Buy, Buy, and Buy!

Jojo's new girlfriend is a shopaholic girl, she likes shopping too much, sometimes she needs time to choose which items she will buy. Jojo was getting bored in waiting for his girlfriend and decided to help her by reducing the choice of goods, which is if the price of the item exceeds her money. Jojo was afraid to disappoint her, so he asked you to count the items she could buy too.

Format Input

The input consists of several lines in **"testdata.in"** file.

The first line consists of N and M, N the number of items available at the store and M the query of the money that Jojo's girlfriend has.

The second line consists of N integer A_i, the price of the item in the store (Unsorted).

The third line, consisting of M integers M_i, the amount of money from Jojo's girlfriend.

Format Output

Output "Query #X: Y" for each question, where X is the query number and Y the number of items that can be bought by her, if she has M_i money.

Constraints

$1 \leq N \leq 10000$
$1 \leq M \leq 50000$
$1 \leq A_i \leq 10^5$
$1 \leq M_i \leq 10^5$

Sample Input (testdata.in)	Sample Output (standard output)
5 5 1 2 3 4 5 5 4 3 2 1	Query #1: 5 Query #2: 4 Query #3: 3 Query #4: 2 Query #5: 1

Explanation:

Jojo's girlfriend has 5 variations of money.
- For money of 5, she can buy 5 items from the store, which has a price 1,2,3,4 and 5.
- For money of 4, she can buy 4 items from the store, which has a price 1,2,3, and 4.
- For money of 3, she can buy 3 items from the store, which has a price 1,2, and 3.
- For money of 2, she can buy 2 items from the store, which has a price 1 and 2.
- For money of 1, she only can buy 1 item from the store.