1129. Shortest Path with Alternating Colors

Hint

Medium 2.8K 153

Companies

You are given an integer `n`, the number of nodes in a directed graph where the nodes are labeled from `0` to `n - 1`. Each edge is red or blue in this graph, and there could be self-edges and parallel edges.

You are given two arrays `redEdges` and `blueEdges` where:

- `redEdges[i] = [a_i, b_i]` indicates that there is a directed red edge from node `a_i` to node `b_i` in the graph, and
- `blueEdges[j] = [u_j, v_j]` indicates that there is a directed blue edge from node `u_j` to node `v_j` in the graph.

Return an array `answer` of length `n`, where each `answer[x]` is the length of the shortest path from node `0` to node `x` such that the edge colors alternate along the path, or `-1` if such a path does not exist.

Example 1:

```
Input: n = 3, redEdges = [[0,1],[1,2]], blueEdges = []
Output: [0,1,-1]
```

Example 2:

```
Input: n = 3, redEdges = [[0,1]], blueEdges = [[2,1]]
Output: [0,1,-1]
```

Constraints:

- `1 <= n <= 100`
- `0 <= redEdges.length, blueEdges.length <= 400`
- `redEdges[i].length == blueEdges[j].length == 2`
- `0 <= a_i, b_i, u_j, v_j < n`

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