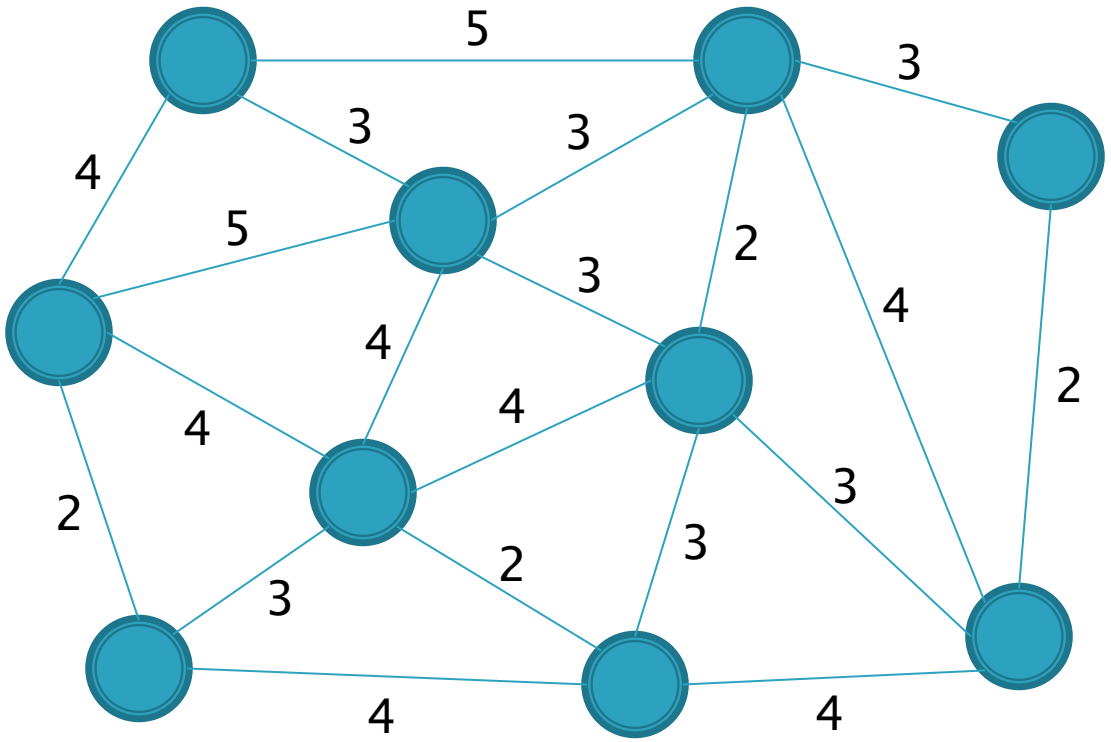
Kruskal & Prim's Algorithms

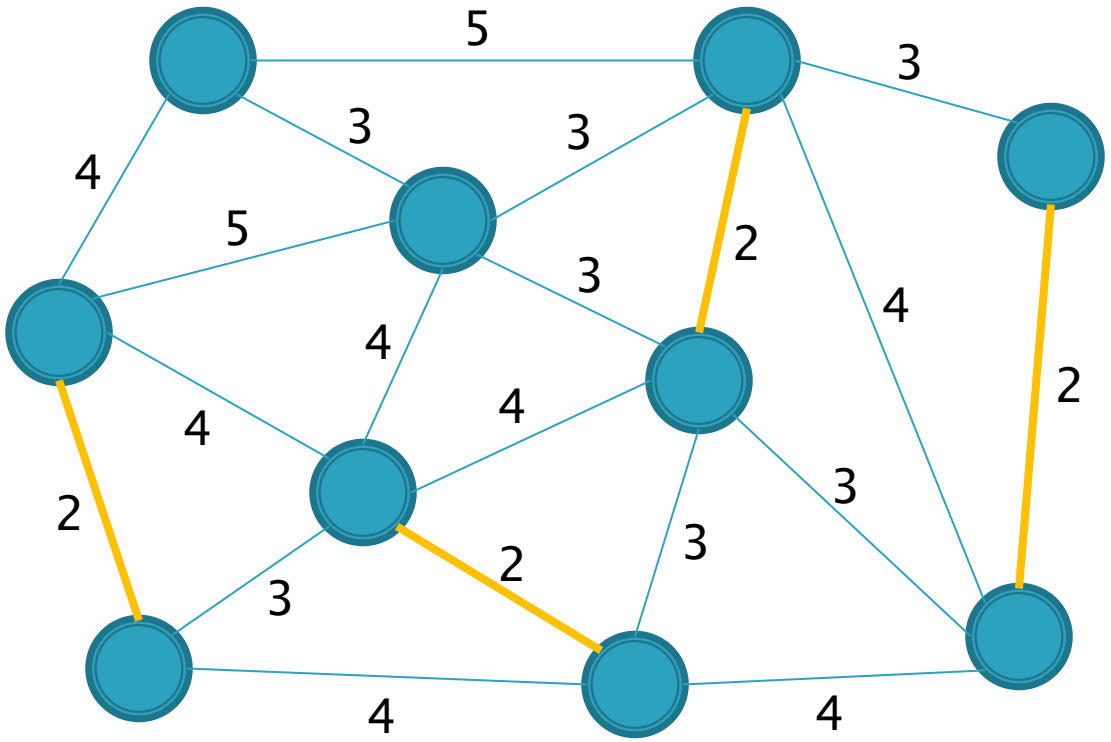
Kruskal's Algorithm



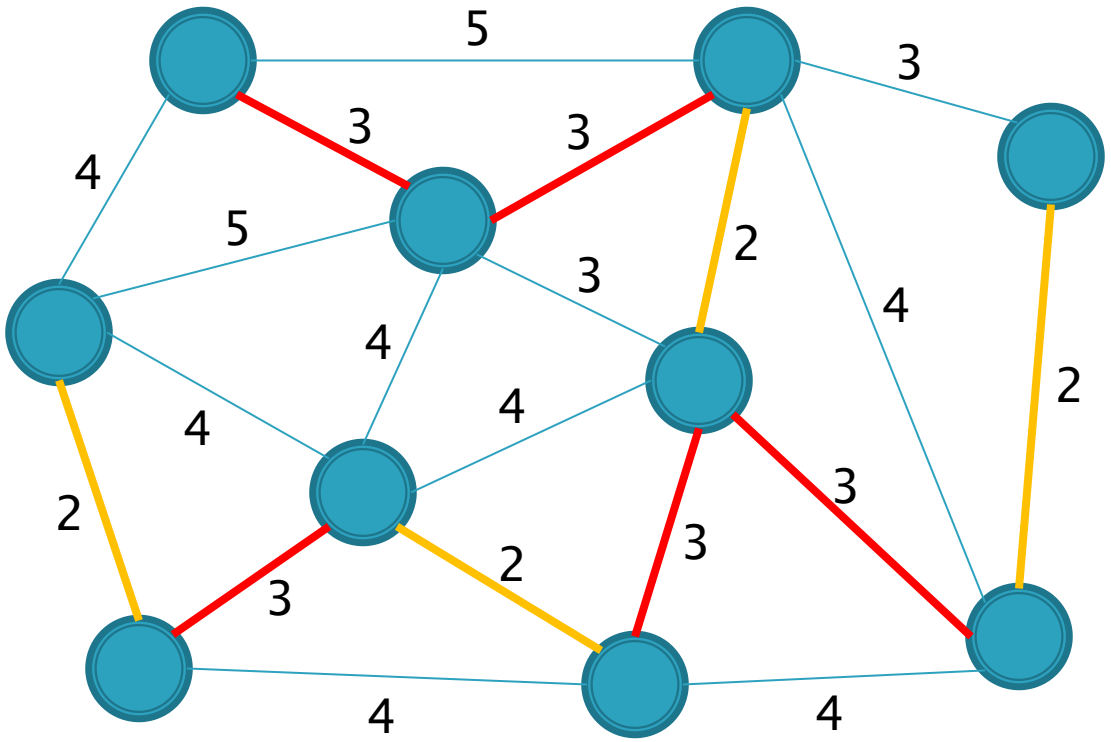
Kruskal's Algorithm

- Starting with the smallest edge.
- Pick out edges as long as it doesn't create a cycle in the graph.
- When all the nodes are covered, you have a minimum spanning tree!

