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Online C# Compiler.

Code, Compile, Run and Debug C# program online.

Write your code in this editor and press "Run" button to execute it.

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using System;

class HelloWorld {

static void Main() {

int [] num = new int[] {10,20,13,15,6,70,18,13,22,9 };

//SelectionSort(num);

//BubbleSort(num);

InsertionSort(num);

}

static void SelectionSort(int[] num)

{

int temp=0;

for(int i=0; i<num.Length-1;i++)

{

for(int j= i+1;j<num.Length; j++)

{

if(num[i] > num [j])

// swap elements

{

temp = num[i];

num[i] = num[j];

num[j] = temp;

}

}

}

for(int i=0;i<num.Length;i++)

{

Console.WriteLine(num[i]);

}

}

static void BubbleSort(int[] num)

{ int n = num.Length;

int temp=0;

for(int i=0; i<n-1;i++)

{

for(int j= 0;j<n-i-1; j++)

{

if(num[j] > num [j+1])

// swap elements

{

temp = num[j];

num[j] = num[j+1];

num[j+1] = temp;

}

}

}

for(int i=0;i<num.Length;i++)

{

Console.WriteLine(num[i]);

}

}

static void InsertionSort(int [] num)

{

int x, j=0;

for(int i = 1; i<num.Length;i++)

{

x = num[i];

j= i-1;

while(j>=0 && num[j]> x)

{

num[j+1] = num[j];

j = j - 1;

}

num[j+1] = x;

}

for(int i=0;i<num.Length;i++)

{

Console.WriteLine(num[i]);

}

}

static int LinearSearch(int [] num, int Num)

{

int flag = 0;

for(int i = 0; i<num.Length; i++)

{

if(num[i] == Num)

{

flag = 1;

break;

}

}

return flag;

}

static int BinarySearch(int [] num, int Num)

{

int flag =0;

int low = 0 , high = num.Length-1 , mid = (low+high)/2;

while(low<=high)

{

Console.WriteLine("low : " + low + "high : " + high + "mid : "+ mid);

if(Num == num[mid])

{

flag=1;

break;

}

else if(Num < num[mid])

{

high = mid-1;

}

else if(Num> num[mid])

{

low = mid+1;

}

mid = (low+high)/2;

}

return flag;

}

}