

*Though Rujia Liu usually sets hard problems for contests (for example, regional contests like Xi'an 2006, Beijing 2007 and Wuhan 2009, or UVa OJ contests like Rujia Liu's Presents 1 and 2), he occasionally sets easy problem (for example, 'the Coco-Cola Store' in UVa OJ), to encourage more people to solve his problems :D*

Given an array, your task is to find the  $k$ -th occurrence (from left to right) of an integer  $v$ . To make the problem more difficult (and interesting!), you'll have to answer  $m$  such queries.

## Input

There are several test cases. The first line of each test case contains two integers  $n, m$  ( $1 \leq n, m \leq 100,000$ ), the number of elements in the array, and the number of queries. The next line contains  $n$  positive integers not larger than 1,000,000. Each of the following  $m$  lines contains two integer  $k$  and  $v$  ( $1 \leq k \leq n, 1 \leq v \leq 1,000,000$ ). The input is terminated by end-of-file (EOF).

## Output

For each query, print the 1-based location of the occurrence. If there is no such element, output '0' instead.

## Sample Input

```
8 4
1 3 2 2 4 3 2 1
1 3
2 4
3 2
4 2
```

## Sample Output

```
2
0
7
0
```