Graph Search

Part 1: Depth-first Search

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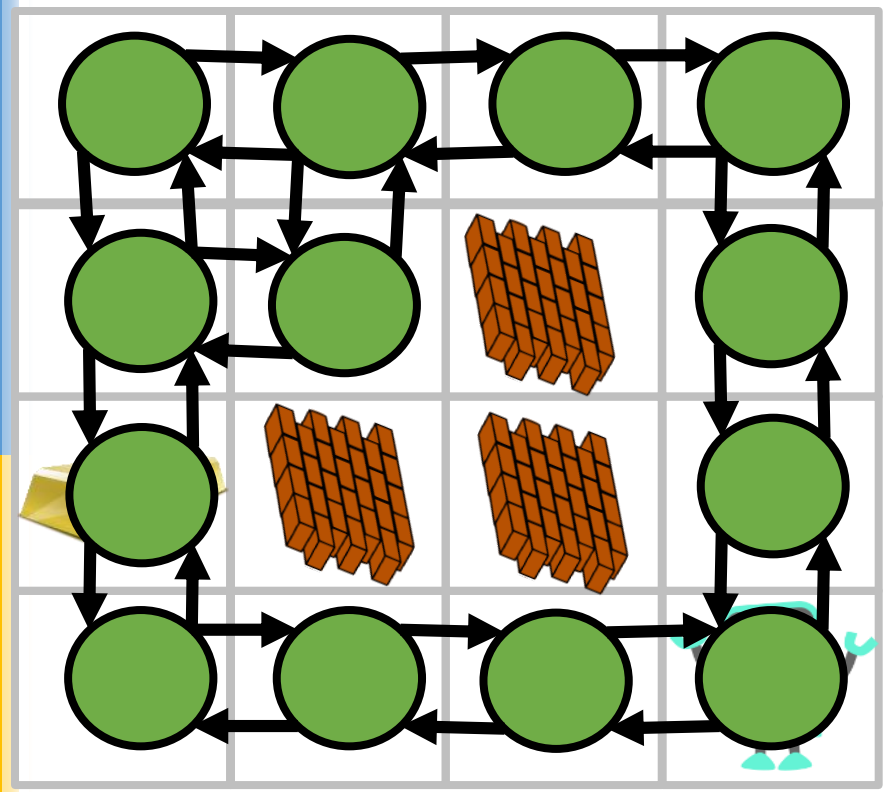
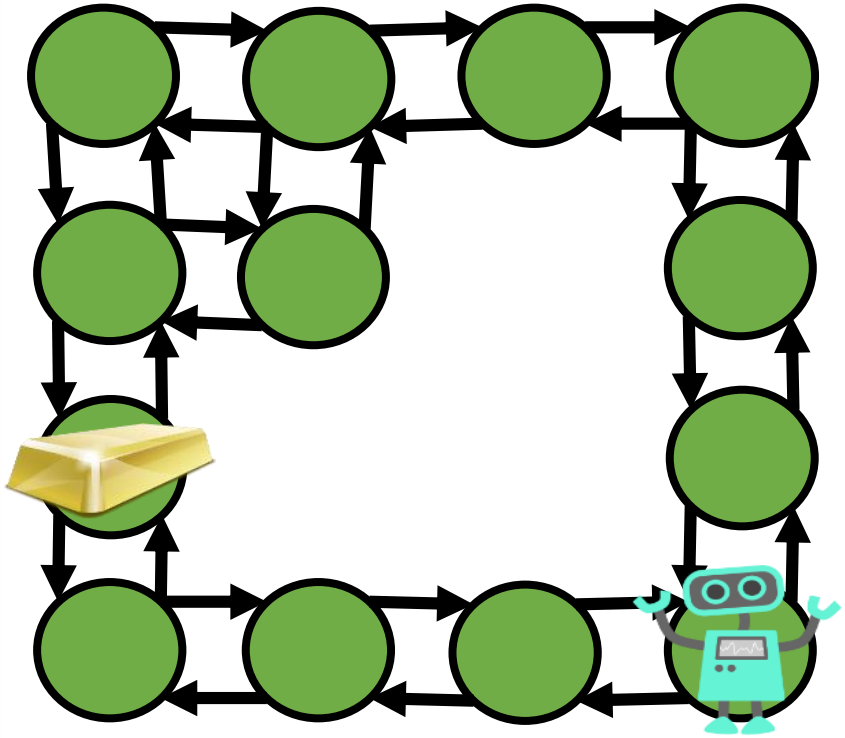
By the end of this video you will be able to…

- Perform Depth-first Search (DFS) on a graph
- Implement the code for depth-first search
- Describe how the ADT Stack works
- Describe how Stacks are used in DFS



Searching



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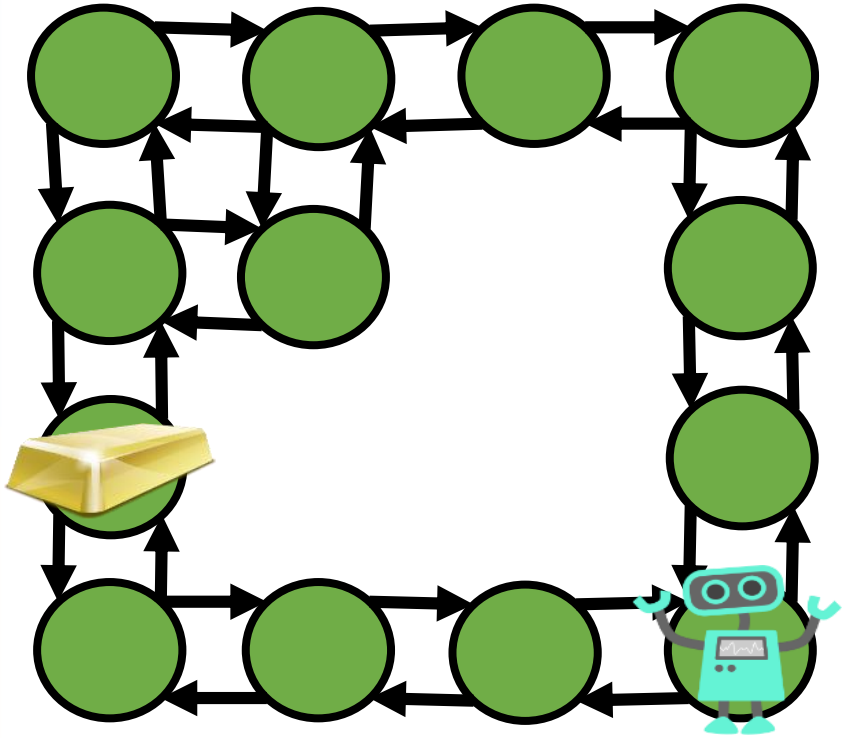
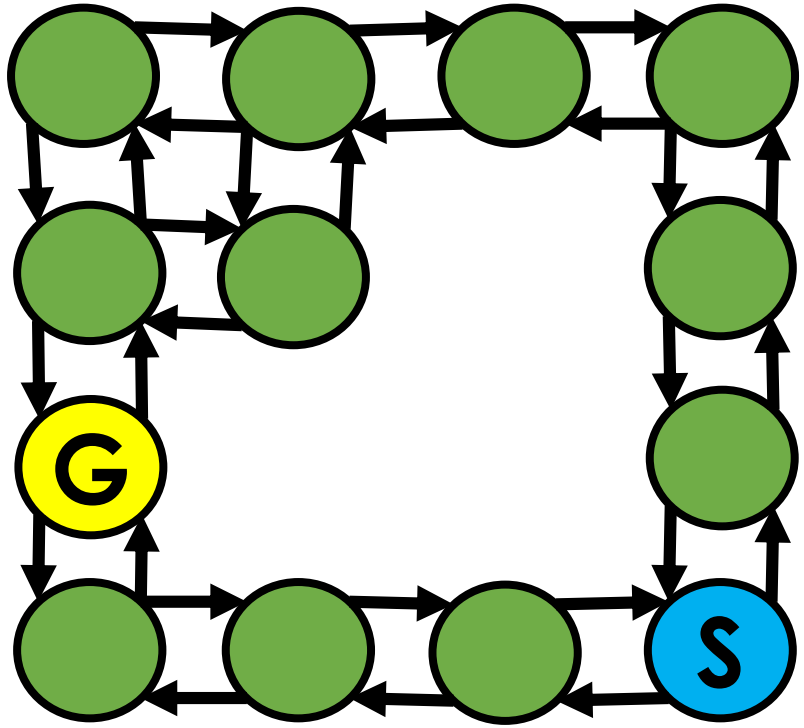


Searching: Two approaches

Depth-first search (DFS)
vs.
Breadth-first search (BFS)



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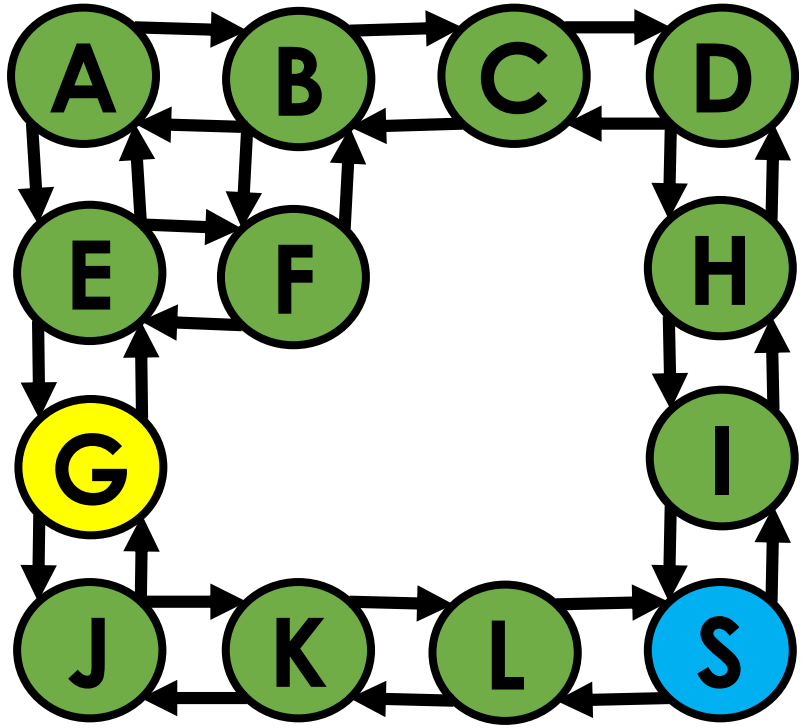

