

Day 21 – Assignment

21-Feb,2022

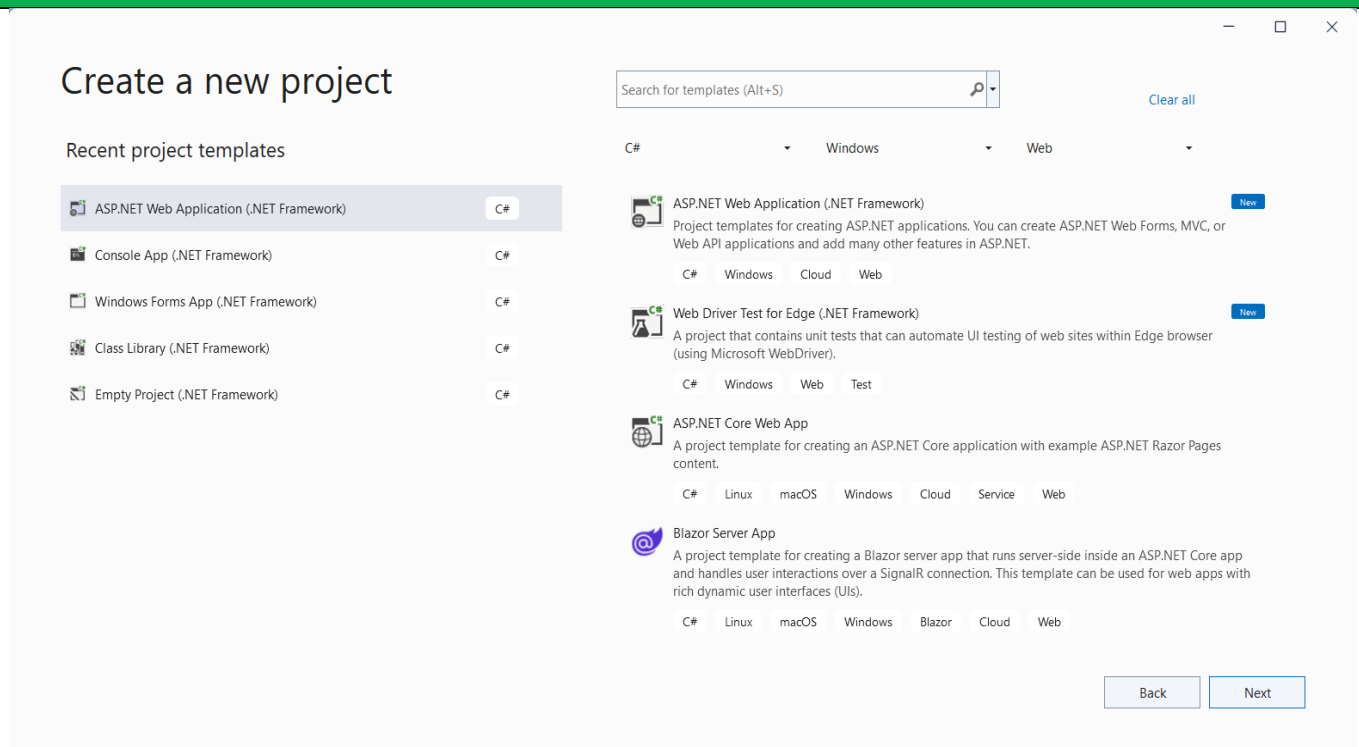
By [Manoj Karnatapu](#) - [NBHealthCareTechnologies](#)



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 Service 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)
```

