**insertion-sort-algorithm.cpp**

// C++ program for insertion sort

#include <iostream>

using namespace std;

// insertion sort

void insertionSort(int arr[], int n)

{

int i, key, j;

for (i = 1; i < n; i++) {

key = arr[i];

j = i - 1;

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

arr[j + 1] = arr[j];

j = j - 1;

}

arr[j + 1] = key;

}

}

int main()

{

int arr[] = { 12, 190, 18, 9, 6, 244, 0, -11, 27 };

int n = sizeof(arr) / sizeof(arr[0]);

insertionSort(arr, n);

cout << "Sorted array: \n";

int i;

for (i = 0; i < n; i++) {

cout << arr[i] << " ";

}

return 0;

}

**OUTPUT**

PS S:\WorkSpace\CollegeWork\DataStructure\Temp> g++ .\insertion-sort-algorithm.cpp

PS S:\WorkSpace\CollegeWork\DataStructure\Temp> ./a

Sorted array:

-11 0 6 9 12 18 27 190 244

PS S:\WorkSpace\CollegeWork\DataStructure\Temp>