Kth Number
🔒 locked

Problem	Submissions	Leaderboard	Discussions	Editorial

You are given an array of N positive integers, $A_1, A_2, \ldots, A_n$. You have to answer Q queries. Each query consists of two integers L and K.

For each query, you have to consider all the elements of array greater than or equal to L, in *original order of occurrence* in array A and then find the Kth element from the selected elements. It is guaranteed that the Kth number will exist.

Input Format

The first line contains two integers N and Q. The next line contains N space separated integers, representing the array, $A_1, A_2, \ldots, A_n$.

Each of the next Q lines contain two space separated integers L and K.

Constraints:

$1 \leq N \leq 10^5$

$1 \leq Q \leq 10^5$

$1 \leq A_i \leq 10^5$

$1 \leq L \leq 10^5$

$1 \leq K \leq 10^5$

Note on TL: C/cpp 1sec, Java 3sec

Output Format

Output Q lines, the answer for each query.

Sample Input

```
10 4
1 9 2 8 3 7 4 6 5 10
4 4
3 2
1 6
8 1
```

Sample Output

```
4
8
7
9
```

Explanation

L = 4, K = 4

Select all the elements greather than or equal to 4, preserving the order of elements.

Elements are *[9, 8, 7, 4, 6, 5, 10]*. Thus 4th element is *4*.

L = 3, K = 2

Select all the elements greather than or equal to 3, preserving the order of elements.

Elements are *[9, 8, 3, 7, 4, 6, 5, 10]*. Thus 2nd element is *8*.

L = 1, K = 7

Select all the elements greather than or equal to 1, preserving the order of elements.

Elements are *[1, 9, 2, 8, 3, 7, 4, 6, 5, 10]*. Thus 6th element is *7*.

L = 8, K = 1

Select all the elements greather than or equal to 4, preserving the order of elements.

Elements are *[9, 8, 10]*. Thus 1st element is *9*.

f ⨯ in

Submissions: 1992
Max Score: 120
Difficulty: Hard

Rate This Challenge:
☆☆☆☆☆

More

C++14   ⤢ ⚙