//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 1

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 1\n\n");

Console.WriteLine("Hello, World!");

Console.WriteLine("\nPress any key to close... bye!");

Console.ReadKey();

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 2

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 2\n\n");

Console.WriteLine("Enter 2 Nums to SUM:");

//numbers

Console.Write("Num1: ");

double num1 = Convert.ToDouble(Console.ReadLine());

Console.Write("Num2: ");

double num2 = Convert.ToDouble(Console.ReadLine());

//sum and print result

Console.WriteLine("The SUM of Numbers: {0} and {1} is {2}",num1,num2,(num1+num2));

//exit

Console.WriteLine("\nPress any key to close... bye!");

Console.ReadKey();

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 3

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 3\n\n");

Console.WriteLine("Enter 4 Nums to calculate:");

//numbers

Console.Write("Num1: ");

double num1 = Convert.ToDouble(Console.ReadLine());

Console.Write("Num2: ");

double num2 = Convert.ToDouble(Console.ReadLine());

Console.Write("Num3: ");

double num3 = Convert.ToDouble(Console.ReadLine());

Console.Write("Num4: ");

double num4 = Convert.ToDouble(Console.ReadLine());

//calculate and print result

Console.WriteLine("The formula \"output = ({0} \* ({1} - {2}))/{3}\", the result is: {4}", num1, num2, num3, num4, (num1 \* (num2 - num3)) / num4);

//exit

Console.WriteLine("\nPress any key to close... bye!");

Console.ReadKey();

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 4

using System.Net.Cache;

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 4\n\n");

\_age:

Console.Write("Enter the User Age (in years):");

try

{

int age = Convert.ToInt16(Console.ReadLine());

if(age > 0 && age < 12)

{

Console.WriteLine("The user is a Child");

}

else if (age < 18)

{

Console.WriteLine("The user is a Young");

}

else if (age < 60)

{

Console.WriteLine("The user is a Adult");

}

else if (age >= 60)

{

Console.WriteLine("The user is a Senior");

}

else

{

Console.WriteLine("The age is out of range");

}

}

catch (Exception e)

{

Console.WriteLine("Age is in incorrect format. Just use Integer Number.");

goto \_age;

}

Console.WriteLine("\nPress any key to close... bye!");

Console.ReadKey();

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 5

using System.Net.Cache;

internal class Program

{

private static void Main(string[] args)

{

//variables

double sideA, sideB, sideC, result = 0;

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 5\n\n");

//entries

Console.Write("Enter the 3 sides of possible triangle and discovery if it is:");

\_sideA:

try

{

Console.Write("\nSide A: ");

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

}

catch (Exception e)

{

Console.WriteLine("\n\tSide is in incorrect format. Just use a Number.");

goto \_sideA;

}

\_sideB:

try

{

Console.Write("\nSide B: ");

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

}

catch (Exception e)

{

Console.WriteLine("\n\tSide is in incorrect format. Just use a Number.");

goto \_sideB;

}

\_sideC:

try

{

Console.Write("\nSide C: ");

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

}

catch (Exception e)

{

Console.WriteLine("\n\tSide is in incorrect format. Just use a Number.");

goto \_sideC;

}

// calculate

if ((Math.Abs(sideB - sideC) < sideA && sideA < (sideB + sideC)) ||

(Math.Abs(sideA - sideC) < sideB && sideB < (sideA + sideC)) ||

(Math.Abs(sideA - sideB) < sideC && sideC < (sideA + sideB)))

{

Console.WriteLine("\n\tThe Triangle exist to sides: {0}, {1}, {2}", sideA, sideB, sideC);

}

else

{

Console.WriteLine("\n\tThe Triangle do not exist to sides: {0}, {1}, {2}", sideA, sideB, sideC);

}

Console.WriteLine("\nPress any key to close... bye!");

Console.ReadKey();

}

}

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 6

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 6\n\n");

