Day 21 – Assignment

21-Feb,2022

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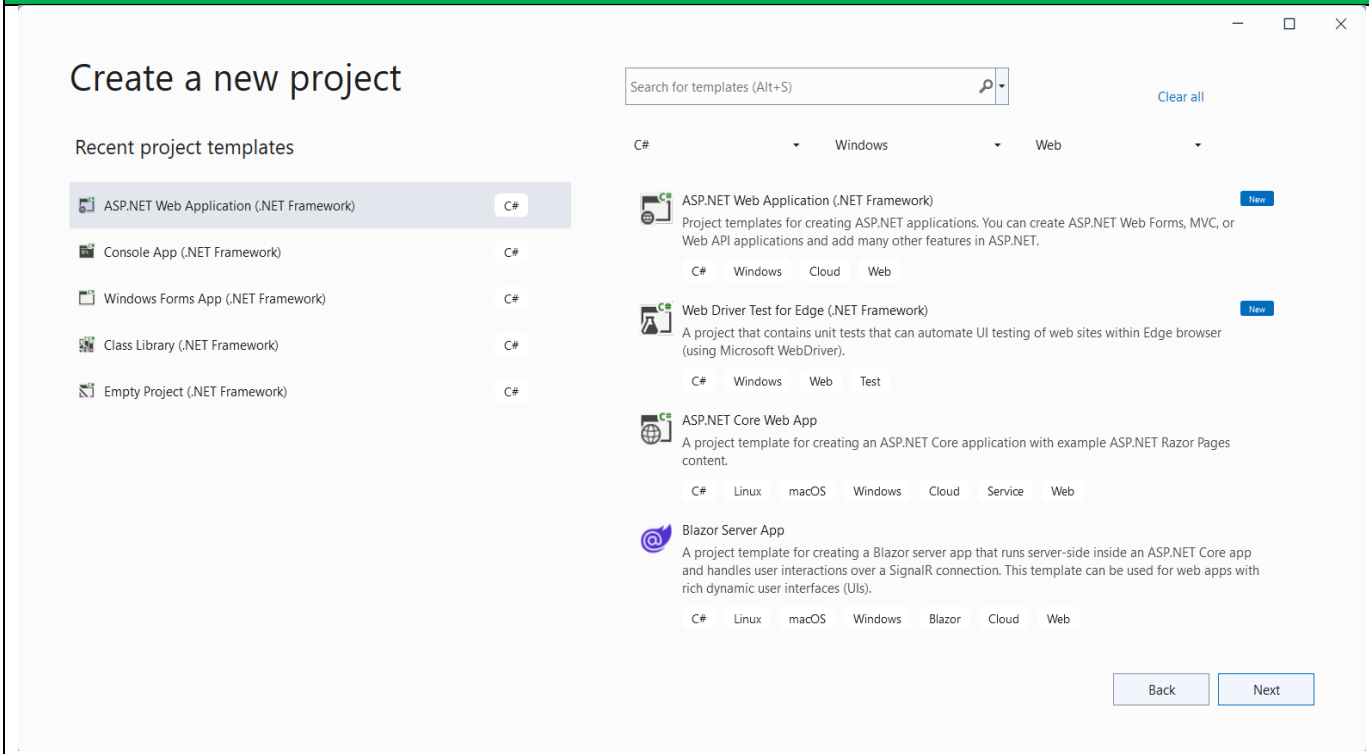
Assignment 1

