882. Reachable Nodes In Subdivided Graph

Description

You are given an undirected graph (the **"original graph"**) with `n` nodes labeled from `0` to `n - 1`. You decide to **subdivide** each edge in the graph into a chain of nodes, with the number of new nodes varying between each edge.

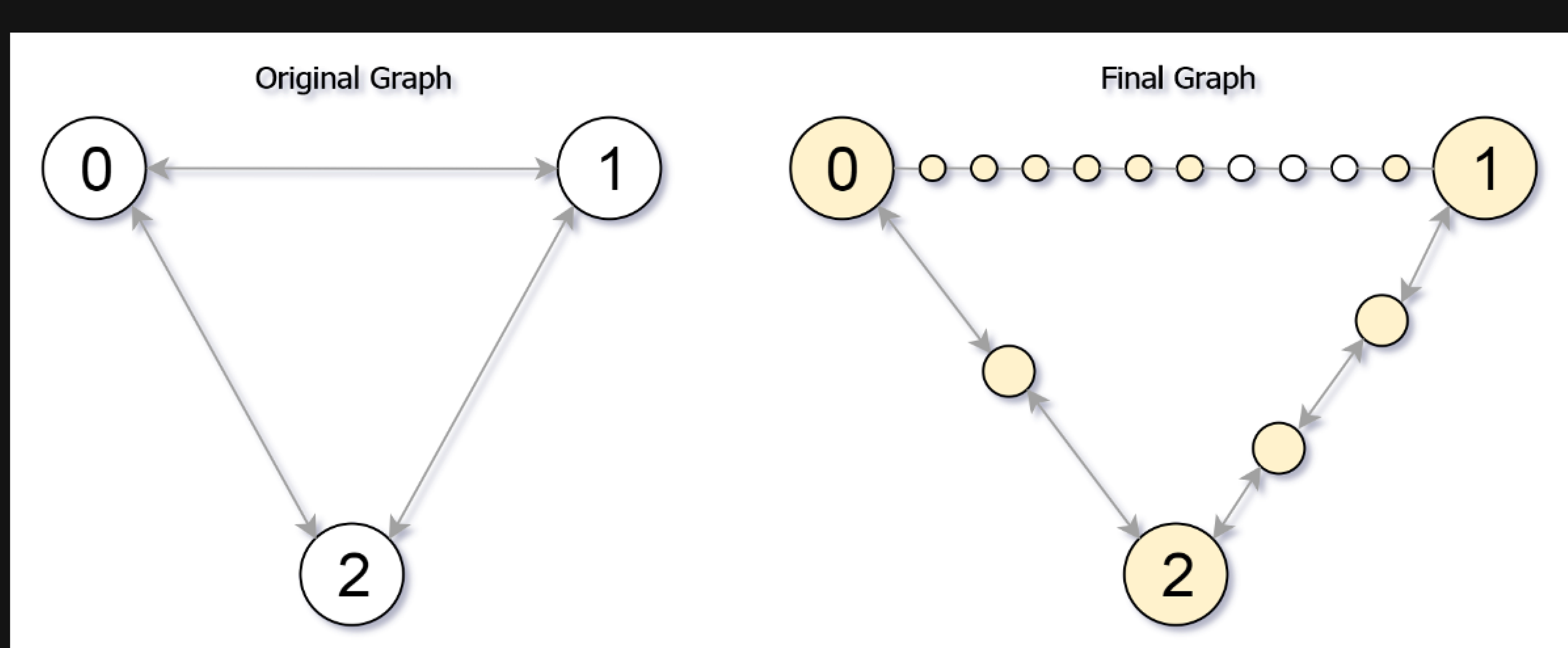
The graph is given as a 2D array of `edges` where $edges[i] = [u_i, v_i, cnt_i]$ indicates that there is an edge between nodes u_i and v_i in the original graph, and cnt_i is the total number of new nodes that you will **subdivide** the edge into. Note that $cnt_i == 0$ means you will not subdivide the edge.

To **subdivide** the edge $[u_i, v_i]$, replace it with $(cnt_i + 1)$ new edges and cnt_i new nodes. The new nodes are x_1, x_2, ..., x_{cnt_i}, and the new edges are $[u_i, x_1]$, $[x_1, x_2]$, $[x_2, x_3]$, ..., $[x_{cnt_i - 1}, x_{cnt_i}]$, $[x_{cnt_i}, v_i]$.

In this **new graph**, you want to know how many nodes are **reachable** from the node `0`, where a node is **reachable** if the distance is `maxMoves` or less.

Given the original graph and `maxMoves`, return *the number of nodes that are **reachable** from node `0` in the new graph*.

Example 1:




```
Input: edges = [[0,1,10],[0,2,1],[1,2,2]], maxMoves = 6, n = 3
Output: 13
Explanation: The edge subdivisions are shown in the image above.
The nodes that are reachable are highlighted in yellow.
```

Example 2:

```
Input: edges = [[0,1,4],[1,2,6],[0,2,8],[1,3,1]], maxMoves = 10, n = 4
Output: 23
```

Example 3:

```
Input: edges = [[1,2,4],[1,4,5],[1,3,1],[2,3,4],[3,4,5]], maxMoves = 17, n = 5
Output: 1
Explanation: Node 0 is disconnected from the rest of the graph, so only node 0 is reachable.
```

Constraints:

- $0 <= edges.length <= min(n * (n - 1) / 2, 10^4)$
- `edges[i].length == 3`
- $0 <= u_i < v_i < n$
- There are **no multiple edges** in the graph.
- $0 <= cnt_i <= 10^4$
- $0 <= maxMoves <= 10^9$
- `1 <= n <= 3000`