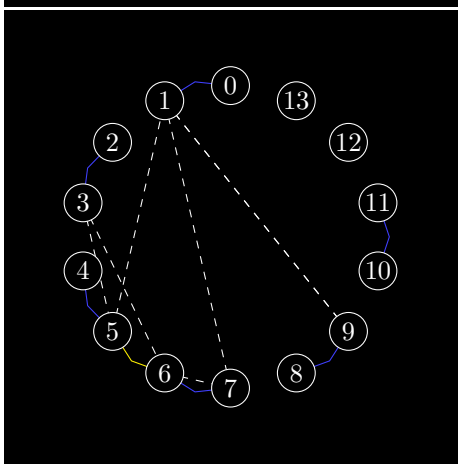
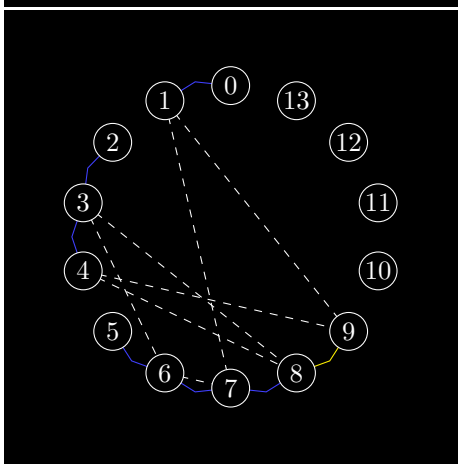
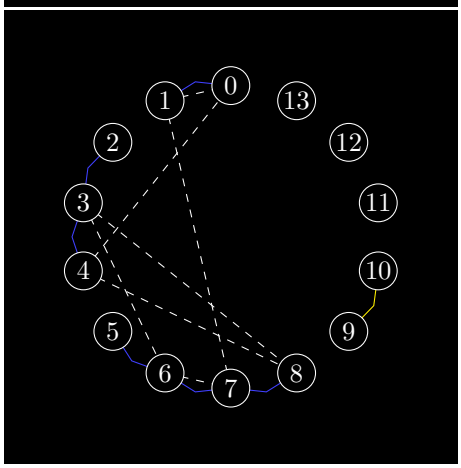

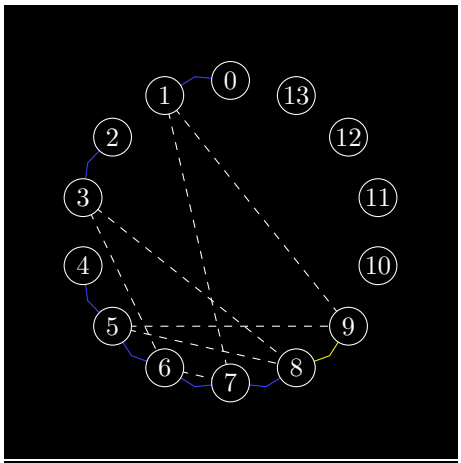
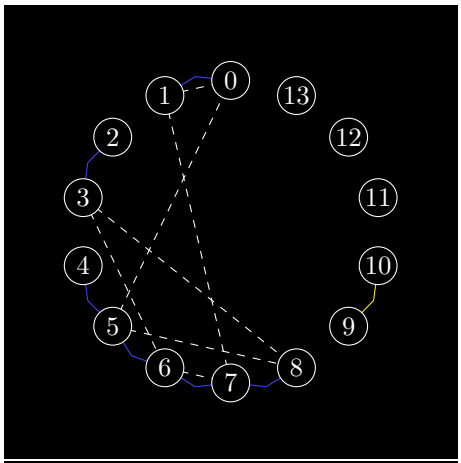
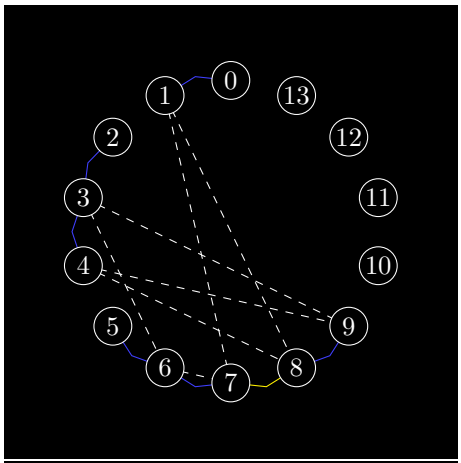
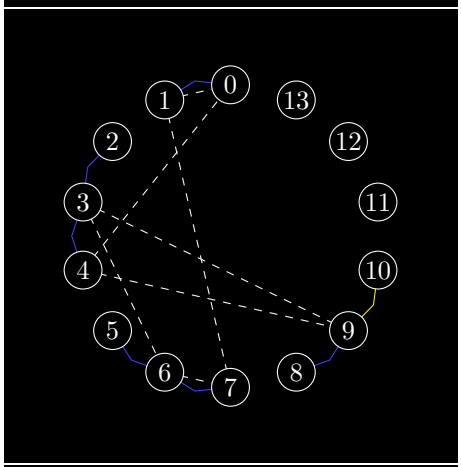
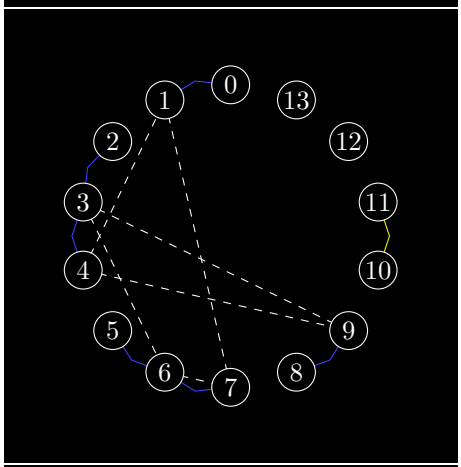
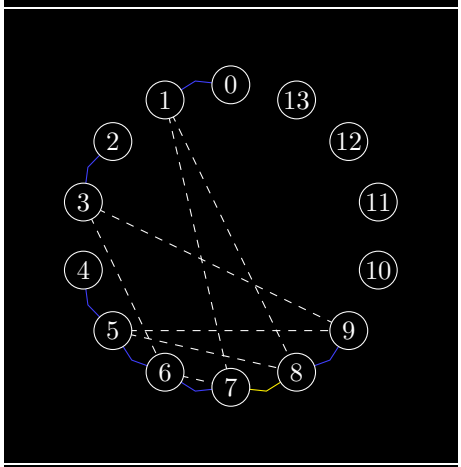
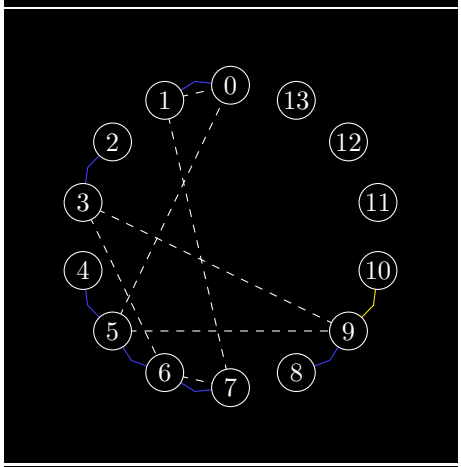
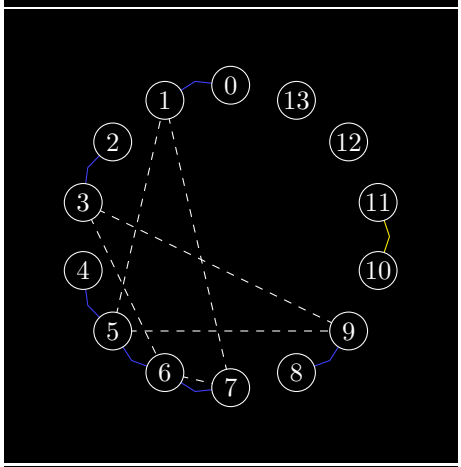
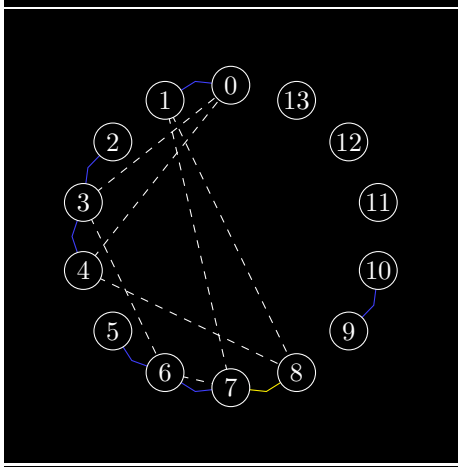
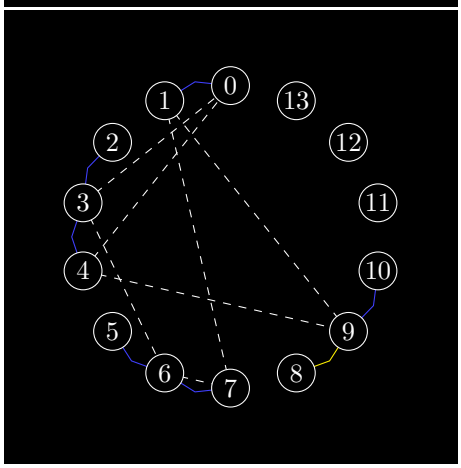
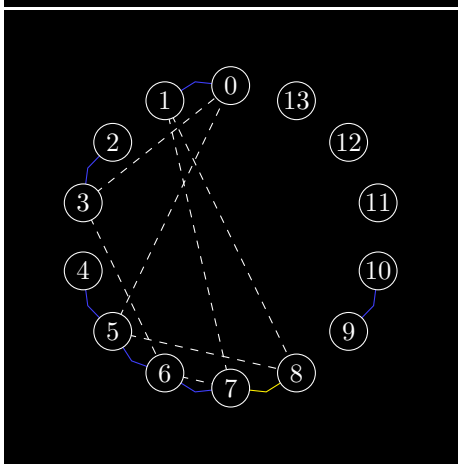
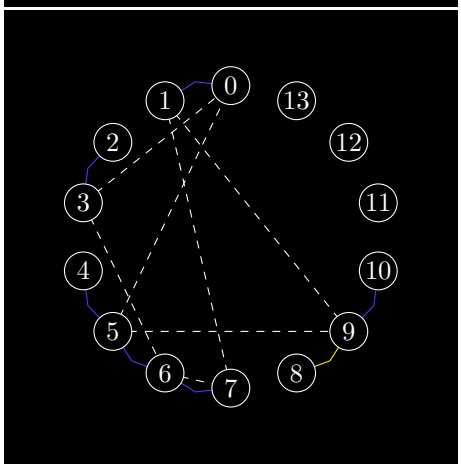

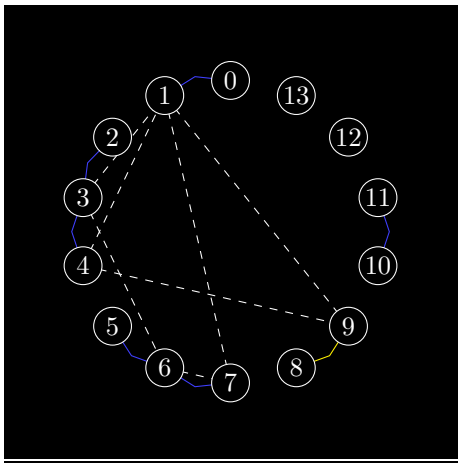
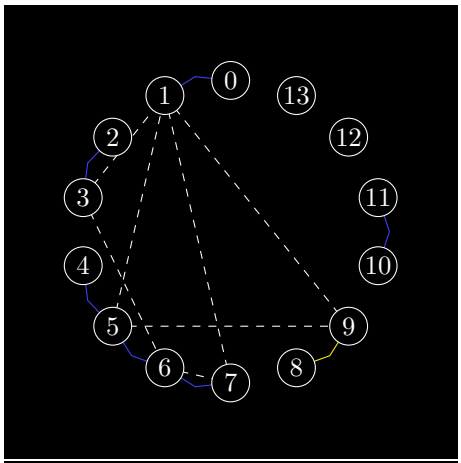
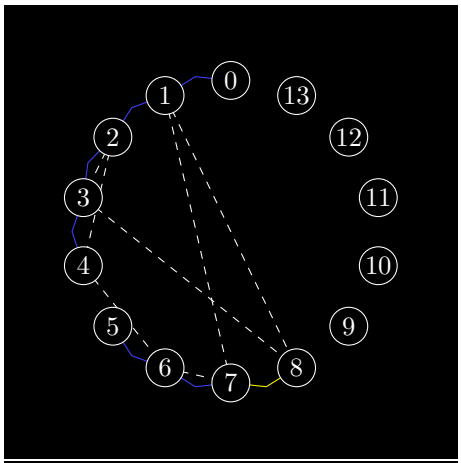
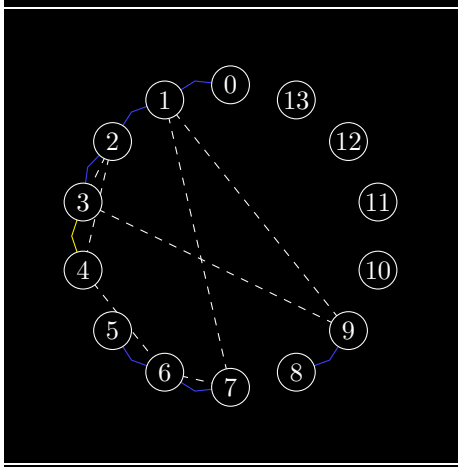
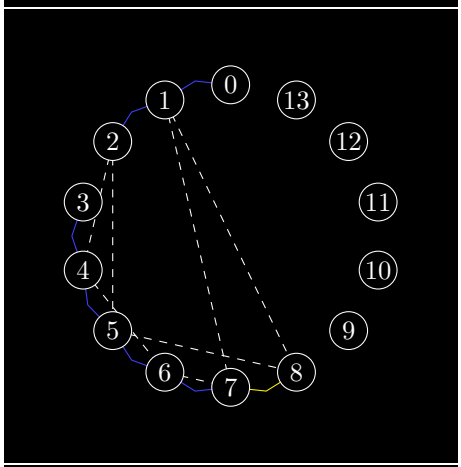
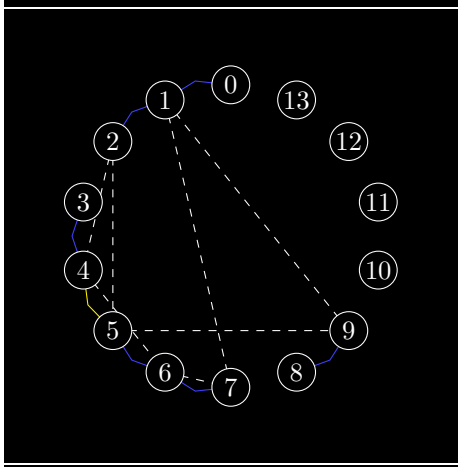
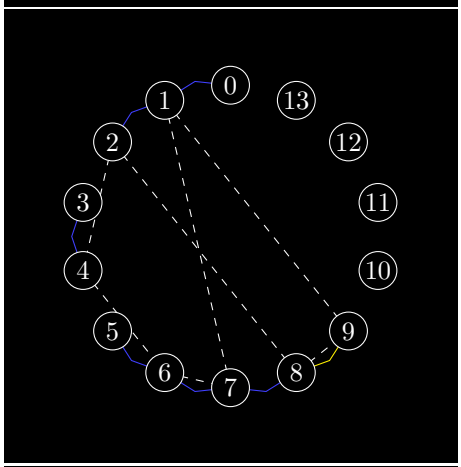
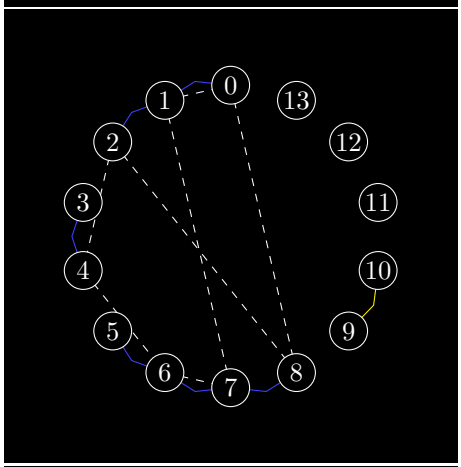
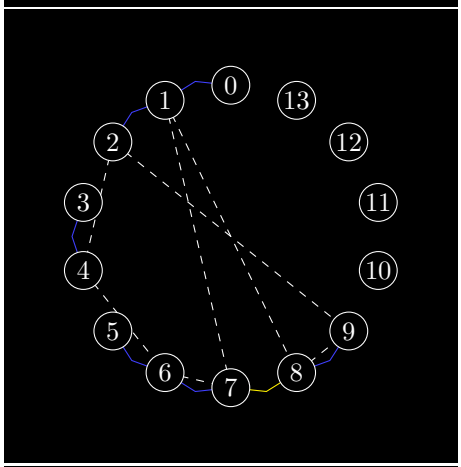
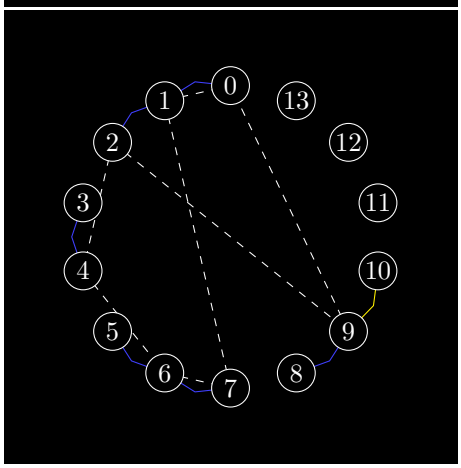
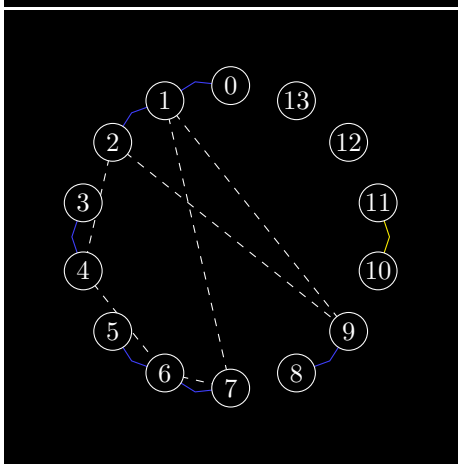
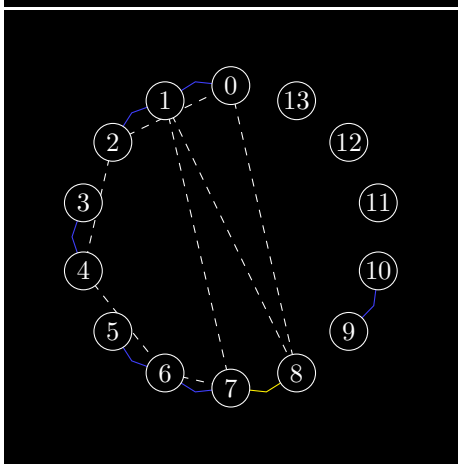

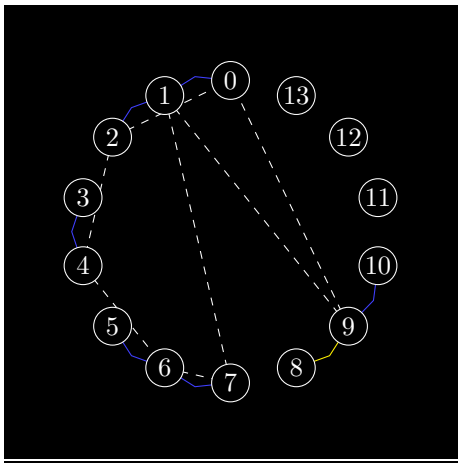
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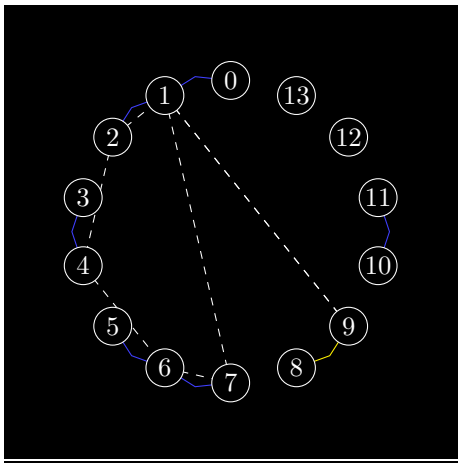
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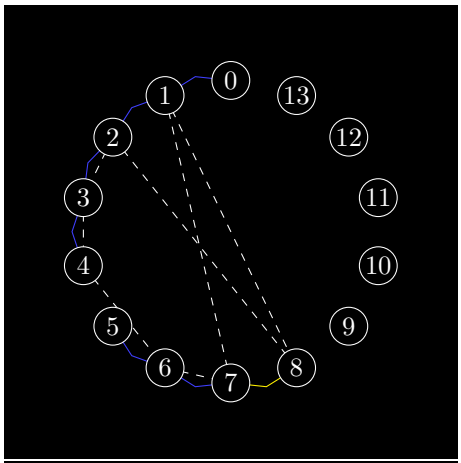
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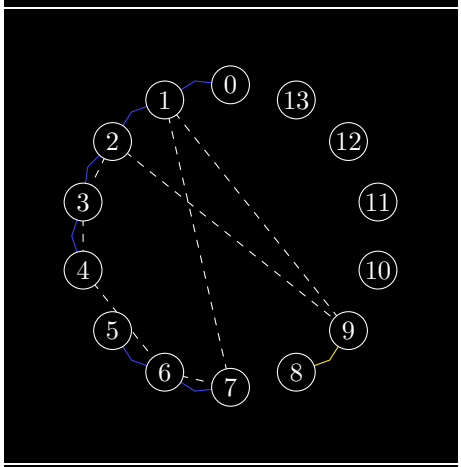
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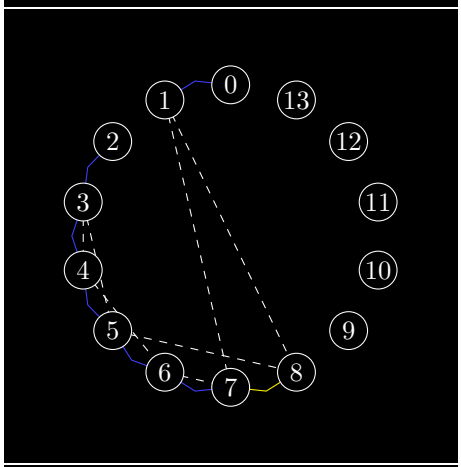
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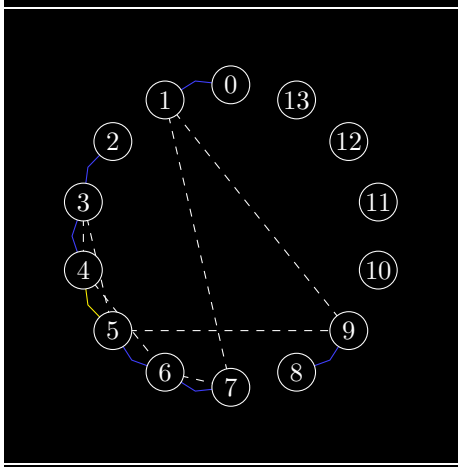
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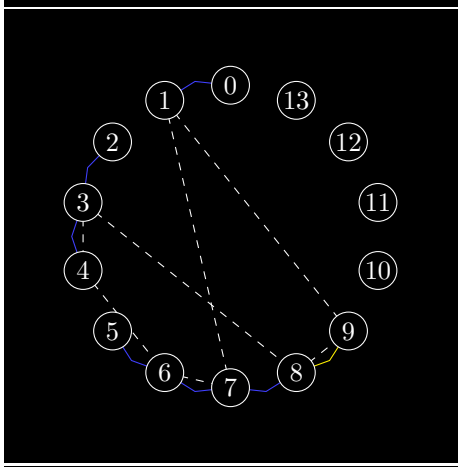
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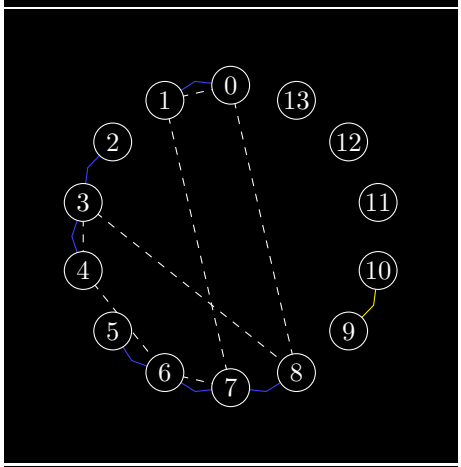
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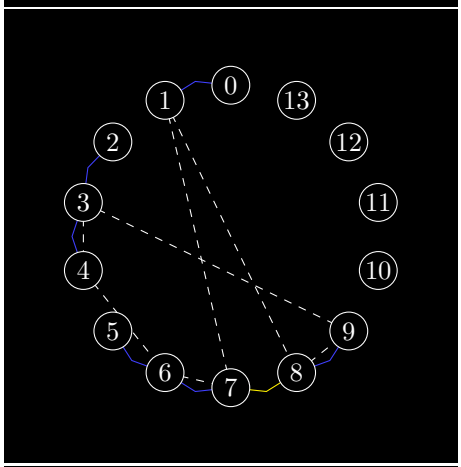
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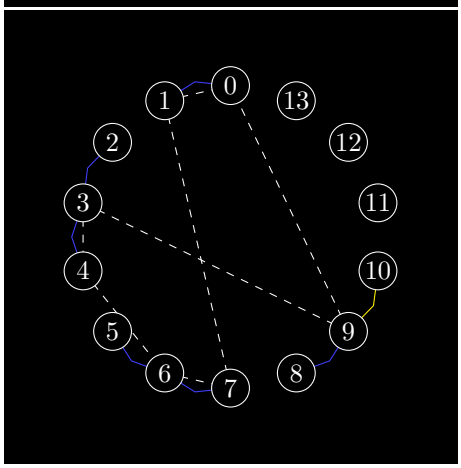
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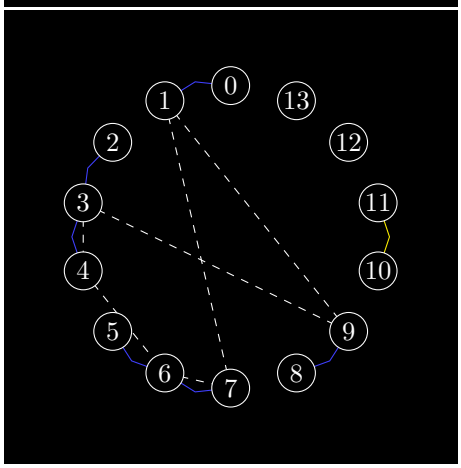
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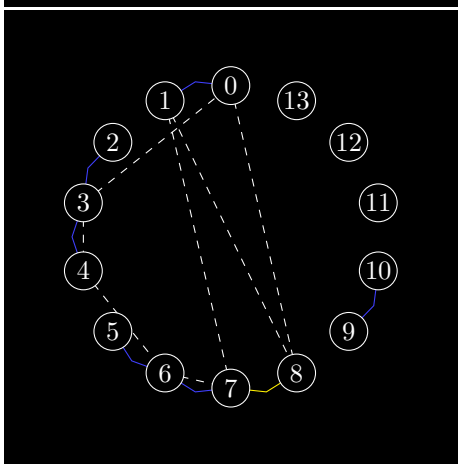
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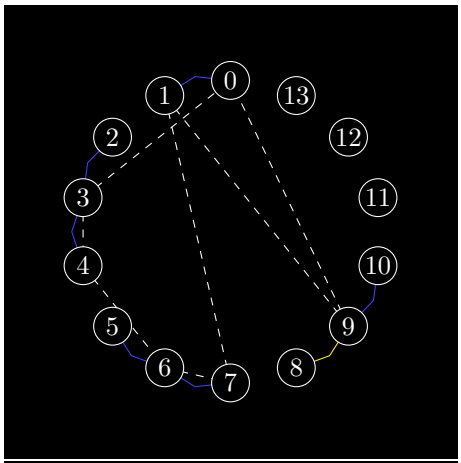
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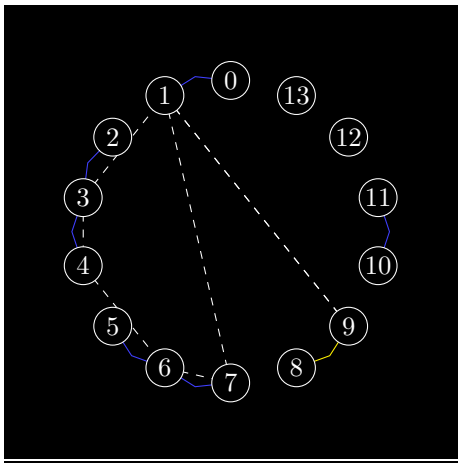
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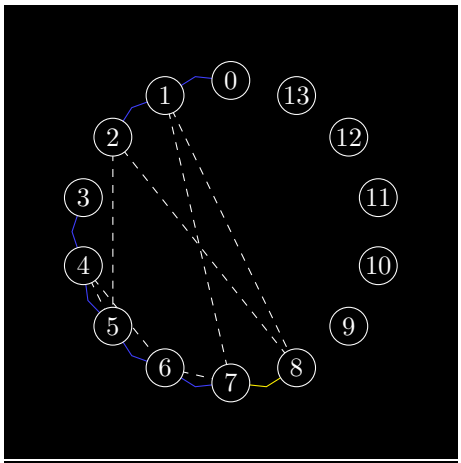
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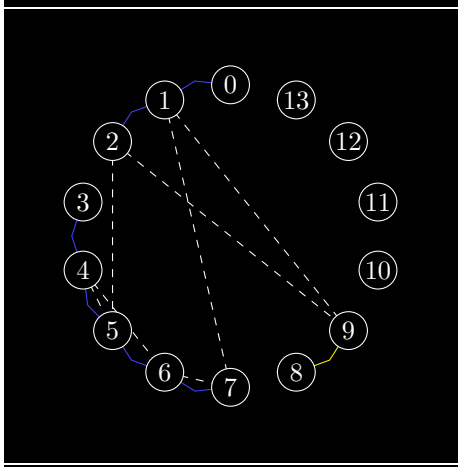
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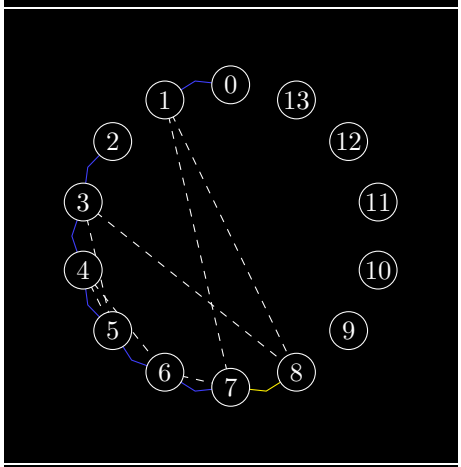
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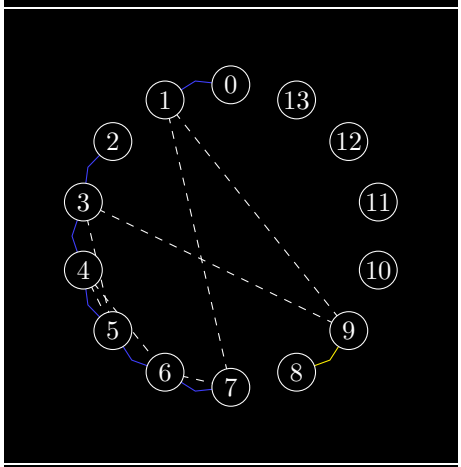
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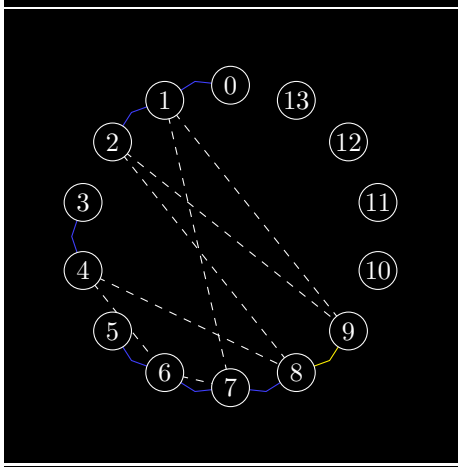
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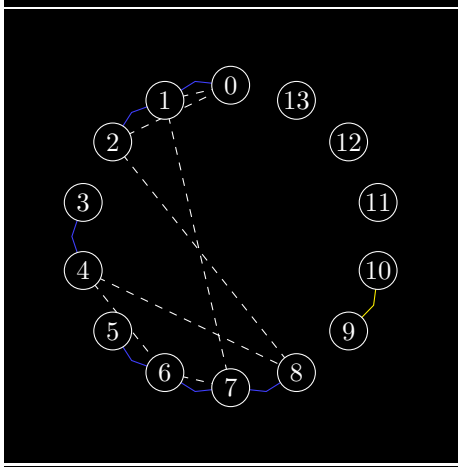
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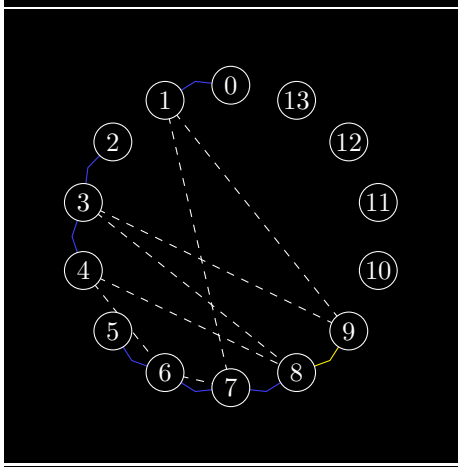
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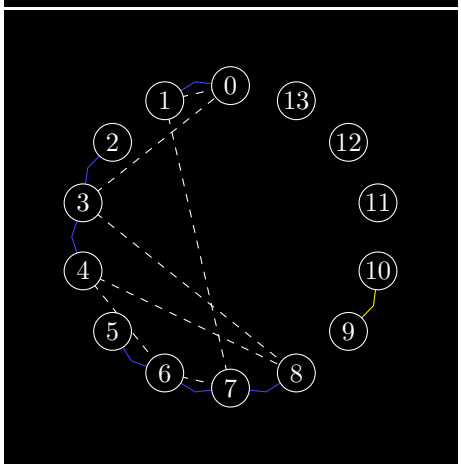
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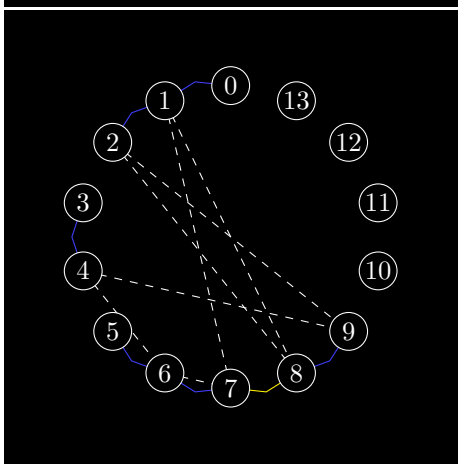
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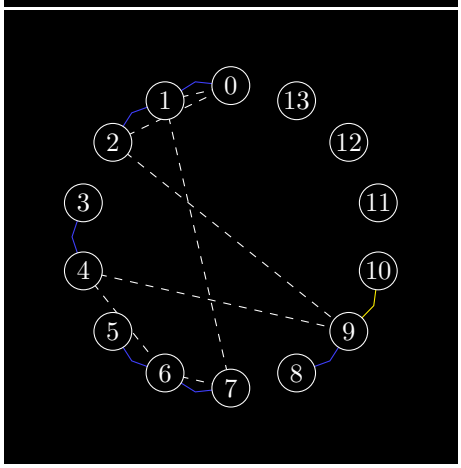
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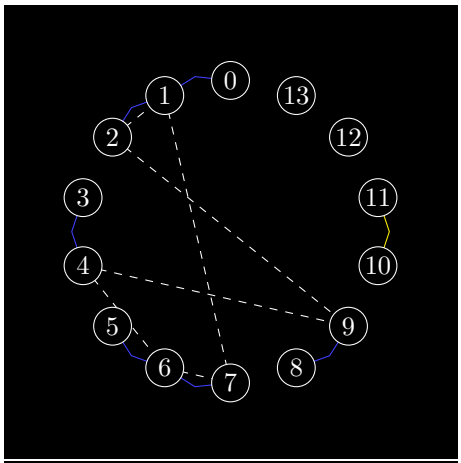
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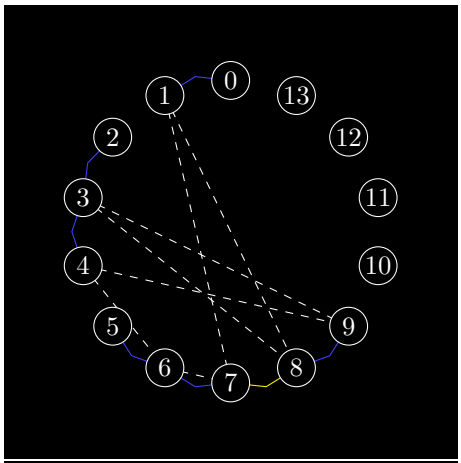
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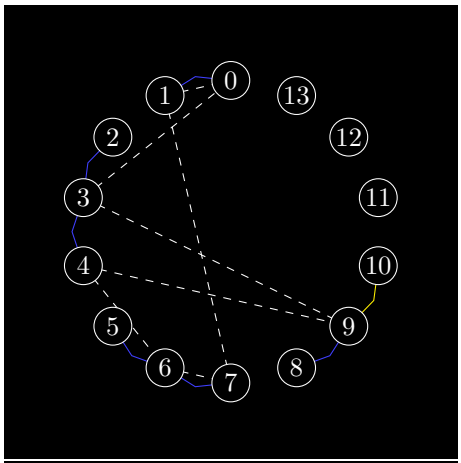
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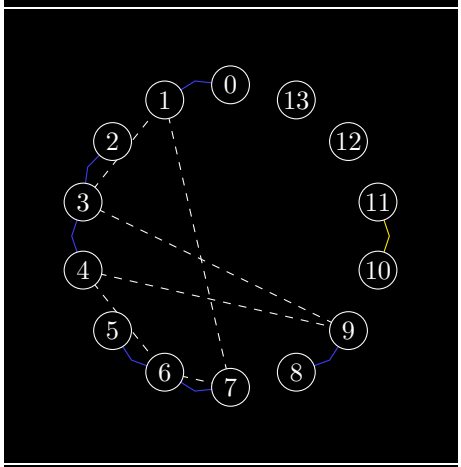
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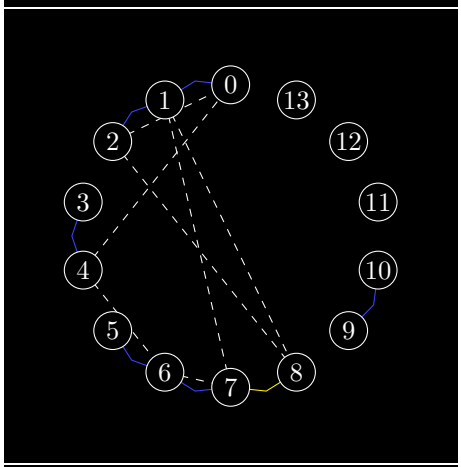
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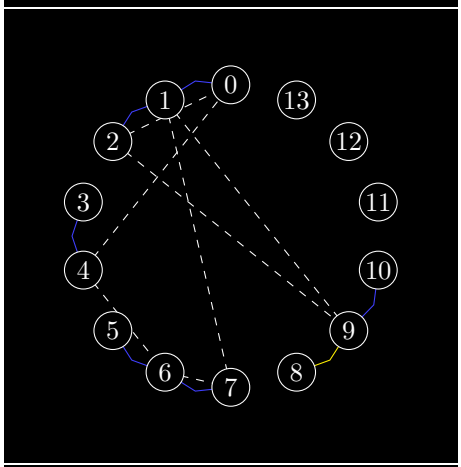
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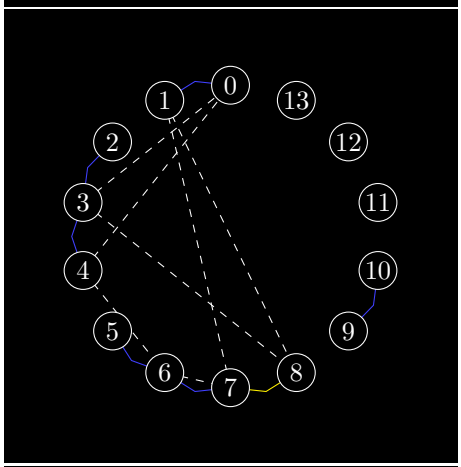
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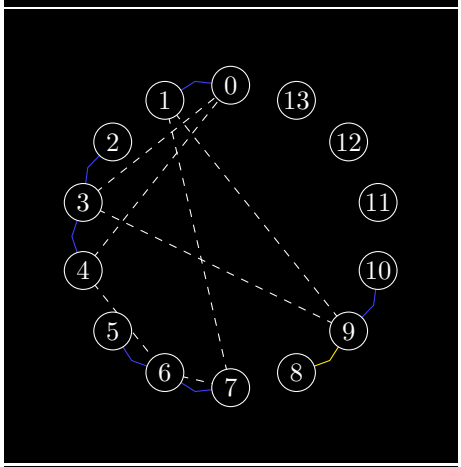
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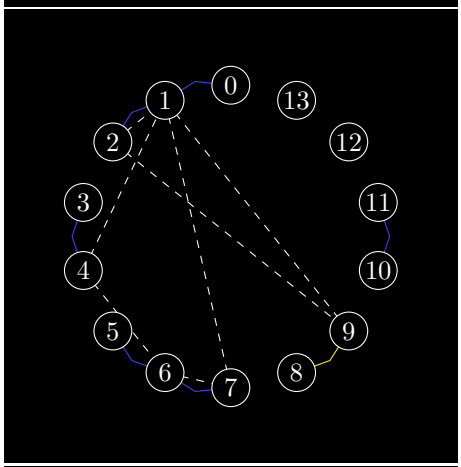
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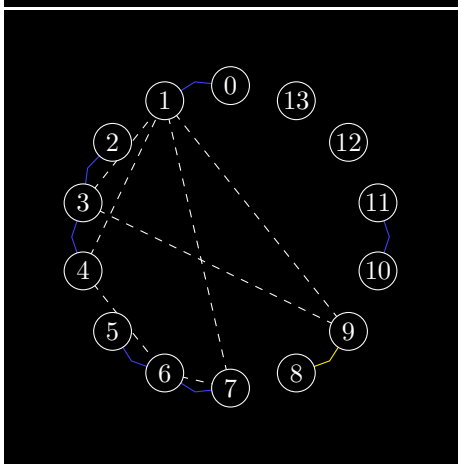
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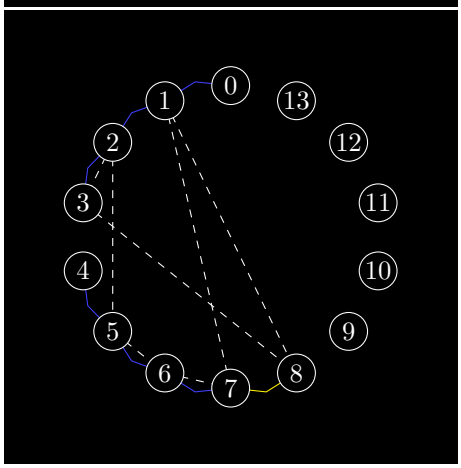
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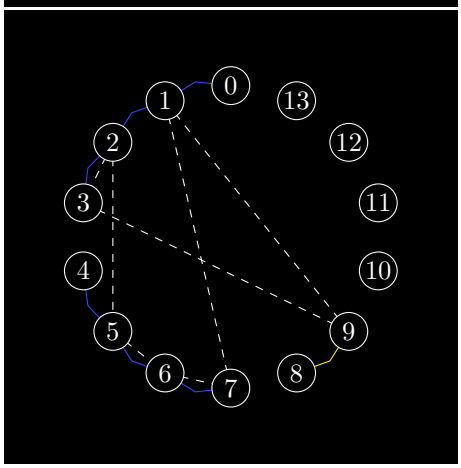
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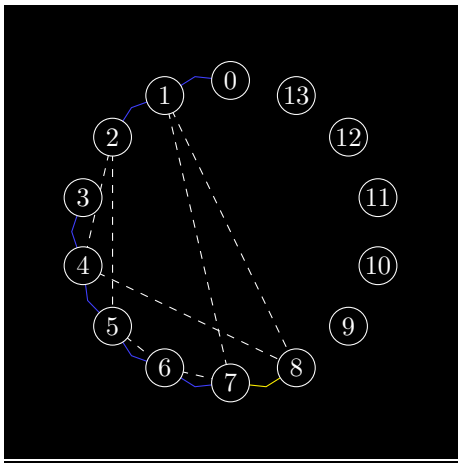
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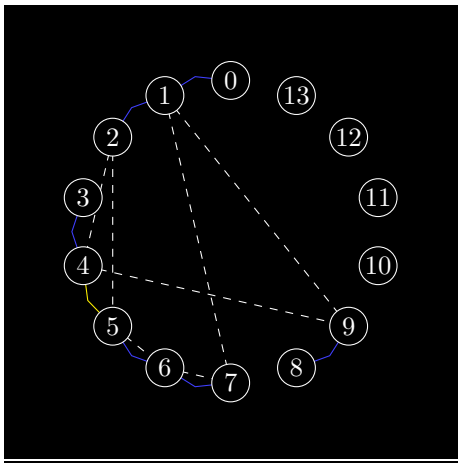
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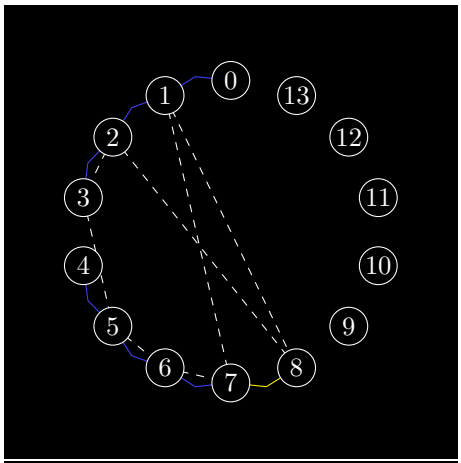
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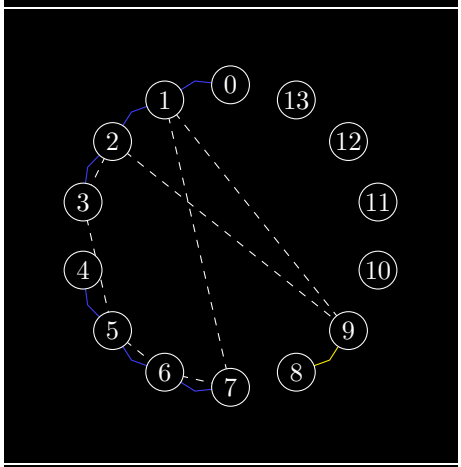
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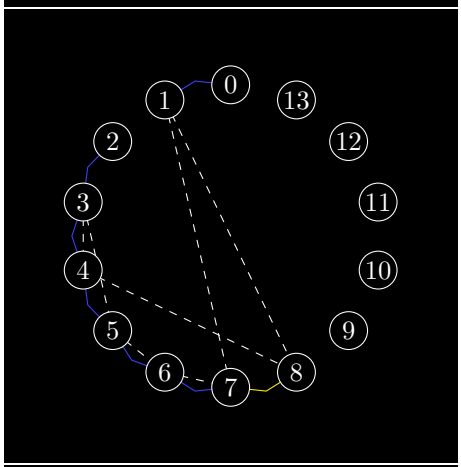
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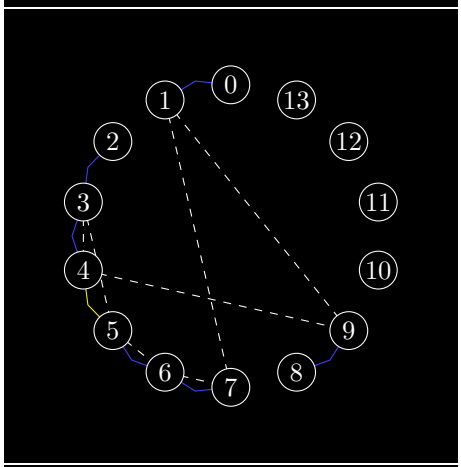
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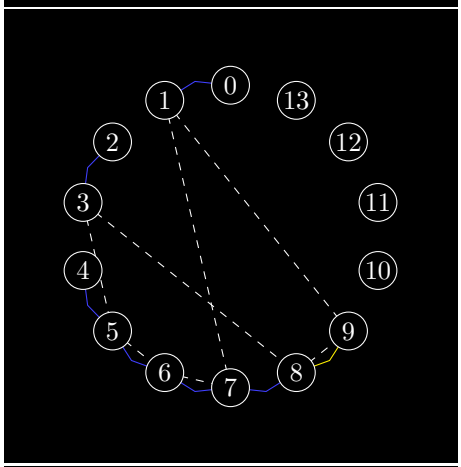
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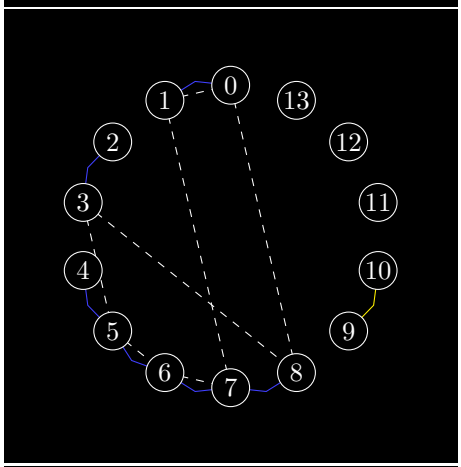
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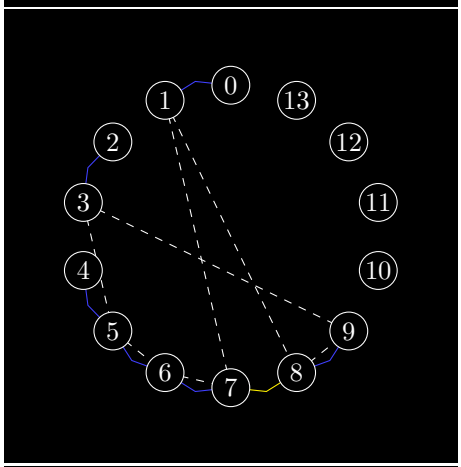
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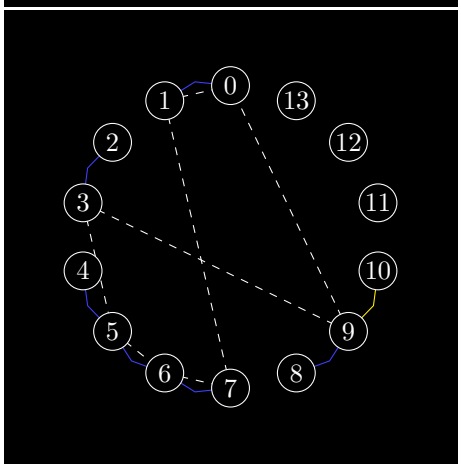
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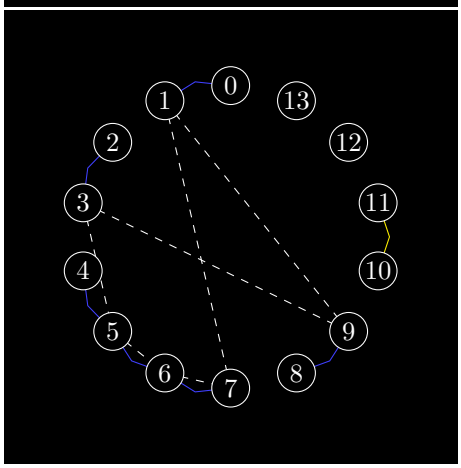
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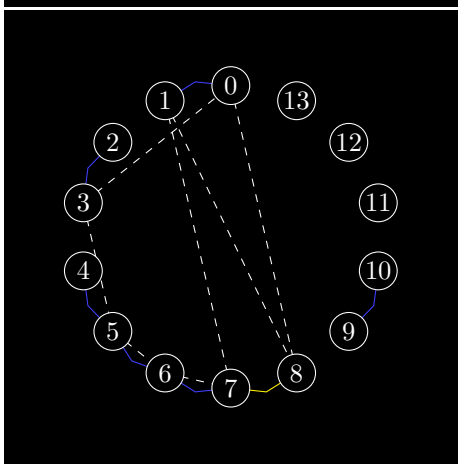
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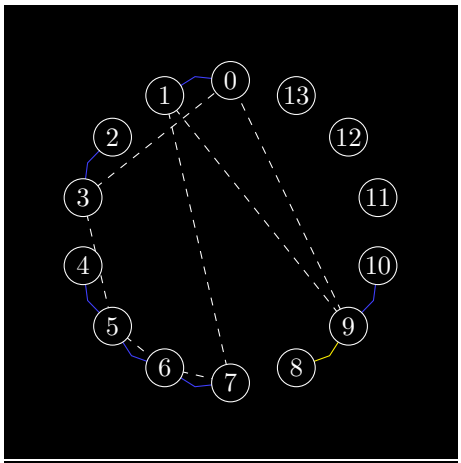
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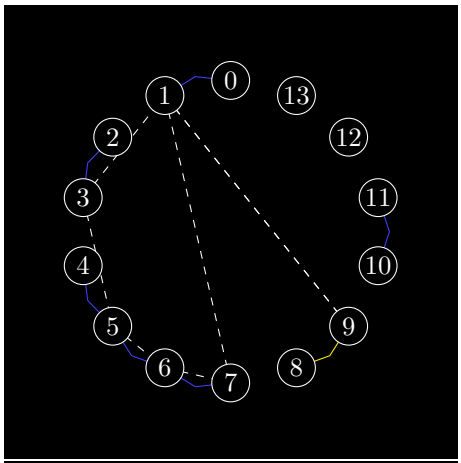
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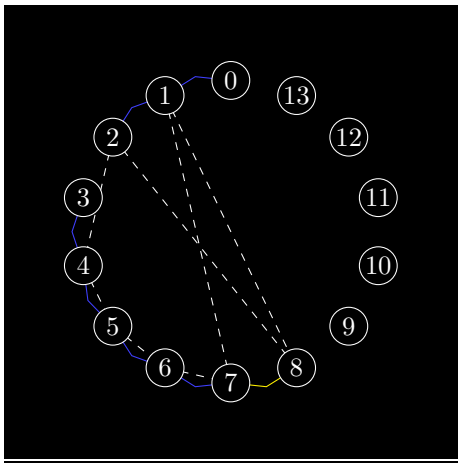
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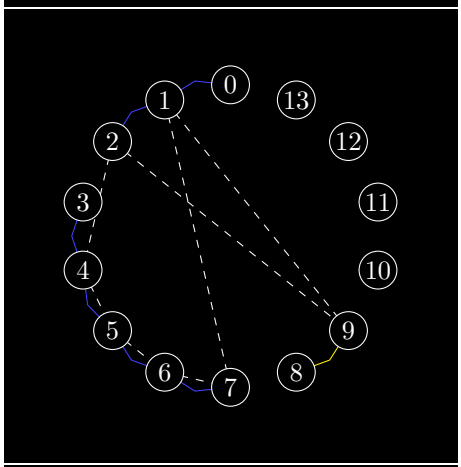
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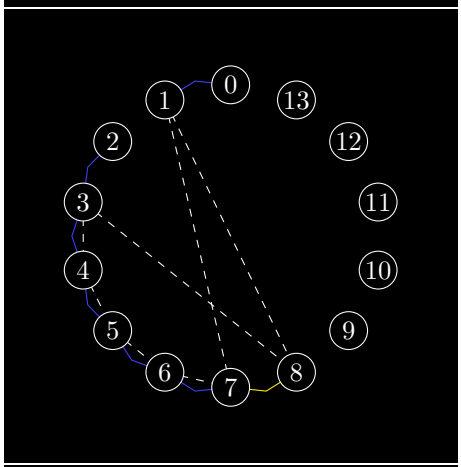
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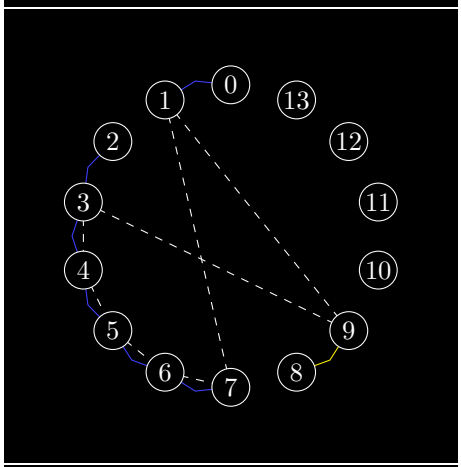
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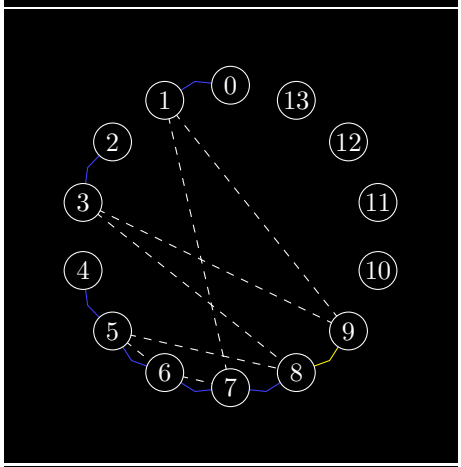
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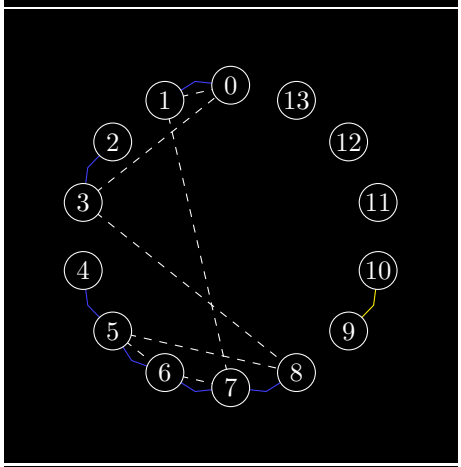
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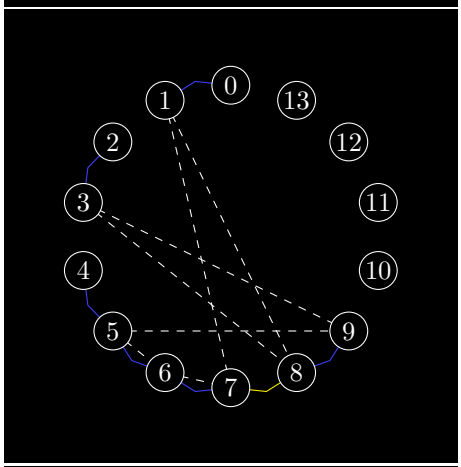
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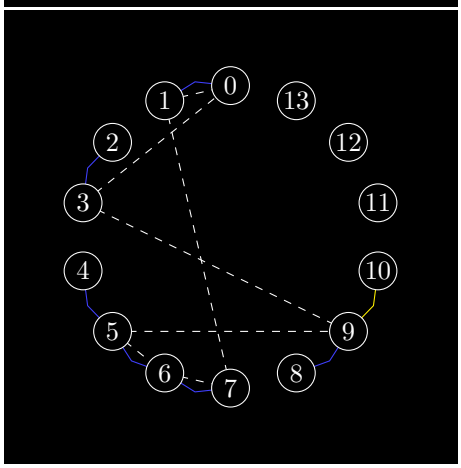
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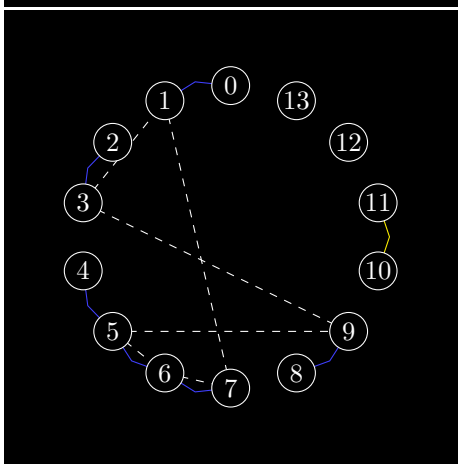
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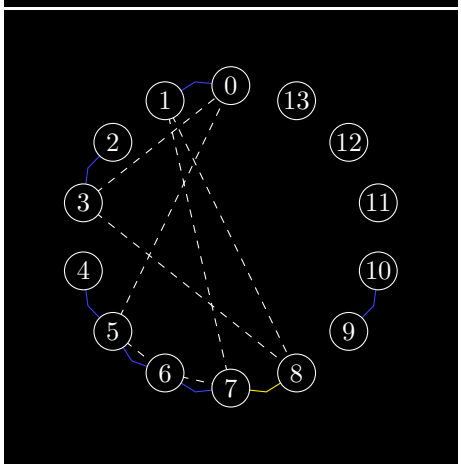
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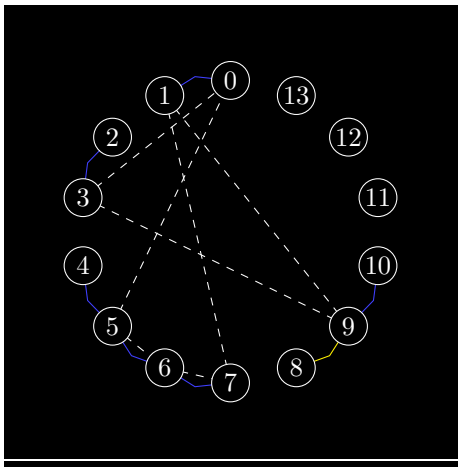
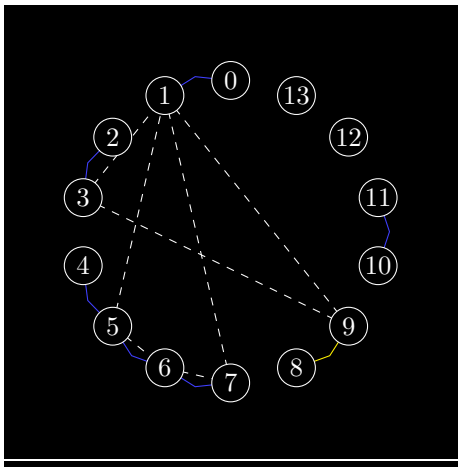
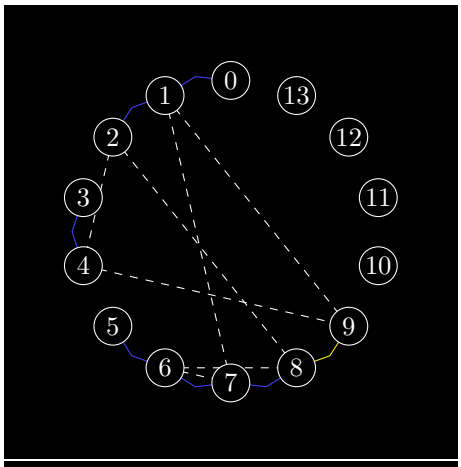
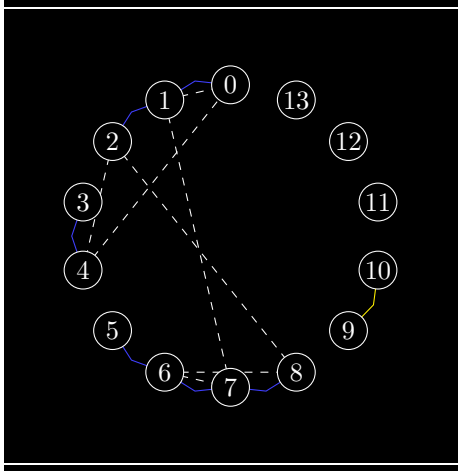
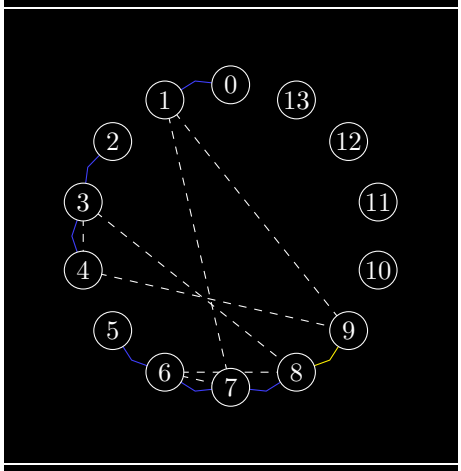
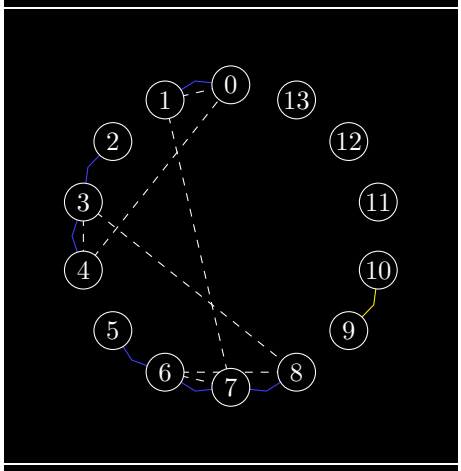
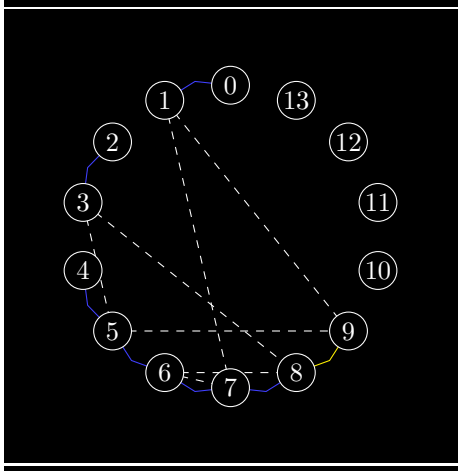
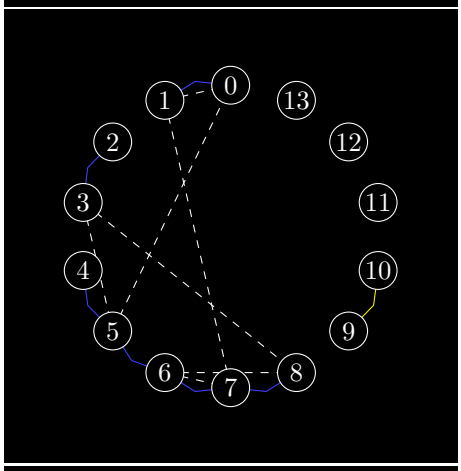
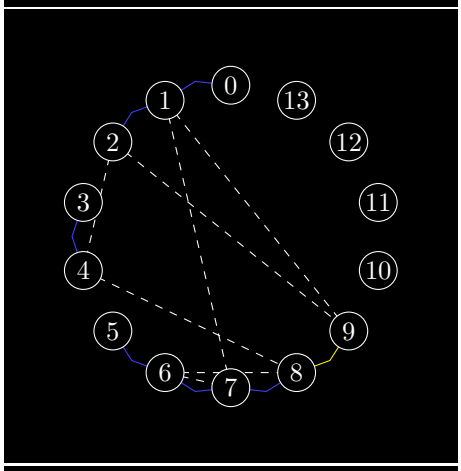
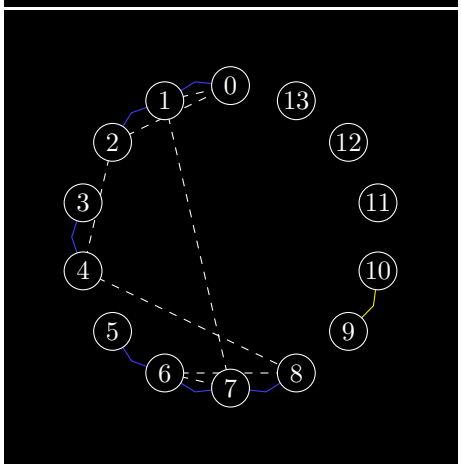
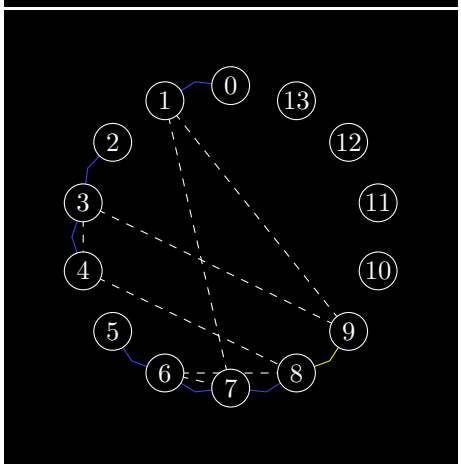
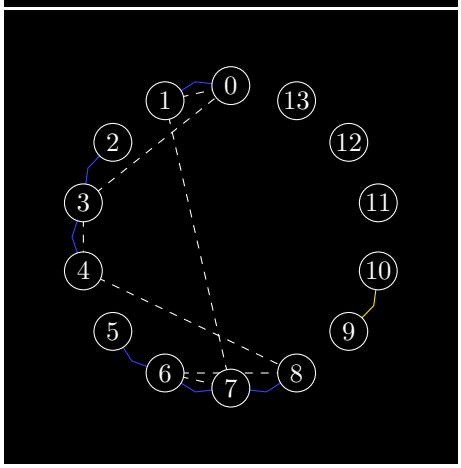

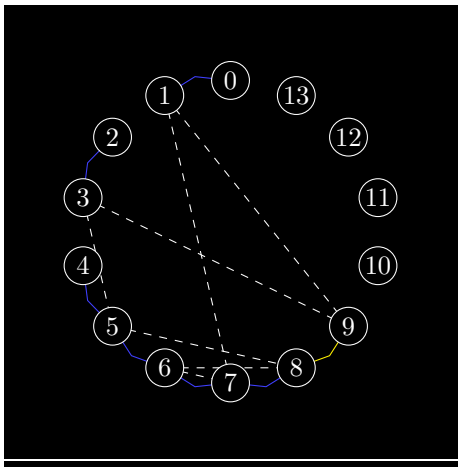
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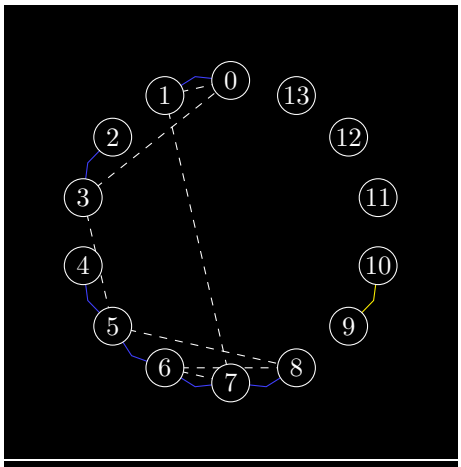
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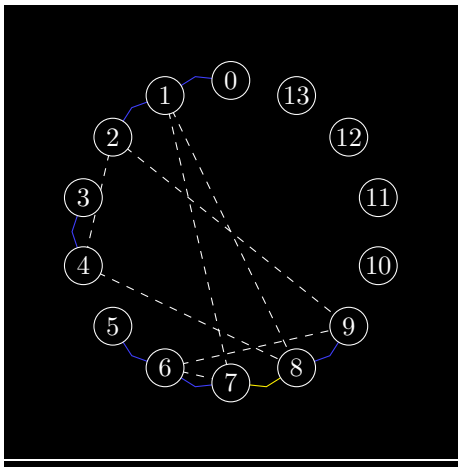
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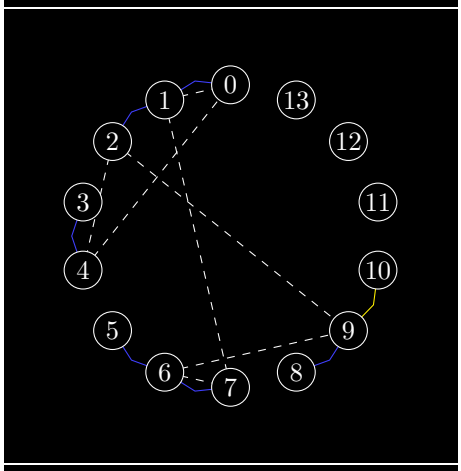
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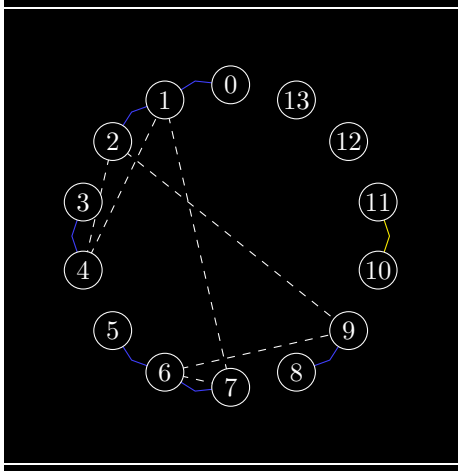
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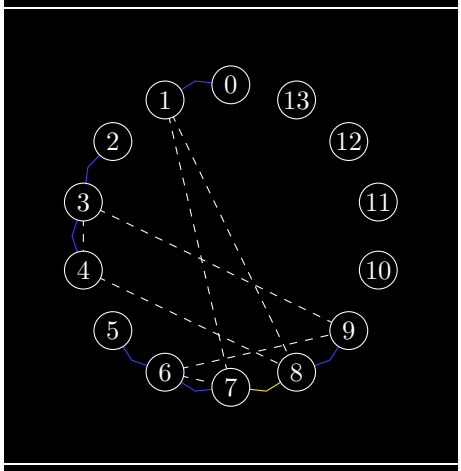
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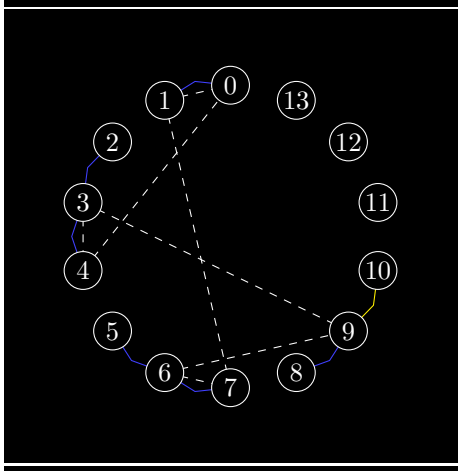
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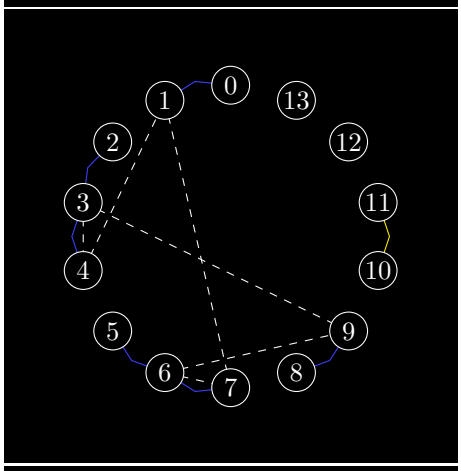
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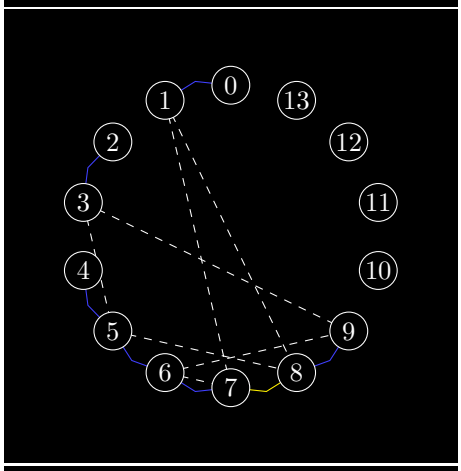
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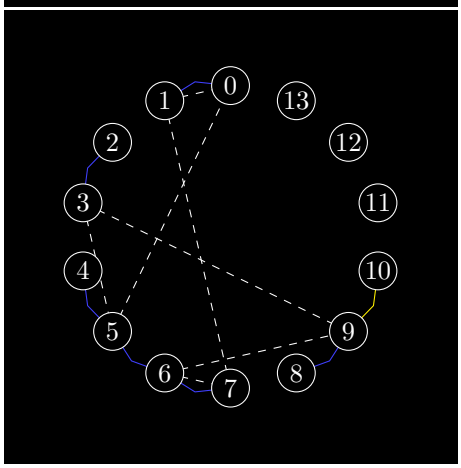
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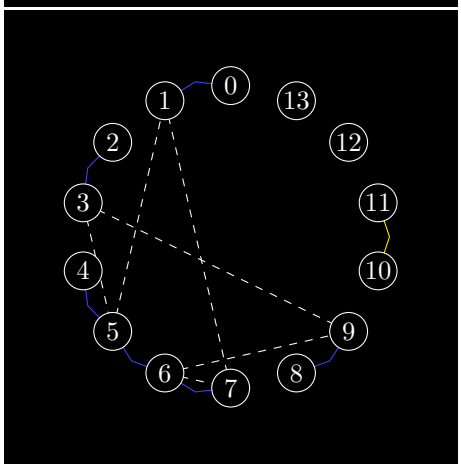
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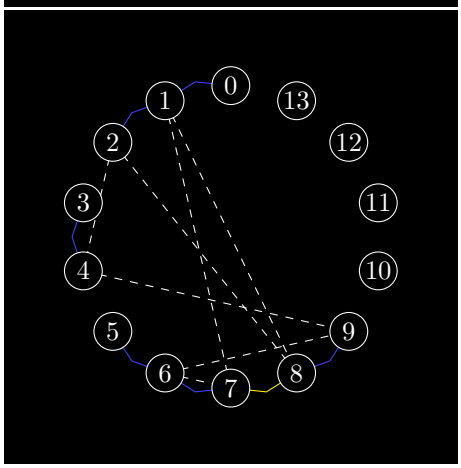
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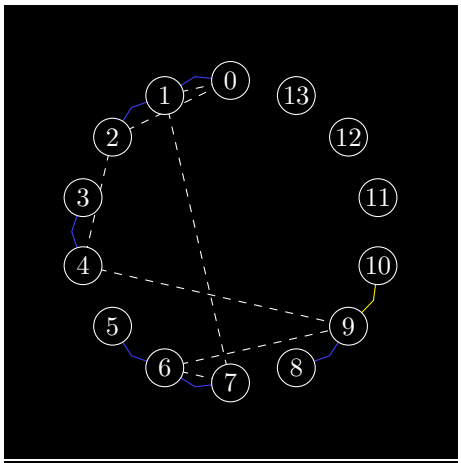
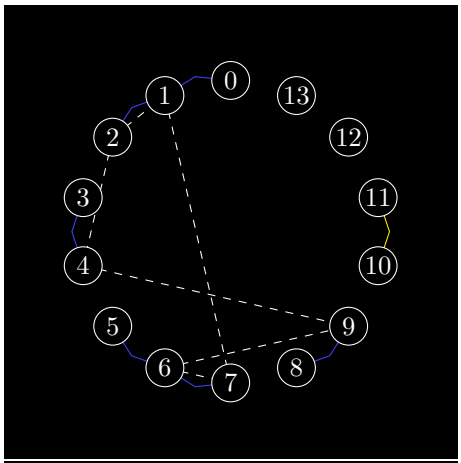
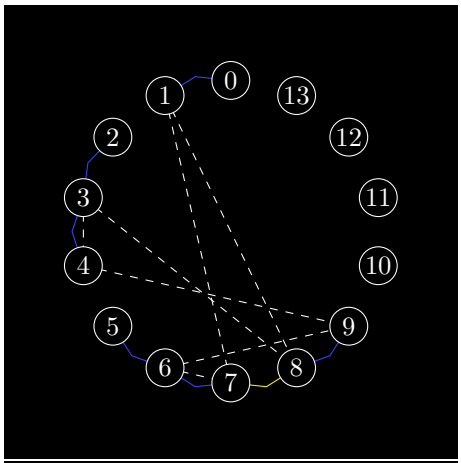
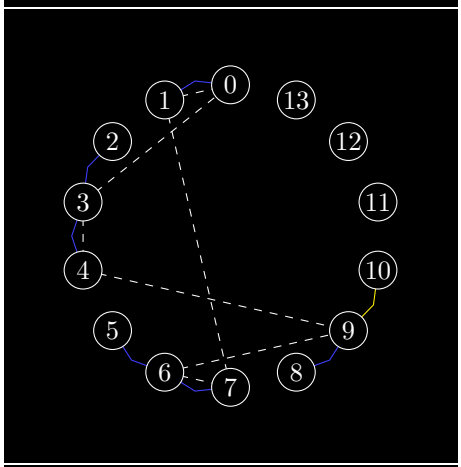
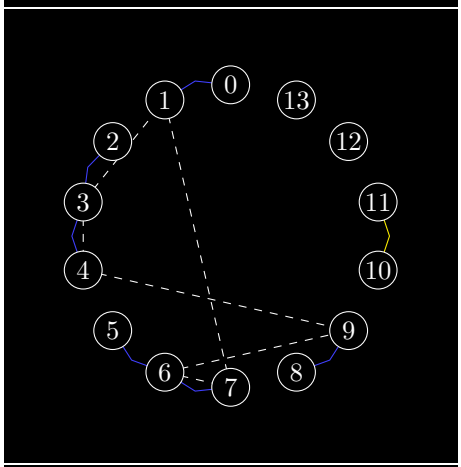
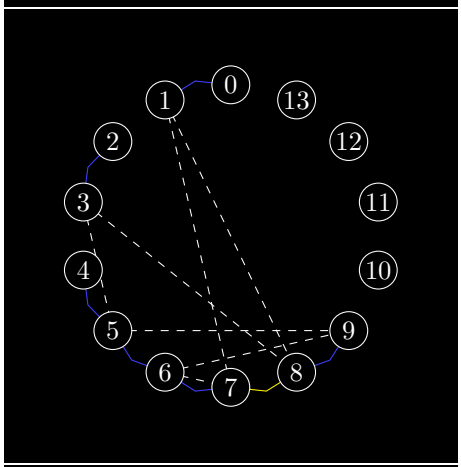
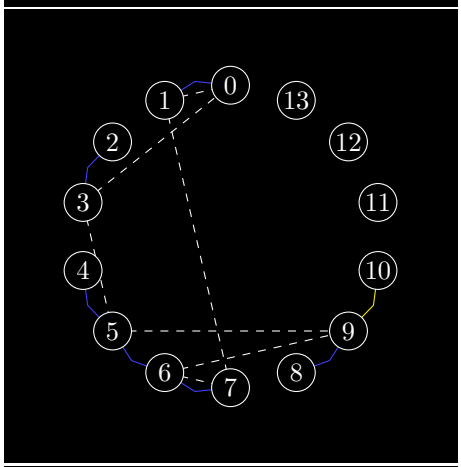
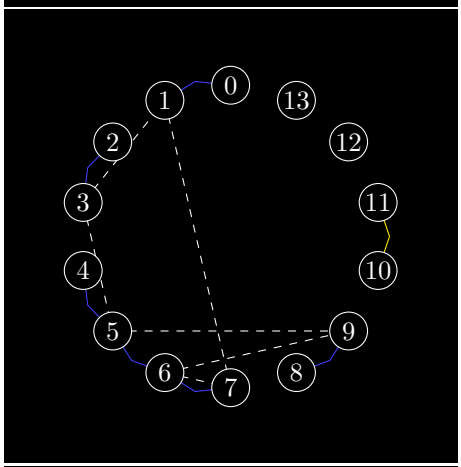
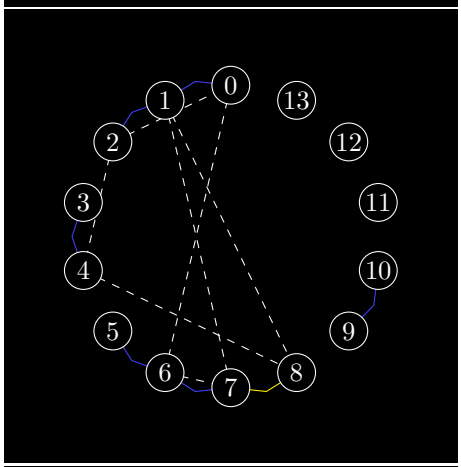
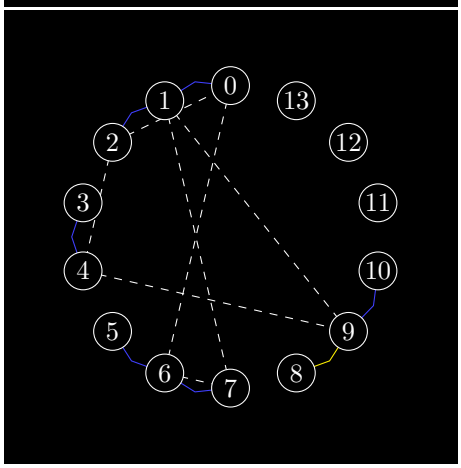
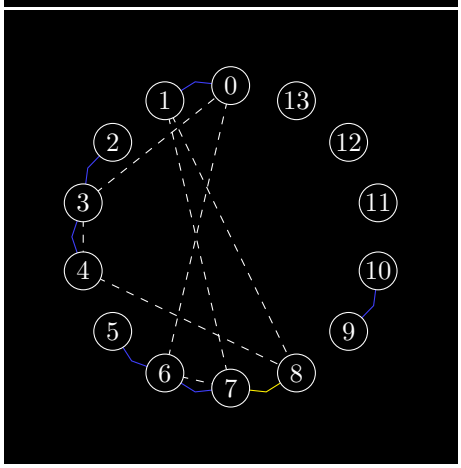
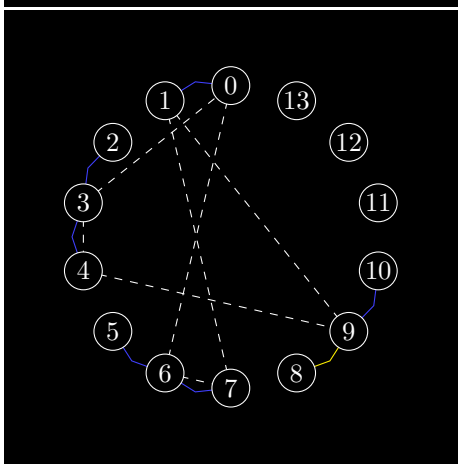

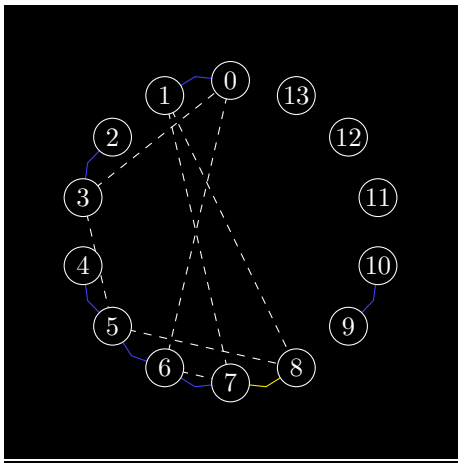
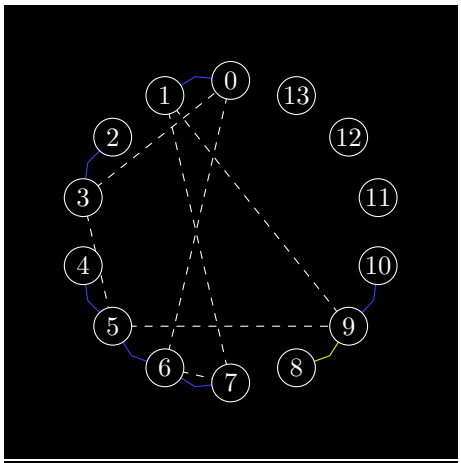
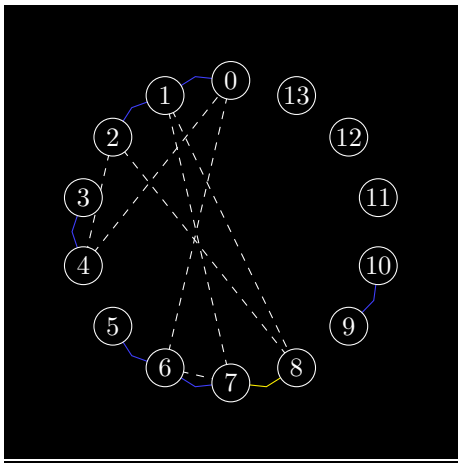
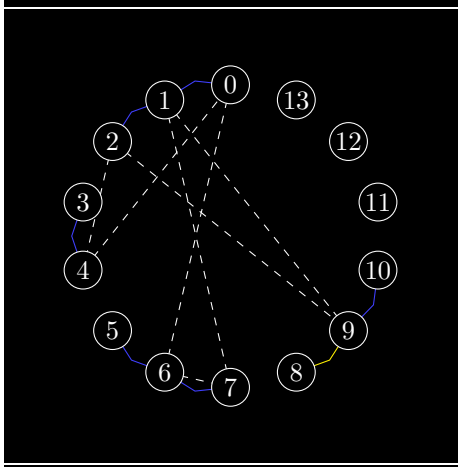
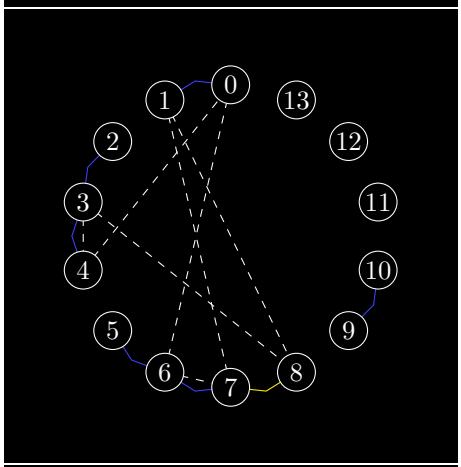
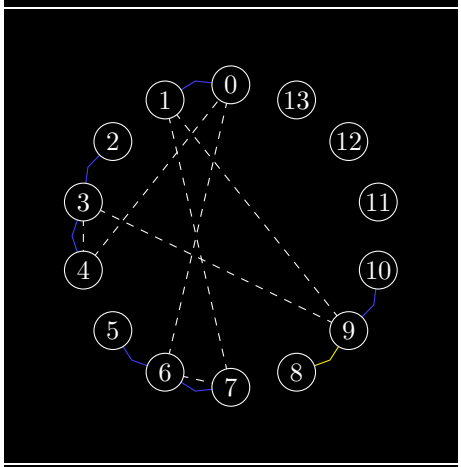
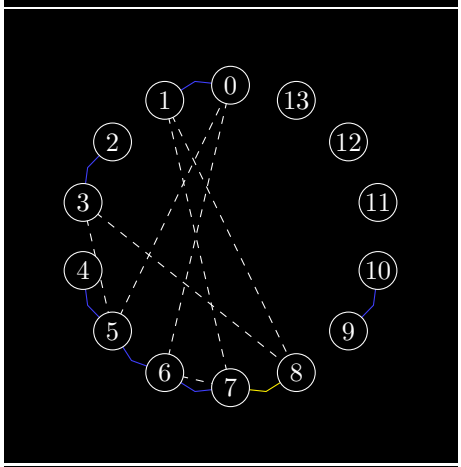
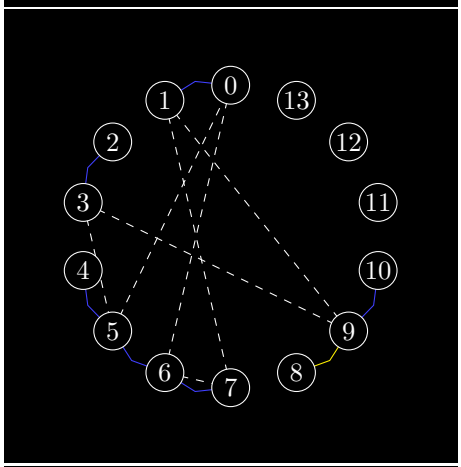
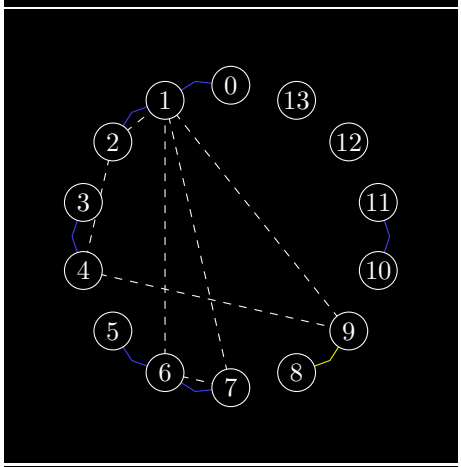
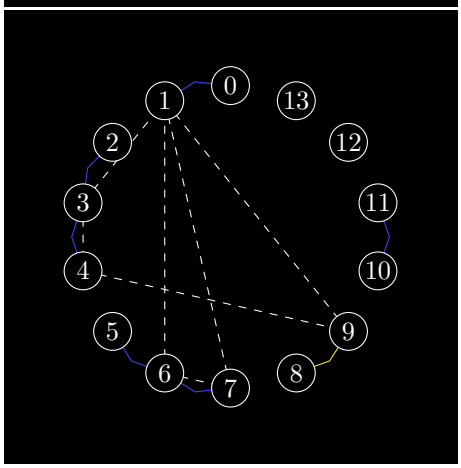
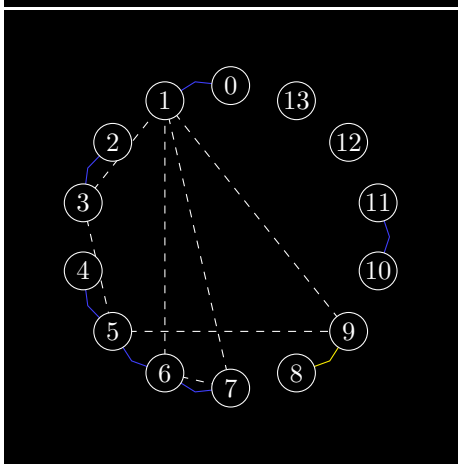
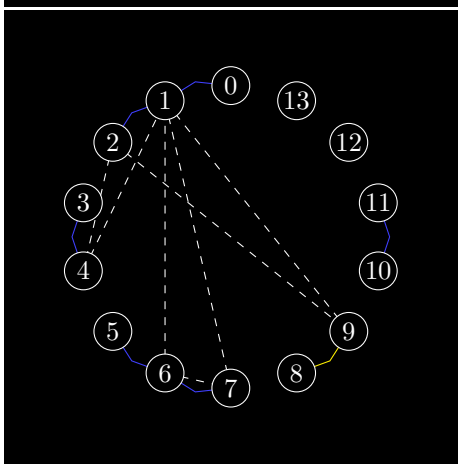

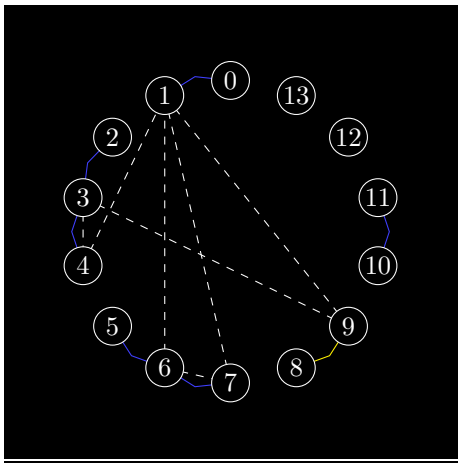
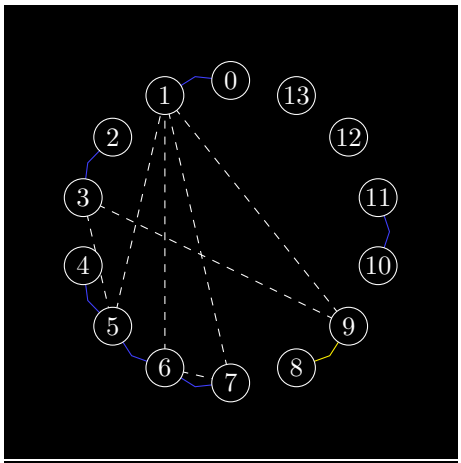
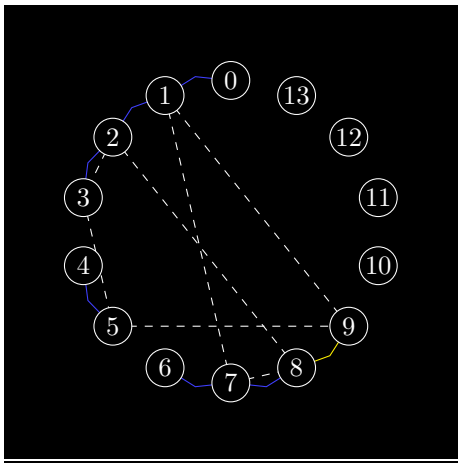
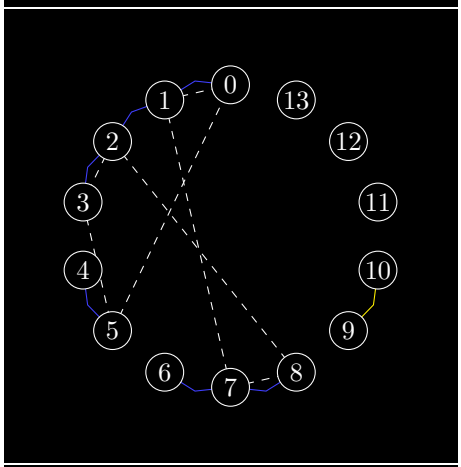
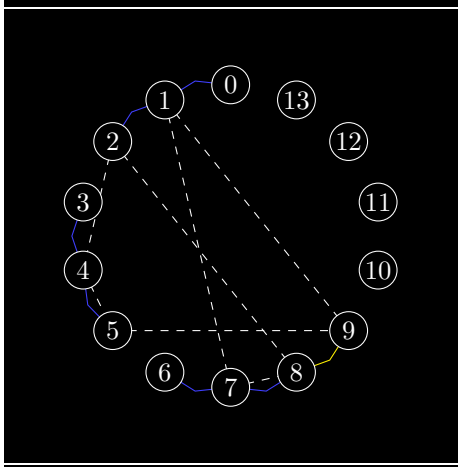
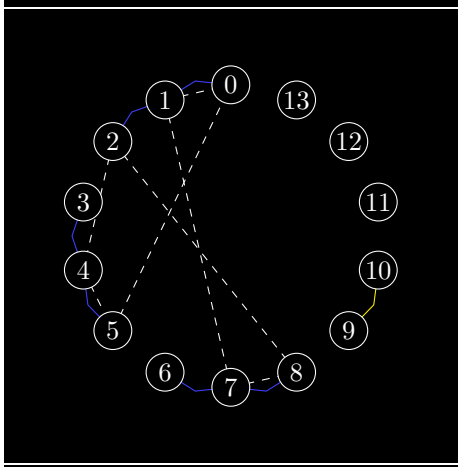
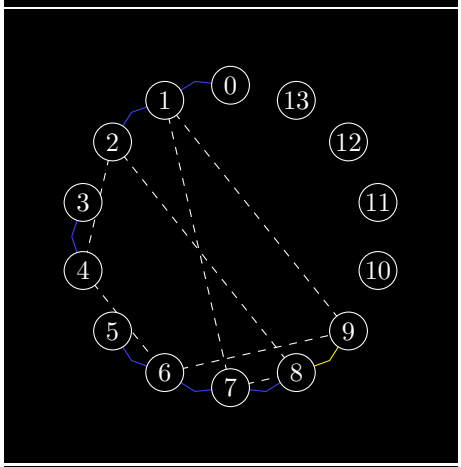
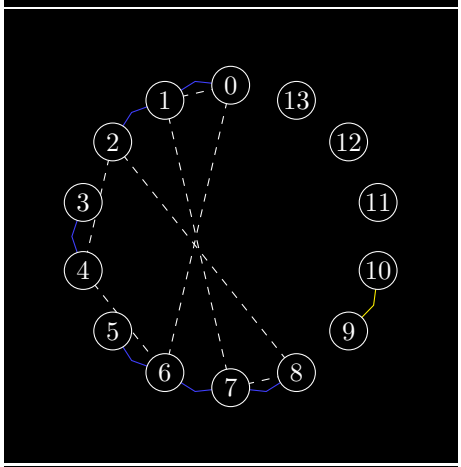
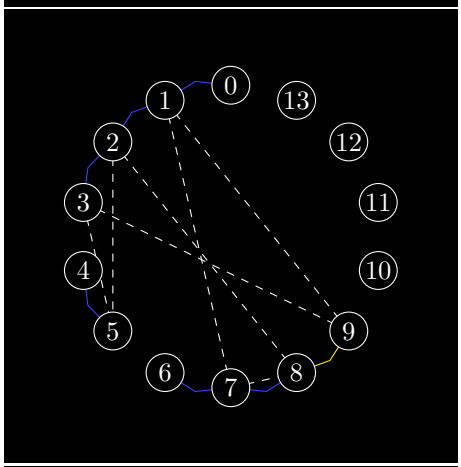
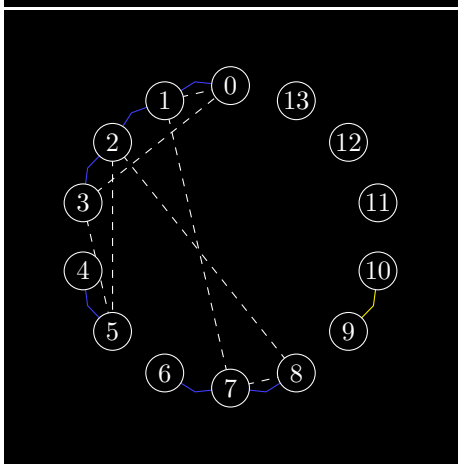
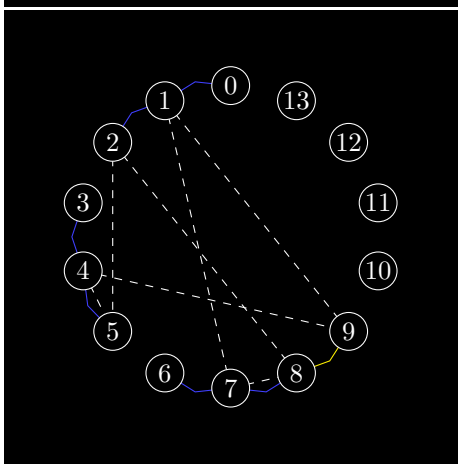
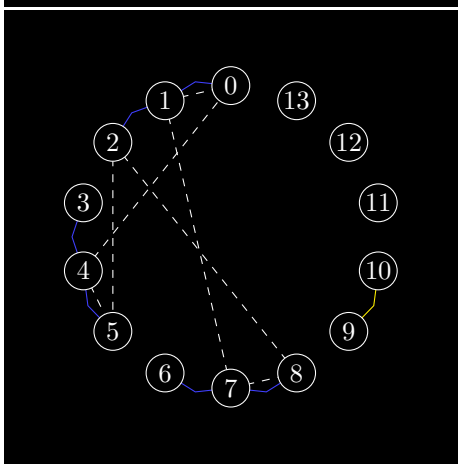

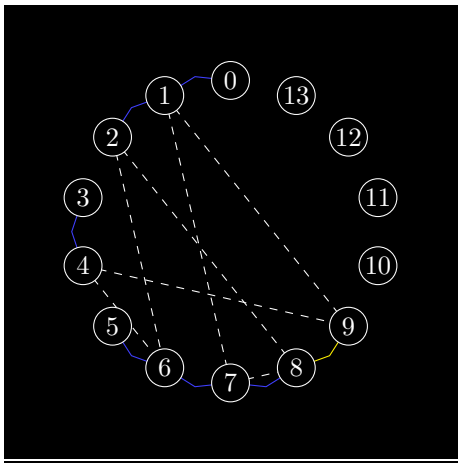
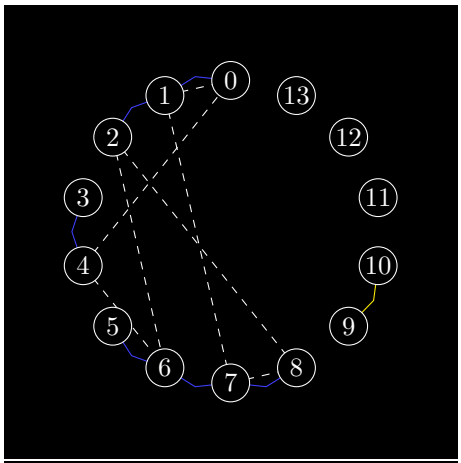
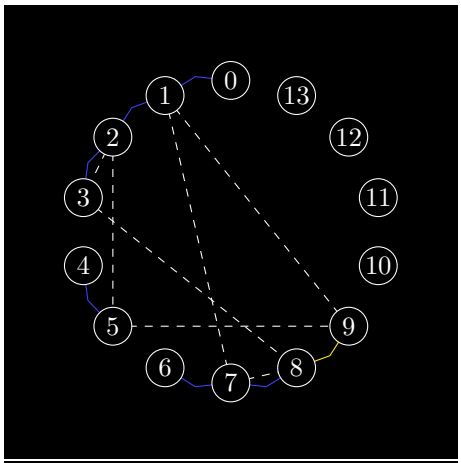
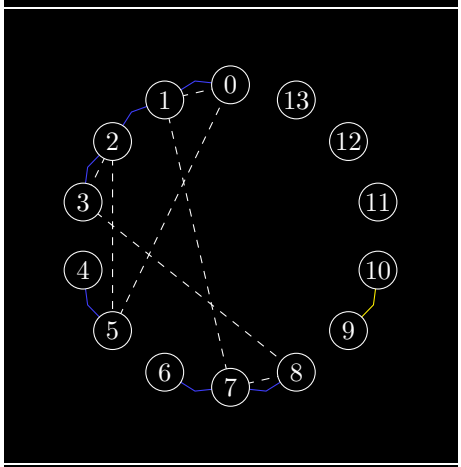
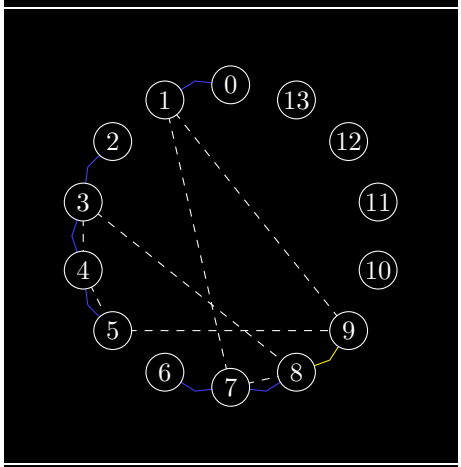
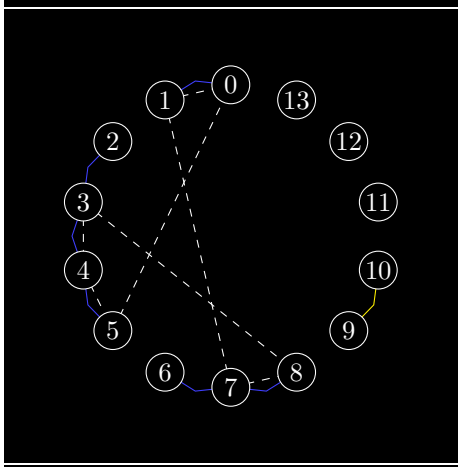
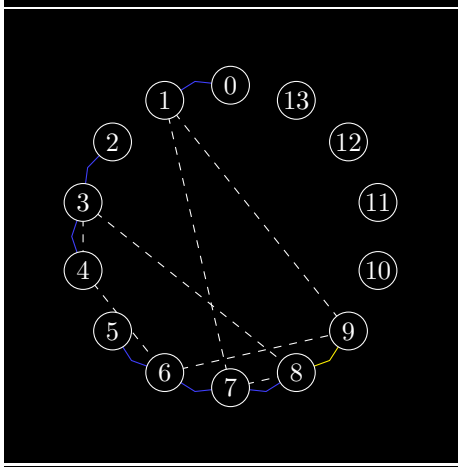
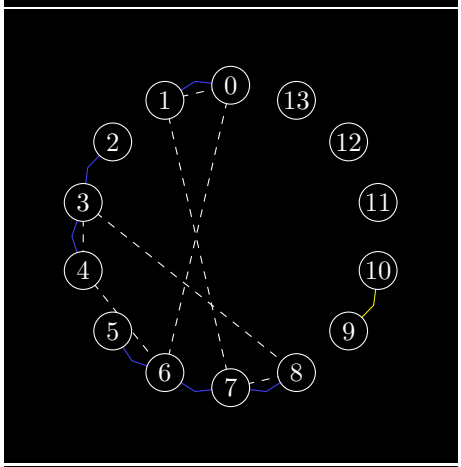
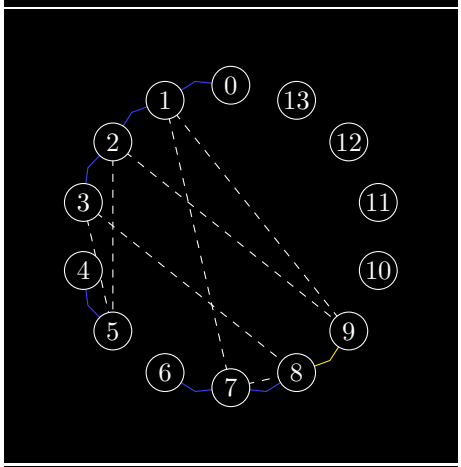
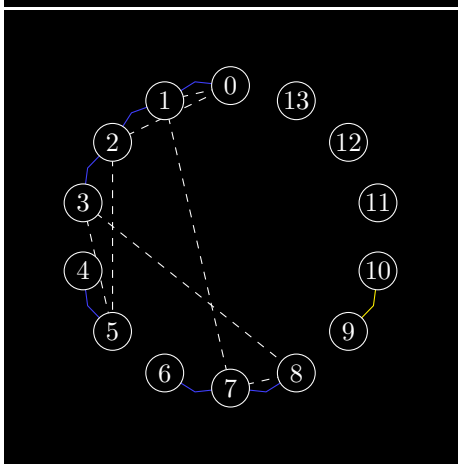
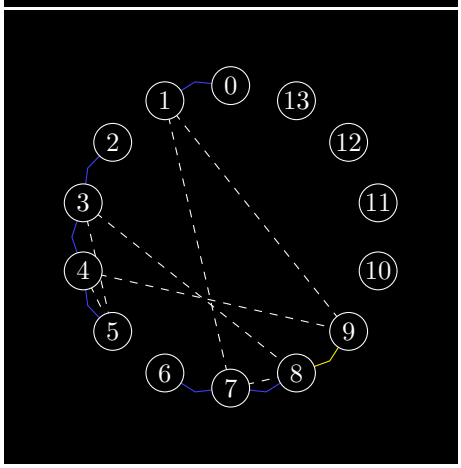
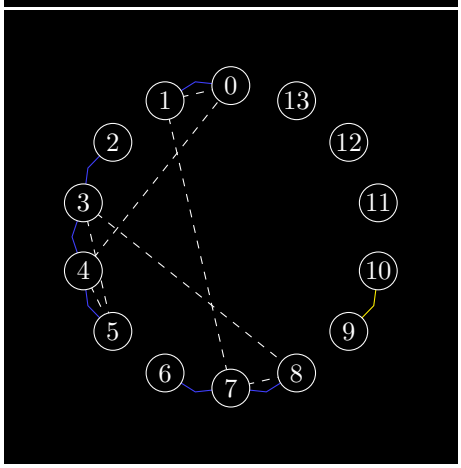

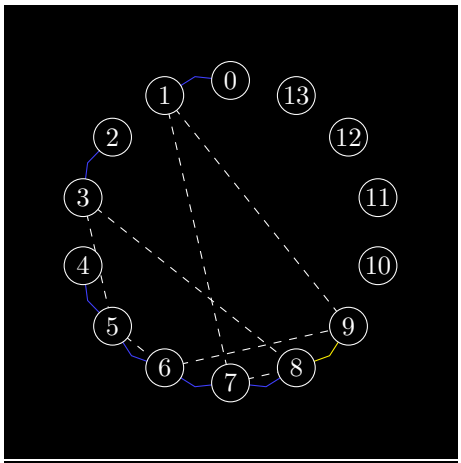
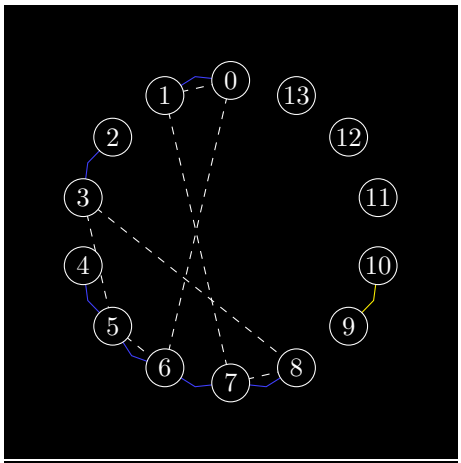
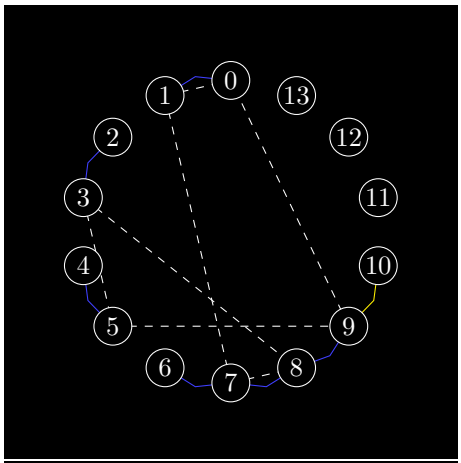
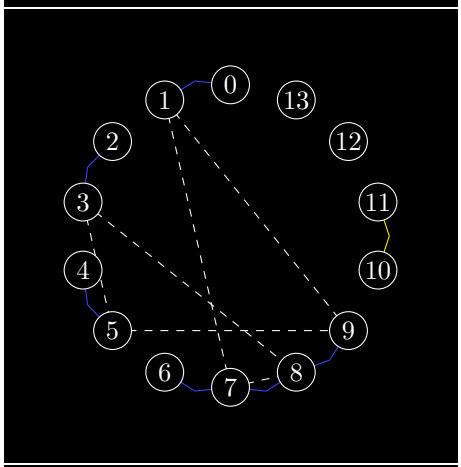
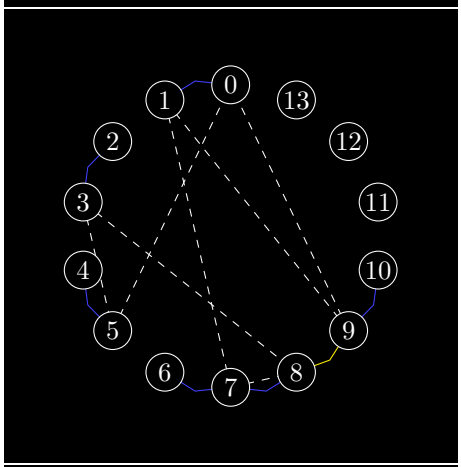
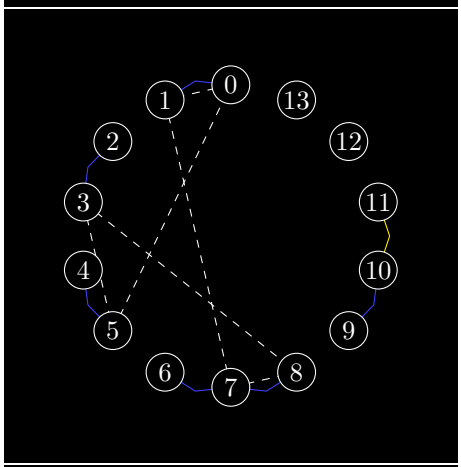
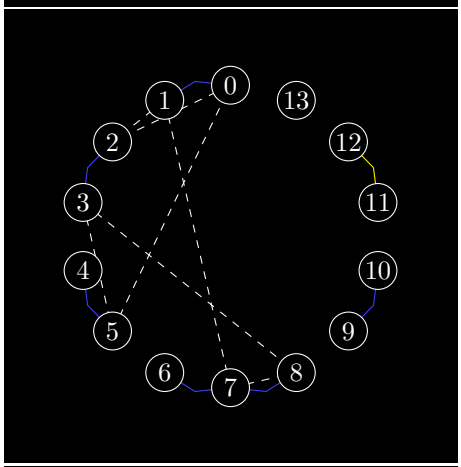
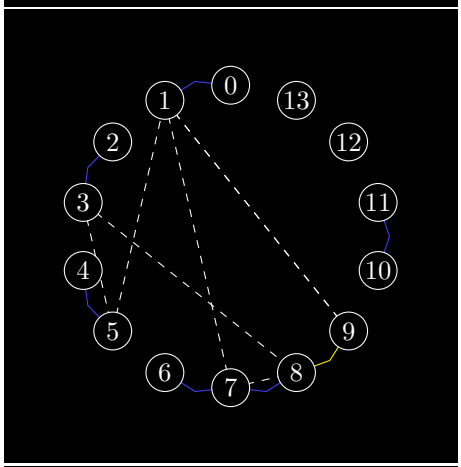
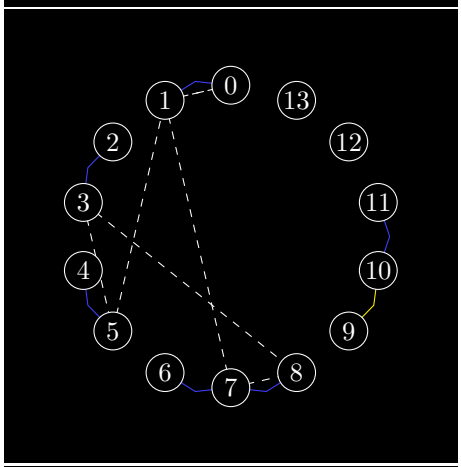
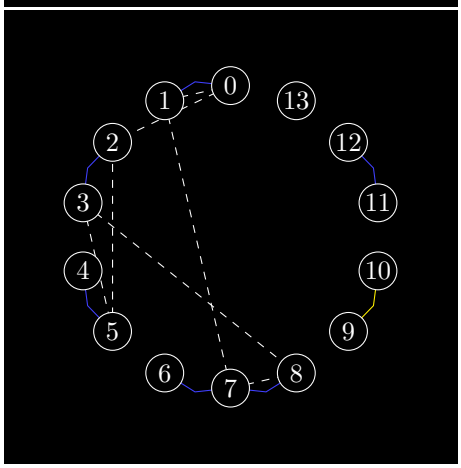
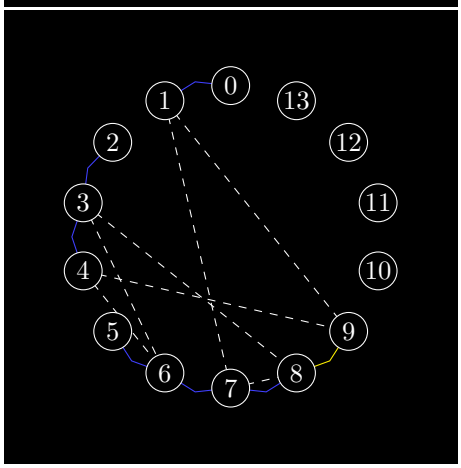
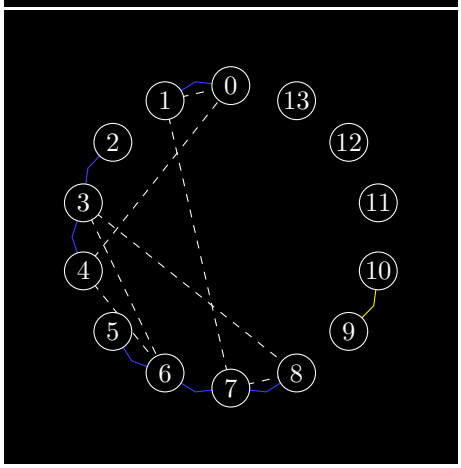

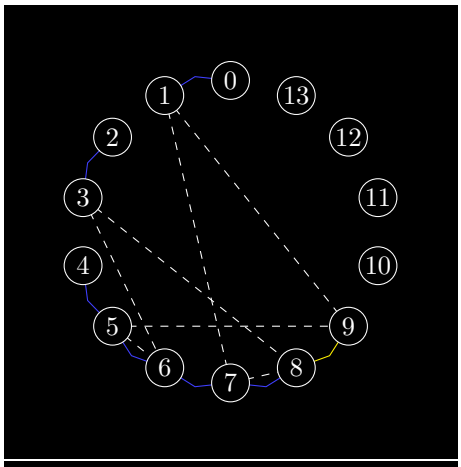
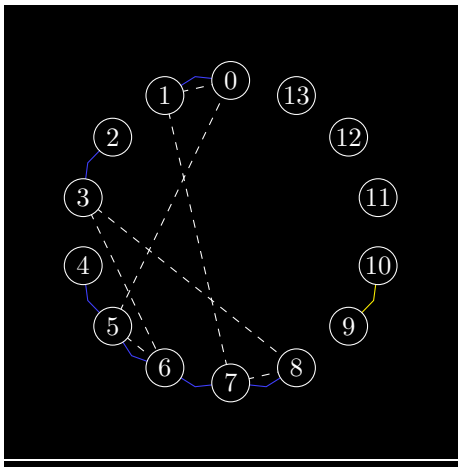
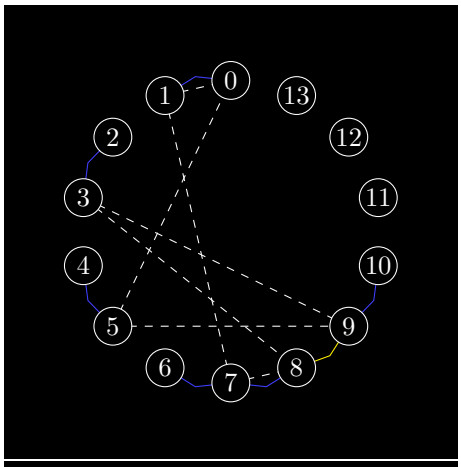
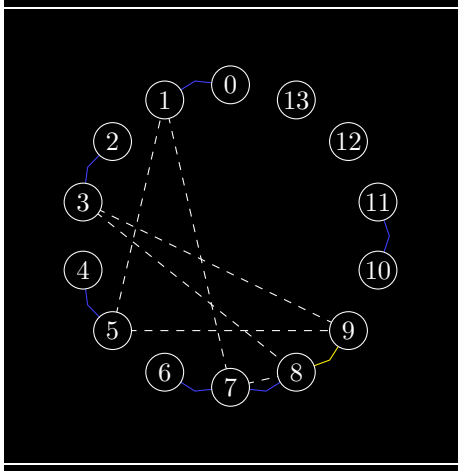
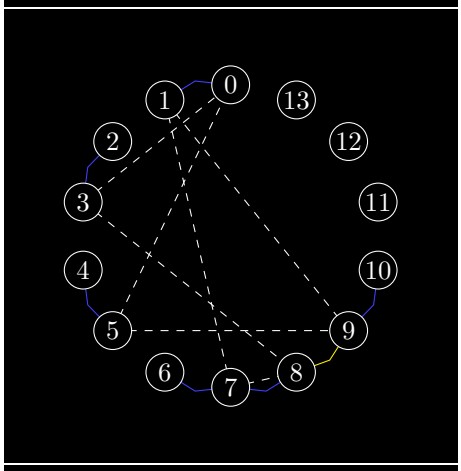
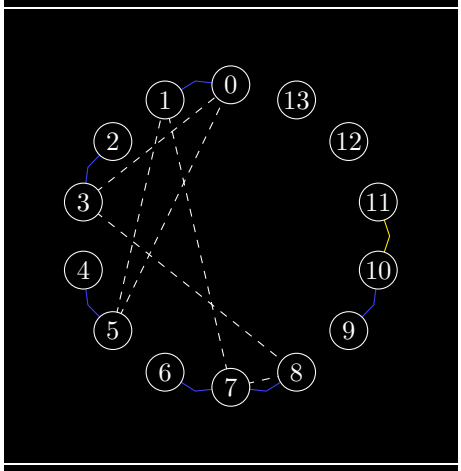
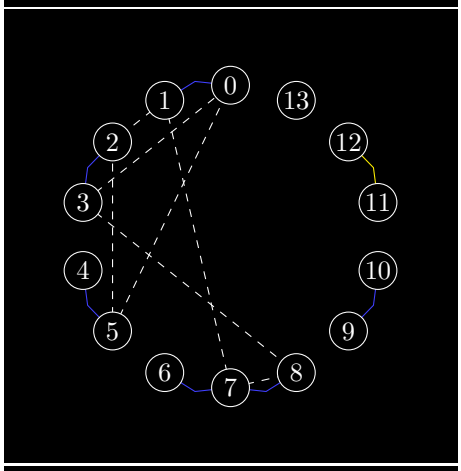
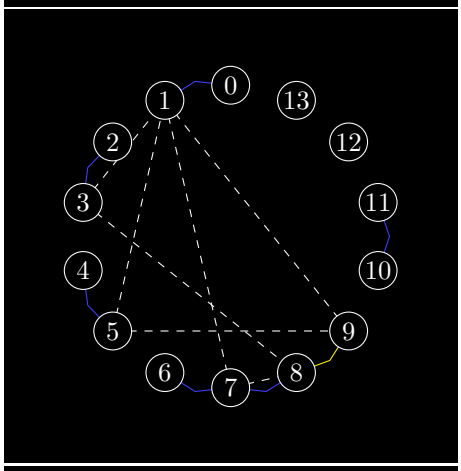
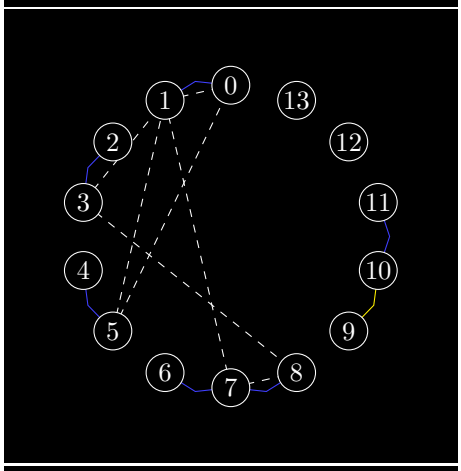
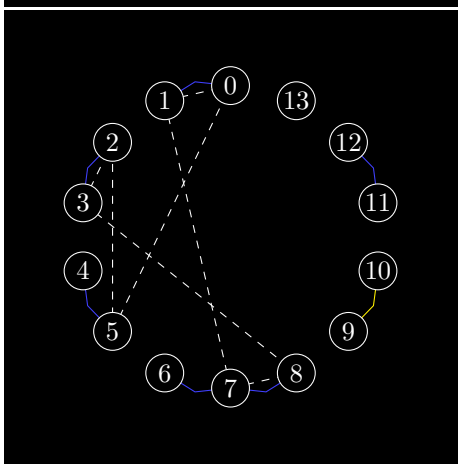
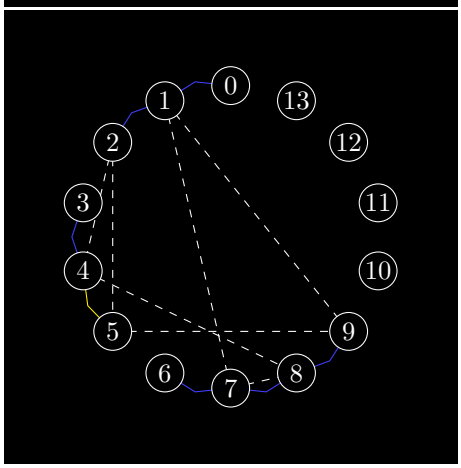
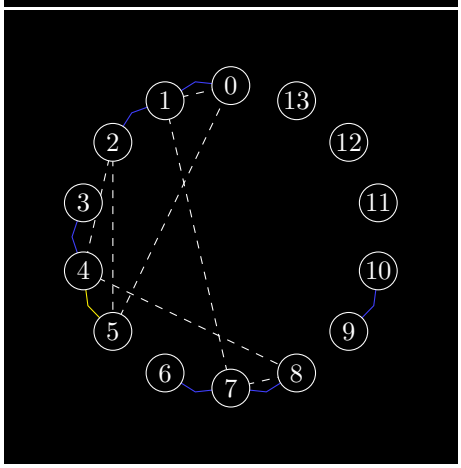

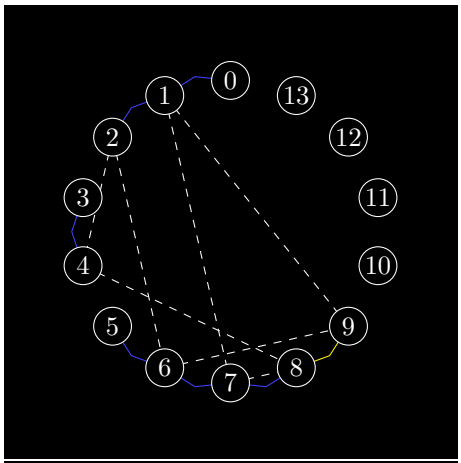
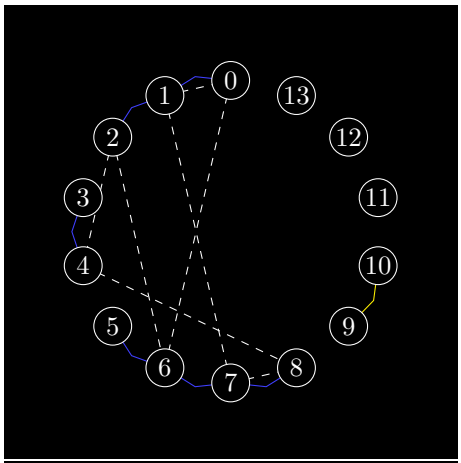
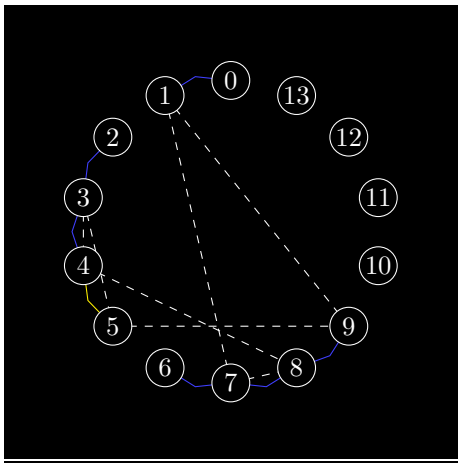
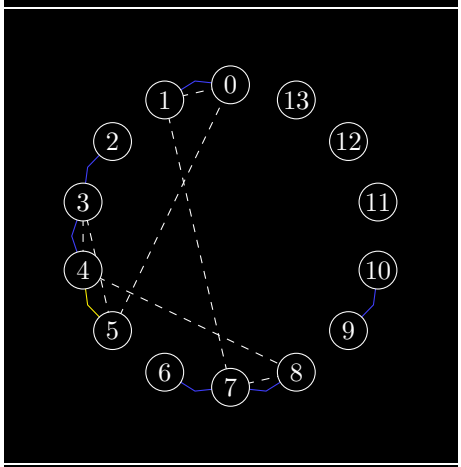
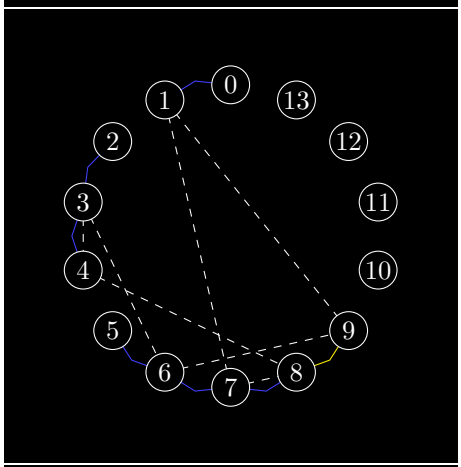
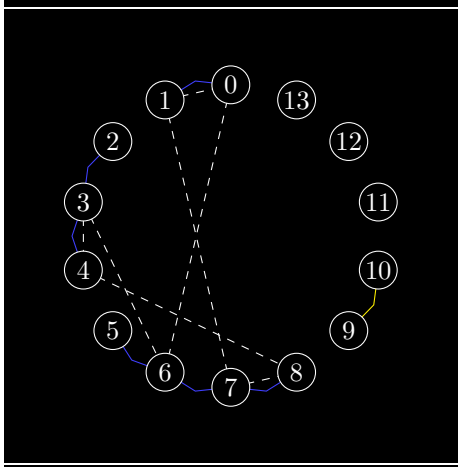
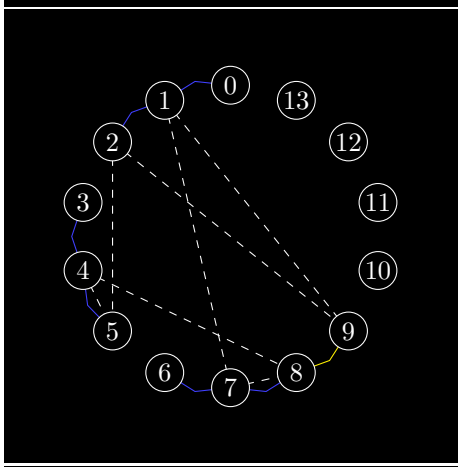
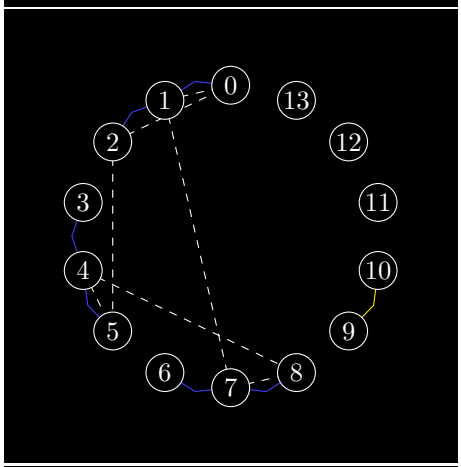
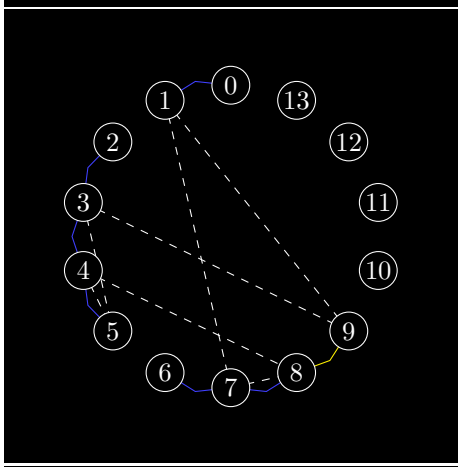
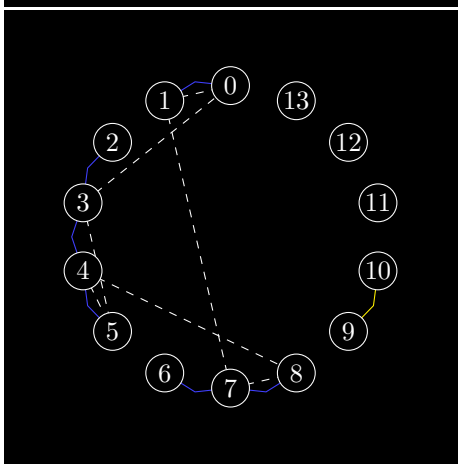
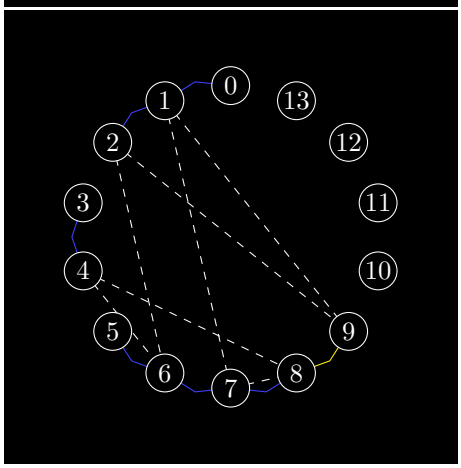
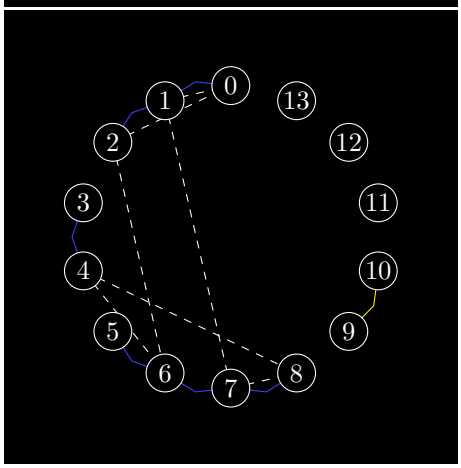

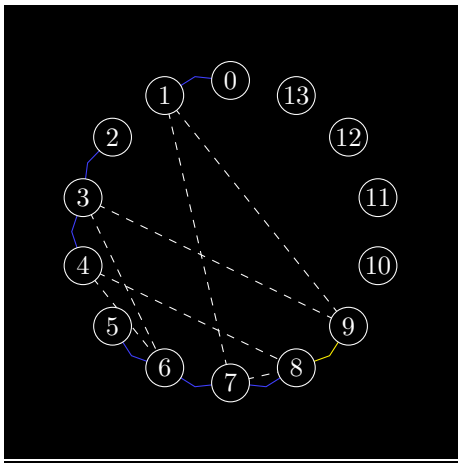
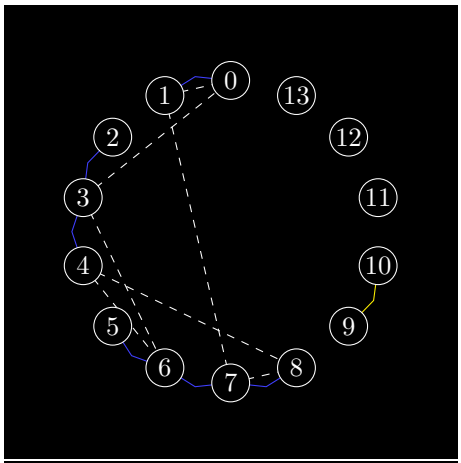
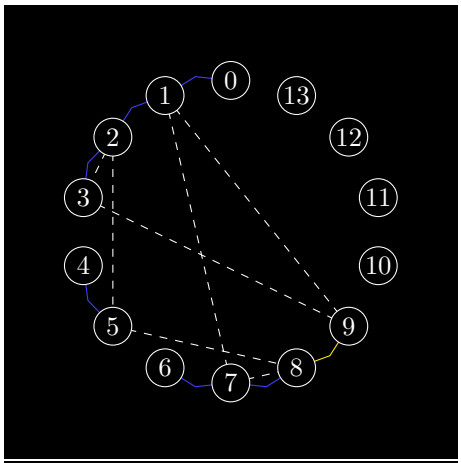
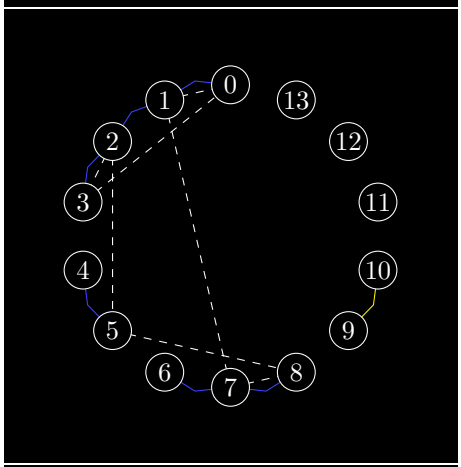
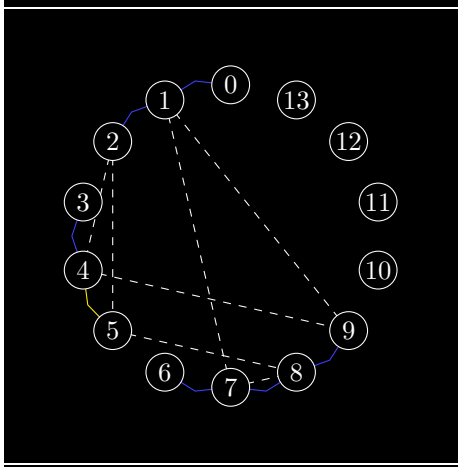
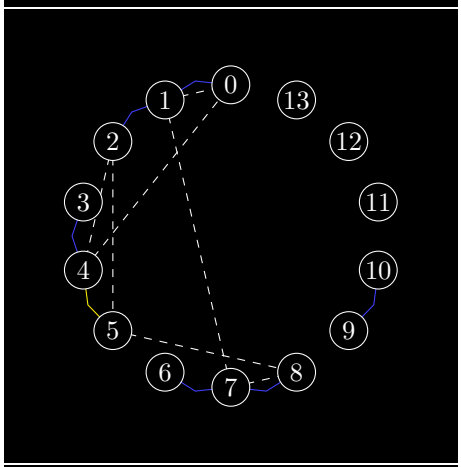
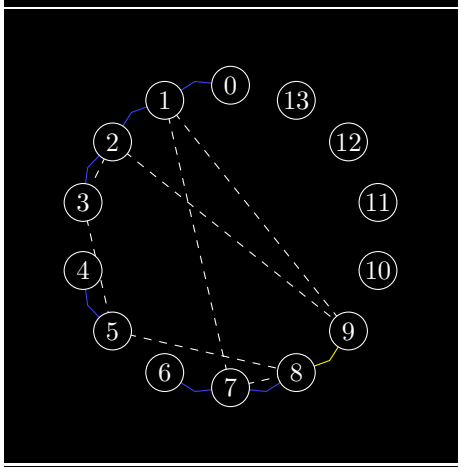
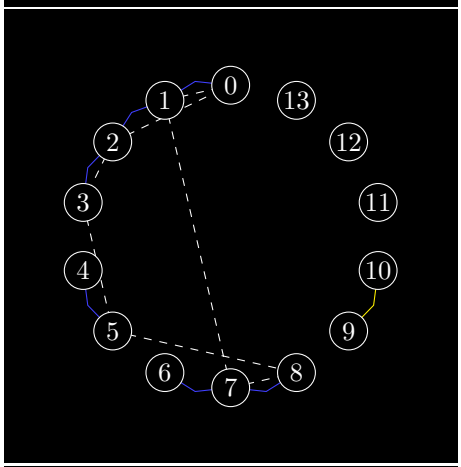
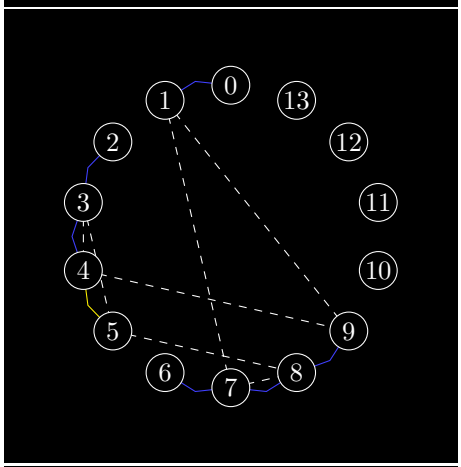
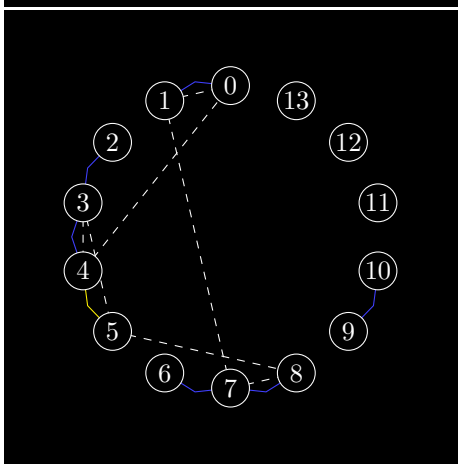
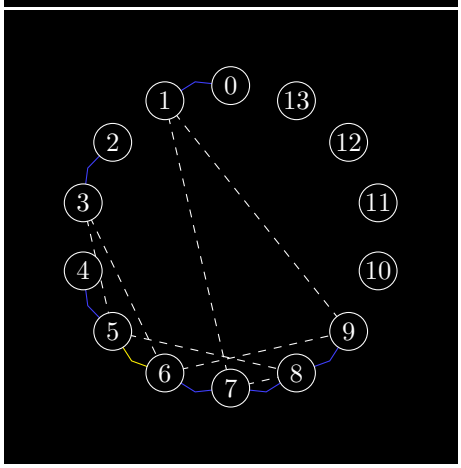
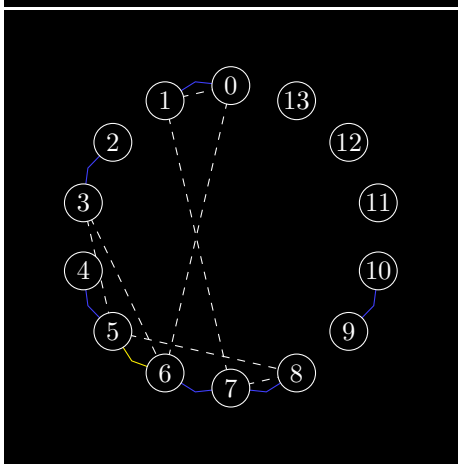

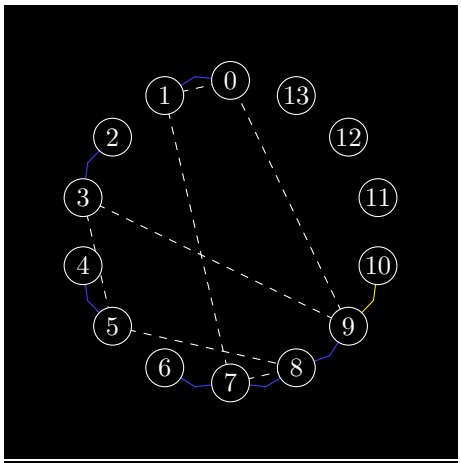
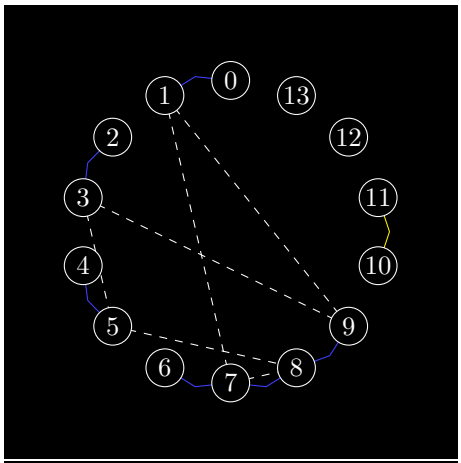
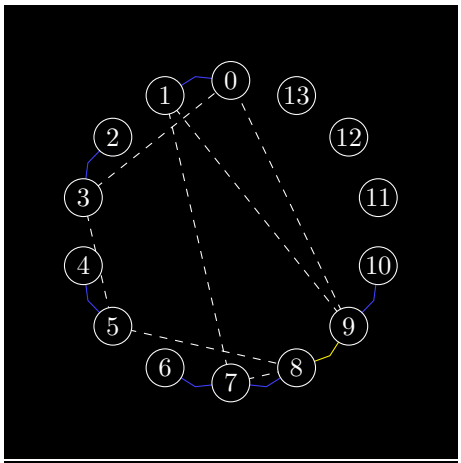
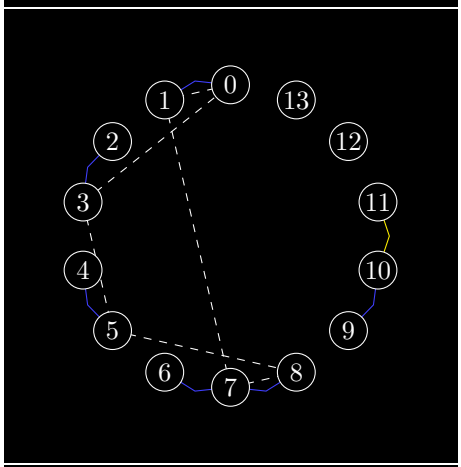
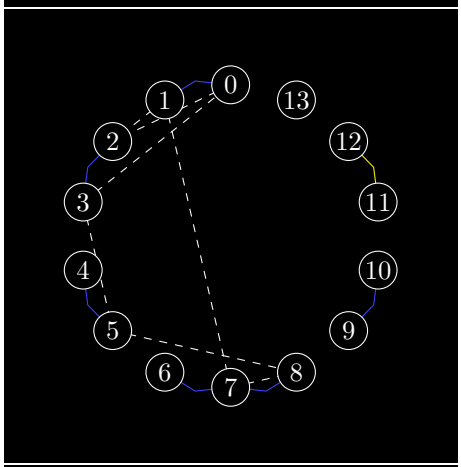
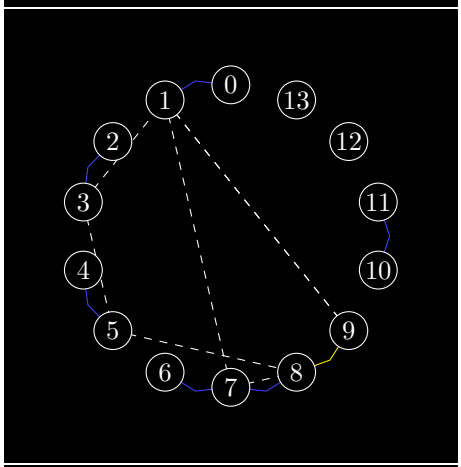
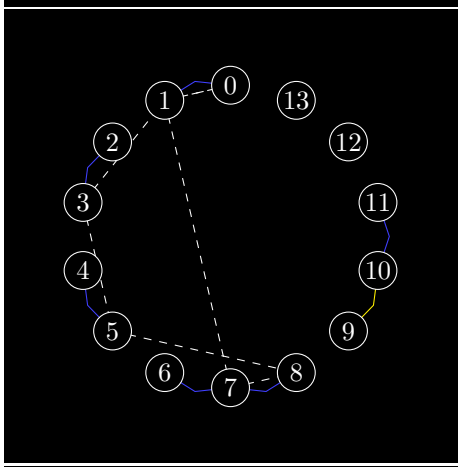
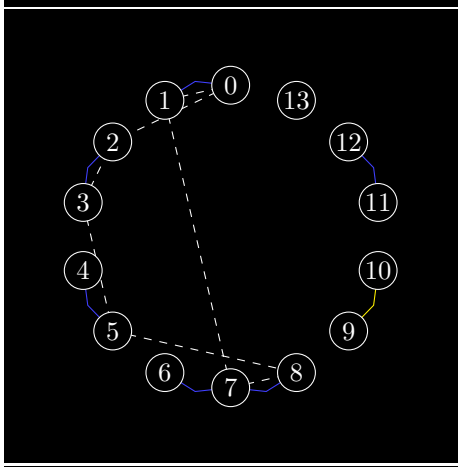
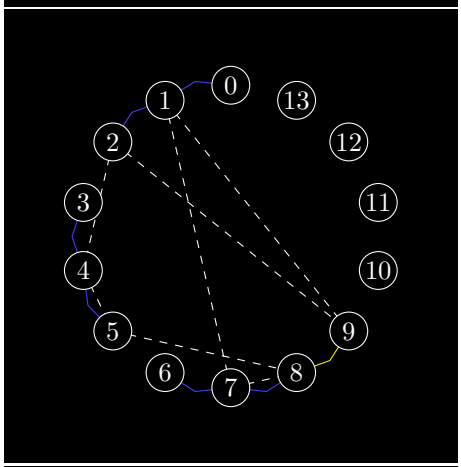
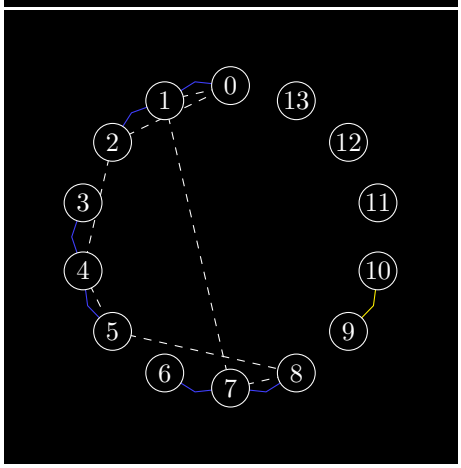
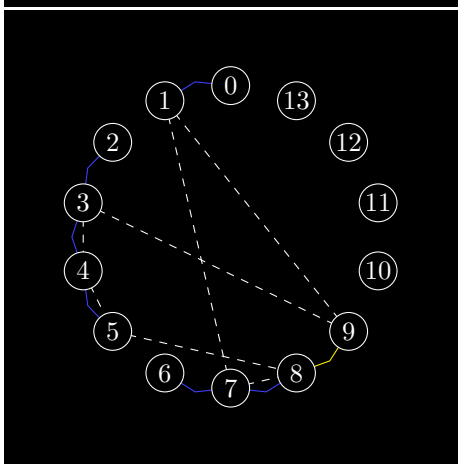
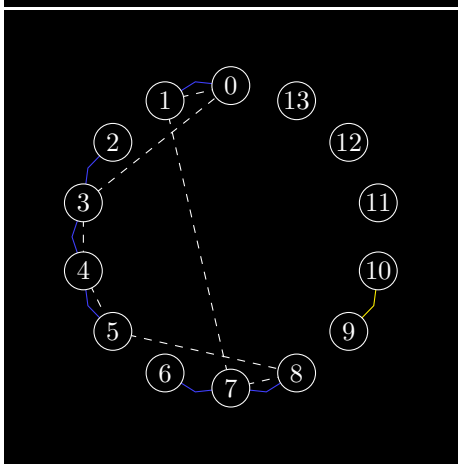

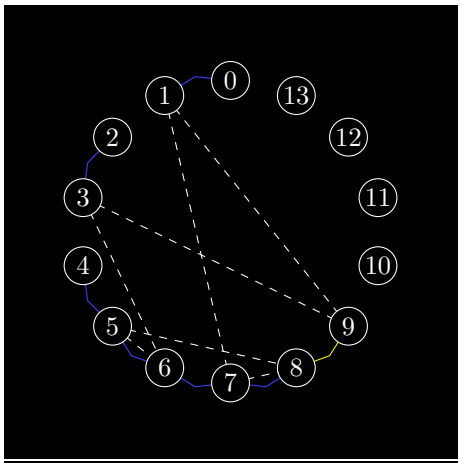
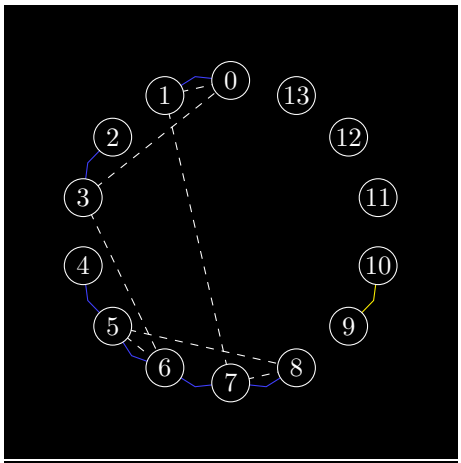
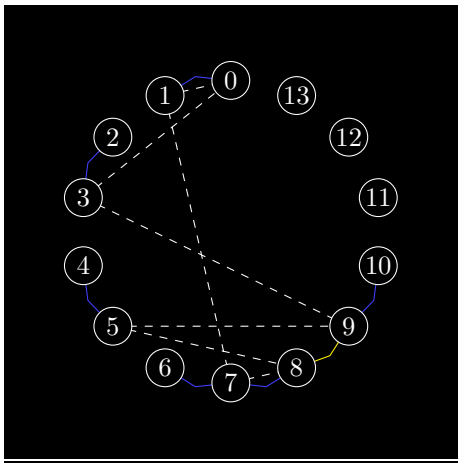
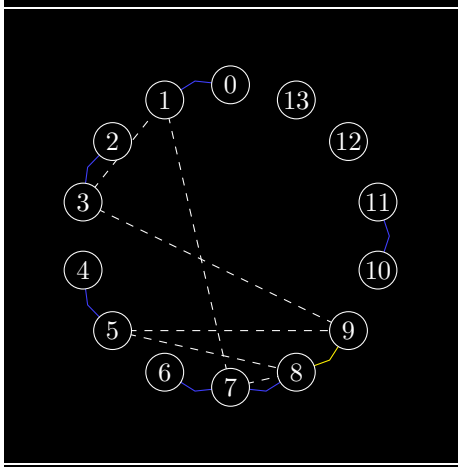
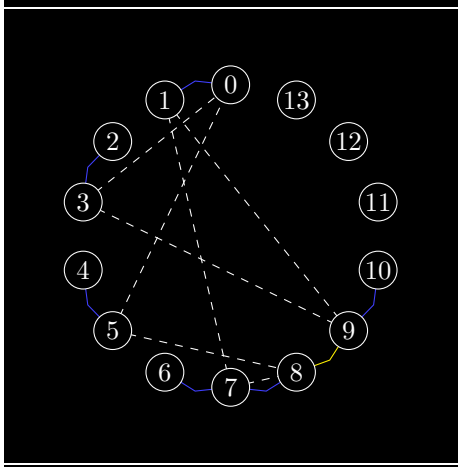
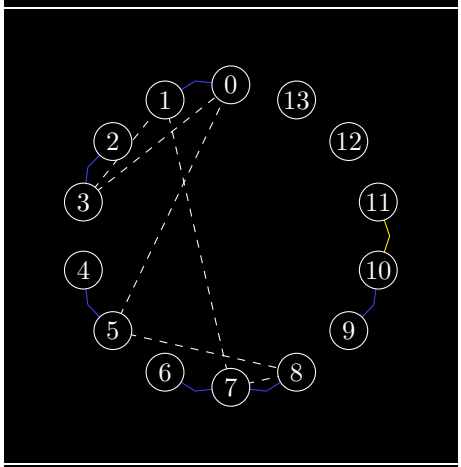
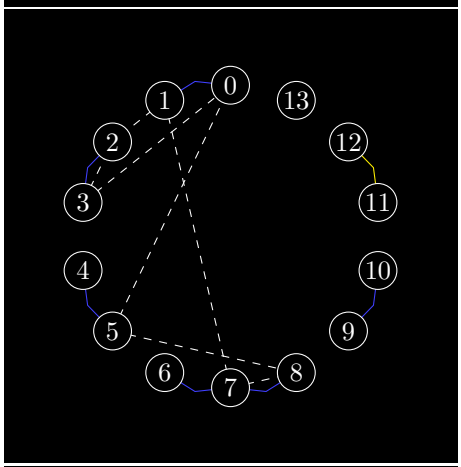
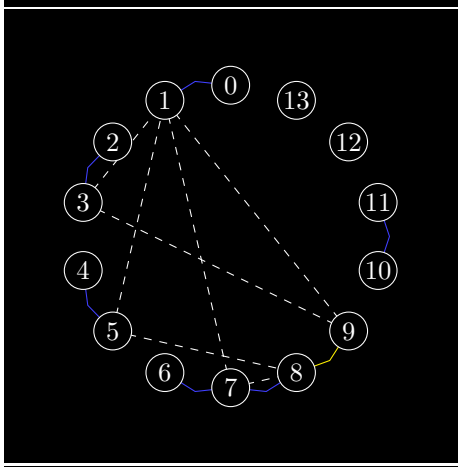
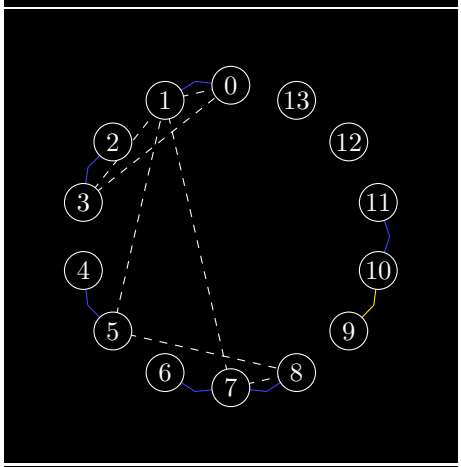
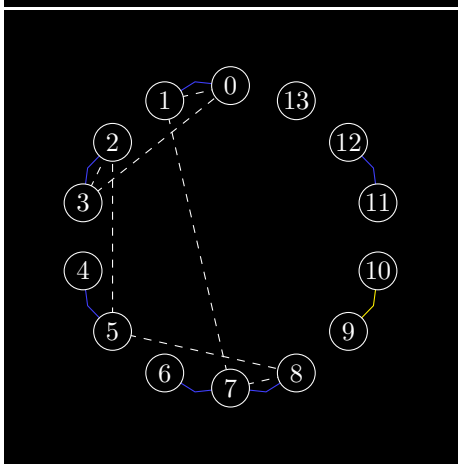
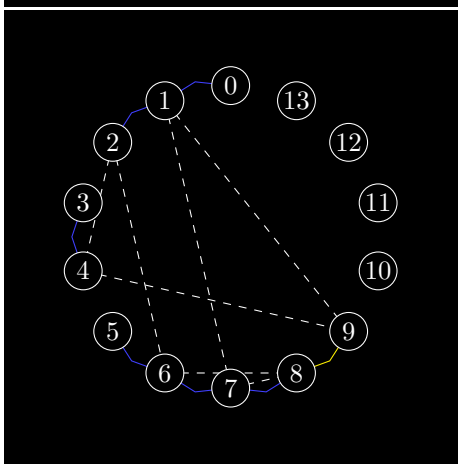
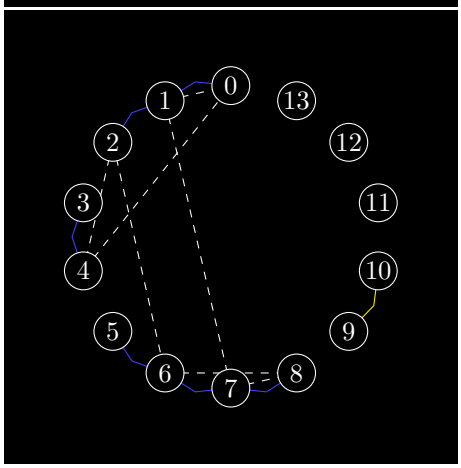

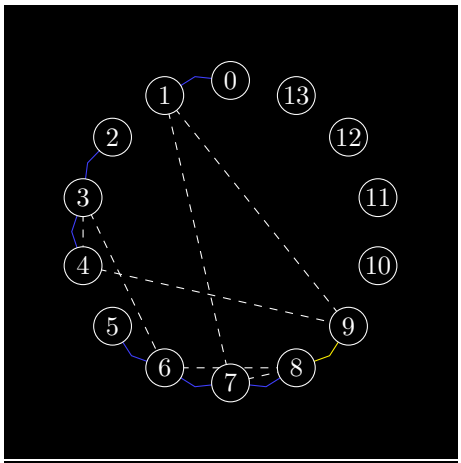
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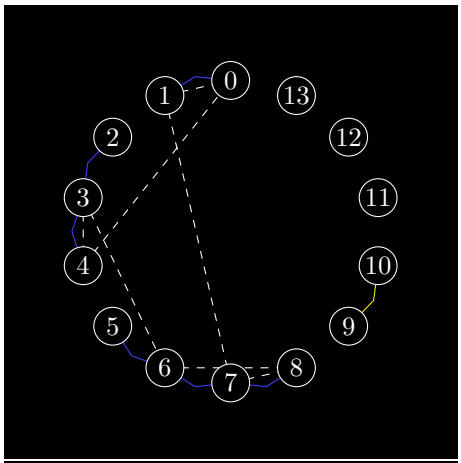
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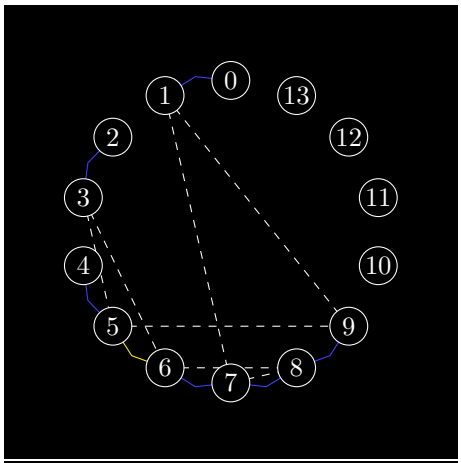
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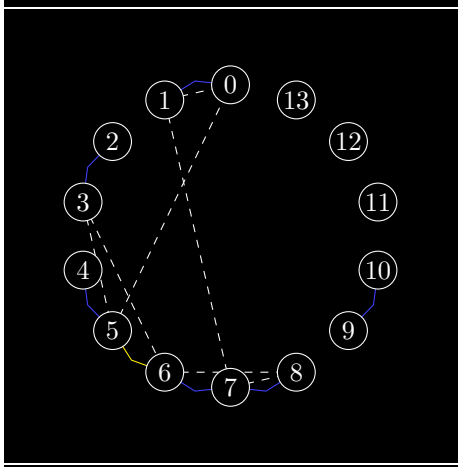
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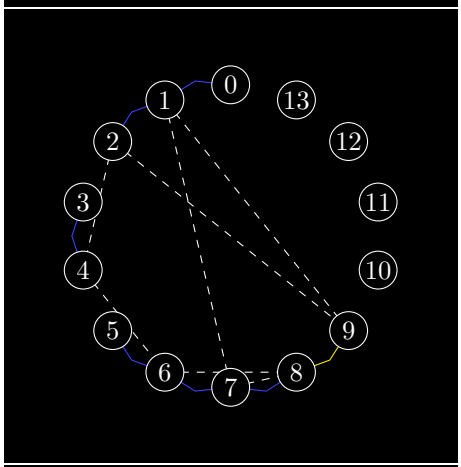
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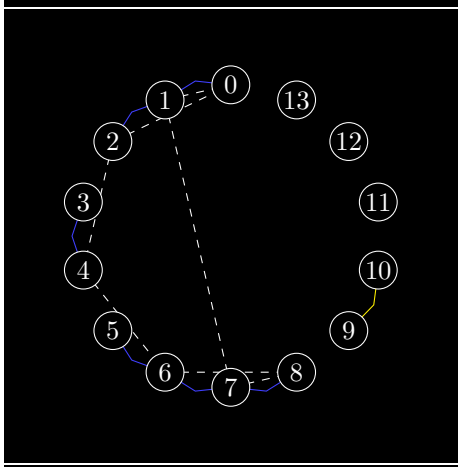
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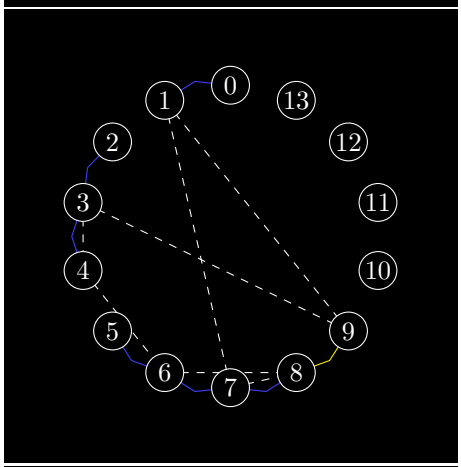
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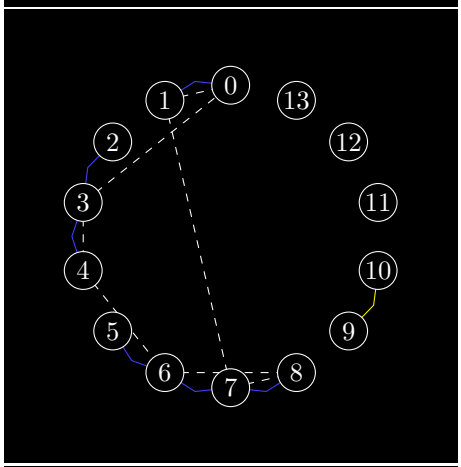
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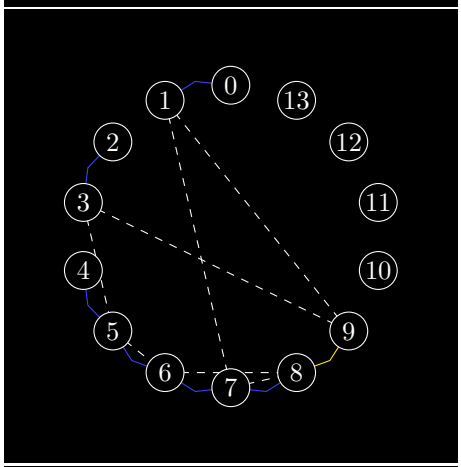
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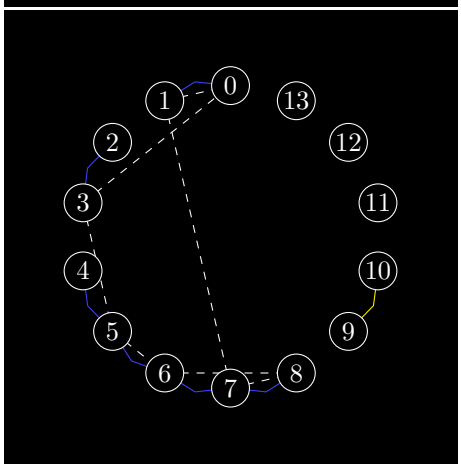
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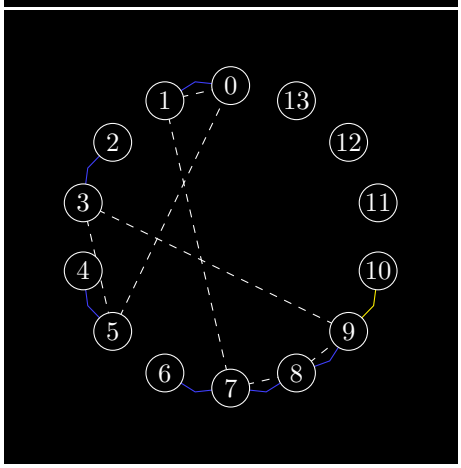
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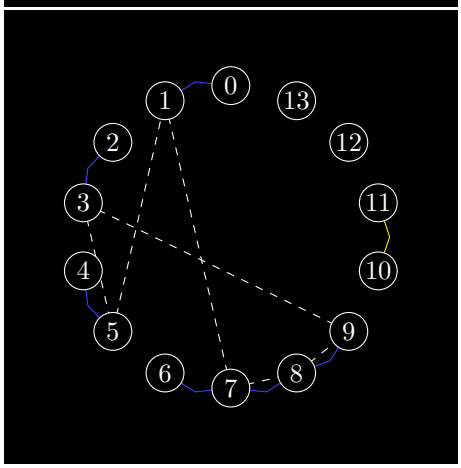
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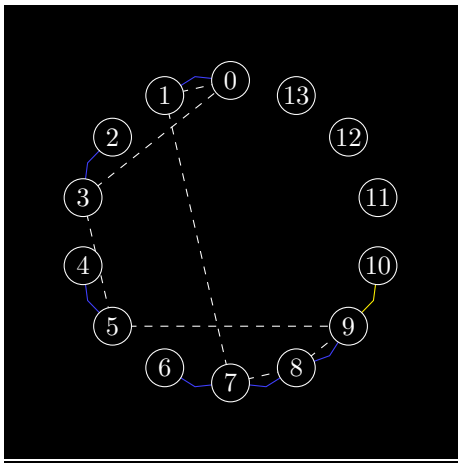
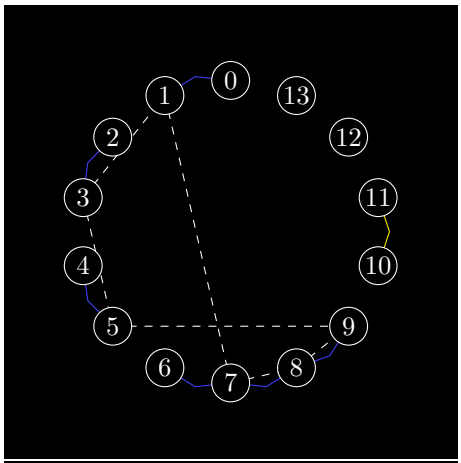
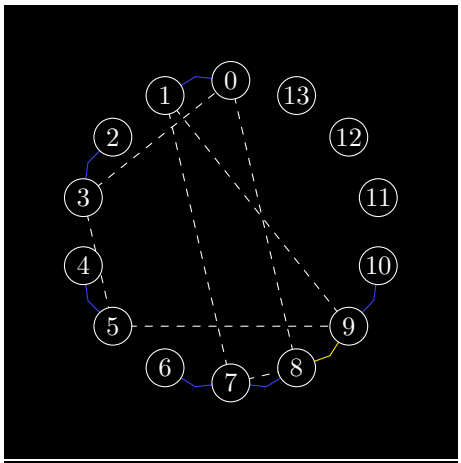
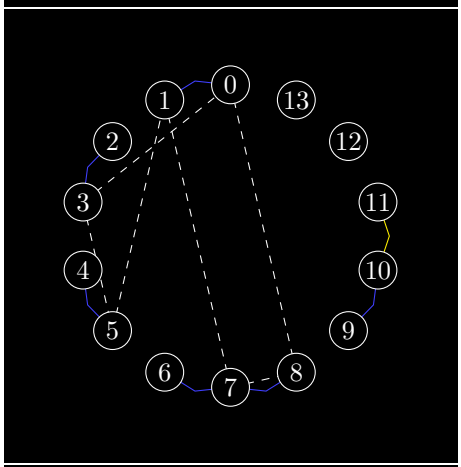
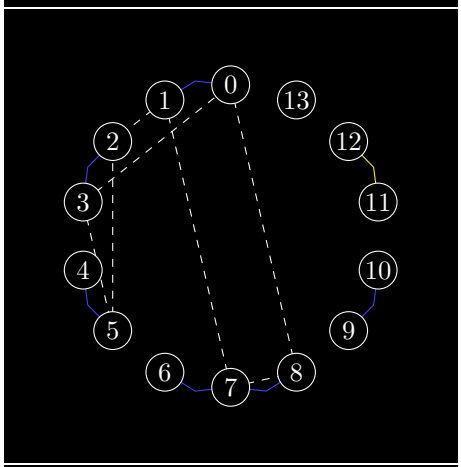
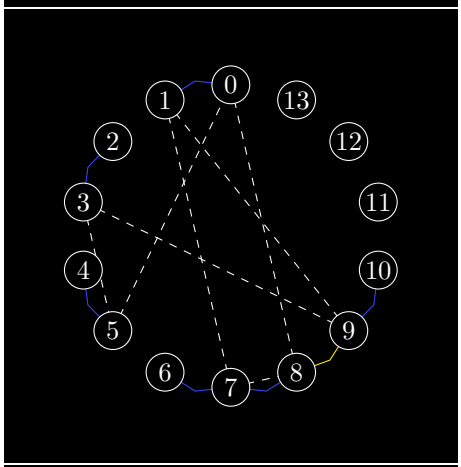
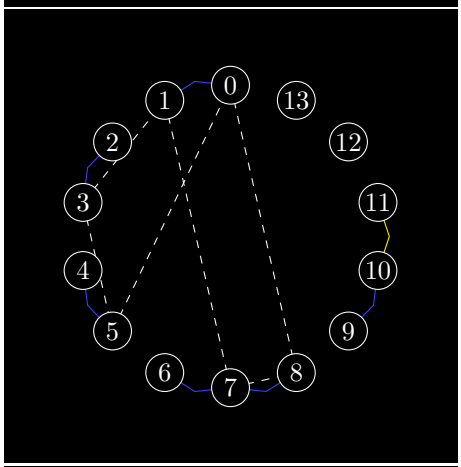
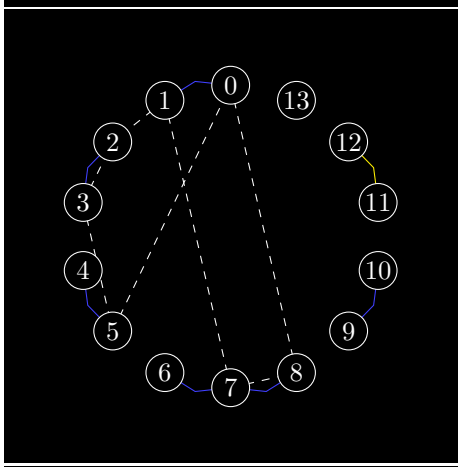
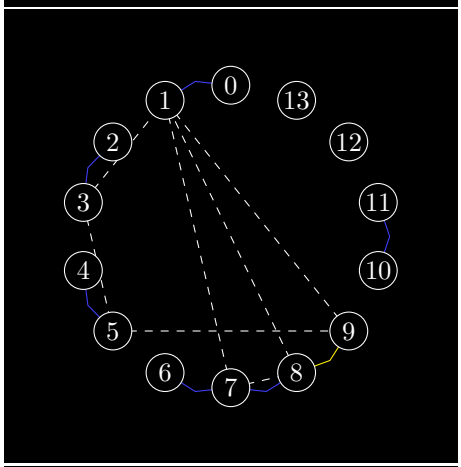
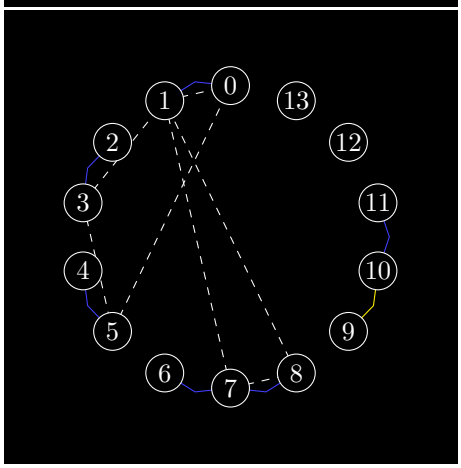
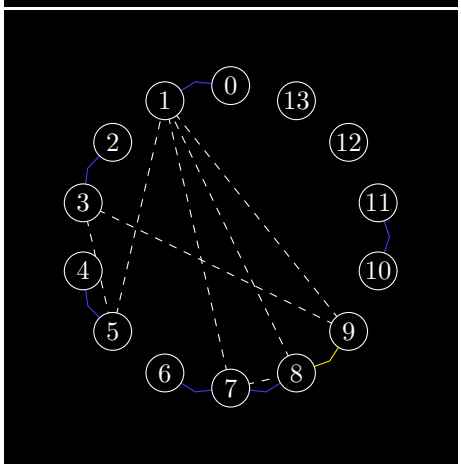
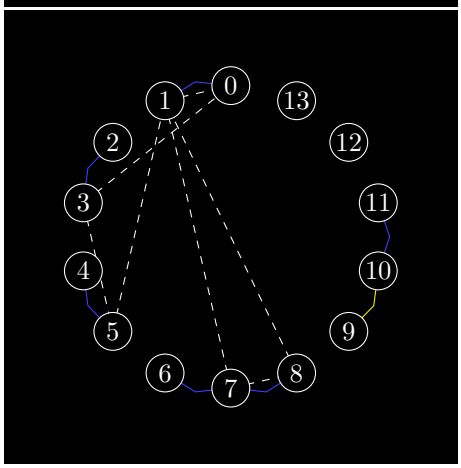

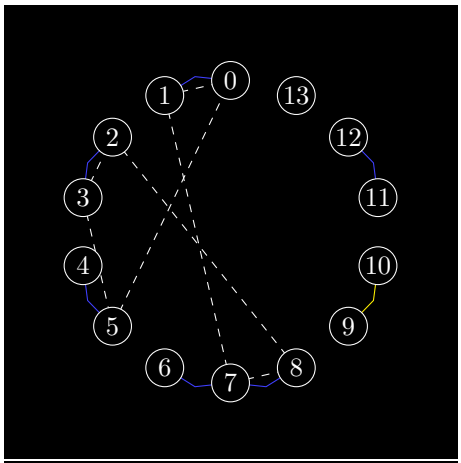
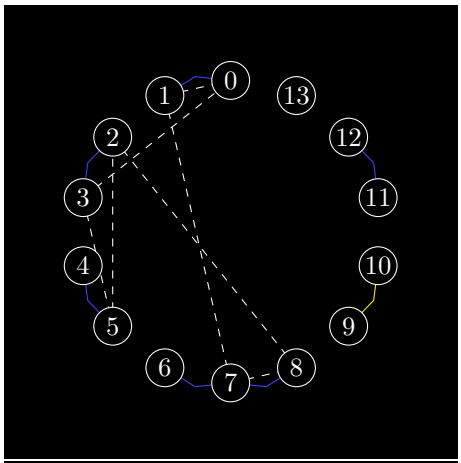
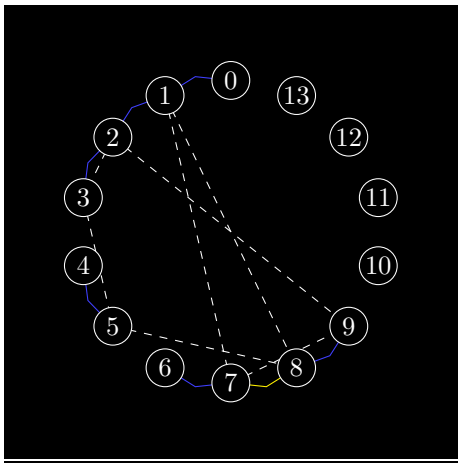
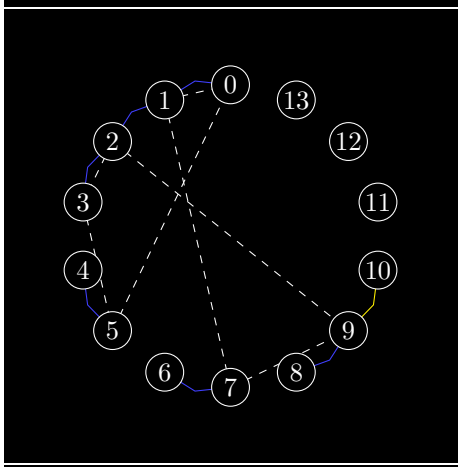
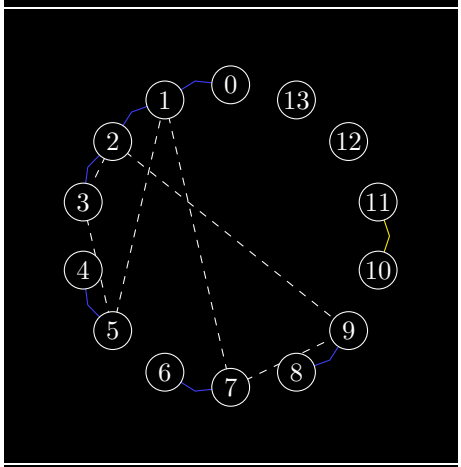
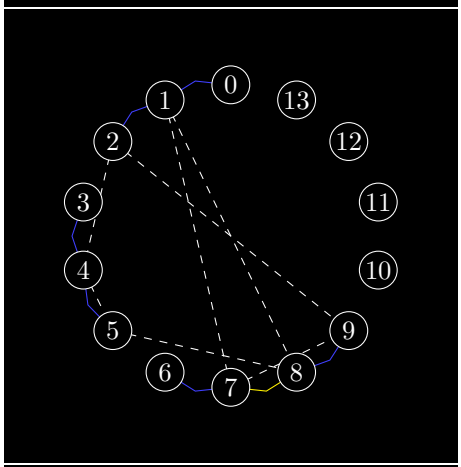
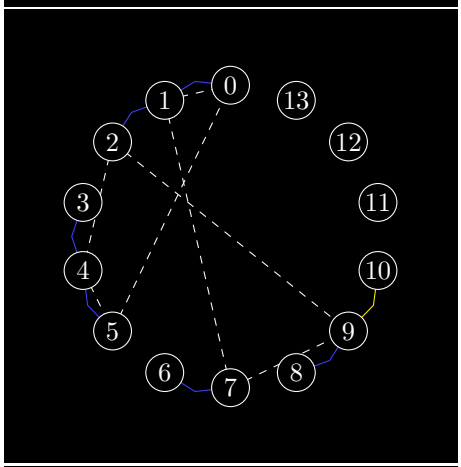
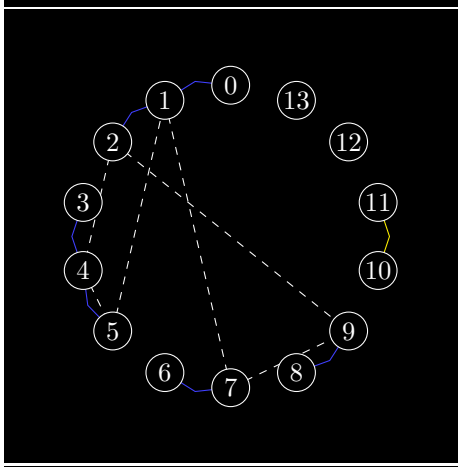
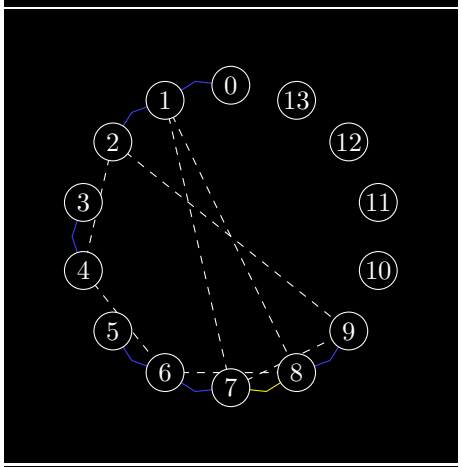
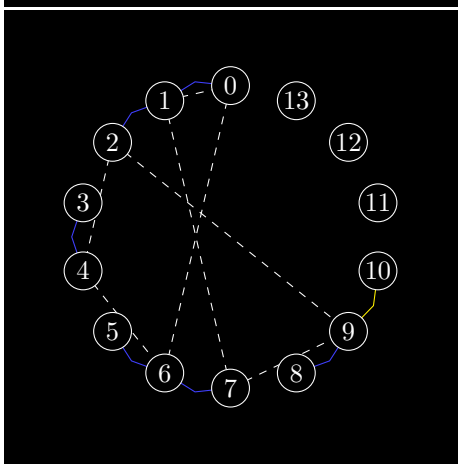
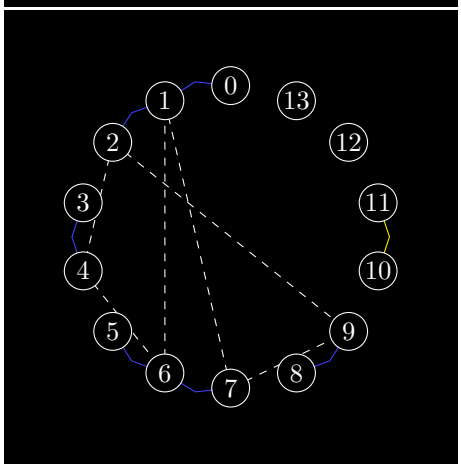
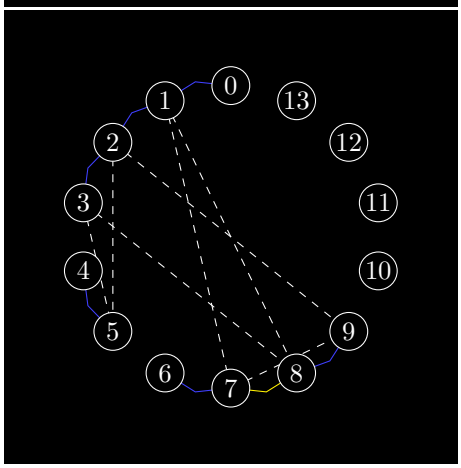

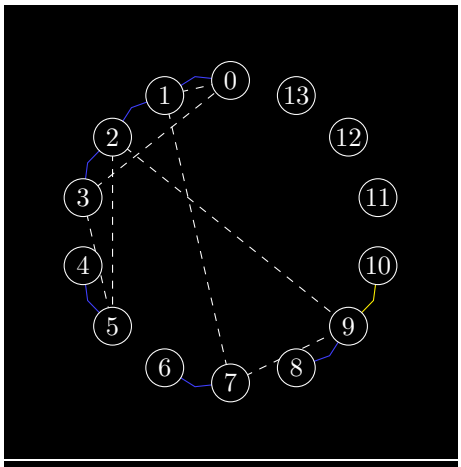
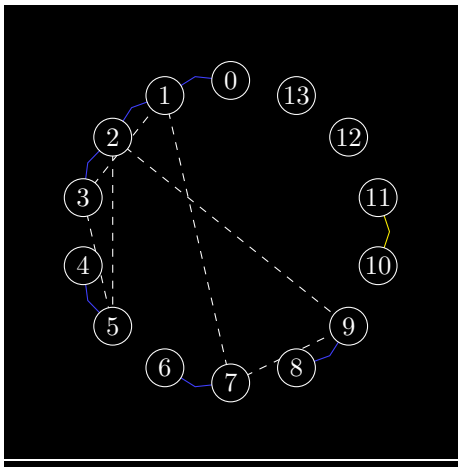
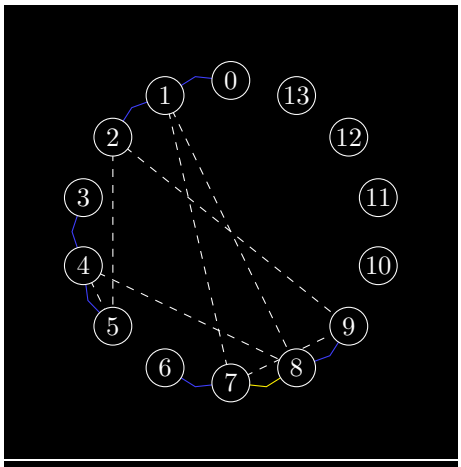
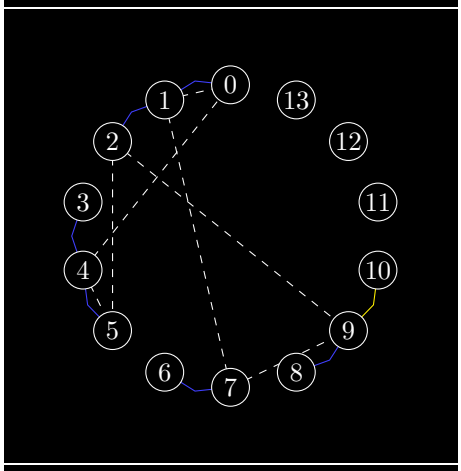
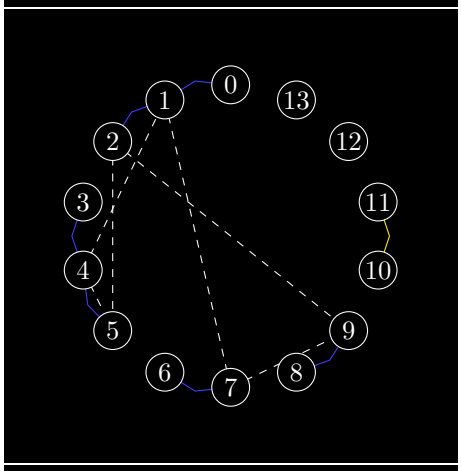
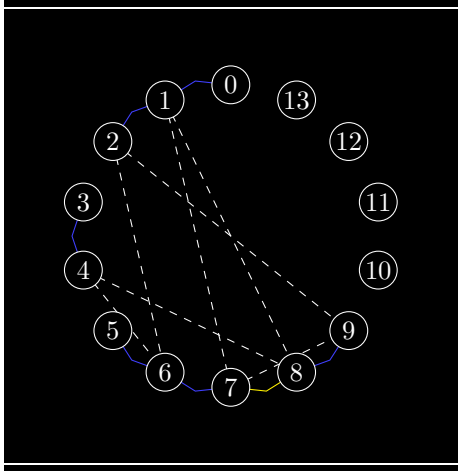
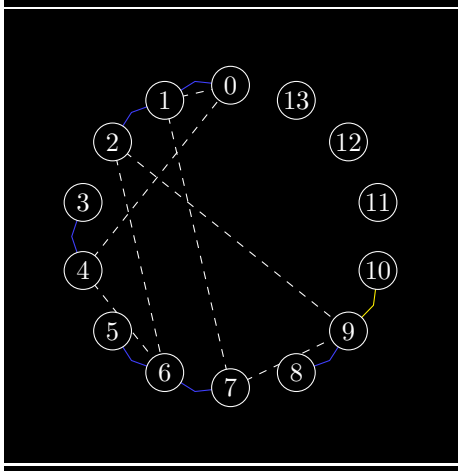
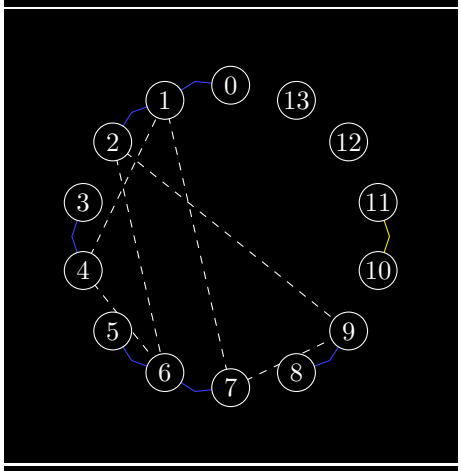
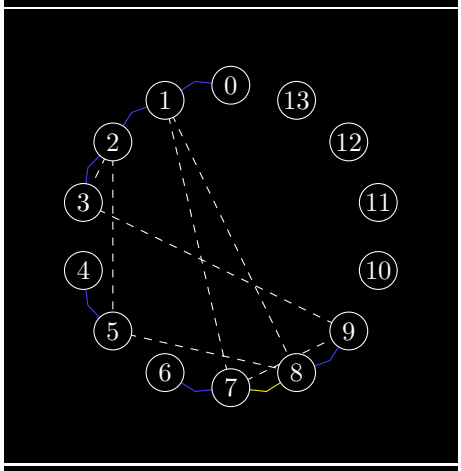
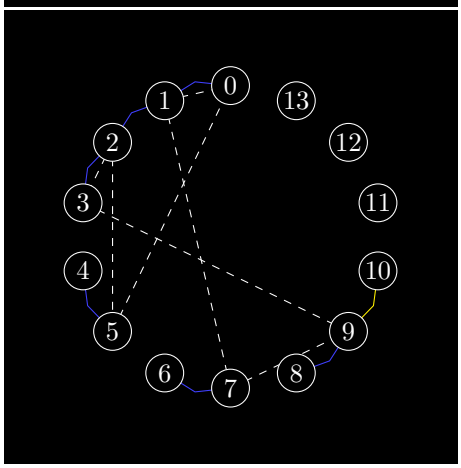
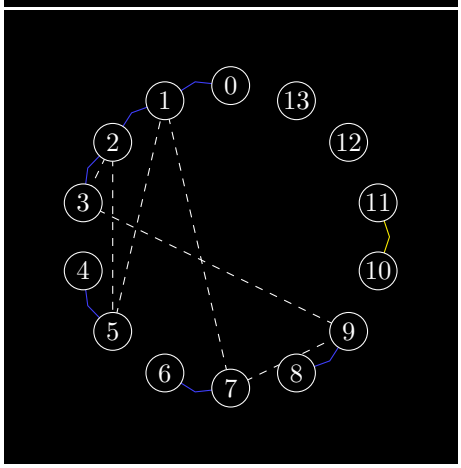
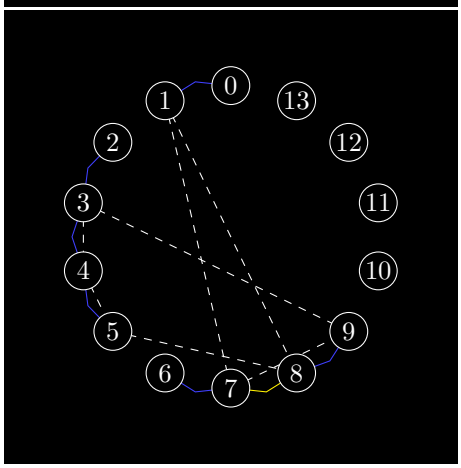

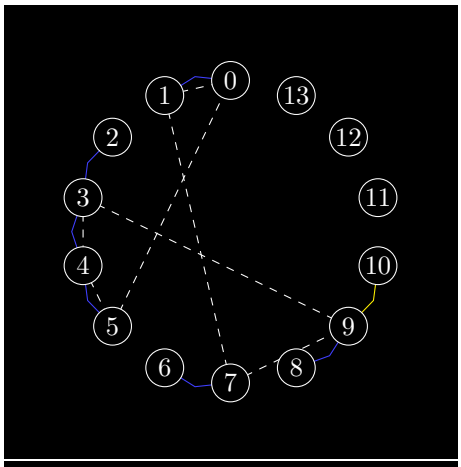
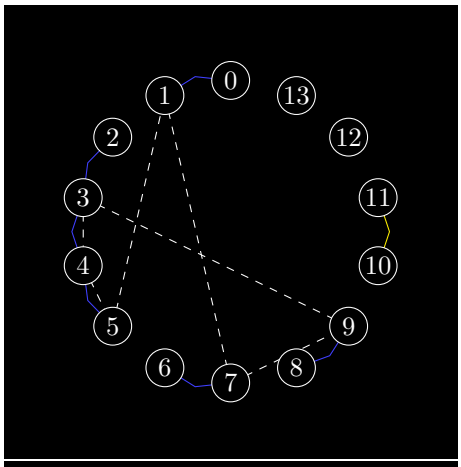
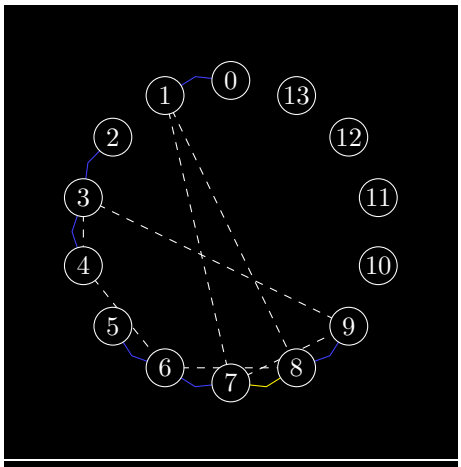
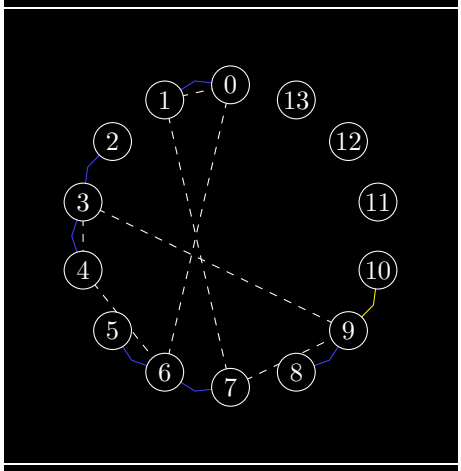
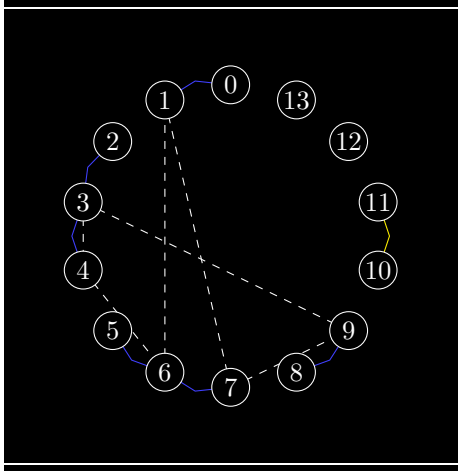
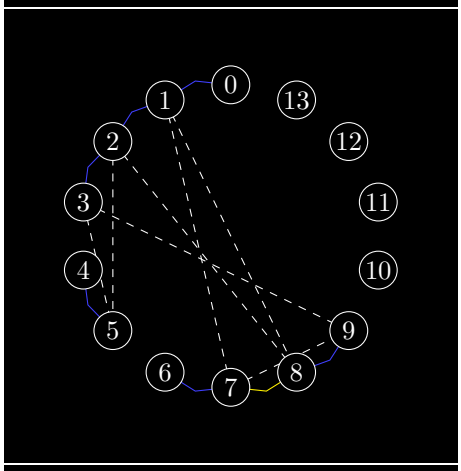
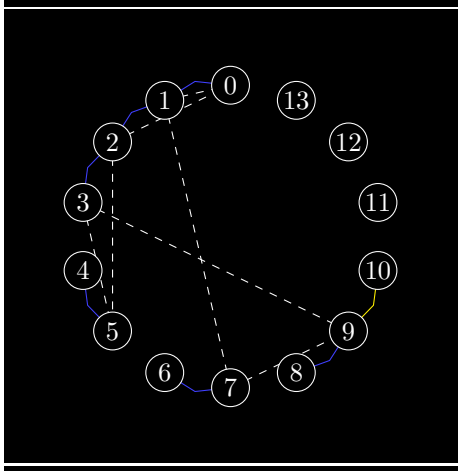
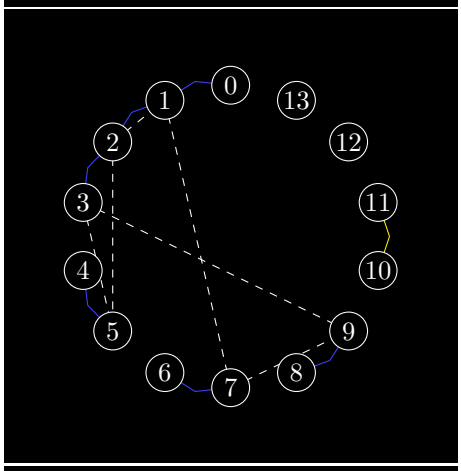
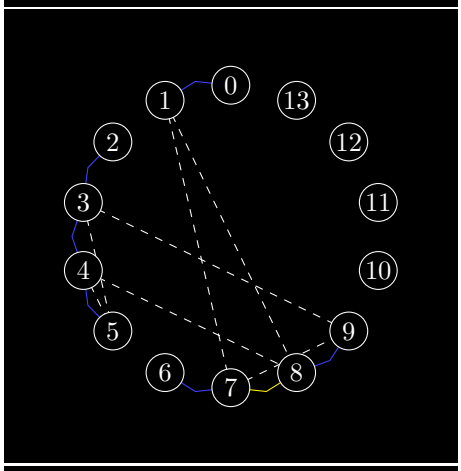
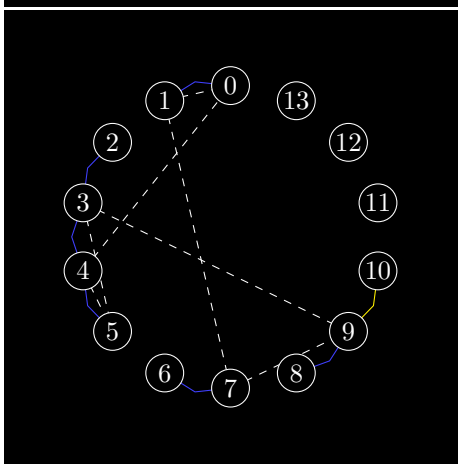
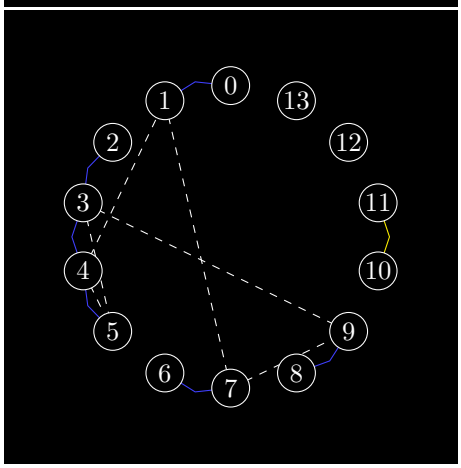
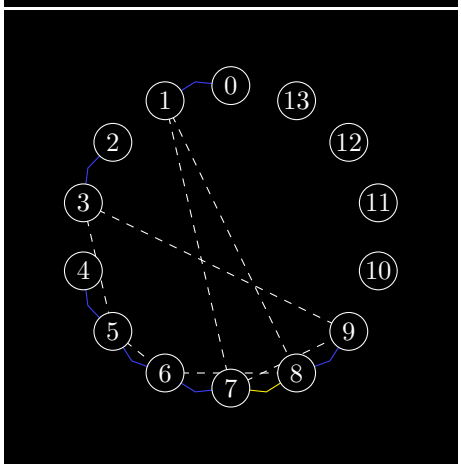

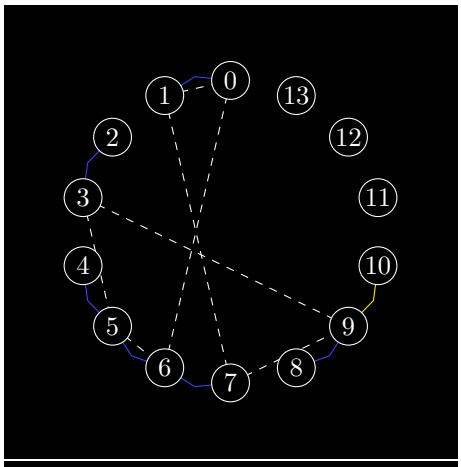
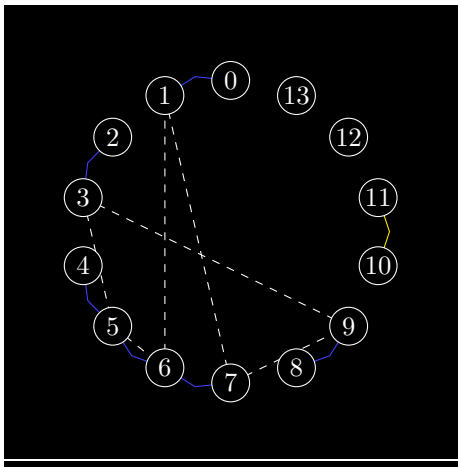
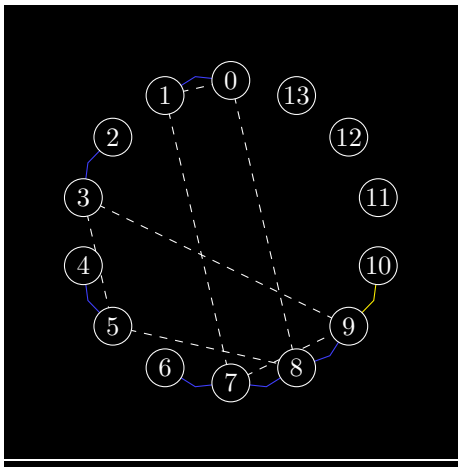
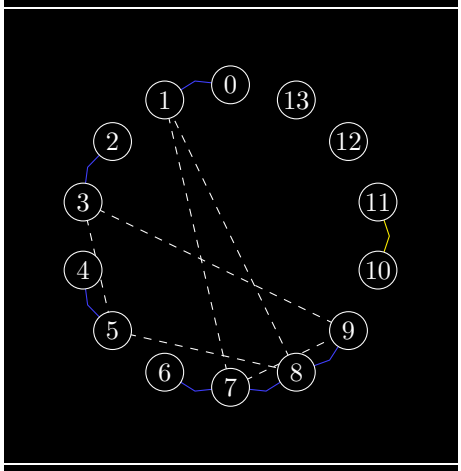
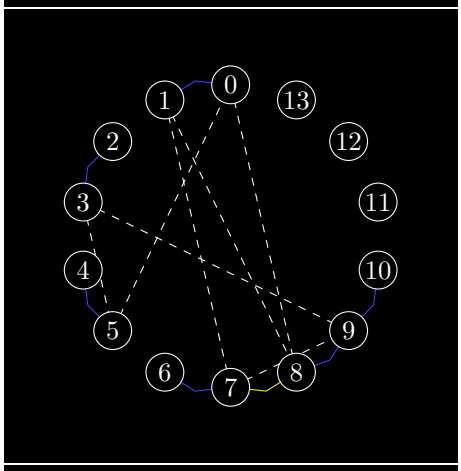
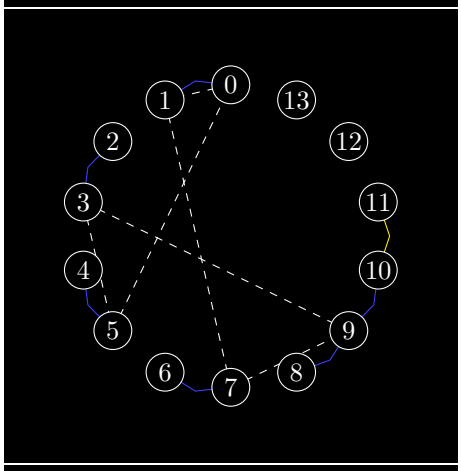
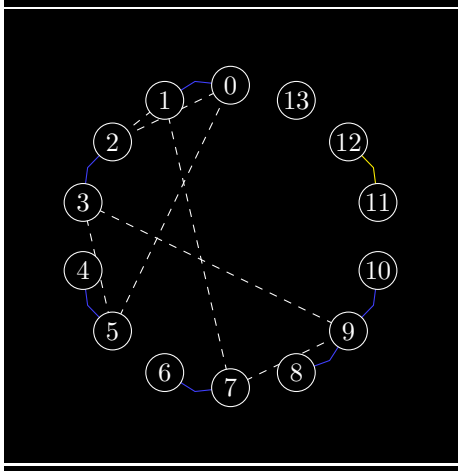
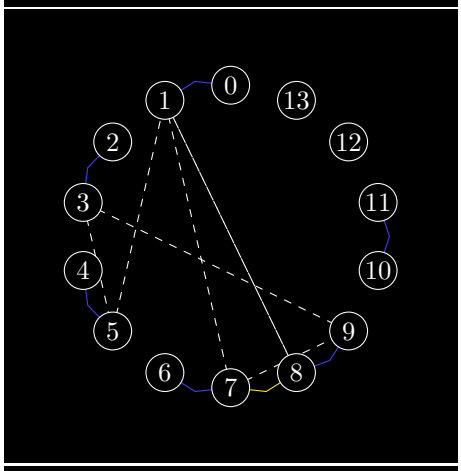
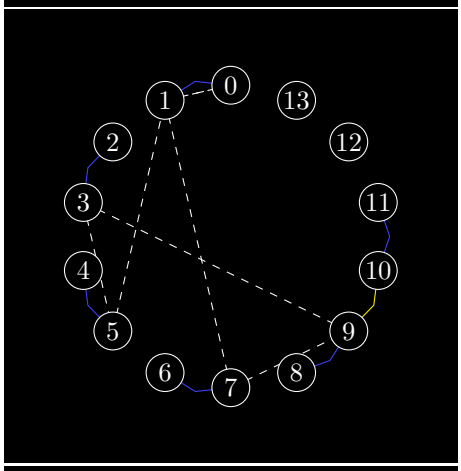
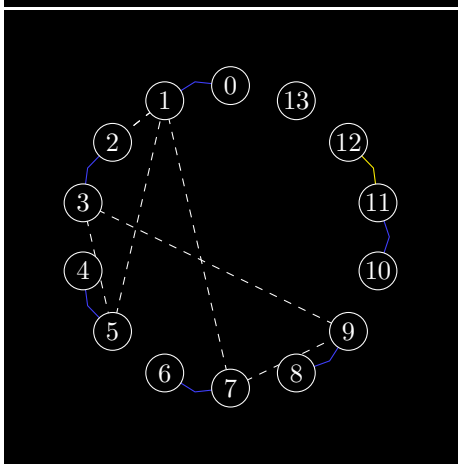
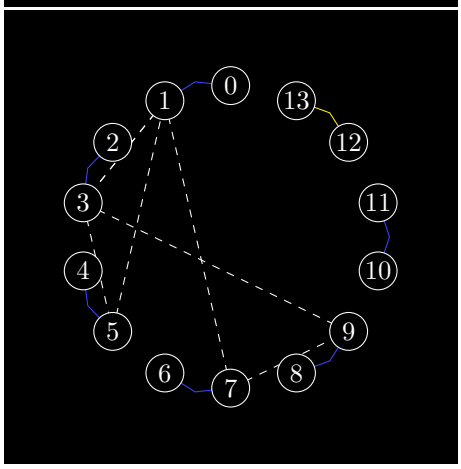
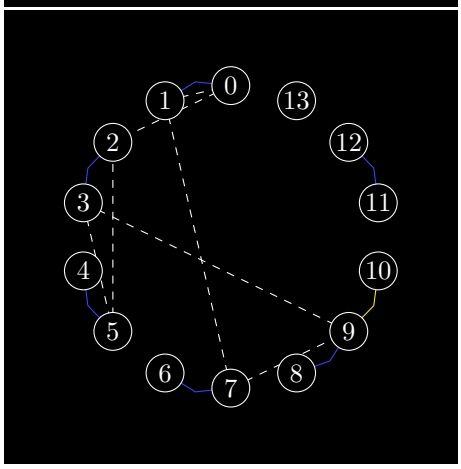

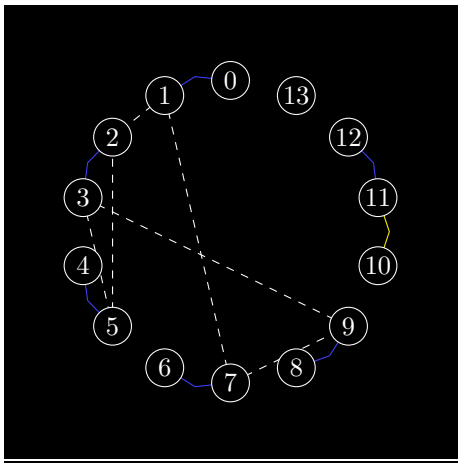
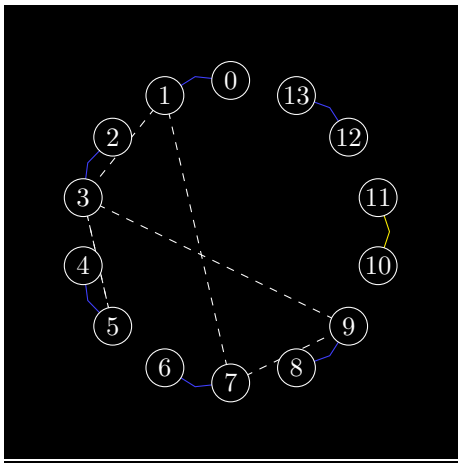
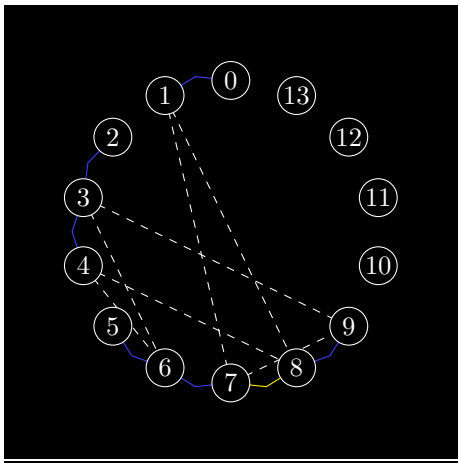
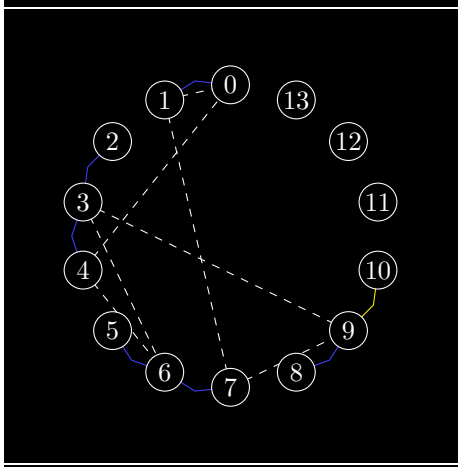
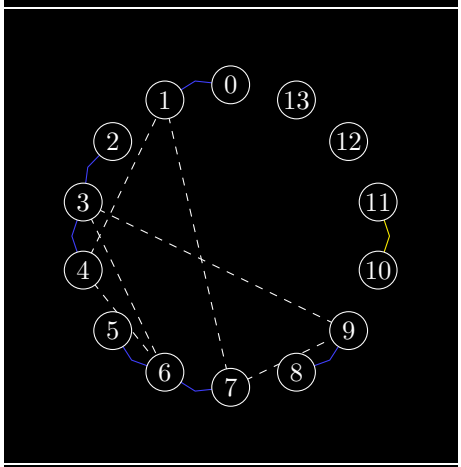
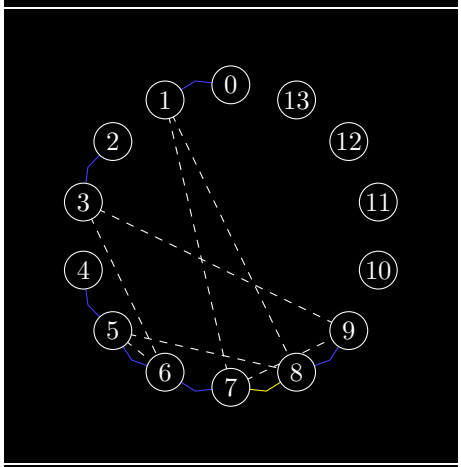
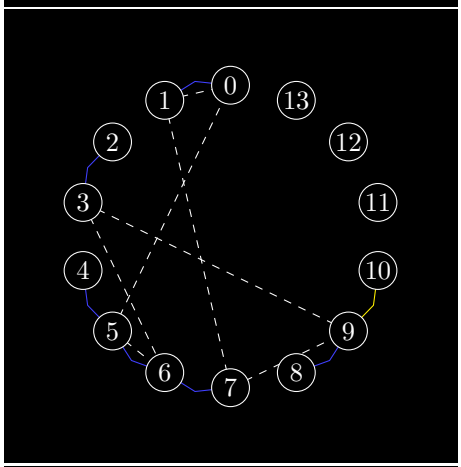
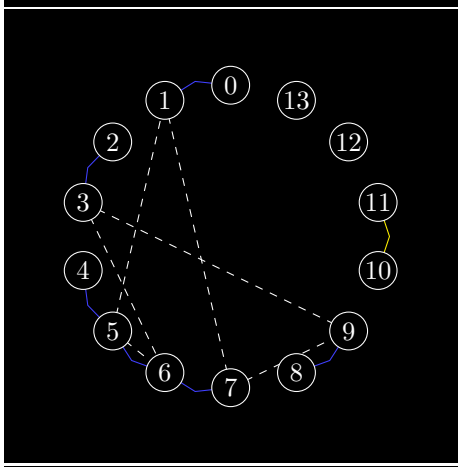
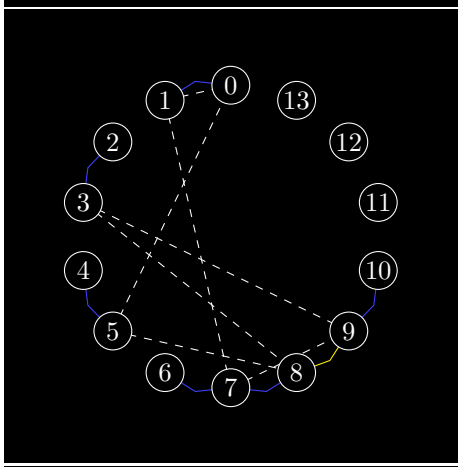
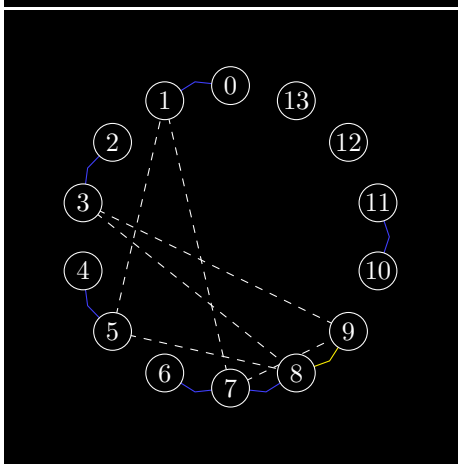
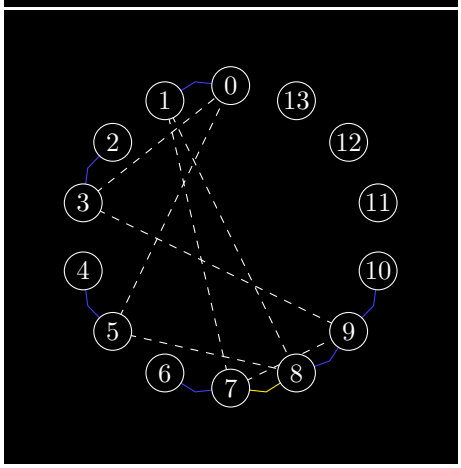
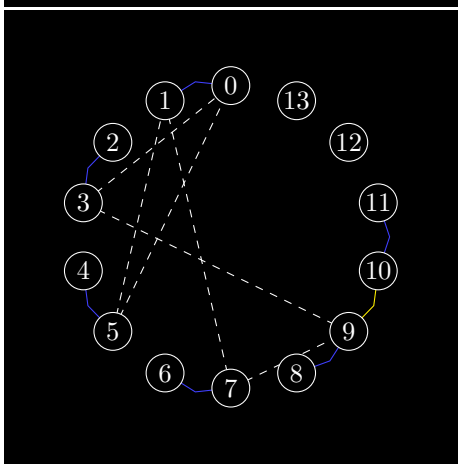

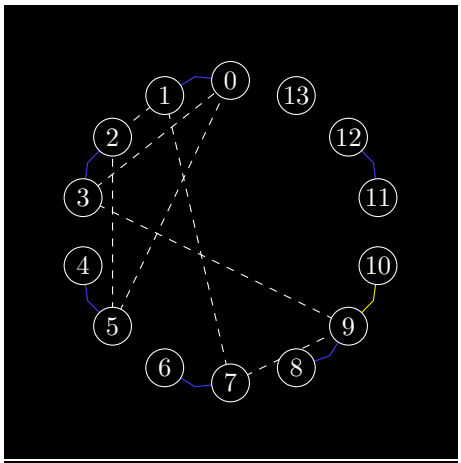
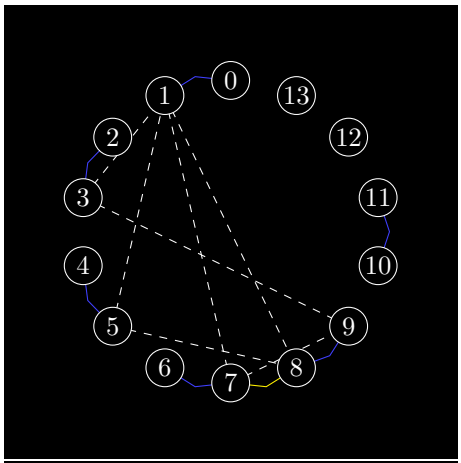
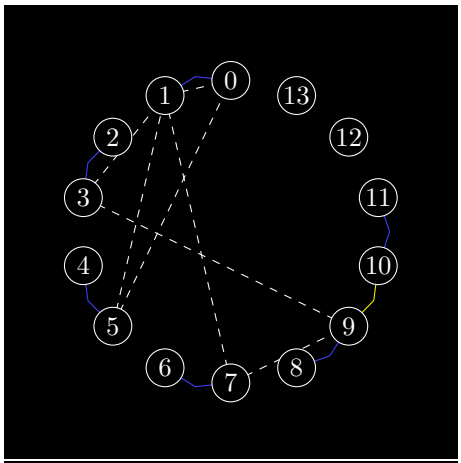
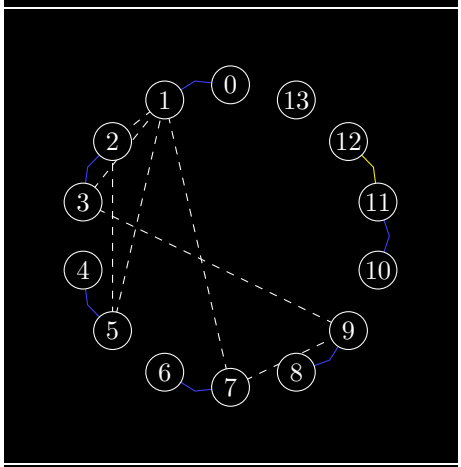
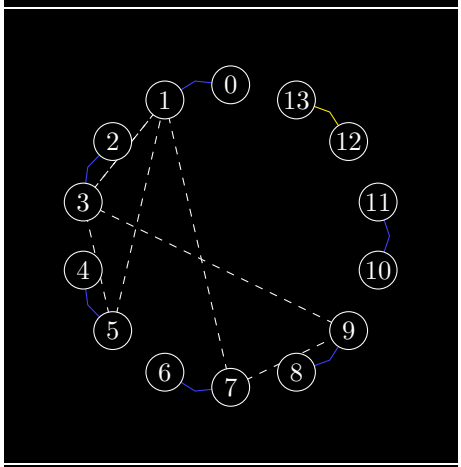
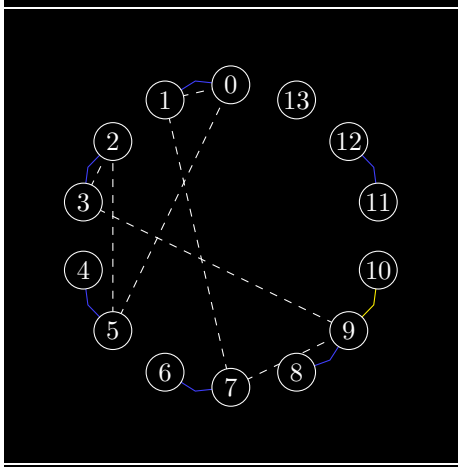
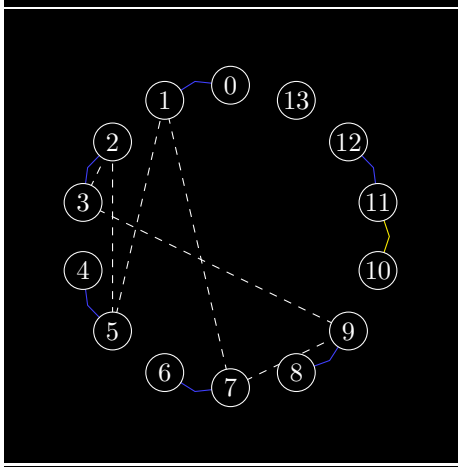
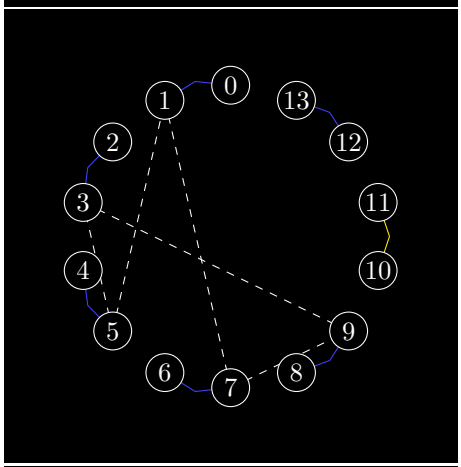
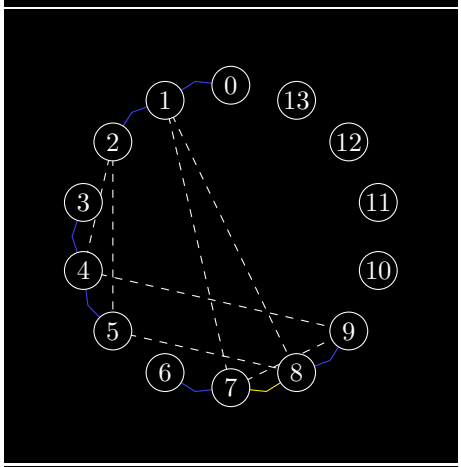
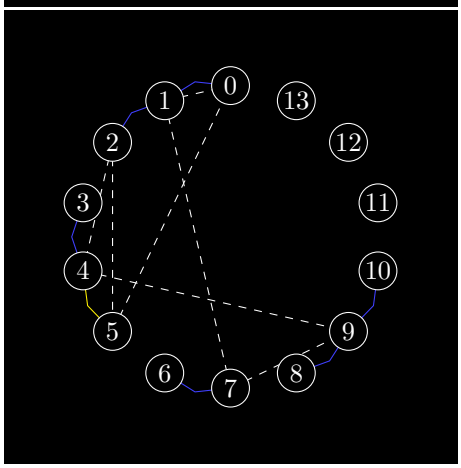
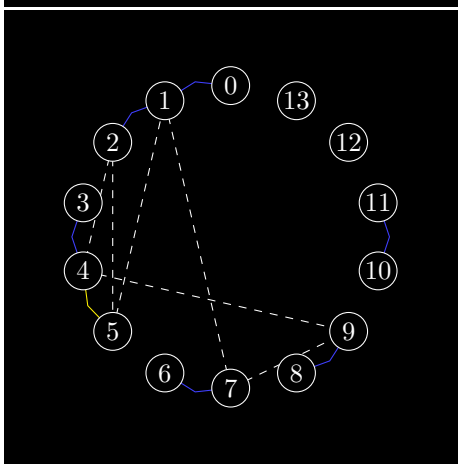
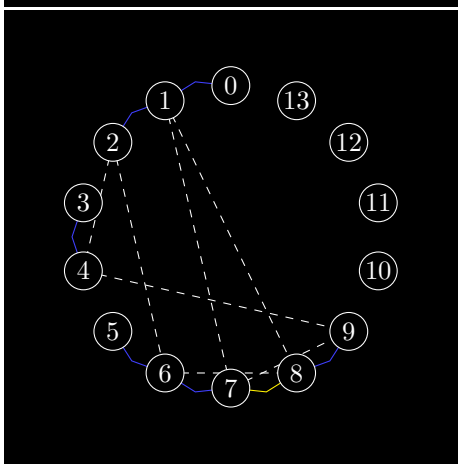

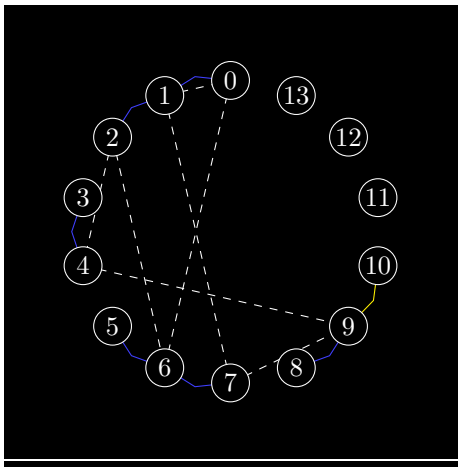
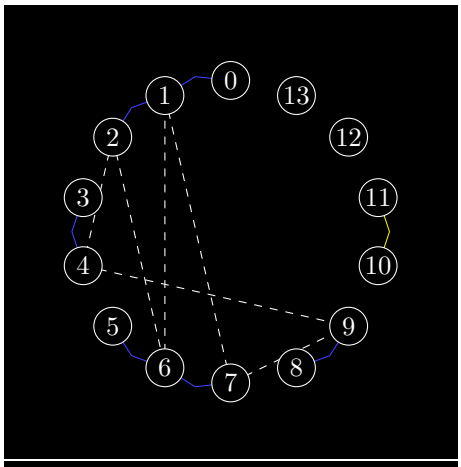
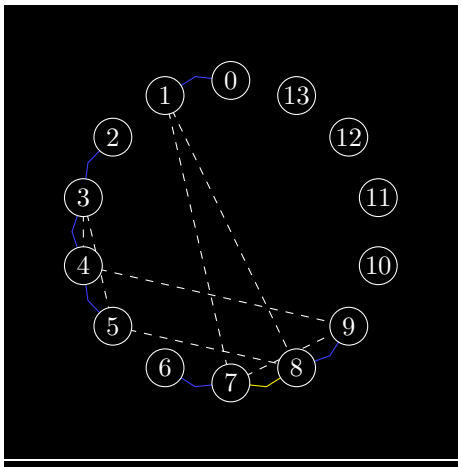
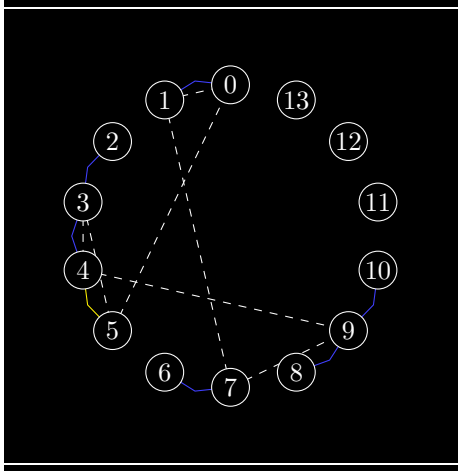
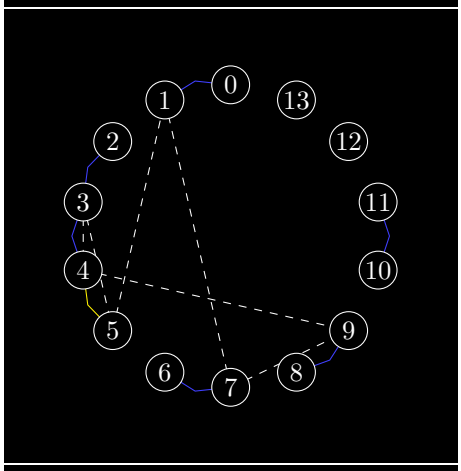
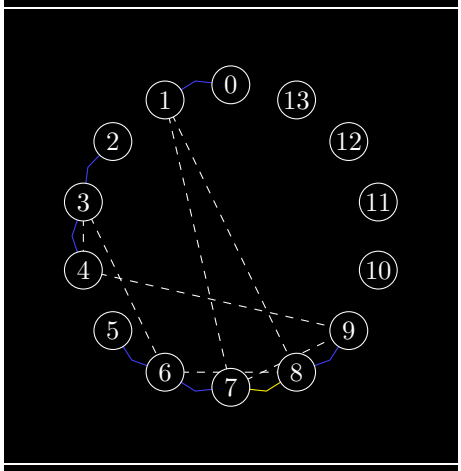
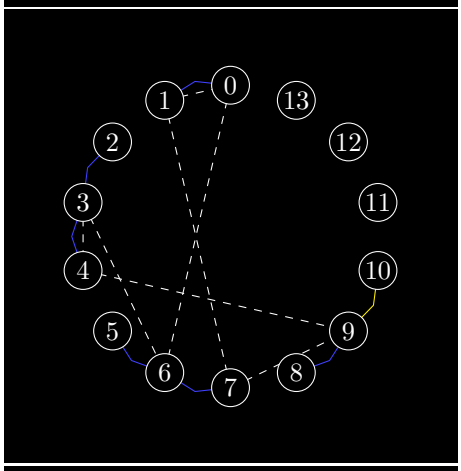
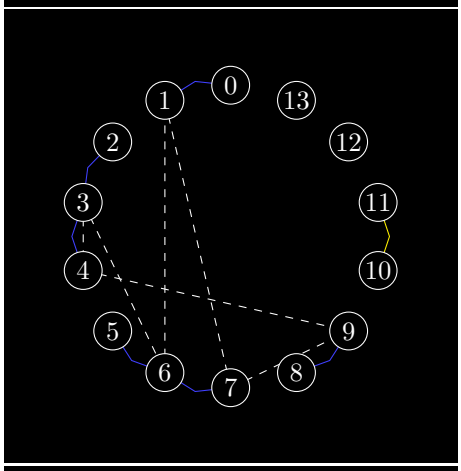
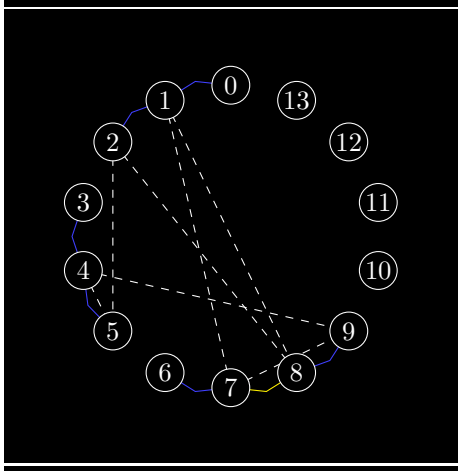
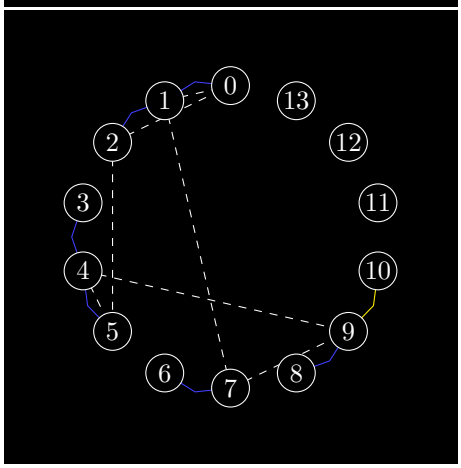
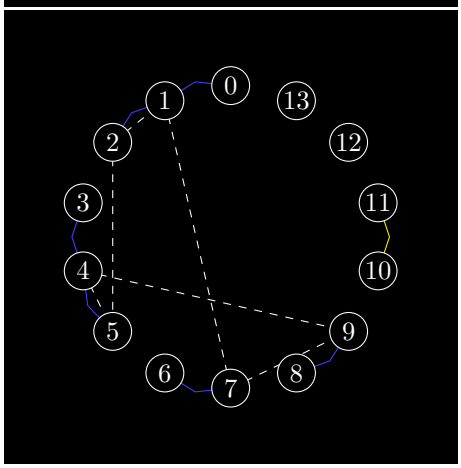
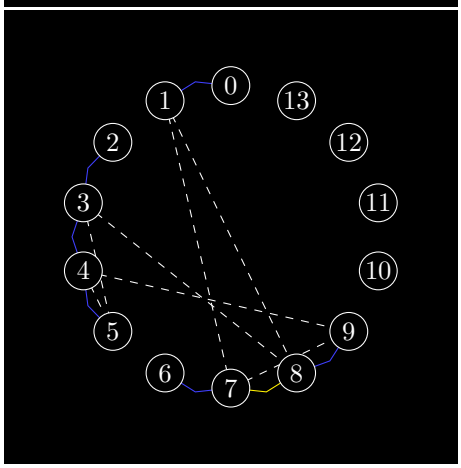

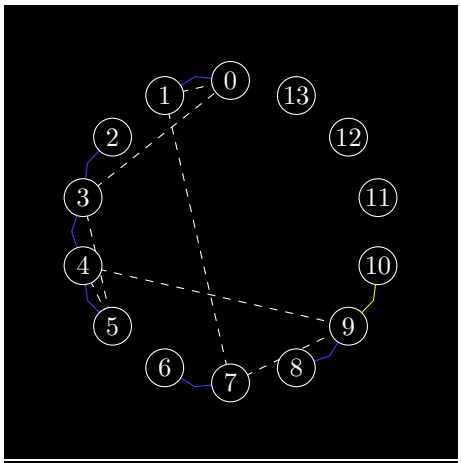
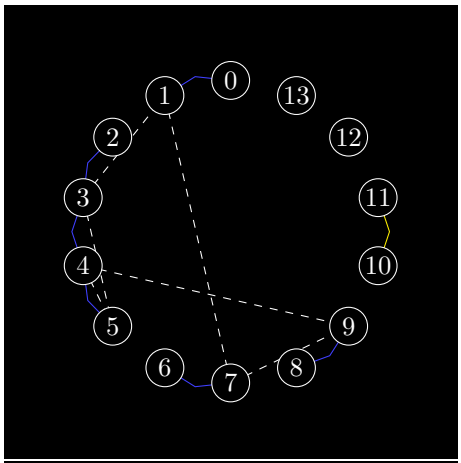
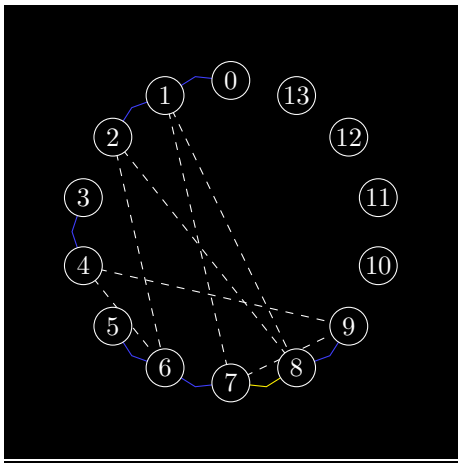
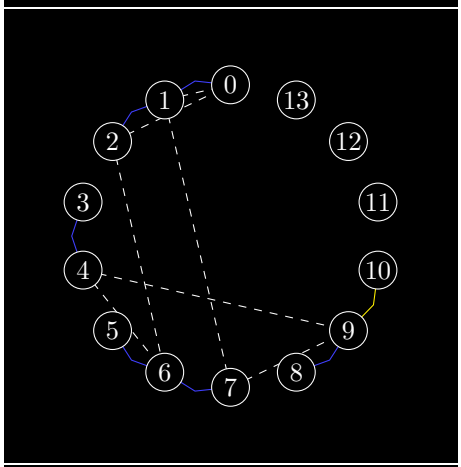
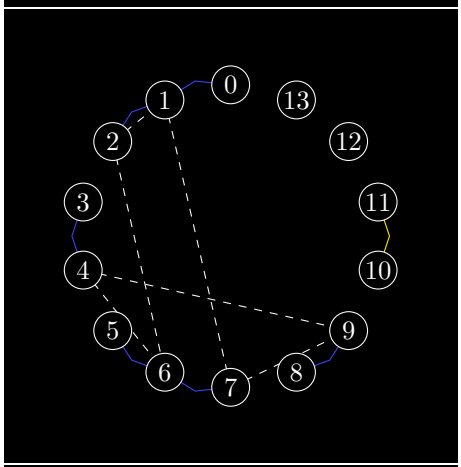
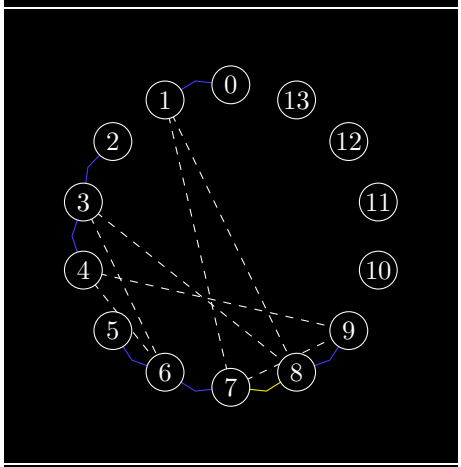
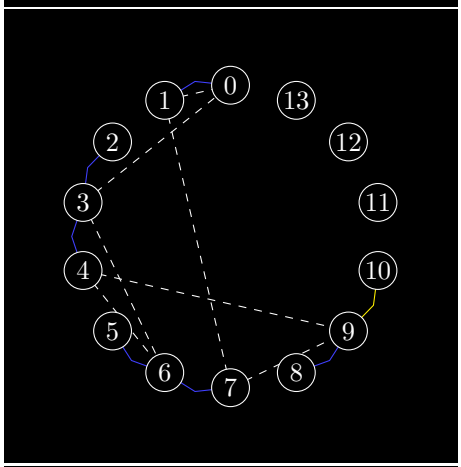
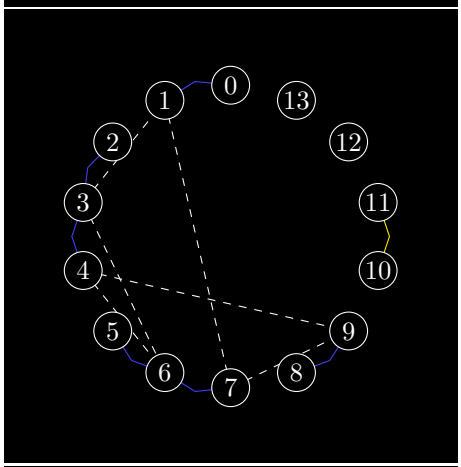
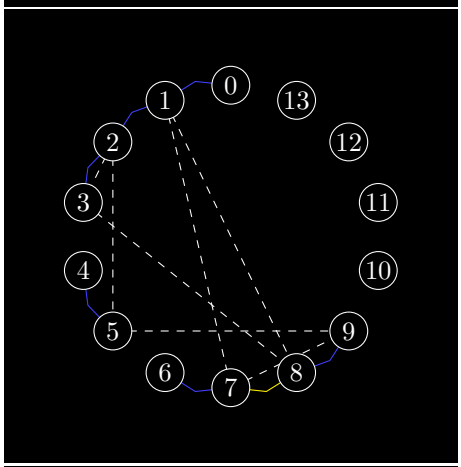
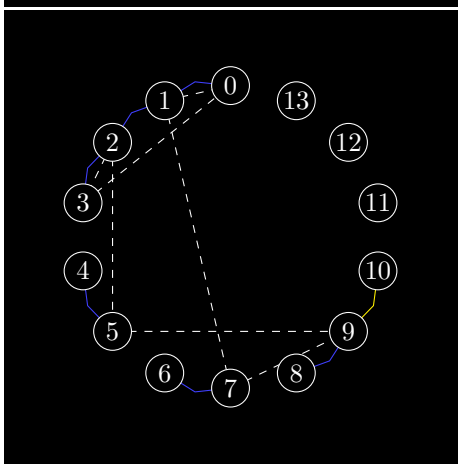
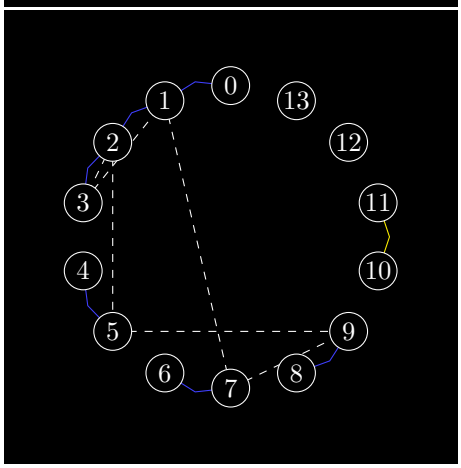
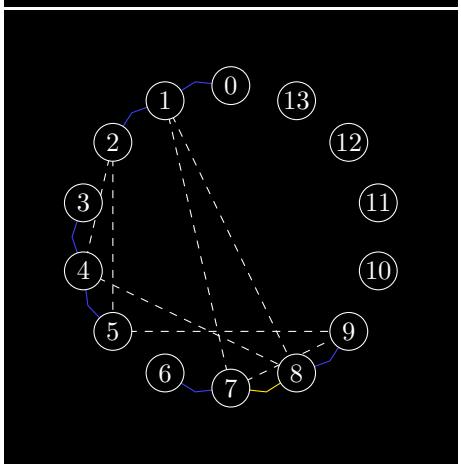

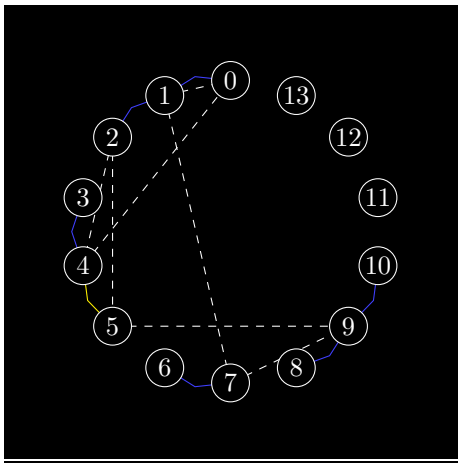
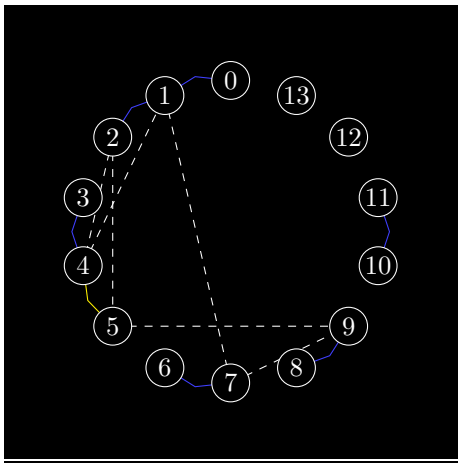
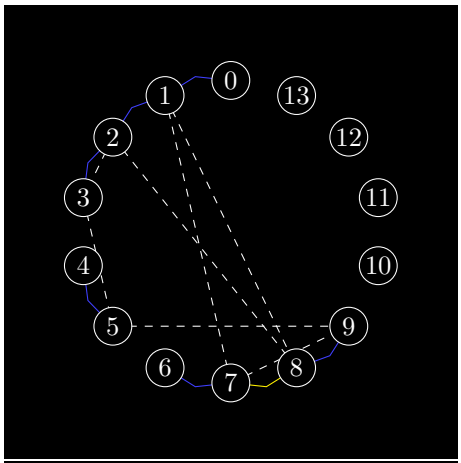
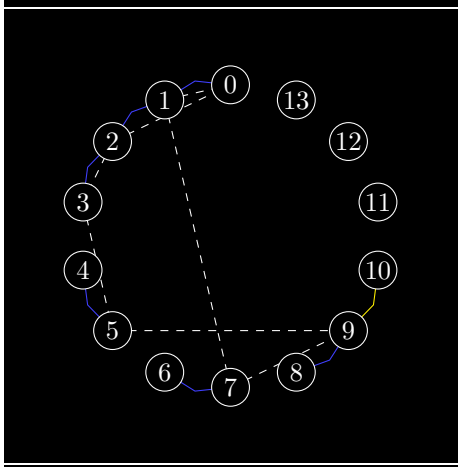
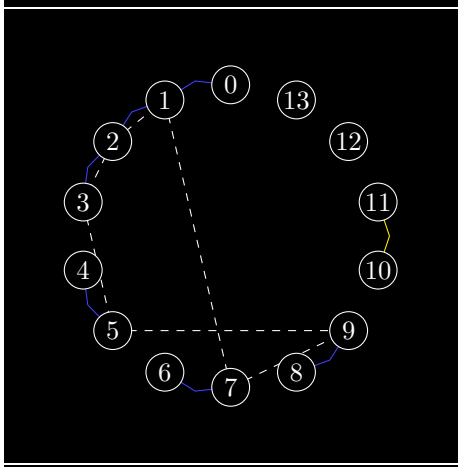
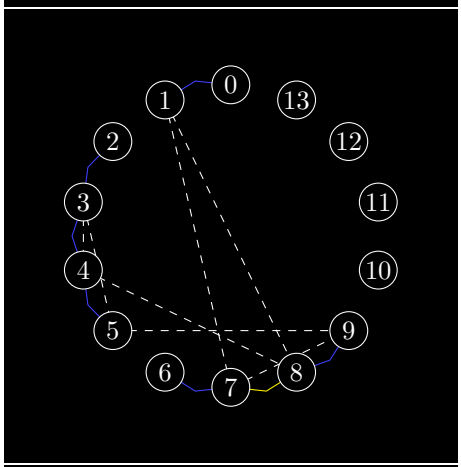
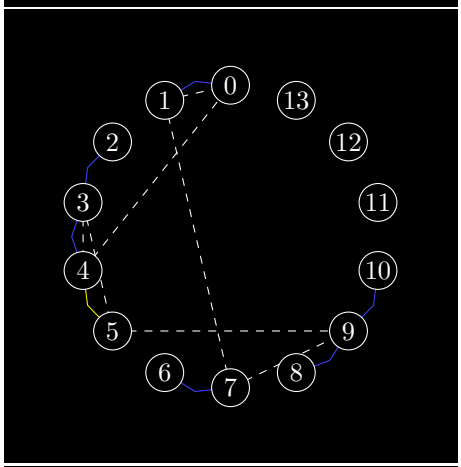
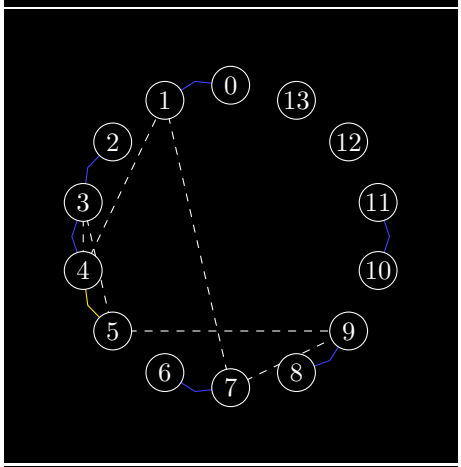
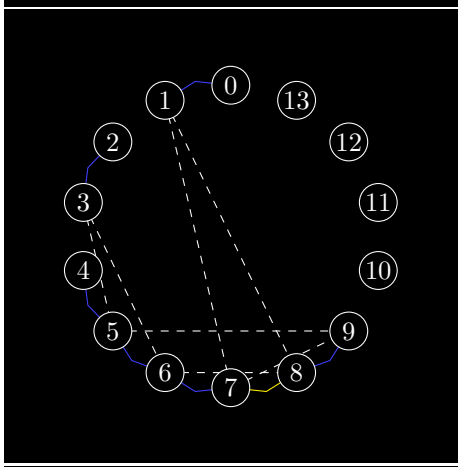
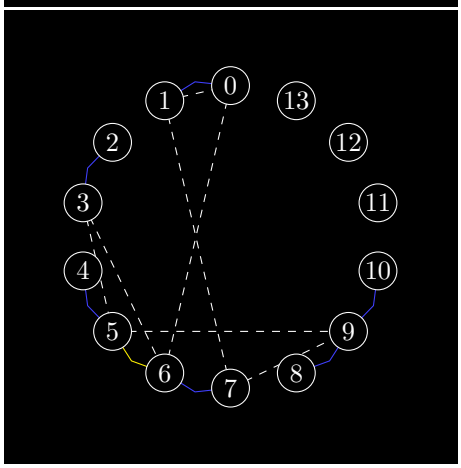
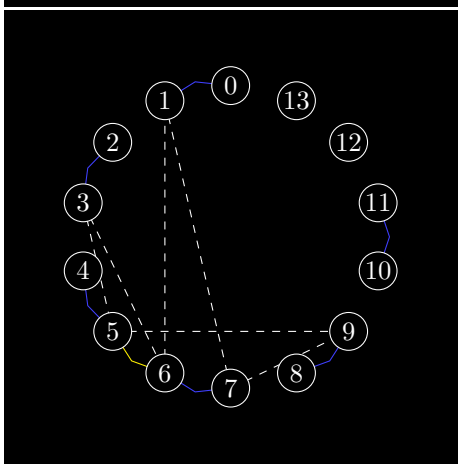
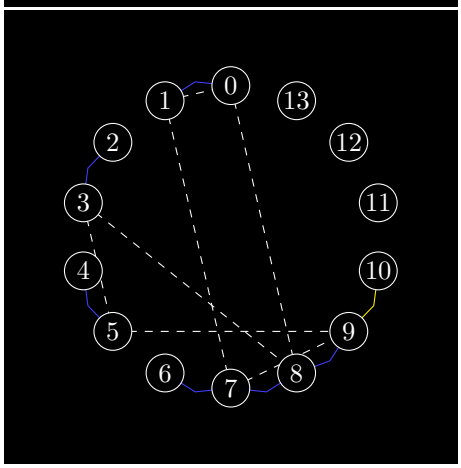

