

# 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 the  $M$  lines contain three integers  $a$ ,  $b$  and  $k$  separated by single space.

## 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 given number. Eg,  $13.65$  and  $13.23$  is rounded down to  $13$ , while  $12.98$  is rounded down to  $12$ .

## Constraints

$3 \leq N \leq 10^7$   
 $1 \leq M \leq 10^5$   
 $1 \leq a \leq b \leq N$   
 $0 \leq k \leq 10^6$

## Sample Input #00

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

## Sample Output #00

```
160
```

## Explanation

Initially each of the jar 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 =  $800/5 = 160$