```
        {
```

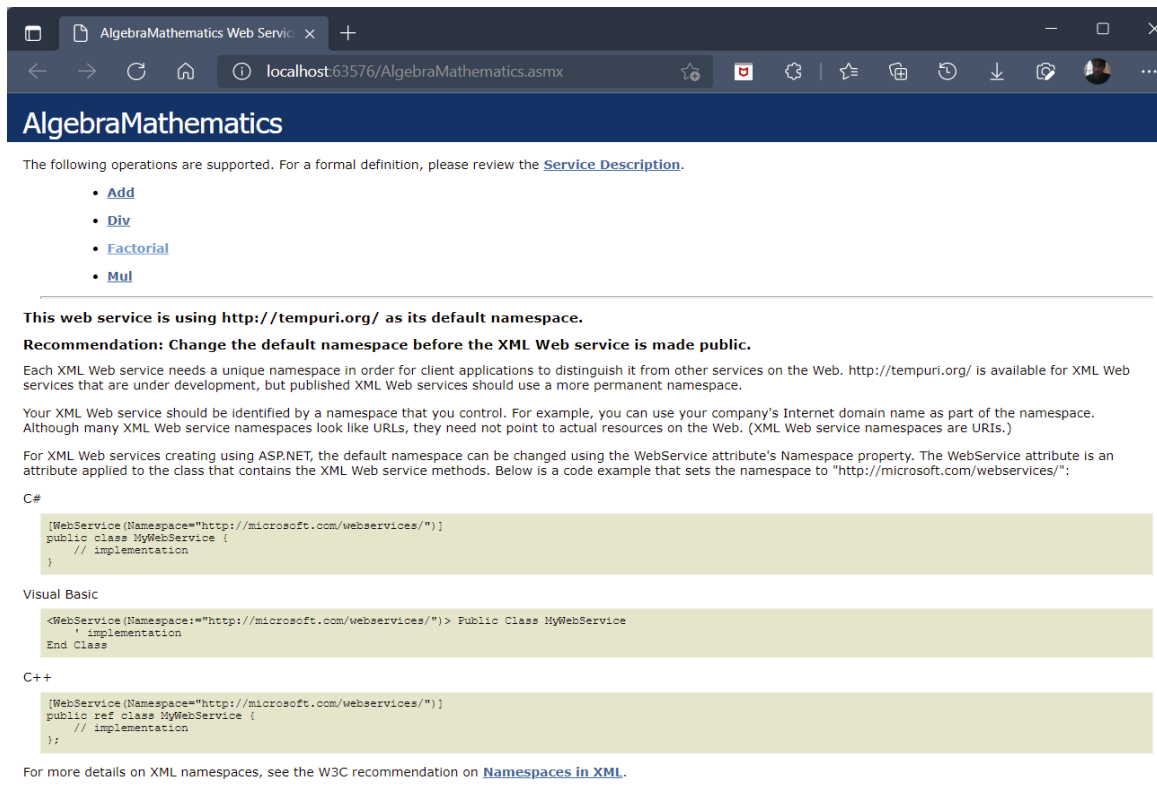
```
            return a / b;
```

```
        }
```

```
    }
```

```
}
```

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

            Console.WriteLine("\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();
}
}

```

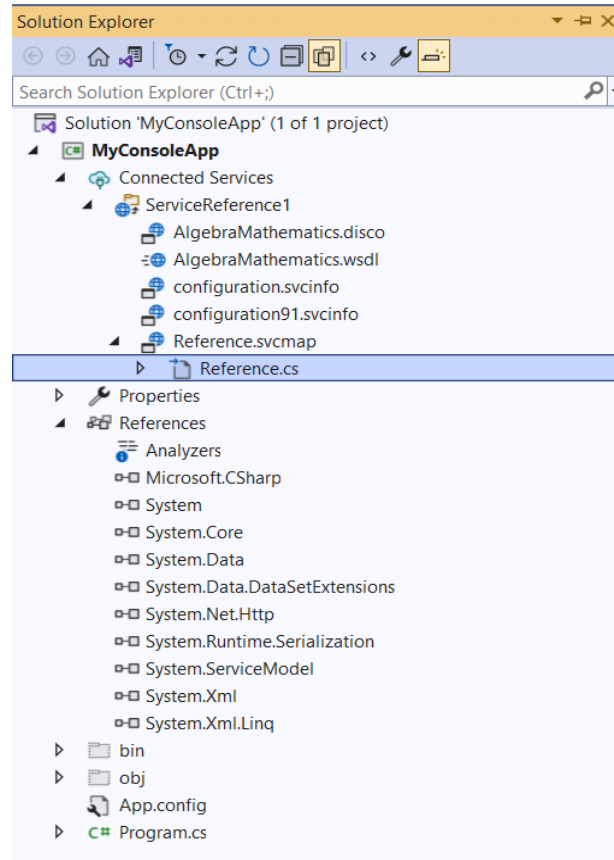
Output

```

C:\Windows\system32\cmd
Enter Any Number to find its Factorial : 7
The Factorial of Given Number 7 is : 5040
Enter Any 2 Number For Arithmetic Calculations
Enter Value for variable(a) : 15
Enter Value for variable(b) : 5
The Addition of 15 and 5 is : 20
The Multiplication of 15 and 5 is : 75
The Division of 15 and 5 is : 3
Press any key to continue . . . |

