

## A. Segment Tree for the Sum

time limit per test: 1 second  
memory limit per test: 1024 megabytes  
input: standard input  
output: standard output

In this task, you need to write a regular segment tree for the sum.

### Input

The first line contains two integers  $n$  and  $m$  ( $1 \leq n, m \leq 100000$ ), the size of the array and the number of operations. The next line contains  $n$  numbers  $a_i$ , the initial state of the array ( $0 \leq a_i \leq 10^9$ ). The following lines contain the description of the operations. The description of each operation is as follows:

- 1  $i$   $v$ : set the element with index  $i$  to  $v$  ( $0 \leq i < n, 0 \leq v \leq 10^9$ ).
- 2  $l$   $r$ : calculate the sum of elements with indices from  $l$  to  $r - 1$  ( $0 \leq l < r \leq n$ ).

### Output

For each operation of the second type print the corresponding sum.

### Example

input	Copy
<pre>5 5 5 4 2 3 5 2 0 3 1 1 1 2 0 3 1 3 1 2 0 5</pre>	
output	Copy
<pre>11 8 14</pre>	

→ Submit?

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

Choose file: Choose File No file chosen

Submit

