Data Structures Lab Lab 3 Tasks

Suppose that an array-based list of sorted integers exists in memory. Write a function (named sortedInsert) that inserts a value in the array list at its proper position in a way that after inserting the value the list is still sorted. The list can either be in ascending or descending order, your function must work for both types. You can write a separate function to determine whether the array list is sorted in ascending or descending order. Consider the array list class is already present. For Example:

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If we want to insert 8 in to the above list, the correct position of 8 is between 6 and 11. **Note:** You are not allowed to sort the list after insertion, you have to insert the value in its proper position. Use of index is not allowed, you can only use pointers (ZERO credit for index based solution).