

Name: Nisha Yadav

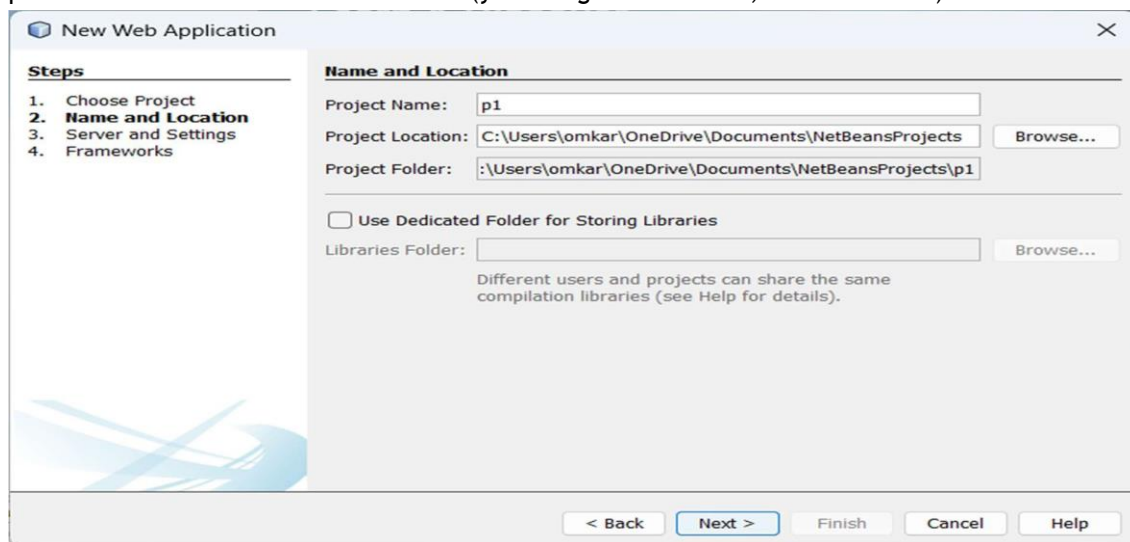
Roll no: 18

Practical 1 - Create a Simple SOAP service

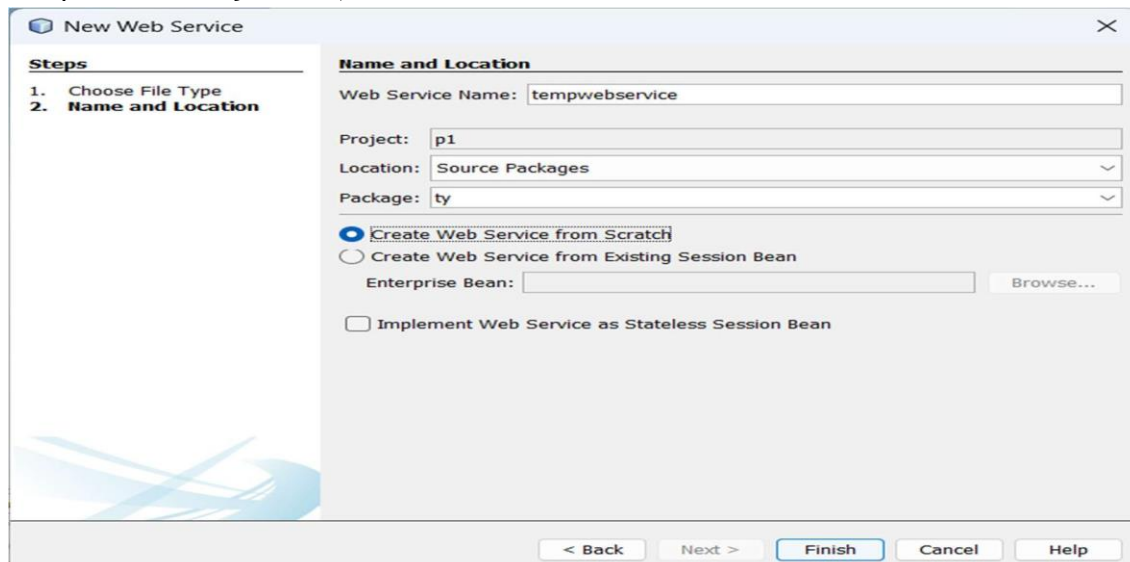
Aim: To create a Simple Web Service that converts the temperature from Celsius to Fahrenheit and vice versa.

