

E. Addition to Segment

time limit per test: 1 second

memory limit per test: 1024 megabytes

input: standard input

output: standard output

There is an array of n elements, initially filled with zeros. You need to write a data structure that processes two types of queries:

- add to the segment from l to $r - 1$ the number v ,
- find the current value of element i .

You may have heard that such requests can be made using the tree of segments with mass change operations (we will talk about it in the next lesson), but this problem can be solved using a regular segment tree.

Input

The first line contains two numbers n and m ($1 \leq n, m \leq 100000$), the size of the array and the number of operations. The following lines contain the description of the operations. The description of each operation is as follows:

- 1 $l\ r\ v$: add the value v to the segment from l to $r - 1$ ($0 \leq l < r \leq n, 0 \leq v \leq 10^9$).
- 2 i : find the value of the element with index i ($0 \leq i < n$).

Output

For each operation of the second type, print the corresponding value.

Example

input	Copy
5 5 1 0 3 3 2 1 1 2 4 4 2 3 2 4	
output	Copy
3 4 0	

→ Submit?

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

