

1697. Checking Existence of Edge Length Limited Paths

My Submissions (/contest/weekly-contest-220/problems/checking-existence-of-edge-length-limited-paths/submissions/)

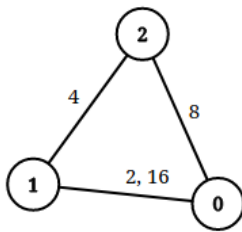
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An undirected graph of n nodes is defined by `edgelist`, where `edgelist[i] = [ui, vi, disi]` denotes an edge between nodes u_i and v_i with distance dis_i . Note that there may be **multiple** edges between two nodes.

Given an array `queries`, where `queries[j] = [pj, qj, limitj]`, your task is to determine for each `queries[j]` whether there is a path between p_j and q_j such that each edge on the path has a distance **strictly less than** $limit_j$.

Return a **boolean array** `answer`, where `answer.length == queries.length` and the j^{th} value of `answer` is `true` if there is a path for `queries[j]` is true, and `false` otherwise.

Example 1:

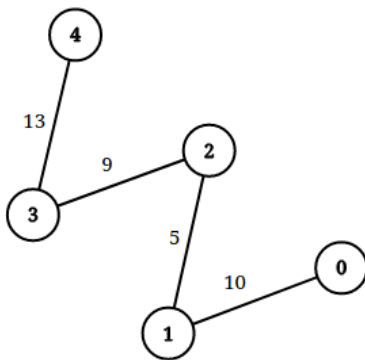


Input: $n = 3$, `edgelist = [[0,1,2],[1,2,4],[2,0,8],[1,0,16]]`, `queries = [[0,1,2],[0,2,5]]`

Output: `[false,true]`

Explanation: The above figure shows the given graph. Note that there are two overlapping edges between 0 and 1 with distances 2 and 16. For the first query, between 0 and 1 there is no path where each distance is less than 2, thus we return false for this query. For the second query, there is a path (0 → 1 → 2) of two edges with distances less than 5, thus we return true for this query.

Example 2:



Input: $n = 5$, `edgelist = [[0,1,10],[1,2,5],[2,3,9],[3,4,13]]`, `queries = [[0,4,14],[1,4,13]]`

Output: `[true,false]`

Explanation: The above figure shows the given graph.

Constraints:

- $2 \leq n \leq 10^5$
- $1 \leq \text{edgelist.length}, \text{queries.length} \leq 10^5$
- `edgelist[i].length == 3`

User Accepted:	325
User Tried:	731
Total Accepted:	354
Total Submissions:	1384
Difficulty:	Hard

- `queries[j].length == 3`
- $0 \leq u_i, v_i, p_j, q_j \leq n - 1$
- $u_i \neq v_i$
- $p_j \neq q_j$
- $1 \leq \text{dis}_i, \text{limit}_j \leq 10^9$
- There may be **multiple** edges between two nodes.

Discuss (<https://leetcode.com/problems/checking-existence-of-edge-length-limited-paths/discuss/>)

Java



```
1 class Solution {  
2     public boolean[] distanceLimitedPathsExist(int n, int[][] edgeList, int[][] queries) {  
3  
4     }  
5 }
```

☐ Custom Testcase

Use Example Testcases

Run

Submit