

The Superworm Manifesto

by Brandon Wiley

BlackHat USA 2003

Worms to be Discussed

Code Red

Nimda

Sapphire/Slammer

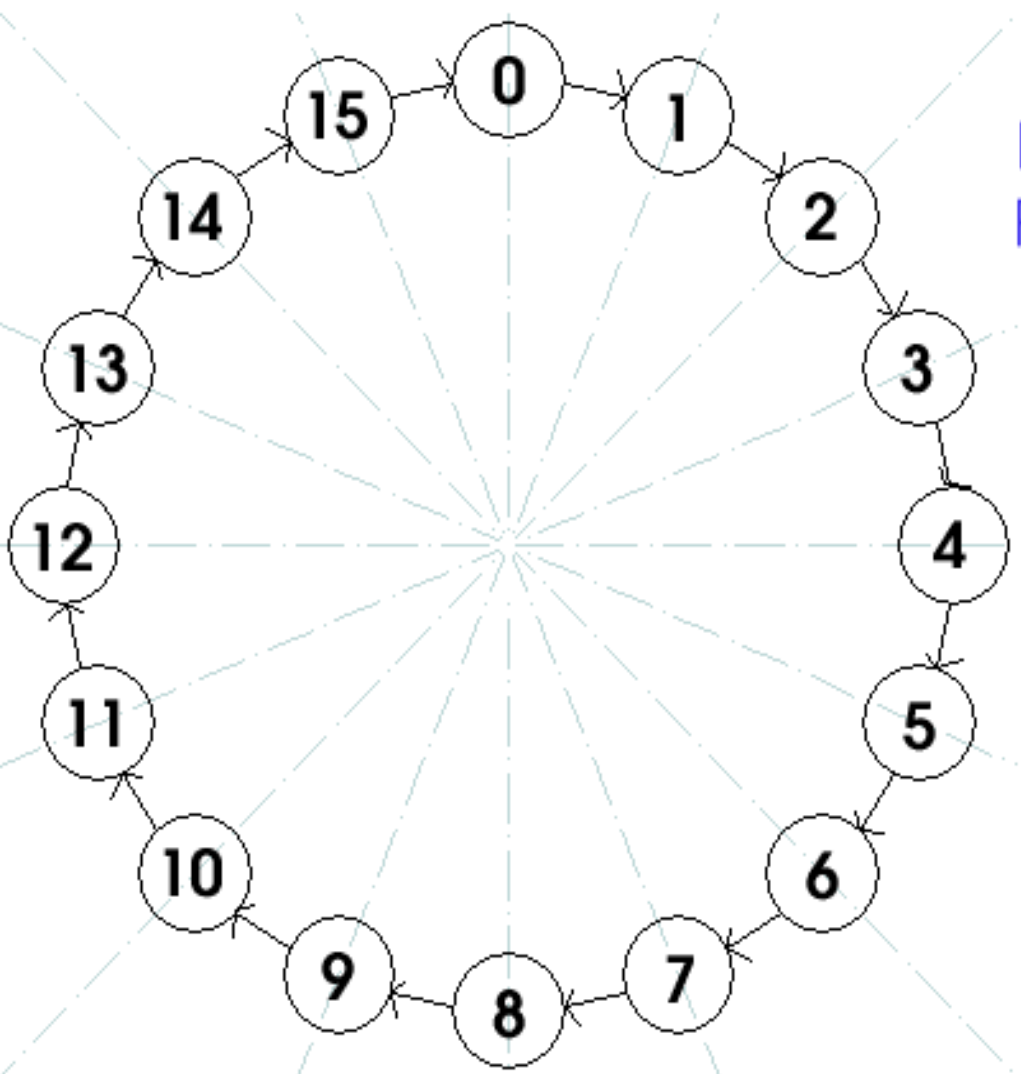
Slapper A,B,C

