

**Day21 Assignment**

**By**

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## Question1:

## Update your visual studio with .Net Framework Template add on?

### Screenshot:

#### Create a new project

##### Recent project templates

- Console App (.NET Framework) C#
- Windows Forms App (.NET Framework) C#
- Class Library (.NET Framework) C#

Search for templates (Alt+S)

Clear all

C# Windows Web

**ASP.NET Web Application (.NET Framework)** New  
Project templates for creating ASP.NET applications. You can create ASP.NET Web Forms, MVC, or Web API applications and add many other features in ASP.NET.

C# Windows Cloud Web

**Web Driver Test for Edge (.NET Framework)** New  
A project that contains unit tests that can automate UI testing of web sites within Edge browser (using Microsoft WebDriver).

C# Windows Web Test

**ASP.NET Core Web App**  
A project template for creating an ASP.NET Core application with example ASP.NET Razor Pages content.

C# Linux macOS Windows Cloud Service Web

**Blazor Server App**  
A project template for creating a Blazor server app that runs server-side inside an ASP.NET Core app and handles user interactions over a SignalR connection. This template can be used for web apps with rich dynamic user interfaces (UIs).

C# Linux macOS Windows Blazor Cloud Web

**ASP.NET Core Web API**  
A project template for creating an ASP.NET Core application with an example Controller for a RESTful HTTP service. This template can also be used for ASP.NET Core MVC Views and Controllers.

C# Linux macOS Windows Cloud Service Web WebAPI

ASP.NET Core Empty

## Question2:

Create a web service for mathematical operations.

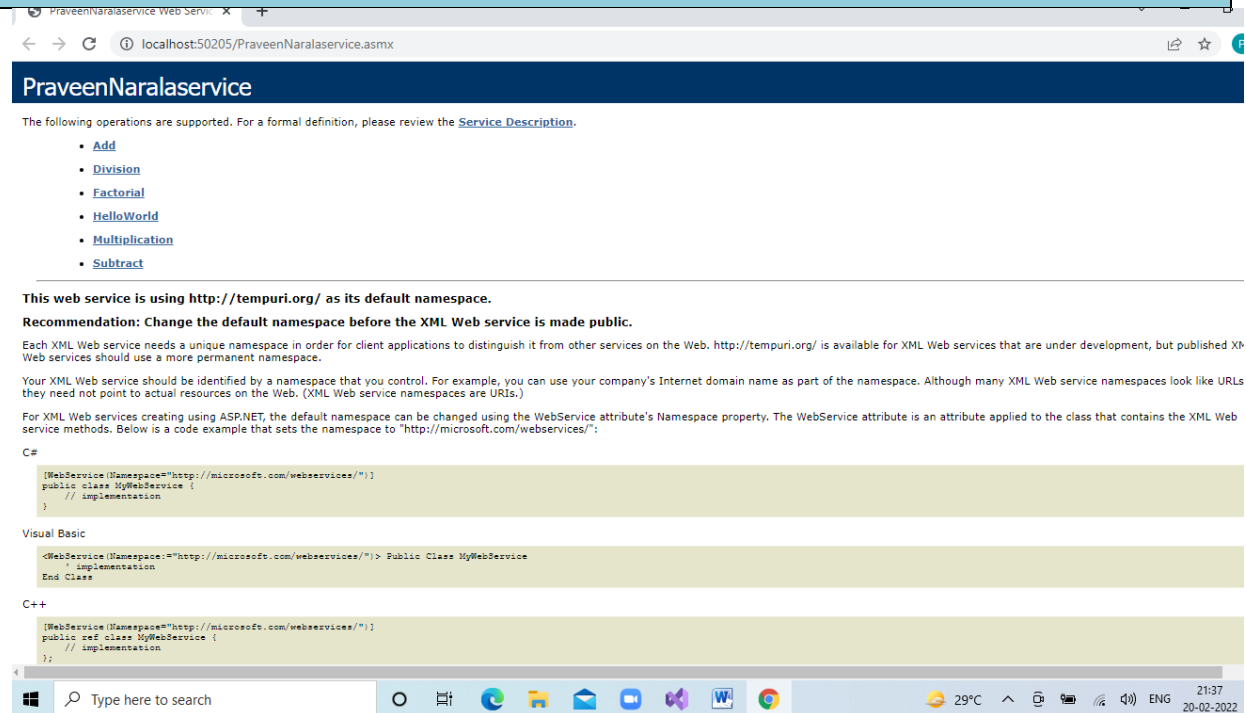
Example :Factorial

Add

Multiplication

Division

## Screenshot:



## Code:

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

namespace PraveenServices
{
    //Author:Narala Praveen
    //Purpose:To create a web service
    /// <summary>
    /// Summary description for PraveenNaralService
    /// </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 PraveenNaralService : System.Web.Services.WebService
    {

        [WebMethod]
        public string HelloWorld()
        {
```

```

        return "Hello World";
    }
    [WebMethod]

    public int Factorial(int n)//Factorial Method
    {
        int fact = 1;
        for (int i = 1; i < n; i++)
            fact = fact * i;
        return fact;
    }

    [WebMethod]
    public int Add(int a, int b)//Addition method
    {
        return a + b;
    }
    [WebMethod]
    public int Multiplication(int a, int b)//Multiplication method
    {
        return a * b;
    }
    [WebMethod]
    public int Division(int a , int b)//Division Method
    {
        return a/b;
    }
    [WebMethod]
    public int Subtract(int a,int b)//Subtract Method
    {
        return a-b;
    }
}

```

### Question 3:

### Create a Console Application and consume the Services?

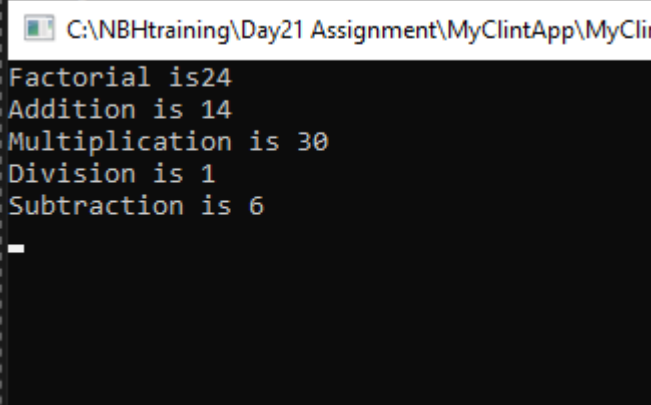
#### Code:

```
using MyClintApp.ServiceReference1;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace MyClintApp
{ //Author:Narala Praveem
    //Purpose:To check the Web services methods
    internal class Program
    {
        static void Main(string[] args)
        {
            PraveenNaralasserviceSoapClient pc = new
PraveenNaralasserviceSoapClient();
            Console.WriteLine($"Factorial is{pc.Factorial(4)}");
            Console.WriteLine($"Addition is {pc.Add(6,8)}");
            Console.WriteLine($"Multiplication is {pc.Multiplication(5,6)}");
            Console.WriteLine($"Division is {pc.Division(8,6)}");
            Console.WriteLine($"Subtraction is {pc.Subtract(21,15)}");
            Console.ReadLine();

        }
    }
}
```

#### Output:



C:\NBHtraining\Day21 Assignment\MyClintApp\MyClir

```
Factorial is24
Addition is 14
Multiplication is 30
Division is 1
Subtraction is 6
-
```

#### Question 4:

Create a windows Forms application and consumes the web services (for finding factorial of the number)?

#### Code:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using WindowsFormsApp1.ServiceReference1;

namespace WindowsFormsApp1
{
    public partial class Form1 : Form
    {
        //Author:Narala Praveen
        //Purpose: To consume web services in windows app.
        public Form1()
        {
            InitializeComponent();

            private void button1_Click(object sender, EventArgs e)
            {
                int n = Convert.ToInt32(textBox1.Text);
                PraveenNaralaspServiceSoapClient pc = new
                PraveenNaralaspServiceSoapClient();
                textBox2.Text = pc.Factorial(n).ToString();
            }
        }
    }
}
```