Console.WriteLine("Enter a positive integer number:");

\_positive:

try

{

Console.Write("\nNumber: ");

int num = Convert.ToInt16(Console.ReadLine());

Console.Write("\nCounting from 1 to {0}: \n", num);

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

{

Console.WriteLine(i+1);

}

}

catch (Exception e)

{

Console.WriteLine("\n\tThe number is in incorrect format. Just use Integer Number.");

goto \_positive;

}

//exit

Console.WriteLine("\nPress any key to close... bye!");

Console.ReadKey();

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 7

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 7\n\n");

Console.WriteLine("Enter a positive integer number of lines:");

\_positive:

try

{

Console.Write("\nNumber: ");

int num = Convert.ToInt16(Console.ReadLine());

if (num <= 0)

{

Console.WriteLine("Please, use a positive number.");

goto \_positive;

}

else

{

Console.Write("\nPrinting lines: \n");

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

{

Console.WriteLine(new string('\*', i));

}

}

}

catch (Exception e)

{

Console.WriteLine("\n\tPlease, use a positive number...");

goto \_positive;

}

//exit

Console.WriteLine("\nPress any key to close... bye!");

Console.ReadKey();

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 8

class Program

{

static void Main()

{

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 8\n\n");

Console.WriteLine("Enter a positive integer number to calculate the factorial:");

Console.Write("\nNumber: ");

int num = Convert.ToInt16(Console.ReadLine());

Console.Write("\nFactorial {0}! = {1}",num, factorialCalculate(num));

}

static int factorialCalculate(int num)

{

int result = 1;

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

{

result \*= i;

}

return result;

}

}

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 9

class Program

{

static void Main()

{

//array

int[] arr = RandomArray(10);

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 9\n\n");

Console.WriteLine("Enter a int number to find into the array:");

Console.Write("\nNumber: ");

int num = Convert.ToInt16(Console.ReadLine());

bool result = isContain(arr, num);

if (result)

{

Console.WriteLine($"The digit {num} is in the array.");

}

else

{

Console.WriteLine($"The digit {num} is not in the array.");

}

}

static int[] RandomArray(int size)

{

Random random = new Random();

int[] arr = new int[size];

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

{

arr[i] = random.Next(1, 20); // range 1..20

}

return arr;

}

static bool isContain(int[] arr, int num)

{

foreach (int number in arr)

{

if (number == num)

{

return true;

}

}

return false;

}

}

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 10

class Program

{

static void Main()

{

//array

string word = "abcd";

Console.WriteLine("Course: Scripting\nStudent: Andraschko, Francisco Ricardo\nActivity: Assignment 0\nQuestion: 9\n\n");

Console.WriteLine("Enter a 4-letter word (from 'a' to 'z'):");

Console.Write("\nWord: ");

string passw = Console.ReadLine();

if (passw.Length != 4)

{

Console.WriteLine("Please enter a 4-letter word.");

}

else if (IsValidWord(passw))

{

if (passw == word)

{

Console.WriteLine("Congrats! Right word: " + word);

}

else

{

Console.WriteLine("Sorry, wrong word. ");

}

}

else

{

Console.WriteLine("Please enter a word containing only lowercase letters ('a' to 'z').");

}

}

static bool IsValidWord(string word)

{

foreach (char letter in word)

{

if (letter < 'a' || letter > 'z')

{

return false;

}

}

return true;

}

}

//Course: Scripting

//Student: Andraschko, Francisco Ricardo

//Activity: Assignment 0

//Date: 2023-09-11

//Question: 11

using System;

using System.Collections.Generic;

class Person

{

public string Name { get; set; }

public int Age { get; set; }

public Person(string name, int age)

{

Name = name;

Age = age;

}

}

class Student : Person // student derivated from Person

{

public double Midterm { get; set; }

public double Final { get; set; }

public double Project { get; set; }

public Student(string name, int age, double midterm, double final, double project) : base(name, age) // aditionals arguments from Person

{

Midterm = midterm;

Final = final;

Project = project;

}

public double CalculateAverage()

{

// Calculate the average of midterm, final, and project grades

return (Midterm + Final + Project) / 3.0;

}

}

class Program

{

static void Main()

{

//lists of stuents --> for this, statics values!

