PROBLEMS   SUBMIT CODE   MY SUBMISSIONS   STATUS   STANDINGS   CUSTOM INVOCATION

M. distinct elements

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

you have an array a of size n, and you need to answer q queries. each query need you to print number of distinct elements less than x and number of distinct elements greater than x.

Input

the first line contains two integer n the size of array, and q number of queries, $(1 \leq n, q \leq 10^5)$.

The second line contains n numbers $a_i (1 \leq a_i \leq 10^5)$.

the next q lines contains one number $x (1 \leq x \leq 10^5)$.

Output

for each query print in one line number of distinct elements less than x and number of distinct elements greater than x.

Example

input	Copy
7 5	
1 1 2 3 3 4 5	
1	
2	
3	
4	
5	

output	Copy
0 4	
1 3	
2 2	
3 1	
4 0	

→ Group Contests ⌄

- Standard #5 (Bits , bit-masking)
- Standard #4 (Binary search , two pointers)
- Standard #3 (set , sorting, compare function , map)
- Standard #2 (binary search , stack , queue, deque , priority queue)
- Standard #1 (Frequency , prefix sum , vector , pair ,struct)

Standard #1 (Frequency , prefix sum , vector , pair ,struct)

Finished

Practice

⭐

→ Virtual participation ⌄

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest]

→ Submit?

Language: GNU G++20 11.2.0 (64 bit, w ⌄

Choose file: [Choose File] No file chosen

[Submit]

→ Last submissions

Submission	Time	Verdict
226503986	Oct/04/2023 01:41	Accepted
226339011	Oct/02/2023 21:13	Accepted
226338836	Oct/02/2023 21:12	Wrong answer on test 1
226338521	Oct/02/2023 21:09	Accepted
226338151	Oct/02/2023 21:06	Wrong answer on test 2
226336895	Oct/02/2023 20:55	Wrong answer on test 1
226336812	Oct/02/2023 20:54	Wrong answer on test 2

226293401	Oct/02/2023 15:21	Wrong answer on test 2
226290811	Oct/02/2023 15:18	Wrong answer on test 2
226289847	Oct/02/2023 15:10	Wrong answer on test 2

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