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;

}

}