List<Student> students = new List<Student>

{

new Student("Francisco", 41, 85, 90, 78),

new Student("Bruno", 35, 95, 92, 95),

new Student("Daniel", 22, 92, 85, 89)

};

double overallAverage = CalculateOverallAverage(students);

Console.WriteLine("Student Grades:");

foreach (var student in students)

{

Console.WriteLine($"{student.Name} ({student.Age} years old) - Average: {student.CalculateAverage():F2}"); //2 decimal cases

}

Console.WriteLine($"\nOverall Average of Students: {overallAverage:F2}"); //2 decimal cases

}

static double CalculateOverallAverage(List<Student> students)

{

double totalAverage = 0;

foreach (var student in students)

{

totalAverage += student.CalculateAverage();

}

return totalAverage / students.Count;

}

}

12)

a) All data from table:

Select \* from Employee;

b) First Name of ID 1354

Select FName from Employee Where (ID = 1354);

c) All with salary is Greater than 38500

Select \* from Employee Where (Salary >= 38500)

d) Mary Parker

Update Employee SET (Phone = ‘514/455-2337’) Where (FName = ‘Mary’ AND LName = ‘Parker’);

13)

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<link rel="stylesheet" href="style.css">

</head>

<body>

<div class="container">

<div class="left-column">

<h1>Learn to code by watching others</h1>

<p>See how experienced developers solve problems in real-time. Watching scripted tutorials is great, but understanding how developers think is invaluable</p>

</div>

<div class="right-column">

<div class="button-warning">Try it free 7 days then $20/mo. thereafter</div>

<div class="form-container">

<form>

<input type="text" placeholder="First name">

<input type="text" placeholder="Last name">

<input type="email" placeholder="Email">

<input type="password" placeholder="Password">

<button type="submit" class="submit-button">CLAIM YOUR FREE TRIAL</button>

</form>

<p class="terms-and-conditions">by clicking the button you are agreeing to our <span style="color:darkred">Terms and Conditions</span></p>

</div>

</div>

</div>

</body>

</div>

</body>

</html>

body {

margin: 0;

padding: 0 24px;

display: flex;

font-family: Arial, sans-serif;

background-image: url('bg.png');

background-size: cover;

background-position: center;

background-repeat: no-repeat;

position: relative;

}

body::before {

content: "";

background: #d92828b5;

position: absolute;

top: 0;

left: 0;

width: 100%;

height: 100%;

z-index: -1;

}

.container {

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

}

.left-column {

flex: 1;

text-align: center;

padding: 20px;

color: #fff;

display: flex;

flex-direction: column;

align-items: center;

}

.right-column {

flex: 1;

background-color: #fff;

border-radius: 10px;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.2);

padding: 20px;

display: flex;

flex-direction: column;

align-items: center;

}

h1 {

font-size: 36px;

}

p {

font-size: 18px;

}

.button-warning {

background-color: #420b8e;

color: #fff;

padding: 10px 20px;

border: none;

border-radius: 5px;

font-size: 16px;

}

.form-container {

margin-top: 20px;

text-align: center;

}

input[type="text"],

input[type="email"],

input[type="password"] {

width: 80%;

padding: 10px;

margin-bottom: 10px;

border: 1px solid #ccc;

border-radius: 5px;

font-size: 16px;

}

.submit-button {

background-color: #4CAF50;

color: #fff;

padding: 10px 20px;

border: none;

border-radius: 5px;

font-size: 18px;

}

.terms-and-conditions {

font-size: 14px;

color: black

}