LAB 03

```
01.using System;

namespace EvenOrOdd
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter an
integer:");
            int number;

            // Read the input as a string
            string input =
Console.ReadLine();

            // Try parsing the input string to
an integer
            if (int.TryParse(input, out
number))
```

{

```
            // Check if the number is even
or odd
            if (number % 2 == 0)
            {
                Console.WriteLine("Even");
            }
            else
            {
                Console.WriteLine("Odd");
            }
        }
        else
        {
            Console.WriteLine("Invalid
input. Please enter a valid integer.");
        }
    }
}
```

```
02. using System;

namespace CountVowels
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter a
string:");
            string input =
Console.ReadLine();

            int vowelCount =
CountVowelsInString(input);

            Console.WriteLine($"Number of
vowels: {vowelCount}");
        }

        static int CountVowelsInString(string
str)
```

{

```
            int count = 0;
            string vowels = "AEIOUaeiou";

            // Loop through each character in
the string
            foreach (char c in str)
            {
                // Check if the character is a
vowel
                if (vowels.Contains(c))
                {
                    count++;
                }
            }

            return count;
        }
    }
}
```

```
03.using System;

namespace SumOfDigits
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter a
number:");
            string input =
Console.ReadLine();

            if (int.TryParse(input, out int
number))
            {
                int sumOfDigits =
CalculateSumOfDigits(number);
                Console.WriteLine($"Sum of
digits: {sumOfDigits}");
            }
            else
```

```
            {
                Console.WriteLine("Invalid
input. Please enter a valid number.");
            }
        }

        static int CalculateSumOfDigits(int
number)
        {
            int sum = 0;

            // Convert the number to a string
to access its digits
            string numberString =
number.ToString();

            // Loop through each digit and
add it to the sum
            for (int i = 0; i <
numberString.Length; i++)
            {
```

```
                char digitChar =
numberString[i];
                if (char.IsDigit(digitChar))
                {
                    // Convert the character digit
back to an integer
                    int digit =
int.Parse(digitChar.ToString());
                    sum += digit;
                }
            }

            return sum;
        }
    }
}



04.  using System;

namespace SumOfOddNumbers
{
```

```
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter a
positive integer:");
            string input =
Console.ReadLine();

            if (int.TryParse(input, out int
number) && number > 0)
            {
                int sumOfOddNumbers =
CalculateSumOfOddNumbers(number);
                Console.WriteLine($"Sum of
odd numbers from 1 to {number}:
{sumOfOddNumbers}");
            }
            else
            {
                Console.WriteLine("Invalid
input. Please enter a valid positive
integer.");
```

```
        }
    }

    static int
CalculateSumOfOddNumbers(int n)
    {
        int sum = 0;

        // Loop through numbers from 1
to n
        for (int i = 1; i <= n; i++)
        {
            // Check if the number is odd
            if (i % 2 != 0)
            {
                sum += i; // Add the odd
number to the sum
            }
        }

        return sum;
    }
```

```
    }
}
```