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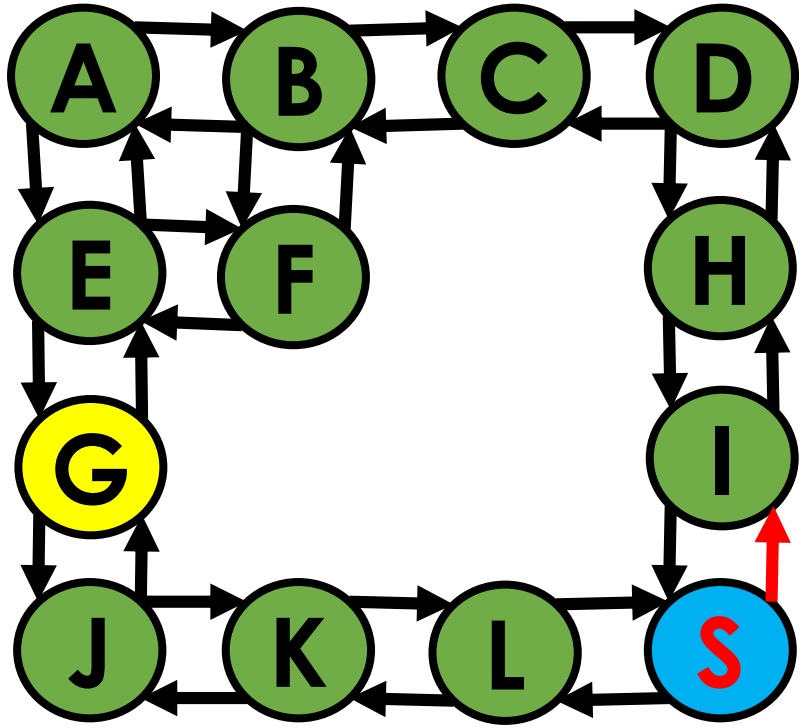
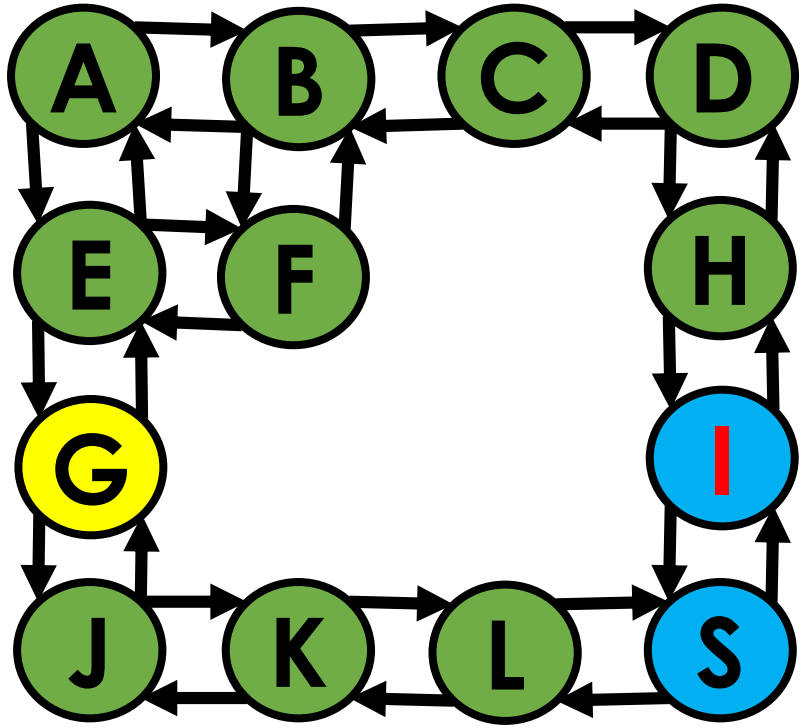


Depth-first Search (DFS)



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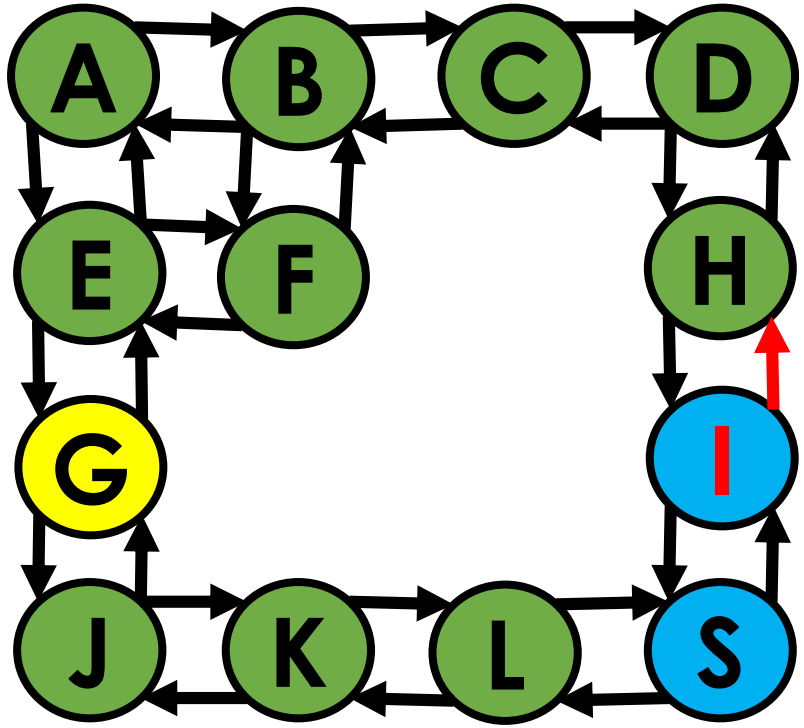

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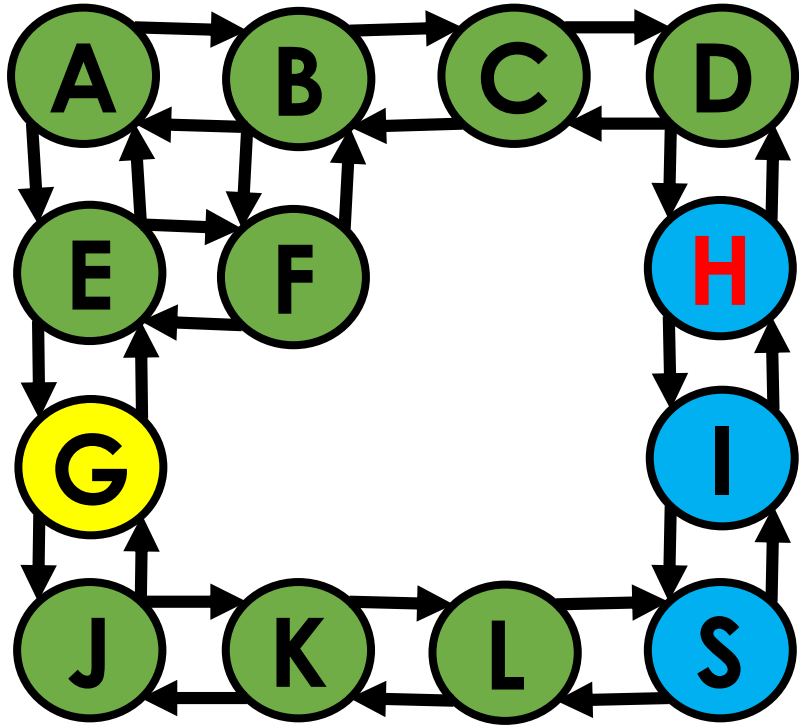

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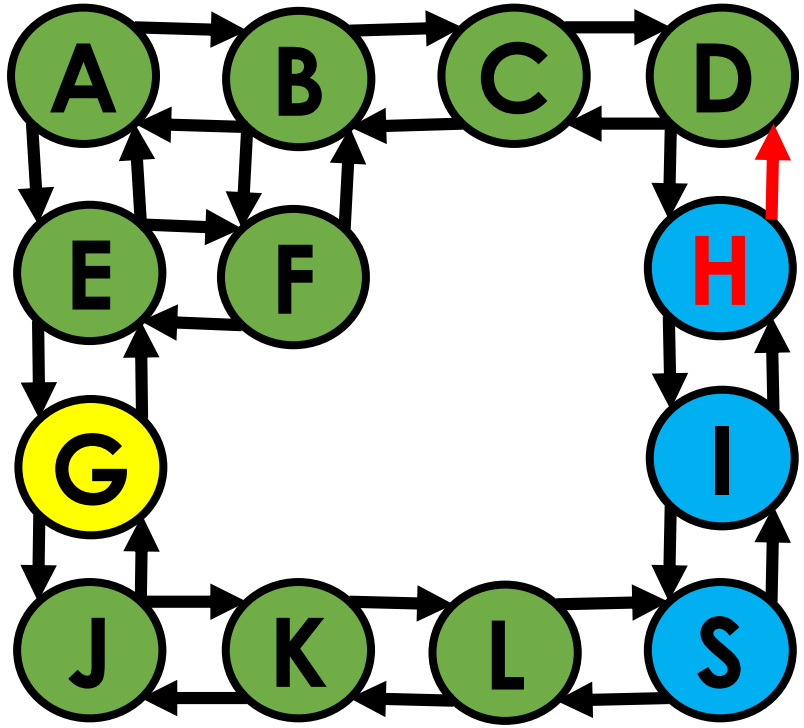