Update your Visual Studio with .Net Framework Templates add on

Answer



Assignment 2

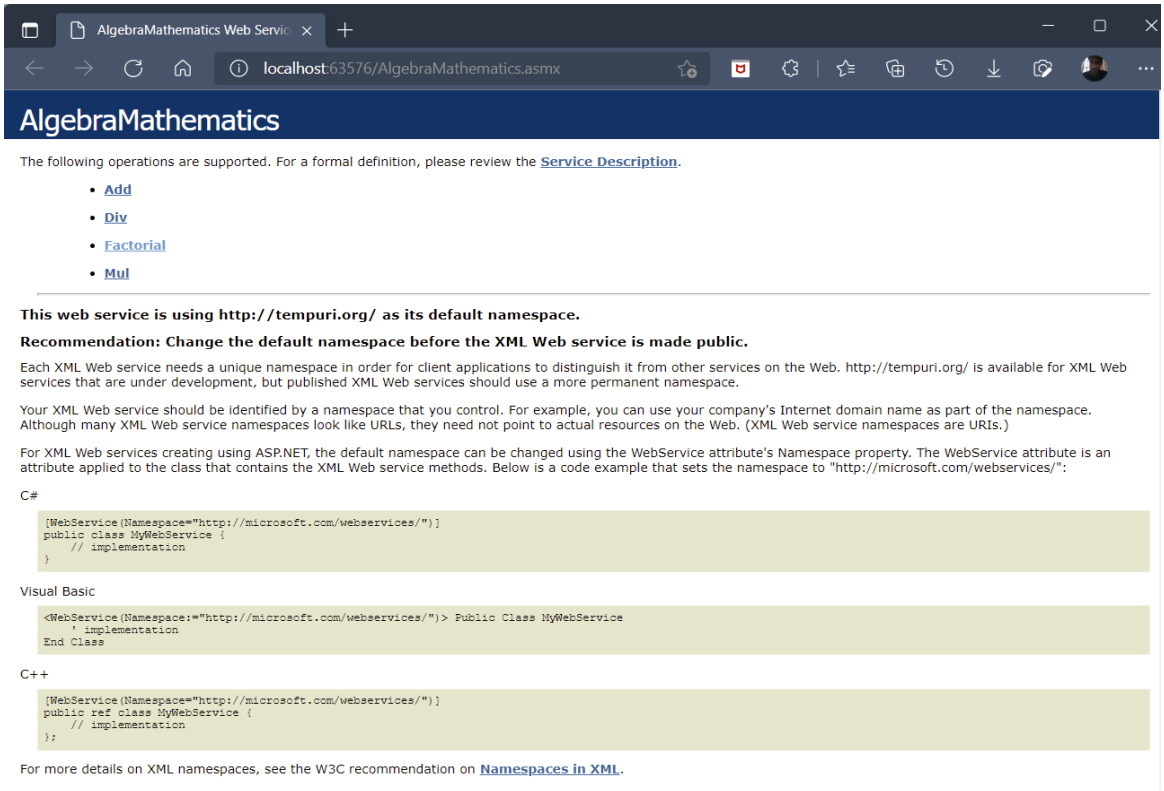
Create a web service for Mathematical Operations.

Code

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

// Author : Manoj.Karnatapu

// Purpose : Creating a Web Serice For Algebra Mathematics, using ASP.NET WEB
Application(using .Net FrameWork)
```

```
// For Reference,Check Manoj Web Service Project in the same Repository.

namespace ManojWebService
{
    /// <summary>
    /// Summary description for AlgebraMathematics
    /// </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 AlgebraMathematics : 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 Mul(int a, int b)
        {
            return a * b;
        }

        [WebMethod]
        public int Div(int a, int b)
        {
            return a / b;
        }

    }

}
```

Output



Assignment 3

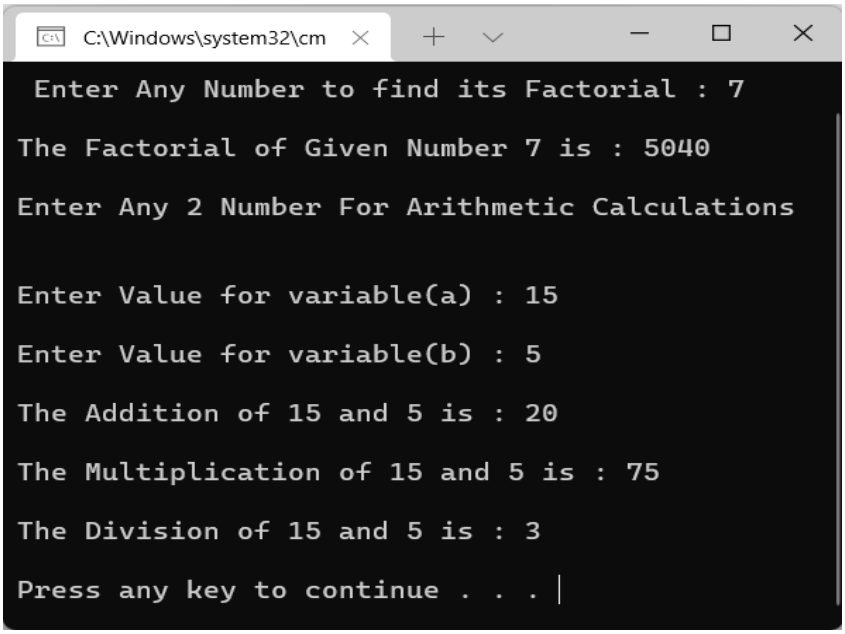
Create a Console Application and consume the webservice

Answer

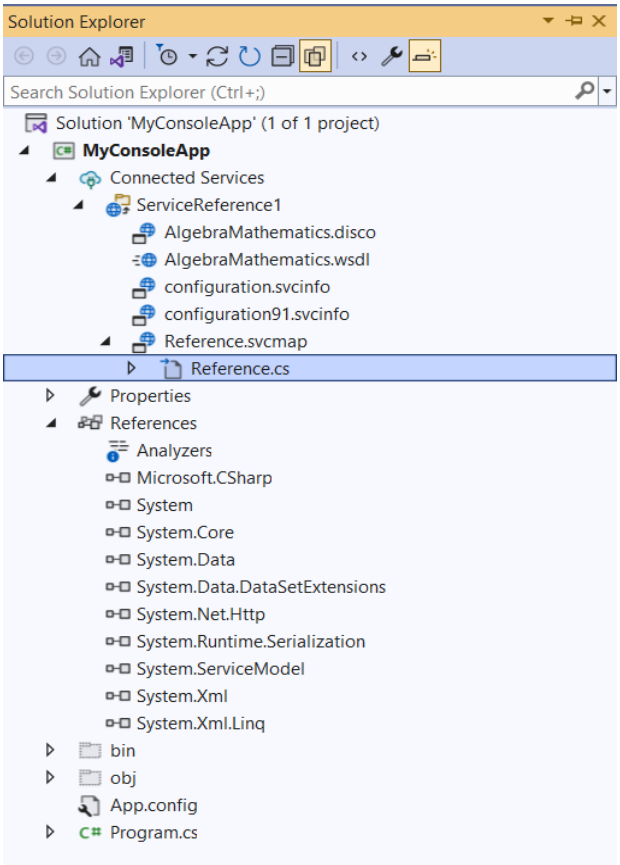
```
using System;
using MyConsoleApp.ServiceReference1;

