Date: 13/10/2020

**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);  }  }  } |

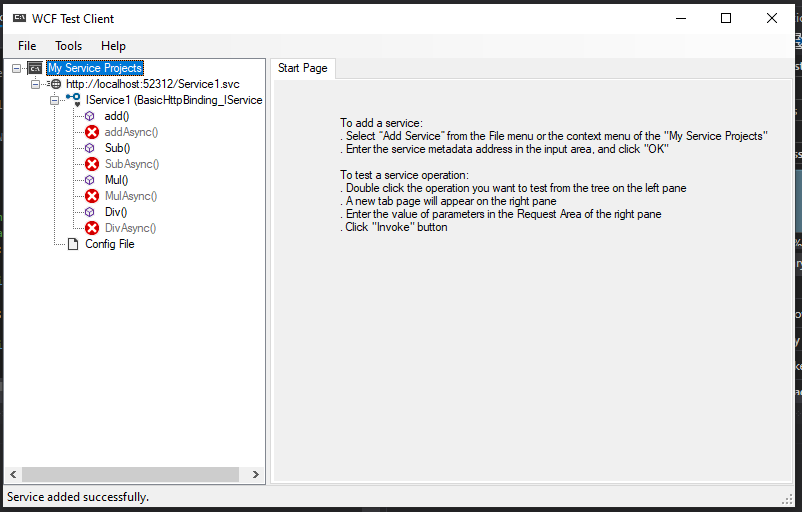
**Webform1.aspx**

|  |
| --- |
| <%@ 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;  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;  <asp:Button ID="Button2" runat="server" Text="Sub" OnClick="btnsub\_Click"/>&nbsp; &nbsp;&nbsp;  <asp:Button ID="Button3" runat="server" Text="Mul" OnClick="btnmul\_Click"/>&nbsp; &nbsp;&nbsp;  <asp:Button ID="Button4" runat="server" Text="Div" OnClick="btndiv\_Click"/> <br /><br />  <asp:Label ID="Label2" runat="server" Text="Result:-"></asp:Label>&nbsp; &nbsp;&nbsp;  <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox> <br /><br /><br /><br />  performed by krunal 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:-**

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