Problem Statement **Suggest Edit**

Aahad and Harshit always have fun by solving problems. Harshit took a sorted array and rotated it clockwise by an unknown amount. For example, he took a sorted array = [1, 2, 3, 4, 5] and if he rotates it by 2, then the array becomes: [4, 5, 1, 2, 3].

After rotating a sorted array, Aahad needs to answer Q queries asked by Harshit, each of them is described by one integer Q[i] which Harshit wanted him to search in the array. For each query, if he founds it, he had to shout the index of the number, otherwise, he had to shout -1.

Input Format:

The first line of input contains the size of the array: N

The second line contains N single space-separated integers: A[i].

The third line of input contains the number of queries: Q

The next Q lines of input contain: the number which Harshit wants Aahad to search: Q[i]

Output Format:

For each test case, print the index of the number if found, otherwise -1.

Output for every test case will be printed in a separate line.

Note:

You are not required to explicitly print the expected output, just return it and printing has already been taken care of.

Constraints:

```
1 <= N <= 10^6
-10^9 <= A[i] <= 10^9
1 <= Q <= 500
-10^9 <= Q[i] <= 10^9
```

Time Limit: 1sec

Sample Input 1:

```
4
2 5 -3 0
2
5
0
```

Sample Output 1:

```
1
3
```

Sample Input 2:

```
5
100 -2 6 10 11
2
100
6
```

Sample Output 2:

```
0
2
```