Assignment 3

//class1.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assigment3

{

class Class1

{

public int isize;

public int[] arr;

public Class1()

{

isize = 2;

this.arr = new int[isize];

}

public Class1(int ino)

{

isize = ino;

this.arr = new int[isize];

}

public Class1(Class1 obj)

{

this.isize = obj.isize;

this.arr = obj.arr;

}

public void Accept()

{

int i = 0;

Console.WriteLine("Enter the Elements");

for (i = 0; i < isize; i++)

{

arr[i] = Convert.ToInt32(Console.ReadLine());

}

}

public void Display()

{

int i = 0;

Console.WriteLine("Display The Elements of array");

for (i = 0; i < isize; i++)

{

Console.WriteLine("{0}", arr[i]);

}

}

}

}

//Arrayoperation.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assigment3

{

class Arrayoperation : Class1

{

public int max = 0, min = 0;

public Class1 num;

public Arrayoperation(int no)

{

num = new Class1(no);

num.Accept();

//num.Display();

}

public void Maximum()

{

int i = 0;

max = num.arr[0];

for(i=0;i<num.isize;i++)

{

if(max<num.arr[i])

{

max = num.arr[i];

}

}

Console.WriteLine("Maximum No is{0}", max);

}

public void Minimum()

{

int i = 0;

min = num.arr[0];

for (i = 0; i < num.isize; i++)

{

if (min > num.arr[i])

{

min= num.arr[i];

}

}

Console.WriteLine("Minimum No is{0}", min);

}

}

}

//arrayCombine.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assigment3

{

class ArrayCombine : Class1

{

public Class1 num;

public ArrayCombine(int no)

{

num = new Class1(no);

num.Accept();

}

public int Search(int n)

{

int i = 0;

int ans = 0; ;

for(i=0;i<num.isize;i++)

{

if(num.arr[i]==n)

{

ans = i;

}

}

return ans;

}

public int Frequancy(int n)

{

int i = 0;

int ans = 0; ;

for (i = 0; i < num.isize; i++)

{

if (num.arr[i] == n)

{

ans++;

}

}

return ans;

}

public void summetion()

{

int i = 0;

int ans = 0; ;

for (i = 0; i < num.isize; i++)

{

ans = ans + num.arr[i];

}

Console.WriteLine("Summetion is{0}", ans);

}

public void average()

{

int i = 0;

int ans = 0;

int avg = 0;

for (i = 0; i < num.isize; i++)

{

ans = ans + num.arr[i];

avg = ans / 3;

}

Console.WriteLine("average is{0}", avg);

}

}

}

//program.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assigment3

{

class Program

{

static void Main(string[] args)

{

int size = 0;

int ret = 0;

Console.WriteLine("Default constructor");

Class1 ob = new Class1();

ob.Accept();

ob.Display();

Console.WriteLine("Enter the Size of array");

size = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("paramerised Constructor");

Class1 ob1 = new Class1(size);

ob1.Accept();

ob1.Display();

Console.WriteLine("copy Constructor");

Class1 ob2 = new Class1(ob);

ob2.Display();

Console.WriteLine("--------Array Operations---------");

Arrayoperation obj = new Arrayoperation(size);

obj.Accept();

obj.Maximum();

obj.Minimum();

Console.WriteLine("---------------Array Combine------------------");

ArrayCombine obj1 = new ArrayCombine(size);

obj1.Accept();

ret=obj1.Search(1);

Console.WriteLine("Element to be search is{0}", ret);

ret = obj1.Frequancy(1);

Console.WriteLine("frequancy is{0}", ret);

obj1.summetion();

obj1.average();

}

}

}