Kruskal's Algorithm

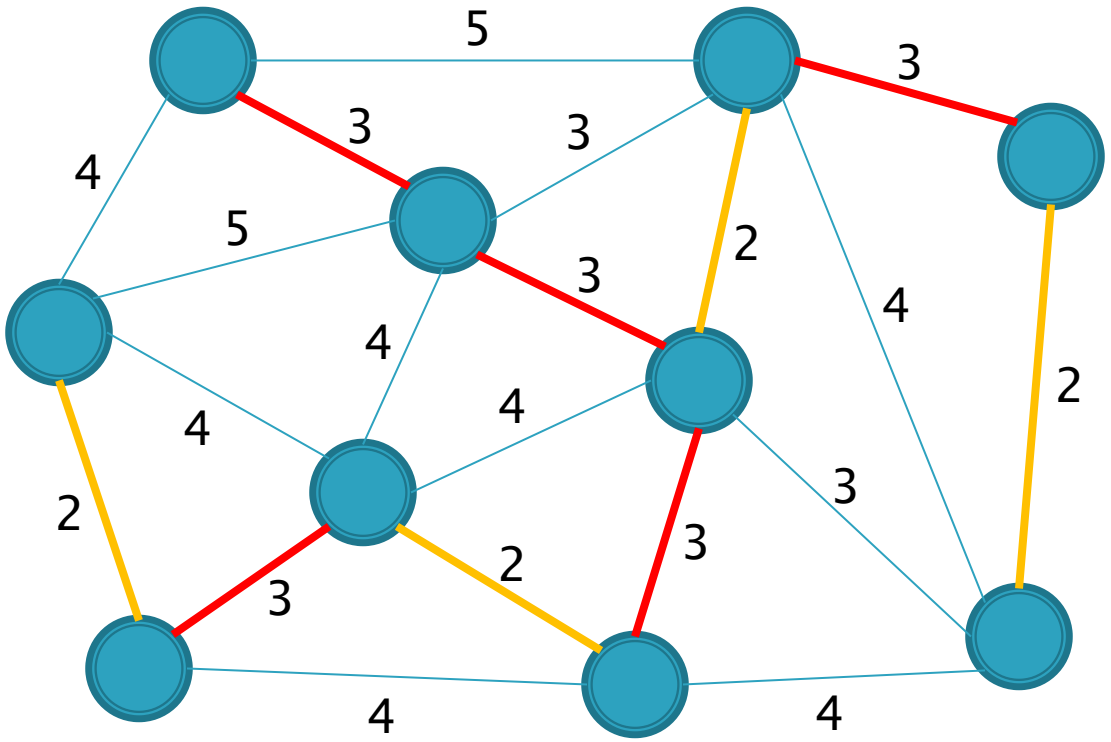


Kruskal's Algorithm



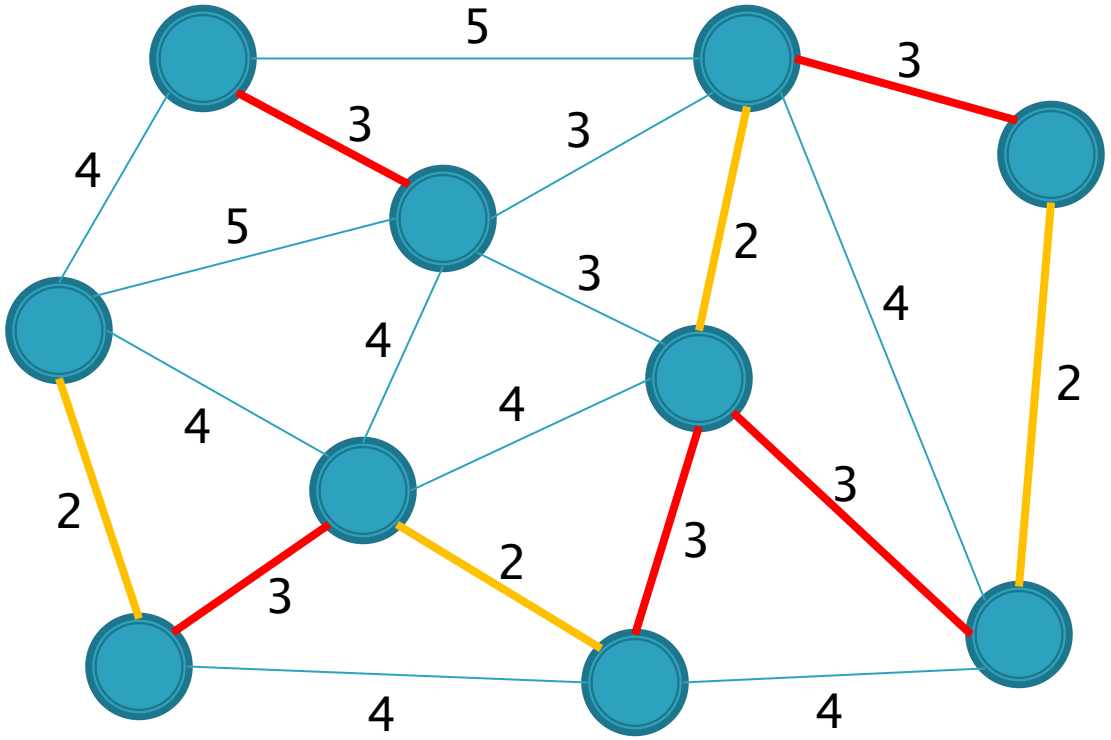
Kruskal's Algorithm

… OR

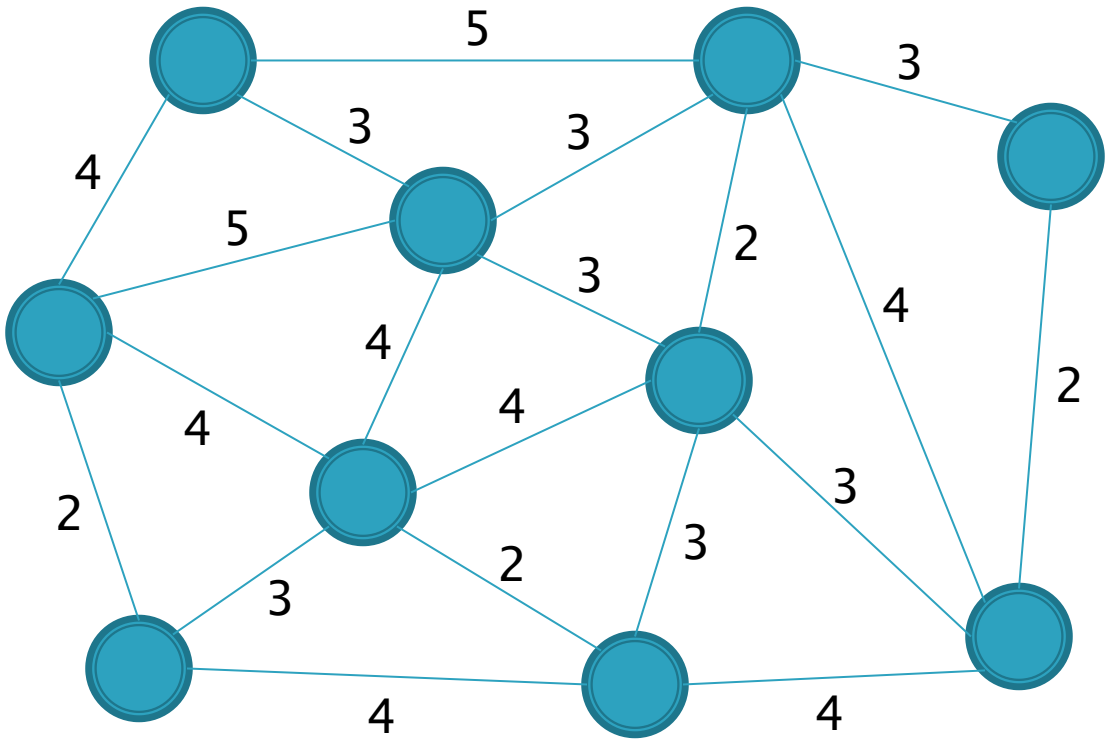


Kruskal's Algorithm

NO!



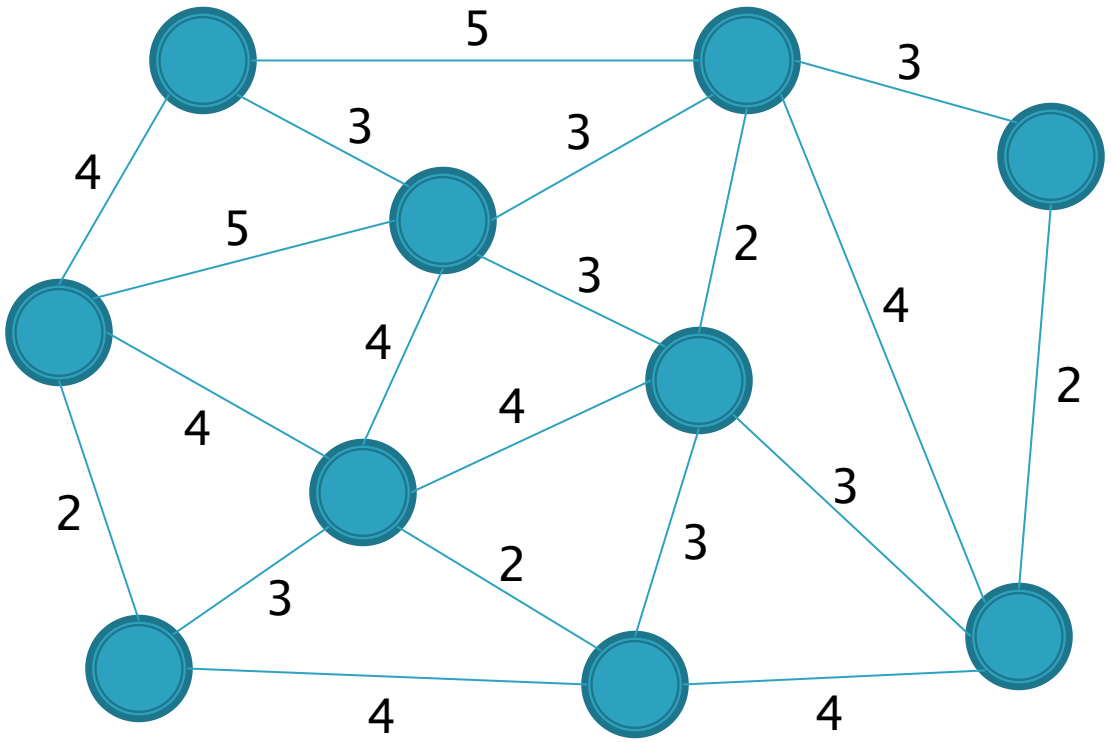
Prim's Algorithm



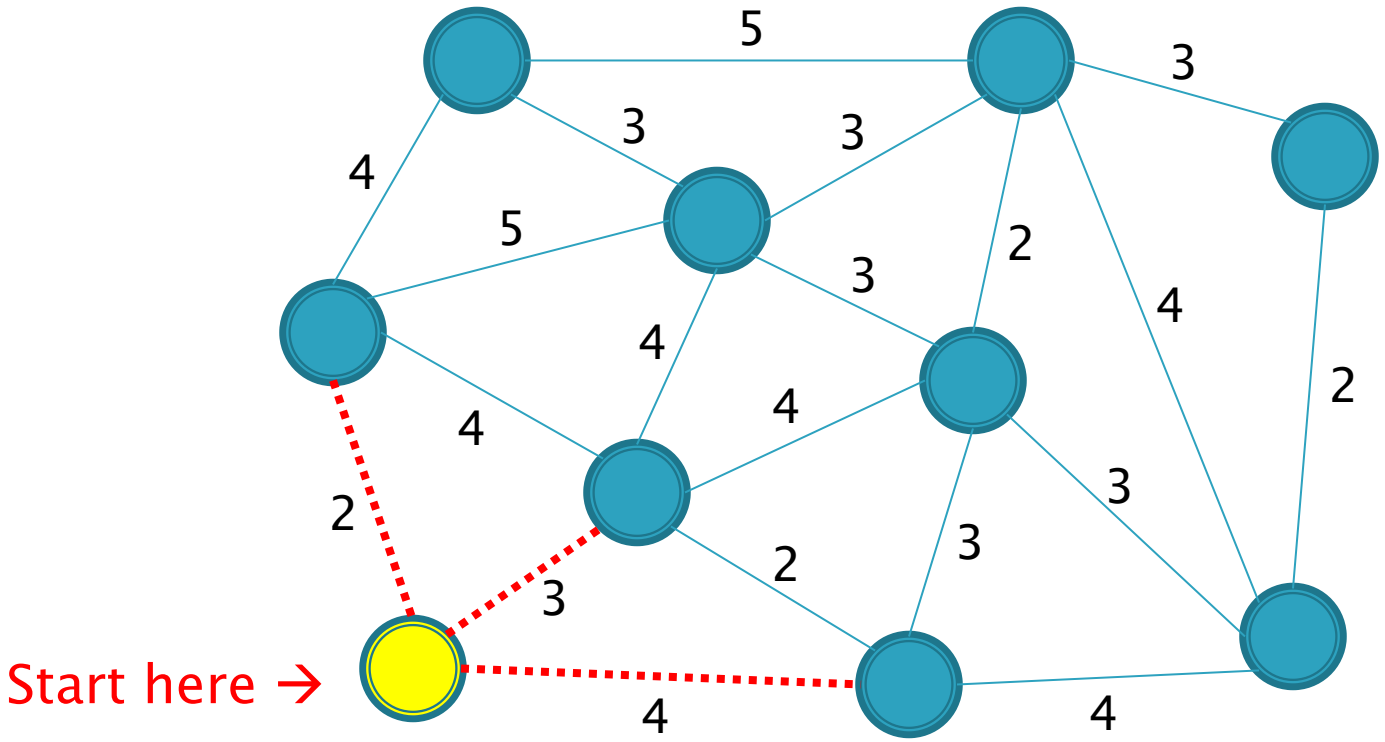
Prim's Algorithm

- Pick a node.
- Pick out the shortest edge that's connected to your tree so far.
- When all the nodes are covered, you have a minimum spanning tree!

