CSE 109
Online on 1-D Array
Subsection: C2

Time: 50 minutes **Full Marks: 20**

Problem 1

In this problem, you will be given a sequence (array) of *n* integers. You need to find the longest increasing continuous subsequence from the sequence.

The first line will contain the value of *n*. Then *n* integers follow. You need to print the length of the longest increasing continuous subsequence. *[Marks: 10]*

Sample Input	**Sample Output**
8 2 6 1 3 9 12 3 5	4
9 0 2 1 3 6 4 5 7 8	4

Problem 2

In this problem, you will be given an array of *n* elements. Your task is to sort the elements of even positions in increasing order. Consider the 0^{th} position as even position. For example, if the given array is {4, 1, 7, -1, 2, 6}, then the elements of even positions are {4, 7, 2}. After sorting the elements of even positions in increasing order, the array becomes {2, 1, 4, -1, 7, 6}.

The first line will contain the value of *n*. Then *n* integers follow. You have to change the array accordingly, and print the changed array. *[Marks: 10]*

Sample Input	**Sample Output**
8 2 6 1 3 9 12 3 5	1 6 2 3 3 12 9 5
9 0 2 1 3 6 4 5 7 8	0 2 1 3 5 4 6 7 8