## **LAB SHEET 3 (LOOPS)**

1. Write a C# code to calculate the sum of N numbers using for loop

```
namespace My_First_Application
{
    internal class forloop
    {
        static void Main ()
        {
            Console.WriteLine(" Enter the N th number ");
            int range = Convert.ToInt32(Console.ReadLine());
            int sum = 0;
            for(int i=0;i<=range;i++)
            {
                sum = sum + i;
            }
            Console.WriteLine("sum of numbers are " + sum);
        }
    }
}</pre>
```

```
Enter the N th number

5

sum of numbers are 15

C:\C#Programming\My First Application\My First Application\bin\Debug\net6.0\My First Application.exe (process 2092) exited with code 0.

To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.

Press any key to close this window . . .
```

### **Assessment 3a:**

Write a program in C# to display the multiplication table of a given integer using for loop.

# **Expected O/P:**

```
Display the multiplication table:

Input the number (Table to be calculated) : 10

10 X 1 = 10

10 X 2 = 20

10 X 3 = 30

10 X 4 = 40

10 X 5 = 50

10 X 6 = 60

10 X 7 = 70

10 X 8 = 80

10 X 9 = 90

10 X 10 = 100
```

# 2. Write a C# program to calculate the sum of odd numbers till Nth number using while loop.

```
namespace OddNum
{
   internal class Program
   {
      static void Main(string[] args)
      {
            Console.WriteLine(" Enter the N th number ");
            int range = int.Parse(Console.ReadLine());
            int i = 1, sum = 0;
            while (i <= range)
            {
                sum = sum + i;
                i = i + 2;
            }
            Console.WriteLine("sum of odd numbers are " + sum);
        }
}</pre>
```

```
Enter the N th number

10
sum of odd numbers are 25

C:\C#Programming\My First Application\My First Application\bin\Debug\net6.0\My First Application.exe (process 25732) exited with code 0.

To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.

Press any key to close this window . . .
```

#### **Assessment 3b:**

Write a C# code to check the given number is palindrome or not using while loop.

Example1:

Enter a Number: 121

It's a Palindrome Number

Example2:

Enter a Number: 2411

Its NOT a Palindrome Number