#### Output:

Form1

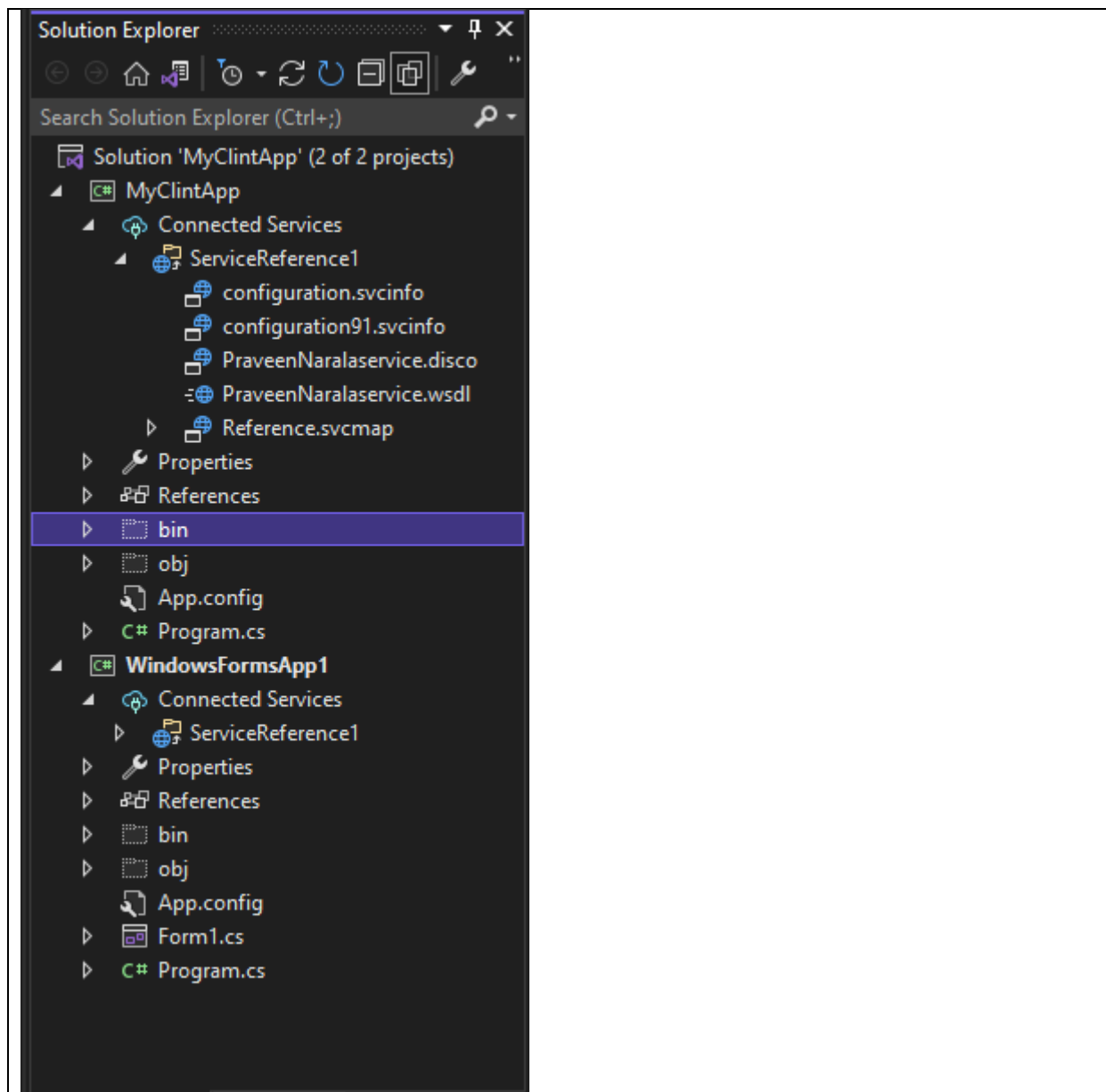
Enter Number

6

Factorial

720

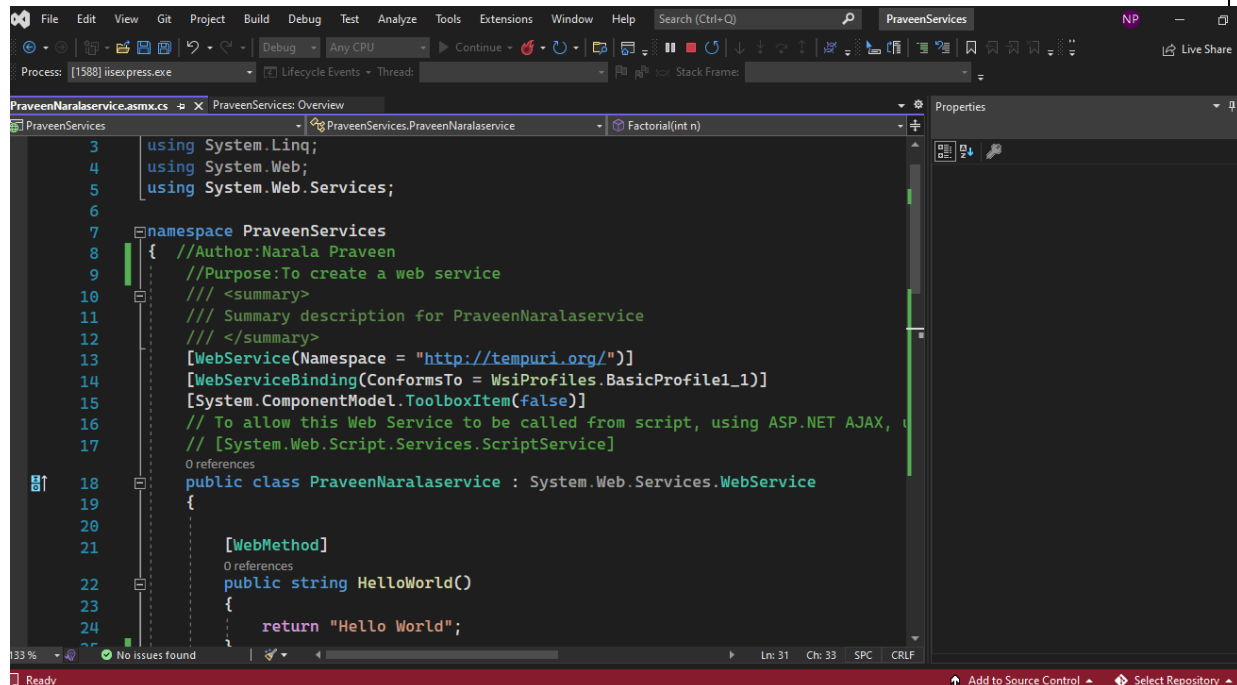
**Solution Explorer:**



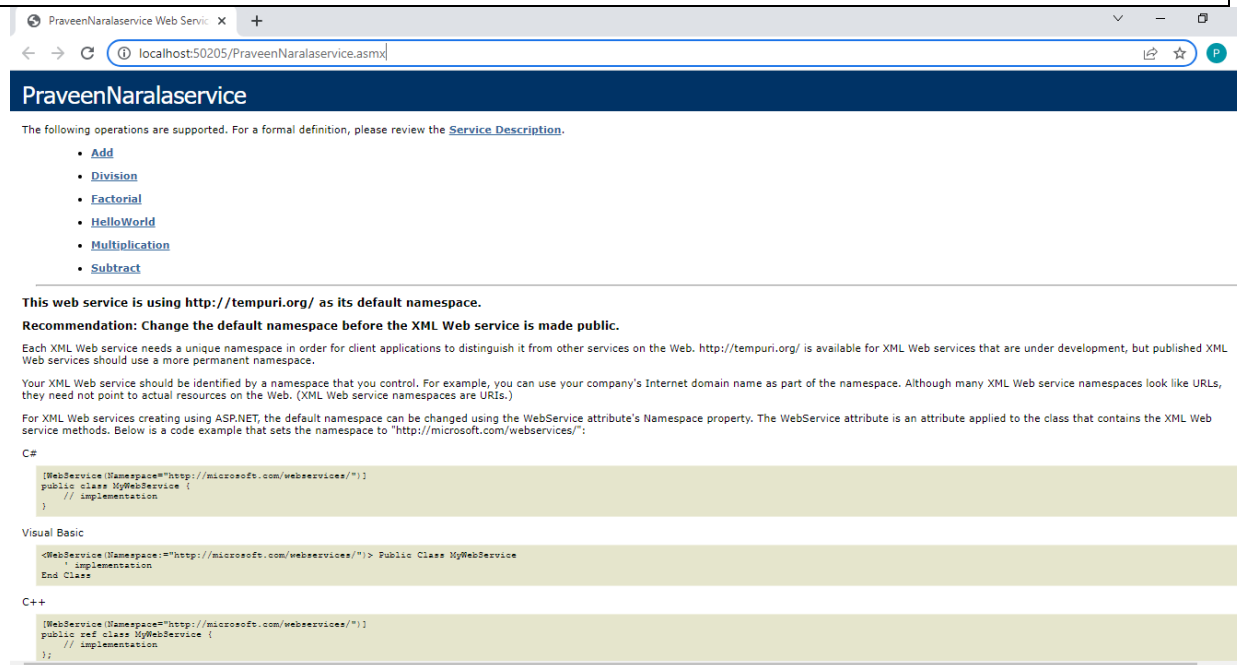


## Question 5: Put the Screen shot of Web service running?

Screen shot:



```
3 using System.Linq;
4 using System.Web;
5 using System.Web.Services;
6
7 namespace PraveenServices
8 {
9     //Author:Narala Praveen
10    //Purpose:To create a web service
11    /// <summary>
12    /// Summary description for PraveenNaralService
13    /// </summary>
14    [WebService(Namespace = "http://tempuri.org/")]
15    [WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]
16    [System.ComponentModel.ToolboxItem(false)]
17    // To allow this Web Service to be called from script, using ASP.NET AJAX, u
18    // [System.Web.Script.Services.ScriptService]
19    public class PraveenNaralService : System.Web.Services.WebService
20    {
21
22        [WebMethod]
23        public string HelloWorld()
24        {
25            return "Hello World";
26        }
27    }
28 }
```



### PraveenNaralService

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

- [Add](#)
- [Division](#)
- [Factorial](#)
- [HelloWorld](#)
- [Multiplication](#)
- [Subtract](#)

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
};
```