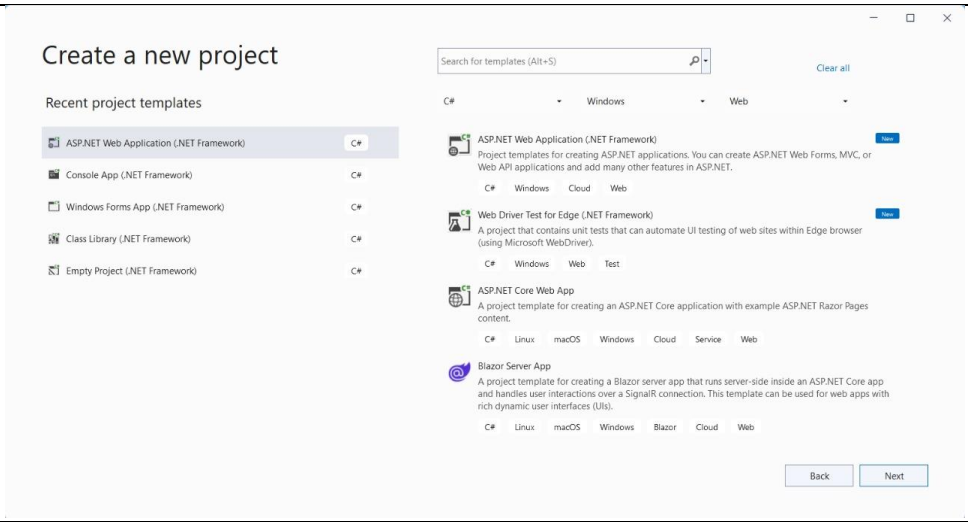
DAY21 ASSIGNMENT
BY
PAVAN KUMAR (21-02-2022)

Q1). Update your Visual Studio with .NET Framework Templates add on



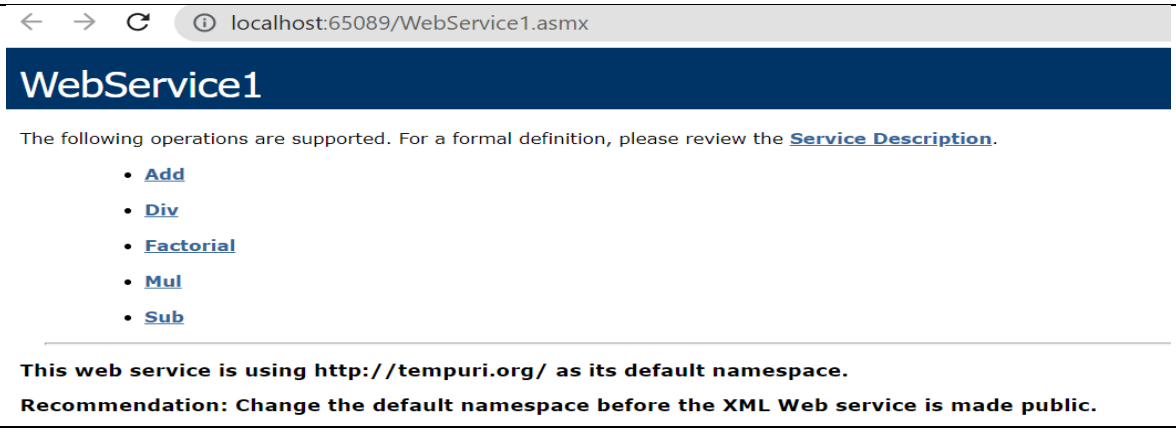
Q2). Create a web service for Mathematical Operations Example: Factorial, add, mul, div

CODE:

```
using System;
using System.Collections.Generic;

namespace PavanServices
{
  /// <summary>
  /// Summary description for WebService1
  /// </summary>
  [WebService(Namespace = "http://tempuri.org/")]
  [WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]
  [System.ComponentModel.ToolboxItem(false)]
  // To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.
  // [System.Web.Script.Services.ScriptService]
  public class WebService1: System.Web.Services.WebService
  {

    [WebMethod]
    public int Factorial(int n)
    {
      int fact = 1;
      for (int i = 1; i <= n; i++)
      {
        fact *= i;
      }
      return fact;
    }
```

```
    [WebMethod]
    public int Add(int a, int b)
    {
      return a + b;
    }
    [WebMethod]
    public int Sub(int a, int b)
    {
      return a - b;
    }
    [WebMethod]
    public int Div(int a, int b)
    {
      return a / b;
    }
    [WebMethod]
    public int Mul(int a, int b)
    {
      return a * b;
    }

  }

  }
```