Stumbler/55808

Warhol

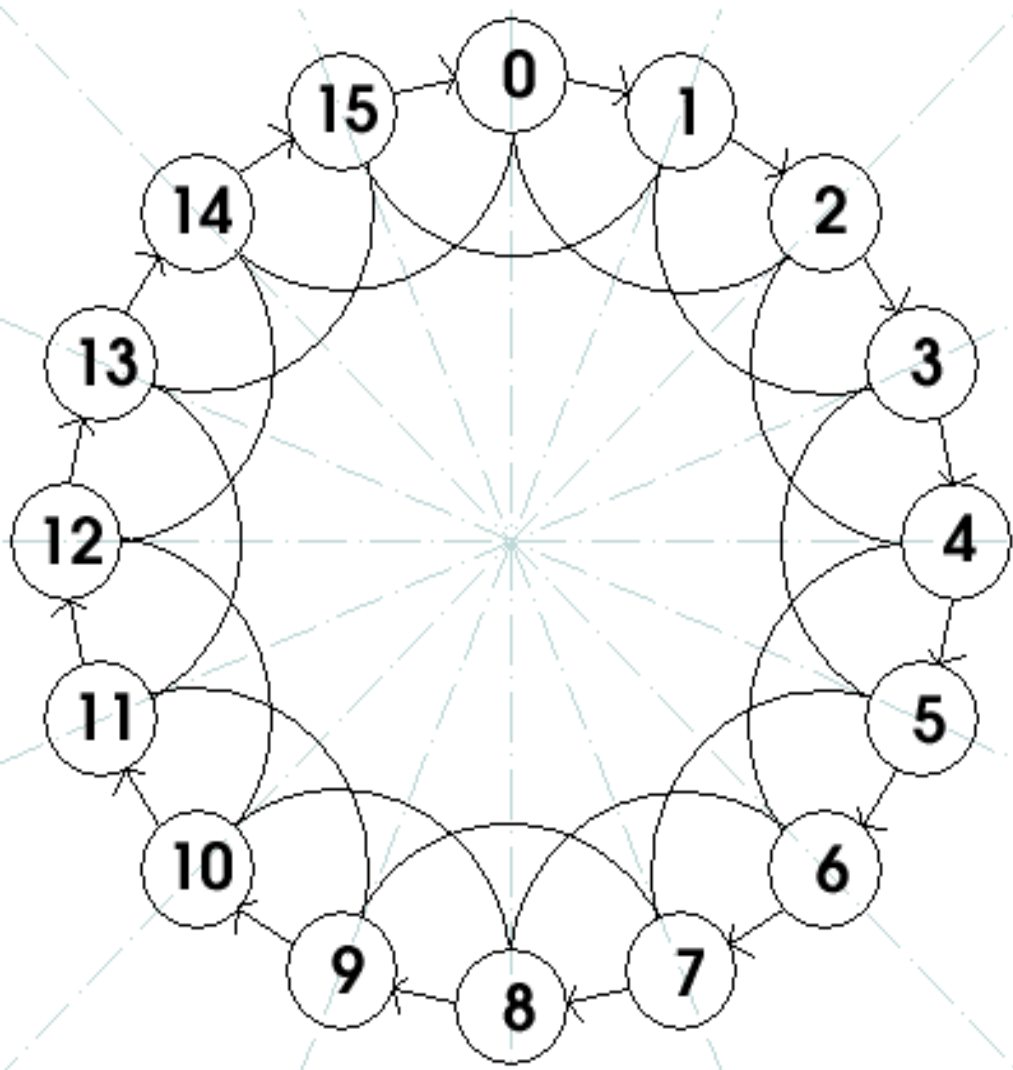
Flash

Curious Yellow



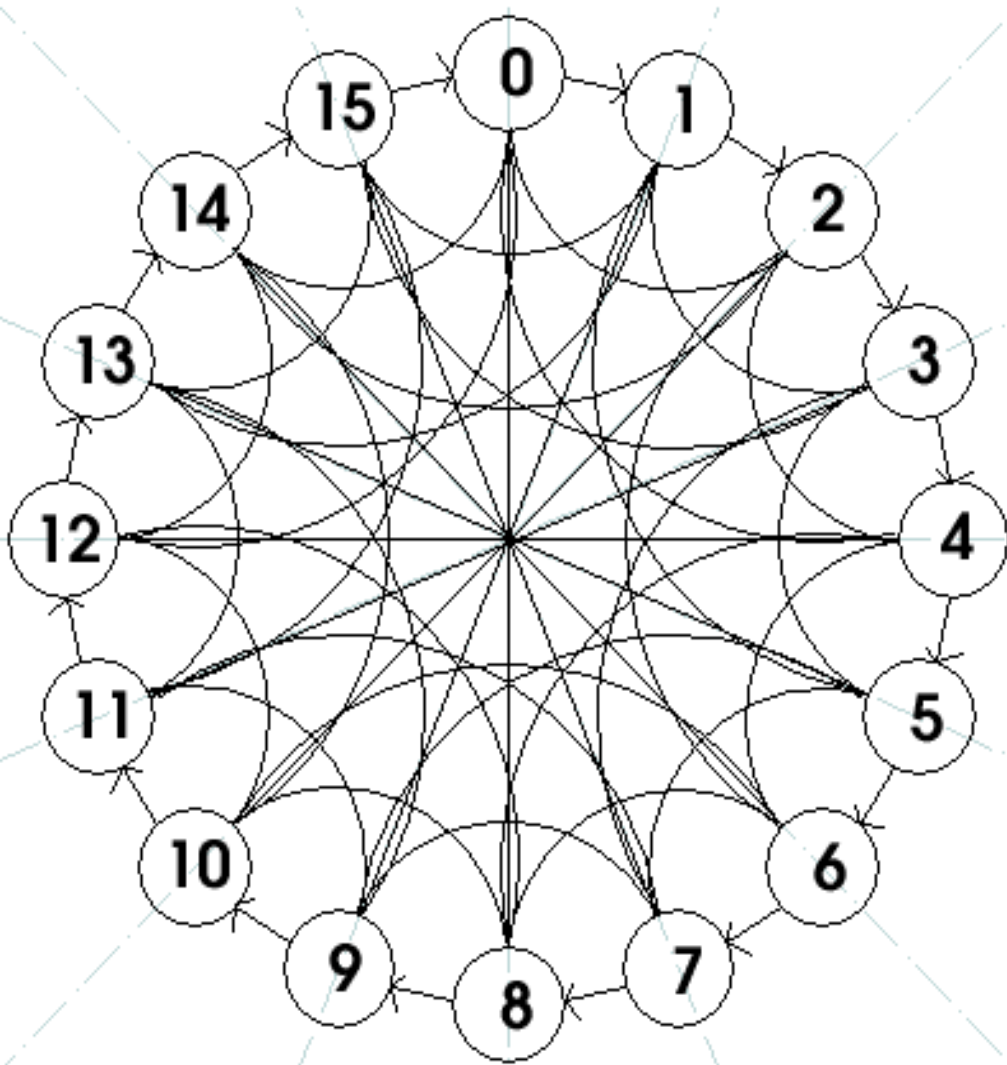
Name: Chord
Function:
clockwise ring distance

