Ice-cream Obsession 3

Time Limit	Memory Limit
1 second	128 MB

Statement

A person has been found unconscious at an ice cream tasting event after suffering acute brain freeze.

You are the driver of the ambulance rushing this person to hospital. The country has N cities (numbered 1 to N) and M bidirectional roads between them of varying length. You are currently at city 1. You aren't going to make it to the hospital at city N in time, but you have a trick up your sleeve.

Using your portal gun, you can teleport from a city to any neighbouring city you can get to by road, effectively reducing the distance of that road to zero. However, you can only use your portal gun once.

With your portal gun powers, what is the minimum distance you need to travel by road to get from city 1 to city N?

Input

- The first line of input contains the integers N and M.
- The next M lines contain three integers: a, b, w, meaning there is a bidirectional road from city a to b of length w metres.

Output

Output a single integer; the shortest path length.

Sample Input 1

```
5 5
1 2 1
1 3 2
2 4 2
3 4 3
4 5 1
```

Sample Output 1

```
2
```

Constraints

- $1 \leq N \leq 10^5$
- $1 \leq M \leq 2 \times 10^5$
- $1 \leq w \leq 10^4$
- You are guaranteed a path exists from 1 to N.

- There are no self-edges and at most one road goes from a to b for any cities a, b.

Subtasks

Number	Points	Other constraints
1	30	$N \leq 1000$
2	10	$w = 1$ for all edges
3	60	No other constraints