Steps:

Step 1: Create a Web Application: File > New Project > Java Web > Web Application > Name: p1 > Add GlassFish Server 4.1 > Finish > (you will get index.html, delete this file).



Step 2: Create a Web Service in that project: Right Click on Project Name > New > Web Service... > Name: tempwebservice and Package Name: ty > OK > (you will get tempwebservice.java file)



Step 3: As we have created our WEB SERVICE (i.e. tempwebservice), WE'LL NOW ADD SOME FUNCTIONALITIES (i.e. temperature conversion methods). So, in the class tempwebservice, add 2 methods by doing:

a) Right Click > Insert Code > Add Web Service Operation...>

Name: convertFtoC >

Return Type: float >

Add a Parameter 'a' with Type: float > OK >

Now add formula in return statement $((a-32) * 5/9)$.

b) Right Click > Insert Code > Add Web Service Operation...>

Name: convertCtoF >

Return Type: float >

Add a Parameter 'b' with Type: float > OK >

Now add formula in return statement $((b*9/5) + 32)$

The screenshot shows the 'Add Operation' dialog box with the following details:

- Name:** convertFtoC
- Return Type:** java.lang.Float
- Parameters:** A table with one parameter 'a' of type 'float'.
- Exceptions:** Empty.
- Buttons:** Add, Remove, Up, Down, OK, Cancel.

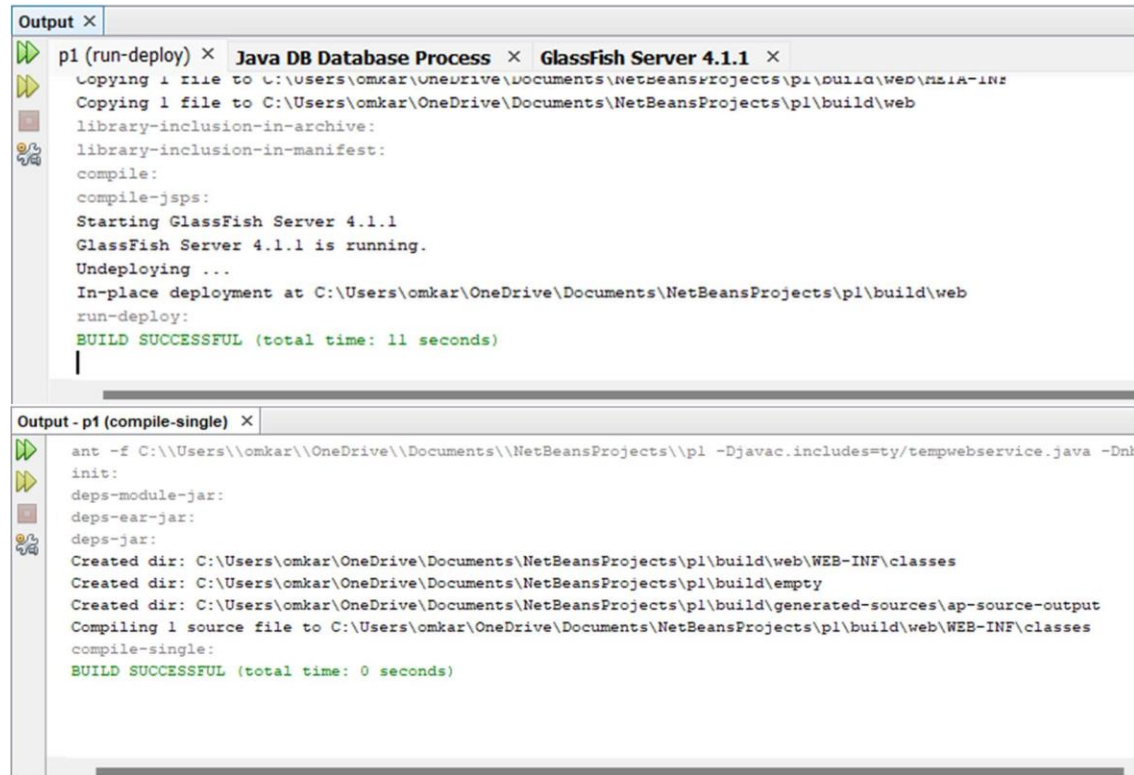
Name	Type	Final
a	float	<input type="checkbox"/>

