**ASSIGNMENT 1**

1)

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class Calculator

{

public static void Main(string[] args)

{

Console.WriteLine("Enter first number");

int a = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter second number");

int b = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("-----MENU-----");

Console.WriteLine("Press 1 for Addition");

Console.WriteLine("Press 2 for Subtraction");

Console.WriteLine("Press 3 for Multiplication");

Console.WriteLine("Press 4 for Division");

Console.WriteLine("Enter your choice");

int ch = Convert.ToInt32(Console.ReadLine());

switch (ch)

{

case 1:

Console.WriteLine("Addition of 2 nos= {0}", a + b);

break;

case 2:

Console.WriteLine("Subtraction of 2 nos = {0}", a - b);

break;

case 3:

Console.WriteLine("Multiplication of 2 nos = {0}", a \* b);

break;

case 4:

if (a > b || a == b)

Console.WriteLine("Division of 2 nos = {0}", a / b);

else if (a < b)

Console.WriteLine("Division of 2 nos = {0}", b / a);

break;

default:

Console.WriteLine("Wrong Choice");

break;

}

Console.ReadKey();

}

}

2) using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class Marks

{

public static void Main(string[] args)

{

Console.WriteLine("enter average marks of 5 Students");

int[] arr = new int[5];

for( int i=0;i<5;i++)

{

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

}

int max;

max = arr[0];

for(int j=0;j<arr.Length;j++)

{

if (arr[j] > max)

{

max = arr[j];

}

}

Console.WriteLine("Highest Marks obtained is = {0}", max);

Console.ReadKey();

}

}

3) using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class SumofInt

{

public static void sumofelements(params int[] arr)

{

int sum = 0;

foreach(int i in arr)

{

sum = sum + i;

}

Console.WriteLine("Sum of elements ={0}",sum);

}

}

//Client program to call the method

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class Clients

{

public static void Main(string[] args)

{

SumofInt.sumofelements(30, 100, 200);

Swapping.Swap(39, 42);

AreaAndCircum.find(6);

Console.ReadKey();

}

}

4) using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class Swapping

{

public static void Swap(int a, int b)

{

a = a + b;

b = a - b;

a= a - b;

Console.WriteLine(" After Swapping : \na={0}\tb={1}",a,b);

}

}

//Client program to call the method

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class Clients

{

public static void Main(string[] args)

{

SumofInt.sumofelements(30, 100, 200);

Swapping.Swap(39, 42);

AreaAndCircum.find(6);

Console.ReadKey();

}

}

5) using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class AreaAndCircum

{

public static void find(double radius)

{

double area=Math.PI\*radius\*radius;

double circumference = 2 \* Math.PI \* radius;

Console.WriteLine("Area of Circle = {0}\nCirumference of Circle= {1}",area,circumference);

Console.ReadKey();

}

}

//Client program to call the method

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class Clients

{

public static void Main(string[] args)

{

SumofInt.sumofelements(30, 100, 200);

Swapping.Swap(39, 42);

AreaAndCircum.find(6);

Console.ReadKey();

}

}

6) using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.IO;

public struct Book

{

public int bookid;

public string title;

public int price;

public int code;

public enum bookType

{

Magazine = 0,

Novel = 1,

ReferenceBook = 2,

Miscellanous = 3

}

public void Accept()

{

Console.WriteLine("Enter the book id");

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

Console.WriteLine("Enter the book title");

title =Console.ReadLine();

Console.WriteLine("Enter the price of the book");

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

Console.WriteLine("Enter the code of bookType");

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

}

public void display()

{

Console.WriteLine("\n===============Details===============");

Console.WriteLine(" Book Title : {0}", title);

Console.WriteLine("Book Price : {0}", price);

Console.WriteLine("Book ID : {0}", bookid);

Console.WriteLine("Book Type :{0}",(bookType)code);

}

static void Main(string[] args)

{

Book book1=new Book();

book1.Accept();

book1.display();

Console.ReadKey();

}

}