C# Lab Tutorials

Name : Sasindi Nethara Welagedara
Batch : 22.2 (Technology Management – Plymouth University)
Student ID: 27975

Day 05

** Please Note that I'm typing out the answers in a word/pdf file and uploading it to github since I own an iPad and VSCode is not available on my device. Please excuse me and I apologize for any inconvenience caused. Thank you. **

Question 03

❖ Calculate Values

```
namespace day05Q3
{
    internal class CalculateValues
    {
        public double calAddition(double num1, double num2)
        {
            return num1 + num2;
        }

        public double calSubstraction(double num1, double num2)
        {
            return num1 - num2;
        }

        public double calMultiplication(double num1, double num2)
        {
            return (num1 * num2);
        }

        public double calDivision(double num1, double num2)
        {
            return (num1 / num2);
        }

    }
}
```

❖ Program

```
namespace lab05Q3
{
    internal class Program
```

```
-       {
-          static void Main(string[] args)
-          {
-             Console.WriteLine("Enter 1 for Addition");
-             Console.WriteLine("Enter 2 for Substraction");
-             Console.WriteLine("Enter 3 For Multiplication");
-             Console.WriteLine("Enter 4 for Division");
-
-             Console.WriteLine();
-
-             Console.Write("Enter Your Choice : ");
-             int choice = Convert.ToInt32(Console.ReadLine());
-
-             Console.WriteLine();
-
-             Console.Write("Enter Number 1: ");
-             double num1 = Convert.ToDouble(Console.ReadLine());
-             Console.Write("Enter Number 2: ");
-             double num2 = Convert.ToDouble(Console.ReadLine());
-
-             Console.WriteLine();
-
-             CalculateValues calculateValues = new CalculateValues();
-
-             double ans;
-
-             if (choice == 1)
-             {
-                ans = calculateValues.calAddition(num1, num2);
-                Console.WriteLine("Your Answer is : {0}", ans);
-             }
-             else if (choice == 2)
-             {
-                ans = calculateValues.calSubstraction(num1, num2);
-                Console.WriteLine("Your Answer is : {0}", ans);
-             }
-             else if (choice == 3)
-             {
-                ans = calculateValues.calMultiplication(num1, num2);
-                Console.WriteLine("Your Answer is : {0}", ans);
-             }
-             else if (choice == 4)
-             {
-                ans = calculateValues.calDivision(num1, num2);
-                Console.WriteLine("Your Answer is : {0}", ans);
-             }
-             else
-             {
-                Console.WriteLine("Error");
-             }
-
```

```
            Console.ReadLine();
        }
    }
}
```

Question 04

❖ Class Files

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace lab05Q4
{
    internal class ClassFiles
    {
        public void sayHello()
        {
            Console.WriteLine("Hello World!");
        }
    }
}
```

❖ Program

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace lab05Q4
{
    internal class Program
    {
        static void Main(string[] args)
        {
            ClassFiles objsayHello = new ClassFiles();
            objsayHello.sayHello();
        }
    }
}
```

05) find the minimum, maximum and the average value of an array with 10 user inputs. And reverse the array.

```
- namespace MinMaxAvgRevArray
- {
-    internal class Program
-    {
-       static void Main(string[] args)
-       {
-          int[] array = new int[10];
-          int sum = 0;
-          Console.WriteLine("Enter 10 numbers:");
-          for (int i = 0; i < 10; i++)
-          {
-             array[i] = int.Parse(Console.ReadLine());
-             sum = sum + array[i];
-          }
-          int max = array[0];
-          int min = array[0];
-          for (int j = 0; j < 10; j++)
-          {
-             if (array[j] > max)
-             {
-                max = array[j];
-             }
-             if (array[j] < min)
-             {
-                min = array[j];
-             }
-          }
-          int[] arryreverse = new int[10];
-          int a = 0;
-          for (int l = 9; l >= 0; l--)
-          {
-             arryreverse[a] = array[l];
-             a++;
-          }
-          Console.WriteLine($"Minimum Value:" + min);
-          Console.WriteLine("Maximum Value:" + max);
-          int avg = sum / 10;
-          Console.WriteLine("Average:" + avg);
-
-          for (int i = 0; i < 10; i++)
-          {
-             Console.WriteLine(arryreverse[i]);
-          }
-
-          Console.ReadLine();
-       }
-    }
- }
```