Lab 03

1. 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 ConsoleApplication1
{
   class Program
   {
      static void Main(string[] args)
      {


         Console.WriteLine("Enter an integer: ");
         int number = int.Parse(Console.ReadLine());



         bool isEven = number % 2 == 0;
         string result = isEven ? "Even" : "Odd";



         Console.WriteLine("The number is " + result);



         Console.WriteLine("Press any key to continue...");
         Console.ReadKey();
      }
   }
}
```

2. Write a C# program that counts the number of vowels in a given string. Consider both uppercase and lowercase vowels.

```
using System;


namespace ConsoleApplication1
{
   class Program
   {
      static void Main(string[] args)
      {


         Console.WriteLine("Enter a string: ");
         string str = Console.ReadLine();



         int vowelCount = 0;



         for (int i = 0; i < str.Length; i++)
         {
            char ch = str[i];


            if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u' ||
               ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch == 'U')
            {
               vowelCount++;
            }
```

```
        }



        Console.WriteLine("The number of vowels in the string is " + vowelCount);



        Console.WriteLine("Press any key to continue...");
        Console.ReadKey();
}
}
```

3. Write a C# program to find the sum of the digits of a given number using a for loop.

```
using System;

namespace ConsoleApplication1
{
   class Program
   {
      static void Main(string[] args)
      {

         Console.WriteLine("Enter a number: ");
         int number = int.Parse(Console.ReadLine());



         int sum = 0;



         while (number > 0)
```

```
        {
            int digit = number % 10;
            sum += digit;
            number /= 10;
        }


        Console.WriteLine("The sum of the digits is " + sum);


        Console.WriteLine("Press any key to continue...");
        Console.ReadKey();
    }
  }
}
```

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

```
using System;

namespace ConsoleApplication1
{
  class Program
  {
    static void Main(string[] args)
    {

      Console.WriteLine("Enter a positive integer: ");
      int number = int.Parse(Console.ReadLine());
```

```
            int sum = 0;



            for (int i = 1; i <= number; i += 2)
            {
               sum += i;
            }



            Console.WriteLine("The sum of the odd numbers from 1 to " + number + " is " + sum);



            Console.WriteLine("Press any key to continue...");
            Console.ReadKey();
        }
    }
}
```