

Problem

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

Example

$n = 10$

$queries = [[1, 5, 3], [4, 8, 7], [6, 9, 1]]$

Submissions

Queries are interpreted as follows:

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

Leaderboard

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

index->	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]									
	[3,3,3,10,10,8,8,8,1, 0]									

Discussions

The largest value is **10** after all operations are performed.

Function Description

Complete the function arrayManipulation in the editor below.

arrayManipulation has the following parameters:

- int n - the number of elements in the array
- int queries[q][3] - a two dimensional array of queries where each queries[i] contains three integers, a, b, and k.

Editorial

Returns

- int - the maximum value in the resultant array

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

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

Sample Input

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

Sample Output

200

Change Theme

Language

Java 8

```
22  */
23
24  public static long arrayManipulation(int n, List<List
25  // Write your code here
26      long ans = 0;
27
28      long arr[] = new long[n+2];
29
30      for(int i=0; i<queries.size(); i++){
31          int l = queries.get(i).get(0);
32          int r = queries.get(i).get(1);
33          int k = queries.get(i).get(2);
34
35          arr[r+1]-=k;
36          arr[l]+=k;
37      }
38
39      for(int i=1; i<=n; i++){
40          arr[i]+=arr[i-1];
41      }
42
43      for(int i=1; i<=n; i++){
44          ans = Math.max(ans,arr[i]);
45      }
46
47      return ans;
48  }
49
```

Line: 86 Col: 1

Upload Code as File

Run Code

Submit Code



Test against custom input

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Earn a certificate in Problem Solving

Kudos on your progress! Take the HackerRank Skills Certification test and enrich your profile

Get Certified

Test case 0

Test case 1

Test case 2

Test case 3

Compiler Message

Success

Input (stdin)

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

Download