

Problem

An arcade game player wants to climb to the top of the leaderboard and track their ranking. The game uses [Dense Ranking](#), so its leaderboard works like this:

- The player with the highest score is ranked number **1** on the leaderboard.
- Players who have equal scores receive the same ranking number, and the next player(s) receive the immediately following ranking number.

Example

*ranked* = [100, 90, 90, 80]  
*player* = [70, 80, 105]

The ranked players will have ranks **1**, **2**, **2**, and **3**, respectively. If the player's scores are **70**, **80** and **105**, their rankings after each game are **4<sup>th</sup>**, **3<sup>rd</sup>** and **1<sup>st</sup>**. Return [4, 3, 1].

Function Description

Complete the climbingLeaderboard function in the editor below.

climbingLeaderboard has the following parameter(s):

- int ranked[n]: the leaderboard scores
- int player[m]: the player's scores

Returns

- int[m]: the player's rank after each new score

Input Format

The first line contains an integer ***n***, the number of players on the leaderboard.  
The next line contains ***n*** space-separated integers ***ranked[i]***, the leaderboard scores in decreasing order.  
The next line contains an integer, ***m***, the number games the player plays.  
The last line contains ***m*** space-separated integers ***player[j]***, the game scores.

Constraints

- $1 \leq n \leq 2 \times 10^5$
- $1 \leq m \leq 2 \times 10^5$
- $0 \leq ranked[i] \leq 10^9$  for  $0 \leq i < n$
- $0 \leq player[j] \leq 10^9$  for  $0 \leq j < m$
- The existing leaderboard, ***ranked***, is in descending order.
- The player's scores, ***player***, are in ascending order.

Subtask

For **60%** of the maximum score:

- $1 \leq n \leq 200$
- $1 \leq m \leq 200$

Sample Input 1

	7
	100 100 50 40 40 20 10
	4
	5 25 50 120

Sample Output 1

6
4
2
1

Sample Input 2

6
100 90 90 80 75 60
5

```
12 # The function is expected to return an INTEGER_ARRAY.
13 # The function accepts following parameters:
14 # 1. INTEGER_ARRAY ranked
15 # 2. INTEGER_ARRAY player
16 #
17
18 def climbingLeaderboard(ranked, player):
19     # removing duplicates from the ranked list
20     ordered_map = {}
21     for rank in ranked:
22         if rank not in ordered_map: ordered_map[rank] = True
23
24     # duplicates have been removed, get back the list
25     ranked = list(ordered_map.keys())
26     stack = []
27
28     # resultant ranks of all the players according to their scores in list player
29     result = []
30
31     # this will help us not append the scores back into the ranked list from the stack
32     player.sort()
33
34     # assuming current score's rank to be the last, and we will update it as we compare it with scores in stack
35     counter = len(ranked) + 1
36
37     for score in player:
38
39         while len(ranked) != 0:
40             popped = ranked.pop()
41
42             if popped > score:
43                 result.append(counter)
44
45                 # for next comparison
46                 ranked.append(popped)
47                 # rank for this score has been determined break out of the loop
48                 break
49
50             counter -= 1
51
52         # when the while loop will determine that the current element's rank is 1
53         # the ranked list will get empty and the rank will not be appended
54         # hence, this check is necessary
55         if counter == 1: result.append(1)
56
57     return result
58
59
60 > if __name__ == '__main__': ...
```

Line: 60 Col: 27

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Congratulations

You solved this challenge. Would you like to challenge your friends?

