• C# LAB 03

1. static void Main(string[] args)

{

Console.WriteLine("Enter an integer");

int number=Convert.ToInt32(Console.ReadLine());

if (IsEven(number))

{

Console.WriteLine(number + " is an even number");

}

else

{

Console.WriteLine(number + " is an odd number");

}

Console.ReadLine();

}

static bool IsEven(int number)

{

return number % 2 == 0;

}

2. static void Main(string[] args)

{

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

string input = Console.ReadLine();

int vowelCount = CountVowels(input);

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

}

static int CountVowels(string input)

{

int count = 0;

string vowels = "AEIOUaeiou";

foreach (char c in input)

{

if (vowels.Contains(c))

{

count++;

}

}

return count;

}

3. static void Main(string[] args)

{

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

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

int sum = CalculateSumOfDigits(number);

Console.WriteLine($"Sum of digits: {sum}");

Console.ReadLine();

}

static int CalculateSumOfDigits(int number)

{

int sum = 0;

for (; number != 0; number /= 10)

{

int digit = number % 10;

sum += digit;

}

return sum;

}

4. static void Main(string[] args)

{

Console.WriteLine("Enter a positive integer:");

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

int sum = CalculateSumOfOddNumbers(n);

Console.WriteLine($"Sum of odd numbers from 1 to {n}: {sum}");

Console.ReadLine();

}

static int CalculateSumOfOddNumbers(int n)

{

int sum = 0;

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

{

sum += i;

}

return sum;

}