

Farthest Smaller Right

You are given an array **arr[]**. For each element at index *i* (0-based indexing), find the **farthest index** *j* to the right (i.e., *j* > *i*) such that **arr[j] < arr[i]**. If no such index exists for a given position, return **-1** for that index. Return the resulting array of answers.

Examples:

Input: arr[] = [2, 5, 1, 3, 2]

Output: [2, 4, -1, 4, -1]

Explanation: arr[0] = 2: Farthest smaller element to the right is arr[2] = 1.

arr[1] = 5: Farthest smaller element to the right is arr[4] = 2.

arr[2] = 1: No smaller element to the right → -1.

arr[3] = 3: Farthest smaller element to the right is arr[4] = 2.

arr[4] = 2: No elements to the right → -1.

Input: arr[] = [2, 3, 5, 4, 1]

Output: [4, 4, 4, 4, -1]

Explanation: arr[4] is the farthest smallest element to the right for arr[0], arr[1], arr[2] and arr[3].

Constraints:

$1 \leq \text{arr.size()} \leq 10^6$

$1 \leq \text{arr}[i] \leq 10^6$