

Alice is playing an arcade game and wants to climb to the top of the leaderboard and wants to track her ranking. The game uses dense ranking, so its leaderboard works like this:

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

For example, the four players on the leaderboard have high scores of 100, 90, 90, 80. Those players will have ranks 1, 2, 2, and 3 respectively. If Alice's scores are 50, 90, 100, 120 her rankings after each game are 4, 2, 1, and 1.

Function Description

Create the *climbingLeaderboard* function. You should return an integer array where each element `res[j]` represents Alice's rank after `j`th game.

`climbingLeaderboard` has the following parameter(s):

- `scores`: an array of integers that represent leaderboard scores
- `alice`: an array of integers that represents Alice's scores

Sample input 1:

Array: *scores*

100 100 50 40 40 20 10

Array *alice*: 5 25 50 120

Sample output 1:

6

4

2

1

Explanation 1:

Alice starts playing with 7 players already on the leaderboard, which looks like this:

Rank	Name	Score
1	Emma	100
1	David	100
2	Caroline	50
3	Ritika	40
3	Tom	40
4	Heraldo	20
5	Riley	10

After Alice finishes game 0, her score is 5 and her ranking is 6:

Rank	Name	Score
1	Emma	100
1	David	100
2	Caroline	50
3	Ritika	40
3	Tom	40
4	Heraldo	20
5	Riley	10
6	Alice	5

After Alice finishes game 1, her score is 25 and her ranking is 4:

Rank	Name	Score
1	Emma	100
1	David	100
2	Caroline	50
3	Ritika	40
3	Tom	40
4	Alice	25
5	Heraldo	20
6	Riley	10

After Alice finishes game 2, her score is 50 and her ranking is tied with Caroline at 2:

Rank	Name	Score
1	Emma	100
1	David	100
2	Caroline	50
2	Alice	50
3	Ritika	40
3	Tom	40
4	Heraldo	20
5	Riley	10

After Alice finishes game 3, her score is 120 and her ranking is 1:

Rank	Name	Score
1	Alice	120
2	Emma	100
2	David	100
3	Caroline	50
4	Ritika	40
4	Tom	40
5	Heraldo	20
6	Riley	10

Sample input 2:

Array: *scores*

100 90 90 80 75 60

Array: *alice*

50 65 77 90 102

Sample Output 2

6

5

4

3

1