Link: <http://www.pdos.lcs.mit.edu/chord/>



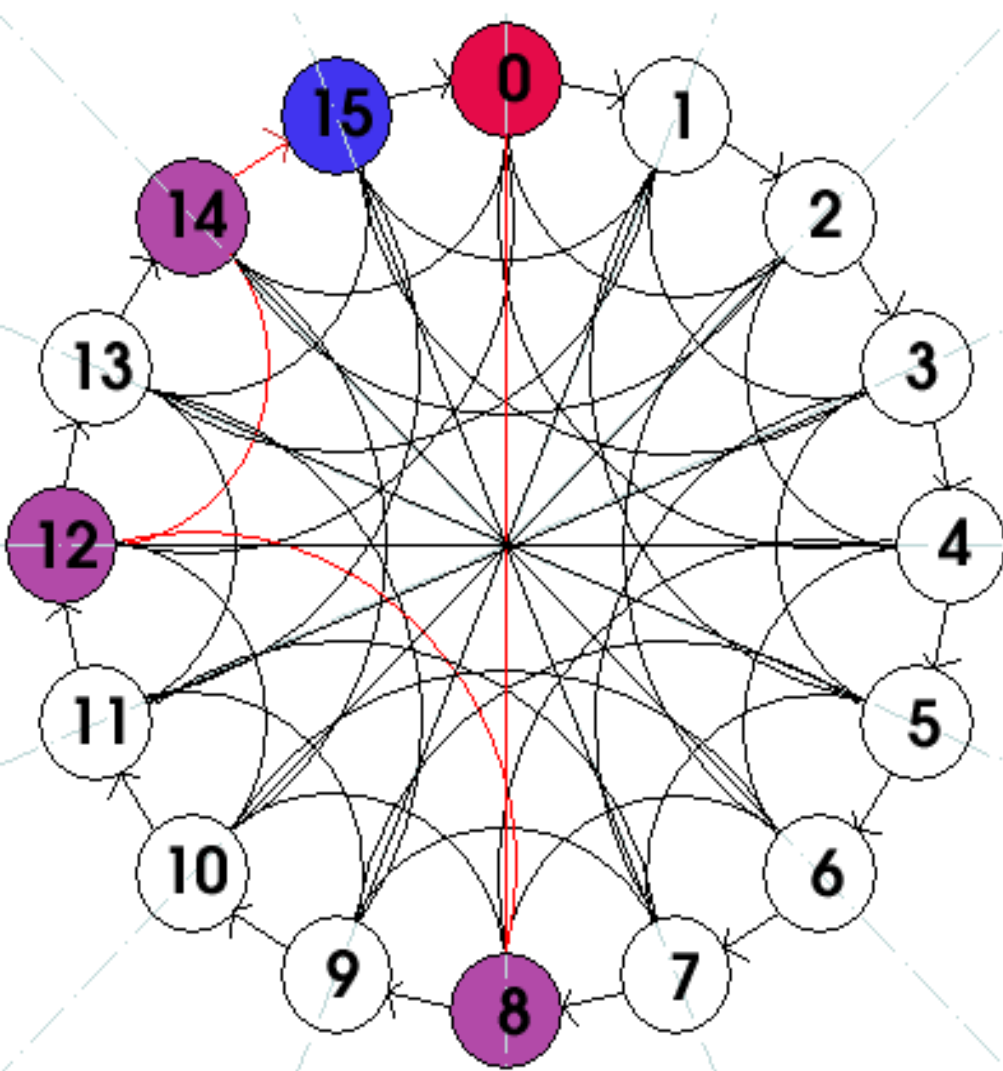
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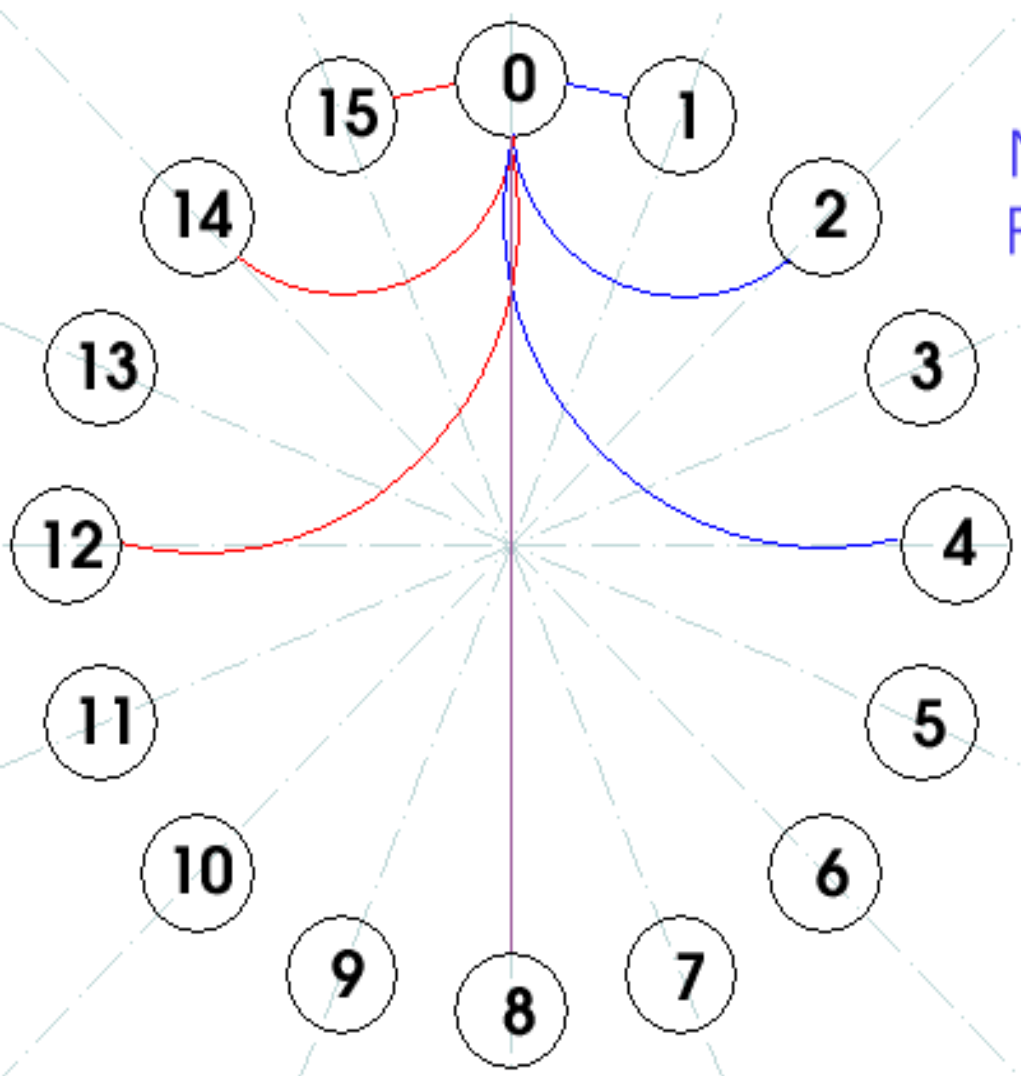
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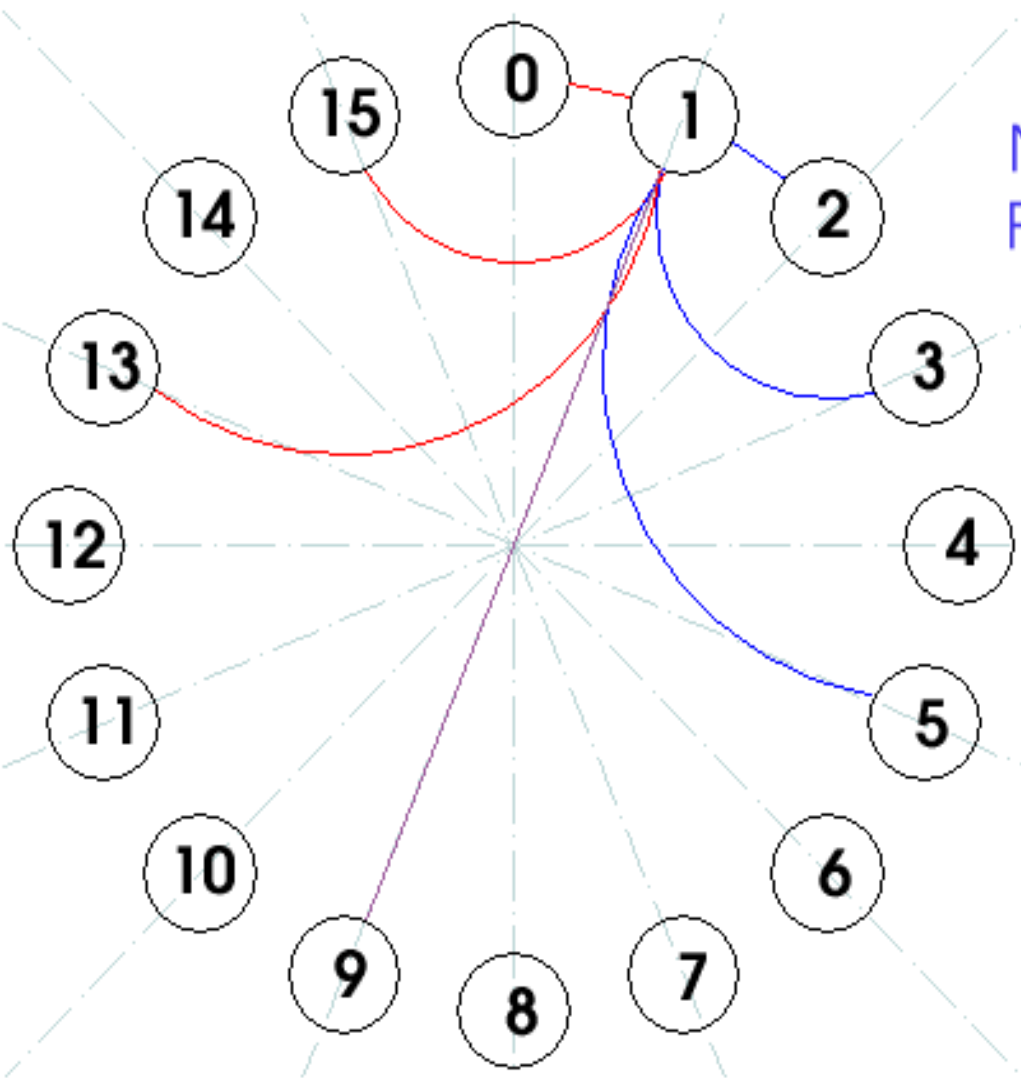