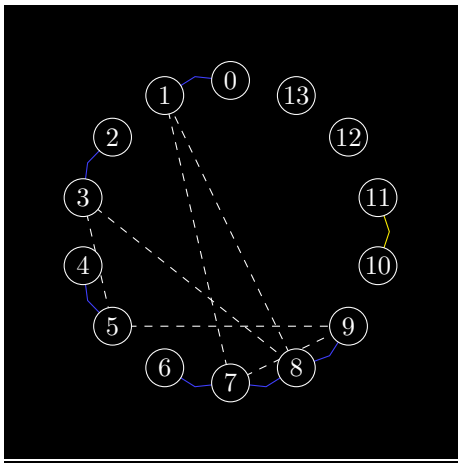
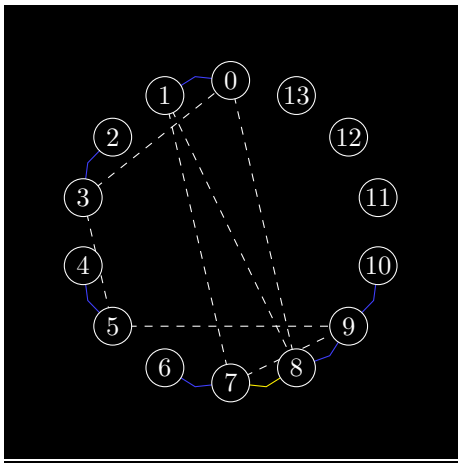
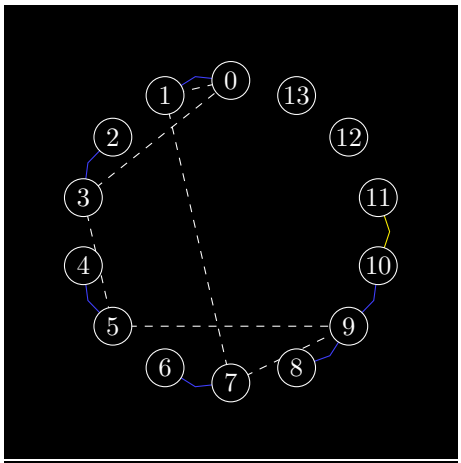
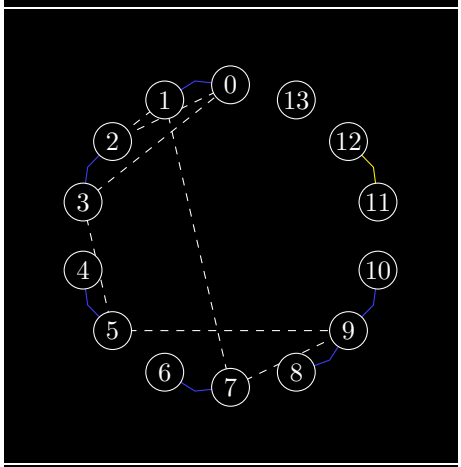
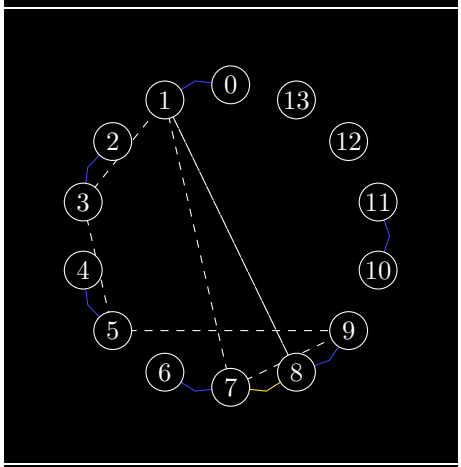
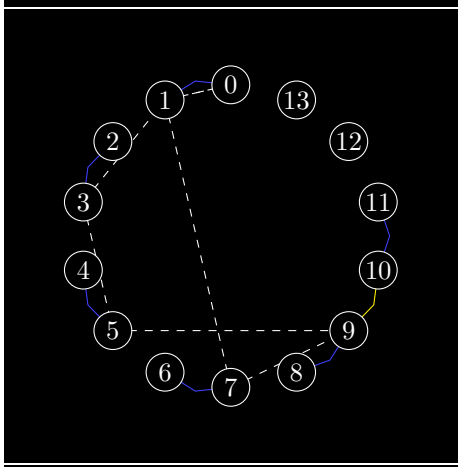
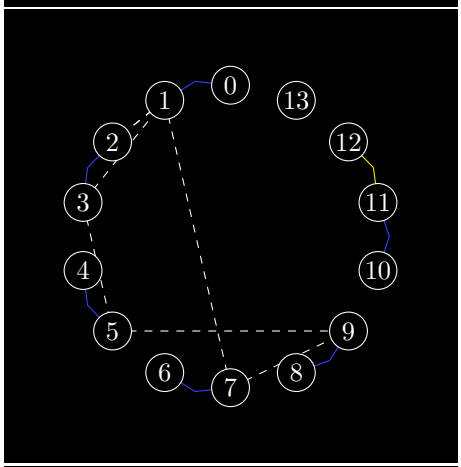
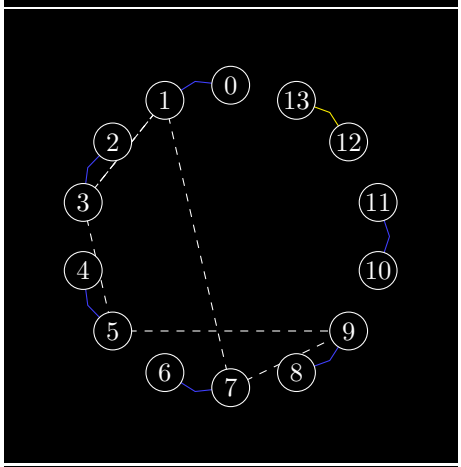
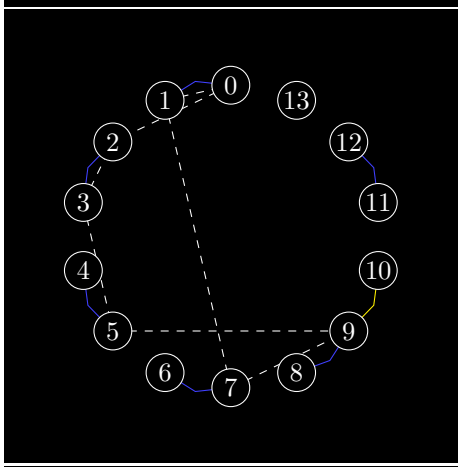
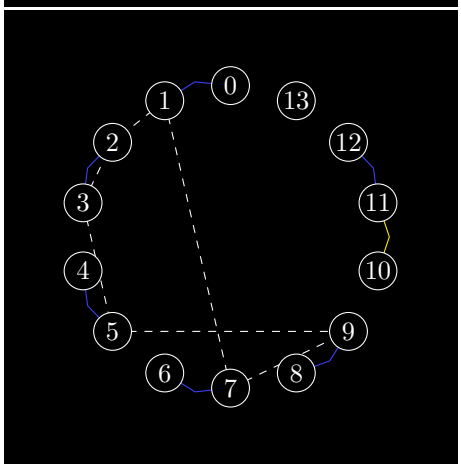
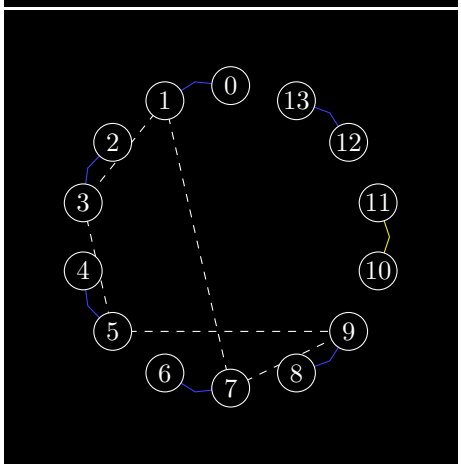
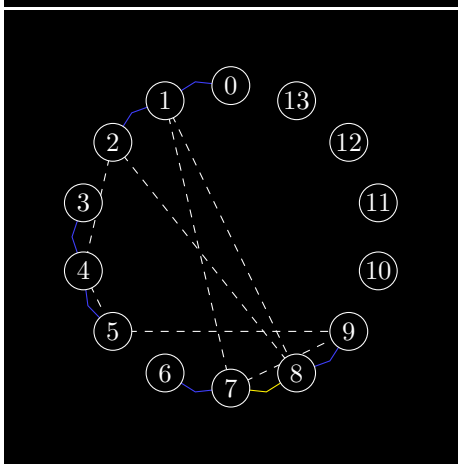

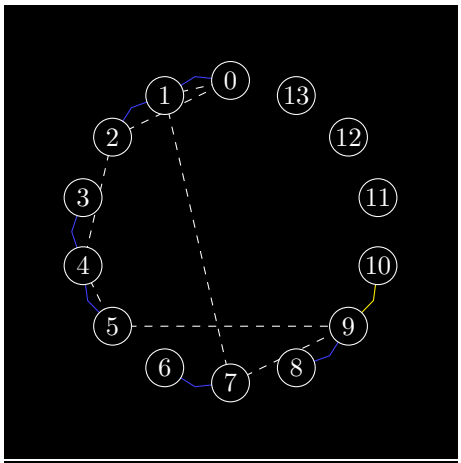
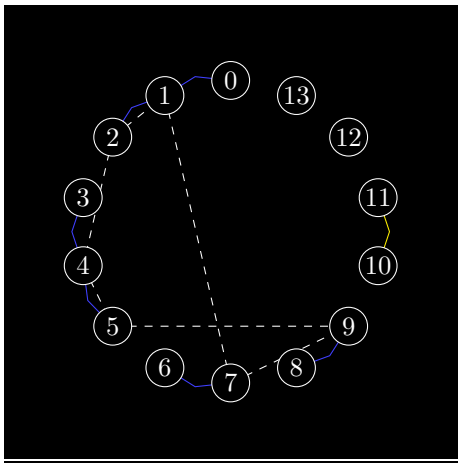
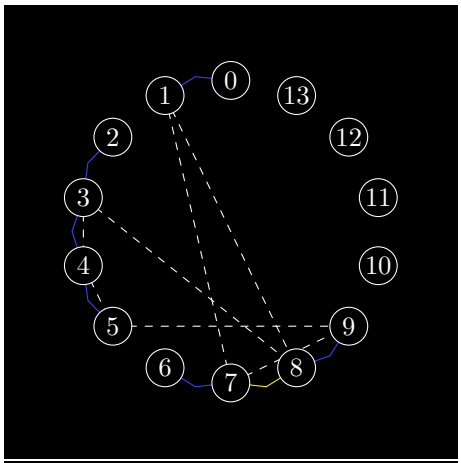
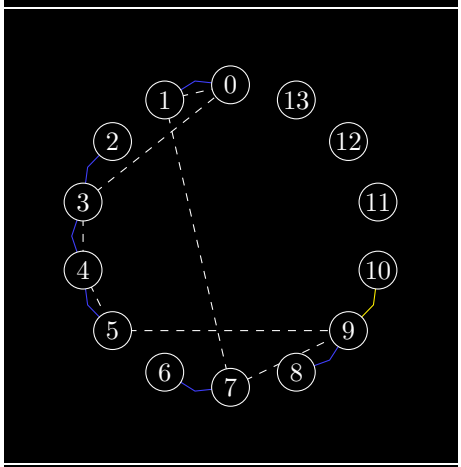
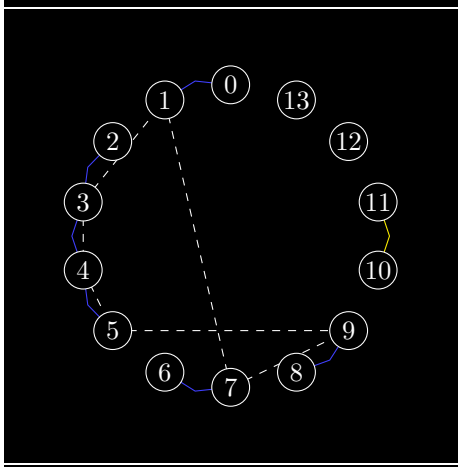
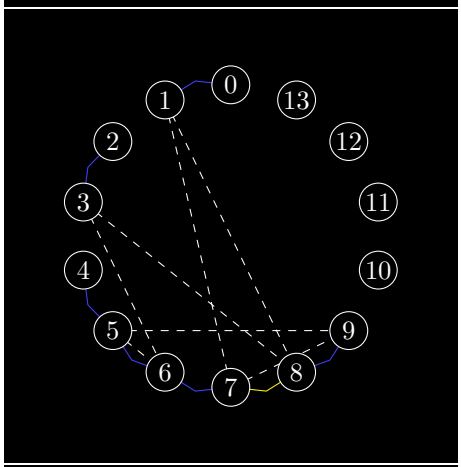
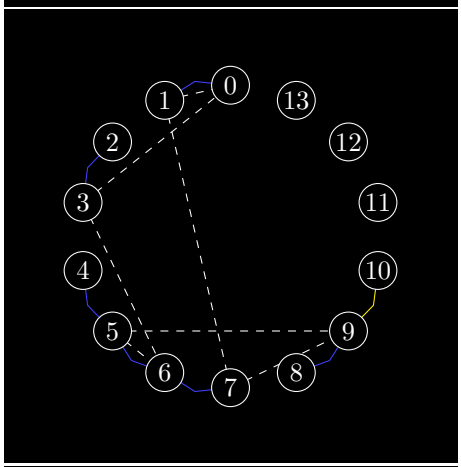
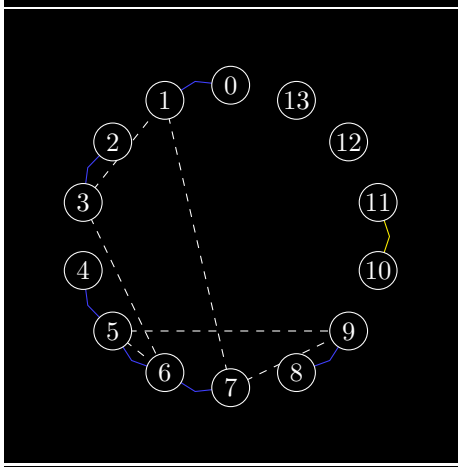
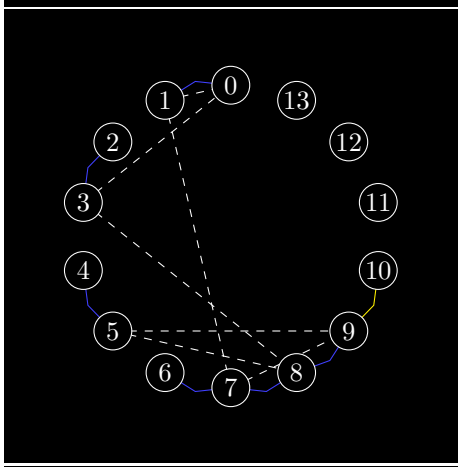
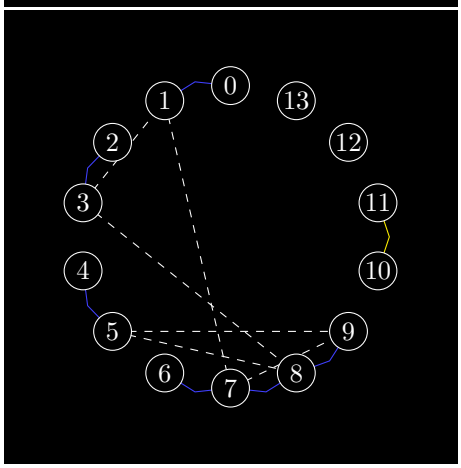
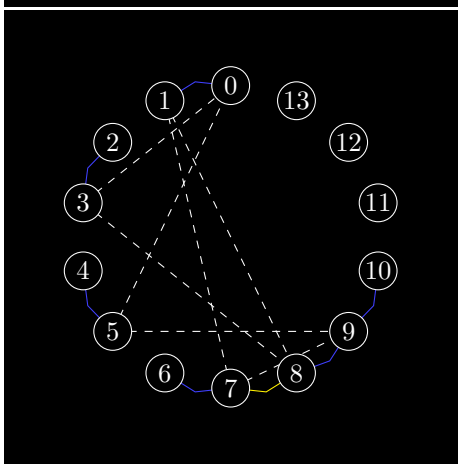
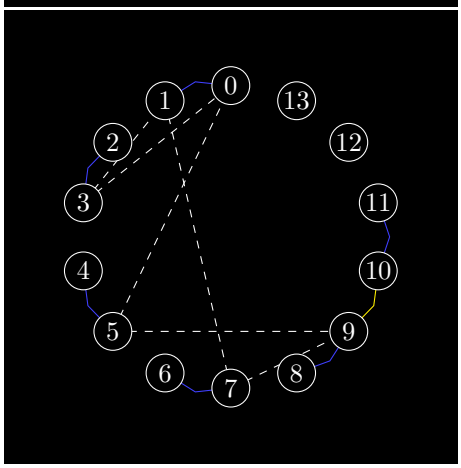

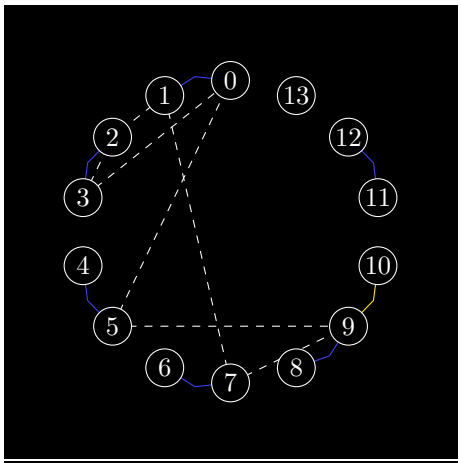
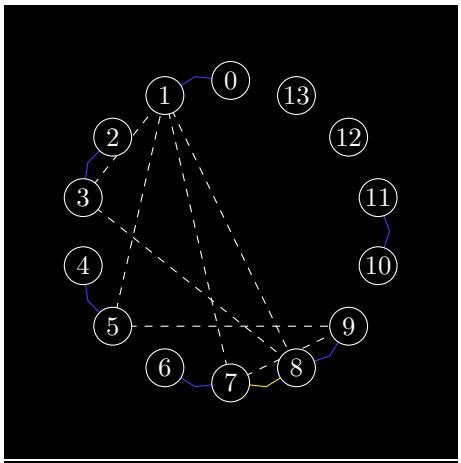
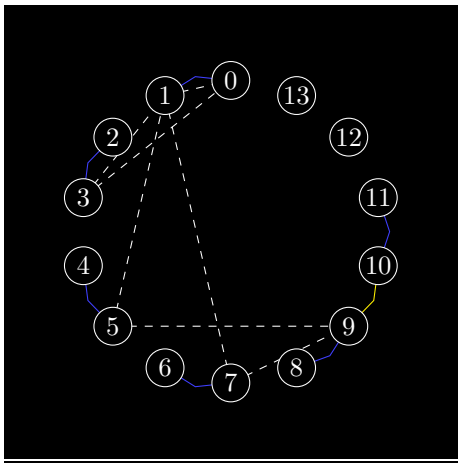
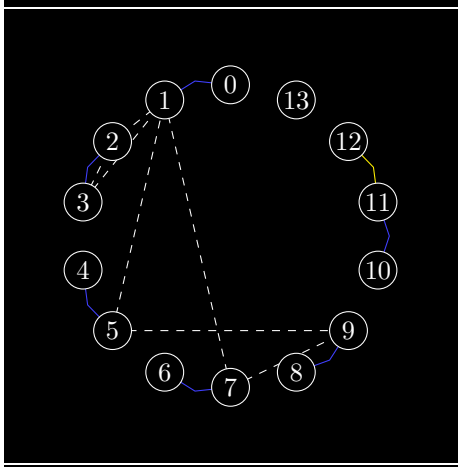
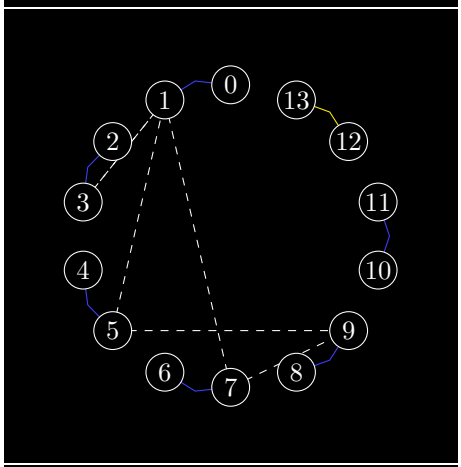
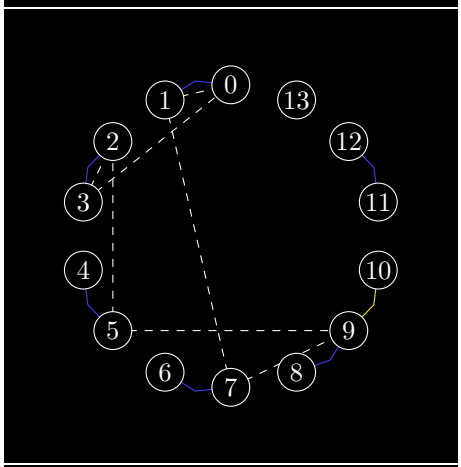
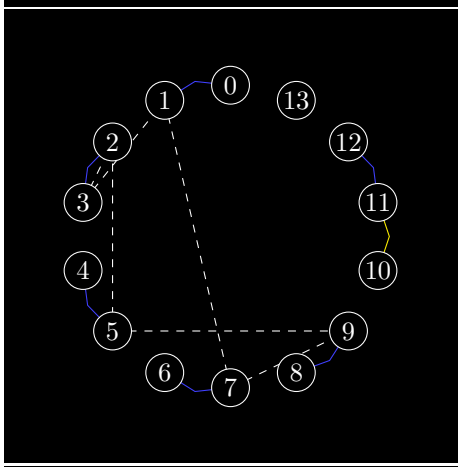
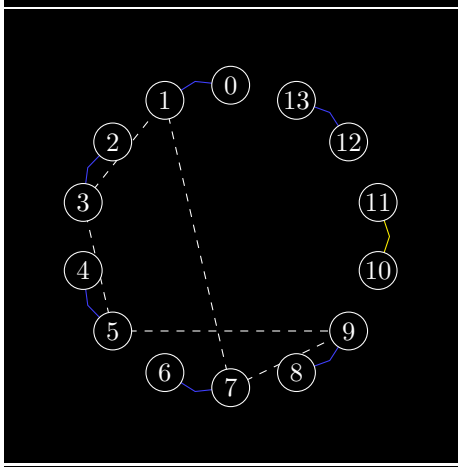
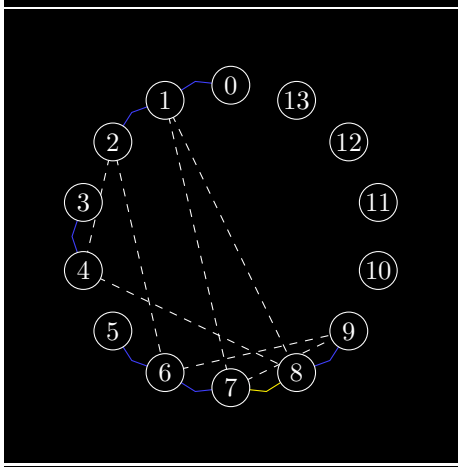
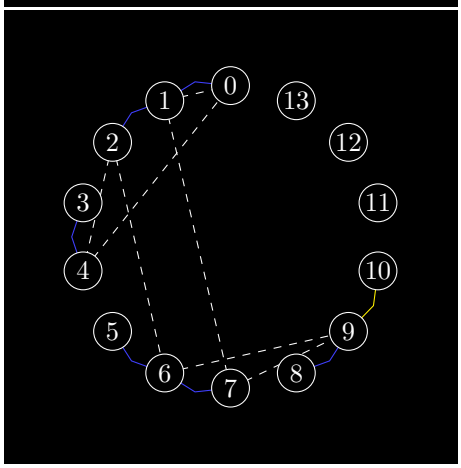
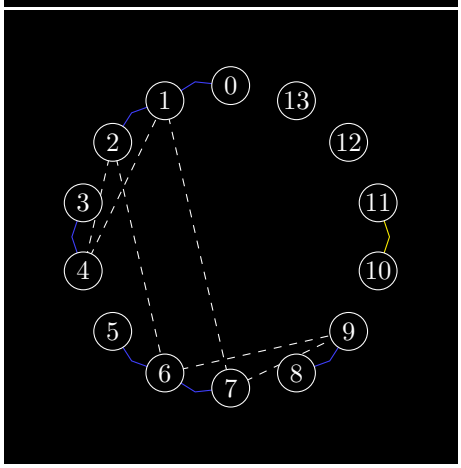
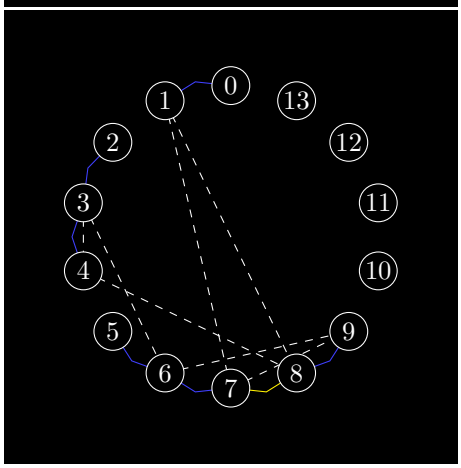

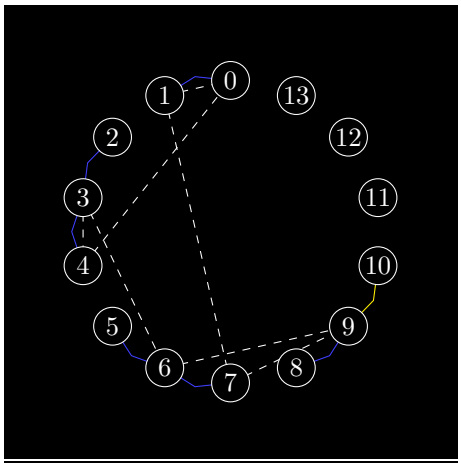
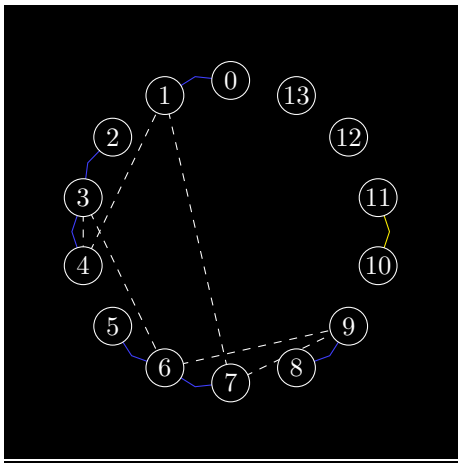
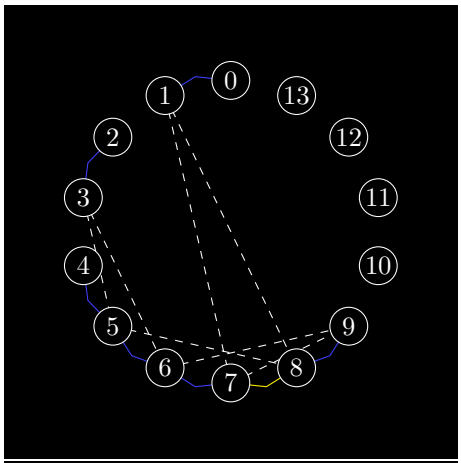
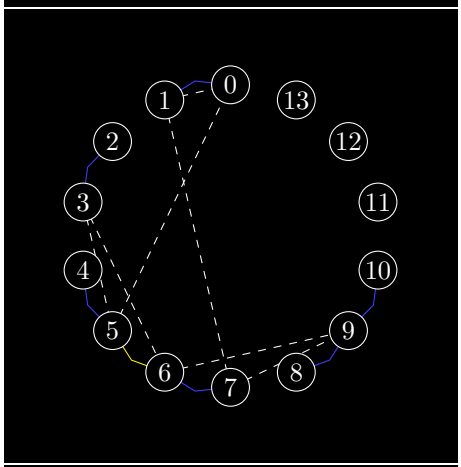
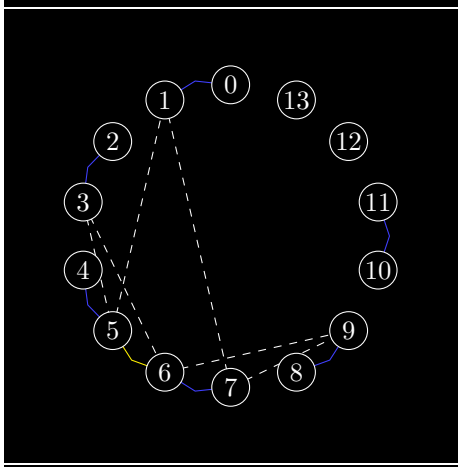
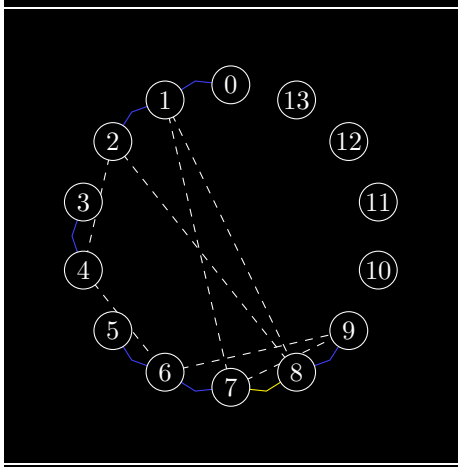
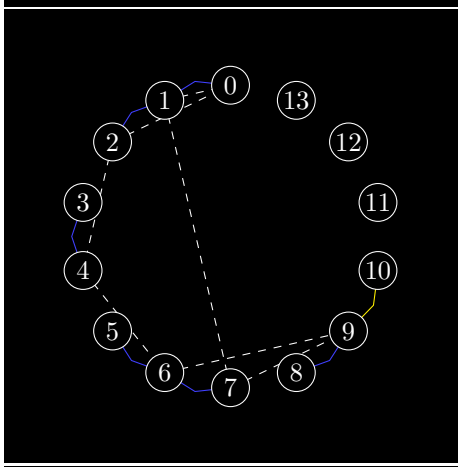
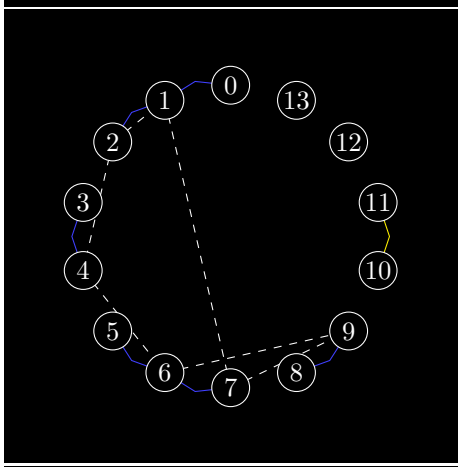
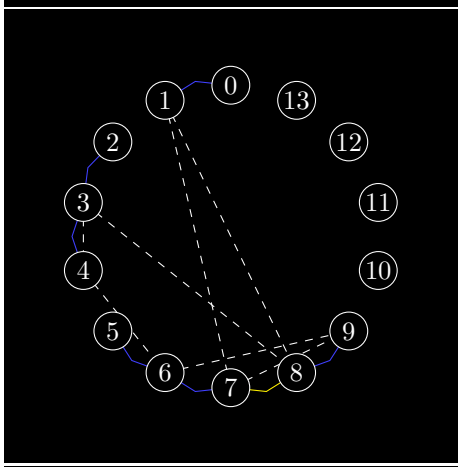
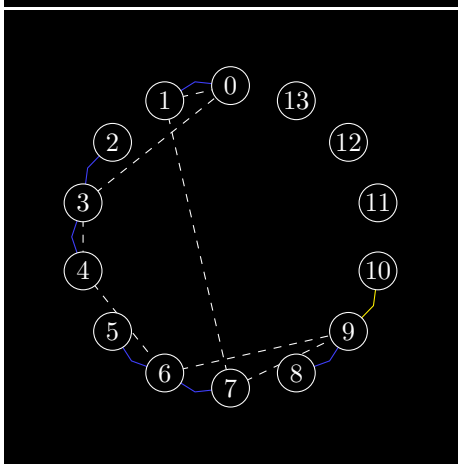
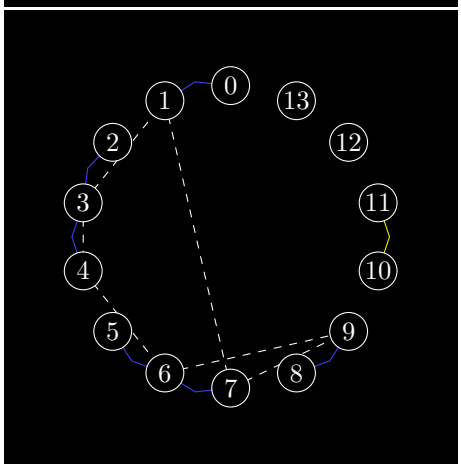
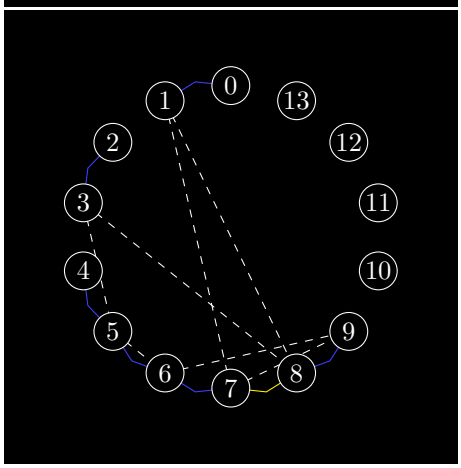

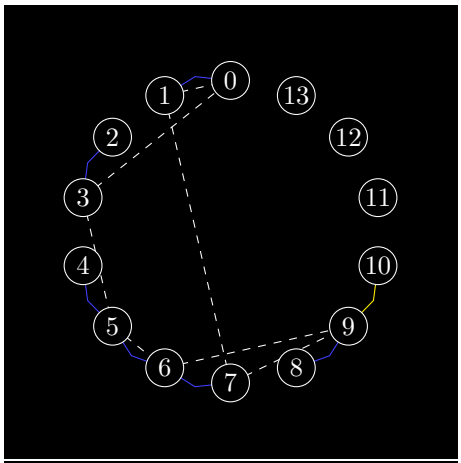
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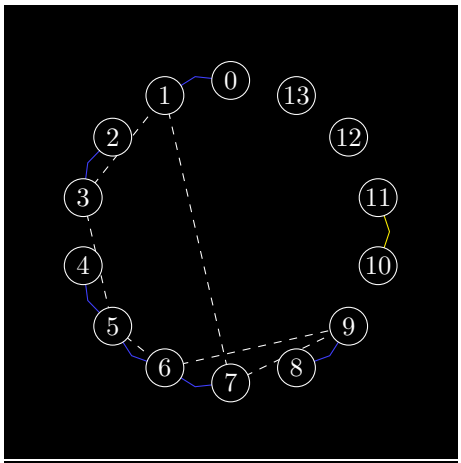
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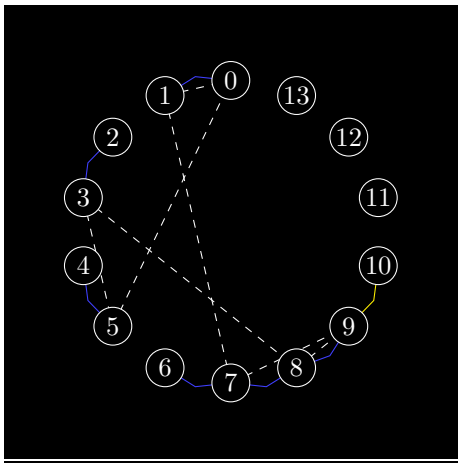
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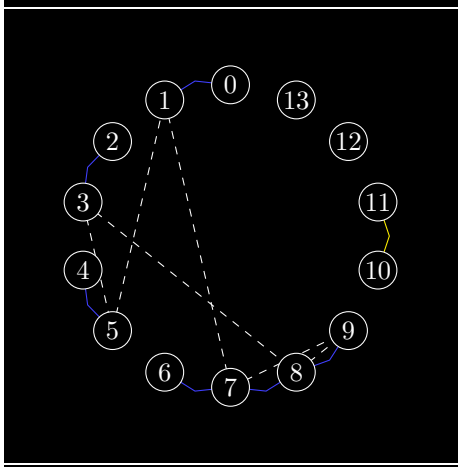
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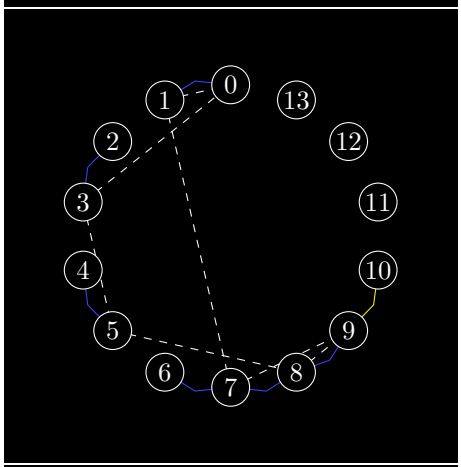
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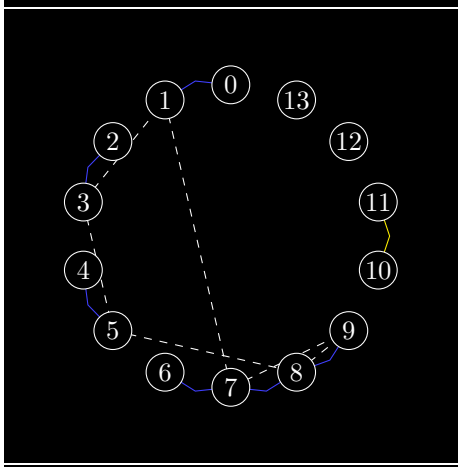
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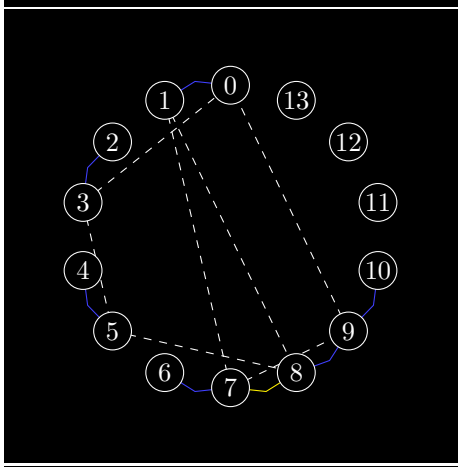
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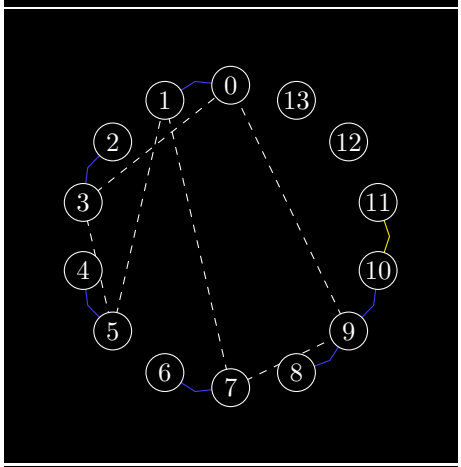
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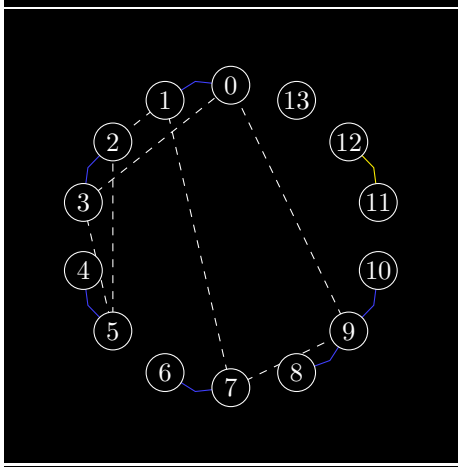
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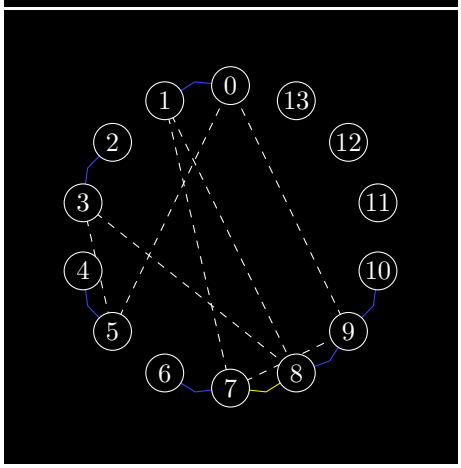
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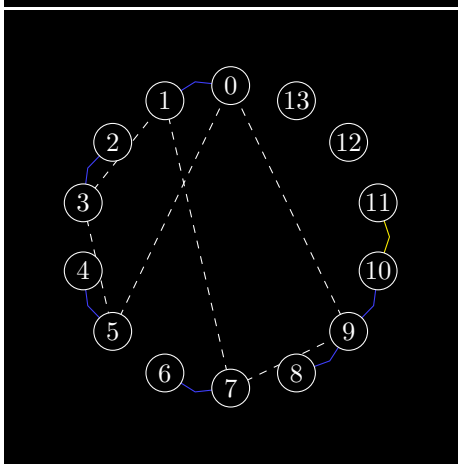
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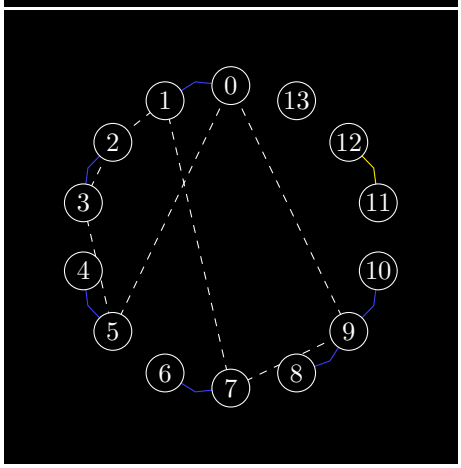
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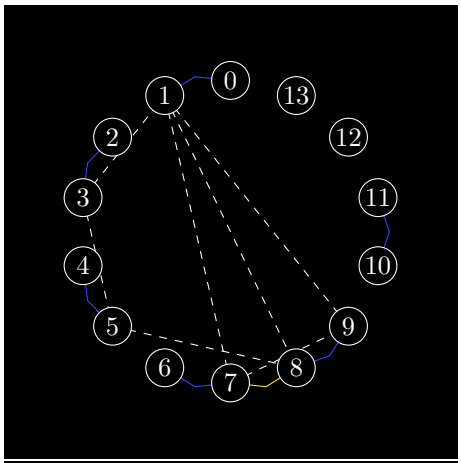
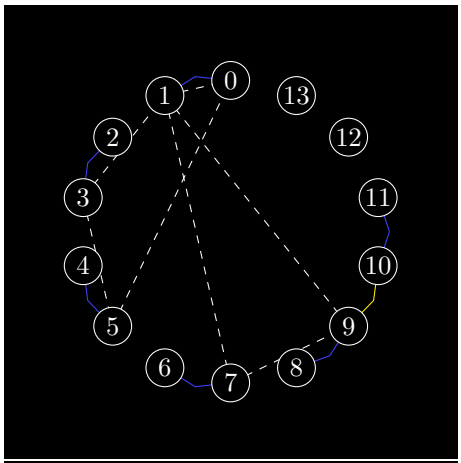
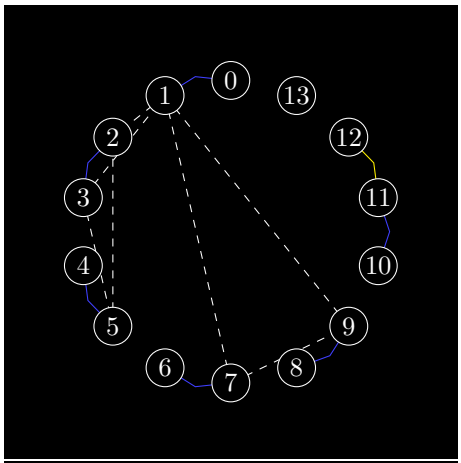
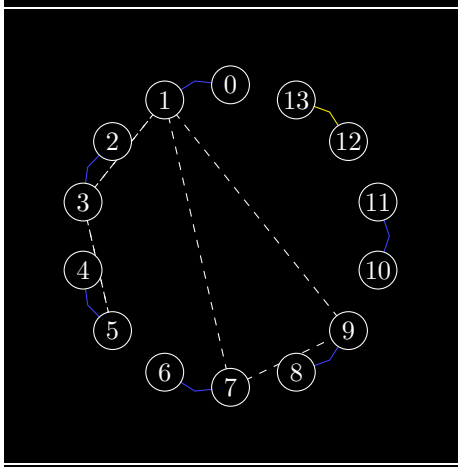
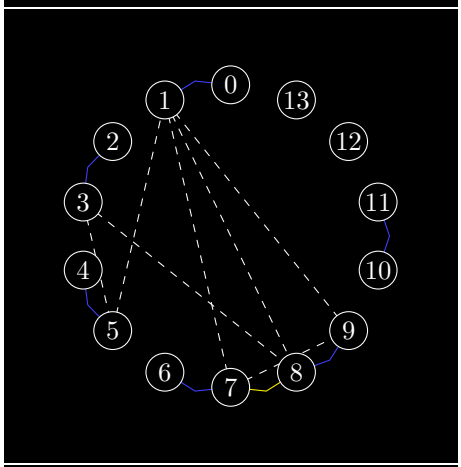
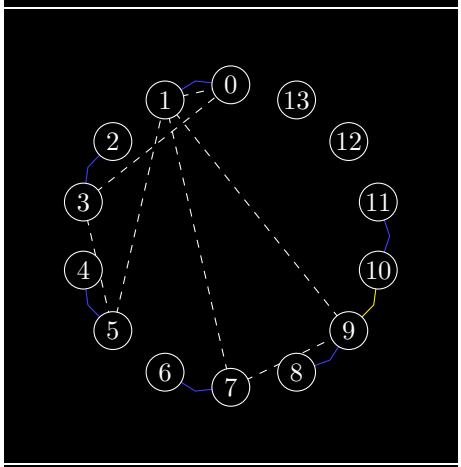
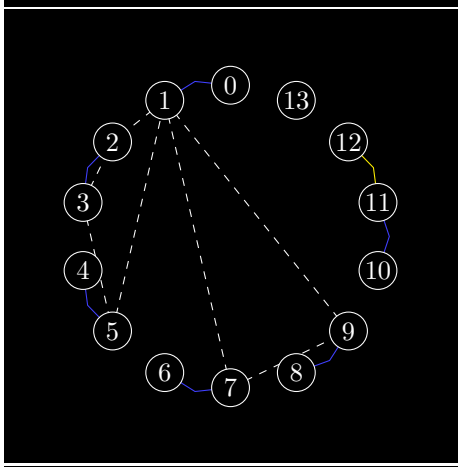
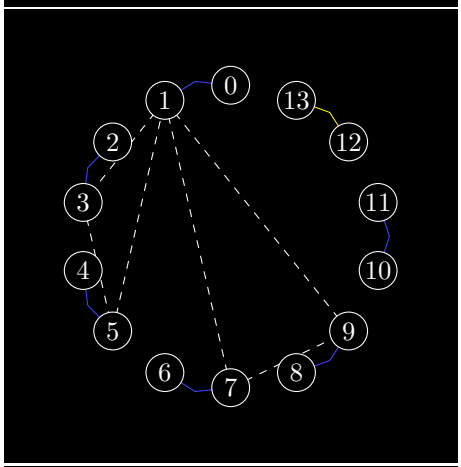
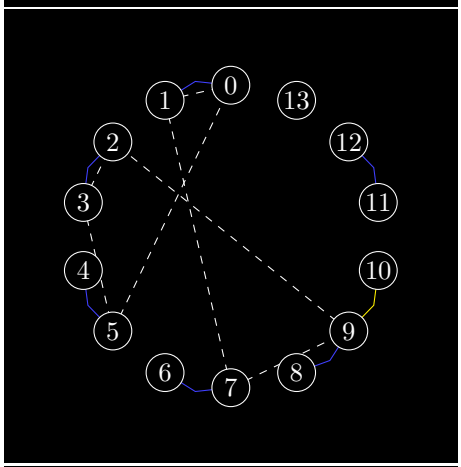
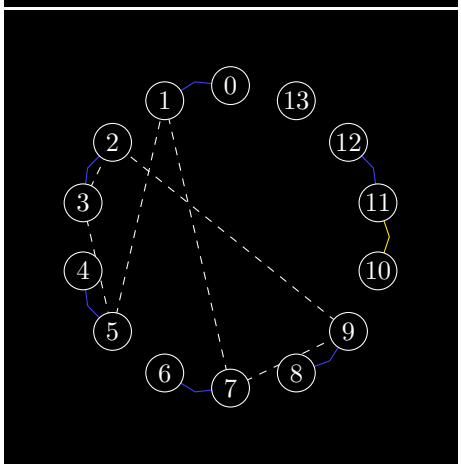
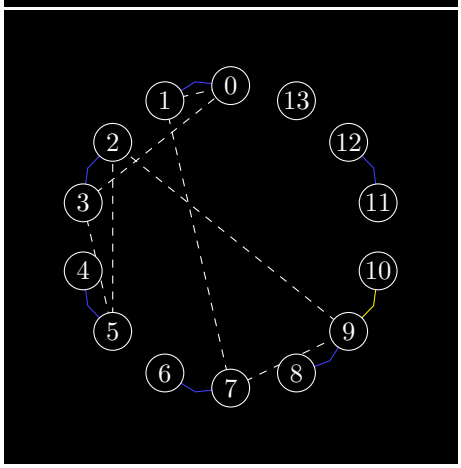
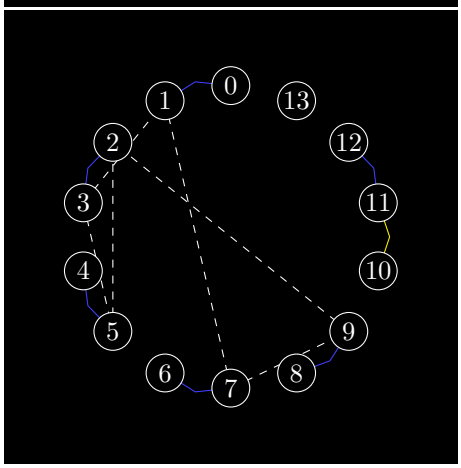

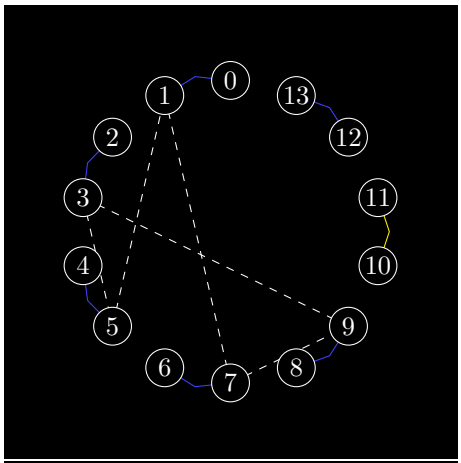
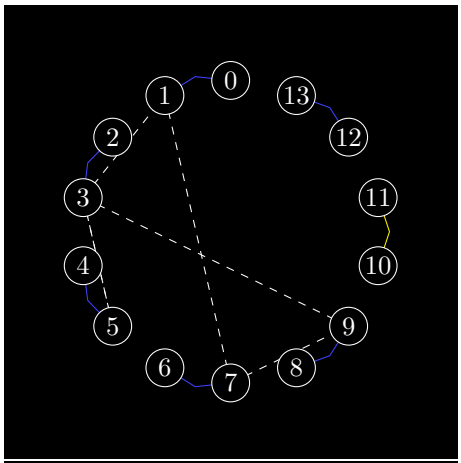
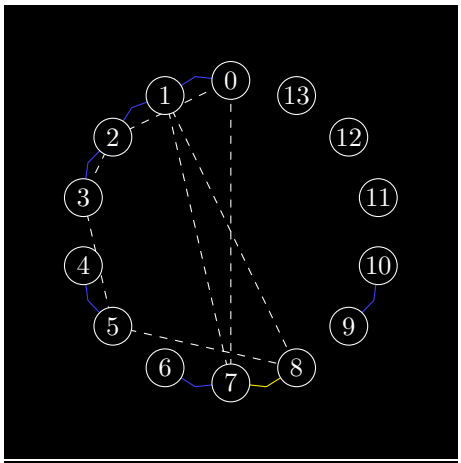
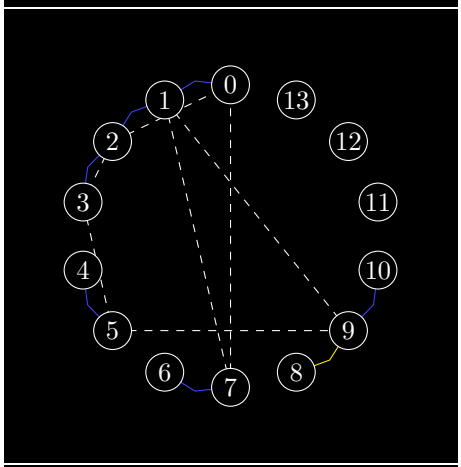
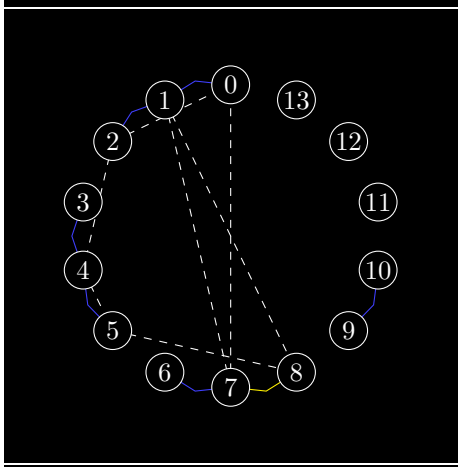
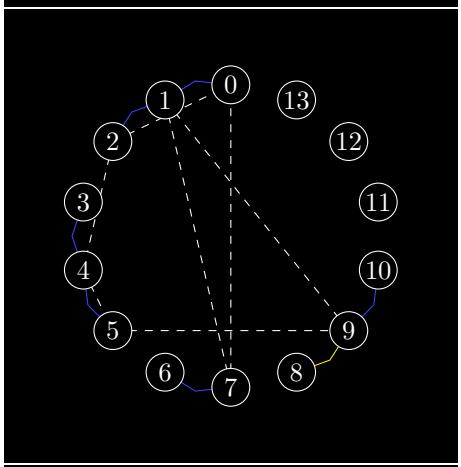
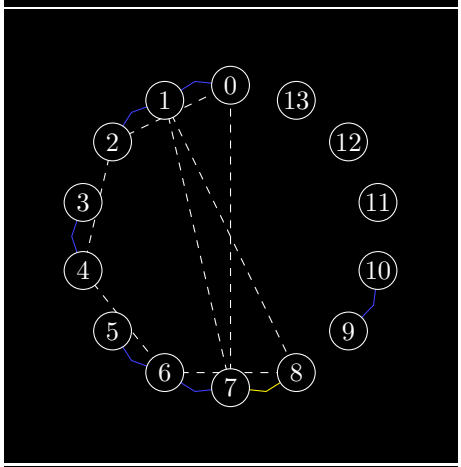
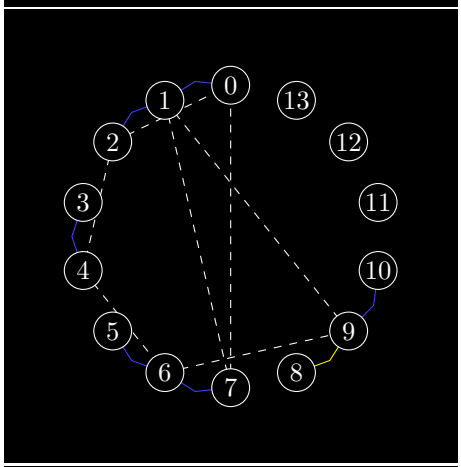
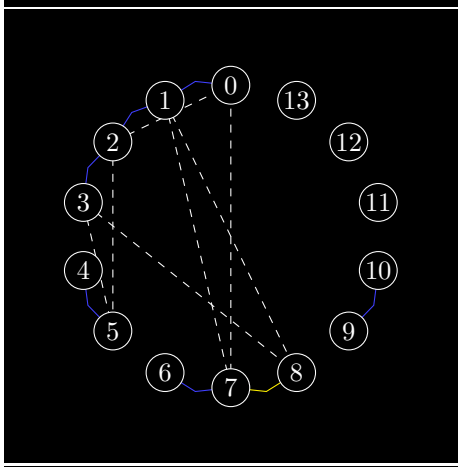
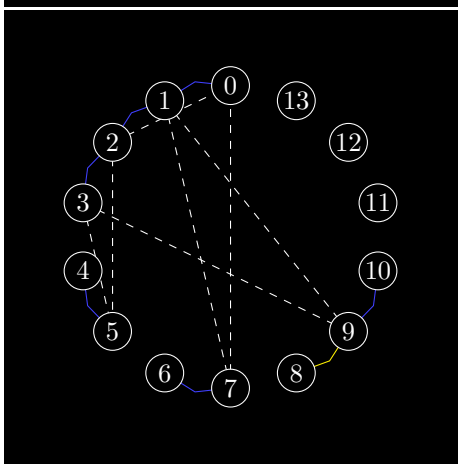
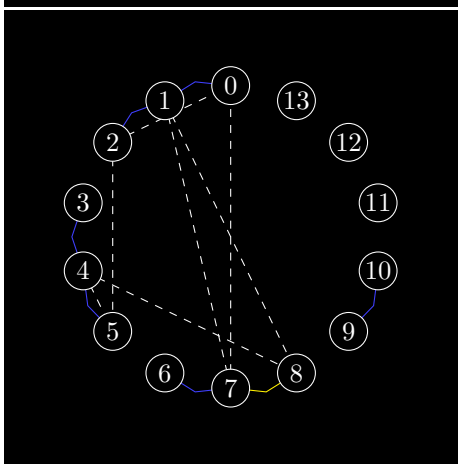
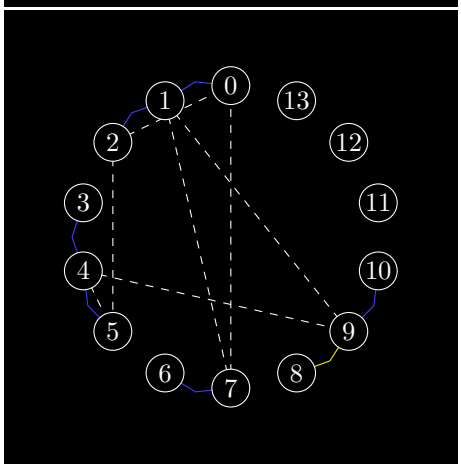

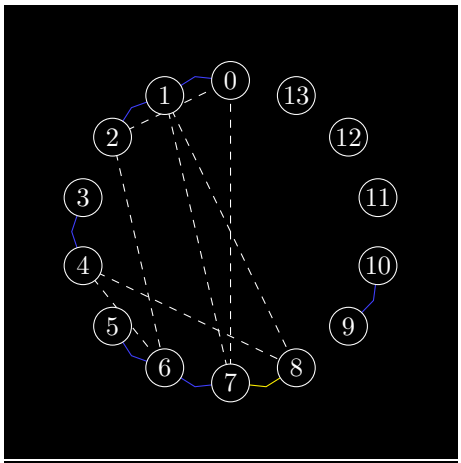
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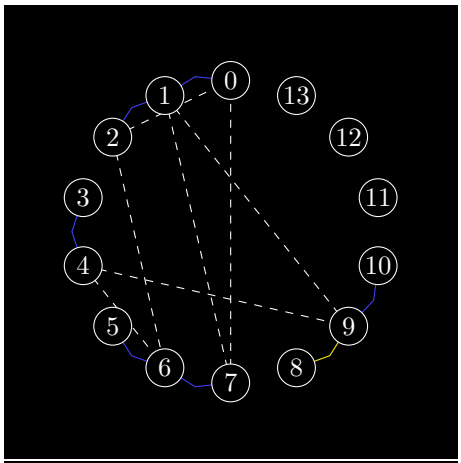
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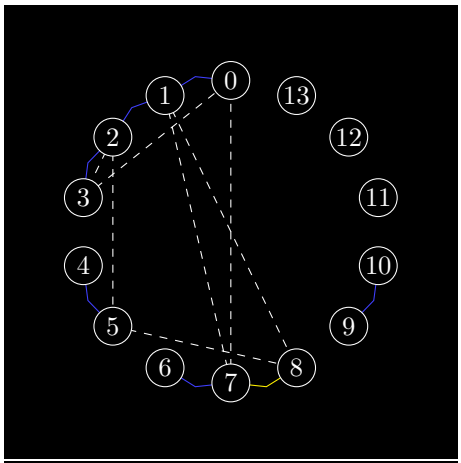
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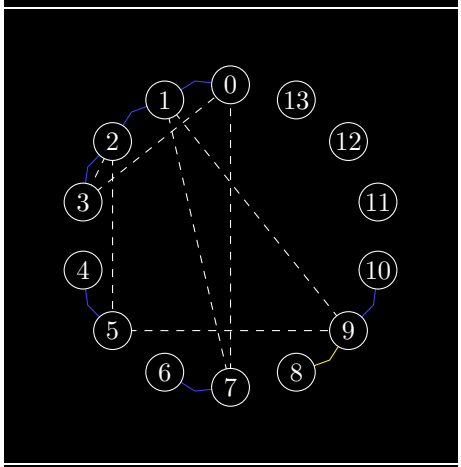
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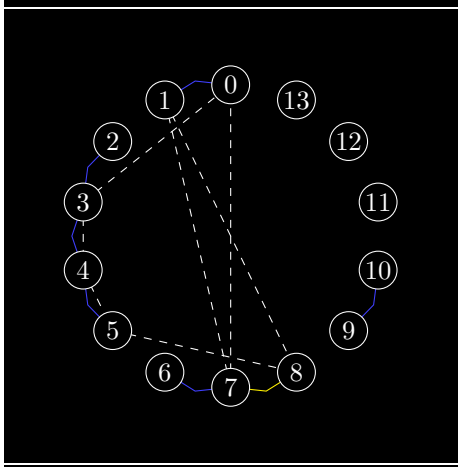
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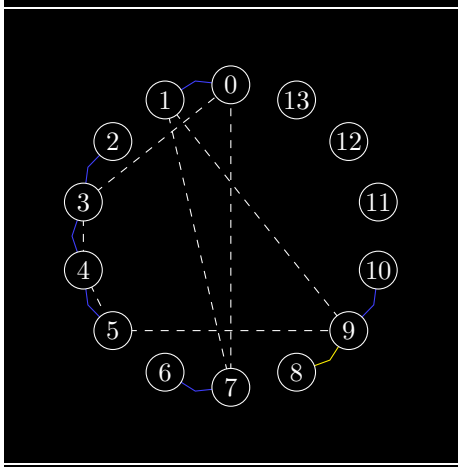
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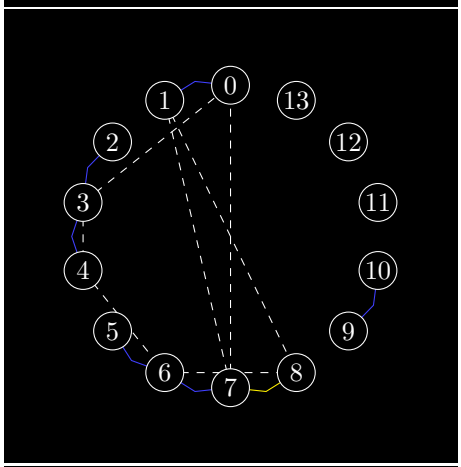
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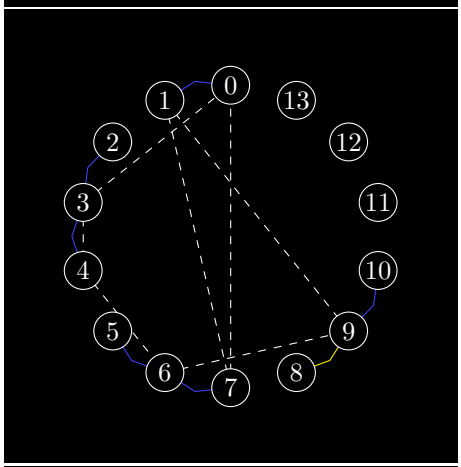
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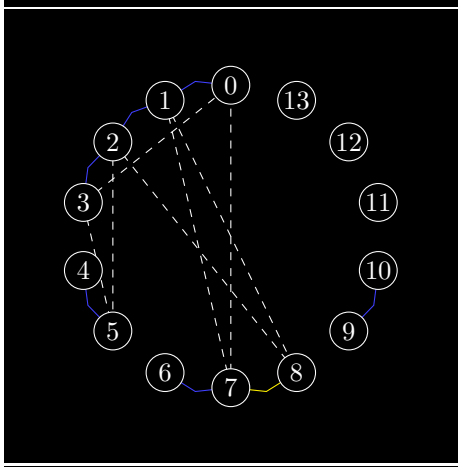
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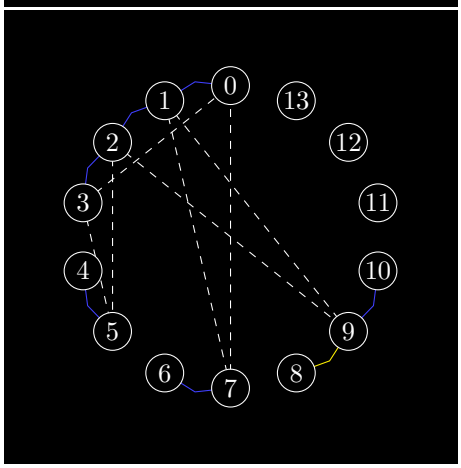
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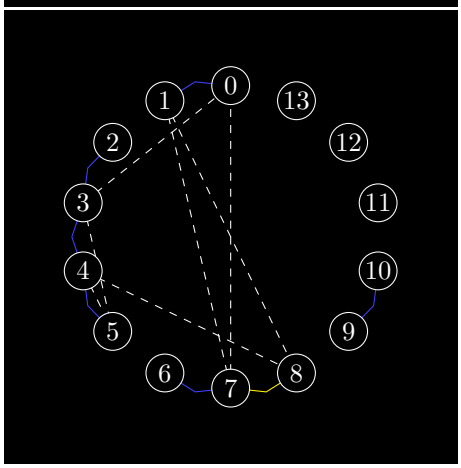
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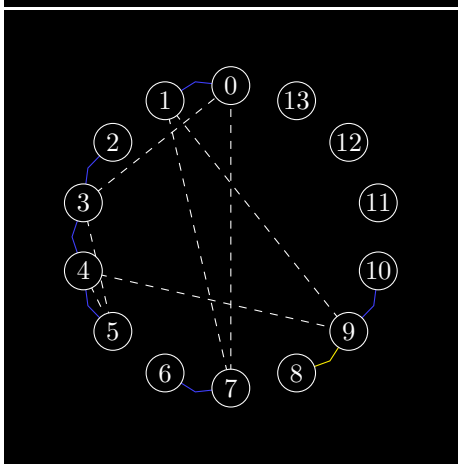
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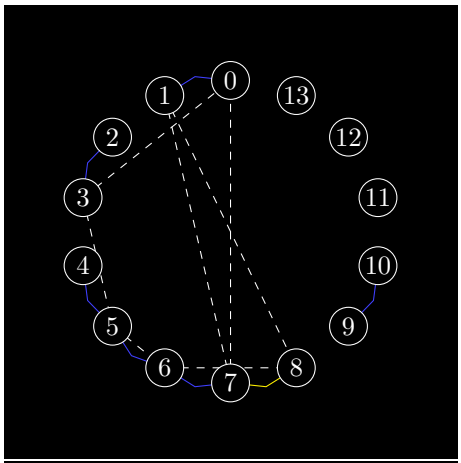
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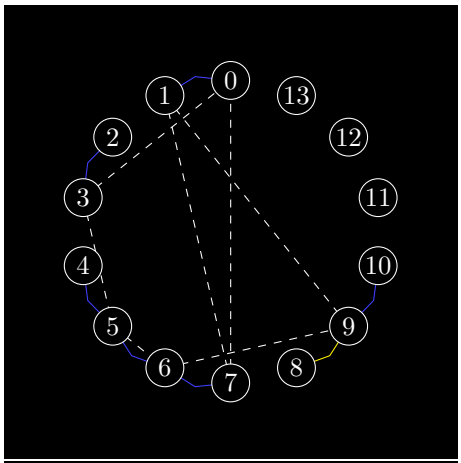
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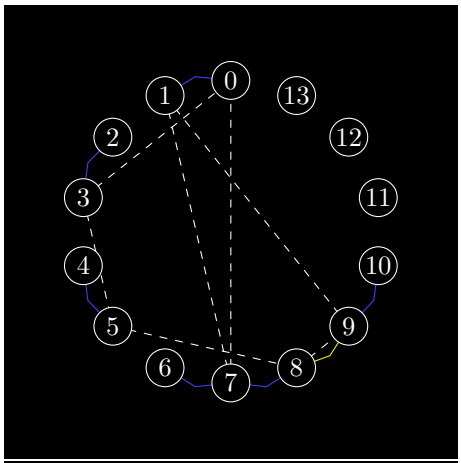
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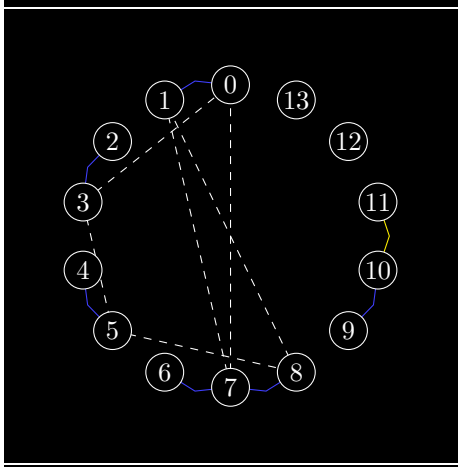
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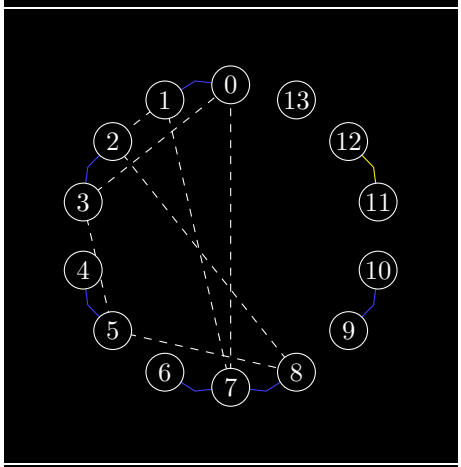
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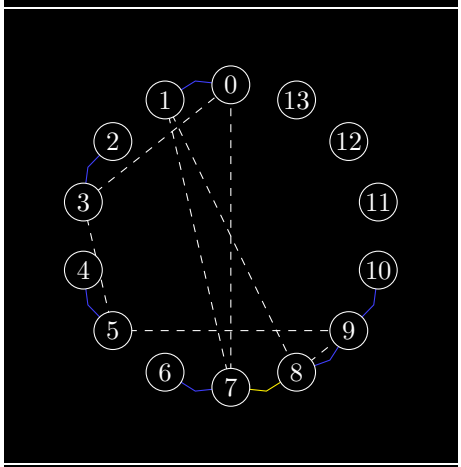
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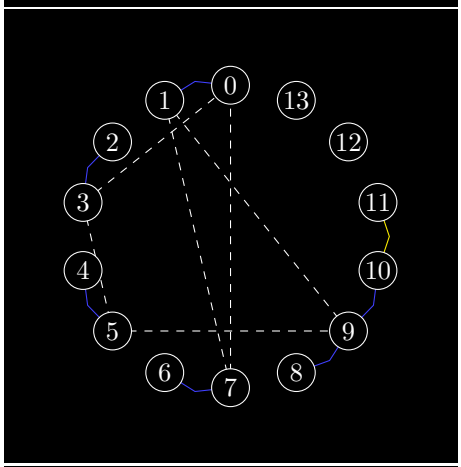
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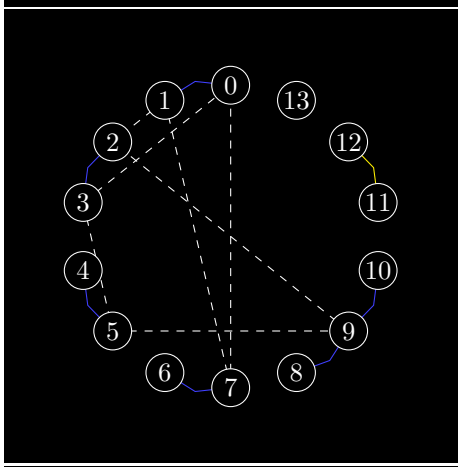
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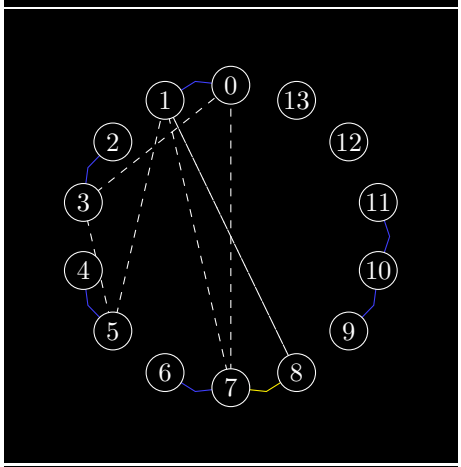
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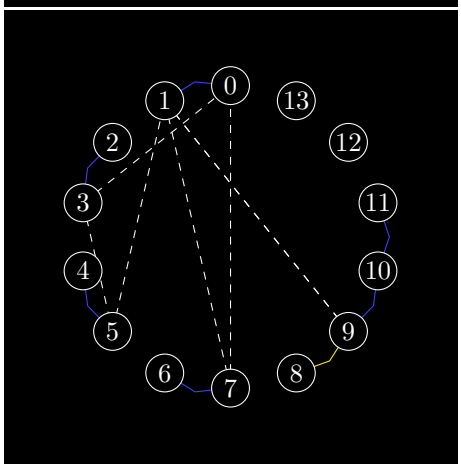
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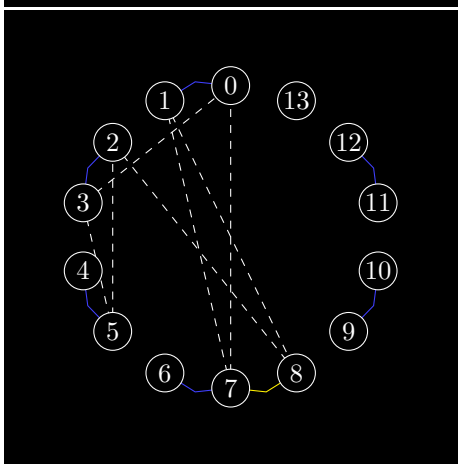
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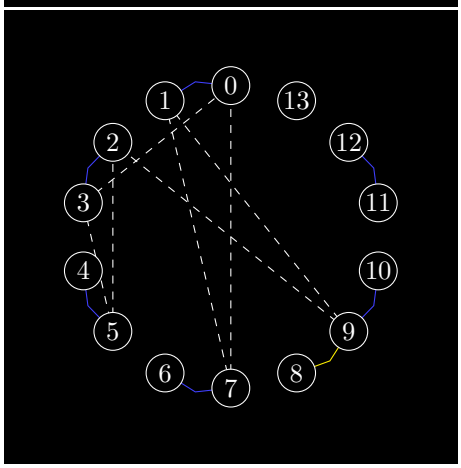
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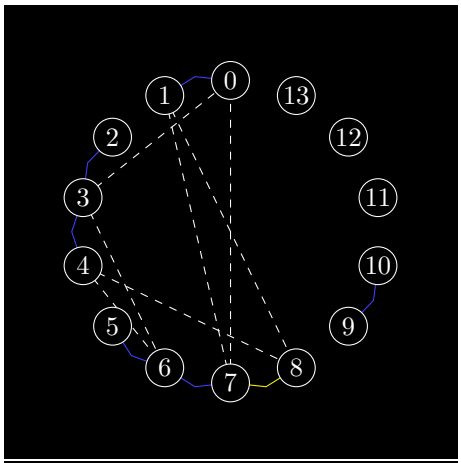
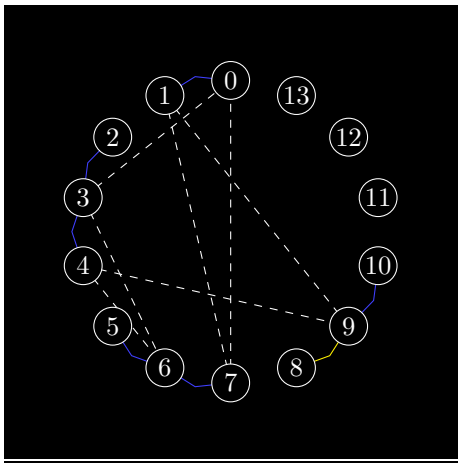
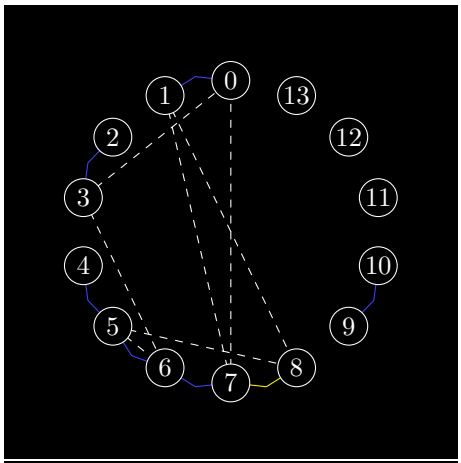
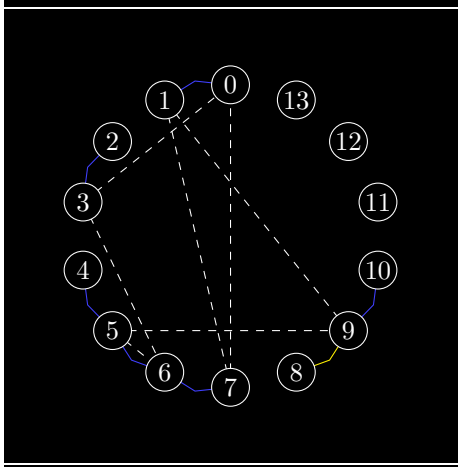
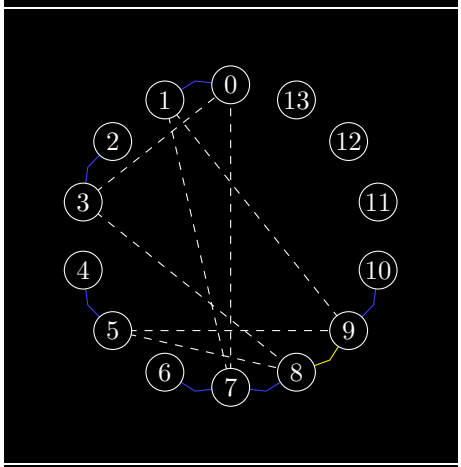
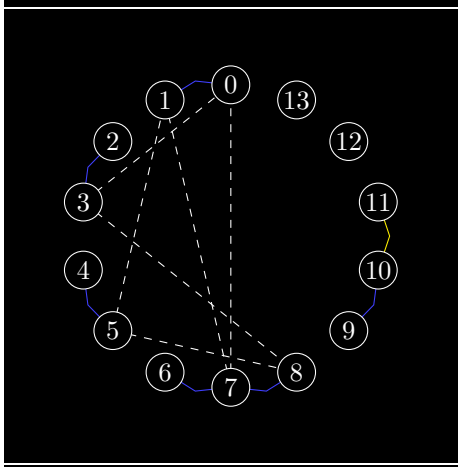
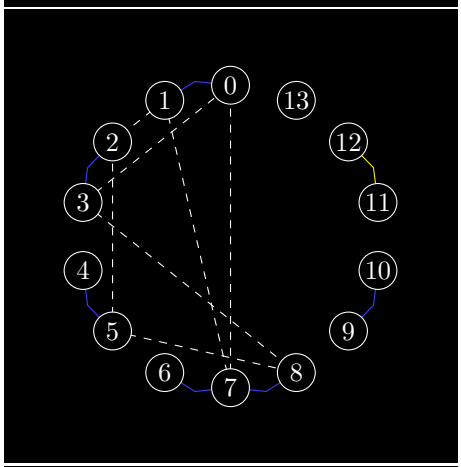
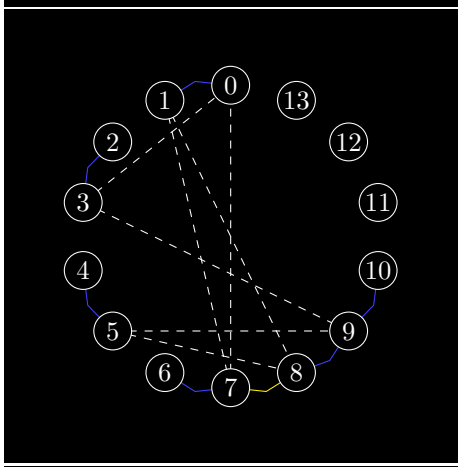
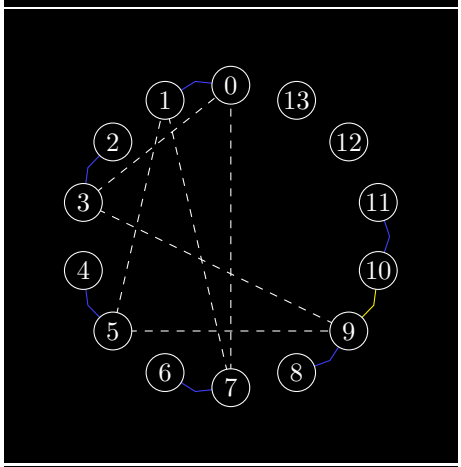
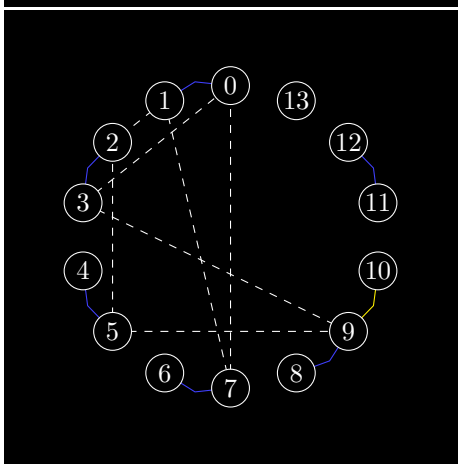
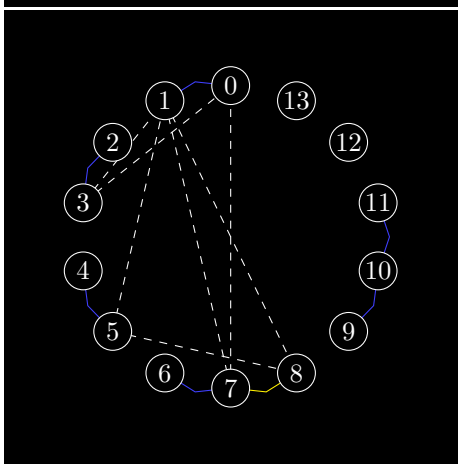
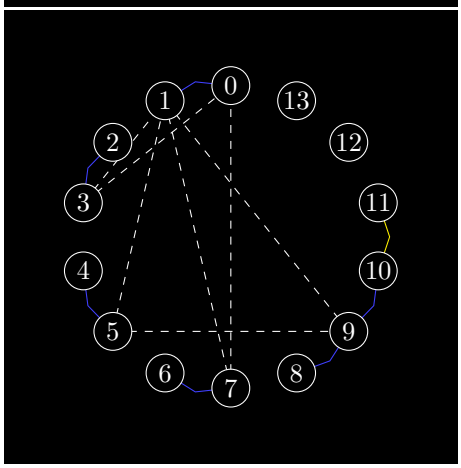

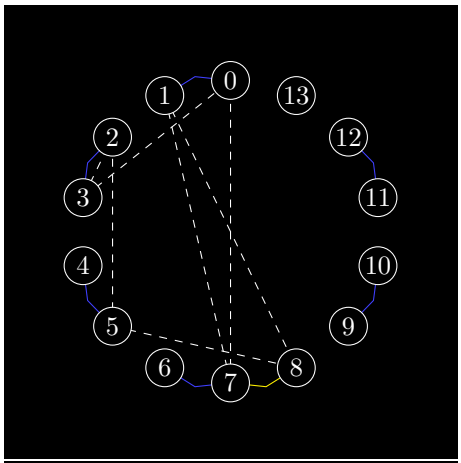
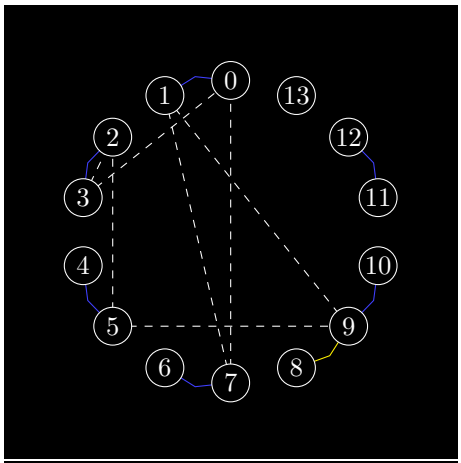
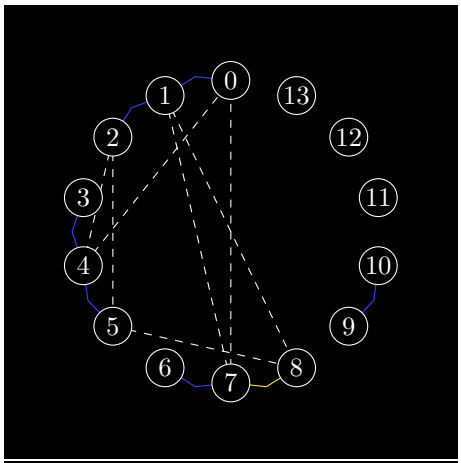
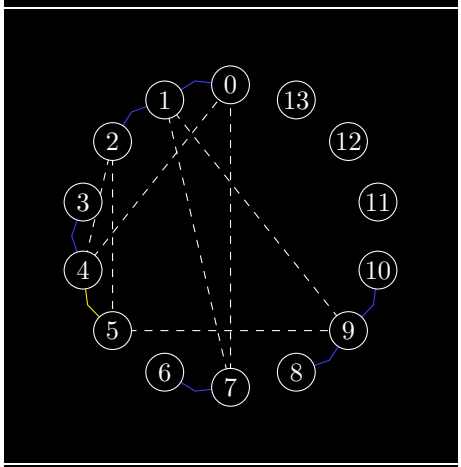
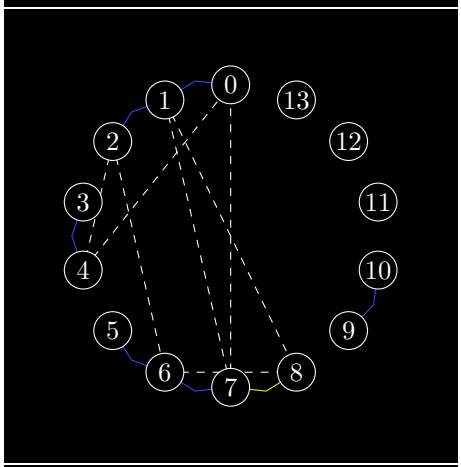
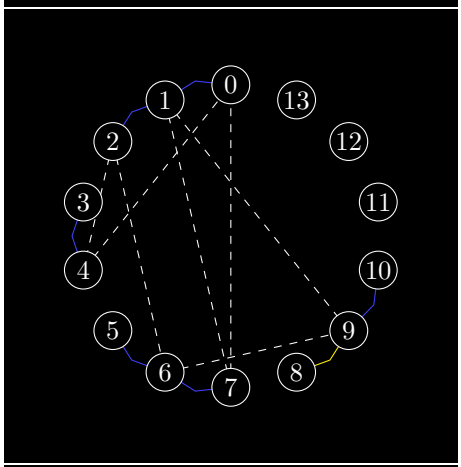
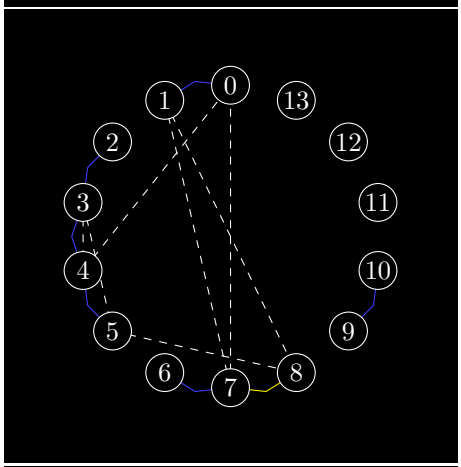
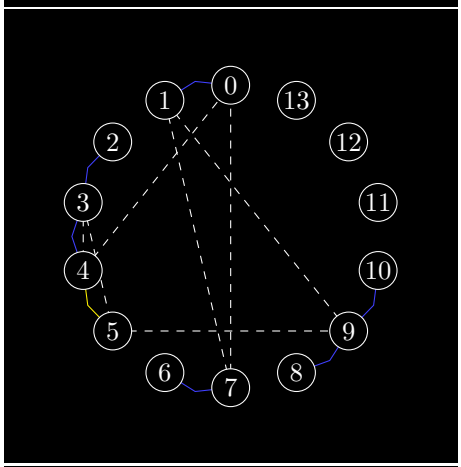
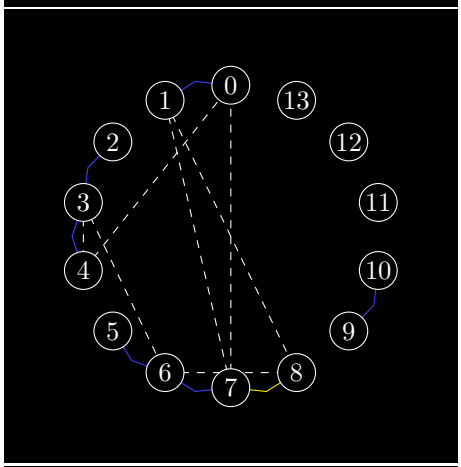
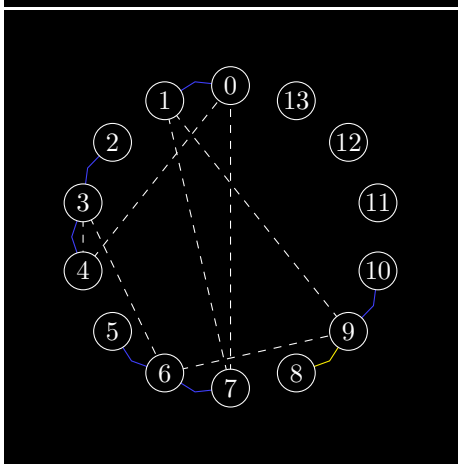
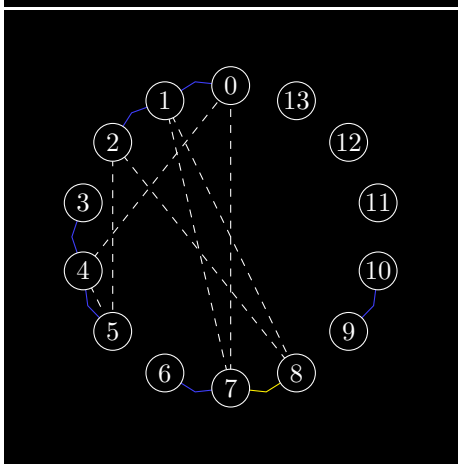
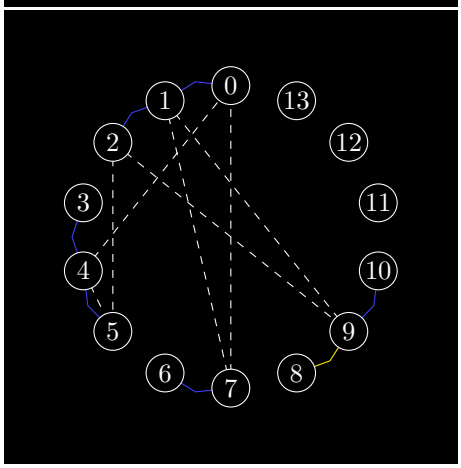

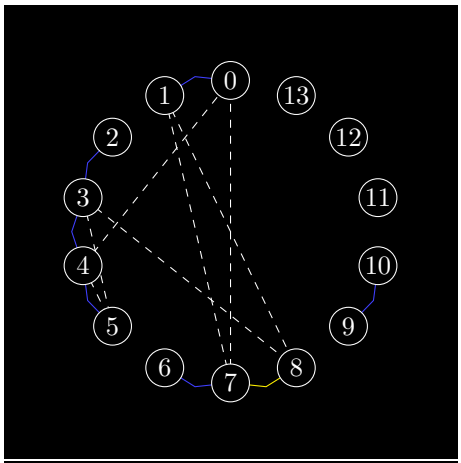
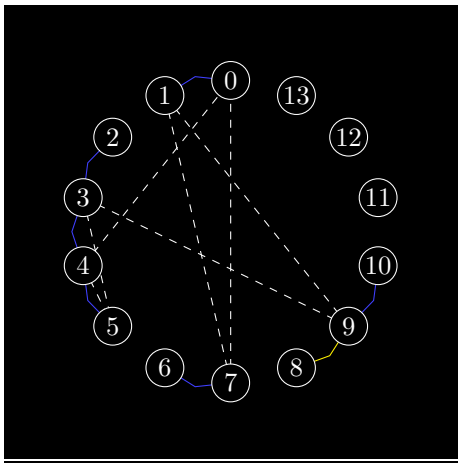
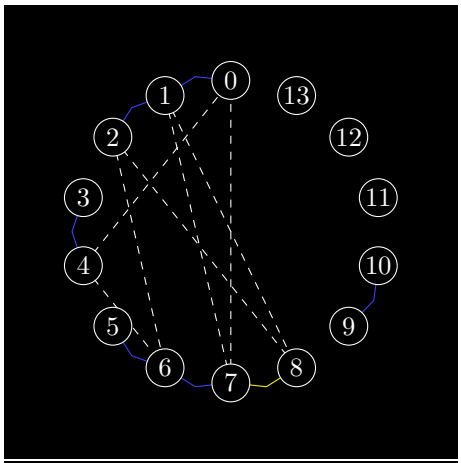
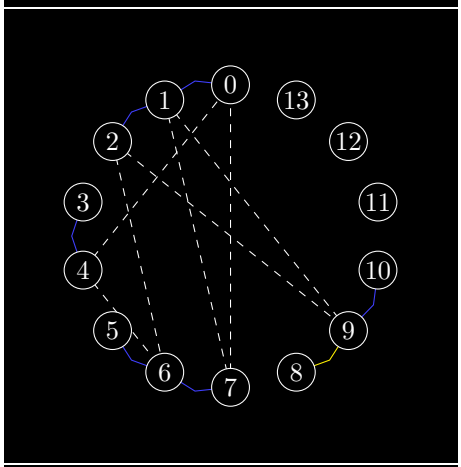
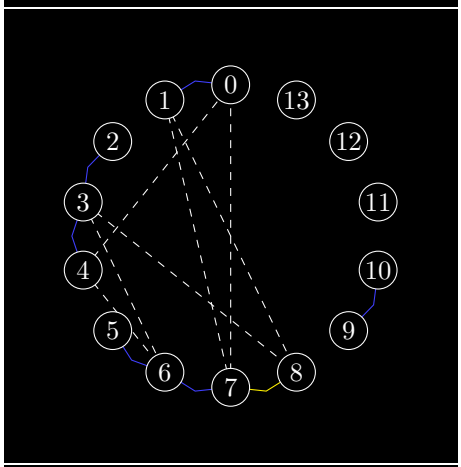
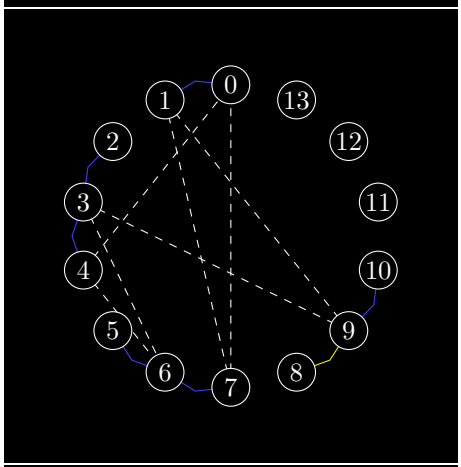
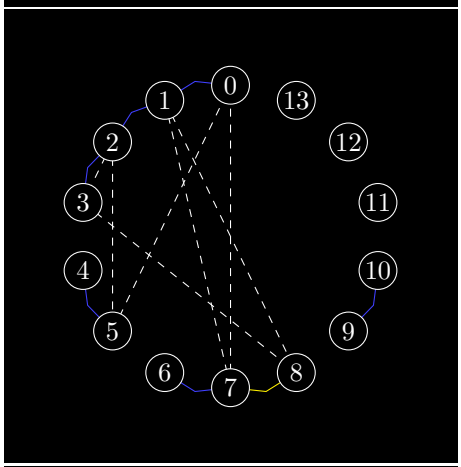
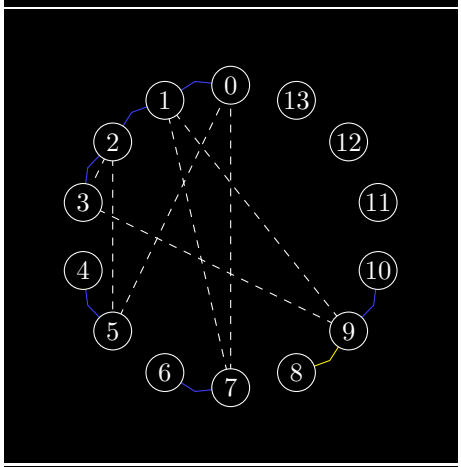
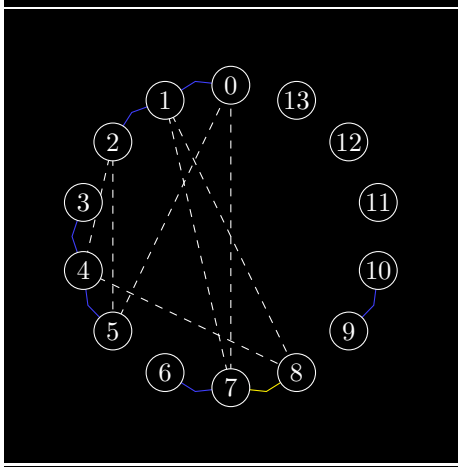
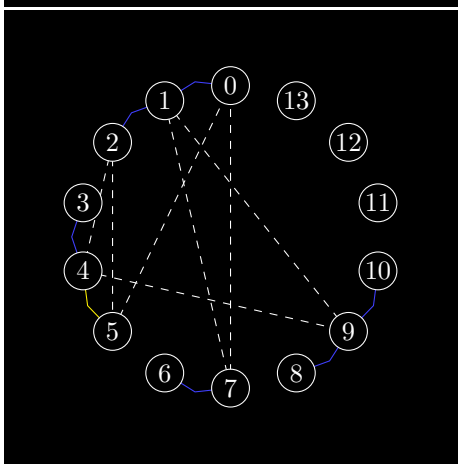
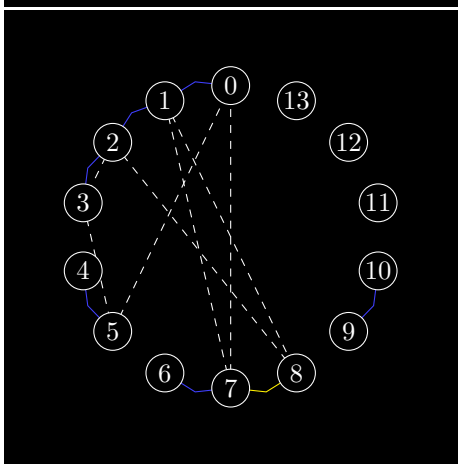
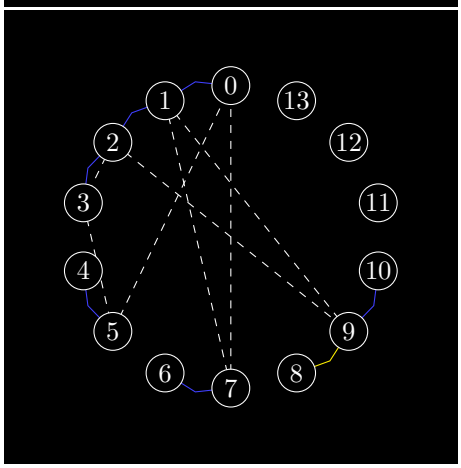

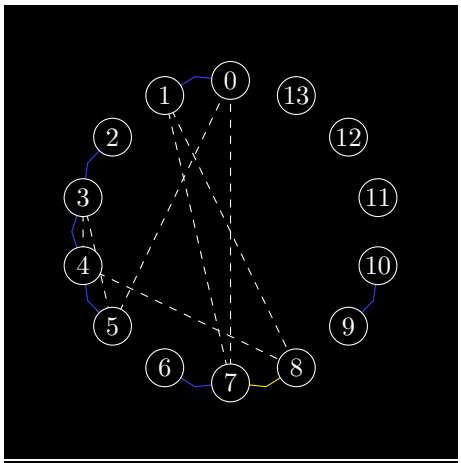
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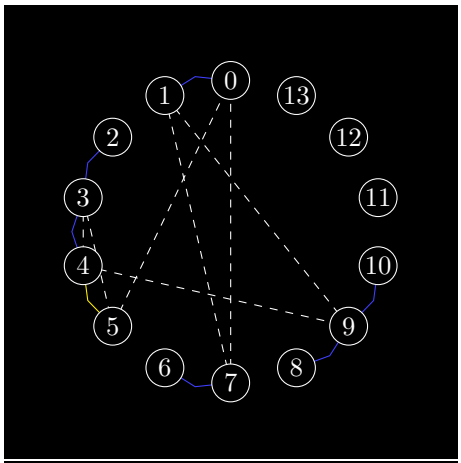
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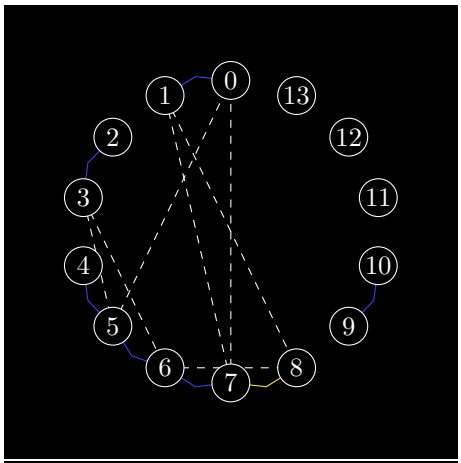
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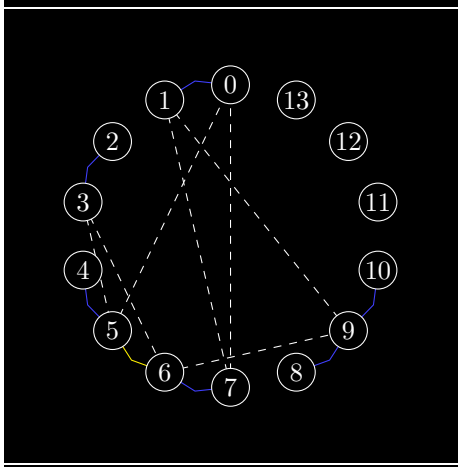
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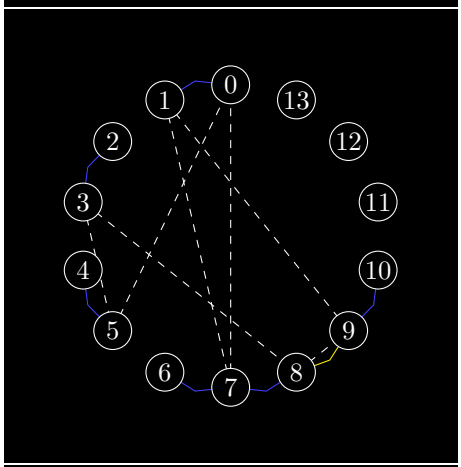
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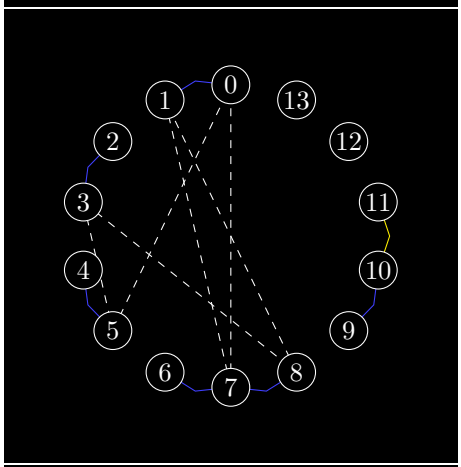
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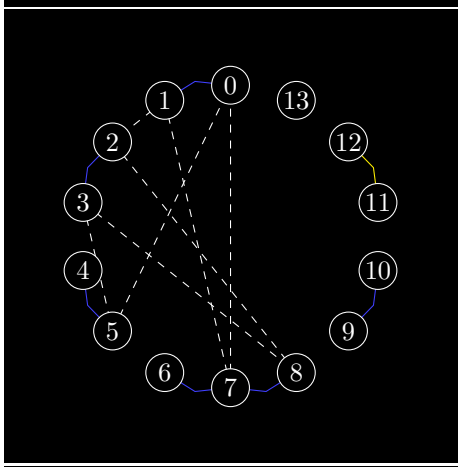
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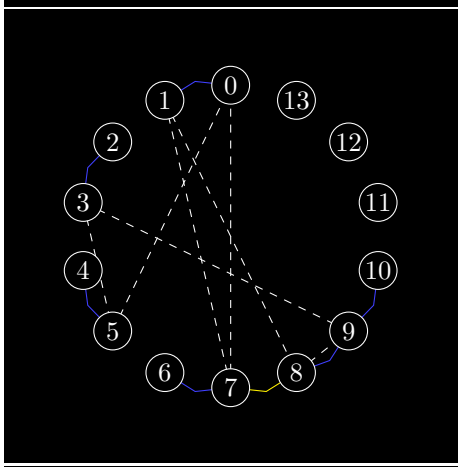
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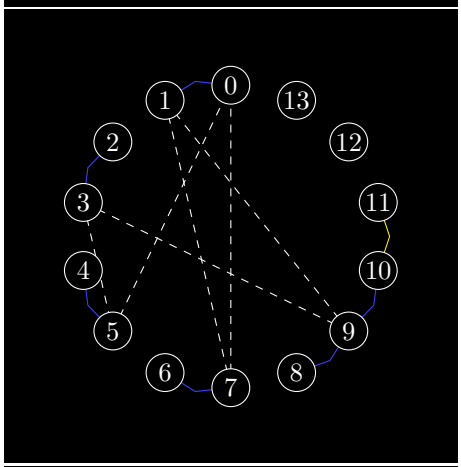
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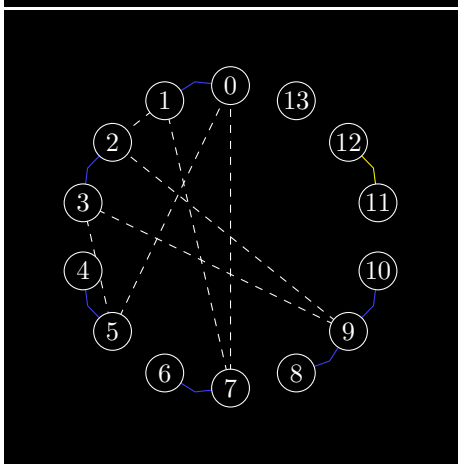
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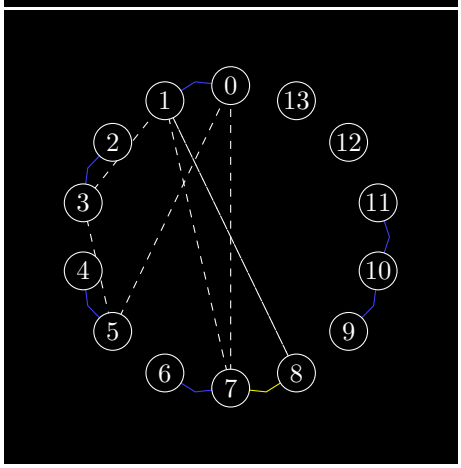
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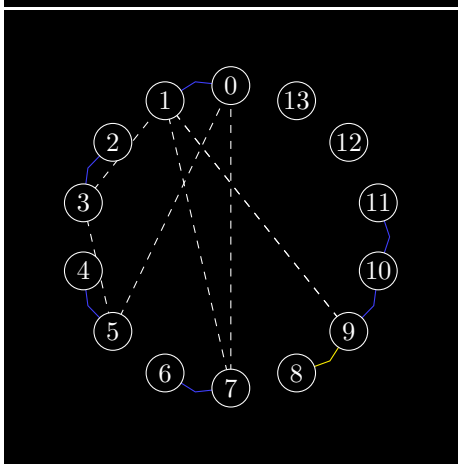
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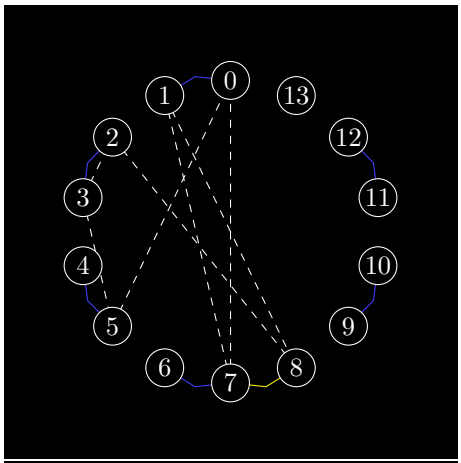
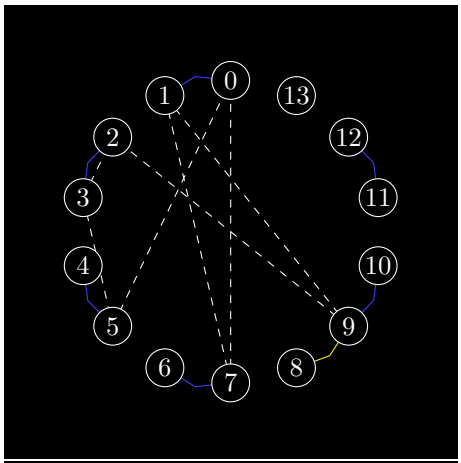
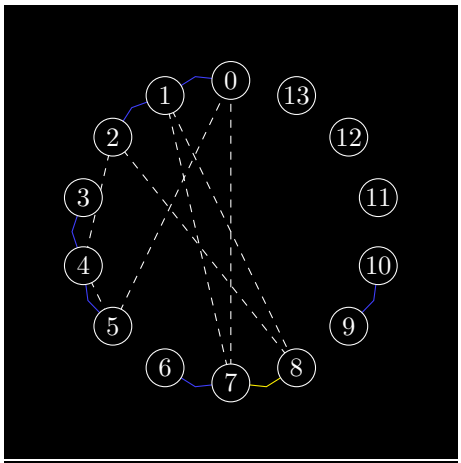
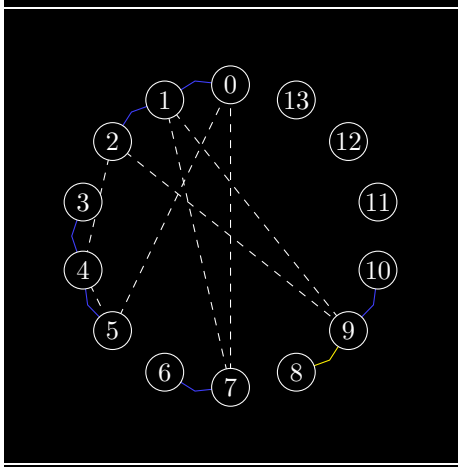
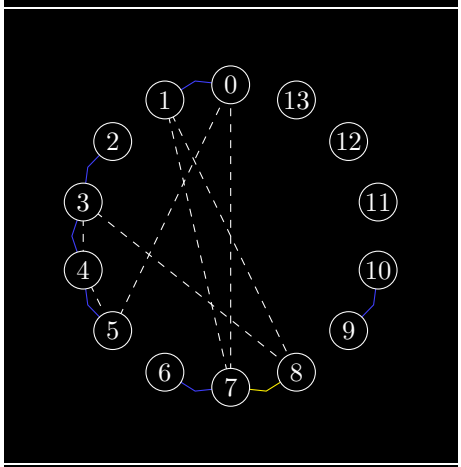
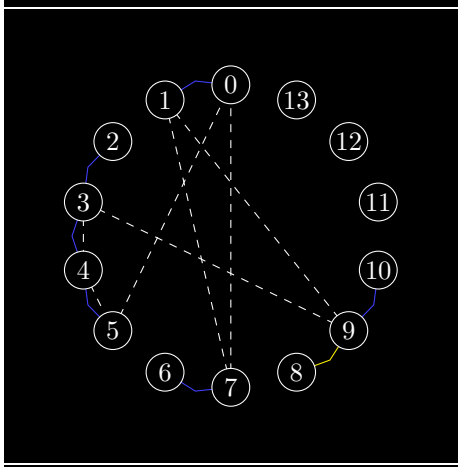
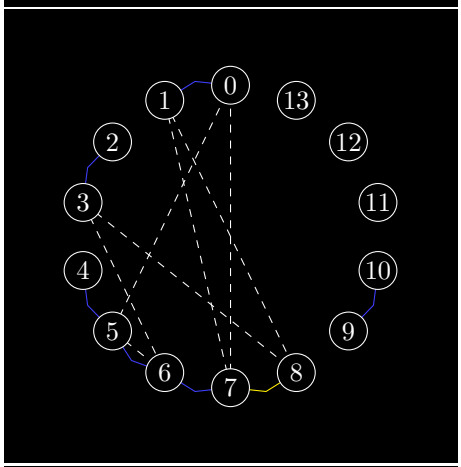
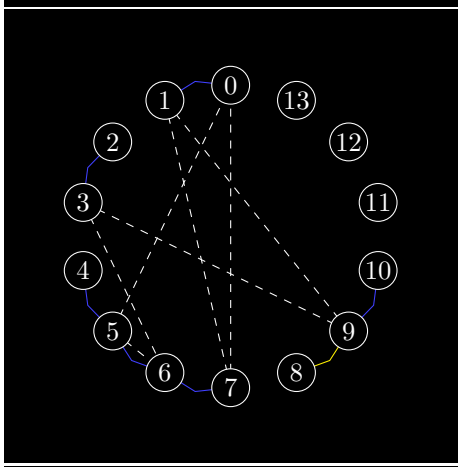
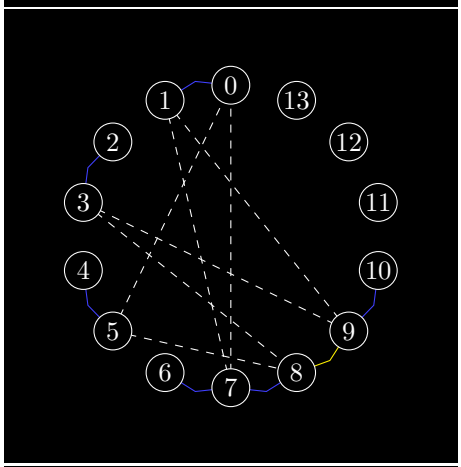
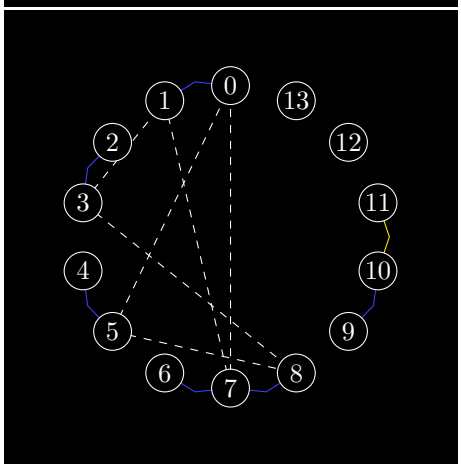
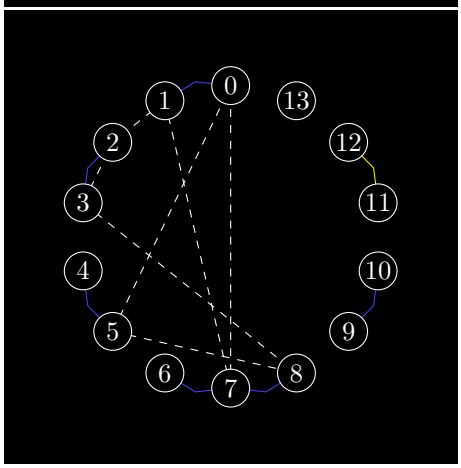
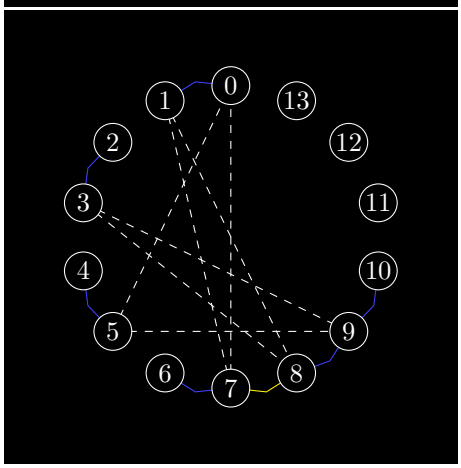

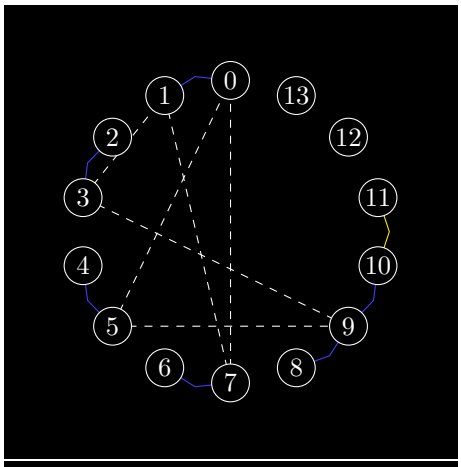
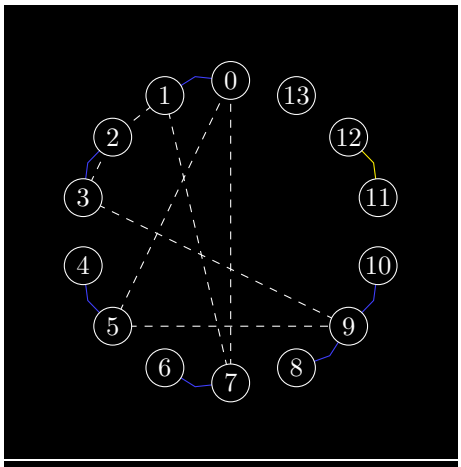
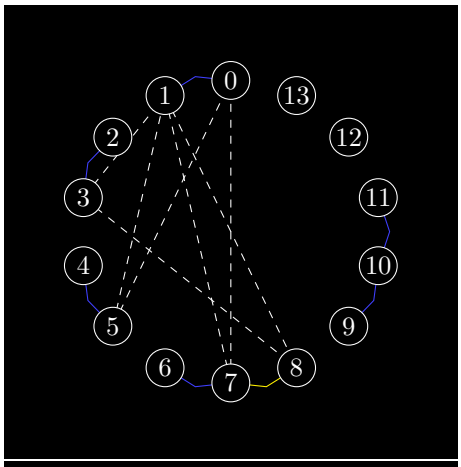
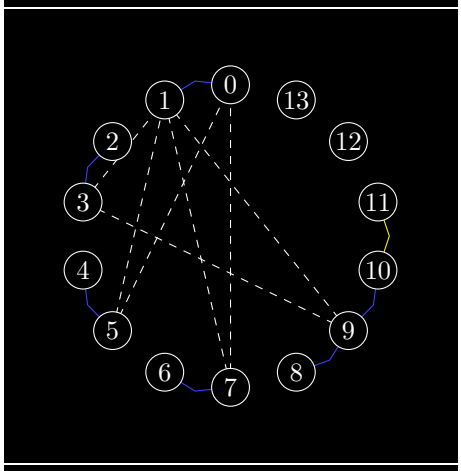
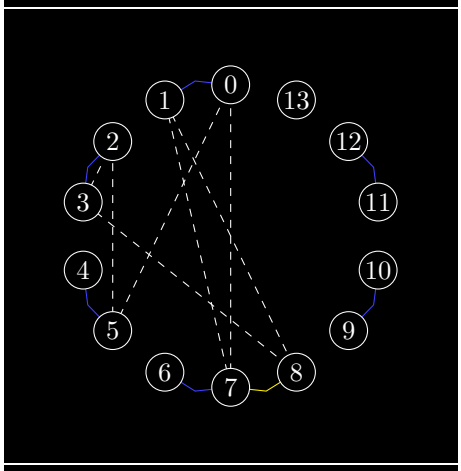
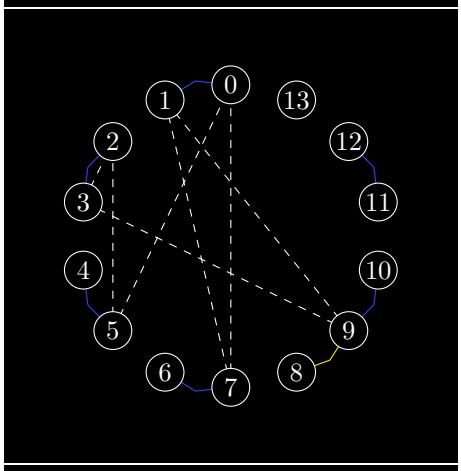
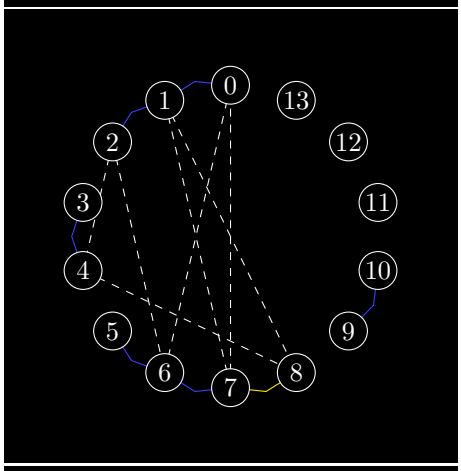
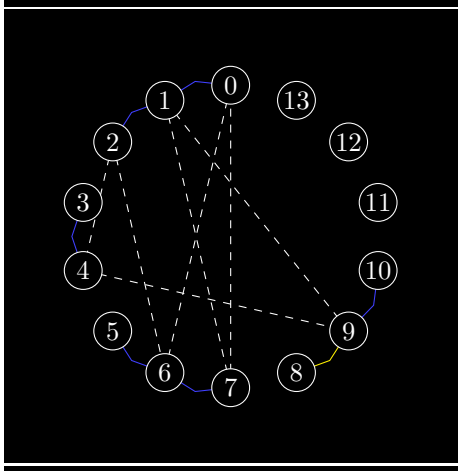
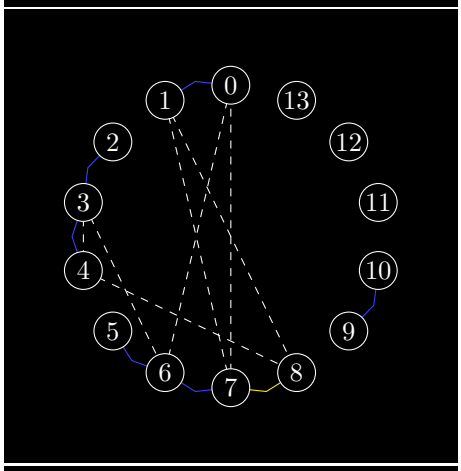
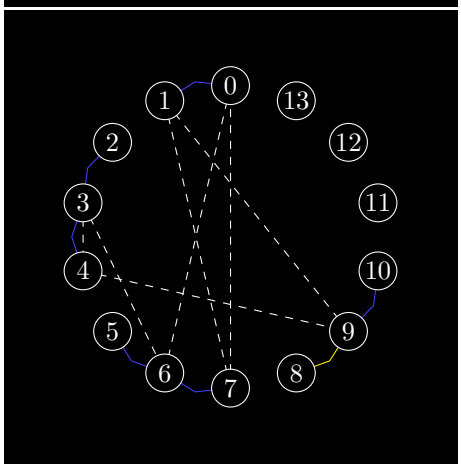
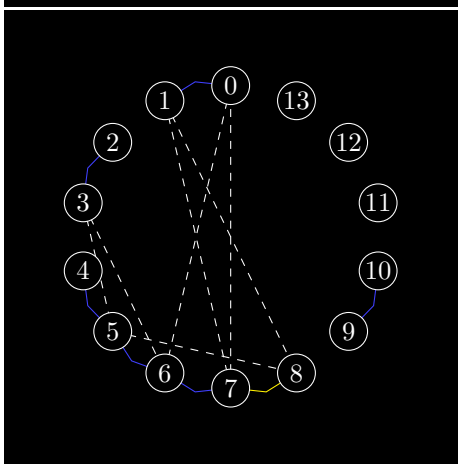
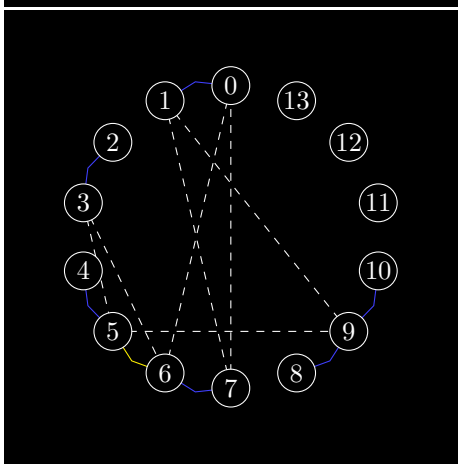

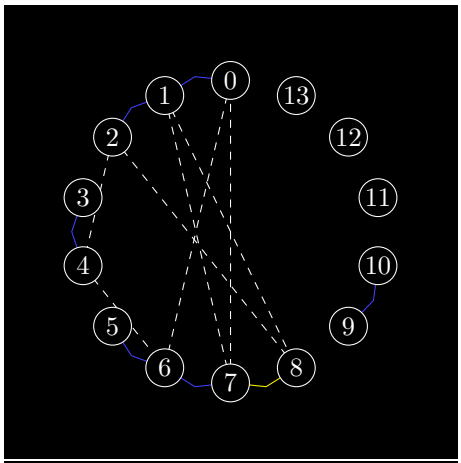
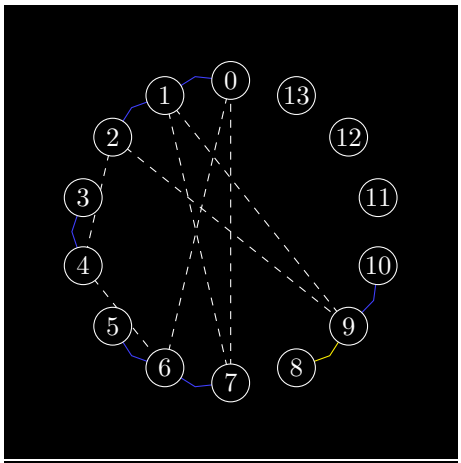
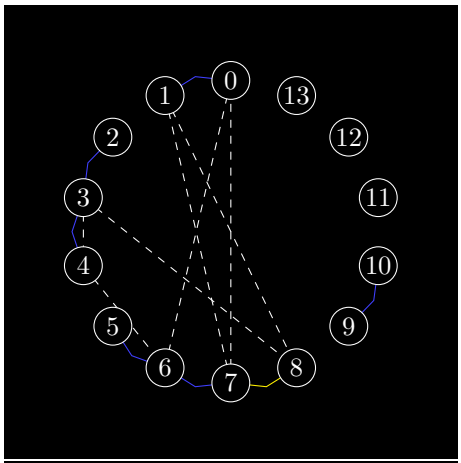
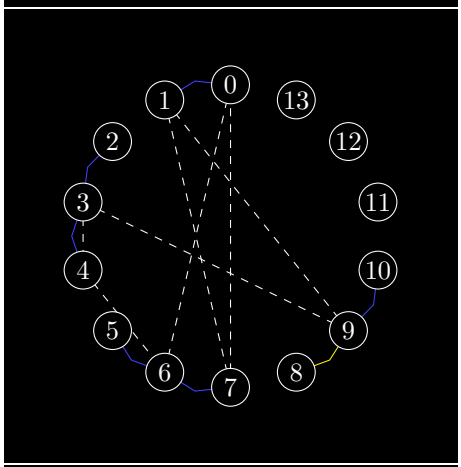
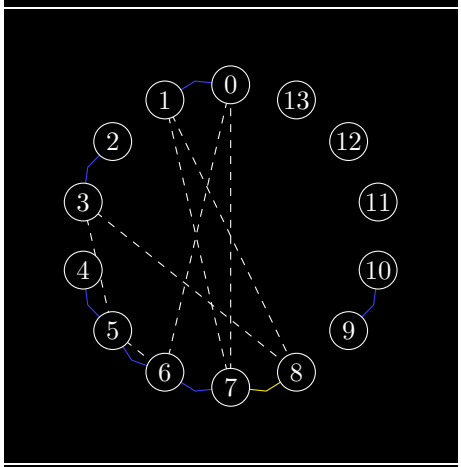
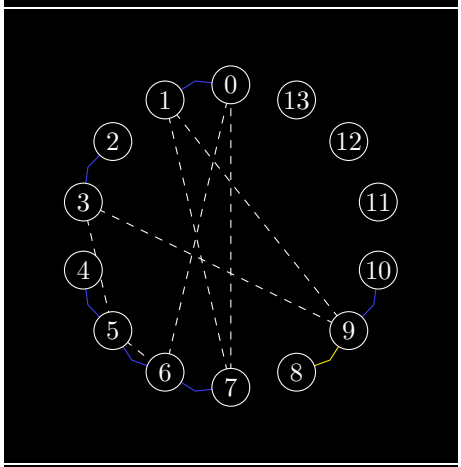
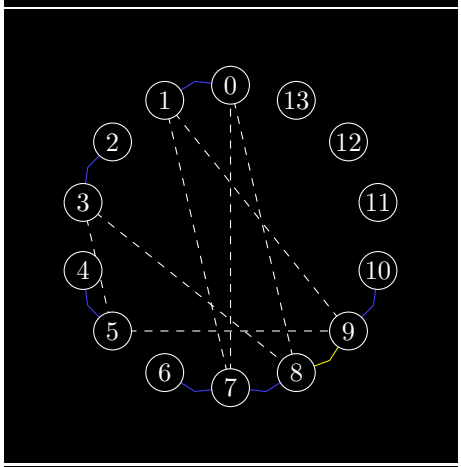
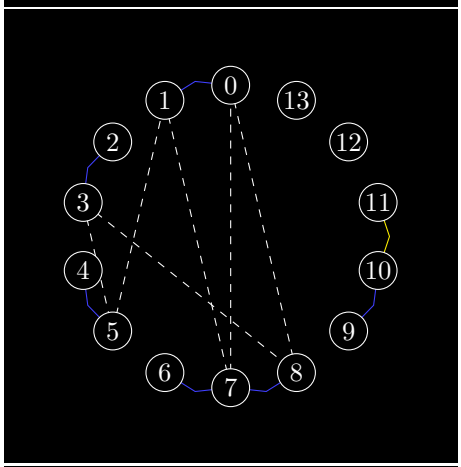
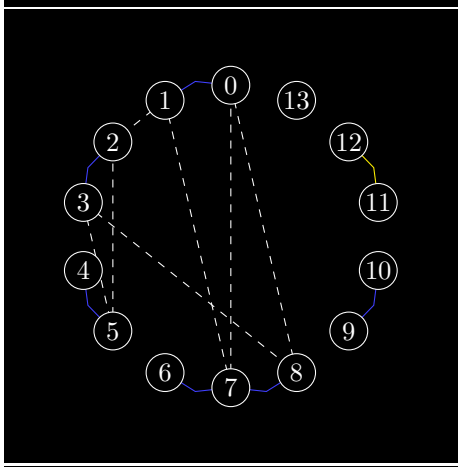
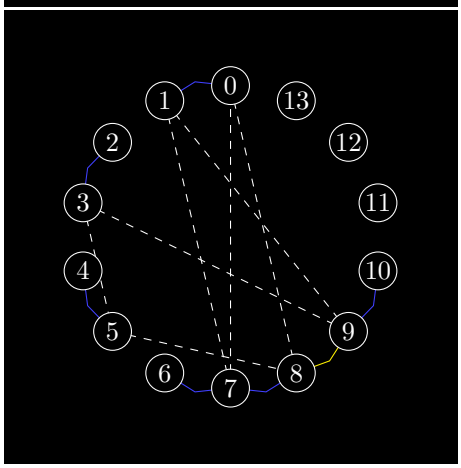
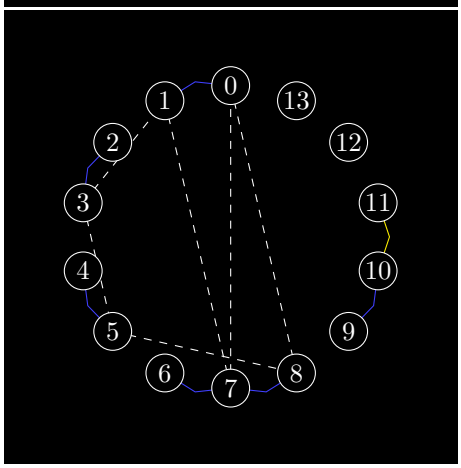
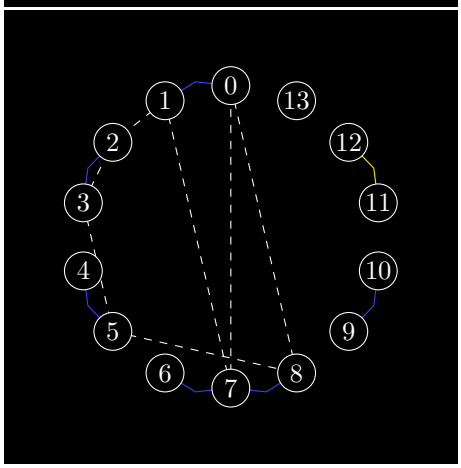

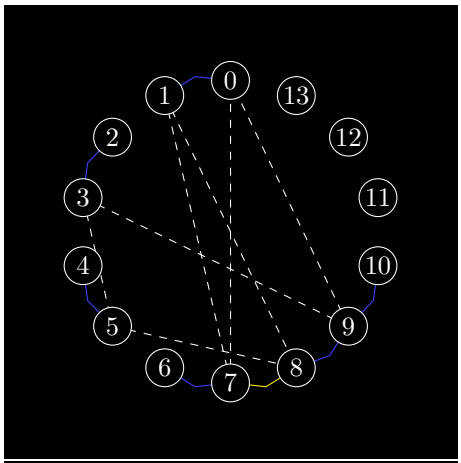
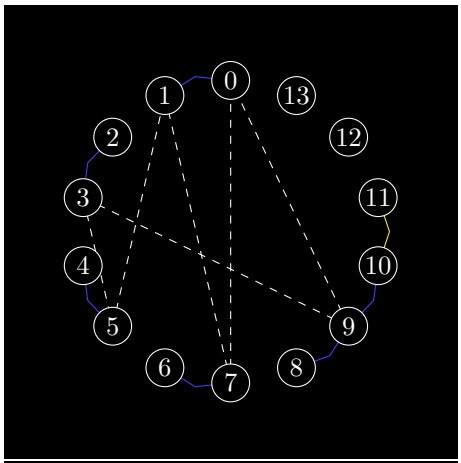
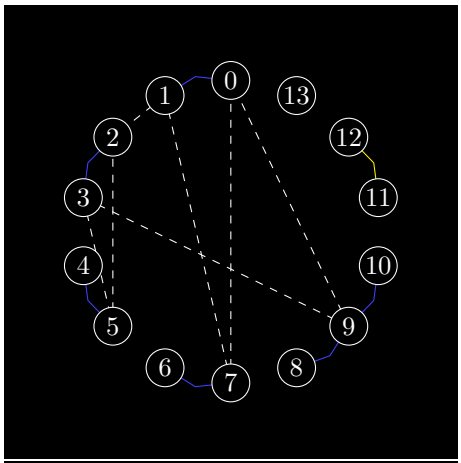
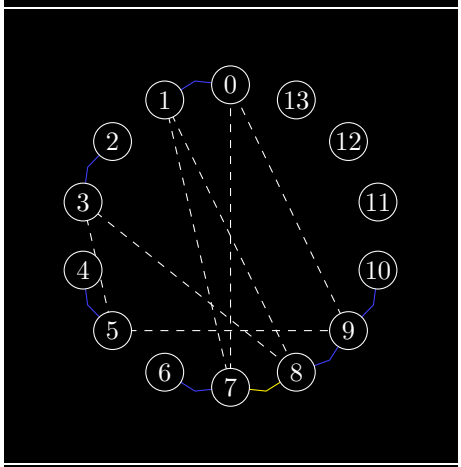
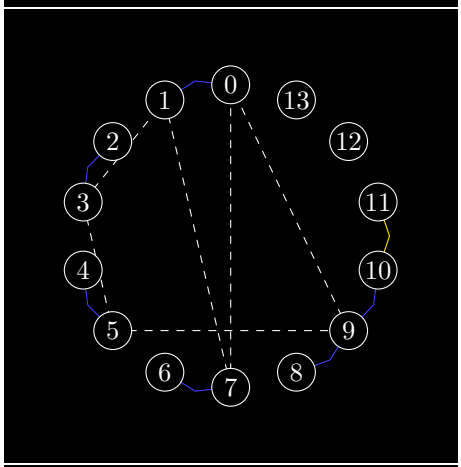
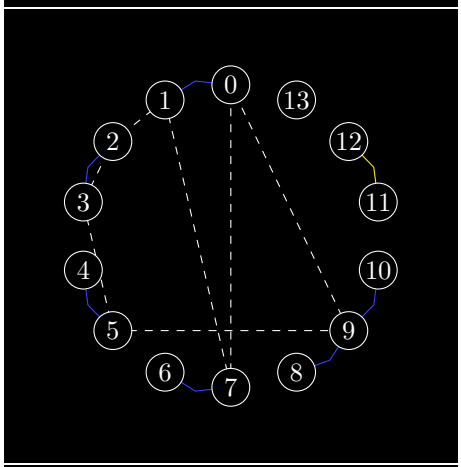
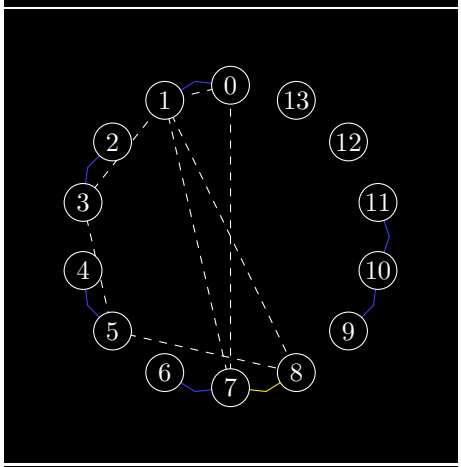
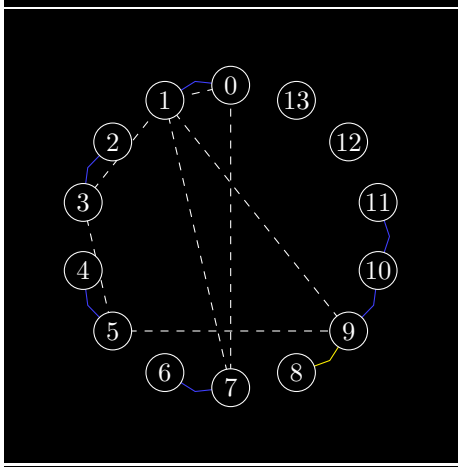
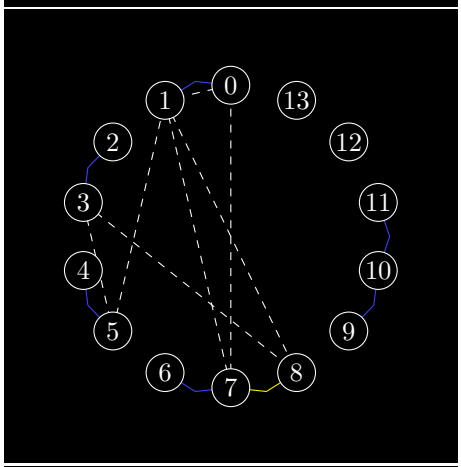
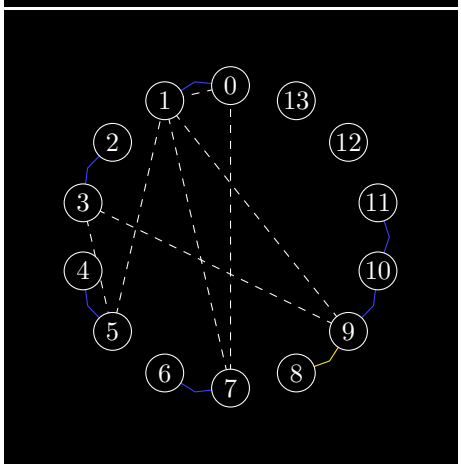
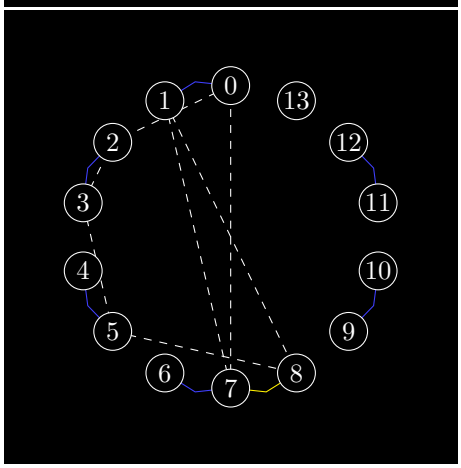
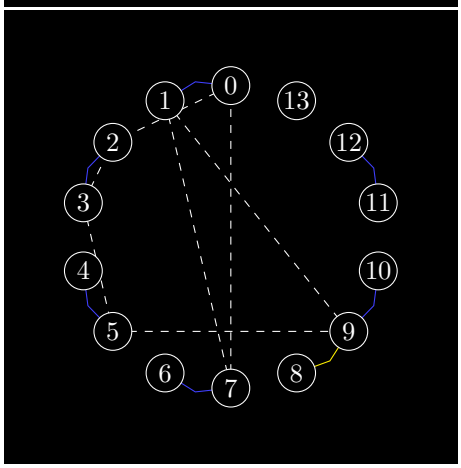

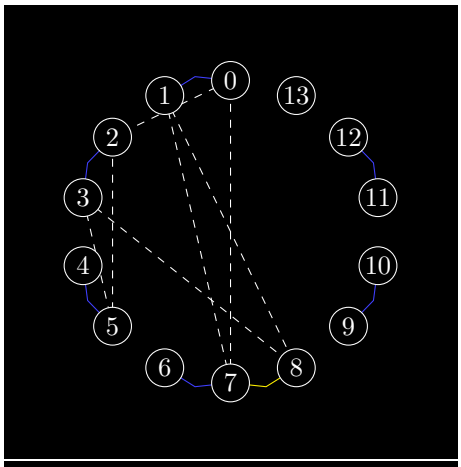
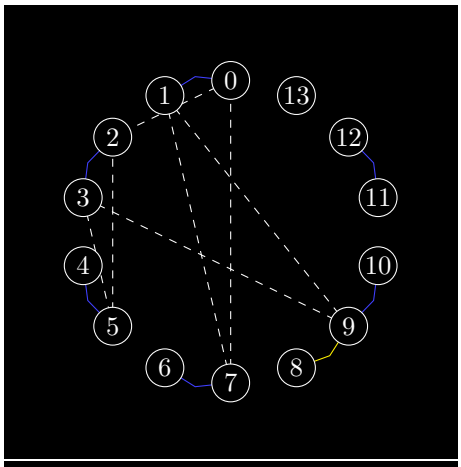
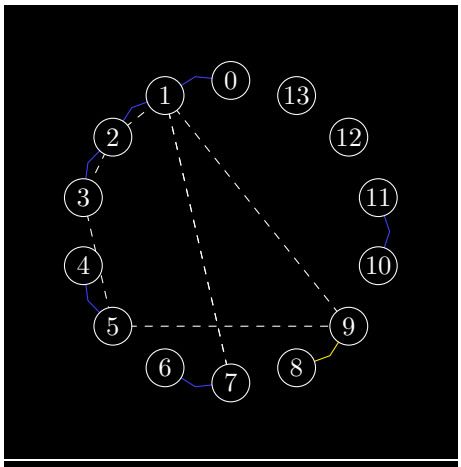
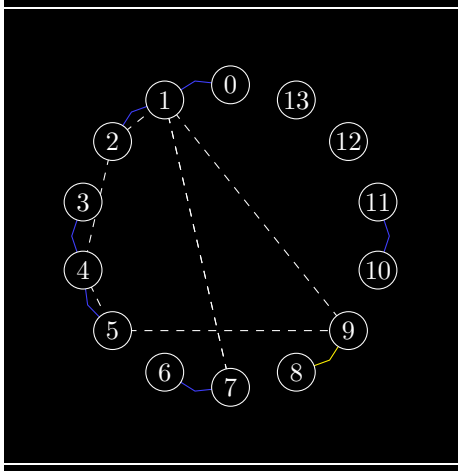
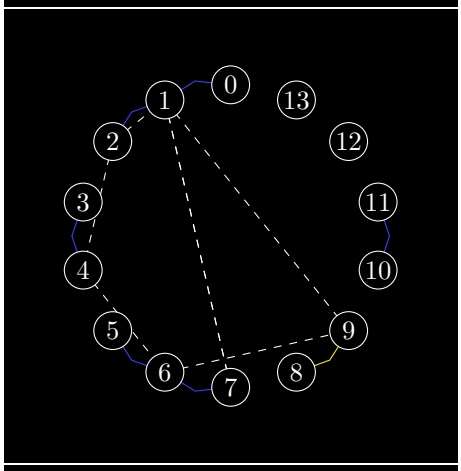
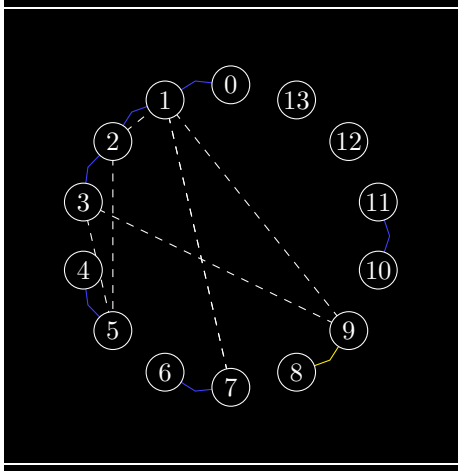
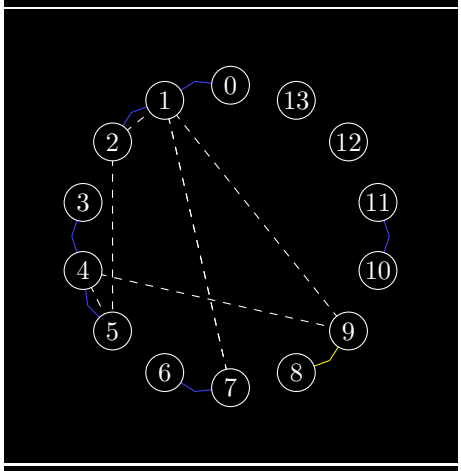
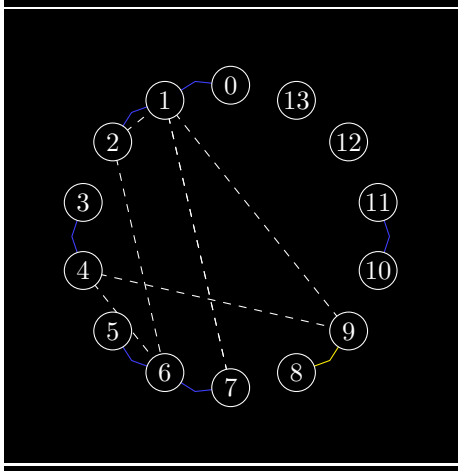
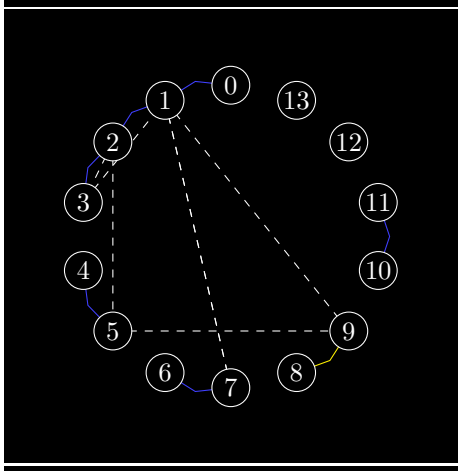
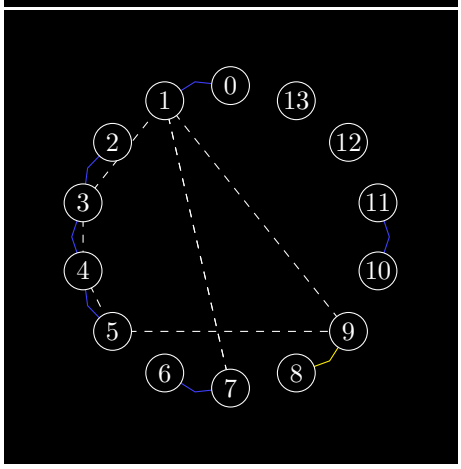
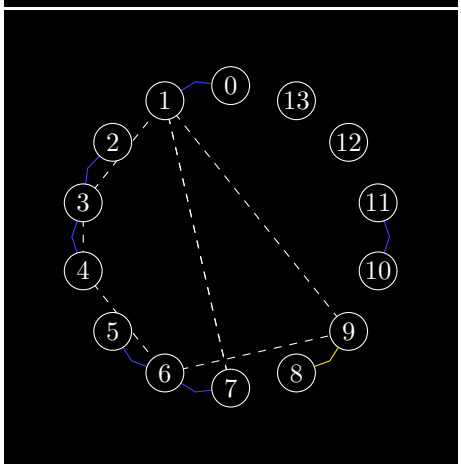
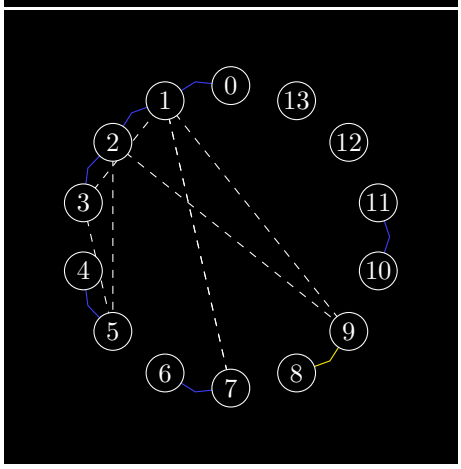

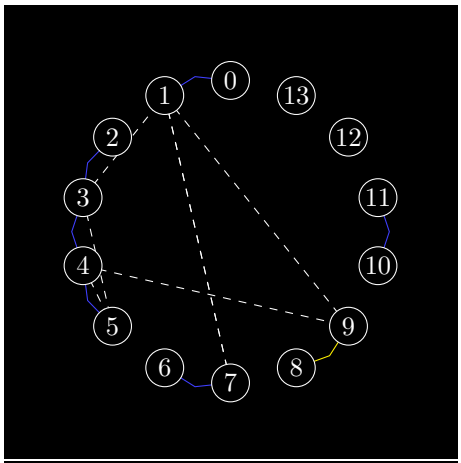
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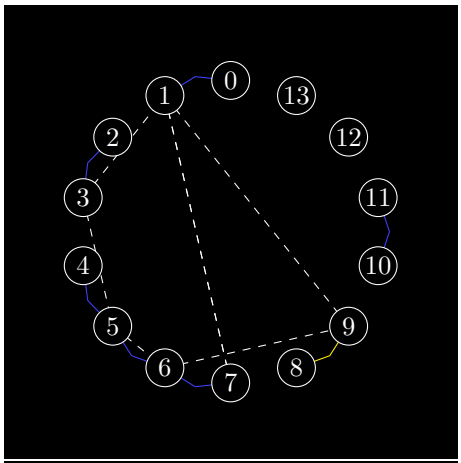
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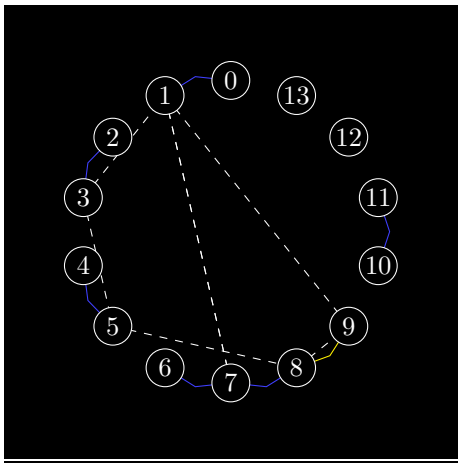
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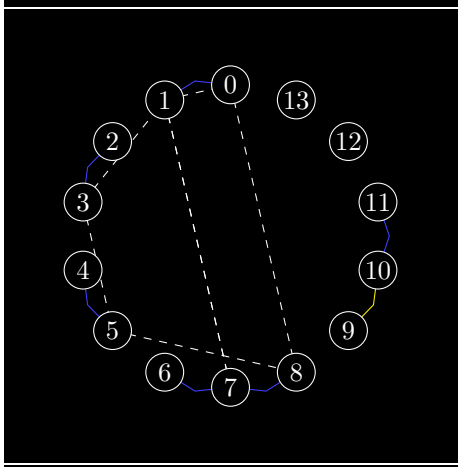
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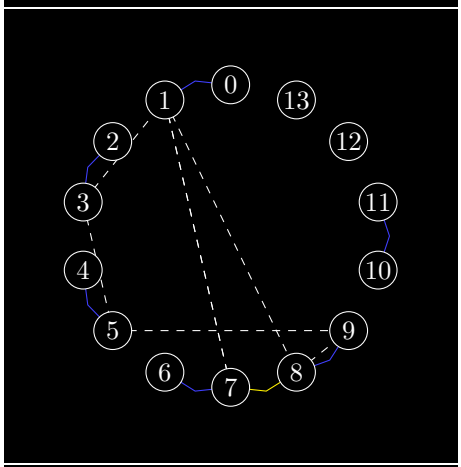
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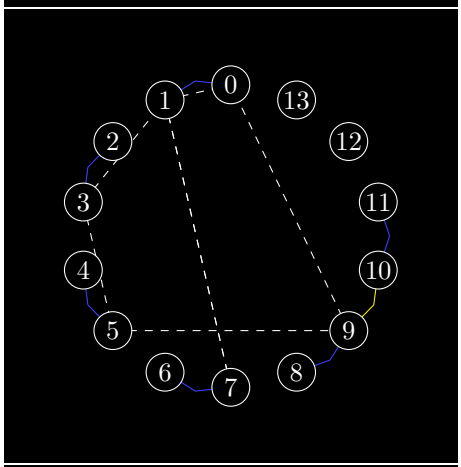
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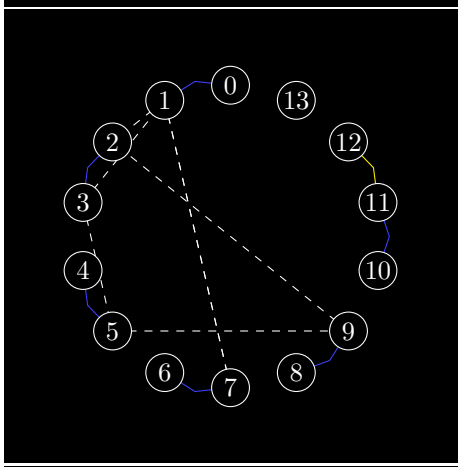
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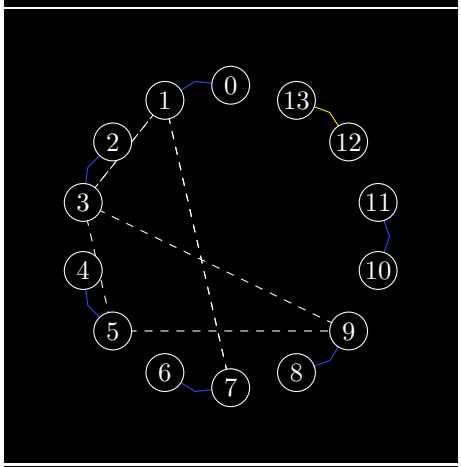
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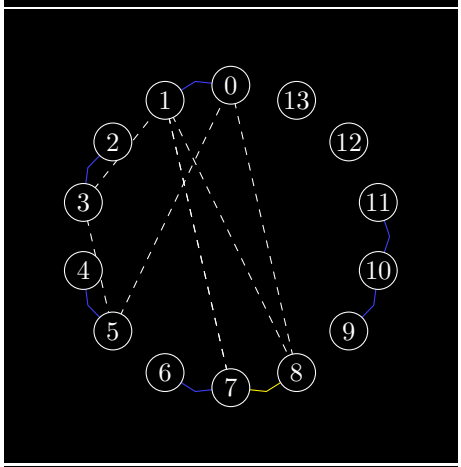
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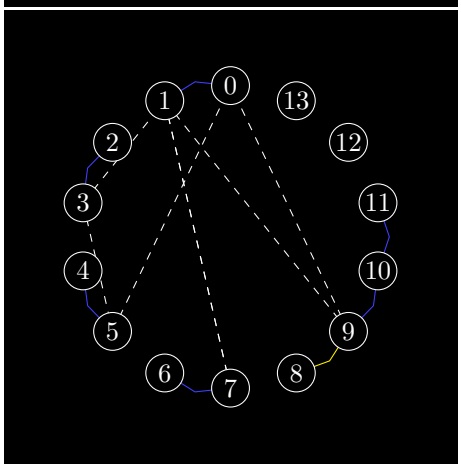
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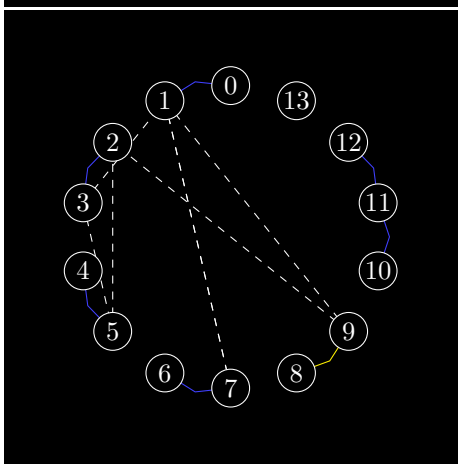
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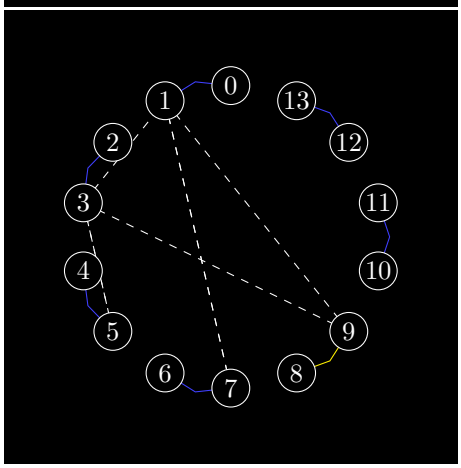
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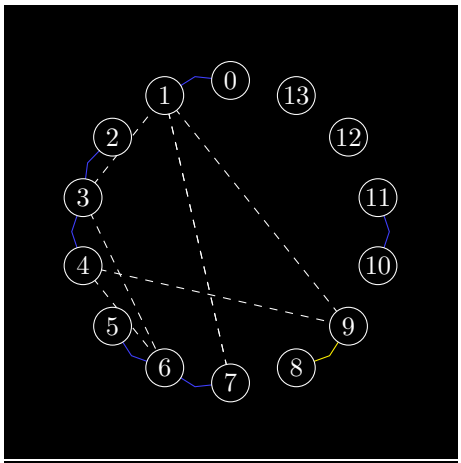
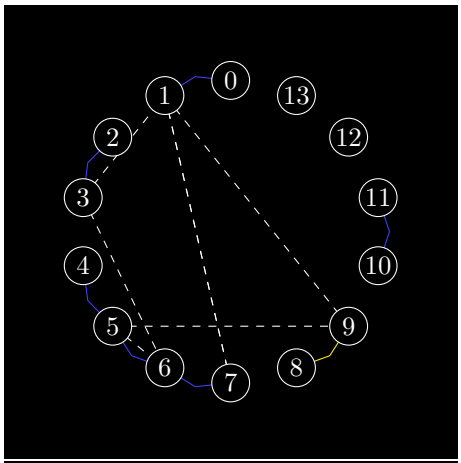
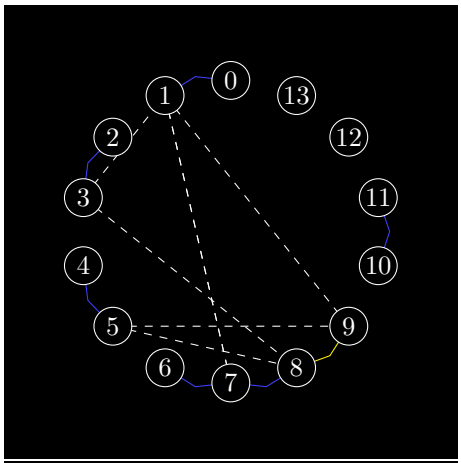
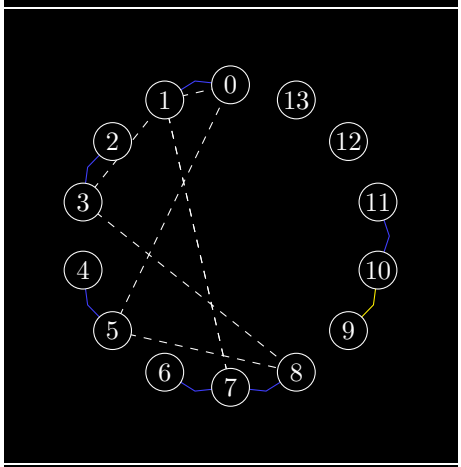
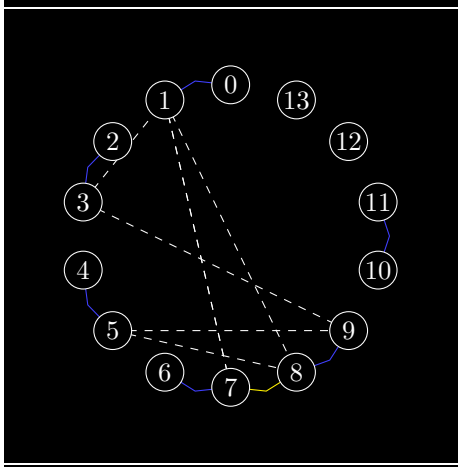
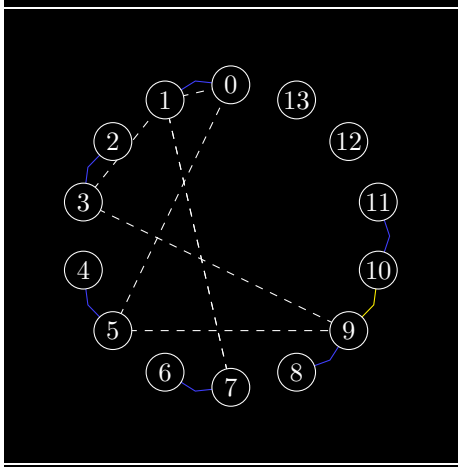
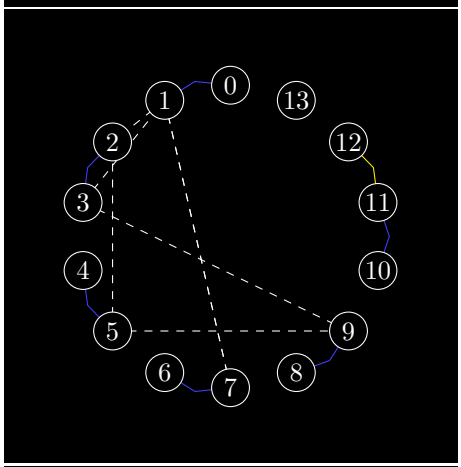
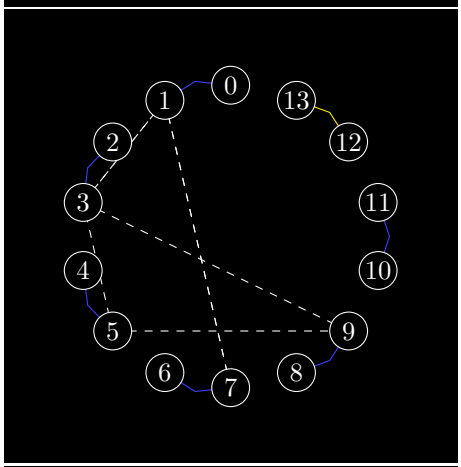
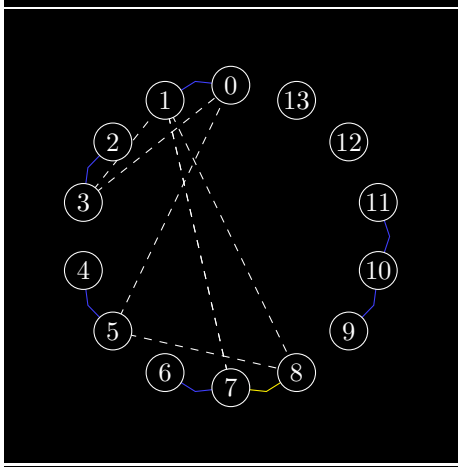
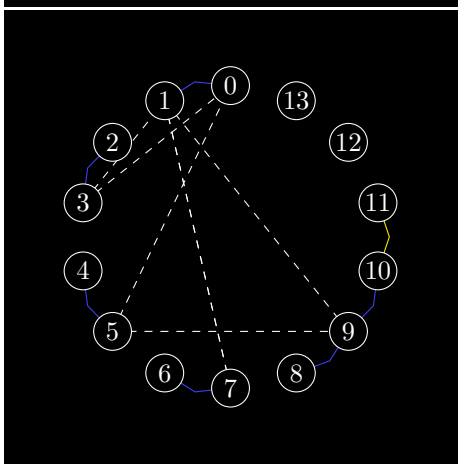
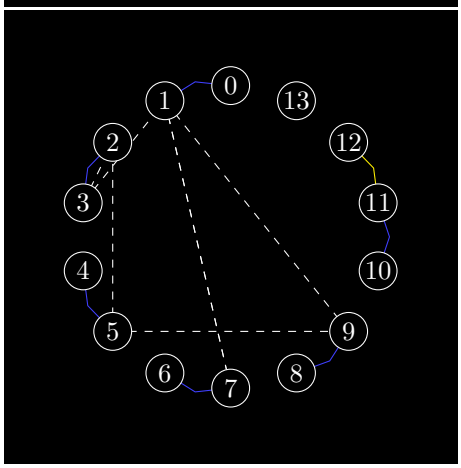
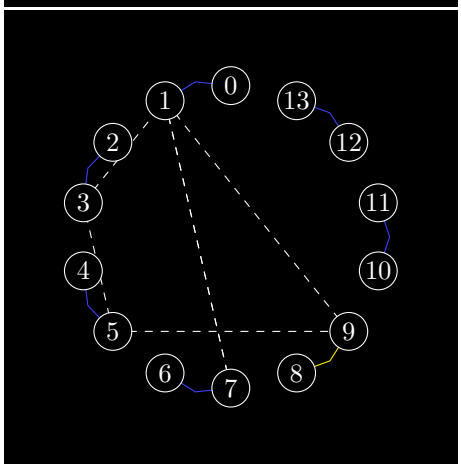

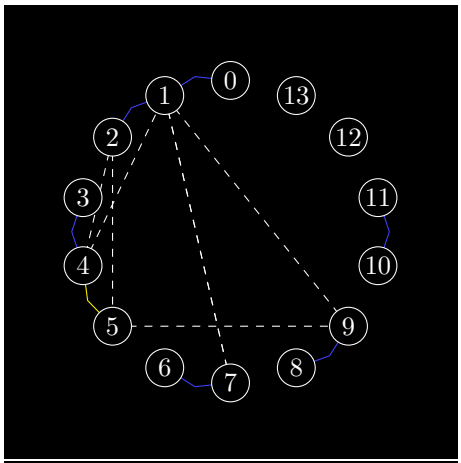
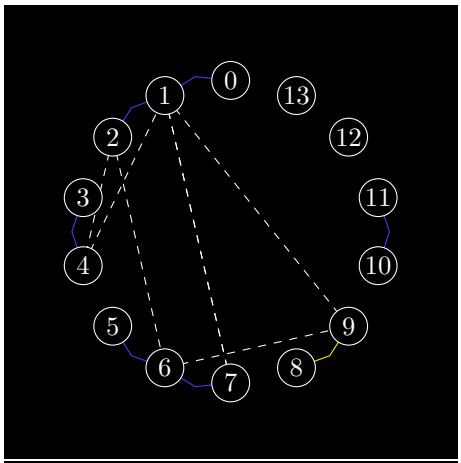
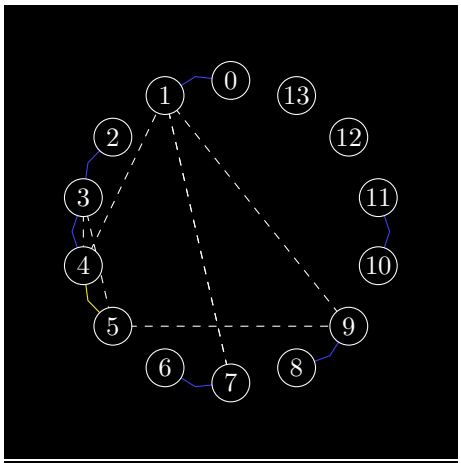
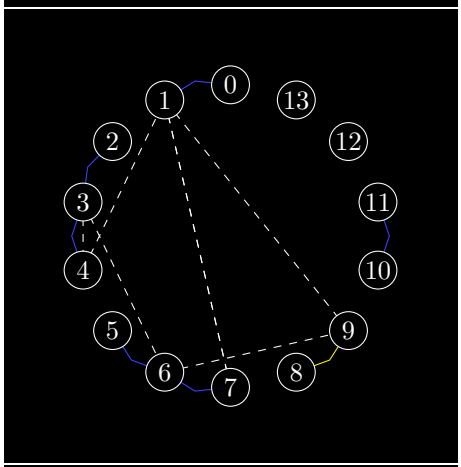
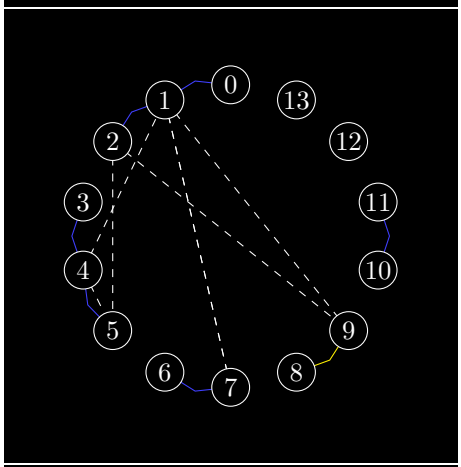
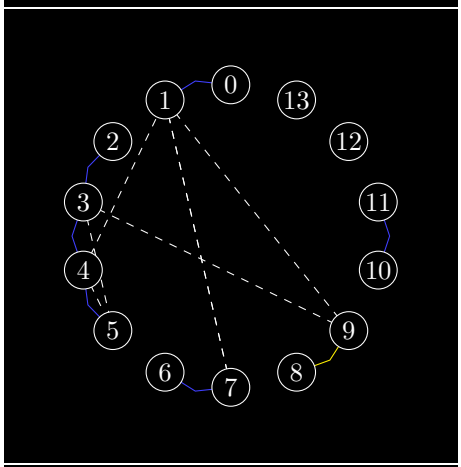
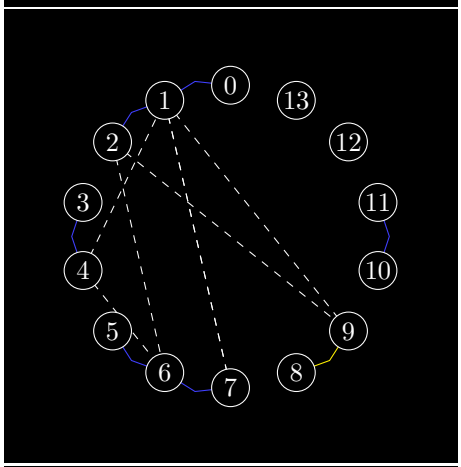
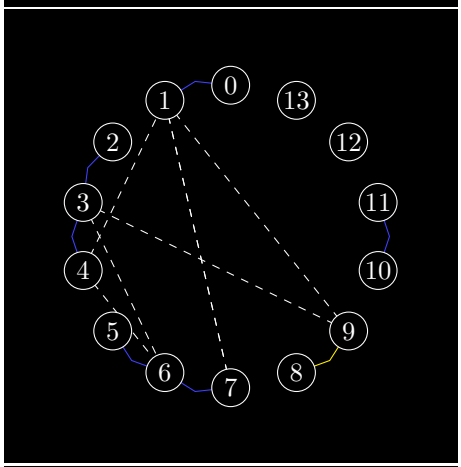
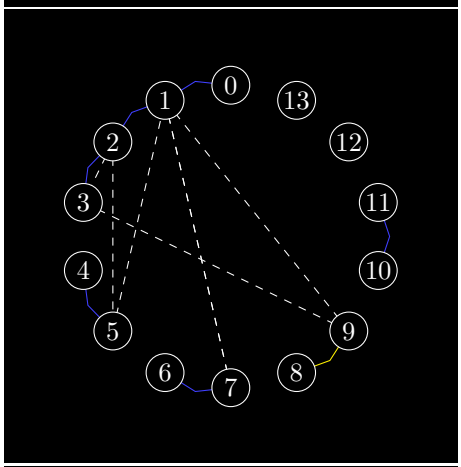
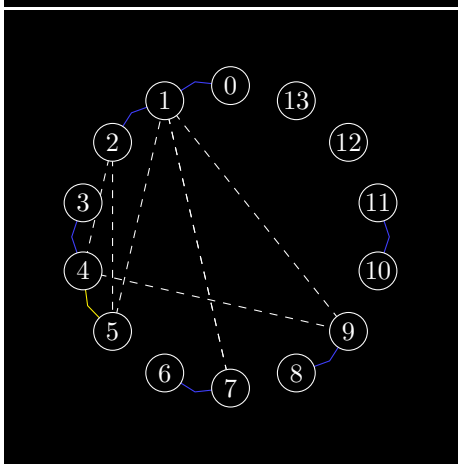
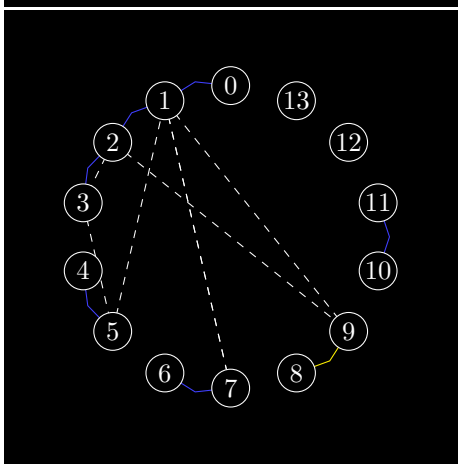
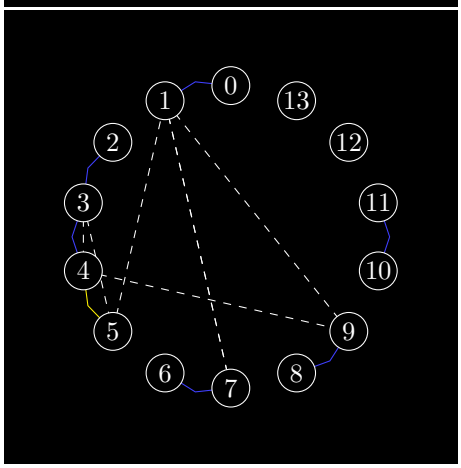

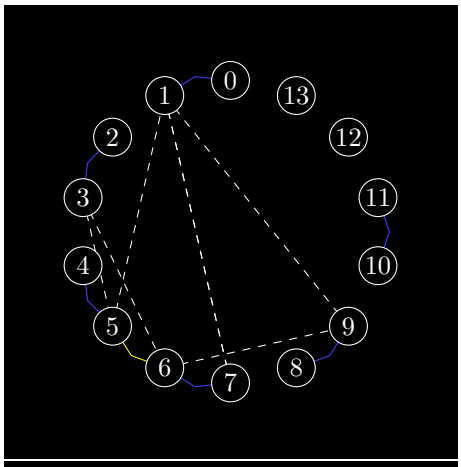
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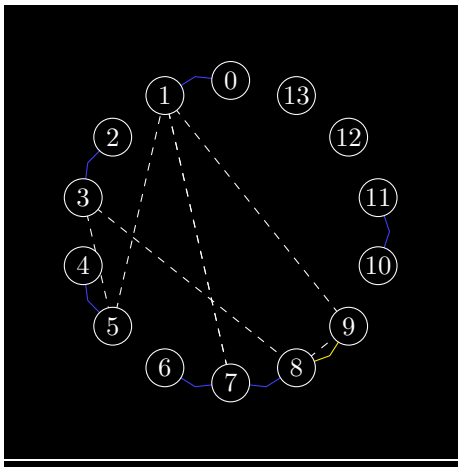
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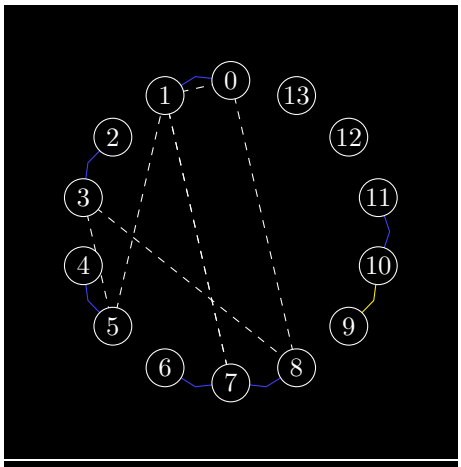
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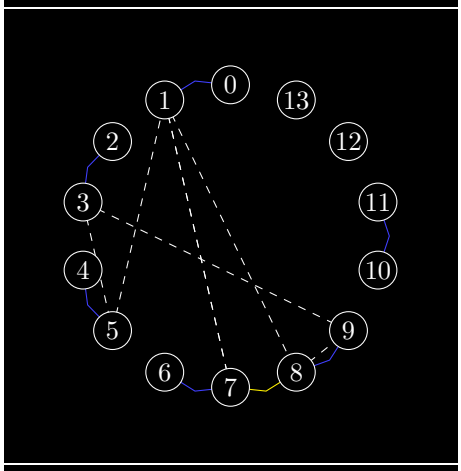
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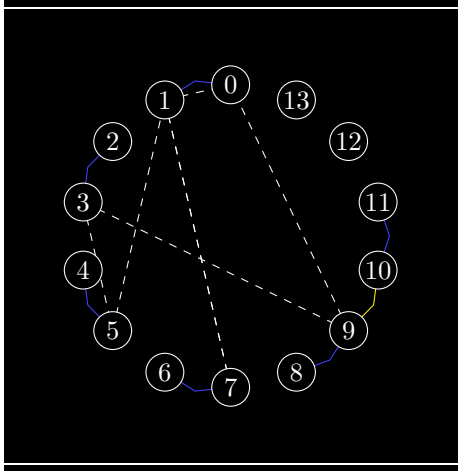
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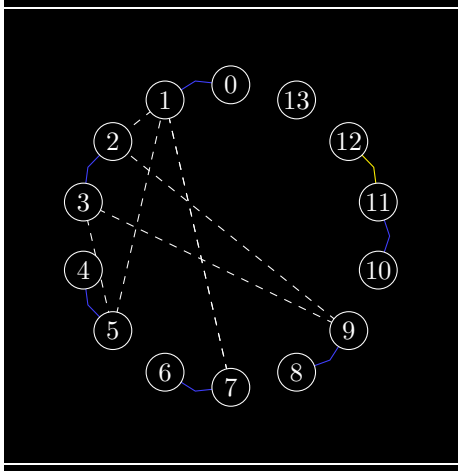
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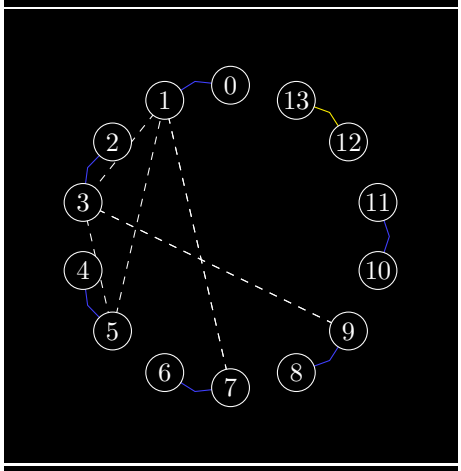
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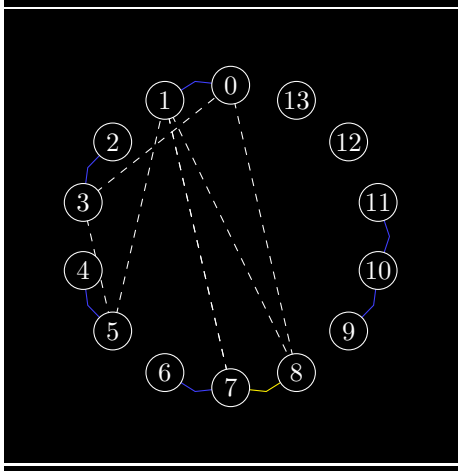
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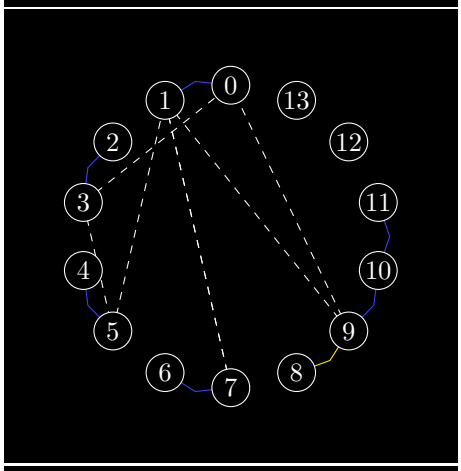
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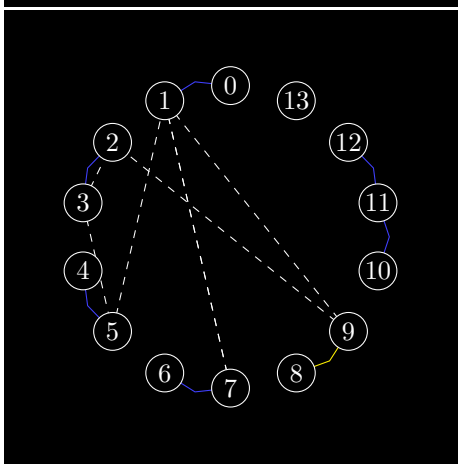
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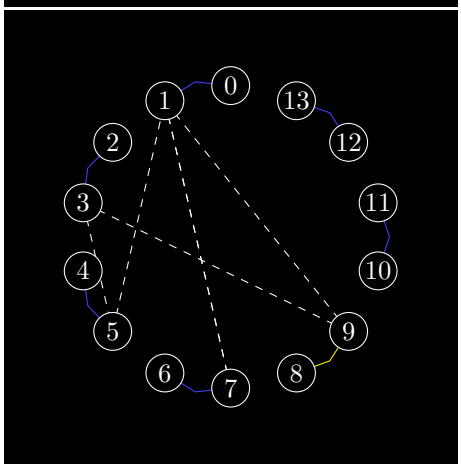
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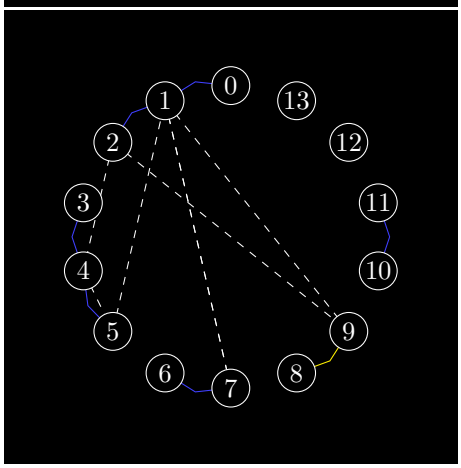
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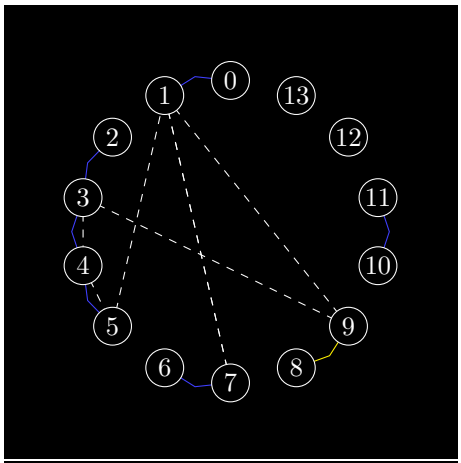
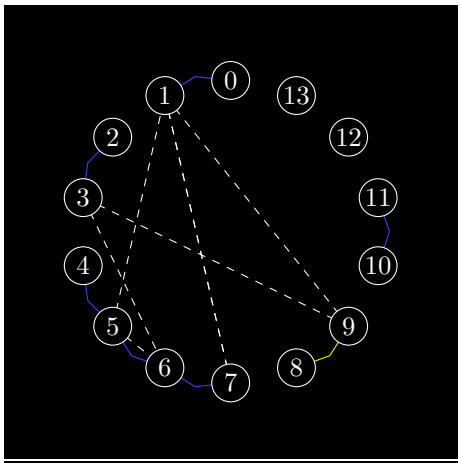
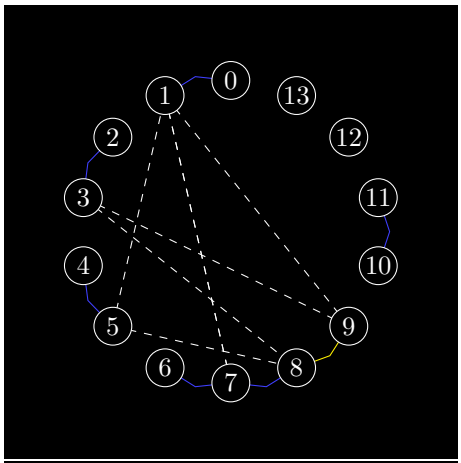
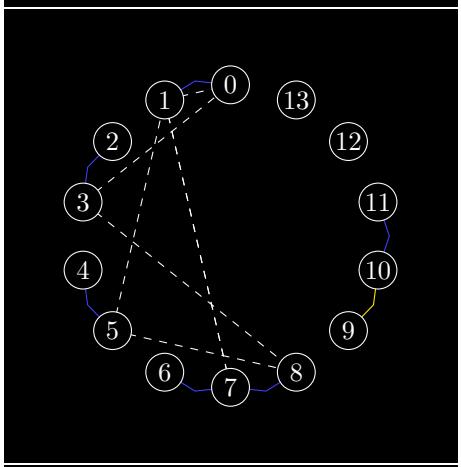
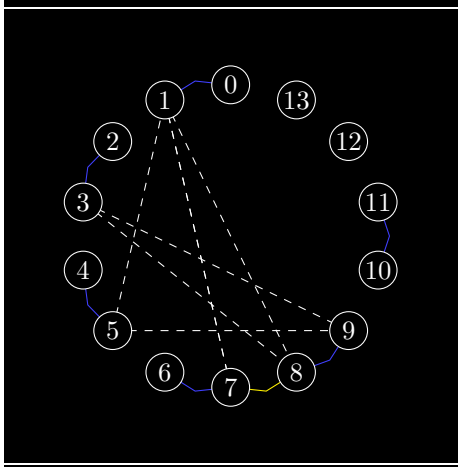
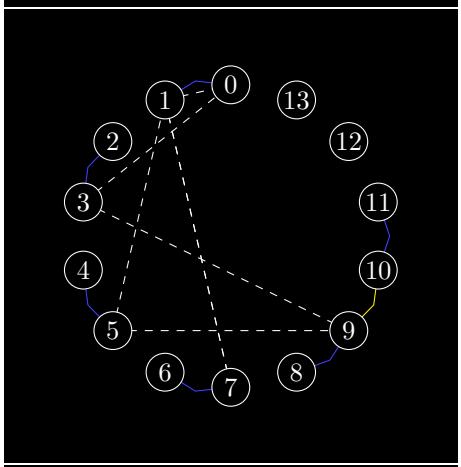
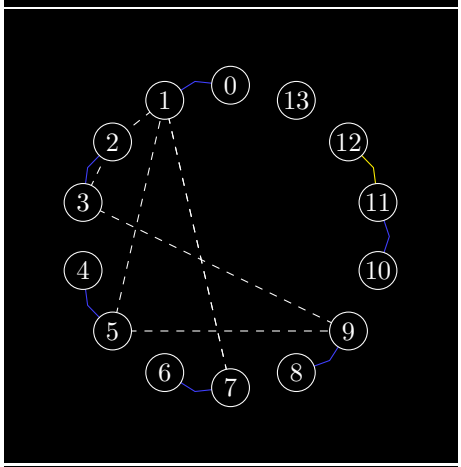
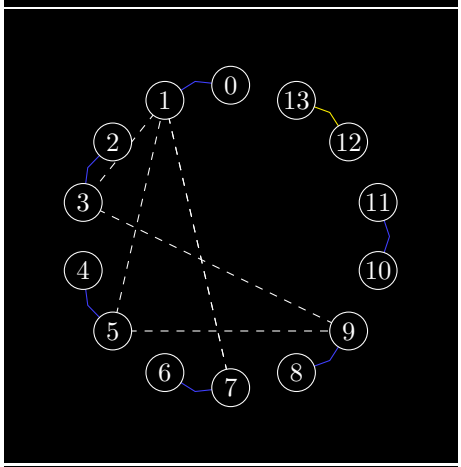
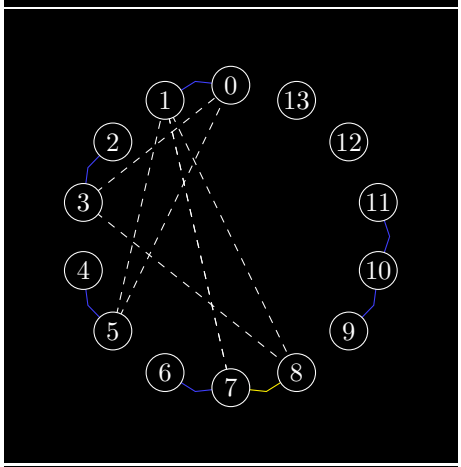
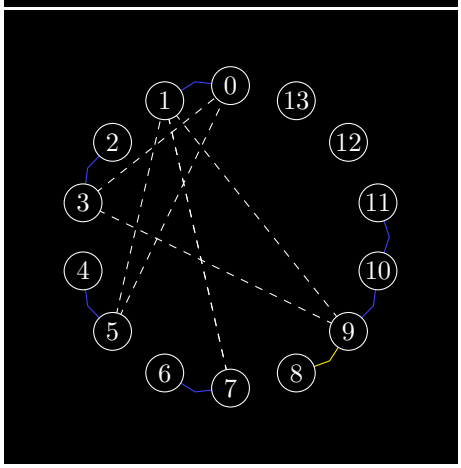
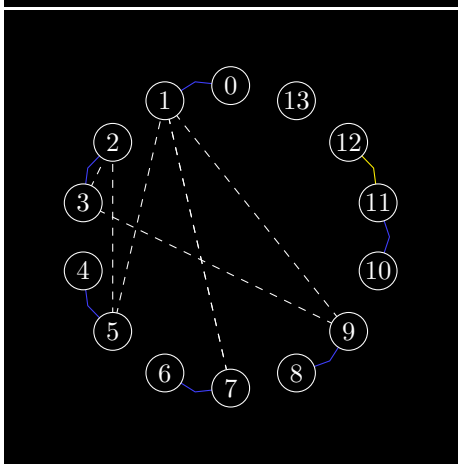
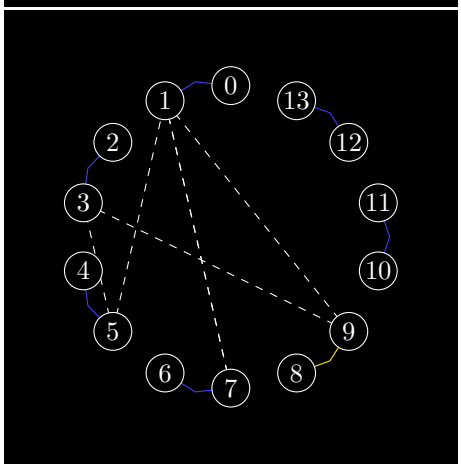

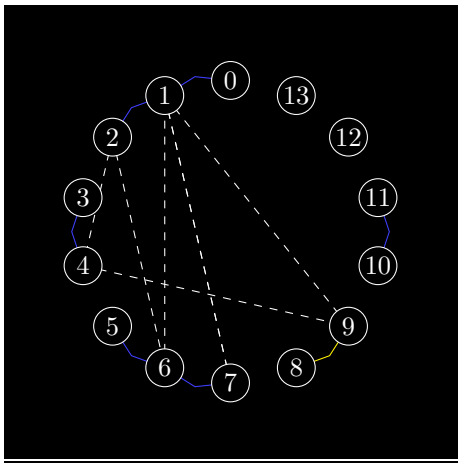
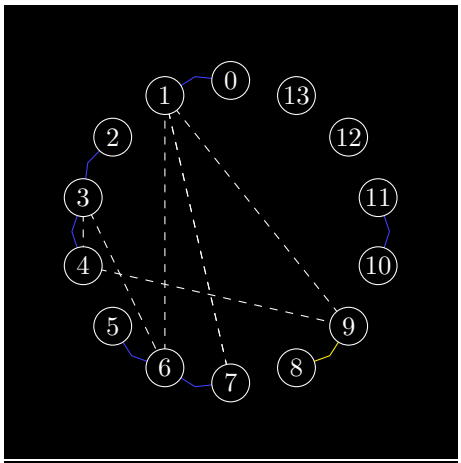
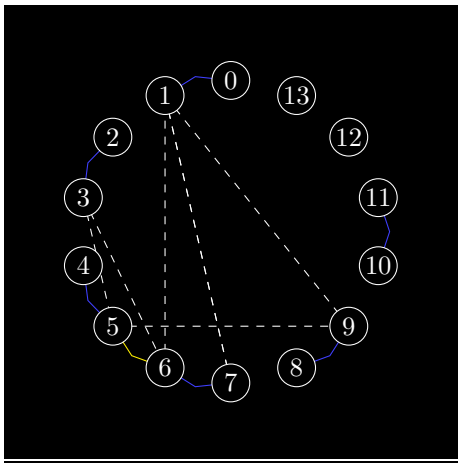
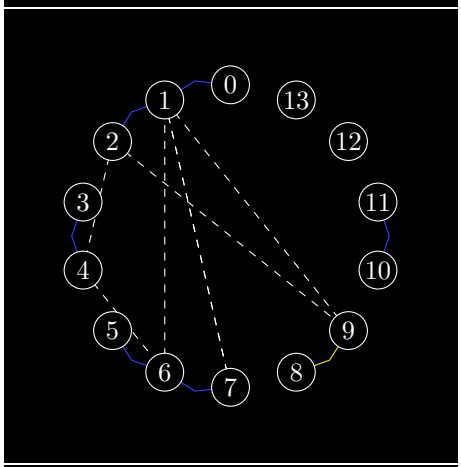
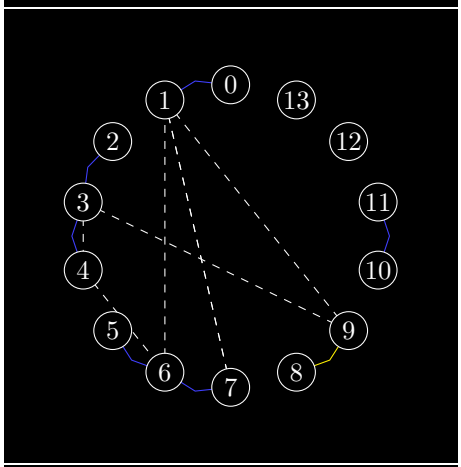
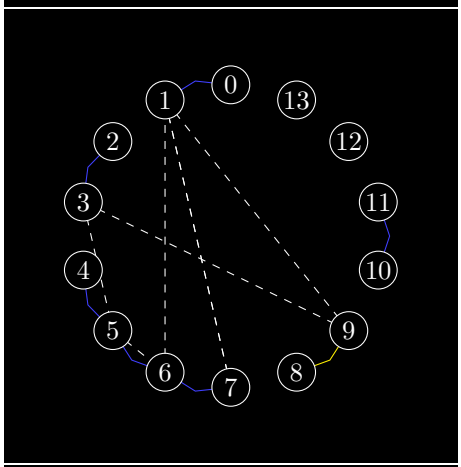
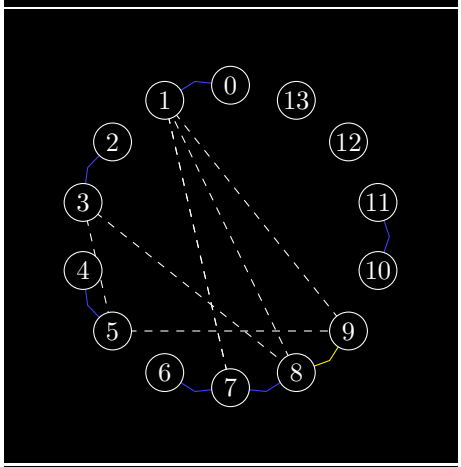
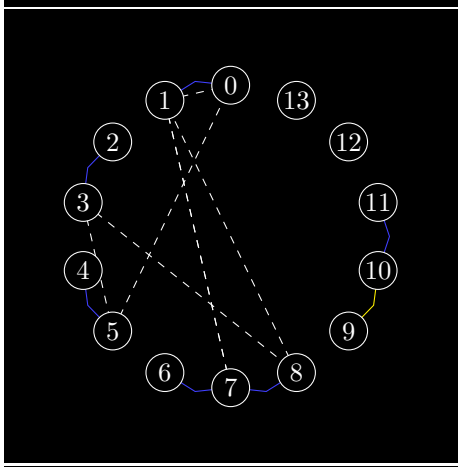
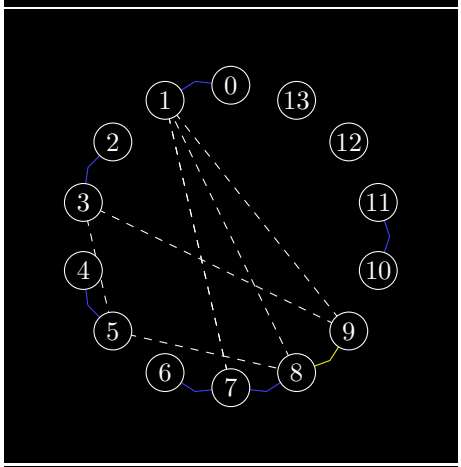
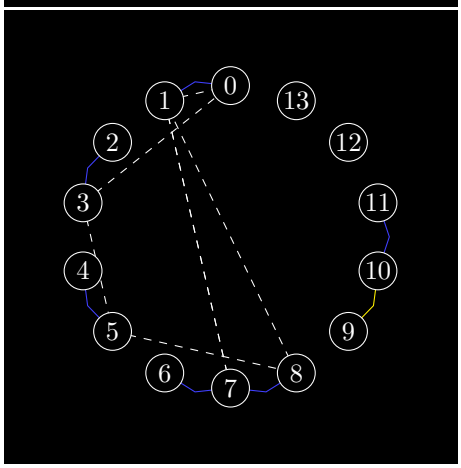
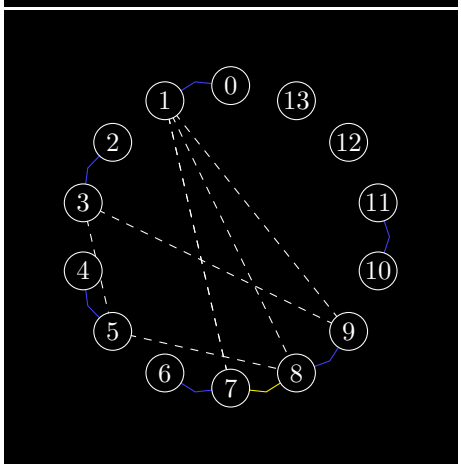
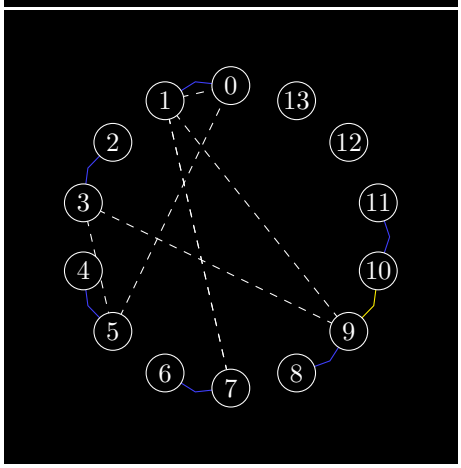

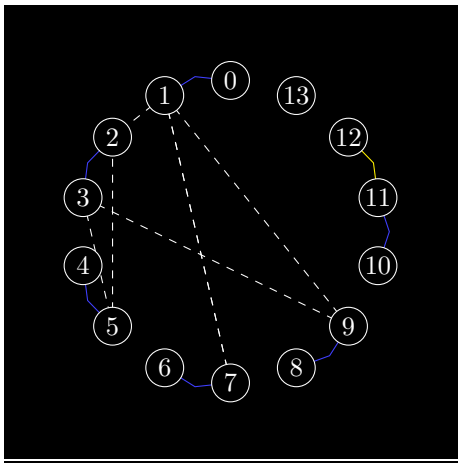
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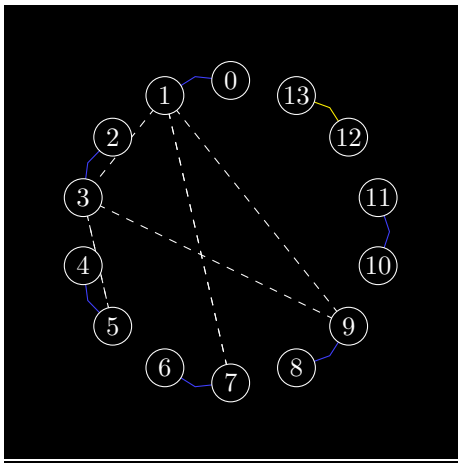
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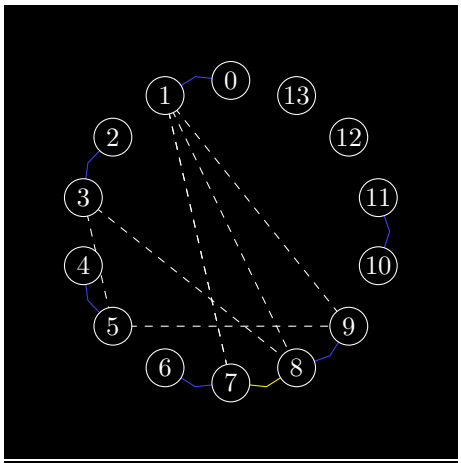
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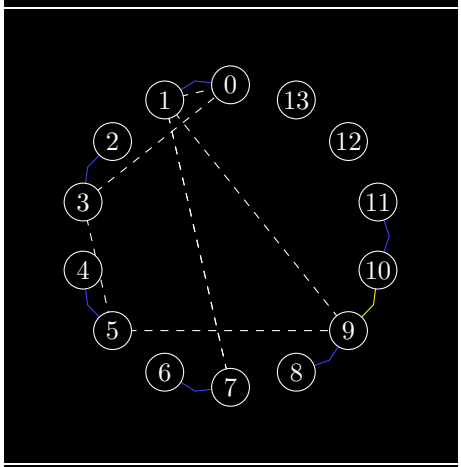
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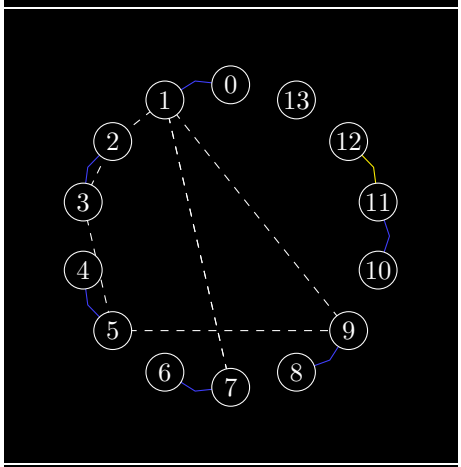
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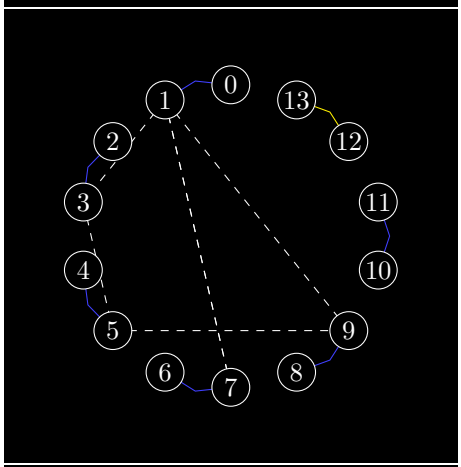
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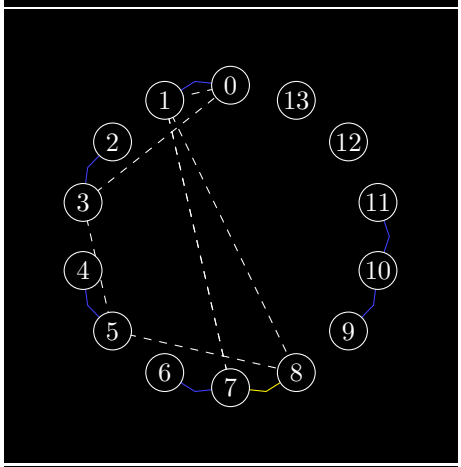
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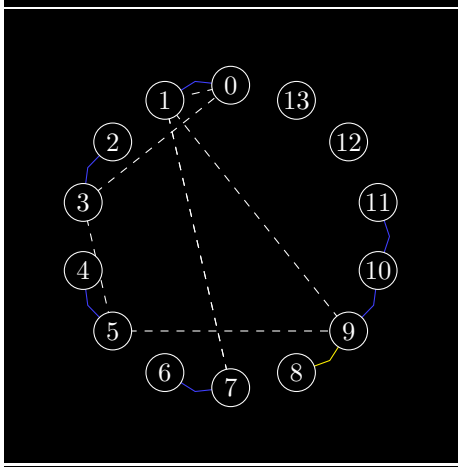
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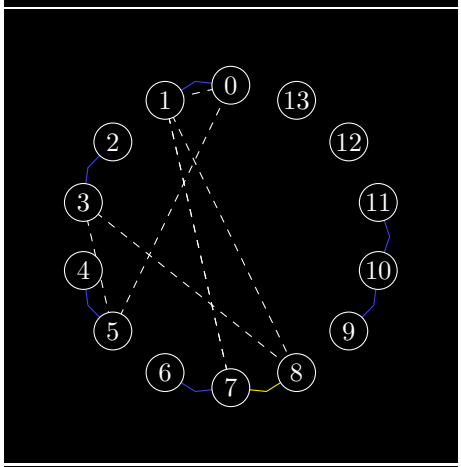
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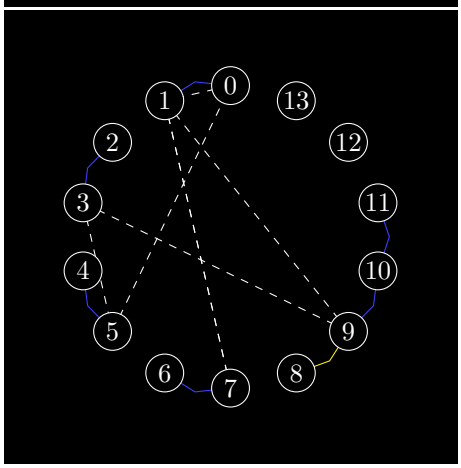
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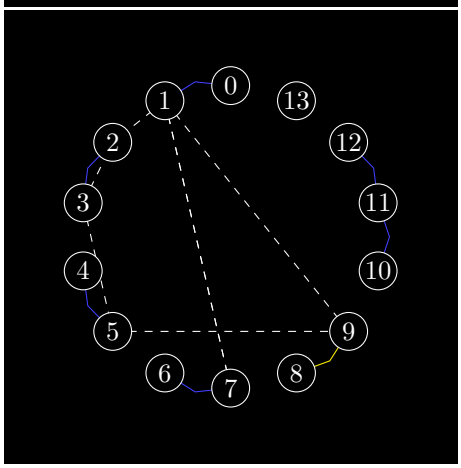
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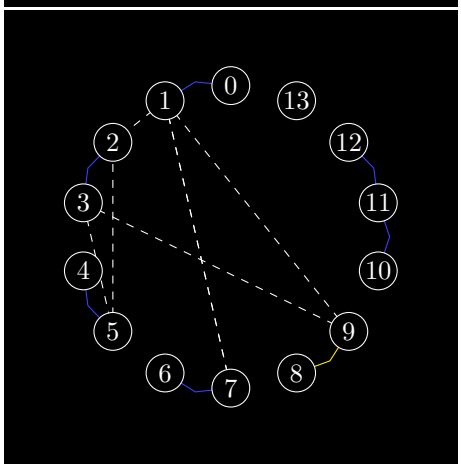
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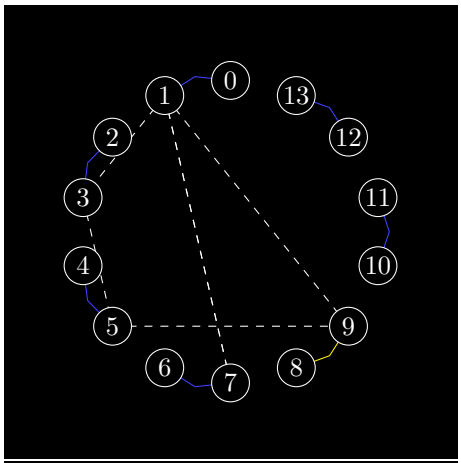
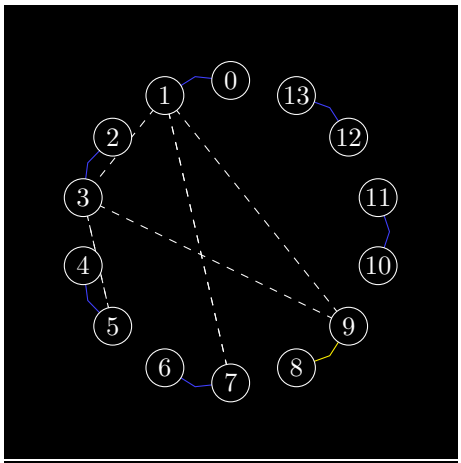
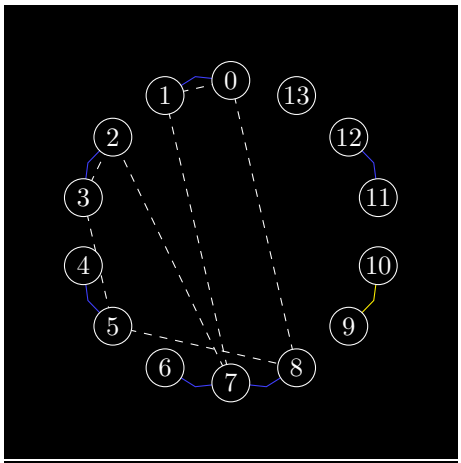
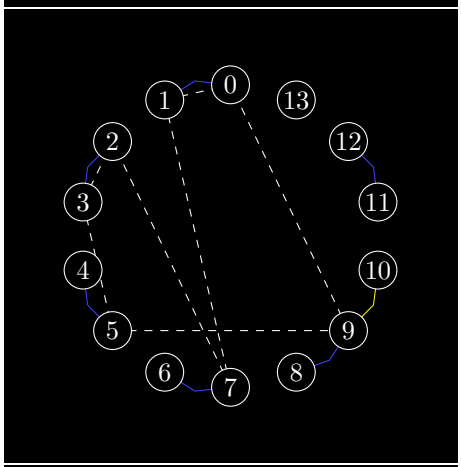
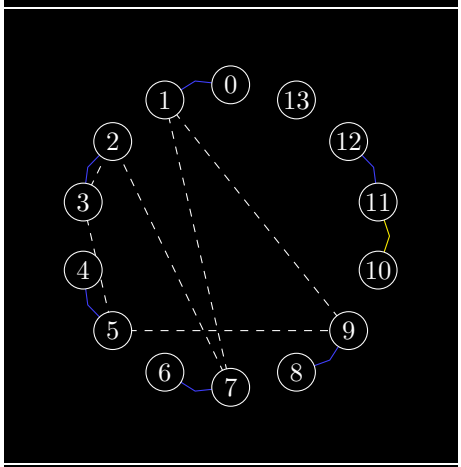
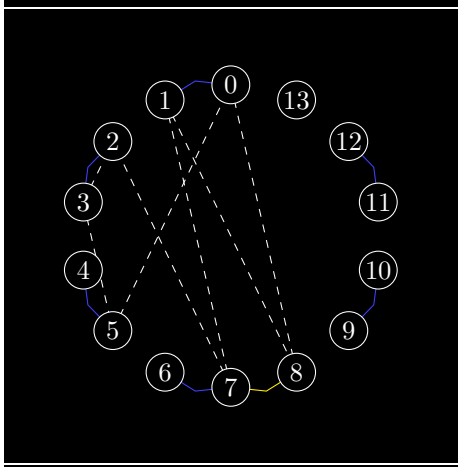
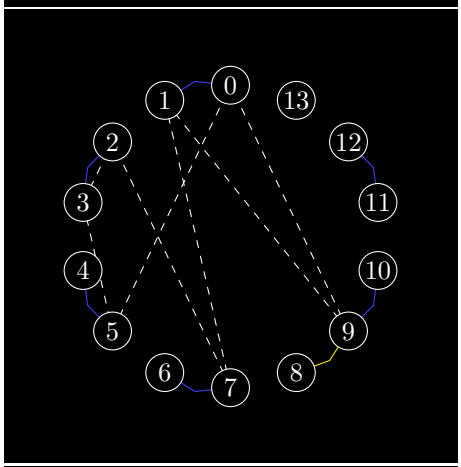
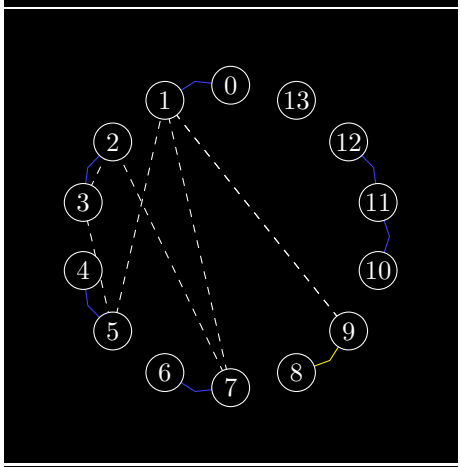
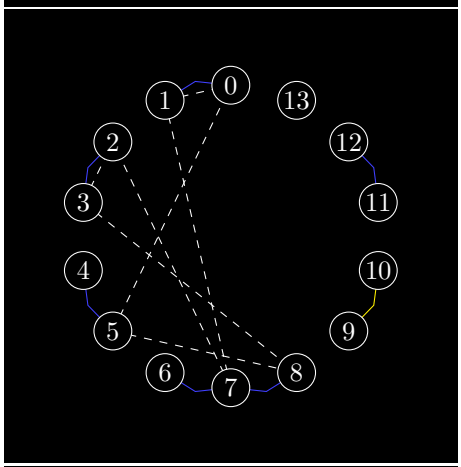
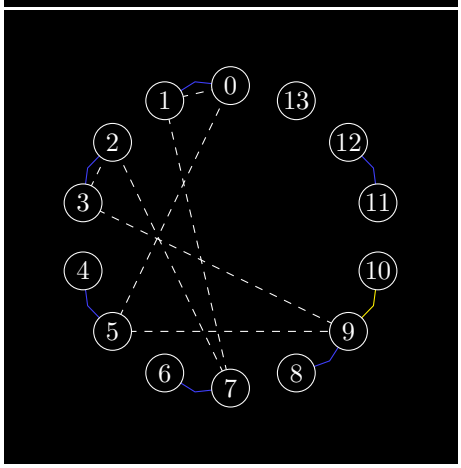
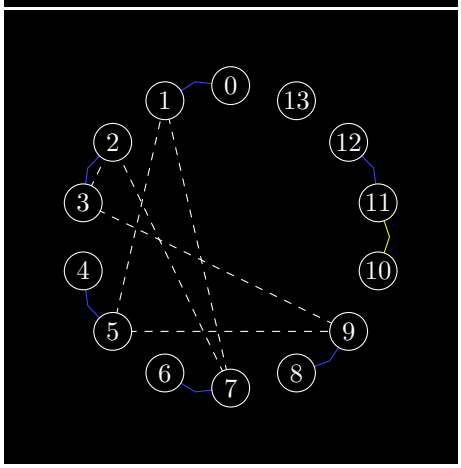
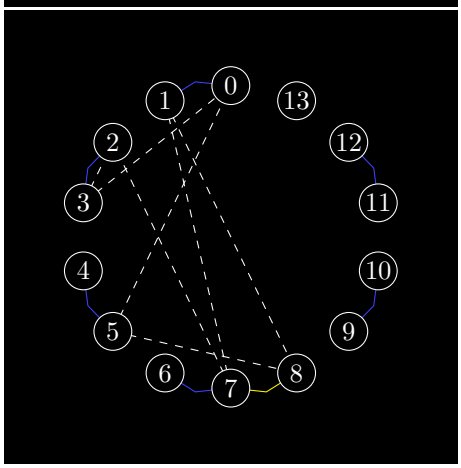

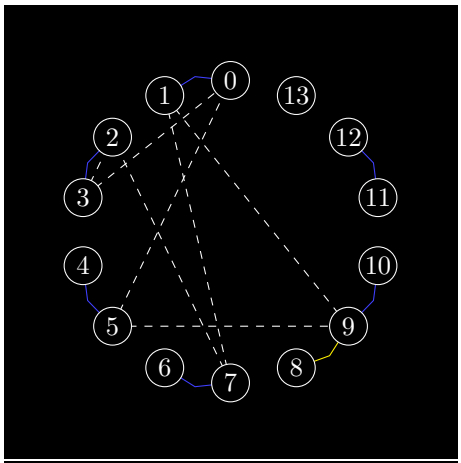
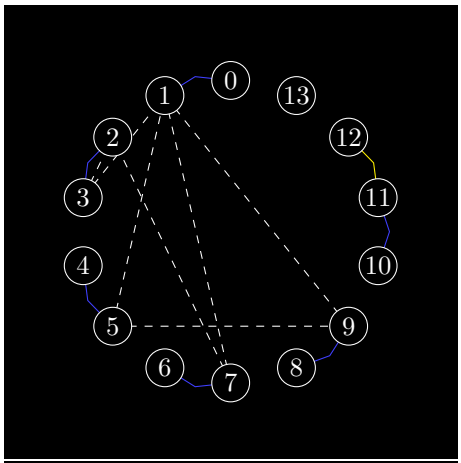
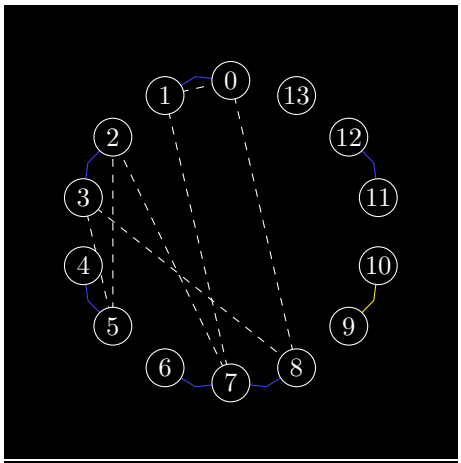
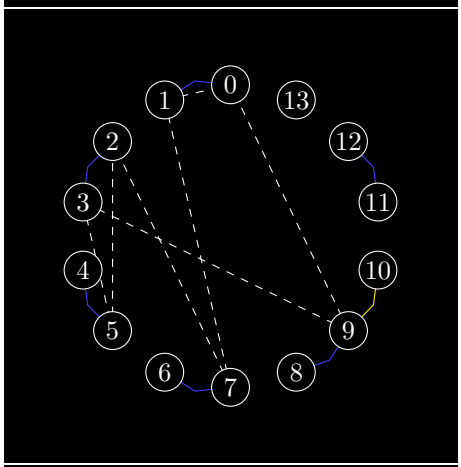
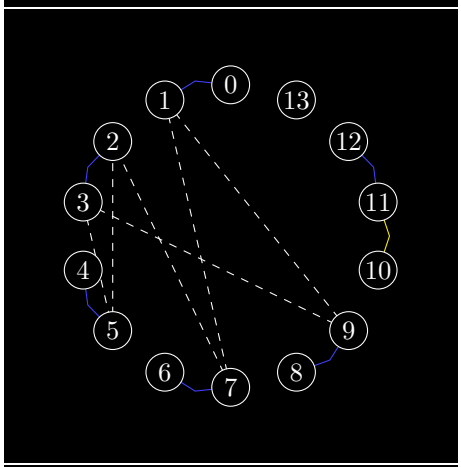
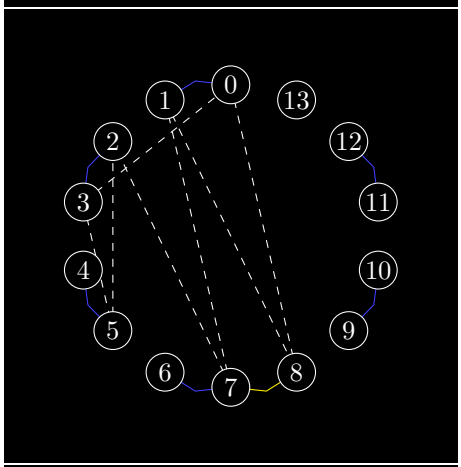
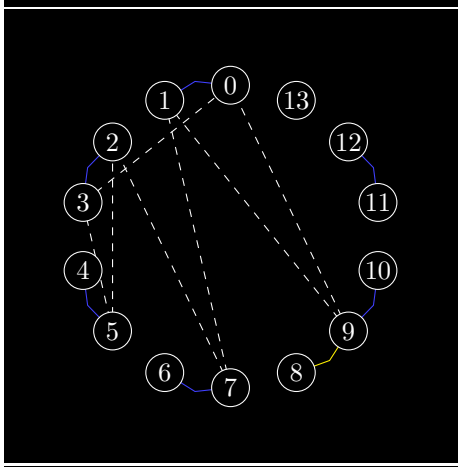
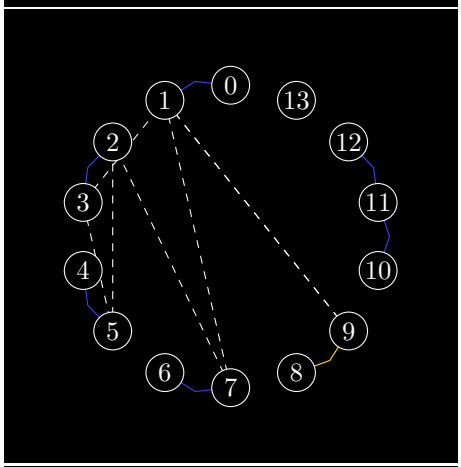
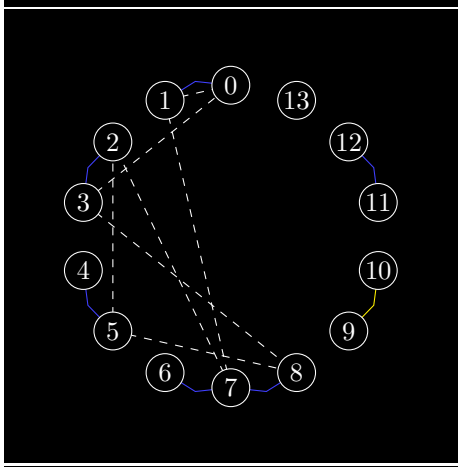
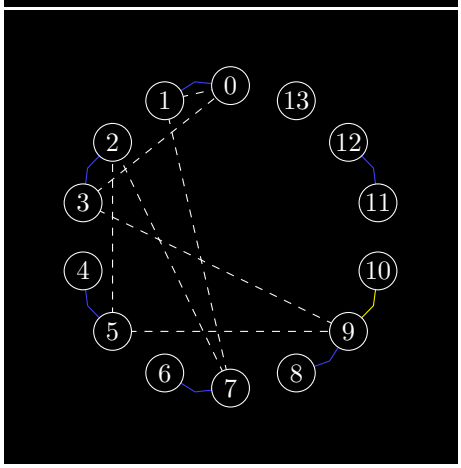
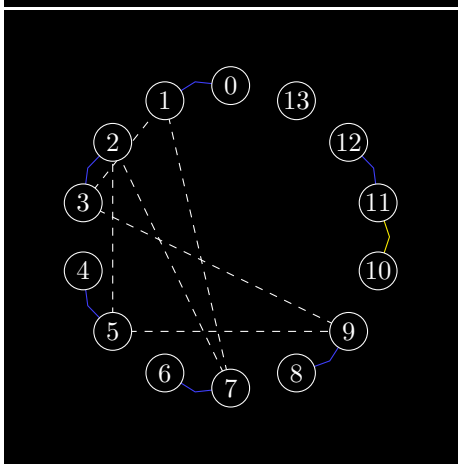
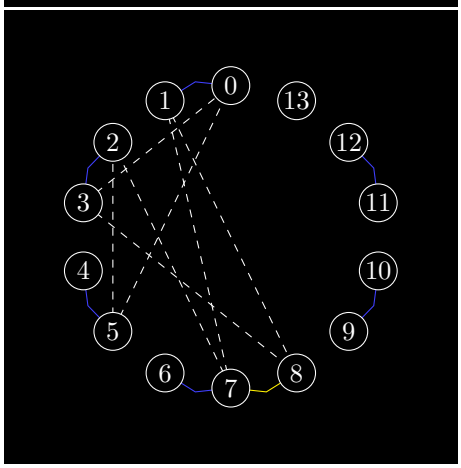

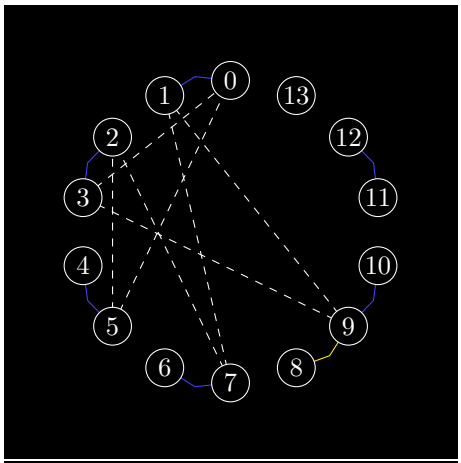
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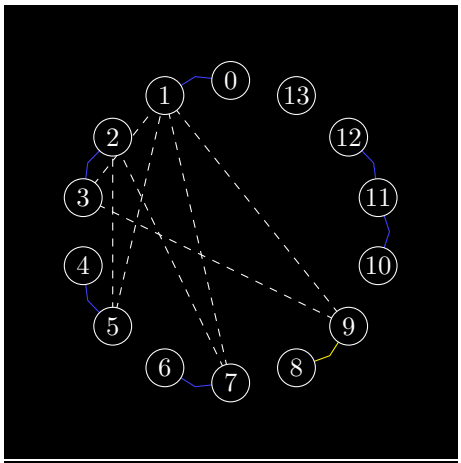
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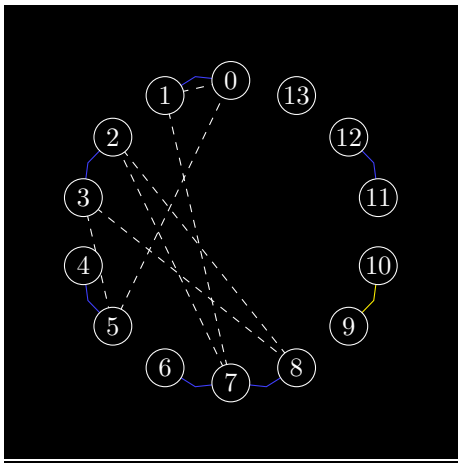
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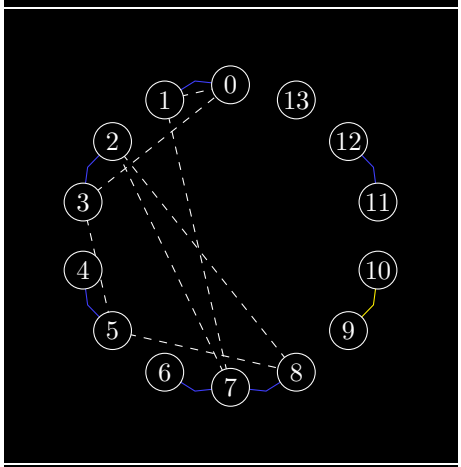
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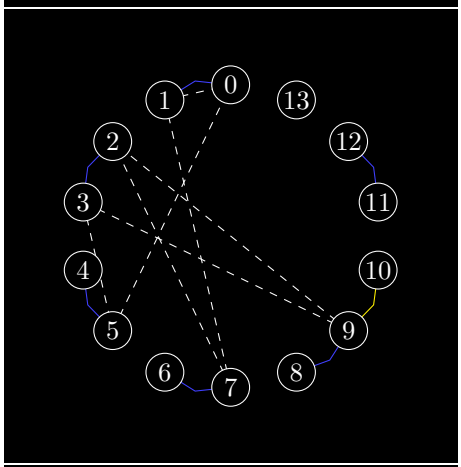
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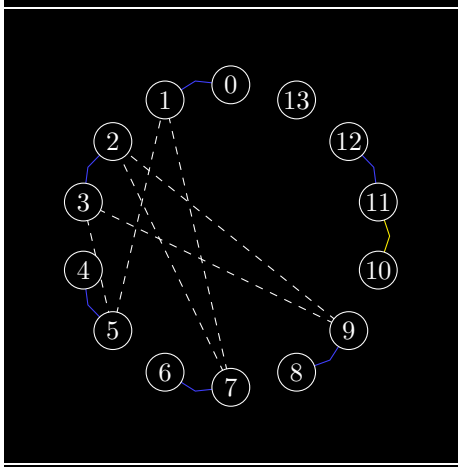
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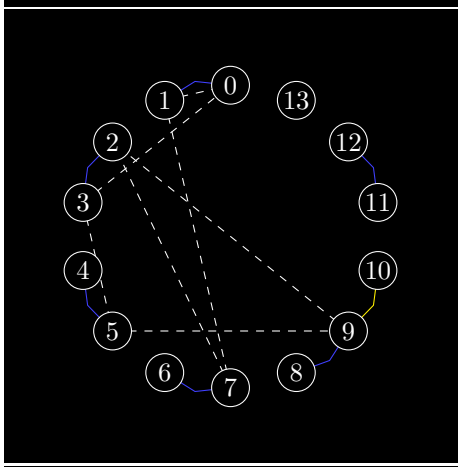
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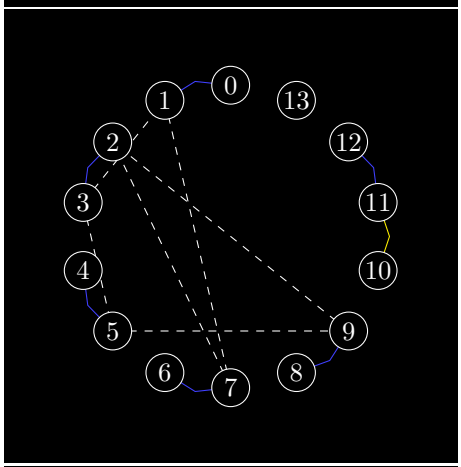
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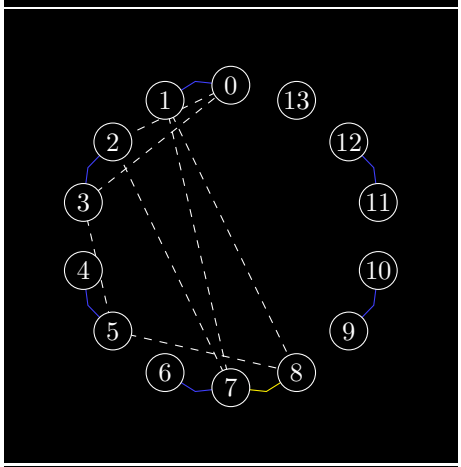
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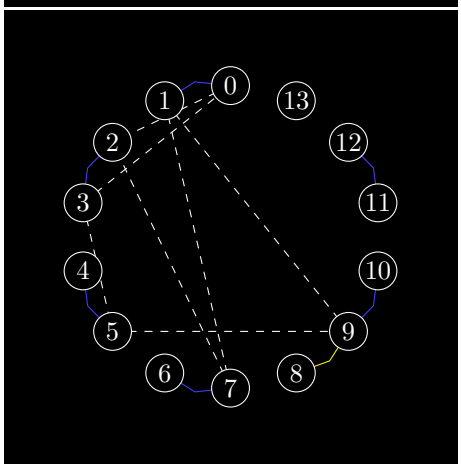
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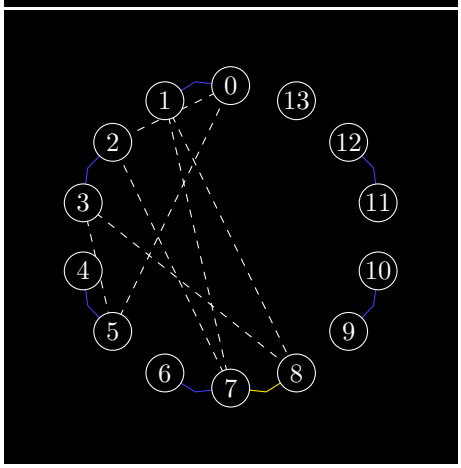
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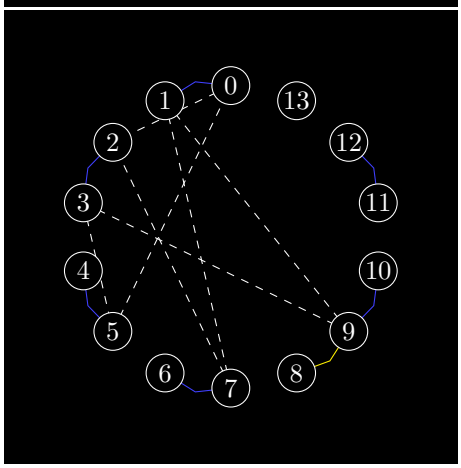
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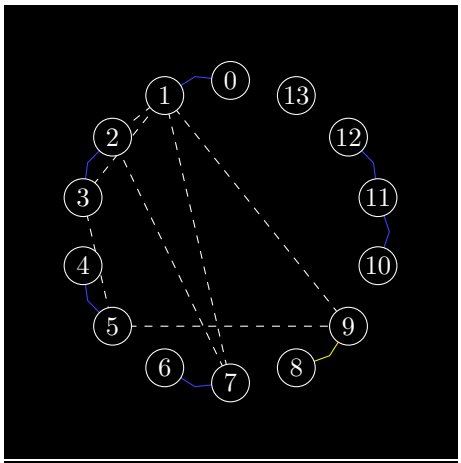
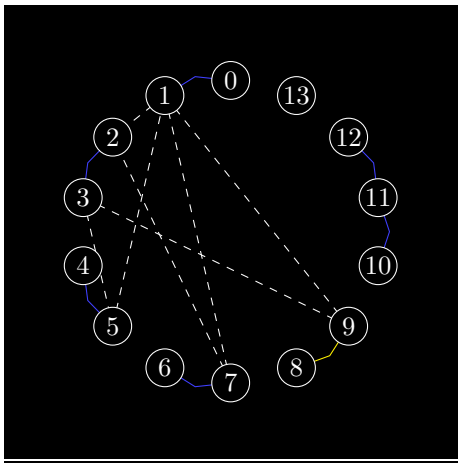
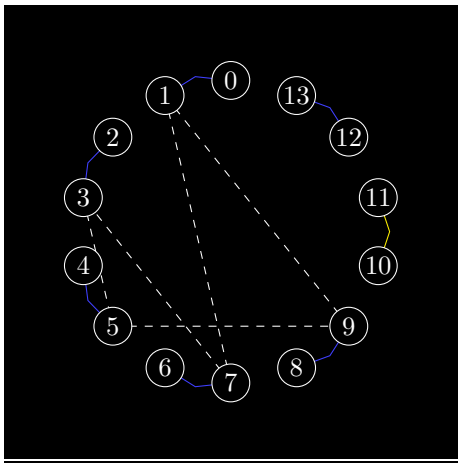
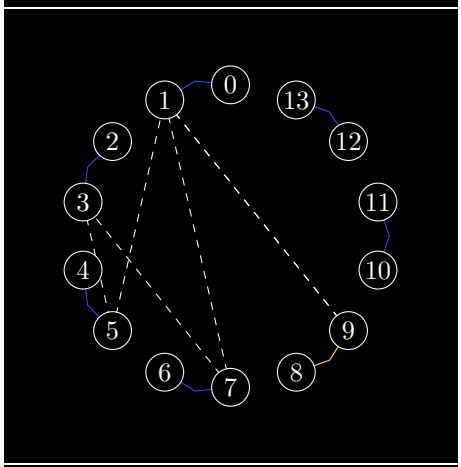
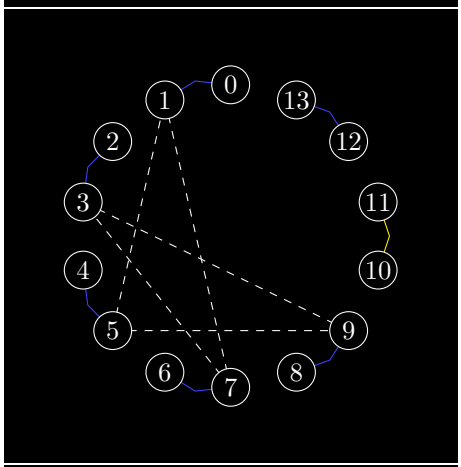
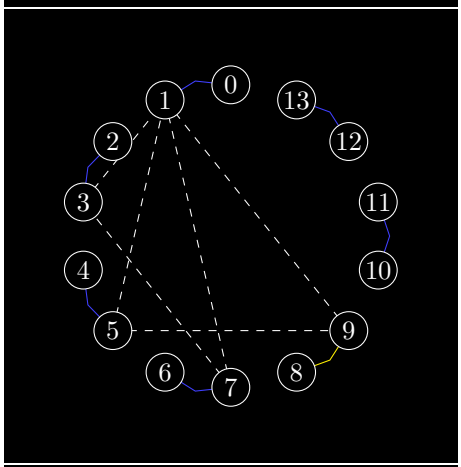
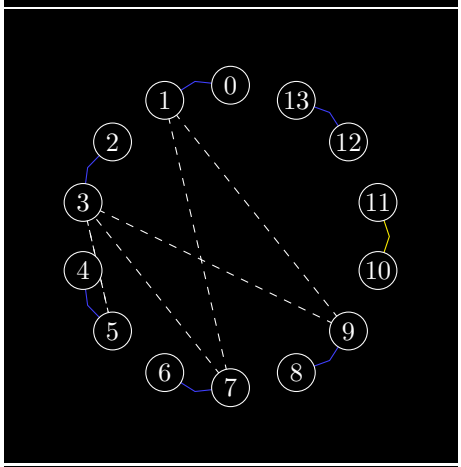
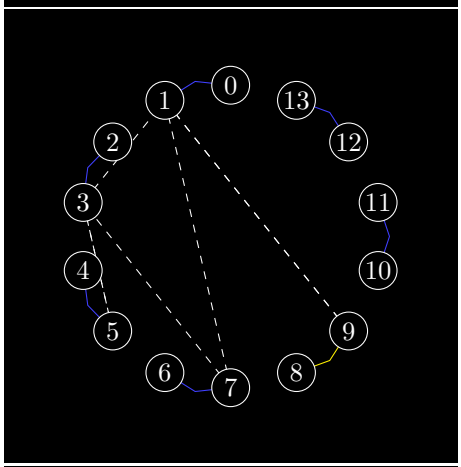
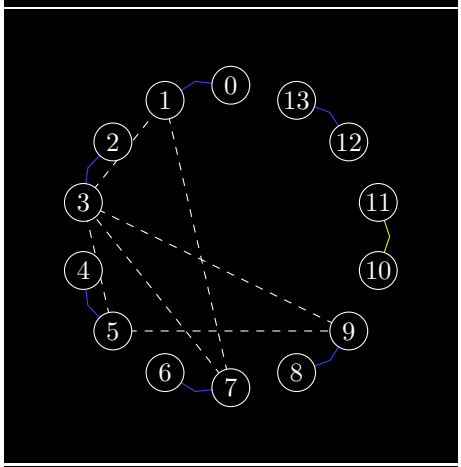
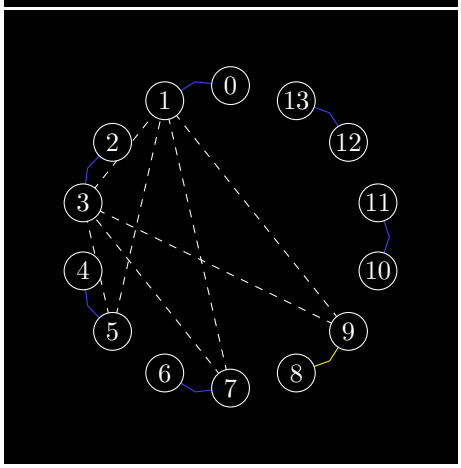
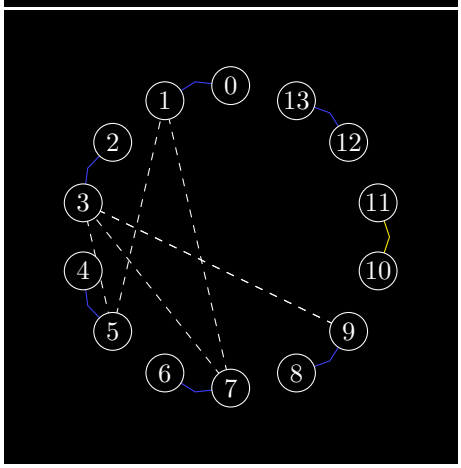
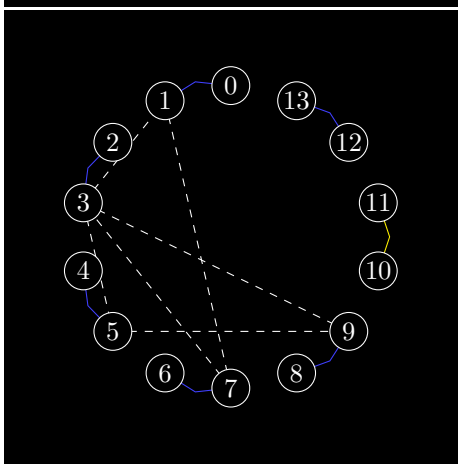

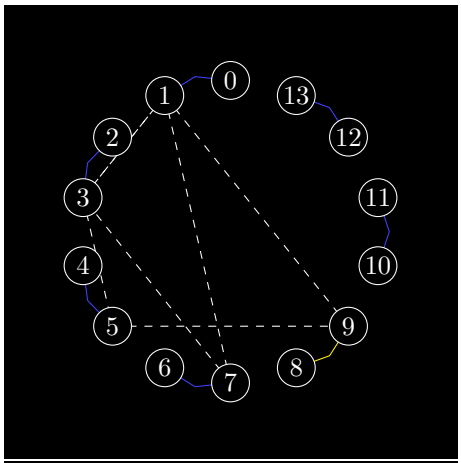
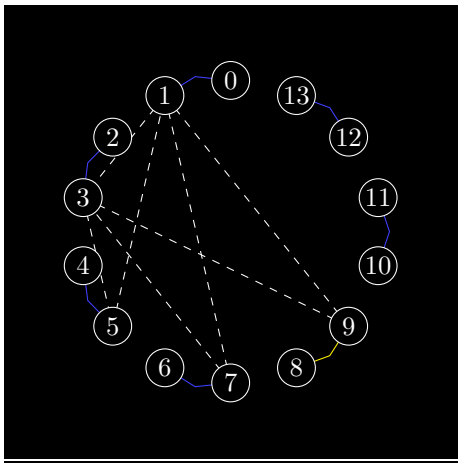
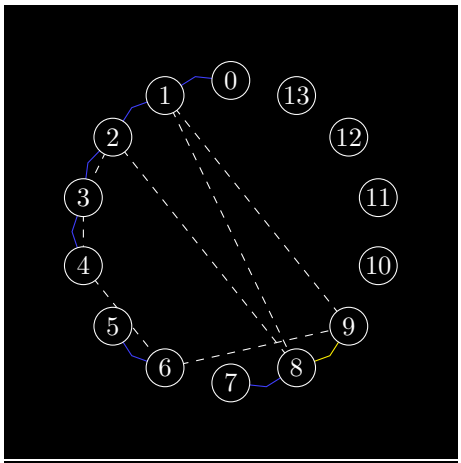
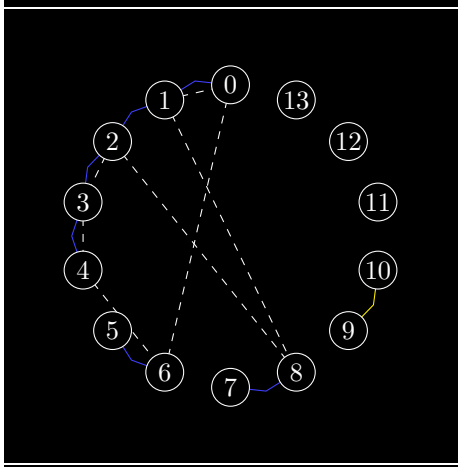
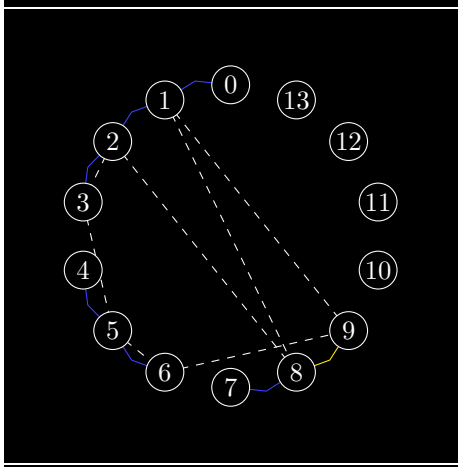
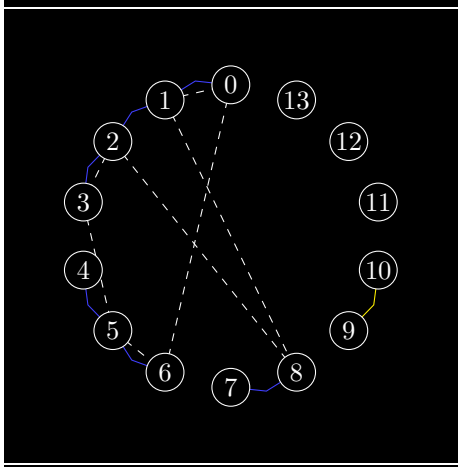
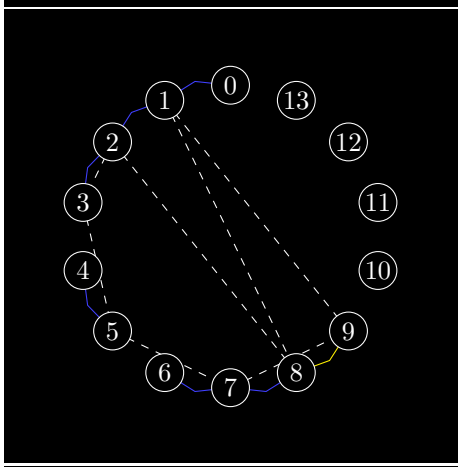
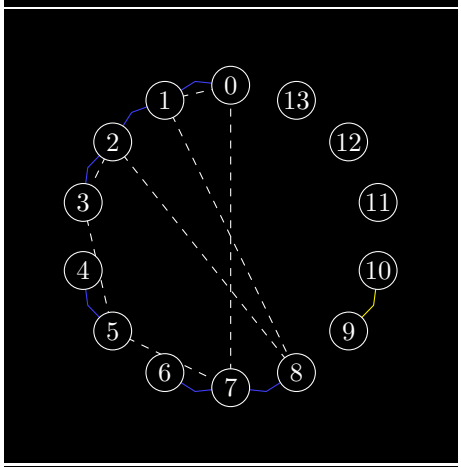
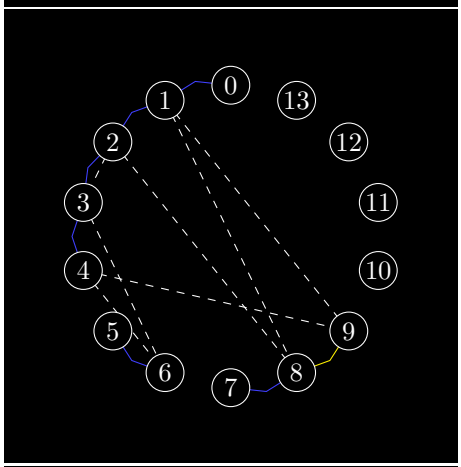
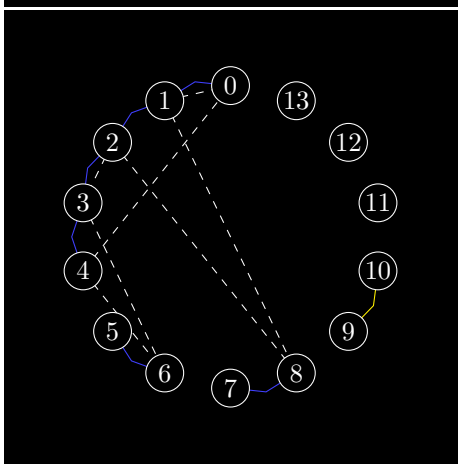
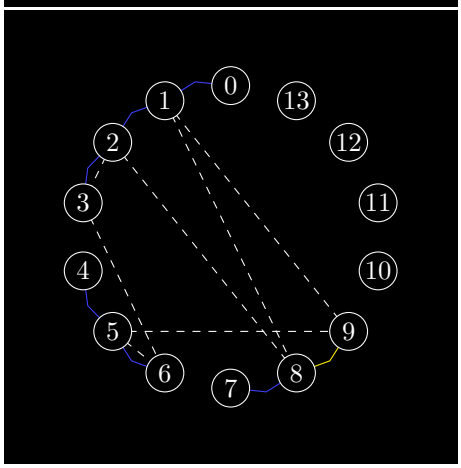
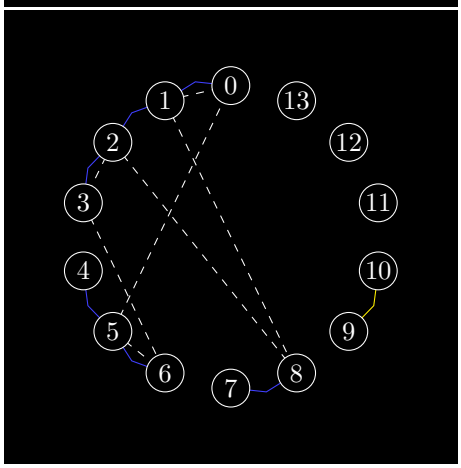

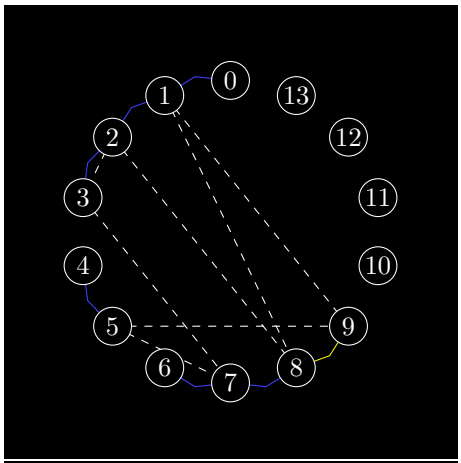
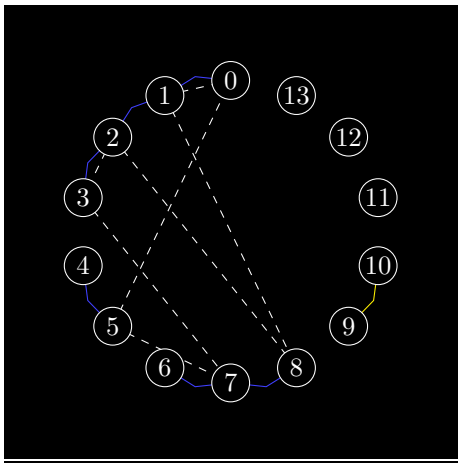
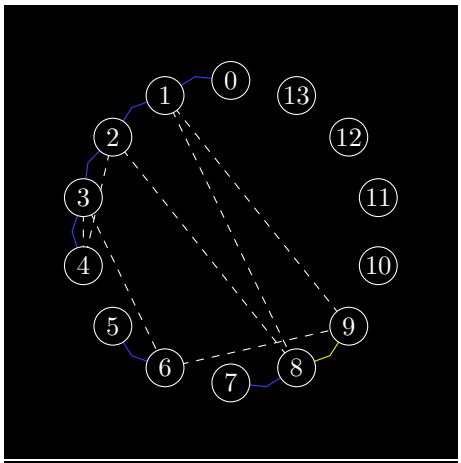
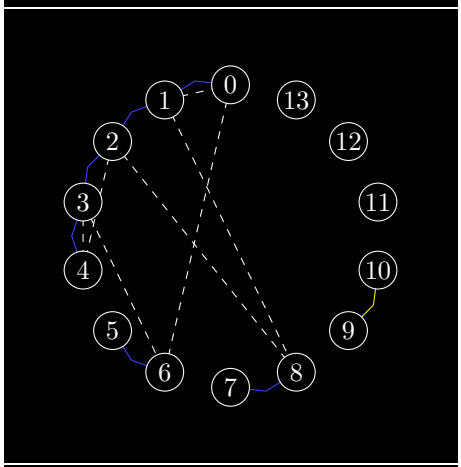
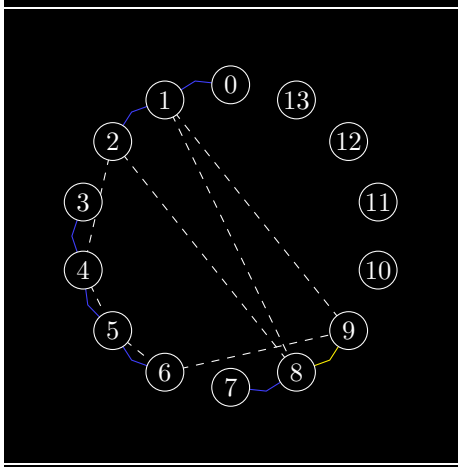
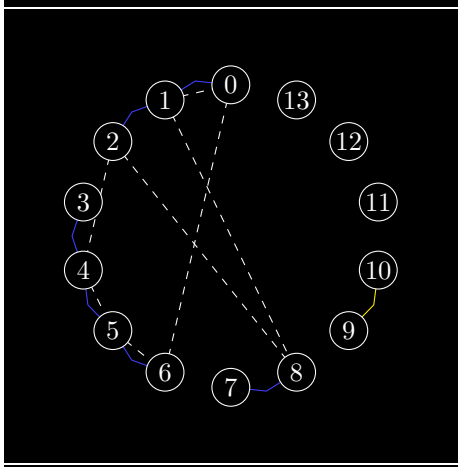
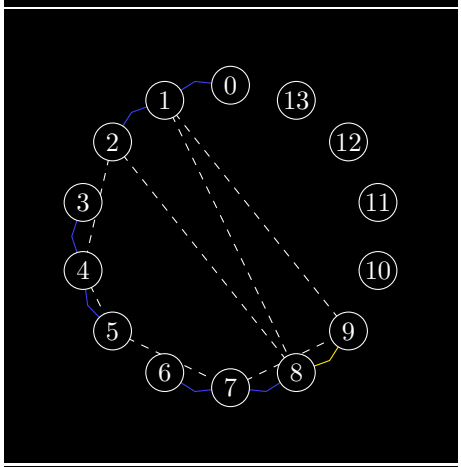
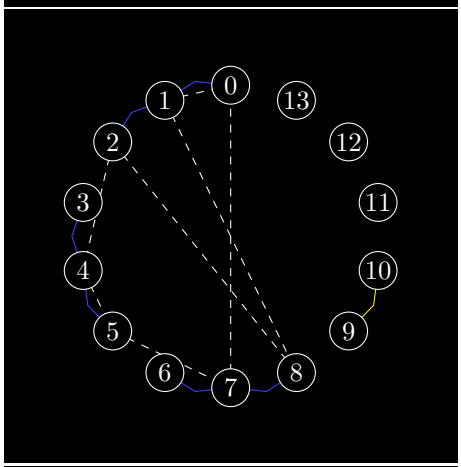
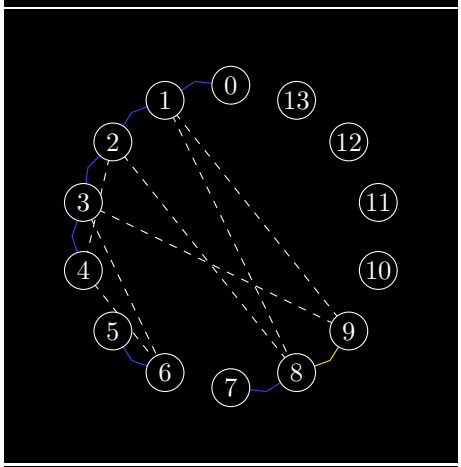
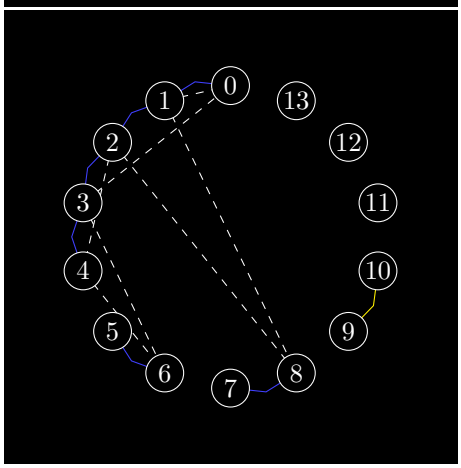
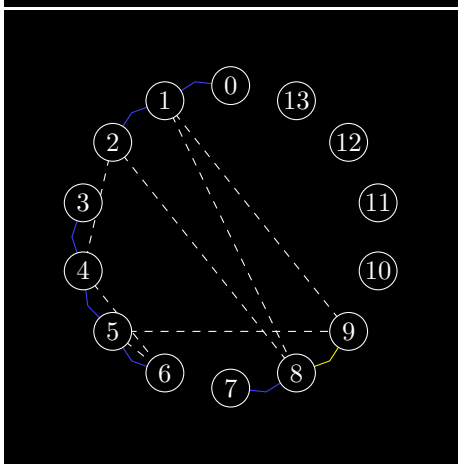
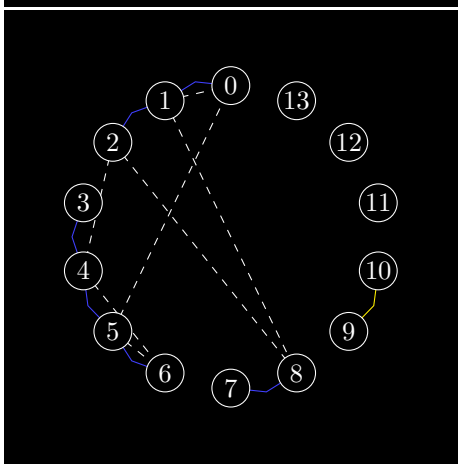

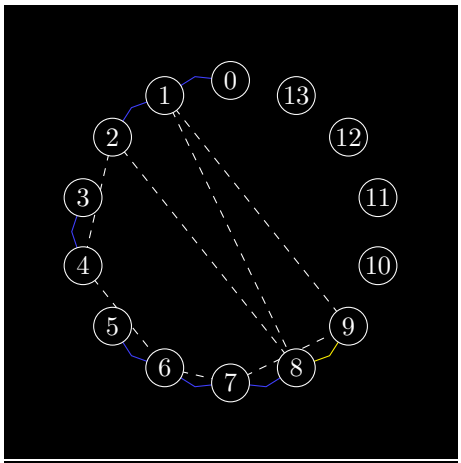
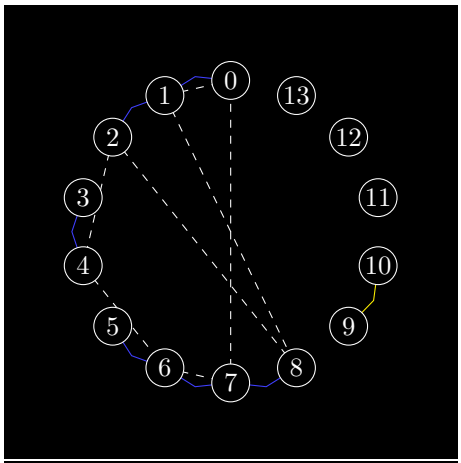
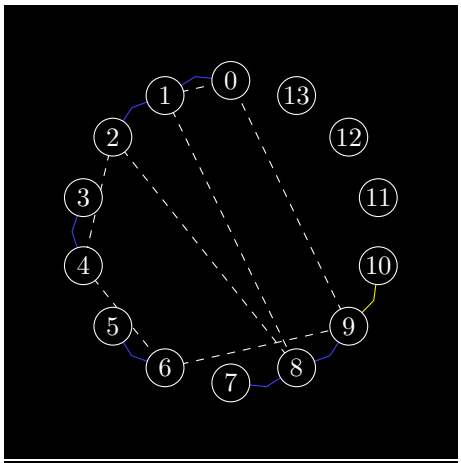
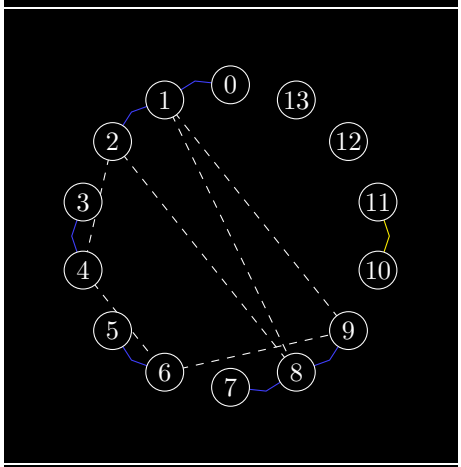
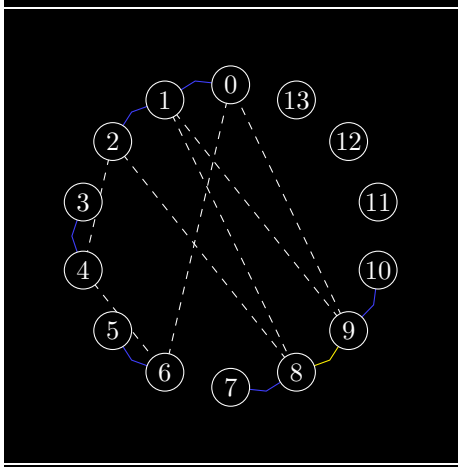
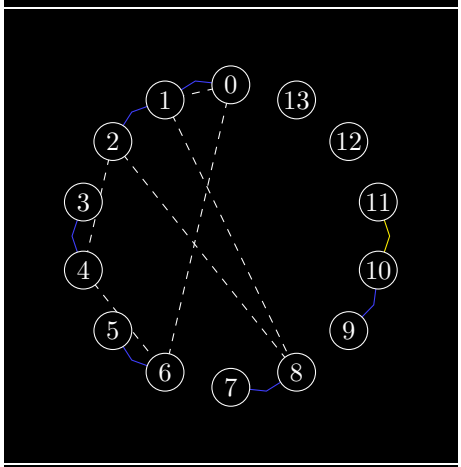
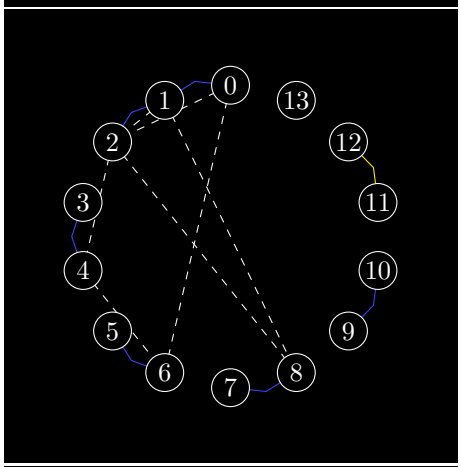
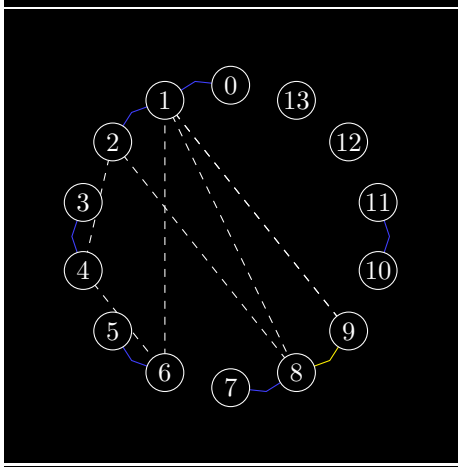
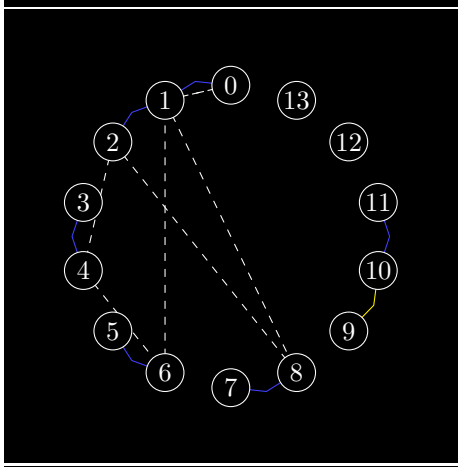
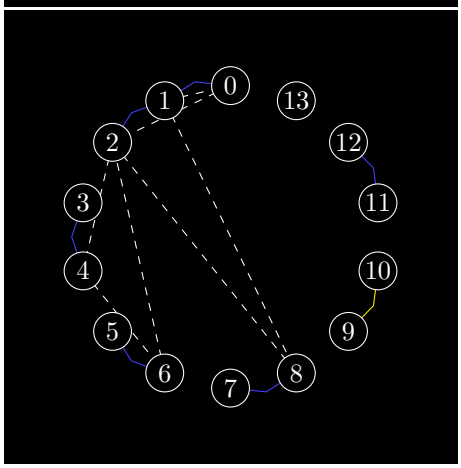
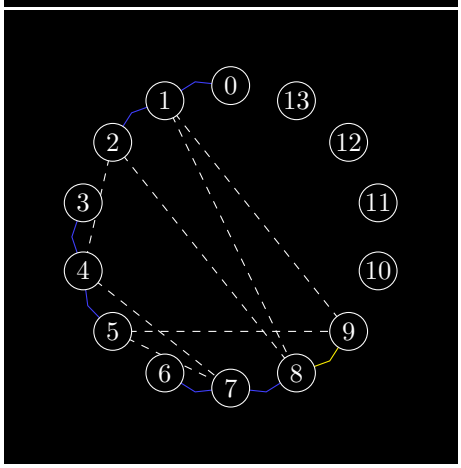
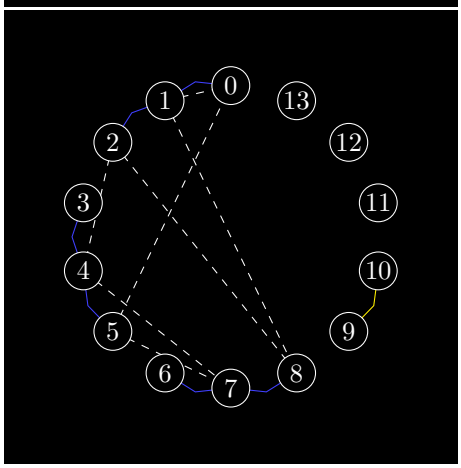

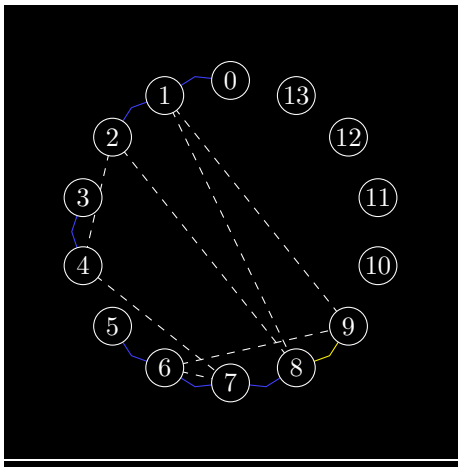
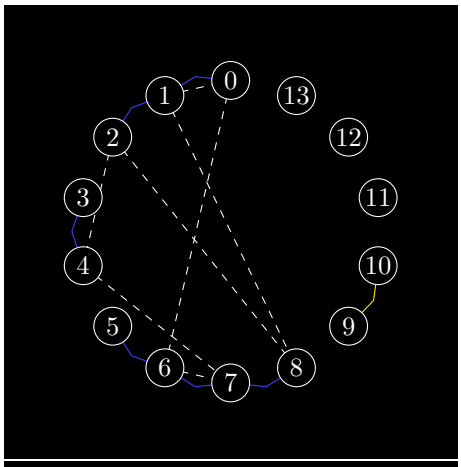
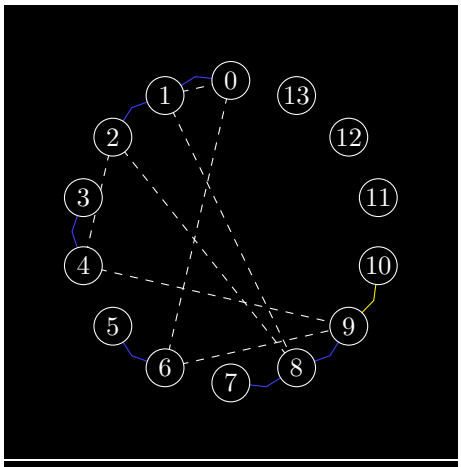
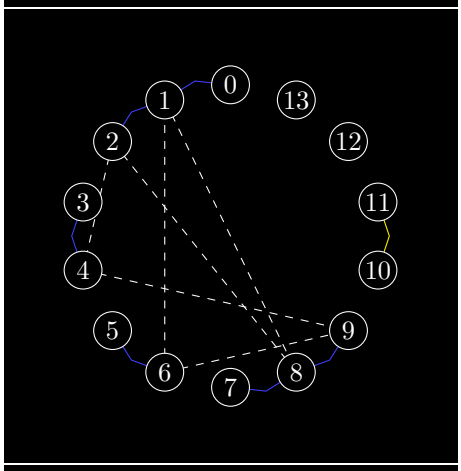
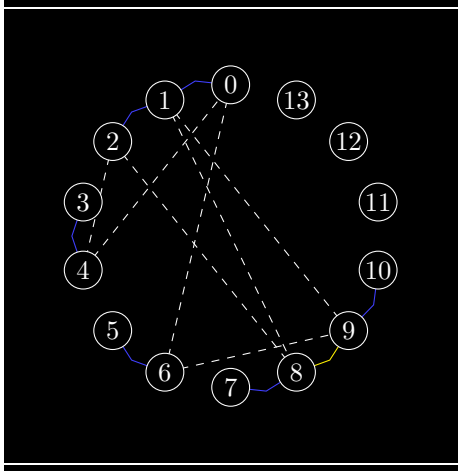
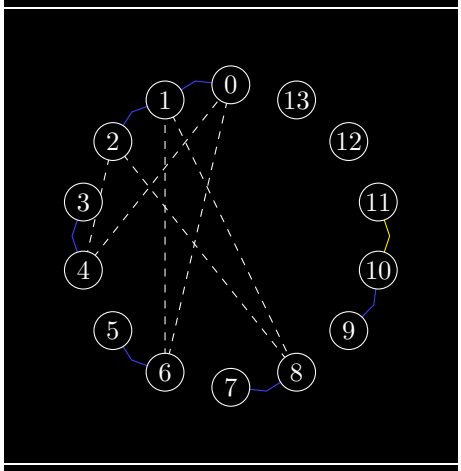
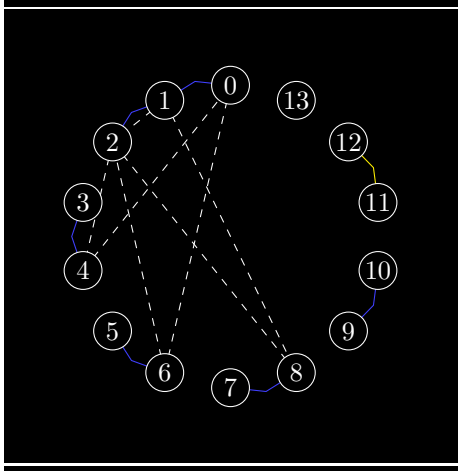
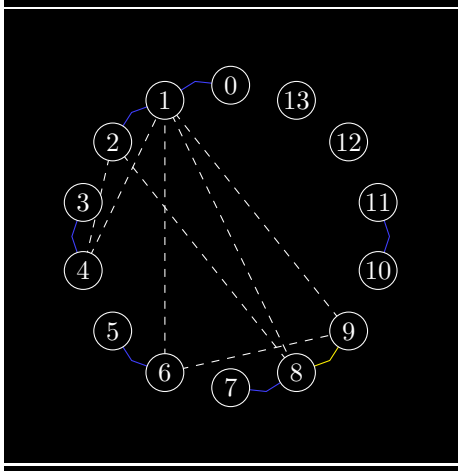
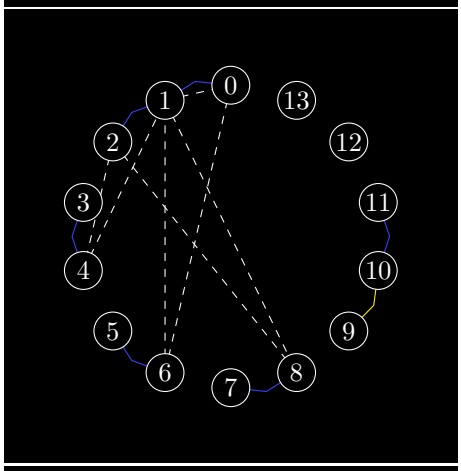
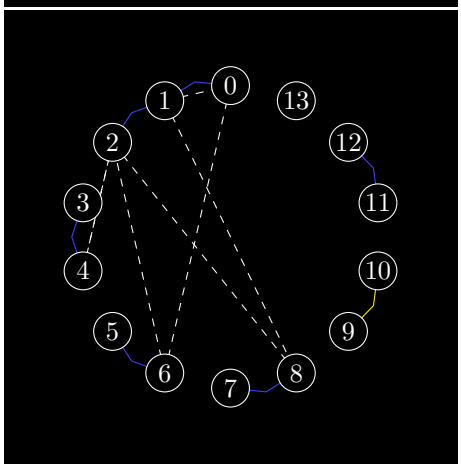
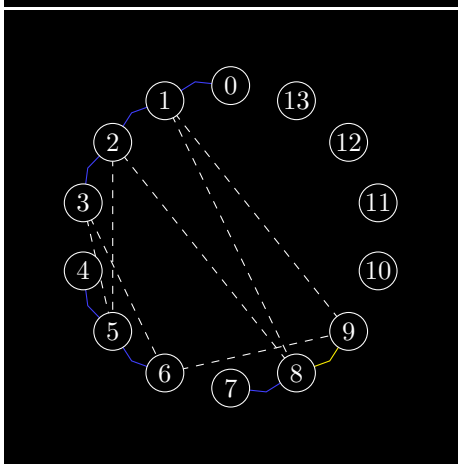
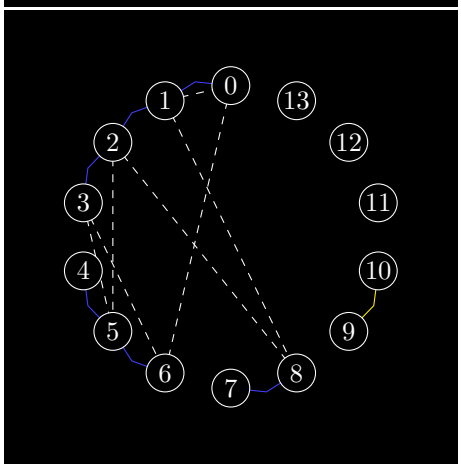

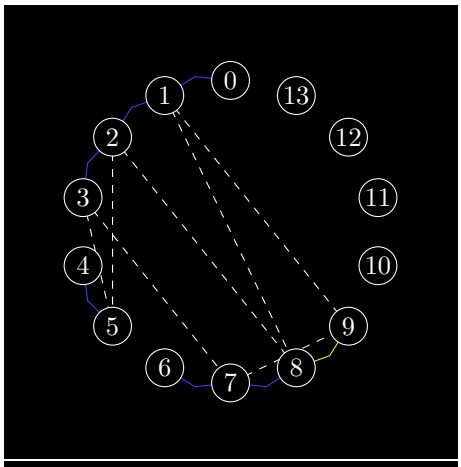
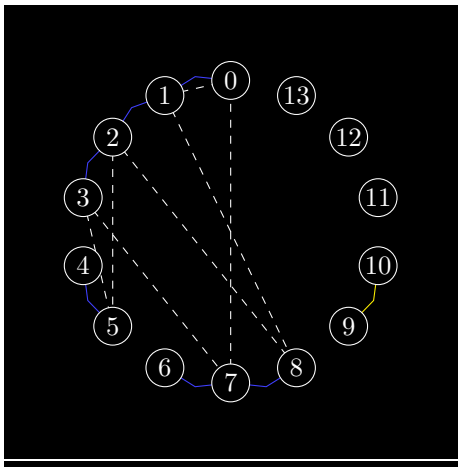
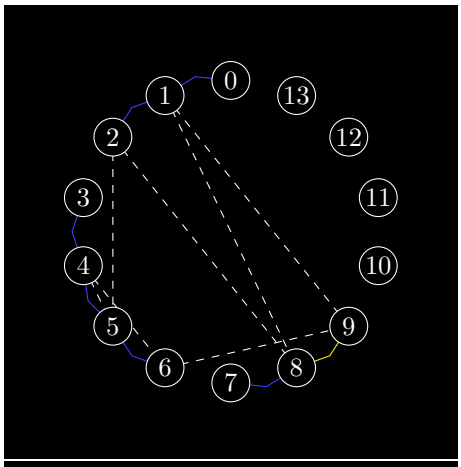
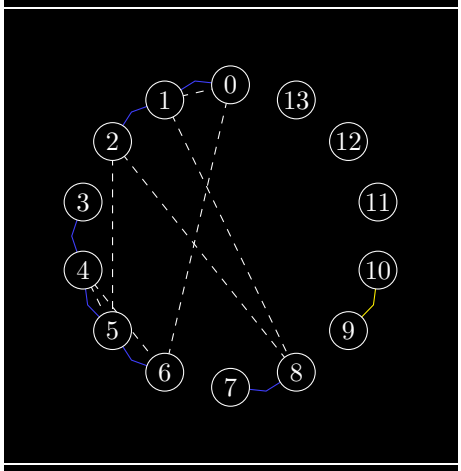
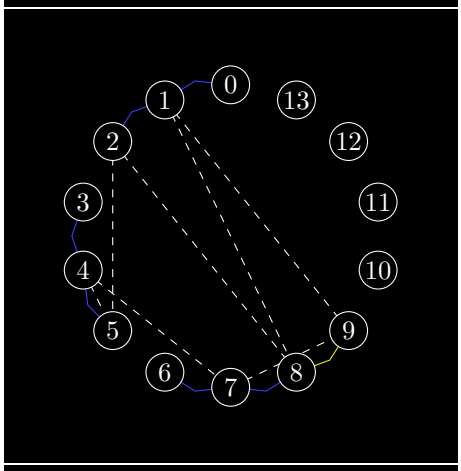
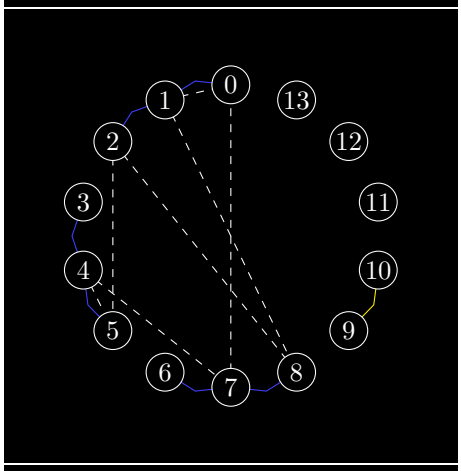
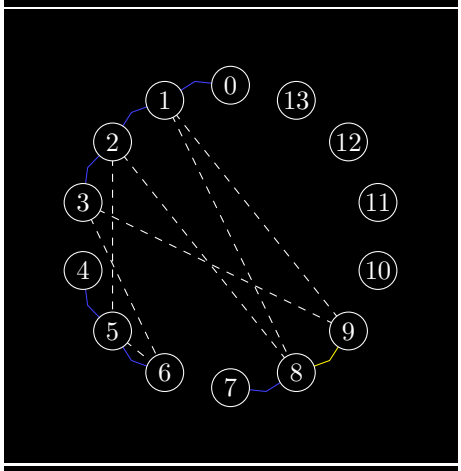
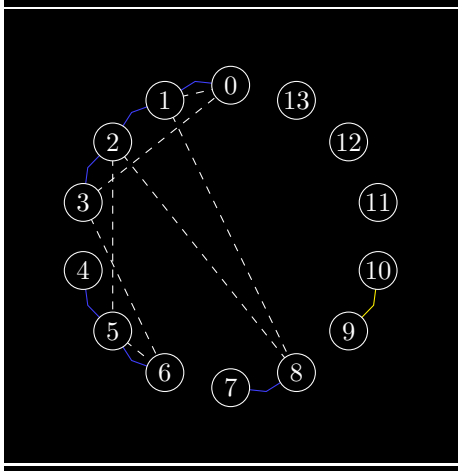
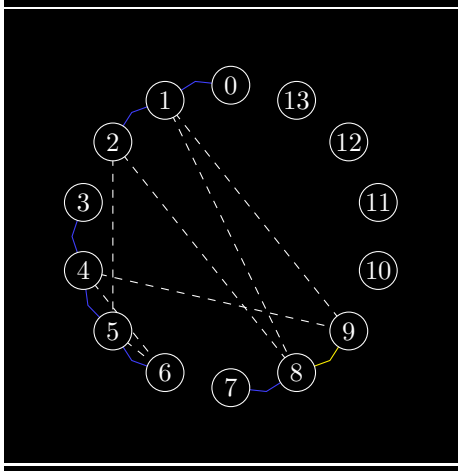
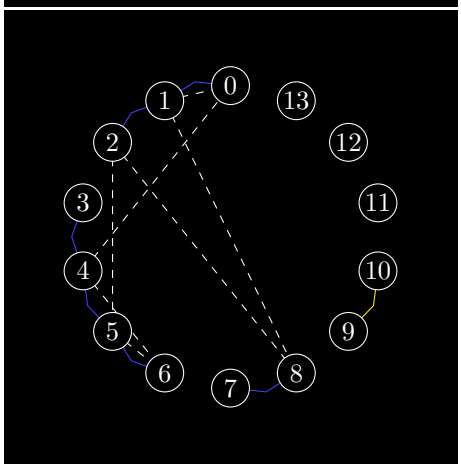
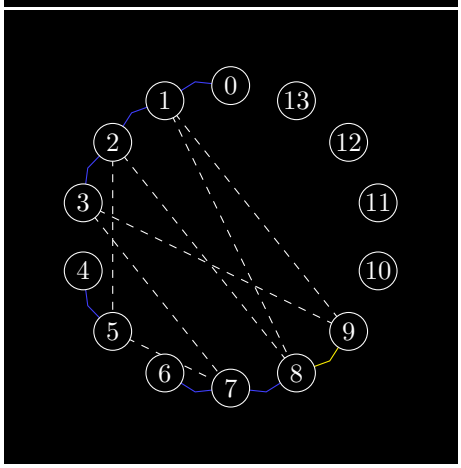
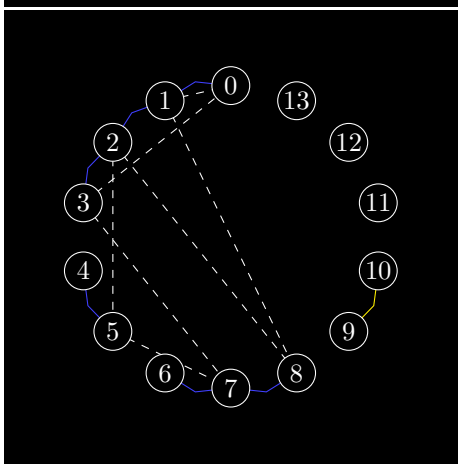

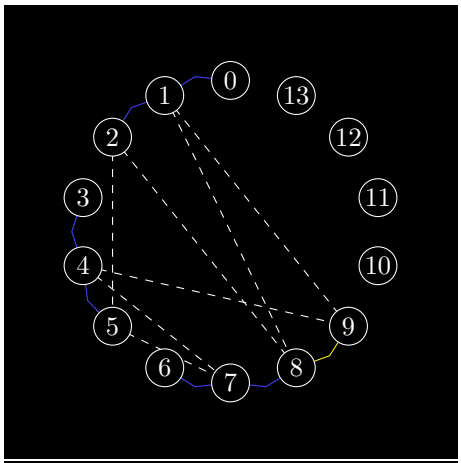
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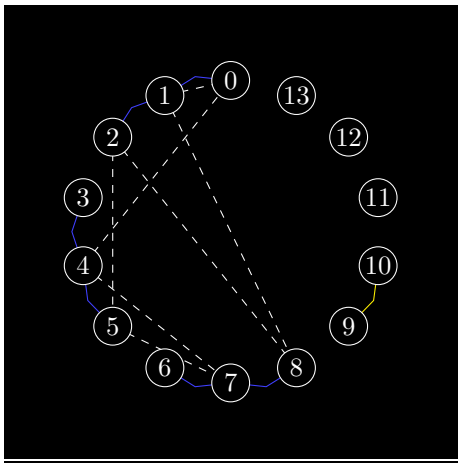
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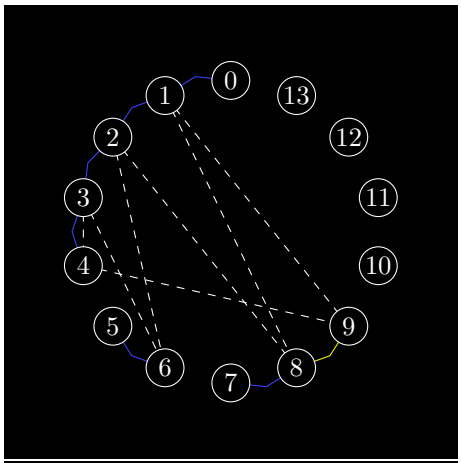
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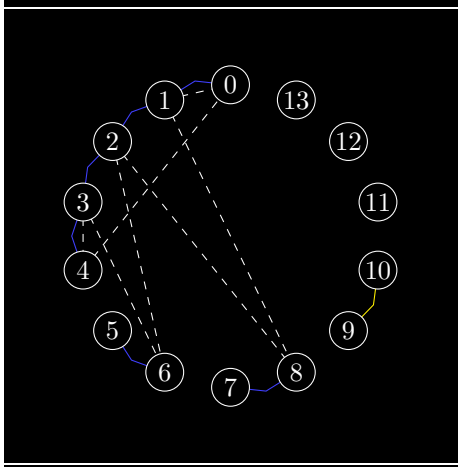
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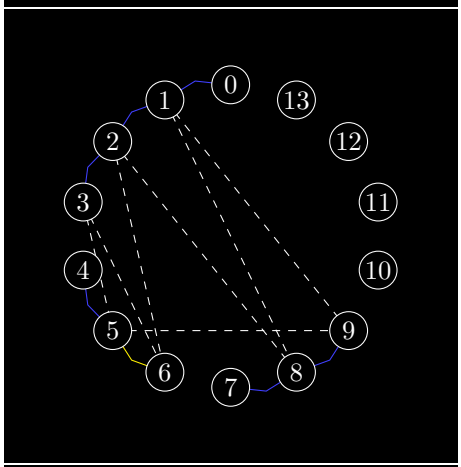
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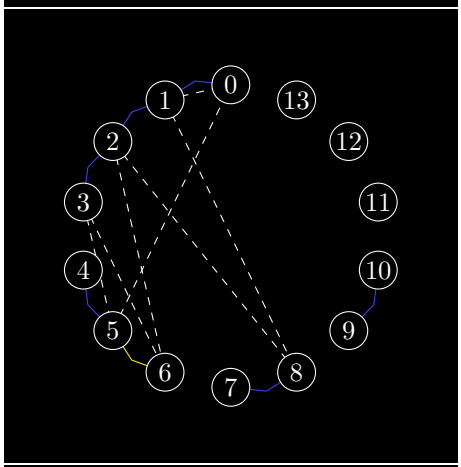
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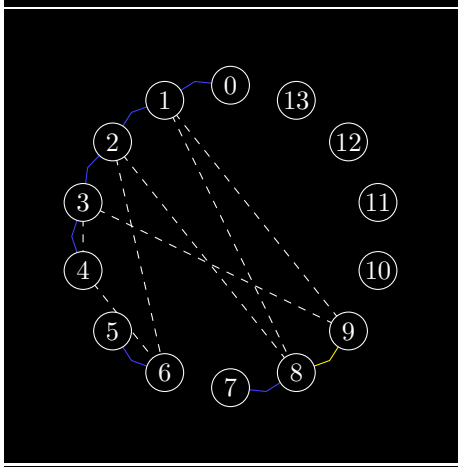
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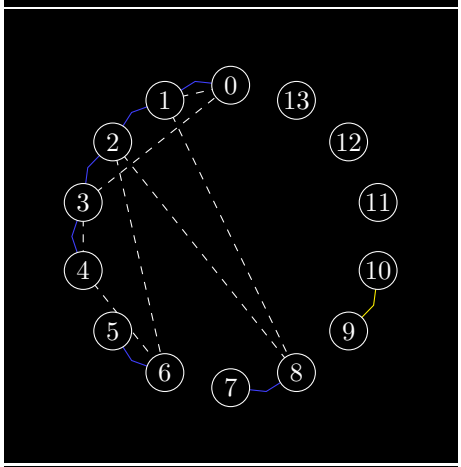
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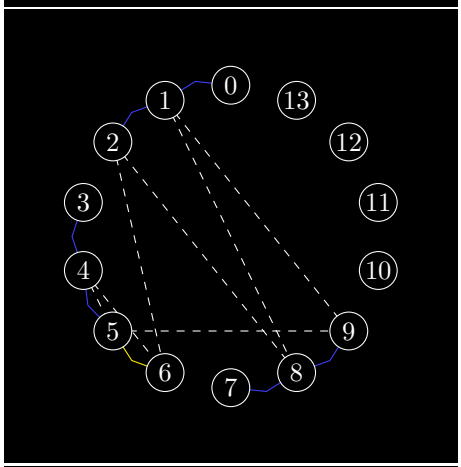
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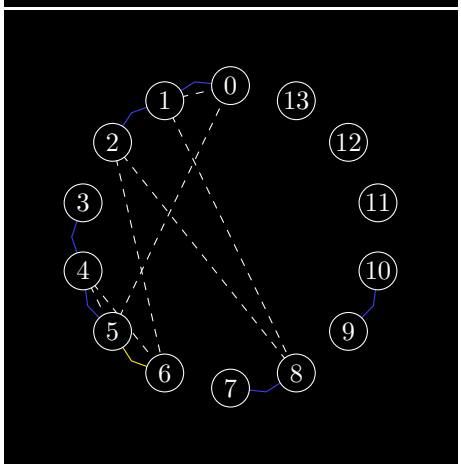
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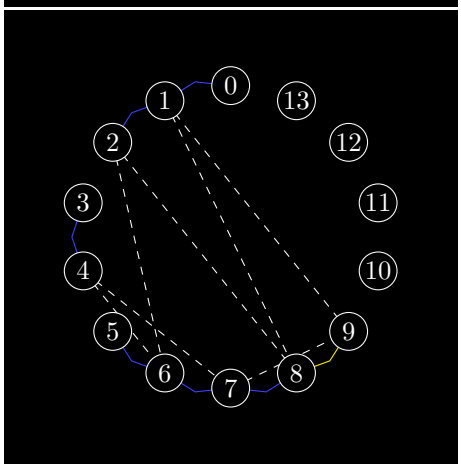
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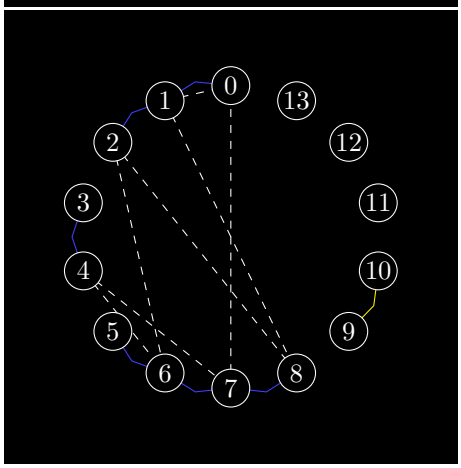
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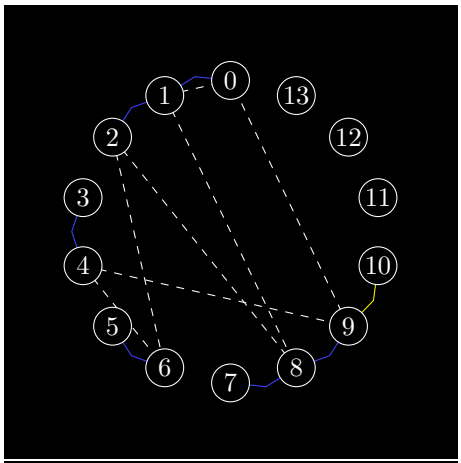
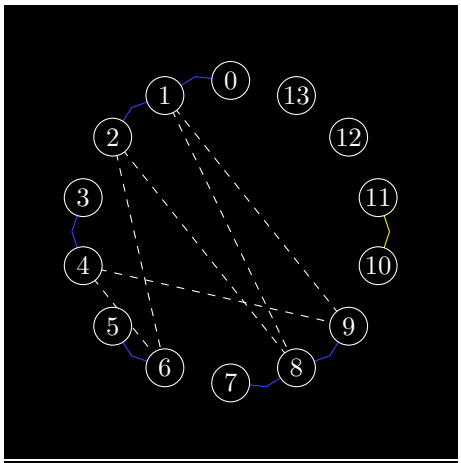
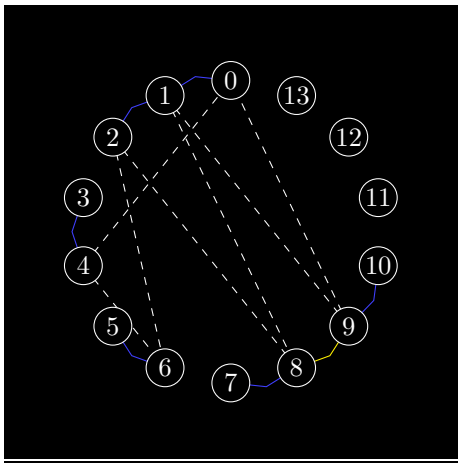
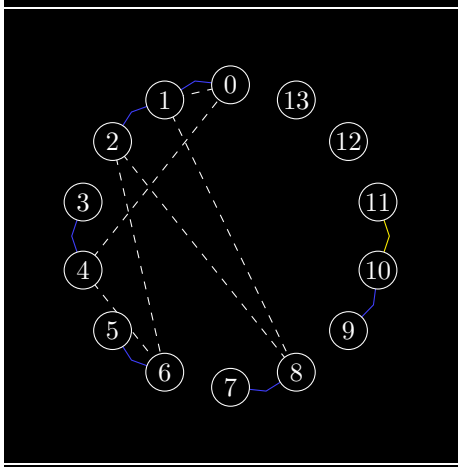
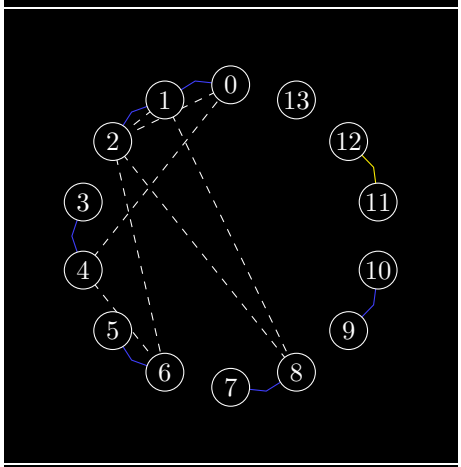
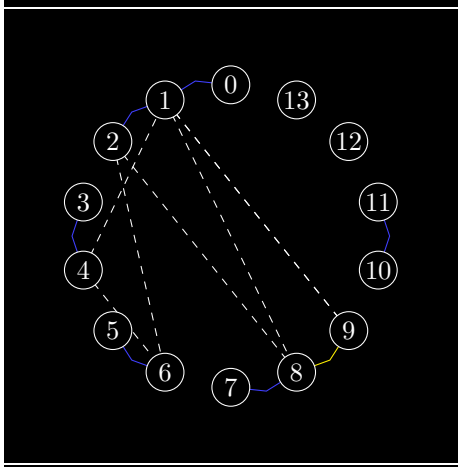
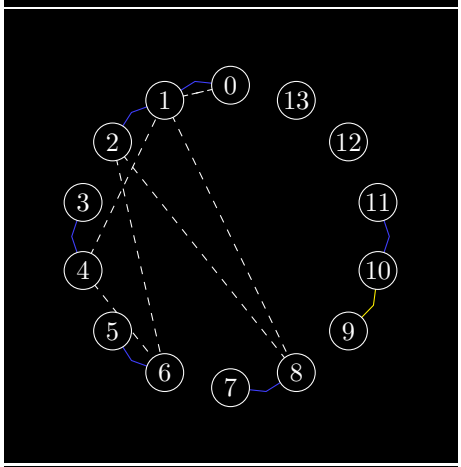
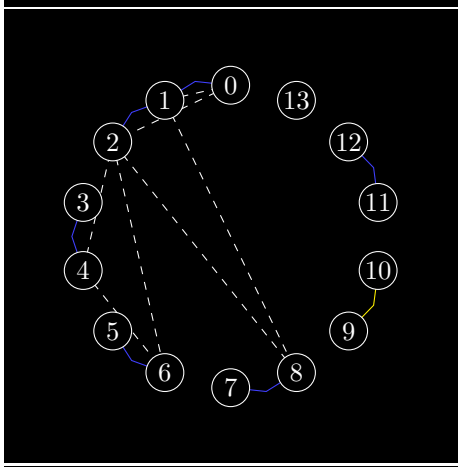
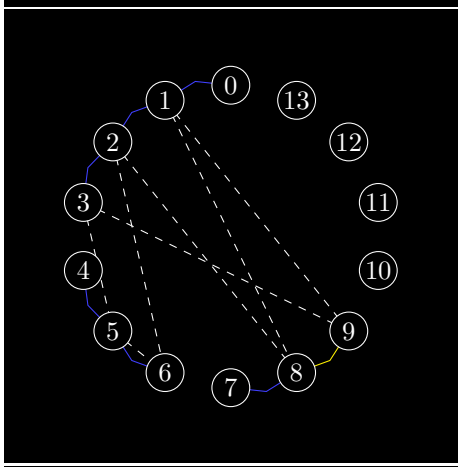
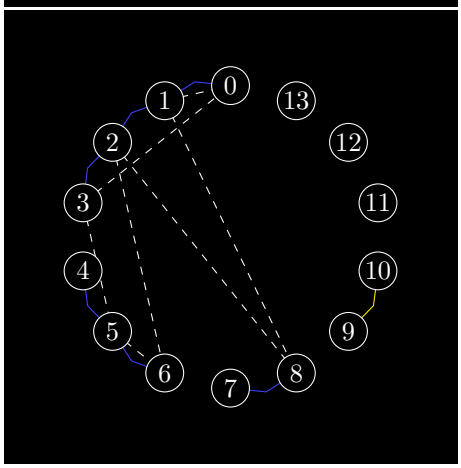
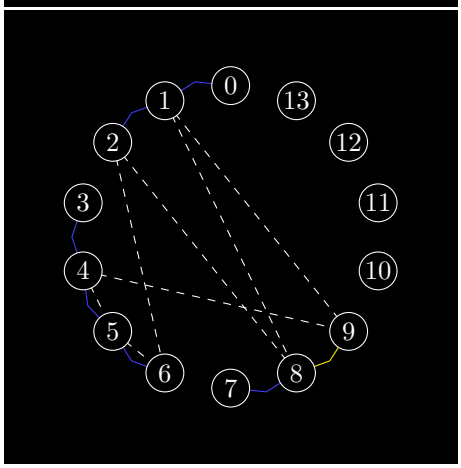
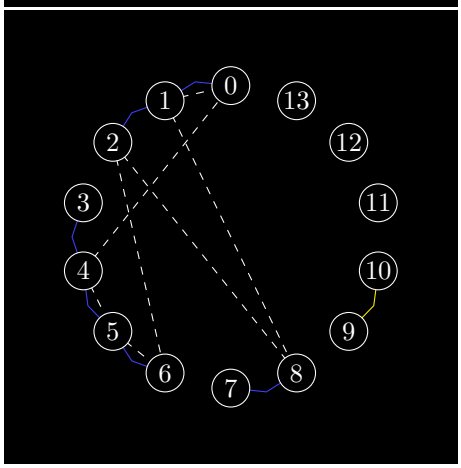

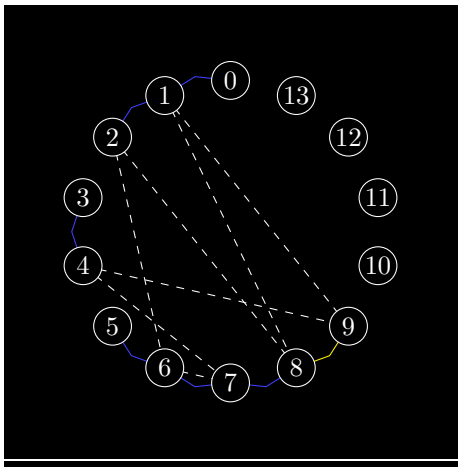
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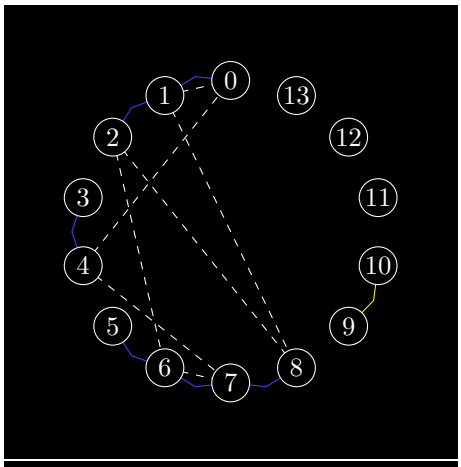
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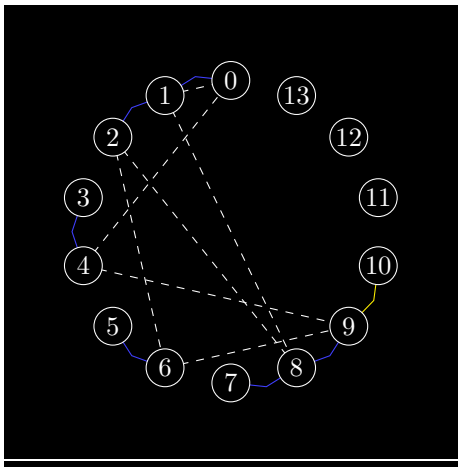
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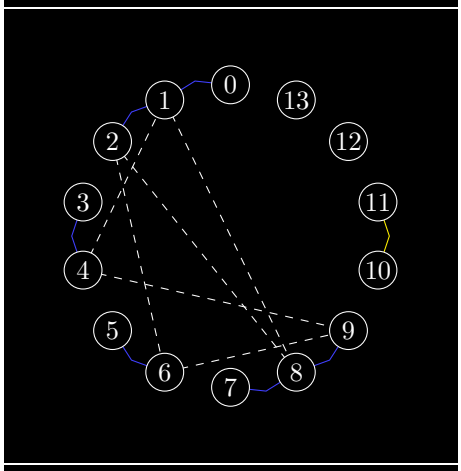
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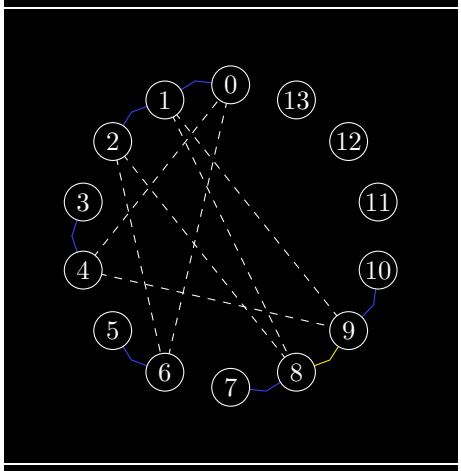
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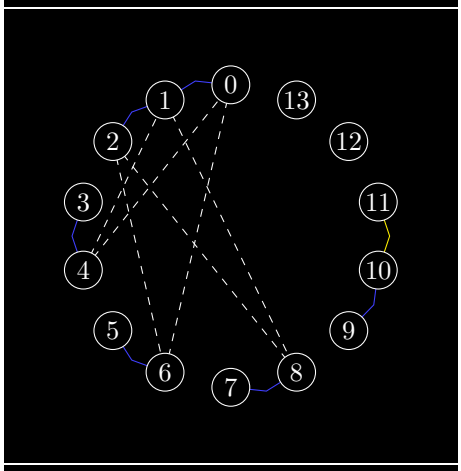
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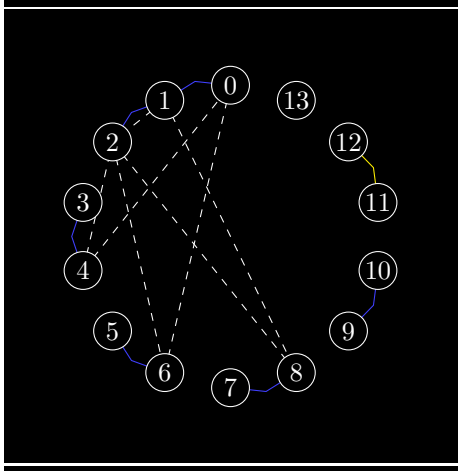
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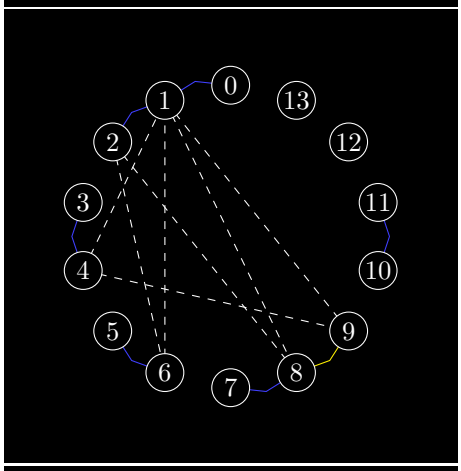
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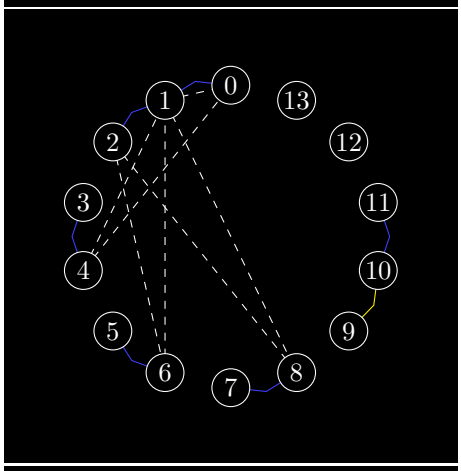
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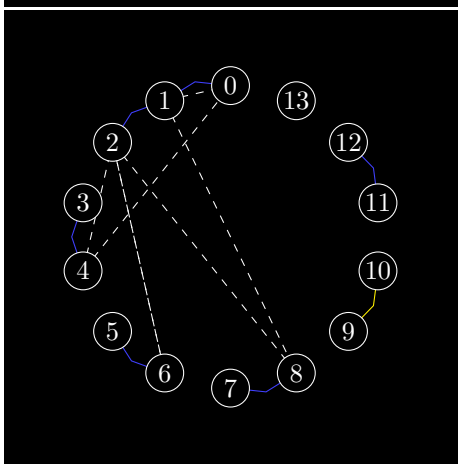
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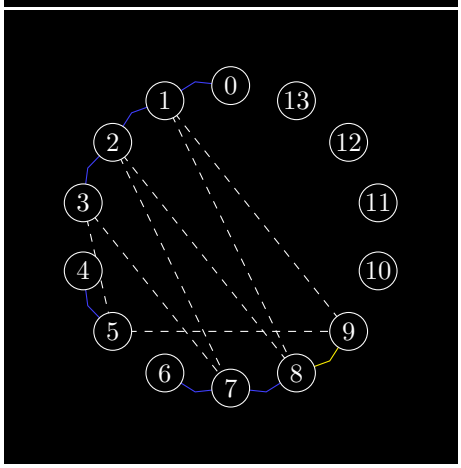
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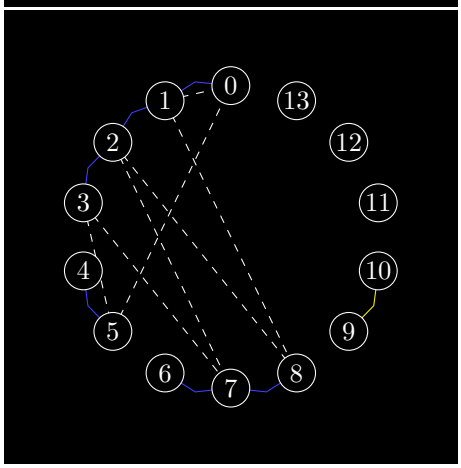
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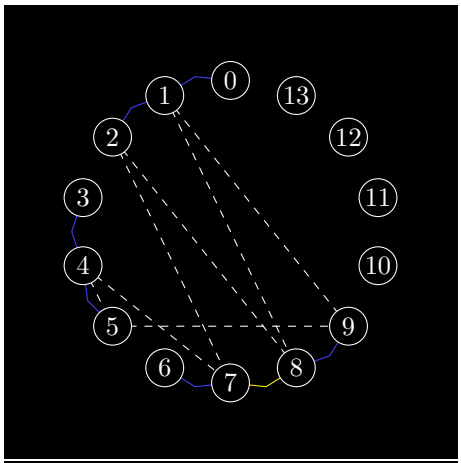
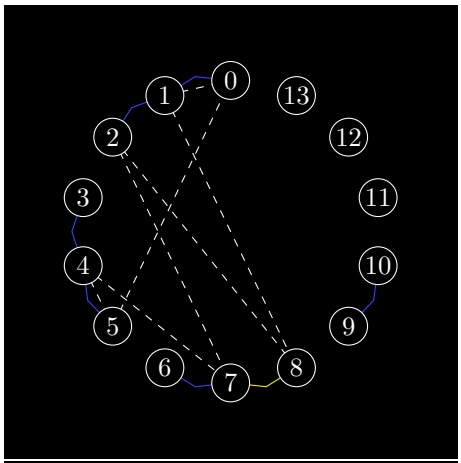
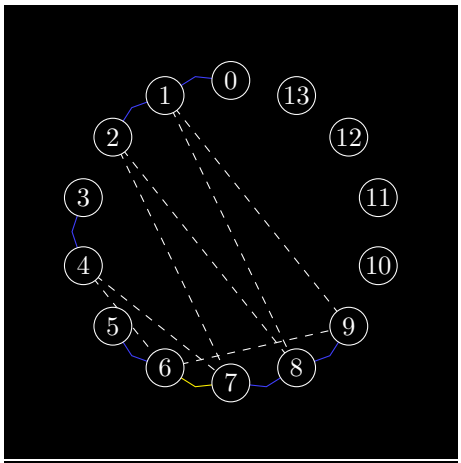
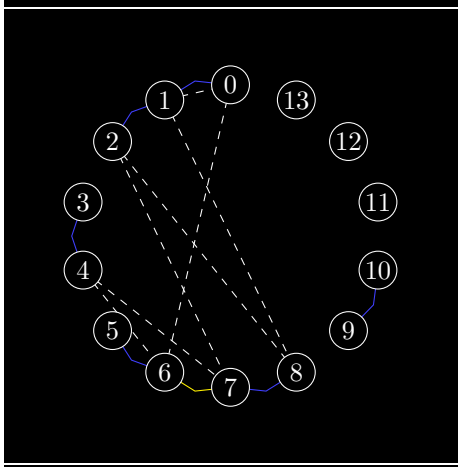
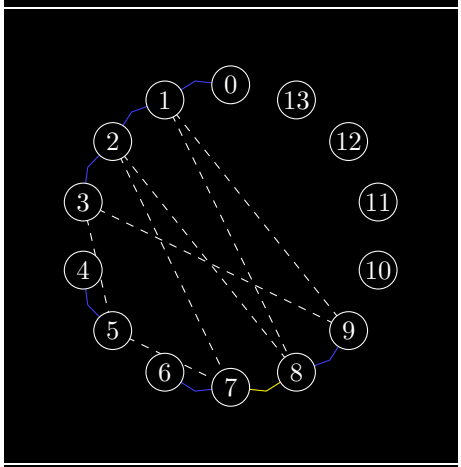
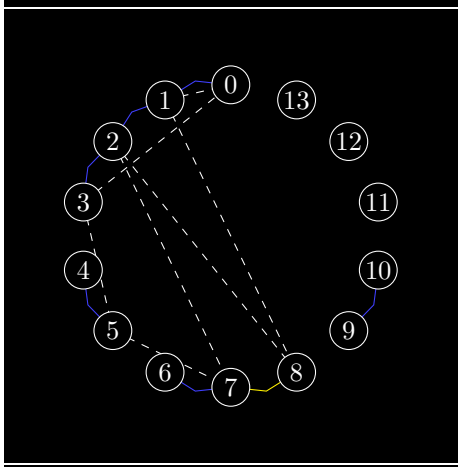
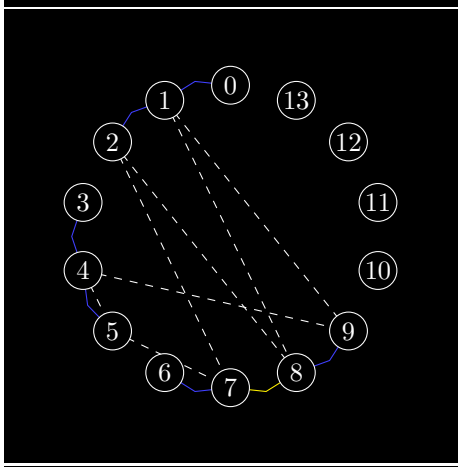
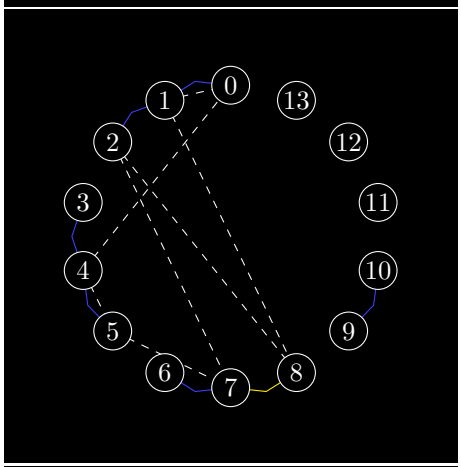
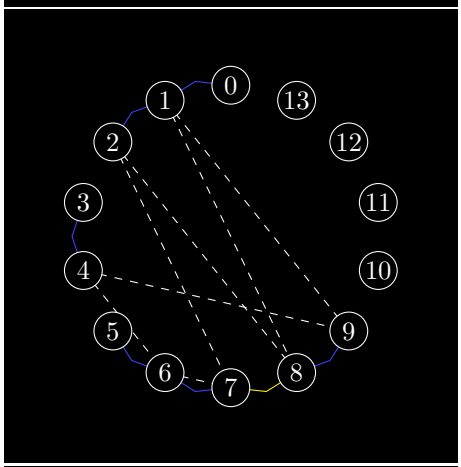
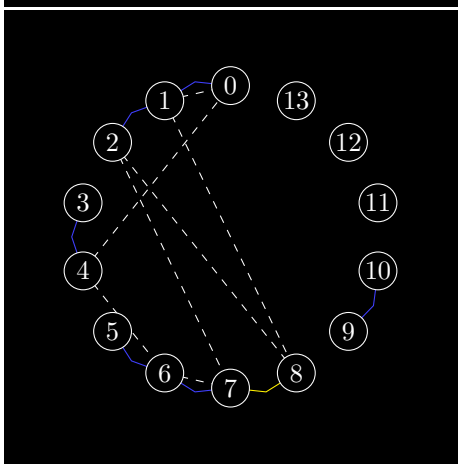
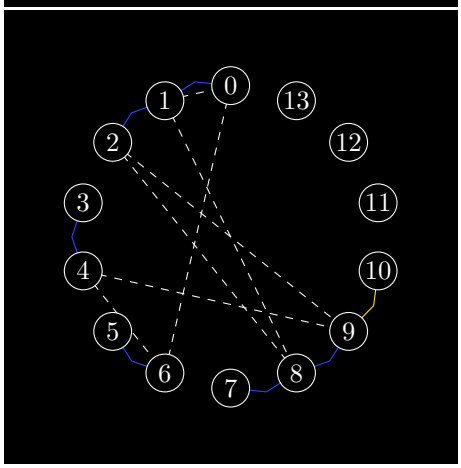
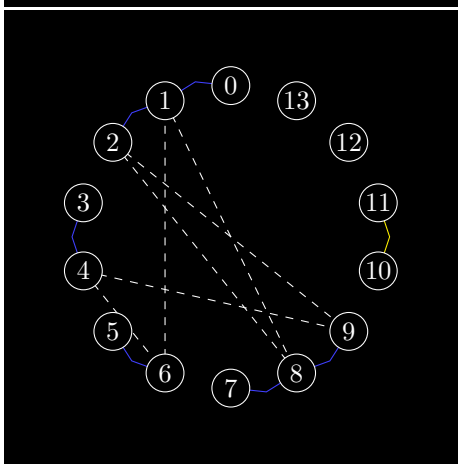

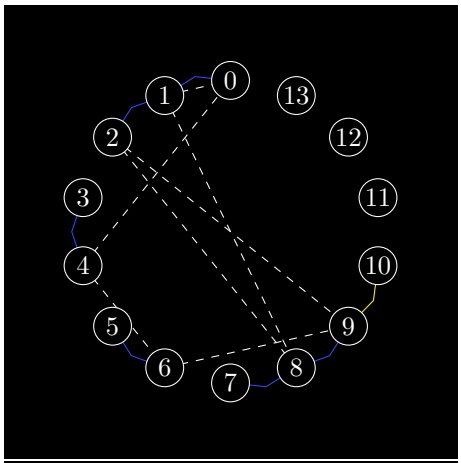
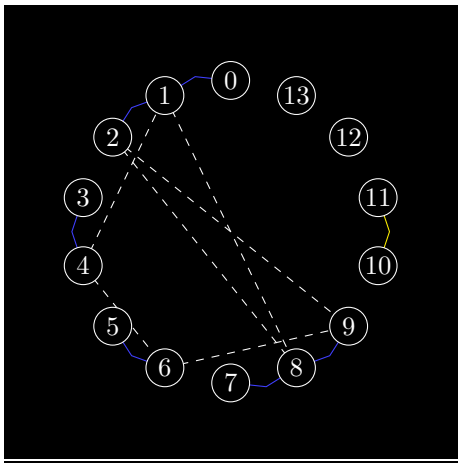
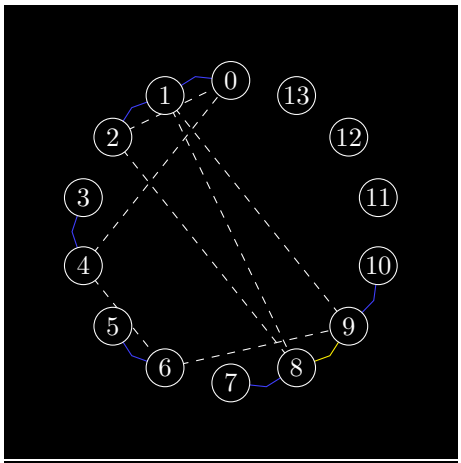
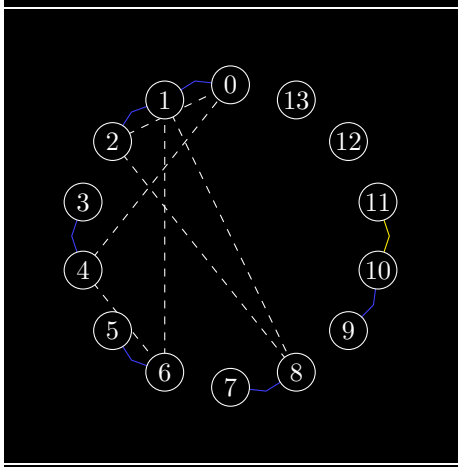
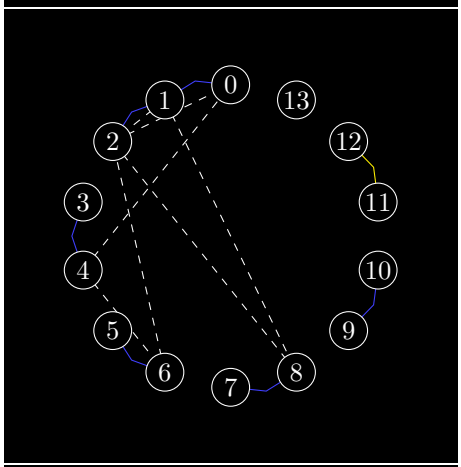
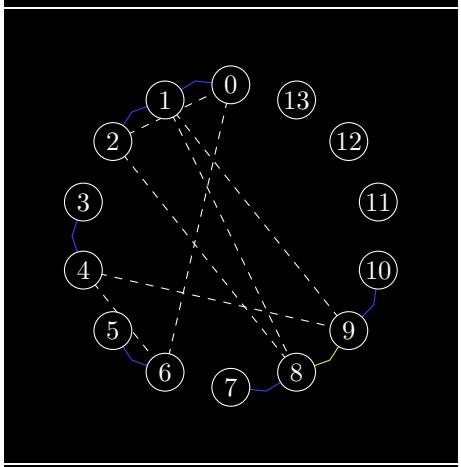
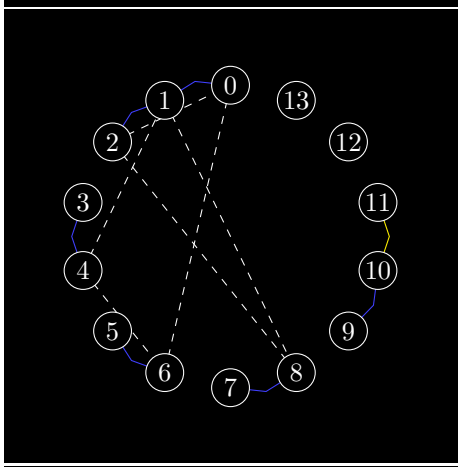
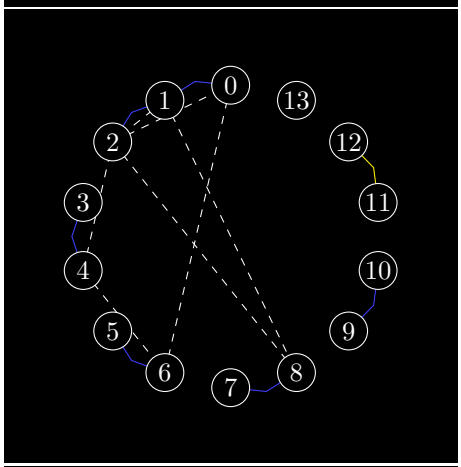
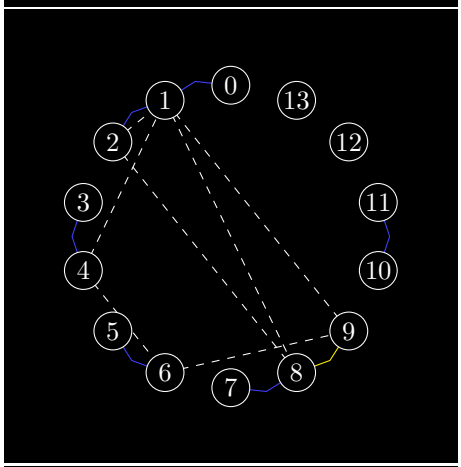
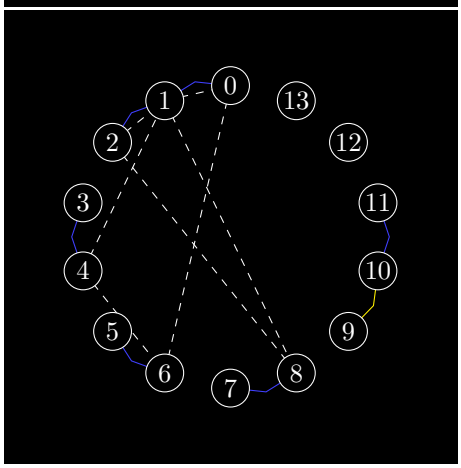
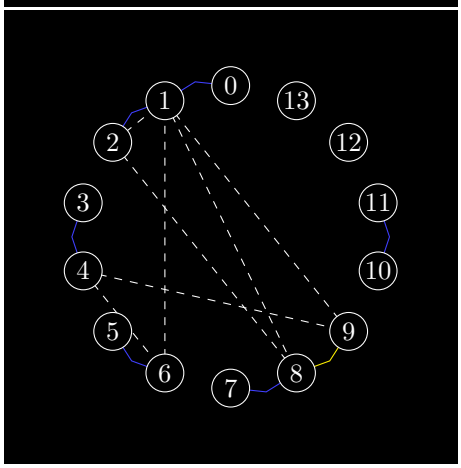
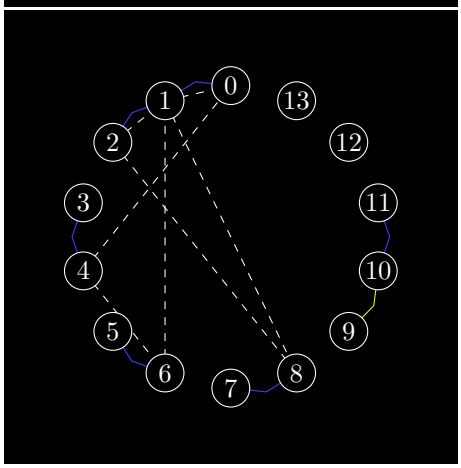

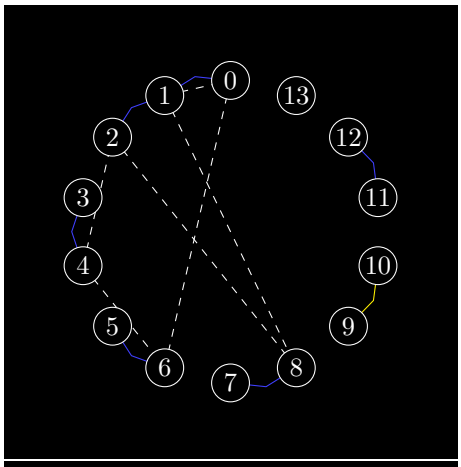
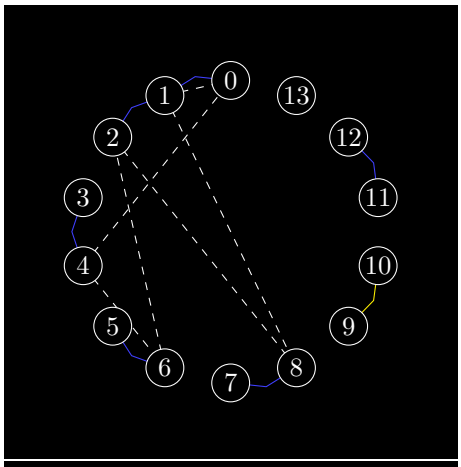
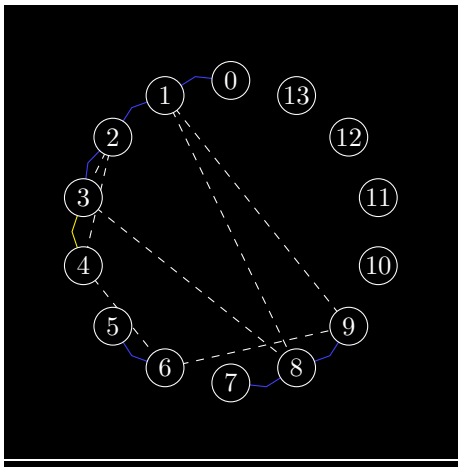
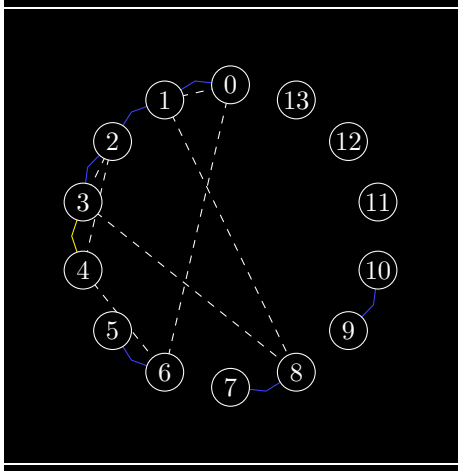
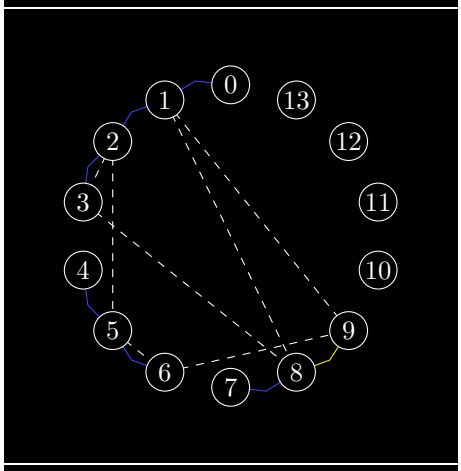
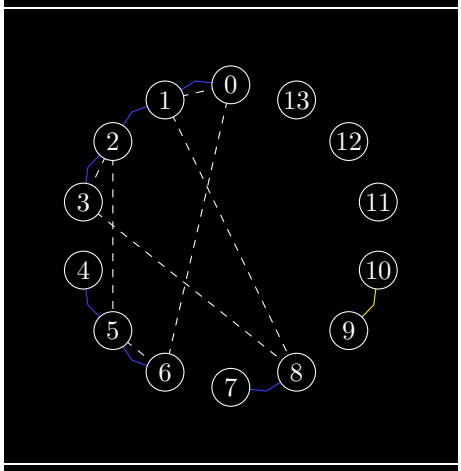
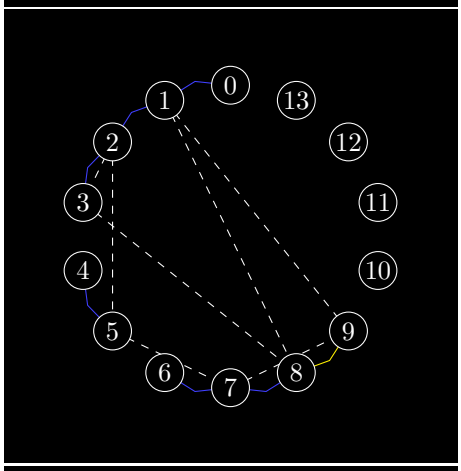
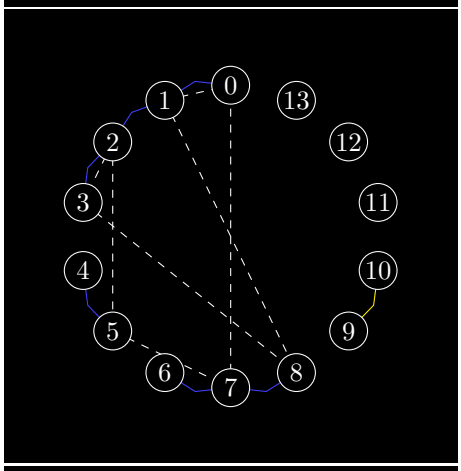
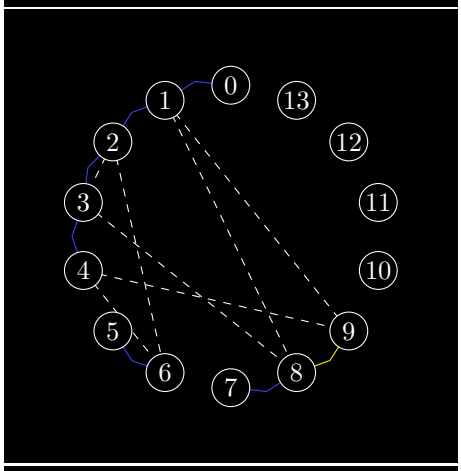
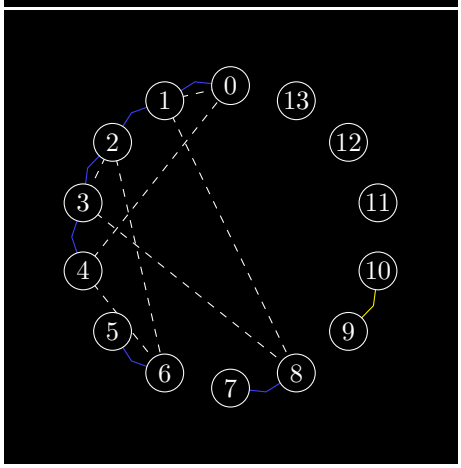
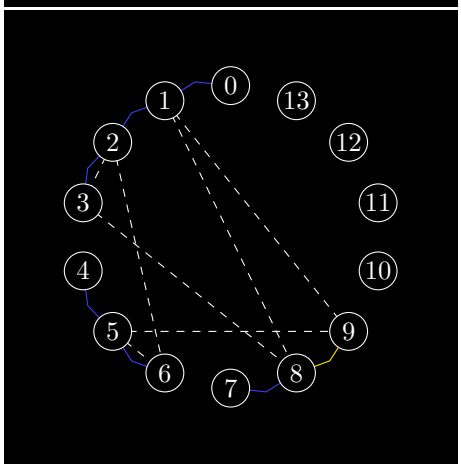
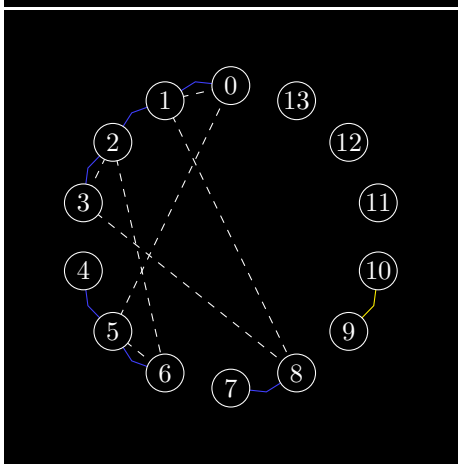

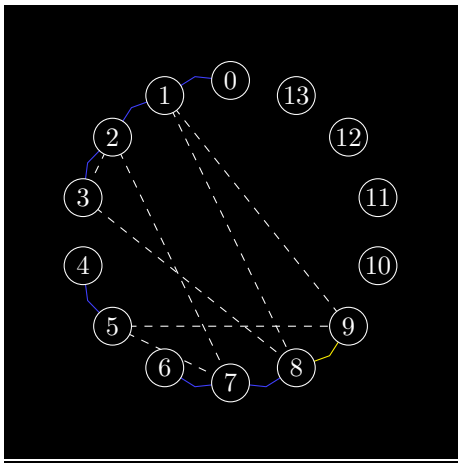
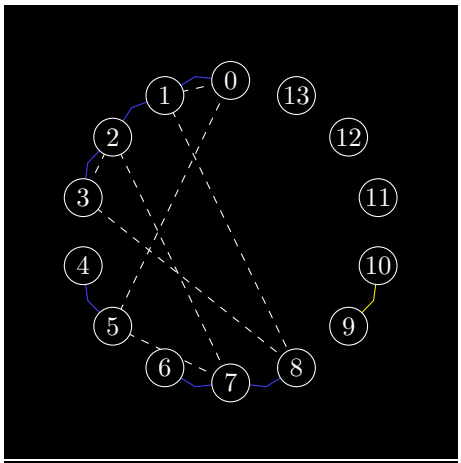
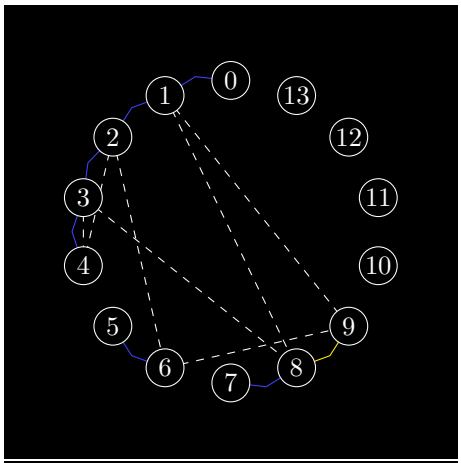
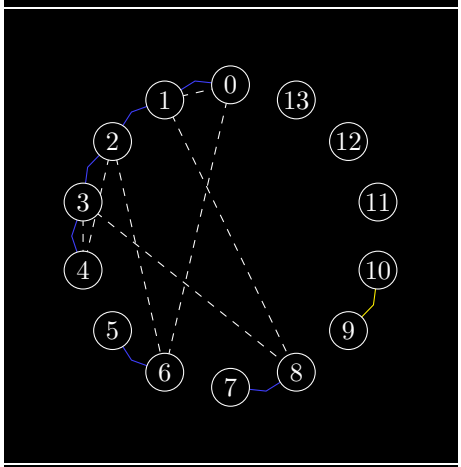
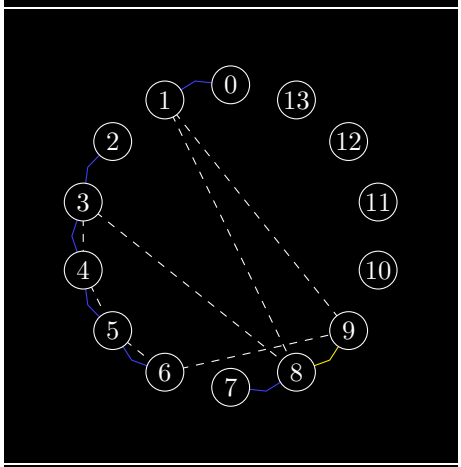
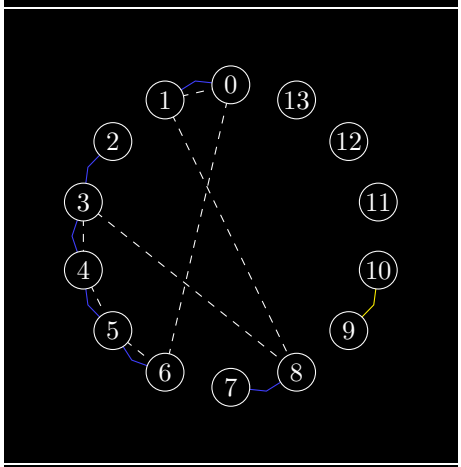
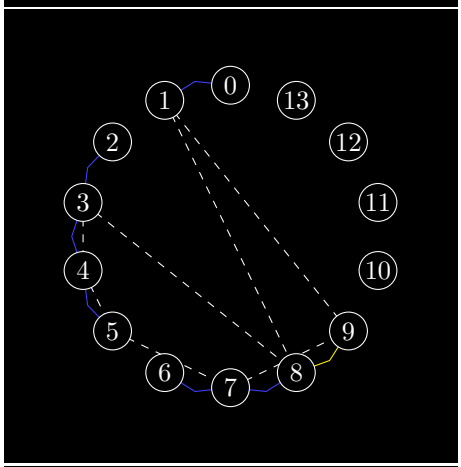
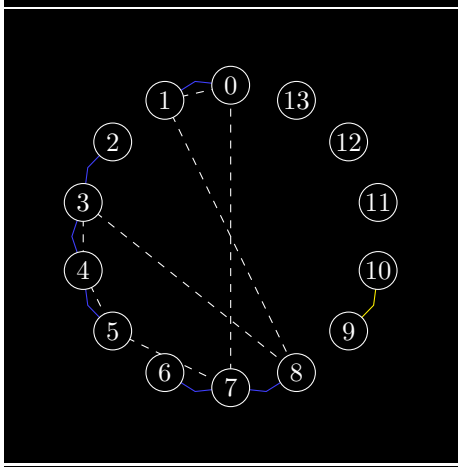
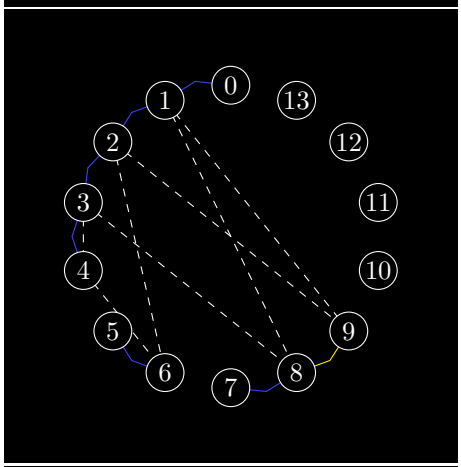
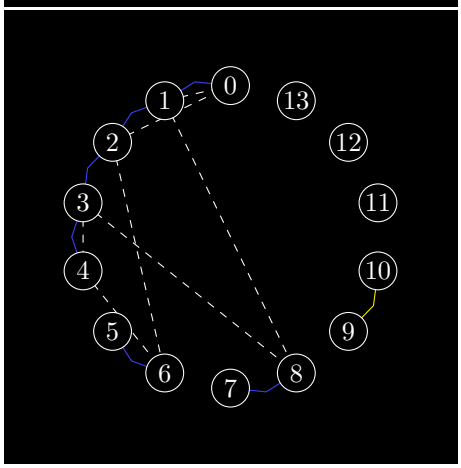
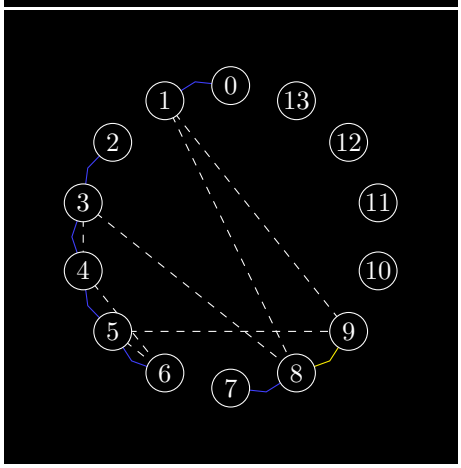
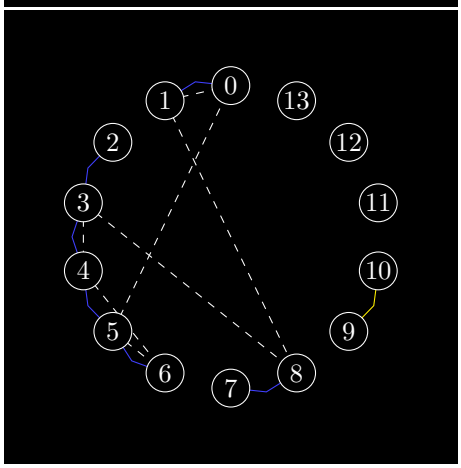

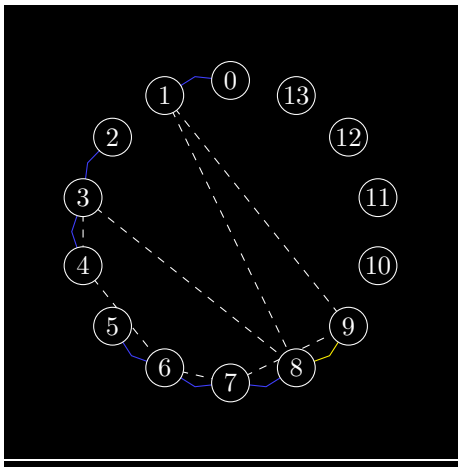
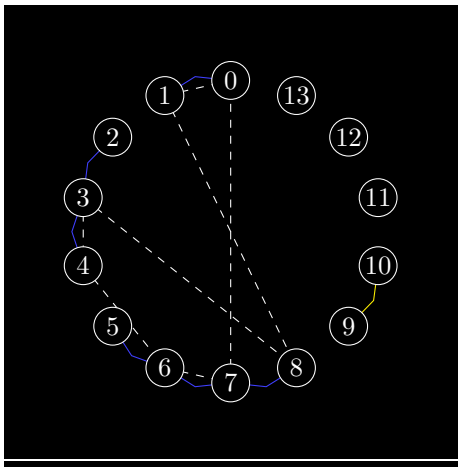
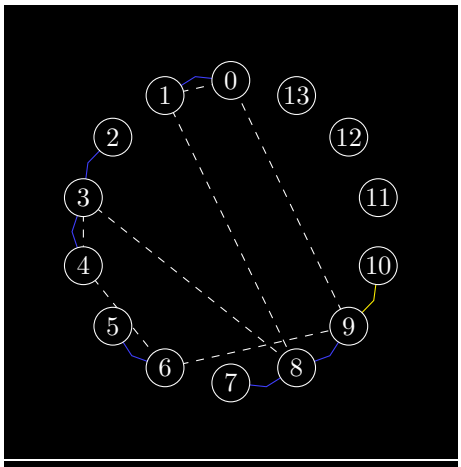
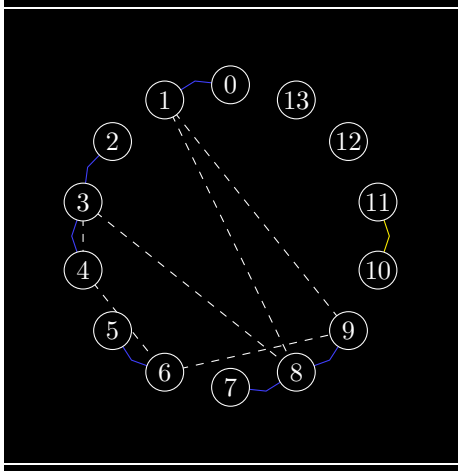
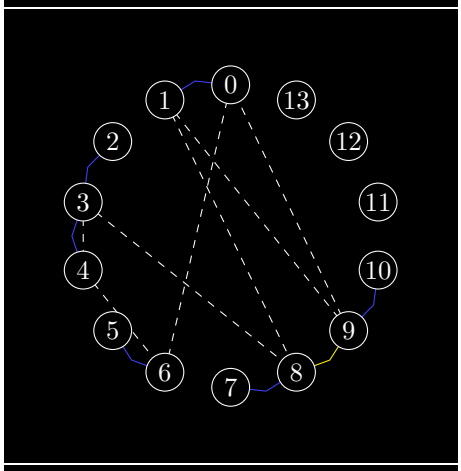
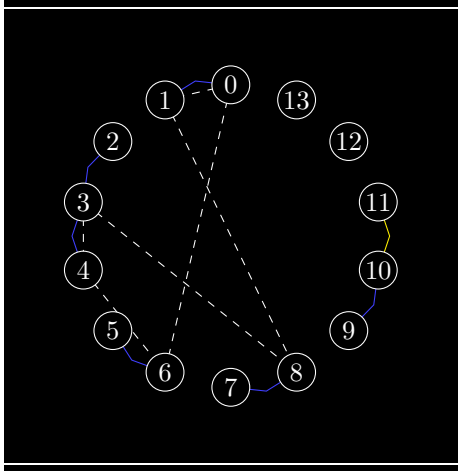
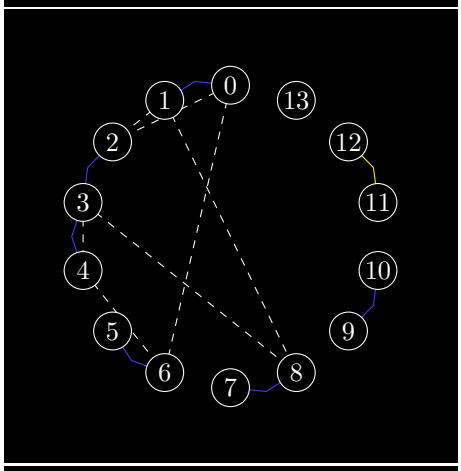
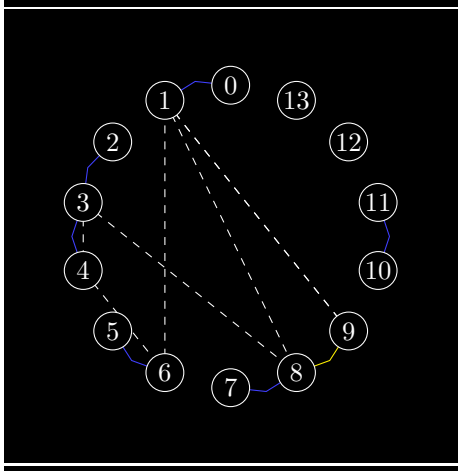
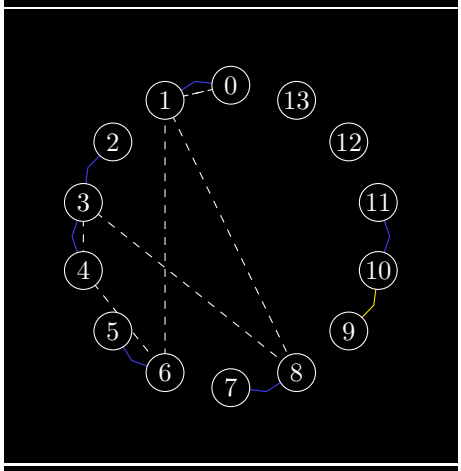
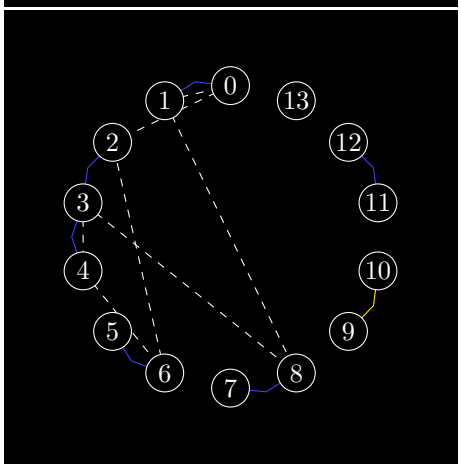
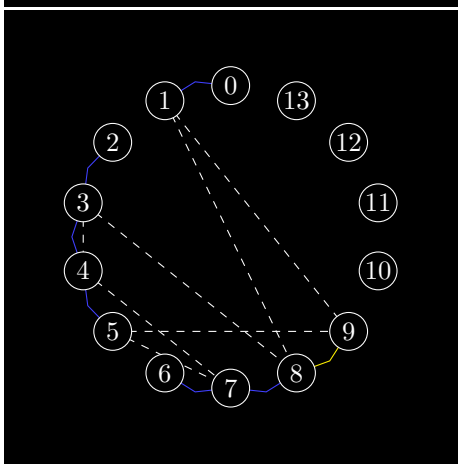
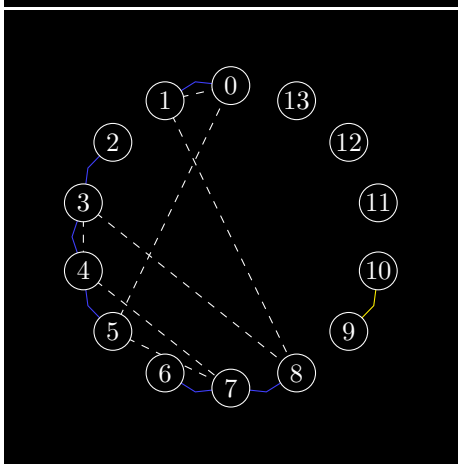

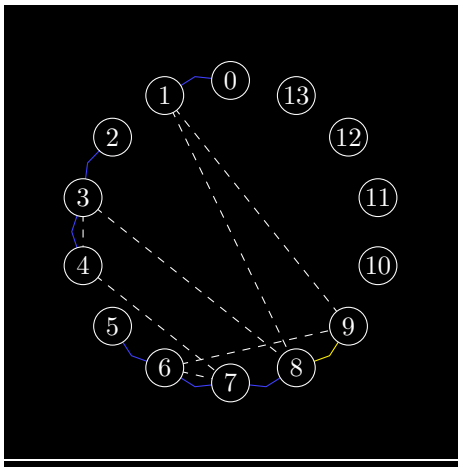
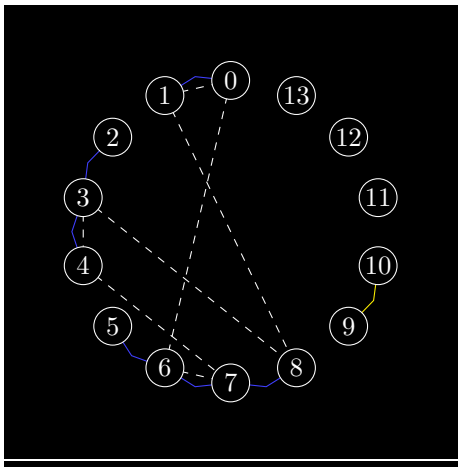
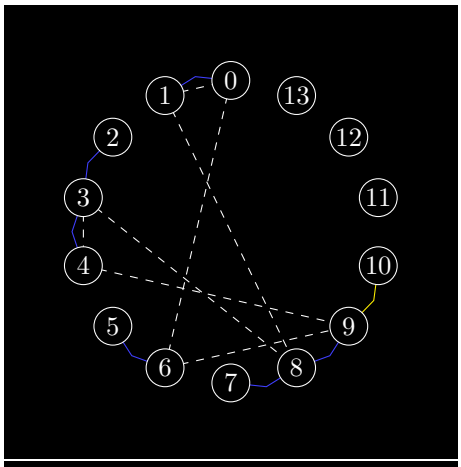
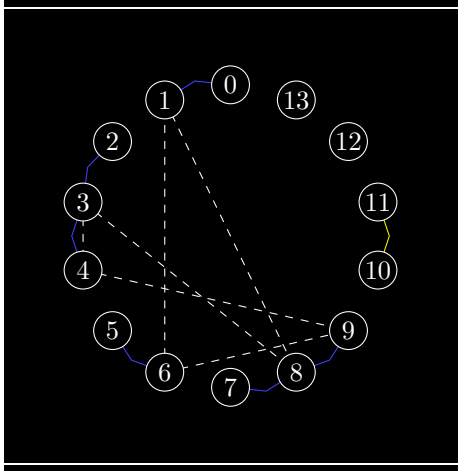
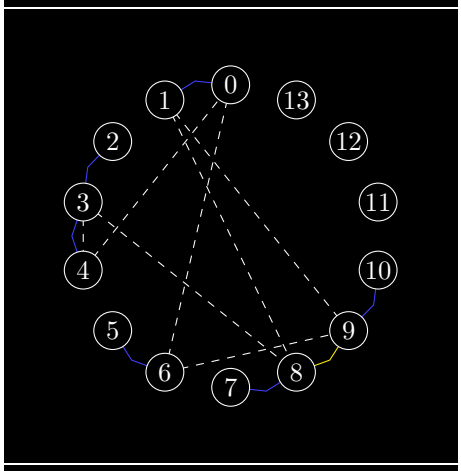
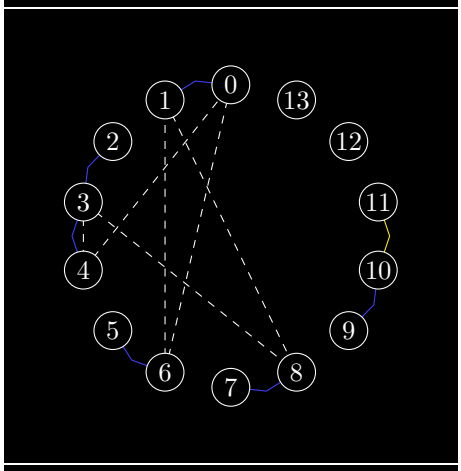
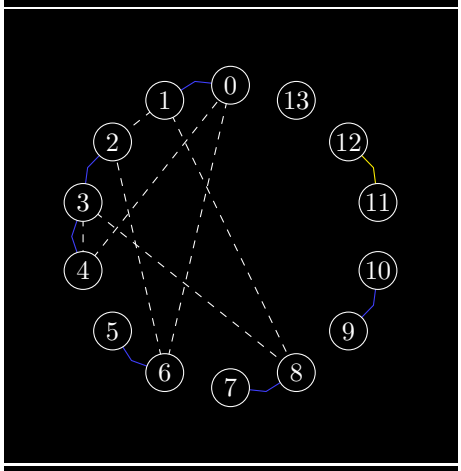
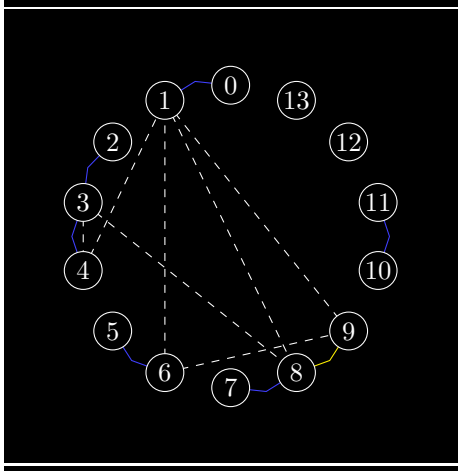
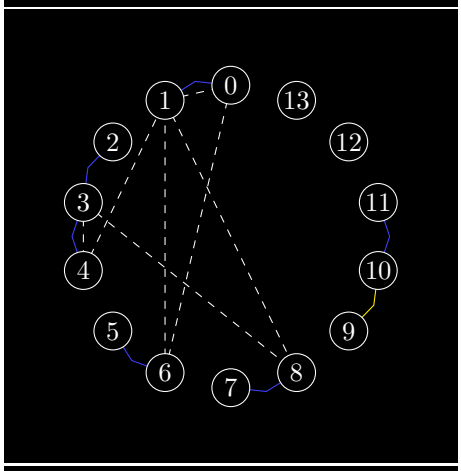
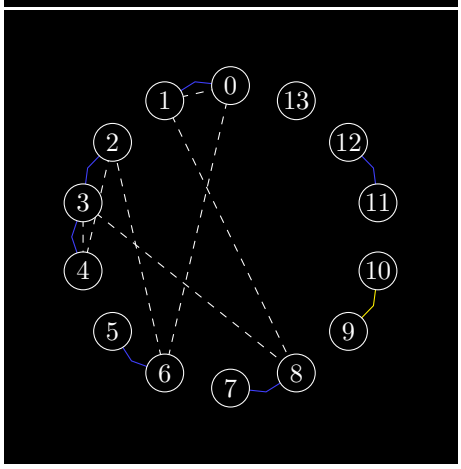
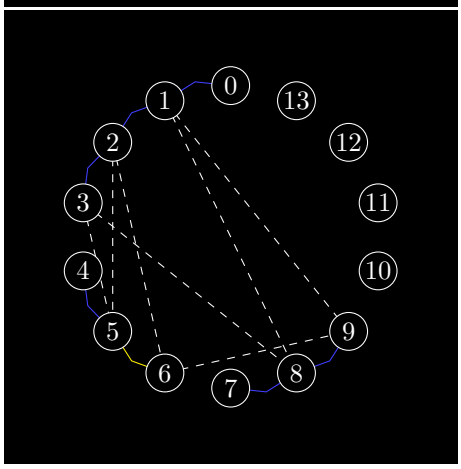
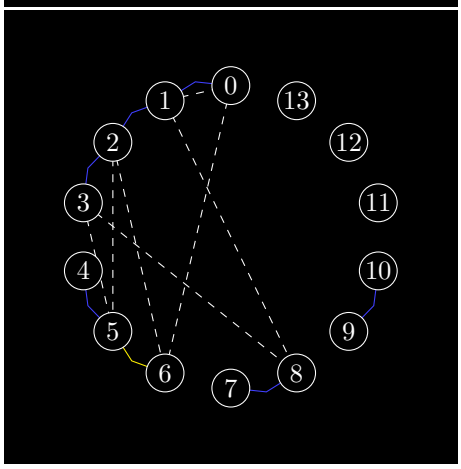

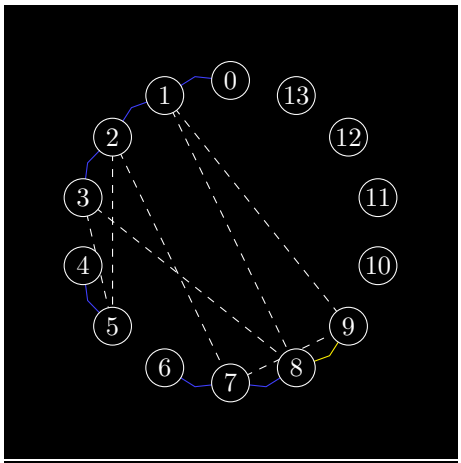
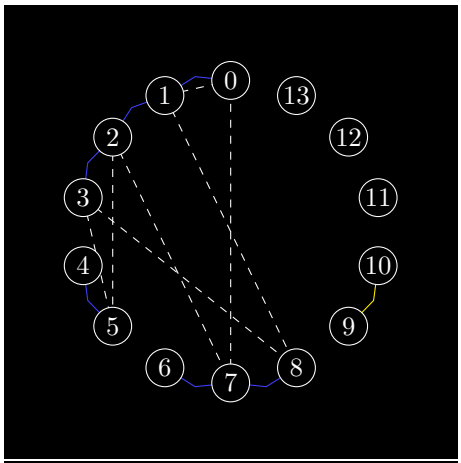
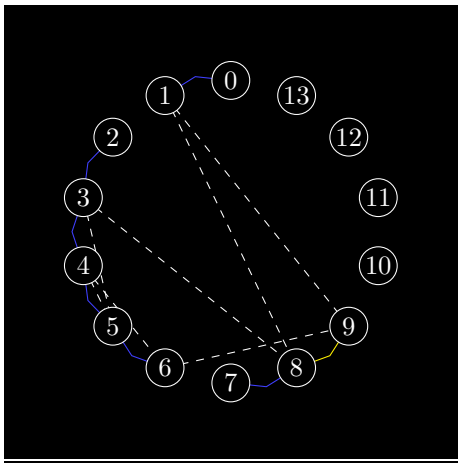
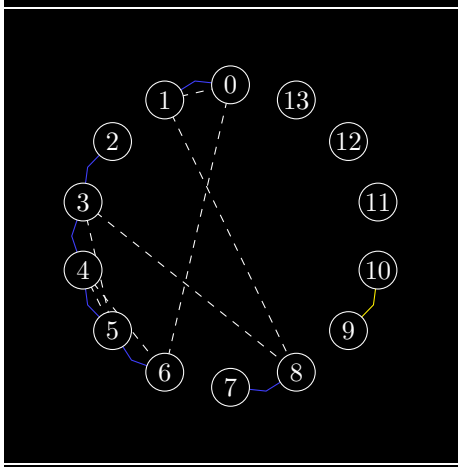
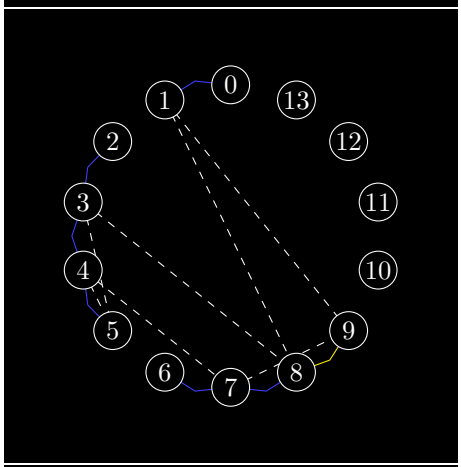
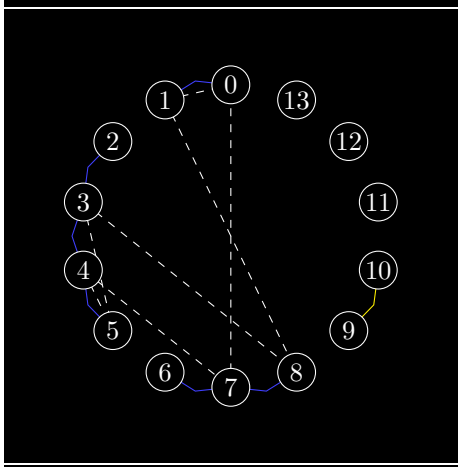
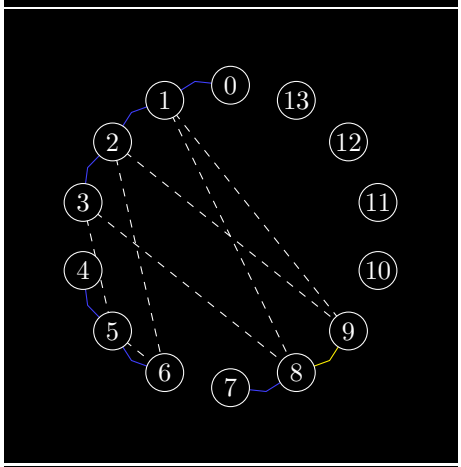
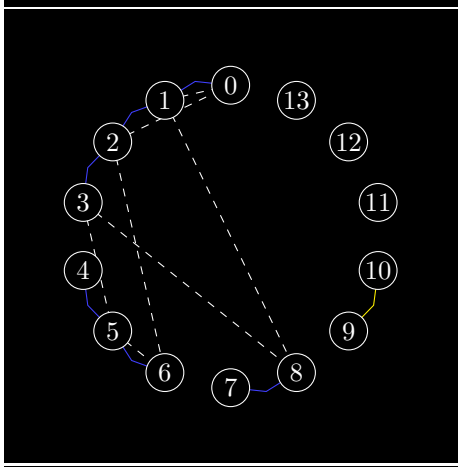
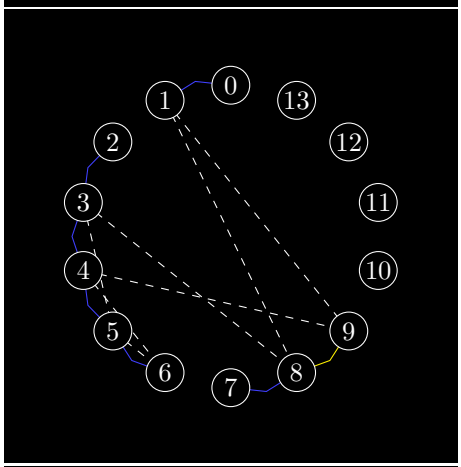
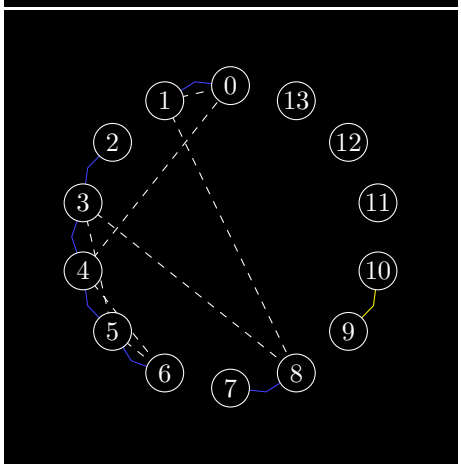
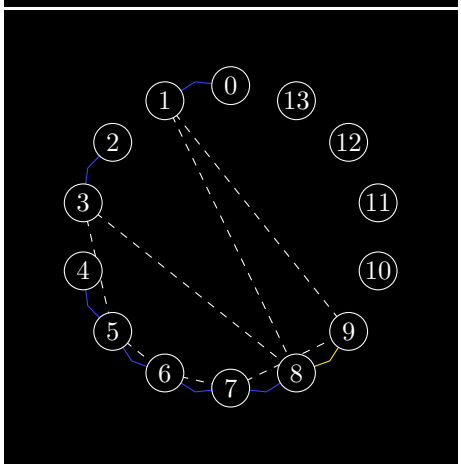
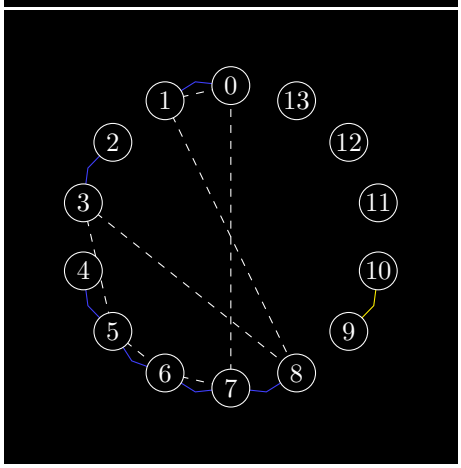

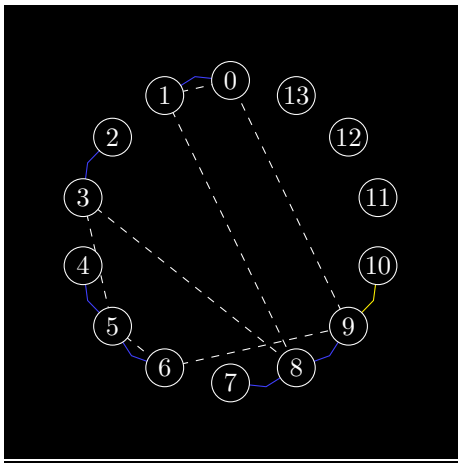
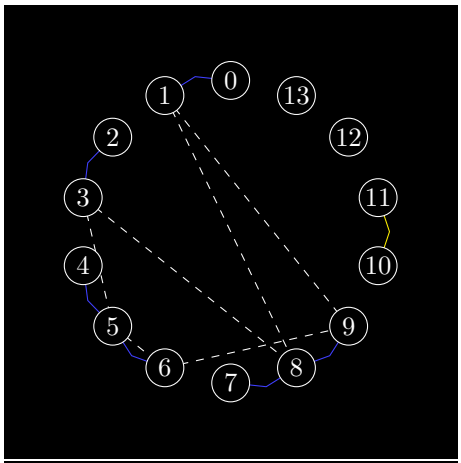
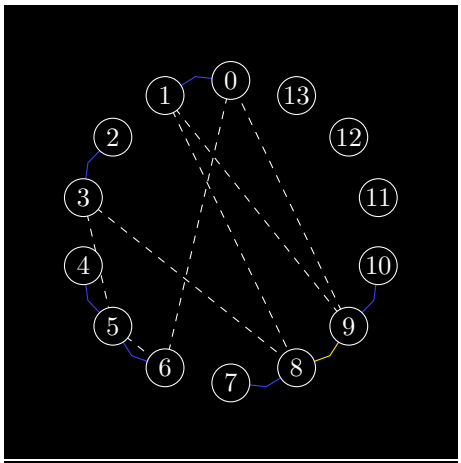
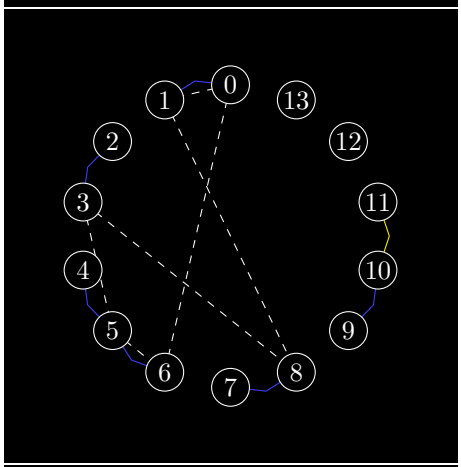
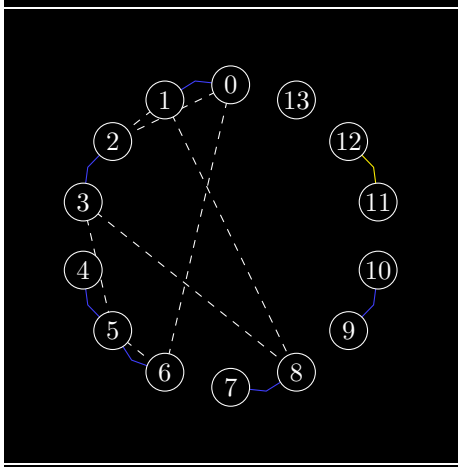
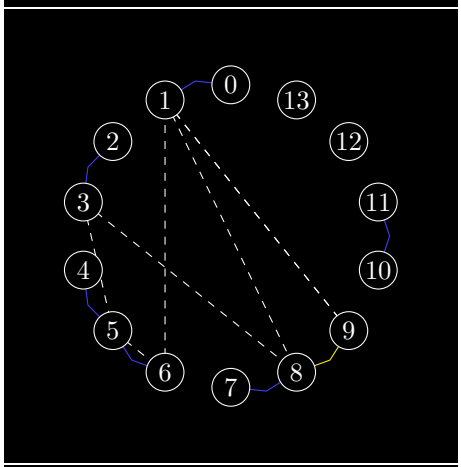
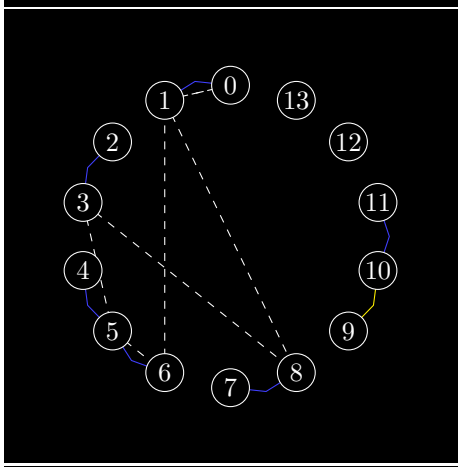
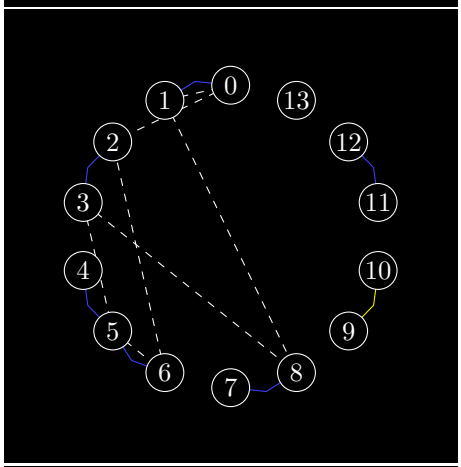
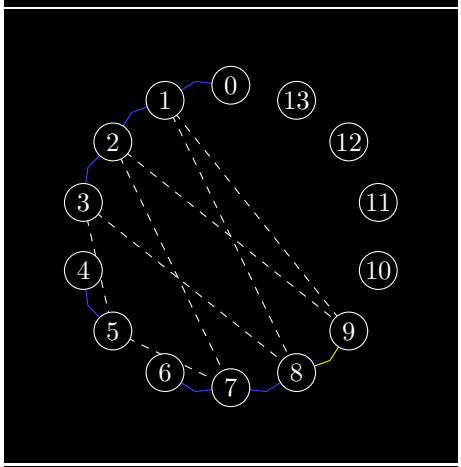
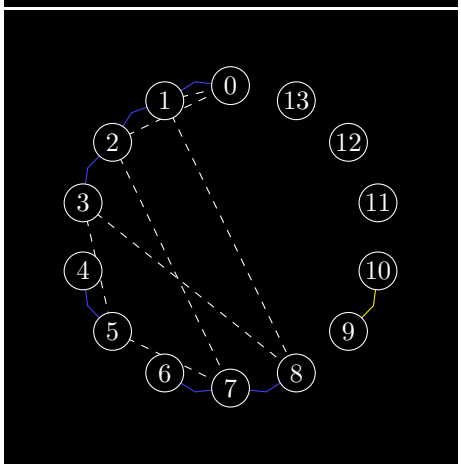
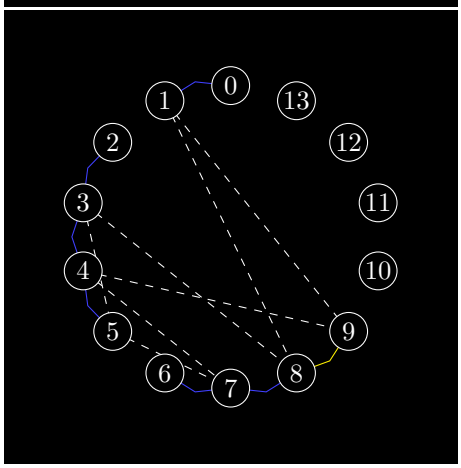
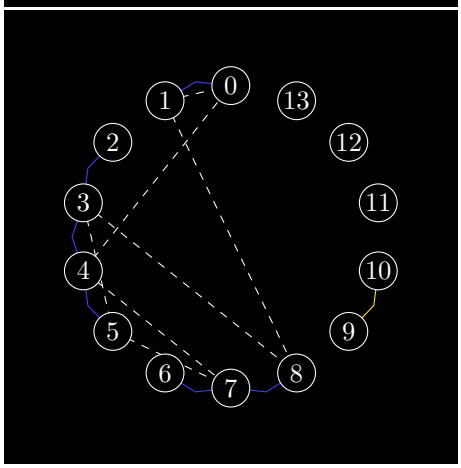

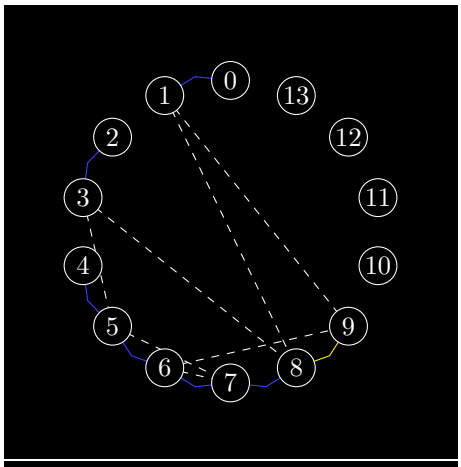
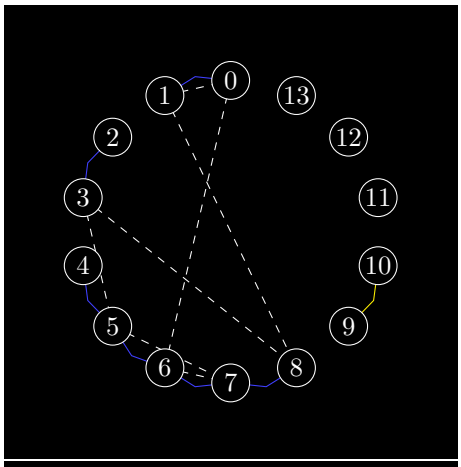
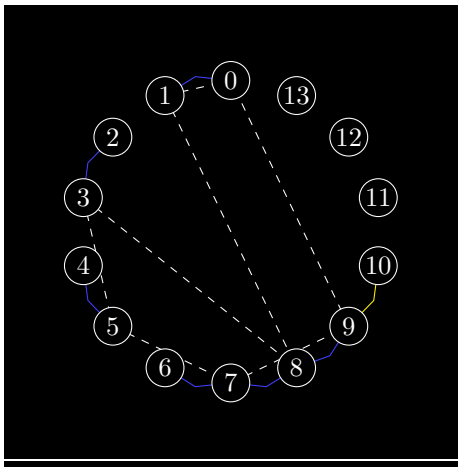
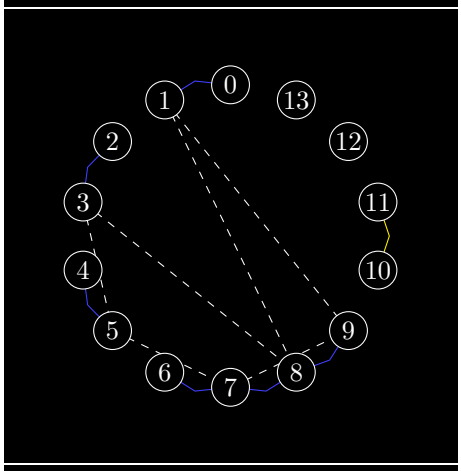
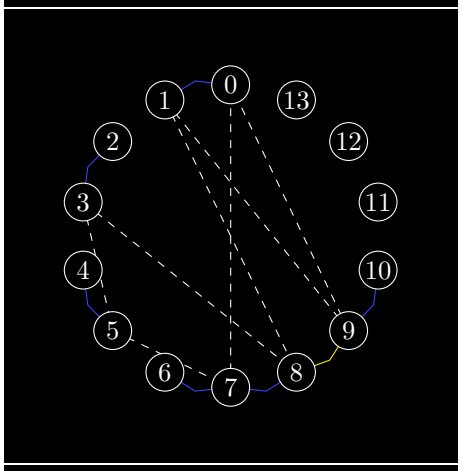
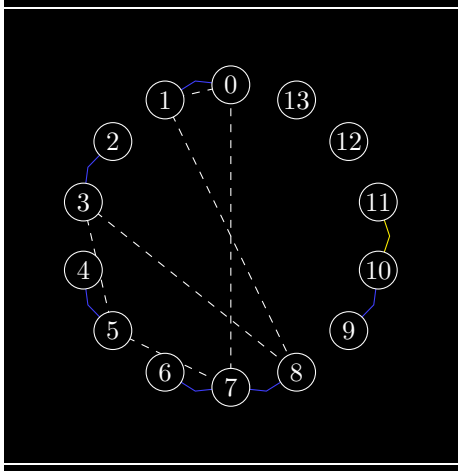
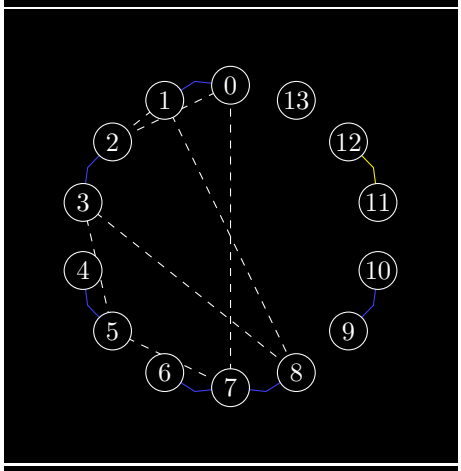
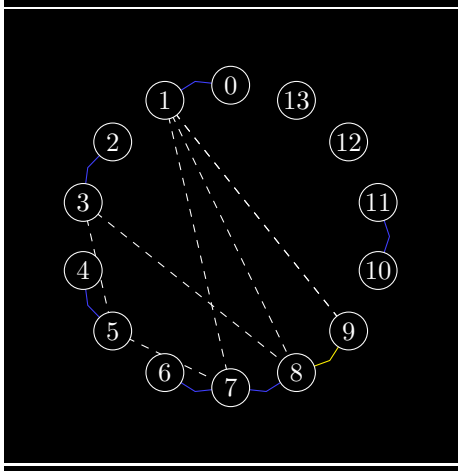
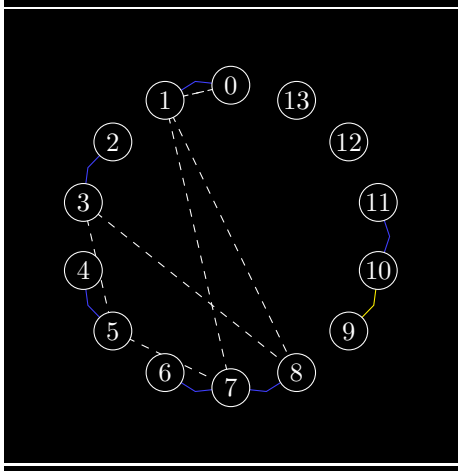
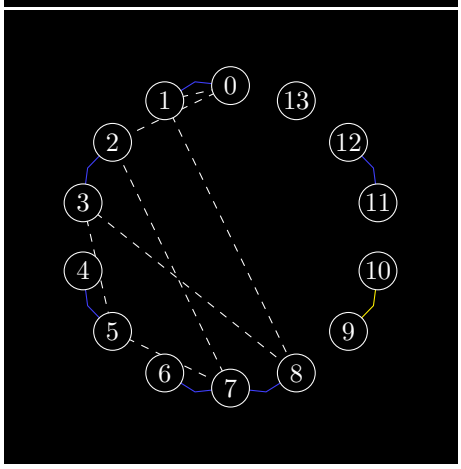
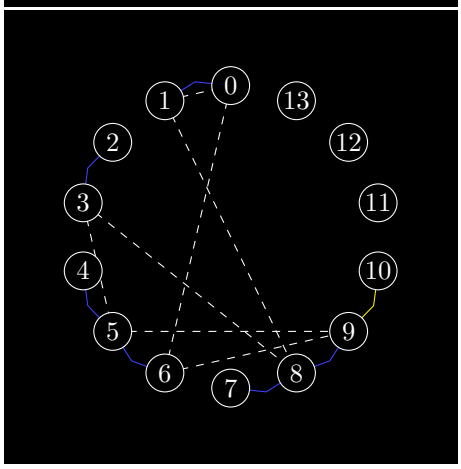
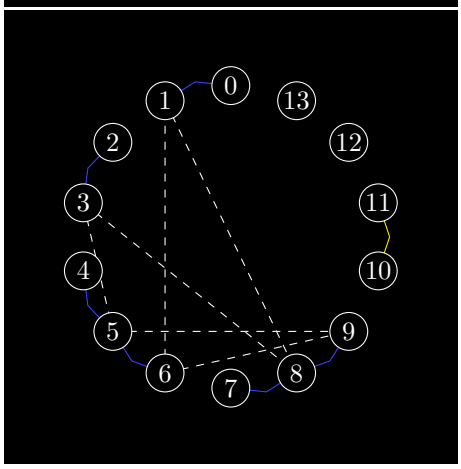

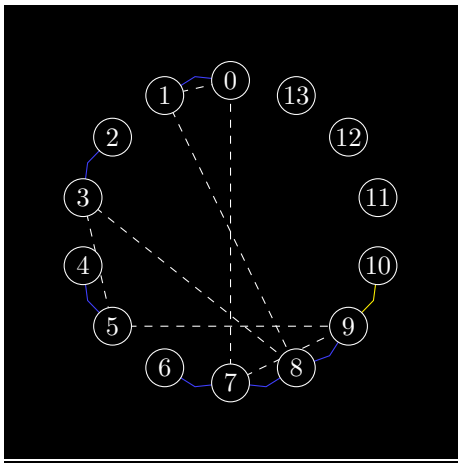
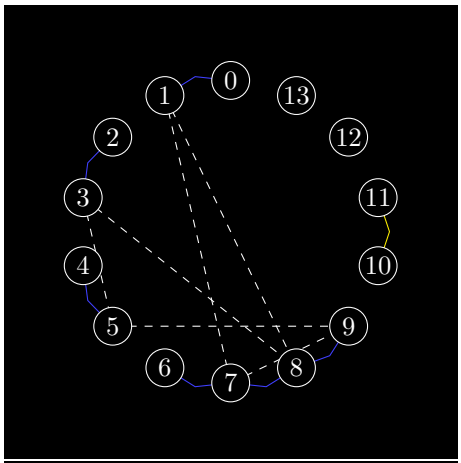
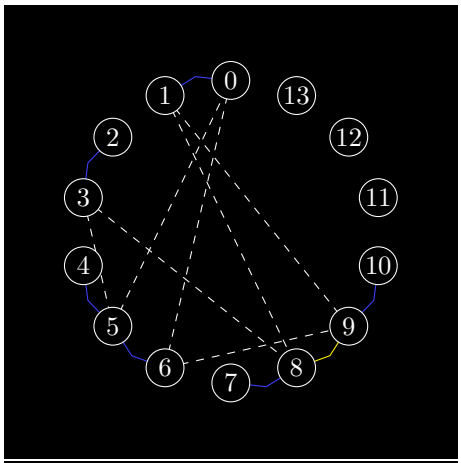
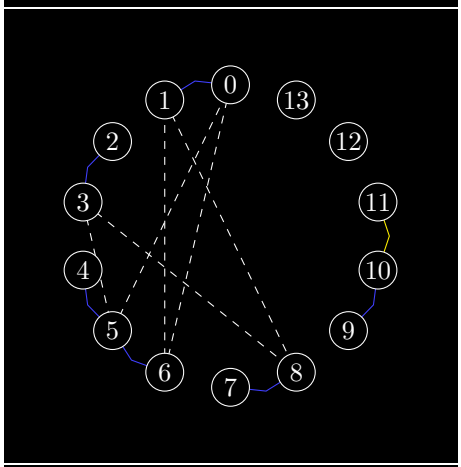
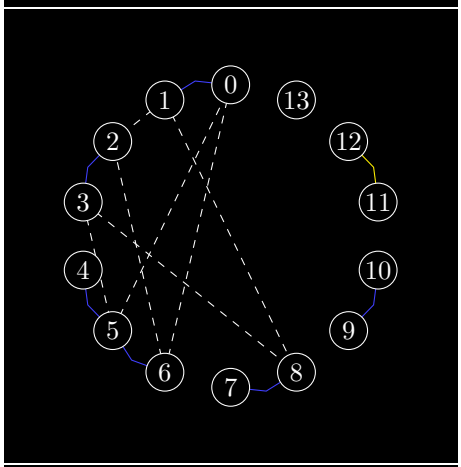
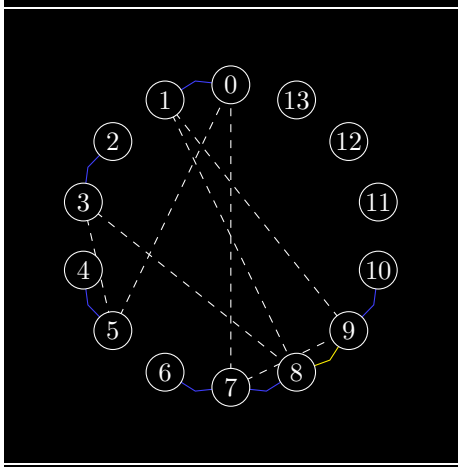
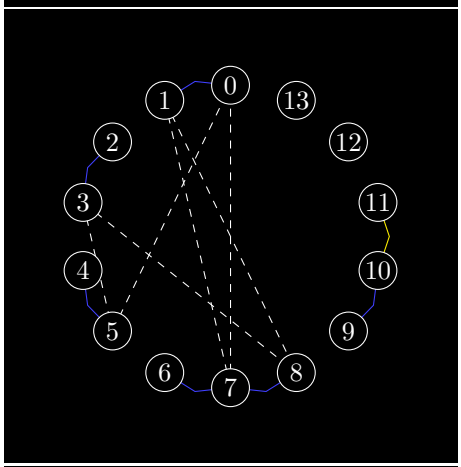
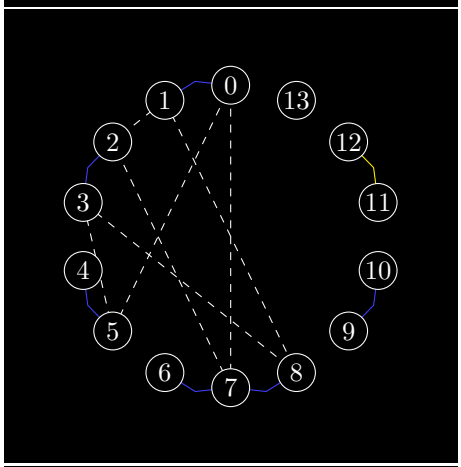
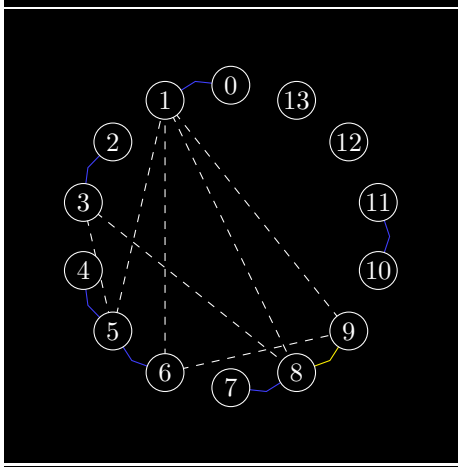
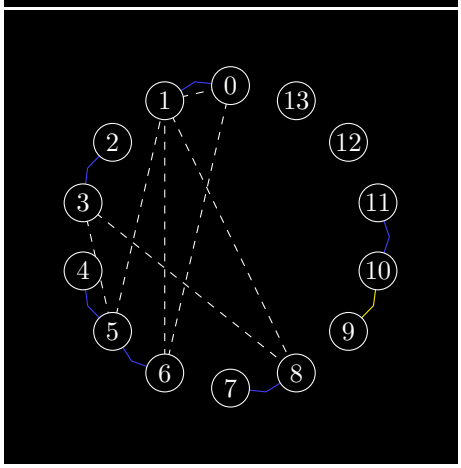
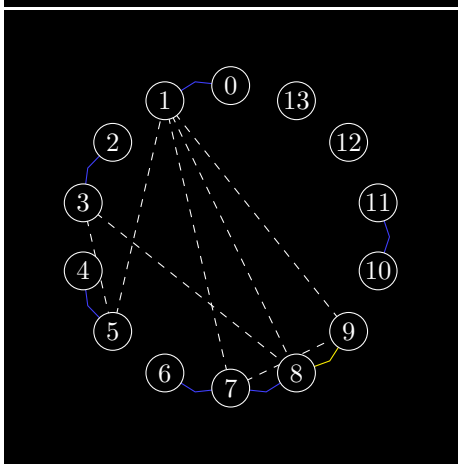
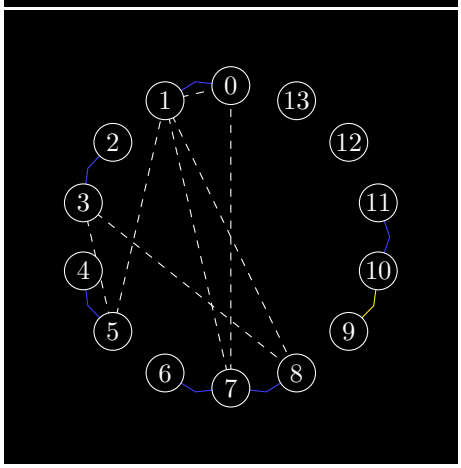

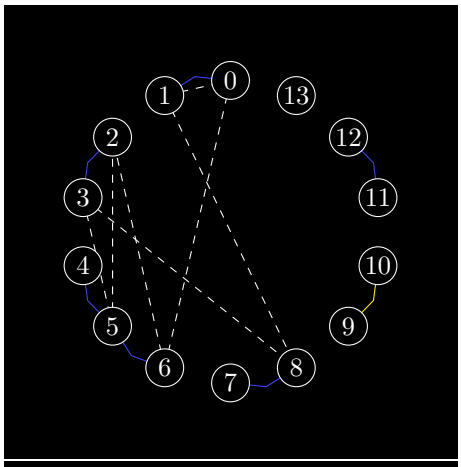
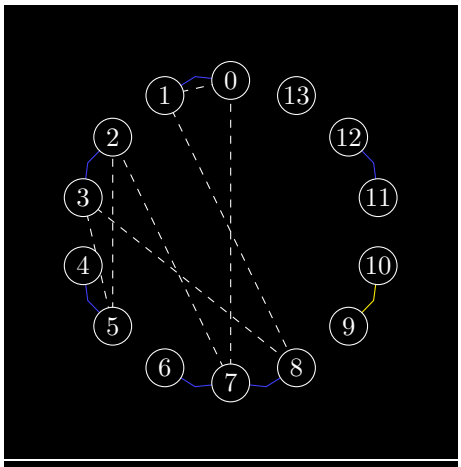
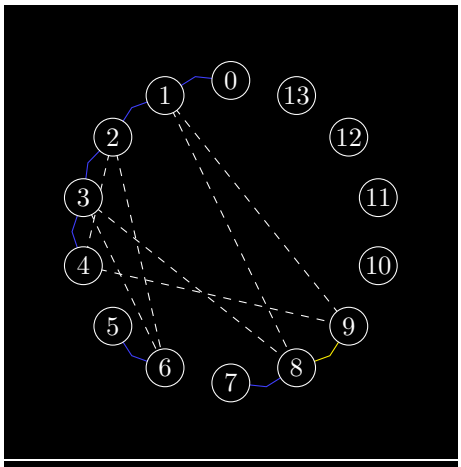
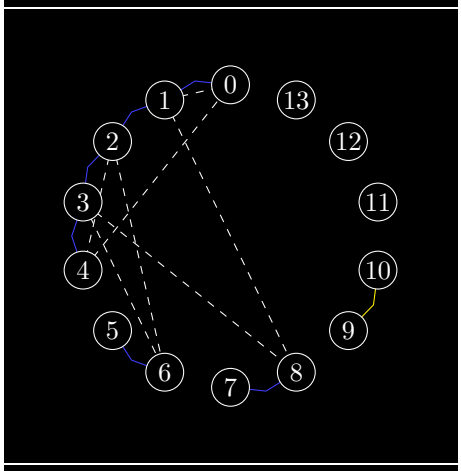
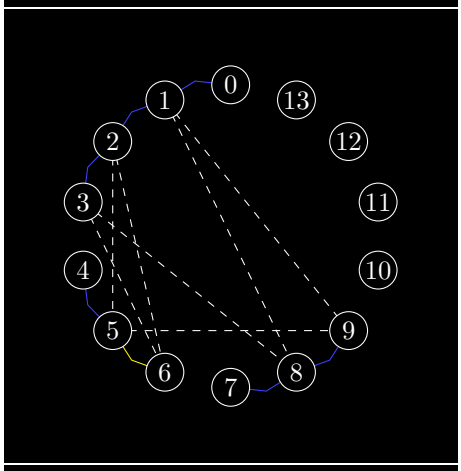
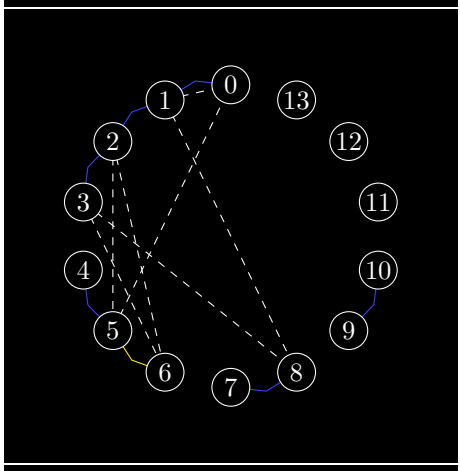
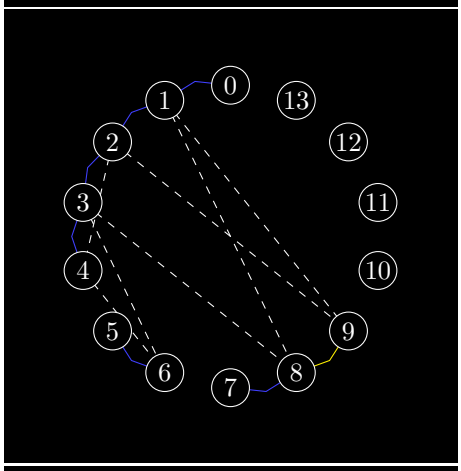
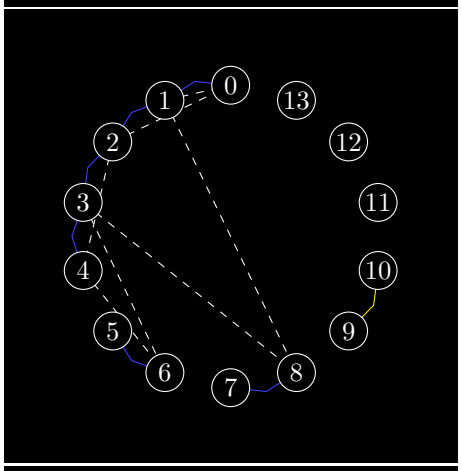
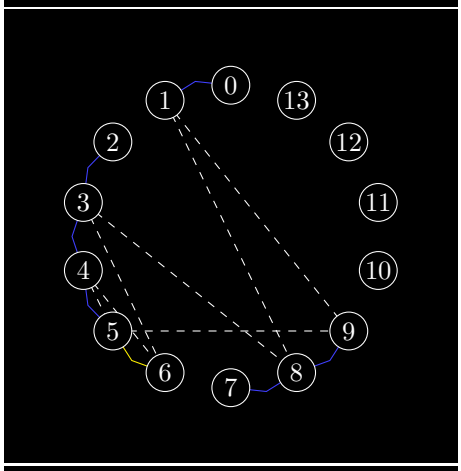
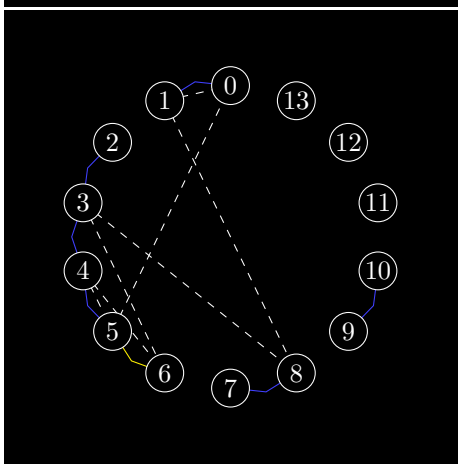
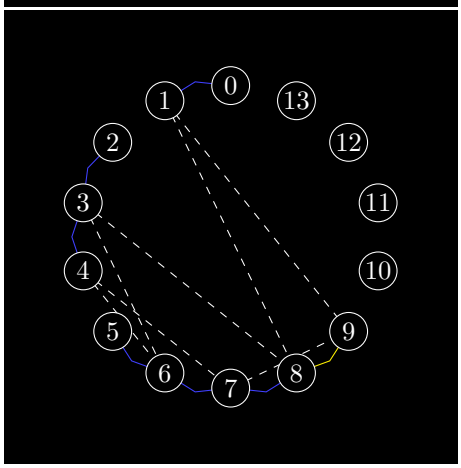
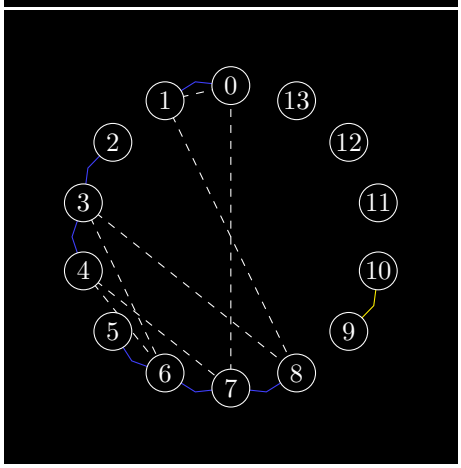

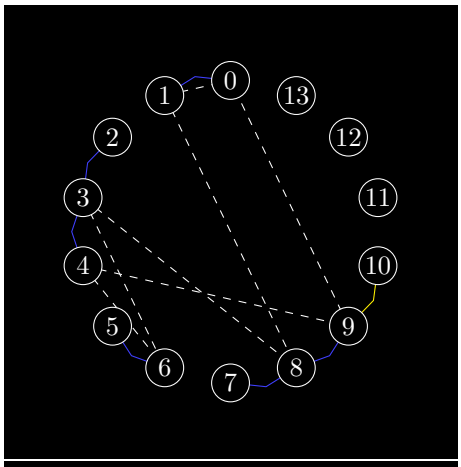
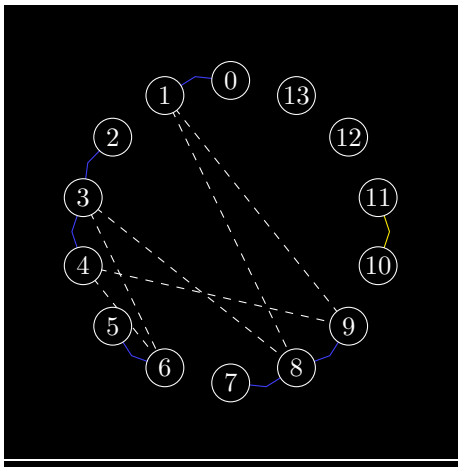
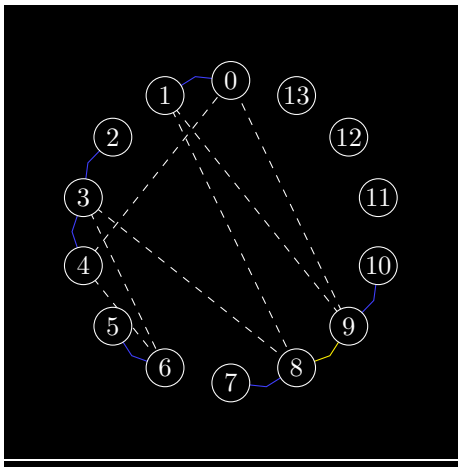
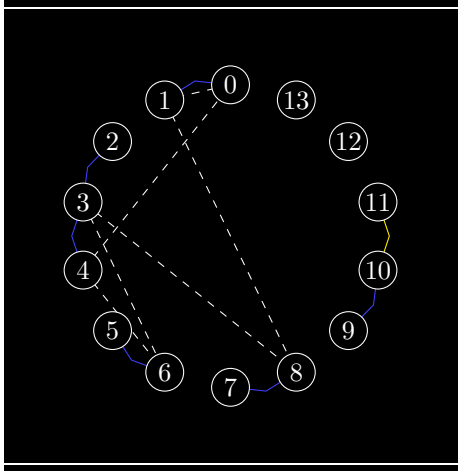
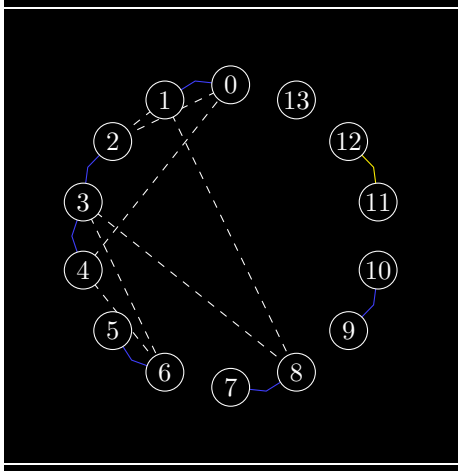
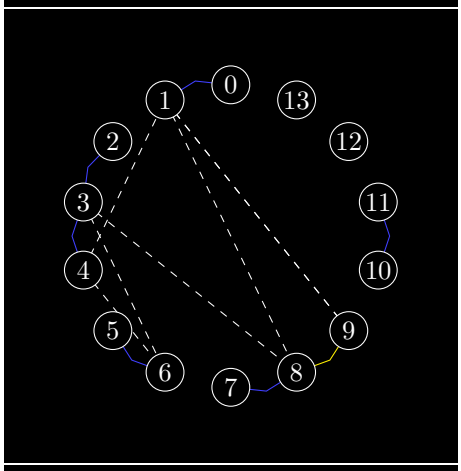
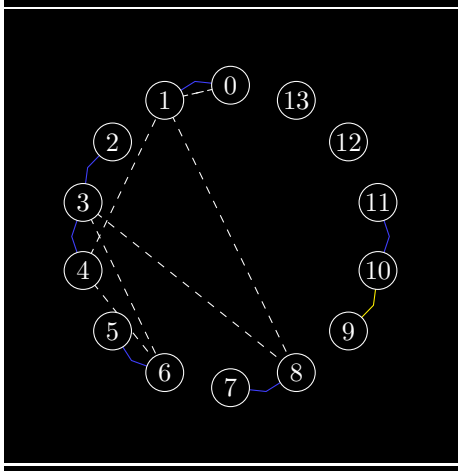
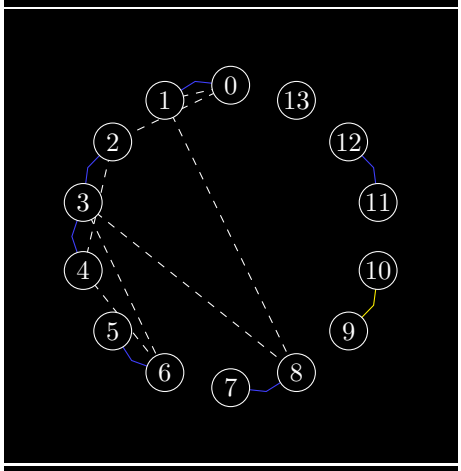
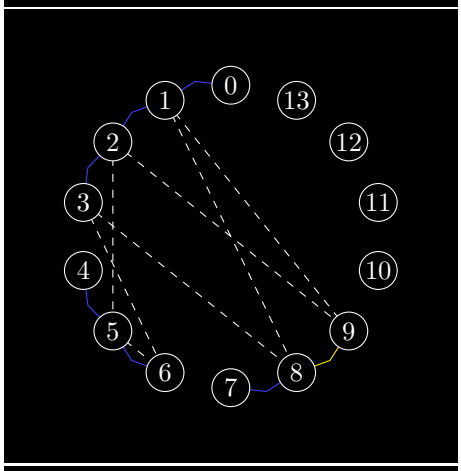
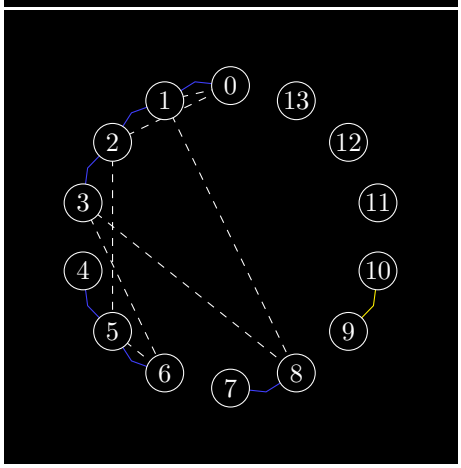
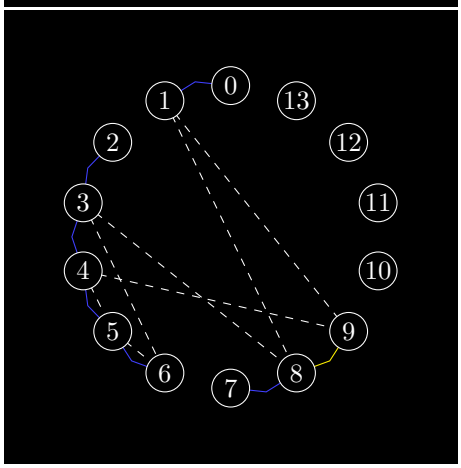
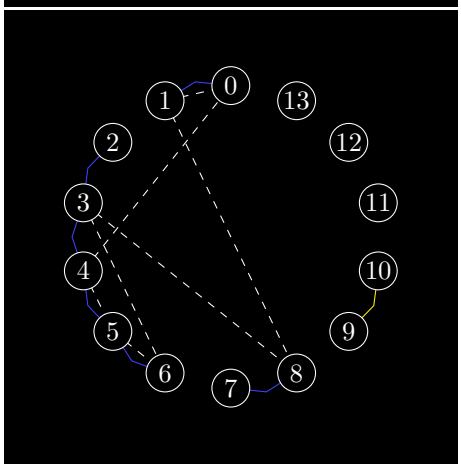

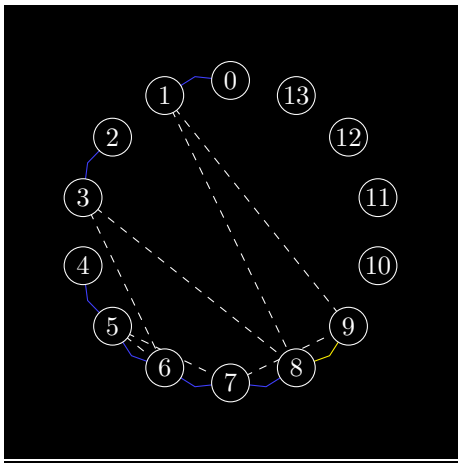
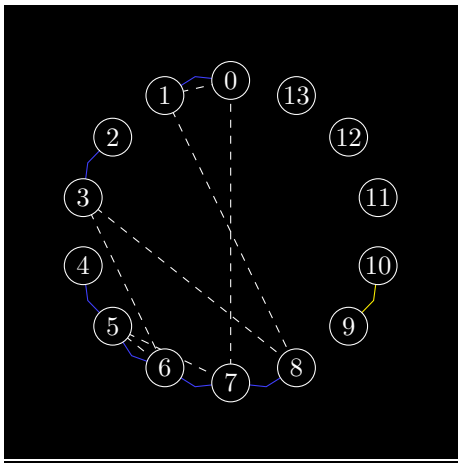
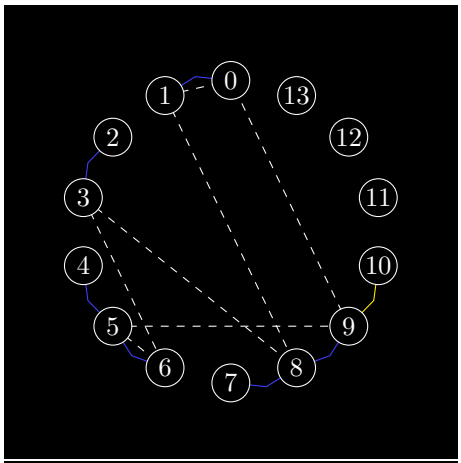
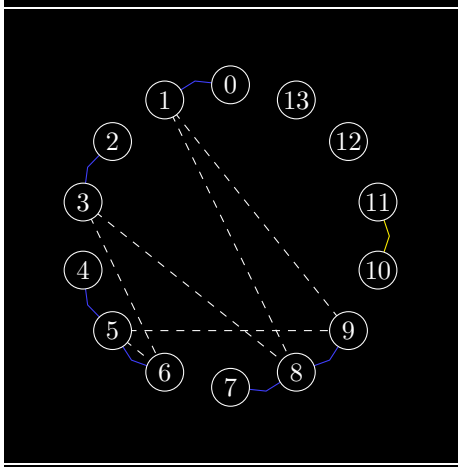
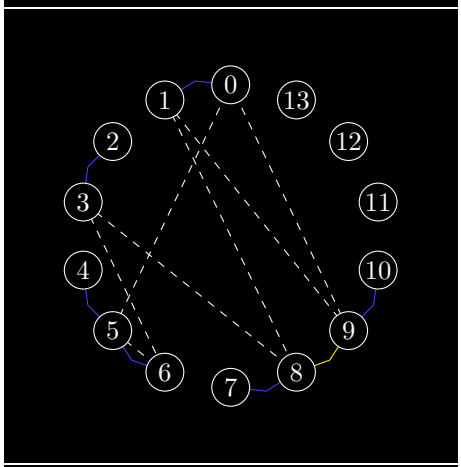
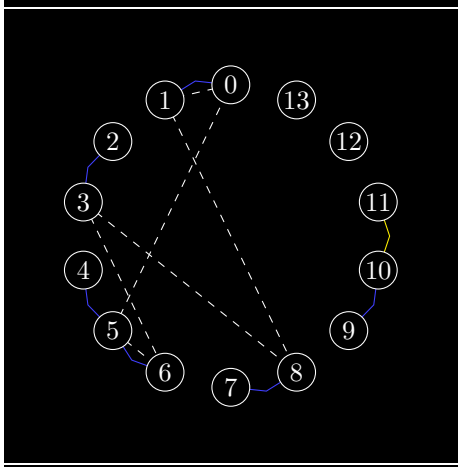
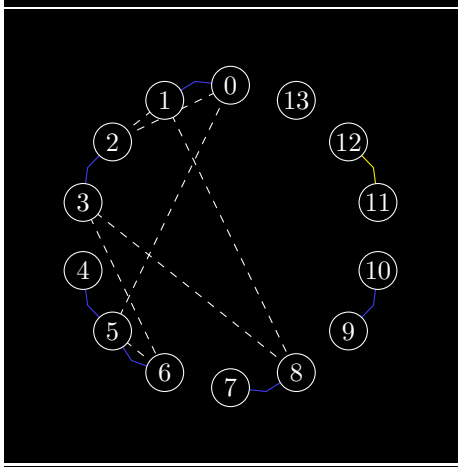
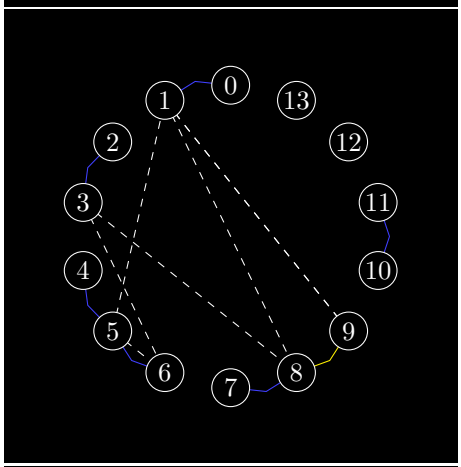
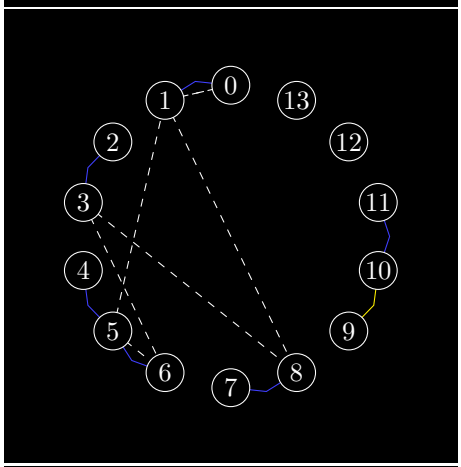
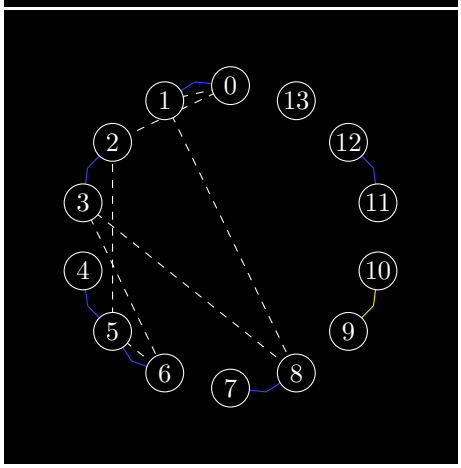
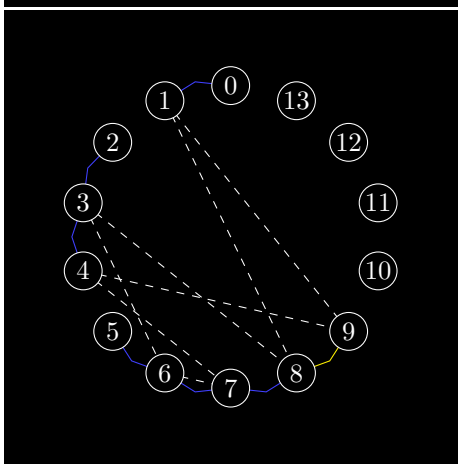
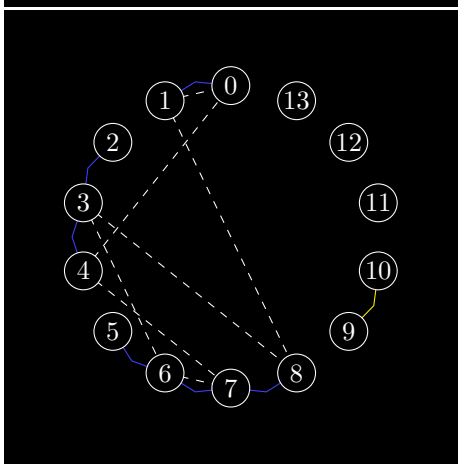

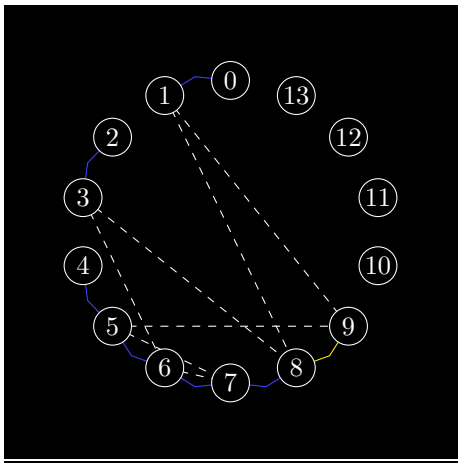
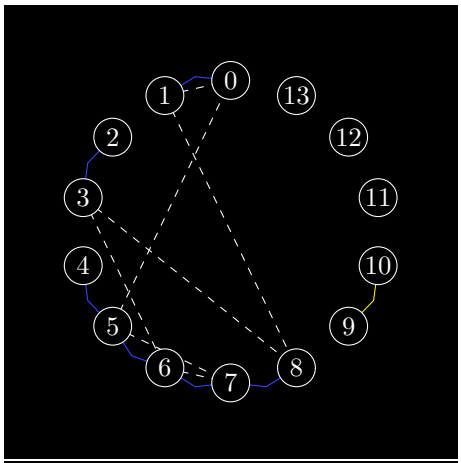
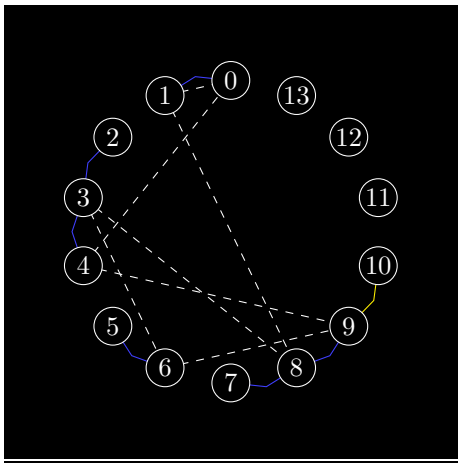
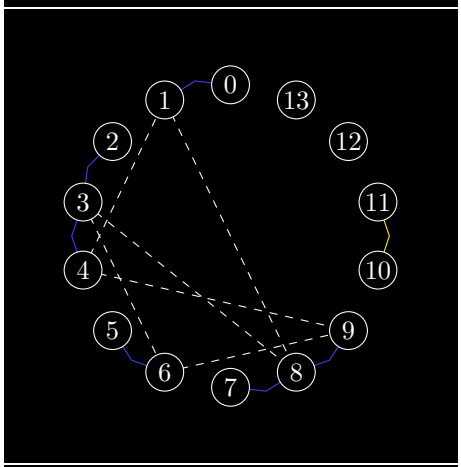
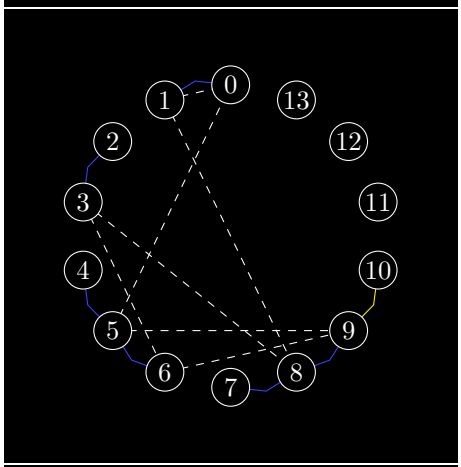
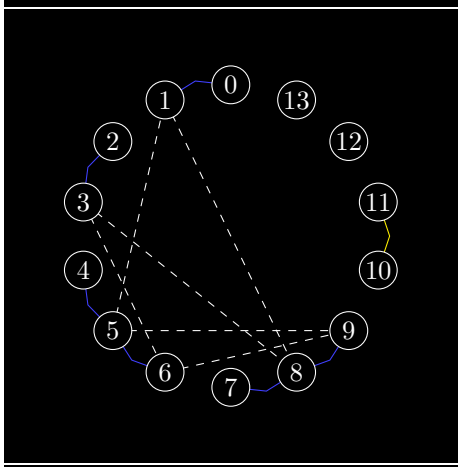
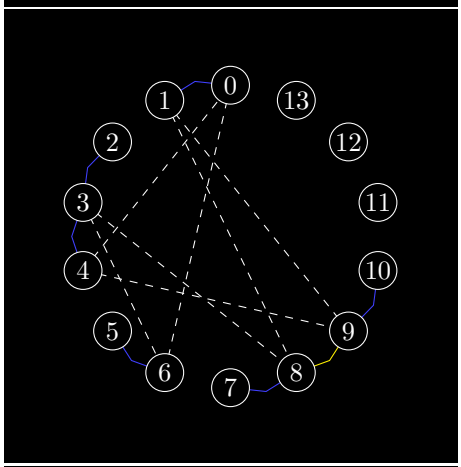
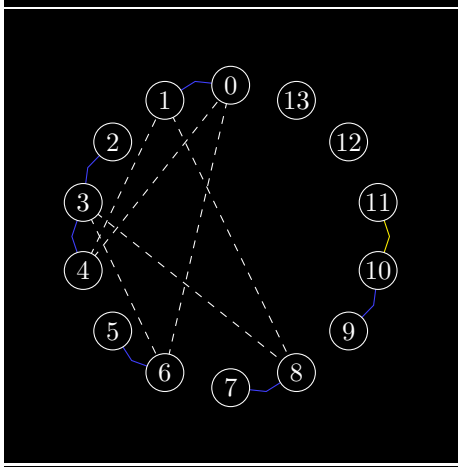
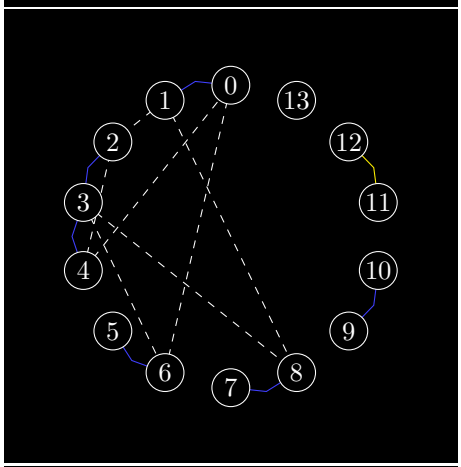
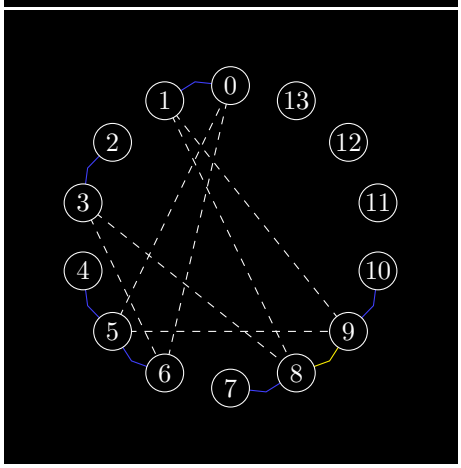
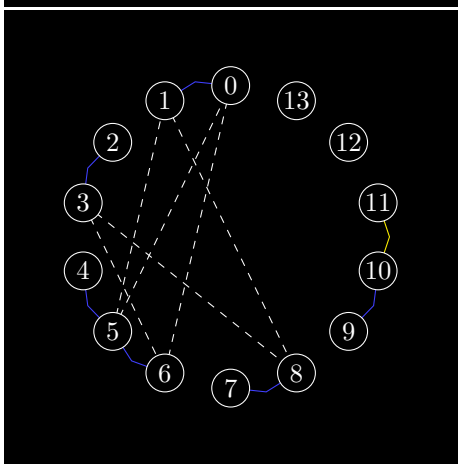
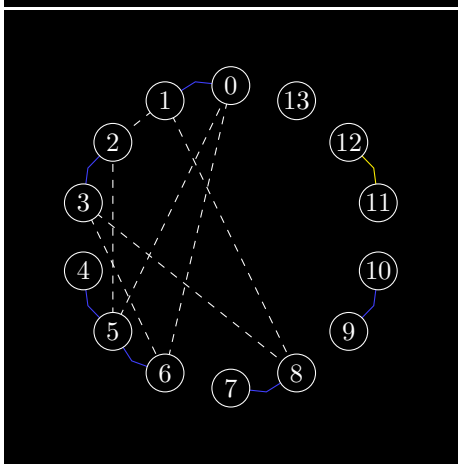

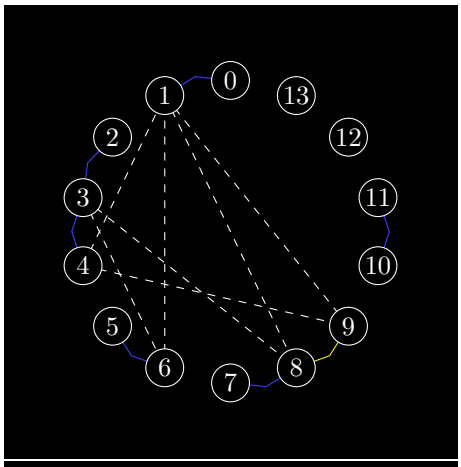
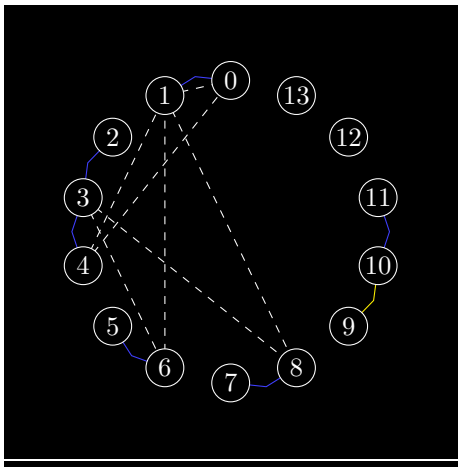
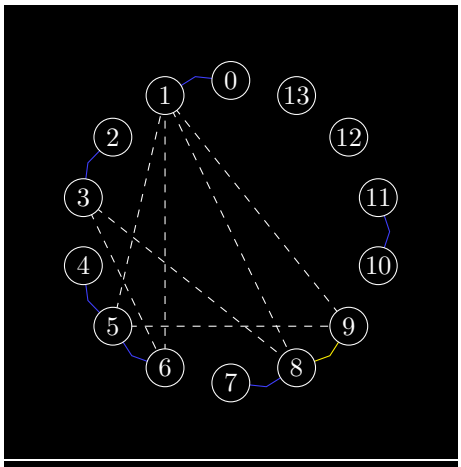
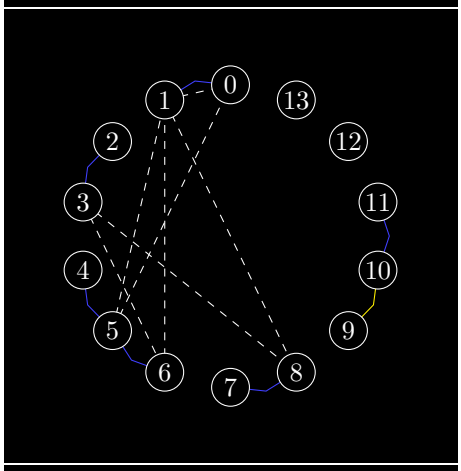
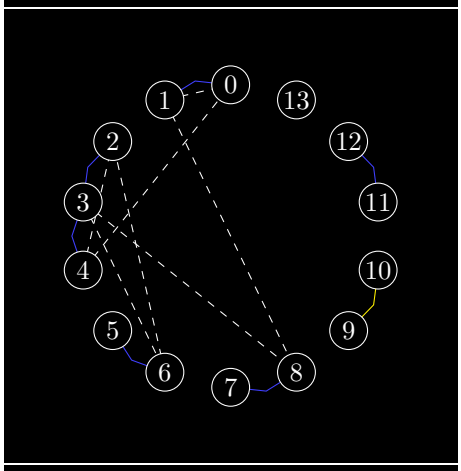
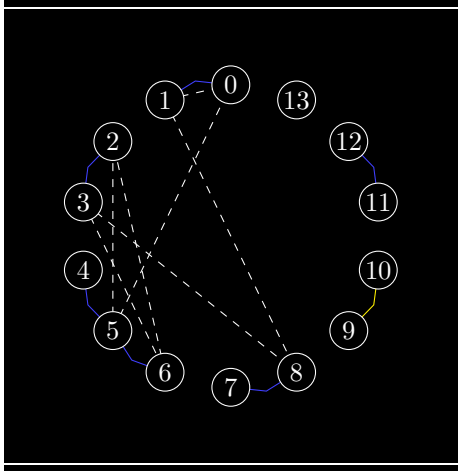
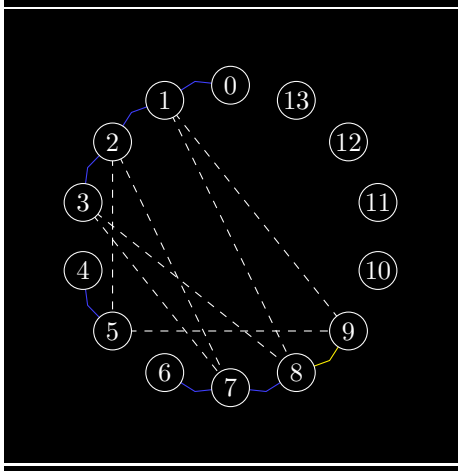
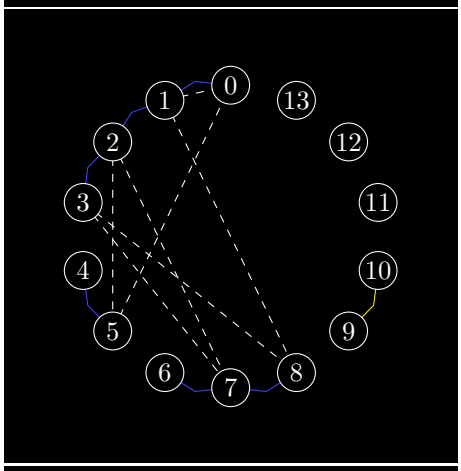
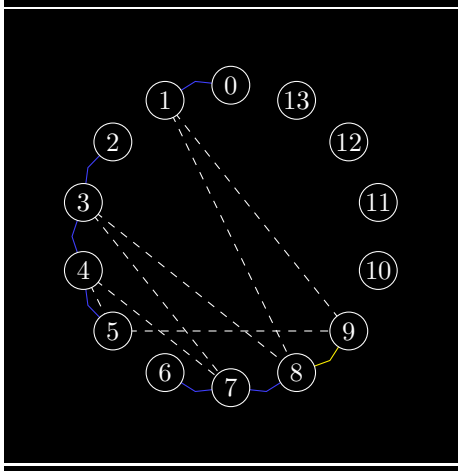
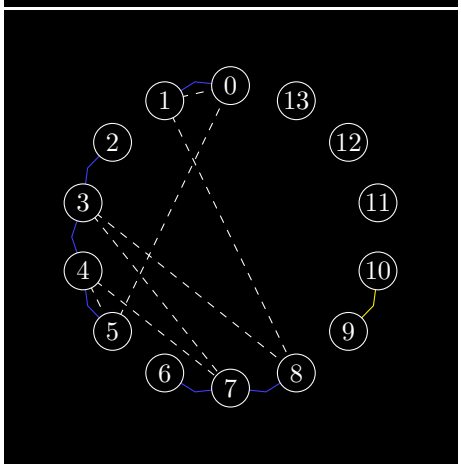
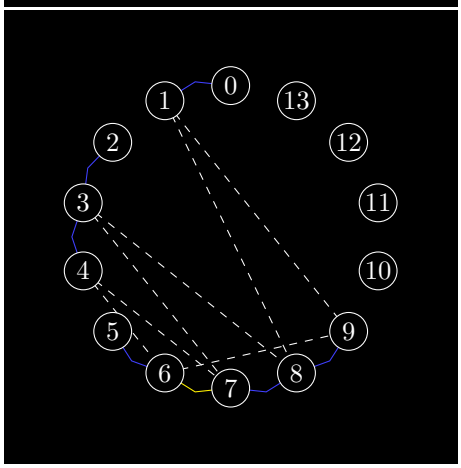
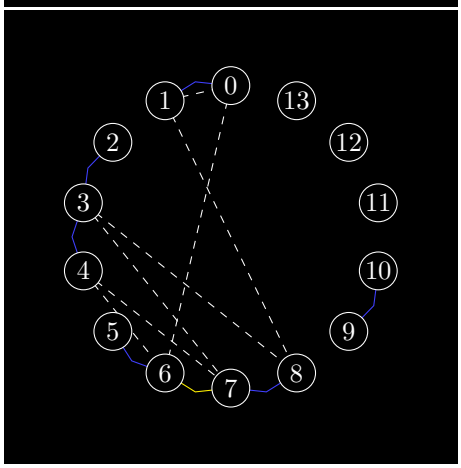

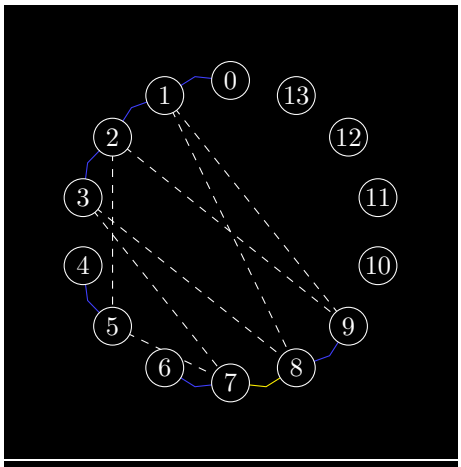
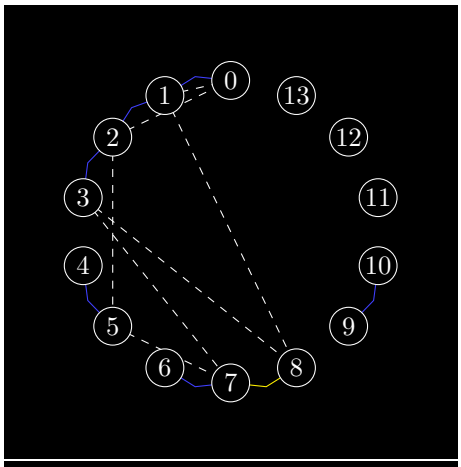
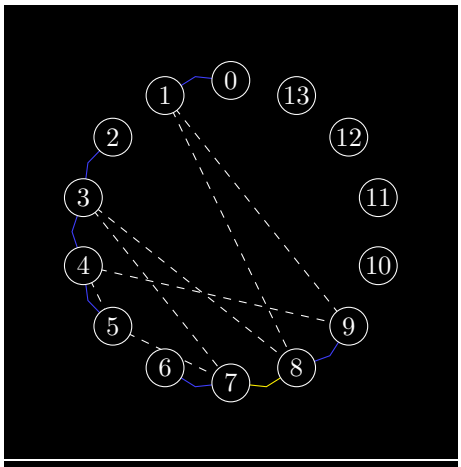
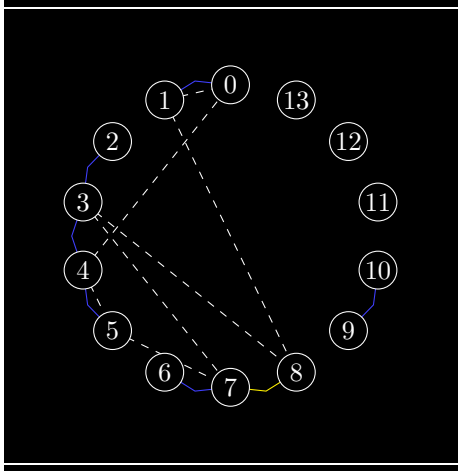
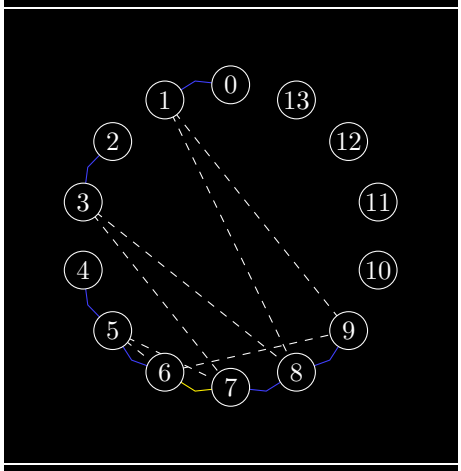
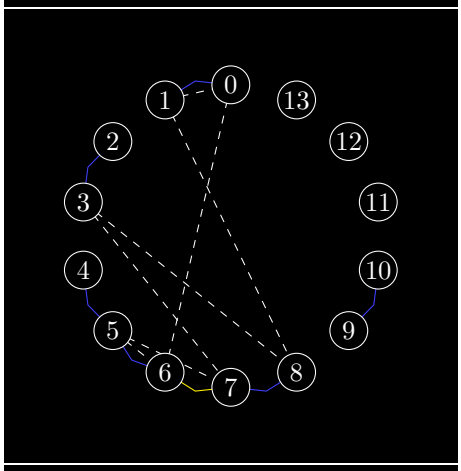
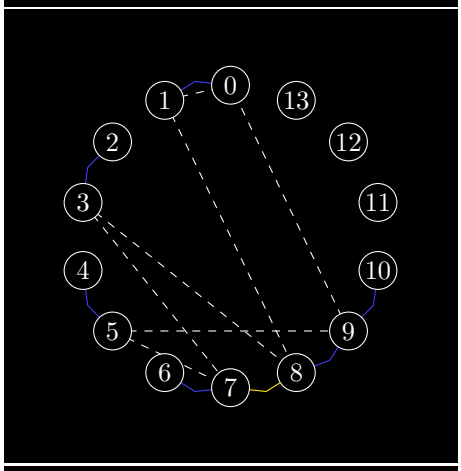
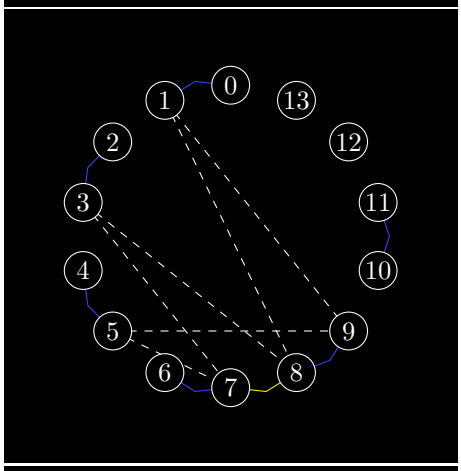
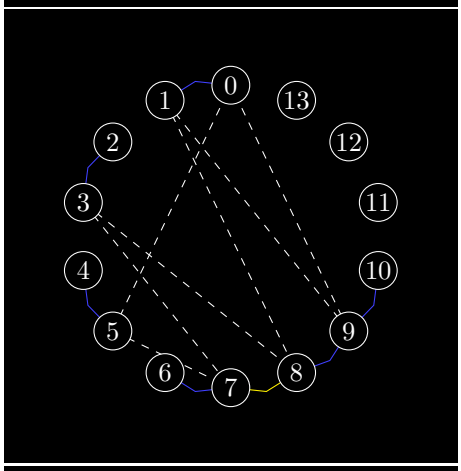
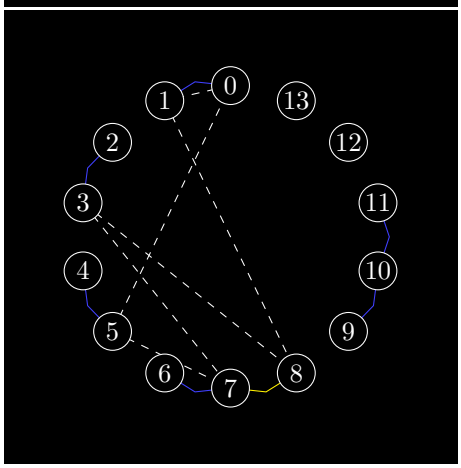
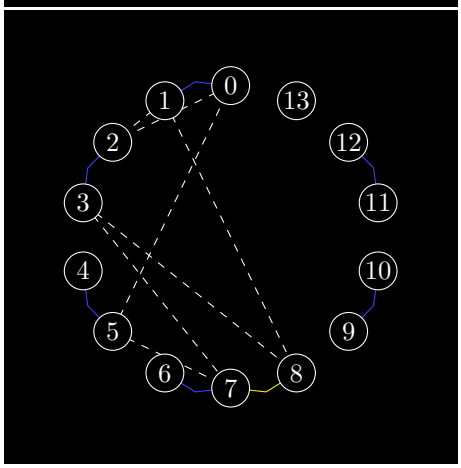
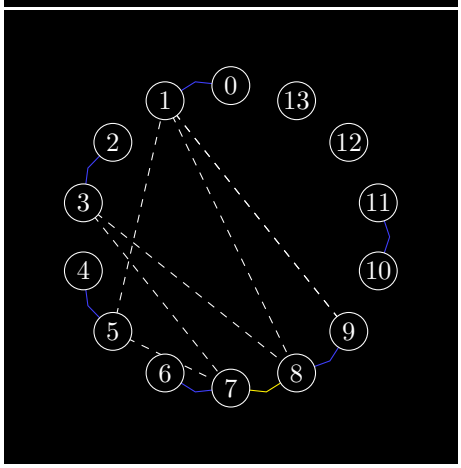

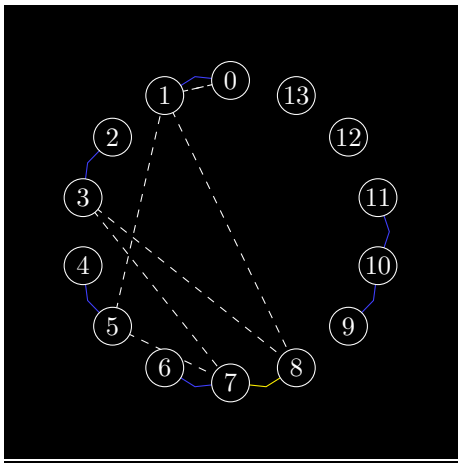
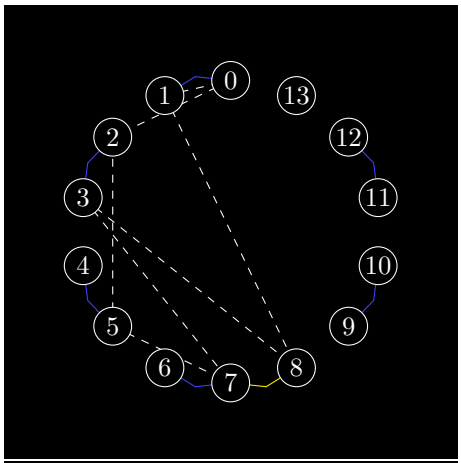
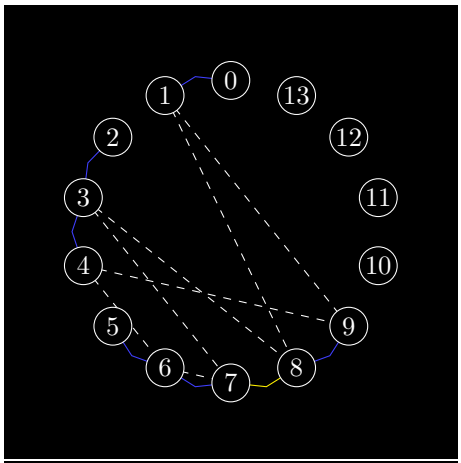
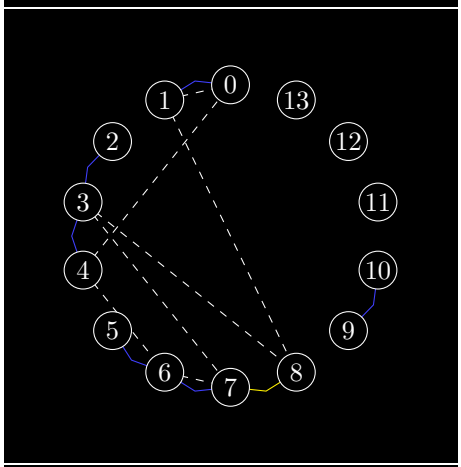
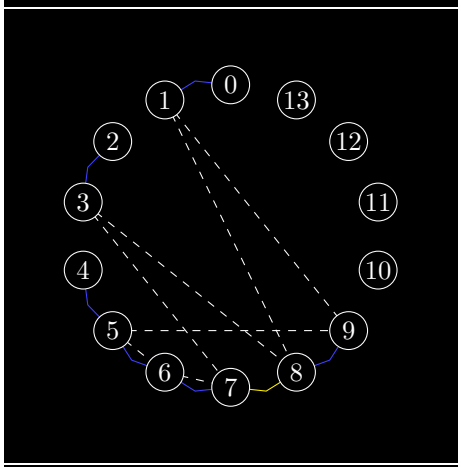
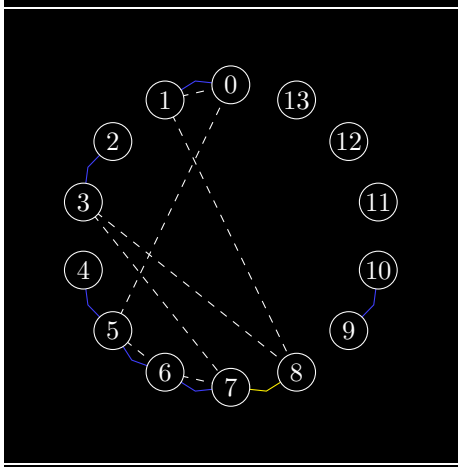
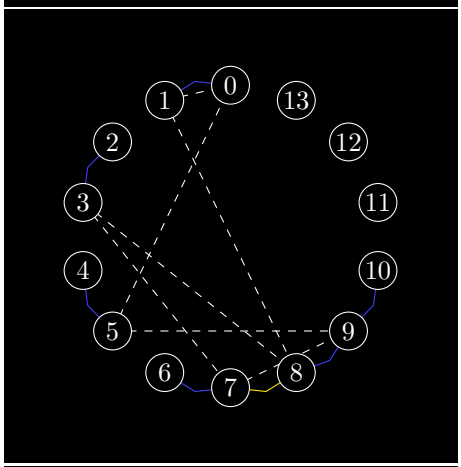
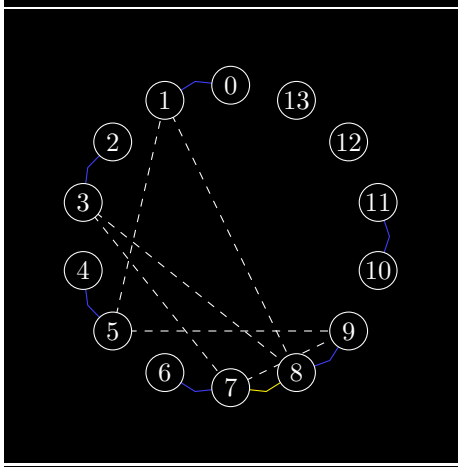
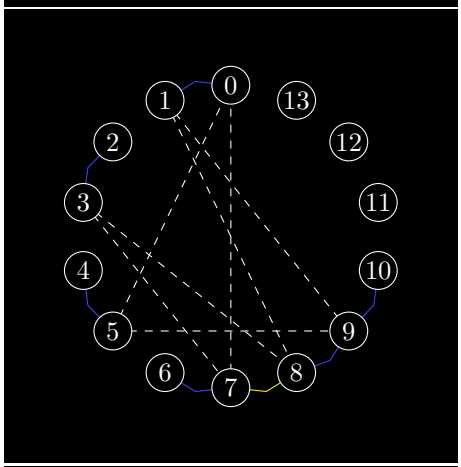
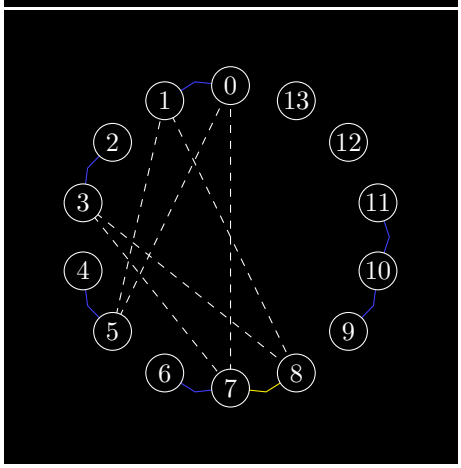
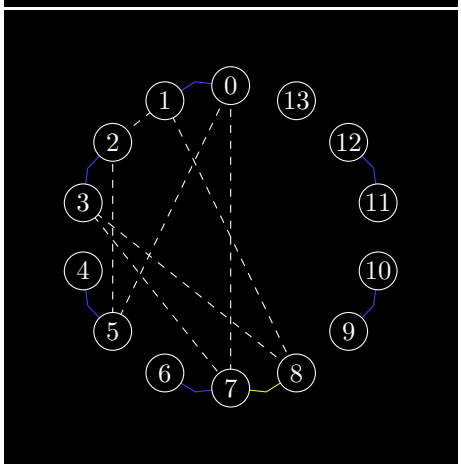
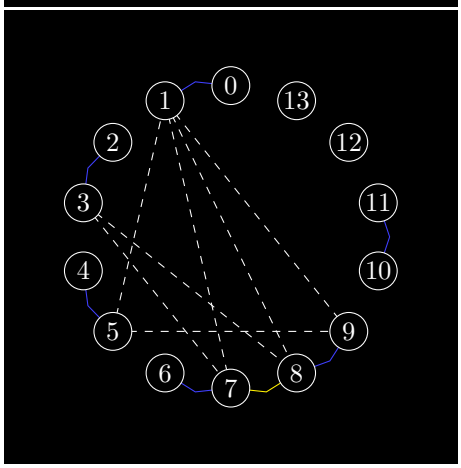

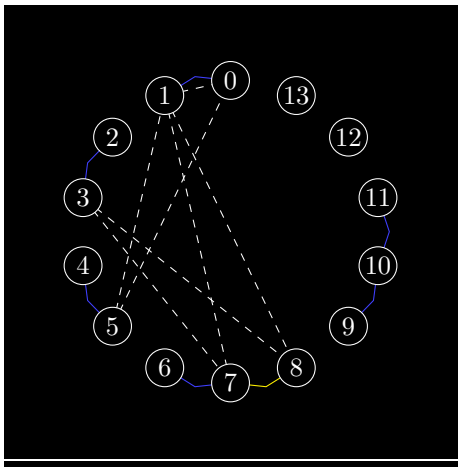
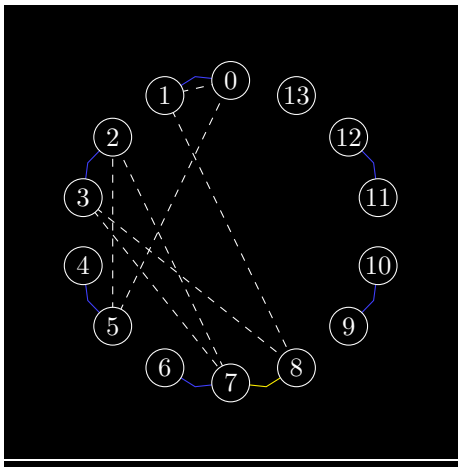
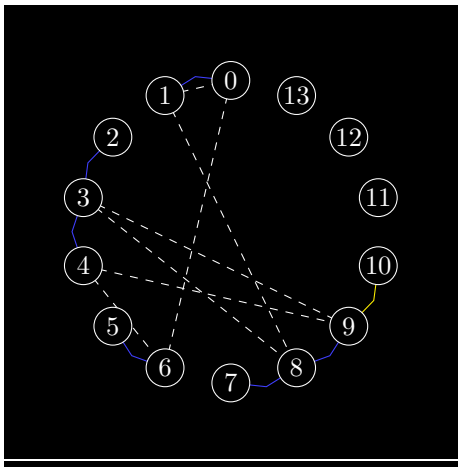
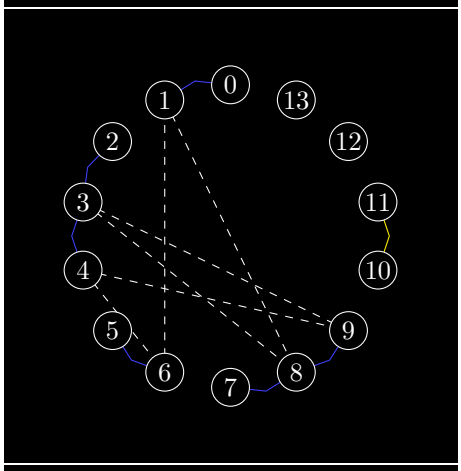
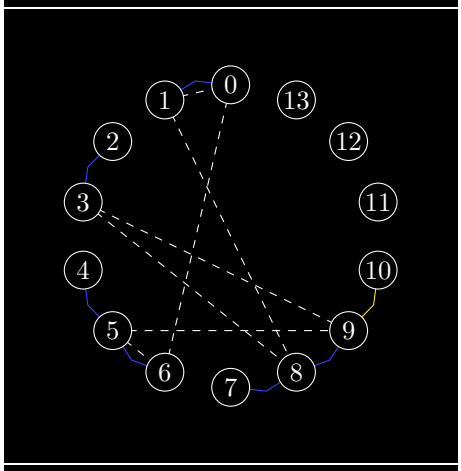
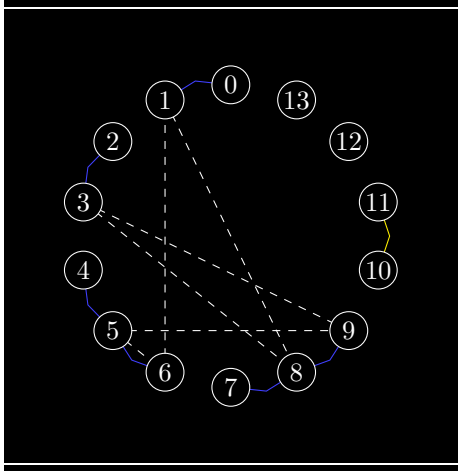
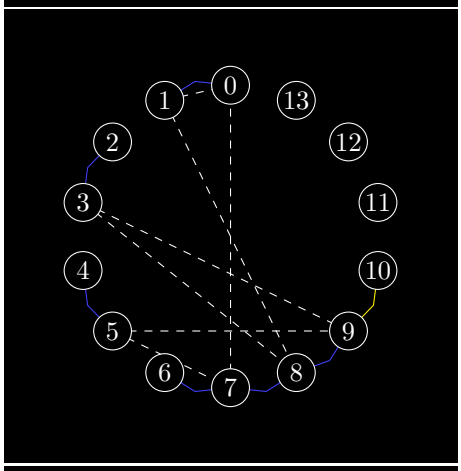
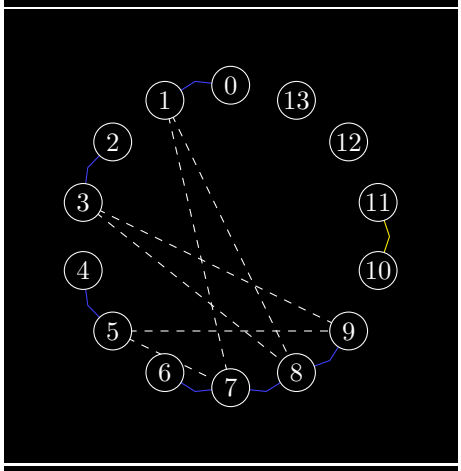
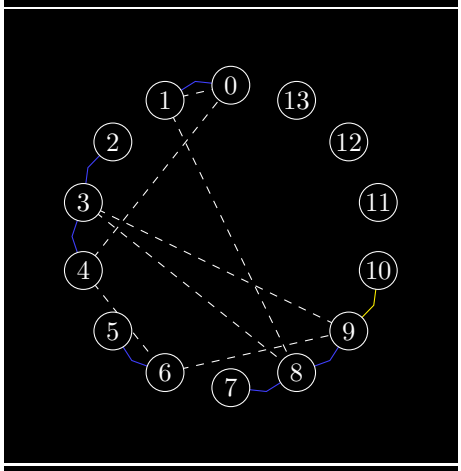
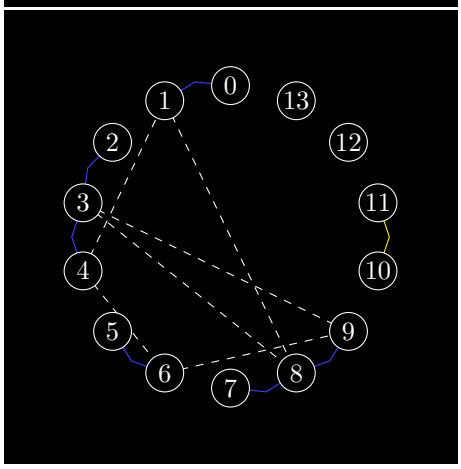
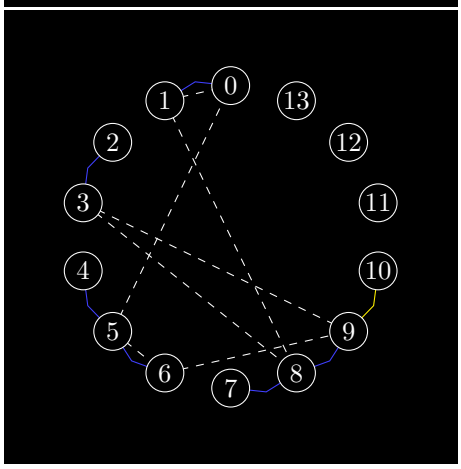
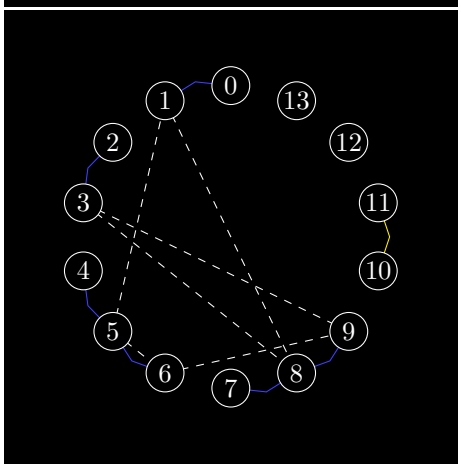

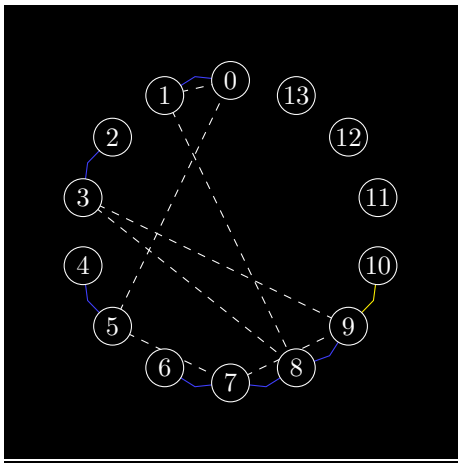
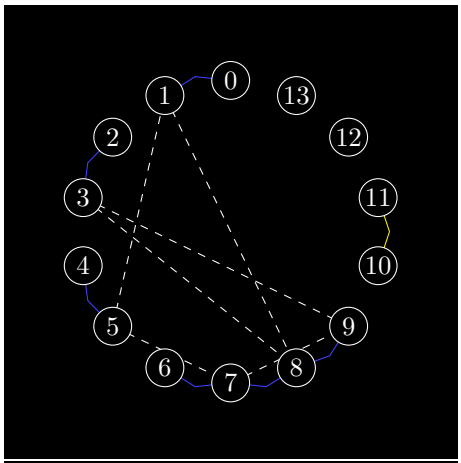
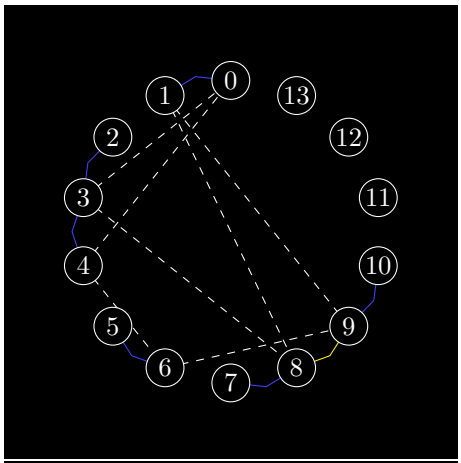
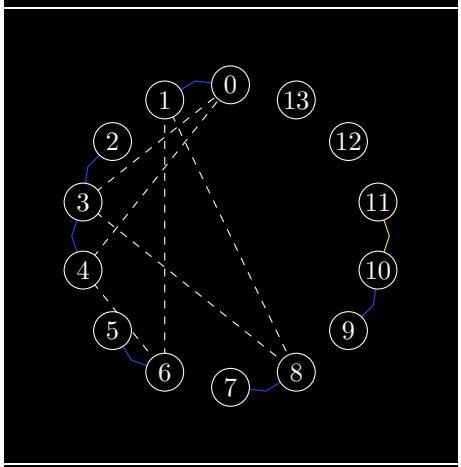
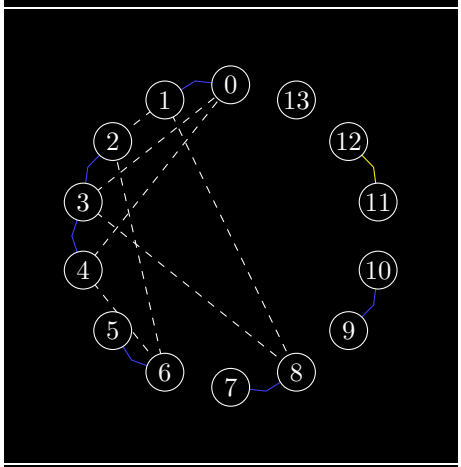
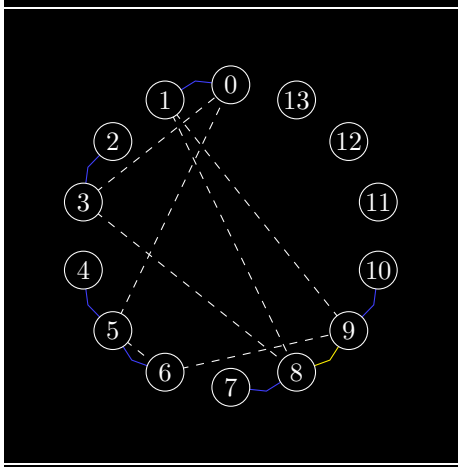
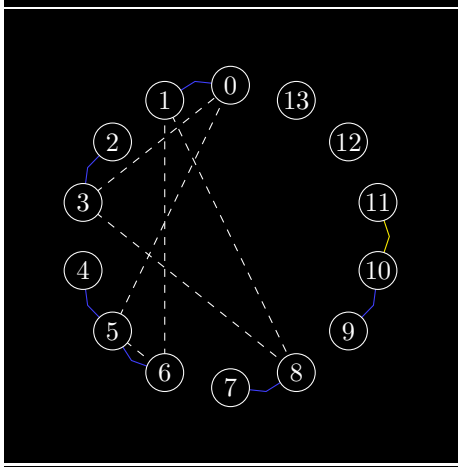
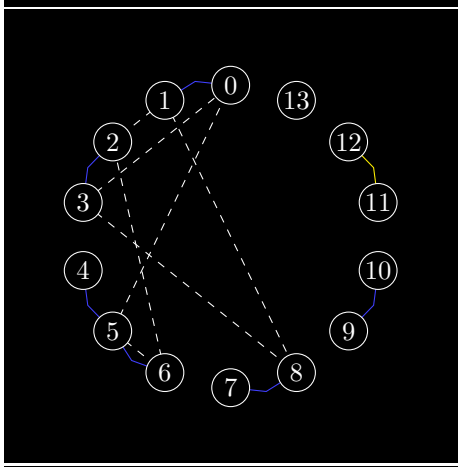
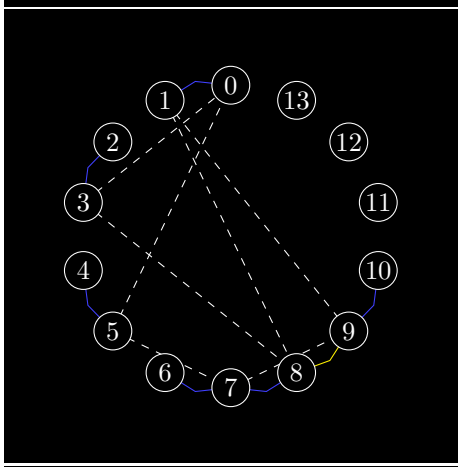
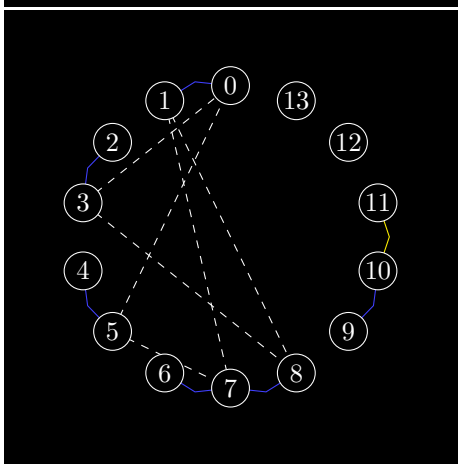
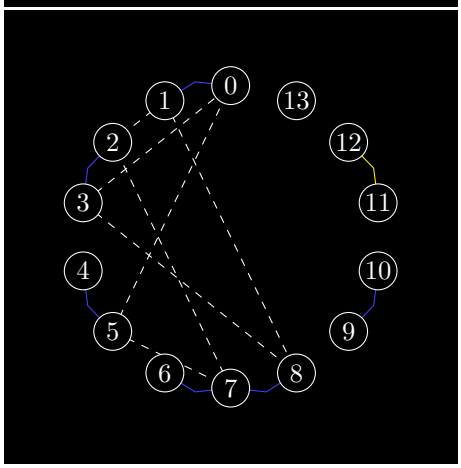
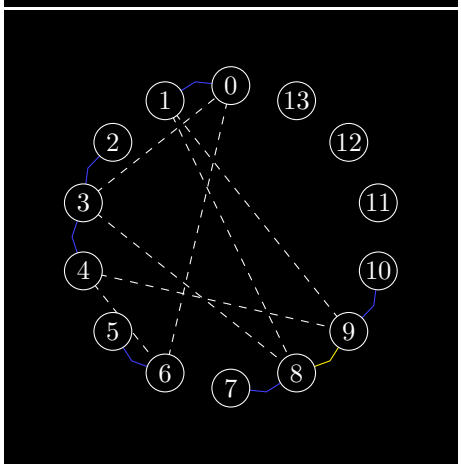

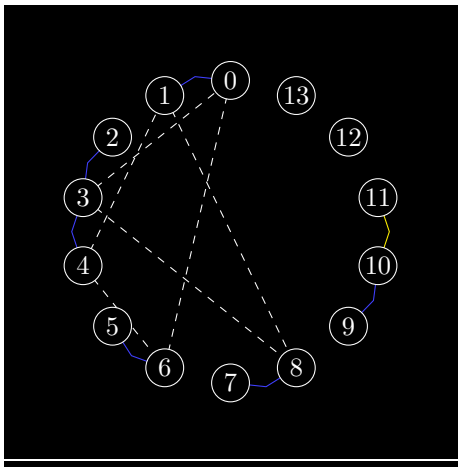
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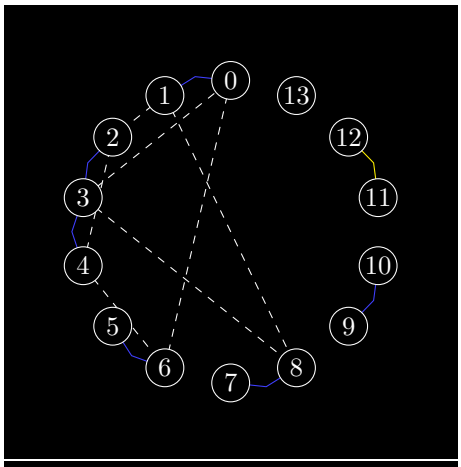
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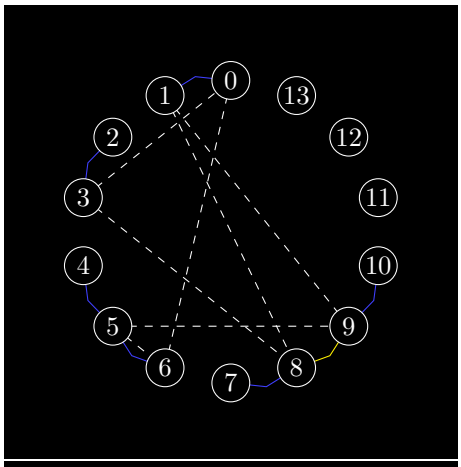
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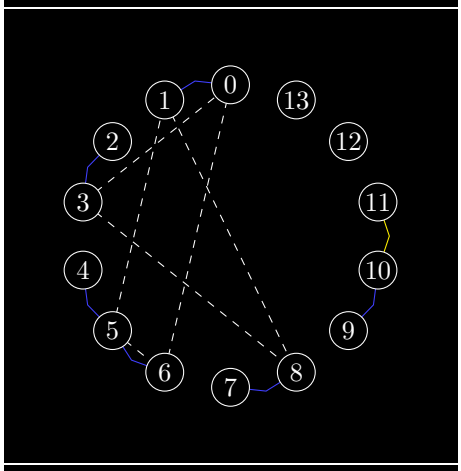
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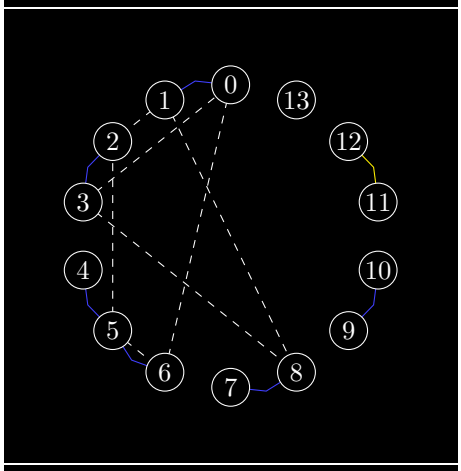
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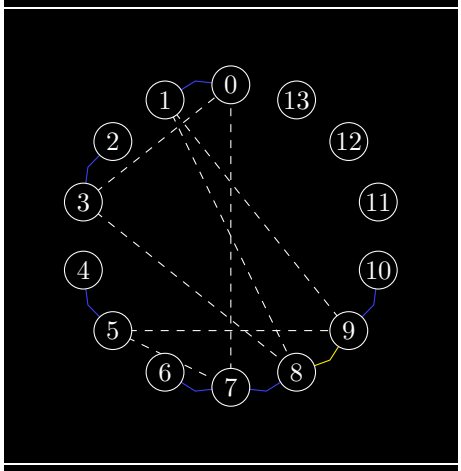
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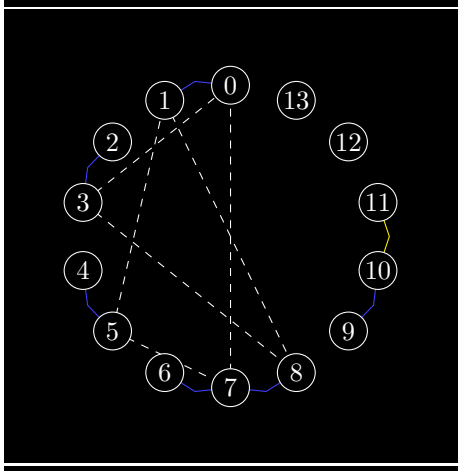
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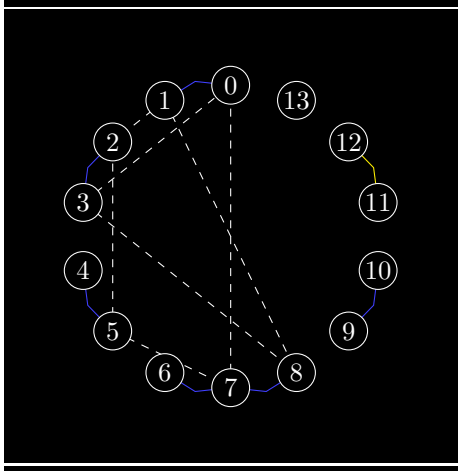
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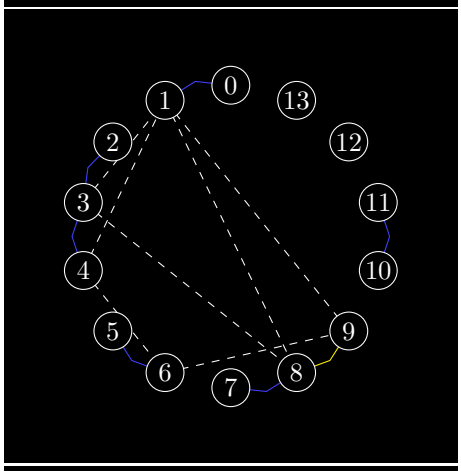
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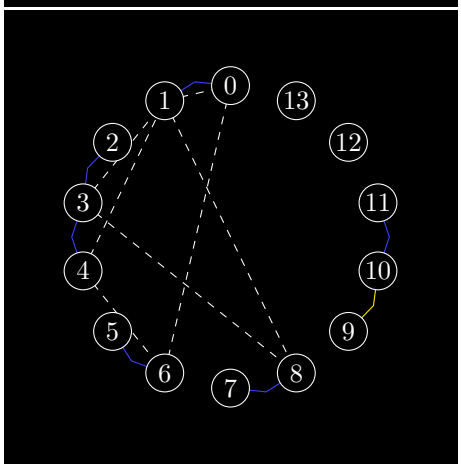
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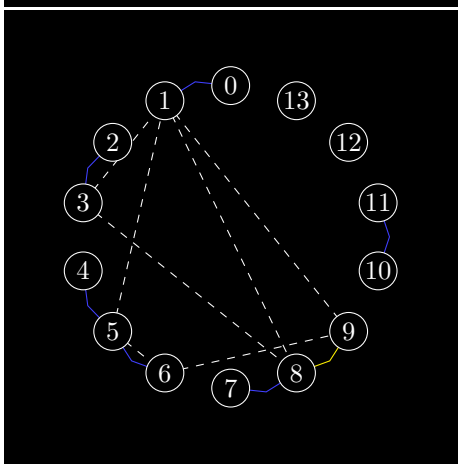
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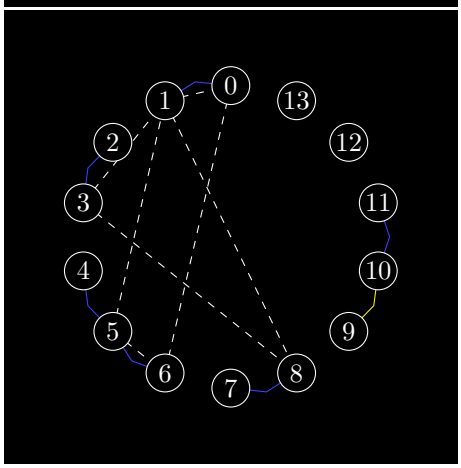
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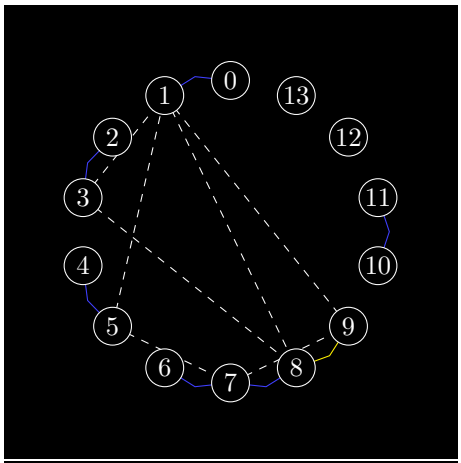
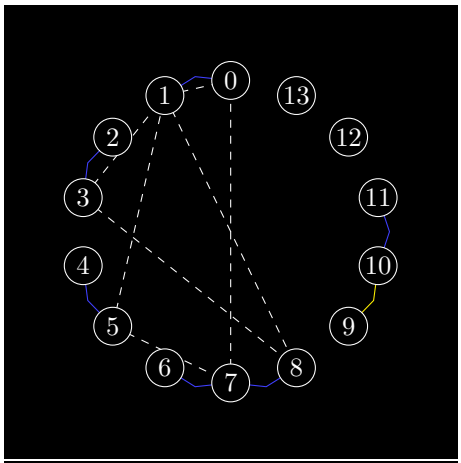
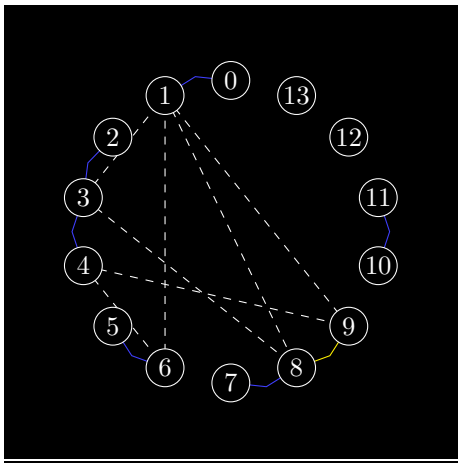
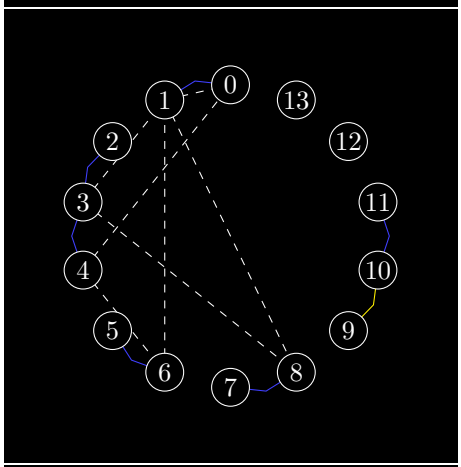
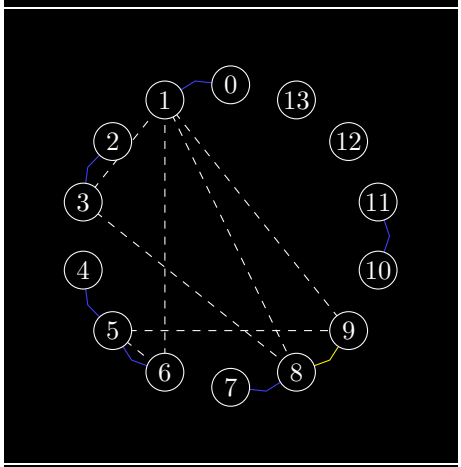
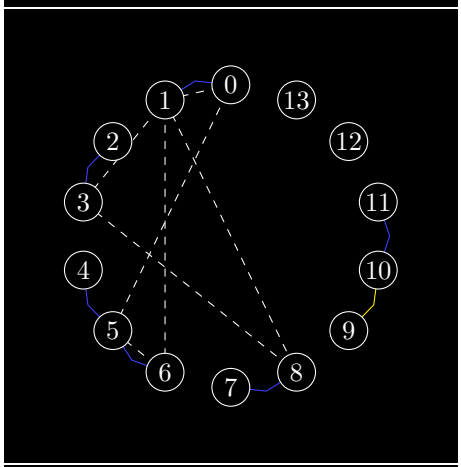
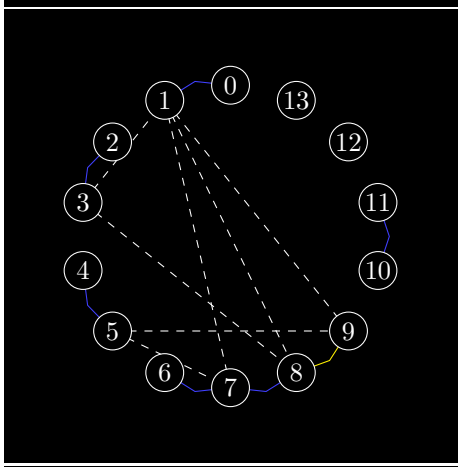
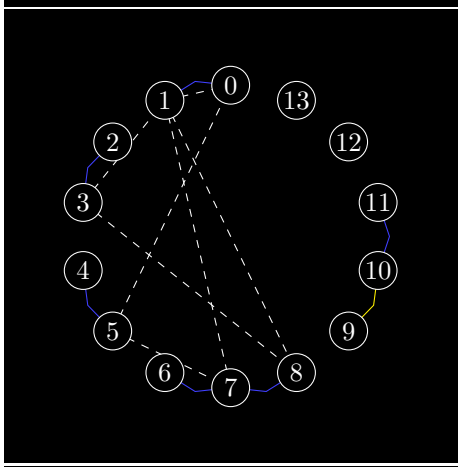
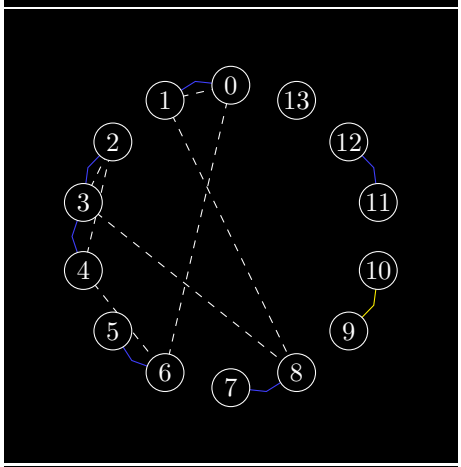
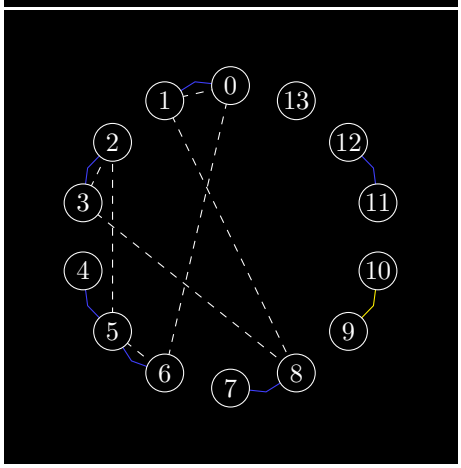
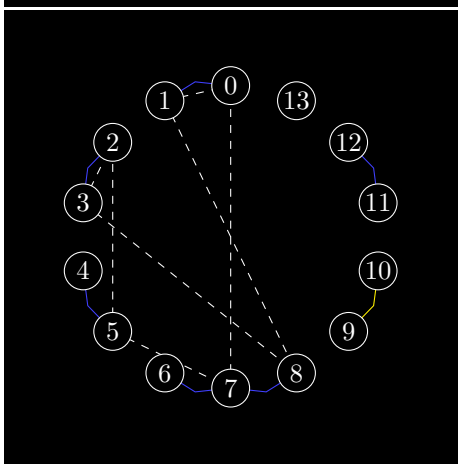
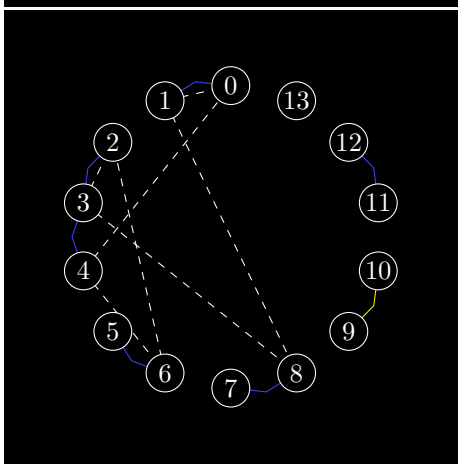

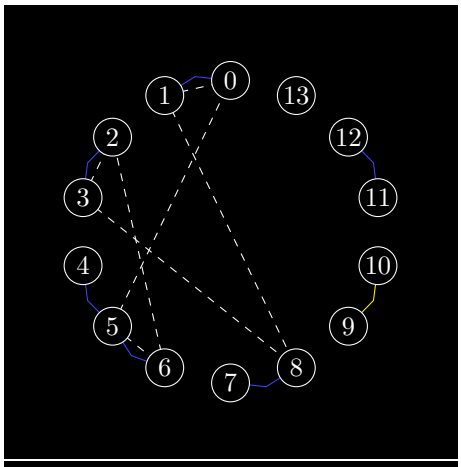
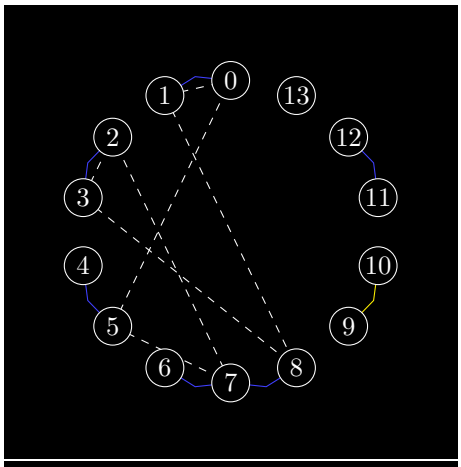
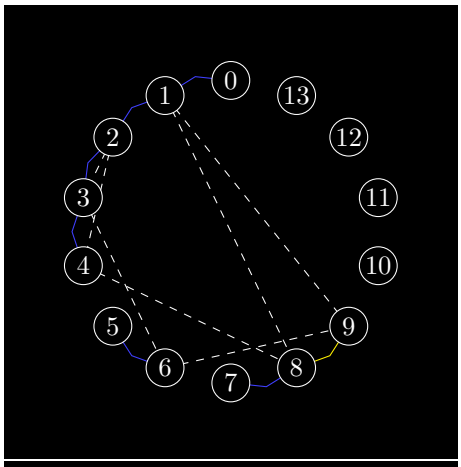
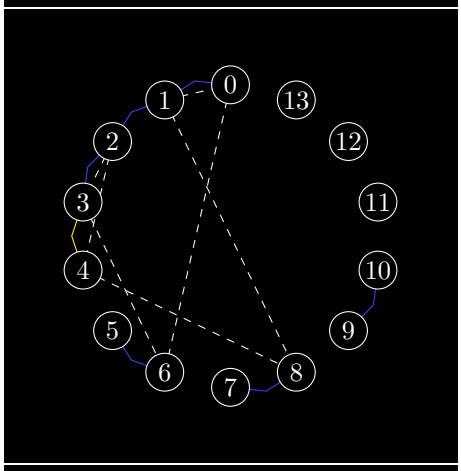
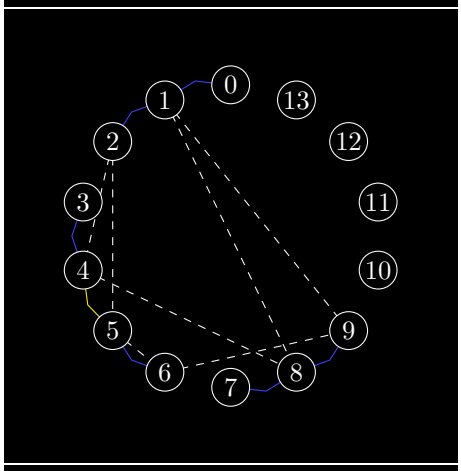
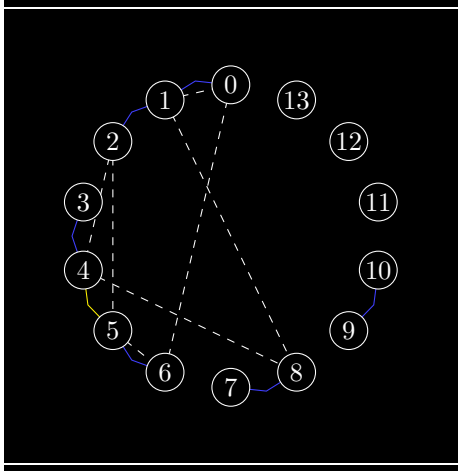
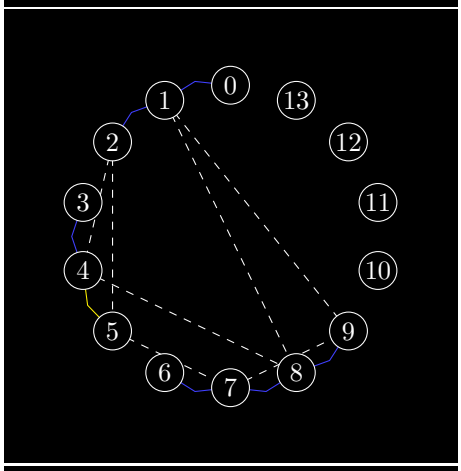
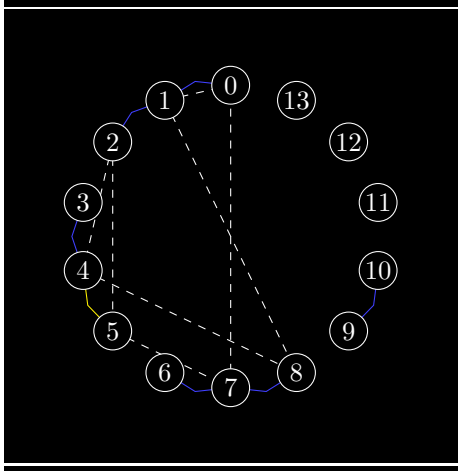
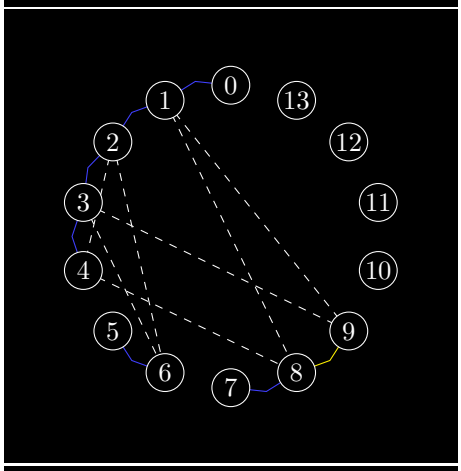
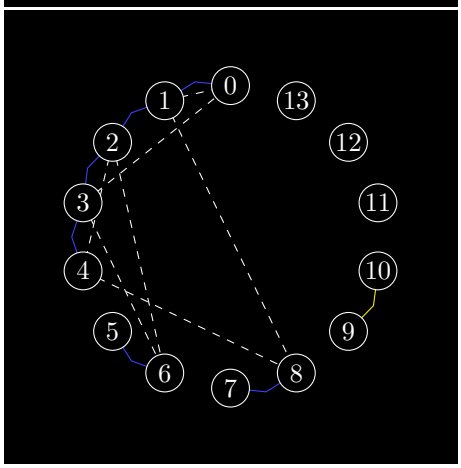
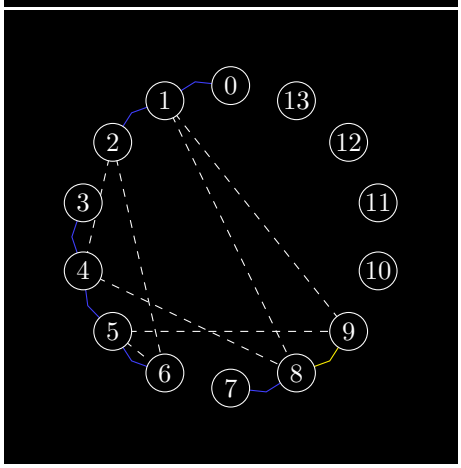
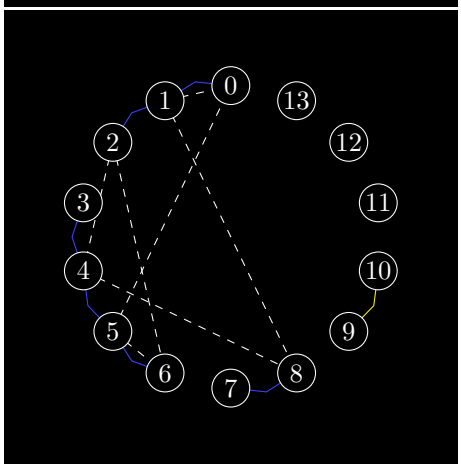

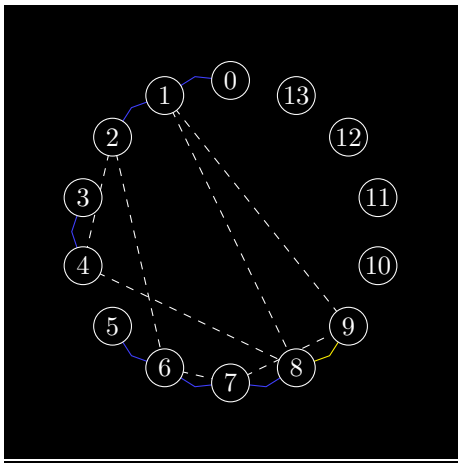
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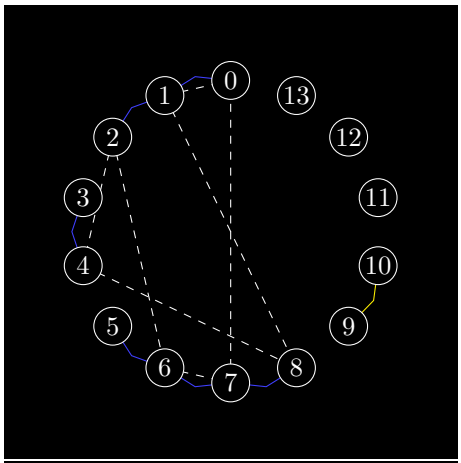
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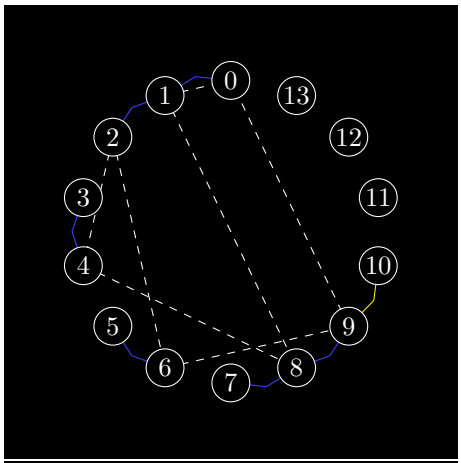
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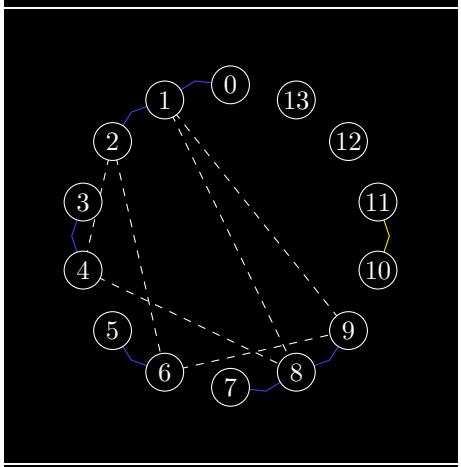
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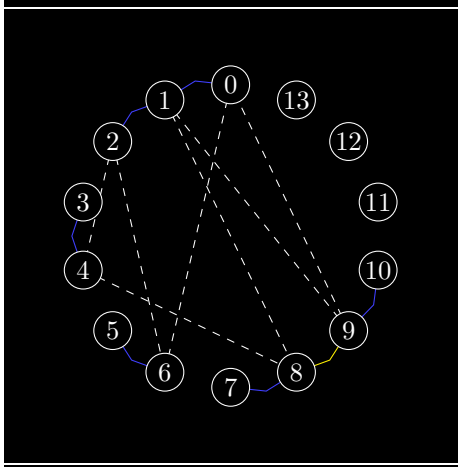
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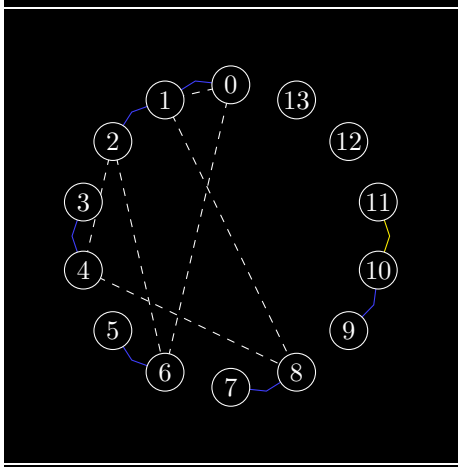
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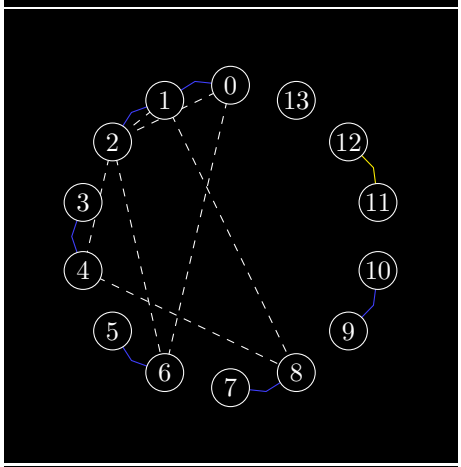
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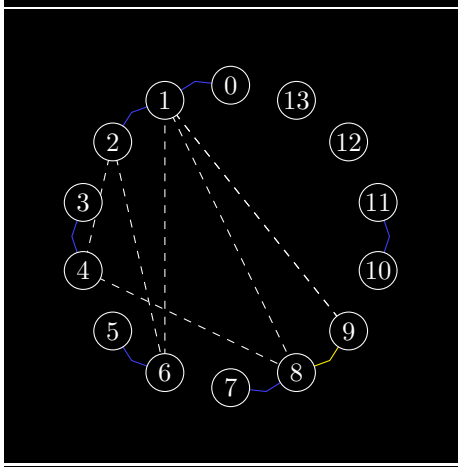
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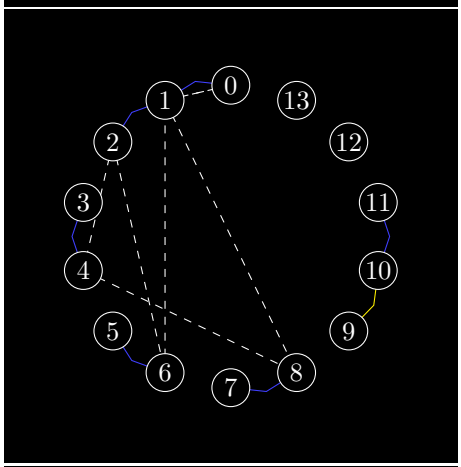
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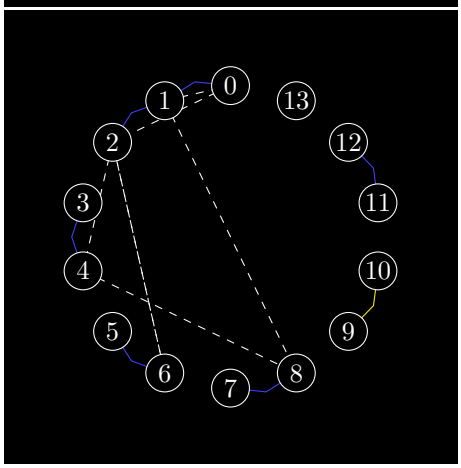
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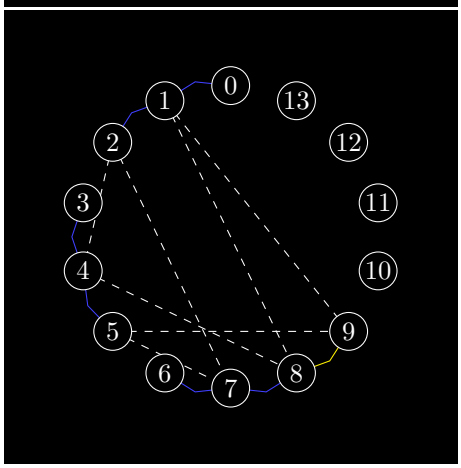
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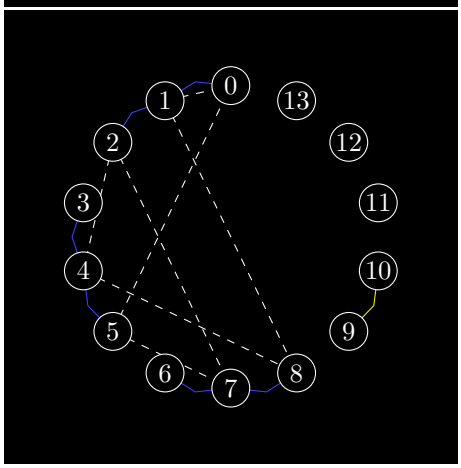
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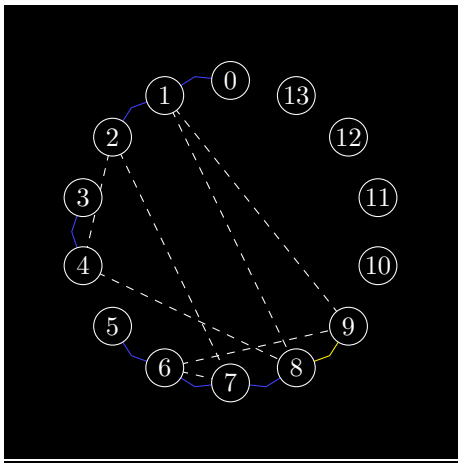
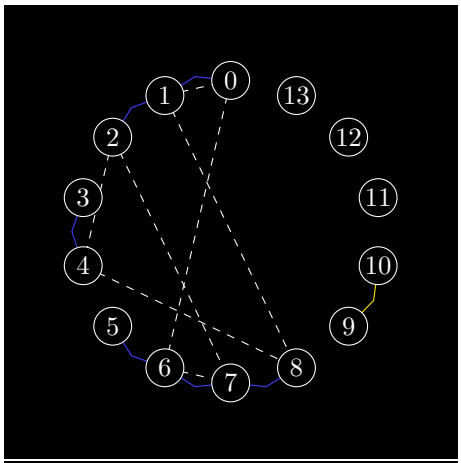
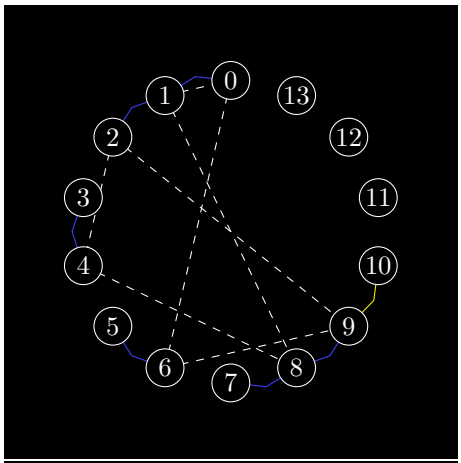
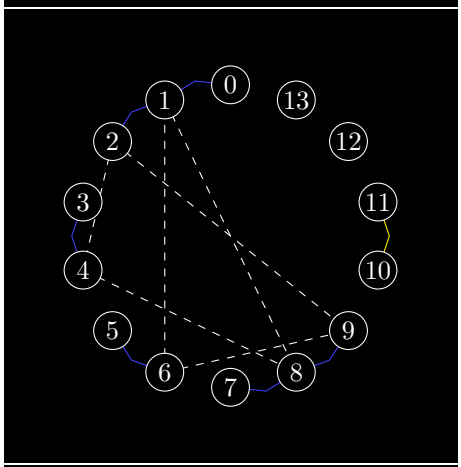
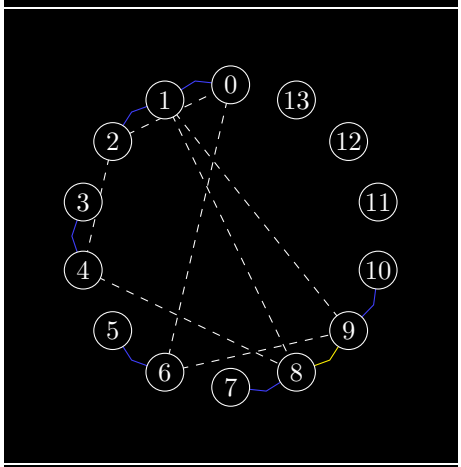
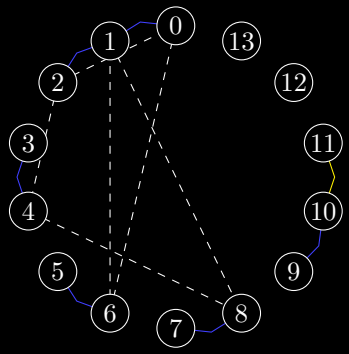
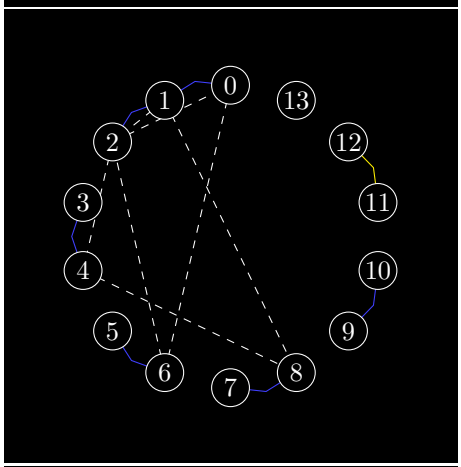
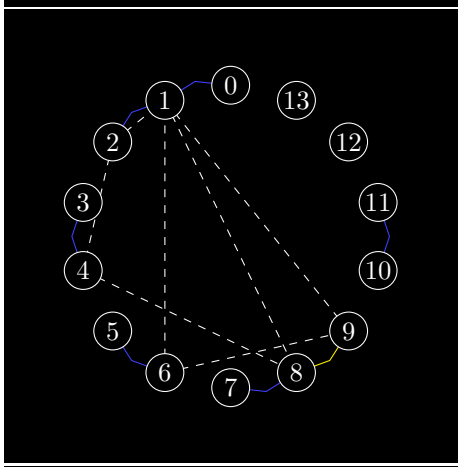
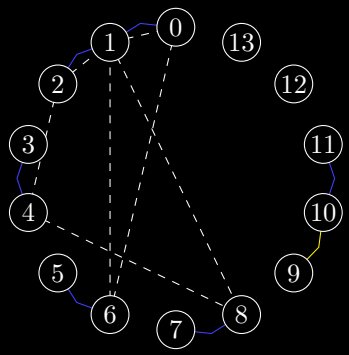
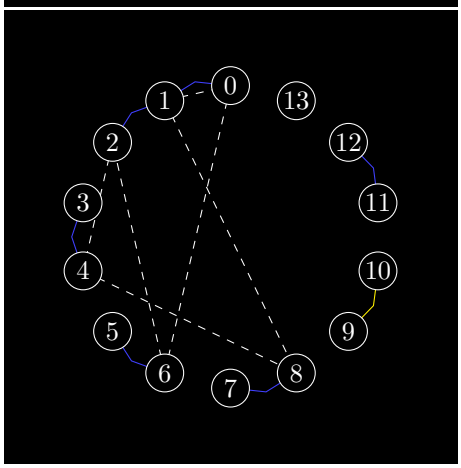
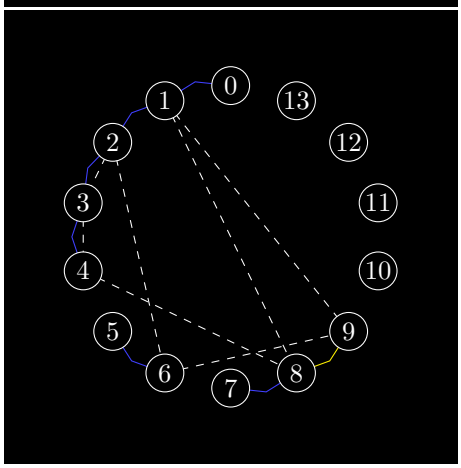
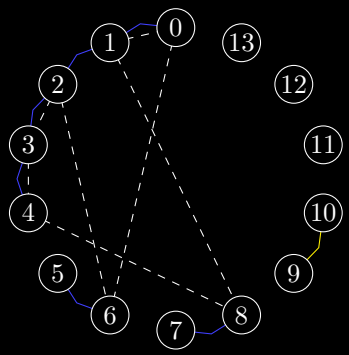

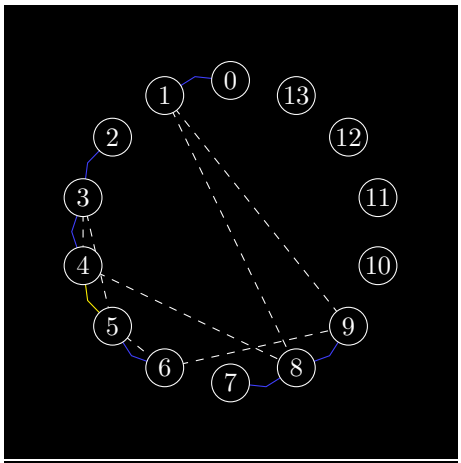
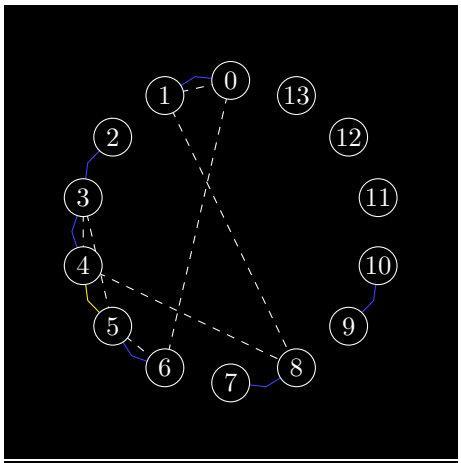
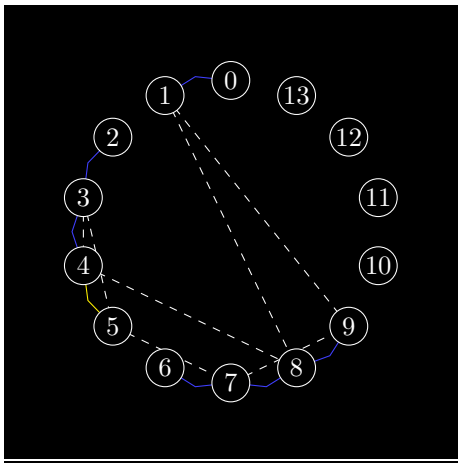
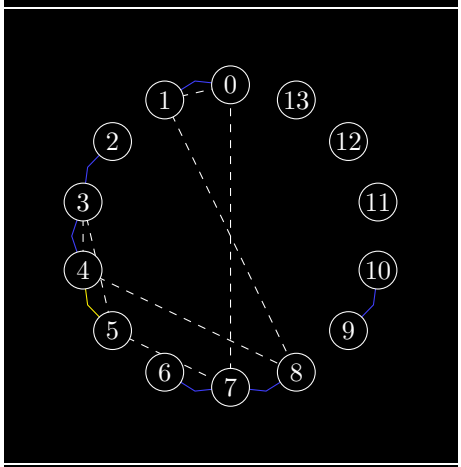
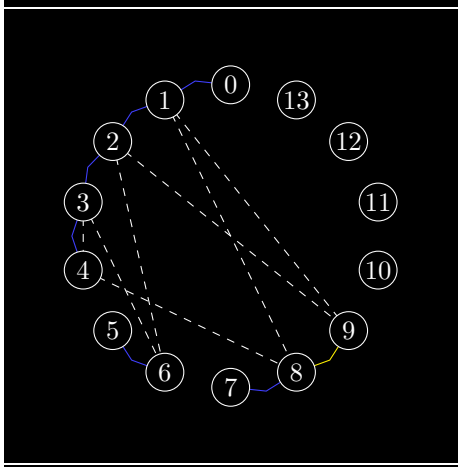
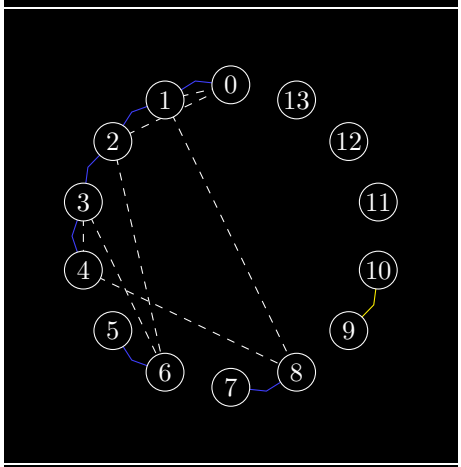
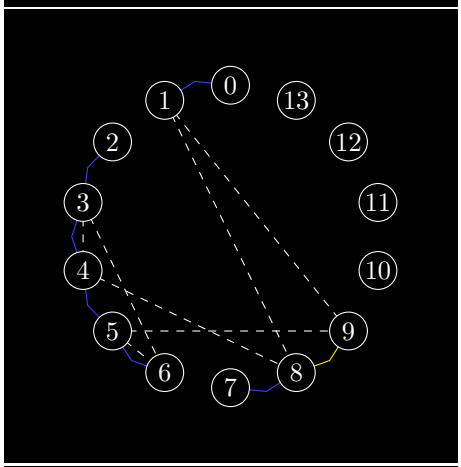
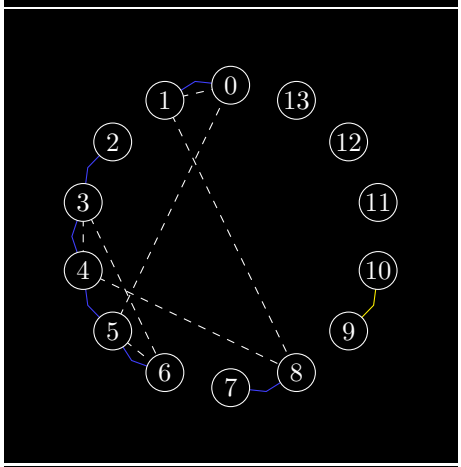
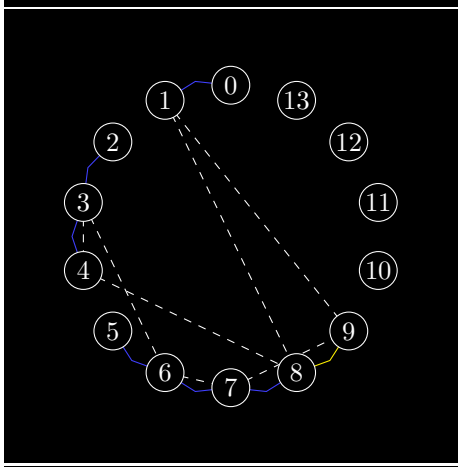
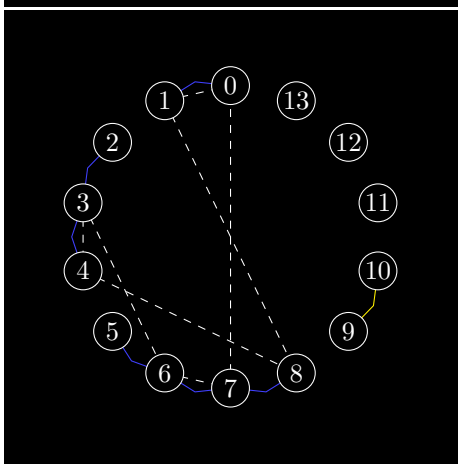
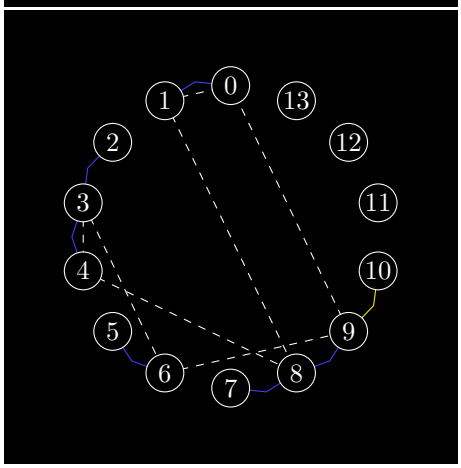
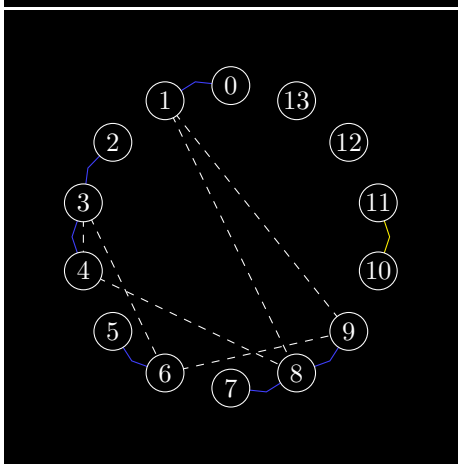

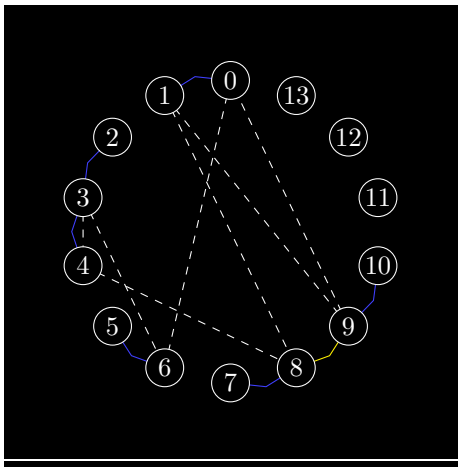
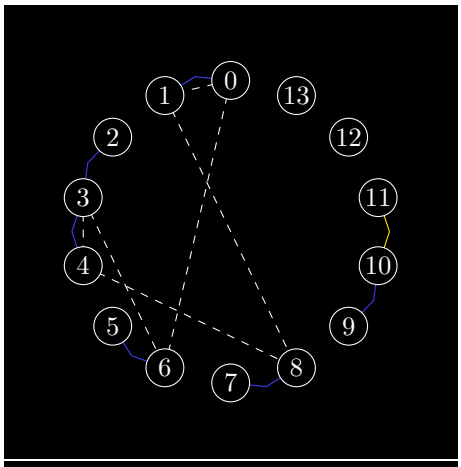
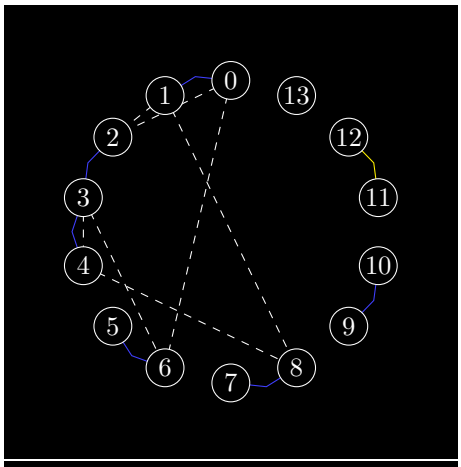
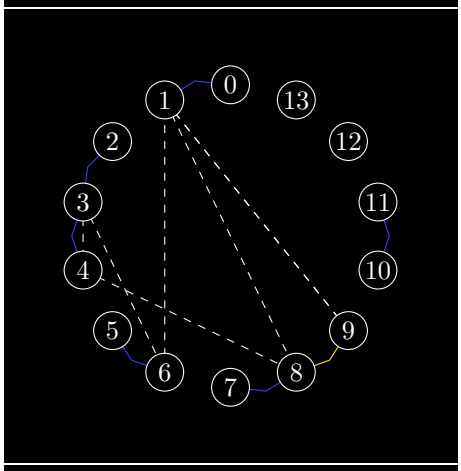
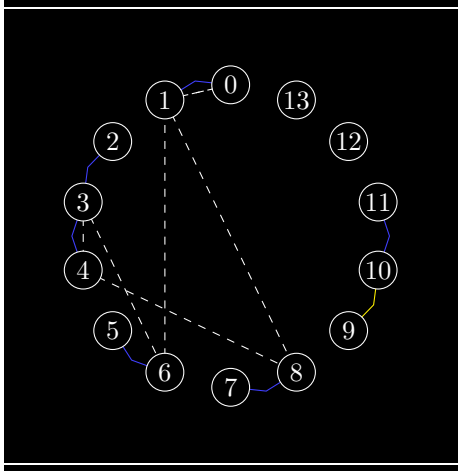
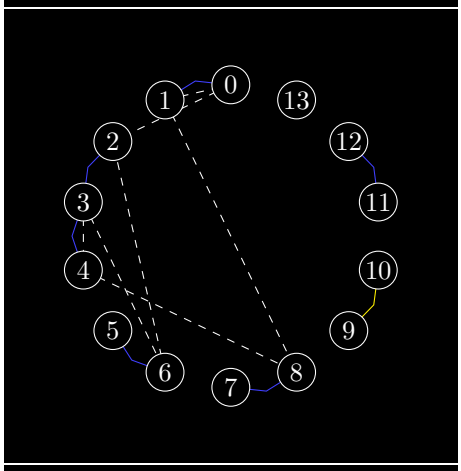
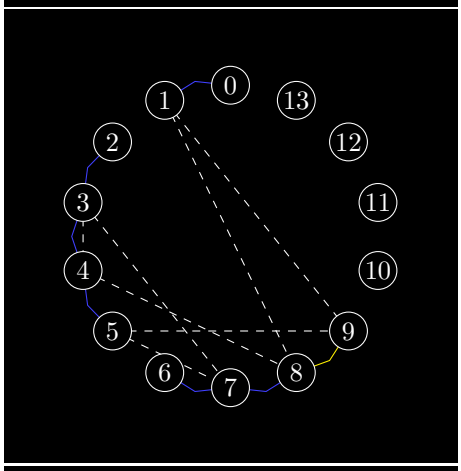
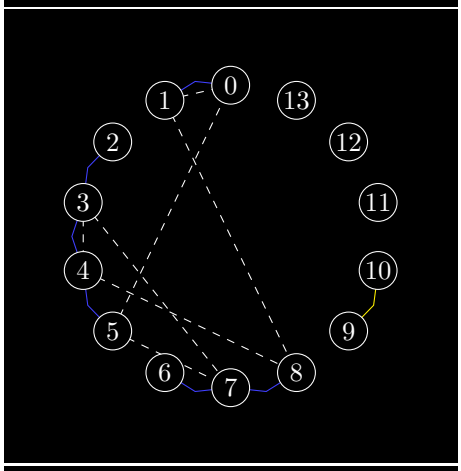
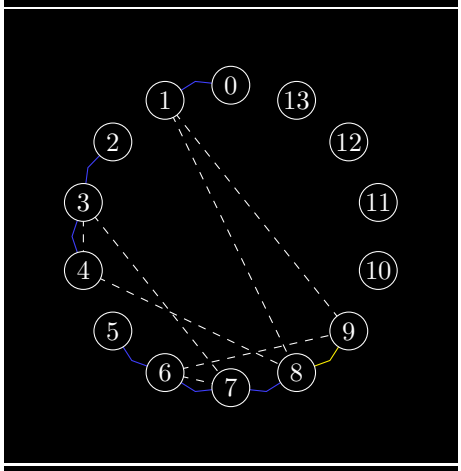
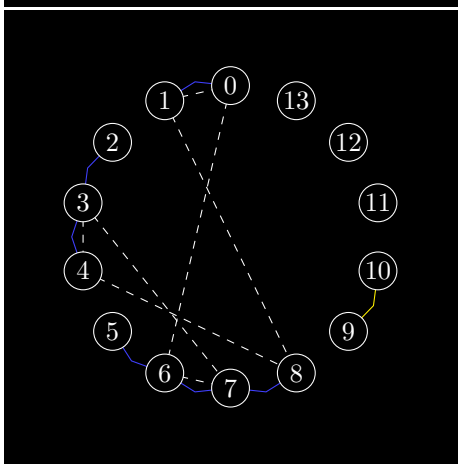
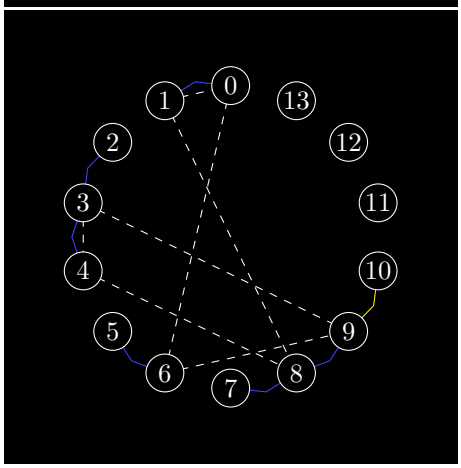
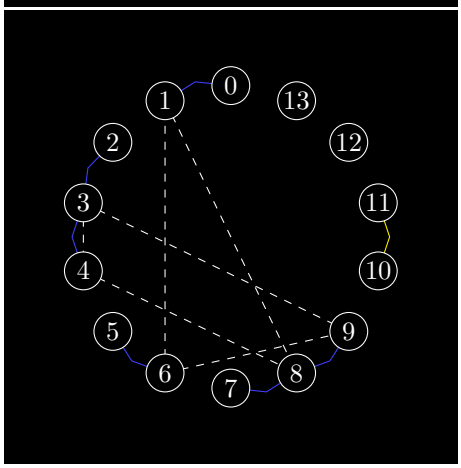

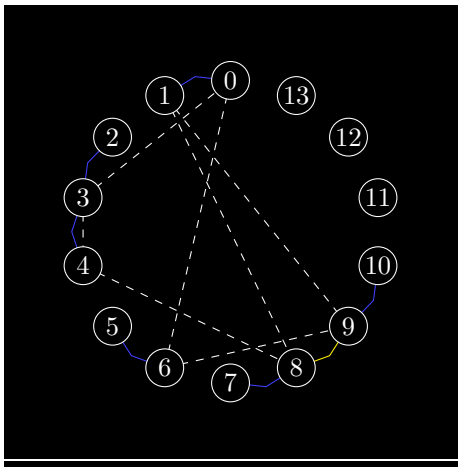
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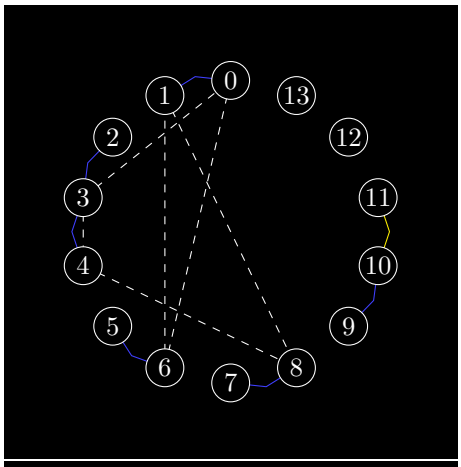
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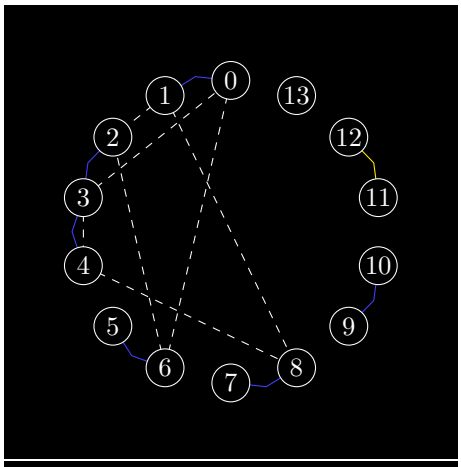
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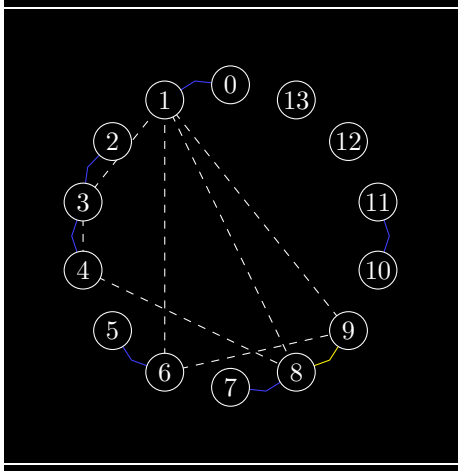
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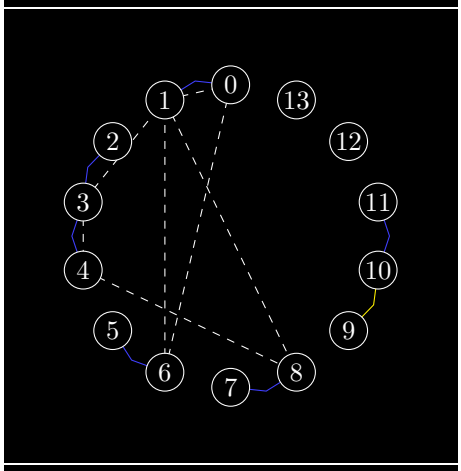
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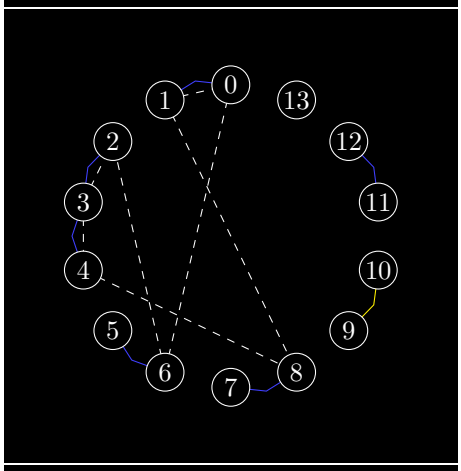
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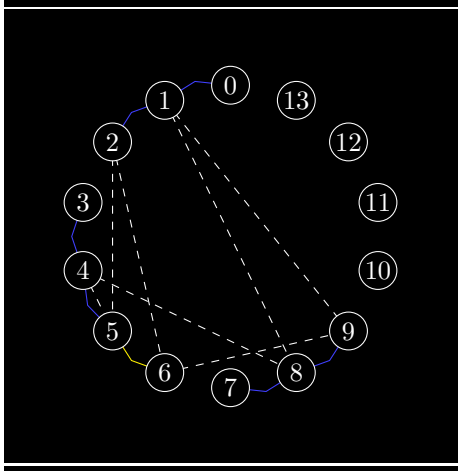
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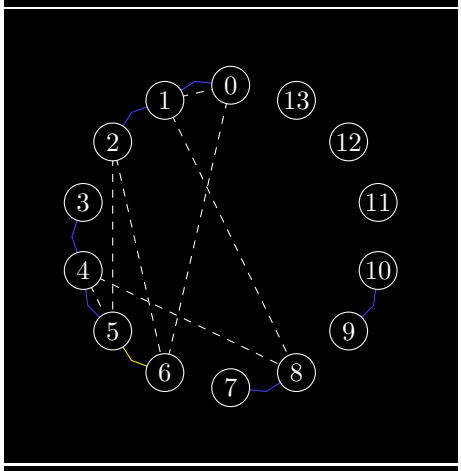
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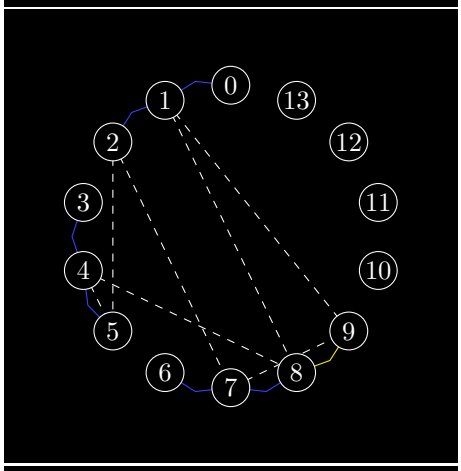
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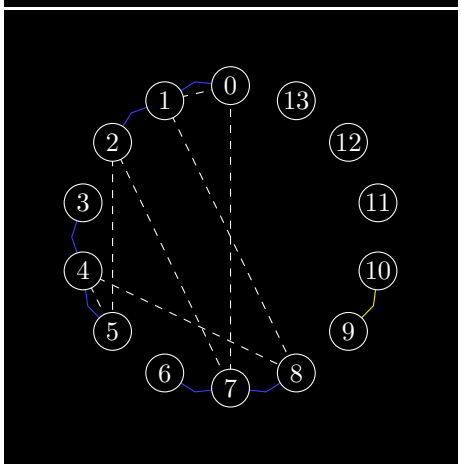
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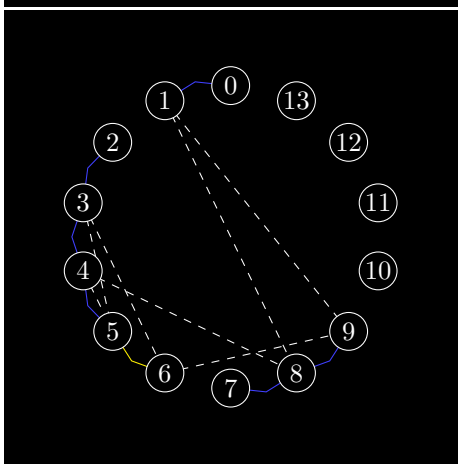
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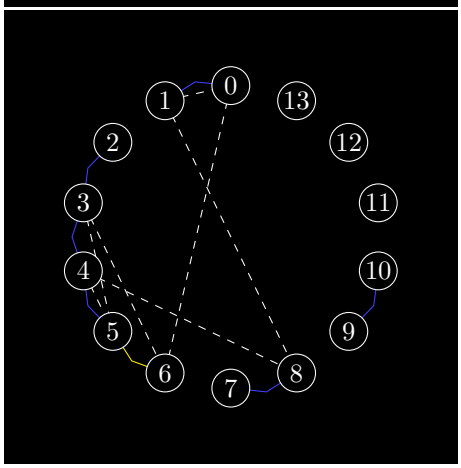
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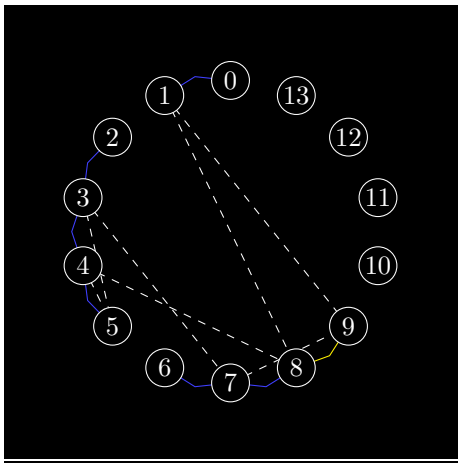
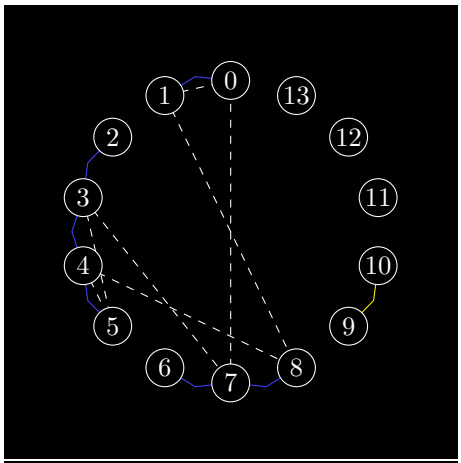
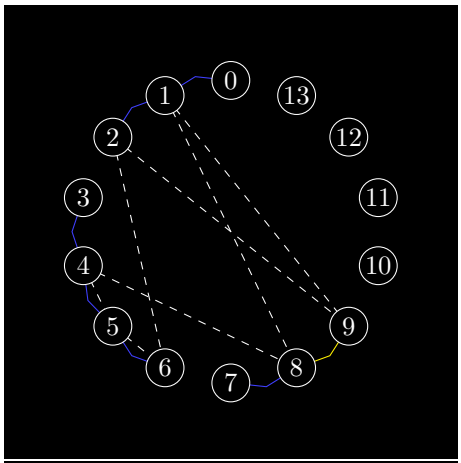
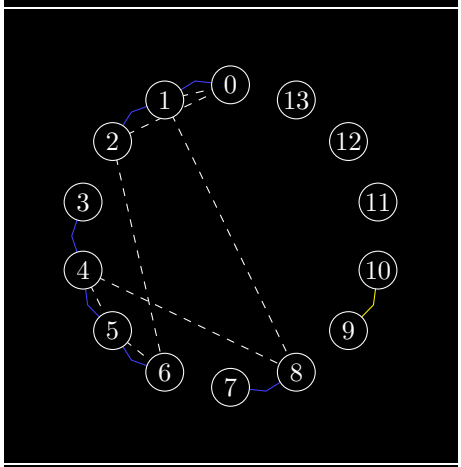
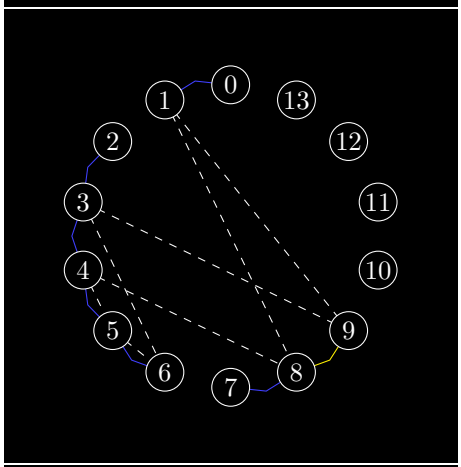
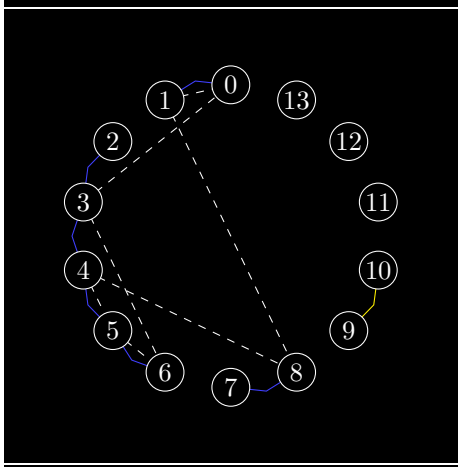
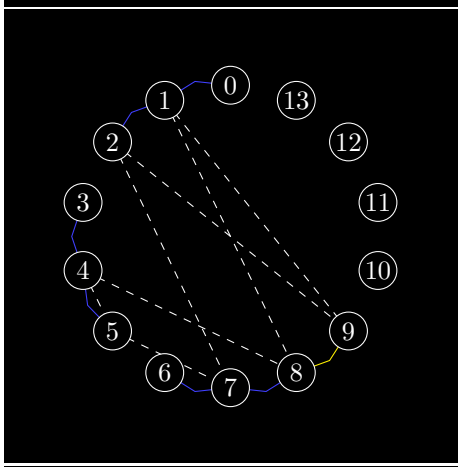
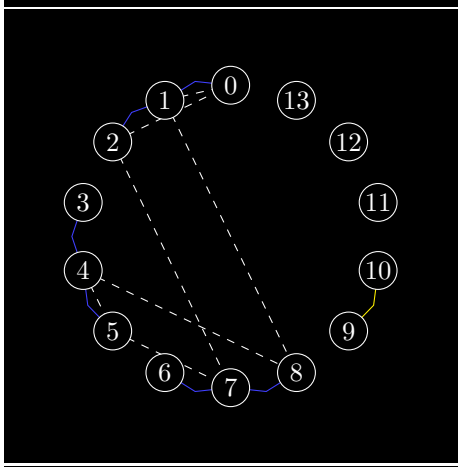
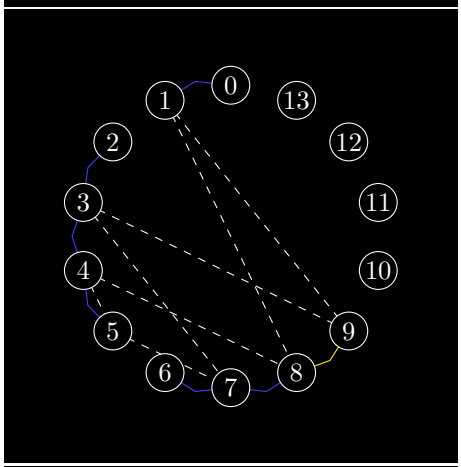
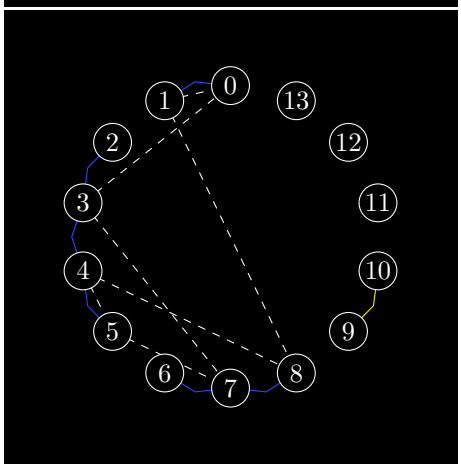
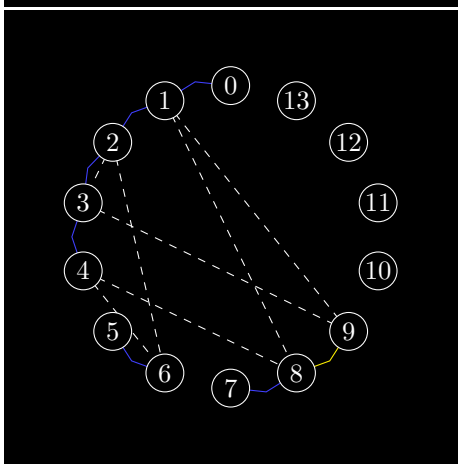
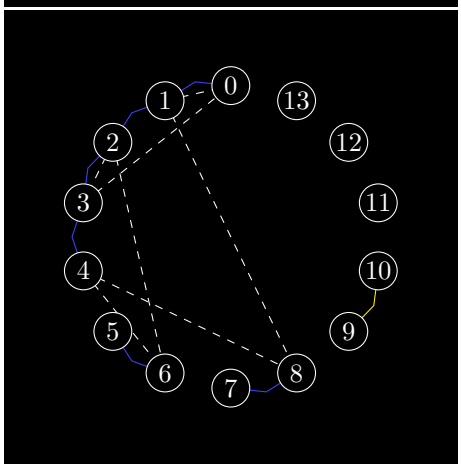

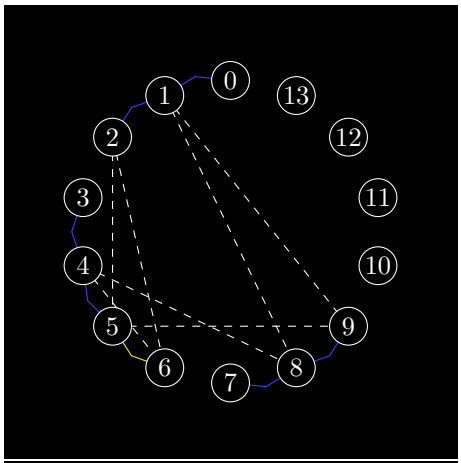
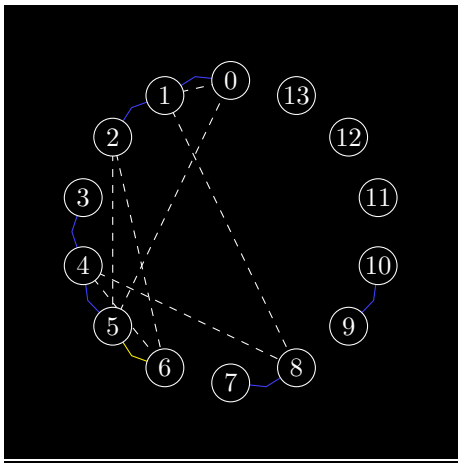
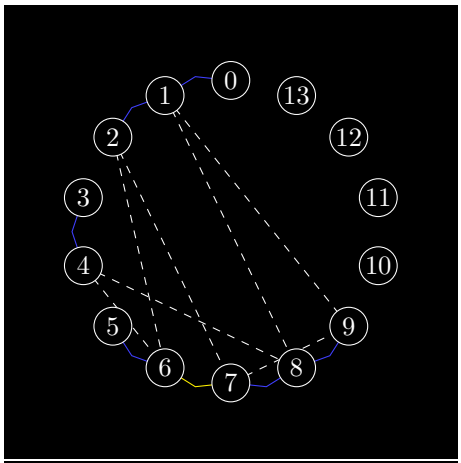
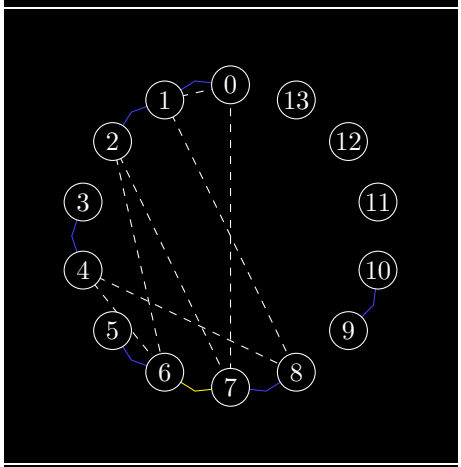
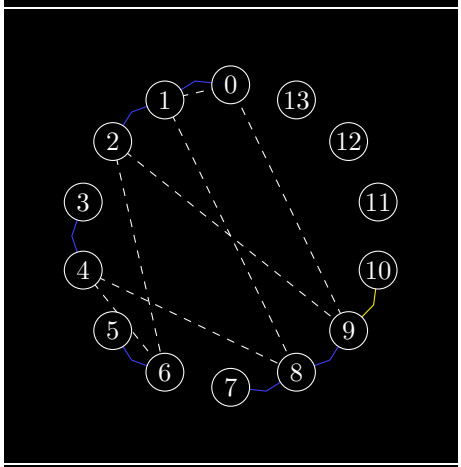
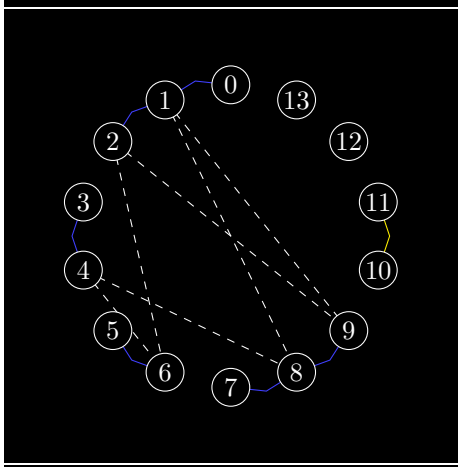
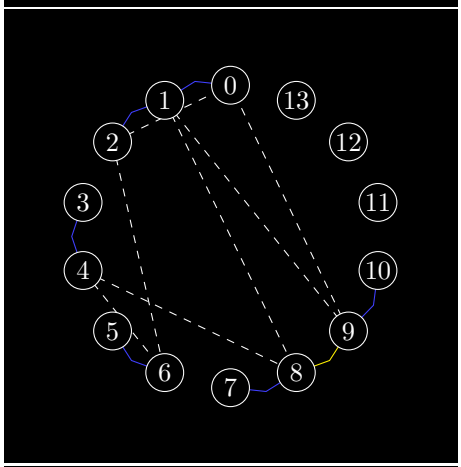
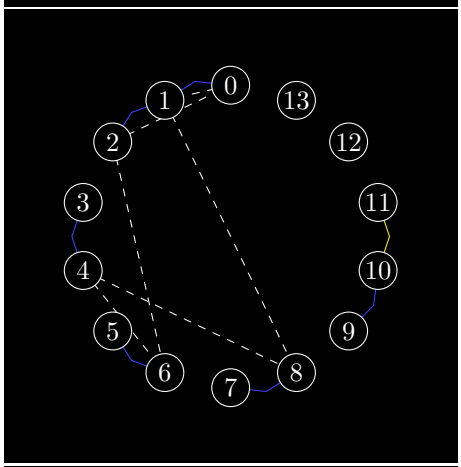
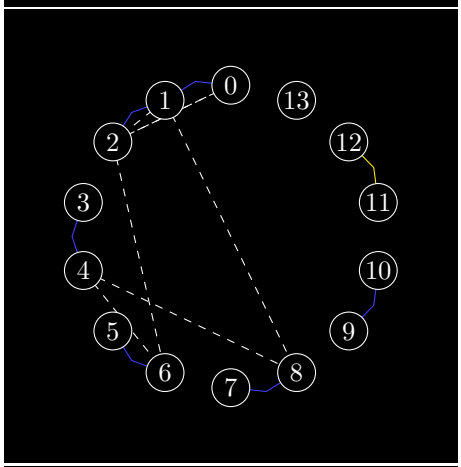
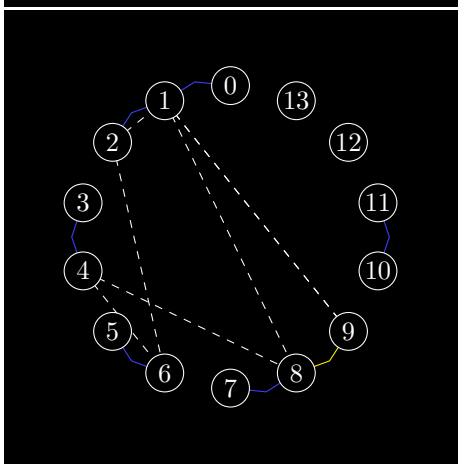
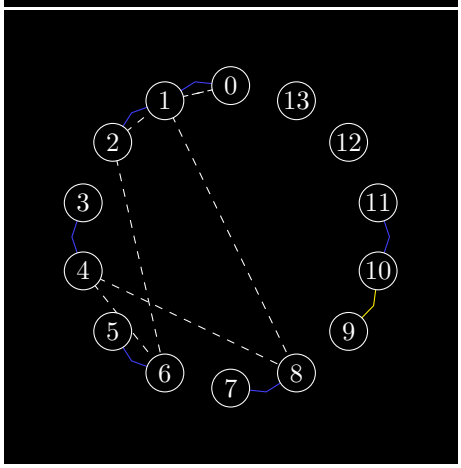
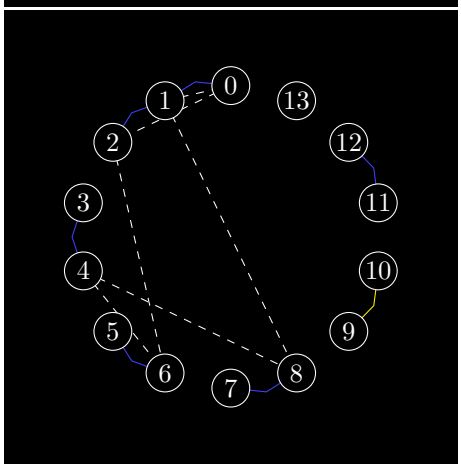

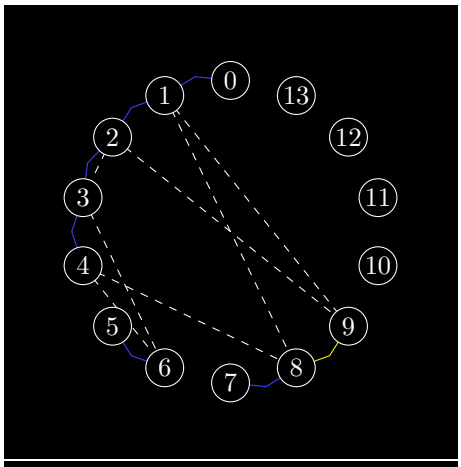
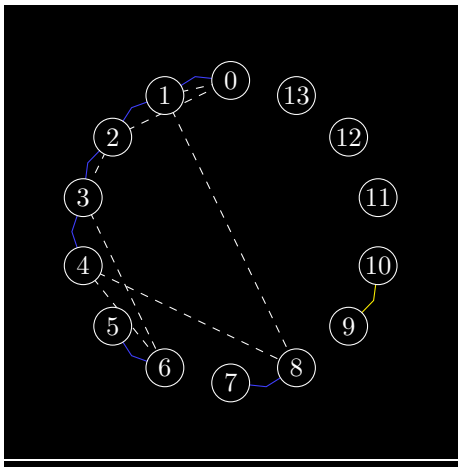
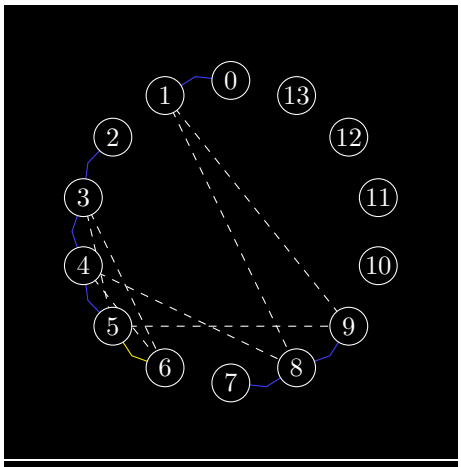
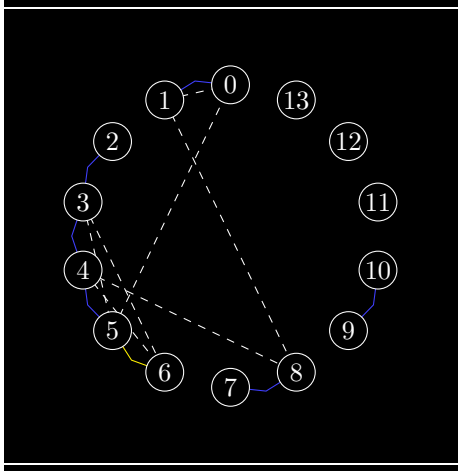
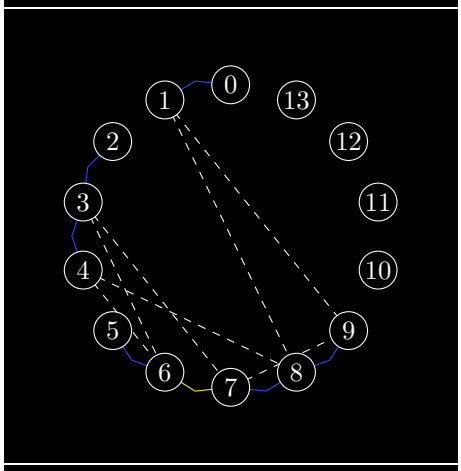
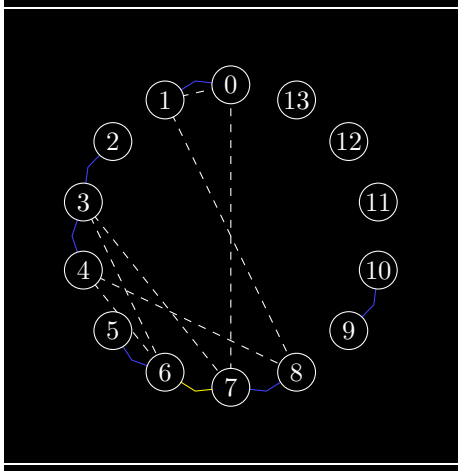
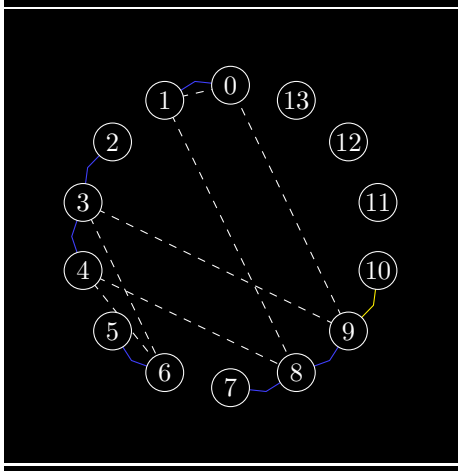
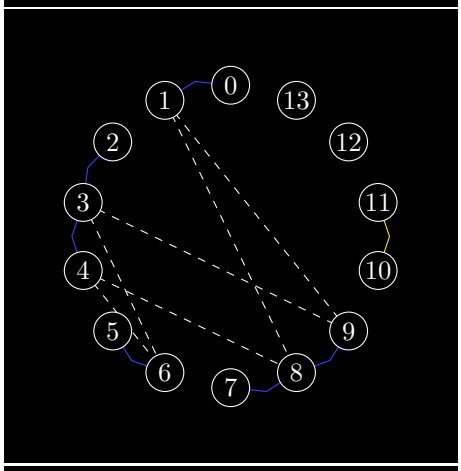
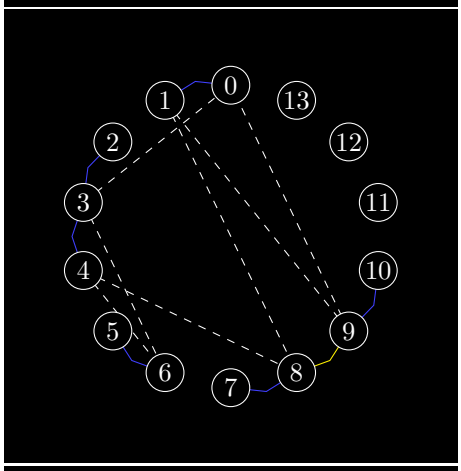
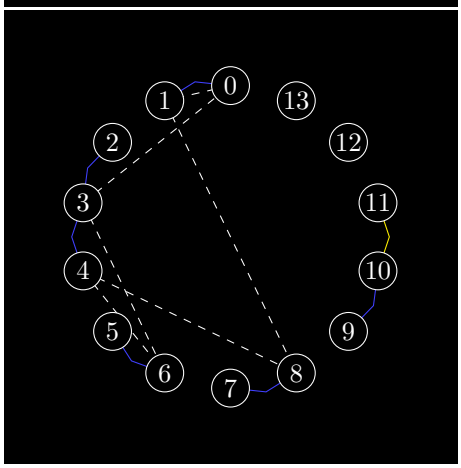
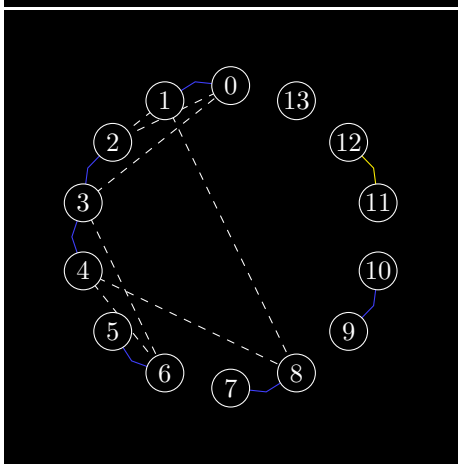
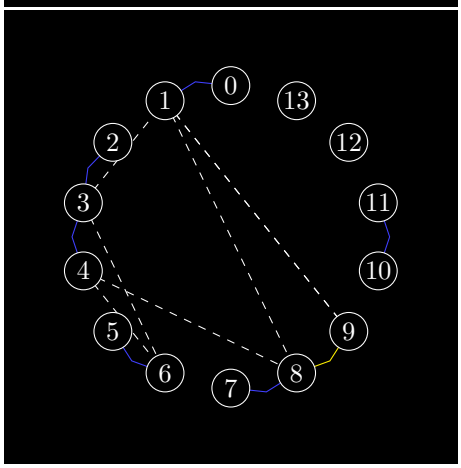

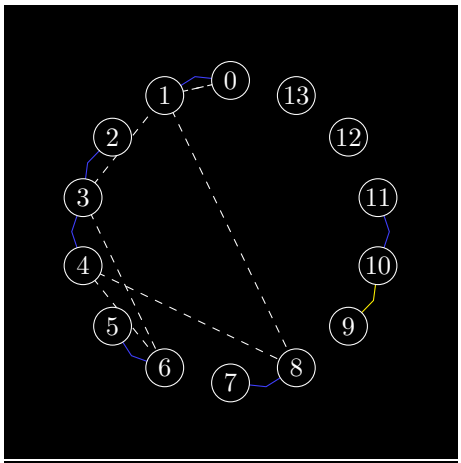
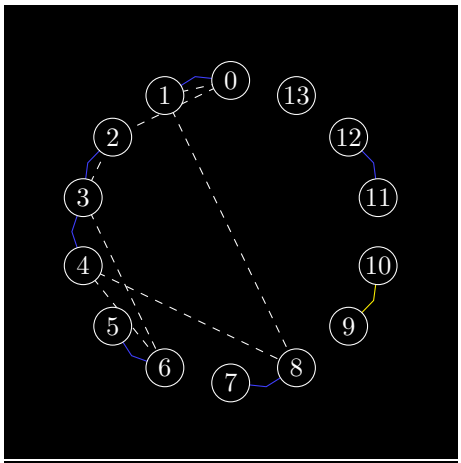
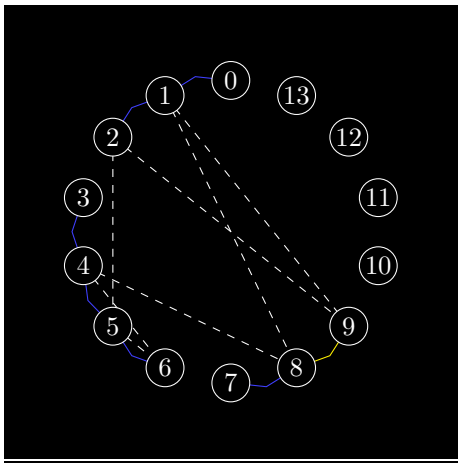
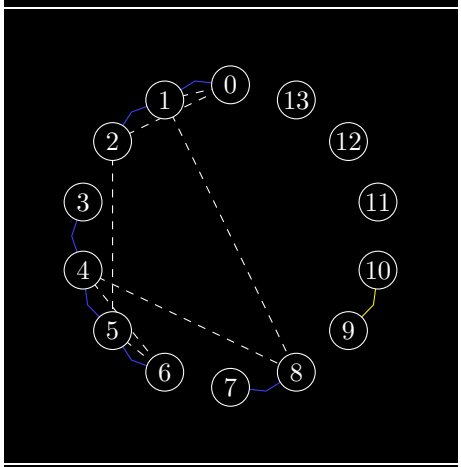
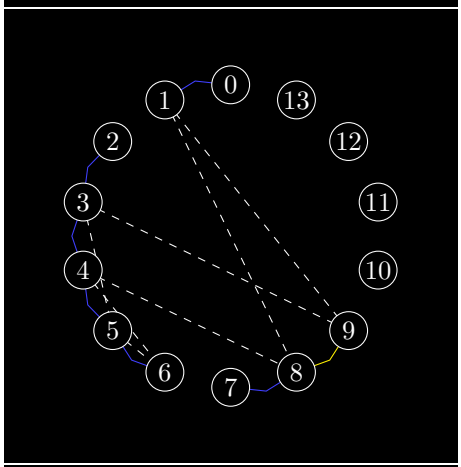
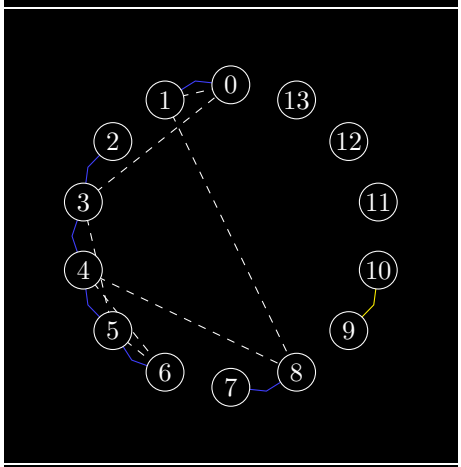
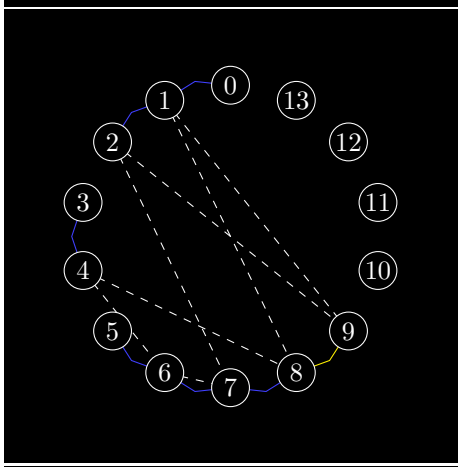
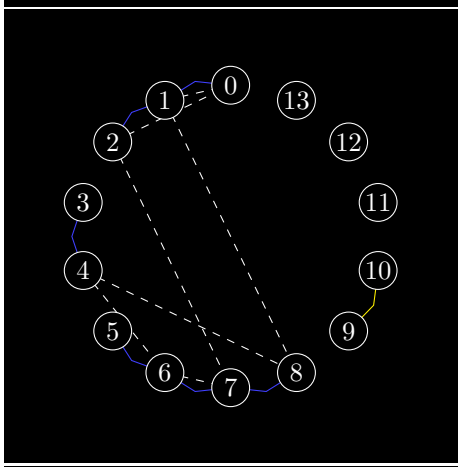
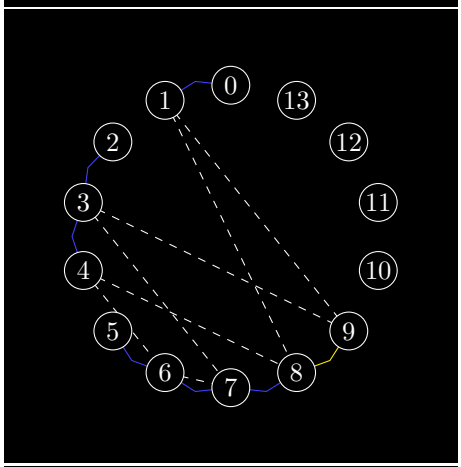
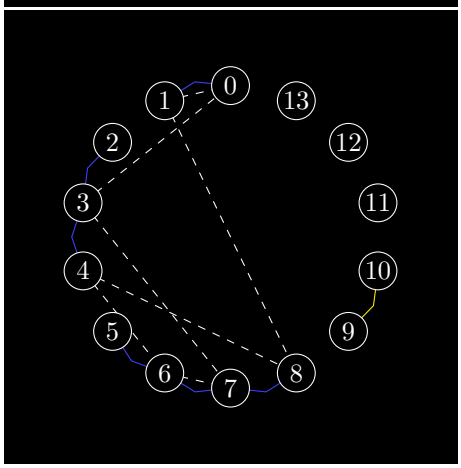
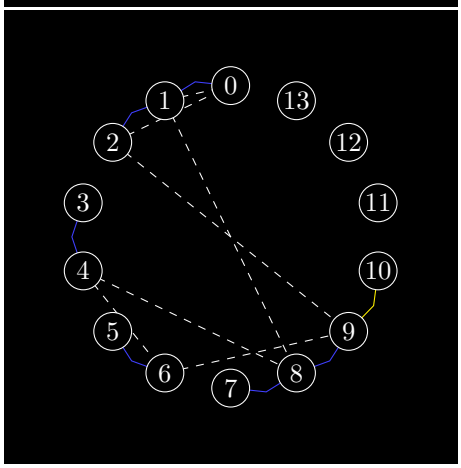
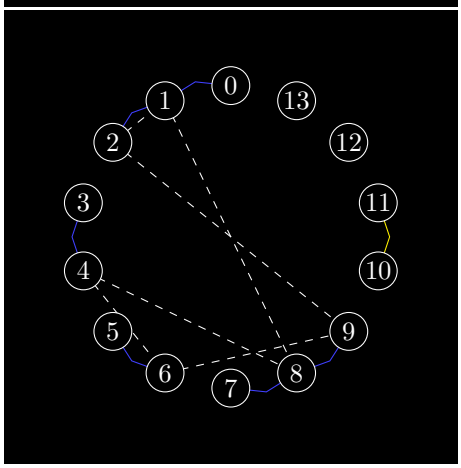

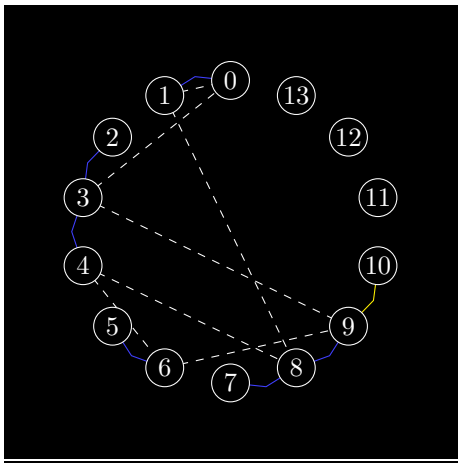
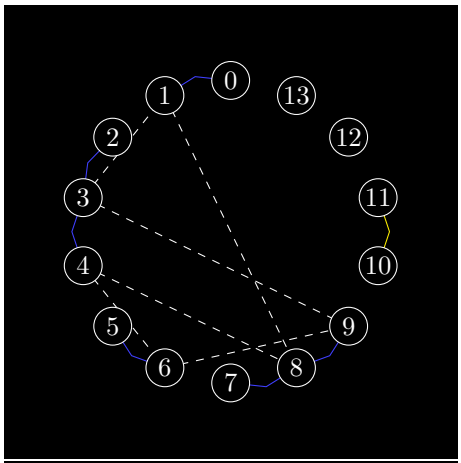
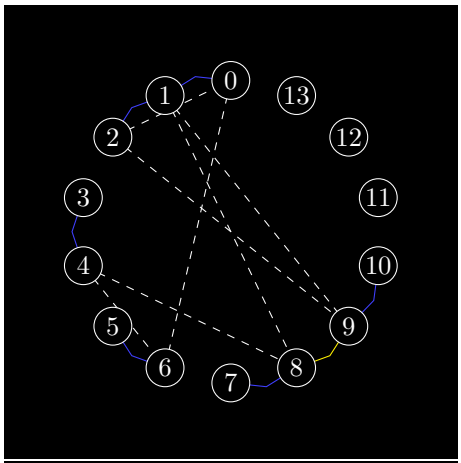
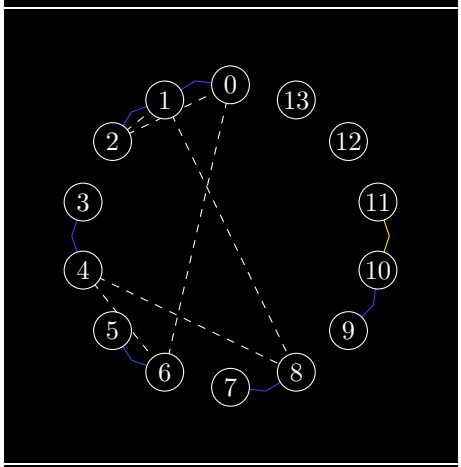
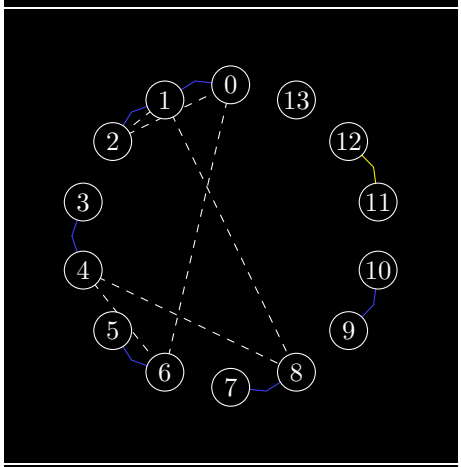
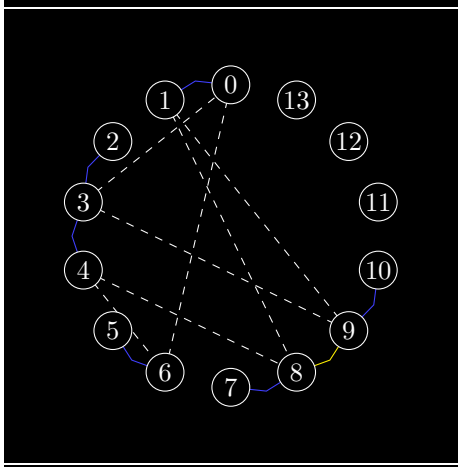
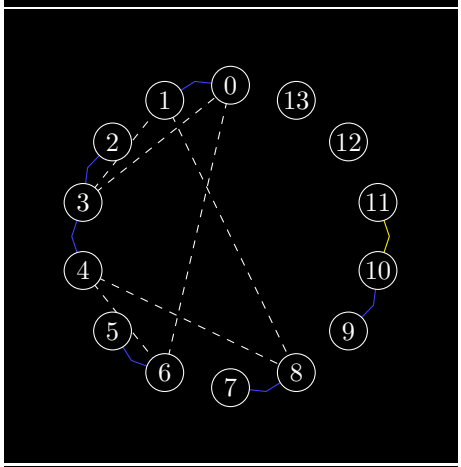
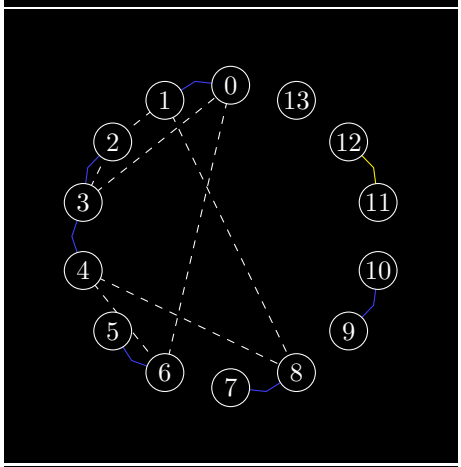
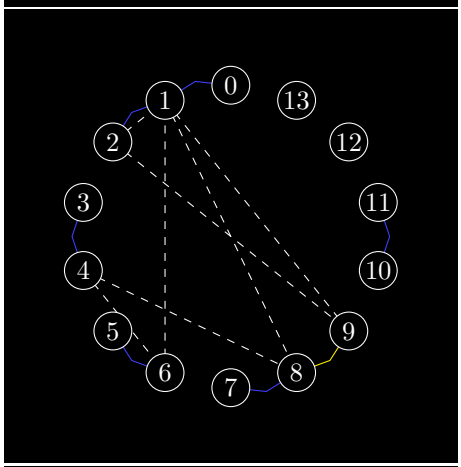
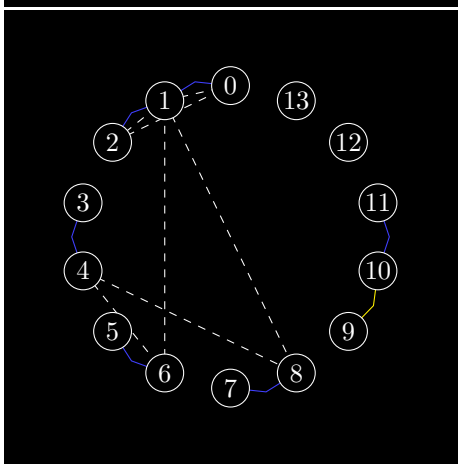
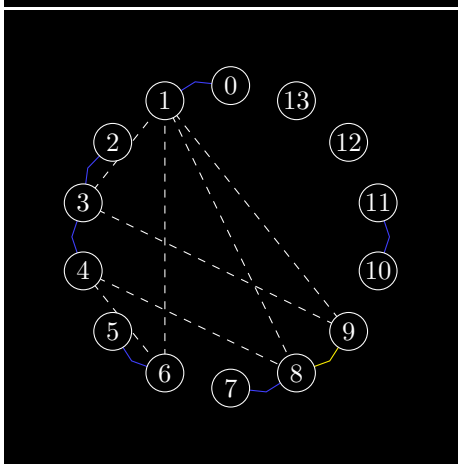
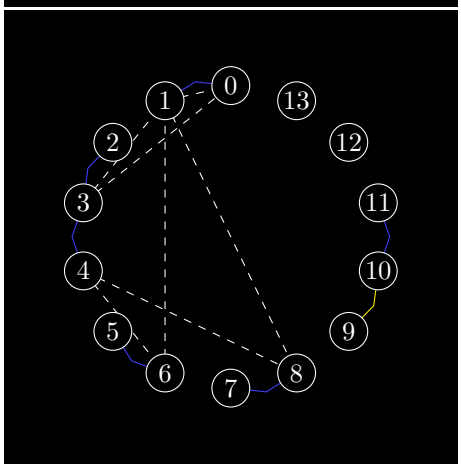

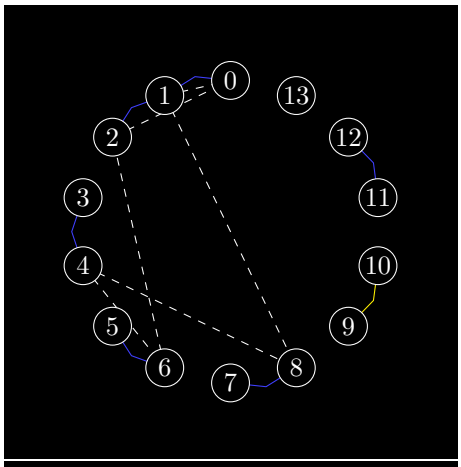
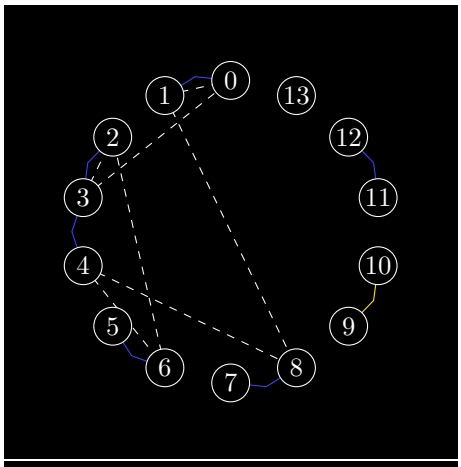
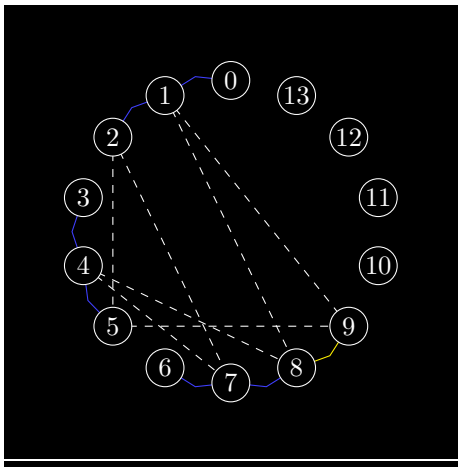
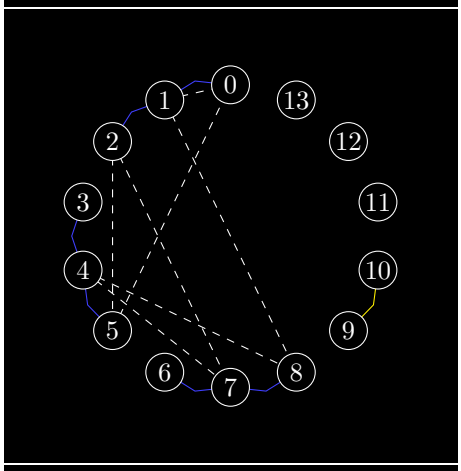
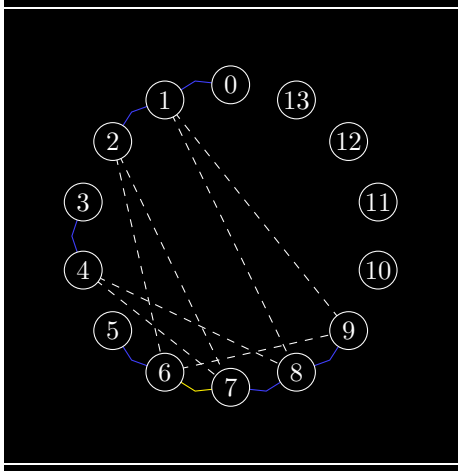
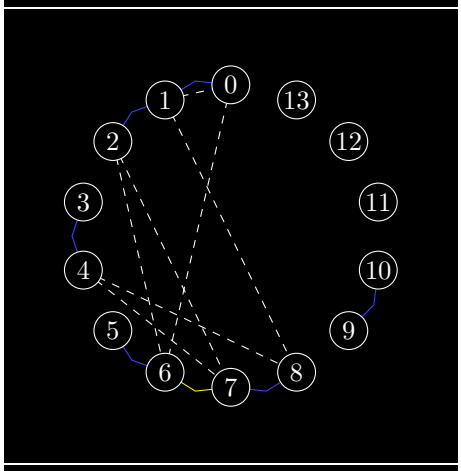
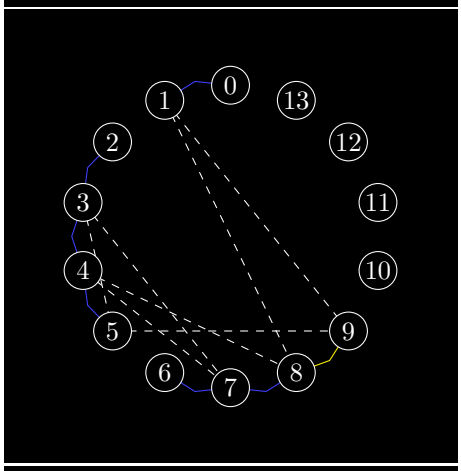
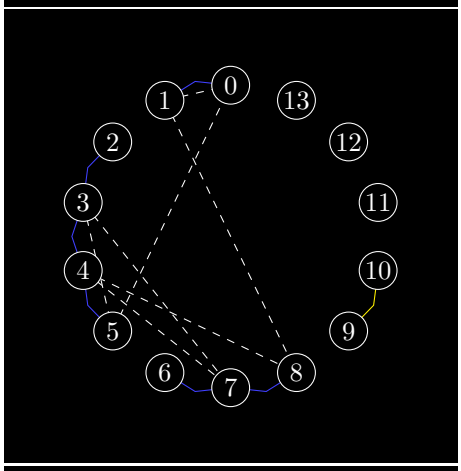
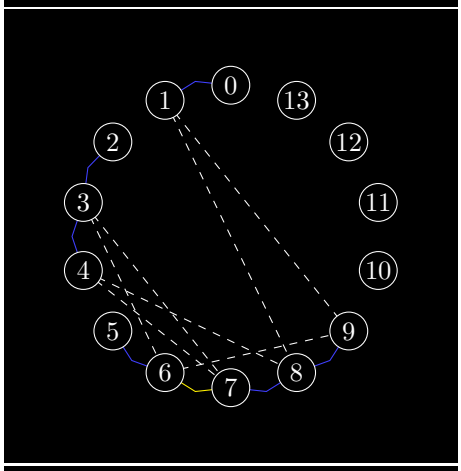
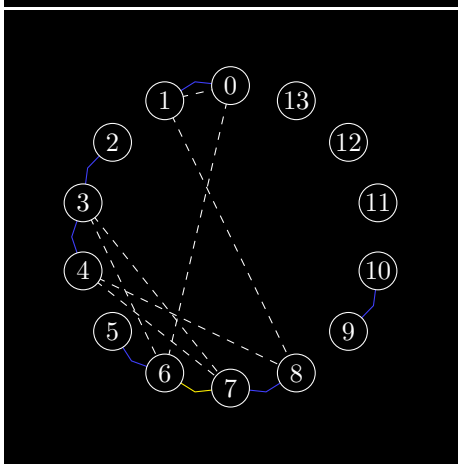
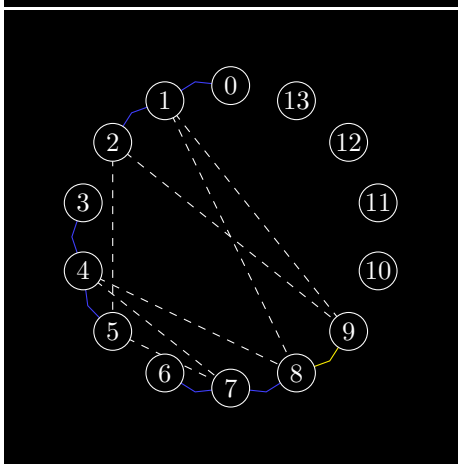
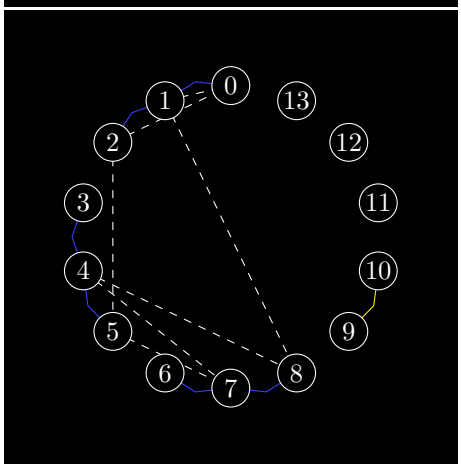

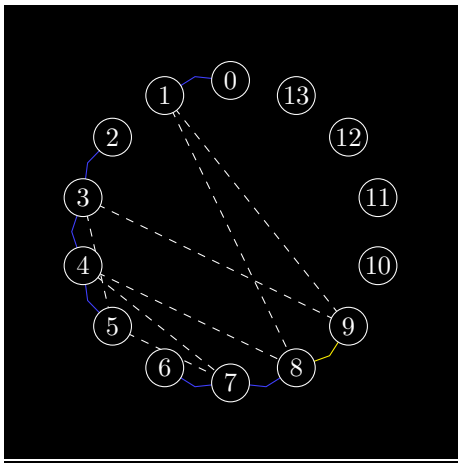
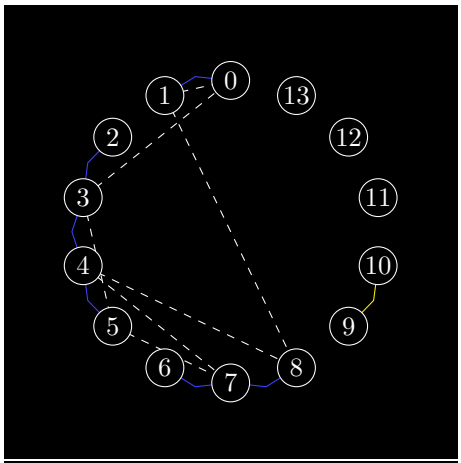
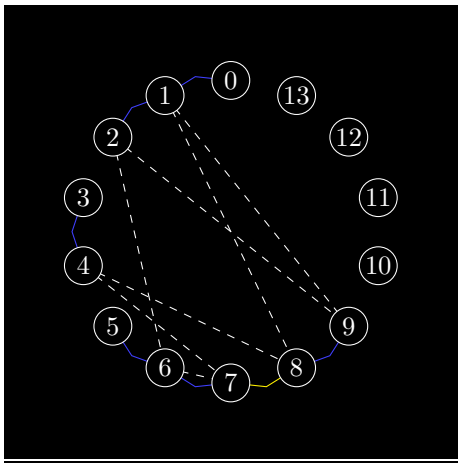
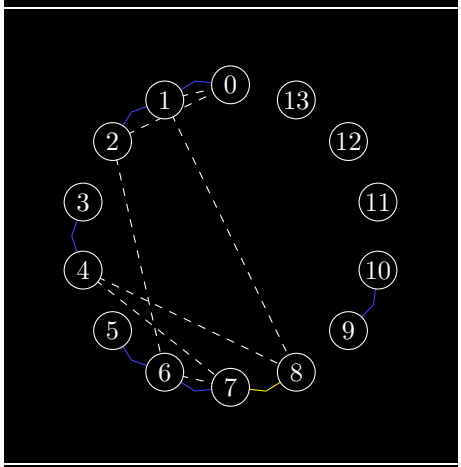
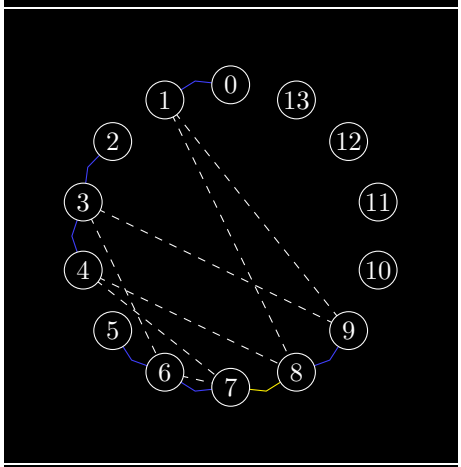
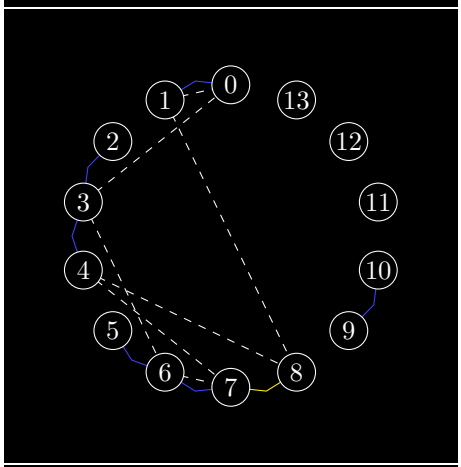
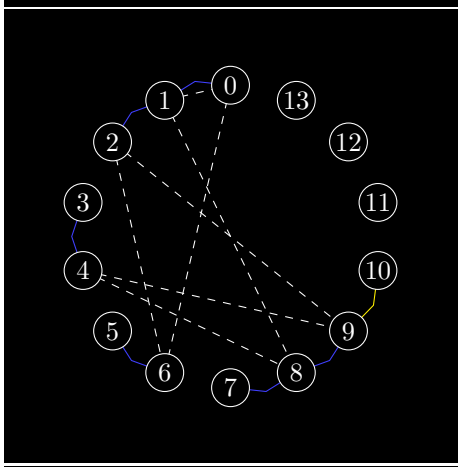
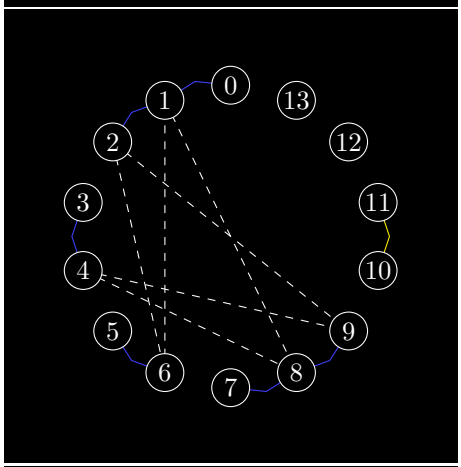
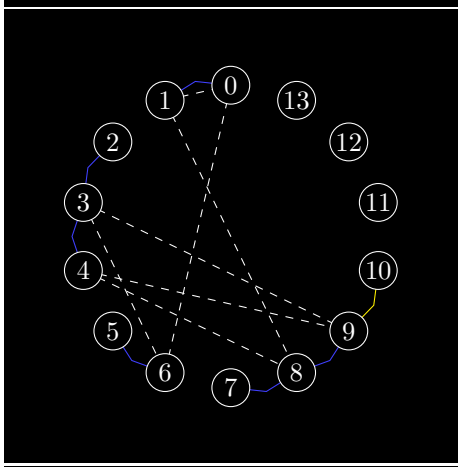
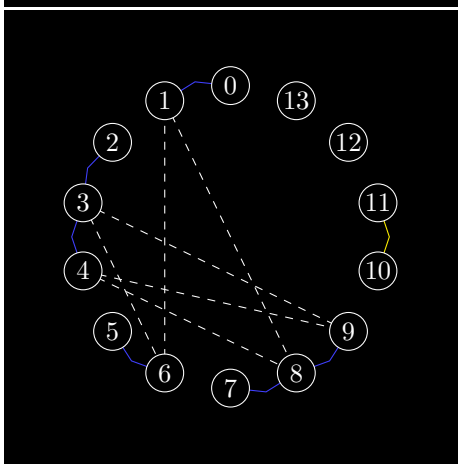
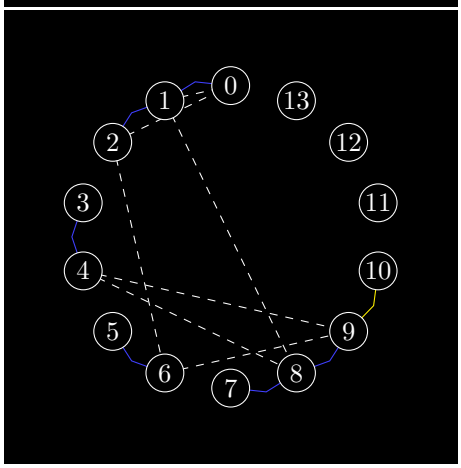
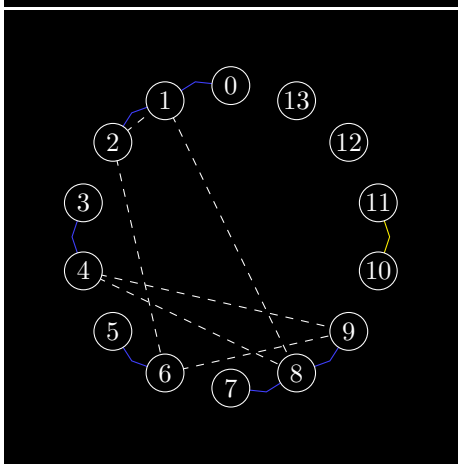

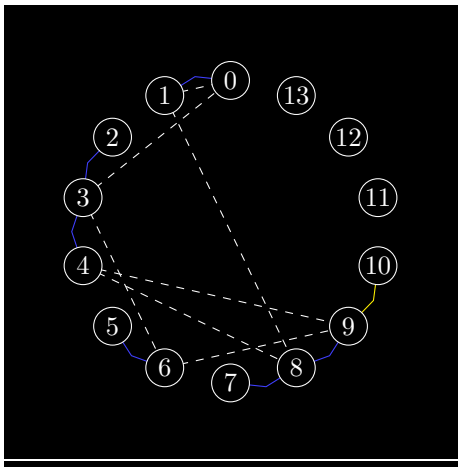
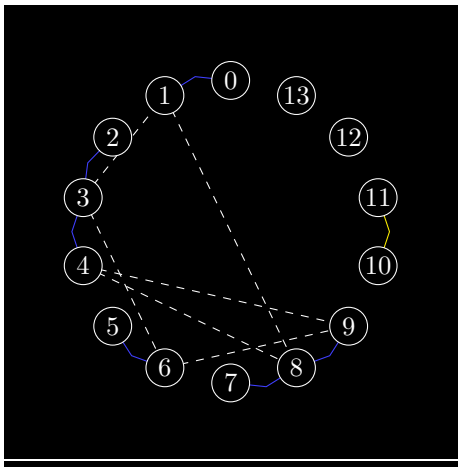
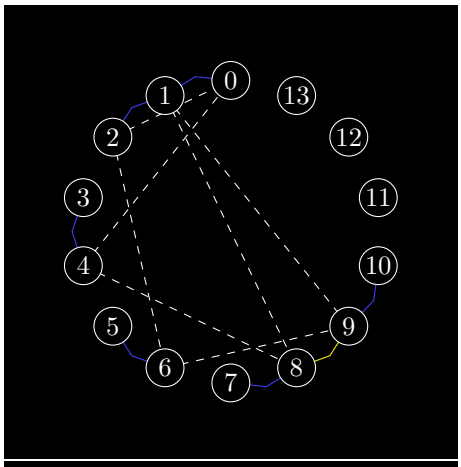
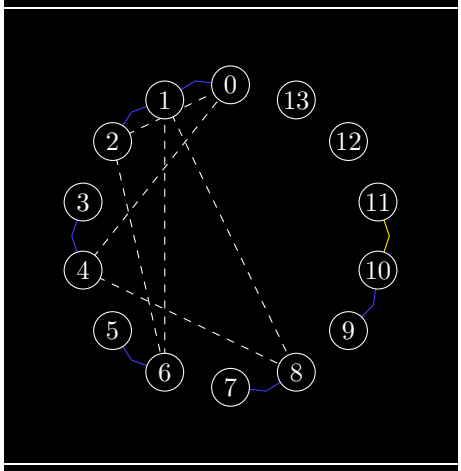
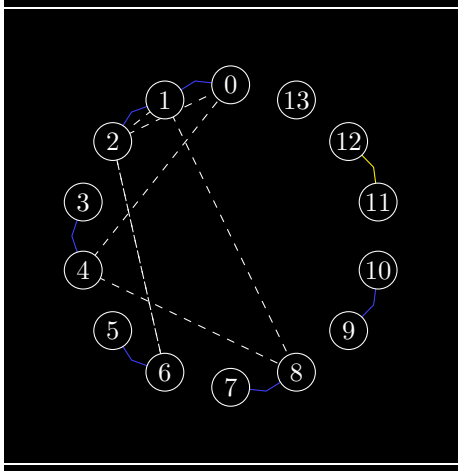
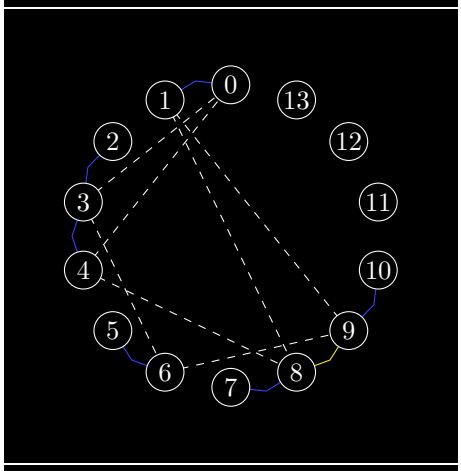
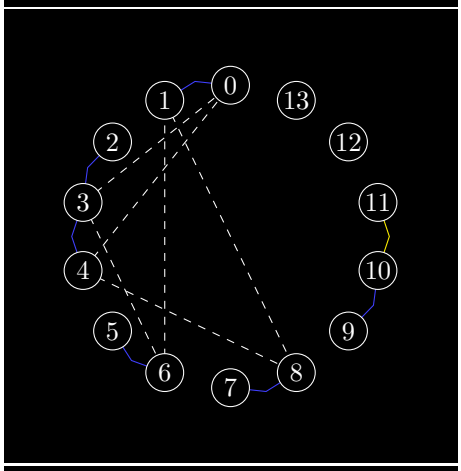
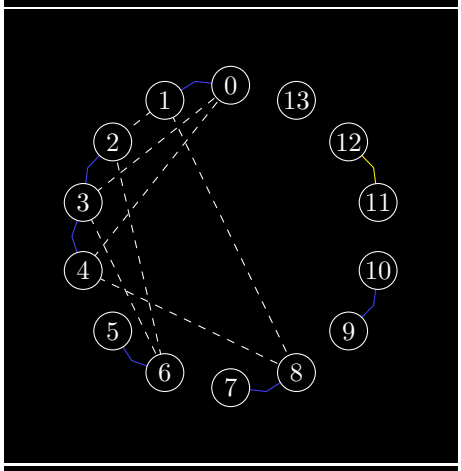
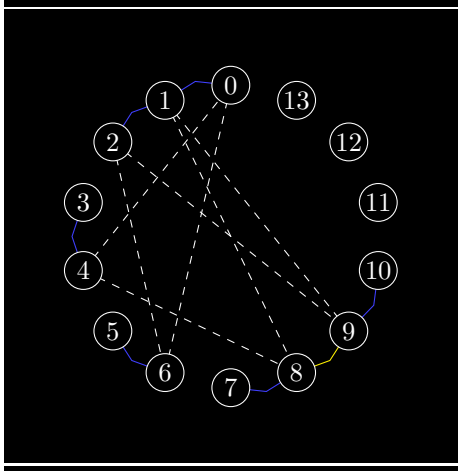
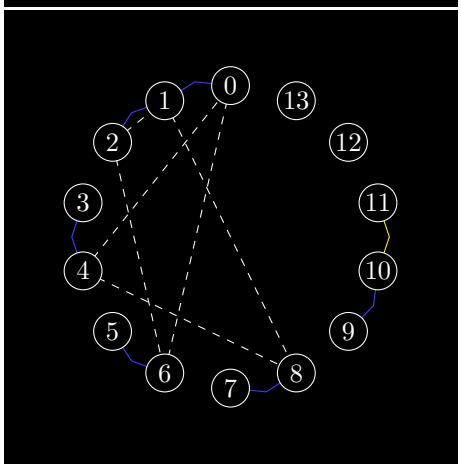
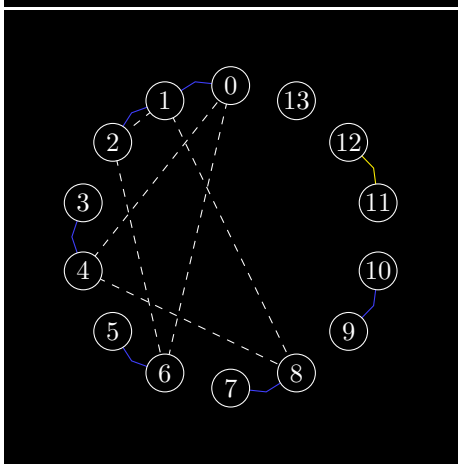
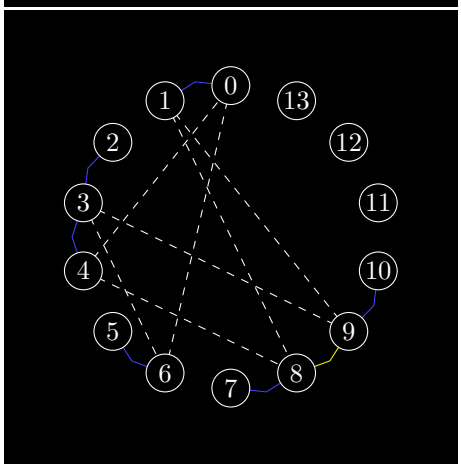

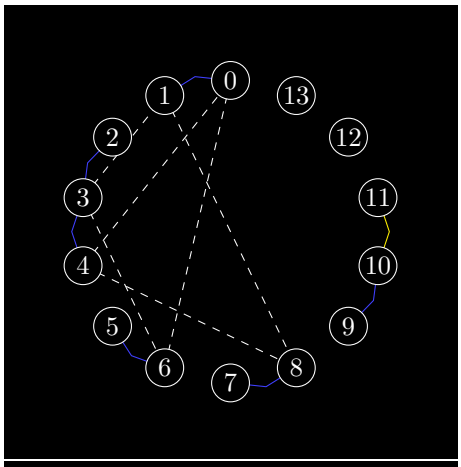
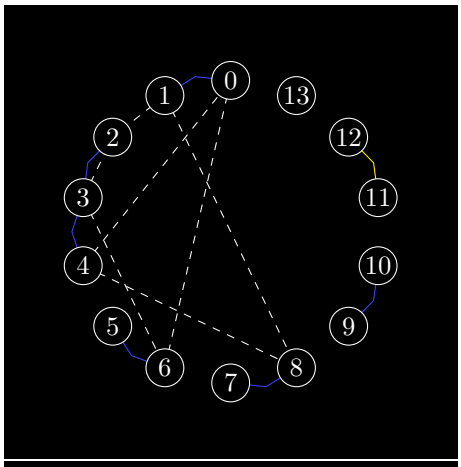
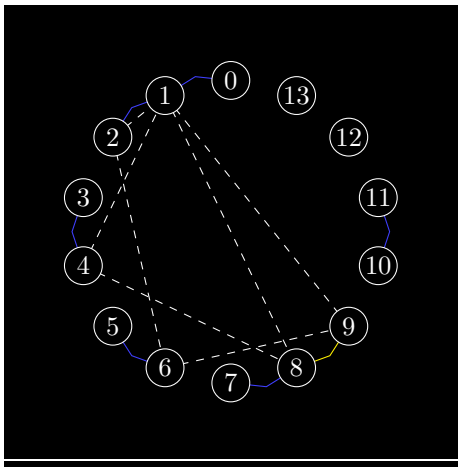
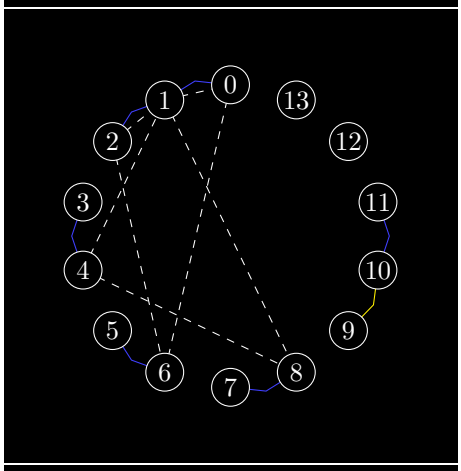
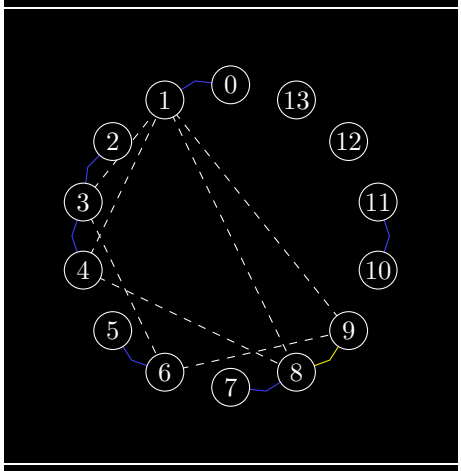
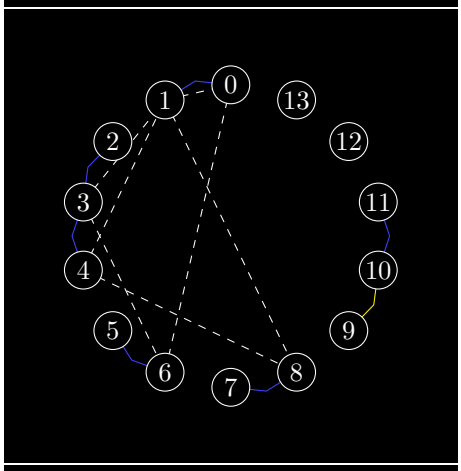
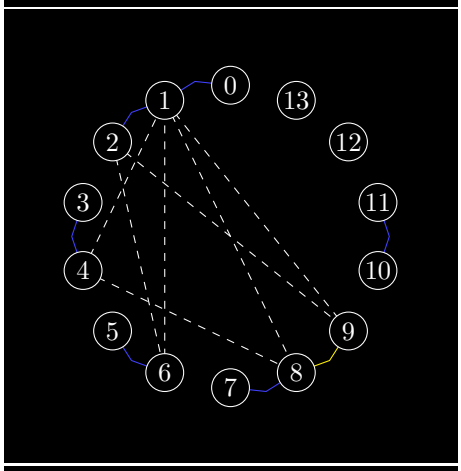
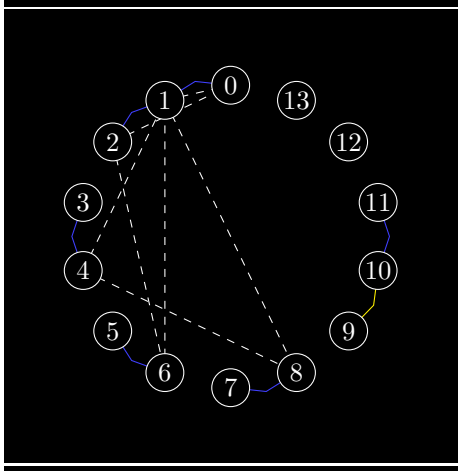
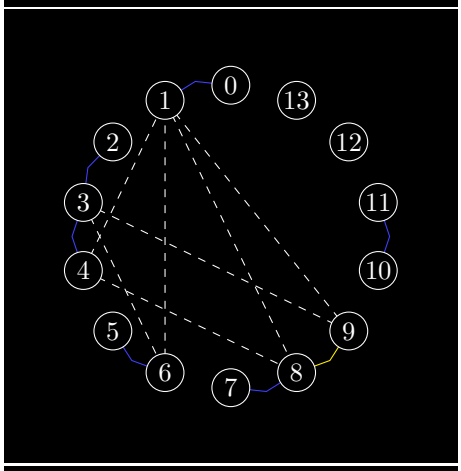
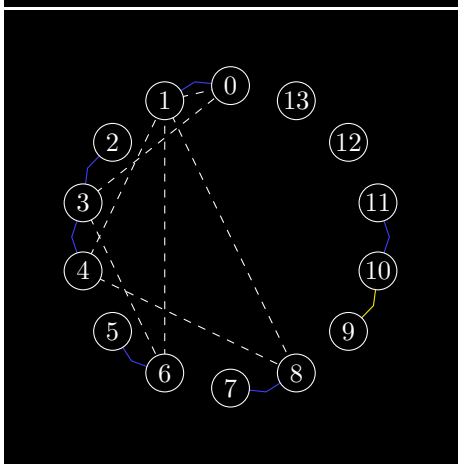
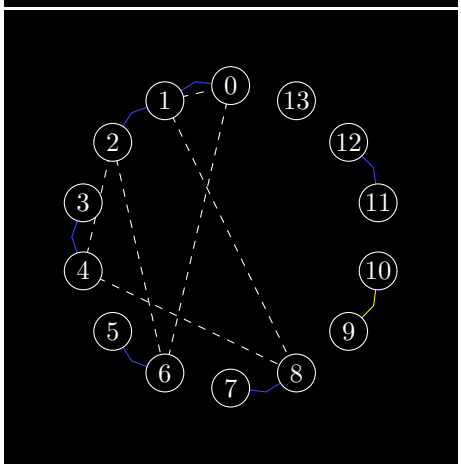
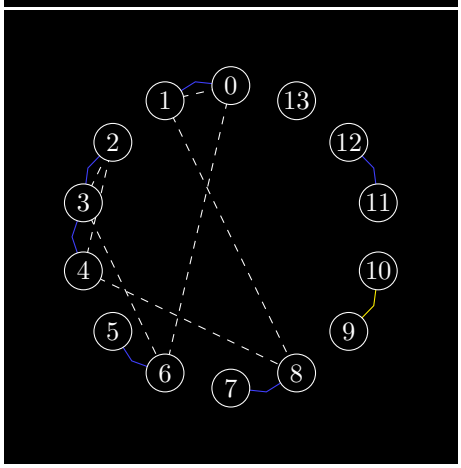

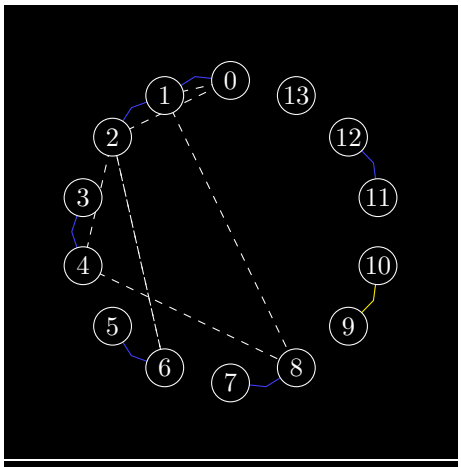
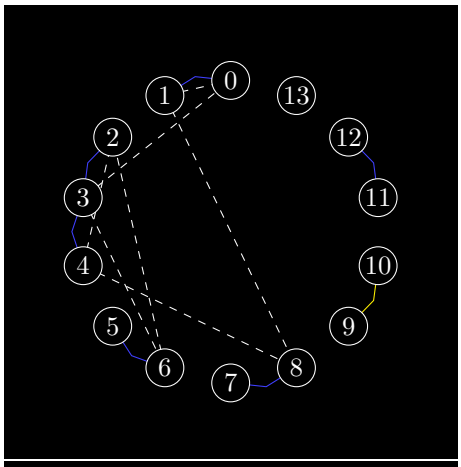
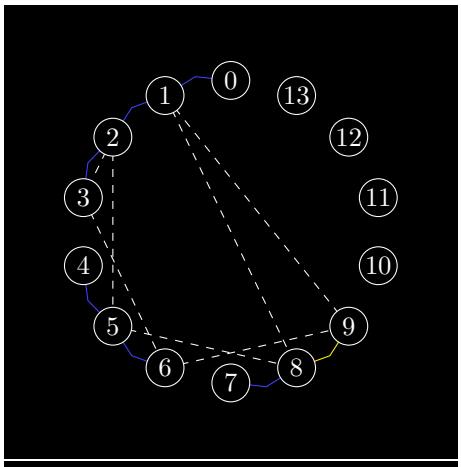
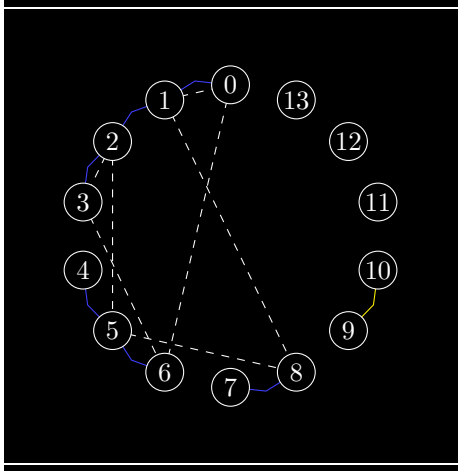
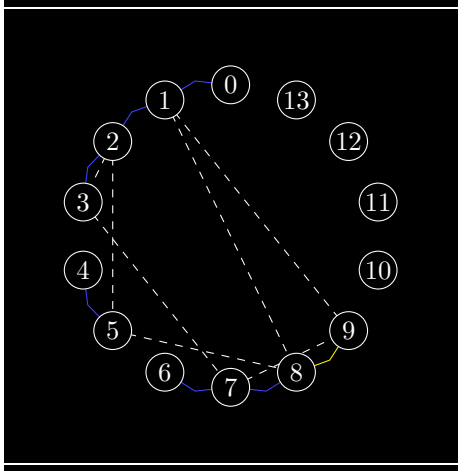
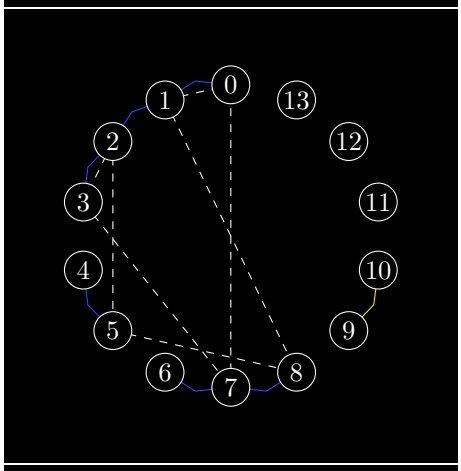
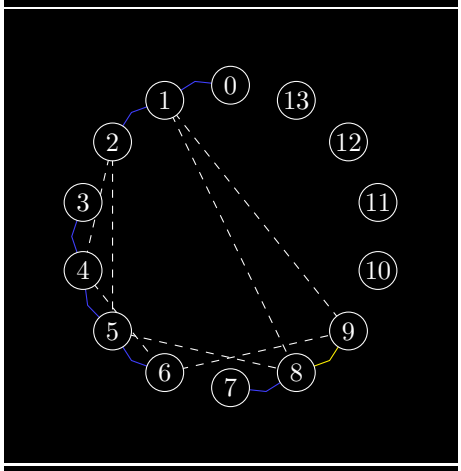
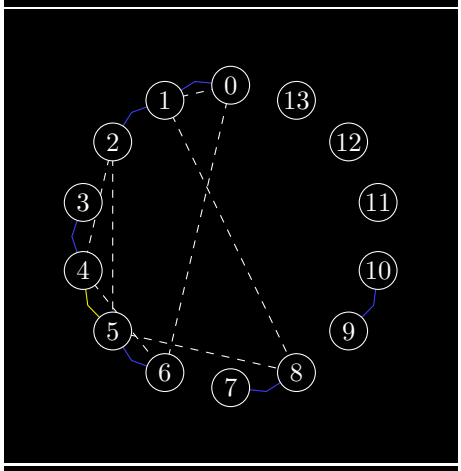
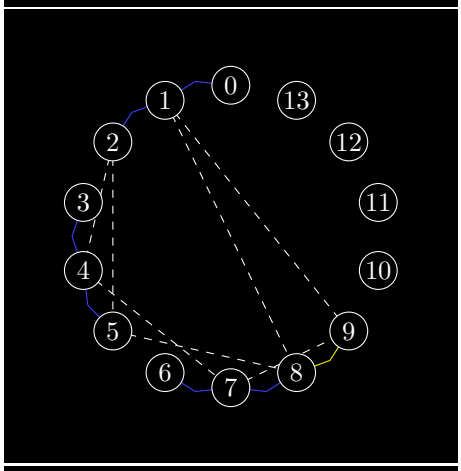
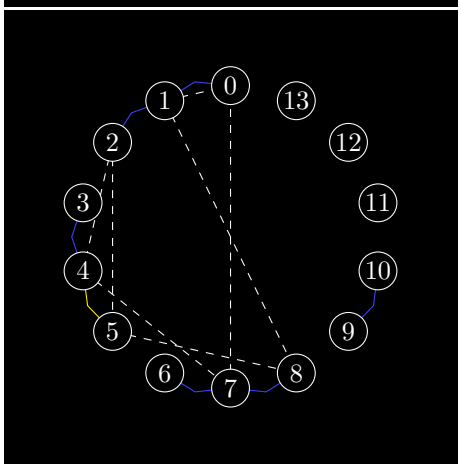
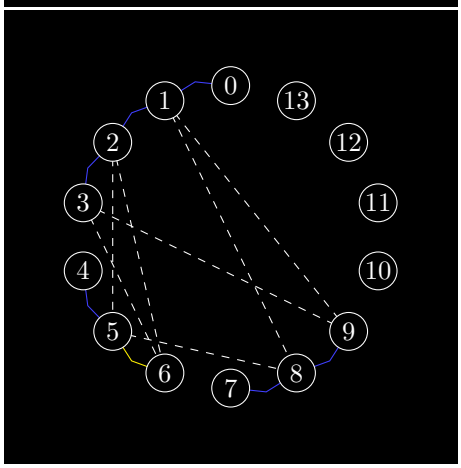
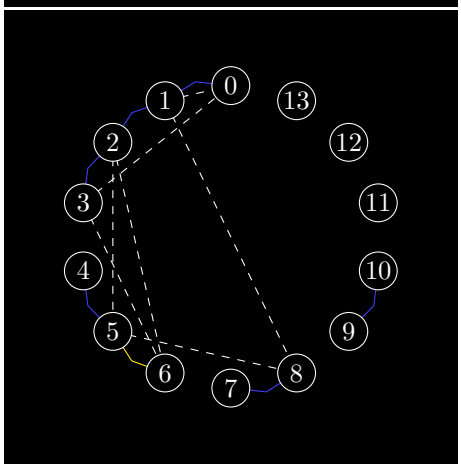

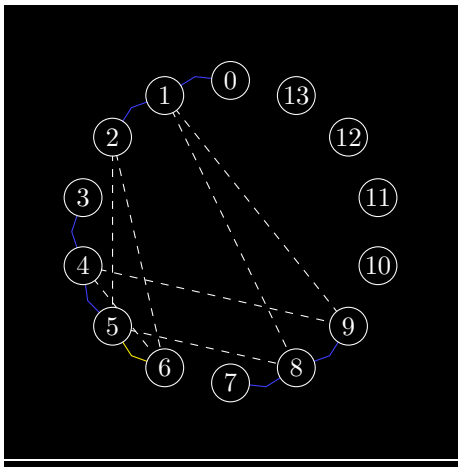
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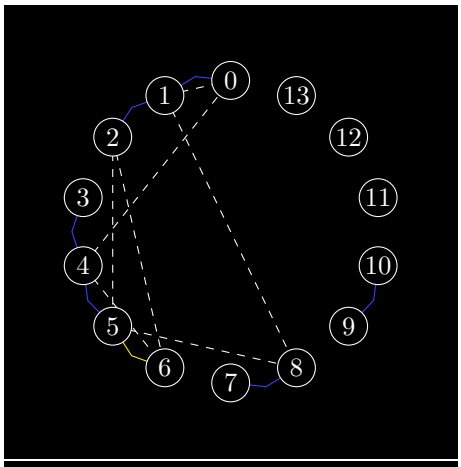
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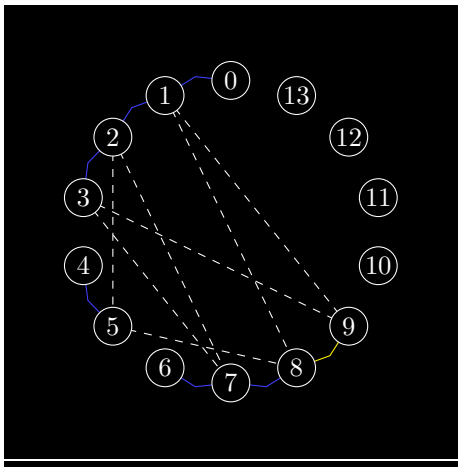
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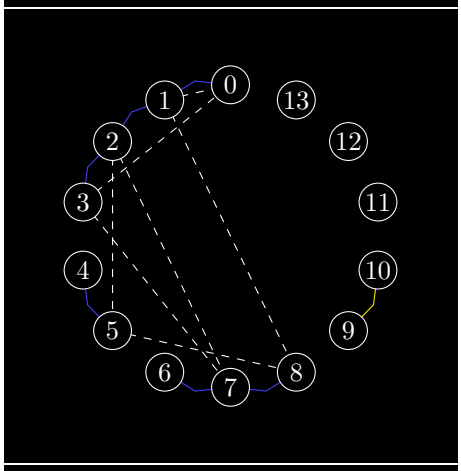
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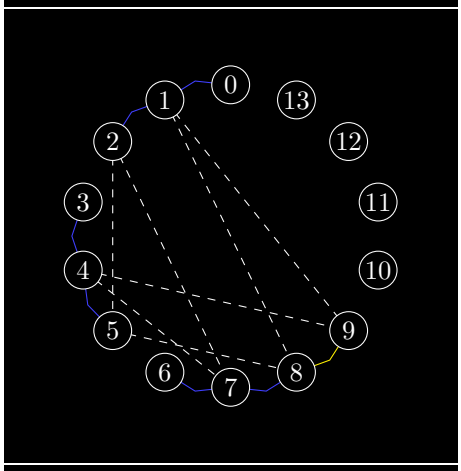
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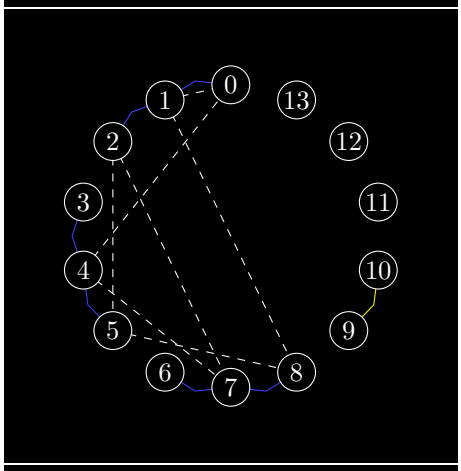
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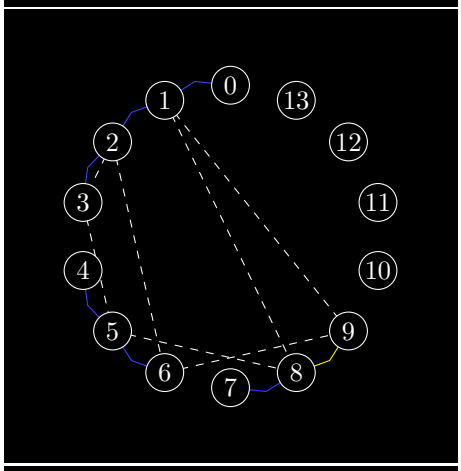
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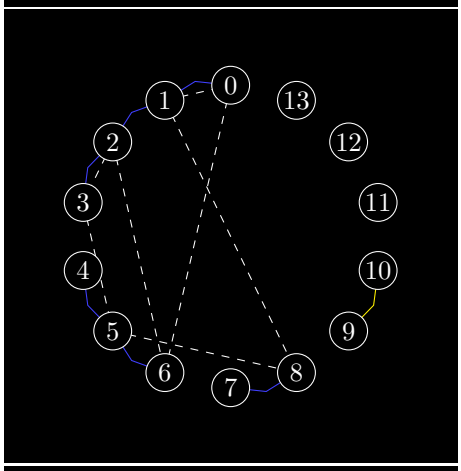
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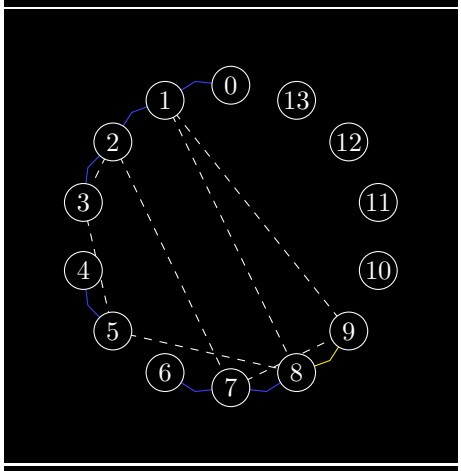
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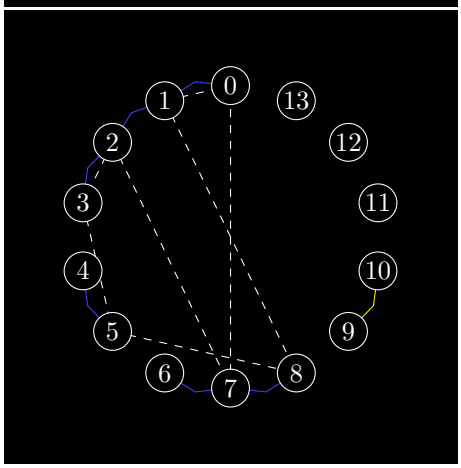
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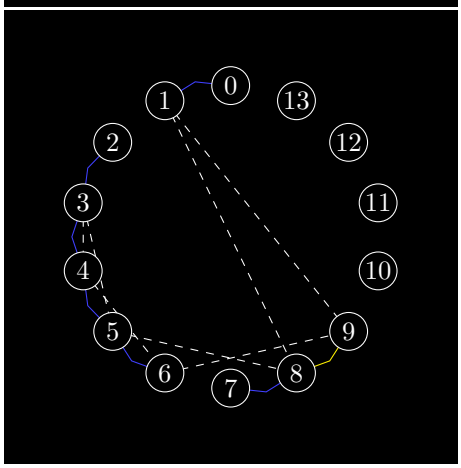
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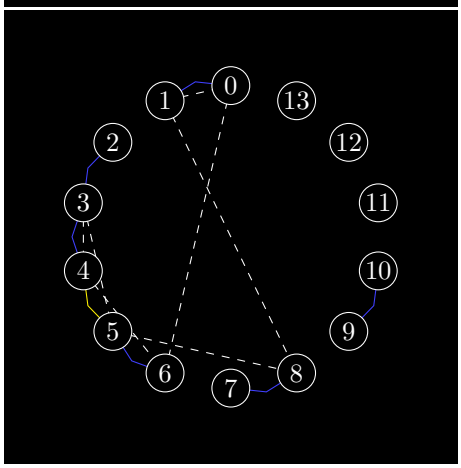
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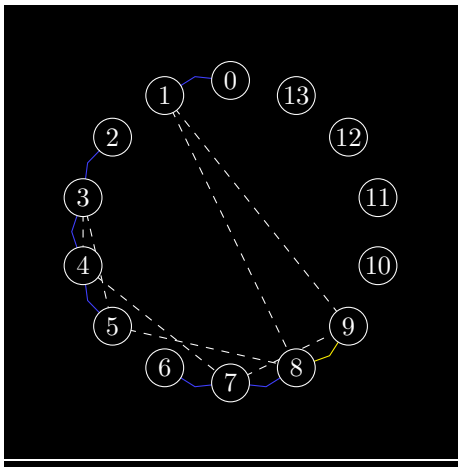
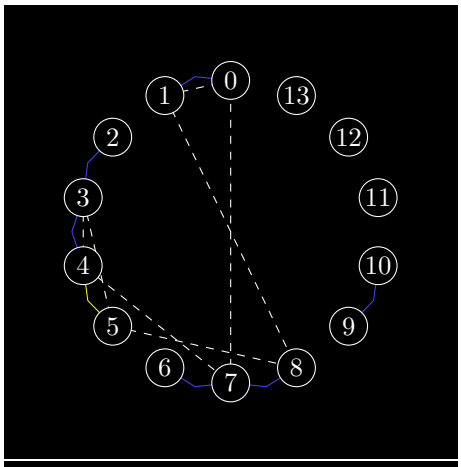
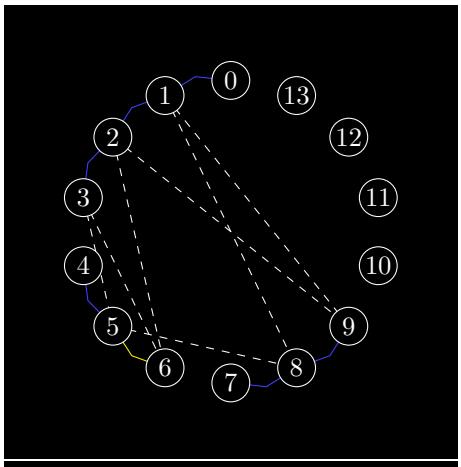
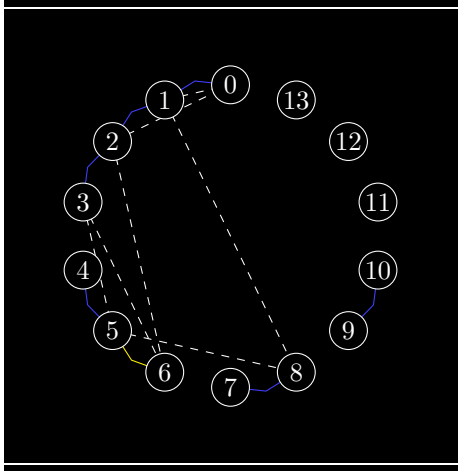
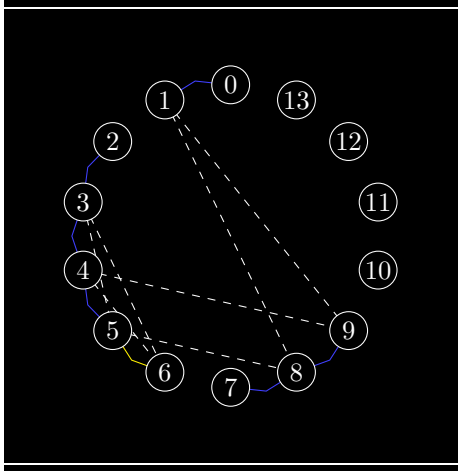
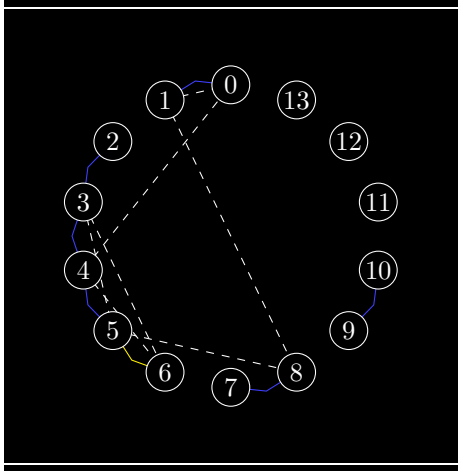
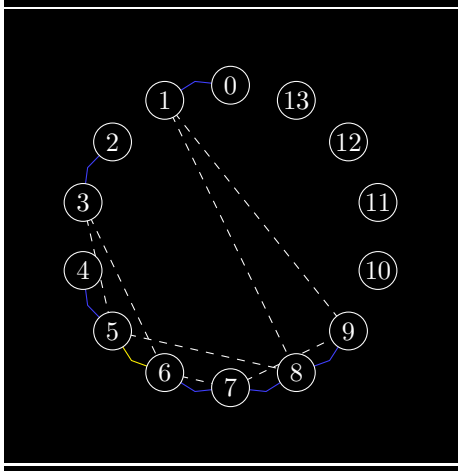
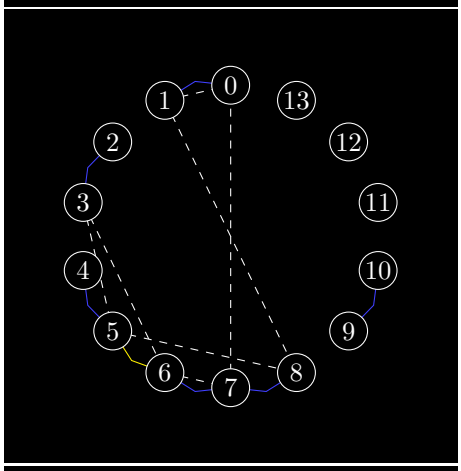
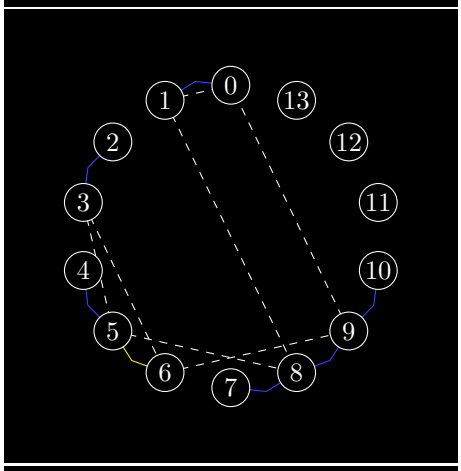
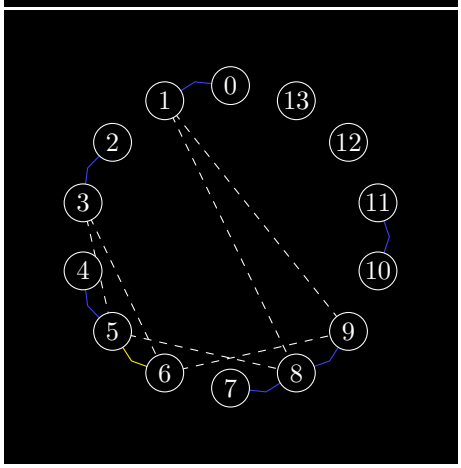
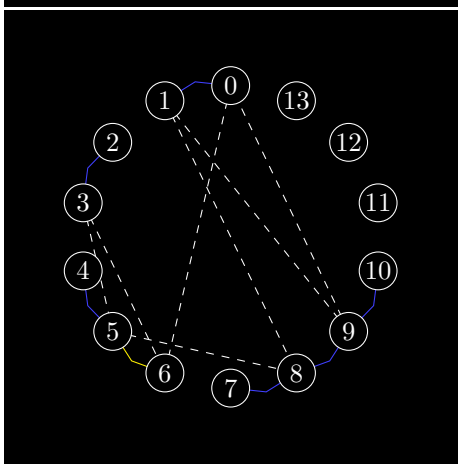
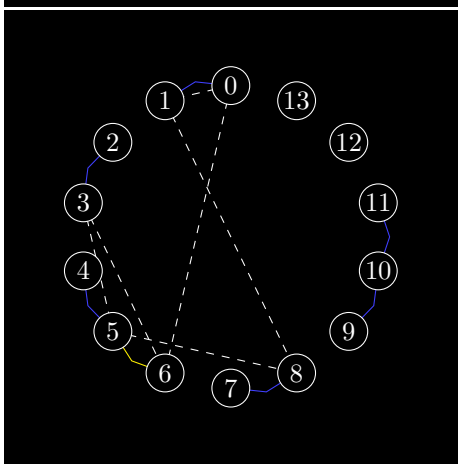

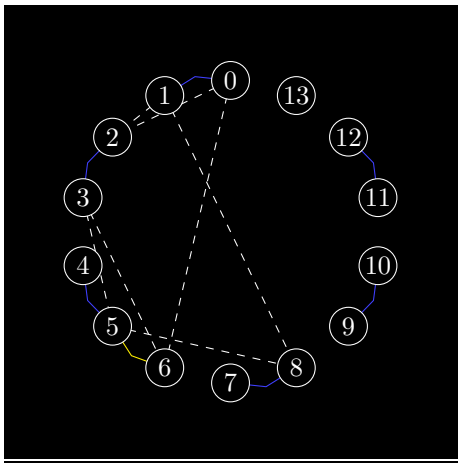
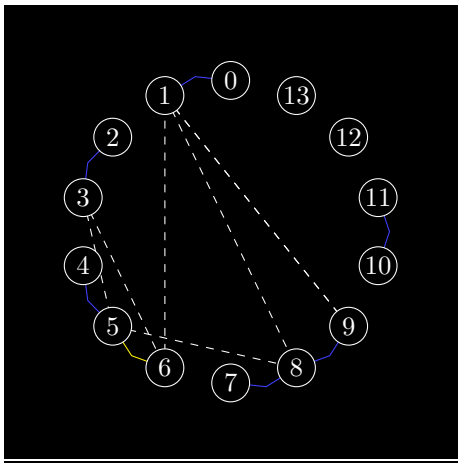
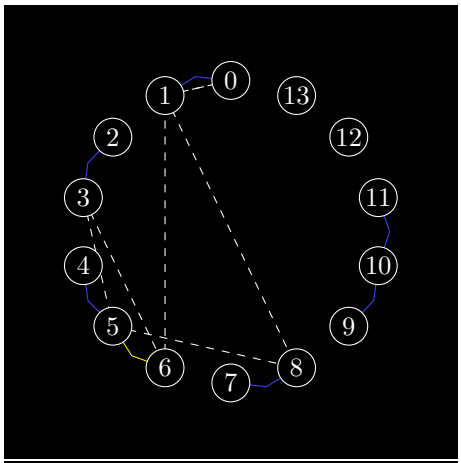
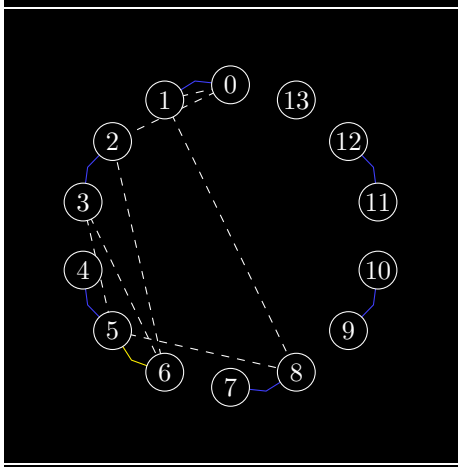
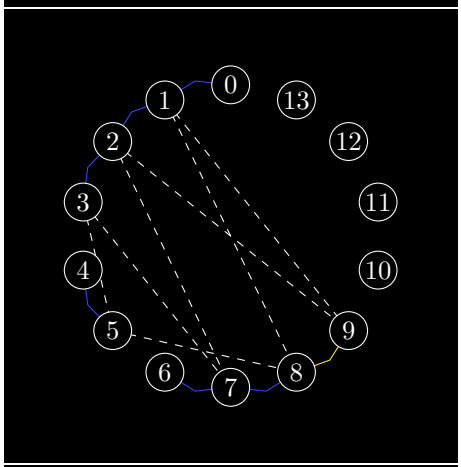
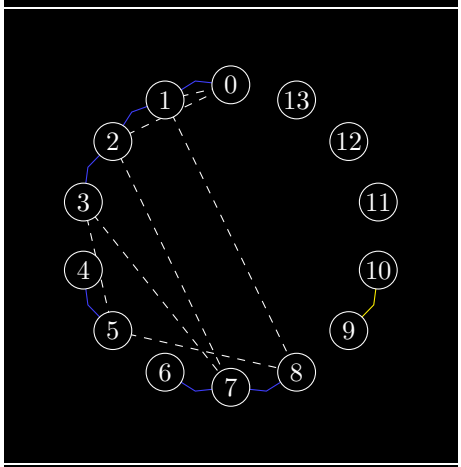
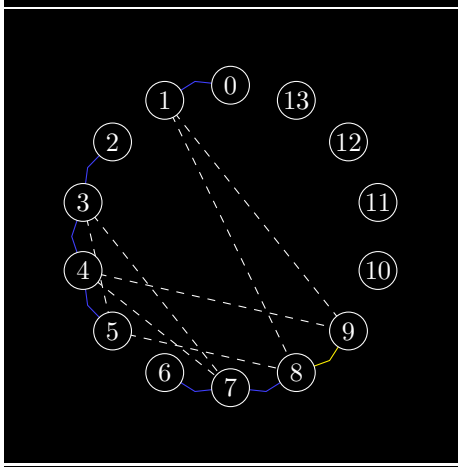
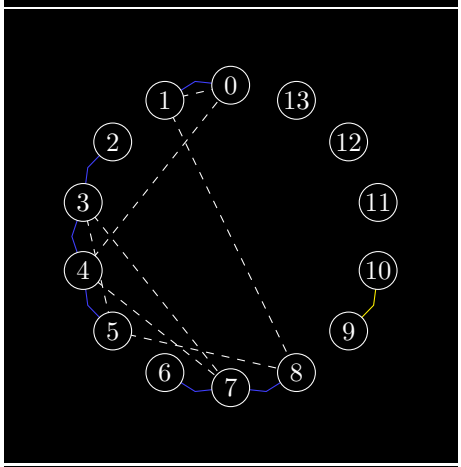
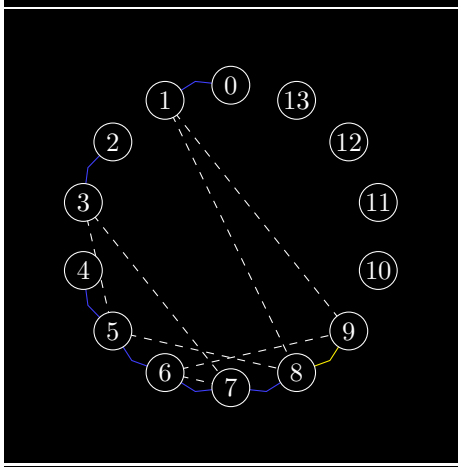
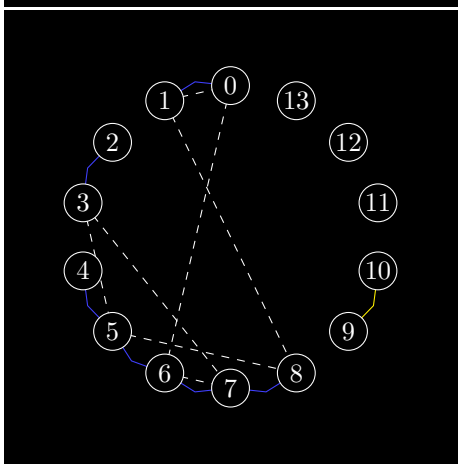
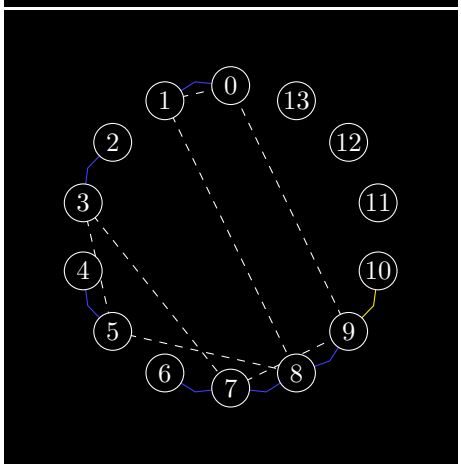
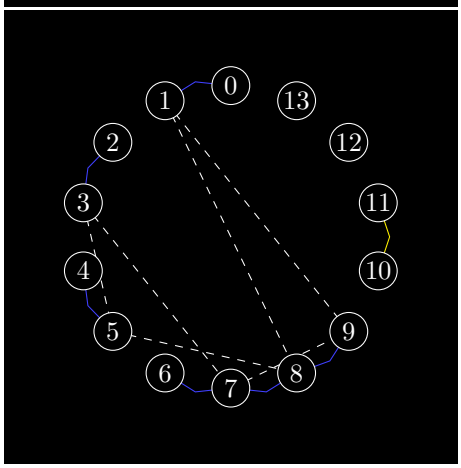

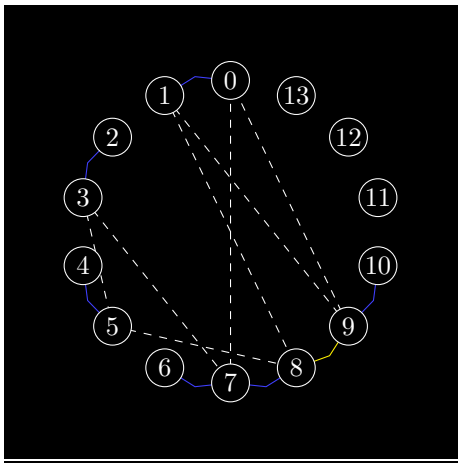
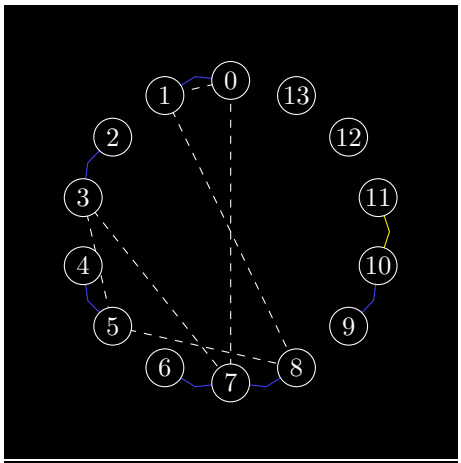
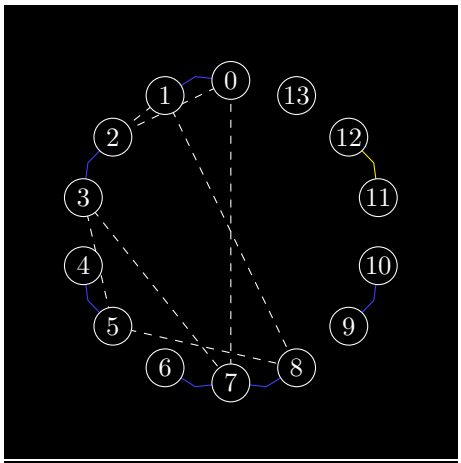
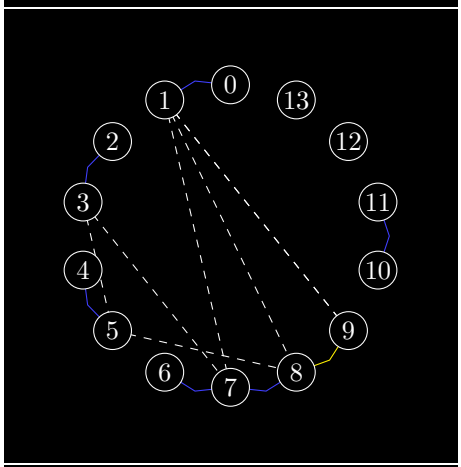
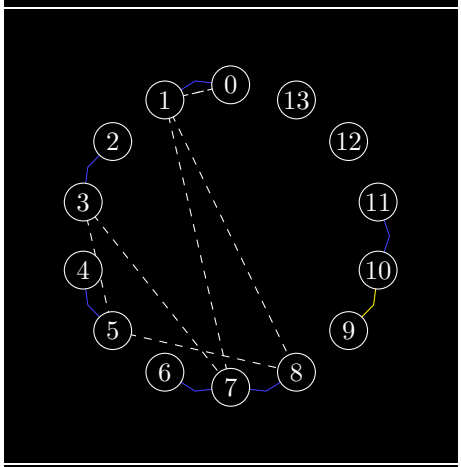
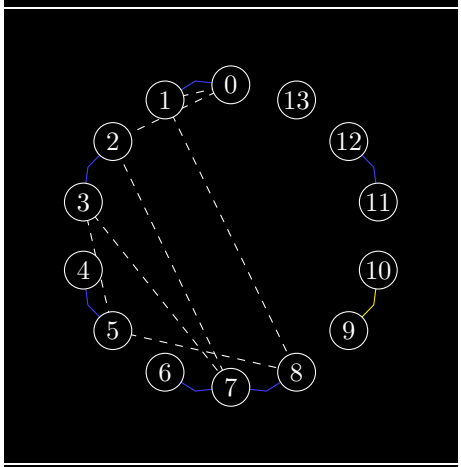
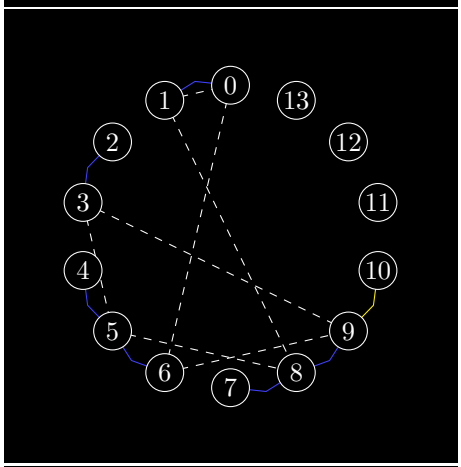
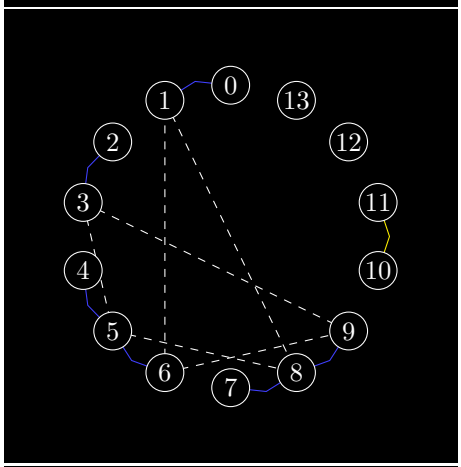
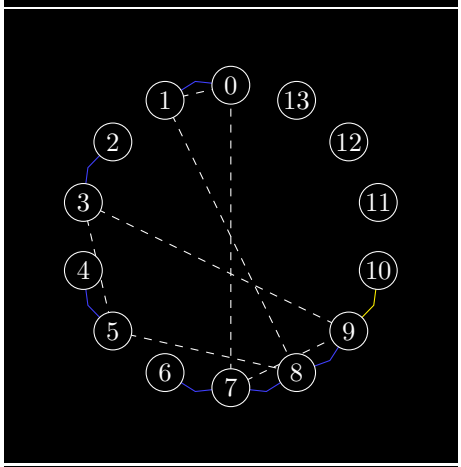
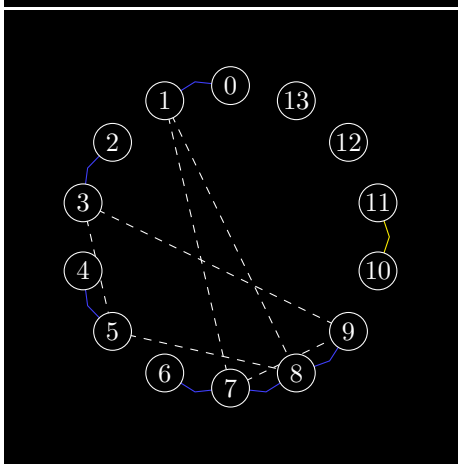
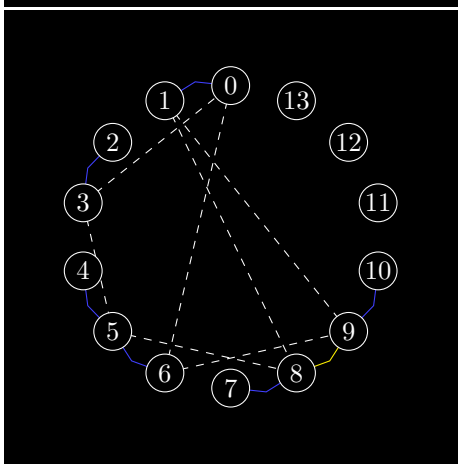
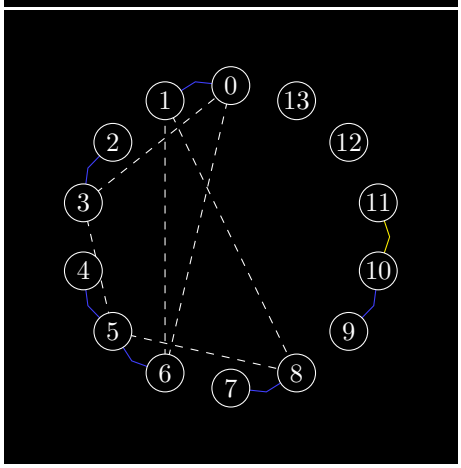

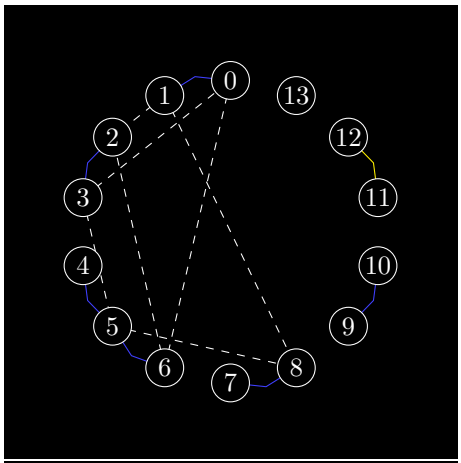
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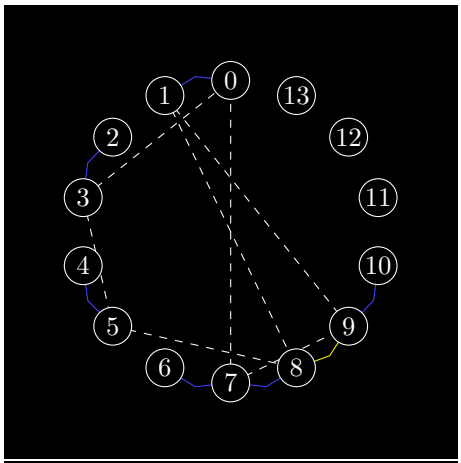
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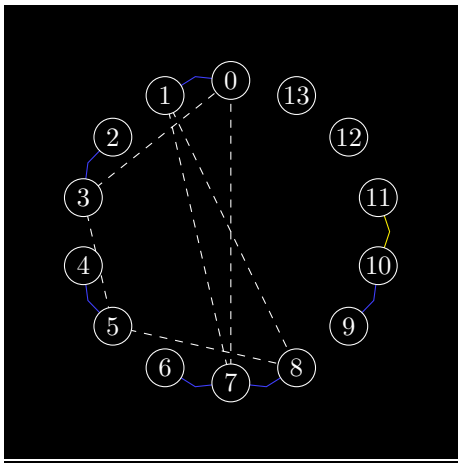
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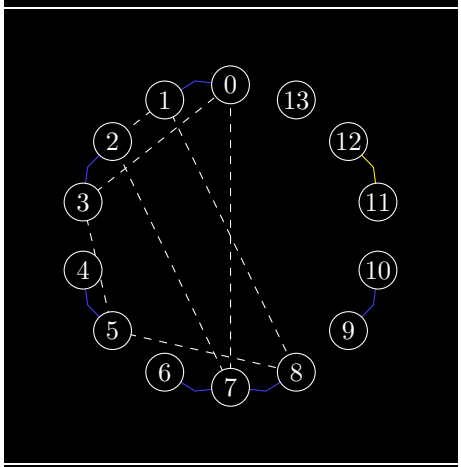
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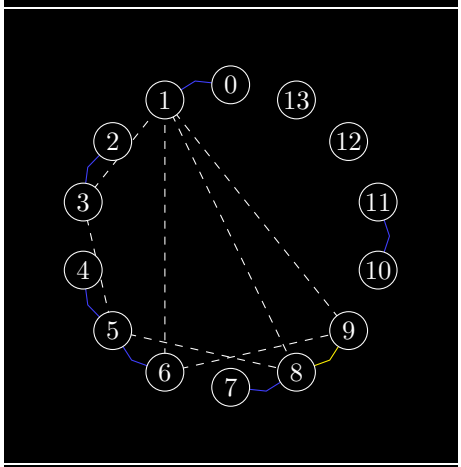
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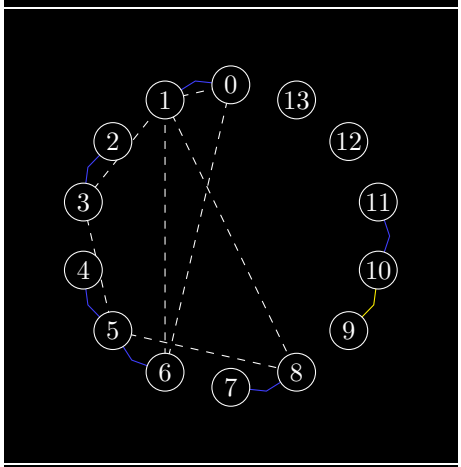
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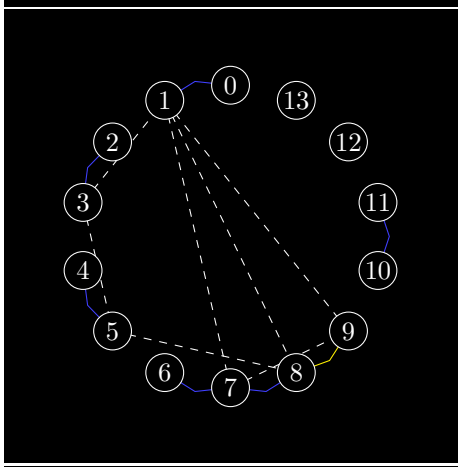
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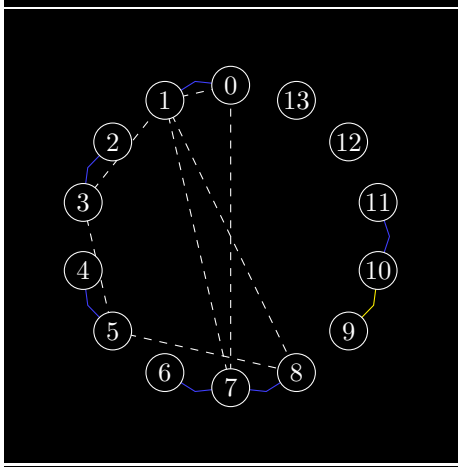
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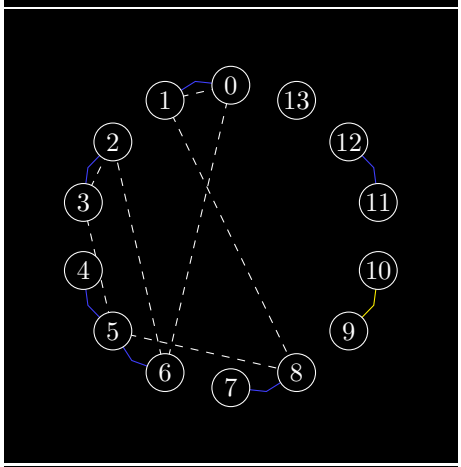
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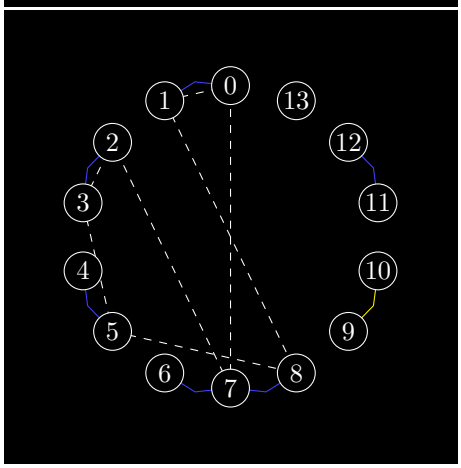
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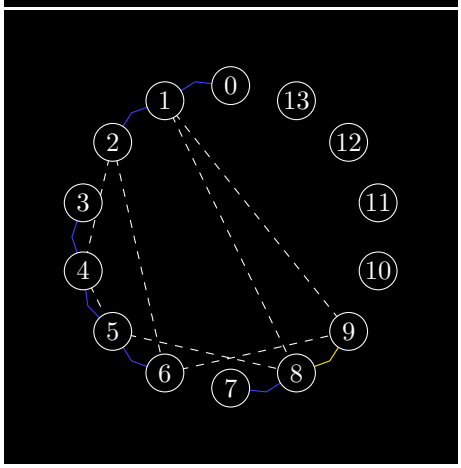
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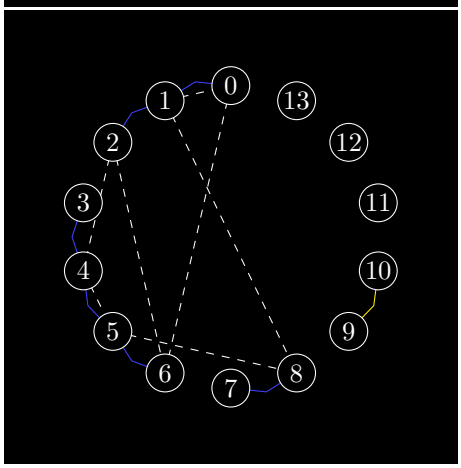
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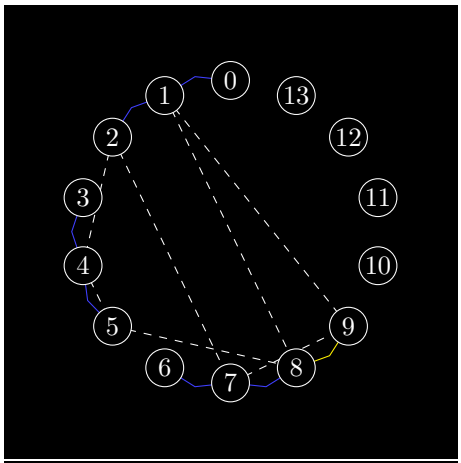
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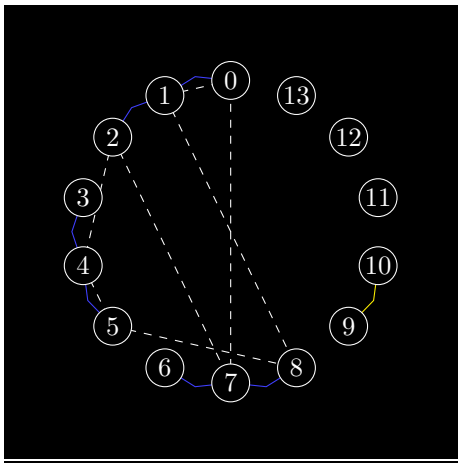
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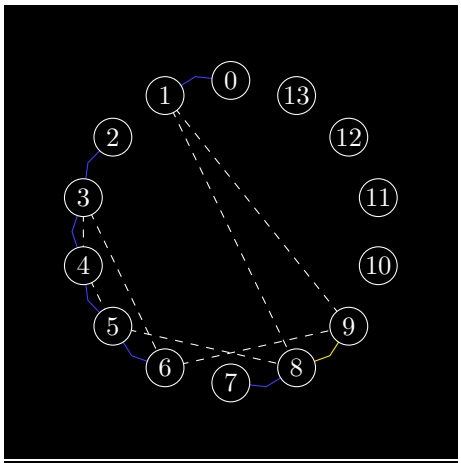
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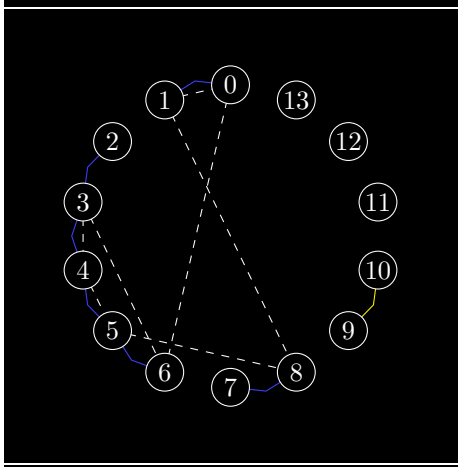
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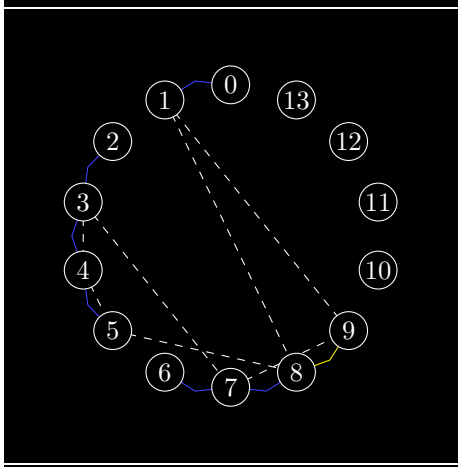
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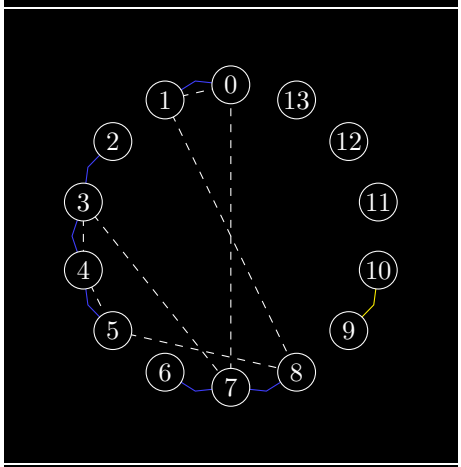
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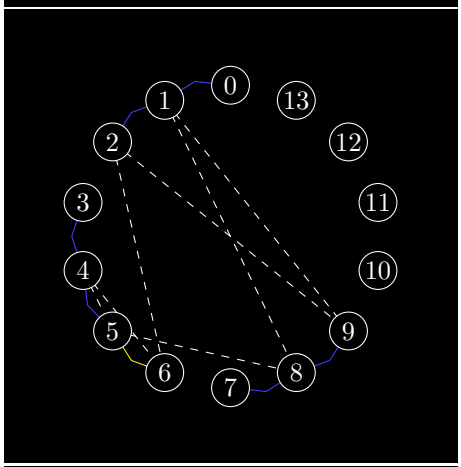
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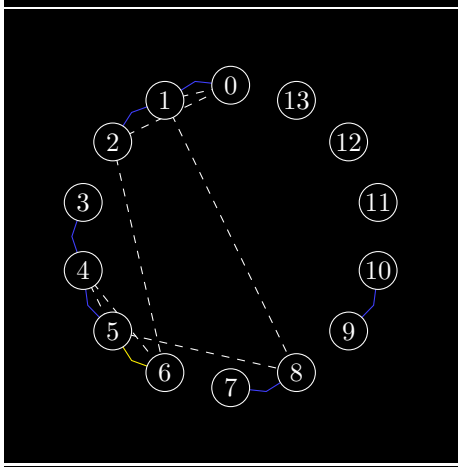
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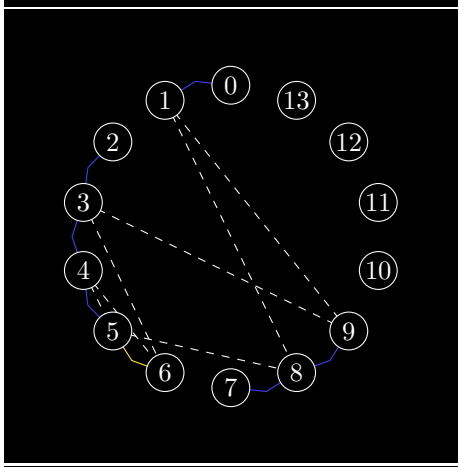
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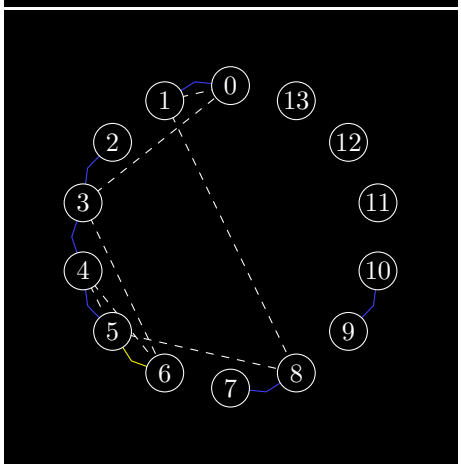
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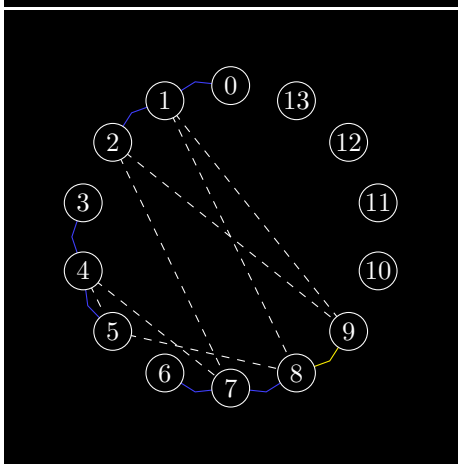
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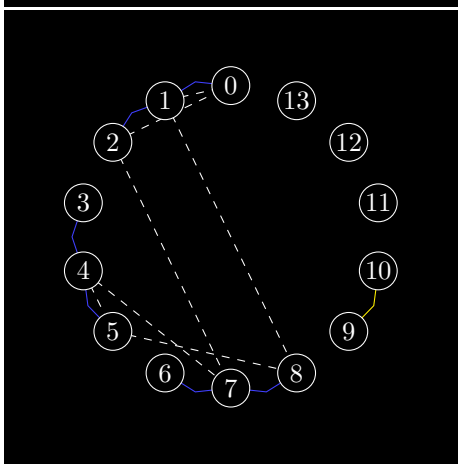
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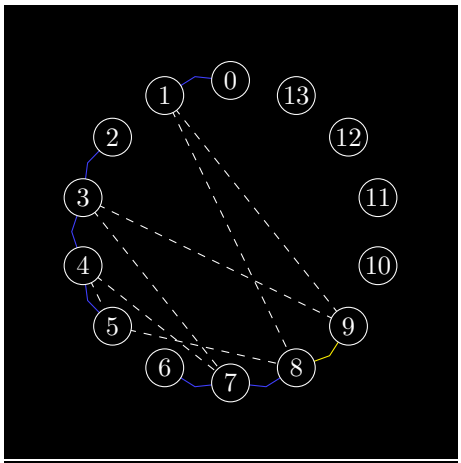
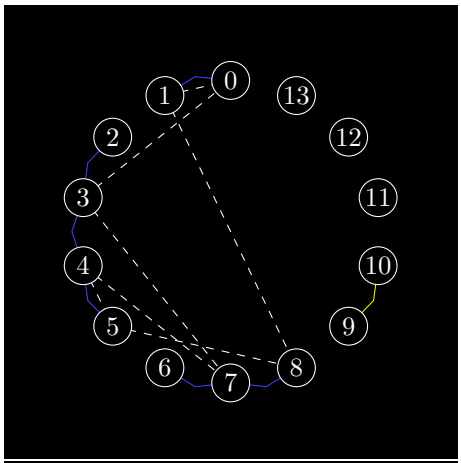
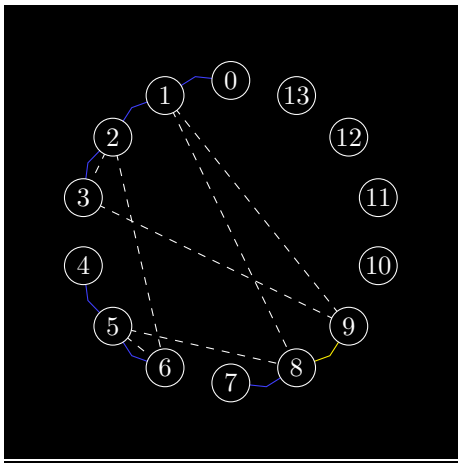
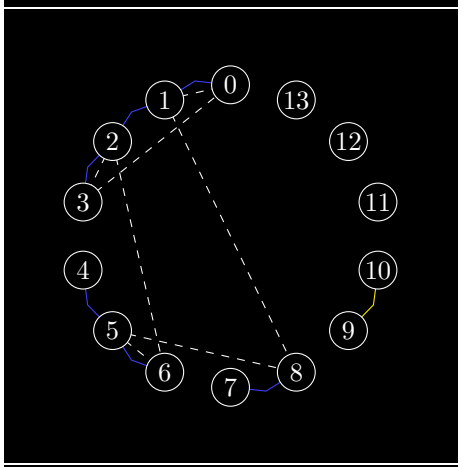
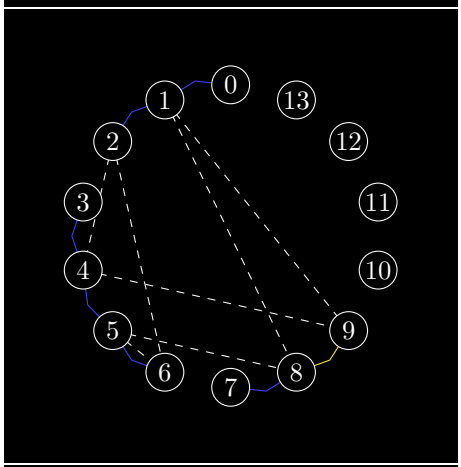
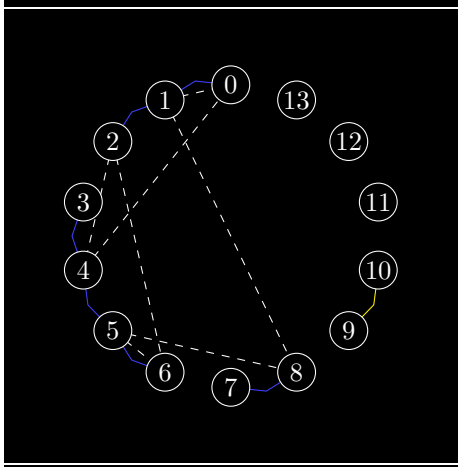
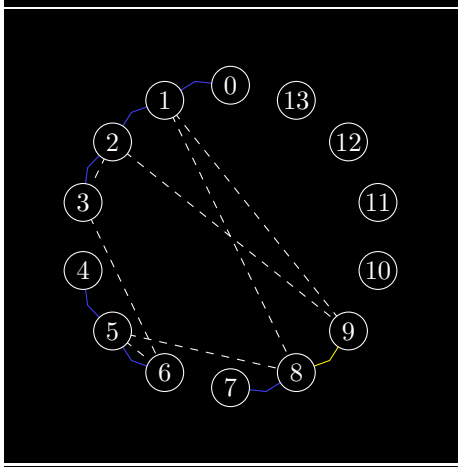
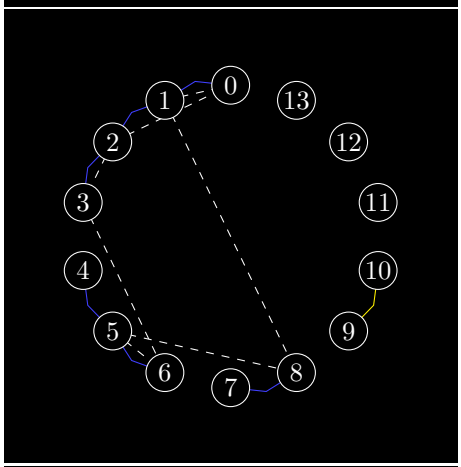
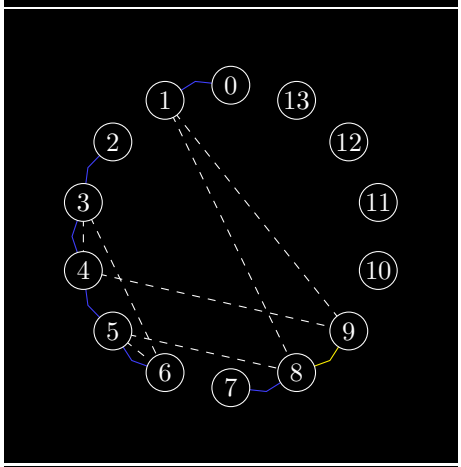
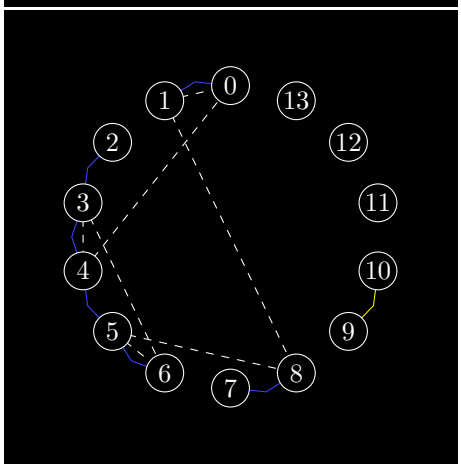
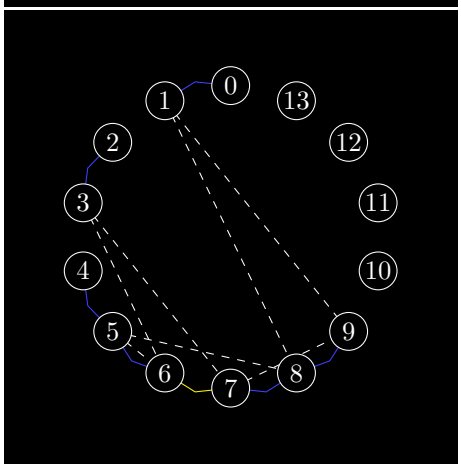
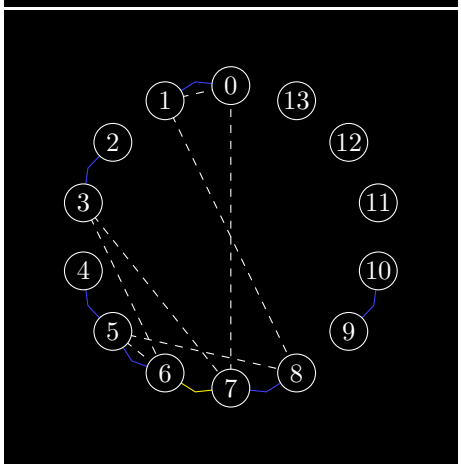

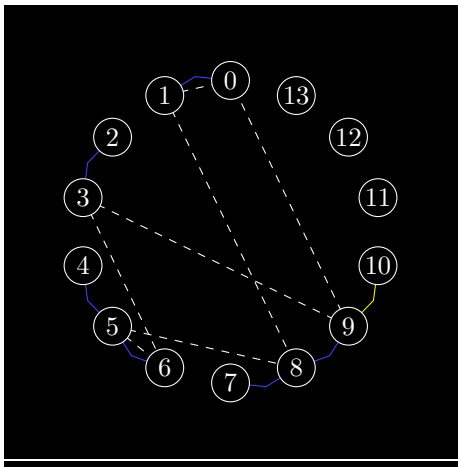
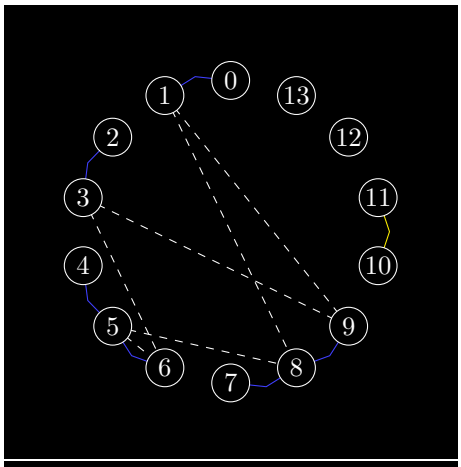
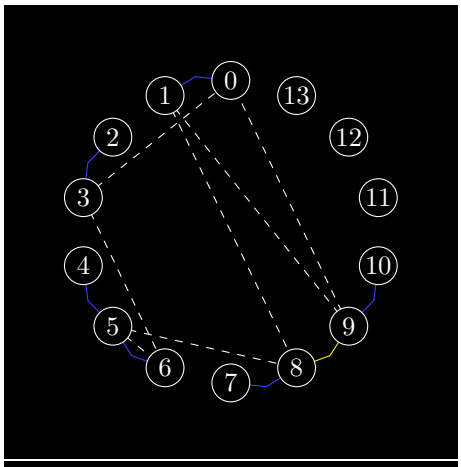
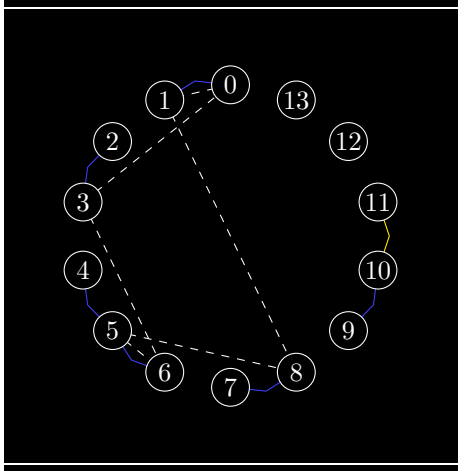
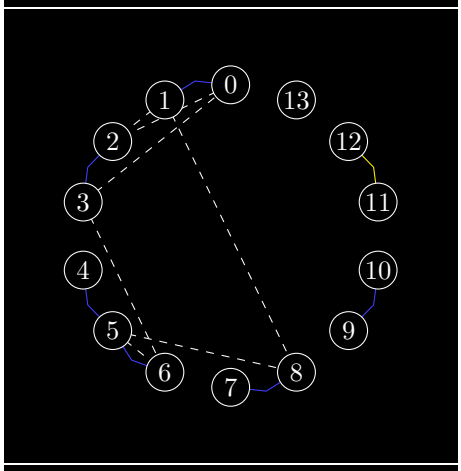
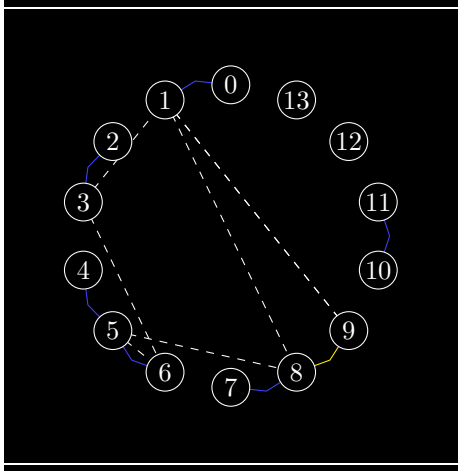
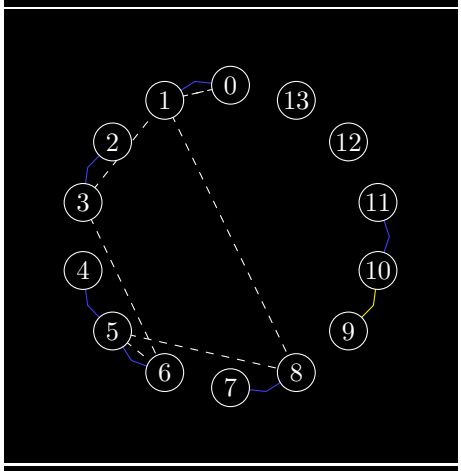
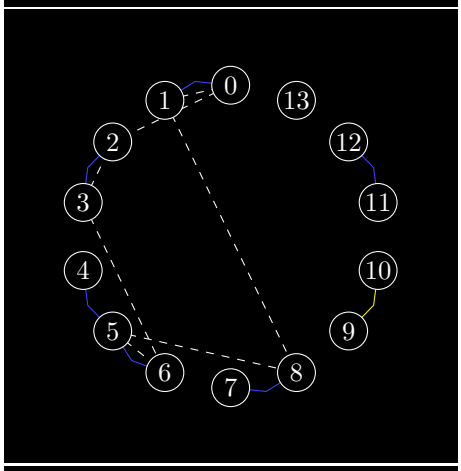
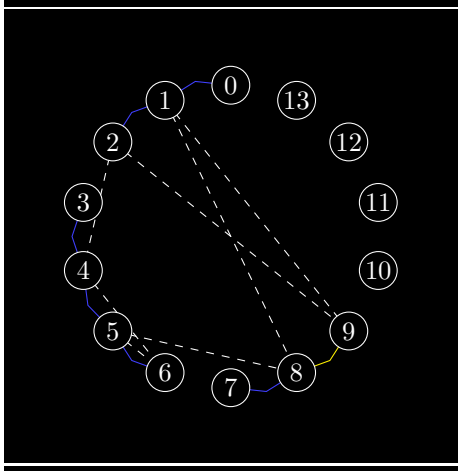
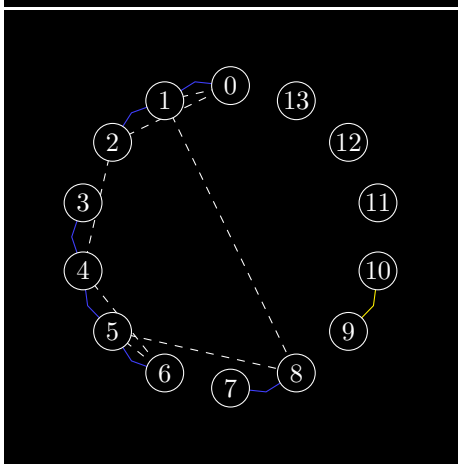
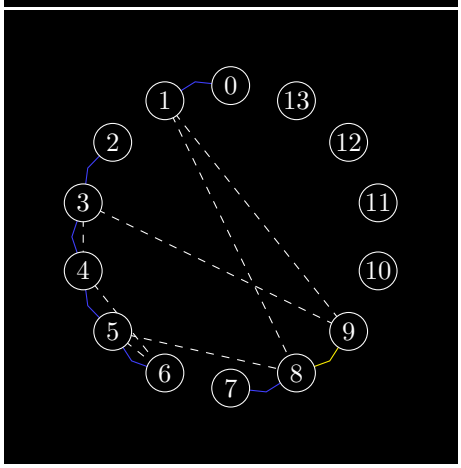
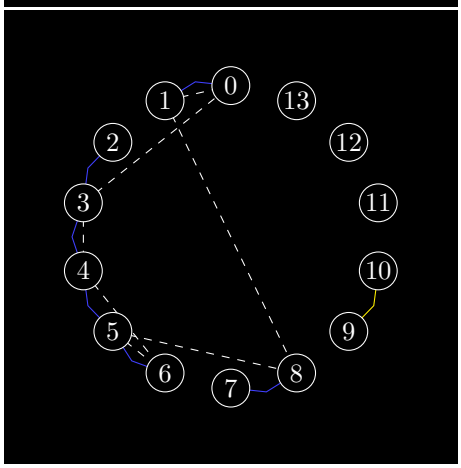

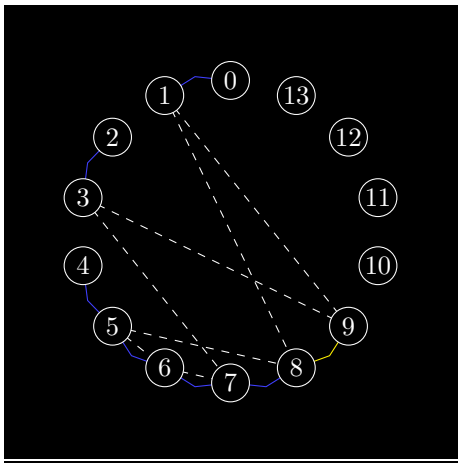
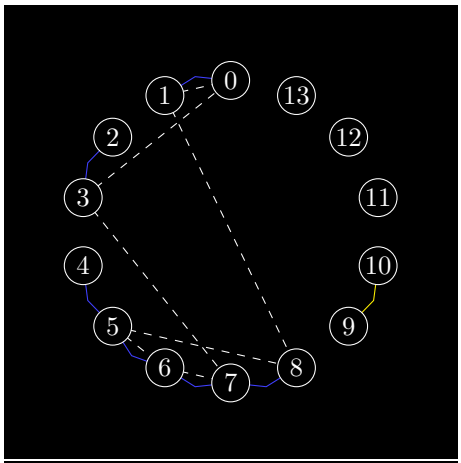
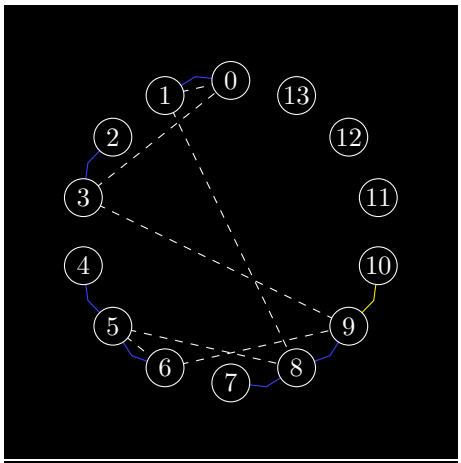
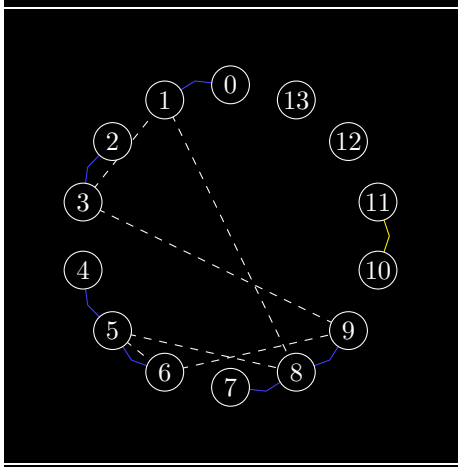
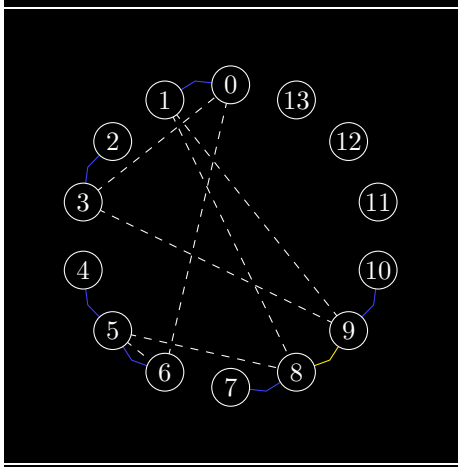
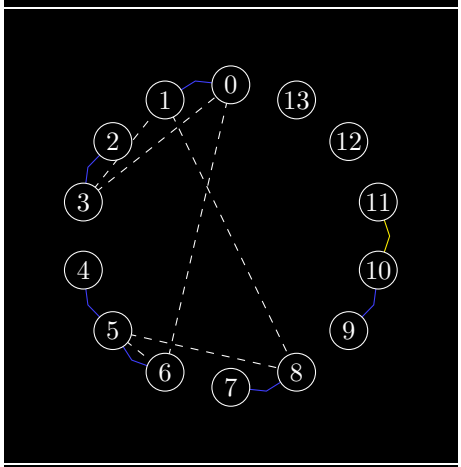
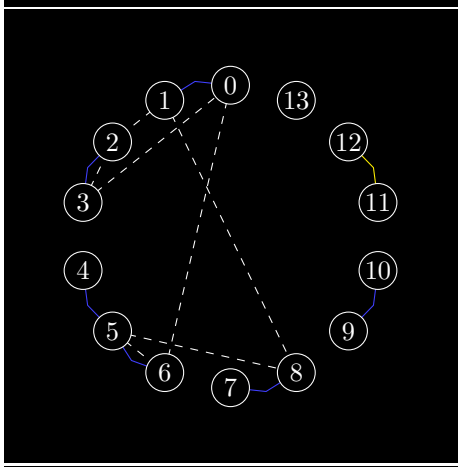
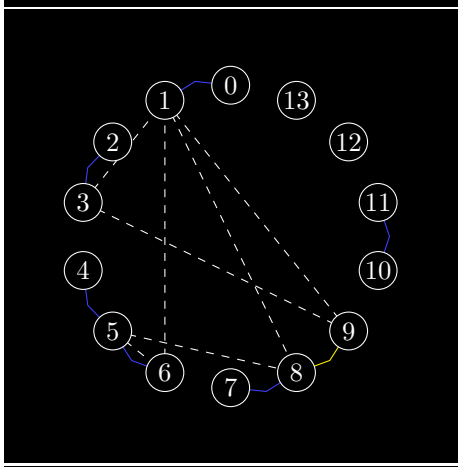
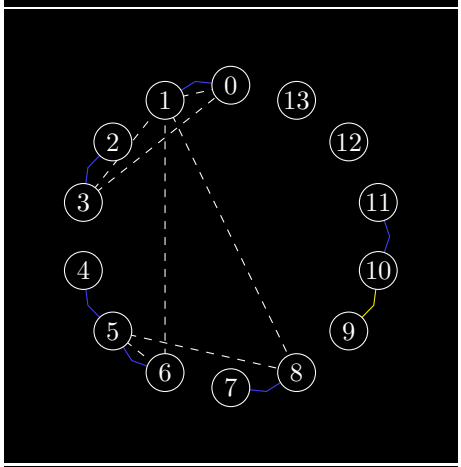
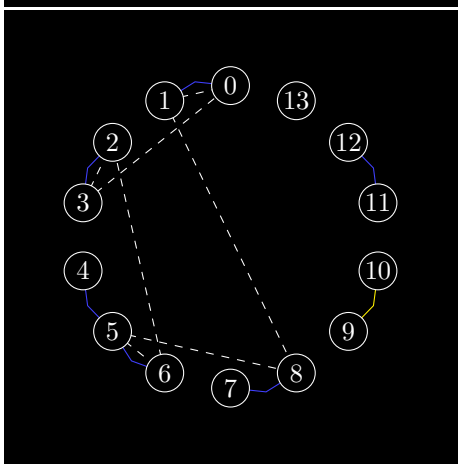
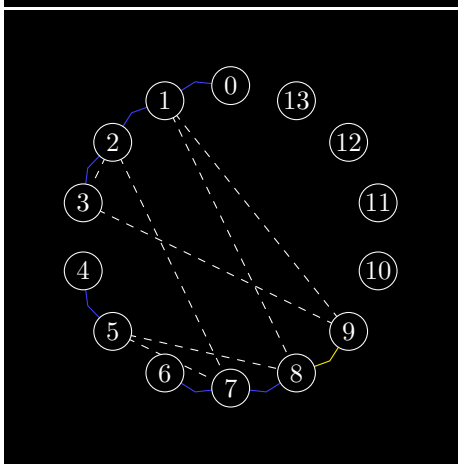
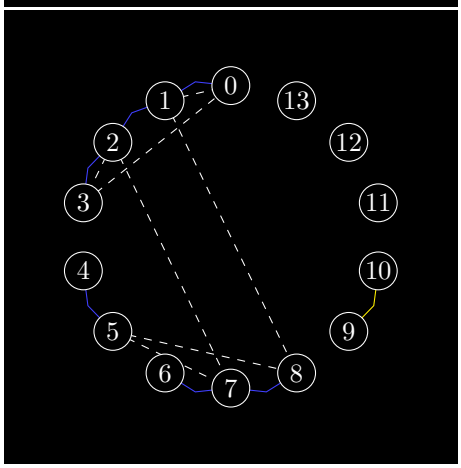

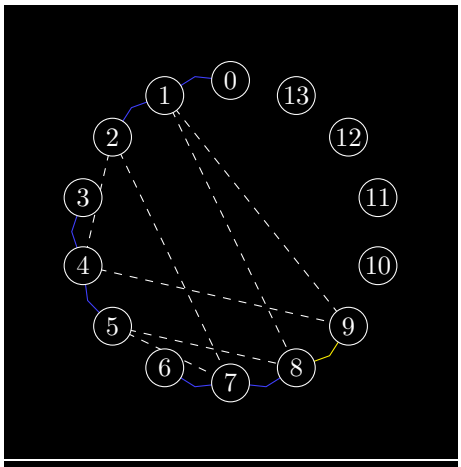
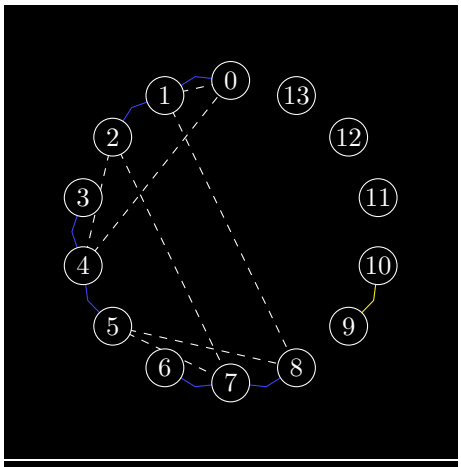
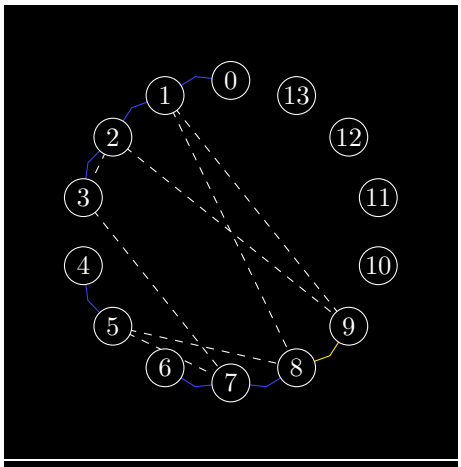
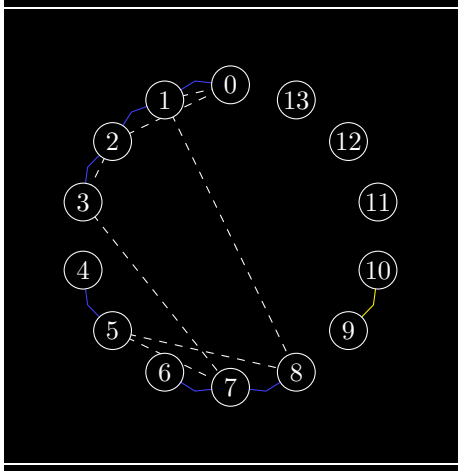
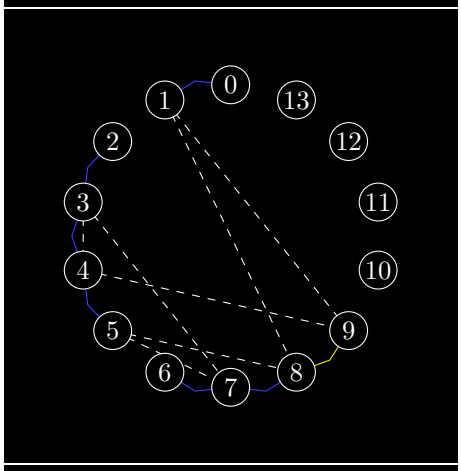
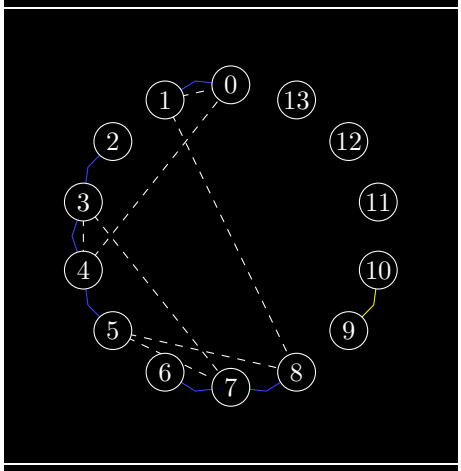
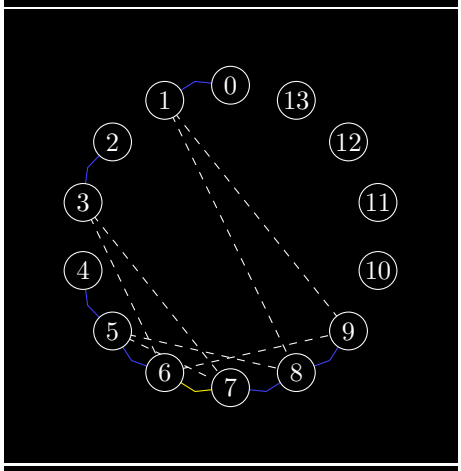
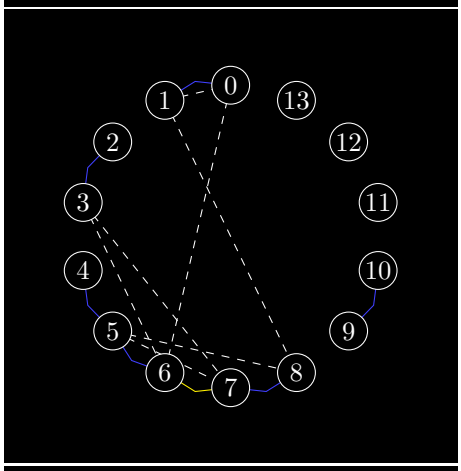
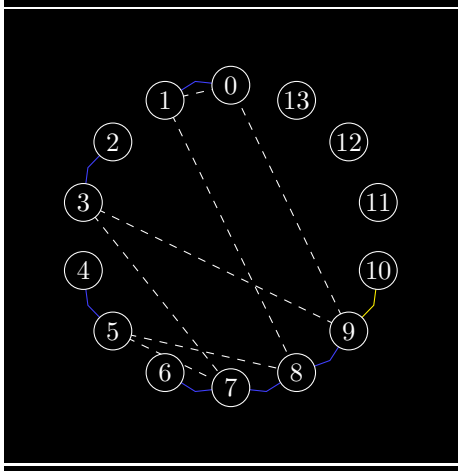
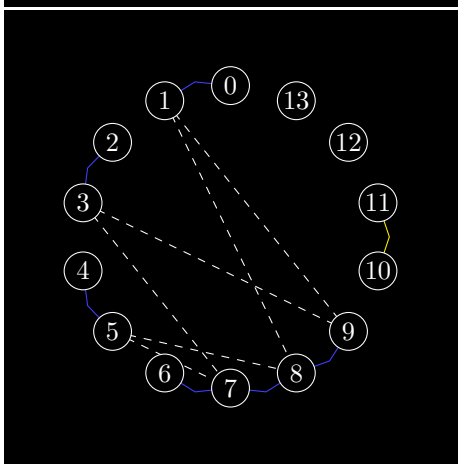
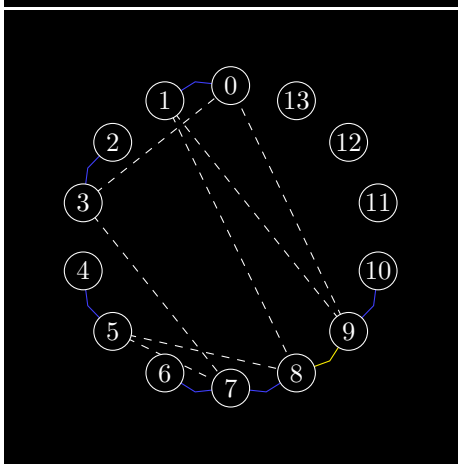
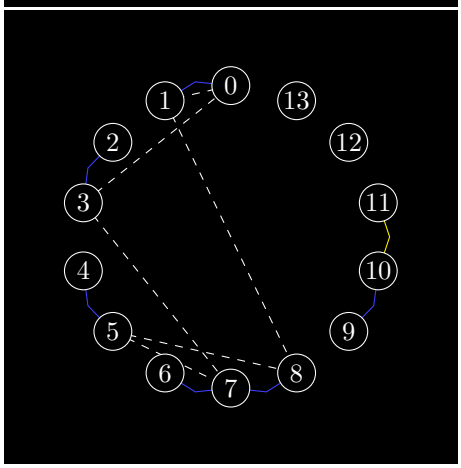

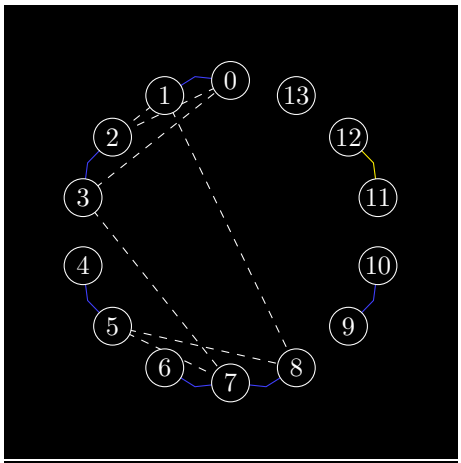
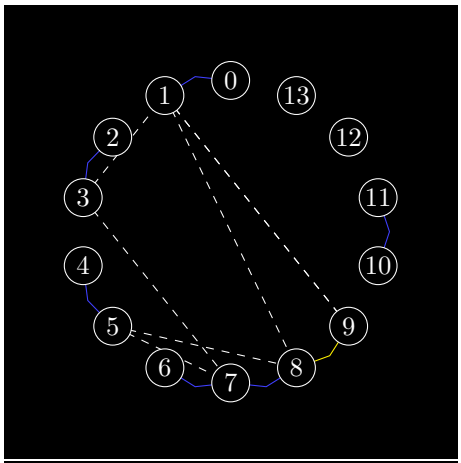
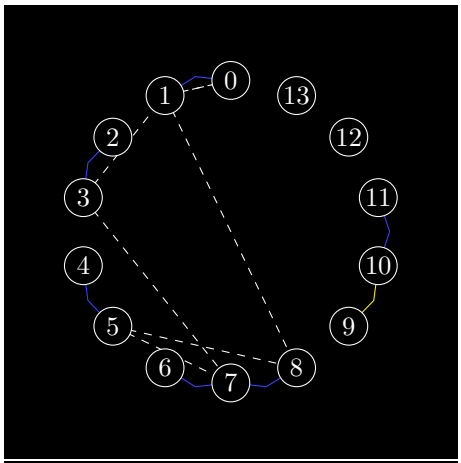
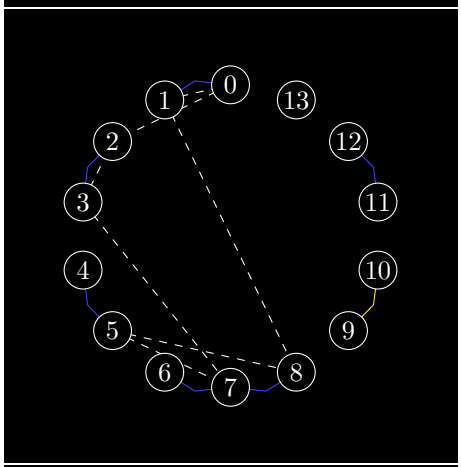
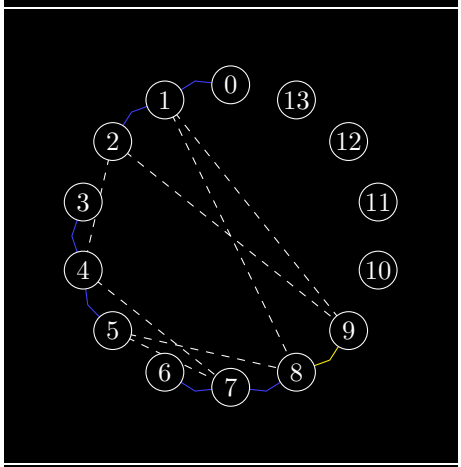
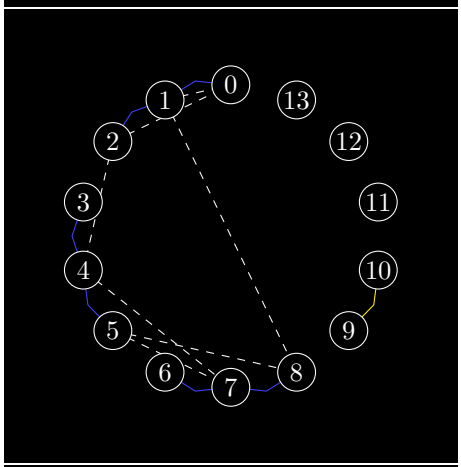
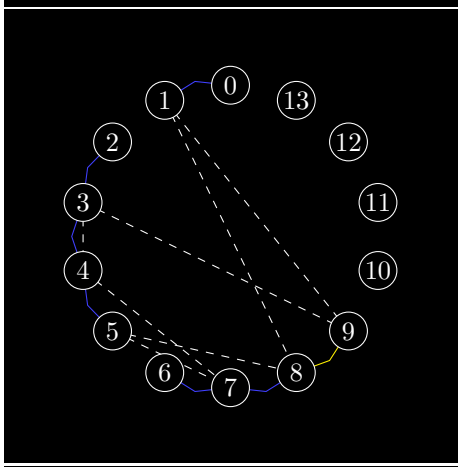
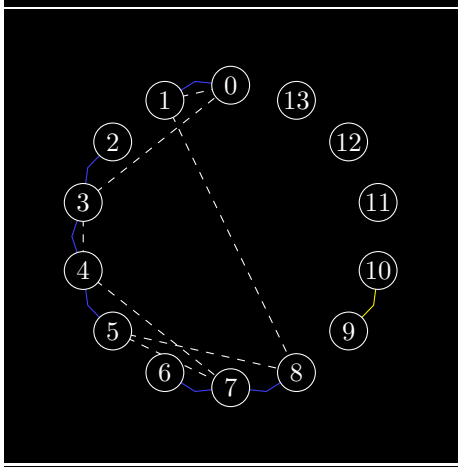
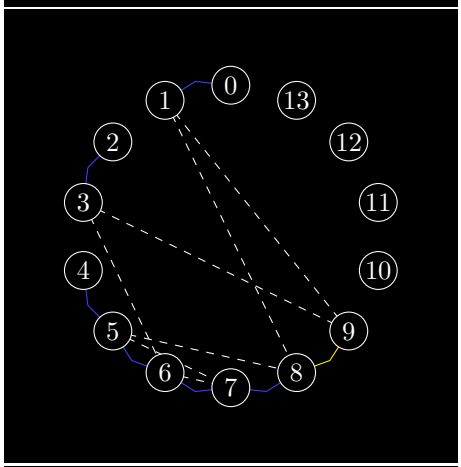
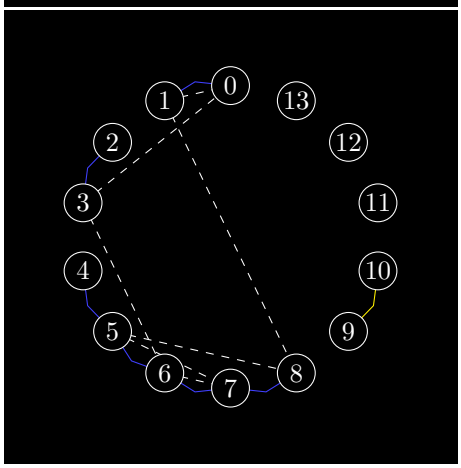
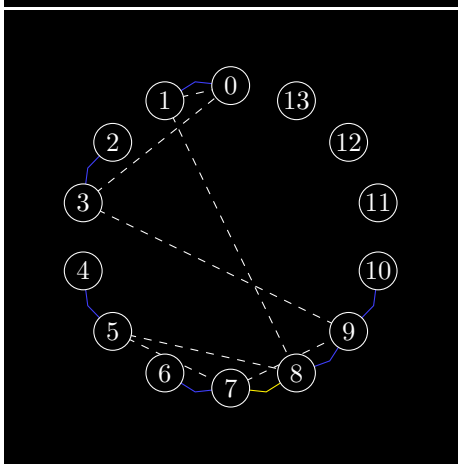
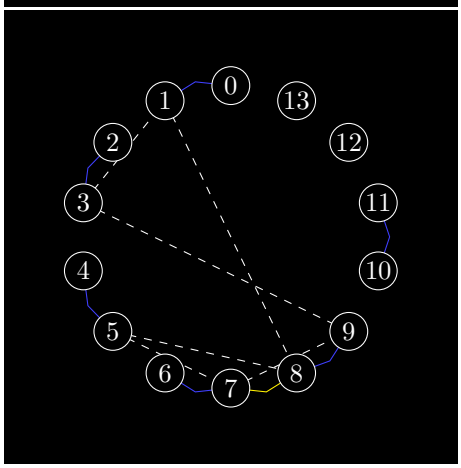

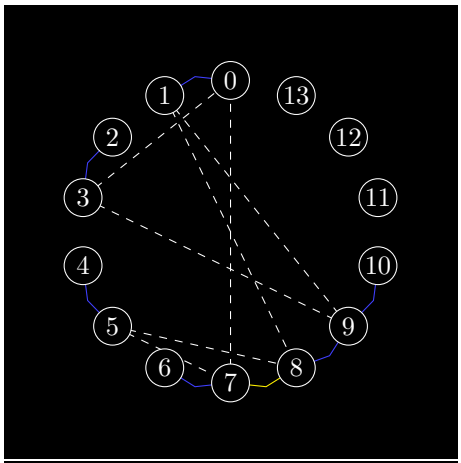
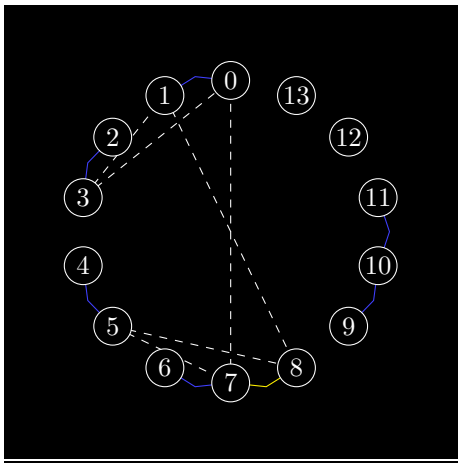
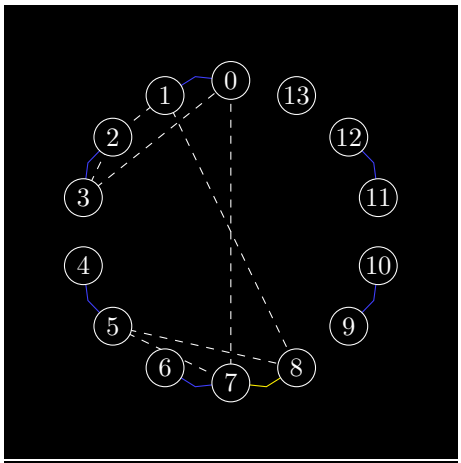
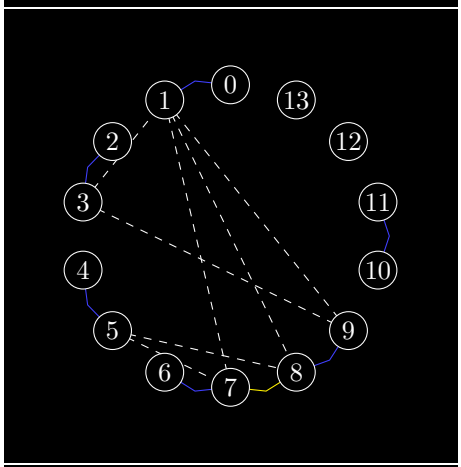
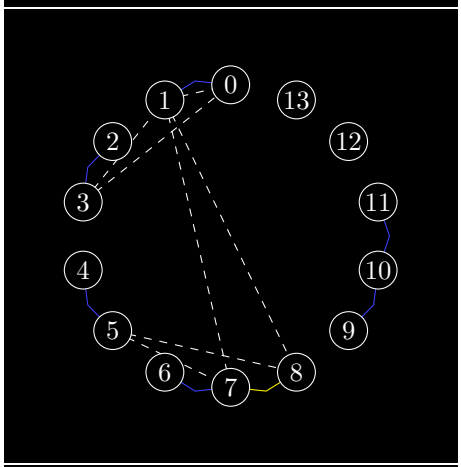
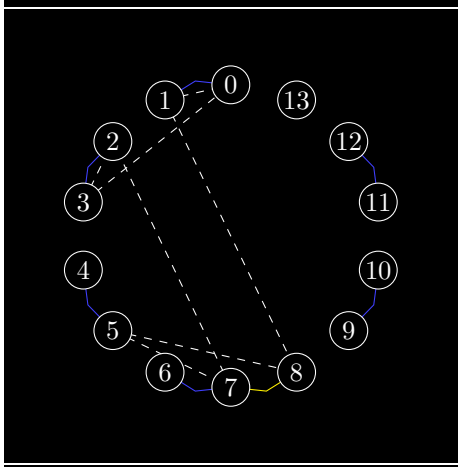
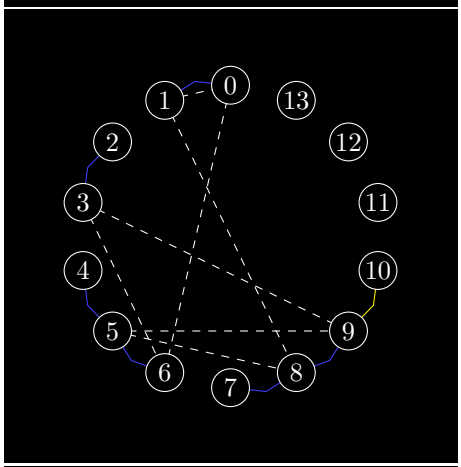
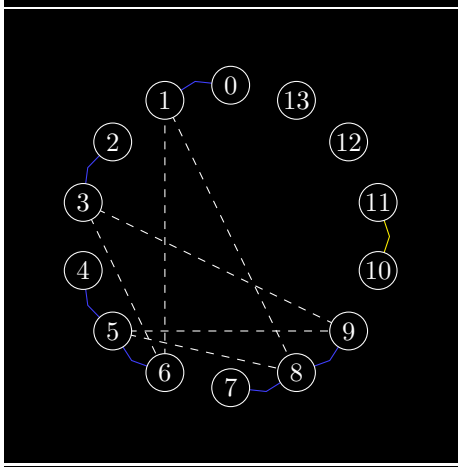
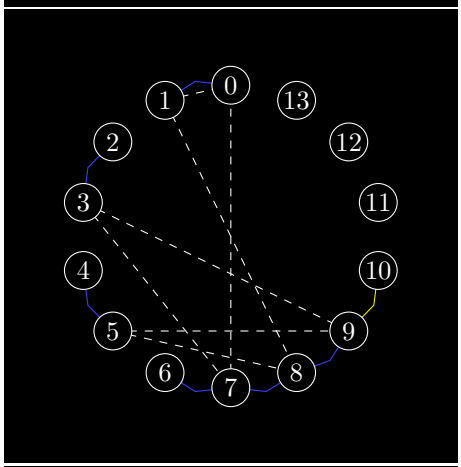
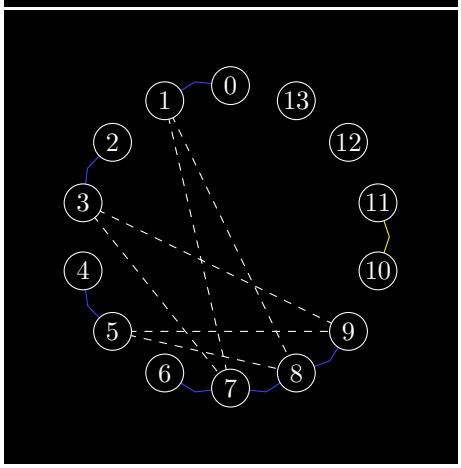
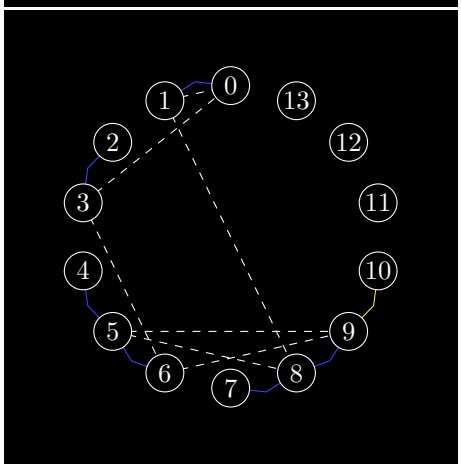
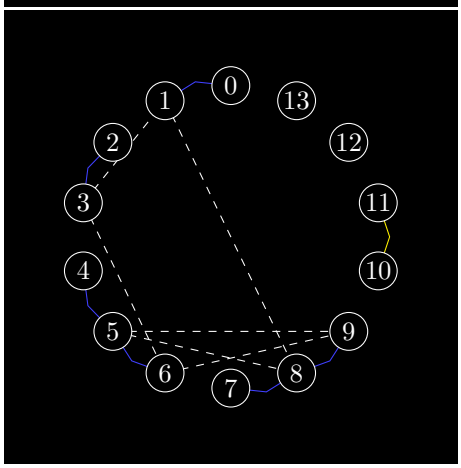

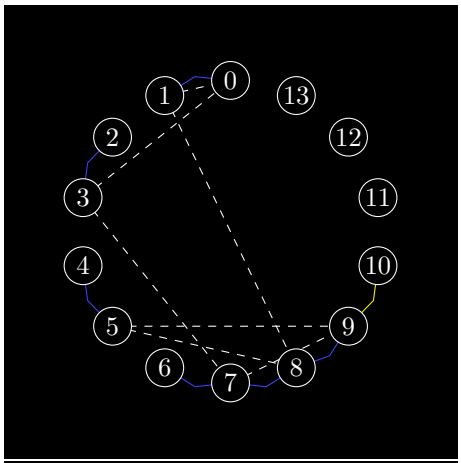
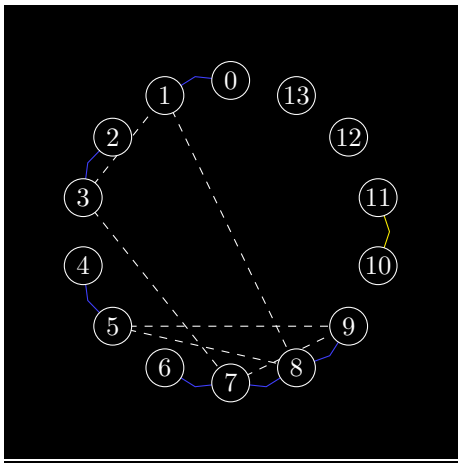
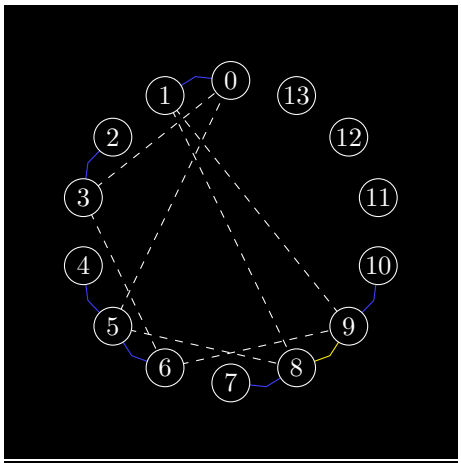
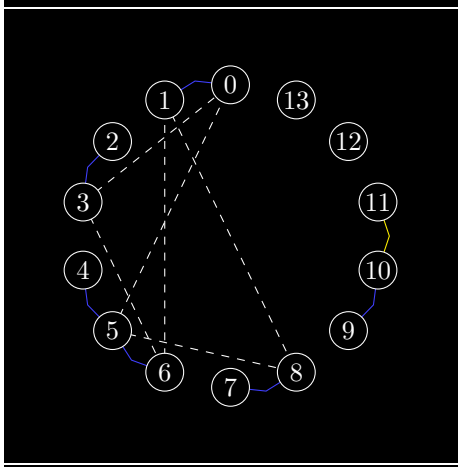
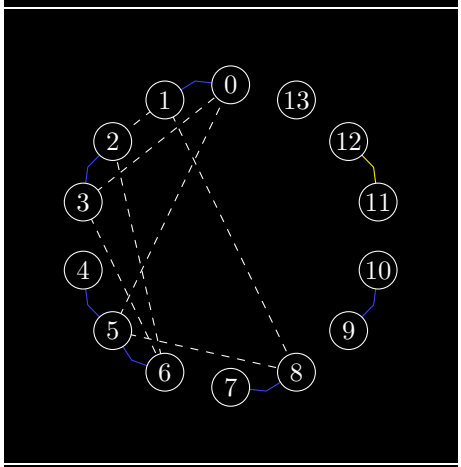
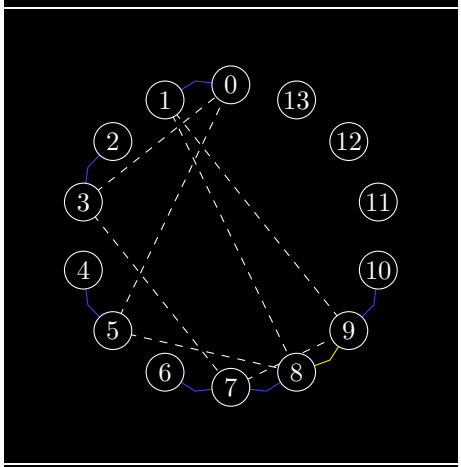
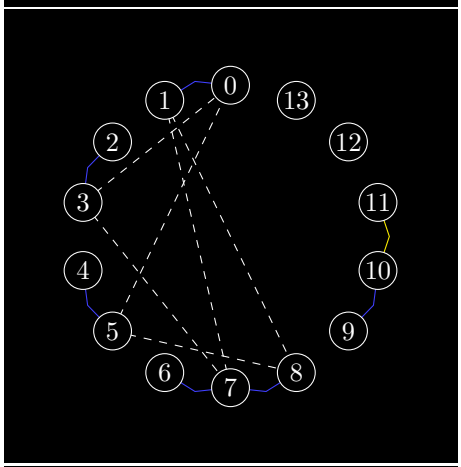
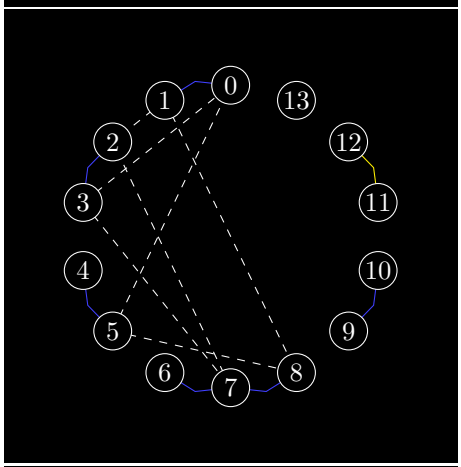
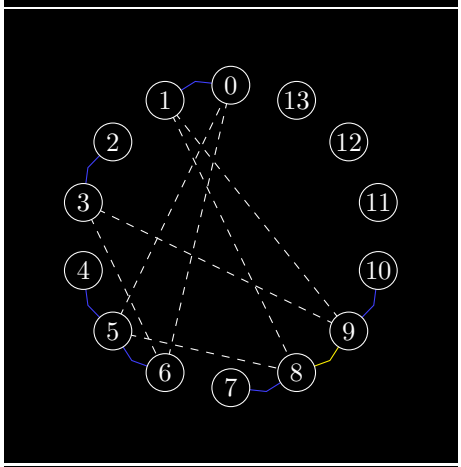
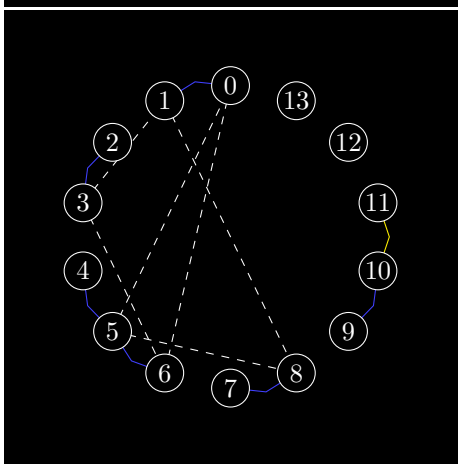
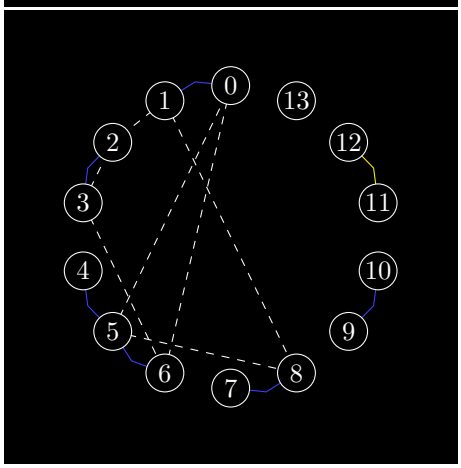
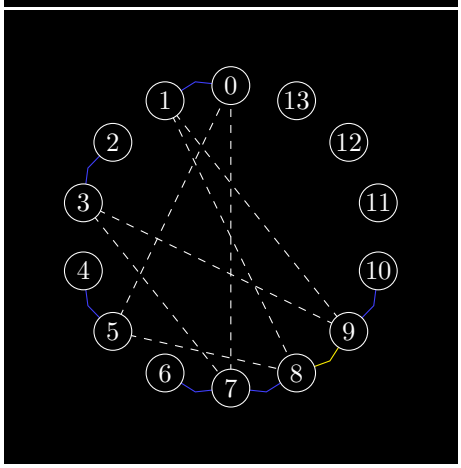

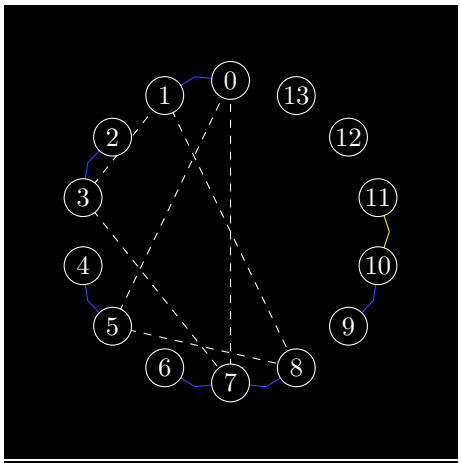
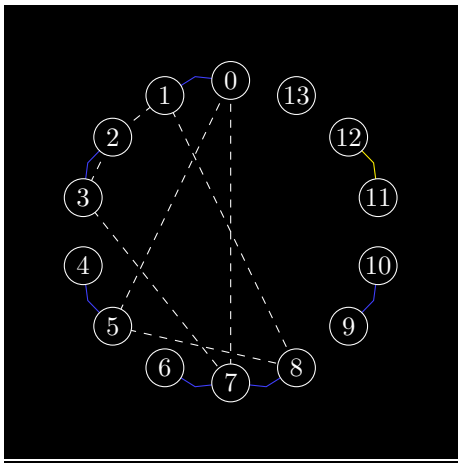
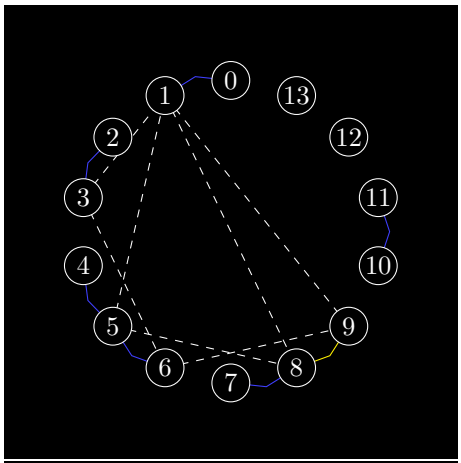
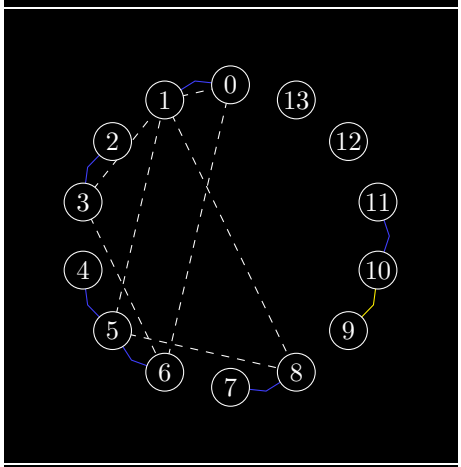
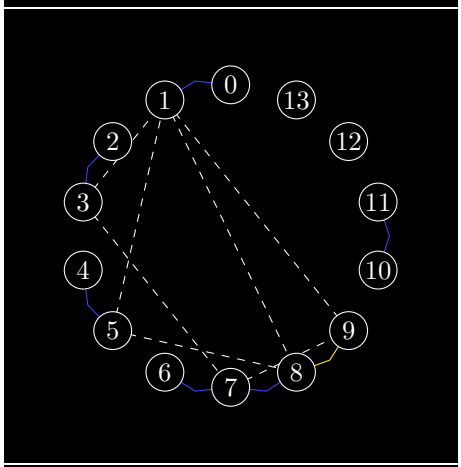
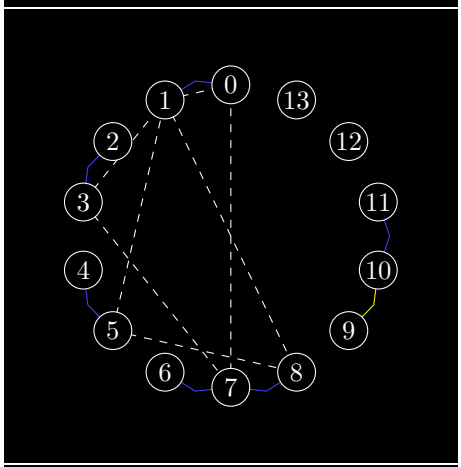
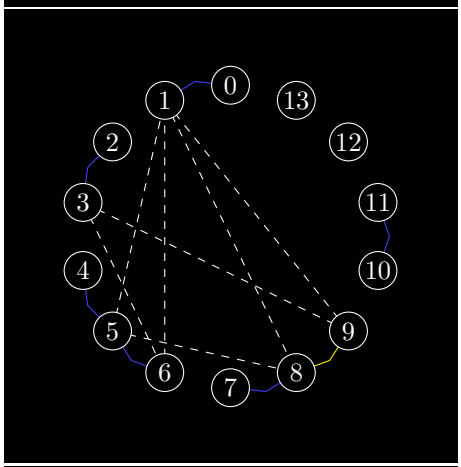
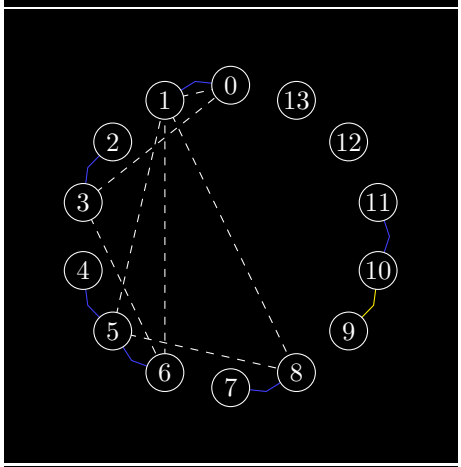
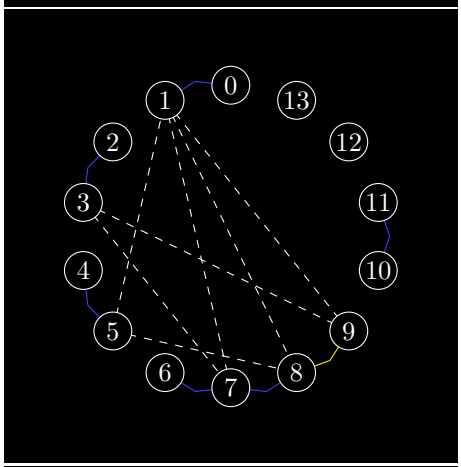
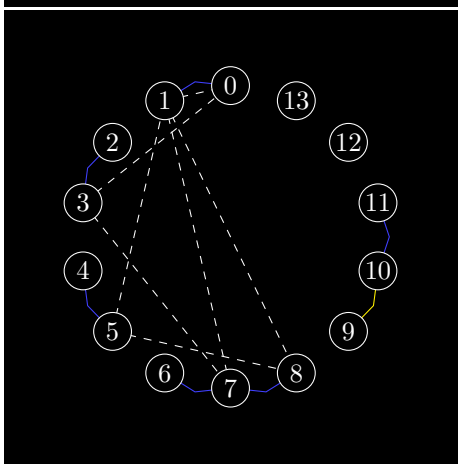
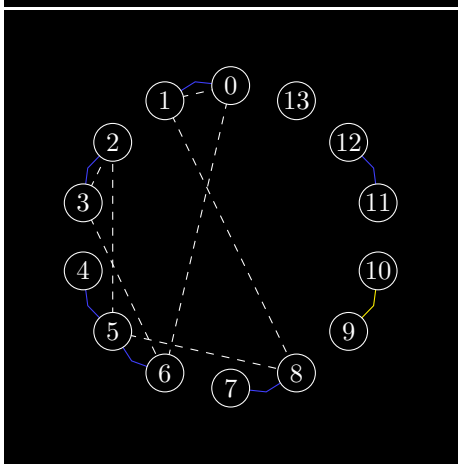
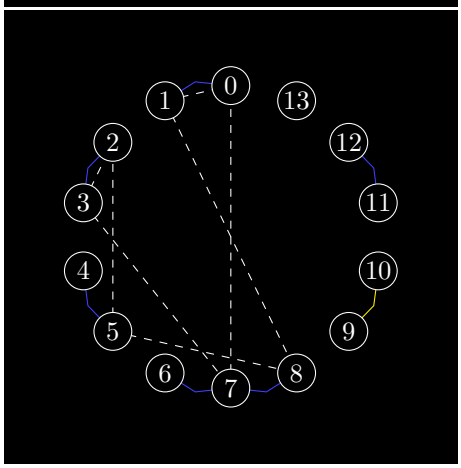

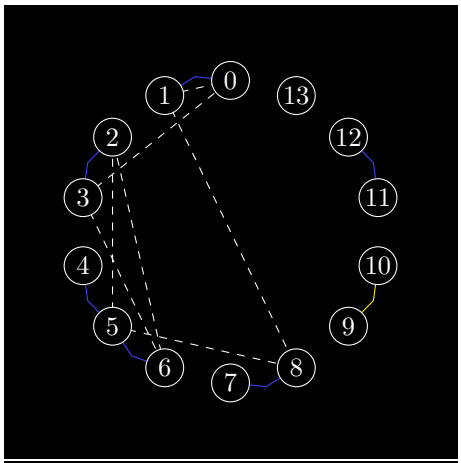
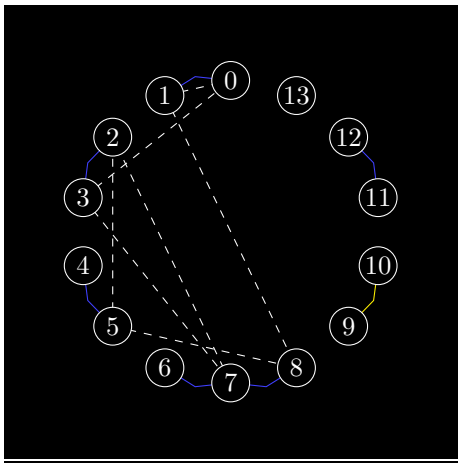
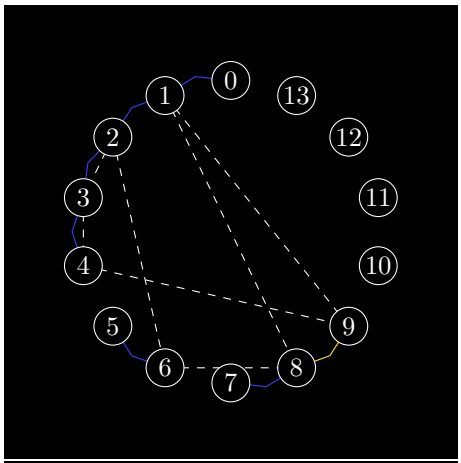
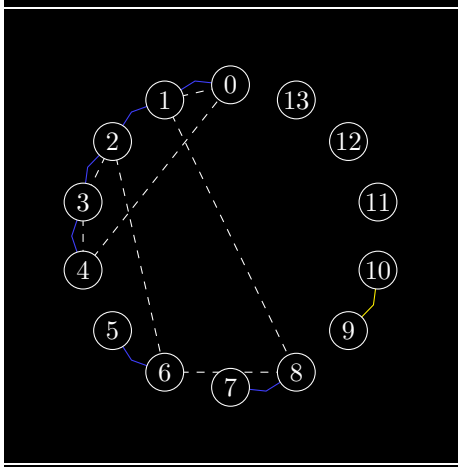
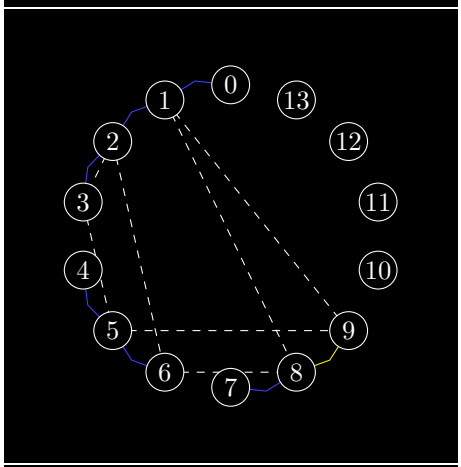
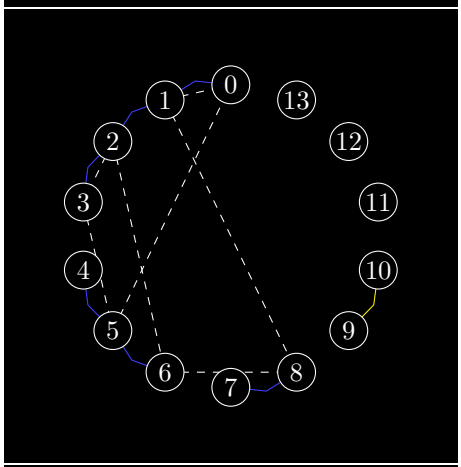
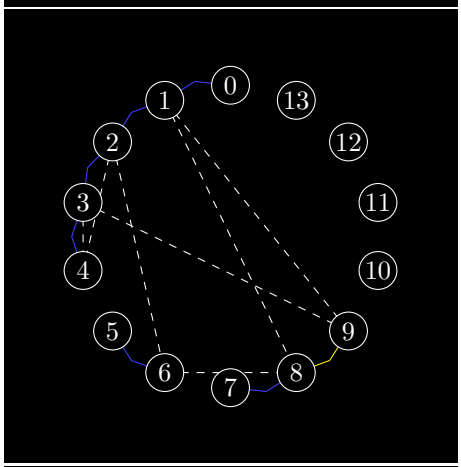
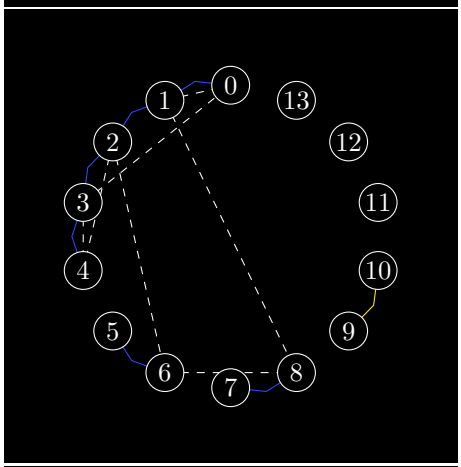
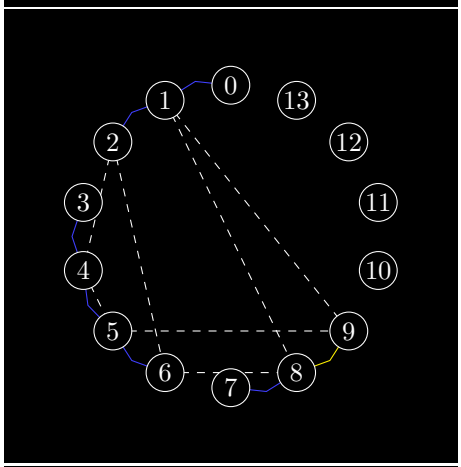
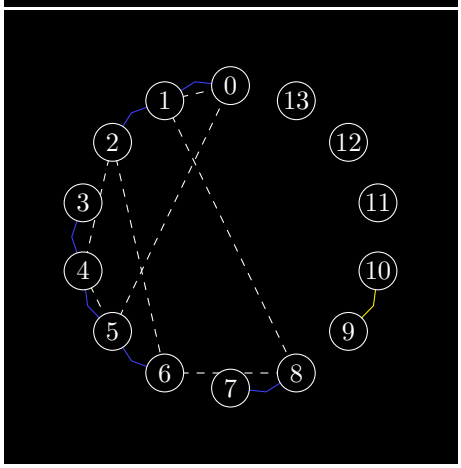
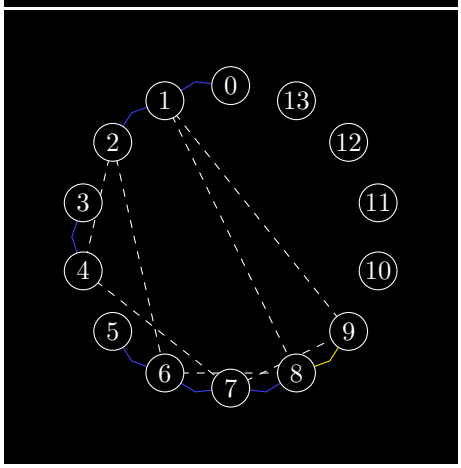
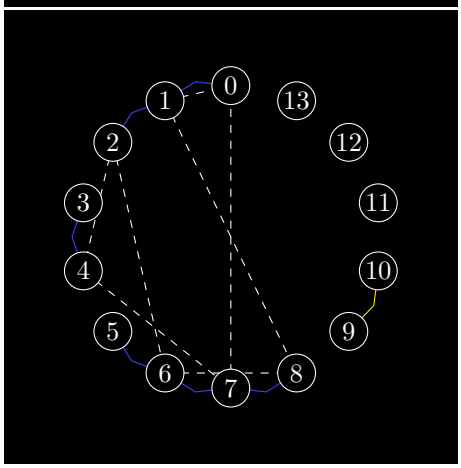

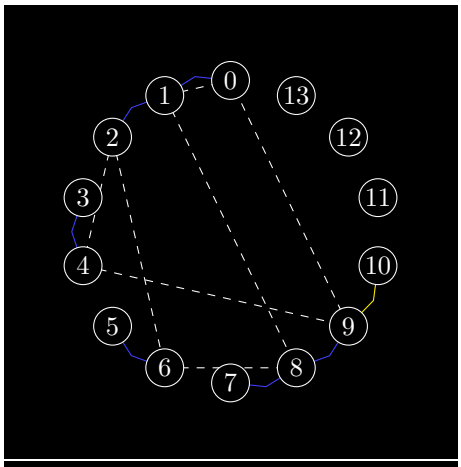
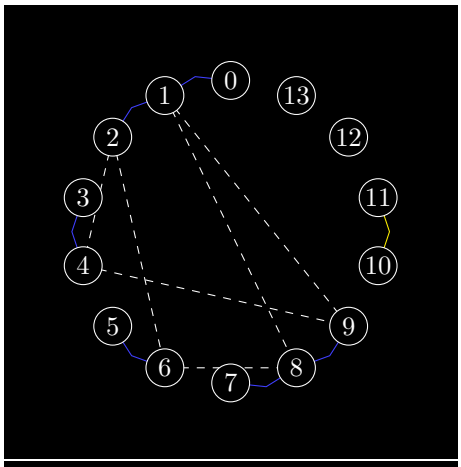
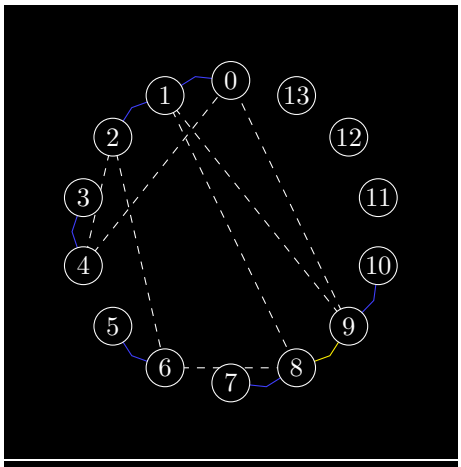
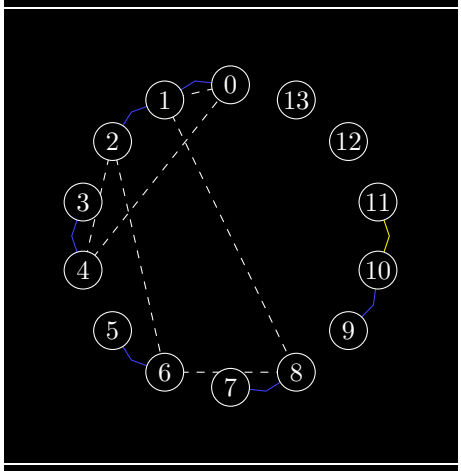
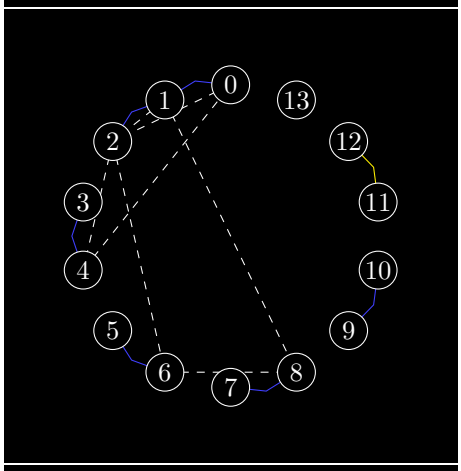
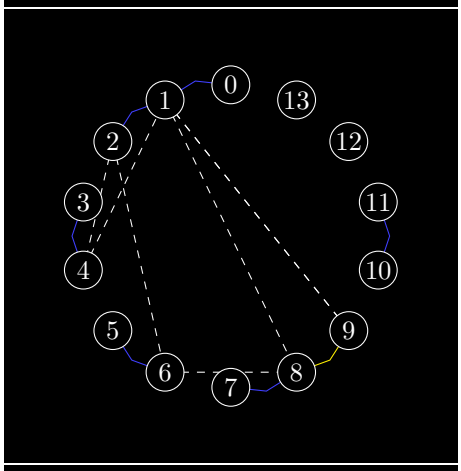
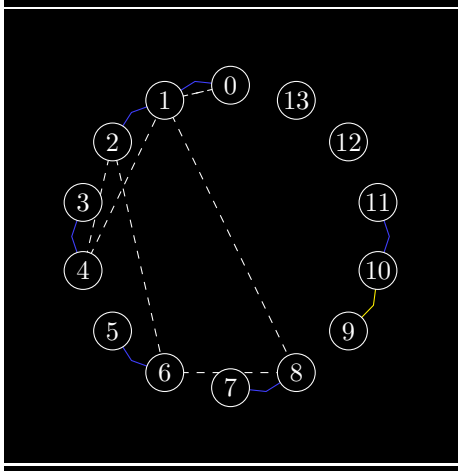
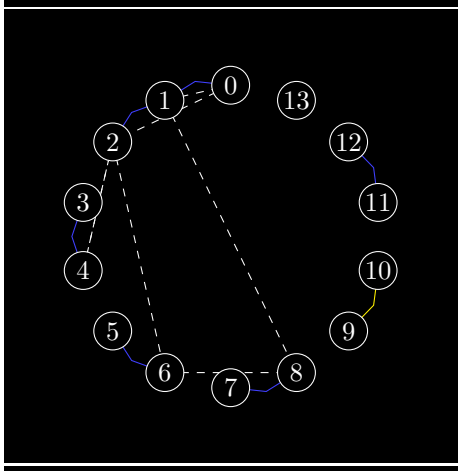
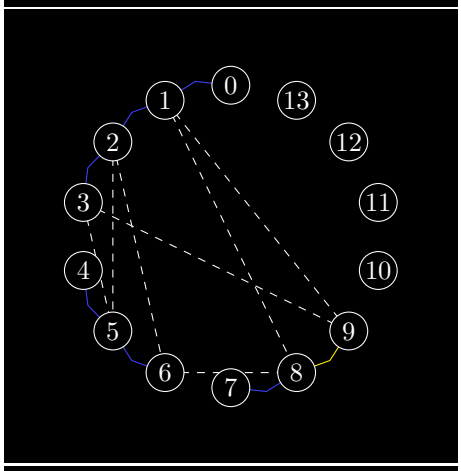
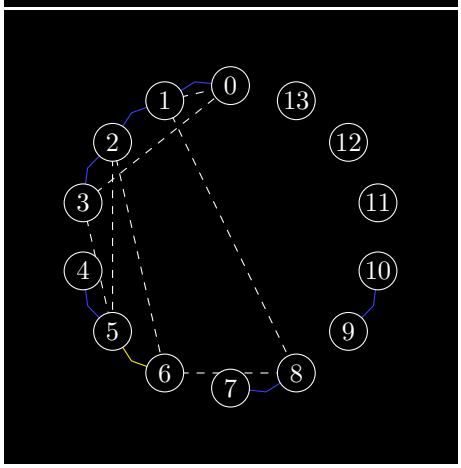
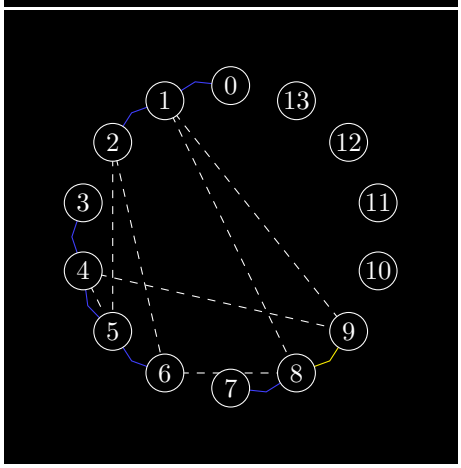
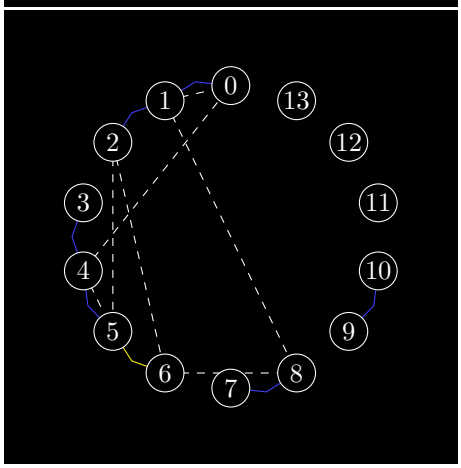

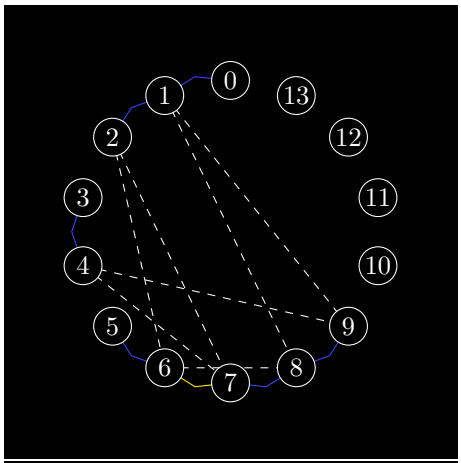
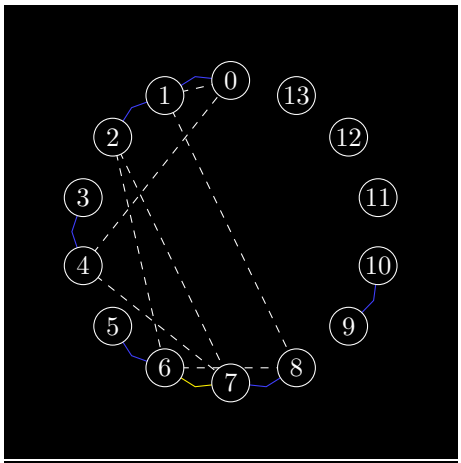
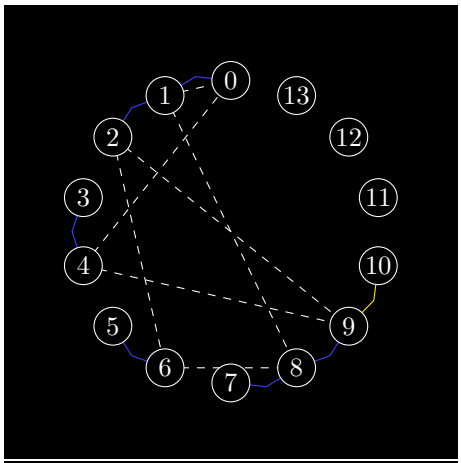
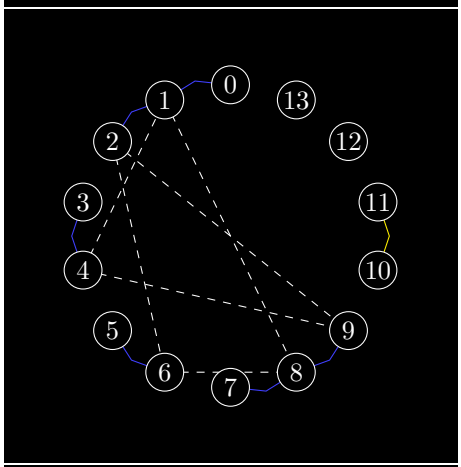
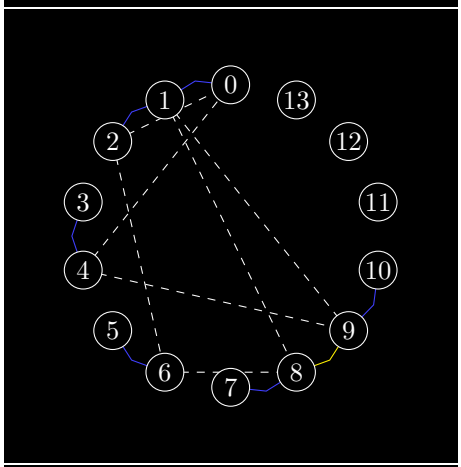
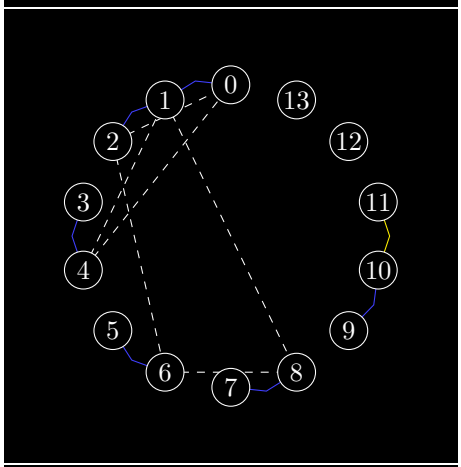
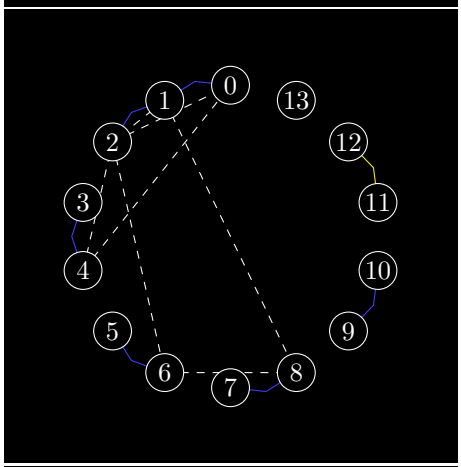
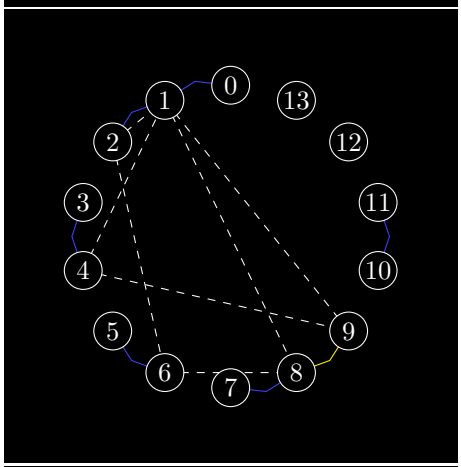
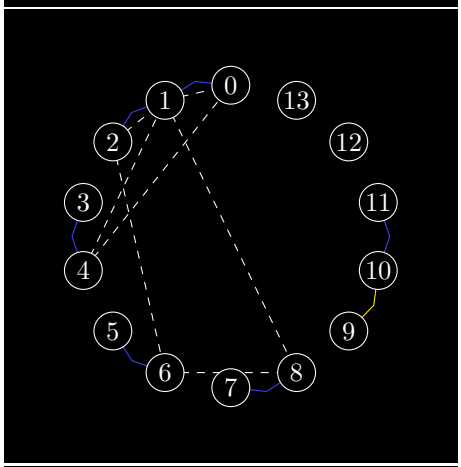
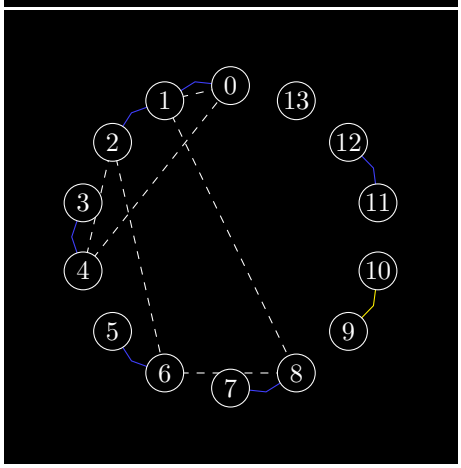
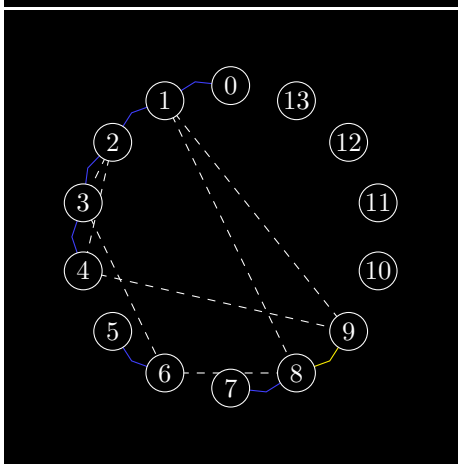
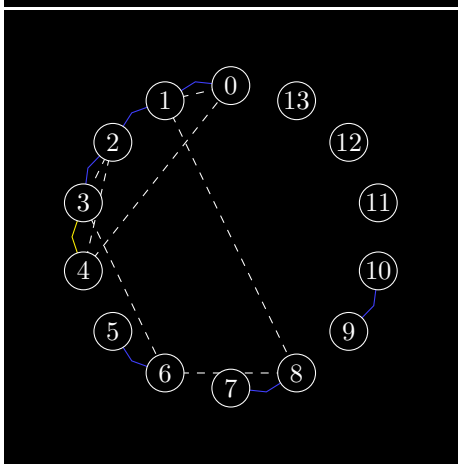

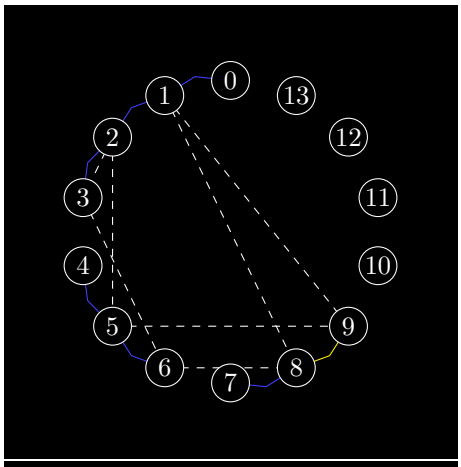
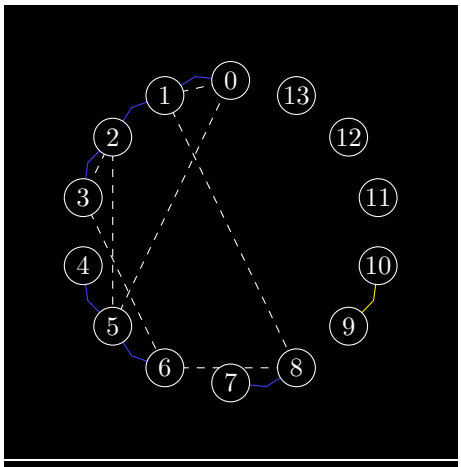
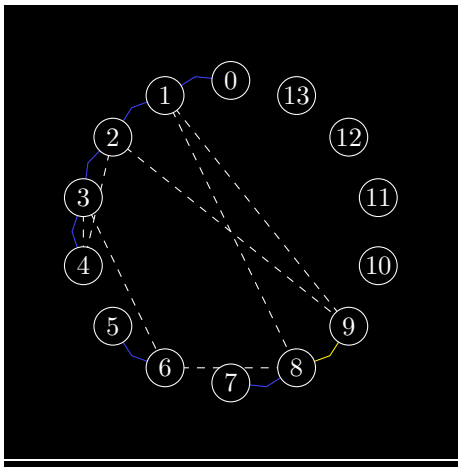
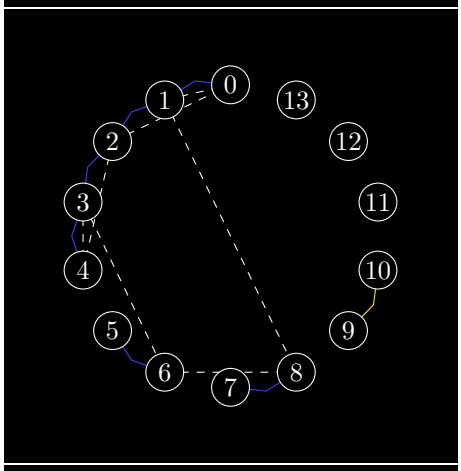
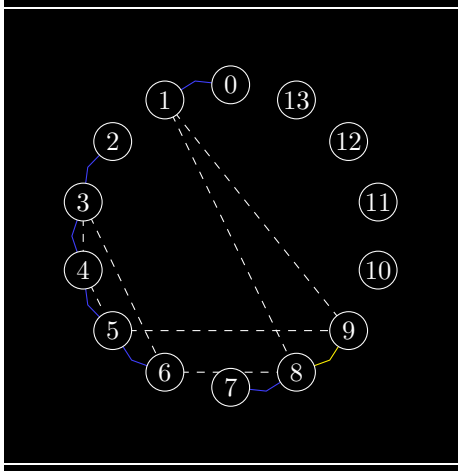
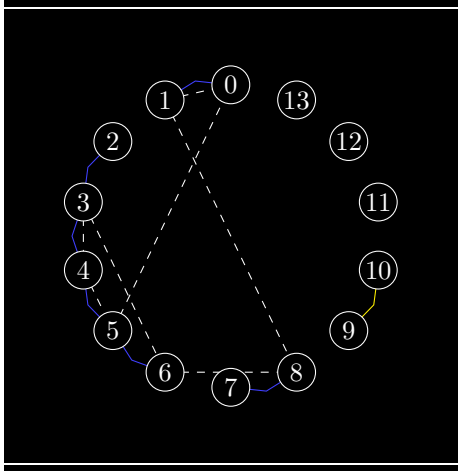
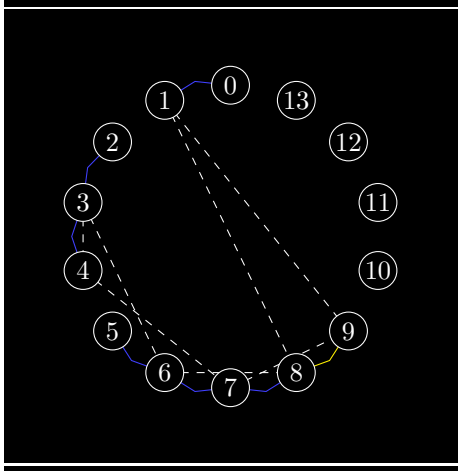
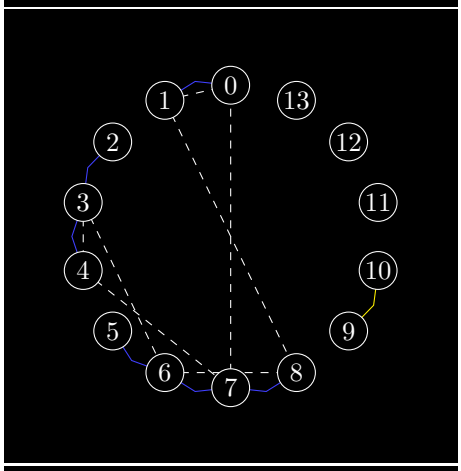
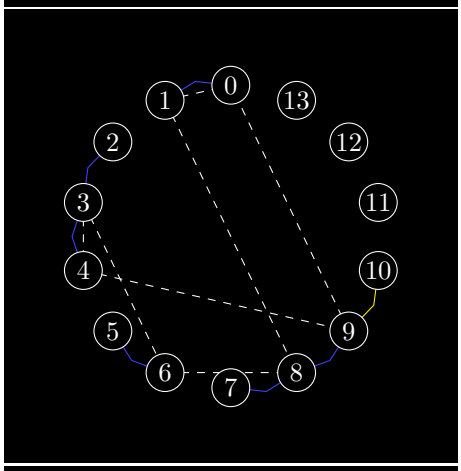
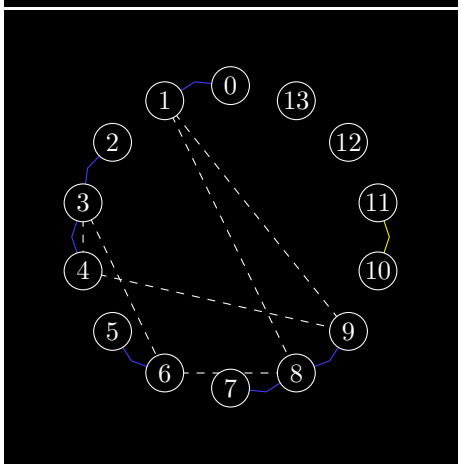
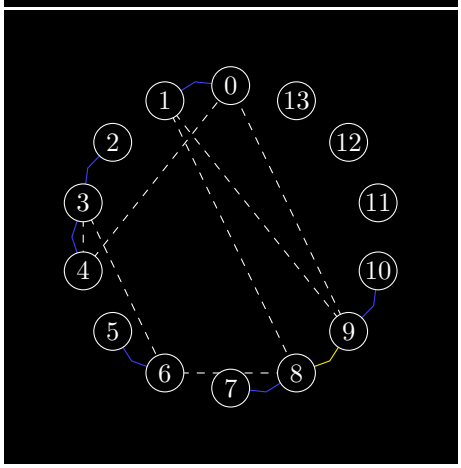
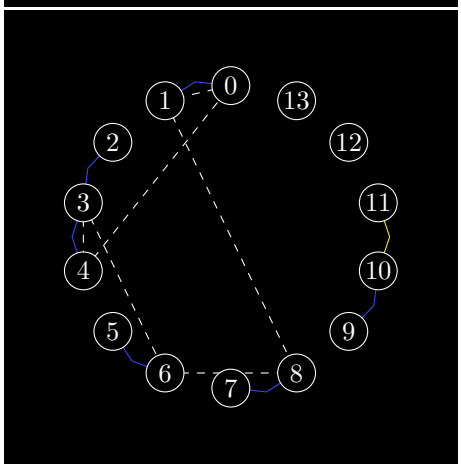

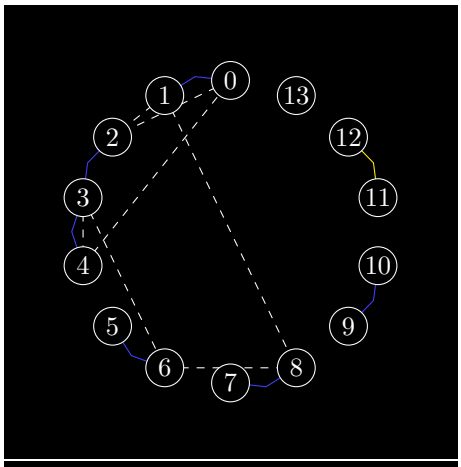
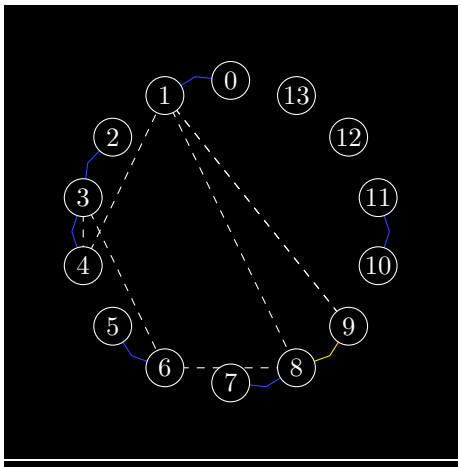
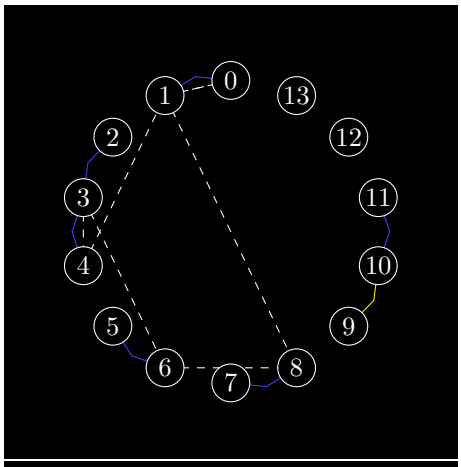
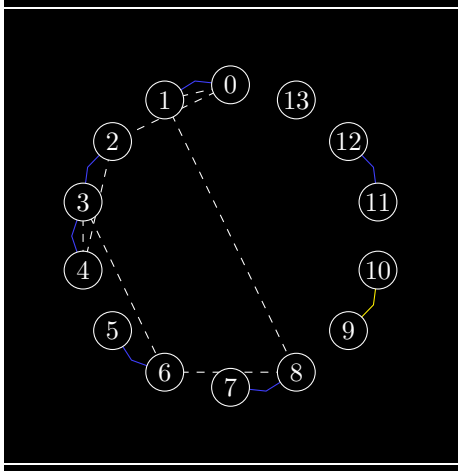
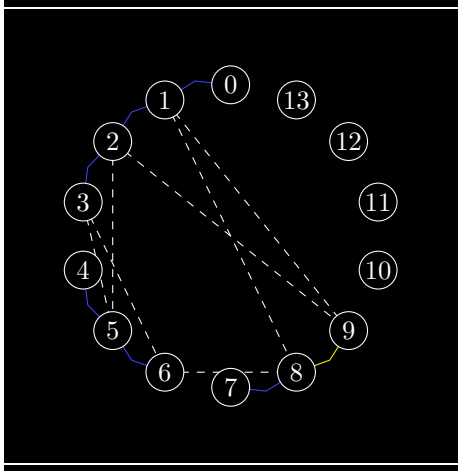
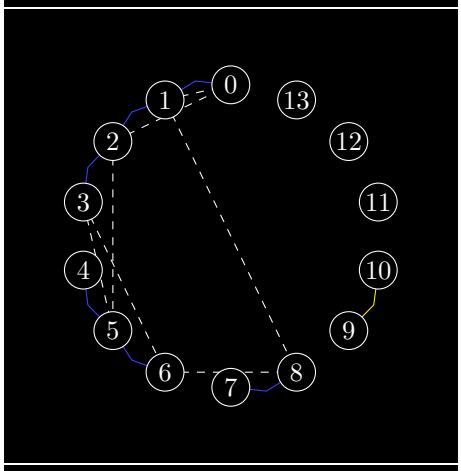
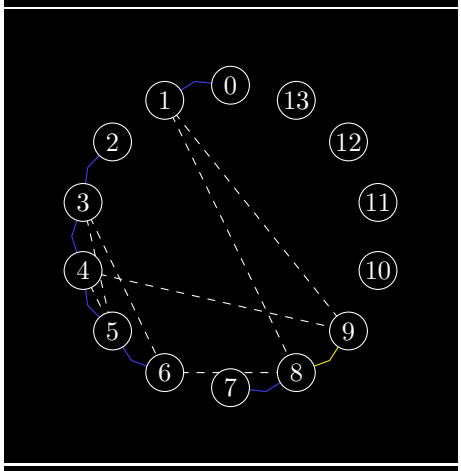
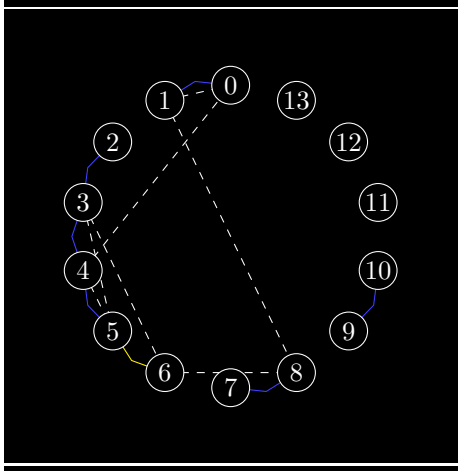
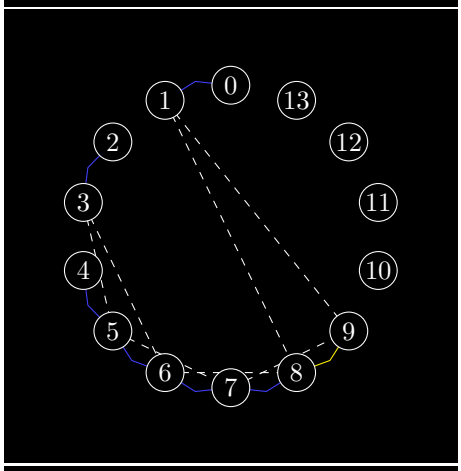
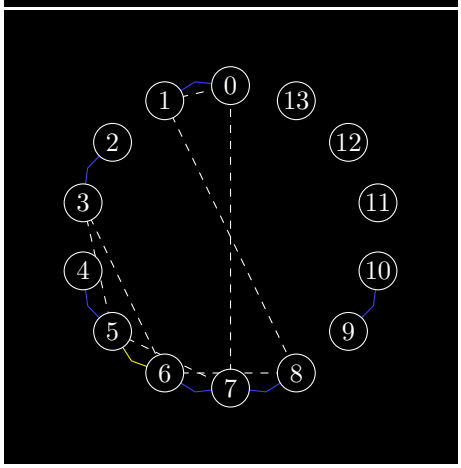
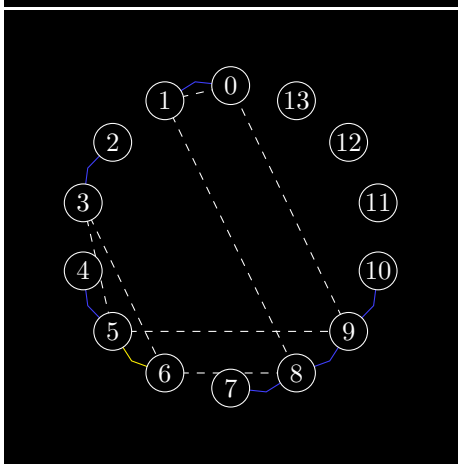
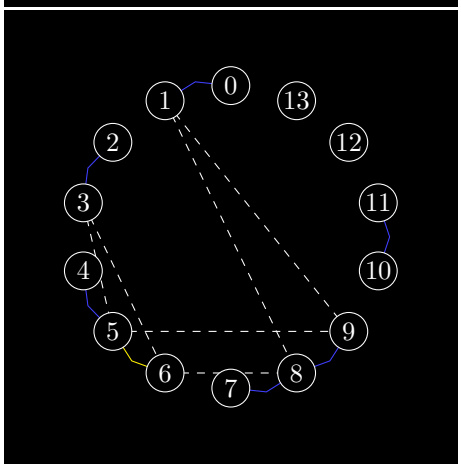

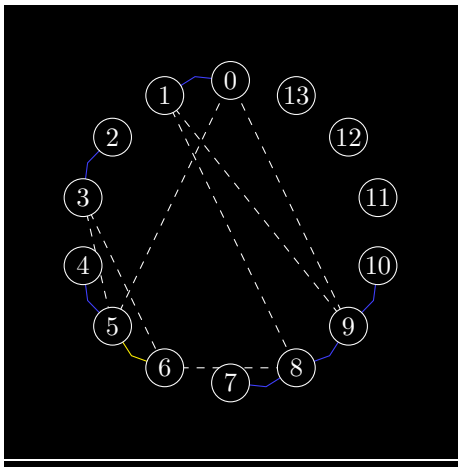
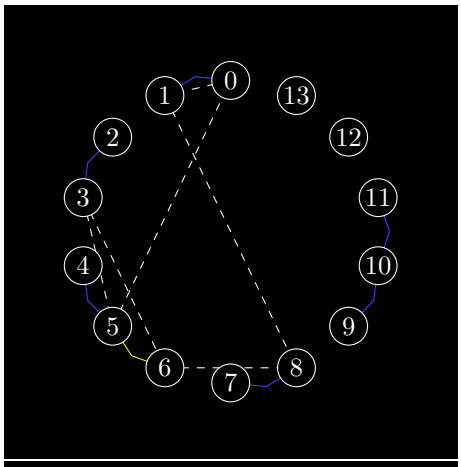
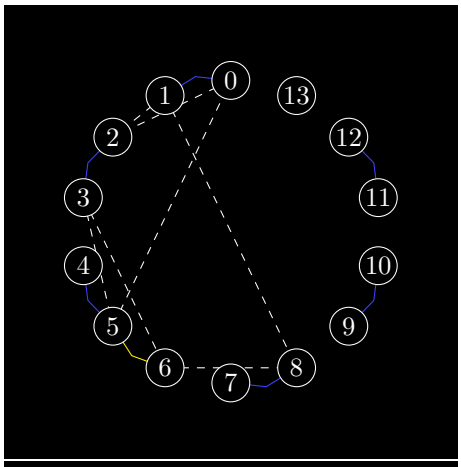
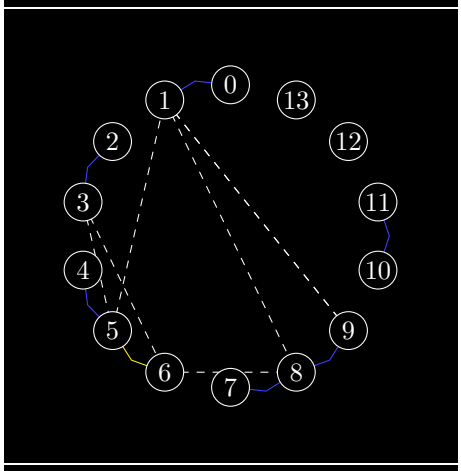
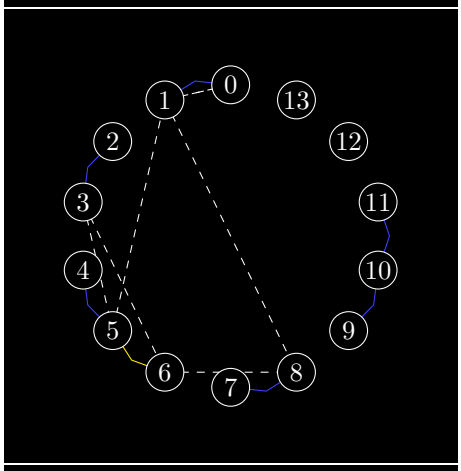
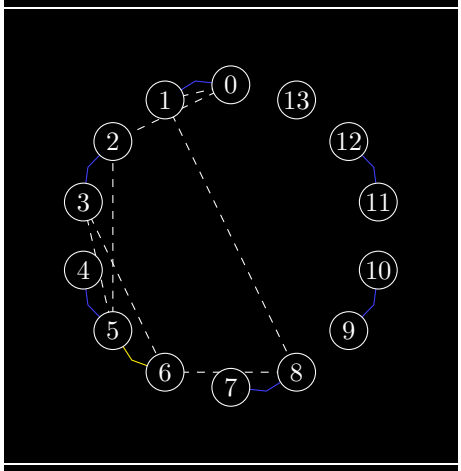
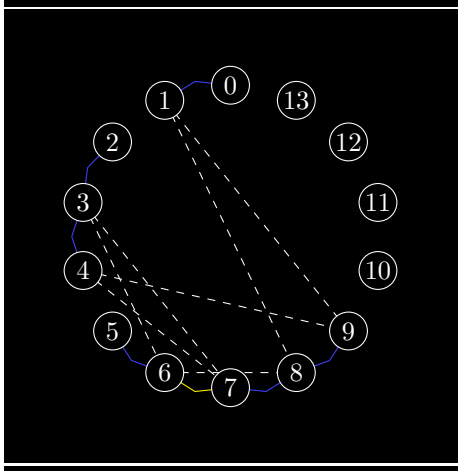
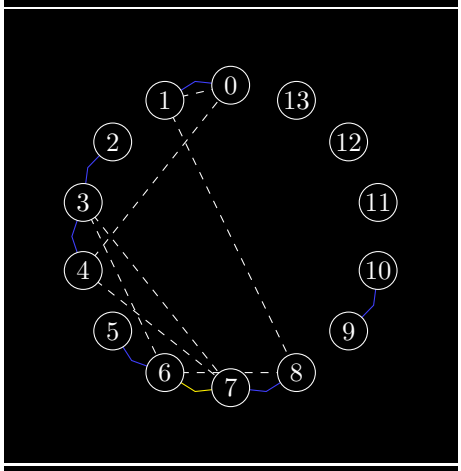
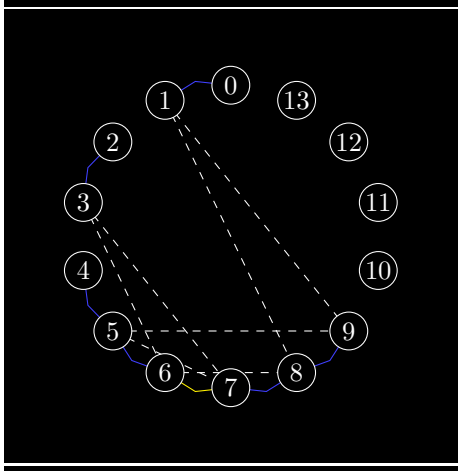
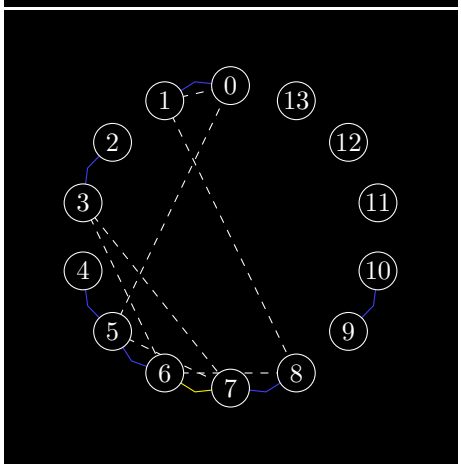
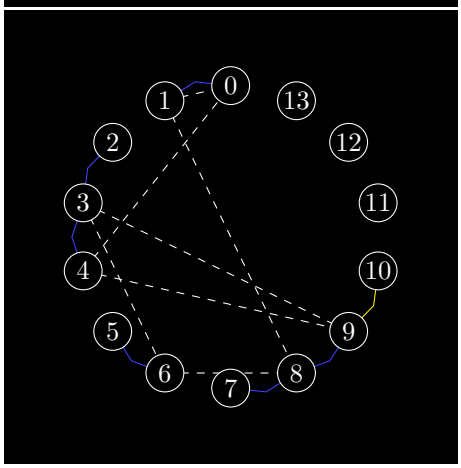
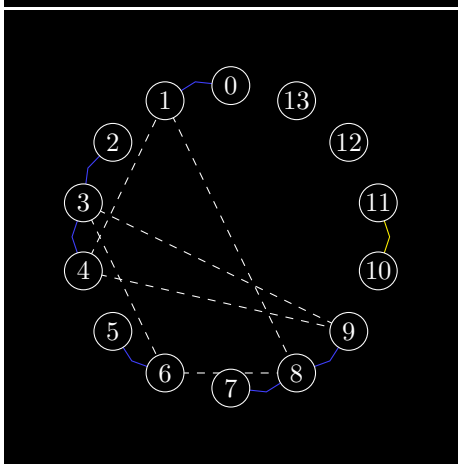

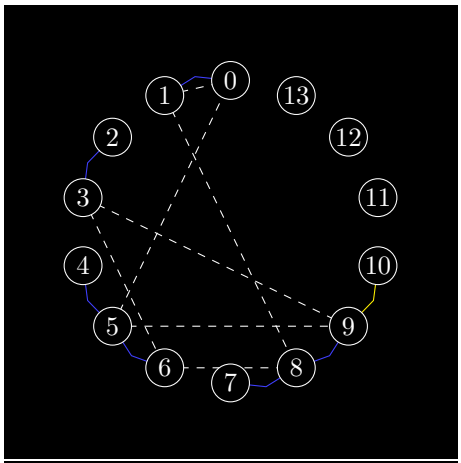
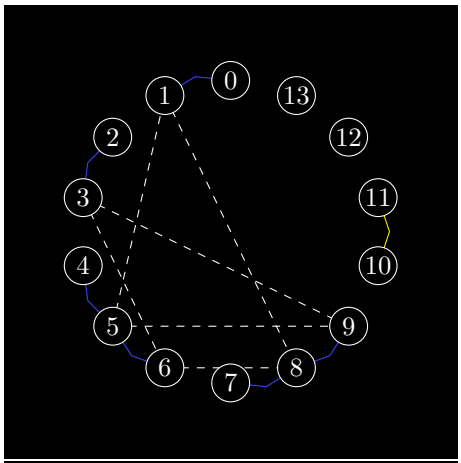
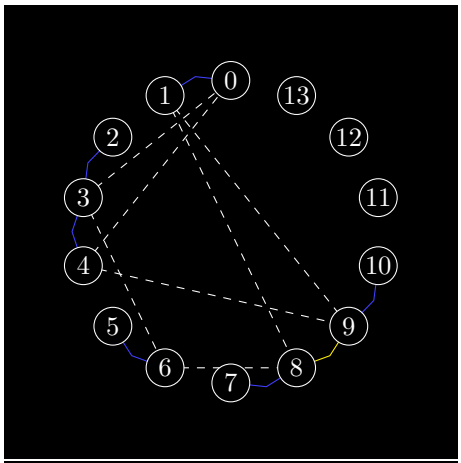
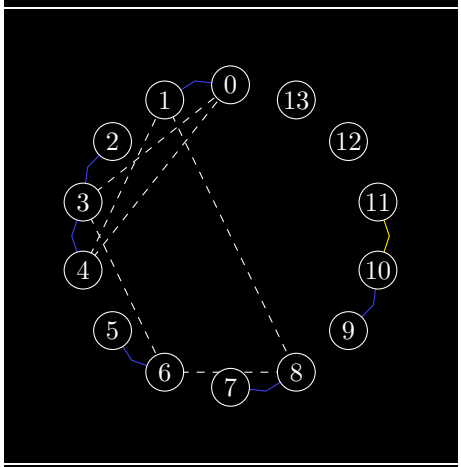
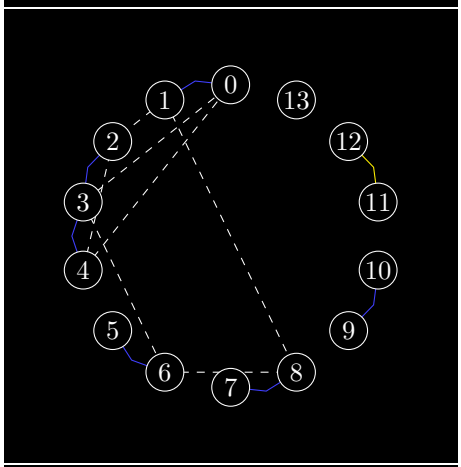
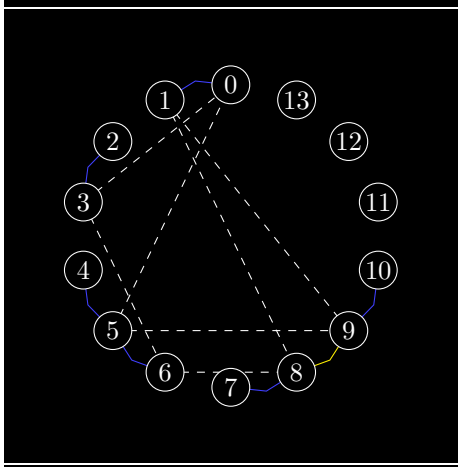
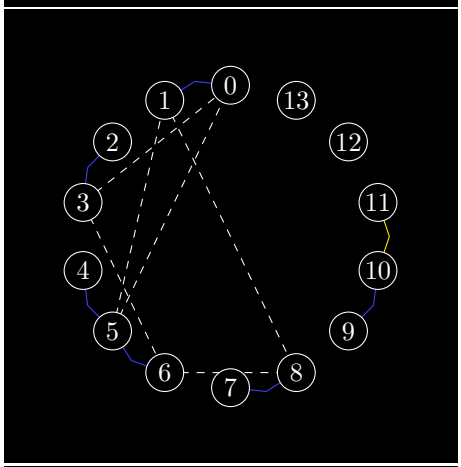
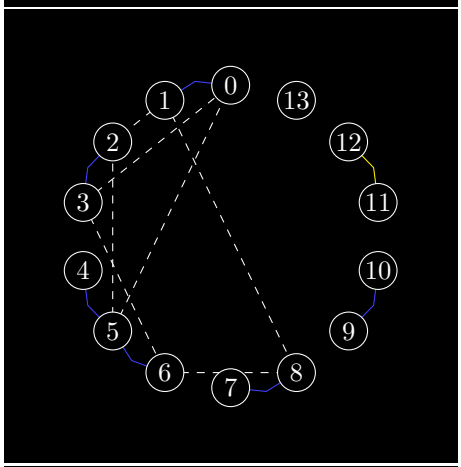
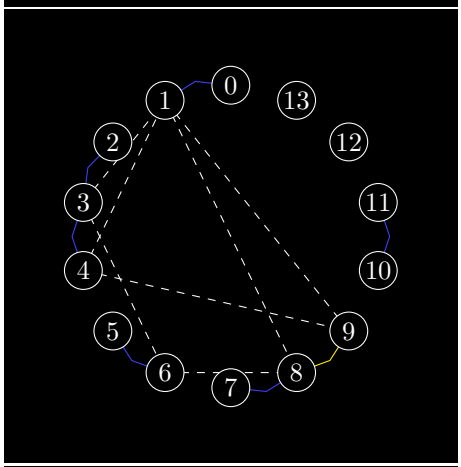
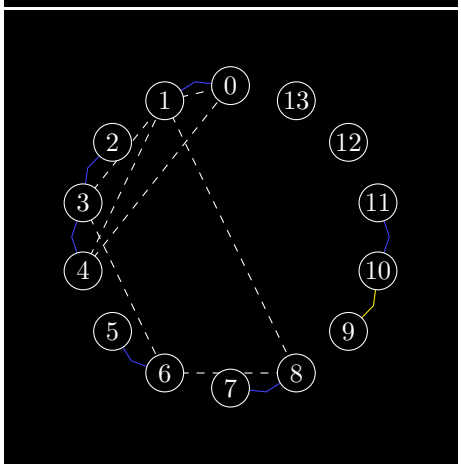
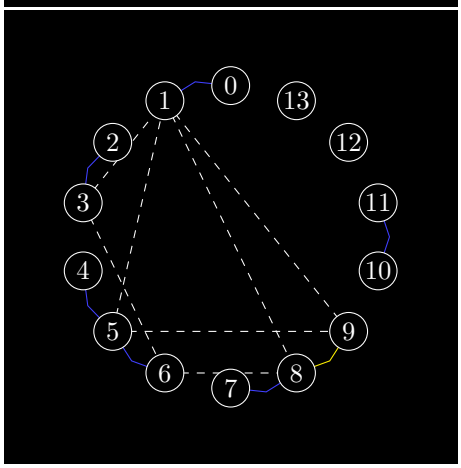
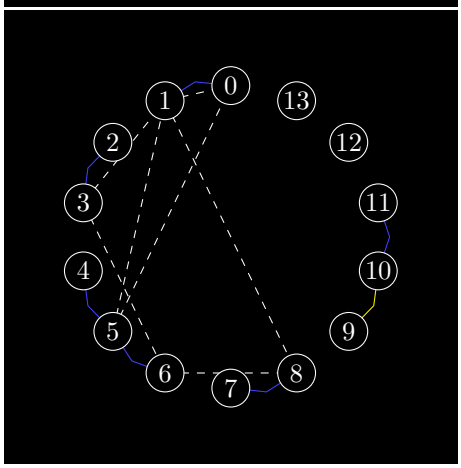

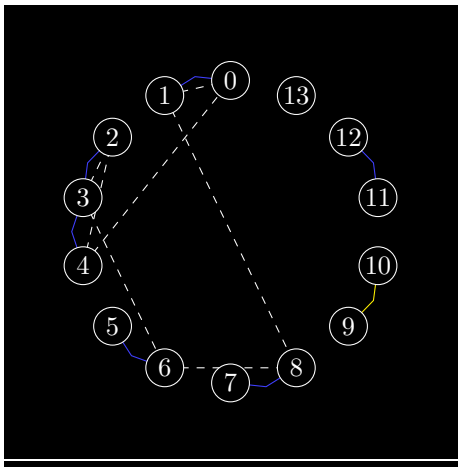
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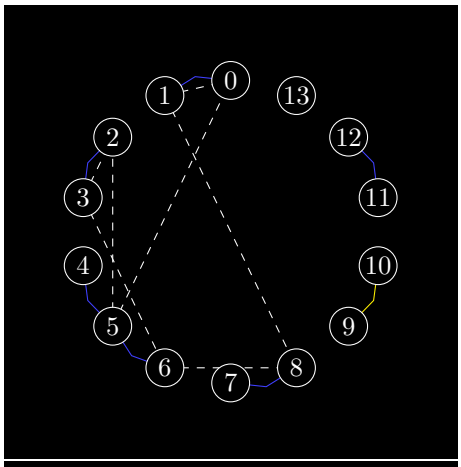
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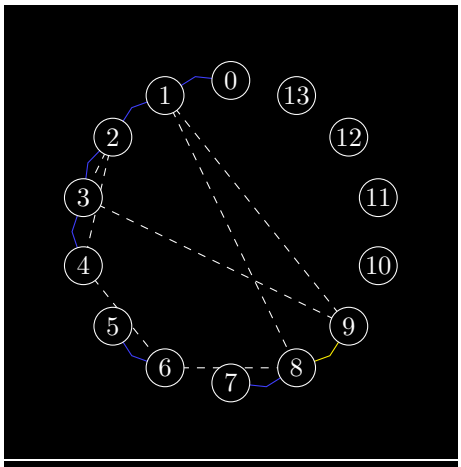
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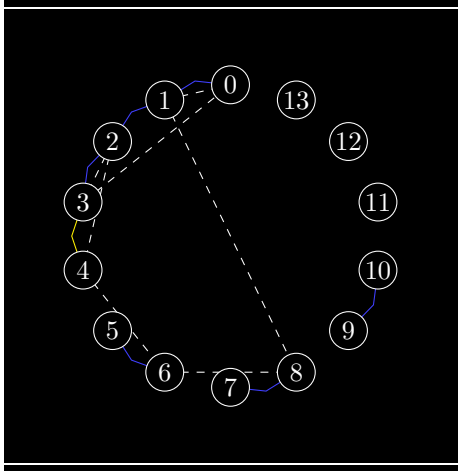
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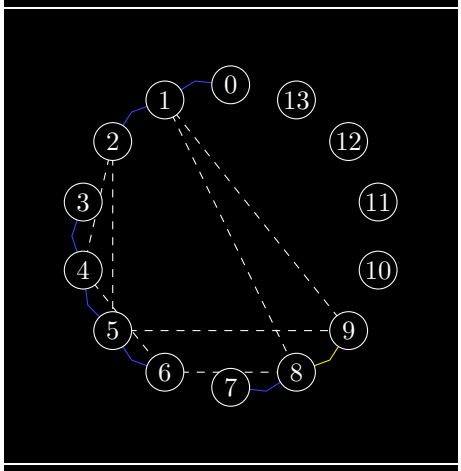
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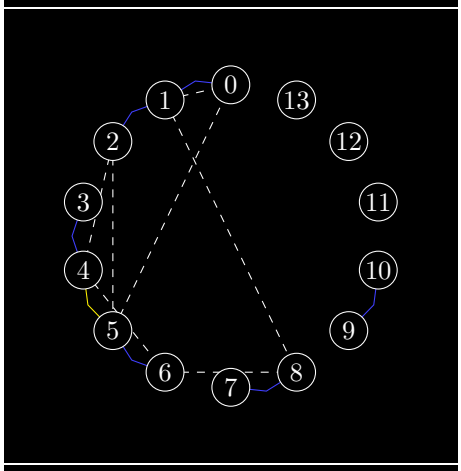
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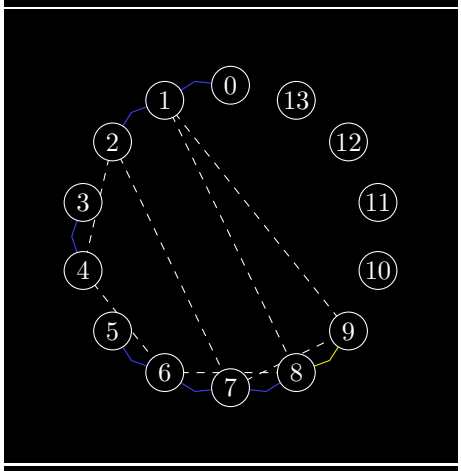
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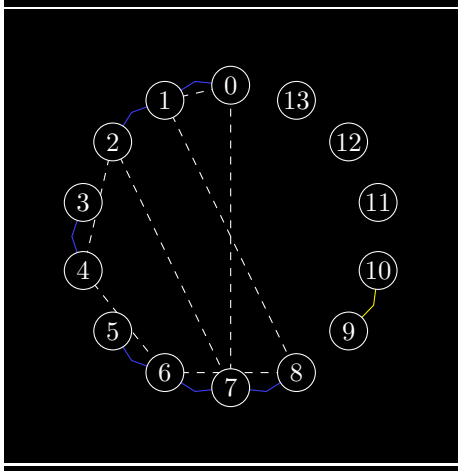
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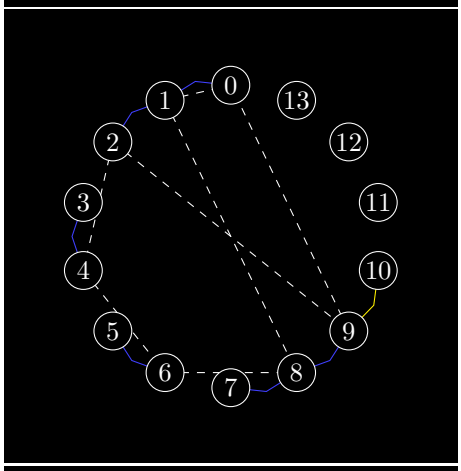
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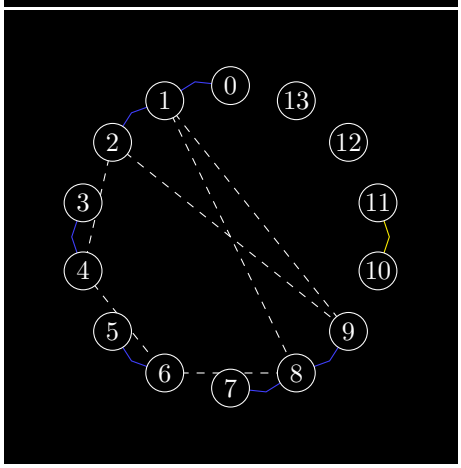
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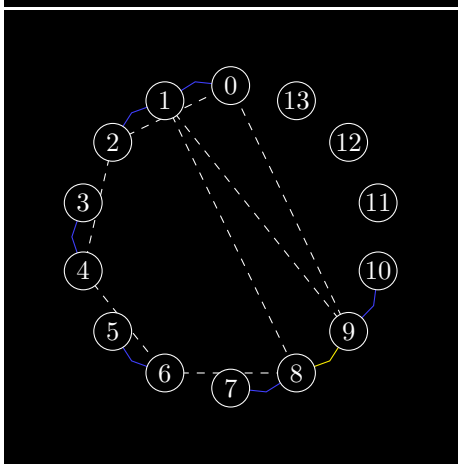
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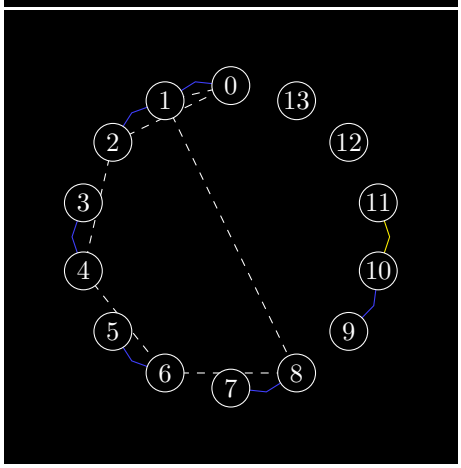
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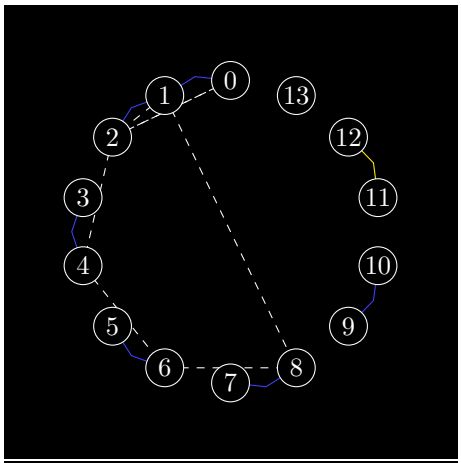
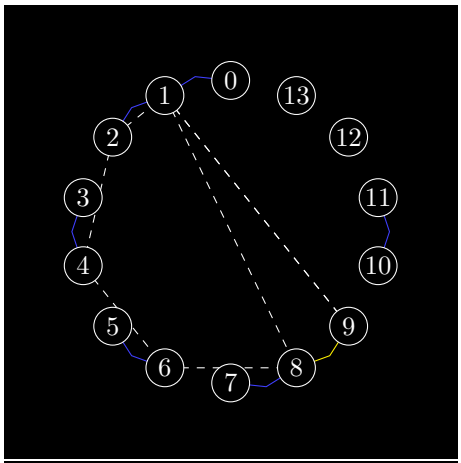
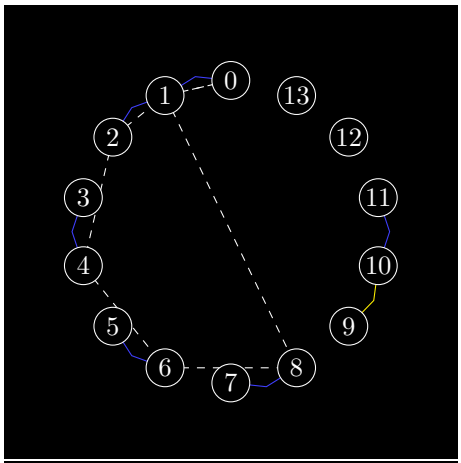
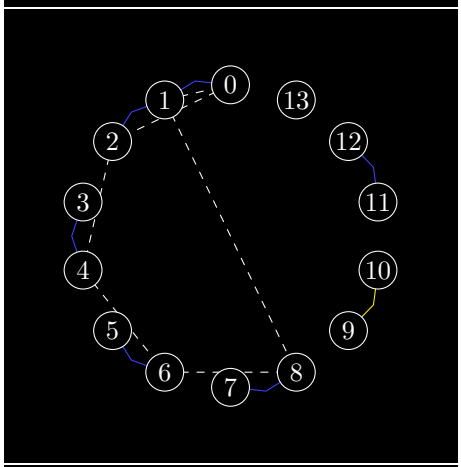
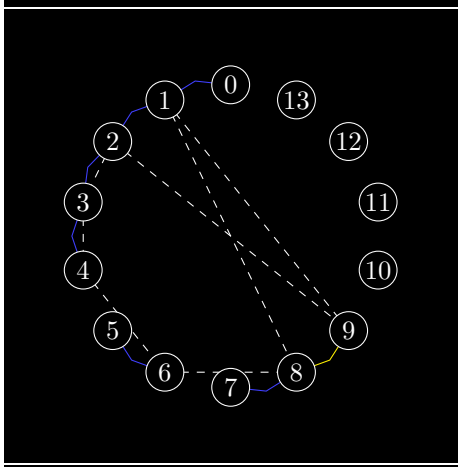
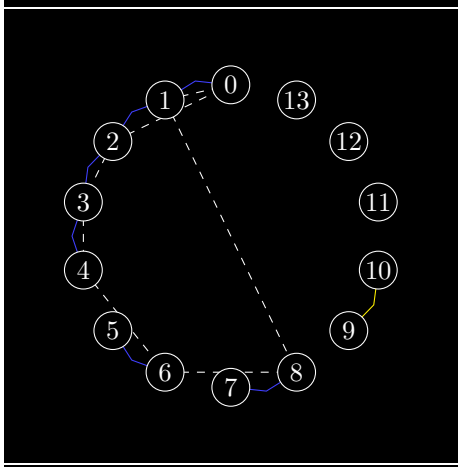
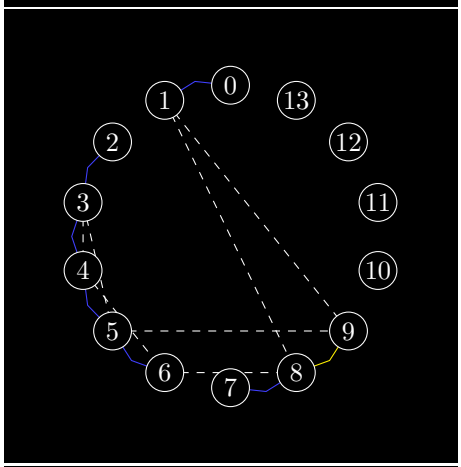
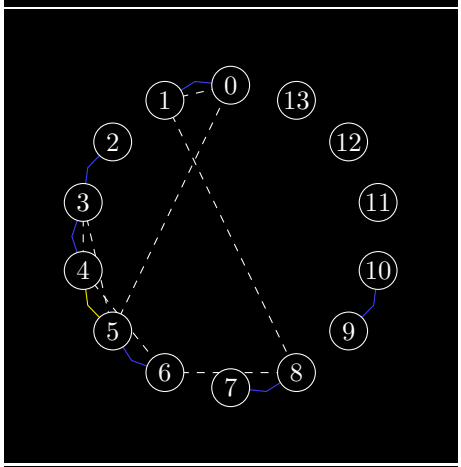
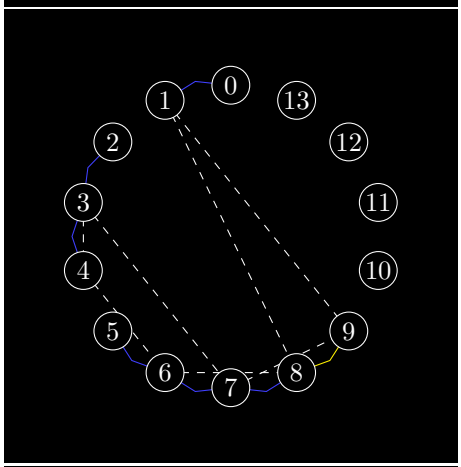
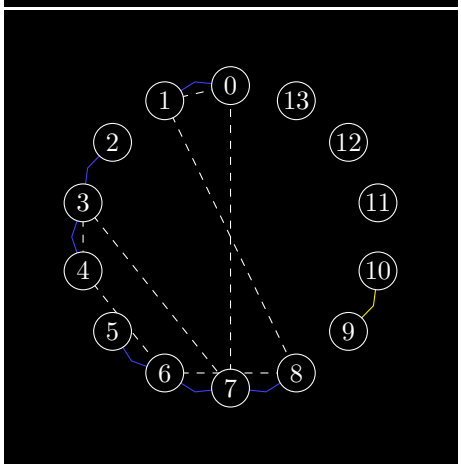
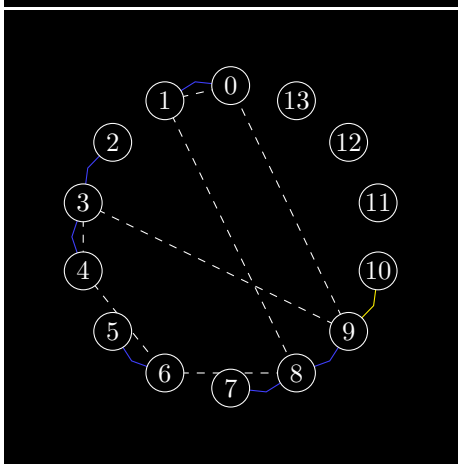
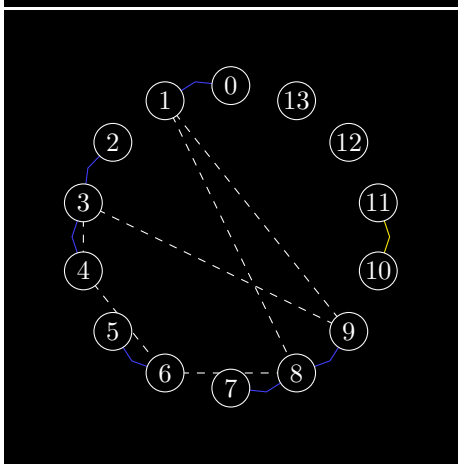

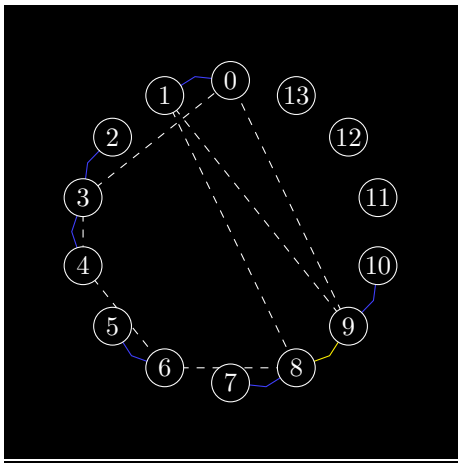
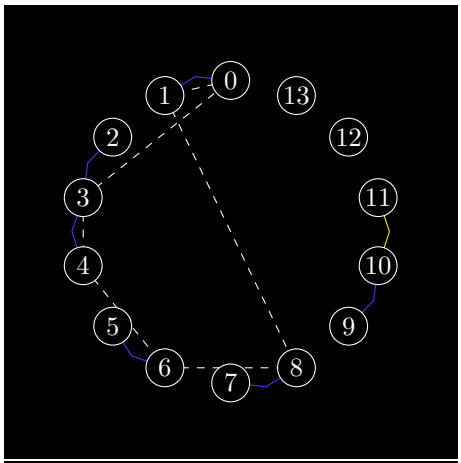
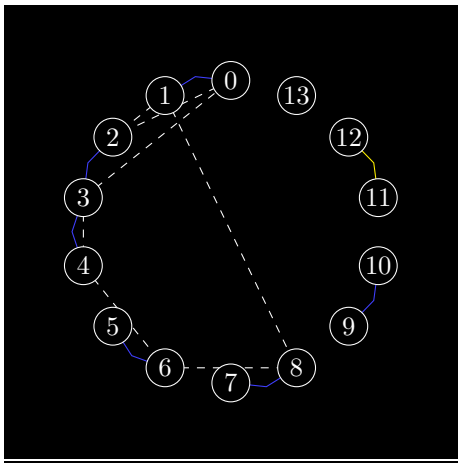
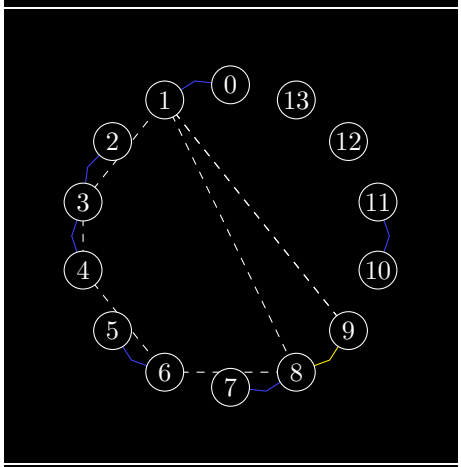
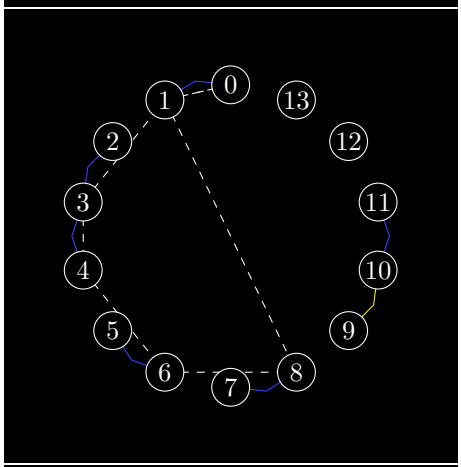
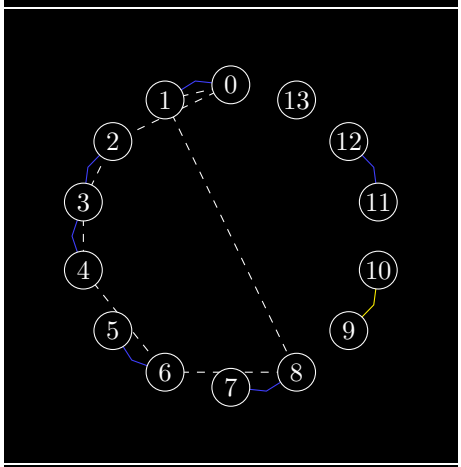
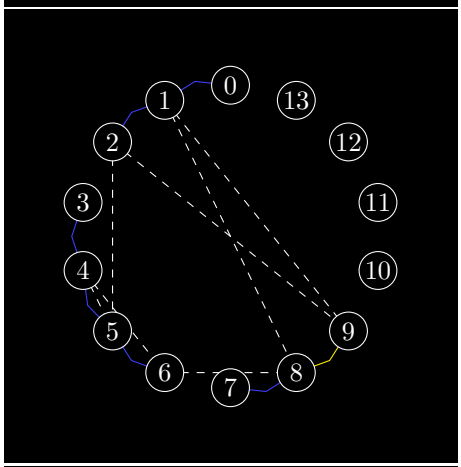
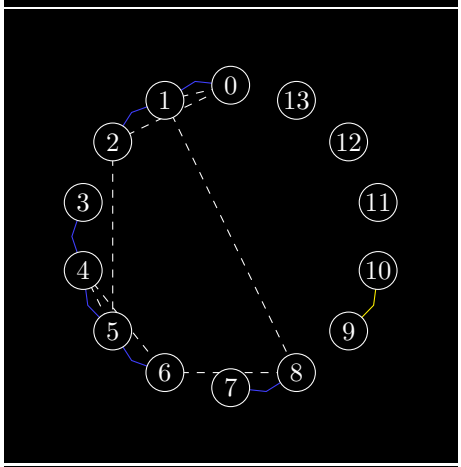
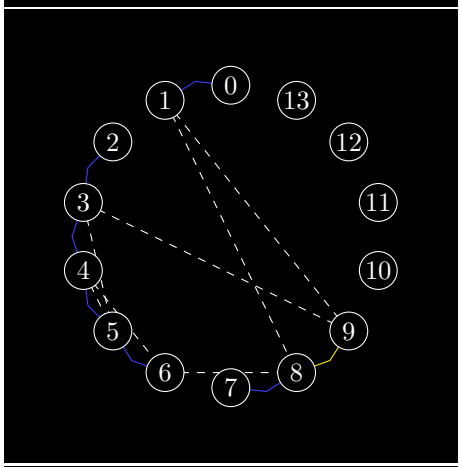
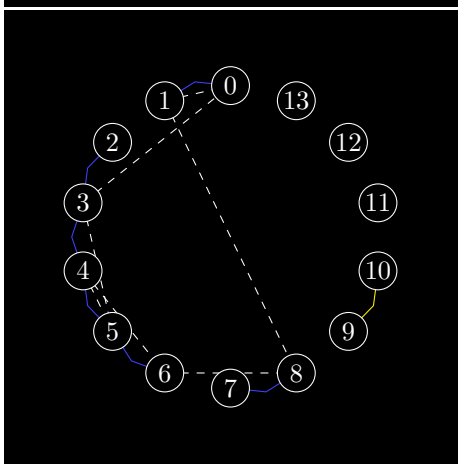
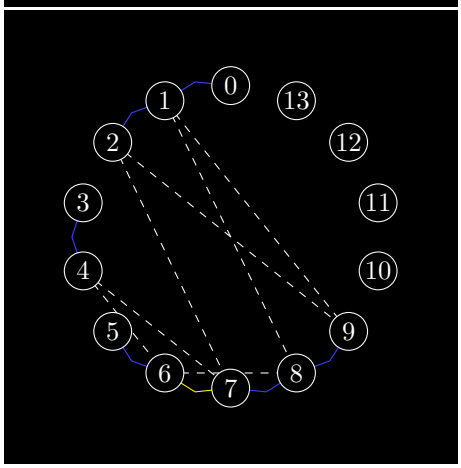
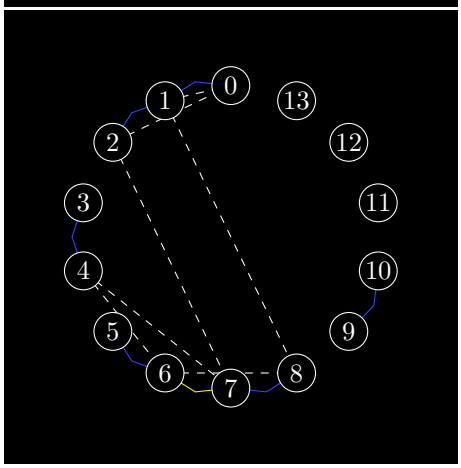

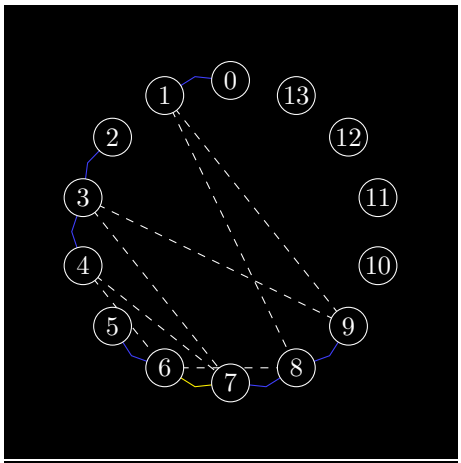
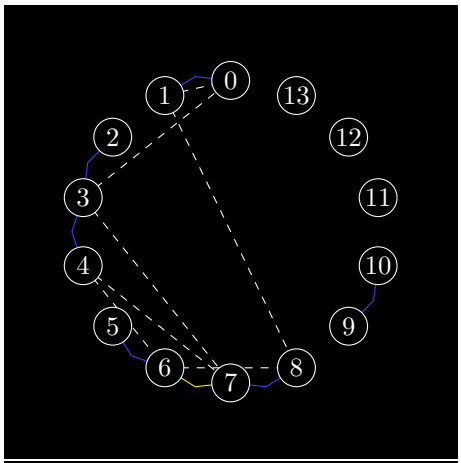
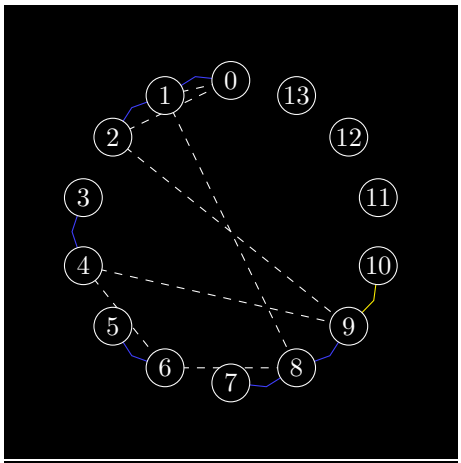
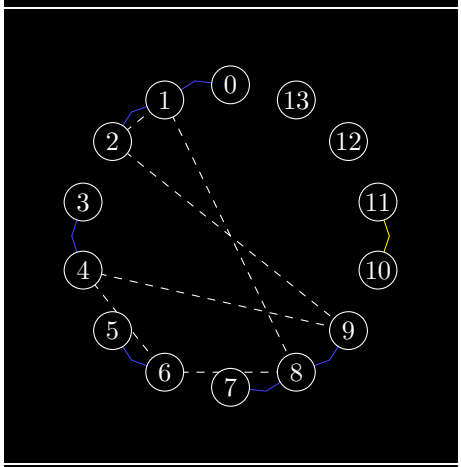
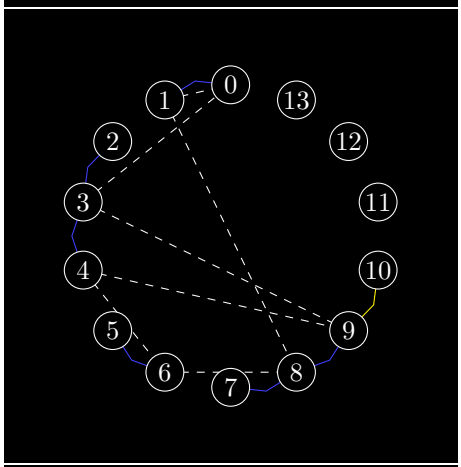
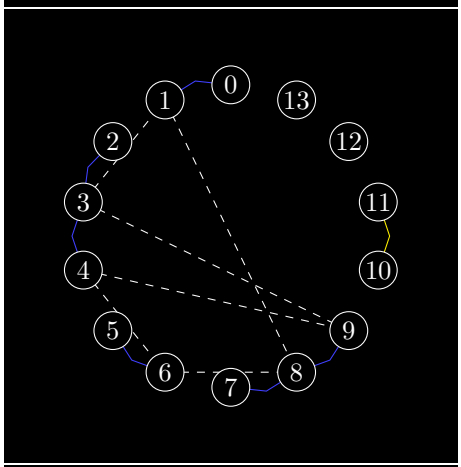
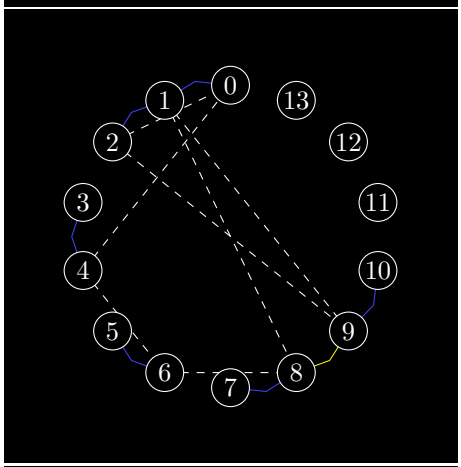
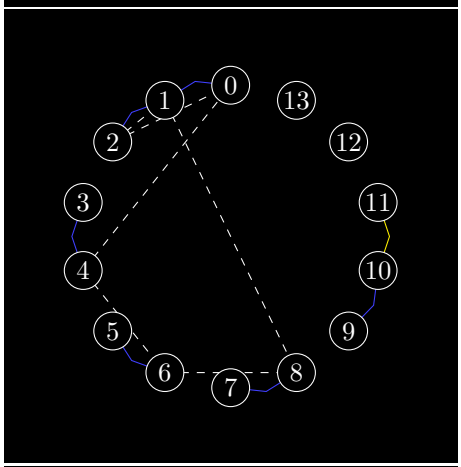
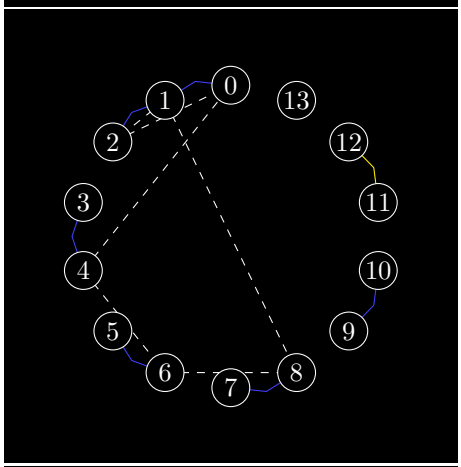
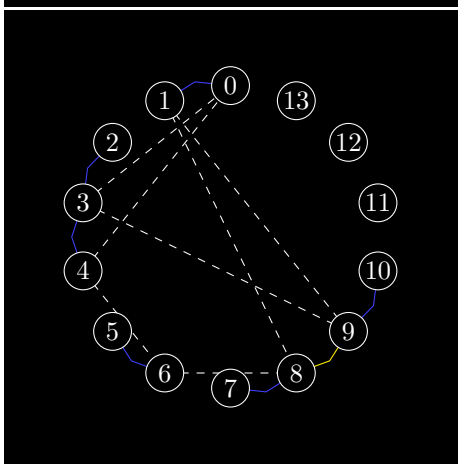
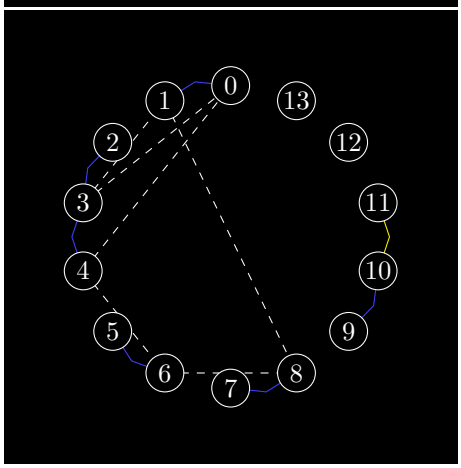
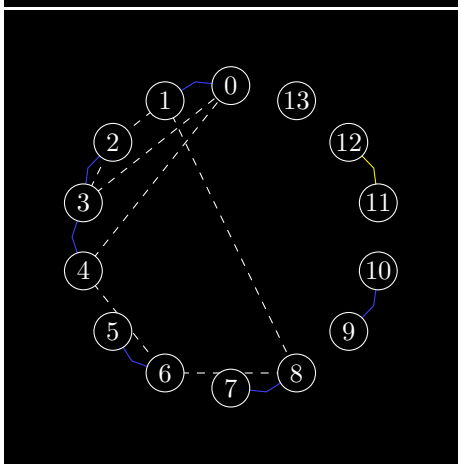

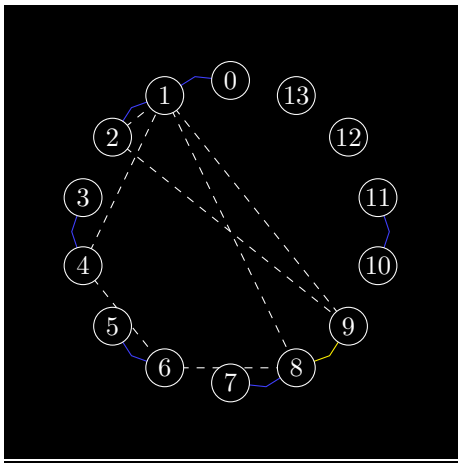
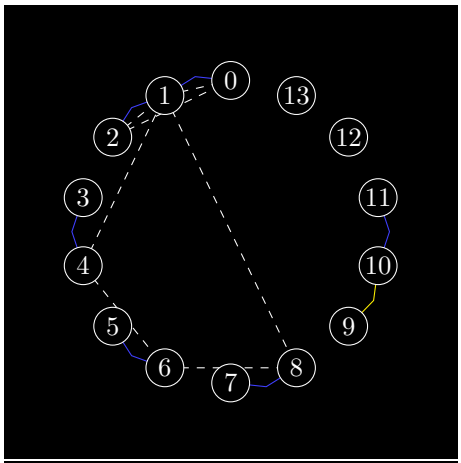
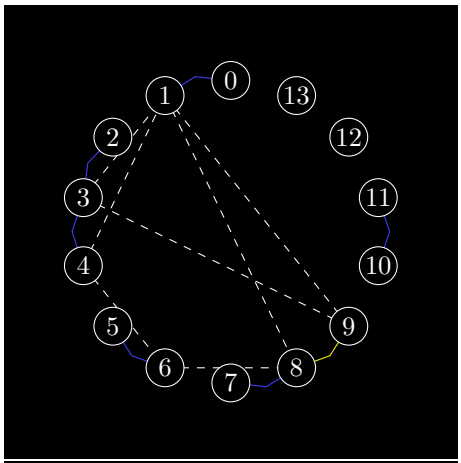
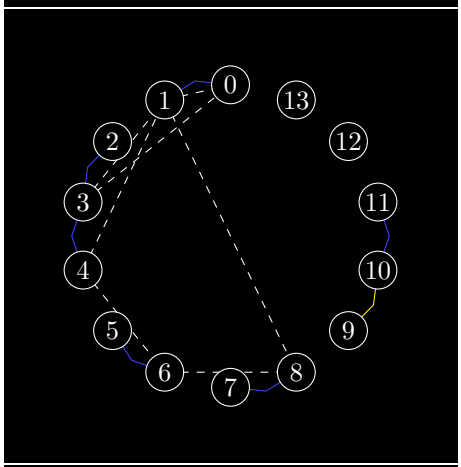
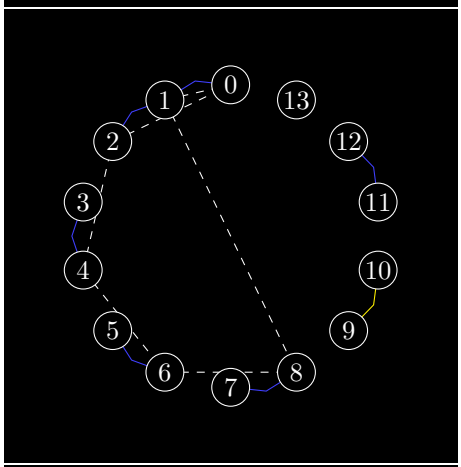
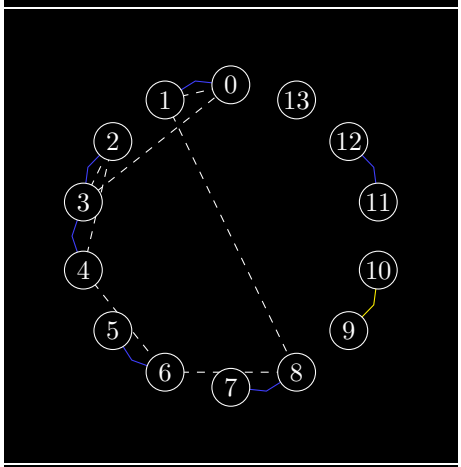
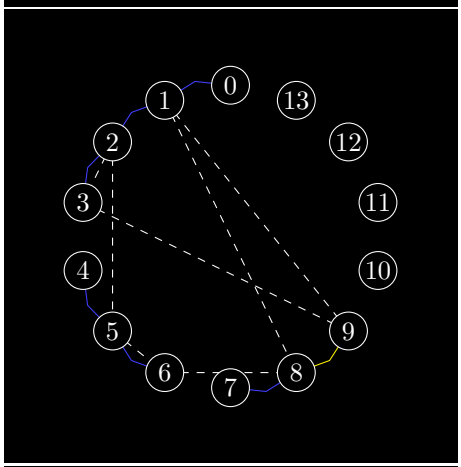
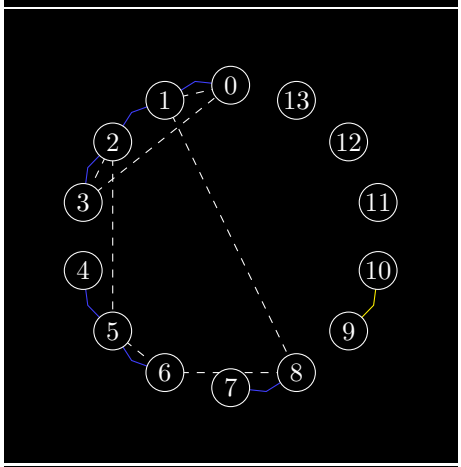
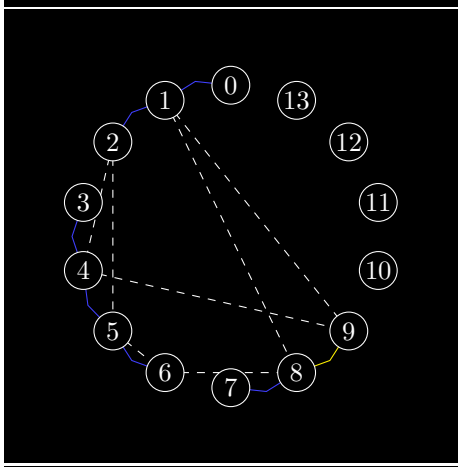
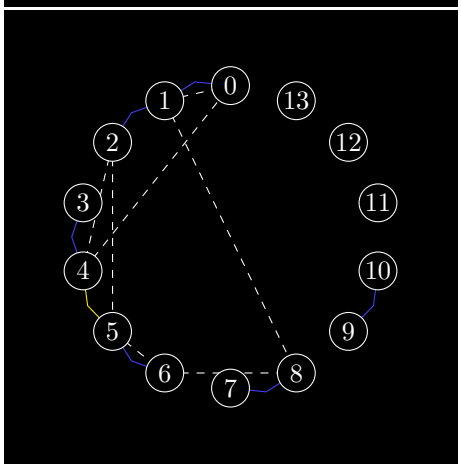
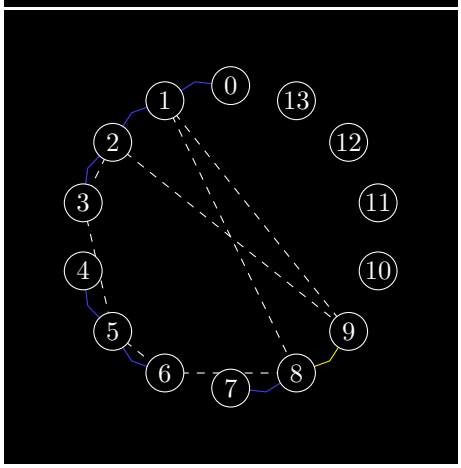
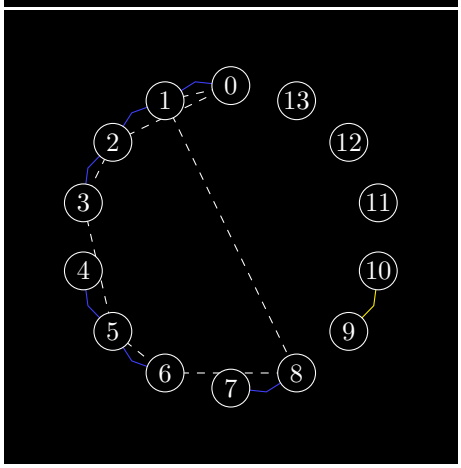

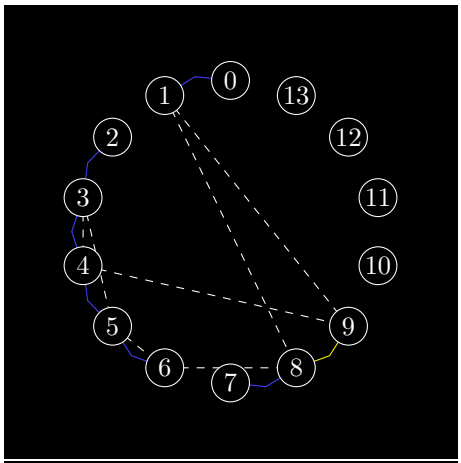
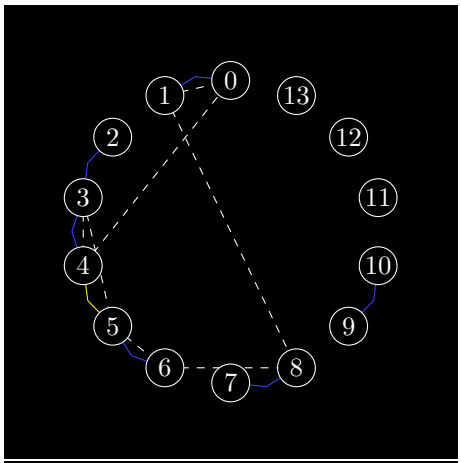
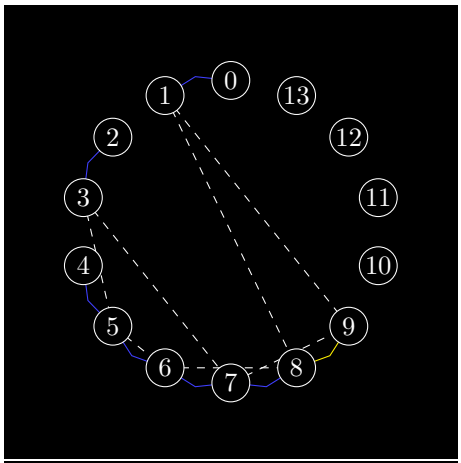
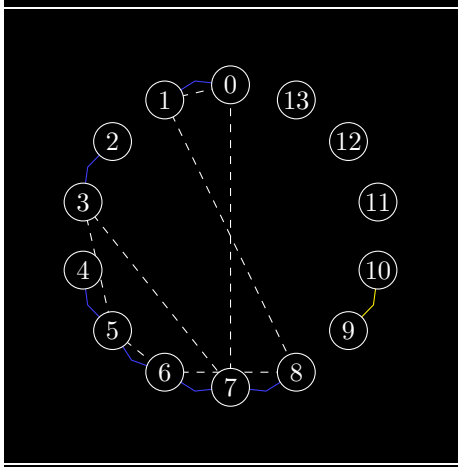
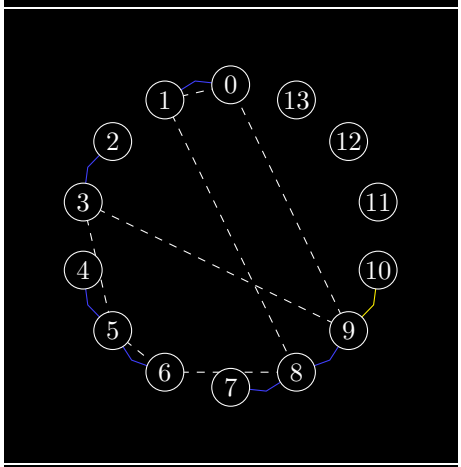
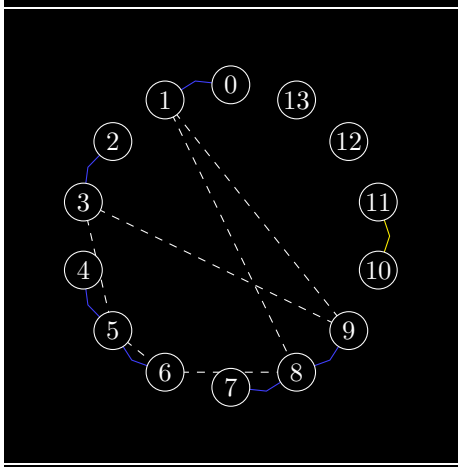
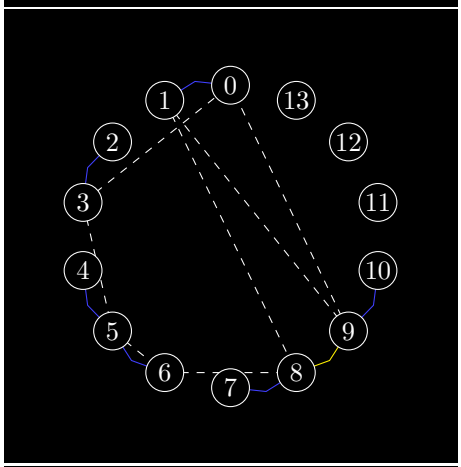
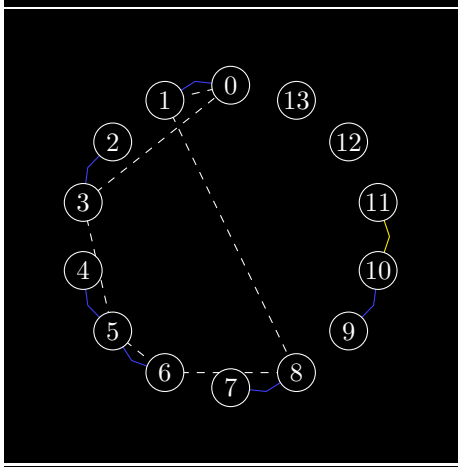
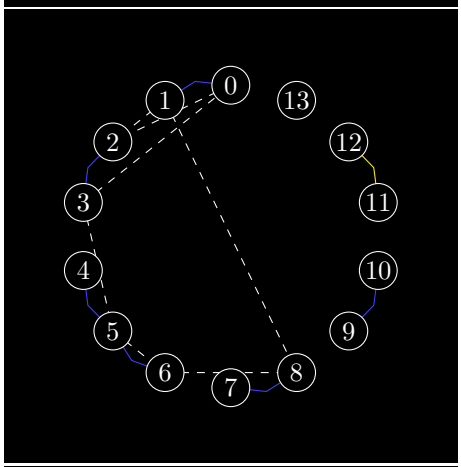
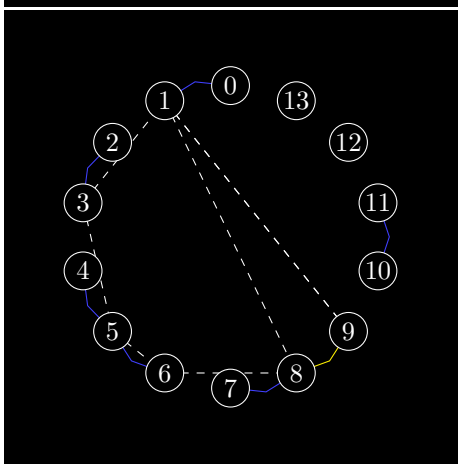
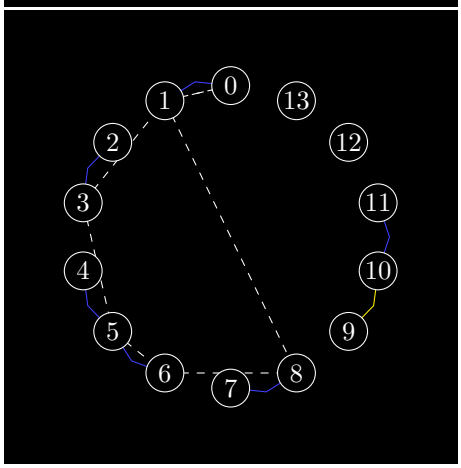
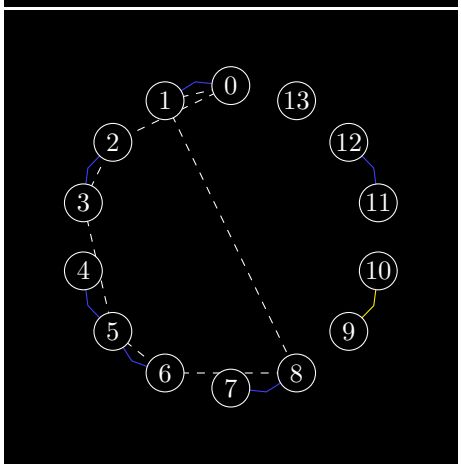

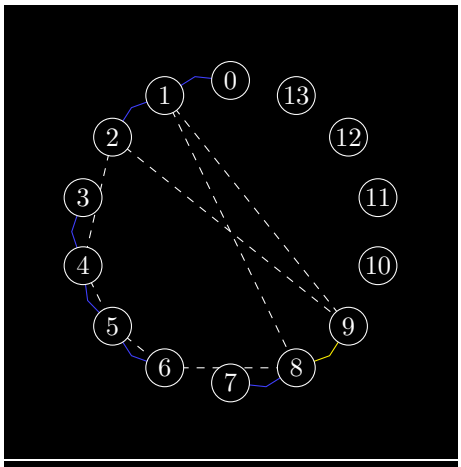
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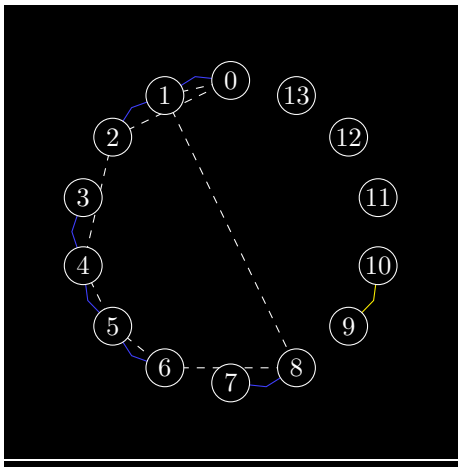
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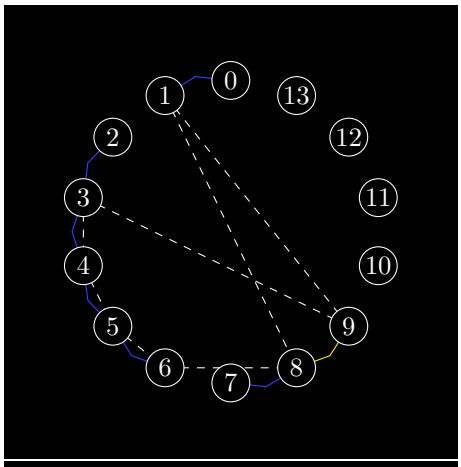
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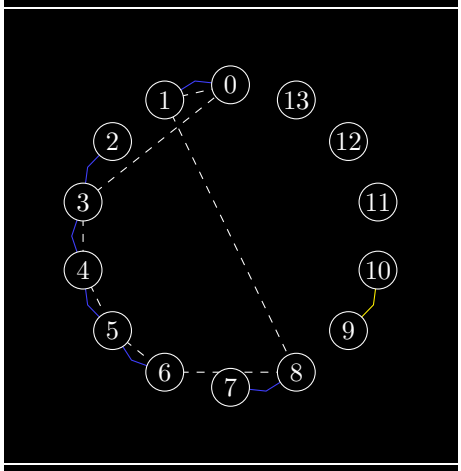
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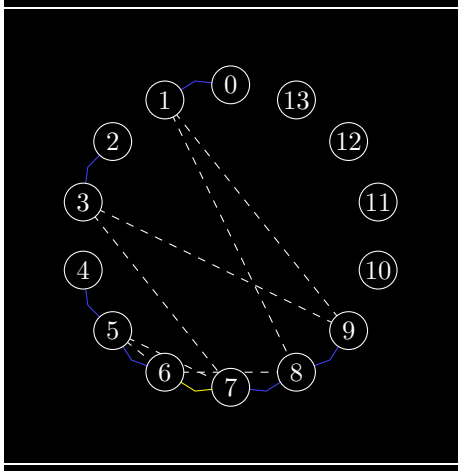
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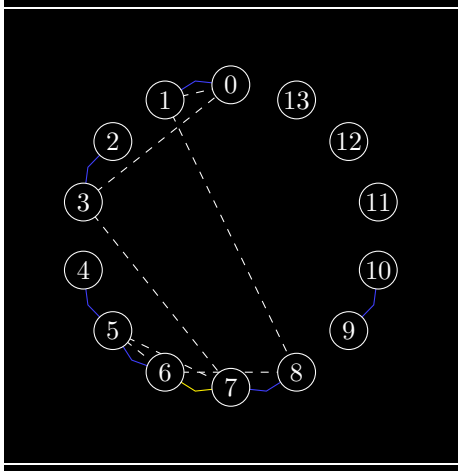
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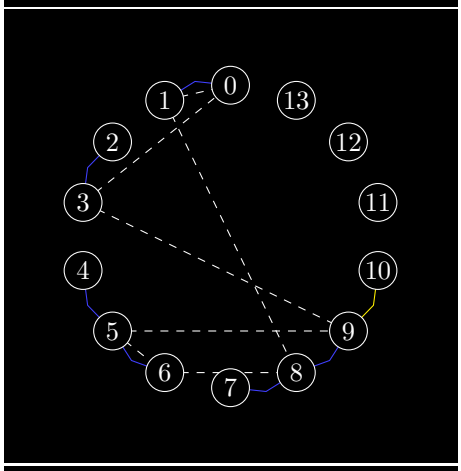
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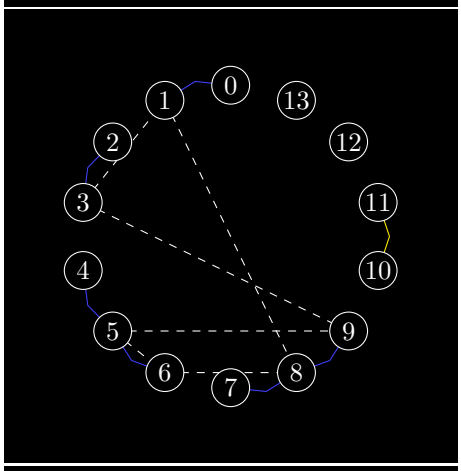
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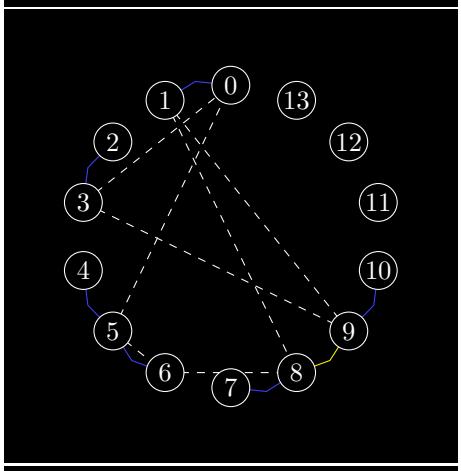
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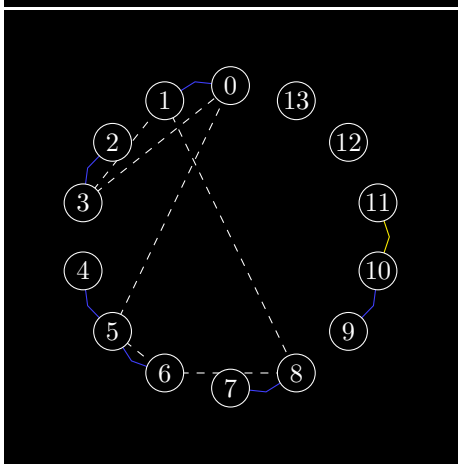
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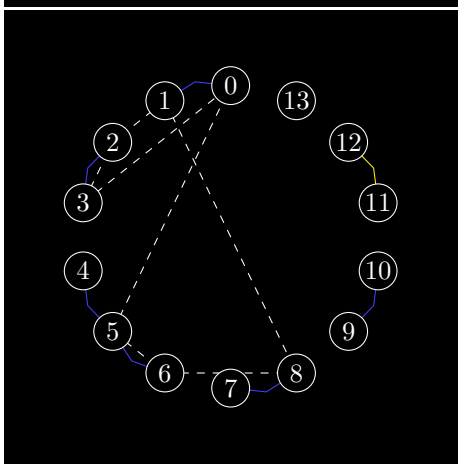
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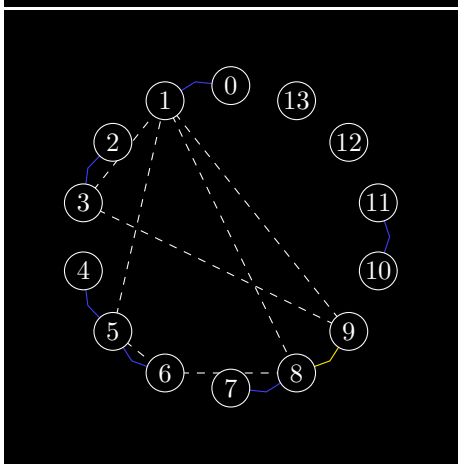
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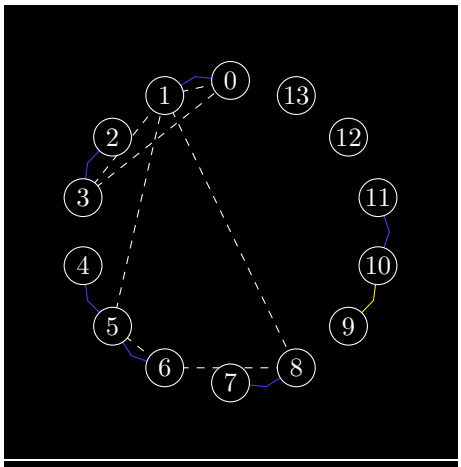
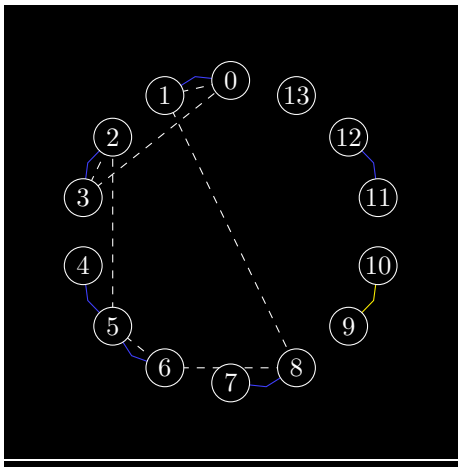
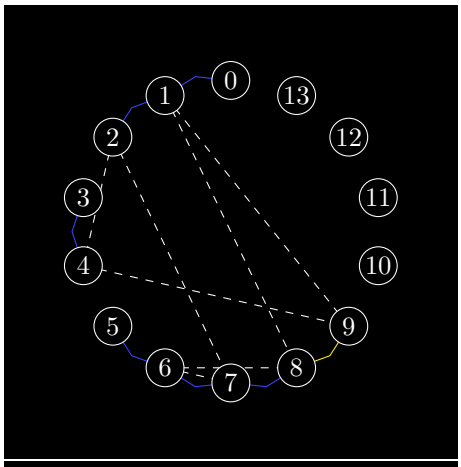
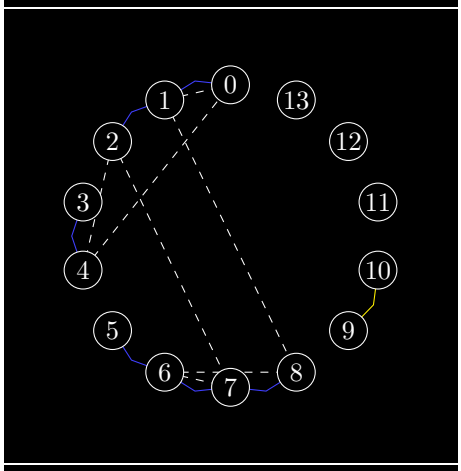
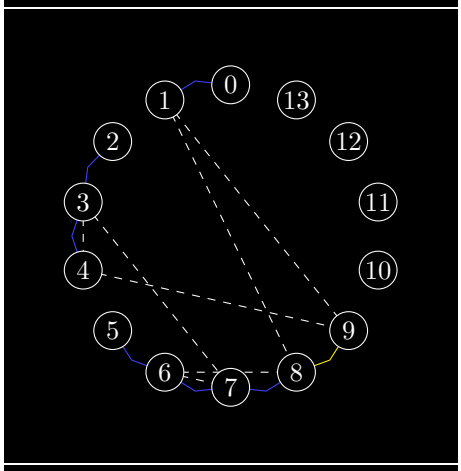
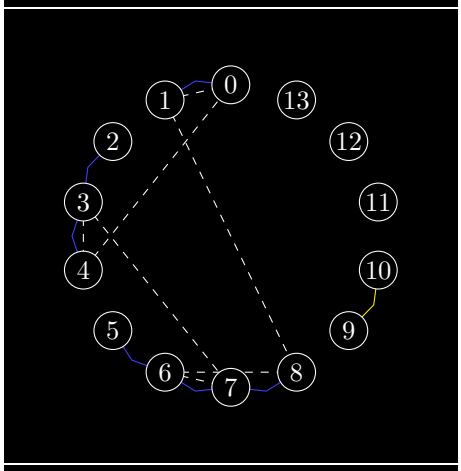
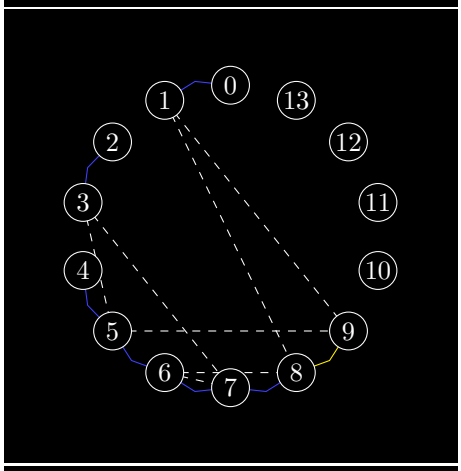
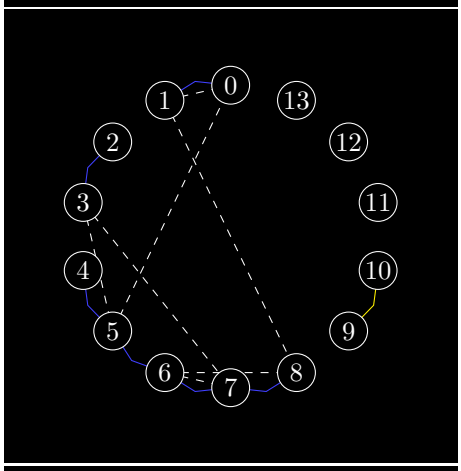
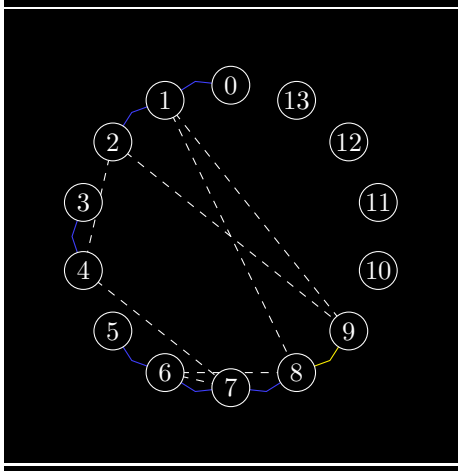
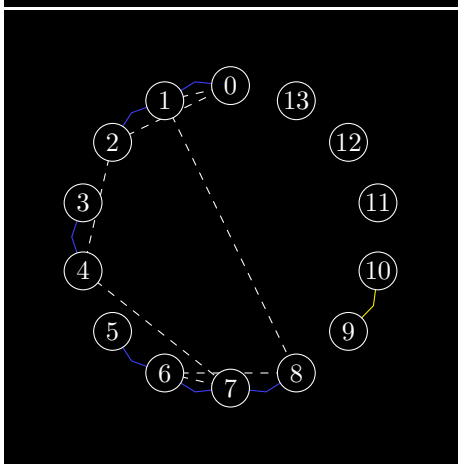
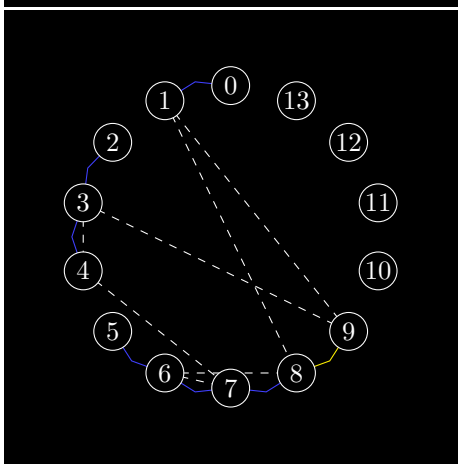
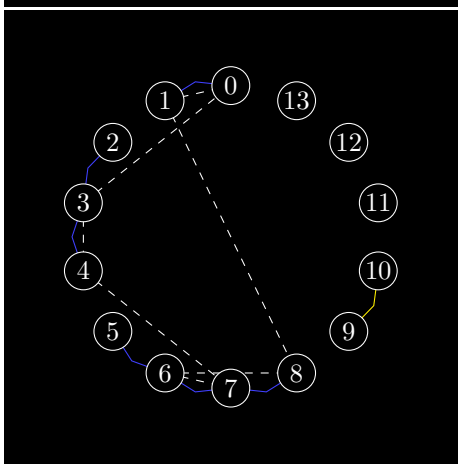

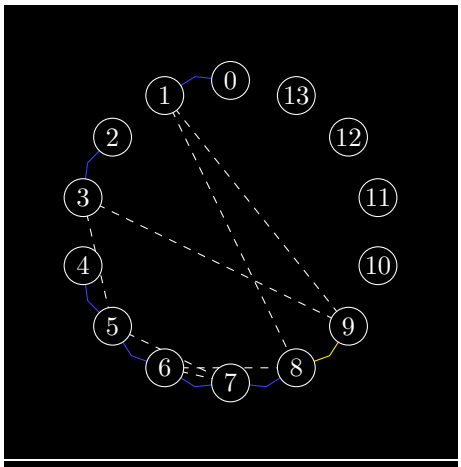
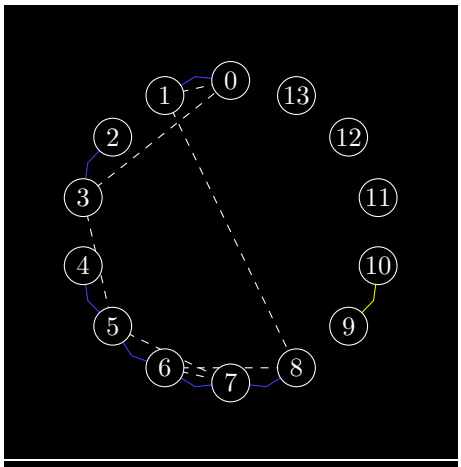
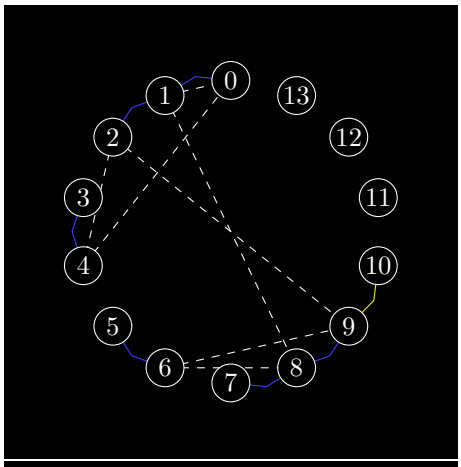
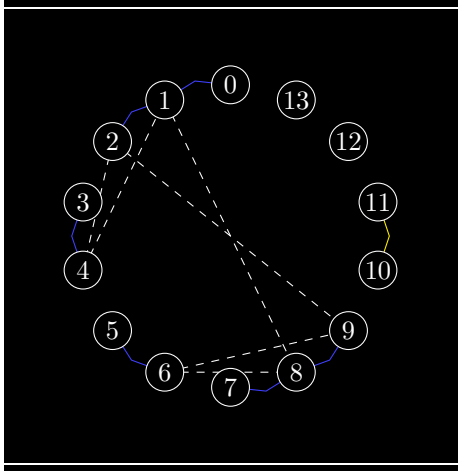
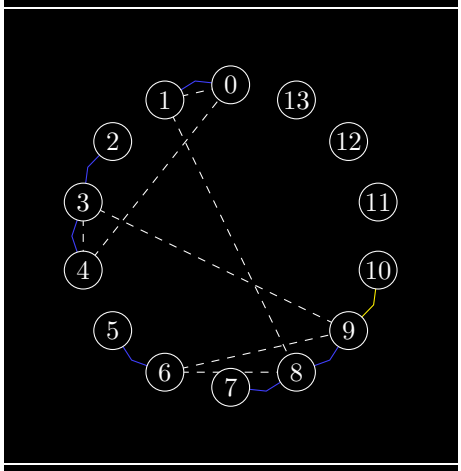
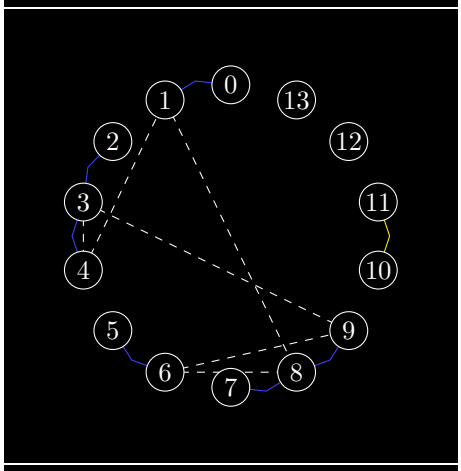
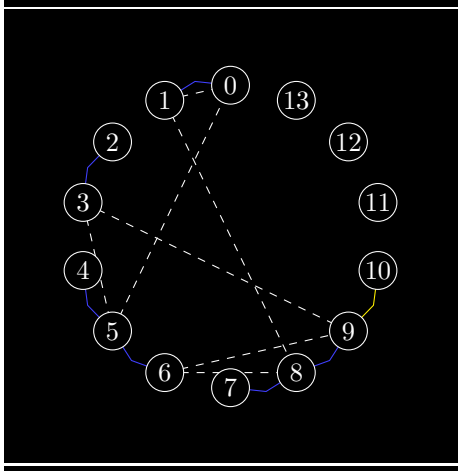
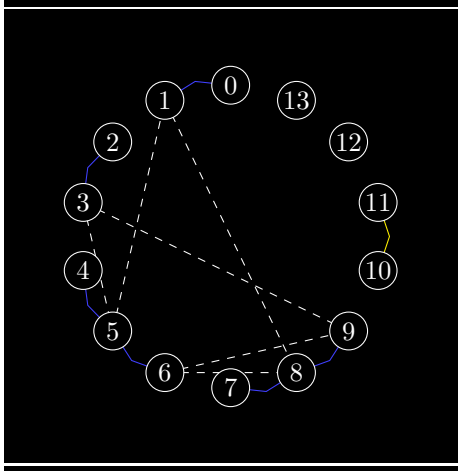
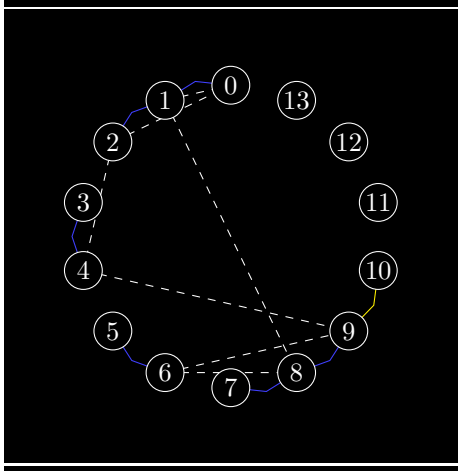
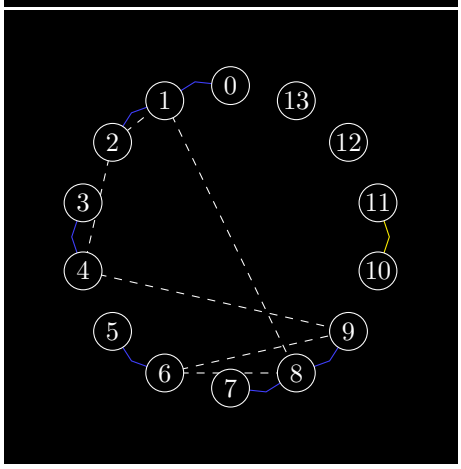
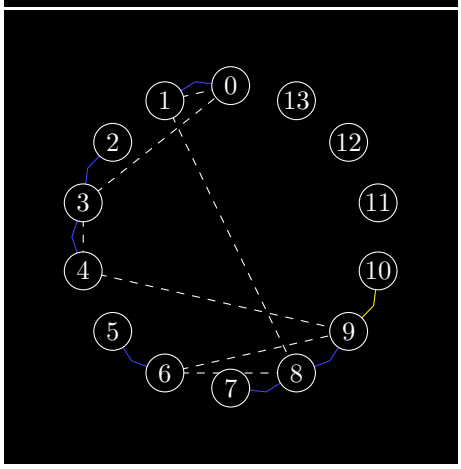
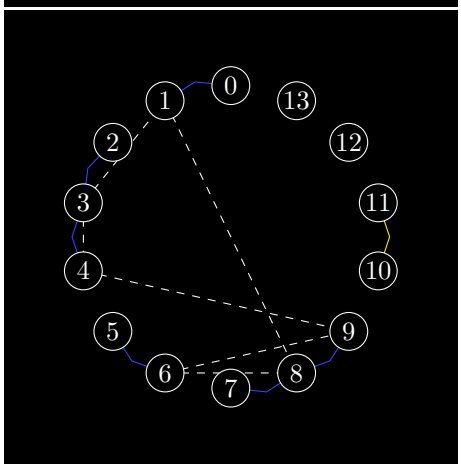

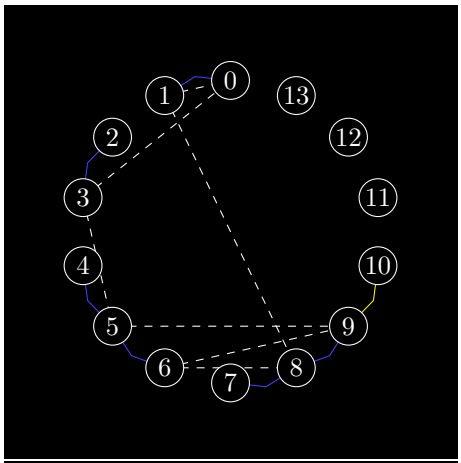
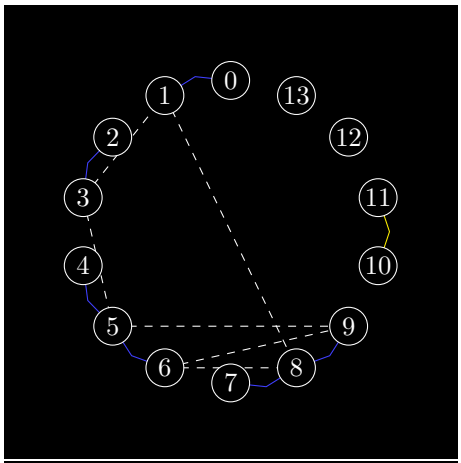
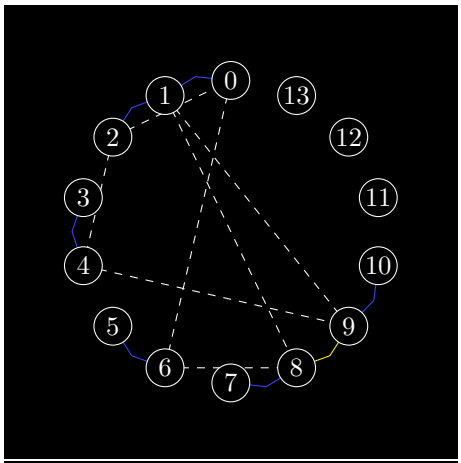
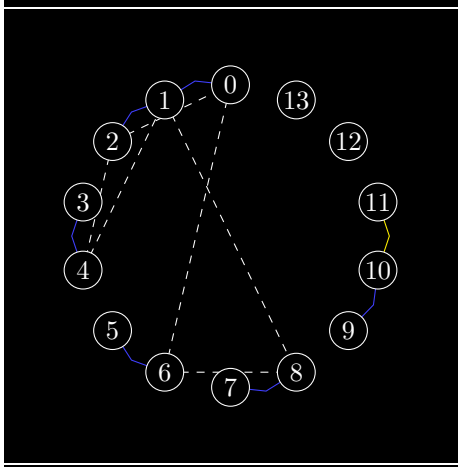
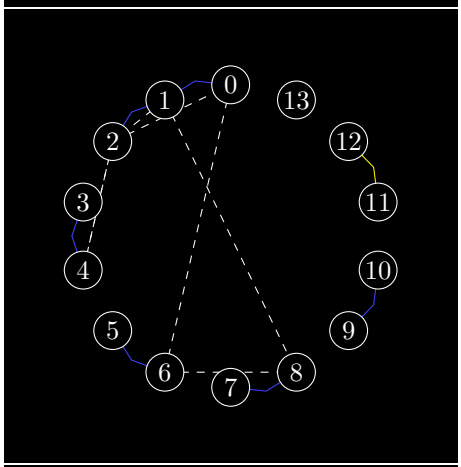
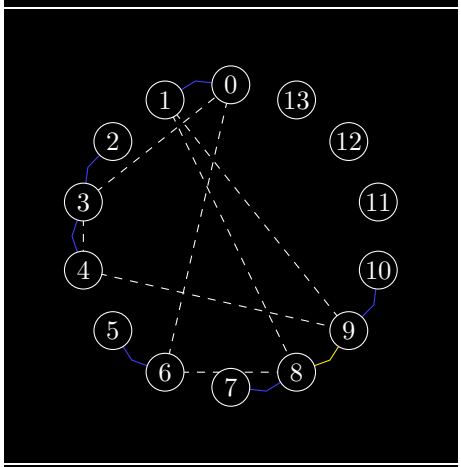
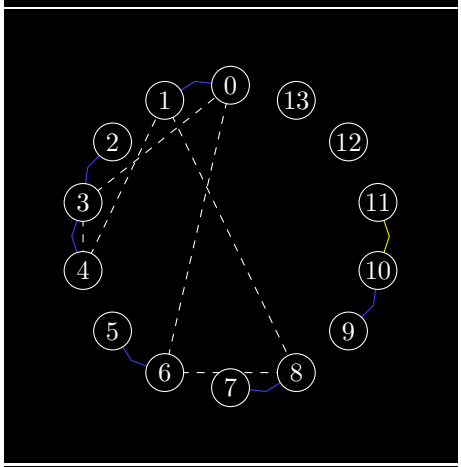
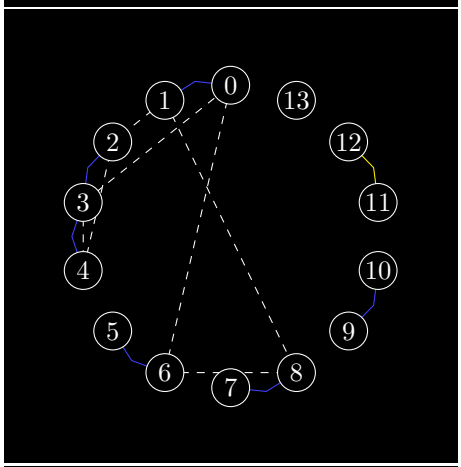
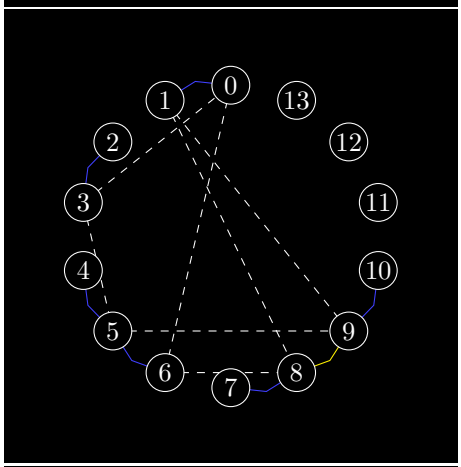
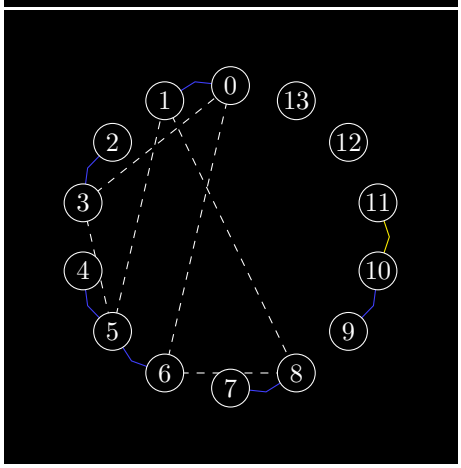
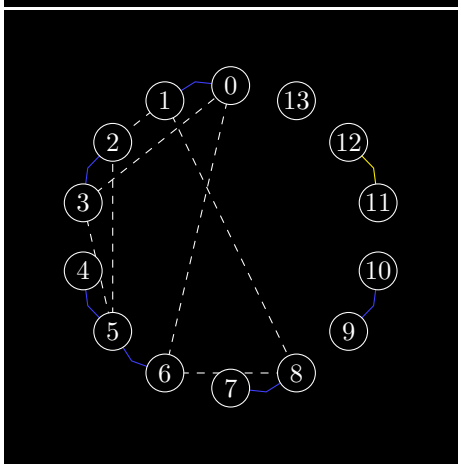
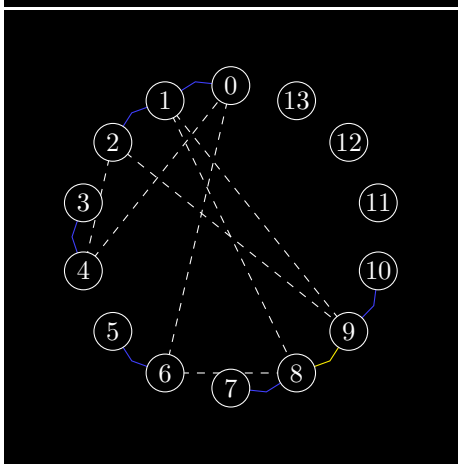

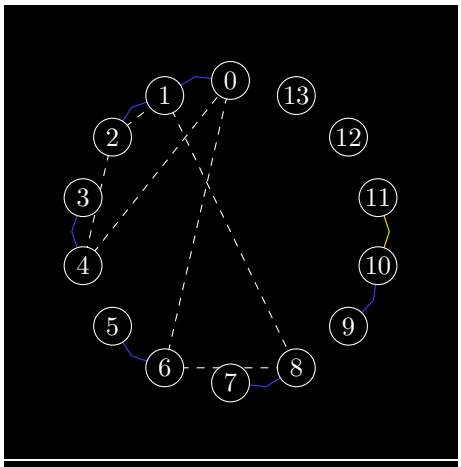
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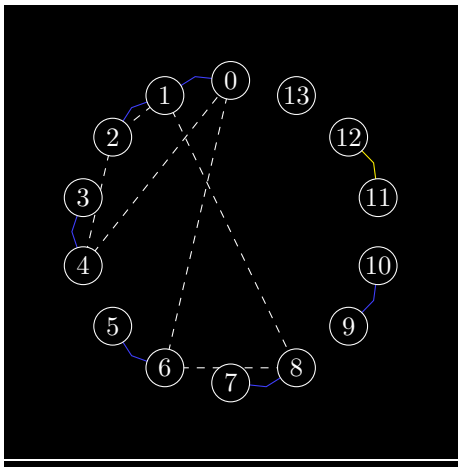
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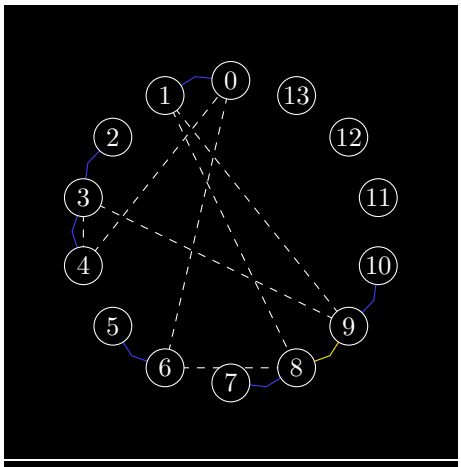
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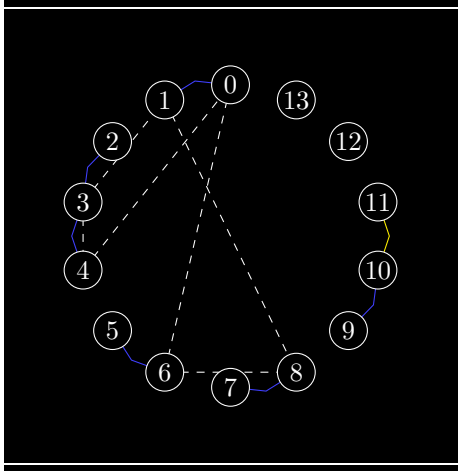
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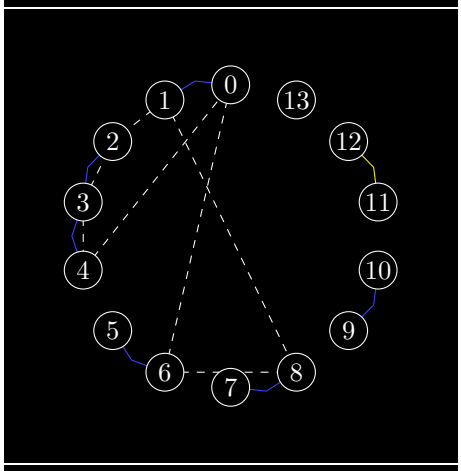
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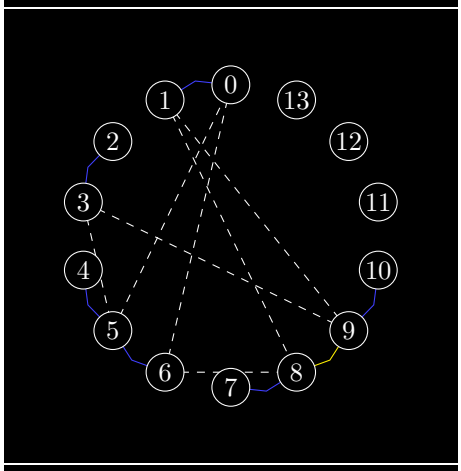
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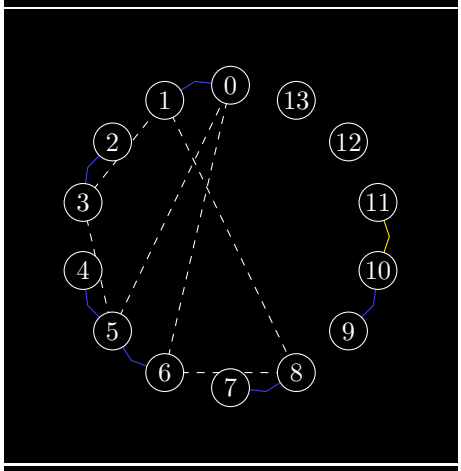
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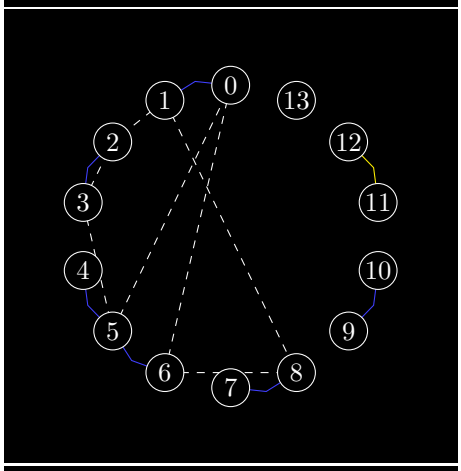
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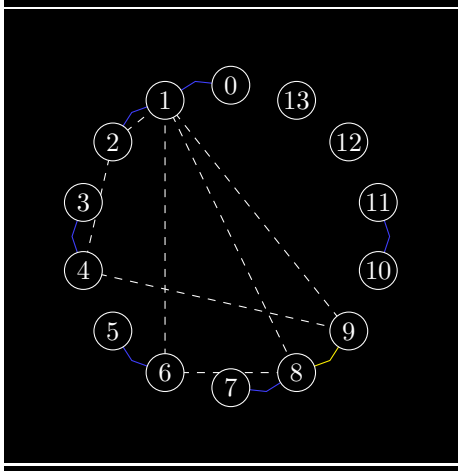
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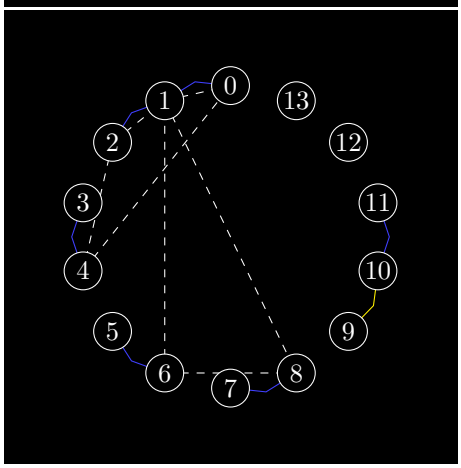
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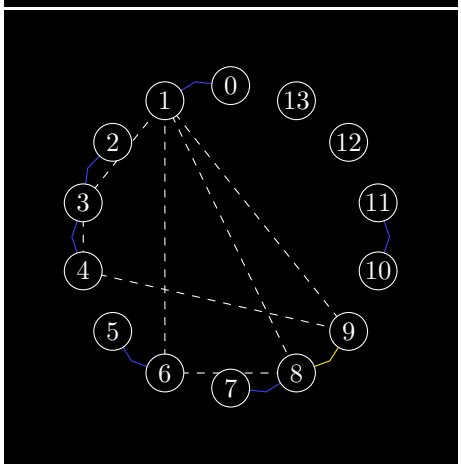
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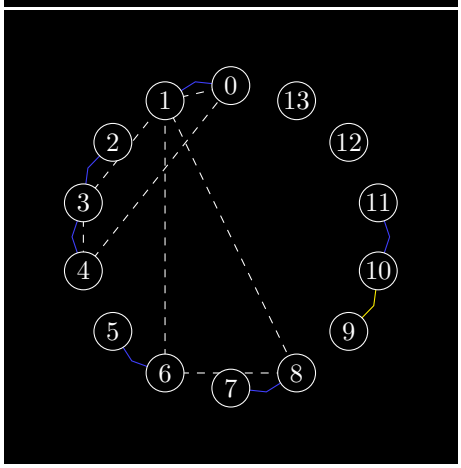
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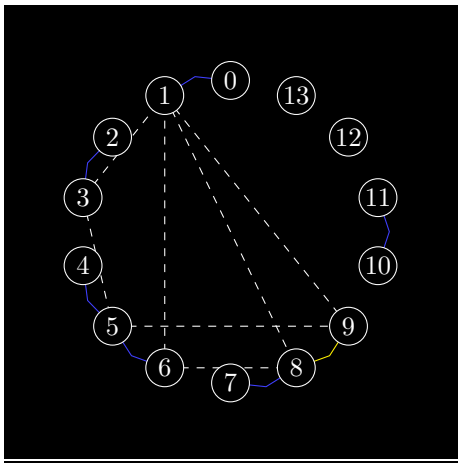
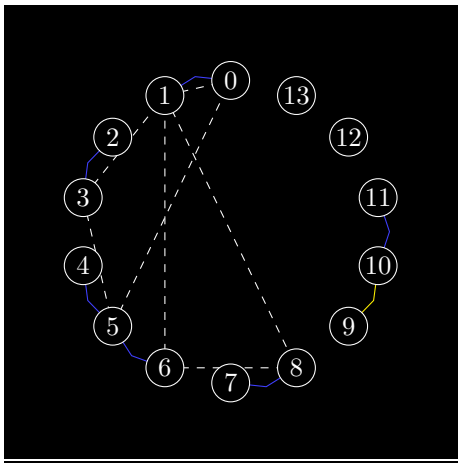
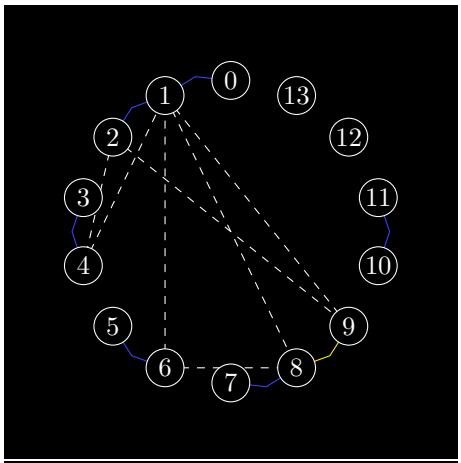
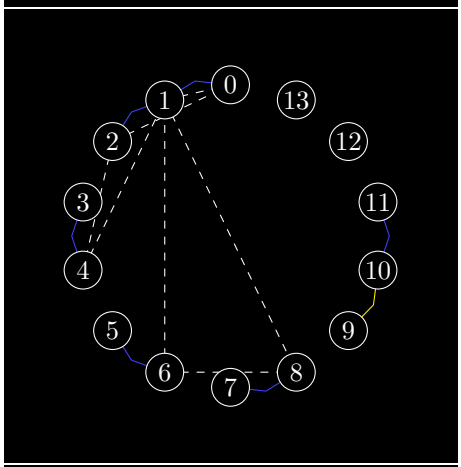
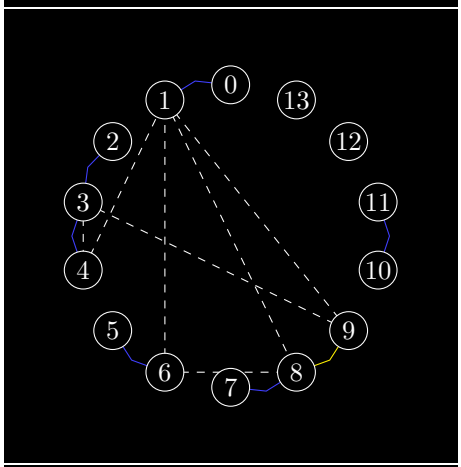
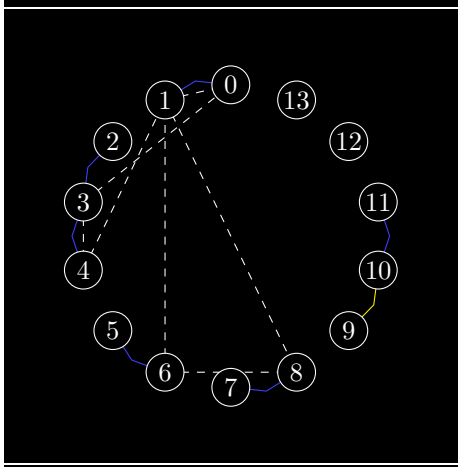
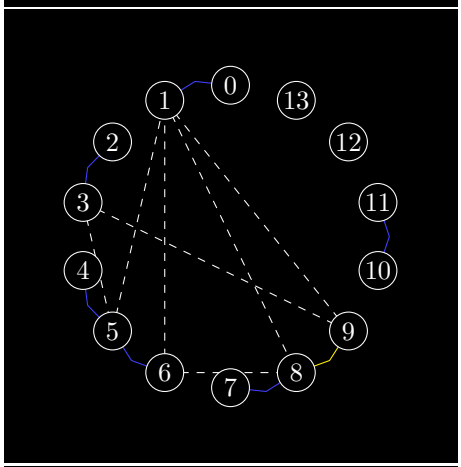
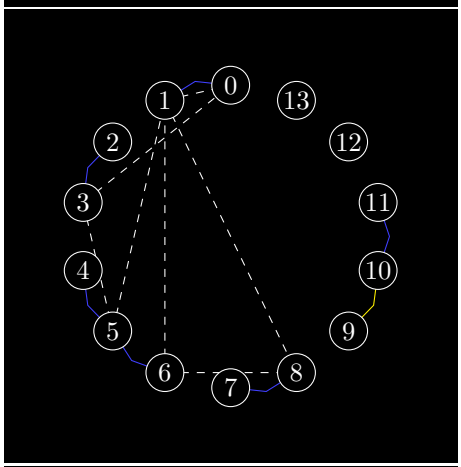
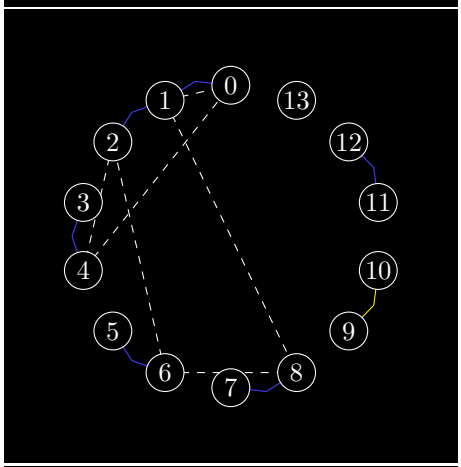
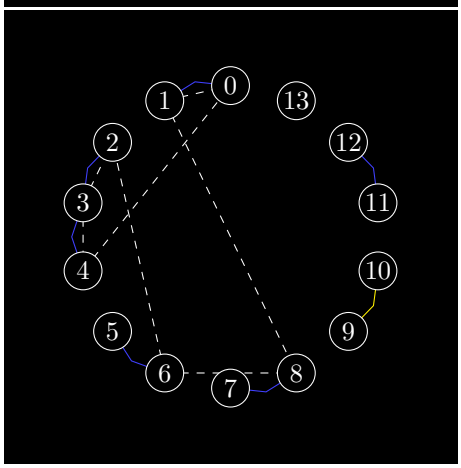
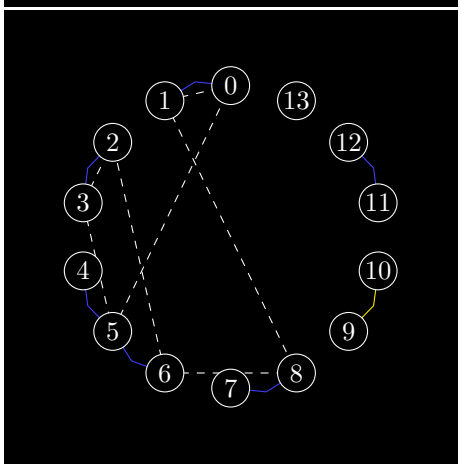
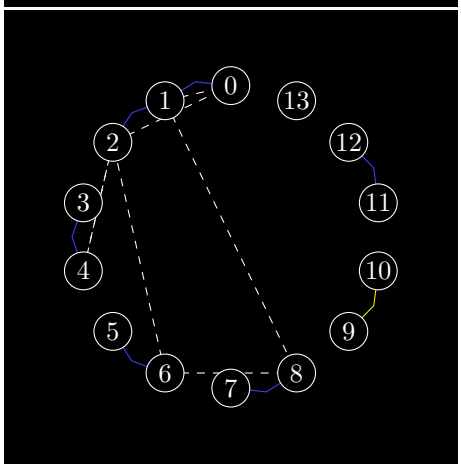

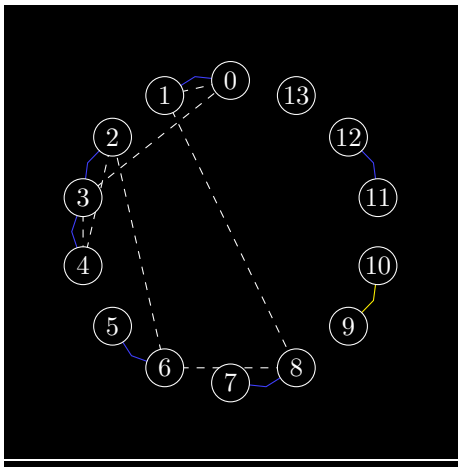
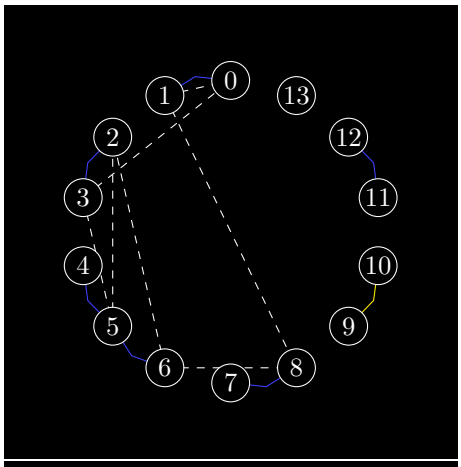
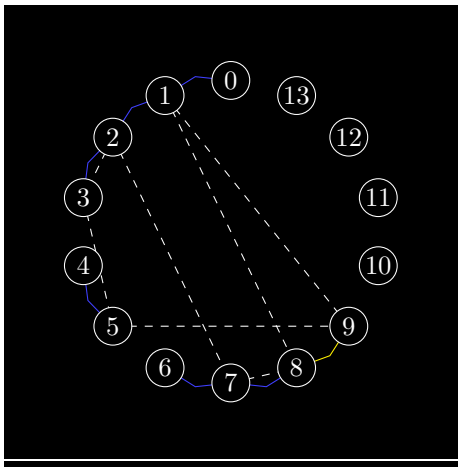
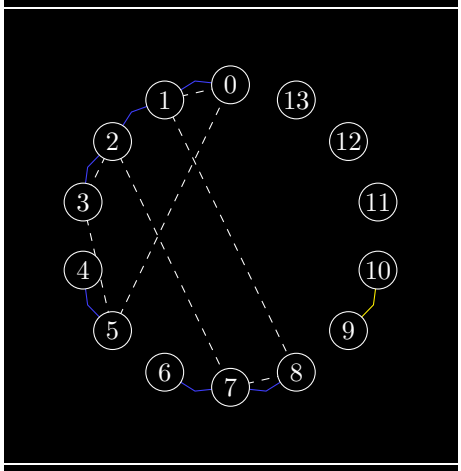
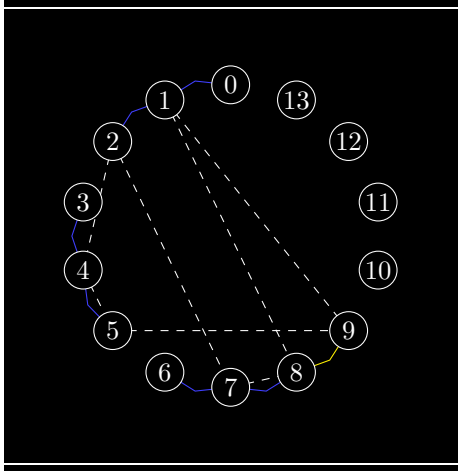
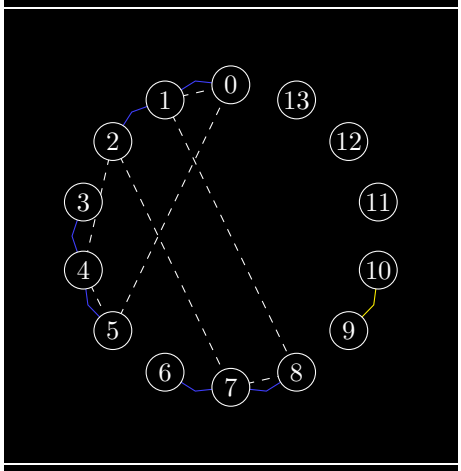
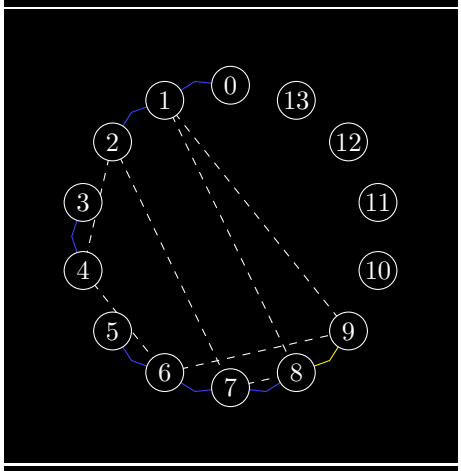
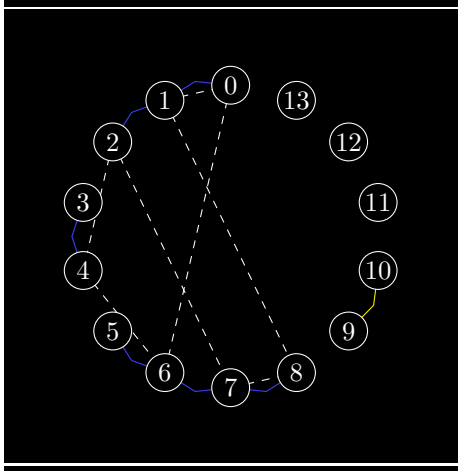
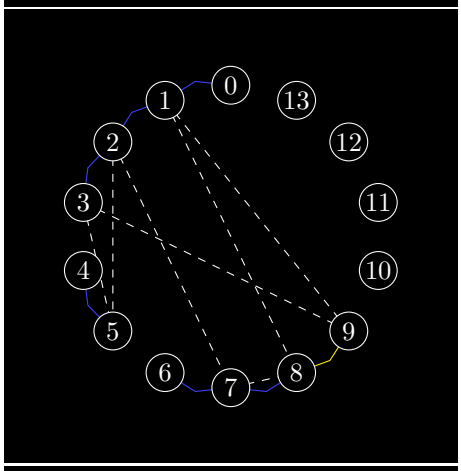
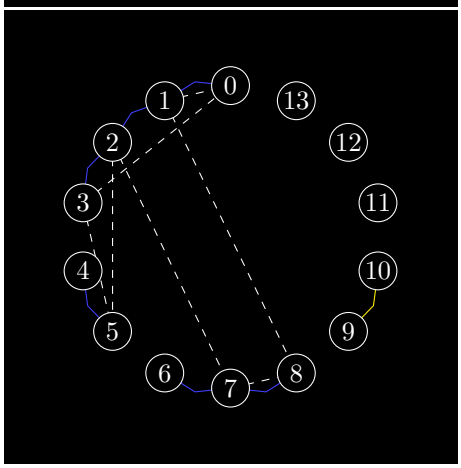
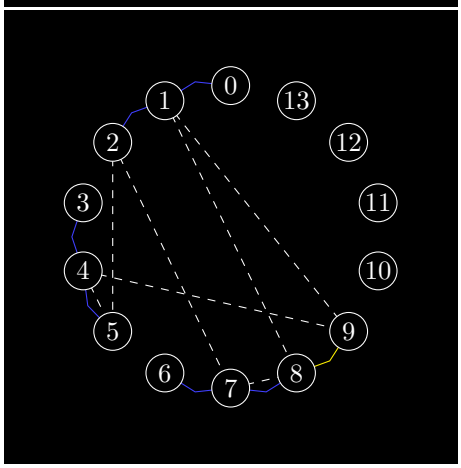
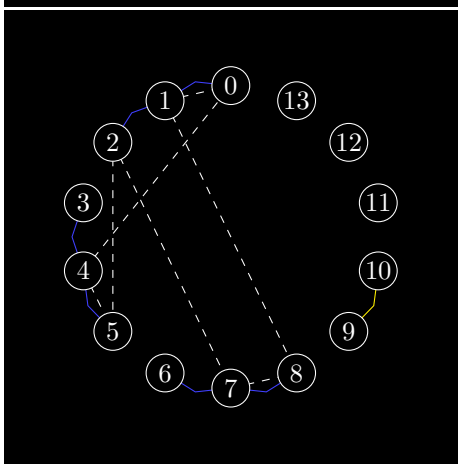

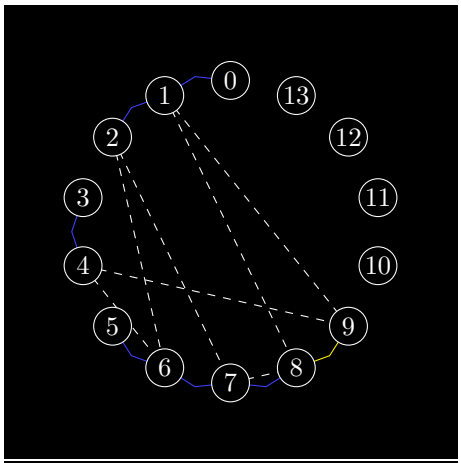
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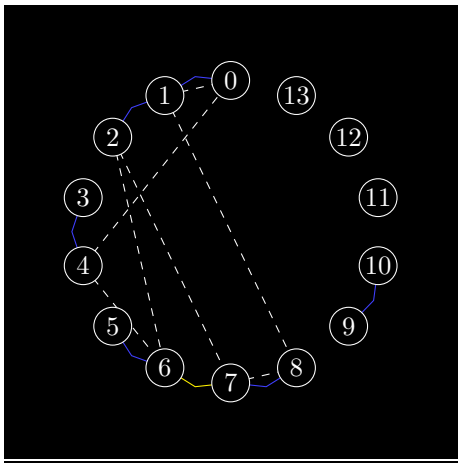
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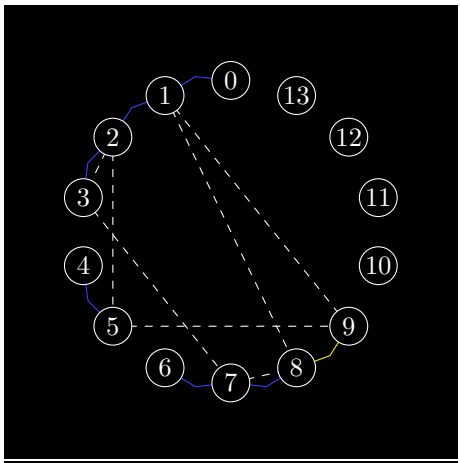
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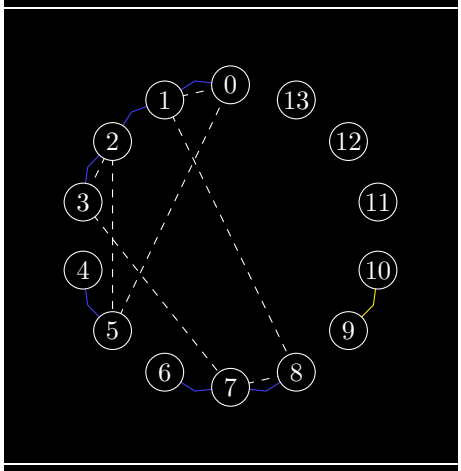
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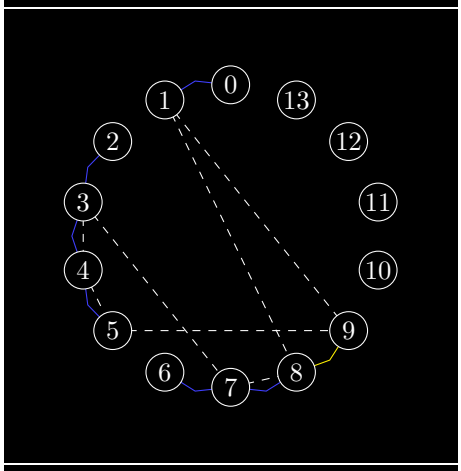
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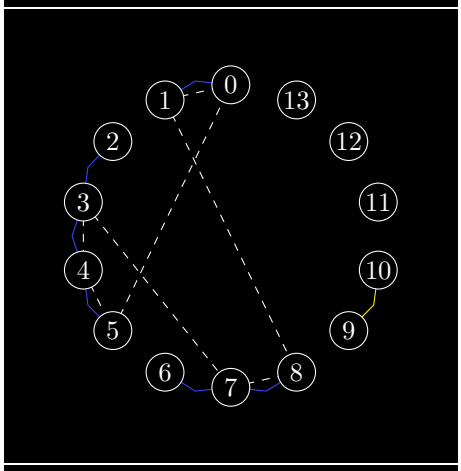
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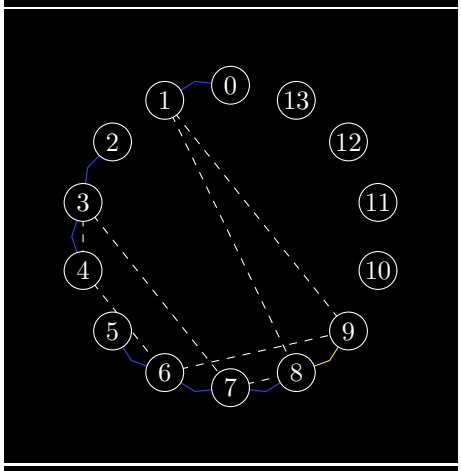
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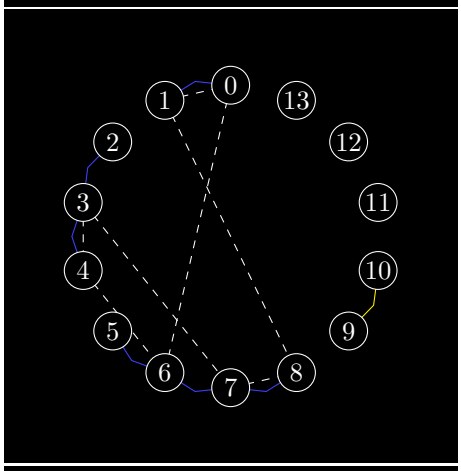
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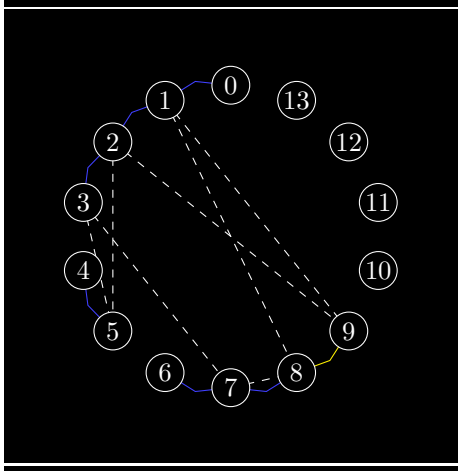
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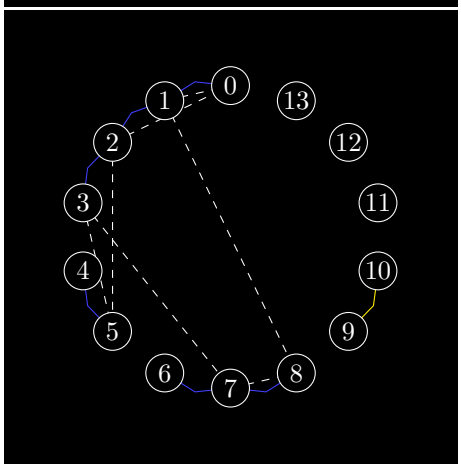
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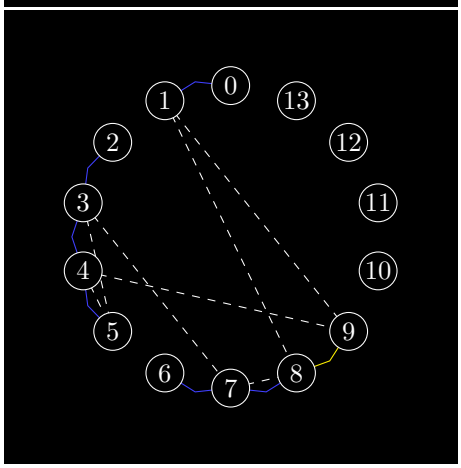
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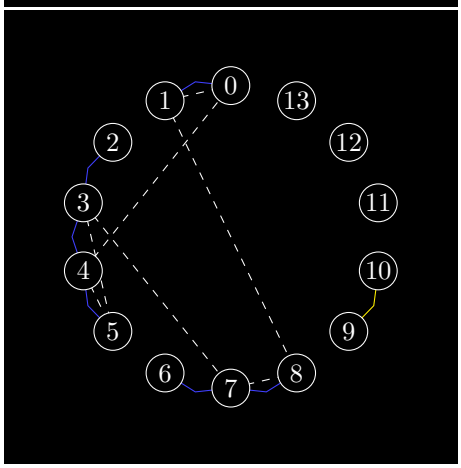
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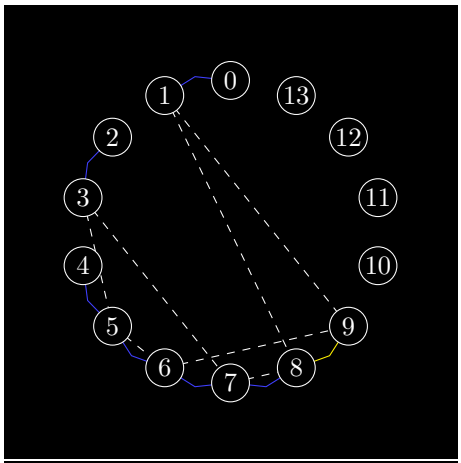
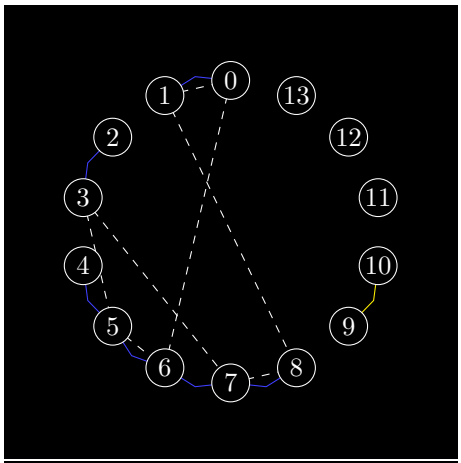
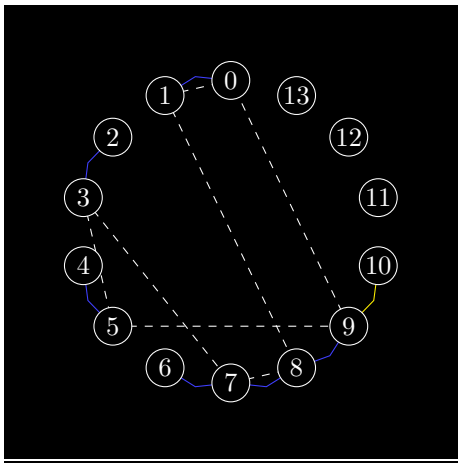
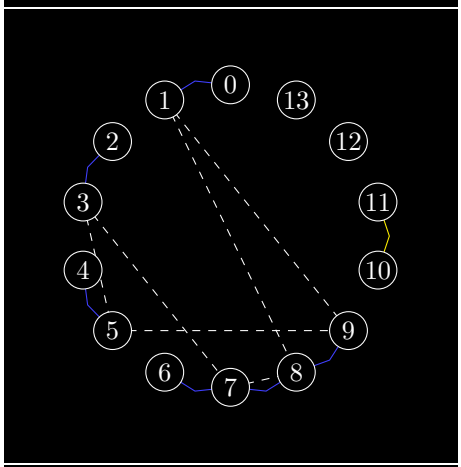
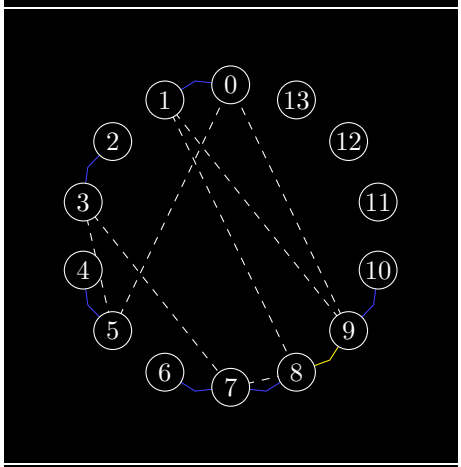
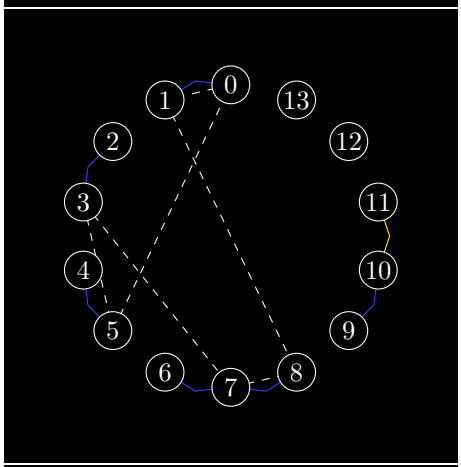
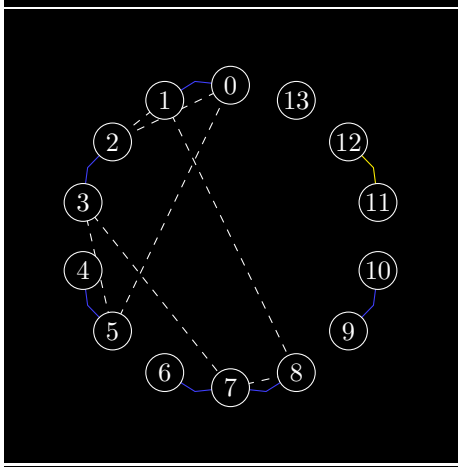
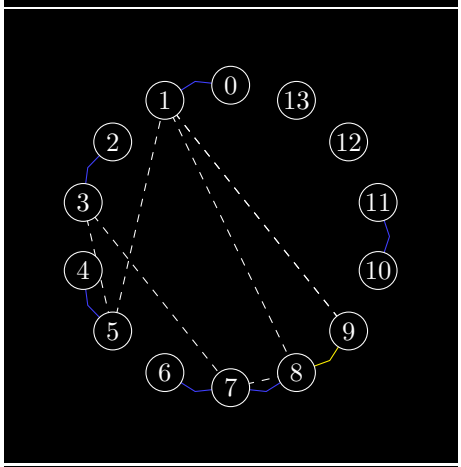
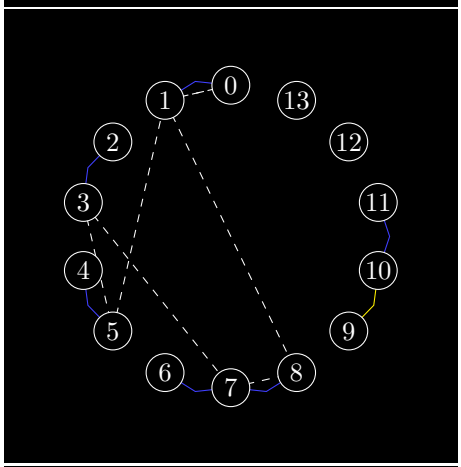
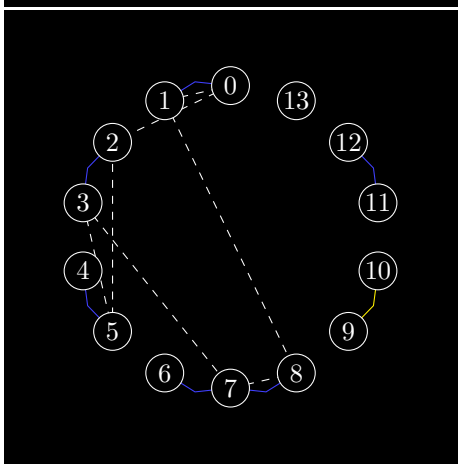
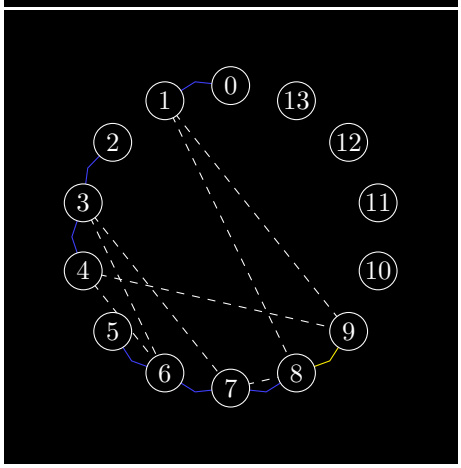
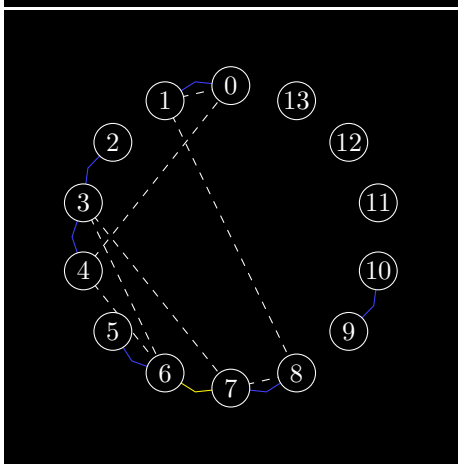

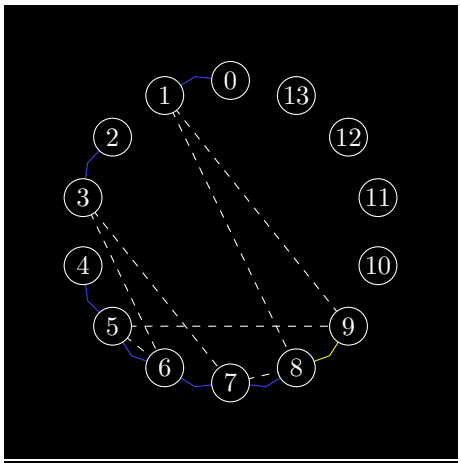
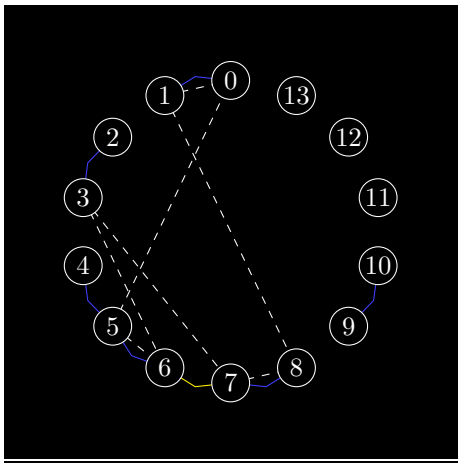
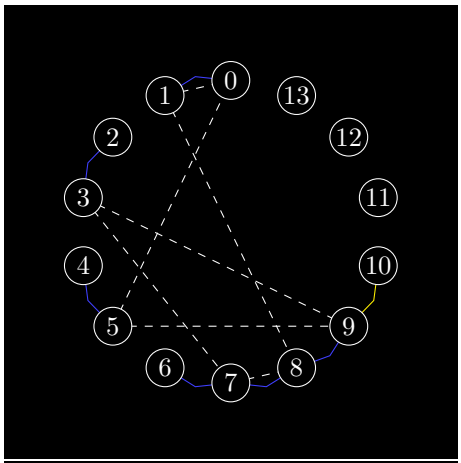
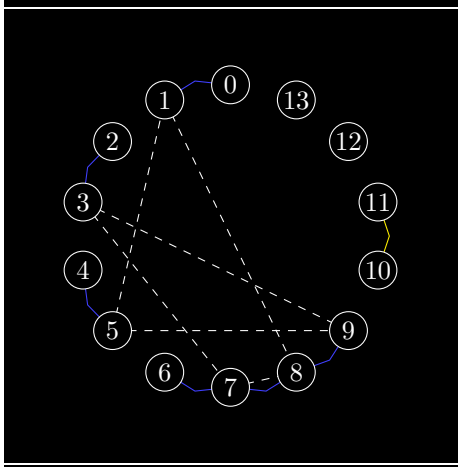
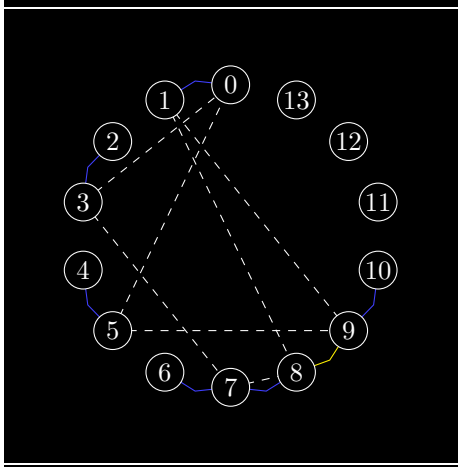
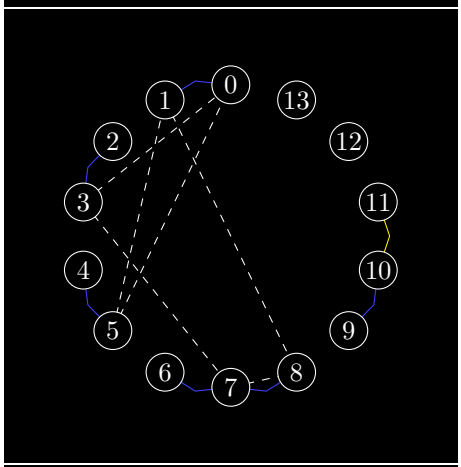
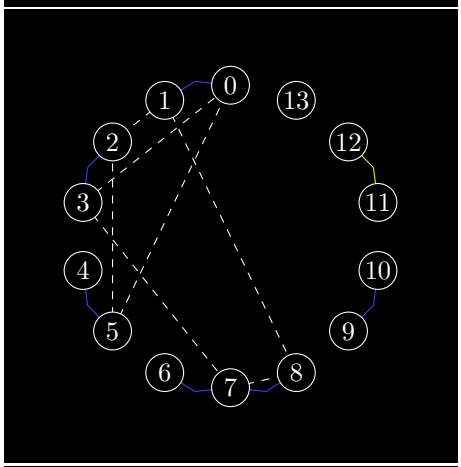
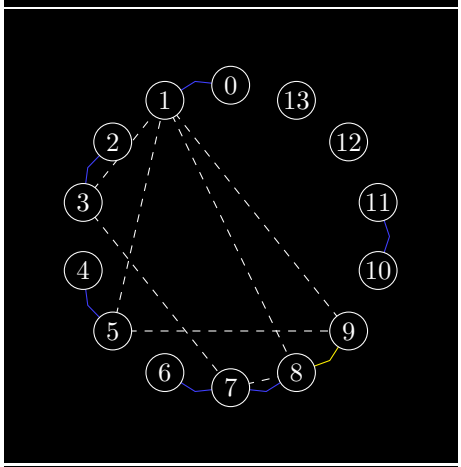
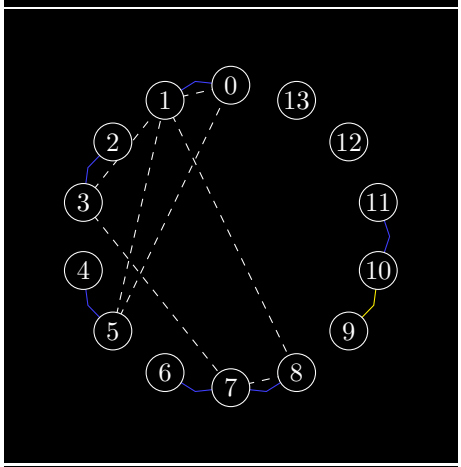
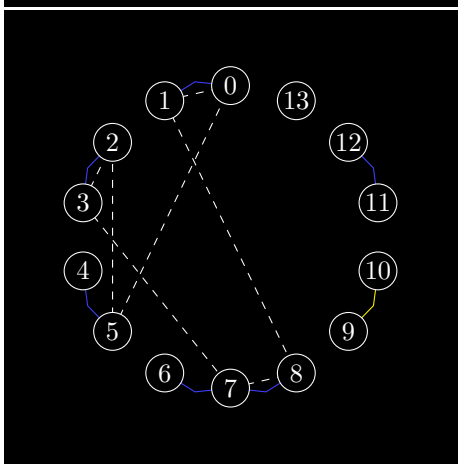
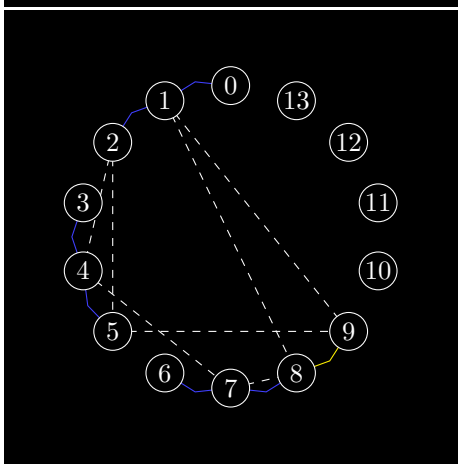
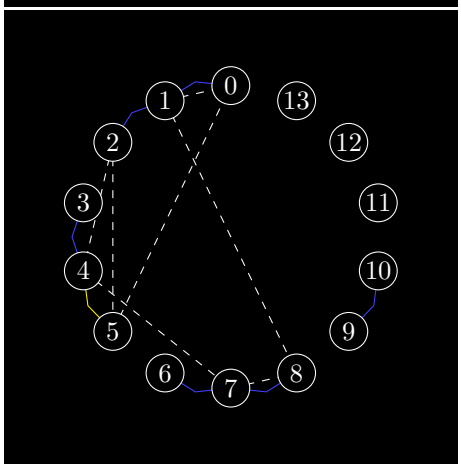

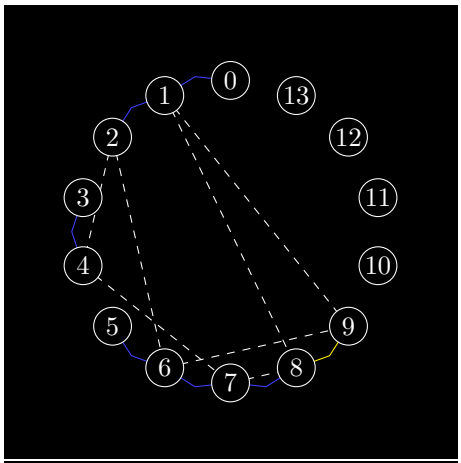
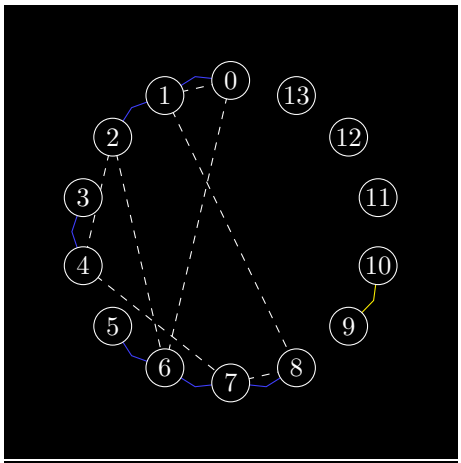
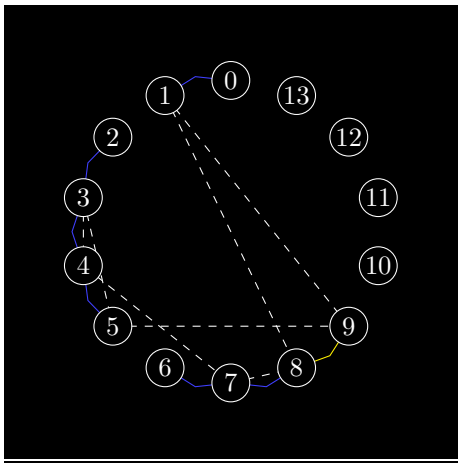
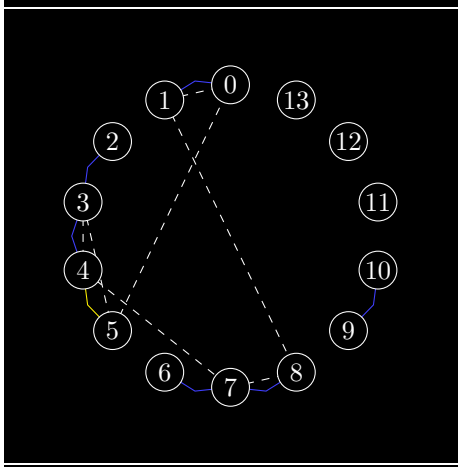
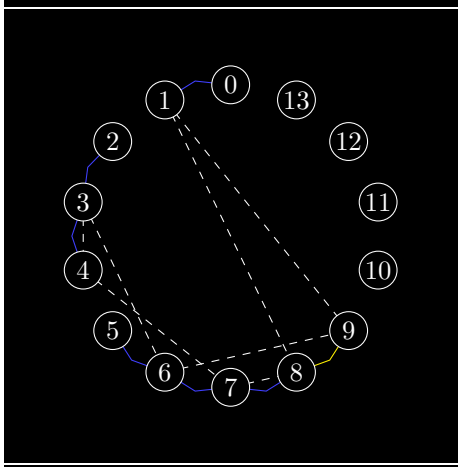
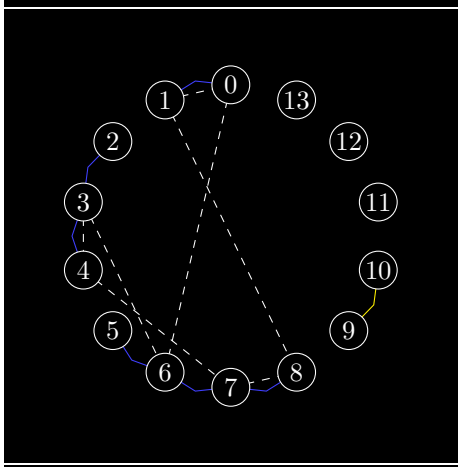
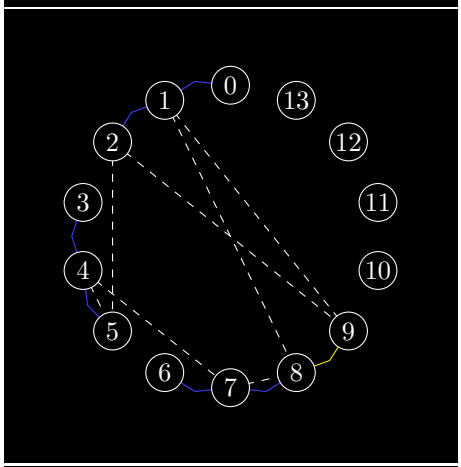
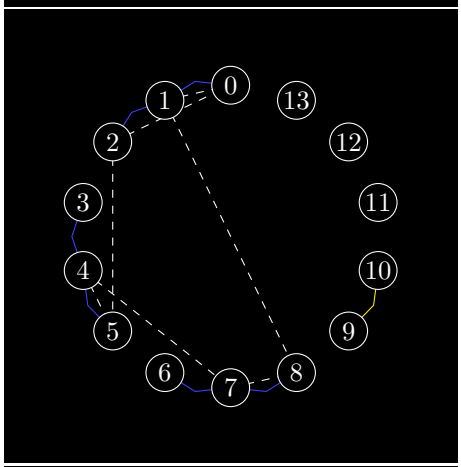
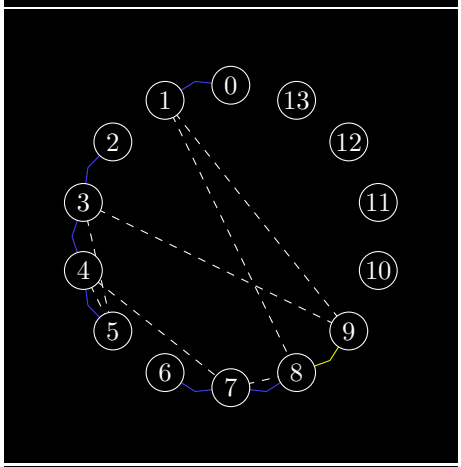
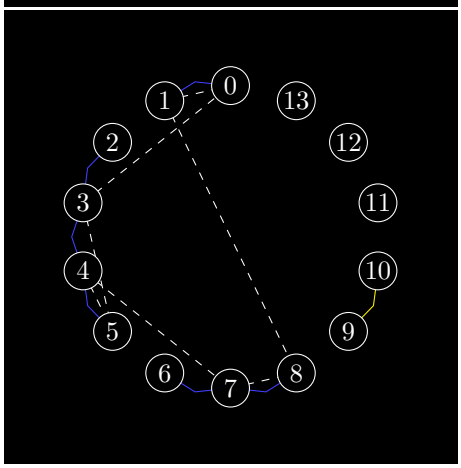
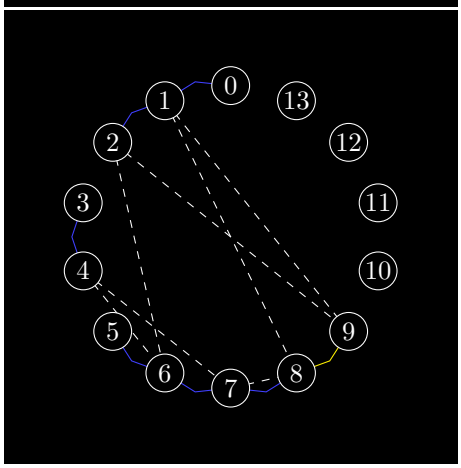
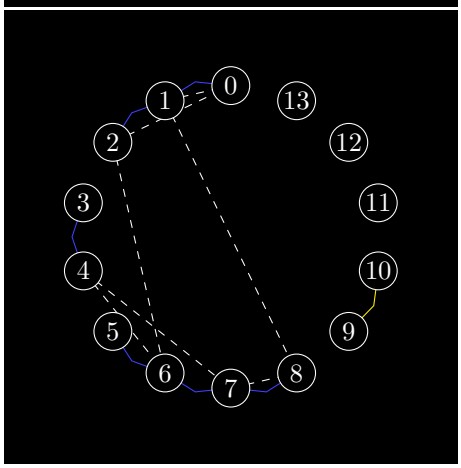

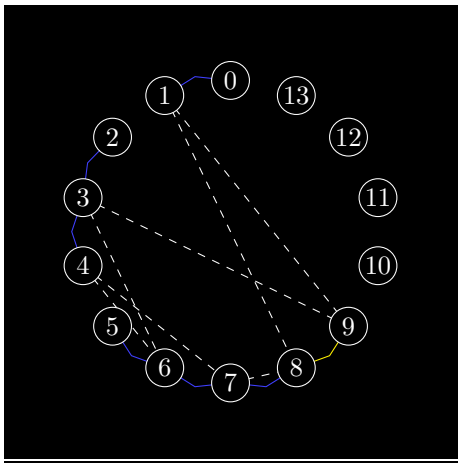
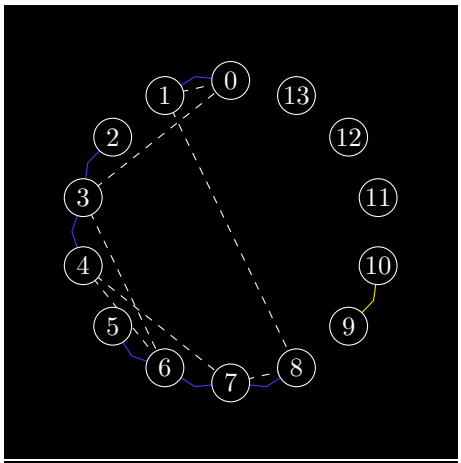
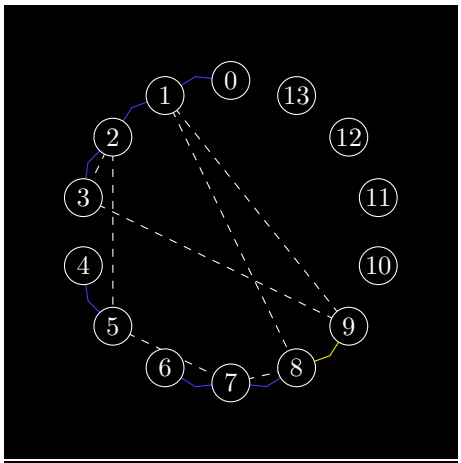
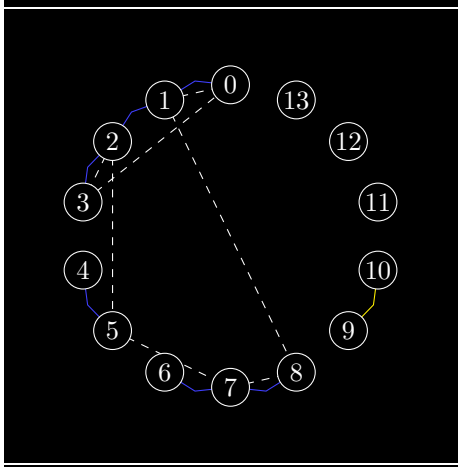
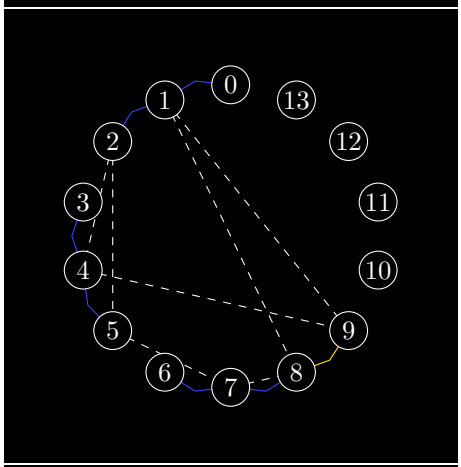
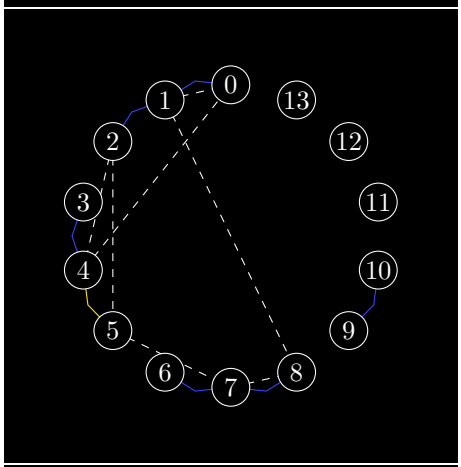
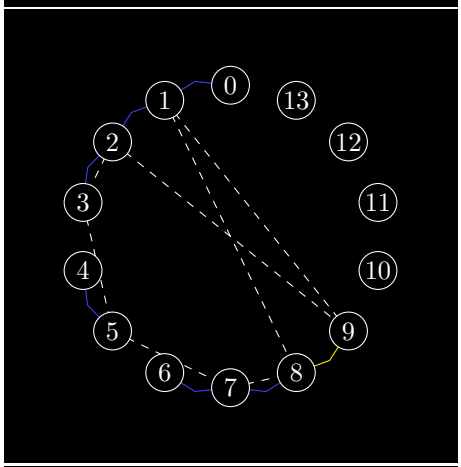
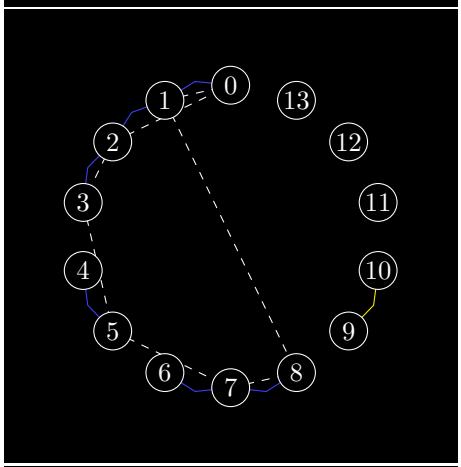
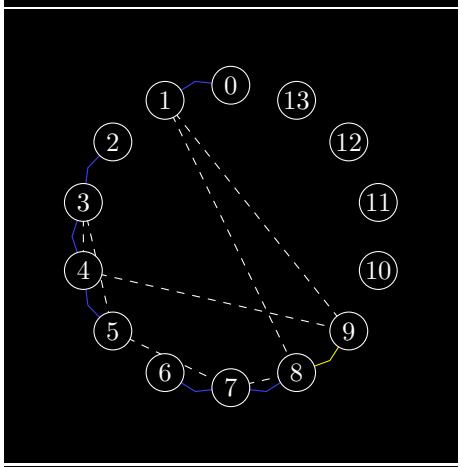
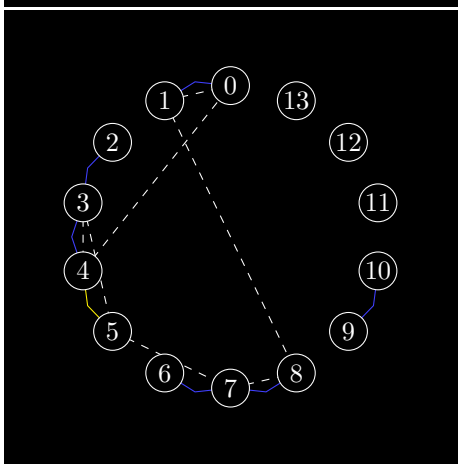
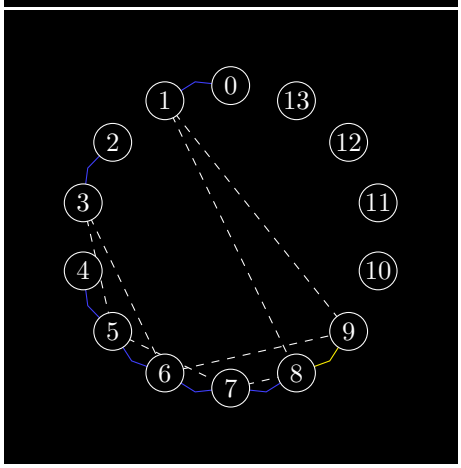
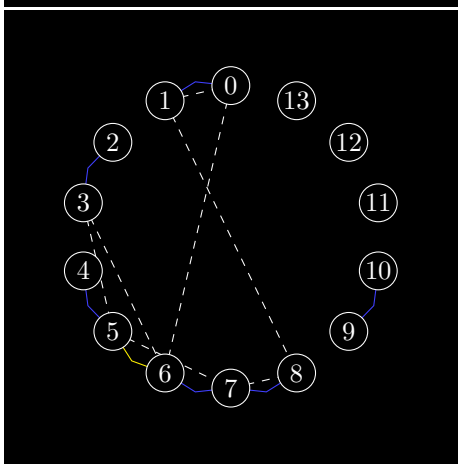

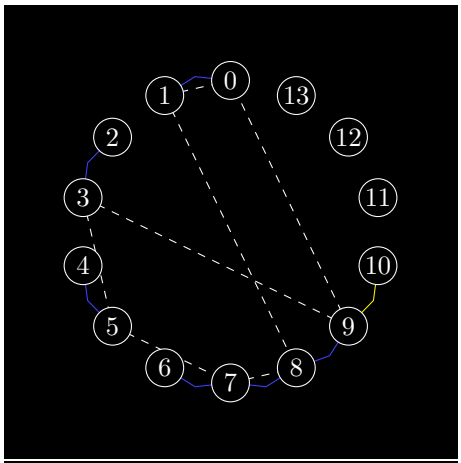
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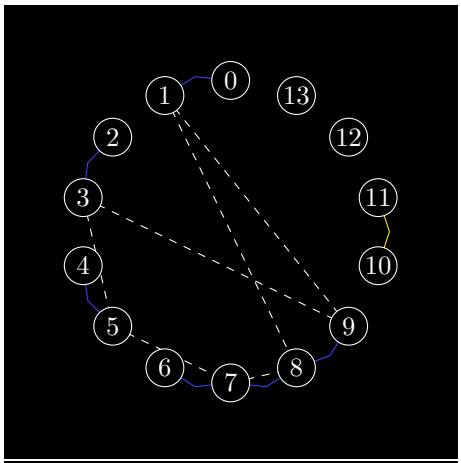
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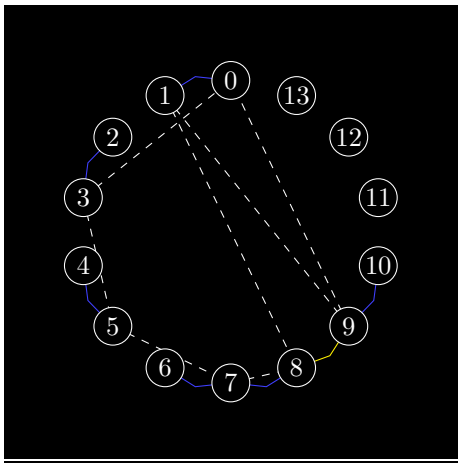
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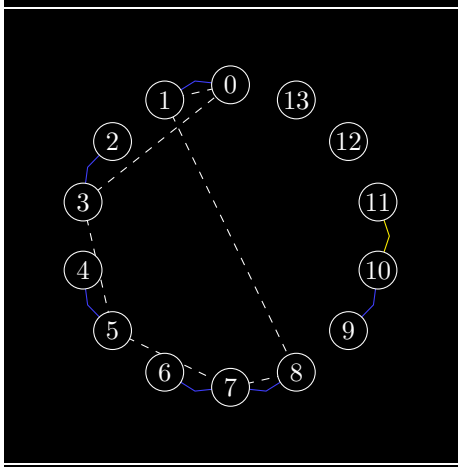
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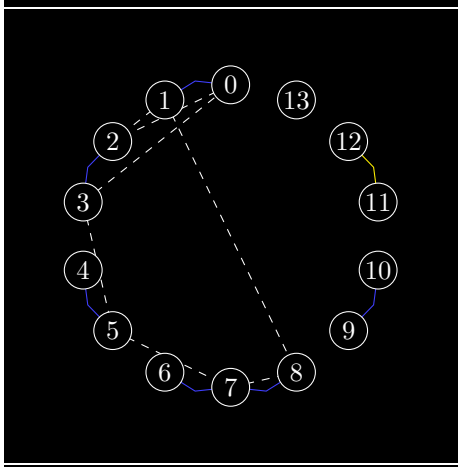
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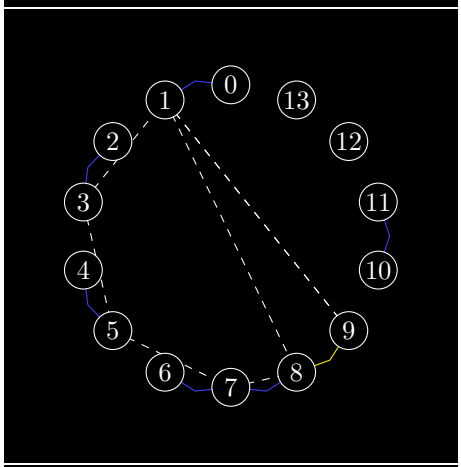
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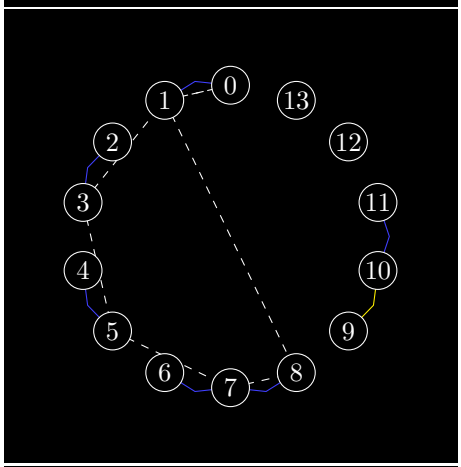
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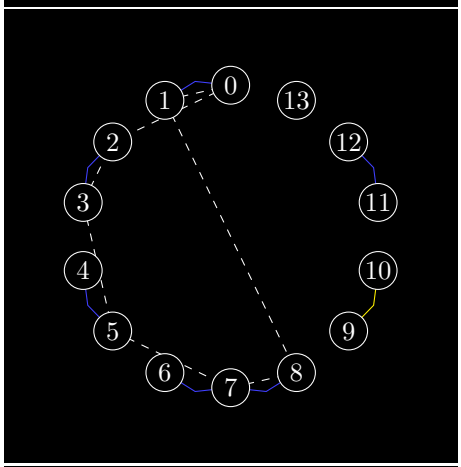
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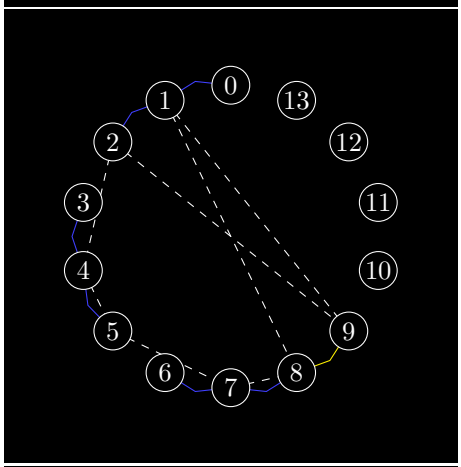
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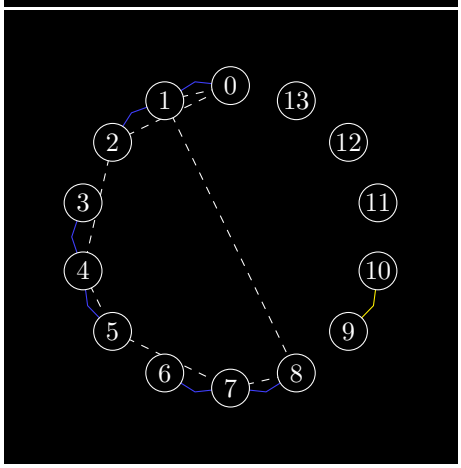
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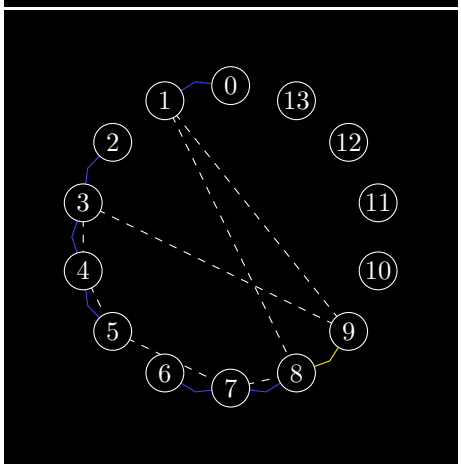
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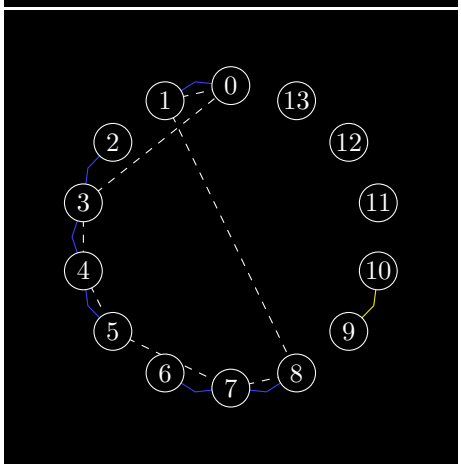
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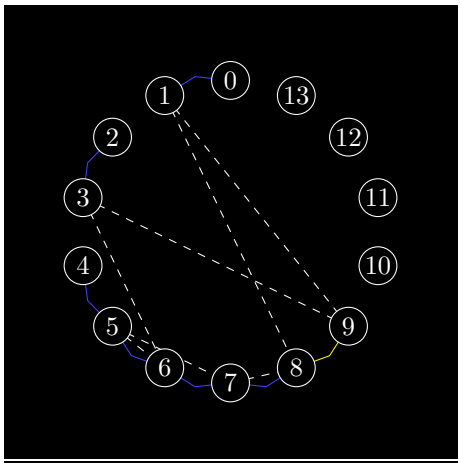
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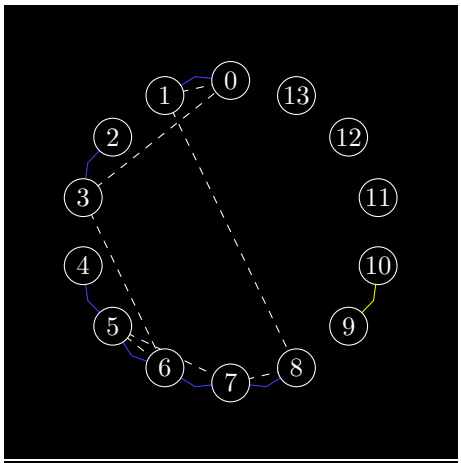
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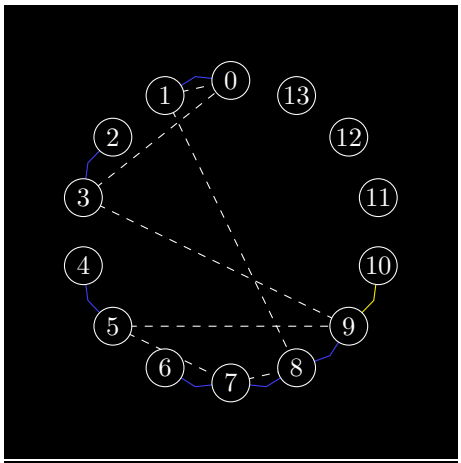
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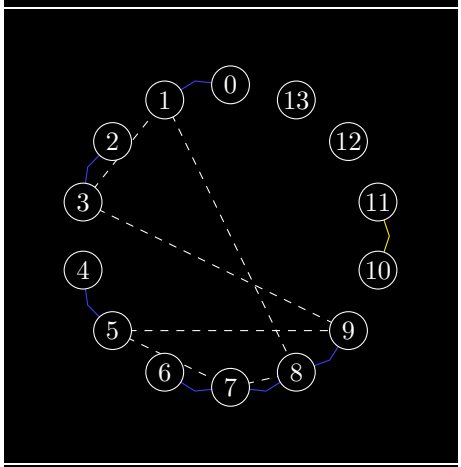
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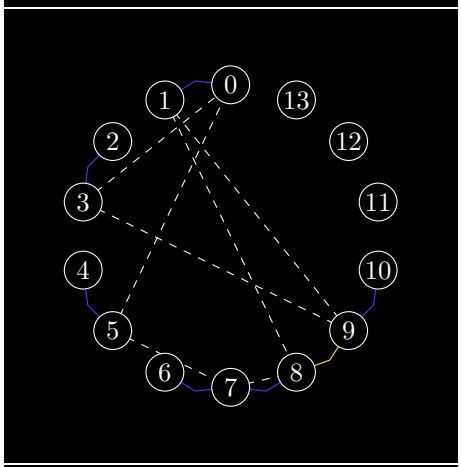
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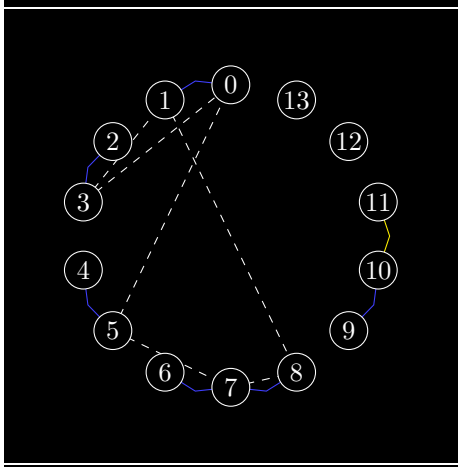
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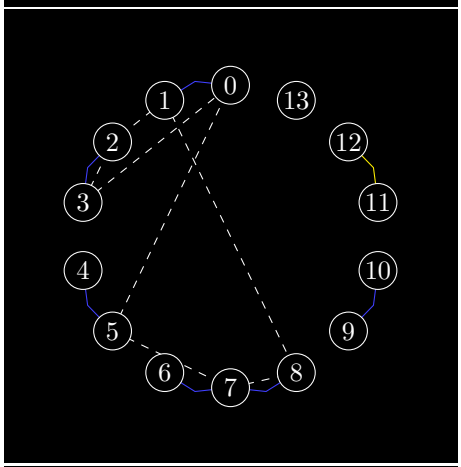
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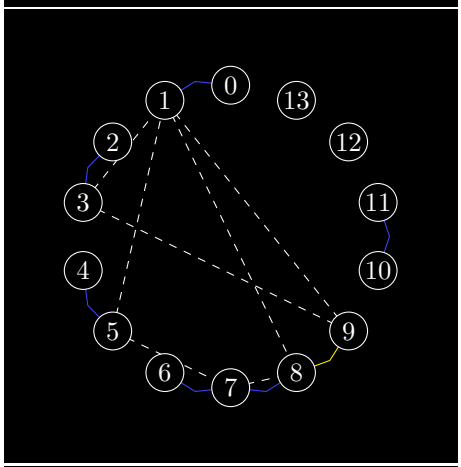
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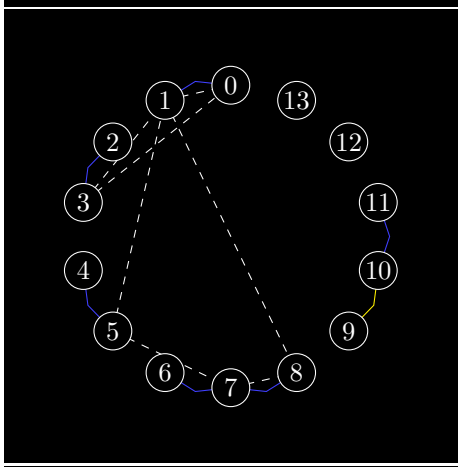
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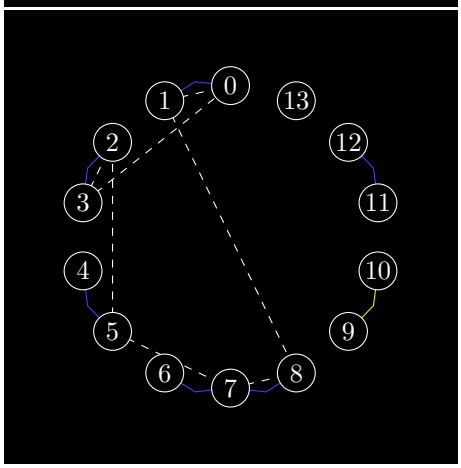
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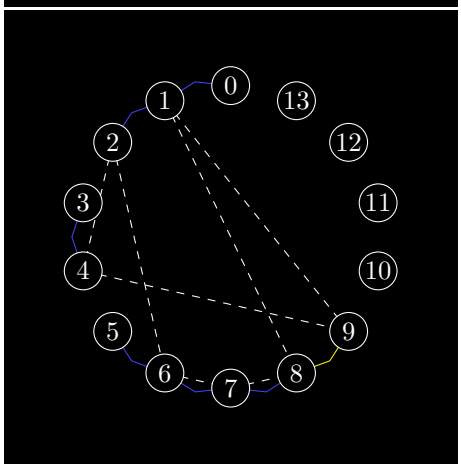
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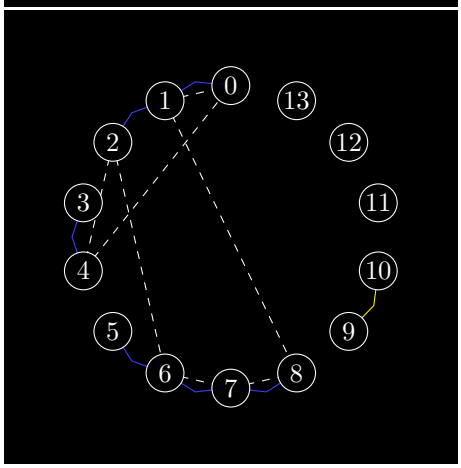
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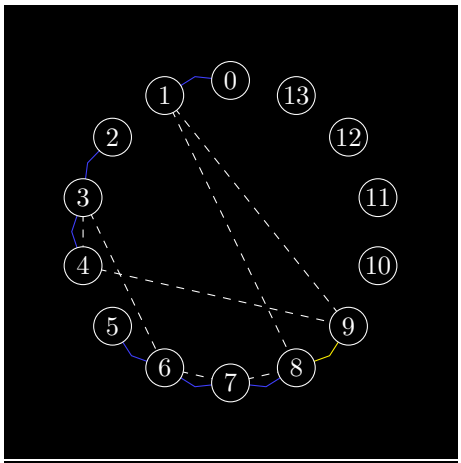
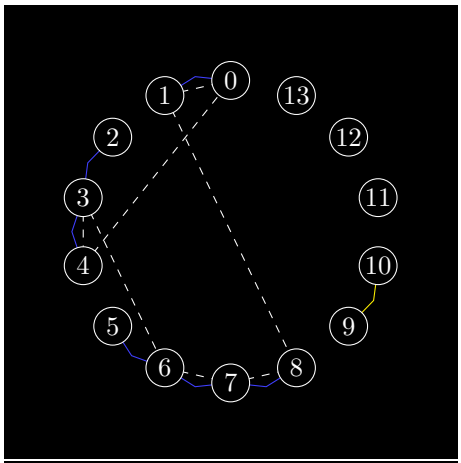
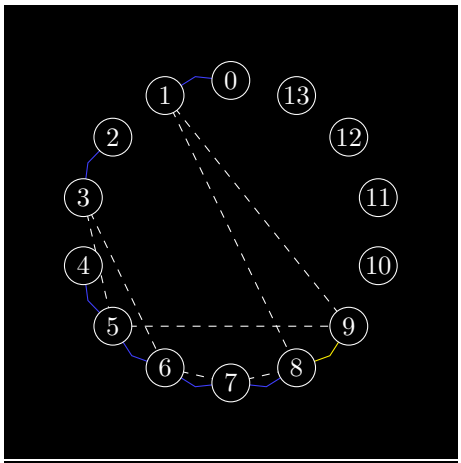
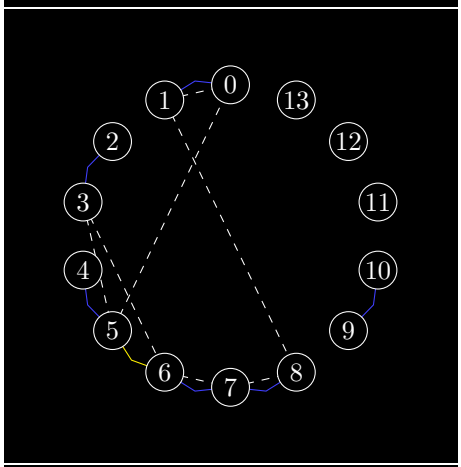
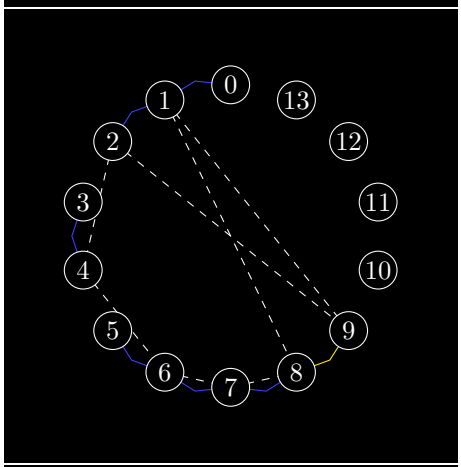
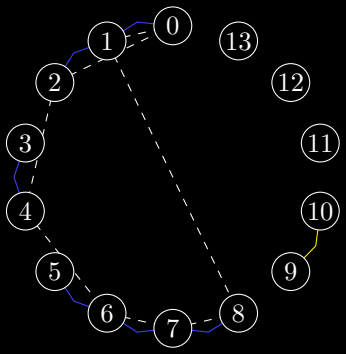
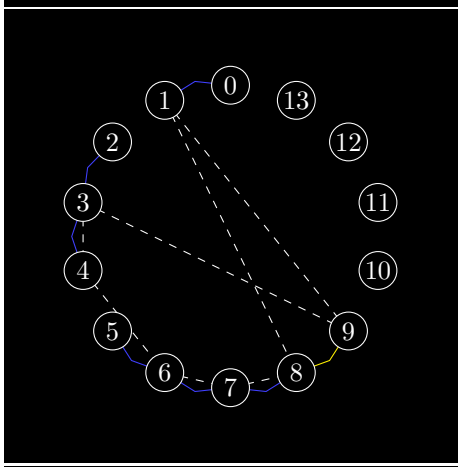
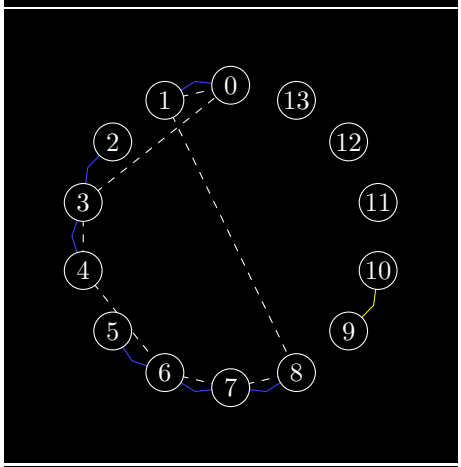
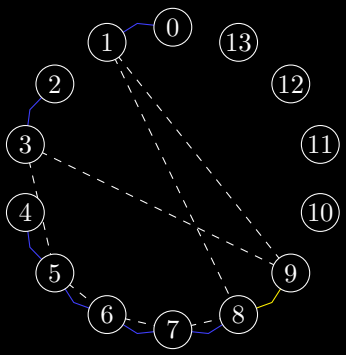
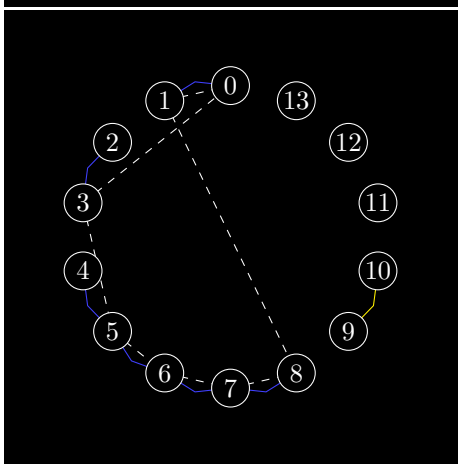
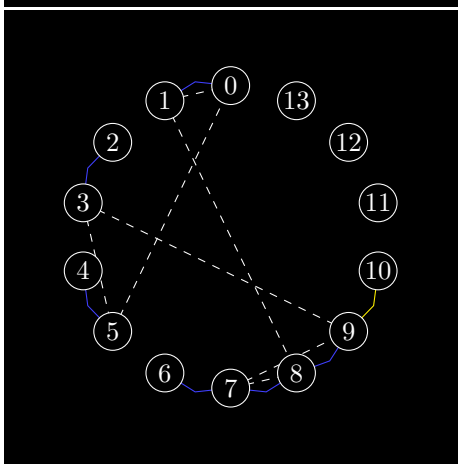
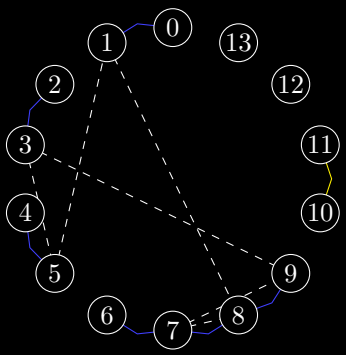

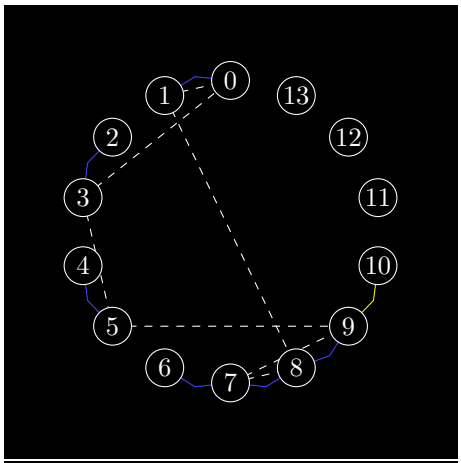
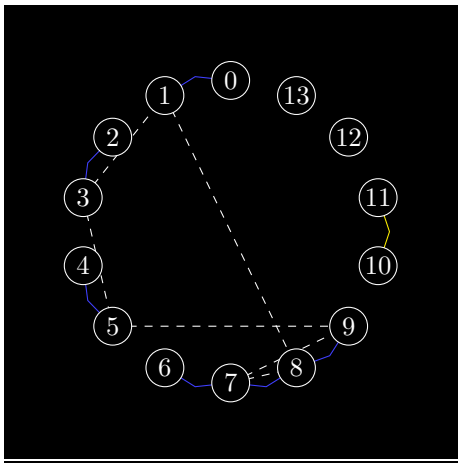
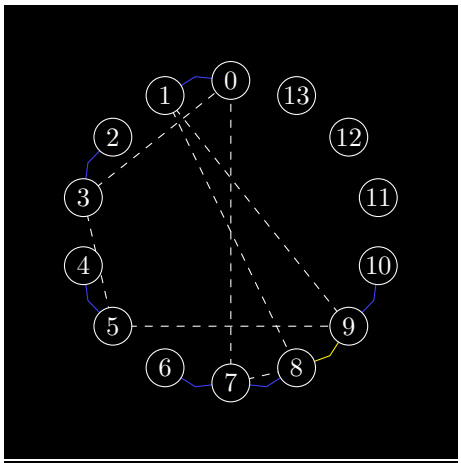
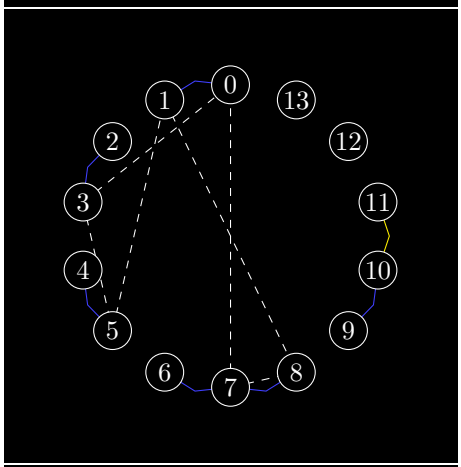
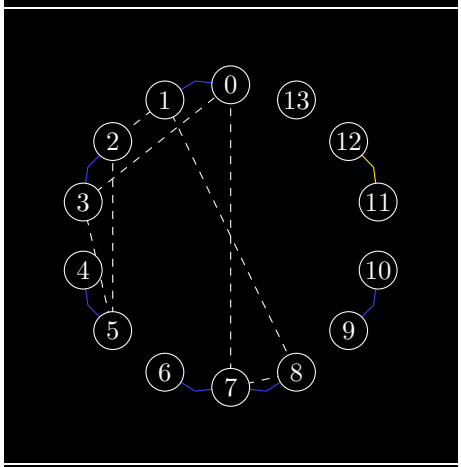
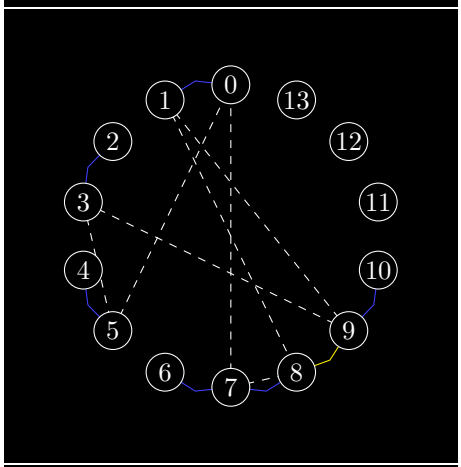
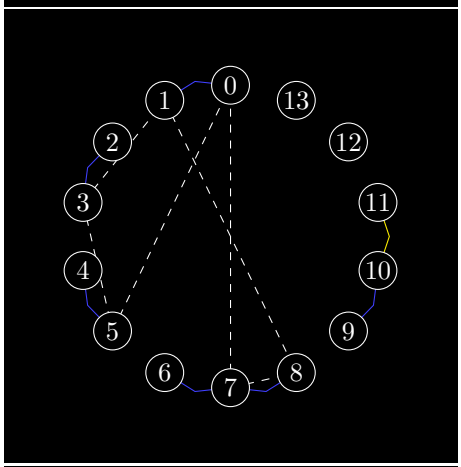
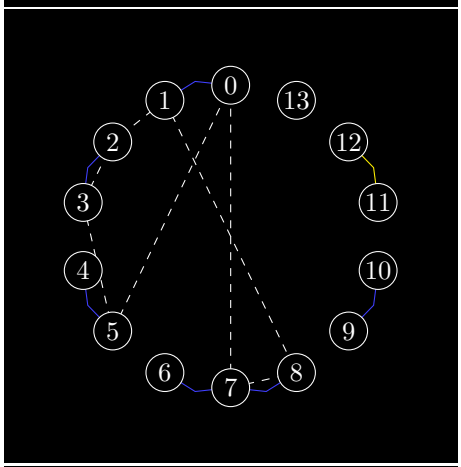
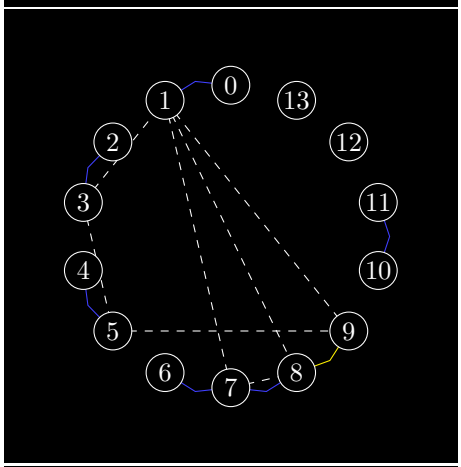
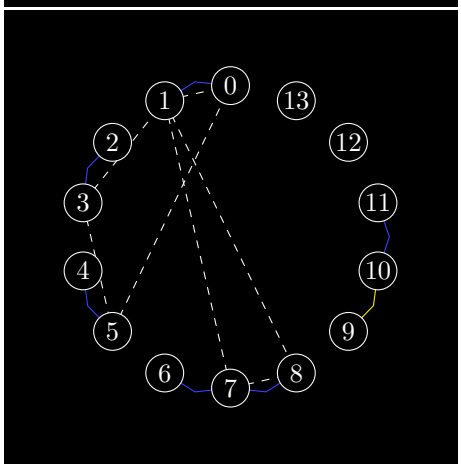
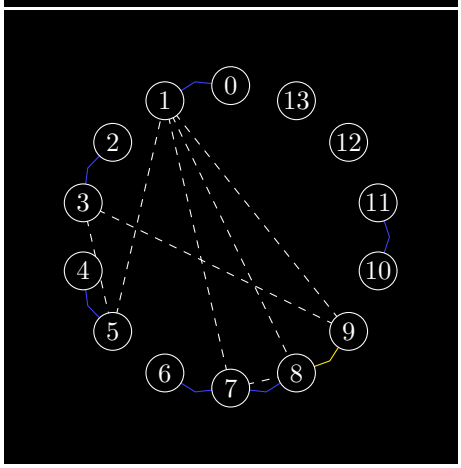
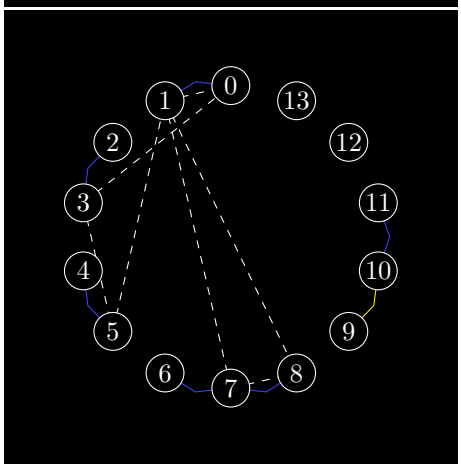

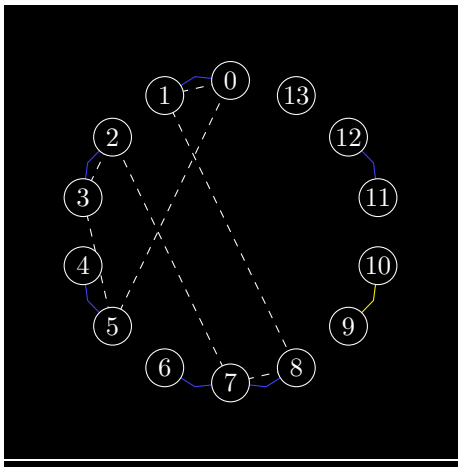
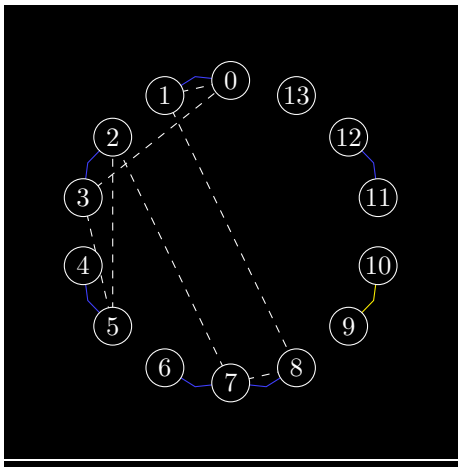
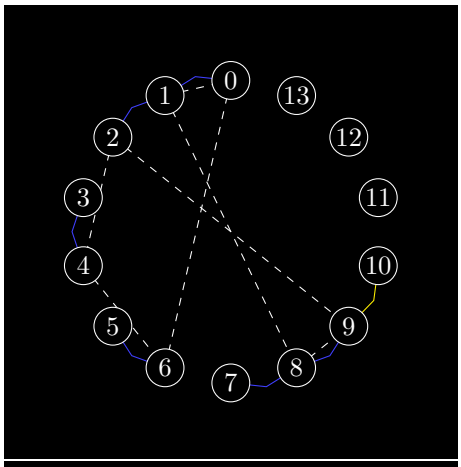
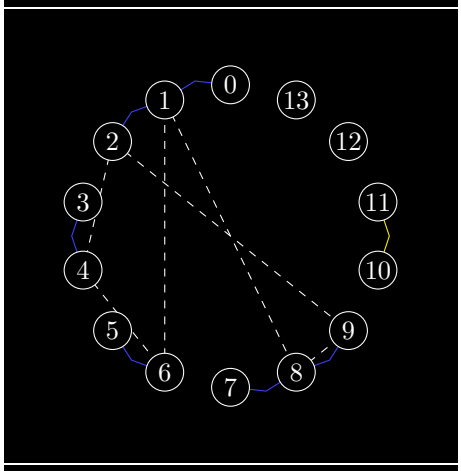
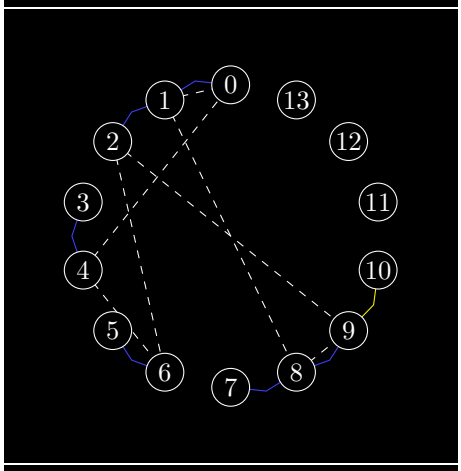
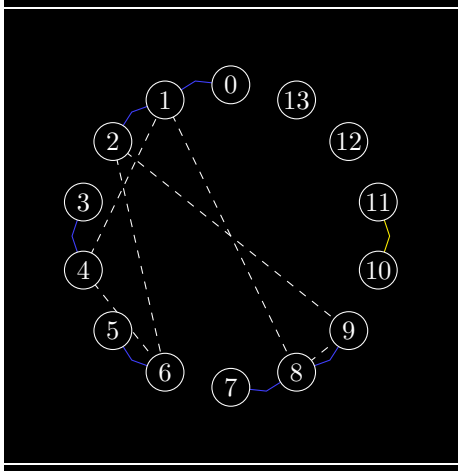
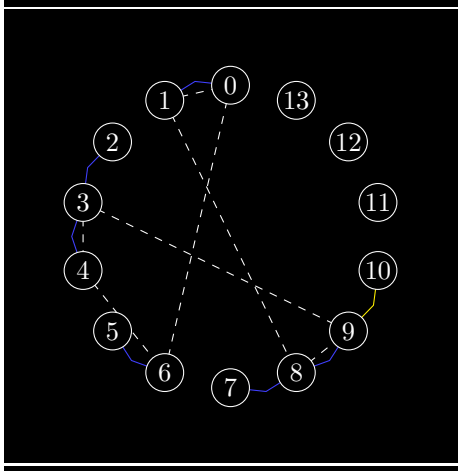
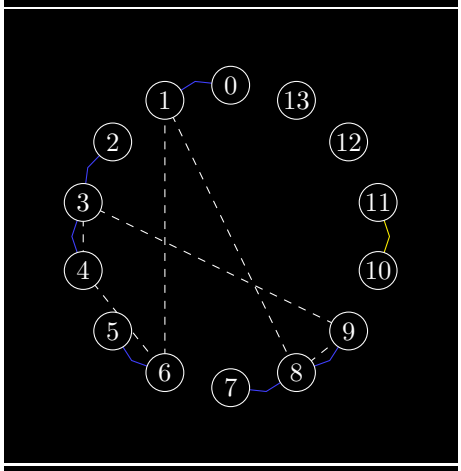
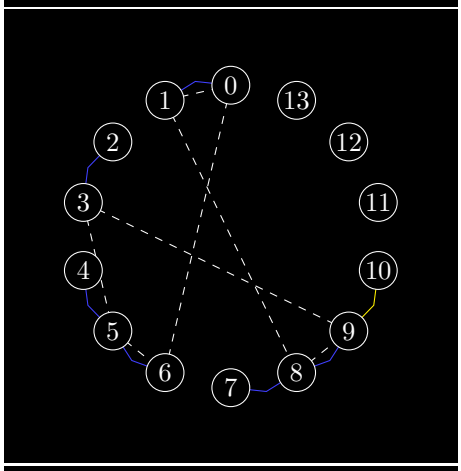
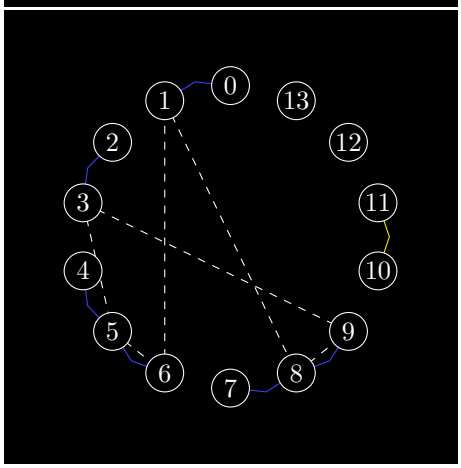
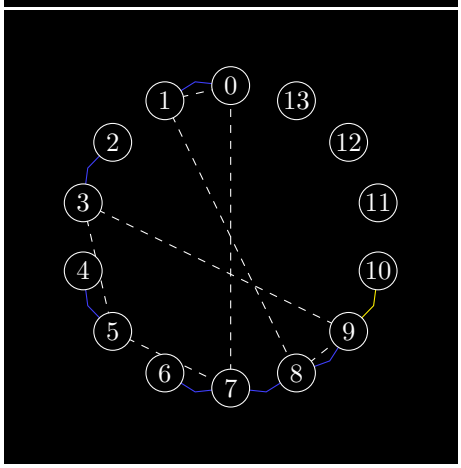
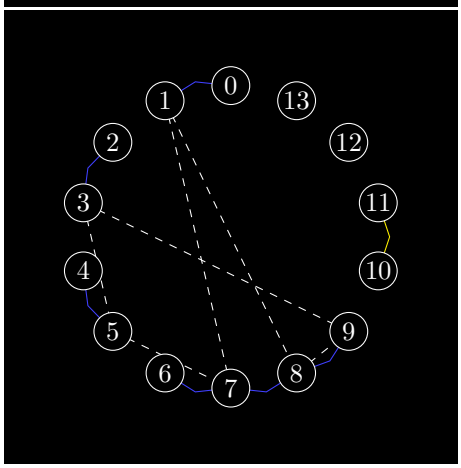

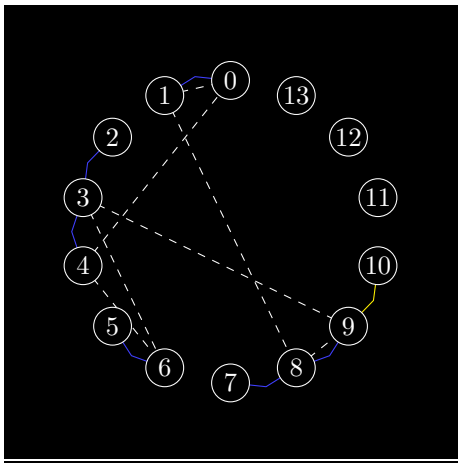
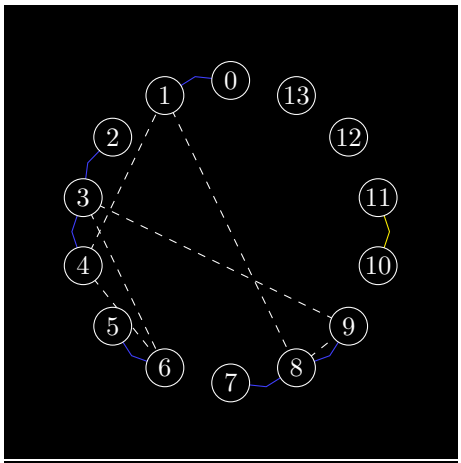
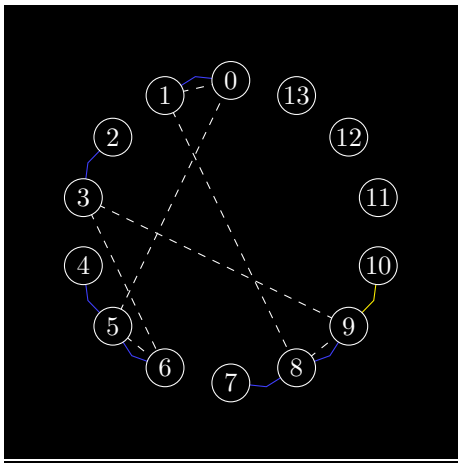
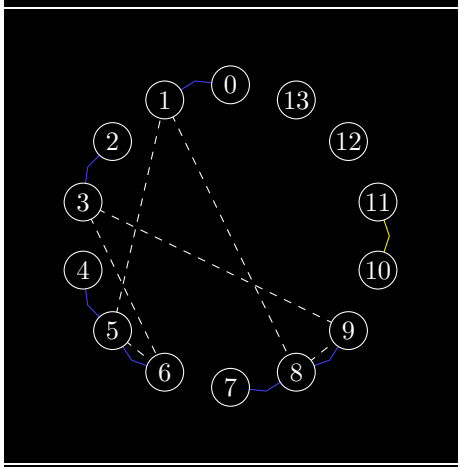
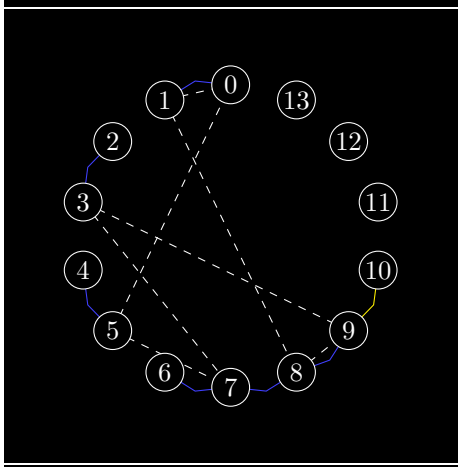
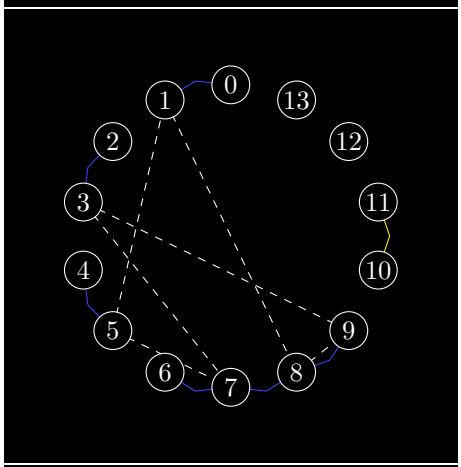
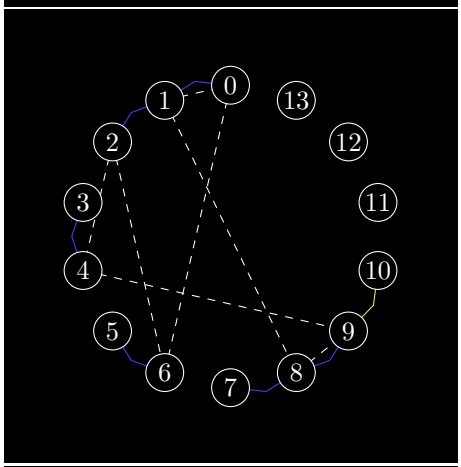
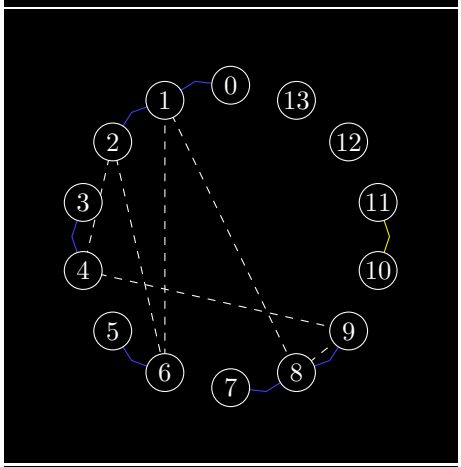
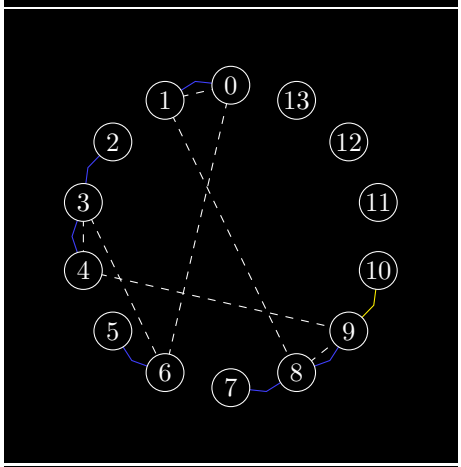
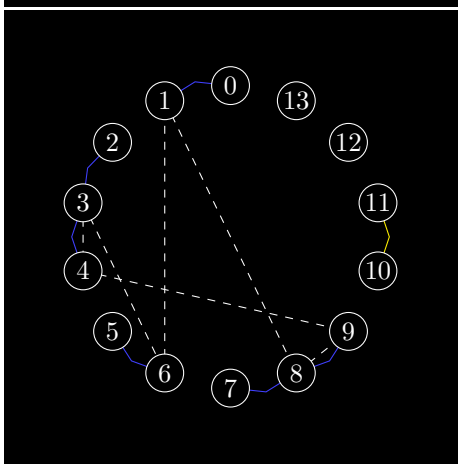
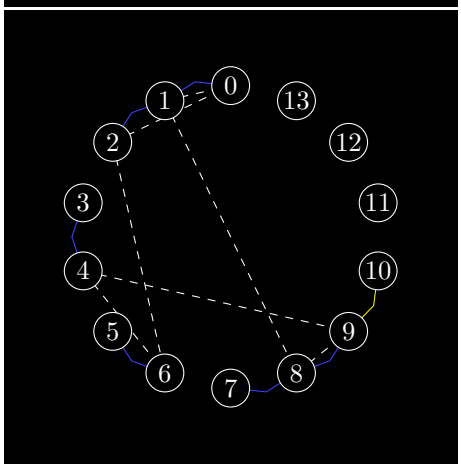
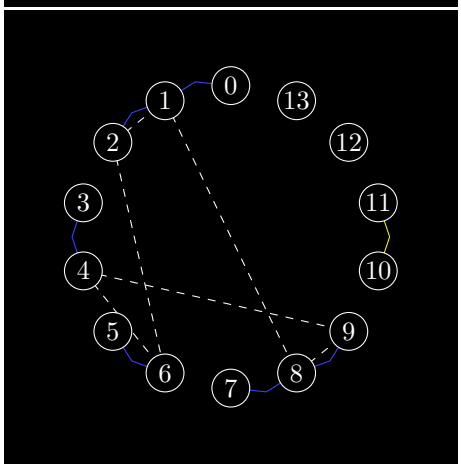

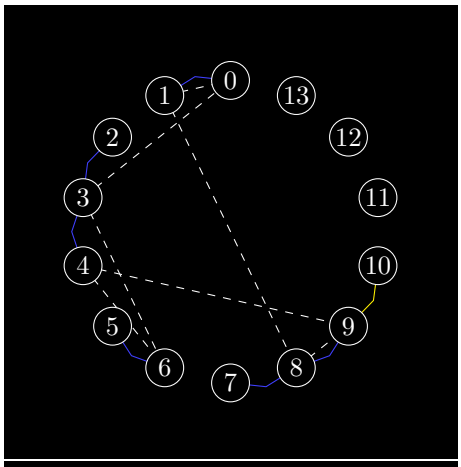
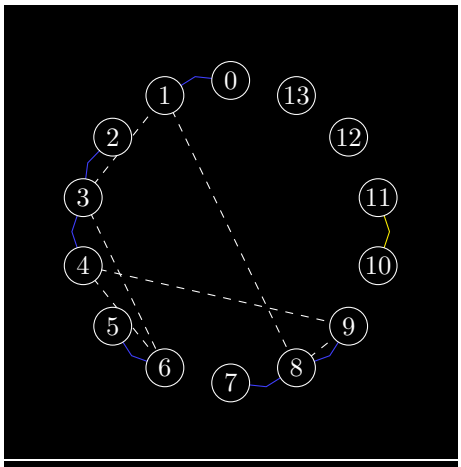
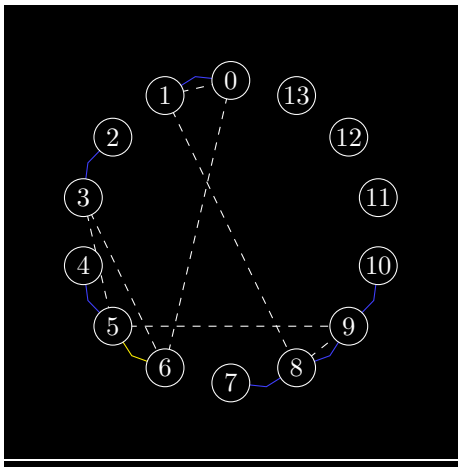
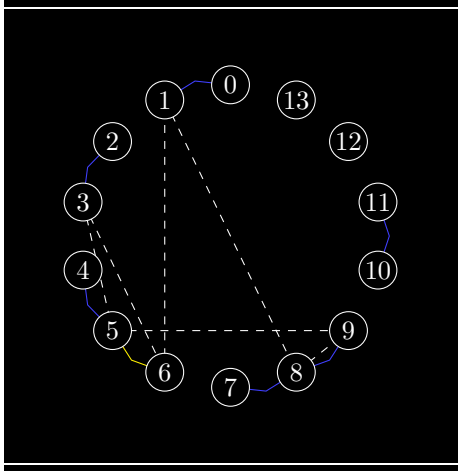
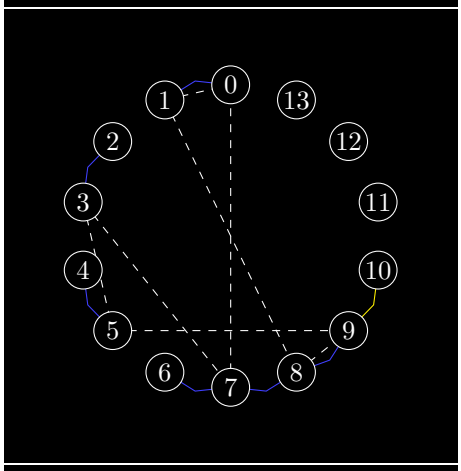
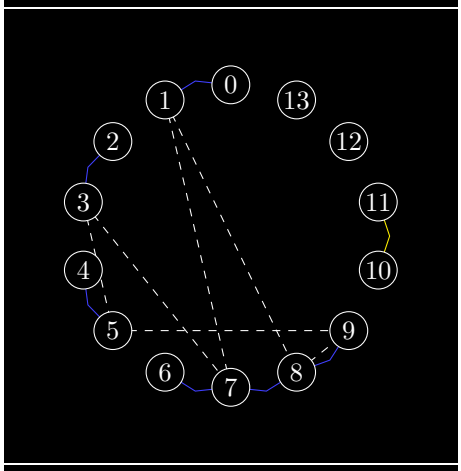
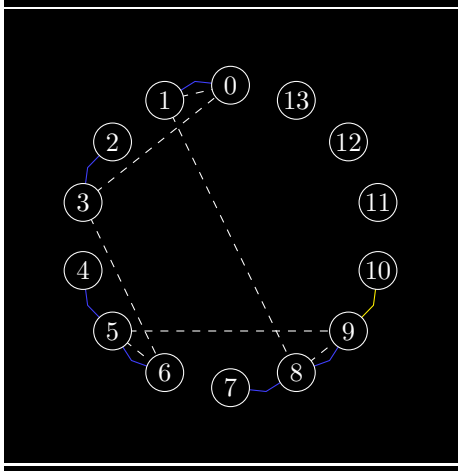
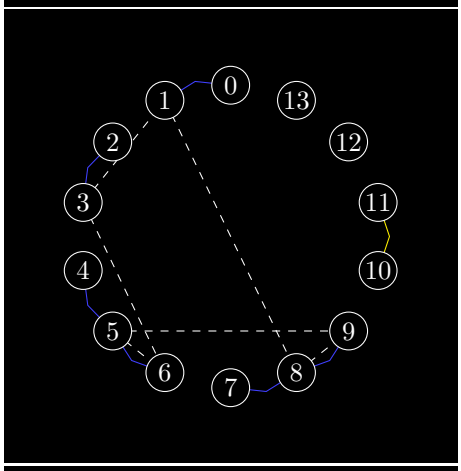
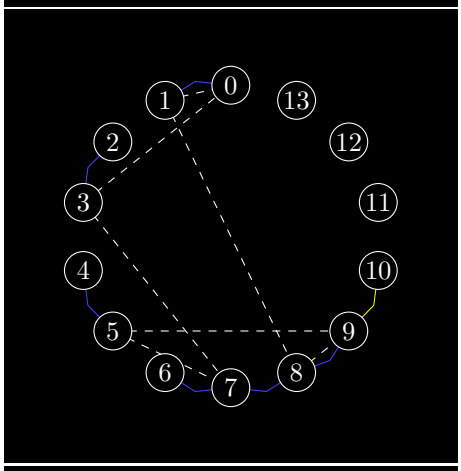
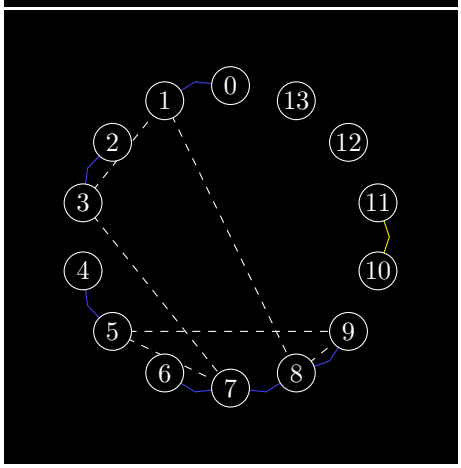
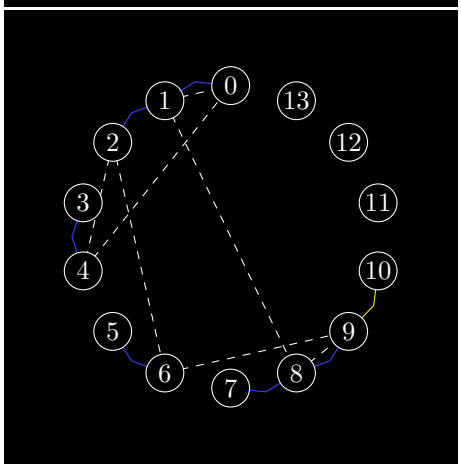
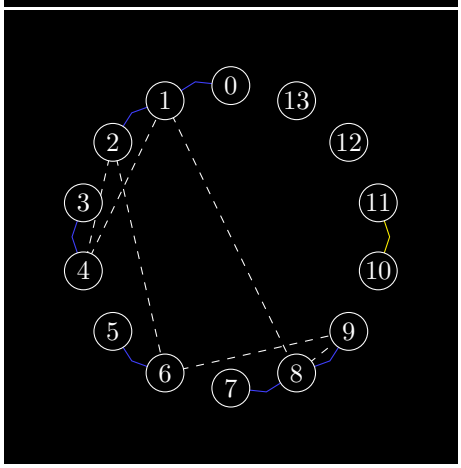

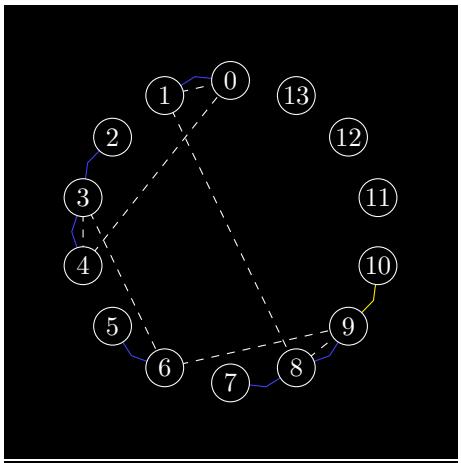
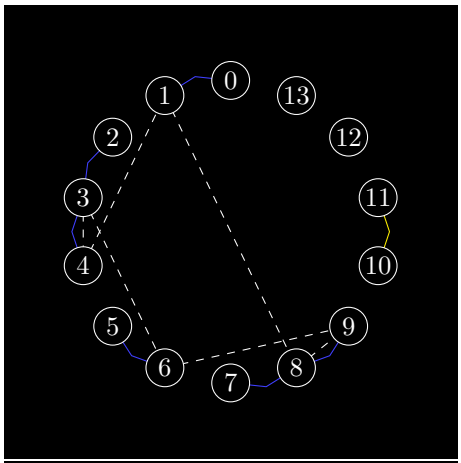
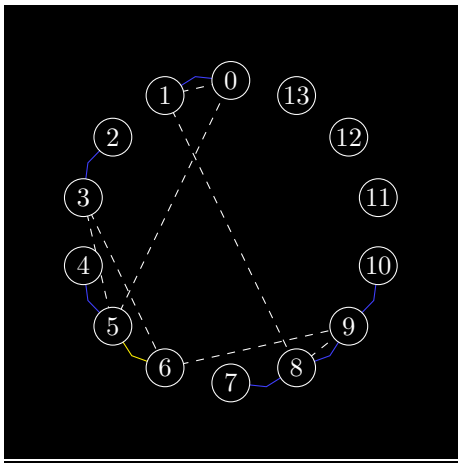
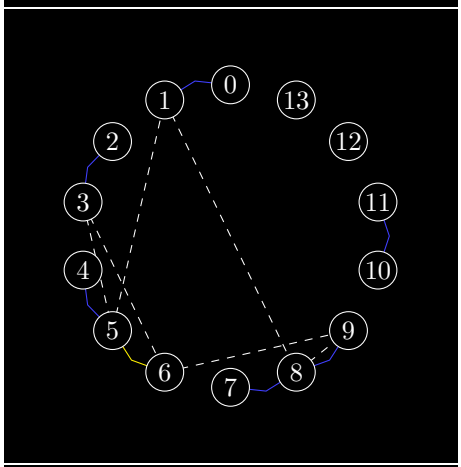
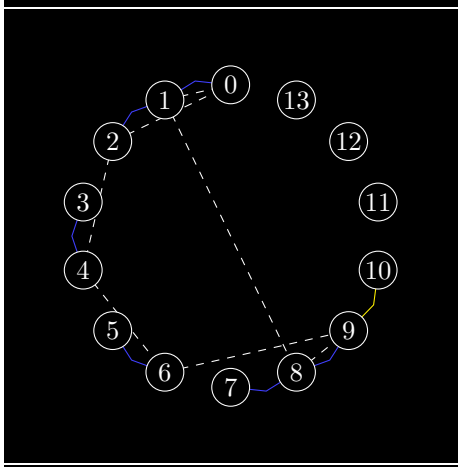
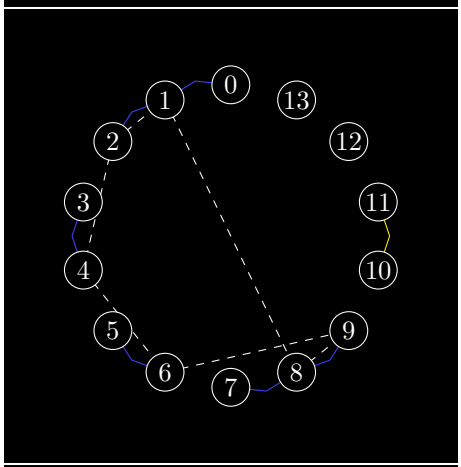
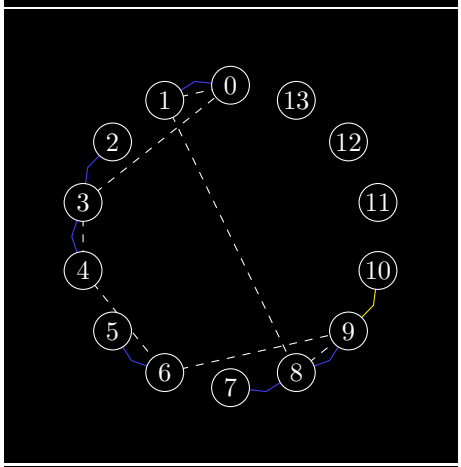
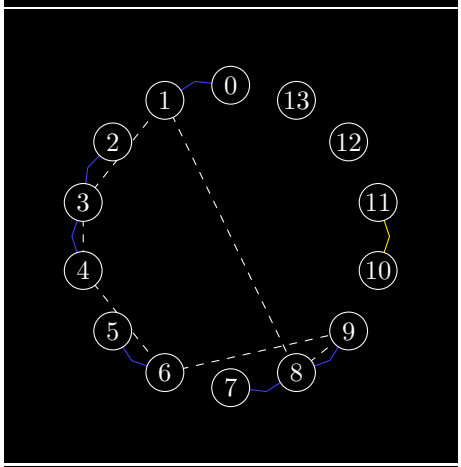
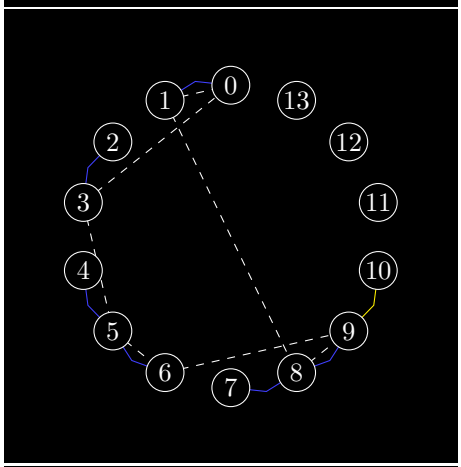
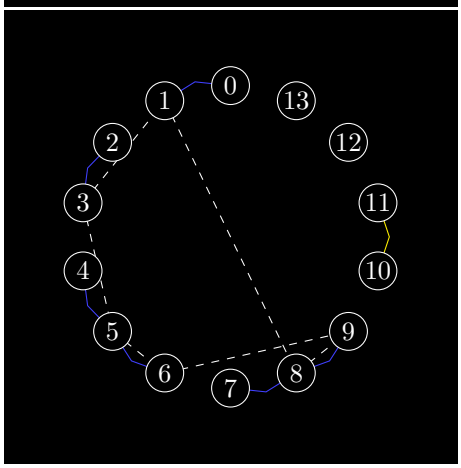
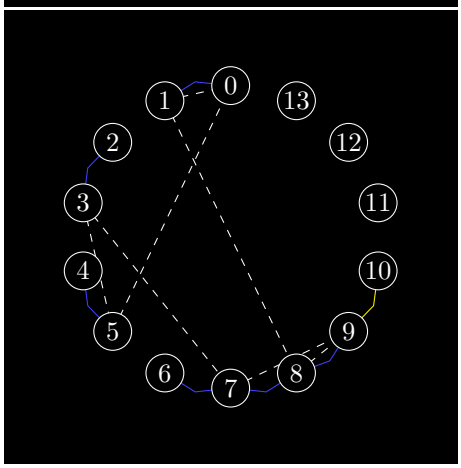
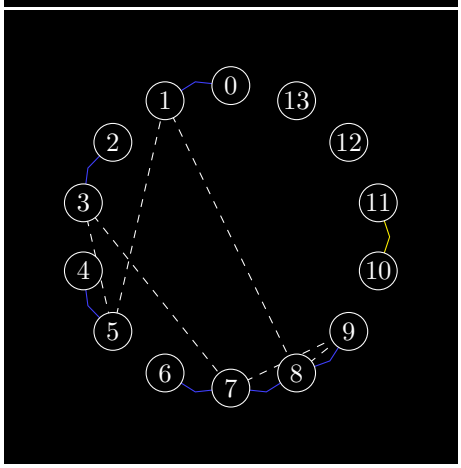

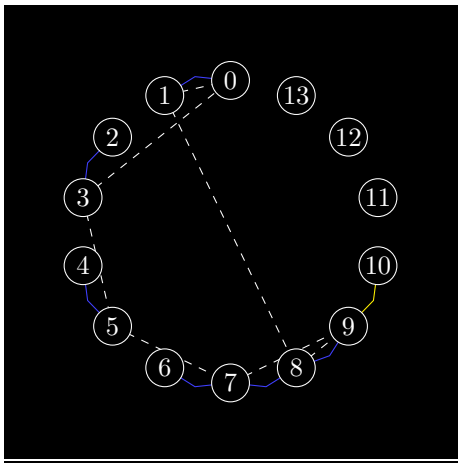
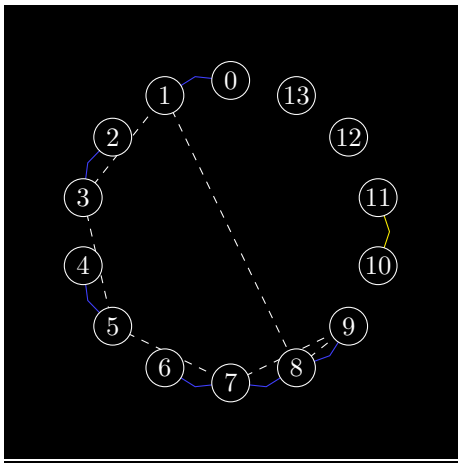
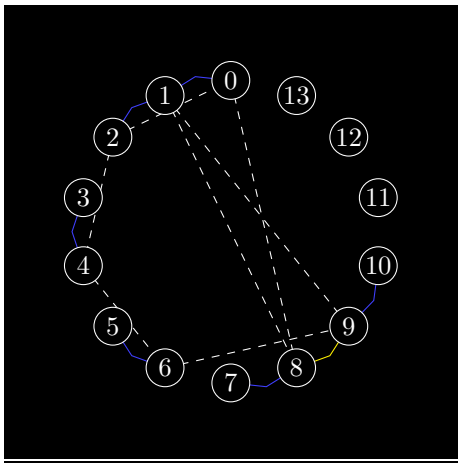
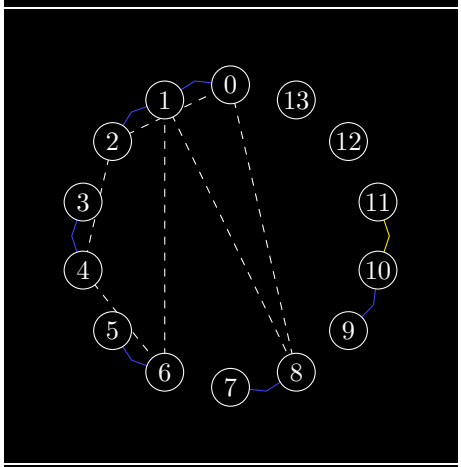
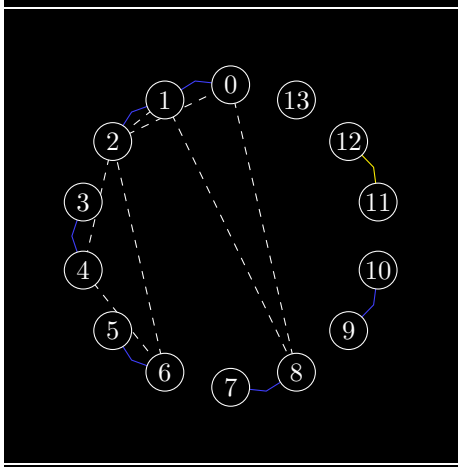
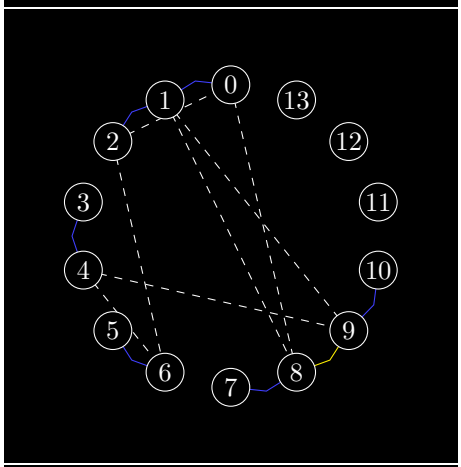
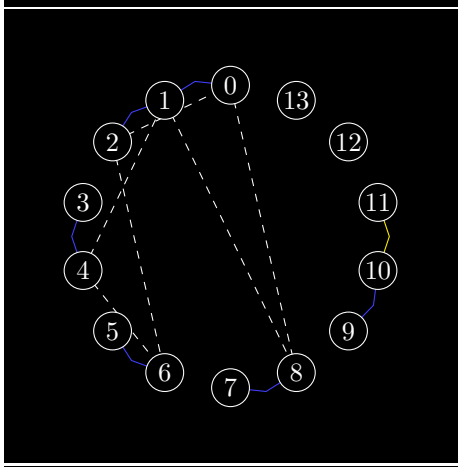
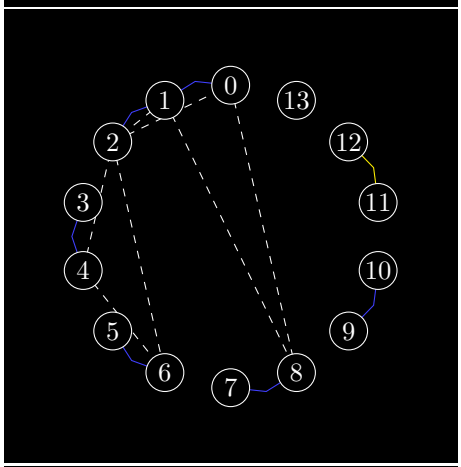
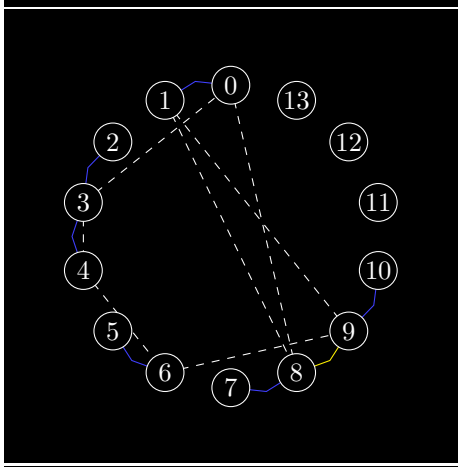
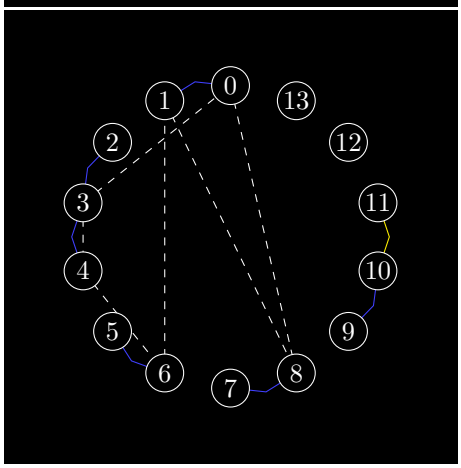
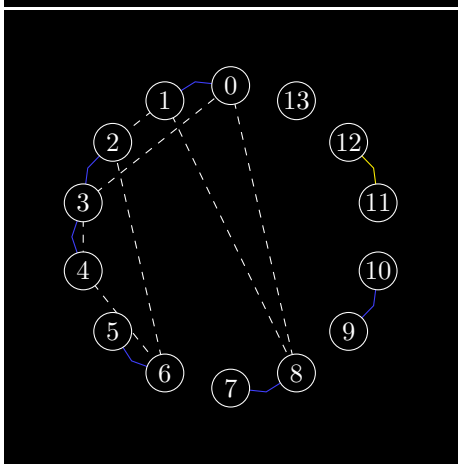
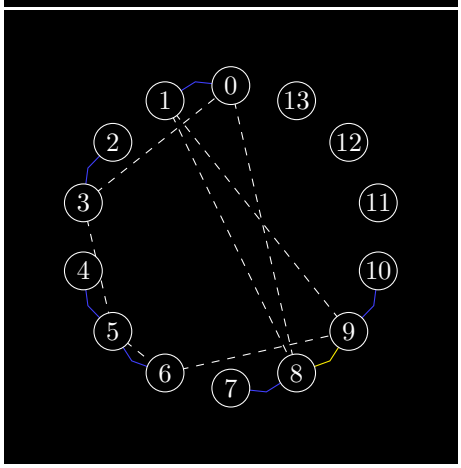

