

Practical - 1

Define a simple services like Converting Rs into Dollar and Call it from different platform like JAVA and .NET

- 1] create a new project and create a new webservice
- 2] now right clickon the code and clickon insert code > add new web service operation
- 3] after give name to operation **FtoC**and add one parameter **a** of double data type and clickok the code willauto generate .
- 4] now do the followingchanges in that auto generated code:

```
*/
@WebMethod(operationName = "FtoC")
public String FtoC(@WebParam(name = "a") double a) {
    //TODO write your implementation code here:
    return "The Fahrenheit Temperature "+a+" in Celsius is "+((a-32)*5/9);
}
```

Now deploy the model.

- 5] After deploying the model just right clickon your web service and clickon test web service . and you willget redirected to a browser page where you can check that your web service is working or not.

Creating java Client using jsp

- 5] now right clickon web pages > new > jsp . and give name as input jsp.
- Again right clickon web pages > new > jsp . and give name as output jsp.
- 6] In input.jsp write the following code :

```
<body>
    <form action="output.jsp">
        <pre>
            Enter the temperature in Fahrenheit:<input type="text" name="t1" required>

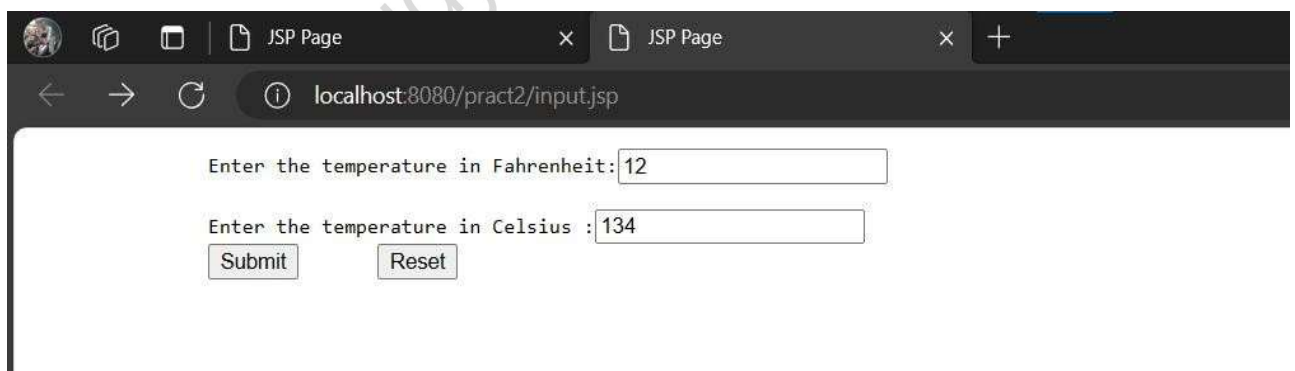
            Enter the temperature in Celsius :<input type="text" name="t2" required>
            <input type="submit">          <input type="reset">
        </pre>
    </form>
</body>
```

7] create a Web service client and give package name as “Client”. After creating web service client go to web service references and drag and drop the operations in output.jsp in body tag as shown

below:

```
<%-- start web service invocation --%><hr/>
<%
try {
    client.Conv_Service service = new client.Conv_Service();
    client.Conv_port = service.getConvPort();
    // TODO initialize WS operation arguments here
    double a = Double.parseDouble(request.getParameter("t1"));
    // TODO process result here
    java.lang.String result = port.FtoC(a);
    out.println(result);
} catch (Exception ex) {
    // TODO handle custom exceptions here
}
%>
<%-- end web service invocation --%><hr/>
```

8] now deploy the model again and run the input.jsp file you will get redirected to the browser page as shown:

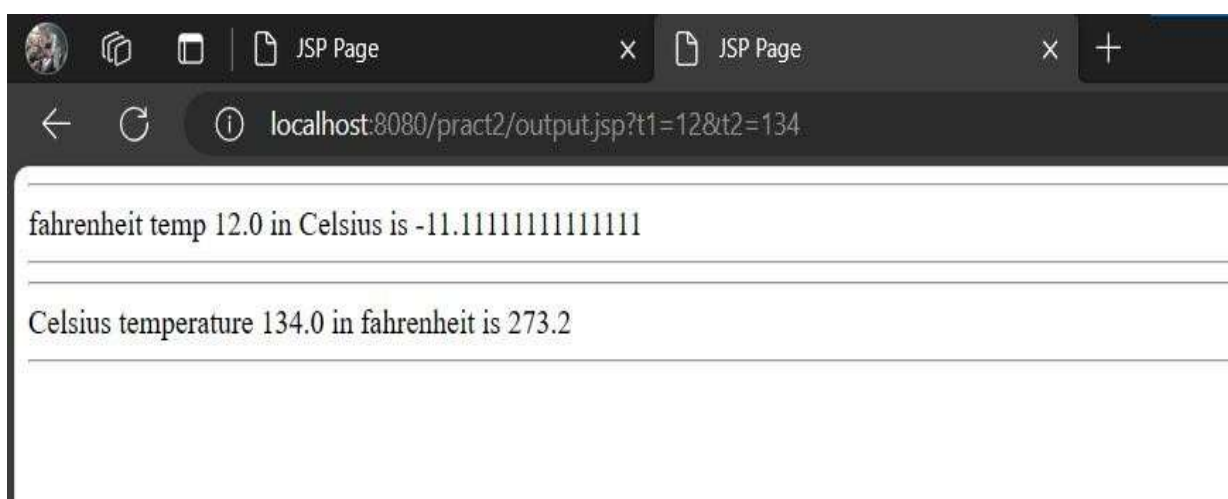


Enter the temperature in Fahrenheit: 12

Enter the temperature in Celsius : 134

Submit Reset

After submitting you will get the following output:



fahrenheit temp 12.0 in Celsius is -11.111111111111111

Celsius temperature 134.0 in fahrenheit is 273.2

Python Client

1] Deploy the web service and write the following code :

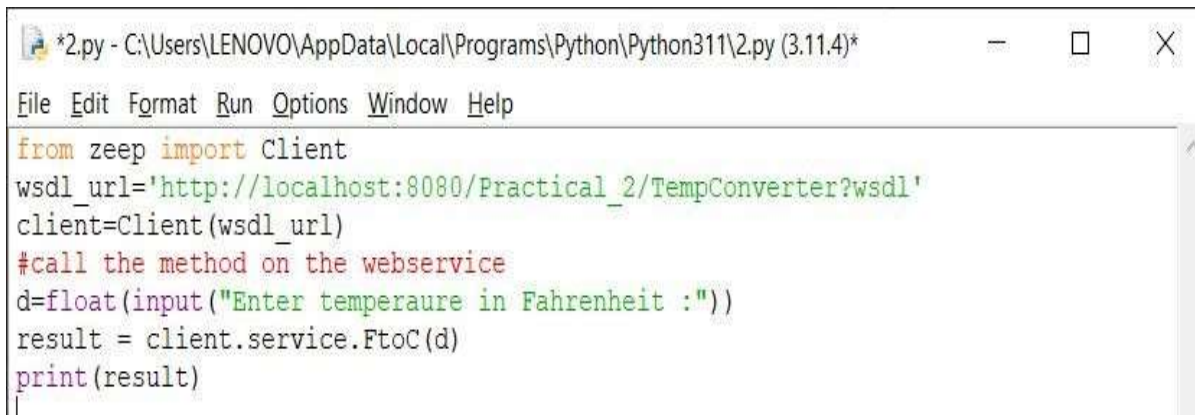
Code:

```
from zeep import Client
wsdl_url='http://localhost:8080/Practical_2/TempConverter?wsdl'
client=Client(wsdl_url)
#call the method on the webservice
d=float(input("Enter temperaure in Fahrenheit :"))
result = client.service.FtoC(d)
print(result)
```

2] replace your_wsdl_url with the url which was copied at the time of web service client creation .

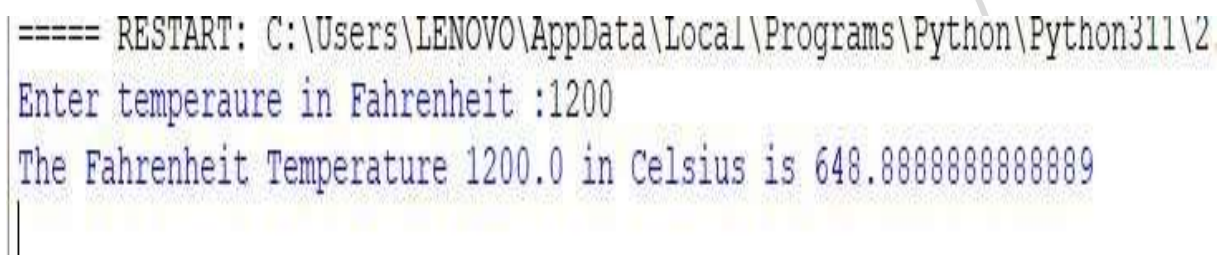
In step no.16 . and replace the operation_name with your method or operation name. and pass parameter to it

3] final code should look like following:



```
*2.py - C:\Users\LENOVO\AppData\Local\Programs\Python\Python311\2.py (3.11.4)*
File Edit Format Run Options Window Help
from zeep import Client
wsdl_url='http://localhost:8080/Practical_2/TempConverter?wsdl'
client=Client(wsdl_url)
#call the method on the webservice
d=float(input("Enter temperaure in Fahrenheit :"))
result = client.service.FtoC(d)
print(result)
```

4) after running the above code you should get the following output:



```
==== RESTART: C:\Users\LENOVO\AppData\Local\Programs\Python\Python311\2
Enter temperaure in Fahrenheit :1200
The Fahrenheit Temperature 1200.0 in Celsius is 648.8888888888889
```