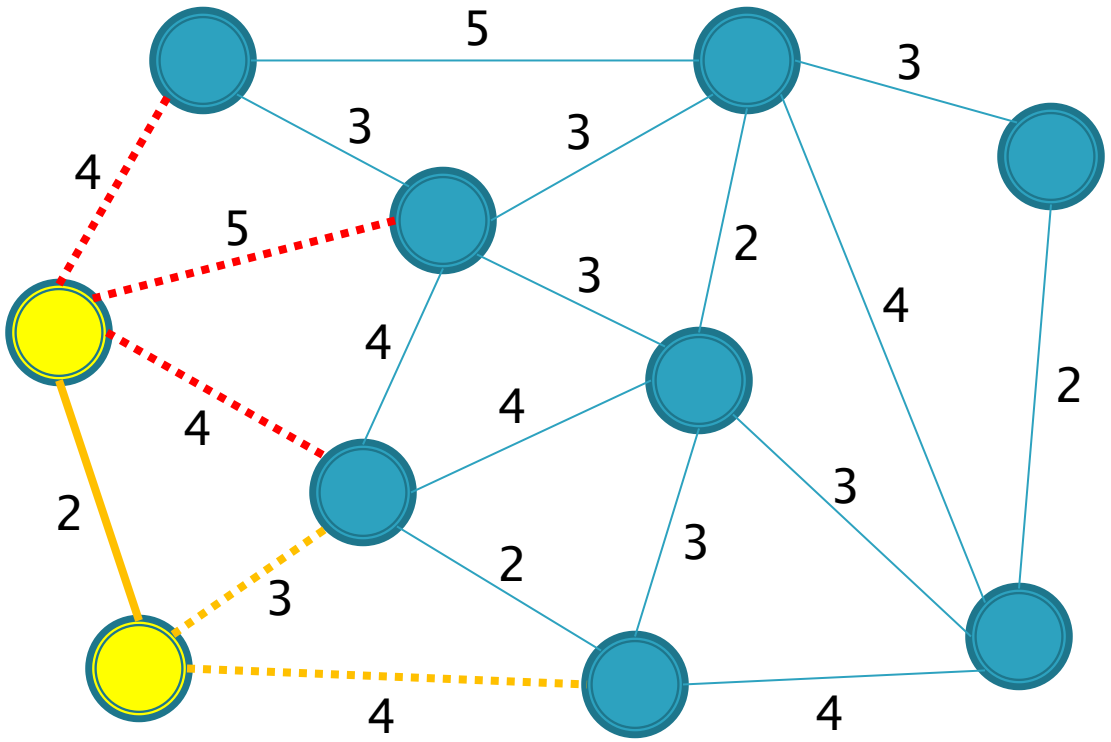
Prim's Algorithm



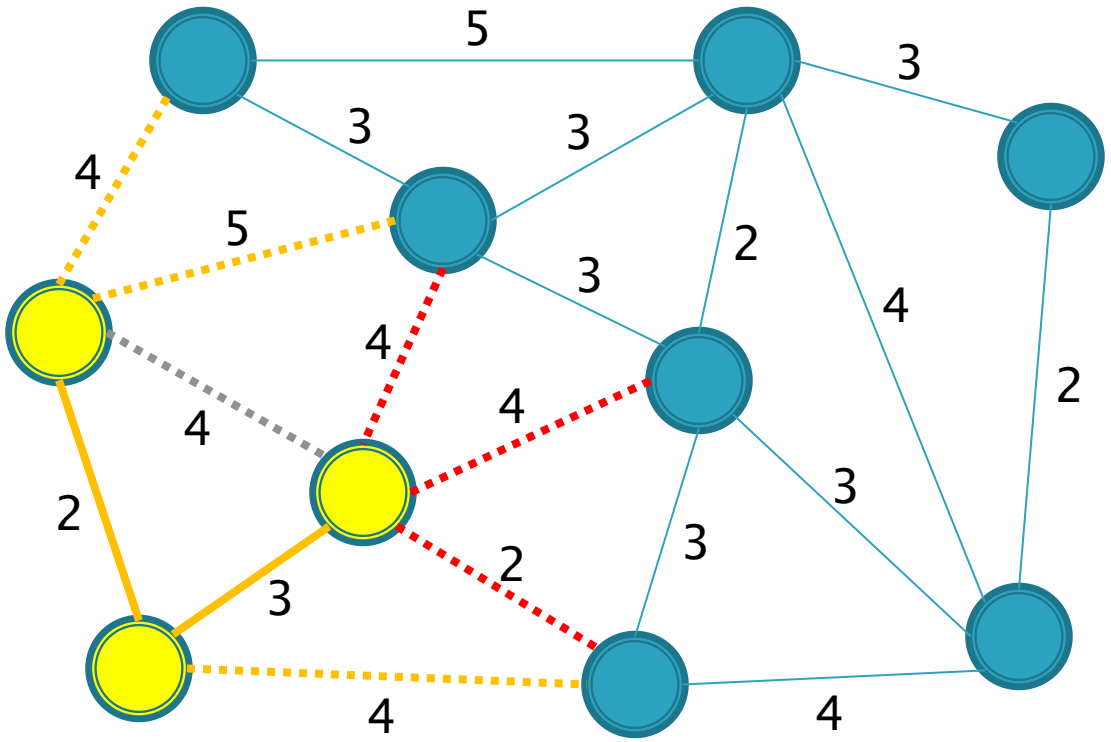
Prim's Algorithm



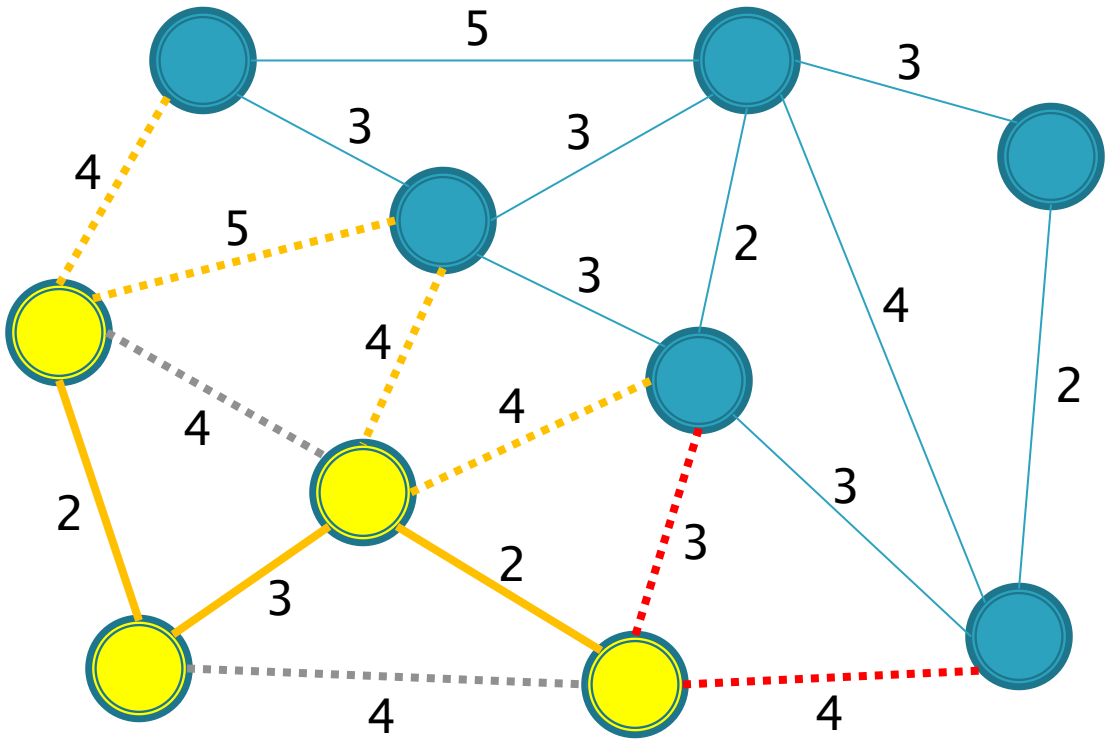
