**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;

}

}

}