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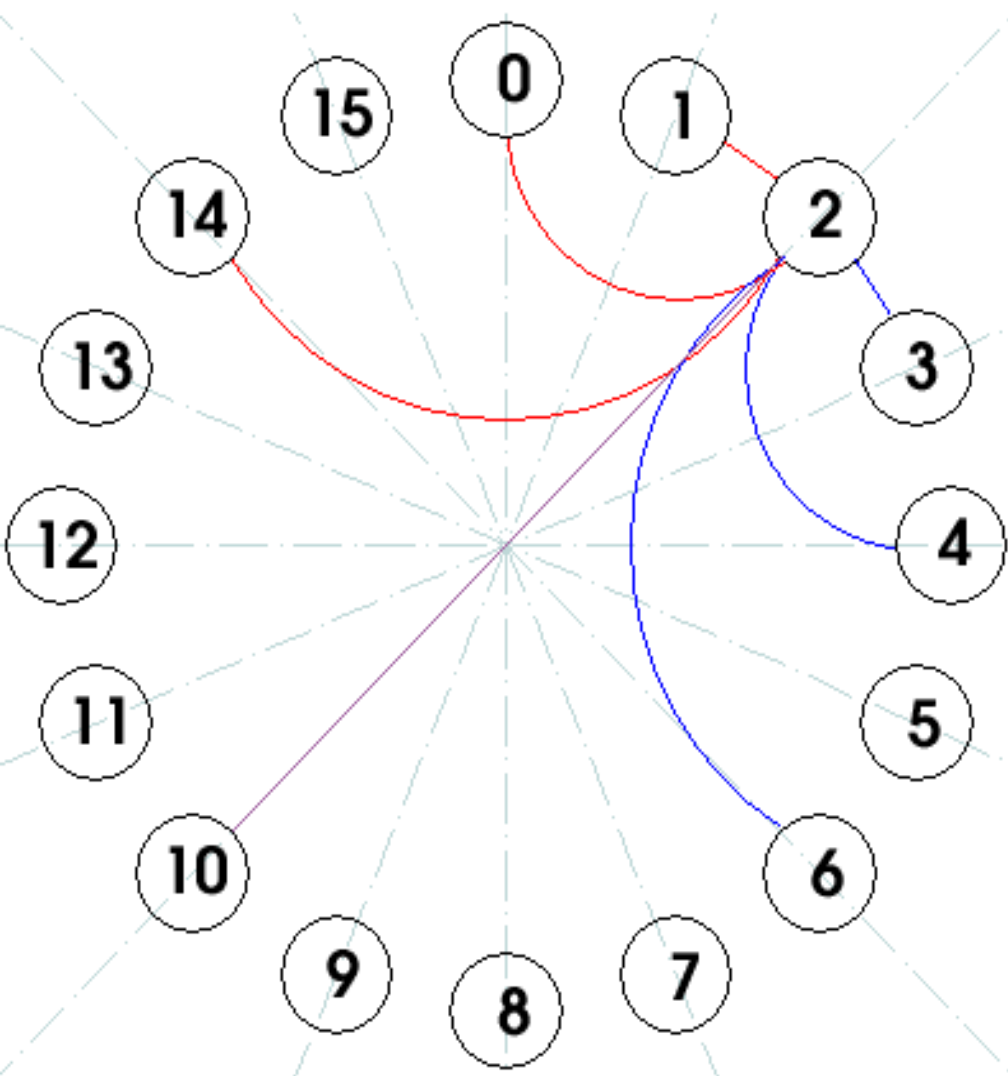