The screenshot shows the 'Add Operation' dialog box with the following details:

- Name:** convertCtoF
- Return Type:** java.lang.Float
- Parameters:** A table with one parameter 'b' of type 'float'.
- Exceptions:** Empty.
- Buttons:** Add, Remove, Up, Down, OK, Cancel.

Name	Type	Final
b	float	<input type="checkbox"/>

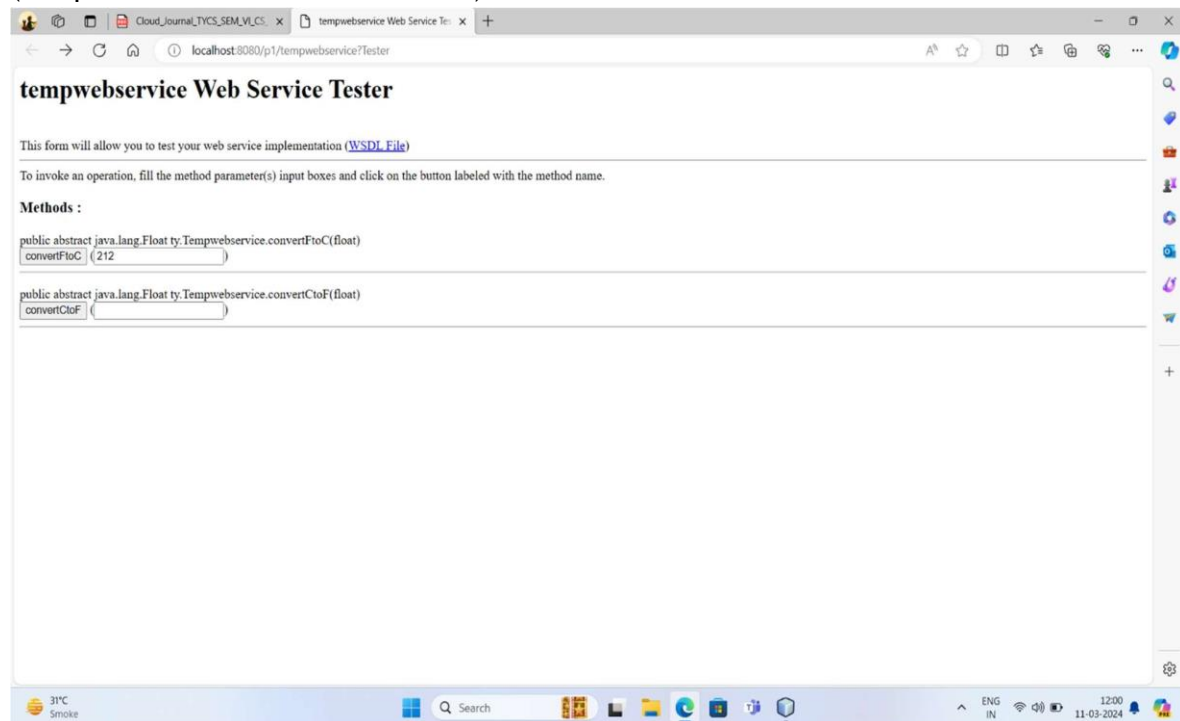
Step 4: Compile(F9) and Deploy (right click on Project Name > Deploy).

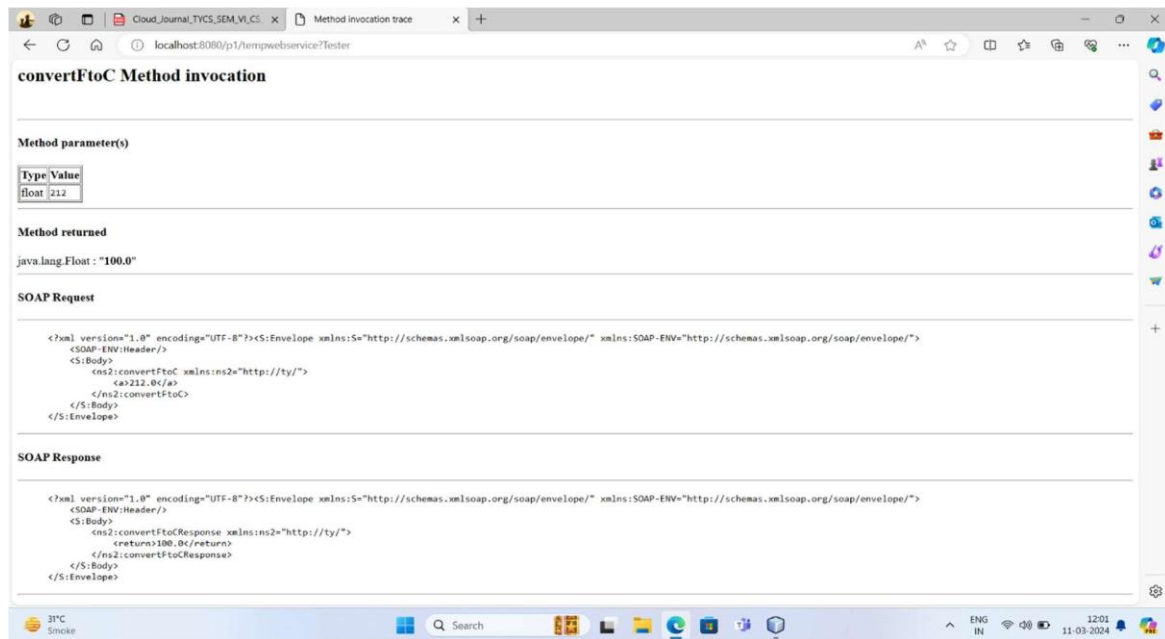


```
Output x
p1 (run-deploy) x Java DB Database Process x GlassFish Server 4.1.1 x
Copying 1 file to C:\Users\omkar\OneDrive\Documents\NetBeansProjects\p1\build\web\META-INF
Copying 1 file to C:\Users\omkar\OneDrive\Documents\NetBeansProjects\p1\build\web
library-inclusion-in-archive:
library-inclusion-in-manifest:
compile:
compile-jsp:
Starting GlassFish Server 4.1.1
GlassFish Server 4.1.1 is running.
Undeploying ...
In-place deployment at C:\Users\omkar\OneDrive\Documents\NetBeansProjects\p1\build\web
run-deploy:
BUILD SUCCESSFUL (total time: 11 seconds)

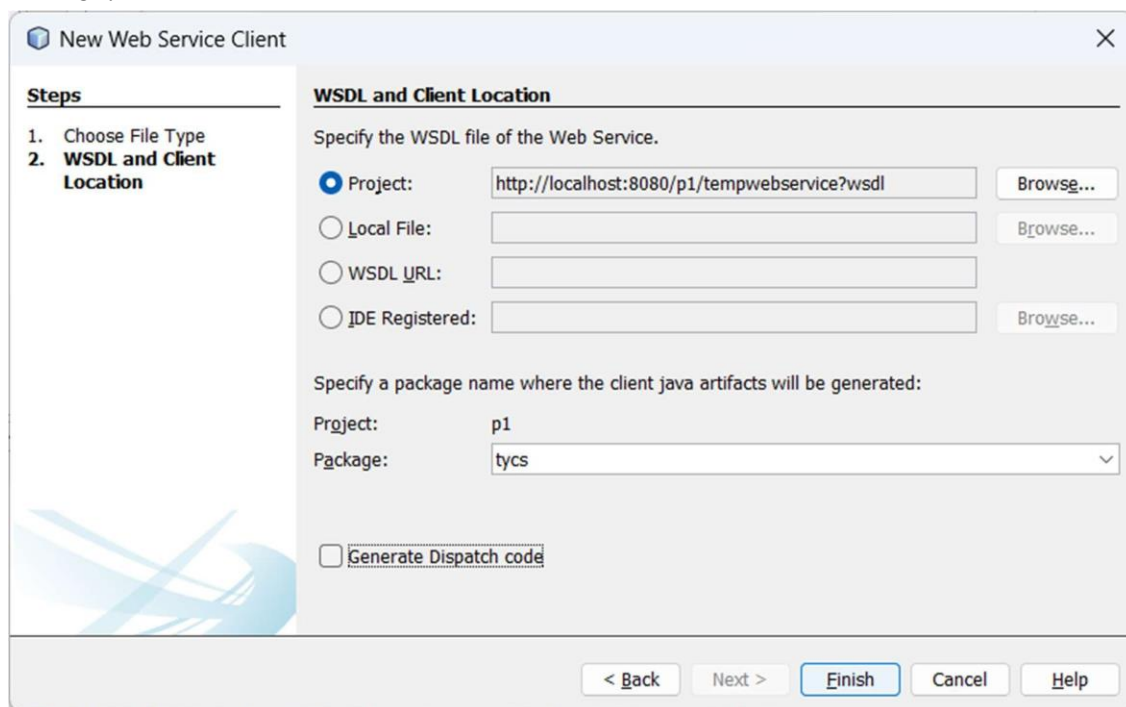
Output - p1 (compile-single) x
ant -f C:\\Users\\omkar\\OneDrive\\Documents\\NetBeansProjects\\p1 -Djavac.includes=ty/tempwebservice.java -Dnb
init:
deps-module-jar:
deps-ear-jar:
deps-jar:
Created dir: C:\Users\omkar\OneDrive\Documents\NetBeansProjects\p1\build\web\WEB-INF\classes
Created dir: C:\Users\omkar\OneDrive\Documents\NetBeansProjects\p1\build\empty
Created dir: C:\Users\omkar\OneDrive\Documents\NetBeansProjects\p1\build\generated-sources\ap-source-output
Compiling 1 source file to C:\Users\omkar\OneDrive\Documents\NetBeansProjects\p1\build\web\WEB-INF\classes
compile-single:
BUILD SUCCESSFUL (total time: 0 seconds)
```

Step 5: Now we will test our web service. So, navigate to: Projects > Project Name > Web Services > right click on tempwebservice > click Test Web Service > (the browser will open). (tempwebservice here is a WSDL file).

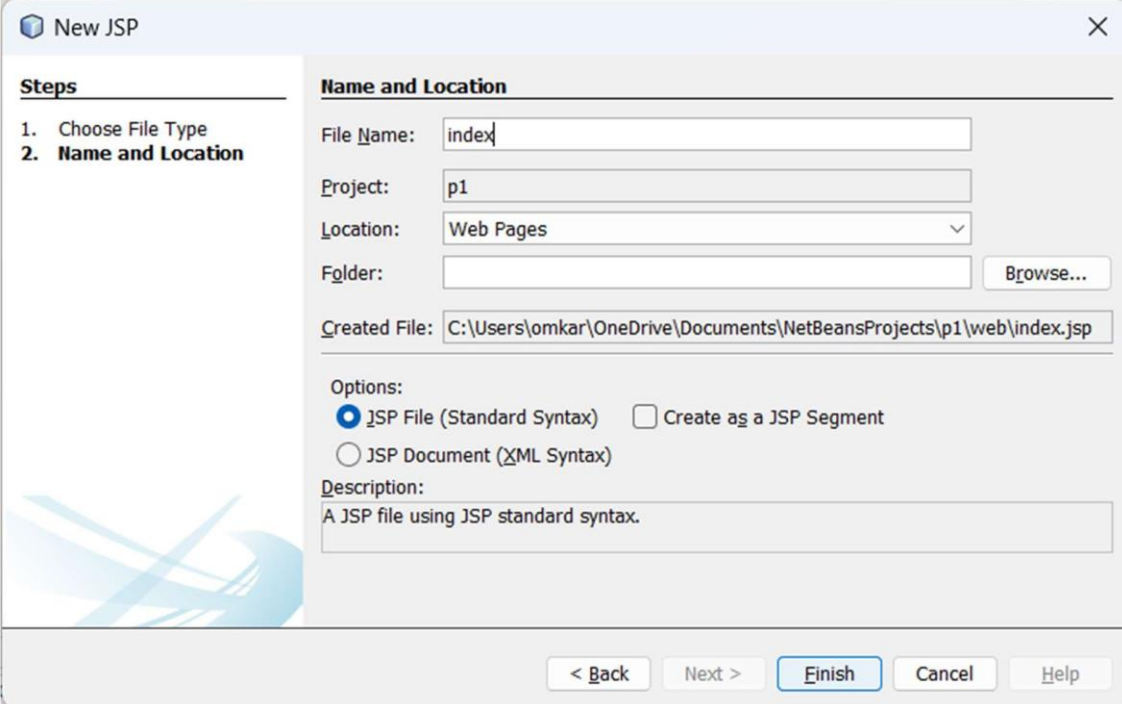




Step 6: Now we will be using the created Web Service (i.e. tempwebservice) by creating our WEB SERVICE CLIENT. So, Right Click on Project Name > New > Other > Web Services > Web Service Client... > Browse your Project Name and select WSDL file > Add Package Name: tycs > Finish.



Step 7: Now to make front page, we need to create a JSP file. So, Right Click on Project Name > New > JSP > File Name: index > Finish. □ Now from the palette, add HTML Form (Action: indexaction.jsp, Type: text, Method: Post) □ Inside Form tag, add Text Input (Name: txt) □ Inside Form tag, add Button (Label: Convert, Type: submit, Name: convert).

A screenshot of the 'New JSP' dialog box in NetBeans. The 'Steps' panel on the left shows '1. Choose File Type' and '2. Name and Location'. The 'Name and Location' section contains fields for 'File Name' (index), 'Project' (p1), 'Location' (Web Pages), and 'Folder'. A 'Browse...' button is next to the 'Folder' field. The 'Created File' field shows the path 'C:\Users\omkar\OneDrive\Documents\NetBeansProjects\p1\web\index.jsp'. Under 'Options', 'JSP File (Standard Syntax)' is selected with a radio button, and 'Create as a JSP Segment' is unchecked. 'JSP Document (XML Syntax)' is also unselected. The 'Description' field contains the text 'A JSP file using JSP standard syntax.' At the bottom are buttons for '< Back', 'Next >', 'Finish', 'Cancel', and 'Help'.

New JSP

Steps

1. Choose File Type
2. **Name and Location**

Name and Location

File Name:

Project:

Location:

Folder:

Created File:

Options:

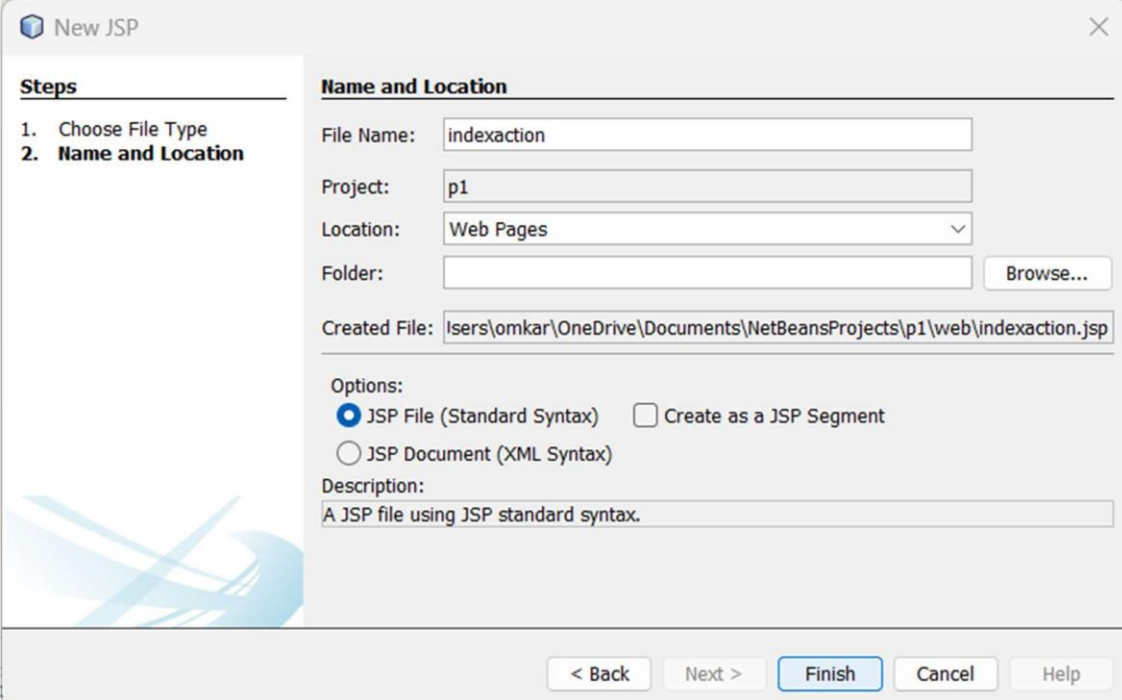
☒ JSP File (Standard Syntax) ☐ Create as a JSP Segment

