

## CLOUD COMP. & WEB SERVICES (PRAC 1)

**AIM: Define a simple services like converting R (rupees) into D (dollar) and call it from different platform**

[Visual studio ide]

Project

Aps.net

(if not, go to vs installer and install asp.net and .net desktop)

Solution explorer section

Add

Web services

As per pdf

new item

web service (.asmx)

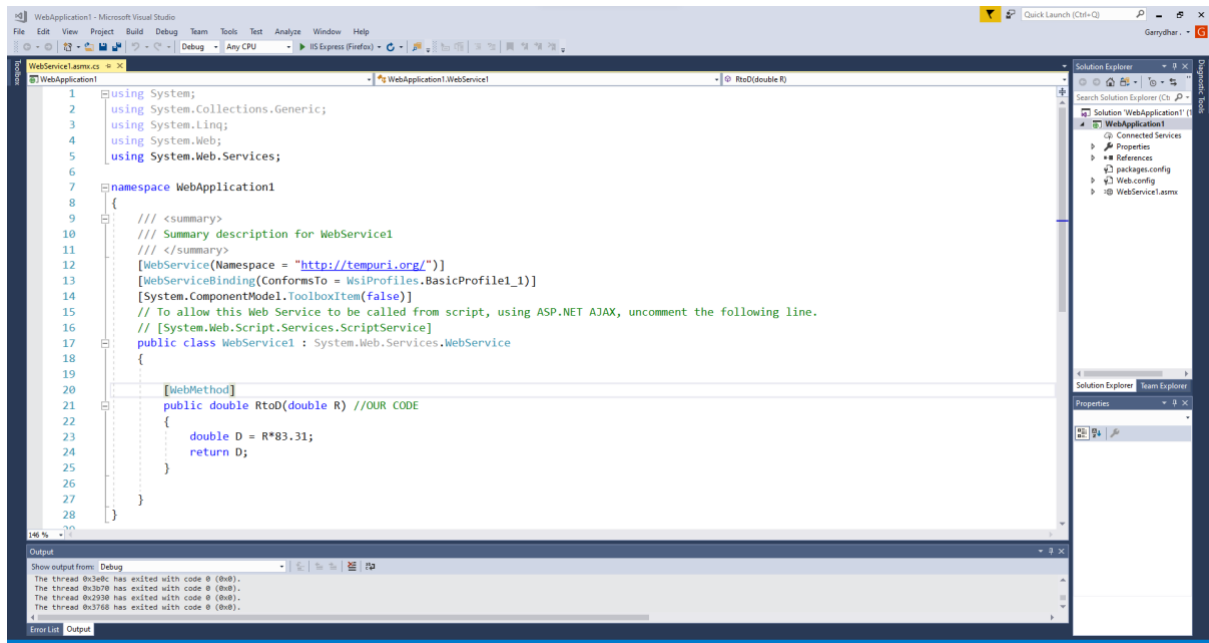
### CODE:

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

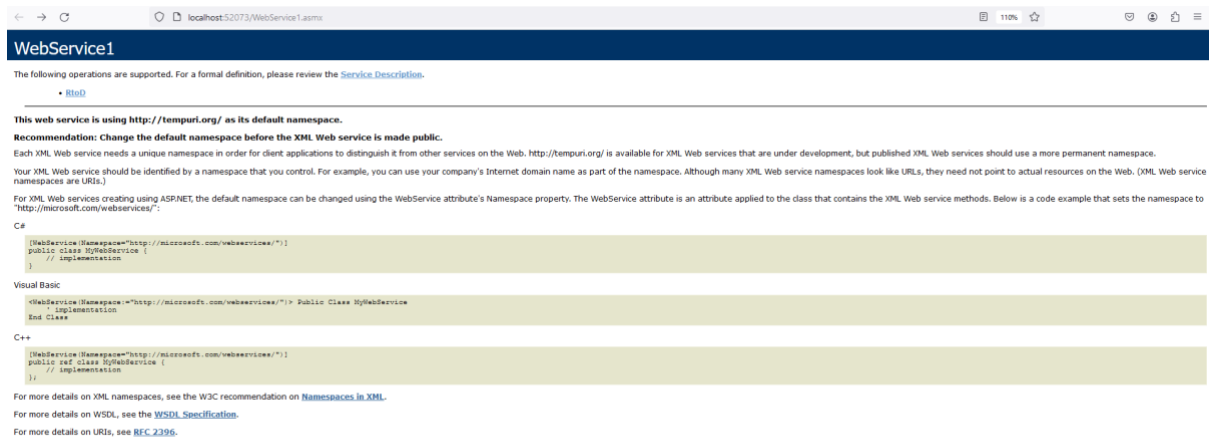
namespace WebApplication1
{
    /// <summary>
    /// Summary description for Webservice1
    /// </summary>
    [WebService(Namespace = "http://tempuri.org/")]
    [WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]
    [System.ComponentModel.ToolboxItem(false)]
    // To allow this Web Service to be called from script, using ASP.NET AJAX,
    uncomment the following line.
    // [System.Web.Script.Services.ScriptService]
    public class Webservice1 : System.Web.Services.WebService
    {

