2492. Minimum Score of a Path Between Two Cities

Description

You are given a positive integer n representing n cities numbered from 1 to n. You are also given a **2D** array roads where roads[i] = [a i, b i, distance i] indicates that there is a **bidirectional** road between cities [a i] and [b i] with a distance equal to [distance i]. The cities graph is not necessarily connected.

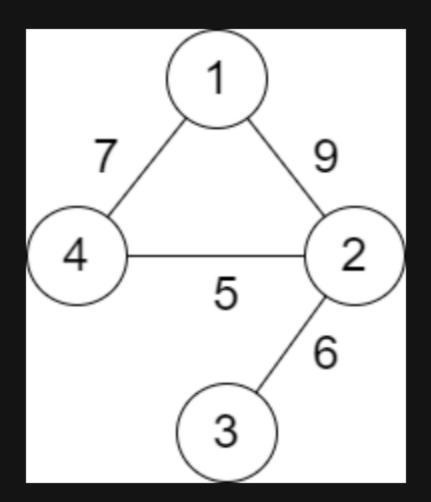
The **score** of a path between two cities is defined as the **minimum** distance of a road in this path.

Return the *minimum* possible score of a path between cities 1 and n.

Note:

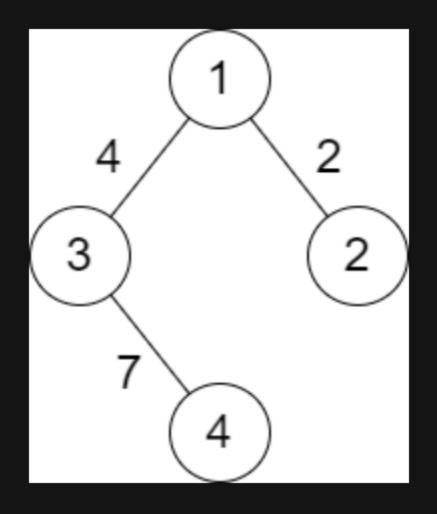
- A path is a sequence of roads between two cities.
- It is allowed for a path to contain the same road multiple times, and you can visit cities 1 and n multiple times along the path.
- The test cases are generated such that there is at least one path between 1 and n.

Example 1:



```
Input: n = 4, roads = [[1,2,9],[2,3,6],[2,4,5],[1,4,7]]
Output: 5
Explanation: The path from city 1 to 4 with the minimum score is: 1 -> 2 -> 4. The score of this path is min(9,5) = 5.
It can be shown that no other path has less score.
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Example 2:



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Input: n = 4, roads = [[1,2,2],[1,3,4],[3,4,7]]
Output: 2
Explanation: The path from city 1 to 4 with the minimum score is: 1 -> 2 -> 1 -> 3 -> 4. The score of this path is min(2,2,4,7) = 2.
```

Constraints:

- 2 <= n <= 10 ⁵
- 1 <= roads.length <= 10 ⁵
- roads[i].length == 3
- $1 \ll a_i$, $b_i \ll n$
- a i != b i
- 1 <= distance $_{i}$ <= 10 4
- There are no repeated edges.
- There is at least one path between 1 and n.