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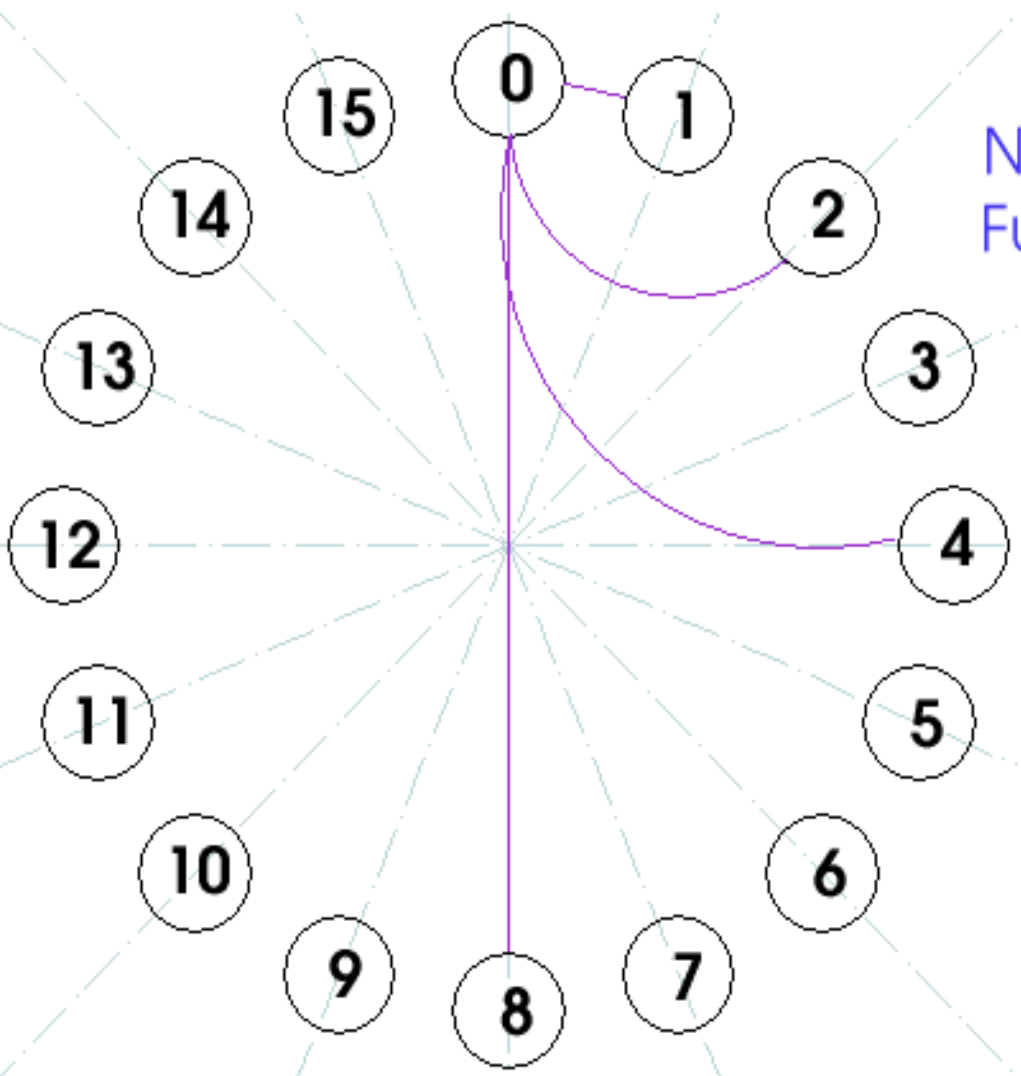


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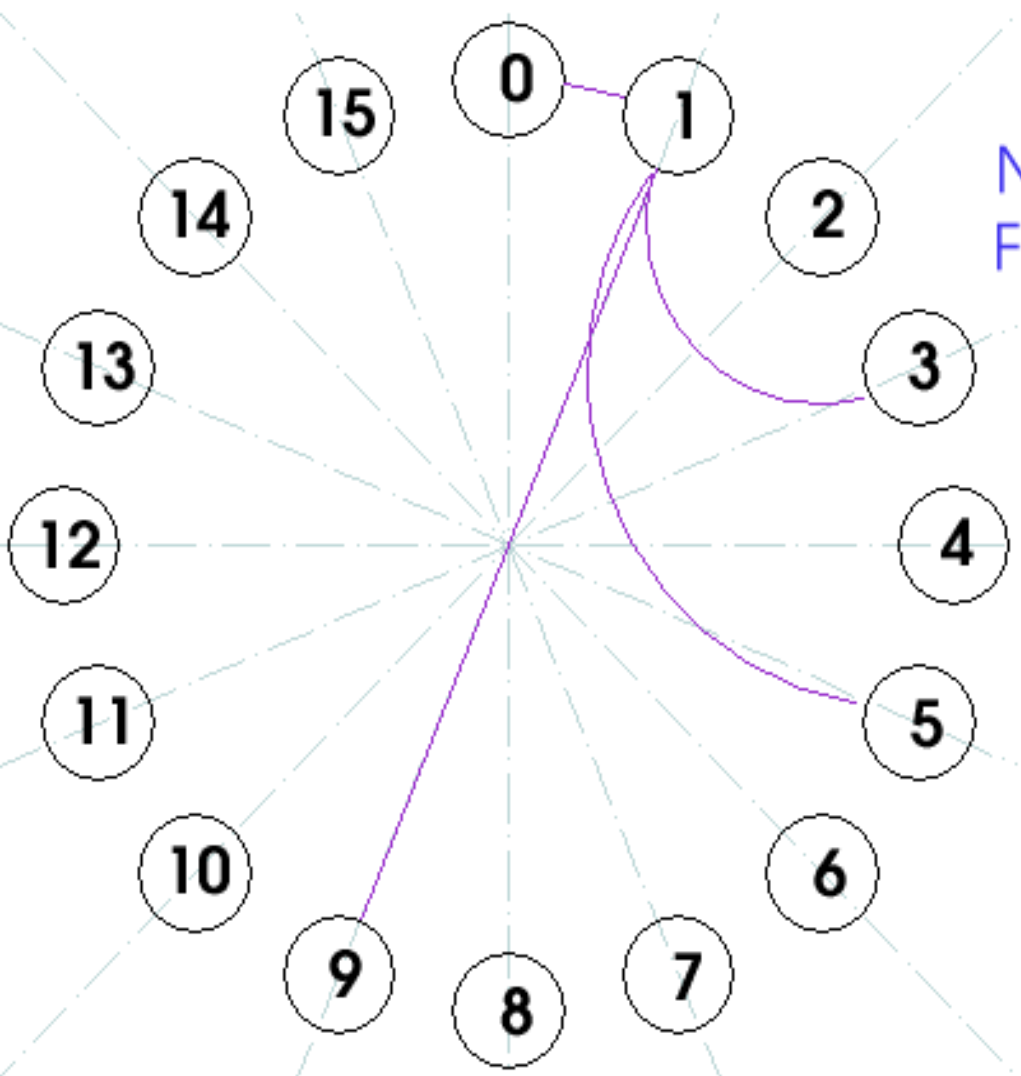