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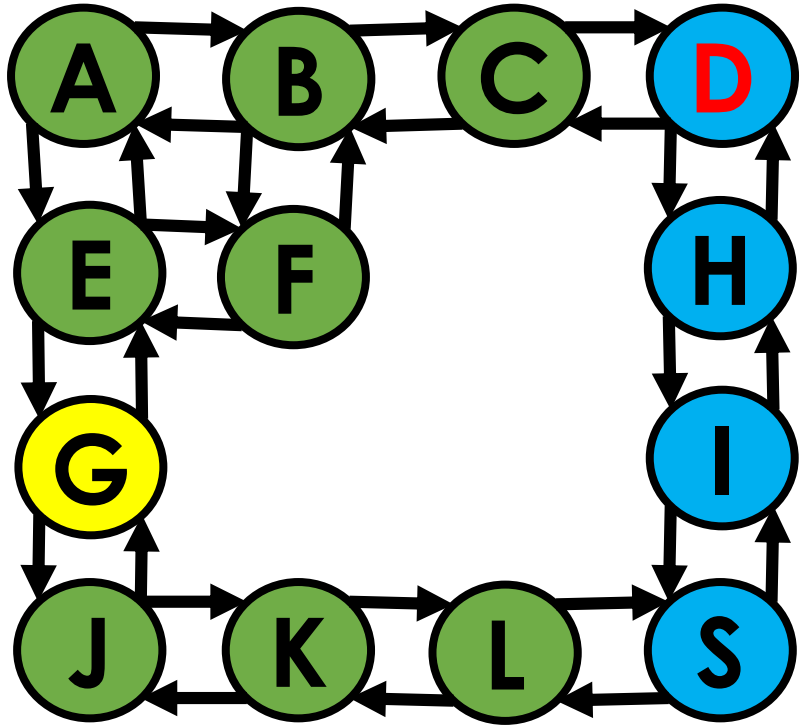

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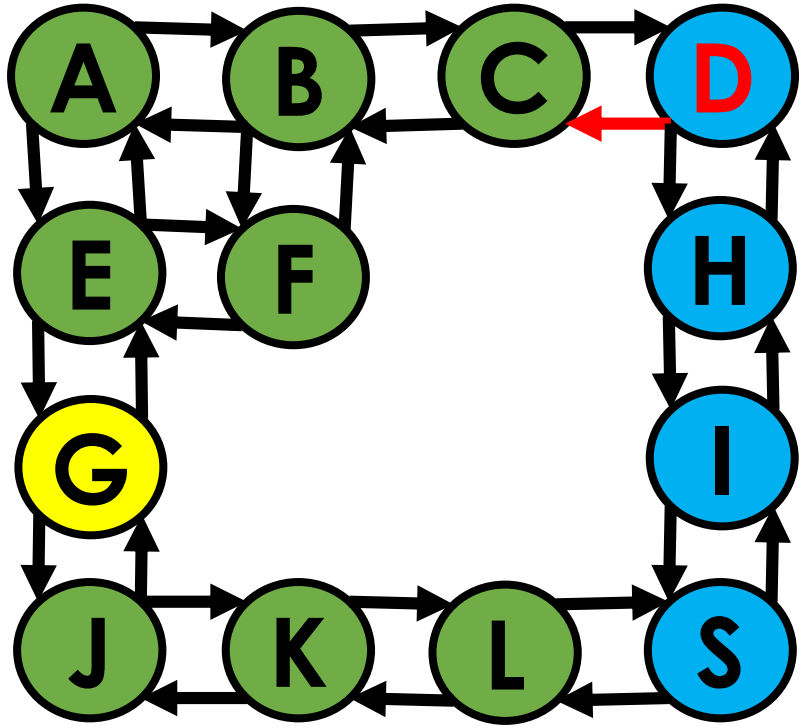

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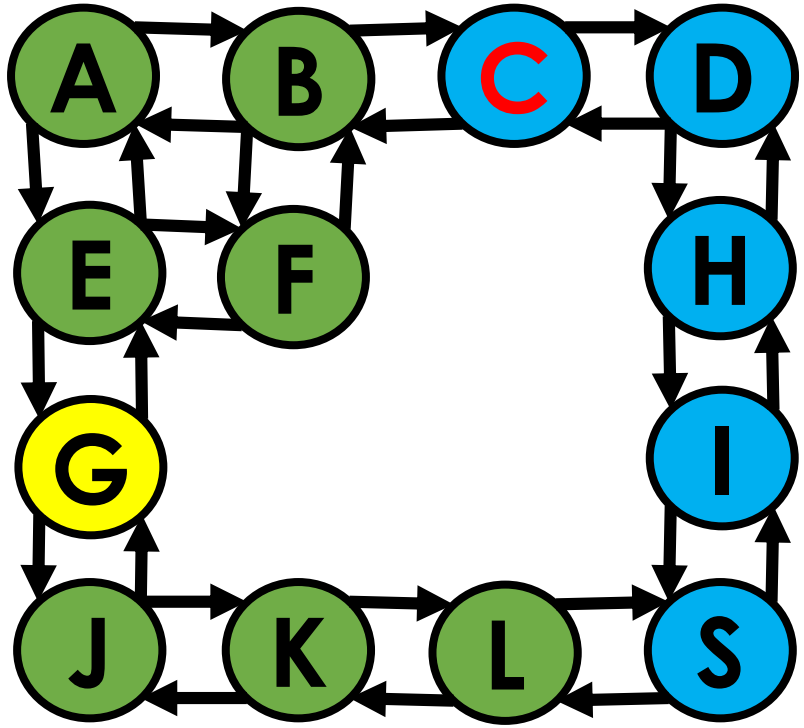

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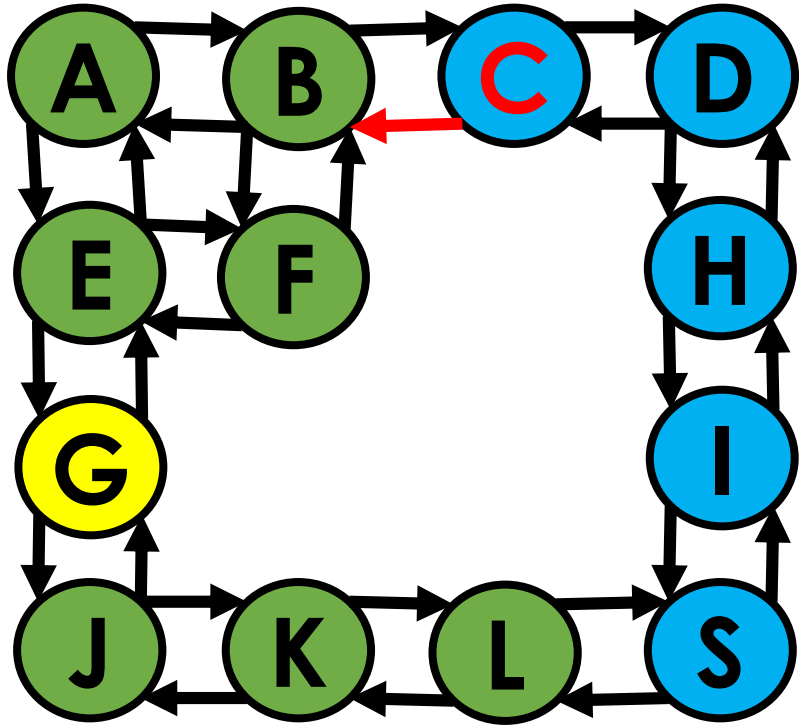

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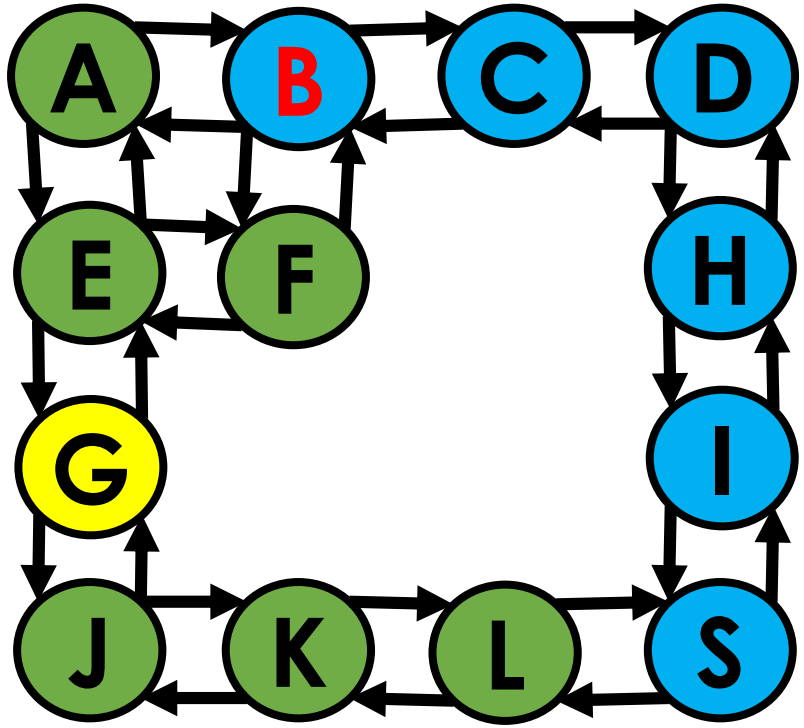

