

# Filling Jars

Animesh has  $N$  empty candy jars, numbered from  $1$  to  $N$ , with infinite capacity. He performs  $M$  operations. Each operation is described by  $3$  integers,  $a$ ,  $b$ , and  $k$ . Here,  $a$  and  $b$  are indices of the jars, and  $k$  is the number of candies to be added inside each jar whose index lies between  $a$  and  $b$  (both inclusive). Can you tell the average number of candies after  $M$  operations?

## Input Format

The first line contains two integers,  $N$  and  $M$ , separated by a single space.  
 $M$  lines follow; each of them contains three integers,  $a$ ,  $b$ , and  $k$ , separated by spaces.

## Constraints

$$\begin{aligned} 3 &\leq N \leq 10^7 \\ 1 &\leq M \leq 10^5 \\ 1 &\leq a \leq b \leq N \\ 0 &\leq k \leq 10^6 \end{aligned}$$

## Output Format

A single line containing the average number of candies across  $N$  jars, *rounded down* to the nearest integer.

**Note:** *Rounded down* means finding the greatest integer which is less than or equal to the given number. E.g.  $13.65$  and  $13.23$  are rounded down to  $13$ , while  $12.98$  is rounded down to  $12$ .

## Sample Input

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

## Sample Output

```
160
```

## Explanation

Initially each of the jars contains  $0$  candies

```
0 0 0 0 0
```

First operation:

```
100 100 0 0 0
```

Second operation:

```
100 200 100 100 100
```

Third operation:

100 200 200 200 100

Total =  $800$ , Average =  $800/5 = 160$