

## Problem D - Too Many Cars

The Netherlands is also taking an interest in your skills as they also have a problem. Lots of people from Dortmund like to visit Texel and many of them are going by car. Texel is an island and boats are needed to transport cars from the mainland (Den Helder) to Texel. Each boat can carry at most 1000 cars at once and travels once every *day* from Den Helder to Texel. The Netherlands wants to be prepared for the worst case scenario and needs your help determining how many boats they could need. There is only a finite number of roads between Dortmund and every road has a fixed capacity of cars it can support (this number is the same in *both* directions, i.e. if a road can support 50 cars between Duisburg and Venlo, 50 cars can travel from Duisburg to Venlo and 50 cars can travel from Venlo to Duisburg). The Netherlands provide you with a full list of their roads and how many cars each road can support per *hour*. Take care that between two cities multiple roads can exist with different capacities.

### Input

The input consists of:

- one line with two integers  $n$  ( $2 \leq n \leq 1000$ ) and  $m$  ( $1 \leq m \leq 1000$ ), where  $n$  is the number of cities and  $m$  are the number of roads.
- $m$  lines, each corresponding to one road and containing three integers  $i, j$ , and  $c$ . Integers  $i$  and  $j$  represent the cities this road ends in and  $c$  the number of cars that can travel over the road each hour.

Furthermore, Dortmund has index 1 and Den Helder has index  $n$ .

### Output

Output one integer representing the smallest possible number of boats that could be necessary.

#### Sample Input 1

```
3 2
1 2 10
2 3 10
```

#### Sample Output 1

```
1
```

#### Sample Input 2

```
4 5
1 2 100
1 3 10
1 4 20
2 3 20
2 4 200
```

#### Sample Output 2

```
4
```