Array Manipulation

Starting with a 1-indexed array of zeros and a list of operations, for each operation add a value to each of the array element between two given indices, inclusive. Once all operations have been performed, return the maximum value in your array.

For example, the length of your array of zeros $n = 10$. Your list of queries is as follows:

```
a b k
1 5 3
4 8 7
6 9 1
```

Add the values of k between the indices a and b inclusive:

```
idx  1 2 3  4  5 6 7 8 9 10
[0,0,0, 0, 0,0,0,0,0, 0]
[3,3,3, 3, 3,0,0,0,0, 0]
[3,3,3,10,10,7,7,7,0, 0]
[3,3,3,10,10,7,8,8,1, 0]
```

The largest value is 8 after all operations are performed.

Input Format

The first line contains two space-separated integers n and m, the size of the array and the number of operations.
Each of the next m lines contains three space-separated integers a, b and k, the left index, right index and summand.

Constraints

- $3 \leq n \leq 10^7$
- $1 \leq m \leq 2 * 10^5$
- $1 \leq a \leq b \leq n$
- $0 \leq k \leq 10^9$

Output Format

Return the integer maximum value in the finished array.

Sample Input

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

Sample Output

```
200
```

Explanation

After the first update list will be `100 100 0 0 0`.
After the second update list will be `100 200 100 100 100`.
After the third update list will be `100 200 200 200 100`.

The required answer will be 200.