Prim's Algorithm



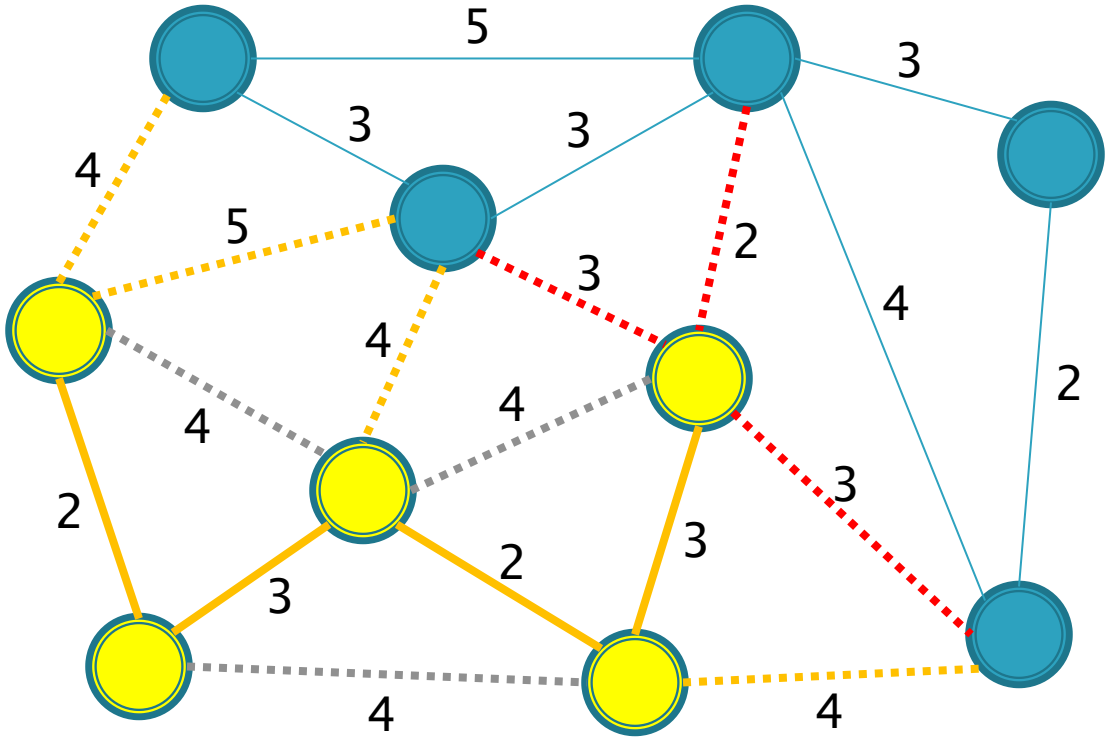
Prim's Algorithm



Prim's Algorithm



Prim's Algorithm



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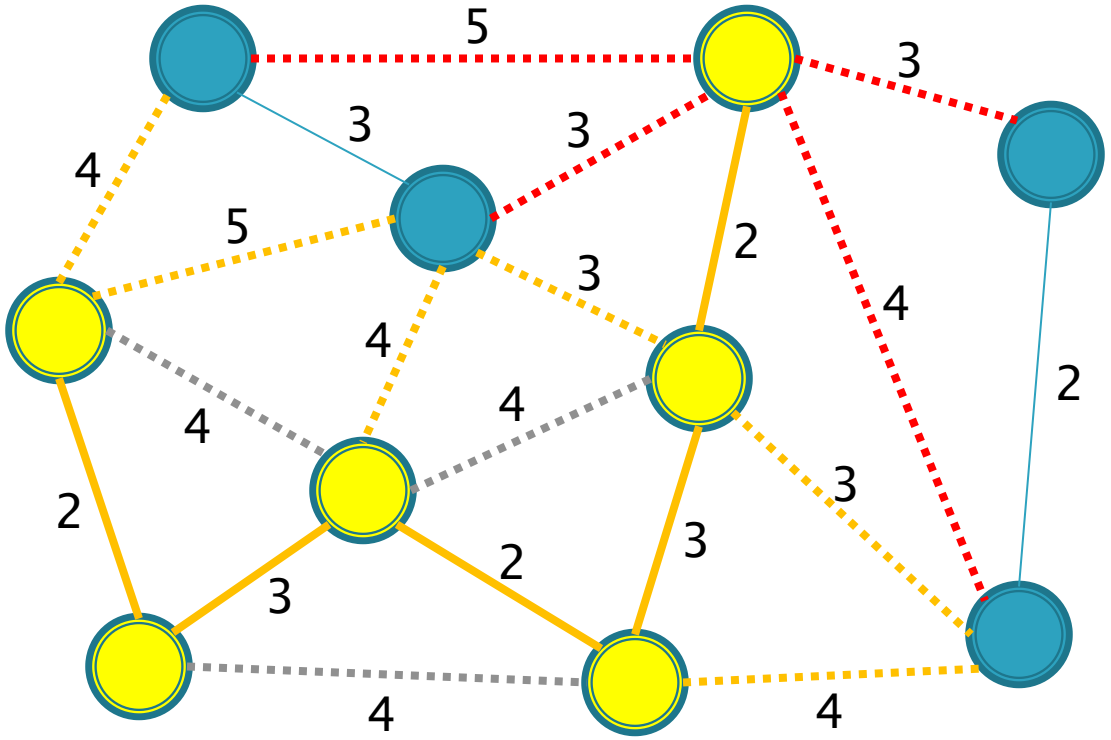

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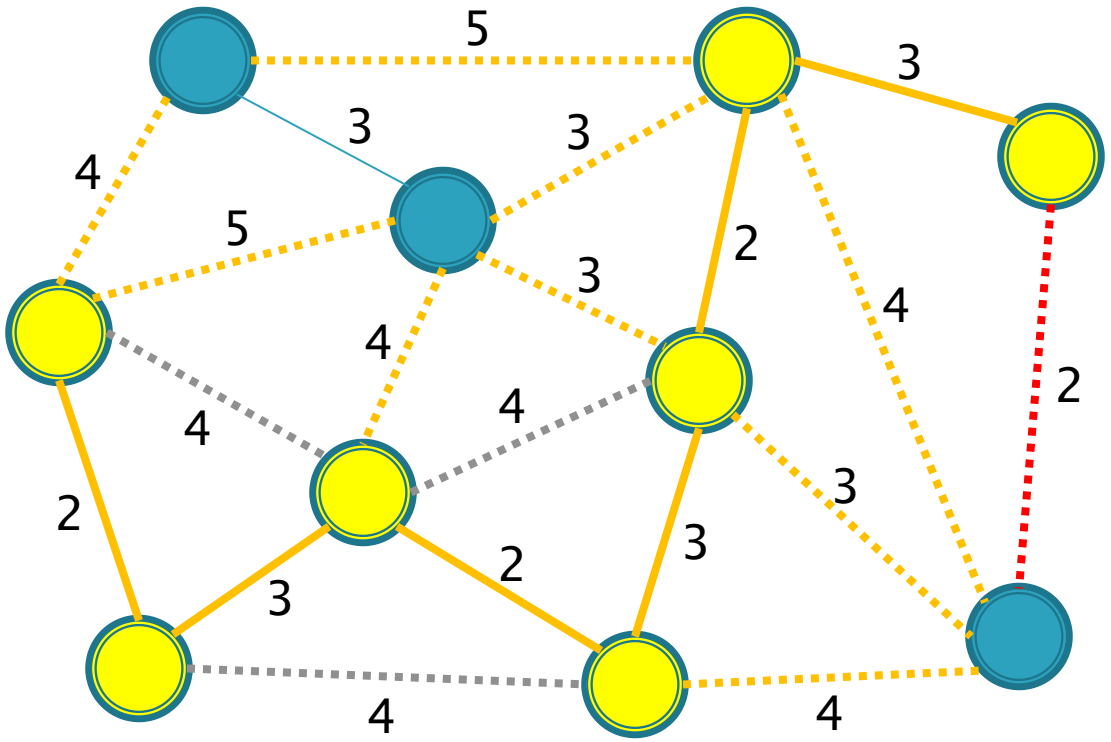
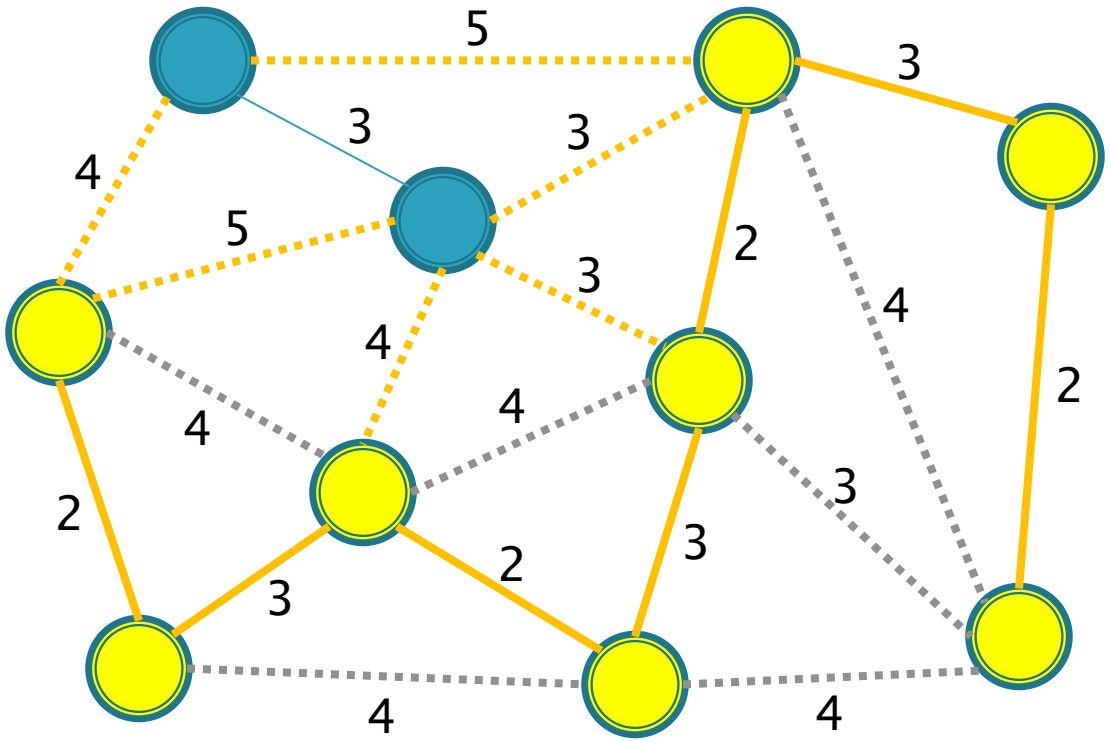