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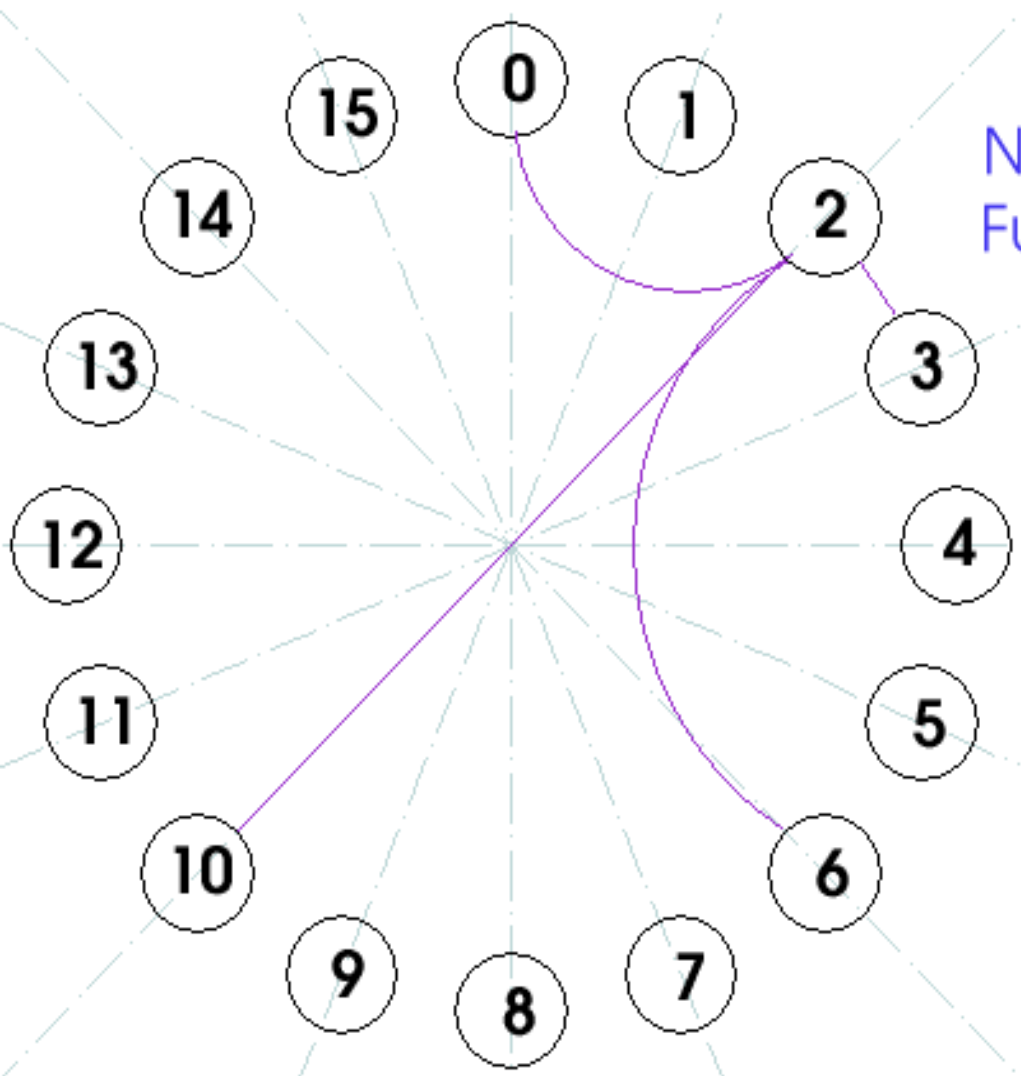
Name: Kademlia
Function: XOR

