using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assignment1

{

class Calculator

{

static void Main(string[] args)

{

Console.WriteLine("Enter the action to be performed");

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

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

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

Console.WriteLine("click 4 for Division \n");

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

Console.WriteLine("Enter 1st number");

int num1 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter 2nd number");

int num2 = Convert.ToInt32(Console.ReadLine());

int result = 0;

switch (choice)

{

case 1:

{

result = Addition(num1, num2);

break;

}

case 2:

{

result = Subtraction(num1, num2);

break;

}

case 3:

{

result = Multiplication(num1, num2);

break;

}

case 4:

{

result = Division(num1, num2);

break;

}

default:

Console.WriteLine("Please enter proper number between 1 to 4");

break;

}

Console.WriteLine("The result is : {0}", result);

}

public static int Addition(int num1, int num2)

{

int result = num1 + num2;

return result;

}

public static int Subtraction(int num1, int num2)

{

int result = num1 - num2;

return result;

}

public static int Multiplication(int num1, int num2)

{

int result = num1 \* num2;

return result;

}

public static int Division(int num1, int num2)

{

int result = num1 / num2;

return result;

}

}

}

second program

using System;

class HighestMark

{

public static void Main(string[] args)

{

int marks1, marks2, marks3, marks4, marks5;

Console.WriteLine("Enter marks of first student : ");

marks1 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter marks of second student : ");

marks2 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter marks of third student ");

marks3 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter marks of fourth student ");

marks4 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter marks of fifth student ");

marks5 = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("");

if (marks1 > marks2 && marks1 > marks3 && marks1 > marks4 && marks1 > marks5)

{

Console.WriteLine("Student-1 Scored Highest Mark");

}

if (marks2 > marks1 && marks2 > marks3 && marks2 > marks4 && marks2 > marks5)

{

Console.WriteLine("Student-2 Scored Highest Mark");

}

if (marks3 > marks1 && marks3 > marks2 && marks3 > marks4 && marks3 > marks5)

{

Console.WriteLine("Student-3 Scored Highest Mark");

}

if (marks4 > marks1 && marks4 > marks2 && marks4 > marks3 && marks4 > marks5)

{

Console.WriteLine("Student-4 Scored Highest Mark");

}

if (marks5 > marks1 && marks5 > marks2 && marks5 > marks3 && marks4 > marks5)

{

Console.WriteLine("Student-5 Scored Highest Mark");

}

if (marks1 == marks2 && marks2 == marks3 && marks3 == marks4 && marks4 == marks5 && marks5 == marks1)

{

Console.WriteLine("All student have equal marks");

}

Console.ReadLine();

}

}

third program

using System;

public class SumArray

{

static void SumArr()

{

int[] arr1 = new int[100];

int i, num, sum = 0;

Console.Write("Sum of all elements of array \n");

Console.Write("Enter the number of elements to be stored in the array : ");

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

Console.Write("Enter {0} elements in the array \n\n", num);

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

{

Console.Write("Enter element - {0} : ", i);

arr1[i] = Convert.ToInt32(Console.ReadLine());

sum += arr1[i];

}

Console.Write("Sum of all elements stored in the array is : {0}\n\n", sum);

}

public static void Main()

{

SumArr();

}

}

Forth Program

using System;

public class Exercise5

{

public static void Main(string[] args)

{

int num1, num2, temp;

Console.Write("\nInput the First Number : ");

num1 = int.Parse(Console.ReadLine());

Console.Write("\nInput the Second Number : ");

num2 = int.Parse(Console.ReadLine());

temp = num1;

num1 = num2;

num2 = temp;

Console.Write("\nAfter Swapping : ");

Console.Write("\nFirst Number : " + num1);

Console.Write("\nSecond Number : " + num2);

Console.Read();

}

}

5th Program

using System;

namespace AssignmentCsharp

{

public class Circle

{

public static void Main(string[] args)

{

double rad, Area, Circumference;

const double PI = 3.14;

Console.WriteLine("Program to calculate the area and circumference of a circle");

Console.Write("\nEnter the radius of circle ");

rad = Convert.ToDouble(Console.ReadLine());

Area = PI \* rad \* rad;

Circumference = 2 \* PI \* rad;

Console.WriteLine("\nThe area of a circle is {0} ", Area);

Console.WriteLine("\nThe circumference of a circle is {0}", Circumference);

}

}

}

6th Program

using System;

namespace AssignmentBook

{

public enum BookType

{

Magazine,

Novel,

ReferenceBook,

Miscellaneous

}

struct Book

{

public string bookId;

public string title;

public string booktype;

public string price;

}

public class BookDetails

{

public static void Main()

{

int actionbook = 0;

int no\_Of\_book = 1000;

Book[] books = new Book[no\_Of\_book];

int i, j, num, number, k = 0;

Console.Write("Enter the number of book to be stored : ");

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

Console.Write("Enter {0} elements in the array \n\n", num);

for (j = 0; j < num; j++)

{

Console.WriteLine("Information of book {0} :", k);

Console.Write("Enter Id of the book : ");

books[j].bookId = Console.ReadLine();

Console.Write("Enter Title of the book : ");

books[j].title = Console.ReadLine();

Console.WriteLine("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

Console.WriteLine("Select Type of the book : ");

foreach (int b in Enum.GetValues(typeof(BookType)))

Console.WriteLine((BookType)b);

Console.Write("Enter Book Type : ");

//actionbook = Convert.ToInt32(Console.ReadLine());

// Console.WriteLine((BookType)actionbook);

books[j].booktype = Console.ReadLine();

Console.WriteLine("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

Console.Write("Enter the Price of the book : ");

books[j].price = Console.ReadLine();

k++;

Console.WriteLine();

}

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

{

Console.WriteLine("{0}: BookId = {1}, Title = {2} ,BookType = {3}, Price = {4} ", i + 1, books[i].bookId, books[i].title, books[i].booktype, books[i].price);

Console.WriteLine();

}

}

}

}