**12.Write a C program to arrange a series of numbers using Insertion Sort**

**Program:-**

#include <stdio.h>

void printArray(int array[], int size) {

for (int i = 0; i < size; i++) {

printf("%d ", array[i]);

}

printf("\n");

}

void insertionSort(int array[], int size) {

for (int step = 1; step < size; step++) {

int key = array[step];

int j = step - 1;

while (key < array[j] && j >= 0) {

array[j + 1] = array[j];

--j;

}

array[j + 1] = key;

}

}

int main() {

int data[] = {10, 45, 7, 52, 58};

int size = sizeof(data) / sizeof(data[0]);

insertionSort(data, size);

printf("Sorted array in ascending order:\n");

printArray(data, size);

}

**Output:-**

