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| Day 21st Assignment  By  J Siva Naga Prasanna |

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| **1. Update your Visual Studio with .Net Framework Templates add on**  **(as discussed in the class)** |
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| **2. Create a web service for Mathematical Operations.**  **Example : Factorial, add, Mul, div** |
| using System;  using System.Collections.Generic;  using System.Linq;  using System.Web;  using System.Web.Services;  namespace MymathematicsWebService  {  /// <summary>  /// Summary description for Algebra  /// </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 Algebra : System.Web.Services.WebService  {  [WebMethod]  public int Factorial(int n)  {  int fact = 1, i;  for (i = 1; i <= n; i++)  fact = 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;  }  [WebMethod]  public int sub(int a, int b)  {  return a - b;  }  }  } |
| Output: |

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| **3. Create a Console Application and consume the web service** |
| Code:  using MyClientApp.ServiceReference1;  using System;  using System.Collections.Generic;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  namespace MyClientApp  {  internal class Program  {  static void Main(string[] args)  {  AlgebraSoapClient obj = new AlgebraSoapClient();  Console.WriteLine(obj.Factorial(8));  Console.WriteLine(obj.Add(15, 11));  Console.WriteLine(obj.mul(12, 3));  Console.WriteLine(obj.sub(11, 7));  Console.WriteLine(obj.div(12, 4));  Console.ReadLine();  }  }  } |
| Output: |

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| **4.Create a Windows Forms application and consume the web service**  **[ 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;  namespace WindowsFormsApp1  {  public partial class Form1 : Form  {  public Form1()  {  InitializeComponent();  }  private void label2\_Click(object sender, EventArgs e)  {  int n = Convert.ToInt32(textBox1.Text);  AlgebraSoapClient obj = new AlgebraSoapClient();  textBox2.Text = obj.Factorial(n).ToString();  }  }  } |
| Output: |

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| **5. Put the screen shots of web service running** |
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