Test Problem ID: problem

Bla bla bla

Input

Input consists of three lines. The first line of input contains integers L, N where 0 < L < 10.000 is the length of the array and 0 < N < 10.000 is the number of operations. The second line of input consists of the integer sequence a_0 , a_1 ,..., a_{L-1} . You can assume that -10.000 $< a_a < 10.000$. Following the second line of input comes N operations written in one of two forms:

- Updates are of the form 'update i v', where i is the index and v is the value.
- Min-queries are of the form 'min s e' where s is the start-index of the query and e is the end-index of the query.

Output

For every min-query, print out one integer: The minimum-value in the given range from s to e.

Sample Input 1

Sample Output 1

9 4	-33
-5 22 3 7 55 -33 4 14 88	3
min 1 6	-5
min 2 3	-175
update 2 -175	
update 2 -175 min 2 6	

Sample Input 2

Sample Output 2

6 6	-24
789 1234324 -24 9 -3004 55	-300
min 3 4	-3004
update 3 -300	-3004
min 3 4	
min 5 6	
update 4 -3002	
min 1 6	