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# GP 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 and an integer  $K$ . Initially, all the elements of the array have value 0.

In each query 3 integers  $A, L, R$  is given, which means perform GP addition

$$Arr[L] += A$$

$$Arr[L+1] += AK$$

$$Arr[L+2] += AKK$$

$$Arr[L+3] += AKKK$$

.

.

.

.

$$Arr[R] += A * (K^{(R-L)})$$

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

## Input Format

The first line contains three space-separated integers  $N, Q, K$  where  $1 \leq N \leq 10^6, 1 \leq Q \leq 10^6, 1 \leq K \leq 10^9$ .

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

## Output Format

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

## Sample Input 1

Copy

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

C++14[GCC] ▾

Submit

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