Link: <http://kademlia.scs.cs.nyu.edu/>



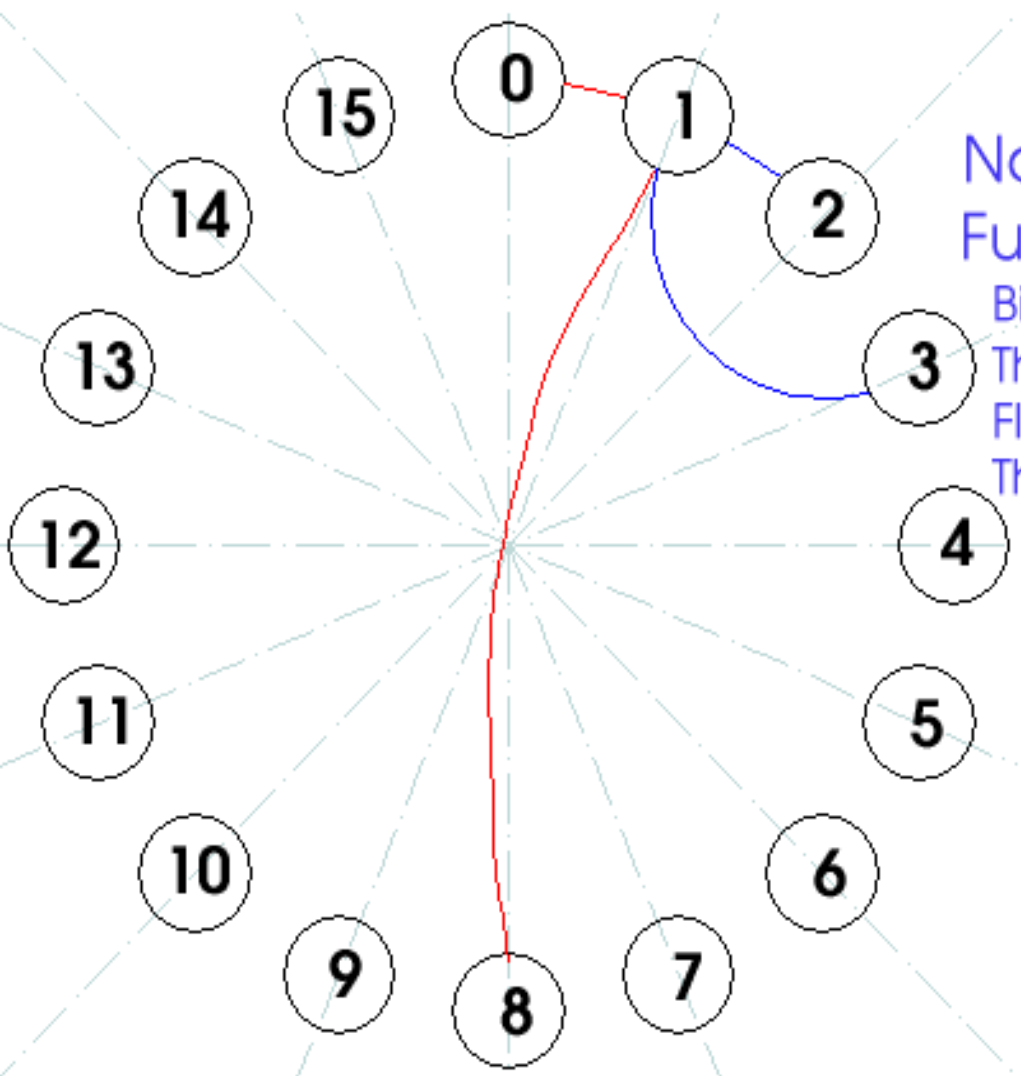
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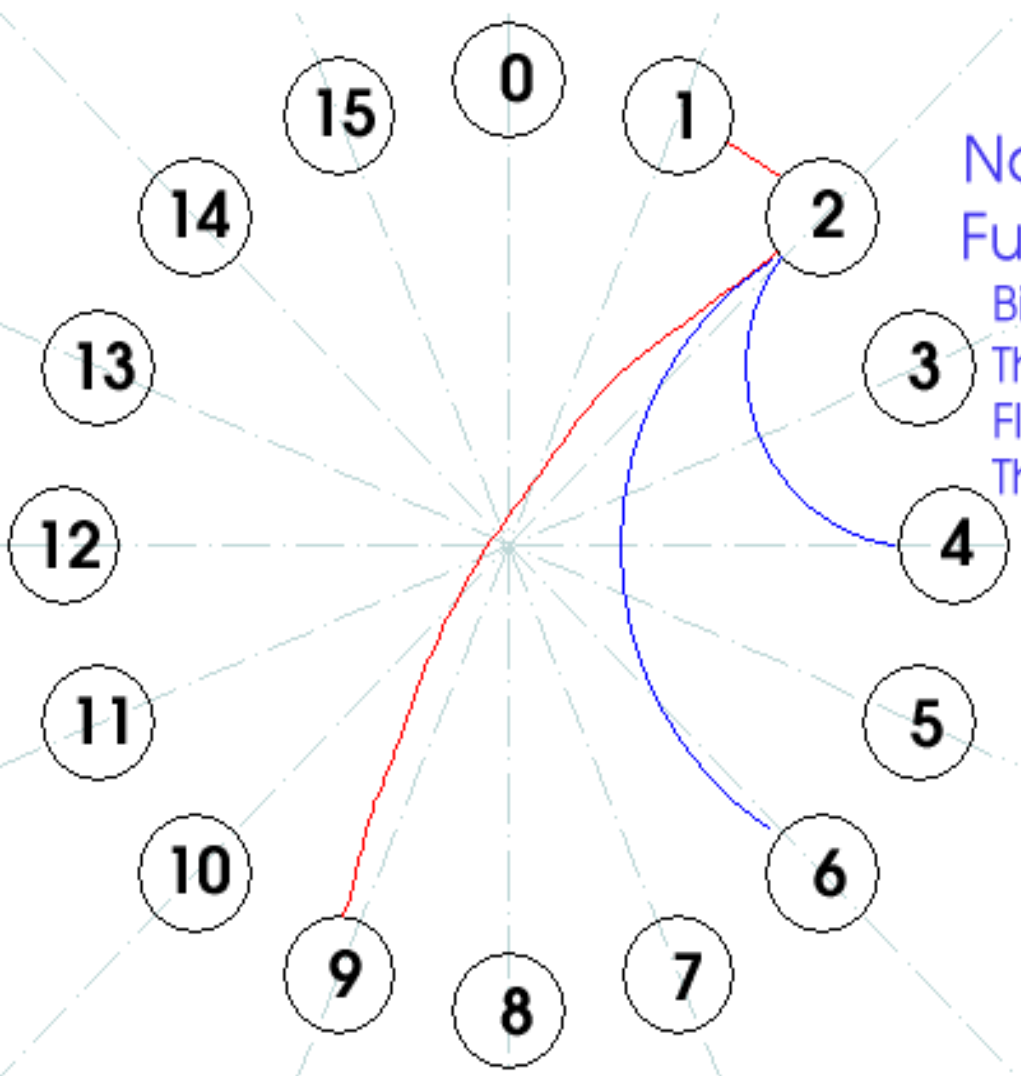


Name: Koorde

Function:

- Bitshift the id one to the left
- This is the first neighbor's id
- Flip the right-most bit to 1
- This is the second neighbor