OUTPUT:



Q3). Create a Console Application and consume the webservice

CODE:

```
using System;
using MyConsoleApp.ServiceReference1;

namespace MyConsoleApp
{
  /// <summary>
  /// DONE BY: PAVAN
  /// PURPOSE: AIRTHEMATIC OPERATIONS USING WEB SERVICES
  /// </summary>
  internal class Program
  {
```

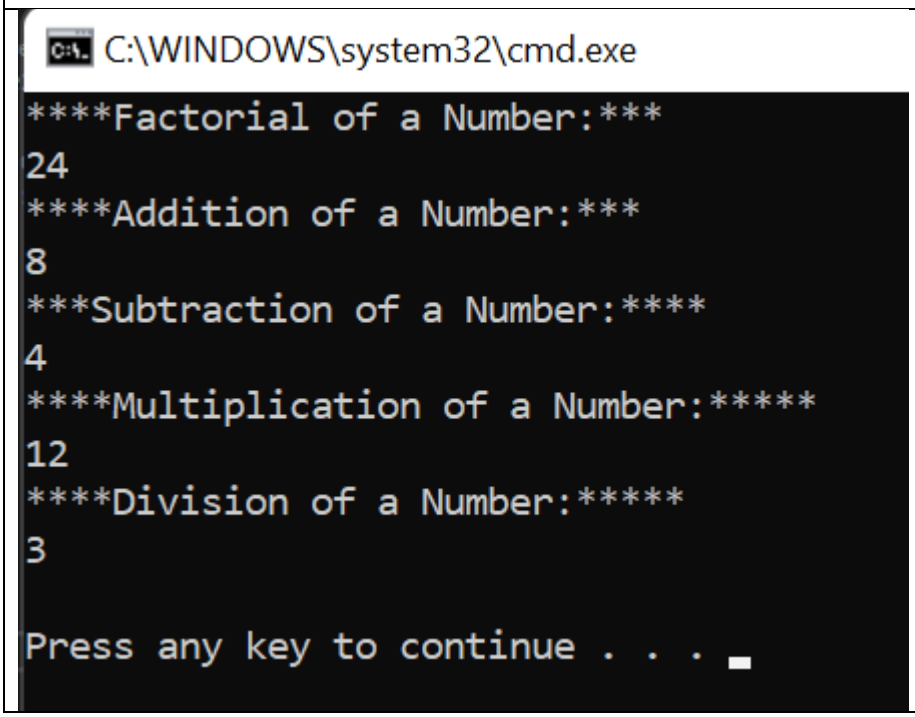
```
        static void Main(string[] args)
        {
            WebService1SoapClient obj = new WebService1SoapClient();
            Console.WriteLine("****Factorial of a Number: ***");
            Console.WriteLine(obj.Factorial(4));
            Console.WriteLine("****Addition of a Number: ***");
            Console.WriteLine(obj.Add(6, 2));
            Console.WriteLine("***Subtraction of a Number: ****");
            Console.WriteLine(obj.Sub(6, 2));
            Console.WriteLine("****Multiplication of a Number: *****");
            Console.WriteLine(obj.Mul(6, 2));
            Console.WriteLine("****Division of a Number: *****");
            Console.WriteLine(obj.Div(6, 2));
            Console.ReadLine();
        }
    }
}
```

WEB SERVICE CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Services;

namespace PavanServices
{
    /// <summary>
    /// Summary description for WebService1
    /// </summary>
    [WebService(Namespace = "http://tempuri.org/")]
    [WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]
    [System.ComponentModel.ToolboxItem(false)]
    // To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.
    // [System.Web.Script.Services.ScriptService]
    public class WebService1: System.Web.Services.WebService
    {

        [WebMethod]
        public int Factorial(int n)
        {
            int fact = 1;
            for (int i = 1; i <= n; i++)
            {
                fact *= i;
            }
            return fact;
        }


        [WebMethod]
        public int Add(int a, int b)
        {
            return a + b;
```

```
    }
    [WebMethod]
    public int Sub(int a, int b)
    {
      return a - b;
    }
    [WebMethod]
    public int Div(int a, int b)
    {
      return a / b;
    }
    [WebMethod]
    public int Mul(int a, int b)
    {
      return a * b;
    }

