Circular Array Rotation

John Watson performs an operation called a *right circular rotation* on an array of integers, $[a_0, a_1, \ldots a_{n-1}]$. After performing one *right circular rotation* operation, the array is transformed from $[a_0, a_1, \ldots a_{n-1}]$ to $[a_{n-1}, a_0, \ldots, a_{n-2}]$.

Watson performs this operation k times. To test Sherlock's ability to identify the current element at a particular position in the rotated array, Watson asks q queries, where each query consists of a single integer, m, for which you must print the element at index m in the rotated array (i.e., the value of a_m).

Input Format

The first line contains 3 space-separated integers, n, k, and q, respectively.
The second line contains n space-separated integers, where each integer i describes array element a_i (where $0 \leq i < n$).
Each of the q subsequent lines contains a single integer denoting m.

Constraints

- $1 \leq n \leq 10^5$
- $1 \leq a_i \leq 10^5$
- $1 \leq k \leq 10^5$
- $1 \leq q \leq 500$
- $0 \leq m \leq N - 1$

Output Format

For each query, print the value of the element at index m of the rotated array on a new line.

Sample Input

```
3 2 3
1 2 3
0
1
2
```

Sample Output

```
2
3
1
```

Explanation

After the first rotation, the array becomes $[3, 1, 2]$.
After the second (and final) rotation, the array becomes $[2, 3, 1]$.

Let's refer to the array's final state as array b. For each query, we just have to print the value of b_m on a new line:

1. $m = 0$, so we print 2 on a new line.
2. $m = 1$, so we print 3 on a new line.
3. $m = 2$, so we print 1 on a new line.