1334. Find the City With the Smallest Number of Neighbors at a Threshold Distance

Solved ●

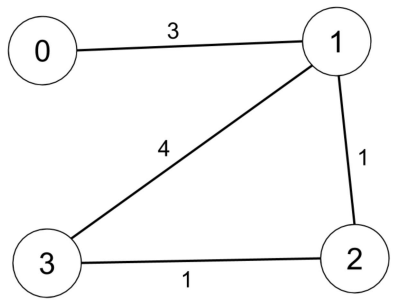
Medium Topics Companies Hint

There are n cities numbered from 0 to $n-1$. Given the array $edges$ where $edges[i] = [from_i, to_i, weight_i]$ represents a bidirectional and weighted edge between cities $from_i$ and to_i, and given the integer $distanceThreshold$.

Return the city with the smallest number of cities that are reachable through some path and whose distance is **at most** $distanceThreshold$, If there are multiple such cities, return the city with the greatest number.

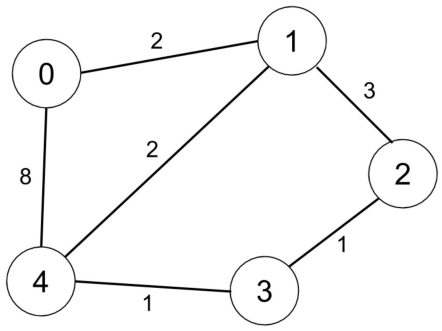
Notice that the distance of a path connecting cities ***i*** and ***j*** is equal to the sum of the edges' weights along that path.

Example 1:



> **Input:** n = 4, edges = [[0,1,3],[1,2,1],[1,3,4],[2,3,1]], distanceThreshold = 4
> **Output:** 3
> **Explanation:** The figure above describes the graph.
> The neighboring cities at a distanceThreshold = 4 for each city are:
> City 0 -> [City 1, City 2]
> City 1 -> [City 0, City 2, City 3]
> City 2 -> [City 0, City 1, City 3]
> City 3 -> [City 1, City 2]
> Cities 0 and 3 have 2 neighboring cities at a distanceThreshold = 4, but we have to return city 3 since it has the greatest number.

Example 2:



> **Input:** n = 5, edges = [[0,1,2],[0,4,8],[1,2,3],[1,4,2],[2,3,1],[3,4,1]], distanceThreshold = 2
> **Output:** 0
> **Explanation:** The figure above describes the graph.
> The neighboring cities at a distanceThreshold = 2 for each city are:
> City 0 -> [City 1]
> City 1 -> [City 0, City 4]

> City 2 -> [City 3, City 4]
> City 3 -> [City 2, City 4]
> City 4 -> [City 1, City 2, City 3]
> The city 0 has 1 neighboring city at a distanceThreshold = 2.

Constraints:

- $2 <= n <= 100$
- $1 <= edges.length <= n * (n - 1) / 2$
- $edges[i].length == 3$
- $0 <= from_i < to_i < n$
- $1 <= weight_i, distanceThreshold <= 10^4$
- All pairs $(from_i, to_i)$ are distinct.

Seen this question in a real interview before? 1/5

Yes No

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Hint 1

Hint 2

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