



List Max

1

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.

2

For every operation, you are given three integers a , b and k . The value k needs to be added to all the elements ranging from index a through b (both inclusive).

3

4

Constraints

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

5

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

6

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

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

7

Input Format

The first line will contain two integers N and M separated by a space.

8

The next M lines will each contain three integers a , b and k separated by a space. The numbers in the list are numbered from 1 to N .

9

Output Format

A single integer on a separate line containing the *maximum value in the list after all the operations are completed*.

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.

Sample Input #01

```
4 3
2 3 603
1 1 286
4 4 882
```

Sample output #01

```
882
```

Explanation

After first update list will be 0 603 603 0

After second update list will be 286 603 603 0

After third update list will be 286 603 603 882

So the required answer will be 882.

Note

The initial test cases are easy and naive solutions might pass, but there are additional test cases that can only be passed with efficiently designed solutions.

YOUR ANSWER

Javascript



[Click here](#) to know how to read from STDIN and write to STDOUT



```
1 process.stdin.resume();
2 process.stdin.setEncoding("ascii");
3 var input = "";
4 ▼ process.stdin.on("data", function (chunk) {
5     input += chunk;
6 });
7 ▼ process.stdin.on("end", function () {
8     // now we can read/parse input
9 });
```

Line: 1 Col: 1



Test against custom input

Run Code

Submit code & Continue

[Download sample testcases](#)

The input/output files have Unix line endings. Do not use Notepad to edit them on windows.

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