```

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.

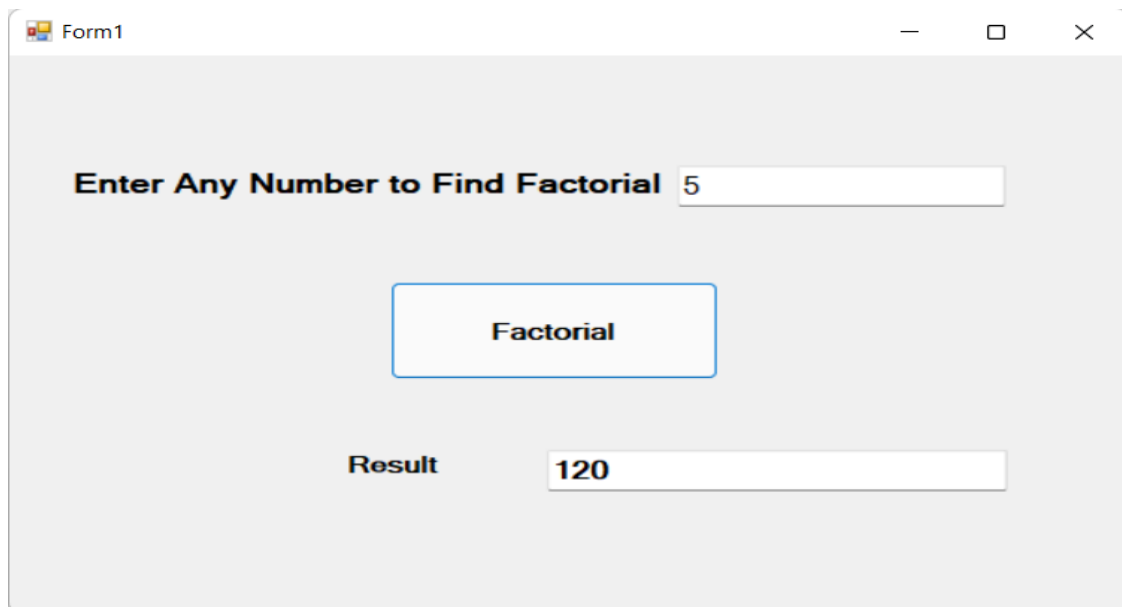
// For Reference, Check MyWindowsApp inside the MyConsoleApp in the same Repository.

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);