Prim's Algorithm



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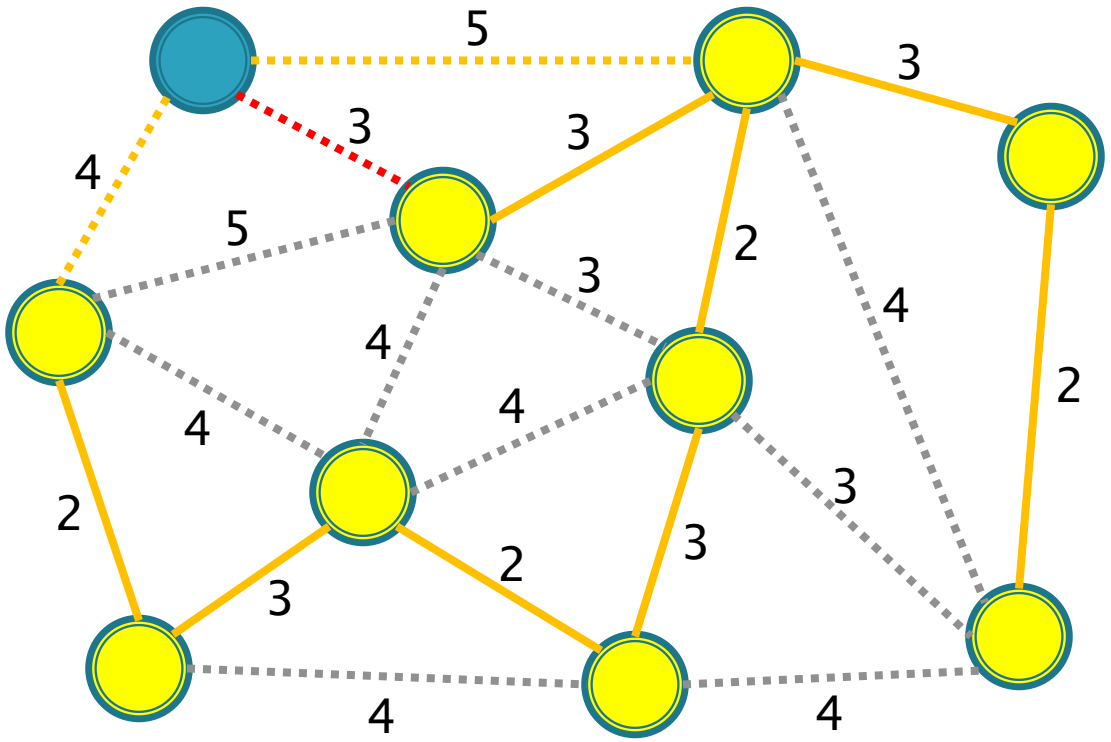

Prim's Algorithm

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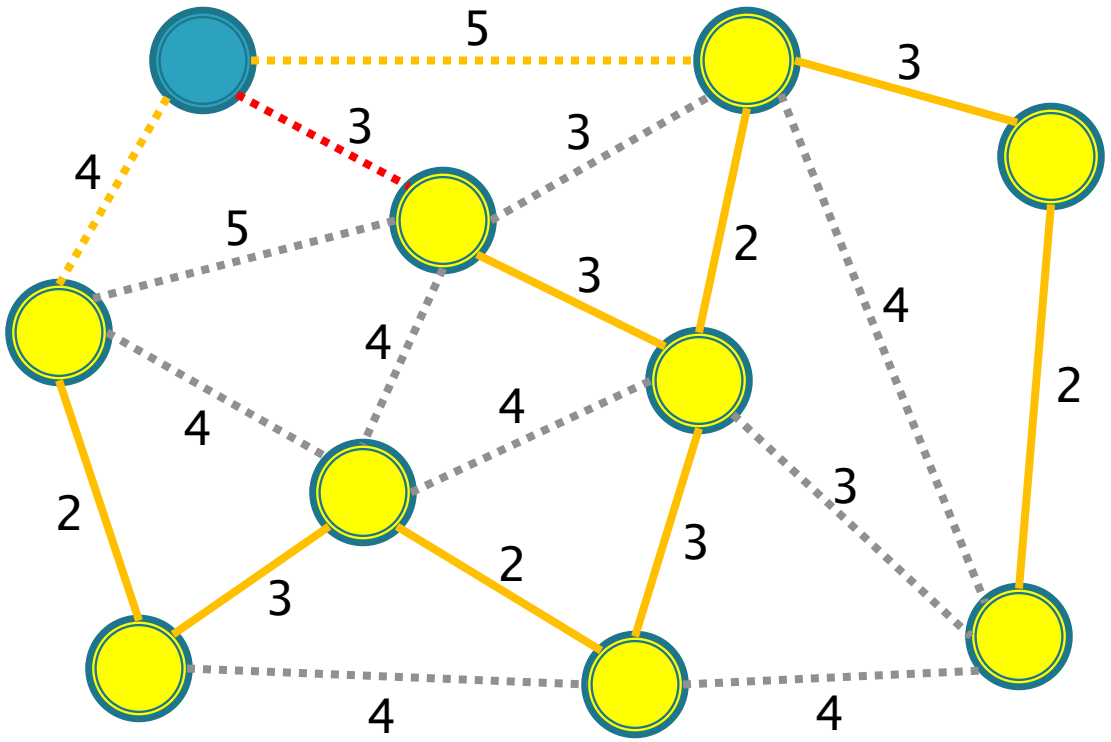

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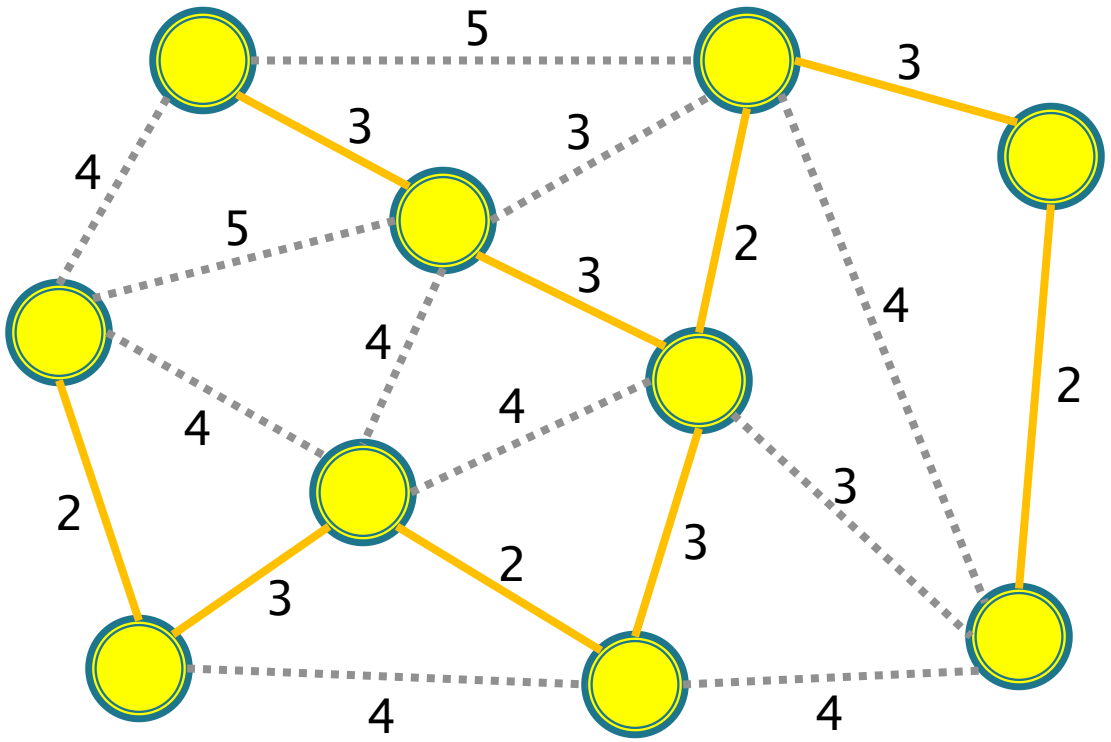

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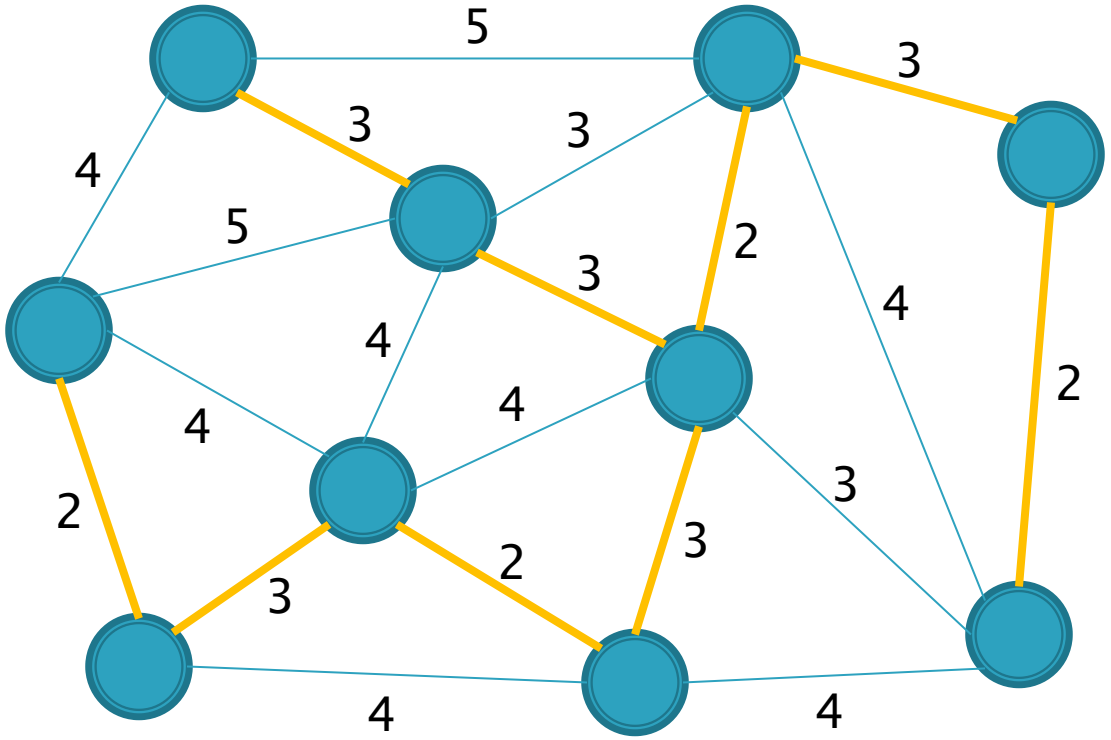

Prim's Algorithm

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