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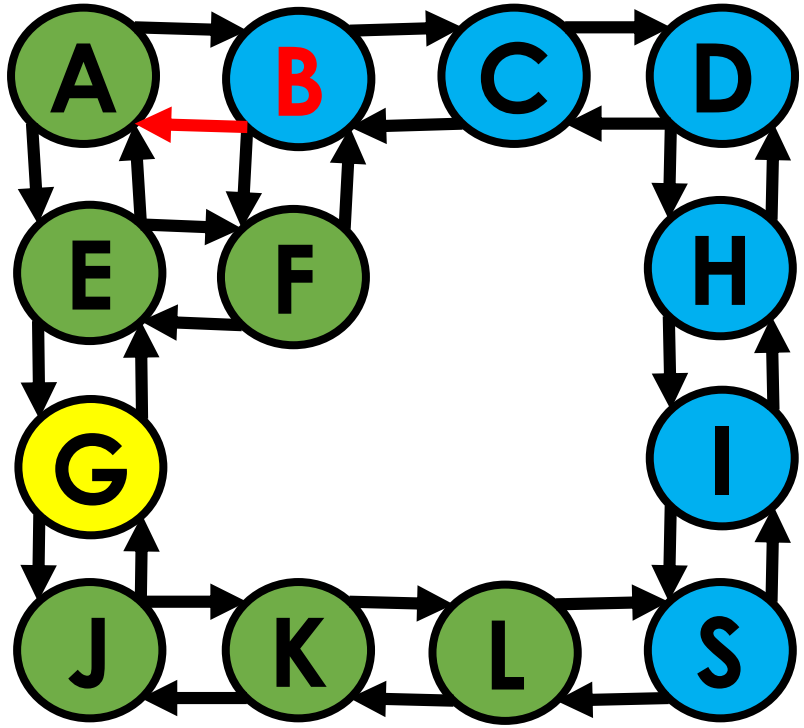

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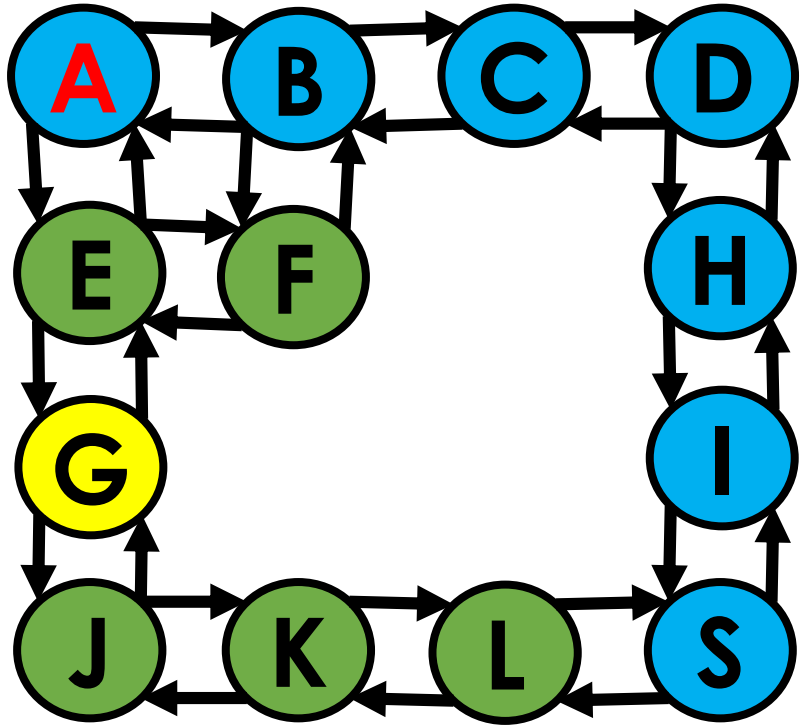

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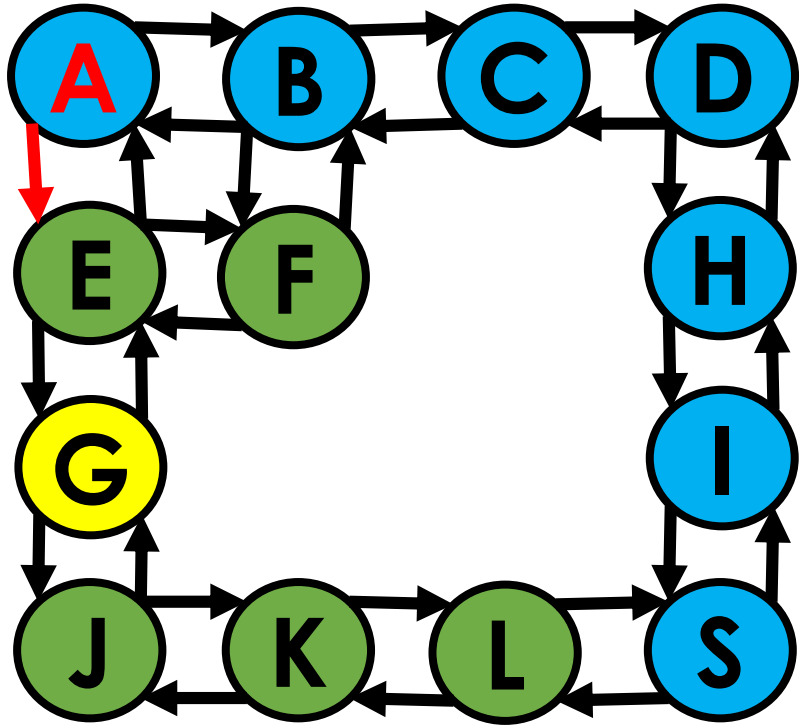

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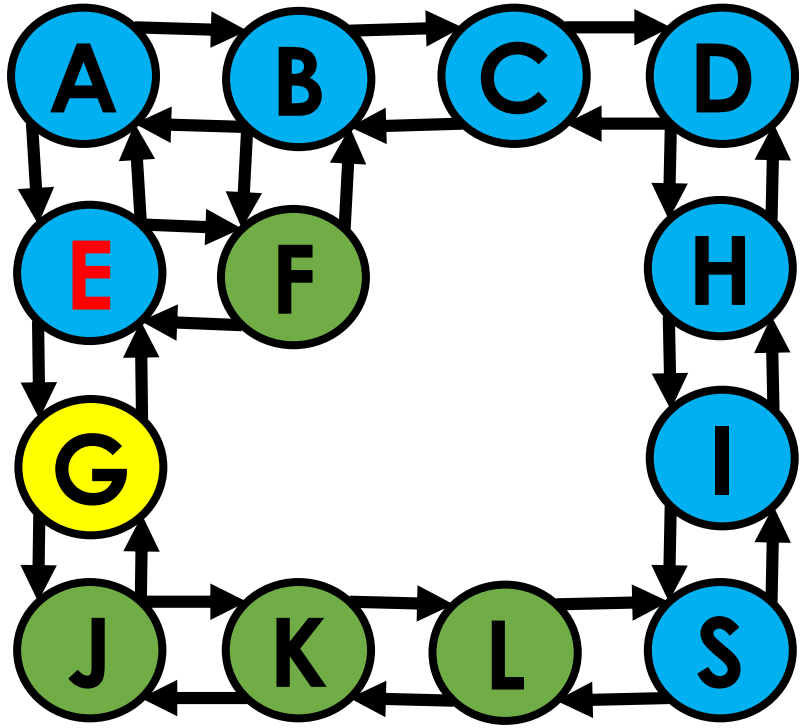

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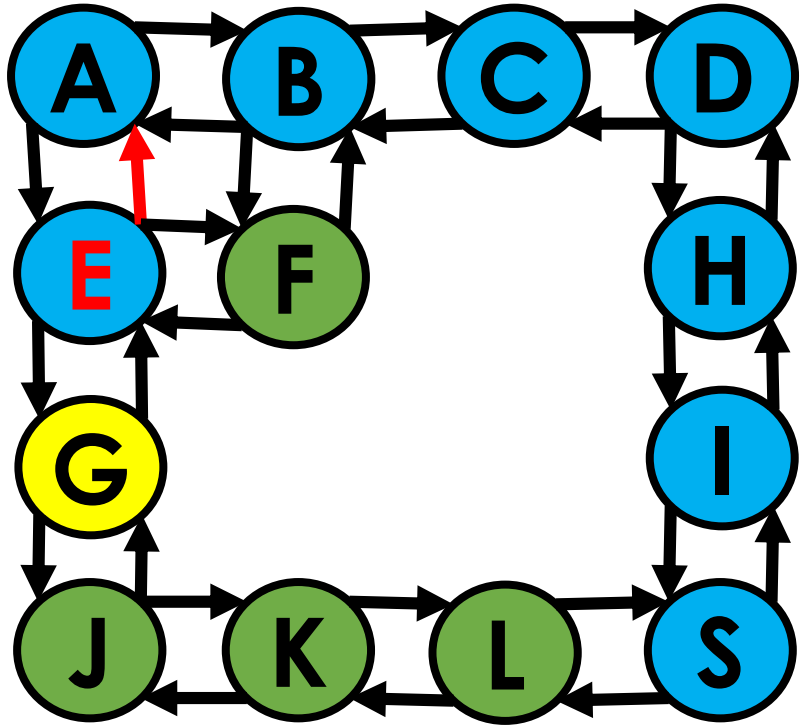