        [WebMethod]
        public double RtoD(double R) //OUR CODE
        {
            double D = R*83.31;
            return D;
        }

    }
}
```



## OUTPUT :





Click [here](#) for a complete list of operations.

## RtoD

### Test

To test the operation using the HTTP POST protocol, click the 'Invoke' button.

Parameter	Value
R:	<input type="text" value="1"/>

### SOAP 1.1

The following is a sample SOAP 1.1 request and response. The [placeholders](#) shown need to be replaced with actual values.

```
POST /WebService1.aspx HTTP/1.1
Host: localhost
Content-Type: text/xml; charset=utf-8
Content-Length: length
SOAPAction: "http://tempuri.org/RtoD"

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <RtoD xmlns="http://tempuri.org/">
      <R>double</R>
    </RtoD>
  </soap:Body>
</soap:Envelope>

HTTP/1.1 200 OK
Content-Type: text/xml; charset=utf-8
Content-Length: length

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <RtoDResponse xmlns="http://tempuri.org/">
      <RtoDResult>double</RtoDResult>
    </RtoDResponse>
  </soap:Body>
</soap:Envelope>
```

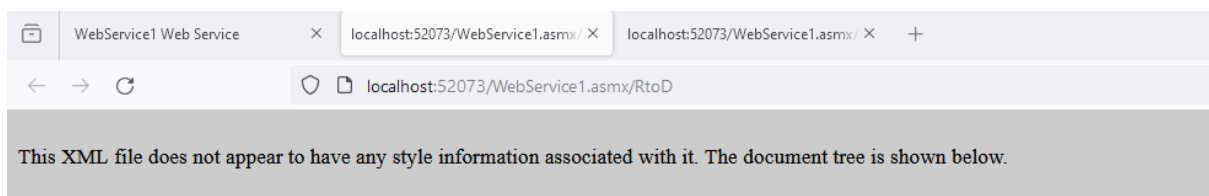
### SOAP 1.2

The following is a sample SOAP 1.2 request and response. The [placeholders](#) shown need to be replaced with actual values.

```
POST /WebService1.aspx HTTP/1.1
Host: localhost
Content-Type: application/soap+xml; charset=utf-8
Content-Length: length

<?xml version="1.0" encoding="utf-8"?>
<soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap12="http://schemas.xmlsoap.org/soap12/">
  <soap12:Body>
    <RtoD xmlns="http://tempuri.org/">
      <R>double</R>
    </RtoD>
  </soap12:Body>
</soap12:Envelope>

HTTP/1.1 200 OK
```



<double>83.31</double>

[Net beans]

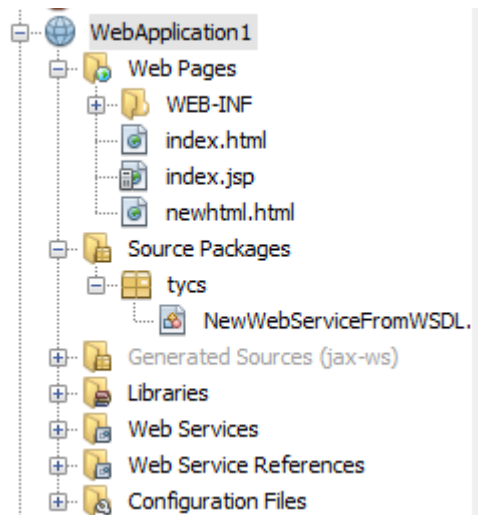
New project

Java web

Web service

Right click on file

Web service client



### Code: (newhtml.html)

