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- Model the problem as a graph! Puddles are the nodes, moats the edges.
- They can meet at some puddle if the graph is connected
  - Start BFS or DFS at any node and check if all nodes were visited.

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  - Best: mark node as visited when pushing into queue
  - Still works: when popping out of the queue, check if node was already visited. If yes, skip it, otherwise mark it as visited
    - Nodes can be in the queue at most degree times
  - Broken: mark as visited when popping, check for visited when looking at neighbors
    - Nodes are processed multiple times, which can amplify arbitrarily

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- Runtime $\mathcal{O}(n + m)$

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- Alternatively run a BFS from every white knight at once

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- there's also a DFS-based algorithm

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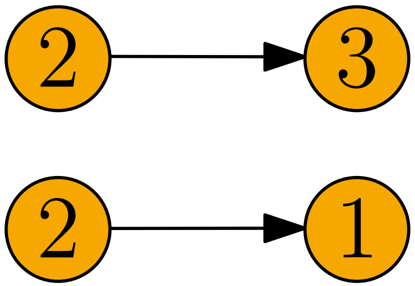

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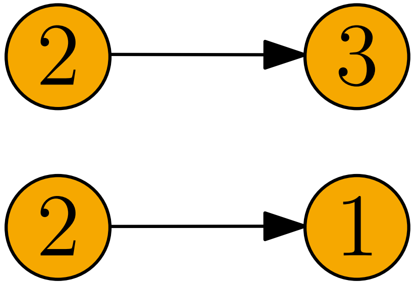

$[2, 2, 1, 3]$ vs. $[2, 1, 2, 3]$

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- For a given battery capacity you can check the size of the reachable subgraph
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- Now do a binary search to find the minimum needed capacity