

Problem Statement

Russian

Devendra is on cloud nine after seeing his crush smiling at him in class. At that very moment his professor singles him out and asks him a question. Devendra's mind is all too fuzzy with his crush and her smile to concentrate on anything else. Help him solve the problem :

You are given a list of size N , initialized with zeroes. You have to perform M operations on the list and output the maximum of final values of all the N elements in the list. For every operation, you are given three integers a , b and k and you have to add value k to all the elements ranging from index a to b (both inclusive).

Input Format

First line will contain two integers N and M separated by a single space.

Next M lines will contain three integers a , b and k separated by a single space.

Numbers in list are numbered from 1 to N .

Output Format

A single line containing *maximum value in the updated list*.

Constraints

$$3 \leq N \leq 10^7$$

$$1 \leq M \leq 2 * 10^5$$

$$1 \leq a \leq b \leq N$$

$$0 \leq k \leq 10^9$$

Sample Input #00

```
5 3
1 2 100
2 5 100
3 4 100
```

Sample Output #00

```
200
```

Explanation

After first update list will be 100 100 0 0 0 .

After second update list will be 100 200 100 100 100 .

After third update list will be 100 200 200 200 100 .

So the required answer will be 200.

Note

The initial testcases are easy and naive solutions might pass. Only efficient solutions can pass the additional testcases.