

Compare with K

You are given n integers and m query. For each query, you are given a number b , you should output the number of elements among given integers that less than or equal to b .

Input

- The first line contains two integers n, m ($1 \leq n, m \leq 10^5$).
- The second line contains n integers ($-10^9 \leq a_i \leq 10^9$).
- The third line contains m integers representing m queries ($-10^9 \leq b_j \leq 10^9$).

Output

For each query, output the number of elements in a that less than or equal to b .

Sample

https://drive.google.com/file/d/1F2NB_Z_uJG3avJO4sb-uUTbPWK0QQePS/view?usp=sharing

Input	Output
5 3 0 3 5 6 9 4 2 8	2 1 4