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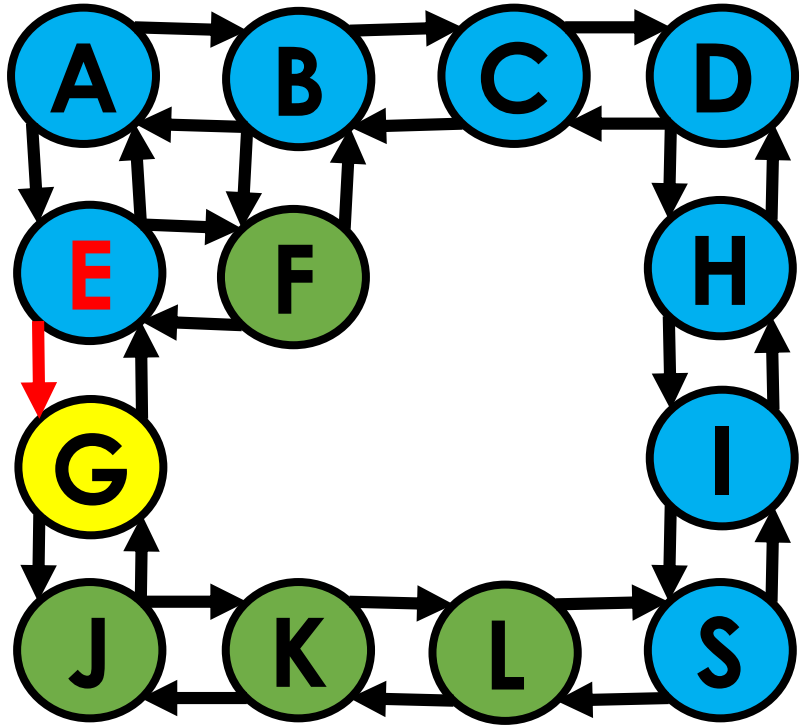

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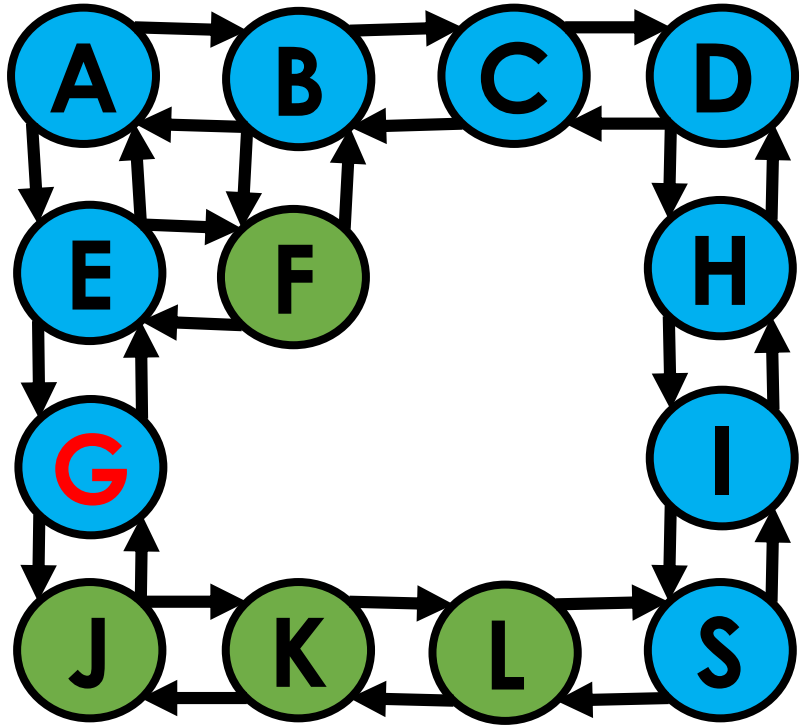

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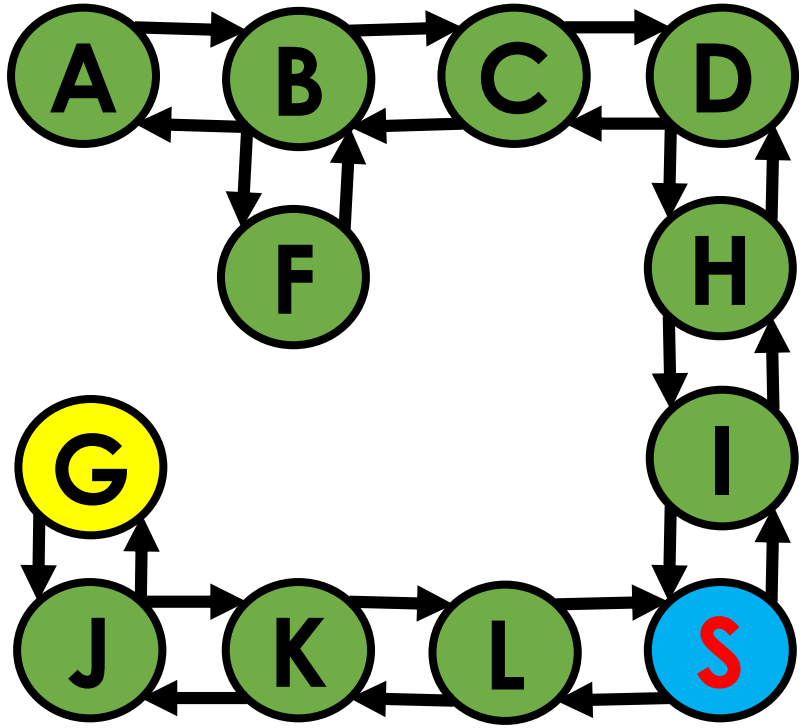

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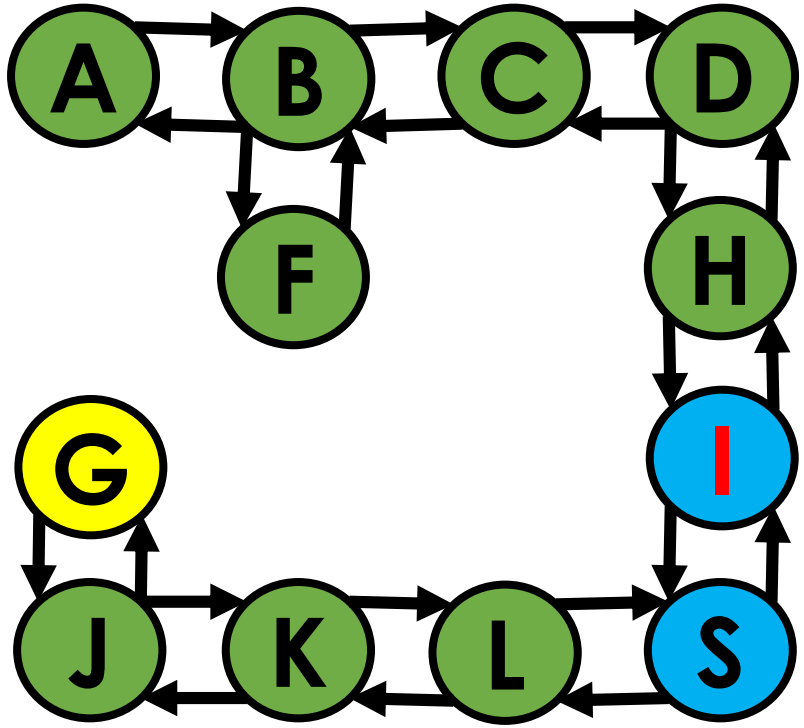

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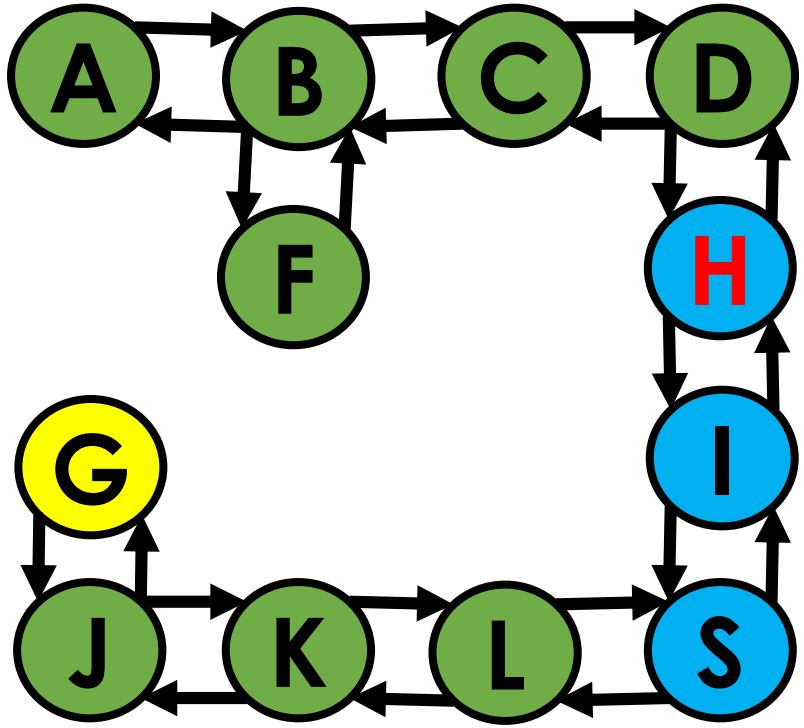