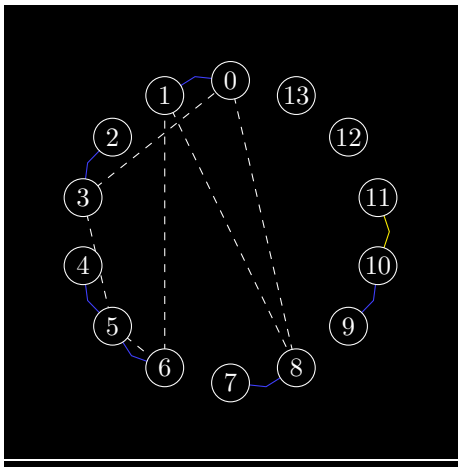
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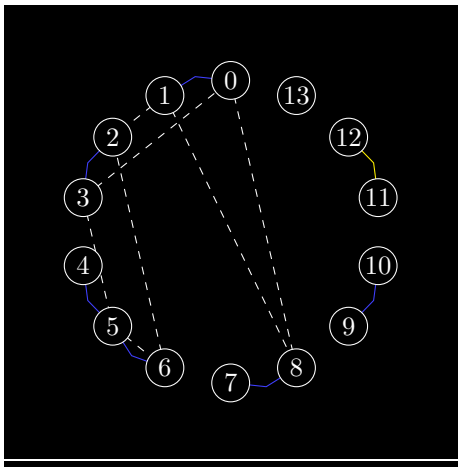
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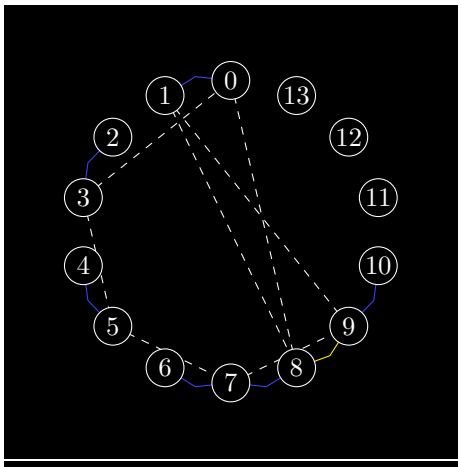
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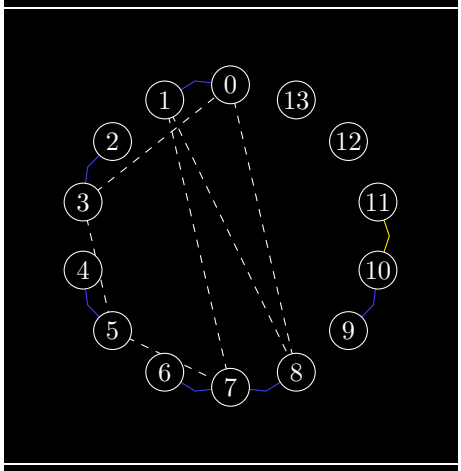
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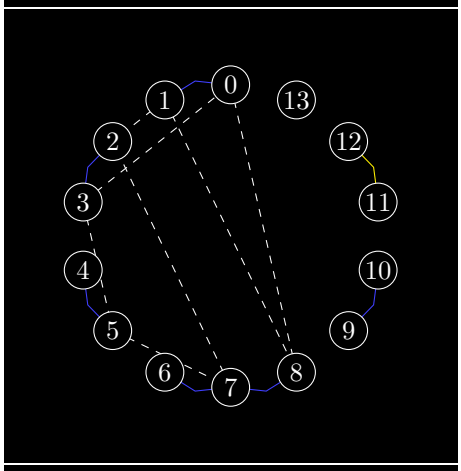
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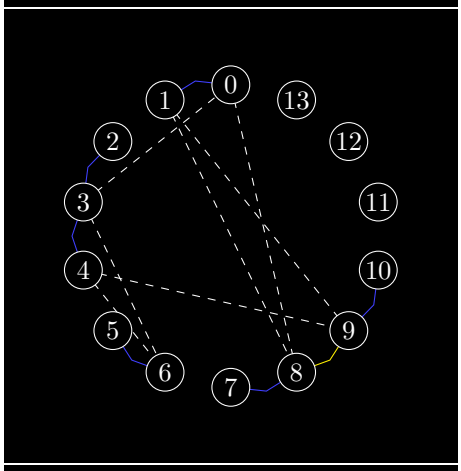
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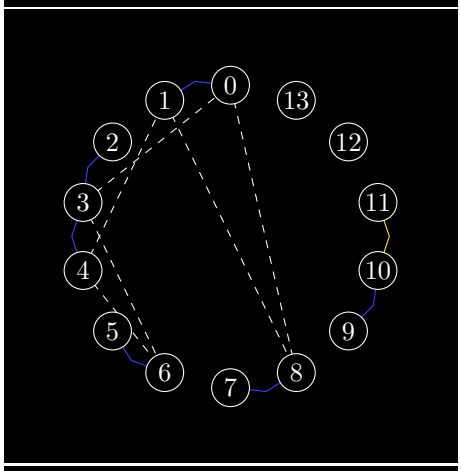
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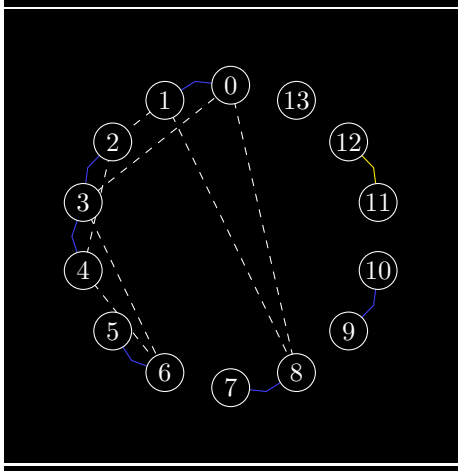
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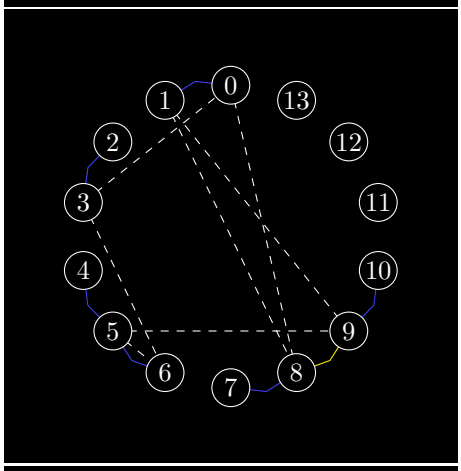
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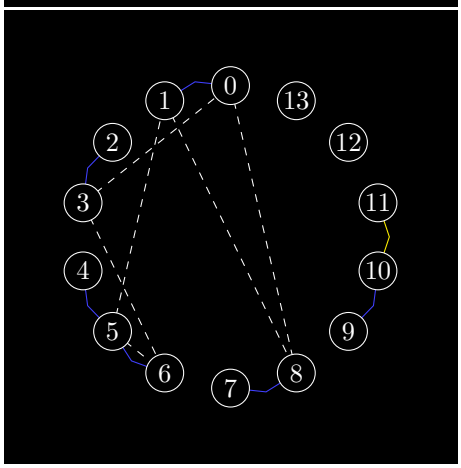
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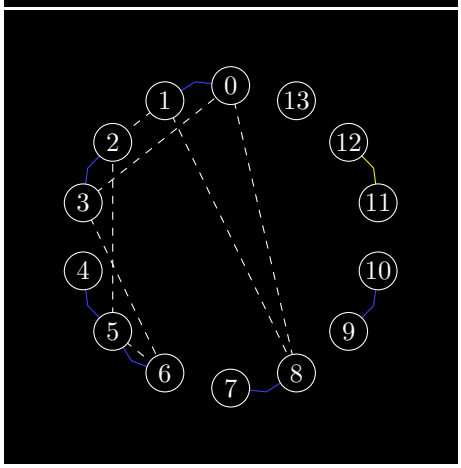
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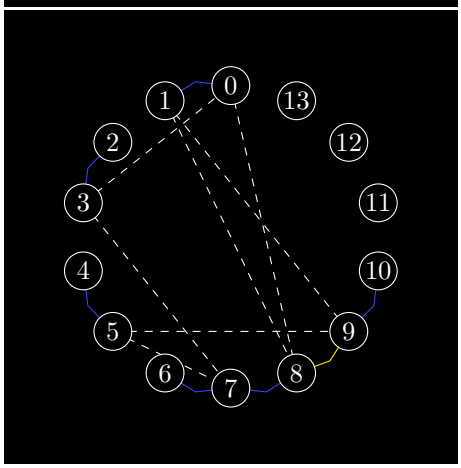
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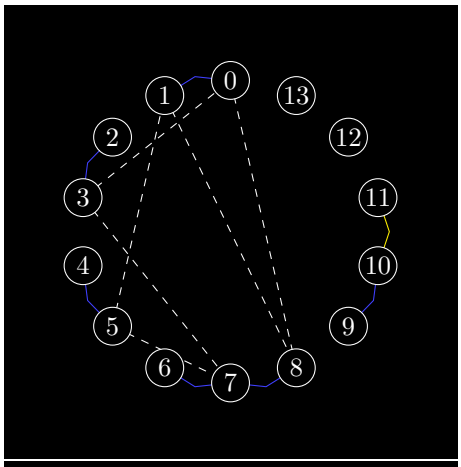
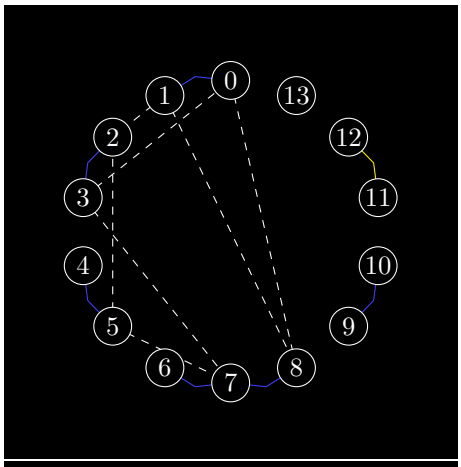
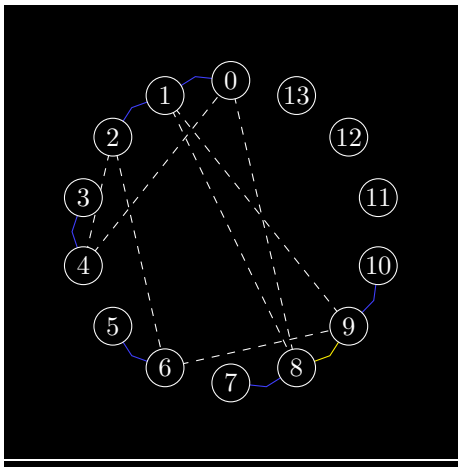
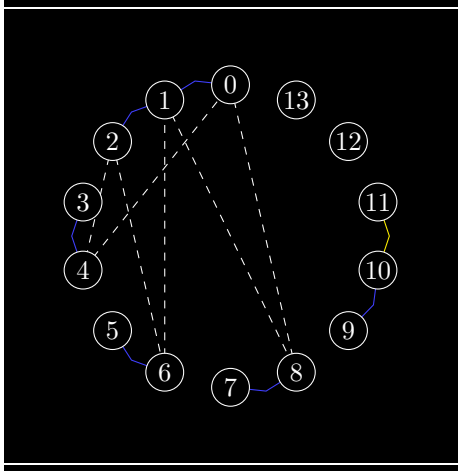
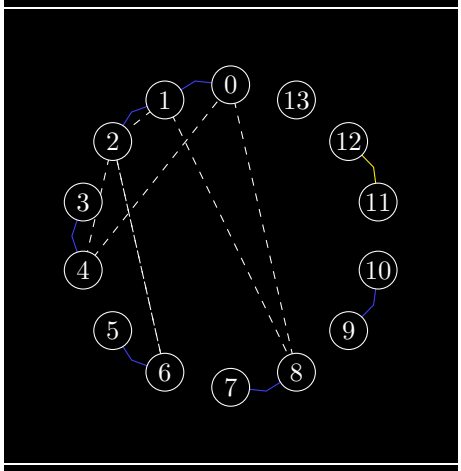
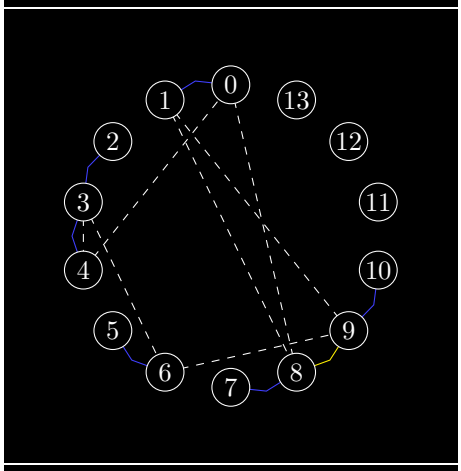
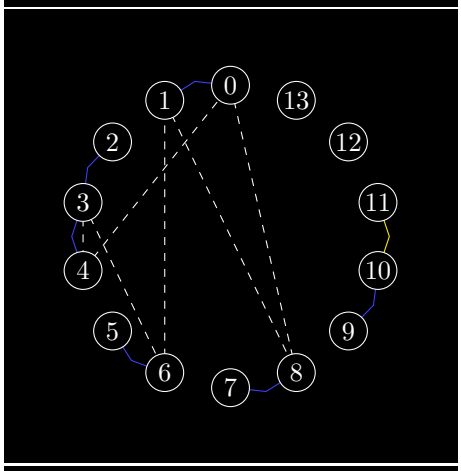
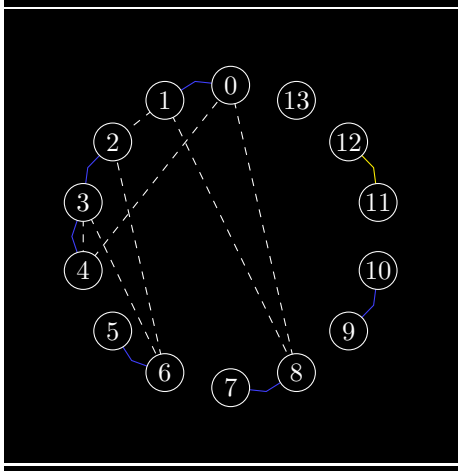
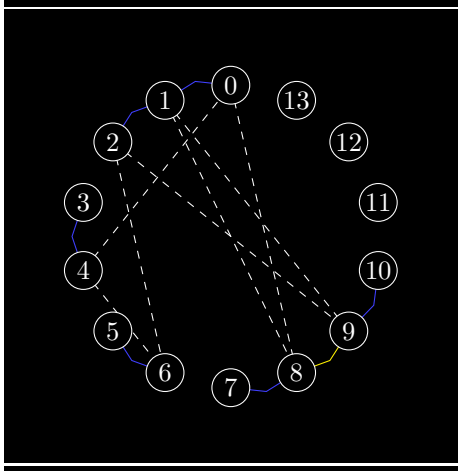
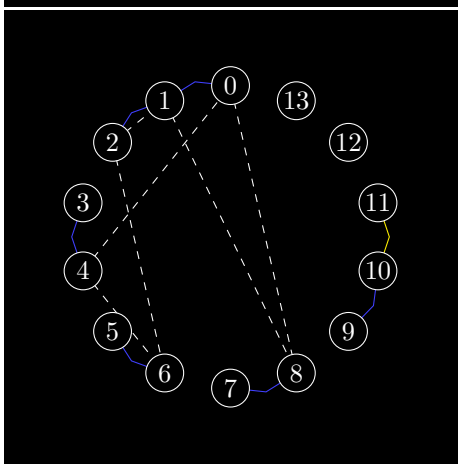
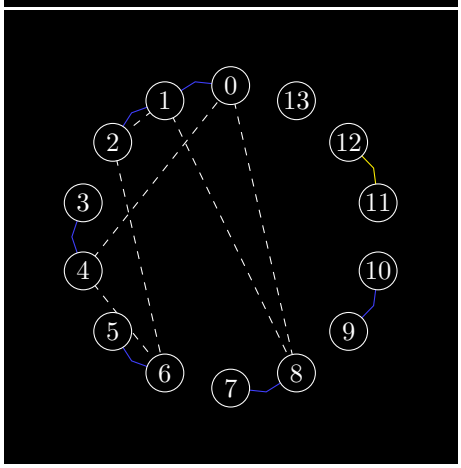
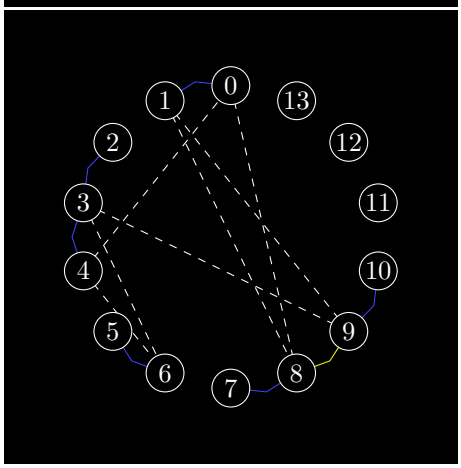

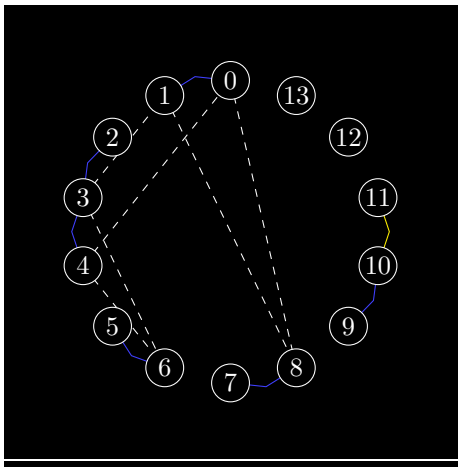
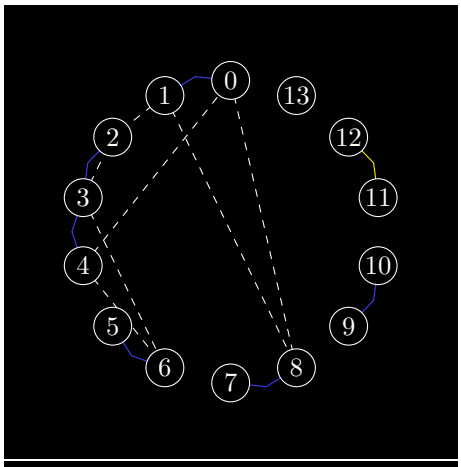
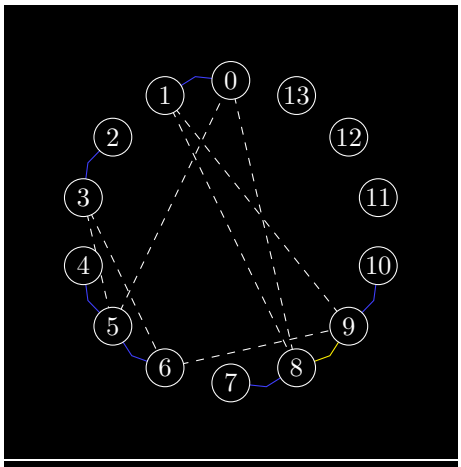
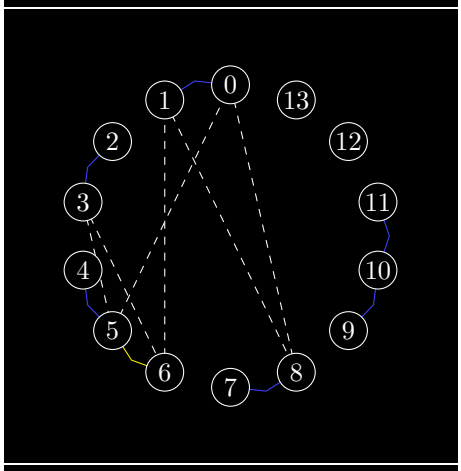
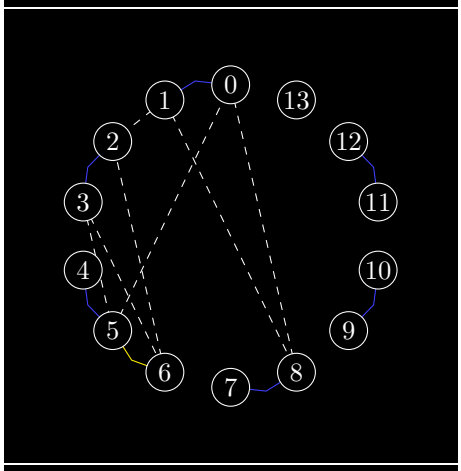
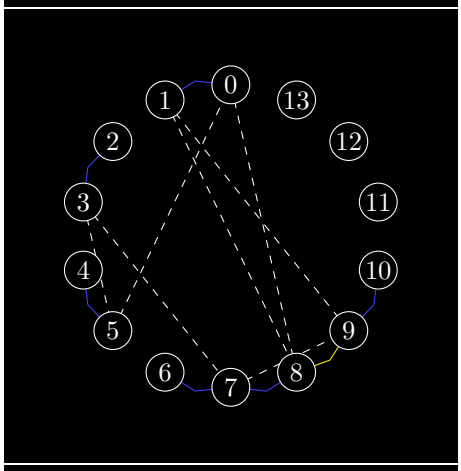
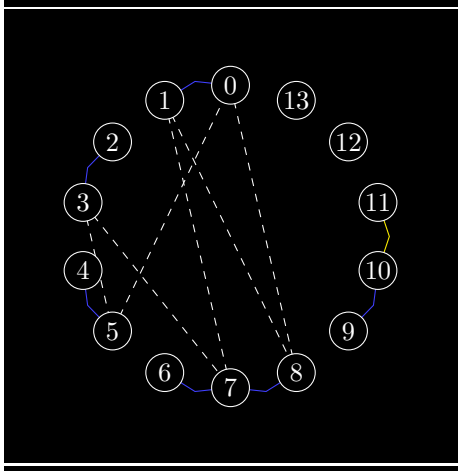
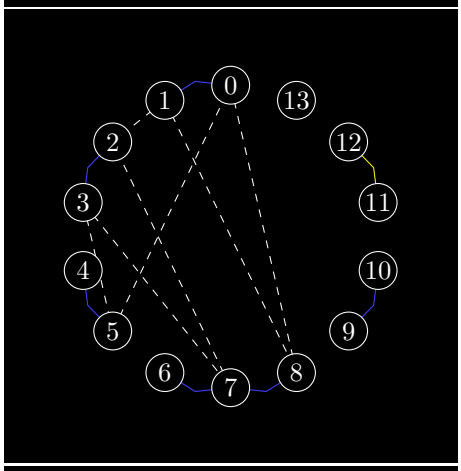
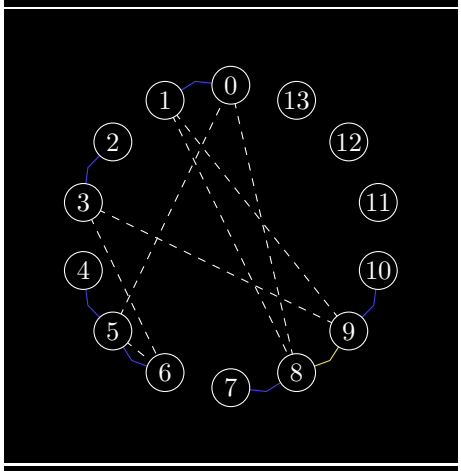
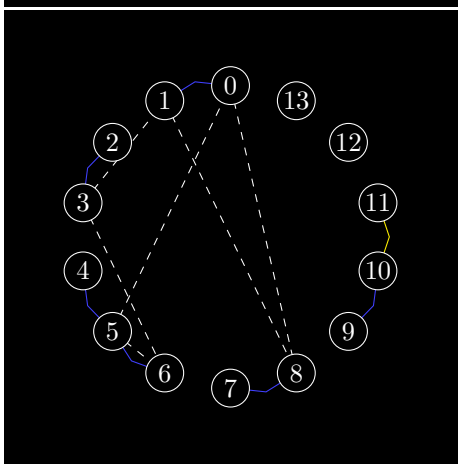
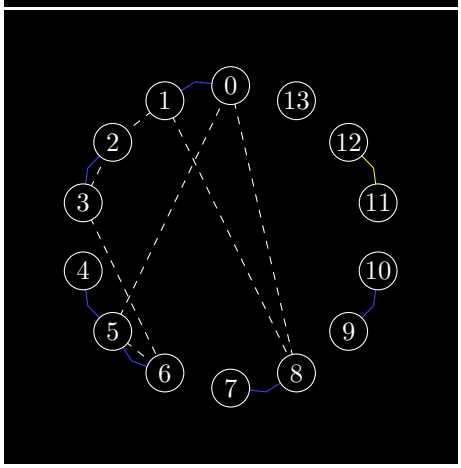
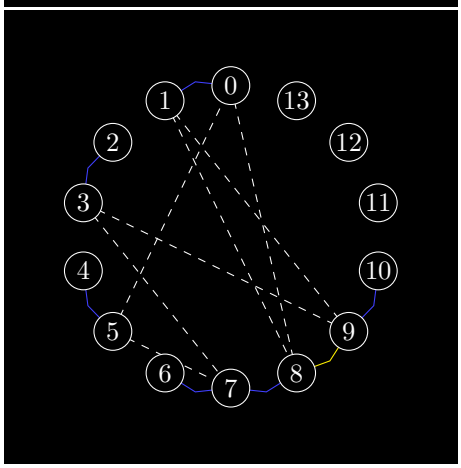

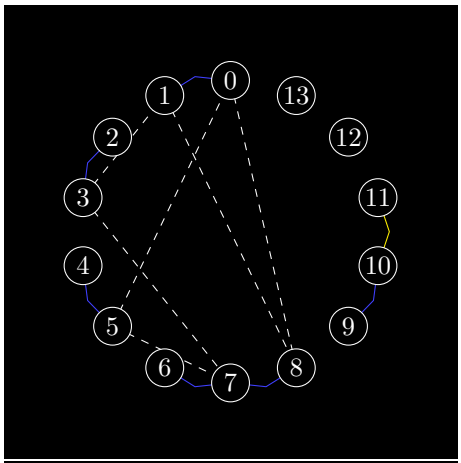
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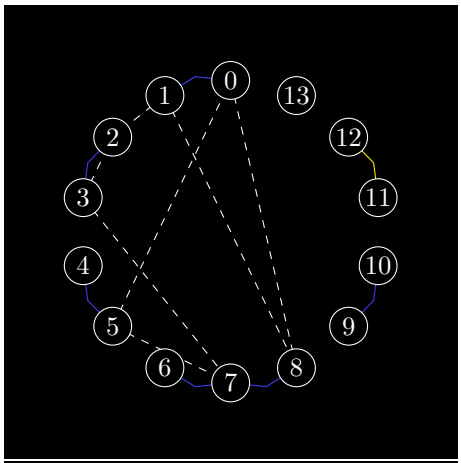
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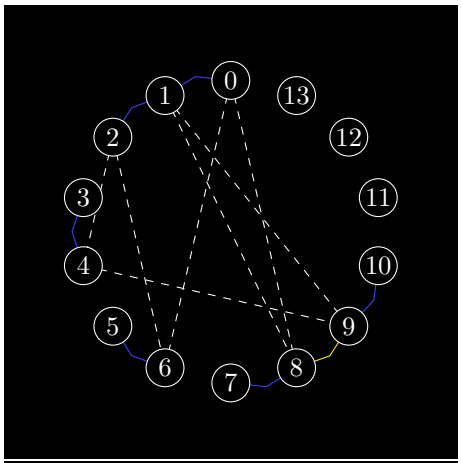
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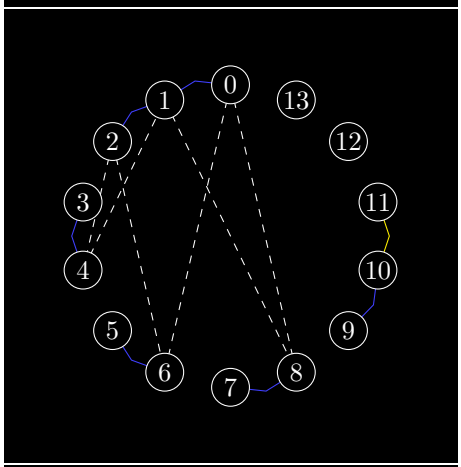
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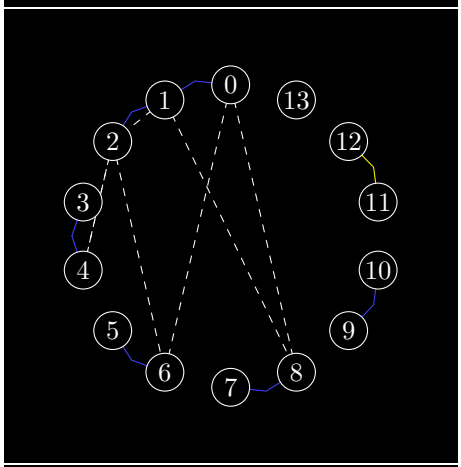
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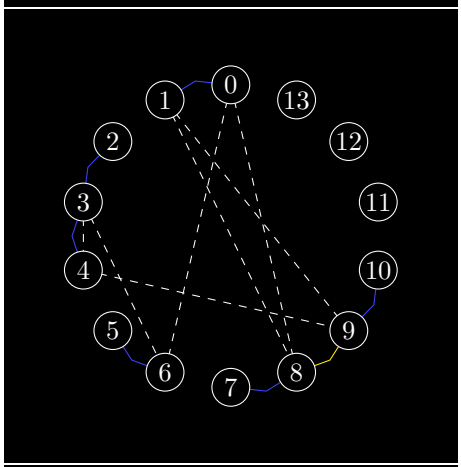
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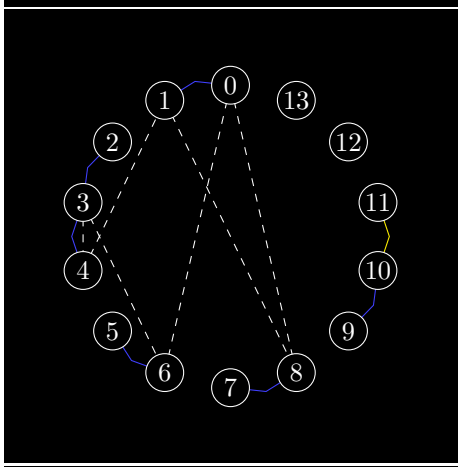
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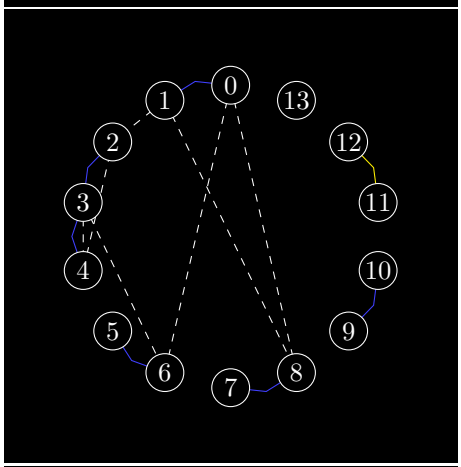
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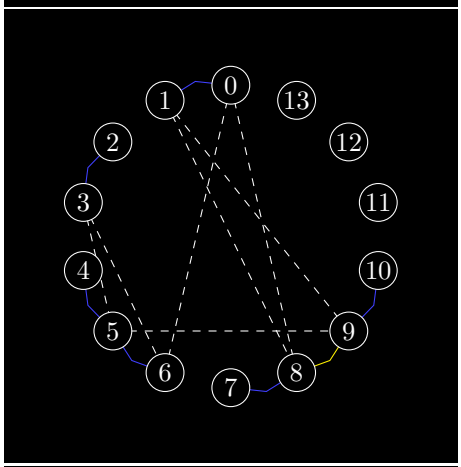
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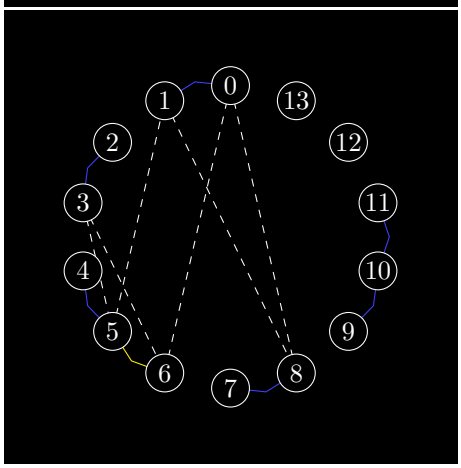
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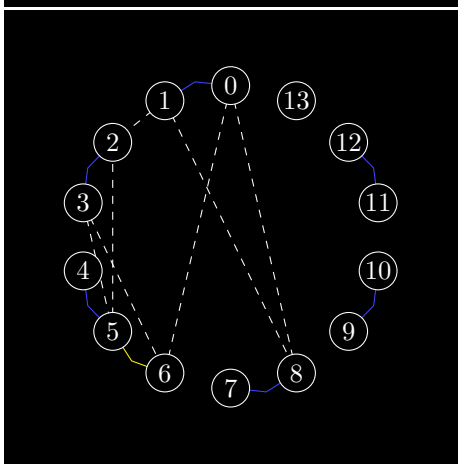
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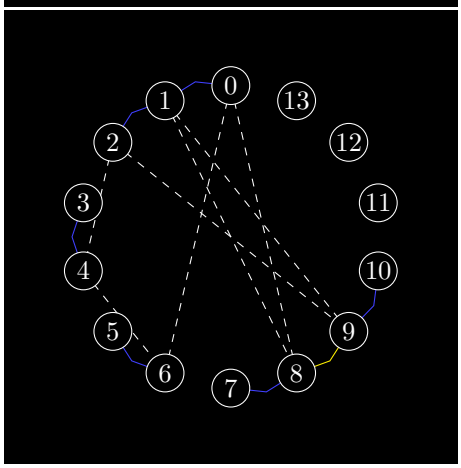
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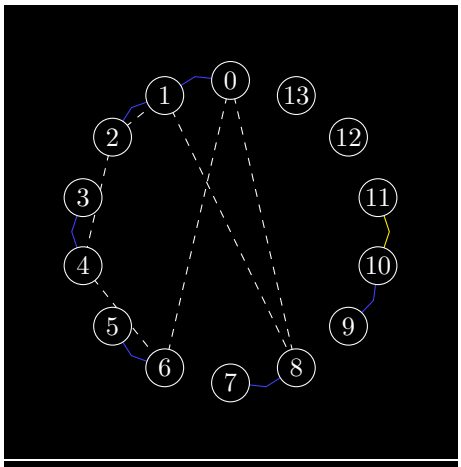
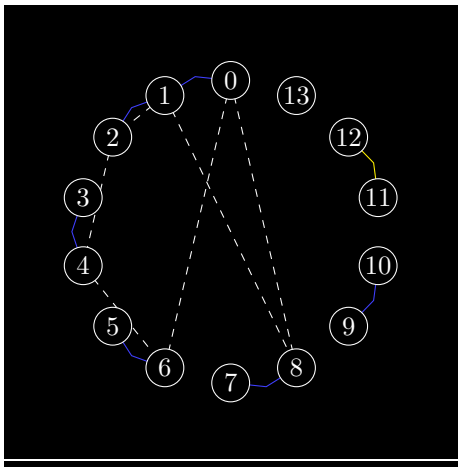
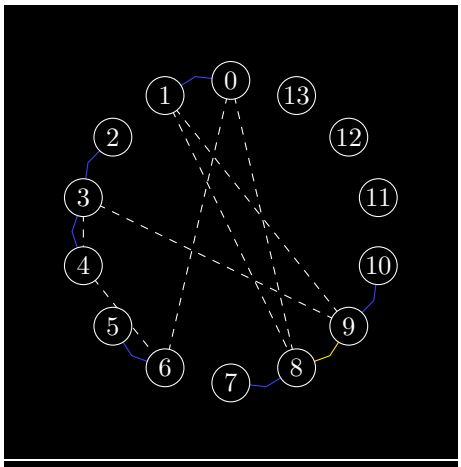
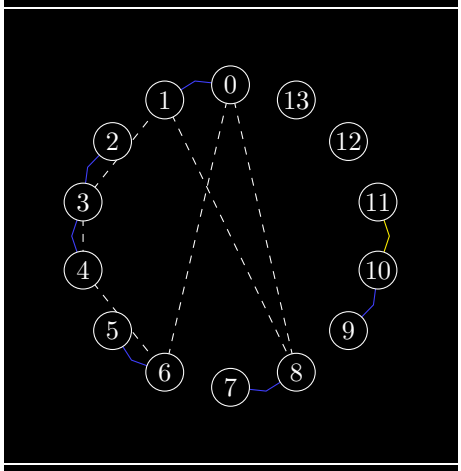
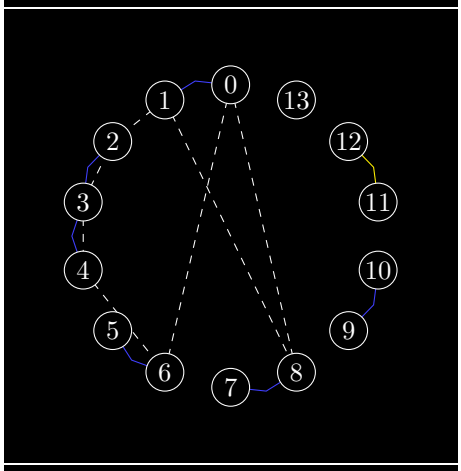
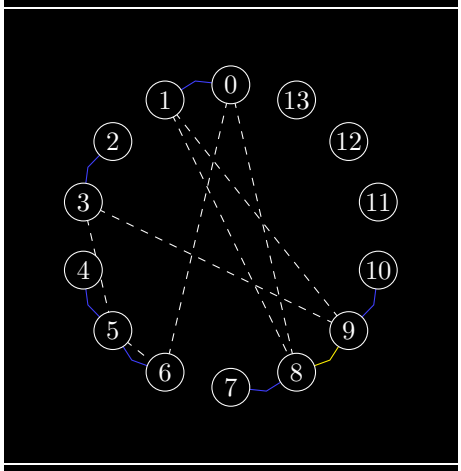
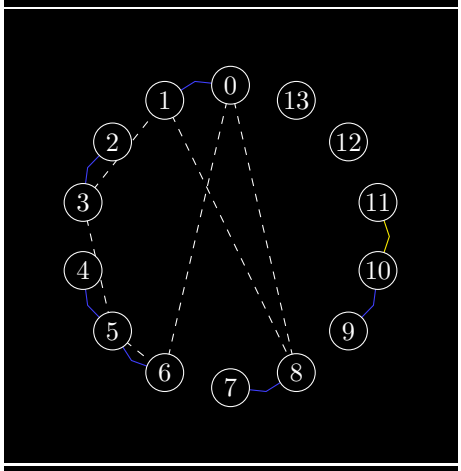
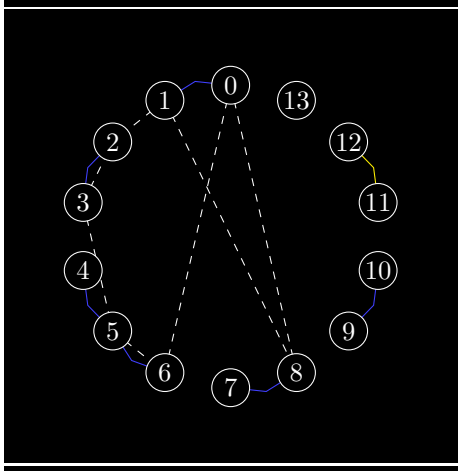
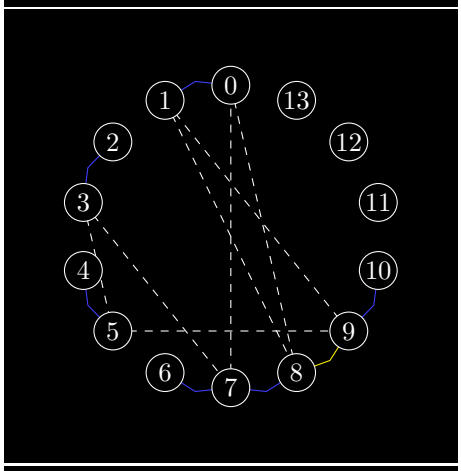
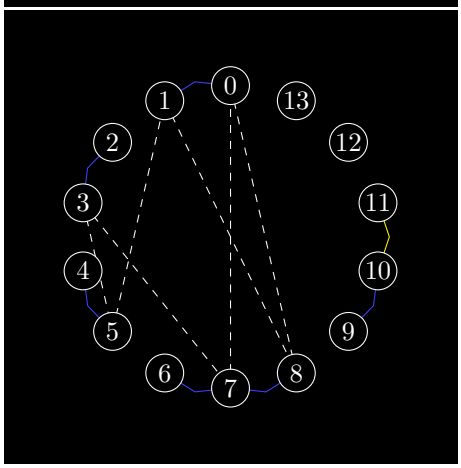
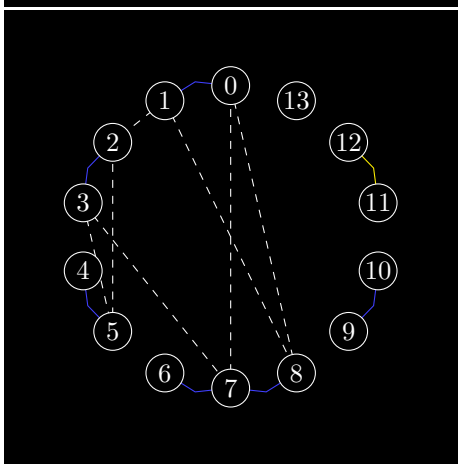
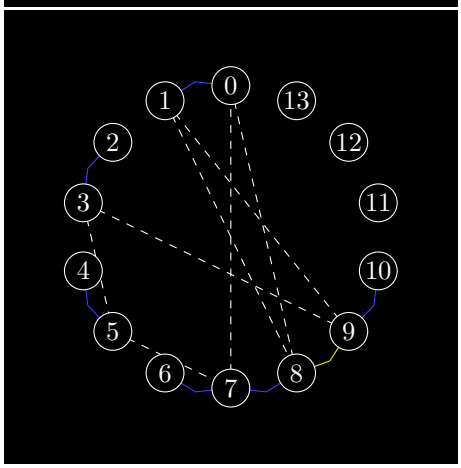

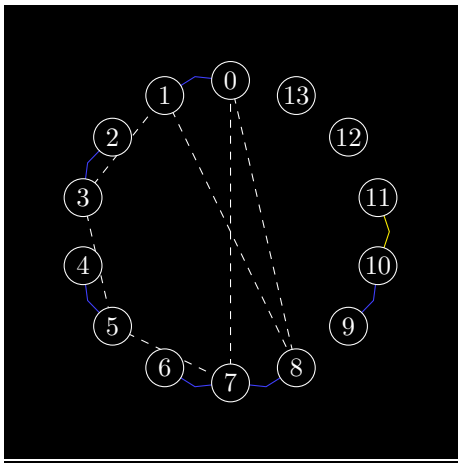
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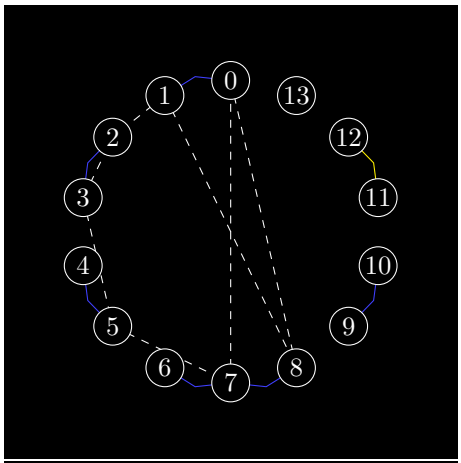
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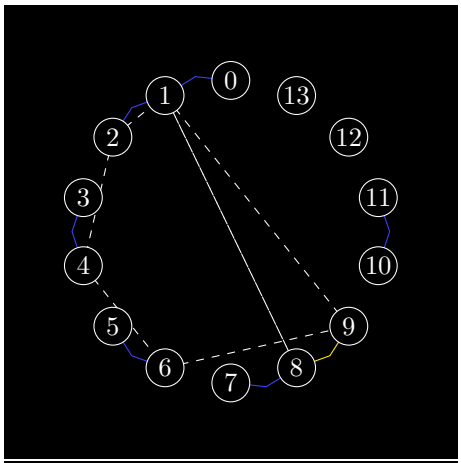
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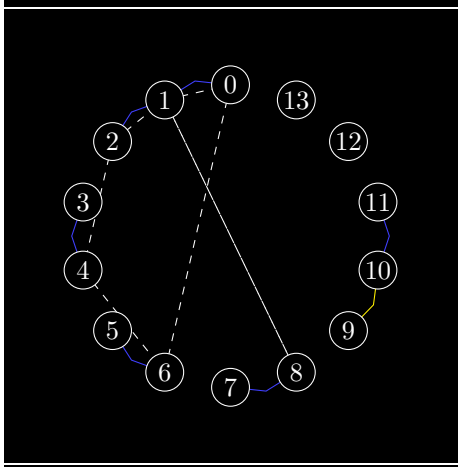
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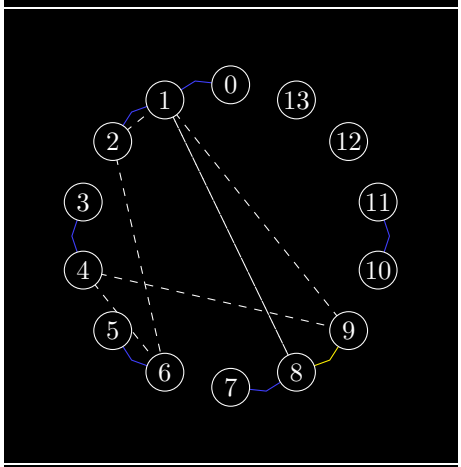
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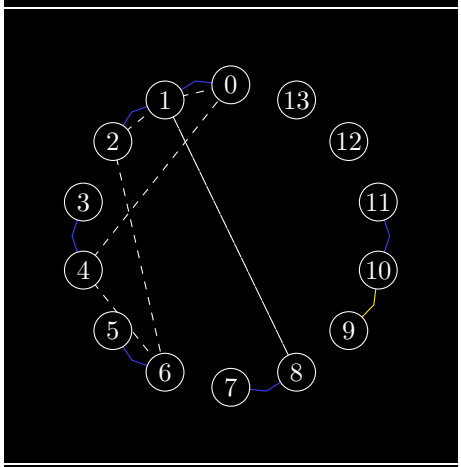
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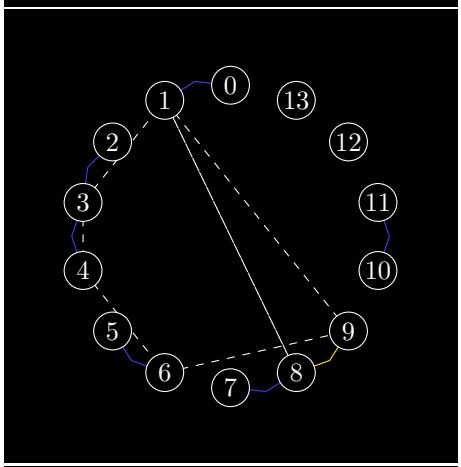
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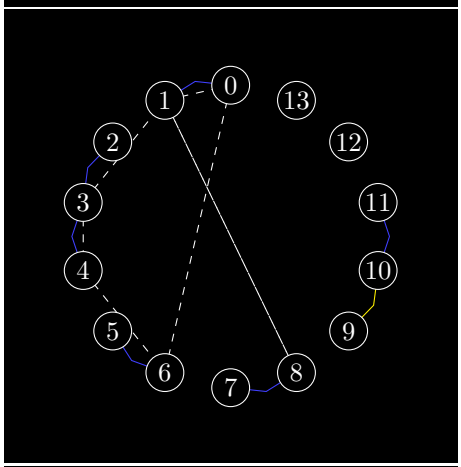
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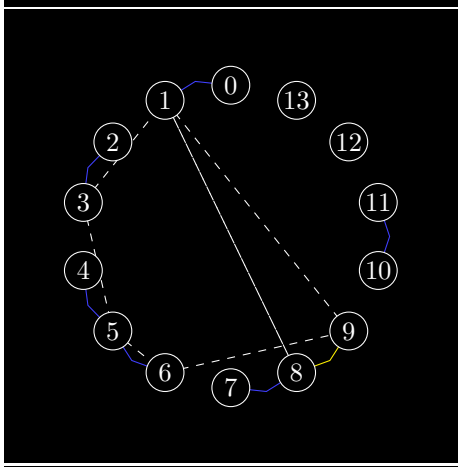
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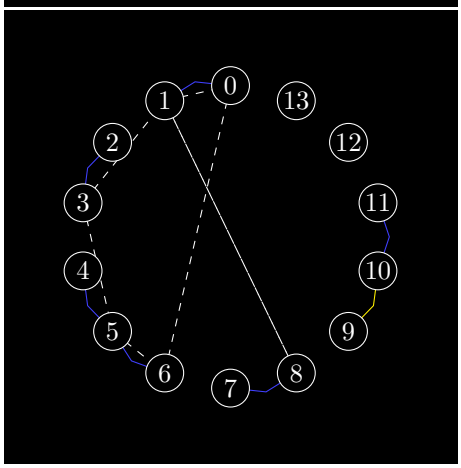
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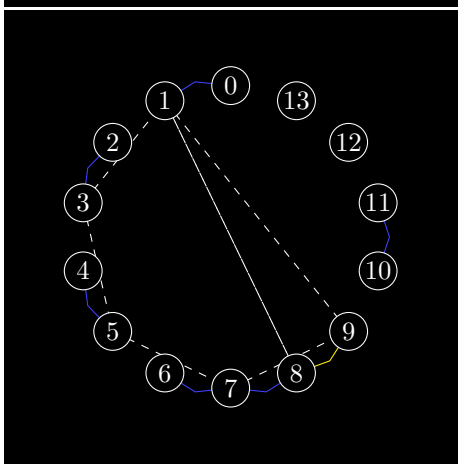
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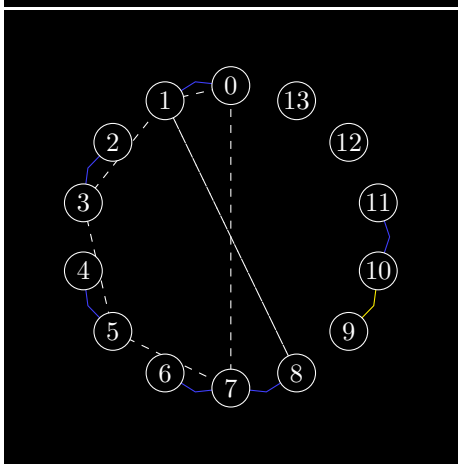
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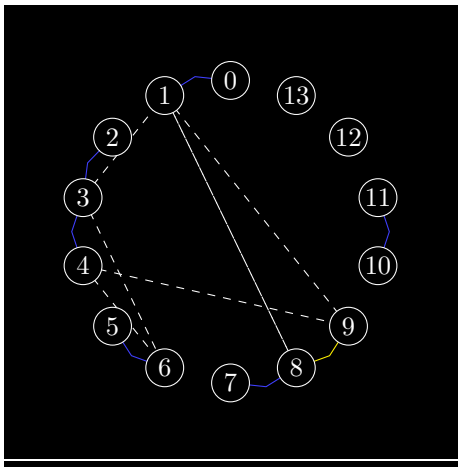
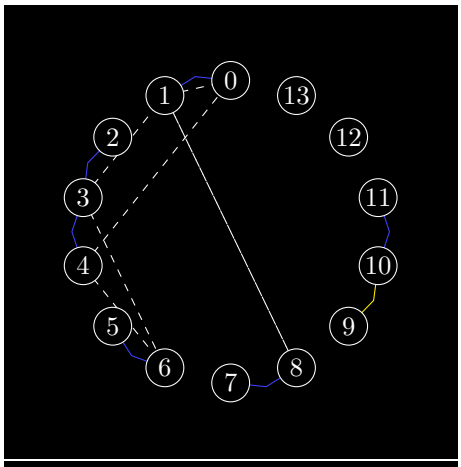
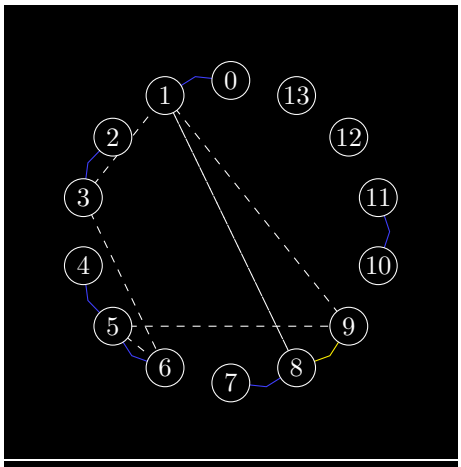
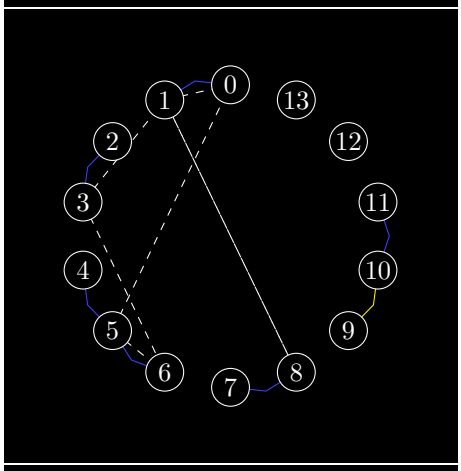
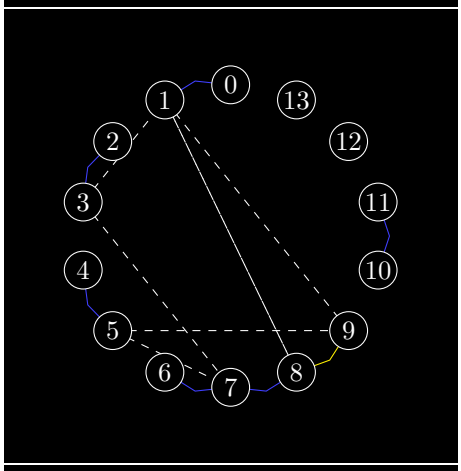
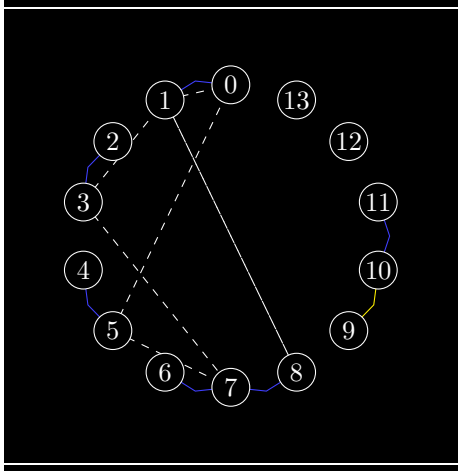
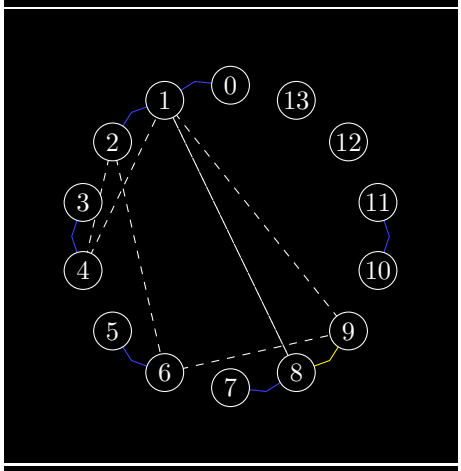
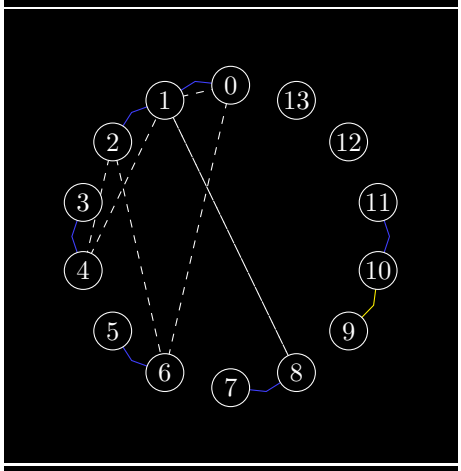
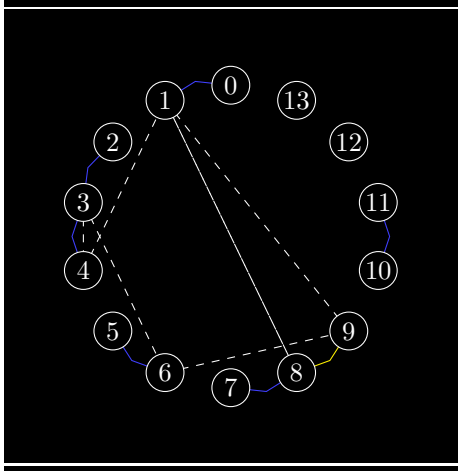
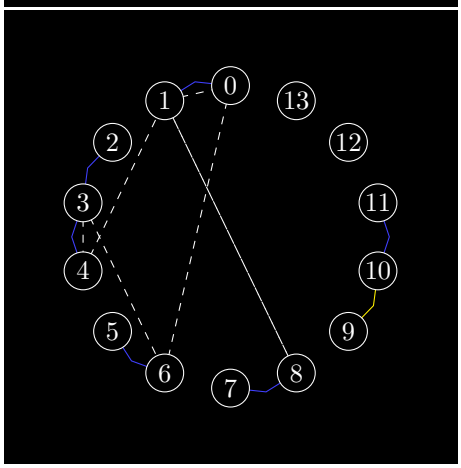
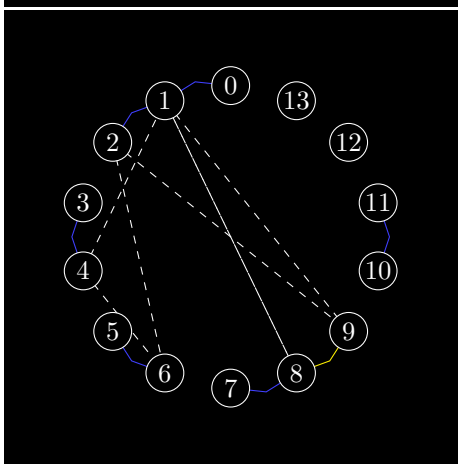
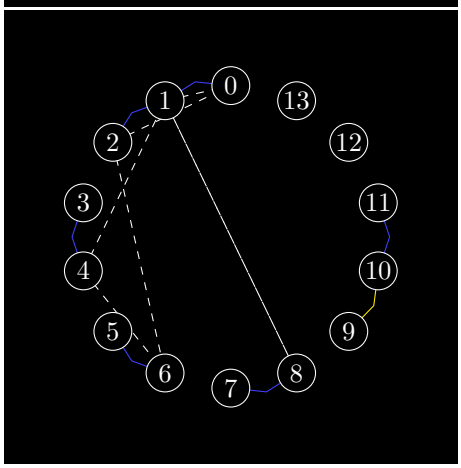

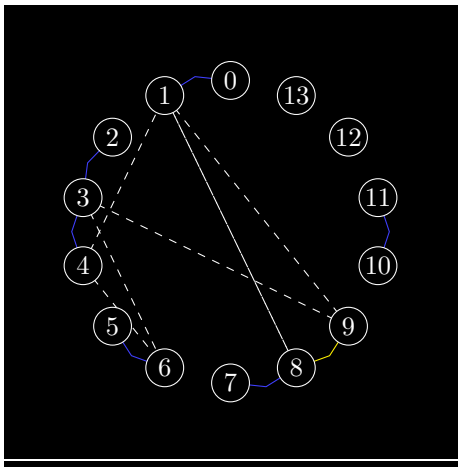
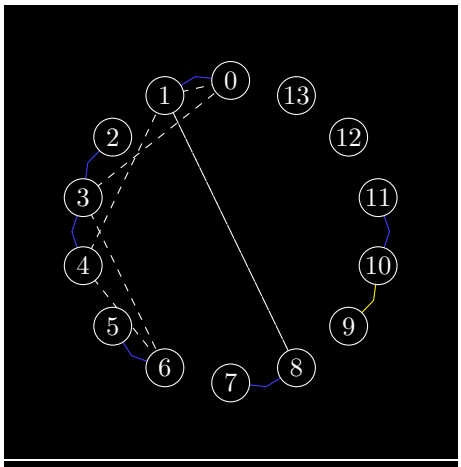
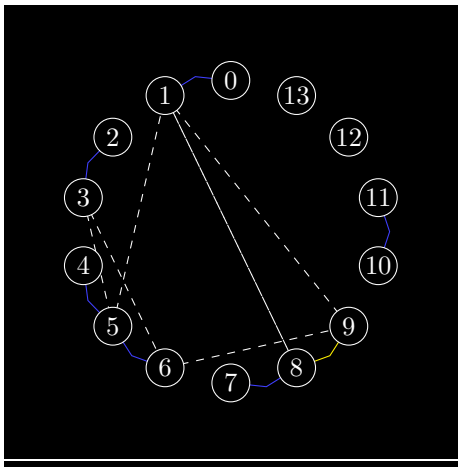
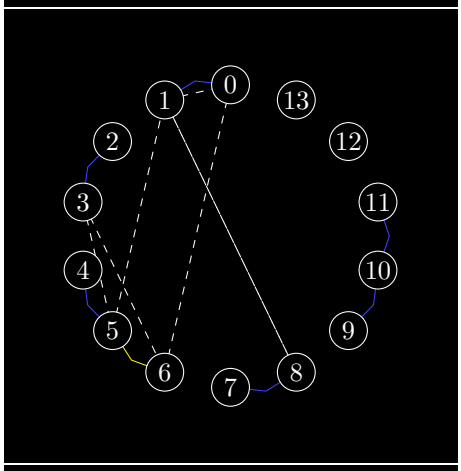
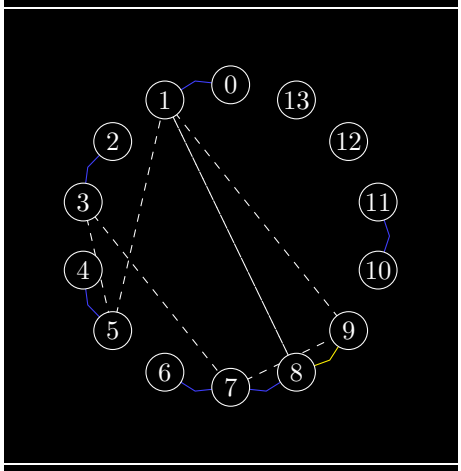
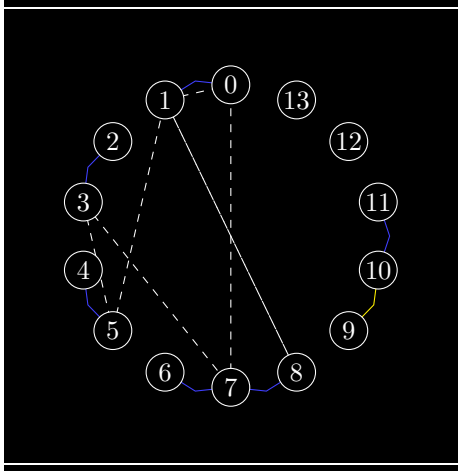
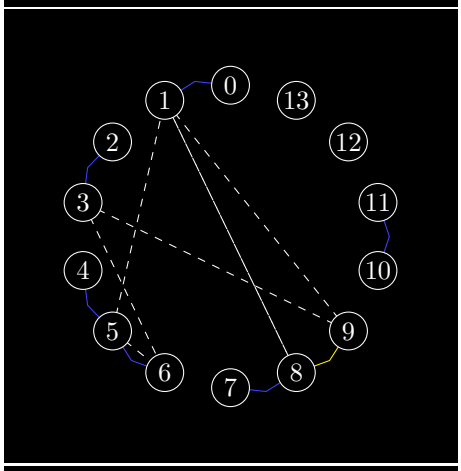
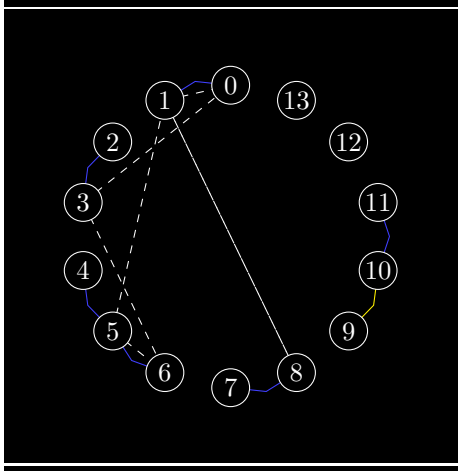
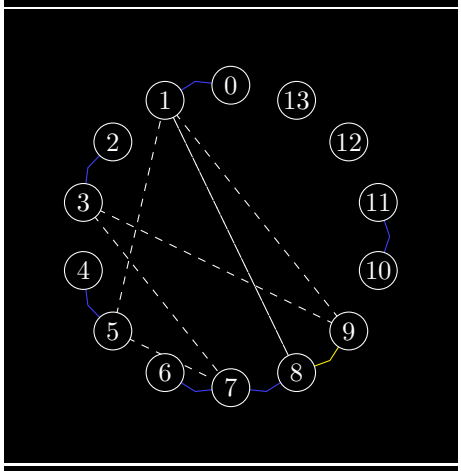
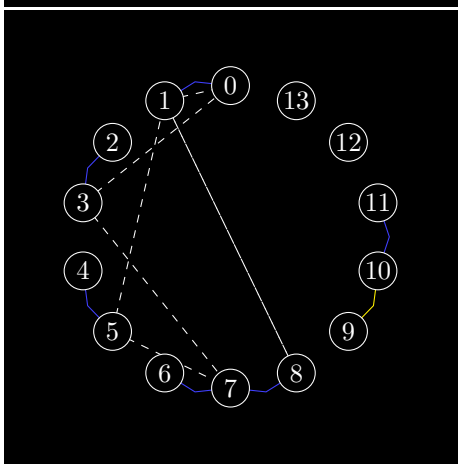
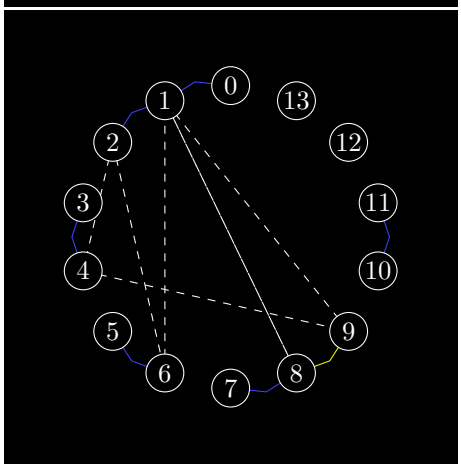
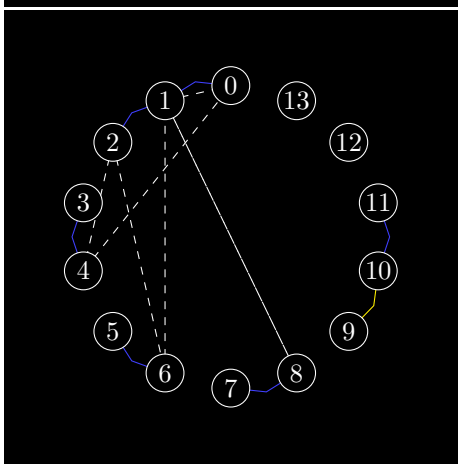

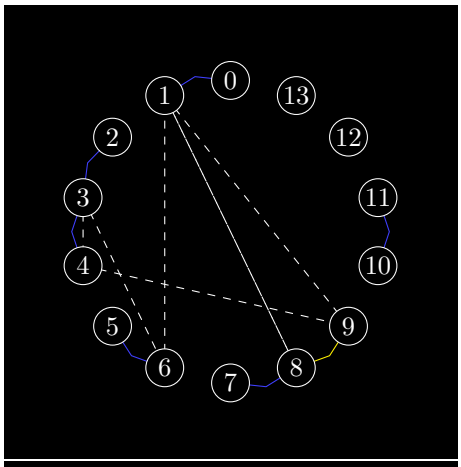
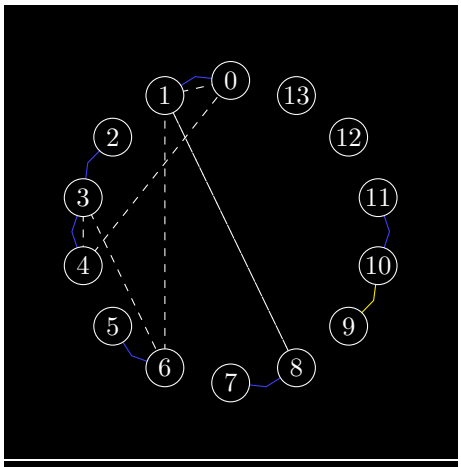
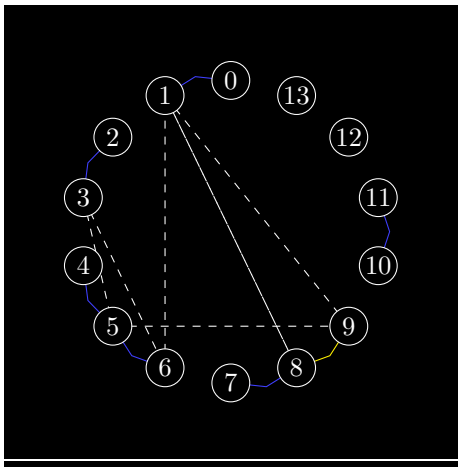
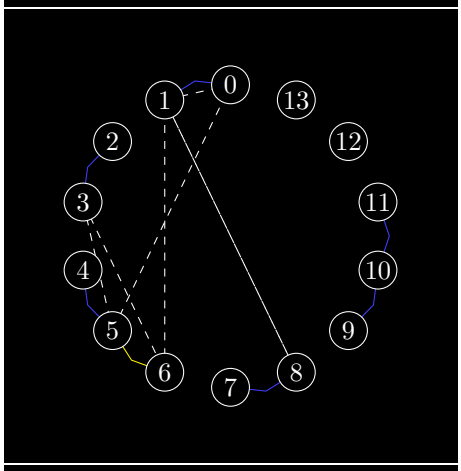
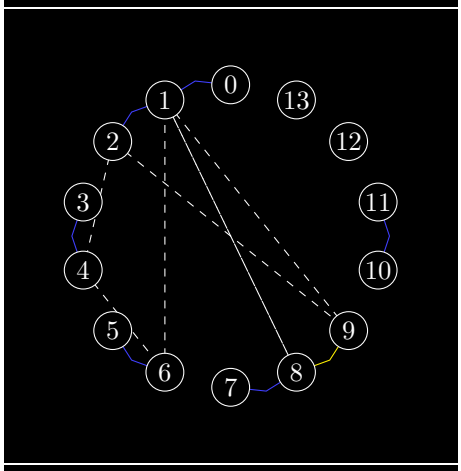
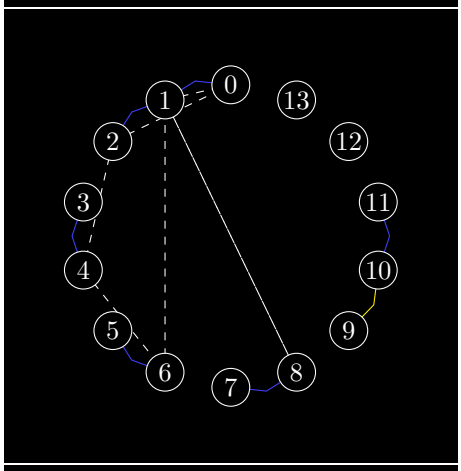
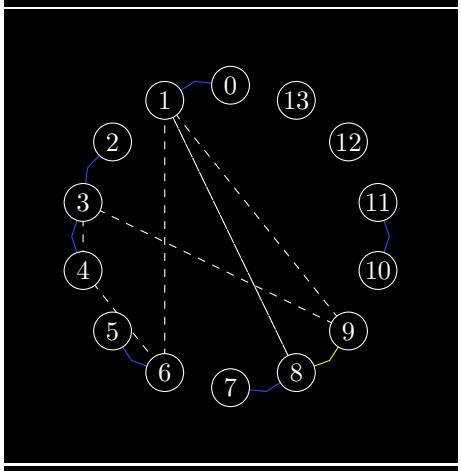
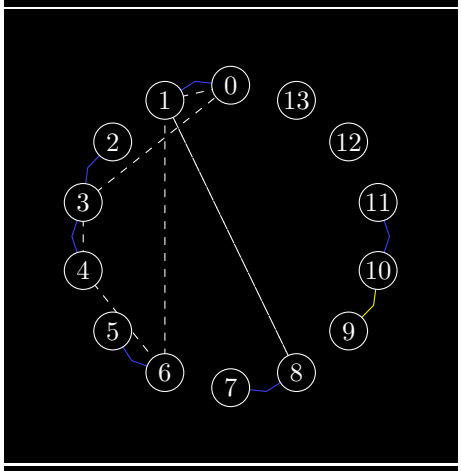
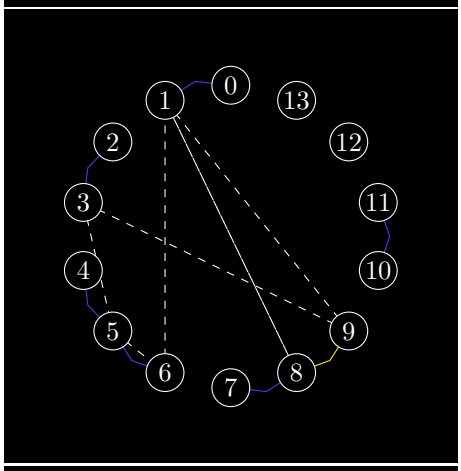
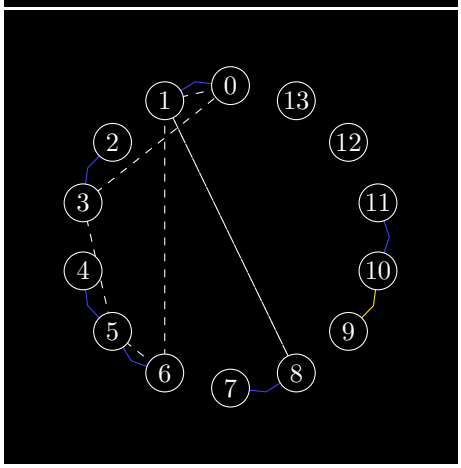
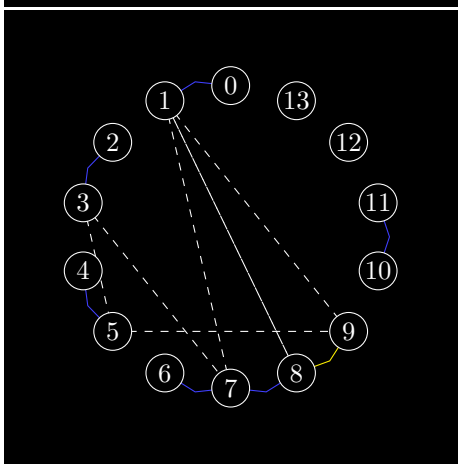
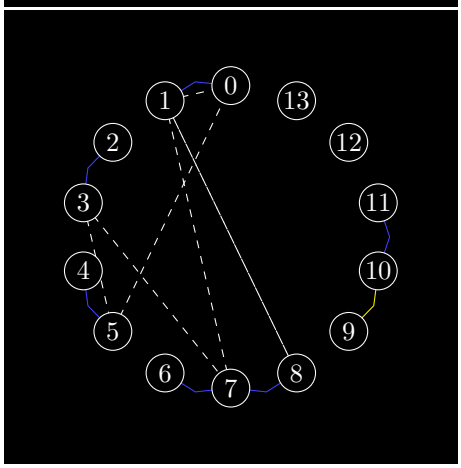

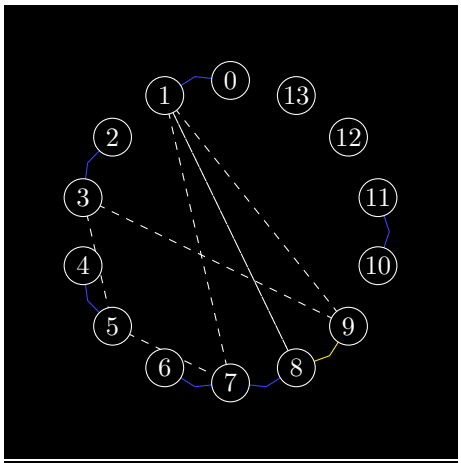
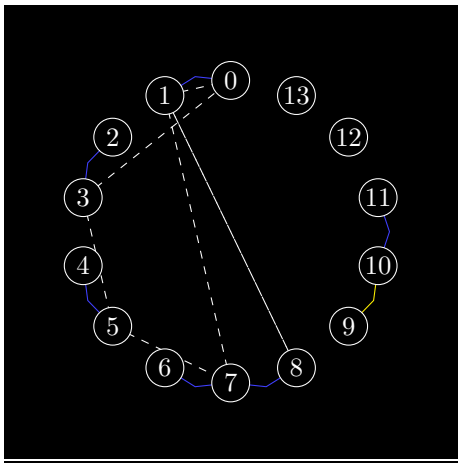
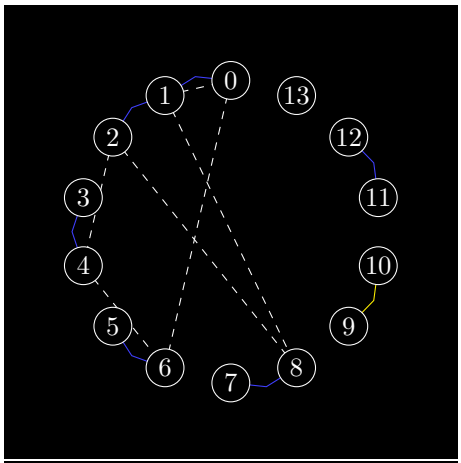
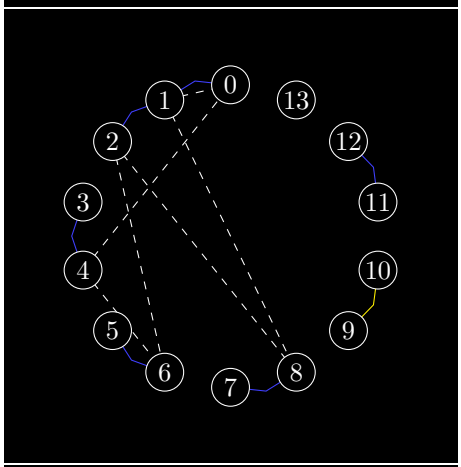
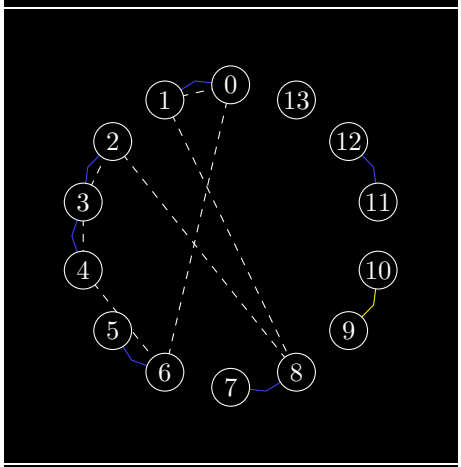
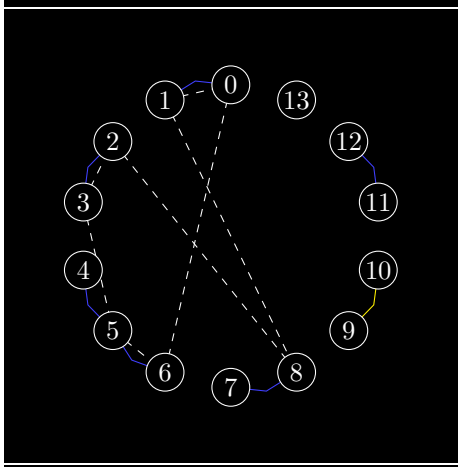
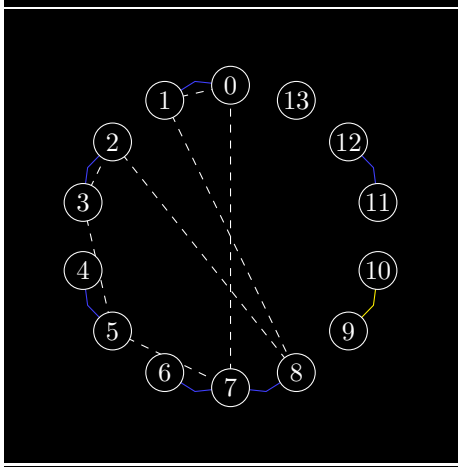
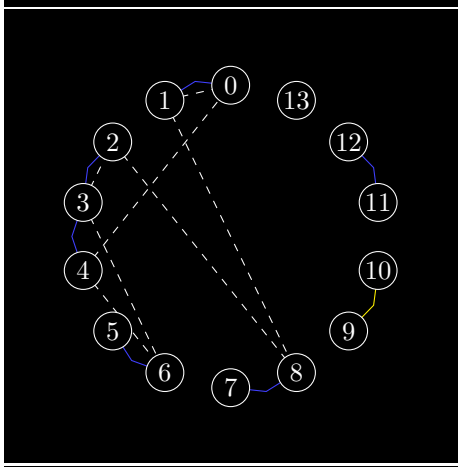
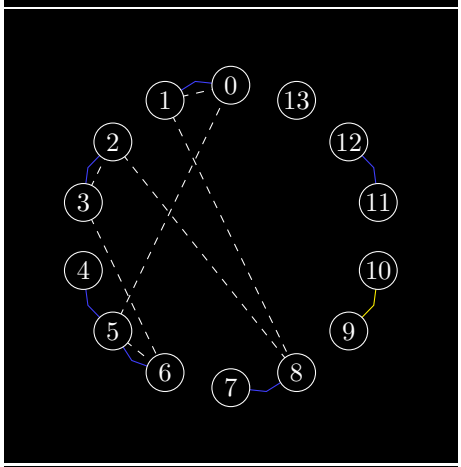
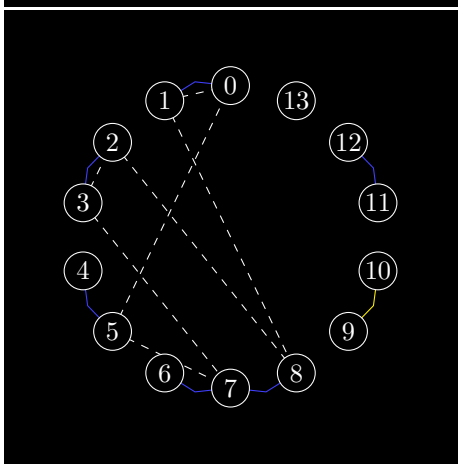
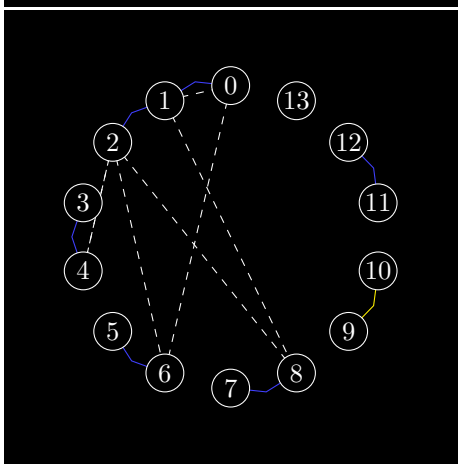
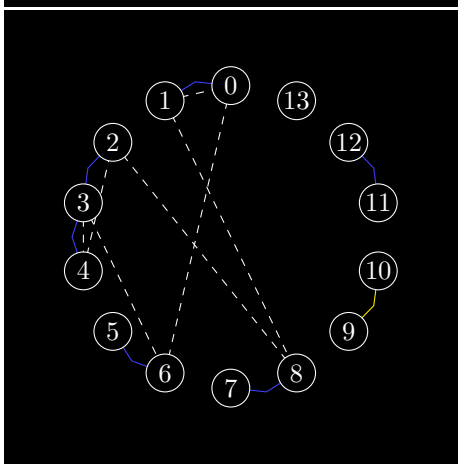

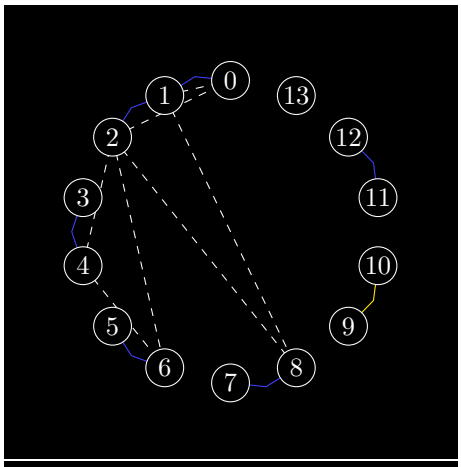
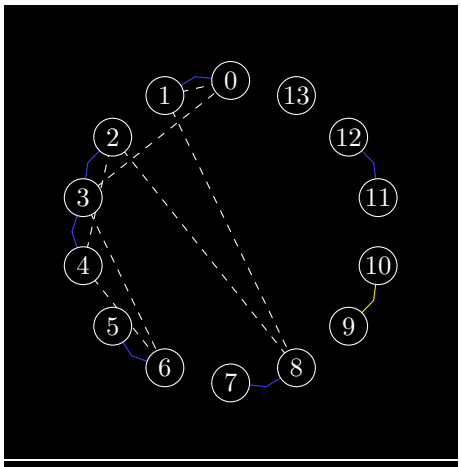
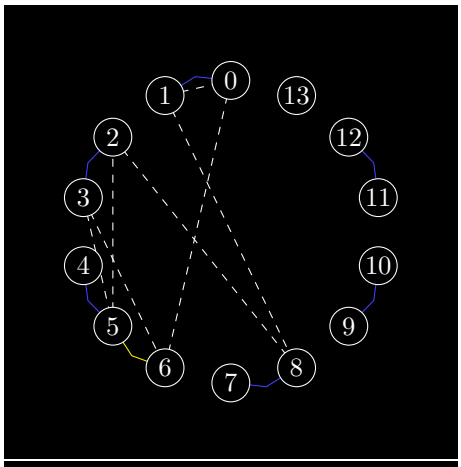
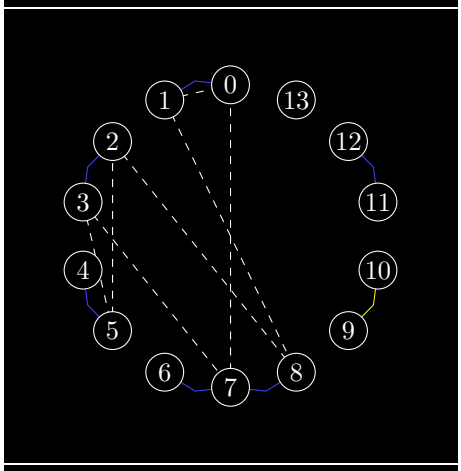
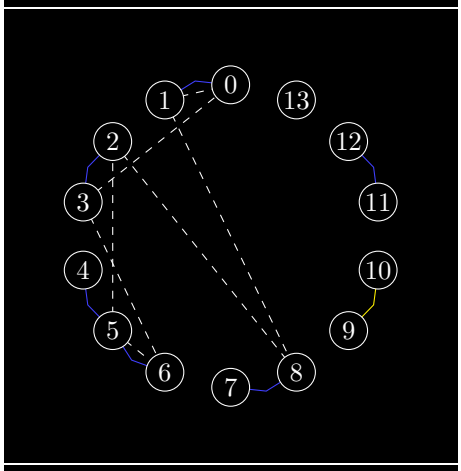
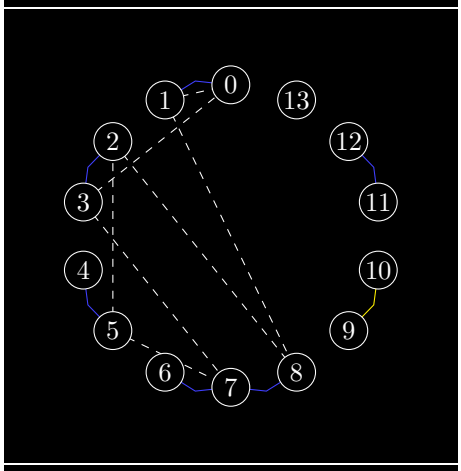
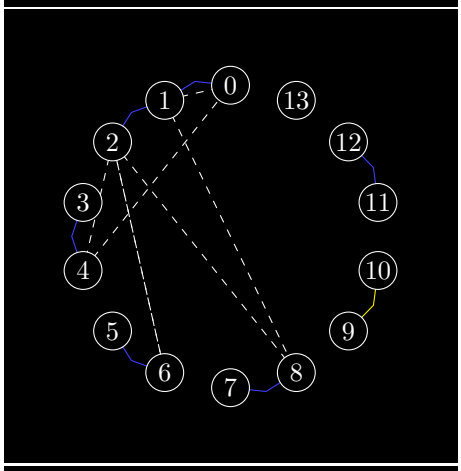
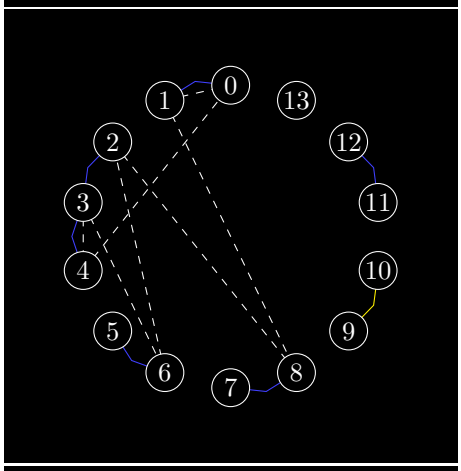
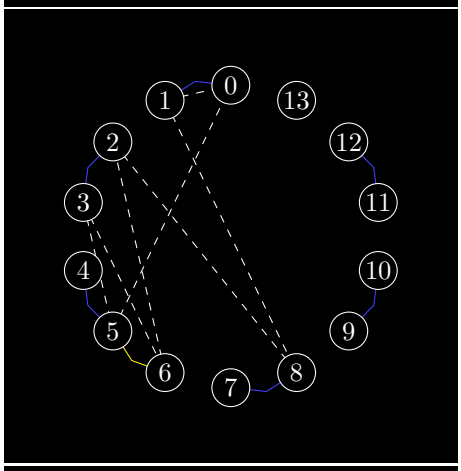
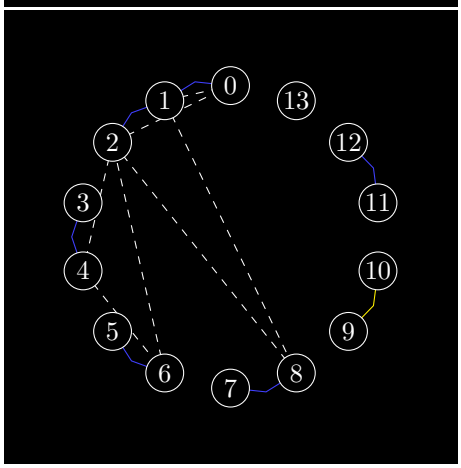
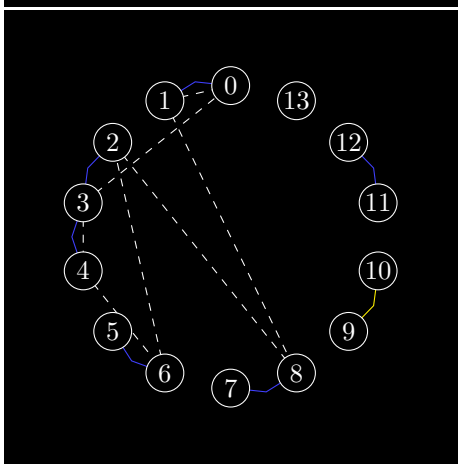
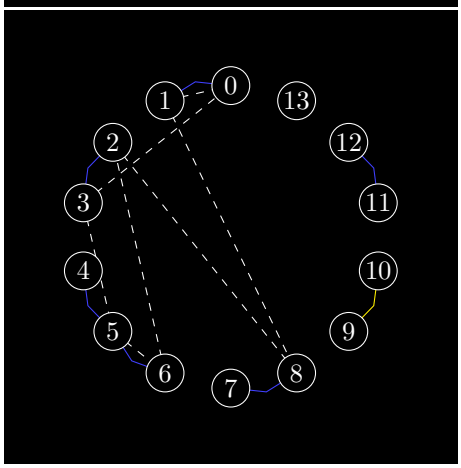

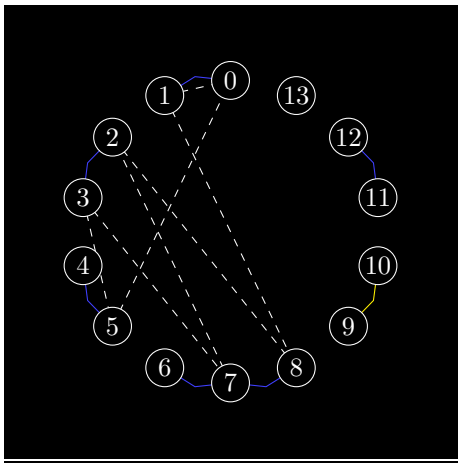
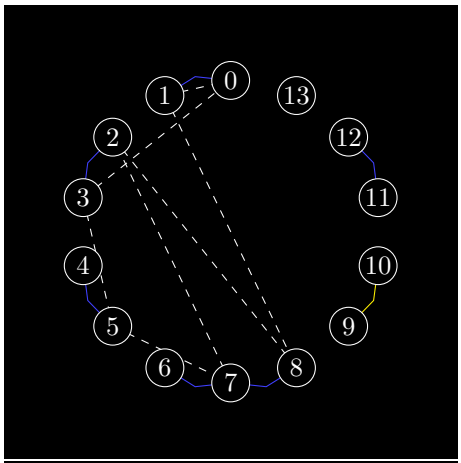
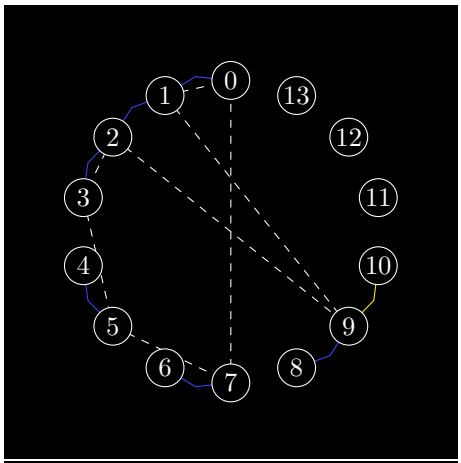
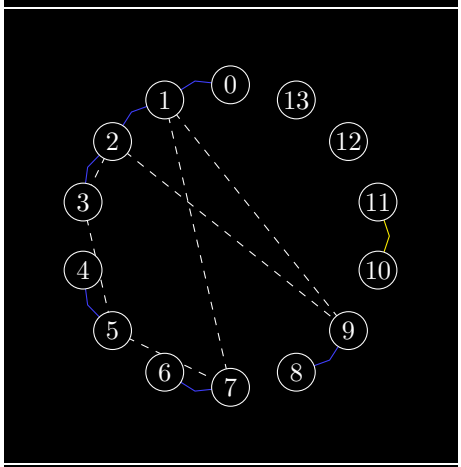
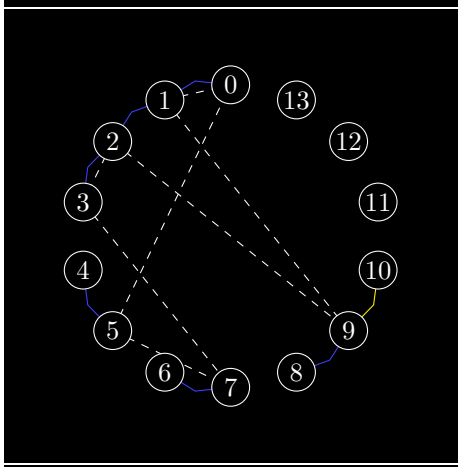
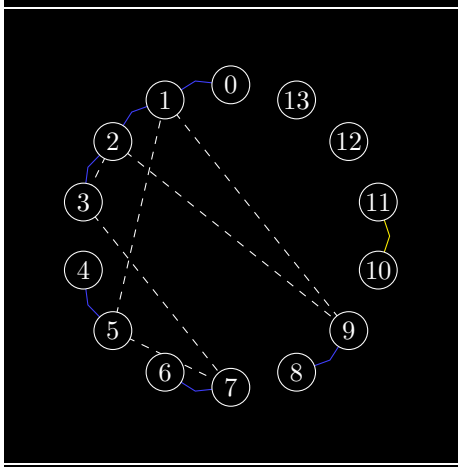
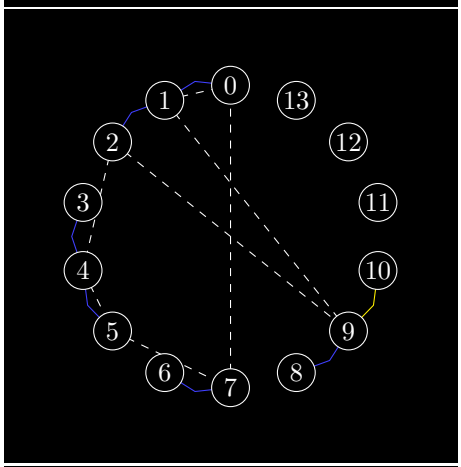
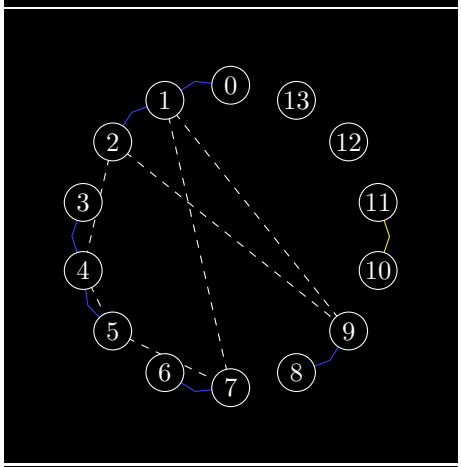
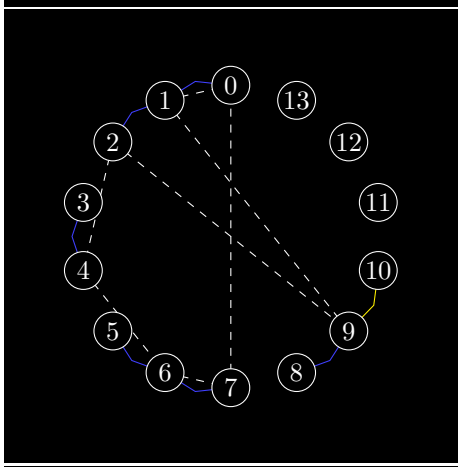
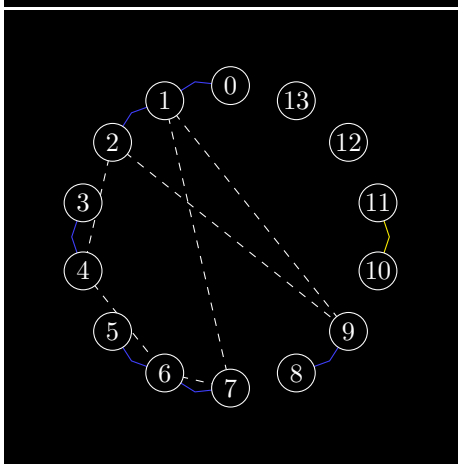
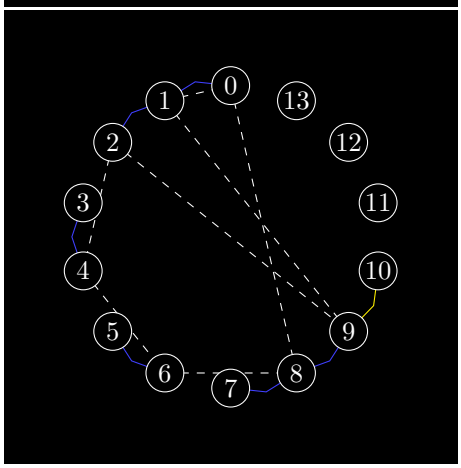
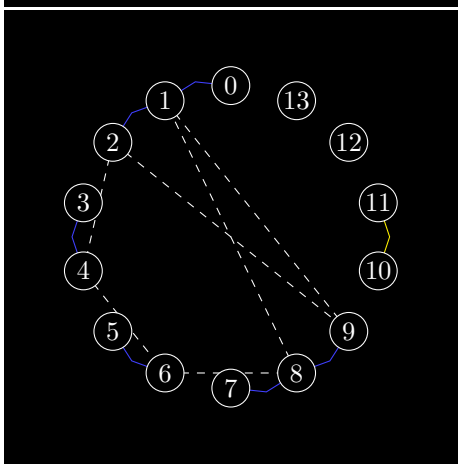

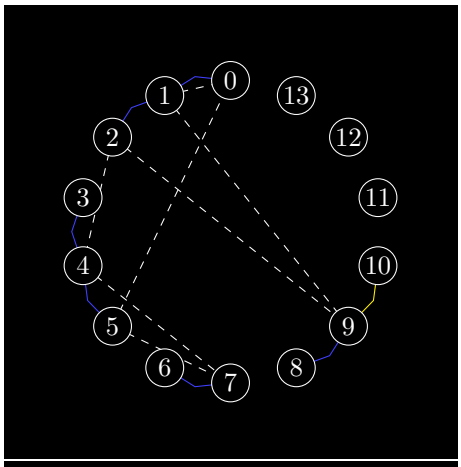
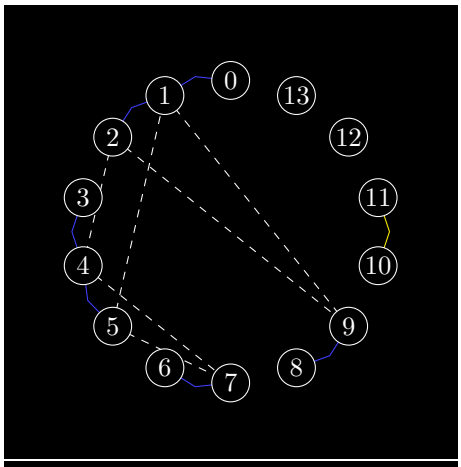
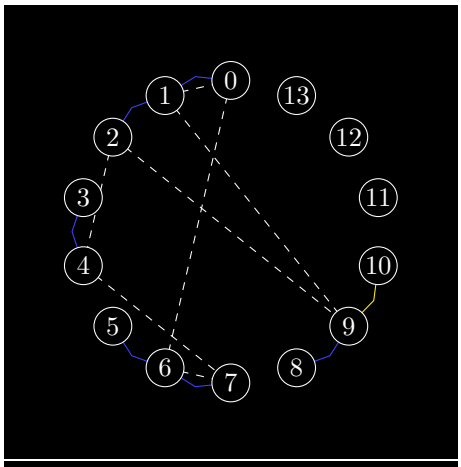
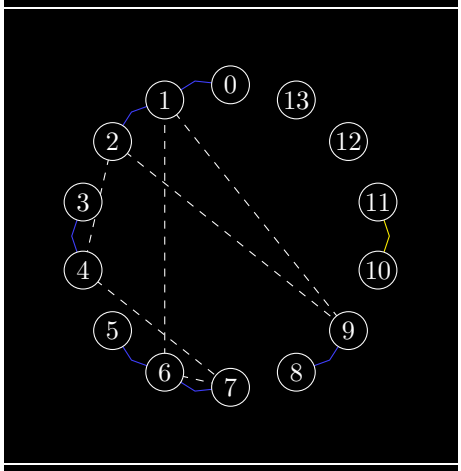
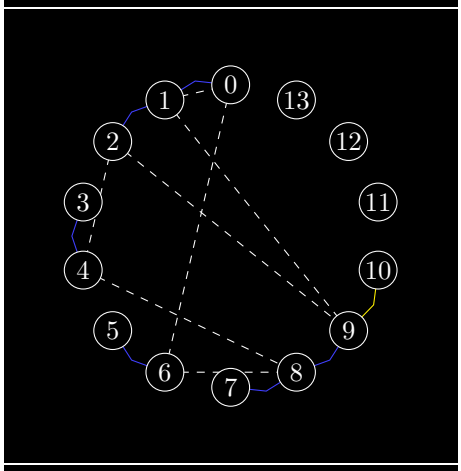
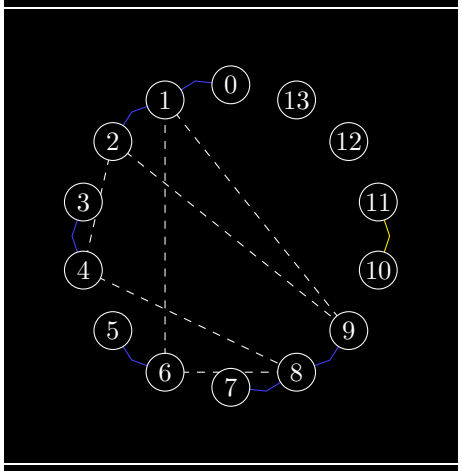
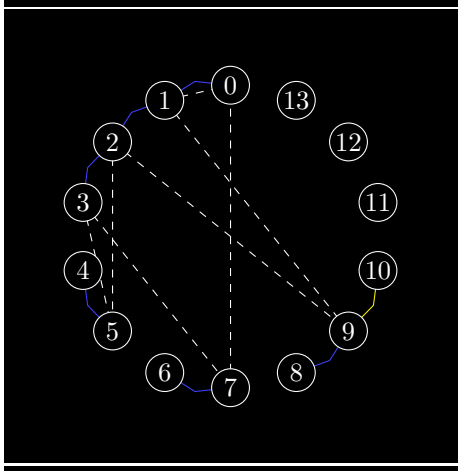
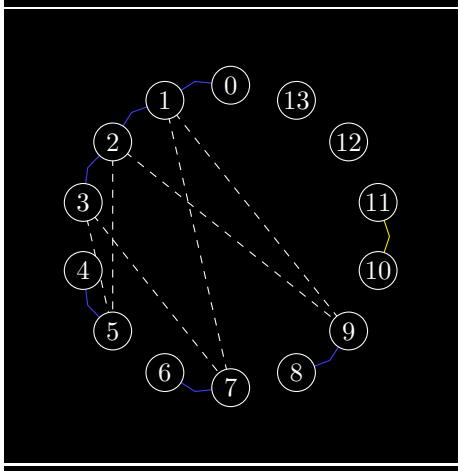
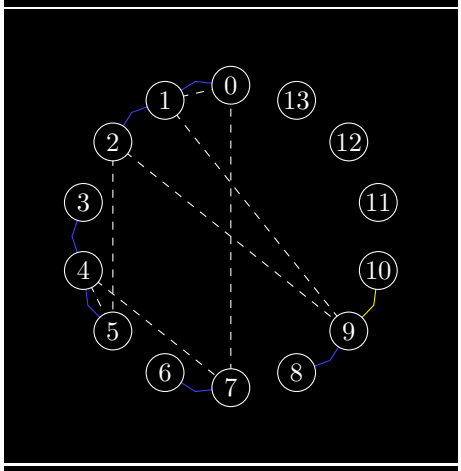
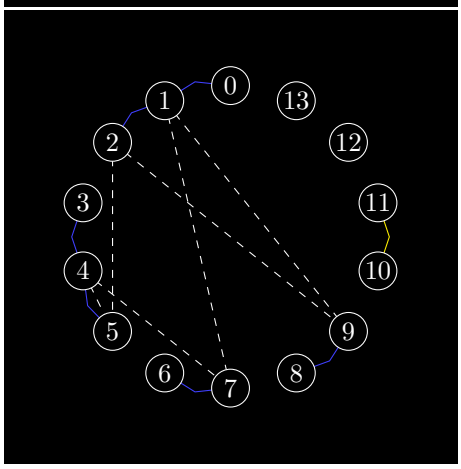
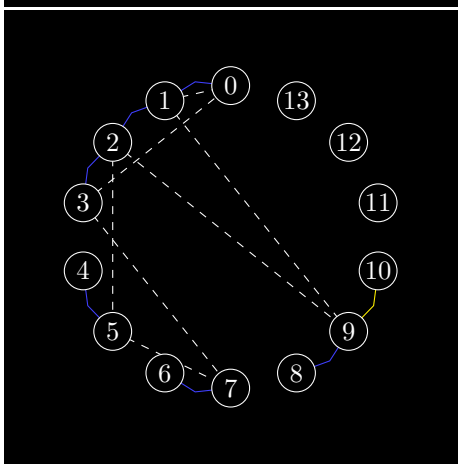
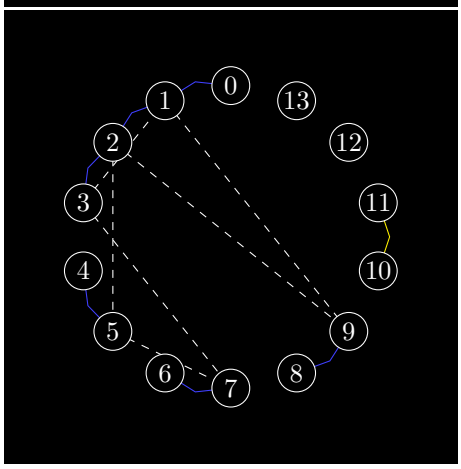

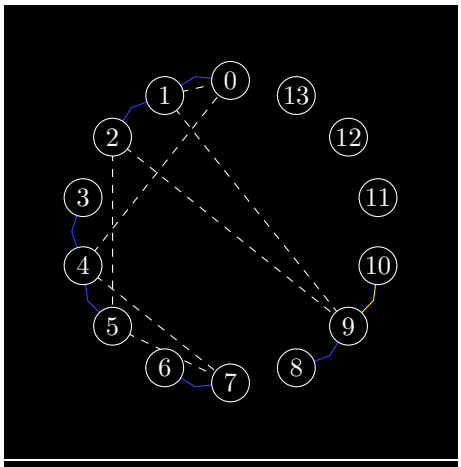
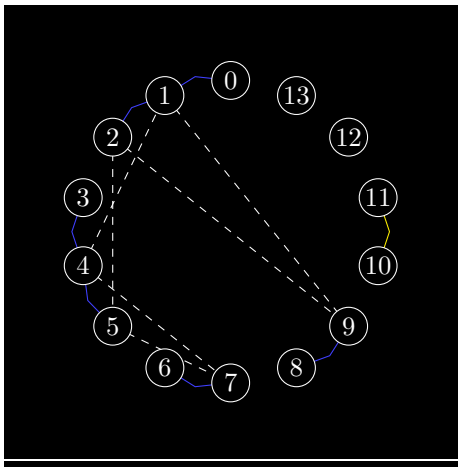
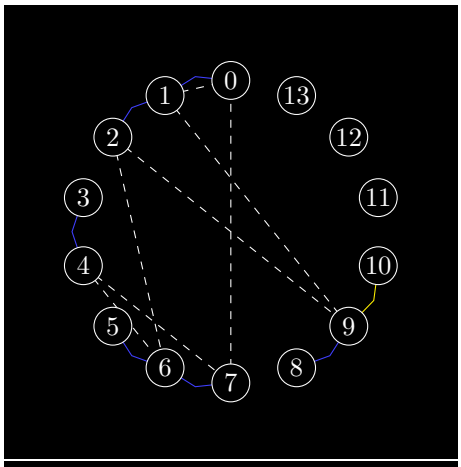
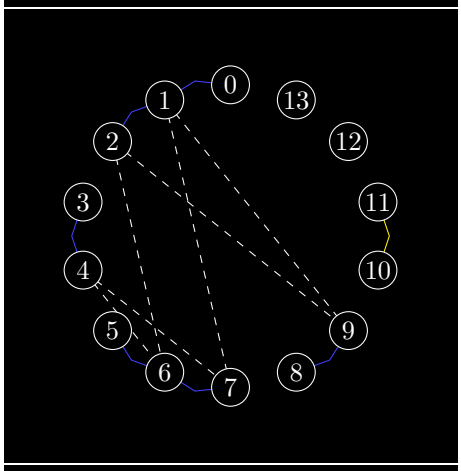
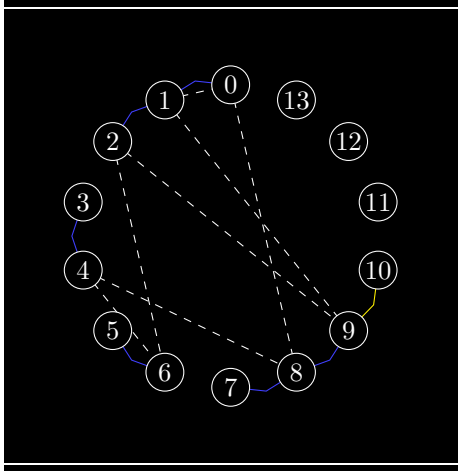
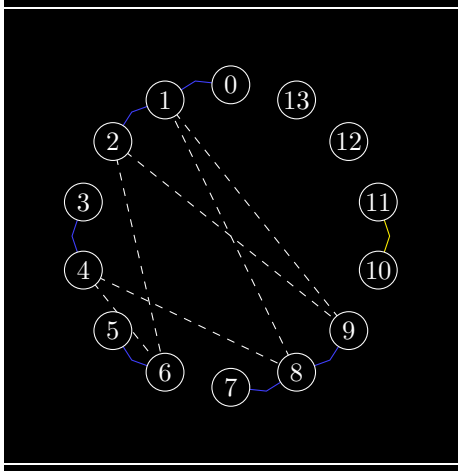
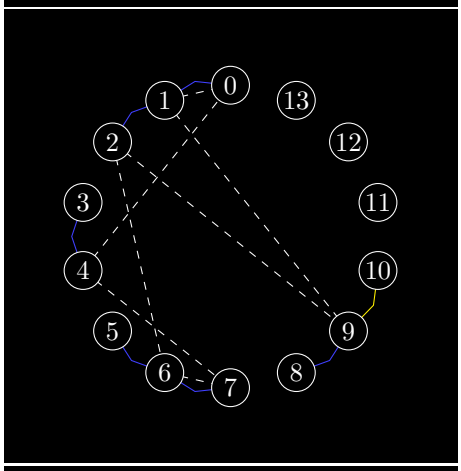
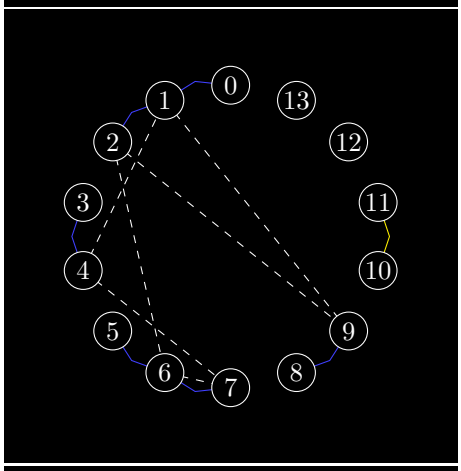
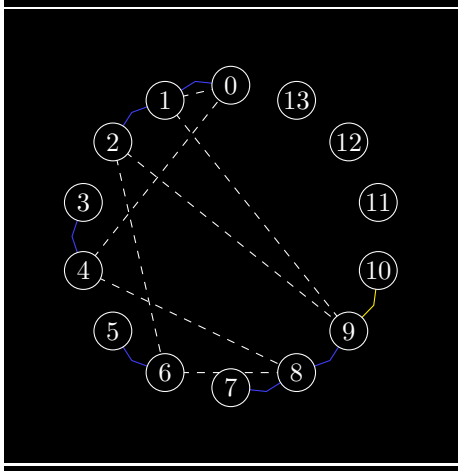
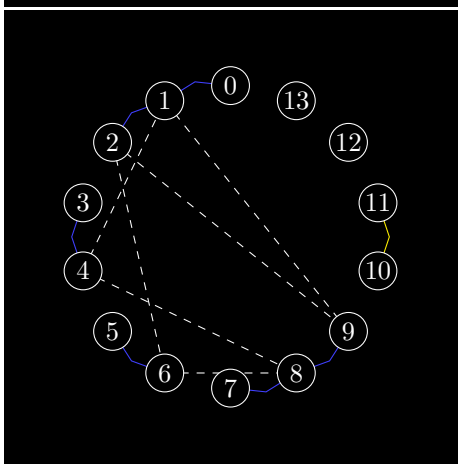
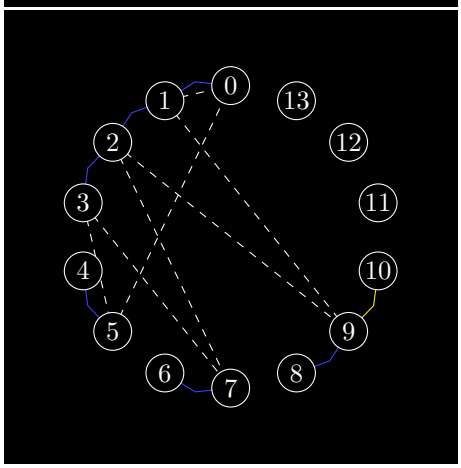
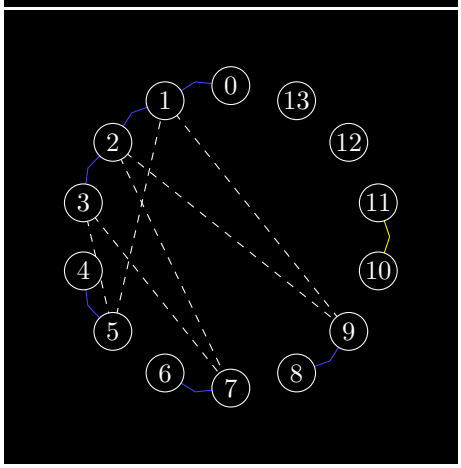

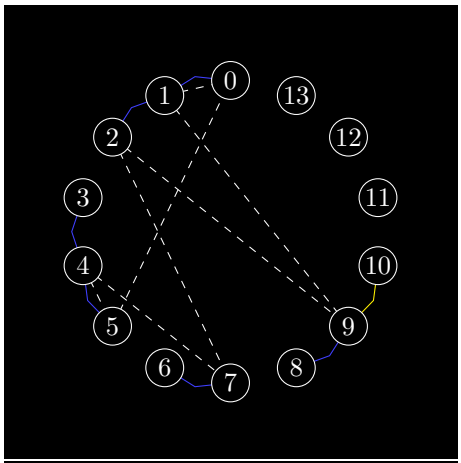
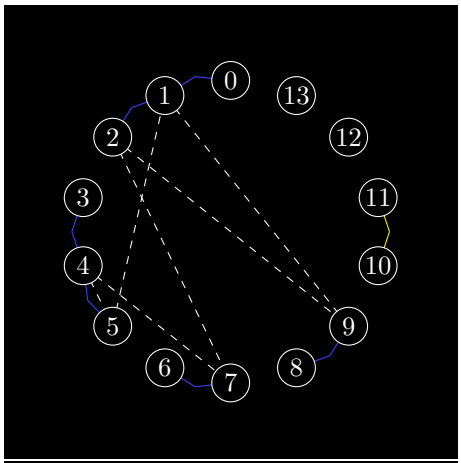
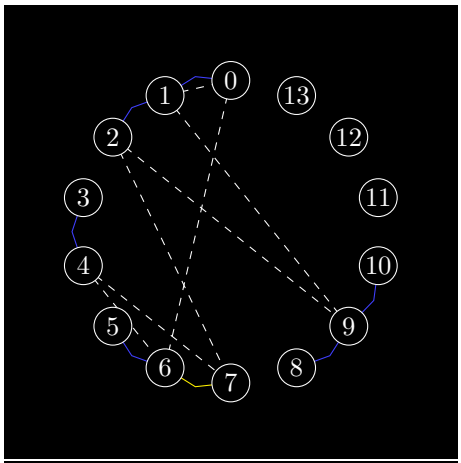
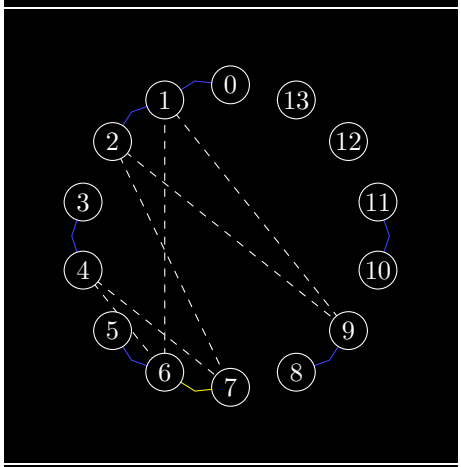
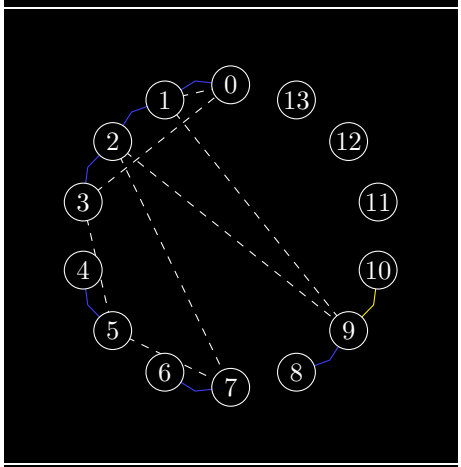
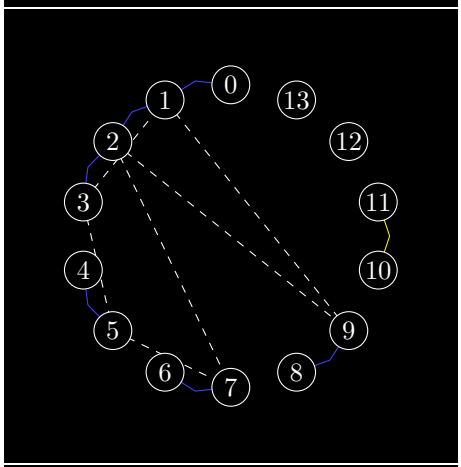
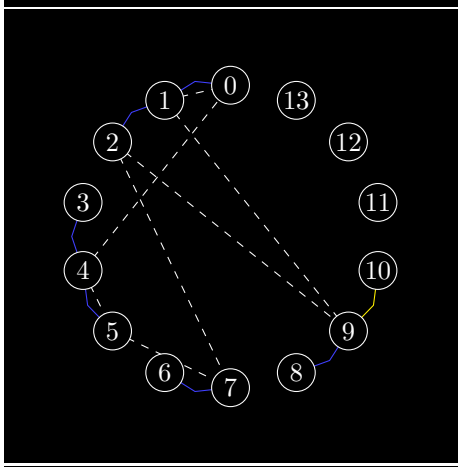
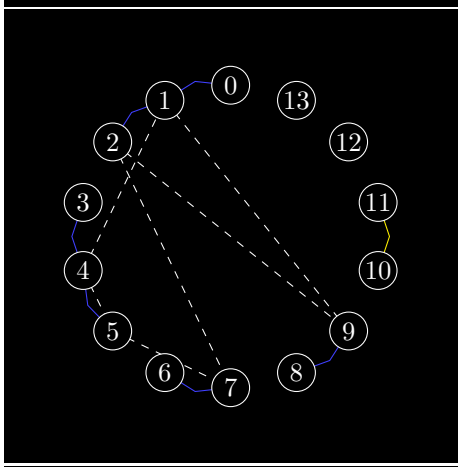
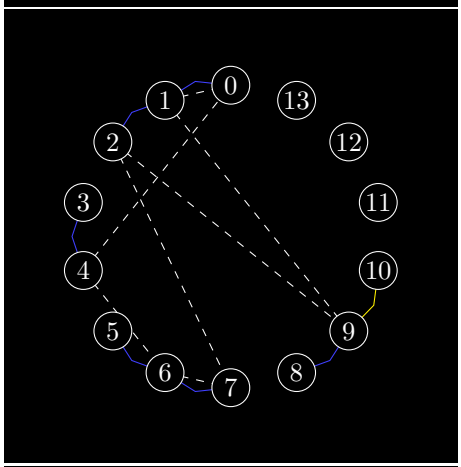
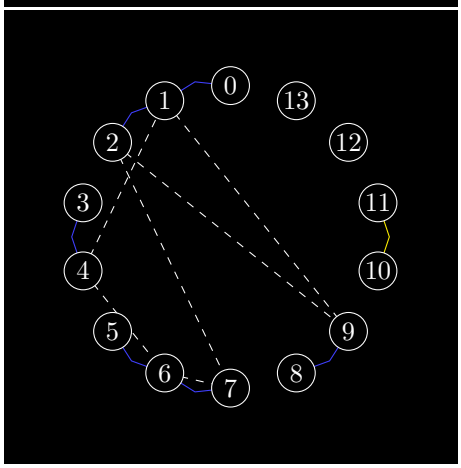
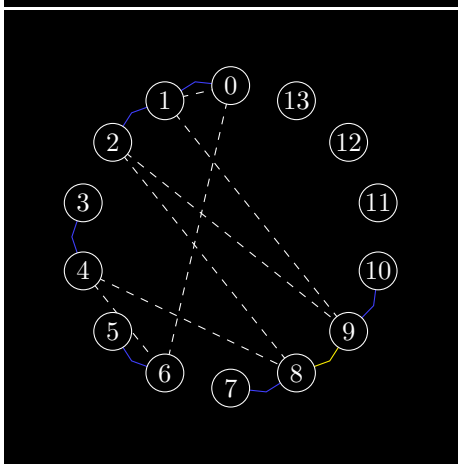
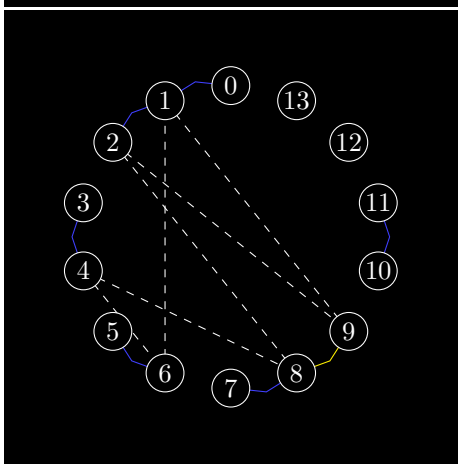

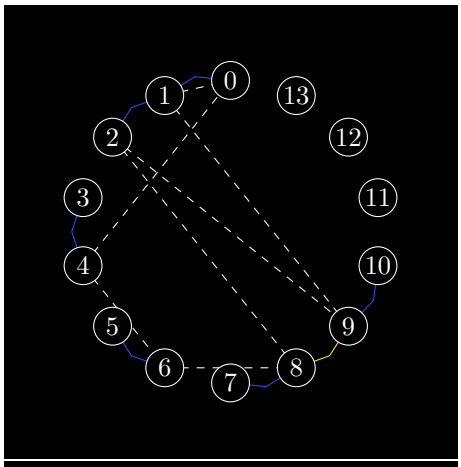
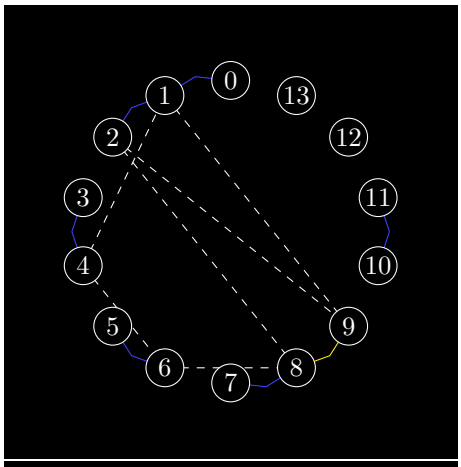
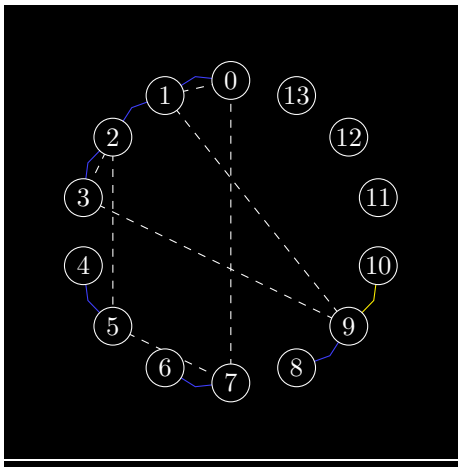
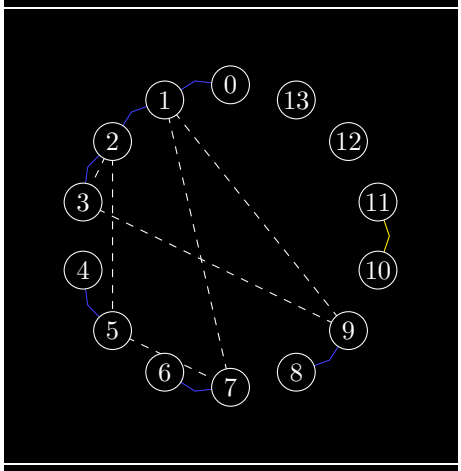
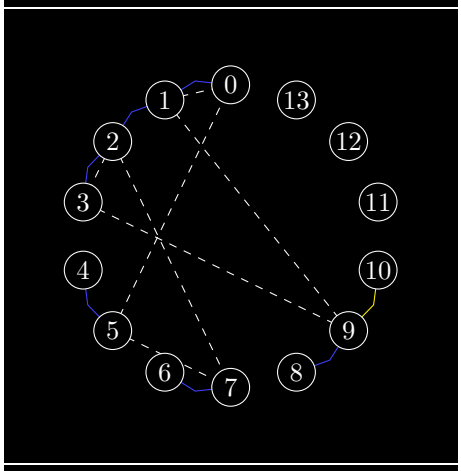
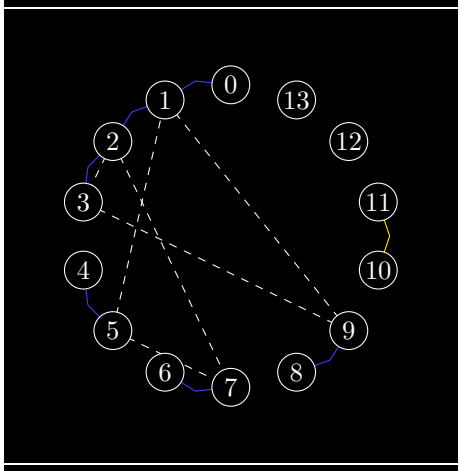
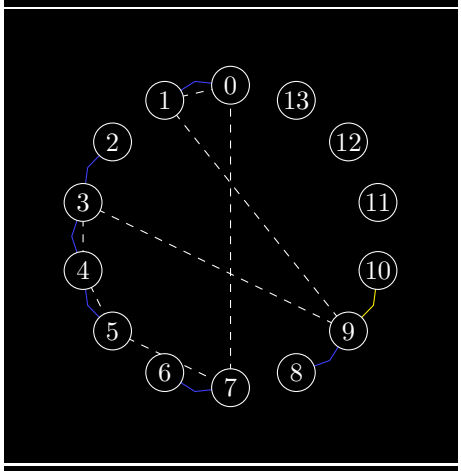
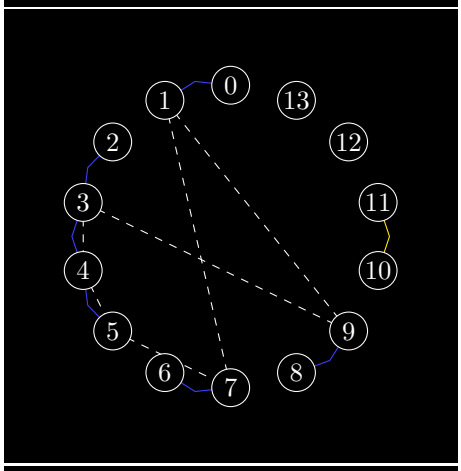
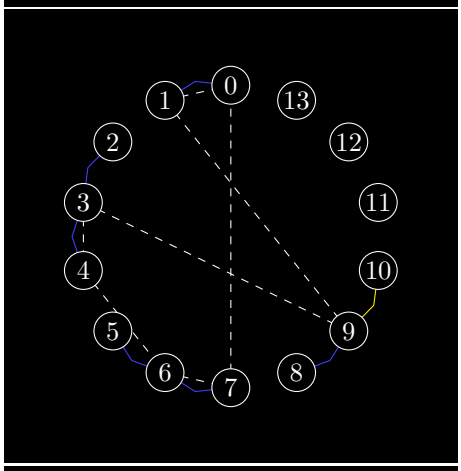
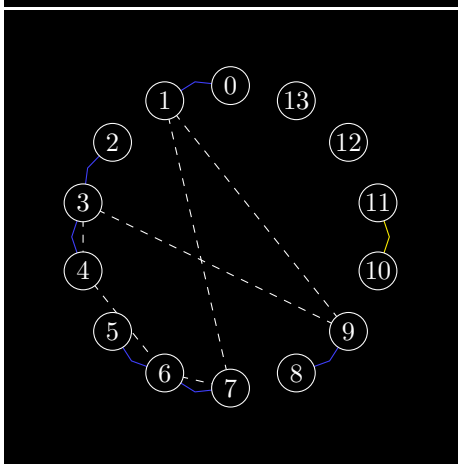
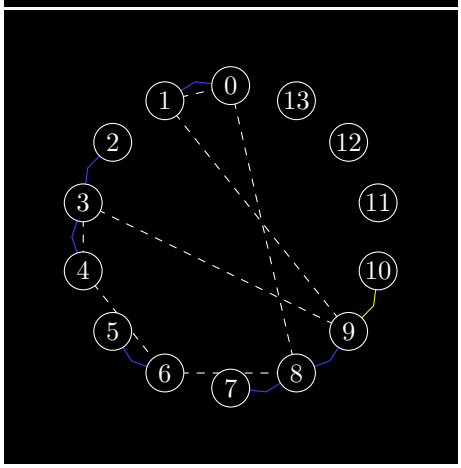
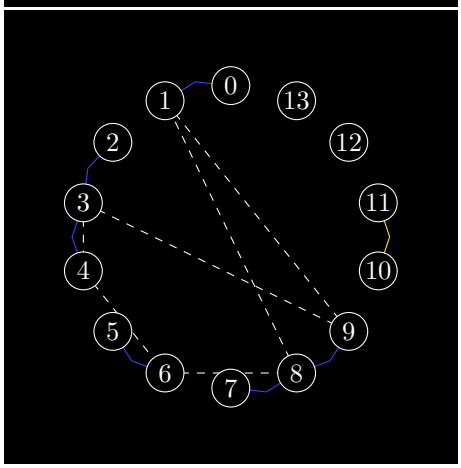

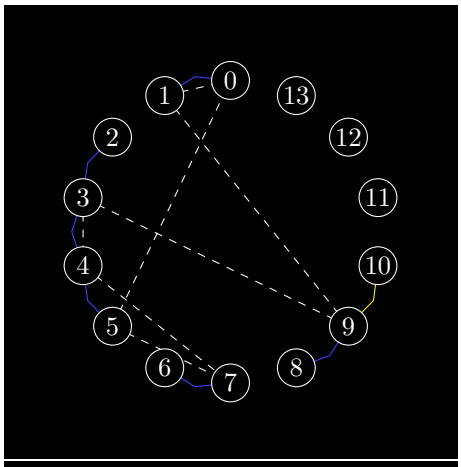
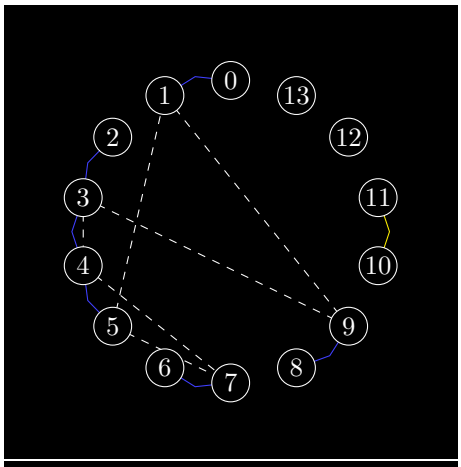
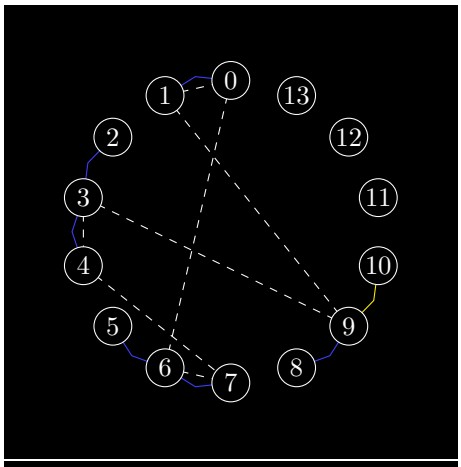
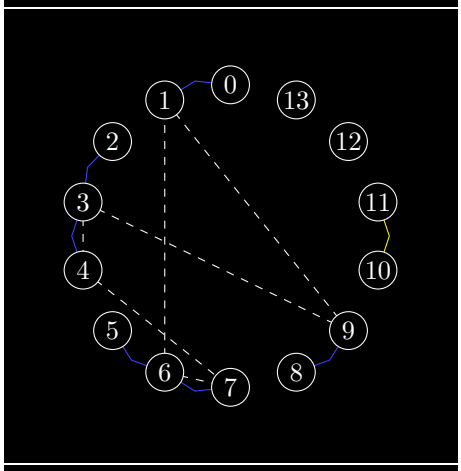
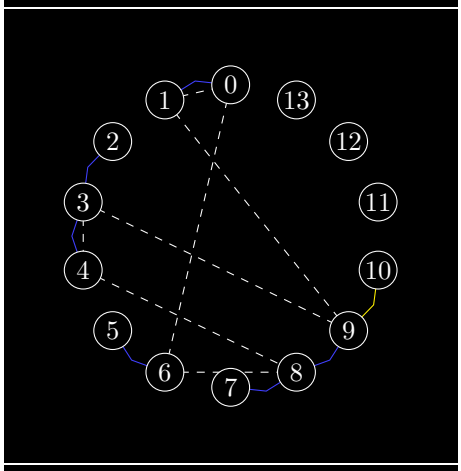
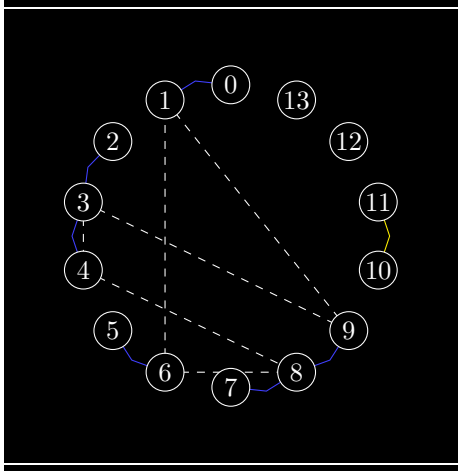
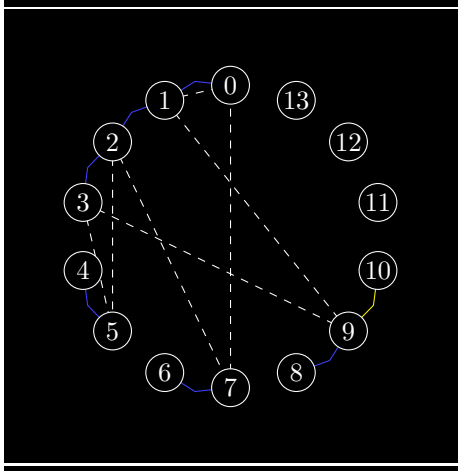
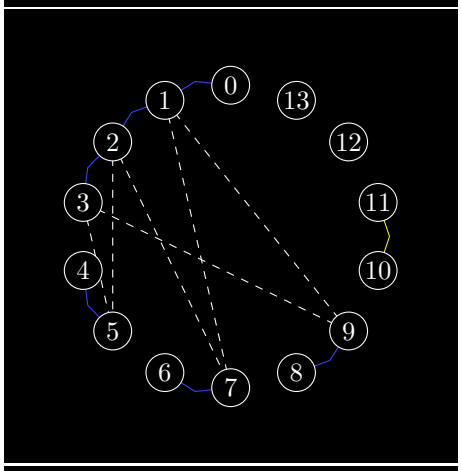
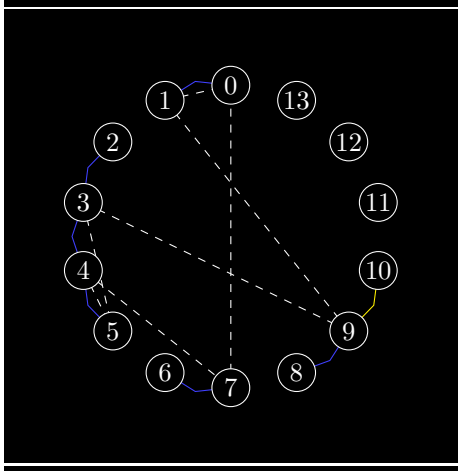
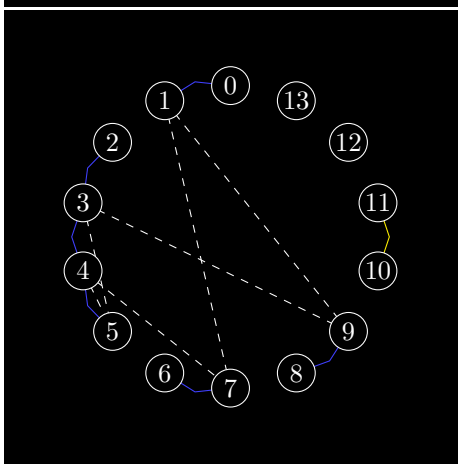
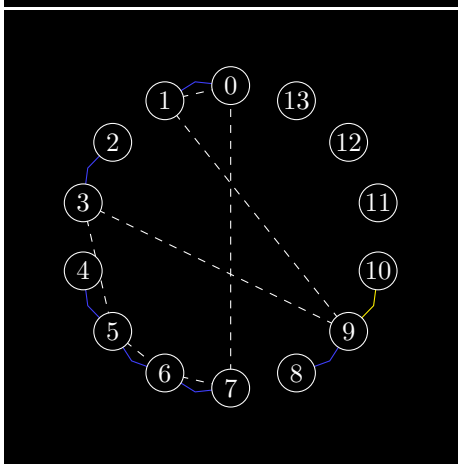
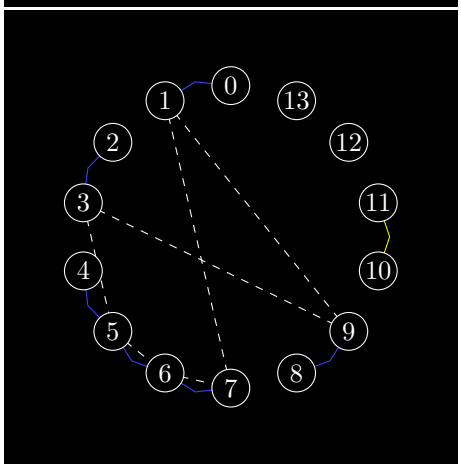

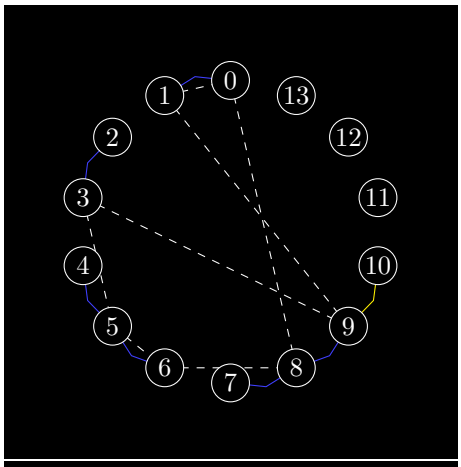
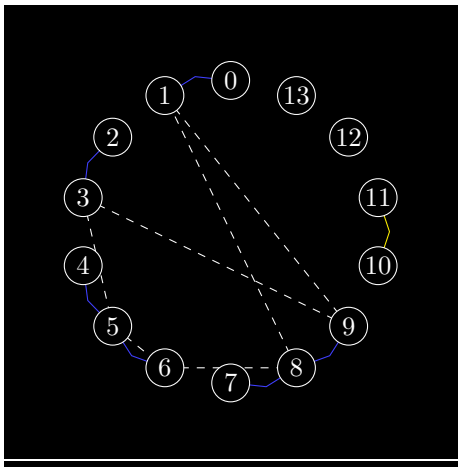
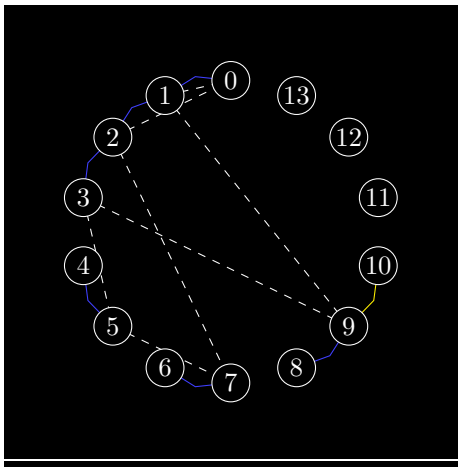
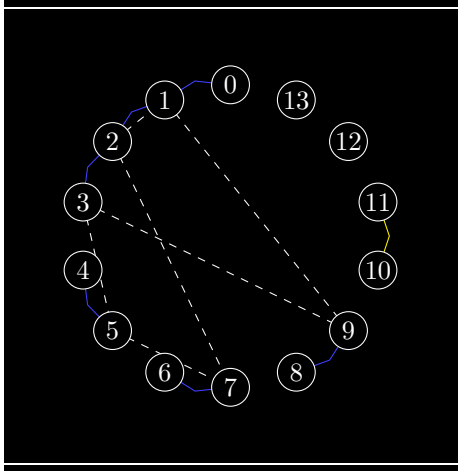
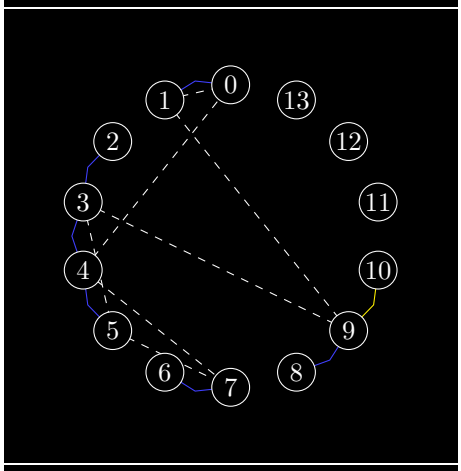
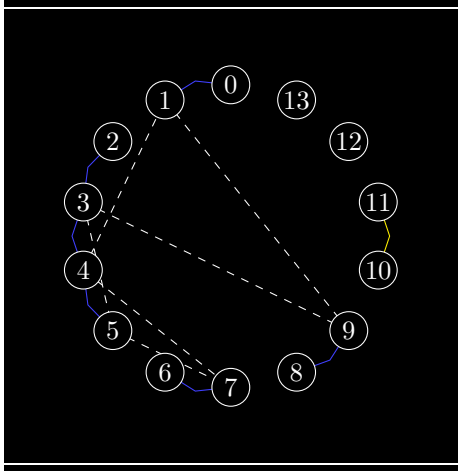
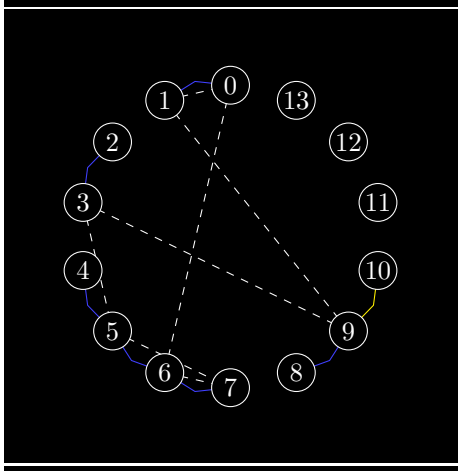
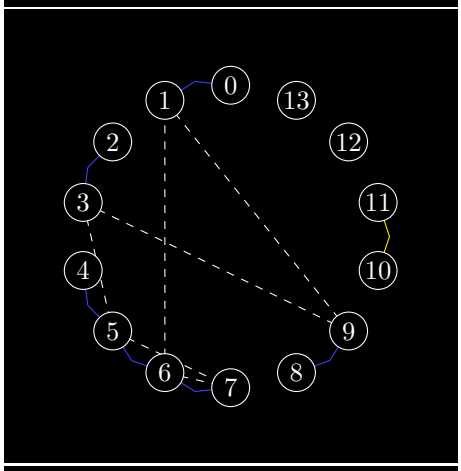
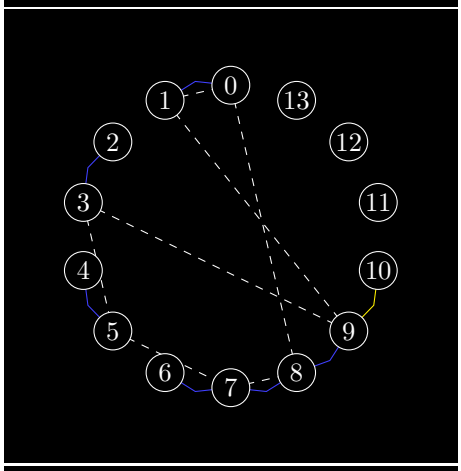
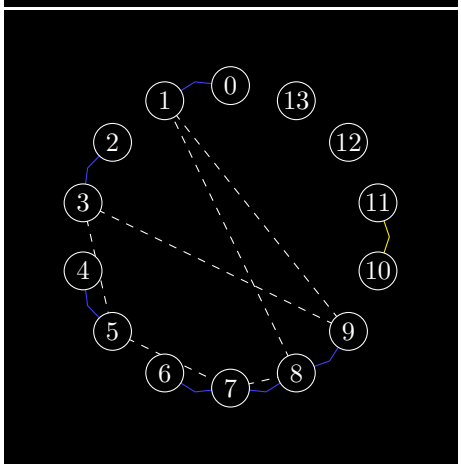
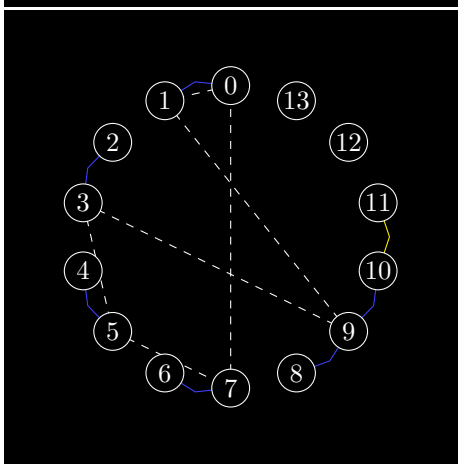
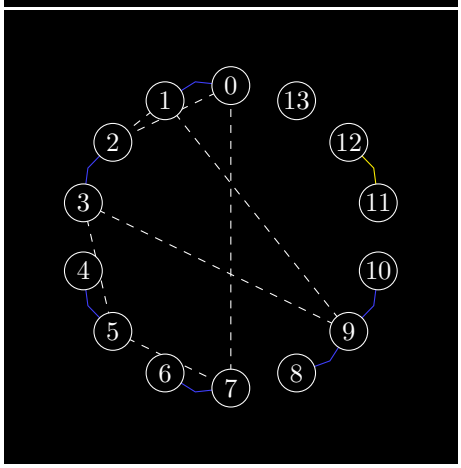

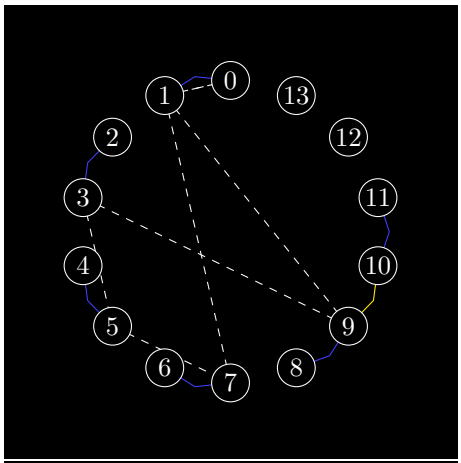
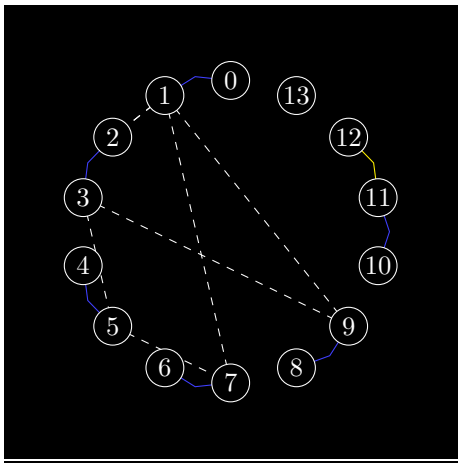
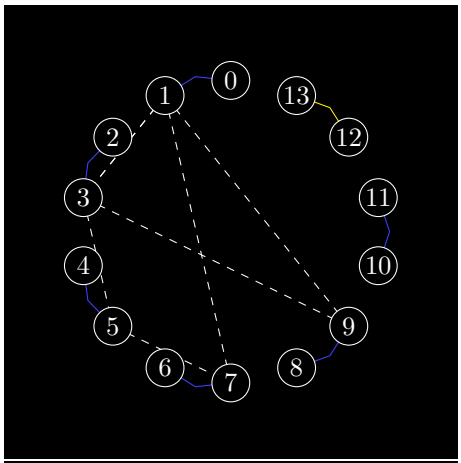
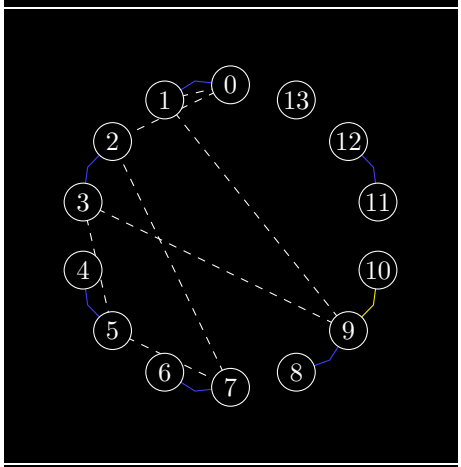
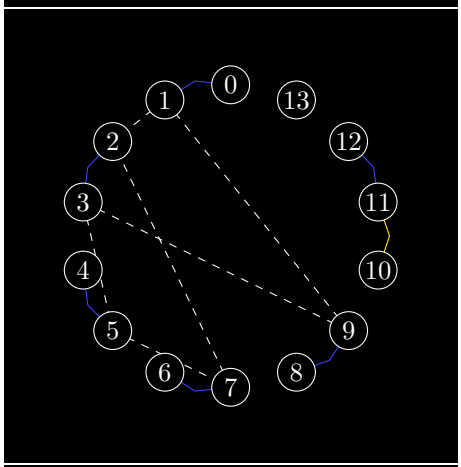
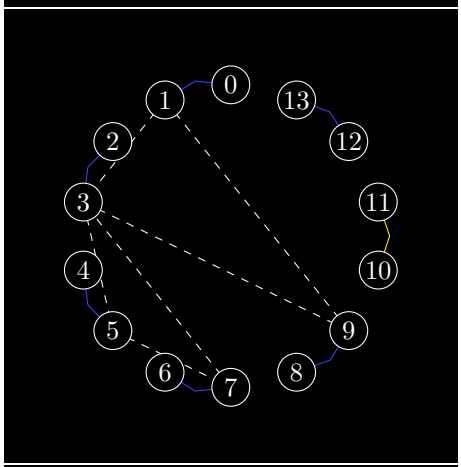
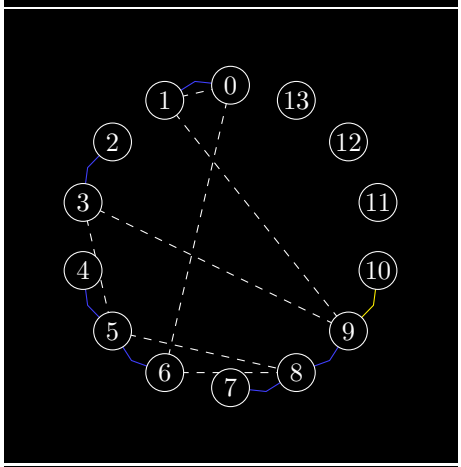
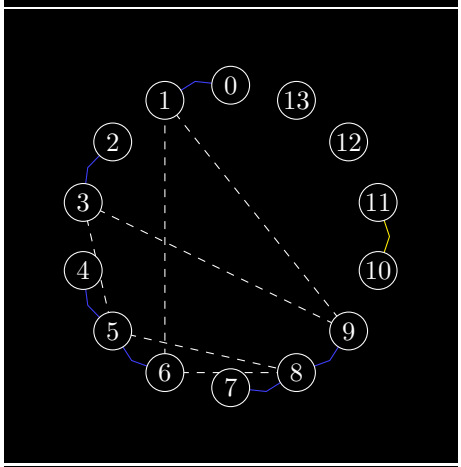
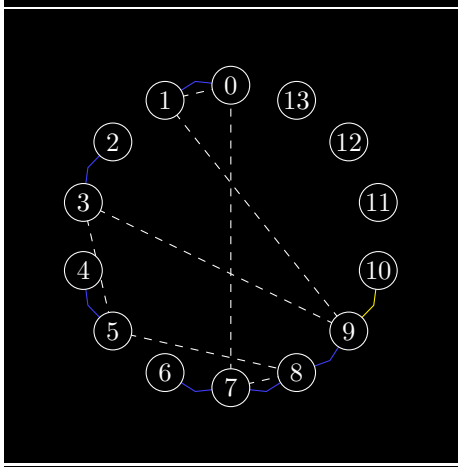
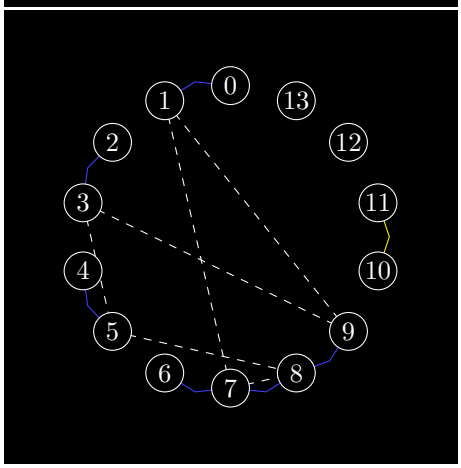
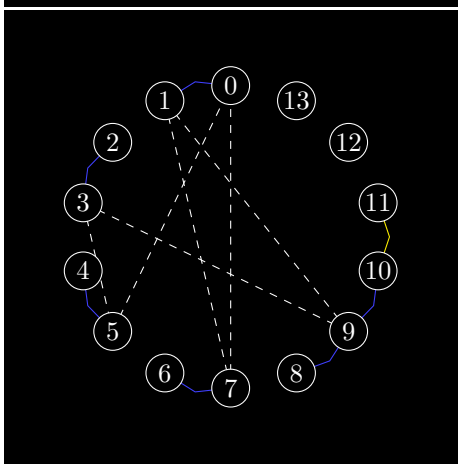
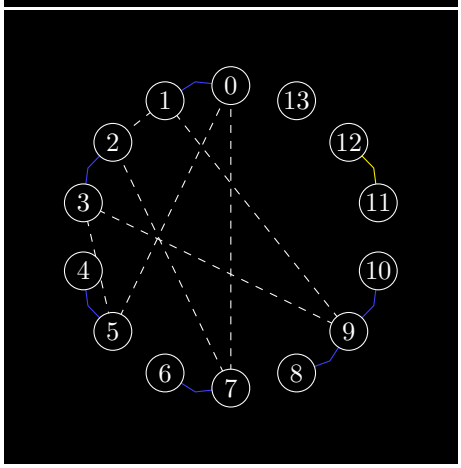

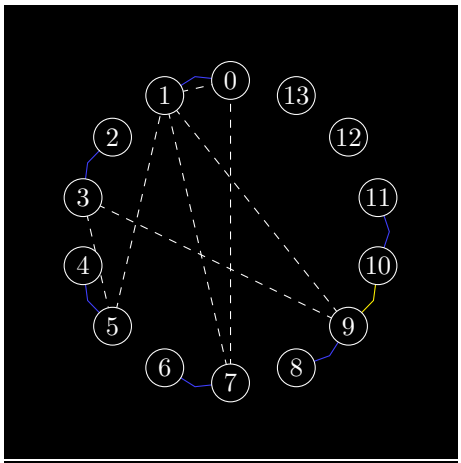
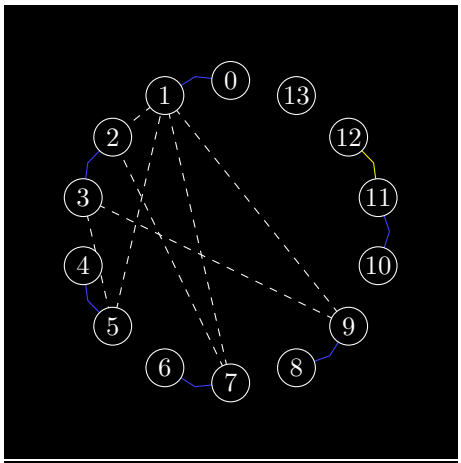
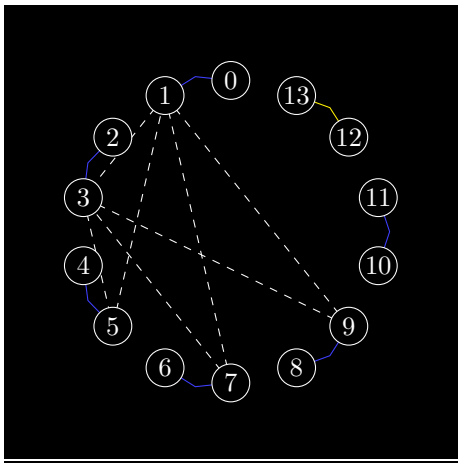
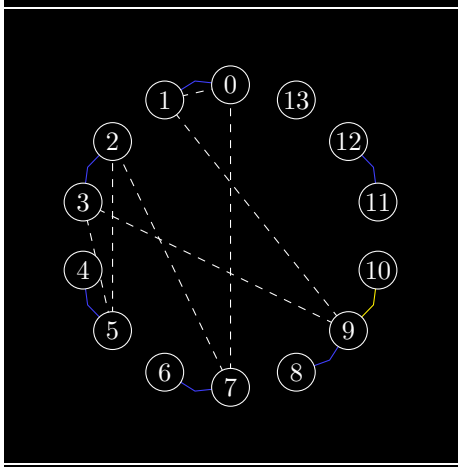
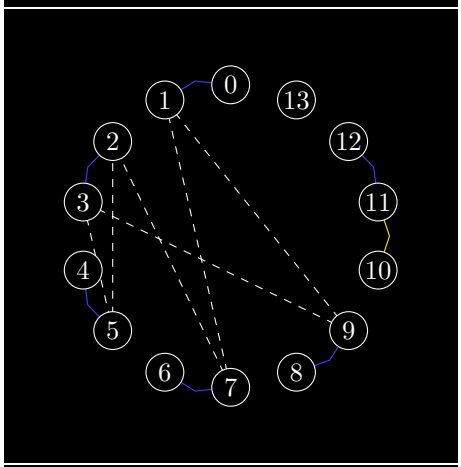
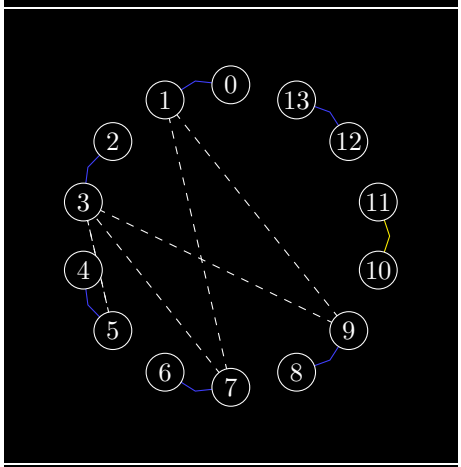
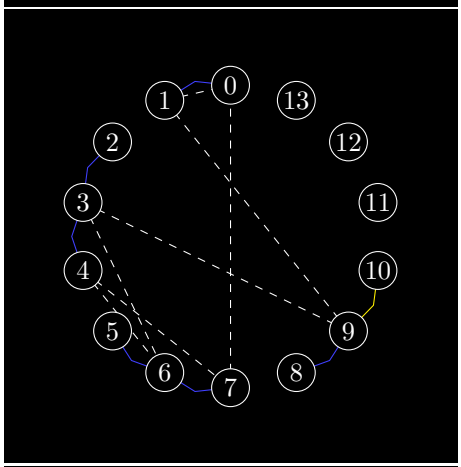
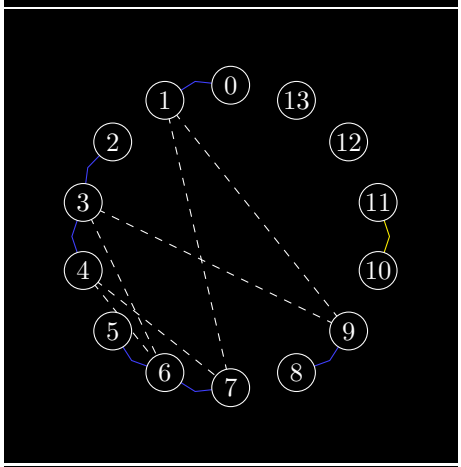
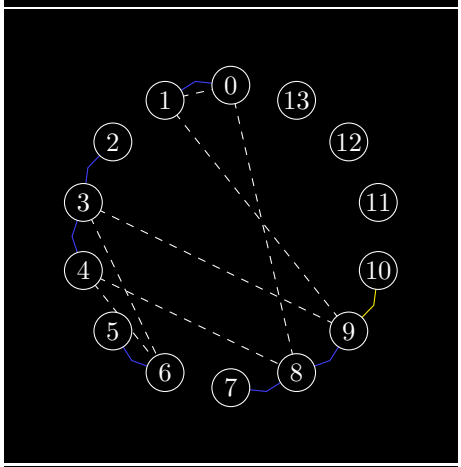
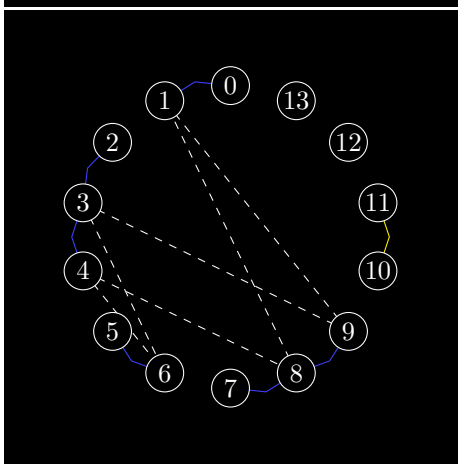
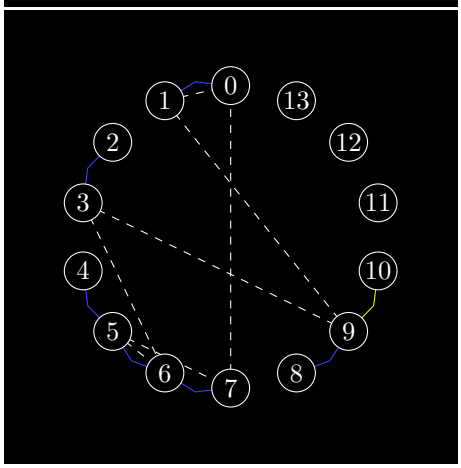
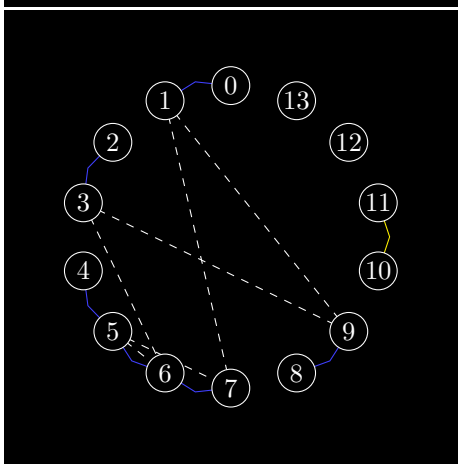

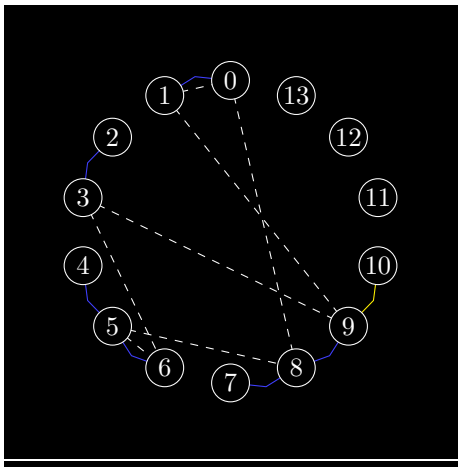
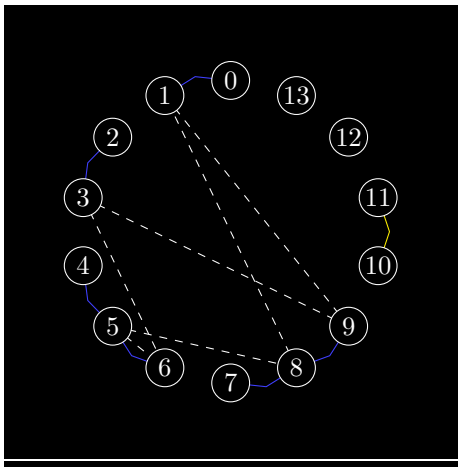
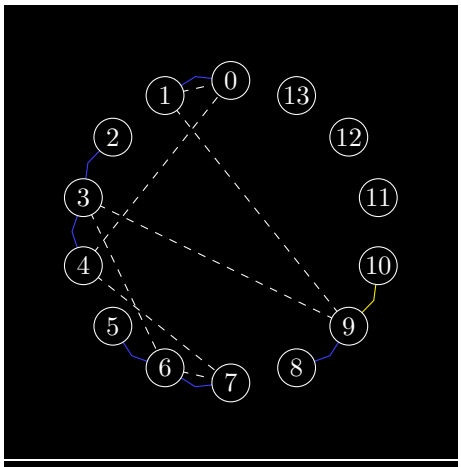
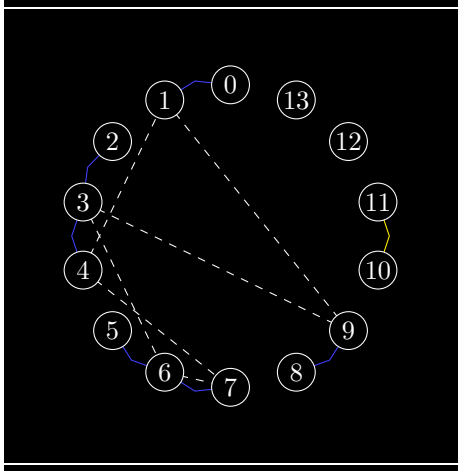
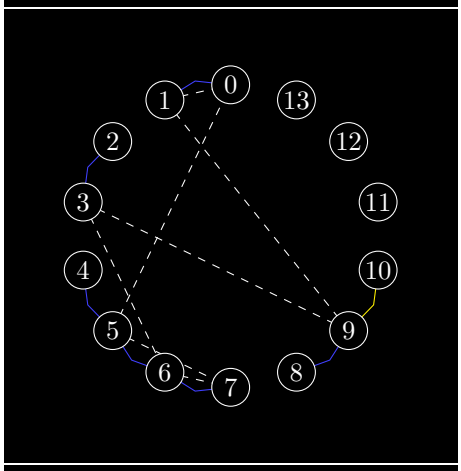
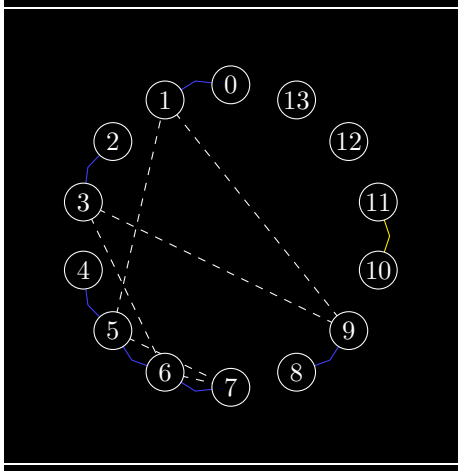
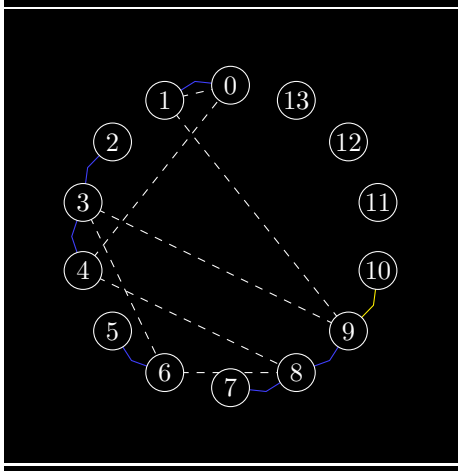
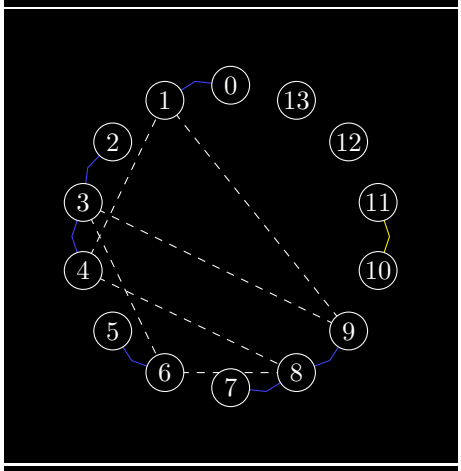
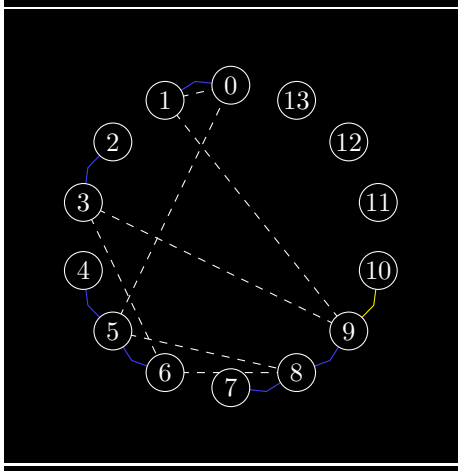
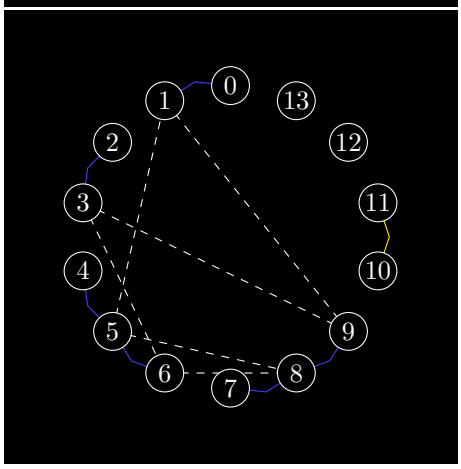
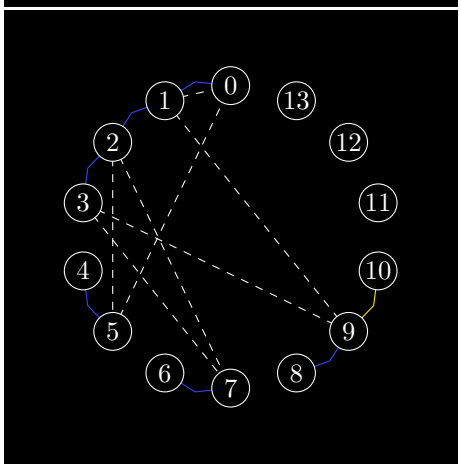
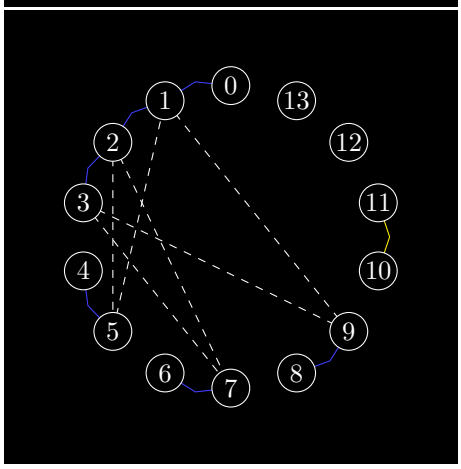

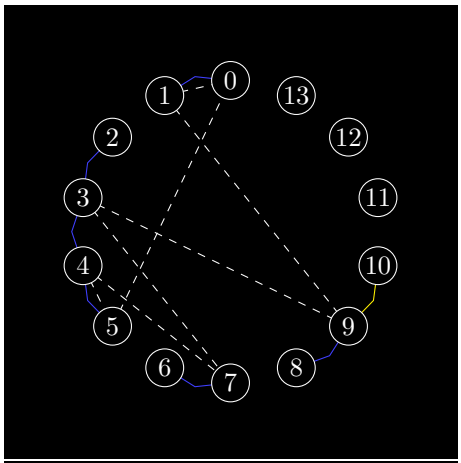
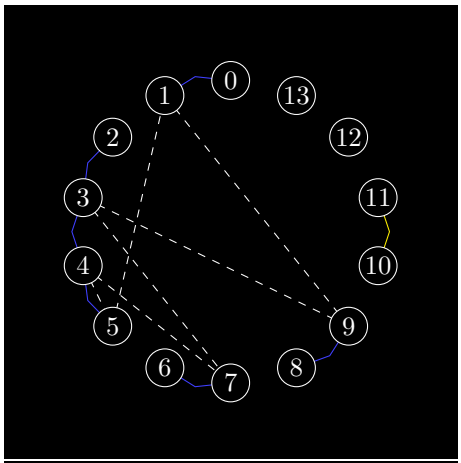
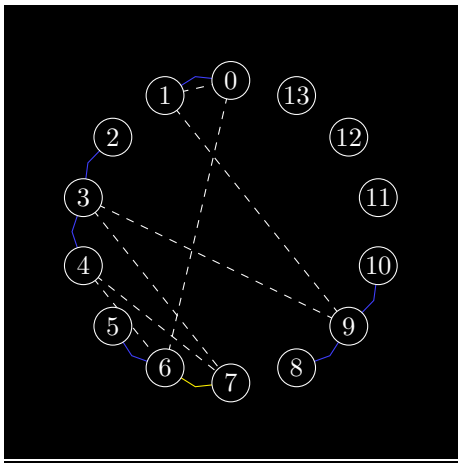
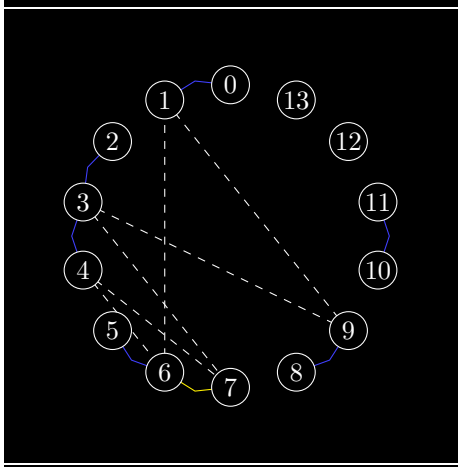
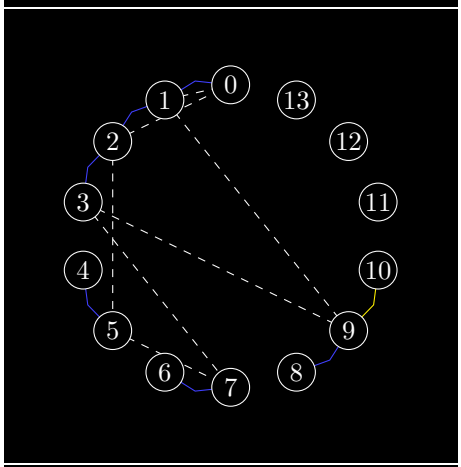
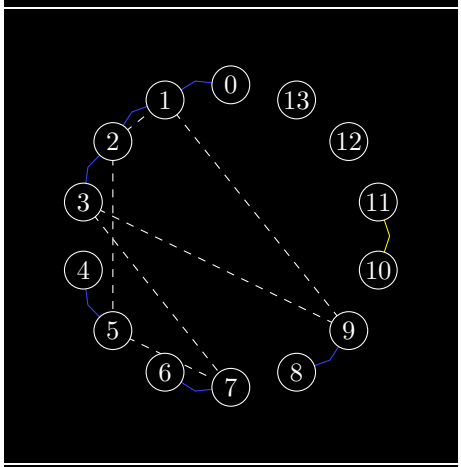
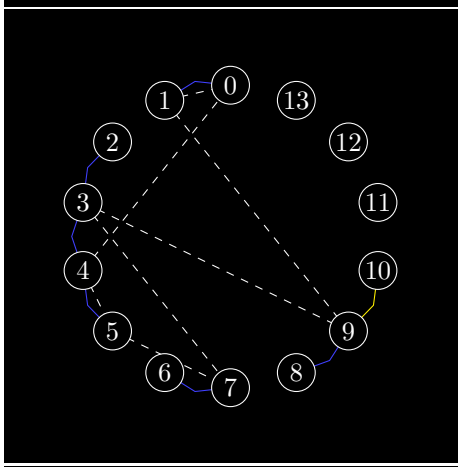
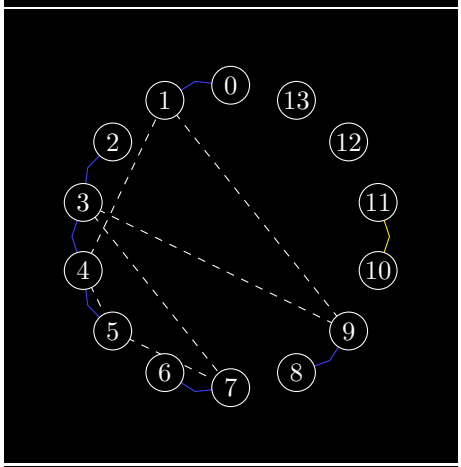
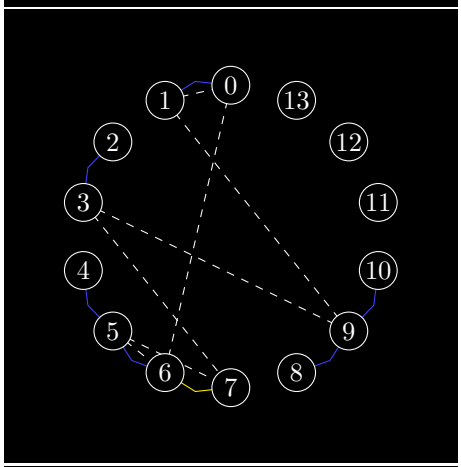
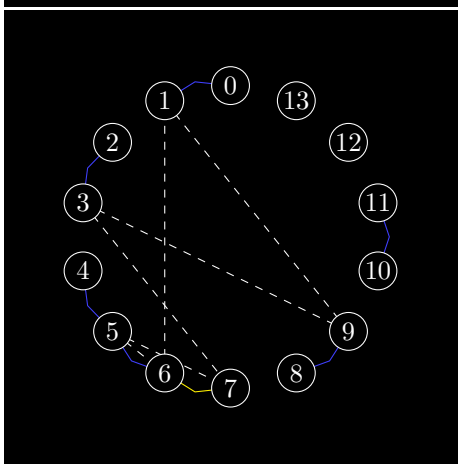
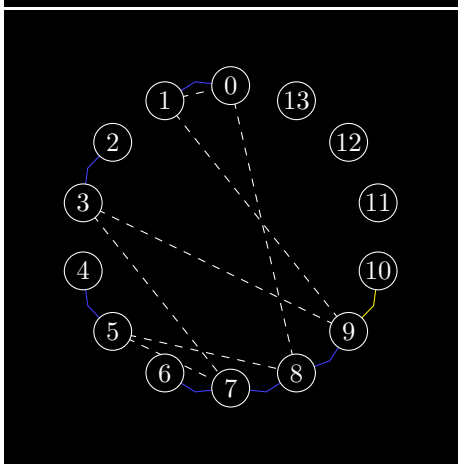
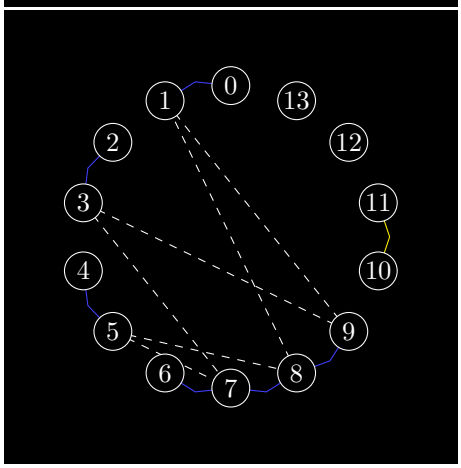

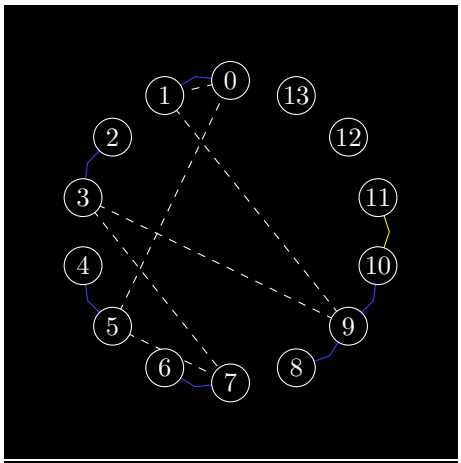
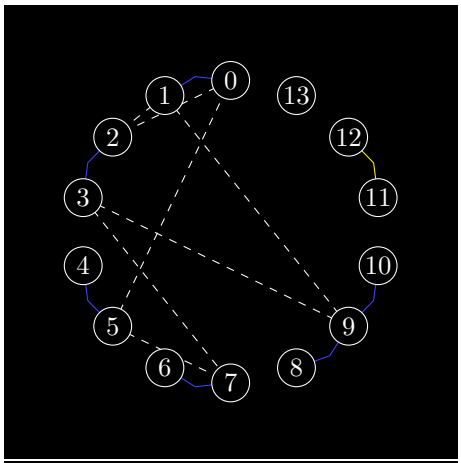
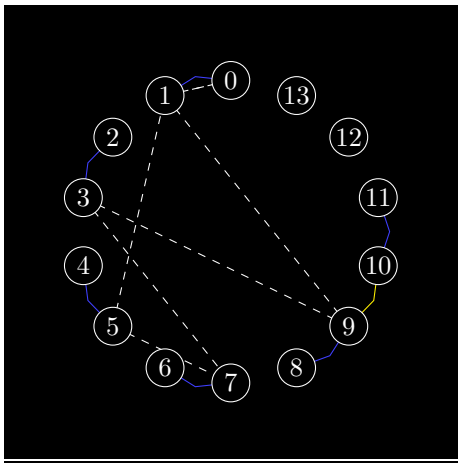
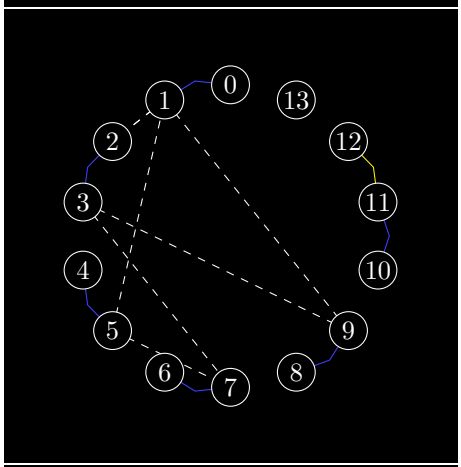
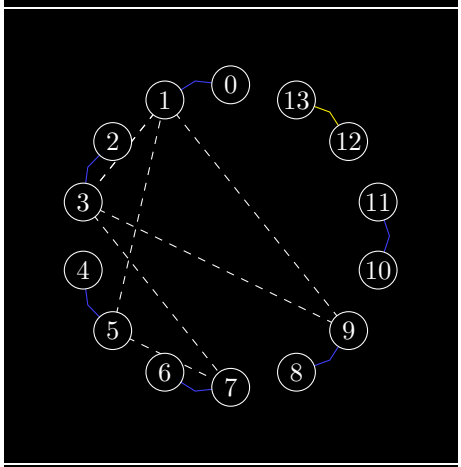
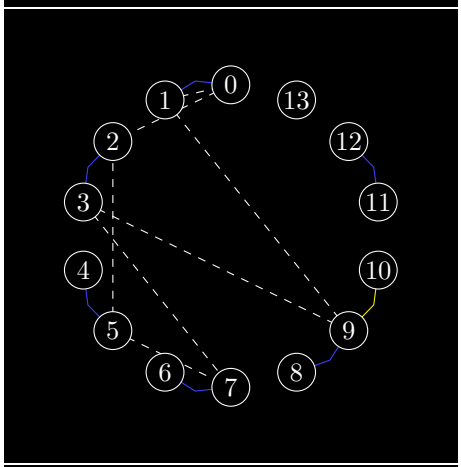
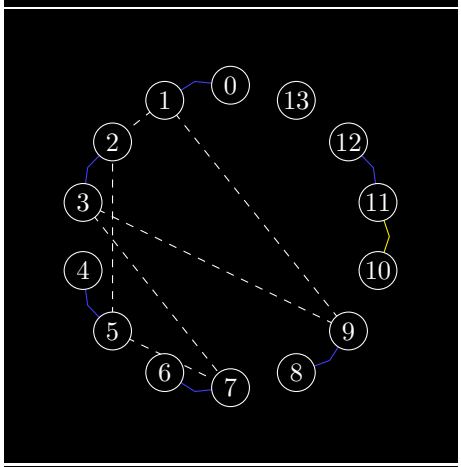
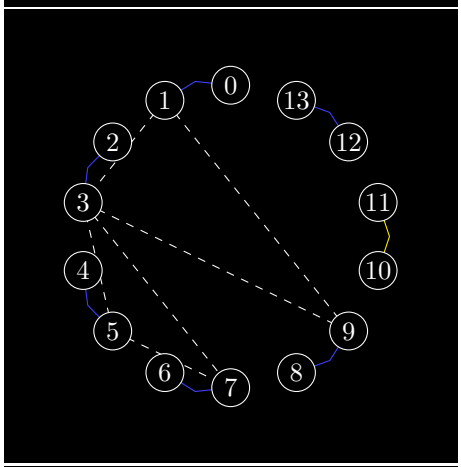
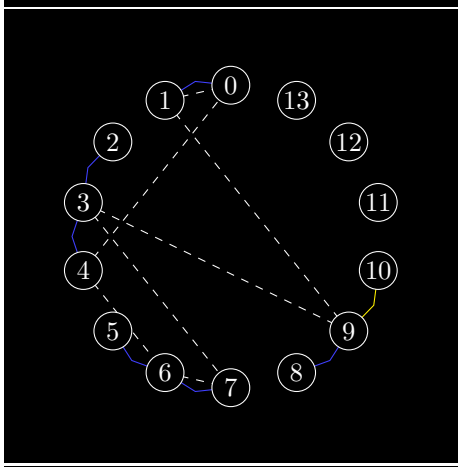
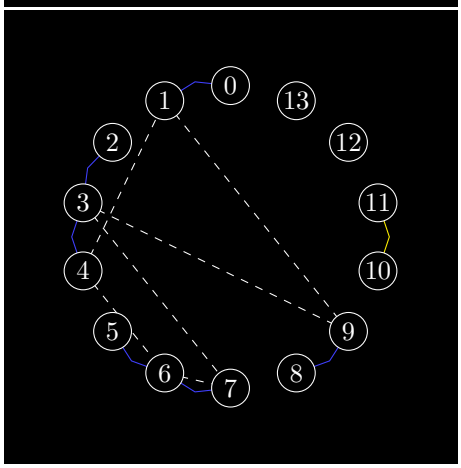
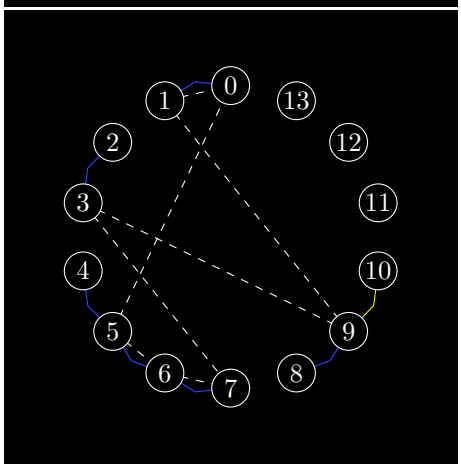
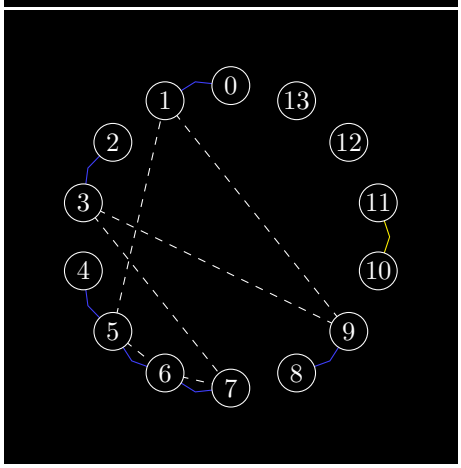

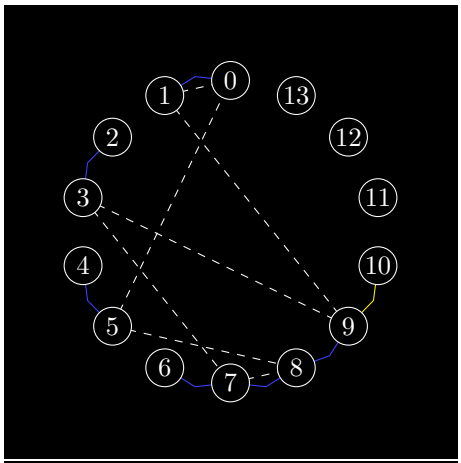
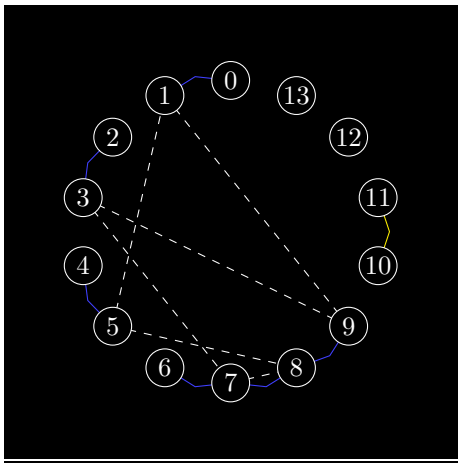
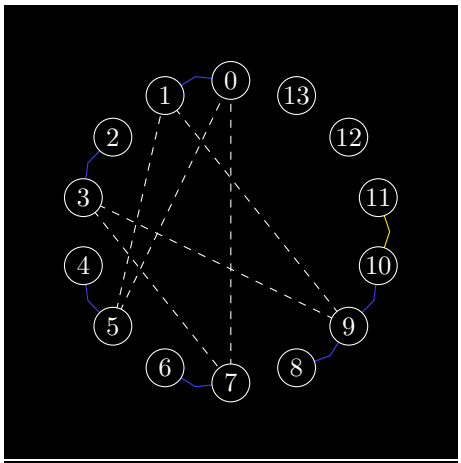
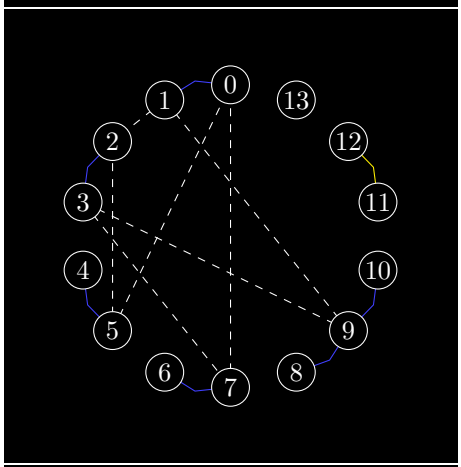
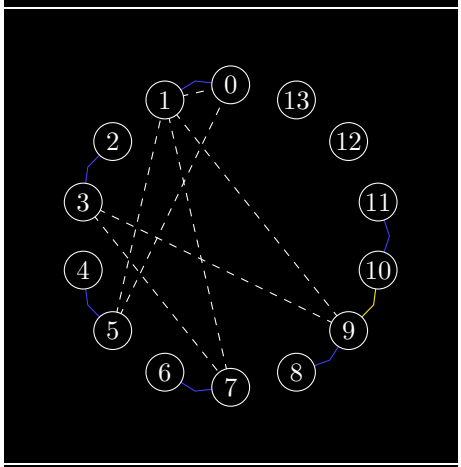
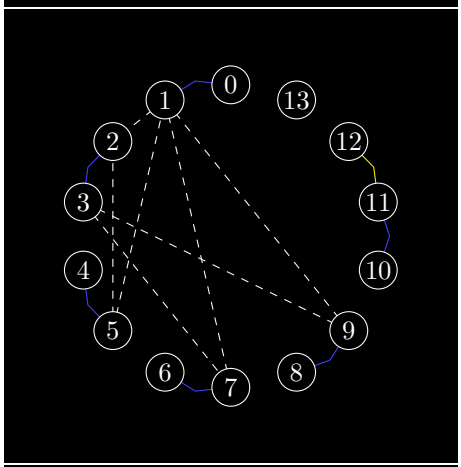
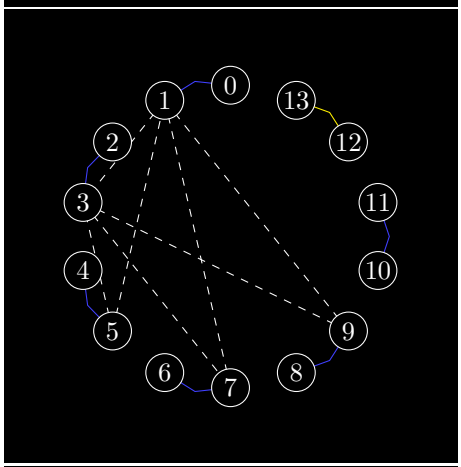
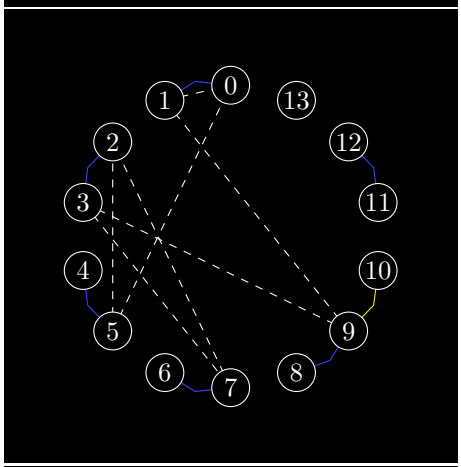
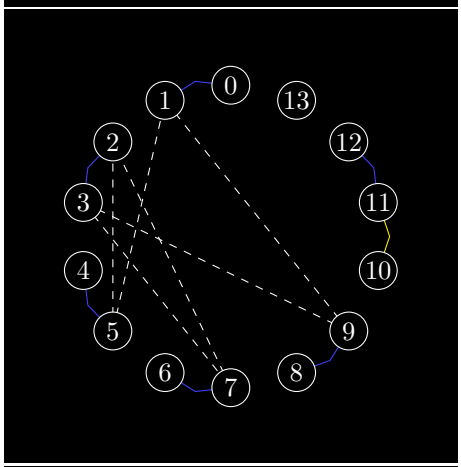
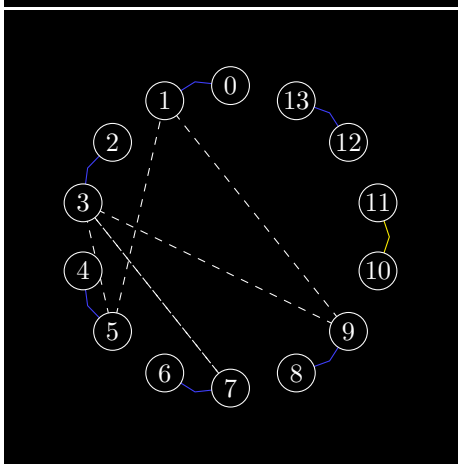
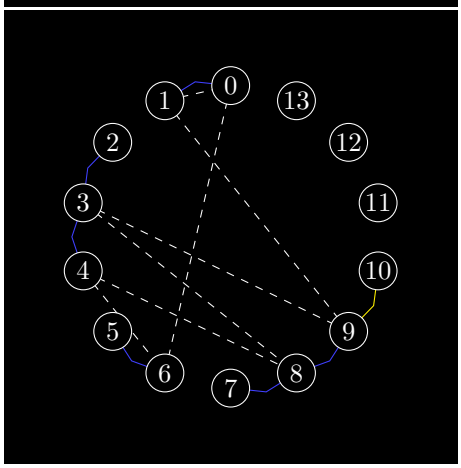
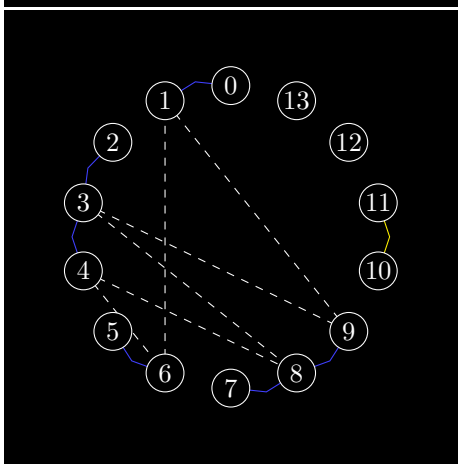

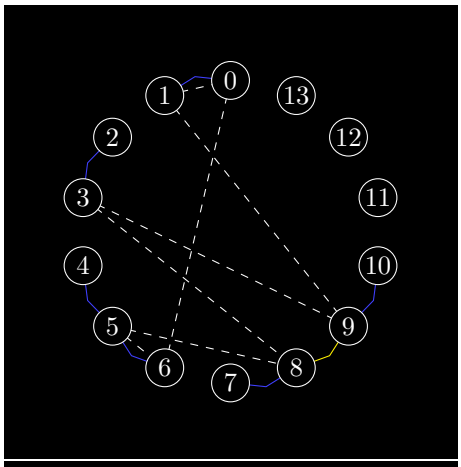
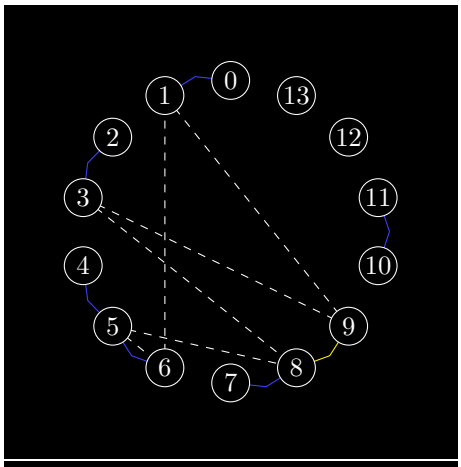
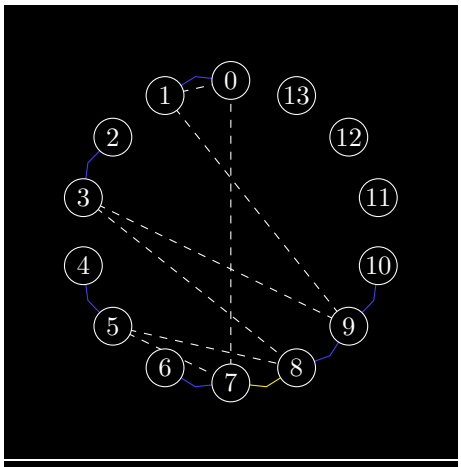
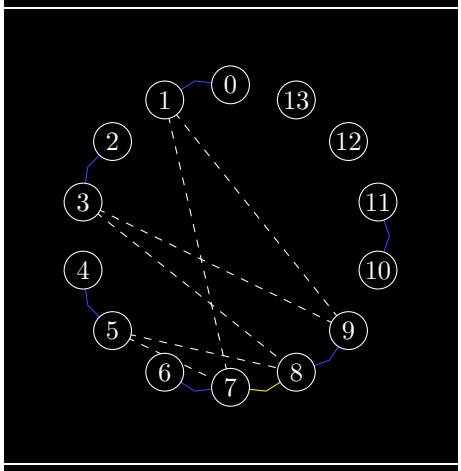
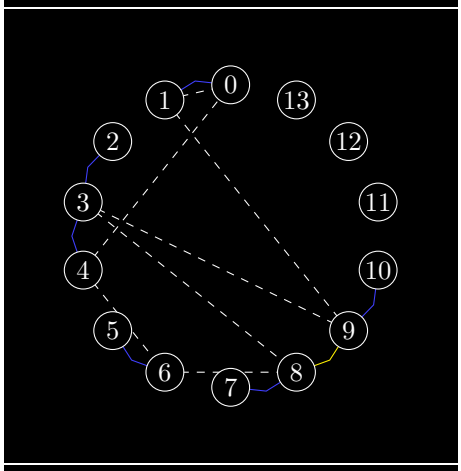
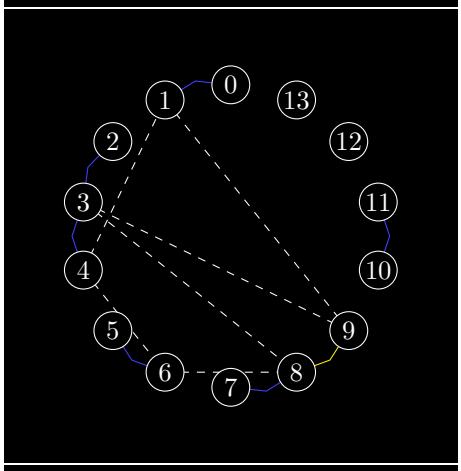
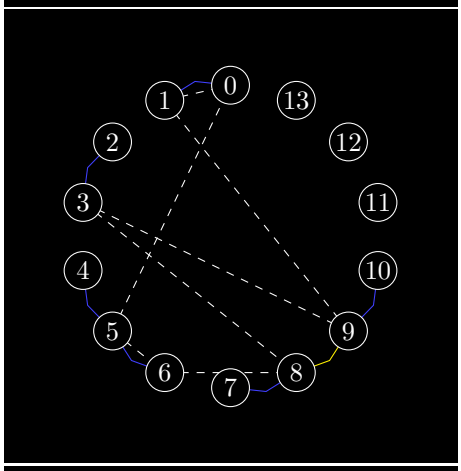
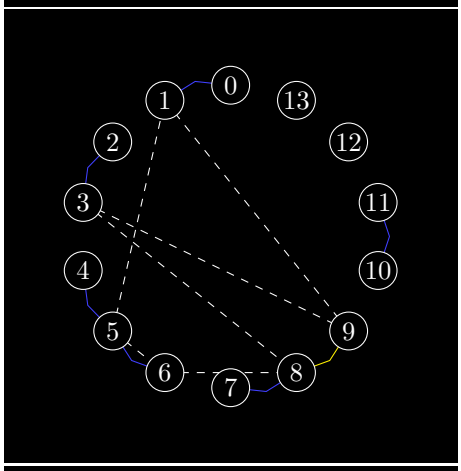
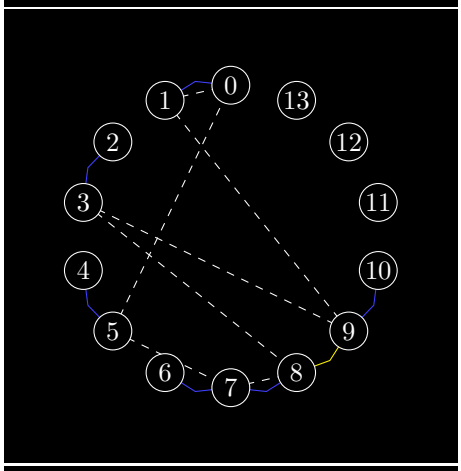
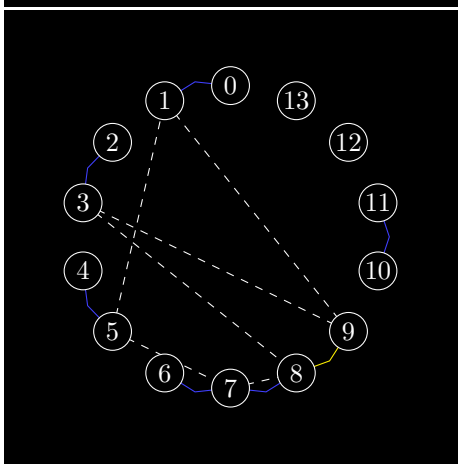
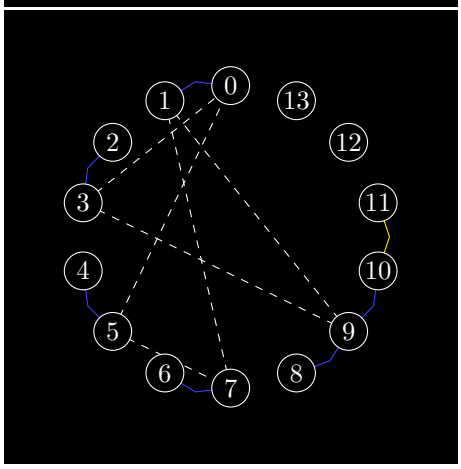
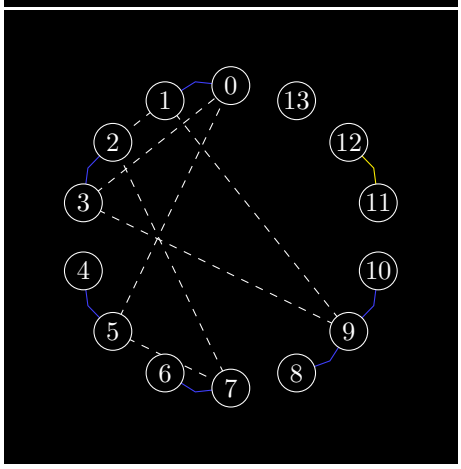

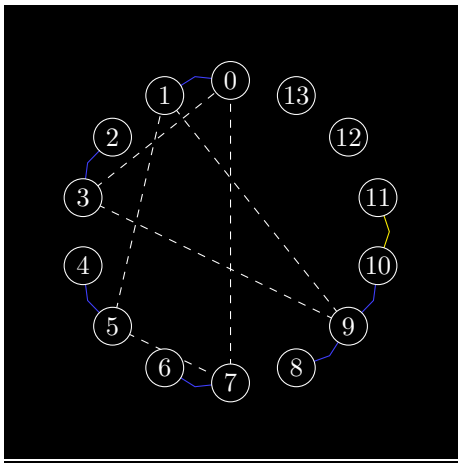
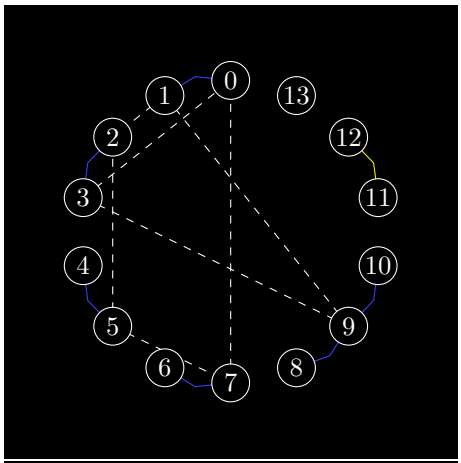
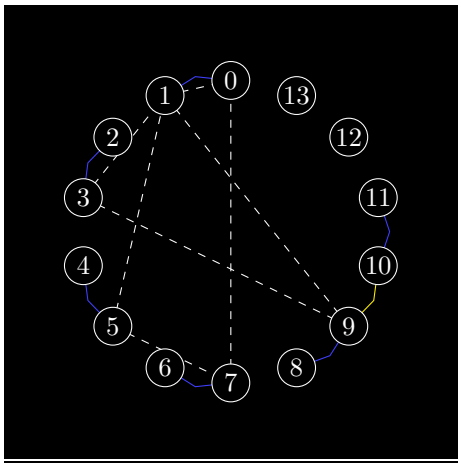
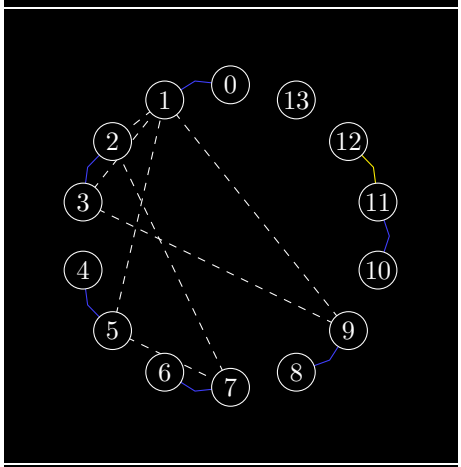
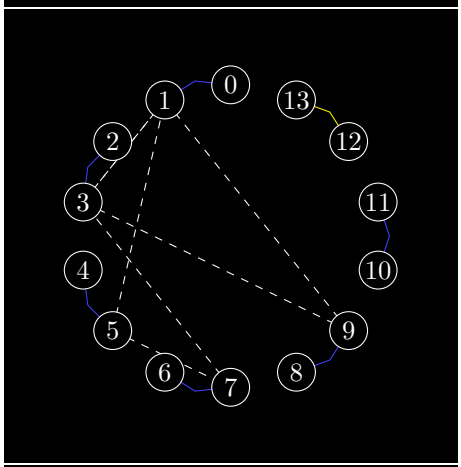
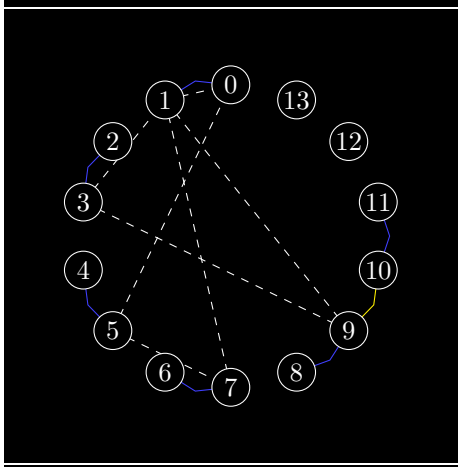
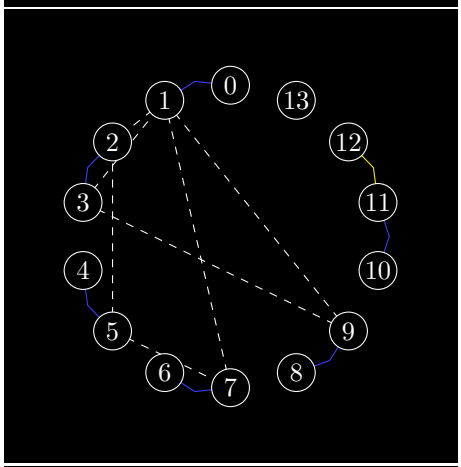
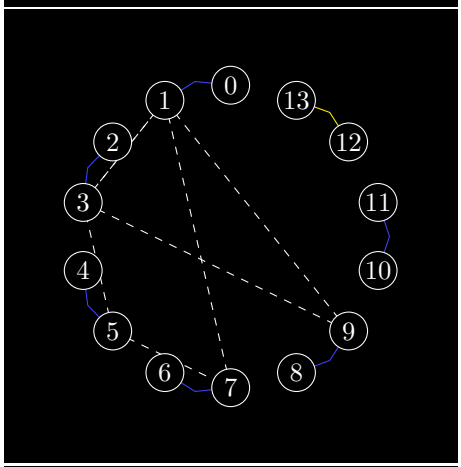
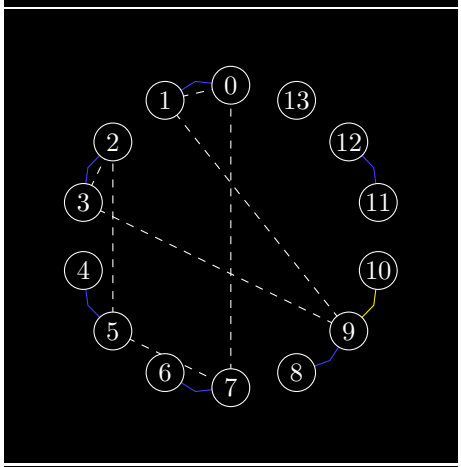
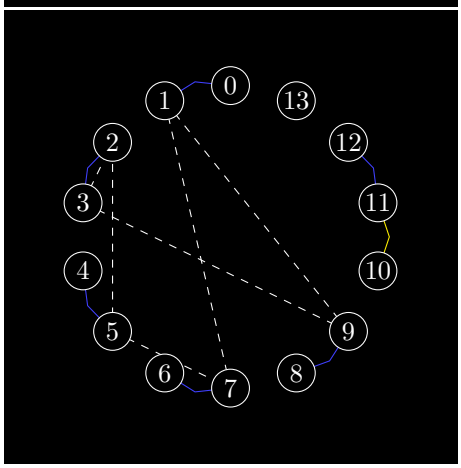
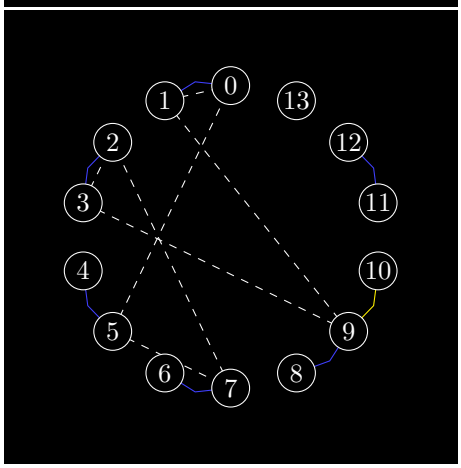
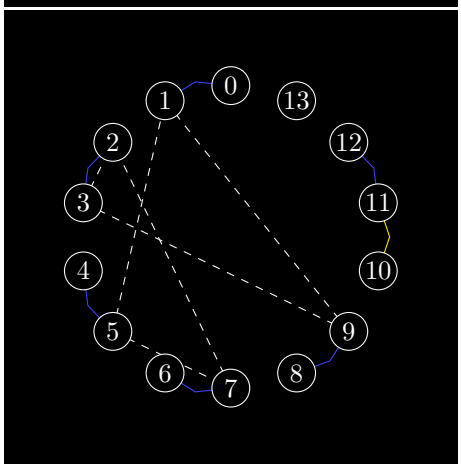

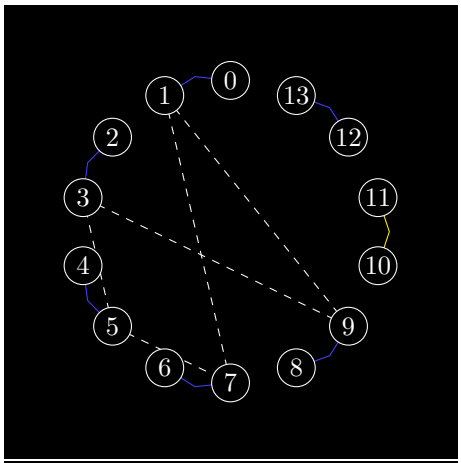
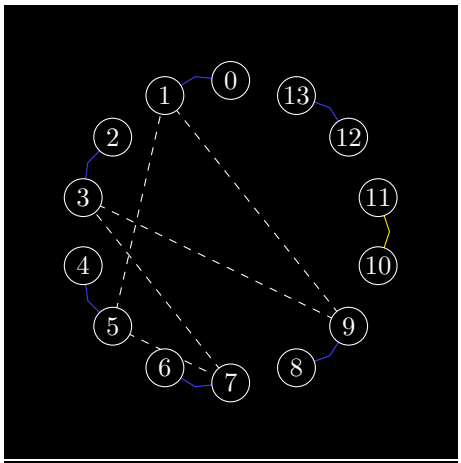
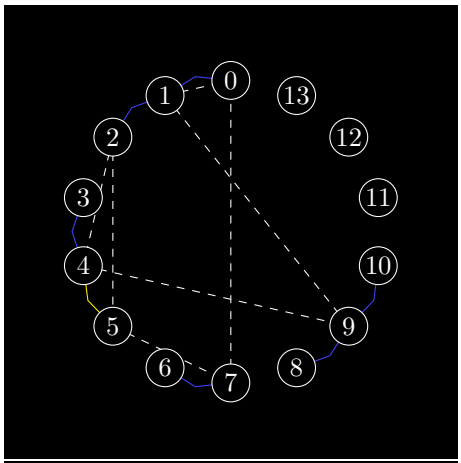
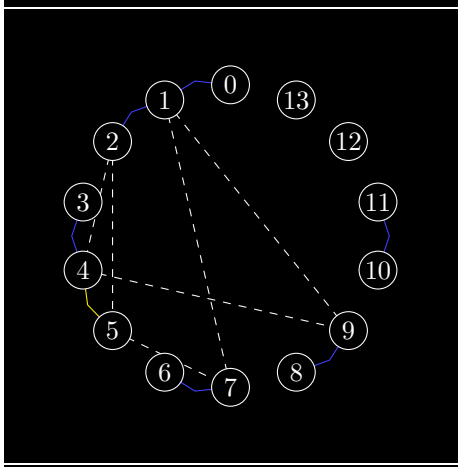
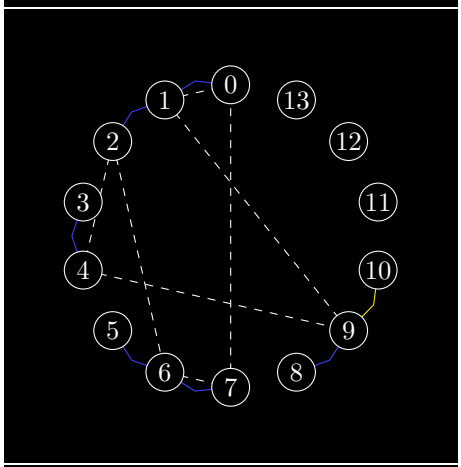
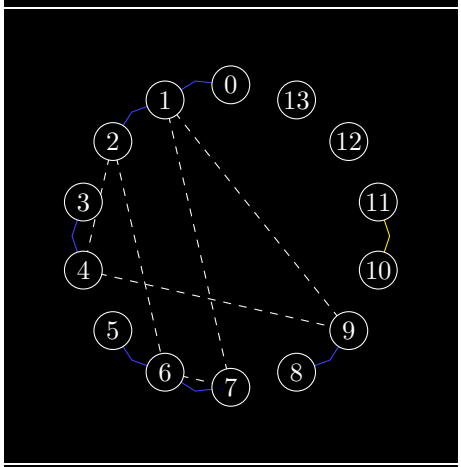
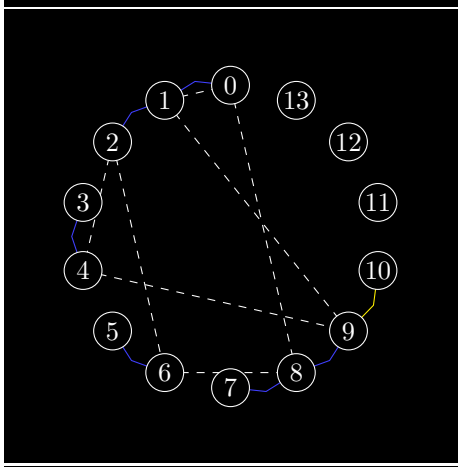
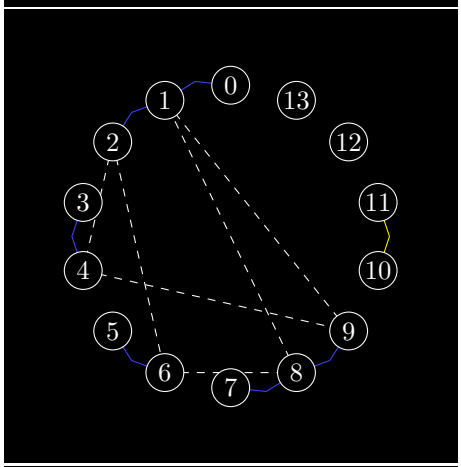
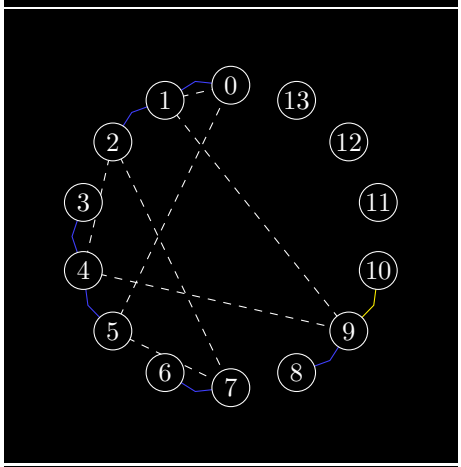
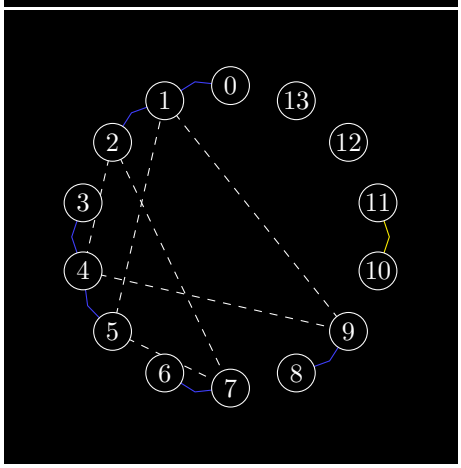
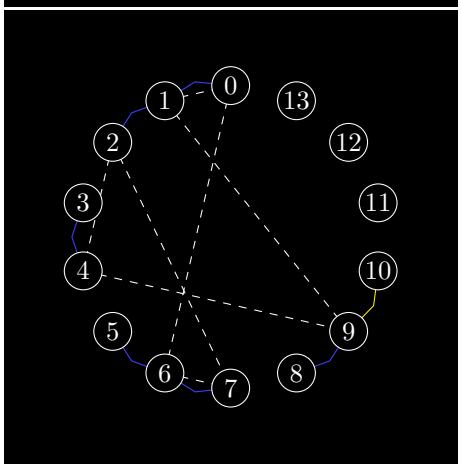
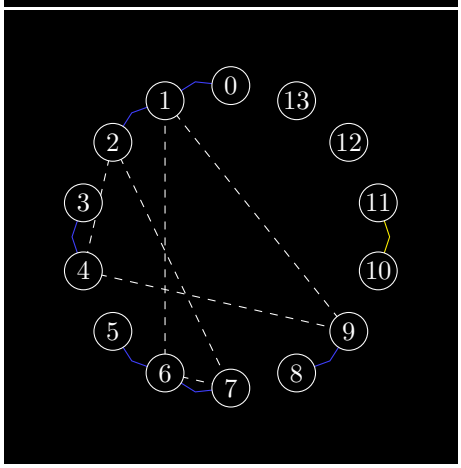

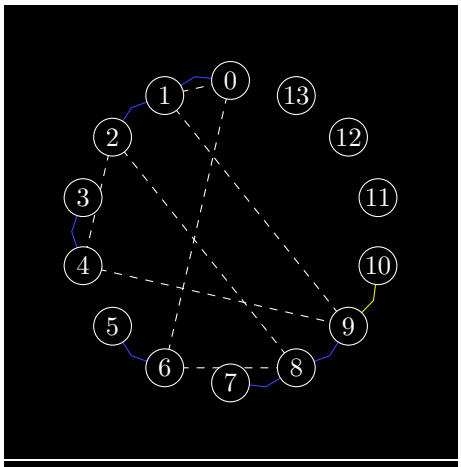
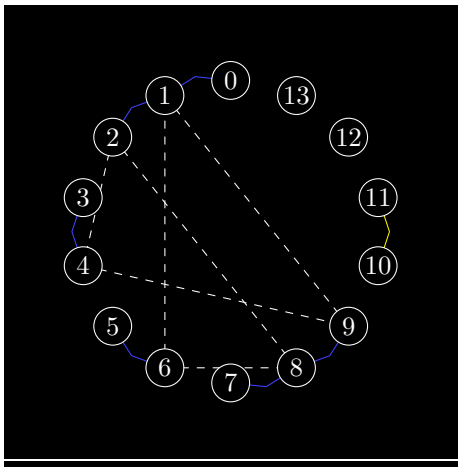
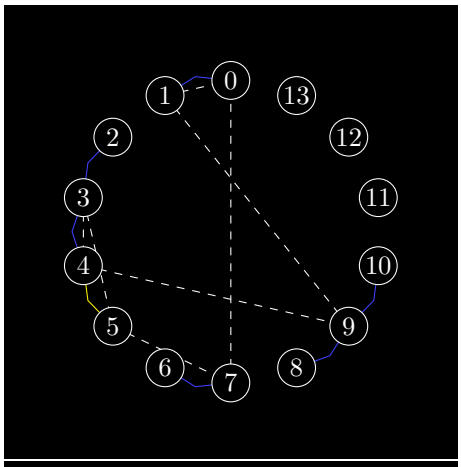
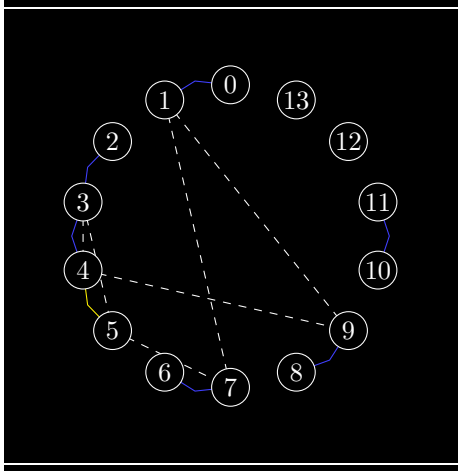
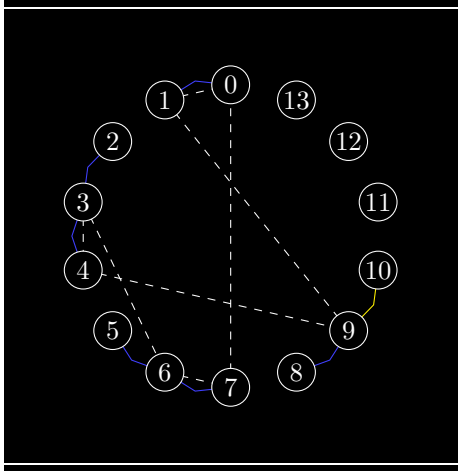
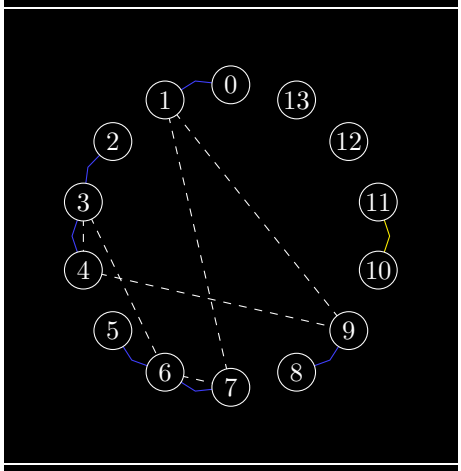
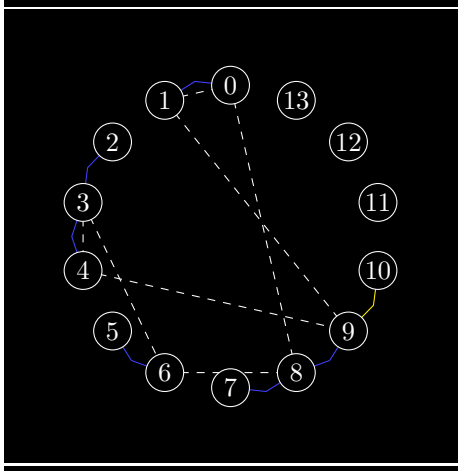
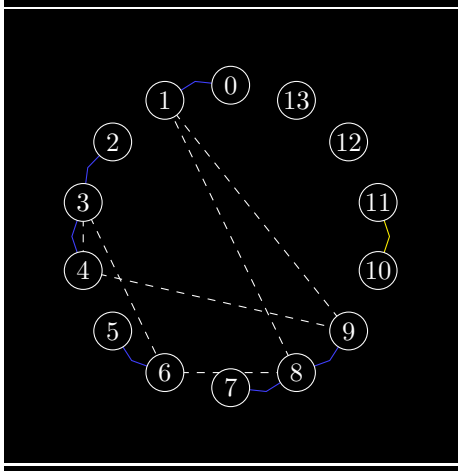
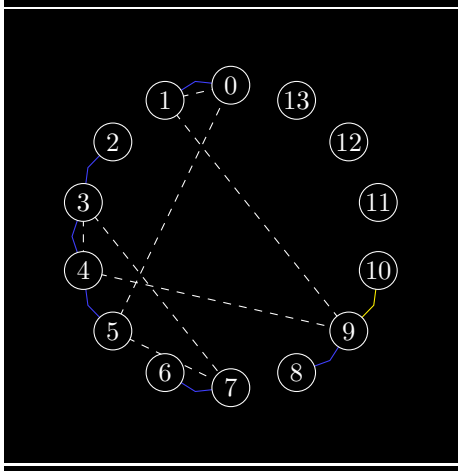
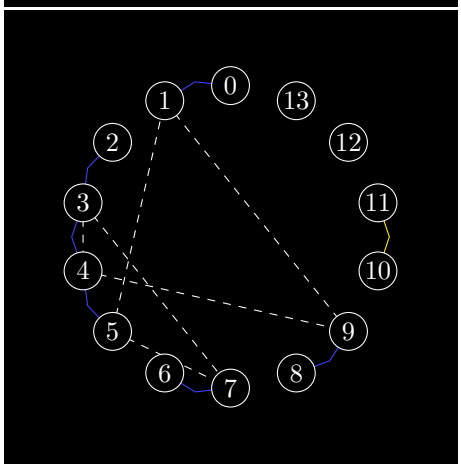
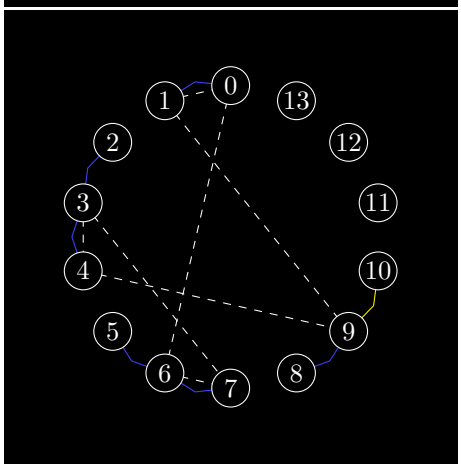
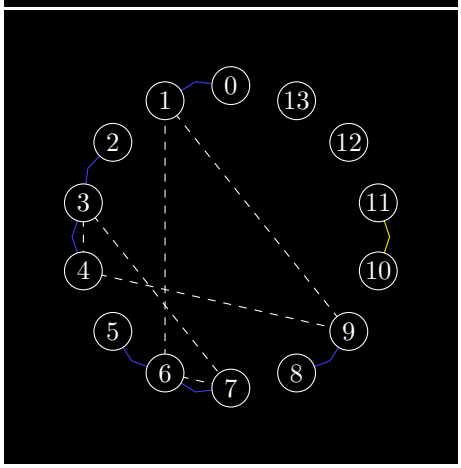

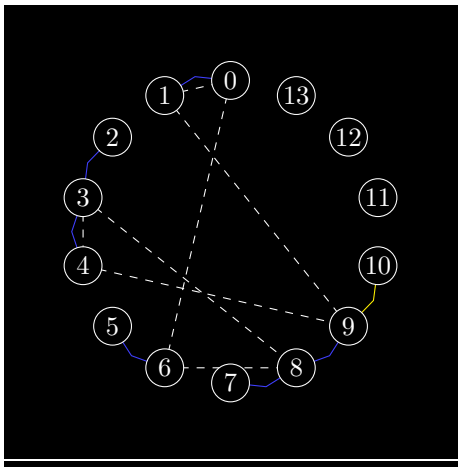
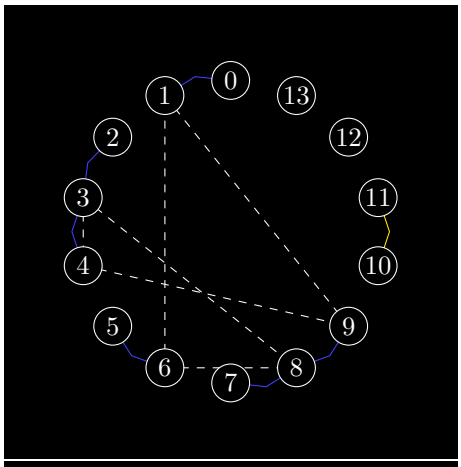
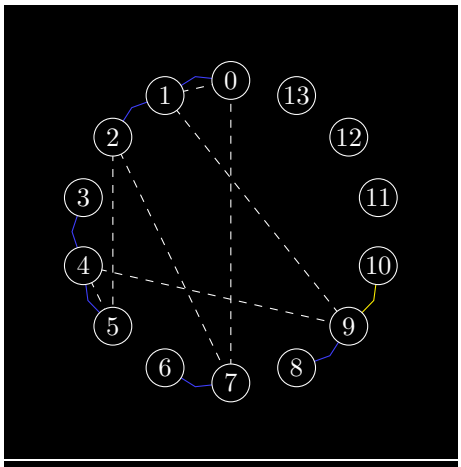
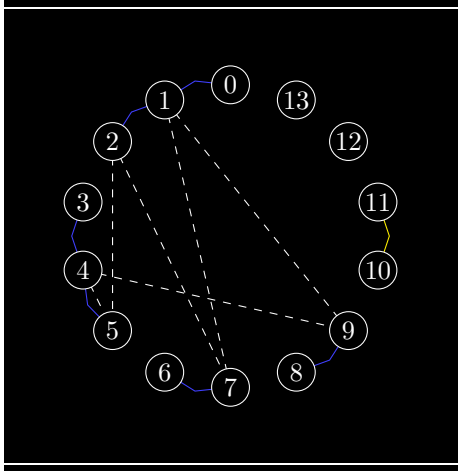
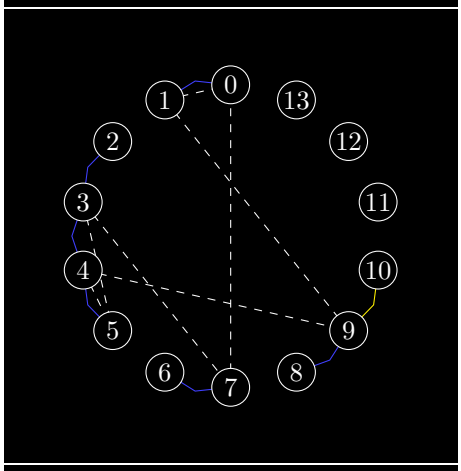
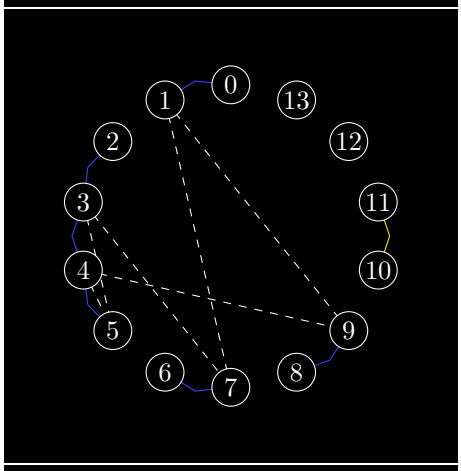
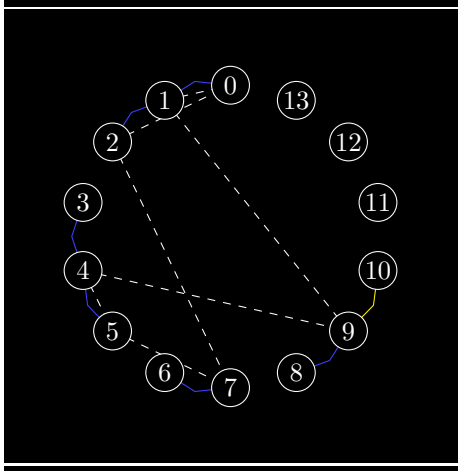
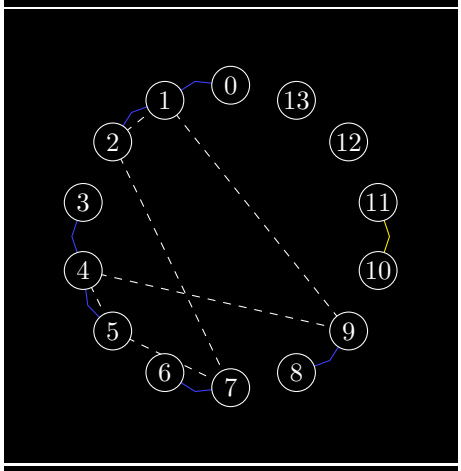
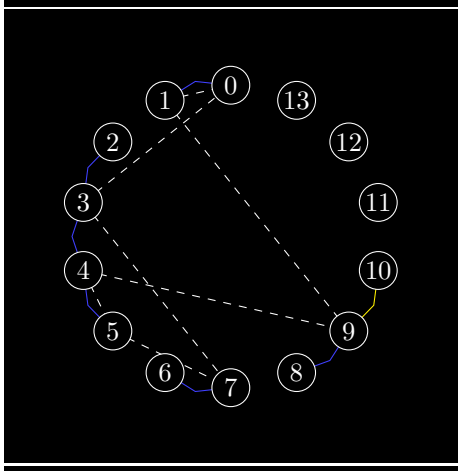
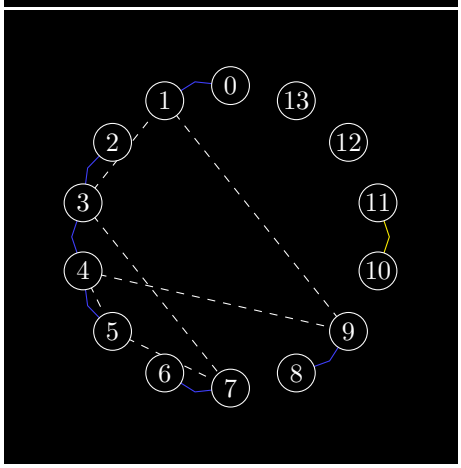
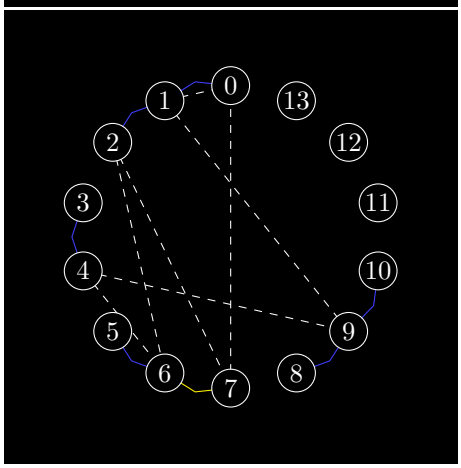
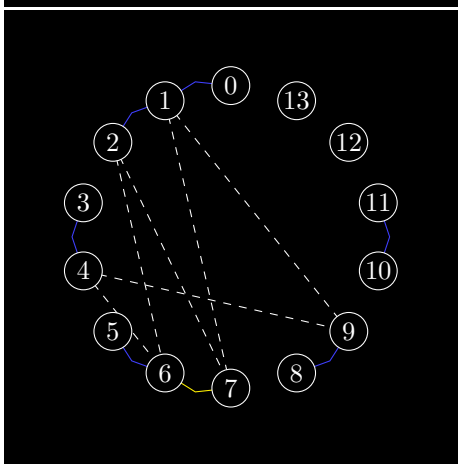

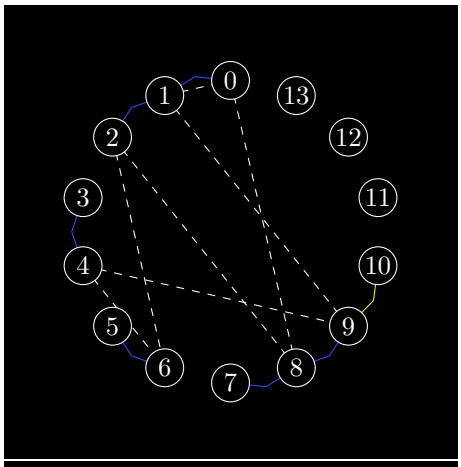
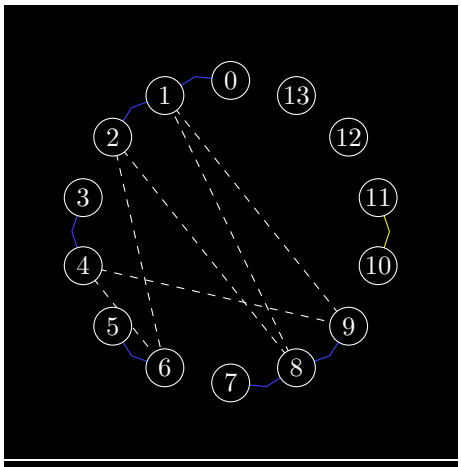
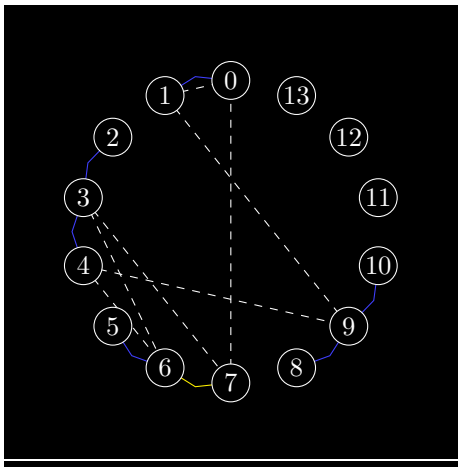
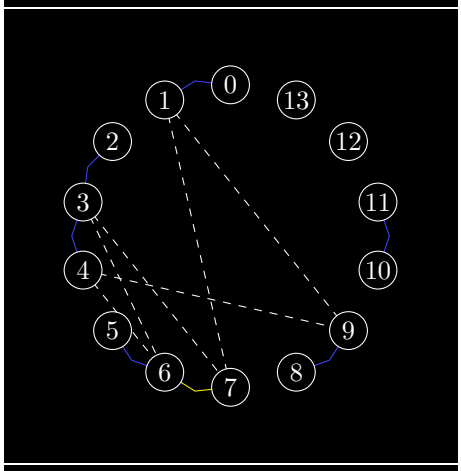
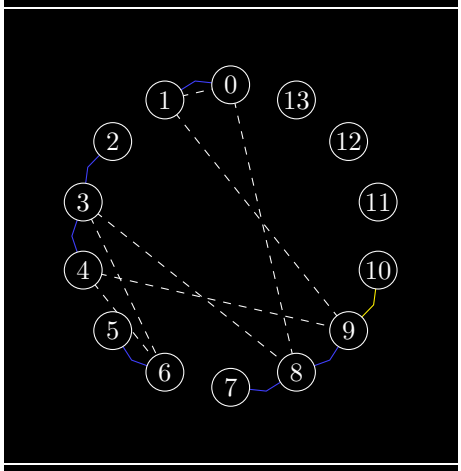
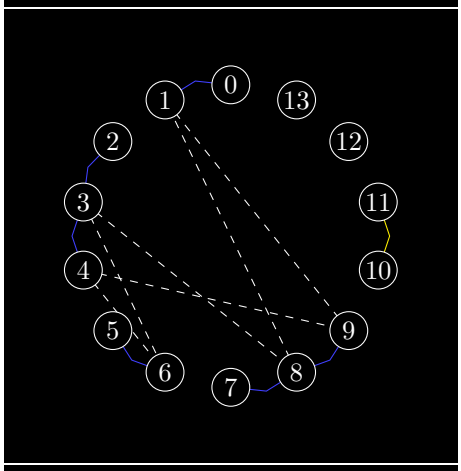
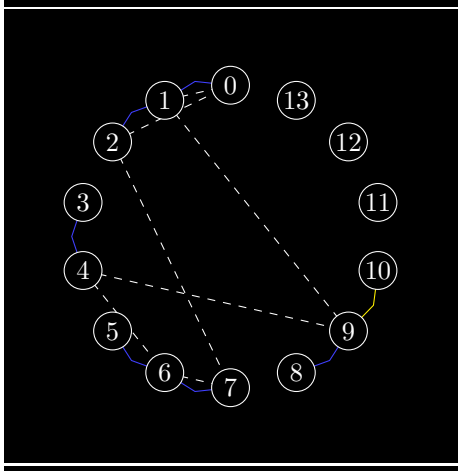
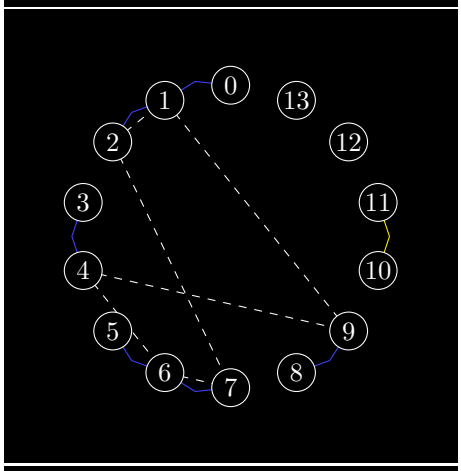
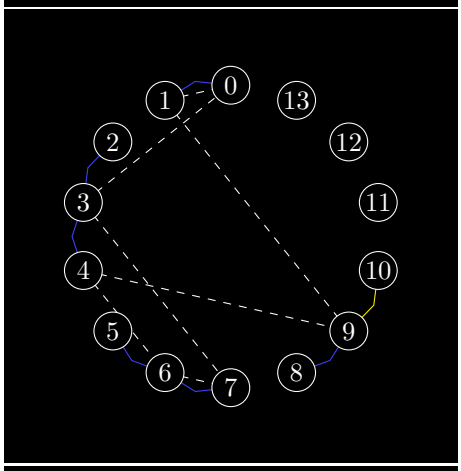
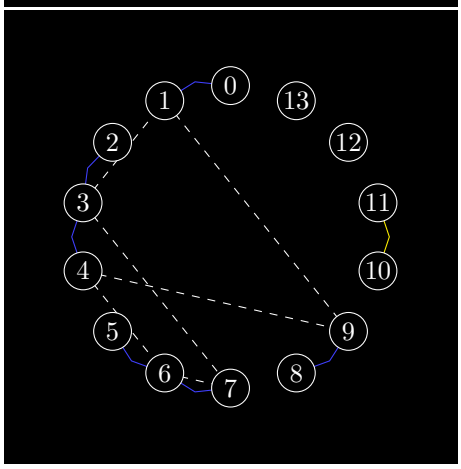
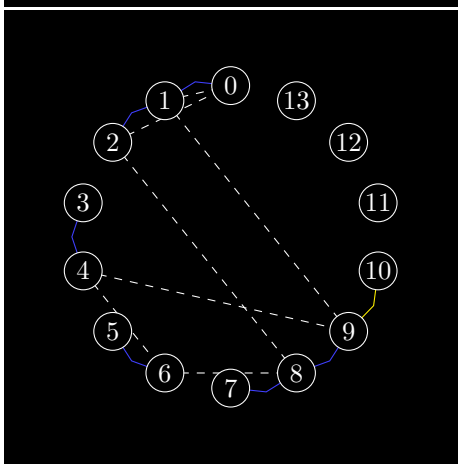
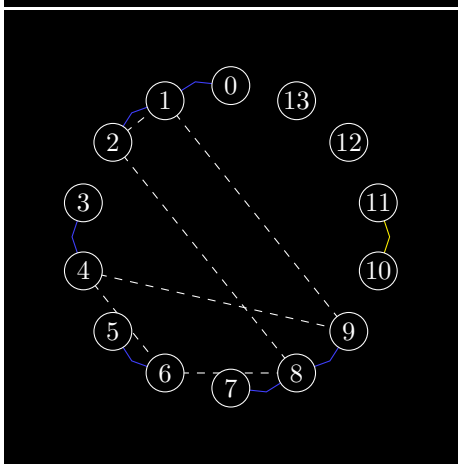