  }

  }
```

OUTPUT:



Q4). Create a Windows Forms application and consume the webservice

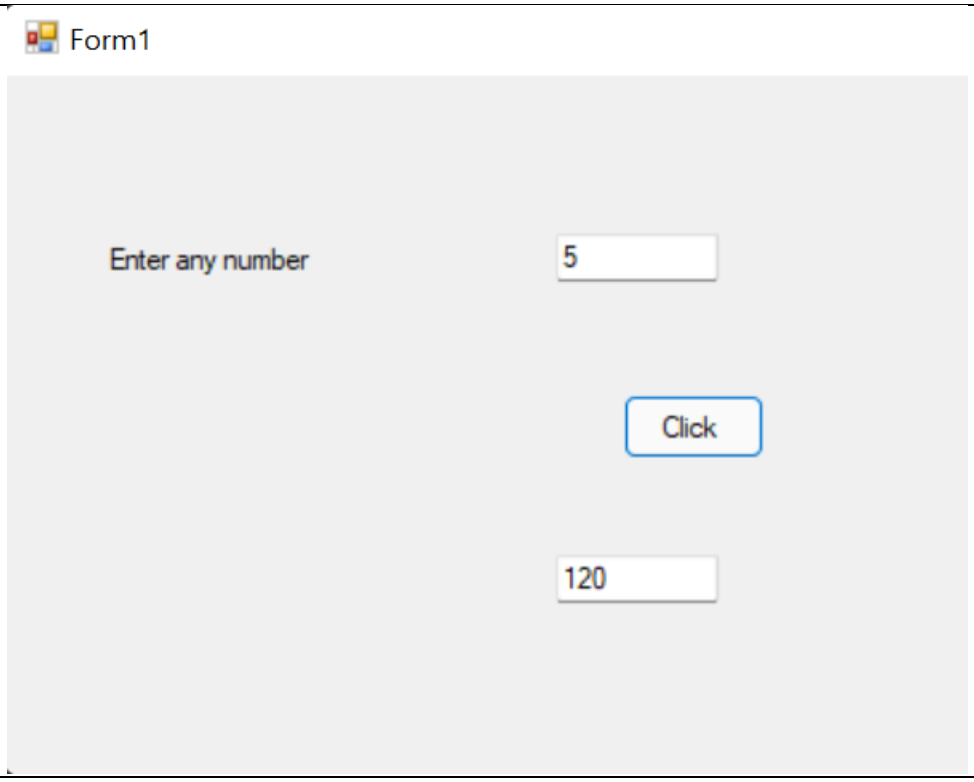
CODE:

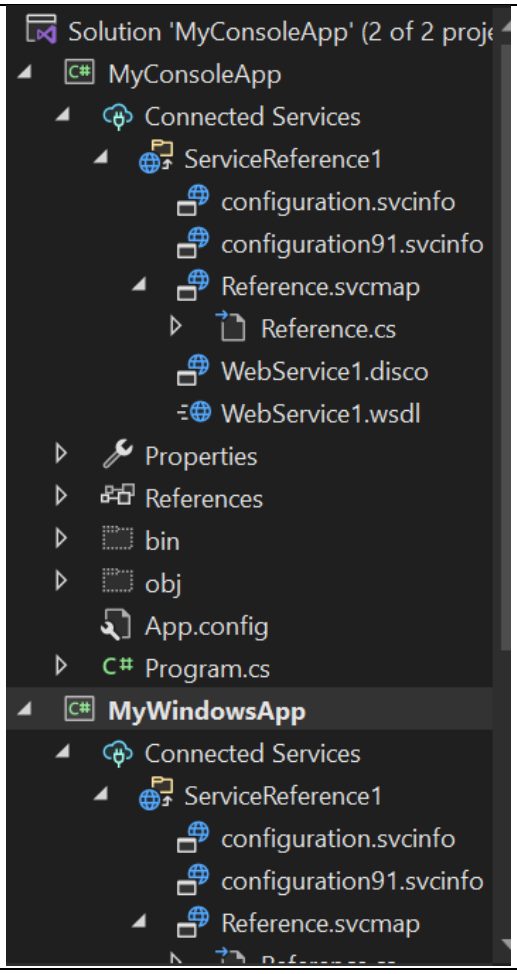
MYWINDOWSAPP:

```
using System;
using System.Windows.Forms;
using MyWindowsApp.ServiceReference1;

namespace MyWindowsApp
{
  public partial class Form1: Form
```

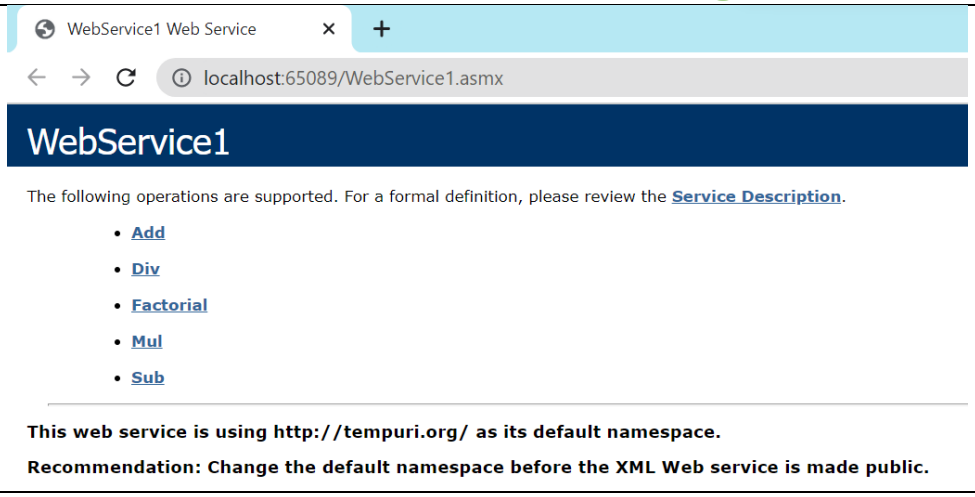
```
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            WebService1SoapClient obj = new WebService1SoapClient();
                textBox2.Text = obj.Factorial(5).ToString();
        }
    }
}
```

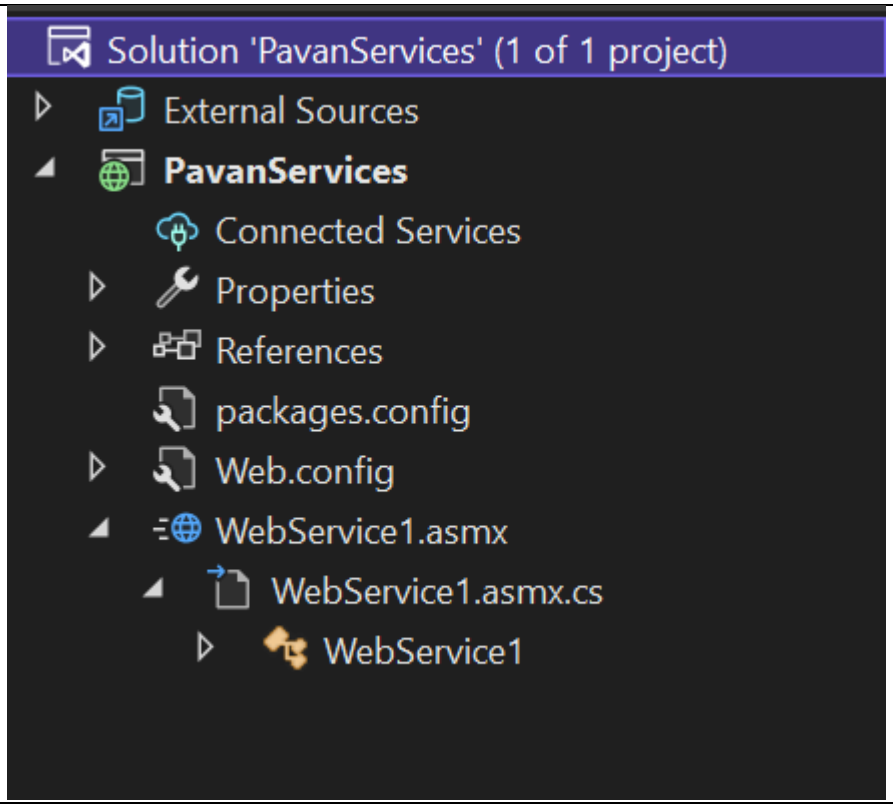
OUTPUT:





Q5). Put the screen shots of webservice running.




Solution 'PavanServices' (1 of 1 project)
External Sources
PavanServices
Connected Services
Properties
References
packages.config
Web.config
WebService1.asmx
WebService1.asmx.cs
WebService1