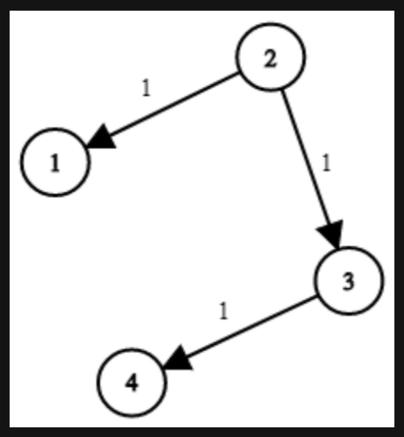
743. Network Delay Time

Description

You are given a network of `n` nodes, labeled from `1` to `n`. You are also given `times`, a list of travel times as directed edges `times[i] = (u_i, v_i, w_i)`, where `u_i` is the source node, `v_i` is the target node, and `w_i` is the time it takes for a signal to travel from source to target.

We will send a signal from a given node `k`. Return *the* ***minimum*** *time it takes for all the* `n` *nodes to receive the signal*. If it is impossible for all the `n` nodes to receive the signal, return `-1`.

Example 1:




```
Input: times = [[2,1,1],[2,3,1],[3,4,1]], n = 4, k = 2
Output: 2
```

Example 2:

```
Input: times = [[1,2,1]], n = 2, k = 1
Output: 1
```

Example 3:

```
Input: times = [[1,2,1]], n = 2, k = 2
Output: -1
```

Constraints:

- `1 <= k <= n <= 100`
- `1 <= times.length <= 6000`
- `times[i].length == 3`
- `1 <= u_i, v_i <= n`
- `u_i != v_i`
- `0 <= w_i <= 100`
- All the pairs `(u_i, v_i)` are **unique**. (i.e., no multiple edges.)