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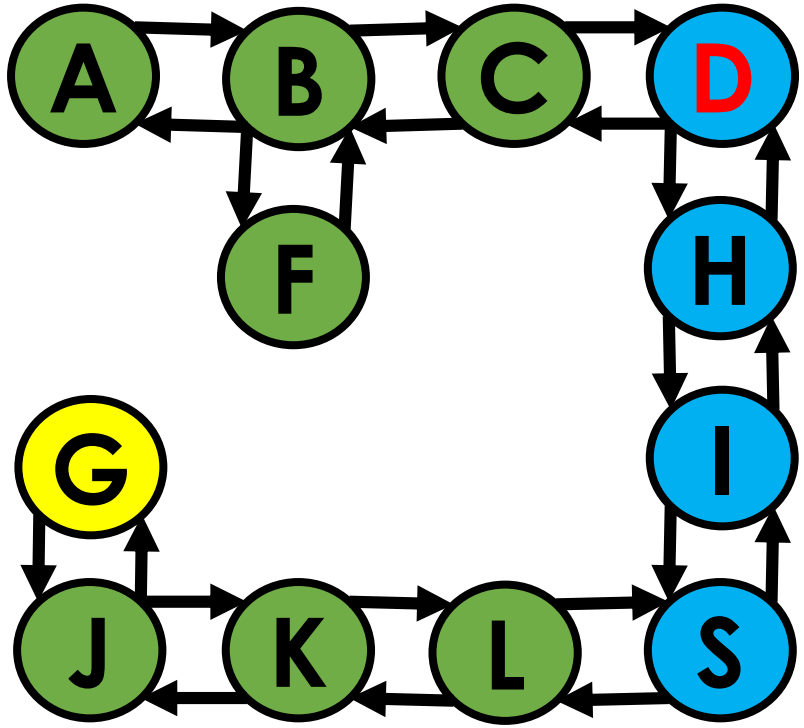

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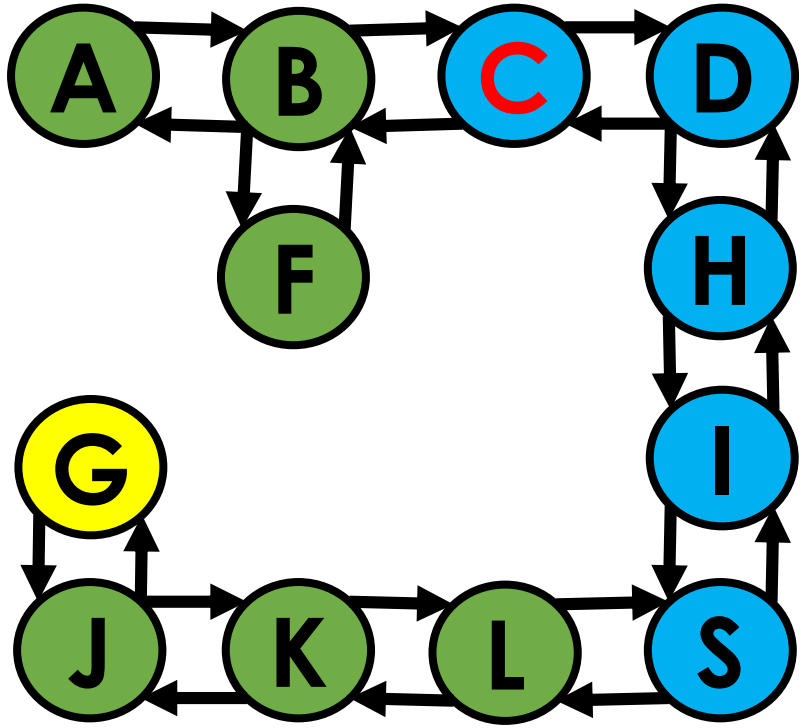

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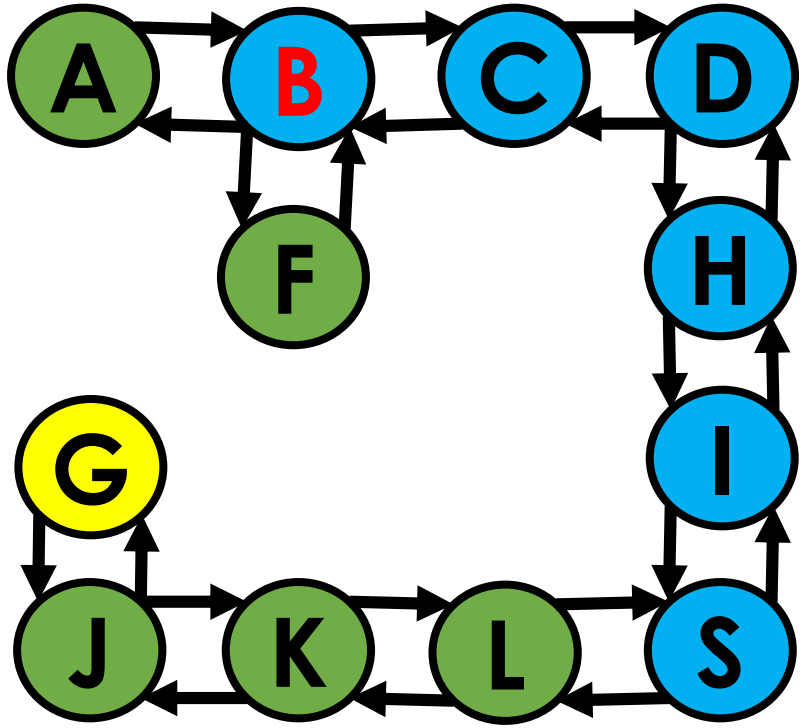

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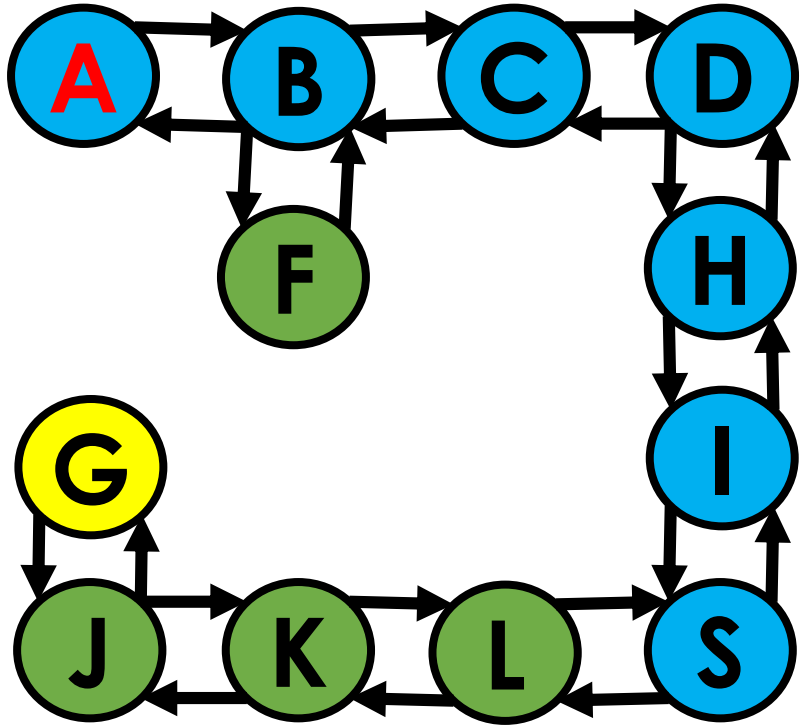
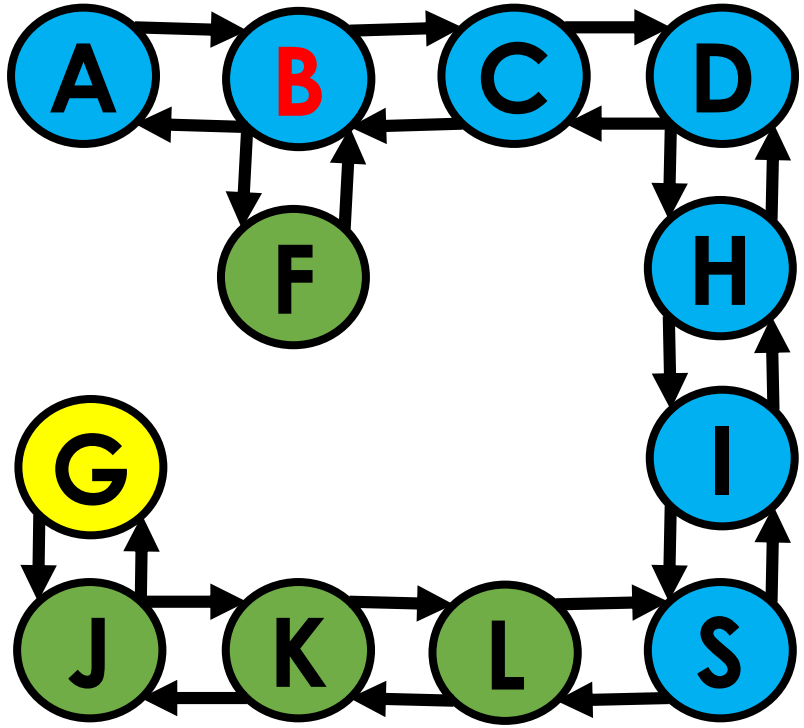


Depth-first Search (DFS)

Which unexplored node will be explored next?



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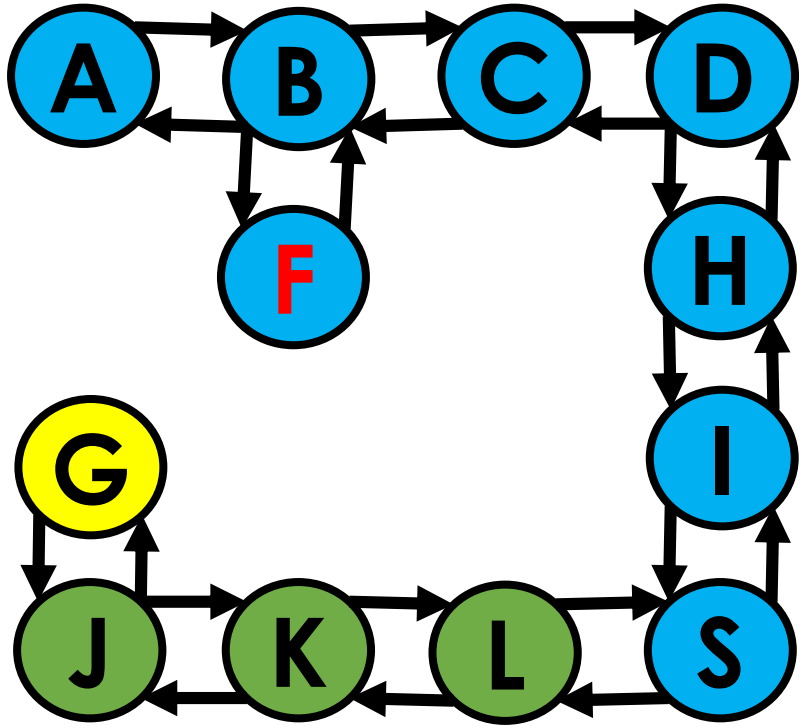

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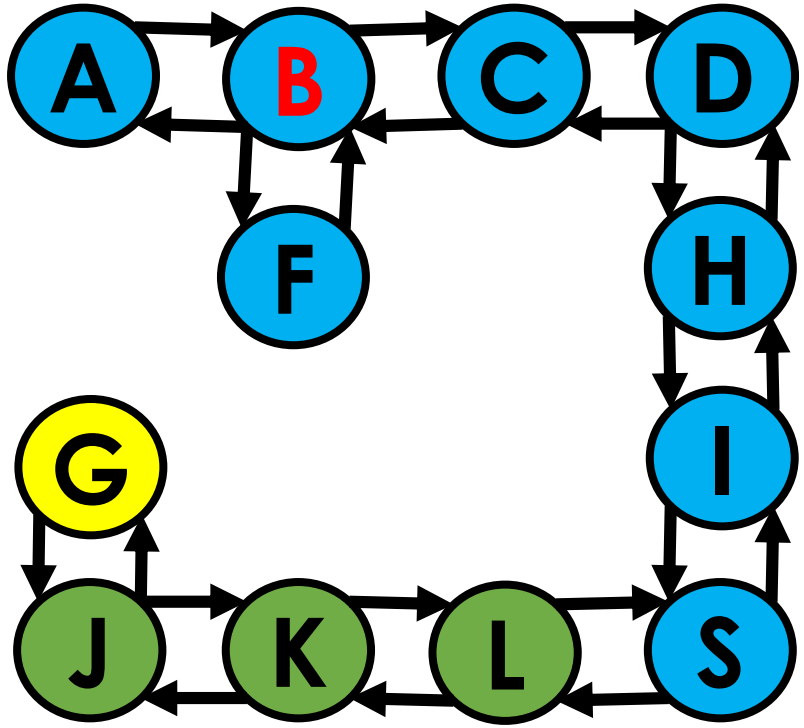

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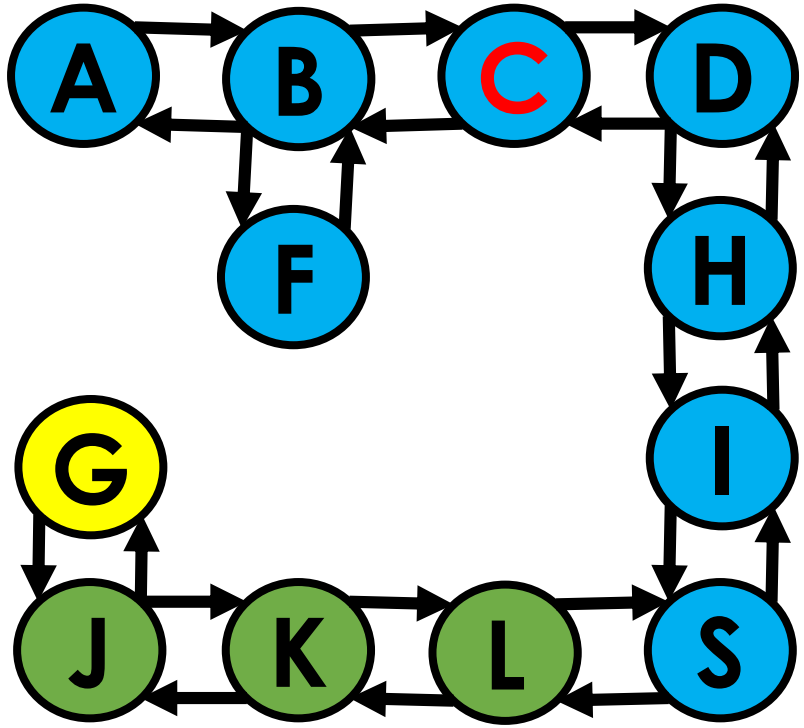

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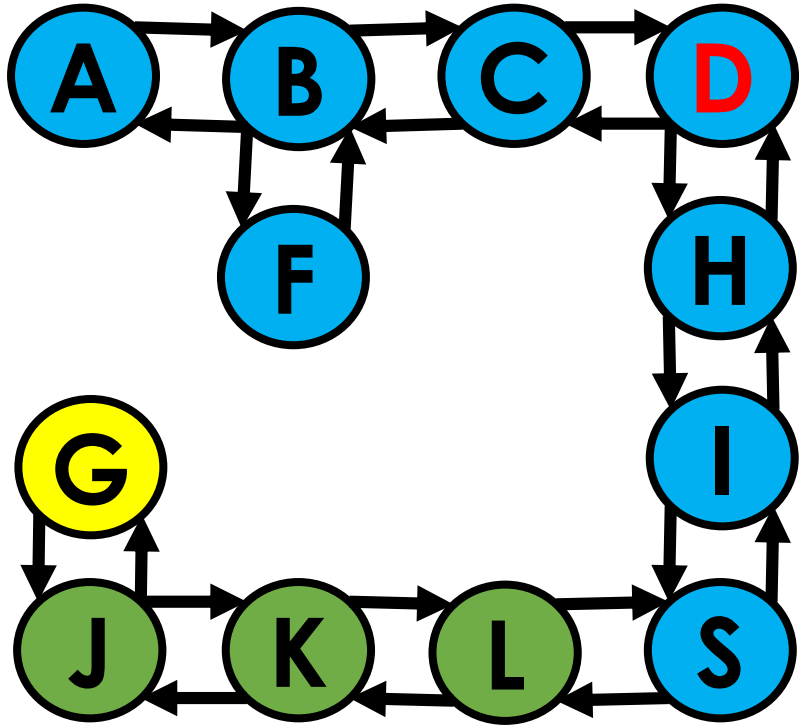

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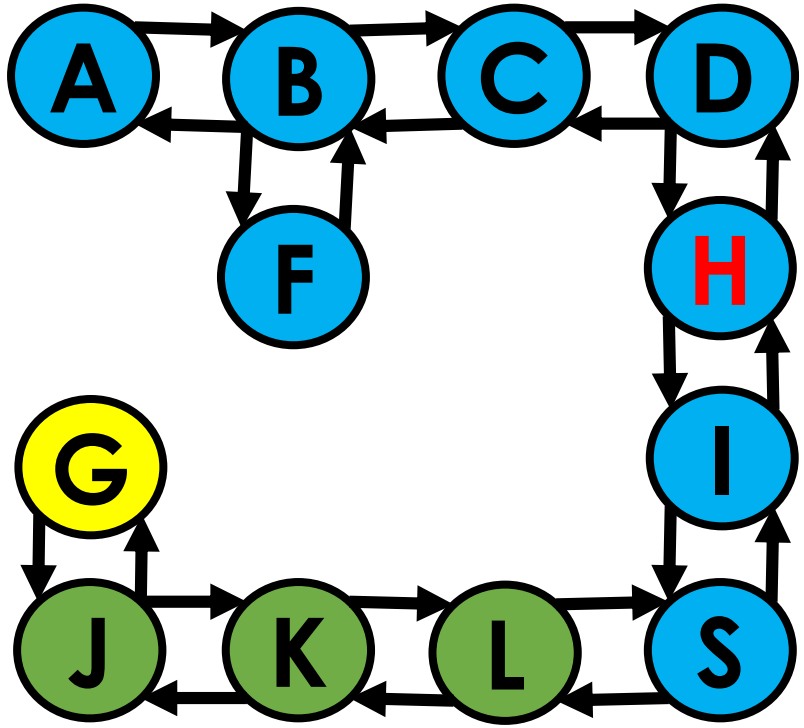

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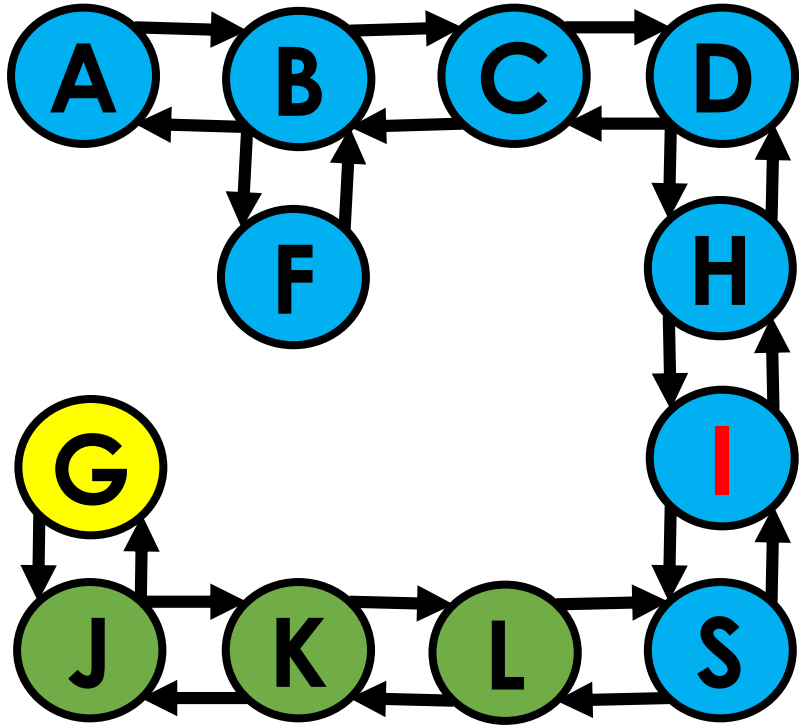

