

5211. Path with Maximum Probability

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You are given an undirected weighted graph of n nodes (0-indexed), represented by an edge list where $\text{edges}[i] = [a, b]$ is an undirected edge connecting the nodes a and b with a probability of success of traversing that edge $\text{succProb}[i]$.

Given two nodes start and end , find the path with the maximum probability of success to go from start to end and return its success probability.

If there is no path from start to end , **return 0**. Your answer will be accepted if it differs from the correct answer by at most $1e-5$.

User Accepted: 0

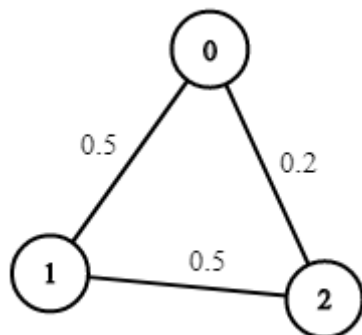
User Tried: 0

Total Accepted: 0

Total Submissions: 0

Difficulty: Medium

Example 1:

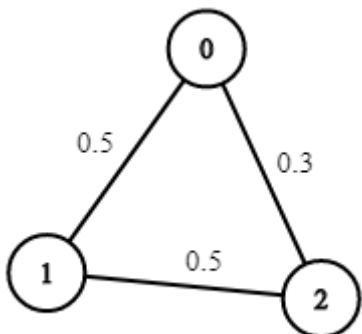


Input: $n = 3$, $\text{edges} = [[0,1],[1,2],[0,2]]$, $\text{succProb} = [0.5,0.5,0.2]$, $\text{start} = 0$, $\text{end} = 2$

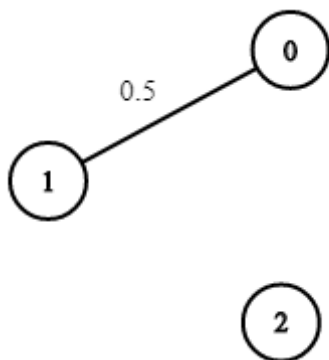
Output: 0.25000

Explanation: There are two paths from start to end, one having a probability of success =

Example 2:



Input: $n = 3$, $\text{edges} = [[0,1],[1,2],[0,2]]$, $\text{succProb} = [0.5,0.5,0.3]$, $\text{start} = 0$, $\text{end} = 2$
Output: 0.30000

Example 3:

Input: $n = 3$, $\text{edges} = [[0,1]]$, $\text{succProb} = [0.5]$, $\text{start} = 0$, $\text{end} = 2$
Output: 0.00000
Explanation: There is no path between 0 and 2.

Constraints:

- $2 \leq n \leq 10^4$
- $0 \leq \text{start}, \text{end} < n$
- $\text{start} \neq \text{end}$
- $0 \leq a, b < n$
- $a \neq b$
- $0 \leq \text{succProb.length} == \text{edges.length} \leq 2 \cdot 10^4$
- $0 \leq \text{succProb}[i] \leq 1$
- There is at most one edge between every two nodes.

JavaScript



```
1 /**
2  * @param {number} n
3  * @param {number[][]} edges
4  * @param {number[]} succProb
5  * @param {number} start
6  * @param {number} end
7  * @return {number}
8  */
9 var maxProbability = function(n, edges, succProb, start, end) {
10
11 };
```

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