C# Lab Tutorials

Name: Sasindi Nethara Welagedara

Batch: 22.2 (Technology Management – Plymouth University)

Student ID: 27975

Day 03

* 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. *

01) Write a C# program that takes an integer as input and checks whether it is even or odd. Display the result "Even" or "Odd" accordingly.

```
using System;
namespace EvenOrOdd
  internal class Program
    static void Main(string[] args)
      Console.WriteLine("Enter the number: ");
      int num = Convert.ToInt32(Console.ReadLine());
      int rem = num % 2;
      if (rem == 1)
         Console.WriteLine("{0} is an odd number", num);
      }
      else
      {
         Console.WriteLine("{0} is an even number", num);
      }
      Console.ReadKey();
    }
  }
}
```

- 02) Write a C# program that counts the number of vowels in a given string. Consider both uppercase and lowercase vowels.
- using System;

namespace CountVowels

```
{
      class Program
        static void Main(string[] args)
          Console.WriteLine("Enter a string:");
          string input = Console.ReadLine();
          int vowelCount = CountVowels(input);
          Console.WriteLine("Number of vowels in the string: " + vowelCount);
        }
        static int CountVowels(string str)
          int count = 0;
          string vowels = "aeiouAEIOU";
          foreach (char c in str)
          {
             if (vowels.Contains(c))
               count++;
          }
          return count;
        }
      }
    }
03) Write a C# program to find the sum of the digits of a given number using a for loop.
    namespace SumOfDigits
    {
      internal class Program
        static void Main(string[] args)
          Console.WriteLine("Enter a value:");
          int Num = int.Parse(Console.ReadLine());
          int Sum = 0, Rem;
          while (Num > 0)
          {
             Rem = Num % 10;
             Sum += Rem;
             Num = Num / 10;
```

Console.WriteLine("Sum:" + Sum);

Console.ReadLine();

}

. }

04) Write a C# program to calculate the sum of all the odd numbers from to a given positive integer.

```
using System;
namespace SumOfOdds
  internal class Program
     static void Main(string[] args)
       Console.Write("Enter a positive integer: ");
       if (int.TryParse(Console.ReadLine(), out int num) && num > 0)
         int sum = CalculateSumOfOddNumbers(num);
         Console.WriteLine("Sum of odd numbers from 1 to " + num + " is: " + sum);
       }
       else
       {
         Console.WriteLine("Invalid input. Please enter a valid positive integer.");
       }
     }
     static int CalculateSumOfOddNumbers(int num)
       int sum = 0;
       for (int i = 1; i \le num; i += 2)
         sum += i;
       }
       return sum;
     }
  }
}
```