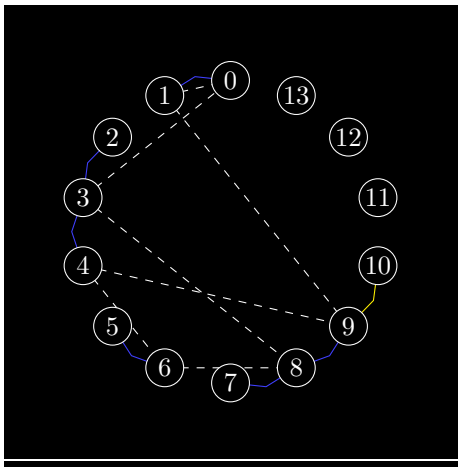
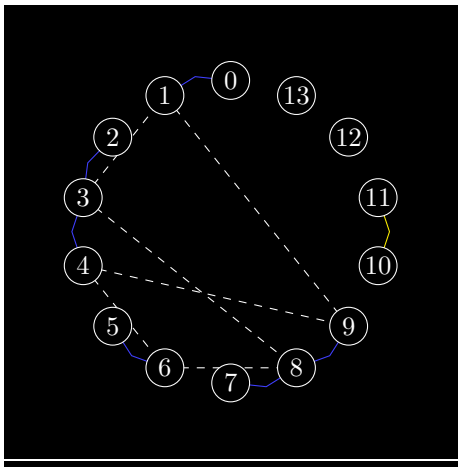
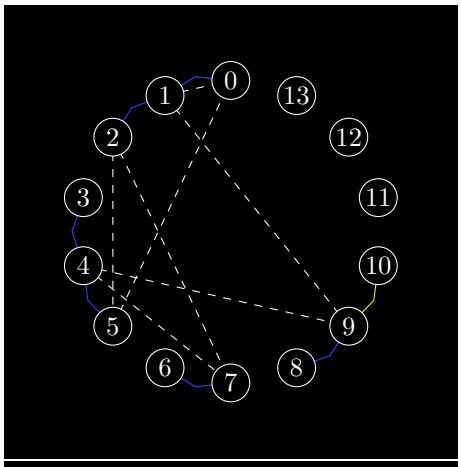
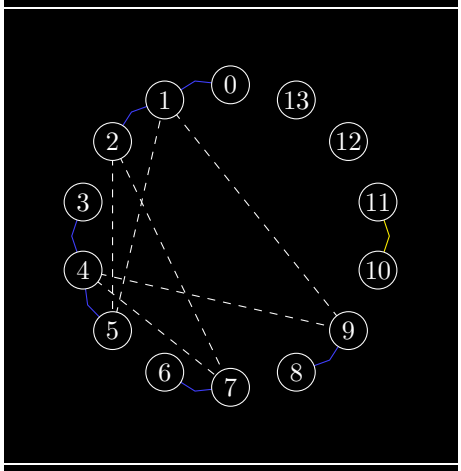
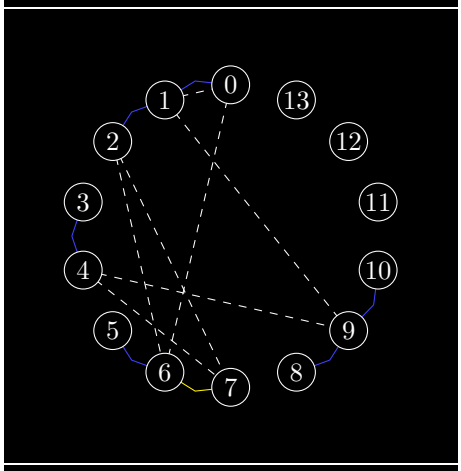
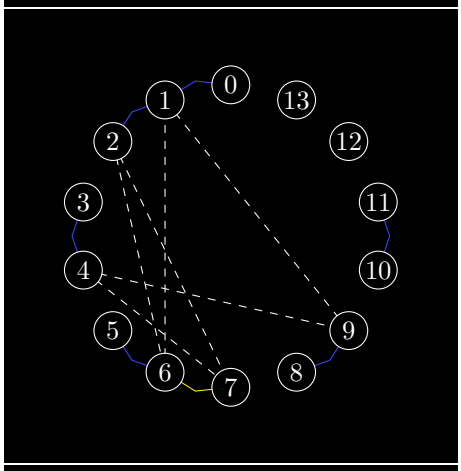
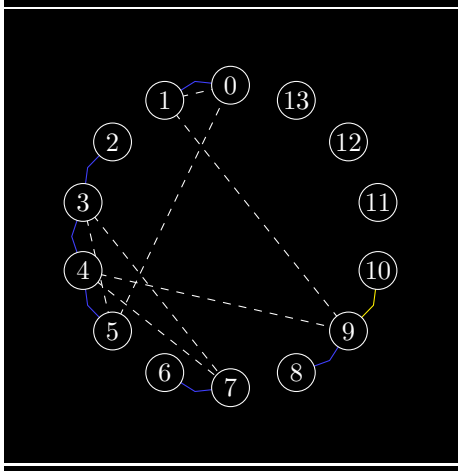
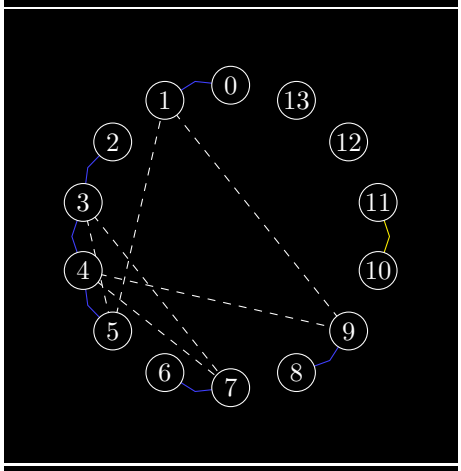
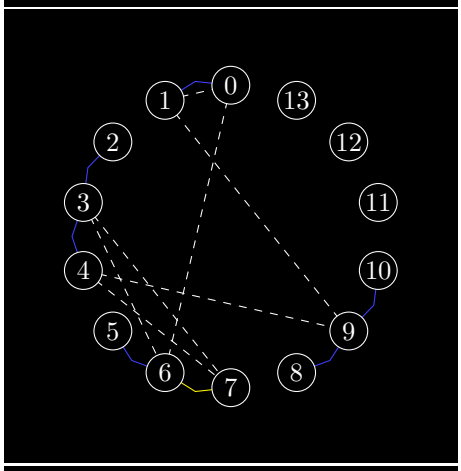
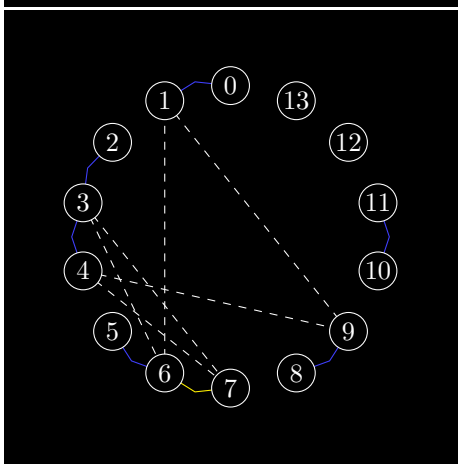
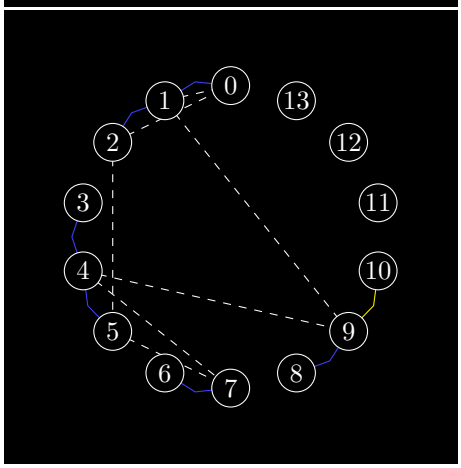
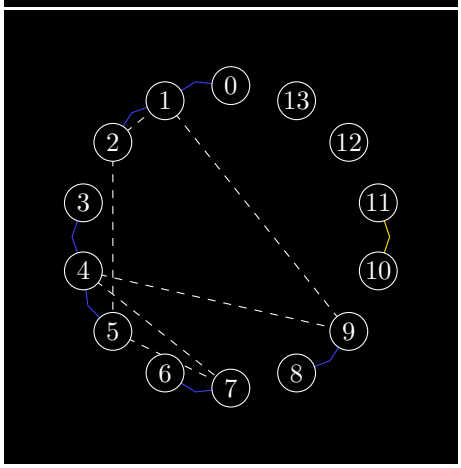

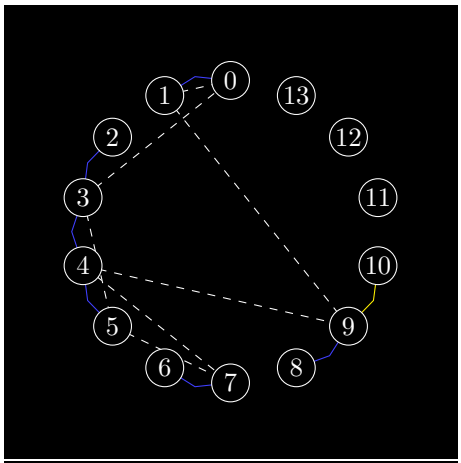
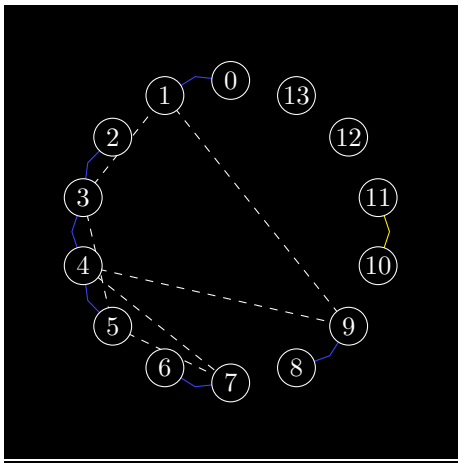
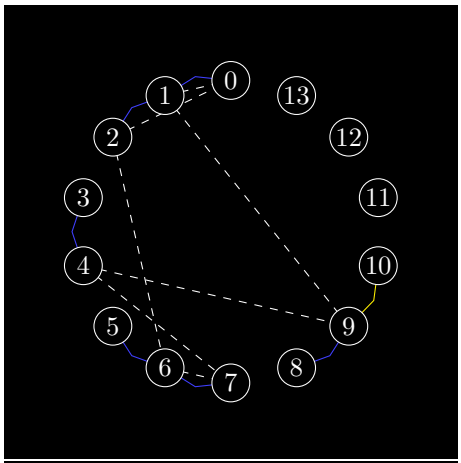
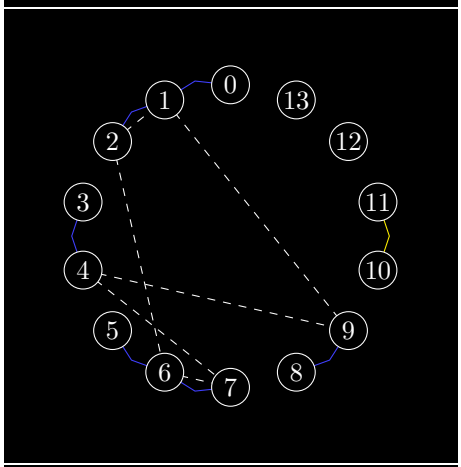
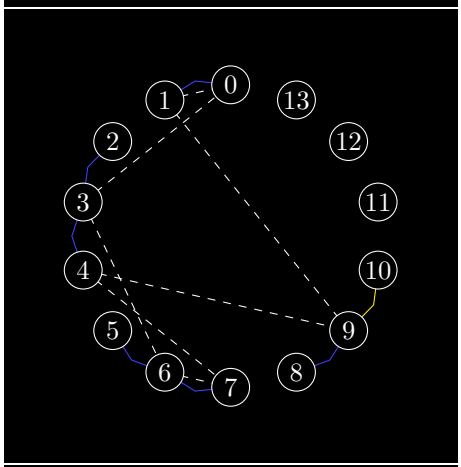
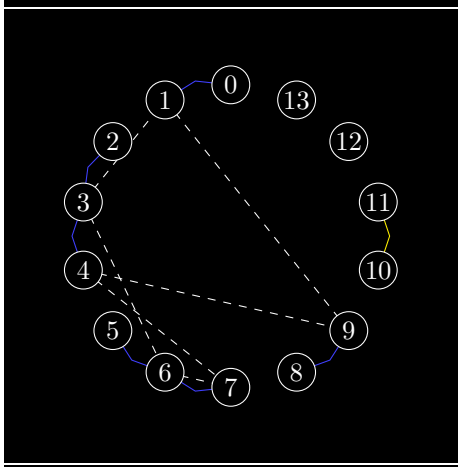
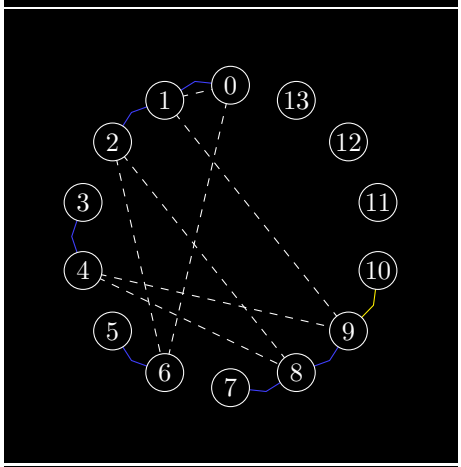
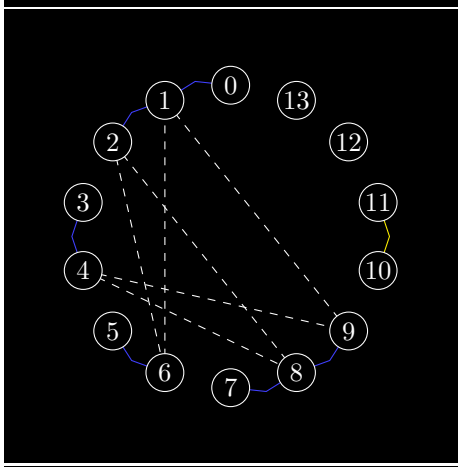
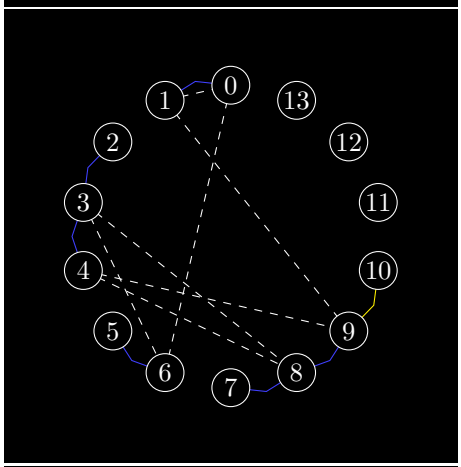
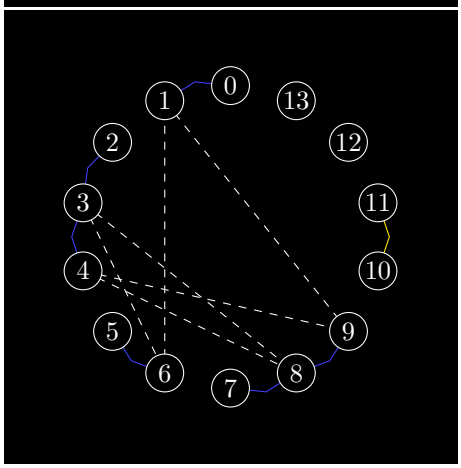
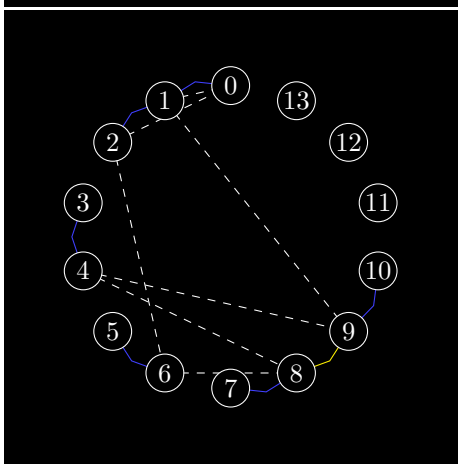
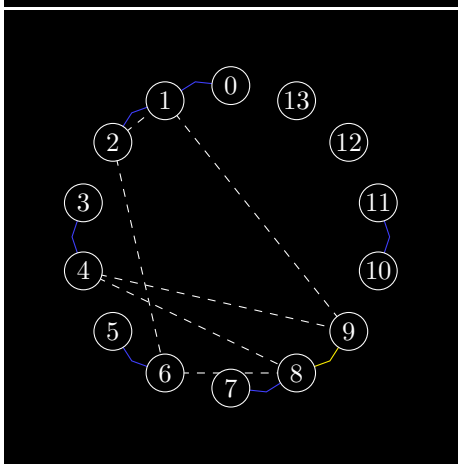

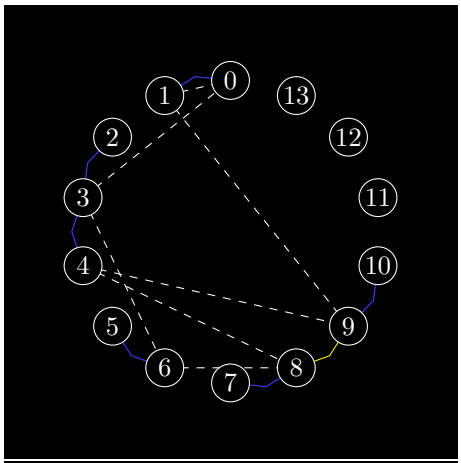
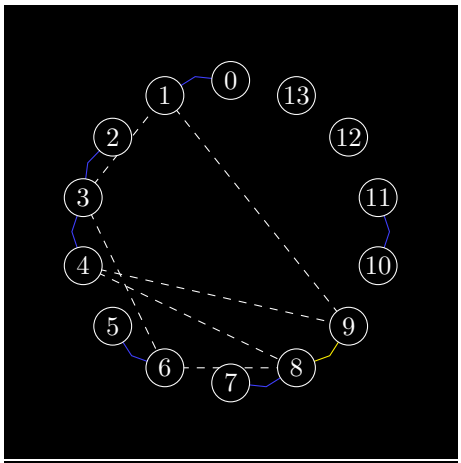
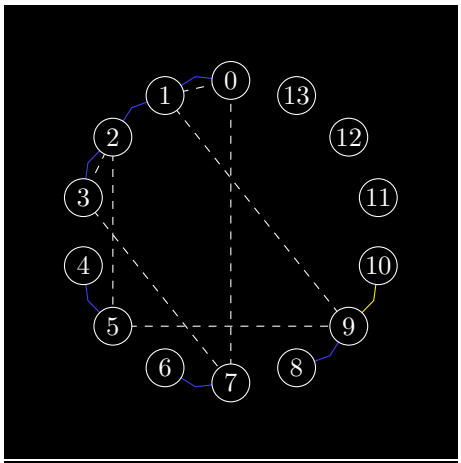
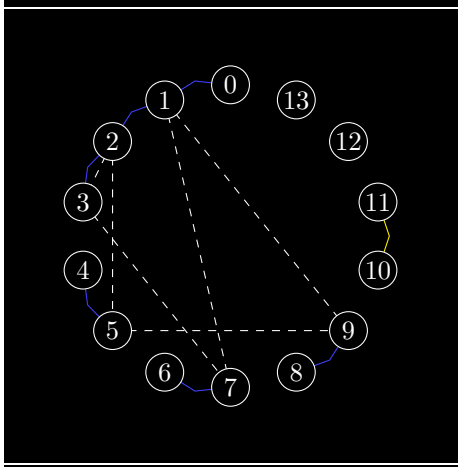
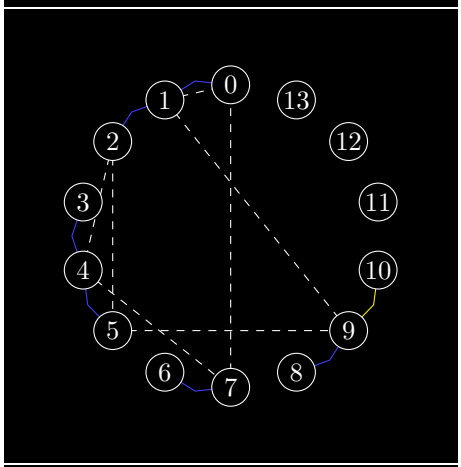
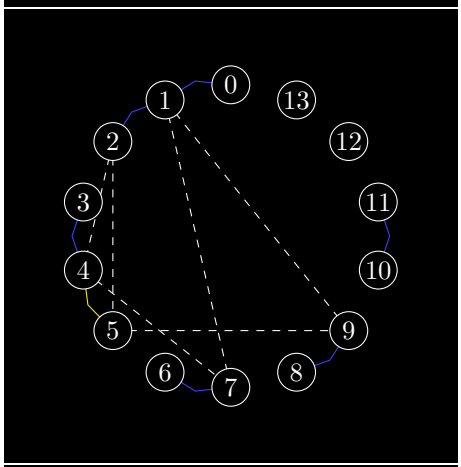
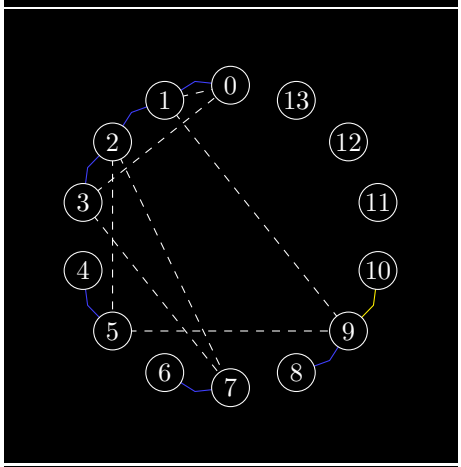
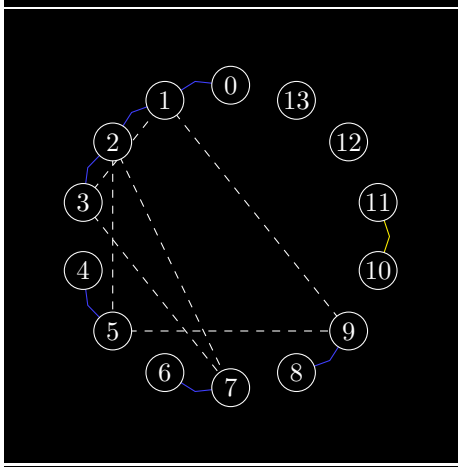
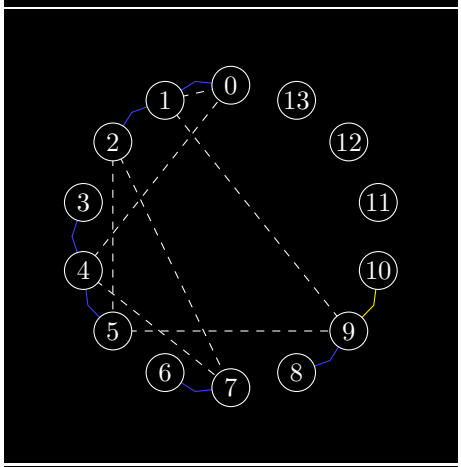
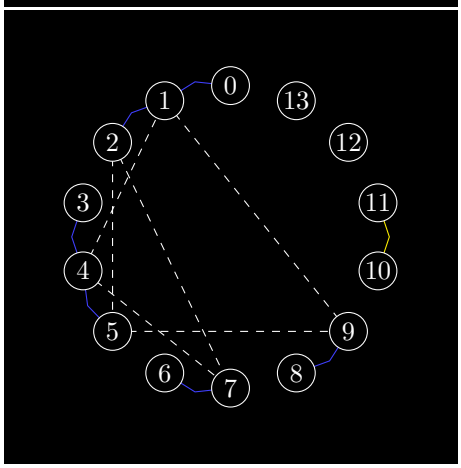
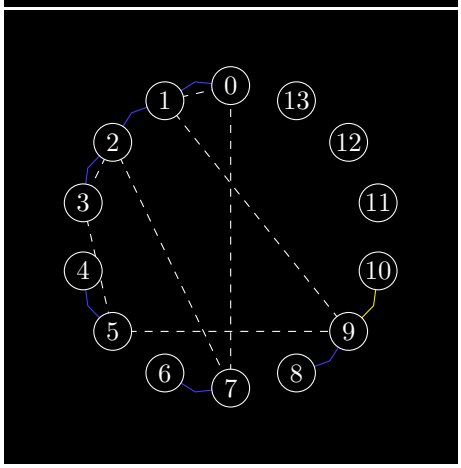
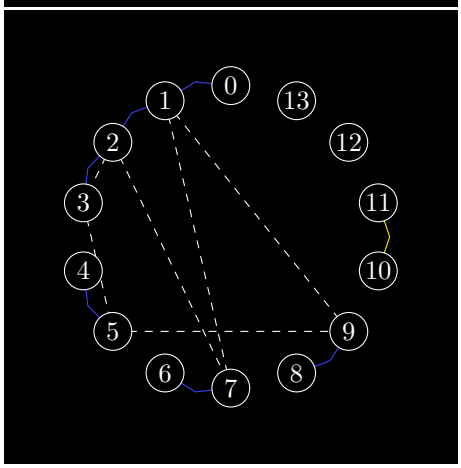

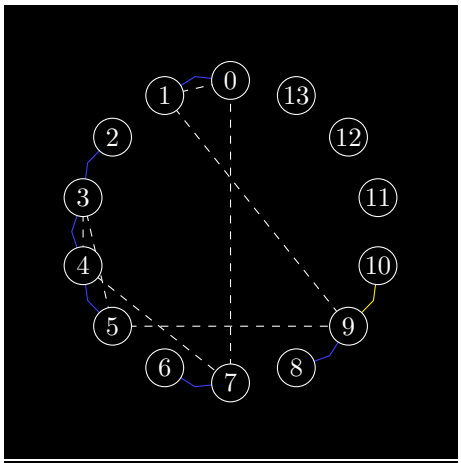
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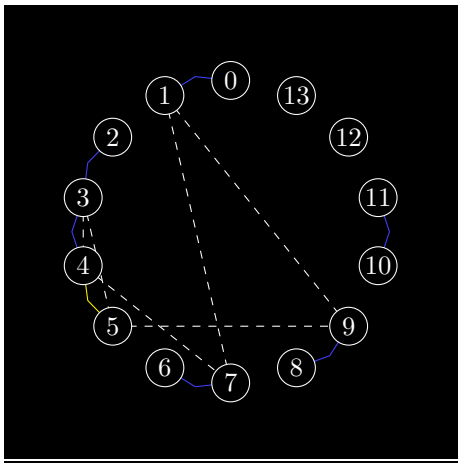
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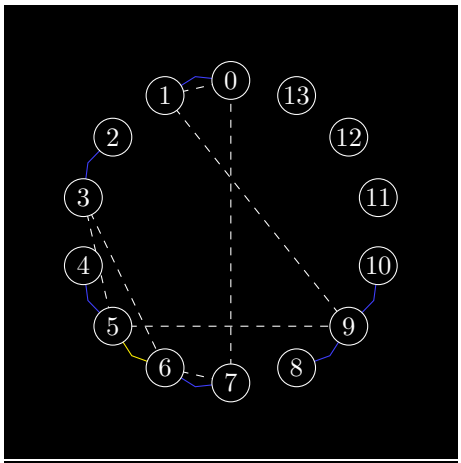
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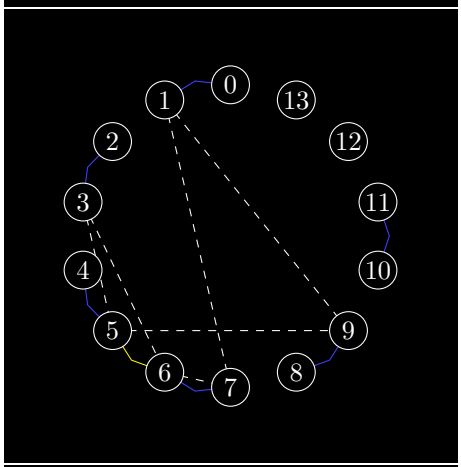
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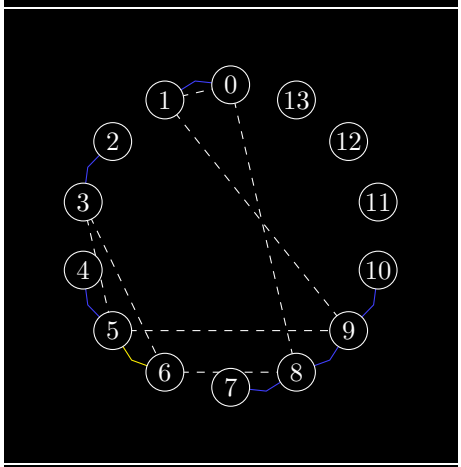
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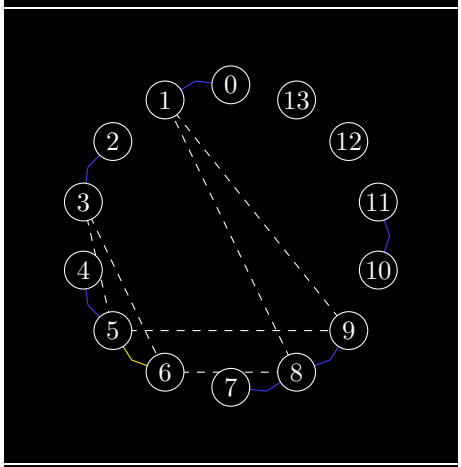
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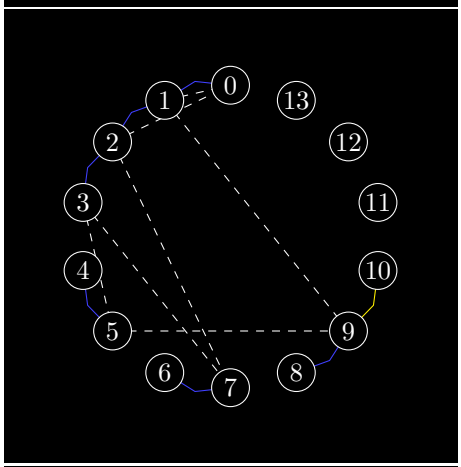
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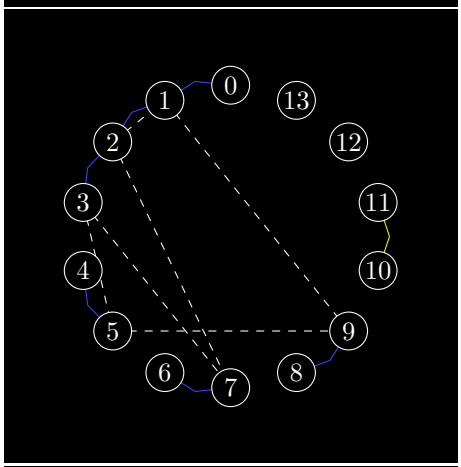
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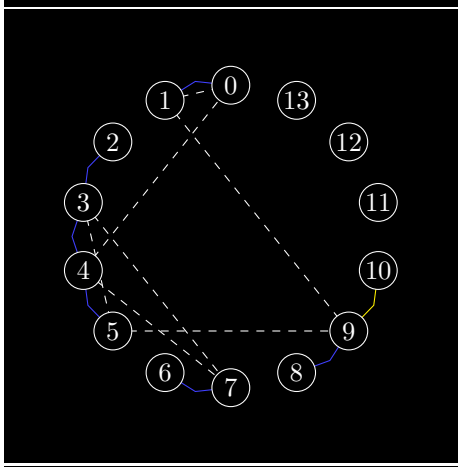
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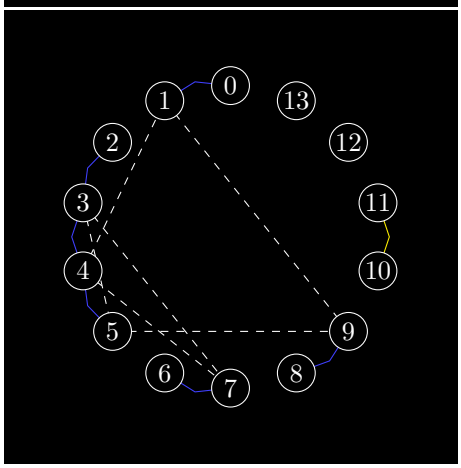
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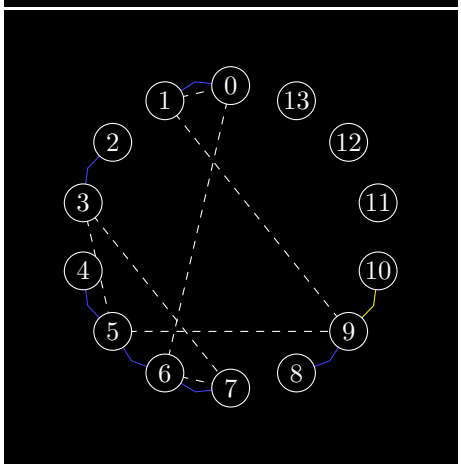
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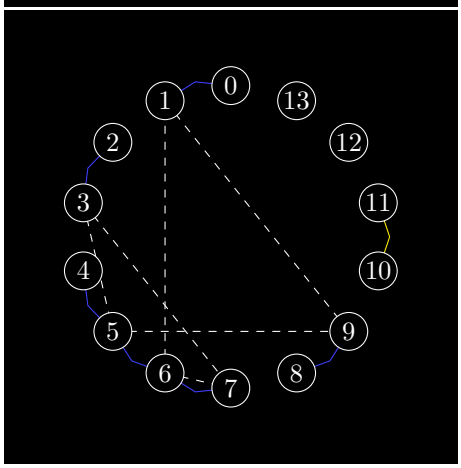
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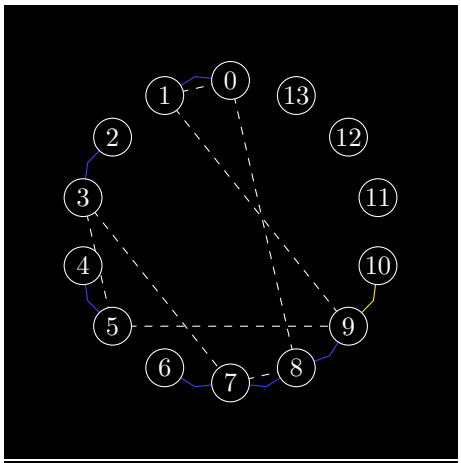
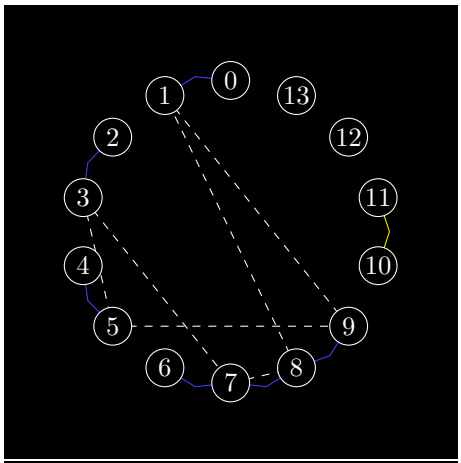
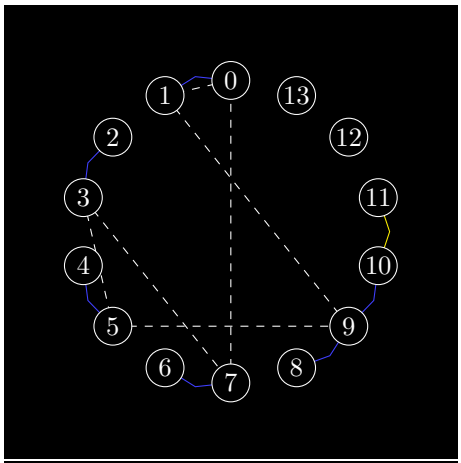
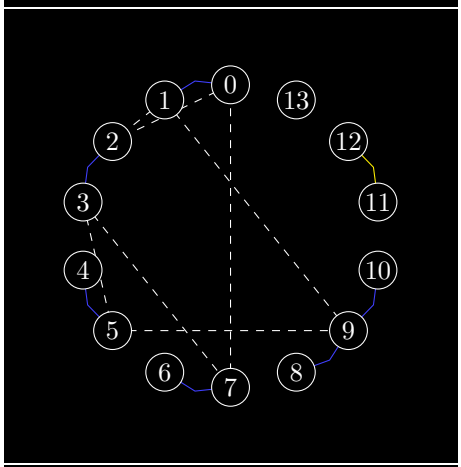
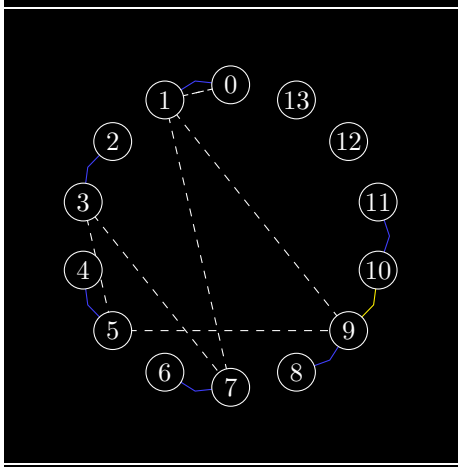
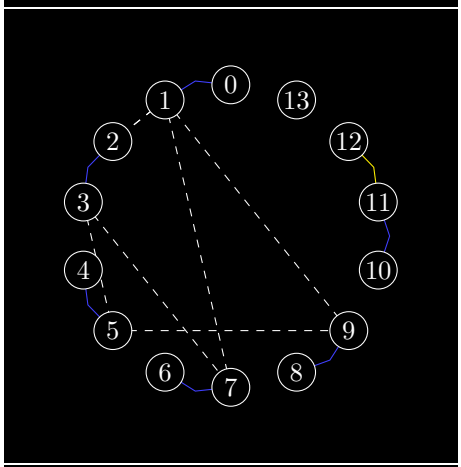
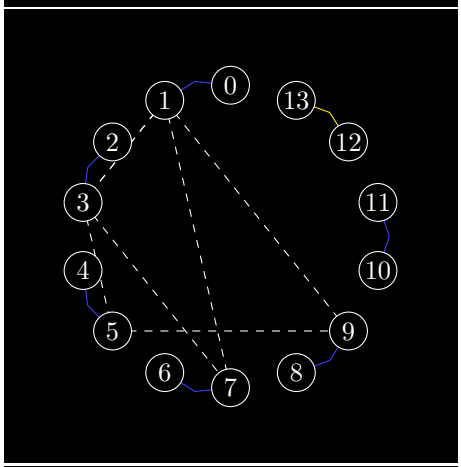
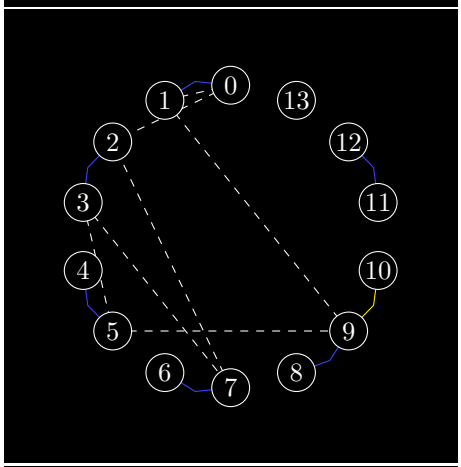
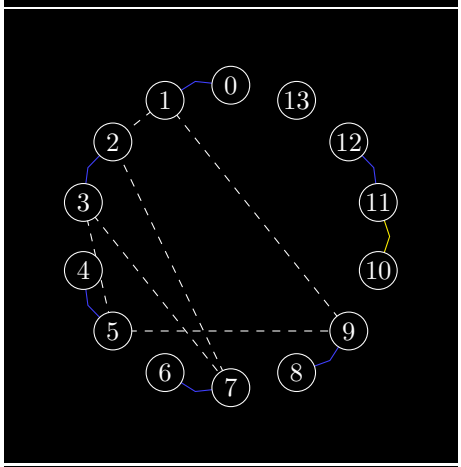
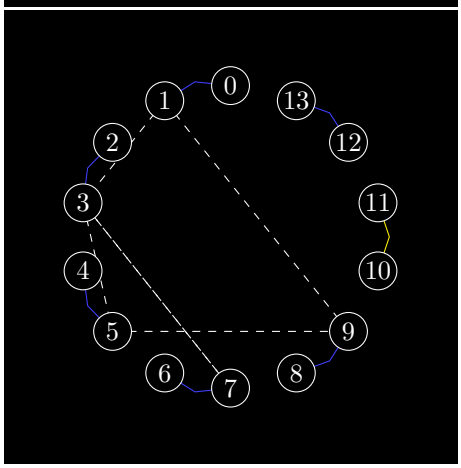
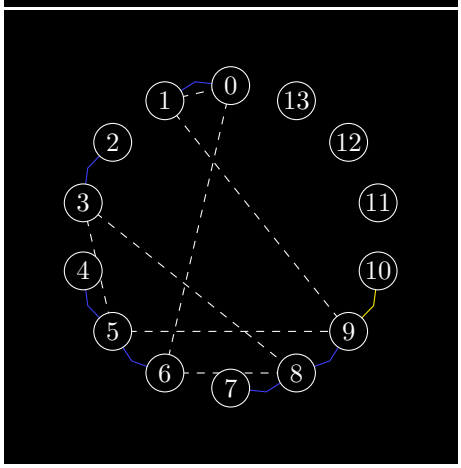
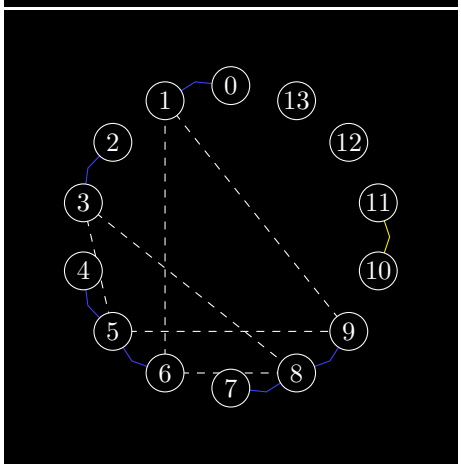

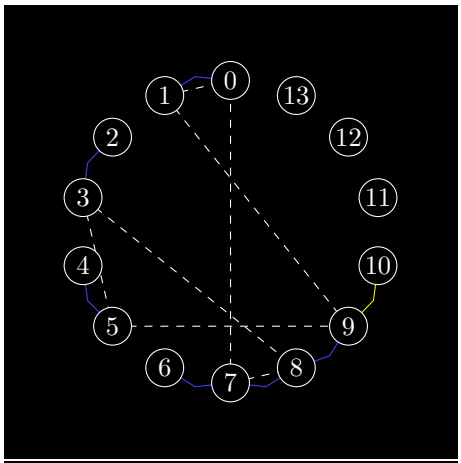
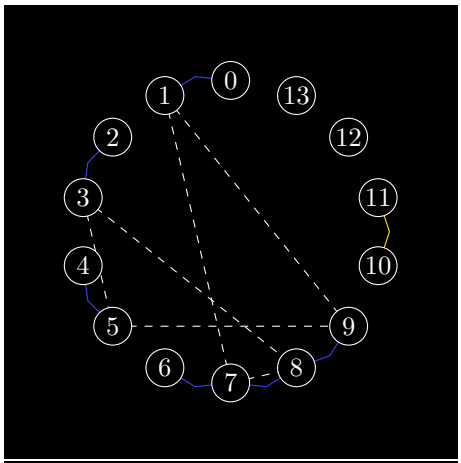
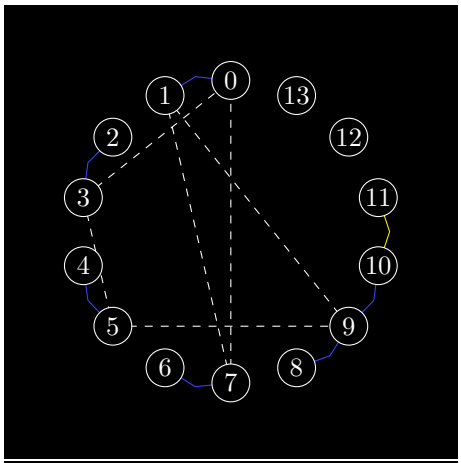
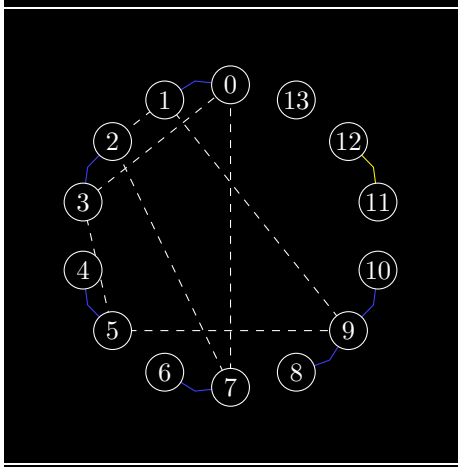
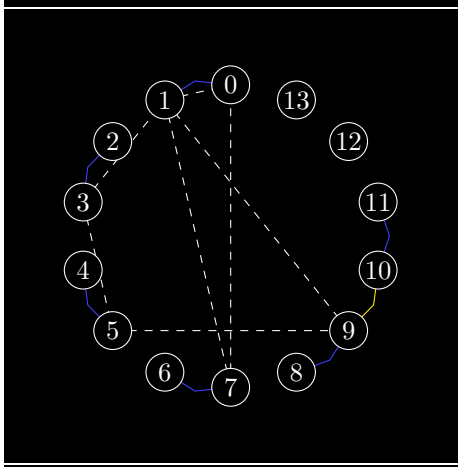
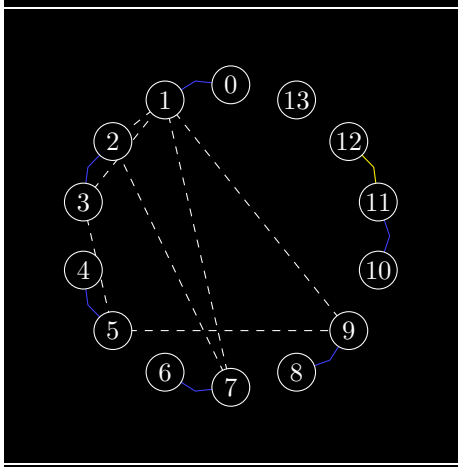
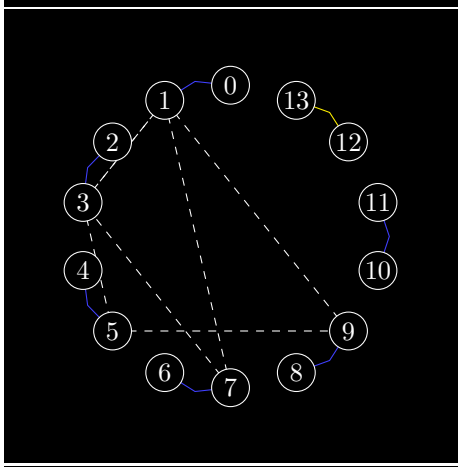
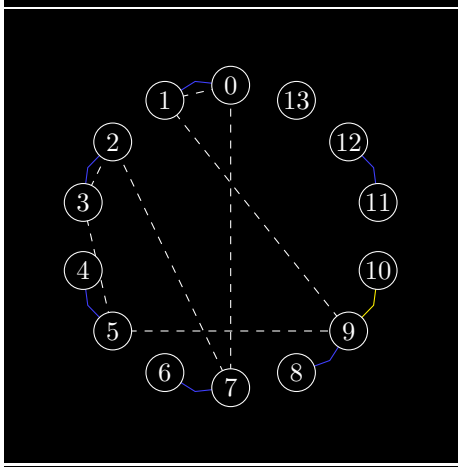
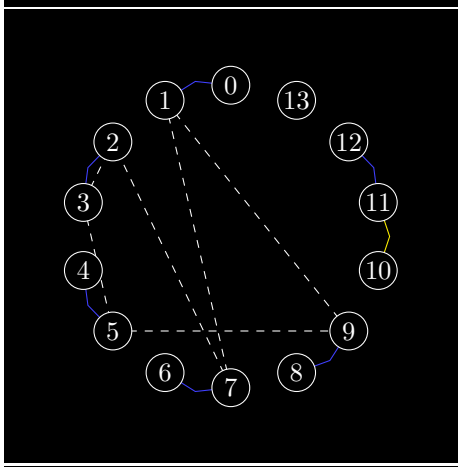
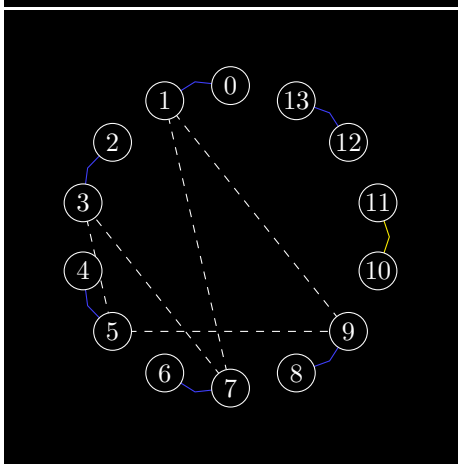
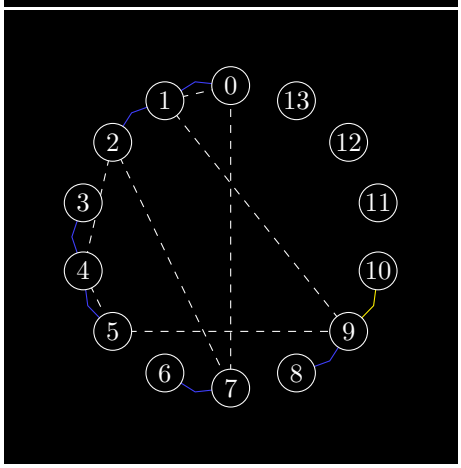
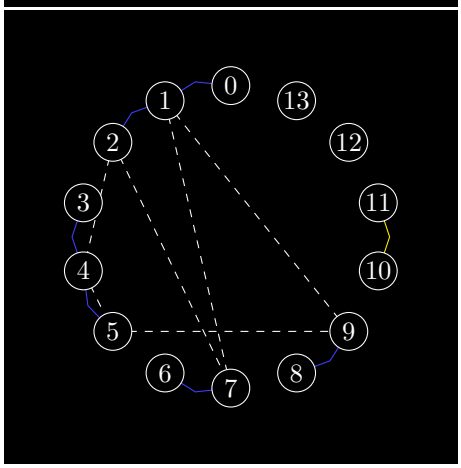

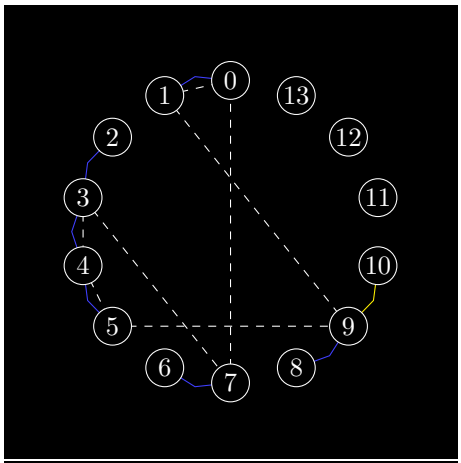
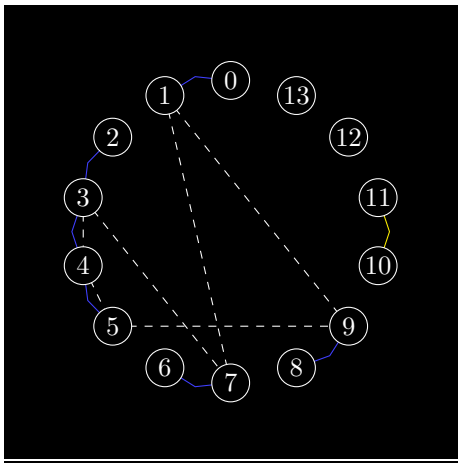
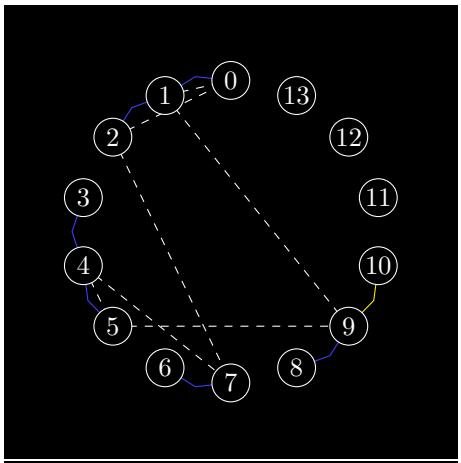
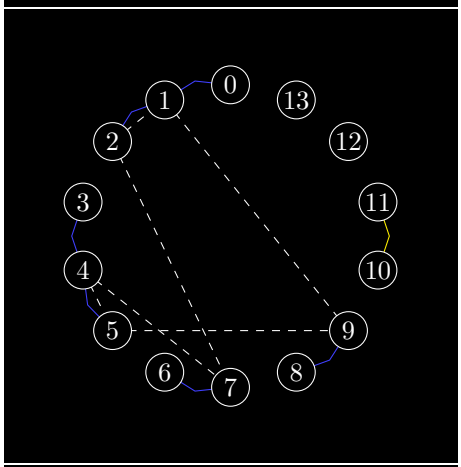
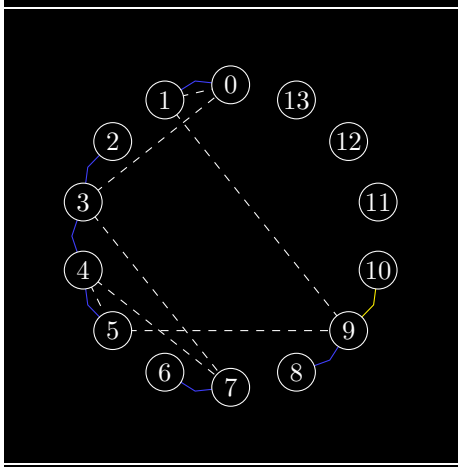
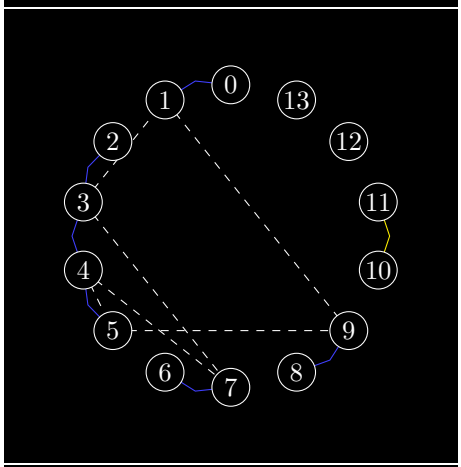
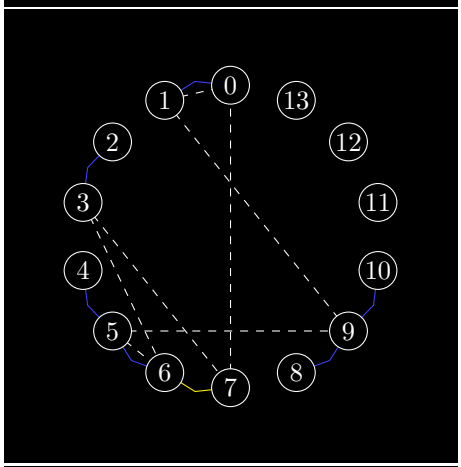
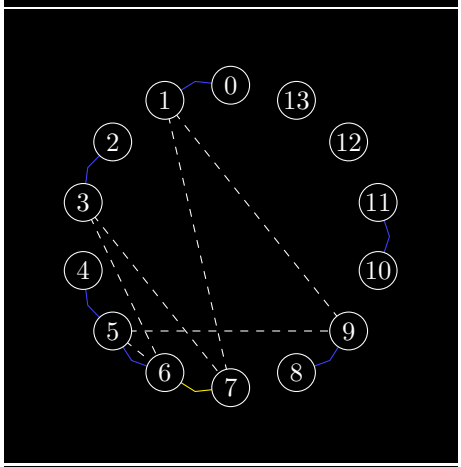
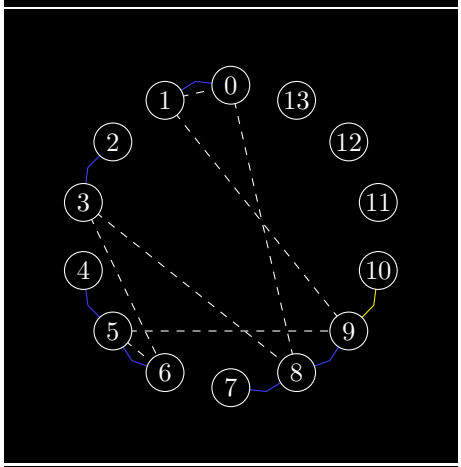
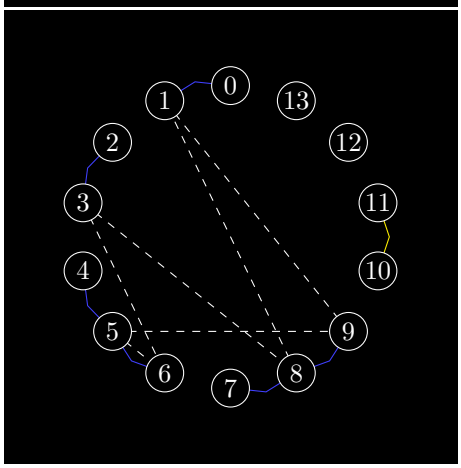
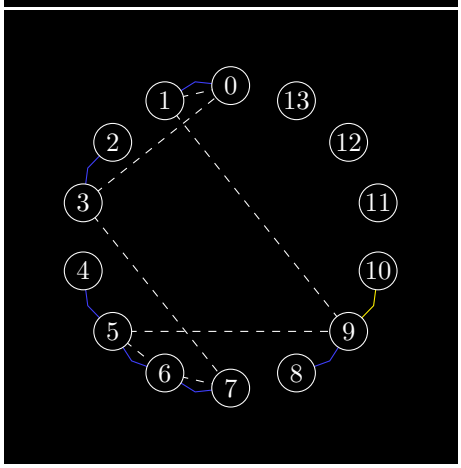
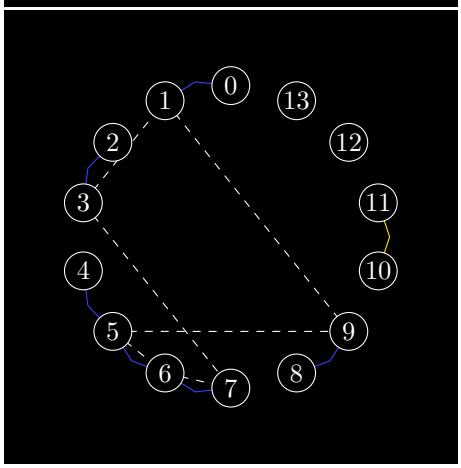

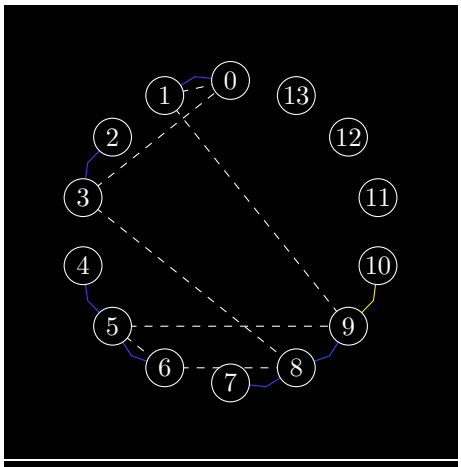
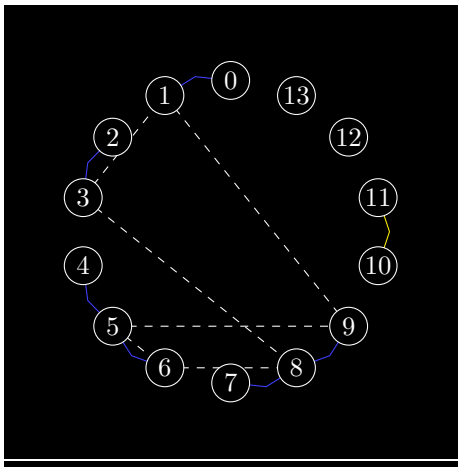
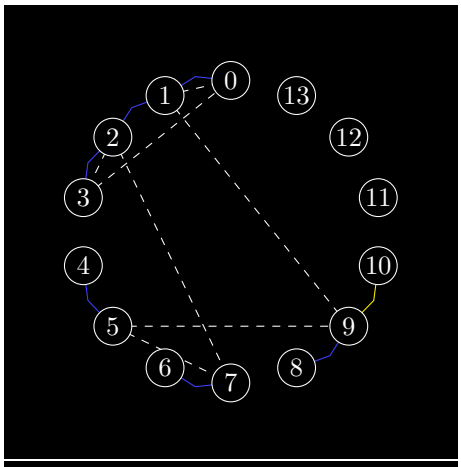
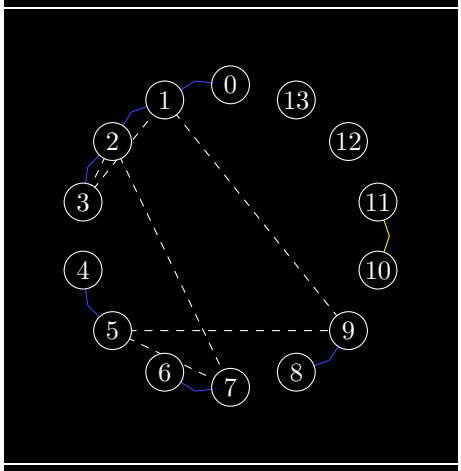
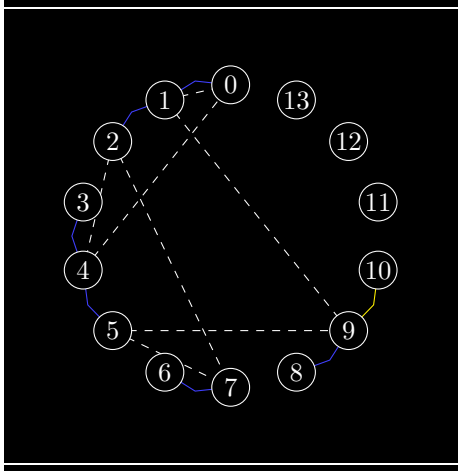
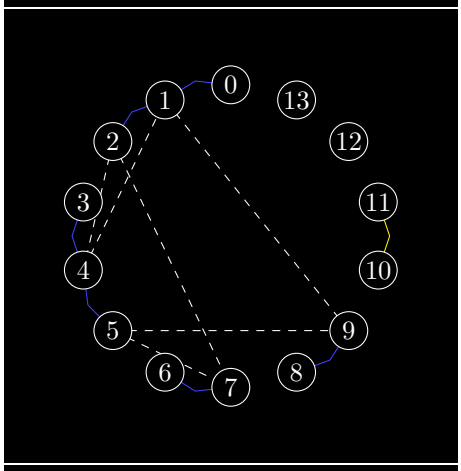
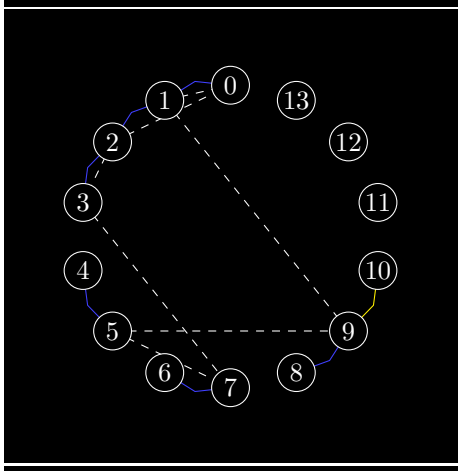
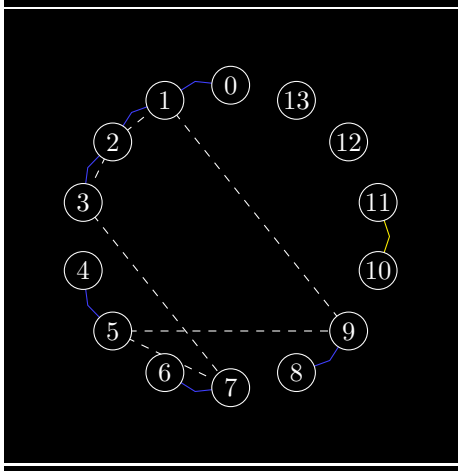
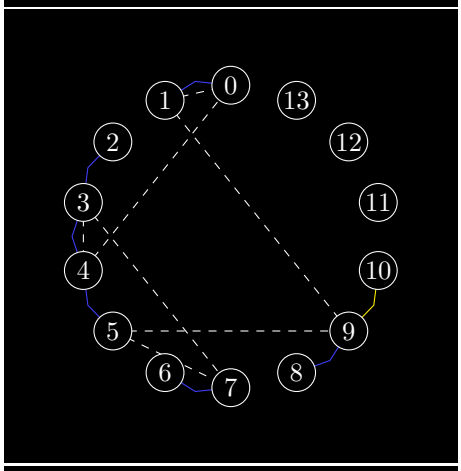
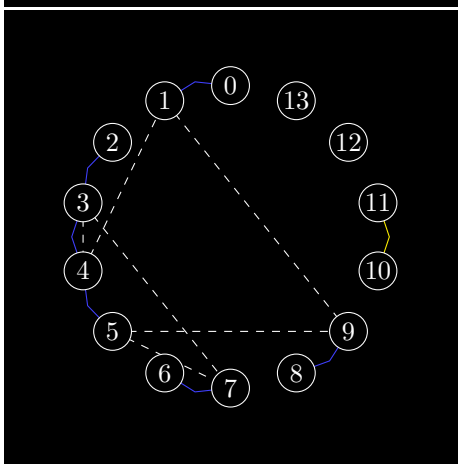
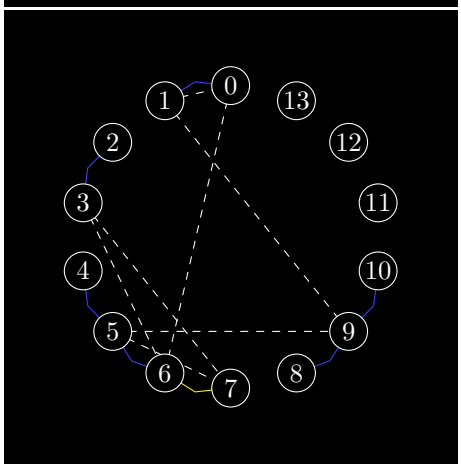
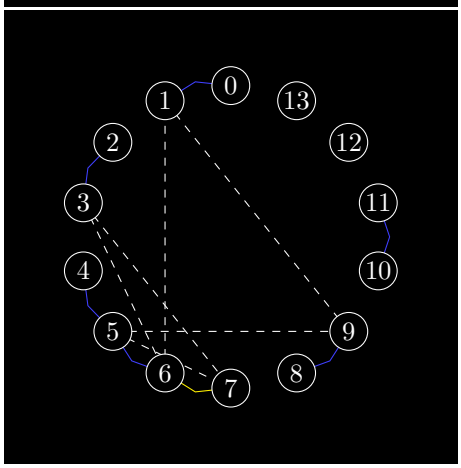

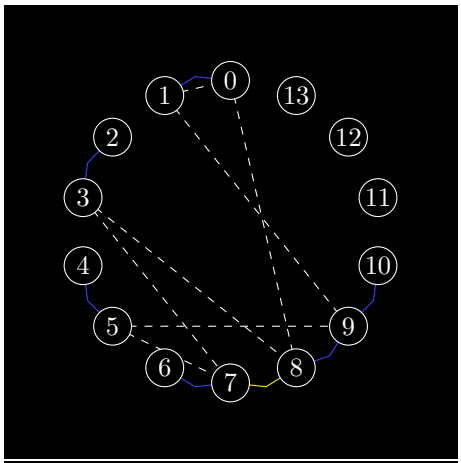
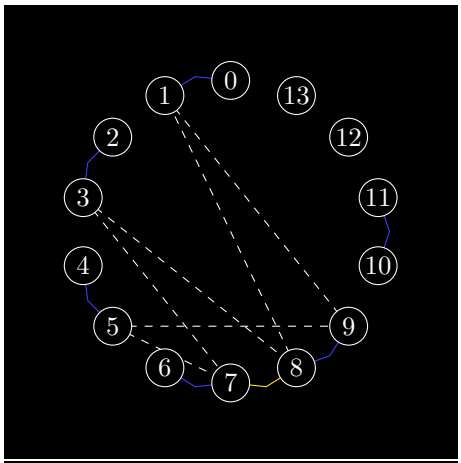
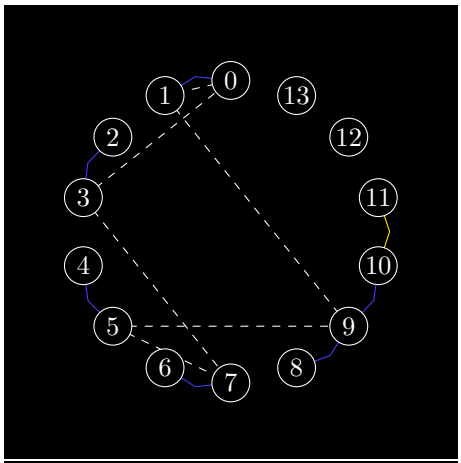
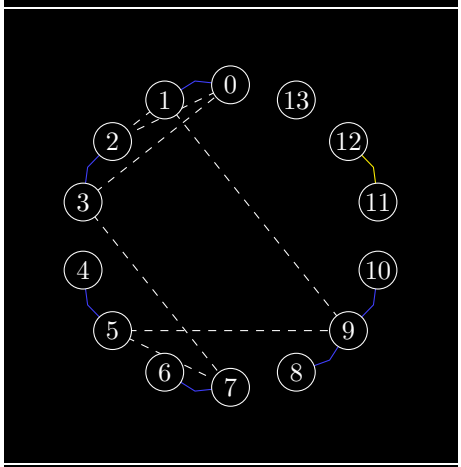
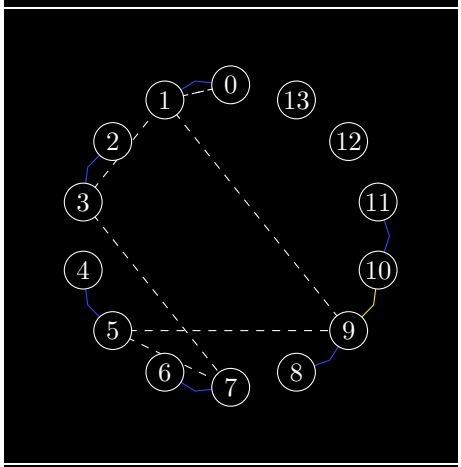
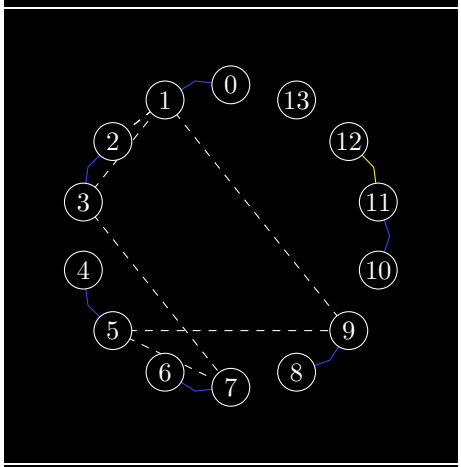
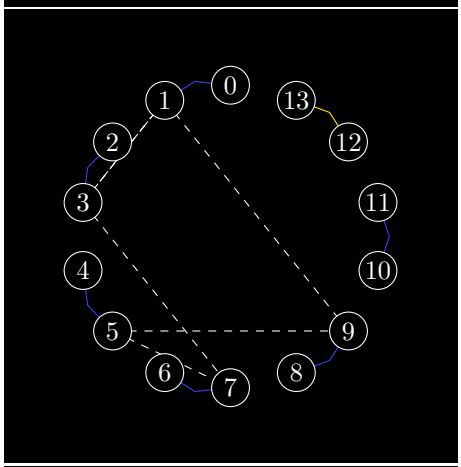
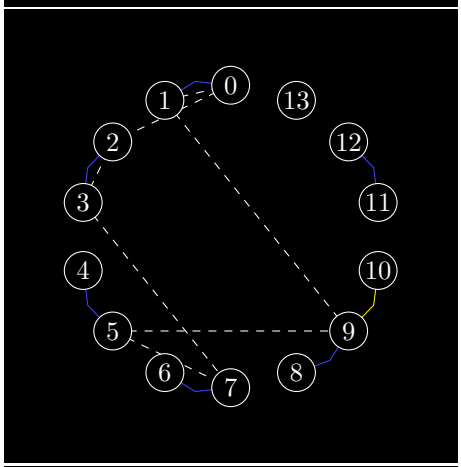
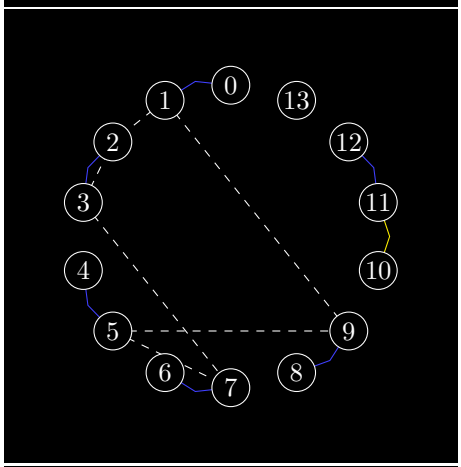
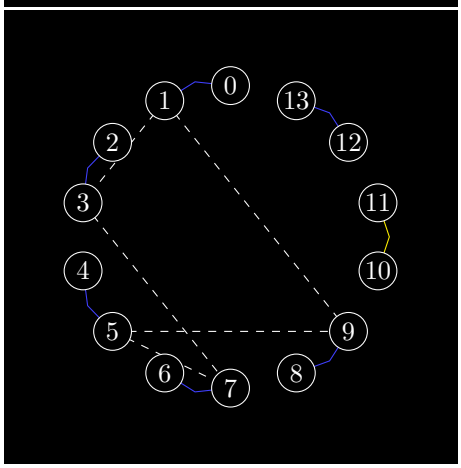
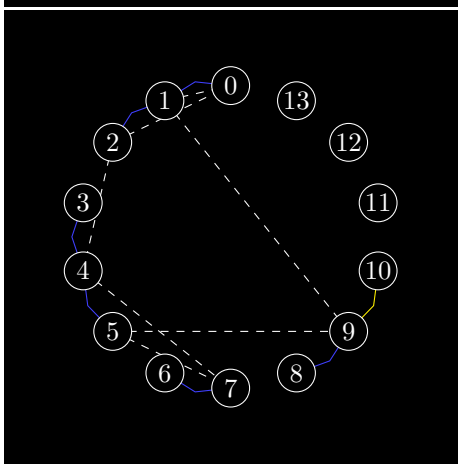
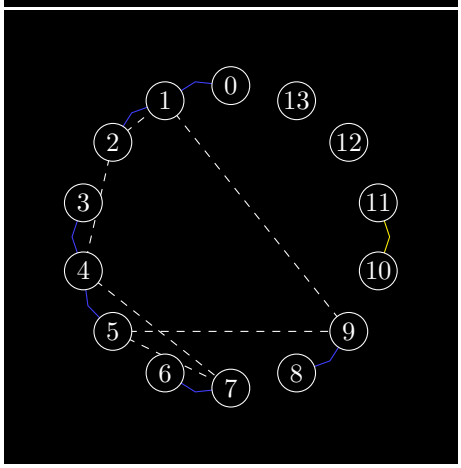

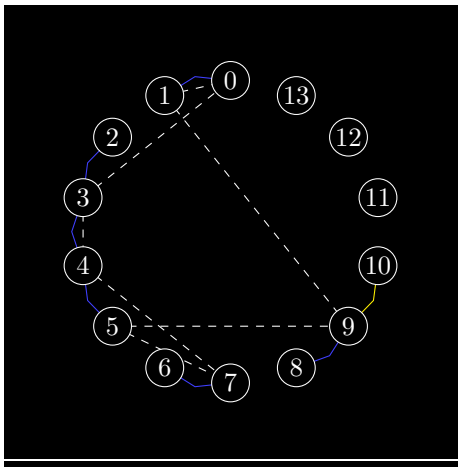
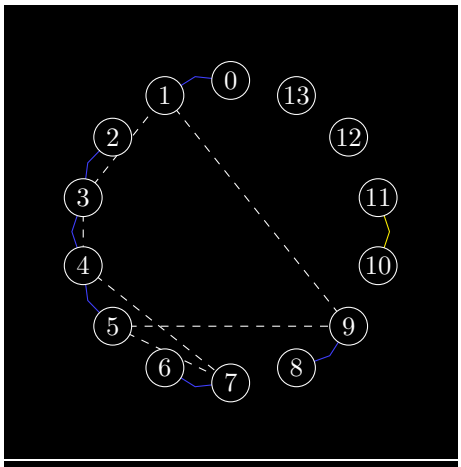
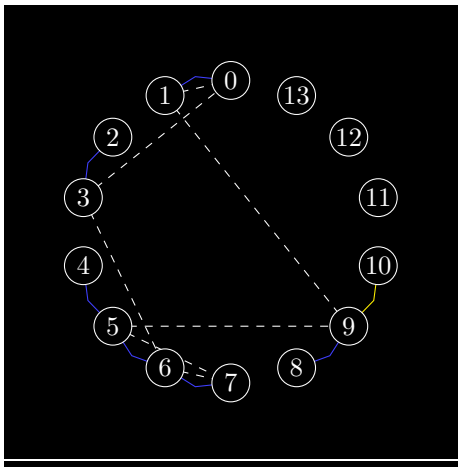
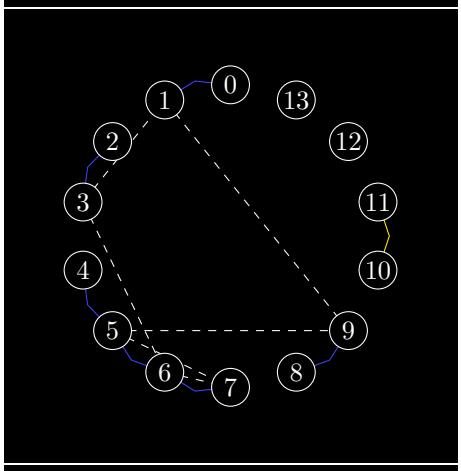
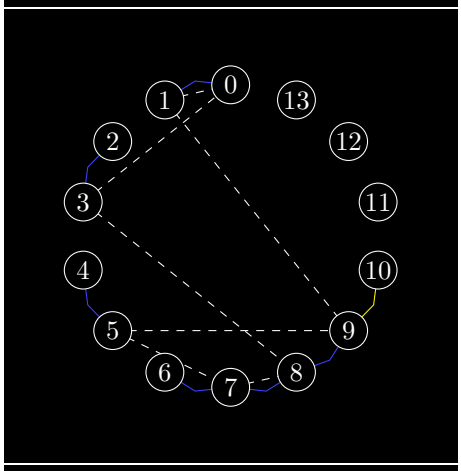
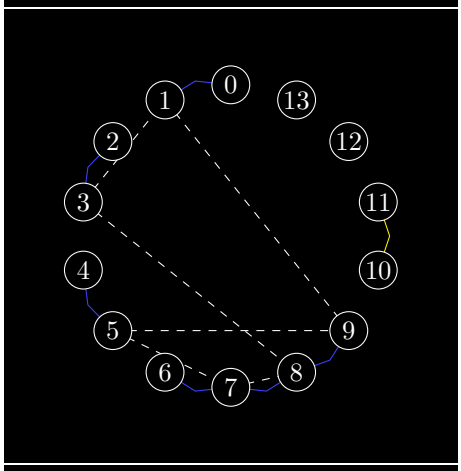
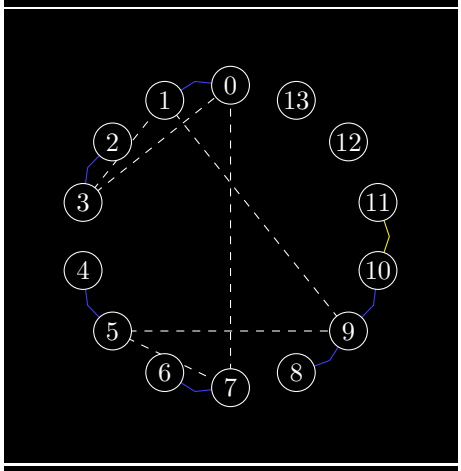
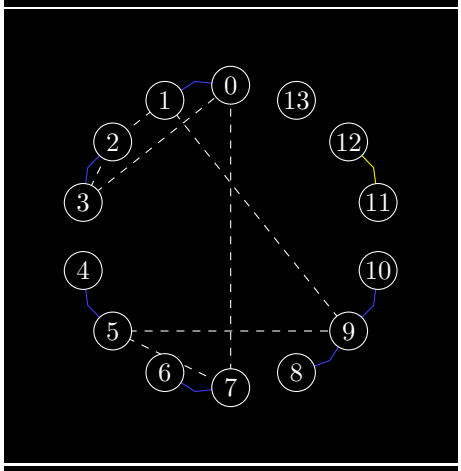
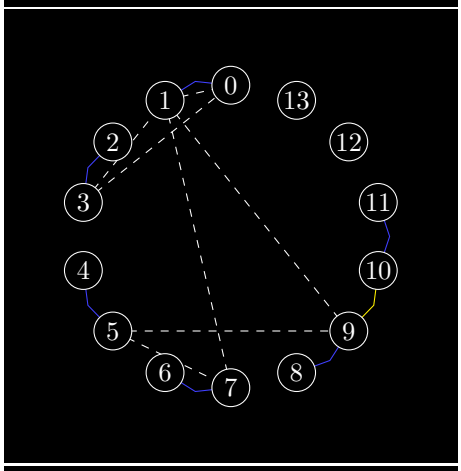
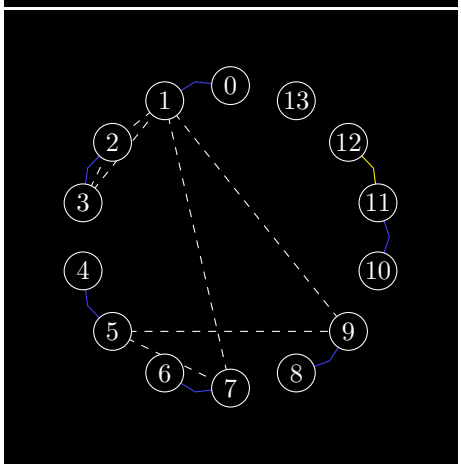
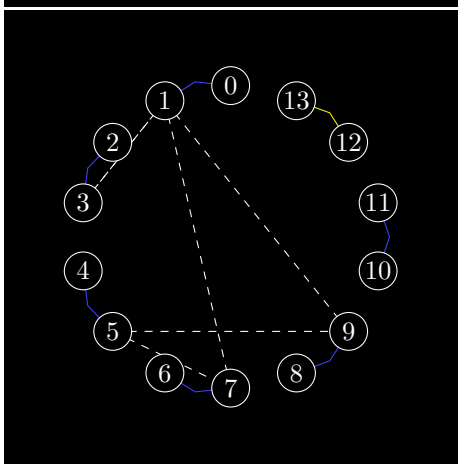
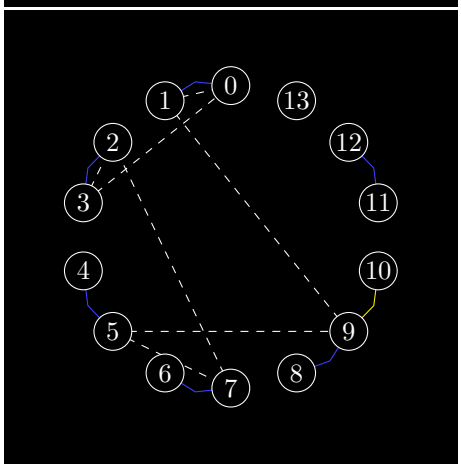

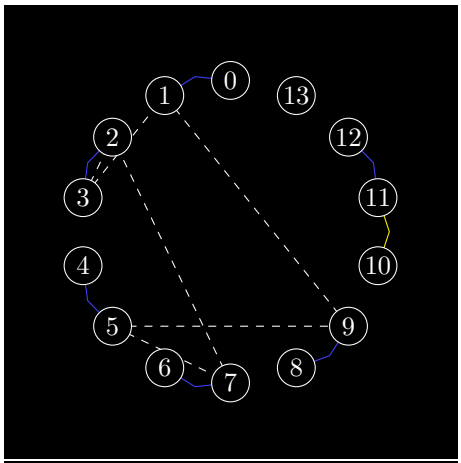
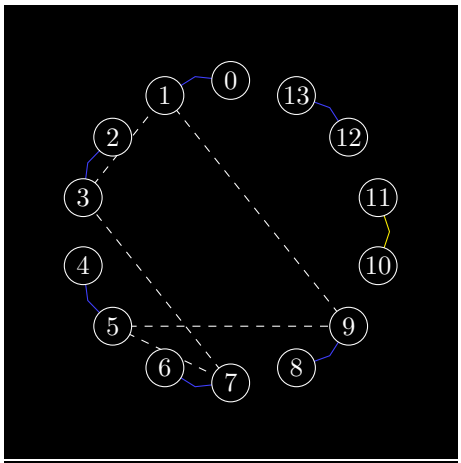
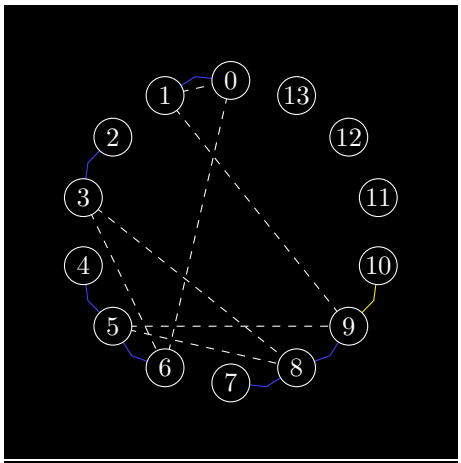
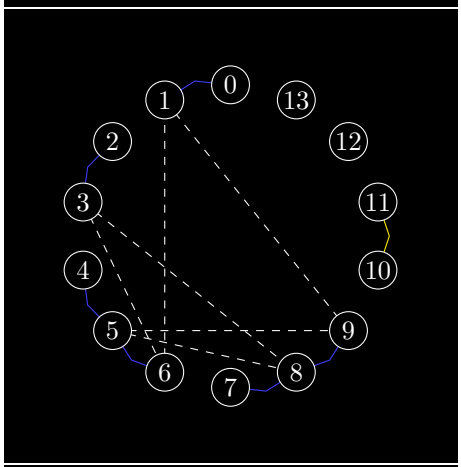
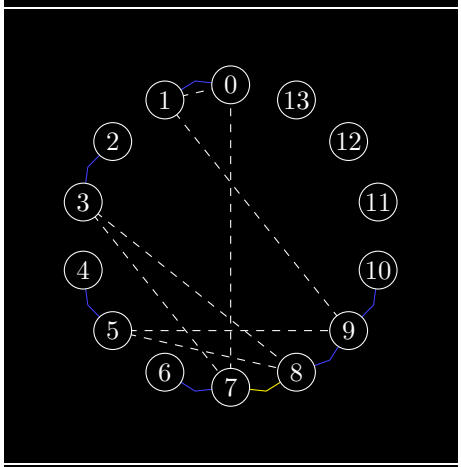
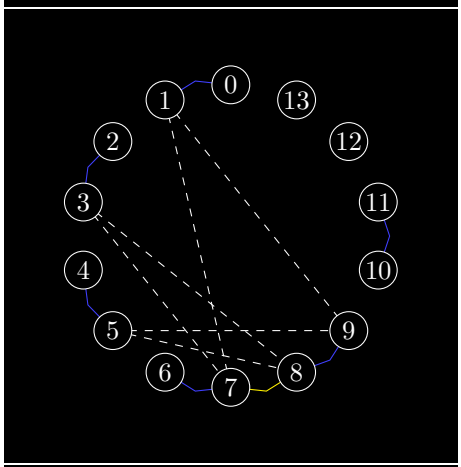
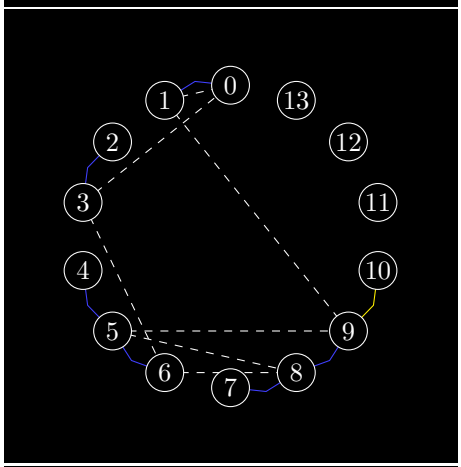
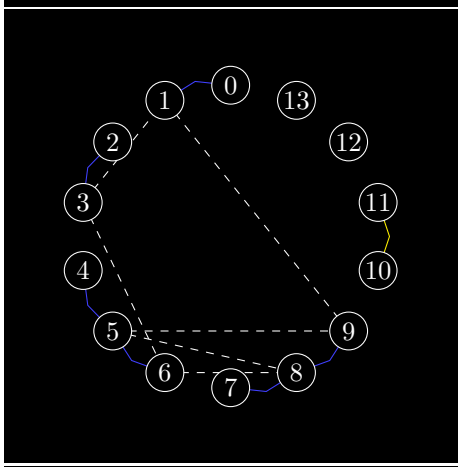
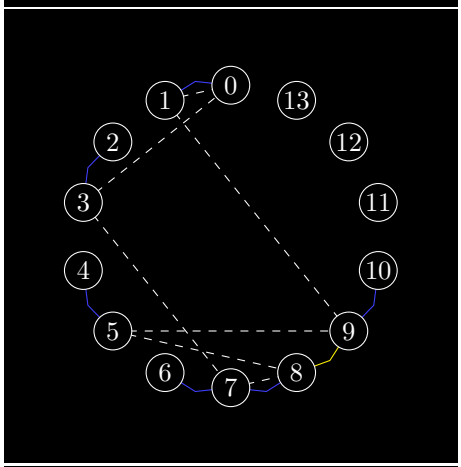
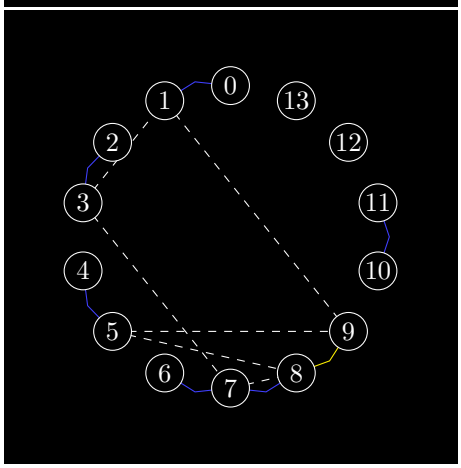
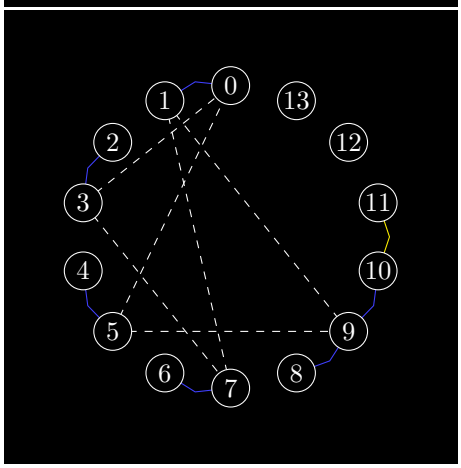
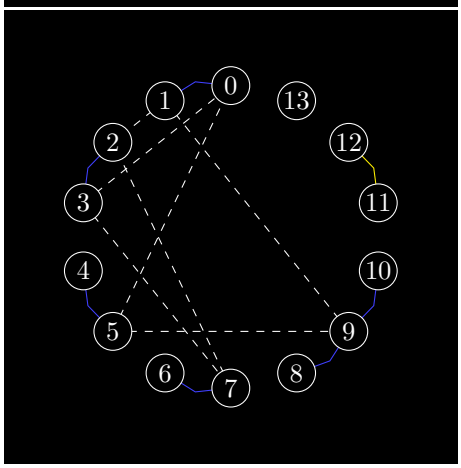

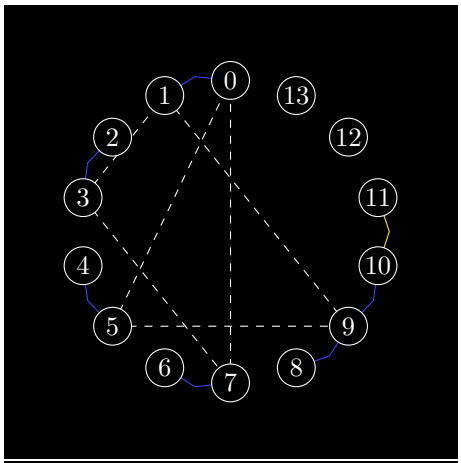
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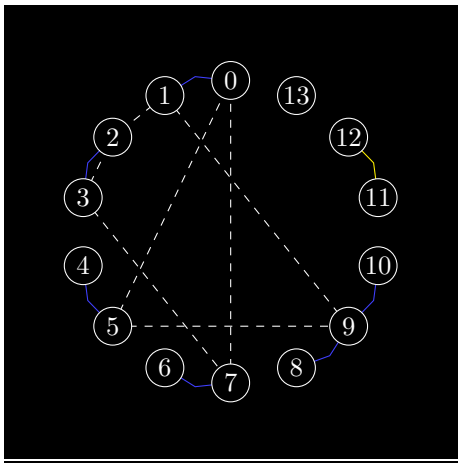
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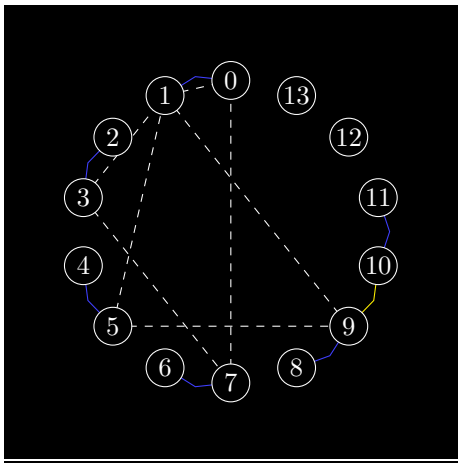
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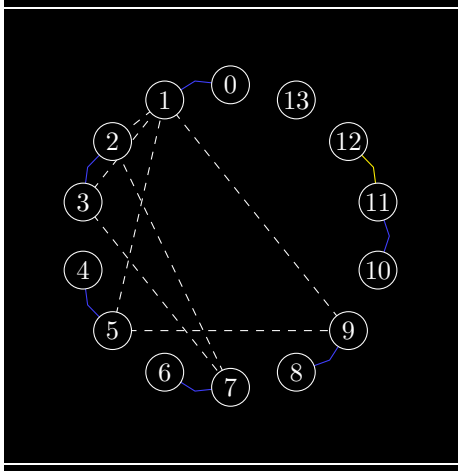
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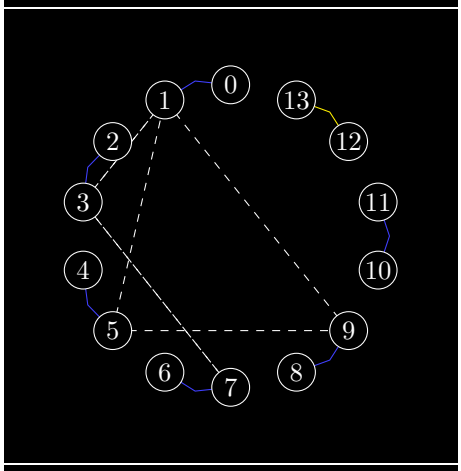
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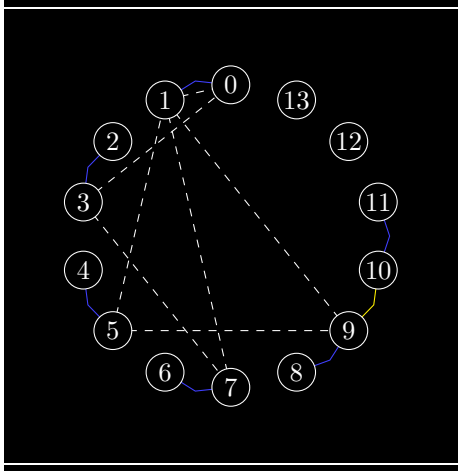
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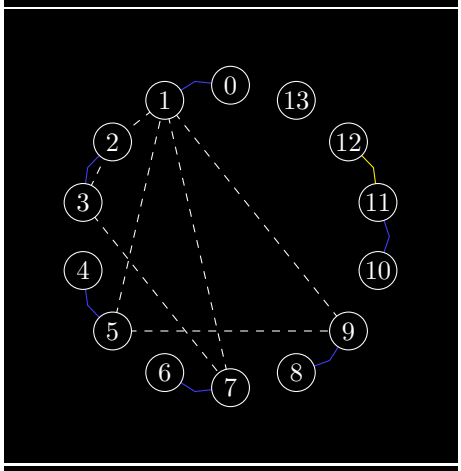
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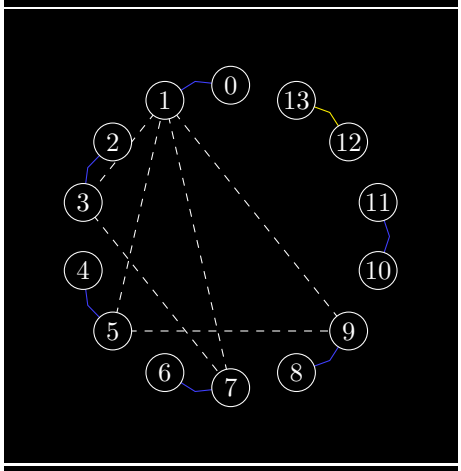
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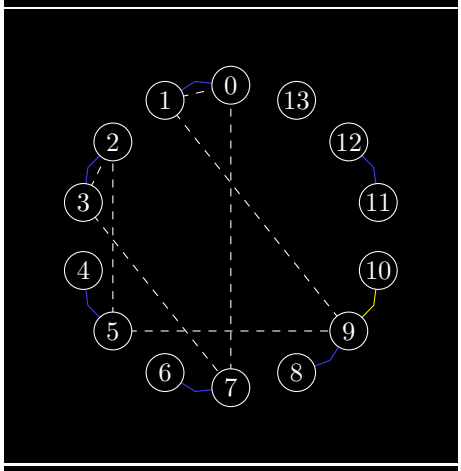
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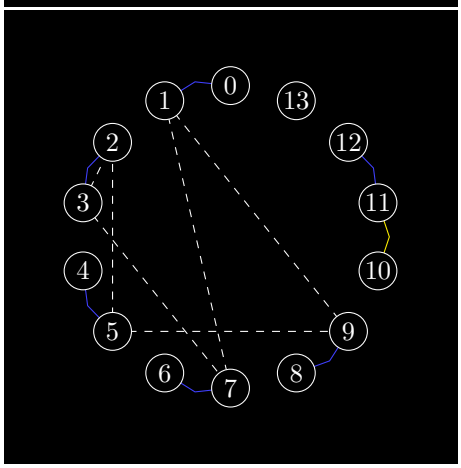
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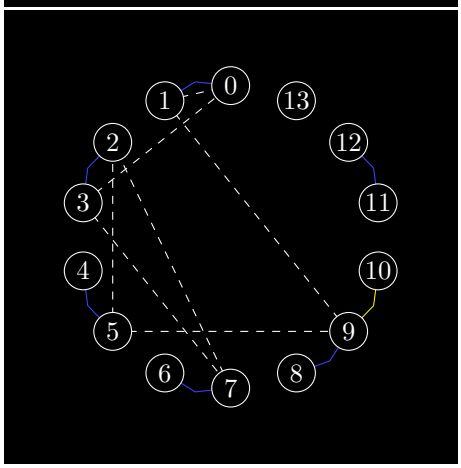
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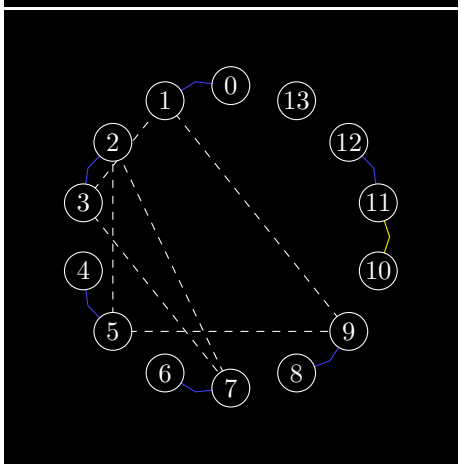
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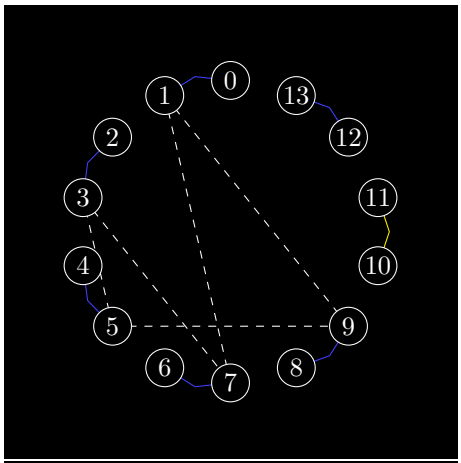
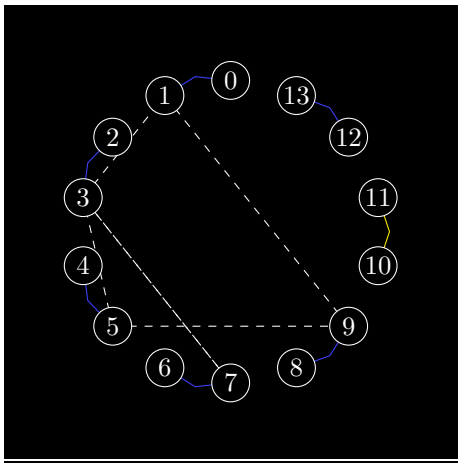
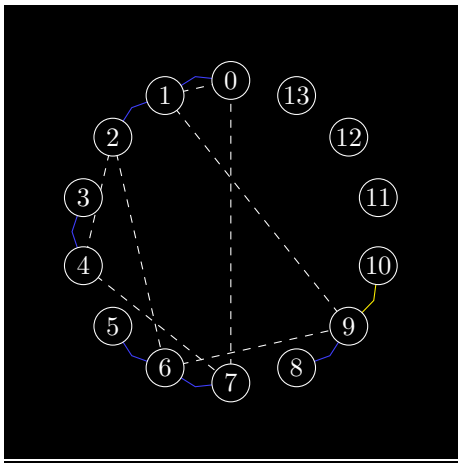
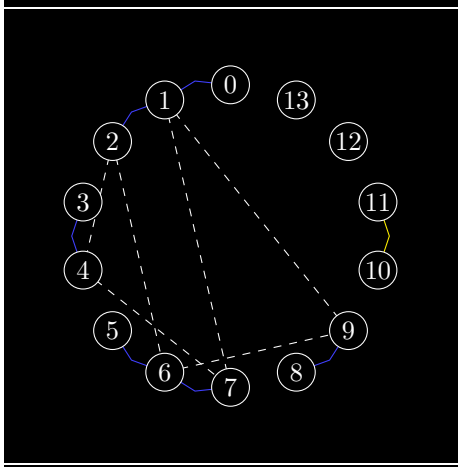
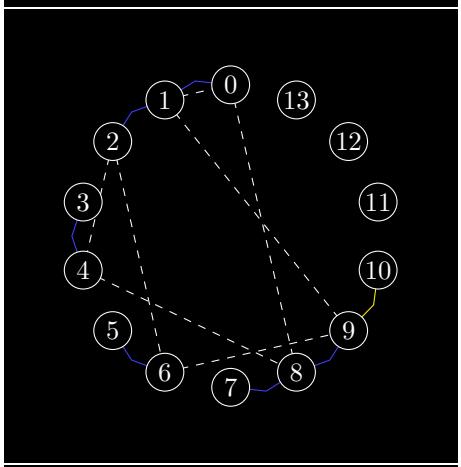
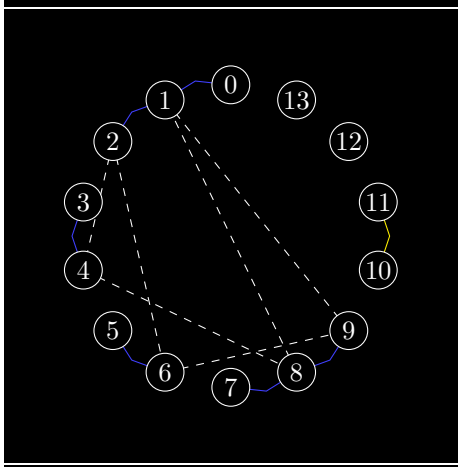
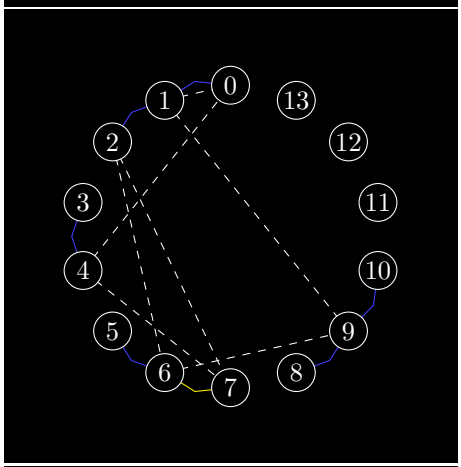
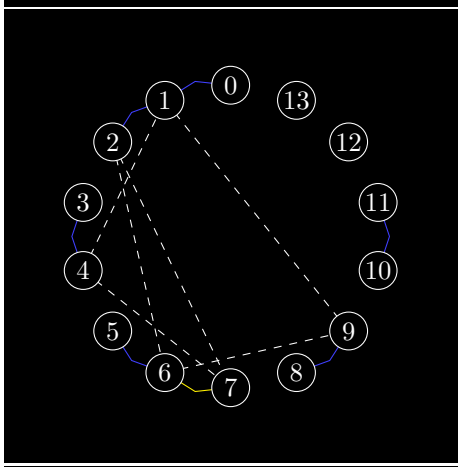
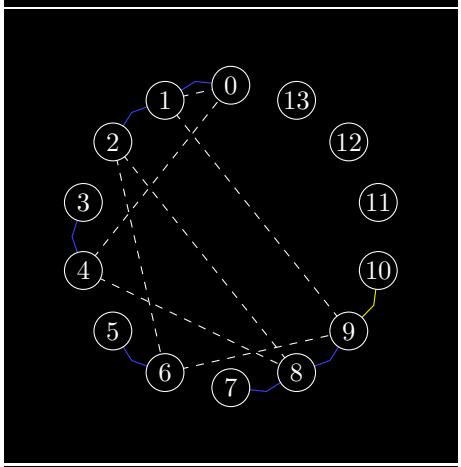
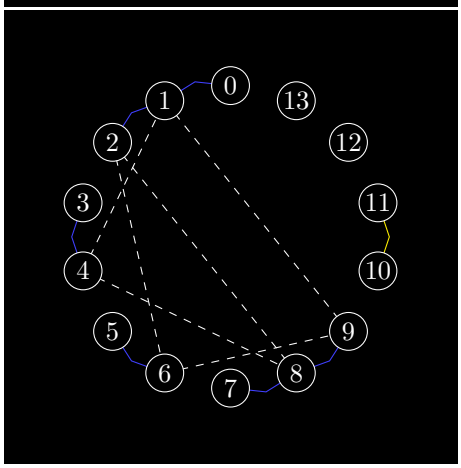
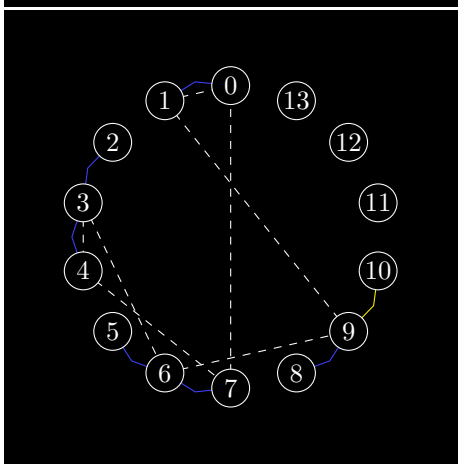
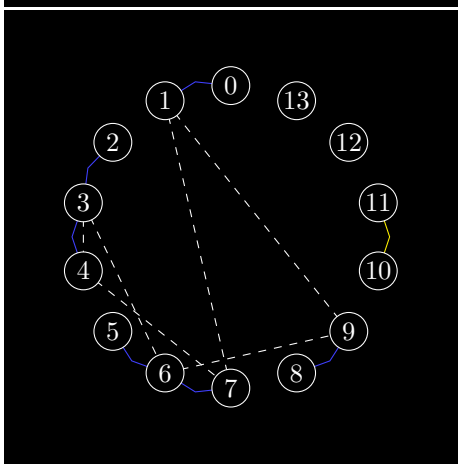

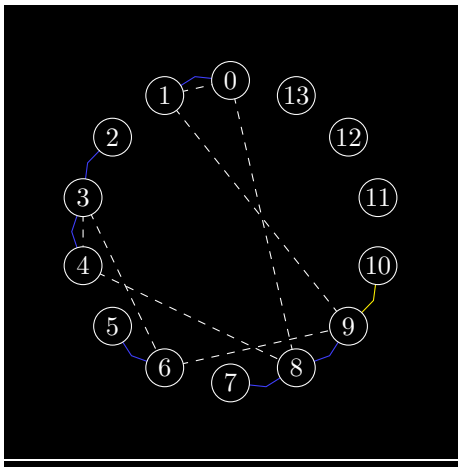
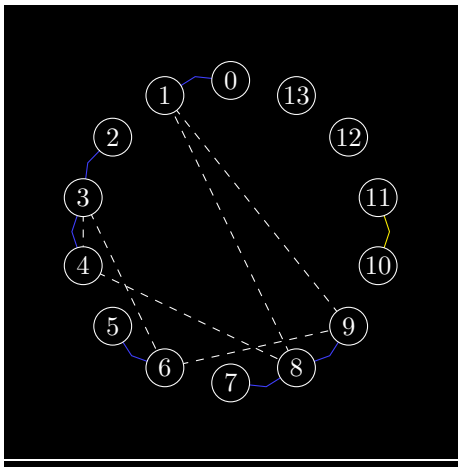
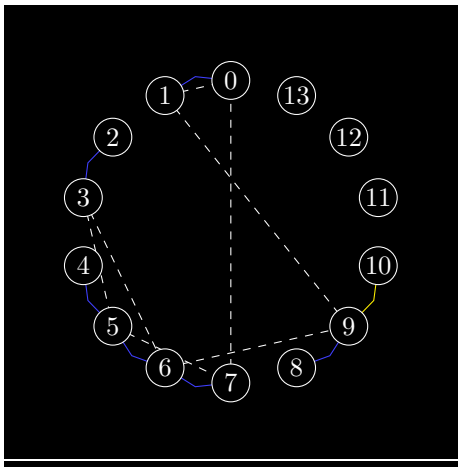
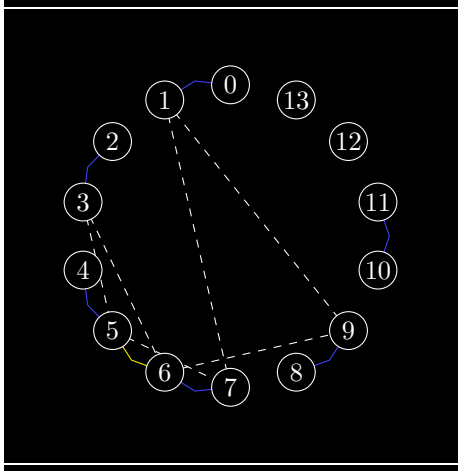
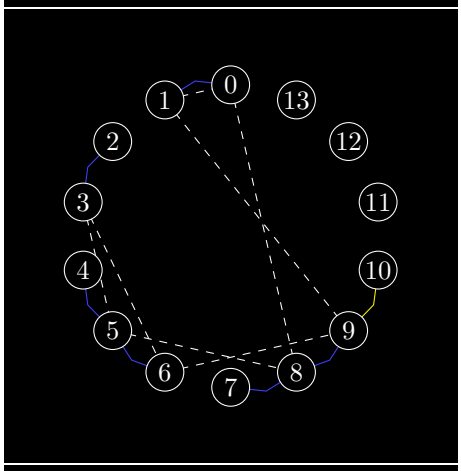
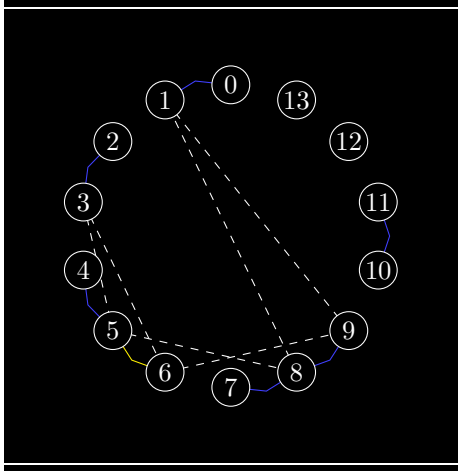
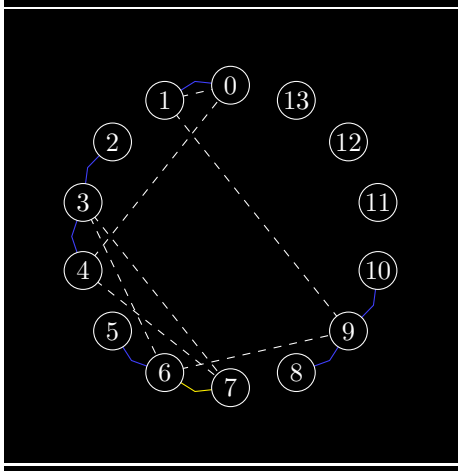
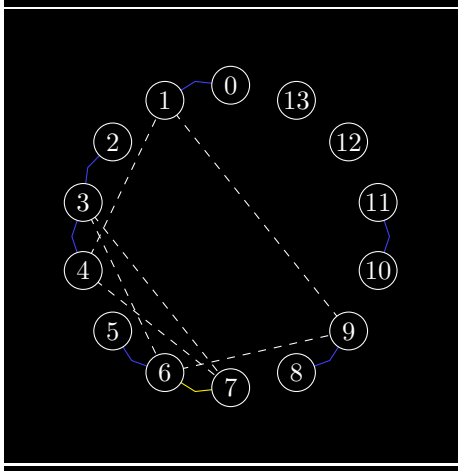
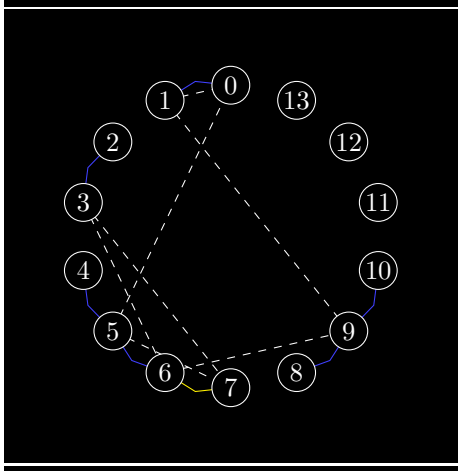
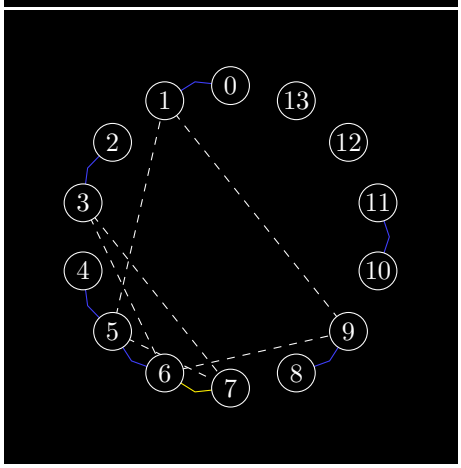
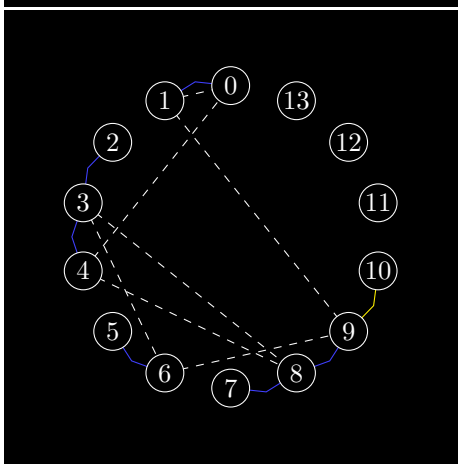
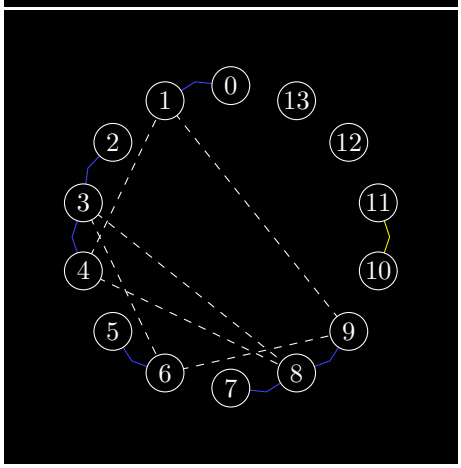

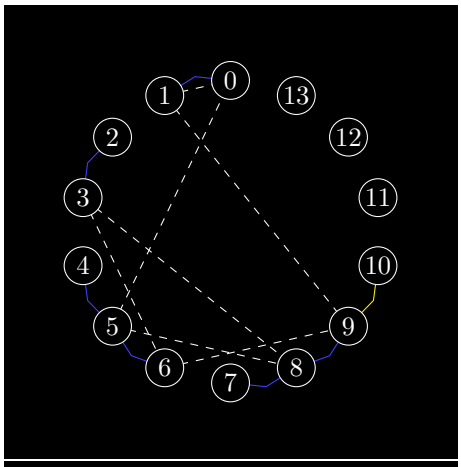
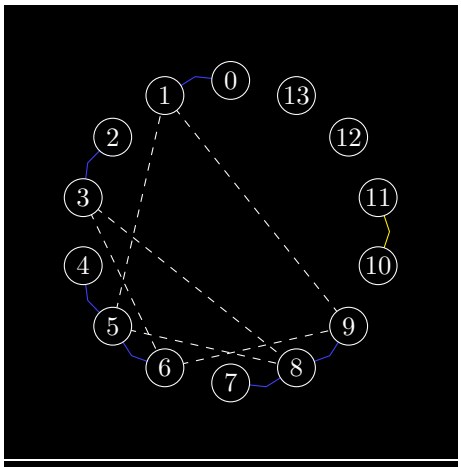
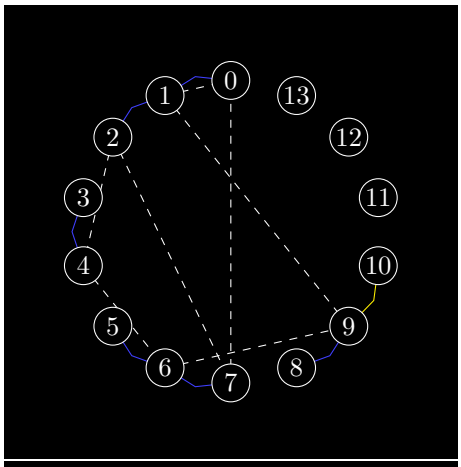
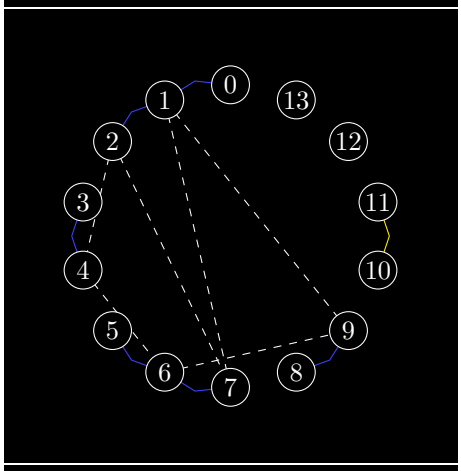
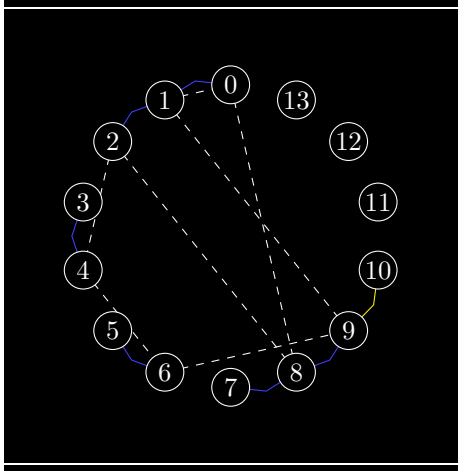
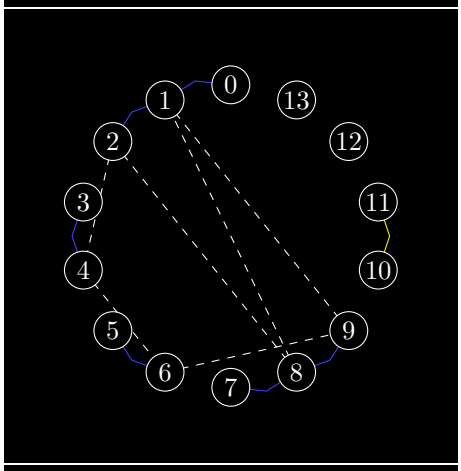
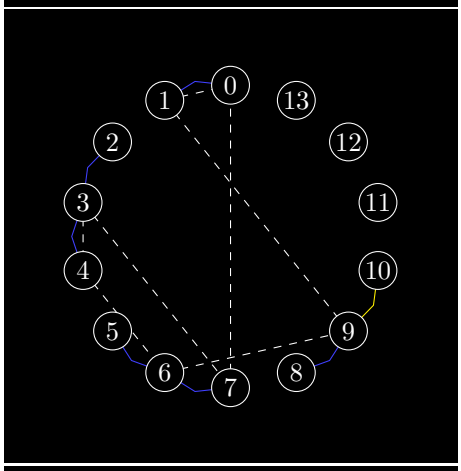
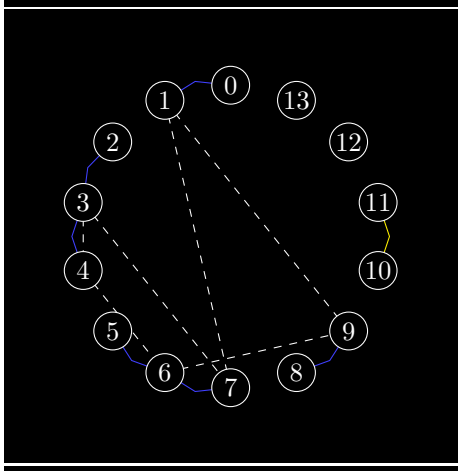
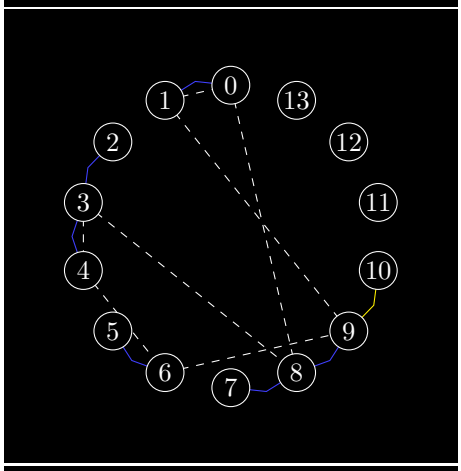
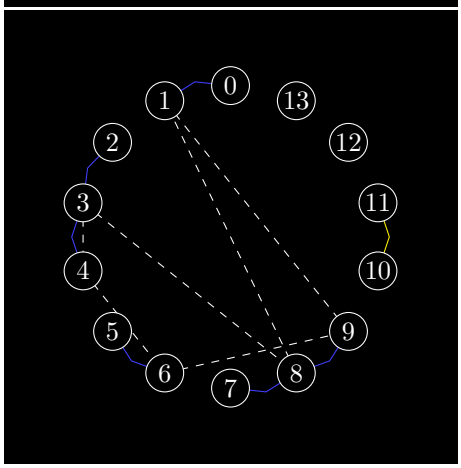
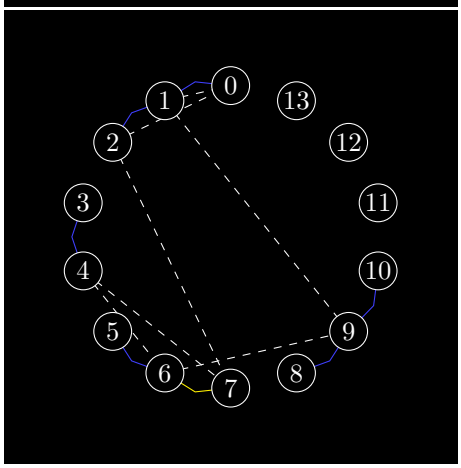
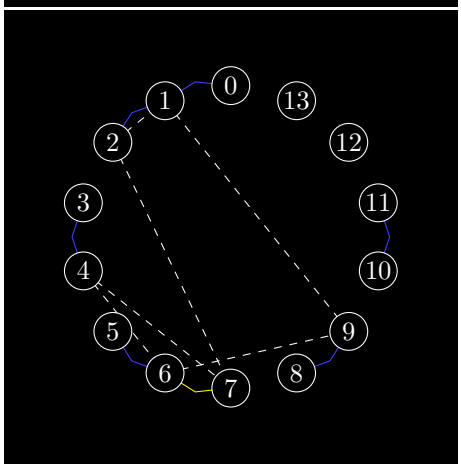

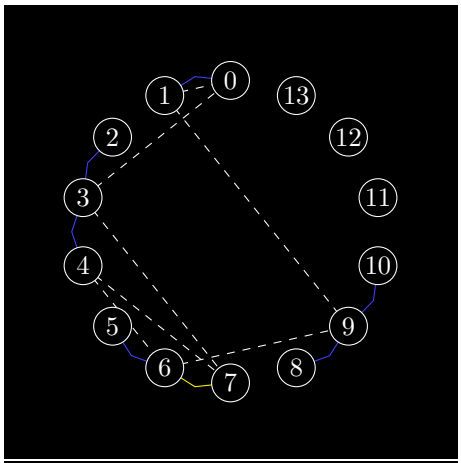
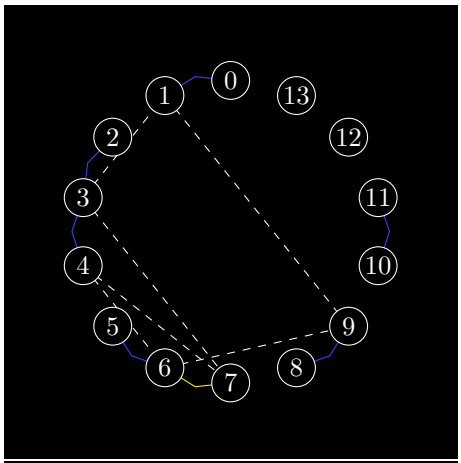
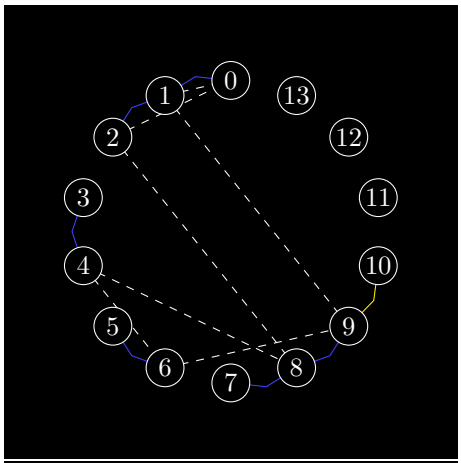
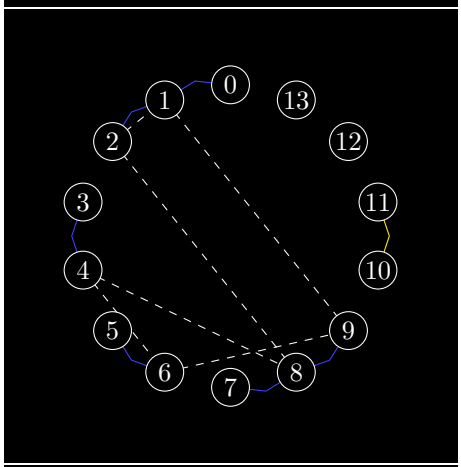
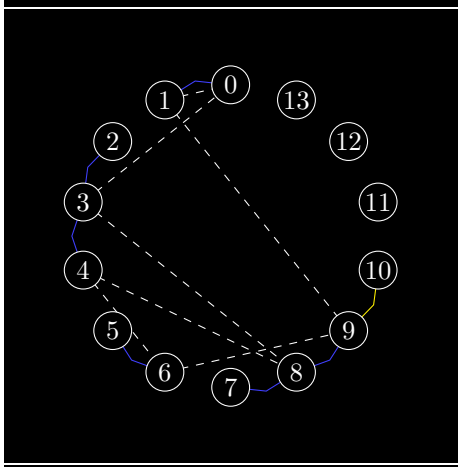
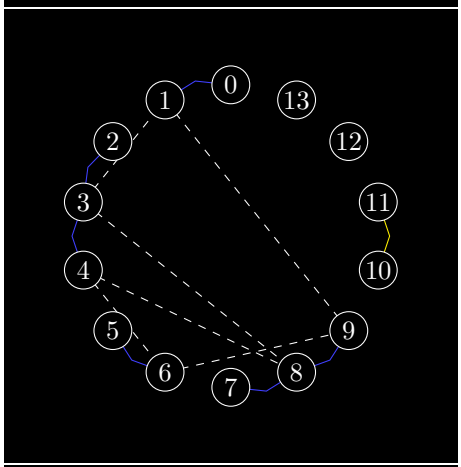
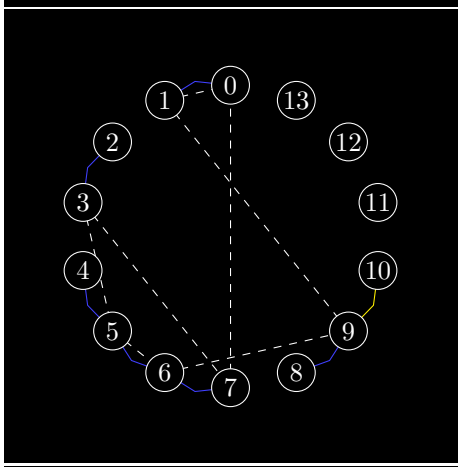
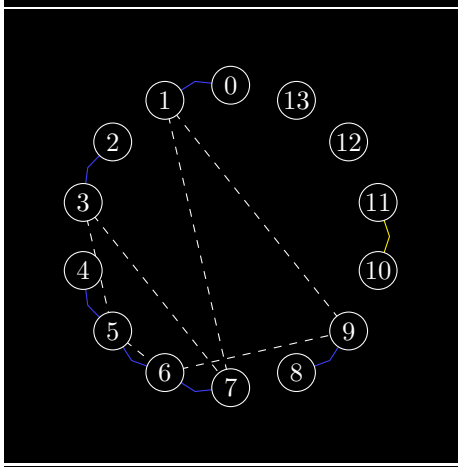
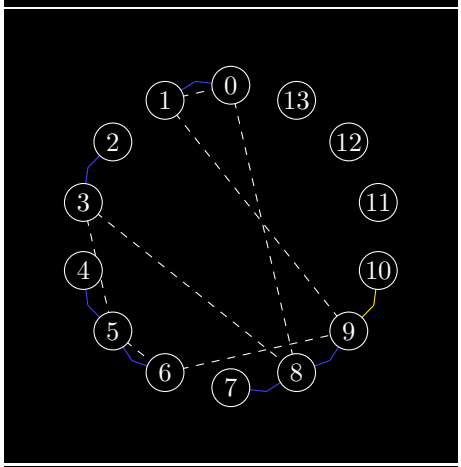
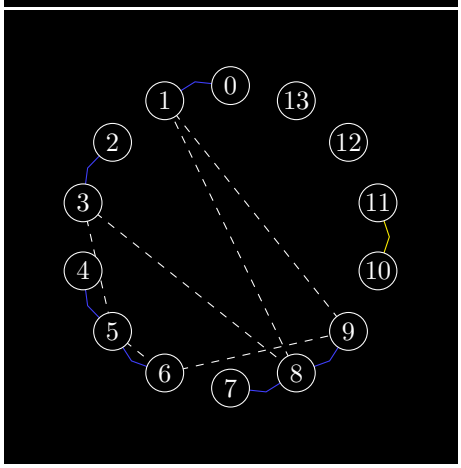
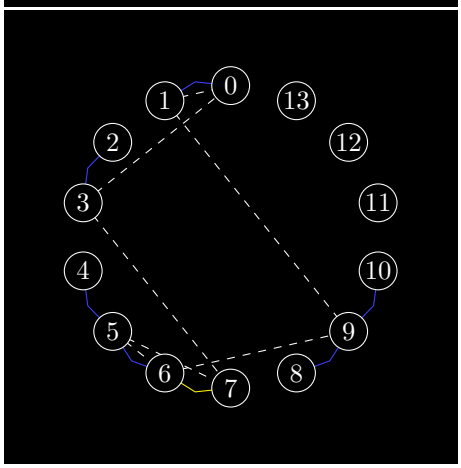
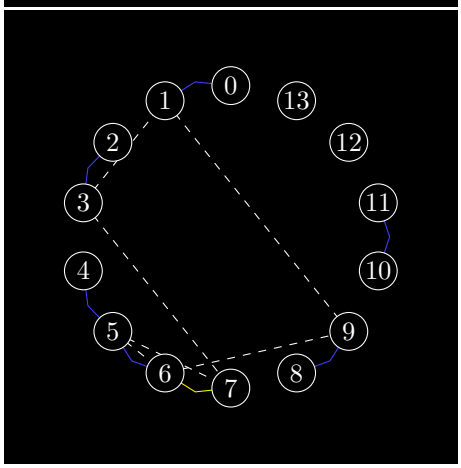

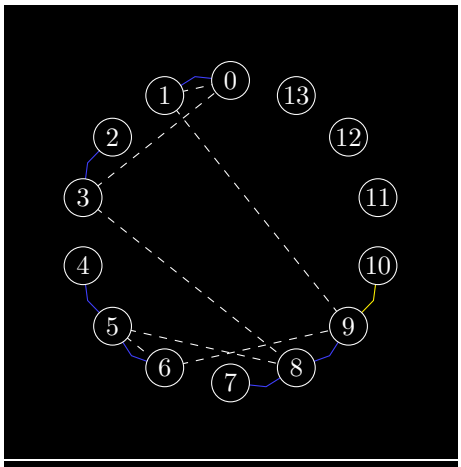
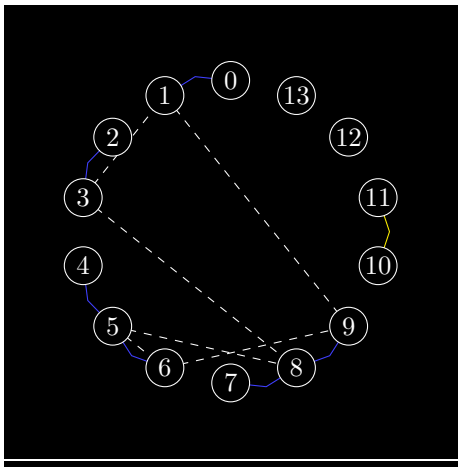
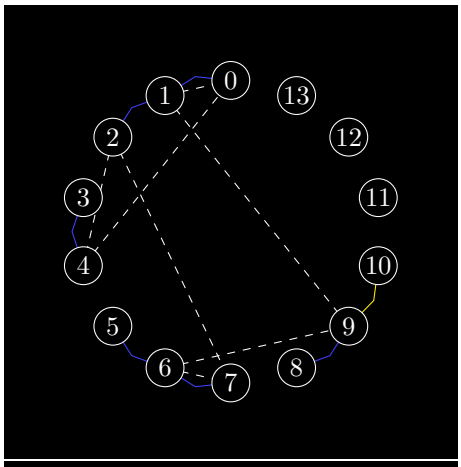
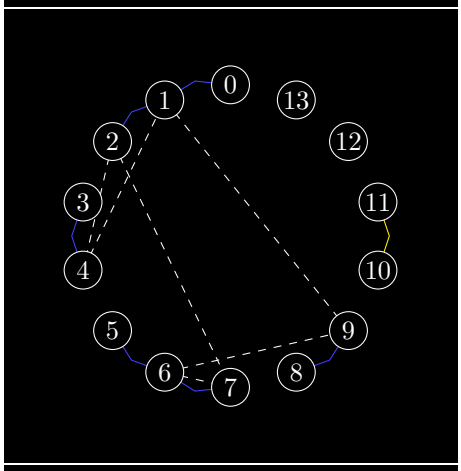
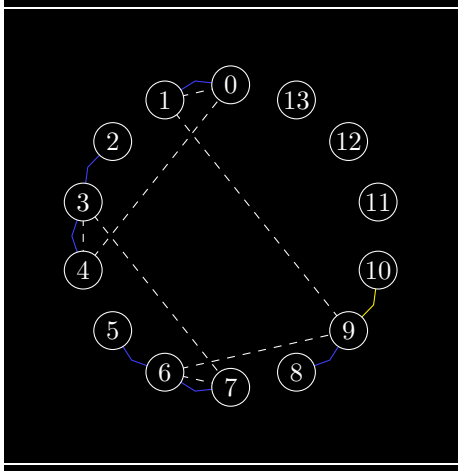
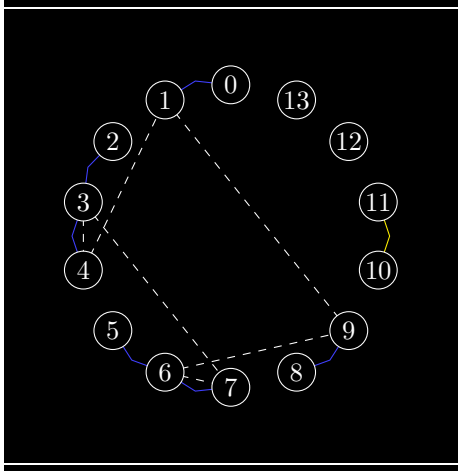
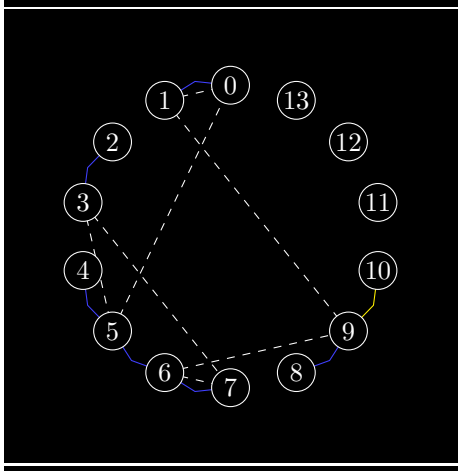
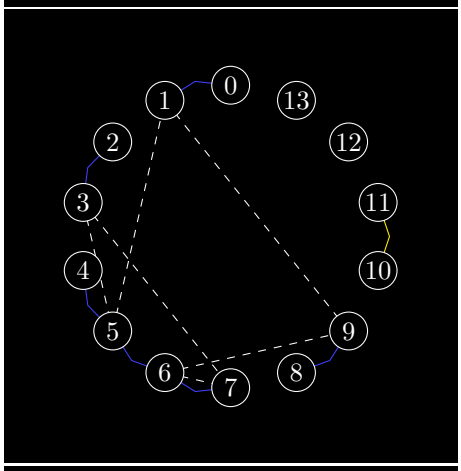
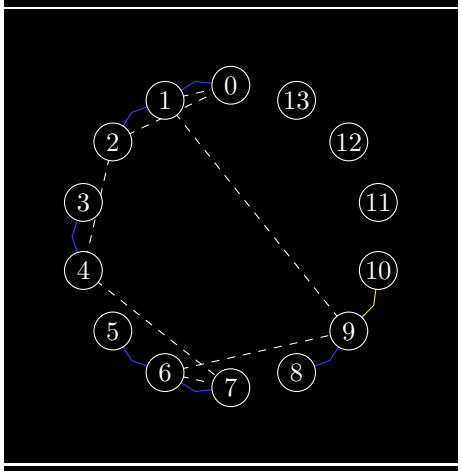
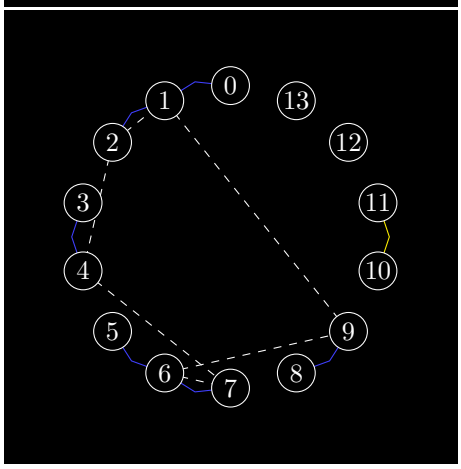
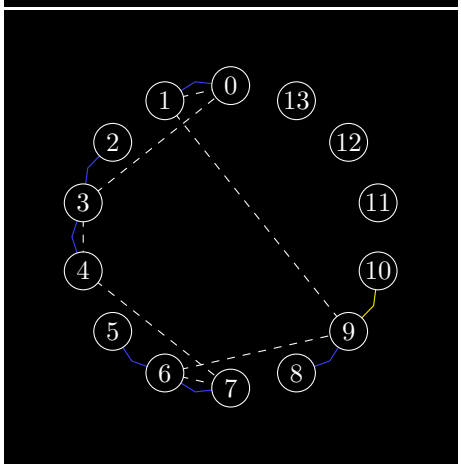
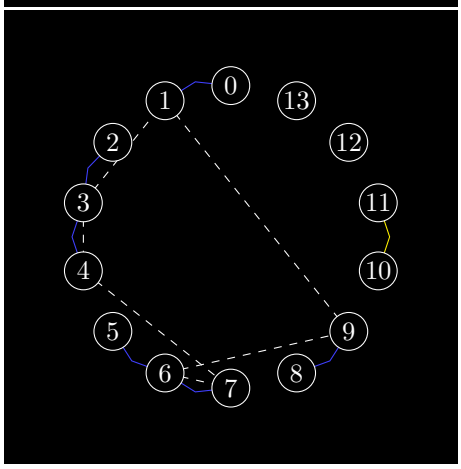

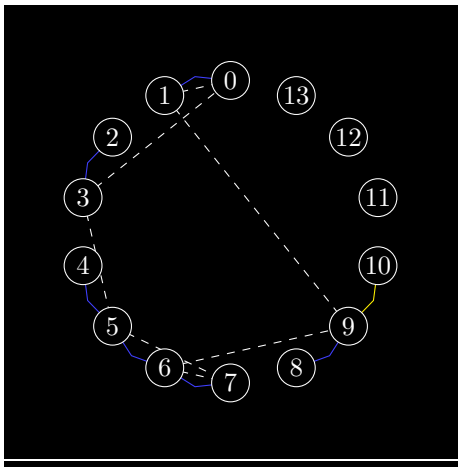
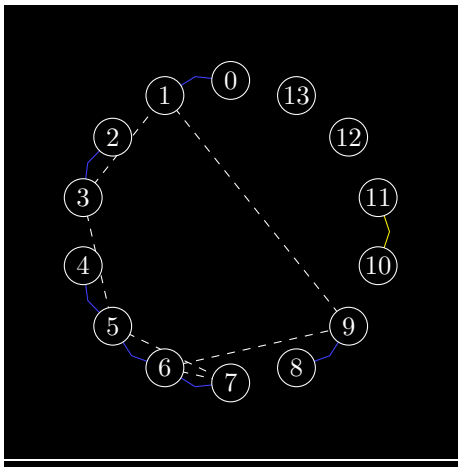
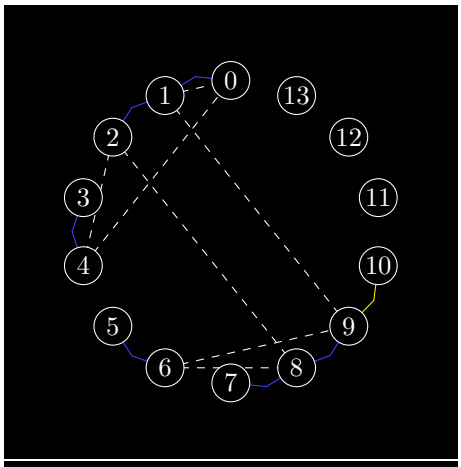
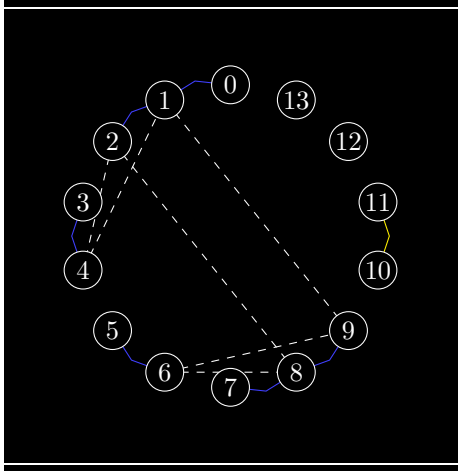
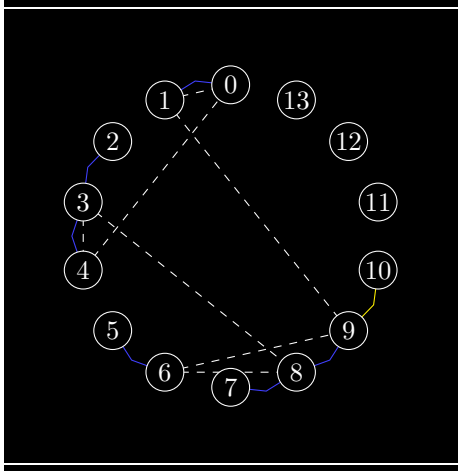
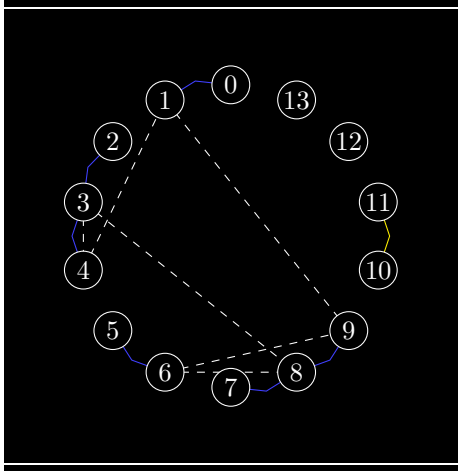
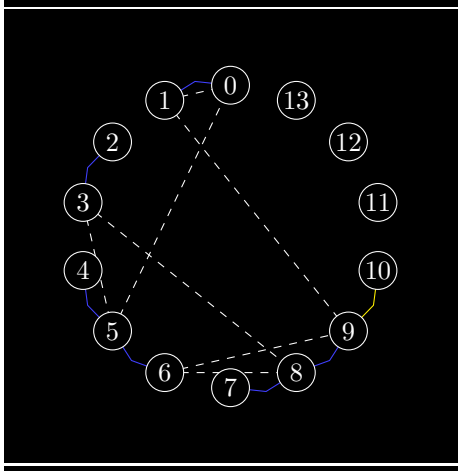
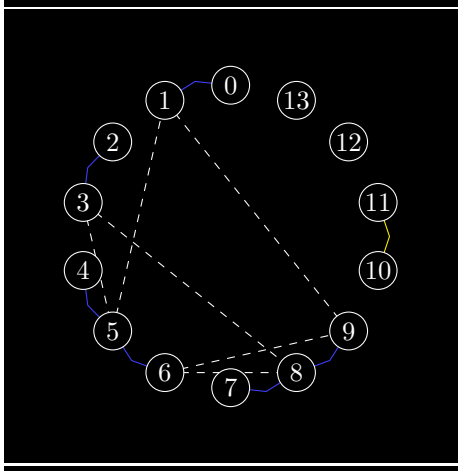
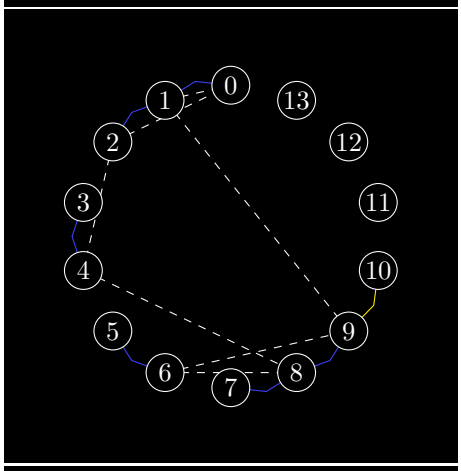
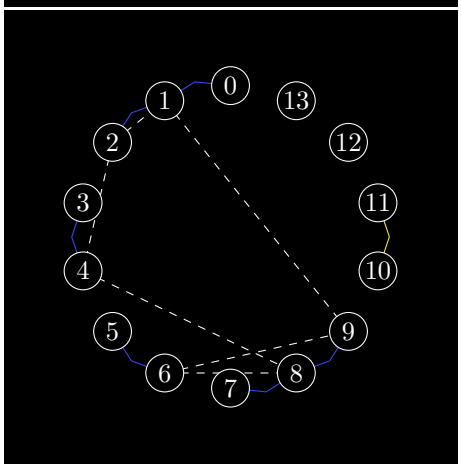
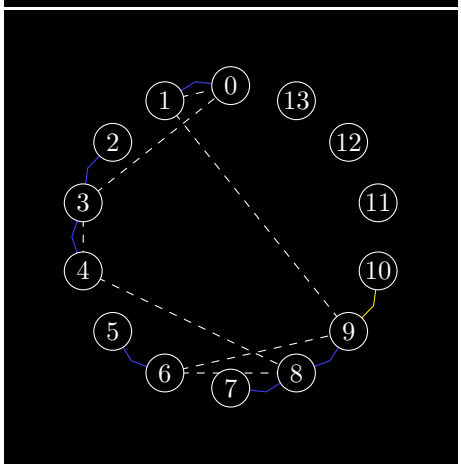
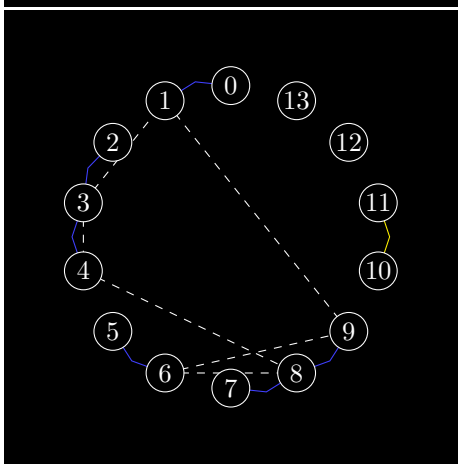

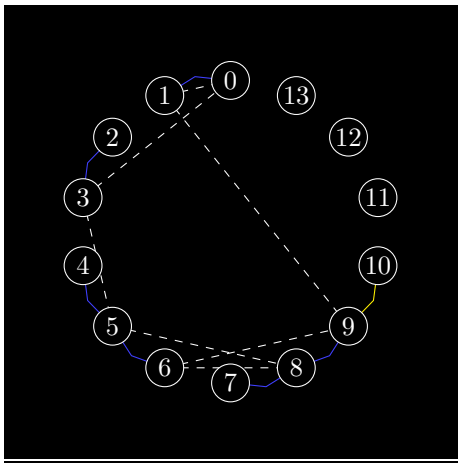
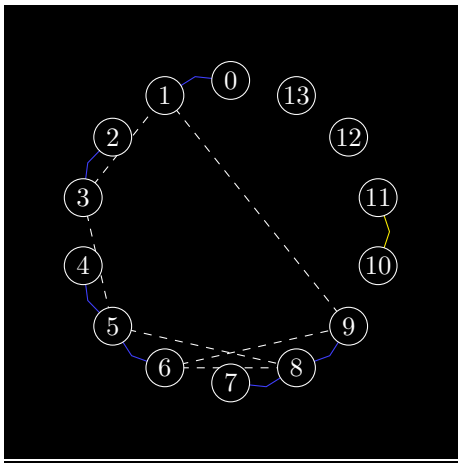
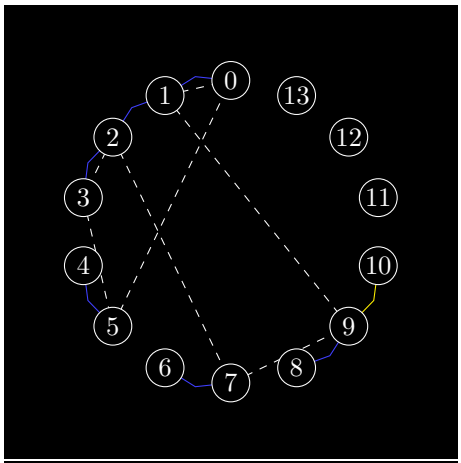
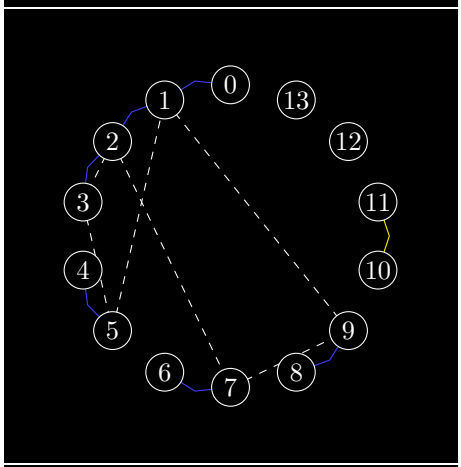
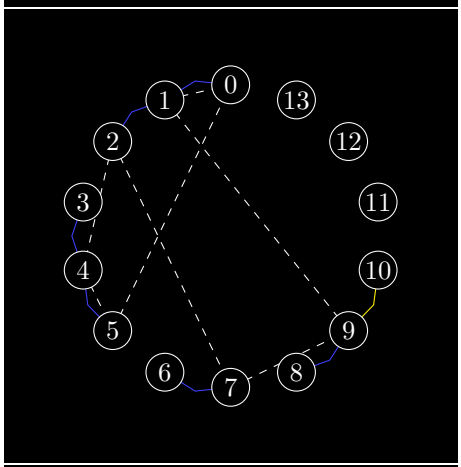
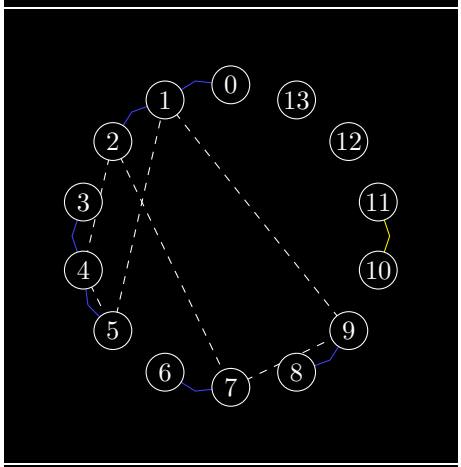
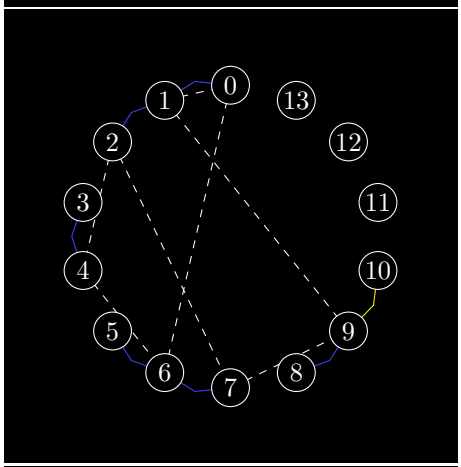
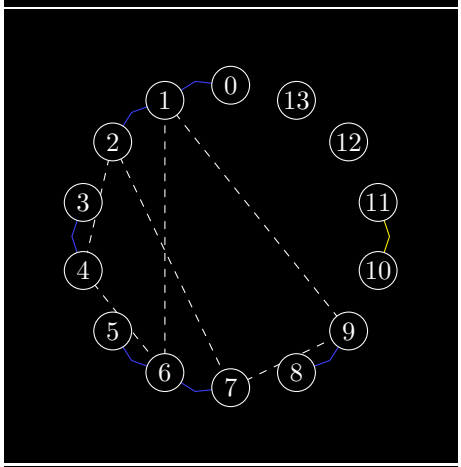
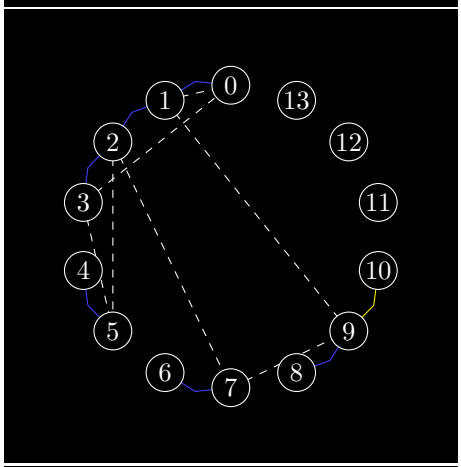
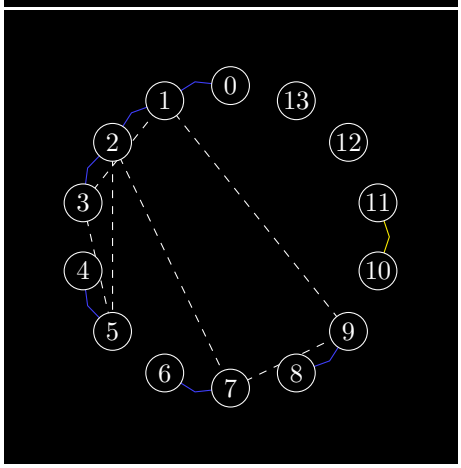
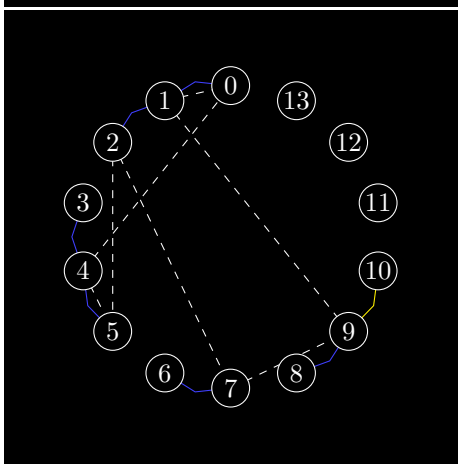
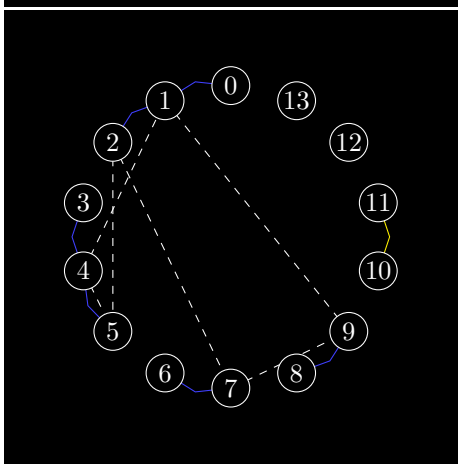

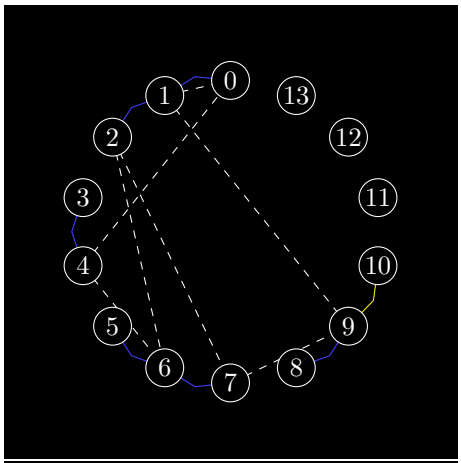
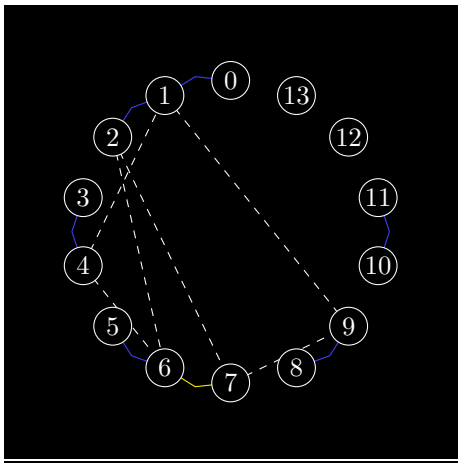
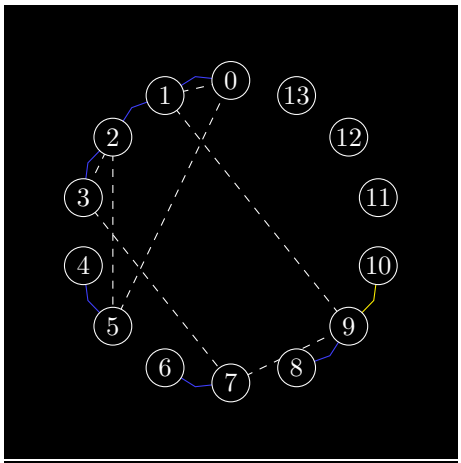
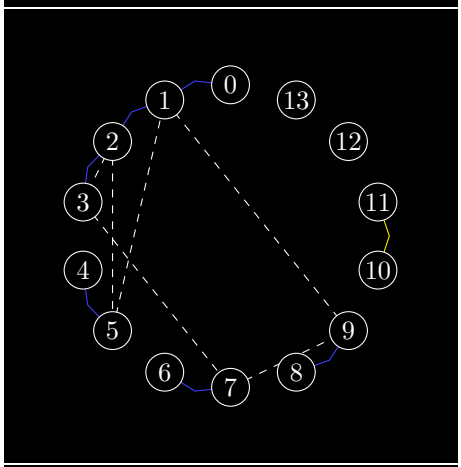
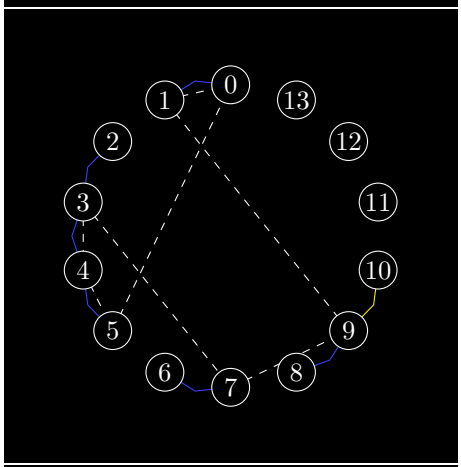
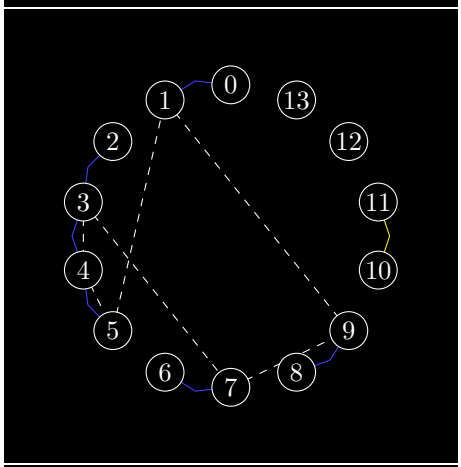
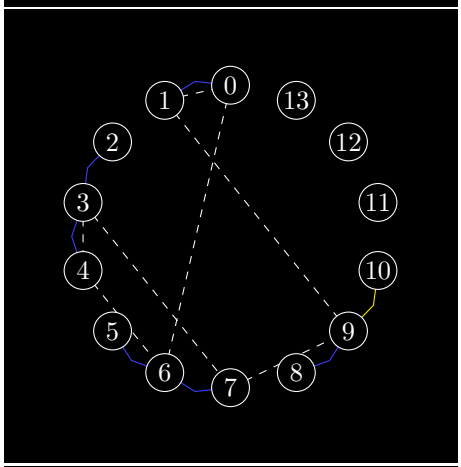
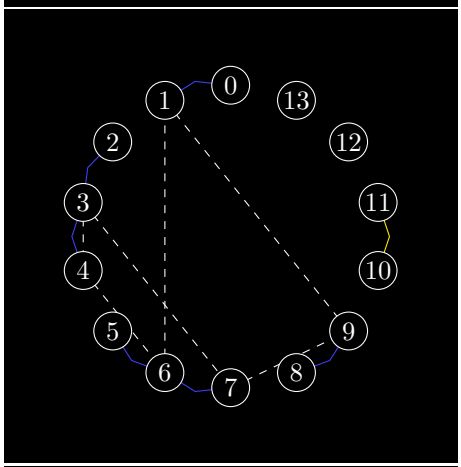
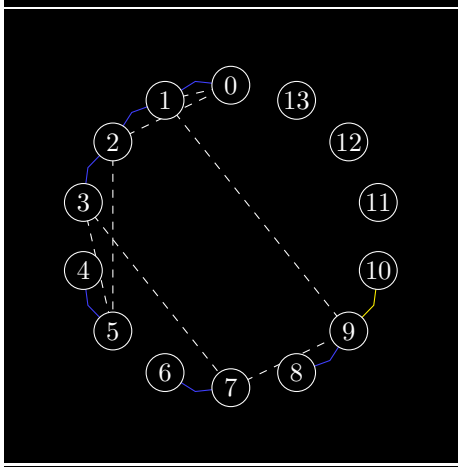
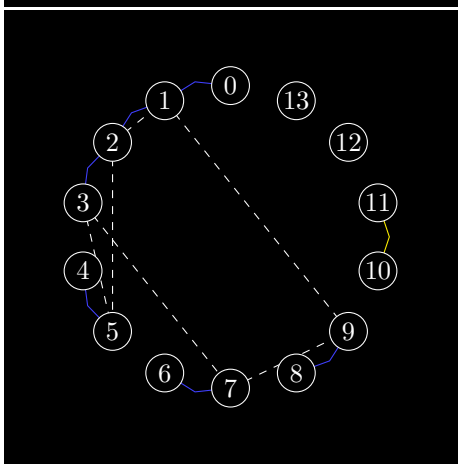
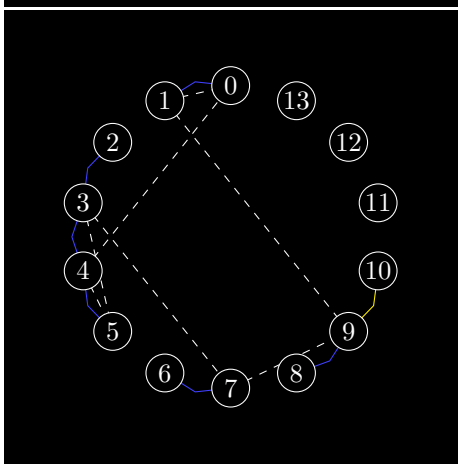
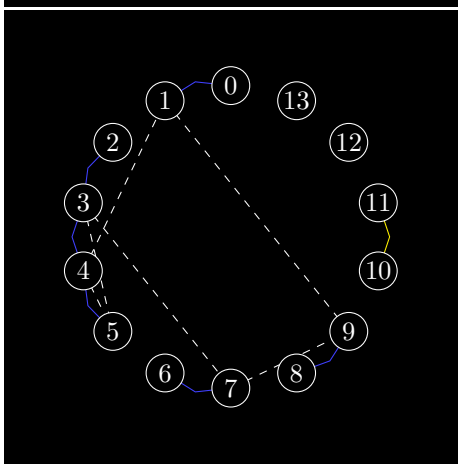

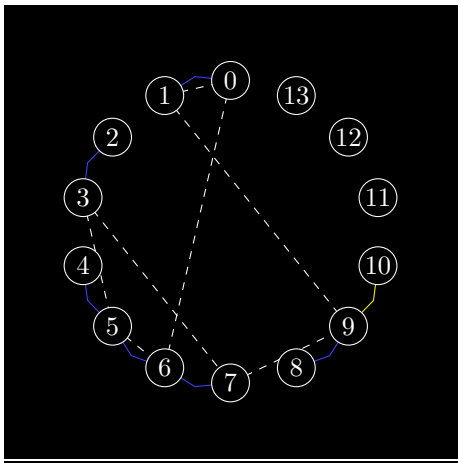
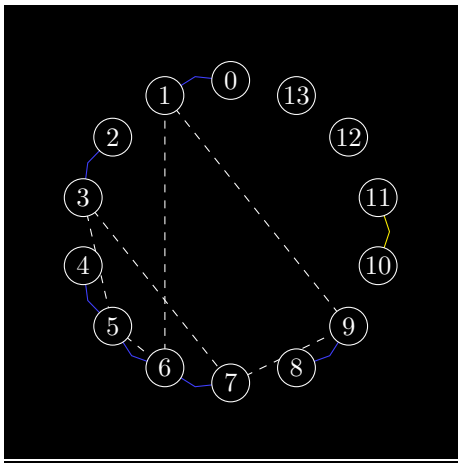
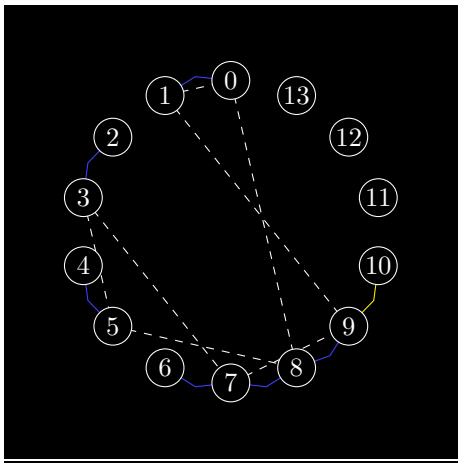
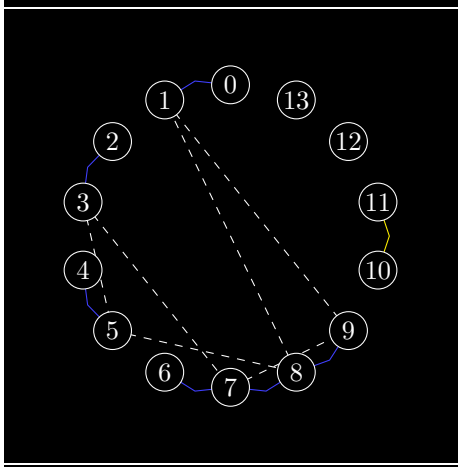
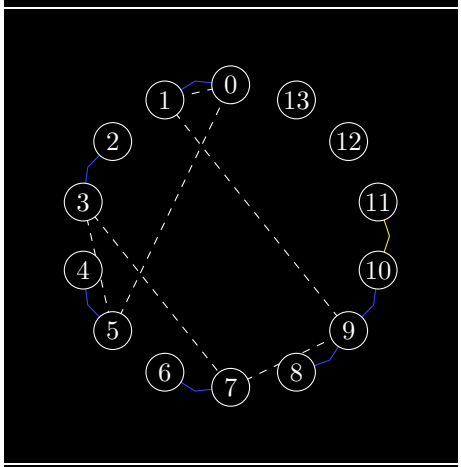
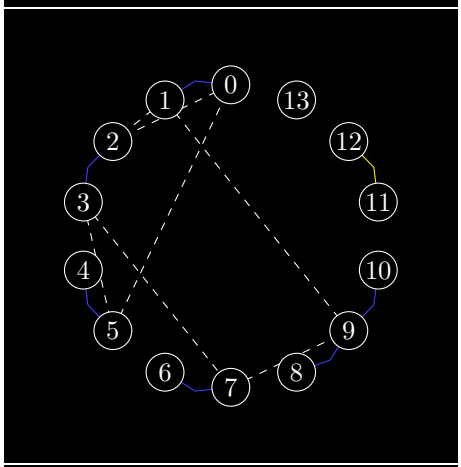
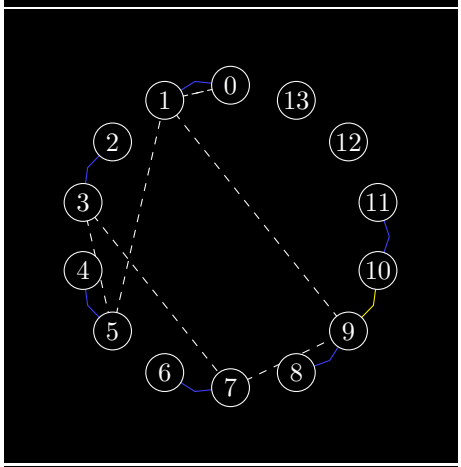
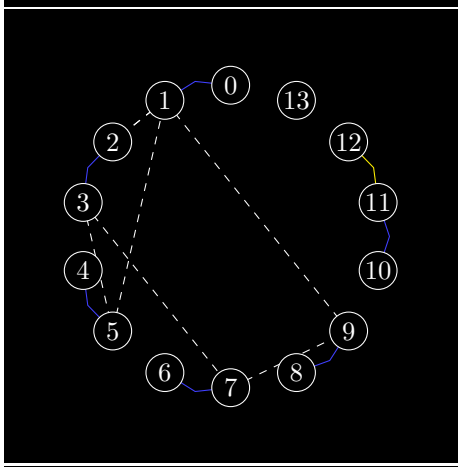
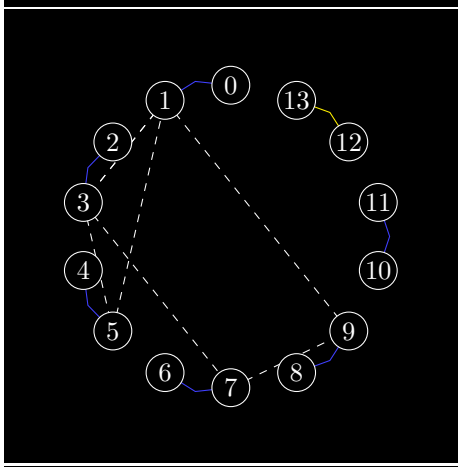
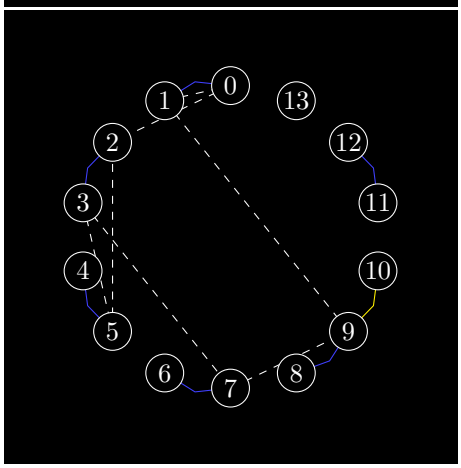
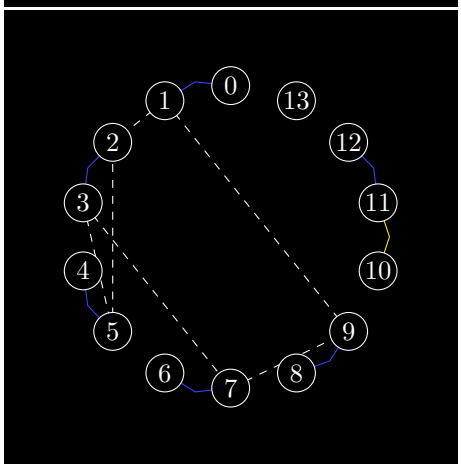
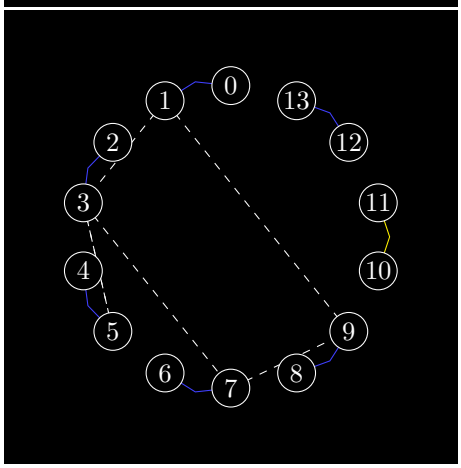

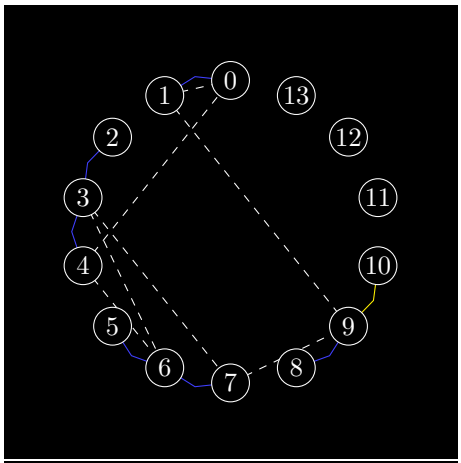
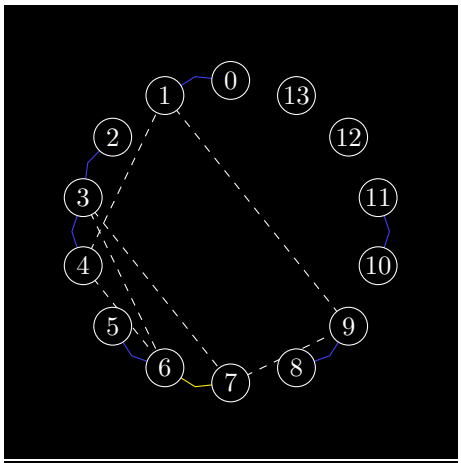
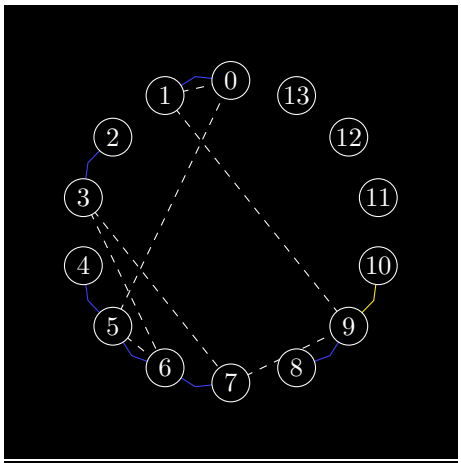
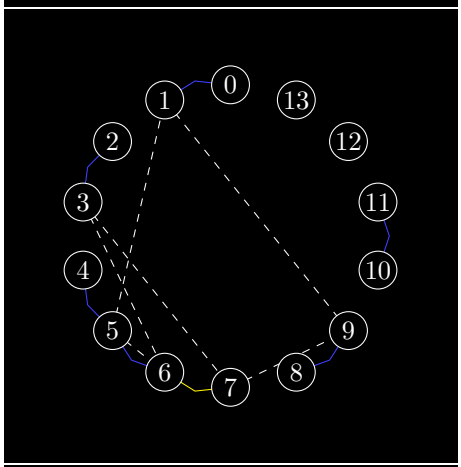
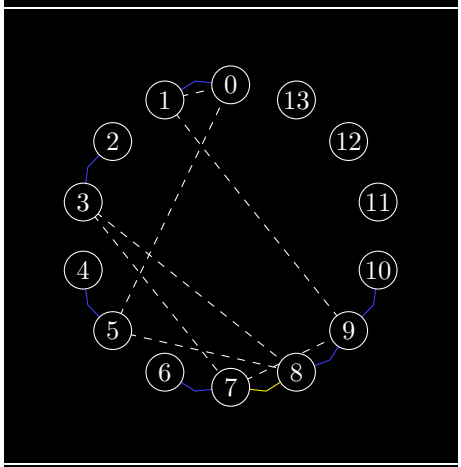
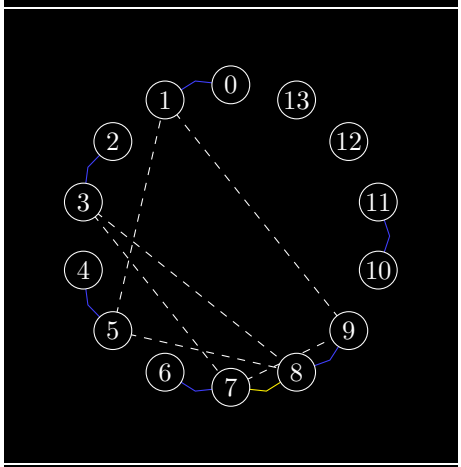
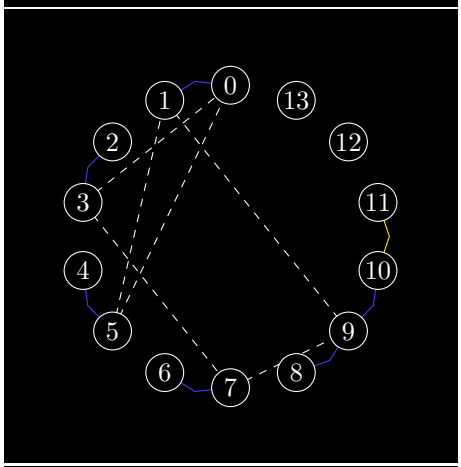
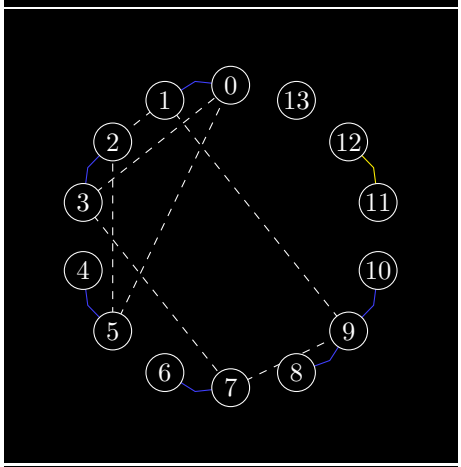
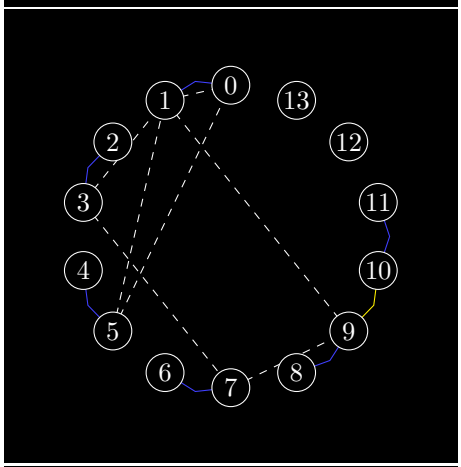
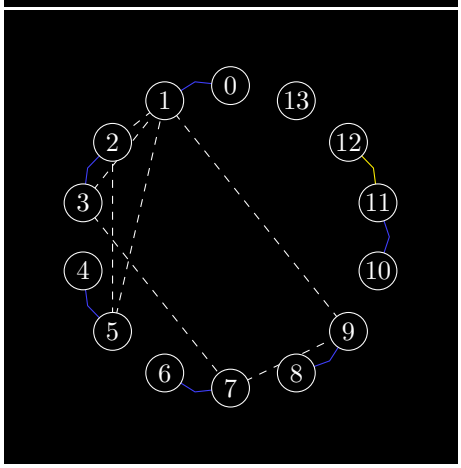
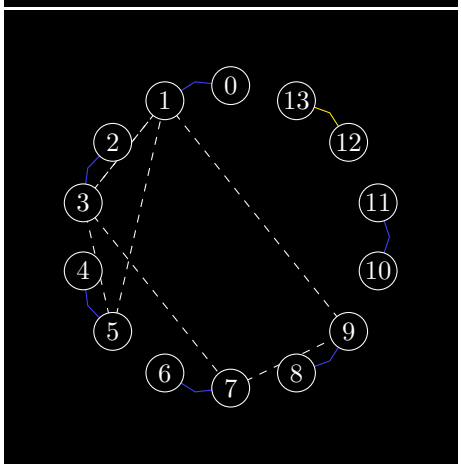
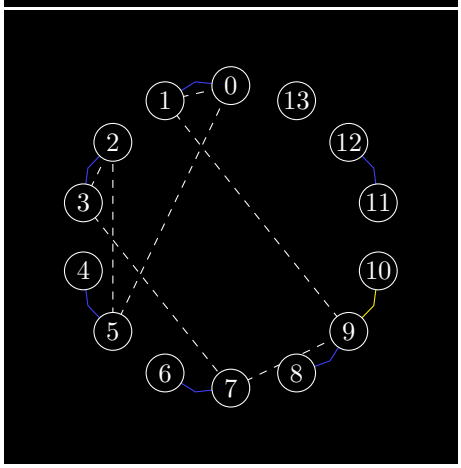

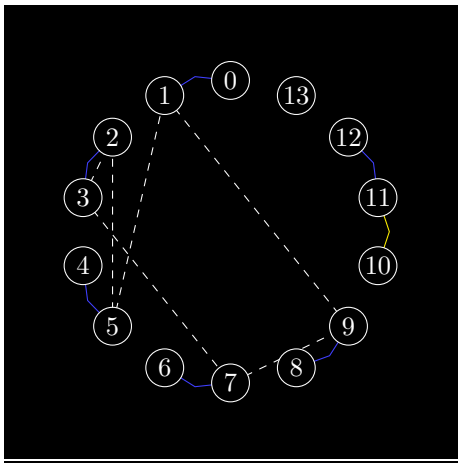
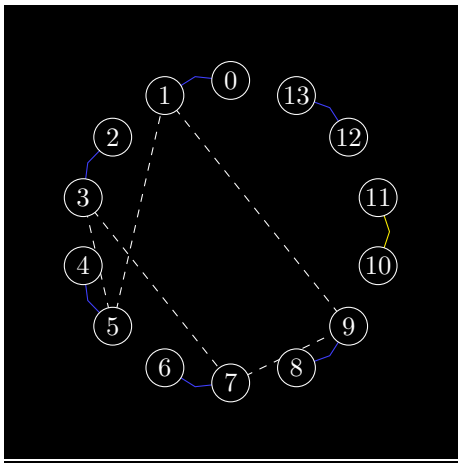
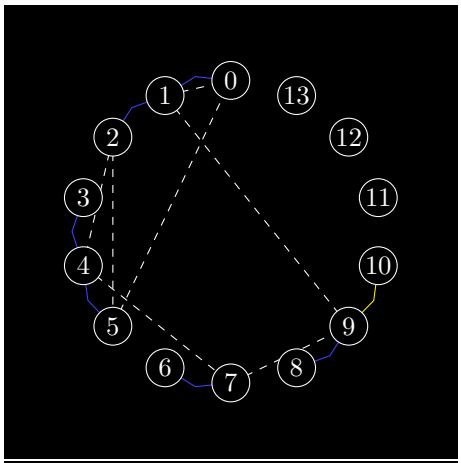
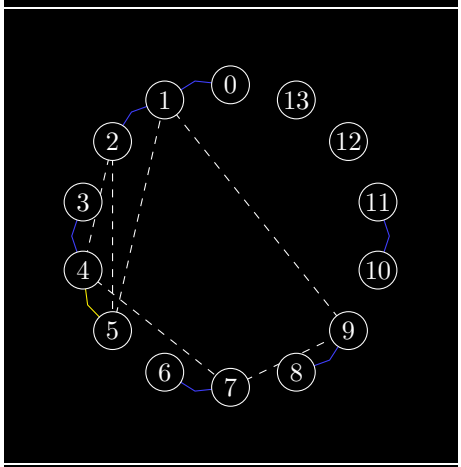
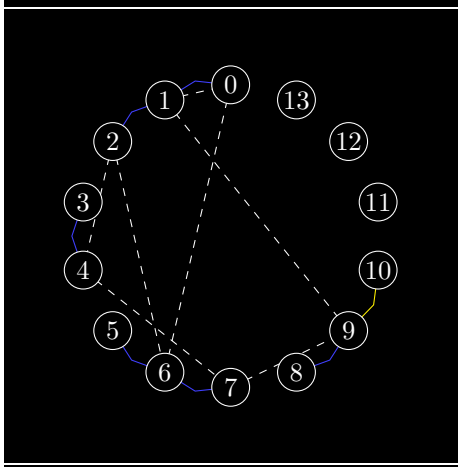
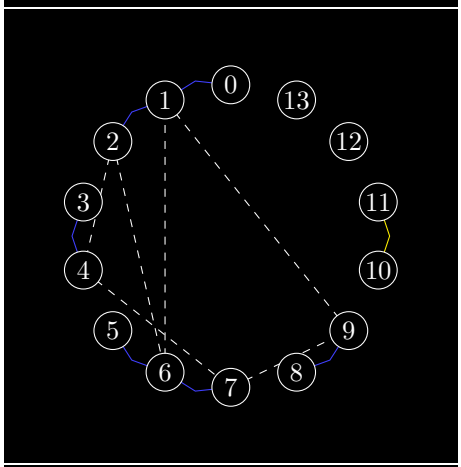
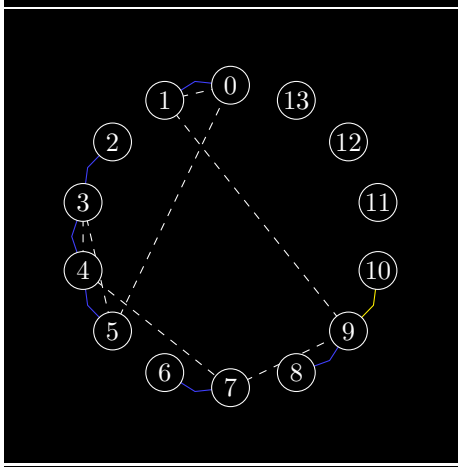
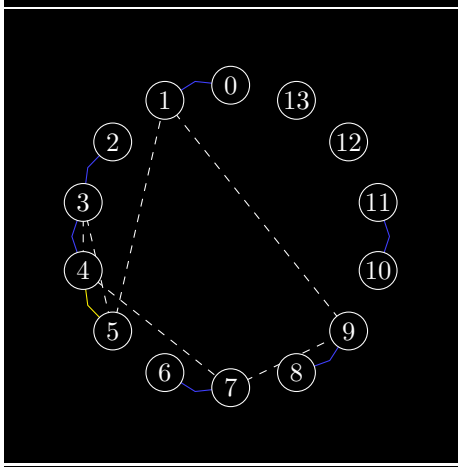
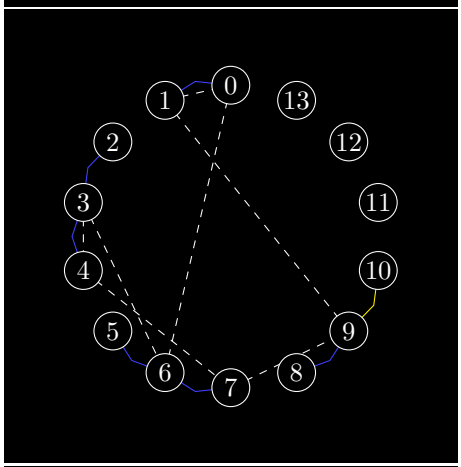
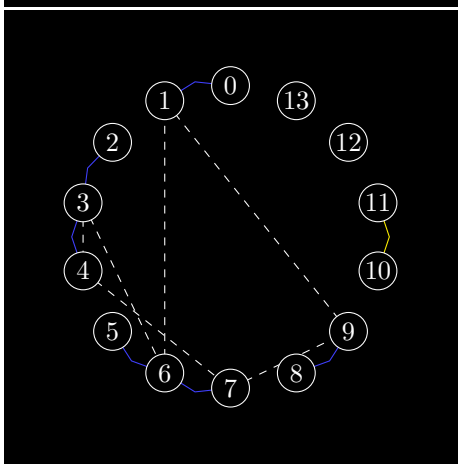
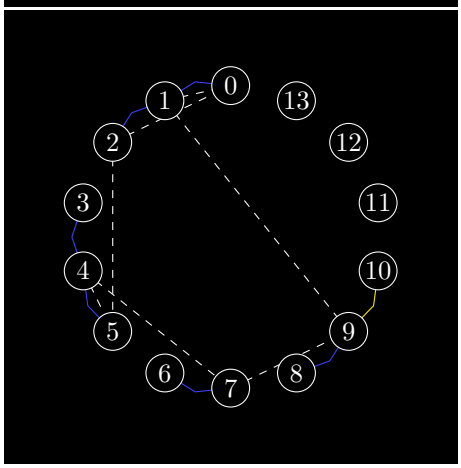
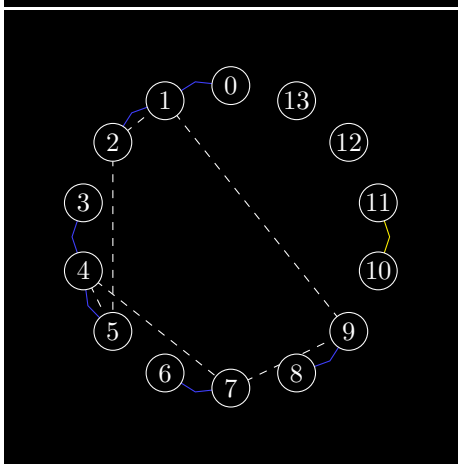

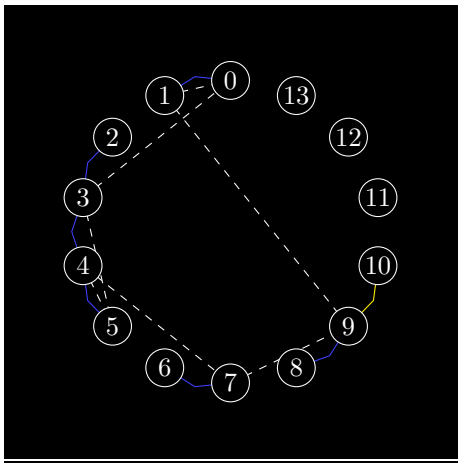
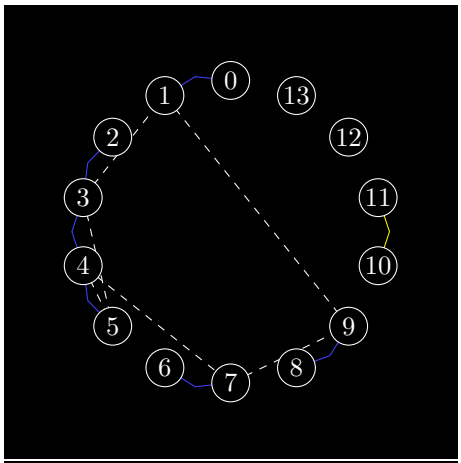
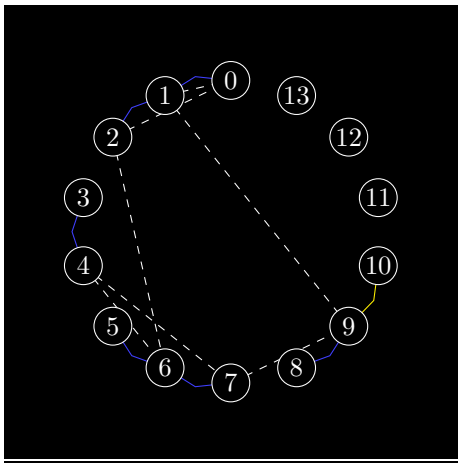
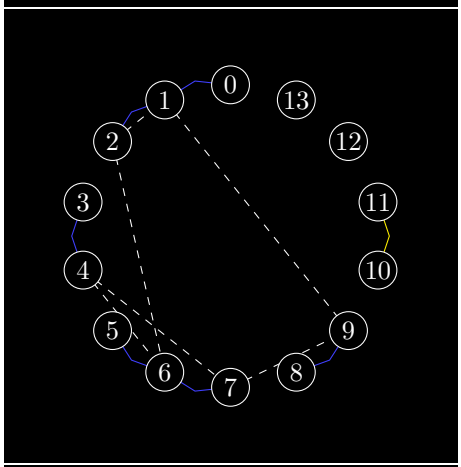
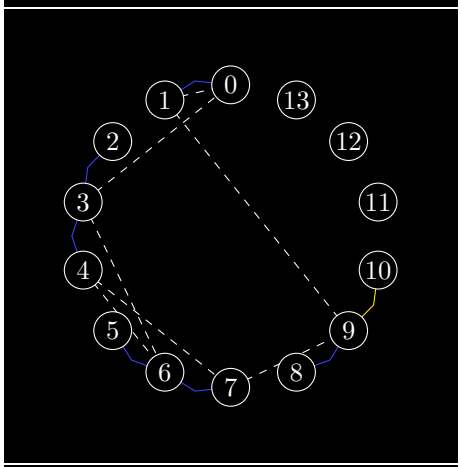
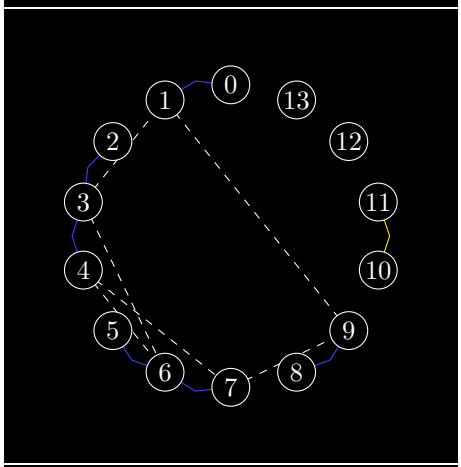
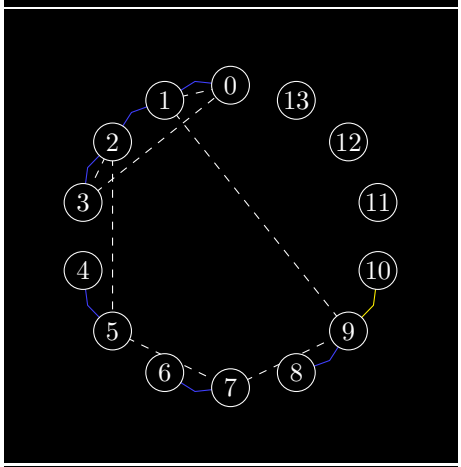
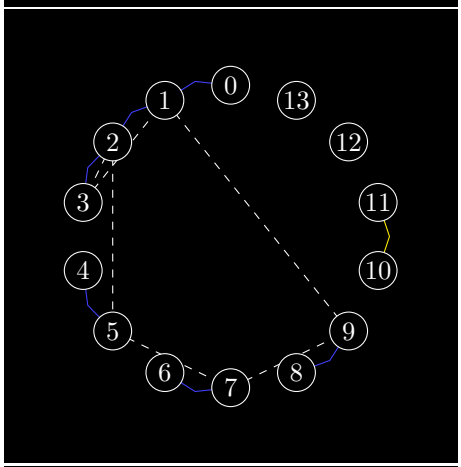
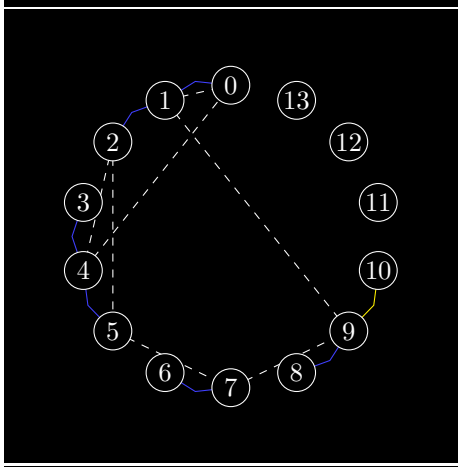
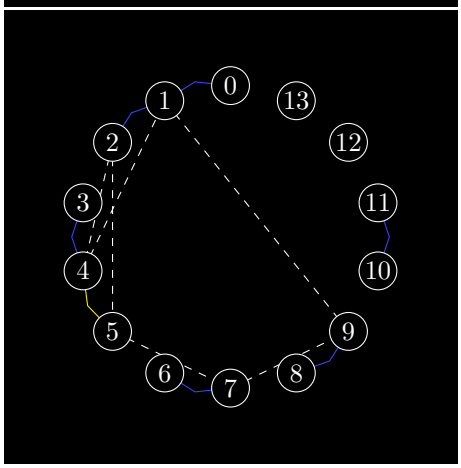
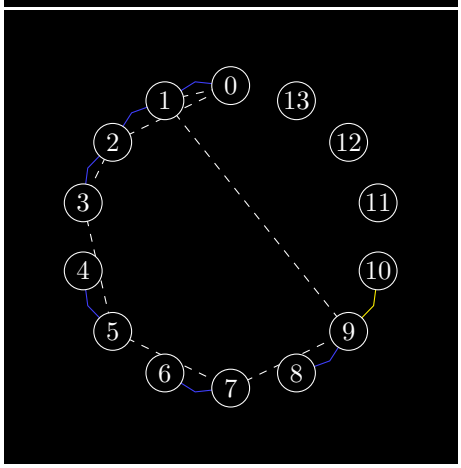
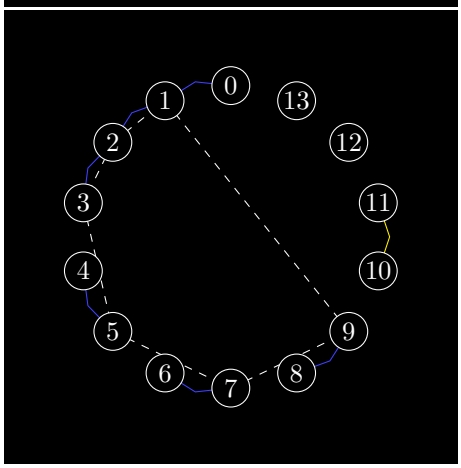

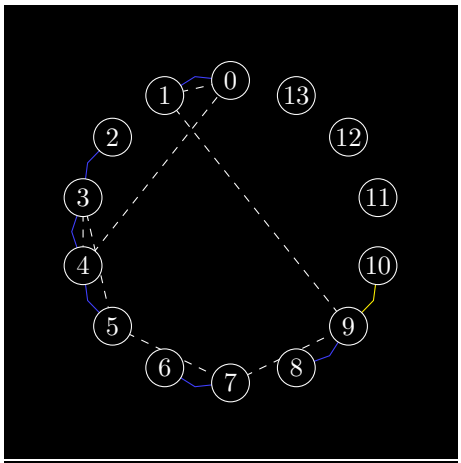
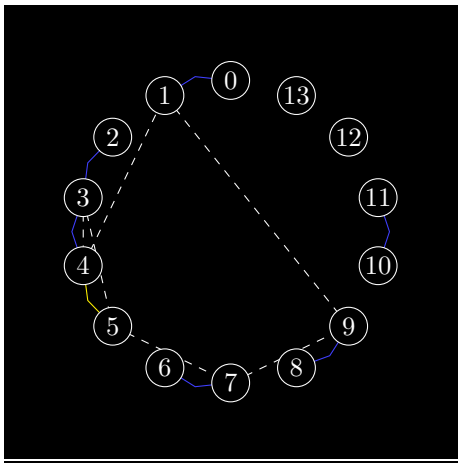
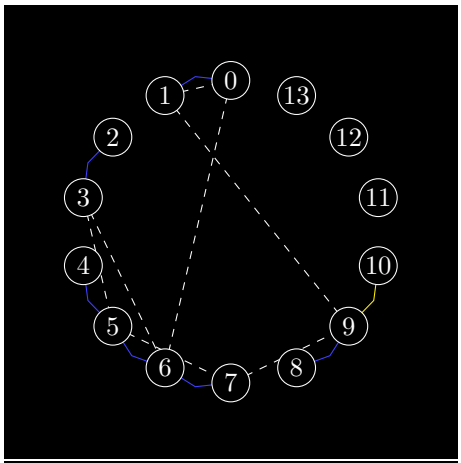
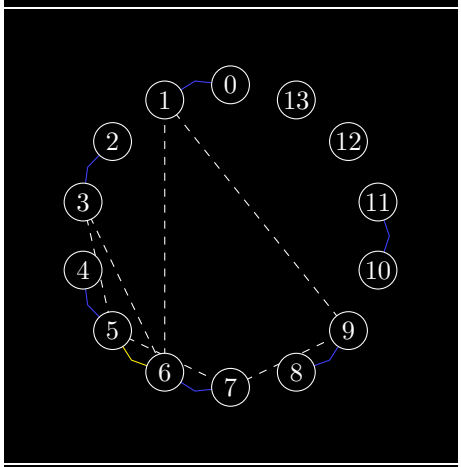
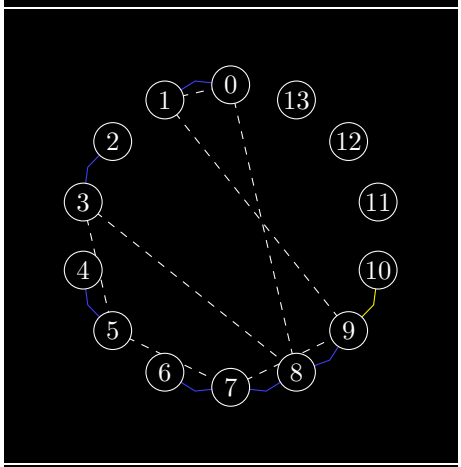
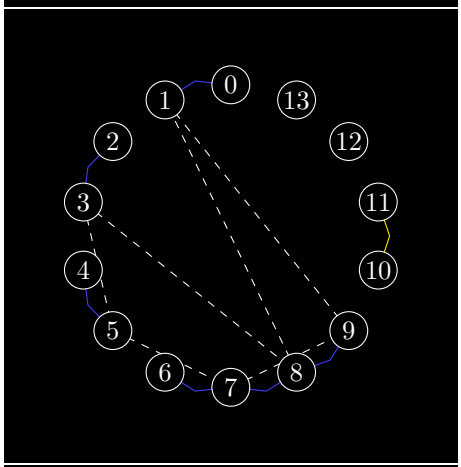
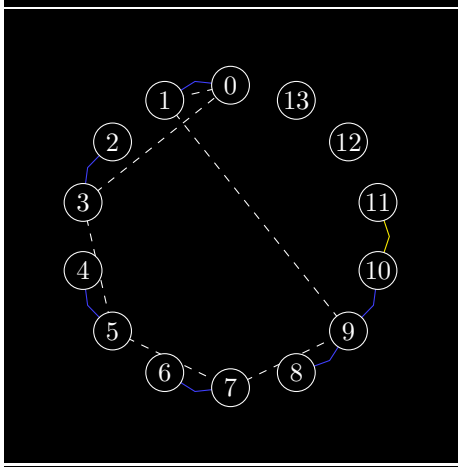
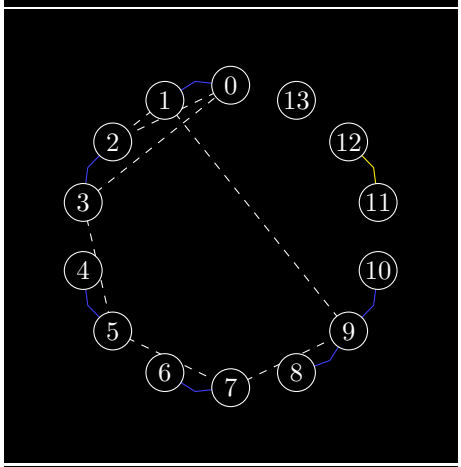
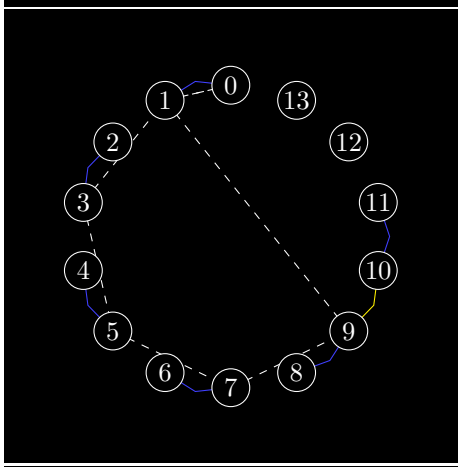
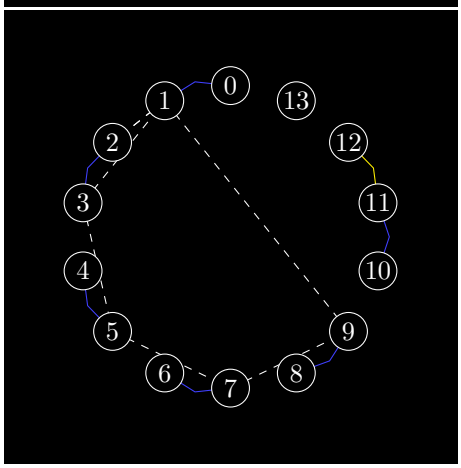
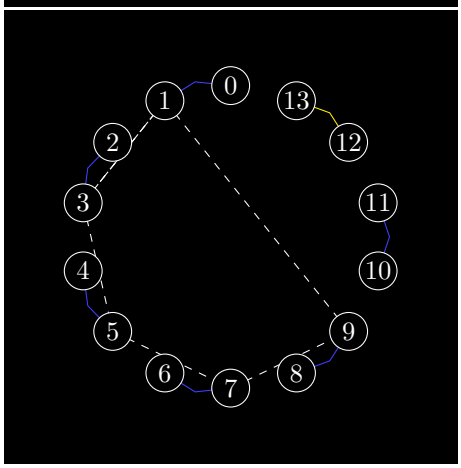
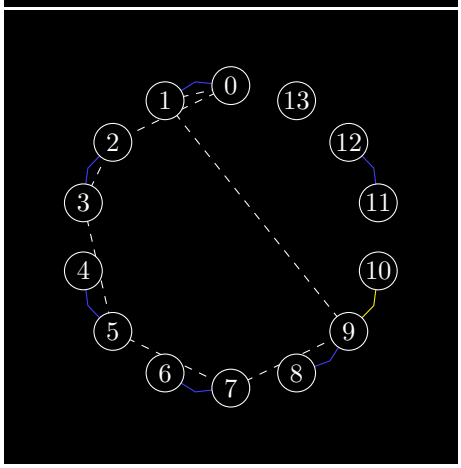

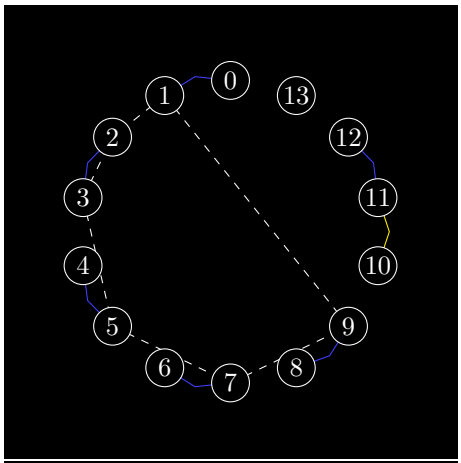
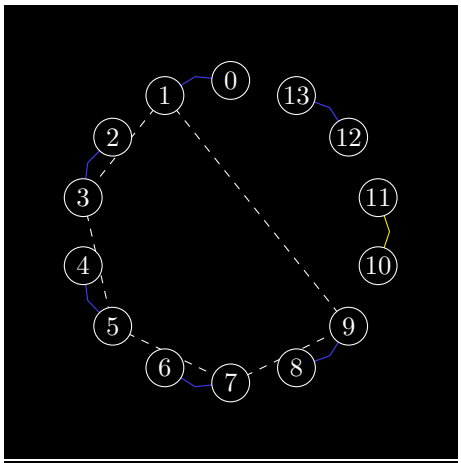
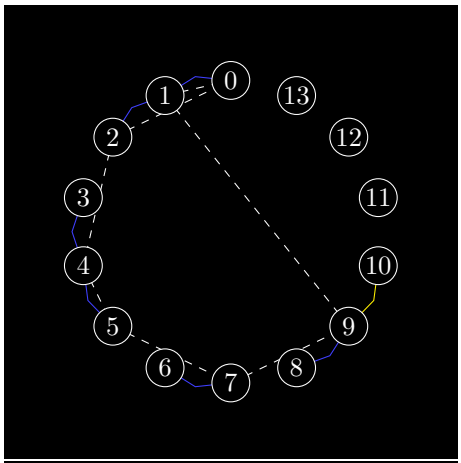
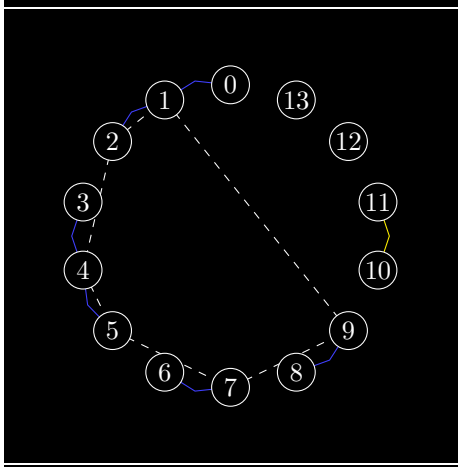
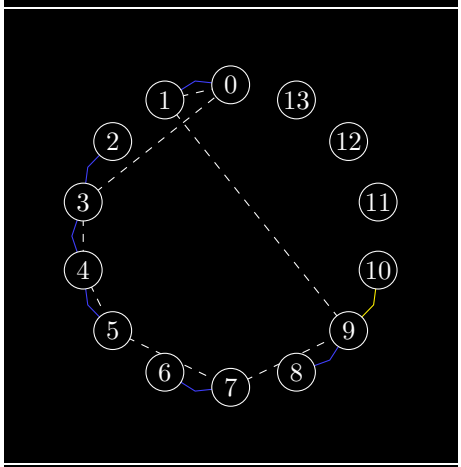
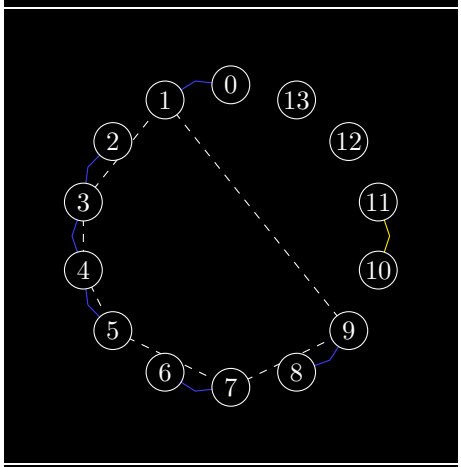
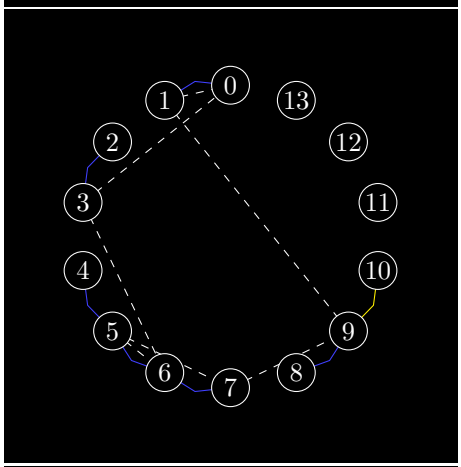
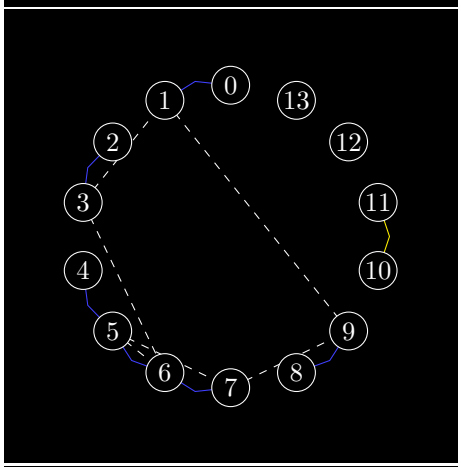
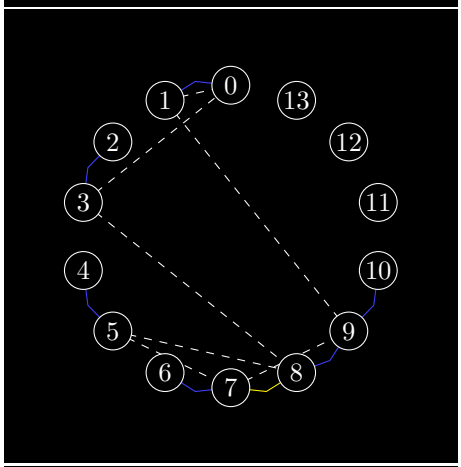
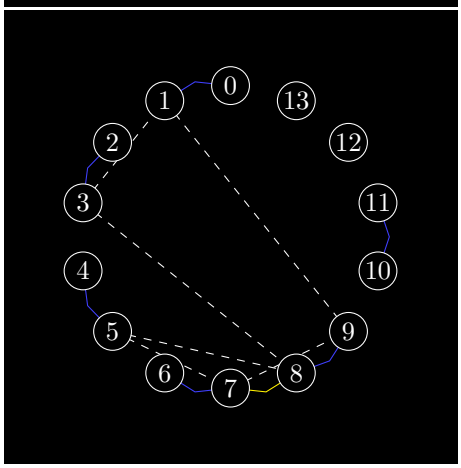
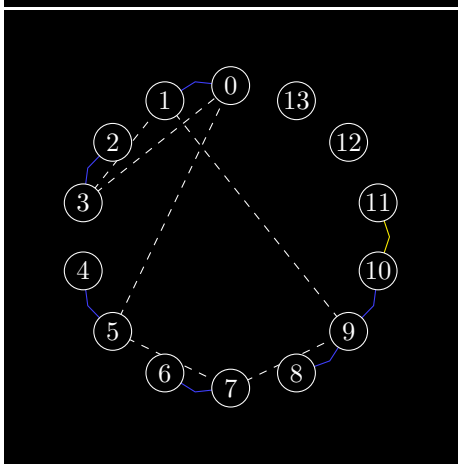
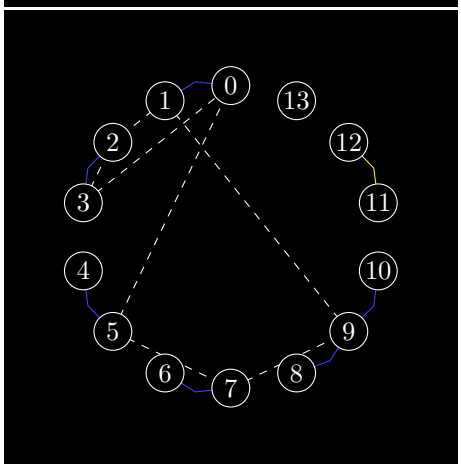

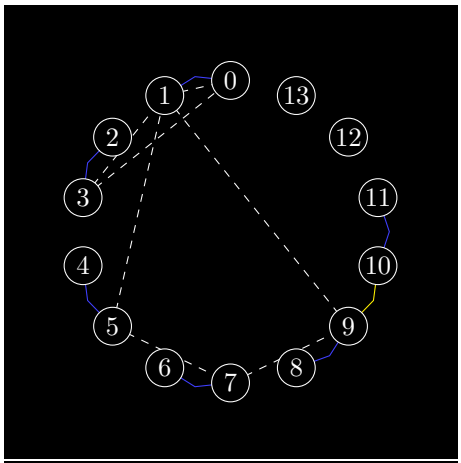
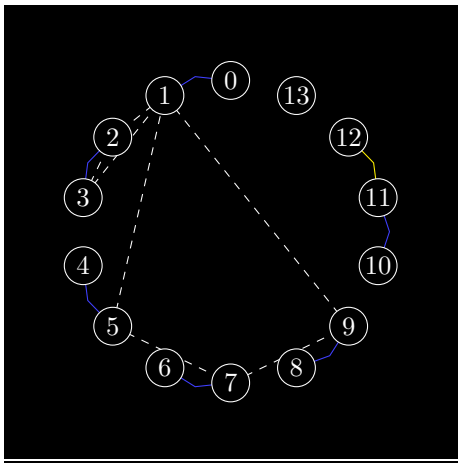
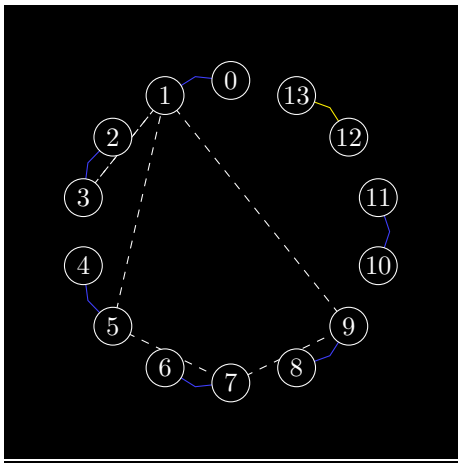
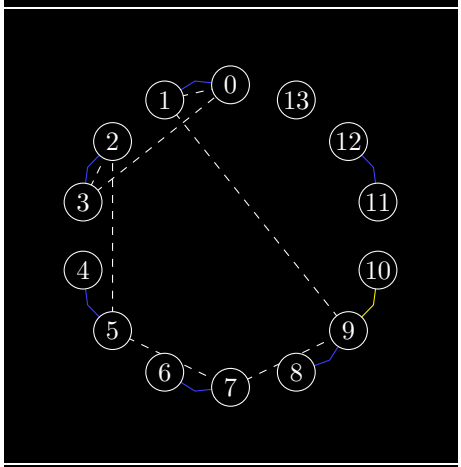
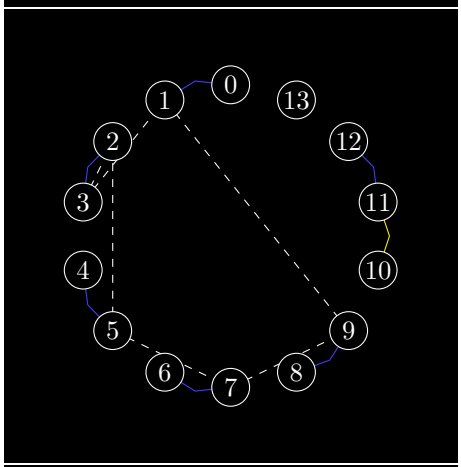
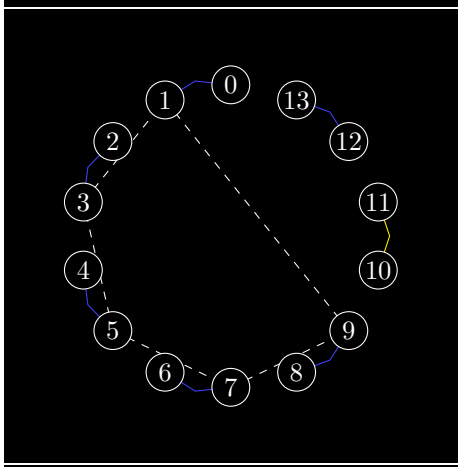
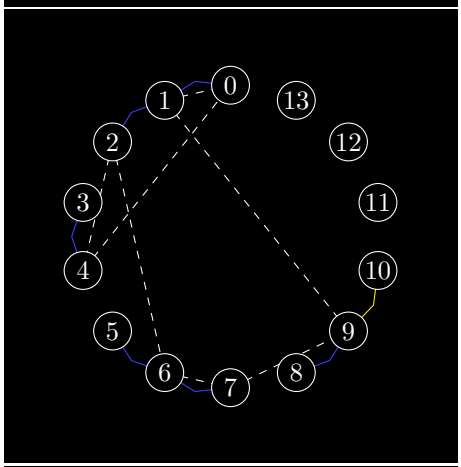
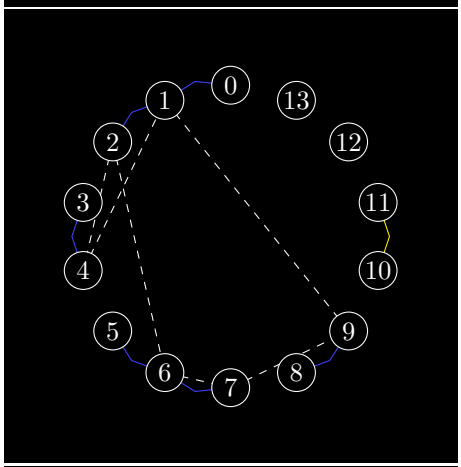
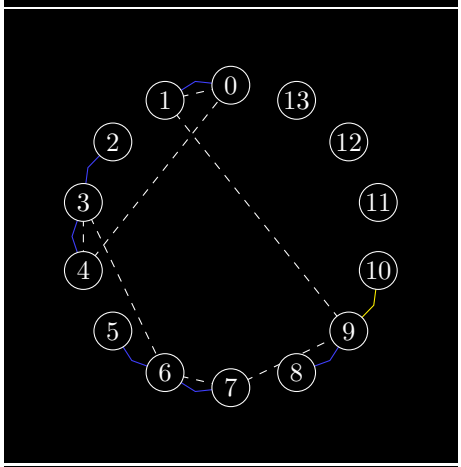
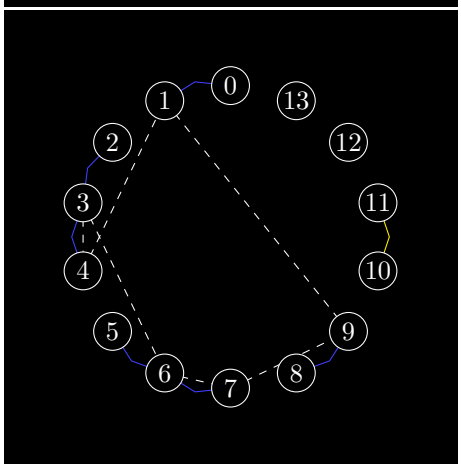
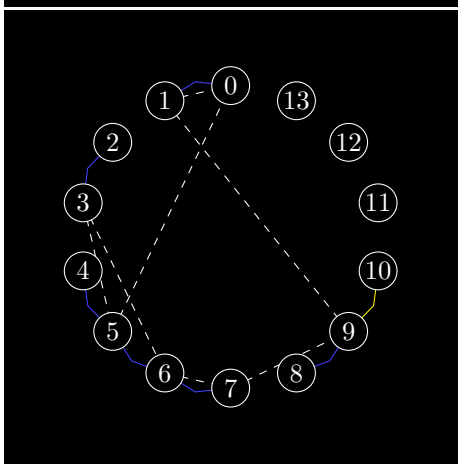
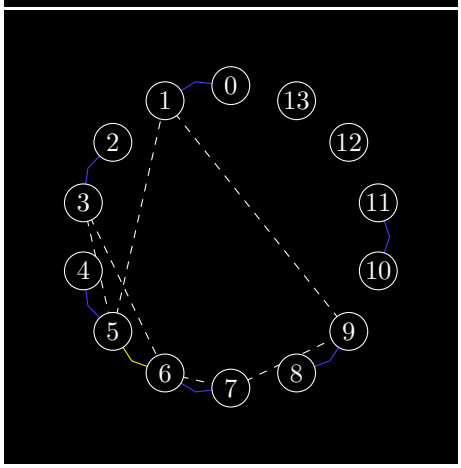

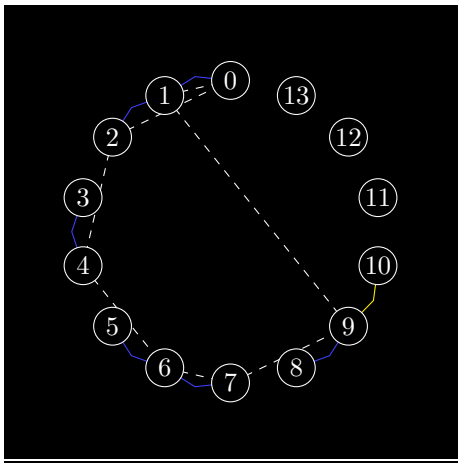
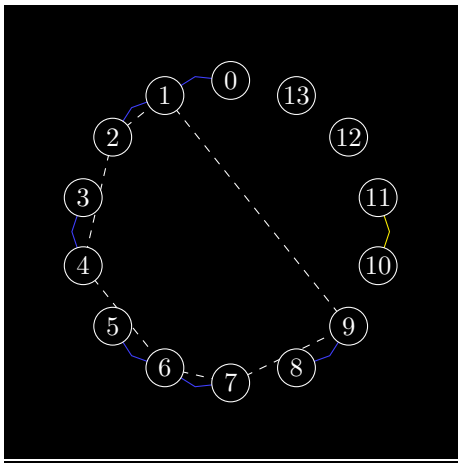
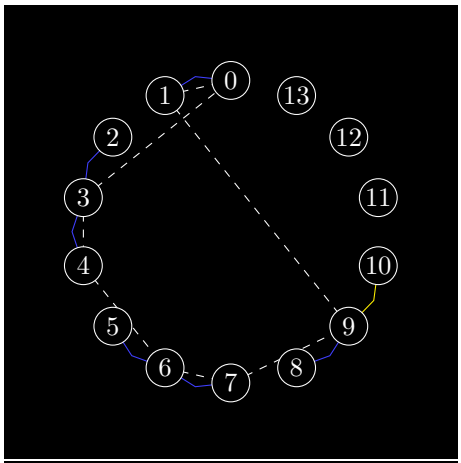
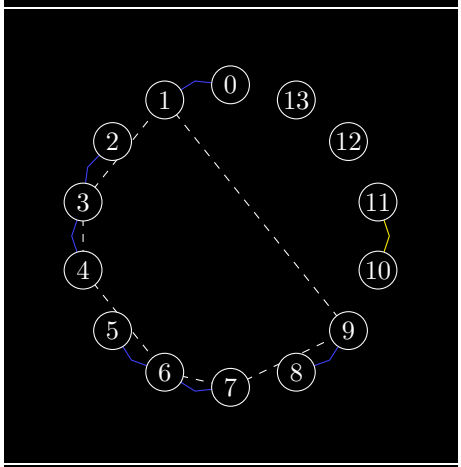
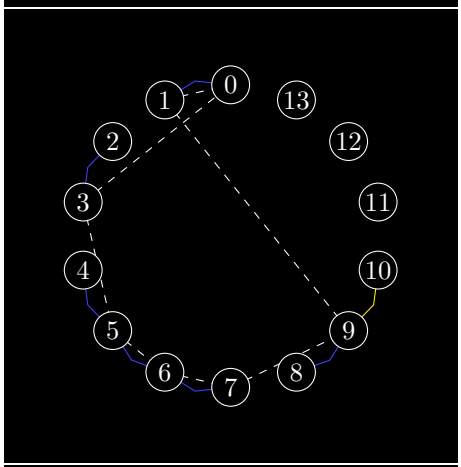
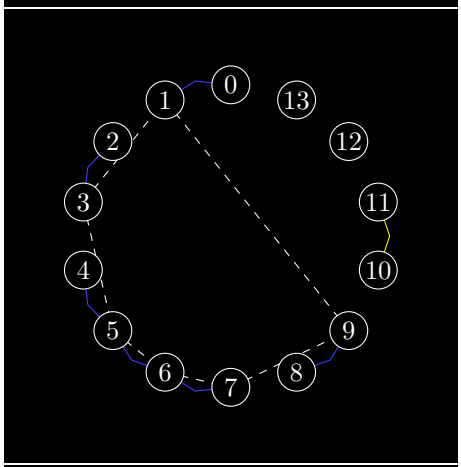
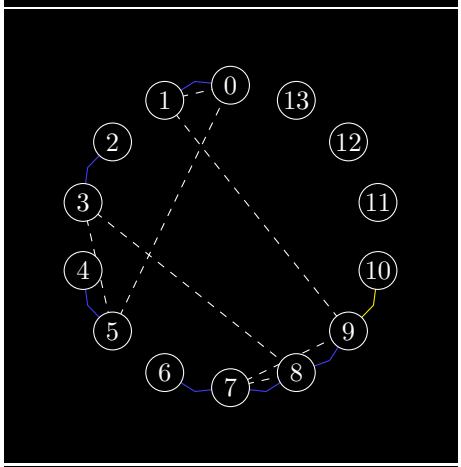
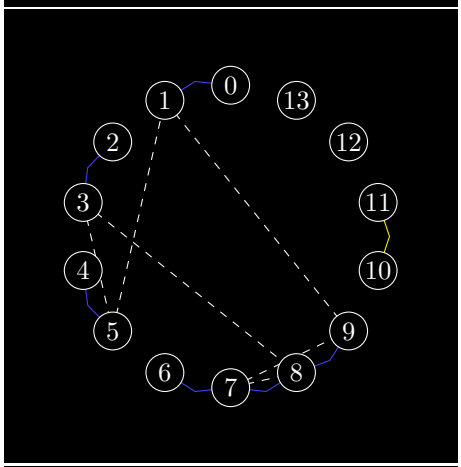
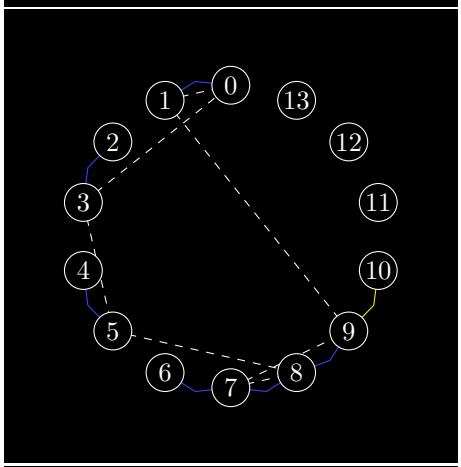
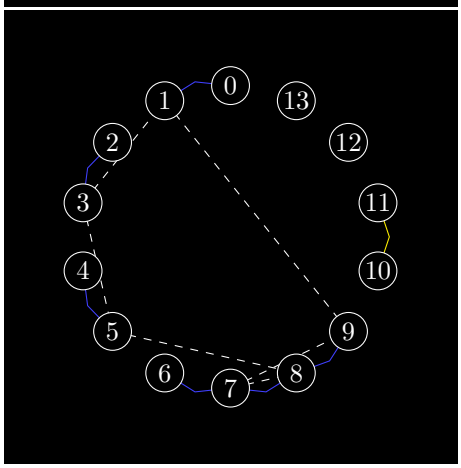
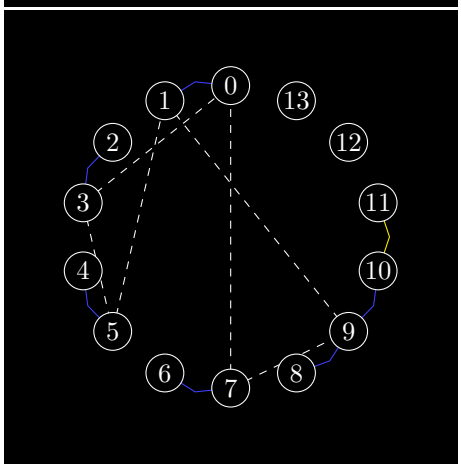
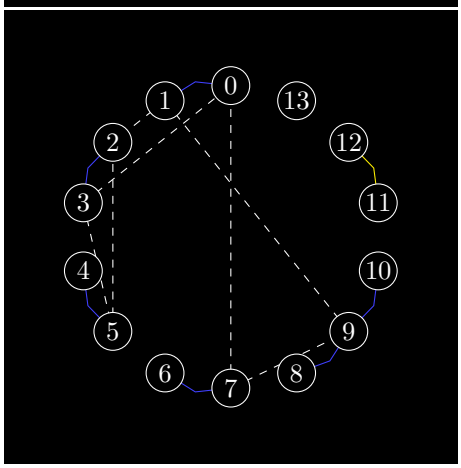

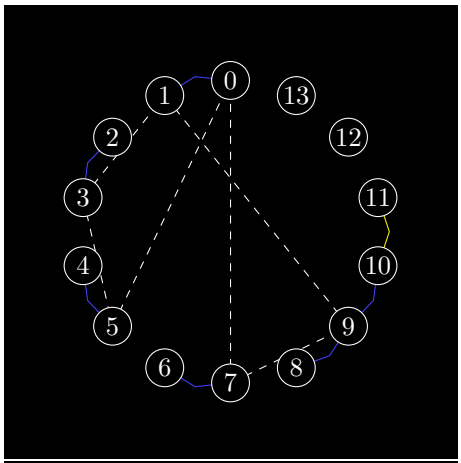
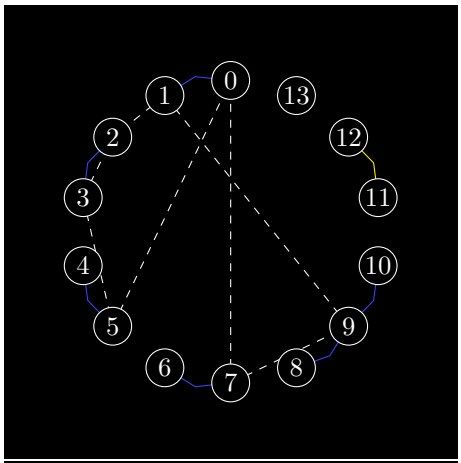
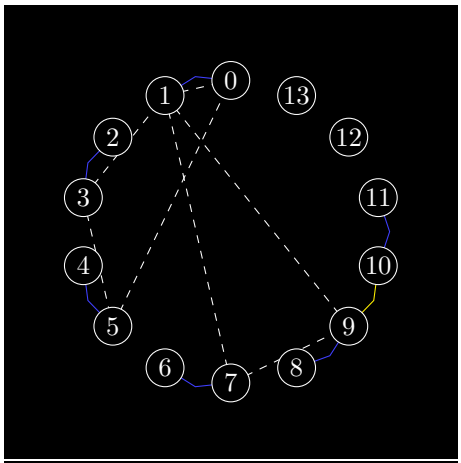
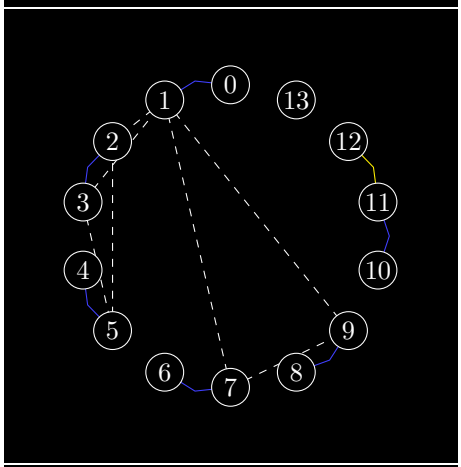
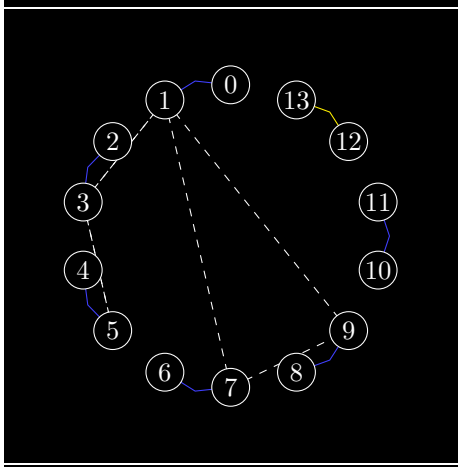
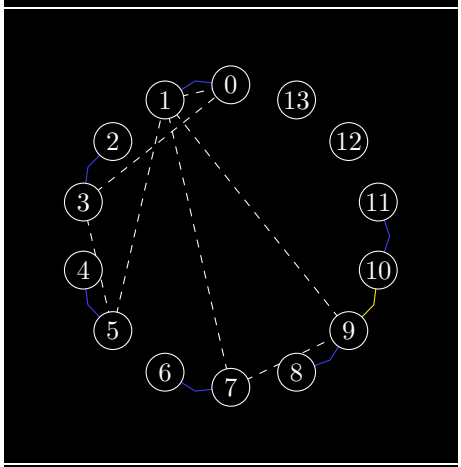
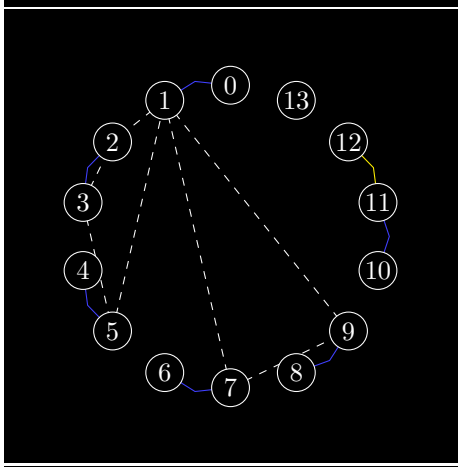
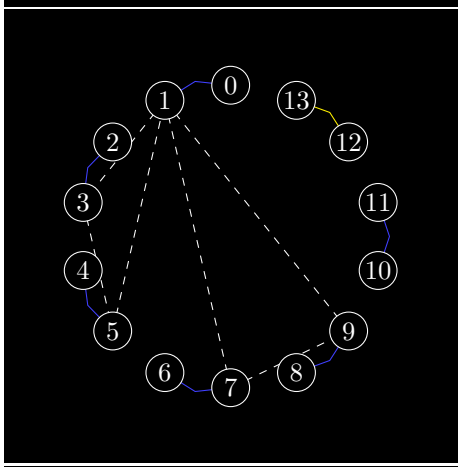
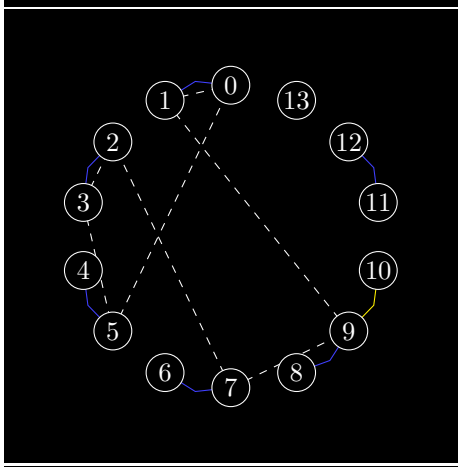
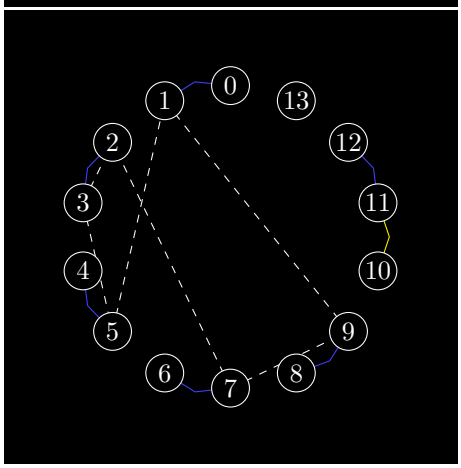
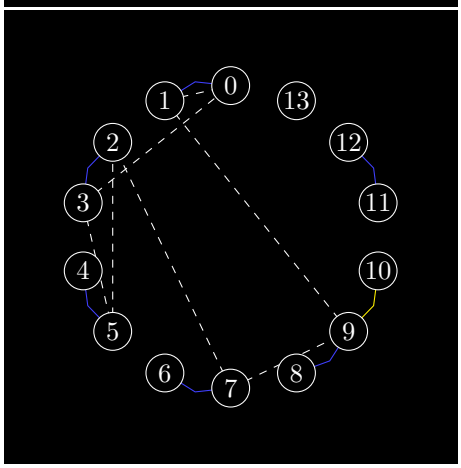
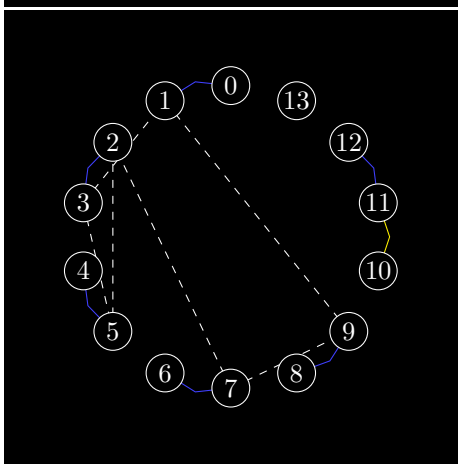

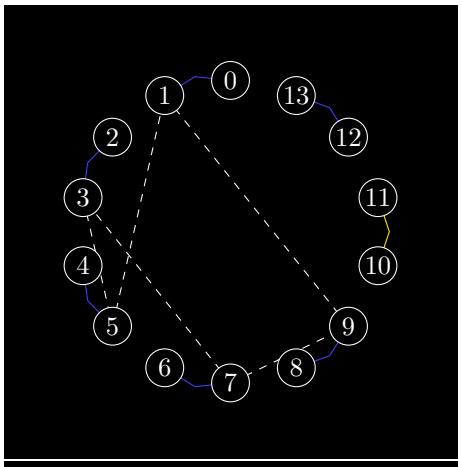
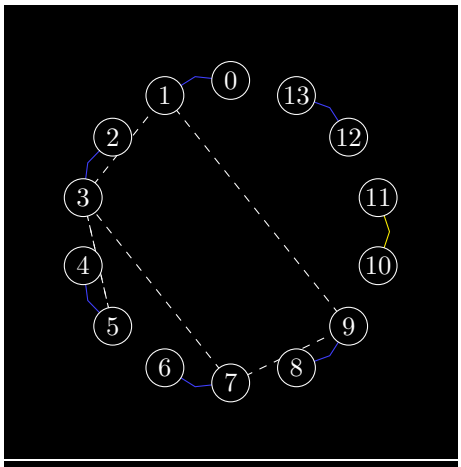
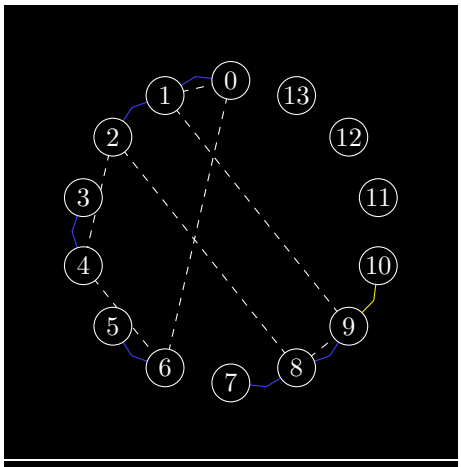
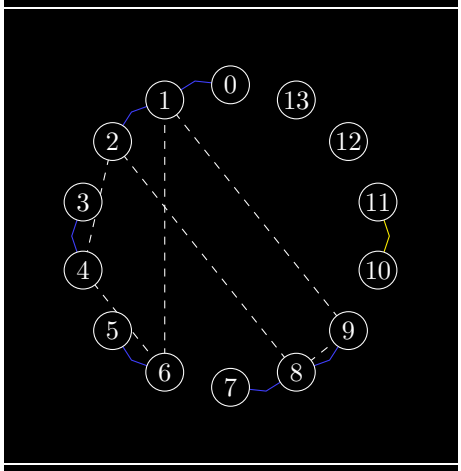
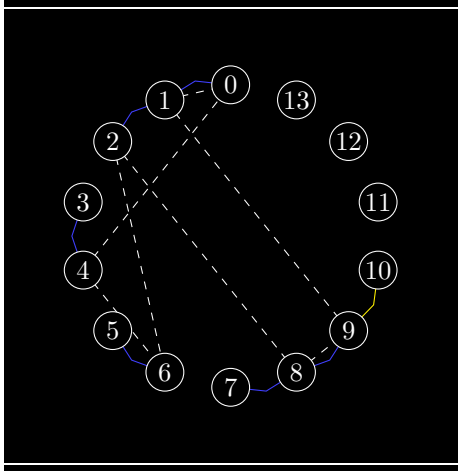
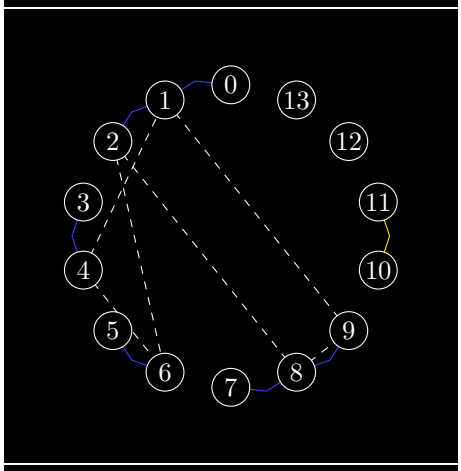
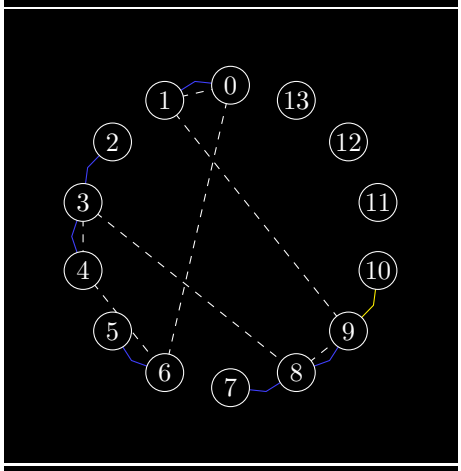
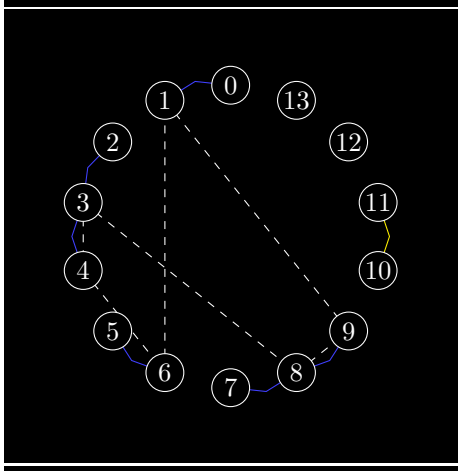
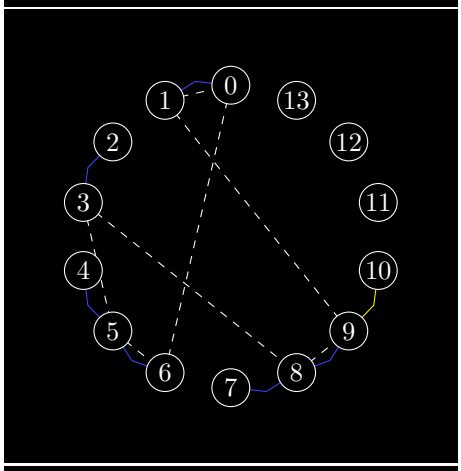
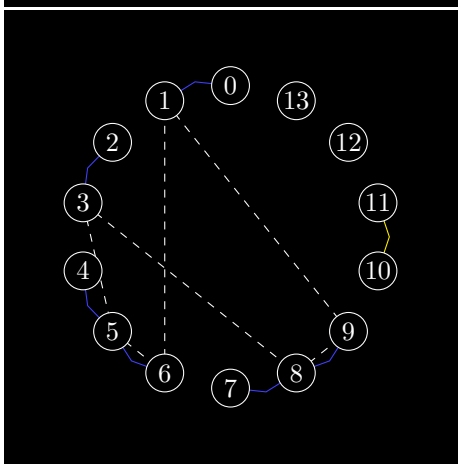
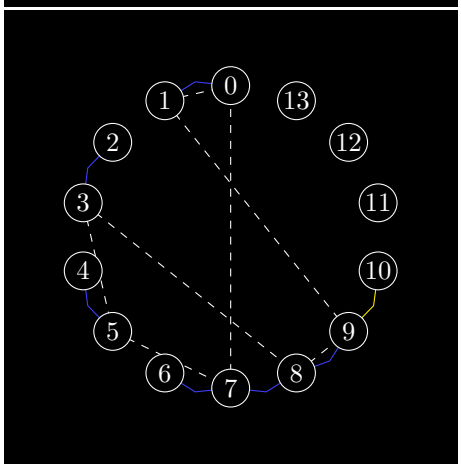
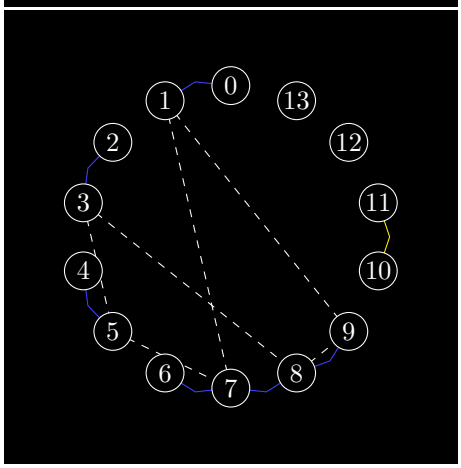

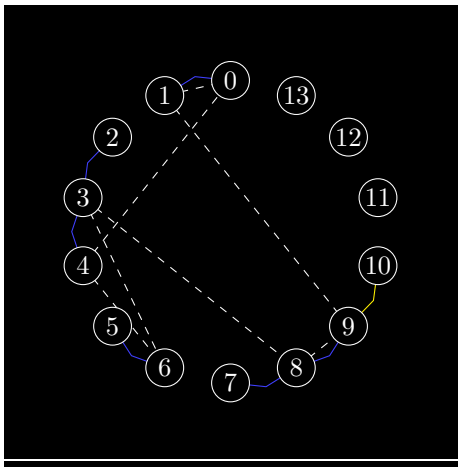
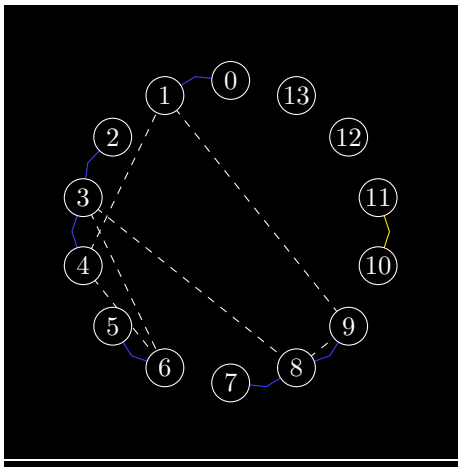
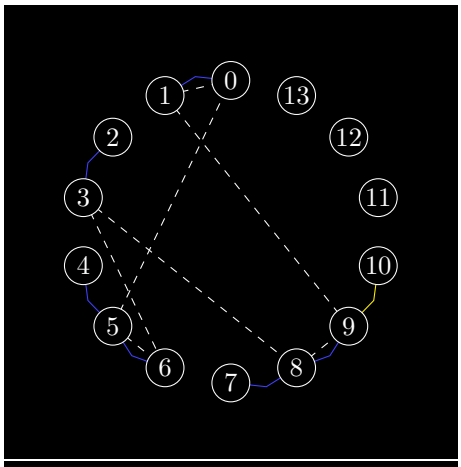
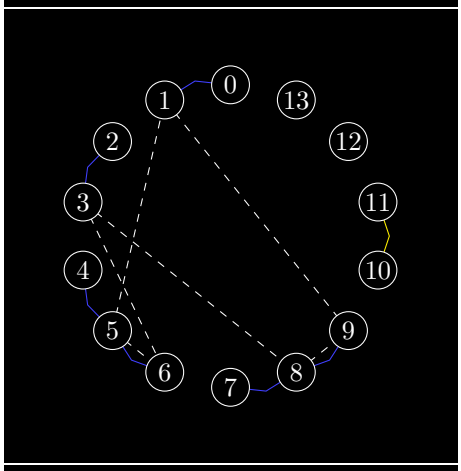
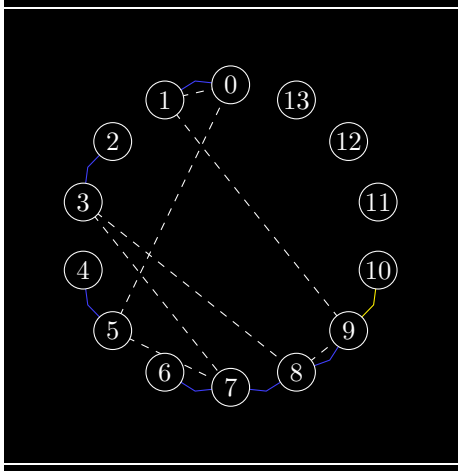
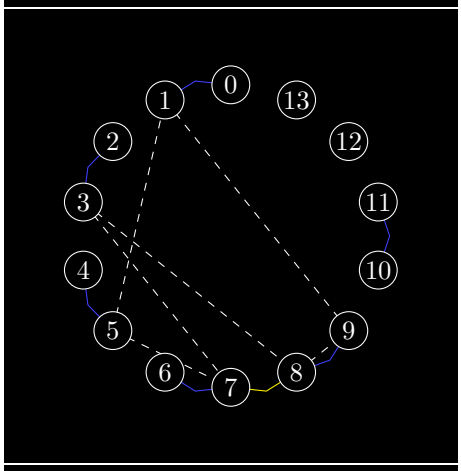
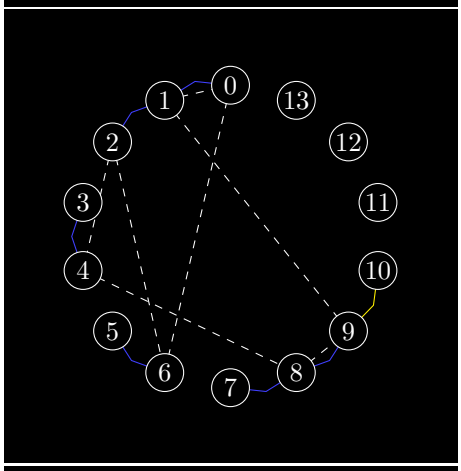
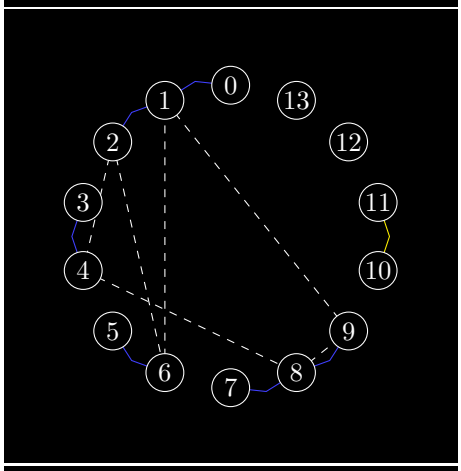
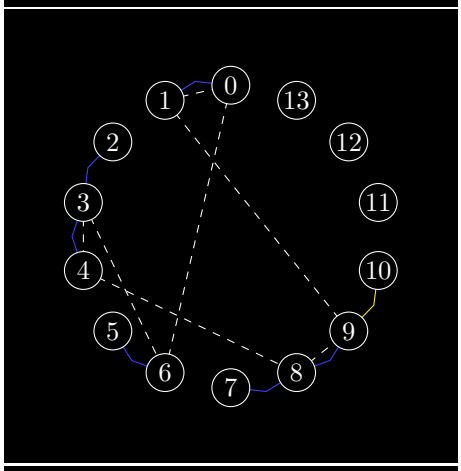
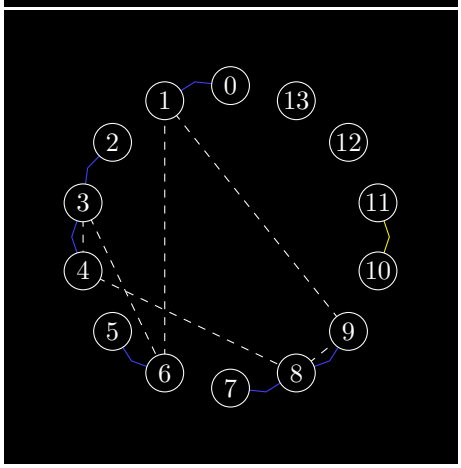
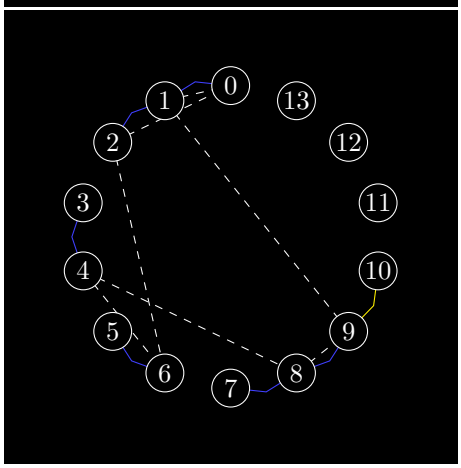
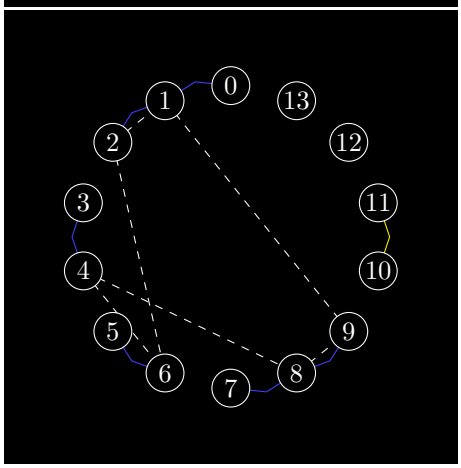

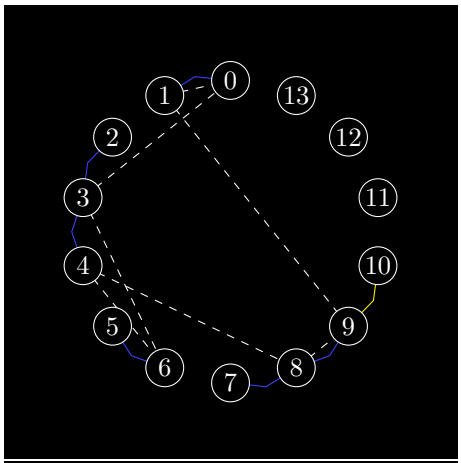
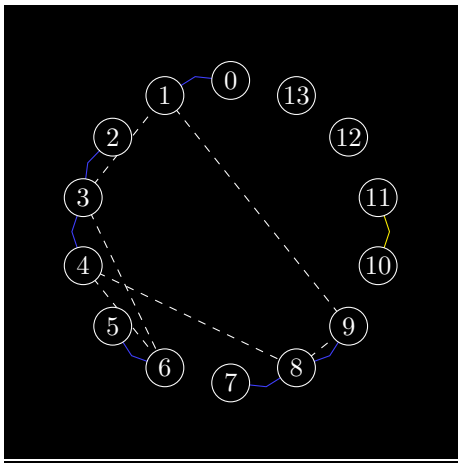
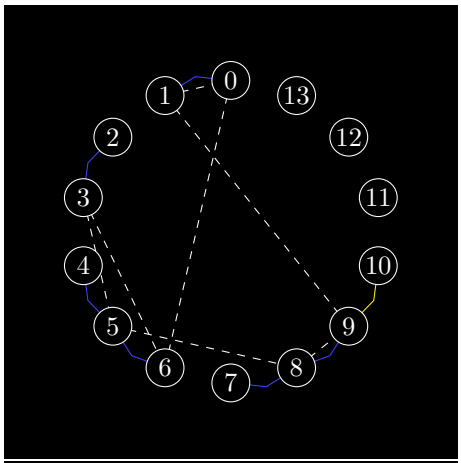
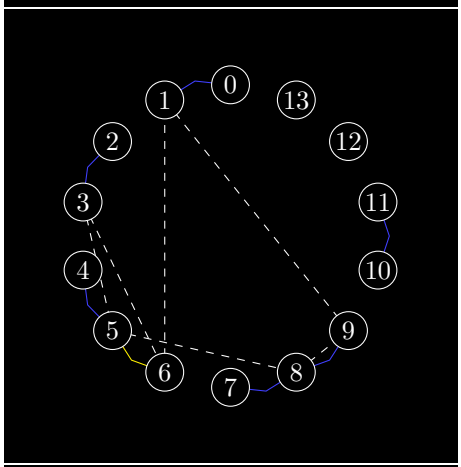
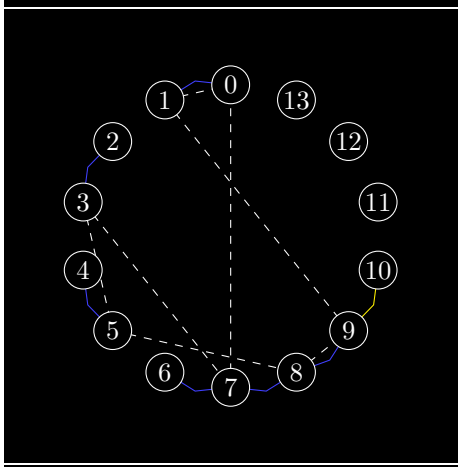
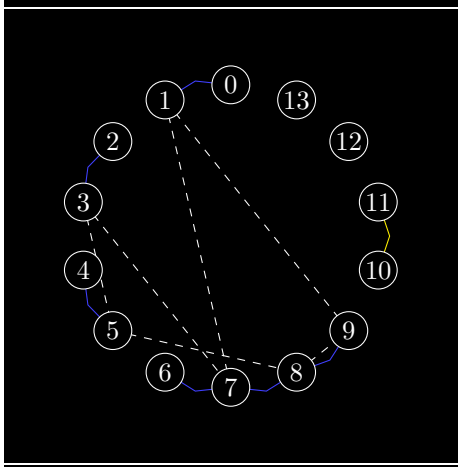
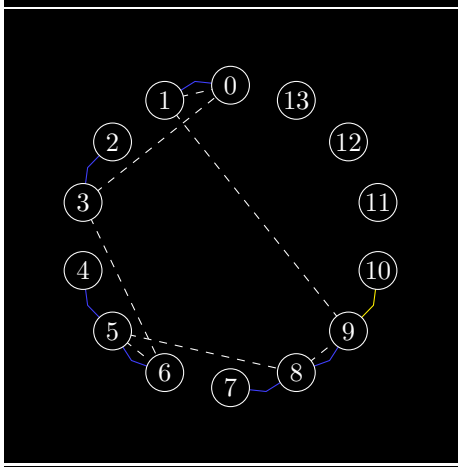
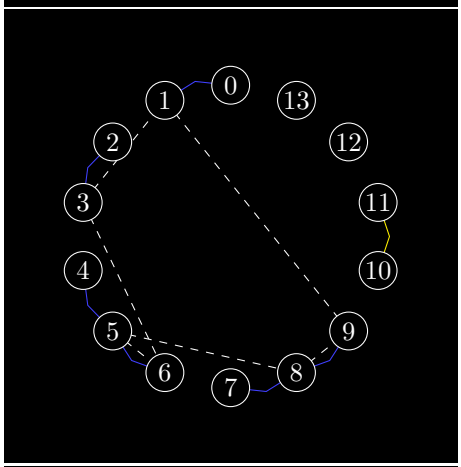
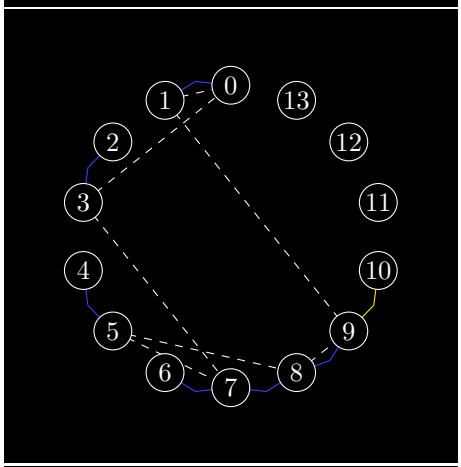
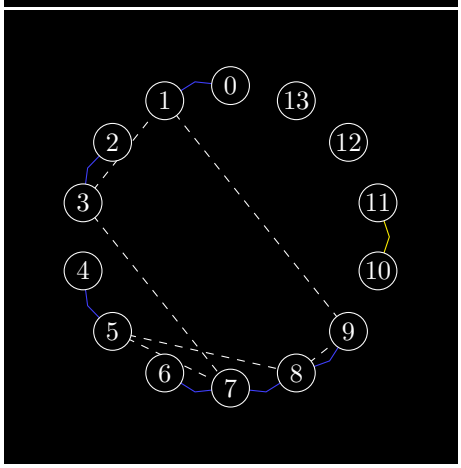
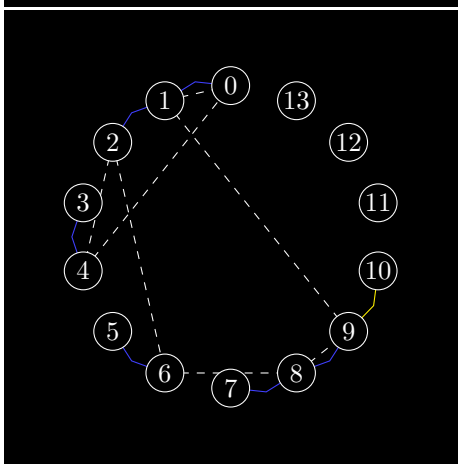
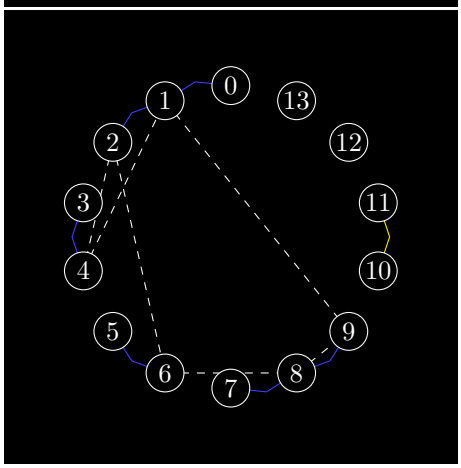

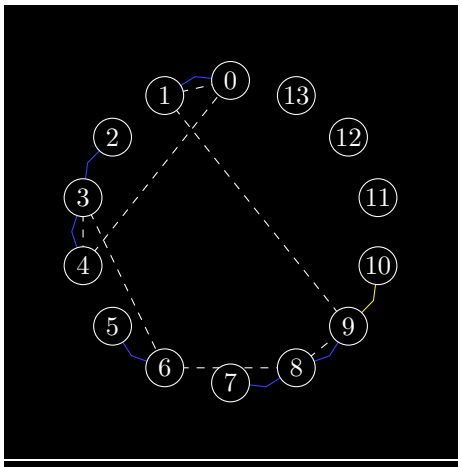
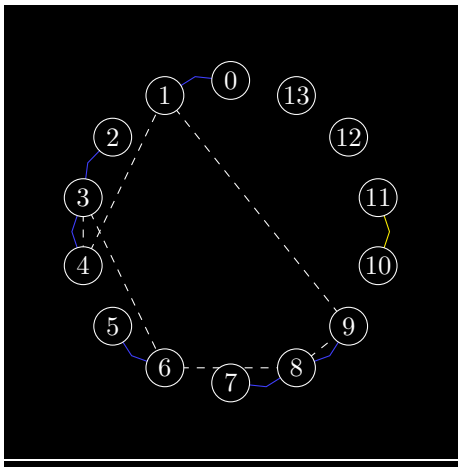
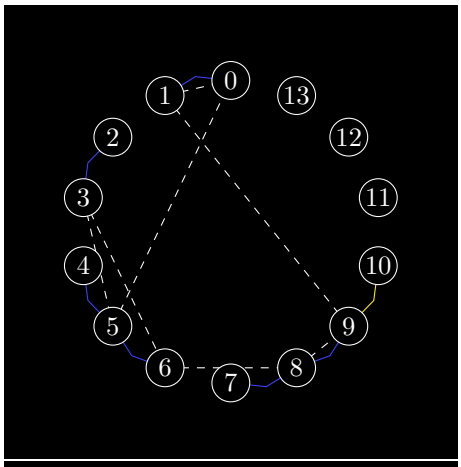
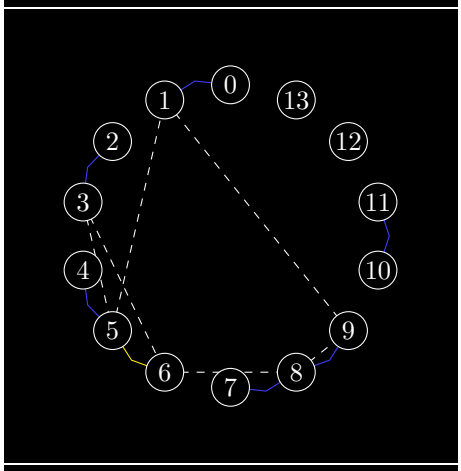
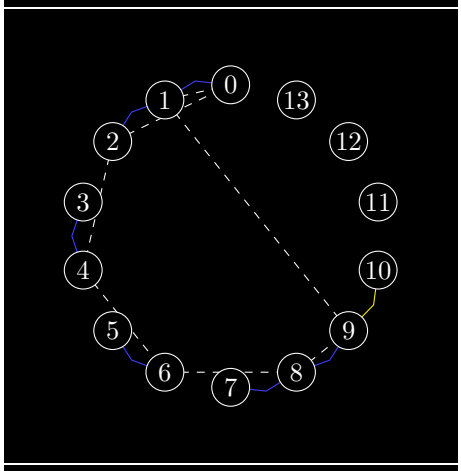
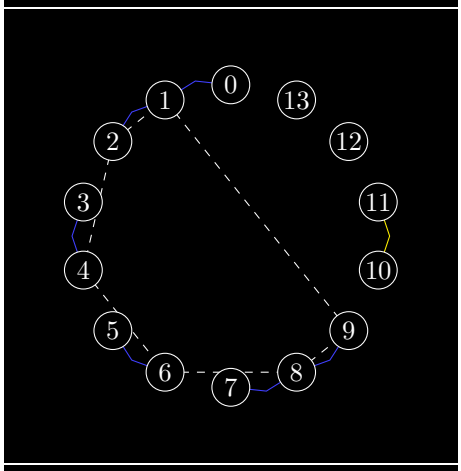
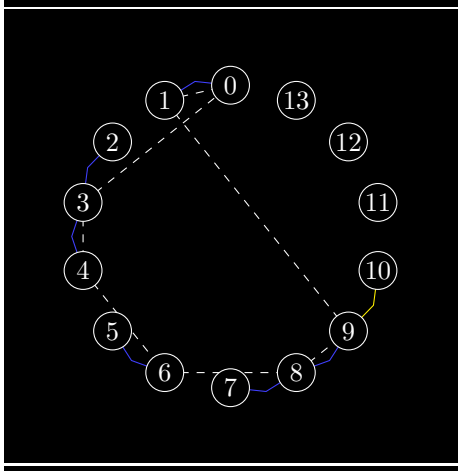
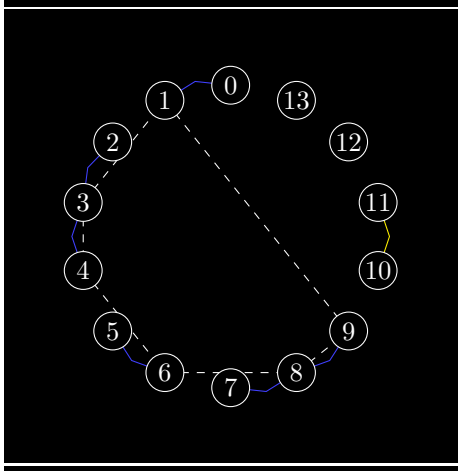
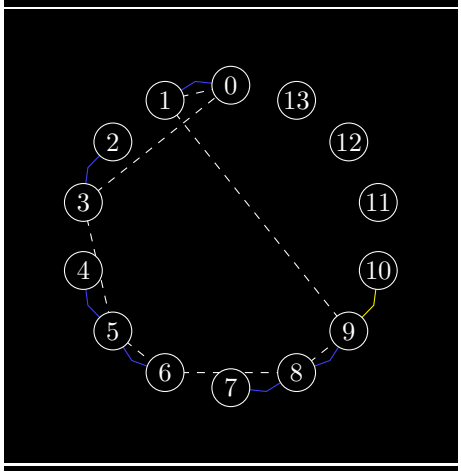
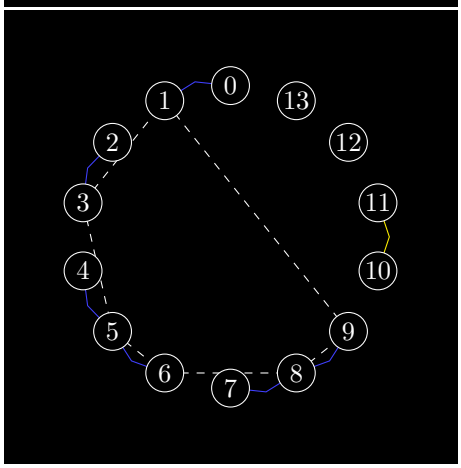
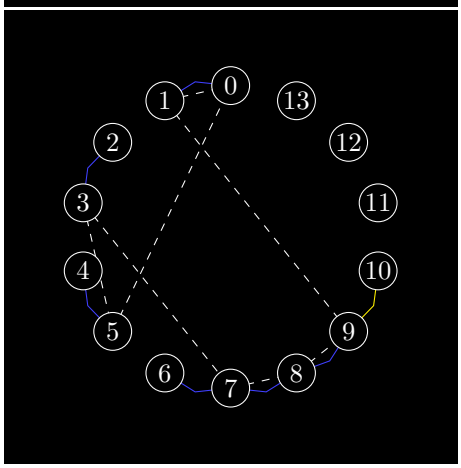
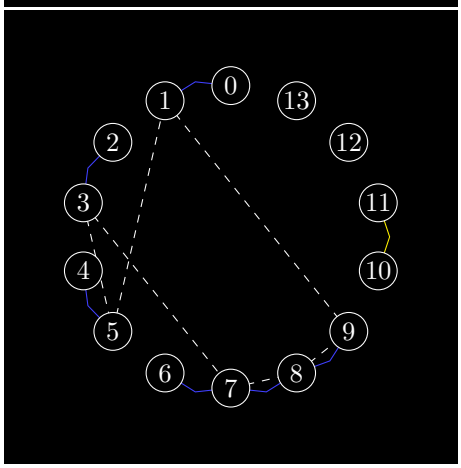

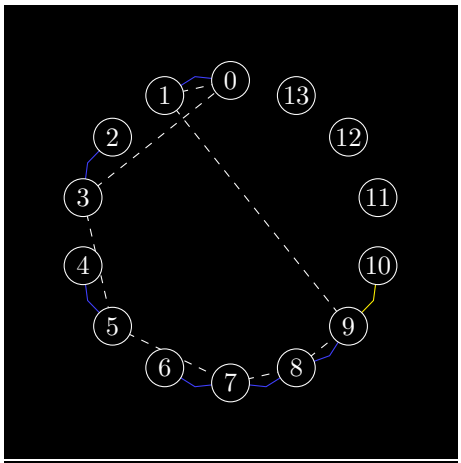
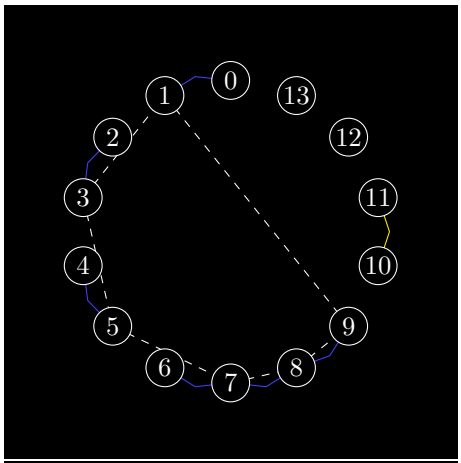
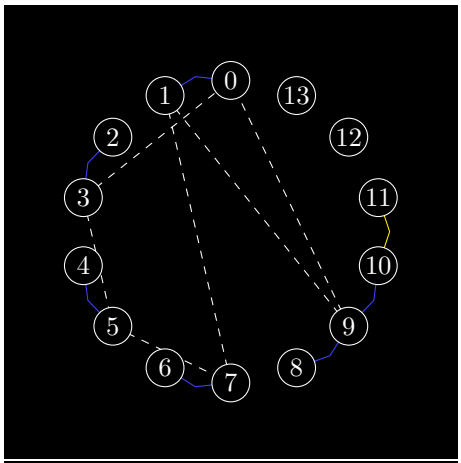
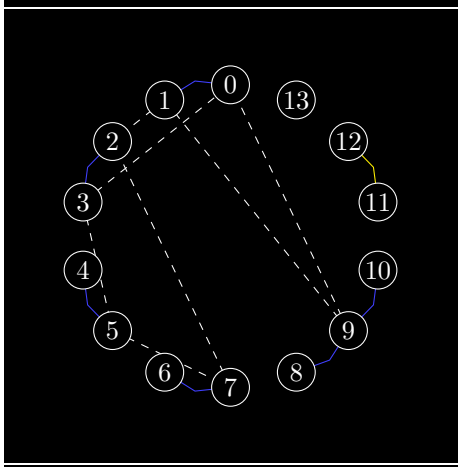
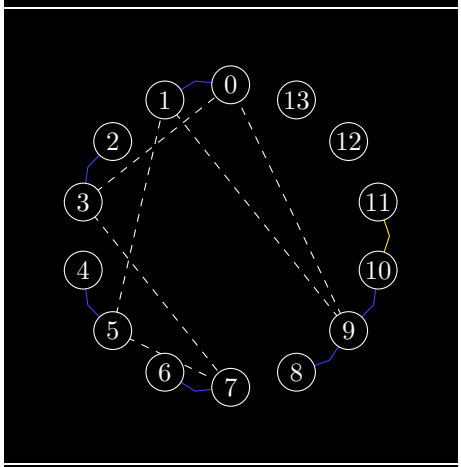
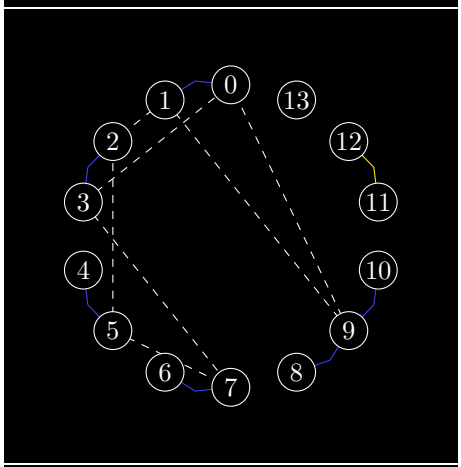
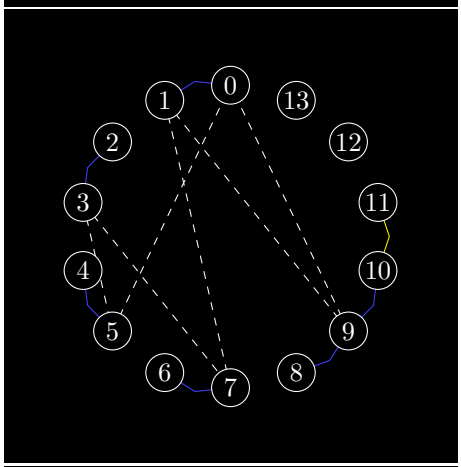
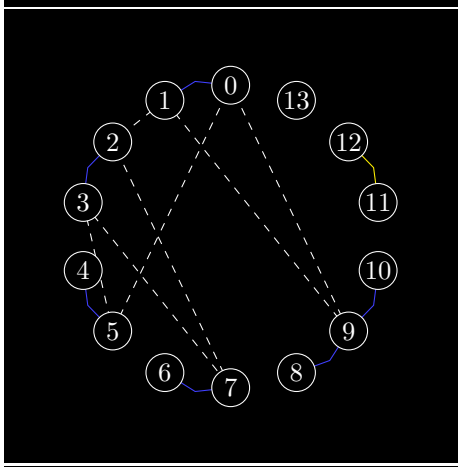
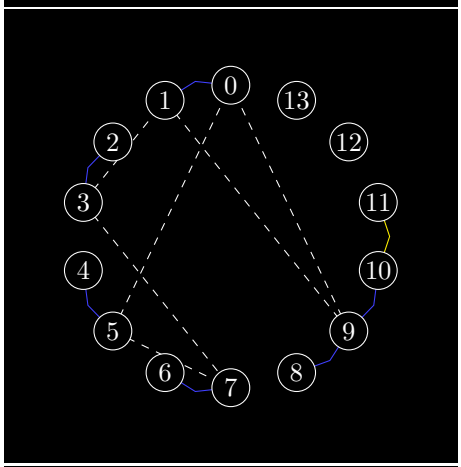
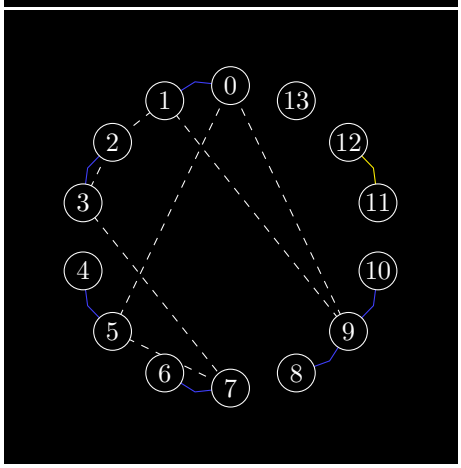
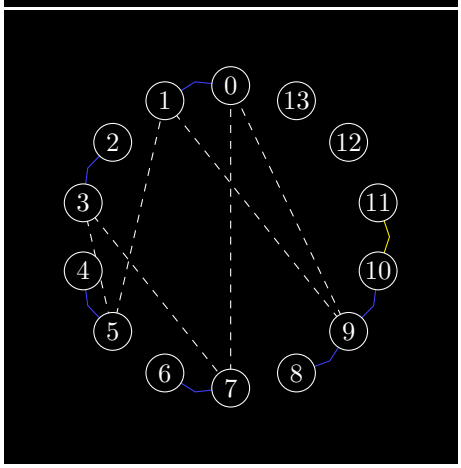
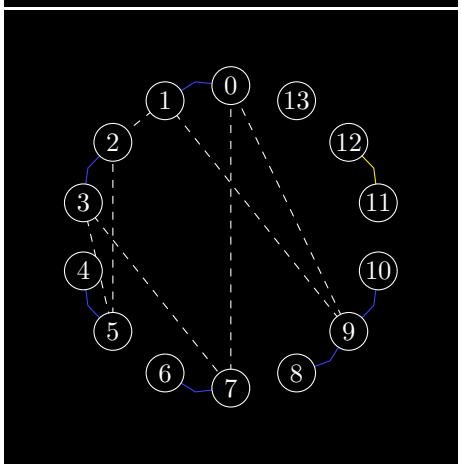

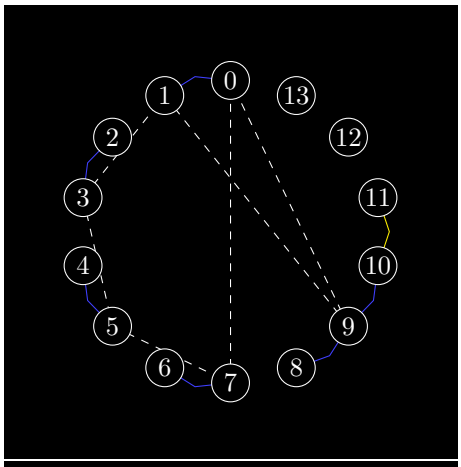
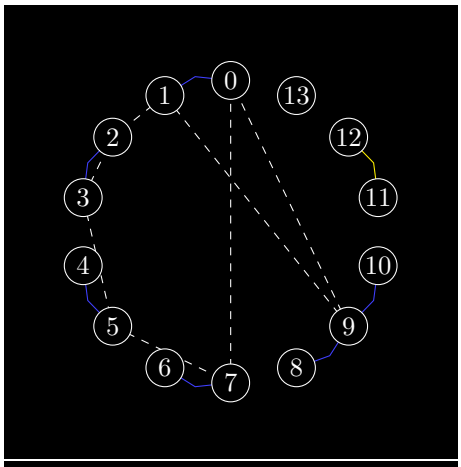
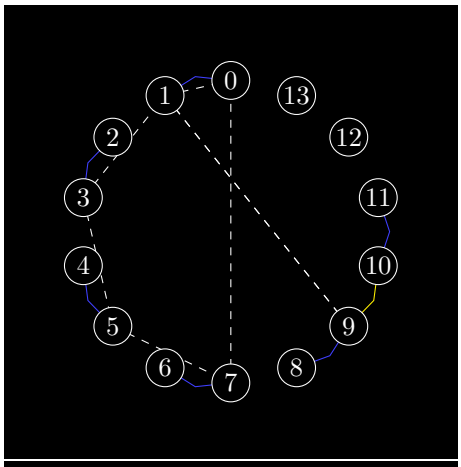
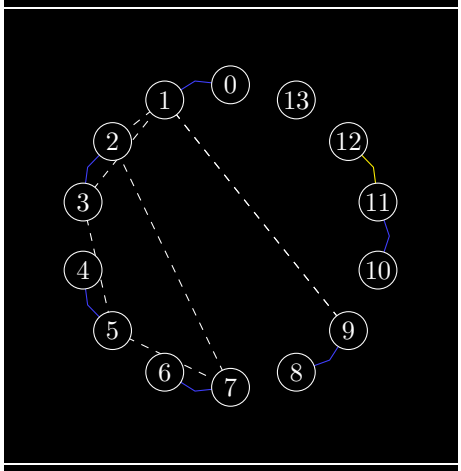
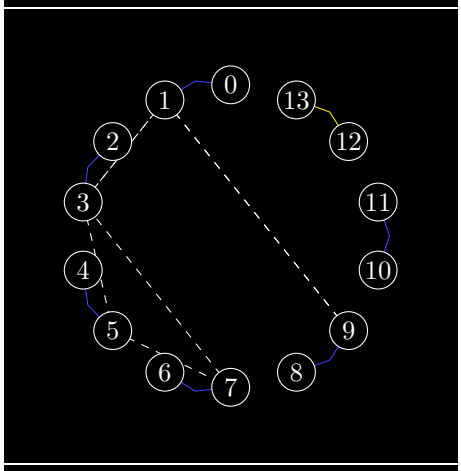
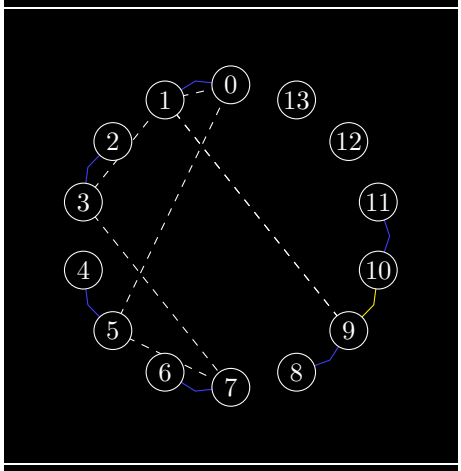
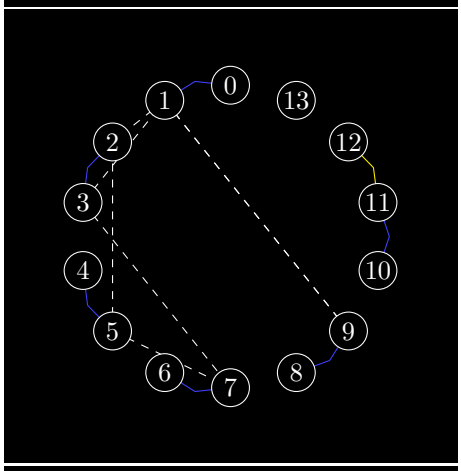
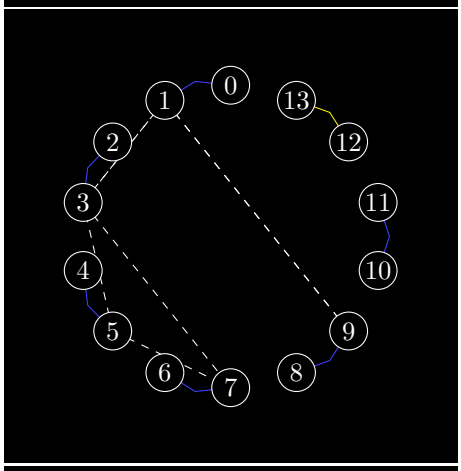
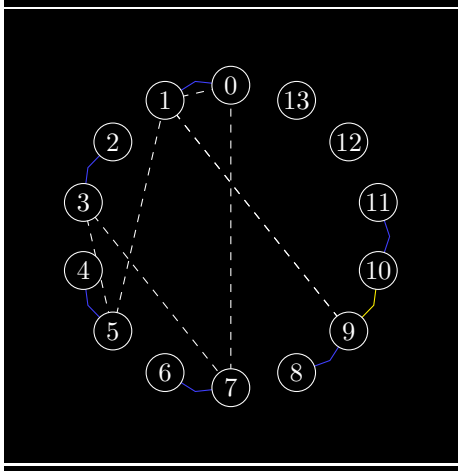
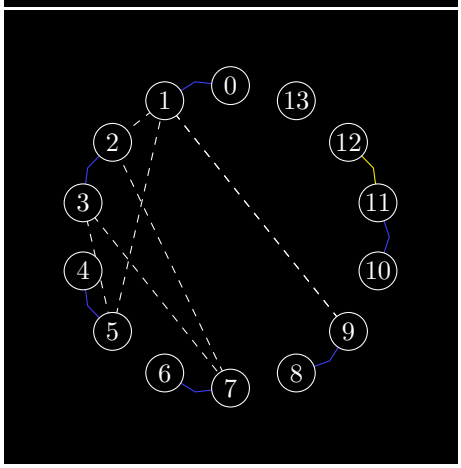
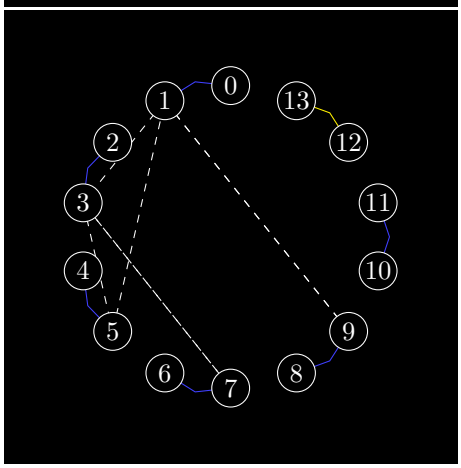
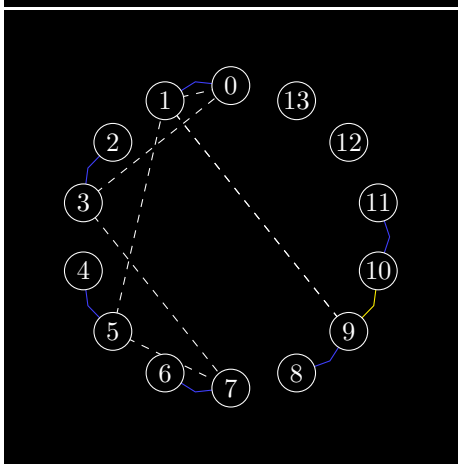

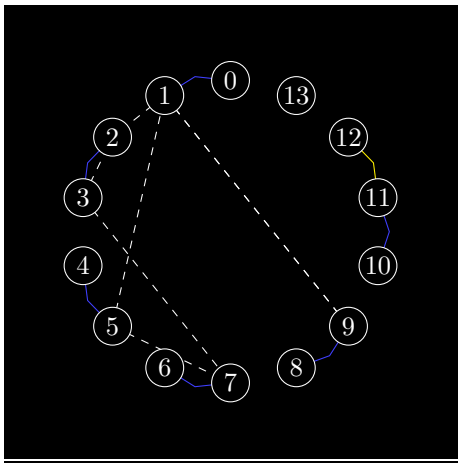
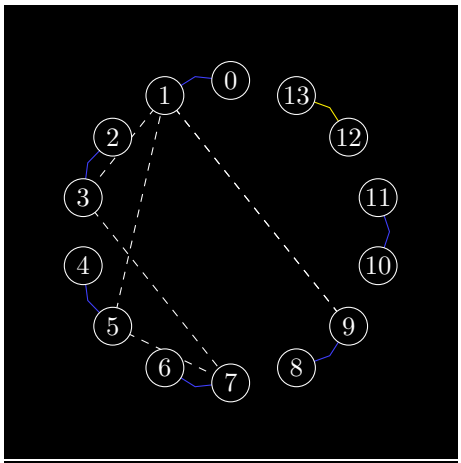
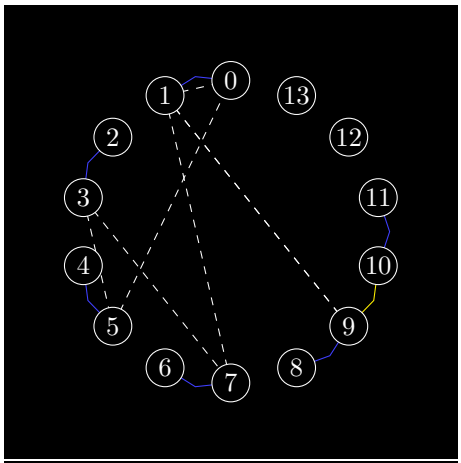
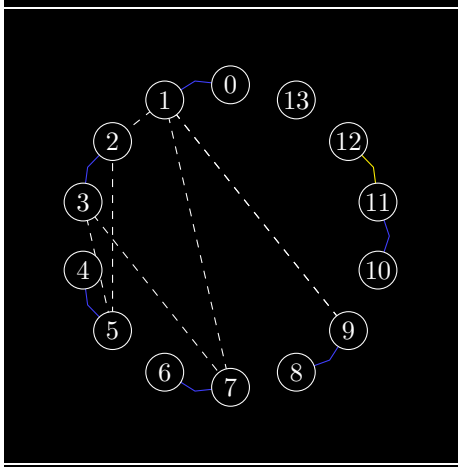
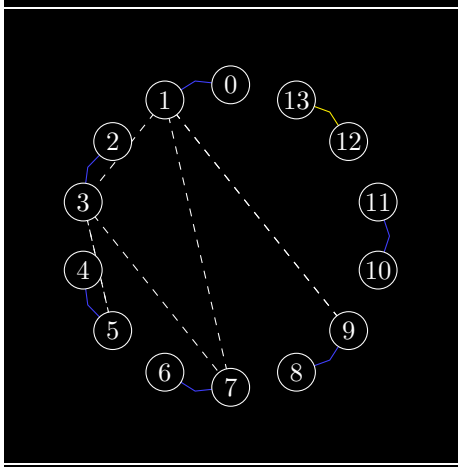
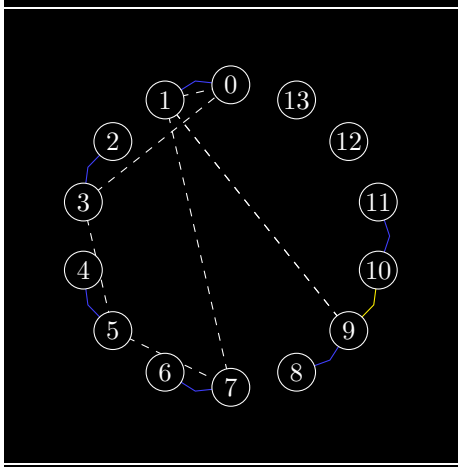
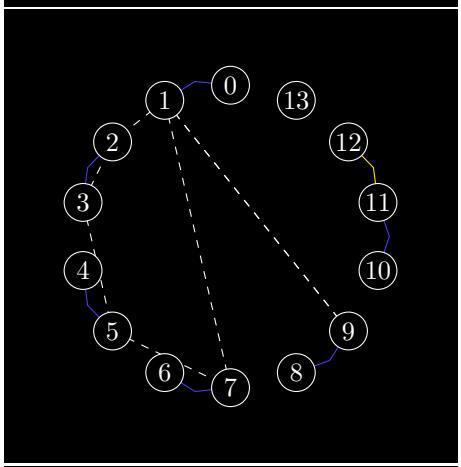
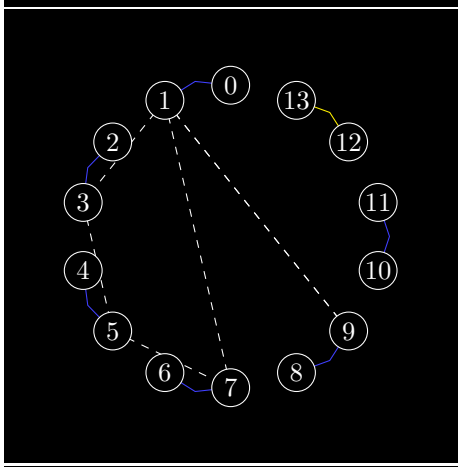
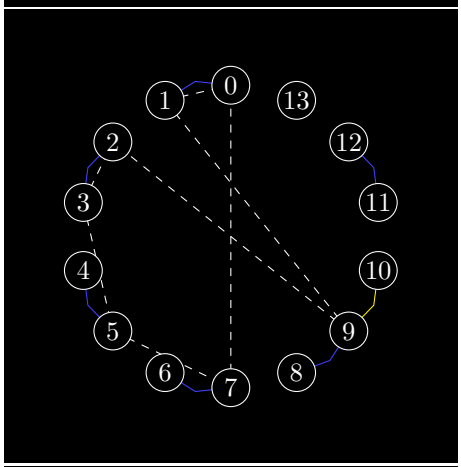
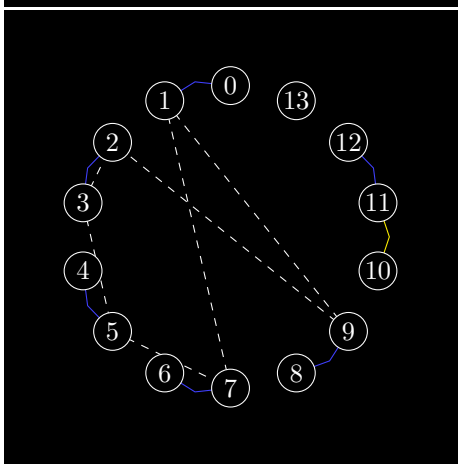
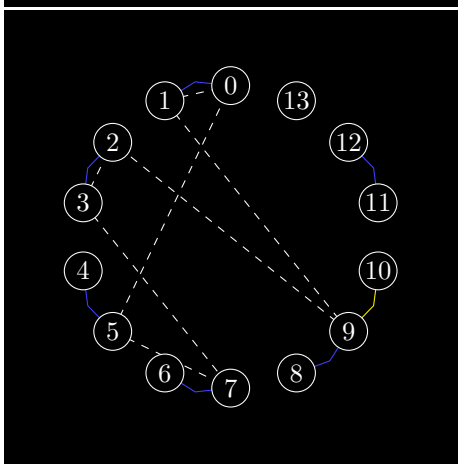
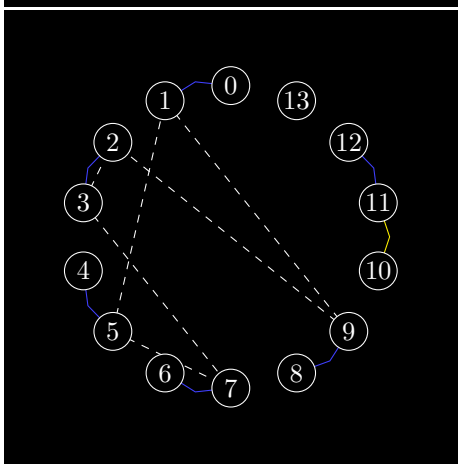

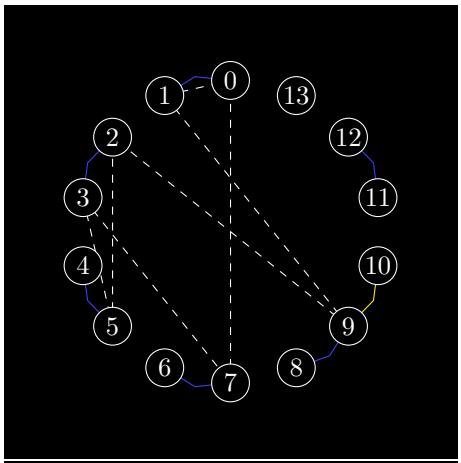
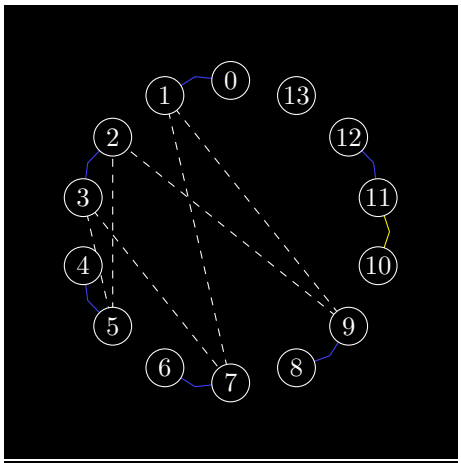
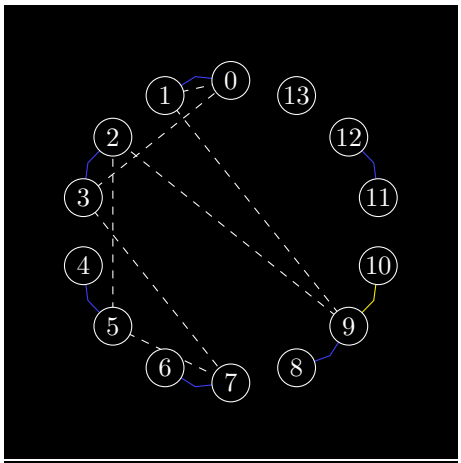
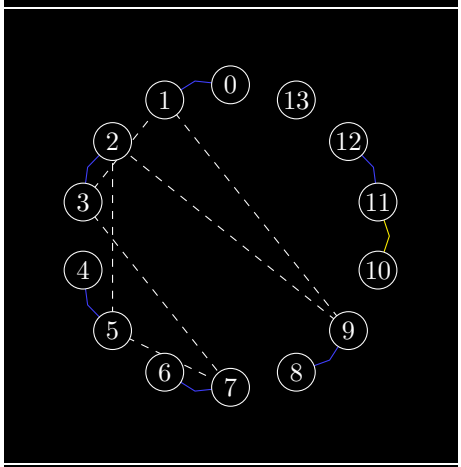
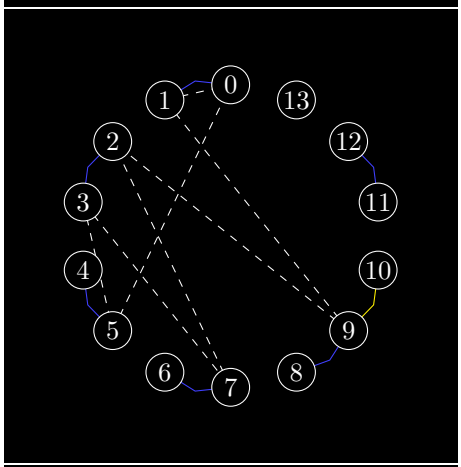
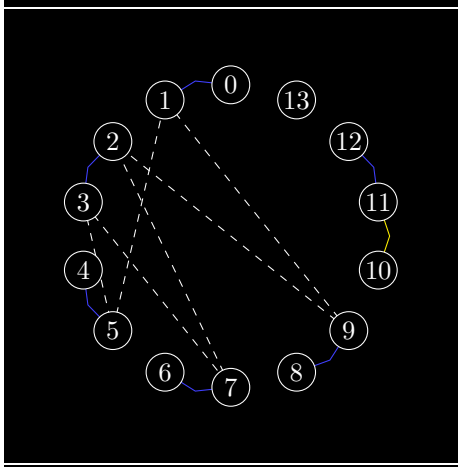
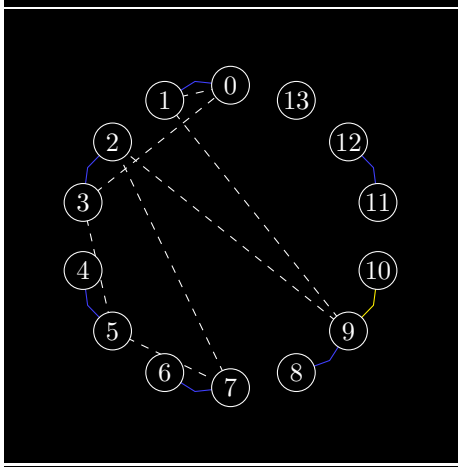
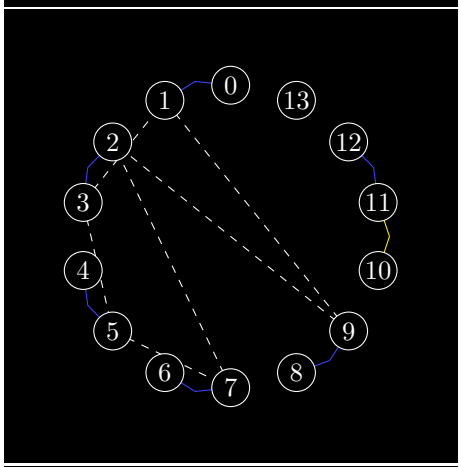
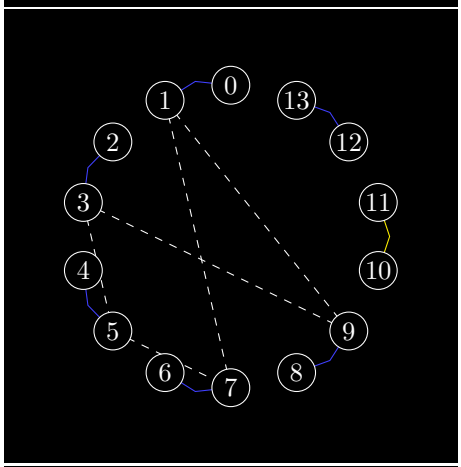
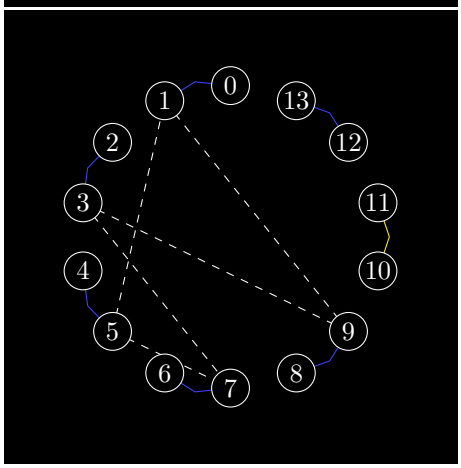
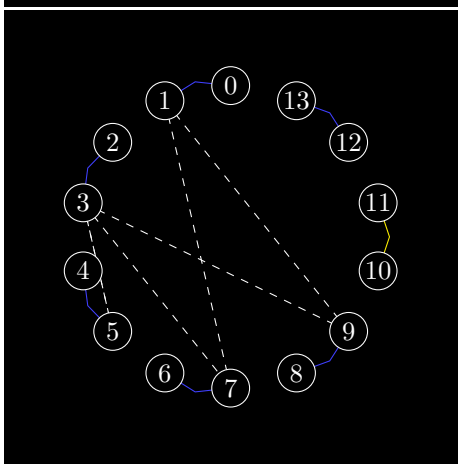
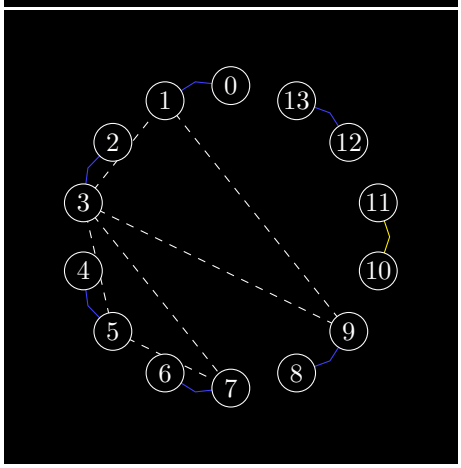

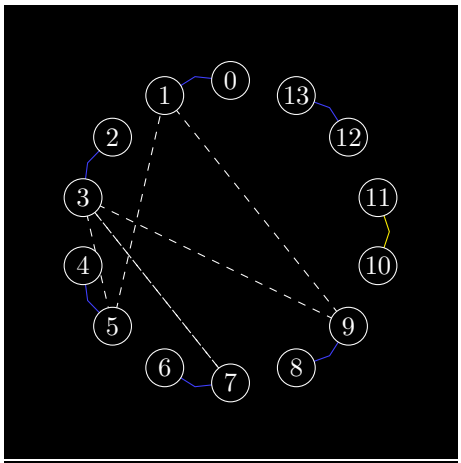
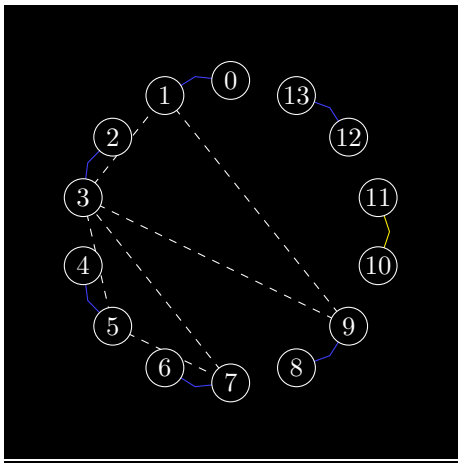
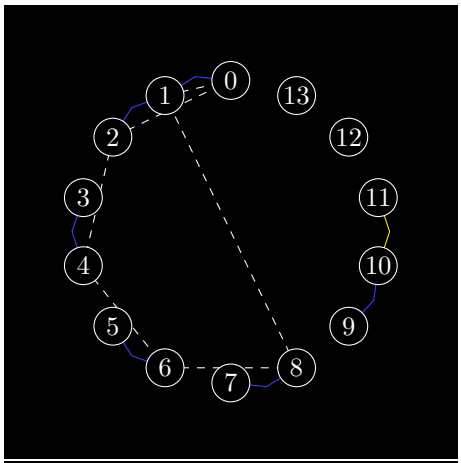
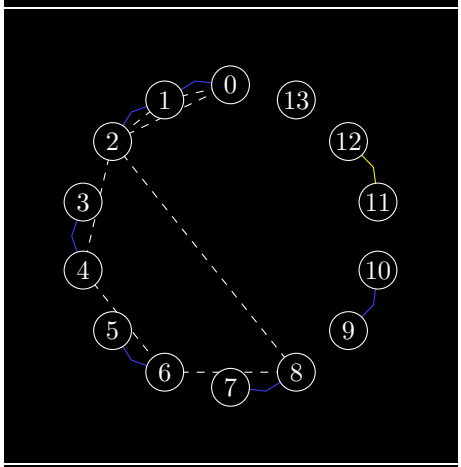
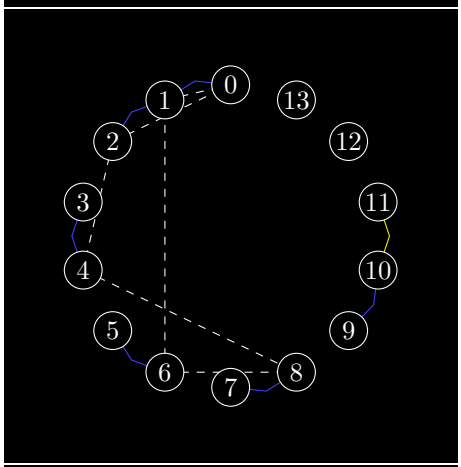
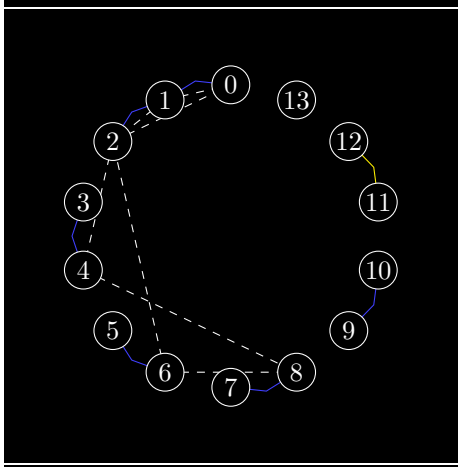
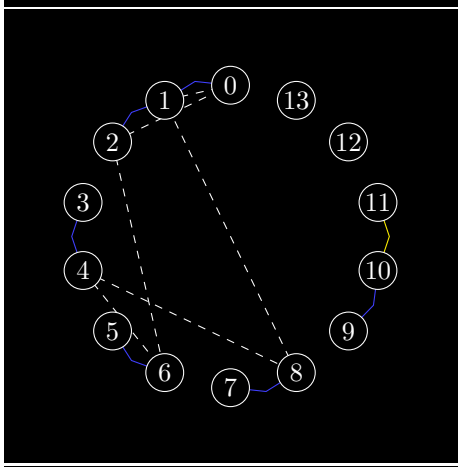
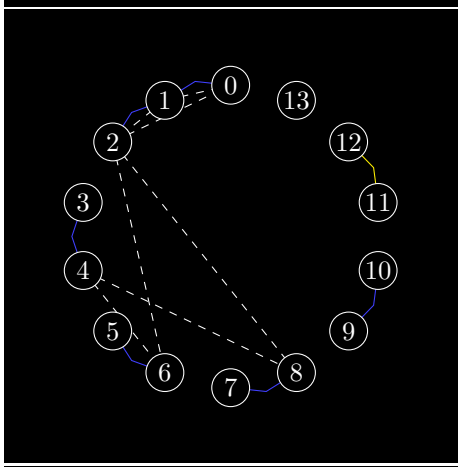
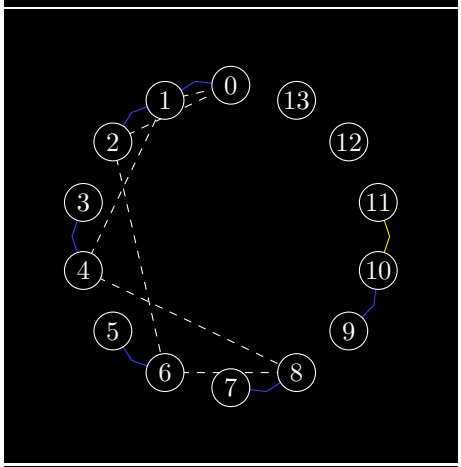
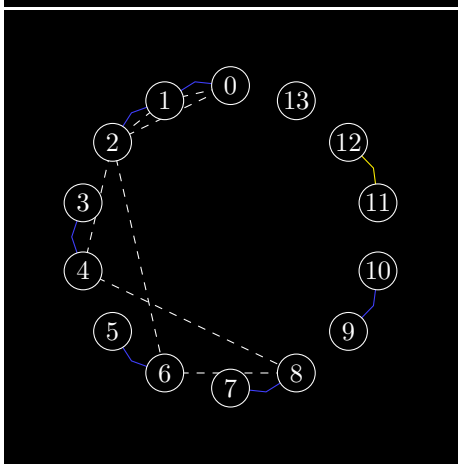
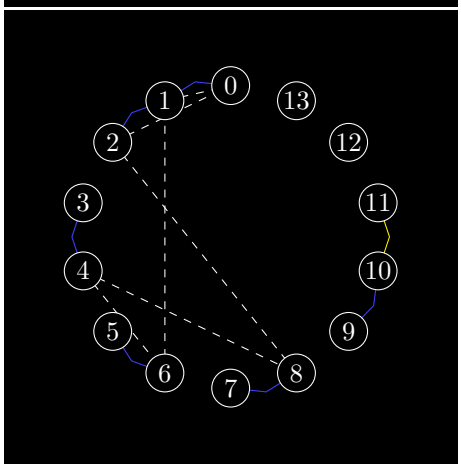
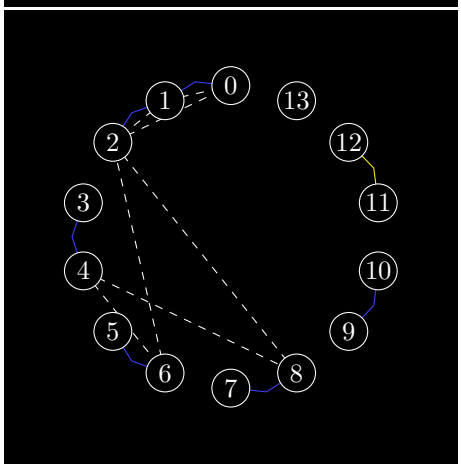

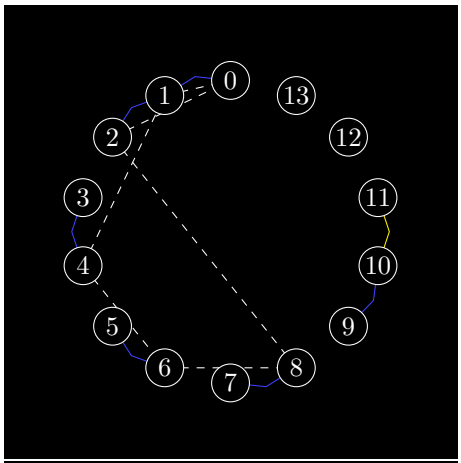
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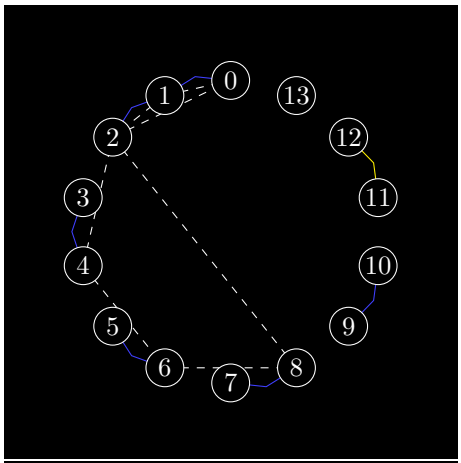
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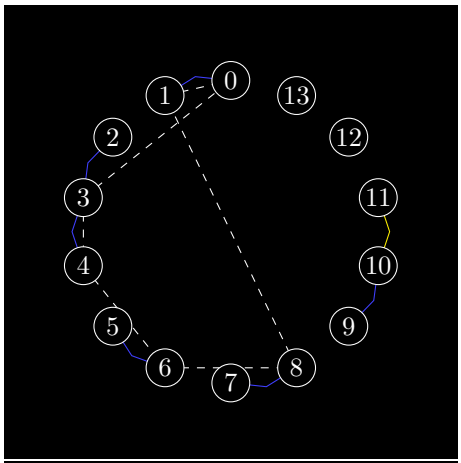
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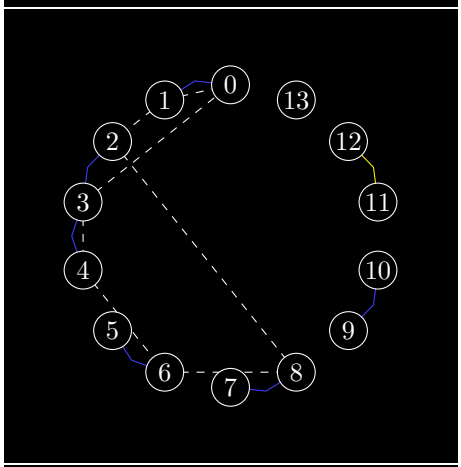
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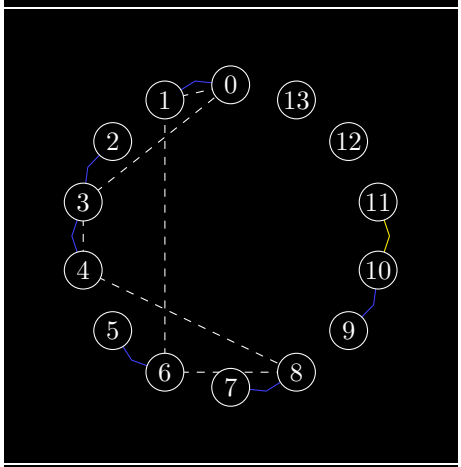
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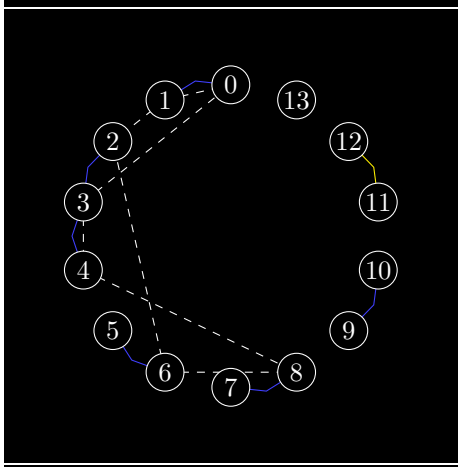
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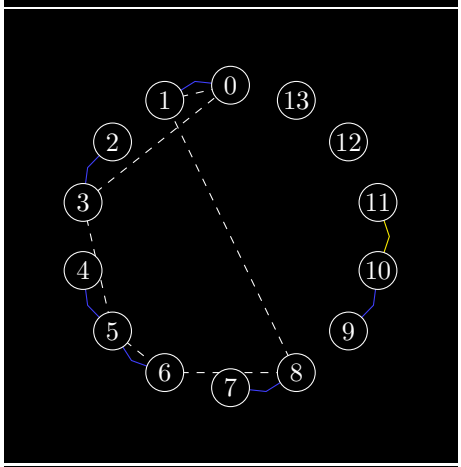
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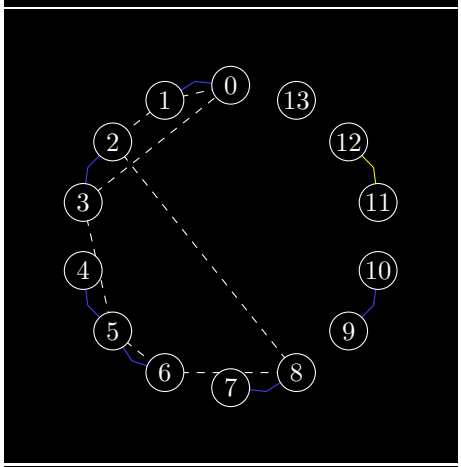
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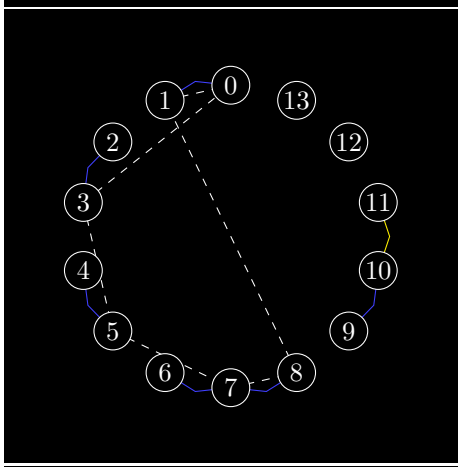
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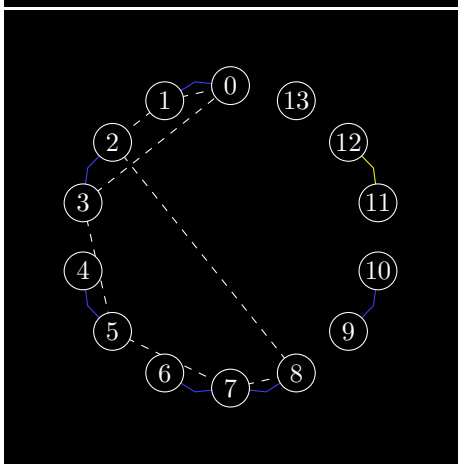
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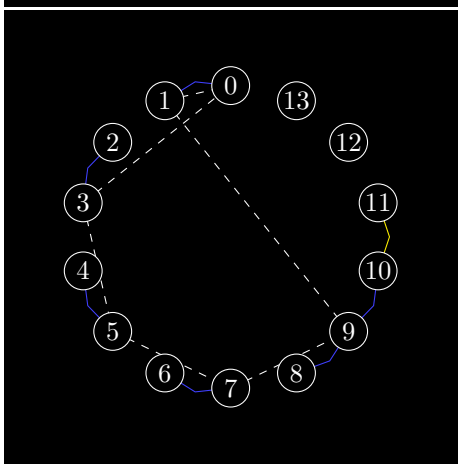
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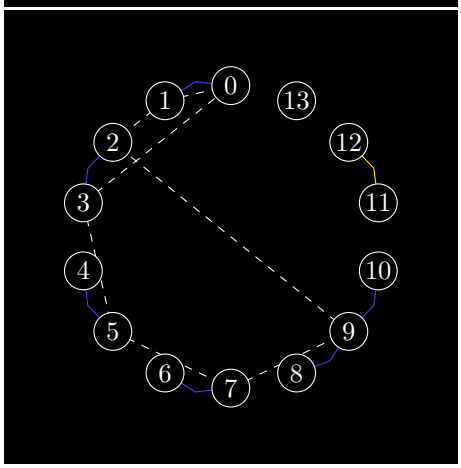
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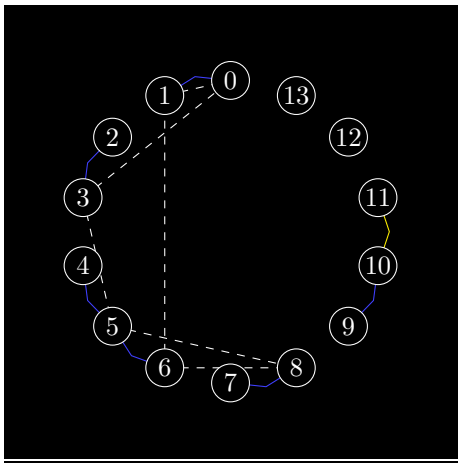
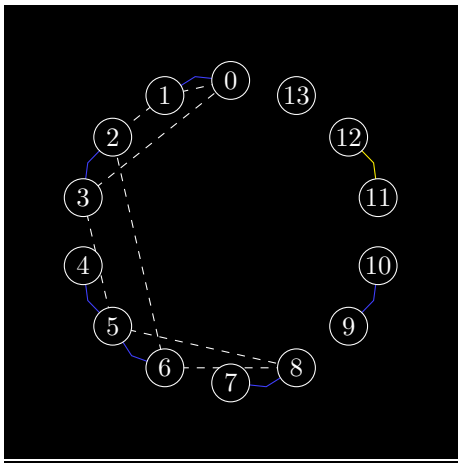
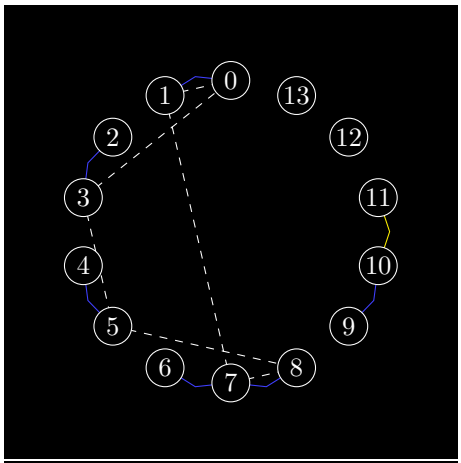
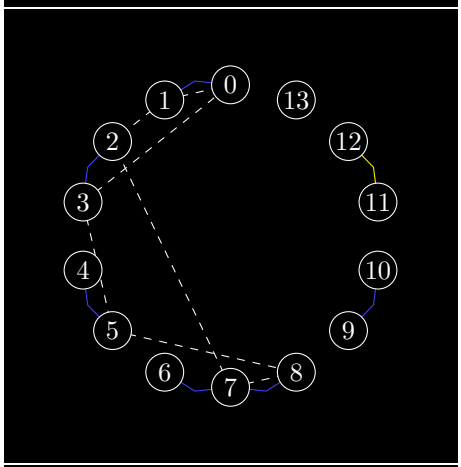
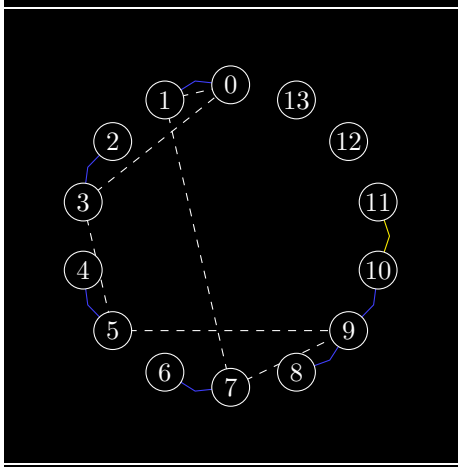
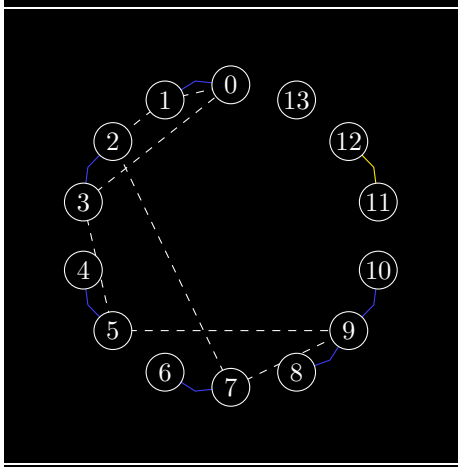
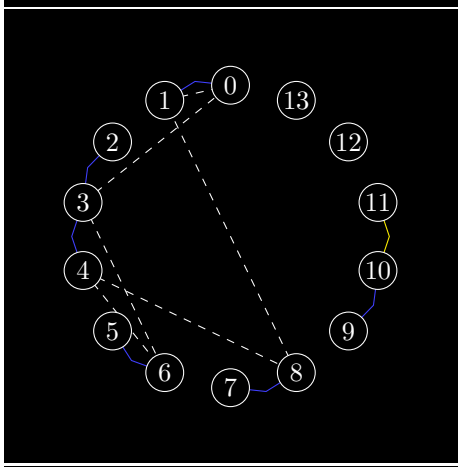
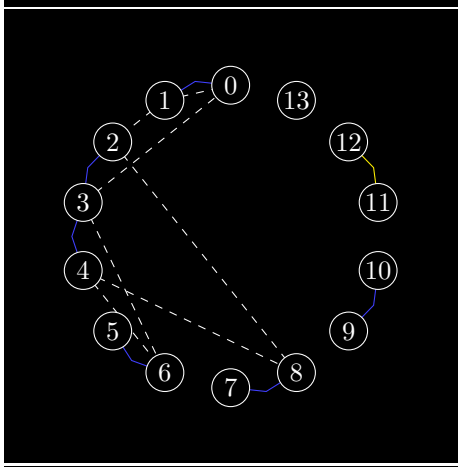
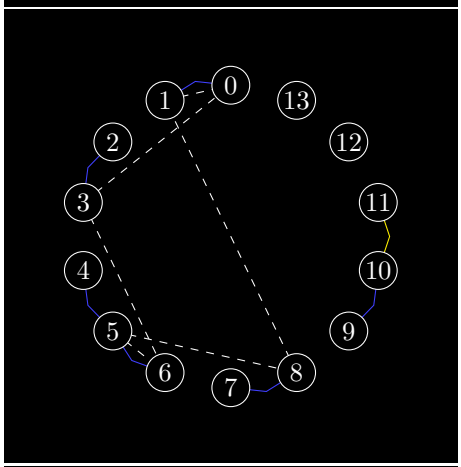
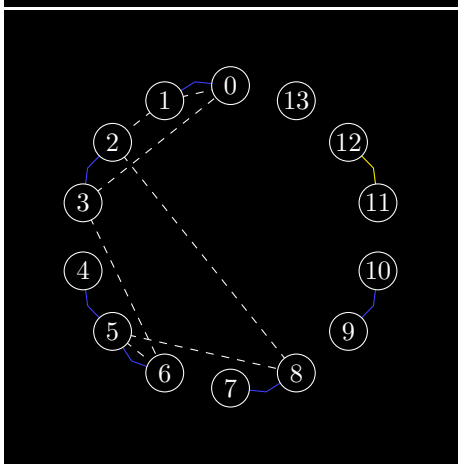
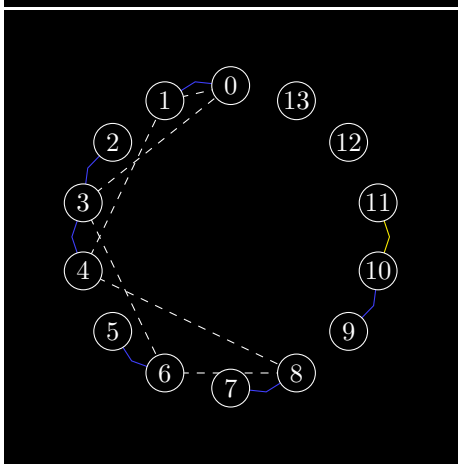
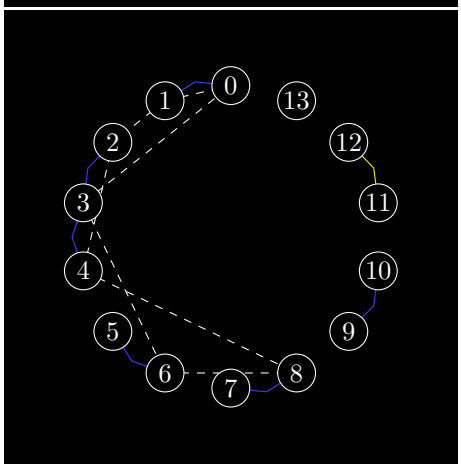

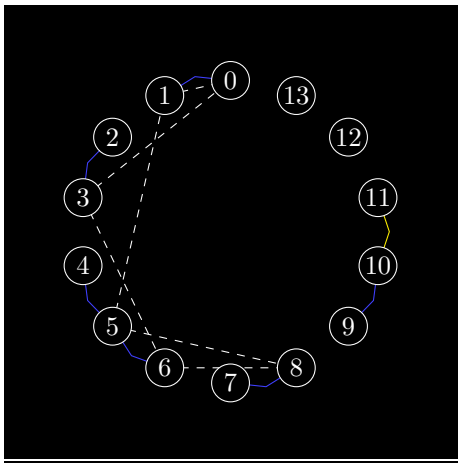
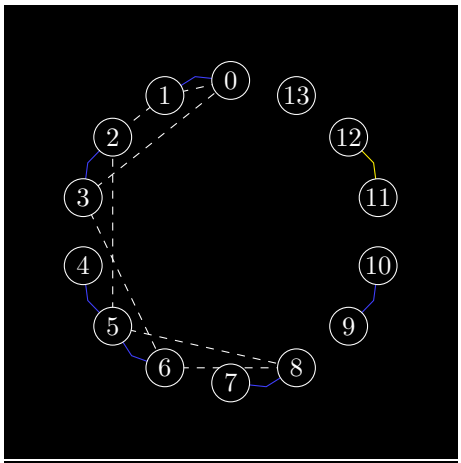
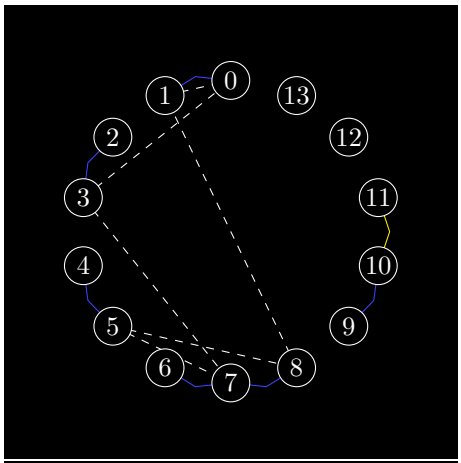
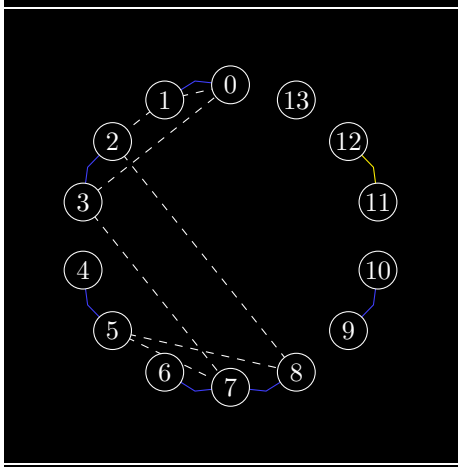
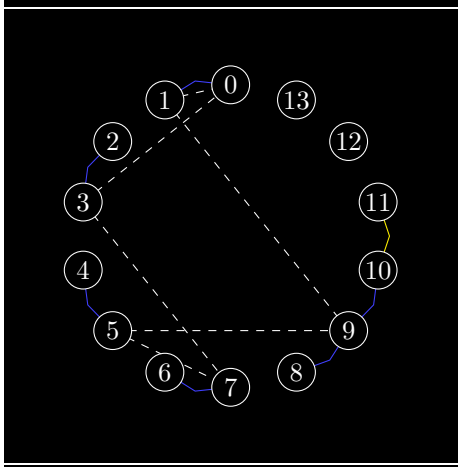
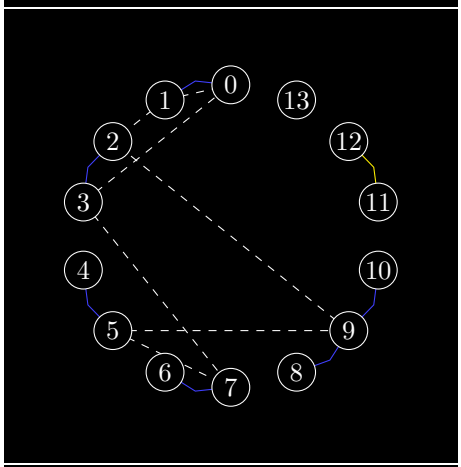
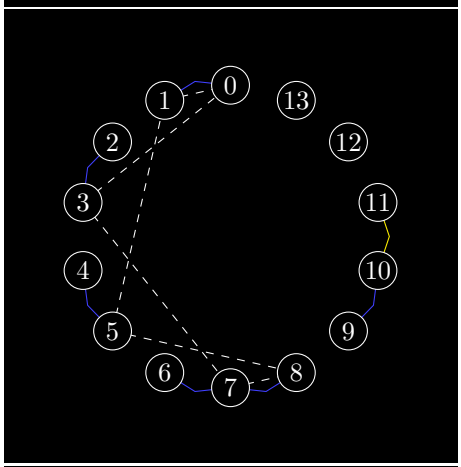
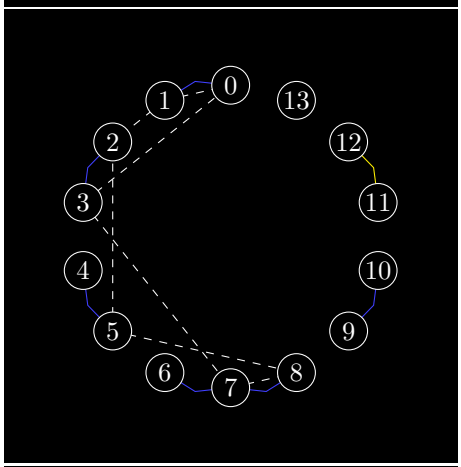
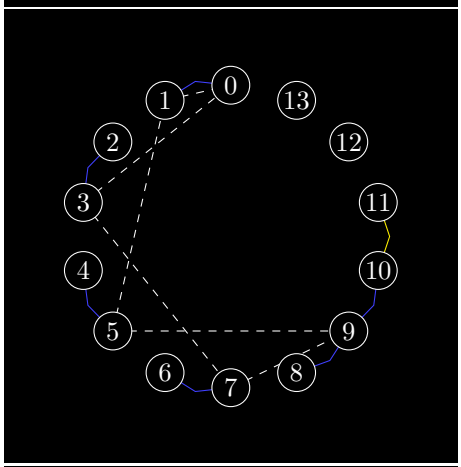
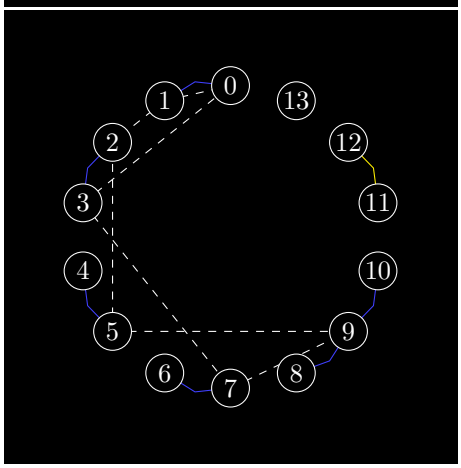
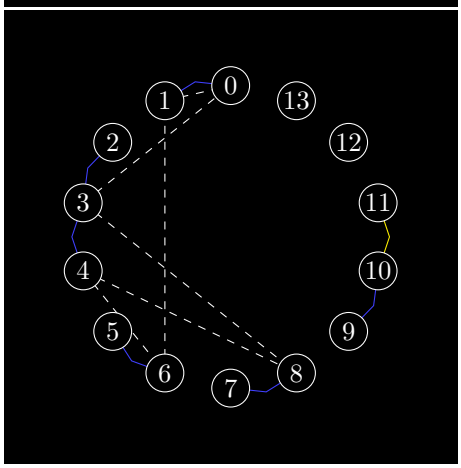
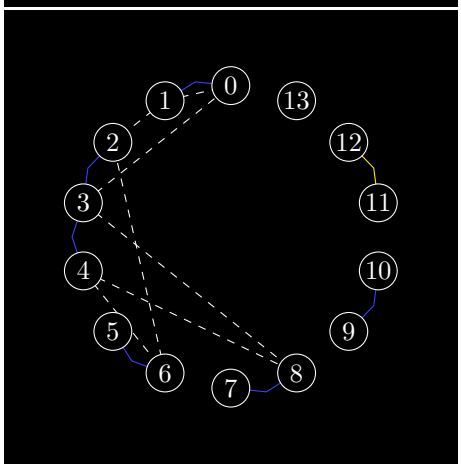

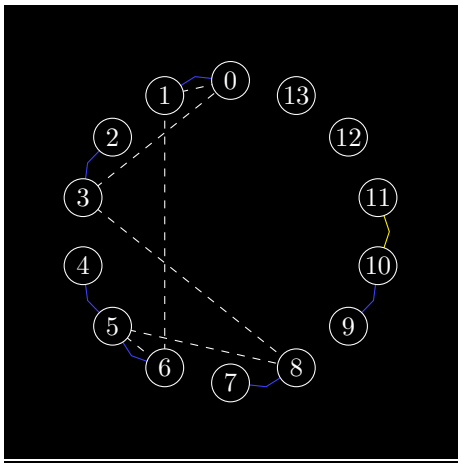
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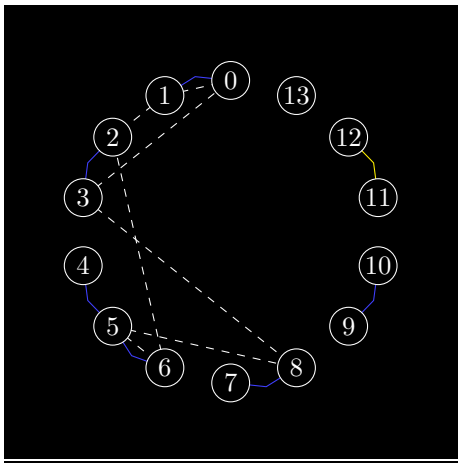
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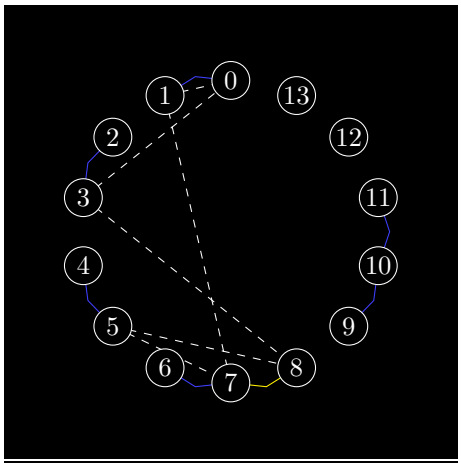
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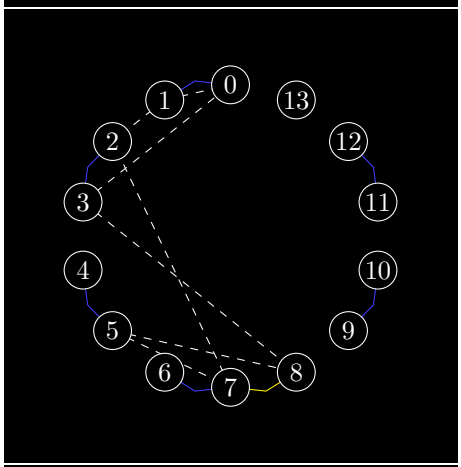
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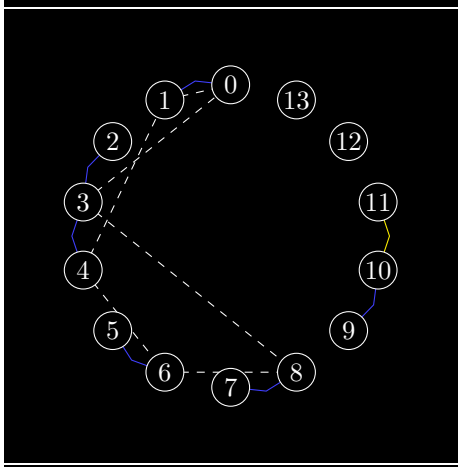
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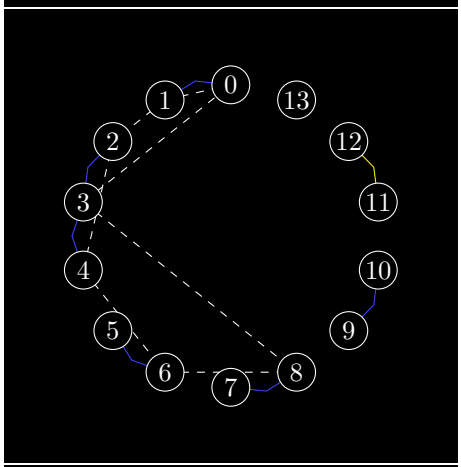
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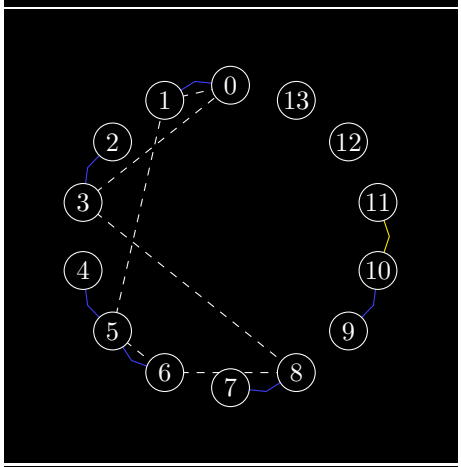
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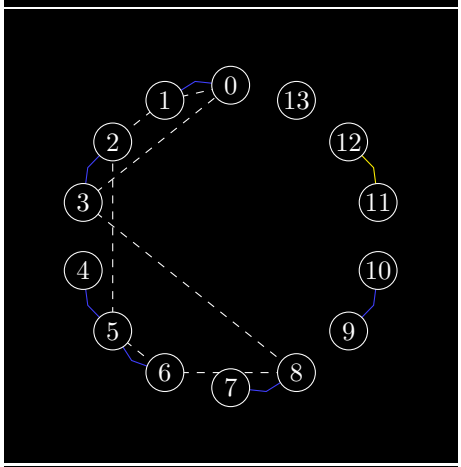
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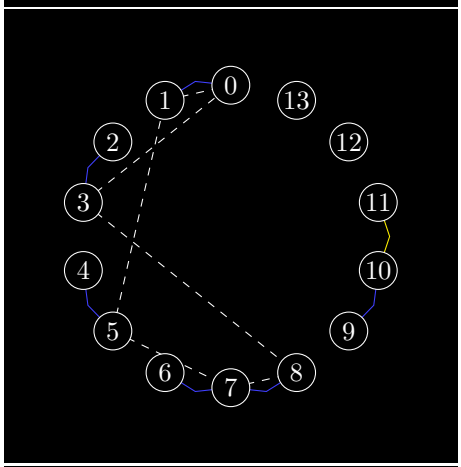
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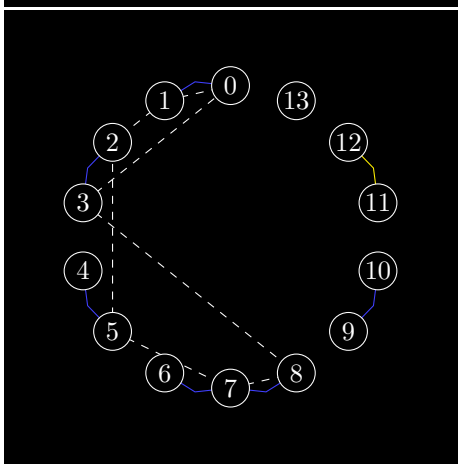
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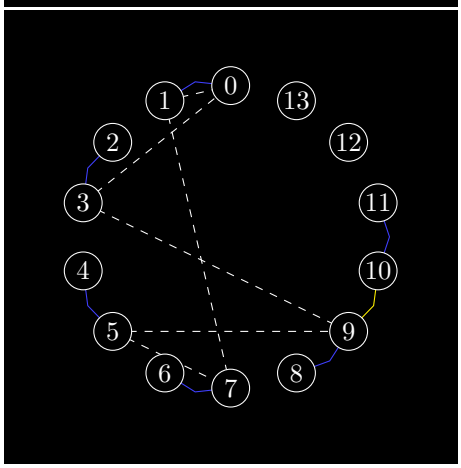
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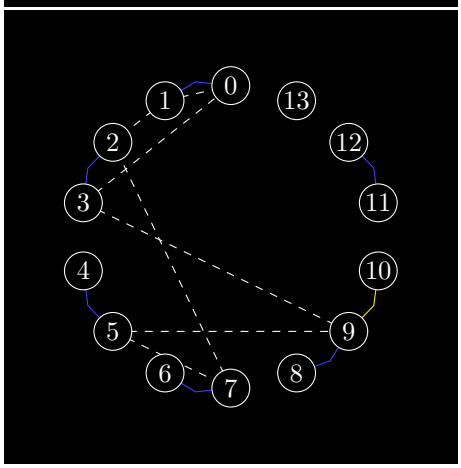
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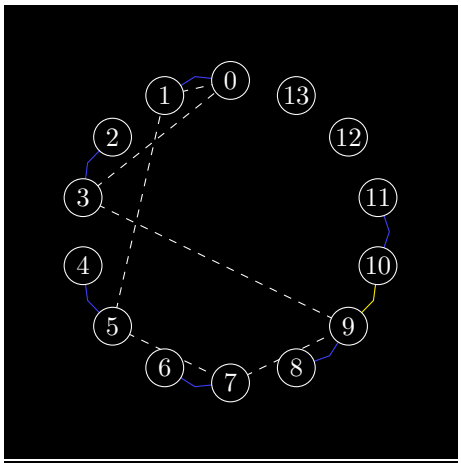
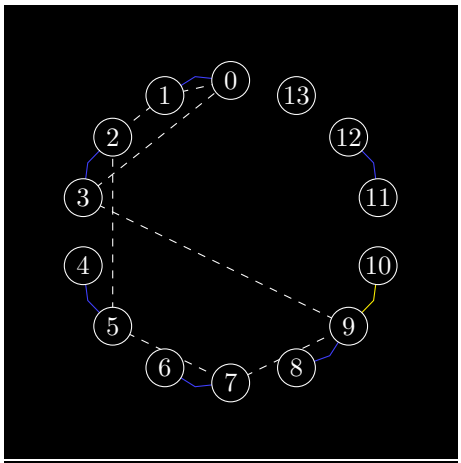
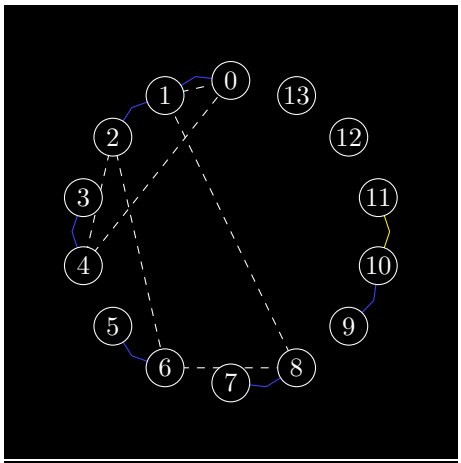
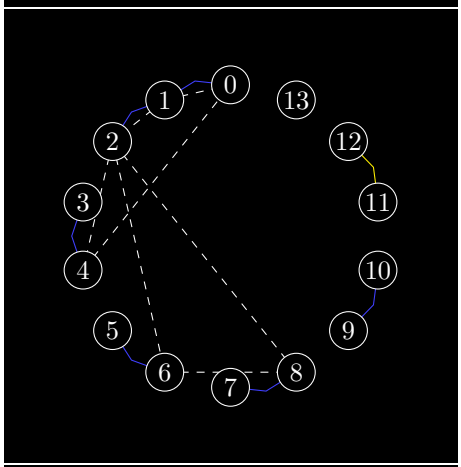
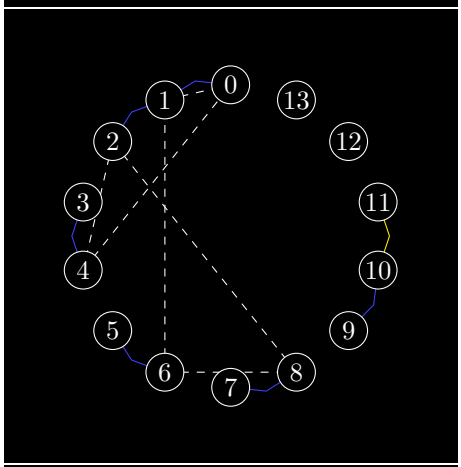
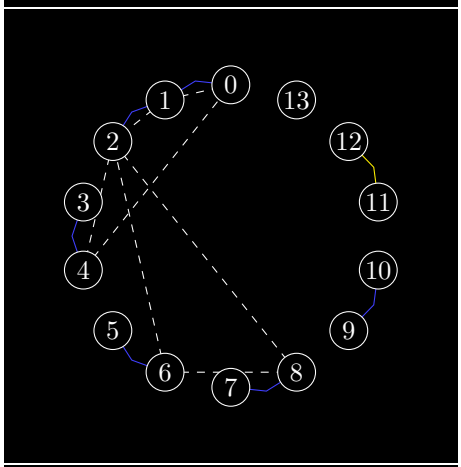
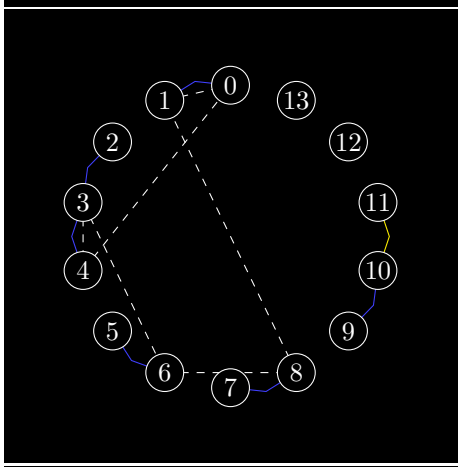
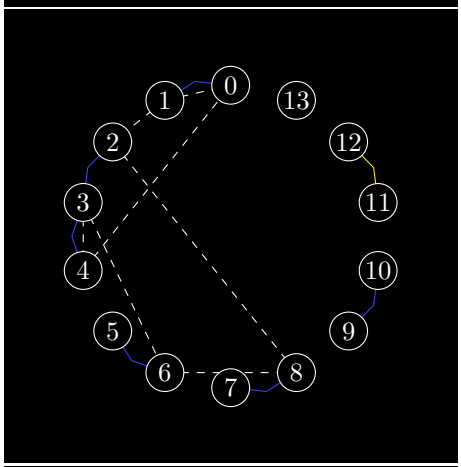
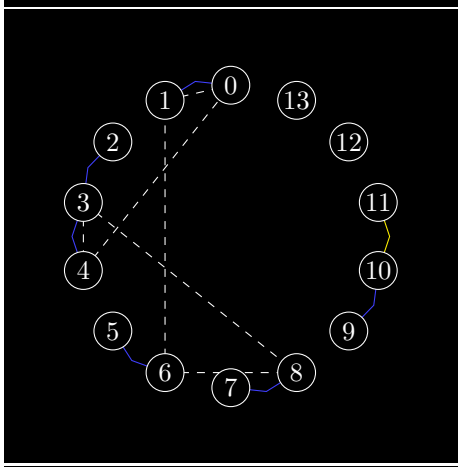
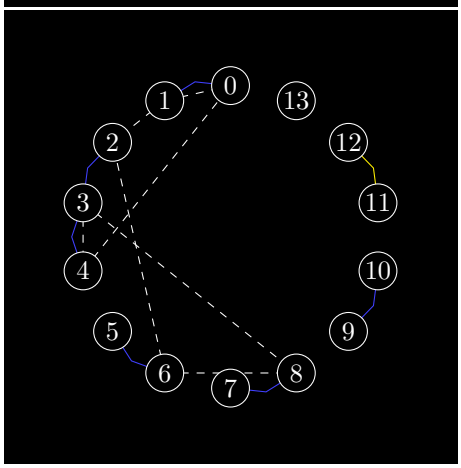
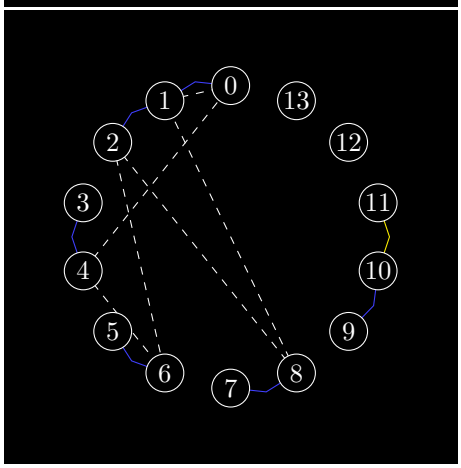
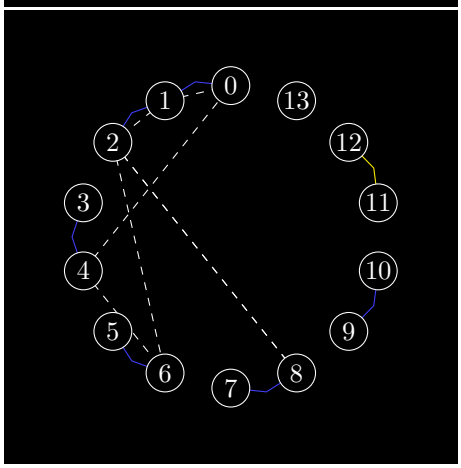

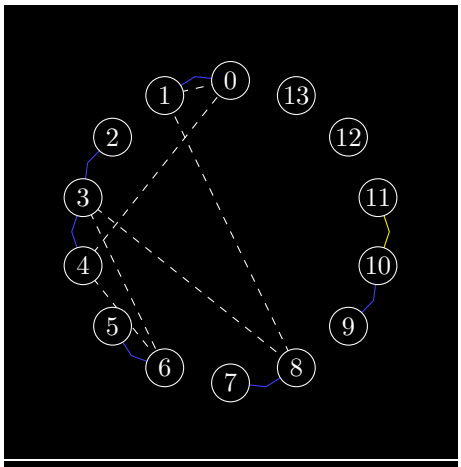
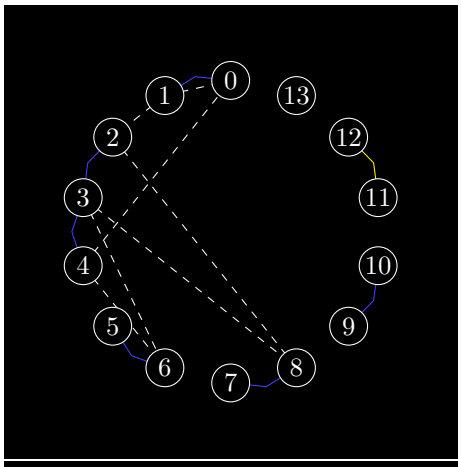
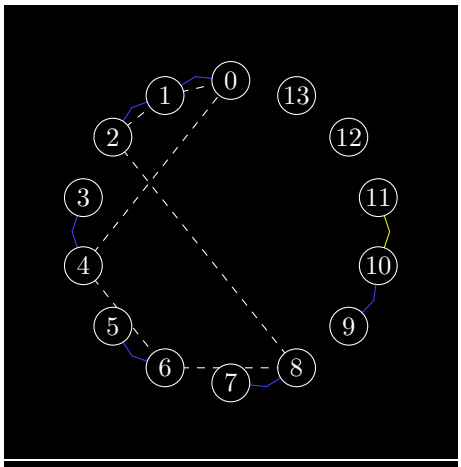
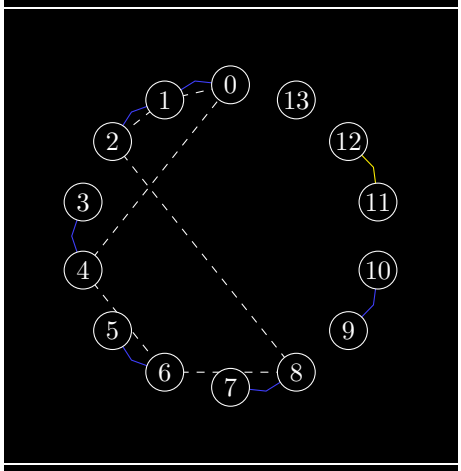
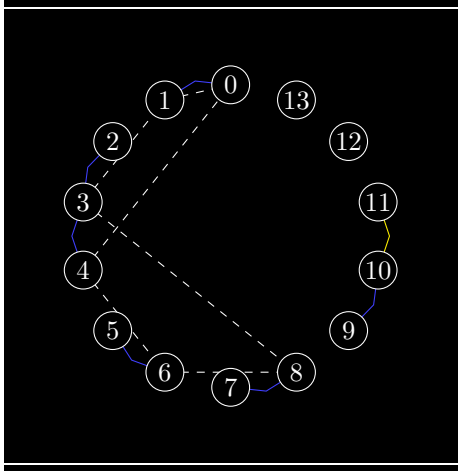
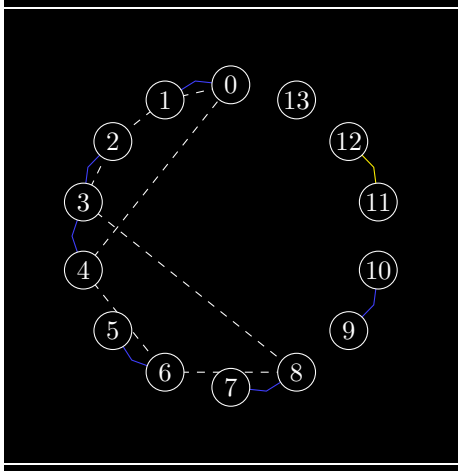
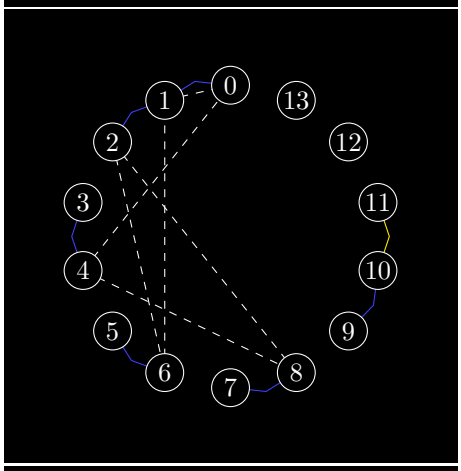
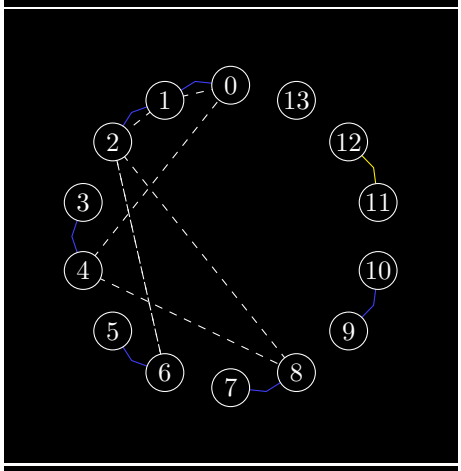
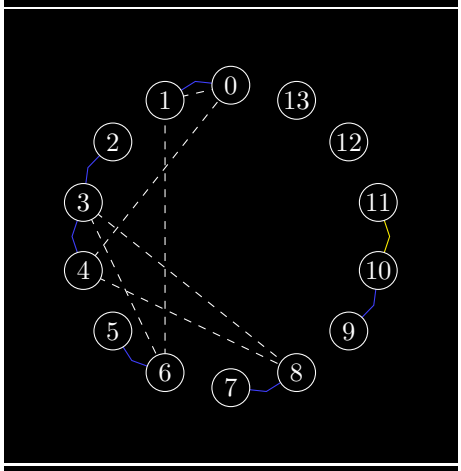
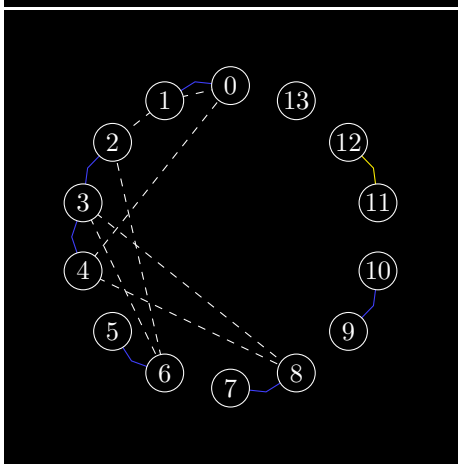
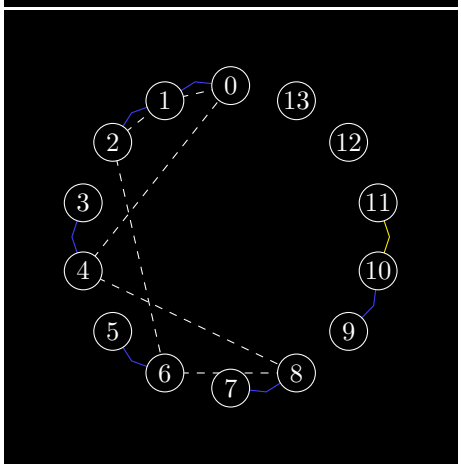
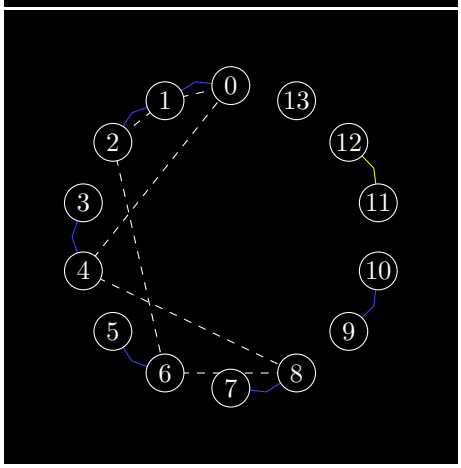

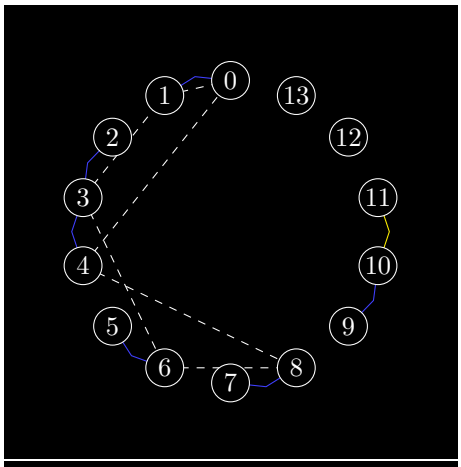
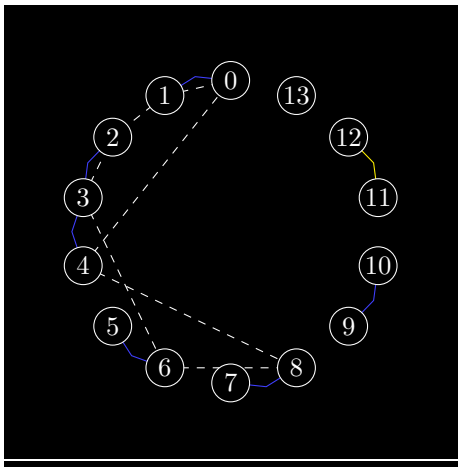
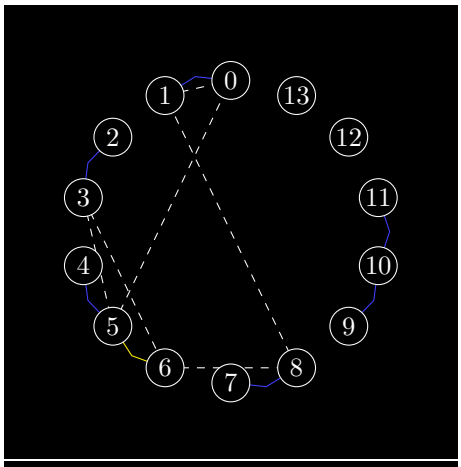
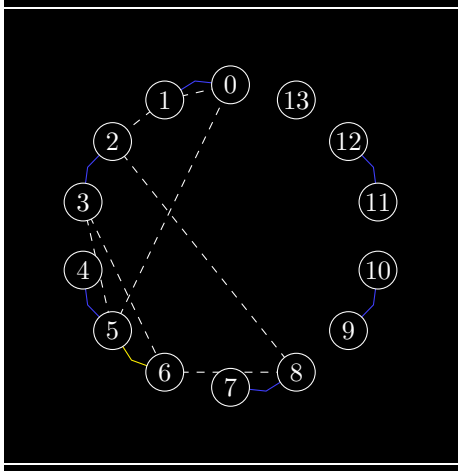
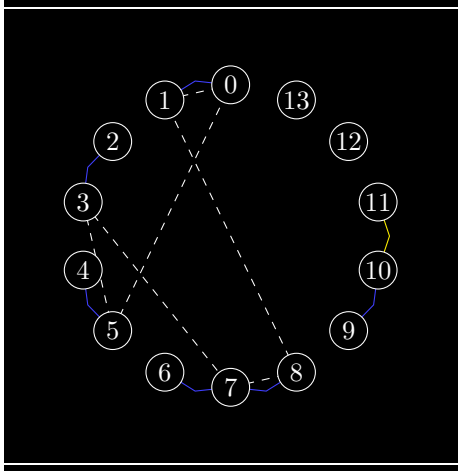
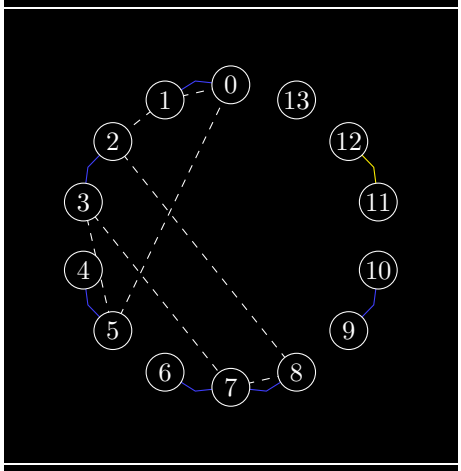
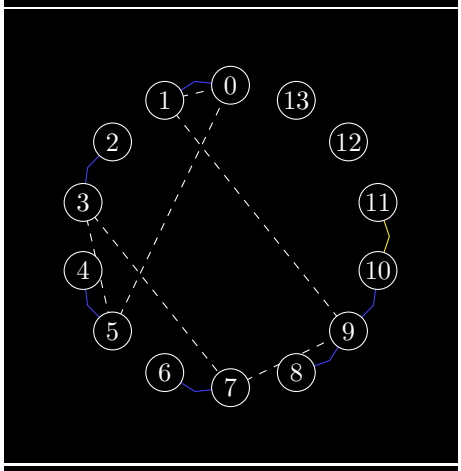
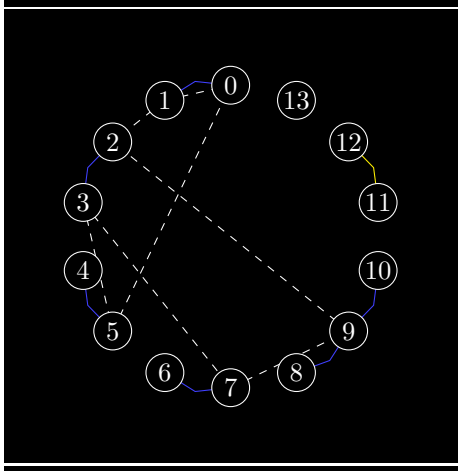
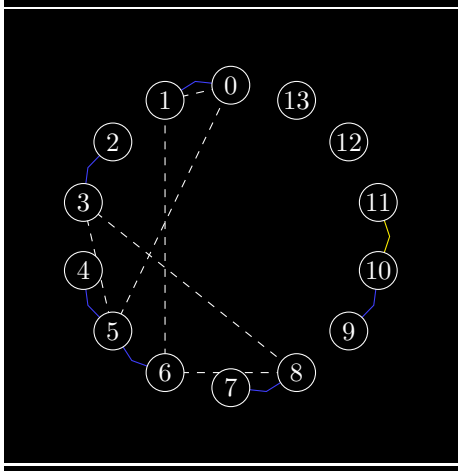
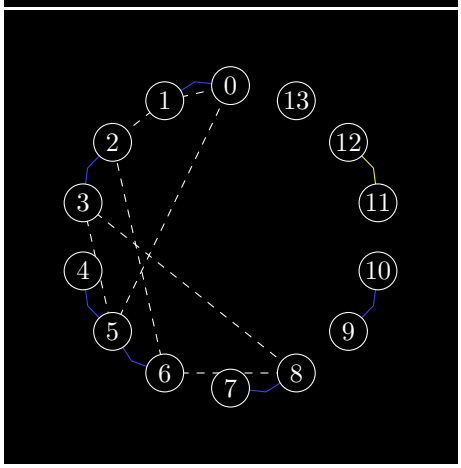
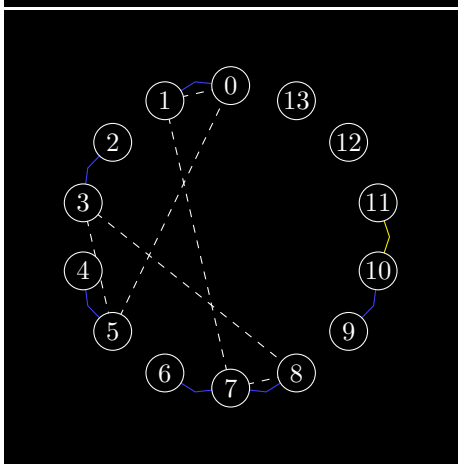
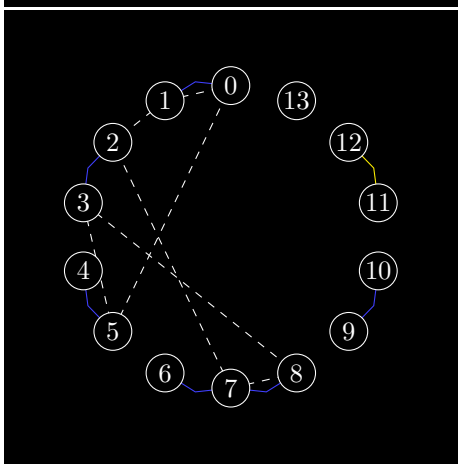

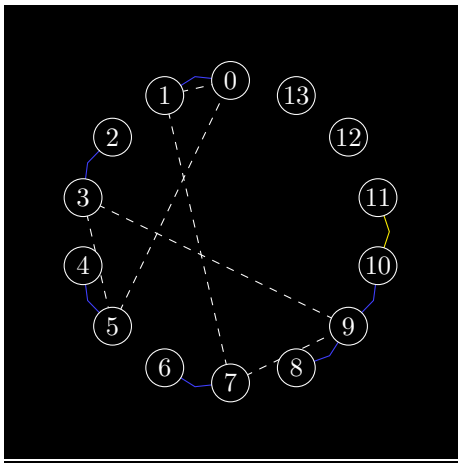
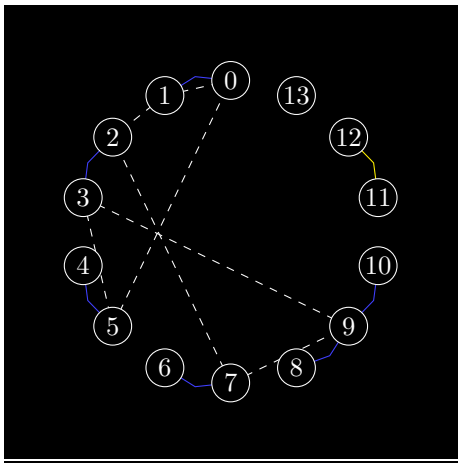
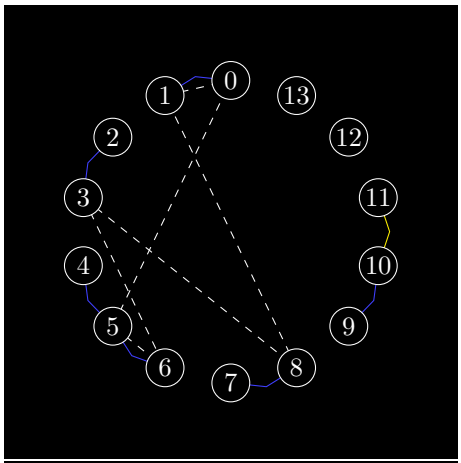
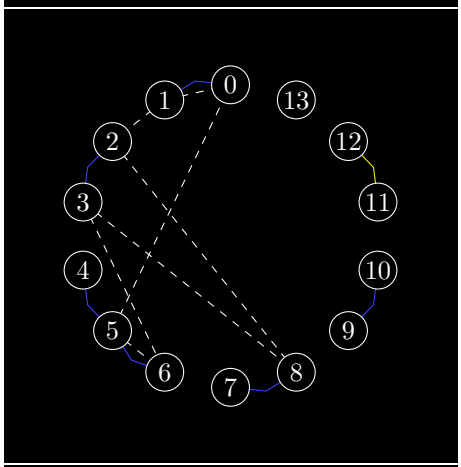
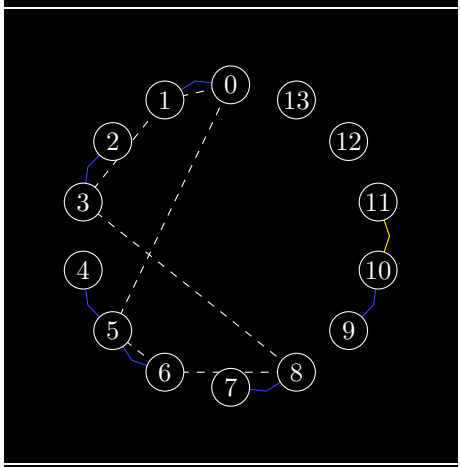
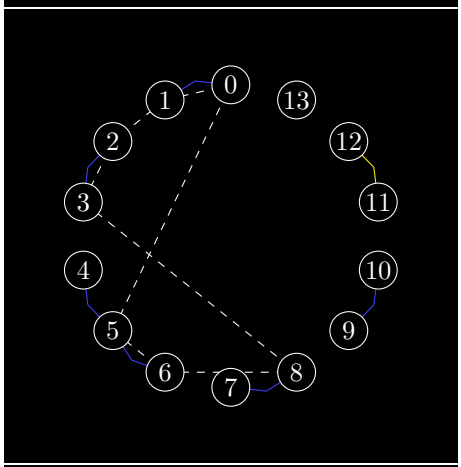
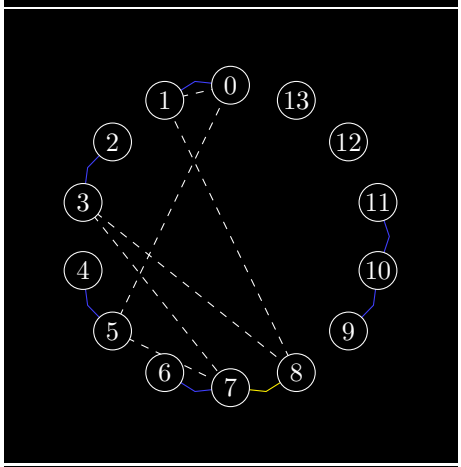
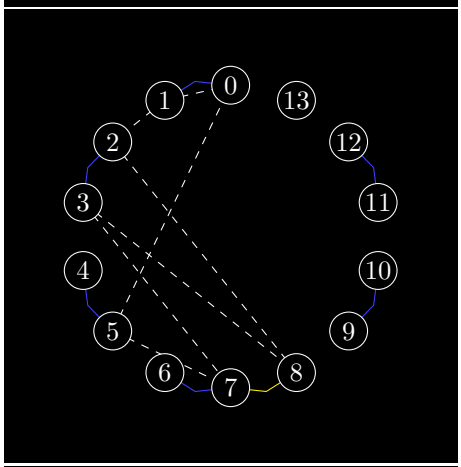
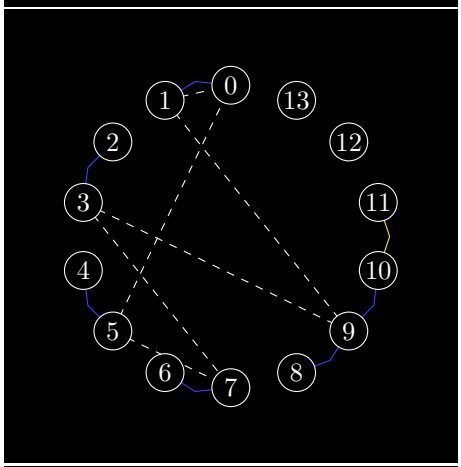
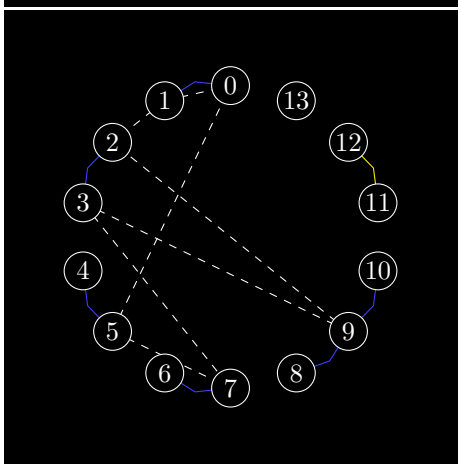
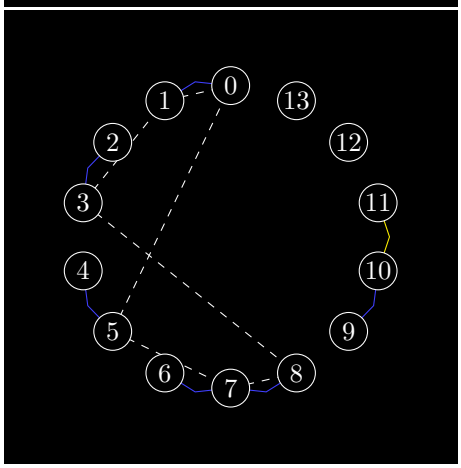
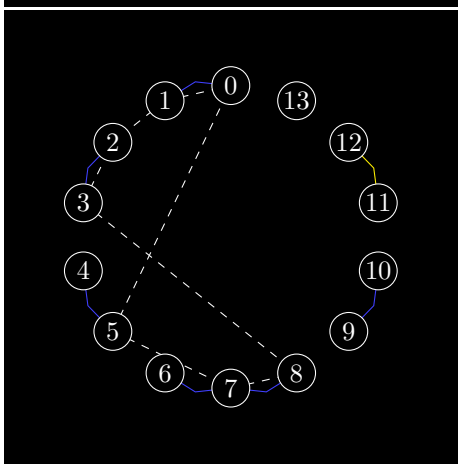

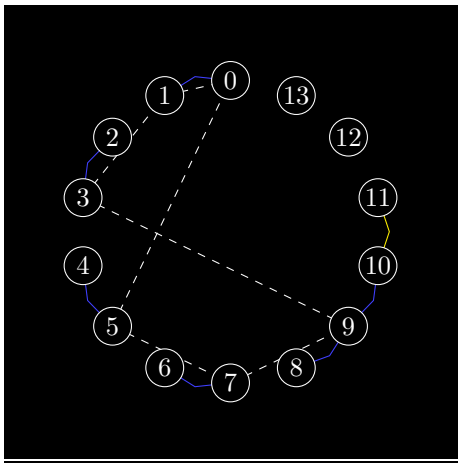
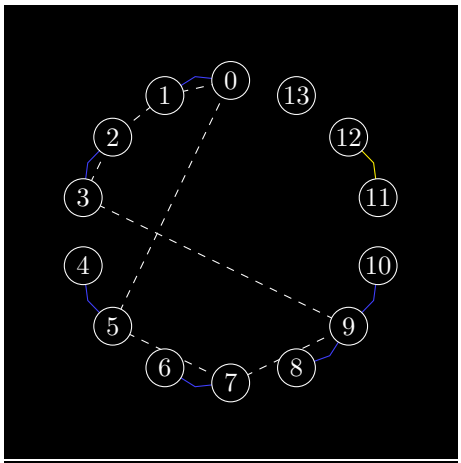
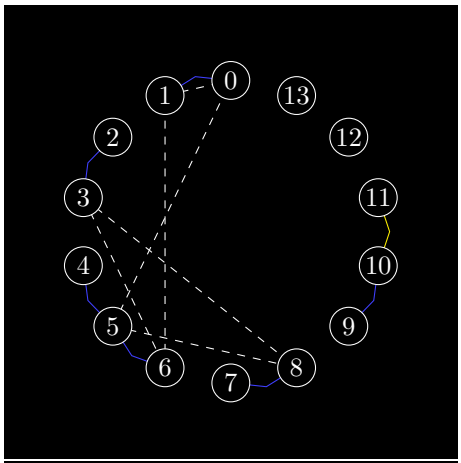
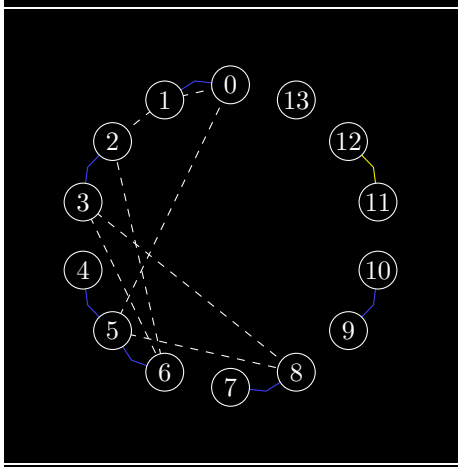
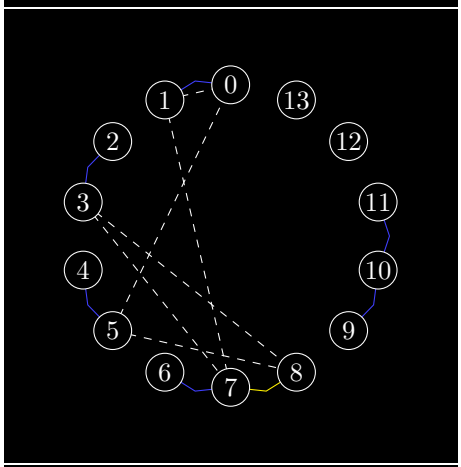
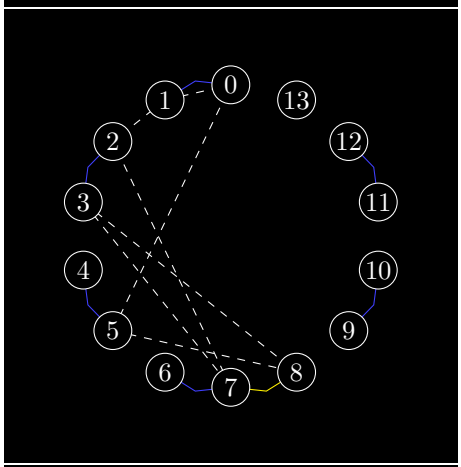
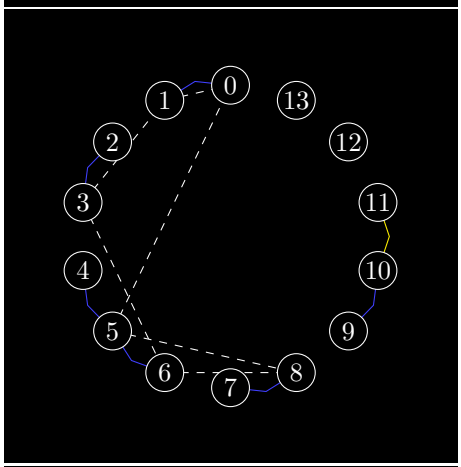
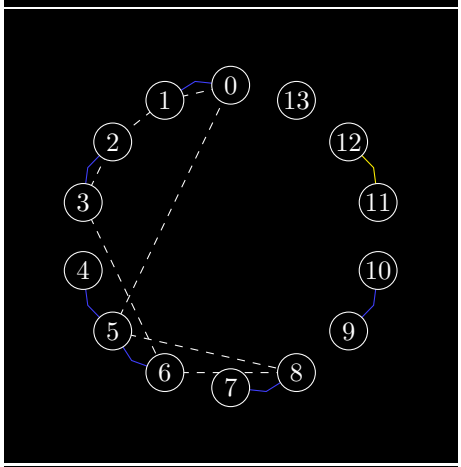
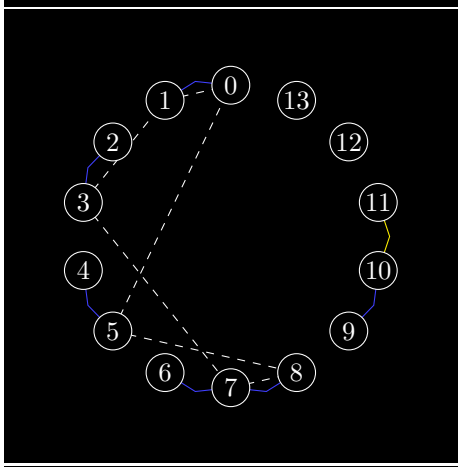
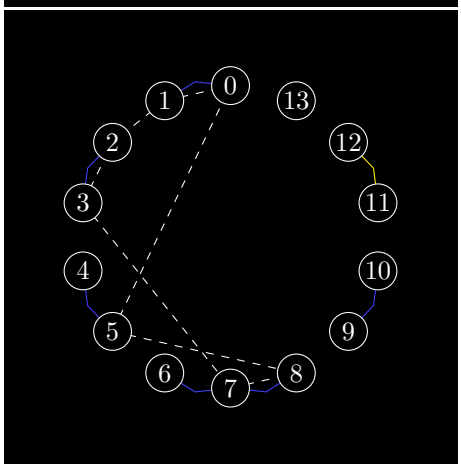
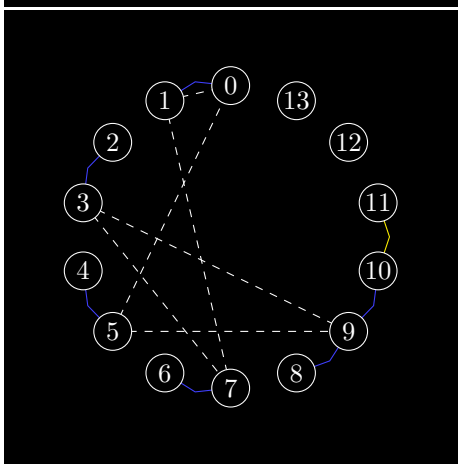
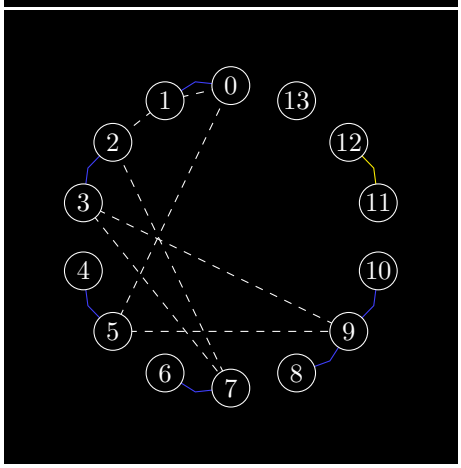

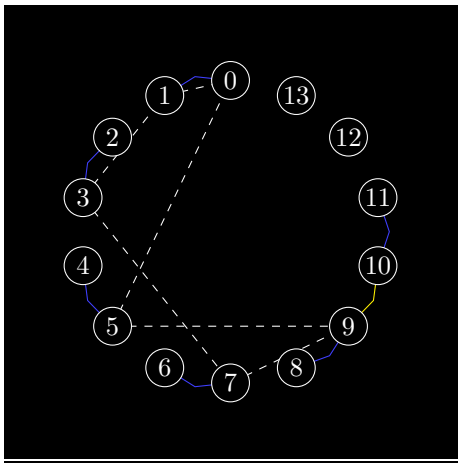
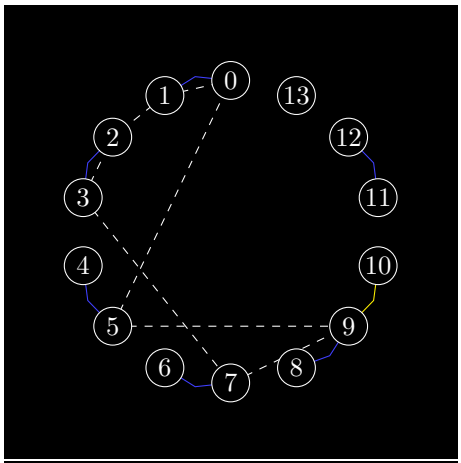
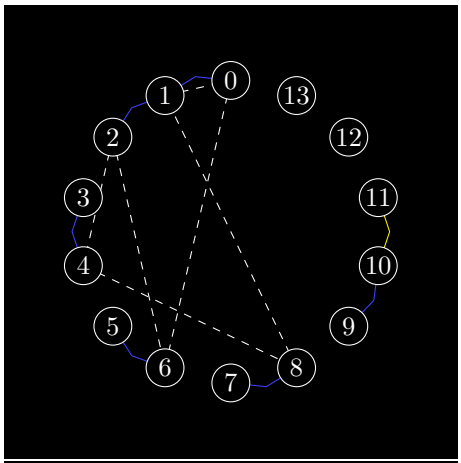
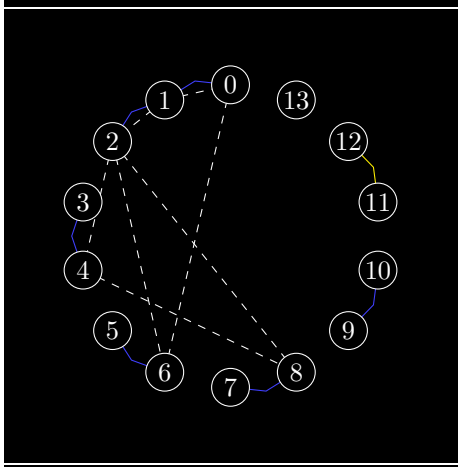
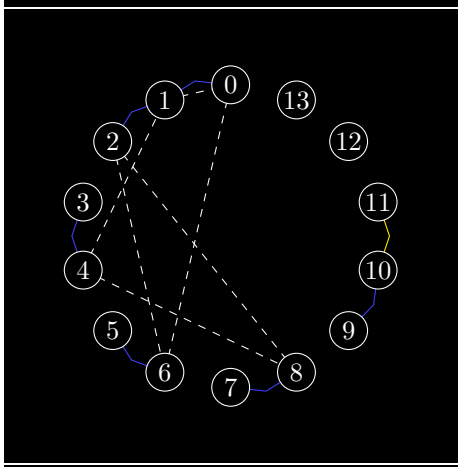
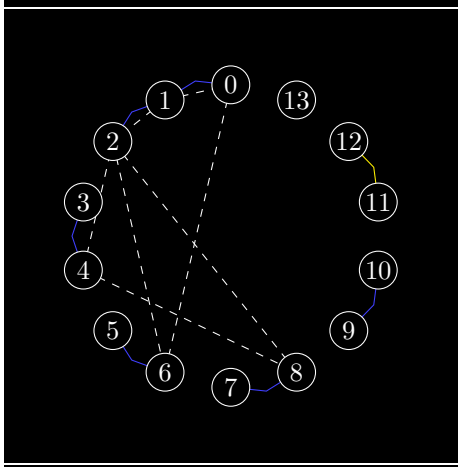
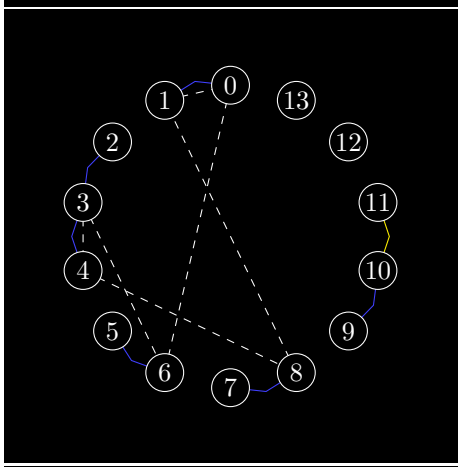
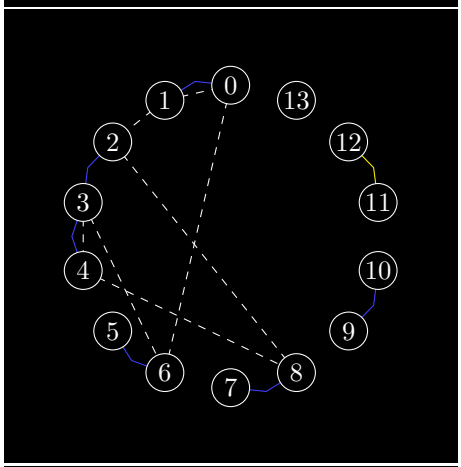
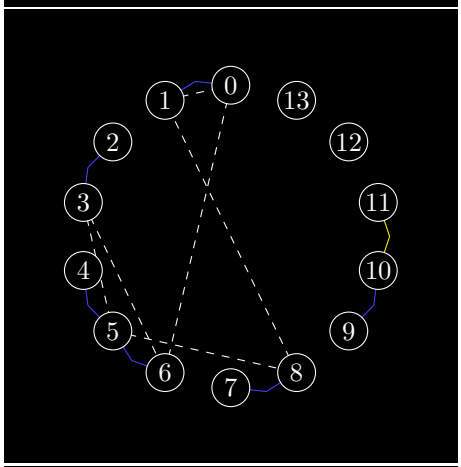
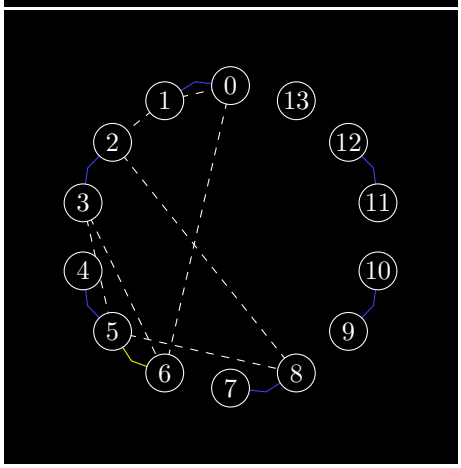
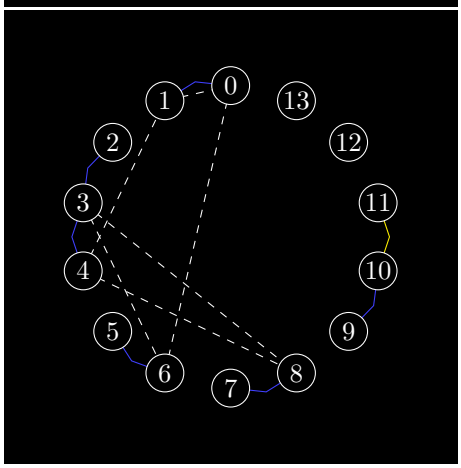
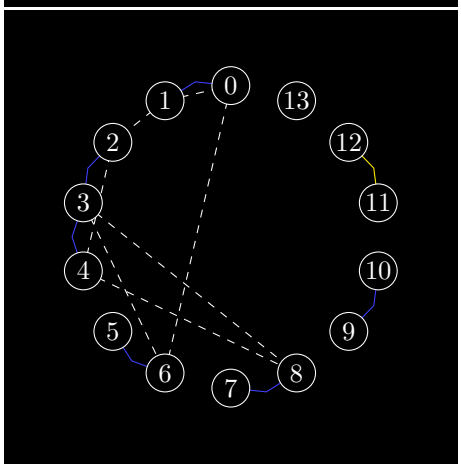

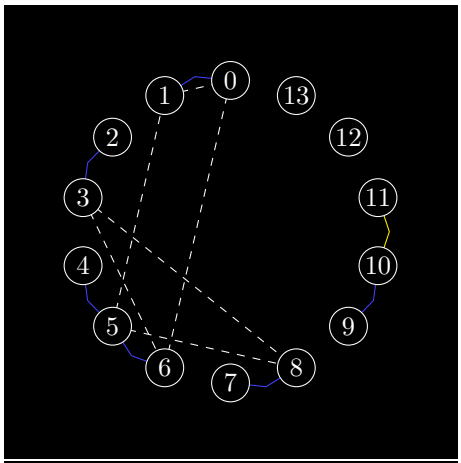
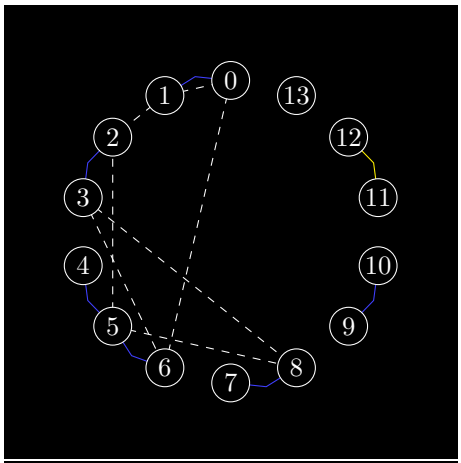
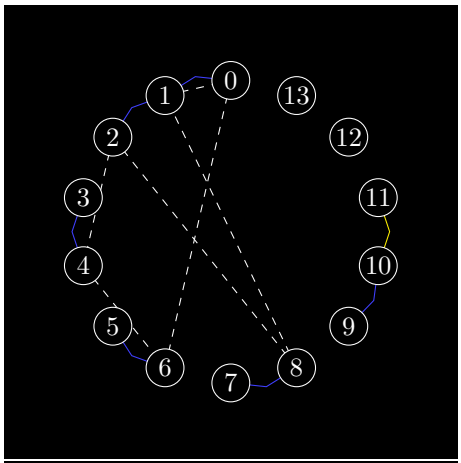
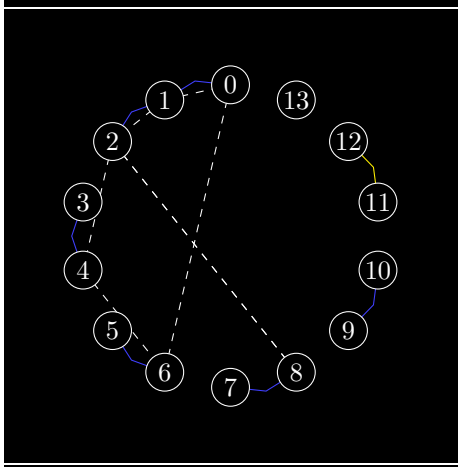
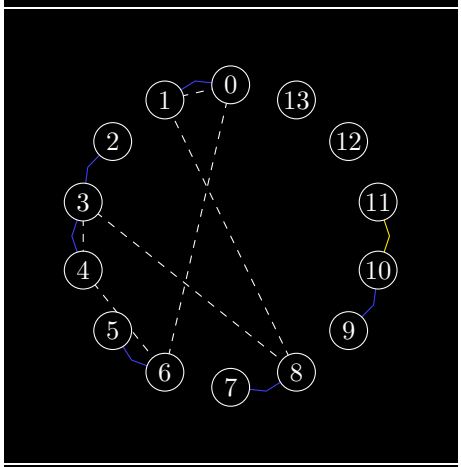
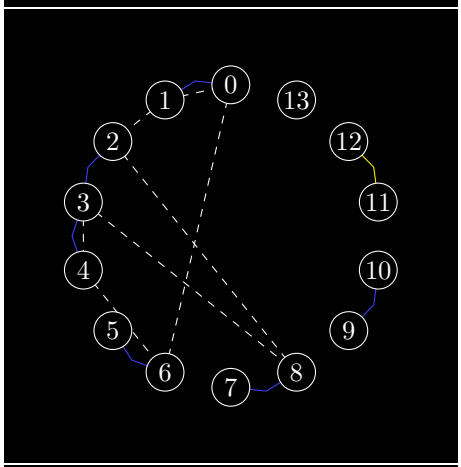
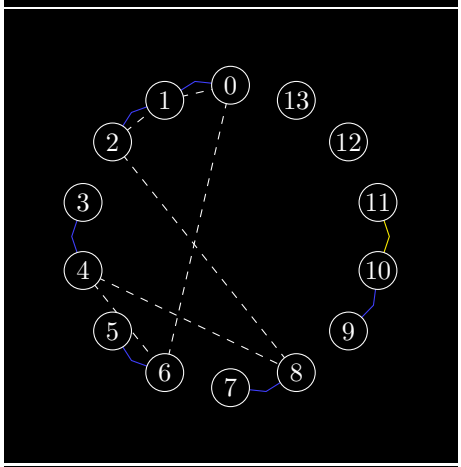
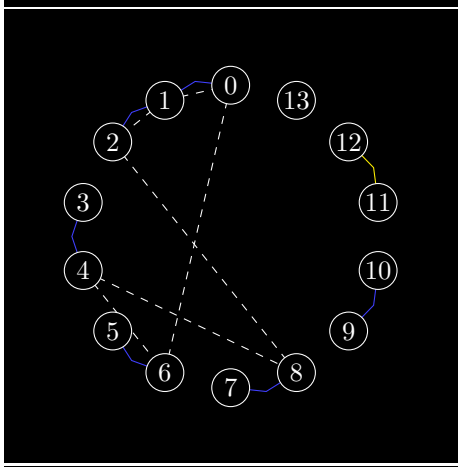
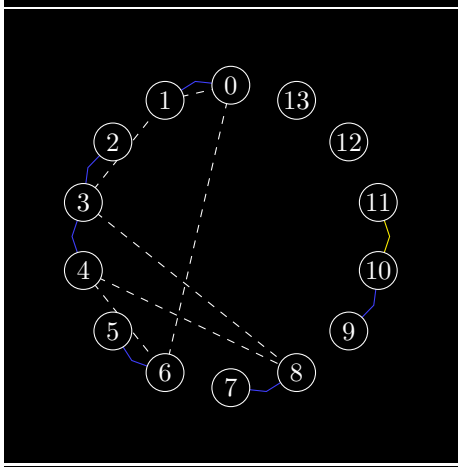
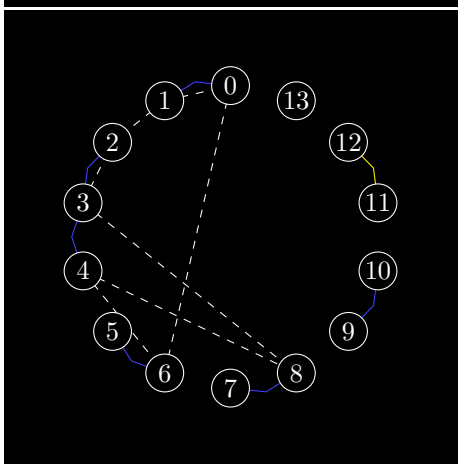
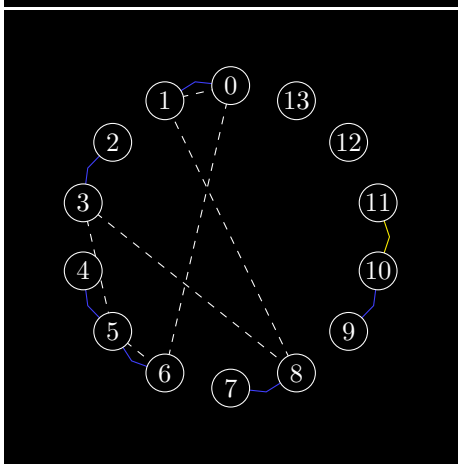
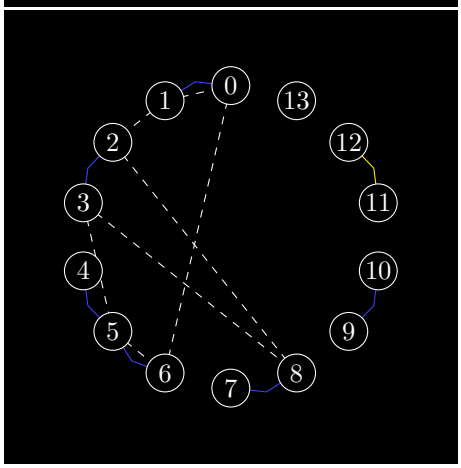

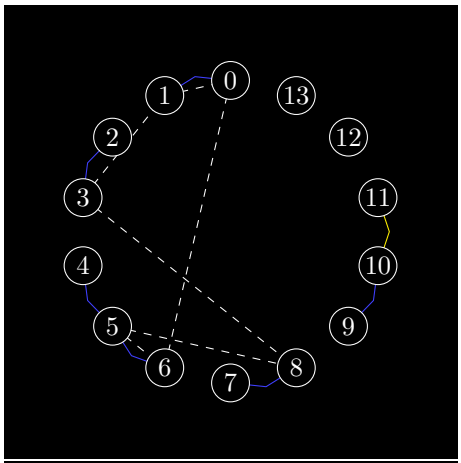
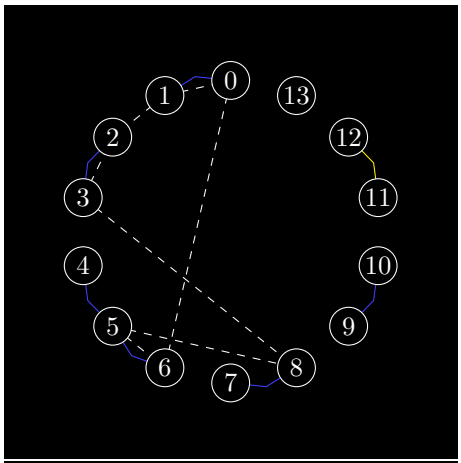
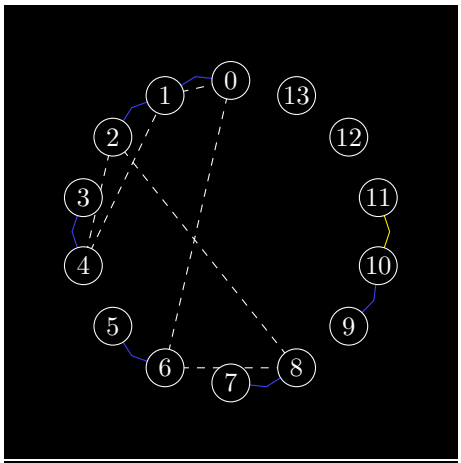
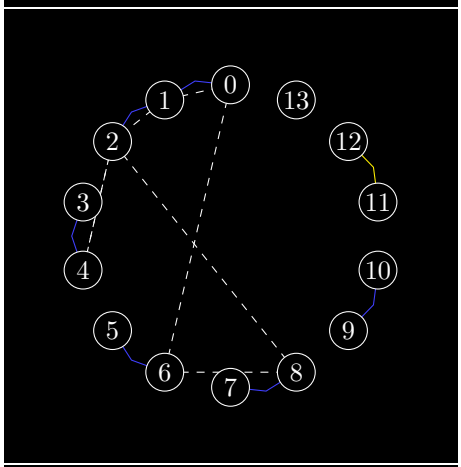
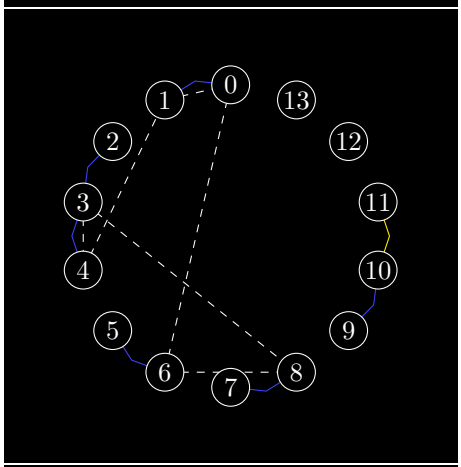
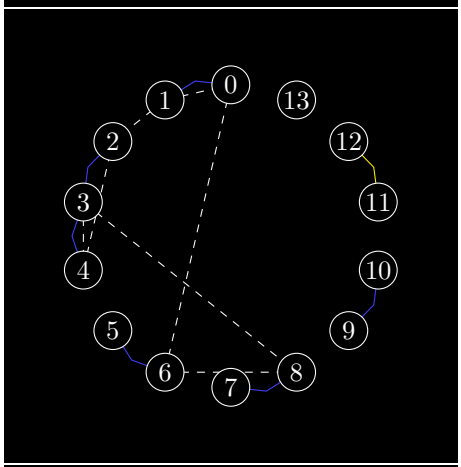
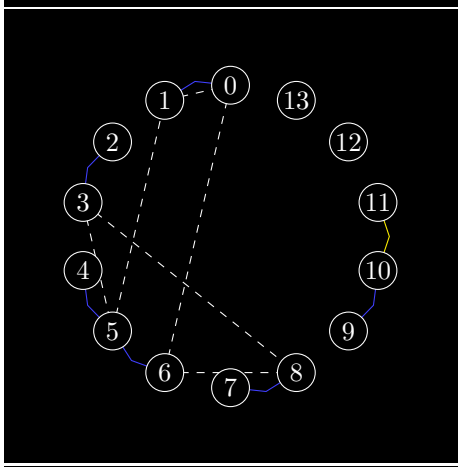
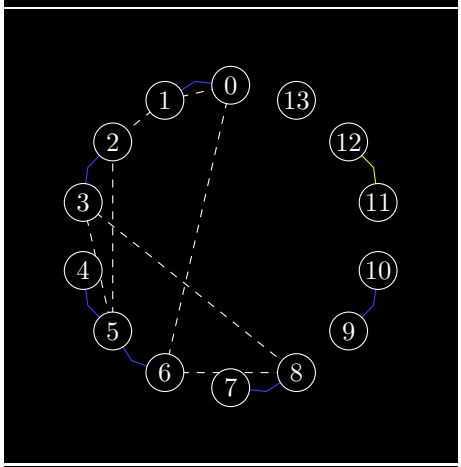
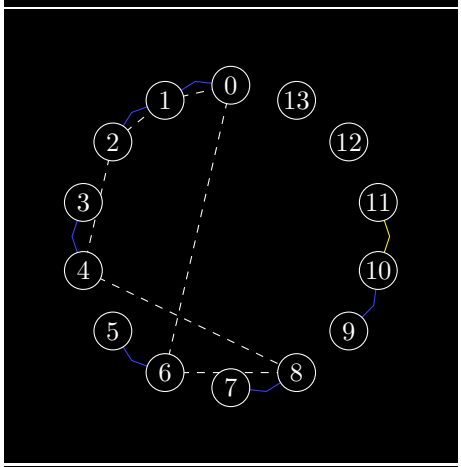
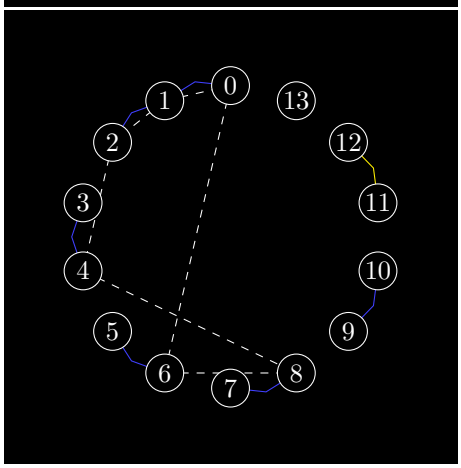
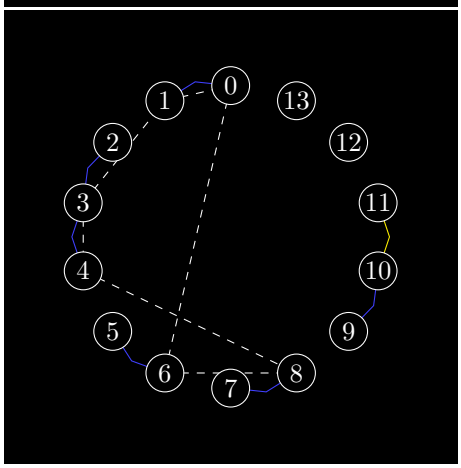
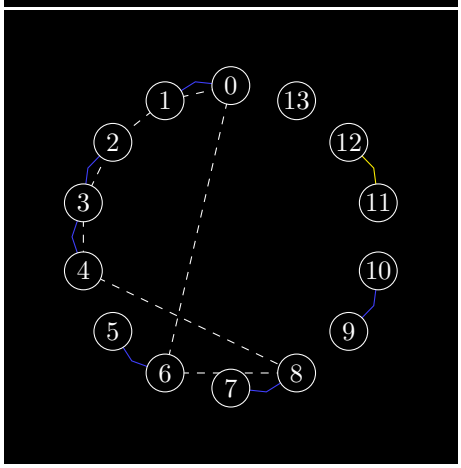

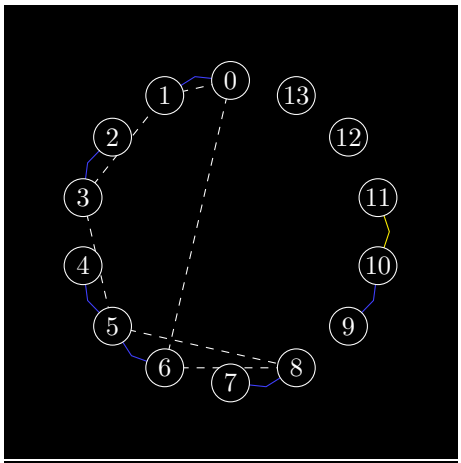
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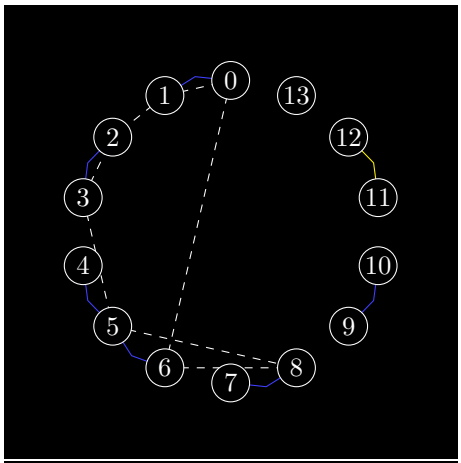
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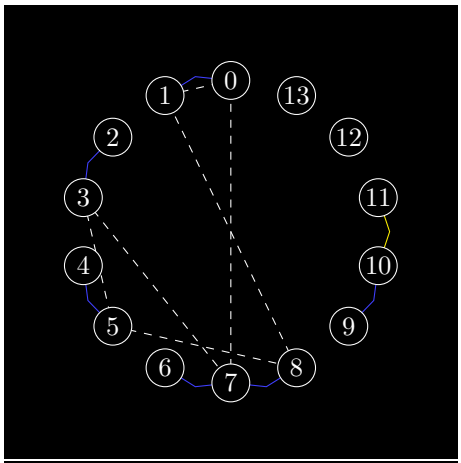
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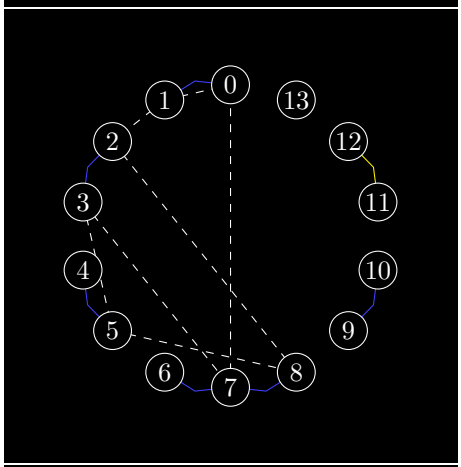
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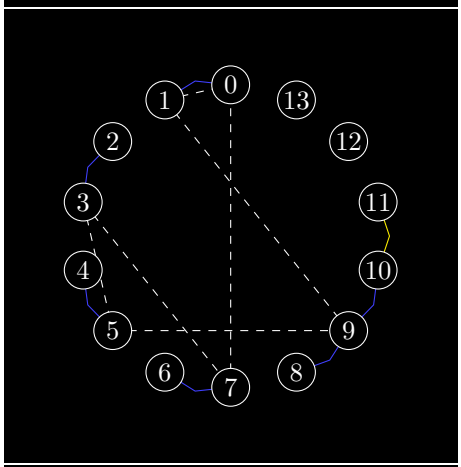
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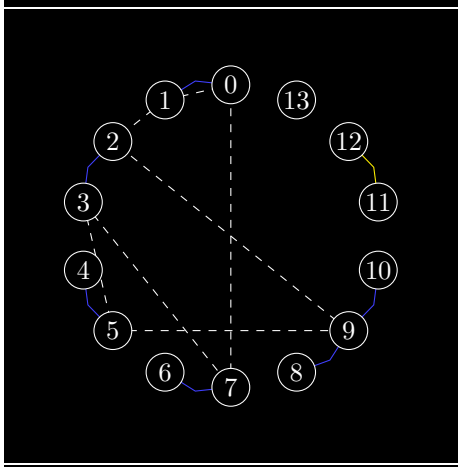
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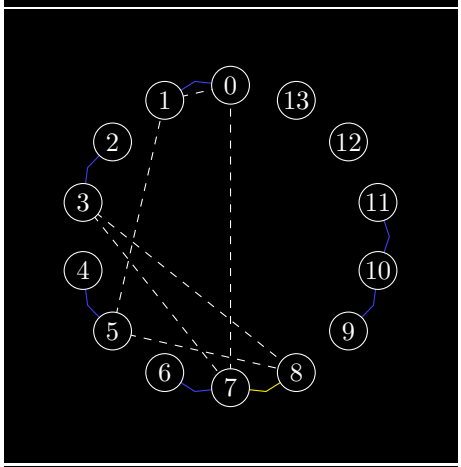
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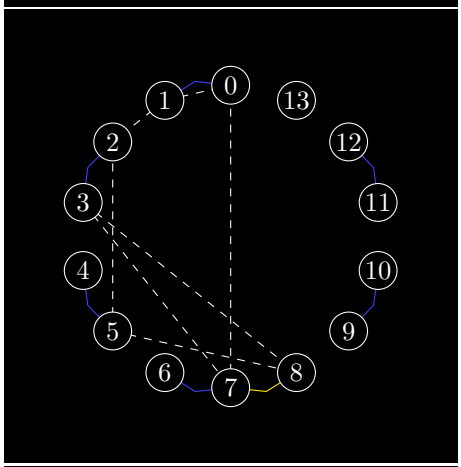
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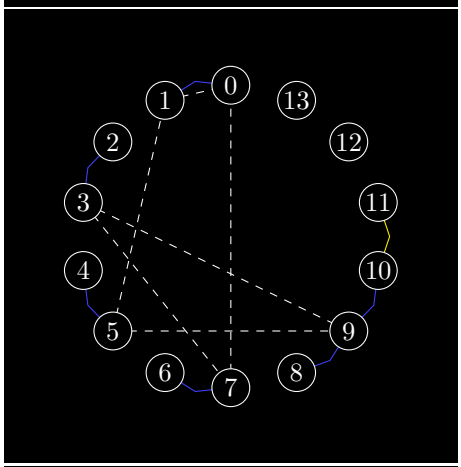
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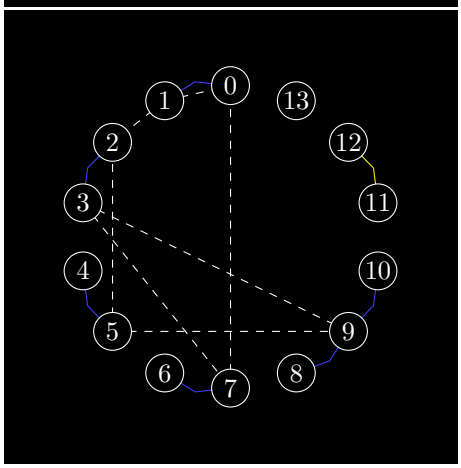
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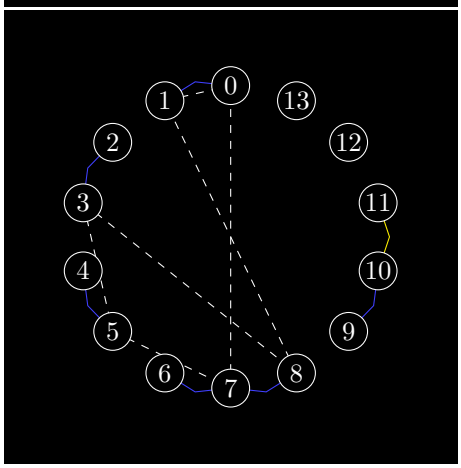
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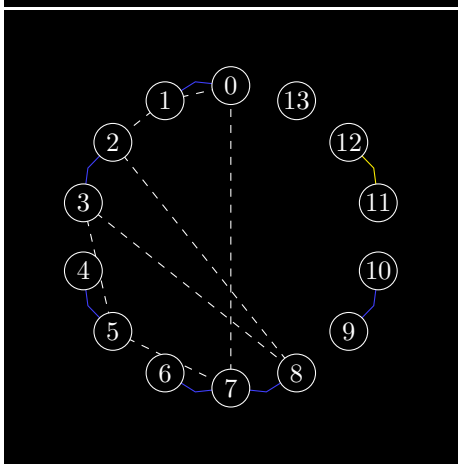
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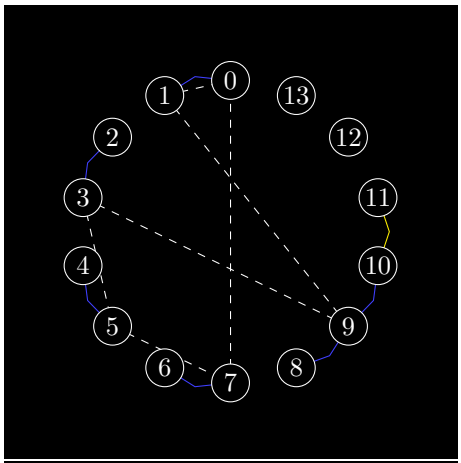
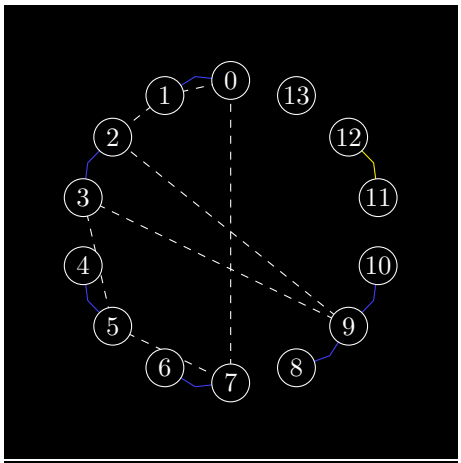
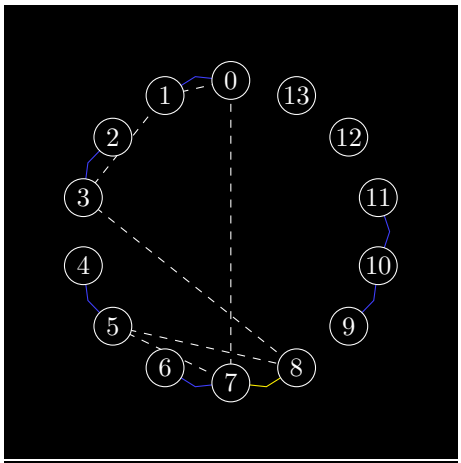
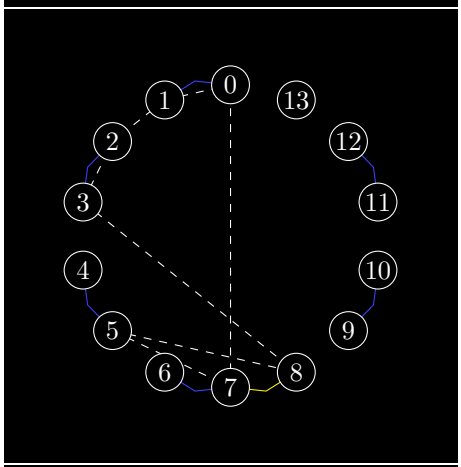
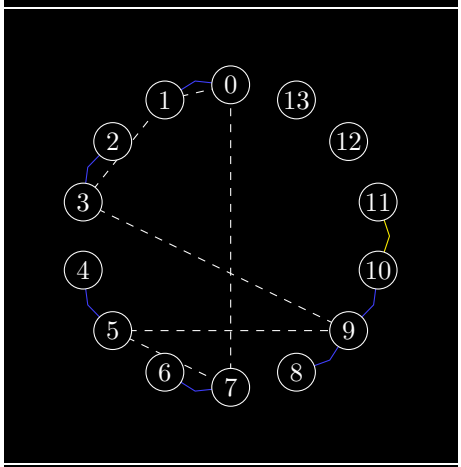
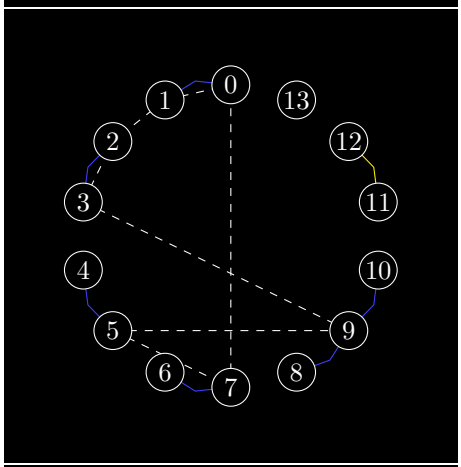
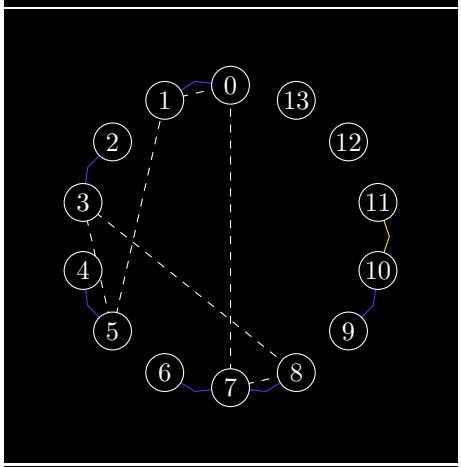
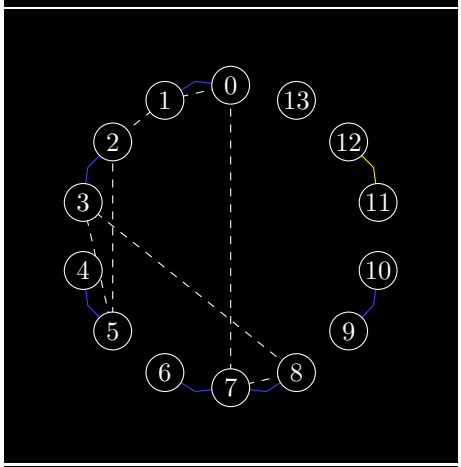
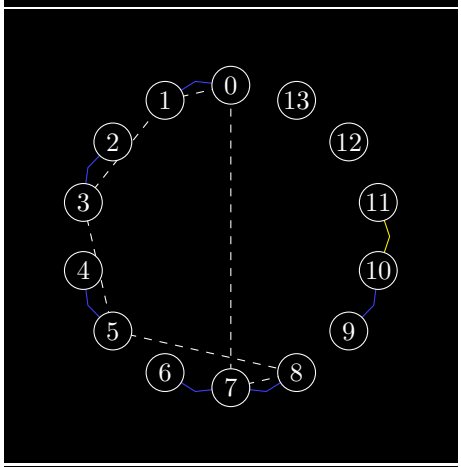
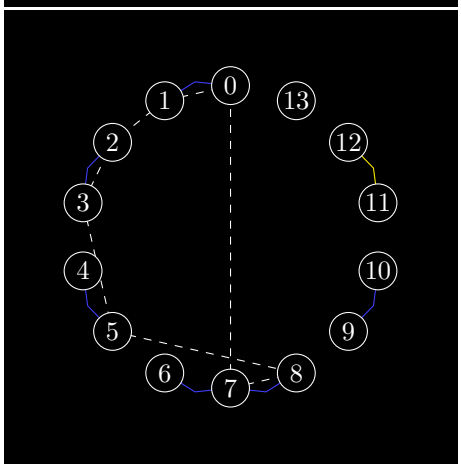
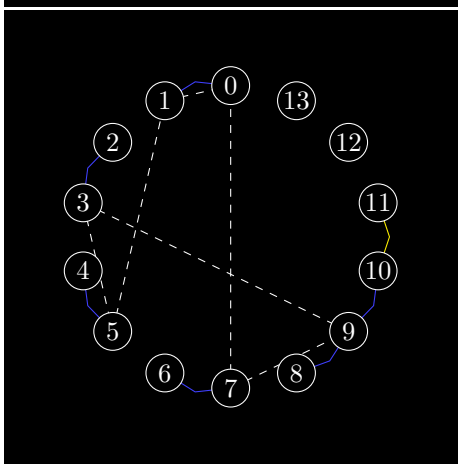
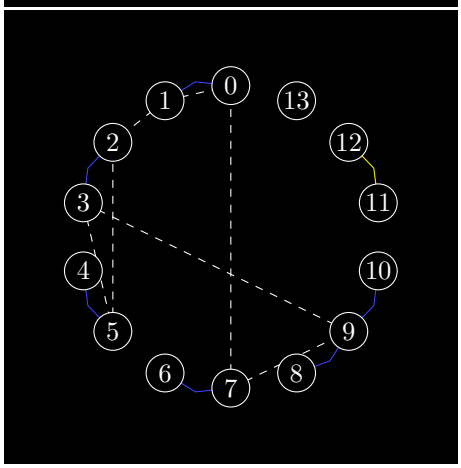

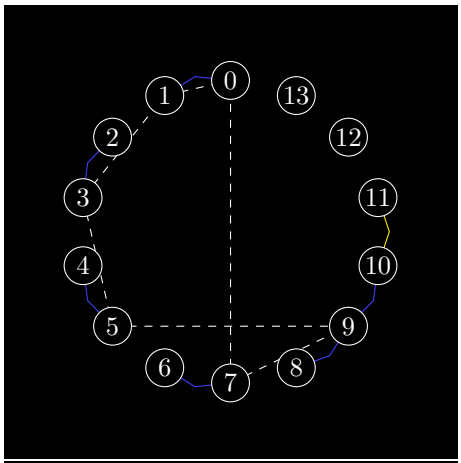
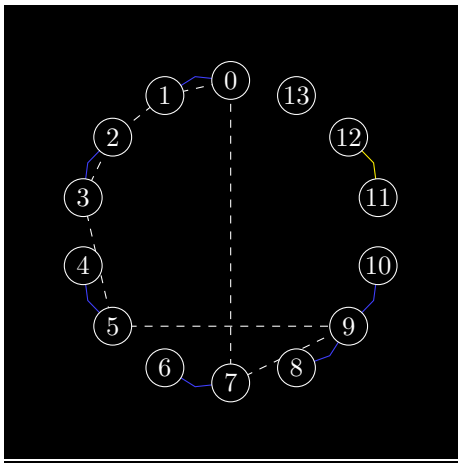
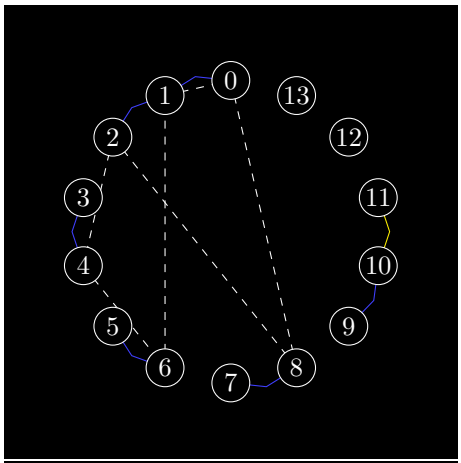
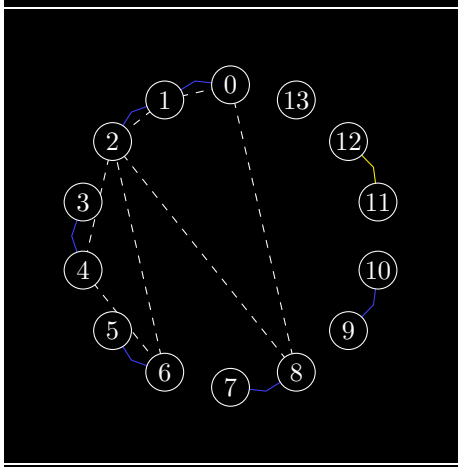
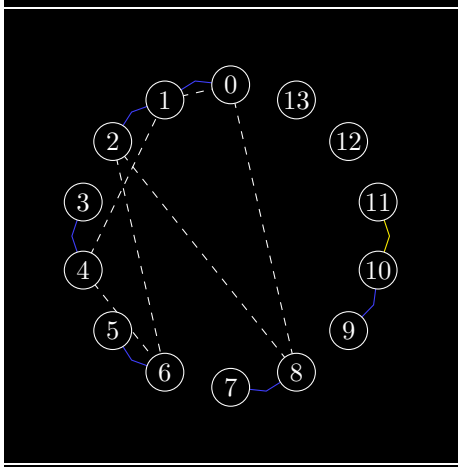
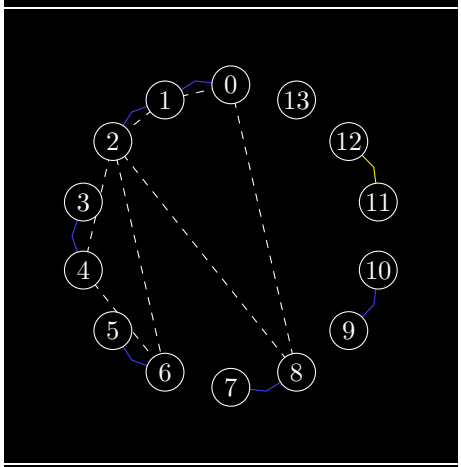
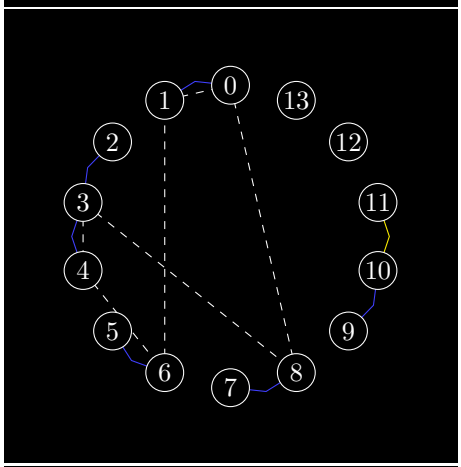
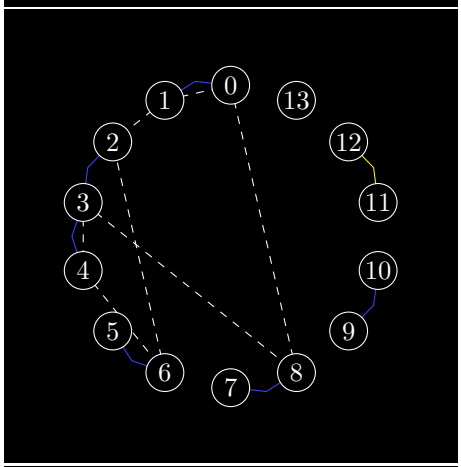
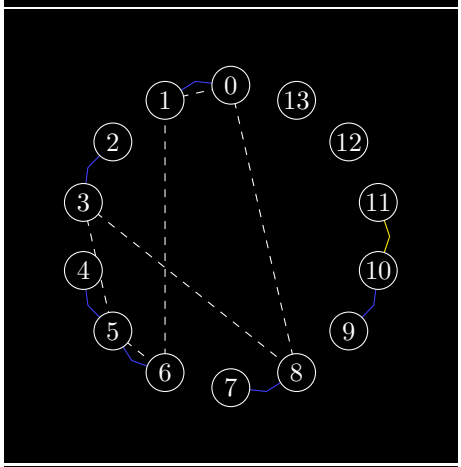
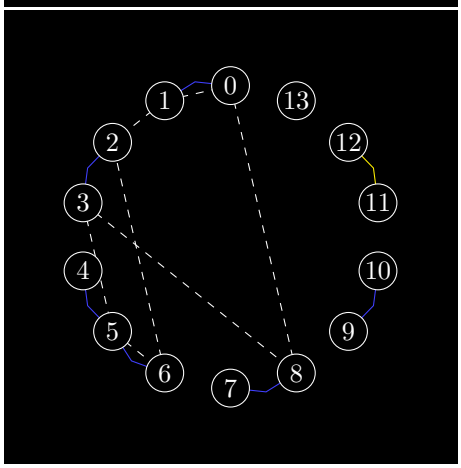
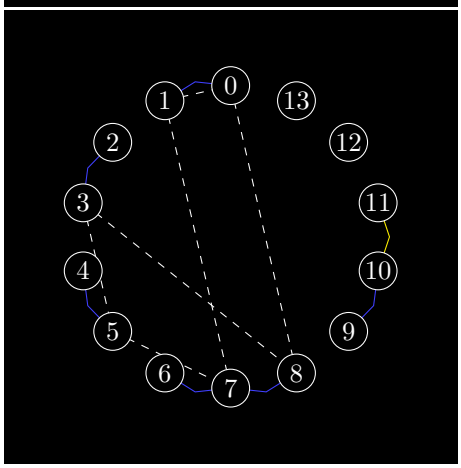
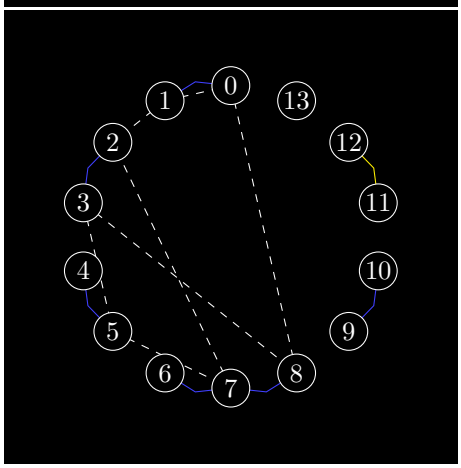

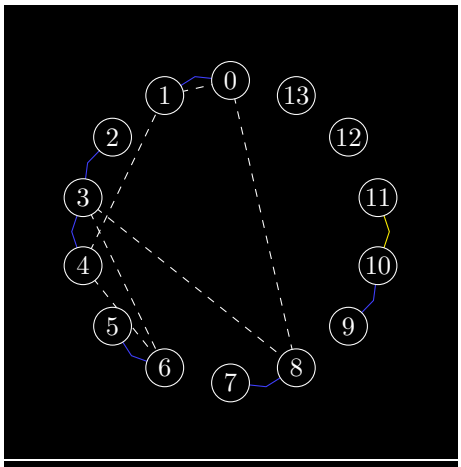
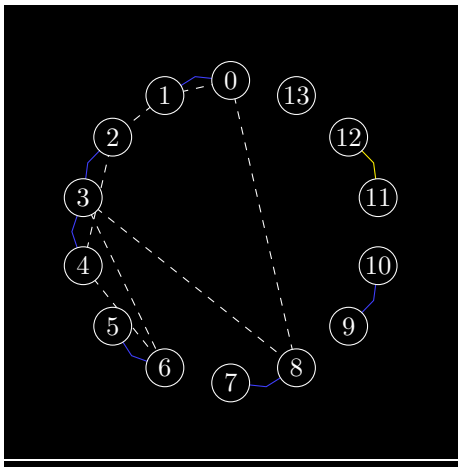
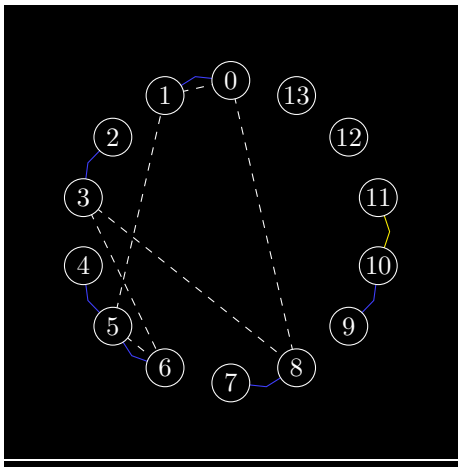
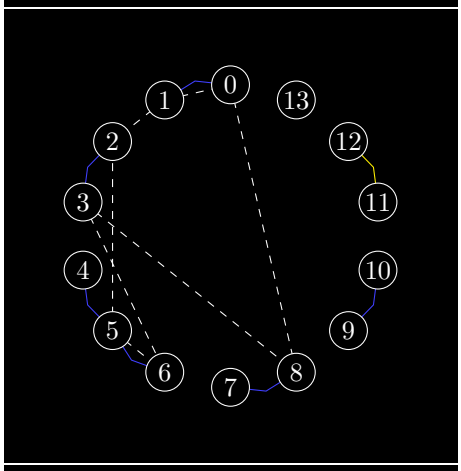
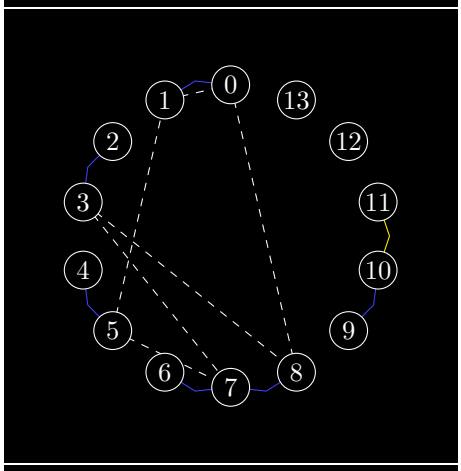
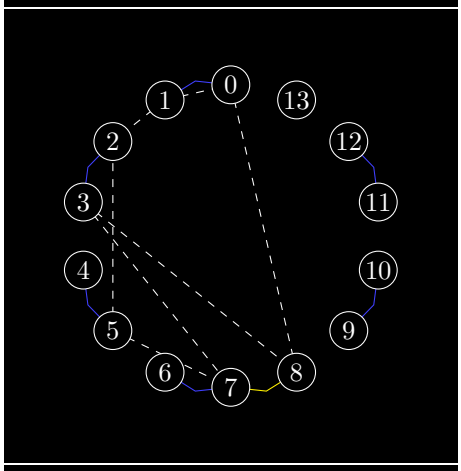
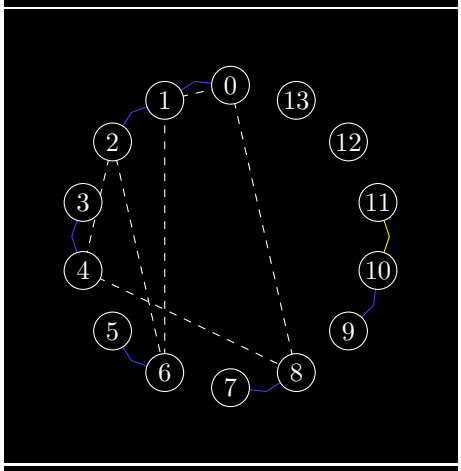
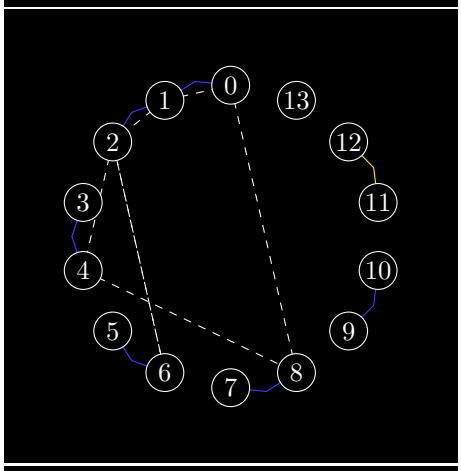
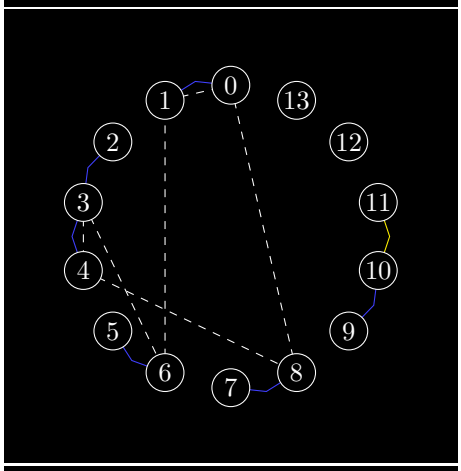
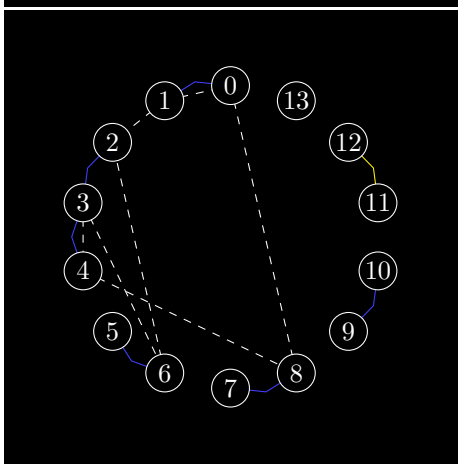
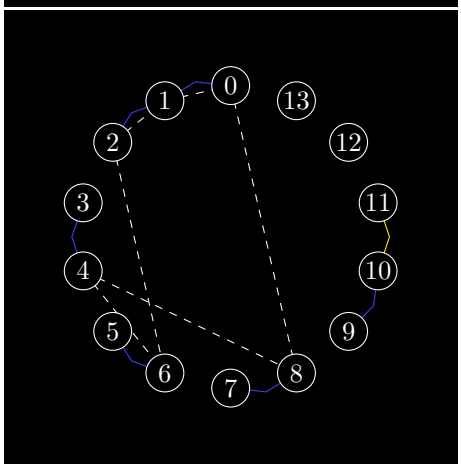
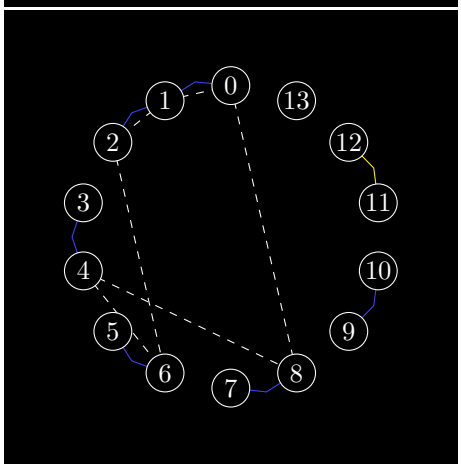

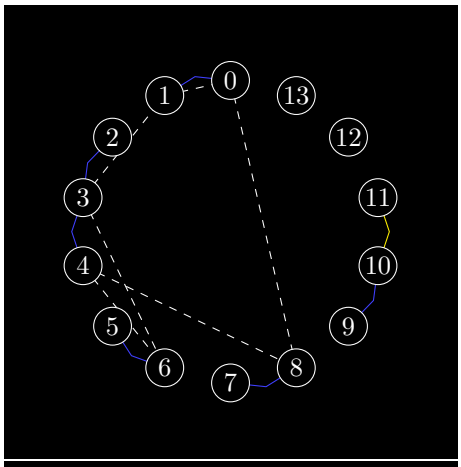
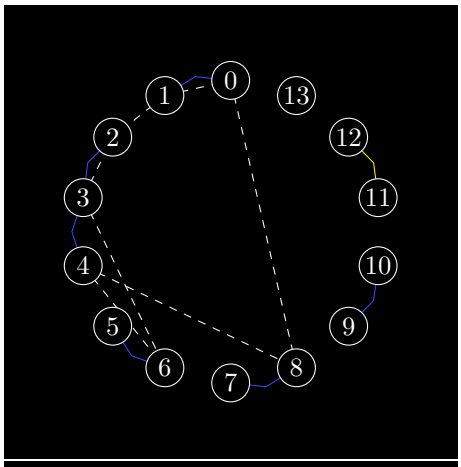
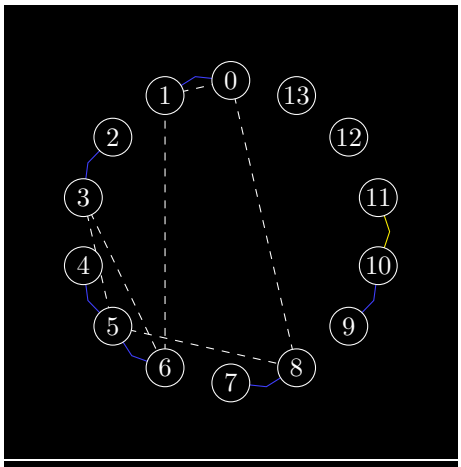
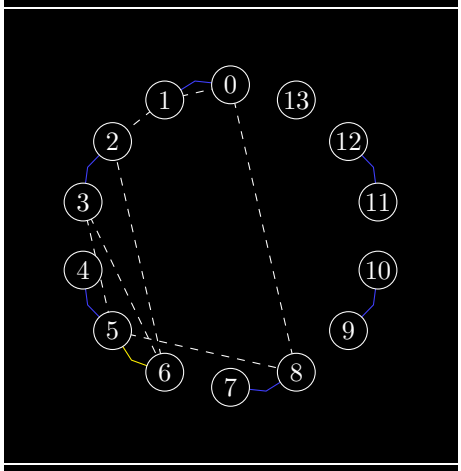
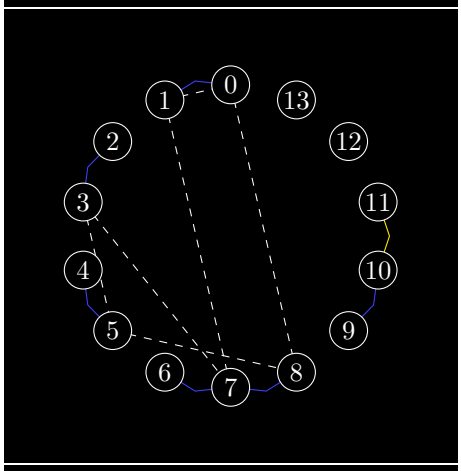
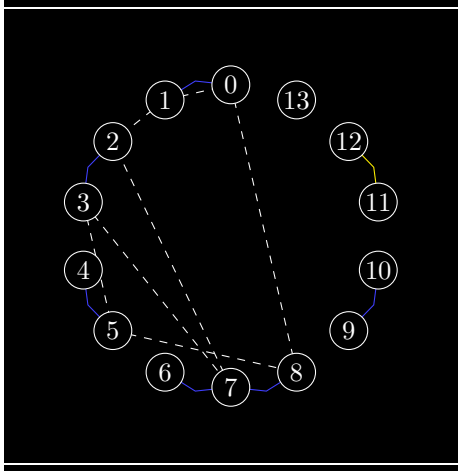
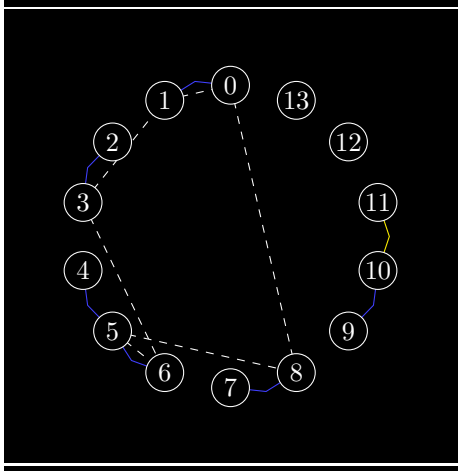
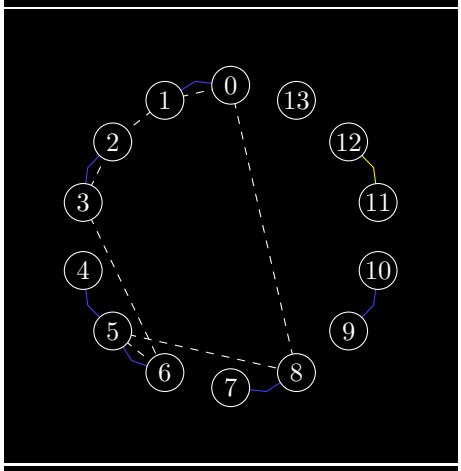
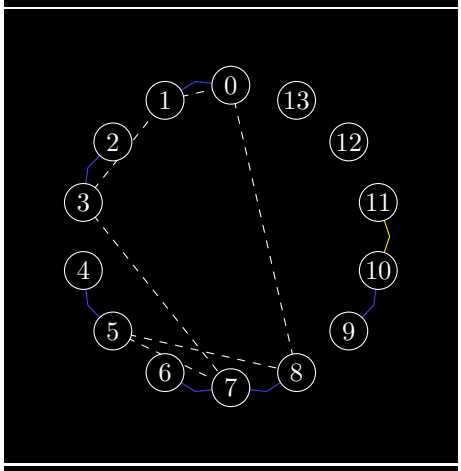
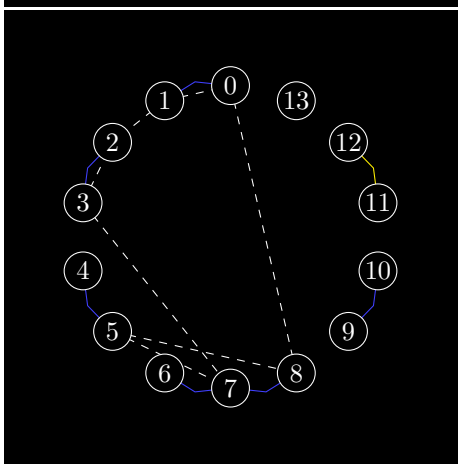
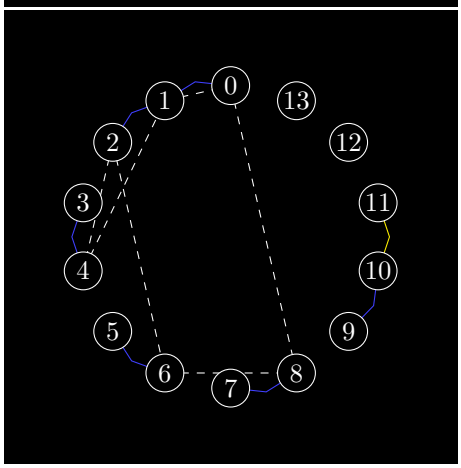
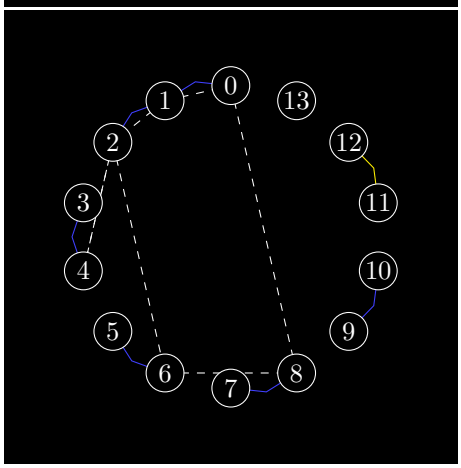

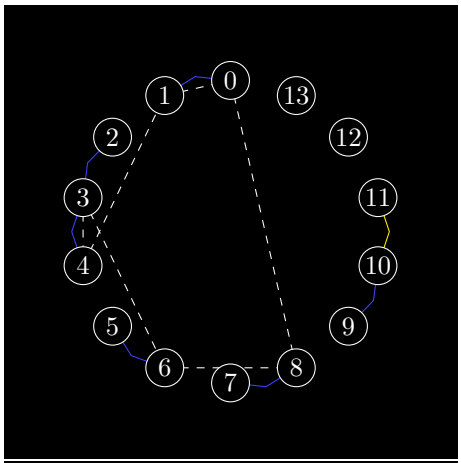
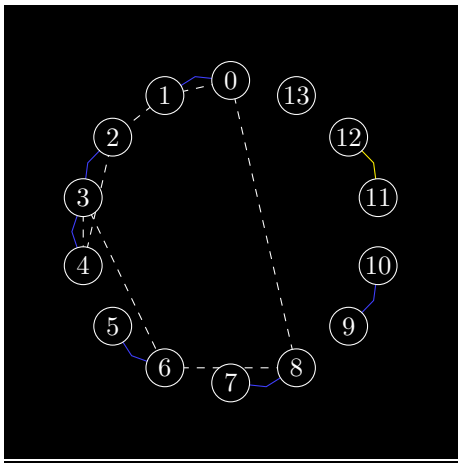
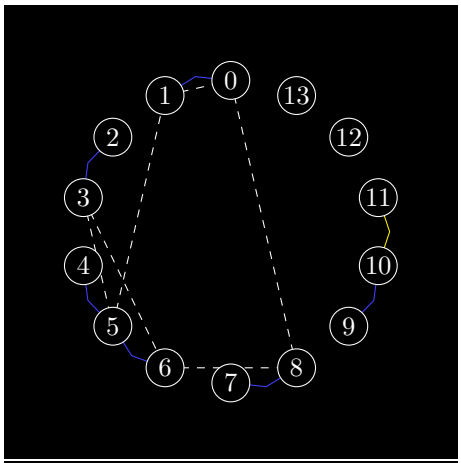
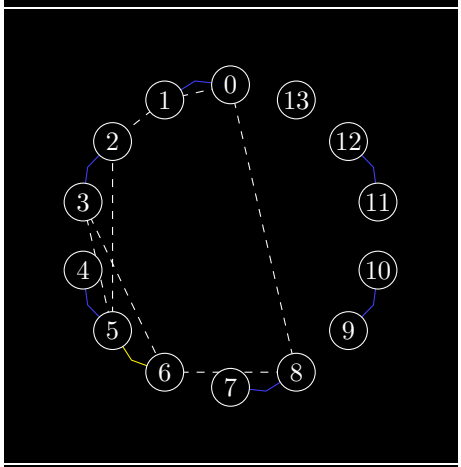
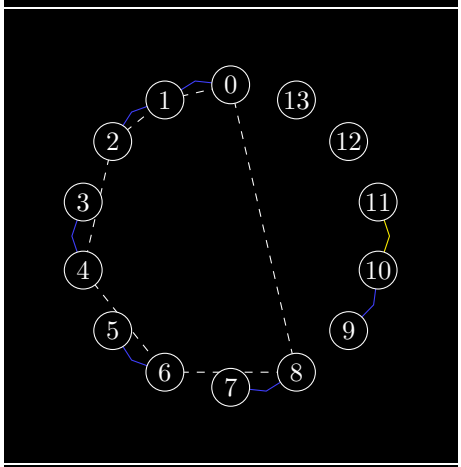
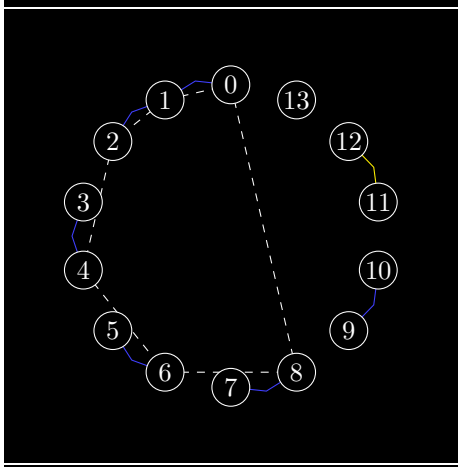
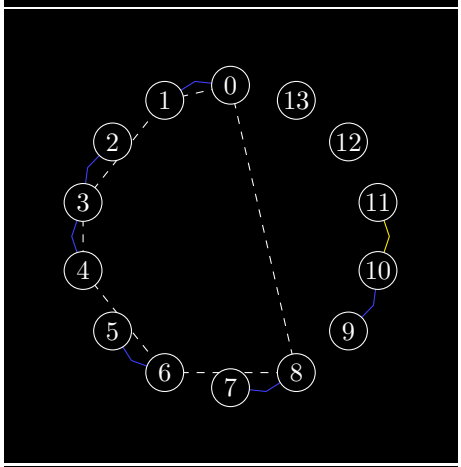
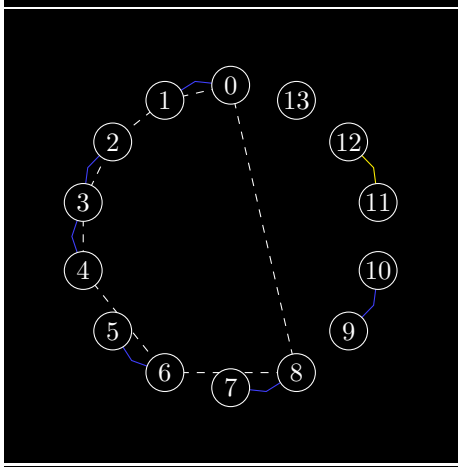
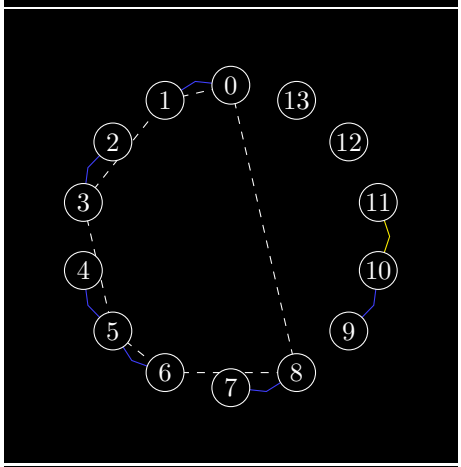
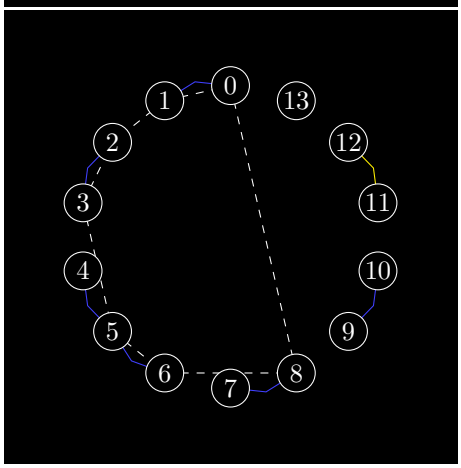
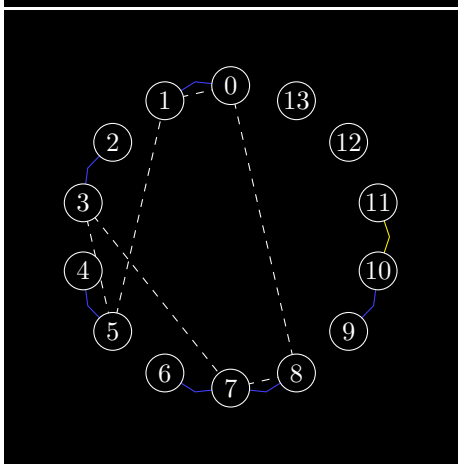
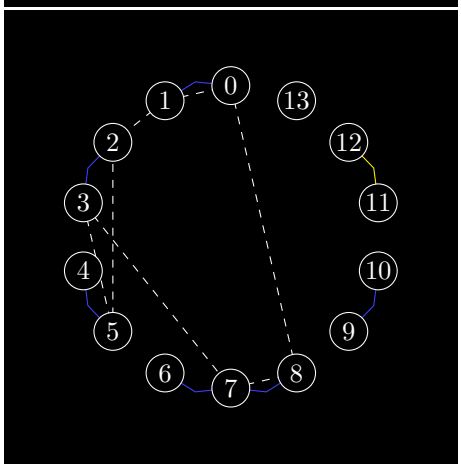

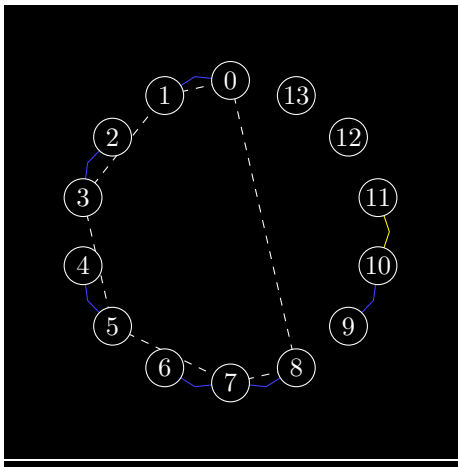
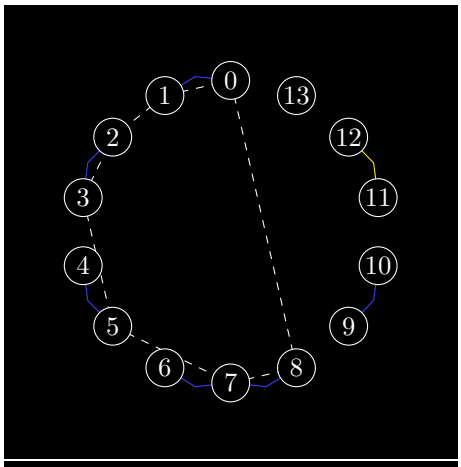
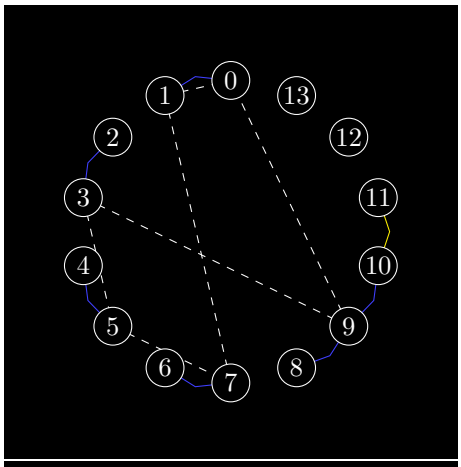
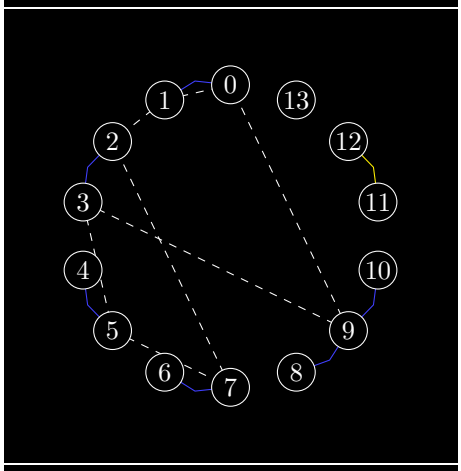
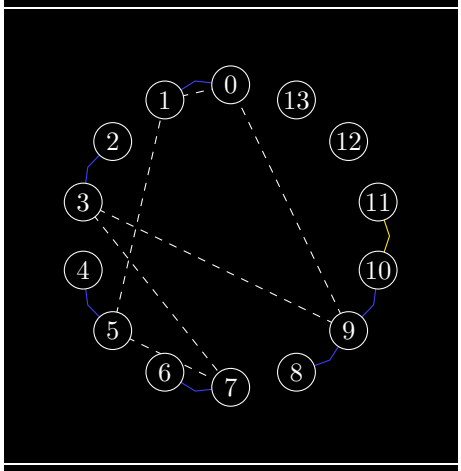
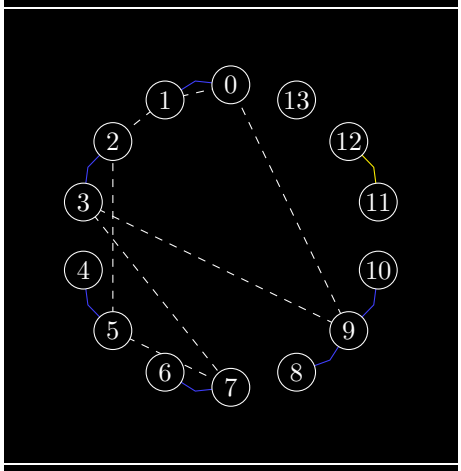
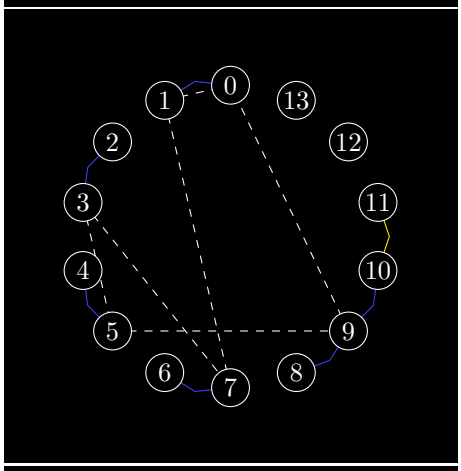
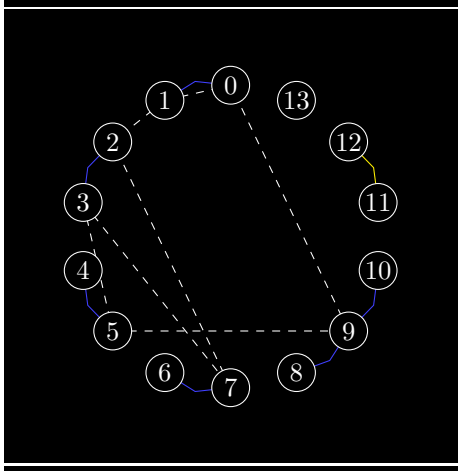
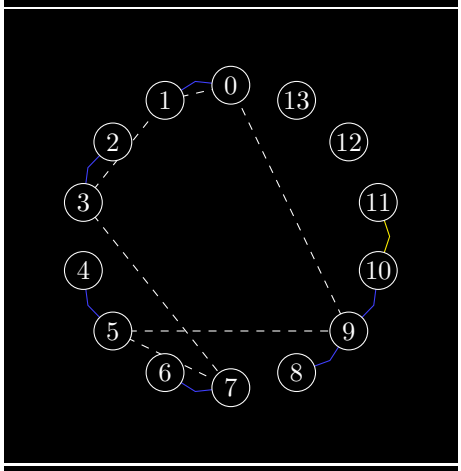
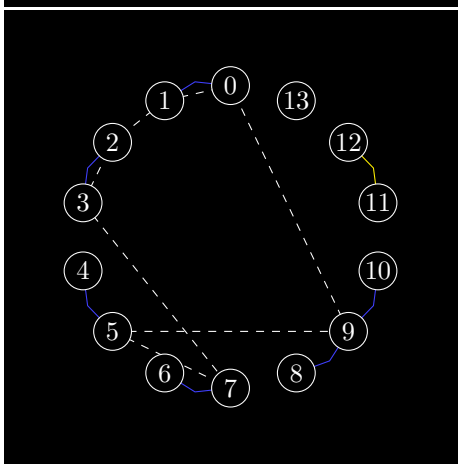
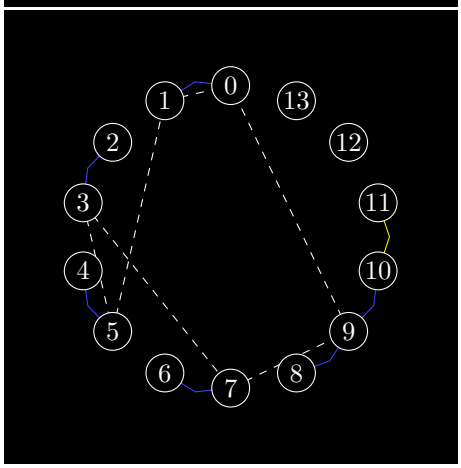
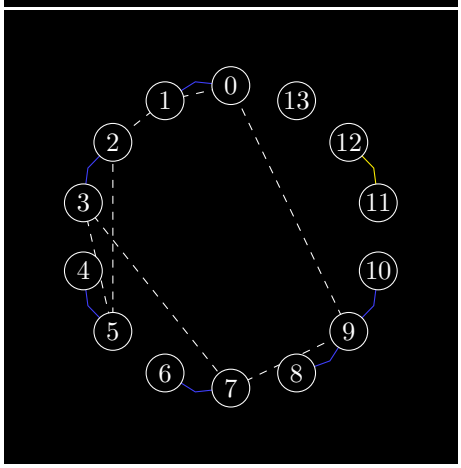

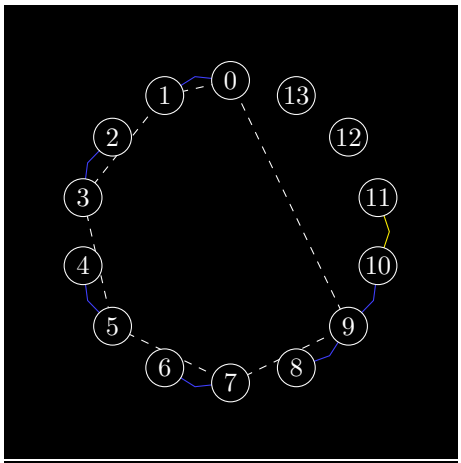
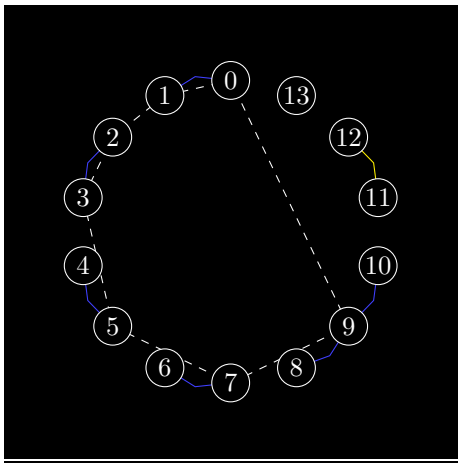
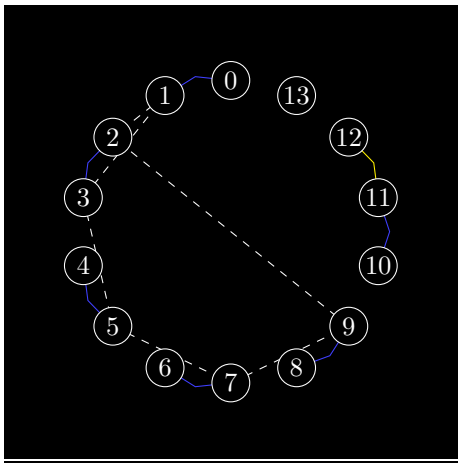
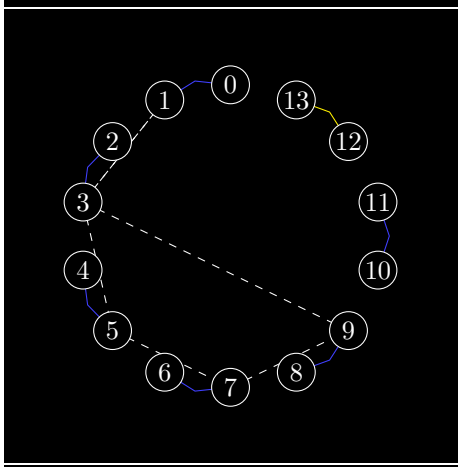
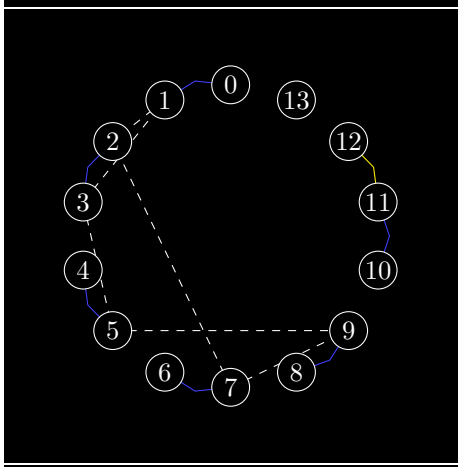
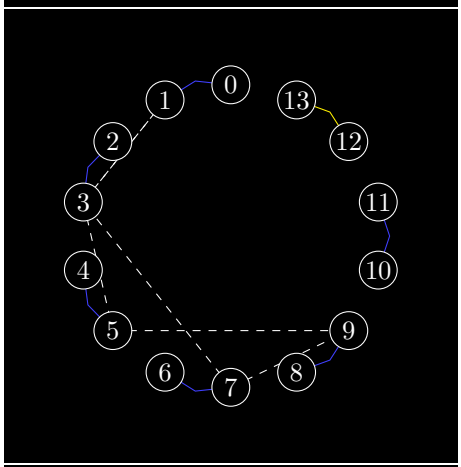
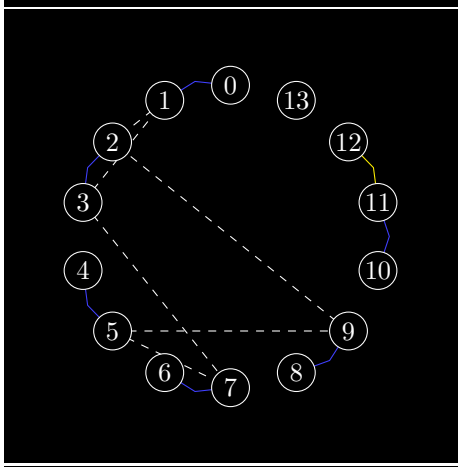
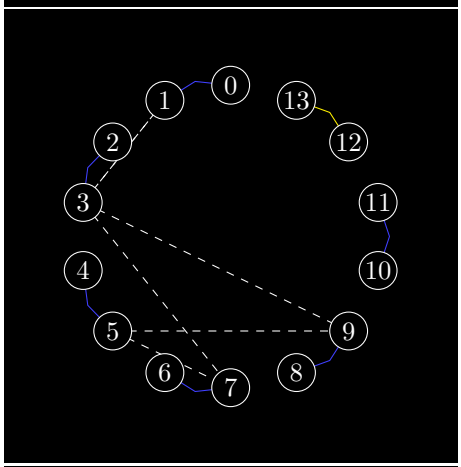
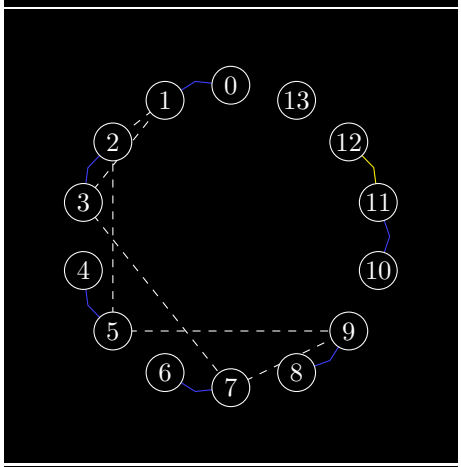
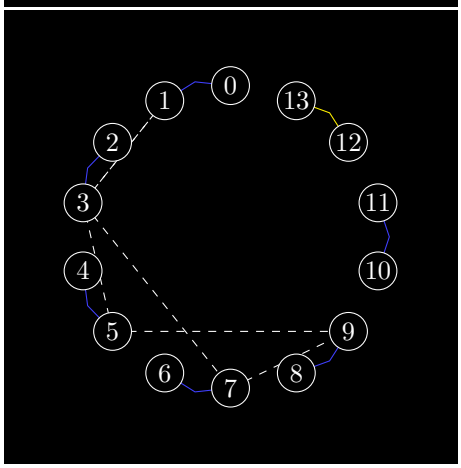
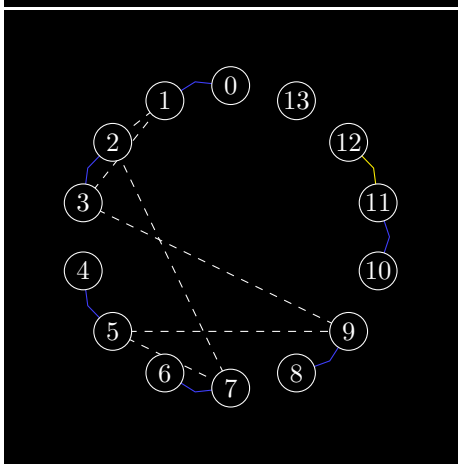
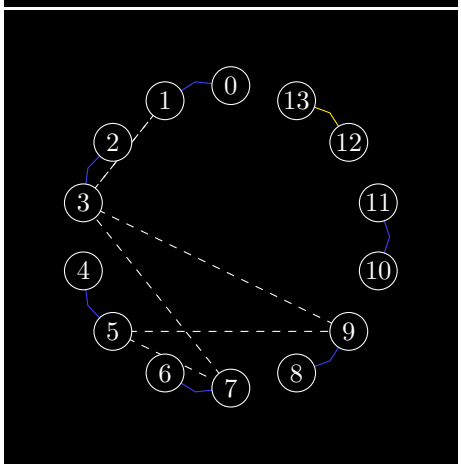

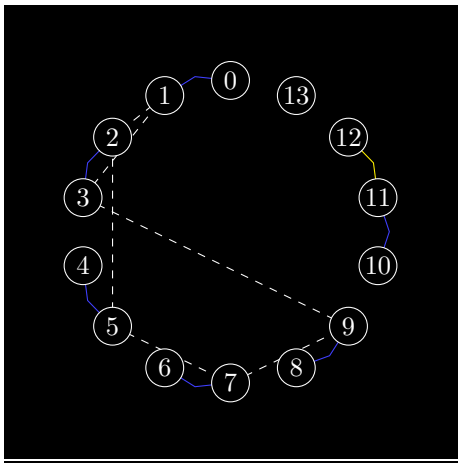
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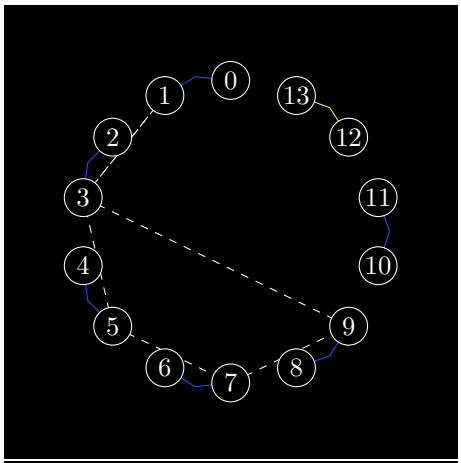
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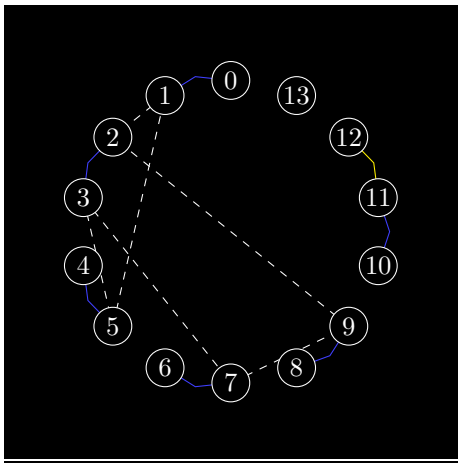
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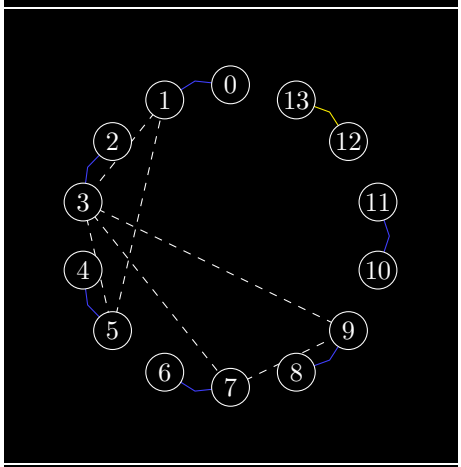
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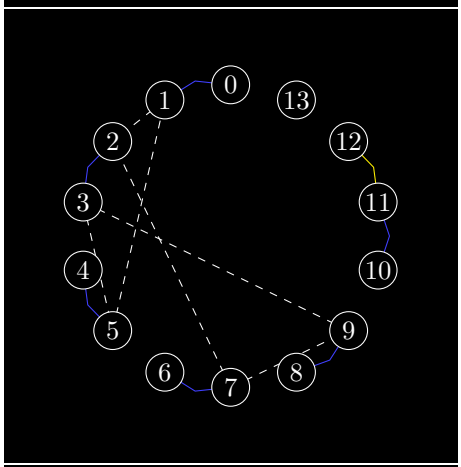
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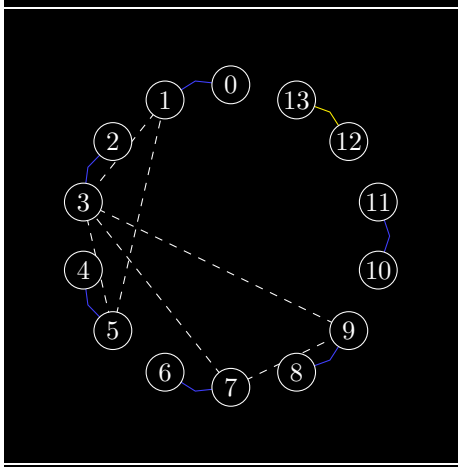
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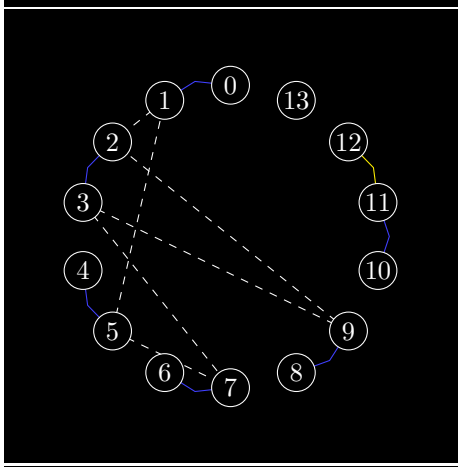
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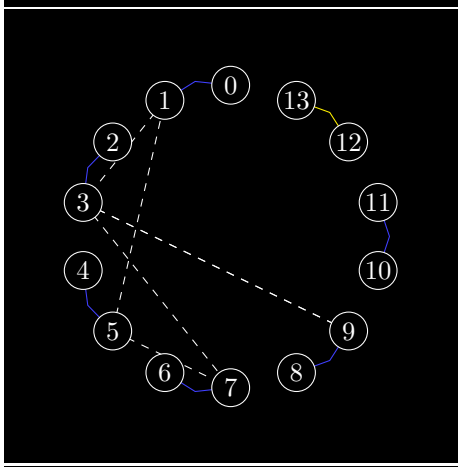
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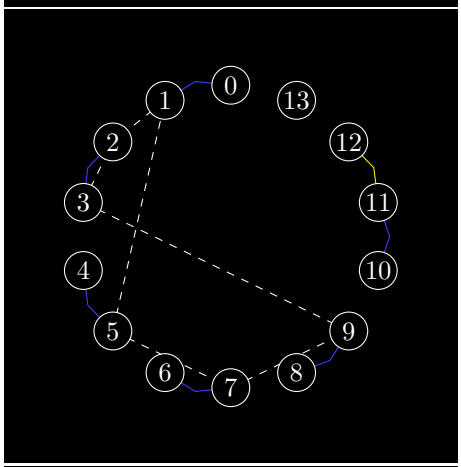
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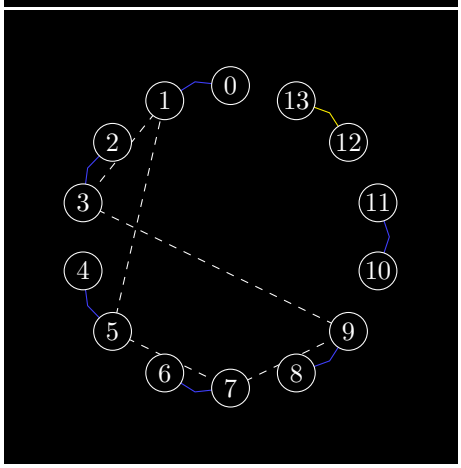
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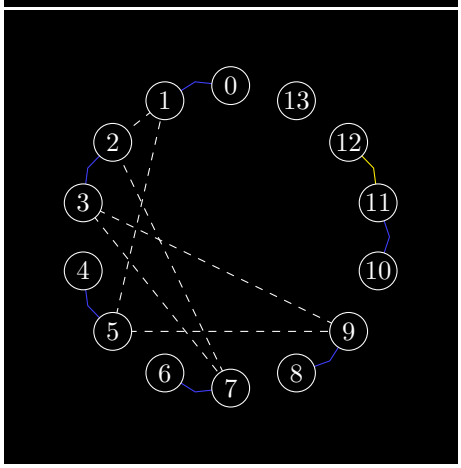
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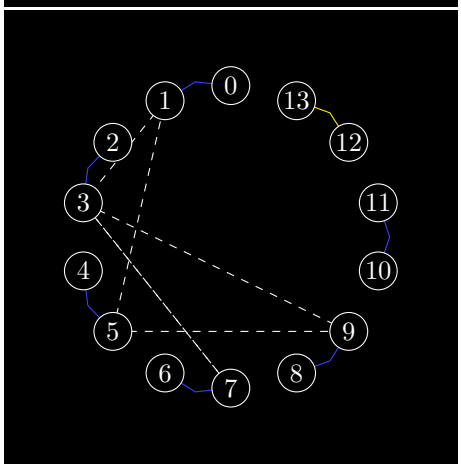
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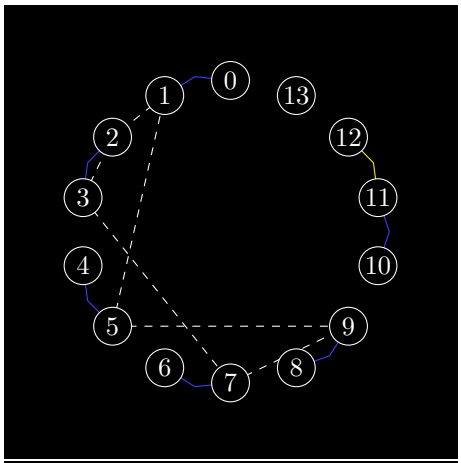
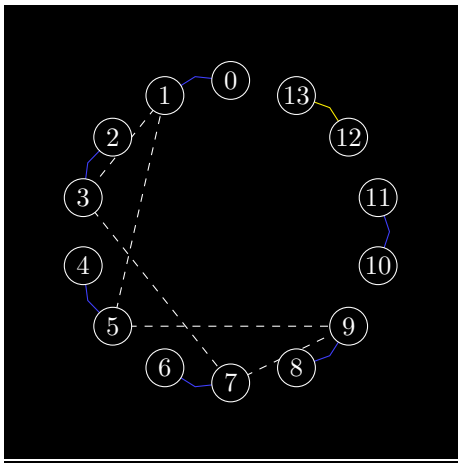
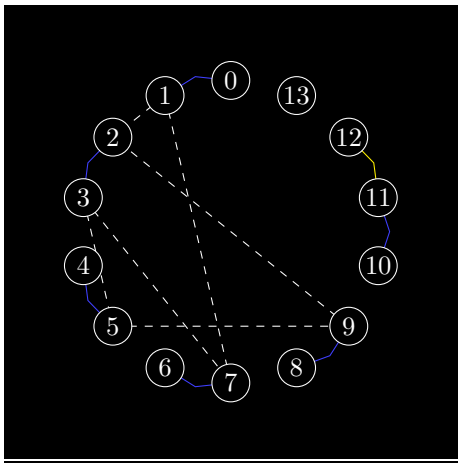
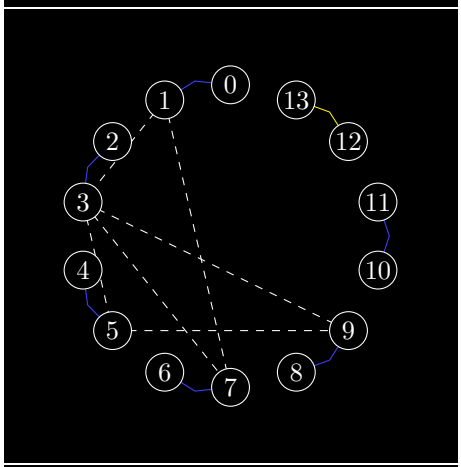
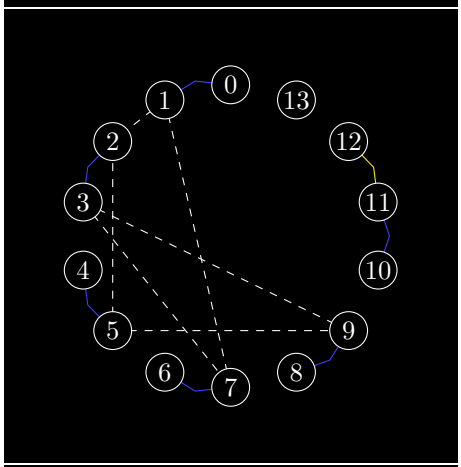
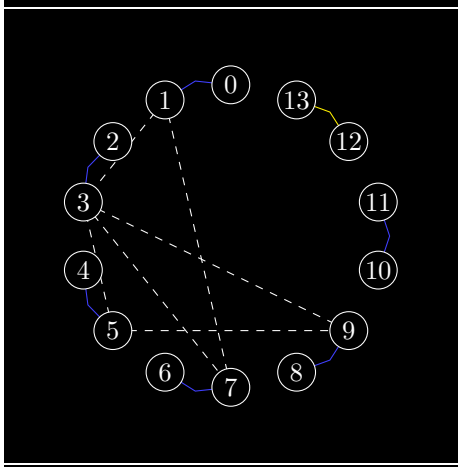
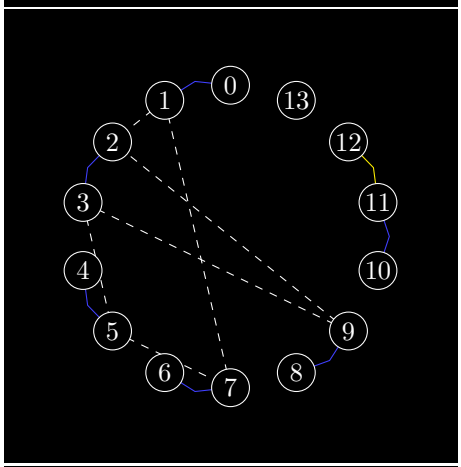
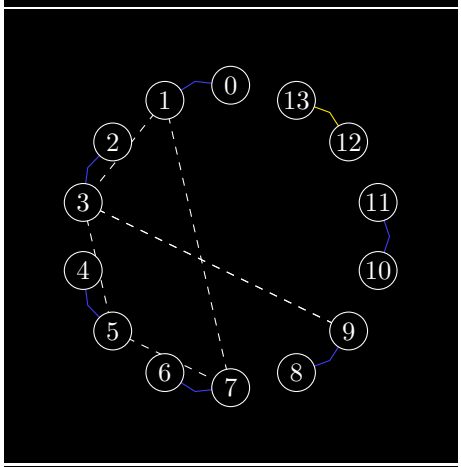
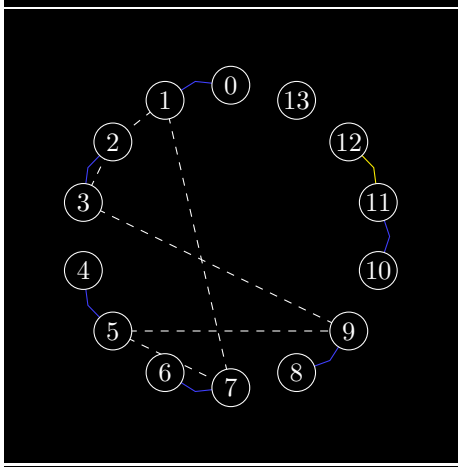
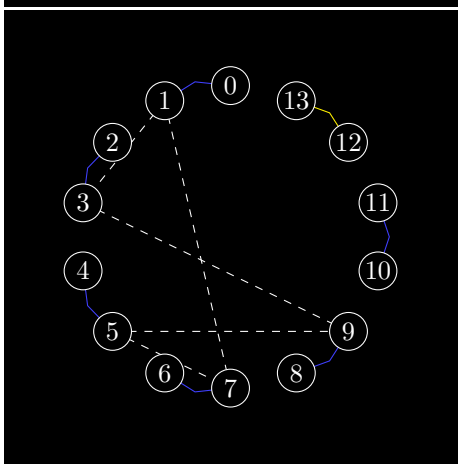
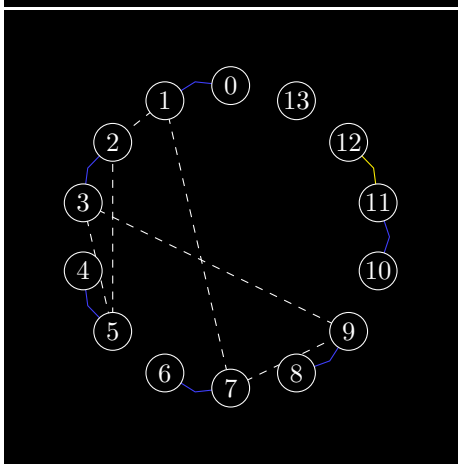
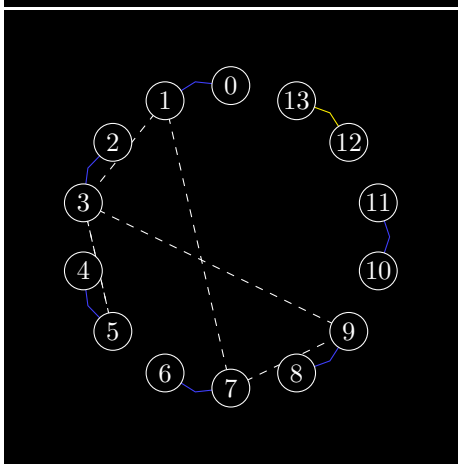

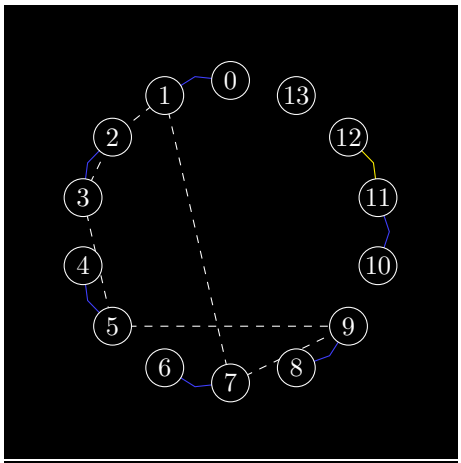
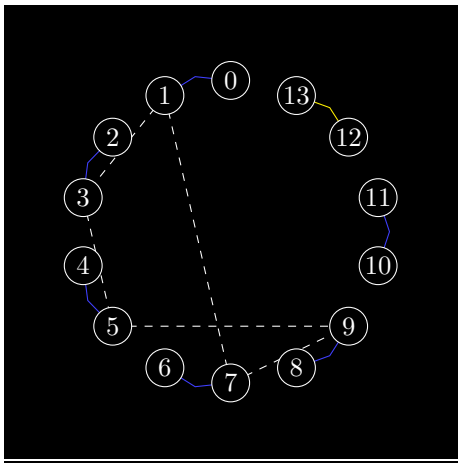
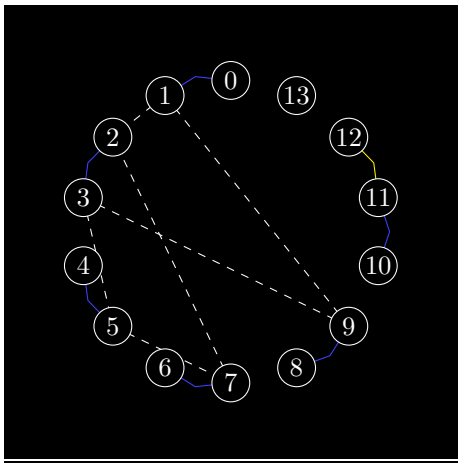
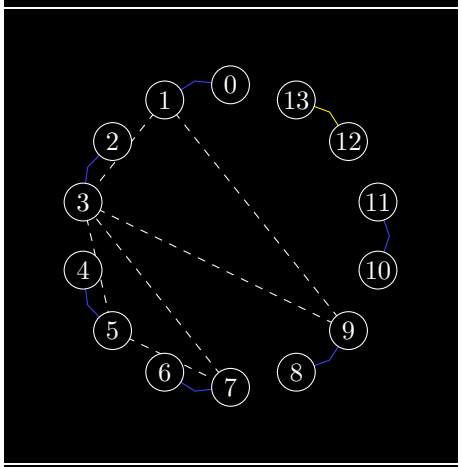
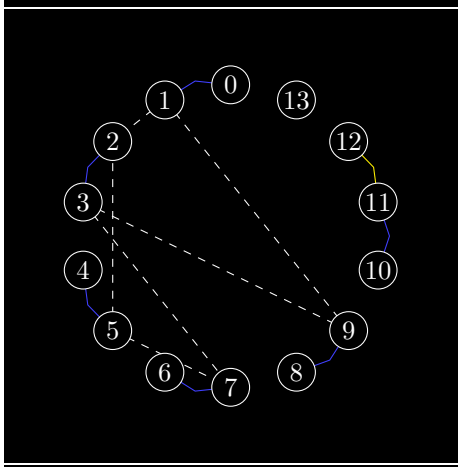
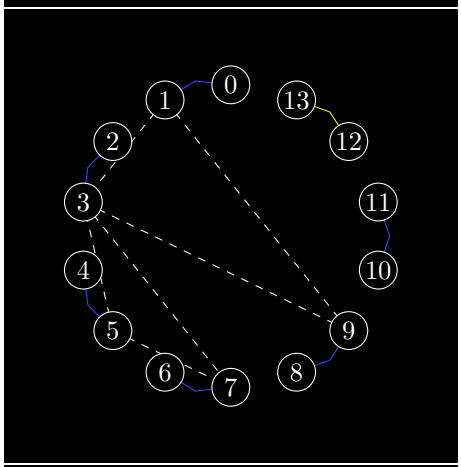
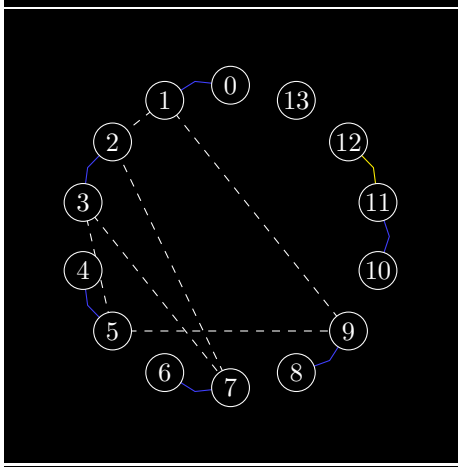
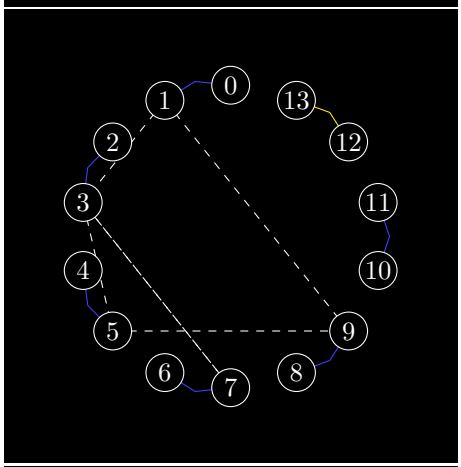
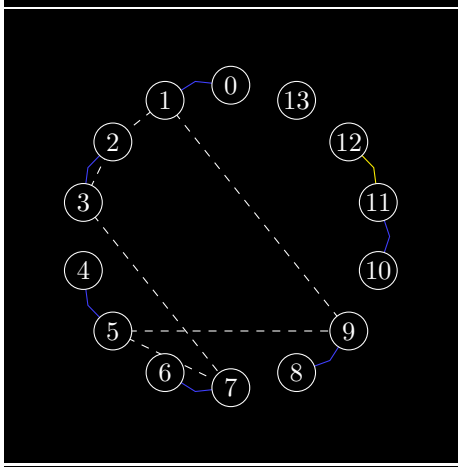
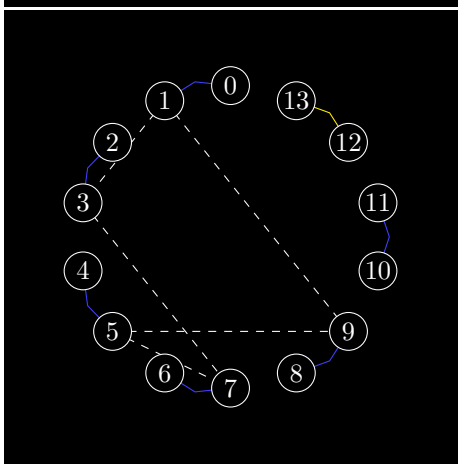
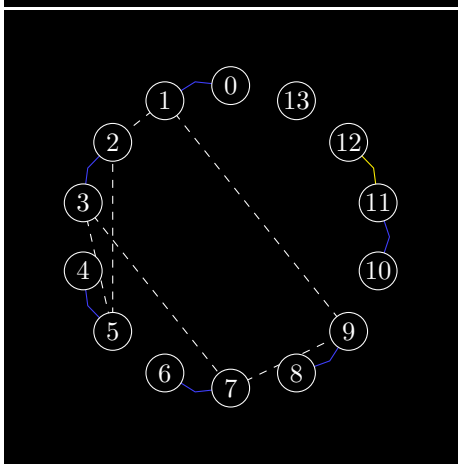
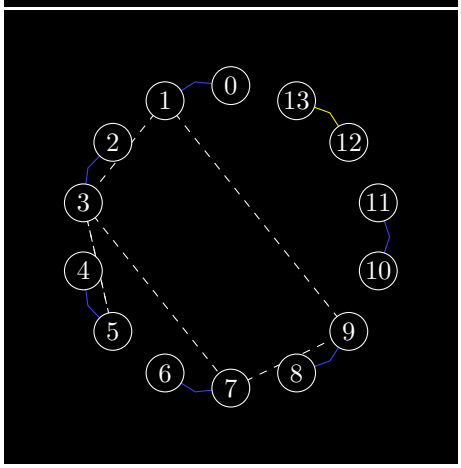

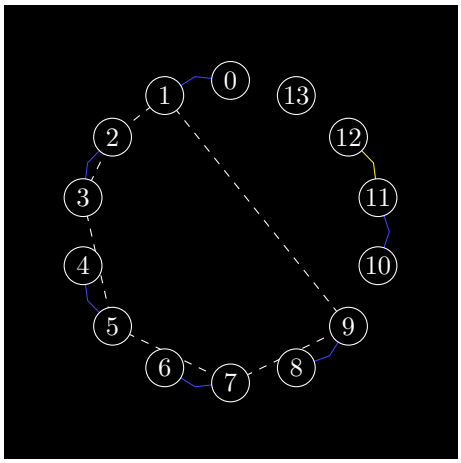

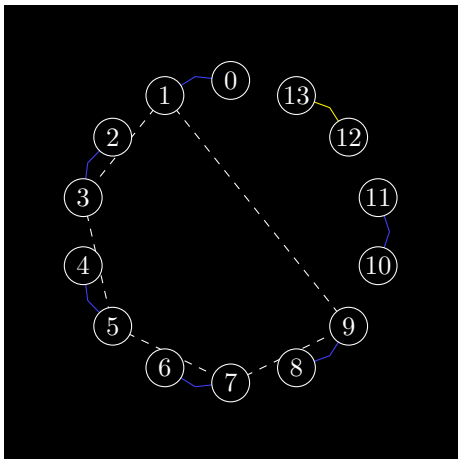

7 Length 8 to 10

Although we have calculated the cases up to cycle length 10, we do not included them here, since they would add 949 760 pages to the pdf file.