// Author : Manoj.Karnatapu
// Purpose : Creating a C# Console application & Consuming the Webservices.

// For Reference, Check MyConsoleApp in the same Repository.

namespace MyConsoleApp
{
    internal class Program
    {
        static void Main(string[] args)
        {
            AlgebraMathematicsSoapClient obj = new AlgebraMathematicsSoapClient();
            Console.Write("\n Enter Any Number to find its Factorial : ");
            int n = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("\nThe Factorial of Given Number {0} is : {1}", n,
obj.Factorial(n));

            Console.WriteLine("\nEnter Any 2 Number For Arithmetic Calculations");
            Console.Write("\nEnter Value for variable(a) : ");
            int a = Convert.ToInt32(Console.ReadLine());

            Console.Write("\nEnter Value for variable(b) : ");
            int b = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine($"\nThe Addition of {a} and {b} is : {obj.Add(a, b)}");
            Console.WriteLine($"\nThe Multiplication of {a} and {b} is : {obj.Mul(a, b)}");
            Console.WriteLine($"\nThe Division of {a} and {b} is : {obj.Div(a, b)}\n");
```

```
            Console.ReadKey();
        }
    }
}
```

Output



Solution Explorer :



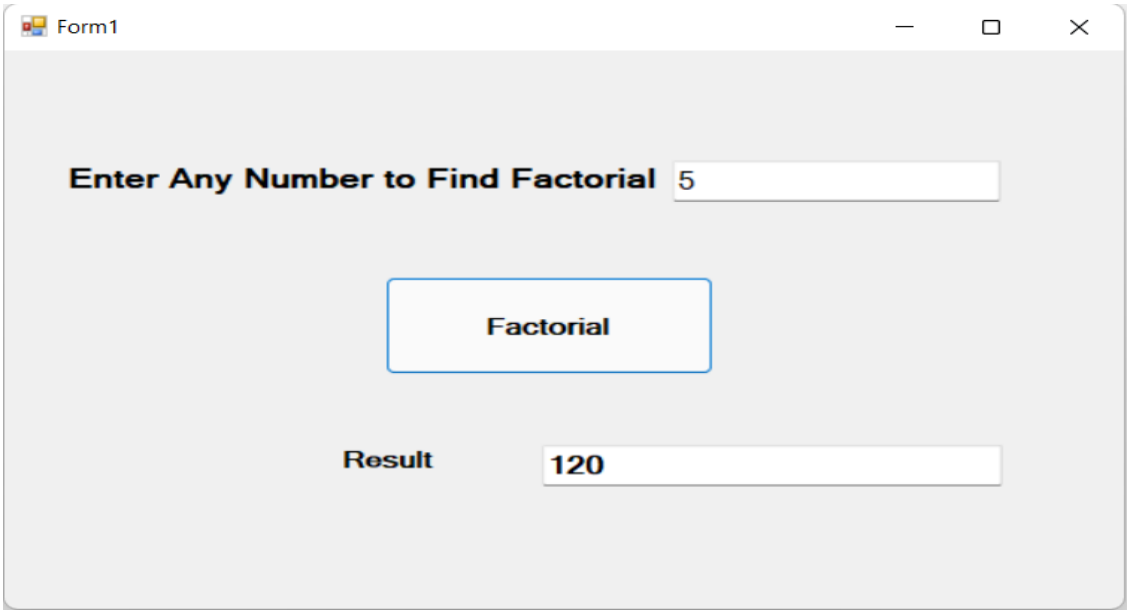
Assignment 4

Create a Windows Forms application and consume the webservice

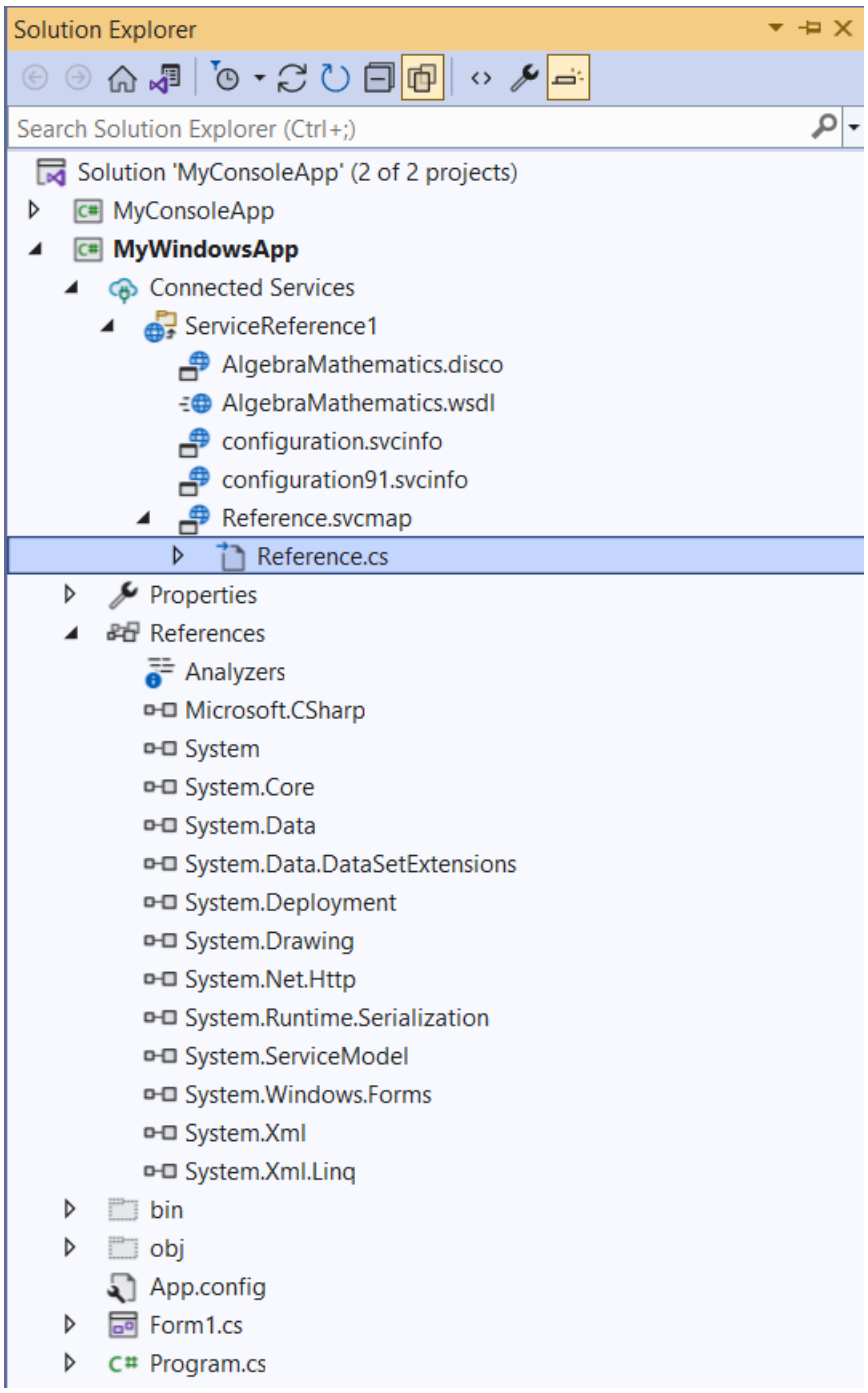
Answer

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

// Author : Manoj.Karnatapu
// Purpose : To Create a C# Windows Forms Application & Consuming WebServices.

// For Reference, Check MyWindowsApp inside the MyConsoleApp in the same Repository.

namespace MyWindowsApp
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void Factorial_Click(object sender, EventArgs e)
        {
            AlgebraMathematicsSoapClient obj = new AlgebraMathematicsSoapClient();
            int n = Convert.ToInt32(textBox1.Text);

            textBox2.Text = obj.Factorial(n).ToString();

        }
    }
}
```

