

5921. Maximum Path Quality of a Graph

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There is an **undirected** graph with n nodes numbered from 0 to $n - 1$ (**inclusive**). You are given a **0-indexed** integer array `values` where `values[i]` is the **value** of the i^{th} node. You are also given a **0-indexed** 2D integer array `edges`, where each `edges[j] = [uj, vj, timej]` indicates that there is an undirected edge between the nodes u_j and v_j , and it takes `timej` seconds to travel between the two nodes. Finally, you are given an integer `maxTime`.

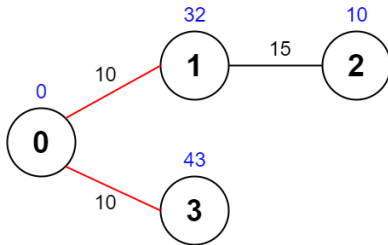
A **valid path** in the graph is any path that starts at node 0 , ends at node 0 , and takes **at most** `maxTime` seconds to complete. You may visit the same node multiple times. The **quality** of a valid path is the **sum** of the values of the **unique nodes** visited in the path (each node's value is added **at most once** to the sum).

Return the **maximum** quality of a valid path.

Note: There are **at most four** edges connected to each node.

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

Example 1:



Input: `values = [0,32,10,43]`, `edges = [[0,1,10],[1,2,15],[0,3,10]]`, `maxTime = 49`

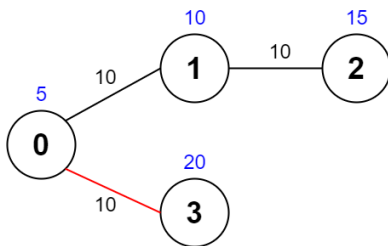
Output: 75

Explanation:

One possible path is $0 \rightarrow 1 \rightarrow 0 \rightarrow 3 \rightarrow 0$. The total time taken is $10 + 10 + 10 + 10 = 40 \leq 49$.

The nodes visited are 0, 1, and 3, giving a maximal path quality of $0 + 32 + 43 = 75$.

Example 2:



Input: `values = [5,10,15,20]`, `edges = [[0,1,10],[1,2,10],[0,3,10]]`, `maxTime = 30`

Output: 25

Explanation:

One possible path is $0 \rightarrow 3 \rightarrow 0$. The total time taken is $10 + 10 = 20 \leq 30$.

The nodes visited are 0 and 3, giving a maximal path quality of $5 + 20 = 25$.

Example 3:

