

Implementing the solution:

1. Creating a web service CalculatorWSApplication:

Create New Project for CalculatorWSApplication.

Create a package org.calculator Create class CalculatorWS.

Right-click on the CalculatorWS and create New Web Service.

IDE starts the glassfish server, builds the application and deploys the application on server.

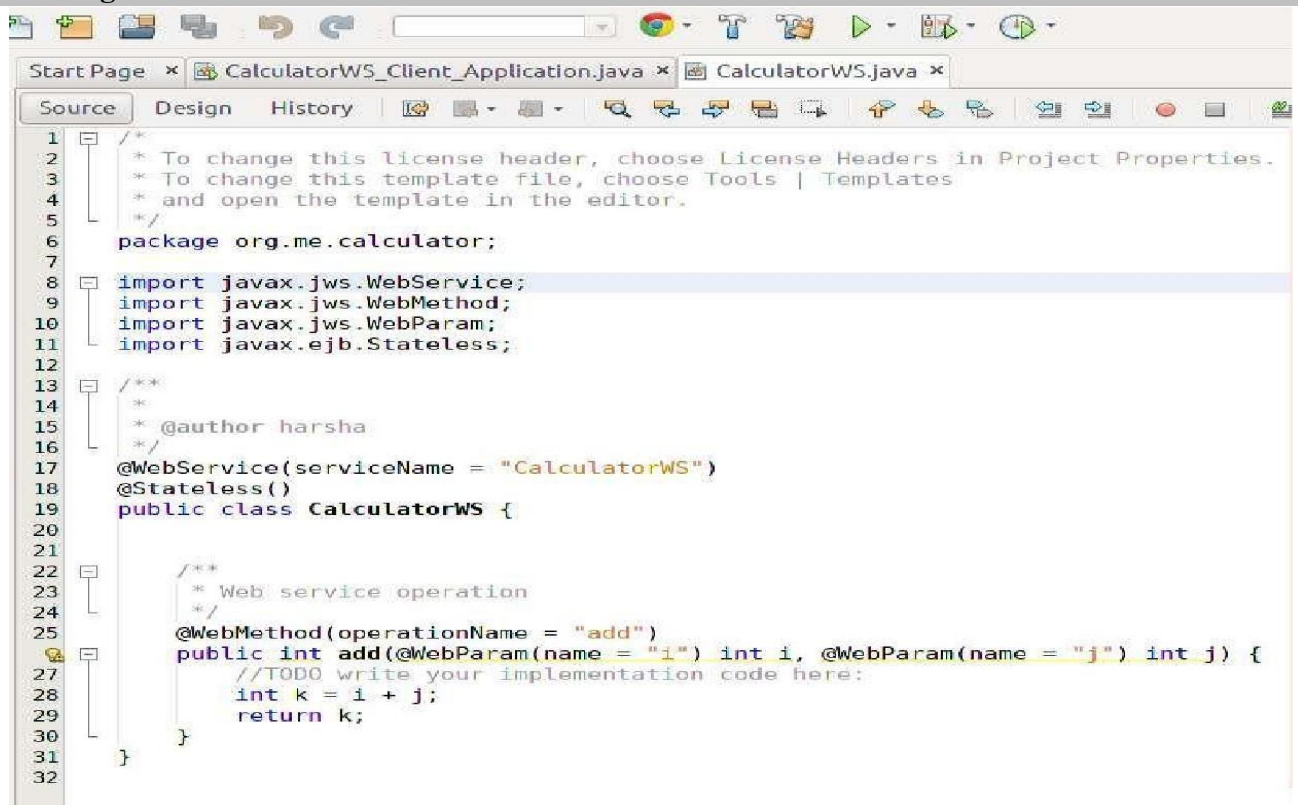
2. Consuming the Webservice:

Create a project with an CalculatorClient Create package org.calculator.client; add java class CalculatorWS.java, addresponse.java, add.java, CalculatorWSService.java and ObjectFactory.java

3. Creating servlet in web application

Create new jsp page for creating user interface.

Writing the source code:



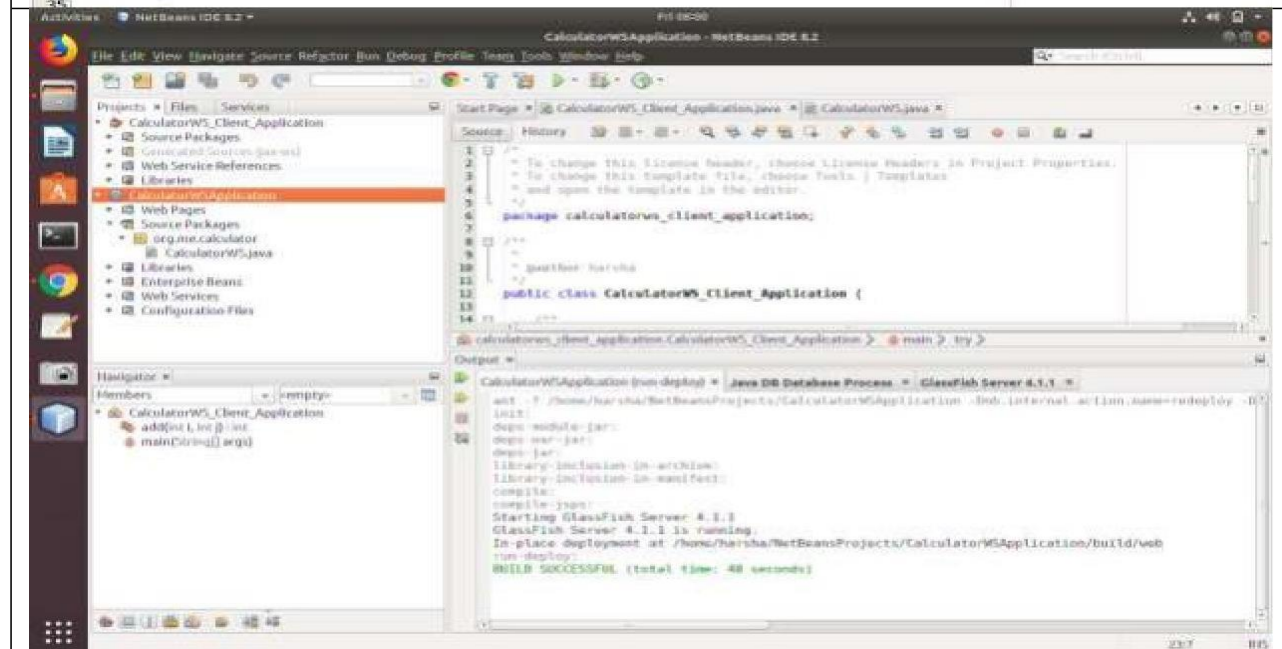
```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6  package org.me.calculator;
7
8  import javax.jws.WebService;
9  import javax.jws.WebMethod;
10 import javax.jws.WebParam;
11 import javax.ejb.Stateless;
12
13 /**
14 *
15 * @author harsha
16 */
17 @WebService(serviceName = "CalculatorWS")
18 @Stateless()
19 public class CalculatorWS {
20
21     /**
22      * Web service operation
23      */
24     @WebMethod(operationName = "add")
25     public int add(@WebParam(name = "i") int i, @WebParam(name = "j") int j) {
26         //TODO write your implementation code here:
27         int k = i + j;
28         return k;
29     }
30 }
31
32
```

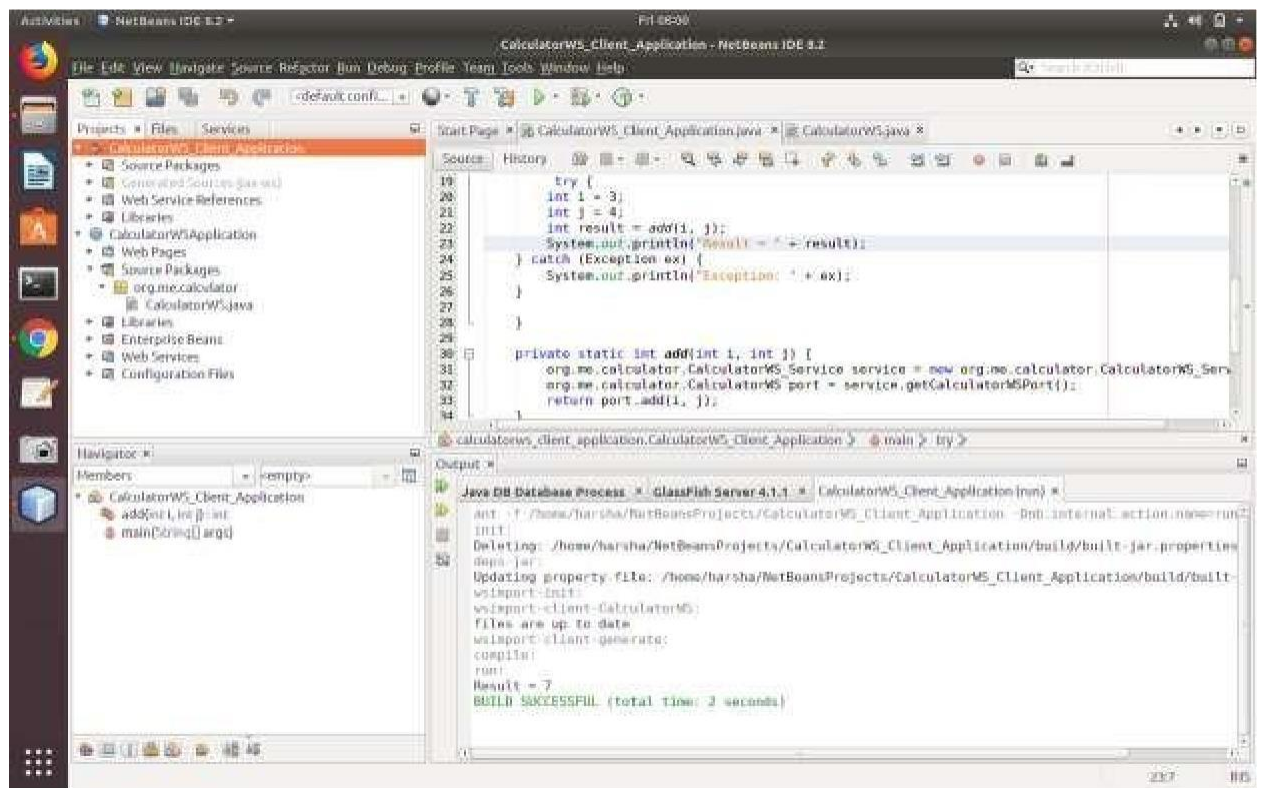
```
Start Page x CalculatorWS_Client_Application.java x CalculatorWS.java x
Source History
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package calculatorws_client_application;

/**
 *
 * @author harsha
 */
public class CalculatorWS_Client_Application {

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        // TODO code application logic here
        try {
            int i = 3;
            int j = 4;
            int result = add(i, j);
            System.out.println("Result = " + result);
        } catch (Exception ex) {
            System.out.println("Exception: " + ex);
        }
    }

    private static int add(int i, int j) {
        org.me.calculator.CalculatorWS_Service service = new org.me.calculator.CalculatorWS_Service();
        org.me.calculator.CalculatorWS port = service.getCalculatorWSPort();
        return port.add(i, j);
    }
}
```

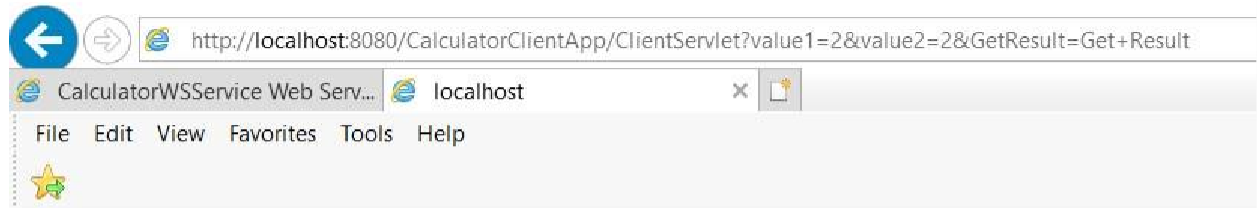




Compiling and Executing the solution:

Right Click on the Project and Choose Run.





Servlet ClientServlet at /CalculatorClientApp

Result: $2 + 2 = 4$