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### **CSES Problem Set**

# **Concert Tickets**

TASK | SUBMIT | RESULTS | STATISTICS | TESTS

### **Time limit:** 1.00 s **Memory limit:** 512 MB

There are n concert tickets available, each with a certain price. Then, m customers arrive, one after another.

Each customer announces the maximum price they are willing to pay for a ticket, and after this, they will get a ticket with the nearest possible price such that it does not exceed the maximum price.

### Input

The first input line contains integers n and m: the number of tickets and the number of customers.

The next line contains n integers  $h_1, h_2, \ldots, h_n$ : the price of each ticket.

The last line contains m integers  $t_1, t_2, \ldots, t_m$ : the maximum price for each customer in the order they arrive.

## **Output**

Print, for each customer, the price that they will pay for their ticket. After this, the ticket cannot be purchased again.

If a customer cannot get any ticket, print -1.

#### **Constraints**

- $1 < n, m < 2 \cdot 10^5$
- $1 < h_i, t_i < 10^9$

## **Example**

Input:

5 3 7 8 5 4 8 3

Output:

### Sorting and Searching

**Distinct Numbers Apartments** Ferris Wheel Concert Tickets **Restaurant Customers** Movie Festival Sum of Two Values Maximum Subarray Sum

#### Your submissions

CSES - Concert Tickets

3 8 -1