```
<!DOCTYPE html>
```

```
<!--
```

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

```
-->
```

```
<html>
```

```
  <head>
```

```
    <title>--Calculation--</title>
```

```
    <meta charset="UTF-8">
```

```
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
  </head>
```

```
  <body>
```

```
    <form action ="index.jsp" method="POST">
```

Enter Rupees:<input type="text" name="txt1" value="" /> <br>

<input type="submit" value="rs to dollar" /> <br>

```
    </form>
```

```
  </body>
```

</html>

---

### Code: (index.jsp)

<%--

Document : index

Created on : 1 Feb, 2024, 12:07:23 PM

Author : admin

--%>

<%@page contentType="text/html" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>JSP Page</title>

</head>

<body>

<h1>Hello World...lets convert dollar to rupees!</h1>

<%

tycs.WebService1 obj = new tycs.WebService1();

tycs.WebService1Soap port=obj.getWebService1Soap();

double num1= Double.parseDouble(request.getParameter("txt1"));

double result = port.rtoD(num1);

out.println("conversion from rs to dollar is " +result);

%>

</body>

</html>

```
StartPage x index.html x NewWebService.java x index.html x TempConvert.java x index.html x index.html x NewWebServiceFromWSDL.java x newhtml.html x index.jsp x
Source Design History
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package tycs;

import javax.jws.WebService;

/**
 *
 * @author admin
 */
@WebService(serviceName = "WebService1", portName = "WebService1Soap", endpointInterface = "org.tempuri.WebService1Soap", targetNamespace = "http://tempuri.org/")
public class NewWebServiceFromWSDL {

    public double addition(double a, double b) {
        //TODO implement this method
        throw new UnsupportedOperationException("Not implemented yet.");
    }

    public double multiplication(double a, double b) {
        //TODO implement this method
        throw new UnsupportedOperationException("Not implemented yet.");
    }

}
```

```
StartPage x index.html x NewWebService.java x index.html x TempConvert.java x index.html x index.html x NewWebServiceFromWSDL.java x newhtml.html x index.jsp x
Source Design History
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
<!DOCTYPE html>
<!--
To change this license header, choose License Headers in Project Properties.
To change this template file, choose Tools | Templates
and open the template in the editor.
-->
<html>
    <head>
        <title>--Calculation--</title>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
    </head>
    <body>
        <form action="index.jsp" method="POST">
            Enter Rupees:<input type="text" name="txt1" value="" /> <br>
            <input type="submit" value="rs to dollar" /> <br>
        </form>
    </body>
</html>
```

```
Start Page x index.html x NewWebService.java x index.html x TempConvert.java x index.html x index.html x NewWebServiceFromWSDL.java x newhtml.html x index.jsp x
Source History
3      Created on : 1 Feb, 2024, 12:07:23 PM
4      Author    : admin
5      --%>
6
7      <%@page contentType="text/html" pageEncoding="UTF-8"%>
8      <!DOCTYPE html>
9      <html>
10     <head>
11         <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
12         <title>JSP Page</title>
13     </head>
14     <body>
15         <h1>Hello World...lets convert dollar to rupess!</h1>
16         <%
17             tycs.WebService1 obj = new tycs.WebService1();
18             tycs.WebService1Soap port=obj.getWebService1Soap();
19             double num1= Double.parseDouble(request.getParameter("txt1"));
20             double result = port.rtoD(num1);
21             out.println("conversion from rs to dollar is " +result);
22         %>
23     </body>
24 </html>
25
```

## OUTPUT:

WebService1.asmx.xml x TODO supply a title x --Calculation-- x TODO supply a title x +

localhost:8080/WebApplication1/newhtml.html

Enter Rupees:

WebService1.asmx.xml x TODO supply a title x JSP Page x TODO supply a title x +

localhost:8080/WebApplication1/index.jsp

# Hello World...lets convert dollar to rupess!

conversion from rs to dollar is 83.31