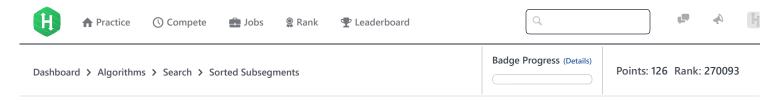
15/11/2017 HackerRank



Sorted Subsegments



Consider an array $A = [a_0, a_1, \ldots, a_{n-1}]$ of n integers. We perform q queries of the following type on A:

• Sort all the elements in the subsegment a_{l_i} , a_{l_i+1} , \ldots , a_{r_i} .

Given \pmb{A} , can you find and print the value at index \pmb{k} (where $\pmb{0} \leq \pmb{k} < \pmb{n}$) after performing \pmb{q} queries?

Input Format

The first line contains three positive space-separated integers describing the respective values of n (the number of integers in A), q (the number of queries), and k (an index in A).

The next line contains n space-separated integers describing the respective values of $a_0, a_1, \ldots, a_{n-1}$.

Each line j of the q subsequent lines contain two space-separated integers describing the respective l_j and r_j values for query j.

Constraints

- $1 \le n, q \le 75000$
- $0 \le k \le n-1$
- $-10^9 \le a_i \le 10^9$
- $0 \le l_i \le r_i < n$

Output Format

Print a single integer denoting the value of a_k after processing all q queries.

Sample Input 0

- 3 1 1
- 3 2 1
- 0 1

Sample Output 0

3

Explanation 0

$$A = [3, 2, 1]$$

There is only one query to perform. When we sort the subarray ranging from index $\mathbf{0}$ to index $\mathbf{1}$, we get A' = [2, 3, 1]. We then print the element at index $\mathbf{1}$, which is $\mathbf{3}$.

Sample Input 1

- 4 2 0
- 4 3 2 1

0 2

Sample Output 1

2

Explanation 1

```
A = [4, 3, 2, 1]
```

There are q = 2 queries:

- 1. When we sort the subarray ranging from index $\mathbf{0}$ to index $\mathbf{2}$, we get $\mathbf{A}' = [\mathbf{2}, \mathbf{3}, \mathbf{4}, \mathbf{1}]$.
- 2. When we sort the subarray of A' from index 1 to index 3, we get A'' = [2, 1, 3, 4].

Having performed all of the queries, we print the element at index 0, which is 2.

f in
Submissions:655
Max Score:80
Difficulty: Hard
Rate This Challenge:
☆☆☆☆☆

```
Current Buffer (saved locally, editable) & 🗘
                                                                                           Java 7
                                                                                                                             Ö
 1 ▼ import java.io.*;
   import java.util.*;
 3
    import java.text.*;
    import java.math.*;
    import java.util.regex.*;
 5
 7 ▼ public class Solution {
 8
         public static void main(String[] args) {
 9 ▼
             /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
10 ▼
11
         }
12
   }
                                                                                                                     Line: 1 Col: 1
                                                                                                         Run Code
                                                                                                                      Submit Code
                      Test against custom input
1 Upload Code as File
```

Join us on IRC at #hackerrank on freenode for hugs or bugs.

Contest Calendar | Blog | Scoring | Environment | FAQ | About Us | Support | Careers | Terms Of Service | Privacy Policy | Request a Feature