2093. Minimum Cost to Reach City With Discounts

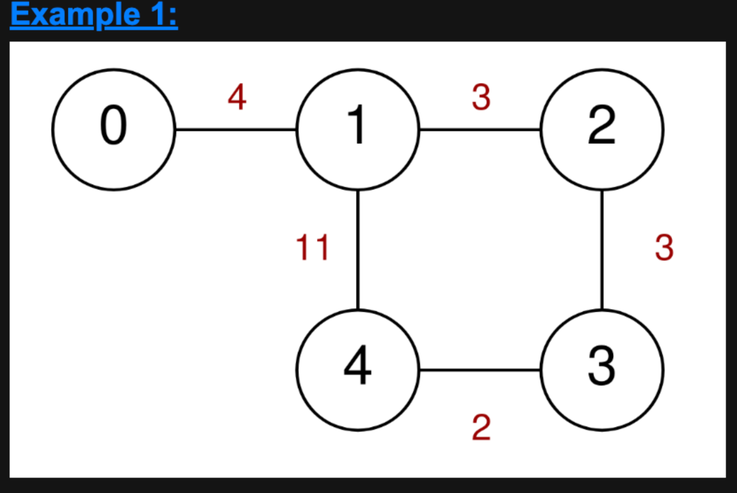
Description

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 `discounts` which represents the number of discounts you have. You can use a discount to travel across the `i th` highway for a cost of `toll i / 2` (**integer division**). Each discount may only be used **once** , and you can only use at most **one** discount per highway.

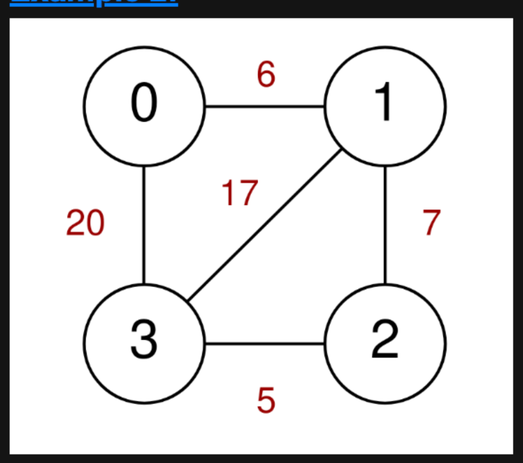
Return *the* ***minimum total cost*** *to go from city* `0` *to city* `n - 1` *, or* `-1` *if it is not possible to go from city* `0` *to city* `n - 1` *.*

Example 1:




```
Input: n = 5, highways = [[0,1,4],[2,1,3],[1,4,11],[3,2,3],[3,4,2]], discounts = 1
Output: 9
Explanation:
Go from 0 to 1 for a cost of 4.
Go from 1 to 4 and use a discount for a cost of 11 / 2 = 5.
The minimum cost to go from 0 to 4 is 4 + 5 = 9.
```

Example 2:

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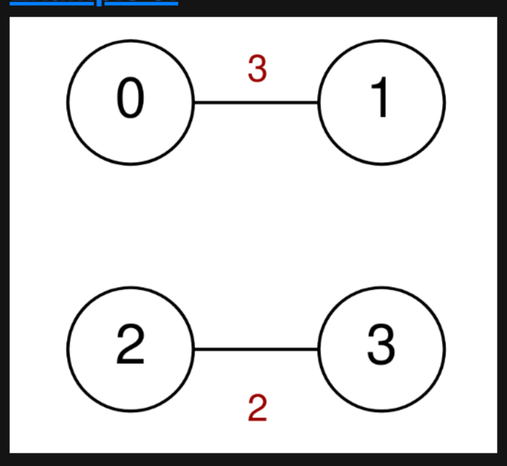
Input: n = 4, highways = [[1,3,17],[1,2,7],[3,2,5],[0,1,6],[3,0,20]], discounts = 20
Output: 8
Explanation:
Go from 0 to 1 and use a discount for a cost of 6 / 2 = 3.
Go from 1 to 2 and use a discount for a cost of 7 / 2 = 3.
Go from 2 to 3 and use a discount for a cost of 5 / 2 = 2.
The minimum cost to go from 0 to 3 is 3 + 3 + 2 = 8.
```

Example 3:




```
Input: n = 4, highways = [[0,1,3],[2,3,2]], discounts = 0
Output: -1
Explanation:
It is impossible to go from 0 to 3 so return -1.
```

Constraints:

- `2 <= n <= 1000`
- `1 <= highways.length <= 1000`
- `highways[i].length == 3`
- `0 <= city1 i , city2 i <= n - 1`
- `city1 i != city2 i`
- `0 <= toll i <= 10 5`
- `0 <= discounts <= 500`
- There are no duplicate highways.