



6032. Minimum Weighted Subgraph With the Required Paths

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You are given an integer n denoting the number of nodes of a **weighted directed** graph. The nodes are numbered from 0 to $n - 1$.

You are also given a 2D integer array `edges` where `edges[i] = [fromi, toi, weighti]` denotes that there exists a **directed** edge from `fromi` to `toi` with weight `weighti`.

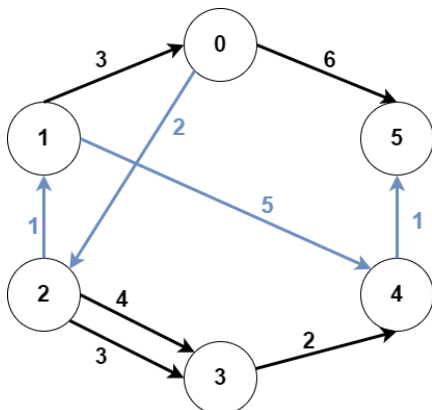
Lastly, you are given three **distinct** integers `src1`, `src2`, and `dest` denoting three distinct nodes of the graph.

Return the **minimum weight** of a subgraph of the graph such that it is **possible** to reach `dest` from both `src1` and `src2` via a set of edges of this subgraph. In case such a subgraph does not exist, return `-1`.

A **subgraph** is a graph whose vertices and edges are subsets of the original graph. The **weight** of a subgraph is the sum of weights of its constituent edges.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Hard

Example 1:



Input: $n = 6$, `edges = [[0,2,2],[0,5,6],[1,0,3],[1,4,5],[2,1,1],[2,3,3],[2,3,4],[3,4,2],[4,5,1]]`, `src1 =`

Output: 9

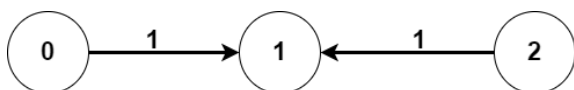
Explanation:

The above figure represents the input graph.

The blue edges represent one of the subgraphs that yield the optimal answer.

Note that the subgraph `[[1,0,3],[0,5,6]]` also yields the optimal answer. It is not possible to get a subgraph with a weight less than 9.

Example 2:



Input: $n = 3$, $edges = [[0,1,1],[2,1,1]]$, $src1 = 0$, $src2 = 1$, $dest = 2$

Output: -1

Explanation:

The above figure represents the input graph.

It can be seen that there does not exist any path from node 1 to node 2, hence there are no subgraphs sa

Constraints:

- $3 \leq n \leq 10^5$
- $0 \leq edges.length \leq 10^5$
- $edges[i].length == 3$
- $0 \leq from_i, to_i, src1, src2, dest \leq n - 1$
- $from_i \neq to_i$
- $src1, src2$, and $dest$ are pairwise distinct.
- $1 \leq weight[i] \leq 10^5$

JavaScript



```

1  /**
2   * @param {number} n
3   * @param {number[][]} edges
4   * @param {number} src1
5   * @param {number} src2
6   * @param {number} dest
7   * @return {number}
8   */
9  var minimumWeight = function(n, edges, src1, src2, dest) {
10
11  };

```

☐ Custom Testcase

Use Example Testcases

Run

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