

**Date: 08/10/2020****Practical no 5****AIM:** Implement a typical service and a typical client using WCF.**Program Code:-****IService1.cs**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Runtime.Serialization;
using System.ServiceModel;
using System.ServiceModel.Web;
using System.Text;

namespace WcfService8
{
    [ServiceContract]
    public interface IService1
    {
        [OperationContract]
        int add(int a, int b);
        [OperationContract]
        int Sub(int a, int b);
        [OperationContract]
        int Mul(int a, int b);
        [OperationContract]
        int Div(int a, int b);
    }
}
```

```
}  
  
}
```

**Service1.svc.cs:-**

```
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Runtime.Serialization;  
using System.ServiceModel;  
using System.ServiceModel.Web;  
using System.Text;  
namespace WcfService8  
{  
    public class Service1 : IService1  
    {  
        int IService1.add(int a, int b)  
        {  
            return (a + b);  
        }  
        int IService1.Sub(int a, int b)  
        {  
            if (a >= b)  
                return (a - b);  
            else  
                return (b - a);  
        }  
        int IService1.Mul(int a, int b)
```

```
{
    return (a * b);
}
int IService1.Div(int a, int b)
{
    if (a >= b)
        return (a / b);
    else
        return (b / a);
}
}
```

**Webform1.aspx**

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WcfService8.WebForm1" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server" style="background-color:lightgray">
        <div>
            Enter first number
            <asp:TextBox ID="TextBox1" runat="server" ></asp:TextBox> &nbsp; &nbsp; &nbsp; &nbsp;
            Enter second number
            <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox> <br /><br />
```

```
<asp.Button ID="Button1" runat="server" Text="Add" OnClick="btnadd_Click" />&nbsp; &nbsp; &nbsp; &nbsp;  
    <asp.Button ID="Button2" runat="server" Text="Sub"  
OnClick="btnclick_Click"/>&nbsp; &nbsp; &nbsp; &nbsp;  
    <asp.Button ID="Button3" runat="server" Text="Mul"  
OnClick="btnmul_Click"/>&nbsp; &nbsp; &nbsp; &nbsp;  
    <asp.Button ID="Button4" runat="server" Text="Div" OnClick="btndiv_Click"/> <br  
    <asp.Label ID="Label2" runat="server" Text="Result:-"></asp.Label>&nbsp;  
&nbsp; &nbsp; &nbsp; &nbsp;  
    <asp.TextBox ID="TextBox3" runat="server"></asp.TextBox> <br /><br /><br /><br />  
    performed by krupal 713  
</div>  
</form>  
</body>  
</html>
```

## WebForm.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WcfService8
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        ServiceReference1.Service1Client Client = new ServiceReference1.Service1Client();
    }
}
```

```
protected void Page_Load(object sender, EventArgs e)
{
}
int a, b;
protected void btnadd_Click(object sender, EventArgs e)
{
    a = Convert.ToInt32(TextBox1.Text);
    b = Convert.ToInt32(TextBox2.Text);
    int Addition = Client.add(a, b);
    TextBox3.Text = Addition.ToString();
}
protected void btnsub_Click(object sender, EventArgs e)
{
    a = Convert.ToInt32(TextBox1.Text);
    b = Convert.ToInt32(TextBox2.Text);
    int sub = Client.Sub(a, b);
    TextBox3.Text = sub.ToString();
}
protected void btnmul_Click(object sender, EventArgs e)
{
    a = Convert.ToInt32(TextBox1.Text);
    b = Convert.ToInt32(TextBox2.Text);
    int mul = Client.Mul(a, b);
    TextBox3.Text = mul.ToString();
}
protected void btndiv_Click(object sender, EventArgs e)
{
    a = Convert.ToInt32(TextBox1.Text);
    b = Convert.ToInt32(TextBox2.Text);
```

```
int div = Client.Div(a, b);  
    TextBox3.Text = div.ToString();  
}  
}  
}
```

**Output:-**

