#include <stdio.h>

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

int i, j, key;

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

key = arr[i];

j = i - 1;

// Move elements of arr[0..i-1], that are greater than key,

// to one position ahead of their current position

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

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

j = j - 1;

}

arr[j + 1] = key;

}

}

int main() {

int arr[] = {12, 11, 13, 5, 6};

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

printf("Unsorted array: ");

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

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

}

printf("\n");

insertionSort(arr, size);

printf("Sorted array: ");

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

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

}

printf("\n");

return 0;

}

OUTPUT

Unsorted array: 12 11 13 5 6

Sorted array: 5 6 11 12 13