Output



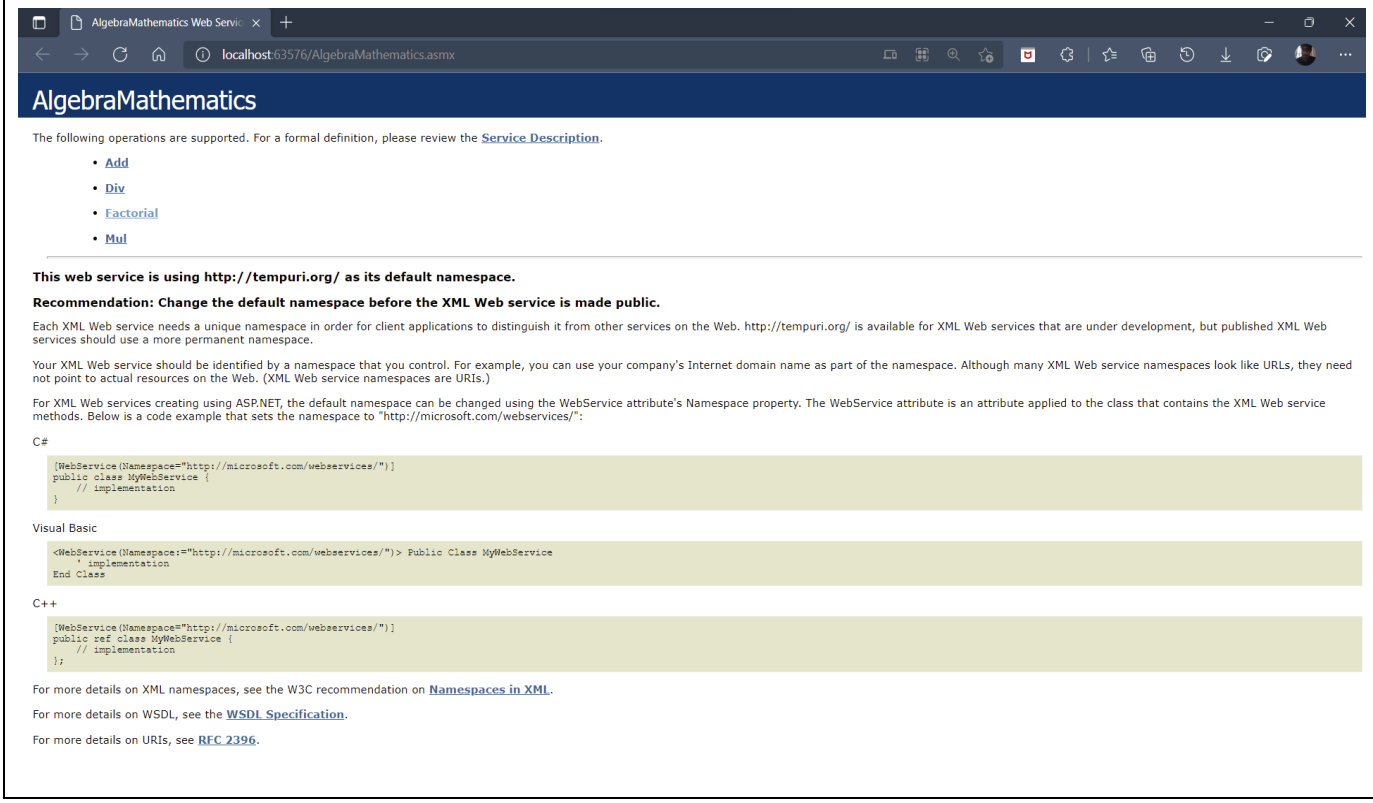
Solution Explorer :



Assignment 5

Put the screen shots of webservice running

Answer



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