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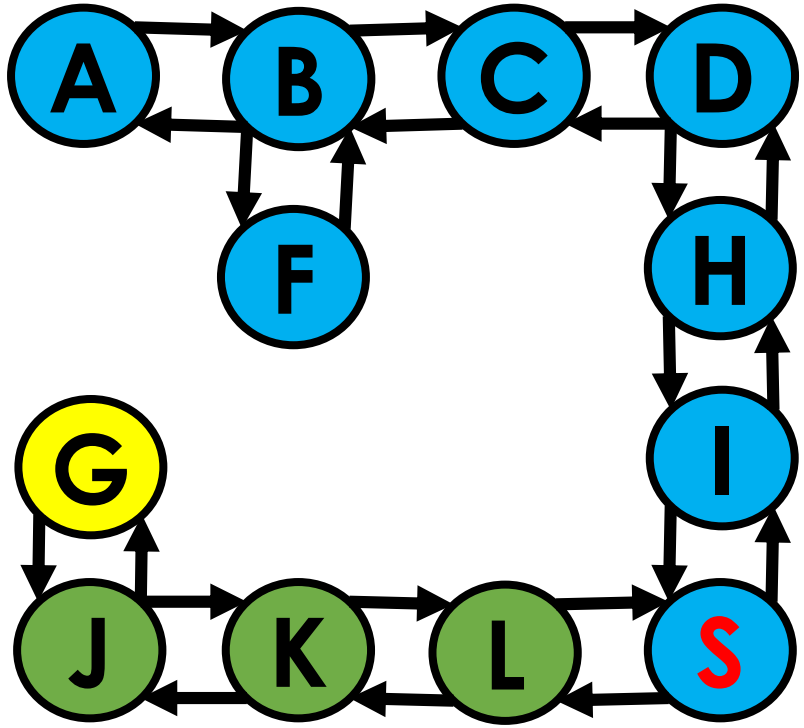

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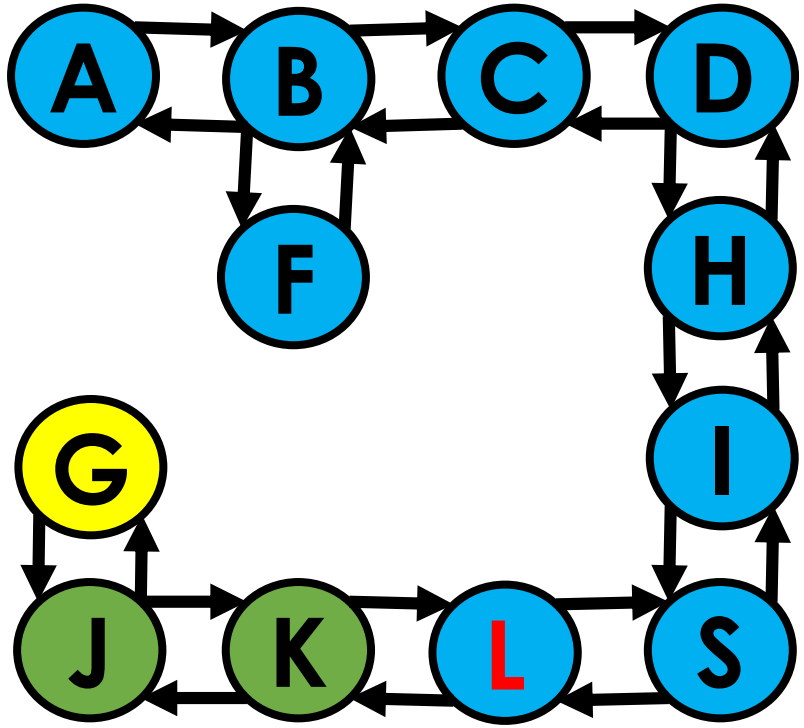

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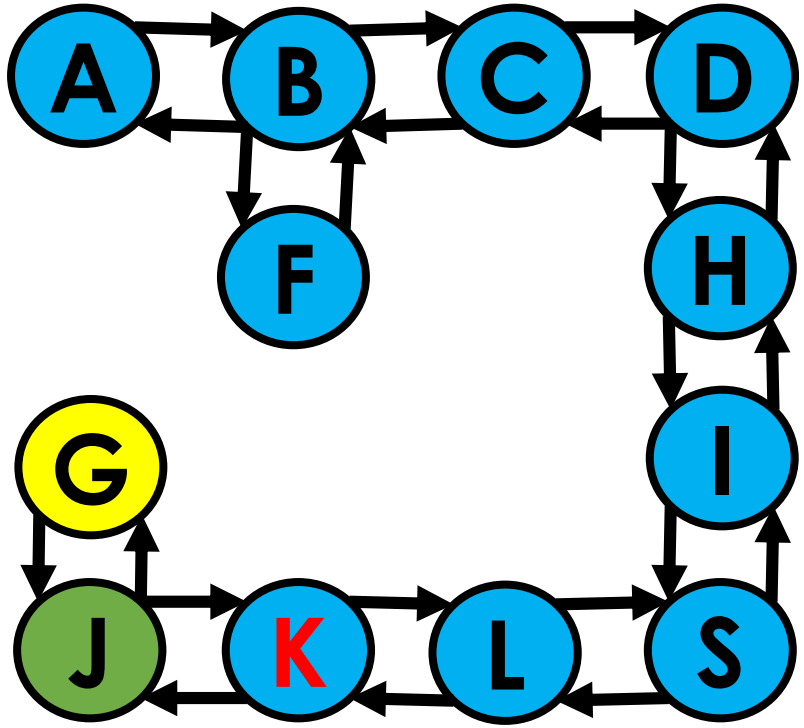

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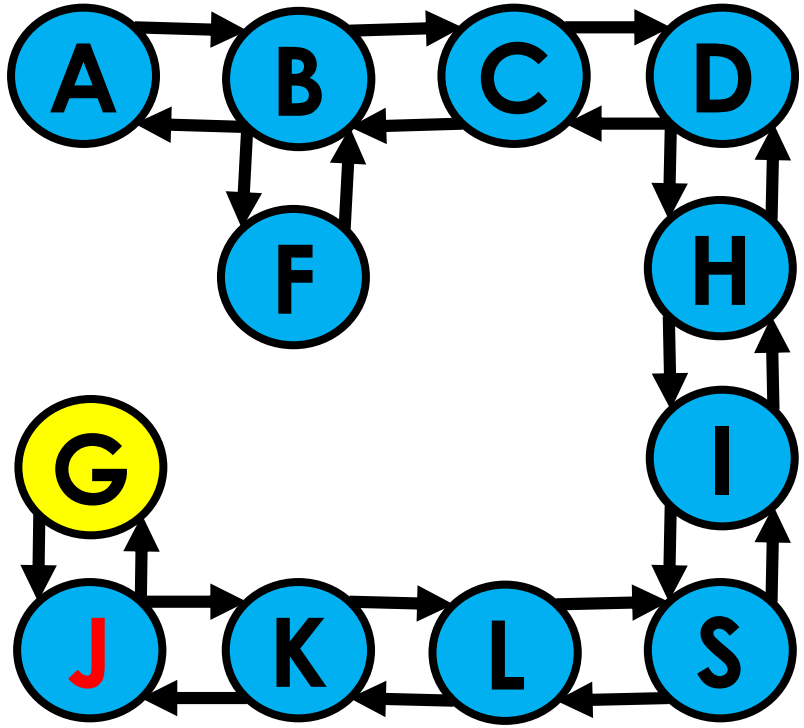

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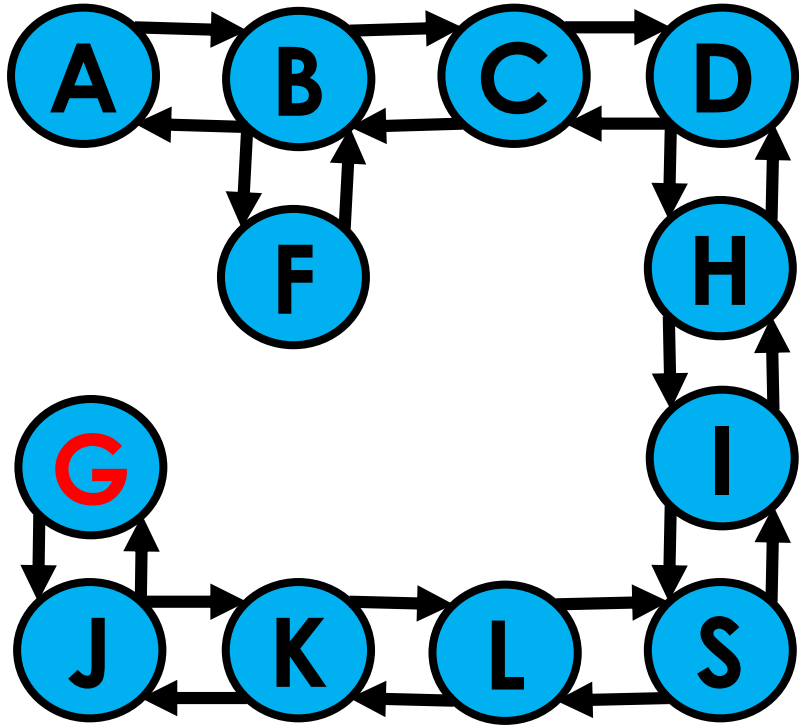

Depth-first Search (DFS)

How to keep track of where to search next?
How to keep track of what's been visited?
How to keep track of the path from start to goal?