

1. Write the function for insertion sort.

Algorithm :-

Step 1 – If it is the first element, it is already sorted. return 1;

Step 2 – Pick next element

Step 3 – Compare with all elements in the sorted sub-list

Step 4 – Shift all the elements in the sorted sub-list that is greater than the value to be sorted.

Step 5 – Insert the value

Step 6 – Repeat until list is sorted

Function :-

```
void insertionSort(int array[], int n)
{
    int i, element, j;
    for (i = 1; i < n; i++) {
        element = array[i]; j = i - 1;
        while (j >= 0 && array[j] > element) {
            array[j + 1] = array[j];
            j = j - 1;
        }
        array[j + 1] = element;
    }
}
```