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# AP Addition

? Ask Doubt

Time-Limit: 4 sec

Score: 0/100

Difficulty: 

★ ★ ★

Memory: 256 MB

Accepted Submissions: 100

Relevant For: 

AZ-201

AZ-202

AZ-301

## Description

Given an array of  $N$  integers and  $Q$  queries. Initially, all the elements of the array have value 0.

In each query 4 integers  $A, D, L, R$  is given, which means perform AP addition

$Arr[L] += A$

$Arr[L+1] += A+D$

$Arr[L+2] += A+2D$

$Arr[L+3] += A+3D$

.

.

.

.

$Arr[R] += A+(R-L)*D.$

After performing all the operations. Print the final array %  $10^9+7$ .

## Input Format

The first line contains two space-separated integers  $N, Q$  where  $1 \leq N \leq 10^6, 1 \leq Q \leq 10^6$ .

Next  $Q$  lines contain four space-separated integers  $A, D, L, R$  where  $0 \leq A, D \leq 10^4, 1 \leq L \leq R \leq N$ .

## Output Format

Print the  $N$  space-separated integer representing the final array % $10^9+7$ .

## Sample Input 1

Copy

```
5 5
1 3 1 5
2 4 2 2
5 6 3 5
6 9 5 5
1 4 2 4
```

C++14[GCC] ▾

Submit

1

