

Find Next Smaller of Next Greater in an array

Given array of integer, find the next smaller of **next greater element** of every element in array. Elements for which no greater element exists or no smaller of greater element exist, print -1.

Examples:

Input : arr[] = {5, 1, 9, 2, 5, 1, 7}

Output: 2 2 -1 1 -1 -1 -1

Explanation :

Next Greater ->	Right Smaller
5 -> 9	9 -> 2
1 -> 9	9 -> 2
9 -> -1	-1 -> -1
2 -> 5	5 -> 1
5 -> 7	7 -> -1
1 -> 7	7 -> -1
7 -> -1	-1 -> -1

Input : arr[] = {4, 8, 2, 1, 9, 5, 6, 3}

Output : 2 5 5 5 -1 3 -1 -1