**Лабораторная работа №2**

Код:

using System;

using System.Diagnostics;

namespace Test\_2

{

class MainClass

{

public static void Main(string[] args)

{

First();

Second();

Third();

Fourth();

Fifth();

Sixth();

Seventh();

Eighth();

Ninth();

}

public static void First()

{

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

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

if (x == 0)

Console.WriteLine("X == 0");

else if (x > 0)

Console.WriteLine("X > 0");

else

Console.WriteLine("X < 0");

}

public static void Second()

{

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

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

switch (x)

{

case 1:

Console.WriteLine("Привет первокурсник!");

break;

case 2:

Console.WriteLine("Привет второкурсник!");

break;

case 3:

Console.WriteLine("Привет третьекурсник!");

break;

case 4:

Console.WriteLine("Привет четверокурсник!");

break;

default:

Console.WriteLine ("Просто привет!");

break;

}

}

public static void Third()

{

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

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

if (x < -190 || x > 10)

Console.WriteLine("Не входит промежуток [-190,10]");

else

Console.WriteLine("Входит промежуток [-190,10]");

}

public static void Fourth()

{

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

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

if (x < 6 || x > 8)

{

Console.WriteLine("Это не каникулы");

}

else

{

Console.WriteLine("Каникулы! Скорее всего");

}

}

public static void Fifth()

{

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

double x = Convert.ToInt32(Console.ReadLine());

double result = 0;

if (x == 0)

{

result = Math.Pow(Math.E, 10 \* Math.PI \* x + Math.Pow(x, 90));

}

else if (x > 0)

{

result = 10 \* Math.Pow(x, 2) + 9;

}

else

{

result = (Math.Pow(Math.Sin(9 \* x), 2) + Math.Pow(Math.Cos(9 \* x), 2)) / 90;

}

Console.WriteLine("Result = " + result);

}

public static void Sixth()

{

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

int[] arr = new int[3];

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

{

Console.Write("[{0}] - ", i);

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

}

int max = arr[0];

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

{

if (max < arr[i])

{

max = arr[i];

}

}

Console.WriteLine("Max = " + max);

}

public static void Seventh()

{

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

double[] arr\_1 = new double[3];

double[] arr\_2 = new double[3];

for (int i = 0; i < arr\_1.Length; i++)

{

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

arr\_1[i] = Convert.ToDouble(Console.ReadLine());

arr\_2[i] = Convert.ToDouble(Console.ReadLine());

}

if (arr\_1[0] == arr\_2[0] && arr\_1[1] == arr\_2[1] && arr\_1[2] == arr\_2[2])

{

Console.WriteLine("Прямые совпадают");

}

else if ((arr\_1[0] / arr\_2[0]) == (arr\_1[1] / arr\_2[1]))

{

Console.WriteLine("Прямые параллельны!");

}

else

{

Console.WriteLine("Прямые пересекаются!");

}

}

public static void Eighth()

{

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

int[] arr = new int[3];

for (int i = 0; i < 3; i++)

{

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

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

}

bool vozr = false, ubyv = false;

if ((arr[0] >= arr[1]) && (arr[1] >= arr[2]))

{

vozr = false;

ubyv = true;

}

else if((arr[0] <= arr[1]) && (arr[1] <= arr[2]))

{

vozr = true;

ubyv = false;

}

for (int i = 0; i < 3; i++)

{

if (vozr == true)

{

arr[i] \*= 10;

}

else if (ubyv == true)

{

arr[i] += 9;

}

else

{

arr[i] = -arr[i];

}

Console.WriteLine("[{0}] - {1}", i, arr[i]);

}

}

public static void Ninth()

{

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

string hero = Console.ReadLine();

switch(hero.ToLower())

{

case "superman":

Console.WriteLine("Justice League, Man of Steel");

break;

case "batman":

Console.WriteLine("Justice League, Dark Knight");

break;

case "wonder woman":

Console.WriteLine("Justice League, Wonder Woman(2017)");

break;

case "green lantern":

Console.WriteLine("Justice League, Green Lantern");

break;

case "aquaman":

Console.WriteLine("Justice League, Aquaman");

break;

}

}

}

}

Скриншот:

