

Week 5

Problem 1

Problem Statement:

Given an array of n elements, for every element print the next greater element. The next greater element is the first element to the right which is larger than the element itself.

If there exists no larger element to the right then output -1.

Input:

The first line contains a single integer n , which is the number of elements in the array.

The second line contains n space separated integers which are the elements of the array.

Output:

Print n integers in a single line separated by a space, where each integer is the value of the next larger element or -1 if no such element exists.

Constraints:

$1 \leq N \leq 10^6$

$1 \leq A[i] \leq 10^9$

Sample Testcases:

Input	Output
5 1 2 1 3 4	2 3 3 4 -1

Input	Output
5 3 2 1 4 2	4 4 4 -1 -1