**C# Lab 03.**

**1.** using System;

namespace CheckEvenOdd

{

class Program

{

static void Main(string[] args)

{

// Get the integer from the user.

Console.WriteLine("Enter an integer:");

int number = int.Parse(Console.ReadLine());

// Check if the number is even or odd.

if (number % 2 == 0)

{

Console.WriteLine("Even");

}

else

{

Console.WriteLine("Odd");

}

}

}

}

**2**. using System;

namespace CountVowels

{

class Program

{

static void Main(string[] args)

{

// Get the string from the user.

Console.WriteLine("Enter a string:");

string str = Console.ReadLine();

// Initialize a counter to count the number of vowels.

int vowelCount = 0;

// Declare a set to store the vowels.

char[] vowels = { 'a', 'e', 'i', 'o', 'u', 'A', 'E', 'I', 'O', 'U' };

// Iterate over the string and count the number of vowels.

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

{

if (vowels.Contains(Char.ToLower(str[i])))

{

vowelCount++;

}

}

// Print the number of vowels.

Console.WriteLine("The number of vowels in the string is {0}.", vowelCount);

}

}

}

**3.** using System;

namespace CountVowels

{

class Program

{

static void Main(string[] args)

{

// Get the string from the user.

Console.WriteLine("Enter a string:");

string str = Console.ReadLine();

// Initialize a counter to count the number of vowels.

int vowelCount = 0;

// Declare a set to store the vowels.

char[] vowels = { 'a', 'e', 'i', 'o', 'u', 'A', 'E', 'I', 'O', 'U' };

// Iterate over the string and count the number of vowels.

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

{

if (vowels.Contains(Char.ToLower(str[i])))

{

vowelCount++;

}

}

// Print the number of vowels.

Console.WriteLine("The number of vowels in the string is {0}.", vowelCount);

}

}

}

**4.** using System;

namespace SumOfOddNumbers

{

class Program

{

static void Main(string[] args)

{

// Get the upper limit from the user.

Console.WriteLine("Enter an upper limit:");

int upperLimit = int.Parse(Console.ReadLine());

// Initialize a variable to store the sum of the odd numbers.

int sum = 0;

// Iterate over the odd numbers from 1 to the upper limit and add them to the sum.

for (int i = 1; i <= upperLimit; i += 2)

{

sum += i;

}

// Print the sum of the odd numbers.

Console.WriteLine("The sum of the odd numbers from 1 to {0} is {1}.", upperLimit, sum);

}

}

}