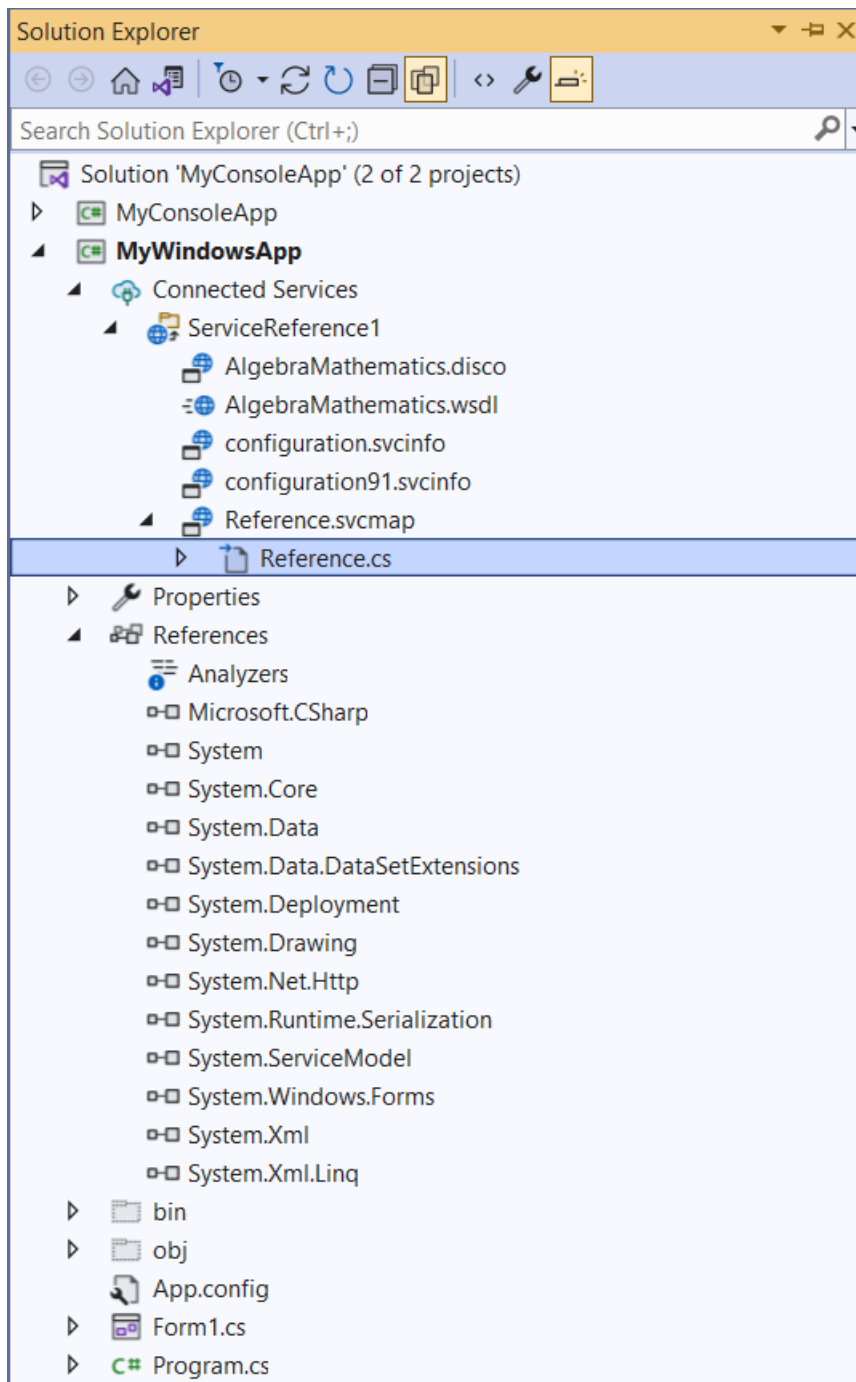
            textBox2.Text = obj.Factorial(n).ToString();
        }
    }
}
```

Output



The screenshot shows a Windows Forms application window titled "Form1". The window contains a label "Enter Any Number to Find Factorial" followed by a text box with the value "5". Below this is a button labeled "Factorial". At the bottom, there is a label "Result" followed by a text box displaying the value "120".

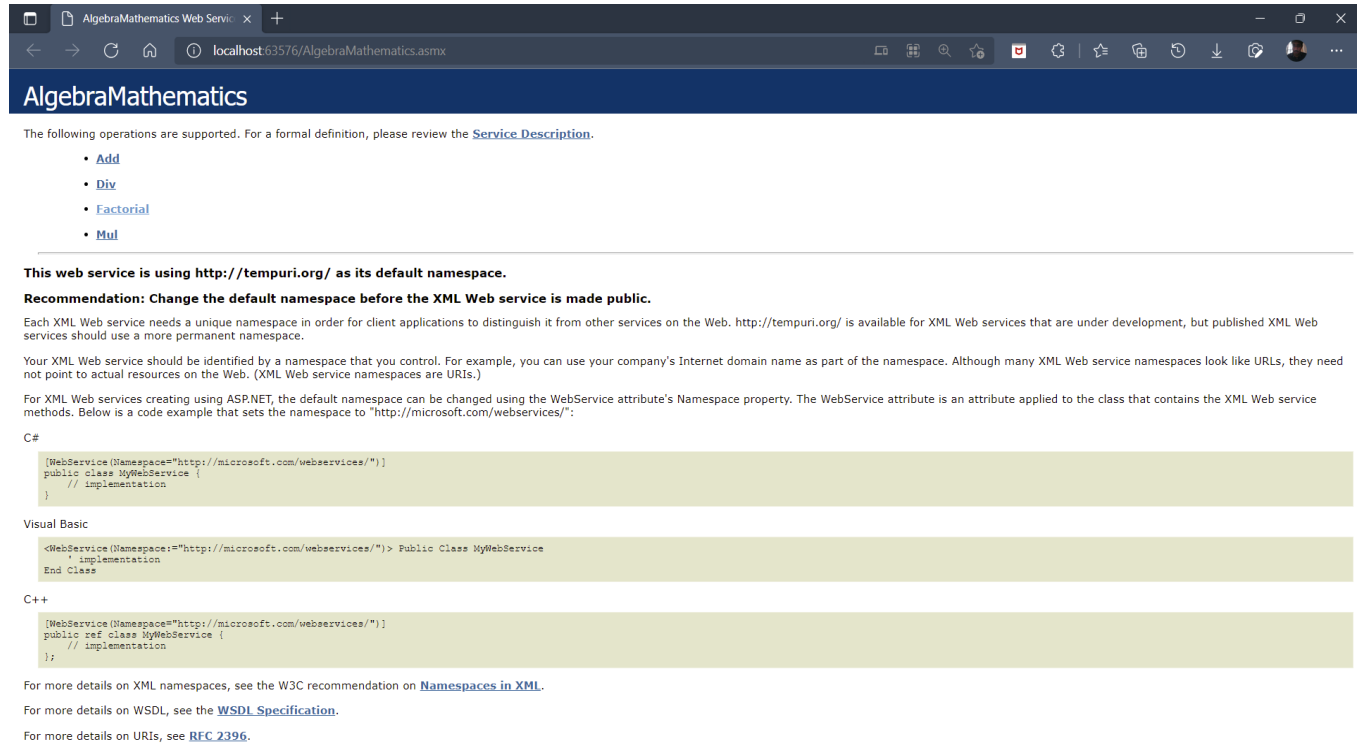
Solution Explorer :



Assignment 5

Put the screen shots of webservice running

Answer



The following operations are supported. For a formal definition, please review the [Service Description](#).

- [Add](#)
- [Div](#)
- [Factorial](#)
- [Mul](#)

This web service is using <http://tempuri.org/> as its default namespace.

Recommendation: Change the default namespace before the XML Web service is made public.

Each XML Web service needs a unique namespace in order for client applications to distinguish it from other services on the Web. <http://tempuri.org/> is available for XML Web services that are under development, but published XML Web services should use a more permanent namespace.

Your XML Web service should be identified by a namespace that you control. For example, you can use your company's Internet domain name as part of the namespace. Although many XML Web service namespaces look like URLs, they need not point to actual resources on the Web. (XML Web service namespaces are URIs.)

For XML Web services creating using ASP.NET, the default namespace can be changed using the WebService attribute's Namespace property. The WebService attribute is an attribute applied to the class that contains the XML Web service methods. Below is a code example that sets the namespace to "http://microsoft.com/webservices/":

C#

```
[WebService(Namespace="http://microsoft.com/webservices/")]
public class MyWebService {
    // Implementation
}
```

Visual Basic

```
<WebService(Namespace="http://microsoft.com/webservices/")> Public Class MyWebService
    ' Implementation
End Class
```

C++

```
[WebService(Namespace="http://microsoft.com/webservices/")]
public ref class MyWebService {
    // Implementation
};
```

For more details on XML namespaces, see the W3C recommendation on [Namespaces in XML](#).

For more details on WSDL, see the [WSDL Specification](#).

For more details on URIs, see [RFC 2396](#).

THE END