# 2247. Maximum Cost of Trip With K Highways

Description

A series of highways connect `n` cities numbered from `0` to `n - 1`. You are given a 2D integer array `highways` where `highways[i] = [city1`$_i$`, city2`$_i$`, toll`$_i$`]` indicates that there is a highway that connects `city1`$_i$` and `city2`$_i$, allowing a car to go from `city1`$_i$ to `city2`$_i$ and **vice versa** for a cost of `toll`$_i$.

You are also given an integer `k`. You are going on a trip that crosses **exactly** `k` highways. You may start at any city, but you may only visit each city **at most** once during your trip.

Return *the* **maximum** *cost of your trip. If there is no trip that meets the requirements, return* `-1`.

Example 1:
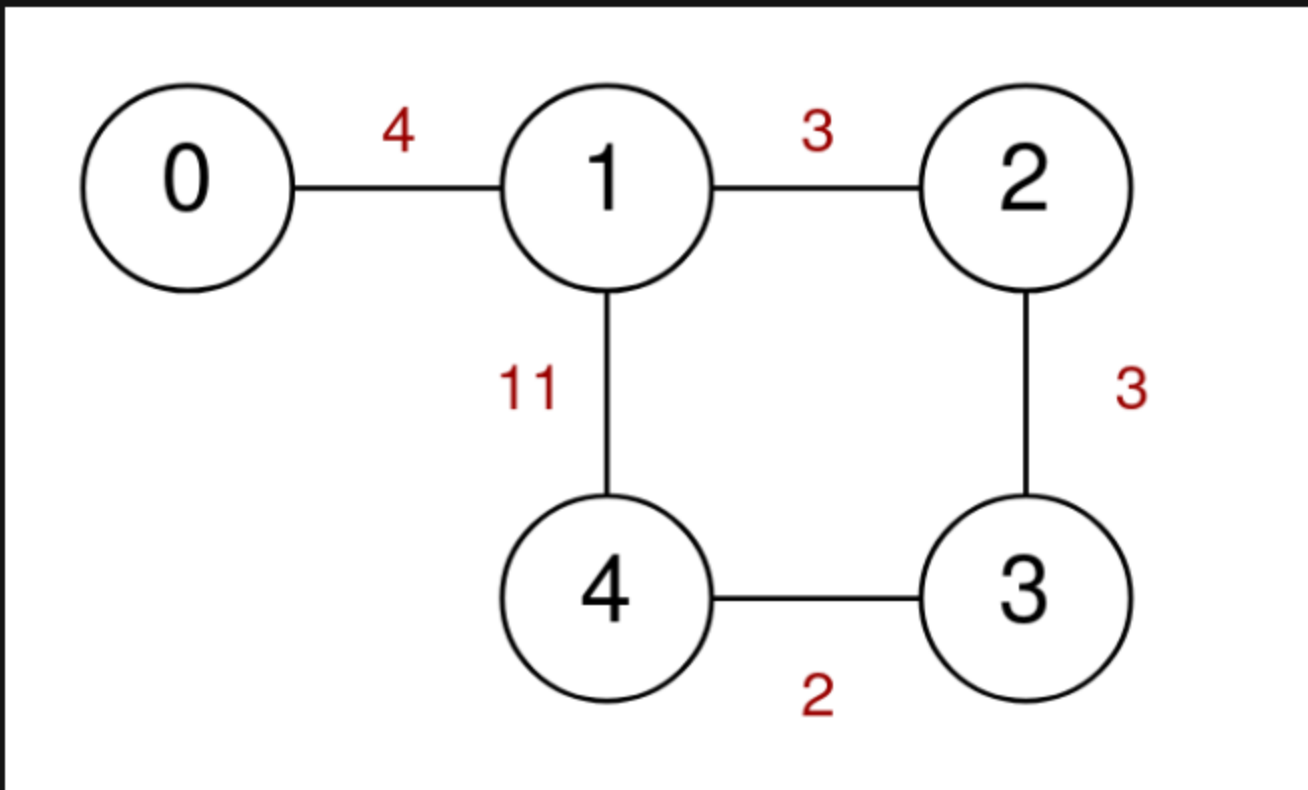

```
Input: n = 5, highways = [[0,1,4],[2,1,3],[1,4,11],[3,2,3],[3,4,2]], k = 3
Output: 17
Explanation:
One possible trip is to go from 0 -> 1 -> 4 -> 3. The cost of this trip is 4 + 11 + 2 = 17.
Another possible trip is to go from 4 -> 1 -> 2 -> 3. The cost of this trip is 11 + 3 + 3 = 17.
It can be proven that 17 is the maximum possible cost of any valid trip.

Note that the trip 4 -> 1 -> 0 -> 1 is not allowed because you visit the city 1 twice.
```

Example 2:
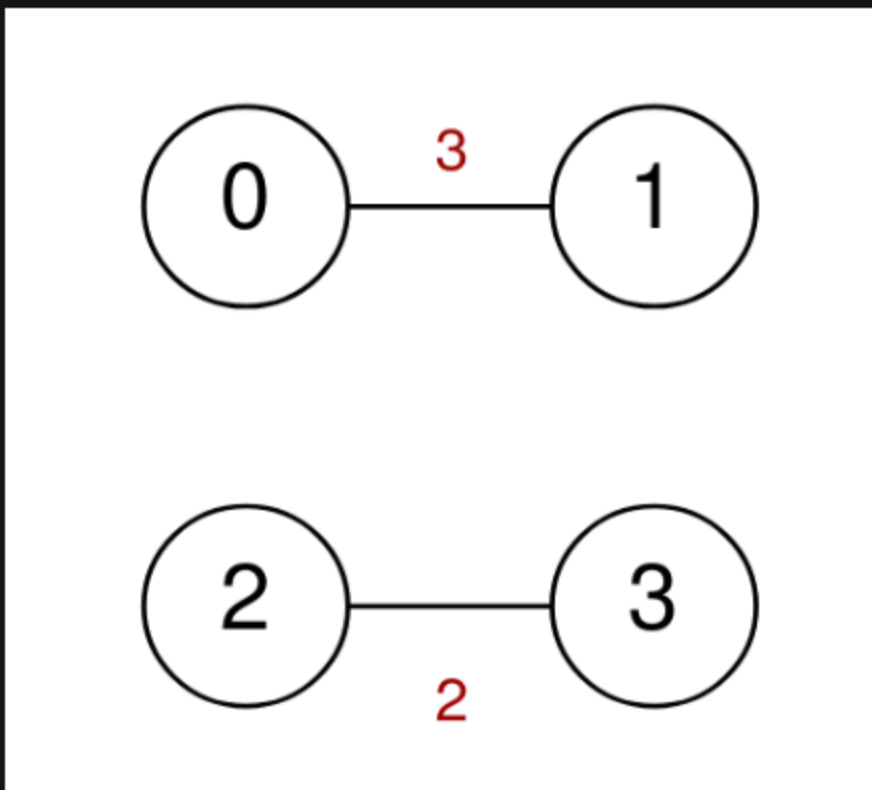

```
Input: n = 4, highways = [[0,1,3],[2,3,2]], k = 2
Output: -1
Explanation: There are no valid trips of length 2, so return -1.
```

Constraints:

- `2 <= n <= 15`
- `1 <= highways.length <= 50`
- `highways[i].length == 3`
- `0 <= city1`$_i$`, city2`$_i$` <= n - 1`
- `city1`$_i$` != city2`$_i$
- `0 <= toll`$_i$` <= 100`
- `1 <= k <= 50`
- There are no duplicate highways.