Bitonic Array

? Ask Doubt

Time-Limit: 2 sec Score: 100.00/100 Difficulty :

Memory: 256 MB Accepted Submissions: 100 Relevant For: AZ-201

Description

Given a bitonic array *A* consisting of *N* integers and an integer *Q*. In each query, you will be given an integer *K*, find the positions of *K* in *A*. Integer *K* exists in *A.*

Bitonic array - A bitonic sequence is a sequence with A[1]<A[2]<A[3]....A[k]>A[k+1]>A[k+2]....>A[N] for some 1<=K≤N.

Input Format

The first line contains *T*, the number of test cases (*1<=T<=10000*).

The first line contains two space separated-integer *N, Q* where *1<=N<=10^5, 1<=Q<=10^6.*

The second line contains N space-separated integers $A_1,A_2....A_N$ where *-1e9<=A_i<=1e9*.

Next Q lines contains an integer *K*, *-1e9<=K<=1e9*.

Sum of *N, Q* across all test case *≤10^6*

Output Format

For each test case print the positions of *K* in *A* in sorted order in a new line.

Positions are 1-indexed.

Sample Input 1

Copy

```
1
6 4
1 2 5 3 2 1
1
2
5
3
```

Sample Output 1

Copy

```
1 6
2 5
3
```

C++14[GCC]

Submit

```
1
```