

Insertion Sort

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Insertion_sort
{
    class Insertion
    {
        void sort(int[] arr)
        {
            int n = arr.Length;
            for (int i = 1; i < n; ++i)
            {
                int key = arr[i];
                int j = i - 1;

                while (j >= 0 && arr[j] > key)
                {
                    arr[j + 1] = arr[j];
                    j = j - 1;
                }
                arr[j + 1] = key;
            }
        }

        static void printArray(int[] arr)
        {
            int n = arr.Length;
            for (int i = 0; i < n; ++i)
                Console.Write(arr[i] + " ");

            Console.WriteLine("\n");
        }

        public static void Main()
        {
            int[] arr = { 12, 11, 13, 5, 6 };
            Insertion ob = new Insertion();
            ob.sort(arr);
            printArray(arr);
        }
    }
}
```