Link: <http://iptps03.cs.berkeley.edu/final-papers/koorde.ps>

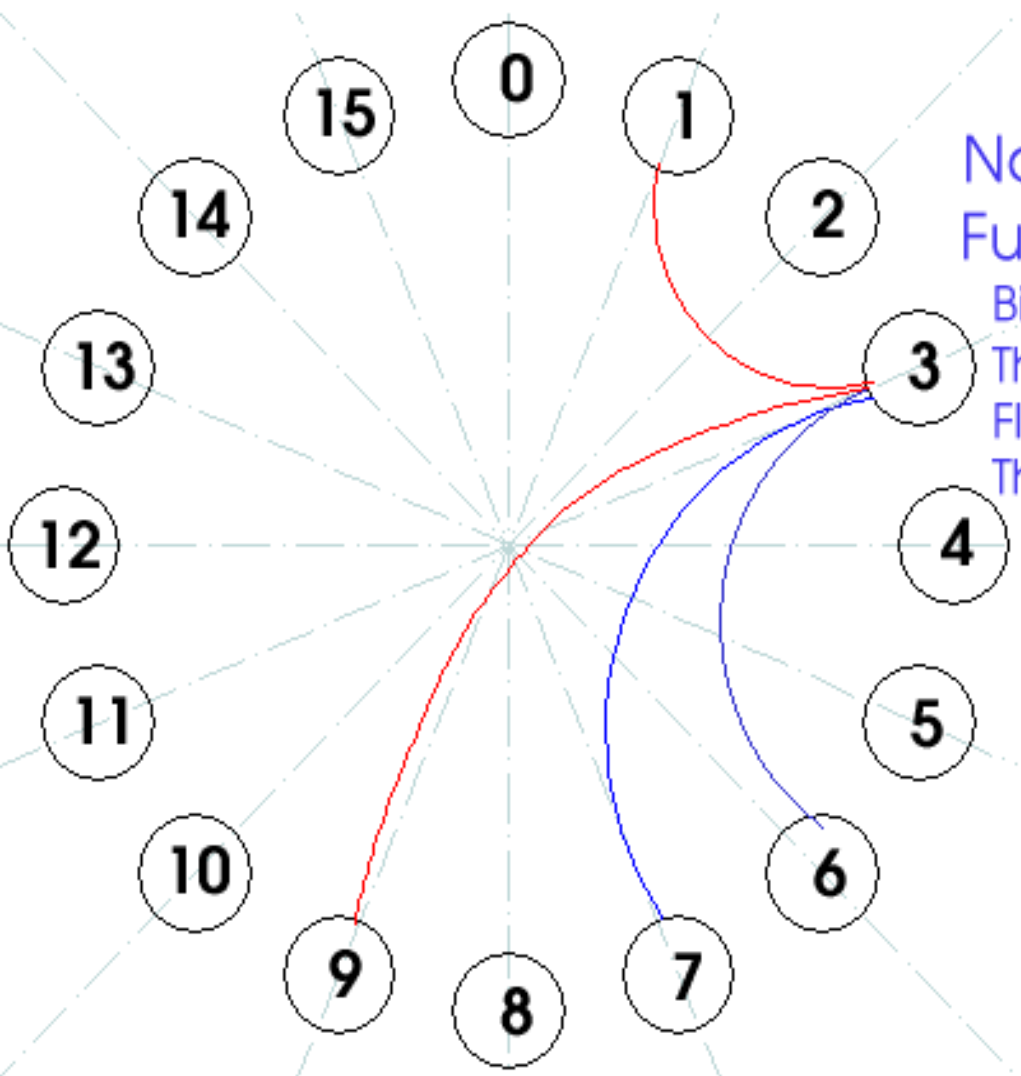


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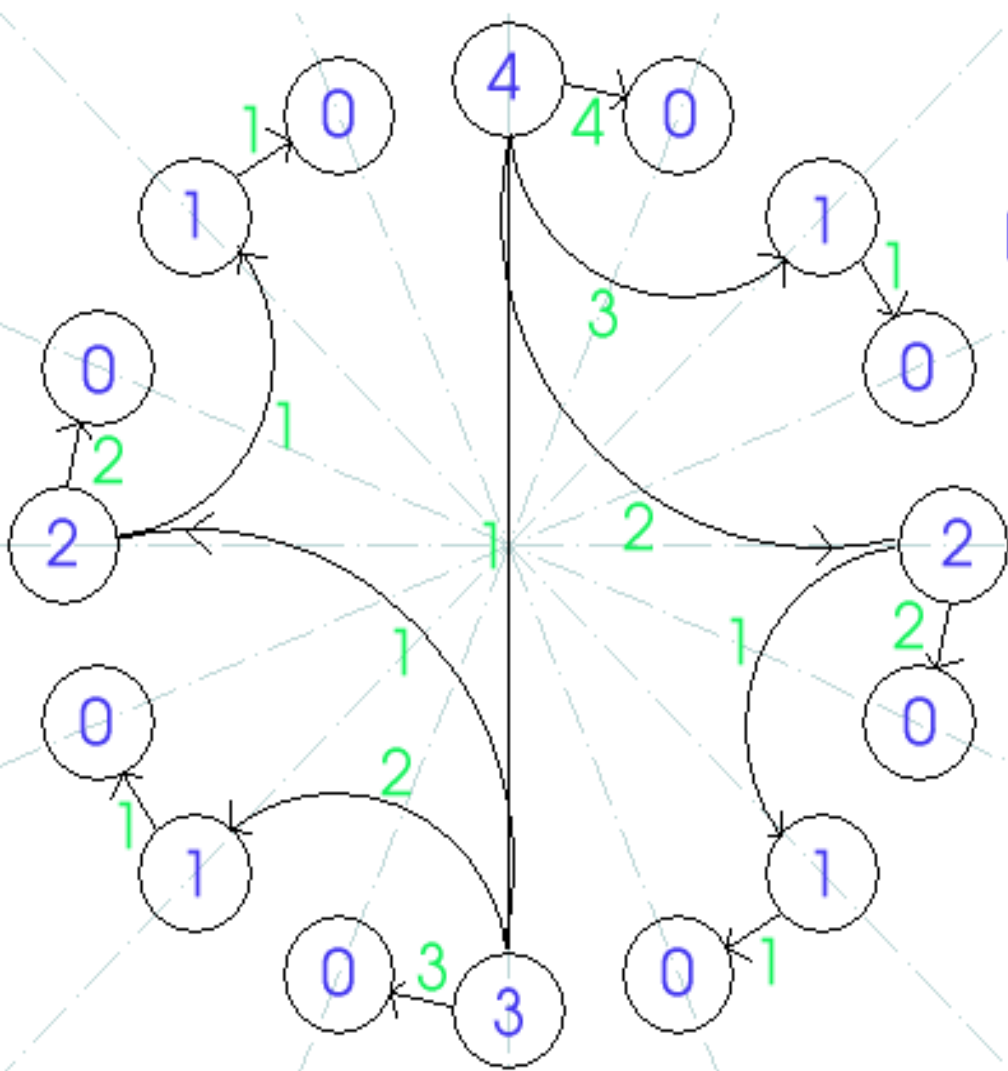
Bitshift the id one to the left

This is the first neighbor's id

Flip the right-most bit to 1

This is the second neighbor

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Name: Pollen

Function:

Nodes have a level L

First node, $L = \log N$

Node has L edges

Edges have level e

From 1 to L

Ordered by Chord length

$L = L - e$

There are L levels.

The first node has L edges.

Link: unpublished

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Curious Yellow

http://blanu.net/curious_yellow.html