☐ JSP Document (XML Syntax)

Description:

< Back Next > **Finish** Cancel Help

Step 8: Now to create the action behind that, we will create another JSP file, with a name that is declared in the previous JSP file. So, Right Click on Project Name > New > JSP > File Name: indexaction.jsp > Finish. Then add some `<%JSP code%>` under body.

A screenshot of the 'New JSP' dialog box in NetBeans, similar to the first one but with 'indexaction' as the file name. The 'Steps' panel shows '1. Choose File Type' and '2. Name and Location'. The 'Name and Location' section has 'File Name' set to 'indexaction', 'Project' to 'p1', 'Location' to 'Web Pages', and an empty 'Folder' field with a 'Browse...' button. The 'Created File' field shows the path 'Iusers\omkar\OneDrive\Documents\NetBeansProjects\p1\web\indexaction.jsp'. Under 'Options', 'JSP File (Standard Syntax)' is selected, and 'Create as a JSP Segment' is unchecked. 'JSP Document (XML Syntax)' is unselected. The 'Description' field contains the text 'A JSP file using JSP standard syntax.' At the bottom are buttons for '< Back', 'Next >', 'Finish', 'Cancel', and 'Help'.

New JSP

Steps

1. Choose File Type
2. **Name and Location**

Name and Location

File Name:

Project:

Location:

Folder:

Created File:

Options:

☒ JSP File (Standard Syntax) ☐ Create as a JSP Segment

☐ JSP Document (XML Syntax)

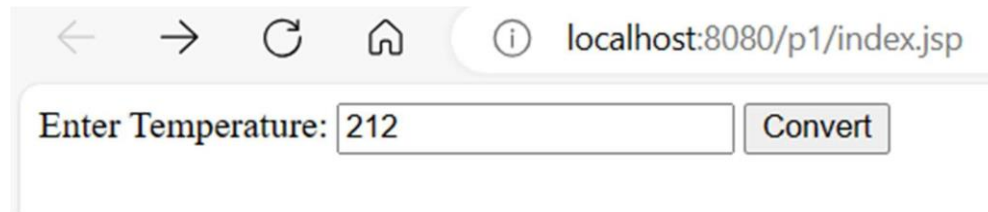
Description:

< Back Next > **Finish** Cancel Help

Step 9: Now RUN “index.jsp” file.

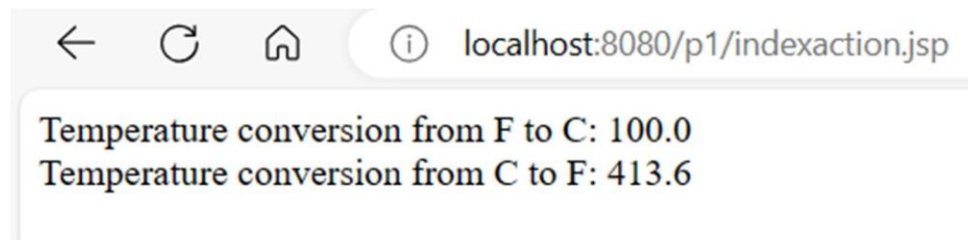
Step 10: Finish!

Outputs:



localhost:8080/p1/index.jsp

Enter Temperature:



localhost:8080/p1/indexaction.jsp

Temperature conversion from F to C: 100.0
Temperature conversion from C to F: 413.6